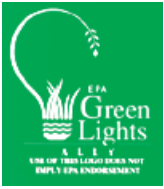




# Lamp Products Catalog 2006



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EPA does not endorse any product or service.

This latest edition of the GE product catalog has been updated to help you more easily select the GE lighting products that best meet your needs.

Technical data in this catalog (life, lumens, wattage, etc.) are nominal values, subject to manufacturer's tolerances. All technical data in this catalog is based on laboratory tests conducted under controlled conditions. Performance of individual lamps may vary. Because of frequent design improvements, the values listed may not be current ratings. Technical bulletins may be issued from time to time if changes in ratings occur prior to the next catalog printing.

**Technical Support**  
**1-800-GE LAMPS**

For the most up-to-date, comprehensive product information, visit the GE Lighting website at [www.gelighting.com](http://www.gelighting.com).

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A



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GE Consumer & Industrial  
Lighting

# ecomagination<sup>SM</sup>

The future can seem pretty intimidating: Our known reserves of oil and natural gas are expected to be depleted by 2045, the climate is changing, and more than a billion people lack clean water. At GE, we believe some of the world's most pressing challenges present an opportunity to do what we do best: **imagine and build innovative solutions that benefit our customers and society at large.**

As a global leader in energy, technology, manufacturing, and infrastructure, GE is uniquely suited to help solve environmental challenges, today and for generations to come. Our customers want a more prosperous, cleaner future. By harnessing our most abundant renewable resource - the imagination of our people - we can create that future with them. We are taking a new approach to solving some of our customers' toughest environmental problems.

**We call it ecomagination.**

## Impact of ecomagination:

*If every household in the U.S. replaced one 100-watt incandescent light bulb with a GE compact fluorescent bulb equivalent in light output, over the bulb's life, we would save enough energy to power more than **1 million U.S. homes for an entire year.***

## Our Heritage, Our Future

We believe that better technology is the answer to our customers' environmental challenges. And we are confident we can find tomorrow's solutions to those challenges just as we have since the days of our founder, Thomas Edison.

Throughout our 127-year history, we have invented solutions to meet our customers' greatest needs. Over many years, we have developed one of the broadest ranges of environmentally advanced technologies. We will build on this legacy of success by researching and developing next-generation clean technologies. Our goal is to be a leader in bringing clean energy, air, and water and improved quality of life to all of the world's citizens.



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## Producing Efficiency

ecomagination  
Products

All Screw-in CFLs  
Ultra T8 Lamps  
T5 Lamps  
UltraMax<sup>®</sup> Ballasts  
UltraStart<sup>™</sup> Ballasts  
Halogen-IR  
Diamond Precise<sup>®</sup>

On the way to certification  
CMH<sup>®</sup> Lamps



# ecomagination<sup>SM</sup>

Products  
Benefits

ecomagination  
Benefits

Additional  
Benefits

## All ENERGY STAR CFLs

Starting on page 5-10

All Screw-in products

Energy Savings up to \$108\* per lamp

Up to 13x longer life

when using a 42 watt CFL to replace a 150W a-line



## Ultra T8 Lamps

Starting on page 4-9

- F28
- Watt-Miser®
- Hi Lumen

Energy Savings up to \$148\* per 4-lamp Fixture

All products Ecolux®, Available in CVG

when using a F28 & UltraMax® ballast to replace a Std. T12 system



## T5 Lamps

Starting on page 4-7

- High Efficiency
- High Output

Energy Savings up to \$132\* per 6-lamp Fixture

All products Ecolux®, Available in CVG

when using a T5 fixture to replace a Std. 400 Metal Halide system



## UltraMax® Ballasts

Starting on page 4-37

T8 Ballasts

Energy Savings up to \$148\* per 4-lamp Fixture

Multi-Voltage

when using a F28 & UltraMax® ballast to replace a Std. T12 system



## UltraMax® Ballasts

Starting on page 4-38

T5 & T8 Ballasts

Energy Savings up to \$148\* per 4-lamp Fixture

Programmed Start Multi-Voltage

when using a F28 & UltraStart™ ballast to replace a Std. T12 system



## Halogen-IR

Starting on page 2-5

- PAR38 HIR & XL
- PAR30 HIR & XL

Energy Savings up to \$13.20\* per lamp

Up to 6000 hour life

when using a Retail HIR™ to replace a Std. Halogen



## Diamond Precise®

Starting on page 2-9

Q21EMR16

Energy Savings up to \$14.50\* per lamp

Up to 2x Longer Life

when using a 21 watt Diamond Precise® to replace a 50R20



## On the way to certification

### CMH® Lamps

Starting on page 3-9

- 400 Watt
- 350 Watt
- 250 Watt

Energy Savings up to \$160.00\* per lamp

SPXX color – CRI 90+

when using a 350W & e-HID UltraMax™ ballast to replace a Std. 400 watt MH system



\* @ 10¢per kWh over life of lamps. Actual savings depends on specific lamps compared.

## We've got the fastest way to slow this down.

Saving energy is good business. Energy-efficient lighting from GE may be the fastest, easiest way to slow your meter down and add dollars to your bottom line.

That's why GE has more than increased our product development investment with a clear goal to be the industry's energy-saving leader.

The result is a whole new line of leadership products, like the F28 UltraMax® system. Combining our 28-watt T-8 lamp with a high-efficiency UltraMax® ballast delivers up to 44% energy savings over T-12 systems. In some cases, pay back is less than a year.

The GE 42-watt compact fluorescent equals the light output of a 150-watt incandescent. That's a savings of 108 watts.

The new Retail HIR™ Halogen uses 27% less energy, with double the life of a standard halogen PAR.

Think your meter is spinning too fast?

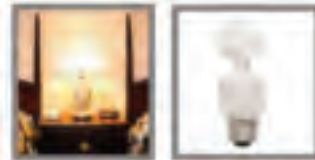
## GE Lighting: Your #1 energy-saving choice



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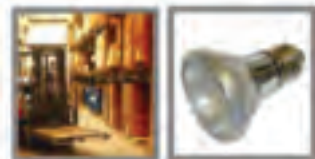
**27% Savings** replacing standard halogen PARs with the Retail HIR™ for accent, merchandising and general lighting.



**72% Savings** when you replace 150-watt incandescent lamps with our 42-watt CFL.



**44% Savings** when you replace T12 System with GE's Ultra Lamps and UltraMax® Ballast.



**50%+ Savings** when you replace standard PARs with GE ConstantColor® CMH® lamps.



## GE Consumer & Industrial Lighting

### The newly expanded GE Lighting and Electrical Institute

World famous training and lighting education center now also offers curriculum for electrical distribution systems!

Impressive, full-scale lighting demonstration spaces.

Comprehensive electrical distribution product center, complete with "control room" simulations.

Variety of scheduled conferences offered throughout the year, led by experienced lighting and electrical distribution professionals.

### And e-tools from the Institute:

Mondays @ noon - Live, on-line training offered each week to sharpen your product and market knowledge

Value\*Light - GE's award-winning cost of light analysis program

The Lighting Toolkit - a collection of 7 simple estimating tools including a Simple Energy Calculator, Lighting Layout Estimator, and the Watts Per Square Foot Estimator.

The Lighting Assistant™ - a set of 26 user-friendly tools including Value\*Light, the Lighting Toolkit, 2005 Energy Policy Act Tax Incentive Calculator and much, much more!

Call 1-800-255-1200, or visit  
[www.gelighting.com](http://www.gelighting.com)



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# See What's Available Online!



## Focus on Products

- Completely redesigned online catalog
- Improved search capability
- More product details
- Highlight energy saving products
- Ballast and product specifications



## Segment Driven Value & Applications

- Hospitality
- Restaurant
- Healthcare
- Retail
- Property management
- Residential builders
- Automotive
- Oil and gas
- Lighting designers



## More Tools & Resources

- Online product catalog
- Literature library
- Conferences
- Environmental information
- MSDS sheets
- TCLP test results
- IES photometric downloads
- Lamp and ballast recycling
- Simple energy estimator
- Lighting layout estimator
- Cost of waiting estimator

For more information, visit  
[www.gelighting.com](http://www.gelighting.com)



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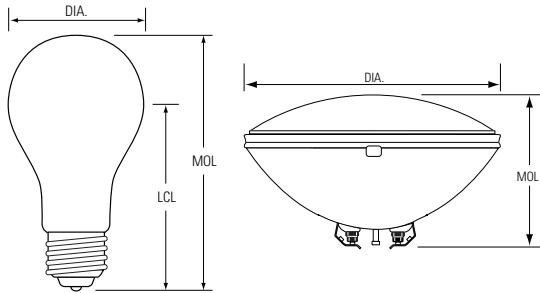
## CROSS REFERENCE ..... 1-27





# Incandescent Lamps

## BULB IDENTIFICATION



DIA: Diameter of bulb at widest point.

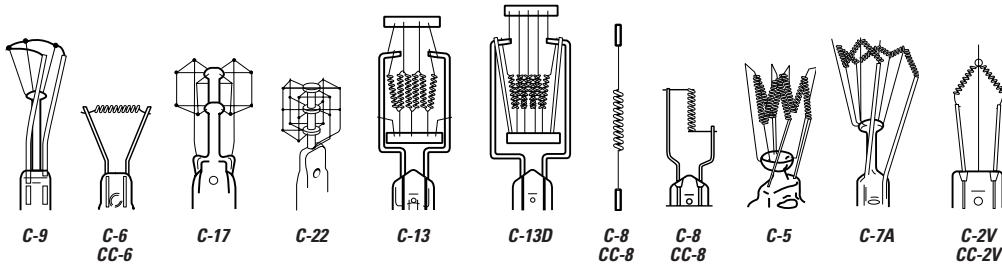
MOL: Maximum Overall Length including base or pins.

LCL: Distance between the center of the arc tube and the Light Center Length reference plane.

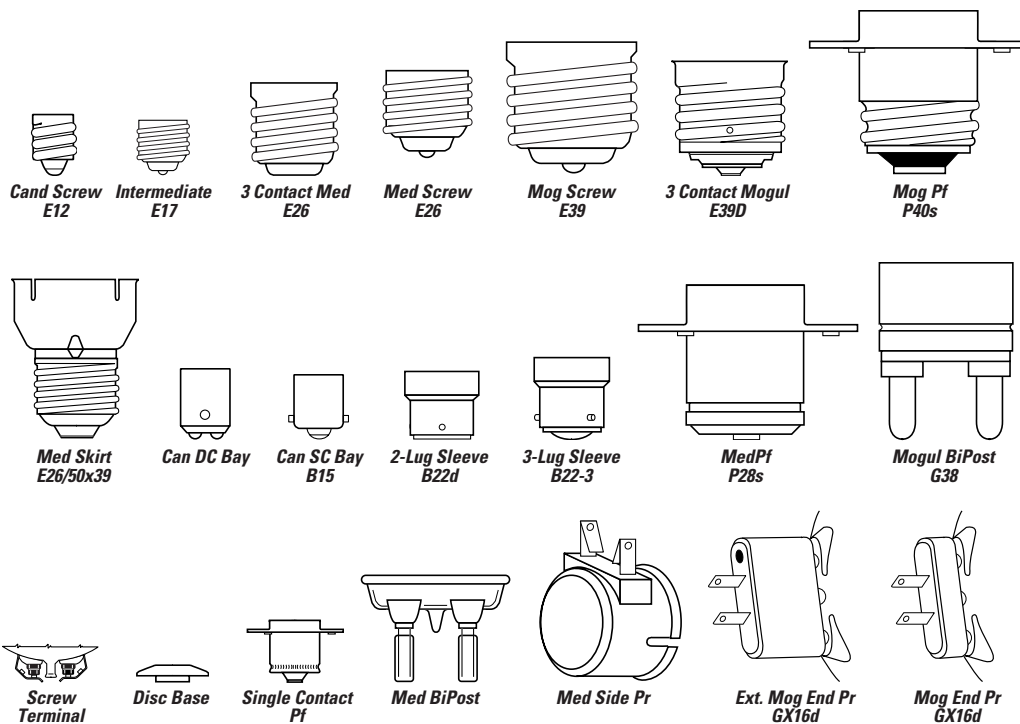
Note: Lamp drawings are not drawn to scale. Be sure to check size and dimension information when identifying each lamp.

To convert inches to millimeters, multiply the dimension (in inches) by 25.4 (i.e. 1.5" x 25.4 = 38.1 mm).

## FILAMENT IDENTIFICATION

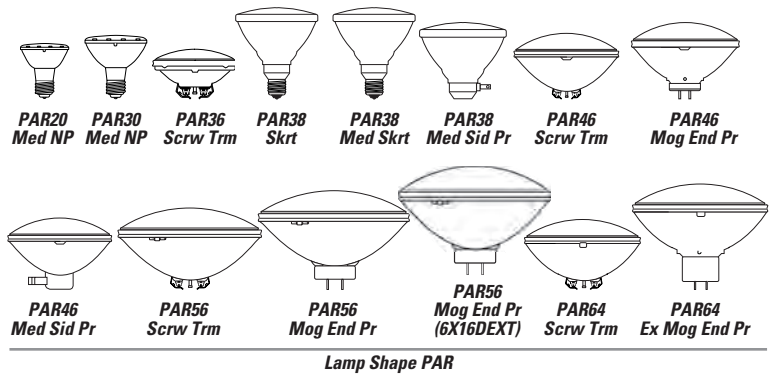
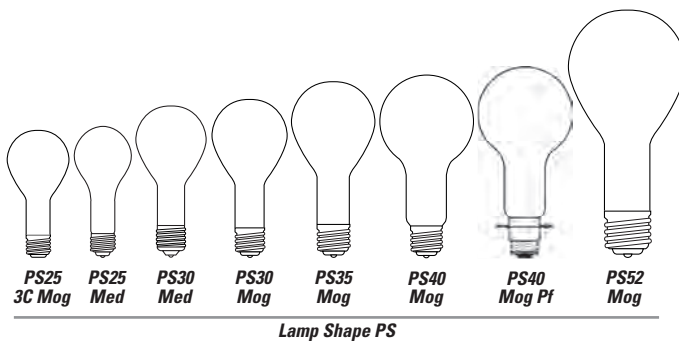
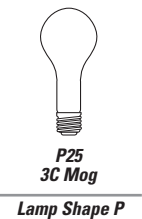
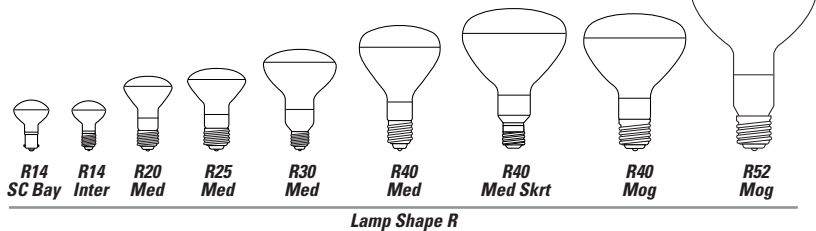
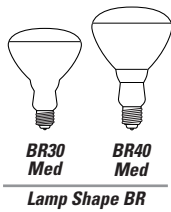
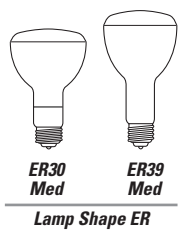
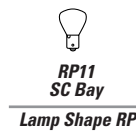
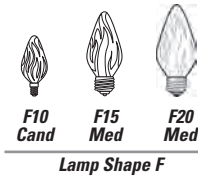
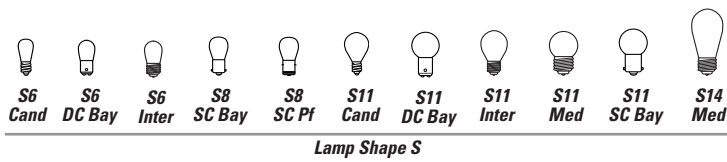
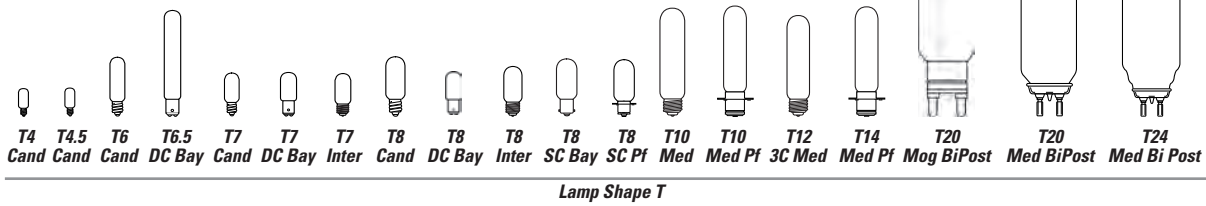
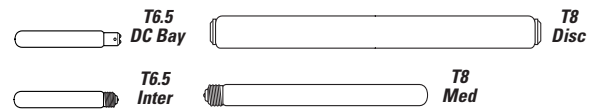
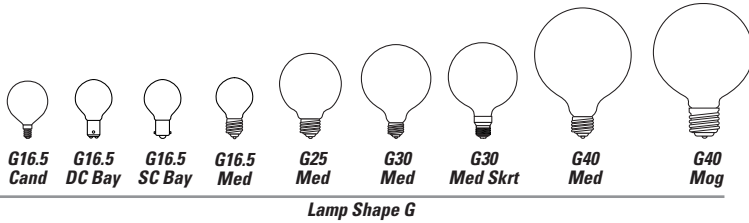
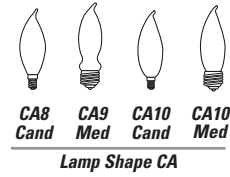
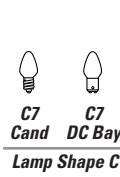
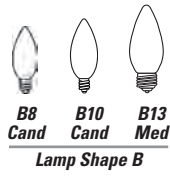
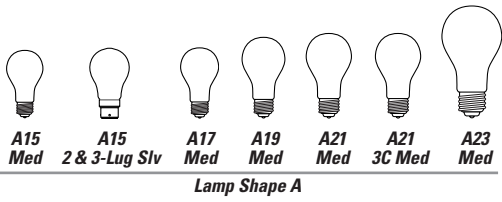


## BASE IDENTIFICATION





## LAMP LOCATOR





## INTRODUCTION

GE's incandescent lamps trace their ancestry to the world's first practical electric bulb, invented by Thomas Alva Edison, founder in 1879, of the company that became General Electric Company.

More than a century of research and development later, the present range of GE incandescent lamps represents the state of the art of lamps for residential and commercial use, as well as special purpose lamps for decorative or display applications.

In an incandescent lamp, light is generated by heating the filament to incandescence. The hotter the filament, the more efficient it is in converting electricity to light. However, when the filament operates hotter, its life is shortened so the design of each lamp is a balance between efficiency and life. This is why lamps of equal wattage may have different lumen ratings and different life ratings.

Incandescent lamps of similar size are commonly available with different wattage ratings. The fixture wattage limit should not be exceeded.

## PROTECTION FROM MOISTURE

When **HRG** (Hard Glass) appears in the Lamp Description column, the outer bulbs are made of special thermal-shock-resistant glass. However, sometimes external protection of the lamps is also needed to eliminate the chance of bulb breakage due to contact with water during operation. Footnotes will indicate when external protection is needed. Where **HRG** is not shown, the bulb glass is such that the lamps require protection from exposure to mist or condensation as well as direct contact with water during operation.

## RATED LIFE

Values are based on a large number of representative lamps under controlled conditions. Individual lamps or groups of lamps may vary from the Rated Life shown. Rated Life is a median value of life expectancy - the total operating time at which under normal conditions 50% of any large group of initially installed lamps are expected to be still burning.

GE	Osram/Sylvania	Phillips
<b>INCANDESCENT BRAND NAME CROSS-REFERENCE</b>		
Reveal®	—	—
Bug-Lite	Bug Lite	Bug-A-Way
Cool Beam	Cool-Lux	Cool Beam
covRguard®	Safeline	Silicone Coated
Saf-T-Gard®	—	—
Soft Pink	Soft Pink	Softone Pastels
Soft White Miser®	Energy Saver Soft White	Energy Saving
Extended Service	Excel-Line®	Extended Service
Plant Light	Spot-GRO	Agro-Lite
Long Life Soft White	Double Life™ Soft White	Longer Life Soft White
Lumiline	Lumiline	Philinea
Party Light	—	—
Survivor™	—	Industrial Service
Watt-Miser®	Super Saver®	Econ-o-Watt
Watt-Miser® PAR	Super Saver Par®	Econ-o-Par
Watt-Miser® Plus	Super Saver Excel®	Extended Service

**ATTENTION:** This brand-name cross-reference chart is provided only as a quick reference. Other lamp company brand listings may only represent a near equivalent, versus an identical match to GE brands. Individual lamp manufacturers' product offerings and performance specifications should be consulted. Lamp performance may be affected by environmental conditions, and/or auxiliary equipment.



*Survivor™*



*covRguard®*



*Long Life  
BR30 Reflector  
Floodlight or  
Spotlight*

## GE REVEAL® LIGHT BULBS

Superior light quality over regular incandescent that:

- Produces “clean, beautiful light™” for more vibrant colors
- Contains Neodymium glass that filters out dulling yellow rays
- Is available in 40-100 watt A-Line
- Also available for nearly every application from candle shapes to flood lights
- A color enhanced full spectrum light bulb

## GE SURVIVOR™ A-LINE BULBS

Built to last, even under many “rough” service conditions...

- Five filament support design protects against early burnouts caused by bumps, jars and vibration
- Longer life... lasts 3000 hours. 3-4 times longer than standard bulbs\*
- Popular wattages available
- Economically priced
- Best A-line choice for general commercial/industrial use

\* Survivor bulbs provide a 300%-400% increase in life with 68%-75% of the light of ordinary bulbs.

## GE COVRGUARD® BULBS

- Teflon®\* coating is shatter and weather-resistant
- Resists breakage from heat and thermal shock that can occur from water, sleet, snow, molten solder, and weld spatter
- Wide choice of wattages and voltages
- Rough service version available for extra tough conditions

### Uses:

Construction sites, loading docks, string lighting, elevators, trouble light, metal fabricating, food processing areas, farms.

\* Teflon is a registered trademark of DuPont.

## GE LONG LIFE FLOODLIGHT OR SPOTLIGHT

- 25% longer life than standard reflectors. Ideal for use in high ceilings and hard to reach track lighting.
- Easy replacement – same length and width as standard R bulbs
- Some lumen loss from standard reflectors (See listing for lumen values)
- Available in 45w floodlight and 65w floodlight and spotlight

### Uses:


Down lighting, display lighting, accent lighting, wall washing. Wherever standard reflector bulbs are used.



# Incandescent Lamps

## HEADINGS IN THIS CATALOG SECTION

The following terms and descriptions can help you when checking Incandescent lamp specifications and when ordering products. Within this product line, lamps are divided by wattage. Within wattage, lamps are listed alphabetically by bulb shape.

<b>Order Code:</b> It is important to use this five-digit code when ordering to ensure that you receive the exact product you require.	<b>LCL in.:</b> Distance between the center of the filament and the Light Center Length reference plane, in inches.	<b>MOL in.:</b> Maximum Overall Length in inches.	<b>Life-Hours:</b> Life (as defined by FTC Lamp Label Rules) is rated life in hours. (see page 1-26).
<b>Energy Used-Nominal Watts:</b> Energy Used (as defined by FTC Lamp Label Rules). To estimate energy consumption (kWh), multiply watts x hours of use and divide by 1000.	<b>Filament Design:</b> Filaments are designated by a letter combination in which C is a coiled wire filament, CC is a coiled wire that is itself wound into a larger coil, and SR is a straight ribbon filament. Numbers represent the type of filament-support arrangement.	<b>Light Output-Lumens:</b> Light output (as defined by FTC Lamp Label Rules) is rated average lumens.	<b>Color Temperature - Kelvins (K):</b> "Warmth" or "Coolness" of the lamp, measured in Kelvins (K). The higher the temperature, the cooler the appearance of the light.
<b>Shape:</b> Bulb shape followed by its size (the maximum diameter of the bulb expressed in eighths of an inch).	<b>Description:</b> The lamp's identification code.	<b>Approximate CBCP (Center Beam Candlepower):</b> For reflector type lamps. Center Beam Candlepower is the intensity (candelas) at the center or maximum intensity of the beam.	<b>Approximate Beam Spread:</b> For reflector type lamps. The total angle of the directed beam (in degrees) to where the intensity of the beam falls to 50% of the maximum value.
<b>Base:</b> The type of base.	<b>Case Quantity:</b> Number of product units packed in a case.	<b>Additional Information:</b> Typical application and/or other important information.	 Indicates that this is a reduced wattage option for lamps normally used in this application. Be sure to check wattage, lumens and life to determine which lamp is best suited to your needs.
<b>Volts:</b> Lamp data is based on operation at rated voltage.			

Shape	Base	Order Watts Code	Description	Case Qty.	Filament Design	MOL	LCL	Rated Life Hours	Lumens Initial	Color Temp. K	CBCP	Beam Spread	Footnotes	Additional Information
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### INCANDESCENT LAMPS 65 WATTS

BR30	Med	65 26640	<b>75R30/FL/65WM/A</b>	120	30							2A, 5E, 9K	Reflector - Amber
------	-----	----------	------------------------	-----	----	--	--	--	--	--	--	------------	-------------------



## 75 R30 / FL / 65WM / A

- Identifies the lamp's wattage.
- Identifies the lamp's shape.
- Identifies the lamp as a floodlight.
- Identifies the lamp as a Watt-Miser<sup>®</sup>
- Identifies this lamp as amber colored.

**WHEN YOU DON'T KNOW THE LAMP DESCRIPTION**

1. Identify the lamp wattage.
2. Measure bulb diameter using ruler in appendix section page A-1 to determine width in eighths of an inch.
3. Identify base type using table on page 1-2.
4. Find your lamp in the table containing the bulb wattage, then match the shape, size and base, which are all listed alphabetically.



# Incandescent Lamps

Shape	Base	Order Watts Code	Description	Volts	Case Qty.	Filament Design	MOL	LCL	Rated Life Hours	Lumens Initial	Color Temp. K	CBCP	Beam Spread	Footnotes	Additional Information
<b>INCANDESCENT LAMPS</b>															
<b>3 WATTS</b>															
	S6	Cand	3 11098 3S6/5 24PK	130	24	C-7A	1.87	1.37	3000	11					Clear-Indicator
<b>4 WATTS</b>															
	C7	Cand	4 16001 4C7/W CD/2	120	240	C-7A	2.12		3000					2E	White-Long Life Night Light
			20572 4C7/S CD/4	120	120	C-7A	2.12		2000					2E	Standard Clear Night Light
			20573 4C7/W/S CD/4	120	120	C-7A	2.12		2000					2E	Standard White Night Light
			26222 4C7/PK-CD2 6PK	120	240	C-7A	2.12		3000					2E	Long Life Pink Night Light
			26223 4C7/BL-CD2 6PK	120	240	C-7A	2.12		3000					2E	Long Life Blue Night Light
			43050 4C7 CD/2	120	240	C-7A	2.12		3000					2E	Long Life Clear Night Light
<b>6 WATTS</b>															
	S6	Cand	6 11316 6S6 24PK	12	24	C-2V	1.87	1.37	1500	50					Clear-Indicator
			11329 6S6	24	240	C-2V	1.87	1.37	1500	50					Clear-Indicator
			11331 6S6 24PK	30	24	C-2V	1.87	1.37	1500	50					Clear-Train
			43397 6S6 BB	32	24	C-2V	1.87	1.37	1500	45					Clear-Train
			11367 6S6 TRAY	120	240	C-7A	1.87	1.37	1500	41					Clear-Indicator. 12-Lamp Tray
			11577 6S6/3	120	240	C-7A	1.87	1.37	5000	23					Clear-Signal Light
			15820 6S6 CARD2	120	240	C-7A	1.87	1.37	1500	41					Clear-Indicator
			11369 6S6 TRAY	130	240	C-7A	1.87	1.37	1500	41					Clear-Indicator. 12-Lamp Tray
			11372 6S6	145	240	C-7A	1.87	1.37	1500	41					Clear-Indicator
			11374 6S6	155	240	C-7A	1.87	1.37	1500	41					Clear-Indicator
		DC Bay	6 11357 6S6DC 24PK	75	24	C-7A	1.81	1.43	1500	45					Clear-Indicator
			11592 6S6DC TRAY	120	240	C-7A	1.81	1.43	1500	41					Clear-Indicator. 12-Lamp Tray
			11594 6S6/DC TRAY	130	240	C-7A	1.81	1.43	1500	41					Clear-Indicator. 12-Lamp Tray
			11609 6S6DC 24PK	145	24	C-7A	1.81	1.43	1500	41					Clear-Indicator. 12-Lamp Tray
		Inter	6 11660 6S6/7 TRAY 24PK	120	24	C-7A	1.81	1.06	1500	41					Clear-Indicator. 12-Lamp Tray
	T4.5	Cand	6 11764 6T41/2/1	130	100	C-7A	1.87	1.31	1500	42					Clear-Indicator
<b>7 WATTS</b>															
	C7	Cand	7 11779 7C7 TRAY	120	240	C-7A	2.12		3000	46					Clear-Indicator. 12-Lamp Tray
			11815 7C7/W TRAY	120	240	C-7A	2.12		3000	36					White-Indicator. 12-Lamp Tray
			11792 7C7 TRAY	130	240	C-7A	2.12		3000	46					Clear-Indicator. 12-Lamp Tray
<b>7.5 WATTS</b>															
	S11	Med	7.5 11847 7 1/2S TRAY	120	240	C-9	2.25		1400	53					Clear-12-Lamp Tray
			41267 7 1/2S/CW CARD	120	240	C-9	2.25		1400	39			2E		White
			11848 7 1/2S TRAY	130	240	C-9	2.25		1400	53					Clear-12-Lamp Tray
			11922 7 1/2S/CW TRAY	130	240	C-9	2.25		1400	39					White-12-Lamp Tray
<b>10 WATTS</b>															
	S6	Cand	10 12041 10S6/10	230	24	C-7A	1.87	1.37	1500	66					Clear-Indicator
			12050 10S6/10 24PK	250	24	C-7A	1.87	1.37	1500	66					Clear-Indicator
		DC Bay	10 12060 10S6/10DC 24PK	230	24	C-7A	1.87	1.87	1500	66					Clear-Indicator
	S11	Cand	10 12249 10S11/79	120	120	C-7A	2.25	1.56	1000	80					Clear-Indicator
		Inter	10 12188 10S11N/F	120	120	C-7A	2.31	1.62	1000	79					Frost-Appliance
			12185 10S11N	130	120	C-7A	2.31	1.62	1000	80					Clear-Sign



# Incandescent Lamps

Shape	Base	Order Watts	Code	Description	Volts	Case Qty.	Filament Design	MOL	LCL	Rated Life Hours	Lumens Initial	Color Temp. K	CBCP	Beam Spread	Footnotes	Additional Information		
<b>INCANDESCENT LAMPS (CONTINUED)</b>																		
<b>11 WATTS</b>																		
	S14	Med	11	<b>12575 11S14</b>	130	120	C-9	3.5	2.5	3000	76					Clear-Sign		
				<b>12589 11S14/IF</b>	130	120	C-9	3.5	2.5	3000	76					I.F.-Sign		
				<b>12621 11S14/R</b>	130	120	C-9	3.5	2.5	3000						Red-Sign		
				<b>12632 11S14/Y</b>	130	120	C-9	3.5	2.5	3000						Yellow-Sign		
<b>12-13.5 WATTS</b>																		
	S8	SC Bay	12	<b>10690 12S8/93T-6PK CD/2</b>	12	240	C-2R	2	1.25	1000	200				2G	Low Voltage, High Intensity		
	S11	SC Bay	13.5	<b>12649 13/3 1/2 S11/95</b>	10	120	CC-6 C-12	2.37	1.25	1000	180					Clear-Railway Signal Light, Filament in Multiple		
<b>15 WATTS</b>																		
	A15	Med	15	<b>12784 15A</b>	34	120	C-9	3.56	2.37	1000	180				5A	I.F.-Train		
				<b>41270 15A/W 24PK</b>	120	120	C-9	3.5	2.37	2500	110						Soft White	
				<b>12658 15A15</b>	130	120	C-9	3.5	2.37	2500	115						Inside Frost	
				<b>16215 15A15/CL/BB</b>	130	120	C-9	3.5	2.37	3000	110						Clear-Sign	
	R14	SC Bay	15	<b>33404 15R14SC/SP</b>	12	120	CC-8	2.62		2000	120					Reflector Spot		
	S11	Cand	15	<b>13210 15S11/13</b>	120	120	C-7A	2.25	1.56	750	115					Clear		
				DC Bay	15	<b>13188 15S11/3DC</b>	75	120	C-9	2.37	1.25	1000	138				Clear-Train	
				Med	15	<b>13291 15S11/102</b>	120	240	C-7A	2.25		400	120				Clear-Refrigerator, 12-Lamp Tray	
	S14	Med	15	<b>42590 15S14/FBB</b>	34	120	C-9	3.5	2.5	1000	144					Frost-Locomotive Cab		
				<b>11137 15S14/GR/CL/8</b>	130	120	C-9	3.5	2.5	8000	90					Clear-Sign. Group Replacement		
				T6	Cand	15	<b>13390 15T6</b>	120	60	C-7A	3.06	1.56	2000	107				Clear-Exit
	T6	Cand	15	<b>13402 15T6</b>	145	60	C-7A	3.06	1.56	1500	102					Clear-Exit		
				<b>22114 15T6C-CD</b>	145	120	C-7A	3.06	1.56	1500	102					Clear-Exit. Blister Card		
				T7	Cand	17	<b>13494 15T7C</b>	120	120	C-7A	2.25	1.5	3000	100				Clear-Signal Light. Appliance
	T7	DC Bay	17	<b>35154 15T7DC CARD</b>	120	240	C-7A	2.25	1.31		100					Clear-Appliance, 12-Pack		
				Inter	17	<b>35153 15T7N CARD</b>	120	240	C-7A	2.25	1.56		100				Clear-Appliance	
	T10	Med	15	<b>34407 15T10 24PK</b>	120	24	C-8	5.62		2500	120					Clear-Aquarium		
<b>15/135/150 WATTS</b>																		
	A21	3C Med	15	<b>23068 15/150/SECURITY 12PK</b>	120	60	C-2R	5.25	3.87	1200	75				2B, 9C, 9J	Security 3-Way, Soft White		
				135				120	CC-8									
				150				120										
<b>18 WATTS</b>																		
	S11	SC Bay	18	<b>13655 18S11/1SC</b>	10	120	CC-6	2.37	1.25	2000	200					Clear-Railway Signal Light		
				<b>13659 18/3 1/2S11SC</b>	10	120	CC-6	2.37	1.25	1000	300						Clear-Railway Signal Light. C-12 Filament in multiple	
<b>20 WATTS</b>																		
	S11	SC Bay	20	<b>19549 20S11/1SC</b>	10	120	CC-6	2.37	1.25	3000						Railway Signal Light		
				T6.5	DC Bay	20	<b>34241 20T61/2DC/F</b>	120	60	C-8	5.56		5000	90				Frost-Exit Light
				Inter	20	<b>34272 20T61/2/F</b>	120	60	C-8	5.5		7000	90					Frost-Exit Light
<b>21.5 WATTS</b>																		
	A15	2-Lug Slv	21.5	<b>13644 18/3 5A15/5</b>	10	120	CC-6	3.75	2.21	1500	235					Clear-Railway Signal Light CC-6 Filament in multiple, 2-Lug Base		
<b>25 WATTS</b>																		
	A15	Med	25	<b>13744 25A15/RS</b>	75	120	C-9	3.46	2.5	1000	250				5A	I.F.-Train. Rough Service		












# Incandescent Lamps

Shape	Base	Order Watts Code	Description	Volts	Case Qty.	Filament Design	MOL	LCL	Rated Life Hours	Lumens Initial	Color Temp. K	CBCP	Beam Spread	Footnotes	Additional Information	
<b>INCANDESCENT LAMPS (CONTINUED)</b>																
<b>25 WATTS (CONTINUED)</b>																
	Med	25 13769 25A		12	120	C-6	3.87	2.56	1000	378				5A	Inside Frost	
		13784 25A		34	120	C-9	3.87	2.56	1000	390				5A	I.F.-Train	
		15064 25A/CL 24PK		120	120	CC-6	4.25	2.5	2500	215						Clear
		16553 25A/TG-CD1 3PK		120	12	C-9	3.87	2.37	2000							Transp. Green-Party Light
		16555 25A/TR-CD1 3PK		120	12	C-9	3.87	2.37	2000							Transp. Red-Party Light
		47625 25A/TB-CD1 3PK		120	12	C-9	3.87	2.37	2000							Transp. Blue-Party Light
		16333 25A/TP-CD 6PK		120	24	C-9	3.87	2.37	2000							Transp. Purple-Party Light
		47627 25A/TPK-CD1 3PK		120	12	C-9	3.87	2.37	2000							Transp. Pink-Party Light
		16335 25A/TY-CD 6PK		120	24	C-9	3.87	2.37	2000							Transp. Yellow-Party Light
		22730 25A/TPK 6PK		120	120	C-9	3.87	2.37	2000							Transp. Pink-Party Light
		22731 25A/TP 6 PK		120	120	C-9	3.87	2.37	2000							Transp. Purple-Party Light
		22732 25A/TE 6PK		120	120	C-9	3.87	2.37	2000							Transp. Teal-Party Light
		33486 25A/RS 24PK		120	24	C-17	3.87	2.56	1000	190					2A, 5E	I.F.-Rough Service
		37577 25A/B 24PK		120	24	C-9	3.87	2.37	2500							Blue
		37578 25A/G 24PK		120	24	C-9	3.87	2.37	2500							Green
		37579 25A/R 24PK		120	24	C-9	3.87	2.37	2500							Red
		37793 25A/Y 24PK		120	24	C-9	3.87	2.37	2500							Yellow
		40320 25A/O-24PK		120	24	C-9	3.87	2.37	2500							Orange
		41272 25A/W 24PK		120	120	CC-6	4.25	2.5	2500	210						Soft White
		46645 25A/SG CD/PQ1/5		120	25	CC-6	4.25	2.5	1500							Stained Glass
		49724 25A/TB 6PK		120	120	C-9	3.87	2.37	2000							Transp. Blue-Party Light
		49725 25A/TG 6PK		120	120	C-9	3.87	2.37	2000							Transp. Green-Party Light
		49727 25A/TR 6PK		120	120	C-9	3.87	2.37	2000							Transp. Red-Party Light
		49728 25A/TY 6PK		120	120	C-9	3.87	2.37	2000							Transp. Yellow-Party Light
		13992 25A/CL		130	120	CC-6	4.25	2.5	2500	215						Clear
		35613 25A		130	120	CC-6	4.25	2.5	2500	215						Inside Frost
		13879 25A		250	120	C-17A	3.87	2.56	1000	220					5A	Inside Frost
			Scrw Term	25 14553 25PAR36		6	12	C-6	2.75		1000	130	3000	19700	5	
14554 25PAR36/NSP				12	12	C-6	2.75		2000	150		2600	9		Narrow Spot-Filament Shield	
14555 25PAR 36WFL				12	12	C-6	2.75		2000	150		360			Wide Flood-Filament Shield	
14556 25 PAR36 VWFL				12	12	C-6	2.75		2000	150		160	55		Very Wide Flood. Filament Shield	
	Scrw Term	25 14562 25PAR46		6	12	C-6	3.75		1000	140		55000			Pin Spot. Filament Shield	
	Inter	25 39156 25R14N		120	120	CC-2V	2.56		1500					5E	Reflector-Light Inside Frost	
		18230 25R14N		130	120	CC-2V	2.56		1500					5E	Reflector-Light Inside Frost	
	SC Bay	25 33405 25R14SC/SP		12	120	CC-8	2.62		2000						Reflector Spot, Light I.F.	
	Cand	25 14585 25S11/2C		120	120	C-7A	2.25	1.43	500	260					Clear-Medical Spot	
		14594 25S11/5C		120	120	C-7A	2.25	1.56	500	260					Reprographic-Frost. Printer	
	SC Bay	25 14575 25S11/4SC		10	120	CC-6	2.37	1.25	1000	360					Clear-Railway Signal Light	
	DC Bay	25 14676 25T6 1/2DC		120	60	C-8	5.56		1000	220					Clear-Appliance. Scale Illuminator	
		14678 25T61/2/DC		130	60	C-8	5.56		1000	244					Clear-Appliance. Scale Illuminator	
		14685 25T61/2DC/F		130	60	C-8	5.56		1000	240					Frost-Appliance Scale Illuminator	
	Inter	25 14639 25T6 1/2		120	60	C-8	5.5		1000	220					Clear-Showcase	
		14641 25T61/2		130	60	C-8	5.5		1000	244					Clear-Showcase	
		14668 25T61/2/F		130	60	C-8	5.5		1000	240					Frost-Showcase	
	DC Bay	25 14741 25T7DC		120	60	C-7A	2.25	1.31	200	195					Clear-Appliance	
		25 10692 25T7N-CD 6PK		120	240	C-7A	2.25	1.56	200	195					Clear-Appliance	
	Inter	14791 25T7N		120	60	C-7A	2.25	1.56	200	195					Clear-Appliance	
	Cand	25 14809 25T8C		120	60	C-7A	2.62	1.5	200	195					Clear-Microwave	
		25 14880 25T10 24PK		120	192	C-8	5.62		1000	248					Clear-Showcase	
	Med	14866 25T10		130	120	C-8	5.62		1000	248					Clear-Showcase	





# Incandescent Lamps

Shape	Base	Order Watts	Code	Description	Volts	Case Qty.	Filament Design	MOL	LCL	Rated Life Hours	Lumens Initial	Color Temp. K	CBCP	Beam Spread	Footnotes	Additional Information
<b>INCANDESCENT LAMPS (CONTINUED)</b>																
<b>27 WATTS</b>																
	R20	Med	27	47681 27R20/SP/LLPQ1-6	120	30	CC-6	3.93		2500						Long Life Reflector - Indoor Spotlight
<b>30 WATTS</b>																
	A15	Med	30	14129 30A15	130	120	C-9	3.5	2.37	5000	215					I.F. Changing Message Sign
				15291 30A15/CL	130	120	C-9	3.5	2.37	5000	215					Clear Changing Message Sign
				19358 30A15/8	130	120	C-9	3.5	2.37	8000	180					I.F. - Sign
	R20	Med	30	14891 30R20/1-6PK	120	30	CC-6	3.93		2000	200					Indoor Reflector
				46848 30R20/1	130	30	C-9	3.93		2000	200				5B, 9K	Indoor Reflector - Light I.F.
				46849 30R20/6	130	30	C-9	3.93		6000	145				9D	Reflector - Light I.F. - Flashing Message Sign
	S11	DC Bay	30	15012 30S11DC	75	120	C-7A	2.37	1.25	500	350				9D	Clear-Train Marker Control, BDTH
				17948 30S11DC/RS	75	120	C-9	2.37	1.25	2000	300					Clear-Train
	T8	Disc	30	15029 L30	120	24	C-8	17.75		1500	230					Clear-Lumiline
				15071 L30/W	120	24	C-8	17.75		1500	210					White-Lumiline
<b>30/70/100 WATTS</b>																
	A21	3C Med	30	41273 30/100 12PK	120	60	C-2R	5.25	3.87	1200	305				2B, 9C, 9J	Soft White. 3-Way
				70	120		CC-8				995					
				100	120						1300					
				30	48711 30/100RVL PQ1/12	120	60	C-2R	5.25	3.875	1200	220			2B, 9C, 9J	Reveal® 3-Way
				70	120						740					
				100	120						960					
<b>33 WATTS</b>																
	A19	Med	33	42626 33A19/5	130	120	C-9	3.87		2500	270					Clear-Changing Message Sign. Group Replacement
<b>34 WATTS</b>																
	A19	Med	34	12612 40A/34WM	120	120	CC-6	4.43	3.12	2000	380					Watt-Miser® - Diffuse Coating
				34	12620 40A/34WM	130	120	CC-6	4.43	3.12	2000	365				Watt-Miser® - Diffuse Coating (Ratings @120 volts)
				30	120					5400	270					
				34	13009 40A/34WMP/99	130	120	CC-6	4.43	3.12	2500	360				Watt-Miser® Plus-Diffuse Coating. Long Life, BB (Ratings @120 volts)
				30	120					6800	265					
<b>40 WATTS</b>																
	A15	Med	40	15199 40A15	120	120	C-9	3.5	2.37	1500	415					Clear-Appliance and Oven Service. Vibration Resistant
				15206 40A15 CARD 12PK	120	60	C-9	3.5	2.37	1500	415					Clear-Appliance and Oven Service. Vibration Resistant
				20451 40A15/CF CD2	120	60	C-9	3.5	2.37	1500	415					Clear-Ceiling Fan. Vibration Resistant
				20452 40A15/W/CF CD2	120	60	C-9	3.5	2.37	1500	355					White-Ceiling Fan. Vibration Resistant
				21188 40A15 CD/2	120	60	C-9	3.5	2.37	1500	415					Clear-Appliance and Oven Service. Vibration Resistant
				27451 40A15/F 120PK	120	120	C-9	3.5	2.37	1500	355					Frosted-Appliance and Oven Service. Vibration Resistant.
				27495 40A15/F/CD	120	60	C-9	3.5	2.37	1500	355					Frosted-Appliance and Oven Service. Vibration Resistant.
				45729 40A15/F CD2	120	60	C-9	3.5	2.37	1500	355					Frosted-Appliance and Oven Service. Vibration Resistant.
				46887 40A15CF/STG CD2	120	30		3.5	2.37	1500	400					Clear, Saf-T-Gard®, Ceiling Fan
				48696 40A15/CF/RVL CD2	120	30	C-9	3.5	2.375	1500	320					Reveal® Clear-Ceiling Fan. Vibration Resistant
				48697 40A15WCF/RVL CD2	120	30	C-9	3.5	2.375	1500	260					Reveal® White-Ceiling Fan. Vibration Resistant
				48706 40A15/RVL CD2	120	30	C-9	3.5	2.375	1500	320					Reveal® Clear-Appliance and Oven Service. Vibration Resistant.



# Incandescent Lamps

Shape	Base	Order Watts Code	Description	Volts	Case Qty.	Filament Design	MOL	LCL	Rated Life Hours	Lumens Initial	Color Temp. K	CBCP	Beam Spread	Footnotes	Additional Information
<b>INCANDESCENT LAMPS (CONTINUED)</b>															
<b>40 WATTS (CONTINUED)</b>															
	Med	40 12311 40A/CL 24PK		120	120	CC-6	4.43	3.12	1500	480					Crystal
		13255 40A 48PK		120	144	CC-6	4.43	3.12	1000	505					Standard
		13257 40A/W 48PK		120	144	CC-6	4.43	3.12	1000	490					Soft White
		48687 40A/RVL 48PK		120	144	CC-6	4.43	3.12	1000	360					Reveal® Soft White
		81869 40A/CL/RVL 24PK		120	120	CC-6	4.43	3.12	1000	370					Reveal® Clear
		40 34034 40A		130	120	CC-6	4.43	3.125	1000	495					Inside Frost
		36		120					2600	365					(Ratings @ 120 volts.)
40 34125 40A/CL		130	120	CC-6	4.43	3.12	1500	480					Clear		
36		120					4000	345					(Ratings @ 120 volts.)		
40 40323 40A/S-130V-24PK		130	24	C-9	4.43	3.12	3000	330					Survivor™ LongLife, I.F., Vibration		
36		120					5500	245					Resistant, BB (Ratings @ 120 volts.)		
	Med	40 15554 40A/TS		130	120	C-9	4.37	2.43	2000	380			9D	Clear-Traffic Signal, BDTH	
	Inter	40 25777 40R14/N/CD		120	30	CC-2V	2.68		1500					Indoor Reflector	
	Med	40 25776 40R14/CD		120	30	CC-2V	2.18		1500					Indoor Reflector	
	Med	40 25781 40R16/CD		120	30	CC-6	3.37		1500					Indoor Reflector	
	Inter	40 15734 40S11N1/F		120	120	C-9	2.31	1.62	500	440			2G, 5E	Frost	
		35156 40S11N1/CD 12PK		120	240	C-9	2.31	1.62	500	440			2G, 5E	Clear-12-Card Pack	
	Inter	40 15740 40T6 1/2/2		120	60	C-8	5.5		750	420				Clear-Refrigerator	
		15742 40T6 1/2/2F		120	60	C-8	5.5		750	420				Frost-Appliance	
	Disc	40 15804 L40		120	24	C-8	11.75		1500	325				Clear-Lumiline	
		15839 L40/W		120	12	C-8	11.75		1500	295				White-Lumiline	
	Med	40 15754 40T8		120	24	C-23	11.75		1000	430				Clear-Showcase	
	Med	40 15852 40T10		120	120	C-8	5.62		1000	420				Clear-Showcase	
		15892 40T10/F		120	120	C-8	5.62		1000	415				Frost-Showcase	
		15854 40T10		130	120	C-8	5.62		1000	420				Clear-Showcase	
<b>45 WATTS</b>															
	Med	45 20330 45R/FL/MI/1 6PK		120	30	CC-6	5.37		2000	485		300	↘ 2A, 5E, 9K	Reflector Flood	
		26804 45R30/FL/LL		120	30	CC-6	5.37		2500	450			↘ 2A, 5E, 9K	Reflector Flood-Long Life	
	Med	45 47682 45R20/SP/LLPQ1-6		120	30	CC-6	3.31		2500				↘ 2A, 5E, 9K	Long Life Indoor Spotlight	
<b>50 WATTS</b>															
	Med	50 16201 50A19/RS		75	120	C-9	3.87	2.5	1000	545			2A, 5A	I.F.-Rough Service, Train	
		14727 50A/RS/CVG 24PK		120	24	C-17A	3.87	2.56	1000	480			2A, 9L, 9M	Inside Frost-covRguard® Rough Service, BB, Teflon® Coated	
		33495 50A/RS 24PK		120	24	C-17A	3.87	2.56	1000	490			2A, 5E	I.F.-Rough Service	
		15995 50A		250	120	C-17A	3.87	2.56	1000	490					Inside Frost
		16147 50A/RS		250	120	C-22	3.87	2.56	1000	470			2A, 5E	I.F.-Rough Service	
		16317 50A19		300	120	C-17A	3.87	2.56	1000	460					Inside Frost
		16317 50A19		300	120	C-17A	3.87	2.56	1000	460					Inside Frost
	Med	50 10686 50A21/RV 6PK		12	48	C-6	4.87	3.43	1000	875			5A	Recreational Vehicle and Marine - Inside Frost	
		16366 50A21		12	120	C-6	4.87	3.43	1000	875			5A	Inside Frost	
		16385 50A21		30	120	C-9	4.87	3.43	1000	805			5A	I.F.-Train	
		16390 50A21		34	120	C-9	4.87	3.43	1000	805			5A	I.F.-Train	
	Med	50 44429 50ER30		120	24	CC-6	6.25		2000	525		690	2A, 2B, 5E	Elliptical Reflector, Light I.F.	
		47878 50ER30/PK		120	24	CC-6	6.25		2000	480			2A, 2B, 5E	Elliptical Reflector-Pink	
		11823 50ER30		130	24	CC-6	6.25		1500	525		690	2A, 2B, 5E	Elliptical Reflector, Light I.F.	
	3C Mog	50 16535 50/50P25/28		120	60	C-5	5.06	3.31	750	400				Clear-2-filament Marine Running Light, BB	



# Incandescent Lamps

Shape	Base	Order Watts	Code	Description	Volts	Case Qty.	Filament Design	MOL	LCL	Rated Life Hours	Lumens Initial	Color Temp. K	CBCP	Beam Spread	Footnotes	Additional Information
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## INCANDESCENT LAMPS (CONTINUED)

### 50 WATTS (CONTINUED)

	PAR36	Scrw	Term	50 11468	50PAR36WFL/4	12	12	C-6	2.75	4000	300		720			Wide Flood, Filament Shield		
				12892	50PAR36VNSP	12	12	C-6	2.75	2000	330		19000	6			Very Narrow Spot, Filament Shield	
				16540	50PAR36/NSP	12	12	C-6	2.75	2000	330		11000	10			Narrow Spot, Filament Shield	
				16541	50 PAR 36 WFL	12	12	C-6	2.75	2000	330		900				Wide Flood, Filament Shield	
				16542	50 PAR 36 VWFL	12	12	C-6	2.75	2000	330		600	55			Very Wide Flood, Filament Shield	
	R20	Med	50	14888	50R20/PL/1 6PK	120	30	CC-6	3.93	2000					2A, 5E, 9K	Reflector Plant Light		
				14896	50R20/1 6PK	120	30	CC-6	3.93	2000	410		510			2A, 5E, 9K	Reflector-I.F.	
				20368	50R20/TWIN	120	30	CC-6	3.93	2000	410		510			2A, 5E, 9K	Reflector Twin Pk.	
				22752	50R20/BLB 6PK	120	6	CC-6	3.93	1000						2A, 2F, 5B, 7A, 7C, 9K	Blacklight Reflector	
				46854	50R20/HP/1	120		CC-6	3.93	2000								Reflector, Hot Pink
				48691	50R20/RVL PQ1/6	120	30	CC-6	3.93	2000								Reveal®
				46851	50R20/1	130	30	CC-6	3.93	2000	410		510					Indoor Reflector - Light I.F.
				46852	50R20/6	130	30	C-9	3.93	6000	400							Reflector - Light I.F. - Flashing Message Sign
				46853	50R20/PK/1	130	30	CC-6	3.93	2000								Indoor Reflector - Pink
				48038	50R20/FUS	130	30	CC-6	3.93	2000								Reflector, Fusia
	T12	3C	Med	50	16726	50/50T12	115	24	C-5 C-9	5.31	3	750	400			Clear-2-filament Marine Running Light, BB		

### 50/100/150 WATTS

	A21	3C	Med	50	14057	50/150/SSW 12PK	120	60	CC-8	5.25	3.87	1200	650		2B, 9C, 9J	Super Soft White, 3-Way		
					100		CC-8				1550							
					150						2200							
				50	22886	50/150A/RL/SW6PK	120	30	CC-8	5.25	3.87	1000	495				2B, 9C, 9J	Soft White-Reader Light™ 3-Way
					100		120		C-2R				1425					
					150		120						1920					
				50	41280	50/150 12PK	120	60	CC-8	5.25	3.87	1200	615				2B, 9C, 9J	Soft White, 3-Way
					100		120		CC-8				1540					
					150		120						2155					
				50	41362	50/150 TWIN 6PK	120	30	CC-8	5.25	3.87	1200	615				2B, 9C, 9J	
					100		120		CC-8				1540					
					150		120						2155					
50	48712	50/150RVL PQ1/12	120	60	CC-8	5.25	3.875	1200	450				2B, 9C, 9J	Reveal® 3-Way				
	100		120		CC-8				1150									
	150		120						1600									

### 50/200/250 WATTS

	A21	3C	Med	50	19445	50/250/1 12PK	120	60	CC-8	5.25	3.87	1200	620		2B, 9C, 9J	Soft White, 3-Way
					200		120		CC-25				3335			
					250		120						3955			

### 52 WATTS










	A19	Med	52	12615	60A/52WWM	120	120	CC-8	4.43	3.12	1330	730			Watt-Miser®-Diffuse Coating	
				12623	60A/52WWM	130	120	CC-8	4.43	3.12	1000	710			Watt-Miser®-Diffuse Coating	
				46		120					2600	530			(Ratings @ 120 volts.)	
				13012	60A/52WMP/99	130	120	CC-8	4.43	3.12	2500	640				Watt-Miser® Plus, Diffuse Coating, LongLife, BB (Ratings @ 120 volts.)
				46		120					6800	480				
52	13555	60A/52WWM/CL	130	120	CC-8	4.43	3.12	1000	720						Watt-Miser®-Clear (Ratings @ 120 volts.)	
																2600

### 54 WATTS

	A21	Med	54	17960	60A21/54WWM/TS	120	C-11V	4.37	2.43	8000	530				Watt-Miser®, Clear-Traffic Signal, Burn BDTH, BB, Krypton
				17961	60A21/54WWM/TS	120	C-11V	4.37	2.43	8000	530				Watt-Miser®, Clear-Traffic Signal, Burn BDTH, BB, Krypton



# Incandescent Lamps

Shape	Base	Order Watts Code	Description	Volts	Case Qty.	Filament Design	MOL	LCL	Rated Life Hours	Lumens Initial	Color Temp. K	CBCP	Beam Spread	Footnotes	Additional Information
<b>INCANDESCENT LAMPS (CONTINUED)</b>															
<b>55 WATTS</b>															
	A19	Med	55 11904 55A/SW/MI 48PK	120	144	CC-8	4.43	3.12	1000	800					Soft White, Miser®
<b>60 WATTS</b>															
	A15	Med	60 14029 60A15/W/CF-CD2	120	60	C-9	3.5	2.37	1500	650					White, Ceiling-Fan, Vibration-Resistant
			17759 60A15/CF CD2	120	60	C-9	3.5	2.37	1500	650					Clear-Ceiling Fan and Appliance, Vibration Resistant
			46888 60A15CF/STGPO2/6	120	30	C-9	3.5	2.37	1500	650					Ceiling Fan Saf-T-Gard®
			48698 60A15/CF/RVL CD2	120	30	C-9	3.5	2.375	1500	480					Reveal® Clear-Ceiling Fan. Vibration Resistant
	A19	Med	60 14052 60A/SSW-24PK	120	120	CC-8	4.43	3.12	1000	840					Super Soft - Soft White
			14414 60A/CSVG 24PK	120	24	CC-6	4.43	3.12	1000	850					Inside Frost-covRguard®, Teflon® Coated
			16364 60A/BLB-CD	120	24	C-9	4.43		1000						Black Light; Carded
			20326 60A/SPK 24PK	120	120	CC-6	4.43	3.12	1000	675					Soft Pink
			22361 60A/COMM 24PK	120	24	CC-6	4.43	3.12	1000	855					Inside Frost
			22384 60A/GD 24PK	120	24	C-9	4.43	3.12	3000	635					Light I.F.-Garage Door, Vibration Resistant
			23097 60A/GD CD	120	24	C-9	4.43	3.12	3000	635					Light I.F. Garage Door, Vibration Resistant, Carded
			25905 60A/BLB 6PK	120	30	C-9	4.43		1000				2A, 2F, 5B, 7A, 7C, 9K		Black Light
			39322 60A/CL 24PK	120	120	CC-6	4.43	3.12	1000	870					Clear
			40324 60A/S-120V-24PK	120	24	C-9	4.43	3.12	3000	600					Survivor™ LongLife I.F., Vibration Resistant, BB
			41026 60A 48PK	120	144	CC-6	4.43	3.12	1000	865					Standard
			41028 60A/W 48PK	120	144	CC-6	4.43	3.12	1000	840					Soft White
			41284 60A/Y 24PK	120	120	CC-6	4.43	3.12	1000	550					Yellow Bug-Lite
			41285 60A/W/LL 24PK	120	120	CC-6	4.43	3.12	1500	820					Soft White-LongLife
			41624 60A/PL 6PK	120	30	CC-6	4.43	3.12	1000	630			5E		Plant Light
			46845 60A/W/STG PQ2/10	120	100	CC-6	4.43	3.12	1000	812					Soft White Saf-T-Gard®
			48688 60A/RVL 48PK	120	144	CC-8	4.43	3.12	1000	630					Reveal® Soft White
			81639 60A/CL/RVL 24PK	120	120	CC-6	4.43	3.12	1000	650					Reveal® Clear
	60		16783 60A	130	120	CC-6	4.43	3.12	1000	850					Inside Frost
	53			120					2600	640					(Ratings @ 120 volts.)
	60		40325 60A/S-130V-24PK	130	24	C-9	4.43	3.12	3000	600					Survivor™ LongLife I.F., Vibration Resistant, BB (Ratings @ 120 volts.)
	53			120					8300	460					
	A21	Med	60 17122 60A21	230	120	C-17A	4.37	2.75	1000	585					Inside Frost
			16997 60A21/B	120	120	C-9	4.87		1000				2B		Blue
			17027 60A21/R	120	120	C-9	4.87		1000				2B		Red
			17968 69A21/60WM/TS		120	C-11V	4.37	2.43	8000	610					Watt-Miser®-Clear, Traffic Signal, Burn BDTH, BB
			17969 69A21/60WM/TS		120	C-11V	4.37	2.43	8000	610					Watt-Miser®-Clear, Traffic Signal, Burn BDTH, BB
	R46	Scrw Term	60 17212 60PAR/2R	38	12	CC-2V	3.75		800						Red Lens-Train Warning
	T8	Disc	60 17226 L60	120	24	C-8	17.75		1500	480					Clear-Lumiline
			17266 L60/W	120	12	C-8	17.75		1500	450					White-Lumiline
	T10	Med	60 17292 60T10/64 24PK	120	192	C-8	5.62		1000	740					Clear-Showcase, BDTH
<b>65 WATTS</b>															
	BR30	Med	65 18011 65R/FL/MI/TWIN	120	6	CC-6	5.37		2000	755			2A, 5E, 9K		Reflector Flood Twin Pack
			20331 65R/FL/MI/1 6PK	120	30	CC-6	5.37		2000	755			2A, 5E, 9K		Reflector Flood
			20332 65R/SP/MI/1 6PK	120	30	CC-6	5.37		2000	755			2A, 5E, 9K		Reflector
			20996 65R30/PL/1 6PK	120	30	CC-6	5.37		2000				2A, 5E, 9K		Reflector -Plant Light, BB
			22714 65R30/FL/COMM 12PK	120	12	CC-6	5.37		2000	755			2A, 5E, 9K		Reflector Flood 12 Pack
			26641 65R30/FL/B	120	30	CC-6	5.37		2000				2A, 5E, 9K		Reflector - Blue

















# Incandescent Lamps

Shape	Base	Order Watts Code	Description	Volts	Case Qty.	Filament Design	MOL	LCL	Rated Life Hours	Lumens Initial	Color Temp. K	CBCP	Beam Spread	Footnotes	Additional Information		
<b>INCANDESCENT LAMPS (CONTINUED)</b>																	
<b>65 WATTS (CONTINUED)</b>																	
	BR30	Med	65 26642 65R30/FL/G	120	30	CC-6	5.37		2000					2A, 5E, 9K	Reflector - Green		
			26645 65R30/FL/Y	120	30	CC-6	5.37		2000						2A, 5E, 9K	Reflector - Yellow	
			26803 65R30/FL/PK	120	30	CC-6	5.37		2000						2A, 5E, 9K	Reflector - Pink	
			26805 65R30/FL/LL	120	30	CC-6	5.37		2500	725					2A, 5E, 9K	Long Life Reflector - Flood	
			26806 65R30/SP/LL	120	30	CC-6	5.37		2500	725					2A, 5E, 9K	Long Life Reflector	
			41837 65R30/SP/HP	120	30	CC-6	5.37		2000								Indoor Reflector, Hot Pink
			46858 65R30/FL/CVG	120	30	CC-6	5.37		2000								Reflector - covRguard® Teflon® Coated
			47723 65R30FL/STGPO1/6	120	30	CC-6	5.37		2000								Indoor Floodlight - Saf-T-Gard®
			48692 65R/FL/RVL PQ1/6	120	30	CC-6	5.37		2000								Reveal®
			46855 65R30/FL	130	30	CC-6	5.37		2000	725							Watt-Miser® - Reflector
46856 65R30/SP	130	30	CC-6	5.37		2000	725							Watt-Miser® - Reflector			
46857 65R30/FL/PK	130	30	CC-6	5.37		2000								Watt-Miser® - Reflector - Pink			
48039 65R30SP/FUS	130	30	CC-6	5.37		2000								Indoor Reflector, Fusia			
	BR40	Med	65 14016 65R40/FL/MI 6PK	120	30	CC-6	6.56		2000	730				2A, 2B, 5E, 9K	Reflector Flood		
			47683 65R40/FL/LLPQ1-6	120	30	CC-6	6.56		2500					2A, 2B, 5E, 9K	Long Life Reflector - Indoor Floodlight		
			46861 65R40/FL	130	30	CC-6	6.56		2000	700					2A, 2B, 5E, 9K	Watt-Miser® - Reflector - I.F.	
			87904 65R40FL/RVL-TP6	120	30	CC-6	6.56		2000						2A, 2B, 5E, 9K	Reveal® Reflector Flood	
	PAR38	Med Sid Pr	65 80314 75PAR/3FL/65WM	120	12	CC-6	4.3		2000	675	2675	1750	30	1A, 2A, 2B	Compact Flood		
			80320 75PAR/3SP/65WM	120	12	CC-6	4.3		2000	675	2675	5900	14	1A, 2A, 2B	Compact Reflector		
<b>67 WATTS</b>																	
	A19	Med	67 12617 75A/67WM	120	120	CC-8	4.43	3.12	1000	1030					Watt-Miser® - Diffuse Coating		
			67 12624 75A/67WM	130	120	CC-8	4.43	3.12	1000	1000					Watt-Miser® - Diffuse Coating		
			60	120					2600	755						(Ratings @ 120 volts.)	
			67 13018 75A/67WMP/99	130	120	CC-8	4.43	3.12	2500	910						Watt-Miser® Plus-Diffuse Coating	
	A21	Med	60	120				6800	685					(Ratings @ 120 volts.)			
			67 38551 67A21/TS	120	120	C-9	4.37	2.43	8000	635					Clear-Traffic Signal, BDTH		
			38553 67A21/TS	130	120	C-9	4.37	2.43	8000	635				Clear-Traffic Signal, BDTH			
<b>69 WATTS</b>																	
	A21	Med	69 17323 69A21/TS	120	120	C-9	4.37	2.43	8000	675					Clear-Traffic Signal, BDTH		
			17325 69A21/TS	130	120	C-9	4.37	2.43	8000	675					Clear-Traffic Signal, BDTH		
<b>70 WATTS</b>																	
	A19	Med	70 11905 70A/SW/MI 48PK	120	144	CC-8	4.43	3.12	750	1125					Soft White, Miser®		
<b>70/170/240 WATTS</b>																	
	A21	3C Med	70 15846 80/250A/RL/SW 6PK	120	30	C-2R	5.75	4.31	1000	800				2B, 2I, 9J	Soft White- Reader Light™ 3-Way		
			170	120	CC-8				1000	2800							
			240	120						1000	3600						
<b>75 WATTS</b>																	
	A19	Med	75 10428 75A/CL 24PK	120	120	CC-6	4.43	3.12	750	1200					Clear		
			22364 75A/COMM 24PK	120	24	CC-6	4.43	3.12	750	1180						Inside Frost	
			41030 75A 48PK	120	144	CC-6	4.43	3.12	750	1190						Standard	
			41032 75A/W 48PK	120	144	CC-6	4.43	3.12	750	1170						Soft White	
			41287 75A/W/LL 24PK	120	120	CC-6	4.43	3.12	1125	1125						Soft White-LongLife	
			48689 75A/RVL 48PK	120	144	CC-8	4.43	3.12	750	830						Reveal® Soft White	
			81870 75A/CL/RVL 24PK	120	120	CC-6	4.43	3.12	750	885						Reveal® Clear	
			75 17347 75A	130	120	CC-6	4.43	3.12	750	1170						Inside Frost	
			67	120						1950	885						(Ratings @ 120 volts.)
			75 40328 75A/S-130V-24PK	130	24	C-9	4.43	3.12	3000	815							Survivor™ LongLife I.F. Vibration Resistant (Ratings @ 120 volts.)
67	120						8300	615									



# Incandescent Lamps

Shape	Base	Order Watts Code	Description	Volts	Case Qty.	Filament Design	MOL	LCL	Rated Life Hours	Lumens Initial	Color Temp. K	CBCP	Beam Spread	Footnotes	Additional Information	
<b>INCANDESCENT LAMPS (CONTINUED)</b>																
<b>75 WATTS (CONTINUED)</b>																
	Med	75 17482 75A21		12	120	C-6	5.25	3.81	1000	1500				5A	Inside Frost	
		18274 75A/RS 12PK		120	60	C-17	5.25	3.81	1000	750				2A, 5E	I.F. Rough Service	
		46895 75A/RS/STG PQ1/6		120	30	C-17	5.25	3.81	1000	740					Rough Service, Saf-T-Gard®	
		47263 75A/RS/CVG-6PK		120	30	C-17	5.25	3.81	1000	740					Inside Frost - covRguard® Rough Service, Teflon® Coated	
	Med	75 17527 75A/RS 60PK		130	60	C-17	5.25	3.81	1000	740				2A, 5E	I.F. Rough Service	
		67		120					2600	560				2A, 5E	(Ratings @ 120 volts)	
	Med Sid Pr	75 37044 75ER30		120	24	CC-6	6.25		2000	850		1200		2A, 2B, 5E	ER-Elliptical Reflector, Light I.F.	
		42850 75ER30		130	24	CC-6	6.25		2000	850		1200		2A, 2B, 5E	ER-Elliptical Reflector, Light I.F.	
	3 Prong	75 80319 75PAR/3SP/MINE		120	12	CC-6	4.3		2000	765	2725			1A, 2A, 2B, 9N	Mine Reflector	
		80316 75PAR/3FL/MINE		120	12	CC-6	4.3		2000	765	2725	1750	33	1A, 2A, 2B, 9N	Mine Flood	
	Med	75 36473 75PAR46/TS		120	12	CC-6	3.87		6000	700					Traffic Signal	
	Med	75 11320 75R20 6PK		120	60	CC-6	3.93		2000	650				2A, 5E, 9K	Reflector , I.F.	
	Med	75 22748 75R30/BLB 6PK		120	6	C-9	5.37		1000					2A, 2F, 5B, 7A, 7C, 9K	Reflector Black Light	
		75 17749 75T10/1		120	24	C-23	11.87		1000	800					Frost-Showcase	
		75 17754 75T10/45		120	24	C-23	11.87		1000	800					Clear-Showcase	
<b>85 WATTS</b>																
	Med Skirt	85 20945 85PAR/FL/BG 6PK		120	6	CC-6	5.31		2000					1A, 2A, 2B	Yellow-Bug-Lite, BB	
		13465 100PAR/B/85WM 6PK		120	6	CC-6	5.31		2000					↗	1A, 2A, 2B	Powder Coated - Blue, BB
		13472 100PAR/R/85WM 6PK		120	6	CC-6	5.31		2000					↗	1A, 2A, 2B	Powder Coated - Red, BB
		13473 100PAR/Y/85WM 6PK		120	6	CC-6	5.31		2000					↗	1A, 2A, 2B	Powder Coated - Yellow, BB
		13474 100PAR/G/85WM 6PK		120	6	CC-6	5.31		2000					↗	1A, 2A, 2B	Powder Coated - Green, BB
<b>88 WATTS</b>																
	Scrw Term	88 39817 88PAR36/FL		75	12	CC-6	2.75		1500	810					Projector-Train Warning	
<b>90 WATTS</b>																
	Med	90 12618 100A/90WVM		120	120	CC-8	4.43	3.12	1000	1465				↗	Watt-Miser®-Diffuse Coating	
		90 12625 100A/90WVM		130	120	CC-8	4.43	3.12	1000	1440				↗	Watt-Miser®-Diffuse Coating	
		80		120					2600	1095					(Ratings @ 120 volts.)	
	Med	90 13023 100A/90WMP/99		130	120	CC-8	4.43	3.12	2500	1260				↗	Watt-Miser® Plus-Diffuse Coating.	
		80		120					6800	960					LongLife, (Ratings @ 120 volts.)	
	Med	90 17972 100A21/90WVM/TS		125	120	C-11V	4.37	2.43	8000	1040				↗	Watt-Miser®-Clear. Traffic Signal. Burn BDTH, Krypton	
		90 46870 90R40/FL		130	30	CC-6	6.563		2000	1050				↗	Watt-Miser® - Reflector - I.F.	
		14017 90R40/FL/MI 6PK		120	30	CC-6	6.56		2000	1100				↗	2A, 2B, 5E, 9K Reflector Flood	
<b>95 WATTS</b>																
	Med	95 11906 95A/SW/MI 48PK		120	144	CC-8	4.43	3.12	750	1610				↗	Soft White Miser®	
<b>100 WATTS</b>																
	Med	100 14056 100A/SSW-24PK		120	120	CC-8	4.43	3.12	750	1690					Super Soft - Soft White	
		17995 100A/LHT/IF		120	120	CC-8	4.43	3.12	750	1710					Inside Frost, Left-Hand Medium Base	
		20328 100A/SPK 24PK		120	120	CC-8	4.43	3.12	1000	1330				2B	Soft Pink	
		22366 100A/COMM 24PK		120	24	CC-8	4.43	3.12	750	1690					Inside Frost	
		39321 100A/CL 24PK		120	120	CC-8	4.43	3.12	750	1730					Clear	
		40329 100A/S-120V-24PK		120	24	C-9	4.43	3.12	3000	1190					2B	Survivor™-I.F., Long Life, Vibration Resistant BB
		41034 100A 48PK		120	144	CC-8	4.43	3.12	750	1710					Standard	
		41036 100A/W 48PK		120	144	CC-8	4.43	3.12	750	1690					Soft White	
		41289 100A/W/LL 24PK		120	120	CC-8	4.43	3.12	1125	1600					Soft White-Long Life	



# Incandescent Lamps

Shape	Base	Order Watts Code	Description	Volts	Case Qty.	Filament Design	MOL	LCL	Rated Life Hours	Lumens Initial	Color Temp. K	CBCP	Beam Spread	Footnotes	Additional Information		
<b>INCANDESCENT LAMPS (CONTINUED)</b>																	
<b>100 WATTS (CONTINUED)</b>																	
	Med	100 41291 100A/Y 24PK		120	120	CC-8	4.43	3.12	1000	900				2B	Bug-Lite		
		46846 100A/W/STGPQ2/10		120	100	CC-8	4.43	3.12	750	1624						Soft White Saf-T-Gard®	
		48690 100A/RVL 48PK		120	144	CC-8	4.43	3.12	750	1260						Reveal® Soft White	
		81871 100A/CL/RVL 24PK		120	120	CC-8	4.43	3.12	750	1300						Reveal® Clear	
		100 17933 100A		130	120	CC-8	4.43	3.12	750	1680						Inside Frost	
		89		120				1950	1275						(Ratings @ 120 volts.)		
		100 40330 100A/S-130V-24PK		130	24	C-9	4.43	3.12	3000	1170				2B	Survivor™-I.F., Long Life, Vibration Resistant, BB (Ratings @ 120 volts.)		
		89		120				8300	880					2B			
	Med	100 17525 100A21/SBIF 60PK		120	60	CC-6	5.25	3.87	1000	1400				2B	I.F. Silvered Bowl		
		18275 100A/RS 12PK-5		120	60	C-17	5.25	3.81	1000	1160				2A, 5E	I.F. Rough Service		
		47261 100A/RS/STGPQ1/6		120	30	C-17	5.25	3.81	1000	1230						Rough Service - Saf-T-Gard®	
		47262 100A/RS/CVG-6PK		120	30	C-17	5.25	3.81	1000	1230						I.F.-covrGuard® Rough Service, Teflon® Coated	
		18365 100A21/TS		130	120	C-9	4.37	2.43	3000	1280						Clear-Traffic Signal. Rated Watts: 98. BDTH	
		100 17522 100A/RS 60PK		130	60	C-17	5.25	3.81	1000	1060					2A, 5E	I.F. Rough Service	
				89		120				2600	800						(Ratings @ 120 volts.)
		100 18221 100A21		130	60	CC-6	5.25	3.87	750	1690						Inside Frost	
				89		120				1950	1285						(Ratings @ 120 volts.)
		100 21315 100A21/99 60PK		130	60	CC-6	5.25	3.87	2500	1420						Diffuse Coating-Extended Service	
				89		120				6800	1080						(Ratings @ 120 volts.)
100 17515 100A 60PK		230	60	C-7A	5.25	3.81	750	1280						Inside Frost			
		17516 100A 60PK		250	60	C-7A	5.25	3.81	750	1200					Inside Frost		
		17524 100A/RS 60PK		250	60	C-17	5.25	3.81	1000	960				2A, 5E	I.F. Rough Service		
		17517 100A 60PK		277	60	C-7A	5.25	3.81	750	1250					Inside Frost		
	Med	100 18512 100A23		12	120	C-6	5.93	4.43	1000	1750				5A	Inside Frost		
		17904 100A		34	120	C-9	5.93	4.43	1000	2160				5A	I.F.-Train		
		18449 100A23/IF		120	120	CC-6	5.93	4.43	750	1600						Inside Frost	
		18542 100A23/20		120	120	CC-6	5.93	4.43	1000	1530						Clear-Commercial Oven	
		100 33456 100A23/VS		130	24	C-9	5.93	4.43	1000	1340						I.F.-Vibration Service	
		89		120				2600	1020						(Ratings @ 120 volts.)		
	DC Bay	100 18721 100G16.5/29DC		120	60	CC-13	3	1.37	120	1660				5E, 9D	Clear Reflector. BDTH, BB		
	Med Sid Pr	100 80323 100PAR38/FL		12	12	C-6	4.3		1000	1400		2200	60	1A, 2A, 2B, 9N	PAR-Mine Flood		
	Med	100 39503 100R30/CL		12	24	C-6	5.37		2000	1200				2B, 5A, 5E	Reflector-Clear, Swimming Pool, BB		
<b>100/200/300 WATTS</b>																	
	3C Mog	100 41459 100/300 6PK		120	30	CC-6	6.68	4.43	1200	1320				2B, 9C, 9J	Soft White - 3-Way		
		200		120		CC-6			1500	3300							
		100		120					4620								
<b>110 WATTS</b>																	
	Med	110 18980 110R30/FL/RS		120	24									2A, 5E, 9K	Reflector Flood. I.F. Rough Service, BB		
		46859 110R30/FL/RS/1		120	30	C-17	5.375		2000	1080						Reflector Flood. I.F. Rough Service	
<b>116 WATTS</b>																	
	Med	116 19008 116A21/TS		120	120	C-9	4.37	2.43	8000	1280					Clear-Traffic Signal, BDTH		
		19009 116A21/TS		125	120	C-9	4.37	2.43	8000	1280						Clear-Traffic Signal, BDTH	
		19010 116A21/TS		130	120	C-9	4.37	2.43	8000	1280						Clear-Traffic Signal, BDTH	
<b>120 WATTS</b>																	
	Med	120 16241 120R40/FL-RVL		120	30	CC-6	6.56		2000						Indoor Floodlight: Reveal		
		46875 120R40/FL/B		120	30	CC-6	6.563		2000			1450				Watt-Miser® - Reflector - Blue	






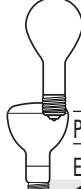





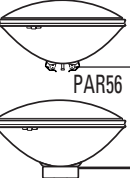
# Incandescent Lamps

Shape	Base	Order Watts Code	Description	Volts	Case Qty.	Filament Design	MOL	LCL	Rated Life Hours	Lumens Initial	Color Temp. K	CBCP	Beam Spread	Footnotes	Additional Information	
<b>INCANDESCENT LAMPS (CONTINUED)</b>																
<b>120 WATTS (CONTINUED)</b>																
	Med	120 46876	120R40/FL/PK	120	30	CC-6	6.563		2000				1450		Watt-Miser® - Reflector - Pink	
		20333	120R/FL/MI/1 6PK	120	30	CC-6	6.56		2000	1600				2A, 2B, 5E, 9K	Miser®-Reflector Flood	
		20334	120R/SP/MI/1 6PK	120	30	CC-6	6.56		2000	1600				2A, 2B, 5E, 9K	Reflector	
		20824	120R/FLMI/TWIN	120	3	CC-6	6.56		2000	1600				2A, 2B, 5E, 9K	Reflector Flood - Twin Pack	
		21000	120R40/PL-1 6PK	120	30	CC-6	6.56		2000					2A, 2B, 5E, 9K	Reflector Plant Light, BB	
		22715	120R/FL/COMM 6PK	120	30	CC-6	6.56		2000	1600				2A, 2B, 5E, 9K	Watt-Miser® Reflector Flood IF	
		47684	120R40/FLLLPQ1-6	120	30	CC-6	6.56		2500	1300						Indoor Floodlight - Long Life
		46871	120R40/FL	130	30	CC-6	6.563		2000	1600				1450		Watt-Miser® - Reflector - I.F.
		46872	120R40/SP	130	30	CC-6	6.563		2000							Reflector
		46877	120R/40/FL/COVG	130	30	CC-6	6.56		1700	1550				1200		Reflector - covRguard® Teflon® Coated
47725	120R40FL/STG PQ6	130	30	CC-6	6.56		1700	1550				1200		Reflector - Saf-T-Gard® Teflon® Coated		
ER39	Med	120 41607	120ER39	120	24	CC-6	7.37		2000	1425			1700	2A, 2B, 5E	ER-Elliptical Reflector, Light I.F.	
	Med Sid Pr	120 80313	150PAR/3FL/120WWM	120	12	CC-6	4.3		2000	1370	2725	3600	30 ↗	1A, 2A, 2B, 9N	Watt-Miser®-Flood	
		80322	150PAR/3SP/120WWM	120	12	CC-6	4.3		2000	1370	2725	9200	18 ↗	1A, 2A, 2B, 9N	Watt-Miser® Reflector	
<b>135 WATTS</b>																
	Med	135 17973	150A21/135WWM/TS	120	C-11V		4.68	3	7000	1750				↗	Watt-Miser®-Clear, Traffic Signal, Burn BDTH, BB, Krypton	
		17974	150A21/135WWM/TS	120	C-11V		4.68	3	7000	1750					↗	Watt-Miser®-Clear, Traffic Signal, Burn BDTH, BB, Krypton
		12619	150A/135WWM	120	60	CC-8	5.37	4.06	1000	2380					↗	Watt-Miser®-Diffuse Coating
		135 12627	150A/135WWM	130	60	CC-8	5.37	4.06	1000	2340					↗	Watt-Miser®-Diffuse Coating
		120		120					2600	1790						(Ratings @ 120 volts.)
		135 13025	150A/135WMP/99	130	60	CC-8	5.37	4.06	2500	2060					↗	Watt-Miser®-Plus-Diffuse Coating, LongLife (Ratings @ 120 volts.)
120		120					6800	1580								
<b>150 WATTS</b>																
	Med	150 10429	150A/W 12PK	120	12	CC-8	5.37	4.06	750	2780					Soft White	
		16703	150A/RVL	120	30	CC-8	5.37	4.06	750	1950					Reveal®	
		22881	150A/RL/SW 6PK	120	30	CC-8	5.75	4.31	750	2650					Soft White-Reader Light™	
		22889	150A/GAR 12PK	120	12	CC-8	5.37	4.16	1125	2600					I.F. - Garage	
		41294	150A 24PK	120	24	CC-8	5.37	4.06	750	2850					Standard	
		150 15818	150A/S	130	60	C-9	4.93	3.37	2000	1925				2B	Survivor™-I.F. Long Life. Vibration Resistant, BB (Ratings @ 120 volts.)	
		133		120					5500	1470						
		150 17625	150A21/RS	130	60	C-17	5.25	3.81	1000	2065				2A, 5E	I.F.-Rough Service (Ratings @ 120 volts.)	
		133		120					2600	1580						
		150 25929	150A21/99/IF	130	60	CC-8	5.37	4.06	2500	2310					I.F.-Extended Service, BB (Ratings @ 120 volts.)	
133		120					6800	1765								
	Med	150 33009	150A	130	60	CC-8	5.37	4.06	750	2800					Inside Frost (Ratings @ 120 volts.)	
		133		120				1950	2140							
	Med Sid Pr	150 19334	150P25/2SB	120	60	C-7A	4.75		200	2100					Clear Reflector. Silvered Bowl. Hard glass button, BB	
		19372	150P25/10	120	60	C-7A	4.75	3	200	2100					Light I.F.-Spot. Hard glass button, BB	
		80321	150PAR/3SP/MINE	120	12	CC-6	4.3		2000	1740			12000	16	1A, 2A, 2B, 9N	Mine Reflector
	Med Sid Pr	80315	150PAR/3FL/MINE	120	12	CC-6	4.3		2000	1740	2775	3100	36	1A, 2A, 2B, 9N	Mine-Flood	
		19489	150PAR/3SP/MINE	130	12	CC-6	4.3		2000	1740			12000	16	1A, 2A, 2B, 9N	Mine Reflector
		80317	150PAR/3FL/MINE	130	12	CC-6	4.3		2000	1740			3100	36	1A, 2A, 2B, 9N	Mine-Flood
		150 19464	150PAR/FL/A	120	12	CC-6	5.31		2000					1A, 2A, 2B	Flood. Dichro Amber	
	Med Skirt	19465	150PAR/FL/B	120	12	CC-6	5.31		2000				1A, 2A, 2B	Flood. Dichro Blue		
		19467	150PAR/FL/G	120	12	CC-6	5.31		2000				1A, 2A, 2B	Flood. Dichro Green		
		19468	150PAR/FL/R	120	12	CC-6	5.31		2000				1A, 2A, 2B	Flood. Dichro Red		





# Incandescent Lamps

Shape	Base	Order Watts Code	Description	Volts	Case Qty.	Filament Design	MOL	LCL	Rated Life Hours	Lumens Initial	Color Temp. K	CBCP	Beam Spread	Footnotes	Additional Information	
<b>INCANDESCENT LAMPS (CONTINUED)</b>																
<b>150 WATTS (CONTINUED)</b>																
	Med Skirt	150 26370	150PAR/FL/CVG	120	12	CC-6	5.31		2000	1700				1A, 2A, 2B, 9L, 9M	covRguard® Flood, BB, Teflon® Coated	
			26371 150PAR/SP/CVG	120	12	CC-6	5.31		2000	1700						covRguard® Spot, BB, Teflon® Coated
			48037 150PAR/FL/STGP06	120	6	CC-6	5.31		2000	1700						Saf-T-Gard® Flood, BB, Teflon® Coated
	3 Prong Scrw Term	150 35327	150PAR46/TS	115	12	CC-6	4		6000	1750					Traffic Signal - Burn Horiz.	
		150 19512	150PAR46/1	32	12	CC-8	3.75		800	1950		100000			Mine Locomotive Headlight	
			19517 150PAR46	125	12	C-13	3.75		1000	1250						Mine Locomotive Headlight
	Med	150 14635	150PS25/CVG	120	60	C-9	6.93		1000	2630				1A, 2A, 5B, 5C, 9N	Medium Flood	
			14716 150/RS/CVG	120	60	C-17	6.93	5.18	1000	2120				2A, 9L, 9M	Inside Frost-covRguard® Rough Service, BB, Teflon® Coated	
			19597 150/SBIF	120	60	C-9	6.93	5.18	1000	2370					I.F.-Silver Bowl	
	Med	150 19530	150/IF	130	60	C-9	6.93	5.18	750	2520					Inside Frost	
		133		120					1950	1930					(Ratings @ 120 volts.) Vibration Resistant	
		150 19618	150/RS	130	60	C-17	6.93	5.18	1000	2160				2A, 5E	I.F.-Rough Service	
		133		120					2600	1650					(Ratings @ 120 volts.)	
		150 19658	150/99/IF	130	60	C-9	6.93	5.18	2500	2200					I.F.-Extended Service	
		133		120					6800	1680					(Ratings @ 120 volts.) Vibration Resistant	
		150 19668	150/99CL	130	60	C-9	6.93	5.18	2500	2200					Clear-Extended Service	
133		120					6800	1680					(Ratings @ 120 volts.) Vibration Resistant			
	Med	150 33465	150/VS	130	24	C-9	6.93	5.18	1000	2270					I.F.-Vibration Service	
		133		120					2600	1735					(Ratings @ 120 volts.)	
	Med	150 19756	150PS30	230	60	C-9	8.06	6	750	1950					Clear-Reflector. Silvered Neck	
		120 43231	120ER40	130	24	CC-6	7.37		2000	1425		1700		2A, 2B, 5E	ER-Elliptical Reflector, Light I.F.	
<b>175 WATTS</b>																
	Med Skirt	175 13643	175PAR38/HEAT	120	12	CC-6	5.31	4.31	5000	3100				1A, 2A, 2B, 3B	Infrared-Clear	
<b>200 WATTS</b>																
	Med	200 11585	200A/W-1 12PK	120	12	CC-8	5.37	4.06	750	3910					Soft White	
			16069 200A/CL-1 12PK	120	12	CC-8	5.37	4.06	750	3980					Crystal	
			25925 200A21/IF/12PK	120	12	CC-8	5.37	4.06	750	3920					Inside Frost	
		200 25930	200A21/IF 130	130	60	CC-8	5.37	4.06	750	3850					Inside Frost	
		177		120					1950	2965					(Ratings @ 120 volts.)	
		200 25932	200A21/CL	130	60	CC-8	5.37	4.06	750	3850					Clear	
		177		120					1950	2965					(Ratings @ 120 volts.)	
200 25936	200A21/99/IF	130	60	CC-8	5.37	4.06	2500	3250					I.F.-Extended Service			
177		120					6800	2500					(Ratings @ 120 volts.)			
200 25937	200A21/99/CL 130	130	60	CC-8	5.37	4.06	2500	3250					Clear-Extended Service			
177		120					6800	2500					(Ratings @ 120 volts.)			
	Med Sid Pr	200 20115	200PAR46/3NSP	120	12	CC-13	4		2000	2270	2750	31000		1A, 2A, 5B, 5C, 9N	Narrow Reflector	
			20138 200PAR46/3MFL	120	12	CC-13	4		2000	2270	2750	11500		1A, 2A, 5B, 5C, 9N	Medium Flood	
			20117 200PAR46/3NSP	130	12	CC-13	4		2000	2270	2750	31000		1A, 2A, 5B, 5C, 9N	Narrow Reflector	
			20140 200PAR46/3MFL	130	12	CC-13	4		2000	2270	2750	11500		1A, 2A, 5B, 5C, 9N	Medium Flood	
	Scrw Term	200 20122	200PAR	30	12	CC-8	4.5		350			230000			Locomotive Headlight	
		200 49889	200PAR56/MFL	120	12	CC-13	5		2000	2270	2750	15000		1A, 2A, 5B, 5C, 9N	Medium Flood	



Shape	Base	Order Watts	Code	Description	Volts	Case Qty.	Filament Design	MOL	LCL	Rated Life Hours	Lumens Initial	Color Temp. K	CBCP	Beam Spread	Footnotes	Additional Information	
<b>INCANDESCENT LAMPS (CONTINUED)</b>																	
<b>200 WATTS (CONTINUED)</b>																	
	PS30	Med	200	14636	200PS30/CVG	120	60	C-9	8.06	6	1000	3480			2A, 9L, 9M	Inside Frost-covRguard® , BB, Teflon® Coated	
				14637	200PS30/RS/CVG	120	60	C-9	8.06	6	1000	3330			2A, 9L, 9M	Inside Frost-covRguard® Rough Service, BB, Teflon® Coated	
				20316	200/SBIF	120	60	C-9	8.06	6	1000	3320				I.F.-Silvered Bowl	
			200	20172	200	177	120	60	C-9	8.06	6	750	3540				Clear (Ratings @ 120 volts.)
			200	20252	200/IF	177	120	60	C-9	8.06	6	750	3540				Inside Frost (Ratings @ 120 volts.)
			200	20354	200/99IF	177	120	60	C-9	8.06	6	2500	3000				I.F.-Extended Service, BB (Ratings @ 120 volts.)
			200	20403	200PS30/24	177	120	60	C-9	8.06	6	1000	3240			2A, 5E	Clear-Rough Service (Ratings @ 120 volts.)
			200	33468	200PS30/23 24PK	177	120	24	C-9	8.06	6	1000	3240			2A, 5E	I.F.-Rough Service (Ratings @ 120 volts.)
			200	20192	200		250	60	C-9	8.06	6	1000	2980				Clear
<b>240 WATTS</b>																	
	A21	Med	240	15843	240A/RL/SW 6PK	120	30	CC-8	5.75	4.31	750	4300				Soft White-Reader Light™	
	PAR56	Scrw Term	240	20575	240PAR56/VNSP	12	12	C-6	4.5		2000		2800	140000	1A, 2A, 5B, 5C, 9N	Very Narrow Reflector	
				20576	240PAR56/MFL	12	12	C-6	4.5		2000		2800	46000	1A, 2A, 5B, 5C, 9N	Medium Flood	
				20577	240PAR56/WFL	12	12	C-6	4.5		2000		2800	13000	1A, 2A, 5B, 5C, 9N	Wide Flood	
<b>250 WATTS</b>																	
	R40	Med	250	37770	250R40/1 6PK	120	30	C-9	6.56		5000	2200			2A, 2B, 3B, 5E, 6A	Reflector-Warm Up Infrared Heat Lamp - Clear Face	
				37771	250R40/10 6PK	120	30	C-9	6.56		5000				2A, 2B, 3B, 5E, 6A	Reflector-Chill Chaser Infrared Heat Lamp. Red, HRG	
				46881	250R40/1/CVG	120	30	C-9	6.56		5000	2150				Clear-covRguard® Teflon® Coated. Food Warming, Reflector-Infrared	
		Med Skirt	250	20724	250R40/4	120	24	C-9	7.43		5000				2A, 2B, 3B, 5E, 6A	Reflector Infrared Industrial-Light I.F., BB	
<b>300 WATTS</b>																	
	PAR56	Scrw Term	300	23427	300PAR56/WFL	12	12	C-6	4.5		1000	6000			2B, 9F, 9N	PAR-Wide Flood. Swimming	
	PAR56	Mog End Pr300	300	20803	300PAR56/NSP	120	12	CC-13	5		2000	3840	2750	68000	1A, 2A, 5B, 5C, 9N	Narrow Reflector	
				20836	300PAR56/MFL	120	12	CC-13	5		2000	3840	2750	24000	1A, 2A, 5B, 5C, 9N	Medium Flood	
				20849	300PAR56/WFL	120	12	CC-13	5		2000	3840	2750	11000	1A, 2A, 5B, 5C, 9N	Wide Flood	
				20838	300PAR56/MFL	130	12	CC-13	5		2000	3840	2750	24000	1A, 2A, 5B, 5C, 9N	Medium Flood	
				20851	300PAR56/WFL	130	12	CC-13	5		2000	3840	2750	11000	1A, 2A, 5B, 5C, 9N	Wide Flood	
	PS25	Med	300	20861	300M	120	60	CC-8	6.93	5.18	750	6200				Clear	
				25919	300M/IF 6PK	120	30	CC-8	6.93	5.18	750	6200				Inside Frost	
			300	20863	300M	266	120	60	CC-8	6.93	5.18	750	6120				Clear (Ratings @ 120 volts.)
			300	20917	300M/IF	266	120	60	CC-8	6.93	5.18	750	6120				Inside Frost (Ratings @ 120 volts.)
							120					1950	4170				





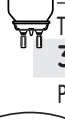




# Incandescent Lamps

Shape	Base	Order Watts Code	Description	Volts	Case Qty.	Filament Design	MOL	LCL	Rated Life Hours	Lumens Initial	Color Temp. K	CBCP	Beam Spread	Footnotes	Additional Information
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## INCANDESCENT LAMPS (CONTINUED)


### 300 WATTS (CONTINUED)

	Med	300 20887 300M/99		130	60	C-9	8.06	6	2500	5110					Clear-Extended Service (Ratings @ 120 volts.)	
		266		120					6800	3935						
	Mog	300 20894 300M/99IF		130	60	C-9	8.06	6	2500	5110					I.F.-Extended Service (Ratings @ 120 volts.)	
		266		120					6800	3935						
	Med	300 21025 300		130	24	C-9	9.37	7	1000	5820					Clear	
		21079 300/IF		130	24	C-9	9.37	7	1000	5820					Inside Frost	
		21139 300/SBIF		130	24	C-9	9.37	7	1000	5410					I.F.-Silver Bowl. Burn base up	
		21167 300/99		130	24	C-9	9.37	7	2500	5190					Clear-Extended Service	
		21177 300/99IF		130	24	C-9	9.37	7	2500	5190					I.F.-Extended Service	
	Med	300 21197 300R/SP		120	24	CC-2V	6.56		2000	3700		9000	2A, 2B, 5B, 9E		Reflector -Light I.F. HORIZ	
		21213 300R/FL		120	24	CC-2V	6.56		2000	3700		2500	2A, 2B, 5B, 9E		Reflector Flood-I.F. HORIZ	
		21229 300R/FL/1		120	24	CC-2V	6.75		2000	3700		1900	2A, 2B, 5B, 9E		Reflector Flood-I.F. BB, HRG	
	Mog	300 21215 300R/FL		130	24	CC-2V	6.56		2000	3465		2500	2A, 2B, 5B, 9E		Reflector Flood-I.F. HORIZ (Ratings @ 120 volts.)	
		266		120					5400	2670						
		300 21254 300R/3FL		120	24	CC-2V	7.25		2000	3750					2A, 2B, 5B, 9E	Reflector Flood-I.F. BB
	Med	300 21256 300R/3FL		130	24	CC-2V	7.25		2000	3750					2A, 2B, 5B, 9E	Reflector Flood-I.F. BB
		21263 300R/3FL		250	24	C-7A	7.25		2000	3300					2A, 2B, 5B, 9E	Reflector Flood-I.F. BB
	Med BiPost	300 21280 300T20/1		120	12	C-13	6.5	4	1000	5500			8A, 9G		Inside Frost, HRG	


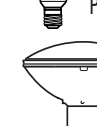
### 350 WATTS

	Scrw Term	350 19866 350PAR56/SP		75	12	CC-8	4.5		500	6200			1A, 2A, 5B, 5C, 9N		Ditch Light-Locomotive
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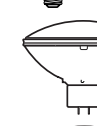

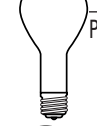
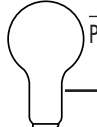

### 375 WATTS

	Med Skirt	375 21331 375R40		115	24	C-9	7.37		5000				2A, 2B, 3B, 5E, 6A		Reflector Infrared Industrial-Light I.F., BB
		21334 375R40/1		115	24	C-9	7.5		5000				2A, 2B, 3B, 5E, 6A		Reflector Infrared Industrial-Clear Face, HRG, BB

### 400 WATTS

	Med	400 21363 400G/FL		120	60	C-5	5.12	3	800	6800			2A, 2B, 2D, 5B		Clear Flood, BDTH, BB
	Med	400 17542 400R40/FL		120	24	CC-2V	6.75		2000	5000			5B, 5C, 9B		Reflector Flood. Swimming Pool, BB, HRG

### 500 WATTS

	MogEndPr	500 39411 500PAR64/MFL		230	12	CC-13	6		2000	5500	2700		1A, 2A, 5B, 5C, 9N		Medium Flood
		39414 500PAR64/WFL		230	12	CC-13	6		2000	5500	2700		1A, 2A, 5B, 5C, 9N		Wide Flood
	ExMogEndPr	500 39406 500PAR64/NSP		120	12	CC-13	6		2000	6500	2800	110000	1A, 2A, 5B, 5C, 9N		Narrow Reflector
	Mog	500 39409 500PAR64/MFL		120	12	CC-13	6		2000	6500	2800	37000	1A, 2A, 5B, 5C, 9N		Medium Flood
		39412 500PAR64/WFL		120	12	CC-13	6		2000	6500	2800	13000	1A, 2A, 5B, 5C, 9N		Wide Flood
	Mog	500 21530 500		120	24	CC-8	9.37	7	1000	10850					Clear, BB
		21532 500		130	24	CC-8	9.37	7	1000	10850					Clear, BB
		21581 500/IF		130	24	CC-8	9.37	7	1000	10850					Inside Frost, BB
		21651 500/99IF		130	24	C-9	9.75	7	2000	9070					I.F.-Extended Service, BB
	Mog	500 21643 500/99		130	24	C-9	9.75	7	2000	9070					Clear-Extended Service, BB
		21687 500PS40		120	24	C-9	9.75	7	1000	9900					Clear, BB



# Incandescent Lamps

Shape	Base	Order Watts Code	Description	Volts	Case Qty.	Filament Design	MOL	LCL	Rated Life Hours	Lumens Initial	Color Temp. K	CBCP	Beam Spread	Footnotes	Additional Information
<b>INCANDESCENT LAMPS (CONTINUED)</b>															
<b>500 WATTS (CONTINUED)</b>															
R40	Mog	500 21734 500R/3FL		120	24	CC-2V	7.25		2000	6500				2A, 2B, 5B, 9E	Reflector Flood-I.F. BB, HRG
		21736 500R/3FL		130	24	CC-2V	7.25		2000	6500				2A, 2B, 5B, 9E	Reflector Flood-I.F. BB, HRG
R52	Mog	500 21761 500R52		130	12	C-7A	11.75		2000	7600					Reflector High Bay-Light I.F. BB
T20	Med BiPost	500 21872 500T20/50		130	12	C-13	6.5	4	1000	9800				8A, 9G	I.F. HRG
<b>750 WATTS</b>															
PS52	Mog	750 22000 750		130	12	CC-8	13	9.5	1000	17040				5D, 5E	Clear, BB
T24	Med BiPost	750 22117 750T24		130	24	C-13	9.18	5.5	1000	14800				8A, 9G	Inside Frost, HRG
<b>1000 WATTS</b>															
PS52	Mog	1000 22260 1000		130	12	CC-8	13	9.5	1000	23740				5D, 5E	Clear, BB
		22301 1000/99		130	12	C-7A	13	9.5	2500	19800				5D, 5E	Clear-Extended Service, BB
		22280 1000		250	12	C-7A	13	9.5	2000	17700				5D, 5E	Clear, BB
		22284 1000		277	12	C-7A	13	9.5	2000	17700				5D, 5E	Clear, BB
T24	Med BiPost	1000 22479 1M/T24		120	24	C-13	9.18	5.5	1000	21200				8A, 9G	Inside Frost, HRG
<b>MISC. INCANDESCENT LAMP TYPES</b>															
R40	Med	23423 21A/R40/FL		12	24	C-2V	6.68		1000					2C, 5A, 5E	Reflector Flood-I.F. Swimming pool. BDTH, HORIZ, HRG, BB
T8	SC Bay	23326 7.5A/T8/92SC		10	24	C-8Z	3.12	1.75	100	1620					Clear-Sound Reproduction Optical Comparator. Source WxH: 1.8 x 4.6mm. ANSI: BXE, BB
<b>EXPORT-ONLY</b>															
<b>65 WATTS</b>															
PAR38	Med Skirt	65 14505 75PAR/SP/65/WM/EX		130	12	CC-6	5.31		2000	675	2675	5900	14	1A, 2A, 2B	Watt-Miser®, Reflector
		14506 75PAR/FL/65WM/EX		130	12	CC-6	5.31		2000	675	2675	1750	30	1A, 2A, 2B	Watt-Miser®, Flood
<b>75 WATTS</b>															
PAR38	Med Skirt	75 14510 75PAR/FL/EX		120	12	CC-6	5.31		2000	765	2700	1750	33	1A, 2A, 2B	Flood
<b>85 WATTS</b>															
PAR38	Med Skirt	85 14509 100PAR/FL/85WM/EX		120	6	CC-6	5.31		2000	930	2700	2000	37	1A, 2A, 2B	Miser® Flood
<b>120 WATTS</b>															
PAR38	Med Skirt	120 14501 150PAR/FL/120WM/EX		120	12	CC-6	5.31		2000	1370	2725	3600	30	1A, 2A, 2B	Watt-Miser®, Flood
		14502 150PAR/SP/120WM/EX		120	12	CC-6	5.31		2000	1370	2725	9200	18	1A, 2A, 2B	Watt-Miser®, Reflector
		14503 150PAR/FL/120WM/EX		130	12	CC-6	5.31		2000	1370	2725	3600	30	1A, 2A, 2B	Watt-Miser®, Flood
<b>150 WATTS</b>															
PAR38	Med Skirt	150 14531 150PAR/FL/EX		120	12	CC-6	5.31		2000	1740	2775	3100	36	1A, 2A, 2B	Flood
		14535 150PAR/SP/EX		120	12	CC-6	5.31		2000	1740	2775	12000	16	1A, 2A, 2B	Reflector
<b>E27 BASE-EXPORT</b>															
<b>80 WATTS</b>															
PAR38	Skirted (E27)	80 18180 80PAR/SP/27		220/0	12									1A, 2A, 2B	Clear Reflector
<b>100 WATTS</b>															
PAR38	Skirted (E27)	100 38854 100PAR/FL/27		220/0	12	CC-6	5.5		2000	800	2600	1500	35	1A, 2A, 2B	Clear Flood
		42711 100PAR/FL/27		240/0	12	CC-6	5.5		2000	800	2600	1500	35	1A, 2A, 2B	Clear Flood



# Incandescent Lamps

Shape	Base	Order Watts	Code	Description	Volts	Case Qty.	Filament Design	MOL	LCL	Rated Life Hours	Lumens Initial	Color Temp. K	CBCP	Beam Spread	Footnotes	Additional Information
<b>E27 BASE-EXPORT (CONTINUED)</b>																
<b>120 WATTS</b>																
	PAR38 Skirted	120	18172	120PAR/FL/27	220/0	12	CC-6	5.5		2000	1150	2675	2300	35	1A, 2A, 2B	Clear Flood
			18173	120PAR/FL/27	240/0	12	CC-6	5.5		2000	1050	2675	2300	35	1A, 2A, 2B	Clear Flood
	PAR56 Scrw Term	120	19023	120PAR56VNSP	12	12	C-6	4.5		2000	1050	2750	60000		1A, 2A, 5B, 5C, 9N	Very Narrow Reflector
			19024	120PAR56/MFL	12	12	C-6	4.5		2000	1050	2750	19000		1A, 2A, 5B, 5C, 9N	Medium Flood
			19025	120PAR56/WFL	12	12	C-6	4.5		2000	1050	2750	5625		1A, 2A, 5B, 5C, 9N	Wide Flood
<b>150 WATTS</b>																
	PAR38 Skirted	150	40033	150PAR/FL/27	220/0	12	CC-6	5.5		2000	1350	2650	2450	35	1A, 2A, 2B	Clear Flood
			40035	150PAR/FL/27	240/0	12	CC-6	5.5		2000	1350	2650	2450	35	1A, 2A, 2B	Clear Flood
<b>EXPORT PAR</b>																
<b>300 WATTS</b>																
	PAR56 GX16DEXT	300	20852	300PAR56/MFL	230	12	CC-13	5		2000	3450				1A, 2A, 5B, 5C, 9N	Medium Flood
			20853	300PAR56/NSP	230	12	CC-13	5		2000	3450				1A, 2A, 5B, 5C, 9N	Narrow Reflector
			20854	300PAR56/WFL	230	12	CC-13	5		2000	3450				1A, 2A, 5B, 5C, 9N	Wide Flood
			18676	300PAR56/NSP	240/0	12	CC-13	5		2000	3450				1A, 2A, 5B, 5C, 9N	Narrow Reflector
			18677	300PAR56/MFL	240/0	12	CC-13	5		2000	3450				1A, 2A, 5B, 5C, 9N	Medium Flood
			18678	300PAR56/WFL	240/0	12	CC-13	5		2000	3450				1A, 2A, 5B, 5C, 9N	Wide Flood
<b>LUMEN RATED TRAFFIC SIGNAL</b>																
<b>165 WATTS</b>																
	P25 Med	165	20094	1950L/P25/TS	120	60	C-9	4.75	3	8000	1950					Clear-Traffic Signal (BDTH), BB
			20097	1950L/P25/TS	130	60	C-9	4.75	3	8000	1950					Clear-Traffic Signal (BDTH), BB
<b>AIRPORT</b>																
<b>30 WATTS</b>																
	T10 Med Pf	30	23294	6.6A/T10/1P		60	C-2V	3.93	1.5	1000	400					Clear
<b>40 WATTS</b>																
	T10 Med Pf	40	15921	40T10P	120	60	CC-2V	3.93	1.5	1000	400					Clear
<b>45 WATTS</b>																
	PAR56 Scrw Term	45	23310	6.6A/PAR56/5		12	C-8	4.5		1000	700					Stippled cover
			T10 Med Pf	45	23295	6.6A/T10P		60	C-2V	3.93	1.5	1000	675			
<b>120 WATTS</b>																
	PAR64 Scrw Term	120	39395	120PAR	6	12	C-6	4		3000	780		180000			Transmissometer. Filament Shielded. Very Narrow Reflector
<b>200 WATTS</b>																
	T14 Med Pf	200	23298	6.6A/T14P		24	C-13	5.75	2.18		4900					Clear
<b>204 WATTS</b>																
	T14 Med Pf	204	23300	6.6A/T14/2P		24	C-13	5.75	2.18	500	4220					Clear



Shape	Base	Order Watts Code	Description	Volts	Case Qty.	Filament Design	MOL	LCL	Rated Life Hours	Lumens Initial	Color Temp. K	CBCP	Beam Spread	Footnotes	Additional Information
<b>AIRPORT (CONTINUED)</b>															
<b>620 WATTS</b>															
PS40	Mog Pf	620 21950 620PS40P		120	24	C-9		10.065.68	3000	11200					Clear
		21952 620PS40P		130	24	C-9		10.065.68	3000	11200					Clear
<b>1000 WATTS</b>															
T20	Mog BiPost1000	22429 1M/T20BP		120	12	C-13	9.5	4	500	22000					Clear-Beacon, HRG
<b>1200 WATTS</b>															
T20	Mog BiPost1200	22524 1200T20		115	12	CC-8	9.5	4	750	29600					Clear-Beacon, HRG
<b>MULTIPLE STREET LIGHTING</b>															
A23	Med	105 42392 105A23/12		125	120	C-9	5.93	4.43	12000						Clear, BB
PS25	Med	189 19939 189PS25/64		130	60	C-9	6.93	5.25	3000						Clear, BB
		205 42663 205PS25/12		125	60	C-9	6.93	5.25	12000						Clear, BB
PS35	Mog	295 20772 295PS35/58		125	24	C-9	9.37	7	3000						Clear, BB
		327 21307 327PS35		125	24	C-9	9.37	7	6000						Clear, BB
PS40	Mog	405 21408 405PS40/54		120	24	C-9	9.75	7	3000	6850					Clear, BB
<b>DECORATIVE</b>															
<b>3 WATTS</b>															
CA10	Cand	3 81167 3CAC/FF/CD1-6PK		120	30		4.125		2000						Flicker Flame
CA10	Med	3 81168 3CAM/FF/CD1-6PK		120	30		4.125		2000						Flicker Flame
<b>15 WATTS</b>															
B8	Cand	15 81559 15BC/CF/CD2-TRAY		120	30	C-7A	3.19		1500						Blunt Tip, Ceiling Fan, Vibration Resistant
		48400 15BC CD2 6PK		120	30	C-7A	3.87		1500						Clear-Blunt Tip
B10	Cand	15 46678 15 BFC PQ2/5		120	25	C-7A	3.87		1500						Faceted-Blunt Tip
CA8	Cand	15 41524 15CAC/L		120	120	C-7A	4.12		4000						Clear-Bent Tip, LL
		48403 15CAC/F CD2 6PK		120	30	C-7A	4.12		1500						Frost-Bent Tip
G16.5	Cand	15 12578 15GC/L		120	60	C-7A	3		4000						Clear-Globe, LL
<b>25 WATTS</b>															
B8	Cand	25 81560 25BC/CF/CD2-TRAY		120	30	C-7A	3.19		1500				5E, 9D		Blunt Tip, Ceiling Fan, Vibration Resistant, BDTH
B10	Cand	25 15787 25BC 25PK		120	200	C-7A	3.75		1500						Clear-Blunt Tip
		46679 25BFC PQ2/5		120	25	CC-2V	3.75		1500						Faceted-Blunt Tip
		48700 25BC/RVL CD2		120	30	CC-2V	3.75		1500						Reveal® Clear-Blunt Tip
B13	Med	25 22756 25BM CD2		120	60	C-9	4.62		1500						Clear-Blunt Tip
CA10	Cand	25 15777 25CAC 25PK		120	200	CC-2V	4.12		1500						Clear-Bent Tip
		16045 25CAC CARD4		120	30	CC-2V	4.12		1500						Clear-Bent Tip
		16046 25CAC/F CARD4		120	30	CC-2V	4.12		1500						Frost-Bent Tip
		16365 25CAC/L-CD4		120	120	CC-2V	4.12		4000						Clear-Bent Tip, LL
		40045 25CAC/L		120	120	CC-2V	4.12		4000						Clear-Bent Tip, LL
		47933 25CAC CARD 2		120	30	CC-2V	4.12		1500						Clear-Bent Tip
F15	Med	25 18890 25FM CD2 6PK		120	30	C-6	4.37		1500						Clear-Flame
		18891 25FM/A CD2 6PK		120	30	C-6	4.37		1500						Amber-Flame
		18894 25FM/AU CD2 6PK		120	30	C-6	4.37		1500						Auradescent-Flame
		18895 25FM/W CD2 6PK		120	30	C-6	4.37		1500						White-Flame
G16.5	Cand	25 11303 25GC 12PK		120	120	CC-2V	3		1500						Clear-Globe
		15790 25GC 25PK		120	100	CC-2V	3		1500						Clear-Globe
		17722 25GC CD2		120	60	CC-2V	3		1500						Clear-Globe



# Incandescent Lamps

Shape	Base	Order Watts Code	Description	Volts	Case Qty.	Filament Design	MOL	LCL	Rated Life Hours	Lumens Initial	Color Temp. K	CBCP	Beam Spread	Footnotes	Additional Information
<b>DECORATIVE (CONTINUED)</b>															
<b>25 WATTS (CONTINUED)</b>															
	Cand	23510	25GC/AU-CD2	120	60	CC-2V	3		1500						Auradescent - Globe
		27301	25GC CD4	120	30	CC-2V	3		1500						Clear-Globe
		27302	25GC/W CD4	120	30	CC-2V	3		1500						White-Globe
		39679	25GC/W 12PK	120	120	CC-2V	3		1500						White-Globe
		43158	25GC-L	120	60	CC-2V	3		4000						Clear-Globe, LL
		48703	25GC/RVL CD2	120	30	CC-2V	3		1500						Reveal® Clear-Globe
	Med	25 31106	25GM/CL-PQ2/6	120	30	CC-2V	3		1500						Clear-Globe, Medium Base
		31107	25GM/W-PQ2/6	120	30	CC-2V	3		1500						White-Globe, Medium Base
		31108	25GM/AU-PQ2/6	120	30	CC-2V	3		1500						Auradescent-Globe, Medium Base
	Med	25 12982	25G25/W 6PK	120	6	C-9	4.5		1500						White-Globe
		12983	25G25 6PK	120	6	C-9	4.5		1500						Clear-Globe
		20408	25G25/L/24	120	24	C-9	4.5		3000						Clear-Globe, LL
		20410	25G25/W/L/24	120	24	C-9	4.5		3000						White-Globe, LL
		25545	25G25 CPK	120	24	C-9	4.5		1500						Clear-Globe
		25546	25G25/W CPK	120	24	C-9	4.5		1500						White-Globe
<b>40 WATTS</b>															
	B8	Cand	40 81561	40BC/CF/CD2-Tray	120	30	C-7A	3.19	1500				5E, 9D		Clear-Blunt Tip, Ceiling Fan, Vibration Resistant, BDTH
	B10	Cand	40 15788	40BC 25PK	120	200	CC-2V	3.75	1500						Clear-Blunt Tip
			19110	40BC CD2 6PK	120	30	CC-2V	3.75	1500						Clear-Blunt Tip
			19981	40BC CARD4	120	30	CC-2V	3.75	1500						Clear-Blunt Tip
			27292	40BFC CD2 6PK	120	30	CC-2V	3.75	1500						Faceted-Blunt Tip
			48701	40BC/RVL CD2	120	30	CC-2V	3.75	1500						Reveal® Clear-Blunt Tip
			48702	40BC/RVL CD4	120	30	CC-2V	3.75	1500						Reveal® Clear-Blunt Tip
	B13	Med	40 12993	40BM CD2	120	60	C-9	4.62	1500						Clear-Blunt Tip
			27310	40BM/CD4	120	6	C-9	4.62	1500						Clear-Blunt Tip
			40891	40BFM PQ2/6	120	30	C-9	4.62	1500						Faceted-Blunt Tip
			48699	40BM/RVL CD2	120	30	C-9	4.625	1500						Reveal® Clear-Blunt Tip
	CA9	Med	40 48391	40CAM/F CD2 6PK	120	30	CC-2V	4.56	1500						Frost-Bent Tip
			16049	40CAM CARD4	120	30	CC-2V	4.56	1500						Clear-Bent Tip
			22813	40CAM/LL/BB CD2	120	30	CC-2V	4.56	3000						Clear-Bent Tip, LL, Post Light
	CA10	Cand	40 15778	40CAC 25PK	120	200	CC-2V	4.12	1500						Clear-Bent Tip
			16047	40CAC CARD4	120	30	CC-2V	4.12	1500						Clear-Bent Tip
			16048	40CAC/F CARD4	120	30	CC-2V	4.12	1500						Frost-Bent Tip
			19107	40CAC CD2 6PK	120	30	CC-2V	4.12	1500						Clear-Bent Tip
			22812	40CAC/LL/BB CD2	120	30	CC-2V	4.12	3000						Clear-Bent Tip, LL, Post Light
			40050	40CAC/L	120	120	CC-2V	4.12	3000						Clear-Bent Tip, LL
	F15	Med	40 18896	40FM CD2 6PK	120	30	C-6	4.37	1500						Clear-Flame
			18897	40FM/AU CD2 6PK	120	30	C-6	4.37	1500						Auradescent-Flame
			18899	40FM/W CD2 6PK	120	30	C-6	4.37	1500						White-Flame
	Cand	40 14958	40GC 12PK	120	120	CC-2V	3		1500				5E, 9D		Clear-Globe, BDTH
		17730	40GC CD/2	120	60	CC-2V	3		1500				5E, 9D		Clear-Globe, BDTH
		23511	40GC/AU CD/2	120	60	CC-2V	3		1500				5E, 9D		Auradescent - Globe, BDTH
		27303	40GC CD4	120	30	CC-2V	3		1500				5E, 9D		Clear-Globe, BDTH
		27304	40GC/W CD4	120	30	CC-2V	3		1500				5E, 9D		White-Globe, BDTH
		48704	40GC/RVL CD2	120	30	CC-2V	3		1500				5E, 9D		Reveal® Clear-Globe, BDTH
		48705	40GC/W/RVL CD2	120	30	CC-2V	3		1500				5E, 9D		Reveal® White-Globe, BDTH
			Med	40 31109	40GM/CL-PQ2/6	120	30	CC-2V	3		1500				5E, 9D
31110	40GM/W-PQ2/6			120	30	CC-2V	3		1500				5E, 9D		White-Globe, Medium Base, BDTH
31113	40GM/AU-PQ2/6			120	30	CC-2V	3		1500				5E, 9D		Auradescent-Globe, Medium Base, BDTH



# Incandescent Lamps

Shape	Base	Order Watts Code	Description	Volts	Case Qty.	Filament Design	MOL	LCL	Rated Life Hours	Lumens Initial	Color Temp. K	CBCP	Beam Spread	Footnotes	Additional Information	
<b>DECORATIVE (CONTINUED)</b>																
<b>40 WATTS (CONTINUED)</b>																
	Med	40 12979	40G25/W 6PK	120	6	C-9	4.5		1500						White-Globe	
			12980	40G25 6PK	120	6	C-9	4.5		1500						Clear-Globe
			20419	40G25/L/24	120	24	C-9	4.5		3000						Clear-Globe, LL
			20420	40G25/W/L/24	120	24	C-9	4.5		3000						White-Globe, LL
			25547	40G25/W CPK	120	24	C-9	4.5		1500						White-Globe
			25548	40G25 CPK	120	24	C-9	4.5		1500						Clear-Globe
			46675	40DG25/F PQ1/6	120	30	C-9	4.5		1500						Designer-Frosted Swirl Top
			48694	40G25C/RVL PQ1/6	120	6	C-9	4.5		1500						Reveal®
	48695	40G25W/RVL PQ1/6	120	6	C-9	4.5		1500						Reveal®		
	G30	Med	40 27499	40G30/W	120	24	CC-6	5	2500						White-Globe	
	Med	40 36191	40G40/W 6PK	120	6	CC-6	6.93		2500						White-Globe	
			37914	40G40/CL	120	24	CC-6	6.93		2500					Clear-Globe	
	Med	40 48707	40T10/RVL CD1	120	25	C-8	5.625		1000						Reveal® Clear-Showcase	
			48709	40T10/F/RVL CD1	120	25	C-8	5.625		1000					Reveal® Frost-Showcase	
	Med	40 46680	40M14/F/CF PQ2/6	120	30	C-9	3.25		1500						Frost-Swirl Top	
<b>60 WATTS</b>																
	Cand	60 27298	60BC/CD4	120	30	CC-2V	3.75		1500						Clear-Blunt Tip	
			48714	60BC/RVL CD2	120	30	CC-2V	3.75		1500					Reveal® Clear-Blunt Tip	
			48715	60BC/RVL CD4	120	30	CC-2V	3.75		1500					Reveal® Clear-Blunt Tip	
	Med	60 22757	60BM CD/2	120	60										Clear-Blunt Tip	
			27497	60BM/CD4	120	6	C-9	4.62		1500					Clear-Blunt Tip	
			48713	60BM/RVL CD2	120	30	C-9	4.625		1500				2C, 9I	Reveal® Clear-Blunt Tip	
	Med	60 21009	60CAM CARD4	120	30	CC-2V	4.56		1500						Clear-Bent Tip, BDTH	
			48401	60CAM CD2 6PK	120	30	CC-2V	4.56		1500					Clear-Bent Tip	
	Cand	60 15781	60CAC 25PK	120	200	CC-2V	4.12		1500						Clear-Bent Tip	
			16050	60CAC CARD4	120	30	CC-2V	4.12		1500					Clear-Bent Tip	
			16051	60CAC/F CARD4	120	30	CC-2V	4.12		1500					Frost-Bent Tip	
			19153	60CAC CD/2 6PK	120	30	CC-2V	4.12		1500					Clear-Bent Tip	
			48404	60CAC/F CD2 6PK	120	30	CC-2V	4.12		1500					Frost-Bent Tip	
	Cand	60 23091	60GC CD/2	120	60	CC-2V	3		1500				5E, 9D		Clear-Globe, BDTH	
			40388	60GC CD4	120	30	CC-2V	3		1500				5E, 9D	Clear-Globe, BDTH	
			40389	60GC/W CD4	120	30	CC-2V	3		1500				5E, 9D	White-Globe, BDTH	
	Med	60 31114	60GM/CL-PQ2/6	120	30	CC-2V	3		1500				5E, 9D		Clear-Globe, Medium Base, BDTH	
			31115	60GM/W-PQ2/6	120	30	CC-2V	3		1500				5E, 9D	White-Globe, Medium Base, BDTH	
	Med	60 14846	60G25 6PK	120	6	C-9	4.5		1500						Clear-Globe	
			14848	60G25/W 6PK	120	6	C-9	4.5		1500					White-Globe	
			20427	60G25/24	120	24	C-9	4.5		1500					Clear-Globe	
			20428	60G25/W/24	120	24	C-9	4.5		1500					White-Globe	
	Med	60 14850	60G30/W 6PK	120	24	CC-9	5		2500					White-Globe. Retail Pack		
	Med	60 14187	60G40 6PK	120	6	CC-6	6.93		2500						Clear-Globe	
			16741	60G40/W CPK	120	24	CC-6	6.93		2500					White-Globe	
			49780	60G40/W 6PK	120	6	CC-6	6.93		2500					White-Globe	
	Med	60 48710	60T10/RVL CD1	120	25	C-8	5.625		1000					Reveal® Clear-Showcase		
<b>75 WATTS</b>																
	Med	75 28917	75E17/TF-PQ1/4	120	20	CC-6	5		4000						Post Light, Teflon® Coated, Saf-T-Gard® BB	
	Med	75 36193	75G40/W 6PK	120	6	CC-6	6.93		2500						White-Globe	





# Incandescent Lamps

Shape	Base	Order Watts Code	Description	Volts	Case Qty.	Filament Design	MOL	LCL	Rated Life Hours	Lumens Initial	Color Temp. K	CBCP	Beam Spread	Footnotes	Additional Information
<b>DECORATIVE (CONTINUED)</b>															
<b>100 WATTS</b>															
F20	Med	100 44540	100F20/TF-PQ1/6	120	30	CC-9	5		3000						Post Light, Teflon® Coated, Saf-T-Gard® BB
G40	Med	100 16742	100G40/W CPK	120	24	CC-6	6.93		2500						White-Globe
		49781	100G40/W 6PK	120	6	CC-6	6.93		2500						White-Globe
<b>150 WATTS</b>															
G40	Med	150 16585	150G40/W	120	24	CC-6	6.93		2500						White-Globe
<b>PORTABLE LIGHTING PRODUCTS</b>															
R30	Med	75 44848	PLK-1	120	4	CC-6							2A, 5E, 9K		Plant Light Kit includes one 75R30/PL Plant Light lamp, UL listed holder and information booklet.

## GENERAL INFORMATION

1

### ▲ WARNING

#### Risk of electric shock

- a. Turn off power before inspection, installation or removal

2

### ▲ WARNING

#### Risk of fire

- a. Keep combustible materials away from lamp
- b. Use in fixture rated for this product
- c. Use in fixture rated for this product – see instructions
- d. Operate base down to horizontal only
- e. Keep away from bed coverings, drapes and other combustible materials
- f. Do not use in enclosed fixture or with lamp shade
- g. Use in a high intensity fixture rated for this product
- h. Do not use as a night light
- i. Burning position base down only

3

### ▲ WARNING

#### Lamp emits IR radiation which may cause eye injury

- a. Use in fixture approved for this product
- b. Do not use on infant, disabled, sleeping, or unconscious person/animal unable to avoid potential injury

4

### ▲ WARNING

#### Pressurized lamp-unexpected rupture may cause injury, fire, or property damage

- a. Use eye protection when handling lamp
- b. Avoid direct water/liquid contact
- c. Use in enclosed fixture rated for this product
- d. Operate lamp only in specified position

5

### ▲ WARNING

#### Unexpected lamp rupture may cause injury, fire, or property damage

- a. Do not exceed rated voltage
- b. Avoid direct water/liquid contact
- c. Use in enclosed fixture rated for this product
- d. Do not use lamp if outer glass is scratched or broken
- e. Avoid direct water, liquid, or metal contact

6

### ▲ WARNING

#### Risk of burn

- a. Do not touch operating lamp

7

### ▲ CAUTION

#### Risk of burn

- a. Allow lamp to cool before handling
- b. Allow lamp/fixture to cool before handling
- c. Do not touch operating lamp

8

### ▲ CAUTION

#### Lamp may shatter and cause injury if broken

- a. Do not use excessive force when installing lamp

9

## OPERATING INSTRUCTIONS

- a. Burning position – base up
- b. Burning position – horizontal
- c. Burn base down only
- d. Burn base down to horizontal
- e. For best performance burn lamp within 45 degrees of vertical base up
- f. For best performance burn within 45 degree of base down to horizontal
- g. For best performance operate base up within 30° of vertical
- h. For best performance burn base down
- i. Do not burn in base up position
- j. To produce all three levels of light, this lamp should be tightened firmly, but not forcibly, in the socket to assure that all contacts are connected
- k. Should not be used in equipment where the base lamp will exceed 550°F (260°C)
- l. Will operate in any burning position, but fixed-socket usage other than base up, or continuous burning in any position in ambient temperatures above 150°F (66°C), may result in some loss of protective coating
- m. Reflectors and accessories may raise bulb temperature
- n. For use with heat-resistant connector supported by bulb rim or metal shell of base
- o. For best performance replace lamp if it blisters or darkens



## INCANDESCENT LAMPS CROSS REFERENCE

<i>GE Description</i>	<i>Osram/Sylvania Description</i>	<i>Philips Description</i>
<b>ORDER THIS GE LAMP</b>	<b>IF YOU CURRENTLY USE THESE LAMPS</b>	
<b>INCANDESCENT LAMPS</b>		
3S6/5 24PK 130V	3S6/5 130V	3S6/5 120-130V
4C7 CARD 2	4C7/BL/2PK	BC-4C7
4C7/W CD2	4C7/W/2PK 120V	BC4C7/W
10S11N	10S11N/CL	10S11N
10S11N/F	10S11/F	10S11N/IF
15S14/GR/CL 130V	15S14/CL 130V	—
15CAC/F-CD/2	—	—
25BC (120)	25B10C/T/BL/2PK	25B101/2 (120)
25CAC (120)	25B10C/BL/2PK	25BA9C (120)
25CAC/F (120)	25B10C/W/BL/2PK	25BA9C/F (120)
25CAC/L (120)	25B10C/DL/BL	25BA9C/4M
25FM CD2 (120)	25F (120-125)	25F15 (120)
25GC (120)	—	25G161/2C (120)
40A15	40A15 120V	40A15-SPB-130
40A 130V	40A-130V	40A-130V
40A/CL 130V	40R/CL-130V	40A/CL-120-130
40R14/N/CD	40R14N/RP	40R14/N
40S11N/1/F	40S11N/CF 120V	40S11N/IF 120V
40T61/2/2	40T6.5/CL/BL/6PK	40T6-1/2/2 120V
40T8	40T8 120-130V	40T8 115-125V
40T10	40T10-120V	40T10-120-130V
40A/34/WMP/99 (120, 130)	40A/99/XL (120,130)	40A/99 (120,130)
40BC (120)	40C91/2C/BL (120-125)	40B101/2 (120)
40BC/W (120)	40C91/2C/W/BL (120-125)	40B101/2/W (120)
40CAC (120)	40B10C/BL (120-125)	40BA9C (120)
40CAC/F (120)	—	40BA9C/F (120)
40CAM (120)	40C11/BL (120)	40BA91/2 (120)
40CAM/F (120)	—	40BA91/2/(120)
40FM (120)	40F (120-125)	40F15 (120)
40S11N/1/F	40S11N/CF	40S11N/IF (120)
50A21 (12, 30, 34)	50A21	50A (12,34)
50A/RS 24 PK	50A/RS-120V	—
50A/RS/CVG	50A/RS/SL	50A/RS/TF (120)
50/150	50/150A/W	50/150T/SW (120)
60A 48 PK	60A/CVP-130V	60A19/35-130V
60A/CVG (120)	60A/SL (120)	60A/TF (120)
60BC (120)	60B10C/ST/BL (120-125)	60B101/2 (120)
60CAC (120)	60B10C/BL (120-125)	60BA9C (120)

<i>GE Description</i>	<i>Osram/Sylvania Description</i>	<i>Philips Description</i>
<b>ORDER THIS GE LAMP</b>	<b>IF YOU CURRENTLY USE THESE LAMPS</b>	
<b>INCANDESCENT LAMPS (CONTINUED)</b>		
60CAC/F (120)	—	60BA9C/F (120)
60CAM (120)	—	60BA91/2 (120)
60A/PL	60A/GRO	60A/AGRO (120)
60T10F/CD (120)	60T10/CF (120)	60T10/64IF (120)
65R30/FL/LL	—	65BR30/FL/LL551
65R30/SP/LL	—	65BR30/SP/LL20/1
75A 48PK	75A/RP 120V	75A-120V
75 A/S (120, 130)	75A/99/XL (120,130)	75A/99 (120,130)
65R30/PL-1 6PK	65BR30/GRO/RP 120V	—
75A/CL 24PK	75A/CL/RP 120V	75A/CL-130V
75A/RS 12PK	75A/RS/RP 120V	75A/RS/VS 120V
75ER30	75ER30 120V	75ER30 120V
65R30/FL/B	65BR30/BV/RP 120V	75BR30/B 120V
65R30/FL/G	65BR30/G/RP 120V	75BR30/G 120V
65R30/FL/Y	65BR30/Y/RP 120V	75BR30/Y 120V
65R30/FL/PK	65BR30/PK/RP 120V	75BR30/PK 120V
100A 130V	100A/CVP 130V	100A 130V
100A/S 130V	100A/RS/XL	100A/RS/VS 125-130V
100A/CL 24 PK	100A/CL-120V	100A/CL 120V
100A/90WWM	100/90/W/ES/4PK	100-90/EW/48PK
100A/RS	100A/RS/RP 130V	100A/RS/VS 125-130V
100A23/VS 24PK	—	—
100A23	—	100A (12)
100A21/99 (120, 130)	100A/99/XL (120,130)	100A/99 (120,130)
100A21/SBIF (120)	—	100A/SBIF (120)
100A/RS (120,130)	100A/RS	100A/RS/VS (120,130)
100A23/VS (120,130)	100A/VS (120,125,130)	100A/RS/VS(2)
100A/RS/CVG (120)	100A21/RS/SL	100A/RS/TF (120)
150A21/99/IF (120,130)	—	150A21/RS/VS/BR 120-130V LAMP
200A21/99CL (120-130)	—	200A/99CL (130)
200PS30/CVG (120)	200PS30/SL	200/TF (120)
200PS30/RS/CVG (120)	200PS30/23/SL	200PS30/RS/TF (120)
250R40/10	250R40/10	250R40/HR (120)
300M 120V	300M/CL 120V	300M 120V
300M (120, 130V)	300M/CL 130V	300-120V CLR PS30
300M/IF 130V	300M/IF 130V	300M/PS30IF 130V
300M/99 (120, 130V)	300M/CL/99/XL 130V	300M/99 130V





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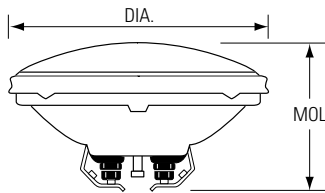
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## BULB IDENTIFICATION



DIA. in.: Diameter of bulb at widest point.

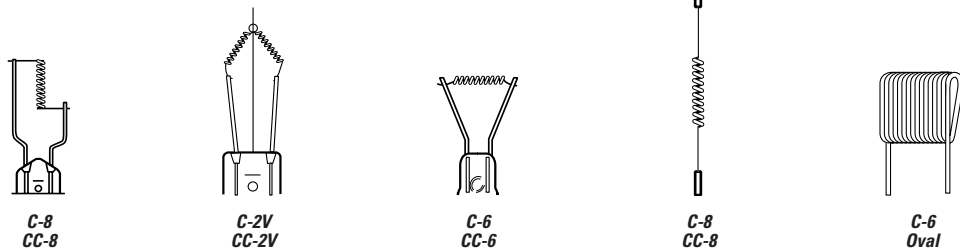
MOL in.: Maximum Overall Length including base or pins.

LCL in.: Distance between the center of the filament and the Light Center Length reference plane.

