

LED Specifications*



Indicates which fixtures are LED or have an LED option. When a letter and page number are also indicated beside the LED icon (p. 658), more details can be found for that integrated LED solution within the noted LED Specifications information.

LED	LUMENS	WATTS	EFFICACY	CRI	COLOR TEMPERATURE	BINNING	LIFE	LED MANUFACTURER
A	500 net of optic / driver	8	63	80	3000K	3-Step	35,000 hrs to L70	SORAA
B	360 net of optic / driver	6 (LED + Driver)	60	80+	3000K	3-Step	30,000 hrs to L70	Citizen
C	850+ net of optic / driver	16 (LED + Driver)	54	80+	2700K, 3000K	3-Step	50,000 hrs to L70	Philips
D	1074+ net of optic / driver	19 (LED + Driver)	57	80+	2700K, 3000K, 3500K	3-Step	50,000 hrs to L70	Citizen
E	750+ gross	8	94	85+	2700K, 3000K	3-Step	50,000 hrs to L70	Nichia
F	350	6 (LED)	59	80+	3000K	3-Step	35,000 hrs to L70	Lynk Labs
G	2000 gross	20	100	80	3000K	3-Step	35,000 hrs to L70	Samsung
H	1500 gross	20	75	80+	3000K	3-Step	35,000 hrs to L70	Lynk Labs
I	1300 gross	18.5 (LED)	71	80+	2700K	3-Step	50,000 hrs to L70	Seoul Semiconductor
J	600 gross	12	50	80	3000K	3-Step	35,000 hrs to L70	Everlight
K	2640 gross	24	110	80	3000K	3-Step	35,000 hrs to L70	Edison
L	1800 gross	24	75	90	3000K	3-Step	35,000 hrs to L70	Lynk Labs
M	1800 gross	24	75	90	3000K-2200K (Warm Color Dimming)	3-Step	35,000 hrs to L70	Lynk Labs
N	600 net / ft	7.8 / ft	77	80+	2400K, 3000K, 3500K, 4000K	n/a	35,000 hrs to L70	Lumenmax
O	2000 net	60	34	80+	3000K	3-Step	35,000 hrs to L70	Everlight
P	1000 gross	14.5	69	90	2200K, 3000K	3-Step	35,000 hrs to L70	Lynk Labs
Q	1200 net	15	80	90	3000K	3-Step	35,000 hrs to L70	Lynk Labs
R	1200 net	15	80	90	3000K-2200K (Warm Color Dimming)	3-Step	35,000 hrs to L70	Lynk Labs
S	500	7	72	80, 90	2700K, 3500K	3-Step	35,000 hrs to L70	Citizen
T	1200 gross	12	100	80, 90	2700K, 3000K, 3500K	3-Step	35,000 hrs to L70	Citizen
U	680	10	68	80+	3000K	3-Step	35,000 hrs to L70	Citizen
V	510	10	51	80+	3000K	3-Step	35,000 hrs to L70	Citizen
W	300 net / ft	3.9	77	80+, 90+	2400K, 3000K, 3500K, 4000K	n/a	35,000 hrs to L70	Lumenmax
X	1000	15	67	80+	3000K	3-Step	50,000 hrs to L70	Seoul Semiconductor
Y	1500	22	69	80+	3000K	3-Step	50,000 hrs to L70	Seoul Semiconductor
Z	1500	20	75	80+	2700K, 3000K	3-Step	50,000 hrs to L70	Seoul Semiconductor
AA	1400	20	70	80	3000K	3-Step	35,000 hrs to L70	Everlight
AB	1500 gross	20	75	80	3000K	3-Step	35,000 hrs to L70	Everlight
AC	1100 gross	30	37	80	3000K	3-Step	35,000 hrs to L70	Everlight
AD	6600 gross	96	69	80	3000K	3-Step	35,000 hrs to L70	Everlight
AE	11,000 gross	160	69	80	3000K	3-Step	35,000 hrs to L70	Everlight
AF	1000 gross	15	67	80	3000K	3-Step	35,000 hrs to L70	Everlight
AG	1200 net	48	25	80	3000K	3-Step	35,000 hrs to L70	Everlight
AI	2000 gross	30	67	80	3000K	3-Step	35,000 hrs to L70	Everlight
AJ	630 net	9	70	80	3000K	3-Step	35,000 hrs to L70	Everlight
AK	3000 gross	28	108	80	3000K	3-Step	35,000 hrs to L70	Everlight
AL	450 gross	6	75	80	3000K	3-Step	35,000 hrs to L70	Citizen
AM	1000	14	72	80+	3000K	3-Step	35,000 hrs to L70	Citizen
AN	2600 gross	15	174	80	3000K	3-Step	35,000 hrs to L70	Everlight
AO	300 gross	4.5	67	80+	3000K	3-Step	35,000 hrs to L70	Samsung
AP	300 gross	4.5	67	80+	3000K	3-Step	35,000 hrs to L70	Samsung
AQ	400	6	67	80+	3000K	3-Step	35,000 hrs to L70	Samsung
AR	840	12	70	80+	3000K	3-Step	35,000 hrs to L70	Everlight
AS	3500	40	88	80	3000K	3-Step	35,000 hrs to L70	Cree
AT	350	7.2	49	80+	3000K	3-Step	35,000 hrs to L70	Samsung
AU	380	5.8	66	80+	3000K	3-Step	35,000 hrs to L70	Samsung
AV	1700 gross	25	68	80+	3000K	3-Step	50,000 hrs to L70	Seoul Semiconductor
AW	1150 net	29	40	80+	3000K	3-Step	50,000 hrs to L70	Seoul Semiconductor
AX	450	6	75	80+	3000K	3-Step	50,000 hrs to L70	Seoul Semiconductor
AY	4200 net down / 800 net up	75	67	80	3000K	3-Step	35,000 hrs to L70	Everlight
AZ	950 net	15	64	80	3000K	3-Step	35,000 hrs to L70	Seoul Semiconductor
BA	600 gross	8	75	80+	3000K	3-Step	35,000 hrs to L70	Lynk Labs
BB	3750 gross	50	75	80+	3000K	3-Step	35,000 hrs to L70	Lynk Labs
BC	2500	28.2	89	80	2400K, 3000K	3-Step	35,000 hrs to L70	Everlight
BD	680 gross	10	68	80, 90	3000K	3-Step	35,000 hrs to L70	Seoul Semiconductor
BE	1350 net	27	50	80+	3000K	3-Step	50,000 hrs to L70	Seoul Semiconductor
BF	700 gross	9	78	90	3000K	3-Step	35,000 hrs to L70	Lynk Labs
BG	3000 gross	40	75	40	3000K	3-Step	35,000 hrs to L70	Everlight
BH	1000 gross	14.5	69	90	3000K-2200K (Warm Color Dimming)	3-Step	35,000 hrs to L70	Lynk Labs
BI	1836 gross	20	92	80+	2700K, 3000K	3-Step	50,000 hrs to L70	Moretech
BJ	1790 gross	22	82	80+	2700K, 3000K	3-Step	50,000 hrs to L70	Moretech
BK	836 gross	12	70	80+	2700K, 3000K	3-Step	50,000 hrs to L70	Moretech

Replacement Lamps

RECOMMENDED LED MR16 REPLACEMENT LAMPS

For too long, many in our industry have used the term “LED replacement lamp” a bit too loosely. As heavy users of MR16 lamps, we have been evaluating LED MR16 lamps for years and are excited to partner with Soraa® because we feel their MR16 lamps are true halogen replacements, both in output and quality of light. At the same time, they exceed the definition of “replacement” on several other criteria and serve as a long-lasting, energy efficient, high CRI complement to our fixtures.



WHY SORAA?

Soraa is a leading developer of LED technology built on pure gallium nitride substrates, commonly referred to as GaN on GaN™.

GaN on GaN™ LEDs provide more light per area than other LED on the market and can also handle more thermal stress – which means they can accept higher input wattage to produce higher output in the same MR16 footprint than competing LED lamps. GaN on GaN also enables a high CRI (95) and color rendering that more closely resembles traditional halogen than other LED solutions.

Soraa lamps exhibit exceptional optical quality, beam control, and smooth dimming to 20%. They incorporate thermal feedback - this allows them to stay within recommended operating temperature range even in the most thermally-constrained environments. Most other LED MR16s that run too hot will become far less reliable.

Finally, Soraa lamps are beautiful. Thought has been given not just to technology, but to the aesthetic design as well.

ITEM NUMBER	MANUFACTURER	VOLTS	WATTS	LAMP SHAPE	BASE TYPE	BEAM SPREAD	COLOR TEMP (K)	CRI	LUMENS	CBCP	RATED AVG LIFE*
300BLV451	SORAA VIVID	12	7.5	MR16	GU5.3	25°	2700	95	410	2260	35,000
300BLV453	SORAA VIVID	12	7.5	MR16	GU5.3	25°	3000	95	435	2400	35,000
300BLV454	SORAA VIVID	12	7.5	MR16	GU5.3	36°	3000	95	435	1130	35,000

We have also evaluated several other LED replacement lamps. Below, you will find several recommendations for a variety of applications.

ITEM NUMBER	MANUFACTURER	VOLTS	WATTS	LAMP SHAPE	BASE TYPE	BEAM SPREAD	COLOR TEMP (K)	CRI	LUMENS	CBCP	RATED AVG LIFE*
300BLV455	LIGHTING SCIENCE DIFINITY™	12	8	MR16	GU5.3	25°	2700	83	470	2323	25,000
300BLV456	LIGHTING SCIENCE DIFINITY™	12	8	MR16	GU5.3	25°	3000	83	500	2323	25,000
300BLV457	LIGHTING SCIENCE DIFINITY™	12	8	MR16	GU5.3	40°	2700	83	470	1147	25,000
300BLV458	LIGHTING SCIENCE DIFINITY™	12	8	MR16	GU5.3	40°	3000	83	500	1147	25,000
300BLV459	PRIVATE LABEL	12	6	MR16	GU5.3	25°	3000	83	360	1620	25,000



Note: Lamp availability and technical specifications are subject to change. Please consult factory.

* LED Lamp life is based on L70 lumen depreciation.

** Please note, while we can recommend the Soraa lamp for our enclosed fixtures (due to the thermal feedback note above) we do not recommend using most LED MR16 replacements in fully enclosed fixtures (e.g. tight accessory) due to thermal strain and the resultant loss in output and life.