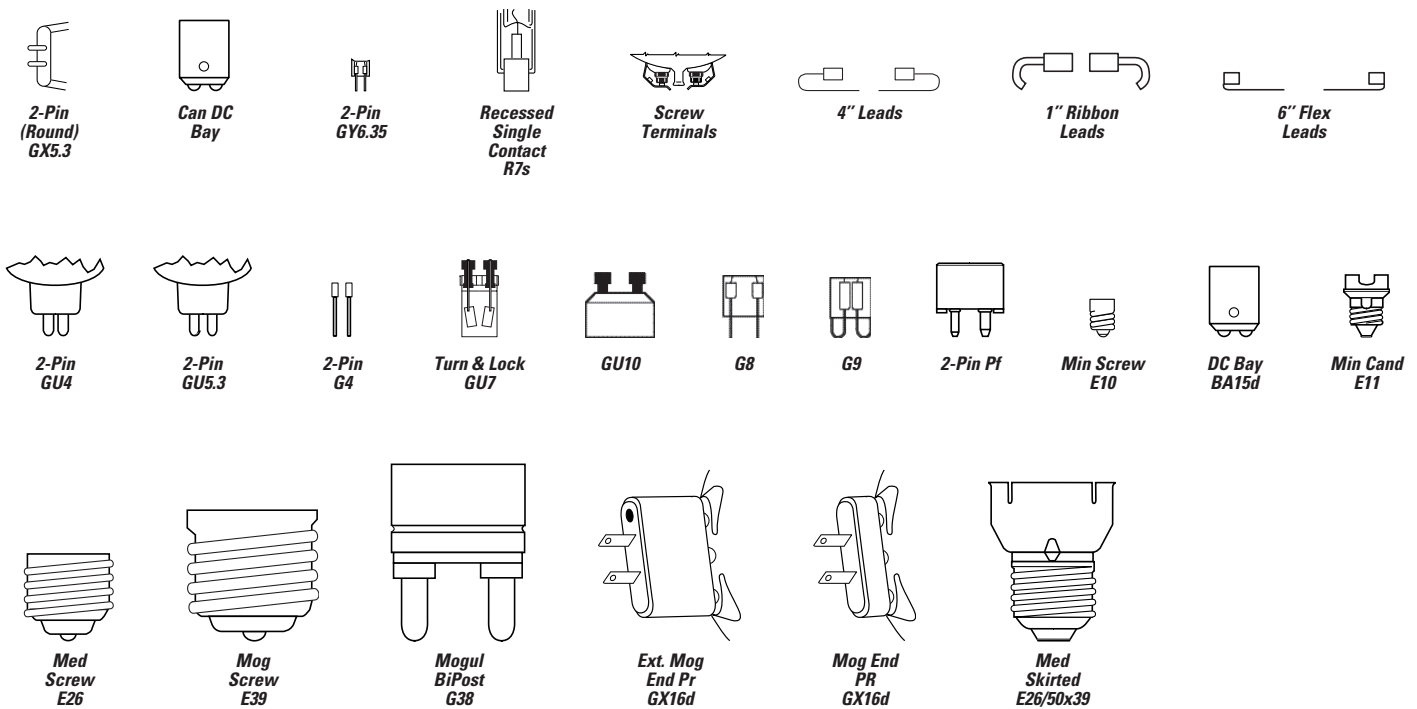
Note: Lamp drawings are not drawn to scale. Be sure to check size and dimension information when identifying each lamp.

To convert inches to millimeters, multiply the dimension (in inches) by 25.4 (i.e. 1.5" x 25.4 = 38.1 mm).

## FILAMENT IDENTIFICATION



## BASE IDENTIFICATION





## INTRODUCTION

Halogen lamps provide a small, white light source with excellent color rendering. Unlike standard incandescent lamps, halogen lamps use a halogen gas which allows the bulbs to burn longer without sacrificing light output.

Compared to incandescent lamps, halogen lamps provide:

- Crisp, white light
- Excellent beam control
- Compact size
- High lumen maintenance
- Long life

## PRODUCT INFORMATION

### PAR38\* VS. STANDARD HALOGEN

#### **Retail HIR™ (PAR38) (pg 2-5)**

- Up to 42% more efficient
- Up to 27% energy savings
- Up to 60% longer life – 4000 hours

#### **HIR XL® UltraLong Life (PAR38) (pg 2-5)**

- Up to 13% energy savings
- Ultra long life – 6000 hours

#### **HIR™ (PAR38) (pgs 2-5 to 2-6)**

- Up to 28% more efficient
- Up to 22% energy savings
- Up to 20% longer life – 3000 hours

#### **Silver Saver™ (PAR38) (pg 2-6)**

- Up to 14% more efficient
- Up to 12% energy savings
- Up to 20% longer life – 3000 hours

#### **Halogen Plus (PAR38) (pgs 2-6 to 2-7)**

- Longer life than standard halogen – 2500 hours
- Wide variety of wattages and beam spreads

#### **Standard Halogen (PAR38) (pg 2-7)**

- Crisp, white light
- Life – 2000 hours

#### **Quartzline® (PAR38) (pg 2-7)**

- High light output for long throws (250 watt)
- Long life – 4200 hours

### COMPACT PAR

#### **Compact HIR™ (PAR30) (pg 2-7)**

- Most efficient PAR30
- Long life – 4000 hours

#### **Long Neck PAR30 Halogen (PAR30L) (pgs 2-7 to 2-8)**

- Energy efficient replacement for R30 lamps
- Ideal for recessed fixtures

#### **Compact PAR Halogen (PAR20/PAR30) (pg 2-8)**

- Small size for “low profile” fixture
- Energy efficient replacement for R20/R30 lamps
- Long life – 3000 hours

#### **Diamond Precise® Electronic (MR16)° (pg 2-9)**

- 58% energy savings vs 50PAR20/50R20
- 2X longer life than 50PAR20/50R20 – 5000 hours
- Precise beam control, 90% lumen maintenance
- 120V Edison base, fully dimmable

### MR

#### **Turn & Lock (TAL) ConstantColor® (MR16) (pg 2-11)**

- User-friendly base... easy to install and remove
- Over 90% maintained light over life
- Virtually no color shift
- Suitable for use in open fixtures

#### **ConstantColor® Precise™ Cover Glass (MR16) (pgs 2-11 to 2-12)**

- Cover glass lens protects bulb from dust and dirt
- Suitable for use in open fixtures

#### **ConstantColor® Precise™ (MR16) (pg 2-12)**

- Precise beam control
- No color shift
- Over 90% maintained light output over life
- Long life – up to 6000 hours (50-watt)

#### **Precise™ Cover Glass IR (MR16) (pg 2-13)**

- Energy saving MR16
- 4000 hour lamp life

#### **Standard MR (MR16/MR11) (pgs 2-13 to 2-14)**

- Small size for “low profile” look
- Crisp, white light

### LINEAR QUARTZ

#### **Linear Quartzline® HIR™ (pgs 2-14 to 2-15)**

- 30%-40% energy cost savings vs. standard quartz lamps
- 95% maintained light output over life
- Cooler operation increases fixture life

\* All comparisons made against standard and Halogen Plus at same/similar lumen output.

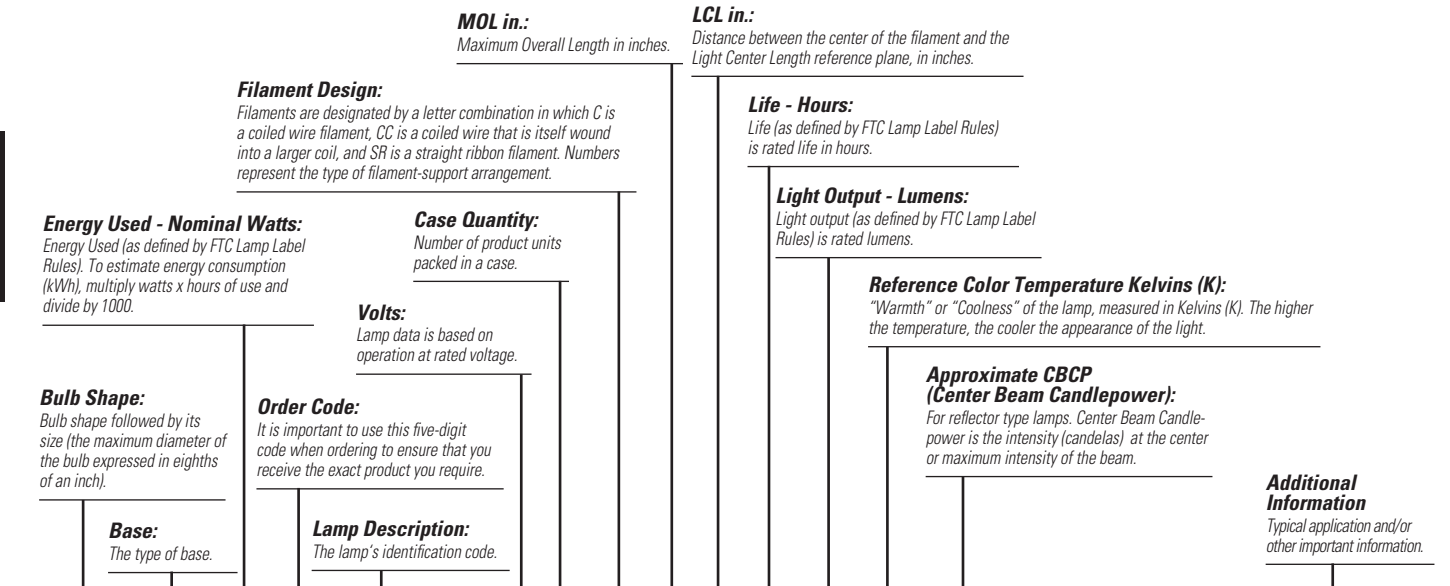
° Although face lumens are 53% less, the multi-faceted reflector concentrates lumens on target, diminishing extraneous light.



# Halogen Lamps

## HEADINGS IN THIS CATALOG SECTION

The following terms and descriptions can help you when checking Halogen lamp specifications and when ordering products. Within each product line, lamps are divided into families. Within families, lamps are listed by wattage. In each of these groups, lamps are listed alphabetically by bulb shape.



Bulb Shape	Base Type	Order Watts	Order Code	Description	Case Volts	Filament Qty.	Type	MOL	LCL	Rated Life (hrs)	Lumens Initial	Initial Color Temp.	CBCP	Footnotes	Additional Information
<b>HALOGEN PAR38 LAMPS</b>															
<b>HIR™</b>															
PAR38	Med Skirt	50	12396	50PAR/HIR/SP9	120	12	CC-8	5.31		3000	800	2810	16000	➔ 1a, 2a, 4f, 9a, 10c	Spotlight

## 50 PAR / HIR / SP 9

- Identifies the lamp's wattage.
- Identifies the lamp shape and the bulb diameter in eighths of an inch.
- Identifies the lamp type.
- Identifies as Spotlight.
- Identifies beam angle, code may also include packaging information.

### HALOGEN BRAND NAME CROSS-REFERENCE




GE	OSRAM/SYLVANIA	PHILIPS
Retail HIR™	—	—
HIR/XL™ PAR	—	—
HIR™ PAR	Capsylite® PAR IR™	Masterline™ IRC
Silver Saver™	—	—
Edison™	—	—
Halogen Plus PAR	Capsylite® PAR	Masterline™ 2500
Standard Halogen PAR	—	Masterline™ 2000
Compact PAR	Capsylite® PAR	Masterline™ PAR
Diamond Precise®	—	—
Turn & Lock (TAL) ConstantColor®	—	—
ConstantColor® Precise™	Tru-Aim Titan®	Continuum Color®
Precise™ IR	Tru-Aim® IR™	Masterline™ ES IRC
Standard MR16	Tru-Aim®	Continuum®
Halogen A-Line	Capsylite® A-Line (Midbreak)	Halogena®

ATTENTION: This brand-name cross reference chart is provided only as a quick reference. Other lamp company brand listings may only represent a near equivalent, versus an identical match to GE Lighting brands. Individual lamp manufacturers' performance specifications should be consulted. Lamp performance may be affected by environmental conditions, and/or other auxiliary equipment.

### WHEN YOU DON'T KNOW THE LAMP DESCRIPTION

1. Identify bulb shape next to lamp information.
2. Measure bulb diameter using ruler in Appendix section page A-1 to determine width in eighths of an inch.
3. Identify base type using table on page 2-2.
4. Find your lamp in the table containing the bulb shape, size and base, which are all listed by wattage.







Bulb Shape	Base Type	Order Watts	Code	Description	Case Volts	Filament Qty.	Type	MOL	LCL	Rated Life (hrs)	Lumens Initial	Initial Color Temp.	CBCP	Footnotes	Additional Information	
<b>HALOGEN PAR38 LAMPS</b>																
<b>RETAIL HIR™ &amp; SILV-IR</b>																
	PAR38 Med Skirt	45	16344	45PAR/HIR/R/SP10	120	12		5.31			4000	800	2750	14000	↘ 1a, 2a, 4f, 9a, 10c	Spotlight
			16345	45PAR/HIR/R/FL25	120	12		5.31			4000	800	2750	3400	↘ 1a, 2a, 4f, 9a, 10c	Floodlight
		50	46168	50PAR/HIR/S/SP10	120	12		5.31			4000	800	2750	14000	↘ 1a, 2a, 4f, 9a, 10c	Spotlight - Heavy Duty Filament
			46167	50PAR/HIR/S/FL25	120	12		5.31			4000	800	2750	3400	↘ 1a, 2a, 4f, 9a, 10c	Floodlight - Heavy Duty Filament
		55	16346	55PAR/HIR/R/SP10	120	12		5.31			4000	1050	2800	17000	↘ 1a, 2a, 4f, 9a, 10c	Spotlight
			16347	55PAR/HIR/R/FL25	120	12		5.31			4000	1050	2800	4000	↘ 1a, 2a, 4f, 9a, 10c	Floodlight
		60	46165	60PAR/HIR/S/SP10	120	12		5.31			4000	1050	2800	17000	↘ 1a, 2a, 4f, 9a, 10c	Spotlight - Heavy Duty Filament
			46166	60PAR/HIR/S/FL30	120	12		5.31			4000	1050	2800	2800	↘ 1a, 2a, 4f, 9a, 10c	Floodlight - Heavy Duty Filament
		90	16348	90PAR/HIR/R/SP10	120	12		5.31			4000	2030	2850	30000	↘ 1a, 2a, 4f, 9a, 10c	Spotlight
			16349	90PAR/HIR/R/FL25	120	12		5.31			4000	2030	2850	7000	↘ 1a, 2a, 4f, 9a, 10c	Floodlight
	<b>HIR XL® (ULTRALONG LIFE) PAR38</b>															
		PAR38 Med Skirt	45	40793	45PAR/HIR/SP12XL	120	6	CC-8	5.31			6000	600	2680	7000	↘ 1a, 2a, 4f, 9a, 10c
			40790	45PAR/HIR/FL40XL	120	6	CC-8	5.31			6000	600	2680	1300	↘ 1a, 2a, 4f, 9a, 10c	Floodlight
55		40794	55PAR/HIR/SP12XL	120	6	CC-8	5.31				6000	800	2680	9000	↘ 1a, 2a, 4f, 9a, 10c	Spotlight
		40792	55PAR/HIR/FL40XL	120	6	CC-8	5.31				6000	800	2680	2000	↘ 1a, 2a, 4f, 9a, 10c	Floodlight
90		40795	90PAR/HIR/SP12XL	120	6	CC-8	5.31				6000	1470	2800	17000	↘ 1a, 2a, 4f, 9a, 10c	Spotlight
		40791	90PAR/HIR/FL40XL	120	6	CC-8	5.31				6000	1470	2800	2800	↘ 1a, 2a, 4f, 9a, 10c	Floodlight
<b>HIR™</b>																
	PAR38 Med Skirt	50	40937	50PAR/HIR/SP6	120	12	CC-8	5.31			3000	800	2810	20000	↘ 1a, 2a, 4f, 9a, 10c	Spotlight
			12396	50PAR/HIR/SP9	120	12	CC-8	5.31			3000	800	2810	16000	↘ 1a, 2a, 4f, 9a, 10c	Spotlight
			12397	50PAR/HIR/FL25	120	12	CC-8	5.31			3000	800	2810	3400	↘ 1a, 2a, 4f, 9a, 10c	Floodlight
	50	46	22850	50PAR/HIR/FL25	130	12	CC-8	5.31			3000	800	2810	3400	↘ 1a, 2a, 4f, 9a, 10c	Floodlight
					120						6000	600				
	60		11881	60PAR/HIR/SP10	120	6	CC-8	5.31			3000	1050	2850	17000	↘ 1a, 2a, 4f, 9a, 10c	Spotlight
			18627	60PAR/HIR/SP10	120	12	CC-8	5.31			3000	1050	2850	17000	↘ 1a, 2a, 4f, 9a, 10c	Spotlight
	60	54	18629	60PAR/HIR/SP10	130	12	CC-8	5.31			3000	1050	2850	17000	↘ 1a, 2a, 4f, 9a, 10c	Spotlight
					120						6000	800				
	60		11878	60PAR/HIR/FL30	120	6	CC-8	5.31			3000	1050	2850	2800	↘ 1a, 2a, 4f, 9a, 10c	Floodlight
			18626	60PAR/HIR/FL30	120	12	CC-8	5.31			3000	1050	2850	2800	↘ 1a, 2a, 4f, 9a, 10c	Floodlight
	60	54	18628	60PAR/HIR/FL30	130	12	CC-8	5.31			3000	1050	2850	2800	↘ 1a, 2a, 4f, 9a, 10c	Floodlight
					120						6000	800				
	60		10467	60PAR/HIR/FL40	120	12	CC-8	5.31			3000	1050	2850	1700	↘ 1a, 2a, 4f, 9a, 10c	Floodlight
			20947	60PAR/HIR/WFL	120	12	CC-8	5.31			3000	1050	2850		↘ 1a, 2a, 4f, 9a, 10c	Wide Floodlight
	60	54	20948	60PAR/HIR/WFL	130	12	CC-8	5.31			3000	1050	2850		↘ 1a, 2a, 4f, 9a, 10c	Wide Floodlight
					120						6000	800				
	70		46367	70PAR/HIR/SP10	120	12	CC-8	5.31			3000	1260	2900	19000	↘ 1a, 2a, 4f, 9a, 10c	Spotlight
	70	64	46369	70PAR/HIR/SP10	130	12	CC-8	5.31			3000	1260	2900	19000	↘ 1a, 2a, 4f, 9a, 10c	Spotlight
					120						6000	950				
	70		46368	70PAR/HIR/FL25	120	12	CC-8	5.31			3000	1260	2900	4700	↘ 1a, 2a, 4f, 9a, 10c	Floodlight
	70	64	46370	70PAR/HIR/FL25	130	12	CC-8	5.31			3000	1260	2900	4700	↘ 1a, 2a, 4f, 9a, 10c	Floodlight
					120						6000	950				
	70		16239	70PAR/HIR/FL/CON	120	6	CC-8	5.31			3000	1260	2900	4700	1a, 2a, 4f, 9a, 10c	Floodlight
	80		27216	80PAR/HIR/SP10	120	12	CC-8	5.31			3000	1500	2900	22000	↘ 1a, 2a, 4f, 9a, 10c	Spotlight
			27217	80PAR/HIR/SP12	120	12	CC-8	5.31			3000	1500	2900	17500	↘ 1a, 2a, 4f, 9a, 10c	Spotlight
			27218	80PAR/HIR/FL25	120	12	CC-8	5.31			3000	1500	2900	5000	↘ 1a, 2a, 4f, 9a, 10c	Floodlight





# Halogen Lamps





Bulb Shape	Base Type	Order Watts	Code	Description	Case Volts	Filament Qty.	Type	MOL	LCL	Rated Life (hrs)	Lumens Initial	Initial Color Temp.	CBCP	Footnotes	Additional Information	
<b>HALOGEN PAR38 LAMPS (CONTINUED)</b>																
<b>HIR™ (CONTINUED)</b>																
	PAR38 Med Skirt	100	<b>18635</b>	<b>100PAR/HIR/SP10</b>	120	12	CC-8	5.31		3000	2030	2900	30000	➤ 1a, 2a, 4f, 9a, 10c	Spotlight	
			<b>11885</b>	<b>100PAR/HIR/SP10</b>	120	6	CC-8	5.31		3000	2030	2900	30000	➤ 1a, 2a, 4f, 9a, 10c	Spotlight	
		100	<b>18636</b>	<b>100PAR/HIR/SP10</b>	130	12	CC-8	5.31		3000	2030	2900	30000	➤ 1a, 2a, 4f, 9a, 10c	Spotlight	
		88			120					6000	1470					
		100	<b>11883</b>	<b>100PAR/HIR/FL25</b>	120	6	CC-8	5.31		3000	2030	2900	7000	➤ 1a, 2a, 4f, 9a, 10c	Floodlight	
			<b>18631</b>	<b>100PAR/HIR/FL25</b>	120	12	CC-8	5.31		3000	2030	2900	7000	➤ 1a, 2a, 4f, 9a, 10c	Floodlight	
		100	<b>18633</b>	<b>100PAR/HIR/FL25</b>	130	12	CC-8	5.31		3000	2030	2900	7000	➤ 1a, 2a, 4f, 9a, 10c	Floodlight	
		88			120					6000	1470					
		100	<b>10473</b>	<b>100PAR/HIR/FL40</b>	120	12	CC-8	5.31		3000	2030	2900	3400	➤ 1a, 2a, 4f, 9a, 10c	Floodlight	
	<b>SILVER SAVER™</b>															
	PAR38 Med Skirt	53	<b>16338</b>	<b>53PAR/H/SS/SP10</b>	120	12	CC-8	5.31		3000	800	2800	14000	➤ 1a, 2a, 4f, 9a, 10c	Spotlight	
			<b>16339</b>	<b>53PAR/H/SS/FL25</b>	120	12	CC-8	5.31		3000	800	2800	2900	➤ 1a, 2a, 4f, 9a, 10c	Floodlight	
		53	<b>27989</b>	<b>53/PAR/HSS/SP10</b>	130	12	CC-8	5.31		3000	800	2800	14000	➤ 1a, 2a, 4f, 9a, 10c	Spotlight	
		47			120					6000	608					
		53	<b>27991</b>	<b>53/PAR/HSS/FL25</b>	130	12	CC-8	5.31		3000	800	2800	2900	➤ 1a, 2a, 4f, 9a, 10c	Floodlight	
		47			120					6000	608					
		66	<b>16340</b>	<b>66PAR/H/SS/SP10</b>	120	12	CC-8	5.31		3000	1050	2850	18000	➤ 1a, 2a, 4f, 9a, 10c	Spotlight	
			<b>16341</b>	<b>66PAR/H/SS/FL25</b>	120	12	CC-8	5.31		3000	1050	2850	4000	➤ 1a, 2a, 4f, 9a, 10c	Floodlight	
		66	<b>28263</b>	<b>66/PAR/HSS/SP10</b>	130	12	CC-8	5.31		3000	1050	2850	18000	➤ 1a, 2a, 4f, 9a, 10c	Spotlight	
		58			120					6000	800					
		66	<b>28265</b>	<b>66PAR/HSS/FL25</b>	130	12	CC-8	5.31		3000	1050	2850	4000	➤ 1a, 2a, 4f, 9a, 10c	Floodlight	
		58			120					6000	800					
		79	<b>16342</b>	<b>79PAR/H/SS/SP10</b>	120	12	CC-8	5.31		3000	1310	2850	20000	➤ 1a, 2a, 4f, 9a, 10c	Spotlight	
			<b>16343</b>	<b>79PAR/H/SS/FL25</b>	120	12	CC-8	5.31		3000	1310	2850	4700	➤ 1a, 2a, 4f, 9a, 10c	Floodlight	
	79	<b>28267</b>	<b>79PAR/HSS/SP10</b>	130	12	CC-8	5.31		3000	1310	2850	20000	➤ 1a, 2a, 4f, 9a, 10c	Spotlight		
	70			120					6000	1000						
	79	<b>28268</b>	<b>79PAR/HSS/FL25</b>	130	12	CC-8	5.31		3000	1310	2850	4700	➤ 1a, 2a, 4f, 9a, 10c	Floodlight		
	70			120					6000	1000						
<b>LONG LIFE PAR38</b>																
	PAR38 Med Skirt	45	<b>16354</b>	<b>45PAR/SP10 XL-EG</b>	120	6	CC-8	5.31		6000	520	2700	8000	➤ 1a, 2a, 4f, 9a, 10c	Spotlight	
			<b>16355</b>	<b>45PAR/FL25 XL-EG</b>	120	6	CC-8	5.31		6000	520	2700	2000	➤ 1a, 2a, 4f, 9a, 10c	Floodlight	
		90	<b>16357</b>	<b>90PAR/SP10 XL-EG</b>	120	6	CC-8	5.31		6000	1310	2800	20000	➤ 1a, 2a, 4f, 9a, 10c	Spotlight	
			<b>16358</b>	<b>90PAR/FL25 XL-EG</b>	120	6	CC-8	5.31		6000	1310	2800	4700	➤ 1a, 2a, 4f, 9a, 10c	Floodlight	
		45	<b>20757</b>	<b>45PAR/SP10XL-OD</b>	120	6	CC-8	5.31		6000	520	2700	8000	➤ 1a, 2a, 4f, 9a, 10c	Spotlight	
			<b>20758</b>	<b>45PAR/FL25XL-OD</b>	120	6	CC-8	5.31		6000	520	2700	2000	➤ 1a, 2a, 4f, 9a, 10c	Floodlight	
		90	<b>20759</b>	<b>90PAR/SP10XL-OD</b>	120	6	CC-8	5.31		6000	1310	2800	20000	➤ 1a, 2a, 4f, 9a, 10c	Spotlight	
			<b>20763</b>	<b>90PAR/FL25XL-OD</b>	120	6	CC-8	5.31		6000	1310	2800	4700	➤ 1a, 2a, 4f, 9a, 10c	Floodlight	
	<b>HALOGEN PLUS</b>															
		PAR38 Med Skirt	45	<b>17470</b>	<b>45PAR/H/SP10</b>	120	6	CC-8	5.31		2500	540	2750	8000	➤ 1a, 2a, 4f, 9a, 10c	Spotlight
45			<b>16229</b>	<b>45PAR/H/SP10</b>	130	12	CC-8	5.31		2500	540	2750	8000	➤ 1a, 2a, 4f, 9a, 10c	Spotlight	
		40			120					5000	410					
		45	<b>17471</b>	<b>45PAR/H/FL25 6PK</b>	120	6	CC-8	5.31		2500	540	2750	2000	➤ 1a, 2a, 4f, 9a, 10c	Floodlight	
		45	<b>16231</b>	<b>45PAR/H/FL25</b>	130	12	CC-8	5.31		2500	540	2750	2000	➤ 1a, 2a, 4f, 9a, 10c	Floodlight	
		40			120					5000	410					
		60	<b>25266</b>	<b>60PAR/H/SP10</b>	120	12	CC-8	5.31		3000	800	2800	13000	➤ 1a, 2a, 4f, 9a, 10c	Spotlight	
		60	<b>25270</b>	<b>60PAR/H/SP10</b>	130	12	CC-8	5.31		3000	800	2800	13000	➤ 1a, 2a, 4f, 9a, 10c	Spotlight	
		54			120					6000	608					
		60	<b>25269</b>	<b>60PAR/H/FL25</b>	120	12	CC-8	5.31		3000	800	2800	3200	➤ 1a, 2a, 4f, 9a, 10c	Floodlight	
	60	<b>25271</b>	<b>60PAR/H/FL25</b>	130	12	CC-8	5.31		3000	800	2800	3200	➤ 1a, 2a, 4f, 9a, 10c	Floodlight		
	54			120					6000	608						









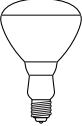

Bulb Shape	Base Type	Order Watts	Description	Case Volts	Filament Qty.	Type	MOL	LCL	Rated Life (hrs)	Lumens Initial	Initial Color Temp.	CBCP	Footnotes	Additional Information	
<b>HALOGEN PAR38 LAMPS (CONTINUED)</b>															
<b>HALOGEN PLUS (CONTINUED)</b>															
	PAR38 Med Skirt	75	14751 75PAR/H/SP9-6PK	120	6	CC-8	5.31		2500	1050	2850	18000	↗ 1a, 2a, 4f, 9a, 10c	Spotlight	
			14748 75PAR/H/FL25-6PK	120	6	CC-8	5.31		2500	1050	2850	4000	↗ 1a, 2a, 4f, 9a, 10c	Floodlight	
			81864 75PAR38HFL25/RVL	120	6	CC-8	5.31		2500	950				↗ 1a, 2a, 4f, 9a, 10c	Reveal®, Floodlight
			26564 75PAR/H/FL-TWIN	120	3	CC-8	5.31		2500	1050	2850	4000	↗ 1a, 2a, 4f, 9a, 10c	Floodlight	
		75	21389 75PAR/H/FL25	130	12	CC-8	5.31		2500	1050	2850	4000	↗ 1a, 2a, 4f, 9a, 10c	Floodlight	
		66		120					5000	800					
		90	17450 90PAR/H/SP10-6PK	120	6	CC-8	5.31		2500	1310	2900	20000	↗ 1a, 2a, 4f, 9a, 10c	Spotlight	
		90	13311 90PAR/H/SP10	130	12	CC-8	5.31		2500	1310	2900	20000	↗ 1a, 2a, 4f, 9a, 10c	Spotlight	
		79		120					5000	1000					
		90	17451 90PAR/H/FL25-6PK	120	6	CC-8	5.31		2500	1310	2900	4700	↗ 1a, 2a, 4f, 9a, 10c	Floodlight	
		90	13308 90PAR/H/FL25	130	12	CC-8	5.31		2500	1310	2900	4700	↗ 1a, 2a, 4f, 9a, 10c	Floodlight	
		79		120					5000	1000					
	90	22742 90PAR/H/FL-TWIN	120	3	CC-8	5.31		2500	1310	2900	4700	↗ 1a, 2a, 4f, 9a, 10c	Floodlight		
		25727 90PAR/H/WFL-120V	120	12	CC-8	5.31		2500	1310	2900			↗ 1a, 2a, 4f, 9a, 10c	Wide Floodlight	
	120	41632 120PAR/H/SP9	120	6	CC-8	5.31		2500	1900	2950	18000		↗ 1a, 2a, 4f, 9a, 10c	Narrow Spot	
	120	41631 120PAR/H/FL30	120	6	CC-8	5.31		2500	1900	2950	4000		↗ 1a, 2a, 4f, 9a, 10c	Floodlight	
<b>STANDARD HALOGEN</b>															
	PAR38 Med Skirt	50	17980 50PAR/H/SP10-6PK	120	6	CC-8	5.31		2000	600	2750	9500	↗ 1a, 2a, 4f, 9a, 10c	Spotlight	
			17979 50PAR/H/FL25-6PK	120	6	CC-8	5.31		2000	600	2750	2200	↗ 1a, 2a, 4f, 9a, 10c	Floodlight	
			25948 50PAR/H/FL-TWIN	120	3	CC-8	5.31		2000	600	2750	2200	↗ 1a, 2a, 4f, 9a, 10c	Floodlight	
		50	17926 50PAR/H/FL	130	12	CC-8	5.31		2000	600	2750	2200	↗ 1a, 2a, 4f, 9a, 10c	Floodlight	
		46		120					4000	450					
		100	17992 100PAR/H/SP10	120	6	CC-8	5.31		2000	1500	2900	22000	↗ 1a, 2a, 4f, 9a, 10c	Spotlight	
			17986 100PAR/H/FL25	120	6	CC-8	5.31		2000	1500	2900	5000	↗ 1a, 2a, 4f, 9a, 10c	Floodlight	
			25679 100PAR/H/FL-TWIN	120	3	CC-8	5.31		2000	1500	2900	5000	↗ 1a, 2a, 4f, 9a, 10c	Floodlight	
	100	17947 100PAR/H/FL25	130	12	CC-8	5.31		2000	1500	2900	5000	↗ 1a, 2a, 4f, 9a, 10c	Floodlight		
		88		120					4000	1150					
<b>COOL BEAM PAR38</b>															
	PAR38 Med Skirt	90	17691 90PAR/CB/H/FL25	120	12	CC-8	5.31		2500	1260	2870	4100	↗ 1a, 2a, 2c, 4f, 9a, 10c	Cool Beam Flood	
<b>QUARTZLINE®</b>															
	PAR38 Med Skirt	250	23719 Q250PAR/SP10	120	12	CC-8	5.31		4200	3600	2880	40000	↗ 1a, 2a, 2j, 4b, 4f, 4g, 4h, 9a, 10c	Spotlight	
			23718 Q250PAR/FL30	120	12	CC-8	5.31		4200	3600	2880	9000	↗ 1a, 2a, 2j, 4b, 4f, 4g, 4h, 9a, 10c	Floodlight	
<b>HALOGEN COMPACT PAR LAMPS</b>															
<b>COMPACT HIR™</b>															
	PAR30 Med	45	41545 45PAR30HIR/SP9XL	120	15	CC-8	3.62		6000	620	2680	9750	↗ 1a, 2a, 4f, 4h, 9a, 10c	Spotlight	
			41547 45PAR30HIR/FL25XL	120	15	CC-8	3.62		6000	620	2680	2025	↗ 1a, 2a, 4f, 4h, 9a, 10c	Floodlight	
			41550 45PAR30HIR/FL35XL	120	15	CC-8	3.62		6000	620	2680	1125	↗ 1a, 2a, 4f, 4h, 9a, 10c	Floodlight	
		50	19902 50PAR30/HIR/SP9	120	15	CC-8	3.62		4000	825	2810	15000	↗ 1a, 2a, 4f, 4h, 9a, 10c	Spotlight	
			19901 50PAR30HIR/FL25	120	15	CC-8	3.62		4000	825	2810	3200	↗ 1a, 2a, 4f, 4h, 9a, 10c	Floodlight	
		50	21533 50PAR30HIR/FL25	130	15	CC-8	3.62		3000	825	2810	3200	↗ 1a, 2a, 4f, 4h, 9a, 10c	Floodlight	
		46		120					6000	620					
		50	19900 50PAR30/HIR/FL35	120	15	CC-8	3.62		4000	825	2810	1800	↗ 1a, 2a, 4f, 4h, 9a, 10c	Floodlight	
		50	19903 50PAR30/HIR/FL35	130	15	CC-8	3.62		3000	825	2810	1800	↗ 1a, 2a, 4f, 4h, 9a, 10c	Floodlight	
		46		120					6000	620					
<b>COMPACT PAR30 LONG NECK</b>															
	PAR30L Med	50	14940 50PAR30L/H/SP10	130	6	CC-8	4.75		3000	580	2800	7500	↗ 1a, 2a, 4f, 4h, 9a, 10c	Spotlight	
		46		120					6000	460					
	50	11117 50PAR30L/H/SP10	130	15	CC-8	4.75		3000	580	2800	7500	↗ 1a, 2a, 4f, 4h, 9a, 10c	Spotlight		
	46		120					6000	460						



# Halogen Lamps











Bulb Shape	Base Type	Order Watts	Code	Description	Case Volts	Filament Qty.	Type	MOL	LCL	Rated Life (hrs)	Lumens Initial	Color Temp.	CBCP	Footnotes	Additional Information	
<b>HALOGEN COMPACT PAR LAMPS (CONTINUED)</b>																
<b>COMPACT PAR30 LONG NECK (CONTINUED)</b>																
	PAR30L Med	50	11116	50PAR30L/H/FL40	120	15	CC-8	4.75		3000	580	2800	1100	↘ 1a, 2a, 4f, 4h, 9a, 10c	Floodlight	
		50	11123	50PAR30L/H/FL40	130	15	CC-8	4.75		3000	580	2800	1100	↘ 1a, 2a, 4f, 4h, 9a, 10c	Floodlight	
		46			120					6000	460					
		50	14941	50PAR30L/H/WFL	120	6	CC-8	4.75			3000	630	2800		↘ 1a, 2a, 4f, 4h, 9a, 10c	Wide Floodlight
		75	11124	75PAR30L/H/SP10	120	15	CC-8	4.75			3000	940	2830	13000	↘ 1a, 2a, 4f, 4h, 9a, 10c	Spotlight
		75	11129	75PAR30L/H/SP10	130	15	CC-8	4.75			3000	940	2830	13000	↘ 1a, 2a, 4f, 4h, 9a, 10c	Spotlight
		66			120					6000	751					
		75	14943	75PAR30L/H/FL25	120	6	CC-8	4.75			3000	940	2830	3800	↘ 1a, 2a, 4f, 4h, 9a, 10c	Floodlight
		75	11131	75PAR30L/H/FL25	130	15	CC-8	4.75			3000	940	2830	3800	↘ 1a, 2a, 4f, 4h, 9a, 10c	Floodlight
		66			120					6000	751					
	75	16393	75PAR30L/H/WFL	120	6	CC-8	4.75			3000	1050	2830		↘ 1a, 2a, 4f, 4h, 9a, 10c	Wide Floodlight	
		81862	75PAR30LHFL25/RVL	120	6	CC-8	4.75			3000	980			1a, 2a, 4f, 4h, 9a, 10c	Reveal <sup>®</sup> , Floodlight	
<b>COMPACT PAR30</b>																
	PAR30 Med	50	14023	50PAR30/H/SP10	120	6	CC-8	3.62		3000	630	2800	8200	↘ 1a, 2a, 4f, 4h, 9a, 10c	Spotlight	
		50	17870	50PAR30/H/SP10	130	15	CC-8	3.62		3000	630	2800	8200	↘ 1a, 2a, 4f, 4h, 9a, 10c	Spotlight	
		46			120					6000	500					
		50	17871	50PAR30/H/FL25	120	15	CC-8	3.62			3000	630	2800	2300	↘ 1a, 2a, 4f, 4h, 9a, 10c	Floodlight
		50	17872	50PAR30/H/FL25	130	15	CC-8	3.62			3000	630	2800	2300	↘ 1a, 2a, 4f, 4h, 9a, 10c	Floodlight
		46			120					6000	500					
		50	14022	50PAR30/H/FL35	120	6	CC-8	3.62			3000	630	2800	1400	↘ 1a, 2a, 4f, 4h, 9a, 10c	Floodlight
		50	17874	50PAR30/H/FL35	130	15	CC-8	3.62			3000	630	2800	1400	↘ 1a, 2a, 4f, 4h, 9a, 10c	Floodlight
		46			120					6000	500					
		60	27212	60PAR30/H/NSP9	120	15	CC-8	3.62			3000	800	2800	11000	↘ 1a, 2a, 4f, 4h, 9a, 10c	Spotlight
			40167	60PAR30/H/FL25	120	15	CC-8	3.62			3000	800	2800	2900	↘ 1a, 2a, 4f, 4h, 9a, 10c	Floodlight
			27214	60PAR30/H/FL35	120	15	CC-8	3.62			3000	800	2800	1700	↘ 1a, 2a, 4f, 4h, 9a, 10c	Floodlight
		75	14802	75PAR30/H/SP10	120	6	CC-8	3.62			3000	1030	2830	13000	↘ 1a, 2a, 4f, 4h, 9a, 10c	Spotlight
			81863	75PAR30HFL35/RVL	120	6	CC-8	3.62			3000	1010			1a, 2a, 4f, 4h, 9a, 10c	Reveal <sup>®</sup> , Floodlight
		75	18056	75PAR30/H/SP10	130	15	CC-8	3.62			3000	1030	2830	13000	↘ 1a, 2a, 4f, 4h, 9a, 10c	Spotlight
		66			120					6000	790					
	75	18057	75PAR30/H/FL25	120	15	CC-8	3.62			3000	1030	2830	3800	↘ 1a, 2a, 4f, 4h, 9a, 10c	Floodlight	
		14779	75PAR30/H/FL35	120	6	CC-8	3.62			3000	1030	2830	2400	↘ 1a, 2a, 4f, 4h, 9a, 10c	Floodlight	
	75	18060	75PAR30/H/FL35	130	15	CC-8	3.62			3000	1030	2830	2400	↘ 1a, 2a, 4f, 4h, 9a, 10c	Floodlight	
	66			120					6000	790						
<b>COMPACT PAR20</b>																
	PAR20 Med	50	14927	50PAR20/H/SP10	120	6	CC-8	3.13		2500	570	2800	6000	↘ 1a, 2a, 4f, 4h, 9a, 10c	Spotlight	
			81861	50PAR20HFL25/RVL	120	6	CC-8	3.13		2500				1a, 2a, 4f, 4h, 9a, 10c	Reveal <sup>®</sup> , Floodlight	
		50	17866	50PAR20/H/SP10	130	15	CC-8	3.13		2500	570	2800	6000	↘ 1a, 2a, 4f, 4h, 9a, 10c	Spotlight	
		46			120					5000	498					
		50	14928	50PAR20H/FL25	120	6	CC-8	3.13			2500	570	2800	1500	↘ 1a, 2a, 4f, 4h, 9a, 10c	Floodlight
	50	17868	50PAR20/H/FL25	130	15	CC-8	3.13			2500	570	2800	1500	↘ 1a, 2a, 4f, 4h, 9a, 10c	Floodlight	
	46			120					5000	498						
<b>HALOGEN COMPACT PAR16</b>																
	PAR16 Med	35	82135	35PAR16CURIO-PQ	120	6	CC-8	2.88		3000				1a, 2a, 4f, 4h, 9a, 10c		
		60	41628	60PAR16/H/SP10	120	6	CC-8	2.88		2000	650	2950	5400		1a, 2a, 4f, 4h, 9a, 10c	Spotlight
			41623	60PAR16/H/FL30	120	6	CC-8	2.88		2000	650	2950	1550		1a, 2a, 4f, 4h, 9a, 10c	Floodlight
			82142	60PAR16FL/RVL-CD	120	6	CC-8	2.88		2000					1a, 2a, 4f, 4h, 9a, 10c	Reveal <sup>®</sup> , Floodlight, Carded
		75	41630	75PAR16/H/SP10	120	6	CC-8	2.88		2000	900	2950	6200		1a, 2a, 4f, 4h, 9a, 10c	Spotlight
		41629	75PAR16/H/FL30	120	6	CC-8	2.88		2000	900	2950	1600		1a, 2a, 4f, 4h, 9a, 10c	Floodlight	








Bulb Shape	Base Type	Watts	Order Code	Description	Case Volts	Filament Qty.	Type	MOL	LCL	Rated Life (hrs)	Lumens Initial	Initial Color Temp.	CBCP	Footnotes	Additional Information
<b>HALOGEN COMPACT PAR LAMPS (CONTINUED)</b>															
<b>DIAMOND PRECISE® ELECTRONIC MR16</b>															
	MR16	Med	21	48545 Q21EMR16/C/SP12	120	6	C-6	3.38		5000	260	2950	3900	➤ 1a, 1c, 2a, 2b, 4f, 4i, 4k, 9b, 10c	Narrow Spot
				48546 Q21EMR16/C/FL25	120	6	C-6	3.38		5000	260	2950	890	➤ 1a, 1c, 2a, 2b, 4f, 4i, 4k, 9b, 10c	Narrow Flood
				48547 Q21EMR16/C/SP12CD	120	6	C-6	3.38		5000	260	2950	3900	➤ 1a, 1c, 2a, 2b, 4f, 4i, 4k, 9b, 10c	Narrow Spot, Carded
				48548 Q21EMR16/C/FL25CD	120	6	C-6	3.38		5000	260	2950	890	➤ 1a, 1c, 2a, 2b, 4f, 4i, 4k, 9b, 10c	Narrow Flood, Carded
<b>PAR36</b>															
	PAR36	Scrw Term	35	19873 35PAR36/H/SP5	12	12	C-6	2.75		4000	250	3050	25000	➤ 2a, 2b, 4f, 4g, 7a, 9b, 10c	Spotlight
				19876 35PAR36/H/SP8	12	12	C-6	2.75		4000	250	3050	8000	➤ 2a, 2b, 4f, 4g, 7a, 9b, 10c	Spotlight
				19877 35PAR36/H/FL30	12	12	C-6	2.75		4000	250	3050	900	➤ 2a, 2b, 4f, 4g, 7a, 9b, 10c	Floodlight
				42072 35PAR36/H/VWFL	12	12	C-6	2.75		4000	250	3050		➤ 2a, 2b, 4f, 4g, 7a, 9b, 10c	Wide Flood
			50	19878 50PAR36/H/SP5	12	12	C-6	2.75		4000	400	3050	39000	➤ 2a, 2b, 4f, 4g, 7a, 9b, 10c	Spotlight
				19879 50PAR36/H/SP8	12	12	C-6	2.75		4000	400	3050	10000	➤ 2a, 2b, 4f, 4g, 7a, 9b, 10c	Spotlight
				19880 50PAR36/H/FL30	12	12	C-6	2.75		4000	400	3050	1300	➤ 2a, 2b, 4f, 4g, 7a, 9b, 10c	Floodlight
<b>A-15</b>															
	A15	Med	40	82114 40A15CF/CL/H-CD2	120	6	CC-8	3.50		2250				➤ 1a, 1b, 2a, 2b, 2e, 4i, 4j, 7a, 10b, 10c	Ceiling Fan, Halogen
				82115 60A15CF/CL/H-CD2	120	6	CC-8	3.50		2250				➤ 1a, 1b, 2a, 2b, 2e, 4i, 4j, 7a, 10b, 10c	Ceiling Fan, Halogen
<b>A-19</b>															
	A19	Med	60	82137 60A/CL/H/RVL-CD	120	5	C-8	4.43		3000	675			➤ 1a, 1b, 2a, 2b, 2e, 4i, 4j, 7a, 10b, 10c	Reveal®, Halogen
				82138 75A/CL/H/RVL-CD	120	5	C-8	4.43		3000	850			➤ 1a, 1b, 2a, 2b, 2e, 4i, 4j, 7a, 10b, 10c	Reveal®, Halogen
				100 82139 100A/CL/H/RVL-CD	120	5	C-8	4.43		3000	1275			➤ 1a, 1b, 2a, 2b, 2e, 4i, 4j, 7a, 10b, 10c	Reveal®, Halogen
<b>A-21</b>															
	A21	Med	30	24699 30/100-HALOGEN	120	6	CC-8	5.25		2500	300			➤ 1a, 2a, 2b, 2c, 4i, 4j, 9a, 10b, 10c	3-Way
			70								1050				
			100								1370				
			50	81590 50/150-HALOGEN	120	6	CC-8	5.25		2500	700			➤ 1a, 2a, 2b, 2c, 4i, 4j, 9a, 10b, 10c	3-Way
			100								1600				
		150								2300					
<b>HALOGEN REFLECTORS</b>															
	BR30	Med	60	85116 60BR30FL/H-PQ1/6	120	6	CC-8	5.37		3000	700			➤ 1a, 1b, 2a, 2b, 2e, 4i, 4j, 7a, 10b, 10c	Halogen Reflector
				85127 60BR30FL/H-3PK	120	6	CC-8	5.37		3000	700			➤ 1a, 1b, 2a, 2b, 2e, 4i, 4j, 7a, 10b, 10c	Halogen Reflector 3-Pack
	BR40	Med	60	85131 60BR40FL/H-PQ1/6	120	6	CC-8	6.56		3000	790			➤ 1a, 1b, 2a, 2b, 2e, 4i, 4j, 7a, 10b, 10c	Halogen Reflector
				100 85146 100BR40F/H-PQ1/6	120	6	CC-8	6.56		3000	1200			➤ 1a, 1b, 2a, 2b, 2e, 4i, 4j, 7a, 10b, 10c	Halogen Reflector
<b>G16.5 GC</b>															
	G16.5	Cand	40	82131 40GC/CL/H-PQ2/3	120	6	CC-8	3.00		2250				➤ 1a, 1b, 2a, 2b, 2e, 4i, 4j, 7a, 10b, 10c	
				82132 60GC/CL/H-PQ2/3	120	6	CC-8	3.00		2250				➤ 1a, 1b, 2a, 2b, 2e, 4i, 4j, 7a, 10b, 10c	



# Halogen Lamps

Bulb Shape	Base Type	Order Watts	Code	Description	Case Volts	Filament Qty.	Type	MOL	LCL	Rated Life (hrs)	Lumens Initial	Initial Temp.	CBCP	Footnotes	Additional Information
<b>G16.5 (CONTINUED)</b>															
<b>GM</b>															
	Med	40	<b>82133</b>	<b>40GM/CL/H-PQ2/3</b>	120	6	CC-8	3.00		2250				1a, 1b, 2a, 2b, 2e, 4i 4j, 7a, 10b, 10c	
		60	<b>82134</b>	<b>60GM/CL/H-PQ2/3</b>	120	6	CC-8	3.00		2250				1a, 1b, 2a, 2b, 2e, 4i 4j, 7a, 10b, 10c	
<b>A-LINE/DECORATIVE</b>															
	Med	45	<b>45650</b>	<b>45BM/HAL/PQ1/6</b>	120	6	CC-8	4.63	2.38	3000	600	2750		1a, 1b, 2a, 2b, 2e, 4i, 4j, 9a, 10b, 10c	Frost, Thick Glass
		50	<b>16747</b>	<b>50TB/H</b>	130	60	CC-8	4.43	3.13	2000	710	2800		➤ 1a, 2a, 4f, 4h, 9a, 10c	Frost, Thick Glass
	Med	46			120					4000	540				
		50	<b>20647</b>	<b>50A/HAL/6PK</b>	120	6	CC-8	4.43	3.13	2000	710	2800		➤ 1a, 2a, 4f, 4h, 9a, 10c	Frost, Thick Glass
		60	<b>48105</b>	<b>60A/HAL/CD</b>	120	4	CC-8	4.43	2.62	3000	840	2800		1a, 2a, 4f, 4h, 9a, 10c	Frost, Thick Glass
			<b>48106</b>	<b>60A/HAL/CL/CD</b>	120	4	CC-8	4.43	2.62	3000	870	2800		1a, 2a, 4f, 4h, 9a, 10c	Clear, Thick Glass
		75	<b>48107</b>	<b>75A/HAL/CD</b>	120	4	CC-8	4.43	2.62	3000	1170	2850		1a, 2a, 4f, 4h, 9a, 10c	Frost, Thick Glass
		90	<b>16745</b>	<b>90TB/H</b>	130	60	CC-8	4.43	3.13	2000	1580	2930		➤ 1a, 2a, 4f, 4h, 9a, 10c	Frost, Thick Glass
		81			120						4000	1220			
	Med	90	<b>20648</b>	<b>90A/HAL/6PK</b>	120	6	CC-8	4.43	3.13	2000	1580	2930		➤ 1a, 2a, 4f, 4h, 9a, 10c	Frost, Thick Glass
			<b>48108</b>	<b>90A/HAL/CD</b>	120	4	CC-8	4.43	2.62	3000	1470	2930		1a, 2a, 4f, 4h, 9a, 10c	Frost, Thick Glass
		60	<b>10036</b>	<b>60BTT/CL/CD</b>	120	5	C-8	4.75	3.00	3000	900	2800		1a, 1b, 2a, 2b, 2e, 4i, 4j, 9a, 10b, 10c	Clear, Brass Base, Carded
			<b>11856</b>	<b>60BTT/CL/CD/TW</b>	120	5	C-8	4.75	3.00	3000	900	2800		1a, 1b, 2a, 2b, 2e, 4i, 4j, 9a, 10b, 10c	Clear, Brass Base twin pack, Carded
			<b>10038</b>	<b>60BTT/SW/CD</b>	120	5	C-8	4.75	3.00	3000	840	2800		1a, 1b, 2a, 2b, 2e, 4i, 4j, 9a, 10b, 10c	White, Brass Base, Carded
	Med		<b>10039</b>	<b>60BTT/SW/CD/TW</b>	120	5	C-8	4.75	3.00	3000	840	2800		1a, 1b, 2a, 2b, 2e, 4i, 4j, 9a, 10b, 10c	White, Brass Base twin pack, Carded
		75	<b>10040</b>	<b>75BTT/SW/CD</b>	120	5	C-8	4.75	3.00	3000	1070	2850		1a, 1b, 2a, 2b, 2e, 4i, 4j, 9a, 10b, 10c	White, Brass Base, Carded
		100	<b>10042</b>	<b>100BTT/SW/CD</b>	120	5	C-8	4.75	3.00	3000	1600	2900		1a, 1b, 2a, 2b, 2e, 4i, 4j, 9a, 10b, 10c	White, Brass Base, Carded
		150	<b>10043</b>	<b>150BTT/SW/CD</b>	120	5	C-8	4.75	3.00	3000	2430	2900		1a, 1b, 2a, 2b, 2e, 4i, 4j, 9a, 10b, 10c	White, Brass Base, Carded
	Med	60	<b>10044</b>	<b>60BTT/POST/CD</b>	120	5	C-8	4.75	3.00	3000	900	2800		1a, 1b, 2a, 2b, 2e, 4i, 4j, 9a, 10b, 10c	Clear, Brass Base, Carded Postlamp
	Med	25	<b>16760</b>	<b>25BM/H/CD2</b>	120	5	CC-8	3.4	2.22	2250	280	2700		1a, 1b, 2a, 2b, 2e, 4i, 4j, 9a, 10b, 10c	Carded Twin Pack
		40	<b>16761</b>	<b>40BM/H/CD2</b>	120	5	CC-8	3.4	2.22	2250	485	2800		1a, 1b, 2a, 2b, 2e, 4i, 4j, 9a, 10b, 10c	Carded Twin Pack
	Cand	25	<b>16764</b>	<b>25BC/H/CD2</b>	120	5	CC-8	3.4	2.22	2250	280	2700		1a, 1b, 2a, 2b, 2e, 4i, 4j, 9a, 10b, 10c	Carded Twin Pack
		40	<b>16765</b>	<b>40BC/H/CD2</b>	120	5	CC-8	3.4	2.22	2250	485	2800		1a, 1b, 2a, 2b, 2e, 4i, 4j, 9a, 10b, 10c	Carded Twin Pack
	Med	25	<b>16766</b>	<b>25BFM/H/CD2</b>	120	5	CC-8	3.4	2.22	2250	280	2700		1a, 1b, 2a, 2b, 2e, 4i, 4j, 9a, 10b, 10c	Carded Twin Pack
		40	<b>16767</b>	<b>40BFM/H/CD2</b>	120	5	CC-8	3.4	2.22	2250	485	2800		1a, 1b, 2a, 2b, 2e, 4i, 4j, 9a, 10b, 10c	Carded Twin Pack
	Med	40	<b>16771</b>	<b>40G25/H/CL</b>	120	6	CC-8	4.45	2.56	2250	510	2700		1a, 1b, 2a, 2b, 2e, 4i, 4j, 9a, 10b, 10c	
			<b>82140</b>	<b>40G25/CL/H/RVL</b>	120	6	C-8	4.50		2250				1a, 1b, 2a, 2b, 2e, 4i, 4j, 9a, 10b, 10c	Reveal® Halogen
		60	<b>16773</b>	<b>60G25/H/CL</b>	120	6	CC-8	4.45	2.56	2250	1000	2900		1a, 1b, 2a, 2b, 2e, 4i, 4j, 9a, 10b, 10c	
			<b>82141</b>	<b>60G25/CL/H/RVL</b>	120	6	C-8	4.50		2250				1a, 1b, 2a, 2b, 2e, 4i, 4j, 9a, 10b, 10c	Reveal® Halogen



Bulb Shape	Base Type	Order Watts	Order Code	Description	Case Volts	Flament Qty.	Type	MOL	LCL	Rated Life (hrs)	Lumens Initial	Initial Color Temp.	CBCP	Footnotes	Additional Information		
<b>A-LINE/DECORATIVE (CONTINUED)</b>																	
	Med	40	16774	40G25/H/CRYSTAL	120	6	CC-8	4.45	2.56	2250	500	2700		1a, 1b, 2a, 2b, 2e, 4i, 4j, 9a, 10b, 10c			
		60	16775	60G25/H/CRYSTAL	120	6	CC-8	4.45	2.56	2250	960	2900		1a, 1b, 2a, 2b, 2e, 4i, 4j, 9a, 10b, 10c			
	Med	25	16776	25T10/H/CD	120	4	CC-8	5.04	2.56	2250	260	2700		1a, 1b, 2a, 2b, 2e, 4i, 4j, 9a, 10b, 10c	Carded		
		40	16777	40T10/H/CD	120	4	CC-8	5.04	2.56	2250	510	2700		1a, 1b, 2a, 2b, 2e, 4i, 4j, 9a, 10b, 10c	Carded		
		60	16778	60T10/H/CD	120	4	CC-8	5.04	2.56	2250	800	2900		1a, 1b, 2a, 2b, 2e, 4i, 4j, 9a, 10b, 10c	Carded		
<b>AR111</b>																	
	G53	35	97532	35AR111/SP8	12	10		2.64		2000		2800	14000	2a, 2j, 4a, 4c, 4e, 4f 9a, 9d, 10b, 10c	Spotlight		
			97533	35AR111/FL24	12	10		2.64		2000		2800	2500	2a, 2j, 4a, 4c, 4e, 4f 9a, 9d, 10b, 10c	Narrow Floodlight		
		50	97534	50AR111/SP8	12	10		2.64		3000		2800	17800	2a, 2j, 4a, 4c, 4e, 4f 9a, 9d, 10b, 10c	Spotlight		
			97535	50AR111/FL24	12	10		2.64		3000		2800	3500	2a, 2j, 4a, 4c, 4e, 4f 9a, 9d, 10b, 10c	Narrow Floodlight		
		75	97536	75AR111/SP8	12	10		2.64		3000		2900	23500	2a, 2j, 4a, 4c, 4e, 4f 9a, 9d, 10b, 10c	Spotlight		
			97537	75AR111/FL24	12	10		2.64		3000		2900	5300	2a, 2j, 4a, 4c, 4e, 4f 9a, 9d, 10b, 10c	Narrow Floodlight		
			97538	75AR111/FL45	12	10		2.64		3000		2900	1700	2a, 2j, 4a, 4c, 4e, 4f 9a, 9d, 10b, 10c	Wide Floodlight		
		100	97539	100AR111/SP8	12	10		2.64		3000		2950	40000	2a, 2j, 4a, 4c, 4e, 4f 9a, 9d, 10b, 10c	Spotlight		
			97540	100AR111/FL24	12	10		2.64		3000		2950	8000	2a, 2j, 4a, 4c, 4e, 4f 9a, 9d, 10b, 10c	Narrow Floodlight		
			97541	100AR111/FL45	12	10		2.64		3000		2950	2300	2a, 2j, 4a, 4c, 4e, 4f 9a, 9d, 10b, 10c	Wide Floodlight		
		<b>MR</b>															
		<b>TURN &amp; LOCK CONSTANTCOLOR®</b>															
	TAL	35	30932	35MR16/Q/8/TL	12	10	C-6	2		3500		2900	8100	2a, 2b, 4f, 7a, 9a, 10b, 10c	Narrow Spot		
		50	30901	50MR16/Q/10/TL	12	10	C-6	2		3500		3000	10800	2a, 2b, 4f, 7a, 9a, 10b, 10c	Narrow Spot		
			30900	50MR16/Q/20/TL	12	10	C-6	2		3500		3000	3330	2a, 2b, 4f, 7a, 9a, 10b, 10c	Narrow Flood		
			30899	50MR16/Q/40/TL	12	10	C-6	2		3500		3000	1395	2a, 2b, 4f, 7a, 9a, 10b, 10c	Floodlight		
<b>CONSTANTCOLOR® PRECISE™ COVER GLASS MR16</b>																	
	2-Pin GU5.3	20	20858	Q20MR16C/CG15	12	20	C-6	1.88		5000		2900	3150	2a, 2b, 4f, 9a, 10c	Narrow Spot, ANSI: ESX		
			20857	Q20MR16C/CG40	12	20	C-6	1.88		5000		2900	475	2a, 2b, 4f, 9a, 10c	Flood, ANSI: BAB		
			21456	FAM6Q20MR16NSCCG	12	1	C-6	1.88		5000		2900	3350	2a, 2b, 4f, 9a, 10c	Narrow Spot, Carded, ANSI: ESX		
			21455	FAM6Q20MR16FLCCG	12	1	C-6	1.88		5000		2900	490	2a, 2b, 4f, 9a, 10c	Flood, Carded ANSI: BAB		
		35	20864	Q35MR16C/CG12	12	20	C-6	1.88		5000		3000	7500	2a, 2b, 4f, 9a, 10c	Narrow Spot, ANSI: FRB		
			20860	Q35MR16C/CG20	12	20	C-6	1.88		5000		3000	3200	2a, 2b, 4f, 9a, 10c	Spot, ANSI: FRA		



# Halogen Lamps

Bulb Shape	Base Type	Order Watts	Order Code	Description	Case Volts	Filament Qty.	Type	MOL	LCL	Rated Life (hrs)	Lumens Initial	Initial Color Temp.	CBCP	Footnotes	Additional Information
<b>MR (CONTINUED)</b>															
<b>CONSTANTCOLOR® PRECISE™ COVER GLASS MR16 (CONTINUED)</b>															
MR16	2-Pin GU5.3	35	20859	Q35MR16C/CG40	12	20	C-6	1.88		5000		3000	900	2a, 2b, 4f, 9a, 10c	Flood, ANSI: FMW
			23252	FAM6Q35MR16SPCCG	12	1	C-6	1.88			5000		3000	3200	2a, 2b, 4f, 9a, 10c
			23253	FAM6Q35MR16FLCCG	12	1	C-6	1.88		5000		3000	900	2a, 2b, 4f, 9a, 10c	Flood, Clear Glass Carded, ANSI: FMW
			41487	Q35MR16/CCG40	24	20	C-6	1.88		4000		2950	920	2a, 2b, 4f, 9a, 10c	Flood
50			20872	Q50MR16C/CG15	12	20	C-6	1.88		6000		3050	8400	2a, 2b, 4f, 9a, 10c	Narrow Spot ANSI: EXT
			20871	Q50MR16C/CG25	12	20	C-6	1.88			6000		3050	2900	2a, 2b, 4f, 9a, 10c
			20867	Q50MR16C/CG40	12	20	C-6	1.88		6000		3050	1500	2a, 2b, 4f, 9a, 10c	Flood, ANSI: EXN
			20865	Q50MR16C/CG55	12	20	C-6	1.88		6000		3050	850	2a, 2b, 4f, 9a, 10c	Wide Flood, ANSI: FNV
			21458	FAM6Q50MR16NSCCG	12	1	C-6	1.88		6000		3050	9500	2a, 2b, 4f, 9a, 10c	Narrow Spot, Carded, ANSI: EXT
			21457	FAM6Q50MR16FLCCG	12	1	C-6	1.88		6000		3050	1720	2a, 2b, 4f, 9a, 10c	Flood, 3050K, Carded, ANSI: EXN
			41488	Q50MR16/CCG15	24	20	C-6	1.88		4000		2950	8400	2a, 2b, 4f, 9a, 10c	Narrow Spot
			41489	Q50MR16/CCG40	24	20	C-6	1.88		4000		2950	1570	2a, 2b, 4f, 9a, 10c	Flood
71			20876	Q71MR16C/CG15	12	20	C-6	1.88		4000		3050	10800	2a, 2b, 4f, 9a, 10c	Narrow Spot, ANSI: EYF
			20874	Q71MR16C/CG25	12	20	C-6	1.88			4000		3050	4550	2a, 2b, 4f, 9a, 10c
			20873	Q71MR16C/CG40	12	20	C-6	1.88		4000		3050	2000	2a, 2b, 4f, 9a, 10c	Flood, ANSI: EYC
<b>CONSTANTCOLOR® PRECISE™ MR16</b>															
MR16	2-Pin GX5.3	20	20816	Q20MR16C/VNSP7	12	20	CC-6	1.88		3000		2900	7400	2a, 2j, 4a, 4c, 4e, 4f, 9a, 9d, 10b, 10c	Very Narrow Spot, ANSI: EZX
			20815	Q20MR16C/NSP15	12	20	C-6	1.88			5000		2900	3750	2a, 2j, 4a, 4c, 4e, 4f, 9a, 9d, 10b, 10c
			20814	Q20MR16C/FL40 10	12	20	C-6	1.88		5000		2900	525	2a, 2j, 4a, 4c, 4e, 4f, 9a, 9d, 10b, 10c	Flood, ANSI: BAB
35			20826	Q35MR16C/SP20	12	20	C-6	1.88		5000		3000	3900	2a, 2j, 4a, 4c, 4e, 4f, 9a, 9d, 10b, 10c	Spot, ANSI: FRA
			20825	Q35MR16C/FL40	12	20	C-6	1.88			5000		3000	1000	2a, 2j, 4a, 4c, 4e, 4f, 9a, 9d, 10b, 10c
42			20830	Q42MR16C/VNSP9	12	20	CC-6	1.88		3500		3000	12300	2a, 2j, 4a, 4c, 4e, 4f, 9a, 9d, 10b, 10c	Very Narrow Spot, ANSI: EZY
50			20839	Q50MR16C/NSP15	12	20	C-6	1.88		6000		3050	9100	2a, 2j, 4a, 4c, 4e, 4f, 9a, 9d, 10b, 10c	Narrow Spot, ANSI: EXT
			20835	Q50MR16C/NFL25	12	20	C-6	1.88			6000		3050	3200	2a, 2j, 4a, 4c, 4e, 4f, 9a, 9d, 10b, 10c
			20834	Q50MR16C/NFL30	12	20	C-6	1.88		6000		3050	2500	2a, 2j, 4a, 4c, 4e, 4f, 9a, 9d, 10b, 10c	Narrow Flood, ANSI: EXK
			20833	Q50MR16C/FL40	12	20	C-6	1.88		6000		3050	1700	2a, 2j, 4a, 4c, 4e, 4f, 9a, 9d, 10b, 10c	Flood, ANSI: EXN
			20832	Q50MR16C/WFL55	12	20	C-6	1.88		6000		3050	900	2a, 2j, 4a, 4c, 4e, 4f, 9a, 9d, 10b, 10c	Wide Flood, ANSI: FNV
71			20843	Q71MR16C/NSP15	12	20	C-6	1.88		4000		3050	11500	2a, 2j, 4a, 4c, 4e, 4f, 9a, 9d, 10b, 10c	Narrow Spot, ANSI: EYF
			20841	Q71MR16C/NFL25	12	20	C-6	1.88			4000		3050	5500	2a, 2j, 4a, 4c, 4e, 4f, 9a, 9d, 10b, 10c
			20840	Q71MR16C/FL40	12	20	C-6	1.88		4000		3050	2200	2a, 2j, 4a, 4c, 4e, 4f, 9a, 9d, 10b, 10c	Flood, ANSI: EYC



Bulb Shape	Base Type	Order Watts	Order Code	Description	Case Volts	Filament Qty.	Type	MOL	LCL	Rated Life (hrs)	Lumens Initial	Initial Color Temp.	CBCP	Footnotes	Additional Information			
<b>MR (CONTINUED)</b>																		
<b>PRECISE™ COVER GLASS IR MR16</b>																		
	MR16	2-Pin GU5.3	37	16715	Q37MR16/HIR/CG10	12	20	C-8	1.8	4000	3000	12500		2a, 2b, 4f, 9a, 10c	Narrow Spot			
				16716	Q37MR16/HIR/CG25	12	20	C-8	1.8	4000	3000	4400		2a, 2b, 4f, 9a, 10c	Narrow Flood			
				16717	Q37MR16/HIR/CG40	12	20	C-8	1.8	4000	3000	2050		2a, 2b, 4f, 9a, 10c	Flood			
			50	16718	Q50MR16/HIR/CG10	12	20	C-8	1.8	4000	3000	15000		2a, 2b, 4f, 9a, 10c	Narrow Spot			
				16719	Q50MR16/HIR/CG25	12	20	C-8	1.8	4000	3000	5700		2a, 2b, 4f, 9a, 10c	Narrow Flood			
				16720	Q50MR16/HIR/CG40	12	20	C-8	1.8	4000	3000	2600			Flood			
<b>STANDARD MR16</b>																		
	MR16	2-Pin GX5.3	20	25481	Q20MR16/SP	12	20	C-6	1.88	2000	2900	3500		2a, 2j, 4a, 4c, 4e, 4f, 9a, 9d, 10b, 10c	Spot, ANSI: ESX			
				25480	Q20MR16/FL	12	20	C-6	1.88	2000	2900	500		2a, 2j, 4a, 4c, 4e, 4f, 9a, 9d, 10b, 10c	Flood, ANSI: BAB			
				81763	Q20MR16CGFLCD-BA	12	6	C-6	1.88	2000				2a, 2j, 4a, 4c, 4e, 4f, 9a, 9d, 10b, 10c	Flood, Basic			
				81765	Q20MR16CGSPCD-BA	12	6	C-6	1.88	2000				2a, 2j, 4a, 4c, 4e, 4f, 9a, 9d, 10b, 10c	Spot, Basic			
			35	81768	Q35MR16CGFLCD-BA	12	6	C-6	1.88	2000				2a, 2j, 4a, 4c, 4e, 4f, 9a, 9d, 10b, 10c	Flood, Basic			
				81769	Q35MR16CGSPCD-BA	12	6	C-6	1.88	2000				2a, 2j, 4a, 4c, 4e, 4f, 9a, 9d, 10b, 10c	Spot, Basic			
			50	81770	Q50MR16CGFLCD-BA	12	6	C-6	1.88	2000				2a, 2j, 4a, 4c, 4e, 4f, 9a, 9d, 10b, 10c	Flood, Basic			
				81771	Q50MR16CGSPCD-BA	12	6	C-6	1.88	2000				2a, 2j, 4a, 4c, 4e, 4f, 9a, 9d, 10b, 10c	Spot, Basic			
				25483	Q50MR16/SP	12	20	C-6	1.88	2000	2900	9500		2a, 2j, 4a, 4c, 4e, 4f, 9a, 9d, 10b, 10c	Spot, ANSI: EXT			
				25482	Q50MR16/FL	12	20	C-6	1.88	2000	2900	1500		2a, 2j, 4a, 4c, 4e, 4f, 9a, 9d, 10b, 10c	Flood, ANSI: EXN			
				42098	Q50MR16FL/CG/3PK	12	6	C-6	1.88	2000	2900	1500		2a, 2b, 4c, 4f, 9a, 10c	Flood, ANSI: EXN			
				82110	Q50MR16FCCGRV-CD	12	6	C-6	1.88	3000				2a, 2j, 4a, 4c, 4e, 4f, 9a, 9d, 10b, 10c	Reveal®, Floodlight, Carded			
				82111	Q50MR16SCCGRV-CD	12	6	C-6	1.88	3000				2a, 2j, 4a, 4c, 4e, 4f, 9a, 9d, 10b, 10c	Reveal®, Spotlight, Carded			
			<b>STANDARD MR11</b>															
				MR11	2-Pin GZ4	20	30754	Q20MR11/SP15	12	10	C-6	1.38	3500	2900	1760		2a, 2b, 4e, 4c, 4f, 9a, 9d, 10b, 10c, 11a	Spot, ANSI: FTC
30773	Q20MR11/NFL30	12					10	C-6	1.38	3500	2900	600		2a, 2b, 4e, 4c, 4f, 9a, 9d, 10b, 10c, 11a	Narrow Flood, ANSI: FTD			
25197	FAM6Q20MR11NF/CD	12					1	C-6	1.38	3500	2900	600		2a, 2b, 4e, 4c, 4f, 9a, 9d, 10b, 10c, 11a	Narrow Flood, ANSI: FTD			
35	30774	Q35MR11SP20				12	10	C-6	1.38	3500	2900	3000		2a, 2b, 4e, 4c, 4f, 9a, 9d, 10b, 10c, 11a	Spot, ANSI: FTF			
	30890	Q35MR11NFL30				12	10	C-6	1.38	3500	2900	1300		2a, 2b, 4e, 4c, 4f, 9a, 9d, 10b, 10c, 11a	Narrow Flood, ANSI: FTH			
	25349	FAM6Q35MR11SP/CD				12	1	C-6	1.38	3500	2900	4100		2a, 2b, 4e, 4c, 4f, 9a, 9d, 10b, 10c, 11a	Spot, ANSI: FTF			
	41483	Q35MR11/CG12 24				24	50	C-6	1.38	2000	2950	4100		2a, 2b, 4c, 4f, 9a, 10c	Spot			
41484	Q35MR11/CG30 24	24				50	C-6	1.38	2000	2950	1300		2a, 2b, 4c, 4f, 9a, 10c	Narrow Flood				
<b>120V MR16</b>																		
	MR16	GU10	20	16753	Q20GU10/FL/CD	120	5	CC-2V	2.13	2000	2600	230		1a, 2a, 2b, 2e, 4f, 4i, 9a, 10b, 10c				
				35	16752	Q35GU10/FL/CD	120	5	CC-2V	2.13	3000	2650	500		1a, 2a, 2b, 2e, 4f, 4i, 9a, 10b, 10c			





# Halogen Lamps










Bulb Shape	Base Type	Order Watts	Code	Description	Case Volts	Filament Qty.	Type	MOL	LCL	Rated Life (hrs)	Lumens Initial	Initial Color Temp.	CBCP	Footnotes	Additional Information	
<b>MR (CONTINUED)</b>																
<b>120V MR16 (CONTINUED)</b>																
	GU10	50	16751	Q50GU10/FL/CD	120	5	CC-2V	2.13		3000		2750	1000	1a, 2a, 2b, 2e, 4f, 4i, 9a, 10b, 10c		
			82143	Q50GU10FL/RVL-CD	120	6	CC-2V	2.13			3000				1a, 2a, 2b, 2e, 4f, 4i, 9a, 10b, 10c	Reveal <sup>®</sup> , Floodlight, Carded
JDR16	Med	35	20641	35PAR16/CURIO	120	3	CC-6V	2.05		3000		2700	500	1a, 2a, 2b, 2e, 4f, 4i, 9a, 10b, 10c		
<b>QUARTZ HALOGEN</b>																
	T3	2-Pin G4	5	42959	Q5T3/CL	12	100	C-6	1.25	0.75	2000	60		2a, 2j, 4c, 4e, 4f, 9a, 9d, 10b, 10c	Clear	
			10	34674	Q10T3/CL	12	100	C-6	1.25	0.75	2000	140			2a, 2j, 4c, 4e, 4f, 9a, 9d, 10b, 10c	Clear
				19371	Q10T3/CL/CD 5PK	12	25	C-6	1.25	0.75	2000	140			2a, 2j, 4c, 4e, 4f, 9a, 9d, 10b, 10c	Clear, Carded
			20	34715	Q20T2.5/12V/CL	12	100	C-6	1.25	0.75	2000	350			2a, 2j, 4c, 4e, 4f, 9a, 9d, 10b, 10c	
				19375	Q20T3/CL/CD 5PK	12	25	C-6	1.25	0.75	2000	350			2a, 2j, 4c, 4e, 4f, 9a, 9d, 10b, 10c	Clear, Carded
	T4	2-Pin G8	25	16809	Q25G8/CD2	120	5	CC-2V	1.59	1.04	1500	240		1a, 2a, 2b, 2e, 4f, 4i, 9a, 10b, 10c	Twin Pack, Carded	
			35	48428	Q35G8/CD	120	5	CC-2V	1.77	1.34	1500				1a, 2a, 2b, 2e, 4f, 4i, 9a, 10b, 10c	Carded
	T3	2-Pin GY6.35	35	34708	Q35T3/12V/CL	12	100	C-6	1.75		2000	550		2a, 2j, 4c, 4e, 4f, 9a, 9d, 10b, 10c		
				48503	Q35T3/CL/CD 5PK	12	25	C-8	1.75		2000				2a, 2j, 4c, 4e, 4f, 9a, 9d, 10b, 10c	Carded
	T4	2-Pin G8	50	21941	Q50G8/CD	120	5	CC-2V	1.77	1.34	1300	700		1a, 2a, 2b, 2e, 4f, 4i, 9a, 10b, 10c	Carded	
	T3	2-Pin GY6.35	50	34702	Q50T3/12V/CL	12	100	C-6	1.75		2000	900		2a, 2j, 4c, 4e, 4f, 9a, 9d, 10b, 10c		
				19376	Q50T3/CL/CD 5PK	12	25	C-6	1.75	1.16	2000	900			2a, 2j, 4c, 4e, 4f, 9a, 9d, 10b, 10c	Clear, Carded
	T4	2-Pin GY6.35	75	19377	Q75T4/CL/CD 5PK	12	25	C-6	1.75	1.16	2000	1600		2a, 2j, 4c, 4e, 4f, 9a, 9d, 10b, 10c	Clear, Carded	
				47801	Q75G8/CD	120	5	CC-2V	1.77	1.34	1500				1a, 2a, 2b, 2e, 4f, 4i, 9a, 10b, 10c	Carded
	T4	2-Pin G8	100	47803	Q100G8/CD	120	5	CC-2V	1.77	1.34	1500			1a, 2a, 2b, 2e, 4f, 4i, 9a, 10b, 10c	Carded	
				34676	Q100T3/12V/CL	12	100	CC-6	1.75		2000	2350			2a, 2j, 4c, 4e, 4f, 9a, 9d, 10b, 10c	
	T3	2-Pin GY6.35		34663	Q100T3/24V/CL	24	100	CC-6	1.75		2000	2000		2a, 2j, 4c, 4e, 4f, 9a, 9d, 10b, 10c		
			<b>QUARTZLINE<sup>®</sup></b>													
<b>HIR<sup>™</sup></b>																
	T2	R7s	225	12282	Q225T2CL/ULTRACD	120	60	C-8	4.69	2.5	3000	5950	2965	➤ 1a, 2a, 2b, 4c, 4d, 4e, 4f, 9a, 9d, 10b, 10c, 12b	IR, Clear, Horizontal	
			350	12283	Q350T3CL/ULTRACD	120	60	C-8	4.69	2.25	2000	10000	3075	➤ 1a, 2a, 2j, 2k, 4a, 4c, 4d, 4e, 4f, 4g, 8a, 9a, 9d, 10b, 10c, 12b	IR, Clear, Horizontal, Carded	
				13894	Q350T3/CL/HIR	120	6	C-8	4.69	2.25	2000	10000	3075	➤ 1a, 2a, 2j, 2k, 4a, 4c, 4d, 4e, 4f, 4g, 8a, 9a, 9d, 10b, 10c, 12b	IR, Clear, Horizontal	
				14311	Q350T3/CL/HIR	130	6	C-8	4.69	2.25	2000	9600	3000	➤ 1a, 2a, 2j, 2k, 4a, 4c, 4d, 4e, 4f, 4g, 8a, 9a, 9d, 10b, 10c, 12b	IR, Clear, Horizontal	



Bulb Shape	Base Type	Order Watts	Code	Description	Case Volts	Filament Qty.	Type	MOL	LCL	Rated Life (hrs)	Lumens Initial	Initial Color Temp.	CBCP	Footnotes	Additional Information	
<b>QUARTZLINE® (CONTINUED)</b>																
<b>HIR™ (CONTINUED)</b>																
	T2.5	R7s	900	13642	Q900T3/CL/HIR	240	6	C-8	10.06	6.13	2000	32000	3160	↗	1a, 2a, 2j, 2k, 4a, 4c, 4d, IR, Clear, Horizontal 4e, 4f, 4g, 8a, 9a, 9d, 10b, 10c, 12b	
				14335	Q900T3/CL/HIR	277	6	C-8	10.06	6.13	2000	31000	3160	↗	1a, 2a, 2j, 2k, 4a, 4c, 4d, IR, Clear, Horizontal 4e, 4f, 4g, 8a, 9a, 9d, Halogen 10b, 10c, 12b	
<b>HALOGEN</b>																
	T4	G9	25	16754	Q25G9/CD	120	5	CC-8	1.77	1.26	3000	240	2650		1a, 2a, 2b, 2e, 4f, 4i, Carded 9a, 10b, 10c	
				81300	Q25G9/F/CD	120	5	CC-8	1.77	1.26	3000					1a, 2a, 2b, 2e, 4f, 4i, Frosted, Carded 9a, 10b, 10c
			40	16755	Q40G9/CD	120	5	CC-8	1.77	1.26	2000	480	2750			1a, 2a, 2b, 2e, 4f, 4i, Carded 9a, 10b, 10c
				81301	Q40G9/F/CD	120	5	CC-8	1.77	1.26	2000					1a, 2a, 2b, 2e, 4f, 4i, Frosted, Carded 9a, 10b, 10c
			60	81468	Q60G9/F/CD	120	5	CC-8	1.77	1.26	3000					1a, 2a, 2b, 2e, 4f, 4i, Frosted, Carded 9a, 10b, 10c
				75	81469	Q75G9/F/CD	120	5	CC-8	1.77	1.26	3000				
	T4	2-Pin PreFoc	45	41541	Q45T4/CL		12	C-6	2.5	1.53	500	835			2a, 2j, 4a, 4c, 4d, 4e, 4f, Clear, Airport, Base 4g, 8a, 9a, 9d, 10b, 10c, 12c Down	
			60	16756	Q60G9/CD	120	5	CC-8	1.77	1.26	3000	780	2800			1a, 2a, 2b, 2e, 4f, 4i, Carded 9a, 10b, 10c
			75	16759	Q75G9/CD	120	5	CC-8	1.77	1.26	3000	1100	2850			1a, 2a, 2b, 2e, 4f, 4i, Carded 9a, 10b, 10c
	T3	Mini-Cand	75	39574	Q75CL	28	20	CC-6	2.5	1.19	2000	1350			2a, 2j, 4a, 4c, 4e, 4f, Clear 4g, 8a, 9a, 9d, 10b, 10c, 12e	
				12715	Q75CL/MC/CD	120	25	CC-8	2.5	1.25	1000	1050	2850			1a, 2a, 2j, 4a, 4c, 4e, 4f, Clear, Carded 4g, 8a, 9a, 9d, 10b, 10c, 12e
	T4	Mini-Cand	100	22489	Q100T3/CL/CD 5PK	120	60	C-8	3.13	1.25	1500	1650	2950			1a, 2a, 2j, 4a, 4c, 4e, 4f, Clear, Horizontal, 4g, 9a, 9d, 10b, 10c, 11a Carded
				15507	Q100CL/MC	120	6	CC-8	2.81	1.38	2000	1550	2950			1a, 2a, 2j, 4a, 4c, 4e, 4f, Frosted 4g, 8a, 9a, 9d, 10b, 10c, 12e
				44385	Q100CL/MC/2V	120	6	CC-2V	2.81	1.38	750	1800	2950			1a, 2a, 2j, 4a, 4c, 4e, 4f, Clear 4g, 8a, 9a, 9d, 10b, 10c, 12e
				19383	Q100CL/MC/CD 5PK	120	25	CC-8	2.81	1.38	2000	1600	2950			1a, 2a, 2j, 4a, 4c, 4e, 4f, Clear, Carded 4g, 8a, 9a, 9d, 10b, 10c, 12e
	T4	D C Bay	100	16451	Q100DC	120	6	CC-8	2.44	1.38	2000	1550	2950			1a, 2a, 2j, 4a, 4c, 4e, 4f, Frosted 4g, 8a, 9a, 9d, 10b, 10c, 12e
				15508	Q100CL/DC	120	6	CC-8	2.44	1.38	2000	1600	2950			1a, 2a, 2j, 4a, 4c, 4e, 4f, Clear 4g, 8a, 9a, 9d, 10b, 10c, 12e
				44386	Q100CL/DC/2V	120	6	CC-2V	2.44	1.38	750	1800	2950			1a, 2a, 2j, 4a, 4c, 4e, 4f, Clear 4g, 8a, 9a, 9d, 10b, 10c, 12e
	T3	R7s	150	27449	Q150T3/117/CL/CD	120	60	C-8	4.69	2.25	1500	2400	2950			1a, 2a, 2j, 4a, 4c, 4d, Clear, Horizontal, 4e, 4f, 4g, 9a, 9d, 10b, Carded 10c, 11a
				19378	Q150T3/CL/CD 5PK	120	60	C-8	3.13	1.25	1500	2400	2950			1a, 2a, 2j, 4a, 4c, 4e, 4f, Clear, Horizontal, 4g, 9a, 9d, 10b, 10c, 11a Carded
				80905	Q150T3/HD/CD2	120	25	C-8	3.13	1.25	2000		2950			1a, 2a, 2j, 4a, 4c, 4e, 4f, Carded, Heavy Duty 4g, 9a, 9d, 10b, 10c, 11a
	T4	R7s	150	23710	Q150T4/CL	25	12	CC-8	2.56		3000	2760	2850			2a, 2j, 4a, 4c, 4e, 4f, 4g, Clear, Dental 8a, 9a, 9d, 10b, 10c Spotlight




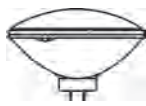






# Halogen Lamps

Bulb Shape	Base Type	Watts	Order Code	Description	Case Volts	Filament Qty.	Filament Type	MOL	LCL	Rated Life (hrs)	Lumens Initial	Initial Color Temp.	CBCP	Footnotes	Additional Information
<b>QUARTZLINE® (CONTINUED)</b>															
<b>HALOGEN (CONTINUED)</b>															
	T4	Mini-Cand	150	<b>44654 Q150MC</b>	120	6	CC-8	3	1.38	2000	2700	2950		1a, 2a, 2j, 4a, 4c, 4e, 4f, Frosted 4g, 8a, 9a, 9d, 10b, 10c, 12e	
				<b>43694 Q150CL/MC</b>	120	6	CC-8	3	1.38	2000	2800	2950		1a, 2a, 2j, 4a, 4c, 4e, 4f, Clear 4g, 8a, 9a, 9d, 10b, 10c, 12e	
				<b>19386 Q150CL/MC/CD 5PK</b>	120	25	CC-8	3	1.38	2000	2800	2950		1a, 2a, 2j, 4a, 4c, 4e, 4f, Clear, Carded 4g, 8a, 9a, 9d, 10b, 10c, 12e	
		D C Bay	150	<b>44653 Q150DC</b>	120	6	CC-8	2.5	1.38	2000	2700	2950		1a, 2a, 2j, 4a, 4c, 4e, 4f, Frosted 4g, 8a, 9a, 9d, 10b, 10c, 12e	
				<b>43693 Q150CL/DC</b>	120	6	CC-8	2.5	1.38	2000	2800	2950		1a, 2a, 2j, 4a, 4c, 4e, 4f, Clear 4g, 8a, 9a, 9d, 10b, 10c, 12e	
				<b>44384 Q150CL/DC/2V</b>	120	6	CC-2V	2.44	1.38	1000	2800	2950		1a, 2a, 2j, 4a, 4c, 4e, 4f, Clear 4g, 8a, 9a, 9d, 10b, 10c, 12e	
	T4	2-Pin PreFoc	200	<b>40702 Q200T4/CL</b>		12	CC-6	2.5	1.53	500	4500			2a, 2j, 4a, 4c, 4d, 4e, 4f, Clear, Airport, 4f, 4g, 8a, 9a, 9d, 10b, 10c, 12c Base Down	
		2-Pin GZ9.5	235	<b>11548 Q235T4/3</b>	33	12	CC-6	2.63	1.53	150	6000			2a, 2j, 4a, 4c, 4e, 4f, 4g, Frosted, Instrument, 8a, 9a, 9d, 10b, 10c, 12c Prefocus	
	T2.5	R7s	250	<b>22865 Q250T3/CL-6PK</b>	120	144	C-8	3.13	1.25	1500	4000	2950		1a, 2a, 2j, 4a, 4c, 4e, 4f, Clear, Horizontal 4g, 9a, 9d, 10b, 10c, 11a	
				<b>22121 Q250T3/CL/CD 5PK</b>	120	60	C-8	3.25	1.13	1500	4000	2950		1a, 2a, 2j, 4a, 4c, 4e, 4f, Clear, Carded 4g, 9a, 9d, 10b, 10c, 11a	
	T4	Mini-Cand	250	<b>43695 Q250MC</b>	120	6	CC-8	3.16	1.63	2000	4850	2950		1a, 2a, 2j, 4a, 4c, 4e, 4f, Frosted 4g, 8a, 9a, 9d, 10b, 10c, 12e	
				<b>43696 Q250MC</b>	130	6	CC-8	3.16	1.63	2000	4850	2950		1a, 2a, 2j, 4a, 4c, 4e, 4f, Frosted 4g, 8a, 9a, 9d, 10b, 10c, 12e	
				<b>43699 Q250CL/MC</b>	120	6	CC-8	3.16	1.63	2000	5000	2950		1a, 2a, 2j, 4a, 4c, 4e, 4f, Clear 4g, 8a, 9a, 9d, 10b, 10c, 12e	
				<b>19387 Q250CL/MC/CD 5PK</b>	120	25	CC-8	3.16	1.63	2000	5000	2950		1a, 2a, 2j, 4a, 4c, 4e, 4f, Clear, Carded 4g, 8a, 9a, 9d, 10b, 10c, 12e	
				<b>43700 Q250CL/MC</b>	130	6	CC-8	3.16	1.63	2000	5000	2950		1a, 2a, 2j, 4a, 4c, 4e, 4f, Clear 4g, 8a, 9a, 9d, 10b, 10c, 12e	
	T4	D C Bay	250	<b>43701 Q250DC</b>	120	6	CC-8	3	1.63	2000	4850	2950		1a, 2a, 2j, 4a, 4c, 4e, 4f, Frosted 4g, 8a, 9a, 9d, 10b, 10c, 12e	
				<b>43702 Q250DC</b>	130	6	CC-8	3	1.63	2000	4850	2950		1a, 2a, 2j, 4a, 4c, 4e, 4f, Frosted 4g, 8a, 9a, 9d, 10b, 10c, 12e	
				<b>43697 Q250CL/DC</b>	120	6	CC-8	3	1.63	2000	5000	2950		1a, 2a, 2j, 4a, 4c, 4e, 4f, Clear 4g, 8a, 9a, 9d, 10b, 10c, 12e	
				<b>43698 Q250CL/DC</b>	130	6	CC-8	3	1.63	2000	5000	2950		1a, 2a, 2j, 4a, 4c, 4e, 4f, Clear 4g, 8a, 9a, 9d, 10b, 10c, 12e	
	T2.5	R7s	300	<b>15535 Q300T3/HD/2CD</b>	120	5	C-8	4.68	2.25	2000	5950	2950		1a, 2a, 2j, 4a, 4c, 4d, 4e, 4f, Clear, Horizontal 4f, 4g, 9a, 9d, 10b, 10c, 11a	
				<b>43704 Q300T3-6PK</b>	120	144	C-8	4.69	2.25	2000	5900	2950		1a, 2a, 2j, 4a, 4c, 4d, 4e, 4f, Frosted, Horizontal 4f, 4g, 9a, 9d, 10b, 10c, 11a	
				<b>43703 Q300T3/CL-6PK</b>	120	144	C-8	4.69	2.25	2000	5950	2950		1a, 2a, 2j, 4a, 4c, 4d, 4e, 4f, Clear, Horizontal 4f, 4g, 9a, 9d, 10b, 10c, 11a	
				<b>19379 Q300T3/CL/CD 5PK</b>	120	60	C-8	4.69	2.25	2000	5950	2950		1a, 2a, 2j, 4a, 4c, 4d, 4e, 4f, Clear, Horizontal, 4e, 4f, 4g, 9a, 9d, 10b, 10c, 11a Carded	
				<b>27447 Q300T3CL/CD2-5PK</b>	120	60	C-8	4.69	2.25	2000	5950	2950		1a, 2a, 2j, 4a, 4c, 4d, 4e, 4f, Clear, Horizontal, 4e, 4f, 4g, 9a, 9d, 10b, 10c, 11a Carded	
	T4	R7s	300	<b>43705 Q300T4/CL</b>	120	12	CC-8	3.13	2.25	2000	5650	2900		1a, 2a, 2j, 4a, 4c, 4e, 4f, Clear 4g, 9a, 9d, 10b, 10c, 11a	



# Halogen Lamps








Bulb Shape	Base Type	Order Watts	Code	Description	Case Volts	Filament Qty.	MOL	LCL	Rated Life (hrs)	Lumens Initial	Initial Color Temp.	CBCP	Footnotes	Additional Information
<b>QUARTZLINE® (CONTINUED)</b>														
<b>HALOGEN (CONTINUED)</b>														
	T4	Mini-Cand	400	<b>43706 Q400MC</b>	120	6	CC-8	3.62	2	2000	7850	2950		1a, 2a, 2j, 4a, 4c, 4e, 4f, Frosted 4g, 8a, 9a, 9d, 10b, 10c, 12e
				<b>43707 Q400CL/MC</b>	120	6	CC-8	3.62	2	2000	8250	2950		1a, 2a, 2j, 4a, 4c, 4e, 4f, Clear 4g, 8a, 9a, 9d, 10b, 10c, 12e
	T2.5	R7s	500	<b>15537 Q500T3/HD/2CD</b>	120	5	C-8	4.68	2.25	2000	11100	2950		1a, 2a, 2j, 2k, 4a, 4c, 4d, 4e, 4f, 4g, 8a, 9a, 9d, 10b, 10c, 12b
				<b>23731 Q500T3/CL</b>	120	12	C-8	4.69	2.25	2000	11100	3000		1a, 2a, 2j, 2k, 4a, 4c, 4d, Clear, Horizontal 4e, 4f, 4g, 8a, 9a, 9d, 10b, 10c, 12b
				<b>23733 Q500T3/CL</b>	130	12	C-8	4.69	2.25	2000	10550	3000		1a, 2a, 2j, 2k, 4a, 4c, 4d, Clear, Horizontal 4e, 4f, 4g, 8a, 9a, 9d, 10b, 10c, 12b
				<b>23744 Q500T3/CL/6-12PK</b>	120	144	C-8	4.69	2.25	1500	10950	3000		1a, 2a, 2j, 2k, 4a, 4c, 4d, Clear, 6 Filament 4e, 4f, 4g, 8a, 9a, 9d,, Support, Rough 10b, 10c, 12b Service, Horizontal
				<b>19382 Q500T3/CL/CD 5PK</b>	120	60	C-8	4.69	2.25	2000	11100	3000		1a, 2a, 2j, 2k, 4a, 4c, 4d, Clear, Horizontal, 4e, 4f, 4g, 8a, 9a, 9d, Carded 10b, 10c, 12b
				<b>27448 Q500T3CL/CD2-5PK</b>	120	60	C-8	4.69	2.25	2000	11100	3000		1a, 2a, 2j, 2k, 4a, 4c, 4d, Clear, Horizontal, 4e, 4f, 4g, 8a, 9a, 9d, Carded 10b, 10c, 12b
	T4	D C Bay	500	<b>43709 Q500DC</b>	120	6	CC-8	3.44	2.13	2000	10100	2950		1a, 2a, 2j, 4a, 4c, 4e, 4f, Frosted 4g, 8a, 9a, 9d, 10b, 10c, 12e
				<b>43710 Q500CL/DC</b>	120	6	CC-8	3.44	2.13	2000	10450	2950		1a, 2a, 2j, 4a, 4c, 4e, 4f, Clear 4g, 8a, 9a, 9d, 10b, 10c, 12e
	T8	Spec 1" Ribbon	500	<b>39071 Q500T8/1CL</b>		20	CC-8	4.25	2.5	500	13400	3200		1a, 2a, 2j, 2k, 4a, 4c, 4d, Clear, Airport, 4e, 4f, 4g, 8a, 9a, 9d, Special bulb 10b, 10c, 12b
	PAR56	Mog End Pr	500	<b>43494 Q500PAR56NSP</b>	120	6	CC-6	5		4000	8000	2950	96000	1a, 2a, 2j, 4b, 4c, 4f, 4g, Narrow Spot 7a, 9b, 10c
				<b>43495 Q500PAR56MFL</b>	120	6	CC-6	5		4000	8000	2950	43000	1a, 2a, 2j, 4b, 4c, 4f, 4g, Medium Flood 7a, 9b, 10c
				<b>43496 Q500PAR56WFL</b>	120	6	CC-6	5		4000	8000	2950	19000	1a, 2a, 2j, 4b, 4c, 4f, 4g, Wide Flood 7a, 9b, 10c
	T3	R7s	1000	<b>43711 Q1000T3/CL-6PK</b>	230	144	C-8	10.06	6.13	2000	21500	3050		1a, 2a, 2j, 2k, 4a, 4c, 4d, Clear, Horizontal 4e, 4f, 4g, 8a, 9a, 9d, 10b, 10c, 12b
				<b>43712 Q1000T3/CL-6PK</b>	240	144	C-8	10.06	6.44	2000	21500	3050		1a, 2a, 2j, 2k, 4a, 4c, 4d, Clear, Horizontal 4e, 4f, 4g, 8a, 9a, 9d, 10b, 10c, 12b
	T6	R7s	1000	<b>23800 Q1000T6/CL</b>	120	6	CC-8	5.63	1	2000	23400	3200		1a, 2a, 2j, 4a, 4c, 4e, Clear 4f, 4g, 8a, 9a, 9d, 10b, 10c
	T20	Mog BiPost	1000	<b>41734 Q1000T20BP</b>	120	6	CC-8	9.5	4	3000	22400	3050		12c Clear, Lighthouse, Base Down
	PAR64	ExMogEndPr	1000	<b>43497 Q1000PAR64NSP</b>	120	6	CC-6	6		4000	19400	3000	200000	1a, 2a, 2j, 4b, 4c, 4f, Narrow Spot 4g, 7a, 9b, 10c
				<b>43498 Q1000PAR64MFL</b>	120	6	CC-6	6		4000	19400	3000	80000	1a, 2a, 2j, 4b, 4c, 4f, Medium Flood 4g, 7a, 9b, 10c
				<b>43499 Q1000PAR64/WFL</b>	120	6	CC-6	6		4000	19400	3000	33000	1a, 2a, 2j, 4b, 4c, 4f, Wide Flood 4g, 7a, 9b, 10c



# Halogen Lamps






Bulb Shape	Base Type	Order Watts	Code	Description	Case Volts	Filament Qty.	Type	MOL	LCL	Rated Life (hrs)	Lumens Initial	Initial Color Temp.	CBCP	Footnotes	Additional Information
<b>QUARTZLINE® (CONTINUED)</b>															
<b>HALOGEN (CONTINUED)</b>															
T3	R7s	1500	23828	Q1500T3/CL-12PK	208	144	C-8	10.06	6.25	2000	35800	3050		1a, 2a, 2j, 2k, 4a, 4c, 4d, Clear, Horizontal 4e, 4f, 4g, 8a, 9a, 9d, 10b, 10c, 12b	
			23826	Q1500T3/CL-12PK	220	144	C-8	10.06	6.81	2000	35800	3050		1a, 2a, 2j, 2k, 4a, 4c, 4d, Clear, Horizontal 4e, 4f, 4g, 8a, 9a, 9d, 10b, 10c, 12b	
			23830	Q1500T3/CL	240	12	C-8	10.06	6.31	2000	35800	3050		1a, 2a, 2j, 2k, 4a, 4c, 4d, Clear, Horizontal 4e, 4f, 4g, 8a, 9a, 9d, 10b, 10c, 12b	
			23832	Q1500T3/CL	277	12	C-8	10.06	6.25	2000	34400	3050		1a, 2a, 2j, 2k, 4a, 4c, 4d, Clear, Horizontal 4e, 4f, 4g, 8a, 9a, 9d, 10b, 10c, 12b	
	Wire Lead	6000	23843	Q6M/T3/CL/HT	480	12	C-8	11.94	9.75	100		3250		1a, 2a, 2b, 4c, 4d, 4e, 4f, Clear, Infrared, High 4g, 8a, 9a, 9d, 10b, Temp, Constr. 10c, 12b, 12e	
	Slv	6600	13511	QH6600T3/CL/HT	480	12	C-8	11.94	9.75	150				1a, 2a, 2b, 4c, 4d, 4e, 4f, Clear, Infrared, 4g, 8a, 9a, 9d, 10b, Horizontal 10c, 12b, 12e	
<b>AIRPORT</b>															
T2.5	Special	45	23847	Q6.6A/T2 1/2/1CL			C-8	1.75		1000	710			2a, 2j, 4a, 4c, 4e, 4f, Clear, Airport 4g, 8a, 9a, 9d, 10b, 10c	
T4	PK30d	100	80584	Q6.6A100PK30d-m			CBAR-6	2.0	0.79	1000	2700			2a, 2j, 4a, 4c, 4e, 4f, Airport, Male Spade 4g, 8a, 9a, 9d, 10b, 10c	
T5	PK30d	100	80588	Q6.6A100PK30d-f			CBAR-6	2.0	0.79	1000	2700			2a, 2j, 4a, 4c, 4e, 4f, Airport, 4g, 8a, 9a, 9d, 10b, 10c Female Spade	
T6	PK30d	150	80585	Q6.6A150PK30d-m			CBAR-6	2.0	0.79	1000	3600			2a, 2j, 4a, 4c, 4e, 4f, Airport, Male Spade 4g, 8a, 9a, 9d, 10b, 10c	
T7	PK30d	150	80589	Q6.6A150PK30d-f			CBAR-6	2.0	0.79	1000	3600			2a, 2j, 4a, 4c, 4e, 4f, Airport, 4g, 8a, 9a, 9d, 10b, 10c Female Spade	
T8	PK30d	200	80586	Q6.6A200PK30d-m			CC-6	2.3	0.79	1000	4800			2a, 2j, 4a, 4c, 4e, 4f, Airport, Male Spade 4g, 8a, 9a, 9d, 10b, 10c	
T9	PK30d	200	80590	Q6.6A200PK30d-f			CC-6	2.3	0.79	1000	4800			2a, 2j, 4a, 4c, 4e, 4f, Airport, 4g, 8a, 9a, 9d, 10b, 10c Female Spade	
T4	Spec 1" Ribbon	200	23857	Q6.6A/T4/5CL			CC-8	3		500	5000			2a, 2j, 4a, 4c, 4e, 4f, Clear, Airport 4g, 8a, 9a, 9d, 10b, 10c	
	D C Bay	200	23860	Q6.6AT4/DCR			CC-6	2.5	1.06	500	5150			2a, 2j, 4a, 4c, 4e, Clear, Airport, 4f, 4g, 8a, 9a, 9d, 10b, Ringed 10c, 12e	
PAR56	Scrw Term	200	33279	Q6.6A PAR56/3			CC-6	4.5		1000		200000		2a, 2j, 4b, 4c, 4d, 4f, 4g, PAR, Airport, BDTH 7a, 9b, 10c	
PAR56	Mog End Pr	200	38271	Q6.6A/PAR56/2			CC-6	5		1000		16000		2a, 2j, 4b, 4c, 4d, 4f, 4g, PAR, Airport, BDTH 7a, 9b, 10c	
			18309	Q6.6A/PAR56/4			CC-6	5		600				2a, 2j, 4b, 4c, 4d, 4f, 4g, PAR, Airport, 7a, 9b, 10c Prismatic Lens, BDTH	
PAR64	Mog End Pr	200	13224	Q6.6A/PAR 64/2P			CC-6	4.5		2000				2a, 2j, 4b, 4c, 4d, 4f, 4g, PAR, Airport, BDTH 7a, 9b, 10c	
PAR56	Scrw Term	300	32861	Q20A/PAR56/2			CC-6	4.5		500		200000		2a, 2j, 4b, 4c, 4f, 4g, PAR, Airport, Burn 7a, 9b, 10c Position: Any	
	Mog End Pr	300	15482	Q20A/PAR56/C			CC-6	5		500				2a, 2j, 4c, 4f, 4g, 7a, PAR, Airport, 9b, 10c Teflon® Coated, Burn Position: Any	
PAR64	Mog End Pr	300	13223	Q6.6A/PAR 64/3P			CC-6	4.5		2000				2a, 2j, 4b, 4c, 4d, 4f, PAR, Airport, BDTH 4g, 7a, 9b, 10c	
PAR56	Scrw Term	499	23863	Q20A/PAR56/3			CC-6	4.5		500		330000		2a, 2j, 4b, 4c, 4d, 4f, PAR, Airport, BDTH 4g, 7a, 9b, 10c	
	Mog End Pr	500	15485	Q20A/PAR56/1/C			CC-6	5		500				2a, 2j, 4c, 4f, 4g, 7a, PAR, Airport, 9b, 10c Teflon® Coated, Burn Position: Any	



Bulb Shape	Base Type	Order Watts	Order Code	Description	Case Volts	Filament Qty.	Type	MOL	LCL	Rated Life (hrs)	Lumens Initial	Initial Color Temp.	CBCP	Footnotes	Additional Information
<b>TUBULAR QUARTZ HEAT</b>															
	Slv	300	39019	QH300T3/CL	120	12	C-8	8.47	4.19	5000		2400		1a, 2a, 2b, 3a, 4c, 4d, 4e, Infrared 4f, 4g, 9a, 9d, 10b, 10c, 12b, 12e	
			375	21337	QH375T3/CL		12	C-8	8.81	5.06	5000	2400		1a, 2a, 2b, 3a, 4c, 4d, 4e, Infrared 4f, 4g, 9a, 9d, 10b, 10c, 12b, 12e	
	R7s	375	38893	QH375T3/CL/7	120	12	C-8	8.69	5.06	5000		2400		1a, 2a, 2b, 3a, 4c, 4d, 4e, Infrared 4f, 4g, 9a, 9d, 10b, 10c, 12b, 12e	
		500	21787	QH500T3/CL/7	120	12	C-8	8.69	4.81	5000		2400		1a, 2a, 2b, 3a, 4c, 4d, 4e, Infrared 4f, 4g, 9a, 9d, 10b, 10c, 12b, 12e	
	Slv	500	21788	QH500T3/CL	120	12	C-8	8.81	4.81	5000		2400		1a, 2a, 2b, 3a, 4c, 4d, 4e, Infrared, Clear 4f, 4g, 9a, 9d, 10b, 10c, 12b, 12e	
		1000	22355	QH1000T3/CL	210	12	C-8	13.81	10	5000		2400		1a, 2a, 2b, 3a, 4c, 4d, 4e, Infrared 4f, 4g, 9a, 9d, 10b, 10c, 12b, 12e	
			22357	QH1000T3/CL	240	12	C-8	13.81	10	5000		2400		1a, 2a, 2b, 3a, 4c, 4d, 4e, Infrared 4f, 4g, 9a, 9d, 10b, 10c, 12b, 12e	
			22358	QH1000T3/CL/1	240	12	C-8	11.88	10	5000		2400		1a, 2a, 2b, 3a, 4c, 4d, 4e, Infrared, Clear, 4f, 4g, 9a, 9d, 10b, 10c, Horizontal 12b, 12e	
			22365	QH1000T3/2CL/HT	240	12	C-8	13.81	10	5000		2400		1a, 2a, 2b, 3a, 4c, 4d, 4e, Infrared, Clear, High 4f, 4g, 9a, 9d, 10b, 10c, Temp, Constr., 12b, 12e Horizontal	
		1200	22531	QH1200T3/CL	144	12	C-8	8.81	6.13	5000		2450		1a, 2a, 2b, 3a, 4c, 4d, 4e, Infrared, Clear, 4f, 4g, 9a, 9d, 10b, 10c, Horizontal 12b, 12e	
			22532	QH1200T3/CL/HT	144	12	C-8	8.81	6.13	5000		2450		1a, 2a, 2b, 3a, 4c, 4d, 4e, Infrared, Clear, High 4f, 4g, 9a, 9d, 10b, 10c, Temp, Constr., 12b, 12e Horizontal	
		1600	22686	QH1600T3/CL	210	12	C-8	19.81	15.88	5000		2350		1a, 2a, 2b, 3a, 4c, 4d, 4e, Infrared, Horizontal 4f, 4g, 9a, 9d, 10b, 10c, 12b, 12e	
			22688	QH1600T3/CL	240	12	C-8	19.81	15.88	5000		2400		1a, 2a, 2b, 3a, 4c, 4d, 4e, Infrared, Clear, 4f, 4g, 9a, 9d, 10b, 10c, Horizontal 12b, 12e	
			22695	QH1600T3/CL	277	12	C-8	19.81	15.88	5000		2400		1a, 2a, 2b, 3a, 4c, 4d, 4e, Infrared, Horizontal 4f, 4g, 9a, 9d, 10b, 10c, 12b, 12e	
	R7s	1600	22691	QH1600T3/CL/7	240	12	C-8	19.63	15.88	5000		2400		1a, 2a, 2b, 3a, 4c, 4d, 4e, Infrared, Horizontal 4f, 4g, 9a, 9d, 10b, 10c, 12b, 12e	
			22699	QH1600T3/CL/7	210	12	C-8	19.63	15.88	5000		2350		1a, 2a, 2b, 3a, 4c, 4d, 4e, Infrared, Horizontal 4f, 4g, 9a, 9d, 10b, 10c, 12b, 12e	
	CER	2000	12716	QH2MT3/CL/HT/R	230	12	C-8		11.06	5000		2450		1a, 2a, 2b, 3a, 4c, 4d, 4e, Infrared, Clear, High 4f, 4g, 9a, 9d, 10b, 10c, Temp, Horizontal, 12b, 12e Reflector 170°	
	Slv	2000	15551	QH2MT3/1CL/HT/VB	240	12	C-8	11.94	9.69	500		2450		1a, 2a, 2b, 3a, 4c, 4d, Infrared, Clear, High 4e, 4f, 4g, 9a, 9d, 10b, Temp, Constr., 10c, 12e Universal	
			18668	QH2MT3/CL/VB	230	12	C-8	13.81	11.06	5000		2450		1a, 2a, 2b, 3a, 4c, 4d, 4e, Infrared, Clear, 4f, 4g, 9a, 9d, 10b, 10c, Universal 12b, 12e	
			22789	QH2M/T3/1CL/HT	240	12	C-8	11.94	9.69	5000		2450		1a, 2a, 2b, 3a, 4c, 4d, 4e, Infrared, Clear, High 4f, 4g, 9a, 9d, 10b, 10c, Temp, Constr. 12b, 12e	
			22790	QH2M/T3/CL/HT	225	12	C-8	13.81	10	5000		2450		1a, 2a, 2b, 3a, 4c, 4d, 4e, Infrared, Clear, High 4f, 4g, 9a, 9d, 10b, 10c, Temp, Constr., 12b, 12e Horizontal	
	R7s	2500	22837	QH2500T3/CL/7	460	12	C-8	28.63	24.88	5000		2400		1a, 2a, 2b, 3a, 4c, 4d, 4e, Infrared, Clear, 4f, 4g, 9a, 9d, 10b, 10c, Horizontal 12b, 12e	



# Halogen Lamps

Bulb Shape	Base Type	Order Watts	Order Code	Description	Case Volts	Filament Qty.	Type	MOL	LCL	Rated Life (hrs)	Lumens Initial	Initial Color Temp.	CBCP	Footnotes	Additional Information
<b>TUBULAR QUARTZ HEAT (CONTINUED)</b>															
	Slv	2500	<b>22838</b>	<b>QH2500T3/CL</b>	480	12	C-8	28.81	24.88	5000		2400		1a, 2a, 2b, 3a, 4c, 4d, 4e, Infrared, Clear, 4f, 4g, 9a, 9d, 10b, 10c, Horizontal 12b, 12e	
	CER	2500	<b>28126</b>	<b>QH2.5MT3/CL/HT/R</b>	400	12	C-8	15.1	12.3	5000		2450		1a, 2a, 2b, 3a, 4c, 4d, 4e, Infrared, High Temp, 4f, 4g, 9a, 9d, 10b, 10c, Horizontal, 12b, 12e	Reflector 170°
	M4 Lug Term	2500	<b>28129</b>	<b>QH2500T3/VB-10PK</b>	240	10	C-8	13.8	11	5000		2450		1a, 2a, 2b, 3a, 4c, 4d, 4e, Infrared, Clear, 4f, 4g, 9a, 9d, 10b, 10c, Universal 12b, 12e	
	CER	3000	<b>28127</b>	<b>QH3MT3/CL/HT/R</b>	400	12	C-8	15.1	12.3	5000		2450		1a, 2a, 2b, 3a, 4c, 4d, 4e, Infrared, High Temp, 4f, 4g, 9a, 9d, 10b, 10c, Horizontal, 12b, 12e	Reflector 170°
	M4 Lug Term	3000	<b>28130</b>	<b>QH3MT3/VB-10PK</b>	240	10	C-8	13.8	11	5000		2450		1a, 2a, 2b, 3a, 4c, 4d, 4e, Infrared, Clear, 4f, 4g, 9a, 9d, 10b, 10c, Universal 12b, 12e	
		3650	<b>10872</b>	<b>QH3650T3/CL/5</b>	480	6	C-8	41.63	38	5000		2500		1a, 2a, 2b, 3a, 4f, 5a, 5b, Infrared, Horizontal 9a, 9d, 10c, 12b, 12e	
	Slv	3800	<b>22875</b>	<b>QH3800T3/CL</b>	575	6	C-8	41.81	38	5000		2500		1a, 2a, 2b, 3a, 4f, 5a, 5b, Infrared, Horizontal 9a, 9d, 10c, 12b, 12e	
			<b>22878</b>	<b>QH3800T3/CL/VB</b>	575	6	C-8	41.81	38	5000		2500		1a, 2a, 2b, 3a, 4f, 5a, 5b, Infrared, Clear, 9a, 9d, 10c, 12e	Universal
		5000	<b>22900</b>	<b>QH5M/T3/1CL/HT</b>	600	12	C-8	28.81	25.25	5000		2500		1a, 2a, 2b, 3a, 4c, 4d, 4e, Infrared, Clear, High 4f, 4g, 9a, 9d, 10b, 10c, Temp, Constr., 12b, 12e	Horizontal
	M4 Lug Term	6000	<b>29889</b>	<b>QH6000T3/HT-ASM</b>	480	12	C-8	14.2	11.4					1a, 2a, 2b, 4c, 4d, 4e, Infrared, Clear, 4f, 4g, 9a, 9d, 10b, 10c, Horizontal, 12b, 12e	High Temp.
	Wire Lead	6000	<b>23843</b>	<b>QH6MT3/CL/HT</b>	480	12	C-8	11.94	9.75	100		3250		1a, 2a, 2b, 4c, 4d, 4e, Infrared, Clear, 4f, 4g, 9a, 9d, 10b, 10c, Horizontal, 12b, 12e	High Temp.
	M4 Lug Term	6600	<b>13511</b>	<b>QH6600T3/CL/HT</b>	480	12	C-8	11.94	9.75	150				1a, 2a, 2b, 4c, 4d, 4e, Infrared, Clear, 4f, 4g, 9a, 9d, 10b, 10c, Horizontal, 12b, 12e	High Temp.



## GENERAL INFORMATION

### HALOGEN LAMP OPERATING PRECAUTIONS

The lamps listed in this catalog are filled to high internal gas pressures to maximize lamp efficacy (lumens per watt). Some general cautions are given below.

### HIGH OPERATING TEMPERATURES

Since operating temperatures are critical to the effective self-cleaning properties of halogen lamps, filament tube wall temperatures should not go below 482°F (250°C). Hot spots on the bulb wall itself can go as high as 1230°F (700°C) in normal operation.

Substantial heat is generated in all halogen lamps, so equipment design should make allowance for the dissipation of excessive heat. Certain lamps and extremely confined fixtures may require additional ventilation or heat sinking to ensure proper operation of the halogen cycle and to prevent damage to the fixture. It is a good practice to test the lamp in the operating environment early in the design cycle to ensure adequate performance. Precautions must be taken in the selection of materials for lampholders, reflectors and lamp housings because the 1230°F (700°C) bulb wall temperature is greater than the kindling temperature of many materials. Lamp base temperatures should not exceed 662°F (350°C) because, above that point, lead wires may deteriorate and the basing cement loosen, causing premature lamp failure.

### DISTRIBUTION OF SPECTRAL RADIATION

Halogen lamps offer large amounts of visible and infrared energy from a small light source, with about 90% of the energy in the infrared. Some halogen lamps can be used for special applications where small amounts of ultraviolet energy are required. The slight ultraviolet radiation that comes from unprotected sources could cause skin and eye irritation following extended direct exposure. Passing the light through ordinary glass or plastic provides adequate protection. The lenses of the PAR, TAL or Cover Glass Precise™ lamps provide this protection.

## OPERATING NOTES

- Turn power off and let lamp cool before removal to avoid potential burn and electrical shock during lamp replacement
- Do not use lamp if outer glass is scratched or broken because it may break during installation or later during operation
- Do not use lamp in close proximity to combustible materials or those adversely affected by drying or fading action because of heat radiation in the lamp beam
- Dispose of removed lamp with care such as placing in used lamp carton or other closed container

### COMPACT PAR LAMPS (PAR20/30)

- Use outdoors in enclosed fixtures or where protected from exposure to water

### QUARTZLINE® PAR (250W)

- Avoid use where subjected to exposure to moisture which may cause lamp to break or shatter
- Do not operate lamp over 110% rated voltage. Overvoltage operation increases pressure and tendency to break.
- Use this lamp only in fixtures designed for Q250PAR38 lamps

### QUARTZ HEAT LAMPS

GE standard quartz heat products are primarily pressurized halogen lamps. Many standard tungsten coil filaments have been converted to a deflection coil winding design that eliminates the need for filament supports through an integral coil/support construction. These changes will improve lamp life as well as keep the bulb wall cleaner during operation and throughout the life of the lamp.

In general, halogen lamps are more efficient than ordinary incandescent lamps. HIR™ lamps are the most efficient halogen lamps we offer. For each application, check life, lumens, wattage, beam spread and lamp dimensions to determine proper bulb selection.

GE has added a reflectorized heat lamp with a patented design that directs the infrared to a surface rather than in 360° angle.

### HALOGEN CAUTION NOTICE – GENERAL

Halogen lamps are constructed of a glass bulb with a pressurized internal filament tube that operates at high temperatures and could unexpectedly shatter. Should the outer bulb break, particles of extremely hot glass could be discharged into the fixture enclosure and/or surrounding environment, thereby creating a risk of personal injury or fire.

### HALOGEN A-LINE (TB/H)

Caution: Cracked or broken bulbs that still light should be replaced immediately. The inner tube of the GE Halogen lamp is pressurized, operates at high temperature and could unexpectedly shatter with the possibility of property damage or personal injury. Avoid use in unstable table lamps, dispose of with care. To avoid burns, electricity should be switched off and the lamp allowed to cool for several minutes before removing from socket. Use outdoors only in enclosed fixtures or where protected from exposure to water.

### OPERATING NOTES – LOW VOLTAGE LAMPS

Low voltage tungsten-halogen lamps are sensitive to voltage variations. Even a small change in voltage can have a considerable impact on lamp life. Designers should match fixture transformer ratings to actual line voltages to ensure that the lamps operate at as close to 12 volts as possible.

Rapid cycling can also shorten lamp life, and designers should take advice from their GE Lighting representative before using these lamps in flashing or blinking applications.

The lamps may be dimmed by reducing voltage. However, this may cause the bulbs to blacken. If this occurs the lamp should be run at full voltage for fifteen minutes, thereby clearing the problem. Note that the nature of low voltage lighting systems requires the use of fluorescent-type dimmers. Lamp can be operated on AC or DC currents.





## WARNINGS AND CAUTION NOTICES

1

**▲ WARNING**

**Risk of electric shock**

- a Turn power off before inspection, installation or removal
- b Turn power off if glass bulb is broken, even if bulb continues to light. Remove and dispose of lamp.
- c Do not open. No user serviceable parts inside.

2

**▲ WARNING**

**Risk of fire**

- a Keep combustible materials away from lamp
- b Use in fixture rated for this product
- c Use in fixture rated for this product—see instructions
- d Operate base down to horizontal only
- e In table lamp use only with shade
- f Do not use in enclosed fixture or with lamp shade
- g Use in high intensity fixture rated for this product
- h Do not use as a night light
- i Burning position base down only
- j Use in enclosed fixture rated for this product
- k Fire Hazard! Do not use in Torchiere or other indoor residential fixtures

3

**▲ WARNING**

**Lamp emits IR radiation which may cause eye injury**

- a Avoid exposure of eyes and skin to unshielded lamp

4

**▲ WARNING**

**Pressurized lamp—unexpected rupture may cause injury, fire, or property damage**

- a Use eye protection when handling lamp
- b Avoid direct water/liquid contact
- c Use in enclosed fixture rated for this product
- d Operate lamp only in specified position
- e Do not touch glass with bare hands
- f Do not use lamp if outer glass is scratched or broken
- g Do not exceed 110% of rated voltage
- h Do not use where directly exposed to water or outdoors without an enclosed fixture
- i Do not exceed rated voltage
- j Do not use lamp if outer jacket is scratched or broken, even if bulb continues to light. Turn power off, remove and dispose.
- k Do not use in wet locations

5

**▲ WARNING**

**Unexpected lamp rupture may cause injury, fire, or property damage**

- a Do not touch glass with bare hands
- b Operate lamp only in specified position
- c Use in enclosed fixture rated for this product
- d Do not use lamp if outer glass is scratched or broken
- e Avoid direct water, liquid or metal contact

6

**▲ WARNING**

**Risk of burn**

- a Do not touch operating lamp

7

**▲ WARNING**

**A damaged lamp emits UV radiation which may cause eye/skin injury**

- a Turn power off if glass bulb is broken. Remove and dispose of lamp.

8

**▲ WARNING**

**Lamp emits UV radiation which may cause eye/skin injury.**

- a Avoid exposure of eyes and skin to unshielded lamp

9

**▲ CAUTION**

**Risk of burn**

- a Allow lamp to cool before handling
- b Allow lamp/fixture to cool before handling
- c Do not touch operating lamp
- d Turn power off before installing lamp

10

**▲ CAUTION**

**Lamp may shatter and cause injury if broken**

- a Wear safety glasses and gloves when handling lamp
- b Dispose of lamp in a closed container
- c Do not use lamp if outer glass is scratched or broken

11

**▲ CAUTION**

**Lamp emits UV radiation which may cause eye/skin irritation.**

- a Minimize exposure

12

**OP. INST.**

- a Burning Position - Base up
- b Burning position - horizontal
- c Burn base down only
- d Burn base down to horizontal
- e Limit seal temp to 650°F. Maintain min bulb wall temp of 500°F for operation of halogen cycle



**HALOGEN LAMPS CROSS REFERENCE**

<i>GE Description</i>	<i>Osram/Sylvania Description</i>	<i>Philips Description</i>
<b>ORDER THIS GE LAMP</b>	<b>IF YOU CURRENTLY USE THESE LAMPS</b>	
<b>HALOGEN PAR LAMPS</b>		
60PAR16/H/SP10	60PAR16/CAP/NSP10	60PAR16/HAL/NSP10
60PAR16/H/FL30	60PAR16/CAP/NFL30	60PAR16/HAL/NFL27
75PAR16/H/SP10	75PAR16/CAP/NSP10	—
75PAR16/H/FL30	75PAR16/CAP/NFL30	—
Q21EMR16/C/SP12	—	—
Q21EMR16/C/FL25	—	—
50PAR20/H/SP10	50PAR20/CAP/SPL/NSP10	50PAR20/HAL/NSP9
50PAR20/H/FL25	50PAR20/CAP/SPL/NFL30	50PAR20/HAL/NFL30
50PAR30/H/SP10	50PAR30/CAP/SPL/NSP9	50PAR30S/HAL/NSP10
50PAR30/H/FL25	50PAR30/CAP/SPL/NFL25	50PAR30S/HAL/NFL30
50PAR30/H/FL35	50PAR30/CAP/SPL/FL40	50PAR30S/HAL/FL40
50PAR30L/H/SP10	50PAR30LN/CAP/SPL/NSP9	50PAR30L/HAL/NSP9
50PAR30L/H/FL40	52PAR30LN/CAP/SPL/NFL30	50PAR30L/HAL/NFL30
50PAR30L/H/WFL	50PAR30LN/CAP/SPL/WFL50	50PAR30L/HAL/WFL60
60PAR30/H/NSP9	60PAR30/CAP/SPL/NSP9	60PAR30S/HAL/NSP10
60PAR30/H/FL25	60PAR30/CAP/SPL/NFL25	60PAR30S/HAL/NFL30
60PAR30/H/FL35	—	60PAR30S/HAL/NFL40
75PAR30/H/SP10	75PAR30/CAP/SPL/NSP9	75PAR30S/HAL/NSP10
75PAR30/H/FL25	75PAR30/CAP/SPL/NFL25	75PAR30S/HAL/NFL30
75PAR30/H/FL35	75PAR30/CAP/SPL/FL40	75PAR30S/HAL/FL40
75PAR30L/H/SP10	75PAR30LN/CAP/NSP9	75PAR30L/HAL/NSP9
75PAR30L/H/FL25	75PAR30LN/CAP/NFL25	75PAR30L/HAL/NFL30
75PAR30L/H/WFL	75PAR30LN/CAP/WFL40	75PAR30L/HAL/FL40
35PAR36/H/SP5	36PAR36/CAP/VNSP5	—
35PAR36/H/SP8	36PAR36/CAP/NSP13	—
35PAR36/H/FL30	36PAR36/CAP/FL32	—
35PAR36/H/WFL	—	—
50PAR36/H/SP5	50PAR36/CAP/NSP6	—
50PAR36/H/SP8	—	—
50PAR36/H/FL30	—	—
45PAR/H/SP10	45PAR/CAP/SPL/SP9	45PAR38/HAL/SP12/LL
45PAR/H/FL25	45PAR/CAP/SPL/FL30	45PAR38/HAL/FL28/LL
50PAR/H/SP10	—	—
50PAR/H/FL25	—	—
53PAR/H/SS/SP10	—	—
53PAR/H/SS/FL25	—	—
60PAR/H/SP10	60PAR/CAP/SPL/SP10	60PAR38/HAL/NSP10/WLL
60PAR/H/FL25	60PAR/CAP/SPL/NSL25	60PAR38/HAL/FL28/WLL
66PAR/H/SS/SP10	—	—
66PAR/H/SS/FL25	—	—
75PAR/H/NSP9	75PAR/CAP/SPLSP9	75PAR38/HAL/SP10/WLL
75PAR/H/FL25	75PAR/CAP/SPL/FL30	75PAR38/HAL/FL28/WLL
79PAR/H/SS/SP10	—	—
79PAR/H/SS/FL25	—	—
90PAR/H/SP10	90PAR/CAP/SPL/SP9	90PAR38/HAL/SP12/LL
90PAR/H/FL25	90PAR/CAP/SPL/FL30	90PAR38/HAL/FL28/LL

<i>GE Description</i>	<i>Osram/Sylvania Description</i>	<i>Philips Description</i>
<b>ORDER THIS GE LAMP</b>	<b>IF YOU CURRENTLY USE THESE LAMPS</b>	
<b>HALOGEN PAR LAMPS (CONTINUED)</b>		
90PAR/H/WFL	90PAR/CAP/SPL/WFL50	90PAR38/HAL/WFL60/WLL
100PAR/H/SP10	—	—
100PAR/H/FL25	—	—
120PAR/H/SP9	120PAR/CAP/SPL/SP10	—
120PAR/H/FL30	120PAR/CAP/SPL/FL30	—
Q250PAR/SP10	250PAR/CAP/SPL/SP10	—
Q250PAR/FL30	250PAR/CAP/SPL/FL30	—
Q500PAR56NSP	500PAR56QNSP	500PAR56Q/NSP
Q500PAR56MFL	500PAR56QMFL	500PAR56Q/MFL
Q500PAR56WFL	500PAR56QWFL	500PAR56Q/WFL
Q1000PAR64NSP	1000PAR64QNSP	1000PAR64Q/NSP
Q1000PAR64MFL	1000PAR64QMFL	1000PAR64Q/MFL
Q1000PAR64WFL	1000PAR64QWFL	1000PAR64Q/WFL
<b>HALOGEN HIR™ PAR LAMPS</b>		
45PAR30/HIR/SP9XL	—	—
45PAR30/HIR/FL25XL	—	—
45PAR30/HIR/FL35XL	—	—
50PAR30/HIR/SP9	50PAR30/CAP/IR/NSP9	50PAR30S/IRC/NSP10
50PAR30/HIR/FL25	50PAR30/CAP/IR/NFL25	50PAR30S/IRC/NFL30
50PAR30/HIR/FL35	50PAR30/CAP/IR/FL40	50PAR30S/IRC/FL40
45PAR/HIR/R/SP10	—	—
45PAR/HIR/R/FL25	—	—
45PAR/HIR/SP12XL	—	—
45PAR/HIR/FL40XL	—	—
50PAR/HIR/SP6	—	—
50PAR/HIR/SP9	50PAR/CAP/IR/NSP9	50PAR38/IRC/SP12
50PAR/HIR/FL25	50PAR/CAP/IR/NFL25	50PAR38/IRC/FL25
50PAR/HIR/S/SP10	—	—
50PAR/HIR/S/FL25	—	—
55PAR/HIR/R/SP10	—	—
55PAR/HIR/R/FL25	—	—
55PAR/HIR/SP12XL	—	—
55PAR/HIR/FL40XL	—	—
60PAR/HIR/SP10	60PAR/CAP/IR/SP9	60PAR38/IRC/SP12
60PAR/HIR/FL30	60PAR/CAP/IR/FL30	60PAR38/IRC/FL25
60PAR/HIR/FL40	—	—
60PAR/HIR/WFL	—	60PAR38/IRC/WFL
60PAR/HIR/S/SP10	—	—
60PAR/HIR/S/FL25	—	—
70PAR/HIR/SP10	—	—
70PAR/HIR/FL25	—	—
80PAR/HIR/SP10	80PAR/CAP/IR/SP10	—
80PAR/HIR/SP12	80PAR/CAP/IR/SP12	—
80PAR/HIR/FL25	80PAR/CAP/IR/FL25	—
90PAR/HIR/R/SP10	—	—
90PAR/HIR/R/FL25	—	—



## HALOGEN LAMPS CROSS REFERENCE

<i>GE Description</i>	<i>Osram/Sylvania Description</i>	<i>Philips Description</i>
<b>ORDER THIS GE LAMP</b>	<b>IF YOU CURRENTLY USE THESE LAMPS</b>	
<b>HALOGEN HIR™ PAR LAMPS (CONTINUED)</b>		
90PAR/HIR/SP12XL	—	—
90PAR/HIR/FL40XL	—	—
100PAR/HIR/SP10	100PAR/CAP/IR/SP10	100PAR38/IRC/SP10
100PAR/HIR/FL25	100PAR/CAP/IR/NFL25	100PAR38/IRC/FL25
100PAR/HIR/FL40	100PAR/CAP/IR/FL40	100PAR38/IRC/WFL
<b>HALOGEN MR11 LAMPS</b>		
Q20MR11/SP15	20MR11/SP10/FTB	20MRC11/SP10
Q20MR11/NFL30	20MR11/FL35/FTD	20MRC11/FL30
Q35MR11/NSP20	35MR11/SP10/FTE	—
Q35MR11/NFL30	35MR11/FL40/FTH	—
<b>HALOGEN STANDARD MR16 LAMPS</b>		
Q20MR16/SP	20MR16/NSP8/ESX	20MRC16/SP10
Q20MR16/FL	20MR16/FL40/BAB	20MRC16/FL36
Q50MR16/SP	50MR16/NSP12/EST	50MRC16/SP10
Q50MR16/FL	20MR16/FL40/EXN	50MRC16/FL38
<b>HALOGEN CONSTANTCOLOR® PRECISE™ MR16 LAMPS</b>		
Q20MR16/C/VNSP7	20MR16/T/NSP10	20MRC16/CC/SP10
Q20MR16/C/NSP15	—	20MRC16/CC/NFL24
Q20MR16/C/FL40	20MR16/T/NFL40	20MRC16/CC/FL38
Q35MR16/C/SP20	35MR16/T/NFL25	—
Q35MR16/C/FL40	35MR16/T/FL40	—
Q42MR16/C/VNSP9	50MR16/T/NSP10	—
Q50MR16/C/NSP15	—	50MRC16/CC/SP10
Q50MR16/C/NFL25	50MR16/T/NFL25	50MRC16/CC/NFL24
Q50MR16/C/NFL30	—	—
Q50MR16/C/FL40	50MR16/T/FL40	50MRC16/CC/NFL38
Q71MR16/C/NSP15	65MR16/T/NSP10	—
Q71MR16/C/NFL25	65MR16/T/NFL25	—
Q71MR16/C/FL40	65MR16/T/FL40	—
<b>HALOGEN HIR™ MR16 LAMPS</b>		
Q37MR16/HIR/CG10	37MR16/IR/NSP10C	35MRC16/IRC/SP8
Q37MR16/HIR/CG25	37MR16/IR/NFL25C	35MRC16/IRC/NFL24
Q37MR16/HIR/CG40	37MR16/IR/FL40C	35MRC16/IRC/FL36
Q50MR16/HIR/CG10	50MR16/IR/NSP10C	45MRC16/IRC/SP8
Q50MR16/HIR/CG25	50MR16/IR/NFL25C	45MRC16/IRC/NFL24
Q50MR16/HIR/CG40	50MR16/IR/FL40C	45MRC16/IRC/FL36

<i>GE Description</i>	<i>Osram/Sylvania Description</i>	<i>Philips Description</i>
<b>ORDER THIS GE LAMP</b>	<b>IF YOU CURRENTLY USE THESE LAMPS</b>	
<b>HALOGEN BIPIN LOW VOLTAGE</b>		
Q5T3/CL	5T3Q/CL	5W12V/Capsule
Q10T3/CL	10T3Q/CL	10W12V/Capsule
Q20T3/CL	20T3Q/CL/AX	20W12V/Capsule
Q35T3/CL	35TQ/CL/AX	35W12V/Capsule
Q50T4/CL	50T4Q/CL	50W12V/Capsule
Q75T4/CL	75T4Q/CL/RP	—
<b>HALOGEN SINGLE-ENDED</b>		
Q100CL/DC	100Q/CL/DC	100Q/CL/DC
Q100CL/MC	100Q/CL/MC	100Q/CL
Q100DC	100Q/DC	—
Q150CL/DC/2V	150Q/CL/DC/1	—
Q150CL/DC	150Q/CL/DC	150Q/CL/DC
Q150CL/MC	150Q/CL/MC/2	150Q/CL
Q150CL/MC/2V	150Q/CL/MC	—
Q150DC	150Q/DC	150Q/DC
Q150MC	150Q/MC	150Q
Q250CL/DC	250Q/CL/DC	250Q/CL/DC
Q250CL/MC	250Q/CL/MC/2	250Q/CL
Q250DC	250Q/DC	—
Q250MC	250Q/MC	—
<b>HALOGEN DOUBLE-ENDED</b>		
Q100T3/CL/CD	100T3Q/CL	BC100T3Q/CL/TP
Q150T3/CL	150T3Q/CL	BC100T3Q/CL/TP
Q300T3/CL	300T3Q/CL	300T3Q/P/CL
Q500T3/CL	500T3Q/CL	500T3Q/P/CL



**CONSTANTCOLOR® CMH® METAL HALIDE LAMPS**

MR16 .....	3-9
PAR .....	3-9
Elliptical .....	3-9
Elliptical Open-Rated .....	3-9
Single-Ended G12 .....	3-10
Double-Ended TD .....	3-10
GU6.5 .....	3-10
Mini's .....	3-10
High-Watt CMH® SPXX .....	3-10
CMH® Chromafit™ .....	3-11

**PULSEARC® MULTI-VAPOR® METAL HALIDE LAMPS ..... 3-11**

**MULTI-VAPOR® METAL HALIDE LAMPS ..... 3-13**

**HIGH OUTPUT AND XHO MULTI-VAPOR® METAL HALIDE LAMPS ..... 3-14**

**SPORTSLIGHTING ..... 3-14**

**PROTECTED MULTI-VAPOR® METAL HALIDE LAMPS..... 3-15**

**CHROMAFIT™ MULTI-VAPOR® METAL HALIDE LAMPS (HPS RETROFIT LAMPS)..... 3-16**

**I-LINE MULTI-VAPOR® METAL HALIDE LAMPS (MERCURY RETROFIT LAMPS) ..... 3-16**

**SAF-T-GARD® SELF-EXTINGUISHING MULTI-VAPOR® LAMPS ..... 3-16**

**ARCSTREAM® METAL HALIDE LAMPS..... 3-16**

**LUCALOX® HIGH PRESSURE SODIUM LAMPS ..... 3-17**

**STANDBY LONGLIFE LUCALOX® LAMPS ..... 3-18**

**ECOLUX® NC NON-CYCLING HIGH PRESSURE SODIUM LAMPS (TCLP COMPLIANT) ..... 3-18**

**ECOLUX® HIGH PRESSURE SODIUM LAMPS (TCLP COMPLIANT) ..... 3-19**

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**MERCURY LAMPS..... 3-20**

**SAF-T-GARD® MERCURY LAMPS ..... 3-21**

**E-Z MERC® SELF-BALLASTED LAMPS (INCANDESCENT RETROFIT) ..... 3-21**

**EXPORT LAMPS**

Metal Halide .....	3-21
Lucalox® High Pressure Sodium.....	3-22
E-Z Lux® Lucalox® High Pressure Sodium (Mercury Retrofit).....	3-22
Mercury .....	3-22

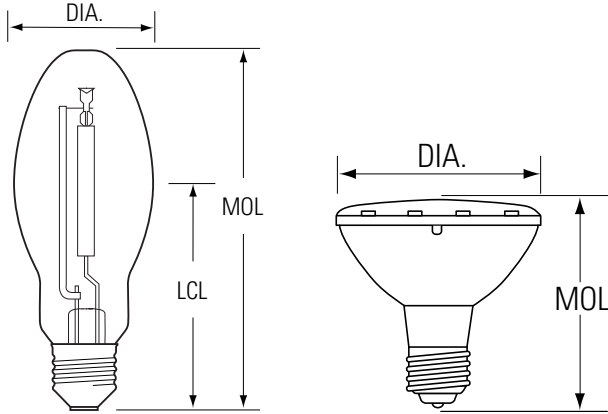
**HORTICULTURAL LAMPS ..... 3-22**

**CROSS REFERENCE..... 3-32**



# High Intensity Discharge Lamps

## BULB IDENTIFICATION



DIA: Diameter of bulb at widest point.