Lamp Information

ITEM #	DESCRIPTION	VOLTS	WATTS	LAMP SHAPE	BASE TYPE	BEAM SPREAD	COLOR TEMP (K)	CRI	CENTER BEAM CANDLE POWER	INITIAL LUMENS	RATED AVG LIFE
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12 VOLT INCANDESCENT LAMPS

12 Volt Halogen Bi-Pin



300BLV034	12v Hal T3 G4 20w Bi-pin CL	12	20	T3	G4	N/A	3000	100	N/A	320	2,000
300BLV026	12v Hal T4 GY6.35 35w Bi-pin CL	12	35	T4	GY6.35	N/A	3000	100	N/A	600	2,000
300BLV035	12v Hal T3 GY6.35 50w Bi-pin CL	12	50	T4	GY6.35	N/A	3000	100	N/A	930	2,000
300BLV037	12v Hal T3 GY6.35 50w Bi-pin FR	12	50	T4	GY6.35	N/A	3000	100	N/A	930	2,000

12 Volt Xenon Bi-Pin



300BLV030	12v Xenon T3 G4 5w Bi-pin	12	5	T3	G4	N/A	2800	100	N/A	60	10,000
300BLV032	12v Xenon T3 G4 10w Bi-pin	12	10	T3	G4	N/A	2800	100	N/A	125	10,000
300BLV031	12v Xenon T3 G4 15w Bi-pin	12	15	T3	G4	N/A	2800	100	N/A	180	10,000
300BLV025	12v Xenon T3 G4 20w Bi-pin	12	20	T3	G4	N/A	2800	100	N/A	250	10,000
300BLV359	12v Xenon T4 GY6.35 35w Bi-pin	12	35	T4	GY6.35	N/A	2900	100	N/A	525	10,000
300BLV461	12v Xenon T4 GY6.35 50w Bi-pin	12	50	T4	GY6.35	N/A	2900	100	N/A	750	10,000
300BLV462	12v Xenon T4 GY6.35 50w Bi-pin Frs	12	50	T4	GY6.35	N/A	2900	100	N/A	750	10,000

12 Volt MR11



300BLV052	12v Hal MR11 GZ4 10° 20w	12	20	MR11	GZ4	10	2925	100	3,000	N/A	2,000
300BLV063	12v Hal MR11 GZ4 17° 20w	12	20	MR11	GZ4	17	2925	100	1,400	N/A	2,000
300BLV067	12v Hal MR11 GZ4 30° 20w	12	20	MR11	GZ4	30	2925	100	600	N/A	2,000
300BLV055	12v Hal MR11 GZ4 10° 35w	12	35	MR11	GZ4	10	2925	100	6,000	N/A	2,000
300BLV056	12v Hal MR11 GZ4 20° 35w	12	35	MR11	GZ4	20	2925	100	2,400	N/A	2,000
300BLV068	12v Hal MR11 GZ4 30° 35w	12	35	MR11	GZ4	30	2800	100	2,925	1,300	2,000

12 Volt MR16



300BLV129	12v Hal MR16 GU5.3 12° 20w	12	20	MR16	GU5.3	12	2950	100	3,500	N/A	5,000
300BLV128	12v Hal MR16 GU5.3 36° 20w	12	20	MR16	GU5.3	36	2950	100	600	N/A	5,000
300BLV102	12v Hal MR16 GU5.3 24° 35w	12	35	MR16	GU5.3	24	2950	100	2,300	N/A	5,000
300BLV105	12v Hal MR16 GU5.3 36° 35w	12	35	MR16	GU5.3	36	2950	100	1,300	N/A	5,000
300BLV132	12v Hal MR16 GU5.3 12° 50w	12	50	MR16	GU5.3	12	3000	100	11,000	N/A	5,000
300BLV133	12v Hal MR16 GU5.3 24° 50w	12	50	MR16	GU5.3	24	3000	100	3,600	N/A	5,000
300BLV131	12v Hal MR16 GU5.3 36° 50w	12	50	MR16	GU5.3	36	3000	100	2,000	N/A	5,000
300BLV110	12v Hal MR16 GU5.3 60° 50w	12	50	MR16	GU5.3	60	3000	100	850	N/A	5,000
300BLV112	12v Hal MR16 GU5.3 12° 75w	12	75	MR16	GU5.3	12	3000	100	13,000	N/A	5,000
300BLV115	12v Hal MR16 GU5.3 24° 75w	12	75	MR16	GU5.3	24	3000	100	4,800	N/A	5,000
300BLV116	12v Hal MR16 GU5.3 36° 75w	12	75	MR16	GU5.3	36	3000	100	2,700	N/A	5,000

12 Volt MR16 GE Constant Color



300BLV130	12v GE CC. Hal MR16 GU5.3 15°	12	20	MR16	GU5.3	15	2900	100	3,150	N/A	5,000
300BLV127	12v GE CC. Hal MR16 GU5.3 40°	12	20	MR16	GU5.3	40	2900	100	475	N/A	5,000
300BLV124	12v GE CC. Hal MR16 GU5.3 20°	12	35	MR16	GU5.3	20	3000	100	3,200	N/A	5,000
300BLV126	12v GE CC. Hal MR16 GU5.3 40°	12	35	MR16	GU5.3	40	3000	100	900	N/A	5,000
300BLV141	12v GE CC. Hal MR16 GU5.3 15°	12	50	MR16	GU5.3	15	3050	100	8,400	N/A	6,000
300BLV138	12v GE CC. Hal MR16 GU5.3 25°	12	50	MR16	GU5.3	25	3050	100	2,900	N/A	6,000
300BLV139	12v GE CC. Hal MR16 GU5.3 40°	12	50	MR16	GU5.3	40	3050	100	1,500	N/A	6,000
300BLV136	12v GE CC. Hal MR16 GU5.3 55°	12	50	MR16	GU5.3	55	3050	100	850	N/A	6,000
300BLV140	12v GE CC. Hal MR16 GU5.3 40°	12	71	MR16	GU5.3	40	3050	100	2,000	N/A	4,000

12 Volt MR16 IR



300BLV254	12v IR MR16 GU5.3 10° 37w	12	37	MR16	GU5.3	10	3000	100	12,500	N/A	5,000
300BLV255	12v IR MR16 GU5.3 25° 37w	12	37	MR16	GU5.3	25	3000	100	4,400	N/A	5,000
300BLV256	12v IR MR16 GU5.3 35° 37w	12	37	MR16	GU5.3	35	3000	100	2,200	N/A	5,000

12 Volt MR16 10,000 Hour



300BLV411	12v MR16 GU5.3 24° 50w	12	50	MR16	GU5.3	24	3100	100	2,700	N/A	10,000
300BLV410	12v MR16 GU5.3 36° 50w	12	50	MR16	GU5.3	36	3100	100	1,500	N/A	10,000

12 Volt MR16 Aluminized Reflector




300BLV412	12v Sld Bk MR16 GU5.3 12° 50w alu	12	50	MR16	GU5.3	12	3000	100	11,000	N/A	3,500
300BLV413	12v Sld Bk MR16 GU5.3 24° 50w alu	12	50	MR16	GU5.3	24	3000	100	3,600	N/A	3,500
300BLV414	12v Sld Bk MR16 GU5.3 36° 50w alu	12	50	MR16	GU5.3	36	3000	100	2,000	N/A	3,500

ITEM #	DESCRIPTION	VOLTS	WATTS	LAMP SHAPE	BASE TYPE	BEAM SPREAD	COLOR TEMP (K)	CRI	CENTER BEAM CANDLE POWER	INITIAL LUMENS	RATED AVG LIFE
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12 VOLT INCANDESCENT LAMPS (CONTINUED)


12 Volt MR16 Solid Back

	300BLV144	12v Sld Bk MR16 GU5.3 24° 50w blk	12	50	MR16	GU5.3	24	3000	100	3,000	N/A	3,500
	300BLV145	12v Sld Bk MR16 GU5.3 36° 50w blk	12	50	MR16	GU5.3	36	3000	100	1,580	N/A	3,500
	300BLV146	12v Sld Bk MR16 GU5.3 24° 50w sil	12	50	MR16	GU5.3	24	3000	100	3,000	N/A	3,500
	300BLV147	12v Sld Bk MR16 GU5.3 36° 50w sil	12	50	MR16	GU5.3	36	3000	100	1,580	N/A	3,500

12 Volt Frost Line

	300BLV415	12v Frostline MR16 GU5.3 20w	12	20	MR16	GU5.3	N/A	2900	100	N/A	N/A	4,000
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12 Volt AR111


	300BLV285	12v AR111 G53 4° 50w	12	50	AR111	G53	4	3000	100	45,000	N/A	3,000
	300BLV286	12v AR111 G53 8° 50w	12	50	AR111	G53	8	3000	100	20,000	N/A	3,000
	300BLV287	12v AR111 G53 25° 50w	12	50	AR111	G53	25	3000	100	4,000	N/A	3,000
	300BLV290	12v AR111 G53 8° 75w	12	75	AR111	G53	8	3000	100	30,000	N/A	3,000
	300BLV291	12v AR111 G53 25° 75w	12	75	AR111	G53	25	3000	100	5,300	N/A	3,000
	300BLV292	12v AR111 G53 45° 75w	12	75	AR111	G53	45	3000	100	2,000	N/A	3,000

24 VOLT INCANDESCENT LAMPS

24 Volt Halogen Bi-Pin

	300BLV350	24v Hal T3 G4 20w Bi-pin	24	20	T3	G4	N/A	N/A	100	N/A	N/A	2,000
	300BLV351	24v Hal T4 GY6.35 35w Bi-pin	24	35	T4	GY6.35	N/A	N/A	100	N/A	N/A	2,000
	300BLV352	24v Hal T4 GY6.35 50w Bi-pin	24	50	T4	GY6.35	N/A	N/A	100	N/A	N/A	2,000

24 Volt Xenon Bi-Pin

	300BLV356	24v Xenon T3 G4 5w Bi-pin	24	5	T3	G4	N/A	2800	100	N/A	55	10,000
	300BLV357	24v Xenon T3 G4 10w Bi-pin	24	10	T3	G4	N/A	2800	100	N/A	125	10,000
	300BLV358	24v Xenon T3 G4 20w Bi-pin	24	20	T3	G4	N/A	2800	100	N/A	250	10,000
	300BLV360	24v Xenon T4 GY6.35 35w Bi-pin	24	35	T4	GY6.35	N/A	2900	100	N/A	525	10,000
	300BLV463	24v Xenon T4 GY6.35 50w Bi-pin	24	50	T4	GY6.35	N/A	2900	100	N/A	750	10,000

24 Volt MR11

	300BLV310	24v Hal MR11 GZ4 30° 20w	24	20	MR11	GZ4	30	2950	100	600	N/A	2,000
	300BLV314	24v Hal MR11 GZ4 10° 35w	24	35	MR11	GZ4	10	2950	100	4,100	N/A	2,000
	300BLV315	24v Hal MR11 GZ4 30° 35w	24	35	MR11	GZ4	30	2950	100	850	N/A	2,000

24 Volt MR16

	300BLV301	24v Hal MR16 GU5.3 12° 50w	24	50	MR16	GU5.3	12	2950	100	7,000	N/A	4,000
	300BLV302	24v Hal MR16 GU5.3 24° 50w	24	50	MR16	GU5.3	24	2950	100	2,900	N/A	4,000
	300BLV303	24v Hal MR16 GU5.3 36° 50w	24	50	MR16	GU5.3	36	2950	100	1,600	N/A	4,000