MOL: Maximum Overall Length including base or pins.

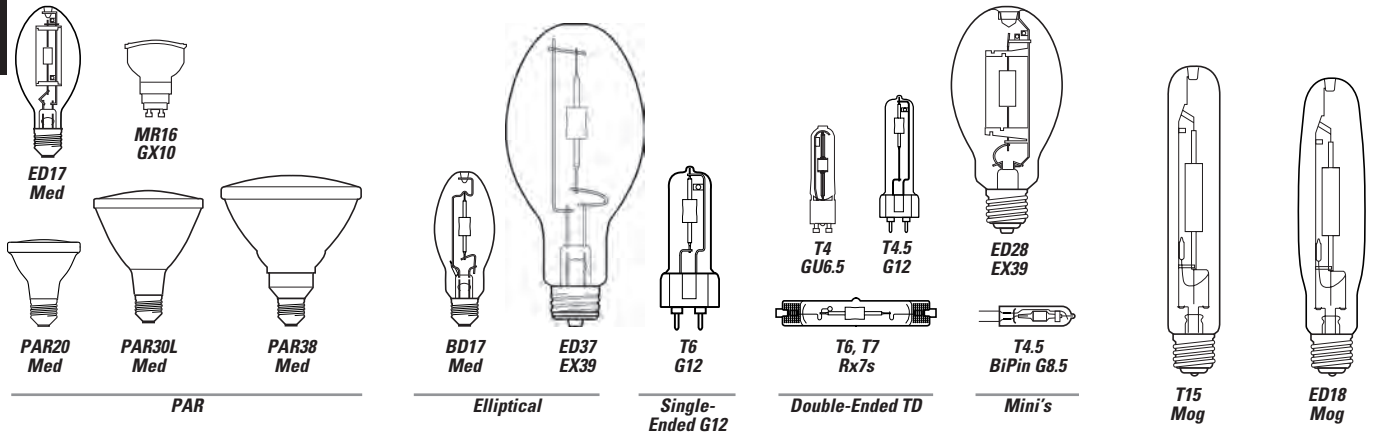
LCL: Distance between the center of the arc tube and the Light Center Length reference plane.

Note: Lamp drawings are not drawn to scale.

Be sure to check size and dimension information when identifying each lamp.

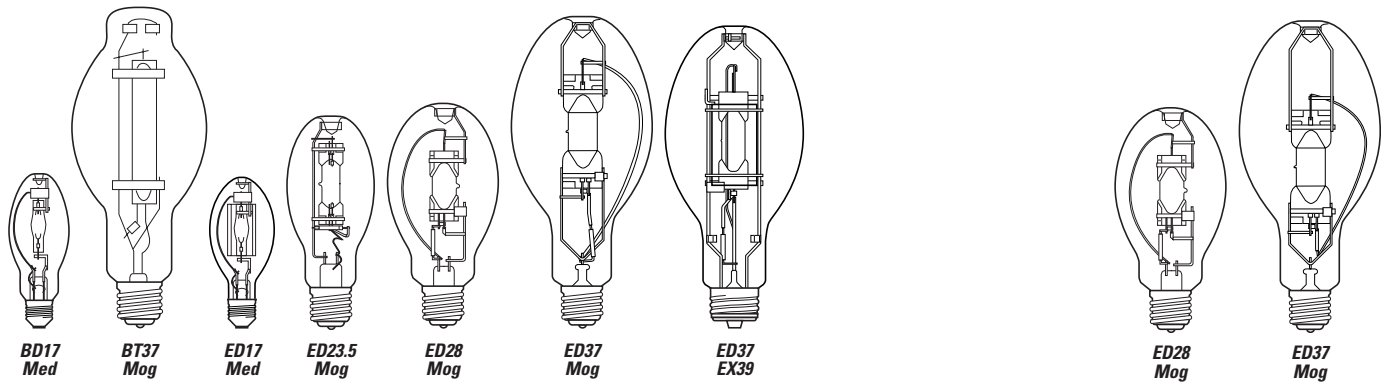
To convert inches to millimeters, multiply the dimension (in inches) by 25.4 (i.e. 1.5" x 25.4 = 38.1 mm).

## LAMP LOCATOR



**ConstantColor® CMH® Ceramic Metal Halide**

**CMH® Chromafit™ Ceramic Metal Halide (HPS Retrofit Lamps)**

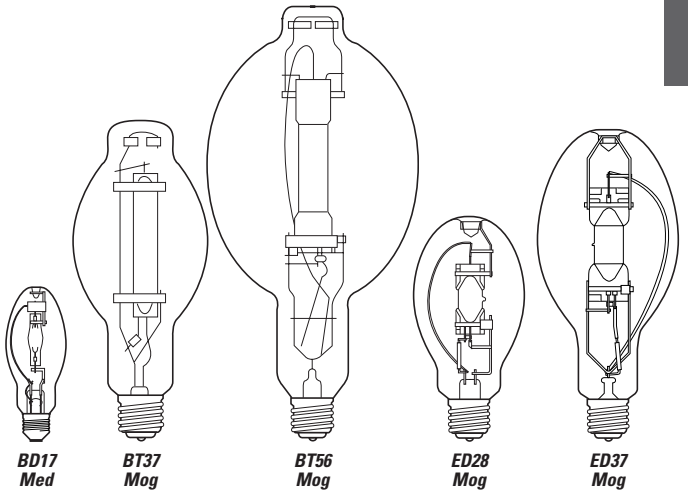


**PulseArc® Multi-Vapor® Metal Halide Lamps**

**Chromafit™ Multi-Vapor® Metal Halide Lamps (HPS Retrofit Lamps)**

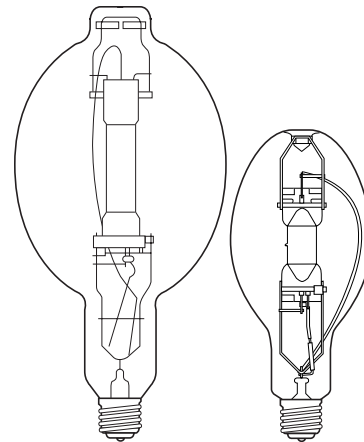


# High Intensity Discharge Lamps



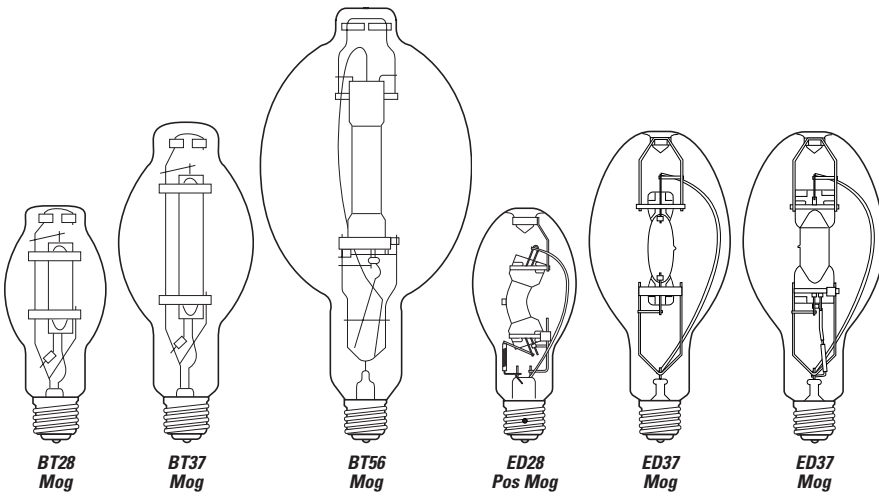
**BD17 Med**  
**BT37 Mog**  
**BT56 Mog**  
**ED28 Mog**  
**ED37 Mog**

## Multi-Vapor® Metal Halide Lamps



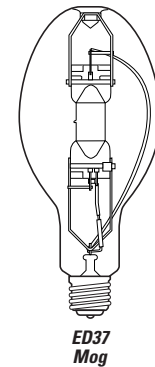
**BT56 Mog**  
**ED37 Mog**

## I-Line Multi-Vapor® Metal Halide Lamps (Mercury Retrofit Lamps)



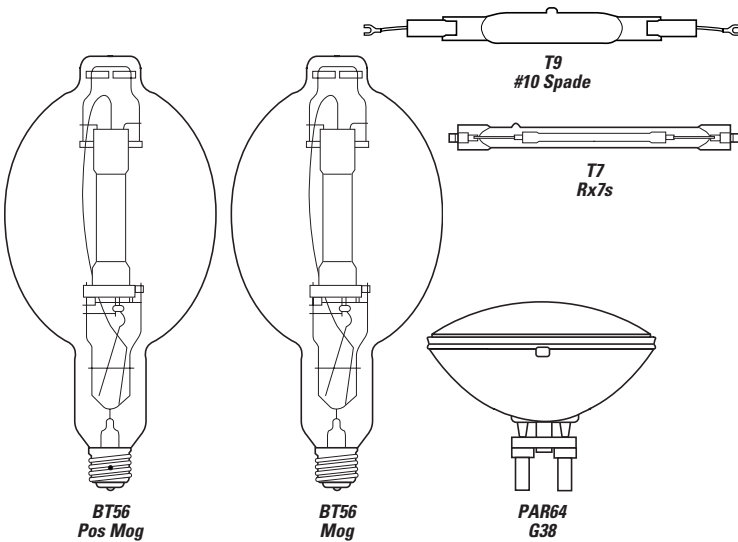
**BT28 Mog**  
**BT37 Mog**  
**BT56 Mog**  
**ED28 Pos Mog**  
**ED37 Mog**  
**ED37 Mog**

## High Output and XHO Multi-Vapor® Metal Halide Lamps



**ED37 Mog**

## Saf-T-Gard® Self-Extinguishing Multi-Vapor® Lamps

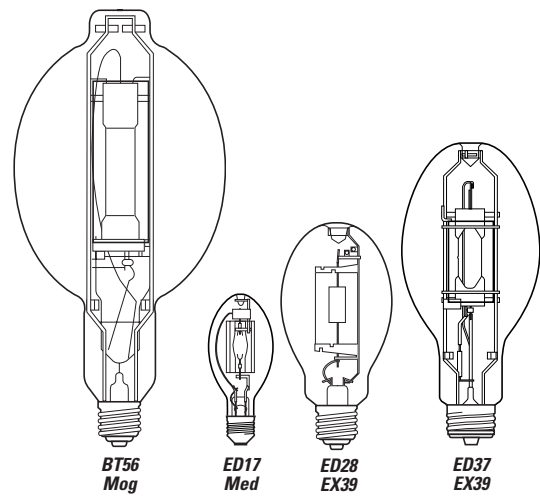


**BT56 Pos Mog**

**BT56 Mog**

**PAR64 G38**

## Sportslighting



**BT56 Mog**

**ED17 Med**

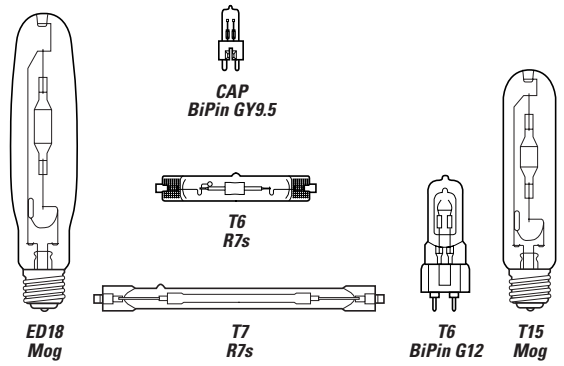
**ED28 EX39**

**ED37 EX39**

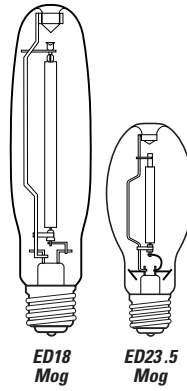
## Protected Multi-Vapor® Metal Halide Lamps



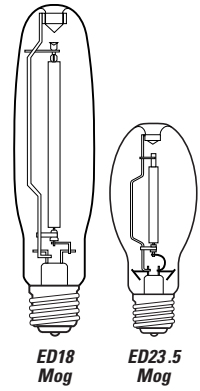
# High Intensity Discharge Lamps



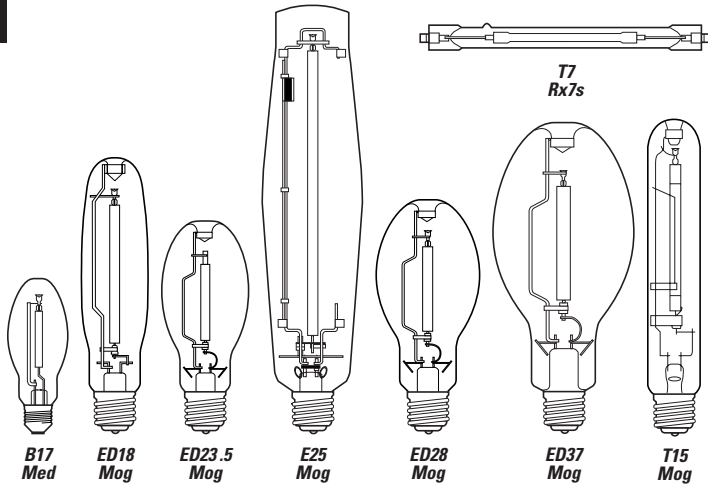
**Arcstream® Metal Halide Lamps**



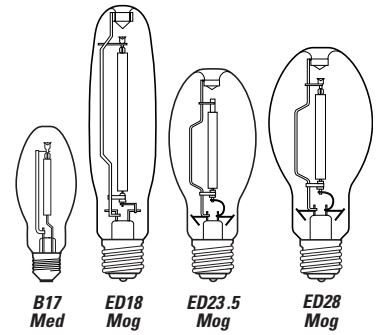
**Ecolux® NC  
Non-Cycling  
High Pressure  
Sodium Lamps  
(TCLP Compliant)**



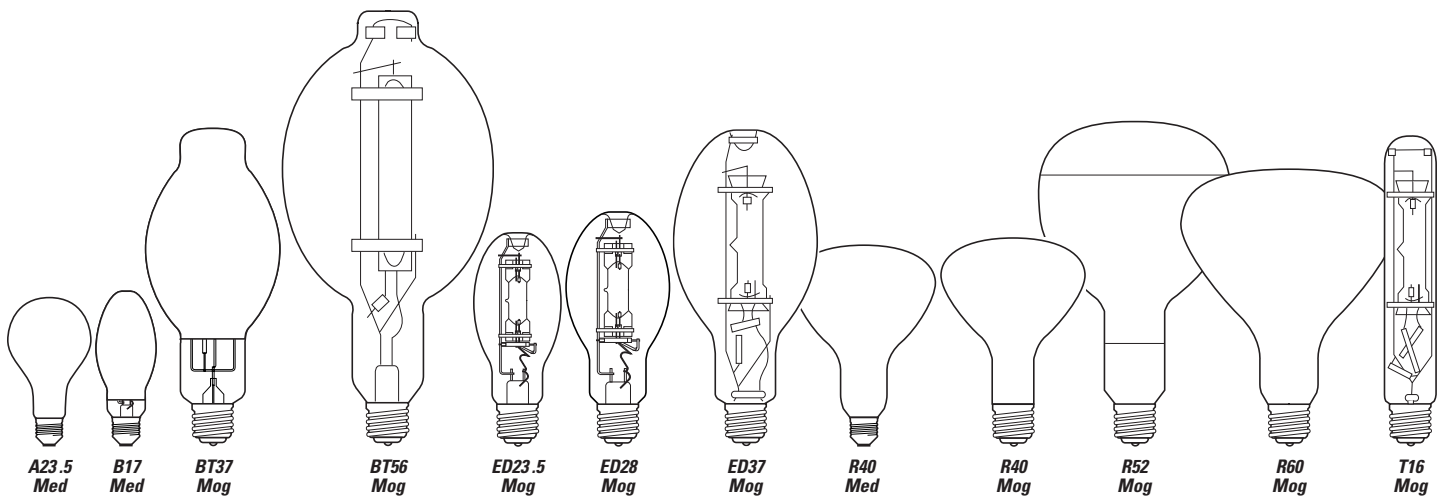
**Ecolux®  
High Pressure  
Sodium Lamps  
(TCLP Compliant)**



**Lucalox® High Pressure Sodium Lamps**



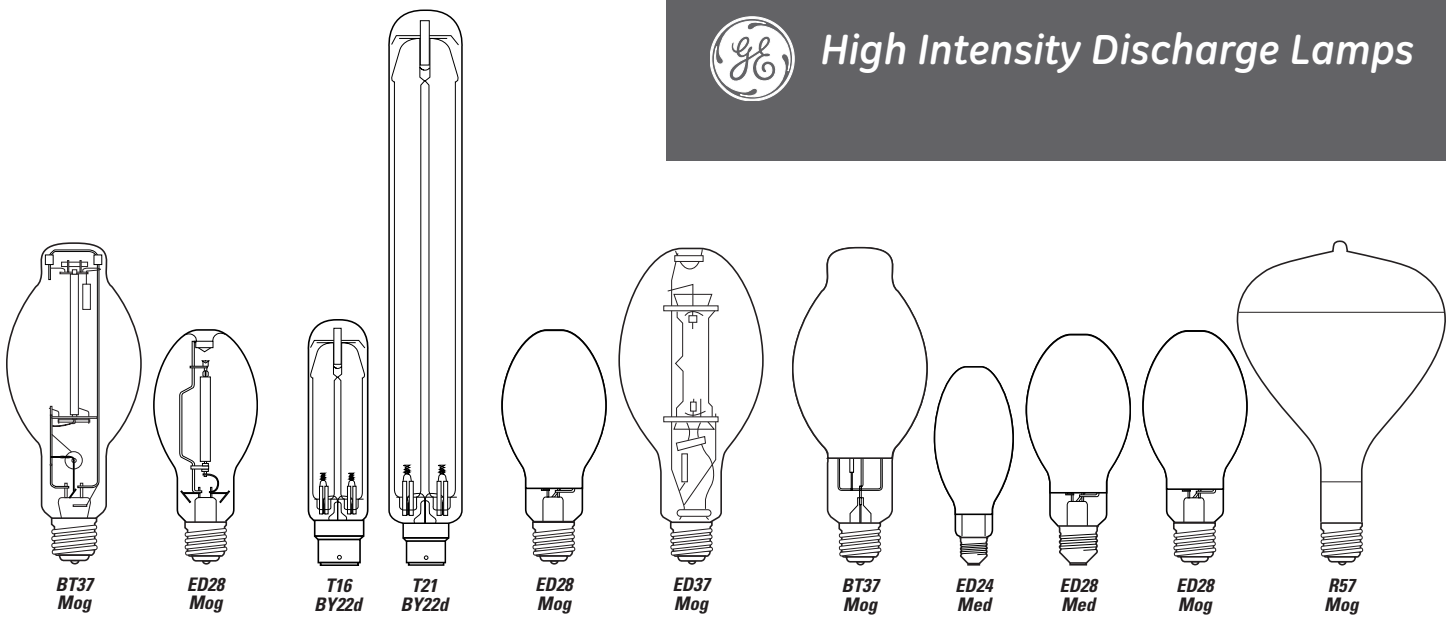
**Deluxe Lucalox® High Pressure Sodium Lamps**



**Mercury Lamps**



# High Intensity Discharge Lamps



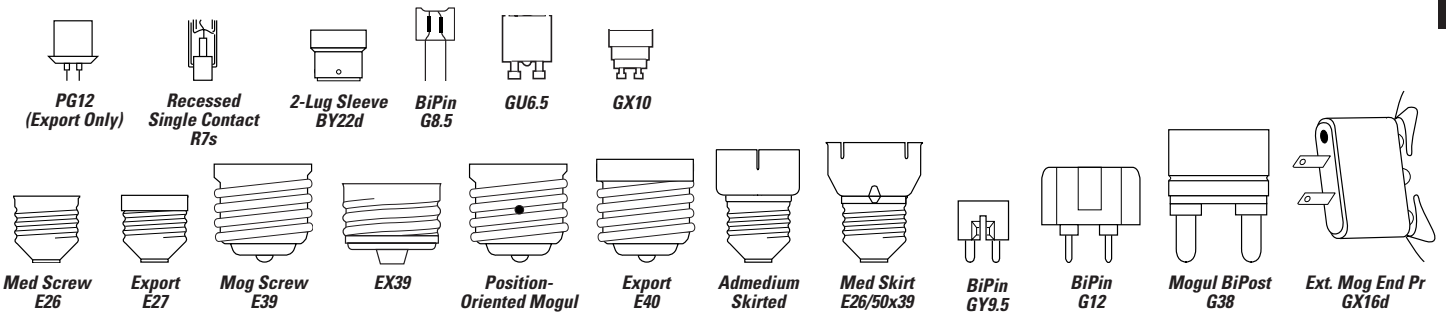
**E-Z Lux® High Pressure Sodium Lamps (Mercury Retrofit)**

**SOX Low Pressure Sodium Lamps**

**Saf-T-Gard® Mercury Lamps**

**E-Z Merc® Self-Ballasted Lamps (Incandescent Retrofit)**

## BASE IDENTIFICATION



## INTRODUCTION

GE HID lamps provide the following benefits:

### High Efficacy/Low Operating Cost.

HID is generally the most efficient light source. Better efficiency almost always means lower operating cost.

### Long Life.

Most HID lamps have life ratings that are better than incandescent lamps and similar to fluorescent lamps.

### Compact Size.

An HID lamp produces high light output from a relatively compact source. Like incandescent, it is a "point" light source, which allows for good optical control.

The chart at right shows how HID lamps compare to incandescent, halogen, and fluorescent in terms of efficiency and rated life. Efficiency is measured in lumens per watt (LPW). Rated life for most lamp types is the number of burning hours when 50% of the tested samples have failed and 50% are still operational. For both HID and fluorescent, lamp life depends on the number of hours per start.

The combination of high efficiency and long life makes HID an ideal light source for many commercial and industrial applications.

## SUGGESTED COLOR APPLICATIONS FOR HID LAMPS

**CMH®:** Stores, people places, display, accent.

**MVR:** Stores, public spaces, industrial, gymnasiums, floodlighting signs and buildings, parking areas, sports.

**MVR/C:** Same as MVR – warmer color – diffuse coating reduces glare.

## Typical Lamp Characteristics

Lamp Type	Typical LPW	Rated Life (in hours)
Incandescent	5 - 22	750 - 2000
Halogen	12 - 36	2000 - 6000
Compact Fluorescent	27 - 80	9000 - 20,000
Fluorescent	75 - 100	12,000 - 24,000 +
Mercury	50 - 60	12,000 - 24,000 +
ConstantColor® CMH®	80 - 95	7,500 - 20,000
Multi-Vapor® Metal Halide	80 - 115	10,000 - 20,000
Lucalox® High Pressure Sodium	90 - 140	10,000 - 40,000

**MVR/SP30:** Same as MVR – warmer than MVR or MVR/C – matches SP30 fluorescent.

**MXR:** Warm color (3200K) – good match for halogen.

**LU:** Street lighting, parking areas, industrial, floodlighting, security, CCTV.

**LU/DX:** Floodlighting, parking areas, indoor/outdoor pedestrian malls, industrial, security, roadway.

**Deluxe (DX) Mercury:** Stores, public spaces – Metal Halide lamps however, are preferred.

**Clear Mercury:** Landscape lighting, specialized floodlighting such as green copper roofs.





## PRODUCT INFORMATION

### GE CONSTANTCOLOR® CMH® CERAMIC METAL HALIDE LAMPS (pgs 3-9 to 3-11)

- Color uniformity lamp-to-lamp and over lamp life
- Excellent color rendering (80+ CRI, 90+ CRI for SPXX versions)
- Delivers more light than standard metal halide (10%–20% more)
- Lamp operates at high efficacy – up to 95 lumens per watt
- Many are universal burn – may be operated in any position
- Perfect for retail and commercial display lighting, accent and floodlighting, lobby and foyer lighting. Ideal for “people places.”

### GE CMH® CHROMAFIT™ CERAMIC METAL HALIDE LAMPS (pg 3-11)

- Convert High Pressure Sodium sockets to crisp, white ceramic metal halide light (80+ CRI)
- Operate on standard HPS ballasts and auxiliary equipment
- Universal burn – may be operated in any position
- Uses: Area lighting, industrial and “people places”
- Enclosed glass fixtures only

### GE PULSEARC® MEDIUM BASED METAL HALIDE LAMPS (/MED MODELS) (pgs 3-11 to 3-13)

- Low wattage metal halide lamps (formerly Halarc®) are now part of the PulseArc® family
- Compact source
- Sparkling white light (3000-4000K) and very good color rendition (70-75 CRI)
- High efficacy – more than 3 times the lumens per watt of incandescent
- Long life – up to 15 times longer than incandescent systems and up to 7 times longer than most PAR and R systems, saving maintenance and labor costs
- Superior optical control
- Uses: Display lighting, downlighting, floodlighting, corridors, lobbies, walkways; retail, office, commercial

### GE PULSEARC® MULTI-VAPOR® METAL HALIDE LAMPS (/PA MODELS) (pgs 3-11 to 3-13)

- Designed for operation only on approved ballasts with metal halide pulse ignitors
- More light – 400W lamps provide highest initial and highest maintained lumens versus other standard universal or vertical base-up lamp options
- 50% longer life – 400W lamps provide 30,000 hours life when burned on 120 hour on/1 hour off cycle (approximately continuous)
- Faster hot restrike – less than 4 minutes versus 10-15 minutes for typical metal halide lamps

### GE MULTI-VAPOR® METAL HALIDE LAMPS (pgs 3-13 to 3-14)

- Sparkling white light (3000-4000K) and very good color rendition (65-75 CRI)
- Warm, rich 3000K color of SP30 blends well with incandescent, halogen and triphosphor fluorescent lamps for interior retail applications
- High efficacy – more efficient than incandescent, mercury and most fluorescent sources
- Long life – 10,000-20,000 hours for most types
- Full line, 150-1000 watts, to meet most application needs
- Uses: Downlighting, floodlighting, corridors, lobbies, walkways; retail, commercial, industrial

### GE HIGH OUTPUT MULTI-VAPOR® LAMPS (pgs 3-14)

- More light – optimized for higher light output in horizontal, vertical base-up and base-down burn applications
  - Horizontal burn lamps provide up to 25% more light than standard universal burn equivalents
  - 400W vertical burn lamps provide up to 22% more light than standard universal burn equivalents; the highest lumen lamps available for operation on standard M59 ballasts
- Longer life – horizontal burn lamps last up to 67% longer than universal burn lamp equivalents, significantly reducing replacement lamp and maintenance costs

### GE STAYBRIGHT® (/STB) LAMPS (pg 3-14)

- Brighter longer – has 32% higher mean lumens while running on standard metal halide ballasts
- Uses: Any application where fixed-orientation lamps can be used. Gas stations, sports lighting, billboards, retail, office, roadway, parking garages, floodlights, sign lighting.

### GE PROTECTED HIGH OUTPUT MULTI-VAPOR® LAMPS (/O) (pgs 3-14 to 3-16)

- Protective quartz jacket surrounds the arc tube
- The/O suffix and/or the “MPR” prefix in the Lamp Description indicates lamps are suitable for open fixture applications

### GE CHROMAFIT™ MULTI-VAPOR® LAMPS (/R) (pg 3-16)

- Convert high pressure sodium sockets to crisp white metal halide light (65-70 CRI)
- Operate on standard HPS ballasts and auxiliary equipment
- Uses: Area lighting, industrial and “people places”

### GE I-LINE MULTI-VAPOR® LAMPS (pgs 3-16)

- Convert mercury sockets to crisp, white metal halide light
- More light, better color, energy cost savings for mercury users
- 40%-100% more light than existing mercury lamps
- Operate on standard CW and CWA mercury ballasts and auxiliary equipment



## PRODUCT INFORMATION (CONTINUED)

### GE SAF-T-GARD® MULTI-VAPOR LAMPS (MVT) (pg 3-16)

- Special self-extinguishing feature prevents exposure to UV in case outer bulb is punctured or broken; lamp turns off within 15 minutes
- Meets requirements of Federal Standard 21CFR1040.30
- Saf-T-Gard® I-Line lamps convert mercury sockets to crisp, white metal halide light
- Saf-T-Gard® I-Line lamps operate on standard mercury ballasts and auxiliary equipment
- Uses: Industrial, commercial, gymnasiums, sports complexes, especially where open fixtures are used and risk of outer bulb breakage is possible

### GE ARCSTREAM® METAL HALIDE LAMPS (pgs 3-16 to 3-17)

- Compact size, white light, excellent color
- Precise optical control delivers a concentrated beam of light right where it's needed
- Variety of color temperatures (3,000K - 6,000K)
- PAR64: ideal for long-range projection and sports lighting applications
- Uses: Ideal for retail and commercial display lighting, floodlighting, accent/highlighting

### GE LUCALOX® HIGH PRESSURE SODIUM LAMPS (pgs 3-17 to 3-18)

- Very high efficacy/low operating cost
- Excellent lumen maintenance – over 90% @ 50% of life
- Very long life – 24,000+ hours
- Universal burn – can be operated in any position without affecting performance
- Warm color
- For open or enclosed fixtures
- Uses: Industrial, roadway, security, floodlighting

### GE DOUBLE-ENDED LUCALOX® LAMPS (/TD) (pg 3-18)

- Compact tubular design fits compact fixtures for excellent optical control
- High efficacy, lumen maintenance and long life of standard Lucalox® HPS

### GE STANDBY LONGLIFE LUCALOX® LAMPS (/SBY) (pg 3-18)

- Extra arc tube provides light instantly after momentary power interruption, and will increase to 80% light output in 1-2 minutes
- Dual arc tubes provide 40,000 hour rated life
- Operates on standard HPS ballasts and auxiliary equipment
- Uses: Industrial, roadway, security, and hard-to-reach sockets

### GE ECOLUX® NC “NON-CYCLING” HIGH PRESSURE SODIUM LAMPS (/ECO/NC) (pgs 3-18 to 3-19)

- Low mercury. Passes TCLP, which can lower disposal costs.
- Non-cycling feature makes locating and replacing end-of-life lamps quick and easy
- Lead-free base
- High efficacy/low operating cost

- 6%-11% higher initial lumens than standard HPS in 100W and 400W versions
- Long life – 30,000 hours
- Open or enclosed fixtures
- Uses: Industrial, roadway, security

### GE ECOLUX® HIGH PRESSURE SODIUM LAMPS (/ECO) (pg 3-19)

- Lead-free base. Passes TCLP, which can lower disposal costs.

### GE DELUXE LUCALOX® HIGH PRESSURE SODIUM LAMPS (pg 3-19)

- High efficacy, lumen maintenance and long life of standard Lucalox® HPS
- High color rendering (65-70CRI), much better than standard HPS
- Blends well with incandescent and standard HPS sources
- Operates on standard HPS ballasts and auxiliary equipment
- Uses: Storage rooms, industrial facilities, offices, gymnasiums, malls, parks, building floodlighting

### GE E-Z LUX® HIGH PRESSURE SODIUM LAMPS (pg 3-19)

- Direct replacement for mercury lamps on mercury ballasts
- More efficient, 57-114% more lumens and 10-14% fewer watts than mercury lamps they replace
- Uses: General lighting, roadway
- See operating notes for further information

### GE SOX LOW PRESSURE SODIUM LAMPS (pg 3-19 to 3-20)

- Highest luminous efficacy for general, not for color-critical lighting
- Monochromatic, yellow color (589nm)

### GE MERCURY LAMPS (pgs 3-20)

- Long life and good efficacy
- Phosphor coated Deluxe lamps provide good color rendering(50CRI)
- Uses: Industrial, roadway, landscapes, residential and commercial security, parking lots

### GE SAF-T-GARD® MERCURY LAMPS (pg 3-21)

- Special self-extinguishing feature prevents exposure to harmful UV in case outer bulb is punctured or broken; lamp turns off within 15 minutes
- Meets requirements of Federal Standard 21 CFR 1040.30
- See operating notes for further information

### GE E-Z MERC® SELF-BALLASTED MERCURY LAMPS (pg 3-21)

- Retrofit incandescent sockets to longer-life mercury lamps without additional mercury ballasts or auxiliary equipment

### GE EXPORT BASE LAMPS (pg 3-21 and 3-22)

- Export-only lamps are not sold or intended for use in North America. The lamps are identified by “/27” or “/40” at the end of the lamp description, and comply with electrical characteristics defined by IEC standards.
- Bulb shapes are generally similar to U.S. lamp types. Refer to drawings on pages 3-2 to 3-5.



# High Intensity Discharge Lamps

HID BRAND NAME CROSS-REFERENCE		
GE	OSRAM/SYLVANIA	PHILIPS
Arcstream® MQI	BRITE-LINE™, HOI®	MHN-TD
ChromaFit™ Multi-Vapor®	—	—
ConstantColor® CMH® Ceramic Metal Halide	Powerball MCP	MasterColor™ CDM
Deluxe Lucalox®	—	Ceramalux™ Comfort
E-Z Lux®	Unalux®	Ceramalux™ Retrolux
E-Z Merc®	—	Self Ballasted Mercury
Ecolux®	Lumalux ECO®	Ceramalux Alto®
Ecolux® NC	Lumalux Plus™/ECO®	Ceramalux Alto® Plus
High Output Multi-Vapor®	Super Metalarc®	Metal Halide
Horizontal Multi-Vapor®	Super Metalarc®	—
I-Line Multi-Vapor®	—	—
Lucalox®	Lumalux®	Ceramalux™
Multi-Vapor®	Metalarc®	Metal Halide
Protected High Output Multi-Vapor®	Metalarc® Pro-Tech™	—
PulseArc®	Super Metalarc® Pulse Start	Pulse Start
Saf-T-Gard® Mercury	Mercury Safeline®	Safety Lifeguard Mercury
Saf-T-Gard® Multi-Vapor®	Metalarc® Safeline®	Safety Lifeguard Metal Halide
SOX Low Pressure Sodium	SOX Low Pressure Sodium	SOX Low Pressure Sodium
Standby Longlife Lucalox®	Lumalux® Standby	Instant Restrike Ceramalux™
StayBright®	—	—
Watt-Miser® Multi-Vapor®	—	—

**ATTENTION:** This brand-name cross-reference chart is provided only as a quick reference. Other lamp company brand listings may only represent a near equivalent, versus an identical match to GE Lighting brands. Individual lamp manufacturers' performance specifications should be consulted. Lamp performance may be affected by environmental conditions, ballast type and/or other auxiliary equipment.

## HEADINGS IN THIS CATALOG SECTION

The following terms and descriptions can help you when checking High Intensity Discharge lamp specifications and when ordering products. Within each product line, lamps are divided into families. Within families, lamps are listed by wattage. In each of these wattage groups, lamps are listed by bulb shape.

### Bulb:

Bulb shape followed by its size (the maximum diameter of the bulb expressed in eighths of an inch).

**LET (Lamp Enclosure Type):**  
Describes fixture requirements for this lamp (see page 3-22).

**OP (Operating Position):**  
(see page 3-23).

**MOL:**  
Maximum Overall Length in inches.

**Base:**  
The type of base.

### LCL:

Distance between the center of the filament and the Light Center Length reference plane, in inches.

### Order Code:

It is important to use this five-digit code when ordering to ensure that you receive the exact product you require.

**Description:**  
The lamp's identification code.

**Case Qty.:**  
Number of product units packed in a case.

**ANSI Ballast Type:**  
Ballast type used to operate lamp.

**Lumens - Initial:**  
Initial light output.

**Rated Life Hours:**  
Lamp burning hours to median life expectancy.

### Color Temperature Kelvins (K):

A measure of the visual "warmth" or "coolness" of the light from the lamp. The higher the value the whiter or "cooler" the light appears.

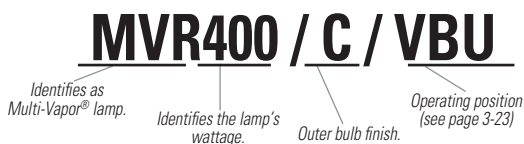
### Color Rendering Index (CRI or Ra):

An indication of the ability of the lamp to render object colors in a normal, natural way. The higher the number (0-100), the better the color appearance.

**Additional Information:**  
Typical application and/or other important information.

Bulb	Base	LET	OP	Watts	MOL	LCL	Order Code	Description	ANSI Ballast Type	Case Qty.	Rated Life (hours)	Lumens Initial	Lumens Mean	Color Temp. K	CRI	Additional Information	Foot-notes	Warning
ED37	Mog	S	VBU	400	11.5	7	49656	MVR400/C/VBU	M59	6	20000	41000	26500	3700	70	Coated	121	

## HIGH OUTPUT AND XHO MULTI-VAPOR® METAL HALIDE LAMPS 400 WATTS



### WHEN YOU DON'T KNOW THE LAMP DESCRIPTION

1. Identify bulb shape by using illustrations on pages 3-2 to 3-5.
2. Measure bulb diameter using ruler in Appendix section page A-1 to determine width in eighths of an inch.
3. Identify base type using table on page 3-5.
4. Find your lamp in the tabular data containing the bulb shape, size and base, which are all listed by wattage.



Bulb	Base	LET	OP	Watts	MOL	LCL	Order Code	Description	ANSI Ballast Type	Case Qty.	CBCP	Rated Life (hours)	Lumens Initial	Lumens Mean	Color Temp. K	CRI	Additional Information	Footnotes	Warning
<b>CONSTANTCOLOR® CMH® METAL HALIDE LAMPS</b>																			
<b>CMH® MR16</b>																			
MR1620	GX10T&L	O	U	20	2.28		85101	CMH20MR16/830/SP	M156	9000	9000	1000	1000	3000	80		12 Spotlight, UV control	33, 51	107
							85110	CMH20MR16/830/FL	M156	2900	9000	1000	1000	3000	80		25 Floodlight, UV control	33, 51	107
							97630	CMH20MR16/830/WFL	M156	1500	9000	1000	1000	3000	80		40 Wideflood, UV Control	33, 51	107
<b>CMH® PAR</b>																			
PAR20	Med	O	U	20	3.5		29485	CMH20PAR20/SP	M156	15	13000	7500	1000	3000	81		8 Spotlight, UV control	33, 51	107
							29486	CMH20PAR20/FL	M156	15	3750	7500	1000	3000	81		25 Floodlight, UV control	33, 51	107
PAR30L	Med	O	U	20	4.75		29487	CMH20PAR30/SP10	M156	6	19800	7500	1200	3000	81		10 Spotlight, UV control	33, 51	107
							29488	CMH20PAR30/SP15	M156	6	14500	7500	1200	3000	81		15 Spotlight, UV control	33, 51	107
							29489	CMH20PAR30/FL25	M156	6	4900	7500	1200	3000	81		25 Floodlight, UV control	33, 51	107
PAR20	Med	O	U	39	3.5		42068	CMH39/UPAR20/FL25	M130	15	7500	10000	2100	3000	86		25 Floodlight, UV control	33,45	107
							42069	CMH39/UPAR20/SP10	M130	15	22000	10000	2100	3000	86		10 Spotlight, UV control	33,45	107
PAR30L	Med	O	U	39	4.75		42066	CMH39/PAR30L/SP15	M130	6	29000	10000	2400	3000	81		15 Spotlight, UV control	33,45	107
							42067	CMH39/PAR30L/FL25	M130	6	11000	10000	2400	3000	81		25 Floodlight, UV control	33,45	107
							45066	CMH39/PAR30L/SP10	M130	6	39600	10000	2400	3000	81		10 Spotlight, UV control	33,45	107
				70	4.75		22152	CMH70/PAR30L/830SP	M98 or M139	6	43000	13000	4700	3000	82		15 Spotlight, UV control	33,45	107
							22159	CMH70/PAR30L/830FL	M98 or M139	6	10000	13000	4700	3000	82		40 Floodlight, UV control	33,45	107
PAR38	Med	O	U	70	5.31		45675	CMH70/PAR38/830SP15/ECO	M98 or M139	6	40000	10000	4800	3000	82		15 Spotlight, UV control	33	108
							45677	CMH70/PAR38/830FL25/ECO	M98 or M139	6	14000	10000	4800	3000	82		25 Spotlight, UV control	33	108
							45679	CMH70/PAR38/830WF/ECO	M98 or M139	6	10000	10000	4800	3000	82		Wide Floodlight, UV control	33	108
				100	5.31		45680	CMH100/PAR38/830S15/ECO	M90 or M140	6	45000	10000	6500	3000	81		15 Spotlight, UV control	33	108
							45681	CMH100/PAR38/830F25/ECO	M90 or M140	6	15000	10000	6500	3000	81		25 Spotlight, UV control	33	108
							45682	CMH100/PAR38/830WF/ECO	M90 or M140	6	10000	10000	6500	3000	81		Wide Floodlight, UV control	33	108
<b>CMH® ELLIPTICAL</b>																			
BD17	Med	E	U	70	5.43	3.37	22119	CMH70/U/830/MED	M98 or M139	6		15000	6300	4100	3000	80	Clear	33	116
							22124	CMH70/C/U/830/MED	M98 or M139	6		15000	6000	4000	3000	80	Coated	33	116
				100	5.43	3.37	22127	CMH100/U/830/MED	M90 or M140	6		10000V 15000H	6600V 9200H	9200V 6400H	3000	83	Clear	33	116
							22137	CMH100/C/U830/MED	M90 or M140	6		10000V 15000H	8700V 8700H	6300V 6300H	3000	83	Coated	33	116
<b>CMH® ELLIPTICAL OPEN-RATED</b>																			
ED17	Med	O	U	70		3.37	31069	CMH70/U/830/MED/O	M98 or M143	6		15000	5700	4100	3000	80	Clear	33	116
							31070	CMH70/C/U/830/MED/O	M98 or M143	6		15000	5700	4100	3000	80	Coated	33	116
							31073	CMH70/U/942/MED/O	M98 or M143	6		15000	5500	4200	4000	90	Clear	33	116
							31074	CMH70/C/U/942/MED/O	M98 or M143	6		15000	5200	4000	4000	90	Coated	33	116
				150		3.37	31065	CMH150/U/830/MED/O	M102 or M142	6		12000	12900	9500	3000	80	Clear	33	116



# High Intensity Discharge Lamps

Bulb	Base	LET	OP	Watts	MOL	LCL	Order Code	Description	ANSI Ballast Type	Case Qty.	CBCP	Rated Life (hours)	Lumens Initial	Lumens Mean	Color Temp. K	CRI	Additional Information	Foot- notes	Warning
<b>CONSTANTCOLOR® CMH® METAL HALIDE LAMPS (CONTINUED)</b>																			
<b>CMH® ELLIPTICAL OPEN-RATED (CONTINUED)</b>																			
ED17	Med	0	U	150	3.37		31066	CMH150/C/U830/MED/O	M102 or 6 M142			12000	11900	8800	3000	80	Coated	33	
							31067	CMH150/U/942/MED/O	M102 or 6 M142			15000	12000	9000	4200	90	Clear	33	
							31068	CMH150/C/U/942/MED/O	M102 or 6 M142			15000	11000	8300	4200	90	Coated	33	
<b>CMH® SINGLE ENDED G12</b>																			
T4.5	BiPin G12	E	U	20	3.56	2.18	29703	CMH20/T/U/830/G12	M156	12		12000	1600	1060	3000	81	UV Control	33,39,51	104
							20153	CMH39/T/U/830/G12	M130	12		10000	3400	2600	3000	82	UV Control	39,44,45	104
							29696	CMH39/T/U/942/G12	M130	12		12000	3150	2700	4200	88	UV Control	39,44,45	104
T6	BiPin G12	E	U	70	3.56	2.18	20016	CMH70/T/U/830/G12	M85, 12 M98, or M139			15000	6200	4700	3000	83	UV Control	39,44,45	104
							20023	CMH70/T/U/942/G12	M85, 12 M98, or M139			15000	6000	4600	4200	93	UV Control	39,44,45	104
				150	3.93	2.18	20017	CMH150/T/U/830/G12	M81, 12 M102, or M142			12000	14000	11000	3000	82	UV Control	39,44,45	104
							20018	CMH150/T/U/942/G12	M81, 12 M102, or M142			12000	13000	11000	4200	94	UV Control	39,44,45	104
<b>CMH® DOUBLE-ENDED TD</b>																			
T6	Rx7s	E	H45	70	4.5	2.25	92587	CMH70/TD/830/RX7S	M85, 12 M98, or M139			15000	7000	5600	3000	81	UV Control	39,44	109
							92588	CMH70/TD/942/RX7S	M85, 12 M98, or M139			15000	7000	5600	4200	88	UV Control	39,44	109
T7	Rx7s	E	H45	150	5.37	2.62	92589	CMH150/TD/830/RX7S	M81, 12 M102, or M142			15000	14000	11500	3000	80	UV Control	39,44	109
							92590	CMH150/TD/942/RX7S	M81, 12 M102, or M142			15000	14000	11500	4200	93	UV Control	39,44	109
<b>CMH® GU6.5</b>																			
T4	GU6.5	E	U	20	2.05	1.18	85086	CMH20/TC/U/830/G6.5	M156	12		9000	1615	1100	3000	80	UV Control	33,44,51	104
<b>CMH® MINI'S</b>																			
T4.5	BiPin G8.5	E	U	20	3.37	2	92696	CMH20/TC/U/830/G8.5	M156	12		12000	1600	1060	3000	81	UV Control	33,44,51	104
							90352	CMH39/TC/U/830/G8.5	M130	12		10000	3400	2600	3000	82	UV Control	39,44,45	104
							29698	CMH39/TC/U/942/G8.5	M130	12		12000	3150	2700	4200	88	UV Control	39,44,45	104
							92585	CMH70/TC/U/830/G8.5	M98 or 12 M139			9000	6200	4700	3000	83	UV Control	39,44,45	104
							29701	CMH70/TC/U/942/G8.5	M98 or 12 M139			15000	6000	4600	4200	90	UV Control	39,44,45	104
<b>HIGH-WATT CMH® SPXX</b>																			
ED28	EX39	0	VBU	250	8.31	5	48429	CMH250/VBU/PA/O		12		20000	23000	18400	4100	90		33,45,52	106
							48432	CMH250/C/VBU/PA/O		12		20000	22000	17600	4100	90		33,45,52	106
ED37	EX39	0	VBU	320	11.31	7	17264	CMH320/PA/O		6		20000	30000	24000	3700	90		33,45,52	106
							17267	CMH320/C/PA/O		6		20000	29000	23200	3700	90		33,45,52	106
				350	11.31	7	11834	CMH350/VBU/940/PA/O		6		20000	34000	27200	3600	90		33,45,52	106
							11835	CMH350/C/VBU/940/PA/O		6		20000	33000	26400	3600	90		33,45,52	106
				400	11.31	7	49910	CMH400/VBU/940/PA/O		6		20000	40000	32000	3700	92		33,45,49,52	106
							49911	CMH400/C/VBU/940/PA/O		6		20000	39000	31200	3700	92		33,45,49,52	106



Bulb	Base	LET	OP	Watts	MOL	LCL	Order Code	Description	ANSI Ballast Type	Case Qty.	CBCP	Rated Life (hours)	Lumens Initial	Lumens Mean	Color Temp. K	CRI	Additional Information	Foot- notes	Warning	
<b>CONSTANTCOLOR® CMH® METAL HALIDE LAMPS (CONTINUED)</b>																				
<b>CMH® CHROMAFIT™</b>																				
T15	Mog	E	U	250	9.75	5.75	93357	CMH250/U/830/R	S50	12		16000	25000	20000	3000	85		44,45	105	
ED18	Mog	E	U	400	9.75	5.75	93295	CMH400/U/830/R	S51	12		20000	41000	31300	3000H	80>		44,45,49	105	
													3600V							
<b>PULSEARC® MULTI-VAPOR® METAL HALIDE LAMPS</b>																				
<b>32 WATTS</b>																				
ED17	Med	O	VBD	32	5.43	3.43	12651	MXR32/C/VBD/O	M100	6		10000	2400	1700	3200	70	Coated, protected	119		
							16469	MXR32/C/VBU/O	M100	6		10000	2400	1700	3200	70	Coated, protected	119		
<b>50 WATTS</b>																				
ED17	Med	O	U	50	5.43	3.43	45670	MXR50/U/MED/O	M110	6		10000	3400	1700	3500	70	Clear, protected	119		
							45671	MXR50/C/U/MED/O	M110	6		10000	3200	1500	3500	70	Coated, protected	119		
							10361	MXR50/U/MED	M110	6		10000	3200	2100	3700	60	Clear	118		
							10364	MXR50/C/U/MED	M110	6		10000	3000	2000	3400	65	Coated	118		
<b>70 WATTS</b>																				
ED17	Med	O	U	70	5.43	3.43	12377	MXR70/U/MED/O	M98	6		15000	5500	3500	3200	70	Clear, protected	119		
							12577	MXR70/C/U/MED/O	M98	6		15000	5300	3300	3200	70	Coated, protected	119		
							22158	MXR70/U/MED	M98	6		12000	5500	3500	3200	70	Clear	118		
							22162	MXR70/C/U/MED	M98	6		12000	5300	3300	3200	70	Coated	118		
							12590	MVR70/U/MED	M98	6		12000	4700	3000	4000	75	Clear	118		
							12594	MVR70/C/U/MED	M98	6		12000	4500	2800	4000	75	Coated	118		
<b>100 WATTS</b>																				
ED17	Med	O	U	100	5.43	3.43	12381	MXR100/U/MED/O	M90	6		15000	9000	6200	3200	70	Clear, protected	119		
							12579	MXR100/C/U/MED/O	M90	6		15000	8500	5900	3200	70	Coated, protected	119		
							18680	MXR100/U/MED	M90	6		15000	9000	6200	3200	70	Clear	118		
							18679	MXR100/C/U/MED	M90	6		15000	8500	5900	3200	70	Coated	118		
							12652	MVR100/U/MED	M90	6		15000	8100	5800	4000	75	Clear	118		
							12653	MVR100/C/U/MED	M90	6		15000	7600	4900	4000	75	Coated	118		
<b>150 WATTS</b>																				
ED17	Med	O	U	150	5.43	3.43	45683	MXR150/U/MED/O	M102	6		15000	12500	8600	3500	70	Clear, protected	119		
							45688	MXR150/C/U/MED/O	M102	6		15000	12000	8300	3500	70	Coated, protected	119		
							22935	MXR150/U/MED	M102	6		15000	13300	10000	3400	60	Clear	118		
							22936	MXR150/C/U/MED	M102	6		15000	12600	9500	3100	60	Coated	118		
							12598	MVR150/U/MED	M102	6		15000	14000	10500	4300	65	Clear	118		
							12604	MVR150/C/U/MED	M102	6		15000	13300	10000	3900	70	Coated	118		
<b>175 WATTS</b>																				
ED23.5	Mog	E	VBU	175	7.5	5	22342	MXR175/VBU/PA	M137 or 6 M152			15000	17000	12500	3200	65	Clear	43	117	
							11185	MXR175/C/VBU/PA	M137 or 6 M152			15000	16000	12000	3200	65	Coated	43	117	
							12622	MVR175/VBU/PA	M137 or 6 M152			15000	17500	13000	4000	75	Clear	43	117	
							12633	MVR175/C/VBU/PA	M137 or 6 M152			15000	16500	12500	4000	75	Coated	43	117	
BD17	Med	E	VBU	175	5.75	3.43	12636	MVR175/VBU/MED/PA	M137 or 6 M152			15000	17500	13000	4000	75	Clear	43	117	
							12637	MVR175/C/VBU/MED/PA	M137 or 6 M152			15000	16500	12500	4000	75	Coated	43	117	



# High Intensity Discharge Lamps

Bulb	Base	LET	OP	Watts	MOL	LCL	Order Code	Description	ANSI Ballast Type	Case Qty.	CBCP	Rated Life (hours)	Lumens Initial	Lumens Mean	Color Temp. K	CRI	Additional Information	Foot-notes	Warning
<b>PULSEARC® MULTI-VAPOR® METAL HALIDE LAMPS (CONTINUED)</b>																			
<b>250 WATTS</b>																			
ED28	Mog	E	VBU	250	8.25	5	26317	MVR250/VBU/PA	M138 or 12 M153			15000	23000	17000	4200	65	Clear	43	117
							26319	MVR250/C/VBU/PA	M138 or 12 M153			15000	21500	15500	3900	65	Coated	43	117
<b>320 WATTS</b>																			
ED28	Mog	E	VBU	320	8.25	5	27501	MVR320/VBU/HO/PA	M132 or 12 M154			20000	31000	18000	4000	65	Clear	43	117
							27502	MVR320/C/VBU/HO/PA	M132 or 12 M154			20000	30000	16500	3700	70	Coated	43	117
							45666	MVR320/VBU/XHO/PA	M132 or 12 M154			20000	34000	25000	4000	65	Clear	43	116
							45669	MVR320/C/VBU/XHO/PA	M132 or 12 M154			20000	33000	23000	3700	70	Coated	43	116
ED37	EX39	O	VBU	320	11.5	7	46275	MPR320/VBU/XHO/PA	M132 or 6 M154			20000	32000	22500	4000	65	Clear, protected	43	120
							46276	MPR320/C/VBU/XHO/PA	M132 or 6 M154			20000	30500	21500	3700	70	Coated, protected	43	120
ED 28	EX39	O	VBU	320	8.25	5	19609	MPR320/C/PA/ED28	M132 or 12 M154			20000	30600	24500	3700	70	Coated, protected	43	120
<b>350 WATTS</b>																			
ED37	Mog	S	V	350	11.5	7	40376	MVR350/VBUXHO/PA	M131	6		20000	36500	27000	4000	62	Clear	43	117
							40377	MVR350/CVBUXHOPA	M131	6		20000	34500	25000	3700	65	Coated	43	117
							10202	MPR350/VBU/PA	M131	6		20000	35200	24600	4000	65	Clear, protected	43	120
							48824	MPR350/C/VBU/PA	M131	6		20000	33400	23500	4000	70	Coated, protected	43	120
							48825	MPR350/C/VBU/3K/PA	M131	6		20000	33400	23500	3400	70	Coated, protected	43	120
<b>400 WATTS</b>																			
ED37	Mog	S	VBU	400	11.5	7	45664	MVR400/VBU/HO/PA	M135 or 6 M155			20000	41000	31000	4000	65	Clear	43, 49	121
							45665	MVR400C/VBU/HO/PA	M135 or 6 M155			20000	40000	30000	3700	70	Coated	43, 49	121
							12642	MVR400/VBU/XHO/PA	M135 or 6 M155			20000	44000	33000	4000	65	Clear	43, 49	121
							12644	MVR400C/VBU/XHO/PA	M135 or 6 M155			20000	42000	31500	3700	70	Coated	43, 49	121
ED37	EX39	O	VBU	400	11.5	7	46273	MPR400/VBU/XHO/PA	M135 or 6 M155			20000	42000	29500	4000	65	Clear, protected	43, 49	120
							46274	MPR400C/VBUXHO/PA	M135 or 6 M155			20000	40000	28000	3700	70	Coated, protected	43, 49	120
ED28	Mog	E	VBU	400	8.25	5	46271	MVR400/VBU/ED28/PA	M135 or 12 M155			20000	44000	28500	4000	65	Clear	43, 49	120
							46272	MVR400C/VBU/ED28/PA	M135 or 12 M155			20000	42000	27500	3700	70	Coated	43, 49	116
ED37	Mog	E	V	400	11.5	7	46632	MVR400VBD/XHO/PA	M135 or 6 M155			20000	44000	35200	4000	65		43, 49	116



Bulb	Base	LET	OP	Watts	MOL	LCL	Order Code	Description	ANSI Ballast Type	Case Qty.	BCBP	Rated Life (hours)	Lumens Initial	Lumens Mean	Color Temp. K	CRI	Additional Information	Foot- notes	Warning
<b>PULSEARC® MULTI-VAPOR® METAL HALIDE LAMPS (CONTINUED)</b>																			
<b>750 WATTS</b>																			
BT37	Mog	S	VBU	750	11.5	7	27219	MVR750/VBU/PA	M149	6		16000	82000	60000	4000	65	Clear	43, 49	121
							45560	MVR750/C/VBU/PA	M149	6		16000	72000	54000	3700	70	Coated	43, 49	121
<b>1000 WATTS</b>																			
BT37	Mog	E	U	1000	11.3	7	10389	MVR1000/U/BT37/PA	M141	6		12000V 9000H	115000V 105000H	90000V 82000H	3900	65	Clear	43, 49	116
<b>MULTI-VAPOR® METAL HALIDE LAMPS</b>																			
<b>150 WATTS</b>																			
ED28	Mog	E	U	150	8.25	5	13481	MVR150/U/WM	M57	12		7500H 10000V	13500V 11500H	8500V 7200H	4000	65	↘ Clear, Watt-Miser® & #174;		117
							13490	MVR150/C/U/WM	M57	12		7500H 10000V	12800V 10900H	8000V 6900H	3700	70	↘ Coated, Watt-Miser® & #174;		117
<b>175 WATTS</b>																			
BD17	Med	E	U	175	5.75	3.43	18902	MVR175/U/MED	M57	6		6000H 10000V	13600V 11700H	8800V 7400H	4000	65	Clear		117
							26432	MVR175/U/MED/CP	M57	4		6000H 10000V	13600V 11700H	8800V 7400H	4000	65	Clear, Consumer Pack		117
							19976	MVR175/C/U/MED	M57	6		6000H 10000V	12900V 11900H	8400V 7900H	3900	65	Coated		117
ED28	Mog	E	U	175	8.25	5	47760	MVR175/U	M57	12		6000H 10000V	13600V 11700H	8800V 7400H	4000	65	Clear		117
							26433	MVR175/U/CP	M57	4		6000H 10000V	13600V 11700H	8800V 7400H	4000	65	Clear, Consumer Pack		117
							47761	MVR175/C/U	M57	12		6000H 10000V	12900V 11900H	8400V 7900H	3900	70	Coated		117
							17634	MVR175/SP30/U	M57	12		6000H 10000V	12000V 10300H	7600V 6500H	3000	70	RE730 Phosphor Coating		117
PAR38	Med	E		175	5.62		25218	MVR175/PAR38/FL/1	M57	6	6500	7500V	12000V	7600V	3800	65	Clear, One-piece PAR		117
<b>250 WATTS</b>																			
ED28	Mog	E	U	250	8.25	5	42729	MVR250/U	M58	12		6000H 10000V	20800V 19100H	13500V 12400H	4200	65	Clear		117
				175	8.25	5	26434	MVR250/U/CP	M58	4		6000H 10000V	20800V 19100H	13500V 12400H	4200	65	Clear, Consumer Pack		117
				250	8.25	5	42731	MVR250/C/U	M58	12		6000H 10000V	19800V 18200H	13000V 11600H	3900	70	Coated		117
							17633	MVR250/SP30/U	M58	12		6000H 10000V	18000V 16600H	11500V 10600H	3000	70	RE730 Phosphor Coating		117
<b>360 WATTS</b>																			
ED37	Mog	S	VBU	360	11.5	7	13495	MVR360/VBU/WM/HO	M59	6		20000	36000	23500	4300	65	↘ Clear, Watt-Miser® & #174;	32, 49	121
							13496	MVR360/C/VBU/WM/HO	M59	6		20000	35000	23000	4000	70	↘ Coated, Watt-Miser® & #174;	32, 49	121
<b>400 WATTS</b>																			
ED37	Mog	S	U	400	11.5	7	43828	MVR400/U	M59	6		15000H 20000V	36000V 33100H	23500V 22100H	4000	65	Clear	49	121
							26435	MVR400/U/CP	M59	4		15000H 20000V	36000V 33100H	23500V 22100H	4000	65	Clear, Consumer Pack	49	121
							43829	MVR400/C/U	M59	6		15000H 20000V	35000V 32200H	23000V 19300H	3700	70	Coated	49	121
							17632	MVR400/SP30/U	M59	6		15000H 20000V	31000V 28500H	18600V 17100H	3000	70	RE730 Phosphor Coating	49	121
ED28	Mog	E	U	400	8.25	5	18904	MVR400/U/ED28	M59	12		15000H 20000V	36000V 33100H	23500V 22100H	4000	65	Clear, Compact Bulb	49	117
							19979	MVR400/C/U/ED28	M59	12		15000H 20000V	35000V 32200H	23000V 19300H	4000	65	Coated, Compact Bulb	49	117





# High Intensity Discharge Lamps

Bulb	Base	LET	OP	Watts	MOL	LCL	Order Code	Description	ANSI Ballast Type	Case Qty.	CBCP	Rated Life (hours)	Lumens Initial	Lumens Mean	Color Temp. K	CRI	Additional Information	Foot-notes	Warning
<b>MULTI-VAPOR® METAL HALIDE LAMPS (CONTINUED)</b>																			
<b>1000 WATTS</b>																			
BT56	Mog	S	U	1000	15.37	9.5	41826	MVR1000/U	M47	6		11000H 108000V 15000V 100280H	86000V 79000H	4000	65		Clear	49	121
							41827	MVR1000/C/U	M47	6		11000H 105000V 15000V 96600H	80000V 73000H	3700	65		Coated	49	121
BT37	Mog	E	U	1000	11.5	7	18205	MVR1000/U/BT37	M47	6		9000H 115000V 12000V 105000H	90000V 82000H	3700	65		Clear, Compact Bulb	49	121
<b>HIGH OUTPUT AND XHO MULTI-VAPOR® METAL HALIDE LAMPS</b>																			
<b>175 WATTS</b>																			
ED28	PosMog	E	HOR	175	8.25	5	18104	MVR175/HOR	M57	12		10000	15000	7700	4000	65	Clear, Position Oriented Socket Required		117
							18105	MVR175/C/HOR	M57	12		10000	14100	7500	3500	70	Coated, Position Oriented Socket Required		117
<b>250 WATTS</b>																			
ED28	PosMog	E	HOR	250	8.25	5	18101	MVR250/HOR	M58	12		15000	21000	10000	4200	65	Clear, Position Oriented Socket Required		117
							18103	MVR250/C/HOR	M58	12		15000	19700	9400	3600	70	Coated, Position Oriented Socket Required		117
<b>360 WATTS - WATT-MISER® ENERGY-SAVING REPLACEMENT FOR 400W METAL HALIDE</b>																			
ED37	Mog	S	VBU	360	11.5	7	40053	MVR360/VBU/WM/XHO	M59	6		20000	37000	24000	4200	65	➤ Clear, Watt-Miser®&#174; 32,49		121
							40055	MVR360/C/VBU/WM/XHO	M59	6		20000	35000	23000	4000	70	➤ Coated, Watt-Miser®&#174; 32,49		121
							47685	MVR360/VBU/STB/WM	M59	6		20000	36000	27000	4300	65	➤ Clear, Watt-Miser®&#174; 32,49 StayBright®&#174;		121
							47686	MVR360/C/VBU/STB/WM	M59	6		20000	35000	26000	4000	70	➤ Coated, Watt-Miser®&#174; 32,49 StayBright®&#174;		121
<b>400 WATTS</b>																			
ED37	Mog	S	VBU	400	11.5	7	26865	MVR400/VBU/STB/HO	M59	6		20000	41000	31000	4000	65	Clear, StayBright®&#174; 49		121
							26866	MVR400/CVBU/STB/HO	M59	6		20000	41000	29500	3700	70	Coated, StayBright®&#174; 49		121
							49657	MVR400/VBU/HO	M59	6		20000	41000	26500	4000	65	Clear	49	121
							49656	MVR400/C/VBU/HO	M59	6		20000	41000	26500	3700	70	Coated	49	121
							49655	MVR400/VBD	M59	6		20000	41000	26500	4000	65	Clear	49	121
							20931	MVR400/SP30/VBU/HO	M59	6		20000	34000	20400	3200	70	RE730 Phosphor Coating, Vertical Base Up &#177;15&	49	121
							13923	MVR400/VBU/XHO	M59	6		20000	43000	28000	4000	65	Clear	49	121
							13924	MVR400/C/VBU/XHO	M59	6		20000	42000	27000	3700	70	Coated	49	121
ED28	Mog	E	VBU	400	8.31	7	40335	MVR400/VBU/ED28/HO	M59	12		20000	41000	26500	4000	65	Clear, Compact Bulb	49	121
BT28	Mog	E	HOR	400	8.25	5	40201	MVR400/HOR/BT28	M59	12		20000	37000	22000	4200	65	Clear, Compact Bulb	49	117
BT37	Mog	E	HOR	400	11.5	7	26218	MVR400/HOR/MOG	M59	6		20000	38000	22500	4200	65	Clear	49	117
							26219	MVR400/C/HOR/MOG	M59	6		20000	36800	22000	3900	70	Coated	49	117
<b>1000 WATTS</b>																			
BT56	EX39	O	VBU	1000	15.37	9.5	41433	MPR1000/VBU/O	M47	6		12000	107000	85500	3500	65	Clear, Protected	49	119
	Mog	S	VBU	1000	15.37	9.5	44835	MVR1000/VBU/HO	M47	6		15000V 111000V	87000V	3800	65	Clear	49	121	
							13137	MVR1000/C/VBU/HO	M47	6		15000V 107000V	81500V	3700	70	Coated	49	121	
<b>SPORTSLIGHTING</b>																			
<b>1000 WATTS</b>																			
PAR64	G38	E	U	1000	6.87		29333	SPL1000/PAR64840	-		11350000	3500	63000	53000	4000	80	Clear, Narrow Spot, 6&#176; 38 Beam, 1,350,000 CBCP	38	124
							29336	SPL1000/PAR64/HR	-		11350000	3500	63000	53000	4000	80	Clear, Narrow Spot, 6&#176; 38 Beam, 1,350,000 CBCP	38	124



Bulb	Base	LET	OP	Watts	MOL	LCL	Order Code	Description	ANSI Ballast Type	Case Qty.	CBCP	Rated Life (hours)	Lumens Initial	Lumens Mean	Color Temp. K	CRI	Additional Information	Foot-notes	Warning
<b>SPORTSLIGHTING (CONTINUED)</b>																			
<b>1500 WATTS</b>																			
T7	Rx7s	E	HOR	1500	10.12	5	16920	SPL1500/H/652	—	1		6000	120000	90000	5200	80	Frosted	38	125
BT56	Mog	E	U	1500	15.37	9.5	47326	MVR1500/U/SPORTS	M48	6		3000H	170000V	153000V	4000	65	Clear	17,42,49	117
							37405	MVR1500/HBU	M48	6		3000H	165000V	140000V	3900	65	Clear	16,17,49	117
												3000V	155000H	130000H					
<b>1650 WATTS</b>																			
BT56	PosMog	E	HOR	1650	15.37	9.5	25532	MVR1650/HOR	M112	6		3000	177000	145000	3200	65	Clear, Position Oriented Socket Required	17,49	117
<b>2000 WATTS</b>																			
T9	#10Spade	E	HOR	2000	10	4.3	12275	MQI2000/T9/40	M134	10		3000	200000	170000	4000	65	Clear		125
<b>PROTECTED MULTI-VAPOR® METAL HALIDE LAMPS</b>																			
<b>32 WATTS</b>																			
ED17	Med	0	VBD	32	5.43	3.43	12651	MXR32/C/VBD/O	M100	6		10000	2400	1700	3200	70	Coated, protected		119
							16469	MXR32/C/VBU/O	M100	6		10000	2400	1700	3200	70	Coated, protected		119
<b>50 WATTS</b>																			
ED17	Med	0	U	50	5.43	3.43	45670	MXR50/U/MED/O	M110	6		10000	3400	1700	3500	70	Clear, protected		119
							45671	MXR50/C/U/MED/O	M110	6		10000	3200	1500	3500	70	Coated, protected		119
<b>70 WATTS</b>																			
ED17	Med	0	U	70	5.43	3.43	12377	MXR70/U/MED/O	M98	6		12000	5500	3500	3200	70	Clear, protected		119
							12577	MXR70/C/U/MED/O	M98	6		12000	5300	3300	3200	70	Coated, protected		119
<b>100 WATTS</b>																			
ED17	Med	0	U	100	5.43	3.43	12381	MXR100/U/MED/O	M90	6		15000	9000	6200	3200	70	Clear, protected		119
							12579	MXR100/C/U/MED/O	M90	6		15000	8500	5900	3200	70	Coated, protected		119
<b>150 WATTS</b>																			
ED17	Med	0	U	150	5.43	3.43	45683	MXR150/U/MED/O	M102	6		15000	12500	8600	3500	70	Clear, protected		119
							45688	MXR150/C/U/MED/O	M102	6		15000	12000	8300	3500	70	Coated, protected		119
<b>175 WATTS</b>																			
BT28	EX39	0	VBU	175	8.25	5	49470	MPR175/VBU/O	M57	6		10000	14400	10200	4000	65	Clear, protected		119
							11649	MPR175/C/VBU/O	M57	6		10000	12800	7800	3800	70	Coated, protected		119
<b>250 WATTS</b>																			
BT28	EX39	0	VBU	250	8.25	5	49471	MPR250/VBU/O	M58	6		10000	23000	17000	4000	65	Clear, protected		119
							11650	MPR250/C/VBU/O	M58	6		10000	20500	14700	3800	70	Coated, protected		119
<b>320 WATTS</b>																			
ED37	EX39	0	VBU	320	11.5	7	46275	MPR320/VBU/XHO/PA	M132 or 6 M154			20000	32000	22500	4000	65	Clear, protected		120
							46276	MPR320/C/VBU/XHO/PA	M132 or 6 M154			20000	30500	21500	3700	70	Coated, protected		120
ED 28	EX39	0	VBU	320	8.25	5	19609	MPR320/C/PA/ED28	M132 or 12 M154			20000	30600	24500	3700	70	Coated, protected	43	120
<b>350 WATTS</b>																			
ED37	EX39	0	VBU	350	11.5	7	10202	MPR350/VBU/PA	M131	6		20000	35200	28200	4000	65	Clear, protected	43	120
							48824	MPR350/C/VBU/PA	M131	6		20000	33400	26700	3700	70	Coated, protected	43	120
							48825	MPR350/C/VBU/3K/PA	M131	6		20000	33400	26700	3200	70	Coated, protected	43	120
<b>360 WATTS - WATT-MISER® ENERGY-SAVING REPLACEMENT FOR 400W METAL HALIDE</b>																			
ED37	EX39	0	VBU	360	11.5	7	40056	MPR360/VBU/WM/HO/O	M59	6		20000	36000	23500	4000	65	Clear, protected	32,49	119
							11685	MPR360CVBUWMHO/O	M59	6		20000	35000	22500	3700	70	Coated, protected	32,49	119



# High Intensity Discharge Lamps

Bulb	Base	LET	OP	Watts	MOL	LCL	Order Code	Description	ANSI Ballast Type	Case Qty.	CBCP	Rated Life (hours)	Lumens Initial	Lumens Mean	Color Temp. K	CRI	Additional Information	Foot-notes	Warning
<b>PROTECTED MULTI-VAPOR® METAL HALIDE LAMPS (CONTINUED)</b>																			
<b>400 WATTS</b>																			
ED37	EX39	0	VBU	400	11.5	7	18708	MPR400/VBU/HO/O	M59	6		20000	40000	26000	3800	65	Clear, protected	49	119
							13582	MPR400/C/VBU/HO/O	M59	6		20000	38000	25000	3600	70	Coated, protected	49	119
							46273	MPR400/VBU/XHO/PA	M135 or M155	6		20000	42000	29500	4000	65	Clear, protected	43,49	120
							46274	MPR400/C/VBUXHO/PA	M135 or M155	6		20000	40000	28000	3700	70	Coated, protected	43,49	120
<b>1000 WATTS</b>																			
BT56	EX39	0	VBU	1000	15.37	9.5	41433	MPR1000/VBU/O	M47	6		12000	107000	85500	3500	65	Clear, Protected	49	119
<b>CHROMAFIT™ MULTI-VAPOR® METAL HALIDE LAMPS (HPS RETROFIT LAMPS)</b>																			
<b>250 WATTS</b>																			
ED28	Mog	E	VBU	250	8.25	5.75	12762	MVR250/VBU/R	S50	12		10000	18500	13900	4500	65	Clear, HPS Retrofit	50	116
							12769	MVR250/C/VBU/R	S50	12		10000	18000	13000	4000	70	Coated, HPS Retrofit	50	116
<b>400 WATTS</b>																			
ED28	Mog	E	U	400	8.31	5	26851	MVR400/U/ED28/R	S51	12		15000H 20000V	36000V 33100H	22000V 20200H	4000	65	Clear, HPS Retrofit, Compact Bulb	49,50	116
ED37	Mog	S	VBU	400	11.5	5.75	12770	MVR400/VBU/R	S51	6		20000	37600	22600	4500	65	Clear, HPS Retrofit	49,50	122
							12772	MVR400/C/VBU/R	S51	6		20000	35700	21400	4000	70	Coated, HPS Retrofit	49,50	122
<b>I-LINE MULTI-VAPOR® METAL HALIDE LAMPS (MERCURY RETROFIT LAMPS)</b>																			
<b>325 WATTS</b>																			
ED37	Mog	S	U	325	11.5	7	10687	MVR325/I/U/WM	H33	6		10000H 20000V	28000V 25800H	13300V 12200H	4000	65	➔ Clear, Retrofit for 400W Mercury, Watt-Miser®&#174;		121
							10688	MVR325/C/I/U/WM	H33	6		10000H 20000V	26300V 24200H	12900V 11800H	3700	70	☞ Coated, Retrofit for 400W Mercury, Watt-Miser®&#174;		121
<b>400 WATTS</b>																			
ED37	Mog	S	U	400	11.5	7	43817	MVR400/I/U	H33 or M59	6		10000H 15000V	36000V 33100H	24000V 22100H	4000	65	Clear, Retrofit for 400W Mercury	49	121
							43818	MVR400/C/I/U	H33 or M59	6		10000H 15000V	35000V 32200H	21000V 19300H	3700	70	Coated, Retrofit for 400W Mercury	49	121
<b>950 WATTS ENERGY-SAVING REPLACEMENT FOR 1000W MERCURY</b>																			
BT56	Mog	S	VBU	950	15.06	9.5	39097	MVR950/I/VBU	H36 or M47	6		12000	100000	62900	3800	65	➔ Coated, Retrofit for 1000W Mercury, Watt-Miser®&#174;	49	121
<b>SAF-T-GARD® SELF-EXTINGUISHING MULTI-VAPOR® LAMPS</b>																			
<b>400 WATTS</b>																			
ED37	Mog	S	U	400	11.5	7	11146	MVT400/I/U	H33 or M59	6		610000H 15000V	36000V 33100H	23500V 22100H	4000	65	Clear, Retrofit for 400W Mercury	49	123
							11119	MVT400/C/I/U	H33 or M59	6		10000H 15000V	35000V 32200H	23000V 19300H	3700	70	Coated, Retrofit for 49 400W Mercury		123
							11144	MVT400/VBU	M59	6		20000	41000	26500	4000	65	Clear	49	123
							11145	MVT400/C/VBU	M59	6		20000	41000	26500	3700	70	Coated	49	123
<b>ARCSTREAM® METAL HALIDE LAMPS</b>																			
<b>70 WATTS</b>																			
T6	R7s	E	HOR	70	4.68		34530	ARC70/TD/UVC/730	M85	12		6000	6000	4800	3000	75	Clear		103
							34536	ARC70/TD/UVC/743	M85	12		6000	6000	4800	4300	75	Clear		103
<b>150 WATTS</b>																			
T7	R7s	E	HOR	150	5.37		34527	ARC150/TD/UVC/730	M81	12		6000	13000	11000	3000	75	Clear		103
							34535	ARC150/TD/UVC/742	M81	12		6000	12000	10000	4200	75	Clear		103
T6	BiPinG12	E	U	150	3	2.25	21053	ARC150T/U/830G12	M81	10		6000	12000	9500	3000	80	Clear		102
							21054	ARC150T/U/840G12	M81	10		6000	11500	10500	4000	80	Clear		102
CAP	BiPinGY9.5	E	U	150	1.62	1.12	34813	CSS150/CAP/50	M81	10		1000	10000	8000	5000	80	Clear, Disco Lamp		102



Bulb	Base	LET	OP	Watts	MOL	LCL	Order Code	Description	ANSI Ballast Type	Case Qty.	CBP	Rated Life (hours)	Lumens Initial	Lumens Mean	Color Temp. K	CRI	Additional Information	Foot- notes	Warning
<b>ARCSTREAM® METAL HALIDE LAMPS (CONTINUED)</b>																			
<b>250 WATTS</b>																			
T15	Mog	E	HOR	250	8.37	5.62	26683	ARC250/T/H/960/E	M80	12		10000	19000	13300	6000	90	Clear, Daylight Color	111	
<b>400 WATTS</b>																			
ED18	Mog	E	HOR	400	10.5	6.75	26685	KRC400/T/H/960/E	M135	12		10000	25000	17500	6000	90	Clear, Daylight Color	49	110
<b>LUCALOX® HIGH PRESSURE SODIUM LAMPS</b>																			
<b>35 WATTS</b>																			
B17	Med	O	U	35	5.43	3.43	11668	LU35/MED	S76	6		16000	2250	2025	1900	22	Clear	111	
							26420	LU35/MED/CP	S76	4		16000	2250	2025	1900	22	Clear, Consumer Pack	111	
							11669	LU35/D/MED	S76	6		16000	2150	1935	1900	22	Diffuse	111	
<b>50 WATTS</b>																			
B17	Med	O	U	50	5.43	3.43	11345	LU50/MED	S68	6		24000+	4000	3600	1900	22	Clear	111	
							26421	LU50/MED/CP	S68	4		24000+	4000	3600	1900	22	Clear, Consumer Pack	111	
							11347	LU50/D/MED	S68	6		24000+	3800	3420	1900	22	Diffuse	111	
ED23.5	Mog	O	U	50	7.75	5	44975	LU50	S68	12		24000+	4000	3600	1900	22	Clear	111	
							26425	LU50/CP	S68	4		24000+	4000	3600	1900	22	Clear, Consumer Pack	111	
							45006	LU50/D	S68	12		24000+	3800	3420	1900	22	Diffuse	111	
<b>70 WATTS</b>																			
B17	Med	O	U	70	5.43	3.43	11339	LU70/MED	S62	6		24000+	6400	5450	1900	22	Clear	111	
							26422	LU70/MED/CP	S62	4		24000+	6400	5450	1900	22	Clear, Consumer Pack	111	
							11340	LU70/D/MED	S62	6		24000+	5950	5050	1900	22	Diffuse	111	
ED23.5	Mog	O	U	70	7.75	5	44033	LU70	S62	12		24000+	6400	5450	1900	22	Clear	111	
							26426	LU70/CP	S62	4		24000+	6400	5450	1900	22	Clear, Consumer Pack	111	
							44035	LU70/D	S62	12		24000+	5950	5050	1900	22	Diffuse	111	
<b>100 WATTS</b>																			
B17	Med	O	U	100	5.5	3.43	13250	LU100/MED	S54	6		24000+	9500	8550	2000	22	Clear	111	
							26423	LU100/MED/CP	S54	4		24000+	9500	8550	2000	22	Clear, Consumer Pack	111	
							13251	LU100/D/MED	S54	6		24000+	8800	7920	2000	22	Diffuse	111	
ED23.5	Mog	O	U	100	7.75	5	44037	LU100	S54	12		24000+	9500	8550	2000	22	Clear	111	
							26427	LU100/CP	S54	4		24000+	9500	8550	2000	22	Clear, Consumer Pack	111	
							44038	LU100/D	S54	12		24000+	8800	7920	2000	22	Diffuse	111	
<b>150 WATTS</b>																			
B17	Med	O	U	150	5.75	3.5	13252	LU150/MED	S55	6		24000+	16000	14400	2000	22	Clear	111	
							26424	LU150/MED/CP	S55	4		24000+	16000	14400	2000	22	Clear, Consumer Pack	111	
							13253	LU150/D/MED	S55	6		24000+	15000	13500	2000	22	Diffuse	111	
ED23.5	Mog	O	U	150	7.75	5	44043	LU150/55	S55	12		24000+	16000	14400	2000	22	Clear	111	
							26429	LU150/55/CP	S55	4		24000+	16000	14400	2000	22	Clear, Consumer Pack	111	
							44045	LU150/55/D	S55	12		24000+	15000	13500	2000	22	Diffuse	111	
ED28	Mog	O	U	150	8.31	5	44243	LU150/100(ED28)	S56	12		24000+	15000	13500	2000	22	Clear	111	
<b>200 WATTS</b>																			
ED18	Mog	O	U	200	9.75	5.75	44206	LU200	S66	12		24000+	22000	19800	2100	22	Clear	111	
<b>250 WATTS</b>																			
ED18	Mog	O	U	250	9.75	5.75	44047	LU250	S50	12		24000+	28000	25200	2100	22	Clear	111	
							26430	LU250/CP	S50	4		24000+	28000	25200	2100	22	Clear, Consumer Pack	111	
				9	5		44051	LU250/D	S50	12		24000+	26000	23400	2100	22	Diffuse	111	
<b>310 WATTS</b>																			
ED18	Mog	O	U	310	9.75	5.75	44053	LU310	S67	12		24000+	37000	33300	2100	22	Clear	111	



# High Intensity Discharge Lamps

Bulb	Base	LET	OP	Watts	MOL	LCL	Order Code	Description	ANSI Ballast Type	Case Qty.	CBCP	Rated Life (hours)	Lumens Initial	Lumens Mean	Color Temp. K	CRI	Additional Information	Foot-notes	Warning
<b>LUCALOX® HIGH PRESSURE SODIUM LAMPS (CONTINUED)</b>																			
<b>400 WATTS</b>																			
ED18	Mog	0	U	400	9.75	5.75	44054	LU400	S51	12		24000+	51000	45000	2100	22	Clear	49	111
							26431	LU400/CP	S51	4		24000+	51000	45000	2100	22	Clear, Consumer Pack	49	111
ED37	Mog	0	U	400	11.31	7	44056	LU400/D	S51	6		24000+	47500	42750	2100	22	Diffuse	49	111
T7	Rx7s	0	HOR	400	10.12		30244	LU400/TD	S51	10		24000	43000	37300	2000	25	Clear, Double-ended, Horizontal Burn		117;20&#176
<b>600 WATTS</b>																			
T15	Mog	0	U	600	11.06	6.62	27187	LU600/T	S106	12		24000+	90000	81000	2000	22	Clear	49	112
<b>750 WATTS</b>																			
ED37	Mog	0	U	750	11.5	6.75	14682	LU750	S111	6		24000+	110000	99000	2100	22	Clear	49	112
<b>1000 WATTS</b>																			
E25	Mog	0	U	1000	15.06	8.75	44058	LU1000/ECO	S52	6		24000+	130000	126000	2100	22	Clear	49	111
T7	Rx7s	0	HOR	1000	13.18		30246	LU1000/TD	S52	10		24000	137500	118200	2000	25	Clear, Double-ended, Horizontal Burn		117;20&#176
<b>STANDBY LONGLIFE LUCALOX® LAMPS</b>																			
<b>70 WATTS</b>																			
ED23.5	Mog	0	U	70	7.75	5	19264	LU70/SBY/XL	S62	12		40000	6400	5050	2000	22	Clear, Standby Longlife, Dual Arc Tube		111
<b>100 WATTS</b>																			
ED23.5	Mog	0	U	100	7.75	5	19265	LU100/SBY/XL	S54	12		40000	9500	8190	2000	22	Clear, Standby Longlife, Dual Arc Tube		111
<b>150 WATTS</b>																			
ED23.5	Mog	0	U	150	7.75	5	19266	LU150/55/SBY/XL	S55	12		40000	16000	14000	2000	22	Clear, Standby Longlife, Dual Arc Tube		111
<b>200 WATTS</b>																			
ED18	Mog	0	U	200	9.75	5.75	23431	LU200/SBY/XL	S66	12		40000	21500	18150	2000	22	Clear, Standby Longlife, Dual Arc Tube		111
<b>250 WATTS</b>																			
ED18	Mog	0	U	250	9.75	5.75	19270	LU250/SBY/XL	S50	12		40000	27500	24750	2000	22	Clear, Standby Longlife, Dual Arc Tube		111
<b>400 WATTS</b>																			
ED18	Mog	0	U	400	9.75	5.75	19272	LU400/SBY/XL	S51	12		40000	50000	45000	2000	22	Clear, Standby Longlife, Dual Arc Tube	49	111
<b>1000 WATTS</b>																			
E25	Mog	0	U	1000	15.06	8.75	27185	LU1000/SBY/XL	S52	6		40000	127000	115000	2100	22	Clear, Standby Longlife, Dual Arc Tube	49	111
<b>ECOLUX® NC NON-CYCLING HIGH PRESSURE SODIUM LAMPS (TCLP COMPLIANT)</b>																			
<b>70 WATTS</b>																			
ED23.5	Mog	0	U	70	7.75	5	14672	LU70/ECO/NC	S62	12		30000	6300	5670	1900	23	Clear, Non-Cycling, TCLP Compliant		111
<b>100 WATTS</b>																			
ED23.5	Mog	0	U	100	7.75	5	14673	LU100/ECO/NC	S54	12		30000	10500	9450	2000	23	Clear, Non-Cycling, TCLP Compliant		111
<b>150 WATTS</b>																			
ED23.5	Mog	0	U	150	7.75	5	40390	LU150/ECO/NC	S55	12		30000	16000	14400	2000	23	Clear, Non-Cycling, TCLP Compliant		111
<b>200 WATTS</b>																			
ET18	Mog	0	U	200	9.75	5.75	45059	LU200/ECO/NC	S66	20		30000	22000	19800	2100	22	Clear, Non-Cycling, TCLP Compliant		111
<b>250 WATTS</b>																			
ED18	Mog	0	U	250	9.75	5.75	14674	LU250/ECO/NC	S50	12		30000	29000	26100	2000	30	Clear, Non-Cycling, TCLP Compliant		111



Bulb	Base	LET	OP	Watts	MOL	LCL	Order Code	Description	ANSI Ballast Type	Case Qty.	Rated Life (hours)	Lumens Initial	Lumens Mean	Color Temp. K	CRI	Additional Information	Foot-notes	Warning
<b>ECOLUX® NC NON-CYCLING HIGH PRESSURE SODIUM LAMPS (TCLP COMPLIANT) (CONTINUED)</b>																		
<b>400 WATTS</b>																		
ED18	Mog	0	U	400	9.75	5.75	14675	LU400/ECO/NC	S51	12	30000	54000	48600	2100	30	Clear, Non-Cycling, TCLP Compliant	49	111
<b>ECOLUX® HIGH PRESSURE SODIUM LAMPS (TCLP COMPLIANT)</b>																		
<b>70 WATTS</b>																		
ED23.5	Mog	0	U	70	7.75	5	45760	LU70/ECO	S62	12	24000+	6400	5450	1900	22	Clear, TCLP Compliant		111
<b>100 WATTS</b>																		
ED23.5	Mog	0	U	100	7.75	5	45761	LU100/ECO	S54	12	24000+	9500	8550	2000	22	Clear, TCLP Compliant		111
<b>150 WATTS</b>																		
ED23.5	Mog	0	U	150	7.75	5	45762	LU150/55/ECO	S55	12	24000+	16000	14400	2000	22	Clear, TCLP Compliant		111
<b>200 WATTS</b>																		
ED18	Mog	0	U	200	9.75	5.75	45763	LU200/ECO	S66	12	24000+	22000	19800	2100	22	Clear, TCLP Compliant		111
<b>250 WATTS</b>																		
ED18	Mog	0	U	250	9.75	5.75	45764	LU250/ECO	S50	12	24000+	28000	25200	2100	22	Clear, TCLP Compliant		111
<b>400 WATTS</b>																		
ED18	Mog	0	U	400	9.75	5.75	45765	LU400/ECO	S51	12	24000+	51000	45000	2100	22	Clear, TCLP Compliant	49	111
<b>1000 WATTS</b>																		
E25	Mog	0	U	1000	15.06	8.75	44058	LU1000/ECO	S52	6	24000+	140000	126000	2100	22	Clear	49	111
<b>DELUXE LUCALOX® HIGH PRESURE SODIUM LAMPS</b>																		
<b>70 WATTS</b>																		
B17	Med	0	U	70	5.5	3.5	16611	LU70/DX/MED	S62	6	10000	3800	3040	2200	65	Clear, Improved CRI		111
<b>150 WATTS</b>																		
B17	Med	0	U	150	5.75	3.5	18094	LU150/DX/MED	S55	6	15000	10500	9135	2200	65	Clear, Improved CRI		111
ED23.5	Mog	0	U	150	7.75	5	18092	LU150/55/DX	S55	12	15000	10500	9135	2200	65	Clear, Improved CRI		111
<b>250 WATTS</b>																		
ED18	Mog	0	U	250	9.75	5.75	11785	LU250/DX	S50	12	15000	22500	20700	2200	65	Clear, Improved CRI		111
<b>400 WATTS</b>																		
ED28	Mog	0	U	400	9	5.18	19650	LU400/DX	S51	12	15000	37400	34400	2200	70	Clear, Improved CRI	49	111
<b>E-Z LUX® HIGH PRESSURE SODIUM LAMPS (MERCURY RETROFIT)</b>																		
<b>150 WATTS</b>																		
ED28	Mog	0	U	150	9	5	49943	LUH150/EZ	H39	12	13000	12500	12000	1900	22	➔ Clear, Energy-saving Retrofit for 175W Mercury	46	111
<b>215 WATTS</b>																		
BT28	Mog	0	U	215	8.3	5	49939	LUH215/EZ	H37 /S65	12	16000	20000	17000	2000	20	➔ Clear, Energy-saving Retrofit for 250W Mercury	47	111
<b>360 WATTS</b>																		
BT37	Mog	0	U	360	11.31	7.12	18012	LUH360/EZ	H33	6	24000	45000	40500	2100	25	➔ Clear, Energy-saving Retrofit for 400W Mercury	48, 49	111
<b>SOX LOW PRESSURE SODIUM LAMPS</b>																		
<b>18 WATTS</b>																		
T16	BY22d	E		18	8.5	5.37	21294	SOX18	L69	16	18000	1800	1570	1800	0	Clear, Horizontal Burn &#177;20&#176; or Vertical		111
<b>35 WATTS</b>																		
T16	BY22d	E		35	12.25	7.25	21296	SOX35	L70	16	18000	4600	4000	1800	0	Clear, Horizontal Burn &#177;20&#176; or Vertical		111
<b>55 WATTS</b>																		
T16	BY22d	E		55	16.75	9.5	21297	SOX55	L71	16	18000	7650	6655	1800	0	Clear, Horizontal Burn &#177;20&#176; or Vertical		111



# High Intensity Discharge Lamps

Bulb	Base	LET	OP	Watts	MOL	LCL	Order Code	Description	ANSI Ballast Type	Case Qty.	CBCP	Rated Life (hours)	Lumens Initial	Lumens Mean	Color Temp. K	CRI	Additional Information	Foot- notes	Warning
<b>SOX LOW PRESSURE SODIUM LAMPS (CONTINUED)</b>																			
<b>90 WATTS</b>																			
T21	BY22d	E		90	20.75	11.5	21298	SOX90	L72	9		16000	12750	11095	1800	0	Clear, Horizontal Burn	111	
<b>135 WATTS</b>																			
T21	BY22d	E		135	30.5	16.37	21299	SOX135	L73	9		16000	22000	19140	1800	0	Clear, Horizontal Burn	111	
<b>MERCURY LAMPS</b>																			
<b>40/50 WATTS</b>																			
B17	Med	O U	50/40	5.12	3.12	12460	HR40/50DX45-46	H45	5		6000	1575/1140	1250/910	3900	50		40W on H45 Ballast, 50W on H46 Ballast, Deluxe White	113	
<b>75 WATTS</b>																			
B17	Med	O U	75	5.43	3.5	12461	HR75DX43	H43	5		16000	2700	2250	3900	50		Deluxe White	113	
<b>100 WATTS</b>																			
A23.5	Med	O U	100	5.43	3.5	12464	HR100A38/A23	H38	5		18000	3700	2400	5700	15		Clear	113	
						12467	HR100DX38/A23	H38	5		18000	4000	2600	3800	50		Deluxe White	113	
B17	Med	O U	100	5.43	3.5	17113	HR100DX38/MED	H38	5		18000	4000	2600	3900	50		Deluxe White	113	
ED23.5	Mog	O U	100	7.5	5	12471	HR100A38	H38	5		24000+	3850	2500	5700	15		Clear	113	
						22575	HR100DX38	H38	12		24000+	4000	2600	3900	50		Deluxe White	113	
						26437	HR100DX38/CP	H38	4		24000+	4000	2600	3900	50		Deluxe White, Consumer Pack	113	
R40	Med	O U	100	7		36238	HR100RFL38	H38	12		24000+	2450	2000	5700	15		Reflector Flood, 48" Beam Spread	113	
						36495	HR100RDXFL38	H38	12		24000+	2450	2050	3900	50		Deluxe White, Reflector WFL, 140" Beam Spread	113	
<b>175 WATTS</b>																			
ED28	Mog	O U	175	8.25	5	24048	HR175A39	H39	12		24000+	7850	6830	5700	15		Clear	113	
						26440	HR175A39/CP	H39	4		24000+	7850	6830	5700	15		Clear, Consumer Pack	113	
						24062	HR175DX39	H39	12		24000+	7800	6800	3900	50		Deluxe White	113	
						26439	HR175DX39/CP	H39	4		24000+	7800	6800	3900	50		Deluxe White, Consumer Pack	113	
R40	Med	O U	175	7		24058	HR175RFL39	H39	12		24000+	5700	4800	5700	15		Clear, Reflector Flood, 40" Beam Spread	113	
						33026	HR175RDXFL39	H39	12		24000+	5700	4350	3900	50		Deluxe White, Reflector WFL, 120" Beam Spread	113	
						36445	HR175RFL39/M	H39	12		24000+	5700	4800	5700	15		Clear, Reflector Flood, 40" Beam Spread	113	
<b>250 WATTS</b>																			
ED28	Mog	O U	250	8.25	5	24068	HR250A37	H37	12		24000	11000	8250	5700	15		Clear	113	
						32127	HR250DX37	H37	12		24000+	11200	8400	3900	50		Deluxe White	113	
<b>400 WATTS</b>																			
BT37	Mog	O U	400	11.31	7	32313	HR400DX33/BT	H33	6		24000+	22600	14400	3900	50		Deluxe White	49	113
ED37	Mog	O U	400	11.31	7	23974	HR400A33	H33	6		24000+	21000	13400	5700	15		Clear	49	113
						23998	HR400DX33	H33	6		24000+	22600	14400	3900	50		Deluxe White	49	113
R52	Mog	O U	400	11.75		33879	HR400RDX33	H33	6		24000+	20800	13400	3900	50		Reflector, Deluxe White, 160" Beam Spread	49	113
R60	Mog	O U	400	10.12		33938	HR400RDXFL33	H33	6		24000+	15500	8950	3900	50		Reflector WFL, Deluxe White, Clear Face, 110" Beam Spread	49	113
<b>1000 WATTS</b>																			
BT56	Mog	O U	1000	15.06	9.5	24171	HR1000A36	H36	6		24000+	57000	28500	5700	15		Clear	49	113
						24191	HR1000DX36	H36	6		24000+	58000	29000	3900	50		Deluxe White	49	113
						9.37 32733	HR1000DX34	H34	6		16000	58300	29200	3900	50		Deluxe White	28, 49	113



# High Intensity Discharge Lamps

Bulb	Base	LET	OP	Watts	MOL	LCL	Order Code	Description	ANSI Ballast Type	Case Qty.	CBBCP	Rated Life (hours)	Lumens Initial	Lumens Mean	Color Temp. K	CRI	Additional Information	Footnotes	Warning	
<b>SAF-T-GARD® MERCURY LAMPS</b>																				
<b>175 WATTS</b>																				
ED28	Mog	0	U	175	8.25	5	43391	HT175DX39	H39	12		16000	7800	6800	3900	50	Deluxe White	114		
<b>400 WATTS</b>																				
ED37	Mog	0	U	400	11.31	7	43363	HT400DX33	H33	6		24000	22600	14400	3900	50	Deluxe White	49	114	
<b>E-Z MERC® SELF-BALLASTED LAMPS (INCANDESCENT RETROFIT)</b>																				
<b>160 WATTS</b>																				
ED24	Med	0	U	160	7	4.5	45178	HSB160/M		24		12000	2300	1600	3900	50	Deluxe White, 120V	9	115	
<b>250 WATTS</b>																				
ED28	Med	0	U	250	8.5	5.18	45174	HSB250M		12		12000	5000	3750	3900	50	Deluxe White, 120V	9	115	
							45176	HSB250		12		12000	5000	3750	3900	50	Deluxe White, 120V	9	115	
<b>450 WATTS</b>																				
BT37	Mog	0	U	450	7.37		40122	HSB450		6		16000	9100	8280	3900	50	Deluxe White, 120V	9, 49	115	
<b>750 WATTS</b>																				
R57	Mog	0	U	750	12.75	8.37	44012	HSB750R/120		6		16000	14000	11200	3900	50	Deluxe White, Reflector Flood, 120V, 130&#176; Beam	9, 49	115	
<b>EXPORT LAMPS</b>																				
<b>METAL HALIDE</b>																				
ED17	E27	0	VBU	32	5.43	3.43	16893	MXR32/C/VBU/O/27	M100	6		10000	2400	1700	3200	70	Coated, protected		119	
				100	5.43	3.43	18684	MXR100/C/U/27	M90	6		15000	8500	5900	3200	70	Coated		117	
ED28	E40	E	U	175	8.25	5	47762	MVR175/U/40	M57	12		6000H	13600V	8800V	4000	65	Clear		117	
												10000V	11700H	7400H						
							47763	MVR175/C/U/40	M57	12		6000H	12900V	8400V	3900	70	Coated		117	
												10000V	11900H	7900H						
							17714	MVR175/SP30/U/40	M57	12		6000H	12000V	7600V	3000	70	RE730 Phosphor Coating		117	
												10000V	10300H	6500H						
				250	8.25	5	44542	MVR250/U/40	M58	12		6000H	20800V	13500V	4200	65	Clear		117	
												10000V	19100H	12400H						
							44543	MVR250/C/U/40	M58	12		6000H	19800V	13000V	3900	70	Coated		117	
												10000V	18200H	11600H						
							17715	MVR250/SP30/U/40	M58	12		6000H	18000V	11500V	3000	70	RE730 Phosphor Coating		117	
												10000V	16600H	10600H						
ED37	E40	S	U	400	11.5	7	43907	MVR400/U/40	M59	6		15000H	36000V	23500V	4000	65	Clear	49	121	
												20000V	33100H	22100H						
							43908	MVR400/C/U/40	M59	6		15000H	35000V	23000V	3700	70	Coated	49	121	
												20000V	32200H	19300H						
		S	V	400	11.5	7	49860	MVR400/VBU/40	M59	6		20000	41000	26500	4000	65	Clear, Vertical Base Up	49	121	
																	&#177;15&#176;			
							49857	MVR400/C/VBU/40	M59	6		20000	41000	25000	3700	70	Coated, Vertical Base Up	49	121	
																	&#177;15&#176;			
		O	VBU	400	11.5	7	27738	MPR400/C/VBU/O/40	M59	6		20000	38000	26000	3200	70	Coated, Vertical Base Up, protected	49	119	
		S	V	400	11.5	7	46420	MVR400/VBU/STB/40	M59	6		20000	41000	31000	4000	65	Clear, StayBright®	&#174; 49	121	
							46421	MVR400/C/VBU/STB/40	M59	6		20000	41000	29500	3700	70	Coated, StayBright®	&#174; 49	121	
		U		400	11.5	7	17716	MVR400/SP30/U/40	M59	6		15000H	31000V	18600V	3000	70	RE730 Phosphor Coating	49	121	
												20000V	28500H	17100H						
		VBU		400	11.5	7	21440	MVR400/SP30/VBU/40	M59	6		20000	34000	20400	3200	70	RE730 Phosphor Coating, Vertical Base Up	&#177;15&	121	
		O	VBU	400	11.5	7	18709	MPR400/VBU/O/40	M59	6		20000	40000	26000	3400	65	Clear, Vertical Base Up	&#177;15&#176;, Shrouded A	49	119
BT56	E40	S	U	1000	15.37	9.5	41828	MVR1000/U/40	M47	6		11000H	108000V	86000V	4000	65	Clear	49	121	
												15000V	100280H	79000H						
							41829	MVR1000/C/U/40	M47	6		11000H	105000V	80000V	3700	65	Coated	49	121	
												15000V	96600H	73000H						





# High Intensity Discharge Lamps

Bulb	Base	LET	OP	Watts	MOL	LCL	Order Code	Description	ANSI Ballast Type	Case Qty.	Rated Life (hours)	Lumens Initial	Lumens Mean	Color Temp. K	CRI	Additional Information	Foot-notes	Warning
<b>EXPORT LAMPS (CONTINUED)</b>																		
<b>LUCALOX® HIGH PRESSURE SODIUM</b>																		
E21	E27	0	U	70	6.3	4.13	10405	LU70/90/27		12	24000+	6000	5400	1900	22	Clear		111
ED23.5	E40	0	U	150	7.75	5	44044	LU150/55/40	S55	12	24000+	16000	14400	2000	22	Clear		111
T14.5	E40	0	U	150	8.23	5.16	27223	LU150/100/40		12	24000+	15000	13500	2000	22	Clear		111
ED28	E40	0	U	150	9.13	5.24	27228	LU150/100/D/40		12	24000+	14000	12600	2000	22	Diffuse		111
ED18	E40	0	U	250	9.75	5.75	44048	LU250/40	S50	12	24000+	28000	25200	2100	22	Clear		111
ED28	E40	0	U	250	9	5	27226	LU250/D/40	S50	12	24000+	26000	23400	2100	22	Clear		111
ED18	E40	0	U	400	9.75	5.75	44055	LU400/40	S51	12	24000+	51000	45000	2100	22	Clear		49 111
ED37	E40	0	U	400	11.31	7	27229	LU400/D/40	S51	6	24000+	47500	42750	2100	22	Diffuse		49 111
E25	E40	0	U	1000	15.06	8.75	44059	LU1000/40	S52	6	24000+	140000	126000	2100	22	Clear		49 111
<b>E-Z LUX® LUCALOX® HIGH PRESURE SODIUM (MERCURY RETROFIT)</b>																		
ED28	E40	0	U	215	9	5	49941	LUH215/D/EZ/40		12	12000	20200	18600	1900	22	↔ Diffuse, Energy-saving Retrofit for 250W Mercury		111
<b>MERCURY</b>																		
ED37	E40	0	U	400	11.42	7.13	32294	HR400DX33/40	H33	6	24000+	22600	14400	3900	50	Deluxe White		49 113
<b>HORTICULTURAL LAMPS</b>																		
T15	E40	0	U	400	11.3	7	41813	LU400/XO/T/40		12	28500	56500	53675	2100	22	Clear		33,38, 111
	E41	0	U	600	11.3	6.7	41814	LU600/XO/T/40		12	28500	90000	85500	2100	22	Clear		33,38, 111
	E42	0	U	400	11.3	7.1	41845	LU400/XOPSL/T/E40		12	28500	56500	53675	2100	22	Clear		33,38, 111
	E43	0	U	600	11.3	6.7	41850	LU600/XOPSL/T/E40		12	28500	90000	85500	2100	22	Clear		33,38, 111
	E44	0	U	750	11.7	7.1	41856	LU750/XOPSL/T/E40		12	16000	112000	106400	2100	22	Clear		33,38, 111

## FOOTNOTES

### # Footnote

- 9 Do not use this lamp in fixtures designed for less than rated lamp wattage.
- 14 Life shown is for vertical ±15° operation.
- 16 Approximate lumen ratings at 45° burning position: Initial - 145,000. Mean - 124,000.
- 17 Rated life based on 5 or more burning hours per start.
- 28 Use only 1000-watt H12 or H34-type ballasts. Do not use on 1000-watt H36-type ballasts.
- 32 Lamp will run at 400-watts when used on a linear reactor ballast.
- 33 Rated life based on 11 hours per start.
- 38 Requires a non-ANSI designated ballast with a special, add-on metal halide ignitor. Contact your local GE representative for a list of approved ballasts and ignitors.
- 39 UV Control is a quartz material that effectively cuts UVB and UVC radiation.
- 42 Approximate lumen ratings at 45° burning position: Initial - 153,000. Mean - 139,000.
- 43 When operated on a 120 hrs. cycle (minimum), lamp life rating may be extended by up to 50% based on engineering estimates.
- 44 Rated life based on 7 hours per start.
- 45 Use electronic ballast, peak lead ballast, or system which can shut itself off if ballast overheating occurs.
- 46 Use only with the following types of H39 175-watt mercury ballasts: high-reactance lag-type autotransformers or 240-volt and 277-volt reactors. Do not use with CW (lead-type) or CWA ballasts.
- 47 Use only with the following types of H37 250-watt mercury ballasts: high-reactance lag-type autotransformers or 240-volt and 277-volt reactors. Do not use with CW (lead-type) or CWA ballasts.
- 48 Use only with the following types of H33 400-watt mercury ballasts: high-reactance lag-type autotransformers, reactors, CWA auto regulators or CW regulators.
- 49 Not for use with lampholders that have stainless steel center contacts to avoid lamp or lampholder damage due to arcing.
- 50 Not for use on Magnetic-Regulator or Electronic-Regulator ballast systems to avoid ballast overheating.
- 51 Use only with electronic ballast.
- 52 Use only with approved ballast.

## GENERAL INFORMATION

### FIXTURE REQUIREMENTS – LAMP ENCLOSURE TYPE

HID lamps have fixture requirements that must be followed. The following three codes identify the appropriate fixture for a particular lamp. Lamps having an "O" code can be operated in an "Open or Enclosed" fixture. Lamps with a "S" code can be used in open fixtures only if operated in a vertical ±15° burn position. Lamps in all other burn positions must be suitably enclosed.

- O = Open or Enclosed Fixtures
- E = Enclosed Fixtures Only
- S = Lamps operated in a vertical position (Base Up or Down), ±15°, can be used in an open fixture. Lamps burned in any other orientation must be used in "enclosed fixtures only".

**Use in Enclosed Fixtures.** "Enclosed" fixture means a fixture suitably enclosed and designed to contain fragments of hot quartz or glass (up to 1100°C) per UL Standard #1598 (if in doubt, contact your fixture manufacturer).

**Use In Open Fixtures.** For lamps operated in the vertical position ±15° that are not designated "Enclosed Fixtures Only," lamp may be used in an open or enclosed lighting fixture depending upon the application and operating environment. For example, if the lamp is located near combustible material or in

an area which is unoccupied for extended periods, an enclosed fixture which can contain fragments of hot quartz or glass is recommended. For more information, contact your fixture manufacturer.

### PROTECTION OF BULBS FROM MOISTURE

Outer bulbs of HID lamps are made of heat-resistant glass, designed to have strength and thermal-shock-resistant characteristics suitable for normal applications in typical luminaries. However, shielding of lamps must be provided to avoid bulb breakage that could result from direct contact with liquids (such as water) during operation.

### RATED LIFE

Values are based on laboratory tests of a large number of representative lamps under controlled conditions, including operation at 10 hours per start on ballasts having specified electrical characteristics. Individual lamps or groups of lamps may, of course, vary from the Rated Life shown. Lamp operating conditions can also affect life. Where Rated Life is less than 24,000 hours, it is a MEDIAN value of life expectancy; that is, the total operating time at which, under normal operating conditions, 50% of any large group of initially installed lamps is expected to be still burning. Where Rated Life is 24,000+ hours, 67% of lamps are expected to be still burning at 24,000 hours.



## GENERAL INFORMATION (CONTINUED)

For cost-of-light calculations involving these lamps, if an estimated operating time is required at which 50% of the lamps will still be burning, a value of 28,500 hours is suggested. At burning cycles shorter than 10 hours per start, the median life will be shortened as follows:

- 5 hrs/start: approx. life 75% of rating
- 2½ hrs/start: approx. life 56% of rating
- 1¼ hrs/start: approx. life 42% of rating

### LUMENS— LUMENS LISTED ARE REFERENCE LUMENS

Rated average lamp lumens are obtained under controlled laboratory conditions in a prescribed burning position. **Initial Reference Lumens** refer to the lamp lumen output after 100-hours burning. **Mean Reference Lumens** refer to the lamp lumen output at the mean lumen point during lamp life. The mean lumen point occurs at 50% rated life for HPS and mercury lamps, and at 40% rated life for metal halide lamps. Lamp performance on typical systems under typical service conditions will vary from the reference lumen ratings.

High Intensity Discharge lighting systems are subject to a wide range of variations which may affect final lighting levels. As a result, lamp performance on actual systems may vary due to lamp orientation, ambient temperatures, ballast variations, line voltage and other reasons. Care must be taken when choosing a system to consider how these changes can affect your light levels both initially and at the mean lumen point.

### BALLASTS

HID lamps (except E-Z-Merc®) require auxiliary ballast equipment designed to produce proper electrical values. Actual lamp watts may vary depending on ballast characteristics. For total system watts, add nominal ballast watts.

All Lucalox®, Mercury, and Metal Halide lamps (except I-Line) will start at ambient temperatures of -22°F (-30°C). I-Line Multi-Vapor® will start at ambient temperatures of 5°F (-15°C) when used on approved mercury ballasts.

### START CHARACTERISTICS

Full light output does not occur immediately when power is applied. Instead, there is a time delay for the lamp to reach 90% total light output. The starting delay for High Pressure Sodium is 3-4 minutes, for Metal Halide 2-5 minutes, and for Mercury 5-7 minutes.

## OPERATING NOTES

### CMH® CHROMAFIT™ METAL HALIDE LAMPS

Use in enclosed luminaire with front cover made of glass, capable of containing the fragments of a lamp should it shatter, to avoid risk of fire. Do not use with Polymeric Lens.

### E-Z LUX® LAMPS

These high pressure sodium lamps should be operated only on certain mercury ballasts, as indicated below.

LUH110/EZ: use only with the following types of 125-watt mercury ballasts: high-reactance lag-type autotransformers or 220-volt or greater reactors.

LUH150/EZ: use only with the following types of H39 175-watt mercury ballasts: high-reactance lag-type autotransformers or 240-volt and 277-volt reactors. Do not use with CW (lead-type) or CWA ballasts.

LUH215/EZ: use only with the following types of H37 250-watt mercury ballasts: high reactance lag-type autotransformers or 240-volt and 277-volt reactors. Do not use with CW (lead-type) or CWA ballasts.

LUH360/EZ: use only with the following types of H33 400-watt mercury ballasts: high-reactance lag-type autotransformers, reactors, CWA auto regulators or CW regulators.

### RESTART CHARACTERISTICS

With a power interruption of a half cycle or more, the arc will extinguish. When power is immediately reapplied, full light output does not occur immediately. For HPS lamps there is a delay of 1 minute to reach 90% total light output; however, Lucalox® LU1000 requires 2 minutes and E-Z Lux® lamps require 3 minutes to reach 90% total light output. For most Metal Halide lamps, including CMH®, when the power is immediately reapplied, there will be a delay of 10 to 17 minutes before the lamps reach the 90% light output level. PulseArc® lamps restrike in <4 minutes. The restart delay for mercury lamps is 3 to 6 minutes to reach 90% total light output.

### OPERATING POSITIONS AND CODES

Mercury and High Pressure Sodium lamps may be operated in any burn position and will still maintain their rated performance specifications. Metal Halide and Low Pressure Sodium lamps, however, are optimized for performance in specific burn positions, or may be restricted to certain burn positions for safety reasons.

- U = Universal burning position
- HBU = Horizontal -15° to Base Up
- HBD = Horizontal +15° to Base Down
- HOR = Horizontal ±15°
- H45 = Horizontal to ±45° only
- VBU = Vertical Base Up ±15°
- VBD = Vertical Base Down ±15°

If no special burn position is noted, the burn position is universal.

### HID COLOR

The color temperature and CRI listed in the tabular data are for reference purposes only. All high intensity discharge lamps exhibit some degree of lamp to lamp color variation and shift over life. These characteristics can be increased based on choice of fixture, ballast, burning position, and ambient conditions. Color variation can be greater than normal during the initial 100 hours of burning. Where color consistency is important, consider using ConstantColor® CMH® for better performance (page 3-9). Contact your local GE Lighting representative for more information.

### EXPORT BASE LAMPS (/27 AND /40)

Export only lamps have a non-domestic (non-U.S.) base and are not intended for use in the United States due to potential shock hazard. The lamps are identified by "/27" or "/40" at the end of the lamp description and comply with electrical characteristics defined by IEC standards.

### MXR32 METAL HALIDE LAMP AND ELECTRONIC BALLAST

MXR32 lamps must be operated on GE's special, high power factor electronic ballast, HAL32/120. Outside dimensions for the ballast are 9¾" long, 3⅜" wide and 1¾" high.

### SAF-T-GARD® MULTI-VAPOR® AND SAF-T-GARD® MERCURY LAMPS

Caution: If the outer glass envelope of a Saf-T-Gard® lamp is broken, the arc tube will self-extinguish, but the supporting structure will still be electrically connected. Be sure power is off and the lamp has cooled before removing the lamp to avoid possible electrical shock from contact with the arc tube support and to avoid risk of burn from the hot arc tube.

### ARCSTREAM® METAL HALIDE LAMPS

Arcstream® tubular-shaped lamps must be used in suitably-enclosed fixtures with UV-absorbing cover glass. Enclosed fixtures must be capable of containing fragments of hot quartz or glass (up to 1100°C) in the unusual event of the outer bulb shattering. Also see complete Warning and Caution Notices on metal halide lamps.



## WARNING NOTICES

**THE FOLLOWING WARNING NOTICES MUST BE COMPLIED WITH TO HELP AVOID POSSIBLE LAMP RUPTURE.** General Electric Company will not be responsible for poor lamp performance, personal injury or property damage resulting from failure to follow these instructions.

### HID LAMPS - GENERAL

#### WARNING

Most HID lamps are constructed of an outer bulb with an internal arc tube made of quartz. The arc tube operates under high pressure at very high temperatures - as high as approximately 1100°C. The arc tube and outer bulb may unexpectedly rupture due to internal causes or external factors such as a system failure or misapplication.

An arc tube rupture can burst and shatter the outer glass bulb resulting in the discharge of glass fragments and extremely hot quartz particles (as high as 1100°C). There is a risk of personal injury, property damage, burns and fire.

Some lamps are position-sensitive and must only be operated in specified burning positions (see "Additional Information" column in this catalog) with compatible electrical equipment in the types of fixtures prescribed in "Lamp Enclosure Type" on Page 3-22 of this catalog.

In addition to the general warnings above, there are specific warnings for the HID lamp types listed below.

#### Metal Halide Lamps

Fixture lens/diffuser material must be able to contain fragments of hot quartz or glass (up to 1100°C). If you do not know whether your fixture can safely withstand an arc tube rupture, contact your fixture manufacturer.

In continuously-operating systems (24 hours/day, 7 days/week), turn lamps off once per week for at least 15 minutes. FAILURE TO COMPLY INCREASES THE RISK OF RUPTURE.

Relamp fixtures at or before the end of rated life. Beyond rated life, light output diminishes while energy consumption and risk of rupture increase.

#### High Pressure Sodium Lamps

This is a vacuum jacket lamp and may implode if broken. As a precaution, wear safety glasses and gloves when installing or removing lamp. High pressure sodium lamps are not position-sensitive and may be operated in any burning position.

#### Mercury Lamps

Fixture lens/diffuser material must be able to contain fragments of hot quartz or glass (up to 1100°C). If you do not know whether your fixture can safely withstand an arc tube rupture, contact your fixture manufacturer.

Relamp fixtures at or before the end of rated life. Beyond rated life, light output diminishes while energy consumption and risk of rupture increase.

Mercury lamps are not position-sensitive and may be operated in any burning position.

#### Low Pressure Sodium Lamps

These lamps contain sodium which will ignite when exposed to water. If lamps are not disposed of properly, there is a risk of fire in the disposal vessel. Consult GE for disposal instructions.

#### LAMP ENCLOSURE TYPE

Use in Enclosed Fixtures. "Enclosed" fixture means a fixture suitably enclosed and designed to contain fragments of hot quartz or glass (up to 1100°C) in accordance with UL Standard #1572 (if in doubt, contact your fixture manufacturer).

Use In Open Fixtures. For lamps operated in the vertical position ±15° that are not designated "Enclosed Fixtures Only," lamp may be used in an open or enclosed lighting fixture depending upon the application and operating environment. For example, if the lamp is located near combustible material or in an area which is unoccupied for extended periods, an enclosed fixture which can contain fragments of hot quartz or glass is recommended. For more information, contact your fixture manufacturer.

#### IMPORTANT NOTICE

In accordance to Federal Regulations (21 CFR 1040.30), the following notice applies to all lamps in the HID section of this catalog except High Pressure, Low Pressure Sodium Lamps, and Saf-T-Gard® Multi-Vapor Lamps.

**"R WARNING:** This lamp can cause serious skin burn and eye inflammation from shortwave ultraviolet radiation if outer envelope of the lamp is broken or punctured, and the arc tube continues to operate. Do not use where people will remain for more than a few minutes unless adequate shielding or other safety precautions are used. Certain types of lamps that will automatically extinguish when the outer envelope is broken or punctured are commercially available."

## WARNING AND CAUTION NOTICES

### 101 - Arcstream®

#### ▲ WARNING

##### Risk of electric shock

- Turn power off before inspection, installation or removal
- Do not use where directly exposed to water or outdoors without an enclosed fixture

##### Risk of fire

- Keep combustible materials away from lamp
- Use in fixture rated for this product
- Use thermally protected ballast

##### A damaged lamp emits UV radiation which may cause eye/skin injury

- Turn power off if glass bulb is broken. Remove and dispose of lamp.

##### Unexpected lamp rupture may cause injury, fire, or property damage

- Do not exceed rated voltage

- Do not use where directly exposed to water or outdoors without an enclosed fixture
- Use in enclosed fixture rated for this product
- Do not use lamp if outer glass is scratched or broken
- Use only properly rated ballast
- Operate lamp only in specified position
- Turn lamp off at least once for 15 minutes per week
- Do not turn on lamp until fully installed

#### ▲ CAUTION

##### Risk of burn

- Allow lamp to cool before handling
- Do not turn on lamp until fully installed

##### Lamp may shatter and cause injury if broken

- Wear safety glasses and gloves when handling lamp
- Do not use lamp if outer glass is scratched or broken
- Do not use excessive force when installing lamp



## WARNING AND CAUTION NOTICES (CONTINUED)

### 102 - Arcstream® G12

#### ▲ WARNING

##### Risk of electric shock

- Turn power off before inspection, installation or removal
- Do not use where directly exposed to water or outdoors without an enclosed fixture

##### Risk of fire

- Keep combustible materials away from lamp
- Use in fixture rated for this product
  - Use thermally protected ballast

##### Lamp emits UV radiation which may cause eye/skin injury.

- Avoid exposure of eyes and skin to unshielded lamp

##### Unexpected lamp rupture may cause injury, fire, or property damage

- Do not exceed rated voltage
- Do not touch glass with bare hands
- Do not use where directly exposed to water or outdoors without an enclosed fixture
- Use in enclosed fixture rated for this product
- Do not use lamp if outer glass is scratched or broken
- Use only properly rated ballast
- Turn lamp off at least once for 15 minutes per week
- Do not turn on lamp until fully installed

#### ▲ CAUTION

##### Risk of burn

- Allow lamp to cool before handling
- Do not turn on lamp until fully installed

##### Lamp may shatter and cause injury if broken

- Do not use lamp if outer glass is scratched or broken
- Do not use excessive force when installing lamp

### 103 - Arcstream® Rx7s

#### ▲ WARNING

##### Risk of electric shock

- Turn power off before inspection, installation or removal
- Do not use where directly exposed to water or outdoors without an enclosed fixture

##### Risk of fire

- Keep combustible materials away from lamp
- Use in fixture rated for this product
- Use thermally protected ballast

##### A damaged lamp emits UV radiation which may cause eye/skin injury

- Turn power off if glass bulb is broken. Remove and dispose of lamp.

##### Unexpected lamp rupture may cause injury, fire, or property damage

- Do not exceed rated voltage
- Do not touch glass with bare hands
- Do not use in wet locations
- Use in enclosed fixture rated for this product
- Do not use lamp if outer glass is scratched or broken
- Use only properly rated ballast
- Operate lamp only in specified position
- Turn lamp off at least once for 15 minutes per week
- Do not turn on lamp until fully installed

#### ▲ CAUTION

##### Risk of burn

- Allow lamp to cool before handling
- Do not turn on lamp until fully installed

##### Lamp may shatter and cause injury if broken

- Wear safety glasses and gloves when handling lamp
- Do not use lamp if outer glass is scratched or broken
- Dispose of lamp in a closed container
- Do not use excessive force when installing lamp

### 104 - CMH® GU6.5, G12 and Mini

#### ▲ WARNING

##### Risk of electric shock

- Turn power off before inspection, installation or removal
- Do not use where directly exposed to water or outdoors without an enclosed fixture

##### Risk of fire

- Keep combustible materials away from lamp
- Use in fixture rated for this product
- Use fused or thermally protected ballast – see instructions

##### A damaged lamp emits UV radiation which may cause eye/skin injury

- Turn power off if glass bulb is broken. Remove and dispose of lamp.

##### Unexpected lamp rupture may cause injury, fire, or property damage

- Do not exceed rated voltage
- Normal handling with bare hands is acceptable. Excessive handling of the quartz outer bulb should be avoided.
- Do not use where directly exposed to water or outdoors without an enclosed fixture
- Use in enclosed fixture rated for this product
- Do not use lamp if outer glass is scratched or broken
- Use only properly rated ballast
- Do not use beyond rated life
- Do not turn on lamp until fully installed

#### ▲ CAUTION

##### Risk of burn

- Allow lamp to cool before handling
- Do not turn on lamp until fully installed

##### Lamp may shatter and cause injury if broken

- Do not use lamp if outer glass is scratched or broken
- Do not use excessive force when installing lamp



## WARNING AND CAUTION NOTICES (CONTINUED)

### 105 - CMH® HW HPS

#### ▲ WARNING

##### Risk of electric shock

- Turn power off before inspection, installation or removal
- Do not use where directly exposed to water or outdoors without an enclosed fixture

##### Risk of fire

- Keep combustible materials away from lamp
- Use in fixture rated for this product
- Use electronic ballast, peak lead ballast, or system which can shut itself off if ballast overheating occurs. Does not apply to CMH 250/R.

##### A damaged lamp emits UV radiation which may cause eye/skin injury

- Turn power off if glass bulb is broken. Remove and dispose of lamp.

##### Unexpected lamp rupture may cause injury, fire, or property damage

- Do not exceed rated voltage
- Do not use where directly exposed to water or outdoors without an enclosed fixture
- Use in enclosed luminaire with front cover made of glass, capable of containing the fragments of a lamp should it shatter, to avoid risk of fire. Do not use with Polymeric Lens.
- Do not use lamp if outer glass is scratched or broken
- Use only properly rated ballast
- Do not use beyond rated life
- Do not turn on lamp until fully installed

#### ▲ CAUTION

##### Risk of burn

- Allow lamp to cool before handling
- Do not turn on lamp until fully installed

##### Lamp may shatter and cause injury if broken

- Wear safety glasses and gloves when handling lamp
- Do not use lamp if outer glass is scratched or broken
- Dispose of lamp in a closed container
- Do not use excessive force when installing lamp

### 106 - CMH® HW PA

#### ▲ WARNING

##### Risk of electric shock

- Turn power off before inspection, installation or removal
- Do not use where directly exposed to water or outdoors without an enclosed fixture

##### Risk of fire

- Keep combustible materials away from lamp
- Use in fixture rated for this product

##### A damaged lamp emits UV radiation which may cause eye/skin injury

- Turn power off if glass bulb is broken. Remove and dispose of lamp.

##### Unexpected lamp rupture may cause injury, fire, or property damage

- Do not exceed rated voltage
- Do not use where directly exposed to water or outdoors without an enclosed fixture
- Do not use lamp if outer glass is scratched or broken
- Use only properly rated ballast
- Operate lamp only in specified position
- Do not store flammable materials near/below lamp
- Do not use beyond rated life
- Do not turn on lamp until fully installed

#### ▲ CAUTION

##### Risk of burn

- Allow lamp to cool before handling
- Do not turn on lamp until fully installed

##### Lamp may shatter and cause injury if broken

- Do not use lamp if outer glass is scratched or broken
- Dispose of lamp in a closed container
- Do not use excessive force when installing lamp

### 107 - CMH® MR16 and PAR20-30

#### ▲ WARNING

##### Risk of electric shock

- Turn power off before inspection, installation or removal
- Do not use where directly exposed to water or outdoors without an enclosed fixture

##### Risk of fire

- Keep combustible materials away from lamp
- Use in fixture rated for this product
- Use fused or thermally protected ballast - see instructions

##### Unexpected lamp rupture may cause injury, fire, or property damage

- Do not exceed rated voltage
- Do not use where directly exposed to water or outdoors without an enclosed fixture
- Do not use lamp if outer glass is scratched or broken
- Use only properly rated ballast
- Do not store flammable materials near/below lamp
- Do not use beyond rated life
- Do not turn on lamp until fully installed

#### ▲ CAUTION

##### Risk of burn

- Allow lamp to cool before handling
- Do not turn on lamp until fully installed

##### Lamp may shatter and cause injury if broken

- Do not use lamp if outer glass is scratched or broken
- Do not use excessive force when installing lamp

### 108 - CMH® PAR38

#### ▲ WARNING

##### Risk of electric shock

- Turn power off before inspection, installation or removal
- Do not use where directly exposed to water or outdoors without an enclosed fixture

##### Risk of fire

- Keep combustible materials away from lamp
- Use in fixture rated for this product

##### A damaged lamp emits UV radiation which may cause eye/skin injury

- Turn power off if glass bulb is broken. Remove and dispose of lamp.

##### Unexpected lamp rupture may cause injury, fire, or property damage

- Do not exceed rated voltage
- Do not use lamp if outer glass is scratched or broken
- Use only properly rated ballast
- Do not turn on lamp until fully installed



## WARNING AND CAUTION NOTICES (CONTINUED)

### ▲ CAUTION

#### Risk of burn

- Allow lamp to cool before handling
- Do not turn on lamp until fully installed

#### Lamp may shatter and cause injury if broken

- Do not use lamp if outer glass is scratched or broken

### 109 - CMH® TD

### ▲ WARNING

#### Risk of electric shock

- Turn power off before inspection, installation or removal
- Do not use where directly exposed to water or outdoors without an enclosed fixture

#### Risk of fire

- Keep combustible materials away from lamp
- Use in fixture rated for this product

#### A damaged lamp emits UV radiation which may cause eye/skin injury

- Turn power off if glass bulb is broken. Remove and dispose of lamp.

#### Unexpected lamp rupture may cause injury, fire, or property damage

- Do not exceed rated voltage
- Normal handling with bare hands is acceptable. Excessive handling of the quartz outer bulb should be avoided.
- Do not use where directly exposed to water or outdoors without an enclosed fixture
- Use in enclosed fixture rated for this product
- Do not use lamp if outer glass is scratched or broken
- Use only properly rated ballast
- Operate lamp only in specified position
- Do not use beyond rated life
- Do not turn on lamp until fully installed

### ▲ CAUTION

#### Risk of burn

- Allow lamp to cool before handling
- Do not turn on lamp until fully installed

#### Lamp may shatter and cause injury if broken

- Do not use lamp if outer glass is scratched or broken
- Do not use excessive force when installing lamp

### 110 - Arcstream®, Kolorarc®

### ▲ WARNING

#### Risk of electric shock

- Turn power off before inspection, installation or removal
- Do not use where directly exposed to water or outdoors without an enclosed fixture

#### Risk of fire

- Keep combustible materials away from lamp
- Use in fixture rated for this product

#### A damaged lamp emits UV radiation which may cause eye/skin injury

- Turn power off if glass bulb is broken. Remove and dispose of lamp.

#### Unexpected lamp rupture may cause injury, fire, or property damage

- Do not exceed rated voltage
- Do not use where directly exposed to water or outdoors without an enclosed fixture
- Use in enclosed fixture rated for this product
- Do not use lamp if outer glass is scratched or broken

- Use only properly rated ballast
- Operate lamp only in specified position
- Turn lamp off at least once for 15 minutes per week
  - Do not turn on lamp until fully installed

### ▲ CAUTION

#### Risk of burn

- Allow lamp to cool before handling
- Do not turn on lamp until fully installed

#### Lamp may shatter and cause injury if broken

- Wear safety glasses and gloves when handling lamp
- Do not use lamp if outer glass is scratched or broken
- Dispose of lamp in a closed container
- Do not use excessive force when installing lamp

### 111 - Lucalox®

### ▲ WARNING

#### Risk of electric shock

- Turn power off before inspection, installation or removal
- Do not use where directly exposed to water or outdoors without an enclosed fixture

#### Risk of fire

- Keep combustible materials away from lamp
- Use in fixture rated for this product

#### Contains sodium – chemical burn risk

- Avoid skin contact with broken pieces

#### Unexpected lamp rupture may cause injury, fire, or property damage

- Do not exceed rated voltage
- Do not use where directly exposed to water or outdoors without an enclosed fixture
- Do not use lamp if outer glass is scratched or broken
- Use only properly rated ballast
- Do not store flammable materials near/below lamp
- Do not turn on lamp until fully installed

### ▲ CAUTION

#### Risk of burn

- Allow lamp to cool before handling
- Do not turn on lamp until fully installed

#### Lamp may shatter and cause injury if broken

- Wear safety glasses and gloves when handling lamp
- Do not use lamp if outer glass is scratched or broken
- Dispose of lamp in a closed container
- Do not use excessive force when installing lamp



## WARNING AND CAUTION NOTICES (CONTINUED)

### 112 - Lucalox® HO

#### ▲ WARNING

##### Risk of electric shock

- Turn power off before inspection, installation or removal
- Do not use where directly exposed to water or outdoors without an enclosed fixture

##### Risk of fire

- Keep combustible materials away from lamp
- Use in fixture rated for this product
- Use fused or thermally protected ballast - see instructions

##### Contains sodium – chemical burn risk

- Avoid skin contact with broken pieces

##### Unexpected lamp rupture may cause injury, fire, or property damage

- Do not exceed rated voltage
- Do not use where directly exposed to water or outdoors without an enclosed fixture
- Do not use lamp if outer glass is scratched or broken
- Use only properly rated ballast
- Do not store flammable materials near/below lamp
- Do not turn on lamp until fully installed

#### ▲ CAUTION

##### Risk of burn

- Allow lamp to cool before handling
- Do not turn on lamp until fully installed

##### Lamp may shatter and cause injury if broken

- Wear safety glasses and gloves when handling lamp
- Do not use lamp if outer glass is scratched or broken
- Dispose of lamp in a closed container
- Do not use excessive force when installing lamp

### 113 - Mercury

#### ▲ WARNING

##### Risk of electric shock

- Turn power off before inspection, installation or removal
- Do not use where directly exposed to water or outdoors without an enclosed fixture

##### Risk of fire

- Keep combustible materials away from lamp
- Use in fixture rated for this product

##### A damaged lamp emits UV radiation which may cause eye/skin injury

- Turn power off if glass bulb is broken. Remove and dispose of lamp.