24 Volt MR16 GE Constant Color

	300BLV306	24v GE CC. Hal MR16 GU5.3 40° 35w	24	35	MR16	GU5.3	40	2950	100	920	N/A	4,000
	300BLV307	24v GE CC. Hal MR16 GU5.3 15° 50w	24	50	MR16	GU5.3	15	2950	100	8,400	N/A	4,000
	300BLV308	24v GE CC. Hal MR16 GU5.3 40° 50w	24	50	MR16	GU5.3	40	2950	100	1,570	N/A	4,000

24 Volt A-Lamp Incandescent


	300BHV478	24v A19 E26 Med 60w Cl.	24	60	A19	E26 Med	N/A	2700	100	N/A	790	2,500
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LINE-VOLTAGE INCANDESCENT LAMPS

A-Lamp Incandescent

	300BHV392	120v A21 E26 Med 150w Wh.	120	150	A21	E26 Med	N/A	2700	100	N/A	2,780	750
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A-Lamp Halogen

	300BHV505	120v A19 E26 Med 43w Wh.	120	43	A19	E26 Med	N/A	2900	100	N/A	620	1,000
	300BHV502	120v A19 E26 Med 43w Cl.	120	43	A19	E26 Med	N/A	2900	100	N/A	800	1,000
	300BHV500	120v A19 E26 Med 53w Wh.	120	53	A19	E26 Med	N/A	2950	100	N/A	1050	1,000
	300BHV509	120v A19 E26 Med 53w Cl.	120	53	A19	E26 Med	N/A	2950	100	N/A	1050	1,000
	300BHV486	120v A19 E26 Med 72w Wh.	120	72	A19	E26 Med	N/A	3000	100	N/A	1270	1,000

BT15 Lamp Halogen


	300BHV504	120v BT15 E26 Med 43w WH	120	43	BT15	E26 Med	N/A	2900	100	N/A	750	1,000
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Lamp Information


ITEM #	DESCRIPTION	VOLTS	WATTS	LAMP SHAPE	BASE TYPE	BEAM SPREAD	COLOR TEMP (K)	CRI	CENTER BEAM CANDLE POWER	INITIAL LUMENS	RATED AVG LIFE
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LINE-VOLTAGE INCANDESCENT LAMPS (CONTINUED)

Classic Edison Style A-Lamp Incandescent

	300BHV389	120v EDISON A19 E26 Med 40w Cl.	120	40	A19 EDISON	E26 Med	N/A	2700	N/A	N/A	118	3,000
	300BHV466	120v EDISON A19 E26 Med 60w Cl.	120	60	A19 EDISON	E26 Med	N/A	2700	N/A	N/A	500	2,500


Classic Edison Style Squirrel Cage Incandescent

	300BHV480	120v Squirrel Cage S21 E26 Med 60w Cl. 120	120	60	S21 SqrL Cage	E26 Med	N/A	2700	N/A	N/A	100	3,000
	300BHV508	120v Squirrel Cage S21 E26 Med 60w Sm. 120	120	60	S21 SqrL Cage	E26 Med	N/A	2700	N/A	N/A	200	3,000

Classic Edison Style T9 Incandescent

	300BHV473	120v Edison T9 E26 Med 30w Cl.	120	30	T9 EDISON	E26 Med	N/A	2700	N/A	N/A	N/A	3,000
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Medium Globe Incandescent

	300BHV487	120v G40 E26 Med 60w CL.	120	60	G40	E26 Med	N/A	2700	100	N/A	565	2,500
	300BHV485	120v G40 E26 Med 60w Half Chrome	120	60	G40	E26 Med	N/A	2700	100	N/A	565	1,500
	300BHV507	120v G25 E26 Med 40w Half Gold	120	40	G25	E26 Med	N/A	2700	100	N/A	565	1,500
	300BHV122	120v G40 E26 Med 150w WH	120	150	G40	E26 Med	N/A	2700	100	N/A	1,770	2,500

Medium T8 Incandescent

	300BHV126	120v T8 E26 Med 75w Fr.	120	60	T8	E26 Med	N/A	2700	100	N/A	874	2,000
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Medium T10 Incandescent

	300BHV127	120v T9 E26 Med 40w Fr.	120	40	T10	E26 Med	N/A	2850	100	N/A	325	2,500
	300BHV128	120v T9 E26 Med 60w Fr.	120	60	T10	E26 Med	N/A	2850	100	N/A	600	1,000


Mini-Candelabra Krypton / Halogen

	300BHV153	120v T3 E11 Mini-can. 40w Cl. Kry	120	40	T3	E11 Mini-Cand.	N/A	2800	100	N/A	560	2,000
	300BHV439	120v T3 E11 Mini-can. 60w Cl. Kry	120	60	T3	E11 Mini-Cand.	N/A	2800	100	N/A	960	2,000
	300BHV150	120v T4 E11 Mini-can. 75w Cl. Hal	120	75	T4	E11 Mini-Cand.	N/A	2850	100	N/A	1,125	1,000
	300BHV151	120v T4 E11 Mini-can. 100w Cl. Hal	120	100	T4	E11 Mini-Cand.	N/A	2850	100	N/A	1,600	1,000
	300BHV152	120v T4 E11 Mini-can. 150w Cl. Hal	120	150	T4	E11 Mini-Cand.	N/A	2900	100	N/A	2,800	2,000