##### Unexpected lamp rupture may cause injury, fire, or property damage

- Do not exceed rated voltage
- Do not use where directly exposed to water or outdoors without an enclosed fixture
- Do not use lamp if outer glass is scratched or broken
- Use only properly rated ballast
- Do not store flammable materials near/below lamp
- Do not use beyond rated life
- Do not turn on lamp until fully installed

#### ▲ CAUTION

##### Risk of burn

- Allow lamp to cool before handling
- Do not turn on lamp until fully installed

##### Lamp may shatter and cause injury if broken

- Do not use lamp if outer glass is scratched or broken
- Dispose of lamp in a closed container
- Do not use excessive force when installing lamp

### 114 - Mercury Saf-T-Gard®

#### ▲ WARNING

##### Risk of electric shock

- Turn power off before inspection, installation or removal
- Do not use where directly exposed to water or outdoors without an enclosed fixture

##### Risk of fire

- Keep combustible materials away from lamp
- Use in fixture rated for this product

##### Unexpected lamp rupture may cause injury, fire, or property damage

- Do not exceed rated voltage
- Do not use where directly exposed to water or outdoors without an enclosed fixture
- Do not use lamp if outer glass is scratched or broken
- Use only properly rated ballast
- Turn lamp off at least once for 15 minutes per week
- Do not store flammable materials near/below lamp
- Do not use beyond rated life
- Do not turn on lamp until fully installed

#### ▲ CAUTION

##### Risk of burn

- Allow lamp to cool before handling
- Do not turn on lamp until fully installed

##### Lamp may shatter and cause injury if broken

- Do not use lamp if outer glass is scratched or broken
- Dispose of lamp in a closed container
- Do not use excessive force when installing lamp

### 115 - Mercury Self-Ballasted

#### ▲ WARNING

##### Risk of electric shock

- Turn power off before inspection, installation or removal
- Do not use where directly exposed to water or outdoors without an enclosed fixture

##### Risk of fire

- Keep combustible materials away from lamp
- Use in fixture rated for this product

##### A damaged lamp emits UV radiation which may cause eye/skin injury

- Turn power off if glass bulb is broken. Remove and dispose of lamp.

##### Unexpected lamp rupture may cause injury, fire, or property damage

- Do not exceed rated voltage
- Do not use where directly exposed to water or outdoors without an enclosed fixture
- Use in enclosed fixture rated for this product
- Do not use lamp if outer glass is scratched or broken



## WARNING AND CAUTION NOTICES (CONTINUED)

### ▲ CAUTION

#### Risk of burn

- Allow lamp to cool before handling
- Do not turn on lamp until fully installed

#### Lamp may shatter and cause injury if broken

- Do not use lamp if outer glass is scratched or broken
- Dispose of lamp in a closed container
- Do not use excessive force when installing lamp

### 116 - QMH E-rated Kr85 and CMH®

### ▲ WARNING

#### Risk of electric shock

- Turn power off before inspection, installation or removal
- Do not use where directly exposed to water or outdoors without an enclosed fixture

#### Risk of fire

- Keep combustible materials away from lamp
- Use in fixture rated for this product

#### A damaged lamp emits UV radiation which may cause eye/skin injury

- Turn power off if glass bulb is broken. Remove and dispose of lamp.

#### Unexpected lamp rupture may cause injury, fire, or property damage

- Do not exceed rated voltage
- Do not use where directly exposed to water or outdoors without an enclosed fixture
- Use in enclosed fixture rated for this product
- Do not use lamp if outer glass is scratched or broken
- Use only properly rated ballast
- Operate lamp only in specified position
- Turn lamp off at least once for 15 minutes per week. Does not apply to CMH.
- Do not use beyond rated life
- If used on a dimming system, see instructions.
- Do not turn on lamp until fully installed

### ▲ CAUTION

#### Risk of burn

- Allow lamp to cool before handling
- Do not turn on lamp until fully installed

#### Lamp may shatter and cause injury if broken

- Do not use lamp if outer glass is scratched or broken
- Dispose of lamp in a closed container
- Do not use excessive force when installing lamp

### 117 - QMH HOR Enclosed

### ▲ WARNING

#### Risk of electric shock

- Turn power off before inspection, installation or removal
- Do not use where directly exposed to water or outdoors without an enclosed fixture

#### Risk of fire

- Keep combustible materials away from lamp
- Use in fixture rated for this product

#### A damaged lamp emits UV radiation which may cause eye/skin injury

- Turn power off if glass bulb is broken. Remove and dispose of lamp.

#### Unexpected lamp rupture may cause injury, fire, or property damage

- Do not exceed rated voltage
- Do not use where directly exposed to water or outdoors without an enclosed fixture
- Use in enclosed fixture rated for this product
- Do not use lamp if outer glass is scratched or broken
- Use only properly rated ballast
- Operate lamp only in specified position
- Turn lamp off at least once for 15 minutes per week
- Do not use beyond rated life
- Do not remove base locating pin if so equipped
- Do not turn on lamp until fully installed

### ▲ CAUTION

#### Risk of burn

- Allow lamp to cool before handling
- Do not turn on lamp until fully installed

#### Lamp may shatter and cause injury if broken

- Do not use lamp if outer glass is scratched or broken
- Dispose of lamp in a closed container
- Do not use excessive force when installing lamp

### 118 - QMH LW Kr85

### ▲ WARNING

#### Risk of electric shock

- Turn power off before inspection, installation or removal
- Do not use where directly exposed to water or outdoors without an enclosed fixture

#### Risk of fire

- Keep combustible materials away from lamp
- Use in fixture rated for this product

#### A damaged lamp emits UV radiation which may cause eye/skin injury

- Turn power off if glass bulb is broken. Remove and dispose of lamp.

#### Unexpected lamp rupture may cause injury, fire, or property damage

- Do not exceed rated voltage
- Do not use where directly exposed to water or outdoors without an enclosed fixture
- Use in enclosed fixture rated for this product
- Do not use lamp if outer glass is scratched or broken
- Use only properly rated ballast
- Turn lamp off at least once for 15 minutes per week
- Do not use beyond rated life
- Do not turn on lamp until fully installed

### ▲ CAUTION

#### Risk of burn

- Allow lamp to cool before handling
- Do not turn on lamp until fully installed

#### Lamp may shatter and cause injury if broken

- Do not use lamp if outer glass is scratched or broken
- Dispose of lamp in a closed container
- Do not use excessive force when installing lamp





## WARNING AND CAUTION NOTICES (CONTINUED)

### 119 - QMH Protected

#### ▲ WARNING

##### Risk of electric shock

- Turn power off before inspection, installation or removal
- Do not use where directly exposed to water or outdoors without an enclosed fixture

##### Risk of fire

- Keep combustible materials away from lamp
- Use in fixture rated for this product

##### A damaged lamp emits UV radiation which may cause eye/skin injury

- Turn power off if glass bulb is broken. Remove and dispose of lamp.

##### Unexpected lamp rupture may cause injury, fire, or property damage

- Do not exceed rated voltage
- Do not use where directly exposed to water or outdoors without an enclosed fixture
- Do not use lamp if outer glass is scratched or broken
- Use only properly rated ballast
- Operate lamp only in specified position
- Turn lamp off at least once for 15 minutes per week
- Do not store flammable materials near/below lamp
- Do not use beyond rated life
- If used on a dimming system, see instructions.
- Do not turn on lamp until fully installed

#### ▲ CAUTION

##### Risk of burn

- Allow lamp to cool before handling
- Do not turn on lamp until fully installed

##### Lamp may shatter and cause injury if broken

- Do not use lamp if outer glass is scratched or broken
- Dispose of lamp in a closed container
- Do not use excessive force when installing lamp

### 120 - QMH Protected Kr85

#### ▲ WARNING

##### Risk of electric shock

- Turn power off before inspection, installation or removal
- Do not use where directly exposed to water or outdoors without an enclosed fixture

##### Risk of fire

- Keep combustible materials away from lamp
- Use in fixture rated for this product

##### A damaged lamp emits UV radiation which may cause eye/skin injury

- Turn power off if glass bulb is broken. Remove and dispose of lamp.

##### Unexpected lamp rupture may cause injury, fire, or property damage

- Do not exceed rated voltage
- Do not use where directly exposed to water or outdoors without an enclosed fixture
- Do not use lamp if outer glass is scratched or broken
- Use only properly rated ballast
- Operate lamp only in specified position
- Turn lamp off at least once for 15 minutes per week
- Do not store flammable materials near/below lamp
- Do not use beyond rated life
- Do not turn on lamp until fully installed

#### ▲ CAUTION

##### Risk of burn

- Allow lamp to cool before handling
- Do not turn on lamp until fully installed

##### Lamp may shatter and cause injury if broken

- Do not use lamp if outer glass is scratched or broken
- Dispose of lamp in a closed container
- Do not use excessive force when installing lamp

### 121 - QMH S-rated

#### ▲ WARNING

##### Risk of electric shock

- Turn power off before inspection, installation or removal
- Do not use where directly exposed to water or outdoors without an enclosed fixture

##### Risk of fire

- Keep combustible materials away from lamp
- Use in fixture rated for this product

##### A damaged lamp emits UV radiation which may cause eye/skin injury

- Turn power off if glass bulb is broken. Remove and dispose of lamp.

##### Unexpected lamp rupture may cause injury, fire, or property damage

- Do not exceed rated voltage
- Do not use where directly exposed to water or outdoors without an enclosed fixture
- Use in enclosed fixture rated for this product – see instructions
- Do not use lamp if outer glass is scratched or broken
- Use only properly rated ballast
- Operate lamp only in specified position
- Turn lamp off at least once for 15 minutes per week
- Do not store flammable materials near/below lamp
- Do not use beyond rated life
- If used on a dimming system, see instructions.
- Do not turn on lamp until fully installed

#### ▲ CAUTION

##### Risk of burn

- Allow lamp to cool before handling
- Do not turn on lamp until fully installed

##### Lamp may shatter and cause injury if broken

- Wear safety glasses and gloves when handling lamp
- Do not use lamp if outer glass is scratched or broken
- Dispose of lamp in a closed container
- Do not use excessive force when installing lamp



## WARNING AND CAUTION NOTICES (CONTINUED)

### 122 - QMH S-rated Kr85

#### ▲ WARNING

##### Risk of electric shock

- Turn power off before inspection, installation or removal
- Do not use where directly exposed to water or outdoors without an enclosed fixture

##### Risk of fire

- Keep combustible materials away from lamp
- Use in fixture rated for this product

##### A damaged lamp emits UV radiation which may cause eye/skin injury

- Turn power off if glass bulb is broken. Remove and dispose of lamp.

##### Unexpected lamp rupture may cause injury, fire, or property damage

- Do not exceed rated voltage
- Do not use where directly exposed to water or outdoors without an enclosed fixture
- Use in enclosed fixture rated for this product – see instructions
- Do not use lamp if outer glass is scratched or broken
- Use only properly rated ballast
- Operate lamp only in specified position
- Turn lamp off at least once for 15 minutes per week
- Do not store flammable materials near/below lamp
- Do not use beyond rated life
- If used on a dimming system, see instructions.
- Do not turn on lamp until fully installed

#### ▲ CAUTION

##### Risk of burn

- Allow lamp to cool before handling
- Do not turn on lamp until fully installed

##### Lamp may shatter and cause injury if broken

- Do not use lamp if outer glass is scratched or broken
- Dispose of lamp in a closed container
- Do not use excessive force when installing lamp

### 123 - QMH S-rated Saf-T-Gard®

#### ▲ WARNING

##### Risk of electric shock

- Turn power off before inspection, installation or removal
- Do not use where directly exposed to water or outdoors without an enclosed fixture

##### Risk of fire

- Keep combustible materials away from lamp
- Use in fixture rated for this product

##### Unexpected lamp rupture may cause injury, fire, or property damage

- Do not exceed rated voltage
- Do not use where directly exposed to water or outdoors without an enclosed fixture
- Use in enclosed fixture rated for this product – see instructions
- Do not use lamp if outer glass is scratched or broken
- Use only properly rated ballast
- Operate lamp only in specified position
- Turn lamp off at least once for 15 minutes per week
- Do not store flammable materials near/below lamp
- Do not use beyond rated life
- Do not turn on lamp until fully installed

#### ▲ CAUTION

##### Risk of burn

- Allow lamp to cool before handling
- Do not turn on lamp until fully installed

##### Lamp may shatter and cause injury if broken

- Do not use lamp if outer glass is scratched or broken
- Dispose of lamp in a closed container
- Do not use excessive force when installing lamp

### 124 - Sport 1000W PAR64

#### ▲ WARNING

##### Risk of electric shock

- Turn power off before inspection, installation or removal
- Do not use where directly exposed to water or outdoors without an enclosed fixture

##### Risk of fire

- Keep combustible materials away from lamp
- Use in fixture rated for this product

##### A damaged lamp emits UV radiation which may cause eye/skin injury

- Turn power off if glass bulb is broken. Remove and dispose of lamp.

##### Unexpected lamp rupture may cause injury, fire, or property damage

- Do not exceed rated voltage
- Do not use where directly exposed to water or outdoors without an enclosed fixture
- Use in enclosed fixture rated for this product
- Do not use lamp if outer glass is scratched or broken
- Use only properly rated ballast
- Operate lamp only in specified position
- Turn lamp off at least once for 15 minutes per week
- Do not turn on lamp until fully installed

#### ▲ CAUTION

##### Risk of burn

- Allow lamp to cool before handling
- Do not turn on lamp until fully installed

##### Lamp may shatter and cause injury if broken

- Wear safety glasses and gloves when handling Lamp
- Do not use lamp if outer glass is scratched or broken
- Dispose of lamp in a closed container
- Do not use excessive force when installing lamp



# High Intensity Discharge Lamps

## WARNING AND CAUTION NOTICES (CONTINUED)

### 125 - Sport MBIL-CSI-CID

#### ▲ WARNING

##### Risk of electric shock

- Turn power off before inspection, installation or removal
- Do not use where directly exposed to water or outdoors without an enclosed fixture

##### Risk of fire

- Keep combustible materials away from lamp
- Use in fixture rated for this product

##### Lamp emits UV radiation which may cause eye/skin injury.

- Avoid exposure of eyes and skin to unshielded lamp

##### Unexpected lamp rupture may cause injury, fire, or property damage

- Do not exceed rated voltage
- Do not touch glass with bare hands

- Do not use where directly exposed to water or outdoors without an enclosed fixture
- Use in enclosed fixture rated for this product
- Do not use lamp if outer glass is scratched or broken
- Use only properly rated ballast
- Operate lamp only in specified position
- Turn lamp off at least once for 15 minutes per week
- Do not turn on lamp until fully installed

#### ▲ CAUTION

##### Risk of burn

- Allow lamp to cool before handling
- Do not turn on lamp until fully installed

##### Lamp may shatter and cause injury if broken

- Do not use lamp if outer glass is scratched or broken
- Do not use excessive force when installing lamp

## HID LAMPS CROSS REFERENCE

GE Description	Osram/Sylvania Description	Philips Description
<b>ORDER THIS GE LAMP</b>	<b>IF YOU CURRENTLY USE THESE LAMPS</b>	
<b>STANDARD AND ECOLUX® HPS LAMPS</b>		
Lucalox®	Lumalux®	Ceramalux™
LU35/MED	LU35/MED	C35S76/M
LU35/D/MED	LU35/D/MED	C35S76/D/M
LU50/MED	LU50/MED	C50S68/M
LU50/D/MED	LU50/D/MED	C50S68/M
LU50	LU50/ECO	C50S68/ALTO
LU50/D	LU50/D	C50S68/D
LU70/MED	LU70/MED	C70S62/M
LU70/D/MED	LU70/D/MED	C70S62/D/M
LU70/ECO	LU70/ECO	C70S62/ALTO
LU70/ECO/NC	LU70/PLUS/ECO	—
LU70/D	LU70/D	C70S62/D
LU100/MED	LU100/MED	C100S54/M
LU100/D/MED	LU100/D/MED	C100S54/D/M
LU100/ECO	LU100/ECO	C100S54/ALTO
LU100/ECO/NC	LU100/PLUS/ECO	—
LU100/D	LU100/D	C100S54/D
LU150/MED	LU150/55/MED	CC150S55/M
LU150/D/MED	LU150/55/D/MED	C150S55/D/M
LU150/55/ECO	LU150/55/ECO	C150S55/ALTO
LU150/ECO/NC	LU150/55/PLUS/ECO	—
LU150/55/D	LU150/55/D	C150S55/D
LU150/100	LU150/100	C150S56/ALTO
LU200/ECO	LU200/ECO	C200S66
LU200/ECO/NC	LU200/PLUS/ECO	—
LU250/ECO	LU250/ECO	C250S50
LU250/ECO/NC	LU250/PLUS/ECO	—
LU250/D	LU250/D	C250S50/D

GE Description	Osram/Sylvania Description	Philips Description
<b>ORDER THIS GE LAMP</b>	<b>IF YOU CURRENTLY USE THESE LAMPS</b>	
<b>STANDARD AND ECOLUX® HPS LAMPS (CONTINUED)</b>		
Lucalox®	Lumalux®	Ceramalux™
LU310	LU310/ECO	C310S67
LU400/ECO	LU400/ECO	C400S51
LU400/ECO/NC	LU400/PLUS/ECO	—
LU400/D	LU400/D	C400S51/D
LU750	LU750	—
LU1000/ECO	LU1000	C1000S52
<b>DELUXE HIGH PRESSURE SODIUM LAMPS</b>		
Lucalox®		Ceramalux™
LU70/DX/MED	—	C70S62/C/M
LU150/DX/MED	—	C150S55/C/M
LU150/55/DX	—	C150S55/C
LU250/DX	—	C250S50/C
LU400/DX	—	C400S51/C
<b>STANDBY LONGLIFE HIGH PRESSURE SODIUM LAMPS</b>		
Lucalox®	Lumalux®	Ceramalux™
LU70/SBY/XL	LU70/SBY	C70S62/2
LU100/SBY/XL	LU100/SBY	C100S54/2
LU150/55/SBY/XL	LU150/551SBY	C150S55/2
LU200/SBY/XL	LU200/100/SBY	—
LU250/SBY/XL	LU250/SBY	C250S50/2
LU400/SBY/XL	LU400/SBY	C400S51/2
LU1000/SBY/XL	LU1000/SBY	C1000S52/2
<b>EZ-LUX® HIGH PRESSURE SODIUM LAMPS</b>		
E-Z LUX®	Unalux®	Ceramalux™
LUH150/EZ	ULX150	C150S63 RETROLUX
LUH215/EZ	UIX215	C215S675 RETROLUX
LUH360/EZ	ULX360	C360S64 RETROLUX



## HID LAMPS CROSS REFERENCE (CONTINUED)

GE Description	Osram/Sylvania Description	Philips Description
ORDER THIS GE LAMP	IF YOU CURRENTLY USE THESE LAMPS	
<b>CERAMIC METAL HALIDE LAMPS</b>		
CMH20/MR16/830/SP	—	—
CMH20/MR16/830/FL	—	—
CMH20/MR16/830/WFL	—	—
CMH20/PAR20/SP	—	—
CMH20/PAR20/FL	—	—
CMH20/PAR30/SP10	MCP20PAR30LN/U/830/SP	—
CMH20/PAR30/SP15	—	—
CMH20/PAR30/FL25	MCP20PAR30LN/U/830/FL	—
CMH39/PAR20/830/SP10	MCP39PAR20/U/830/SP	CDM35/PAR20/M/SP
CMH39/PAR20/830/FL30	MCP39PAR20/U/830/FL	CDM35/PAR20/M/FL
CMH39/PAR30L/830/SP10	MCP39PAR30LN/U/830/SP	CDM35/PAR30L/M/SP
CMH39/PAR30L/830/SP15	—	—
CMH39/PAR30L/830/FL25	MCP39PAR30LN/U/830/FL	CDM35/PAR30L/M/FL
CMH70/PAR30L/830/SP15	MCP70PAR30LN/U/830/SP	CDM70/PAR30L/M/SP
CMH70/PAR30L/830/FL40	MCP70PAR30LN/U/830/FL	CDM70/PAR30L/M/FL
CMH70/PAR38/830/SP15	MCP70PAR38/U/830/SP	CDM70/PAR38/SP/3K
CMH70/PAR38/830/FL25	MCP70PAR38/U/830/FL	CDM70/PAR38/FL/3K
CMH70/PAR38/830/WFL	MCP70PAR38/U/830/WFL	CDM70/PAR38/WFL/3K
CMH100/PAR38/830/SP15	MCP100PAR38/U/830/SP	CDM100/PAR38/SP/3K
CMH100/PAR38/830/FL25	MCP100PAR38/U/830/FL	CDM100/PAR38/FL/3K
CMH100/PAR38/830/WFL	MCP100PAR38/U/830/WFL	CDM100/PAR38/WFL/3K
CMH70/U/830/MED	MCP70/U/MED/830	MHC70/U/M/3K
CMH70/C/U/830/MED	MCP70/C/U/MED/830	MHC70/C/U/M/3K
CMH100/U/830/MED	MCP100/U/MED/830	MHC100/U/M/3K
CMH100/C/U/830/MED	MCP100/C/U/MED/830	MHC100/C/U/M/3K
CMH70/U/830/MED/O	MCP70/U/MED/830	MHC70/U/MP/3K/ALTO
CMH70/C/U/830/MED/O	MCP70/C/U/MED/830	MHC70/C/U/MP/3K/ALTO
CMH70/U/942/MED/O	—	MHC70/U/MP/4K/ALTO
CMH70/C/U/942/MED/O	—	MHC70/C/U/MP/4K/ALTO
CMH150/U/830/MED/O	MCP150/U/MED/830	MCH150/U/MP/3K/ALTO
CMH150/C/U/830/MED/O	MCP150/C/U/MED/830	MHC150/C/U/MP/3K/ALTO
CMH150/U/942/MED/O	—	MHC150/U/MP/4K/ALTO
CMH150/C/U/942/MED/O	—	MHC150/C/U/MP/4K/ALTO
CMH20/T/U/830/G12	—	—
CMH39/T/U/830/G12	MC39T6/U/G12/830	CDM35/T6/830
CMH39/TC/U/942/G12	MC39T6/U/G12/940	—
CMH70/T/U/830/G12	MC70T6/U/G12/830	CDM70/T6/830
CMH70/T/U/942/G12	MC70T6/U/G12/940	CDM70/T6/942
CMH150/T/U/830/G12	MC150T6/U/G12/830	CDM150/T6/830
CMH150/T/U/942/G12	MC150T6/U/G12/940	CDM150/T6/942
CMH70/TD/830/Rx7s	MC70T6/DE/830	CDM70/TD/830
CMH70/TD/942/Rx7s	—	CDM70/TD/942
CMH150/TD/830/Rx7s	MC150T6/DE/830	CDM150/TD/830
CMH150/TD/942/Rx7s	—	CDM150/TD/942

GE Description	Osram/Sylvania Description	Philips Description
ORDER THIS GE LAMP	IF YOU CURRENTLY USE THESE LAMPS	
<b>CERAMIC METAL HALIDE LAMPS (CONTINUED)</b>		
CMH250/PA/O-SPXX	MCP250/PS/BU-only/940	—
CMH320/PA/O-SPXX	MCP320/PS/BU/840/BT37	CDM320/V/O/PS/4K
CMH350/PA/O-SPXX	—	CDM350/V/O/PS/4K
CMH400/BU/PA/O-SPXX	—	CDM350/V/O/PS/4K
CMH20/TC/U/830/GU6.5	—	—
CMH20/TC/U/830/G8.5	MC20TC/U/G8.5/830	—
CMH39/TC/U/830/G8.5	MC39TC/U/G8.5/830	CDM35/TC/830
CMH39/TC/U/942/G8.5	MC39TC/U/G8.5/942	CDM35/TC/942
CMH70/TC/U/830/G8.5	MC70TC/U/G8.5/830	CDM70/TC/830
CMH70/TC/U/942/G8.5	MC70TC/U/G8.5/942	CDM70/TC/942
<b>MULTI-VAPOR® PULSEARC® METAL HALIDE LAMPS</b>		
MXR32C/VBU	—	—
MXR50/U/MED	MP50/U/MED	MH50/U/M
MXR50/C/U/MED	MP50/C/U/MED	MH50/C/U/M
MXR70/U/MED	MH70/U/MED	MHC70/U/M/3K
MXR70/C/U/MED	MH70/C/U/MED	MHC70/C/U/M/3K
MXR70/U/MED/O	MP70/U/MED	MHC70/C/U/M/3K
MXR70/C/U/MED/O	MP70/C/U/MED	MHC70/C/U/M/3K
MXR100/U/MED	M100/U/MRD	MHC100/U/M/3K
MXR100/C/U/MED	MH100/C/U/MED	MHC100/C/U/M/3K
MVR100/U/MED	MH100/U/4K/MED	MHC100/U/M/4K
MVR100/C/U/MED	—	MHC100/C/U/M/4K
MXR100/U/MED/O	MP100/U/MED	MHC100/U/M/3K
MXR100/C/U/MED/O	MP100/C/U/MED	MHC100/C/U/M/3K
MXR150/U/MED	M150/U/MED	MH150/U/M
MXR150/C/U/MED	M150/C/U/MED	MH150/C/U/M
MVR175/VBU/PA	MS175/PS/BU	MS175/BU/PS
MVR175/C/VBU/PA	MS175/C/PS/BU	—
MVR250/VBU/PA	MS250/PS/BU	MS250/BU/PS
MVR250/C/VBU/PA	MS250/C/PS/BU	—
MVR320/VBU/HO/PA	MS320/PS/BU	MS320/BU/PS
MVR320/C/VBU/HO/PA	MS320/C/PS/BU-HOR	MS320/C/BU/PS
MPR320/VBU/XHO/PA	MP320/350/PS/BU	MP320/BU/PS
MPR320/C/VBU/XHO/PA	MP320/350/C/PS/BU	MP320/C/BU/PS
MPR350/VBU/PA	MP320/350/PS/BU	MP350/BU/PS
MPR350/C/VBU/PA	MP320/350/C/PS/BU	MP350/C/BU/PS
MPR400/VBU/XHO/PA	MP350/400/PS/BU	MP400/BU/PS
MPR400/C/VBU/XHO/PA	MP350/400/C/PS/BU	MP400/C/BU/PS
MVR750/VBU/PA	MS750/PS/BU-HOR/BT37	—
MVR750/C/VBU/PA	MS750/C/PS/BU-HOR/BT37	—
MVR1000/BT37/PA	M1000/PS/U/BT37	MS1000/BU/BT37/PS



# High Intensity Discharge Lamps

## HID LAMPS CROSS REFERENCE (CONTINUED)

<i>GE Description</i>	<i>Osram/Sylvania Description</i>	<i>Philips Description</i>
<b>ORDER THIS GE LAMP</b>	<b>IF YOU CURRENTLY USE THESE LAMPS</b>	
<b>MULTI-VAPOR® STANDARD METAL HALIDE LAMPS</b>		
MVR175/U/MED	M175/U/MED	MH175/U/M
MVR175/C/U/MED	M175/C/U/MED	MH175/C/U/M
MVR175/U	M175/U	MH175/U
MVR175/C/U	M175/C/U	MH175/C/U
MVR175/HOR	MS175/HOR	MS175/HOR
MVR175/C/HOR	MS175/C/HOR	MS175/C/HOR
MVR250/U	M250/U	MH250/U
MVR250/C/U	M250/C/U	MH250/C/U
MVR250/SP30/U	M2503K/BU-only	MH250/3K/BU
MVR250/HOR	MS250/HOR	MS250/HOR
MVR250/C/HOR	MS250/C/HOR	MS250/C/HOR
MVR400/U	M400/U	MH400/U
MVR400/C/U	M400/C/U	MH400/C/U
MVR400/SP30/U	MS400/BU	MH400/3K/U
MVR400/VBU	MS400/BU	MS400/BU
MVR400/VBD	MS400/BD	—
MVR400/C/VBU	MS400/C/BU	MS400/C/BU&
MVR400/C/VBD	MS400/C/BD	—
MVR400/HOR	MS400/HOR	MS400/HOR
MVR400/C/HOR	MS400/C/HOR	MS400/C/HOR
MVR400/SP30/HOR	MS400/3K/HOR	—
MPR400/U	MP400/BU	MP400/U
MPR400/VBU	MP400/BU/BD	—
MVR1000/U	M1000/U	MH1000/U
MVR1000/C/U	M1000/C/U	MH1000/C/U
MVR1000/VBU	MS1000/BU	MS1000/BU
MPR1000/VBU/O	MP1000/BU	MP1000/BU
MVR1500/U/SPORTS	M1500/BU-HOR	MH1500BU
<b>DOUBLE-ENDED LAMPS</b>		
ARC70/TD/730/R7S	HQI-DE70/WDX	CDM70/TD/830
ARC70/TD/743/R7S	—	MHN70/TD/840
ARC150/TD/730/R7S	HQI-DE150/WDX	CDM150/TD/830
ARC150/TD/742/R7S	HQI-DE150/NDX	MHN150/TD/840
<b>SAFETY METAL HALIDE LAMPS</b>		
MVT400/VBU	MPT400/BU	MHT400/U
MVT400/C/VBU	MPT400/C/BU	MHT400/C/U

<i>GE Description</i>	<i>Osram/Sylvania Description</i>	<i>Philips Description</i>
<b>ORDER THIS GE LAMP</b>	<b>IF YOU CURRENTLY USE THESE LAMPS</b>	
<b>MERCURY VAPOR LAMPS</b>		
HR40/50DX45-46	H45/46DL-40/50/DX	H46DL-40-50/DX
HR75DX43	H43AV-75/DX	H43AV-75/DX
HR75/100PFL43-44	—	—
HR100DX38/E17	—	—
HR100A38/A23	—	—
HR100DX38/A23	H38AV-100/DX	H38MP-100/DX
HR100A38	H38HT-100	H38HT-100
HR100DX38	H38JA-100/DX	H38JA-100/DX
HT100DX38	H38JA-T100/DX	H38JA-T100/DX
HR100WDX38	H38JA-100/N	—
HR100RFL38	—	—
HR100RDXFL38	H38BP-100/DX	H38BP-100/DX
HR100PSP44	H44GS-100	H44GS-100
HR100PFL44	H44JM-100	—
HR175A39	H39KB-175	H39KB-175
HR175DX39	H39KC-175/DX	H39KC-175/DX
HT175DX39	H39KC-T175/DX	H39KC-T175
HR175WDX39	H39KC-175/N	—
HR175RFL39	—	H39BM-175
HR175RDXFL39	H39BP-175/DX	H39BP-175/DX
HR250A37	H37KB-250	H37KB-250
HR250DX37	H37KC-250/DX	H37KC-250/DX
HT250DX37	H37KC-T250/DX	H37KC-T250/DX
HR250WDX37	H37KC-250/N	—
HR400A33	H33CD-400	H33CD-400
HR400DX33	H33GL-400/DX	H33GL-400/DX
HR400DX33BT	—	—
HT400DX33	H33GL-T400/DX	H33GL-T400/DX
HR400WDX33	H33GL-400/N	—
HR400R33	—	—
HR400RDX33	—	H33DN-400/DX
HR400RDXFL33	—	H33FS-400/DX
HR400RSP33	—	—
HR400A33/T16	H33AR-400	—
HR700DX35	—	H35ND-700/DX
HR1000DX34	H34GV-1000	—
HR1000DX34	H34GW-1000/DX	H34GW-1000/DX
HR1000A36	H36GV-1000	H36GV-1000
HR1000DX36	H36GW-1000/DX	H36GW-1000/DX
HT1000DX36	H36GW-T1000/DX	H36GW-T1000/DX
<b>SELF-BALLASTED MERCURY VAPOR LAMPS</b>		
HSB160/M	—	—
HSB250	—	S250E28/DX
HSB250/M	—	S250E28/DX/M
HSB450	—	S450BT37/C
HSB750R/120	—	S750R57



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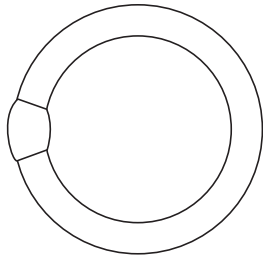
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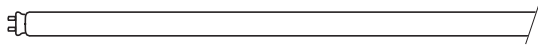
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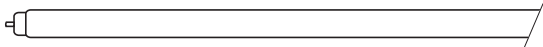
## LAMP LOCATOR (NOT DRAWN TO SCALE)



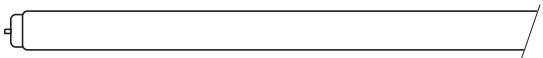
**T9 Circline (1 1/8" diameter) 4-Pin Base (G10q)**



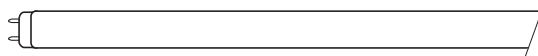
**T5 (5/8" diameter) Miniature Bipin Base (G5)**



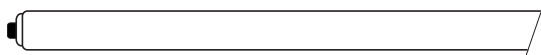
**T6 (3/4" diameter) Single Pin Base (Fa8)**



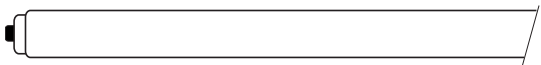
**T8 (1" diameter) Single Pin Base (Fa8)**



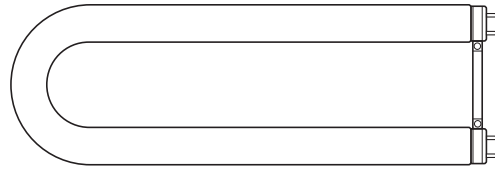
**T8 (1" diameter) Medium Bipin Base (G13)**



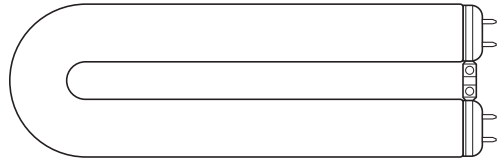
**T8 (1" diameter) Recessed Double Contact Base (R17d)**



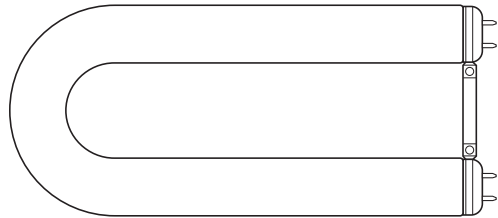
**T10 (1 1/4" diameter) Recessed Double Contact Base (R17d)**



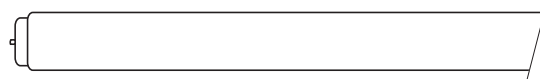
**Mod-U-Line® T8/U6 (1" diameter) Medium Bipin Base (G13)**



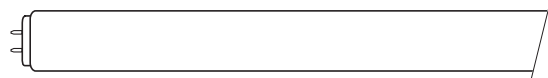
**Mod-U-Line® T12/U3 (1 1/2" diameter) Medium Bipin Base (G13)**



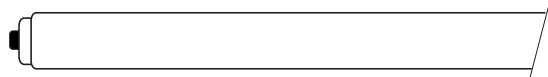
**Mod-U-Line® T12/U6 (1 1/2" diameter) Medium Bipin Base (G13)**



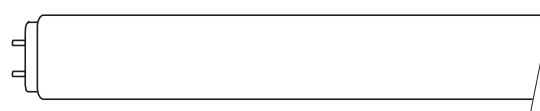
**T12 (1 1/2" diameter) Single Pin Base (Fa8)**



**T12 (1 1/2" diameter) Medium Bipin Base (G13)**



**T12 (1 1/2" diameter) Recessed Double Contact Base (R17d)**



**T17 (2 1/8" diameter) Mogul Bipin (G20)**



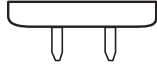
**Power Groove® (2 1/8" diameter)  
Recessed Double Contact Base (R17d)**



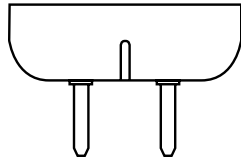
## BASE IDENTIFICATION



**Min Bipin  
G5**



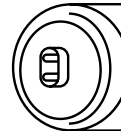
**Med Bipin  
G13**



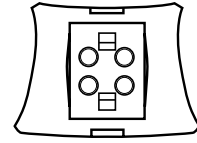
**Mog Bipin  
G20**



**Single Pin  
Fa8**



**Recessed Double  
Contact  
R17d**



**4-Pin  
G10q  
(Circline)**

## INTRODUCTION

GE introduced the first fluorescent lamp in 1939. Today, these lamps have become almost a universal standard in office and other lighting applications. The characteristics of fluorescent lamps vary widely according to the lamp type. In general, fluorescent lamps have the following advantages:

- Low Operating Cost:**  
 Efficient, fluorescent lamps can cost significantly less to operate over their lifetime than incandescent lamps. Many common linear fluorescent lamps now have energy saving versions often designated in this catalog by Watt-Miser® (WM).
- Long Life:**  
 Life ratings for fluorescent lamps range from 6000 to 30,000 hours based on the industry standard of 3 burning hours per start, except where noted.
- Light Quality:**  
 GE Starcoat® T5 and T8 lamps offer higher color rendering and lumen maintenance of 95%.
- Flexibility:**  
 Fluorescent lamps are available in a wide range of sizes, shapes, color performance, and wattage ratings.
- Fast Starting:**  
 Rapid-Start and Instant-Start lamps typically start within 1 second of being turned on.

### FLUORESCENT BRAND NAME CROSS-REFERENCE

GE	OSRAM/SYLVANIA	PHILIPS
Aquarium/Terrarium	—	—
Chroma 50	Design 50®	Colortone 50
CovrGuard®	—	—
Ecolux®	Ecologic	Alto
Gro & Sho™/Plant & Aquarium	GRO-LUX®	Agro-Lite
Kitchen and Bath ULTRA™	Interior Design® (D30)	Softone Pastel FL (SPEC.30)
Mod-U-Line®	Curvalume®	U-Bent
Power Groove®	—	—
Specification Series (SP)	Designer® Series (D)	SPEC Series
Specification Series (SPX)	Designer® "800" Series	Ultralume™
Starcoat®	—	—
T5	Pentron®	Silhouette™
T8	Octron®	TL70/TL80™
T10/1500MA	VHO/LT	—
/1500	VHO	VHO
Watt-Miser®	SuperSaver®	Econ-o-Watt
Watt-Miser® Plus	SuperSaver Plus®	—
XL	XP	Advantage

**ATTENTION:** This brand-name cross-reference chart is provided only as a quick reference. Other lamp company brand listings may only represent a near equivalent, versus an identical match to GE Lighting brands. Individual lamp manufacturer's performance specifications and product offerings should be consulted. Lamp performance may be affected by environmental conditions, ballast type and/or other auxiliary equipment.

**See [www.gelighting.com](http://www.gelighting.com) e-Catalog for a comprehensive cross-reference tool.**





## PRODUCT INFORMATION

### GE T5 STARCOAT® ECOLUX® LAMPS (pgs 4-7 to 4-8)

- Used in a variety of applications from indirect fixtures in commercial office buildings to warehouses and manufacturing facilities
- Many combinations of wattage and length provide flexibility of fixture design and ceiling layout
- Longer rated life at 30,000 hours
- TCLP Compliant, lowering disposal costs where applicable (state regulations vary, consult your state EPA)

### GE T8 STARCOAT® ECOLUX® LAMPS (pgs 4-8 to 4-9 and 4-27)

- More light over life – 95% lumen maintenance
- Enhanced color rendering... available in 700 and 800 series
- High system efficiency, relative to T12, delivers significant energy cost savings
- TCLP Compliant, lowering disposal costs where applicable (state regulations vary, consult your state EPA)

### GE STARCOAT® ECOLUX® XL EXTRA-LIFE LAMPS (pgs 4-8 to 4-9)

- Same great features of the T8 Starcoat® Ecolux®... with longer life... up to 20% longer than standard T8 lamps

### ULTRA~T8 REPLACEMENT (ENERGY-SAVING ALTERNATIVE) GE T8 30W WATT-MISER® (pg 4-9)

- Energy-saving replacement lamp for all standard T8's on Instant Start Ballast systems
- Up to 5% savings over 32W T8 systems with maintained light levels
- Operates on any standard T8 Instant Start Ballast
- Also approved for use on GE UltraStart PRS Ballast
- Available in XL version – 20% longer life than standard T8 lamps
- All T8 Watt-Miser® lamps are TCLP Compliant and may reduce disposal costs
- 80+ CRI (Color Rendering Index)

### ULTRA~T12 RETROFIT (ENERGY-SAVING ALTERNATIVE) GE T8 28W ULTRAMAX® (pg 4-9)

- Highly efficient T8 system utilizing the new 28W T8 lamp designed for optimal use on the GE UltraMax® ballast product family
- Operates on any standard T8 Instant Start Ballast
- Also approved for use on GE UltraStart PRS Ballast
- 80+ CRI (Color Rendering Index) and TCLP Compliant

### ULTRA~NEW CONSTRUCTION (ENERGY-SAVING ALTERNATIVE) GE T8 32W HIGH LUMEN LAMPS (HL) (pg 4-10)

- 5-8% more lumens than GE 32W T8 SP and SPX
- 3100 initial lumens allows you to increase light levels over a standard T8 or the option to implement a de-lamp or de-fixture strategy
- 20% longer life over GE F32T8
- 80+ CRI (Color Rendering Index) and TCLP Compliant

### GE T8 MOD-U-LINE® U-SHAPED FLUORESCENT LAMPS (pg 4-11)

- Primarily used in 2x2 fixtures with prismatic or parabolic lenses
- Lower energy cost... 36% energy cost savings vs. F40T12 U-Tubes
- Longer lamp life than T12 Mod-U-Line® – 20,000 hours
- 700 and 800 Series

### GE 8' T8 LAMPS (pg 4-10)

- One of the most efficient fluorescent products available, up to 97 lumens per watt (LPW)
- Single-pin based lamps designed to operate on Instant Start Ballast
- Available in longer life (XL) versions... up to 17% longer life

### GE 8' T8 WATT-MISER® (XL) EXTRA LIFE LAMPS (ENERGY-SAVINGS ALTERNATIVE) (pg 4-10)

- Extra-life... lasts 17% longer than standard F96T8 lamps for reduced lamp replacement and maintenance cost
- Maximum energy savings... up to 3.5% less energy consumed than standard F96T8 lamps
- Same light output as standard lamps
- Excellent color... color enhanced SP and SPX versions
- New Watt-Miser® Plus lamp reduces wattage to 54W per lamp

### GE 8' T8 HIGH OUTPUT LAMPS (pg 4-10)

- High system efficiency delivers 38% energy cost savings
- 50% longer life than T12 high output lamps
- Wide choice of color options
- Operate at 400mA

### GE 4' T12 ECOLUX® RAPID START LAMPS (pgs 4-12 to 4-13 and 4-29)

- Popular for commercial lighting
- Upgrade new and existing facilities easily... change the lamp to SP/SPX color-improved lamps, available in Watt-Miser® version
- TCLP Compliant, lowering disposal costs where applicable (state regulations vary, consult your state EPA)

### GE 4' T12 WATT-MISER® ECOLUX® ENERGY-SAVING LAMPS (WM) (pg 4-12 to 4-13 and 4-28 to 4-29)

- Energy-saving replacement for all standard T12 fluorescent lamps
- 12% to 20% savings in energy costs vs. standard fluorescent
- TCLP Compliant, lowering disposal costs where applicable (state regulations vary, consult your state EPA)

### GE T12 MOD-U-LINE® U-SHAPED LAMPS (pgs 4-14 and 4-28)

- Available in standard and Watt-Miser® versions
- Operate on standard or electronic Rapid Start Ballasts

### GE T12 HIGH OUTPUT LAMPS (pgs 4-16 to 4-17 and 4-29)

- High light output and long life
- Produces about 45% more initial lumens than standard lamps of the same size
- Usually operated at 800mA

### GE T12 VERY HIGH OUTPUT LAMPS (pg 4-17)

- Where high light levels are required – factories, warehouses, gymnasiums, open areas
- Rapid Start, operated at 1500mA



## PRODUCT INFORMATION (CONTINUED)

### COVRGUARD® SHATTER PROTECTED FLUORESCENT LAMPS (pgs 4-19 to 4-23 and 4-30)

- Polycarbonate shield effectively contains shattered glass particles if lamp is broken, protecting people, food and other valuable items
- UV blocking properties guard against fading and UV degradation
- Available in a variety of colors for decorative and architectural applications
- The covRguard® feature is available on nearly all fluorescent lamps

### GE COLD-TEMPERATURE LAMPS (pg 4-23 to 4-24)

- Specifically designed for cold temperature applications such as freezers and coolers, display cases and outdoor areas
- Available in T8, T10 and T12 versions
- Rated nominal watts and initial lumens are peak values. Actual watt and lumen values may be somewhat lower in service, depending on ambient conditions.

### GE APPLIANCE LAMPS (pg 4-24 to 4-25)

- Designed for intermittent service in appliances such as oven hoods and microwaves

### GE BLACKLIGHT AND REPROGRAPHIC (pgs 4-25 and 4-30)

- Blacklight (BL) lamps are commonly used in insect traps
- Blacklight Blue (BLB) lamps are often used decoratively in disco lighting and theatrical applications. These lamps are produced with a special dark blue glass that filters most visible light.
- The Diazo lamp emits a blue light, peaking at approximately 417nm which is used primarily in reprographic equipment

### GE CINEMA FLUORESCENT LAMPS (See Stage and Studio Section)

- Specifically designed to be used in cinematography applications and are color corrected to match the spectral sensitivity of film
- For more information and product details, visit the Stage & Studio section of this catalog

### GE GOLD LAMPS (pgs 4-25 to 4-26)

- Effectively blocks all UV emissions below 520nm
- Available in covRguard®
- Used in photo-sensitive applications such as semi-conductor assembly and darkrooms

### GE GERMICIDAL LAMPS (pg 4-26)

- Clear lamps with special UV transmitting glass
- The 254nm radiation penetrates and inactivates the DNA of most micro-organisms
- Used in air, water and surface purification applications

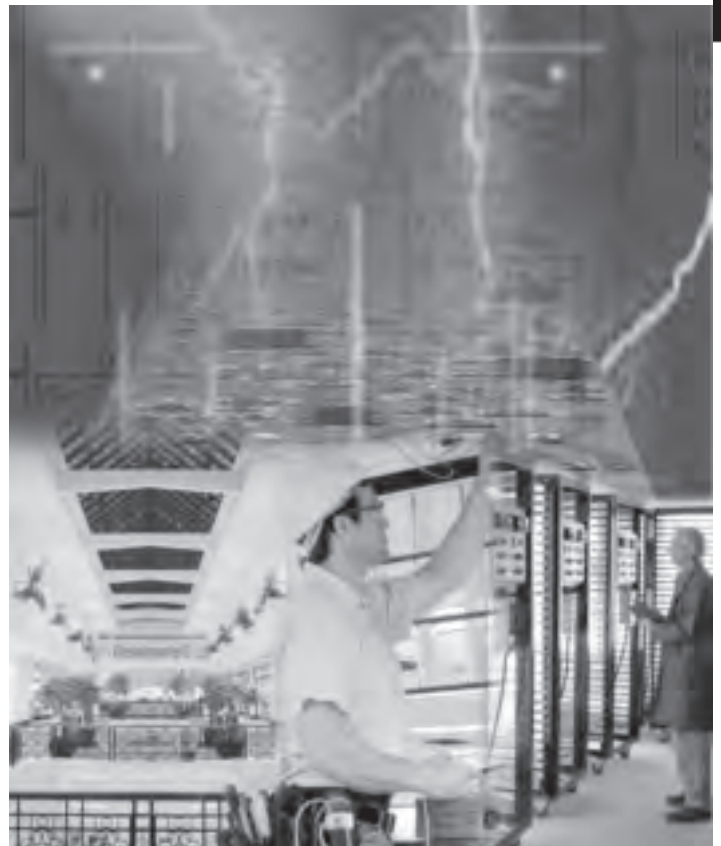
### GE BALLASTS

Energy efficiency and high performance make GE Electronic Ballasts and GE Fluorescent Lamps the perfect match for total performance.

- Energy efficient – GE offers a highly efficient system to dramatically reduce electricity costs... GE UltraMax® Ballasts
  - Outstanding quality
  - Technical hotline provides specification and application support
  - Electromagnetic, HID, CFL, and Sign ballasts also available from GE
- See **GE Ballast System Catalog** for more information.

### ULTRAMAX® BALLAST (pgs 4-36 to 4-37)

- The GE UltraMax® Ballast can be used with F32T8, F32T8/WM, and F28T8/UMX lamps. The UltraMax™ Ballast is Multi-Voltage for use in 120V and 277V applications.
- The UltraMax® Ballast is available in low (.77), normal (.87), and high (1.15) ballast factors.
- The UltraMax® Ballast is equipped with ArcGuard Protection, UL Type CC Anti-Arc Rating, and Striation Control.





# Fluorescent Lamps

## HEADINGS IN THIS CATALOG SECTION

The following terms and descriptions can help you when checking Fluorescent lamp specifications and when ordering products. Within each product line, lamps are divided into families, within these families, lamps are then listed by wattage, then bulb, and then by base. There are exceptions to this ordering among the specialty lamps listed.

**Order Code:**

It is important to use this five-digit code when ordering to ensure that you receive the exact product you require.

**Nominal Length in.:**

Lamp length including base and/or pins.

**Watts:**

Energy used (as defined by FTC Lamp Label Rules). To estimate energy consumption (kWh), multiply watts x hours of use and divide by 1000.

**Bulb:**

Bulb shape followed by its size (the maximum diameter of the bulb expressed in eighths of an inch).

**Base:**

The type of base.

**Mean Lumens:**

Lamp light output at 40% of rated lamp life.

**Initial Lumens:**

Lamp light output after the initial 100 hours of operation.

**Rated Life - Hours:**

Lamp burning hours to median life expectancy.

**Case Quantity:**

Number of product units packed in a case.

**Description:**

The lamp's identification code.

**Color Temperature Kelvins (K):**

A measure of the visual "warmth" or "coolness" of the light from the lamp. The higher the value, the whiter or "cooler" the light appears.

**Color Rendering Index (CRI or Ra):**

An indication of the ability of the lamp to render object colors in a normal, natural way. The higher the number (0-100), the better the color appearance.



Means this lamp meets Federal Minimum Efficiency Standards.

Indicates that this is a lamp with high color rendering, which helps objects and persons illuminated to appear more true to life.

Indicates that this is a reduced wattage option for lamps normally used in this application. Be sure to check wattage, lumens and life to determine which lamp is best suited to your needs.

**Additional Information:**

Typical application and/or other important information.

Bulb	Base	Nominal Length Order		Description	Case Qty.	Rated Life (hours)	Color Lumens Temp.		Warning and Cautions	Additional Information	
		Watts in.	Code				Initial	Mean K CRI			
<b>T8 STARCOAT® LAMPS</b>											
<b>3' T8 ECOLUX® - TCLP COMPLIANT</b>											
T8	Medium BiPin (G13)	25	36	45753 (F25T8/SPX30/ECO)	24	20000	2150	2040	3000	86	

## F 25 T8 / SPX30 / ECO

Identifies as Fluorescent lamp.

Identifies either the lamp's wattage or its length in inches.

Identifies the lamp shape and the bulb diameter in eighths of an inch.


Identifies the lamp finish or color.

Identifies TCLP compliance.

### WHEN YOU DON'T KNOW THE LAMP DESCRIPTION

1. Identify bulb shape by using table on page 4-2.
2. Measure bulb diameter using ruler in Appendix section page A-1 to determine width in eighths of an inch.
3. Identify base type using table on page 4-3.
4. Find your lamp in the table containing the bulb shape, size and base.

## GE T8 ULTRA "ENERGY SAVING PRODUCTS"



energy & ecolux® at work

**ULTRA**  
F32 WATT-MISER®

**REPLACEMENT FOR T8**

F32T8/SP/IS/WM/ECO  
F32T8/XL/SP/WM/ECO

Replace F32T8 lamps with the F32T8/WM. Up to 5% is saved instantly. For greater savings use F28T8/UMX lamps.



energy & ecolux® at work

**ULTRA**  
F28 ULTRAMAX®

**RETROFIT FOR T12**

F28T8/SP/UMX/ECO

Retrofit 4' T12 Systems with the 28W T8 UltraMax®. The ultimate in energy efficiency. Over 40% savings realized.



energy & ecolux® at work

**ULTRA**  
F32 HIGH LUMEN

**NEW CONSTRUCTION**

F32T8/XL/SPX/HL/ECO

De-lamp or use fewer fixtures in new construction. Higher light output means fewer total lamps may be needed to achieve desired footcandle levels. 5-6% higher lumens versus standard T8.



Bulb Base	Nominal Length Order	Watts in.	Code	Description	Case Qty.	Rated Life		Lumens		Color Temp.		Foot-notes	Warning and Cautions	Additional Information
						3hr/ Start	12hr/ Start	Initial	Mean	K	CRI			
<b>T5 STARCOAT ECOLUX® LAMPS</b>														
<b>HIGH EFFICIENCY</b>														
T5 Miniature BiPin (G5)	14	21.6	31590	F14W/T5/830/ECO	40	30000	36000	1350	1240	3000	85	19	101	
			46671	F14W/T5/835/ECO	40	30000	36000	1350	1240	3500	85	19	101	
			46673	F14W/T5/841/ECO	40	30000	36000	1350	1240	4100	85	19	101	
			46674	F14W/T5/850/ECO	40	30000	36000	1300	1190	5000	85	19	101	
			46676	F14W/T5/865/ECO	40	30000	36000	1250	1150	6500	85	19	101	
	21	33.4	46677	F21W/T5/830/ECO	40	30000	36000	2100	1930	3000	85	19	101	
			46684	F21W/T5/835/ECO	40	30000	36000	2100	1930	3500	85	19	101	
			46687	F21W/T5/841/ECO	40	30000	36000	2100	1930	4100	85	19	101	
			46688	F21W/T5/850/ECO	40	30000	36000	2000	1840	5000	85	19	101	
			46689	F21W/T5/865/ECO	40	30000	36000	1950	1790	6500	85	19	101	
	28	45.2	46704	F28W/T5/830/ECO	40	30000	36000	2900	2660	3000	85	19	101	
			46705	F28W/T5/835/ECO	40	30000	36000	2900	2660	3500	85	19	101	
			46706	F28W/T5/841/ECO	40	30000	36000	2900	2660	4100	85	19	101	
			46707	F28W/T5/850/ECO	40	30000	36000	2750	2530	5000	85	19	101	
			46708	F28W/T5/865/ECO	40	30000	36000	2700	2480	6500	85	19	101	
	35	57.1	46724	F35W/T5/830/ECO	40	30000	36000	3650	3350	3000	85	19	101	
			46727	F35W/T5/835/ECO	40	30000	36000	3650	3350	3500	85	19	101	
			46735	F35W/T5/841/ECO	40	30000	36000	3650	3350	4100	85	19	101	
			46742	F35W/T5/850/ECO	40	30000	36000	3500	3220	5000	85	19	101	
			46743	F35W/T5/865/ECO	40	30000	36000	3400	3120	6500	85	19	101	
<b>HIGH OUTPUT</b>														
T5 Miniature BiPin (G5)	24	21.6	46699	F24W/T5/830/ECO	40	30000	36000	2000	1840	3000	85	19	101	
			46700	F24W/T5/835/ECO	40	30000	36000	2000	1840	3500	85	19	101	
			46701	F24W/T5/841/ECO	40	30000	36000	2000	1840	4100	85	19	101	
			46702	F24W/T5/850/ECO	40	30000	36000	1900	1740	5000	85	19	101	
			46703	F24W/T5/865/ECO	40	30000	36000	1900	1740	6500	85	19	101	
	39	33.4	46744	F39W/T5/830/ECO	40	30000	36000	3500	3220	3000	85	19	101	
			46745	F39W/T5/835/ECO	40	30000	36000	3500	3220	3500	85	19	101	
			46746	F39W/T5/841/ECO	40	30000	36000	3500	3220	4100	85	19	101	
			46747	F39W/T5/850/ECO	40	30000	36000	3350	3080	5000	85	19	101	
			46748	F39W/T5/865/ECO	40	30000	36000	3330	3060	6500	85	19	101	
	54	45.2	46759	F54W/T5/830/ECO	40	30000	36000	5000	4600	3000	85	19	101	
			46760	F54W/T5/835/ECO	40	30000	36000	5000	4600	3500	85	19	101	
			46761	F54W/T5/841/ECO	40	30000	36000	5000	4600	4100	85	19	101	
			46762	F54W/T5/850/ECO	40	30000	36000	4800	4410	5000	85	19	101	
			46763	F54W/T5/865/ECO	40	30000	36000	4750	4370	6500	85	19	101	
	49	57.1	46751	F49W/T5/830/ECO	40	30000	36000	4900	4500	3000	85	19	101	
			46752	F49W/T5/835/ECO	40	30000	36000	4900	4500	3500	85	19	101	
			46753	F49W/T5/841/ECO	40	30000	36000	4900	4500	4100	85	19	101	
			46757	F49W/T5/850/ECO	40	30000	36000	4700	4320	5000	85	19	101	
			46758	F49W/T5/865/ECO	40	30000	36000	4650	4270	6500	85	19	101	
	80	57.1	46802	F80W/T5/830/ECO	40	30000	36000	7000	6440	3000	85	19	101	
			46803	F80W/T5/835/ECO	40	30000	36000	7000	6440	3500	85	19	101	
			46804	F80W/T5/841/ECO	40	30000	36000	7000	6440	4100	85	19	101	
			46805	F80W/T5/850/ECO	40	30000	36000	6700	6160	5000	85	19	101	
			46806	F80W/T5/865/ECO	40	30000	36000	6650	6110	6500	85	19	101	



# Fluorescent Lamps

Bulb Base	Nominal Length Order	Watts	in.	Code	Description	Case Qty.	Rated Life	Lumens			Color Temp.		Foot-notes	Warning and		Additional Information	
								Initial	Mean	Temp. K	CRI	Cautions		Additional Information			
<b>T5 PREHEAT LAMPS</b>																	
<b>6" T5</b>																	
T5	Miniature BiPin (G5)	4	6	10004	F4T5/CW	24	5000	135	100	4100	60				101		
				15983	F4T5/CW CARD	10	5000	135	100	4100	60				101		
<b>9" T5</b>																	
T5	Miniature BiPin (G5)	6	9	10032	F6T5/CW	24	5000	295	235	4100	60				101		
				15986	F6T5/CW CARD	10	5000	295	235	4100	60				101		
				10028	F6T5/D	24	5000	230	185	6500	75 <sup>ⓔ</sup>				101		
<b>12" T5</b>																	
T5	Miniature BiPin (G5)	8	12	10059	F8T5/CW	24	5000	400	320	4100	60				101		
				15987	F8T5/CW CARD	10	5000	400	320	4100	60				101		
				10055	F8T5/D	24	5000	330	265	6500	75 <sup>ⓔ</sup>				101		
				10064	F8T5/WW	24	5000	410	330	3000	52				101		
				25425	F8T5/WW/CARD	5	5000	410	330	3000	52				101		
<b>21" T5</b>																	
T5	Miniature BiPin (G5)	13	21	10086	F13T5/CW	24	5000	850	705	4100	60				101		
				49333	F13T5/CW/CD	5	5000	850	705	4100	60				101		
				10089	F13T5/WW	24	5000	870	720	3000	52				101		
				25426	F13T5/WW/CARD	5	5000	870	720	3000	52				101		
Bulb Base	Nominal Length Order	Watts	in.	Code	Description	Case Qty.	Rated Life		Lumens			Color Temp.		Foot-notes	Warning and		Additional Information
							3hr/ Start	12hr/ Start	Initial	Mean	Temp. K	CRI	Cautions		Additional Information		
<b>T8 STARCOAT® LAMPS</b>																	
<b>2' T8 ECOLUX® - TCLP COMPLIANT</b>																	
T8	Medium BiPin (G13)	17	24	45741	F17T8/SP30/ECO	24	20000	24000	1325	1260	3000	78	ⓔ	18		101	
				45743	F17T8/SP35/ECO	24	20000	24000	1325	1260	3500	78	ⓔ	18		101	
				45748	F17T8/SP41/ECO	24	20000	24000	1325	1260	4100	78	ⓔ	18		101	
				45742	F17T8/SPX30/ECO	24	20000	24000	1350	1280	3000	86	ⓔ	18		101	
				45747	F17T8/SPX35/ECO	24	20000	24000	1350	1280	3500	86	ⓔ	18		101	
				45749	F17T8/SPX41/ECO	24	20000	24000	1350	1280	4100	86	ⓔ	18		101	
<b>2' T8 ECOLUX® XL EXTRA-LIFE</b>																	
T8	Medium BiPin (G13)	17	24	15476	F17T8/XL/SP30/ECO	24	24000	29000	1325	1260	3000	78	ⓔ	18		101	
				15479	F17T8/XL/SP35/ECO	24	24000	29000	1325	1260	3500	78	ⓔ	18		101	
				15480	F17T8/XL/SP41/ECO	24	24000	29000	1325	1260	4100	78	ⓔ	18		101	
				15481	F17T8/XL/SPX30/ECO	24	24000	29000	1350	1280	3000	86	ⓔ	18		101	
				15483	F17T8/XL/SPX35/ECO	24	24000	29000	1350	1280	3500	86	ⓔ	18		101	
				15484	F17T8/XL/SPX41/ECO	24	24000	29000	1350	1280	4100	86	ⓔ	18		101	
				10415	F17T8/XL/SPX50/ECO	24	24000	29000	1300	1235	5000	86	ⓔ	18		101	
				16092	F17T8/XL/SPX65/ECO	24	24000	29000	1250	1125	6500	85	ⓔ	18		101	
<b>3' T8 ECOLUX® - TCLP COMPLIANT</b>																	
T8	Medium BiPin (G13)	25	36	45750	F25T8/SP30/ECO	24	20000	24000	2080	1970	3000	78	ⓔ	18		101	
				45754	F25T8/SP35/ECO	24	20000	24000	2080	1970	3500	78	ⓔ	18		101	
				45756	F25T8/SP41/ECO	24	20000	24000	2080	1970	4100	78	ⓔ	18		101	
				45753	F25T8/SPX30/ECO	24	20000	24000	2150	2040	3000	86	ⓔ	18		101	
				45755	F25T8/SPX35/ECO	24	20000	24000	2150	2040	3500	86	ⓔ	18		101	
				45757	F25T8/SPX41/ECO	24	20000	24000	2150	2040	4100	86	ⓔ	18		101	

ⓔ Means this lamp meets Federal Minimum Efficiency Standards.

See [www.gelighting.com](http://www.gelighting.com) e-catalog for the most up-to-date product information. To convert inches to millimeters, multiply by 25.4. All footnote references found at the end of this section. ⚡ Reduced Wattage ⓔ High Color Rendering.



Bulb Base	Nominal Length Order	Watts in.	Code	Description	Case Qty.	Rated Life		Lumens			Color Temp.		Foot- notes	Warning and Cautions	Additional Information
						3hr/ Start	12hr/ Start	Initial	Mean	K	CRI				
<b>T8 STARCOAT® LAMPS (CONTINUED)</b>															
<b>3' T8 ECOLUX® XL EXTRA-LIFE</b>															
T8	Medium BiPin (G13)	25	36	15486	F25T8/XL/SP30/ECO	24	24000	29000	2080	1970	3000	78	⚡	18	101
				15487	F25T8/XL/SP35/ECO	24	24000	29000	2080	1970	3500	78	⚡	18	101
				15488	F25T8/XL/SP41/ECO	24	24000	29000	2080	1970	4100	78	⚡	18	101
				15489	F25T8/XL/SPX30/ECO	24	24000	29000	2150	2040	3000	86	⚡	18	101
				15490	F25T8/XL/SPX35/ECO	24	24000	29000	2150	2040	3500	86	⚡	18	101
				15491	F25T8/XL/SPX41/ECO	24	24000	29000	2150	2040	4100	86	⚡	18	101
				10416	F25T8/XL/SPX50/ECO	24	24000	29000	2050	1950	5000	86	⚡	18	101
				16314	F25T8/XL/SPX65/ECO	24	24000	29000	1950	1755	6500	85	⚡	18	101
<b>4' T8 ECOLUX® - TCLP COMPLIANT</b>															
T8	Medium BiPin (G13)	32	48	26666	F32T8/SP30/ECO	36	20000	24000	2800	2660	3000	78	⚡	18	101
				26667	F32T8/SP35/ECO	36	20000	24000	2800	2660	3500	78	⚡	18	101
				11873	F32T8/SP35/ECO 12PK	12	20000	24000	2800	2660	3500	78	⚡	18	101
				26668	F32T8/SP41/ECO	36	20000	24000	2800	2660	4100	78	⚡	18	101
				16090	F32T8/SP50/ECO	36	20000	24000	2750	2610	5000	78	⚡	18	101
				16091	F32T8/SP65/ECO	36	20000	24000	2700	2565	6500	78	⚡	18	101
				25611	F32T8/SPX30/ECO	36	20000	24000	2950	2800	3000	86	⚡	18	101
				25612	F32T8/SPX35/ECO	36	20000	24000	2950	2800	3500	86	⚡	18	101
				25613	F32T8/SPX41/ECO	36	20000	24000	2950	2800	4100	86	⚡	18	101
				42064	F32T8/SPX50/ECO	36	20000	24000	2800	2660	5000	86	⚡	18	101
<b>4' T8 ECOLUX® XL EXTRA-LIFE</b>															
T8	Medium BiPin (G13)	32	48	27616	F32T8/XL/SP30/ECO	36	24000	29000	2800	2660	3000	78	⚡	18	101
				27617	F32T8/XL/SP35/ECO	36	24000	29000	2800	2660	3500	78	⚡	18	101
				27618	F32T8/XL/SP41/ECO	36	24000	29000	2800	2660	4100	78	⚡	18	101
				27619	F32T8/XL/SPX30/ECO	36	24000	29000	2950	2800	3000	86	⚡	18	101
				27620	F32T8/XL/SPX35/ECO	36	24000	29000	2950	2800	3500	86	⚡	18	101
				27621	F32T8/XL/SPX41/ECO	36	24000	29000	2950	2800	4100	86	⚡	18	101
				16313	F32T8/XL/SPX50/ECO	36	24000	29000	2800	2660	5000	86	⚡	18	101
				16089	F32T8/XL/SPX65/ECO	36	24000	29000	2750	2475	6500	85	⚡	18	101
<b>4' T8 ECOLUX® SUPER LONG LIFE</b>															
T8	Medium BiPin (G13)	32	48	49702	F32T8/SXL/SP30/ECO	36	30000	36000	2850	2675	3000	84	⚡	18	101
				49778	F32T8/SXL/SP35/ECO	36	30000	36000	2850	2675	3500	83	⚡	18	101
				49779	F32T8/SXL/SP41/ECO	36	30000	36000	2850	2675	4100	81	⚡	18	101
<b>ULTRA ENERGY SAVING T8 LAMPS</b>															
<b>4' T8 ECOLUX® WATT-MISER®</b>															
T8	Medium BiPin (G13)	30	48	48277	F32T8/SP30/IS/WM/ECO	36	20000	24000	2850	2675	3000	84	Ⓢ ⚡	1,18	101
				48278	F32T8/SP35/IS/WM/ECO	36	20000	24000	2850	2675	3500	83	Ⓢ ⚡	1,18	101
				48279	F32T8/SP41/IS/WM/ECO	36	20000	24000	2850	2675	4100	81	Ⓢ ⚡	1,18	101
				11791	F32T8/SP50/IS/WM/ECO	36	20000	24000	2750	2585	5000	80	Ⓢ ⚡	1,18	101
<b>4' T8 ECOLUX® WATT-MISER® XL EXTRA-LIFE</b>															
T8	Medium BiPin (G13)	30	48	48521	F32T8/XL/SP30/WM/ECO	36	24000	29000	2800	2625	3000	84	Ⓢ ⚡	1,18	101
				48522	F32T8/XL/SP35/WM/ECO	36	24000	29000	2800	2625	3500	83	Ⓢ ⚡	1,18	101
				48523	F32T8/XL/SP41/WM/ECO	36	24000	29000	2800	2625	4100	81	Ⓢ ⚡	1,18	101
				42553	F32T8/XL/SP50/WM/ECO	36	24000	29000	2700	2540	5000	80	Ⓢ ⚡	1,18	101
<b>4' T8 ECOLUX® ULTRAMAX®</b>															
T8	Medium BiPin (G13)	28	48	00255	F28T8/SP30/UMX/ECO	36	18000	24000	2750	2585	3000	85	Ⓢ ⚡	1,18	101
				00256	F28T8/SP35/UMX/ECO	36	18000	24000	2750	2585	3500	85	Ⓢ ⚡	1,18	101
				00257	F28T8/SP41/UMX/ECO	36	18000	24000	2750	2585	4100	82	Ⓢ ⚡	1,18	101
				42554	F28T8/SP50/UMX/ECO	36	18000	24000	2650	2490	5000	80	Ⓢ ⚡	1,18	101

Ⓢ Means this lamp meets Federal Minimum Efficiency Standards.



# Fluorescent Lamps

Bulb Base	Nominal Length Order	Watts in.	Code	Description	Case Qty.	Rated Life		Lumens			Color Temp.		Foot-notes	Warning and Cautions	Additional Information
						3hr/ start	12hr/ start	Initial	Mean	K	CRI				

## ULTRA ENERGY SAVING T8 LAMPS

### 4' T8 ECOLUX® HIGH LUMEN

T8	Medium Bipin (G13)	32	48	<b>10327</b>	F32T8/XL/SPX30/HL/ECO	36	24000	29000	3100	2915	3000	85	Ⓢ	↘	18	101
				<b>10326</b>	F32T8/XL/SPX35/HL/ECO	36	24000	29000	3100	2915	3500	85	Ⓢ		18	101
				<b>10322</b>	F32T8/XL/SPX41/HL/ECO	36	24000	29000	3100	2915	4100	82	Ⓢ		18	101
				<b>42556</b>	F32T8/XL/SPX50/HL/ECO	36	24000	29000	3000	2820	5000	80	Ⓢ		18	101

### F25T12 ECOLUX® FOR T8 BALLASTS

T12	Medium BiPin (G13)	25	48	<b>80066</b>	F25T12/SP30/ECO	30	15000	20000	2300	2140	3000	70	Ⓢ	↘	18	101
				<b>80067</b>	F25T12/SP35/ECO	30	15000	20000	2300	2140	3500	70	Ⓢ	↘	18	101
				<b>80076</b>	F25T12/SP41/ECO	30	15000	20000	2300	2140	4100	70	Ⓢ	↘	18	101

## 8' T8 LAMPS

### 8' T8

T8	Single Pin (Fa8)	59	96	<b>23407</b>	F96T8/SP30	24	15000	20000	5800	5500	3000	78	Ⓢ			101
				<b>23411</b>	F96T8/SP35	24	15000	20000	5800	5500	3500	78	Ⓢ			101
				<b>23412</b>	F96T8/SP41	24	15000	20000	5800	5500	4100	78	Ⓢ			101
				<b>23414</b>	F96T8/SPX30	24	15000	20000	5950	5650	3000	86	Ⓢ			101
				<b>23415</b>	F96T8/SPX35	24	15000	20000	5950	5650	3500	86	Ⓢ			101
				<b>23416</b>	F96T8/SPX41	24	15000	20000	5950	5650	4100	86	Ⓢ			101
				<b>23575</b>	F96T8/SPX50	24	15000	20000	5950	5650	5000	86	Ⓢ			101

### 8' T8 XL EXTRA-LIFE

T8	Single Pin (Fa8)	59	96	<b>41889</b>	F96T8/XL/SP30	24	24000	29000	5800	5500	3000	78	Ⓢ			101
				<b>41890</b>	F96T8/XL/SP35	24	24000	29000	5800	5500	3500	78	Ⓢ			101
				<b>41891</b>	F96T8/XL/SP41	24	24000	29000	5800	5500	4100	78	Ⓢ			101
				<b>41892</b>	F96T8/XL/SPX30	24	24000	29000	5950	5650	3000	86	Ⓢ			101
				<b>41893</b>	F96T8/XL/SPX35	24	24000	29000	5950	5650	3500	86	Ⓢ			101
				<b>41894</b>	F96T8/XL/SPX41	24	24000	29000	5950	5650	4100	86	Ⓢ			101
				<b>45497</b>	F96T8/XL/SPX50	24	24000	29000	5950	5650	5000	86	Ⓢ			101

### 8' T8 XL EXTRA-LIFE WATT-MISER® ENERGY SAVING LAMPS

T8	Single Pin (Fa8)	57	96	<b>48524</b>	F96T8/XL/SP30/WMM	24	24000	29000	5800	5450	3000	84	Ⓢ	↘	1	101
				<b>48525</b>	F96T8/XL/SP35/WMM	24	24000	29000	5800	5450	3500	83	Ⓢ	↘	1	101
				<b>48526</b>	F96T8/XL/SP41/WMM	24	24000	29000	5800	5450	4100	81	Ⓢ	↘	1	101

### 8' T8 XL EXTRA-LIFE WATT-MISER® PLUS ENERGY SAVING LAMPS

T8	Single Pin (Fa8)	54	96	<b>47072</b>	F96T8/XL/SP30/WMP	24	24000	29000	5800	5450	3000	84	Ⓢ	↘	1	101
				<b>47076</b>	F96T8/XL/SP35/WMP	24	24000	29000	5800	5450	3500	83	Ⓢ	↘	1	101
				<b>47103</b>	F96T8/XL/SP41/WMP	24	24000	29000	5800	5450	4100	81	Ⓢ	↘	1	101

Bulb Base	Nominal Length Order	Watts in.	Code	Description	Case Qty.	Rated Life	Lumens			Color Temp.		Foot-notes	Warning and Cautions	Additional Information
							Initial	Mean	K	CRI				

## 8' T8 HIGH OUTPUT

### 8' T8 HIGH OUTPUT - RECESSED DOUBLE CONTACT

T8	R17d	86	96	<b>12536</b>	F96T8/SP30/HO	24	18000		8000	7600	3000	78	Ⓢ			101
				<b>12537</b>	F96T8/SP35/HO	24	18000		8000	7600	3500	78	Ⓢ			101
				<b>12538</b>	F96T8/SP41/HO	24	18000		8000	7600	4100	78	Ⓢ			101
				<b>12533</b>	F96T8/SPX35/HO	24	18000		8200	7800	3500	86	Ⓢ			101
				<b>12534</b>	F96T8/SPX41/HO	24	18000		8200	7800	4100	86	Ⓢ			101
				<b>12535</b>	F96T8/SPX50/HO	24	18000		8200	7800	5000	86	Ⓢ			101 1

### 8' T8 INSTANT START

T8	Single Pin (Fa8)	50	96	<b>10912</b>	F96T8/CW	24	7500		4050	3730	4100	60				101
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Ⓢ Means this lamp meets Federal Minimum Efficiency Standards.



Bulb Base	Nominal Length	Order Code	Description	Case Qty.	Rated Life	Lumens			Color Temp.		Foot- notes	Warning and Cautions	Additional Information
						Initial	Mean	Temp. K	CRI	Temp. K			
<b>T8 MOD-U-LINE®</b>													
<b>T8 1 5/8" SPACING</b>													
T8	Medium BiPin (G13)	31	22.5	41776	F31T8/SPX30/U	15	20000	2725	2500	3000	82	☺	105
				41777	F31T8/SPX35/U	15	20000	2725	2500	3500	82	☺	105
				41778	F31T8/SPX41/U	15	20000	2725	2500	4100	82	☺	105
<b>T8 6" SPACING</b>													
T8	Medium BiPin (G13)	32	22.5	10479	F32T8/SP30/U/6	12	20000	2700	2565	3000	78	☺	105
				23585	F32T8/SP35/U/6	12	20000	2700	2565	3500	78	☺	105
				10480	F32T8/SP41/U/6	12	20000	2700	2565	4100	78	☺	105
				10483	F32T8/SPX30/U/6	12	20000	2800	2630	3000	86	☺	105
				10485	F32T8/SPX35/U/6	12	20000	2800	2630	3500	86	☺	105
				10488	F32T8/SPX41/U/6	12	20000	2800	2630	4100	86	☺	105
				10489	F32T8/SPX50/U/6	12	20000	2660	2510	5000	86	☺	105
<b>OTHER T8 LENGTHS</b>													
<b>18" T8 W/ STARCOAT®</b>													
T8	Medium BiPin (G13)	15	18	49489	FE15T8/XL/SPX65	24	24000	875	785	6500	85	☺	101 Use with Electronic Ballast Only
<b>5' T8 W/ STARCOAT®</b>													
T8	Medium BiPin (G13)	40	60	15950	F40T8/SP30	24	20000	3600	3420	3000	75	☺	101
				15951	F40T8/SP35	24	20000	3600	3420	3500	75	☺	101
				15952	F40T8/SP41	24	20000	3600	3420	4100	75	☺	101
				22660	F40T8/SPX30	24	20000	3725	3350	3000	84	☺	101
				22661	F40T8/SPX35	24	20000	3725	3350	3500	84	☺	101
				22662	F40T8/SPX41	24	20000	3725	3350	4100	84	☺	101
<b>6' T8 INSTANT START</b>													
T8	Single Pin (Fa8)	35	72	10829	F72T8/CW	24	7500	3000	2730	4100	60		101
				10835	F72T8/WW 6PK	6	7500	3100	2820	3000	52		101 Warm White
<b>T8 POLYLUX®</b>													
<b>2' T8 POLYLUX®</b>													
T8	Medium Bipin (G13)	18	24	93311	F18T8/835PLYXLR	25	20000	1350	1280	3500	85	☺	101
				93317	F18T8/841PLYXLR	25	20000	1350	1280	4100	85	☺	101
<b>4' T8 POLYLUX®</b>													
T8	Medium Bipin (G13)	36	48	19991	F36T8/835PLYXLR	25	20000	3350	3180	3500	85	☺	101
				16856	F36T8/841PLYXLR	25	20000	3350	3180	4100	85	☺	101
<b>6' T8 POLYLUX®</b>													
T8	Medium Bipin (G13)	58	60	40120	F58T8/835PLYXLR	25	20000	5200	4940	3500	85	☺	101
				40081	F58T8/841PLYXLR	25	20000	5200	4940	4000	85	☺	101
<b>7' T8 POLYLUX®</b>													
T8	Medium Bipin (G13)	70	72	39451	F70T8/835PLYXLR	25	20000	6300	5985	3500	85	☺	101
				39452	F70T8/840PLYXLR	25	20000	6300	5985	4000	85	☺	101
<b>T8 PREHEAT</b>													
<b>12" T8</b>													
T8	Medium BiPin (G13)	13	12	10098	F13T8/CW	24	7500	565	480	4100	60		101
<b>15" T8</b>													
T8	Medium BiPin (G13)	14	15	10104	F14T8/CW	24	7500	685	580	4100	60		101
<b>18" T8</b>													
T8	Medium BiPin (G13)	15	18	17911	F15T8/SP35	24	7500	940	850	3500	75	☺	101
				19643	F15T8/SP41	24	7500	940	850	4100	72	☺	101
				19644	F15T8/SPX30	24	7500	1000	900	3000	82	☺	101
				19645	F15T8/SPX35	24	7500	1000	900	3500	82	☺	101
				10142	F15T8/CW	24	7500	825	725	4100	60		101





# Fluorescent Lamps

Bulb Base	Nominal Length Order	Watts in.	Code	Description	Case Qty.	Rated Life	Lumens			Color Temp.		Foot-notes	Warning and Cautions		Additional Information
							Initial	Mean	Temp. K	CRI	Temp. K		CRI	Notes	
<b>T8 PREHEAT (CONTINUED)</b>															
<b>18" T8 (CONTINUED)</b>															
T8	Medium BiPin (G13)	15	18	<b>10143</b>	F15T8/CW 6PK	24	7500	825	725	4100	60	☞	101		
				<b>10134</b>	F15T8/D	24	7500	700	615	6500	75	☞	101	Daylight	
				<b>21326</b>	F15T8/KB 6PK	24	7500	940	850	3000	70	☞	101	Kitchen & Bath	
				<b>13968</b>	F15T8/SUN 6PK	24	7500	620	525	5000	90	☞	101	Sunlight	
				<b>10147</b>	F15T8/WW	24	7500	845	745	3000	52	☞	101	Warm White	
<b>36" T8</b>															
T8	Medium BiPin (G13)	30	36	<b>16323</b>	F30T8/SPX30	24	7500	2300	2140	3000	82	☞	101		
				<b>10316</b>	F30T8/CW 6PK	24	7500	2175	1980	4100	60	☞	101		
				<b>10310</b>	F30T8/D	24	7500	1850	1625	6500	75	☞	101	Daylight	
				<b>22747</b>	F30T8/KB 6PK	24	7500	2125	1910	3000	70	☞	101	Kitchen & Bath	
				<b>10318</b>	F30T8/WW	24	7500	2150	1880	3000	52	☞	101	Warm White	
<b>T12 LAMPS</b>															
<b>3' T12 ECOLUX® - RAPID START</b>															
<b>25W</b>															
T12	Medium BiPin (G13)	25	36	<b>80080</b>	F25T12/SP30/RS/WM/ECO	24	18000	2025	1780	3000	70	☞	101		
				<b>80081</b>	F25T12/SP35/RS/WM/ECO	24	18000	2025	1780	3500	73	☞	101		
				<b>80065</b>	F25T12/CW/RS/WM/ECO	24	18000	1925	1640	4100	60	☞	101		
				<b>80077</b>	F25T12/WW/RS/WM/ECO	24	18000	1975	1680	3000	52	☞	101	Warm White	
<b>30W</b>															
T12	Medium BiPin (G13)	30	36	<b>80087</b>	F30T12/SP35/RS/ECO	24	18000	2350	2120	3500	73	☞	101		
				<b>80088</b>	F30T12/SP41/RS/ECO	24	18000	2350	2120	4100	72	☞	101		
				<b>80089</b>	F30T12/SPX30/RS/ECO	24	18000	2375	2140	3000	82	☞	101		
				<b>80090</b>	F30T12/SPX35/RS/ECO	24	18000	2375	2140	3500	82	☞	101		
				<b>80083</b>	F30T12/C50/RS/ECO	24	18000	1650	1350	5000	90	☞	101	Chroma 50	
				<b>80084</b>	F30T12/CW/RS/ECO	24	18000	2200	1910	4100	60	☞	101		
				<b>80085</b>	F30T12/CW/RS/ECO 6PK	24	18000	2200	1910	4100	60	☞	101		
				<b>80086</b>	F30T12/D/RS/ECO	24	18000	1900	1650	6500	75	☞	101	Daylight	
				<b>80091</b>	F30T12/WW/RS/ECO	24	18000	2275	1980	3000	52	☞	101	Warm White	
<b>4' T12 - RAPID START</b>															
<b>32W WATT-MISER® PLUS</b>															
T12	Medium BiPin (G13)	32	48	<b>14225</b>	F40/SP35/RS/WMP 30PK	30	20000	2650	2400	3500	80	☞ ⚡	1	101	
				<b>14224</b>	F40/SP41/RS/WMP 30PK	30	20000	2650	2400	3500	80	☞ ⚡	1	101	
				<b>14221</b>	F40/CW/RS/WMP 30PK	30	20000	2500	2200	4100	60	☞ ⚡	1	101	
<b>34W WATT-MISER® ECOLUX® - TCLP COMPLIANT</b>															
T12	Medium BiPin (G13)	34	48	<b>23163</b>	F34/SP30/RS/WM/ECO	30	20000	2750	2475	3000	70	☞ ⚡	1	101	
				<b>25401</b>	F34/SP30/RS/WM/ECO/UPC	30	20000	2750	2475	3000	70	☞ ⚡	1	101	
				<b>23165</b>	F34/SP35/RS/WM/ECO	30	20000	2750	2475	3500	73	☞ ⚡	1	101	
				<b>23486</b>	F34/SP35/WM/ECO/C	10	20000	2750	2475	3500	73	☞ ⚡	1	101	
				<b>21858</b>	F34/SP35/RS/WM/ECO/UPC6P	24	20000	2750	2475	3500	73	☞ ⚡	1	101	
				<b>23166</b>	F34/SP41/RS/WM/ECO	30	20000	2750	2475	4100	72	☞ ⚡	1	101	
				<b>25397</b>	F34/SP41/RS/WM/ECO/UPC	30	20000	2750	2475	4100	72	☞ ⚡	1	101	
				<b>41563</b>	F34/SP65/RS/WM/ECO	30	20000	2650	2430	6500	75	☞ ⚡	1	101	
				<b>23157</b>	F34/SPX30/RS/WM/ECO	30	20000	2900	2610	3000	82	☞ ⚡	1	101	
				<b>23158</b>	F34/SPX35/RS/WM/ECO	30	20000	2900	2610	3500	82	☞ ⚡	1	101	
				<b>23159</b>	F34/SPX41/RS/WM/ECO	30	20000	2900	2610	4100	80	☞ ⚡	1	101	
				<b>80095</b>	F34/SPX50/RS/WM/ECO	30	20000	2700	2430	5000	80	☞ ⚡	1	101	
				<b>80092</b>	F34/C50/RS/WM/ECO	30	20000	2000	1720	5000	90	☞ ⚡	1	101	Chroma 50
				<b>23010</b>	F34/CW/RS/WM/ECO	30	20000	2650	2280	4100	60	☞ ⚡	1	101	

☞ Means this lamp meets Federal Minimum Efficiency Standards.

See [www.gelighting.com](http://www.gelighting.com) e-catalog for the most up-to-date product information. To convert inches to millimeters, multiply by 25.4. All footnote references found at the end of this section. ⚡ Reduced Wattage ☞ High Color Rendering.



# Fluorescent Lamps

Bulb Base	Nominal Length Watts in.	Order Code	Description	Case Qty.	Rated Life	Color			Warning						
						Lumens Initial	Temp. Mean K	CRI	Foot-notes	and Cautions	Additional Information				
<b>T12 LAMPS (CONTINUED)</b>															
<b>34W WATT-MISER® ECOLUX® - TCLP COMPLIANT (CONTINUED)</b>															
T12	Medium BiPin (G13)	34	48	25391	F34/CW/RS/WM/ECO/UPC	30	20000	2650	2280	4100	60	Ⓢ	↘	1	101
				23485	F34/CW/RS/WM/ECO/C 10PK	10	20000	2650	2280	4100	60	Ⓢ	↘	1	101
				80093	F34/DX/RS/WM/ECO	30	20000	1950	1620	6500	84	Ⓢ	↘	1	101 Daylight Deluxe
				80094	F34/LW/RS/WM/ECO	30	20000	2825	2430	4200	49	Ⓢ	↘	1	101 Lite White
				45065	F34/WW/RS/WM/ECO	30	20000	2700	2320	3000	52	Ⓢ	↘	1	101 Warm White
				25398	F34/WW/RS/WM/ECO/UPC	30	20000	2700	2320	3000	52	Ⓢ	↘	1	101 Warm White
<b>40W ECOLUX® - TCLP COMPLIANT</b>															
T12	Medium BiPin (G13)	40	48	80099	F40/SP30/ECO	30	20000	3250	2950	3000	70	Ⓢ	↘		101
				80186	F40/SP35/ECO	30	20000	3200	2910	3500	73	Ⓢ	↘		101
				80187	F40/SP41/ECO	30	20000	3200	2910	4100	72	Ⓢ	↘		101
				23382	F40/SP41/ECO/C	10	20000	3200	2910	4100	72	Ⓢ	↘		101
				80188	F40/SP65/ECO	30	20000	3050	2775	6500	75	Ⓢ	↘		101
				25400	F40/SP65/ECO/UPC	30	20000	3050	2775	6500	75	Ⓢ	↘		101
				80189	F40/SPX30/ECO	30	20000	3400	3090	3000	82	Ⓢ	↘		101
				80190	F40/SPX35/ECO	30	20000	3400	3090	3500	82	Ⓢ	↘		101
				80191	F40/SPX41/ECO	30	20000	3350	3050	4100	80	Ⓢ	↘		101
				80199	F40/SPX50/ECO	30	20000	3200	2860	5000	80	Ⓢ	↘		101
				80096	F40/C50/ECO	30	20000	2250	1870	5000	90	Ⓢ	↘		101 Chroma 50
				25399	F40/C50/ECO/UPC	30	20000	2250	1870	5000	90	Ⓢ	↘		101 Chroma 50
				13795	F40/C75 30PK	30	20000	1950	1680	7500	92	Ⓢ	↘		101 Chroma 75, non-TCLP compliant
				13969	F40/D/ULTRA/ECO 6PK	24	20000	3050	2775	6500	75	Ⓢ	↘		101 Daylight
				80097	F40/DX/ECO	30	20000	2250	1910	6500	84	Ⓢ	↘		101 Daylight Deluxe
				40333	F40/KB/ECO 2PK	9	20000	3400	3090	3000	70	Ⓢ	↘		101 Kitchen & Bath
				21323	F40/KB/ECO 6PK	24	20000	3400	3090	3000	70	Ⓢ	↘		101 Kitchen & Bath
				80098	F40/N/ECO	30	20000	2100	1740	3700	90	Ⓢ	↘		101 Natural
				12224	F40/SUN/ECO 6PK	24	20000	2250	1870	5000	90	Ⓢ	↘		101 Sunlight
				14440	F40/RES/ECO/SLV	30	15000	3150	2860	4100	72	Ⓢ	↘		101
				14433	F40/RES/ECO/SLV 6PK	24	15000	3150	2860	4100	72	Ⓢ	↘		101
				14441	F40/RES/ECO TWN 9PK	9	15000	3150	2860	4100	72	Ⓢ	↘		101
<b>40W ECOLUX® XL EXTRA-LIFE</b>															
T12	Medium BiPin (G13)	40	48	80217	F40/XL/SP30/ECO	30	24000	3300	2970	3000	75	Ⓢ	↘		101
				80224	F40/XL/SP35/ECO	30	24000	3300	2970	3500	75	Ⓢ	↘		101
				80227	F40/XL/SP41/ECO	30	24000	3300	2970	4100	73	Ⓢ	↘		101
				80230	F40/XL/SPX30/ECO	30	24000	3400	3060	3000	82	Ⓢ	↘		101
				80248	F40/XL/SPX35/ECO	30	24000	3400	3060	3500	82	Ⓢ	↘		101
				80249	F40/XL/SPX41/ECO	30	24000	3400	3060	4100	80	Ⓢ	↘		101
				80250	F40/XL/SPX50/ECO	30	24000	3350	3050	5000	80	Ⓢ	↘		101
<b>25W ECOLUX® UTILITY SHOPLIGHT</b>															
T12	Medium BiPin (G13)	25	48	14450	F48/25W/UTECO/SLV	30	12000	1860	1675	4100	60			10	101
				14456	F48/25W/UTECO/TWN	9	12000	1860	1675	4100	60			10	101
				14445	F48/25W/UTECO/UPC	30	12000	1860	1675	4100	60			10	101

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# Fluorescent Lamps

Bulb Base	Nominal Length Watts in.	Order Code	Description	Case Qty.	Rated Life	Lumens			Color Temp.		Foot-notes	Warning and Cautions		Additional Information
						Initial	Mean	Final	K	CRI		Notes	Additional Information	
<b>T12 LAMPS (CONTINUED)</b>														
<b>T12 MOD-U-LINE®</b>														
<b>T12 3 5/8" SPACING</b>														
T12 Medium BiPin (G13)	40	22.5	<b>15259</b> F40/SP30/U/3	12	14000	2925	2660	3000	70	Ⓜ	Ⓜ		105	
			<b>14228</b> F40/SP35/U/3	12	14000	2925	2660	3500	73	Ⓜ	Ⓜ		105	
			<b>15260</b> F40/SP41/U/3	12	14000	2925	2660	4100	72	Ⓜ	Ⓜ		105	
			<b>14814</b> F40/SPX30/U/3	12	14000	3000	2730	3000	82	Ⓜ	Ⓜ		105	
			<b>14813</b> F40/SPX35/U/3	12	14000	3000	2730	3500	82	Ⓜ	Ⓜ		105	
			<b>14649</b> F40/SCW/U/3	12	14000	2725	2400	4100	75	Ⓜ	Ⓜ		105	Super Cool White
<b>T12 6" SPACING</b>														
T12 Medium BiPin (G13)	40	22.5	<b>15263</b> F40/SP30/U/6	12	14000	3050	2780	3000	70	Ⓜ	Ⓜ		105	
			<b>14227</b> F40/SP35/U/6	12	14000	3050	2780	3500	73	Ⓜ	Ⓜ		105	
			<b>22050</b> F40/SP35/U/6/UPC	12	14000	3050	2780	3500	73	Ⓜ	Ⓜ		105	
			<b>15265</b> F40/SP41/U/6	12	14000	3050	2780	4100	72	Ⓜ	Ⓜ		105	
			<b>14816</b> F40/SPX30/U/6	12	14000	3100	2820	3000	82	Ⓜ	Ⓜ		105	
			<b>14648</b> F40/SCW/U/6	12	14000	2800	2460	4100	75	Ⓜ	Ⓜ		105	Super Cool White
			<b>25374</b> F40/SCW/U6/UPC 6PK	6	14000	2800	2460	4100	75	Ⓜ	Ⓜ		105	Super Cool White
			<b>14815</b> F40/SPX35/U/6	12	14000	3100	2820	3500	82	Ⓜ	Ⓜ		105	
			<b>14632</b> F40/SWW/U/6	12	14000	2800	2460	3000	75	Ⓜ	Ⓜ		105	Super Warm White
<b>WATT-MISER® ENERGY SAVING LAMPS</b>														
<b>T12 3 5/8" SPACING WATT-MISER®</b>														
T12 Medium BiPin (G13)	35	22.5	<b>12199</b> F35/CW/U/3/WM	12	14000	2200	2050	4100	60	Ⓜ	Ⓜ	1	105	
			<b>12200</b> F35/WW/U/3/WM	12	14000	2300	2100	3000	52	Ⓜ	Ⓜ	1	105	Warm White
<b>T12 6" SPACING WATT-MISER®</b>														
T12 Medium BiPin (G13)	35	22.5	<b>12203</b> F35/CW/U/6/WM	12	14000	2300	2100	4100	60	Ⓜ	Ⓜ	1	105	
			<b>14471</b> F35/CW/U/6/WM/UPC	12	14000	2300	2100	4100	60	Ⓜ	Ⓜ	1	105	
			<b>23383</b> F35/CW/U6/WM/C	6	14000	2300	2100	4100	60	Ⓜ	Ⓜ	1	105	
			<b>12207</b> F35/WW/U/6/WM	12	14000	2350	2150	3000	52	Ⓜ	Ⓜ	1	105	Warm White
<b>T12 6" SPACING WATT-MISER® ECOLUX®</b>														
T12 Medium BiPin (G13)	34	22.5	<b>15622</b> F34/CW/U/6/WM/ECO	12	18000	2600	2235	4200	62	Ⓜ	Ⓜ	1	105	
<b>T12 INSTANT START</b>														
T12 Single Pin (Fa8)	20	24	<b>10691</b> F24T12/CW	24	7500	1050	900	4100	60				101	
	30	36	<b>10709</b> F36T12/CW	24	7500	2000	1800	4100	60				101	
	35	42	<b>10735</b> F42T12/CW	24	7500	2400	2210	4100	60				101	
	40	48	<b>15262</b> F48T12/SP35	24	9000	3000	2820	3500	73	Ⓜ	Ⓜ		101	
			<b>15088</b> F48T12/SPX30	24	9000	3050	2870	3000	82	Ⓜ	Ⓜ		101	
			<b>15116</b> F48T12/SPX35	24	9000	3050	2870	3500	82	Ⓜ	Ⓜ		101	
			<b>10748</b> F48T12/CW	24	9000	2875	2650	4100	60				101	
			<b>20461</b> F48T12/CW/UPC 6PK	24	9000	2875	2650	4100	60				101	
<b>WATT-MISER® ENERGY SAVING LAMPS</b>														
T12 Single Pin (Fa8)	30	48	<b>14319</b> F48T12/SP35/WM	24	9000	2575	2420	3500	73	Ⓜ	Ⓜ	1	101	
			<b>13048</b> F48T12/SP41/WM	24	9000	2575	2420	4100	72	Ⓜ	Ⓜ	1	101	
			<b>44967</b> F48T12/CW/WM	24	9000	2475	2400	2210	60	Ⓜ	Ⓜ	1	101	
<b>8' T12 INSTANT START</b>														
<b>8' INSTANT START STANDARD</b>														
T12 Single Pin (Fa8)	75	96	<b>15357</b> F96T12/SP30 15PK	15	12000	6500	6110	3000	70	Ⓜ	Ⓜ		101	
			<b>14067</b> F96T12/SP35 15PK	15	12000	6500	6110	3500	73	Ⓜ	Ⓜ		101	
			<b>15358</b> F96T12/SP41 15PK	15	12000	6500	6110	4100	72	Ⓜ	Ⓜ		101	
			<b>12127</b> F96T12/SP65	15	12000	6125	5760	6500	75	Ⓜ	Ⓜ		101	
			<b>15110</b> F96T12/SPX30 15PK	15	12000	6800	6390	3000	82	Ⓜ	Ⓜ		101	

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# Fluorescent Lamps

Bulb Base	Nominal Length Order		Description	Case Qty.	Rated Life	Lumens			Color Temp.		Foot- notes	Warning and Cautions	Additional Information
	Watts	in.				Code	Initial	Mean	K	CRI			
<b>T12 LAMPS (CONTINUED)</b>													
<b>8' T12 INSTANT START (CONTINUED)</b>													
<b>8' INSTANT START STANDARD (CONTINUED)</b>													
T12	Single Pin (Fa8)	75	96	15101	F96T12/SPX35 15PK	15	12000	6800	6390	3500	82	Ⓢ	101
				15335	F96T12/SPX41 15PK	15	12000	6800	6390	4100	80	Ⓢ	101
				23466	F96T12/SPX50 15PK	15	12000	6250	5880	5000	80	Ⓢ	101
				14652	F96T12/DX	15	12000	4500	4050	6500	84	Ⓢ	101 Daylight Deluxe
				13725	F96T12/N 15PK	15	12000	4250	3740	3700	90	Ⓢ	101 Natural
				13752	F96T12/C50	15	12000	4600	4050	5000	90	Ⓢ	101 Chroma 50
				25387	F96T12/C50/UPC	15	12000	4600	4050	5000	90	Ⓢ	101 Chroma 50
<b>8' INSTANT START XL EXTRA-LIFE</b>													
T12	Single Pin (Fa8)	75	96	23576	F96T12/XL/SP35	15	15000	6700	6180	3500	75	Ⓢ	101
				11661	F96T12/XL/SP41	15	15000	6700	6180	4100	73	Ⓢ	101
				11664	F96T12/XL/SPX41	15	15000	6900	6370	4100	80	Ⓢ	101
				11665	F96T12/XL/SPX50	15	15000	6425	5930	5000	80	Ⓢ	101
<b>WATT-MISER® ENERGY SAVING LAMPS</b>													
<b>8' INSTANT START WATT-MISER®</b>													
T12	Single Pin (Fa8)	60	96	14201	F96T12/SP30/WM 15PK	15	12000	5700	5360	3000	70	Ⓢ ⚡	101
				13849	F96T12/SP35/WM 15PK	15	12000	5700	5360	3500	73	Ⓢ ⚡	101
				21856	F96T12/SP35/WM/UPC	15	12000	5700	5360	3500	73	Ⓢ ⚡	101
				11217	F96T12/SP35/WM/C 10PK	10	12000	5700	5360	3500	73	Ⓢ ⚡	101
				13758	F96T12/SP41/WM 15PK	15	12000	5700	5360	4100	72	Ⓢ ⚡	101
				25395	F96T12/SP41/WM/UPC	15	12000	5700	5360	4100	72	Ⓢ ⚡	101
				25171	F96T12/UTCW/EE/C	10	12000	5500	5060	4100	60	Ⓢ ⚡	101
				12128	F96T12/SP65/WM	15	12000	5100	4800	6500	75	Ⓢ ⚡	101
				14629	F96T12/SPX30/WM 15PK	15	12000	6000	5640	3000	82	Ⓢ ⚡	101
				14630	F96T12/SPX35/WM 15PK	15	12000	6000	5640	3500	82	Ⓢ ⚡	101
				13756	F96T12/C50/WM 15PK	15	12000	4000	3520	5000	90	Ⓢ ⚡	101 Chroma 50
				13729	F96T12/CW/WM 15PK	15	12000	5500	5060	4100	60	Ⓢ ⚡	101
				21713	F96T12/CW/WM/UPC 10PK	10	12000	5500	5060	4100	60	Ⓢ ⚡	101
				13742	F96T12/LW/WM 15PK	15	12000	5800	5340	4200	49	Ⓢ ⚡	101 Lite White
				13736	F96T12/WW/WM 15PK	15	12000	5700	5240	3000	52	Ⓢ ⚡	101 Warm White
<b>8' INSTANT START WATT-MISER® XL EXTRA-LIFE</b>													
T12	Single Pin (Fa8)	60	96	12406	F96T12/XL/SP35/WM	15	15000	5900	5480	3500	75	Ⓢ ⚡	101
				12408	F96T12/XL/SP41/WM	15	15000	5900	5480	4100	73	Ⓢ ⚡	101
<b>8' INSTANT START WATT-MISER® ECOLUX®</b>													
T12	Single Pin (Fa8)	60	96	27233	F96T12/SP35/WM/ECO	15	12000	5700	5360	3500	73	Ⓢ ⚡	101
				27235	F96T12/SP41/WM/ECO	15	12000	5700	5360	4100	72	Ⓢ ⚡	101
				40373	F96T12/SP65/WM/ECO	15	12000	5100	4800	6500	75	Ⓢ ⚡	101
				27237	F96T12/SPX30/WM/ECO	15	12000	6000	5640	3000	82	Ⓢ ⚡	101
				27238	F96T12/SPX35/WM/ECO	15	12000	6000	5640	3500	82	Ⓢ ⚡	101
				27186	F96T12/CW/WM/ECO	15	12000	5500	5060	4100	60	Ⓢ ⚡	101
<b>T12 OTHER LENGTHS</b>													
<b>5' T12 INSTANT START</b>													
T12	Single Pin (Fa8)	50	60	23073	F60T12/CW 15PK	15	12000	3600	3310	4100	60		101
				23076	F60T12/D 15PK	15	12000	3000	2760	6500	75	Ⓢ	101 Daylight
<b>64" T12 INSTANT START</b>													
T12	Single Pin (Fa8)	50	64	23082	F64T12/CW15PK	15	10000	3850	3540	4100	60		101
				23085	F64T12/D 15PK	15	10000	3300	3040	6500	75	Ⓢ	101 Daylight

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# Fluorescent Lamps

Bulb Base	Nominal Length Order	Watts in.	Code	Description	Case Qty.	Rated Life	Lumens Initial	Lumens Mean	Color Temp. K	CRI	Foot-notes	Warning and Cautions	Additional Information
<b>T12 LAMPS (CONTINUED)</b>													
<b>T12 OTHER LENGTHS (CONTINUED)</b>													
<b>6' T12 INSTANT START®</b>													
T12	Single Pin (Fa8)	55	72	15286	F72T12/SP35 15PK	15	12000	4700	4420	3500	73	☞	101
				15097	F72T12/SP41	15	12000	4700	4420	4100	72	☞	101
				15117	F72T12SPX30 15PK	15	12000	4800	4510	3000	82	☞	101
				15098	F72T12/SPX35 15PK	15	12000	4800	4510	3500	82	☞	101
				13743	F72T12/CW 15PK	15	12000	4500	4140	4100	60		101
				23385	F72T12/CW/C	10	12000	4500	4140	4100	60		101
				12525	F72T12/CW/UPC 10PK	10	12000	4500	4140	4100	60		101
				13748	F72T12/D 15PK	15	12000	3800	3500	6500	75	☞	101 Daylight
<b>7' T12 INSTANT START®</b>													
T12	Single Pin (Fa8)	65	84	13764	F84T12/CW 15PK	15	12000	5300	4880	4100	60		101
<b>T12 HIGH OUTPUT (800mA) RAPID START RECESSED DOUBLE CONTACT</b>													
<b>18" HIGH OUTPUT</b>													
T12	R17d	30	18	10204	F18T12/CW/HO	24	9000	1000	750	4100	60		101
<b>2' HIGH OUTPUT</b>													
T12	R17d	35	24	10261	F24T12/CW/HO	24	9000	1620	1345	4100	60		101
				10275	F24T12/D/HO	24	9000	1400	1160	6500	74	☞	101 Daylight
<b>30" HIGH OUTPUT</b>													
T12	R17d	40	30	33707	F30T12/CW/HO	24	9000	2250	1950	4100	60		101
<b>3' HIGH OUTPUT</b>													
T12	R17d	45	36	10374	F36T12/CW/HO	24	9000	2800	2440	4100	60		101
				10380	F36T12/D/HO	24	9000	2350	2040	6500	75	☞	101
				10388	F36T12/SGN/HO	24	9000	2150	1830	5400	82	☞	101
<b>42" HIGH OUTPUT</b>													
T12	R17d	55	42	10559	F42T12/CW/HO	24	9000	3200	2790	4100	60		101
				10560	F42T12/D/HO	24	9000	2900	2520	6500	74	☞	101 Daylight
				10562	F42T12/SGN/HO	24	9000	2600	2215	5400	82	☞	101 Sign White
<b>4' HIGH OUTPUT</b>													
T12	R17d	60	48	15359	F48T12/SP30/HO	24	12000	4250	3830	3000	70	☞	101
				15360	F48T12/SP35/HO	24	12000	4250	3830	3500	73	☞	101
				15361	F48T12/SP41/HO	24	12000	4250	3830	4100	72	☞	101
				15115	F48T12/SPX35/HO	24	12000	4350	3920	3500	82	☞	101
				10773	F48T12/CW/HO	24	12000	3825	3320	4100	60		101
				27313	F48T12/CW/HO/UPC	24	12000	3825	3320	4100	60	☞	101
				10778	F48T12/D/HO	24	12000	3400	2960	6500	75	☞	101 Daylight
				10573	F48T12/SGN/HO	24	12000	3100	2640	5400	80		101 Sign White
<b>4' HIGH OUTPUT WATT-MISER® ENERGY SAVING LAMPS</b>													
T12	R17d	55	48	15342	F48T12/SP35/HO/WM	24	12000	3850	3465	3500	73	☞ ⚡ 1	101
				11179	F48T12/LW/HO/WM	24	12000	3900	3390	4200	49	⚡ 1	101 Lite White
<b>5' HIGH OUTPUT</b>													
T12	R17d	75	60	23075	F60T12/CW/HO 15PK	15	12000	5150	4480	4100	60		101
				23077	F60T12/D/HO 15PK	15	12000	4400	3830	6500	75	☞	101 Daylight
				23081	F60T12/SGN/HO 15PK	15	12000	4000	3400	5400	82	☞	101 Sign White
<b>64" HIGH OUTPUT</b>													
T12	R17d	80	64	23083	F64T12/CW/HO 15PK	15	12000	5600	4870	4100	60		101
				23087	F64T12/D/HO 15PK	15	12000	4750	4130	6500	75	☞	101 Daylight
				23089	F64T12/SGN/HO15PK	15	12000	4300	3660	5400	82	☞	101 Sign White



# Fluorescent Lamps

Bulb Base	Nominal Length Order		Description	Case Qty.	Rated Life	Lumens			Color Temp.		Foot- notes	Warning and Cautions		Additional Information		
	Watts	in.				Code	Initial	Mean	K	CRI		Temp.	Temp.			
<b>T12 LAMPS (CONTINUED)</b>																
<b>T12 HIGH OUTPUT (800mA) RAPID START RECESSED DOUBLE CONTACT (CONTINUED)</b>																
<b>6' HIGH OUTPUT</b>																
T12 R17d	85	72	15343	F72T12/SP30/HO 15PK	15	12000	6650	5990	3000	70	☉		101			
			15347	F72T12/SP35/HO 15PK	15	12000	6650	5990	3500	73	☉		101			
			15348	F72T12/SP41/HO 15PK	15	12000	6650	5990	4100	72	☉		101			
			15137	F72T12/SPX30/HO 15PK	15	12000	6800	6120	3000	82	☉		101			
			15351	F72T12/SPX35/HO 15PK	15	12000	6800	6120	3500	82	☉		101			
			13697	F72T12/CW/HO 15PK	15	12000	6350	5520	4100	60			101			
			13699	F72T12/D/HO 15PK	15	12000	5350	4650	6500	75	☉		101	Daylight		
			12527	F72T12/N/HO	10	12000	4300	3610	3700	90	☉		101	Natural		
			13701	F72T12/SGN/HO 15PK	15	12000	4900	4170	5400	82	☉		101	Sign White		
			13702	F72T12/WW/HO 15PK	15	12000	6550	5700	3000	52			101	Warm White		
<b>7' HIGH OUTPUT</b>																
T12 R17d	100	84	13766	F84T12/CW/HO 15PK	15	12000	7700	6700	4100	60			101			
			13767	F84T12/D/HO 15PK	15	12000	6500	5660	6500	75	☉		101	Daylight		
			13768	F84T12/SGN/HO 15PK	15	12000	6000	5100	5400	82	☉		101	Sign White		
<b>8' HIGH OUTPUT</b>																
T12 R17d	110	96	15362	F96T12/SP30/HO 15PK	15	12000	9200	8280	3000	70	☉ ☉		101			
			15363	F96T12/SP35/HO 15PK	15	12000	9200	8280	3500	73	☉ ☉		101			
			15364	F96T12/SP41/HO 15PK	15	12000	9200	8280	4100	72	☉ ☉		101			
			12130	F96T12/SP65/HO	15	12000	8900	8010	6500	75	☉ ☉		101			
			15119	F96T12/SPX30/HO 15PK	15	12000	9350	8420	3000	82	☉ ☉		101			
			15352	F96T12/SPX35/HO 15PK	15	12000	9350	8420	3500	82	☉ ☉		101			
			23070	F96T12/SPX41/HO 15PK	15	12000	9350	8420	4100	80	☉ ☉		101			
			13707	F96T12/C50/HO 15PK	15	12000	6750	5670	5000	90	☉		101	Chroma 50		
			14653	F96T12/DX/HO	15	12000	6600	5610	6500	84	☉		101	Daylight Deluxe		
			13709	F96T12/N/HO 15PK	15	12000	6200	5210	3700	90	☉		101	Natural		
<b>8' HIGH OUTPUT WATT-MISER® ENERGY SAVING LAMPS</b>																
T12 R17d	95	96	14069	F96T12/SP35/HO/WM	15	12000	8350	7520	3500	73	☉ ☉ ⚡	1	101			
			13721	F96T12/SP41/HO/WM 15PK	15	12000	8350	7520	4100	72	☉ ☉ ⚡	1	101			
			12131	F96T12/SP65/HO/WM	15	12000	7700	6930	6500	75	☉ ☉ ⚡	1	101			
			15120	F96T12/SPX30/HO/WM	15	12000	8500	7650	3000	82	☉ ☉ ⚡	1	101			
			15122	F96T12/SPX35/HO/WM	15	12000	8500	7650	3500	82	☉ ☉ ⚡	1	101			
			23069	F96T12/SPX41/HO/WM	15	12000	8500	7650	4100	80	☉ ☉ ⚡	1	101			
			13716	F96T12/CW/HO/WM 15PK	15	12000	8000	6960	4100	60	☉		1	101		
			21714	F96T12/CW/HO/WM/UPC	15	12000	8000	6960	4100	60	☉		1	101		
			13720	F96T12/LW/HO/WM	15	12000	8500	7900	4200	49	☉ ⚡	1	101	Lite White		
			13719	F96T12/WW/HO/WM 15PK	15	12000	8200	7130	3000	52	☉ ⚡	1	101	Warm White		
<b>8' HIGH OUTPUT WATT-MISER ECOLUX®</b>																
T12 R17d	95	96	16495	F96T12/CW/HO/WM/ECO	15	12000	8000	6480	4100	60	☉ ☉ ⚡	1	101			
<b>T12 VERY HIGH OUTPUT (1500mA) RECESSED DOUBLE CONTACT</b>																
T12 R17d	110	48	10751	F48T12/CW/1500	24	10000	6200	4030	4100	60		4	101			
			165	72	13760	F72T12/CW/1500 15PK	15	10000	9000	6300	4100	60		4	101	
			185	96	13789	F96T12/CW/1500/WM 15PK	15	9000	12500	9380	4100	60	⚡	4	101	
					13790	F96T12/LW/1500/WM 15PK	15	9000	13250	9940	4200	49	⚡	4	101	Lite White
			215	96	13781	F96T12/CW/1500 15PK	15	10000	13500	10125	4100	60		4	101	
					13783	F96T12/D/1500 15PK	15	10000	11500	8630	6500	74	☉	4	101	Daylight
13785	F96T12/WW/1500 15PK	15	10000	14000	10500	3000	52		4	101						

☉ Means this lamp meets Federal Minimum Efficiency Standards.

See [www.gelighting.com](http://www.gelighting.com) e-catalog for the most up-to-date product information. To convert inches to millimeters, multiply by 25.4. All footnote references found at the end of this section. ⚡ Reduced Wattage ☉ High Color Rendering.



# Fluorescent Lamps

Bulb Base	Nominal Length Order	Watts in.	Code	Description	Case Qty.	Rated Life	Lumens			Color Temp.		Foot-notes	Warning and Cautions		Additional Information
							Initial	Mean	Final	K	CRI		Notes	Caution	
<b>T12 LAMPS (CONTINUED)</b>															
<b>T12 PREHEAT</b>															
<b>15"</b>															
T12	Medium BiPin (G13)	14	15	10116	F14T12/CW	24	9000	650	550	4100	60		101	Preheat	
				10117	F14T12/CW 6PK	24	9000	650	550	4100	60		101	Preheat	
				22979	F14T12/KB 6PK	24	9000	700	650	3000	70	☞	104	Preheat, Kitchen & Bath	
<b>18"</b>															
T12	Medium BiPin (G13)	15	18	10183	F15T12/CW 6PK	24	9000	760	685	4100	60		10	Preheat	
				22745	F15T12/KB 6PK	24	9000	785	730	3000	70	☞	104	Preheat, Kitchen & Bath	
				10185	F15T12/WW	24	9000	780	700	3000	52		101	Preheat	
<b>24"</b>															
T12	Medium BiPin (G13)	20	24	14423	F20T12/SP35	24	9000	1275	1200	3500	73	☞	101	Preheat	
				15353	F20T12/SP41	24	9000	1275	1200	4100	72	☞	101	Preheat	
				15354	F20T12/SPX35	24	9000	1300	1220	3500	82	☞	101	Preheat	
				38114	F20T12/C50	24	9000	875	790	5000	90	☞	101	Preheat, Chroma 50	
				10213	F20T12/CW	24	9000	1200	1150	4100	60		101	Preheat	
				10214	F20T12/CW 6PK	24	9000	1200	1150	4100	60		101	Preheat	
				10205	F20T12/D	24	9000	1025	945	6500	75	☞	101	Preheat, Daylight	
				25575	F20T12/D/UPC	24	9000	1025	945	6500	75	☞	101	Preheat, Daylight	
				21325	F20T12/KB 6PK	24	9000	1275	1200	3000	70	☞	104	Preheat, Kitchen & Bath	
				14419	F20T12/SUN 6PK	24	9000	875	790	5000	90	☞	101	Preheat, Sunlight	
				10217	F20T12/WW	24	9000	1250	1150	3000	52		101	Preheat, Warm White	
				25577	F20T12/WW-UPC	24	9000	1250	1150	3000	52		101	Preheat, Warm White	
<b>OTHER DIAMETERS</b>															
<b>T6 INSTANT START</b>															
T6	Single Pin (Fa8)	25	42	12221	F42T6/SP35	24	7500	1830	1700	3500	73	☞	101		
				10720	F42T6/CW	24	7500	1750	1580	4100	60		101		
				10721	F42T6/WW	24	7500	1825	1640	3000	52		101	Warm White	
		40	64	12223	F64T6/SP35	24	7500	2930	2720	3500	73	☞	101		
				10805	F64T6/CW	24	7500	2800	2520	4100	60		101		
				10807	F64T6/WW	24	7500	2900	2610	3000	52		101	Warm White	
<b>T17 INSTANT START</b>															
T17	Mogul BiPin (G20)	40	60	10575	F40T17/CW/IS	12	7500	2850	2620	4100	60	3	101	Use only w/ instant start ballasts	
<b>T17 PREHEAT</b>															
T17	Mogul BiPin (G20)	82	60	43443	F90T17/CW/WM	12	9000	5750	5060	4100	60	⚡ 4	101		
		90	60	10643	F90T17/CW	12	9000	6000	5280	4100	60	4	101		
<b>PG17 POWER GROOVE RECESSED DOUBLE CONTACT (1500mA)</b>															
PG17	R17d	185	96	42666	F96PG17/CW/WM	8	12000	12700	9900	4100	60	⚡ 4	101		
		215	96	11009	F96PG17/CW	8	10000	14000	10915	4100	60	4	101		
				11018	F96PG17/D	8	10000	12100	9440	6500	74	☞ 4	101	Daylight	
<b>T9 CIRCLINE® LAMPS</b>															
T9	4 Pin (G10q)	20	6.5	42732	FC6T9/CW	12	12000	800	560	4100	60		101		
		22	8.25	33774	FC8T9/CW	12	12000	1100	825	4100	60		101		
				11026	FC8T9/D	12	12000	925	690	6500	75	☞	101	Daylight	
				11084	FC8T9/KB	6	12000	1400	1120	3000	82	☞	104	Kitchen & Bath	
		32	12	33890	FC12T9/CW	12	12000	1950	1460	4100	60		101		
				11039	FC12T9/D	12	12000	1675	1260	6500	75	☞	101	Daylight	
				11085	FC12T9/KB	6	12000	2400	1920	3000	82	☞	104	Kitchen & Bath	
		40	16	33893	FC16T9/CW	12	12000	2700	2030	4100	60		101		
				11052	FC16T9/D	12	12000	2250	1690	6500	75	☞	101	Daylight	



Bulb Base	Nominal Length Order		Description	Case Qty.	Rated Life	Lumens			Color Temp.		Warning			
	Watts	in.				Initial	Mean	K	CRI	Foot- notes	and Cautions	Additional Information		
<b>SPECIAL APPLICATION LAMPS</b>														
<b>COVRGUARD® SHATTER PROTECTED</b>														
<b>T5</b>														
<i>T5 HIGH EFFICIENCY</i>														
T5 Miniature BiPin (G5)	28	45.2	81546	F28T5/830ECO/CVG	40	20000	2840	2670	3000	85	☞	11,13 103		
			81547	F28T5/835ECO/CVG	40	20000	2840	2670	3500	85	☞	11,13 103		
			81548	F28T5/841ECO/CVG	40	20000	2840	2670	4100	85	☞	11,13 103		
			81549	F28T5/850ECO/CVG	40	20000	2840	2670	5000	85	☞	11,13 103		
			81550	F28T5/865ECO/CVG	40	20000	2840	2670	6500	85	☞	11,13 103		
<i>T5 HIGH OUTPUT</i>														
T5 Miniature BiPin (G5)	54	45.2	48433	F54T5/830ECO/HO/CVG	40	30000	4850	4560	3000	85	☞	11,13 103		
			48436	F54T5/835ECO/HO/CVG	40	30000	4850	4560	3500	85	☞	11,13 103		
			48458	F54T5/841ECO/HO/CVG	40	30000	4850	4560	4100	85	☞	11,13 103		
			80311	F54T5/850ECO/HO/CVG	40	30000	4650	4560	5000	85	☞	11,13 103		
			48469	F54T5/865ECO/HO/CVG	40	30000	4600	4320	6500	85	☞	11,13 103		
<i>T5 PREHEAT LAMPS</i>														
T5 Miniature BiPin (G5)	4	6	41435	F4T5/CW/CVG	24	5000	130	95	4100	60		11,13 103		
			6	9	41106	F6T5/CW/CVG	24	5000	285	225	4100	60		11,13 103
			8	12	41107	F8T5/CW/CVG	24	5000	385	310	4100	60		11,13 103
			13	21	41108	F13T5/CW/CVG	24	5000	820	680	4100	60		11,13 103
<b>T6</b>														
<i>T6 INSTANT START LAMPS</i>														
T6 Single Pin (Fa8)	25	42	41140	F42T6/CW/CVG	24	7500	1690	1530	4100	60		11,13 103		
			41142	F42T6/SP35/CVG	24	7500	1770	1640	3500	73	☞	11,13 103		
			41141	F42T6/WW/CVG	24	7500	1770	1590	3000	52		11,13 103 Warm White		
	40	64	46422	F64T6/CW/CVG	24	7500	2710	2440	4100	60		11,13 103		
			41143	F64T6/SP35/CVG	24	7500	2840	2630	3500	73	☞	11,13 103		
<b>T8 ECOLUX® W/ STARCOAT</b>														
<i>2' T8 ECOLUX® W/ STARCOAT</i>														
T8 Medium BiPin (G13)	17	24	47417	F17T8/SP30/ECO/CVG	24	20000	1280	1220	3000	78	☞	11,13,18 103		
			15974	F17T8/SP35/ECO/CVG	24	20000	1280	1220	3500	78	☞	11,13,18 103		
			15877	F17T8/SP41/ECO/CVG	24	20000	1280	1220	4100	78	☞	11,13,18 103		
			15975	F17T8/SPX35/ECO/CVG	24	20000	1310	1242	3500	86	☞	11,13,18 103		
			15976	F17T8/SPX41/ECO/CVG	24	20000	1310	1242	4100	86	☞	11,13,18 103		
<i>3' T8 ECOLUX® W/ STARCOAT</i>														
T8 Medium BiPin (G13)	25	36	15978	F25T8/SP30/ECO/CVG	24	20000	2020	1920	3000	78	☞	11,13,18 103		
			15981	F25T8/SP35/ECO/CVG	24	20000	2020	1920	3500	78	☞	11,13,18 103		
			15984	F25T8/SP41/ECO/CVG	24	20000	2020	1920	4100	78	☞	11,13,18 103		
			15989	F25T8/SPX30/ECOCVG	24	20000	2080	1970	3000	86	☞	11,13,18 103		
			15990	F25T8/SPX35/ECOCVG	24	20000	2080	1970	3500	86	☞	11,13,18 103		
			15991	F25T8/SPX41/ECOCVG	24	20000	2080	1970	4100	86	☞	11,13,18 103		

Ⓢ Means this lamp meets Federal Minimum Efficiency Standards.





# Fluorescent Lamps

Bulb Base	Nominal Length Order	Watts in.	Code	Description	Case Qty.	Rated Life	Lumens			Color Temp.		Foot-notes	Warning and Cautions	Additional Information
							Initial	Mean	Final	K	CRI			
<b>SPECIAL APPLICATION LAMPS (CONTINUED)</b>														
<b>COVARGUARD® SHATTER PROTECTED (CONTINUED)</b>														
<b>T8 ECOLUX® W/ STARCOAT® (CONTINUED)</b>														
<b>4' T8 (48") ECOLUX® W/ STARCOAT®</b>														
T8	Medium BiPin (G13)	32	48	40803	F32T8/SP30/ECO/CVG	36	20000	2715	2580	3000	78	Ⓢ	1,13,18	103
				40804	F32T8/SP35/ECO/CVG	36	20000	2715	2580	3500	78	Ⓢ	1,13,18	103
				40812	F32T8/SP41/ECO/CVG	36	20000	2715	2580	4100	78	Ⓢ	1,13,18	103
				18366	F32T8/SP50/ECO/CVG	36	20000	2665	2530	5000	78	Ⓢ	1,13,18	103
				18368	F32T8/SP65/ECO/CVG	36	20000	2620	2490	6500	78	Ⓢ	1,13,18	103
				41125	F32T8/SPX30/ECO/CVG	36	20000	2860	2710	3000	86	Ⓢ	1,13,18	103
				41126	F32T8/SPX35/ECO/CVG	36	20000	2860	2710	3500	86	Ⓢ	1,13,18	103
				41127	F32T8/SPX41/ECO/CVG	36	20000	2860	2710	4100	86	Ⓢ	1,13,18	103
				15971	F32T8/SPX50/ECO/CVG	36	20000	2715	2580	5000	86	Ⓢ	1,13,18	103
				<b>4' T8 ECOLUX® XL EXTRA-LIFE W/ STARCOAT®</b>										
T8	Medium BiPin (G13)	32	48	15972	F32T8/XL/SPX30ECO/CVG	36	20000	2860	2715	3000	86	Ⓢ	1,13,18	103
				15973	F32T8/XL/SPX35ECO/CVG	36	20000	2860	2715	3500	86	Ⓢ	1,13,18	103
				18369	F32T8/XL/SPX41ECO/CVG	36	20000	2860	2715	4100	86	Ⓢ	1,13,18	103
				23746	F32T8/XL/SPX50ECO/CVG	36	20000	2860	2715	4100	86	Ⓢ	1,13,18	103
<b>4' T8 ECOLUX® SUPER LONG LIFE W/ STARCOAT®</b>														
T8	Medium BiPin (G13)	32	48	14560	F32T8/SXL/SP35/ECO/CVG	36	30000	2765	2595	3500	83	Ⓢ	1,13,18	103
				14551	F32T8/SXL/SP41/ECO/CVG	36	30000	2765	2595	4100	81	Ⓢ	1,13,18	103
<b>ULTRA ENERGY SAVING T8 LAMPS W/ COVARGUARD®</b>														
<b>4' T8 ECOLUX® WATT-MISER® W/ STARCOAT®</b>														
T8	Medium BiPin (G13)	32	48	40286	F32T8/SP30/IS/WM/ECO/CVG	36	20000	2790	2620	3000	84	Ⓢ	1,11,13,18	103
				40299	F32T8/SP35/IS/WM/ECO/CVG	36	20000	2765	2595	3500	83	Ⓢ	1,11,13,18	103
				40309	F32T8/SP41/IS/WM/ECO/CVG	36	20000	2740	2570	4100	81	Ⓢ	1,11,13,18	103
				47422	F32T8/SP50/IS/WM/ECO/CVG	36	20000	2740	2570	4100	81	Ⓢ	1,11,13,18	103
<b>4' T8 ECOLUX® WATT-MISER® XL EXTRA-LIFE W/ STARCOAT®</b>														
T8	Medium BiPin (G13)	32	48	10023	F32T8/XL/SP30/WM/ECOCVG	36	24000	2740	2570	3000	84	Ⓢ	1,11,13,18	103
				40297	F32T8/XL/SP35/WM/ECOCVG	36	24000	2715	2545	3500	83	Ⓢ	1,11,13,18	103
				40310	F32T8/XL/SP41/WM/ECOCVG	36	24000	2690	2520	4100	81	Ⓢ	1,11,13,18	103
				47423	F32T8/XL/SP50/WM/ECOCVG	36	24000	2690	2520	4100	81	Ⓢ	1,11,13,18	103
<b>4' T8 ECOLUX® HIGH LUMEN XL EXTRA-LIFE W/ STARCOAT®</b>														
T8	Medium BiPin (G13)	32	48	00267	F32T8/XL/SPX30/HL/ECO/CVG	36	24000	3005	2825	4100	82	Ⓢ	1,13,18	103
				00268	F32T8/XL/SPX35/HL/ECO/CVG	36	24000	3005	2825	3500	85	Ⓢ	1,13,18	103
				00269	F32T8/XL/SPX41/HL/ECO/CVG	36	24000	3005	2825	3000	85	Ⓢ	1,13,18	103
				80497	F32T8/XL/SPX50/HL/ECO/CVG	36	24000	3005	2825	4100	82	Ⓢ	1,13,18	103
<b>T8 MOD-U-LINE® 6" SPACING</b>														
T8	Medium BiPin (G13)	32	22.5	23655	F32T8/SP30/U6/CVG	12	20000	2640	2510	3000	78	Ⓢ	11,13	103
				23656	F32T8/SP35/U6/CVG	12	20000	2640	2510	3500	78	Ⓢ	11,13	103
				23657	F32T8/SP41/U6/CVG	12	20000	2640	2510	4100	78	Ⓢ	11,13	103
				23658	F32T8/SPX30/U6/CVG	12	20000	2740	2575	3000	86	Ⓢ	11,13	103
				23659	F32T8/SPX35/U6/CVG	12	20000	2740	2575	3500	86	Ⓢ	11,13	103
				23660	F32T8/SPX41/U6/CVG	12	20000	2740	2575	4100	86	Ⓢ	11,13	103
				<b>5' T8 W/ STARCOAT®</b>										
<b>5' T8 (60") W/ STARCOAT®</b>														
T8	Medium BiPin (G13)	40	60	41130	F40T8/SP35/CVG	24	20000	3490	3140	3500	75	Ⓢ	11,13	103
				41131	F40T8/SPX35/CVG	24	20000	3610	3240	3500	84	Ⓢ	11,13	103
				47351	F40T8/SPX41/CVG	24	20000	3610	3250	4100	80	Ⓢ	11,13	103

Ⓢ Means this lamp meets Federal Minimum Efficiency Standards.



Bulb Base	Nominal Length Order		Description	Case Qty.	Rated Life	Lumens			Color Temp.		Warning		
	Watts	in.				Code	Initial	Mean	K	CRI	Foot- notes	and Cautions	Additional Information
<b>SPECIAL APPLICATION LAMPS (CONTINUED)</b>													
<b>COVARGUARD® SHATTER PROTECTED (CONTINUED)</b>													
<b>T8 INSTANT START W/ STARCOAT®</b>													
<b>6' T8 (72") INSTANT START</b>													
T8	Single Pin (Fa8)	35	72	41149	F72T8/CW/CVG	24	7500	2910	2640	4100	60	11,13	103
<b>8' T8 (96") INSTANT START W/ STARCOAT®</b>													
T8	Single Pin (Fa8)	59	96	40094	F96T8/SP30/CVG	24	15000	5620	5330	3000	75	11,13	103
				40095	F96T8/SP35/CVG	24	15000	5620	5330	3500	75	11,13	103
				40096	F96T8/SP41/CVG	24	15000	5620	5330	4100	75	11,13	103
				40099	F96T8/SPX30CVG	24	15000	5770	5480	3000	84	11,13	103
				40105	F96T8/SPX35/CVG	24	15000	5770	5480	3500	84	11,13	103
				40106	F96T8/SPX41/CVG	24	15000	5770	5480	4100	80	11,13	103
<b>8' T8 HIGH OUTPUT LAMPS RECESSED DOUBLE CONTACT W/ STARCOAT®</b>													
T8	R17d	86	96	40107	F96T8/SP35/HO/CVG	24	18000	7760	6980	3500	75	11,12,13	103
				40108	F96T8/SP41/HO/CVG	24	18000	7760	6980	4100	75	11,12,13	103
<b>T8 PREHEAT LAMPS</b>													
T8	Medium BiPin (G13)	13	12	41109	F13T8/CW/CVG	24	7500	545	465	4100	60	11,13	103 Preheat
		15	18	41110	F15T8/CW/CVG	24	7500	800	700	4100	60	11,13	103 Preheat
				46627	F15T8/KB/CVG/UPC	24	7500	910	825	3000	70	11,13	103 Preheat, Kitchen & Bath
				46216	F15T8/SP35/CVG	24	7500	910	825	3500	75	11,13	103 Preheat
				41111	F15T8/SPX35/CVG	24	7500	970	870	3500	82	11,13	103 Preheat
		18	24	41117	F24T8/CW/4/CVG	6	7500	1180	1000	4100	60	11,13	103 Preheat
		19	28	41121	F28T8/CW/4/CVG	6	7500	1300	1110	4100	60	11,13	103 Preheat
		30	36	41122	F30T8/CW/CVG	24	7500	2100	1920	4100	60	11,13	103 Preheat
				46206	F30T8/SPX30/CVG	24	7500	2230	2070	3000	82	11,13	103 Preheat
<b>T12 RAPID START LAMPS</b>													
<b>3' ECOLUX® T12 (36")</b>													
T12	Medium BiPin (G13)	30	36	80486	F30T12/CW/RS/ECO/CVG	24	18000	2130	1850	4100	60	11,13	103
				80987	F30T12/SPX30/RS/ECO/CVG	24	18000	2300	2070	3000	82	11,13	103
				80487	F30T12/SPX35/RS/ECO/CVG	24	18000	2300	2070	3500	86	11,13	103
				80986	F30T12/SP35/ECO/CVG	24	18000	2280	2050	3500	73	11,13	103
<b>4' T12 ECOLUX® RAPID START LAMPS (48")</b>													
T12	Medium BiPin (G13)	40	48	80495	F40/CW/ECO/CVG	30	20000	2950	2600	4100	60	11,13	103
				80992	F40/CW/ECO/CVG 6PACK	6	20000	2950	2600	4100	60	11,13	103
				80995	F40/KB/ECO/CVG/UPC	24	20000	3290	2990	3000	82	11,13	103 Kitchen & Bath
				80988	F40T12/SP30/ECO/CVG	30	20000	3150	2860	3000	70	11,13	103
				80989	F40T12/SP35/ECO/CVG	30	20000	3100	2820	3500	73	11,13	103
				80990	F40/SP65/ECO/CVG	30	20000	2950	2690	6500	75	11,13	103
				80493	F40/SPX30/ECO/CVG	30	20000	3290	2990	3000	82	11,13	103
				80494	F40/SPX35/ECO/CVG	30	20000	3290	2990	3500	82	11,13	103
				80991	F40/SPX41/ECO/CVG	30	20000	3240	2950	4100	80	11,13	103
				80993	F40/D/ECO/CVG	30	20000	2470	2170	6250	75	11,13	103 Daylight
				80994	F40/DX/ECO/CVG	30	20000	2180	1850	6500	84	11,13	103 Daylight Deluxe
				80996	F40/N/ECO/CVG	30	20000	2030	1680	3700	90	11,13	103 Natural
				80496	F40/C50/ECO/CVG	30	20000	2180	1810	5000	90	11,13	103 Chroma 50
				41133	F40/C75/CVG	30	20000	1890	1630	7500	92	11,13	103 Chroma 75, non-TCLP Compliant



# Fluorescent Lamps

Bulb Base	Nominal Length Order	Watts in.	Code	Description	Case Qty.	Rated Life	Lumens Initial	Lumens Mean	Color Temp. K	CRI	Foot-notes	Warning and Cautions	Additional Information
<b>SPECIAL APPLICATION LAMPS (CONTINUED)</b>													
<b>COVARGUARD® SHATTER PROTECTED (CONTINUED)</b>													
<b>T12 RAPID START LAMPS (CONTINUED)</b>													
<b>4' T12 ECOLUX® RAPID START WATT-MISER® LAMPS (48")</b>													
T12	Medium BiPin (G13)	34	48	<b>80489 F34/SP35/RS/WM/ECO/CVG</b>	30	20000	2660	2400	3500	73	⚡	1,11,13	103
				<b>80490 F34/SP41/RS/WM/ECO/CVG</b>	30	20000	2660	2400	4100	72	⚡	1,11,13	103
				<b>80491 F34/SPX41/RS/WM/ECO/CVG</b>	30	20000	2820	2530	4100	80	⚡	1,11,13	103
				<b>80488 F34/WW/RS/WM/ECO/CVG</b>	30	20000	2620	2250	3000	52	⚡	1,11,13	103 Warm White
				<b>80492 F34/LW/RS/WM/ECO/CVG</b>	30	20000	2730	2350	4200	49	⚡	1,11,13	103 Lite White
				<b>40805 F34/CW/RS/WM/ECO/CVG</b>	30	20000	2570	2210	4100	60	⚡	1,11,13	103
				<b>41138 F34/SPX30/RS/WM/ECO/CVG</b>	30	20000	2810	2530	3000	82	⚡	1,11,13	103
				<b>41139 F34/SPX35/RS/WM/ECO/CVG</b>	30	20000	2810	2530	3500	82	⚡	1,11,13	103
<b>4' T12 RAPID START LAMPS UTILITY SHOPLIGHT (48")</b>													
T12	Medium BiPin (G13)	25	48	30		12000	1800	1620	4100	60		11,13	103
<b>T12 INSTANT START</b>													
T12	Single Pin (Fa8)	20	24	<b>47342 F24T12/CW/CVG</b>	24	7500	870	785	4100	60		11,13	103
		40	48	<b>40127 F48T12/CW/CVG</b>	24	9000	2780	2560	4100	60		11,13	103
				<b>48091 F48T12/SP35/CVG</b>	24	9000	2910	2730	4100	60		11,13	103
				<b>41144 F48T12/SPX35/CVG</b>	24	9000	2950	2780	3500	82	⚡	11,13	103
		50	60	<b>41147 F60T12/CW/CVG</b>	15	12000	3490	3210	4100	60		11,13	103
		55	72	<b>46213 F72T12/SP35/CVG</b>	15	12000	4550	4280	3500	73		11,13	103
				<b>41151 F72T12/SPX30/CVG</b>	15	12000	4650	4370	3000	82	⚡	11,13	103
				<b>41153 F72T12/SPX35/CVG</b>	15	12000	4650	4370	3500	82	⚡	11,13	103
		75	96	<b>40117 F96T12/CW/CVG</b>	15	12000	5960	5480	4100	60		11,13	103
				<b>46215 F96T12/SP35/CVG</b>	15	12000	6300	5920	3500	73		11,13	103
				<b>41157 F96T12/SPX30/CVG</b>	15	12000	6590	6190	3000	82	⚡	11,13	103
				<b>41158 F96T12/SPX35/CVG</b>	15	12000	6590	6190	3500	82	⚡	11,13	103
				<b>41159 F96T12/SPX41/CVG</b>	15	12000	6590	6190	4100	80	⚡	11,13	103
				<b>41973 F96T12/DX/CVG</b>	15	12000	4360	3920	6500	84	⚡	11,13	103 Daylight Deluxe
				<b>46208 F96T12/C50/CVG</b>	15	12000	4460	3920	5000	90	⚡	11,13	103 Chroma 50
<b>T12 INSTANT START ~ WATT-MISER® ENERGY SAVING LAMPS</b>													
<b>8' T12 RAPID START WATT-MISER® LAMPS (96")</b>													
T12	Single Pin (Fa8)	58	96	<b>45993 F96T12/SP35/WMP/CVG</b>	15	12000	5520	5190	3500	75	⚡	1,11,13	103
		60	96	<b>40115 F96T12/CW/WM/CVG</b>	15	12000	5330	4910	4100	60	⚡	1,11,13	103
			96	<b>40124 F96T12/SP35/WM/CVG</b>	15	12000	5520	5200	3500	73	⚡	1,11,13	103
<b>8' T12 ECOLUX® RAPID START WATT-MISER® LAMPS (96")</b>													
T12	Single Pin (Fa8)	60	96	<b>40807 F96T12/CW/WM/ECO/CVG</b>	15	12000	5330	4910	4100	60		1,11,13	103
<b>T12 MOD-U-LINE® ~ WATT-MISER® ENERGY SAVING LAMPS</b>													
T12	Medium BiPin (G13)	35	22.5	<b>47694 F35/CW/U6/WM/CVG</b>	10	14000	2230	2030	4100	60	⚡	1,11,13	103 6" Spacing Between Legs
<b>T12 MOD-U-LINE® 6" SPACING</b>													
T12	Medium BiPin (G13)	40	22.5	<b>23661 F40T12/SP30/U6/CVG</b>	10	14000	2230	2030	3000	73	⚡	11,13	103
				<b>23662 F40T12/SP35/U6/CVG</b>	10	14000	2230	2030	3500	73	⚡	11,13	103
				<b>23664 F40T12/SP41/U6/CVG</b>	10	14000	2230	2030	4100	73	⚡	11,13	103



Bulb Base	Nominal Length Watts in.	Order Code	Description	Case Qty.	Rated Life	Color			Warning				
						Initial	Mean	Temp. K CRI	Foot- notes	and Cautions	Additional Information		
<b>SPECIAL APPLICATION LAMPS (CONTINUED)</b>													
<b>COVRGUARD® SHATTER PROTECTED (CONTINUED)</b>													
<b>T12 PREHEAT</b>													
T12 Medium BiPin (G13)	15	18	<b>41114 F15T12/CW/CVG</b>	24	9000	735	660	4100	60	11,13	103	Preheat	
	20	24	<b>46377 F20T12/C50/CVG</b>	24	9000	845	765	5000	90	☞	11,13	103	Preheat, Chroma 50
			<b>40125 F20T12/CW/CVG</b>	24	9000	1160	1110	4100	60	11,13	103	Preheat	
			<b>41000 F20T12/CW/CVG/UPC</b>	24	9000	1160	1110	4100	60	11,13	103	Preheat, UPC	
			<b>46622 F20T12/KB/CVG/UPC</b>	24	9000	1230	1160	3000	70	☞	11,13	103	Preheat, Kitchen and Bath, UPC
			<b>46218 F20T12/SP35/CVG</b>	24	9000	1230	1160	3500	73	☞	11,13	103	Preheat
			<b>41116 F20T12/SPX35/CVG</b>	24	9000	1260	1180	3500	82	☞	11,13	103	Preheat
	25	33	<b>41120 F25T12/WW/33/CVG</b>	24	7500	1850	1660	3000	52	11,13	103	Preheat, Warm White	
	<b>T12 HIGH OUTPUT LAMPS RECESSED DOUBLE CONTACT</b>												
	T12 R17d	35	24	<b>48090 F24T12/CW/HO/CVG</b>	24	9000	1570	1300	4100	60	11,12,13	103	
60		48	<b>40129 F48T12/CW/HO/CVG</b>	24	12000	3930	3410	4100	60	11,12,13	103		
			<b>41146 F48T12/SPX35/HO/CVG</b>	24	12000	4220	3800	3500	82	☞	11,12,13	103	
			<b>41969 F48T12/D/HO/CVG</b>	24	12000	3290	2870	6500	75	☞	11,12,13	103	Daylight
			<b>41148 F60T12/CW/HO/CVG</b>	15	12000	4990	4340	4150	62	11,12,13	103		
85		72	<b>40811 F72T12/CW/HO/CVG</b>	15	12000	6150	5350	4100	60	11,12,13	103		
			<b>46207 F72T12/SP35/HO/CVG</b>	15	12000	6450	5810	3500	73	☞	11,12,13	103	
			<b>41152 F72T12/SPX30/HO/CVG</b>	15	12000	6590	5930	3000	82	☞	11,12,13	103	
			<b>41154 F72T12/SPX35/HO/CVG</b>	15	12000	6590	5930	3500	82	☞	11,12,13	103	
			<b>48094 F72T12/N/HO/CVG</b>	10	12000	4170	3500	3700	90	☞	11,12,13	103	Natural
			<b>41156 F84T12/CW/HO/CVG</b>	15	12000	7460	6490	4100	60	11,12,13	103		
100		84	<b>40808 F96T12/CW/HO/CVG</b>	15	12000	8630	7500	4100	60	11,12,13	103		
			<b>46210 F96T12/SP35/HO/CVG</b>	15	12000	8920	8030	3500	73	☞	11,12,13	103	
			<b>45264 F96T12/SP65/HO/CVG</b>	15	12000	8630	7760	6500	75	☞	11,12,13	103	
			<b>41160 F96T12/SPX30/HO/CVG</b>	15	12000	9070	8160	3000	82	☞	11,12,13	103	
			<b>41161 F96T12/SPX35/HO/CVG</b>	15	12000	9070	8160	3500	82	☞	11,12,13	103	
			<b>41162 F96T12/SPX41/HO/CVG</b>	15	12000	9070	8160	4100	80	☞	11,12,13	103	
			<b>46424 F96T12/D/HO/CVG</b>	15	12000	7370	6410	6500	75	☞	11,12,13	103	Daylight
			<b>46430 F96T12/DX/HO/CVG</b>	15	12000	6400	5440	6500	84	☞	11,12,13	103	Daylight Deluxe
<b>T12 HIGH OUTPUT LAMPS RECESSED DOUBLE CONTACT ~ WATT-MISER® ENERGY SAVING LAMPS</b>													
T12 R17d	95	96	<b>40116 F96T12/CW/HO/WM/CVG</b>	15	12000	7760	6750	4100	60	1,11,12,13	103		
			<b>40118 F96T12/SP35/HO/WM/CVG</b>	15	12000	8090	7290	3500	73	☞	1,11,12,13	103	
			<b>40123 F96T12/SP41/HO/WM/CVG</b>	15	12000	8090	7290	4100	72	☞	1,11,12,13	103	
			<b>16821 F96T12/CW/HO/WM/ECO/CVG</b>	15	12000	7760	6285	4100	60	1,11,12,13	103		
<b>COLD TEMPERATURE</b>													
<b>T5</b>													
T5 Miniature BiPin (G5)	54	45.2	<b>81521 F54T5/835</b>	36	30000	4500	4275	3500	86	☞	11,13,17	101	Plastic jacket
			<b>81522 F54T5/841</b>	36	30000	4500	4275	4100	86	☞	11,13,17	101	Plastic jacket
<b>T8</b>													
T8 Medium BiPin (G13)	18	24	<b>31147 F18WT8/835</b>	12	20000	1215	1152	3500	86	☞	11,13,17	101	Plastic jacket
			<b>31148 F18WT8/841</b>	12	20000	1215	1152	4100	86	☞	11,13,17	101	Plastic jacket
	36	48	<b>25763 F36WT8/835</b>	30	20000	3015	2860	3500	86	☞	11,13,17	101	Plastic jacket
			<b>25764 F36WT8/841</b>	30	20000	3015	2860	4100	86	☞	11,13,17	101	Plastic jacket
	58	60	<b>16148 F58WT8/835</b>	24	20000	4680	4450	3500	86	☞	11,13,17	101	Plastic jacket
			<b>23752 F58WT8/841</b>	24	20000	4680	4450	4100	86	☞	11,13,17	101	Plastic jacket
	70	72	<b>16149 F70WT8/835</b>	18	20000	5670	5386	3500	86	☞	11,13,17	101	Plastic jacket
			<b>23754 F70WT8/841</b>	18	20000	5670	5386	4100	86	☞	11,13,17	101	Plastic jacket



# Fluorescent Lamps

Bulb Base	Nominal Length Order		Description	Case Qty.	Rated Life	Lumens			Color Temp.		Warning		Additional Information		
	Watts	in.				Code	Initial	Mean	K	CRI	Foot-notes	and Cautions			
<b>SPECIAL APPLICATION LAMPS (CONTINUED)</b>															
<b>COLD TEMPERATURE (CONTINUED)</b>															
<b>INSTANT START</b>															
T12	Single Pin (Fa8)	75	96	47350	F96T12/CW-CT	15	12000	5960	5490	4100	60	11,13,17	101	Plastic jacket	
<b>HIGH OUTPUT (800mA) RECESSED DOUBLE CONTACT</b>															
T12	R17d	35	24	48097	F24T12/CW/HO-CT	12	9000	1570	1300	4100	60	11,13,17	101	Plastic jacket	
		60	48	48530	F48T12/SP35/HO-AT	12	12000	4120	3710	3500	73	⊕	11,13,17	101	Plastic jacket w/ vent holes
				47352	F48T12/SPX30/HO-CT	24	12000	4210	3800	3000	82	⊕	11,13,17	101	Plastic jacket
				45976	F48T12/CW/HO-AT	12	12000	3710	3220	4100	60		11,13,17	101	Plastic jacket w/ vent holes
		75	60	47353	F60T12/CW/HO-CT	12	12000	4990	4340	4100	60		11,13,17	101	Plastic jacket
		85	72	47346	F72T12/SP35/HO-CT	8	12000	6450	5810	3500	73	⊕	11,13,17	101	Plastic jacket
				46201	F72T12/SP41/HO-CT	8	12000	6450	5810	4100	72	⊕	11,13,17	101	Plastic jacket
				48095	F72T12/SPX35/HO-CT	8	12000	6590	5930	3500	82	⊕	11,13,17	101	Plastic jacket
				46199	F72T12/CW/HO-AT	8	12000	6150	5350	4100	60		11,13,17	101	Plastic jacket w/ vent holes
		110	96	45979	F96T12/SP35/HO-CT	8	12000	8920	8030	3500	73	⊕	11,13,17	101	Plastic jacket
				48096	F96T12/SPX35/HO-CT	8	12000	9060	8160	3500	82	⊕	11,13,17	101	Plastic jacket
				45912	F96T12/CW/HO-AT	8	12000	8630	7500	4100	60		11,13,17	101	Plastic jacket w/ vent holes
				11918	F96T12/CW/HO/CT	15	12000	8900	7740	4100	60		11,13,17	101	Plastic jacket
				11919	F96T12/D/HO/CT	15	12000	7600	6610	6500	75	⊕	11,13,17	101	Plastic jacket
<b>T10 VERY HIGH OUTPUT (1500mA) RECESSED DOUBLE CONTACT</b>															
T10	R17d	110	48	10742	F48T10/CW	24	9000	6200		4100	60	4	101		
				46196	F48T10/CW/VHO-CT	12	9000	6010		4100	60		13, 17	101	Plastic jacket
		135	60	17135	F60T10/SP30	24	6000	8500		3000	70	⊕	4	101	
				39157	F60T10/CW	24	6000	7000		4100	60		4	101	
				13002	F60T10/CW 6PK	6	6000	7000		4100	60		4	101	
				46197	F60T10/CW/VHO-CT	12	6000	6790		4100	60		13, 17	101	Plastic jacket
		160	72	13776	F72T10/CW 15PK	15	9000	9700		4100	60		4	101	
				46198	F72T10/CW/VHO-CT	8	9000	9400		4100	60		13, 17	101	Plastic jacket
		<b>T12 VERY HIGH OUTPUT (1500mA) RECESSED DOUBLE CONTACT</b>													
		T12	R17d	110	48	34206	F48T12/CW/1500/0	24	10000	7000		4100	60	4	101
				46195	F48T12/CW/VHO-CT	12	10000	6790		4100	60		15, 17	101	Plastic jacket
170	72			13762	F72T12/CW/1500/0	15	10000	10800		4100	60	4	101		
				46200	F72T12/CW/VHO-CT	8	10000	10470		4100	60		15, 17	101	Plastic jacket
220	96			13788	F96T12/CW/1500/0	15	10000	14400		4100	60	4	101		
				46202	F96T12/CW/VHO-CT	8	10000	13960		4100	60		15, 17	101	Plastic jacket
<b>DIAZO REPROGRAPHIC 1500mA (SUPERBLUE)</b>															
<b>T12</b>															
T12	Medium BiPin (G13)	120	54	40092	F54" T12/SPB	24	2000					↗ 2	101		
		125	59	39683	F59" T12/SPB	24	2000					↗ 2	101		
<b>T17</b>															
T17	Mogul BiPin (G20)	180	54	26390	F54" T17/SPB	12	2000					↗ 2	101		
<b>APPLIANCE</b>															
<b>T8</b>															
T8	Medium BiPin (G13)	18	22	10257	F22" T8/D/4	24	7500	925	790	6500	75	⊕	101	Daylight	
				17705	F24" T8/CW/4 6PK	24	7500	1225	1040	4100	60		101		
		19	26	10702	F26" T8/CW/4	24	7500	1275	1085	4100	60		101		
				38199	F26" T8/CW/4 6PK	24	7500	1275	1085	4100	60		101		
				17704	F28" T8/CW/4 6PK	24	7500	1350	1145	4100	60		101		
				10349	F30" T8/CW/4	24	7500	1375	1170	4100	60		101		



Bulb Base	Nominal Length Watts in.	Order Code	Description	Case Qty.	Rated Life	Lumens			Color Temp.		Foot- notes	Warning and Cautions	Additional Information
						Initial	Mean		K	CRI			
<b>SPECIAL APPLICATION LAMPS (CONTINUED)</b>													
<b>APPLIANCE (CONTINUED)</b>													
<b>T12</b>													
T12 Medium BiPin (G13)	21 30	10355	F30" T12/CW	24	7500	1350	1220	4100	60			101	
	25 28	10282	F25T12CW/28 6PK	24	7500	1550	1390	4100	60			101	
		10286	F25T12/D/28	24	7500	1450	1310	6500	75	☞		101	Daylight
	33	38201	F25T12/CW/33 6PK	24	7500	1860	1675	4100	60			101	
		10299	F25T12/D/33	24	7500	1600	1440	6500	75	☞		101	Daylight
		10293	F25T12/WW/33	24	7500	1910	1720	3000	52			101	Warm White
<b>BLACKLIGHT/BLACKLIGHT BLUE</b>													
<b>BLACKLIGHT</b>													
T8 Medium BiPin (G13)	15 18	35884	F15T8/BL 6PK	24	7500						8	105	Blacklight, UVA Source
T12 Medium BiPin (G13)	20 24	10244	F20T12/BL 6PK	24	9000						8	105	Blacklight, UVA Source
	40 22.5	40537	F40BL/U/3	12	14000						8	105	Blacklight, UVA Source, Mod-U-Line®; 3 5/8" Spacing Between Legs
	48	10526	F40BL 6PK	24	20000						8	105	Blacklight, UVA Source
<b>BLACKLIGHT BLUE</b>													
T5 Miniature BiPin (G5)	4 6	10019	F4T5/BLB	24	5000						8	101	Blacklight Blue, UVA Source, Integral Dark Blue Filter
	8 12	10077	F8T5/BLB	24	5000						8	101	Blacklight Blue, UVA Source, Integral Dark Blue Filter
T8 Medium BiPin (G13)	15 18	35885	F15T8/BLB 6PK	24	7500						8	101	Blacklight Blue, UVA Source, Integral Dark Blue Filter
T9 4 Pin (G10q)	22 8.25	25665	FC8T9/BLB	6	12000						8	101	Blacklight Blue, UVA Source, Integral Dark Blue Filter
T12 Medium BiPin (G13)	20 24	34747	F20T12/BLB 6PK	24	9000						8	101	Blacklight Blue, UVA Source, Integral Dark Blue Filter
	40 48	10531	F40BLB 6PK	24	20000						8	101	Blacklight Blue, UVA Source, Integral Dark Blue Filter
<b>COLORED LAMPS</b>													
<b>T8</b>													
T8 Medium BiPin (G13)	32 48	15992	F32T8/R/24/ECO/CVG	36	20000							103	Sleeved Rosco Red 24
		15993	F32T8/B/65/ECO/CVG	36	20000							103	Sleeved Rosco Blue 65
		15994	F32T8/G/89/ECO/CVG	36	20000							103	Sleeved Rosco Green 89
<b>T12</b>													
T12 Medium BiPin (G13)	40 48	10514	F40/B 6 PK	24	20000	1200	720					101	Phosphor Blue
		10517	F40/G 6 PK	24	20000	4000	2000					101	Phosphor Green
		81003	F40T12/R24/ECO/CVG	30	20000							103	Sleeved Rosco Red 24
		81001	F40T12/B65/ECO/CVG	30	20000							103	Sleeved Rosco Blue 65
		81002	F40T12/G89/ECO/CVG	30	20000							103	Sleeved Rosco Green 89
<b>PREHEAT</b>													
T12 Medium BiPin (G13)	20 24	48259	F20T12/R/24/CVG	24	9000							103	Sleeved Rosco Red 24
		48260	F20T12/B/65/CVG	24	9000							103	Sleeved Rosco Blue 65
		48261	F20T12/G/89/CVG	24	9000							103	Sleeved Rosco Green 89
		10231	F20T12/B 6PK	24	9000	450	330					101	Phosphor Blue
		10233	F20T12/G 6PK	24	9000	1575	975					101	Phosphor Green
<b>GOLD</b>													
<b>T5 LAMPS</b>													
T5 Miniature BiPin (G5)	28 45.2	25768	F28T5/GO/CVG	40	20000	1986	1946	Gold	N/A			103	



# Fluorescent Lamps

Bulb Base	Nominal Length Order			Case Qty.	Rated Life	Lumens			Color Temp.		Foot-notes	Warning and	
	Watts	in.	Code			Initial	Mean	K	CRI	Caution		Additional Information	
<b>GOLD (CONTINUED)</b>													
<b>T8 LAMPS</b>													
T8	Medium BiPin (G13)	17	24	25779	F17T8/GO/CVG	24	20000	970	950	Gold/N/A		103	Gold Sleeved, Blocks UV and Deep Blue Emissions
		15	36	25783	F25T8/GO/CVG	24	20000	1590	1558	Gold/N/A		103	Gold Sleeved, Blocks UV and Deep Blue Emissions
		32	48	25784	F32T8/GO/CVG	36	20000	2280	2235	Gold/N/A		103	Gold Sleeved, Blocks UV and Deep Blue Emissions
		36	48	81334	F36T8/GO/CVG	25	20000	2600	2545	Gold/N/A		103	Gold Sleeved, Blocks UV and Deep Blue Emissions
		58	60	80053	F58T8/GO/CVG	25	20000	4080	4000	Gold/N/A		103	Gold Sleeved, Blocks UV and Deep Blue Emissions
		59	96	25810	F96T8/GO/CVG	24	20000	4492	4400	Gold/N/A		103	Gold Sleeved, Blocks UV and Deep Blue Emissions
<b>T12 LAMPS</b>													
T12	Medium BiPin (G13)	40	48	25850	F40/GO/CVG	30	20000	2510	2460	Gold/N/A		103	Gold Sleeved, Blocks UV and Deep Blue Emissions
	Single Pin (Fa8)	55	72	25854	F72T12/GO/CVG	15	12000	4150	4070	Gold/N/A		103	Gold Sleeved, Blocks UV and Deep Blue Emissions
		75	96	25852	F96T12/GO/CVG	15	12000	5640	5530	Gold/N/A		103	Gold Sleeved, Blocks UV and Deep Blue Emissions
	R17d	110	96	25853	F96T12/GO/HO/CVG	15	12000	8010	7850	Gold/N/A		103	Gold Sleeved, Blocks UV and Deep Blue Emissions
<b>GROCERY DISPLAY LAMPS</b>													
T12	Medium BiPin (G13)	40	48	81000	F40T12/FL/ECO/CVG	30	20000	1925	1450	2750			CovRFresh®
<b>GERMICIDAL</b>													
T5	Miniature BiPin (G5)	4	6	15872	G4T5	24	6000				9, 16	106	Clear, UVC Source
		6	8	15873	G6T5	24	6000				9, 16	106	Clear, UVC Source
		8	12	11077	G8T5	24	6000				9, 16	106	Clear, UVC Source
		11	11.9	29495	G11T5	24	8000				9, 16	106	Clear, UVC Source
		16	8.91	16495	G16T5	24	8000				9, 16	106	Clear, UVC Source
	Single Pin (Fa8)	39	36	15874	G36T5	24	9000				9, 16	106	Clear, UVC Source
		65	64	15864	G64T5	24	9000				9, 16	106	Clear, UVC Source
<b>GERMICIDAL (CONTINUED)</b>													
T8	Medium BiPin (G13)	10	13.6	29498	G10T8	24	6000				9, 16	106	Clear, UVC Source
		15	18	11078	G15T8	24	8000				9, 16	106	Clear, UVC Source
		25	18	11082	G25T8	24	8000				9, 16	106	Clear, UVC Source
		30	36	11080	G30T8	24	8000				9, 16	106	Clear, UVC Source
		36	48	29499	G36T5	24	8000				9, 16	106	Clear, UVC Source
		55	36	15875	G55T8/HO	24	8000				9, 16	106	Clear, UVC Source
T10	Medium BiPin (G13)	20	24	15876	G20T10	24	8000				9, 16	106	Clear, UVC Source
		40	48	29532	G40T10	24	8000				9, 16	106	Clear, UVC Source
<b>PLANT AND AQUARIUM/TERRARIUM</b>													
<b>T8 LAMPS</b>													
<b>15" T8 LAMPS</b>													
T8	Medium BiPin (G13)	14	15	41373	F14T8/AR/FR 6PK	24	7500	360	4000	92		104	Aquarium Lamp Freshwater
				40903	F14T8/AR/FS/6PK	24	7500	550	9325	64		104	Aquarium Lamp Fresh and Saltwater
				41375	F14T8/AR/SA 6PK	24	7500	190	1000062			104	Aquarium Lamp Saltwater
				41377	F14T8/SR 6PK	24	7500	565	5000	90		104	Aquarium/Terrarium Lamp
<b>18" T8 LAMPS</b>													
T8	Medium BiPin (G13)	15	18	22907	F15T8/AR/FR 6PK	24	7500	425	4000	92		104	Aquarium Lamp Freshwater
				22910	F15T8/AR/FS 6PK	24	7500	675	9325	64		104	Aquarium Lamp Fresh and Saltwater



# Fluorescent Lamps

Bulb Base	Nominal Length Order	Watts in.	Code	Description	Case Qty.	Rated Life	Lumens			Color Temp.		Foot- notes	Warning and Cautions	Additional Information	
							Initial	Mean		K	CRI				
<b>PLANT AND AQUARIUM/TERRARIUM (CONTINUED)</b>															
<b>T8 LAMPS (CONTINUED)</b>															
<b>18" T8 LAMPS (CONTINUED)</b>															
T8	Medium BiPin (G13)	15	18	22920	F15T8/AR/SA 6PK	24	7500	210	1000	62		104	Aquarium Lamp	Saltwater	
				49892	F15T8/PL/AQ 6PK	24	7500	510	3100	90	☞	104	Plant & Aquarium Wide Spectrum		
				22904	F15T8/SR 6PK	24	7500	620	5000	90	☞	104	Aquarium/Terrarium Lamp		
<b>36" T8 LAMPS</b>															
T8	Medium BiPin (G13)	30	36	41374	F30T8/AR/FR 6PK	24	9000	630	4000	92	☞	104	Aquarium Lamp	Freshwater	
				40904	F30T8/AR/FS 6PK	24	9000	1400	9235	64		104	Aquarium Lamp	Fresh and Saltwater	
				41376	F30T8/AR/SA 6PK	24	9000	315	10000	62		104	Aquarium Lamp	Saltwater	
<b>T12 LAMPS</b>															
<b>24" T12 LAMPS</b>															
T12	Medium BiPin (G13)	20	24	22908	F20T12/AR/FR 6PK	24	9000	600	4000	92	☞	104	Aquarium Lamp	Freshwater	
				22911	F20T12/AR/FS 6PK	24	9000	950	9325	64		104	Aquarium Lamp	Fresh and Saltwater	
				22922	F20T12/AR/SA 6PK	24	9000	270	1000	62		104	Aquarium Lamp	Saltwater	
				49891	F20T12/PL/AQ 6PK	24	9000	750	3100	90	☞	104	Plant & Aquarium Wide Spectrum		
				22905	F20T12/SR 6PK	24	9000	875	5000	90	☞	104	Aquarium/Terrarium Lamp		
<b>36" T12 LAMPS</b>															
T12	Medium BiPin (G13)	30	36	41378	F30T12/SR 6PK	24	18000	1100	5000	90	☞	104	Aquarium/Terrarium Lamp		
<b>48" T12 LAMPS</b>															
T12	Medium BiPin (G13)	40	48	22909	F40T12/AR/FR 6PK	24	9000	1425	4000	92	☞	104	Aquarium Lamp	Freshwater	
				22914	F40T12/AR/FS 6PK	24	9000	2350	9325	64		104	Aquarium Lamp	Fresh and Saltwater	
				22923	F40T12/AR/SA 6PK	24	9000	700	1000	62		104	Aquarium Lamp	Saltwater	
				49893	F40PL/AQ 6PK	24	20000	1900	3100	90	☞	104	Plant & Aquarium Wide Spectrum		
				22906	F40T12/SR 6PK	24	20000	2250	5000	90	☞	104	Aquarium/Terrarium Lamp		
<b>EXPORT OUTSIDE U.S. AND CANADA ONLY</b>															
T12	Medium BiPin (G13)	40	22.5	14496	F40CW/U/6/EX	12	14000	2800	2460	4100	60		102	6" Spacing Between Legs	
				14498	F40D/U/6/EX	12	14000	2350	2070	6500	75	☞	102	Daylight, 6" Spacing Between Legs	
		40	48	14656	F40CW/EX-30PK	30	20000	3050	2680	4100	60		101		
				14488	F40D/EX	30	20000	2550	2240	6500	75	☞	101	Daylight	
		Single Pin (Fa8)	75	96	12541	F96T12CW/EX-15PK	15	12000	6150	5660	4100	60		101	
					12543	F96T12/D/EX-15PK	15	12000	5250	4330	6500	75	☞	101	Daylight
		R17d	110	96	12540	F96T12CW/HO/EX	15	12000	8900	7740	4100	60		101	
12542	F96T12D/HO/EX-15				15	12000	7600	6610	6500	75	☞	101	Daylight		
<b>CONSUMER PRODUCTS</b>															
<b>T8</b>															
<b>4' T8</b>															
T8	Medium BiPin (G13)	32	48	15900	F32T8/SP30/ECO/UPC	36	20000	2800	2660	3000	78	☞	101		
				15903	F32T8/SP35/ECO/UPC	36	20000	2800	2660	3500	78	☞	101		
				11873	F32T8/SP35/ECO 12PK	12	20000	2800	2660	3500	78	☞	101		
				15909	F32T8/SP41/ECO/UPC	36	20000	2800	2660	4100	78	☞	101		
				15904	F32T8/SP41/ECO/C	12	20000	2800	2660	4100	78	☞	101		
				16263	F32T8/RESI/ECO/2PK	6	15000	2650	2385	4100	78	☞	101		
				31231	F32T8/RES/ECO/2PK	24	15000	2650	2385	4100	78	☞	101		
				49356	F32T8/KB/ECO/2PK	6	20000	2800	2660	3000	78	☞	104	Kitchen & Bath	
				49357	F32T8/KB/ECO/2PK-24	24	20000	2800	2660	3000	78	☞	104	Kitchen & Bath	
				29566	F32T8/D/ECO/2PK	24	20000	2700	2565	6500	78	☞	101	Daylight	
				87783	F32T8/D/ECO/TW	6	20000	2700	2565	6500	78	☞	101	Daylight	

☞ Means this lamp meets Federal Minimum Efficiency Standards.

See [www.gelighting.com](http://www.gelighting.com) e-catalog for the most up-to-date product information. To convert inches to millimeters, multiply by 25.4. All footnote references found at the end of this section. ☞ Reduced Wattage ☞ High Color Rendering.





# Fluorescent Lamps

Bulb Base	Nominal Length Order Watts in. Code	Description	Case Qty.	Rated Life	Lumens Initial Mean	Color Temp. K CRI	Foot-notes	Warning and Cautions	Additional Information
<b>CONSUMER PRODUCTS (CONTINUED)</b>									
<b>T8</b>									
<b>8' T8</b>									
T8	Single Pin (Fa8)	59 96 10401 F96T8/SP41/UPC	24	15000	5800 5500 4100	78 ⑧ ⑨		101	
<b>T12</b>									
<b>4' F40 ECOLUX® STANDARD</b>									
T12	Medium BiPin (G13)	40 48 23382 F40SP41/ECO/C	10	20000	3200 2910 4100	72 ⑧ ⑨		101	
		25400 F40SP65/ECO/UPC	30	20000	3050 2775 6500	75 ⑧ ⑨		101	
		25399 F40/C50/ECO/UPC	30	20000	2250 1870 5000	90 ⑨		101	Chroma 50
		16083 F40D/ULTRA/ECO/2PK	9	20000	3050 2775 6500	75 ⑧ ⑨		101	Daylight Ultra
		13969 F40D/ULTRA/ECO/6PK	24	20000	3050 2775 6500	75 ⑧ ⑨		101	Daylight Ultra
		40333 F40/KB/ECO 2PK	9	20000	3400 3090 3000	70 ⑧ ⑨		104	Kitchen & Bath
		21323 F40/KB/ECO 6PK	24	20000	3400 3090 3000	70 ⑧ ⑨		104	Kitchen & Bath
		12224 F40/SUN/ECO/6PK	24	20000	2250 1870 5000	90 ⑨		101	Sunlight
		10949 F40/RES/ECO/LL/2PK	9	20000	3200 2910 4100	72 ⑧ ⑨		101	
		14440 F40/RES/ECO/SLV	30	15000	3150 2860 4100	72 ⑧ ⑨		101	
		14433 F40/RES/ECO/SLV 6PK	24	15000	3150 2860 4100	72 ⑧ ⑨		101	
		14441 F40/RES/ECO/TWIN-9PK	9	15000	3150 2860 4100	72 ⑧ ⑨		101	
		48510 F40/RES/ECO/TWIN-15PK	15	15000	3150 2860 4100	72 ⑧ ⑨		101	
<b>4' ECOLUX® UTILITY SHOPLIGHT</b>									
T12	Medium BiPin (G13)	25 48 14445 F48"/25W/UTECOUPC	30	12000	1860 1675 4100	60 ⑩ ⑪		101	
		14450 F48"/25W/UTECOSLV	30	12000	1860 1675 4100	60 ⑩ ⑪		101	
		14456 F48"/25W/UTECOTWN	9	12000	1860 1675 4100	60 ⑩ ⑪		101	
		48511 F48"/25W/UTECO2PK	15	12000	1860 1675 4100	60 ⑩ ⑪		101	
<b>4' F34 ECOLUX® WATT-MISER® ENERGY SAVING LAMPS</b>									
T12	Medium BiPin (G13)	34 48 25401 F34/SP30/RS/WM/ECO/UPC	30	20000	2750 2475 3000	70 ⑧ ⑨ ⚡ ⑫		101	
		23486 F34/SP35/WM/ECO/C	10	20000	2750 2475 3500	73 ⑧ ⑨ ⚡ ⑫		101	
		21858 F34/SP35/RS/WM/ECO/UPC	24	20000	2750 2475 3500	73 ⑧ ⑨ ⚡ ⑫		101	
		40372 F34/SP41/RS/WM/ECO	24	20000	2750 2475 4100	72 ⑧ ⑨ ⚡ ⑫		101	
		25397 F34/SP41/RS/WM/ECO/UPC	30	20000	2750 2475 4100	72 ⑧ ⑨ ⚡ ⑫		101	
		25391 F34/CW/RS/WM/ECO/UPC	30	20000	2650 2280 4100	60 ⑩ ⚡ ⑫		101	
		23485 F34/CW/RS/WM/ECO/C 10PK	10	20000	2650 2280 4100	60 ⑩ ⚡ ⑫		101	
		25398 F34/WW/RS/WM/ECO/UPC	30	20000	2700 2320 3000	52 ⑦ ⚡ ⑫		101	Warm White
<b>MOD-U-LINE® WATT-MISER® U-TUBES</b>									
T12	Medium BiPin (G13)	35 22.5 14471 F35/CW/U/6/WM/UPC	12	14000	2300 2100 4100	60 ⑩ ⚡ ⑫		102	
		23383 F35/CW/U/6/WM/C	6	14000	2300 2100 4100	60 ⑩ ⚡ ⑫		102	
<b>MOD-U-LINE® STANDARD U-TUBES</b>									
T12	Medium BiPin (G13)	40 22.5 22050 F40/SP35/U/6/UPC	12	14000	3050 2780 3500	73 ⑧ ⑨		102	
		25374 F40/SCW/U/6/UPC 6PK	6	14000	2800 2460 4100	75 ⑧ ⑨		102	Super Cool White
<b>T12 INSTANT START</b>									
<b>4' T12</b>									
T12	Single Pin (Fa8)	40 48 20461 F48T12/CW/UPC 6PK	24	9000	2875 2650 4100	60		101	
<b>8' T12</b>									
T12	Single Pin (Fa8)	75 96 10149 F96T12/SP41/UPC	15	12000	6500 6110 4100	72 ⑧ ⑨		101	

⑧ Means this lamp meets Federal Minimum Efficiency Standards.



# Fluorescent Lamps

Bulb Base	Nominal Length Order	Watts in.	Code	Description	Case Qty.	Rated Life	Lumens			Color Temp.		Foot-notes	Warning and Cautions	Additional Information
							Initial	Mean	Temp.	K	CRI			
<b>CONSUMER PRODUCTS (CONTINUED)</b>														
<b>T12 (CONTINUED)</b>														
<b>8' T12 WATT-MISER® ENERGY SAVING LAMPS</b>														
T12	Single Pin (Fa8)	60	96	21856	F96T12/SP35/WM/UPC	15	12000	5700	5360	3500	73	Ⓢ ⚡ 1	101	
				11217	F96T12/SP35/WM/C 10PK	10	12000	5700	5360	3500	73	Ⓢ ⚡ 1	101	
				25395	F96T12/SP41/WM/UPC	15	12000	5700	5360	4100	72	Ⓢ ⚡ 1	101	
				21713	F96T12/CW/WM/UPC 10PK	10	12000	5500	5060	4100	60	Ⓢ ⚡ 1	101	
				25171	F96T12/UTCW/EE/C	10	12000	5500	5060	4100	60	Ⓢ ⚡ 1	101	
<b>8' T12 ECOLUX® WATT-MISER® ENERGY SAVING LAMPS</b>														
T12	Single Pin (Fa8)	60	96	16816	F96T12/CW/WM/ECO	15	12000	5500	5060	4100	60	Ⓢ ⚡ 1	101	
<b>T12 RAPID START</b>														
T12	Medium BiPin (G13)	30	36	39176	F30T12/CW/RS 6PK	24	18000	2200	1910	4100	60		101	
				77119	F30T12/RS/KB/PM	24	18000	2350	2120	3000	70	Ⓢ	104	Kitchen & Bath
<b>T12 HIGH OUTPUT RAPID START RECESSED DOUBLE CONTACT</b>														
T12	R17d	60	48	27313	F48T12/CW/HO/UPC	24	12000	4050	3520	4100	60		101	
		95	96	21714	F96T12/CW/HO/WM/UPC	15	12000	8000	6960	4100	60	Ⓢ ⚡ 1	101	
<b>PREHEAT</b>														
<b>T5</b>														
T5	Miniature BiPin (G5)	4	6	15983	F4T5/CW CARD	10	5000	135	100	4100	60		101	Preheat
		6	9	15986	F6T5/CW CARD	10	5000	295	235	4100	60		101	Preheat
		8	12	15987	F8T5/CW CARD	10	5000	400	320	4100	60		101	Preheat
				25425	F8T5/WW/CARD	5	5000	410	330	3000	52		101	Preheat, Warm White
		13	21	25426	F13T5/WW/CARD	5	5000	870	720	3000	52		101	Preheat, Warm White
<b>T8</b>														
T8	Medium BiPin (G13)	15	18	13968	F15T8/SUN 6PK	24	7500	620	525	5000	90	Ⓢ	101	Preheat, Sunlight
		30	36	22747	F30T8/KB 6PK	24	7500	2125	1910	3000	70	Ⓢ	104	Preheat, Kitchen & Bath
		15	18	46982	F15T12/KB-TP	24	9000	785	730	3000	70	Ⓢ	104	Preheat, Kitchen & Bath
				46981	F15T8/KB-TP	24	7500	940	850	3000	70	Ⓢ	104	Preheat, Kitchen & Bath
				21326	F15T8/KB/6PK	24	7500	940	850	3000	70	Ⓢ	104	Preheat, Kitchen & Bath
				10143	F15T8/CW/6PK	24	7500	825	725	4100	60	Ⓢ	101	Preheat
				46980	F15T8/SUN-TP	24	7500	620	525	5000	90	Ⓢ	101	Preheat, Sunlight
<b>T12</b>														
T12	Medium BiPin (G13)	14	15	10117	F14T12/CW 6PK	24	9000	650	550	4100	60		101	Preheat
				22979	F14T12/KB 6PK	24	9000	700	650	3000	70	Ⓢ	104	Preheat, Kitchen & Bath
		15	18	10183	F15T12/CW 6PK	24	9000	760	685	4100	60		104	Preheat, Kitchen & Bath
				22745	F15T12/KB 6PK	24	9000	785	730	3000	70		104	Preheat, Kitchen & Bath
		20	24	80046	F20T12/CW/ECO/6PK	24	9000	1200	1150	4100	60		101	Preheat
				25575	F20T12/D/ECO/UPC	24	9000	1025	945	6500	75	Ⓢ	101	Preheat, Daylight
				21325	F20T12/KB/ECO/6PK	24	9000	1275	1200	3000	70	Ⓢ	104	Preheat, Kitchen & Bath
				14419	F20T12/SUN/ECO/6PK	24	9000	875	790	5000	90	Ⓢ	101	Preheat, Sunlight
				25577	F20T12/WW/ECO/UPC	24	9000	1250	1150	3000	52		101	Preheat, Warm White
				10231	F20T12/B 6PK	24	9000	450	330				101	Preheat
				10233	F20T12/G 6PK	24	9000	1575	957				101	Preheat
				46914	F20T12/KB/ECO-TP	24	9000	1275	1200	3000	70	Ⓢ	104	Preheat, Kitchen & Bath
				46826	F20T12/SUN/ECO-TP	24	9000	875	790	5000	90	Ⓢ	101	Preheat, Sunlight
		30	36	46917	F30T12/KB/ECO-TP	24	18000	2350	2120	3000	70	Ⓢ	104	Preheat, Kitchen & Bath

Ⓢ Means this lamp meets Federal Minimum Efficiency Standards.

See [www.gelighting.com](http://www.gelighting.com) e-catalog for the most up-to-date product information. To convert inches to millimeters, multiply by 25.4. All footnote references found at the end of this section. ⚡ Reduced Wattage Ⓢ High Color Rendering.



# Fluorescent Lamps

Bulb Base	Nominal Length Order	Watts in.	Code	Description	Case Qty.	Rated Life	Lumens			Color Temp.		Foot-notes	Warning and Cautions		Additional Information
							Initial	Mean	Final	K	CRI		Notes	Additional Information	
<b>CONSUMER PRODUCTS (CONTINUED)</b>															
<b>BLACKLIGHT</b>															
T8 Medium BiPin (G13)	15	18	35884	F15T8/BL 6PK	24	7500						8	105	Blacklight, UVA Source	
T12	20	24	10244	F20T12/BL 6PK	24	9000						8	105	Blacklight, UVA Source	
	40	48	10526	F40BL 6PK	24	20000						8	105	Blacklight, UVA Source	
<b>BLACKLIGHT BLUE</b>															
T8 Medium BiPin (G13)	15	18	35885	F15T8/BLB 6PK	24	7500							101	Blacklight Blue, UVA Source, Integral Dark Blue Filter	
T12 Medium BiPin (G13)	20	24	34747	F20T12/BLB 6PK	24	9000							101	Blacklight Blue, UVA Source, Integral Dark Blue Filter	
T9 4 Pin (G10q)	22	8.25	25665	FC8T9/BLB	6	12000							101	Blacklight Blue, UVA Source, Integral Dark Blue Filter	
T12 Medium BiPin (G13)	40	48	10531	F40BLB 6PK	24	20000							101	Blacklight Blue, UVA Source, Integral Dark Blue Filter	
<b>T9 CIRCLINE®</b>															
T9 4 Pin (G10q)	20	6.5	42732	FC6T9/CW	12	12000	800	560	4100	60			101		
	22	8.25	33774	FC8T9/CW	12	12000	1100	825	4100	60			101		
			11026	FC8T9/D	12	12000	925	690	6500	75	☞		101	Daylight	
			11084	FC8T9/KB	6	12000	1400	1120	3000	82	☞		104	Kitchen & Bath	
	32	12	33890	FC12T9/CW	12	12000	1950	1460	4100	60			101		
			11039	FC12T9/D	12	12000	1675	1260	6500	75	☞		101	Daylight	
			11085	FC12T9/KB	6	12000	2400	1920	3000	82	☞		104	Kitchen & Bath	
	40	16	33893	FC16T9/CW	12	12000	2700	2030	4100	60			101		
			11052	FC16T9/D	12	12000	2250	1690	6500	75	☞		101	Daylight	
<b>COVRGUARD® SHATTER RESISTANT</b>															
<b>T8 PREHEAT</b>															
T8 Medium BiPin (G13)	15	18	46627	F15T8/KB/CVG/UPC	24	7500	910	825	3000	70	☞	11, 13	104	Kitchen & Bath	
<b>T12 RAPID START</b>															
T12 Medium BiPin (G13)	25	48	46625	F48"/25W/UTSL/CVG/UPC	30	12000	1800	1620	4100	60		11, 13	103		
	40	48	80995	F40/KB/ECO/CVG/UPC	24	20000	3290	2990	3000	82	☞	11, 13	108	Kitchen & Bath	
			80999	F40/CW/ECO/CVG/UPC	30	20000	2930	2370	4100	60		11, 13	103		
<b>T12 RAPID START WATT-MISER®</b>															
T12 Medium BiPin (G13)	34	48	80997	F34/CW/WM/ECO/CVG/UPC	30	20000	2570	2210	4100	60	⚡	1, 11, 13	103		
<b>T12 PREHEAT</b>															
T12 Medium BiPin (G13)	20	24	80984	F20T12/CW/ECO/CVG/UPC	24	9000	1160	1110	4100	60		11, 13	103		
			80985	F20T12/KB/ECO/CVG/UPC	24	9000	1230	1160	3000	70	☞	11, 13	108	Kitchen & Bath	
<b>T12 INSTANT START</b>															
T12 Single Pin (Fa8)	60	96	41002	F96T12/CW/WM/CVG/UPC	15	12000	5330	4910	4100	60	⚡	1, 11, 13	103	Watt-Miser®	
<b>PLANT AND AQUARIUM / TERRARIUM</b>															
T8 Medium BiPin (G13)	14	15	41373	F14T8/AR/FR 6PK	24	7500	360	4000	92		☞		104	Aquarium Lamp Freshwater	
			40903	F14T8/AR/FS/6PK	24	7500	550	9325	64				104	Aquarium Lamp Fresh and Saltwater	
			41375	F14T8/AR/SA 6PK	24	7500	190	1000062					104	Aquarium Lamp Saltwater	
			41377	F14T8/SR 6PK	24	7500	565	5000	90		☞		104	Aquarium/Terrarium Lamp	
	15	18	22907	F15T8/AR/FR 6PK	24	7500	425	4000	92		☞		104	Aquarium Lamp Freshwater	
			22910	F15T8/AR/FS 6PK	24	7500	675	9325	64				104	Aquarium Lamp Fresh and Saltwater	
			22920	F15T8/AR/SA 6PK	24	7500	210	1000062					104	Aquarium Lamp Saltwater	
			49892	F15T8/PL/AQ 6PK	24	7500	510	3100	90		☞		104	Plant & Aquarium Wide Spectrum	
			22904	F15T8/SR 6PK	24	7500	620	5000	90		☞		104	Aquarium/Terrarium Lamp	



Bulb Base	Nominal Length	Order Watts in.	Code	Description	Case Qty.	Rated Life		Color Temp.		Foot-notes	Warning and Cautions	Additional Information		
						3hr/ Start	12hr/ Start	Lumens Initial Mean	K CRI					
<b>CONSUMER PRODUCTS (CONTINUED)</b>														
<b>PLANT AND AQUARIUM / TERRARIUM (CONTINUED)</b>														
T12 Medium BiPin (G13)	20	24	22908	F20T12/AR/FR 6PK	24	9000	600	4000	92	☞	104	Aquarium Lamp Freshwater		
			22911	F20T12/AR/FS 6PK	24	9000	950	9325	64		104	Aquarium Lamp Fresh and Saltwater		
			22922	F20T12/AR/SA 6PK	24	9000	270	1000062			104	Aquarium Lamp Saltwater		
			49891	F20T12/PL/AQ 6PK	24	9000	750	3100	90	☞	104	Plant & Aquarium Wide Spectrum		
			22905	F20T12/SR 6PK	24	9000	875	5000	90	☞	104	Aquarium/Terrarium Lamp		
T8 Medium BiPin (G13)	30	36	41374	F30T8/AR/FR 6PK	24	9000	630	4000	92	☞	104	Aquarium Lamp Freshwater		
			40904	F30T8/AR/FS 6PK	24	9000	1400	9235	64		104	Aquarium Lamp Fresh and Saltwater		
			41376	F30T8/AR/SA 6PK	24	9000	315	1000062			104	Aquarium Lamp Saltwater		
T12 Medium BiPin (G13)	30	36	41378	F30T12/SR 6PK	24	18000	1100	5000	90	☞	104	Plant & Aquarium Wide Spectrum		
			40	48	22909	F40T12/AR/FR 6PK	24	9000	1425	4000	92	☞	104	Aquarium Lamp Freshwater
					22914	F40T12/AR/FS 6PK	24	9000	2350	9325	64		104	Aquarium Lamp Fresh and Saltwater
			22923	F40T12/AR/SA 6PK	24	9000	700	1000062			104	Aquarium Lamp Saltwater		
			49893	F40PL/AQ 6PK	24	20000	1900	3100	90	☞	104	Plant & Aquarium Wide Spectrum		
22906	F40T12/SR 6PK	24	20000	2250	5000	90	☞	104	Aquarium/Terrarium Lamp					

## OPERATING NOTES

### GENERAL OPERATION

GE fluorescent lamps should be used only with auxiliary equipment designed to produce proper characteristics. Specifications for auxiliary equipment are covered by ANSI. Specifications for auxiliary equipment not included in ANSI Standards are available from GE Lighting.

### FACTORS AFFECTING LAMP PERFORMANCE

#### Ballasts

The three basic types of ballasts for fluorescent lamps are Preheat (PH), Instant Start (IS), and Rapid Start (RS). In general, lamps identified as preheat, rapid start or instant start should be used only on the corresponding ballast type. Electronic ballasts are presently available in both instant start and rapid start designs. Ballasts that operate with output currents below recommended levels, either by design or poor performance, will reduce fluorescent lamp life.

**Application** - Choosing the appropriate ballast for an application can have an impact on lamp life. For example, T8 lamps with electronic Instant Start ballasts should not be used in applications with electronic controls (such as occupancy sensors). The frequent switching will significantly reduce lamp life. Use only programmed rapid start ballasts in these situations.

**Operating Characteristics** - Fluorescent lamp life is strongly affected by the ballast. ANSI has set standards for fluorescent ballasts that will ensure proper operation of fluorescent lamps. Ballast characteristics that have a significant effect on lamp life are Current Crest Factor, Starting Time, Cathode Voltage and Open Circuit Voltage.

**Ballast Factor** - This is the percentage of a lamp's rated lumen output that can be expected when operated on a specific, commercially available ballast. For example, a ballast having a ballast factor of 0.93 will result in the lamp emitting 93% of its rated lumen output.

**High Frequency** - All fluorescent lamps operate more efficiently when driven at frequencies greater than 15 kHz. Four-foot fluorescent lamps operate approximately 10% more efficiently, while eight-foot lamps improve efficiency by about 5%. This efficiency improvement is one reason for the popularity of electronic ballasts.

#### Temperature

Light output and watts of a fluorescent lamp are affected by the ambient temperature, and by drafts. Most fluorescent lamps reach their maximum light output at room temperatures or at "luminaire temperatures." All-Weather fluorescent lamps are designed with jackets that improve performance in low temperature environments.

#### Luminaire

The design of the lighting fixture (luminaire) affects the ambient temperature in which the fluorescent lamps will be operating. A fixture that operates too cool or warm will result in lower light output from the lamps and reduce illumination levels.

#### Starting

The life of a fluorescent lamp is affected by the number of times the lamp is started. Starting results in shorter lamp life, while continuous operation will provide the longest lamp life. All fluorescent lamps, except where noted, have life ratings based on 3 hours per start.



## GENERAL INFORMATION

### LUMENS

**Nominal Initial Lumens** refer to the nominal light output of the lamp after 100 hours of operation at 25° C. **Nominal Mean Lumens** refer to the nominal light output of the lamp at 40% of its rated life. Some values are based on engineering calculations derived from extrapolation of initial measured lumens.

A self-ballasted lamp is measured using its integral ballast. Lamps without an integral ballast are measured using reference ballasts.

Lumens produced by lamps operated on commercial ballasts may not be equivalent to reference ballast ratings. For lighting design calculations, refer to the ballast manufacturer's published data for the appropriate "Ballast Factor".

### NOMINAL WATTS

Wattage is classified in accordance with American National Standards Institute standards and may not be the same as the wattage run on a reference ballast. The nominal wattage as defined by ANSI may vary from the listed wattage. Watts consumed by lamps operated on commercial ballasts may not be equivalent to reference ballast ratings. The watts shown for self ballasted lamps are nominal system watts.

### RATED LIFE

The rated life (hours) is the approximate median life when lamps are operated for three hours per start under laboratory conditions using ballasts which meet industry standards or GE Lighting specifications where no industry standards exist. Rated life for self-ballasted lamps is the approximate median life when operated for three hours per start under laboratory conditions. Some lamps are rated at 12 hours per start where noted.

## FOOTNOTES

### # Footnote

- 1 Watt-Miser®, Watt-Miser® Plus, F28T8/UMX and Energy Efficient (/EE) lamps are intended for use where ambient temperatures are 60°F (16°C) or higher and where the lamp surface is protected from strong air drafts. Failure to protect the lamp surface may result in reduced life, poor starting or erratic operation, such as flickering or spiraling. These lamps are not recommended for use with dimming systems. All T12 Watt-Miser® lamps are intended for use on two-lamp, indoor, lead, high power factor ballasts and are not recommended for use with dimming or reduced current systems. The use of T12 Watt-Miser® lamps on single lamp ballasts may shorten lamp life. T12 Rapid Start Watt-Miser® lamps are intended for use only with Rapid Start Ballasts. F34 Rapid Start Watt-Miser® lamps on high frequency electronic systems may display erratic starting before end of life. T8 Watt-Miser® lamps and F28/UMX lamps are intended for use only with instant start ballasts. They are, however, also approved for use on GE UltraStart programmed rapid start ballasts.
- 2 Reprographic Peak Emission 417nm. 2000 hours useful life; burning hours longer.
- 3 F40T17/CW/IS lamps are for use only in fixtures equipped with instant start ballasts.
- 4 Because Power Groove® and Very High Output lamps are most used in commercial applications, the life rating is based on 12 hrs. per start.
- 6 Bare "Cold Temperature" lamps (as indicated by /CT) and "All Temperature" lamps are designed for use where ambient temperatures drop below 60°F (16°C).
- 7 Performance data based on engineering estimates.
- 8 CAUTION: Risk Group 1 (Low Risk): UV emitted from this lamp. Skin or eye irritation could result. Minimize exposure.
- 9 WARNING: Risk Group 3 (High Risk): UV emitted from this lamp. Avoid exposure of eyes and skin to unshielded lamp. Skin or eye injury will result.
- 10 Shoplites are not recommended to be used on F40 full light output ballasts. Life will be reduced by approximately 50%.
- 11 Lumen rating based on approximate 3% reduction in light output with CovRguard® sleeving.
- 12 Do not use CovRguard® HO lamps in watertight or airtight fixtures.
- 13 Blocks 100% of UV-B and UV-C. Blocks from 75 to 99% of UV-A, depending on lamp type.
- 14 Life rating is based on 12 hrs. per start.
- 15 Lumen rating based on approximate 3% reduction in light output with jacket.
- 16 Life rating is based on UV maintenance curve and is measured at 80% of initial (100hr) UVC output.
- 17 Jacketed "Cold Temperature" lamps (as indicated by -CT) are designed for use where ambient temperatures do not rise above 32°F (0°C).
- 18 T8 lamps run on Instant Start ballasts should not be used in conjunction with electronic controls such as occupancy sensors. The frequent switching will significantly impact lamp life and void any warranties. Programmed Rapid Start ballasts such as GE's UltraStart ballast should be used in these situations.
- 19 T5 Starcoat® Ecolux® lamp initial and mean lumen ratings are taken at 95°F (35°C)

### Performance Notes:

#### T8 Lamps:

- Rated life for F32T8, F32T8/XL or SXL, and F32T8/HL/XL lamps is rated life on **rapid start and instant start** circuits. See product section for lamp specific ratings.
- Rated life for F32T8/WM and F32T8/WM/XL and the F28T8/UMX lamps is rated life on **instant start** circuits.
- Rated life for F17T8 and F25T8 (including XL versions), as well as, the F40T8 is rated life on **rapid start** circuits. Rated life for these linear lamps on instant start electronic circuits is reduced by 25%.

**T12 Lamps:** Life of 4' T12 lamps on single-lamp, rapid start ballasts may be reduced.

### COLOR TEMPERATURE / CHROMATICITY

Approximate color temperature of fluorescent is measured using industry standard methods and is based on a nominal 40-watt source. Fluorescent sources operating at different lamp currents will have slightly shifted color appearances when compared to the corresponding 40-watt sources.

### SCOTOPIC/PHOTOPIC RATIO

This measurement accounts for the fact that of the two light sensors in the retina, rods are more sensitive to blue light (Scotopic Vision) and cones to yellow light (Photopic Vision). The Scotopic/Photopic (S/P) Ratio is an attempt to capture the relative strengths of these two responses. S/P is calculated as the ratio of scotopic lumens to photopic lumens, for the light source, on an ANSI reference ballast. Cooler sources (higher color temperature lamps) tend to have higher values of the S/P Ratio compared to warm sources.

### SCOTOPIC/PHOTOPIC (S/P) RATIO:

This measurement accounts for the fact that of the two light sensors in the retina, rods are more sensitive to blue light (Scotopic vision) and cones to yellow light (Photopic vision). The Scotopic/Photopic (S/P) Ratio is an attempt to capture the relative strengths of these two responses. Cooler sources (higher color temperature lamps) tend to have higher values of the S/P Ratio compared to warm sources.

T5	S/P Ratio	F17 and F25T8	S/P Ratio	F32 and F32T8/WM	S/P Ratio
830	1.3	SP30	1.3	SP30	1.3
835	1.5	SP35	1.4	SP35	1.4
841	1.7	SP41	1.6	SP41	1.6
850	1.9	F17 and F25T8	S/P Ratio	SP50	1.9
865	2.2	SPX30	1.3	SP65	2.1
F28T8	S/P Ratio	SPX35	1.5	F32T8 and F32T8/HL	S/P Ratio
SP30	1.3	SPX41	1.8	SPX30	1.3
SP35	1.5	SPX50	2.0	SPX35	1.5
SP41	1.8	SPX65	2.3	SPX41	1.8
SP50	2.0			SPX50	2.0
				SPX65	2.3



## WARNING AND CAUTION NOTICES

### 101

#### ▲ WARNING

##### Risk of electric shock

- Turn power off before inspection, installation or removal

#### ▲ CAUTION

##### Lamp may shatter and cause injury if broken

- Wear safety glasses and gloves when handling lamp
- Do not use excessive force when installing lamp

### 102

#### ▲ WARNING

##### Risk of electric shock

- Turn power off before inspection, installation or removal

#### ▲ CAUTION

##### Improper handling may cause breakage

- Do not carry lamp by bracket

##### Lamp may shatter and cause injury if broken

- Wear safety glasses and gloves when handling lamp
- Do not use excessive force when installing lamp

### 103

#### ▲ WARNING

##### Risk of electric shock

- Turn power off before inspection, installation or removal

### 104

#### ▲ WARNING

##### Risk of electric shock

- Turn power off before inspection, installation or removal
- Avoid direct water/liquid contact

#### ▲ CAUTION

##### Lamp may shatter and cause injury if broken

- Wear safety glasses and gloves when handling lamp
- Do not use excessive force when installing lamp

### 105

#### ▲ WARNING

##### Risk of electric shock

- Turn power off before inspection, installation or removal

#### ▲ CAUTION

##### Lamp emits UV radiation which may cause eye/skin irritation. RG-1

- Minimize exposure

##### Lamp may shatter and cause injury if broken

- Wear safety glasses and gloves when handling lamp
- Do not use excessive force when installing lamp

### 106

#### ▲ WARNING

##### Risk of electric shock

- Turn power off before inspection, installation or removal

##### Lamp emits UV radiation which may cause eye/skin injury. RG-3

- Avoid exposure of eyes and skin to unshielded lamp

#### ▲ CAUTION

##### Lamp may shatter and cause injury if broken

- Wear safety glasses and gloves when handling lamp
- Do not use excessive force when installing lamp

### 107

#### ▲ WARNING

##### Risk of electric shock

- Turn power off before inspection, installation or removal
- Do not open - there are no serviceable parts inside
- Do not drill or cut into plastic parts
- Avoid direct water/liquid contact
- Fully insert plug
- Use indoors only

#### ▲ CAUTION

##### Lamp may shatter and cause injury if broken

- Wear safety glasses and gloves when handling lamp
- Lamp is not replaceable. Do not attempt to remove lamp from fixture
- Use in permanent installation only — not for portable use

##### Unit will fail if not installed properly

- Follow installation instructions

### 108

#### ▲ WARNING

##### Risk of electric shock

- Turn power off before inspection, installation or removal
- Avoid direct water/liquid contact



## FLUORESCENT LAMP CROSS REFERENCE

GE Description	Osram Sylvania Description	Philips Description
<b>ORDER THIS GE LAMP IF YOU USE THESE LAMPS</b>		
<b>APPLIANCE</b>		
F24T8/CW/4	F18T8/CW/K/24	F18T8/CW/24
F26T8/CW/4 (19W)	F18T8/CW/K/26	F16T8/CW/26 (16W)
F28T8/CW/4 (19W)	F18T8/CW/K/28	F17T8/CW/28 (17W)
F30T8/CW/4	F18T8/CW/K/30	F18T8/CW/30 (18W)
F25T12/CW/33	F25T12/CW/33	—
<b>ECOLUX® T8 SP</b>		
	<b>OCTRON®</b>	<b>TL70</b>
F17T8/SP30/ECO	F017/730/ECO	F17T8/TL730/ALTO
F17T8/SP35/ECO	F017/735/ECO	F17T8/TL735/ALTO
F17T8/SP41/ECO	F017/741/ECO	F17T8/TL741/ALTO
F25T8/SP30/ECO	F025/730/ECO	F25T8/TL730/ALTO
F25T8/SP35/ECO	F025/735/ECO	F25T8/TL735/ALTO
F25T8/SP41/ECO	F025/741/ECO	F25T8/TL741/ALTO
F32T8/SP30/ECO	F032/730/ECO	F32T8/TL730/ALTO
F32T8/SP35/ECO	F032/735/ECO	F32T8/TL735/ALTO
F32T8/SP41/ECO	F032/741/ECO	F32T8/TL741/ALTO
F32T8/SP50/ECO	F032/750/ECO	F32T8/TL750/ALTO
F32T8/SP65/ECO	F032/765/ECO	—
<b>ECOLUX® T8 SPX</b>		
	<b>OCTRON®</b>	<b>TL80</b>
F17T8/SPX30/ECO	F017/830/ECO	F17T8/TL830/ALTO
F17T8/SPX35/ECO	F017/835/ECO	F17T8/TL835/ALTO
F17T8/SPX41/ECO	F017/841/ECO	F17T8/TL841/ALTO
F25T8/SPX30/ECO	F025/830/ECO	F25T8/TL830/ALTO
F25T8/SPX35/ECO	F025/835/ECO	F25T8/TL835/ALTO
F25T8/SPX41/ECO	F025/841/ECO	F25T8/TL841/ALTO
F32T8/SPX30/ECO	F032/830/ECO	F32T8/TL830/ALTO
F32T8/SPX35/ECO	F032/835/ECO	F32T8/TL835/ALTO
F32T8/SPX41/ECO	F032/841/ECO	F32T8/TL841/ALTO
F32T8/SPX50/ECO	F032/850/ECO	F32T8/TL850/ALTO
<b>ECO EXTRA-LIFE T8 SP</b>		
F17T8/XL/SP30/ECO	F017/730/XP/ECO	—
F17T8/XL/SP35/ECO	F017/735/XP/ECO	—
F17T8/XL/SP41/ECO	F017/741/XP/ECO	—
F25T8/XL/SP30/ECO	F025/730/XP/ECO	—
F25T8/XL/SP35/ECO	F025/735/XP/ECO	—
F25T8/XL/SP41/ECO	F025/741/XP/ECO	—
F32T8/XL/SP30/ECO	F032/730/XP/ECO	F32T8/TL730 PLUS/ALTO
F32T8/XL/SP35/ECO	F032/735/XP/ECO	F32T8/TL735 PLUS/ALTO
F32T8/XL/SP41/ECO	F032/741/XP/ECO	F32T8/TL741 PLUS/ALTO

GE Description	Osram Sylvania Description	Philips Description
<b>ORDER THIS GE LAMP IF YOU USE THESE LAMPS</b>		
<b>ECO EXTRA-LIFE T8 SPX XP/ECO PLUS/ALTO</b>		
F17T8/XL/SPX30/ECO	F017/830/XP/ECO	F17T8/TL830/PLUS/ALTO
F17T8/XL/SPX35/ECO	F017/835/XP/ECO	F17T8/TL835/PLUS/ALTO
F17T8/XL/SPX41/ECO	F017/841/XP/ECO	F17T8/TL841/PLUS/ALTO
F17T8/XL/SPX50/ECO	F017/850/XP/ECO	F17T8/TL850/PLUS/ALTO
F17T8/XL/SPX65/ECO	F017/865/XP/ECO	F17T8/TL865/PLUS/ALTO
F25T8/XL/SPX30/ECO	F025/830/XP/ECO	F25T8/TL830/PLUS/ALTO
F25T8/XL/SPX35/ECO	F025/835/XP/ECO	F25T8/TL835/PLUS/ALTO
F25T8/XL/SPX41/ECO	F025/841/XP/ECO	F25T8/TL841/PLUS/ALTO
F25T8/XL/SPX50/ECO	F025/850/XP/ECO	F25T8/TL850/PLUS/ALTO
F25T8/XL/SPX65/ECO	F025/865/XP/ECO	F25T8/TL865/PLUS/ALTO
F32T8/XL/SPX30/ECO	F032/830/XP/ECO	F32T8/TL830 PLUS/ALTO
F32T8/XL/SPX35/ECO	F032/841/XP/ECO	F32T8/TL835 PLUS/ALTO
F32T8/XL/SPX41/ECO	F032/835/XP/ECO	F32T8/TL841 PLUS/ALTO
F32T8/XL/SPX50/ECO	F032/850/XP/ECO	F32T8/TL850 PLUS/ALTO
F32T8/XL/SPX65/ECO	F032/865/XP/ECO	F32T8/TL865 PLUS/ALTO
<b>4' T8 HIGH LUMEN (HL)</b>		
F32T8/XL/SPX30/HL/ECO	F032/830/XPS/ALTO	F32T8/ADV830/ALTO
F32T8/XL/SPX35/HL/ECO	F032/835/XPS/ALTO	F32T8/ADV835/ALTO
F32T8/XL/SPX41/HL/ECO	F032/841/XPS/ALTO	F32T8/ADV841/ALTO
F32T8/XL/SPX50/HL/ECO	F032/850/XPS/ALTO	F32T8/ADV850/ALTO
<b>4' T8 WATT-MISER®</b>		
F32T8/SP30/IS/WM/ECO	F032/730/SS/ECO	—
F32T8/SP35/IS/WM/ECO	F032/735/SS/ECO	—
F32T8/SP41/IS/WM/ECO	F032/741/SS/ECO	—
F32T8/SP50/IS/WM/ECO	F032/750/SS/ECO	—
<b>4' T8 WATT-MISER® EXTRA-LIFE</b>		
F32T8/XL/SP30/WM/ECO	—	F32T8/ADV830/EW/LL/ALTO
F32T8/XL/SP35/WM/ECO	—	F32T8/ADV835/EW/LL/ALTO
F32T8/XL/SP41/WM/ECO	—	F32T8/ADV841/EW/LL/ALTO
F32T8/XL/SP50/WM/ECO	—	F32T8/ADV850/EW/LL/ALTO
<b>4' T8 ULTRAMAX™ 28W</b>		
F28T8/SP30/UMX/ECO	F028/830/XP/SS/ECO	—
F28T8/SP30/UMX/ECO	F028/835/XP/SS/ECO	—
F28T8/SP30/UMX/ECO	F028/841/XP/SS/ECO	—
<b>4' T8 VERY LONG LIFE (SXL)</b>		
F32T8/SXL/SP30/ECO	F032/830/XPS/ECO	F32T8/TL830 PLUS/ALTO
F32T8/SXL/SP35/ECO	F032/835/XPS/ECO	F32T8/TL830 PLUS/ALTO
F32T8/SXL/SP41/ECO	F032/841/XPS/ECO	F32T8/TL830 PLUS/ALTO
<b>4' T12 WATT-MISER® F40</b>		
F34/CW/RS/WM/ECO	F34CW/SS/ECO	F34CW/RS/EW/ALTO
F34WW/RS/WM/ECO	F34WW/SS/ECO	F34WW/RS/EW/ALTO
F34/SP30/RS/WM/ECO	F34/D30/SS/ECO	F34/SPEC30/RS/EW/ALTO
F34/SP35/RS/WM/ECO	F34/D35/SS/ECO	F34/SPEC35/RS/EW/ALTO
F34/SP41/RS/WM/ECO	F34/D41/SS/ECO	F34/SPEC41/RS/EW/ALTO
F34/SP50/RS/WM/ECO	—	—
F34/SP65/RS/WM/ECO	—	—



**FLUORESCENT LAMP CROSS REFERENCE (CONTINUED)**

<i>GE Description</i>	<i>Osram Sylvania Description</i>	<i>Philips Description</i>
<b>ORDER THIS GE LAMP IF YOU USE THESE LAMPS</b>		
<b>4' T12 WATT-MISER® F40 SPX</b>		
F34/SPX30/RS/WM/ECO	F34/D830/SS/ECO	F34/30U/RS/EW/ALTO
F34/SPX35/RS/WM/ECO	F34/D835/SS/ECO	F34/35U/RS/EW/ALTO
F34/SPX41/RS/WM/ECO	F34/D841/SS/ECO	F34/41U/RS/EW/ALTO
<b>8' T12 WATT-MISER® (WM)</b>		
F96T12/SP30/WM/ECO	F96T12/D30/SS/ECO	F96T12/SPEC30/EW/ALTO
F96T12/SP35/WM/ECO	F96T12/D35/SS/ECO	F96T12/SPEC35/EW/ALTO
F96T12/SP41/WM/ECO	F96T12/D41/SS/ECO	F96T12/SPEC41/EW/ALTO
F96T12/SP65/WM/ECO	F96T12/D65/SS (not ECO)	—
F96T12/SPX30/WM/ECO	F96T12/D830/SS/ECO	F96T12/30U/EW/ALTO
F96T12/SPX35/WM/ECO	F96T12/D835/SS/ECO	F96T12/35U/EW/ALTO
F96T12/SPX41/WM/ECO	F96T12/D841/SS/ECO	F96T12/41U/EW/ALTO
F96T12/SP30/ECO	F96T12/D30/ECO	F96T12/SPEC30/ALTO
F96T12/SP35/ECO	F96T12/D35/ECO	F96T12/SPEC35/ALTO
F96T12/SP41/ECO	F96T12/D41/ECO	F96T12/SPEC41/ALTO
F96T12/SPX30/ECO	F96T12/D830/ECO	F96T12/SPEC30U/ALTO
F96T12/SPX35/ECO	F96T12/D835/ECO	F96T12/SPEC35U/ALTO
F96T12/SPX41/ECO	F96T12/D841/ECO	F96T12/SPEC41U/ALTO
<b>8' T12 HIGH OUTPUT (WM)</b>		
F96T12/CW/HO/WM/ECO	F96T12/CW/HO/SS/ECO	F96T12/CW/HO/EW/ALTO
<b>T5 AND T5/HO</b>		
F14W/T5/830/ECO	FP14/830/ECO	F14T5/830/ALTO
F14W/T5/835/ECO	FP14/835/ECO	F14T5/835/ALTO
F14W/T5/841/ECO	FP14/841/ECO	F14T5/841/ALTO
F14W/T5/850/ECO	—	—
F14W/T5/865/ECO	—	—
F21W/T5/830/ECO	FP21/830/ECO	F21T5/830/ALTO
F21W/T5/835/ECO	FP21/835/ECO	F21T5/835/ALTO
F21W/T5/841/ECO	FP21/841/ECO	F21T5/841/ALTO
F21W/T5/850/ECO	—	—
F21W/T5/865/ECO	—	—
F28W/T5/830/ECO	FP28/830/ECO	F28T5/830/ALTO
F28W/T5/835/ECO	FP28/835/ECO	F28T5/835/ALTO
F28W/T5/841/ECO	FP28/841/ECO	F28T5/841/ALTO
F28W/T5/850/ECO	—	—
F28W/T5/865/ECO	FP28/865/ECO	—
F35W/T5/830/ECO	FP35/830/ECO	F35T5/830
F35W/T5/835/ECO	FP35/835/ECO	F35T5/835
F35W/T5/841/ECO	FP35/841/ECO	F35T5/841
F35W/T5/850/ECO	—	—
F35W/T5/865/ECO	—	—
F24W/T5/830/ECO	FP24/830/HO/ECO	F24T5/830/HO/ALTO
F24W/T5/835/ECO	FP24/835/HO/ECO	F24T5/835/HO/ALTO
F24W/T5/841/ECO	FP24/841/HO/ECO	F24T5/841/HO/ALTO
F24W/T5/850/ECO	—	—

<i>GE Description</i>	<i>Osram Sylvania Description</i>	<i>Philips Description</i>
<b>ORDER THIS GE LAMP IF YOU USE THESE LAMPS</b>		
<b>T5 AND T5/HO (CONTINUED)</b>		
F24W/T5/865/ECO	—	—
F39W/T5/830/ECO	FP39/830/HO/ECO	F39T5/830/HO/ALTO
F39W/T5/835/ECO	FP39/835/HO/ECO	F39T5/835/HO/ALTO
F39W/T5/841/ECO	FP39/841/HO/ECO	F39T5/841/HO/ALTO
F39W/T5/850/ECO	—	—
F39W/T5/865/ECO	—	—
F54W/T5/830/ECO	FP54/830/HO/ECO	F54T5/830/HO/ALTO
F54W/T5/835/ECO	FP54/835/HO/ECO	F54T5/835/HO/ALTO
F54W/T5/841/ECO	FP54/841/HO/ECO	F54T5/841/HO/ALTO
F54W/T5/850/ECO	FP54/850/HO/ECO	F54T5/850/HO/ALTO
F54W/T5/865/ECO	FP54/865/HO/ECO	F54T5/865/HO/ALTO
F49W/T5/830/ECO	—	—
F49W/T5/835/ECO	—	—
F49W/T5/841/ECO	—	—
F49W/T5/850/ECO	—	—
F49W/T5/865/ECO	—	—
F80W/T5/830/ECO	FP80/830/HO	F80T5/830/HO
F80W/T5/835/ECO	FP80/835/HO	F80T5/835/HO
F80W/T5/841/ECO	FP80/841/HO	F80T5/841/HO
F80W/T5/850/ECO	—	—
F80W/T5/865/ECO	—	—
<b>OTHER RAPID START</b>		
F96PG17/CW/WM	—	—
F34CW/U/6/WM/ECO	FB34/CW/6/SS/ECO	FB34/CW/6/EW/ALTO
F40CW/U/3	—	—
F40CW/U/6	FB40CW/6	—
F48T12/CW/1500	F48T12/CW/VHO	F48T12/CW/VHO
F48PG17/CW	—	—
F72T12/CW/1500	F72T12/CW/VHO	F72T12/CW/VHO
F72PG17/CW	—	—
F96T12/CW/1500	F96T12/CW/VHO	F96T12/CW/VHO
F96PG17/CW	—	—
F48T12/CW/1500/0	F48T12/CW/VHO/LT	F48T12/CW/VHO-0
F48T12/CW/VHO/0	—	—
F60T10/CW	F60T12/CW/VHO/LT	F60T12/CW/VHO-0
F72T12/CW/1500/0	F72T12/CW/VHO/LT	F72T12/CW/VHO-0
F96T12/CW/1500/0	F96T12/CW/VHO/LT	F96T12/CW/VHO-0
F48T10J/CW	FJ48T12/CW/VHO/LT	FJ48T12/CW/VHO-0
F60T10J/CW	—	FJ60T12/CW/VHO-0
F72T10J/CW	FJ72T12/CW/VHO/LT	FJ72T12/CW/VHO-0
F96T10J/CW	FJ96T12/CW/VHO/LT	FJ96T12/CW/VHO-0





## GE ULTRAMAX® INSTANT START BALLASTS

### GE REVOLUTIONIZES LIGHTING AGAIN WITH BREAKTHROUGH TECHNOLOGY

In the GE labs, our engineers have developed a breed of ballasts to make lighting systems that save more energy, are more adaptable, and deliver optimal lamp performance. The innovative, patented technology in our new UltraMax® electronic ballasts exceeds expectations, and is like nothing else available.

### MULTI-VOLTAGE TECHNOLOGY MEANS A SINGLE ULTRAMAX® MODEL HANDLES VOLTAGE FROM 120 THROUGH 277

UltraMax® Ballasts can virtually “read” the incoming voltage and adapt automatically to any voltage from 108V to 305V. The benefits of Multi-Voltage Control (MVC) are obvious:

- Fewer models handle more jobs, eliminating inventory hassles.
- MVC simplifies installation and eliminates guesswork at the job site.
- MVC compensates for incoming voltage fluctuations or variations from unreliable power.

### THE ULTRAMAX® IS THE ONLY FULL LINE OF T8 BALLASTS WITH A UL TYPE CC ANTI-ARC RATING

UL Type CC Rating is a stringent designation of protection against arcing in electrical devices. GE's Arc-Guard design eliminates the damaging effects arcing can have on lamps, ballasts and sockets.

### HIGH EFFICIENCY DELIVERS OVER 40% ENERGY SAVINGS

Ballasts are the new frontier of energy efficiency. Systems combining UltraMax® electronic ballasts and T8/WM lamps can deliver over 40% energy savings over standard electromagnetically ballasted T12 systems. Since energy costs are typically 80% of the overall cost of light, a more efficient system can pay for itself in a very short time and provide an excellent return on investment.

### ULTRAMAX® IS ULTRA LAMP FRIENDLY

With an industry low lamp current crest factor (LCCF) of <1.5, UltraMax® ensures optimal lamp operation and maximum lamp life, which can save on lamp and maintenance costs.

### ACTIVE CURRENT REGULATION (ACR) TECHNOLOGY IS A PATENTED ADVANTAGE

The UltraMax® ballast's patented ACR modular design means individual inverter modules regulate the output current to each lamp. So, unlike conventional ballasts, if one lamp fails, the remaining lamps are not forced to operate at a higher current. This ensures optimal lamp performance.

### ANTI-STRIATION CONTROL FOR BETTER LIGHT QUALITY, WITH NO STRIATIONS

The UltraMax® is the only line of T8 ballasts with Anti-Striation Control. This advanced technology eliminates the maintenance issues caused by striating lamps, often referred to as spiraling or swirling. This provides a flicker- and worry-free environment.

### COMPARE THE ENERGY USE OF A THREE LAMP FIXTURE

Technology	Watts
Standard T12/WM System	117
Standard Electronic T8 System	87
UltraMax™ L System With GE F28T8	65

### FULLY PARALLEL INDEPENDENT LAMP OPERATION MAKES SYSTEM EASIER TO MAINTAIN

If one lamp fails, all the others in the system stay lit. That means system maintenance is easier to manage.

### ULTRAMAX® IS ULTRA-COOL

The UltraMax® ballast's high efficiency design results in ultra-cool operation that can provide additional AC energy savings, especially during peak demand periods.

### A BIG IDEA IN A SMALL PACKAGE

The UltraMax® ballast housing is smaller, lower-profile and lightweight. That can be a big help in retrofits. It also means future fixture designs can be more compact and streamlined.

### EVERY UNIT IS TESTED AND PROVEN BEFORE IT'S SHIPPED

GE does 100% burn-in on every UltraMax™ ballast using our extreme open/short test, which simulates undesirable and harsh-use situations, so you are assured of a system you can rely on right out of the box.

### GE SIX SIGMA QUALITY BACKED BY A FULL 5-YEAR LIMITED WARRANTY

The UltraMax® ballast is designed by GE's expert engineers and custom-manufactured to our exacting Six Sigma specifications, all backed by a full 5-year warranty. When used with GE T8 Lamps you also get our Total Performance System Warranty which can cover lamps up to 3 years depending on your annual usage. Contact your GE Representative for more details.

### A FULL FAMILY OF HIGH EFFICIENCY MULTI-VOLTAGE BALLASTS FOR ALL T8 APPLICATIONS



**The Low watt option** for Max energy savings. With a ballast factor of .77, the L line is the most energy efficient choice. It provides adequate illumination for most applications. For 1, 2, 3, and 4 T8 lamps in 2', 3', and 4' lengths.



**The Normal light option** balances efficiency and illumination. The most-used type of ballast, the N line saves energy without sacrificing lumens. A ballast factor of .87 meets most application needs. For 1, 2, 3, and 4 T8 lamps in 2', 3', 4', and 8' lengths.



**The choice for High light output.** With a ballast factor of 1.15, UltraMax® H delivers the most lumens for maximum light or when you want more savings using fewer lamps. This is the first high-efficiency high-light output line for 2, 3 and 4 T8 lamps.



## ULTRASTART® PROGRAMMED START BALLASTS

### FEATURES AND BENEFITS

#### Longer Lamp Life in Frequently Switched Applications

- UltraStart® extends lamp life by 18% to greater than 200% versus instant start ballasts in frequently switched applications, saving you money in maintenance costs and replacement lamps.
- Program Start ballasts are required in any applications using sensors or where extended lamp life is a primary concern. Operation of instant start ballast systems in frequently-switched applications in conjunction with automated controls (such as, but not limited to, occupancy sensor) will void lamp warranties.

#### Same Energy Savings as High-Efficiency Instant Start Ballasts

- GE UltraStart® ballasts operate at an industry high 90%+ efficiency. Traditional PS ballasts typically operate between 79–86%.

#### Simplify Installation with Multi-Voltage Technology

- The UltraStart® T5 and UltraStart® T8 XL and H ballasts incorporate Multi-Voltage technology. UltraStart® can virtually “read” the incoming voltage and adapt automatically to any voltage from 108V to 305V. Fewer models handle more jobs with Multi-Voltage technology, and it eliminates guess work at the job site. Multi-Voltage BallastsControl (MVC) also compensates for incoming voltage fluctuations or variations from unreliable power.

#### Lower Maintenance Costs with Parallel Mode Operation

- Most PS ballasts operate in series mode, meaning if one bulb goes out, they all go out. GE UltraStart® T8 ballasts operate in parallel mode, meaning if one bulb goes out, others stay on.

#### Fast Starting Time

- GE UltraStart® T8 ballasts start in visually the same time as instant start ballasts (less than 0.7 seconds)—a significant improvement versus

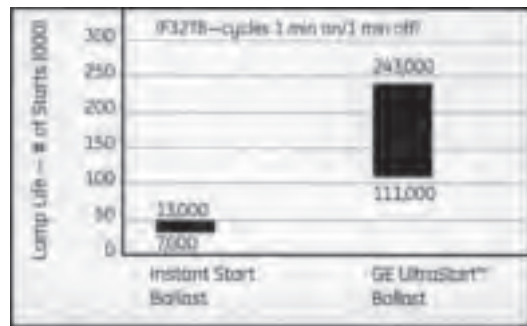
traditional PS ballasts. An important feature when using sensors and the annoying delay of waiting for the lights to turn on with traditional PS ballasts.

#### Complies with (RoHS) Restrictions of Hazardous Materials Standards.

### GE LAMP LIFE RANGE—INSTANT START VS. PROGRAMMED START\*\*

GE lamp life studies have shown that lamp life is up to 20 times longer in rapid cycle testing. Lamp life tests have demonstrated 111,000 to 243,000 starts on F32T8 lamps with GE UltraStart® ballasts as opposed to only 7,000 to 13,000 starts with standard instant start ballasts. UltraStart® maximizes lamp life in frequently switched applications and where lamp life is a primary concern. GE UltraStart® ballasts and lamps provide guaranteed performance with the GE Total System Limited Warranty.

\*\*GE 2004–2005 lamp testing @ industry standard B50 rapid cycle testing.



Product Code	Description	Application	Starting Method	Ballast Factor	Lamp Wiring	Package Type	Units Per Carton
<b>ULTRAMAX® INSTANT START MULTI-VOLTAGE HIGH EFFICIENCY</b>							
49706	GE132MAX-L/ULTRA	1- F32T8 120 to 277 "L" .77BF	Instant Start	Low	Parallel	Standard	10
49771	GE132MAX-N/ULTRA	1- F32T8 120 to 277 "N" .87 BF	Instant Start	Normal	Parallel	Standard	10
23939	GE132MAX-N-IP	1- F32T8 120 to 277 "N" .87 BF I-Pack 4/carton	Instant Start	Normal	Parallel	DIY	4
49775	GE232MAX-H/ULTRA	2 or 1- F32T8 120 to 277 "H" 1.15 BF	Instant Start	High	Parallel	Standard	10
47548	GE232MAX-H-42T	2 or 1- F32T8 120 to 277 "H" 1.15 BF Pallet Pack	Instant Start	High	Parallel	Pallet Pack	420
49707	GE232MAX-L/ULTRA	2 or 1- F32T8 120 to 277 "L" .77 BF	Instant Start	Low	Parallel	Standard	10
47546	GE232MAX-L-42T	2 or 1- F32T8 120 to 277 "L" .77 BF Pallet Pack	Instant Start	Low	Parallel	Pallet Pack	420
49772	GE232MAX-N/ULTRA	2 or 1- F32T8 120 to 277 "N" .87 BF	Instant Start	Normal	Parallel	Standard	10
31052	GE232MAX-N-42T	2 or 1- F32T8 120 to 277 "N" .87 BF Pallet Pack	Instant Start	Normal	Parallel	Pallet Pack	420
23940	GE232MAX-N-IP	2 or 1- F32T8 120 to 277 "N" .87 BF I-Pack 4/carton	Instant Start	Normal	Parallel	DIY	4
49776	GE332MAX-H/ULTRA	3 or 2- F32T8 120 to 277	Instant Start	High	Parallel	Standard	10
47549	GE332MAX-H-42T	3 or 2- F32T8 120 to 277 "H" 1.15 BF Pallet Pack	Instant Start	High	Parallel	Pallet Pack	420
49708	GE332MAX-L/ULTRA	3 or 2- F32T8 120 to 277 "L" .77 BF	Instant Start	Low	Parallel	Standard	10
31055	GE332MAX-L-42T	3 or 2- F32T8 120 to 277 "L" .77 BF Pallet Pack	Instant Start	Low	Parallel	Pallet Pack	420
49773	GE332MAX-N/ULTRA	3 or 2- F32T8 120 to 277 "N" .87 BF	Instant Start	Normal	Parallel	Standard	10
31053	GE332MAX-N-42T	3 or 2- F32T8 120 to 277 "N" .87 BF Pallet Pack	Instant Start	Normal	Parallel	Pallet Pack	420
23941	GE332MAX-N-IP	3 or 2- F32T8 120 to 277 "N" .87 BF I-Pack 4/carton	Instant Start	Normal	Parallel	DIY	4
49777	GE432MAX-H/ULTRA	4 or 3- F32T8 120 to 277 "H" 1.15 BF	Instant Start	High	Parallel	Standard	10
47550	GE432MAX-H-42T	4 or 3- F32T8 120 to 277 "H" 1.15 BF Pallet Pack	Instant Start	High	Parallel	Pallet Pack	420
49709	GE432MAX-L/ULTRA	4 or 3- F32T8 120 to 277 "L" .77 BF	Instant Start	Low	Parallel	Standard	10
47547	GE432MAX-L-42T	4 or 3- F32T8 120 to 277 "L" .77 BF Pallet Pack	Instant Start	Low	Parallel	Pallet Pack	420
49774	GE432MAX-N/ULTRA	4 or 3- F32T8 120 to 277 "N" .87 BF	Instant Start	Normal	Parallel	Standard	10
31054	GE432MAX-N-42T	4 or 3- F32T8 120 to 277 "N" .87 BF Pallet Pack	Instant Start	Normal	Parallel	Pallet Pack	420
23942	GE432MAX-N-IP	4 or 3- F32T8 120 to 277 "N" .87 BF I-Pack 4/carton	Instant Start	Normal	Parallel	DIY	4



Product Code	Description	Application	Starting Method	Ballast Factor	Lamp Wiring	Package Type	Units Per Carton
<b>ULTRAMAX™ INSTANT START MULTI-VOLTAGE HIGH EFFICIENCY (CONTINUED)</b>							
49766	GE159MAX-N/ULTRA	1- F96T8 120 to 277	Instant Start	Normal	Parallel	Standard	10
49767	GE259MAX-N/ULTRA	2 or 1- F96T8 120 to 277 "N" .87 BF	Instant Start	Normal	Parallel	Standard	10
23954	GE259MAX-N-IP	2 or 1- F96T8 120 to 277 "N" .87 BF I-Pack 4/carton	Instant Start	Normal	Parallel	DIY	4
<b>ULTRASTART™ T8 PROGRAM START</b>							
29621	GE-232-120-PS-N	2 F32T8 120V Normal Light .87 BF<10% THD UltraStart	Programmed Start	Normal	Parallel	Standard	10
29630	GE-232-120PS-N-T	2 F32T8 120V Normal Light .87 BF<10% THD UltraStart	Programmed Start	Normal	Parallel	Pallet Pack	420
29622	GE-232-277-PS-N	2 F32T8 277V Normal Light .87 BF<10% THD	Programmed Start	Normal	Parallel	Standard	10
29632	GE-232-277PS-N-T	2 F32T8 277V Normal Light .87 BF<10% THD UltraStart	Programmed Start	Normal	Parallel	Pallet Pack	420
29675	GE-232-MVPS-H	2 F32T8 120V-277V High Light 1.15 BF<10% THD UltraStart	Programmed Start	High	Parallel	Standard	10
29651	GE-232-MV-PS-H-T	2 F32T8 120V-277V High Light 1.15 BF<10% THD UltraStart	Programmed Start	High	Parallel	Pallet Pack	420
29671	GE-232-MVPS-XL	2 F32T8 120V-277V Ultra Low Watt .60 BF<10% THD	Programmed Start	Ultra Low	Parallel	Standard	10
29665	GE-232-MVPS-XL-T	2 F32T8 120V-277V Ultra Low Watt .60 BF<10% THD	Programmed Start	Ultra Low	Parallel	Pallet Pack	420
29623	GE-332-120-PS-N	3 F32T8 120V Normal Light .87 BF<10% THD UltraStart	Programmed Start	Normal	Parallel	Standard	10
29633	GE-332-120PS-N-T	3 F32T8 120V Normal Light .87 BF<10% THD UltraStart	Programmed Start	Normal	Parallel	Pallet Pack	420
29624	GE-332-277-PS-N	3 F32T8 277V Normal Light .87 BF<10% THD UltraStart	Programmed Start	Normal	Parallel	Standard	10
29634	GE-332-277PS-N-T	3 F32T8 277V Normal Light .87 BF<10% THD UltraStart	Programmed Start	Normal	Parallel	Pallet Pack	420
29676	GE-332-MVPS-H	3 F32T8 120V-277V High Light 1.15 BF<10% THD UltraStart	Programmed Start	High	Parallel	Standard	10
29656	GE-332-MV-PS-H-T	3 F32T8 120V-277V High Light 1.15 BF<10% THD UltraStart	Programmed Start	High	Parallel	Pallet Pack	420
29672	GE-332-MVPS-XL	3 F32T8 120V-277V Ultra Low Watt .60 BF<10% THD	Programmed Start	Ultra Low	Parallel	Standard	10
29666	GE-332-MVPS-XL-T	3 F32T8 120V-277V Extra Low Watt .60 BF<10% THD	Programmed Start	Ultra Low	Parallel	Pallet Pack	420
29625	GE-432-120-PS-N	4 F32T8 120V Normal Light .87 BF<10% THD UltraStart	Programmed Start	Normal	Parallel	Standard	10
29635	GE-432-120PS-N-T	4 F32T8 120V Normal Light .87 BF<10% THD UltraStart	Programmed Start	Normal	Parallel	Pallet Pack	420
29627	GE-432-277-PS-N	4 F32T8 277V Normal Light .87 BF<10% THD UltraStart	Programmed Start	Normal	Parallel	Standard	10
29650	GE-432-277PS-N-T	4 F32T8 277V Normal Light .87 BF<10% THD UltraStart	Programmed Start	Normal	Parallel	Pallet Pack	420
29678	GE-432-MVPS-H	4 F32T8 120V-277V High Light 1.15 BF<10% THD UltraStart	Programmed Start	High	Parallel	Standard	8
29657	GE-432-MV-PS-H-T	4 F32T8 120V-277V High Light 1.15 BF<10% THD UltraStart	Programmed Start	High	Parallel	Pallet Pack	420
<b>RAPID START T12 HIGH OUTPUT</b>							
80162	B295SR120HP	2- F96T12HOES RS 120	Rapid Start	Normal	Series	Standard	6
80163	B295SR277HP	2- F96T12HOES RS 277	Rapid Start	Normal	Series	Standard	6
<b>ULTRASTART® T5 PROGRAM START</b>							
29726	GE454MVPSN1	4 or 2- F54T5HO 120 to 277 UltraStart PRS	Programmed Start	Normal	Series-Parallel	Standard	12
29717	GE454MVPSN1-B	4 or 2- F54T5HO 120 to 277 UltraStart PRS Pallet Pack	Programmed Start	Normal	Series-Parallel	Pallet Pack	420



Product Code	Description	Application	Starting Method	Ballast Factor	Lamp Wiring	Package Type	Units Per Carton
<b>T5 PROGRAMMED START MULTI-VOLT 120V - 277V</b>							
47534	B224PUNV-COG1C	2- F24T5HO PRS UNV 50/60 Hz	Programmed Start	Normal	Series	Standard	10
47536	B228PUNV-COG1C	2- F28T5 PRS UNV 50/60 Hz	Programmed Start	Normal	Series	Standard	10
47540	B239PUNV-DOG1C	2- F39T5HO PRS UNV 50/60 Hz	Programmed Start	Normal	Series	Standard	10
47542	B254PUNV-DGE1C	2- F54T5HO PRS UNV 50/60 Hz	Programmed Start	Normal	Series	Standard	10
<b>PROLINE™ T8 INSTANT START</b>							
23680	GE-132-120-N	1 F32T8 120V "N".87 BF	Instant Start	Normal	Parallel	Standard	10
24161	GE-132-120-N-84T	1 F32T8 120V "N".87 BF Pallet Pack	Instant Start	Normal	Parallel	Pallet Pack	840
23681	GE-132-277-N	1 F32T8 277V "N".87 BF	Instant Start	Normal	Parallel	Standard	10
24162	GE-132-277-N-84T	1 F32T8 277V "N".87 BF Pallet Pack	Instant Start	Normal	Parallel	Pallet Pack	840
23671	GE-232-120-N	2 or 1- F32T8 120V "N".87 BF	Instant Start	Normal	Parallel	Standard	10
24163	GE-232-120-N-84T	2 or 1- F32T8 120V "N".87 BF Pallet Pack	Instant Start	Normal	Parallel	Pallet Pack	840
23672	GE-232-277-N	2 or 1- F32T8 277V "N".87 BF	Instant Start	Normal	Parallel	Standard	10
24164	GE-232-277-N-84T	2 or 1- F32T8 277V "N".87 BF Pallet Pack	Instant Start	Normal	Parallel	Pallet Pack	840
23673	GE-332-120-N	3 or 2- F32T8 120V "N".87 BF	Instant Start	Normal	Parallel	Standard	10
24165	GE-332-120-N-84T	3 or 2- F32T8 120V "N".87 BF Pallet Pack	Instant Start	Normal	Parallel	Pallet Pack	840
23674	GE-332-277-N	3 or 2- F32T8 277V "N".87 BF	Instant Start	Normal	Parallel	Standard	10
24166	GE-332-277-N-84T	3 or 2- F32T8 277V "N".87 BF Pallet Pack	Instant Start	Normal	Parallel	Pallet Pack	840
23675	GE-432-120-N	4 or 3- F32T8 120V "N".87 BF	Instant Start	Normal	Parallel	Standard	10
24167	GE-432-120-N-84T	4 or 3- F32T8 120V "N".87 BF Pallet Pack	Instant Start	Normal	Parallel	Pallet Pack	840
23676	GE-432-277-N	4 or 3- F32T8 277V "N".87 BF	Instant Start	Normal	Parallel	Standard	10
24168	GE-432-277-N-84T	4 or 3- F32T8 277V "N".87 BF Pallet Pack	Instant Start	Normal	Parallel	Pallet Pack	840
23677	GE-259-120-N	2 or 1 F96T8 120v Normal Light .87 BF<10%THD	Instant Start	Normal	Parallel	Standard	10
24169	GE-259-120-N-84T	2 or 1- F96T8 120v "N".87 BF Pallet Pack	Instant Start	Normal	Parallel	Pallet Pack	840
23678	GE-259-277-N	2 or 1- F96T8 277v "N".87 BF	Instant Start	Normal	Parallel	Standard	10
24170	GE-259-277-N-84T	2 or 1- F96T8 277v "N".87 BF Pallet Pack	Instant Start	Normal	Parallel	Pallet Pack	840
<b>MULTI-VOLT PROLINE™ T8 INSTANT START 120-277V</b>							
30189	GE-132-MV-N	1- F32T8 120 to 277 "N".87 BF	Instant Start	Normal	Parallel	Standard	10
30268	GE-132-MV-N-42T	1- F32T8 120 to 277 "N".87 BF Pallet Pack	Instant Start	Normal	Parallel	Pallet Pack	420
30198	GE-232-MV-H2 or	1- F32T8 120 to 277 "H" 1.15 BF	Instant Start	High	Parallel	Standard	10
30275	GE-232-MV-H-42T	2 or 1- F32T8 120 to 277 "H" 1.15 BF Pallet Pack	Instant Start	High	Parallel	Pallet Pack	420
30247	GE-232-MV-L	2 or 1- F32T8 120 to 277 "L".77 BF	Instant Start	Low	Parallel	Standard	10
30191	GE-232-MV-N	2 or 1- F32T8 120 to 277 "N".87 BF	Instant Start	Normal	Parallel	Standard	10
30269	GE-232-MV-N-42T	2 or 1- F32T8 120 to 277 "N".87 BF Pallet Pack	Instant Start	Normal	Parallel	Pallet Pack	420
30199	GE-332-MV-H	3 or 2- F32T8 120 to 277 "H" 1.15 BF	Instant Start	High	Parallel	Standard	10
30296	GE-332-MV-H-42T	3 or 2- F32T8 120 to 277 "H" 1.15 BF Pallet Pack	Instant Start	High	Parallel	Pallet Pack	420
30255	GE-332-MV-L	3 or 2- F32T8 120 to 277	Instant Start	Low	Parallel	Standard	10
30309	GE-332-MV-L-42T	3 or 2- F32T8 120 to 277	Instant Start	Low	Parallel	Standard	420
30192	GE-332-MV-N	3 or 2- F32T8 120 to 277 "N".87 BF	Instant Start	Normal	Parallel	Standard	10
30270	GE-332-MV-N-42T	3 or 2- F32T8 120 to 277 "N".87 BF Pallet Pack	Instant Start	Normal	Parallel	Pallet Pack	420
30219	GE-432-MV-H	4 or 3- F32T8 120 to 277 "H" 1.15 BF	Instant Start	High	Parallel	Standard	10
30303	GE-432-MV-H-42T	4 or 3- F32T8 120 to 277 "H" 1.15 BF Pallet Pack	Instant Start	High	Parallel	Pallet Pack	420
30262	GE-432-MV-L	4 or 3- F32T8 120 to 277	Instant Start	Low	Parallel	Standard	10
30310	GE-432-MV-L-42T	4 or 3- F32T8 120 to 277	Instant Start	Low	Parallel	Pallet Pack	420
30193	GE-432-MV-N	4 or 3- F32T8 120 to 277 "N".87 BF	Instant Start	Normal	Parallel	Standard	10
30271	GE-432-MV-N-42T	4 or 3- F32T8 120 to 277 "N".87 BF Pallet Pack	Instant Start	Normal	Parallel	Pallet Pack	420
30195	GE-159-MV-N	1- F96T8 120 to 277 "N".87 BF	Instant Start	Normal	Parallel	Standard	10
30274	GE-159-MV-N-42T	1- F96T8 120 to 277 "N".87 BF Pallet Pack	Instant Start	Normal	Parallel	Pallet Pack	420
30194	GE-259-MV-N	2 or 1- F96T8 120 to 277 "N".87 BF	Instant Start	Normal	Parallel	Standard	10
30272	GE-259-MV-N-42T	2 or 1- F96T8 120 to 277 "N".87 BF Pallet Pack	Instant Start	Normal	Parallel	Pallet Pack	420



Product Code	Description	Application	Starting Method	Ballast Factor	Lamp Wiring	Package Type	Units Per Carton
<b>MULTI-VOLT PROLINE™ T8 INSTANT START 120-277V (CONTINUED)</b>							
30176	GE-286-HO-MV-N	2 or 1- F96T8HO IS 120 to 277 "N" .87 BF	Instant Start	Normal	Parallel	Standard	10
30187	GE-286-HO-MV-N-P	2 or 1- F96T8HO IS 120 to 277 "N" .87 BF	Instant Start	Normal	Parallel	Pallet Pack	420
<b>MULTI-VOLT PROLINE™ T12 ELECTRONIC T12 120-277V</b>							
24107	GE-240-RS-MV-N	2 or 1- F40 or F34T12 Rapid Start 120 to 277 "N" BF	Rapid Start	Normal	Parallel	Standard	10
24773	GE-240RS-MV-N-DIY	2 or 1- F40 or F34T12 RS 120 to 277 I-Pack 4/carton	Rapid Start	Normal	Parallel	DIY	4
24109	GE-340-RS-MV-N	3 or 2- F40 or F34T12 Rapid Start 120 to 277	Rapid Start	Normal	Parallel	Standard	10
24774	GE-340RS-MV-N-DIY	3 or 2- F40 or F34T12 RS 120 to 277 I-Pack 4/carton	Rapid Start	Normal	Parallel	DIY	4
24776	GE-260IS-MV-N-DIY	2 or 1- F96T12 IS 120 to 277; I-Pack 4/carton	Instant Start	Normal	Parallel	DIY	4
24108	GE-260-IS-MV-N	2 or 1- F96T12 Instant Start 120 to 277	—	High	Parallel	Standard	6
<b>OTHER INSTANT START</b>							
80148	B259I120RHH	2 F96T8 IS 120 60 HBEX	Instant Start	High	Parallel	Standard	6
80149	B259I277RHH	2 F96T8 IS 277 60 HBCX	Instant Start	High	Parallel	Standard	6
80136	B332I347HP	3- F32T8 IS 347 60Hz <10% THD "N" BF	Instant Start	Normal	Parallel	Standard	10
80277	B332I347HPL	3- F32T8 IS 347 <10% THD "L" BF	Instant Start	Low	Parallel	Standard	10
<b>T8 DIMMING</b>							
80353	B132R120V5	1- F32T8 DIM 100 to 5% RS 120	Rapid Start	Normal	Series	Standard	10
80355	B232SR120V5	2- F32T8 DIM 100 to 5% RS 120	Rapid Start	Normal	Series	Standard	10
80362	B232SR277S50	2- F32T8 Switch 100 / 50% RS 277	Rapid Start	Normal	Series	Standard	10
80356	B232SR277V5	2- F32T8 DIM 100 to 5% RS 277	Rapid Start	Normal	Series	Standard	10
80357	B332SR120V5	3- F32T8 DIM 100 to 5% RS 120	Rapid Start	Normal	Series	Standard	10
80358	B332SR277V5	3- F32T8 DIM 100 to 5% RS 277	Rapid Start	Normal	Series	Standard	10
<b>MAGNETIC T12, T8, CIRCLELINE® BALLASTS</b>							
89711	GEM120-PH-120-DIY	1- F20T12 F15T8 F1512 120V Magnetic Ballast(200H2)	Preheat	Normal	Series	DIY	10
89712	GEM120-TC-120-DIY	1- F20T12 F15T8 F15T12 F14T12 120V Magnetic Ballast (546BTCP)	Trigger Start	Normal	Series	DIY	4
89714	GEM140-HRS-120-DIY	1- F40T12 F40T12 120V Magnetic Ballast (412LSLHTCP)	Rapid Start	Normal	Series	DIY	4
89709	GEM140-RS-120-DIY	1- F40T12 F30T12 F48/25W 120V Magnetic Ballast (413CTCP)	Rapid Start	Normal	Series	DIY	4
86158	GEM140-RS-277-IP	2- F40T12, F40T10, 120V, Magnetic Ballast, (446LSLHTCP)	Rapid Start	Normal	Series	Individual Pack	10
89719	GEM196-IS-120-DIY	1- F96T12 120V Magnetic Ballast (822BRTCP)	Instant Start	Normal	Series	DIY	4
86372	GEM196-IS-120-IP	1- F96T12 IS 120 Magnetic Ballast (822BRTCP)	Instant Start	Normal	Series	Individual Pack	6
86381	GEM196-IS-277	1- F96T12 IS 277 Magnetic Ballast (828BRTCP)	Instant Start	Normal	Series	Individual Pack	6
86231	GEM1F4T5-PH-120	1- F20T12, F15T8, F15T12, F14T12, 120V, Magnetic (546BTCP)	Preheat	Normal	Series	Individual Pack	20
89720	GEM1FC16T9-RS-120	2- FC12T9 FC16T9 FC8T9 FC12T9 120V Magnetic (726VLHWSTCP)	Rapid Start	Normal	Series	DIY	4
86132	GEM1FC16T9-RS-120-IP	1- F96T12, IS, 277V, Magnetic Ballast (828BRTCP)	Rapid Start	Normal	Series	Individual Pack	10
89722	GEM1FC8T9-RS-120-DIY	1- FC8T9 RS 120V Magnetic Ballast (547RSWSTCP)	Rapid Start	Normal	Series	DIY	4
86227	GEM1FC8T9-RS-120-IP	1- FC8T9 RS 120V Magnetic Ballast (547RSWSTCP)	Rapid Start	Normal	Series	Individual Pack	10
89717	GEM1FC12T9-RS-120	2 FC12T9 RS 120V Magnetic Ballast (449LRWSTCP)	Rapid Start	Normal	Series	Standard	4
80819	GEM220-TS-120-DIY	2- F20T12 F15T8 F15T12 F14T12 120V Magnetic Ballast (447LRVLTCP)	Trigger Start	Normal	Series	DIY	4
80644	GEM230-RS-120	2- F30T12 120V Magnetic Ballast (573LTCP)	Rapid Start	Normal	Series	DIY	4
87125	GEM232T8-RS-120	2- F32T8 RS 120V Magnetic Ballast (M232SR120C)	Rapid Start	Normal	Series	Individual Pack	10
87130	GEM232T8-RS-277	2- F32T8 RS 277V Magnetic Ballast (M232SR277C)	Rapid Start	Normal	Series	Individual Pack	10
89710	GEM240-HRS-120-DIY	2- F40T12 F40T12 120V Magnetic Ballast (420LTCP)	Mod. Rapid Start	Normal	Series	DIY	4



Product Code	Description	Application	Starting Method	Ballast Factor	Lamp Wiring	Package Type	Units Per Carton
<b>MAGNETIC T12, T8, CIRCLELINE® BALLASTS (CONTINUED)</b>							
86206	GEM240-IS-277-IP	2- F40T12 F40T10 IS 277V Magnetic Ballast (532BRTCP)	Instant Start	Normal	Series	Individual Pack	6
89707	GEM240-RS-120-DIY	2- F40T12 F40T10 120V Magnetic Ballast (446LSLHTCP)	Rapid Start	Normal	Series	Pallet Pack	72
46958	GEM240-RS-120-DIY	2 F40T12 F40T10 120V Magnetic Ballast	Rapid Start	Normal	Series	DIY	6
86139	GEM240-RS-120-IP	2- F40T12 RS 120V Magnetic Ballast (446LSLHTCP)	Rapid Start	Normal	Series	Individual Pack	10
89713	GEM240-RS-277-DIY	2- F40T12 F40T10 277V Magnetic Ballast (443LSLHTCP)	Rapid Start	Normal	Series	DIY	4
86124	GEM240-RS-277-IP	2- F40T12 RS 277V Magnetic Ballast (443LSLHTCP)	Rapid Start	Normal	Series	Individual Pack	10
86341	GEM240-RS-220	2- F40T12 F40T10 220V Magnetic Ballast (754LTCP)	Rapid Start	Normal	Series	Standard	10
86176	GEM272HO-RS-120	2- F72T12HO RS 120V Magnetic Ballast (490XLHTCP)	Rapid Start	Normal	Series	Individual Pack	4
89718	GEM296HO-RS-120-DIY	2- F96T12HO F72T12HO 120V Magnetic Ballast (480SLHTCP)	Rapid Start	Normal	Series	DIY	2
86164	GEM296HO-RS-120-IP	2- F96T12HO F72T12HO RS 120V Magnetic Ballast (480SLHTCP)	Rapid Start	Normal	Series	DIY	4
86171	GEM296HO-RS-2772	F96T12 HO RS 277V Magnetic Ballast (487SLHTCP)	Rapid Start	Normal	Series	Individual Pack	4
89708	GEM296-IS-120-DIY2	F96T12 IS 120V Magnetic Ballast (806SLHTCP)	Instant Start	Normal	Series	Pallet Pack	48
46965	GEM296-IS-120-DIY2	F96T12 IS 120V Magnetic Ballast 60 HBCB	Instant Start	Normal	Series	DIY	4
86360	GEM296-IS-120-IP2	F96T12 IS 120V Magnetic Ballast (806SLHTCP)	Instant Start	Normal	Series	Individual Pack	6
89715	GEM296-IS-277-DIY2	F96T12 IS 277V Magnetic Ballast (827SLHTCP)	Instant Start	Normal	Series	DIY	4
86379	GEM296-IS-277-IP2	F96T12 IS 277V Magnetic Ballast (827SLHTCP)	Instant Start	Normal	Series	Individual Pack	6
<b>MAGNETIC T12 SIGN BALLASTS</b>							
88921	USB-0412-12-IP	04 to 12 foot 1 to 2 lamps	Rapid Start	Normal	Series	Individual Pack	4
88931	USB-0816-14-IP	08 to 16 feet 1 to 4 lamps	Rapid Start	Normal	Series	Individual Pack	4
88934	USB-1632-24-IP	16 to 32 feet 2 to 4 lamps	Rapid Start	Normal	Series	Individual Pack	2
88936	USB-1024-14-IP	10 to 24 feet 1 to 4 lamps	Rapid Start	Normal	Series	Individual Pack	2
88939	USB-2036-46-IP	20 to 36 feet 4 to 6 lamps	Rapid Start	Normal	Series	Individual Pack	2
88940	USB-2048-46-IP	20 to 48 feet 4 to 6 lamps	Rapid Start	Normal	Series	Individual Pack	2
<b>MAGNETIC T12 SIGN MAX-3 SERIES BALLASTS</b>							
88918	USB-0218-16-IP	Max 3 02 to 18 feet 1 to 6 lamps	Rapid Start	Normal	Series	Individual Pack	2
88919	USB-1048-16-IP	Max 3 10 to 48 feet 1 to 6 lamps	Rapid Start	Normal	Series	Individual Pack	2
88920	USB-1232-16-IP	Max 3 12 to 32 feet 1 to 6 lamps	Rapid Start	Normal	Series	Individual Pack	2
<b>MAGNETIC BALLASTS FOR COMPACT FLUORESCENT LAMPS</b>							
87533	GEM1CF13-PH-120	1- CFT/Q13W/GX23 Pre Heat 120 (4111H2P)	Preheat	Normal	Series	Standard	20
87623	GEM2FT36-RS-120	2- FT36W/2G11 RS 120 (4150P)	Rapid Start	Normal	Series	Standard	10
87625	GEM2FT40-RS-120	2- FT40W/2G11RS RS 120 (4152P)	Rapid Start	Normal	Series	Standard	10
87634	GEM1CF579-PH-277	1- CFT579Q9W/G23 Pre Heat 277 (4205F2P)	Preheat	Normal	Series	Standard	20
87655	GEM2CF13-PH-277	2- CFT/Q13W/GX23 Pre Heat 277 (4214PBES)	Preheat	Normal	Series	Standard	10
87700	GEM2CF24-PH-277	2- CFQ26W/G24d Pre Heat 277 (4226PBES)	Preheat	Normal	Parallel	Standard	10
<b>ELECTRONIC BALLASTS FOR COMPACT FLUORESCENT LAMPS</b>							
80669	C213UNVBE-IP	2 or 1- CFQ13W/G24q PS UNV Bottom Exit	Prog. Rapid Start	Normal	Series	Individual Pack	10
80671	C213UNVBES-IP	2 or 1- CFQ13W/G24q PS UNV Bottom Exit w/ Studs	Prog. Rapid Start	Normal	Series	Individual Pack	10
80673	C213UNVSE-IP	2 or 1- CFQ13W/G24q PS UNV Side Exit (most common)	Prog. Rapid Start	Normal	Series	Individual Pack	10
80675	C218UNVBEIP	2 or 1- CFQ18W/G24q PS UNV Bottom Exit	Prog. Rapid Start	Normal	Series	Individual Pack	10
80677	C218UNVBES-IP	2 or 1- CFQ18W/G24q PS UNV Bottom Exit w/ Studs	Prog. Rapid Start	Normal	Series	Individual Pack	10
80679	C218UNVSE-IP	2 or 1- CFQ18W/G24q PS UNV Side Exit (most common)	Prog. Rapid Start	Normal	Series	Individual Pack	10
80683	C240PUNVHP-B-IP	2 or 1- FT40W/2G11 PS UNV	Prog. Rapid Start	Normal	Series	Individual Pack	10
80680	C240SI120RH-IP	2- FT40W/2G11 IS 120	Instant Start	Normal	Series	Individual Pack	10
80681	C240SI277RH-IP	2- FT40W/2G11- IS 277	Instant Start	Normal	Series	Individual Pack	10



Product Code	Description	Application	Starting Method	Ballast Factor	Lamp Wiring	Package Type	Units Per Carton
<b>ELECTRONIC BALLASTS FOR COMPACT FLUORESCENT LAMPS (CONTINUED)</b>							
47506	C242UNVBES-IP	2- 42 / 36 / 32 / 26 / 24 watt CFL UNV Bottom Exit w/ Studs	Prog. Rapid Start	Normal	Series	Individual Pack	10
47509	C242UNVSE-IP	2- 42 / 36 / 32 / 26 / 24 watt CFL UNV Side Exit	Prog. Rapid Start	Normal	Series	Individual Pack	10
80685	C2642UNVBE-IP	2 or 1- CF 26 42w PS UNV	Prog. Rapid Start	Normal	Series	Individual Pack	10
80687	C2642UNVBES-IP	2 or 1- CF 26 42w PS UNV	Prog. Rapid Start	Normal	Series	Individual Pack	10
80689	C2642UNVSE-IP	1/2 CF 26 42W PS UNV 60 HBXX	Prog. Rapid Start	Normal	Series	Individual Pack	10
80690	C340SI120RH-IP	3- FT40W/2G11 IS 120	Instant Start	Normal	Series	Individual Pack	10
80691	C340SI277RH-IP	3- FT40W/2G11 IS 277	Instant Start	Normal	Series	Individual Pack	10
<b>ELECTRONIC HID</b>							
29377	GE-MH-250-400-MA	1- 250 to 400w UltraMax HID Electronic 208-277 50-60Hz	M155, M154, M153, M131	Electronic		Standard Pack	1

Product Code	Description	Application*	ANSI Lamp/ Ballast	Circuit Type	Frame Size (H x L)	Package Type	Units Per Carton
<b>DISTRIBUTOR REPLACEMENT BALLAST KITS - METAL HALIDE</b>							
86824	M50MLTLC3M500K	1- 50w MH M110 or M148 Quad	M110	HX-HPF	3x4	Distributor Kit	6
86847	M70MLTLC3M500K	1- 70w MH M 98 or M143 Quad	M98	HX-HPF	3x4	Distributor Kit	6
86839	M7048TLC3M500K	1- 70w MH M 98 or M143 480	M98	HX-HPF	3x4	Distributor Kit	6
86675	M100MLTLC3M500K	1- 100w MH M 90 or M140 Quad	M90, M92, M140	HX-HPF	4.25x5.75	Distributor Kit	6
86667	M10048TLC3M500K	1- 100w MH M 90 or M140 480	M90, M92, M140	HX-HPF	3x4	Distributor Kit	6
86718	M150MLTLC3M500K	1- 150w MH M102 or M142 Quad	M102, M142	HX-HPF	3x4	Distributor Kit	6
86711	M15048TLC3M500K	1- 150w MH M102 or M142 480	M102, M142, M107	HX-HPF	3x4	Distributor Kit	6
86741	M175MLTAC3M500K	1- 175w MH M 57 or H 39 Quad	M57, H39, M107	CWA	3x4	Distributor Kit	6
87210	M175ML5AC3M500K	1- 175w MH M 57 or H 39 Multi-5 for all voltages	M57, H39, M109	CWA	3x4	Distributor Kit	6
86765	M250MLTAC3M500K	1- 250w MH M 58 or H 37 Quad	M58, H37	CWA	3x4	Distributor Kit	6
87211	M250ML5AC3M500K	1- 250w MH M 58 or H 37 Multi-5 small standard frame	M58, H37	CWA	3x4	Distributor Kit	6
49763	M250ML5AC3M555K	1- 250w MH M 58 or H 37 Multi-5 with Lamp (555K)	M58, H37	CWA	3x4	Distributor Kit	1
87212	M250ML5AC4M500K	1- 250w MH M 58 or H 37 Multi-5 large frame	M59, H33	CWA	4.25x4.75	Distributor Kit	3
49742	M250ML5AC4M555K	1- 250w MH M 58 or H 37 Multi-5 with Lamp (555K)	M59, H33	CWA	4.25x4.75	Distributor Kit	1
86814	M400MLTAC4M500K	1- 400w MH M 59 or H 33 Quad	M59, H33	CWA	4.25x4.75	Distributor Kit	3
86803	M40048TAC4M500K	1- 400w MH M 59 or H 33 480	M59, H33	CWA	4.25x4.75	Distributor Kit	3
86808	M400ML5AC4M500K	1- 400w MH M 59 or H 33 Multi-5 for all voltages	M58, H37	CWA	4.25x4.75	Distributor Kit	3
49745	M400ML5AC4M555K	1- 400w MH M 59 or H 33 Multi-5 with Lamp (555K)	M58, H37	CWA	4.25x4.75	Distributor Kit	1
86650	M100048TAC5M500K	1- 1000w MH M 47 or H 36 480	M47, H36	CWA	4.25x5.75	Distributor Kit	2
86655	M1000MLTAC5M500K	1- 1000w MH M 47 or H 36 Quad	M47, H36	CWA	4.25x5.75	Distributor Kit	2
87213	M1000ML5AC5M500K	1- 1000w MH M 47 or H 36 Multi-5 for all voltages	M47, H36	CWA	4.25x5.75	Distributor Kit	2
86698	M1500MLTAC5M500K	1- 1500w MH M 48 Quad	M48	CWA	4.25x5.75	Distributor Kit	2
86693	M150048TAC5M500K	1- 1500w MH M 48 480	M48	CWA	4.25x5.75	Distributor Kit	2

<b>DISTRIBUTOR REPLACEMENT BALLAST KITS - PULSE START METAL HALIDE</b>							
86876	P17548TAC3M500K	1- 175w PS M137 or M152 480	M152, M137	CWA	3x4	Distributor Kit	6
86885	P175MLTAC3M500K	1- 175w PS M137 or M 152 Quad	M153, M 137	CWA	3x4	Distributor Kit	6
86926	P25048TAC4M500K	1- 250w PS M138 or M153 480	M153, M138	CWA	4.25x4.75	Distributor Kit	3
86935	P250MLTAC4M500K	1- 250w PS M138 or M153 Quad	M153, M138	CWA	4.25x4.75	Distributor Kit	3
86952	P32048TAC4M500K	1- 320w PS M132 or M154 480	M154, M132	CWA	4.25x4.75	Distributor Kit	3
86968	P320TRIAC4M502K	1- 320w PS M132 or M154 TRI-Voltage 120 277 347	M154, M132	CWA	4.25x4.75	Distributor Kit	3
86959	P320MLTAC4M500K	1- 320w PS M132 or 154 Quad	M154, M132	CWA	4.25x4.75	Distributor Kit	3
86984	P350MLTAC4M500K	1- 350w PS M131 Quad	M131	CWA	4.25x4.75	Distributor Kit	3
42692	P350277RCEM500K	1- 350w PS M131 277 Reactor	M131	RX-NPF	3.75x4.5	Distributor Kit	3
86999	P40048TAC4M500K	1- 400w PS M135 now M155 480	M155, M135	CWA	4.25x4.75	Distributor Kit	3



Product Code	Description	Application*	ANSI Lamp/Ballast	Circuit Type	Frame Size (H x L)	Package Type	Units Per Carton
<b>DISTRIBUTOR REPLACEMENT BALLAST KITS - PULSE START METAL HALIDE (CONTINUED)</b>							
87008	P400MLTAC4M500K	1- 400w PS M135 or M155 Quad	M155,M135	CWA	4.25x4.75	Distributor Kit	3
46934	P750MLTAC5M500K	1-750w PS M149 Quad	M149	CWA	4.25x5.75	Distributor Kit	2
46936	P75048TAC5M500K	1-750w PS M149 480	M149	CWA	4.25x5.75	Distributor Kit	2
<b>DISTRIBUTOR REPLACEMENT BALLAST KITS - HIGH PRESSURE SODIUM</b>							
87152	S50MLTLC3M500K	1- 50w S68 Quad	S68	HX-HPF	3x4	Distributor Kit	6
86587	S70MLTLC3M500K	1- 70w S62 Quad	S62	HX-HPF	3x4	Distributor Kit	6
86456	S7048TLC3M500K	1- 70w S62 480	S62	HX-HPF	3x4	Distributor Kit	6
87074	S100MLTLC3M500K	1- 100w S54 Quad	S54	HX-HPF	3x4	Distributor Kit	6
87068	S10048TLC3M500K	1- 100w S54 480	S54	HX-HPF	3x4	Distributor Kit	6
87094	S150MLTLC3M500K	1- 150w S55 Quad	S55	HX-HPF	3x4	Distributor Kit	6
87087	S15048TLC3M500K	1- 150w S55 480	S55	HX-HPF	3x4	Distributor Kit	6
87214	S250ML5AC4M500K	1- 250w S50 Multi-5 for all voltages	S50	CWA	4.25x4.75	Distributor Kit	3
49757	S250ML5AC4M555K	1- 250w S50 Multi-5 with Lamp (555K)	S50	CWA	4.25x4.75	Distributor Kit	1
87121	S250MLTAC4M500K	1- 250w S50 Quad	S50	CWA	4.25x4.75	Distributor Kit	3
87164	S400MLTAC4M500K	1- 400w S51 Quad smaller standard frame	S51	CWA	4.25x4.75	Distributor Kit	3
87175	S400MLTAC5M500K	1- 400w S51 Quad	S51	CWA	4.25x5.75	Distributor Kit	2
87217	S400ML5AC5M500K	1- 400w S51 Multi-5 for all voltages	S51	CWA	4.25x5.75	Distributor Kit	2
49758	S400ML5AC4M555K	1- 400w S51 Multi-5 with lamp (555K)	S52	CWA	4.25x4.75	Distributor Kit	1
87215	S400ML5AC4M500K	1- 400w S51 Multi-5 in smaller standard frame	S51	CWA	4.25x4.75	Distributor Kit	3
87198	S40048TAC4M500K	1- 400w S51 480 in smaller frame	S51	CWA	4.25x4.75	Distributor Kit	3
87206	S40048TAC5M500K	1- 400w S51 480	S51	CWA	4.25x5.75	Distributor Kit	2
87056	S1000MLTAC5M500K	1- 1000w S52 Quad	S52	CWA	4.25x5.75	Distributor Kit	2
87048	S100048TAC5M500K	1- 1000w S52 480	S52	CWA	4.25x5.75	Distributor Kit	2
87218	S1000ML5AC5M500K	1- 1000w S52 Multi-5 for all voltages	S52	CWA	4.25x5.75	Distributor Kit	2
<b>DISTRIBUTOR REPLACEMENT BALLAST KITS - MERCURY</b>							
86519	H100MLTAC3M500K	1- 100w H36 Quad	H38, H44	CWA	3x4	Distributor Kit	6
86527	H175MLTAC3M500K	1- 175w H39 Quad	H39	CWA	3x4	Distributor Kit	6
86542	H400MLTAC4M500K	1- 400w H39 Quad	H33	CWA	4.25x4.75	Distributor Kit	3
<b>METAL HALIDE</b>							
86576	11210277CTC000C	1- 70w M85 120/277 Enclosed & Potted	M85	HX-HPF	0	Standard	4
86578	11210506CTC000C	1- 70w M98 120/277 Enclosed & Potted	M98	HX-HPF	0	Standard	4
86574	11210239CTC000I	1- 100w M90 120/277 Enclosed & Potted	M90	HX-HPF	0	Standard	4
86563	1110245SCTC000I	1- 175w M57 120/277 Enclosed & Potted	M57, H39	CWA	0	Standard	2
86564	1110246CTC000C	1- 250w M58 120/277 Enclosed & Potted	M58, H37	CWA	0	Standard	2
42670	1110-247SC-TC	1- 400w M59 120/277 Enclosed & Potted F-can	M59, H33	CWA	0	Standard	2
80728	1111-247SCTC000I	1- 400w M59 120/277 Enclosed & Potted	M59, H33	CWA	0	Standard	4
<b>HIGH PRESSURE SODIUM</b>							
86605	1233142U000I	1- 70w S62 120 Reactor-NPF	S62	R-NPF	0	Standard	6
86596	12210237CTC000I	1- 70w S62 120/277 E & P F-can built-in starter	S62	HX-HPF	0	Standard	4
86606	1233154U000I	1- 150w S55 120 Reactor-NPF	S55	R-NPF	0	Standard	6

\*Quad = 120V, 208V, 240V, 277V  
Multi 5 = 120V, 208V, 240V, 277V, 480V





## **PLUG-IN LAMPS**

2-Pin Low Wattage Biax® .....	5-7
4-Pin High Lumen Biax® .....	5-7
2-Pin Double Biax® .....	5-8
4-Pin Double Biax® .....	5-8
4-Pin Triple Biax® .....	5-8
4-Pin High Output Biax® .....	5-9
4-Pin 2D® .....	5-9

## **SELF-BALLASTED LAMPS**

Spiral® .....	5-10
Biax® .....	5-11
Reflectors .....	5-11
Genura® .....	5-12
Decorative Shapes .....	5-12

## **LAMPS AND ADAPTERS**

Circlite® .....	5-13
2D®-Electronic .....	5-13

## **BRIGHT STIK® LIGHTING UNITS ..... 5-13**

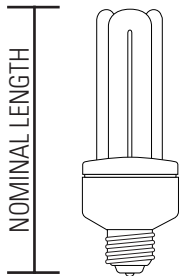
## **CROSS REFERENCE..... 5-16**

## **GE ENHANCED PLUG-IN PRODUCT CONVERSION ..... 5-18**



# Compact Fluorescent Lamps

## BULB IDENTIFICATION



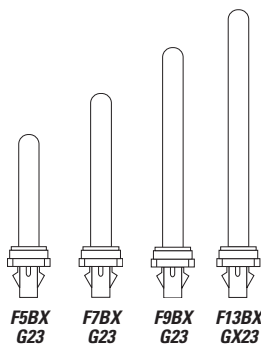
NOMINAL LENGTH:

Overall length including base or pins.

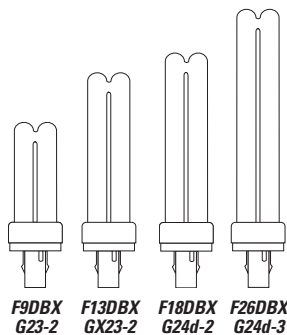
Note: Lamp drawings are not drawn to scale. Be sure to check size and dimension information when identifying each lamp.

To convert inches to millimeters, multiply the dimension (in inches) by 25.4 (i.e. 1.5" x 25.4 = 38.1 mm).

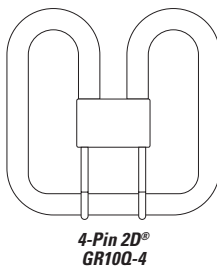
## LAMP LOCATOR



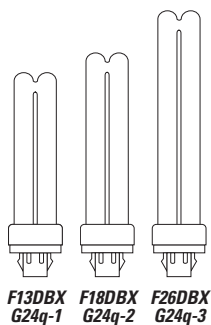
2-Pin Low Wattage Biax®



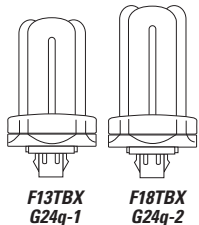
2-Pin Double Biax®



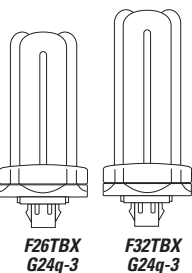
4-Pin 2D®



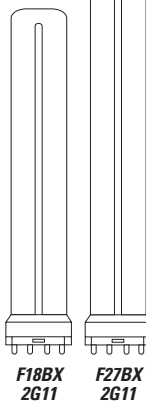
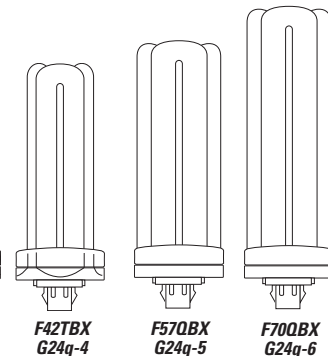
4-Pin Double Biax®



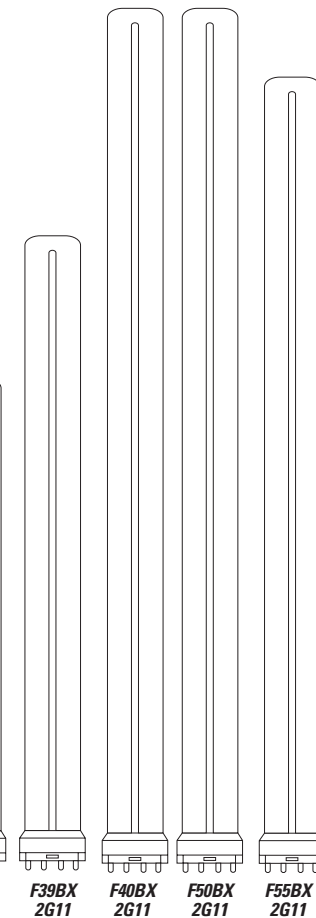
4-Pin Triple Biax®



4-Pin High Output Biax®



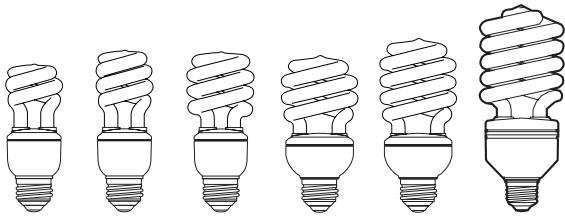
4-Pin High Lumen Biax®



### Plug-in Lamps

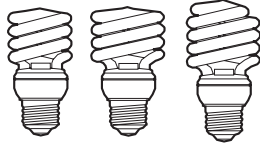


# Compact Fluorescent Lamps



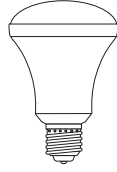
FLE10HT3 Med FLE13HT3 Med FLE15HT3 Med FLE20HT3 Med FLE26HT3 Med FLE42HLX Med

### Spiral®



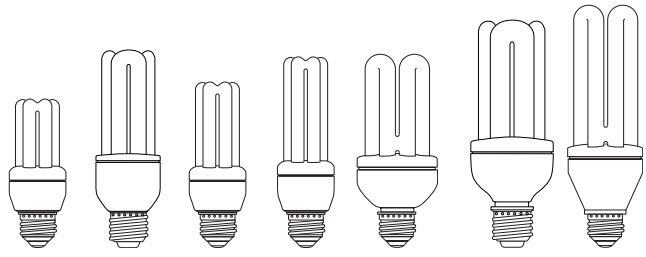
FLE10HT2 Med FLE13HT2 Med FLE15HT2 Med

### Spiral®



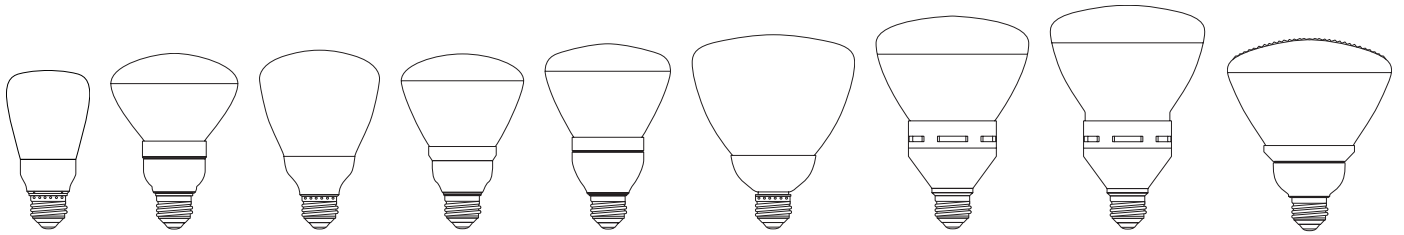
EL23 Med

### Genura®



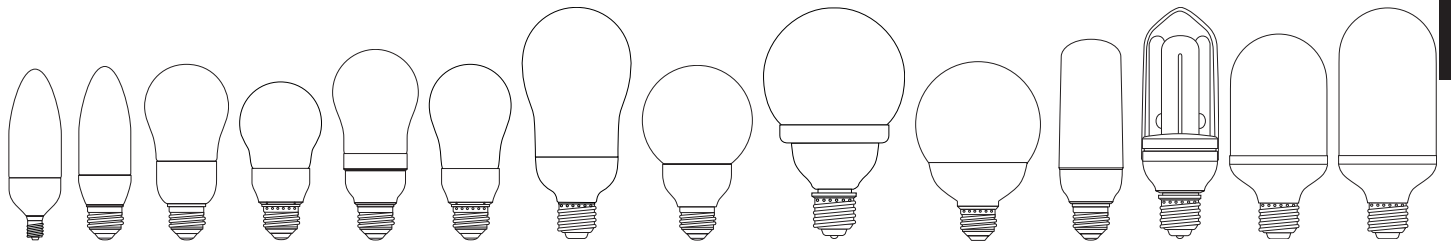
FLE12TT3 Med FLE14TT3 Med FLE15TT3 Med FLE20TT3 Med FLE24QBx Med FLE28QBx Med FLE29QBx Med

### Biax®



FLE11/R20 Med FLE11/R30 Med FLE15/A2/R30 Med FLE15/R30 Med FLE15/R30 Dimming Med FLE23/A4/R40 Med FLE26/R40 Med FLE26/R40 Dimming Med FLE26/PAR38 Med

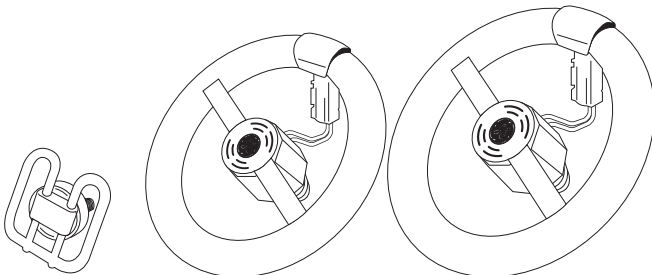
### Reflectors



Candle E12 Med FLE11/A-Line Med FLE12/A-Line Med FLE14/A-Line Med FLE15/A-Line Med FLE20/A-Line Med FLE9/Globe Med FLE15TBX/Globe Med FLE15/A3/Globe Med FLE11/Post Light Med FLE15/Post Light Med FLE15TBX/Bullet Med FLE20TBX/Bullet Med

### Decorative Shapes

## Self-Ballasted Lamps



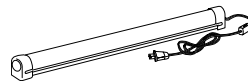
FEA 2D Med

FCA21 Med

FEA30 Med

### 2D®-Electronic

### Circlite®



FBS25

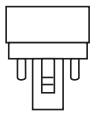
### Bright Stik®

### Lamps and Adapters

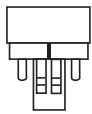


# Compact Fluorescent Lamps

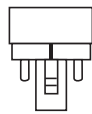
## BASE IDENTIFICATION



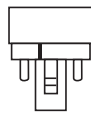
**G23-2**  
(DBX2P)



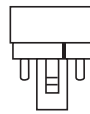
**GX23-2**  
(DBX2P)



**G24d-1**  
(DBX2P)



**G24d-2**  
(DBX2P)



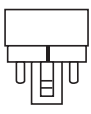
**G24d-3**  
(DBX2P)



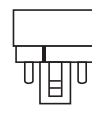
**G23**  
(LWBX)



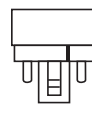
**GX23**  
(LWBX)



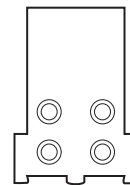
**G24q-1**  
(DBX4P)



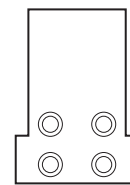
**G24q-2**  
(DBX4P)



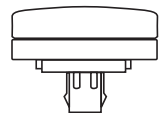
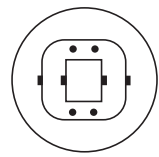
**G24q-3**  
(DBX4P)



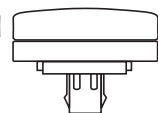
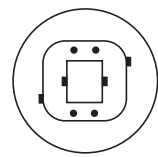
**GRY10q-3**  
(2D4P)



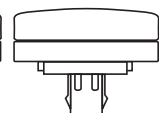
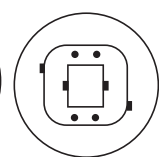
**GR10q-4**  
(2D4P)



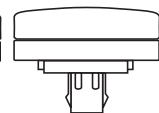
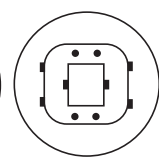
**GX24q-1**  
(TBX4P)



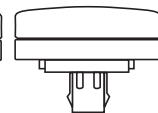
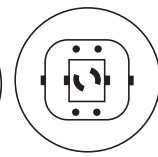
**GX24q-2**  
(TBX4P)



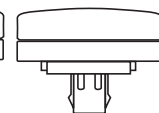
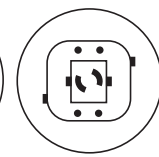
**GX24q-3**  
(TBX4P)



**GX24q-4**  
(TBX4P)



**GX24q-5**  
(QBX4P)



**GX24q-6**  
(QBX4P)



**2G11-4**  
(HLBX)



**E26**  
Med Screw



**E12**  
Candelabra

## INTRODUCTION

GE Compact Fluorescent Lamps offer many advantages:

- Dramatic energy cost savings... up to 77% vs. incandescent lamps of comparable light output
- Extra long life... most last 8 to 10 times longer, and some last up to 20 times longer, than standard incandescent lamps
- High light output comparable, and in some cases exceeding, incandescent lamps replaced
- Excellent color rendering... rare earth tri-phosphor provides such high quality color you won't believe it's fluorescent. Most types offer a choice of color options, from warm to cool, to let you select the tone and atmosphere you need.
- A choice of wattages, shapes and sizes to meet your lighting needs. Designed to fit everything from table lamps to wall sconces and ceiling fixtures.
- Many lamps use amalgam technology which provides stable lumen performance when operated in any position, over a wider range of ambient temperatures.