Double-Ended Halogen

	300BHV443	120v T3 R7S 100w 118mm	120	100	T3	RS7	N/A	2950	100	N/A	1,650	2,000
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G9 Bi-Pin Halogen

	300BHV361	120v Hal G9 bi-pin T4 40w Fr.	120	40	T4	G9 Bi-Pin	N/A	2900	100	N/A	480	2,000
	300BHV364	120v Hal G9 bi-pin T4 60w Fr.	120	60	T4	G9 Bi-Pin	N/A	2900	100	N/A	790	2,000


PAR16 GU10 Halogen

	300BHV411	120v Hal PAR16 GU10 40° 50w	120	50	PAR16	GU10	40	2950	100	400	640	2,000
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PAR20 Halogen

	300BHV495	120v Hal PAR20 E26 Med 10° 39w	120	39	PAR20	E26 Med	10	2850	100	3,700	475	1,500
	300BHV496	120v Hal PAR20 E26 Med 30° 39w	120	39	PAR20	E26 Med	30	2850	100	1,000	475	1,500

PAR30 Short Halogen

	300BHV418	120v Hal PAR30 E26 Med 9° 50w	120	50	PAR30	E26 Med	9	2950	100	8,800	660	2,500
	300BHV419	120v Hal PAR30 E26 Med 25° 50w	120	50	PAR30	E26 Med	25	2950	100	2,300	660	2,500
	300BHV420	120v Hal PAR30 E26 Med 40° 50w	120	50	PAR30	E26 Med	40	2950	100	1,300	660	2,500

PAR30 Long Halogen

	300BHV424	120v Hal PAR30L E26 Med 9° 50w	120	50	PAR30LN	E26 Med	9	2950	100	8,800	660	2,500
	300BHV425	120v Hal PAR30L E26 Med 25° 50w	120	50	PAR30LN	E26 Med	25	2950	100	2,300	660	2,500
	300BHV503	120v Hal PAR30L/IR E26 Med 50° 50w	120	50	PAR30LN	E26 Med	50	2850	100	1,000	850	3,000
	300BHV499	120v Hal PAR30L/IR E26 Med 10° 60w	120	60	PAR30LN	E26 Med	10	2850	100	12,300	1,100	3,000

ITEM #	DESCRIPTION	VOLTS	WATTS	LAMP SHAPE	BASE TYPE	BEAM SPREAD	COLOR TEMP (K)	CRI	CENTER BEAM CANDLE POWER	INITIAL LUMENS	RATED AVG LIFE
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LINE-VOLTAGE INCANDESCENT LAMPS (CONTINUED)

PAR38 Halogen



300BHV430	120v Hal PAR38 E26 Med 9° 60w	120	60	PAR38	E26 Med	9	2950	100	16,000	850	3,000
300BHV431	120v Hal PAR38 E26 Med 30° 60w	120	60	PAR38	E26 Med	30	2950	100	2,500	850	3,000
300BHV432	120v Hal PAR38 E26 Med 9° 90w	120	90	PAR38	E26 Med	9	2950	100	19,000	1,310	2,500
300BHV433	120v Hal PAR38 E26 Med 30° 90w	120	90	PAR38	E26 Med	30	2950	100	3,500	1,310	2,500
300BHV434	120v Hal PAR38 E26 Med 50° 90w	120	90	PAR38	E26 Med	50	2950	100	1,600	1,310	2,500
300BHV435	120v Hal PAR38 E26 Med 10° 120w	120	120	PAR38	E26 Med	10	2950	100	22,500	1,800	3,000
300BHV436	120v Hal PAR38 E26 Med 30° 120w	120	120	PAR38	E26 Med	30	2950	100	4,600	1,800	3,000
300BHV437	120v Hal PAR38 E26 Med 55° 120w	120	120	PAR38	E26 Med	55	2950	100	2,000	1,800	3,000

FLUORESCENT LAMPS

Compact Fluorescent Twin Tube



300BHV388	Flr 2G7 Twin Tube 7w	N/A	7	CFL Twin	2G7	N/A	2700	82	N/A	400	10,000
300BHV454	Flr 2G7 Twin Tube 9w	N/A	9	CFL Twin	2G7	N/A	2700	82	N/A	580	10,000
300BHV367	Flr 2GX7 Twin Tube 13w	N/A	13	CFL Twin	2GX7	N/A	2700	82	N/A	800	10,000
300BHV387	Flr 2G11 Twin Tube 18w	N/A	18	CFL Twin	2G11	N/A	3000	82	N/A	1,200	12,000
300BHV381	Flr 2G11 Twin Tube 36w	N/A	36	CFL Twin	2G11	N/A	3000	82	N/A	2,900	12,000

Compact Fluorescent Quad Tube



300BHV458	Flr G24Q-2 Quad Tube 18w	N/A	18	CFL Quad	G24Q-2	N/A	2700	82	N/A	1,200	12,000
300BHV395	Flr G24Q-3 Quad Tube 26w	N/A	26	CFL Quad	G24Q-3	N/A	2700	82	N/A	1,700	12,000

Compact Fluorescent Triple Tube



300BHV370	Flr GX24Q-1 Triple Tube 13w	N/A	13	CFL Triple	GX24Q-1	N/A	2700	82	N/A	900	12,000
300BHV371	Flr GX24Q-2 Triple Tube 18w	N/A	18	CFL Triple	GX24Q-2	N/A	2700	82	N/A	1,200	12,000
300BHV378	Flr GX24Q-3 Triple Tube 26w	N/A	26	CFL Triple	GX24Q-3	N/A	2700	82	N/A	1,800	12,000
300BHV386	Flr GX24Q-3 Triple Tube 32w	N/A	32	CFL Triple	GX24Q-3	N/A	2700	82	N/A	2,328	12,000