## COMPACT FLUORESCENT BRAND NAME CROSS-REFERENCE

GE	OSRAM/SYLVANIA	PHILIPS
2D®	-	-
Biax®	Dulux® S	PL-S
High Lumen Biax®	Dulux® L	PL-L
Double Biax®	Dulux® D, D/E	PL-C
Triple Biax®	Dulux® T/E	PL-T
Quad Biax®	-	-
High Output Biax®	-	PL-H
Spiral®	Dulux® EL Twist	EL Twist
Genura®	Dura-One	-

ATTENTION: This brand-name cross-reference chart is provided only as a quick reference. Other lamp company brand listings may only represent a near equivalent, versus an identical match to GE Lighting brands. Individual lamp manufacturer's performance specifications should be consulted. Lamp performance may be affected by environmental conditions, ballast type and/or other auxiliary equipment.



## PRODUCT INFORMATION

### PLUG-IN LAMPS

#### **2-Pin Low Wattage Biax® (pg 5-7)**

- Compact size offers fixture and design flexibility
- GX23 and G23 bases are preheat lamps with internal starters
- 13 watt version also available with internal electronic starter, providing flicker-free instant on
- Available in warm and cool color temperatures
- TCLP Compliant

#### **4-Pin High Lumen Biax® (pgs 5-7 to 5-8)**

- Available in a range of sizes and wattages for innovative compact luminaires
- High efficiency and outstanding performance in fixtures make them ideal for 2X2, 1X1 and indirect fixtures
- Available in warm to cool color temperatures; excellent color rendering

#### **2-Pin Double Biax® (pg 5-8)**

- More compact than low wattage Biax® CFLs with higher lumen output - suitable for a broad range of applications
- Preheat lamps with starters; not suitable for use with dimming ballasts
- 26 watt version also available with internal electronic starter, providing flicker-free instant on
- Available in warm to cool color temperatures
- TCLP Compliant

#### **4-Pin Double Biax® (pg 5-8)**

- More compact than low wattage Biax® CFLs with higher lumen output - suitable for a broad range of applications
- Dimmable and compatible with electronic ballasts
- Available in warm to cool color temperatures
- TCLP Compliant

#### **4-Pin Triple Biax® (pgs 5-8 to 5-9)**

- GE's shortest, most compact Biax® lamp. 17-31% shorter than similar wattage Double Biax® lamps.
- 4-Pin, dimmable and compatible with electronic ballasts
- Available in a wide range of wattages: from 13 to 42 watts
- Available in warm to cool color temperatures
- TCLP Compliant

#### **4-Pin High Output Biax® (pg 5-9)**

- GE's highest light output compact fluorescent lamps
- High efficacy 72-75 LPW
- Dimmable, available in 5 colors (2,700 to 5,000K)
- Suitable for high-bay lighting
- TCLP Compliant

#### **4-Pin 2D® (pgs 5-9)**

- Unique shape suitable for broad range of applications
- Uniform light distribution
- High light output - up to 200W incandescent equivalent

### SELF-BALLASTED LAMPS

#### **Spiral® (pgs 5-10 to 5-11)**

- Long life - up to 12,000 hours
- One piece unit screws directly into incandescent sockets
- Wide variety of wattages to meet application needs
- T2 & T3 Spiral® CFLs provide economical solution with small overall size
- The 42-watt T4 Spiral® CFL provides a 150W incandescent replacement in the smallest possible size (fits an 8.5" harp)

#### **Biax® (pg 5-11)**

- Super long life - from 10,000 to 15,000 hour rating
- One piece unit screws directly into incandescent sockets
- Wide variety of wattages to meet application needs
- T3 Mini Biax® CFL provides longest life with smallest overall size
- Selected lamps offer 3-way or dimming functionality

#### **Reflectors (pgs 5-11 to 5-12)**

- R20, R30 and R40 glass reflectors available to meet application needs
- Medium based; fits most incandescent reflector applications
- R30 and R40 lamps available with dimming functionality

#### **Genura® (pg 5-12)**

- Extremely long life - rated life of 15,000 hours
- One piece unit screws directly into incandescent sockets
- Provides more light than 75W incandescent reflector lamps
- Electrodeless design

#### **Decorative Shapes (pgs 5-12 to 5-13)**

- Variety of shapes (A-Line, Bullet, Candle, Globe, and Post) and wattages to meet all needs
- One piece unit screws directly into incandescent sockets
- Candle-shaped CFLs available in both medium base and candelabra base

### LAMPS AND ADAPTERS

#### **Circlite® (pg 5-13)**

- Lamp and adapter are separate. Replaceable lamps plug into adapters that screw into standard incandescent sockets.
- Lamps last 10,000 hours; adapters last 40,000 hours (4 lamp lives)

#### **2D®-Electronic (pg 5-13)**

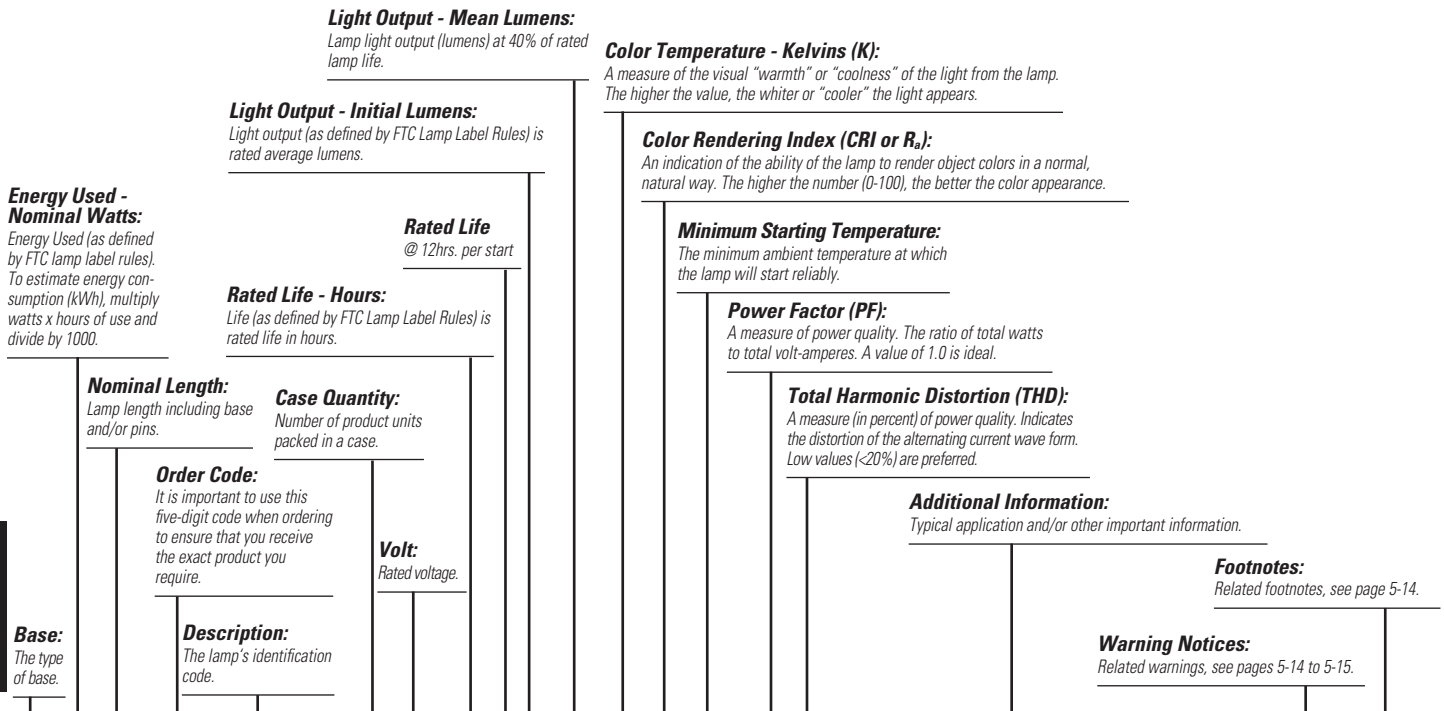
- Lamp and adapter are separate. Replaceable lamps plug into adapters that screw into standard incandescent sockets.
- Lamps last 10,000 hours; adapters last 40,000 hours (4 lamp lives)



# Compact Fluorescent Lamps

## HEADINGS IN THIS CATALOG SECTION

The following terms and descriptions can help you when checking Compact Fluorescent lamp specifications and when ordering products. Within each product line, lamps are divided into families, within these families, lamps are then listed by wattage.

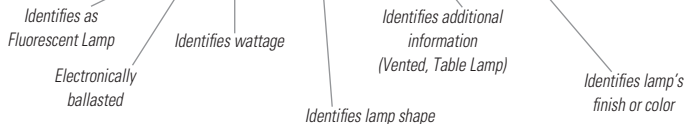


Base	Nominal Length	Order	Description	Case Qty	Rated Life Hours	Lumens		Color Temp. K	Min. Start Temp. (°F)	Power Factor	THD	Additional Information	Warning Notices	Footnotes
						Initial	Mean							

### SELF-BALLASTED LAMPS

<b>SPIRAL®</b>																		
Med	42	6.4	16107	FLE42HLX/VT/827	10	120	10000	2650	2275	2700	82	14	0.6	170	⚡	BASE DOWN OPERATION ONLY, T4 Spiral®, RE 827 Phosphor, Boxed	154	1, 7, 10, 15

## FL E 42 HLX / VT / 827



### WHEN YOU DON'T KNOW THE LAMP DESCRIPTION

1. Identify bulb shape next to lamp information.
2. Measure bulb diameter using ruler in appendix section page A-1 to determine width in eighths of an inch.
3. Identify base type using table on page 5-4.
4. Find your lamp in the table containing the bulb shape, size and base.



# Compact Fluorescent Lamps

Base	Nominal Length Order	Watts in.	Code	Description	Case Qty.	Rated Life Hours	Rated Life 12 Hrs.	Lumens Initial	Lumens Mean	Color Temp. K.	Min. Start Temp. (°F)	CRI	Additional Information	Warning Notice	Footnotes		
<b>PLUG-IN LAMPS</b>																	
<b>2-PIN LOW WATTAGE BIAX®</b>																	
	5	4.2	97551	F5BX/827/ECO	100	10000		265	220	2700	82			151	1,2		
			97552	F5BX/827/CDECO	6	10000		265	220	2700	82			Carded	151	1,2	
			97553	F5BX/841/ECO	100	10000		265	220	4100	82				151	1,2	
	7	5.3	97554	F7BX/827/ECO	100	10000		425	350	2700	82				151	1,2	
			97555	F7BX/827/CDECO	6	10000		425	350	2700	82			Carded	151	1,2	
			97556	F7BX/835/ECO	100	10000		425	350	3500	82				151	1,2	
	9	6.6	97557	F7BX/841/ECO	100	10000		425	350	4100	82				151	1,2	
			97558	F9BX/827/ECO	100	10000		600	500	2700	82				151	1,2	
			97559	F9BX/827/CDECO	6	10000		600	500	2700	82			Carded	151	1,2	
GX23	13	7.0	97560	F9BX/835/ECO	100	10000		600	500	3500	82			151	1,2		
			97561	F9BX/841/ECO	100	10000		600	500	4100	82				151	1,2	
			97573	F13BX/827/ECO	100	10000		825	710	2700	82				151	1,2	
			97567	F13BX/827/CDECO	6	10000		825	710	2700	82			Carded	151	1,2	
	13	7.0	97574	F13BX/830/ECO	100	10000		825	710	3000	82			151	1,2		
			97569	F13BX/835/ECO	100	10000		825	710	3500	82				151	1,2	
			97568	F13BX/835 100P	100	10000		825	710	3500	82			Bulk Pack	151	1,2	
			97571	F13BX/841/ECO	100	10000		825	710	4100	82				151	1,2	
			97570	F13BX/841 100P	100	10000		825	710	4100	82			Bulk Pack	151	1,2	
			97572	F13BX/850/ECO	100	10000		785	675	5000	80				151	1,2	
			97562	F13BX/E/827/ECO	100	10000		825	710	2700	82			Internal Electronic Starter	151	1,2	
			97563	F13BX/E/830/ECO	100	10000		825	710	3000	82			Internal Electronic Starter	151	1,2	
			97564	F13BX/E/835/ECO	100	10000		825	710	3500	82			Internal Electronic Starter	151	1,2	
			97565	F13BX/E/841/ECO	100	10000		825	710	4100	82			Internal Electronic Starter	151	1,2	
			97566	F13BX/E/850/ECO	100	10000		785	675	5000	80			Internal Electronic Starter	151	1,2	
<b>4-PIN HIGH LUMEN BIAX®</b>																	
	18	9.0	16649	F18BX/SPX30 10PK	40	10000		1200	1080	3000	82	-4		151	1,2,4,6		
			16053	F18BX/SPX35 10PK	40	10000		1200	1080	3500	82	-4			151	1,2,4,6	
			16940	F18BX/SPX41 10PK	40	10000		1200	1080	4100	82	-4			151	1,2,4,6	
	10.5	10.5	10.5	17174	F18BX/SPX30/RS	40	20000		1250	1130	3000	82	10		151	1,2,6,13	
				17175	F18BX/SPX35/RS	40	20000		1250	1130	3500	82	10			151	1,2,6,13
				17176	F18BX/SPX41/RS	40	20000		1250	1130	4100	82	10			151	1,2,6,13
				12521	F18BX/SPX65/RS	40	20000		1160	1050	6500	82	10			151	1,2,6,13
	27	12.8	12.8	16944	F27BX/SPX30/RS	40	12000		1800	1620	3000	82	10		151	1,2,6,13	
				16948	F27BX/SPX35/RS	40	12000		1800	1620	3500	82	10			151	1,2,6,13
				16951	F27BX/SPX41/RS	40	12000		1800	1620	4100	82	10			151	1,2,6,13
	39	16.5	16.5	16538	F39BX/SPX30/RS	40	12000		2850	2510	3000	82	10		151	1,2,6,13	
				15867	F39BX/SPX35/RS	40	12000		2850	2510	3500	82	10			151	1,2,6,13
				16952	F39BX/SPX41/RS	40	12000		2850	2510	4100	82	10			151	1,2,6,13
	40	22.5	22.5	16953	F40/30BX/SPX30	40	20000		3150	2840	3000	82	10		151	1,2,6,13	
				20444	F40/30BX/SPX30-36	36	20000		3150	2840	3000	82	10		Bulk Pack	151	1,2,6,13
				16648	F40/30BX/SPX35	40	20000		3150	2840	3500	82	10			151	1,2,6,13
				20446	F40/30BX/SPX35-36	36	20000		3150	2840	3500	82	10		Bulk Pack	151	1,2,6,13
				16954	F40/30BX/SPX41	40	20000		3150	2840	4100	82	10			151	1,2,6,13
				20447	F40/30BX/SPX41-36	36	20000		3150	2840	4100	82	10		Bulk Pack	151	1,2,6,13
	50	22.5	22.5	10490	F40/30BX/SPX50RS	36	20000		2900	2700	5000	80	10		Bulk Pack	151	1,2,6,13
				20898	F50BX/SPX30/RS	40	14000		4000	3400	3000	82	10			151	1,2,6,13
20899				F50BX/SPX35/RS	40	14000		4000	3400	3500	82	10			151	1,2,6,13	
55	20.7	20.7	20900	F50BX/SPX41/RS	40	14000		4000	3400	4100	82	10		151	1,2,6,13		
			31951	F55BX/830	25	10000		4800	4080	3000	82	10			151	1,2,6,13	
			31952	F55BX/835	25	10000		4800	4080	3500	82	10			151	1,2,6,13	
			31953	F55BX/840	25	10000		4800	4080	4100	82	10		151	1,2,6,13		

For the most up-to-date product information, see [www.gelighting.com](http://www.gelighting.com). To convert inches to millimeters, multiply by 25.4.

All footnote references found at the end of this section. ⚡ Reduced Wattage ⚡ High Color Rendering ⚡ TLCP Compliant Plug-Ins ⚡ EOL Protection Plug-Ins ⚡ Energy Star Screw-Ins



# Compact Fluorescent Lamps
























































































































































Base	Nominal Length Watts in.	Order Code	Description	Case Qty.	Rated Life Hours	Rated Life 12 Hrs.	Lumens Initial Mean	Color Temp. K.	CRI	Min. Start Temp. (°F)	Additional Information	Warning Notice	Footnotes
<b>PLUG-IN LAMPS (CONTINUED)</b>													
<b>4-PIN HIGH LUMEN BIAX® (CONTINUED)</b>													
G2G11	55	20.7	45851 F55BX/AR/FS 6PK	6	10000		4800 4080	9325	67	10		Fresh and Salt Water Phosphor	151 1,2,6,13
			45859 F55BX/AR/FS/BULK	25	10000		4800 4080	9325	67	10		Fresh and Salt Water Phosphor	151 1,2,6,13
<b>2-PIN DOUBLE BIAX®</b>													
G23-2	9	4.3	97576 F9DBX23/827/ECO	50	10000		550 470	2700	82				151 1,2,17
			97575 F9DBX23/841/ECO	50	10000		550 470	4100	82				151 1,2,17
GX23-2	13	4.7	97586 F13DBX23/827/ECO	50	10000		810 685	2700	82				151 1,2,17
			97585 F13DBX/827/CD	6	10000		810 685	2700	82			Carded	151 1,2,17
			97587 F13DBX23/830/ECO	50	10000		810 685	3000	82				151 1,2,17
			97588 F13DBX23/835/ECO	50	10000		810 685	3500	82				151 1,2,17
			97589 F13DBX23/841/ECO	50	10000		810 685	4100	82				151 1,2,17
G24d-1	13	5.3	97590 F13DBX/827/ECO	50	10000		900 755	2700	82				151 1,2,17
			97591 F13DBX/830/ECO	50	10000		900 755	3000	82				151 1,2,17
			97592 F13DBX/835/ECO	50	10000		900 755	3500	82				151 1,2,17
			97593 F13DBX/841/ECO	50	10000		900 755	4100	82				151 1,2,17
G24d-2	18	6.1	97577 F18DBX/827/ECO	50	10000		1200 980	2700	82				151 1,2,5,17
			97578 F18DBX/830/ECO	50	10000		1200 980	3000	82				151 1,2,5,17
			97579 F18DBX/835/ECO	50	10000		1200 980	3500	82				151 1,2,5,17
			97580 F18DBX/841/ECO	50	10000		1200 980	4100	82				151 1,2,5,17
G24d-3	26	6.7	97606 F26DBX/827/ECO	50	10000		1710 1460	2700	82				151 1,2,17
			97607 F26DBX/830/ECO	50	10000		1710 1460	3000	82				151 1,2,17
			97608 F26DBX/835/ECO	50	10000		1710 1460	3500	82				151 1,2,17
			97609 F26DBX/841/ECO	50	10000		1710 1460	4100	82				151 1,2,17
			97602 F26DBX/E/827/ECO	50	10000		1710 1460	2700	82			Internal Electronic Starter	151 1,2,15,17
			97603 F26DBX/E/830/ECO	50	10000		1710 1460	3000	82			Internal Electronic Starter	151 1,2,15,17
			97604 F26DBX/E/835/ECO	50	10000		1710 1460	3500	82			Internal Electronic Starter	151 1,2,15,17
97605 F26DBX/E/841/ECO	50	10000		1710 1460	4100	82			Internal Electronic Starter	151 1,2,15,17			
<b>4-PIN DOUBLE BIAX®</b>													
G24q-1	13	5.0	97594 F13DBX/827/ECO4P	50	12000	20000	900 755	2700	82				151 1,2,6,17
			97595 F13DBX/830/ECO4P	50	12000	20000	900 755	3000	82				151 1,2,6,17
			97596 F13DBX/835/ECO4P	50	12000	20000	900 755	3500	82				151 1,2,6,17
			97597 F13DBX/841/ECO4P	50	12000	20000	900 755	4100	82				151 1,2,6,17
G24q-2	18	5.8	97598 F18DBX/827/ECO4P	50	12000	20000	1200 970	2700	82				151 1,2,5,6,17
			97599 F18DBX/830/ECO4P	50	12000	20000	1200 970	3000	82				151 1,2,5,6,17
			97600 F18DBX/835/ECO4P	50	12000	20000	1200 970	3500	82				151 1,2,5,6,17
			97601 F18DBX/841/ECO4P	50	12000	20000	1200 970	4100	82				151 1,2,5,6,17
G24q-3	26	6.4	97610 F26DBX/827/ECO4P	50	12000	20000	1710 1440	2700	82				151 1,2,6,17
			97611 F26DBX/830/ECO4P	50	12000	20000	1710 1440	3000	82				151 1,2,6,17
			97612 F26DBX/835/ECO4P	50	12000	20000	1710 1440	3500	82				151 1,2,6,17
			97613 F26DBX/841/ECO4P	50	12000	20000	1710 1440	4100	82				151 1,2,6,17
<b>4-PIN TRIPLE BIAX®</b>													
GX24q-1	13	4.2	97623 F13TBX/827/4P/ECO	10	12000	20000	900 755	2700	82			Non-Amalgam	151 1,2,6,17
			97619 F13TBX/827/A/ECO	10	12000	20000	900 755	2700	82				151 1,2,6,12,17
			97620 F13TBX/830/A/ECO	10	12000	20000	900 755	3000	82				151 1,2,6,12,17
			97621 F13TBX/835/A/ECO	10	12000	20000	900 755	3500	82				151 1,2,6,12,17
			97622 F13TBX/841/A/ECO	10	12000	20000	900 755	4100	82				151 1,2,6,12,17
GX24q-2	18	4.8	97628 F18TBX/827/4P/ECO	10	12000	20000	1200 1010	2700	82			Non-Amalgam	151 1,2,6,12,17
			97624 F18TBX/827/A/ECO	10	12000	20000	1200 1010	2700	82				151 1,2,6,12,17
			97625 F18TBX/830/A/ECO	10	12000	20000	1200 1010	3000	82				151 1,2,6,12,17
			97626 F18TBX/835/A/ECO	10	12000	20000	1200 1010	3500	82				151 1,2,6,12,17

**New Product Codes.** (These product codes will be available September 2006. Until that time, use order code found on page 5-18).





# Compact Fluorescent Lamps






Base	Nominal Watts	Length in.	Order Code	Description	Case Qty.	Rated Life Hours	Rated Life 12 Hrs.	Lumens Initial	Lumens Mean	Color Temp. K.	CRI	Min. Start Temp. (°F)	Additional Information	Warning Notice	Footnotes
<b>PLUG-IN LAMPS (CONTINUED)</b>															
<b>4-PIN TRIPLE BIAX® (CONTINUED)</b>															
	GX24q-2	18	4.8	97627	F18TBX/841/A/ECO	10	12000	20000	1200	1020	4100	82	    	151	1,2,6,12,17
	GX24q-3	26	5.2	97618	F26TBX/827/4P/ECO	10	12000	20000	1710	1440	2700	82	     Non-Amalgam	151	1,2,6,17
				97614	F26TBX/827/A/ECO	10	12000	20000	1710	1440	2700	82	    	151	1,2,6,12,17
				97615	F26TBX/830/A/ECO	10	12000	20000	1710	1440	3000	82	    	151	1,2,6,12,17
				97616	F26TBX/835/A/ECO	10	12000	20000	1710	1440	3500	82	    	151	1,2,6,12,17
				97617	F26TBX/841/A/ECO	10	12000	20000	1710	1440	4100	82	    	151	1,2,6,12,17
	GX24-q3	32	5.5	97629	F32TBX/827/A/ECO	10	12000	20000	2200	1850	2700	82	    	151	1,2,6,12,17
				97630	F32TBX/830/A/ECO	10	12000	20000	2200	1850	3000	82	    	151	1,2,6,12,17
				97631	F32TBX/835/A/ECO	10	12000	20000	2200	1850	3500	82	    	151	1,2,6,12,17
				97632	F32TBX/841/A/ECO	10	12000	20000	2200	1850	4100	82	    	151	1,2,6,12,17
	GX24-q4	42	6.4	97633	F42TBX/827/A/ECO	10	12000	20000	3200	2690	2700	82	    	151	1,2,6,12,17
				97634	F42TBX/830/A/ECO	10	12000	20000	3200	2690	3000	82	    	151	1,2,6,12,17
				97635	F42TBX/835/A/ECO	10	12000	20000	3200	2690	3500	82	    	151	1,2,6,12,17
				97636	F42TBX/841/A/ECO	10	12000	20000	3200	2690	4100	82	    	151	1,2,6,12,17
<b>4-PIN HIGH OUTPUT BIAX®</b>															
	GX24q-5	57	7.1	48861	F57QBX/827/A/ECO	10	12000	20000	4300	3700	2700	82	    	151	1,2,6,12,17
				48862	F57QBX/830/A/ECO	10	12000	20000	4300	3700	3000	82	    	151	1,2,6,12,17
				48863	F57QBX/835/A/ECO	10	12000	20000	4300	3700	3500	82	    	151	1,2,6,12,17
				48864	F57QBX/841/A/ECO	10	12000	20000	4300	3700	4100	82	    	151	1,2,6,12,17
				93404	F57QBX/850/A/ECO	10	12000	20000	4300	3700	5000	82	    	151	1,2,6,12,17
	GX24q-6	70	8.2	48865	F70QBX/827/A/ECO	10	12000	20000	5200	4470	2700	82	    	151	1,2,6,12,17
				48866	F70QBX/830/A/ECO	10	12000	20000	5200	4470	3000	82	    	151	1,2,6,12,17
				48867	F70QBX/835/A/ECO	10	12000	20000	5200	4470	3500	82	    	151	1,2,6,12,17
				48868	F70QBX/841/A/ECO	10	12000	20000	5200	4470	4100	82	    	151	1,2,6,12,17
				93406	F70QBX/850/A/ECO	10	12000	20000	5200	4470	5000	82	    	151	1,2,6,12,17
<b>4-PIN 2D®</b>															
	GR10q-4	10	3.6	21301	F102D/827/4P	60	10000		650	545	2700	82	 	151	1,2,3,6
		16	5.5	22169	F162D/827/4P	50	10000		1050	880	2700	82	 	151	1,2,3,6
				22177	F162D/835/4P	50	10000		1050	880	3500	82	 	151	1,2,3,6
		21	5.5	21303	F212D/827/4P	50	10000		1350	1135	2700	82	 	151	1,2,3,6
				22178	F212D/835/4P	50	10000		1350	1135	3500	82	 	151	1,2,3,6
		28	8.1	22172	F282D/827/4P	20	10000		2050	1720	2700	82	 	151	1,2,3,6
				22180	F282D/835/4P	20	10000		2050	1720	3500	82	 	151	1,2,3,6
		38	8.1	21305	F382D/827/4P	20	10000		2850	2395	2700	82	 	151	1,2,3,6
				25427	F38/2D/827/4P/CD	5	10000		2850	2395	2700	82	  Carded	151	1,2,3,6
				22181	F382D/835/4P	20	10000		2850	2395	3500	82	 	151	1,2,3,6
	GRY10q-3	55	8.1	37525	F552D/827/A/4P/B	48	10000		3900	3300	2700	82	  Bulk Pack	151	1,2,3,6
				36358	F552D/830A/T4P/B	20	10000		4000	3400	3000	82	  Torchiere Replacement Lamp	151	1,2,3,6
				40184	F552D/830/4P/CD	5	10000		4000	3400	3000	82	  Torchiere Replacement Lamp, Carded	151	1,2,3,6
				37529	F552D/835/A/4P/B	48	10000		3900	3300	3500	82	  Bulk Pack	151	1,2,3,6

**New Product Codes.** (These product codes will be available September 2006. Until that time, use order code found on page 5-18).

For the most up-to-date product information, see [www.gelighting.com](http://www.gelighting.com). To convert inches to millimeters, multiply by 25.4. All footnote references found at the end of this section.  Reduced Wattage  High Color Rendering  TLCP Compliant Plug-Ins  EOL Protection Plug-Ins  Energy Star Screw-Ins



# Compact Fluorescent Lamps

Nominal Length Order	Base Watts	in.	Code	Description	Case Qty	Rated Life Hours	Lumens		Color Temp. K	CRI	Min. Start Temp. (°F)	Power Factor	THD	Additional Information	Warning Notices	Footnotes		
							Initial	Mean										
<b>SELF-BALLASTED LAMPS</b>																		
<b>SPIRAL®</b>																		
Med 	10	4.4	15829	FLE10HT3/2/827	10	120	8000	520	420	2700	82	5	0.6	120	↻ → ★	T3 Spiral®, Boxed	153	1,7,8,9,10
				49906	FLE10HLX/2/SW/CD	12	120	8000	520	420	2700	82	5	0.6	120	↻ → ★	T3 Spiral®, Carded Single Pack	153
			49907	FLE10HLX/2/SW/CD/2PK	3	120	8000	520	420	2700	82	5	0.6	120	↻ → ★	T3 Spiral®, Carded Twin Pack	153	1,7,8,9,10
			25182	FLE10HT3/2/841	10	120	8000	520	420	4100	82	5	0.6	120	↻ → ★	T3 Spiral®, Boxed	153	1,7,8,9,10
			85393	FLE10HT3/2/D/2PK	3	120	8000	500	400	6500	82	5	0.6	120	↻ → ★	T3 Spiral®, Carded Twin Pack	153	1,7,8,9,10
			80936	FLE10HT3/2/XL	10	120	12000	550	440	2700	82	5	0.6	120	↻ → ★	T3 Spiral®, Boxed	153	1,7,8,9,10
			47430	FLE10HT3/2/XL/CD	12	120	12000	550	440	2700	82	5	0.6	120	↻ → ★	T3 Spiral®, Carded Single Pack	153	1,7,8,9,10
			49671	FLE10HT3/2/XL2PK	3	120	12000	550	440	2700	82	5	0.6	120	↻ → ★	T3 Spiral®, Carded Twin Pack	153	1,7,8,9,10
	10		86241	FLE10HT2/2/827	10	120	12000	580	464	2700	82	5	0.6	120	↻ → ★	T2 Spiral®, Boxed	153	1,7,8,9,10
			85382	FLE10HT2/2/SW/CD	12	120	12000	580	464	2700	82	5	0.6	120	↻ → ★	T2 Spiral®, Carded Single Pack	153	1,7,8,9,10
			85389	FLE10HT2/2/SW2PK	3	120	12000	580	464	2700	82	5	0.6	120	↻ → ★	T2 Spiral®, Carded Twin Pack	153	1,7,8,9,10
	13	4.7	16460	FLE13HT3/2/SW/CD	12	120	8000	825	660	2700	82	5	0.6	120	↻ → ★	T3 Spiral®, Carded Single Pack	153	1,7,8,9,10
			16459	FLE13HT3/2/SW/CD/2PK	3	120	8000	825	660	2700	82	5	0.6	120	↻ → ★	T3 Spiral®, Carded Twin Pack	153	1,7,8,9,10
			21760	FLE13HT3/2/10PK	10	120	8000	825	660	2700	82	5	0.6	120	↻ → ★	T3 Spiral®, Consumer 10 Pack	153	1,7,8,9,10
	13		86256	FLE13HT2/2/827	10	120	8000	870	715	2700	82	5	0.6	120	↻ → ★	T2 Spiral®, Boxed	153	1,7,8,9,10
			85383	FLE13HT2/2/SW/CD	12	120	8000	870	715	2700	82	5	0.6	120	↻ → ★	T2 Spiral®, Carded Single Pack	153	1,7,8,9,10
			85390	FLE13HT2/2/SW2PK	3	120	8000	870	715	2700	82	5	0.6	120	↻ → ★	T2 Spiral®, Carded Twin Pack	153	1,7,8,9,10
	15	4.8	15831	FLE15HT3/2/827	10	120	8000	950	765	2700	82	5	0.6	145	↻ → ★	T3 Spiral®, Boxed	153	1,7,8,9,10
			41520	FLE15HT3/2/SW/CD	12	120	8000	950	765	2700	82	5	0.6	145	↻ → ★	T3 Spiral®, Carded Single Pack	153	1,7,8,9,10
			41525	FLE15HT3/2/SW/2PK	3	120	8000	950	765	2700	82	5	0.6	145	↻ → ★	T3 Spiral®, Carded Twin Pack	153	1,7,8,9,10
			00261	FLE15HT3/2/SW/3PK	3	120	8000	950	765	2700	82	5	0.6	145	↻ → ★	T3 Spiral®, Carded 3 Pack	153	1,7,8,9,10
			16252	FLE15HT3/2/6H/4PK	3	120	6000	850	685	2700	82	5	0.6	145	↻ → ★	6000 Hr Life, T3 Spiral®, Boxed Consumer 4 Pack	153	1,7,8,9,10
			25183	FLE15HT3/2/841	10	120	8000	950	765	4100	82	5	0.6	145	↻ → ★	T3 Spiral®, Boxed	153	1,7,8,9,10
			85394	FLE15HT3/2/D/2PK	3	120	8000	900	738	6500	82	5	0.6	145	↻ → ★	T3 Spiral®, Carded Twin Pack	153	1,7,8,9,10
			80937	FLE15HT3/2/XL	10	120	12000	950	760	2700	82	5	0.6	145	↻ → ★	T3 Spiral®, Boxed	153	1,7,8,9,10
			47435	FLE15HT3/2/XL/CD	12	120	12000	950	760	2700	82	5	0.6	145	↻ → ★	T3 Spiral®, Carded Single Pack	153	1,7,8,9,10
			49680	FLE15HT3/2/XL2PK	3	120	12000	950	760	2700	82	5	0.6	145	↻ → ★	T3 Spiral®, Carded Twin Pack	153	1,7,8,9,10
	15		86271	FLE15HT2/2/827	10	120	12000	950	780	2700	82	5	0.6	145	↻ → ★	T2 Spiral®, Boxed	153	1,7,8,9,10
			85385	FLE15HT2/2/SW/CD	12	120	12000	950	780	2700	82	5	0.6	145	↻ → ★	T2 Spiral®, Carded Single Pack	153	1,7,8,9,10
			85391	FLE15HT2/2/SW2PK	3	120	12000	950	780	2700	82	5	0.6	145	↻ → ★	T2 Spiral®, Carded Twin Pack	153	1,7,8,9,10
	20	4.7	15834	FLE20HT3/2/827	10	120	8000	1200	965	2700	82	5	0.6	135	↻ → ★	T3 Spiral®, Boxed	153	1,7,8,9,10
			15516	FLE20HT3/2/SW/CD	12	120	8000	1200	965	2700	82	5	0.6	135	↻ → ★	T3 Spiral®, Carded Single Pack	153	1,7,8,9,10
			15518	FLE20HT3/2/SW/2PK	3	120	8000	1200	965	2700	82	5	0.6	135	↻ → ★	T3 Spiral®, Carded Twin Pack	153	1,7,8,9,10
			16253	FLE20HT3/2/6H/4PK	3	120	6000	1150	925	2700	82	5	0.6	135	↻ → ★	6000 Hr Life, T3 Spiral®, Boxed Consumer 4 Pack	153	1,7,8,9,10
			25186	FLE20HT3/2/841	10	120	8000	1200	965	4100	82	5	0.6	135	↻ → ★	T3 Spiral®, Boxed	153	1,7,8,9,10,3
			85396	FLE20HT3/2/D/2PK	3	120	8000	1150	945	6500	82	5	0.6	135	↻ → ★	T3 Spiral®, Carded Twin Pack	153	1,7,8,9,10
			80888	FLE20HT3/2/XL	10	120	12000	1300	1040	2700	82	5	0.6	135	↻ → ★	T3 Spiral®, Boxed	153	1,7,8,9,10
			47442	FLE20HT3/2/XL/CD	12	120	12000	1300	1040	2700	82	5	0.6	135	↻ → ★	T3 Spiral®, Carded Single Pack	153	1,7,8,9,10
			49684	FLE20HT3/2/XL2PK	3	120	12000	1300	1040	2700	82	5	0.6	135	↻ → ★	T3 Spiral®, Carded Twin Pack	153	1,7,8,9,10
			47466	FLE20HT3/2/XL/D	12	120	12000	1300	1040	6500	82	5	0.6	135	↻ → ★	T3 Spiral®, Carded Single Pack, Daylight	153	1,7,8,9,10
	23	5.1	80889	FLE23HT3/2/XL	10	120	12000	1600	1280	2700	82	5	0.6		↻ → ★	T3 Spiral®, Boxed	153	1,7,8,9,10
			47445	FLE23HT3/2/XL/CD	12	120	12000	1600	1280	2700	82	5	0.6		↻ → ★	T3 Spiral®, Carded Single Pack	153	1,7,8,9,10
			15836	FLE26HT3/2/827	10	120	8000	1750	1400	2700	82	5	0.6	120	↻ → ★	T3 Spiral®, Boxed	153	1,7,8,9,10
			15517	FLE26HT3/2/SW/CD	12	120	8000	1750	1400	2700	82	5	0.6	120	↻ → ★	T3 Spiral®, Carded Single Pack	153	1,7,8,9,10
			15519	FLE26HT3/2/SW/2PK	3	120	8000	1750	1400	2700	82	5	0.6	120	↻ → ★	T3 Spiral®, Carded Twin Pack	153	1,7,8,9,10



Base	Nominal Length Watts in. Code	Order Code	Description	Case Qty	Rated Life Hours	Lumens		Color Temp.		Min. Start Temp. (°F)	Power Factor	THD	Additional Information	Warning Notices	Footnotes																	
						Initial	Mean	K	CRI																							
<b>SELF-BALLASTED LAMPS (CONTINUED)</b>																																
<b>SPIRAL® (CONTINUED)</b>																																
	Med	26	5.2	00262 FLE26HT3/2/SW/3PK	3	120	8000	1750	1400	2700	82	5	0.6	120		T3 Spiral®, Carded 3 Pack	153	1,7,8,9,10														
				16254 FLE26HT3/2/6H/4PK	3	120	6000	1750	1400	2700	82	5	0.6	120		6000 Hr Life, T3 Spiral®, Boxed Consumer 4 Pack	153	1,7,8,9,10														
				21845 FLE26HT3/2/10PK	10	120	8000	1700	1365	2700	82	5	0.6	120		T3 Spiral®, Consumer 10 Pack	153	1,7,8,9,10														
				25195 FLE26HT3/2/841	10	120	8000	1750	1400	4100	82	5	0.6	120		T3 Spiral®, Boxed	153	1,7,8,9,10														
				85397 FLE26HT3/2/D/2PK	3	120	8000	1600	1315	6500	82	5	0.6	120		T3 Spiral®, Carded Twin Pack	153	1,7,8,9,10														
				80890 FLE26HT3/2/XL	10	120	12000	1700	1360	2700	82	5	0.6	120		T3 Spiral®, Boxed	153	1,7,8,9,10														
				47446 FLE26HT3/2/XL/CD	12	120	12000	1700	1360	2700	82	5	0.6	120		T3 Spiral®, Carded Single Pack	153	1,7,8,9,10														
				49685 FLE26HT3/2/XL2PK	3	120	12000	1700	1360	2700	82	5	0.6	120		T3 Spiral®, Carded Twin Pack	153	1,7,8,9,10														
				81514 FLE29HLX/2/XL/827	10	120	12000	2200	1760	2700	82	5	0.6			T4 Spiral®, Boxed	153	1,7,8,9,10														
				47459 FLE29HLX/2/XL/CD	12	120	12000	2200	1760	2700	82	5	0.6			T4 Spiral®, Carded Single Pack	153	1,7,8,9,10														
	29	6.3	81515 FLE29HLX/2D3/827	10	120	10000	600	480	2700	82	5	0.6		T4 Spiral®, Boxed, 3-way	155	1,7,8,9,10																
																	1600	1280														
																	2200	1760														
	42	6.4	80891 FLE42HLX/2/XL	10	120	12000	2700	2160	2700	82	5	0.6	170		T4 Spiral®, Boxed	153	1,7,8,9,10															
																		47452 FLE42HLX/2/XL/CD	12	120	12000	2700	2160	2700	82	5	0.6	170		T4 Spiral®, Carded Single Pack	153	1,7,8,9,10
																		16107 FLE42HLX/VT/827	10	120	10000	2650	2275	2700	82	14	0.6	170		BASE DOWN OPERATION ONLY, T4 Spiral®, Boxed	154	1,7,10,15
<b>BIAX®</b>																																
	Med	12	4.4	20702 FLE12TT3/827	10	120	15000	600	480	2700	82	5	0.6	120		T3 Triple Biax®, Boxed	153	1,7,8,9,10,12														
				14	5.9	49884 FLE14TBX/2/SW/CD	12	120	8000	850	685	2700	82	5	0.6	120		Triple Biax®, Carded Single Pack	153	1,7,8,9,10												
				15	4.9	12004 FLE15TT3/827	10	120	15000	900	720	2700	82	5	0.6	145		T3 Triple Biax®, Boxed	153	1,7,8,9,10,12												
						12005 FLE15TT3/SW/CD	3	120	15000	900	720	2700	82	5	0.6	145		T3 Triple Biax®, Carded Single Pack	153	1,7,8,9,10,12												
				20	5.5	12008 FLE20TT3/827	10	120	15000	1200	960	2700	82	5	0.6	130		T3 Triple Biax®, Boxed	153	1,7,8,9,10,12												
						12009 FLE20TT3/SW/CD	3	120	15000	1200	960	2700	82	5	0.6	130		T3 Triple Biax®, Carded Single Pack	153	1,7,8,9,10,12												
				24	5.6	6.9 49885 FLE20TBX/2/SW/CD	12	120	8000	1200	965	2700	82	5	0.6	120		Triple Biax®, Carded Single Pack	153	1,7,8,9,10												
						23669 FLE24QBX/A/827	6	120	12000	1520	1290	2700	82	-9	0.6	170		New Quad Biax® design, even shorter MOL, boxed	153	1,7,8,9,10,12												
				27	6.9	49887 FLE27QBX/2/SW/CD	12	120	6000	1700	1365	2700	82	5	0.6	130		Quad Biax®, Carded Single Pack	153	1,7,8,9,10												
						40351 FLE28QBX/LL/CD	3	120	12000	1750	1485	2700	82	-9	0.6	170		Soft White, Quad Biax®, Carded, Standard Shell Ballast	153	1,7,8,9,10,12												
28	5.9	46270 FLE28QBX/A/827	6	120	12000	1750	1485	2700	82	-9	0.6	170		Shorter MOL	153	1,7,8,9,10,12																
		41457 FLE29QBX/DV/827	6	120	10000	1750	1500	2700	82	-9	0.6	170		Dimming, Standard Shell Ballast	156	1,7,8,9,12,14																
29	6.3	45599 FLE29QBX/DV/827/CD	3	120	10000	1750	1500	2700	82	-9	0.6	170		Dimming, Carded, Standard Shell Ballast	156	1,7,8,9,12,14																
<b>REFLECTORS</b>																																
	Med	11	4.7	20704 FLE11/R20	10	120	10000	370	296	2700	82	5	0.6	120		Soft White, R20 Glass Reflector	157	1,8,9,10,12														
				80892 FLE11/2/R20XL	10	120	10000	400	320	2700	82	5	0.6	120		Soft White, R20 Glass Reflector, Boxed	157	1,8,9,10,12														
				47477 FLE11/2/R20XL/CD	12	120	10000	400	320	2700	82	5	0.6	120		Soft White, R20 Glass Reflector, Carded Single Pack	157	1,8,9,10,12														
	15	5.5	49917 FLE15/A2/R30	6	120	10000	550	445	2700	82	-22	0.6	170		Soft White, R30 Glass Reflector	157	1,8,9,10,12															
																		5.4 20708 FLE15/2/R30/SWCD	3	120	8000	720	580	2700	82	5	0.6	120		Soft White, R30 Glass Reflector, Carded Single Pack	158	1,8,9,10,12
																		80893 FLE15/2/R30XL	10	120	10000	750	600	2700	82	5	0.6	120		Soft White, R30 Glass Reflector, Boxed	157	1,8,9,10,12
																		47478 FLE15/2/R30XL/CD	12	120	10000	750	600	2700	82	5	0.6	120		Soft White, R30 Glass Reflector, Carded Single Pack	157	1,8,9,10,12
5.6 21709 FLE15/2/DV/R30	6	120	6000	720	580	2700	82	5	0.6	110		Dimming, Soft White, R30 Glass Reflector, Boxed	165	1,8,9,12,14																		



# Compact Fluorescent Lamps

Base	Nominal Length Watts in. Code	Order Code	Description	Case Qty	Rated Life Hours	Lumens		Color Temp.		Min. Start Temp. (°F)	Power Factor	THD	Additional Information	Warning Notices	Footnotes
						Initial	Mean	K	CRI						

## SELF-BALLASTED LAMPS (CONTINUED)

### REFLECTORS (CONTINUED)

	Med	15	5.6	21710	FLE15/2/DV/R30/SW/CD	3	120	6000	720	580	2700	82	5	0.6	110		Dimming, Soft White, R30 Glass Reflector, Carded Single Pack	165	1,8,9,12,14
	Med	23	5.9	15382	FLE23/A4/R40	6	120	10000	950	760	2700	82	-13	0.6	170		Soft White, R40 Glass Reflector	157	1,8,9,10,12
		26	6.5	21738	FLE26/2/R40/SW/CD	3	120	6000	1300	1040	2700	82	5	0.6	120		Soft White, R40 Glass Reflector, Carded Single Pack	158	1,8,9,10,12
				80894	FLE26/2/R40XL	6	120	10000	1300	1040	2700	82	5	0.6	120		Soft White, R40 Glass Reflector, Boxed	157	1,8,9,10,12
				47479	FLE26/2/R40XL/CD	3	120	10000	1300	1040	2700	82	5	0.6	120		Soft White, R40 Glass Reflector, Carded Single Pack	157	1,8,9,10,12
		6.9		21716	FLE26/2/DV/R40	6	120	6000	1300	1040	2700	82	5	0.6	110		Dimming, Soft White, R40 Glass Reflector, Boxed	165	1,8,9,12,14
				21718	FLE26/2/DV/R40/SW/CD	3	120	6000	1300	1040	2700	82	5	0.6	110		Dimming, Soft White, R40 Glass Reflector, Carded Single Pack	165	1,8,9,12,14
		5.5		21739	FLE26/2/PAR38/SW/CD	3	120	6000	1200	970	2700	82	5	0.6	120		Soft White, Par 38 Glass Reflector, Carded Single Pack		1,8,9,12,16
		5.6		80895	FLE26/2/PAR38/XL	6	120	10000	1300	1040	2700	82	5	0.6			Soft White, Par 38 Glass Reflector, Boxed, Wet rated	166	1,8,9,12,16
				47483	FLE26/2/PAR38/XL	3	120	10000	1300	1040	2700	82	5	0.6			Soft White, Par 38 Glass Reflector, Carded Single Pack, Wet rated	166	1,8,9,12,16

### GENURA®

	Med	23	4.9	25418	EL23/R25/SW	6	120	15000	1100	880	2700	82	32	0.6	130		Genura® Electrodeless Design, Soft White	160	1,8,9,10
				12273	EL23/R25/WW	6	120	15000	1100	880	3000	82	32	0.6	130		Genura® Electrodeless Design, RE 830 Phosphor, Warm White	160	1,8,9,10

### DECORATIVE SHAPES

	Cand	5	4.8	16098	FLE5/2/CAC/827	10	120	6000	200	160	2700	82	5	0.6	145		Candle Shape, Candelabra Base, Boxed	157	1,8,10,12	
	Med	5	4.8	16099	FLE5/2/CAM/827	10	120	6000	200	160	2700	82	5	0.6	145		Candle Shape, Medium Base, Boxed	157	1,8,10,12	
	Cand	7	5.2	16103	FLE7/2/CAC/827	10	120	6000	370	296	2700	82	5	0.6	130		Candle Shape, Candelabra Base, Boxed	157	1,8,10,12	
	Med	7	5.2	16104	FLE7/2/CAM/827	10	120	6000	370	296	2700	82	5	0.6	130		Candle Shape, Medium Base, Boxed	157	1,8,10,12	
	Cand	9	5.4	85388	FLE9/2/CAC/SW/CD	12	120	6000	430	344	2700	82	5	0.6	125		Candle Shape, Candelabra Base, Carded Single Pack	157	1,8,10,12	
				16105	FLE9/2/CAC/827	10	120	6000	430	344	2700	82	5	0.6	125		Candle Shape, Candelabra Base, Boxed	157	1,8,10,12	
	Med	9	5.4	47488	FLE9/2/CAM/XL/CD	12	120	10000	430	344	2700	82	5	0.6	125		Candle Shape, Medium Base, Carded Single Pack	157	1,8,10,12	
				16106	FLE9/2/CAM/827	10	120	6000	430	344	2700	82	5	0.6	125		Candle Shape, Medium Base, Boxed	157	1,8,10,12	
	11	4.4		47486	FLE11/2/A17XL/CD	12	120	10000	550	440	2700	82	5	0.6			A-Line Shape, Carded Single Pack	157	1,8,10,12	
	11	4.8		47484	FLE11/2/G25XL/CD	12	120	10000	550	440	2700	82	5	0.6			Globe Shape, Carded Single Pack	157	1,8,10,12	
				5.2	49894	FLE11/2/TC14/SW/CD	12	120	6000	520	420	2700	82	5	0.6	120		Post Light, Carded Single Pack	157	1,8,10,12
				5.2	49895	FLE11/2/TC14/BUG/CD	12	120	6000	520	420	2700	82	5	0.6	120		Bug Yellow Post Light, Carded Single Pack	157	1,8,10,12
	12	4.8		20703	FLE12/A19/827	10	120	10000	550	440	2700	82	5	0.6	120		A-Line Shape, Reduced Size, Boxed	157	1,8,10,12	
	14	5		47464	FLE14/2/TC16/BUG	12	120	10000	750	600	2700	82	5	0.6			Bug Yellow Post Light, Carded Single Pack	157	1,8,10,12	
	15	4.8		47487	FLE15/2/A21XL/CD	12	120	10000	825	660	2700	82	5	0.6			A-Line Shape, Carded Single Pack	157	1,8,10,12	
				47485	FLE15/2/G25XL/CD	12	120	10000	800	640	2700	82	5	0.6			Globe Shape, Carded Single Pack	157	1,8,10,12	
				4.7	21733	FLE15/2/A21/SW/CD	12	120	8000	850	689	2700	82	5	0.6	120		A-Line Shape, Carded Single Pack	158	1,8,10,12
				5.4	12010	FLE15/A19/827	6	120	10000	825	660	2700	82	5	0.6	145		A-Line Shape, Reduced Size, Boxed	157	1,8,10,12
				12011	FLE15/A19/SW/CD	3	120	10000	825	660	2700	82	5	0.6	145		A-Line Shape, Reduced Size, Carded Single Pack	157	1,8,10,12	
	15	5.3		41325	FLE15/6/T19/827	10	120	6000	800	640	2700	84	32	0.6	170		Bullet	158	1,8,10,12	
				5.8	12501	FLE15TBX/L/G29	6	120	12000	750	600	2700	82	-9	0.6	170		Soft White, G30 Globe Slimshell Ballast	157	1,8,10,12
				5.4	41546	FLE15/A3/G30	6	120	10000	730	590	2700	82	-9	0.6	170		Soft White, G30 Globe, Reduced Overall Length	157	1,8,10,12
				6	41464	FLE15/L/TC16/827	6	120	12000	850	680	2700	82	-9	0.6	170		Post Light, Slimshell Ballast	157	1,8,10,12



# Compact Fluorescent Lamps

Base	Watts	Nominal Length in.	Order Code	Description	Case Qty	Voltage	Rated Life Hours	Lumens		Color Temp. K	CRI	Min. Start Temp. (°F)	Power Factor	THD	Additional Information	Warning Notices	Footnotes
								Initial	Mean								

## SELF-BALLASTED LAMPS (CONTINUED)

### DECORATIVE SHAPES (CONTINUED)

Med	20	6.1	41456	FLE20/A2/A24/827	6	120	6000	1125	950	2700	82	0	0.6	170		A-Line Shape, Slimshell Ballast	157	1,8,10,12
			41441	FLE20/A2/A24/SW/CD 3	3	120	6000	1125	950	2700	82	0	0.6	170		A-Line Shape, Carded, Slimshell Ballast	157	1,8,10,12

### LAMPS AND ADAPTERS

#### CIRCLITE®

Med	21	3.4	11307	FCA21/CD	4	120	10000	1200	1020	3000	82	0.5	20		Circlite, Carded, FC8T9/KB Replacement Lamp	163	1,7,10,11	
			48222	FCA21/D CD TRAY	4	120	10000								Circlite, Carded Tray Pack, FC8T9/KB Replacement Lamp	163	1,7,10,11	
	30	3.5	27251	FEA30CIR/SW/CD	4	120	10000	1900	1520	2700	82	32	0.6	170		Electronic Circlite, Carded, Replacement Lamp FC8T9	164	1,7,10,11

#### 2D®-ELECTRONIC

Med	39	4.3	27253	FEA38/2D/3WAY/CD	4	120	10000	2780	2365	2700	82	32	0.5	2		3-Way, Carded Uses F382D/827 Replacement Lamp	164	1,3,7,10,11,12
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### BRIGHT STICK® LIGHTING UNITS

	33	25	12257	FBS25/WX/PP	6		7500	725		3450	59					Bright Stik, White Lamp-In-Holder Unit with Standard 2-Prong Plug, Integral Lamp(1)*		1,10
			12263	FBS25/GS/PP	6		7500	470		3050	90					Bright Stik, Gro & Sho, Lamp-In-Holder Unit with Standard 2-Prong Plug, Integral Lamp (1)*		1,10
			47912	FBS25/BLB/PP	6		7500									Bright Stik, Blacklight Blue Lamp-In-Holder Unit with Standard 2-Prong Plug, Integral Lamp (1)*		1,10

Bulb	Base	Watts	Nominal Length in.	Order Code	Description	Case Qty	Rated Life Hours	Additional Information	Warning Notices	Footnotes
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### GERMICIDAL

T4	G23	5	3.35	16479	GBX5/UVC	100	8000	Clear, Preheat, 2 Pin Internal Starter, UVC Source	106	9, 16
		9	5.71	15877	GBX9/UVC	100	8000	Clear, Preheat, 2 Pin Internal Starter, UVC Source	106	9, 16
		11	8.46	15879	GBX11/UVC	100	8000	Clear, Preheat, 2 Pin Internal Starter, UVC Source	106	9, 16
	GH23	13	6.69	15881	GBX13/UVC	100	8000	Clear, Preheat, 2 Pin Internal Starter, UVC Source	106	9, 16
T6	2G11	18	8.8	15882	GBX18/UVC/2G11	40	8000	Clear, UVC Source	106	9, 16
		36	16.33	15883	GBX36/UVC/2G11	40	8000	Clear, UVC Source	106	9, 16
		55	21.1	15885	GBX55/UVC/2G11	25	8000	Clear, UVC Source	106	9, 16

### BLACKLIGHT

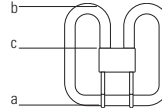
T4	G23	5	3.35	42935	F9BX BL G23	10	10000	Blacklight UVA Source 2 pin Internal Starter	104	8
		11	5.71	42936	F11BX BL G23	10	10000	Blacklight UVA Source 2 pin Internal Starter	104	8
		13	8.46	42937	F13BX BL GX23	10	10000	Blacklight UVA Source 2 pin Internal Starter	104	8
T4	G24d-3	26	6.7	42938	F26DBX BL G24d-3	10	10000	Blacklight UVA Source 4 Pin Electronic	104	8
T6	2G11	24	12.8	42939	F24BX BL 2G11	10	10000	Blacklight UVA	104	8
		36	16.33	42940	F36BX BL 2G11	10	10000	Blacklight UVA	104	8
		55	21.1	42941	F55BX BL 2G11	10	10000	Blacklight UVA	104	8



## FOOTNOTES

### # Footnote

- 1 Fluorescent lamp lumens decline during life.
- 2 Based on 60Hz reference circuit.
- 3 10-watt, 16-watt and 28-watt 2D® lamps may be operated in any position. 21-watt, 38-watt, 39-watt and 55-watt 2D® lamps must be used with the leg marked (a) in the diagram below the bend (b), in order to avoid overheating the end of the cap marked (c).
- 4 Life ratings for the F18BX preheat lamps are based on operating the lamp at 3hrs. per start on a preheat type circuit. Operation on rapid start and instant start ballasts is not recommended.
- 5 Cold cathode resistance is approximately 6.0 Ohms.
- 6 4-Pin lamp minimum starting temperature is a function of the ballast. Most ballasts are rated with a minimum starting temperature of 50°F (10°C). Ballasts are also available that provide reliable starting to 0°F (-18°C) and -20°F (-29°C).
- 7 Most one piece self ballasted lamps for incandescent sockets and plug-in lamps with screw-in adapters do not work with clip-on shades.
- 8 Lumens on one piece self ballasted lamp systems are measured base up.
- 9 Best performance if operated base up and at 77°F (25°C) ambient temperature.
- 10 Use only on 120V, 60Hz circuits. Do not use on dimming circuits, photocells or timers. Do not use in wet locations.
- 11 Adapters rated at 40,000 hours life.
- 12 Amalgam products experience stable brightness over a wider temperature range and in various operating positions.
- 13 Life ratings are based on operating the lamp at 3hrs. per start on a rapid start type ballast. Life rating on a preheat or instant start ballast is 25% lower.
- 14 Use only on 120V, 60Hz circuits. Do not use on with photocells or timers. Do not use in wet locations.
- 15 These lamps are only recommended for use with single lamp ballasts or parallel wired 2-lamp ballasts.
- 16 UL Listed for wet locations. Use only on 120V, 60Hz circuits. Do not use on dimming circuits, photocells or timers.
- 17 Max. bulb wall temperature not to exceed 180°C. Consult GE sales representative for further information.



## WARNING AND CAUTION NOTICES

### 151

#### ⚠ CAUTION

##### Lamp may shatter and cause injury if broken

- Remove and install by grasping only plastic portion of the lamp

### 152

#### ⚠ CAUTION

##### Risk of electric shock

- Do not use where directly exposed to water
- Do not open - no user serviceable parts inside

##### Lamp may shatter and cause injury if broken

- Remove and install by grasping only plastic portion of the lamp

This product complies with Part 18 of the FCC Rules, but may cause interference to radios, televisions, wireless telephones, and remote controls. Avoid placing this product near these devices. If interference occurs, move the product away from the device or plug either into a different outlet. Do not install this product near maritime safety equipment or other critical navigation or communication equipment operating between 0.45-30 MHz. Not intended for use with emergency exit fixtures or lights, electronic timers, photocells, dimmers, or in totally enclosed recessed fixtures.

### 153

#### ⚠ CAUTION

##### Risk of electric shock

- Do not use where directly exposed to water
- Do not open - no user serviceable parts inside

##### Lamp may shatter and cause injury if broken

- Remove and install by grasping only plastic portion of the lamp

This product complies with Part 18 of the FCC Rules, but may cause interference to radios, televisions, wireless telephones, and remote controls. Avoid placing this product near these devices. If interference occurs, move the product away from the device or plug either into a different outlet. Do not install this product near maritime safety equipment or other critical navigation or communication equipment operating between 0.45-30 MHz. Not intended for use with emergency exit fixture or lights, electronic timers, photocells, or with dimmers

### 154

#### ⚠ CAUTION

##### Risk of electric shock

- Do not use where directly exposed to water
- Do not open - no user serviceable parts inside

##### Lamp may shatter and cause injury if broken

- Remove and install by grasping only plastic portion of the lamp

This product complies with Part 18 of the FCC Rules, but may cause interference to radios, televisions, wireless telephones, and remote controls. Avoid placing this product near these devices. If interference occurs, move the product away from the device or plug either into a different outlet. Do not install this product near maritime

safety equipment or other critical navigation or communication equipment operating between 0.45 - 30 MHz. Not intended for use with emergency exit fixtures or lights, in totally enclosed recessed fixtures, or with dimmers

### 155

#### ⚠ CAUTION

##### Risk of electric shock

- Do not use where directly exposed to water
- Do not open - no user serviceable parts inside

##### Lamp may shatter and cause injury if broken

- Remove and install by grasping only plastic portion of the lamp

This product complies with Part 18 of the FCC Rules, but may cause interference to radios, televisions, wireless telephones, and remote controls. Avoid placing this product near these devices. If interference occurs, move the product away from the device or plug either into a different outlet. Do not install this product near maritime safety equipment or other critical navigation or communication equipment operating between 0.45 - 30 MHz. Not intended for use with emergency exit fixtures or lights, electronic timers, photocells, in totally enclosed recessed fixtures, or with dimmers

### 156

#### ⚠ CAUTION

##### Risk of electric shock

- Do not use where directly exposed to water
- Do not open - no user serviceable parts inside

##### Lamp may shatter and cause injury if broken

- Remove and install by grasping only plastic portion of the lamp

This product complies with Part 18 of the FCC Rules, but may cause interference to radios, televisions, wireless telephones, and remote controls. Avoid placing this product near these devices. If interference occurs, move the product away from the device or plug either into a different outlet. Do not install this product near maritime safety equipment or other critical navigation or communication equipment operating between 0.45-30 MHz. Not intended for use with emergency exit fixtures or lights, electronic timers, photocells, or in totally enclosed recessed fixtures.

### 157

#### ⚠ CAUTION

##### Risk of electric shock

- Do not open - no user serviceable parts inside
- Do not use where directly exposed to water or outdoors without an enclosed fixture

This product complies with Part 18 of the FCC Rules, but may cause interference to radios, televisions, wireless telephones, and remote controls. Avoid placing this product near these devices. If interference occurs, move the product away from the device or plug either into a different outlet. Do not install this product near maritime safety equipment or other critical navigation or communication equipment operating between 0.45-30 MHz. Not intended for use with emergency exit fixtures or lights, electronic timers, photocells, or with dimmers.



## WARNING AND CAUTION NOTICES (CONTINUED)

158

### ▲ CAUTION

#### Risk of electric shock

- Do not open - no user serviceable parts inside
- Do not use where directly exposed to water or outdoors without an enclosed fixture

This product complies with Part 18 of the FCC Rules, but may cause interference to radios, televisions, wireless telephones, and remote controls. Avoid placing this product near these devices. If interference occurs, move the product away from the device or plug either into a different outlet. Do not install this product near maritime safety equipment or other critical navigation or communication equipment operating between 0.45-30 MHz. Not intended for use with emergency exit fixtures or lights, electronic timers, photocells, dimmers, or in totally enclosed recessed fixtures.

159

### ▲ CAUTION

#### Risk of electric shock

- Do not open - no user serviceable parts inside
- Do not use in wet locations
- Use indoors only

#### Risk of fire

- Do not use this adapter on dimmers, electronic timers, or photocells

Added weight may cause instability of free-standing portable lamps. Use only with portable lamps in which the distance from the bottom of the base to the top of the lamp holder does not exceed three times the base width and which are provided with lamp shades. Not intended for use with emergency exit fixtures or lights.

160

### ▲ CAUTION

#### Risk of electric shock

- Do not use where directly exposed to water
- Do not open - no user serviceable parts inside

#### Lamp may shatter and cause injury if broken

- Remove and install by grasping only plastic portion of the lamp

This product may cause interference to radio equipment operating in the frequency range of 2.2 - 2.8 MHz. Avoid placing this product near these devices. To reduce the possibility of radio interference to maritime safety communications, this device should not be installed:

- 1) On board cargo vessels of more than 300 tons
- 2) On board cargo vessels carrying more than 12 passengers for hire
- 3) At any medium frequency public coast station

Further, installation is not recommended on board vessels equipped with medium frequency, single sideband marine radios. If interference occurs, move this product away from the device or plug either into a different outlet. Such interference complaints should be reported to: Application Solutions at General Electric Company, 1975 Noble Road, Cleveland, Ohio 44112, or call toll free (800) 435-4448 from 8:00 am to 6:00 pm EST.

Not intended for use with emergency exit fixtures or lights, electronic timers, photocells, dimmers, or in totally enclosed recessed fixtures.

161

### ▲ CAUTION

#### Risk of electric shock

- Do not use where directly exposed to water
- Do not open - no user serviceable parts inside
- Use indoors only

#### Lamp may shatter and cause injury if broken

- Remove and install by grasping only plastic portion of the lamp

This product complies with Part 18 of the FCC Rules, but may cause interference to radios, televisions, wireless telephones, and remote controls. Avoid placing this product near these devices. If interference occurs, move the product away from the device or plug either into a different outlet. Do not install this product near maritime safety equipment or other critical navigation or communication equipment operating between 0.45-30 MHz. Not intended for use with emergency exit fixtures or lights, electronic timers, photocells, in totally enclosed recessed fixtures, or with dimmers. Use only with portable lamps which are provided with lamp shades.

162

### ▲ CAUTION

#### Risk of electric shock

- Do not use where directly exposed to water
- Do not open - no user serviceable parts inside
- Use indoors only

#### Lamp may shatter and cause injury if broken

- Remove and install by grasping only plastic portion of the lamp

This product complies with Part 18 of the FCC Rules, but may cause interference to radios, televisions, wireless telephones, and remote controls. Avoid placing this product near these devices. If interference occurs, move the product away from the device or plug either into a different outlet. Do not install this product near maritime safety equipment or other critical navigation or communication equipment operating between 0.45-30 MHz. Not intended for use with emergency exit fixtures or lights, electronic timers, photocells, in totally enclosed recessed fixtures, or with dimmers. Added weight may cause instability of free-standing portable lamps. Use only with portable lamps in which the distance from the bottom of the base to the top of the lamp holder does not exceed three times the base width. Use only with portable lamps which are provided with lamp shades.

163

### ▲ CAUTION

#### Risk of electric shock

- Do not use where directly exposed to water
- Do not open - no user serviceable parts inside
- Use indoors only

#### Lamp may shatter and cause injury if broken

- Remove and install by grasping only plastic portion of the lamp

Added weight may cause instability of free-standing portable lamps. Use only with portable lamps in which the distance from the bottom of the base to the top of the lamp holder does not exceed three times the base width or with portable lamps which are provided with lamp shades. Not intended for use with emergency exit fixtures or lights, electronic timers, photocells, in totally enclosed recessed fixtures, or with dimmers.

164

### ▲ CAUTION

#### Risk of electric shock

- Do not use where directly exposed to water
- Do not open - no user serviceable parts inside
- Use indoors only

#### Lamp may shatter and cause injury if broken

- Remove and install by grasping only plastic portion of the lamp

This product complies with Part 18 of the FCC Rules, but may cause interference to radios, televisions, wireless telephones, and remote controls. Avoid placing this product near these devices. If interference occurs, move the product away from the device or plug either into a different outlet. Do not install this product near maritime safety equipment or other critical navigation or communication equipment operating between 0.45-30 MHz. Not intended for use with emergency exit fixtures or lights, in totally enclosed recessed fixtures, or with dimmers. Added weight may cause instability of free-standing portable lamps. Use only with portable lamps in which the distance from the bottom of the base to the top of the lamp holder does not exceed three times the base width. Use only with portable lamps which are provided with lamp shades.

165

### ▲ CAUTION

#### Risk of electric shock

- Do not open - no user serviceable parts inside
- Do not use where directly exposed to water or outdoors without an enclosed fixture

This product complies with Part 18 of the FCC Rules, but may cause interference to radios, televisions, wireless telephones, and remote controls. Avoid placing this product near these devices. If interference occurs, move the product away from the device or plug either into a different outlet. Do not install this product near maritime safety equipment or other critical navigation or communication equipment operating between 0.45-30 MHz. Not intended for use with emergency exit fixtures or lights, electronic timers, photocells or in totally enclosed recessed fixtures.

166

### ▲ CAUTION

#### Risk of electric shock

This product complies with Part 18 of the FCC Rules, but may cause interference to radios, televisions, wireless telephones, and remote controls. Avoid placing this product near these devices. If interference occurs, move the product away from the device or plug either into a different outlet. Do not install this product near maritime safety equipment or other critical navigation or communication equipment operating between 0.45-30 MHz. Not intended for use with emergency exit fixtures or lights, electronic timers, photocells, or with dimmers.



# Compact Fluorescent Lamps

## CFL CROSS REFERENCE

GE Description	Generic Description	Osram/Sylvania Description	Philips Description
<b>ORDER THIS GE LAMP</b>	<b>IF YOU CURRENTLY USE THESE LAMPS</b>		
<b>LOW WATTAGE BIAx® 2-PIN</b>			
F5BX/SPX27	CFT5W/G23/827	CF5DS/827	PL-S 5W/827
F5BX/SPX41	CFT5W/G23/841	CFDS/841	—
F7BX/SPX27	CFT7W/G23/827	CF7DS/827	PL-S 7W/827
F7BX/SPX35	CFT7W/G23/835	CF7DS/835	PL-S 7W/835
F7BX/SPX41	CFT7W/G23/841	CF7DS/841	PL-S 7W/841
F9BX/SPX27	CFT9W/G23/827	CF9DS/827	PL-S 9W/827
F9BX/SPX35	CFT9W/G23/835	CF9DS/835	PL-S 9W/835
F9BX/SPX41	CFT9W/G23/841	CF9DS/841	PL-S 9W/841
F13BX/SPX27	CFT13W/G23/827	CF13DS/827	PL-S 13W/827
F13BX/SPX30	CFT13W/G23/830	CF13DS/830	PL-S 13W/830
F13BX/SPX35	CFT13W/G23/835	CF13DS/835	PL-S 13W/835
F13BX/SPX41	CFT13W/G23/841	CF13DS/841	PL-S 13W/841
F13BX/SPX50	CFT13W/G23/850	CF13DS/850	PL-S 13W/850
F13BX/E/827	CFT13W/G23/827	—	—
F13BX/E/830	CFT13W/G23/830	—	—
F13BX/E/835	CFT13W/G23/835	—	—
F13BX/E/841	CFT13W/G23/841	—	—
F13BX/E/850	CFT13W/G23/850	—	—
<b>HIGH LUMEN BIAx®</b>			
F18BX/SPX30	FT18W/2G11/830	FT18DL/830	PL-L 18W/830
F18BX/SPX35	FT18W/2G11/835	FT18DL/835	PL-L 18W/835
F18BX/SPX41	FT18W/2G11/841	FT18DL/841	PL-L 18W/841
F18BX/SPX30/RS	FT18W/2G11/RS/830	FT18DL/830/RS	PL-L 18W/830
F18BX/SPX35/RS	FT18W/2G11/RS/835	FT18DL/835/RS	PL-L 18W/835
F18BX/SPX41/RS	FT18W/2G11/RS/841	FT18DL/841/RS	PL-L 18W/841
F18BX/SPX65/RS	FT18W/2G11/RS/865	—	—
F27BX/SPX3/RS	FT24W/2G11/830	FT24DL/830	PL-L 24W/830
F27BX/SPX35/RS	FT24W/2G11/835	FT24DL/835	PL-L 24W/835
F27BX/SPX41/RS	FT24W/2G11/841	FT24DL/841	PL-L 24W/841
F39BX/SPX3/RS	FT36W/2G11/830	FT36DL/830	PL-L 36W/830
F39BX/SPX3/RS	FT36W/2G11/835	FT36DL/835	PL-L 36W/835
F39BX/SPX3/RS	FT36W/2G11/841	FT36DL/841	PL-L 36W/841
F40/30BX/SPX30	FT40W/2G11/RS/830	FT40DL/830/RS	PL-L 40W/830/RS/IS
F40/30BX/SPX35	FT40W/2G11/RS/835	FT40DL/835/RS	PL-L 40W/835/RS/IS
F40/30BX/SPX41	FT40W/2G11/RS/841	FT40DL/841/RS	PL-L 40W/841/RS/IS
F40/30BX/SPX50/RS	FT40W/2G11/RS/850	—	—
F50/30BX/SPX30/RS	FT50W/2G11/RS/830	—	PL-L 50W/830/RS
F50/30BX/SPX35/RS	FT50W/2G11/RS/835	—	PL-L 50W/835/RS
F50/30BX/SPX41/RS	FT50W/2G11/RS/841	—	PL-L 50W/841/RS
F55BX/830	FT55W/2G11/RS/830	FT55DL/830	—
F55BX/835	FT55W/2G11/RS/835	FT55DL/835	—
F55BX/841	FT55W/2G11/RS/841	FT55DL/841	—

GE Description	Generic Description	Osram/Sylvania Description	Philips Description
<b>ORDER THIS GE LAMP</b>	<b>IF YOU CURRENTLY USE THESE LAMPS</b>		
<b>DOUBLE BIAx® 2-PIN</b>			
F9DBX23T4/SPX27	CFQ9W/G23/827	CF9DD/827	—
F9DBX23T4/841	CFQ9W/G23/841	—	—
F13DBX23T4/SPX27	CFQ13W/GX23/827	CF13DD/827	PL-C 13W/827/USA
F13DBX23T4/SPX30	CFQ13W/GX23/830	CF13DD/830	PL-C 13W/830/USA
F13DBX23T4/SPX35	CFQ13W/GX23/835	CF13DD/835	PL-C 13W/835/USA
F13DBX23T4/SPX41	CFQ13W/GX23/841	CF13DD/841	PL-C 13W/841/USA
F13DBXT4/SPX27	CFQ13W/G24d/827	—	PL-C 13W/827
F13DBXT4/SPX30	CFQ13W/G24d/830	—	PL-C 13W/830
F13DBXT4/SPX35	CFQ13W/G24d/835	—	—
F13DBXT4/SPX41	CFQ13W/G24d/841	—	—
F18DBXT4/SPX27	CFQ18W/G24d/827	CF18DD/827	PL-C 18W/827
F18DBXT4/SPX30	CFQ18W/G24d/830	CF18DD/830	PL-C 18W/830
F18DBXT4/SPX35	CFQ18W/G24d/835	CF18DD/835	PL-C 18W/835
F18DBXT4/SPX41	CFQ18W/G24d/841	CF18DD/841	PL-C 18W/841
F26DBXT4/SPX27	CFQ26W/G24d/827	CF26DD/827	PL-C 26W/827
F26DBXT4/SPX30	CFQ26W/G24d/830	CF26DD/830	PL-C 26W/830
F26DBXT4/SPX35	CFQ26W/G24d/835	CF26DD/835	PL-C 26W/835
F26DBXT4/SPX41	CFQ26W/G24d/841	CF26DD/841	PL-C 26W/841
F26DBX/E/827	CFQ26W/G24d/827	—	—
F26DBX/E/830	CFQ26W/G24d/830	—	—
F26DBX/E/835	CFQ26W/G24d/835	—	—
F26DBX/E/841	CFQ26W/G24d/841	—	—
<b>DOUBLE BIAx® 4-PIN</b>			
F13DBX/SPX27/4P	CFQ13W/G24q/827	CF13DD/E/827	PL-C 13W/827/4P
F13DBX/SPX30/4P	CFQ13W/G24q/830	CF13DD/E/830	PL-C 13W/830/4P
F13DBX/SPX35/4P	CFQ13W/G24q/835	CF13DD/E/835	PL-C 13W/835/4P
F13DBX/SPX41/4P	CFQ13W/G24q/841	CF13DD/E/841	PL-C 13W/841/4P
F18DBX/SPX27/4P	CFQ18W/G24q/827	CF18DD/E/827	PL-C 18W/827/4P
F18DBX/SPX30/4P	CFQ18W/G24q/830	CF18DD/E/830	PL-C 18W/830/4P
F18DBX/SPX35/4P	CFQ18W/G24q/835	CF18DD/E/835	PL-C 18W/835/4P
F18DBX/SPX41/4P	CFQ18W/G24q/841	CF18DD/E/841	PL-C 18W/841/4P
F26DBX/SPX27/4P	CFQ26W/G24q/827	CF26DD/E/827	PL-C 26W/827/4P
F26DBX/SPX30/4P	CFQ26W/G24q/830	CF26DD/E/830	PL-C 26W/830/4P
F26DBX/SPX35/4P	CFQ26W/G24q/835	CF26DD/E/835	PL-C 26W/835/4P
F26DBX/SPX41/4P	CFQ26W/G24q/841	CF26DD/E/841	PL-C 26W/841/4P





**CFL CROSS REFERENCE**

<i>GE Description</i>	<i>Generic Description</i>	<i>Osram/Sylvania Description</i>	<i>Philips Description</i>
<b>ORDER THIS GE LAMP</b>	<b>IF YOU CURRENTLY USE THESE LAMPS</b>		
<b>TRIPLE BIAx® 4-PIN</b>			
F13TBX/SPX27/A/4P	CFTR13W/GX24q/827	CF13DT/E/827	—
F13TBX/SPX27/A/4P	CFTR13W/GX24q/830	CF13DT/E/830	—
F13TBX/SPX27/A/4P	CFTR13W/GX24q/835	CF13DT/E/835	—
F13TBX/SPX27/A/4P	CFTR13W/GX24q/841	CF13DT/E/841	—
F18TBX/SPX27/A/4P	CFTR18W/GX24q/827	CF18DT/E/IN/827	PL-T 18W/827/4P
F18TBX/SPX30/A/4P	CFTR18W/GX24q/830	CF18DT/E/IN/830	PL-T 18W/830/4P
F18TBX/SPX35/A/4P	CFTR18W/GX24q/835	CF18DT/E/IN/835	PL-T 18W/835/4P
F18TBX/SPX41/A/4P	CFTR18W/GX24q/841	CF18DT/E/IN/841	PL-T 18W/841/4P
F26TBX/SPX27/A/4P	CFTR26W/GX24q/827	CF26DT/E/IN/827	PL-T 26W/827/4P
F26TBX/SPX30/A/4P	CFTR26W/GX24q/830	CF26DT/E/IN/830	PL-T 26W/830/4P
F26TBX/SPX35/A/4P	CFTR26W/GX24q/835	CF26DT/E/IN/835	PL-T 26W/835/4P
F26TBX/SPX41/A/4P	CFTR26W/GX24q/841	CF26DT/E/IN/841	PL-T 26W/841/4P
F32TBX/SPX27/A/4P	CFTR32W/GX24q/827	CF32DT/E/IN/827	PL-T 32W/827/4P
F32TBX/SPX30/A/4P	CFTR32W/GX24q/830	CF32DT/E/IN/830	PL-T 32W/830/4P
F32TBX/SPX35/A/4P	CFTR32W/GX24q/835	CF32DT/E/IN/835	PL-T 32W/835/4P
F32TBX/SPX41/A/4P	CFTR32W/GX24q/841	CF32DT/E/IN/841	PL-T 32W/841/4P
F42TBX/827/A/4P/EOL	CFTR42W/GX24q/827	CF42DT/E/IN/827	PL-T 42W/827/4P
F42TBX/830/A/4P/EOL	CFTR42W/GX24q/830	CF42DT/E/IN/830	PL-T 42W/830/4P
F42TBX/835/A/4P/EOL	CFTR42W/GX24q/835	CF42DT/E/IN/835	PL-T 42W/835/4P
F42TBX/841/A/4P/EOL	CFTR42W/GX24q/841	CF42DT/E/IN/841	PL-T 42W/841/4P
<b>HIGH OUTPUT BIAx® 4-PIN</b>			
F57QBX/827/A/4P/EOL	CFM57W/GX24q/827	CF57DT/E/IN/827	—
F57QBX/830/A/4P/EOL	CFM57W/GX24q/830	CF57DT/E/IN/830	—
F57QBX/835/A/4P/EOL	CFM57W/GX24q/835	CF57DT/E/IN/835	—
F57QBX/841/A/4P/EOL	CFM57W/GX24q/841	CF57DT/E/IN/841	—
F57QBX/850/A/4P/EOL	CFM57W/GX24q/850	CF57DT/E/IN/850	—
F70QBX/827/A/4P/EOL	CFM70W/GX24q/827	—	—
F70QBX/830/A/4P/EOL	CFM70W/GX24q/830	—	—
F70QBX/835/A/4P/EOL	CFM70W/GX24q/835	—	—
F70QBX/841/A/4P/EOL	CFM70W/GX24q/841	—	—
F70QBX/850/A/4P/EOL	CFM70W/GX24q/850	—	—



# Compact Fluorescent Lamps

## GE ENHANCED PLUG-IN PRODUCT CONVERSION

IF YOU USED TO ORDER GE PRODUCT:		NOW ORDER GE PRODUCT:		IF YOU USED TO ORDER GE PRODUCT:		NOW ORDER GE PRODUCT:	
PC	PC Description	New PC	New Description	PC	PC Description	New PC	New Description
37654	F5BX/SPX27/827	97551	F5BX/827/ECO	12870	F18DBX/SPX41/4P	97601	F18DBX/841/ECO4P
13575	F5BX/SPX27/CD	97552	F5BX/827/CDECO	46290	F26DBX/E/827	97602	F26DBX/E/827/ECO
37661	F5BX/SPX41/840	97553	F5BX/841/ECO	46291	F26DBX/E/830	97603	F26DBX/E/830/ECO
37846	F7BX/SPX27/827	97554	F7BX/827/ECO	46292	F26DBX/E/835	97604	F26DBX/E/835/ECO
13576	F7BX/SPX27/CD	97555	F7BX/827/CDECO	46294	F26DBX/E/841	97605	F26DBX/E/841/ECO
37659	F7BX/SPX35/835	97556	F7BX/835/ECO	35250	F26DBXT4/SPX27	97606	F26DBX/827/ECO
37660	F7BX/SPX41/840	97557	F7BX/841/ECO	35237	F26DBXT4/SPX30	97607	F26DBX/830/ECO
37651	F9BX/SPX27/827	97558	F9BX/827/ECO	35251	F26DBXT4/SPX35	97608	F26DBX/835/ECO
13577	F9BX/SPX27/CD	97559	F9BX/827/CDECO	35252	F26DBXT4/SPX41	97609	F26DBX/841/ECO
37652	F9BX/SPX35/835	97560	F9BX/835/ECO	35247	F26DBXT4SPX27/4P	97610	F26DBX/827/ECO4P
37653	F9BX/SPX41/840	97561	F9BX/841/ECO	35235	F26DBXT4SPX30/4P	97611	F26DBX/830/ECO4P
41645	F13BX/E/827	97562	F13BX/E/827/ECO	35248	F26DBXT4SPX35/4P	97612	F26DBX/835/ECO4P
41646	F13BX/E/830	97563	F13BX/E/830/ECO	35236	F26DBXT4SPX41/4P	97613	F26DBX/841/ECO4P
41649	F13BX/E/835	97564	F13BX/E/835/ECO	34391	F13TBX/SPX27/A/4	97619	F13TBX/827/A/ECO
41651	F13BX/E/841	97565	F13BX/E/841/ECO	34395	F13TBX/SPX30/A/4	97620	F13TBX/830/A/ECO
41652	F13BX/E/850	97566	F13BX/E/850/ECO	34400	F13TBX/SPX35/A/4	97621	F13TBX/835/A/ECO
14583	F13BX/SPX27/CD	97567	F13BX/827/CDECO	34387	F13TBX/SPX41/A/4	97622	F13TBX/841/A/ECO
41757	F13BX/SPX35 100P	97568	F13BX/835 100P	47696	F13TBX827/4P/EOL	97623	F13TBX827/4P/ECO
17048	F13BX/SPX35/835	97569	F13BX/835/ECO	34392	F18TBX/SPX27/A/4	97624	F18TBX/827/A/ECO
41758	F13BX/SPX41 100P	97570	F13BX/841 100P	34396	F18TBX/SPX30/A/4	97625	F18TBX/830/A/ECO
20434	F13BX/SPX41/840	97571	F13BX/841/ECO	34405	F18TBX/SPX35/A/4	97626	F18TBX/835/A/ECO
11671	F13BX/SPX50	97572	F13BX/850/ECO	34385	F18TBX/SPX41/A/4	97627	F18TBX/841/A/ECO
14650	F13BXSPX27/827	97573	F13BX/827/ECO	48869	F18TBX827/4P/EOL	97628	F18TBX827/4P/ECO
17612	F13BXSPX30/830	97574	F13BX/830/ECO	34393	F26TBX/SPX27/A/4	97614	F26TBX/827/A/ECO
42065	F9DBX23T4/841	97575	F9DBX23/841/ECO	34397	F26TBX/SPX30/A/4	97615	F26TBX/830/A/ECO
12409	F9DBX23T4SPX27/8	97576	F9DBX23/827/ECO	34406	F26TBX/SPX35/A/4	97616	F26TBX/835/A/ECO
13578	F13DBX/SPX27/CD	97585	F13DBX/827/CD	34381	F26TBX/SPX41/A/4	97617	F26TBX/841/A/ECO
18844	F13DBX23T4/SPX27	97586	F13DBX23/827/ECO	48870	F26TBX827/4P/EOL	97618	F26TBX827/4P/ECO
10574	F13DBX23T4/SPX30	97587	F13DBX23/830/ECO	39377	F32TBX/SPX27A/4P	97629	F32TBX/827/A/ECO
18556	F13DBX23T4/SPX35	97588	F13DBX23/835/ECO	39378	F32TBX/SPX30A/4P	97630	F32TBX/830/A/ECO
20531	F13DBX23T4/SPX41	97589	F13DBX23/841/ECO	39379	F32TBX/SPX35A/4P	97631	F32TBX/835/A/ECO
18557	F13DBXT4/SPX27	97590	F13DBX/827/ECO	39380	F32TBX/SPX41A/4P	97632	F32TBX/841/A/ECO
12956	F13DBXT4/SPX30	97591	F13DBX/830/ECO	46312	F42TBX827A4P/EOL	97633	F42TBX/827/A/ECO
18559	F13DBXT4/SPX35	97592	F13DBX/835/ECO	46313	F42TBX830A4P/EOL	97634	F42TBX/830/A/ECO
20532	F13DBXT4/SPX41	97593	F13DBX/841/ECO	46314	F42TBX835A4P/EOL	97635	F42TBX/835/A/ECO
30035	F13DBX/SPX27/4P	97594	F13DBX/827/ECO4P	46315	F42TBX841A4P/EOL	97636	F42TBX/841/A/ECO
10580	F13DBX/SPX30/4P	97595	F13DBX/830/ECO4P	48861	F57QBX/827/A/4P/EOL	48861	F57QBX/827/A/ECO
30037	F13DBX/SPX35/4P	97596	F13DBX/835/ECO4P	48862	F57QBX/830/A/4P/EOL	48862	F57QBX/830/A/ECO
30038	F13DBX/SPX41/4P	97597	F13DBX/841/ECO4P	48863	F57QBX/835/A/4P/EOL	48863	F57QBX/835/A/ECO
12860	F18DBXT4/SPX27	97577	F18DBX/827/ECO	48864	F57QBX/841/A/4P/EOL	48864	F57QBX/841/A/ECO
12861	F18DBXT4/SPX30	97578	F18DBX/830/ECO	93404	F57QBX/850/A/4P/EOL	93404	F57QBX/850/A/ECO
12863	F18DBXT4/SPX35	97579	F18DBX/835/ECO	48865	F70QBX/827/A/4P/EOL	48865	F70QBX/827/A/ECO
12864	F18DBXT4/SPX41	97580	F18DBX/841/ECO	48866	F70QBX/830/A/4P/EOL	48866	F70QBX/830/A/ECO
12865	F18DBX/SPX27/4P	97598	F18DBX/827/ECO4P	48867	F70QBX/835/A/4P/EOL	48867	F70QBX/835/A/ECO
12866	F18DBX/SPX30/4P	97599	F18DBX/830/ECO4P	48868	F70QBX/841/A/4P/EOL	48868	F70QBX/841/A/ECO
12869	F18DBX/SPX35/4P	97600	F18DBX/835/ECO4P	93406	F70QBX/850/A/4P/EOL	93406	F70QBX/850/A/ECO



**QUARTZLINE® TUNGSTEN HALOGEN ..... 6-7**

**QUARTZLINE® TUNGSTEN HALOGEN HIGH VOLTAGE..... 6-8**

**CINEMA LAMPS**

Fluorescent Lamps .....	6-9
Fluorescent covRguard® Lamps.....	6-9
Fluorescent Biax® .....	6-10

**CSR METAL HALIDE LAMPS**

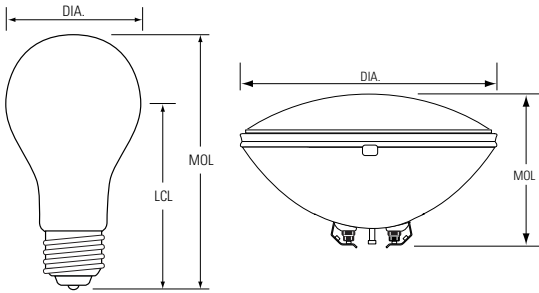
Discharge-CSR/CSD (Daylight) Metal Halide, Single-Ended Cold Start.....	6-11
Discharge-CSR (Daylight) Metal Halide, Single-Ended Short Arc.....	6-11
Discharge-CSR (Daylight) Metal Halide, Single-Ended Hot Restrike .....	6-11
Discharge-CSR (Daylight) Metal Halide, Double-Ended Hot Restrike .....	6-11
CSR (Daylight) Metal Halide, Single-Ended Hot Restrike UV-Control.....	6-11

**ANSI CODES..... 6-12**



# Stage and Studio Lamps

## BULB IDENTIFICATION

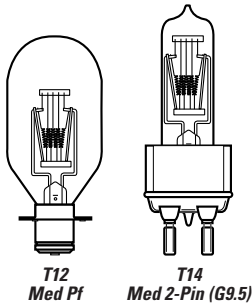


DIA: Diameter of bulb at widest point.  
 MOL: Maximum Overall Length including base or pins.  
 LCL: Distance between the center of the arc tube and the Light Center Length reference plane.

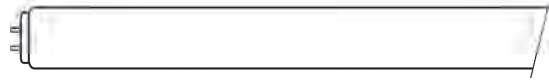
Note: Lamp drawings are not drawn to scale. Be sure to check size and dimension information when identifying each lamp.

To convert inches to millimeters, multiply the dimension (in inches) by 25.4 (i.e. inches x 25.4 = millimeters).

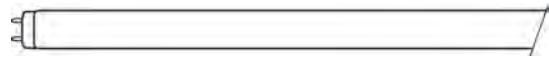
## LAMP LOCATOR



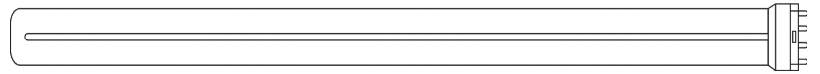
**Incandescent Lamps**



**T12  
G13**

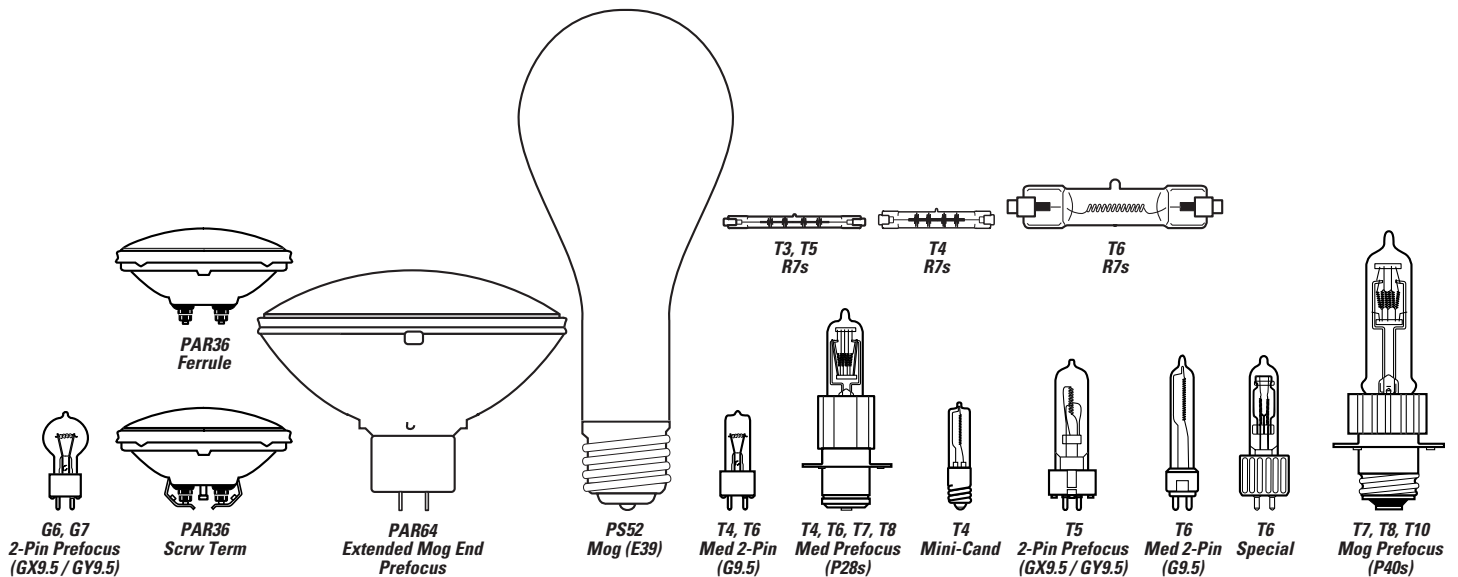


**T8  
G13**

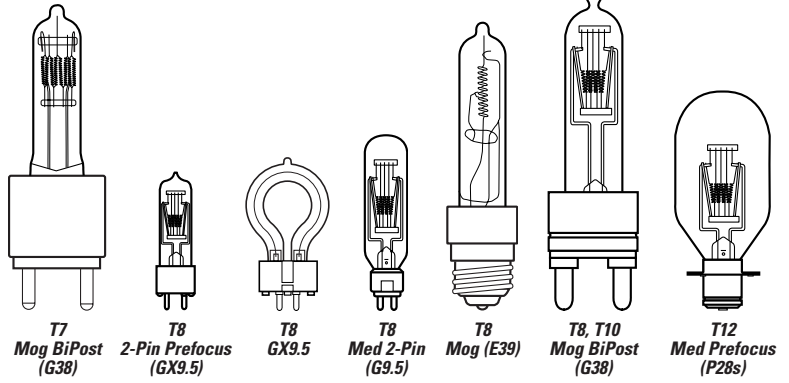
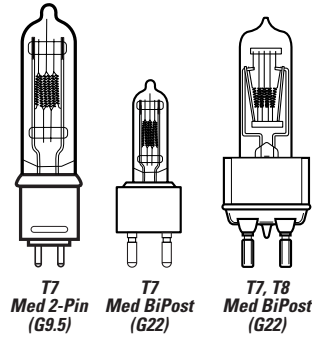
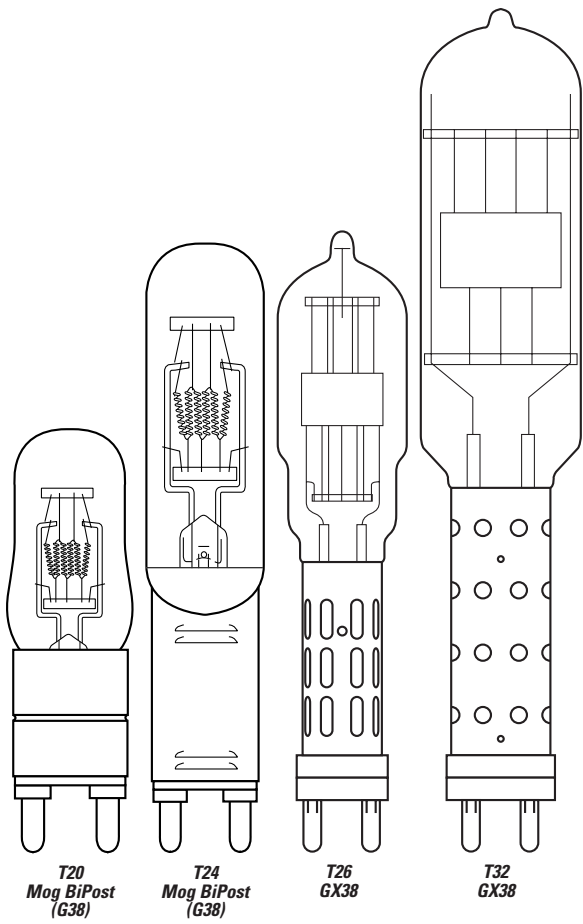


**Biax®  
2G11**

**Fluorescent Cinema Lamps**



**Quartzline® Tungsten Halogen**

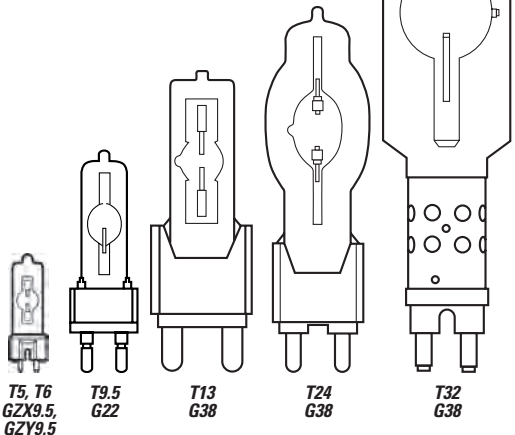


Quartzline® Tungsten Halogen (Continued)

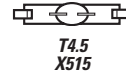


G7  
GY9.5

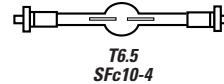
Short Arc Discharge



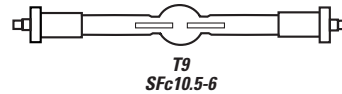
Single-Ended Hot Restrike



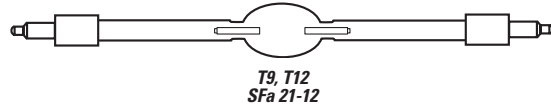
T4.5  
X515



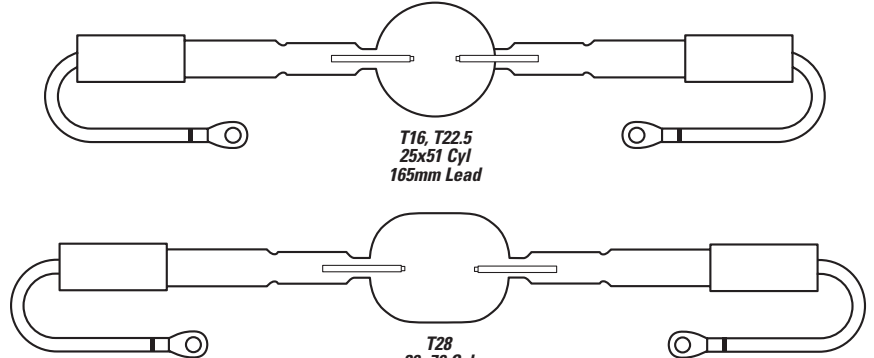
T6.5  
SFc10-4



T9  
SFc10.5-6



T9, T12  
SFa 21-12



T16, T22.5  
25x51 Cyl  
165mm Lead

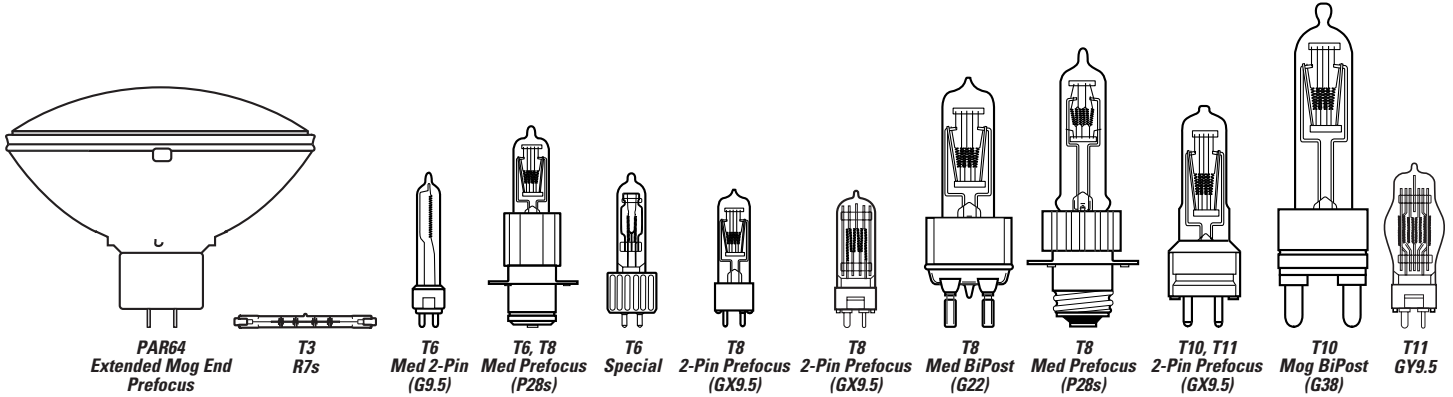
T28  
30x70 Cyl  
165mm Lead

Double-Ended Hot Restrike

CSR Metal Halide Lamps

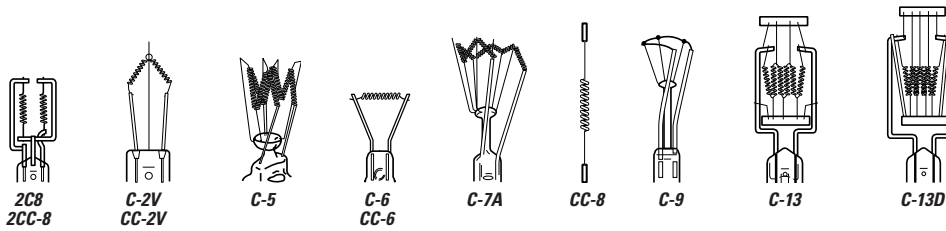


## LAMP LOCATOR (CONTINUED)

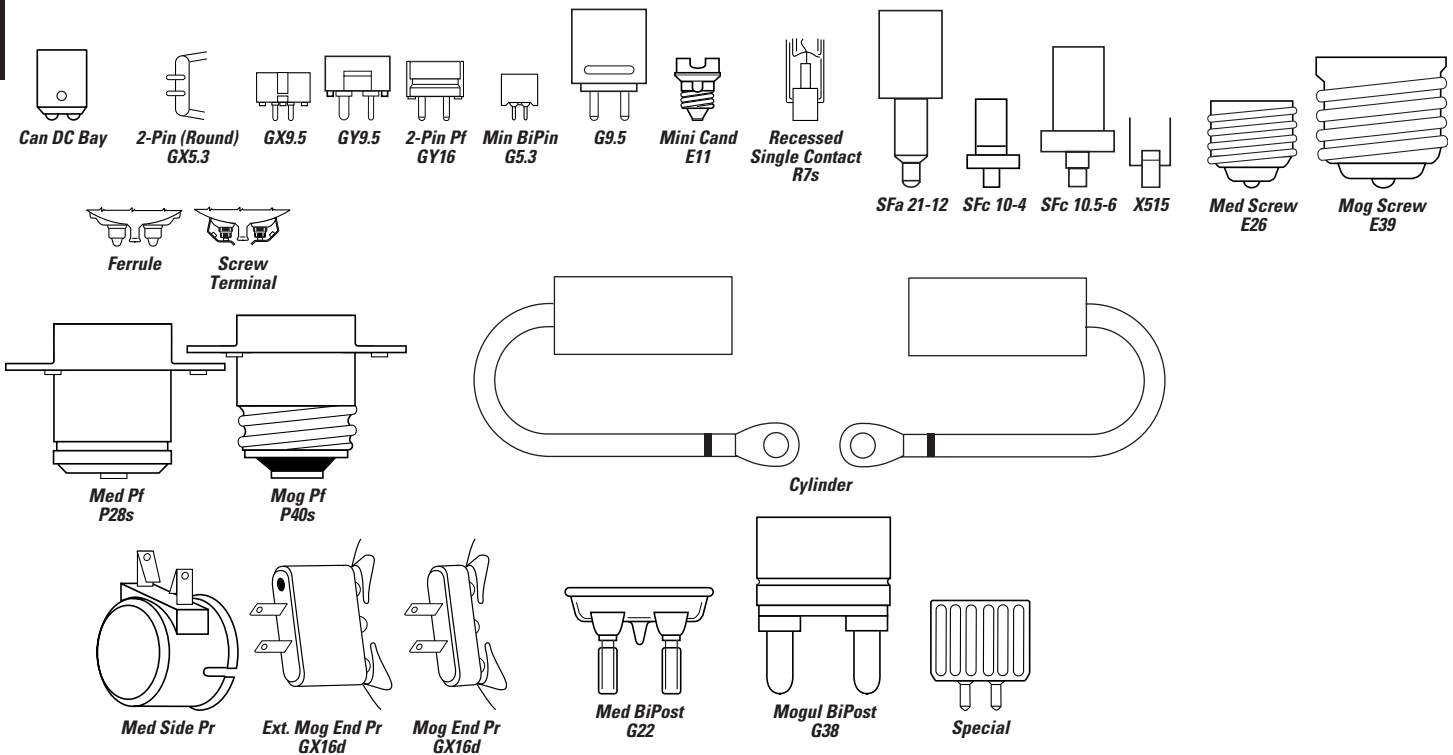


### Quartzline® Tungsten Halogen High Voltage

## FILAMENT IDENTIFICATION



## BASE IDENTIFICATION





## INTRODUCTION

GE has been a leading supplier to stage and studio users for many decades, and continues its pioneering work in the development of new and innovative light sources.

The primary change in recent years has been the migration from glass to quartz as the standard bulb material. The higher melting point of quartz enables bulb envelopes to be reduced in size and the halogen fillings to be run at higher pressures, leading to smaller, lighter, brighter, more energy-efficient and more reliable lamps.

GE's comprehensive range of single- and double-ended lamps is complemented by a group of PAR lamps, where the light source is enclosed in a sealed reflector unit.

## GENERAL INFORMATION

### OPERATIONAL CHARACTERISTICS

Quartz halogen lamps are designed to be operated within close voltage tolerances, and excessive voltage can lead to drastically shortened life, albeit with significantly higher light output.

A second important variable is temperature. The tungsten halogen cycle does not operate properly below about 482°F (250°C) and quartz may begin to devitrify above about 1832°F (1000°C). Bulb envelopes should therefore be held in the range 482-1472°F (250-800°C).

The contact pins are plated to ensure good electrical connection with the lampholder. However, at temperatures above 350°C, the plating may lose adhesion, leading to deterioration in contact and possibly local hot spots, arcing and consequent irreparable damage to both lamp and holder.

Note that if there is evidence that this has occurred, the lampholder should be replaced before the next lamp is fitted, otherwise it is likely to fail prematurely for the same reason.

Lamps normally fail by fusing of the filament. This is often followed by arcing, leading to very high currents which can cause the envelope and seals to fail and the lamp to shatter. A quick-acting, high-breaking capacity fuse should therefore be connected to the supply line in all applications. Suitable types are given in IEC 127, 241 and 269.

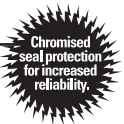
The beam patterns of PAR lamps range from very narrow spot to wide-angle floods. This ensures consistency from lamp to lamp, interchangeability to suit the beam pattern needs of the moment and instant replaceability without the need to refocus and re-aim fixtures.

The sealed beam design prolongs the life of the inner lamp as well as protecting it from dust, vapor and other hazards, thereby ensuring high lumen maintenance over the life of the lamp.

PAR lamps may be used with very simple, lightweight, economical fixtures.

### CHROMISE SEAL PROTECTION

Many Quartzline® Stage/Studio lamps have a special chromised seal protection, which allows lamp seal temperatures up to 500° C (vs traditional 350° C), which increases life and reliability.



If the package does not have this seal, lamp base temperatures for Quartzline® lamps should not exceed 350°C because, above that point, lead wires in the sealing area will deteriorate, and base cement can loosen, both causing premature lamp failure. Note overvoltageing a lamp will increase the seal heat.

### LAMP CODES

GE Stage & Studio lamps are coded as such:

Lamp Description. This may be either an American National Standards Institute (ANSI) three letter code such as EJJ, or a descriptive code in the general form Q750T3/4CL. ANSI codes are assigned to lamp specifications – mechanical, electrical and photometric characteristics – filed with the Institute.

They ensure interchangeability among similarly coded lamps from different manufacturers. Most of these lamps are rated for 120-volt operation. In a few cases a pair of ANSI codes are given (e.g. BFL/BFK), where the first is the official code for the lamp and the second code describes lamps the specifications of which are met or exceeded. In such cases, the lamps may be used to replace lamps with either code.

Base designations conform to IEC standards.

## PRODUCT INFORMATION

### GE CSR/CSD METAL HALIDE LAMPS

New GE range of metal halide lamps for use in a variety of applications including TV and film, stage, concerts, photographic and large screen presentation and color simulation.

- Excellent color rendering  $R_g > 90$
- Daylight color temperature, typically 6000K
- Universal burning position
- High efficiency up to 100 Lm/Watt
- Hot restrike and dimmable with stable color temperature
- Superior color stability
- Excellent lumen maintenance
- Use with electronic or AC magnetic ballast/ignitor control gear
- Applications include inside and outside TV and film production, stage, concerts, sporting events, photographic studios, overhead and large screen projection and color simulation.

### GE CINEMA FLUORESCENT LAMPS

- High CRI (Color Rendering Index)... traditional fluorescent lamps have not been widely used in photography and film making because of relatively low CRI and the prominent green spike found in typical fluorescent phosphors. GE Lighting Cinema 32 and Cinema 55 lamps have corrected these deficiencies with products that now have a CRI of 95 (out of 100 max.) and colors that respond to the spectral sensitivity curves of film and electronic imaging media.
- Optional Shatter Resistance... GE Cinema 32 and 55 offer the option of GE's exclusive covRguard® shatter resistance that helps contain glass fragments if the lamps are broken. Reduce the possibility of glass related injuries to irreplaceable talent, damage to expensive sets, contamination of delicate equipment or missing critical deadlines because GE offers shatter resistance. GE's covRguard® process wraps the Cinema lamps in a full 15 ml thick casing of GE's exclusive Lexan™ polycarbonate that helps contain the glass, phosphor and chemicals if the lamp is broken. Unlike other shatter-resistant lamps, GE's covRguard® lamps require no assembly.



## PRODUCT INFORMATION (CONTINUED)

- Superior Light Output... the GE covRguard® process offers maximum protection with minimal light loss... the lowest loss of initial light of other shielded products.
- Dependable UV Blocking... the GE covRguard® process also offers excellent UV blocking. CovRguard® blocks 98% of the UV that is normally transmitted from an unprotected fluorescent lamp — all UVC, all UVB and most of UVA. This is critical for protecting expensive sets and wardrobe from the fading effects of UV exposure.

- Chromaticity... the Cinema 32 has a chromaticity of X=.415 and Y=.377 with a CRI of 95. The Cinema 32 mixes well with both incandescent and quartz halogen light sources without color corrections. The Cinema 55 is a broad band spectrum daylight lamp with a chromaticity of X=.325 and Y=.321 and a CRI of 96. The Cinema 55 mixes well with ambient daylight and short arc discharge HID light sources without color corrections.

For more detailed information on all GE Stage and Studio lighting order "Showbiz®" 2005, PC 23766 from your GE sales representative.

## HEADINGS IN THIS CATALOG SECTION

The following terms and descriptions can help you when checking Stage/Studio lamp specifications and when ordering products. Within each product line, lamps are divided into families, within these families, lamps are then listed by wattage.

<b>Watts:</b> Energy used. To find actual energy used (kWh) multiply power (watts shown) x time divided by 1000.	<b>Volts:</b> Lamp data is based on operation at rated voltage.	<b>Order Code:</b> It is important to use this five-digit code when ordering to ensure that you receive the exact product you require.	<b>Case Quantity:</b> Number of product units packed in a case.	<b>Color Temperature - Kelvins (K):</b> A measure of the visual "warmth" or "coolness" of the light from the lamp. The higher the value, the whiter or "cooler" the light appears.	<b>Approximate CBCP (Center Beam Candlepower):</b> For reflector type lamps. Center Beam Candlepower is the intensity (candelas) at the center or maximum intensity of the beam.	<b>Filament Design:</b> Filaments are designated by a letter combination in which C is a coiled wire filament, CC is a coiled wire that is itself wound into a larger coil, and SR is a straight ribbon filament. Numbers represent the type of filament-support arrangement.	<b>MOL in.:</b> Maximum Overall Length in inches.	<b>LCL in.:</b> Distance between the center of the filament and the Light Center Length reference plane, in inches.	<b>Beam Spread:</b> For reflector type lamps. The total angle of the directed beam (in degrees) to where the intensity of the beam falls to 50% or 10% of the maximum value as indicated.	<b>Rated Life - Hours:</b> Lamp burning hours to median life expectancy.	<b>Footnotes:</b> See pg 6-12.
<b>Shape:</b> Bulb shape followed by its size (the maximum diameter of the bulb expressed in eighths of an inch).	<b>Base:</b> The type of base (ANSI).	<b>LIF Code:</b> These are assigned by the Lighting Federation of London, U.K. They ensure electrical and mechanical interchangeability of similarly coded lamps. LIF codes are divided into groups according to the primary application of the lamps.	<b>Description:</b> The lamp's identification code.	<b>Lumens Initial:</b> Initial light output.							

Watts	Shape	Base	Order Volts	LIF Code	Description	Case Qty.	Lumens Initial	Color Temp. CBCP	Filament Design	MOL		Beam Spread		Rated Life Hours	Footnotes	
										in.	in.	10%	50%			
500	T6	Med Pf (P28s)	120	11966	T17	BTL-Q500T6/CL/P	12	11000	3000	C-13	5.25	2.18			500	3, 12

## BTL- Q500 T6/CL/P

Identifies the lamp ANSI code.

Identifies the lamp's wattage.  
Q=Quartz Halogen

Identifies the lamp shape and the bulb diameter in eighths of inches.

### WHEN YOU DON'T KNOW THE LAMP DESCRIPTION

1. Identify bulb shape by using tables on pages 6-2 – 6-4.
2. Measure bulb diameter using ruler in Appendix section page A-1 to determine width in eighths of an inch.
3. Identify base type using table on page 6-4.
4. Find your lamp in the table containing the bulb shape, size and base.





Watts	Shape	Base	Order Volts	LIF Code	Description	Case Qty.	Lumens Initial	CBCP	Color Temp. K	Filament Design	MOL	LCL	Beam Spread		Rated Life Hours	Footnotes			
													10%	50%					
<b>QUARTZLINE® TUNGSTEN HALOGEN</b>																			
200	T4	Cand DC Bay BA15d	120	14119	FEV-Q200/4CL/DC	6	5500		3200	CC-2V	2.43	1.37			50	12			
300	T8	2-Pin Pf (GY9.5)	120	39781 CP81	FKW-Q300T8	24	6900		3200	C-13	3.54	1.81			50	12			
350	T2	R7S	120	20881	FDF/HIR-Q350T2/4	6	13250		3200	C-8	4.68				400	↔ 2, 12			
375	T6	Special	115	17608	HPL375/C 115V	12	10540		3250	4-C8	4.17	2.37			300	12			
				18189	HPL375/LL/C 115V	12	8000		3050	4-C8	4.17	2.37			1000	12			
420	G7	2-Pin Pf (GY9.5)	120	33934	EKB-Q420/4CL/2PP	24	11000		3200	CC-6	2.5	1.43			75	12			
500	T3	R7S	120	23735	FDF-Q500T3/4CL	12	13250		3200	C-8	4.68				400	2, 12			
				23734 P2/31	FDN-Q500T3/4	12	12800		3200	C-8	4.68					400	2, 7, 12		
	T4	Med Pf (P28s)	120	39135	EGE-Q500CL/P	12	10450		2950	CC-8	6	3.5			2000	12			
		Mini-Cand (E11)	120	47950	EVR-Q500CL/MC	6	10450		2950	CC-8	3.62	2			2000	8, 12			
	T6	Med Pf (P28s)	120	11966 T17	BTL-Q500T6/CL/P	12	11000		3000	C-13	5.25	2.18			500	3, 12			
				16465	BTM-Q500T64CL/2P	12	13000		3200	C-13	5.25	2.18			150	3, 12			
	T7	Med BiPost (G22)	120	30373	EGN-Q500T8	12	13000		3200	C-13	5.51	2.5			150	12			
	T6	Med 2-Pin (G9.5)	120	39768	EHD-Q500CL/TP	24	10000		2900	CC-8	4.1	2.37			2000	12			
				39789	EHC-Q500/5CL	24	12700		3150	CC-8	4.1	2.37			500	12			
	T8	2-Pin Pf (GY9.5)	120	39623 CP82	FRG-Q500T8	24	13000		3200	C-13	3.54	1.81			150	3, 12			
	T4	Med Pf (P28s)	120	39134	EGC-Q500/5CL/P	12	12700		3150	CC-8	6	3.5			500	12			
525	T3	R7S	120	20883	EJG/HIR-Q525T2 -1	6	20600		3250	C-8	4.68				400	↔ 2, 12			
550	T6	Special	115	17607	HPL550/C 77 V	12	16170		3250	4-C8	4.17	2.37			300	12			
575	T6	Med 2-Pin (G9.5)	115	39730	FLK/LL-Q575T6	24	12800		2950	CC-8	4.1	2.37			1500	12			
				11450	FLK-Q575T6/4CL	24	16500		3200	CC-8	4.1	2.37			300	12			
				93428	GLA-Q575T6/4CL	24	13000		3050	C-13D	4.1	2.37			1500	12			
				93429	GLC-Q575T6/5CL	24	14500		3200	C-13D	4.1	2.37			300	12			
				Special	115	92431	HPL575/C115V	12	16500		3200	4C-8	4.2	2.37			300	12	
						92434	HPL575/LL/C 115V	12	12360		3050	4C-8	4.2	2.37			1500	12	
						120	92433	HPL575/C 120V	12	16520		3200	4C-8	4.2	2.37			300	12
			120	92435	HPL575/LL/C 120V	12	12360		3050	4C-8	4.2	2.37			2000	12			
600	T5	2-Pin Pf (GY9.5)	120	30475	FMR-Q600T5	24	12600		3050	CC-8	3.4	2			2000	3, 12			
650	G6	2-Pin Pf (GX9.5)	120	34328	EKD-Q650/3CL/2PP	24	20000		3300	CC-6	2.5	1.43			25	3, 12			
				PAR36 Ferrule	41668	FAY-Q650PAR36/3D	12	36000	5000	C-7A	2.75			25	15	30	13		
					41672	FCW-Q650PAR36/6	12	9000	3200	C-7A	2.75			60	55	100	13		
					41673	FCX-Q650PAR36/7	12	24000	3200	C-7A	2.75			40	30	100	13		
				Screw Term	120	41667	DWE-Q650PAR36/1	12	24000	3200		2.75			40	30	100	13	
						41669	FBE-Q650PAR36/5D	12	36000	5000	C-7A	2.75			25	15	30	13	
							120	41671	FBO-Q650PAR36/5	12	67000	3400	C-7A	2.75			25	15	30
	T3	R7S	120	13895	FCM/HIR-Q650T3/4	6	25200		3275	C-8	4.68				400	↔ 2, 12			
	T4	R7S	120	30325 P2/6	FAD-Q650T4/4CL	24	16500		3200	CC-8	3.13				100	12			
				30343 P2/6	FBX-Q650T4/4	24	16500		3200	CC-8	3.13				100	7, 12			
	T8	2-Pin Pf (GY9.5)	120	39637 CP89	FRK-Q650T8	24	16900		3200	C-13	3.54	1.81			200	3, 12			
675	T3	R7S	120	20884	FFT/HIR-Q675T3/4	6	26400		3250	C-8	6.56				400	↔ 2, 12			
750	T3	R7S	120	23756	EJG-Q750T3/4CL	12	20600		3200	C-8	4.68				400	2, 12			
				23755	EMD-Q750T3/4	12	19500		3200	C-8	4.68				400	2, 12			
	T6	Med 2-Pin (G9.5)	120	39771	EHF-Q750/4CL	24	20000		3200	CC-8	4.1	2.37			300	12			
				39770	EHG-Q750CL/TP	24	15000		3000	CC-8	4.1	2.37			2000	12			
				92771	GLD-Q750T6/4CL	24	19000		3200	C-13D	4.1	2.37			300	12			
				92773	GLE-Q750T6/4CL	24	17400		3050	C-13D	4.1	2.37			1500	12			
				Med Pf (P28s)	120	39136	EGF-Q750/4CL/P	12	20400		3200	CC-8	6	3.5				300	12
						39137	EGG-Q750CL/P	12	15750		3000	CC-8	6	3.5			2000	12	
				Special	115	92432	HPL750/C 115V	12	22000		3200	4-C-8	4.17	2.37				300	12
92770	HPL750/LL/C	12	16400				3050	4-C-8	4.17	2.37			1500	12					



# Stage and Studio Lamps

Watts	Shape	Base	Order Volts	LIF Code	Description	Case Qty.	Lumens Initial	Color Temp. K	Filament Design	MOL	LCL	Beam Spread				Rated Life Hours	Footnotes
												10%	50%	Horiz.	Vert.		
<b>QUARTZLINE® TUNGSTEN HALOGEN (CONTINUED)</b>																	
750	T7	Med BiPost (G22)	120	39190	EGR-Q750T7/4CL	12	21000	3200	C-13D	5	2.5					200	1, 3, 12
		Med Pf (P28s)	120	11953	BTN-Q750T7/CL/2P	12	17600	3050	C-13D	4.75	2.18					500	1, 11, 12
				11954	BTP-Q750T7/4CL2P	12	21000	3200	C-13D	4.75	2.18					200	1, 11, 12
		Med 2-Pin (G9.5)	120	39680	BWM-Q750T7/4CLTP	6	21000	3200	C-13D	4.5	2.37					200	1, 3, 12
1000	PAR64	ExMogEndPr	120	13233	FFN-Q1000PAR64/1	6	400000	3200	C-7A	6		24	10	12	6	800	13
				13229	FFP-Q1000PAR64/2	6	330000	3200	C-7A	6		26	14	14	7	800	13
				13228	FFR-Q1000PAR64/5	6	125000	3200	C-7A	6		44	21	28	12	800	13
				13227	FFS-Q1000PAR64/6	6	40000	3200	C-7A	6		71	45	48	24	800	13
				13226	FGM-Q1000PAR64/3	6	200000	5200	C-7A	6		24	12	13	6	200	13
				13225	FGN-Q1000PAR647D	6	70000	5200	C-7A	6		43	20	27	11	200	13
	PS52	Mog (E39)	120	39582	DKZ/DSE-Q1000PS5	12	28000	3200	CC-8	13	9.5					750	1, 13
	ED37	Mog (E39)	120	34377	DSE/Q1000	10	28000	3200	CC-8	13	9.5					750	1, 13
	T3	R7S	120	23797	P2/28 FCM-Q1000T3/4CL	12	28000	3200	C-8	4.68						400	2, 12
				33280	FFT-Q1000T3/1CL	12	26400	3200	C-8	6.56						400	2, 12
				23792	P2/29 FHM-Q1000T3/4	12	27300	3200	C-8	4.68						400	2, 7, 12
			185	23788	EJD-Q1000T3/3CL	12	33600	3350	C-8	4.68						100	2, 12
	T5	R7S	120	30157	DXW-Q1000T5/4CL	24	28000	3200	CC-8	3.75						150	12
				30374	FBY-Q1000T5/4	24	26000	3200	CC-8	3.75						150	7, 12
	T6	Med 2-Pin (G9.5)	120	39769	CP77 FEL-Q1000/4CL	24	27500	3200	CC-8	4.1	2.37					300	10, 12
		Med Pf (P28s)	120	38853	EGJ-Q1000/4CL/P	12	27500	3200	CC-8	6	3.5					300	12
				38852	EGK-Q1000/4/P	12	26500	3200	CC-8	6	3.5					300	12
				39138	EGM-Q1000CL/P	12	21500	3000	CC-8	6	3.5					2000	12
		R7S	120	33760	FER-Q1000T6/4CL	6	27500	3200	CC-8	5.62						500	12
		Med 2-Pin (G9.5)	120	35853	FCV-Q1000/4	6	26500	3200	CC-8	4.1	2.37					375	10, 12
	T7	Med 2-Pin (G9.5)	120	39792	BWN-Q1000T7/4CL	24	28500	3200	C-13D	4.5	2.37					250	1, 3, 12
		Med Pf (P28s)	120	11955	BTR-Q1000T74CL2P	12	28500	3200	C-13D	4.75	2.18					250	1, 12
		Med BiPost (G22)	120	39191	EGT-Q1000T7/4CL	12	28500	3200	C-13D	5	2.5					250	1, 3, 12
		Mog BiPost (G38)	120	42697	CYVQ1000T7/4CLBP	6	28500	3200	C-13D	8	5					200	1, 3, 12
		Mog Pf (P40s)	120	12554	BVT-Q1MT7/CL/MP	6	24500	3050	C-13D	7.25	3.93					500	1, 3, 12
				12553	BVV-Q1MT7/4CL/MP	6	28500	3200	C-13D	7.25	3.93					200	1, 3, 12
1200	PAR64	ExMogEndPr	120	34812	GFA-Q1200PAR64/5	6	160000	3200	C-7A	6		22	36	13	24	400	13
				34810	GFB-Q1200PAR64/2	6	450000	3200	C-7A	6		16	18	8	10	400	13
				34808	GFC-Q1200PAR64/1	6	540000	3200	C-7A	6		14	16	8	10	400	13
1500	PS52	Mog (E39)	120	40357	DKX/DSFQ1500PS52	12	41000	3200	C-8	13						1000	1, 13
	ED37	Mog (E39)	120	34378	DSF/Q1500	10	41000	3200	C-8	13						1000	1, 13
	T4	R7S	120	23841	FDB-Q1500T4/4CL	12	41250	3200	C-8	6.56						400	2, 12
				41229	FGT-Q1500T4/4	12	40200	3200	C-8	6.56						400	2, 7, 12
	T8	Mog Pf (P40s)	120	30522	DTA-Q1500T8/4CL	6	41000	3200	C-13D	7.87	3.43					300	3, 12
	T10	Mog BiPost (G38)	120	37564	CXZ-Q1500T10/4CL	6	44500	3200	C-13	8.5	5					400	1, 3, 12
2000	T10	R7S	120	39790	P2/27 FEY-Q2000T8/4CL	12	57000	3200	CC-8	5.62						400	2, 12
	T8	Mog (E39)	120	37086	BWF-Q2000/4CL	6	54000	3200	CC-8	7.5	5.25					500	12
		Mog BiPost (G38)	120	39587	BWA-Q2000/4CL/BP	6	54000	3200	CC-8	8.25	5					500	3, 12
	T10	Mog BiPost (G38)	120	36636	CYX-Q2000T10/4CL	6	59000	3200	C-13	8.5	5					350	1, 3, 12
		Mog Pf (P40s)	120	12555	CP53 BVWQ2MT10/4CL/MP	6	59000	3200	C-13	8.46	3.93					350	3, 12
5000	T20	Mog BiPost (G38)	120	41736	CP29 DPY-Q5000T20/4CL	6	143000	3200	C-13	11	6.5					500	1, 4, 12
10000	T24	Mog BiPost (G38)	120	24886	DTY-Q10M/T24/4CL	4	290000	3200	C-13	15.75	10					300	1, 4, 12
12000	T26	GX38	120	48770	Q12MT26/4CL 120V	1	420000	3400	C-13	16.14	10					150	4, 12
<b>QUARTZLINE® TUNGSTEN HALOGEN HIGH VOLTAGE</b>																	
575	T6	Special	230	37128	HPL575	12	14900	3200	6C-8	4.2	2.37					300	12
				37817	HPL575/LL 230V	12	11780	3050	6C-8	4.2	2.37					1500	12



Watts	Shape	Base	Order Volts	LIF Code	Description	Case Qty.	Lumens Initial	Color Temp. K	Filament Design	MOL	LCL	Beam Spread				Rated Life Hours	Footnotes										
												10%	50%	Horiz.	Vert.												
<b>QUARTZLINE® TUNGSTEN HALOGEN HIGH VOLTAGE (CONTINUED)</b>																											
600	T6	Med 2-Pin (G9.5)	230	39739	GKV-Q575T6/4CL	24	14000	3200	C-13	4.1	2.37					250	12										
750	T6	Special	230	37824	HPL750	12	19750	3200	6C-8	4.2	2.37					300	12										
1000	T6	Med 2-Pin (G9.5) PAR64 ExMogEndPr	230	39738	CP77 FEP-Q1000T6/4CL	24	25000	3200	CC-8	4.1	2.37					300	12										
												240	10925	EXC-Q1MPAR64CP60	6			352000	3200	C-7A	6	20	17	12	9	300	13
													10929	EXD-Q1MPAR64CP61	6			297000	3200	C-7A	6	22	20	14	10	300	13
				10931	EXE-Q1MPAR64CP62	6	138000	3200	C-7A	6		38	20	24	11	300	13										
2000	T10	R7S	230	35338	P2/27 FEX-Q2MT8/4CL	12	50000	3200	CC-8	5.62						300	2, 12										
12000	T26	GX38	230	48771	Q12MT26/4CL 230V	1	420000	3400	C-13	16.14	10					130	4, 12										
			240	48779	Q12MT264/CL 240V	1	420000	3400	C-13	16.14	10					130	4, 12										
20000	T32	GX38	208	48772	BCM Q20MT32/4CL	1	580000	3200	C-13	22.05	13.94					400	4, 12										
			220	48773	BCM Q20MT32/4CL	1	580000	3200	C-13	22.05	13.94					400	4, 12										
			240	48774	BCM Q20MT32/4CL	1	580000	3200	C-13	22.05	13.94					400	4, 12										
24000	T32	GX38	220	48776	Q24MT32/4CL 220V	1	800000	3400	C-13	22.05	13.94					150	4, 12										
			240	48777	Q24MT32/4CL 240V	1	800000	3400	C-13	22.05	13.94					150	4, 12										

## CINEMA LAMPS

### FLUORESCENT LAMPS

15	T8	Medium BiPin (G13)	15722	F15T8/CINEMA32	24	720	3200	18								8000	
			15723	F15T8/CINEMA55	24	700	5500	18								8000	
17	T8	Medium BiPin (G13)	15724	F17T8/CINEMA32	24	800	3200	24								20000	
			15725	F17T8/CINEMA55	24	770	5500	24								20000	
20	T12	Medium BiPin (G13)	15558	F20T12/CINEMA32	24	780	3200	24								10000	
			15710	F20T12/CINEMA55	24	760	5500	24								10000	
30	T12	Medium BiPin (G13)	15714	F30T12/CINEMA32	24	1450	3200	36								18000	
			15715	F30T12/CINEMA55	24	1400	5500	36								18000	
32	T8	Medium BiPin (G13)	47868	F32T8/CINEMA32	36	1800	3200	48								20000	
			47869	F32T8/CINEMA55	36	1750	5500	48								20000	
35	T12	Medium BiPin (G13)	15712	F20T12/CINEMA32/HO	24	1130	3200	24								7500	
			15713	F20T12/CINEMA55/HO	24	1100	5500	24								7500	
40	T12	Medium BiPin (G13)	47857	F40T12/CINEMA32	30	2000	3200	48								20000	
			47864	F40T12/CINEMA55	30	1950	5500	48								20000	
60	T12	Medium BiPin (G13)	15716	F40T12/CINEMA32/HO	30	2900	3200	48								15000	
			15717	F40T12/CINEMA55/HO	30	2820	5500	48								15000	
85	T12	Medium BiPin (G13)	15718	F72T12/CINEMA32/HO	15	4150	3200	72								15000	
			15719	F72T12/CINEMA55/HO	15	4050	5500	72								15000	
110	T12	Medium BiPin (G13)	15720	F96T12/CINEMA32/HO	15	5800	3200	96								15000	
			15721	F96T12/CINEMA55/HO	15	5650	5500	96								15000	

### FLUORESCENT COVRGUARD® LAMPS

15	T8	Medium BiPin (G13)	15800	F15T8/CINEMA32/CVG	24	720	3200	18								8000	
			15801	F15T8/CINEMA55/CVG	24	700	5500	18								8000	
17	T8	Medium BiPin (G13)	15806	F17T8/CINEMA32/CVG	24	800	3200	24								20000	
			15810	F17T8/CINEMA55/CVG	24	770	5500	24								20000	
20	T12	Medium BiPin (G13)	15766	F20T12/CINEMA32/CVG	24	780	3200	24								10000	
			15774	F20T12/CINEMA55/CVG	24	760	5500	24								10000	
30	T12	Medium BiPin (G13)	15779	F30T12/CINEMA32/CVG	24	1450	3200	36								18000	
			15780	F30T12/CINEMA55/CVG	24	1400	5500	36								18000	
32	T8	Medium BiPin (G13)	47881	F32T8/CINEMA32/CVG	36	1800	3200	48								20000	
			47882	F32T8/CINEMA55/CVG	36	1750	5500	48								20000	
35	T12	Medium BiPin (G13)	15775	F20T12/CINEMA32/HO/CVG24	24	1130	3200	24								7500	
			15776	F20T12/CINEMA55/HO/CVG24	24	1100	5500	24								7500	



Watts	Shape	Base	Order Volts	LIF Code	Description	Case Qty.	Lumens Initial	Color Temp. K	Filament Design	MOL	LCL	Beam Spread		Rated Life Hours	Footnotes
												10% Horiz.	50% Vert.		
<b>CINEMA LAMPS (CONTINUED)</b>															
<b>FLUORESCENT COVRGUARD® LAMPS (CONTINUED)</b>															
40	T12	Medium BiPin (G13)	47876	F40T12/CINEMA32/CVG	30	2000	3200	48						20000	
			47877	F40T12/CINEMA55/CVG	30	1950	5500	48						20000	
60	T12	Medium BiPin (G13)	15782	F40T12/CINEMA32/HO/CVG30	30	2900	3200	48						15000	
			15783	F40T12/CINEMA55/HO/CVG30	30	2820	5500	48						15000	
85	T12	Medium BiPin (G13)	15785	F72T12/CINEMA32/HO/CVG15	15	4150	3200	72						15000	
			15786	F72T12/CINEMA55/HO/CVG15	15	4050	5500	72						15000	
110	T12	Medium BiPin (G13)	15794	F96T12/CINEMA32/HO/CVG15	15	5800	3200	96						15000	
			15798	F96T12/CINEMA55/HO/CVG15	15	5650	5500	96						15000	
<b>FLUORESCENT BIAx®</b>															
36	T5	2G11-4 Pin	15816	F36BX/CINEMA32	10	2900	3200	21.1						8000	
			15819	F36BX/CINEMA56	10	2900	5600	21.1						8000	
55	T5	2G11-4 Pin	15811	F55BX/CINEMA32	10	4100	3200	21.1						8000	
			15814	F55BX/CINEMA56	10	4100	5600	21.1						8000	
			22084	F55BX/CINPLUS/32	10	2400	3200	21.1						8000	
			22085	F55BX/CINPLUS/56	10	2400	5600	21.1						8000	



Bulb Watts OD	GE Description	Footnotes/ Safety Notices	Product Code	Std. Pack Qty.	Base	Initial Design Volts	Design Color Temp (K)	Color CRI Index	Arc Rated			LCL (hrs)	MOL (mm)	Burn (mm)	Position	
									CIE x	CIE y	Length (mm)					
<b>CSR METAL HALIDE LAMPS</b>																
<b>DISCHARGE-CSR/CSD (DAYLIGHT) METAL HALIDE, SINGLE-ENDED COLD START</b>																
250	T7	CSD250/2/SE	14, 63	27817	10	90	18000	8500	65+	.289	.305	5	2000		Any	
575	T9	CSR575/2/T/SE	14, 63	49492	10	97	49000	7200	80+	.302	.320	7	1000	65	12	Any
		CSR575/2/SE	14, 63	15378	10	97	49000	7200	80+	.302	.320	7	1000	65	125	Any
700	T9	CSR700/2/SE	14, 63	49491	10	70	55000	7200	80+	.302	.320	8	1000	75	155	Any
1200	T12	CSR1200/2/SE	14, 63	49490	6	100	110000	7200	85+	.302	.320	10	800	85	175	Any
<b>DISCHARGE-CSR (DAYLIGHT) METAL HALIDE, SINGLE-ENDED SHORT ARC</b>																
700	G7	CSR700/SA	14, 63	15380	6	70	58000	5600	75+	.330	.342	4	500	39	85	Any
1200	G9	CSR1200/SA	14, 18, 63	21849	6	100	100000	5800	80+	.326	.330	7	750	59	135	Any
1800	G9	CSR2000/SA	14, 18, 63	21801	4	100	155000	6000	80+	.320	.330	7	750	59	135	Any
<b>DISCHARGE-CSR (DAYLIGHT) METAL HALIDE, SINGLE-ENDED HOT RESTRIKE</b>																
125	T5	CSR125/SE/HR	14, 63	48461	10	80	9400	5600	90+	.323	.328	4	200	39	75	Any
200	T6	CSR200/SE/HR	14, 63	48462	10	70	15000	5600	90+	.323	.328	5	200	39	80	Any
400	T6	CSR400/SE/HR	14, 18, 63	21853	10	70	32000	6000	90+	.323	.328	6	750	60	110	Any
575	T9.5	CSR575/SE/HR	14, 63	48463	10	95	48000	6000	90+	.323	.328	7	750	70	145	Any
1200	T13	CSR1200/SE/HR	14, 63	48464	6	100	110000	6000	90+	.323	.328	11	750	107	200	Any
2500	T19.5	CSR2500/SE/HR	14, 63	48465	6	100	220000	6000	90+	.323	.328	14	500	127	240	Any
4000	T24	CSR4000/SE/HR	14, 63	48466	6	200	380000	6000	90+	.323	.328	20	500	142	260	Any
6000	T26.5	CSR6000/SE/HR	14, 63	48467	6	130	540000	6000	90+	.323	.328	24	300	210	360	Any
12000	T32	CSR12000/SE/HR	14, 63	48468	4	160	1100000	6000	90+	.323	.328	28	250	255	450	Any
18000	T32	CSR18000/SE/HR	14, 63	22496	1	225	1650000	6000	90+	.323	.328	35	250	260	460	Any
<b>DISCHARGE-CSR (DAYLIGHT) METAL HALIDE, DOUBLE-ENDED HOT RESTRIKE</b>																
200	T4.5	CSR200/DE	14, 63	48450	10	80	16000	6000	90+	.323	.325	8	300		75	H15
400	T6.5	CSR400/S/DE	14, 63	22478	10	49	26000	7500	80+	.323	.325	3	750		135	Any
575	T6.5	CSR575/DE	14, 63	48451	10	95	49000	6000	90+	.323	.325	7	750		145	Any
700	T6.5	CSR700/S/DE	14, 63	22493	10	70	59000	6000	85+	.323	.325	4	750		135	Any
1200	T6.5	CSR1200/S/DE	14, 63	22494	10	100	110000	6000	90+	.323	.325	7	500		145	H15
	T8.5	CSR1200/DE	14, 63	48453	6	100	110000	6000	90+	.323	.325	10	750		220	Any
2500	T9.5	CSR2500/DE	14, 63	48454	6	115	240000	6000	90+	.323	.325	14	500		355	Any
4000	T12	CSR4000/DE	14, 63	48455	6	200	410000	6000	90+	.323	.325	34	500		405	H15
6000	T16	CSR6000/DE	14, 63	48456	6	125	570000	6000	90+	.323	.325	24	300		450	H15
12000	T22.5	CSR12000/DE	14, 63	48457	4	160	1100000	6000	90+	.323	.325	32	300		470	H15
18000	T28	CSR18000/DE	14, 63	48459	4	225	1650000	6000	90+	.323	.325	45	300		500	H15
		CSR18000/S/DE	14, 63	48460	4	225	1650000	6000	90+	.323	.325	45	300		470	H15
<b>CSR (DAYLIGHT) METAL HALIDE, SINGLE-ENDED HOT RESTRIKE UV-CONTROL</b>																
575	T9.5	CSR575/SE/HR/UV-C	14, 63	40460	10	95	48000	5800	90+	.323	.328	7	750	70	145	Any
800	T9.5	CSR800/SE/HR/UV-C	14, 63	22495	10	95	64000	5800	90+	.325	.327	7	1000	70	145	Any
1200	T13	CSR1200/SE/HR/UV-C	14, 63	27764	6	100	110000	5800	90+	.323	.328	11	750	107	200	Any
2500	T19.5	CSR2500/SE/HR/UV-C	14, 63	40482	6	100	220000	5800	90+	.323	.328	14	500	127	240	Any
4000	T24	CSR4000/SE/HR/UV-C	14, 63	27765	6	200	380000	5800	90+	.323	.328	20	500	142	260	Any
6000	T26.5	CSR6000/SE/HR/UV-C	14, 63	40492	6	130	540000	5800	90+	.323	.328	24	300	210	360	Any



## STAGE AND STUDIO ANSI CODES REFERENCE

ANSI Code	Order Code	Lamp Description	Volts
<b>STAGE &amp; STUDIO ANSI CODES</b>			
BCM	48772	BCM Q20MT32/4CL	208
BCM	48773	BCM Q20MT32/4CL	220
BCM	48774	BCM Q20MT32/4CL	240
BTL	11966	BTL-Q500T6/CL/P	120
BTM	16465	BTM-Q500T64CL/2P	120
BTN	11953	BTN-Q750T7/CL/2P	120
BTP	11954	BTP-Q750T7/4CL2P	120
BTR	11955	BTR-Q1000T74CL2P	120
BVT	12554	BVT-Q1MT7/CL/MP	120
BVV	12553	BVV-Q1MT7/4CL/MP	120
BVV	12555	BVVQ2MT10/4CL/MP	120
BWA	39587	BWA-Q2000/4CL/BP	120
BWF	37086	BWF-Q2000/4CL	120
BWM	39680	BWM-Q750T7/4CLTP	120
BWN	39792	BWN-Q1000T7/4CL	120
CXZ	37564	CXZ-Q1500T10/4CL	120
CYV	42697	CYVQ1000T7/4CLBP	120
CYX	36636	CYX-Q2000T10/4CL	120
DKX	40357	DKX/DSFQ1500PS52	120
DKZ	39582	DKZ/DSE-Q1000PS5	120
DPY	41736	DPY-Q5000T20/4CL	120
DSE	34377	DSE/Q1000	120
DTA	30522	DTA-Q1500T8/4CL	120
DTY	18305	DTY-Q10M/T24/4CL	120
DWE	41667	DWE-Q650PAR36/1	120

ANSI Code	Order Code	Lamp Description	Volts
<b>STAGE &amp; STUDIO ANSI CODES</b>			
DXW	30157	DXW-Q1000T5/4CL	120
EGC	39134	EGC-Q500/5CL/P	120
EGE	39135	EGE-Q500CL/P	120
EGF	39136	EGF-Q750/4CL/P	120
EGG	39137	EGG-Q750CL/P	120
EGJ	38853	EGJ-Q1000/4CL/P	120
EGK	38852	EGK-Q1000/4/P	120
EGM	39138	EGM-Q1000CL/P	120
EGN	30373	EGN-Q500T8	120
EGR	39190	EGR-Q750T7/4CL	120
EGT	39191	EGT-Q1000T7/4CL	120
EHC	39789	EHC-Q500/5CL	120
EHD	39768	EHD-Q500CL/TP	120
EHF	39771	EHF-Q750/4CL	120
EHG	39770	EHG-Q750CL/TP	120
EJD	23788	EJD-Q1000T3/3CL	185
EJG	20883	EJG/HIR-Q525T2-1	120
EJG	23756	EJG-Q750T3/4CL	120
EKB	33934	EKB-Q420/4CL/2PP	120
EKD	34328	EKD-Q650/3CL/2PP	120
EMD	23755	EMD-Q750T3/4	120
EVR	47950	EVR-Q500CL/MC	120
EXC	93409	EXC-Q1MPAR64CP60	230
EXC	10925	EXC-Q1MPAR64CP60	240
EXD	10928	EXD-Q1MPAR64CP61	230

ANSI Code	Order Code	Lamp Description	Volts
<b>STAGE &amp; STUDIO ANSI CODES</b>			
EXD	10929	EXD-Q1MPAR64CP61	240
EXE	10930	EXE-Q1MPAR64CP62	230
EXE	10931	EXE-Q1MPAR64CP62	240
FAD	30325	FAD-Q650T4/4CL	120
FAY	41668	FAY-Q650PAR36/3D	120
FBE	41669	FBE-Q650PAR36/5D	120
FBO	41671	FBO-Q650PAR36/5	120
FBX	30343	FBX-Q650T4/4	120
FBY	30374	FBY-Q1000T5/4	120
FCM	13895	FCM/HIR-Q650T3/4	120
FCM	23797	FCM-Q1000T3/4CL	120
FCV	35853	FCV-Q1000/4	120
FCW	41672	FCW-Q650PAR36/6	120
FCX	41673	FCX-Q650PAR36/7	120
FDB	23841	FDB-Q1500T4/4CL	120
FDI	20881	FDI/HIR-Q350T2/4	120
FDI	23735	FDI-Q500T3/4CL	120
FDN	23734	FDN-Q500T3/4	120
FEL	39769	FEL-Q1000/4CL	120
FEP	39738	FEP-Q1000T6/4CL	230
FER	33760	FER-Q1000T6/4CL	120
FEV	14119	FEV-Q200/4CL/DC	120
FEX	35338	FEX-Q2MT8/4CL	230
FEY	39790	FEY-Q2000T8/4CL	120
FFN	13233	FFN-Q1000PAR64/1	120

ANSI Code	Order Code	Lamp Description	Volts
<b>STAGE &amp; STUDIO ANSI CODES</b>			
FFP	13229	FFP-Q1000PAR64/2	120
FFR	13228	FFR-Q1000PAR64/5	120
FFS	13227	FFS-Q1000PAR64/6	120
FFT	20884	FFT/HIR-Q675T3/4	120
FFT	33280	FFT-Q1000T3/1CL	120
FGM	13226	FGM-Q1000PAR64/3	120
FGN	13225	FGN-Q1000PAR64/7D	120
FGT	41229	FGT-Q1500T4/4	120
FHM	23792	FHM-Q1000T3/4	120
FKW	39781	FKW-Q300T8	120
FLK	39730	FLK/LL-Q575T6	115
FLK	11450	FLK-Q575T6/4CL	115
FMR	30475	FMR-Q600T5	120
FRG	39623	FRG-Q500T8	120
FRK	39637	FRK-Q650T8	120
GFA	34812	GFA-Q1200PAR64/5	120
GFB	34810	GFB-Q1200PAR64/2	120
GFC	34808	GFC-Q1200PAR64/1	120
GKV	39739	GKV-Q575T6/4CL	230
GLA	93428	GLA-Q575T6/4CL	115
GLC	93429	GLC-Q575T6/5CL	115
GLD	92771	GLD-Q750T6/4CL	120
GLE	92773	GLE-Q750T6/4CL	120

ANSI Code	Order Code	Lamp Description	Volts
<b>STAGE &amp; STUDIO ANSI CODES</b>			
<b>(SEE SECTION - HALOGEN)</b>			
DVS	23733	Q500T3/CL-DVS	130
EHM	43703	Q300T3/CL-EHM	120
EHP	43705	Q300T4/CL-EHP	120
EHR	43708	Q400T4/CL-EHR	120
EHT	43699	Q250CL/MC-EHT	120
EHZ	43704	Q300T3-EHZ	120
ESL	44383	Q150CL/MC/2V-ESL	120
ESM	43695	Q250MC-ESM	120
ESN	44385	Q100CL/MC/2V-ESN	120
ESP	44384	Q150CL/DC/2V-ESP	120
ESR	44386	Q100CL/DC/2V-ESR	120
ESS	43697	Q250CL/DC-ESS	120
ETB	43701	Q250DC-ETB	120
ETC	43693	Q150CL/DC-ETC	120
ETD	44657	Q100DC/2V-ETD	120
ETE	44656	Q100MC/2V-ETE	120
ETF	44653	Q150DC-ETF	120
ETG	43694	Q150CL/MC-ETG	120
ETH	44654	Q150MC-ETH	120
FCL	23731	Q500T3/CL-FCL	120



## FOOTNOTES

### # Footnote

- 1 Filament with low noise construction.
- 2 Burn position horizontal  $\pm 4$  degrees.
- 3 Burn position base down to horizontal.
- 4 Burning position vertical base down  $\pm 45$  degrees.
- 5 Burning position horizontal  $\pm 15$  degrees.
- 6 Enclosed fixture only per UL standard 1572. In accordance with Federal Regulations (21CFR 1040.30) the following notice applies.  
**WARNING:** This lamp can cause serious skin burn and eye inflammation from shortwave ultraviolet radiation if the outer envelope of the lamp is broken or punctured, and the arc tube continues to operate. Do not use where people will remain more than a few minutes unless adequate shielding or other safety precautions are used. Certain types of lamp that will automatically extinguish when the outer envelope is broken or punctured are commercially available.
- 7 Frosted. Apparent lighted length slightly longer than similar clear lamp.
- 8 Life dependent on service conditions; for use only in equipment specially designed to maintain bulb and base temperatures within safe limits.
- 9 Available late 2003.
- 10 To avoid possible overheating, this lamp is not recommended for use without force-cooling in deep-bowled fixtures.
- 11 Burn vertical base down  $\pm 30$  degrees.

### 12

#### **Safety Notice for exposed unshielded lamps (if shielded fixture use footnote 13)**

##### **▲ WARNING**

##### **Risk of electrical shock**

- Turn power off before inspection, installation or removal

##### **Risk of fire**

- Keep combustible materials away from lamp
- Use in enclosed fixture rated for this product

##### **Pressurized lamp-unexpected rupture may cause injury, fire, or property damage**

- Use eye protection when handling lamp
- Do not touch glass with bare hands
- Use in enclosed fixtures rated for this product
- Do not use lamp if outer glass is scratched or broken
- Operate lamp only in specified position
- Do not exceed 110% of rated voltage

##### **▲ CAUTION**

##### **Risk of burn**

- Allow lamp/fixture to cool before handling
- Turn power off before installing lamp

##### **Lamp may shatter and cause injury if broken**

- Do not use lamp if outer glass is scratched or broken
- Dispose of lamp in a closed container
- Wear safety glasses and gloves when handling lamp

##### **Lamp emits UV radiation which may cause eye/skin irritation. RG-2.**

- Limit unshielded exposure to less than 15 minutes per day

### 13

#### **Safety Notice for PAR lamps and enclosed, shielded lamps**

##### **▲ WARNING**

##### **Risk of electrical shock**

- Turn power off before inspection, installation or removal

##### **Risk of fire**

- Keep combustible materials away from lamp
- Use in fixture rated for this product

##### **A damaged lamp emits UV radiation which may cause eye/skin injury**

- Turn power off if glass is broken. Remove and dispose of lamp

##### **Pressurized lamp-unexpected rupture may cause injury, fire, or property damage**

- Use in enclosed fixtures rated for this product
- Do not use lamp if outer glass is scratched or broken
- Do not exceed 110% of rated voltage
- Avoid direct water/liquid contact

##### **▲ CAUTION**

##### **Risk of burn**

- Allow lamp/fixture to cool before handling
- Turn power off before installing lamp

##### **Lamp may shatter and cause injury if broken**

- Do not use lamp if outer glass is scratched or broken
- Dispose of lamp in a closed container







**GENERAL INFORMATION**

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**LAMPS**

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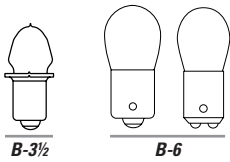
**FOOTNOTES AND SAFETY NOTES ..... 7-21**



# Miniature & Sealed Beam Lamps

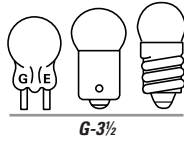
## LAMP LOCATOR

The lamps listed here are not to scale. To determine the diameter of a bulb in inches, multiply the bulb number by one-eighth. For example T-2 means approximately  $\frac{2}{8}$ " or  $\frac{1}{4}$ " diameter.

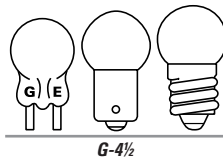


B-3 1/2

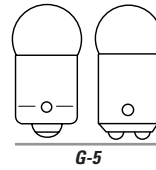
B-6



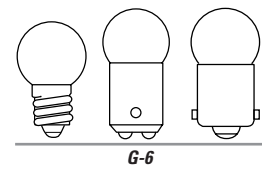
G-3 1/2



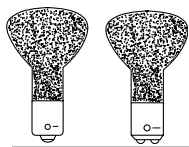
G-4 1/2



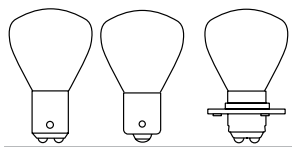
G-5



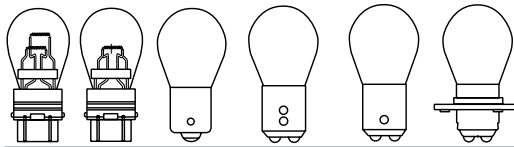
G-6



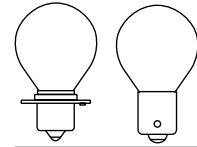
R-12



RP-11



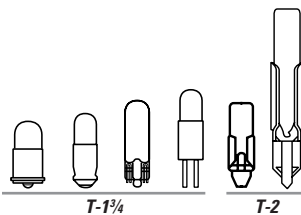
S-8



S-11

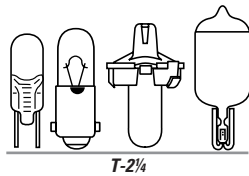


T-1

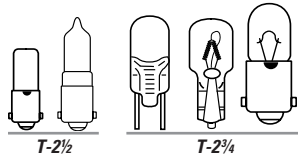


T-1 1/4

T-2



T-2 1/4

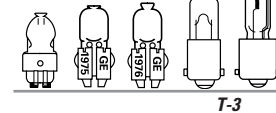


T-2 1/2

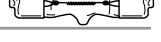
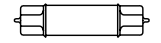
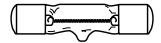
T-2 3/4



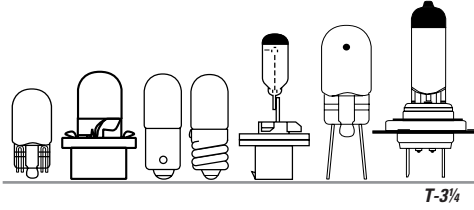
TL-2 1/4



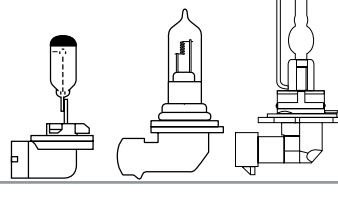
T-3



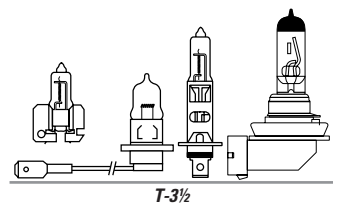
TL-3



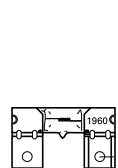
T-3 1/4



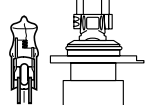
TL-3 1/4



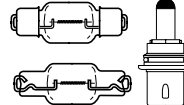
T-3 3/4



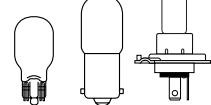
T-4



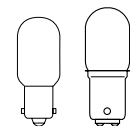
T-4 1/2



T-4 3/4



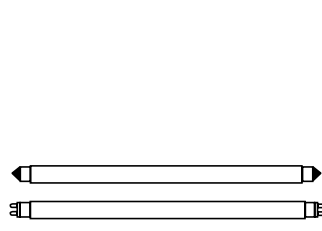
T-5



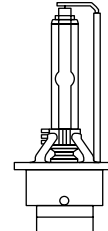
T-7



T-8



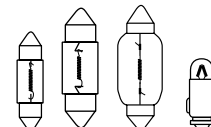
Electric Discharge



Central Discharge



Neon Glow



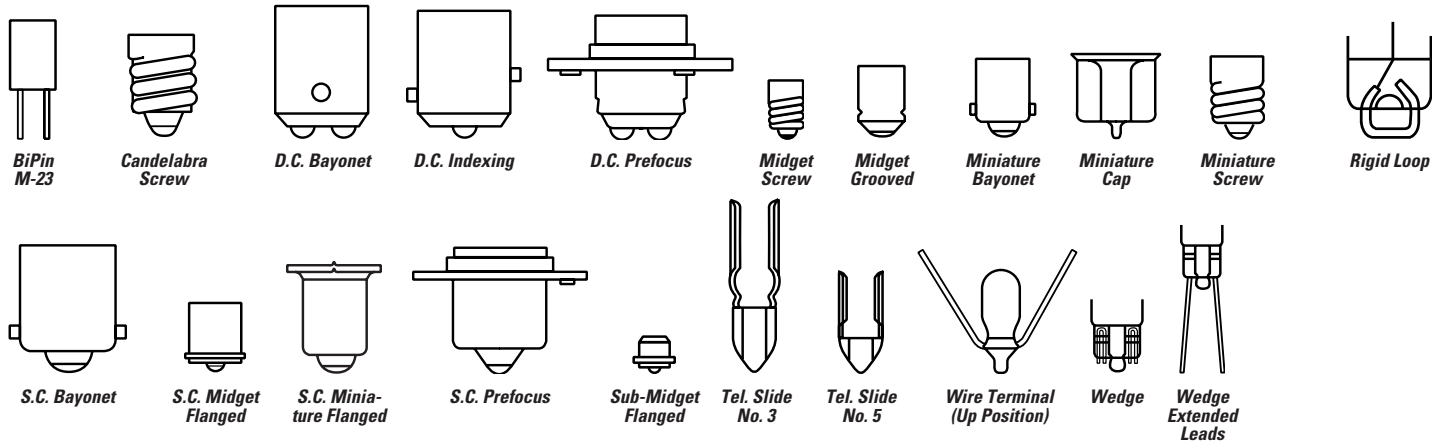
Festoon Type



## MINIATURE BASES

Bases provide electrical contact to the lamp and, in most cases, also support the lamp in the fixture. For miniature and subminiature lamps, bayonet or wedge base types are generally preferred over screw types when vibration

is present. In addition, wedge bases reduce socket size and complexity. Flanged or collared types are usually associated with requirements for filament location.

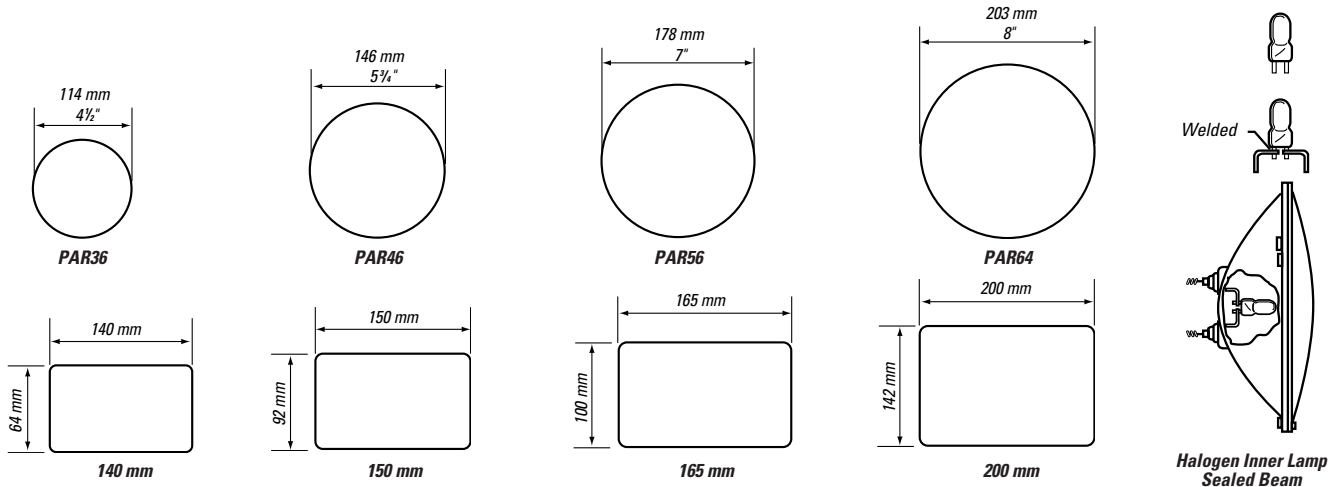


## S.C. AND D.C. PREFOCUSED BASE LAMPS

The letter "A" following the base type designates that the distance from the bottom of the collar to the bottom of the base contact is  $1\frac{3}{32}$ ". For "B" bases this distance is  $\frac{5}{16}$ ". The few lamps identified by the letter "S" in the "Base"

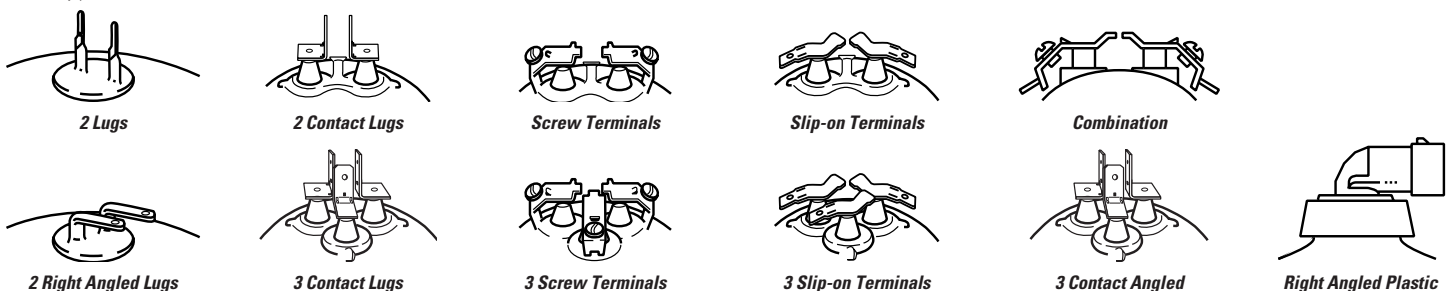
column are special in that the collar location and/or the orientation of the contacts differs from the above.

## SEALED BEAM LAMPS



## SEALED BEAM BASES

Bases provide electrical contact to the lamp. The most common bases for sealed beam lamps are the screw terminal and contact lug types. Other types are also available, as illustrated.





# Miniature & Sealed Beam Lamps

## INTRODUCTION

### GE MINIATURE AND SEALED BEAM PRODUCT ORDERING INFORMATION

GE Miniature and Sealed Beam Lamps are designed for those applications requiring specific bulb size, base, and voltage. These lamps are operated on vehicles (cars, trucks, boats, aircraft, tractors) or in special applications utilizing low voltage sources. Most lamps are designated by common ANSI (American National Standards Institute) lamp numbers and lamps in this section are arranged in numerical order. To assist you in identifying lamps, drawings (not to scale) are provided, along with descriptions of bulb and base sizes.

Specific market segments covered in this section are products used in:

Aircraft	Emergency Building Lighting	Marine
Automotive	Flashlight/Hand Lanterns	Medical/Instruments
Agriculture	Garden/Outdoor	Telephone
CIM/Tractor	Indicator	Toys/Entertainment

For additional specifications refer to **Miniature and Sealed Beam Catalog** obtained through your GE Sales Office. **Automotive Selection Guide** also available.

### FINDING AND ORDERING A LAMP

Most Miniature Lamps have a number on the base or bulb. Generally it will match the lamp number in this catalog, which is sorted in numeric order (prefixes last). The catalog is divided into Miniature and Sealed Beam sections. Sealed Beam lamps start on page 7-16. Often the first prefix is another lamp manufacturer's identification and can be ignored. You can verify the lamp using the drawings provided. Order codes for Blister, Unit, and Bulk Pack for OEM's are provided.

### FORMULAS

The following are commonly used formulas to assist any calculations you may need. For further information, contact your GE Lamp Representative.

- Watts = Volts x Amps
- Lumens = 12.57 x Mean Spherical Candlepower
- Kelvin = Celsius + 273
- Footcandles = Candlepower/Distance squared
- Hot Resistance (Ohms) = Volts/Amps (miniature lamps only)

### ABBREVIATIONS

The abbreviations used in this catalog include:

<b>A</b> Amperes	<b>C.I.M.</b> Construction & Industrial Machinery
<b>ANSI</b> American National Standards Institute	<b>C.P.</b> Candlepower
<b>Bay.</b> Bayonet	<b>Cand.</b> Candelabra

<b>D.C.</b> Double Contact	<b>PAR</b> Parabolic Aluminized Reflector
<b>ECE</b> European Common Market (European Motor Vehicle Standards)	<b>Pf.</b> Prefocus
<b>Fig.</b> Flanged	<b>SAE</b> Society of Automotive Engineers (US Motor Vehicle Standards)
<b>HID</b> High Intensity Discharge	<b>Sc.</b> Screw
<b>HIR</b> Halogen Infrared	<b>S.C.</b> Single Contact
<b>LCL</b> Light Center Length	<b>Spec.</b> Special
<b>Min.</b> Miniature	<b>Tel.</b> Telephone
<b>MOL</b> Maximum Overall Length	<b>Term.</b> Terminals
<b>MSCP</b> Mean Spherical Candlepower	<b>V</b> Volts
<b>Nom.</b> Nominal	<b>W</b> Watts

### GE MINIATURE LAMP PREFIXES

<b>DE</b> Double-Ended	<b>Q</b> Quartz Halogen
<b>H</b> Halogen	<b>SE</b> Single-Ended
<b>K</b> Krypton Gas	<b>W,T,R,C,P</b> European Designation
<b>PC</b> Printed Circuit Application	
<b>PR</b> Prefocus Base (E.G., "Flashlight Lamp")	

### GE MINIATURE LAMP SUFFIXES

<b>A</b> Amber	<b>NA</b> Natural Amber (automotive lighting)
<b>AF</b> All Frost (on outside)	<b>PSB</b> Pilot Indicator/Short Base
<b>AS10</b> Ages and Selected (for candlepower)	<b>R</b> Red
<b>B</b> Blue	<b>SB</b> Silver Bowl (all or some portion of bulb is silver)
<b>C1</b> Refers to a range of current on telephone lamps (A1, B1, D1, E1, etc. used also)	<b>TY</b> Letters after a quartz halogen lamp mean a deviation from the standard lamp - usually refers to the electrical terminals
<b>CW</b> Cool White (aircraft lighting)	<b>U</b> Lead wires up or no base, e.g., unbased sealed beam lamp
<b>D</b> Lead Wires Down	<b>WW</b> Warm White (aircraft lighting)
<b>E</b> Extended Lead Wires	<b>X</b> Indicates some arbitrary deviation from the normal product
<b>E-1</b> Different lead wire material (NI plated)	<b>Y</b> Yellow
<b>G</b> Green	<b>-1</b> Slip on terminals
<b>HD</b> Heavy Duty	<b>-2</b> Represents various deviations
<b>HIR</b> Halogen Infrared	<b>-3</b> Represents deviations (e.g. combination terminal)
<b>HO</b> High Output	<b>W</b> European Designation (Watts)
<b>K</b> Unique Base	
<b>KR</b> Krypton Fill	
<b>L, XL, LL</b> Long Life	
<b>MB</b> Miniature Bayonet	

### MSCP/MBCP

Approximate output expressed as initial mean spherical candlepower (see lumen conversion). For sealed beam MBCP is the maximum intensity of the beam in candelas, generally in the beam's center, and spread is beam size expressed in degrees.

### Filament Design

C=coiled, CC=coiled coil, -6=horizontal, -8=vertical to base. See Miniature and Sealed Beam Catalog for all variations.

### MOL:

In inches from the top of the bulb to the bottom of the base.

### GE Lamp No.:

In nearly all cases lamps are marked with a General Electric Trade Number recorded with the ANSI. See glossary of prefixes and suffixes above.

### Order Code:

Use this code when ordering to ensure that you receive the exact product you require.

### Case Qty.

Quantity of lamps per case if blister pack (BP), unit, or bulk (OEM's).\*

### Amps or Watts

Energy used expressed as amperes (A) or watts (W) at design voltage.

### Volts:

Voltage at which the lamp is designed to provide the amperes, candlepower, and laboratory life characteristics.

### Bulb:

The prefix letter describes the shape and the number is the approximate bulb diameter.

### Base:

Base types are depicted on the previous pages for both Miniature and Sealed Beam.

### LCL

Distance in inches between base reference plane and filament center.

### Rated Life

Lamp burning hours to medium life expectancy.

### Safety Footnotes

See page 7-21 for explanation.

Order Code	Case Qty.	GE	Amps or	Bulb:	Filament	LCL	MOL	Rated Life	Warning						
Blister	Unit	Bulk	BP/Unit/Bulk	Lamp No.	Primary Application	Volts	Watts	MSCP	Bulb	Base	Design	(in)	(in)	(hrs)	& Footnotes

### MINIATURE LAMPS

40848	14132	/10/540	862	Tractor	12.8	2.93A	60	T-3 <sup>1</sup> / <sub>4</sub>	Rt Angle Prefocus	C-6	1.25	2.68	1,900	306
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T-2 is Tubular approximately 2/16" in diameter. Sealed Beam bulb sizes are also in eighths of an inch if round (PAR). PAR36 is 3/8" or 4 1/2" in diameter. If the Sealed Beam is rectangular in shape the longest side is measured in millimeters. A 165mm Sealed Beam measures 6 1/2" (165mm) across the top.

\* Miniature Incandescent BP is 2 lamps, Miniature Halogen BP is 1 lamp, selected miniature headlamps available in 2 pack BP; PC not shown.

Identifies the shape (S= Pear, T=Tubular, G=Globe, R=Reflector)

Identifies the approximate bulb diameter in eighths of an inch.



# Miniature & Sealed Beam Lamps

Order Code	Case Qty.	GE	Primary Application	Volts	Amps or Watts	MSCP	Bulb	Base	Filament Design	LCL (in)	MOL (in)	Rated Life (hrs)	Warning & Footnotes		
Blister Unit	Bulk BP/Unit/Bulk	Lamp No.													
<b>MINIATURE LAMPS</b>															
25312	/50/	10	Indicator	2.50	.50A	.5	G-3½	Miniature Two Pin	C-6	.62	.94	3,000	69		
25319	/50/	12	Radio	6.30	.15A	.35	G-3½	Miniature Two Pin	C-6	.62	.94	5,000	44, 69		
25331	/50/	13	Flashlight – 3D Cells	3.70	.30A	.98	G-3½	Miniature Screw	C-2R	.72	.94	15	116		
25354	/50/	14	Flashlight – 2D Cells	2.47	.30A	.5	G-3½	Miniature Screw	C-2R	.72	.94	15	116		
25371	/50/	15	Indicator	7.0	.40A	2	G-4½	Miniature Two Pin	C-6	.69	1.07	500	69		
25377	25379	/50/1000	19	Toy Train	14.4	.10A	.9	G-3½	Miniature Two Pin	C-6	.62	.94	1,000	69	
12325	17853	48/50/	24	Auto Side Marker	14.0	.24A	2	T-2¾	Wedge	C-2V	.46	.91	1,500		
12316	48/ /	24NA	Auto Side Marker	14.0	.24A	1.5	T-2¾	Wedge	C-2V	.46	.91	1,500			
25388	/50/	27	Hand Lantern – 4F Cells	4.9	.30A	1.4	G-4½	Miniature Screw	C-2R	.72	1.07	30	116		
26480	39220	13689	48/50/4000	37	Auto	14.0	.09A	.5	T-1¾	Wedge	C-2F	.40	.80	2,500	
25442	/50/	43	Indicator	2.5	.50A	.5	T-3¼	Miniature Bayonet	C-2R	.78	1.19	3,000			
25450	/50/	44	Indicator, Radio, and TV	6.3	.25A	.9	T-3¼	Miniature Bayonet	C-2R	.78	1.19	3,000			
25485	/50/	47	Radio, TV, and Indicator	6.3	.15A	.52	T-3¼	Miniature Bayonet	C-2R	.78	1.19	3,000			
25529	/50/	51	Indicator	7.50	.22A	1	G-3½	Miniature Bayonet	C-2R	.50	.94	1,000			
25550	25552	/50/4000	53	Auto and Indicator	14.4	.12A	1	G-3½	Miniature Bayonet	C-2V	.50	.94	1,000		
25576	/50/	55	Instrument	7.0	.41A	2	G-4½	Miniature Bayonet	C-2R	.56	1.07	500			
23218	25591	48/50/	57	Auto and Instrument	14.0	.24A	2	G-4½	Miniature Bayonet	C-2V	.56	1.07	500		
12321	48/ /	63	Coin Machine	7.0	.63A	3	G-6	S.C. Bayonet	C-2R	.75	1.44	1,000			
25643	/50/	64	Aircraft and Marine	7.0	.63A	3	G-6	D.C. Bayonet	C-2R	.75	1.44	1,000			
12324	25652	25654	48/50/1000	67	Auto	13.5	.59A	4	G-6	S.C. Bayonet	C-2R	.81	1.44	5,000	4
25692	/50/	68	Auto and Marine	13.5	.59A	4	G-6	D.C. Bayonet	C-2R	.81	1.44	5,000	4		
43606	43607	/50/4000	70	Auto	14.0	.15A	1.5	T-1¾	Wedge	C-2F	.40	.80	100	14	
23015	39218	39219	48/50/4000	73	Indicator	14.0	.08A	.3	T-1¾	Wedge	C-2F	.40	.80	15,000	79
21029	38457	38458	48/50/4000	74	Auto	14.0	.10A	.7	T-1¾	Wedge	C-2F	.40	.80	1,000	
25736	/50/	81	Auto, Aircraft	6.5	1.02A	6	G-6	S.C. Bayonet	C-2R	.75	1.44	500			
25751	/50/	82	Auto and Marine	6.5	1.02A	6	G-6	D.C. Bayonet	C-2R	.75	1.44	500			
40969	/50/	85	Indicator	28.0	.04A	.3	T-1¾	Wedge	C-2F	.40	.80	7,000	79		
40967	40968	/50/4000	86	Indicator	6.3	.20A	.4	T-1¾	Wedge	C-2F	.40	.80	20,000	79, 130	
25772	/10/	88	Indicator	6.8	1.91A	15	S-8	D.C. Bayonet	C-6	1.12	2.0	300			
12363	25778	18618	48/50/1000	89	Auto	13.0	.58A	6	G-6	S.C. Bayonet	C-2R	.75	1.44	750	
47797	48/ /	89KR	Auto. Krypton. Long Life	13.0	.58A	6	G-6	S.C. Bayonet	C-2R	.75	1.44	1,500			
12364	25794	25796	48/50/1000	90	Auto and Marine	13.0	.58A	6	G-6	D.C. Bayonet	C-2R	.75	1.44	750	
23217	25811	25813	48/50/500	93	Auto	12.8	1.04A	15	S-8	S.C. Bayonet	C-6	1.12	2.0	700	
25829	25831	/50/500	94	Auto and Marine	12.8	1.04A	15	S-8	D.C. Bayonet	C-6	1.12	2.0	700		
12322	25836	25838	48/50/1000	97	Auto – Heavy Duty	13.5	.69A	4	G-6	S.C. Bayonet	C-2V	.81	1.44	5,000	4
16287	16286	/50/1000	98	Auto, Heavy Duty	13.0	.62A	6	G-6	S.C. Bayonet	C-2V	.75	1.44	800		
36147	/50/	105	Auto Interior – Heavy Duty	12.8	1.00A	12	B-6	S.C. Bayonet	C-6	1.06	1.75	500			
25848	/50/	112	Flashlight – 1AA, C or D	1.2	.22A	–	TL-3	Miniature Screw	S-2	–	.93	5	116		
25916	/50/	147	Indicator	7.0	.43A	2	T-3¼	Wedge	C-2R	.56	1.06	1,500			
15731	/ /1000	149	Emergency Lighting	6.15	.53A	3.5	T-3¼	Wedge	C-2R	.56	1.06	15			
25927	/50/	157	Medical	5.8	1.10A	8.1	G-6	Miniature Screw	C-2R	1.0	1.22	50	127		
25931	25933	/50/4000	158	Auto, Instrument	14.0	.24A	2	T-3¼	Wedge	C-2V	.56	1.06	500		
23016	25956	16489	48/50/4000	161	Auto, Instrument	14.0	.19A	1	T-3¼	Wedge	C-2F	.56	1.06	4,000	
12327	25962	16302	48/50/4000	168	Auto Instrument	14.0	.35A	3	T-3¼	Wedge	C-2F	.56	1.06	1,500	
47827	48/ /	168XL	Auto-Long Life	14.0	.35A	3	T-3¼	Wedge	C-2F	.56	1.06	3,000			
19553	19852	/50/4000	193	Heavy Duty Truck	14.0	.33A	2	T-3¼	Wedge	C-2F	.56	1.06	15,000		
19921	/ /4000	193E	Heavy Duty Truck	14.0	.33A	2	T-3¼	Wire Terminal	C-2F	.56	1.06	15,000	122		
11807	/ /4000	193E-1	Truck Clearance	14.0	.33A	2	T-3¼	Wire Terminal	C-2F	–	1.06	15,000	122		
12328	25965	16303	48/50/4000	194	Auto, Instrument	14.0	.27A	2	T-3¼	Wedge	C-2F	.56	1.06	2,500	
12356	48/ /	194B	Auto courtesy – Blue	14.0	.27A	2	T-3¼	Wedge	C-2F	–	1.06	2,500	132		
12357	48/ /	194G	Auto courtesy – Green	14.0	.27A	2	T-3¼	Wedge	C-2F	–	1.06	2,500	132		



# Miniature & Sealed Beam Lamps

Blister	Order Code Unit	Case Qty. Bulk	GE BP/Unit/Bulk	Lamp No.	Primary Application	Volts	Amps or Watts	MSCP	Bulb	Base	Filament Design	LCL (in)	MOL (in)	Rated Life (hrs)	Warning & Footnotes
<b>MINIATURE LAMPS (CONTINUED)</b>															
	12319	44859	27470	48/50/4000	194NA	Auto Sidemarker. Amber	14.0	.27A	1.5	T-3/4	Wedge	C-2F	–	1.06	2,500
	47794			48/	194NAXL	Auto Sidemarker. Amber	14.0	.27A	1.5	T-3/4	Wedge	C-2F	–	1.06	5,000
	12355			48/	194R	Auto courtesy – Red	14.0	.27A	2	T-3/4	Wedge	C-2F	–	1.06	2,500 132
	25832			48/	194XL	Auto, Long Life	14.0	.27A	2	T-3/4	Wedge	C-2F	.56	1.06	12,000
	37983	37984		/50/500	198	Truck Stop, Signal	12.8 14.0	2.25A .59A	32	S-8	D.C. Index	C-6	1.25	2.0	1,200 5,000 110, 147
	37985	37986		/50/500	199	Truck Signal	12.8	2.25A	32	S-8	S.C. Bayonet	C-6	1.25	2.0	1,200 110
	25988			/50/	210	Instrument	6.5	1.78A	15	B-6	D.C. Bayonet	C-6	1.06	1.75	100
	12673	39224	39225	48/50/1000	211-2	Auto	12.8	.97A	12	T-3	Miniature Cap	C-8	–	1.72	1,000
	23220		39223	48/1000	212-2	Auto	13.5	.74A	6	T-3	Miniature Cap	C-8	–	1.72	2,000 4
	39356	39357		/50/1000	214-2	Auto	13.5	.52A	4	T-3	Miniature Cap	C-8	–	1.72	1,000 4
	26008			/50/	222	Flashlight – AA cells	2.25	.25A	–	TL-3	Miniature Screw	C-2R	–	.93	5 116
	26063			/50/	243	Flashlight – 2 C cells	2.33	.27A	–	TL-3	Miniature Screw	C-2R	–	.93	10 116
	26095			/50/	258	Toy Train, Flasher Lamp	14.0	.27A	1.6	G-4 1/2	Miniature Screw	C-2R	.81	1.07	500 3, 70
	26099			/50/	259	Radio, TV, and Indicator	6.3	.25A	.65	T-3/4	Wedge	C-2R	.65	1.06	5,000 44, 147
	44719			/50/	265	Indicator	28.0	.08A	.75	G-3 1/2	Miniature Bayonet	C-2F	.50	.94	5,000
	42758			/50/	267	Indicator – Flasher Lamp	6.3	.15A	.33	T-3/4	Miniature Bayonet	C-2R	.62	1.19	5,000 3, 70
	32688			/50/	293	Auto and Radio	14.0	.33A	2	G-4 1/2	Miniature Bayonet	C-2F	.56	1.07	7,500
	81642			/50/	301	Aircraft	28.0	.17A	3	G-5	S.C. Bayonet	C-2F	.69	1.25	500
	26120			/50/	302	Aircraft	28.0	.17A	3	G-5	D.C. Bayonet	C-2F	.69	1.25	500
	81641			/50/	303	Aircraft	28.0	.30A	6	G-6	S.C. Bayonet	C-2F	.75	1.44	500
	81643			/50/	304	Aircraft	28.0	.30A	6	G-6	D.C. Bayonet	C-2F	.75	1.44	500
	26143			/50/	305	Aircraft	28.0	.51A	15	S-8	S.C. Bayonet	C-2V	1.12	2.0	300
	26145			/50/	305AF	Aircraft – All frosted	28.0	.51A	–	S-8	S.C. Bayonet	C-2V	–	2.0	300
	26152			/50/	306	Aircraft	28.0	.51A	15	S-8	D.C. Bayonet	C-2V	1.12	2.0	300
	81644			/50/	307	Aircraft	28.0	.67A	21	S-8	S.C. Bayonet	C-2V	1.12	2.0	300
	26161			/50/	307AF	Aircraft – All frosted	28.0	.67A	21	S-8	S.C. Bayonet	C-2V	–	2.0	300
	81645			/50/	308	Aircraft	28.0	.67A	21	S-8	D.C. Bayonet	C-2V	1.12	2.0	300
	81646			/50/	308AF	Aircraft – All frosted	28.0	.67A	–	S-8	D.C. Bayonet	C-2V	–	2.0	300
	26175			/10/	309	Aircraft	28.0	.90A	32	S-11	S.C. Bayonet	C-2V	1.25	2.38	300
	81647			/10/	311	Aircraft	28.0	1.29A	50	S-11	S.C. Bayonet	C-2V	1.25	2.38	300
	81649	81650		/50/4000	313	Aircraft	28.0	.17A	3.5	T-3/4	Miniature Bayonet	C-2F	.62	1.19	500
	81651			/50/	315	Aircraft	28.0	.90A	32	S-8	S.C. Bayonet	C-2V	1.12	2.0	300
	81652			/50/	316	Aircraft	6.0	.70A	3.4	T-3/4	Miniature Bayonet	C-2R	.62	1.19	500
	80862			/10/	317	Aircraft	12.0	3.5W	2.63	T-3	G4 2-Pin	C-2R	.78	1.16	1000
	28519			/50/	327	Aircraft	28.0	.04A	.34	T-1 1/4	S.C. Midget Flanged	C-2F	.38	.63	4,000 79
	28546			/50/	328	Aircraft	6.0	.20A	.34	T-1 1/4	S.C. Midget Flanged	C-2R	.38	.63	1,000 10
	28567			/50/	330	Aircraft	14.0	.08A	.5	T-1 1/4	S.C. Midget Flanged	C-2F	.38	.63	1,500
	28588			/50/	334	Aircraft	28.0	.04A	.34	T-1 1/4	Midget Grooved	C-2F	.38	.63	4,000 79
	29917			//1000	338	Aircraft	2.7	.06A	.04	T-1 1/4	Midget Flanged	C-2R	–	.63	6,000
	29918			//1000	345	Aircraft	6	.04A	.055	T-1 1/4	Midget Flanged	C-2R	–	.63	10,000
	26255			/50/	356	Aircraft	28.0	.17A	3.5	G-3 1/2	Miniature Bayonet	C-2F	.50	.94	500 14
	87381			//1000	380	Aircraft	6.3	.04A	.03	T-1 1/4	Midget Flanged	C-2V	–	.64	50,000
	28653			/50/	381	Indicator	6.3	.20A	.4	T-1 1/4	S.C. Midget Flanged	C-2F	.38	.63	20,000 79
	28657			/50/	382	Indicator	14.0	.08A	.3	T-1 1/4	S.C. Midget Flanged	C-2F	.38	.63	40,000 79
	28660			/50/	385	Indicator	28.0	.04A	.15	T-1 1/4	S.C. Midget Flanged	C-2F	.44	.81	10,000 78,79
	87306			//1000	385AS15	Aircraft	28.0	.04A	.2	T-1 1/4	Midget Flanged	C-2F	–	.36	25,000
	28662			/50/	386	Indicator	14.0	.08A	.3	T-1 1/4	Midget Grooved	C-2F	.38	.63	40,000 79
	28664	25090		/50/1000	387	Indicator	28.0	.04A	.3	T-1 1/4	Midget Flanged	C-2F	–	.63	7,000
	28672			/50/	388	Indicator	28.0	.04A	.3	T-1 1/4	Midget Grooved	C-2F	.38	.63	7,000 79
	87398			//1000	394	Aircraft	12	.04A	.12	T-1 1/4	Midget Flanged	C-2F	–	.64	10,000
	38918			/50/	400	Aircraft	28.0	.10A	1.6	T-3/4	Wedge	C-2F	.56	1.06	1,000



# Miniature & Sealed Beam Lamps

Order Code	Case Qty.	GE				Amps or					Filament	LCL	MOL	Rated Life	Warning
Blister	Unit	Bulk	BP/Unit/Bulk	Lamp No.	Primary Application	Volts	Watts	MSCP	Bulb	Base	Design	(in)	(in)	(hrs)	& Footnotes
<b>MINIATURE LAMPS (CONTINUED)</b>															
			/50/	<b>425</b>	Hand Lantern – 4F Cells	5.0	.50A	2.3	G-4½	Miniature Screw	C-2R	.72	1.07	15	116
			/50/	<b>456</b>	Instrument	28.0	.17A	2	G-4½	Miniature Bayonet	C-2F	.56	1.07	5,000	
			/50/	<b>464</b>	Aircraft	28.0	.17A	3	T-3¼	Wedge	C-2F	.56	1.06	1,500	
			/50/	<b>502</b>	Hand Lantern – 4F Cells	5.1	.15A	.6	G-4½	Miniature Screw	C-2R	.72	1.07	100	116
			/50/	<b>509K</b>	Indicator	24.0	.18A	2.8	G-6	Candelabra Screw	C-2R	.75	1.47	1,000	303
	<b>44773</b>	<b>44774</b>	/50/4000	<b>555</b>	Coin, Novelty	6.3	.25A	.9	T-3¼	Wedge	C-2R	.65	1.06	3,000	
			/50/	<b>558</b>	Auto Lens end	13.0	.33A	–	TL-3¼	Wedge	C-2V	–	1.06	500	68
<b>12358</b>	<b>39746</b>	<b>40023</b>	48/50/1000	<b>561</b>	Auto	12.8	.97A	12	T-3	Rigid Loop	C-8	–	1.72	1,000	
<b>23019</b>		<b>40024</b>	48//1000	<b>562</b>	Auto	13.5	.74A	6	T-3	Rigid Loop	C-8	–	1.72	2,000	4
	<b>26205</b>		48//	<b>563</b>	Auto	13.5	.52A	4	T-3	Rigid Loop	C-8	–	1.72	1,000	4
	<b>12672</b>		48//	<b>570</b>	Truck Bed Light	12.8	2.10A	32	T-4¾	Rigid Loop	C-8	–	1.72	600	
<b>23020</b>			48//	<b>577</b>	Auto	12.8	1.40A	21	T-4¾	Double End Cap	C-8	–	1.72	1,000	
	<b>18442</b>	<b>18439</b>	/50/4000	<b>590</b>	Strip Lighting (Xenon)	13.5	.37A	4	T-3¼	Wedge	C-2V	.5	1.06	2,000	
	<b>25199</b>	<b>25200</b>	/50/4000	<b>591</b>	Strip Lighting (Xenon)	14.0	.24A	2	T-3¼	Wedge	C-2V	.5	1.06	3,000	
	<b>26549</b>		/50/	<b>605</b>	Flashlight – 5D Cells	6.15	.50A	3.4	G-4½	Miniature Screw	C-2R	.72	1.07	15	116
	<b>81653</b>	<b>81654</b>	/50/1000	<b>623</b>	Instrument	28.0	.37A	6	G-6	S.C. Bayonet	2C-2V	.75	1.44	1,000	
	<b>26567</b>	<b>26568</b>	/50/1000	<b>624</b>	Marine	28.0	.37A	6	G-6	D.C. Bayonet	2C-2V	.75	1.44	1,000	
<b>23023</b>	<b>26570</b>		48/50/	<b>631</b>	Auto	14.0	.63A	6	G-6	S.C. Bayonet	2C-2R	.75	1.44	1,000	
	<b>38866</b>		/50/	<b>656</b>	Indicator	28.0	.06A	.62	T-3¼	Wedge	C-2F	.56	1.06	2,500	
	<b>38196</b>		/50/	<b>657</b>	Indicator	28.0	.08A	.62	T-3¼	Wedge	C-2F	.56	1.06	15,000	79
	<b>81670</b>		/50/	<b>658</b>	Indicator	14.0	.08A	0.31	T-3¼	Wedge	C-2F	0.56	1.06	15,000	
	<b>87407</b>		//1000	<b>680</b>	Aircraft	5.0	.06A	.03	T-1	Wire Terminal	C-2R		.24	100,000	
	<b>87336</b>		//1000	<b>683</b>	Aircraft	5.0	.06A	.05	T-1	Wire Terminal	C-2R		.24	100,000	
	<b>87321</b>		//1000	<b>683AS15</b>	Aircraft	5.0	.06A	.05	T-1	Wire Terminal	C-2R		.24	100,000	
	<b>28706</b>		//1000	<b>685</b>	Aircraft	5.0	.06A	.05	T-1	Sub-Midget Flanged	C-2R	.19	.38	40,000	79
	<b>87276</b>		/1000	<b>685AS15</b>	Aircraft	5.0	.06A	.05	T-1	Sub-Midget Flanged	C-2R		.36	100,000	
<b>43132</b>			/50/	<b>705</b>	Aircraft	28.0	.51A	15	S-8	S.C. Bayonet	CC-6	1.12	2.0	900	
	<b>87411</b>		//1000	<b>713</b>	Aircraft	5.0	.75A	.09	T-1	Wire Terminal	C-2R		.24	100,000	
	<b>29903</b>		//1000	<b>715</b>	Aircraft	5.0	.115A	.15	T-1	Wire Terminal	C-2R		.25	40,000	
	<b>29901</b>		//1000	<b>715AS15</b>	Aircraft	5.0	.115A	.15	T-1	Wire Terminal	C-2R		.25	40,000	
	<b>29916</b>		//1000	<b>718</b>	Aircraft	5.0	.115A	.15	T-1	Sub-Midget Flanged	C-2R		.36	40,000	
	<b>29905</b>		//1000	<b>718AS15</b>	Aircraft	5.0	.115A	.15	T-1	Sub-Midget Flanged	C-2R		.36	40,000	
	<b>26591</b>		/50/	<b>755</b>	Indicator	6.3	.15A	.33	T-3¼	Miniature Bayonet	C-2R	.78	1.19	20,000	
	<b>26593</b>		/50/	<b>756</b>	Indicator	14.0	.08A	.31	T-3¼	Miniature Bayonet	C-2F	.62	1.19	15,000	
	<b>81655</b>		/50/	<b>757</b>	Indicator	28.0	.08A	.62	T-3¼	Miniature Bayonet	C-2F	.62	1.19	15,000	79
	<b>11014</b>		/20/	<b>767</b>	Instrument	6.0	2.00A	19	T-2¼	Miniature Bayonet	C-6	.56	1.13	50	306
	<b>11250</b>		/10/	<b>773</b>	Special Service	12.0	.67A	10	T-2¾	G-4 Two Pin	C-6	.77	1.05	1,000	124, 306
	<b>12723</b>	<b>12724</b>	/10/500	<b>774</b>	Emergency Lighting	12.0	.67A	13	T-2¼	G-4 Two Pin	C-6	.77	1.0	50	124, 306
		<b>47618</b>	//500	<b>777</b>	Flashlight, Halogen	4.0	1.20A	5.5	T-2¼	G-4 Two Pin	C-6	.77	1.0	275	124, 306
	<b>49718</b>		/10/	<b>778</b>	Instrument	6.0	3.33A	32	T-2¾	G-4 Two Pin	C-6	.77	1.05	100	124, 306
	<b>18344</b>	<b>18345</b>	/10/500	<b>780</b>	Strip Light	12.0	10W	12	T-2¾	G-4 Two Pin	C-6	.77	1.05	2,000	124, 306
	<b>44840</b>	<b>44841</b>	/10/500	<b>782</b>	Special Service	12.0	1.66A	25	T-2¾	G-4 Two Pin	C-6	.77	1.05	2,000	124, 306
	<b>44500</b>	<b>44501</b>	/10/500	<b>783</b>	Emergency Lighting	12.0	1.00A	22	T-2¼	G-4 Two Pin	C-6	.77	1.0	50	124, 306
	<b>43760</b>	<b>43761</b>	/10/500	<b>784</b>	Emergency Lighting	6.0	1.00A	9	T-2¼	G-4 Two Pin	C-6	.77	1.0	50	124, 306
	<b>43762</b>	<b>43763</b>	/10/500	<b>785</b>	Emergency Lighting	6.0	1.33A	13	T-2¼	G-4 Two Pin	C-6	.77	1.0	50	124, 306
	<b>43764</b>	<b>43765</b>	/10/500	<b>786</b>	Emergency Lighting	6.0	2.00A	19	T-2¼	G-4 Two Pin	C-6	.77	1.0	50	124, 306
	<b>43115</b>	<b>43116</b>	/10/500	<b>787</b>	Instrument	6.0	1.67A	16	T-2¼	G-4 Two Pin	C-6	.77	1.0	100	124, 306
	<b>43117</b>	<b>43118</b>	/10/500	<b>788</b>	Instrument	6.0	3.33A	32	T-2¼	G-4 Two Pin	C-6	.77	1.0	100	124, 306
	<b>43119</b>		/10/	<b>789</b>	Instrument	12.0	1.17A	22	T-2¾	G-4 Two Pin	C-6	.77	1.05	200	124, 306
	<b>43121</b>	<b>43122</b>	/10/500	<b>790</b>	Instrument	14.0	1.79A	42	T-2¾	G-4 Two Pin	C-6	.77	1.05	200	124, 306
	<b>43123</b>	<b>43124</b>	/10/500	<b>791</b>	Instrument	14.0	2.50A	61	T-2¾	G-4 Two Pin	C-6	.77	1.05	200	124, 306
	<b>20469</b>		/10/	<b>795</b>	Signal	12.8	50W	108	T-4	S.C. Bayonet	C-6	1.25	2.50	200	4, 306



# Miniature & Sealed Beam Lamps

Blister	Order Code Unit	Case Qty. Bulk	GE BP/Unit/Bulk	Lamp No.	Primary Application	Volts	Amps or Watts	MSCP	Bulb	Base	Filament Design	LCL (in)	MOL (in)	Rated Life (hrs)	Warning & Footnotes
<b>MINIATURE LAMPS (CONTINUED)</b>															
	40848	14132	/10/540	862	Tractor	12.8	2.93A	60	T-3¼	Rt Angle Prefocus	C-6	1.25	2.68	1,900	306
12320		20904	48/ /540	880	Auto Fog. H27W/1	12.8	2.10A	43	T-3¼	Axial Prefocus	C-6 C-6	1.25	2.68	300	17, 160, 306 150
		27582	/ /540	880L	Auto Fog. H27W/1	12.8	2.10A	43	T-3¼	Axial Prefocus	C-6	1.25	2.68	300	17, 160, 306
		14694	/ /540	880X	Auto Fog. H27W/1	12.8	2.10A	43	T-3¼	Axial Prefocus	C-6	1.25	2.68	1,000	17, 160, 306
12334		20905	48/ /540	881	Auto Fog. H27W/2	12.8	2.10A	43	T-3¼	Rt Angle Prefocus	C-6 C-6	1.25	2.68	300	17, 160, 306 150
		27583	/ /540	881L	Auto Fog. H27W/2	12.8	2.10A	43	T-3¼	Rt Angle Prefocus	C-6	1.25	2.68	1,000	17, 160, 306
		11646	/ /540	881X	Auto Fog. H27W/2	12.8	2.10A	43	T-3¼	Rt Angle Prefocus	C-6	1.25	2.68	300	17, 160, 306
	13158	13161	/10/1000	882	Auto Inst.	12.8	.35A	3.8	T-2¼	Socket	C-6	.37	1.18	2,000	306
	18167	16772	/10/500	882X	Auto Inst.	12.8	.35A	3.8	T-2¼	G-4 Two Pin	C-6	.77	1.0	2,000	124, 306
12335		20907	48/ /540	885	Auto Fog	12.8	3.90A	100	T-3¼	Axial Prefocus	C-6	1.25	2.68	200	4, 306
14689		20909	48/ /540	886	Auto Fog	12.8	3.90A	100	T-3¼	Rt Angle Prefocus	C-6	1.25	2.68	200	4, 306
		25639	/ /540	887	Tractor Work Light	12.8	3.90A	95	T-3¼	Axial Prefocus	C-6	1.25	2.68	400	4, 306
		25703	/ /540	888	Tractor Work Light	12.8	3.90A	95	T-3¼	Rt Angle Prefocus	C-6	1.25	2.68	400	4, 306
12336		20910	48/ /540	889	Auto – Signal	12.8	2.10A	43	T-3¼	Right Angle	C-6	1.00	2.68	300	306
12337		20911	48/ /540	890	Auto – Signal	12.8	2.10A	43	T-3¼	Axial	C-6	1.00	2.68	300	306
12308	15246	15248	48/10/500	891	Auto High Mounted Stop	12.8	.63A	11	T-2¼	G-4 Two Pin	C-6	.77	1.0	500	306,124
	16481		/10/	892	Auto, Signal	12.8	1.25A	28	T-3¼	Axial	C-6	1.00	2.68	300	306
12338		20913	48/ /540	893	Auto Fog	12.8	2.93A	75	T-3¼	Axial Prefocus	C-6	1.25	2.68	200	4, 17, 160, 306
		12727	/ /540	893X	Auto Fog	12.8	2.93A	75	T-3¼	Axial Prefocus	C-6	1.25	2.68	200	4, 17, 160, 306
22112	20238	18455	48/10/540	894	Tractor	12.8	2.93A	75	T-3¼	Rt Angle Prefocus	C-6	1.25	2.68	200	4, 306
		26345	/ /540	894X	Tractor	12.8	2.93A	75	T-3¼	Rt Angle Prefocus	C-6	1.25	2.68	200	4, 306
22113		20914	48/ /540	896	Auto Fog	12.8	2.93A	75	T-3¼	Rt Angle Prefocus	C-6	1.25	2.68	200	4, 17, 160, 306
		12271	/ /540	898	Auto Fog	12.8	2.93A	60	T-3¼	Rt Angle Prefocus	C-6	1.25	2.68	1,900	4, 17, 160, 306
22111		12272	48/ /540	899	Auto Fog	12.8	2.93A	60	T-3¼	Axial Prefocus	C-6	1.25	2.68	1,900	4, 17, 160, 306
14273		14007	48/ /1000	901	Garden & Security	12.8	.31A	2.9	T-5	Wedge	C-2R	0.81	1.49	500	
40675			30/ /	901A	Garden & Security. Amber	12.8	.31A	-	T-5	Wedge	C-2R	0.81	1.49	500	
23024	40462	40463	48/50/1000	904	Auto – Heavy Duty	13.5	.69A	4	T-5	Wedge	C-2F	.81	1.49	5,000	4
12366	40289	40290	48/50/1000	906	Auto – Heavy Duty	13.0	.69A	6	T-5	Wedge	C-2F	.81	1.49	1,000	
		48505	/ /1000	906A	Auto, Side Signal-Amber	13.0	.69A	-	T-5	Wedge	C-2F	.81	1.49	1,000	
	44754	44755	/50/1000	908	Emergency Lighting	6.0	1.50A	12	T-5	Wedge	C-2R	0.81	1.49	50	
	44756	44757	/50/1000	909	Emergency Lighting	6.0	.62A	3	T-5	Wedge	C-2R	0.81	1.49	50	
12365	40504	40505	48/50/1000	912	Auto – Heavy Duty	12.8	1.00A	12	T-5	Wedge	C-2R	.81	1.49	1,000	
		44769	/50/	914	Emergency Lighting	4.0	.90A	3.5	T-5	Wedge	C-6	0.75	1.49	50	
	44771	44772	/50/1000	915	Emergency Lighting	12.0	.75A	11	T-5	Wedge	C-2R	0.81	1.49	50	
23025		16288	48/ /1000	916	Auto, Side Marker	13.5	.54A	2	T-5	Wedge	C-2F	.81	1.49	10,000	
23026	21860		48/50/	916NA	Auto, Side Marker. Amber	13.0	.54A	1.5	T-5	Wedge	C-2F	.81	1.49	10,000	
		44801	/ /1000	917	Home Appliance	12.0	1.20	10	T-5	Wedge	C-2F	.81	1.49	1,200	
40179	17837	14008	30/50/2000	918	Garden & Security	12.8	.56A	6.5	T-5	Wedge	C-2R	.81	1.49	500	
26199			48/ /	920	Auto	12.8	1.20A	10	T-5	Wedge	-	.81	1.49	1,200	
12307	43374	11743	48/50/1000	921	Auto – Heavy Duty	12.8	1.40A	21	T-5	Wedge	C-2R	.81	1.49	500	121
85938			25/ /	921XEBP	Undercabinet Fixture	12.8	18W	21.17	T-5	Wedge	C-2R	.81	1.49	10,000	
23027	13274	13275	48/50/1000	922	Auto – Heavy Duty	12.8	.98A	15	T-5	Wedge	C-2R	.81	1.49	200	
40180			30/ /	923	Garden & Security	12.8	.91A	12.5	T-5	Wedge	C-2R	.81	1.49	500	
		13483	/50/	926	Emergency Lighting	4.0	1.80A	7.5	T-5	Wedge	C-2R	0.81	1.49	50	
	13485	13486	/50/1000	927	Emergency Lighting	6.0	1.20A	8	T-5	Wedge	C-2R	0.81	1.49	50	
	16975	15285	/50/1000	939	Emergency Lighting	6.0	.90A	5.4	T-5	Wedge	C-2R	0.81	1.49	50	





# Miniature & Sealed Beam Lamps

Order Code Blister	Case Qty. Unit	GE Lamp No.	Primary Application	Volts	Amps or Watts	MSCP	Bulb	Base	Filament Design	LCL (in)	MOL (in)	Rated Life (hrs)	Warning & Footnotes	
<b>MINIATURE LAMPS (CONTINUED)</b>														
	23684	//2000	963	Emergency Lighting	6.0	2.00A	15 T-5	Wedge	C-2R	0.81	1.49	50		
12367	26709	48/50/	1003	Auto Interior	12.8	.94A	15 B-6	S.C. Bayonet	C-6	1.06	1.75	200		
47800		48//	1003KR	Auto Interior. Long Life	12.8	.94A	15 B-6	S.C. Bayonet	C-6	1.06	1.75	400		
12373	26726	26728	48/50/500	1004	Auto Interior and Marine	12.8	.94A	15 B-6	D.C. Bayonet	C-6	1.06	1.75	200	
	26775	/50/	1034	Auto Stop Tail Signal	12.8 14.0	1.80A .59A	32 S-8 3	D.C. Index	C-6	1.25	2	200 5,000		
	32147	/10/	1062	Special Service	40.0	.92A	50 RP-11	D.C. Bayonet	C-5	1.25	2.25	100	305	
40134	26838	48/50/	1073	Auto Signal	12.8	1.80A	32 S-8	S.C. Bayonet	C-6	1.25	2.0	200		
	26854	/50/	1076	Auto	12.8	1.80A	32 S-8	D.C. Bayonet	C-6	1.25	2.0	200		
	37169	/10/	1096	Instrument, Microscope	6.0	4.50A	30 S-8	D.C. Pf. (S)	C-2R	1.00	2.0	500		
	26872	/10/	1129	Special Service	6.4	2.63A	21 S-8	S.C. Bayonet	C-6	1.25	2.0	200		
	26885	/10/	1133	Instrument	6.2	3.91A	32 RP-11	S.C. Bayonet	C-2R	1.25	2.25	200	305	
12346	26903	26905	48/50/500	1141	Auto	12.8	1.44A	21 S-8	S.C. Bayonet	C-6	1.25	2.0	1,000	
47802		48//	1141KR	Auto. Long Life	12.8	1.44A	21 S-8	S.C. Bayonet	C-6	1.25	2.0	2,000		
	26917	26919	/50/500	1142	Auto	12.8	1.44A	21 S-8	D.C. Bayonet	C-6	1.25	2.0	1,000	
	26945	/10/	1152	Special Service	12.8	1.34A	21 S-8	D.C. Bayonet	C-2R	1.25	2	500		
12297		48//	1154	Auto Stop, Tail, Signal	6.4 7	2.63A .75A	21 S-8 3	D.C. Index	C-6	1.25	2	200 1,000		
	26955	/50/	1155	Auto, Truck Marker	13.5	.59A	4 G-6	S.C. Bayonet	2C-2R	.81	1.44	5,000	4	
12344	26960	26962	48/50/500	1156	Auto Stop	12.8	2.10A	32 S-8	S.C. Bayonet	C-6	1.25	2.0	1,200	
23334		48//	1156KR	Auto Stop. Long Life	12.8	2.10A	32 S-8	S.C. Bayonet	C-6	1.25	2.0	2,400		
21028	20248	48/50/	1156NA	Auto Stop. Amber	12.8	2.10A	24 S-8	S.C. Bayonet	C-6	1.25	2.0	1,200		
12294	26969	26971	48/50/500	1157	Auto Stop, Signal	12.8 14.0	2.10A .59A	32 S-8 3	D.C. Index	C-6 C-6	1.25	2.0	1,200 5,000	
23337		48//	1157KR	Auto Stop, Signal. Long Life	12.8 14.0	2.10A .59A	32 S-8 3	D.C. Index	C-6 C-6	1.25	2.0	2,400 10,000		
12310	26975	26976	48/50/500	1157NA	Amber Amber	12.8 14.0	2.10A .59A	24 S-8 2.2	D.C. Index	C-6 C-6	1.25	2.0	1,200 5,000	
47798		48//	1157 NAKR	Auto Stop, Amber. Long Life	12.8 14.0	2.10A .59A	24 S-8 2.2	D.C. Index	C-6 C-6	1.25	2.0	2,400 10,000		
	27004	/10/	1176	Auto Stop, Tail, Signal	12.8 14.0	1.34A .59A	21 S-8 6	D.C. Bayonet	C-6 C-6	1.25	2.0	300 1,500		
	27021	27023	/50/500	1195	Auto – Nickel-plated base	12.5	3.00A	50 RP-11	S.C. Bayonet	C-2R	1.25	2.25	300	305
	27026	/10/	1196	Auto	12.5	3.00A	50 RP-11	D.C. Bayonet	C-2R	1.25	2.25	300	305	
	27032	/10/	1203	Special Service	28.0	.71A	21 S-8	S.C. Bayonet	C-2V	1.25	2.0	400		
	27044	/50/	1224	Marine	34.0	.16A	3.8 G-6	D.C. Bayonet	C-2F	.69	1.44	500	147	
	39904	/10/	1229	Emergency Lighting	40.0	.38A	15 S-8	D.C. Bayonet	C-2V	1.12	2.0	400		
	81679	/50/	1251	Instrument, filaments in series	28.0	.23A	3 G-6	S.C. Bayonet	2C-2V	.75	1.44	2,000		
	27097	/50/	1252	Instrument, filaments in series	28.0	.23A	3 G-6	D.C. Bayonet	2C-2V	.75	1.44	2,000		
41755	22523	48/10/	1295NA	Auto Signal	12.5	3.00A	37 S-8	S.C. Bayonet	C-2R	1.25	2.0	200		
	12824	/50/	1308	Aircraft Reading	28.0	.56A	16 B-6	S.C. Bayonet	CC-8	1.06	1.75	2,000		
	81656	/50/	1309	Aircraft Interior	28.0	.52A	15 B-6	S.C. Bayonet	2C-2R	1.06	1.75	300		
	81667	/50/	1315	Aircraft Emergency Lighting	2.5	1.00A	1.75 G-5	S.C. Bayonet	C-6	.69	1.25	20	116	
	34265	/50/	1317	Aircraft Emergency Lighting	6.00	.51A	3.4 B-6	S.C. Bayonet	C-6	1.12	1.75	100	116	
	27150	/10/	1383	Auto, Reading Light	13.0	20W	– R-12	S.C. Bayonet	C-8	–	2.63	300		
	27154	/10/	1385	Special Reading Light	28.0	20W	– R-12	S.C. Bayonet	CC-8	–	2.63	300		
	27159	/10/	1388	Special Telephone Trouble	24.0	20W	– R-12	D.C. Bayonet	CC-8	–	2.63	500		
	27179	/50/	1408	Signal	10.0	.13A	.85 T-3/4	Miniature Bayonet	C-2V	.62	1.19	250	13	
	27193	/10/	1434	Instrument, Photocell exciter	3.7	2.75A	11 T-5	S.C. Bayonet	C-6	1.12	1.75	100		



# Miniature & Sealed Beam Lamps

Order Code Blister	Case Qty. Unit	GE Lamp No.	Primary Application	Volts	Amps or Watts	MSCP	Bulb	Base	Filament Design	LCL (in)	MOL (in)	Rated Life (hrs)	Warning & Footnotes		
<b>MINIATURE LAMPS (CONTINUED)</b>															
12329	27207	27209	48/50/4000	1445	Auto / Toy Train Ratings	14.4	.135A	.7	G-3½	Miniature Bayonet	C-2V	.50	.94	2,000	13
	27252		/50/	1449	Toy Train	14.0	.20A	2	G-3½	Miniature Screw	C-2V	.72	.94	250	13
	27263		/50/	1450	Indicator	24.0	.035A	.23	G-3½	Miniature Bayonet	C-2F	.50	.94	3,000	
	28310		/10/	1460	Medical	6.5	2.75A	23	S-8	D.C. Pf. (A)	C-6	1.25	2.0	100	11
	81669	37343	/10/500	1460X	Microscope Illuminator	6.5	2.75A	23	S-8	D.C. Pf. (A)	C-6	1.25	2.0	100	11
	27305		/10/	1468	Medical Instrument	6.0	4.50A	30	S-8	D.C. Pf. (S)	C-2R	1.25	2.0	500	
	27356		/50/	1487	Indicator	14.0	.20A	1.4	T-3¼	Miniature Screw	C-2F	.94	1.19	3,000	
	27382		/10/	1493	Instrument, Microscope	6.5	2.75A	23	S-8	D.C. Bayonet	C-6	1.12	2.0	100	11
	81657		/10/	1495	Aircraft	28.0	.30A	6	T-4½	Miniature Bayonet	C-2F	.62	1.38	500	14
	81678		/10/	1495X	Aircraft – Gas filled	28.0	.30A	6	T-4½	Miniature Bayonet	C-2F	.62	1.38	500	
	27431		/10/	1561	Instrument, Colorimeter	6.3	4.00A	24	S-11	S.C. Pf. (B)	C-8Z	.88	2.38	1,500	
	81672		/10/	1591	Auto	28.0	.61A	15	S-8	S.C. Bayonet	C-2V	1.12	2.0	1,000	13
	40945		/50/	1591AF	Aircraft – All frosted	28.0	.61A	–	S-8	S.C. Bayonet	C-2V	–	2.0	1,000	13
	27439		/10/	1594	Instrument, Microscope	6.0	5.00A	36	S-8	D.C. Bayonet	C-6	1.25	2.0	250	
	27461		/10/	1612	Instrument	5.4	1.90A	10	S-8	D.C. Bayonet	C-6	1.25	2.0	1,000	147
	27472		/10/	1619	Instrument	6.7	1.90A	15	S-8	S.C. Bayonet	C-6	1.12	2.0	500	
	27488	27489	/10/500	1630	Instrument, Microscope	6.5	2.75A	23	S-8	D.C. Pf. (A)	C-6	1.00	2.0	100	11
	27491		/10/	1631X	Instrument, Colorimeter	6.5	2.75A	23	S-8	D.C. Pf. (A)	C-6	1.00	2.0	100	11
	27496		/10/	1634	Instrument, Microscope	20.0	1.00A	24	S-8	D.C. Pf. (A)	CC-6	1.25	2.0	200	
	27504		/50/	1638	Marine	28.0	1.02A	32	S-8	D.C. Bayonet	2C-6	1.25	2.0	500	
	27529	27530	/10/500	1662	Aircraft	28.0	.93A	32	S-8	D.C. Index	CC-6	1.25	2.0	400	13, 15, 33
						28.0	.34A	6	S-8	D.C. Index	C-2V	–	–	1,000	
	27532		/50/	1665	Aircraft	28.0	.80A	21	S-8	S.C. Bayonet	C-2V	1.12	2.0	1,000	13
	81658		/50/	1665AF	Aircraft – All frosted	28.0	.80A	–	S-8	S.C. Bayonet	C-2V	–	2.0	1,000	13
	27548		/10/	1680	Aircraft	6.0	4.10A	32	S-8	S.C. Bayonet	C-6	1.25	2.0	300	
	81668		/10/	1680X	Aircraft	6.0	4.10A	32	S-8	S.C. Bayonet	C-6	1.25	2.0	300	
	27557		/50/	1683	Aircraft. Series filament	28.0	1.02A	32	S-8	S.C. Bayonet	2C-6	1.25	2.0	500	
	27566		/50/	1691	Aircraft. Series filament	28.0	.61A	15	S-8	S.C. Bayonet	2C-2R	1.12	2.0	1,000	
	27568		/50/	1691AF	Aircraft. Frosted	28.0	.61A	–	S-8	S.C. Bayonet	2C-2R	–	2.0	1,000	
	27571		/10/	1692	Marine	28.0	.61A	15	S-8	D.C. Bayonet	2C-2R	1.12	2.0	1,000	
		87408	/ /1000	1764	Aircraft	28.0	.04A	.34	T-1¼	Wire Terminal	C-2F	–	.4	4,000	
	27630		/10/	1777	Aircraft Tail Light	12.8	1.52A	26	S-8	S.C. Bayonet	C-2R	1.12	2.0	400	
	27667		/50/	1813	Radio	14.4	.10A	.86	T-3¼	Miniature Bayonet	C-2V	.62	1.19	1,000	13
	27677	27679	/50/4000	1815	Indicator	14.0	.20A	1.4	T-3¼	Miniature Bayonet	C-2F	.75	1.19	3,000	147
12359	27688		48/50/	1816	Aircraft and Auto	13.0	.33A	3	T-3¼	Miniature Bayonet	C-2V	.62	1.19	1,000	13
	81659		/50/	1818	Aircraft	24.0	.17A	3.3	T-3¼	Miniature Bayonet	C-2F	.62	1.19	250	147
	81660	81661	/50/1000	1819	Indicator	28.0	.04A	.34	T-3¼	Miniature Bayonet	C-2F	.62	1.19	2,500	
	81663		/50/	1820	Indicator	28.0	.10A	1.6	T-3¼	Miniature Bayonet	C-2F	.62	1.19	1,000	
	27749		/50/	1822	Indicator	36.0	.10A	2.1	T-3¼	Miniature Bayonet	C-2F	.62	1.19	1,000	
	27772		/50/	1828	Indicator	37.5	.05A	.65	T-3¼	Miniature Bayonet	C-2F	.62	1.19	3,000	
	81664		/50/	1829	Indicator	28.0	.07A	1	T-3¼	Miniature Bayonet	C-2F	.62	1.19	1,000	
	27804		/50/	1835	Indicator	55.0	.05A	1.1	T-3¼	Miniature Bayonet	C-2F	.62	1.19	5,000	
	27816		/50/	1843	Indicator	28.0	.022A	.2	T-3¼	Miniature Bayonet	C-2F	.62	1.19	3,000	15
	27819		/50/	1847	Radio, TV	6.3	.15A	.38	T-3¼	Miniature Bayonet	C-2R	.78	1.19	5,000	44
	27833		/50/	1850	Signal	5.0	.09A	.25	T-3¼	Miniature Bayonet	C-2R	.62	1.19	1,500	116
	81665	81666	/50/1000	1864	Aircraft	28.0	.17A	3	T-3¼	Miniature Bayonet	C-2F	.62	1.19	1,500	
	27868		/50/	1866	Radio	6.3	.25A	.65	T-3¼	Miniature Bayonet	C-2R	.78	1.19	5,000	44
	40383	40384	/50/1000	1873	Aircraft	28.0	.20A	3	T-3¼	Miniature Bayonet	C-2F	.62	1.19	7,000	
	27889		/10/	1876	Photoelectric Scanner	3.5	2.50A	6.5	T-5	S.C. Bayonet	C-6	1.12	1.75	2,000	
	27907		/50/	1889	Auto – Heavy Duty	14.0	.27A	2	T-3¼	Miniature Bayonet	C-2F	.56	1.19	2,000	
12331	27917		48/50/	1891	Auto, Radio and Indicator	14.0	.24A	2	T-3¼	Miniature Bayonet	C-2F	.62	1.19	500	



Order Code Blister	Case Qty. Unit	GE Bulk	Case Qty. BP/Unit/Bulk	GE Lamp No.	Primary Application	Volts	Amps or Watts	MSCP	Bulb	Base	Filament Design	LCL (in)	MOL (in)	Rated Life (hrs)	Warning & Footnotes
<b>MINIATURE LAMPS (CONTINUED)</b>															
	27927		/50/	1892	Auto and Indicator	14.4	.12A	.75	T-3¼	Miniature Bayonet	C-2F	.62	1.19	1,000	
12332	27935	27937	48/50/4000	1893	Auto – Heavy Duty	14.0	.33A	2	T-3¼	Miniature Bayonet	C-2F	.62	1.19	7,500	
12330	27945	27948	48/50/4000	1895	Auto, Truck Marker	14.0	.27A	2	G-4½	Miniature Bayonet	C-2F	.56	1.07	2,000	
	34021		/10/	1939X	Aircraft Marker	28.0	1.79A	70	T-7	S.C. Bayonet	C-2V	1.25	2.16	300	13, 14
	28008		/10/	1940	Aircraft Marker	14.0	3.57A	75	T-7	S.C. Bayonet	C-8Z	1.25	2.16	300	14
	45087		/10/	1944X	Special Service - silver contact	14.0	3.57A	75	T-7	S.C. Bayonet	C-8Z	1.25	2.25	300	14
	18617		/10/	1946	Aircraft	28.0	250W	660	T-3	Two Pin with Leads	CC-6	.87	1.46	50	304
	28011		/10/	1958	Aircraft	28.0	150W	250	T-4	Tab	CC-8	.75	2.25	300	304
	39641		/10/	1962B	Special Service	8.5	62W	110	T-3	Wire Terminal	C-6	.285	1.14	50	304
	12859		//100	1962BG	Aircraft	8.5	62W	110	T-3	Wire Terminals	C-6	.285	1.14	50	304
	37947		//100	1962DX	Special Service	8.5	62W	80	T-3	Wire Terminals	C-6	.285	1.14	150	304
	44152		/10/	1962DZ	Special Service	8.5	62W	80	T-3	Wire Terminals	C-6	.285	1.14	150	304
	13667		/10/	1962TY	Medical	8.5	62W	110	T-3	Wire Terminals	C-6	.285	1.14	50	304
	28034		/10/	1968	Aircraft Gunsight	28.0	25W	15	T-3	Double Slide	C-2V	.41	1.17	500	13, 304
	28036		/10/	1970	Aircraft	28.0	100W	150	T-3	Special Sleeve	CC-8	–	2.25	1,000	304
	41938		/10/	1970X	Aircraft	28.0	100W	140	T-3	Special Sleeve	CC-8	–	2.25	1,000	13, 304
	32780		/10/	1974	Instrument	6.0	20W	10	T-3	Wire Terminals	C-6	.285	1.14	10,000	304
	38545		/10/	1978X	Aircraft Navigation	10.0	100W	130	T-3	Special	C-8	–	2.15	2,000	304
	38627		/10/	1982	Aircraft Navigation	28.0	75W	110	T-3	S.C. Bayonet	CC-8	1.06	1.88	1,000	13, 304
	21061		/10/	1982SP	Aircraft – Quartz Bulb	28.0	75W	107	T-3	S.C. Bayonet	CC-6	1.00	1.97	2,000	304
	39718		/10/	1983	Aircraft – Navigation	10.0	100W	130	T-4	Two Pin	C-8	1.25	1.80	2,000	304
	44717		/10/	1986	Aircraft – Quartz bulb	28.0	250W	600	T-4	Wire Terminal	CC-6	1.03	2.00	100	304
	47695		/10/	1987	Aircraft – Quartz bulb	28.0	150W	240	T-4	D.C. Bayonet	CC-6	1.18	2.44	700	304
	38535		/10/	1988	Aircraft Gunsight	10.0	100W	130	T-3	Special Wire Leads	C-8	–	2.15	2,000	304
12326	19280		48/10/	2040	Auto Light Bar	12.8	.625A	10.5	T-2¼	Wedge	C-6	.40	1.25	500	306
12296	44760	18620	48/50/500	2057	Auto Stop, Signal	12.8 14.0	2.10A .48A	32 2	S-8	D.C. Index	C-6 C-6	1.25	2.0	1,200 5,000	
23339	10018		48/ /500	2057KR	Auto Stop, Signal. Long Life	12.8 14.0	2.10A .48A	32 2	S-8	D.C. Index	C-6 C-6	1.25	2.0	2,400 10,000	
12312	44763	44764	48/50/500	2057NA	Auto Stop, Signal. Amber	12.8 14.0	2.10A .48A	24 1.5	S-8	D.C. Index	C-6 C-6	1.25	2.0	1,200 5,000	
47799			48/ /	2057 NAKR	Auto Stop. Amber. Long Life	12.8 14.0	2.10A .48A	24 1.5	S-8	D.C. Index	C-6 C-6	1.25 1.25	2.0	2,400 10,000	
	12899		//600	2058U	Auto/Truck Stop, Signal	12.8 14.0	2.10A .48A	32 2	S-8	Wire Terminals	C-6 C-6	–	1.81	1,200 5,000	113
	26697		/10/	2059	Aircraft-Reading Lamps	12.0	.833A	9.1	T-2½	Miniature Bayonet	C-8	0.59	1.30	4,000	304
	26698		/10/	2059X	Aircraft-Reading Lamps	12.0	.833A	8	T-2½	Miniature Bayonet	C-8	0.59	1.30	4,000	304
	21494		/10/	2074	Instrument	7.0	25W	24	T-3	Wire Terminals	C-6	.285	1.14	2,700	304
	28085		//600	2144	Auto/Truck	12.8	2.10A	32	S-8	Wire Terminals	C-6	–	1.75	1,200	113
	32701		//500	2155	Truck	28.0 28.0	.93A .34A	32 6	S-8	Wire Terminals	CC-6 C-2V	–	1.75	400 1,000	13, 15
	34763		/50/	2232	Aircraft	28.0	.643A	18	S-8	S.C. Bayonet	CC-8	1.19	2.0	2,000	
	26702		/50/	2232LL	Aircraft Long Life	28.0	.643A	18	S-8	S.C. Bayonet	CC-8	1.19	2.0	4,000	
	81677		/10/	2232SB	Aircraft. Reflectorized	28.0	.643A	–	S-8	S.C. Bayonet	CC-8	1.19	2.0	2,000	
	36906		/10/	2233	Aircraft	28.0	.766A	21	S-8	S.C. Bayonet	CC-8	1.19	2.0	2,000	
	44964		//1000	2286D	Auto/Truck	14.0	.35A	2.7	T-3¼	Wire Term Down	C-2F	–	1.05	1,500	
	28100		/10/	2331	Instrument	5.9 6.2	4.66A 4.49A	32 32	RP-11	D.C. Pf. (S)	C-6	1.18	2.25	400 400	305
12298	16291	16290	48/50/500	2357	Auto Stop, Signal	12.8 14.0	2.20A .59A	40 3	S-8	D.C. Index	C-6 C-6	1.25	2.0	400 5,000	
12299	15698	15699	48/50/500	2357NA	Auto Stop, Signal. Amber	12.8 14.0	2.20A .59A	30 2.2	S-8	D.C. Index	C-6 C-6	1.25	2.0	400 5,000	



# Miniature & Sealed Beam Lamps

Order Code Blister Unit	Case Qty. Bulk	GE BP/Unit/Bulk Lamp No.	Primary Application	Volts	Amps or Watts	MSCP	Bulb	Base	Filament Design	LCL (in)	MOL (in)	Rated Life (hrs)	Warning & Footnotes	
<b>MINIATURE LAMPS (CONTINUED)</b>														
18047	/10/	2396	Auto Stop	12.8	2.23A	40	S-8	S.C. Bayonet	C-6	1.25	2.0	400		
27560	48/	2397	Auto Stop, Signal	12.8 14.0	2.23A .48A	40 2	S-8	D.C. Index	C-6 C-6	1.25	2.0	400 5,000		
19792	/100	2556	Aircraft	28.0	200W	525	T-3	Two Pin	CC-6	.87	1.46	50	304	
19566	/100	2586	Aircraft	28.0	250W	600	T-4	Two Pin with Leads	CC-6	1.30	1.90	100	304	
43805	/10/	2604X	Instrument – Lens end	5.0	2.00A		TL-2 <sup>3</sup> / <sub>4</sub>	G-4 Two Pin	C-6	–	1.18	5,000	124, 128, 306	
36508	/10/	3011	Aircraft	28.0	1.29A	44	S-11	S.C. Bayonet	C-2V	1.25	2.38	1,000	13	
12305	18389	48/50/	3057	Auto Stop, Signal	12.8 14.0	2.10A .48A	2 2	S-8	Plastic Wedge	C-6 C-6	1.10	2.09	1,200 5,000	
26378	48/	3057KR	Auto Stop, Signal. Long Life	12.8 14.0	2.10A .48A	32 2	S-8	Plastic Wedge	C-6 C-6	1.1	2.09	2,000 10,000		
12313	18391	48/50/	3057NA	Auto Stop, Signal. Amber	12.8 14.0	2.10A .48A	24 1.5	S-8	Plastic Wedge	C-6 C-6	1.10	2.09	1,200 5,000	
14698	/10/	3078	Aircraft Navigation	10.0	100W	95	T-3	Special	C-8	–	2.15	4,500	304	
23028	48/	3155	Auto Signal	12.8	1.60A	21	S-8	Plastic Wedge	C-6	1.10	2.09	1,500		
12351	21863	48/50/	3156	Auto Stop	12.8	2.10A	32	S-8	Plastic Wedge	C-6	1.10	2.09	1,200	
27565	48/	3156KR	Auto Stop. Long Life	12.8	2.10A	32	S-8	Plastic Wedge	C-6	1.10	2.09	2,000		
12306	17172	48/50/	3157	Auto Stop, Signal	12.8 14.0	2.10A .59A	32 3	S-8	Plastic Wedge	C-6 C-6	1.10	2.09	1,200 5,000	
26377	48/	3157KR	Auto Stop, Signal. Long Life	12.8 14.0	2.10A .59A	32 3	S-8	Plastic Wedge	C-6 C-6	1.10	2.09	2,000 10,000		
12314	17173	48/50/	3157NA	Auto Stop, Signal. Amber	12.8 14.0	2.10A .59A	24 2.2	S-8	Plastic Wedge	C-6 C-6	1.10	2.09	1,200 5,000	
26380	48/	3157 NAKR	Stop, Signal. Amber. Long Life	12.8 14.0	2.10A .59A	24 2.2	S-8	Plastic Wedge	C-6 C-6	1.10 1.10	2.09 2.09	2,000 10,000		
14387	22525	48/50/	3357/3457	Auto Stop, Signal	12.8 14.0	2.10A .59A	40 3	S-8	Plastic Wedge	C-6 C-6	1.10	2.09	400 5,000	
26379	48/	3457KR	Auto Stop, Signal. 3357 Sub	12.8 14.0	2.10A .59A	40 3	S-8	Plastic Wedge	C-6 C-6	1.10	2.09	800 10,000		
14388	22526	48/50/	3357NA/ 3457NA	Auto Stop, Signal. 3457NA Sub	12.8 14.0	2.10A .59A	30 2.2	S-8	Plastic Wedge	C-6 C-6	1.10	2.09	400 5,000	
25834	48/	3496	Auto Japanese Vehicles	12.8 14.0	2.10A .59A	43 3	T-7	D.C. Index	C-6 C-6	–	2.00	600 5,000		
25835	48/	3497	Auto Japanese Vehicles	12.8	2.10A	45	T-7	S.C. Bayonet	C-6	–	2.00	600		
25837	48/	3652	Auto-Japanese Vehicles	13.5	.37A	6	T-3 <sup>3</sup> / <sub>4</sub>	Wedge	–	–	1.06	700		
15657	48/	4157KR	Auto Stop, Signal. Long Life	12.8 14.0	2.23A .59A	32 3	S-8	Plastic Wedge	C-6 C-6	1.10	2.09	3,600 10,000		
47458	48/	4157 NAKR	Stop, Signal. Amber. Long Life	12.8 14.0	2.23A .59A	24 2.2	S-8	Plastic Wedge	C-6 C-6	1.10 1.10	2.09 2.09	3,600 10,000		
28154	/24/	5004CW	Aircraft – Cool White	A.C.	4W	11.9	T-5	Miniature Pinless			6.00	7,500	32, 162, 309	
28155	/24/	5004WW	Aircraft – Warm White	A.C.	4W	11.1	T-5	Miniature Pinless			6.00	7,500	32, 162, 309	
28160	/24/	5008CW	Aircraft – Cool White	A.C.	8W	35.4	T-5	Miniature Pinless			12.00	7,500	32, 162, 309	
28163	/24/	5008WW	Aircraft – Warm White	A.C.	8W	34.6	T-5	Miniature Pinless			12.00	7,500	32, 162, 309	
28168	/24/	5013CW	Aircraft – Cool White	A.C.	13W	65.2	T-5	Miniature Pinless			21.00	7,500	32, 162, 309	
28169	/24/	5013WW	Aircraft – Warm White	A.C.	13W	62.8	T-5	Miniature Pinless			21.00	7,500	32, 162, 309	
27367	/24/	5104CW	Aircraft – Cool White	A.C.	4W	11.9	T-5	Miniature BiPin			6.00	7,500	32, 162, 309	
28173	/24/	5104WW	Aircraft – Warm White	A.C.	4W	11.1	T-5	Miniature BiPin			6.00	7,500	32, 162, 309	
12774	/24/	5106CW	Aircraft – Cool White	A.C.	6W	24.7	T-5	Miniature BiPin			9.00	7,500	32, 162, 309	
33612	/24/	5106WW	Aircraft – Warm White	A.C.	6W	23.9	T-5	Miniature BiPin			9.00	7,500	32, 162, 309	
27466	/24/	5108CW	Aircraft – Cool White	A.C.	8W	35.4	T-5	Miniature BiPin			12.00	7,500	32, 162, 309	
28175	/24/	5108WW	Aircraft – Warm White	A.C.	8W	34.6	T-5	Miniature BiPin			12.00	7,500	32, 162, 309	
12775	/24/	5113CW	Aircraft – Cool White	A.C.	13W	65.2	T-5	Miniature BiPin			21.00	7,500	32, 162, 309	
28178	/24/	5113WW	Aircraft – Warm White	A.C.	13W	62.8	T-5	Miniature BiPin			21.00	7,500	32, 162, 309	



Order Code Blister	Case Qty. Unit	GE Lamp No.	Primary Application	Volts	Amps or Watts	MSCP	Bulb	Base	Filament Design	LCL (in)	MOL (in)	Rated Life (hrs)	Warning & Footnotes	
<b>MINIATURE LAMPS (CONTINUED)</b>														
	29897	//1000	6034BP	Aircraft	28.0	.024A	.15 T-1 $\frac{3}{4}$	BiPin	C-2F	.64		5,000		
	29895	//1000	6034BPGPL	Aircraft	28.0	.024A	.15 T-1 $\frac{3}{4}$	BiPin	C-2F	.64		5,000		
	87360	//1000	6832	Aircraft	5.0	.06A	.05 T-1	Short Wire Terminal	C-2R	.14		100,000		
	87351	//1000	6832AS15	Aircraft	5.0	.06A	.05 T-1	Short Wire Terminal	C-2R	.14		100,000		
	87291	//1000	6839	Aircraft	28.0	.024A	.15 T-1	Sub-Midget Flanged	CC-2F	.36		16,000		
	29893	//1000	6839BPE	Aircraft	28.0	.024A	.15 T-1	BiPin	CC-2F	.35		16,000		
	29894	//1000	6839BPGPL	Aircraft	28.0	.024A	.15 T-1	BiPin	CC-2F	.35		16,000		
	87274	//1000	7132AS15	Aircraft	5.0	.075A	.09 T-1	Short Wire Terminal	C-2R	.14		40,000		
	87402	//1000	7152	Aircraft	5.0	.115A	.15 T-1	Short Wire Terminal	C-2R	.14		40,000		
	97548	//1000	7152AS15	Aircraft	5.0	.115A	.15 T-1	Short Wire Terminal	C-2R	.14		40,000		
	28926	/50/	7387	Indicator	28.0	.04A	.3 T-1 $\frac{3}{4}$	BiPin M-23	C-2F	.50	.61	7,000	79	
	26200	48//	7440	Auto Japanese Vehicles	13.5	1.85A	37 T-7	Wedge / 103 x 16DQ	C-6	-	1.75	300		
	26201	10014	48//1000	7443	Auto Japanese Vehicles	13.5	1.85A	35 T-7	Wedge / 103 x 16DQ	C-6	-	1.75	500	
					13.5	.4A	3		C-6	-	1.75	1,000		
	22432	22389	14542	48/100/200	9003/HB2	Headlamp Type HB2/H4	12.8	67W	119 T-4 $\frac{3}{4}$	P43T-38	C-8	1.12	3.62	150 4, 306
							12.8	60W	72					800
	45470	48//	9003SB	Headlamp. White Light.	12.8	67W	119 T-4 $\frac{3}{4}$	P43T-38	C-8	1.12	3.62	80 4, 306		
					12.8	60W	72		C-8			150		
	18508	13382	18699	48/100/250	9004/HB1	Headlamp. Type HB1	12.8	65W	95 T-4 $\frac{3}{4}$	Axial Prefocus	C-6	1.75	4.17	150 4, 161, 306
							12.8	45W	55					320
	27561	48//	9004HO	Headlamp. HB1. Higher output.	12.8	65W	95 T-4 $\frac{3}{4}$	Axial Prefocus	C-6	1.75	4.17	150 4, 161, 306		
					12.8	42W	56		C-6			640		
	45471	48//	9004SB	Headlamp. HB1. White Light.	12.8	65W	95 T-4 $\frac{3}{4}$	Axial Prefocus	C-6	1.75	4.17	40 4, 161, 306		
					12.8	45W	56		C-6			200		
	13993	11249	20559	48/100/250	9004XL	Headlamp Long life. HB1	12.8	65W	95 T-4 $\frac{3}{4}$	Axial Prefocus	C-6	1.75	4.17	150 4, 161, 306
							12.8	47W	55			850		
	18509	13384	14710	48/100/200	9005/HB3	Headlamp. High Beam. HB3	12.8	65W	135 T-4	Rt Angle Prefocus	C-8	1.24	3.13	800 4, 306
	45472	48//	9005SB	Headlamp. High. White Light	12.8	65W	135 T-4	Rt Angle Prefocus	C-8	1.24	3.13	150 4, 75, 306		
	45866	48//	9005XSL	Headlamp. High. HB3A.	12.8	65W	135 T-4	Axial Prefocus	C-8	1.24	3.13	700 4, 306		
	18510	13397	14711	48/100/200	9006/HB4	Headlamp, Low Beam. HB4	12.8	55W	80 T-4	Rt Angle Prefocus	C-8	1.24	3.13	850 4, 306
	47640	48//	9006HO	Headlamp. Low. Higher Output	12.8	55W	80 T-4	Rt Angle Prefocus	C-8	1.24	3.13	1000 4, 306		
	45473	48//	9006SB	Headlamp. Low. HB4. White Light	12.8	55W	80 T-4	Rt Angle Prefocus	C-8	1.24	3.13	320 4, 75, 306		
	45868	48//	9006XSL	Headlamp, Low. HB4A.	12.8	55W	80 T-4	Axial Prefocus	C-8	1.24	3.13	2,000 4, 306		
	22388	20551	48/100/	9007/HB5	Headlamp High/Low. Type HB5.	12.8	65W	107 T-4 $\frac{3}{4}$	Axial Prefocus	C-8	1.75	4.17	150 4, 161, 306	
							12.8	55W	79			1,100		
	47642	48//	9007HO	Headlamp High/Low. High Output.	12.8	65W	107 T-4 $\frac{3}{4}$	Axial Prefocus	C-8	1.75	4.17	150 4, 161, 306		
					12.8	53W	80		C-8			320		
	10209	//250	9007LL	Headlamp High/Low. Long life	12.8	65W	107 T-4 $\frac{3}{4}$	Axial Prefocus	C-8	1.75	4.17	150 4, 161, 306		
					12.8	55W	79		C-8			1,450		
	45474	48//	9007SB	Headlamp High/Low. White Light	12.8	65W	107 T-4 $\frac{3}{4}$	Axial Prefocus	C-8	1.75	4.17	110 4, 161, 306		
					12.8	58W	80		C-8	1.75	4.17	250		
	14776	//360	9011	Headlamp High. HIR1. Infrared.	12.8	65W	183 T-3 $\frac{1}{4}$	PX20D	C-8	1.25	3.50	150 4, 306		
	47327	//900	9011X HIR	Headlamp High. Infrared.	12.8	65W	183 T-3 $\frac{1}{4}$	PX20D	C-8	1.25	3.50	150 4, 306		
	41495	//360	9012 (HIR2)	Headlamp Low. HIR2. Infrared	12.8	55W	135 T-3 $\frac{1}{4}$	PX 22D	C-8	1.25	2.8	900 4, 306		
	40843	37735	48//200	9145 (H10)	Auto Fog ECE H10	12.8	45W	65 T-4	PY20D	C-8	1.24	3.01	1,500 4, 306	
	45591	48//	56110	Auto-Interior-12V 20W	13.2	1.83A	40 T-3	Miniature Bayonet	C-2R	.59	1.22	100 308		
	47461	48//	58540	Auto-Interior-12V 5W	13.5	.37A	63 T-3	Miniature Bayonet	C-2R	.59	1.22	240 308		



# Miniature & Sealed Beam Lamps

Order Code Blister Unit	Case Qty. Bulk	GE BP/Unit/Bulk Lamp No.	Primary Application	Volts	Amps or Watts	MSCP	Bulb	Base	Filament Design	LCL (in)	MOL (in)	Rated Life (hrs)	Warning & Footnotes	
<b>MINIATURE LAMPS (CONTINUED)</b>														
26696	/10/	<b>A-103</b>	Aircraft-Quartz Bulb- Navigation	28.0	50W	60	T-3	Special	CC-8	-	1.87	1,000	304	
12064	/10/	<b>B1A</b>	Neon Glow (NE-51)	120	1/25W		T-3¼	Miniature Bayonet			1.19	15,000	164	
12065	/10/	<b>B2A</b>	Neon Glow (NE-51H)	120	1/7W		T-3¼	Miniature Bayonet			1.19	25,000	164	
31675	/10/	<b>B7A</b>	Neon Glow (NE-45)	120	1/4W		T-4½	Candelabra Screw			1.53	7,500	164	
23312	48/	<b>C5W</b>	Auto. ECE C5W	13.5	.37A	3.6	T-3½	SV8.5/8			1.45	450		
16124	//144	<b>D2R</b>	Low Beam Reflector System	85	35W	114	T-3	P32d-3	-	1.06	3.09	1,000	1, 2, 310	
15999	//144	<b>D2S</b>	Low Beam Projector System	85	35W	254	T-3	P32d-2	-	1.06	3.09	1,000	1, 2, 310	
25323	48/	<b>DE3021</b>	Dome & Courtesy	14.0	.24A	2	T-2¼	SV7MM			1.15	1,000		
12353	48/	<b>DE3022</b>	Dome & Courtesy	13.0	.38A	3	T-2¼	SV7MM			1.18	1,000		
12354	12084	48/50/	<b>DE3175</b>	Dome & Courtesy	13.0	.77A	9.55	T-3¼	SV8.5MM		1.25	400		
12085	/10/	<b>DE3425</b>	Dome & Courtesy	13.0	.77A	9.55	T-4	SV8.5MM			1.50	400		
23324	48/	<b>DE7576</b>	Strip. Auto DIN 72601K	13.5	.74A	9.8	T-3½	SV8.5/8			1.65	200		
40336	27328	32376	48/10/300	<b>H1-55</b>	Auto ECE. GE50310/1	13.2	62W	123	T-3½	P14.5S	C-8	1.08	2.66	225 308
27569	/10/	<b>H1-70/28V</b>	Auto. ECE. GE50320/1	28.0	80W	151	T-3½	P14.5S	C-8	1.08	2.46	600	308	
27329	/10/	<b>H1-100</b>	Off Road Auxiliary. GE52140	13.2	100W	219	T-3½	P14.5S	C-8	1.08	2.66	100	308	
27330	/10/	<b>H2-55</b>	Auto. GE50410	13.2	62W	143	T-3½	X511	C-8	.48	1.22	225	308	
23442	//400	<b>H3-35</b>	C.I.M. GE50390	13.2	40W	60	T-3½	PK22S	C-6	.71	1.65	200	308	
12339	27331	22132	48/10/400	<b>H3-55</b>	Auto ECE. GE50340	13.2	62W	115	T-3½	PK22S	C-6	.71	1.65	225 308
23445	//400	<b>H3-55HD</b>	C.I.M. GE50340HD	13.2	62W	111	T-3½	PK22S	C-6	.71	1.65	600	308	
35044	//400	<b>H3-55LL</b>	Auto ECE GE50340LL. Long Life	13.2	64W	106	T-3½	PK22S	C-6	.71	1.65	2,000	308	
23428	//400	<b>H3-65/28V</b>	C.I.M. GE52590HD	28.0	66W	102	T-3½	PK22S	C-6	.71	1.65	1,000	308	
27332	23438	/10/400	<b>H3-70/28V</b>	C.I.M. GE50350	28.0	75W	135	T-3½	PK22S	CC-6	.71	1.65	225 308	
12341	48/	<b>H3-100</b>	Off Road Auxiliary. GE52130	13.2	92W	187	T-3½	PK22S	C-6	.71	1.65	100	308	
18132	27334	22133	48/10/200	<b>H4-60/55</b>	Auto. GE50440	13.2	71W	138	T-5	P43T-38	C-8	1.12	3.62	225 306
						13.2	66W	80		C-8			900	
27342	30833	/10/200	<b>H4-75/ 70/28V</b>	Bus GE50450	28.0	80W	151	T-5	P43T-38	C-8	1.14	3.62	150 308	
						28.0	73W	95		C-8			300	
26374	35755	48//200	<b>H7-55</b>	Auto ECE, DOT GE58520	13.2	56.5W	115	T-3½	PX26D	C-8	.98	2.36	500 308	
15765	//300	<b>H8</b>	Auto ECE Fog	13.2	40W	64	T-3½	PGJ19-1	C-8	1.06	2.63	400	2, 308	
15827	//300	<b>H9</b>	Auto ECE High Beam	13.2	65W	167	T-3½	PGJ19-5	C-8	1.08	2.63	125	2, 308	
15828	//300	<b>H11</b>	Auto ECE Low Beam	13.2	55W	107	T-3½	PGJ19-2	C-8	1.07	2.63	550	2, 308	
15963	//300	<b>H11LL</b>	Auto ECE Low Beam	13.2	55W	107	T-3½	PGJ19-2	C-8	1.07	2.63	1,400	4, 308	
22961	48//	<b>KPR102</b>	Flashlight - 2D Krypton	2.4	.70A	1.3	B-3½	S.C. Miniature Flanged	C-2R	.25	1.25	15	116	
23151	48//	<b>KPR104</b>	Flashlight - 2D Krypton	2.2	.47A	.47	B-3½	S.C. Miniature Flanged	C-2R	.25	1.25	15	116	
23153	48//	<b>KPR113</b>	Flashlight - 4D Krypton	4.8	.75A	4.1	B-3½	S.C. Miniature Flanged	C-2R	.25	1.25	20	116	
23154	48//	<b>KPR118</b>	Flashlight - 6D Krypton	7.2	.55A	5.2	B-3½	S.C. Miniature Flanged	C-2R	.25	1.25	15	116	
12571	/48/	<b>ML20/ OF-28</b>	Aircraft. Lumiline. Frosted	28.0	20W	-	T-8	Disk	2C-8	-	5.75	500	12	
23306	11601	48//1000	<b>P21W</b>	Auto Stop. (ECE). P25-1.	13.5	1.85A	36.6	S-8	S.C. Bayonet	C-6	1.25	2.0	250	
38655	//1000	<b>P21W LL</b>	Auto Stop (ECE). Long Life	13.5	1.85A	36.6	S-8	S.C. Bayonet	C-6	1.25	2.0	300		
27561	30857	48//1000	<b>P21/4W</b>	Auto Stop, Signal. (ECE)	13.5	1.85A .37A	35 1.19	S-8	D.C. Index	C-6	1.25	2.0	100	
					13.5	.44A	2.78		C-6				100	
23303	11604	48//1000	<b>P21/5W</b>	Auto Stop, Signal. (ECE). P25-2.	13.5	1.85A .44A	35 2.78	S-8	D.C. Index	C-6	1.25	2.0	250	
					13.5	.44A	2.78		C-6				1,000	
	92475	//1000	<b>P21/5W LL</b>	Auto Stop, Signal. Long Life	13.5	1.85A .44A	35 2.78	S-8	D.C. Index	C-6	1.25	2.0	600	
					13.5	.44A	2.78		C-6	1.25	2.0	3,000		
40778	/10/	<b>P21W 24V</b>	Bus Stop-European (ECE)	28.0	1.00A	36.6	S-8	S.C. Bayonet	C-6	1.25	2.0	150		



# Miniature & Sealed Beam Lamps

Order Code Blister Unit	Case Qty. Bulk	GE BP/Unit/Bulk	Lamp No.	Primary Application	Volts	Amps or Watts	MSCP	Bulb	Base	Filament Design	LCL (in)	MOL (in)	Rated Life (hrs)	Warning & Footnotes
<b>MINIATURE LAMPS (CONTINUED)</b>														
	30856	//1000	P21/5W	Bus Stop /Tail. (ECE)	28.0 28.0	1.00A .36A	35 3.18	S-8	D.C. Index	C-6 C-6	1.25	2.0	150 1,500	
	23036	//1000	PC161	Auto Instrument	14.0	.19A	1	T-3¼	Printed Circuit Socket	C-2F	.45	1.11	4,000	
	27222	23037	/10/1000	PC168	Auto Instrument	14.0	.35A	3	T-3¼	Printed Circuit Socket	C-2F	.45	1.11	1,500
	72221	23021	/10/1000	PC194	Auto Inst. & Ind., H.D.	14.0	.27A	2	T-3¼	Printed Circuit Socket	C-2F	.45	1.11	2,500
12675	25181		48/50/	PR2	Flashlight – 2D Cells	2.38	.50A	.8	B-3½	S.C. Miniature Flanged	C-2R	.25	1.25	15 116
12676	25193		48/50/	PR3	Flashlight – 3D Cells	3.57	.50A	1.5	B-3½	S.C. Miniature Flanged	C-2R	.25	1.25	15 116
12677			48/ /	PR4	Flashlight – 2C Cells	2.33	.27A	.4	B-3½	S.C. Miniature Flanged	C-2R	.25	1.25	10 116
	25222		/50/	PR6	Flashlight – 2D Cells	2.47	.30A	.45	B-3½	S.C. Miniature Flanged	C-2R	.25	1.25	30 116
	25235		/50/	PR7	Flashlight – 3D Cells	3.70	.30A	.9	B-3½	S.C. Miniature Flanged	C-2R	.25	1.25	30 116
12680	25252		48/50/	PR12	Flashlight – 5D Cells	5.95	.50A	3.1	B-3½	S.C. Miniature Flanged	C-2R	.25	1.25	15 116
12681	25262		48/50/	PR13	Lantern – 4F Cells	4.75	.50A	2.2	B-3½	S.C. Miniature Flanged	C-2R	.25	1.25	15 116
	25289		/50/	PR18	Flashlight – 6D Cells	7.20	.55A	5.5	B-3½	S.C. Miniature Flanged	C-2R	.25	1.25	3 14, 116
41370	32648	48/ /500	PY21W	Auto Stop. (ECE) – Amber	13.5	1.85A	22.3	S-8	S.C. Bayonet	C-6	1.25	2.0	250	
23314	30859	48/ /2000	R5W LL	Auto. ECE R5W GE 2619	13.5	5W	4.0	G-6	S.C. Bayonet	C-2R	.75	1.47	500	
23322	35417	48/ /2000	R10W LL	Auto. ECE R10W GE 2641	13.5	10W	10.0	G-6	S.C. Bayonet	C-2R	.75	1.47	400	
23318		48/ /	T4W	Auto. ECE T4W GE 2662	13.5	.30A	2.8	T-2¾	Miniature Bayonet	C-2R	.59	1.08	450	
	12756		/50/	TEL/6PSB	Indicator	6.0	.14A	550	T-2	Tel. Slide #5	C-2V	1.11	20,000	80
	12760		/50/	TEL/12PSB	Indicator	12.0	.17A	2,000	T-2	Tel. Slide #5	C-2F	1.11	12,000	80
	29001		/50/	TEL/24E2	Telephone	24.0	.035A	600	T-2	Tel. Slide #3	C-2F	1.69	7,000	80
	12071		/50/	TEL/24PSB	Indicator	24.0	.073A	3,000	T-2	Tel. Slide #5	C-2F	1.11	10,000	80
	12761		/50/	TEL/28MB	Indicator	28.0	.04A	.29	T-2½	Miniature Bayonet	C-2F	–	1.19	5,000
	12072		/50/	TEL/28PSB	Indicator	28.0	.04A	1,600	T-2	Tel. Slide #5	C-2F	1.11	5,000	80
	29041		/50/	TEL/48C2	Telephone	48.0	.035A	750	T-2	Tel. Slide #3	C-2F	1.69	5,000	80
	12075		/50/	TEL/48PSB	Indicator	48.0	.05A	1,800	T-2	Tel. Slide #5	C-7A	1.11	10,000	80
	12076		/50/	TEL/60MB	Indicator	60.0	.05A	.73	T-2½	Miniature Bayonet	C-7A	–	1.19	7,500
	12077		/50/	TEL/60PSB	Indicator	60.0	.05A	1,800	T-2	Tel. Slide #5	C-7A	1.11	7,500	80
	12078		/50/	TEL/ 120MB	Indicator	120.0	.025A	.36	T-2½	Miniature Bayonet	CC-7A	–	1.19	7,500
	12080		/50/	TEL/ 120PSB	Indicator	120.0	.025A	1,000	T-2	Tel. Slide #5	CC-7A	1.11	7,500	80
27562	35030	48/ /2000	W3W	Auto-European ECE	13.5	3W	1.75	T-3¼	Wedge	C-2V	.5	1.06	1,000	13
27563	37640	48/ /2000	W5W	Auto-European ECE	13.5	5W	4	T-3¼	Wedge	C-2V	.5	1.06	300	13
	26353	//1000	W16W	Auto ECEW16W	13.5	1.44A	24.6	T-5	Wedge	C-2F	.81	1.49	250	121



# Miniature & Sealed Beam Lamps

Order Code Unit	Case Qty. Bulk	GE Unit/Bulk	Lamp No.	Bulb	Primary Application	Design Volts	Design Watts	MBCP	Base	MOL (in)	Rated Life (hrs)	Spread to 10% Horiz	MBCP Warning Vert & Footnotes	
<b>SEALED BEAM</b>														
18511	6	4000	PAR46	Headlamp, Low Beam Type 2C1	12.8	37.5W 12.8 60W	SAE	3 Contact Lugs	4	200 320			4	
24327	12	4013	PAR46	Tractor, Flood	6.4	25W	800	Screw Terminals	3.75	300	80	20		
24339	24338	12/60	4014	PAR36	Emergency Bldg. Lighting	6.4	18W	1,500	Screw Terminals	2.75	200	50	25	
24369	12	4019	PAR46	Tractor	6.2	30W	1,200	Screw Terminals	3.75	300	Trapezoidal		23	
38418	12	4040	PAR46	Headlamp, Low. Type 2C1	12.8	37.5W 12.8 60W	SAE	3 Contact Lugs	4	300 500			4	
39585	39586	12/60	4042	PAR36	Emergency Bldg. Lighting	6.4	12W	1,100	Screw Terminals	2.75	150	45	20	
40588	40589	12/60	4044	PAR36	Emergency Bldg. Lighting	12.0	12W	1,100	Screw Terminals	2.75	150	50	25	
10540	10541	12/60	4044-1	PAR36	Emergency Bldg. Lighting	12.0	12W	1,100	Slip-on Terminals	2.75	150	50	25	
25051	12	4313	PAR36	Aircraft Landing	13.0	250W	140,000	Screw Terminals	2.75	25	16	7	302	
39366	39367	12/60	4340	PAR36	Electric Truck Work Light	48.0	80W	2,500	Slip-on Terminals	2.75	400	Trapezoidal	15	
39362	39363	12/60	4350	PAR36	Electric Truck Work Light	36.0	60W	2,100	Slip-on Terminals	2.75	400	Trapezoidal	15	
12961	12	4402A	PAR36	CIM Signal	28.0	50W	1,000	Screw Terminals	2.75	400	50	25		
24425	24423	12/60	4405	PAR36	Spotlight	12.8	30W	50,000	Screw Terminals	2.75	100	6	5	167
24430	24428	12/60	4406	PAR36	Tractor, Flood	12.8	35W	600	Screw Terminals	2.75	300	80	30	4
24439	12	4410	PAR36	Backup Lamp, Tractor Flood	12.8	35W	600	Screw Terminals	2.75	300	80	30	4	
24448	24443	12/60	4411	PAR36	Tractor	12.8	35W	3,000	Screw Terminals	2.75	300	Trapezoidal	4	
37889	37890	12/60	4411-1	PAR36	Tractor	12.8	35W	3,000	Slip-on Terminals	2.75	300	Trapezoidal	4	
	48032	60	4411-3	PAR36	Tractor	12.8	35W	3,000	Combination	2.75	300	Trapezoidal	4	
24454	24453	12/24	4412	PAR46	Fog	12.8	35W	11,000	Screw Terminals	3.75	300	40	7	167
24460	24459	12/24	4412A	PAR46	Fog, Yellow	12.8	35W	8,800	Screw Terminals	3.75	300	40	7	167
22981	24464	12/24	4413	PAR46	Tractor, Flood	12.8	35W	1,100	Screw Terminals	3.75	300	80	20	4
24478	24477	12/60	4414	PAR36	Warning Signal, Garden	12.8	18W	1,500	Screw Terminals	2.75	300	50	25	
24487	12	4414R	PAR36	Warning Signal Red Lens	12.8	18W	275	Screw Terminals	2.75	300	50	25		
22982	24490	12/60	4415	PAR36	Fog	12.8	35W	9,000	Screw Terminals	2.75	300	40	5	167
24499	24497	12/60	4415A	PAR36	Fog, Yellow Lens	12.8	35W	7,000	Screw Terminals	2.75	300	40	5	167
22983	24503	12/60	4416	PAR36	Spotlamp, Signal	12.8	30W	35,000	Screw Terminals	2.75	300	11	4	
	34901	12/60	4416-1	PAR36	Spotlamp, Signal	12.8	30W	35,000	Slip-on Terminals	2.75	300	11	4	
24506	12	4416A	PAR36	Signal, Yellow Lens Cover	12.8	30W	26,000	Screw Terminals	2.75	300	11	4		
24513	12	4416R	PAR36	Signal, Red Lens Cover	12.8	30W	4,000	Screw Terminals	2.75	300	11	4		
24531	24525	12/24	4419	PAR46	Tractor	12.8	35W	1,600	Screw Terminals	3.75	300	Trapezoidal	4	
24539	24541	12/24	4421	PAR46	Auto/Truck, Special	13.0	100W	23,000	Slip-on Terminals	3.75	300	50	7	109, 167
24542	12	4422	PAR36	Tractor	12.8	35W	600	Screw Terminals	2.75	300	75° Cone		4	
24572	12	4434A	PAR46	Bus Signal, Amber Lens	12.8	40W	1,000	Screw Terminals	3.75	100	55	25		
24577	24576	12/24	4435	PAR46	Spotlamp	12.8	30W	75,000	Screw Terminals	3.75	100	5	5	167
24582	12	4436	PAR46	Signal	12.8	35W	60,000	Screw Terminals	3.75	300	10	4		
39932	39933	12/60	4440X	PAR36	Tractor	12.8	40W 12.8 40W	6,000 4,500	3 Contact Lugs	3	320 320	40 33	7 9	4
39748	12	4440X-1	PAR36	Tractor	12.8	40W 12.8 40W	6,000 4,500	3 Slip-on Terminals	2.75	320 320	40 33	7 9	4	
37046	37047	12/60	4446	PAR36	Emergency Bldg. Lighting	12.8	25W	400	Screw Terminals	2.75	300	80	80	
40176	12	4460X	PAR36	Tractor	12.8	40W 12.8 40W	6,500 5,000	3 Screw Terminals	2.75	320 320	22 22	10 13	4	
24592	12	4461	PAR36	Tractor	12.8	60W	6,000	Screw Terminals	2.75	300	Trapezoidal		4	
24596	12	4466	PAR36	Tractor	12.8	60W	1,000	Screw Terminals	2.75	300	80	30	4	
24613	12	4478	PAR46	C.I.M. Flood	13.0	60W	1,600	2 Contact Lugs	4	800	56	32	4	
24627	12	4502	PAR36	Auto Headlamp, Military	28.0	50W	10,000	Screw Terminals	2.75	400	40	7		
24640	24638	12/60	4505	PAR36	Aircraft Navigation	28.0	50W	45,000	Screw Terminals	2.75	400	11	5	
24650	24649	12/60	4509	PAR36	Aircraft Landing Spotlamp	13.0	100W	110,000	Screw Terminals	2.75	25	12	6	167
41503	12	4509X	PAR36	Marine Spotlamp	13.0	100W	110,000	Screw Terminals	2.75	25	12	6	167	





# Miniature & Sealed Beam Lamps

Order Code Unit	Case Qty. Bulk	GE Lamp No.	Bulb	Primary Application	Design Volts	Design Watts	MBCP	Base	MOL (in)	Rated Life (hrs)	Spread to 10% Horiz	MBCP Warning Vert	Notes	
<b>SEALED BEAM (CONTINUED)</b>														
11524	12	4509Y	PAR36	Special Service	13.0	100W	—	Screw Terminals	2.75	25	12	6		
24654	24653	12/60	4510	PAR36	Tractor Flood, Emergency	6.4	25W	800	Screw Terminals	2.75	300	80	20	
24663	24661	12/60	4511	PAR36	Tractor	6.2	30W	2,300	Screw Terminals	2.75	300	Trapezoidal	23	
24673	24671	12/60	4515	PAR36	Spotlamp	6.4	30W	55,000	Screw Terminals	2.75	100	5	5	167
24678	12	4516	PAR36	Spotlamp	6.2	30W	45,000	Screw Terminals	2.75	300	9	4		
24690	12	4519	PAR36	Marine	13.0	100W	30,000	Screw Terminals	2.75	25	40	7		
24700	12	4522	PAR46	Aircraft Landing	13.0	250W	290,000	Screw Terminals	3.13	25	12	10	92, 138, 167	
24721	12	4530	PAR46	Signal, Flashing	26.0	5.3A	100,000	Screw Terminals	3.75	50	11	11		
24726	12	4531	PAR46	Auto Headlamp, Military	12.5	40W	30,000	Screw Terminals	3.75	400	20	5		
19628	12	4532	PAR46	Aircraft	28.0	250W	75M	Screw Terminals	3.75	100	12	19		
					28.0	150W	14,500			100	16	19		
24735	24733	12/24	4535	PAR46	Spotlamp	6.4	30W	95,000	Screw Terminals	3.75	100	5½	4	167
24742	12	4537	PAR46	Aircraft Landing	13.0	100W	200,000	Screw Terminals	3.13	25	11	6	167	
40822	40823	12/24	4537-2	PAR46	Spotlamp	13.0	100W	200,000	Screw Terminals	3.13	25	11	6	
39022	12	4537X	PAR46	Marine Spotlamp	13.0	100W	200,000	Screw Terminals	3.13	25	11	6	167	
24756	12	4541	PAR56	Aircraft Landing	28.0	450W	470,000	Screw Terminals	4.5	25	15	11	167, 302	
24764	12	4543	PAR56	Marine Spotlamp	12.5	100W	250,000	Screw Terminals	4.5	50	9	5		
24768	12	4545	PAR56	Marine Searchlight	12.0	100W	225,000	Screw Terminals	4.5	100	9	5	167	
24780	24783	12/60	4546	PAR36	Hand Lantern	4.7	.5A	6,300	Screw Terminals	2.75	100	3	3	
24770	24775	12/60	4546-1	PAR36	Hand Lantern	4.7	.5A	6,300	Slip-on Terminals	2.75	100	3	3	
24788	12	4547	PAR36	Hand Lantern	4.75	1.25A	20,000	Screw Terminals	2.75	100	3	3		
24795	12	4551	PAR46	Aircraft Taxiing	28.0	250W	75,000	Screw Terminals	3.75	25	50	10	138	
40576	12	4552	PAR64	Aircraft Landing	28.0	250W	500,000	Screw Terminals	3.75	25	7	8	138, 167	
24799	12	4553	PAR46	Aircraft Landing	28.0	250W	300,000	Screw Terminals	3.13	25	11	12	138, 167	
24802	12	4554	PAR46	Aircraft Taxiing	28.0	450W	90,000	Screw Terminals	3.13	25	50	16	302	
40583	12	4555	PAR64	Aircraft Landing	115.0	1,000W	600,000	Screw Terminals	3.75	25	20	11	138, 302	
40581	12	4557	PAR64	Aircraft Landing/Taxiing	28.0	1,000W	540M	3 Screw Terminals	3.75	25	11	15	138, 302	
					28.0	400W	100M			100	25	11		
40578	12	4559	PAR64	Aircraft Landing	28.0	600W	600,000	Screw Terminals	3.75	25	11	12	138, 167	
24828	12	4570	PAR46	Aircraft Taxiing	28.0	150W	32,000	Screw Terminals	3.75	300	50	9		
24830	12	4571	PAR46	Flood, Special Service	28.0	150W	7,000	Screw Terminals	3.75	300	80	25		
24833	12	4572	PAR46	Auto Flood, Military	28.0	150W	4,500	Screw Terminals	3.75	300	55	55		
25005	25007	12/24	4578	PAR46	C.I.M. Flood	28.0	60W	1,600	2 Contact Lugs	4	800	55	30	
25009	25011	12/24	4579	PAR46	C.I.M. Headlamp	28.0	80W	24M	3 Contact Lugs	4	400	25	25	
					28.0	60W	11M			400	7	7		
24859	12	4580	PAR46	Aircraft Landing	28.0	450W	400,000	Screw Terminals	3.75	10	13	14	302	
24862	12	4581	PAR46	Aircraft Landing	28.0	450W	400,000	Screw Terminals	3.13	10	13	14	302	
24853	12	4582	PAR46	Aircraft/Helicopter Flood	28.0	450W	20,000	Screw Terminals	3.75	10	50	55	302	
24867	12	4587	PAR36	Aircraft Taxiing	28.0	250W	40,000	Screw Terminals	2.75	25	40	13	302	
24873	24871	12/60	4589	PAR36	Aircraft Cockpit Flood, C.I.M.	28.0	50W	5,000	Screw Terminals	2.75	400	Trapezoidal		
	23509	60	4589-1	PAR36	Aircraft Cockpit Flood, C.I.M.	28.0	50W	5,000	Slip-on Terminals	2.75	400	Trapezoidal		
24882	12	4591	PAR36	Aircraft Landing	28.0	100W	90,000	Screw Terminals	2.75	25	12	6		
24887	12	4593	PAR36	Aircraft In-Air Refueling	28.0	50W	1,500	Screw Terminals	2.75	400	80	30		
24891	12	4594	PAR36	Aircraft Navigation	28.0	100W	70,000	Screw Terminals	2.75	300	13	7		
24892	12	4595	PAR36	Aircraft Navigation	28.0	100W	60,000	Screw Terminals	2.75	300	14	6		
24898	12	4596	PAR36	Aircraft Landing	28.0	250W	150,000	Screw Terminals	2.75	25	11	12	302	
24964	12	4626	PAR36	Aircraft Taxiing	28.0	150W	25,000	Screw Terminals	2.75	300	40	9		
24966	12	4627	PAR36	Aircraft Flood	28.0	100W	3,000	Screw Terminals	2.75	300	80	30		
33284	12	4635	PAR46	Aircraft Landing	16.5	450W	325,000	Screw Terminals	3.75	25	14	15	302	
19632	16407	12/672	4636-3	PAR46	Signal	14.0	80W	90,000	Combination	3.75	200	9	7½	