Compact Fluorescent GU24 Self-Ballasted



300BHV450	120v Flr Self-Ballasted GU24 Spiral 13w	120	13	CFL Spiral	GU24	N/A	2700	82	N/A	900	10,000
300BHV451	120v Flr Self-Ballasted GU24 Spiral 18w	120	18	CFL Spiral	GU24	N/A	2700	82	N/A	1,200	10,000
300BHV452	120v Flr Self-Ballasted GU24 Spiral 27w	120	27	CFL Spiral	GU24	N/A	2700	82	N/A	1,800	10,000
300BHV471	120v Flr Self-Ballasted GU24 Spiral 32w	120	32	CFL Spiral	GU24	N/A	2700	82	N/A	2,100	10,000
300BHV472	120v Flr Self-Ballasted GU24 Spiral 42w	120	42	CFL Spiral	GU24	N/A	2700	82	N/A	2,800	10,000

Compact Fluorescent Plumen Self-Ballasted



300BHV488	120v Flr Self-Ballasted Baby Plumen 9w	120	9	CFL Plumen	E26 Med	N/A	2700	82	N/A	435	10,000
300BHV479	120v Flr Self-Ballasted Plumen 11w	120	11	CFL Plumen	E26 Med	N/A	2700	82	N/A	630	8,000

Linear Fluorescent



300BHV369	Flr T5 Mini Bi-Pin 14w 22"	N/A	14	T5	Mini Bi-Pin	N/A	3000	82	N/A	1,350	20,000
300BHV382	Flr T5HO Mini Bi-Pin 24w 22"	N/A	24	T5 HO	Mini Bi-Pin	N/A	3000	82	N/A	2,000	20,000
300BHV467	Flr T5HO Mini-Bi-Pin 39w 34"	N/A	39	T5 HO	Mini Bi-Pin	N/A	3000	85	N/A	3,100	20,000
300BHV468	Flr T5HO Mini-Bi-Pin 54w 46"	N/A	54	T5 HO	Mini Bi-Pin	N/A	3000	85	N/A	4,450	25,000

LINE-VOLTAGE LED LAMPS

Philips LED A19 Replacement



300BHV512	120v Philips LED A19 9.5w	120	9.5	LED A19	E26 Med	N/A	2700	80	N/A	800	25,000
300BHV501	120v Philips LED A21 19w	120	19	LED A21	E26 Med	N/A	2700	80	N/A	1,680	25,000

Maxlite LED A19 Replacement



300BHV498	120v Maxlite LED A19	120	11	LED A19	E26 Med	N/A	3000	80	N/A	800	25,000
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Philips LED PAR Replacement



300BHV489	120v Philips LED PAR20 25°	120	8	LED PAR20	E26 Med	25°	3000	85	2400	470	45,000
300BHV492	120v Philips LED PAR30L 25°	120	12	LED PAR30LN	E26 Med	25°	3000	80	5300	900	50,000

Lamp Information

ITEM #	DESCRIPTION	VOLTS	WATTS	LAMP SHAPE	BASE TYPE	BEAM SPREAD	COLOR TEMP (K)	CRI	CENTER BEAM CANDLE POWER	INITIAL LUMENS	RATED AVG LIFE
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CERAMIC METAL HALIDE LAMPS (CMH)

CMH T4.5



300BHV401	CMH T4.5 Bi-Pin 20w	N/A	20	T4.5 Bi-Pin	G8.5	N/A	3000	>80	N/A	1,700	6,000
300BHV402	CMH T4.5 Bi-Pin 39w	N/A	39	T4.5 Bi-Pin	G8.5	N/A	3000	>80	N/A	3,400	9,000
300BHV403	CMH T4.5 Bi-Pin 70w	N/A	70	T4.5 Bi-Pin	G8.5	N/A	3000	>80	N/A	6,200	9,000

CMH MR16 GE Constant Color



300BHV440	GE CMH MR16 GX10 12° 20w	N/A	20	MR16	GX10	12	3000	80	9,000	1,000	12,000
300BHV441	GE CMH MR16 GX10 25° 20w	N/A	20	MR16	GX10	25	3000	80	2,900	1,000	12,000
300BHV442	GE CMH MR16 GX10 40° 20w	N/A	20	MR16	GX10	40	3000	80	1,500	1,000	12,000
300BHV459	GE CMH MR16 GX10 12° 39w	N/A	39	MR16	GX10	12	3000	80	16,000	2,100	10,000
300BHV460	GE CMH MR16 GX10 25° 39w	N/A	39	MR16	GX10	25	3000	80	5,500	2,100	10,000
300BHV461	GE CMH MR16 GX10 40° 39w	N/A	39	MR16	GX10	40	3000	80	3,000	2,100	10,000

CMH PAR20



300BHV462	CMH PAR20 Medium 8° 20w	N/A	20	PAR20	E26 Med	8	3000	81	13,000	1,000	12,000
300BHV463	CMH PAR20 Medium 25° 20w	N/A	20	PAR20	E26 Med	25	3000	81	3,750	1,000	12,000
300BHV410	CMH PAR20 Medium 10° 39w	N/A	39	PAR20	E26 Med	10	3000	>85	22,000	2,100	10,000
300BHV409	CMH PAR20 Medium 25° 39w	N/A	39	PAR20	E26 Med	25	3000	>85	7,500	2,100	10,000