# Miniature & Sealed Beam Lamps

Order Code Unit	Case Qty. Bulk	GE Unit/Bulk	Lamp No.	Bulb	Primary Application	Design Volts	Design Watts	MBCP	Base	MOL (in)	Rated Life (hrs)	Spread to 10% MBCP Horiz Vert		Warning & Footnotes
<b>SEALED BEAM (CONTINUED)</b>														
18517	41861	6/576	4651	165mm	Headlamp, High Beam, 1A1	12.8	50W	SAE	2 Contact Lugs	4.8	200			4, 307
18518		6	4652	165mm	Headlamp, Low Beam, 2A1	12.8	40W 60W	SAE	3 Contact Lugs	4.8	200 320			4, 307
39906	39907	12/60	4700	PAR36	Spot/Flood	113.0 13.0	100W 100W	100M	3 Screw Terminals 50M	2.75	25 255	12 17	7 18	
45427		12	4713	PAR36	Aircraft Logo	28.0	150W	4,200	Screw Terminals	2.75	300	50	65	
44724		12	4752	PAR36	C.I.M. Flood	28.0	60W	2,000	Screw Terminals	2.75	800	50	25	
24973		12	4800	PAR56	Auto Headlamp, Military	28.0 28.0	50W 40W	SAE	3 Contact Lugs	5	400 400			
24980		12	4811	PAR36	Auto Headlamp, Military	28.0 28.0	110W 55W	SAE	3 Contact Lugs	3	400 400			
24981	24982	12/60	4825R	PAR36	C.I.M. Stop/Tail Red Lens	28.0 28.0	50W 18W	200	3 Screw Terminals 40	2.75	200 200	-	-	
24995		12	4880	PAR46	C.I.M. Headlamp	28.0	60W	6,000	2 Contact Lugs	4	800	-	-	
45110	45111	12/576	4912-1	165mm	Auto/Truck Fog	12.8	50W	14,000	Slip-on Terminals	4.53	300	40	7	167, 307
	45113	16	4913-1	165mm	Farm Tractor, Flood	12.8	50W	1,350	Slip-on Terminals	4.53	400	80	20	4, 307
45116	16195	12/576	4921-1	165mm	Auto/Truck, Special Service	13.0	100W	25,000	Slip-on Terminals	4.53	300	40	7	109, 307
11639		6	5001	PAR46	Headlamp, High Beam, 1C1	12.8	50W	SAE	2 Contact Lugs	4	300			4
16152		12	5557	PAR64	Aircraft Landing/Taxiing	28.0 28.0	1,000W 400W	540M	3 Screw Terminals 100M	3.75	50 100	11 25	15 11	138, 302
25114		12	6006	PAR56	Auto Headlamp	6.1 6.2	50W 40W	SAE	3 Contact Lugs	5	300 500			
18519		6	6014	PAR56	Auto Headlamp, Type 2D1	12.8 12.8	60W 50W	SAE	3 Contact Lugs	5	320 150			4
38416	38607	12/432	6015	PAR56	Headlamp, Type 2D1	12.8 12.8	50W 50W	SAE	3 Contact Lugs	5	300 500			4
25153		12	6045	PAR56	Signal	26.0	170W	230,000	Screw Terminals	4.5	100	9	8	
18521	43867	6/448	6052	200mm	Auto Headlamp, Type 2B1	12.8 12.8	65W 55W	SAE	3 Contact Lugs	5.44	150 320			4, 307
40190	40191	12/60	7400	PAR36	Signal, Rotating Beacon	12.8	35W	33,000	Slip-on Terminals	2.75	300	12	5	
	42385	60	7400-1	PAR36	Signal, Rotating Beacon	12.8	35W	33,000	Screw Terminals	2.75	300	12	5	
39987	39988	12/60	7414Y	PAR36	Signal, Light Yellow Lens	12.8	18W	1,000	Screw Terminals	2.75	300	50	25	
41865	41866	12/60	7613	PAR36	Emergency Bldg. Lighting	6.0	8W	400	Screw Terminals	2.75	50	30	20	
45101	45102	12/60	7613-1	PAR36	Emergency Bldg. Lighting	6.0	8W	400	Slip-on Terminals	2.75	50	30	20	
11421	11422	12/60	7672-1	PAR36	Emergency Bldg. Lighting	6.0	7.2W	350	Slip-on Terminals	2.75	50	30	20	
22386		6	H4351	140mm	Headlamp Low Beam Type K	12.8	55W	SAE	Right Angle	4	500			307
10211		6	H4351LH	140mm	Auto – Left Drive – Export only	12.8	55W	-	Right Angle	4	500			307
22387		6	H4352	140mm	Headlamp, Upper Beam, Type K	12.8	65W	SAE	Right Angle	4	150			307
	18350	48	H4360	140mm	Tractor	12.8	37.5W	2,000	2 Right Angle Lugs	3	320	Trapezoidal		307
15129		12	H4405	PAR36	Spotlamp, Shielded Bulb	12.8	30W	66,000	Screw Terminals	2.75	100	7	4	167, 307
	17674	60	H4460X	PAR36	Tractor	12.8 12.8	40W 40W	11,000	3 Screw Terminals 8,500	2.75	320 320	22 22	10 13	4, 307
15133		12	H4515	PAR36	Spotlamp, Shielded Bulb	6.4	30W	67,000	Screw Terminals	2.75	100	5.5	4	167, 307
18532	45027	6/576	H4651	165mm	Headlamp, High Beam, Type 1A	12.8	50W	SAE	2 Contact Lugs	4.8	200			4, 307
46375		6	H4651SB	165mm	Headlamp, High, 1A. White Light	12.8	50W	SAE	2 Contact Lugs	4.8	200			4, 307
18533	49810	6/576	H4656	165mm	Headlamp, Low Beam, 2A1	12.8 12.8	35W 35W	SAE	3 Contact Lugs	4.8	200 320			4, 307
14753		6	H4656H0	165mm	Headlamp, Low 2A1. High output	12.8 12.8	40W 55W	SAE	3 Contact Lugs	4.8	200 700			4, 307
45475		6	H4656SB	165mm	Headlamp, Low 2A1. White Light	12.8 12.8	40W 55W	SAE	3 Contact Lugs	4.8	75 200			4, 307



# Miniature & Sealed Beam Lamps

Order Code Unit	Case Qty. Bulk	GE Unit/Bulk	Lamp No.	Bulb	Primary Application	Design Volts	Design Watts	MBCP	Base	MOL (in)	Rated Life (hrs)	Spread to 10% Horiz	MBCP Vert	Warning & Footnotes
<b>SEALED BEAM (CONTINUED)</b>														
18535	22879	6/576	H4666	165mm	Headlamp, High/Low Beam, 2E1	12.8 12.8	65W 55W	SAE	3 Contact Lugs	4.8	150 320			4, 166, 307
18536	48533	6/480	H4701	150mm	Headlamp High Beam Type UF	12.8	65W	SAE	2 Lugs	3.4	150			307
18538	48534	6/480	H4703	150mm	Headlamp, Low Beam Type LF	12.8	55W	SAE	2 Lugs	3.4	320			307
18522	6	H5001	PAR46		Headlamp High Beam, Type 1C1	12.8	50W	SAE	2 Contact Lugs	4	200			4, 307
18523	6	H5006	PAR46		Headlamp, Low Beam Type 2C1	12.8 12.8	35W 35W	SAE	3 Contact Lugs	4	200 320			4, 307
19428	19559	6/432	H5024	PAR56	Headlamp. High/Low. 2D1.	12.8 12.8	65W 42W	SAE	3 Contact Lugs	5	400 2000			4, 307
19411	19556	6/576	H5051	165mm	Headlamp, High. 1A. Long Life	12.8	50W	SAE	2 Contact Lugs	4.8	500			4, 307
19429	19558	6/448	H5054	200mm	Headlamp. High/Low. 2B1.	12.8 12.8	65W 42W	SAE	3 Contact Lugs	5.44	400 2000			4, 307
19412	19557	6/576	H5062	165mm	Headlamp, High/Low. 2A1.	12.8 12.8	40W 55W	SAE	3 Contact Lugs	4.8	400 2000			4, 307
	41453	48	H5360	140mm	Halogen Tractor Work Light	12.8	37.5W	2,000	2 Right Angle Lugs	3	900	Trapezoidal		307
18525	6	H6024	PAR56		Headlamp, High/Low Beam, 2D1	12.8 12.8	65W 35W	SAE	3 Contact Lugs	5	150 320			4, 307
18534	11545	6/448	H6054	200mm	Headlamp, High/Low Beam, 2B1	12.8 12.8	65W 35W	SAE	3 Contact Lugs	5.44	150 320			4, 307
14752	6	H6054HO	200mm		Headlamp, 2B1. High Output.	12.8 12.8	65W 55W	SAE	3 Contact Lugs	5.44	150 700			4, 307
45477	6	H6054SB	200mm		Headlamp, 2B1. White Light	12.8 12.8	65W 55W	SAE	3 Contact Lugs	5.44	75 200			4, 307
43561	43562	12/60	H7550	PAR36	Hand Lantern	6.0	8W	25,000	Screw Terminals	2.75	50	3	3	307
	23541	60	H7550-1	PAR36	Hand Lantern	6.0	8W	25,000	Slip-on Terminals	2.75	50	3	3	307
43564	43565	12/60	H7551	PAR36	Emergency Bldg. Lighting	6.0	8W	550	Screw Terminals	2.75	50	30	20	307
43567	12	H7552	PAR36		Emergency Bldg. Lighting	6.0	10W	650	Screw Terminals	2.75	50	30	20	307
43570	43571	12/60	H7553	PAR36	Emergency Bldg. Lighting	6.0	12W	850	Screw Terminals	2.75	50	30	20	307
	43574	60	H7554	PAR36	Emergency Bldg. Lighting	6.0	20W	1,400	Screw Terminals	2.75	50	30	20	307
44642	44643	12/60	H7555	PAR36	Emergency Bldg. Lighting	12.0	8W	550	Screw Terminals	2.75	50	30	20	307
44924	44925	12/60	H7556	PAR36	Emergency Bldg. Lighting	6.0	6W	400	Screw Terminals	2.75	50	30	20	307
12720	12721	12/60	H7557	PAR36	Emergency Bldg. Lighting	12.0	12W	850	Screw Terminals	2.75	50	30	20	307
42841	42842	12/60	H7600	PAR36	Signal, Rotating Beacon	12.8	37.5W	60,000	Screw Terminals	2.75	300	9	4½	307
43576	43577	12/60	H7604	PAR36	Halogen Spotlamp	12.8	50W	100,000	Screw Terminals	2.75	100	7	5	307
14616	43580	6/60	H7606	PAR36	Tractor, Flood	12.8	50W	1,000	Screw Terminals	2.75	400	80	30	4, 307
	17672	60	H7607	PAR36	Tractor Flood	12.8	65W	1,500	Screw Terminals	2.75	600	Non-Symmetrical		4, 307
14617	43583	6/24	H7609	PAR46	Tractor Flood	12.8	50W	2,200	Screw Terminals	3.75	400	80	20	4, 307
14618	43586	6/60	H7610	PAR36	Halogen Tractor	12.8	50W	5,200	Screw Terminals	2.75	400	Trapezoidal		4, 307
49695	12	H7612	PAR46		Halogen Fog	12.8	37.5W	15,000	Screw Terminals	3.75	450	40	7	307
49731	49732	12/60	H7614	PAR36	Halogen Flood	12.8	50W	2,000	Screw Terminals	2.75	100	70	30	307
42838	42839	12/60	H7616	PAR36	Halogen Spotlamp	12.8	37.5W	70,000	Screw Terminals	2.75	300	7	4	307
14619	43589	6/24	H7619	PAR46	Halogen Tractor	12.8	50W	6,000	Screw Terminals	3.75	400	Trapezoidal		4, 307
	45058	24	H7621-1	PAR46	Auto/Truck Special Service	12.8	50W	20,000	Slip-on Terminals	3.75	200	50	7	4, 109, 307
43591	43592	12/24	H7635	PAR46	Halogen Spotlamp	12.8	50W	160,000	Screw Terminals	3.75	100	6½	4	307
	18022	24	H7635X	PAR46	Halogen Spotlamp	12.8	50W	160,000	Screw Terminals	3.75	100	6½	4	167, 307
17894	17890	12/24	H7680 HIR	PAR46	Infrared Spotlamp	13.0	80W	275,000	Screw Terminals	3.75	100	6½	6½	301
26694	26695	12/24	H7680X HIR	PAR46	Infrared-Spotlamp Long Life	13.0	80W	230,000	Screw Terminals	3.75	300	6½	6½	301



# Miniature & Sealed Beam Lamps

Order Code Unit	Case Qty. Bulk	GE Lamp No. Unit/Bulk	Bulb	Primary Application	Design Volts	Design Watts	MBCP	Base	MOL (in)	Rated Life (hrs)	Spread to 10% MBCP		Warning & Footnotes
				Horiz	Vert								
<b>SEALED BEAM (CONTINUED)</b>													
23250	16	H7913 HIR	165mm	Farm Tractor, Flood Infrared	12.8	65W	4,000	2 Contact Lugs	4.8	800	70	20	301
13426	16	H7921-1	165mm	Auto/Truck Special Service	12.8	50W	23,900	Slip-on Terminals	4.53	200	35	5	4, 109, 307
47460	14892	6/16 H7935-1	165mm	Halogen Spotlamp	12.8	50W	175,000	Slip-on Terminals	4.53	100	6½	3½	307
15767	15763	12/48 H9405	150mm	Spotlamp, Halogen	12.8	50W	100,000	2 Right Angle Lugs	3	100	7	4	307
15769	15768	12/48 H9406	150mm	Tractor, Flood, Halogen	12.8	50W	1,350	2 Right Angle Lugs	3	400	70	30	4, 307
15771	15770	12/48 H9411	150mm	Tractor, Trapezoidal	12.8	50W	5,400	2 Right Angle Lugs	3	400	Trapezoidal		4, 307
15772	48	H9414	150mm	Tractor Medium Flood	12.8	50W	2,700	2 Right Angle Lugs	3	400	45	20	4, 307
16484	16483	12/48 H9415	150mm	Auto, Fog	12.8	37.5W	12,000	2 Right Angle Lugs	3	200	45	5	4, 307
17988	12	H9415A	150mm	Auto Fog Amber	12.8	37.5W	-	2 Right Angle Lugs	3	200	45	5	4, 307
16976	16978	12/48 H9420	150mm	Auto, Driving	12.8	50W	47,000	2 Right Angle Lugs	3	200	15	5	4, 307
16482	16204	12/48 H9421	150mm	Auto, Truck, Special Service	12.8	50W	4,000	2 Right Angle Lugs	3	200	45	8	4, 109, 307
22109	12	Q4509	PAR36	Aircraft Landing	13.0	100W	140,000	Screw Terminal	2.75	100	7	7	301
37706	12	Q4554	PAR46	Aircraft Taxiing	28.0	450W	65,000	Screw Terminals	2.63	100	50	11	301
40579	12	Q4559	PAR64	Aircraft Landing	28.0	600W	600,000	Screw Terminals	3.75	100	12	8	138, 301
42552	12	Q4559X	PAR64	Aircraft Landing	28.0	600W	765,000	Screw Terminals	3.75	100	11	7½	139, 301
41097	12	Q4566	PAR46	Aircraft Logo Light	28.0	450W	150,000	Screw Terminals	3.32	1,000	16	12	301
37372	12	Q4597	PAR46	Aircraft Flood	28.0	450W	16,000	Screw Terminals	3.32	1,000	60	35	301
40577	12	Q4629	PAR64	Aircraft Logo Light	28.0	600W	20,000	Screw Terminals	4.81	1000	55	35	301
34537	12	Q4631	PAR36	Aircraft Landing, Wing Inspection	13.0	250W	80,000	Screw Terminals	2.75	500	13	12	301
39112	12	Q4632	PAR36	Aircraft Logo	13.0	250W	75,000	Screw Terminals	2.75	500	14	12	301
36271	12	Q4681	PAR46	Aircraft Landing	28.0	450W	310,000	Screw Terminals	2.63	50	15	9	301
41452	12	Q5551	PAR46	Aircraft Taxiing	28.0	250W	60,000	Screw Terminals	3.32	100	48	12	301
16784	12	Q5559	PAR64	Aircraft Landing	28.0	600W	650,000	Screw Terminals	3.75	200	11	7½	138, 301
29130	22227	12/60 Q7558	PAR36	Landscaping	12.0	20W	365	Screw Terminals	2.75	5000	55	45	301
28113	12	Q7559	PAR36	Landscaping	12.0	20W	120	Screw Terminals	2.75	5000	70	70	301
28111	12	Q7560	PAR36	Landscaping	12.0	20W	1,900	Screw Terminals	2.75	5000	24	23	301
28874	12	Q7561	PAR36	Landscaping	12.0	20W	11,000	Screw Terminals	2.75	5000	9	8	301



## FOOTNOTES

### # Footnote

- 1 Special ballast required per ECE R99.
- 2 B3 life, not average life.
- 3 Useful life hours.
- 4 Life at 14 volts.
- 10 Life at 5 volts.
- 11 Filament vertical.
- 12 Average overall length.
- 13 Filament supported.
- 14 This lamp may not be suitable for some uses because of its excessive wattage requirements for the bulb size.
- 15 This lamp may not be suitable for some uses because of its limited mechanical strength.
- 17 Filament shielded.
- 23 Life at 7 volts.
- 32 Designed and rated for operation in supplementary cathode preheat circuits.
- 33 Connections of major and minor filament to base are reversed from those for automotive lamps with Double Contact Index bases. Burn base down to horizontal.
- 44 Life at 6.6 volts.
- 68 Uses lens-end TL3¼ bulb. Provides 7,000 to 11,000 foot-candles in a ¼" diameter spot at ¼" from end of bulb.
- 69 Not recommended for new OEM applications - suggested for new design are wedge base.
- 70 These lamps produce a random flashing indication only. The majority should flash between 40-160 flashes per minute at normal room temperature, some will be outside this range. As ambient temperature and/or input voltage changes, the flash rate may vary considerably. At rated voltage and room temperature most lamps will flash within 60 seconds.
- 75 Life estimated. Based on limited test information.
- 78 ANSI specifies .38" LCL and .63" MOL.
- 79 Life shown is AC voltage only. DC life will be approx. 50% of AC.
- 80 Light output is approx. end foot candles, not spherical MSCP.
- 92 Filament segments parallel.
- 109 Special fixture required for highway use.
- 110 To be used with variable load flasher in applications where bulb outage indication is not required, or with an appropriate fixed load flasher. Flash rate may be altered if used with incorrect fixed load flasher.
- 113 This is a flange seal wire terminal lamp. When unbased lamps such as these are handled and wired into a device, damage can be kept to a minimum by allowing sufficient clearance so that no physical strain or excessive heat is placed on the exhaust tube, exhaust tube tip, or glass seal; by taking care in mounting lamp in equipment so that any material touching the glass is compatible in thermal expansion; and by avoiding excessive tensile strain on the lead wires.
- 116 Life tests are performed on DC voltage only.
- 121 To minimize the possible adverse effects on lamp life due to excessive wattage in relationship to bulb size: Burn Base Down to Base 45° Above Horizontal. Regardless of burning position, this excessive wattage will abnormally decrease light output during lamp life.
- 122 This is a wire terminal lamp. The glass-to-metal seal (and tip where applicable) are susceptible to damage by thermal shock, and soldering or welding within ¼" of the glass should be avoided as glass cracks and air leaks may develop. Solderability may be adversely affected by storage for an extended period in excess of six months or by storage in a high humidity environment. Lamps with tinned leads would be subject to these storage restrictions. Nickel-plated leads are not recommended for soldering; however, their ability to be welded is not affected by these storage restrictions.
- 124 .028" metal pins spaced 44mm (.157") apart. GE's two-pin lamps might not be compatible with all G-4 sockets since many sockets do not provide clearance for the exhaust tip.
- 127 LCL measured to top of filament.
- 128 Output is minimum ¼" spot at .100" from bulb top.
- 130 Subminiature wedge base lamps under 12 volts have copper-clad outer lead wires to decrease contact resistance at the expense of corrosion resistance in severe environments.
- 132 Paint may peel, craze or discolor when subjected to excessive moisture, heat, and freezing in housings with plugged drain holes or which otherwise leak or trap moisture.
- 138 Life Test Conditions: Cycled 5 minutes on, 5 off.
- 139 Life Test Conditions: Cycled 20 minutes on, 20 off.
- 147 Differs from ANSI.
- 160 Filament will generate specified MSCP in a non shielded bulb.
- 161 MSCP measured with black top.
- 162 Life based on three hours of burning per start. MSCP at 100 Hrs. Designed and rated for operation in supplementary cathode preheat circuits. Use these lamps with auxiliary equipment specially designed to produce proper electrical values according to established specification. For total load, add auxiliary watts to lamp watts.
- 164 Life to approximately 50% of initial output. Values shown apply to use on AC unless otherwise shown. Life on DC is approximately 60% of AC values when DC current is equal to R.M.S. (Root Mean Square) AC value. When equal DC and R.M.S. AC voltages and equal resistances are utilized, life will be approximately the same.
- 166 Contact Lugs are angled.
- 167 Filament shielded.

## WARNINGS AND CAUTION NOTICES

### 301

#### ▲ WARNING

##### Risk of fire

- Keep combustible materials away from lamp
- Use in fixture rated for this product

##### A damaged lamp emits UV radiation which may cause eye/skin injury

- Turn power off if glass bulb is broken. Remove and dispose of lamp.

##### Pressurized lamp—unexpected rupture may cause injury, fire, or property damage

- Use in enclosed fixture rated for this product
- Do not use lamp if outer glass is scratched or broken

#### ▲ CAUTION

##### Risk of burn

- Allow lamp/fixture to cool before handling

##### Lamp may shatter and cause injury if broken

- Do not use lamp if outer glass is scratched or broken
- Dispose of lamp in a closed container

### 302

#### ▲ WARNING

##### Risk of fire

- Keep combustible materials away from lamp
- Use in fixture rated for this product

##### Unexpected lamp rupture may cause injury, fire, or property damage

- Avoid contact with glass during operation
- Avoid direct water/liquid contact
- Use in enclosed fixture rated for this product

### 303

#### ▲ WARNING

##### Lamp may shatter if used in wrong circuit

- Do not use in 110-120 Volt household circuit

### 304

#### ▲ WARNING

##### Risk of fire

- Keep combustible materials away from lamp
- Use in fixture rated for this product

##### Lamp emits UV radiation which may cause eye/skin injury

- Avoid exposure of eyes and skin to unshielded lamp

##### Pressurized lamp—unexpected rupture may cause injury, fire, or property damage

- Use eye protection when handling lamp
- Do not exceed rated voltage
- Do not touch glass with bare hands
- Do not use lamp if outer glass is scratched or broken
- Dispose of lamp in a closed container
- Do not turn on lamp until fully installed
- Keep away from children
- Use protective screen when handling

#### ▲ CAUTION

##### Risk of burn

- Allow lamp/fixture to cool before handling

#### FOR BEST PERFORMANCE

- Limit seal temperature to 350°C
- Maintain 250°C minimum bulb wall temperature
- Remove fingerprints from bulb with grease-free solvent
- Operate at design voltage



## WARNINGS AND CAUTION NOTICES (CONTINUED)

**305**

**▲ CAUTION**

**Lamp may shatter and cause injury if broken**

- Do not use excessive force when installing lamp

**306**

**▲ WARNING**

**Pressurized lamp—unexpected rupture may cause injury, fire, or property damage**

- Use eye protection when handling lamp
- Do not exceed rated voltage
- Avoid direct water/liquid contact
- Use in enclosed fixture rated for this product
- Do not use lamp if outer glass is scratched or broken
- Dispose of lamp in a closed container
- Do not turn on lamp until fully installed
- Keep away from children
- Use protective screen when handling

**▲ CAUTION**

**Risk of burn**

- Allow lamp/fixture to cool before handling

**307**

**▲ WARNING**

**Pressurized lamp—unexpected rupture may cause injury, fire, or property damage**

- Do not use lamp if outer glass is scratched or broken
- Dispose of lamp in a closed container

**308**

**▲ WARNING**

**Risk of fire**

- Keep combustible materials away from lamp
- Use in fixture rated for this product

**Pressurized lamp—unexpected rupture may cause injury, fire, or property damage**

- Use eye protection when handling lamp
- Do not exceed rated voltage
- Do not touch glass with bare hands
- Do not use lamp if outer glass is scratched or broken
- Dispose of lamp in a closed container
- Do not turn on lamp until fully installed
- Keep away from children
- Use protective screen when handling

**▲ CAUTION**

**Risk of burn**

- Allow lamp/fixture to cool before handling

**FOR BEST PERFORMANCE**

- Limit seal temperature to 350°C
- Maintain 250°C minimum bulb wall temperature
- Remove fingerprints from bulb with grease-free solvent
- Operate at design voltage

**309**

**▲ WARNING**

**Risk of electric shock**

- Turn power off before inspection, installation or removal

**▲ CAUTION**

**Lamp may shatter and cause injury if broken**

- Wear safety glasses and gloves when handling lamp
- Do not use excessive force when installing lamp

**310**

**▲ WARNING**

**Risk of electric shock**

- Turn power off before inspection, installation or removal

**Risk of fire**

- Use in fixture rated for this product

**A damaged lamp emits UV radiation which may cause eye/skin injury**

- Turn power off if glass bulb is broken. Remove and dispose of lamp.

**Pressurized lamp—unexpected rupture may cause injury, fire, or property damage**

- Use eye protection when handling lamp
- Do not exceed rated voltage
- Do not touch glass with bare hands
- Avoid direct water/liquid contact
- Use in enclosed fixture rated for this product
- Do not use lamp if outer glass is scratched or broken
- Use only properly rated ballast
- Operate lamp only in specified position
- Do not use beyond rated life
- Do not turn on lamp until fully installed

**▲ CAUTION**

**Risk of burn**

- Allow lamp to cool before handling
- Do not turn on lamp until fully installed
- Turn power off before installing lamp

**Lamp may rupture if used on wrong ballast**

- Use only properly rated ballast

**Lamp may shatter and cause injury if broken**

- Wear safety glasses and gloves when handling lamp
- Do not use lamp if outer glass is scratched or broken
- Dispose of lamp in a closed container
- Remove and install by grasping only plastic portion of the lamp
- Do not use excessive force when installing lamp

**INSTRUCTIONS**

**FDA Warning**

WARNING - This lamp can cause serious skin burn and eye inflammation from short-wave ultraviolet radiation if outer envelope of the lamp is broken or punctured and the arc tube continues to operate. Do not use where people will remain for more than a few minutes unless adequate shielding or other safety precautions are used. Certain types of lamps that will automatically extinguish when the outer envelope is broken or punctured are commercially available. 21 CFR 1040.30.

Hg - LAMP CONTAINS MERCURY

Manage in Accord with Disposal Laws

See: [www.lamprecycle.org](http://www.lamprecycle.org) or 1-800-435-4448

Lamp should be installed by an automotive service specialist.



**GENERAL INFORMATION**

Lamp Locator .....	8-2
Base Identification .....	8-3
Light Center Length.....	8-3
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**QUARTZLINE® REFLECTOR LAMPS**

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**INCANDESCENT PROJECTION**

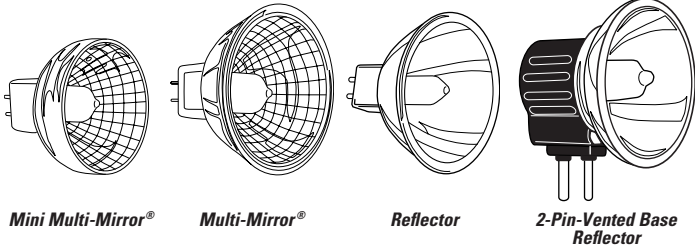
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## LAMP LOCATOR

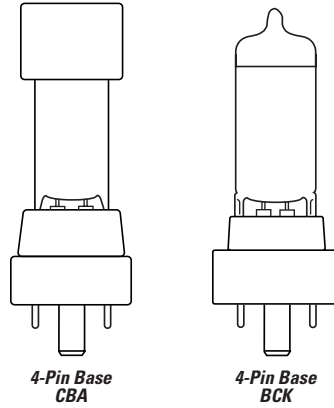


Mini Multi-Mirror®

Multi-Mirror®

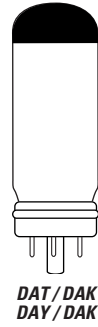
Reflector

2-Pin-Vented Base Reflector



4-Pin Base CBA

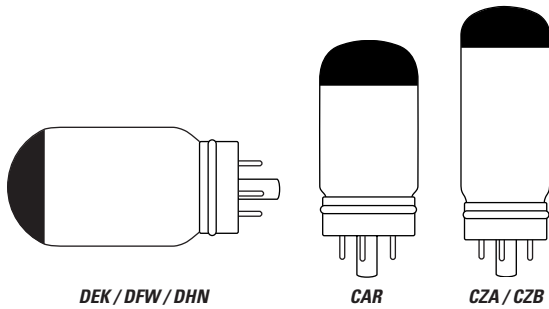
4-Pin Base BCK



DAT / DAK  
DAY / DAK

### Quartzline® Projection Lamps

### Incandescent Projection Lamps / 4-Pin Base

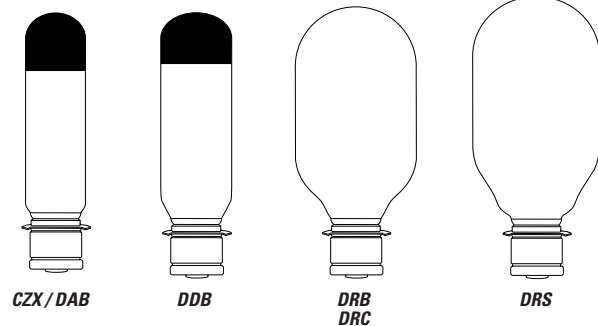


DEK / DFW / DHN

CAR

CZA / CZB

### Incandescent Projection Lamps / 4-Pin Base – Proximity Reflector



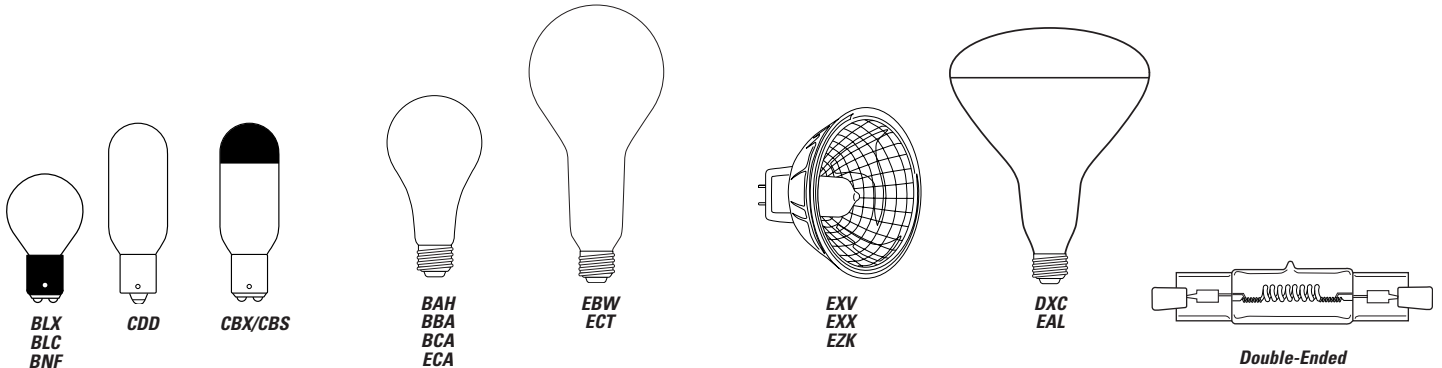
CZX / DAB

DDB

DRB  
DRC

DRS

### Incandescent Projection Lamps / Medium Prefocus Base



BLX  
BLC  
BNF

CDD

CBX/CBS

BAH  
BBA  
BCA  
ECA

EBW  
ECT

EXV  
EXX  
EZK

DXC  
EAL

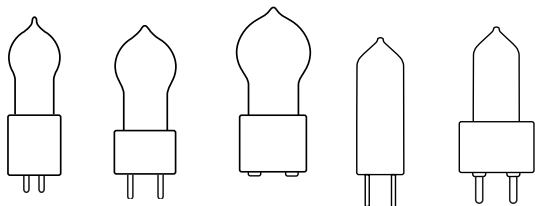
Double-Ended

### Quartzline® Projection Lamps

### Incandescent Projection Lamps / Single or Double Contact Bayonet Base

### Standard Photofloods

### Reflector Photofloods



G-6  
G5.3

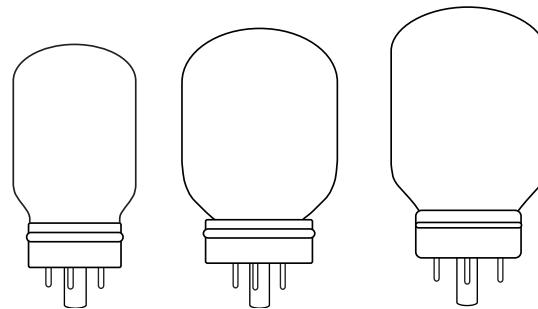
G-7  
G29.5

G-7  
2 Button

T-4  
GY6.35

T-4  
G29.5

### Quartzline® Projection Lamps – Single-Ended



DFN / DFC / DCH /  
DJA / DFP

DLD / DFZ  
GX17q

DJL  
G17q

### Incandescent Projection Lamps / 4-Pin Base – Focusing Reflector



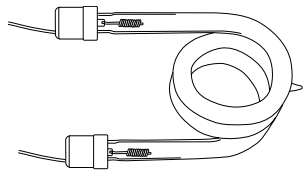
DPT  
Mog Base

### Incandescent Projection Lamps / Misc.



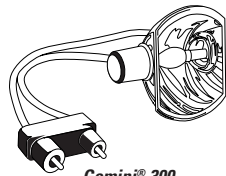


# Projection Lamps



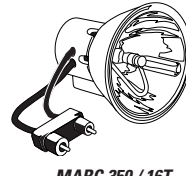
PXA-50  
PXA-80

Pulsed Xenon Arc Lamps



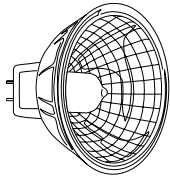
Gemini® 300  
EZG

High-Intensity Gemini® Arc Lamps

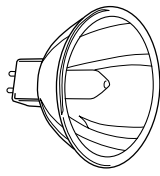


MARC 350 / 16T  
EZT

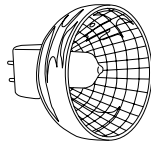
High-Intensity MARC™ Arc Lamps



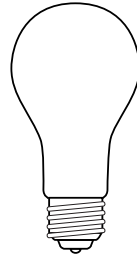
DDF ENH  
EJL ESD  
ELC ESJ  
ELH EVW  
EYA



EJV



EZJ/EZJ



PH/211  
PH/212  
PH/213  
BBA



PH/140



PH/111A

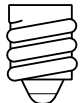


FAL  
FFJ

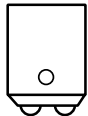
Enlarger & Printer Lamps

## BASE IDENTIFICATION

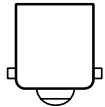
Typical bases used on Projection lamps in this catalog are shown below along with their names and common abbreviations. Where the base is an ANSI standard type, the ANSI reference code (which is the same as the IEC base code) is also shown. ANSI reference codes conform to American National Standard C81.10, C81.30, C81.50 specifications for electric lamp bases and lampholders. Illustrations are not to scale.



Candelabra  
(Cand.)  
E12/15



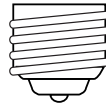
Double Contact  
Bayonet  
(D.C. Bay.)  
BA15d



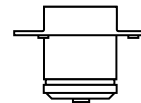
Single Contact  
Bayonet  
(S.C. Bay.)  
BA15s



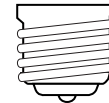
Candelabra Prefocus  
(S.C. Pref.)  
P30s  
(D.C. Pref.)  
P30d



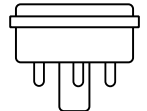
Medium  
E26s



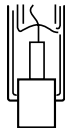
Medium Prefocus  
P28/25



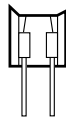
Mogul  
E39



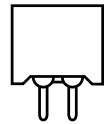
4-Pin  
G17q (Std. Volts)  
GX17q (Low Volts)



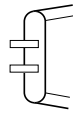
Recessed Single  
Contact  
R7



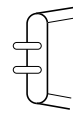
Glass 2-Pin  
G6.35 (.040" diam. Pins)  
GY6.35 (.050" diam. Pins)  
GZ6.35 (Reflector Quartz-  
line® lamps)



Miniature 2-Pin  
G5.3



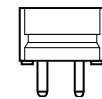
GY5.3 2-Pin  
(Flat Pins)



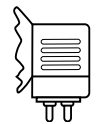
GX5.3 2-Pin  
(Round Pins)



2-Button



2-Pin Prefocus  
GY & GZ9.5



2-Pin Vented  
G7.9 (Std. Volts)  
GX7.9 (Low Volts)

## LIGHT CENTER LENGTH (LCL)

Light center length is the distance from the center of the light source to the point indicated below for the lamp base used. It is a measurement to which the lamp is designed and is subject to the manufacturer's tolerances.

Base Type	LCL Reference
All Screw Bases	Bottom base contact
Medium Prefocus	Top of base fins
S.C. or D.C. Bayonet	Top of base pins
2-Pin Prefocus	Bottom of base ceramic
Miniature 2-Pin	Bottom of base pins
Glass 2-Pin	Bottom of base pins

Base Type	LCL Reference
2-Button	Top of ceramic base to top of filament coil
2-Pin Vented	Bottom of base ceramic to lamp optical axis
4-Pin	Bottom edge of base cup
Locking 4-Pin	Bottom edge of base cup
S.C., or D.C. Candelabra	
Prefocus	Plane of locating bosses on prefocus collar



## FILAMENT IDENTIFICATION

The configuration of the filament in all tungsten filament lamps (including Quartzline®) is identified by a prefix letter and a suffix number. The prefix letter indicates whether the filament wire is a single coil (C) or a coiled coil (CC). The suffix number indicates the form or arrangement of the filament coil or coils on its support structure. Illustrations are not to scale.



**C-2V**  
**CC2-V**



**C-9**



**2C-8**  
**2CC-8**



**C-13**



**C-13D**



**C-6 Oval**



**C-6**  
**CC-6**



**C-8**  
**CC-8**

## INTRODUCTION

General Electric Projection Lamps are designed for a wide variety of applications... and now extending well beyond the original picture-taking and audio-visual projection uses into such fields as: fiber optical systems, graphic arts, video camera lights, airport runway markers, micrographics, photo printers and enlargers, medical/scientific instruments, and many others.

The information contained in this section is designed to provide end-users, equipment manufacturers, and lamp distributors and dealers with:

- Essential technical data on GE Projection Lamps (Quartzline®, Incandescent, MARC™ and Photoflood)
- Suggested substitutes for improved performance or discontinued lamps

The majority of Projection Lamps described herein are characterized by:

- Precisely manufactured, tailored filaments... maximizing source brightness, optimum performance in precision optical devices

- High light-generating efficacy (lumens per watt)... to help minimize power requirements and heat generation
- Prefocus type bases, or rim-reference mounting for Multi-Mirror® lamps... to position the filament accurately in relation to the associated optics
- Design life Rated Life (per ANSI Standard)
- Lamps with internal or external reflectors (as in Multi-Mirror® and some 4-pin projection lamps)... permitting high-efficiency illumination system designs with a minimum of additional optical control elements

Manufacturers and designers of equipment requiring lamps should select lamps of established design whenever possible for maximum economy, as well as for ease of replacement by their customers through regular trade channels. General Electric offers application engineering assistance to all customers for applying lamps in product design. Contact your local GE Lamp Representative for additional information or assistance.

## CAUTION NOTICE

As with any product, certain precautions should be observed in the handling and use of GE Projection Lamps to provide optimum performance and safety. These are given in the Caution Notices that are printed on page 8-13.

### Important Notice

This catalog contains accumulated data to March 2006. Additional information is constantly being uncovered through research and testing, which may modify the data given herein. This is particularly true of newer lamps. For the latest lamp design data and information, contact your General Electric Lamp Representative.

The data and suggested applications contained in this catalog, as well as any additional information our representative may be able to furnish, are for general information only and are not intended and should not be taken as representations or warranties as to the suitability of a lamp for any particular

application or use in any particular equipment, nor are our representatives authorized to make any such representations or give any such warranties. Applications and conditions of use are many and varied, and beyond our control. We cannot possibly have the same degree of knowledge that the purchaser has with respect to the design of his equipment and the conditions of its use. Therefore, it is up to the purchaser to make his own determination as to the suitability of a lamp for his intended application or use and to assume the responsibility for that determination.

General Electric desires to supply the best possible products at all times. For this reason, General Electric reserves the right to make changes in its products when it believes such changes will improve its products.



## GENERAL INFORMATION

General Electric Projection Lamps are briefly described in the alphabetical lamp index (pages 8-6 – 8-7). More extensive descriptive and performance data are found in the lamp tables, which are organized as “families” of lamps with one or more features in common – such as Multi-Mirror® Quartzline®, Single-Ended Quartzline®, 4-Pin Based Incandescent, PhotoFlood, etc. Within each table, lamps are listed alphabetically by GE Lamp Code.

## GE MULTI-MIRROR® QUARTZLINE® PROJECTION LAMPS

Invented By GE For Optimized Projection System Performance.

The Multi-Mirror® and its new companion, the Mini Multi-Mirror®, are reflector halogen Quartzline® lamps with innovative GE features that result in better system efficiency, screen uniformity, lamp-to-lamp consistency and relamping convenience.

Feature	Benefit	Applications
• Dichroic reflector	<ul style="list-style-type: none"> <li>• Cool light beam</li> <li>• Efficient light reflection</li> <li>• Quick lamp installation</li> </ul>	<ul style="list-style-type: none"> <li>• Slide Projection</li> <li>• Front/Rear Screen Projection</li> <li>• Microfilm</li> <li>• Overhead Projection</li> <li>• 16mm Movie</li> <li>• 8mm Movie</li> <li>• Film Strip</li> <li>• Enlargers/Printers</li> <li>• Fiber Optics</li> <li>• Medical/Scientific Instruments</li> <li>• Video Camera Lights</li> <li>• Airport Runways</li> <li>• Display</li> </ul>
<ul style="list-style-type: none"> <li>• Precise rim reference               <ul style="list-style-type: none"> <li>• Accurate snap-in alignment</li> </ul> </li> <li>• Faceted reflector</li> </ul>	<ul style="list-style-type: none"> <li>• Efficient beam for brighter image</li> <li>• Uniform screen image</li> <li>• Precision beam control</li> </ul>	
• Halogen Quartzline® lamp	<ul style="list-style-type: none"> <li>• Whiter and brighter light</li> <li>• No bulb blackening/blistering</li> <li>• Constant light output through life</li> <li>• Stable color temperature</li> </ul>	

Each GE Multi-Mirror® lamp type is optically tailored to its application. First, the appropriate type of multi-faceted reflector is determined. Then a filament tube developed, using advanced Quartzline® technology. Finally, the two are combined, using sophisticated, computerized precision-assembly techniques. The result – consistently high performance... lamp after lamp after lamp.



# Projection Lamps

Order Code	Description	Watts	Volts	Bulb Shape	Base	Table No.	Page No.
<b>INDEX-ANSI CODED GE PROJECTION LAMPS</b>							
<b>BAB USE Q20MR16CG40BAB</b>							
10933	BAB/PH	20	12	MR16	GX5.3 2-Pin	3	9
40886	BAH	300	115	A21	Medium	18	12
40563	BBA	250	118	A21	Medium	18	12
40564	BCA	250	118	A21	Medium	18	12
36178	BCK	500	120	T6	G17q 4-Pin	6	10
40658	BHB	250	120	MR14	G7.9 2-Pin	5	10
<b>BHC USE DYS/DYV/BHC</b>							
29140	BLC	30	118	S11	D. C. Bay.	15	12
30232	BLK	30	125	S11	Cand.	18	12
29156	BLX	50	118	S11	D. C. Bay.	15	12
32137	BNF	75	120	S11	D. C. Bay.	15	12
29604	BRH	1000	120	T5	R7s	9	11
18234	BRL	50	12	T3.5	G6.35 2-Pin	7	10
30421	BXB	34	8.5	T8	S. C. Pref.	16	12
29525	CAL	300	120	T10	G17q 4-Pin	11	11
29380	CAR	150	120	T10	G17q 4-Pin	11	11
29171	CAX	50	118	T8	D. C. Bay.	15	12
29169	CAX	50	130	T8	D. C. Bay.	15	12
<b>CBS USE CBX/CBS</b>							
29208	CBX/CBS	75	118	T8	D. C. Bay.	15	12
29257	CDD	100	120	T8	S. C. Bay.	14	12
29266	CDJ	100	118	T8	D. C. Bay.	15	12
29244	CEB	100	118	T8	D. C. Bay.	15	12
43330	CEM	120	120	T8	S. C. Bay.	14	12
29664	CZA/CZB	500	120	T10	G17q 4-Pin	11	11
<b>CZB USE CZA/CZB</b>							
29677	CZX/DAB	500	120	T10	Med. Pref.	13	12
<b>DAB USE CZX/DAB</b>							
<b>DAK USE DAT/DAK</b>							
40214	DAT/DAK	400	120	T10	G17q 4-Pin	10	11
29695	DAY/DAK	500	120	T10	G17q 4-Pin	10	11
29360	DCA	150	21	T12	GX17q 4-Pin	12	11
29364	DCH/DJA/DFP	150	120	T12	G17q 4-Pin	12	11
43537	DDL	150	20	MR16	GX5.3 2-Pin	3	9
43206	DDM	80	19	MR16	GX5.3 2-Pin	3	9
43988	DDS	80	21	MR16	GX5.3 2-Pin	3	9
43950	DED	85	13.8	MR16	GX5.3 2-Pin	3	9
29737	DEK/DFW/DHN	500	120	T12	G17q 4-Pin	11	11
<b>DFC USE DFN/DFC</b>							
36122	DFE	80	30	T12	GX17q 4-Pin	12	11
29386	DFN/DFC	150	125	T12	G17q 4-Pin	12	11
<b>DFP USE DHC/DJA/DFP</b>							
<b>DFW USE DEK/DFW/DHN</b>							
<b>DFZ USE DLD/DFZ</b>							

Order Code	Description	Watts	Volts	Bulb Shape	Base	Table No.	Page No.
<b>INDEX-ANSI CODED GE PROJECTION LAMPS (CONTINUED)</b>							
<b>DHN USE DEK/DFW/DHN</b>							
<b>DHX USE DLS/DLG/DHX</b>							
<b>DJA USE DHC/DJA/DFP</b>							
29338	DJL	150	120	T14	G17q 4-Pin	12	12
44854	DJT	50	13.8	MR16	GX5.3 2-Pin	3	9
40216	DLD/DFZ	80	30	T14	GX17q 4-Pin	12	12
<b>DLG USE DLS/DLG/DHX</b>							
29366	DLS/DLG/DHX	150	22	T14	GX17q 4-Pin	12	12
40161	DNE	150	120	MR16	G7.9 2-Pin	5	10
39742	DNF	150	21	MR16	GX7.9 2-Pin	5	10
29959	DPT	1000	120	T20	Mogul	17	12
29968	DRB	1000	118	T20	Med. Pref.	13	12
29947	DRS	1000	120	T20	Med. Pref.	13	12
30304	DVY	650	120	G6	G5.3 2-Pin	7	10
30151	DXB	500	120	R40	Medium	19	13
30145	DXC	500	120	R40	Medium	19	13
36952	DXX	800	230	T4	R7s	9	11
36953	DXX	800	240	T4	R7s	9	11
30364	DYH	600	120	G7	G5.3 2-Pin	7	10
32071	DYP	600	120	G7	2-Button	7	10
33248	DYR	650	220	G7	GZ9.5 2-Pin Pf	7	10
33250	DYR	650	240	G7	GZ9.5 2-Pin Pf	7	10
32955	DYS/DYV/BHC	600	120	G7	GZ9.5 2-Pin Pf	7	10
<b>DYV USE DYS/DYV/BHC</b>							
19479	DYS-5	600	120	G7	GZ9.5 2-Pin Pf	7	10
37346	DZA	30	10.8	T3.5	G5.3 2-Pin	7	10
37695	DZE/FDS	150	24	T4	GZ9.5 2-Pin Pf	7	10
30202	EAJ	35/25	12	T6.4	D.C. Bay.	15	12
30281	EAL	500	120	R40	Medium	19	13
40566	EBV	500	118	PS25	Medium	18	12
40567	EBW PH/B2	500	118	PS25	Medium	18	12
40565	ECA	250	120	A23	Medium	18	12
40568	ECT	500	120	PS25	Medium	18	12
21276	EFM	50	8	MR16	GZ6.35 2-Pin	3	9
21277	EFN	75	12	MR16	GZ6.35 2-Pin	3	9
21278	EFP	100	12	MR16	GZ6.35 2-Pin	3	9
21279	EFR	150	15	MR16	GZ6.35 2-Pin	3	9
37527	EHA	500	120	T6	GZ9.5 2-Pin Pf	7	10
14874	EHJ	250	24	T4	G6.35 2-Pin	7	10
32882	EJA	150	21	MR16	GX5.3 2-Pin	4	10
29150	EJL	200	24	MR16	GX5.3 2-Pin	3	9
29151	EJM	150	21	MR16	GX5.3 2-Pin	3	9
<b>EJN USE ELD/EJN</b>							
32831	EJV	150	21	MR16	GX5.3 2-Pin	4	10
32886	EJY	80	19	MR16	GX5.3 2-Pin	4	10
35200	EKE	150	21	MR16	GX5.3 2-Pin	3	9



# Projection Lamps

Order Code	Description	Watts	Volts	Bulb Shape	Base	Table No.	Page No.
<b>INDEX-ANSI CODED GE PROJECTION LAMPS (CONTINUED)</b>							
35800	EKP/ENA	80	30	MR16	GX5.3 2-Pin	3	9
<b>EKS USE EMM/EKS</b>							
36899	EKX	200	24	MR16	GX5.3 2-Pin	3	9
36902	EKZ	30	10.8	MR16	GX5.3 2-Pin	3	9
37462	ELC	250	24	MR16	GX5.3 2-Pin	3	9
15377	ELC/500	250	24	MR16	GX5.3 2-Pin	3	9
22023	ELC/C	250	24	MR16	GX5.3 2-Pin	3	9
38306	ELD/EJN	150	21	MR16	GX5.3 2-Pin	3	9
38476	ELH	300	120	MR16	GY5.3 2-Pin	3	9
<b>ELR USE ELS/ELR</b>							
41885	ELS/ELR	50	18	MR14	GX7.9 2-Pin	5	10
42612	EML	175	24	T4	G5.3 2-Pin	7	10
40017	EMM/EKS	250	24	MR14	GX7.9 2-Pin	5	10
<b>ENA USE EKP/ENA ENC USE ENW/ENC</b>							
38686	ENH	250	120	MR16	GY5.3 2-Pin	3	9
25475	ENL	50	12	MR16	GX5.3 2-Pin	3	9
40248	ENW/ENC	80	19	MR16	GX5.3 2-Pin	3	9
41705	ENX	360	82	MR16	GY5.3 2-Pin	3	9
19475	ENX-5	360	86	MR16	GY5.3 2-Pin	3	9
40598	ENZ	50	30	MR16	GX5.3 2-Pin	4	10
41430	EPN	35	12	MR16	GX5.3 2-Pin	3	9
41729	EPT	42	10.8	MR16	GX5.3 2-Pin	3	9
41882	EPV	90	14.5	MR16	GX5.3 2-Pin	3	9
42614	EPX	90	14.5	MR16	GX5.3 2-Pin	3	9
41874	ERV	340	36	MR16	GX5.3 2-Pin	3	9
43756	ESD	150	120	MR16	GY5.3 2-Pin	3	9
11698	ESJ	85	82	MR16	GY5.3 2-Pin	3	9
11322	ETJ	250	120	MR16	GY5.3 2-Pin	3	9
38311	ETT	1000	120	T5	R7s	9	11
41164	EVD	400	36	T6	GY6.35 2-Pin	7	10
10099	EVV	120	6.6A	T4	GZ9.5 2-Pin	8	11
11110	EVW	250	82	MR16	GY5.3 2-Pin	3	9
11427	EWR	150	6.6A	T4	GZ9.5 2-Pin	8	11
11478	EXL	30	6.6A	T3.5	GZ9.5 2-Pin	8	11
11482	EXM	45	6.6A	T3.5	GZ9.5 2-Pin	8	11
12092	EXR	300	82	MR13	GX5.3 2-Pin	2	9
12003	EXV	100	12	MR16	GX5.3 2-Pin	3	10
12095	EXW	300	82	MR13	GX5.3 2-Pin	2	9
11750	EXX	250	120	MR16	GY5.3 2-Pin	3	10
12097	EXY	250	82	MR13	GX5.3 2-Pin	2	9
12696	EYB	360	82	T3.5	G5.3 2-Pin	7	11
19322	EYB-5	360	86	T3.5	G5.3 2-Pin	7	11
13617	EYH/FKT	250	120	G6	G5.3 2-Pin	7	11

Order Code	Description	Watts	Volts	Bulb Shape	Base	Table No.	Page No.
<b>INDEX-ANSI CODED GE PROJECTION LAMPS (CONTINUED)</b>							
41783	EZA/4	32	6.6A	MR16	Wire Term.	3	10
23071	EZC	45	6.6A	MR16	GX5.3 2-Pin	3	10
15832	EZF/EZJ	225	68	MR13	GX5.3 2-Pin	2	9
<b>EZJ USE EZF/EZJ</b>							
15477	EZK	150	120	MR16	GY5.3 2-Pin	3	10
15243	EZL	200	6.6A	T4	GZ9.5 2-Pin	8	11
29581	FAL	420	120	T4	R7s	9	11
<b>FBD USE FBG/FBD</b>							
33663	FBG/FBD	500	120	G6	G5.3 2-Pin	7	11
29598	FCB	600	120	T4	R7s	9	11
14876	FCR	100	12	T3	GY6.35 2-Pin	7	11
13598	FCS	150	24	T4	G6.35 2-Pin	7	11
<b>FDS USE DZE/FDS</b>							
35321	FDT	100	12	T3	GZ9.5 2-Pin Pf	7	11
36878	FDV	150	24	T4	G6.35 2-Pin	7	11
29592	FFJ	600	120	T4	R7s	9	11
30276	FFM	420	120	T4	R7s	9	11
47614	FHS	300	82	MR13	GX5.3 2-Pin	2	9
47914	FHX	25	13.8	MR16	GX5.3 2-Pin	3	10
<b>FKT USE EYH/FKT</b>							
30894	FLS	28	12	MR11	GZ4 2-Pin	1	9
25261	FLT	28	13.8	MR11	GZ4 2-Pin	1	9
19886	FLW	300	24	T4	GY6.35 Ceramic	7	11
14887	FML	50	13.8	MR16	GX5.3 2-Pin	3	10
18241	FNT/100	275	24	T4	G6.35 2-Pin	7	11
21613	FXL	410	82	MR16	GY5.3 2-Pin	3	10
80853	GCA	250	120	T3.5	G5.3	7	11
11134	GEMINI 300(EZG)	300	35	PAR20	Special 2-Pin Plug	21	13
39936	MARC 350-16T EZT	350	45	PAR24	Special 2-Pin Plug	21	13
30162	PH/111A	75	125	S11	S.C. Bay.	20	13
43220	PH/140	75	120	S14	Medium	20	13
40569	PH/211	75	120	A21	Medium	20	13
40570	PH/212	150	120	A21	Medium	20	13
40571	PH/213	250	120	A21	Medium	20	13
30124	PXA 50	4000		T3	WireTerm/Ceramic	21	13
30129	PXA/80	8000		T3	WireTerm/Ceramic	21	13



## HEADINGS IN THIS CATALOG SECTION

The following terms and descriptions can help you when checking Projection lamp specifications and when ordering products. Within each product line, lamps are divided into families. Within families, lamps are listed by ANSI code.

### Maximum Overall Length (MOL)

This dimension include the lamp bulb and all rigid parts of the base. Since the listed lengths include maximum tolerances, actual lamps are generally slightly shorter.

### Bulb

Projection Lamp bulb designations use a combination of letters and numerals to indicate bulb shape and maximum diameter in eighths of an inch. For example: a "T12" bulb is Tubular-shaped and 12-eighths of an inch, or 1 1/2" in diameter. Illustrations of typical Projector Lamps and their respective bulb designations are shown in the tables of lamp families, pages 8-9 – 8-13.

### Base

Projection Lamp base illustrations appear on page 8-3, along with their common trade names and abbreviations, plus their letter-number ANSI/IEC designations where applicable.

### Watts (or Amps)

This column shows the rated power consumption (watts) of the lamp at its design voltage. A few lamps, in Table 8, are rated in terms of current (amperes) drawn initially at their rated voltage. The watts shown for the lamps in Table 8 are the approximate initial values for operation at rated amperes.

### Order Code:

It is important to use this five-digit code when ordering to ensure that you receive the exact product you require.

### Description

This is a 3-letter or letter-number code uniquely identifying the lamp for ordering purposes. In some instances, lamps with 3-letter (ANSI) codes are offered in more than one design voltage, in which case the voltage required should also be specified when ordering.

### Volts

The voltage shown is the design voltage of the lamp, on which the life and wattage ratings are based. Lamps are available only in the design voltage(s) shown. When ordering lamps listed for more than one voltage, be sure to specify the voltage required. (Supply voltage variation can significantly affect lamp life.)

### Case Quantity:

Number of product units packed in a case.

### Filament

Typical filament configurations for Projection Lamps are shown on page 8-4, along with an explanation of the filament designation system.

### Light Center Length (LCL)

This dimension defines the location of the filament in relation to the base. It is measured from the geometric center of the filament to a specified point on, or plane through, the base. Light Center Length is subject to manufacturing tolerances. Reference points/planes from which LCL is measured are tabulated on page 8-3 for the various styles of lamp bases.

### Rated Life

Life ratings of Projection Lamps are based on closely controlled laboratory tests of lamps, at their rated voltage, over a long period of production time. Rated Life is not necessarily the same as service life; mechanical shock and vibration, voltage fluctuation, temperature and other environmental factors may result in shorter service life. As with any median value, some individual lamps will operate longer, and some will operate shorter, than their Rated Life. (Supply voltage variation can significantly affect lamp life.)

### Initial Lumens

The value shown is based on spherical photometry, at rated voltage, of lamps that have been seasoned for approximately 15% (or minimum of 2 hours) or more of their rated average life.

### Color Temperature

The radiation within the visible spectrum from tungsten filament lamps is similar in spectral distribution to that from a "blackbody" at specific color temperatures. The Color Temperatures shown are approximate initial values in degrees kelvin (K) for lamps operated at rated voltage.

### CBCP (Center Beam Candlepower):

For reflector type lamps. Center Beam Candlepower is the intensity (candelas) at the center or maximum intensity of the beam.

### Operating Position

For good performance, lamps must be used within specified limitations on operating position. The following abbreviations are used in the lamp tables to indicate these limits:

- BD = Base Down. Operate only vertical, base down.
- HD = Base Down to Horizontal. Do not operate base above horizontal.
- H22 = Operate base down to 22° base up.
- U = Operate in any position.

### Additional Information

Typical application and/or other important information.

### Source Size

This is defined as the dimensions of the rectangular area, centered on the lamp axis, within which all luminous parts of the filament lie, when viewed perpendicular to the axis of the filament coil or to the plane of C-13 and C-13D filaments.

### Typical Working Distance

For Multi-Mirror® and other reflector Quartzline® lamps and MARC™ lamps, the Working Distance shown is the distance from the front surface of the reflector rim to the film plane, in the optical system for which the lamp was first designed. In most cases, it provides a uniform plane of light for the intended aperture.

Bulb Shape	Base	Order Watts	Order Code	Case Qty.	Filament Design	MOL	LCL	Rated Life	Color Temp.	Burn Position	Additional Information	Footnote	Typical Source Working Distance (WxH)	
								Hours	Initial K					
<b>QUARTZLINE® MULTI-MIRROR® REFLECTORS</b>														
<b>MR-16 FACETED DICHROIC REFLECTOR. 2" DIAMETER (51MM). TABLE 3.</b>														
MR16	GX5.3	2-Pin	150 43537	DDL	20	20	C-6	1.75	500	3150	HD	Microfilm	A	7.75

# DDL

ANSI Code.



Bulb Shape	Base	Order Watts	Code Description	Case Qty.	Filament Design	MOL	LCL	Rated Life Hours	Lumens Initial	Color Temp. K	Burn Position	Additional Information	Footnote	Typical Working Distance (WxH)	Source Size (WxH)
<b>QUARTZLINE® MULTI-MIRROR® REFLECTORS</b>															
<b>MR-11 FACETED DICHROIC REFLECTOR. 1 3/8" DIAMETER (35MM). TABLE 1.</b>															
MR11	GZ4 2-Pin	28	<b>30894 FLS</b>	12	10	CC-6	1.38	1000		3000	HD	Microfilm	A		
			<b>25261 FLT</b>	13.8	10	CC-6	1.38	500		3050	HD	Microfilm	A		
<b>MR-13 FACETED DICHROIC REFLECTOR. 1 1/2" DIAMETER(42MM). TABLE 2.</b>															
MR13	GX5.3 2-Pin	300	<b>12092 EXR</b>	82	20	CC-8	1.75	35		3350	HD	Slide projection	A	6.00	
			<b>12095 EXW</b>	82	20	CC-8	1.75	15		3450	HD	Slide projection	A	6.00	
		250	<b>12097 EXY</b>	82	20	CC-8	1.75	200		3200	HD	Slide projection	A	6.00	
		225	<b>15832 EZF/EZJ</b>	68	20	CC-8	1.75	350			HD	Color printer.	A, R		
		300	<b>47614 FHS</b>	82	20	CC-8	1.75	70		3300	HD	Slide projection	A	6.00	
<b>MR-16 FACETED DICHROIC REFLECTOR. 2" DIAMETER (51MM). TABLE 3.</b>															
MR16	GX5.3 2-Pin	20	<b>10933 BAB/PH</b>	12	20	C-6	1.88	2000		2900	HD	Flood	A	5.00	
		150	<b>43537 DDL</b>	20	20	C-6	1.75	500		3150	HD	Microfilm	A	7.75	
		80	<b>43206 DDM</b>	19	20	CC-6	1.75	50		3350	HD	Slide projection	A	6.00	
		80	<b>43988 DDS</b>	21	20	CC-6	1.75	1000		3125	HD	Microfilm	A	6.50	
		85	<b>43950 DED</b>	13.8	20	C-6	1.75	1000		3150	HD	Microfilm	A	6.50	
		50	<b>44854 DJT</b>	13.8	20	CC-6	1.75	1000		3150	HD	Microfilm	A	6.00	
GZ6.35 2-Pin		50	<b>21276 EFM</b>	8	20	C-6	1.75	50		3300	HD	8mm projection	A	1.25	
		75	<b>21277 EFN</b>	12	20	CC-6	1.75	50		3350	HD	8mm projection	A	1.25	
		100	<b>21278 EFP</b>	12	20	CC-6	1.75	50		3350	HD	8mm projection	A	1.25	
		150	<b>21279 EFR</b>	15	20	CC-6	1.75	50		3350	HD	8mm projection	A	1.25	
GX5.3 2-Pin		200	<b>29150 EJL</b>	24	20	CC-6	1.75	50		3400	HD	16mm, Color printer	A	1.25	
		150	<b>29151 EJM</b>	21	20	CC-6	1.75	40		3350	HD	8mm projection	A	1.50	
		150	<b>35200 EKE</b>	21	20	CC-6	1.75	250		3250	HD	8mm projection, fiber optics	A	1.75	
		80	<b>35800 EKP/ENA</b>	30	20	CC-6	1.75	25		3350	HD	8mm projection	A	1.75	
		200	<b>36899 EKX</b>	24	20	CC-6	1.75	25		3400	HD	Microfilm	A	5.50	
		30	<b>36902 EKZ</b>	10.8	20	C-6	1.75	200		3100	HD	16mm projection	A	1.50	
		250	<b>37462 ELC</b>	24	20	CC-6	1.75	50		3400	HD	Fiber optics, color printer	A	1.25	
		250	<b>22023 ELC/C</b>	24	20	CC-6	1.75	50		3400	HD	Fiber optics, color printer	A	1.25	
		250	<b>15377 ELC/500</b>	24	20	CC-6	1.75	500		3350	HD	Fiber optics, disco	A	1.25	
		150	<b>38306 ELD/EJN</b>	21	20	CC-6	1.75	40		3350	HD	Microfilm	A	6.50	
GY5.3 2-Pin		300	<b>38476 ELH</b>	120	20	CC-8	1.75	35		3350	HD	Slide projection	A	6.00	
		250	<b>38686 ENH</b>	120	20	CC-8	1.75	175		3250 11700	HD	Slide projection	A	6.00	
GX5.3 2-Pin		50	<b>25475 ENL</b>	12	20	C-6	1.75	4000		3050	HD	Fiber optics, display lighting	A	1.50	
		80	<b>40248 ENW/ENC</b>	19	20	CC-6	1.75	200		3200	HD	8mm projection	A	1.75	
GY5.3 2-Pin		360	<b>41705 ENX</b>	82	20	CC-8	1.75	75		3300	HD	Overhead projection	A	11.75	
			<b>19475 ENX-5</b>	86	20	CC-8	1.75	75		3300	HD	Overhead projection	A		
GX5.3 2-Pin		35	<b>41430 EPN</b>	12	20	C-6	1.75	50		3300	HD	8mm projection	A	1.13	
		42	<b>41729 EPT</b>	10.8	20	C-6	1.75	10000		2900	HD	Fiber optics	A	1.50	
		90	<b>41882 EPV</b>	14.5	20	CC-6	1.75	500		3150	HD	Microfilm	A	6.13	
			<b>42614 EPX</b>	14.5	20	CC-6	1.75	500		3150	HD	Microfilm	A	6.50	
		340	<b>41874 ERV</b>	36	20	CC-8	1.75	75		3300	HD	Overhead projection	A	11.75	
GY5.3 2-Pin		150	<b>43756 ESD</b>	120	20	CC-8	1.75	12		3350	HD	Enlarger, projection	A	1.75	
		85	<b>11698 ESJ</b>	82	20	CC-8	1.75	40		3350	HD	Enlarger, projection	A	1.75	
		250	<b>11322 ETJ</b>	120	20	CC-8	1.75	175		3300	HD	Fiber Optics	A	1.50	
		250	<b>11110 EVW</b>	82	20	CC-8	1.75	50		3300	H22	Overhead projection	A	11.75	



# Projection Lamps

Bulb Shape	Base	Order Watts	Order Code	Description	Case Volts	Qty.	Filament Design	MOL	LCL	Rated Life Hours	Lumens Initial	Color Temp. K	Burn Position	Additional Information	Footnote	Typical Working Distance (WxH)	Source Size (WxH)
<b>QUARTZLINE® MULTI-MIRROR® REFLECTORS (CONTINUED)</b>																	
<b>MR-16 FACETED DICHROIC REFLECTOR. 2" DIAMETER (51MM). TABLE 3. (CONTINUED)</b>																	
MR16	GX5.3 2-Pin	100	<b>12003</b>	<b>EXV</b>	12	20	CC-6	1.75		50	3100	3350	3100	U	Camera Light	A	
		250	<b>11750</b>	<b>EXX</b>	120	20	CC-8	1.75		25	6750	3300	6750	U	Camera Light	A	
	Wire Term.	32	<b>41783</b>	<b>EZA/4</b>	6.6A	20	C-8	1.75		1000		2900	4500	HD	Airport	A	
	GX5.3 2-Pin	45	<b>23071</b>	<b>EZC</b>	6.6A	20	C-8	1.75		1000		2950		HD	Airport	A	
	GY5.3 2-Pin	150	<b>15477</b>	<b>EZK</b>	120	20	CC-8	1.75		200		3200	3600	U	Camera Light	A	
	GX5.3 2-Pin	25	<b>47914</b>	<b>FHX</b>	13.8	20	CC-6	1.75		250		3200		HD	Microfilm	A	4.13
		50	<b>14887</b>	<b>FML</b>	13.8	20	CC-6	1.75		1000		3150		HD	Microfilm	A	8.44
	GY5.3 2-Pin	410	<b>21613</b>	<b>FXL</b>	82	20	CC-8	1.75		38		3300		HD	Overhead projection	A	11.75
	2-Pin w/LEADS	150	<b>25137</b>	<b>Q150MR</b>	15	20	C-8	1.88		150		3400		HD		A	1.75
																	<b>16-15/LEADS</b>
<b>QUARTZLINE® REFLECTOR LAMPS</b>																	
<b>MR-16 SMOOTH DICHROIC REFLECTOR. 2" DIAMETER (51MM). TABLE 4.</b>																	
MR16	GX5.3 2-Pin	150	<b>32882</b>	<b>EJA</b>	21	20	CC-6	1.75		40		3350		HD	Fiber Optics	A	1.10
		150	<b>32831</b>	<b>EJV</b>	21	20	CC-6	1.75		40		3350		HD	8mm proj., printer	A	1.75
		80	<b>32886</b>	<b>EJY</b>	19	20	CC-6	1.75		25		3400		HD	Fiber Optics	A	1.50
		50	<b>40598</b>	<b>ENZ</b>	30	20	CC-6	1.75		25		3450		HD	8mm projection	A	1.25
<b>MR-14 (1 3/4" DIAMETER) OR MR-16 (2" DIAMETER) DICHROIC REFLECTOR. 2-PIN VENTED BASE. TABLE 5.</b>																	
MR14	G7.9 2-Pin	250	<b>40658</b>	<b>BHB</b>	120	24	CC-8	1.67		25		3350		HD	16mm projection	A	2.63
MR16	G7.9 2-Pin	150	<b>40161</b>	<b>DNE</b>	120	24	CC-8	1.77		12		3350		HD	8mm projection	A	2.75
	GX7.9 2-Pin	150	<b>39742</b>	<b>DNF</b>	21	24	CC-8	1.77		25		3400		HD	8mm projection	A	2.75
MR14	GX7.9 2-Pin	50	<b>41885</b>	<b>ELS/ELR</b>	18	24	CC-8	1.41		650		3100		HD	Microfilm	A	4.75
		250	<b>40017</b>	<b>EMM/EKS</b>	24	24	CC-8	1.66		50		3400		HD	16mm projection	A	2.63
<b>QUARTZLINE® SINGLE-ENDED</b>																	
<b>4-PIN SLIDE PROJECTION. TABLE 6.</b>																	
T6	G17q 4-Pin	500	<b>36178</b>	<b>BCK</b>	120	24	C-13D	3.25	1.56	50		3200		HD	Slide Projection.	A, D	
<b>APPLICATIONS: PROJECTION, MICROFILM, STUDIO, ETC. TABLE 7.</b>																	
T3.5	G6.35 2-Pin	50	<b>18234</b>	<b>BRL</b>	12	100	C-6	1.72	1.17	50	1400	3400		U		A	
G6	G5.3 2-Pin	650	<b>30304</b>	<b>DVY</b>	120	24	CC-6	2.48	1.44	25	20000	3300		HD		A, E	.50 x .20
G7	G5.3 2-Pin	600	<b>30364</b>	<b>DYH</b>	120	24	CC-6	2.50	1.44	75	17000	3200		U		A	.50 x .25
	2-Button	600	<b>32071</b>	<b>DYP</b>	120	24	CC-6	2.25	1.00	75	17000	3200		HD		A	.50 x .25
	GY9.5 2-Pin Pf	650	<b>33248</b>	<b>DYR</b>	220	24	2CC-8	2.50	1.44	50	16500	3200		U		A	.45 x .45
			<b>33250</b>	<b>DYR</b>	240	24	2CC-8	2.50	1.44	50	16500	3200		U		A	.45 x .45
		600	<b>19479</b>	<b>DYS-5</b>	120	24	CC-6	2.50	1.44	150	15500	3200		HD		A	.45 x .45
			<b>32955</b>	<b>DYS/DYV/ BHC</b>	120	24	CC-6	2.50	1.44	75	17000	3200		HD		A	.50 x .25
T3.5	G5.3 2-Pin	30	<b>37346</b>	<b>DZA</b>	10.8	24	C-6	2.00	1.06	400	530	3100		HD		A	.15 x .05
T4	GY9.5 2-Pin Pf	150	<b>37695</b>	<b>DZE/FDS</b>	24	24	C-6 Oval	2.68	1.31	100	4000	3250		HD		A	.25 x .15
T6	GY9.5 2-Pin Pf	500	<b>37527</b>	<b>EHA</b>	120	24	C-13D	3.00	1.44	50		3300		HD		A, D	.35 x .35
T4	G6.35 2-Pin	250	<b>14874</b>	<b>EHJ</b>	24	100	C-6 Oval	2.25	1.31	50	8000	3400		HD		A	.30 x .15
	G5.3 2-Pin	175	<b>42612</b>	<b>EML</b>	24	24	C-6	2.12	1.06	125	5000	3200		HD		A	.21 x .19
T6	GY6.35 2-Pin	400	<b>41164</b>	<b>EVD</b>	36	24	C-6	2.34	1.40	50	14500	3200		HD	Overhead projector	A	





Bulb Shape	Base	Order Watts	Code Description	Case Qty.	Filament Design	MOL	LCL	Rated Life Hours	Lumens Initial	Color Temp. K	Burn Position	Additional Information	Footnote	Typical Working Distance (WxH)	Source Size (WxH)
<b>QUARTZLINE® SINGLE-ENDED (CONTINUED)</b>															
<b>APPLICATIONS: PROJECTION, MICROFILM, STUDIO, ETC. TABLE 7. (CONTINUED)</b>															
T3.5	G5.3 2-Pin	360	<b>12696 EYB</b>	82	24 CC-8	2.25	1.25	75	10000	3300	HD		A	.30 x .20	
			<b>19322 EYB-5</b>	86	24 CC-8	2.25	1.25	75		3200	HD		A	.30 x .20	
G6	G5.3 2-Pin	250	<b>13617 EYH/FKT</b>	120	24 CC-6	2.50	1.44	200	6000	3000	HD		A	.55 x .17	
		500	<b>33663 FBG/FBD</b>	120	24 CC-6	3.00	1.75	50	13200	3200	U		A	.50 x .20	
T3	GY6.35 2-Pin	100	<b>14876 FCR</b>	12	100 C-6 Oval	1.75	1.18	50	2800	3300	HD		A	.20 x .15	
T4	G6.35 2-Pin	150	<b>13598 FCS</b>	24	100 C-6 Oval	2.00	1.18	50	4500	3300	HD		A	.25 x .15	
T3	GZ9.5 2-Pin Pf	100	<b>35321 FDT</b>	12	24 C-6 Oval	2.12	1.06	50	2900	3300	HD		A	.23 x .15	
T4	G6.35 2-Pin	150	<b>36878 FDV</b>	24	24 C-6 Oval	2.00	1.19	100	4300	3050	U		A	.25 x .15	
	GY6.35 Ceramic	300	<b>19886 FLW</b>	24	48 C-6 Oval	2.15	1.21	50	10200	3500	HD		A	.34 x .23	
	G6.35 2-Pin	275	<b>18241 FNT/100</b>	24	100 C-6 Oval	2.25	1.31	50	10000	3400	HD		A	.14 x .28	
T3.5	G5.3	250	<b>80853 GCA</b>	120	12 CC-8	2.24	1.26	200	5700	3200	U		A		
<b>QUARTZLINE® SINGLE-ENDED – AMP RATED. TABLE 8.</b>															
T4	GZ9.5 2-Pin	120	<b>10099 EVV</b>	6.6A	24 C-6 Oval	2.50	1.54	500	3150	3200	BD	Airport	A	.25 x .12	
		150	<b>11427 EWR</b>	6.6A	24 C-6 Oval	2.50	1.54	500	4100	3200	BD	Airport	A	.25 x .16	
T3.5	GZ9.5 2-Pin	30	<b>11478 EXL</b>	6.6A	24 C-8	1.75	1.00	1000	375	2900	HD	Airport	A	.05 x .13	
		45	<b>11482 EXM</b>	6.6A	24 C-8	1.75	1.00	1000	750	2950	HD	Airport	A	.06 x .19	
T4	GZ9.5 2-Pin	200	<b>15243 EZL</b>	6.6A	24 C-6 Oval	2.50	1.54	500	5000	3100	BD	Airport	A	.28 x .19	
<b>QUARTZLINE® DOUBLE-ENDED PROJECTION. TABLE 9.</b>															
T5	R7s	1000	<b>29504 BRH</b>	120	24 CC-8	3.75		60	30000	3350	U	Overhead Projection	A	.70 x .21	
T4	R7s	800	<b>36952 DXX</b>	230	24 CC-8	3.13		75	21400	3200	U	Copyboard, Studio	A	.90 x .17	
			<b>36953 DXX</b>	240	24 CC-8	3.13		75	21400	3200	U	Copyboard, Studio	A	.90 x .17	
T5	R7s	1000	<b>38311 ETT</b>	120	24 CC-8	3.75		70		3350	U	Spec. (PH1000H)	A		
T4	R7s	420	<b>29581 FAL</b>	120	24 CC-8	2.63		90	11000	3200	U	Printer	A	.35 x .17	
		600	<b>29598 FCB</b>	120	24 CC-8	3.75		120	17000	3250	U	Overhead Projection	A	.45 x .18	
			<b>29592 FFJ</b>	120	24 CC-8	2.63		85	17000	3250	U	Printer	A	.60 x .17	
		420	<b>30276 FFM</b>	120	24 CC-8	3.13	0.50	90	11000	3200	U	Copyboard	A	.50 x .25	
<b>INCANDESCENT PROJECTION</b>															
<b>4-PIN BASE. TABLE 10.</b>															
T10	G17q 4-Pin	400	<b>40214 DAT/DAK</b>	120	24 C-13D	4.00	1.56	25	9800	3200	BD	Slide Projection	A		
		500	<b>29695 DAY/DAK</b>	120	24 C-13D	4.00	1.56	30	12500	3200	BD	Slide Projection.	A, J		
<b>4-PIN BASE – PROXIMITY REFLECTOR. TABLE 11.</b>															
T10	G17q 4-Pin	300	<b>29525 CAL</b>	120	24 C-13	4.00	1.56	25		3200	BD	Slide, Film Strip.	A, I		
		150	<b>29380 CAR</b>	120	24 2CC-8	3.13	1.31	15		3100	BD	Slide, Film Strip.	A, J		
		500	<b>29664 CZA/CZB</b>	120	24 C-13D	4.00	1.56	25		3300	BD	Slide Projection Gold Top (opaque)	A, I		
T12	G17q 4-Pin	500	<b>29737 DEK/DFW/DHN</b>	120	24 C-13D	3.62	1.75	25		3250	HD	Slide Projection.	A, H, I		
<b>4-PIN BASE – FOCUSING REFLECTOR. TABLE 12.</b>															
T12	GX17q 4-Pin	150	<b>29360 DCA</b>	21	24 CC-6	3.56	1.56	15		3250	HD	8mm Projection.	A, I	1.75	
	G17q 4-Pin	150	<b>29364 DCH/DJA/DFP</b>	120	24 CC-6	3.38	1.56	15		3150	BD	8mm Projection	A	2.25	
	GX17q 4-Pin	80	<b>36122 DFE</b>	30	24 CC-8	3.19	1.56	15		3400	HD	8mm Projection	A	2.25	
	G17q 4-Pin	150	<b>29386 DFN/DFC</b>	125	24 CC-8	3.19	1.56	15		3150	HD	8mm Projection	A	2.25	



# Projection Lamps

Bulb Shape	Base	Order Watts	Order Code	Description	Case Volts	Case Qty.	Filament Design	MOL	LCL	Rated Life Hours	Lumens Initial	Color Temp. K	Burn Position	Additional Information	Footnote	Typical Working Distance (WxH)	Source Size (WxH)
<b>INCANDESCENT PROJECTION (CONTINUED)</b>																	
<b>4-PIN BASE – FOCUSING REFLECTOR. TABLE 12. (CONTINUED)</b>																	
T14	G17q 4-Pin	150	29338	DJL	120	24	CC-8	3.50	1.56	15		3150	HD	8mm Projection	A	1.75	
	GX17q 4-Pin	80	40216	DLD/DFZ	30	24	CC-6	3.50	1.56	15		3400	HD	8mm Projection.	A, K	1.75	
		150	29366	DLS/DLG/DHX	22	24	CC-6	3.44	1.56	15		3250	HD	8mm Projection.	A, K	1.75	
<b>MEDIUM PREFOCUS BASE. ANSI BASE DESIGNATION: P28/25. TABLE 13.</b>																	
T10	Med. Pref.	500	29677	CZX/DAB	120	24	C-13D	5.75	2.19	25	12500	3200	BD	8mm Projection.	A, J		
T20	Med. Pref.	1000	29968	DRB	118	24	C-13	5.75	2.19	25	32000	3350	BD	Overhead projection	A		
			29947	DRS	120	24	C-13D	5.75	2.19	25	28500	3325	BD	Overhead projection	A		
<b>SINGLE CONTACT BAYONET BASE. ANSI BASE DESIGNATION: BA15S. TABLE 14.</b>																	
T8	S. C. Bay.	100	29257	CDD	120	24	CC-2V	3.13	1.38	50	2000	2975	BD	Slide Projection	A		
		120	43330	CEM	120	24	2CC-8	3.13	1.38	200	1950	3000	BD	Wheel Align Projection.	A, J		
<b>DOUBLE CONTACT BAYONET BASE. ANSI BASE DESIGNATION: BA15D. TABLE 15.</b>																	
S11	D. C. Bay.	30	29140	BLC	118	120	CC-2V	2.38	1.38	50	400	2775	U	Editor Projection			
		50	29156	BLX	118	120	CC-2V	2.38	1.38	50	780	2850	HD	Toy Projection			
		75	32137	BNF	120	120	CC-2V	2.38	1.38	25	1300	2900	HD	Toy Projection			
T8	D. C. Bay.	50	29171	CAX	118	24	CC-2V	3.13	1.38	50	775	2875	BD	Optical Projection			
		50	29169	CAX	130	24	CC-2V	3.13	1.38	50	775	2875	BD	Optical Projection			
		75	29208	CBX/CBS	118	24	CC-13	3.13	1.38	50	1200	2925	BD	Slide Projection.	A, J		
		100	29266	CDJ	118	24	CC-2V	3.13	1.38	50	2000	2975	BD	Slide Projection	A		
			29244	CEB	118	24	CC-13	3.13	1.38	50	1850	2975	BD	Slide Projection	A		
T6.4	D.C. Bay.	35	30202	EAJ	12	24	C6	4.00	1.77	300	620		U	Flashtube Modeling.	A, L		
		25					C6			300	420						
<b>SINGLE CONTACT PREFOCUS BASE. ANSI BASE DESIGNATION: P30S. TABLE 16.</b>																	
T8	S. C. Pref.	34	30421	BXB	8.5	24	C-8	3.13	1.63	100	690		HD	Sound Reproduction. Filament offset $\frac{3}{16}$ " from base axis.			
<b>MISCELLANEOUS. TABLE 17.</b>																	
T20	Mogul	1000	29959	DPT	120	12	C-13	9.06	4.75	50	28000	3200	BD	Opaque Projection	A		
<b>PHOTOFLOOD</b>																	
<b>STANDARD. TABLE 18.</b>																	
A21	Medium	300	40886	BAH	115	24	C-9	4.94		20	9000	3200	U	Photocopy, Inside Frost	A		
		250	40563	BBA	118	24	C-9	4.94		3	8000	3400	U	No. 1 Photoflood, Frost	A		
			40564	BCA	118	24	C-9	4.94		3	5000	4800	U	No B1 Blue, Inside Frost	A		
S11	Cand.	30	30232	BLK	125	120	CC-2V	2.25		50	400	2700	U	Photocopy, Inside Frost	A		
PS25	Medium	500	40566	EBV	118	24	C-9	6.94		6	17000	3400	U	No 2, Inside Frost	A		
			40567	EBW PH/B2	118	24	C-9	6.94		6	10500	4800	U	No. B2, Blue, Inside Frost	A		
A23	Medium	250	40565	ECA	120	24	C-9	6.00		20	6500	3200	U	Inside Frost	A		
PS25	Medium	500	40568	ECT	120	24	C-9	6.94		60	13650	3200	U	Inside Frost	A		



Bulb Shape	Base	Order Watts	Code	Description	Volts	Case Qty.	Filament Design	MOL	LCL	Rated Life Hours	Lumens Initial	Color Temp. K	Burn Position	Additional Information	Footnote	Typical Working Distance (WxH)	Source Size (WxH)	
<b>PHOTOFLOOD (CONTINUED)</b>																		
<b>REFLECTOR. TABLE 19.</b>																		
R40	Medium	500	30151	DXB	120	24	CC-2V	6.63		6		3300	45000	Spot Beam, 15 degrees.	A, Q			
			30145	DXC	120	24	C-9	6.63		6		3300	5500	Flood Beam, 90 degrees.	A, Q			
			30281	EAL	120	24	CC-2V	6.63		15		3200	6800	Medium Beam, 60 degrees.	A, Q			
<b>ENLARGER &amp; PRINTER. TABLE 20.</b>																		
S11	S.C. Bay.	75	30162	PH/111A	125	120		2.38		15	1120	2900	HD	Enlarger, White	A			
S14	Medium	75	43220	PH/140	120	120		3.38		35	1150	2900	U	Enlarger, White	A			
A21	Medium	75	40569	PH/211	120	24		4.94		65	1000	3000	U	Enlarger, White	A			
		150	40570	PH/212	120	24		4.94		100	2300	3050	U	Enlarger, White	A			
		250	40571	PH/213	120	24		4.94		3	7000	3400	U	Enlarger, White	A			
<b>PULSED XENON ARC, GEMINI®, AND MARC™. TABLE 21.</b>																		
T3	WireTerm/ Ceramic	4000	30124	PXA 50		6		4.63			125000	6000	U	Graphic Arts	A, B			
		8000	30129	PXA/80		6		4.63			240000	6000	U	Graphic Arts	A, B			
T11	Special	175	29376	CXE175/BF	12	4		1.67		1000	2200	5600	350000	BDTH	Light Engine, Medical	A, S		
		300	46909	CXE300/BF/SB	14	4		1.67		1000	6000	5600	500000	BDTH	Light Engine, Medical	A, S		
		300	10115	CXE300/BF	14	4		1.67		1000	5000	5600	500000	BDTH	Light Engine, Medical	A, S		
PAR20	Special 2-Pin Plug	300	11134	GEMINI 300(EZG)	35	4				75		6000	H	Replaces MARC 300/16A.	A, O	1.46		
PAR24	Special 2-Pin Plug	350	39936	MARC 350-16T EZT	45	4				50	50	5000	H		A, O	2.05		

### POWER SUPPLY TO OPERATE GEMINI® AND MARC™ LAMPS

For information on the special power supply used to operate these lamps, contact:

Scientecular Lab Company  
98 McKinney Avenue  
Central Islip, NY 11722-4120  
(516) 232-3345

NAPS/Fortron Source  
328 Ley Road, Suite 300  
Ft. Wayne, IN 46808  
(219) 471-1368  
Fax: (219) 471-1368

## WARNING AND CAUTION NOTICES

### A

#### ▲ WARNING

##### Risk of electrical shock

- Turn power off before inspection, installation or removal

##### Risk of fire

- Keep combustible material away from lamp
- Use in enclosed fixtures rated for this product

##### Pressurized lamp-unexpected rupture may cause injury, fire, or property damage

- Do not exceed 110% of rated voltage
- Avoid direct water/liquid contact
- Use in enclosed fixtures rated for this product
- Do not use lamp if outer glass is scratched or broken

#### ▲ CAUTION

##### Risk of burn

- Allow lamp/fixture to cool before handling
- Turn off power before installing lamp  
Lamp may shatter and cause injury if broken
- Do not use lamp if outer glass is scratched or broken
- Dispose of lamp in enclosed container

### S

#### ▲ WARNING

##### Lamp emits UV radiation which may cause eye/skin irritation. RG-3

- Avoid exposure of eyes and skin to unshielded lamp

#### ▲ CAUTION

##### Lamp may shatter and cause injury if broken

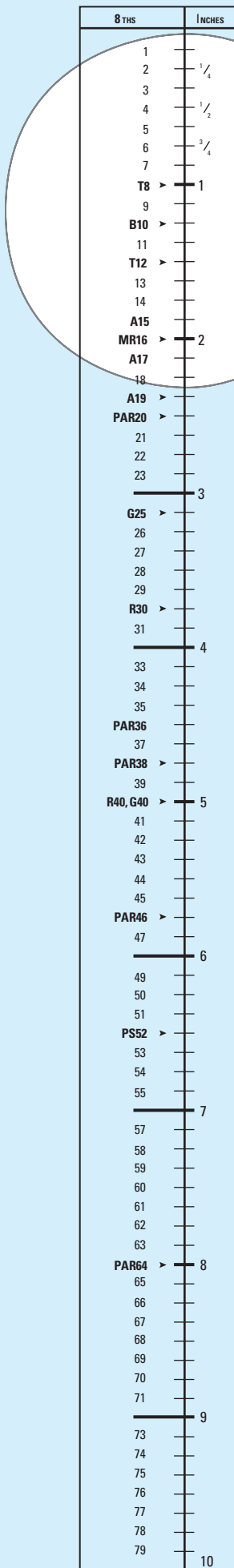
- Wear safety glasses and gloves when handling lamp
- Do not use excessive force when installing lamp

## FOOTNOTES

### # Footnote

- B Pulsed Xenon lamps emit high levels of ultraviolet (UV) radiation and must be completely enclosed in an inter-locked system with all walls made of UV absorbing material. The lamp must be made inoperative before the system is opened. The operator or user should never be exposed to the high level of UV radiation emitted by PXA lamps.
- C Opaque Ceramic top on bulb.
- D Proximity Reflector.
- E Ultraviolet absorbing bulb.
- G Heat resistant glass bulb.
- H Collector grid.
- I Gold Top (opaque).
- J Black Top (opaque).
- K Dichroic reflector.
- L Two-filament lamp.
- M Filament offset 3 3/8" from base axis.
- O Should not be operated for periods of less than three minutes.
- Q Approximate beam spread to 1/2 center-beam intensity.
- R Red-enhanced dichroic filter.





## LAMP SIZING GUIDE

### LAMP SIZE/DIAMETER

The diameter of a lamp, at its maximum dimension, is expressed in eighths of an inch. Examples: The diameter of an A19 lamp is 19-eighths of an inch, or 2 $\frac{3}{8}$ ", at its widest point. A T8 lamp has a diameter of 8-eighths, or one inch.

### LIGHT CENTER LENGTH (L.C.L.)

The distance between the center of the filament, or arc tube, and a reference plane — usually the bottom of the lamp base. See L.C.L. Reference Plane Location chart below.

#### L.C.L. Reference Plane Location

Base Type	Location
All Screw Bases (except Mini-Can.)	Bottom of base contact
Mini-Can	Where diameter of ceramic base insulator is .531 inches
3-Contact Medium	Bottom of base contact
Mogul Medium Prefocus	Top of base fins
Mogul Prefocus	Top of base fins
Medium BiPost	Base end of bulb (Glass lamps)
	Bottom of ceramic base (Quartz lamps)
Mogul BiPost	Shoulder of posts (Glass lamps)
	Bottom of ceramic base (Quartz lamps)
2-Pin Prefocus	Bottom of ceramic base.
S.C. or D.C. Bayonet Candelabra	Top of base pins
Medium Bayonet	Top of base pins
S.C. or D.C. Prefocus	Plane of locating bosses on prefocus collar
Medium 2-Pin	Bottom of metal base shell

### MAXIMUM OVERALL LENGTH (M.O.L.)

The end-to-end measurement of a lamp, expressed in inches or millimeters.

## IMPORTANT NOTICE

This catalog is a compilation of accumulated data. Additional information is constantly being uncovered through research and testing, which may modify the data given herein. This is particularly true of newer lamps and ballasts. Accordingly, SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE. For the latest lamp and ballast design data and information, contact your GE Representative.

The data and suggested applications contained in this catalog, as well as any additional information our representative may be able to furnish, are for general information only and are not intended and should not be taken as representations or warranties as to the suitability of a lamp or ballast for any particular application or use in any particular equipment, nor are our representatives authorized to make any such warranties. Applications and conditions of use are many and varied, and beyond our control. We cannot possibly have the same degree of knowledge that the purchaser has with respect to the design of his equipment and the conditions of its use. Therefore, it is up to the purchaser to make his own determination as to the suitability of a lamp or ballast for his intended application or use and to assume the responsibility for that determination.

General Electric desires to supply the best possible products at all times. For this reason, General Electric reserves the right to make changes in its products, and to introduce new products or discontinue existing ones without notice.

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## GE LIGHTING U.S. AND CANADIAN SALES OFFICES AND CUSTOMER SERVICE CENTERS

US Sales Offices			
Region/States	Location	Address	Phone/Fax No.
<b>GE Lighting Headquarters</b>			
		Nela Park, 1975 Noble Rd. Cleveland, OH 44112	p. 216 266-2121
<b>Eastern</b>	<b>Plainville</b>	41 Woodford Ave. Plainville, CT 06062	p. 860 747-7094 f. 860 747-7849
<b>NY, NJ</b>	<b>New York</b>	34 West Rt. 22 Branchburg, NJ 08876	p. 908 203-6527 f. 908 231-6391
<b>NJ, East PA</b>	<b>Cherry Hill</b>	535 Rt. 38 East Cherry Hill, NJ 08002	p. 856 317-5228 f. 856 317-5236
<b>NJ., NY, DE</b>	<b>Wayne</b>	155 Rt. 46 West Wayne, NJ 07470	p. 973 256-8956 f. 973 256-4350
<b>MA, RI, VT, NH, ME, CT</b>	<b>Boston</b>	980 Washington St., Ste. 332N Dedham, MA 02026	p. 781 320-4256 f. 781 320-4245
<b>Southeast</b>	<b>Atlanta</b>	20 Technology Pkwy. Norcross, GA 30092	p. 770 662-4979 f. 770 447-7218
<b>NC, SC</b>	<b>Charlotte</b>	4601 Park Rd., Ste. 400 Charlotte, NC 28209	p. 803 462-2016 f. 803 462-2017
<b>AL, GA</b>	<b>Birmingham</b>	31 Inverness Center Pkwy., Ste. 500 Birmingham, AL 35242	p. 205 408-9902 f. 205 408-9903
<b>FL</b>	<b>Tampa</b>	4300 West Cypress Ste. 700 Tampa, FL 33607	p. 813 910-0086 f. 813 972-9382
<b>Central</b>	<b>Cleveland</b>	1975 Noble Rd., Bldg. 335F Cleveland, OH 44112	p. 216 266-8358 f. 216 266-5580
<b>DC, MD, VA</b>	<b>Washington</b>	7272 Park Circle Dr., Ste. 300 Hanover, MD 21076	p. 410 737-7212 f. 410 737-7216
<b>TN, KY</b>	<b>Memphis</b>	1760 Moriah Woods Blvd., Ste. 9 Memphis, TN 38117	p. 901 762-4332 f. 901 762-4336
<b>Cent OH</b>	<b>Columbus</b>	4079 Executive Pkwy., Ste. 310 Westerville, OH 43081	p. 614 899-8931 f. 614 899-8908
<b>So OH, KY</b>	<b>Cincinnati</b>	10101 Alliance Rd., Ste. 135 Cincinnati, OH 45242	p. 513 936-6591 f. 513 936-6599
<b>IN</b>	<b>Indianapolis</b>	12722 Hamilton Cross Blvd. Carmel, IN 46032	p. 317 574-1577 f. 317 574-1970
<b>Midwest</b>	<b>Chicago</b>	701 E 22nd St., Ste. 300 Lombard, IL 60148	p. 630 652-4400 f. 630 652-4486
<b>WI, IA</b>	<b>Milwaukee</b>	400 N Executive Dr., Ste. 300 Brookfield, WI 53005	p. 262 797-4946 f. 262 797-4917
<b>MI, NW OH</b>	<b>Detriot</b>	Two Towne Square Southfield, MI 48076	p. 248 262-2762 f. 248 262-2856
<b>Southwest</b>	<b>Dallas</b>	PO Box 610847 1717 West Airfield Dr. Dallas, TX 75261-0847	p. 972 574-0548 f. 972 574-0561
<b>CO, WY</b>	<b>Denver</b>	2000 S. Colorado Blvd., Ste. 100 Denver, CO 80222	p. 303 464-2823 f. 303 464-2879
<b>KS, MO, OK</b>	<b>Kansas City</b>	10550 Barkley St., Ste. 200 Overland Park, KS 66212	p. 913 967-6373 f. 913 967-6378
<b>LA, MS, AR</b>	<b>New Orleans</b>	201 Evans Rd., Ste. 200 Harahan, LA 70123	p. 504 731-5540 f. 504 731-5535
<b>South TX</b>	<b>Houston</b>	3530 W. 12th St., Ste. 100 Houston, TX 77008	p. 713 880-7496 f. 713 880-7493
<b>West</b>	<b>Los Angeles</b>	3191 Temple Ave., Ste. 200 Pomona, CA 91768	p. 909 444-5230 f. 909 444-5227

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## GLOSSARY OF TERMS

### **Ambient Temperature**

Light output of fluorescent lamps depends on ambient temperature which refers to the temperature INSIDE the fixture in the air surrounding the fluorescent lamp.

### **Amperes**

("Amps.") A measure of electrical current. In incandescent lamps, the current is related to voltage and power as follows: Current (Amps) = Power (Watts) / Voltage (Volts).

### **American National Standards Institute (ANSI)**

A consensus-based organization which coordinates voluntary standards for the physical, electrical and performance characteristics of lamps, ballasts, luminaires and other lighting and electrical equipment.

### **ANSI Ballast Type**

A reference to the ANSI document describing the lamp which also lists the characteristics of the ballast required to operate the lamp. The following naming system is used: H - mercury lamps; M - metal halide lamps; S - high pressure sodium lamps; L - low pressure sodium lamps.

### **Ballast**

An auxiliary piece of equipment required to start and to properly control the flow of current to gas discharge light sources such as fluorescent and high intensity discharge (HID) lamps.

### **Ballast Factor (BF)**

This is the percentage of a lamp's rated lumen output that can be expected when operated on a specific, commercially available ballast. For example, a ballast with a ballast factor of 0.93 will result in the lamp's emitting 93% of its rated lumen output. A ballast with a lower BF results in less light output and also generally consumes less power.

### **Ballast Losses**

Power or energy dissipated in the ballast as heat and not converted to lamp energy.

### **Beam Angle**

The angular dimension of the cone of light from reflectorized lamps (such as R and PAR types) encompassing the central part of the beam out to the angle where the intensity is 50% of maximum. The beam angle sometimes called "beam spread" is often part of the ordering code for reflectorized lamps. Example: The 50PAR30/HIR/NFL25 is a 50 watt PAR30 narrow flood lamp with a beam angle of 25 degrees. See also Field Angle.

### **Beam Lumens**

The total lumens present within the portion of the beam contained in the beam angle.

### **Biax<sup>®</sup>**

GE trademark for its biaxial family of high-efficiency and long-life compact fluorescent lamps. DBX (Double Biax) TBX (Triple Biax) and QBX (Quad Biax) refer to the number of U-shaped legs present in the lamp.

### **Canadian Standards Association (CSA)**

An organization that writes standards and tests lighting equipment for performance as well as electrical and fire safety. Canadian provincial laws generally require that all products sold for consumer use in Canada must have CSA or equivalent approval.

### **Candela (cd)**

The measure of luminous intensity of a source in a given direction. The term has been retained from the early days of lighting when a standard candle of a fixed size and composition was defined as producing one candela in every direction. A plot of intensity versus direction is called a candela distribution curve and is often provided for reflectorized lamps and for luminaires with a lamp operating in them.

### **Candlepower**

An obsolete term for luminous intensity; current practice is to refer to this simply as candelas. See Candela.

### **Candlepower Distribution Curve**

A graphical presentation of the distribution of light intensity of a light source, usually a reflector lamp or luminaire.

### **Cathode see electrode**

### **Center Beam Candlepower (CBCP)**

Refers to the luminous intensity at the center of the beam of a blown or pressed reflector lamp (such as a PAR lamp). Measured in candelas. See also Candela.

### **Ceramic Metal Halide (CMH<sup>®</sup>)**

A type of metal halide lamp that uses a ceramic material for the arc tube instead of glass quartz, resulting in better color rendering (>80 CRI) and improved lumen maintenance. GE ConstantColor<sup>®</sup> CMH<sup>®</sup> lamps feature a 3-piece arc tube design that delivers terrific color consistency and lamp reliability.

### **ChromaFit<sup>®</sup>**

A GE brand name for metal halide lamps designed to operate on HPS ballasts, allowing a user to switch from the yellowish color of HPS to the white color of metal halide without retrofitting ballasts. These products are available in both quartz metal halide and ceramic metal halide (CMH) versions.

### **Coefficient of Utilization (CU)**

In general lighting calculations, the fraction of initial lamp lumens that reach the work plane. CU is a function of luminaire efficiency, room surface reflectances and room shape.

### **Color Rendering Index (CRI)**

An international system used to rate a lamp's ability to render object colors. The higher the CRI (based upon a 0-100 scale) the richer colors generally appear. CRI ratings of various lamps may be compared, but a numerical comparison is only valid if the lamps are close in color temperature. CRI differences among lamps are not usually significant (visible to the eye) unless the difference is more than 3 -5 points.

### **Color Temperature (Correlated Color Temperature - CCT)**

A number indicating the degree of "yellowness" or "blueness" of a white light source. Measured in kelvins, CCT represents the temperature an incandescent object (like a filament) must reach to mimic the color of the lamp. Yellowish-white ("warm") sources, like incandescent lamps, have lower color temperatures in the 2700K - 3000K range; white and bluish-white ("cool") sources, such as cool white (4100K) and natural daylight (6000K), have higher color temperatures. The higher the color temperature the whiter, or bluer, the light will be.

### **Compact Fluorescent Lamp (CFL)**

The general term applied to fluorescent lamps that are single-ended and that have smaller diameter tubes that are bent to form a compact shape. Some CFLs have integral ballasts and medium or candelabra screw bases for easy replacement of incandescent lamps.

### **ConstantColor<sup>®</sup>**

A GE registered name for lamp families that show very little color shift over life, such as GE's Precise<sup>®</sup> MR16 lamps and GE's ceramic metal halide (CMH<sup>®</sup>) lamps.

### **Cost of Light**

Usually refers to the cost of operating and maintaining a lighting system on an ongoing basis. The 88-8-4 rule states that (typically) 88% is the cost of electricity, 8% is labor and only 4% is the cost of lamps.



## GLOSSARY OF TERMS

### **CovRGuard®**

A lamp encased by a sleeve made of the highest quality GE Lexan® plastic and sealed using a patented process. The Lexan covering helps contain glass fragments if the lamp breaks.

### **Diamond Precise®**

Diamond Precise® is the GE trade name for its line-voltage MR16 ConstantColor® halogen lamp. An integral ballast and a medium screw base enable Diamond Precise® lamps to operate on standard (120 volt) circuits. The MR16 technology of Diamond Precise® allows a tighter, more intense beam than can be attained by the 50-watt PAR20 and R20 types it's designed to replace, even though the lumen output is significantly less by comparison.

### **Discharge Lamp**

A lamp where light is emitted from an electrical discharge between two electrodes as opposed to a filament lamp. Examples are: Fluorescent lamps and HID (High Intensity Discharge) lamps like Metal Halide, Mercury and High Pressure Sodium. All discharge lamps require some kind of current-limiting device, e.g. a ballast to operate them.

### **Ecolux®**

A term for GE lamps that pass the TCLP test. See TCLP.



### **Edison**

GE's trademark for a wide range of lighting products.

### **Efficacy**

See Luminous Efficacy.

### **e-HID ballast see Electronic HID Ballast**

### **Electrode**

In a discharge lamp the arc is struck between two protruding metal terminals in the chamber. These are called electrodes. The negative electrode which emits electrons to fuel the electrical discharge is called the cathode.

### **Electrodeless Lamp**

See Induction Lighting and GENURA®.

### **Electromagnetic Ballast**

See Magnetic Ballast.

### **Electromagnetic Spectrum**

A continuum of electric and magnetic radiation that can be characterized by wavelength or frequency. Visible light encompasses a small part of the electro-magnetic spectrum in the region from about 380 nanometers (violet) to 770 nanometers (red) by wavelength.

### **Electromagnetic Interference (EMI)**

High frequency electronic ballasts and other electronic devices can produce a small amount of radio waves that can interfere with radio and TV. Federally-mandated requirements must be met for EMI levels before an electronic device is considered FCC compliant. (FCC is the Federal Communications Commission)

### **Electronic Ballast**

A short name for a fluorescent or HID high frequency electronic ballast. Electronic ballasts use solid state electronic components and typically operate fluorescent lamps at frequencies in the range of 25-35 kHz. The benefits are: increased lamp efficacy, reduced ballast losses and lighter, smaller ballasts compared to electro-magnetic ballasts. Electronic ballasts may also be used with HID lamps.

### **Electronic HID Ballast**

An electronic ballast capable of operating an HID lamp. GE's Ultramax® (electronic HID ballast operates Pulse Arc® (metal halide) and CMH® (ceramic metal halide) lamps between 250W and 400W and provides higher efficiency and significantly improved lumen maintenance over magnetic ballasts.

### **Elliptical Reflector (ER) Lamp**

An incandescent lamp with a built-in elliptically-shaped reflecting surface. This shape produces a focal point directly in front of the lamp which reduces light absorption in some types of luminaires. It is particularly effective at increasing the efficiency of baffled downlights.

### **Enclosed Fixtures**

### **Energy Policy Act (EPACT)**

Comprehensive energy legislation passed by the U.S. Congress in 2005. The lighting portion includes minimum energy efficacy requirements for many lamp and ballast components, bans ballasts for mercury lamps from 2008 on and provides significant tax incentives in 2006 and 2007 for buildings retrofitted or constructed with low lighting power densities (watts per square foot).

### **Energy Star®**

US Department of Energy (DOE) designation for products meeting certain energy efficiency and performance standards. Among manufacturers of Compact Fluorescent Lamps, GE has the largest number of Energy Star® products as listed on the Federal Government's website.

### **EOL (End-of-Life Protection)**

A circuit that senses that a lamp has reached end of life (compact fluorescent lamps and small diameter linear fluorescent lamps) and turns off power to the lamp. Continuing to power the lamp beyond end of life can result in overheating of the lamp ends.

### **Federal Communications Commission (FCC)**

The U.S. Federal agency that regulates emissions in the radio frequency portion of the electromagnetic spectrum. Part 18 of the FCC rules specifies electromagnetic interference (EMI) from lighting devices operating at frequencies greater than 9 kilohertz (kHz). Typical electronically-ballasted compact fluorescent lamps operate in the 24 – 100 kHz frequency range.

### **Field Angle**

The angular dimension of the cone of light from reflectorized lamps (such as R and PAR types) encompassing the central part of the beam out to the angle where the intensity is 10% of maximum. See Beam Angle.

### **Fluorescent HO**

And VHO lamps require special ballasts that generate higher currents than standard ballasts and operate the lamps at higher wattage than standard lamps. These lamps are generally less efficient than the standard product. Metal Halide HO and XHO lamps operate on the same ballasts as standard lamps and at the same wattage but are more efficient and produce higher light output than standard lamps.

### **Fluorescent Lamp**

A high efficiency lamp utilizing an electric discharge through low pressure mercury vapor to produce ultra-violet (UV) energy. The UV excites phosphor materials applied as a thin layer on the inside of a glass tube which makes up the structure of the lamp. The phosphors transform the UV to visible light.

### **Footcandle (fc)**

A unit of illuminance or light falling onto a surface. It stands for the light level on a surface one foot from a standard candle. One footcandle is equal to one lumen per square foot. See also Lux.





## **Full Spectrum Lighting**

A marketing term, typically associated with light sources that are similar to some forms of natural daylight (5000K and above, 90+ CRI), but sometimes more broadly used for lamps that have a smooth and continuous color spectrum.

## **Genura®**

GE's electrodeless compact fluorescent lamp, Genura®, uses induction to power the discharge. The chamber generates UV (just like a discharge in a regular fluorescent lamp) that is converted by phosphors to visible light. Because Genura® uses no electrodes, the life of this unique reflector lamp is longer than typical compact fluorescent products. See Induction Lighting.

## **Glare**

Visual discomfort caused by excessive brightness is called discomfort glare. If task performance is affected it is called disability glare. Glare can be direct glare or indirect (reflected) glare.

## **Halogen Lamp**

A halogen lamp is an incandescent lamp with a filament that is surrounded by halogen gases, such as iodine or bromine. Halogen gases allow the filaments to be operated at higher temperatures and higher efficacies. The halogen participates in a tungsten transport cycle, returning tungsten to the filament and prolonging lamp life. All halogen lamps have a tungsten filament and, often, a quartz envelope.

## **Halogen-IR® (HIR) Lamp**

GE designation for high-efficiency tungsten halogen lamps. HIR lamps utilize shaped filament tubes coated with numerous layers of materials that transmit light but reflect the heat (infrared) back onto the filament. This reduces the power needed to keep the filament hot.

## **Harmonic Distortion see Total Harmonic Distortion (THD)**

## **Hertz**

Unit of frequency of vibration, denoting cycles per second.

## **Highbay Lighting**

Lighting designed for (typically) industrial locations with a ceiling height of 25 feet and above.

## **High-Intensity Discharge (HID) Lamp**

A general term for mercury, metal halide (GE ConstantColor® CMH®, Multi-Vapor®, MXR or Arcstream®) and high-pressure sodium (GE Lucalox®) lamps. HID lamps contain compact arc tubes which enclose various gases and metal salts operating at relatively high pressures and temperatures.

## **High Output/Very High Output (HO, VHO) Lamps**

Designation for lamps generating more light than standard lamps.

## **High-Pressure Sodium (HPS) Lamp**

HPS lamps are high intensity discharge light sources that produce light by an electrical discharge through sodium vapor operating at relatively high pressures and temperatures. GE markets these lamps under the trade name of Lucalox®.

## **Hot Restart Time**

If there is a momentary power interruption and the HID lamp goes out, there will be a delay of 10 to 15 minutes before the lamp has cooled down sufficiently to start again. This is called the Hot Restart time. PulseArc® lamps have a significantly shorter Hot Restart time (typically 3-5 minutes) than standard metal halide lamps. Lucalox® Standby lamps will start up immediately while standard Lucalox® lamps require a few minutes.

## **Ignitor**

An electronic device providing a high voltage pulse to initiate an electrical discharge. Typically, the ignitor is paired with or is a part of the ballast.

## **Illuminance**

The "density" of light (lumens/area) incident on a surface; i.e. the light level on a surface. Illuminance is measured in footcandles or lux.

## **Incandescent Lamp**

A light source that generates light utilizing a thin filament wire (usually of tungsten) heated to white heat by an electric current passing through it.

## **Indirect Lighting**

The method of lighting a space by directing the light from luminaires upwards towards the ceiling. The light scattered off the ceiling produces a soft, diffuse illumination for the entire area.

## **Induction Lighting**

Gases can be excited directly by radio-frequency or microwaves from a coil that creates induced electromagnetic fields. This is called induction lighting and it differs from a conventional discharge, which uses electrodes to carry current into the arc. Induction lamps have no electrodes inside the chamber and generally, therefore, have longer life than standard lamps. Genura® is an example of an induction lamp.

## **Infrared Radiation**

Electromagnetic energy radiated in the wavelength range of about 770 to 1,000,000 nanometers. Energy in this range cannot be seen by the human eye, but can be sensed as heat by the skin.

## **Input Watts, Input Volts**

These refer to the ballast: the input watts represents the total power consumption of the ballast. It includes the power to the lamps and the power dissipated in the ballast. The input volts of the ballast is the line voltage the ballast is designed for, e.g. 120 volts or 277 volts.

## **Instant Start**

A type of ballast designed to start fluorescent lamps as soon as the power is applied. Most T8 fluorescent lamps are being operated on electronic instant-start ballasts. Slimline fluorescent lamps operate only on instant start circuits.

## **Kelvins see Color Temperature**

## **Kilowatt (kW)**

A measure of electrical power equal to 1000 watts.

## **Kilowatt Hour (kWh)**

The standard measure of electrical energy and the typical billing unit used by electrical utilities for electricity use. A 100-watt lamp operated for 10 hours consumes 1000 watt-hours (100 x 10) or one kilowatt-hour. If the utility charges \$.10/kWh, then the electricity cost for the 10 hours of operation would be 10 cents (1 x \$.10).

## **Lamp**

The term used to refer to the complete light source package, including the inner parts as well as the outer bulb or tube. "Lamp", of course, is also commonly used to refer to a type of small light fixture such as a table lamp.

## **Life**

See Rated Lamp Life.



GLOSSARY OF TERMS (CONTINUED)

**Light**

Radiant energy that can be sensed or seen by the human eye. Visible light is measured in lumens.

**Light Center Length (L.C.L.)**

The distance between the center of the filament, or arc tube, and a reference plane — usually the bottom of the lamp base. See L.C.L. Reference Plane Location chart on page A-1.

**Light Emitting Diode (LED)**

A solid that directly converts electrical impulses into light. Some LED's today incorporate fluorescent materials to change the color characteristics of the emitted light.

**Light Loss Factor (LLF)**

The product of all factors that contribute to lowering the illumination level including reflector degradation, dirt, lamp depreciation over time, voltage fluctuations, temperature effects, burn-out factor, etc.

**Lucalox®**

The GE brand name for high-pressure sodium lamps.

**Lumen**

A measure of luminous flux or quantity of light emitted by a source. For example, a dinner candle provides about 12 lumens. A 60-watt Soft White incandescent lamp provides 840 lumens.

**Lumen Depreciation, Lumen Maintenance**

A measure of how well a lamp maintains its light output over time. It may be expressed numerically or as a graph of light output vs. time.

**Lumens Per Watt (lpW)**

A ratio expressing the luminous efficacy of a light source.

Typical lamp efficacies:

Edison's first lamp .....	1.4 lpW
Incandescent lamps .....	10-40
Halogen incandescent lamps .....	20-45
Fluorescent lamps .....	35-105
Mercury lamps .....	50-60
Metal halide lamps .....	60-120
High-pressure sodium lamps .....	60-140

**Note:** The values above for discharge lamps do not include the effect of the ballasts, which must be used with those lamps. Taking ballast losses into account reduces "system" or lamp ballast efficacies typically by 10-20% depending upon the type of ballast used.

**Luminaire**

A complete lighting unit consisting of a lamp (or lamps), ballast (or ballasts) as required together with the parts designed to distribute the light, position and protect the lamps and connect them to the power supply. A luminaire is often referred to as a fixture.

**Luminaire Efficiency**

The ratio of total lumens emitted by a luminaire to those emitted by the lamp or lamps used in that luminaire.

**Luminance**

A photometric measure of "brightness" of a surface as seen by the observer, measured in candelas per square meter.

**Luminous Efficacy**

The light output (lumens) of a light source divided by the total power input (watts) to that source. It is expressed in lumens per watt. See Lumens per Watt.

**Lux (lx)**

A unit of illuminance or light falling onto a surface. One lux is equal to one lumen per square meter. Ten lux approximately equals one footcandle. See also Footcandle.

**Magnetic Ballast**

A ballast used with discharge lamps that consists primarily of transformer-like copper windings on a steel or iron core. See also Electronic Ballasts.

**Maximum Overall Length (M.O.L.)**

The end-to-end measurement of a lamp, expressed in inches or millimeters.

**Mean Lumens**

The average light output of a lamp over its rated life. Based on the shape of the lumen depreciation curve, for fluorescent and metal halide lamps, mean lumens are measured at 40% of rated lamp life. For mercury, high pressure sodium and incandescent lamps, mean lumen ratings refer to lumens at 50% of rated lamp life. See Lumen Maintenance.

**Mercury Lamp**

A high-intensity discharge light source operating at a relatively high pressure (about 1 atmosphere) and temperature in which most of the light is produced by radiation from excited mercury vapor. Phosphor coatings on some lamp types add additional light and improve color rendering.

**Metal Halide Lamp**

A high-intensity discharge light source in which the light is produced by the radiation from mercury, plus halides of metals such as sodium, scandium, indium and dysprosium. Some lamp types may also utilize phosphor coatings. GE trade names include: Multi-Vapor®, ConstantColor® CMH®, PulseArc®, Staybright®, Watt-Miser®, ChromaFit® and Arcstream®.

**Mortality Curve**

Lamps have a rated or expected life but individual failures occur earlier and some lamps will last longer. The mortality curve depicts the expected percent surviving in a group of lamps at various points between zero hours and rated life or beyond. The curve starts with 100% at zero hours and goes to 50% surviving at the rated life (e.g. 3000 hours or 20,000 hours, etc.) However, the shape of the curve between these two end points can vary depending on the lamp type.

**Multi-Vapor®**

Multi-Vapor® A GE brand name for metal halide lamps.

**Nanometer**

A unit of wavelength equal to one billionth of a meter.

**National Electric Code (NEC)**

A nationally accepted electrical installation code to reduce the risk of fire, developed by the National Fire Protection Association.

**PAR Lamp**

PAR is an acronym for parabolic aluminized reflector. A PAR lamp, which may utilize either an incandescent filament, a halogen filament tube or a HID arc tube, is a precision pressed-glass reflector lamp. PAR lamps rely on both the internal reflector and prisms in the lens for the control of the light beam.



### **Parallel Lamp Operation/Parallel Wiring**

Refers to ballasts that employ multiple output current paths from a single ballast to allow lamps to operate independent of one another, allowing other lamps operated by the ballast to remain lit should companion lamp(s) fail. (See Series Lamp Operation).

### **Phosphor**

An inorganic chemical compound processed into a powder and deposited on the inner glass surface of fluorescent tubes and some mercury and metal-halide lamp bulbs. Phosphors are designed to absorb short wavelength ultraviolet radiation and to transform and emit it as visible light.

### **Photometry**

The measurement of light and related quantities.

### **Photopic see Scotopic/Photopic**

### **Power Factor (PF)**

A measure of the phase difference between voltage and current drawn by an electrical device, such as a ballast or motor. Power factors can range from 0 to 1.0 with 1.0 being ideal. Power factor is sometimes expressed as a percent. Incandescent lamps have power factors close to 1.0 because they are simple "resistive" loads. The power factor of a fluorescent and HID lamp system is determined by the ballast used. "High" power factor usually means a rating of 0.9 or greater. Power companies may penalize users for using low power factor devices.

### **Precise®**

The GE trade name for the compact MR-16 and MR-11 low-voltage halogen dichroic cool beam reflectorized spot and flood lamps.

### **Preheat Circuit**

A type of fluorescent lamp-ballast circuit used with the first commercial fluorescent lamp products. A push button or automatic switch is used to preheat the lamp cathodes to a glow state. Starting the lamp can then be accomplished using simple "choke" or reactor ballasts.

### **Programmed Rapid Start see UltraStart**

### **PulseArc®**

GE description for a type of metal halide lamp that provides improved lumen maintenance for longer useful life and extended relamp cycles. These products are designed to operate on ballasts that have ignitors to help with lamp starting.

### **Quartz-Halogen Lamp see Halogen Lamp**

### **Quartzline®**

A GE registered trademark term for some types of halogen lamps.

### **Rapid Start Circuit**

A fluorescent lamp-ballast circuit that utilizes continuous cathode heating, while the system is energized, to start and maintain lamp light output at efficient levels. Rapid start ballasts may be either electromagnetic, electronic or of hybrid designs. Full-range fluorescent lamp dimming is only possible with rapid start systems.

### **Rated Lamp Life**

For most lamp types, rated lamp life is the length of time of a statistically large sample between first use and the point when 50% of the lamps have died. It is possible to define "useful life" of a lamp based on practical considerations involving lumen depreciation and color shift.

### **Reflector Lamp (R)**

A light source with a built-in reflecting surface. Sometimes, the term is used to refer specifically to blown bulbs like the "R" and "ER" lamps; at other times, it includes all reflectorized lamps like PAR and MR.

### **Reveal®**

GE's product family of incandescent lamps with the element Neodymium added to the glass bulb. Neodymium filters out much of the yellow light produced by ordinary lamps. Less yellow means whites look whiter and colors appear more vibrant in spaces lighted with Reveal lamps.

### **Scotopic/Photopic (S/P) Ratio**

This measurement accounts for the fact that of the two light sensors in the retina, rods are more sensitive to blue light (Scotopic vision) and cones to yellow light (Photopic vision). The Scotopic/Photopic (S/P) Ratio is an attempt to capture the relative strengths of these two responses. S/P is calculated as the ratio of scotopic lumens to photopic lumens for the light source on an ANSI reference ballast. Cooler sources (higher color temperatures lamps) tend to have higher values of the S/P Ratio compared to warm sources.

### **Series Lamp Operation**

Refers to ballasts that employ a single current path passing through all lamps operated by the ballast. If one lamp should fail, companion lamps operated by the same ballasts will also extinguish or dim.

### **Specification Series (SP) Colors**

Energy-efficient, all-purpose tri-phosphor fluorescent lamp colors that provide good color rendering. The CRI for SP colors is 70 or above and varies by specific lamp type. See Lamp Color Chart on page A-10.

### **Specification Series Deluxe (SPX) Colors**

Energy-efficient tri-phosphor fluorescent lamp colors that provide better color rendering than Specification Series (SP) colors. The CRI for SPX colors is 80 or higher and varies by specific lamp type. All GE CFL products use SPX phosphors. See Lamp Color Chart on page A-10.

### **Spectral Power Distribution (SPD)**

A graph of the radiant power emitted by a light source as a function of wavelength. SPD's provide a visual profile or "finger print" of the color characteristics of the source throughout the visible part of the spectrum.

### **Spiral® Lamp**

GE trademark for its helical family of high-efficiency, long-life compact fluorescent lamps.

### **Starcoat®**

GE's special barrier coating applied on the inside of all GE T8 fluorescent lamps, as well as some other lamp types, to enhance lamp life and deliver superior lumen maintenance.

### **Starting Temperature (Minimum)**

The minimum ambient temperature at which the lamp will start reliably on the ballast.

### **TCLP Test**

The Toxicity Characteristic Leaching Procedure (TCLP) test, specified in the Resource Conservation and Recovery Act (RCRA) of 1990, is used to characterize fluorescent lamp waste as hazardous or nonhazardous waste. The TCLP test measures the ability of the mercury and/or lead in a lamp to leach from a landfill into ground water.



**GLOSSARY OF TERMS** (CONTINUED)

**Total Harmonic Distortion (THD)**

A measure of the distortion of the input current on alternating current (AC) power systems caused by higher order harmonics of the fundamental frequency (60Hz in North America). THD is expressed in percent and may refer to individual electrical loads (such as a ballast) or a total electrical circuit or system in a building. ANSI C82.77 recommends THD not exceed 32% for individual commercial electronic ballasts, although some electrical utilities may require lower THD's on some systems. Excessive THD's on electrical systems can cause efficiency losses as well as overheating and deterioration of system components.

**Troffer**

A long, recessed lighting unit, usually installed in an opening in the ceiling.

**Tungsten Halogen Lamp see Halogen Lamp**

**Ultra**

GE designation for lamps and ballasts belonging to the new generation of energy-saving fluorescent systems.

**UltraMax®**

The designation for GE's electronic ballasts for both linear fluorescent systems and for HID systems (see "Electronic HID Ballast"). The family of high-efficiency GE instant-start electronic linear fluorescent ballasts are designed to optimize GE's T8 Ultra lamps for enhanced system energy savings. UltraMax ballasts have a low lamp current crest factor and virtually read and adapt to incoming voltage from 108V to 305V. Other features include UL Type CC Anti-Arc Rating and anti-striation control to eliminate lamp striations and spiraling.

**UltraStart**

GE's line of Programmed Rapid Start ballasts, for both T8 and T5 lamps, made specifically for applications where lamps are switched on and off frequently. The "ultra soft" starting associated with these ballasts ensures long lamp life even in frequently switched applications. Additional features include high efficiency and start times comparable to Instant Start ballasts, and series operation of lamps.

**Ultraviolet (UV) Radiation**

For practical purposes, any radiant energy within the range of 100-380 nanometers. It is beyond the blue or violet region of the spectrum, and is invisible to the eye just like the silent "ultrasound" dog whistle is inaudible to the ear.

UV is divided into 3 regions:

- UVA..... 100 to 280 nm
- UVB..... 280 to 315 nm
- UVC..... 315 to 400 nm

Some wavelengths (180-220) produce ozone, some (220-300) are bactericidal, some (280-320) erythema (reddened human skin); others (320-400) cause secondary luminance (black light).

**Ultra Watt-Miser®**

GE's family of energy-saving T8 fluorescent lamps.

**Underwriter's Lab (UL)**

A private organization which tests and lists electrical and other equipment for electrical and fire safety standards. Generally luminaires are UL listed, not lamps (except for CFL lamps with built-in ballasts.)

**Voltage**

A measurement of the electromotive force in an electrical circuit or device expressed in volts. Voltage can be thought of as being analogous to the pressure in a waterline.

**Voltage Surge**

Transient spikes in line voltage that can be harmful to electronic equipment like computers and electronic ballasts. Surge suppressors are often used to protect against such transients.

**Warm-up Time**

HID lamps typically take a few minutes to warm-up to full brightness after starting.

**Watt**

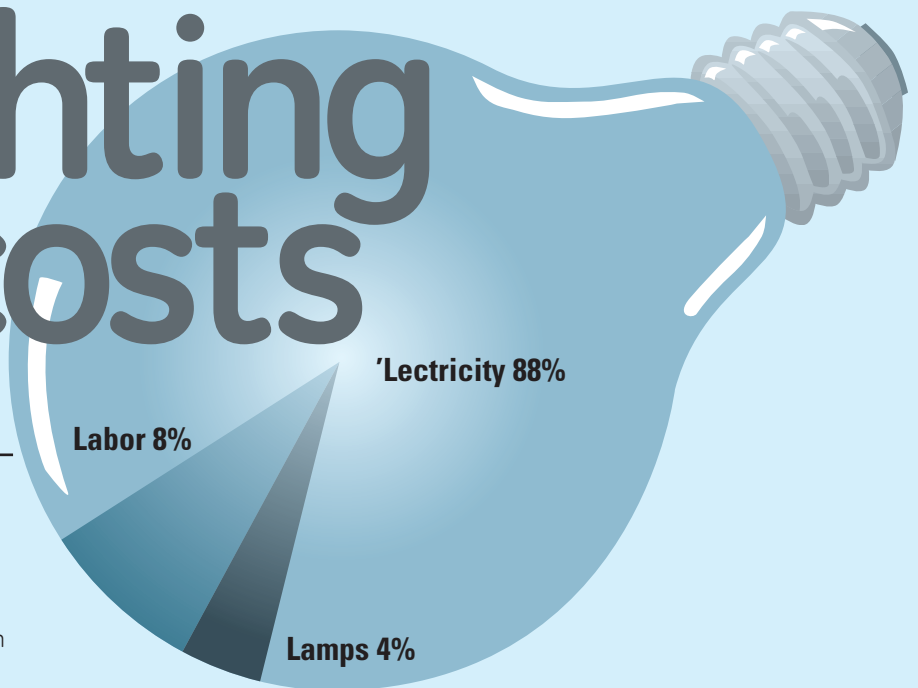
A unit of electrical power. Lamps are rated in watts to indicate the rate at which they consume energy. See Kilowatt Hour.

**Watt-Miser®**

A Watt-Miser® lamp is a term used by GE to indicate a reduced-wattage lamp with performance characteristics (life, light output, etc.) such that it can usually directly replace a higher-wattage product. Watt-Miser® lamps are available in a wide range of incandescent, fluorescent and HID lamp types.



# the three of **L**'s Lighting costs



## ELECTRICITY IS THE BIGGEST CHUNK OF YOUR LIGHTING COSTS

Averaging across different lamp types and systems, we estimate that only \$1 of every \$25 goes toward lamps, \$2 toward labor, and **\$22 toward electricity!**

The simplest way to save energy is to retrofit with energy-efficient products and systems from GE Lighting: your #1 energy-saving choice!

And remember... every watt reduced in your lighting system results in a one-third watt reduction in your A/C load (while A/C is running).

**Energy-Saving Examples**  
(assuming 4500 hours per year, \$0.10 per kWh, and excluding A/C savings)

- Each F32T8 replaced with an F32T8/WM saves \$3.20 per lamp in energy over the life of the lamp.
- Each 4-lamp T12 fixture retrofitted with GE's latest UltraMax™ system saves \$27 per year in energy costs, with nearly the same light output (3% reduction in lumens: T12/WM on standard magnetic ballast vs. T8 on 0.77 BF electronic instant start ballast).
- Each 90W PAR halogen lamp replaced with a 70W PAR HIR™ lamp will save \$9 per year in energy costs, with nearly the same light output (4% reduction in lumens).
- MVR400/U retrofitted with MVR360/STB/WM saves \$80 per fixture in energy over the life of the lamp.
- Each 100W incandescent bulb replaced with a 26W CFL will save \$33 per year per socket in energy costs.

## REDUCE LABOR COSTS WITH PLANNED MAINTENANCE/GROUP RELAMPING

**Schedule your lighting maintenance instead of simply waiting for lamps to fail!**

In any large installation, failure rates increase with age in a predictable way. The **optimal** point for group relamping is typically when 8% to 12% of lamps have failed, usually around two-thirds of rated life. At this point, both lumen output and lamp color may have deteriorated, yet the cost of electricity remains at "full price."

The per-lamp labor cost of installing new lamps is usually significantly less when an entire site is relamped, compared to the per-lamp labor cost of replacing lamps one at a time.

The result? The facility gets a face-lift and the maintenance costs over the next two or three years are generally significantly reduced. **Contact your GE Account Manager or GE Distributor to understand the full benefits of planned maintenance and to get set up on a money-saving group relamping schedule.**



# selecting the best color lamp

## DESCRIPTIONS: "WARM" OR "COOL"

When talking about white light sources (or about white paint) we use the descriptions "warm" and "cool." White light with a yellowish tinge, reminiscent of candlelight and fireplaces, is called "warm white." Incandescent lamps produce a warm white color. Bluish white, reminiscent of moonlight on cold snow, is considered "cool white." Fluorescent lamps can produce warm white or cool white, or anywhere in-between, depending on the mix of phosphors used.

## CORRELATED COLOR TEMPERATURE (CCT)

Correlated Color Temperature is a way of describing the degree of "yellowness" or "blueness" of a white light source. We relate the light source to the color of a hypothetical piece of hot metal. A piece of steel or tungsten as it is heated, will progressively change color in the sequence shown below:



When we say a lamp has a color temperature of 2700K—typical of incandescent lighting—it simply means that a piece of metal heated to a temperature of 2700 kelvins (which is about 3000°C or 5400°F) would mimic the color of the lamp. Such a source would be yellowish-white. In contrast, the color of a lamp at 6000K—typical of daylight entering through a window on a sunny day—can be mimicked by doubling the temperature of the hot metal piece to 6000 kelvins. This is significantly bluer or "cooler" than the light of incandescent lamps. Note that higher CCT refers to sources described as "cooler."

Generally, 4000K and above is considered "cool white", 3200K and below is "warm white", and 3500K is "neutral white."

## BETTER COLOR RENDERING FOR BETTER APPEARANCE

There is no such thing as the "true" color of any material; the perceived color is a function of the light under which the material is viewed and the reflectance characteristics of the material itself. However, we can make a general statement: the higher the Color Rendering Index (CRI) of a light source (also denoted by  $R_a$ ) the better—and more natural—colors typically appear under the light source.

In measuring CRI, scientists compare how eight specific colors appear under the source to how these same colors appear under a reference source. However, there are two reference sources: incandescent lighting is the reference for warm color lamps and daylight is the reference for cool color lamps. In this system, both incandescent lamps and daylight are considered to have "perfect" CRI's of nearly 100 even though, as we know, materials appear quite different when viewed under these light sources. These two sources are very different in color temperature (see below) although both have CRI's close to 100. CRI is, therefore, meaningful in comparing lamps that are close in color temperature.

CRI is not a perfect measure, but it is still useful as an indicator of the quality of light from a source.

Typical Color Indicators for Various Lamps	Correlated Color Temperature	Color Rendering Index
<b>INCANDESCENT LAMPS</b>		
Typical	2500-2800K	97-100
<b>HALOGEN LAMPS</b>		
Typical	2800-3000K	97-100
<b>FLUORESCENT LAMPS (ordered by CCT)</b>		
C75 "Chroma Series"	7500K	90 +
SPX65 (865)	6500K	80 +
SP65 (765)	6500K	70 +
C50 "Chroma Series"	5000K	90 +
SPX50 (850)	5000K	80 +
SP50 (750)	5000K	70 +
SPX41 (841)	4100K	80 +
SP41 (741)	4100K	70 +
Cool White	4100K	62
SPX35 (835)	3500K	80 +
SP35 (735)	3500K	70 +
SPX30 (830)	3000K	80 +
SP30 (730)	3000K	70 +
Warm White	3000K	50
covRfresh	2750K	87
SPX27 (827)	2700K	80 +
<i>Note: Some 4' T8 "SP" lamps, including reduced wattage types, may have a CRI &gt;80.</i>		
<b>HIGH PRESSURE SODIUM LAMPS</b>		
Lucalox®	1900-2100K	22
Deluxe Lucalox®	2200K	65
<b>METAL HALIDE LAMPS</b>		
Standard and PulseArc® MVR Multi-Vapor®	3000-4300K	65-75
MXR Multi-Vapor®	3200-3500K	65-70
Arcstream®	3000-6000K	75-90
Multi-Vapor® ChromaFit™	4000-4500K	65-70
<b>CERAMIC METAL HALIDE LAMPS</b>		
CMH®	3000-4200K	80-93
CMH® ChromaFit™	3000K	85