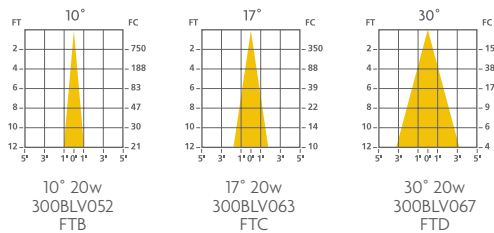
CMH PAR30 Long



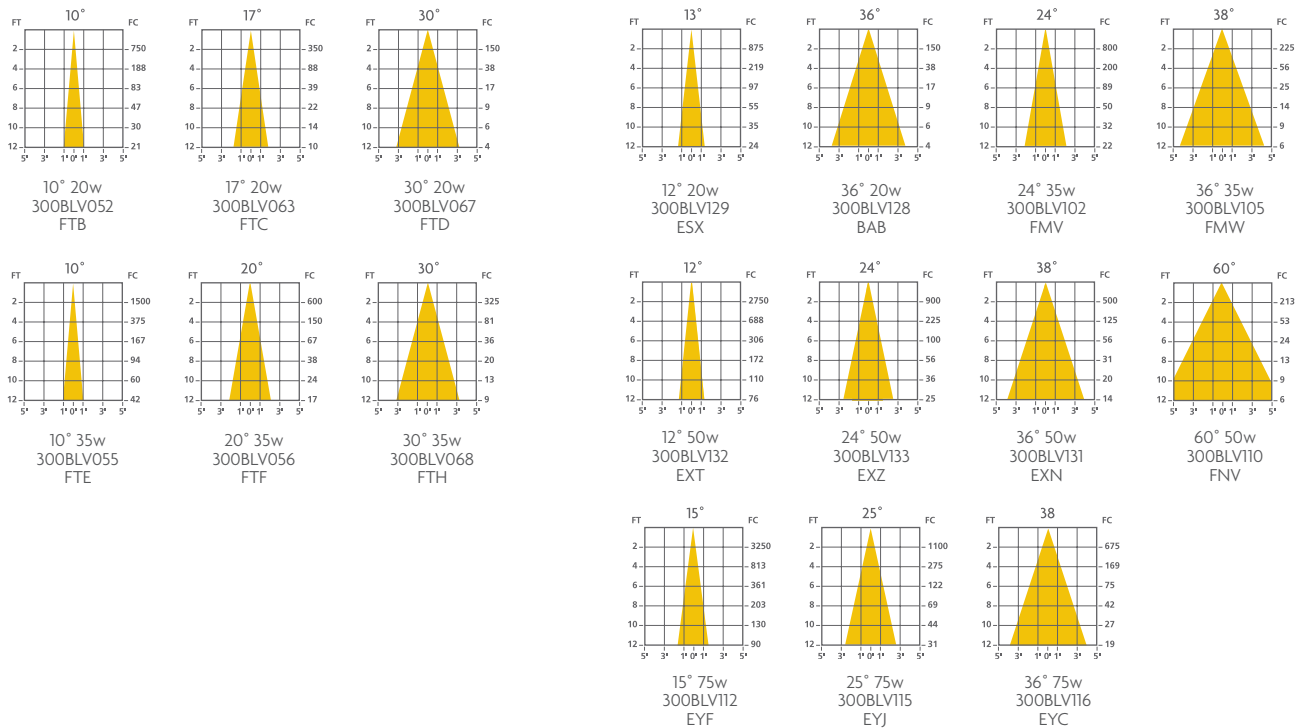
300BHV464	CMH PAR30L Medium 10° 20w	N/A	20	PAR30L	E26 Med	10	3000	81	19,800	1,200	12,000
300BHV465	CMH PAR30L Medium 25° 20w	N/A	20	PAR30L	E26 Med	25	3000	81	4,900	1,200	12,000
300BHV406	CMH PAR30L Medium 10° 39w	N/A	39	PAR30L	E26 Med	10	3000	>80	39,600	2,400	10,000
300BHV405	CMH PAR30L Medium 25° 39w	N/A	39	PAR30L	E26 Med	25	3000	>80	11,000	2,400	10,000
300BHV407	CMH PAR30L Medium 15° 70w	N/A	70	PAR30L	E26 Med	15	3000	>80	43,000	4,700	10,000
300BHV408	CMH PAR30L Medium 40° 70w	N/A	70	PAR30L	E26 Med	40	3000	>80	10,000	4,700	10,000

Selected Lamp Photometrics

12 VOLT MR11

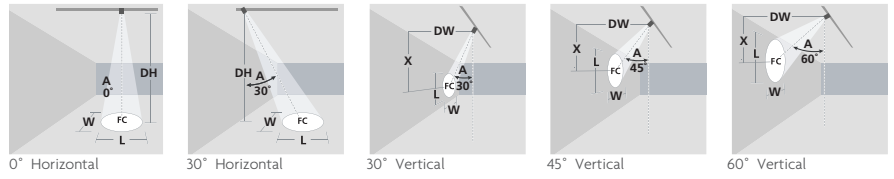


12 VOLT MR16



Photometrics

- A Aiming angle of fixture, measured from 0°
- DH Vertical distance from fixture to horizontal surface
- DW Distance from fixture to wall
- FC Footcandles at beam center
- X Vertical distance from beam center to ceiling
- L Length of beam
- W Width of beam
- CBCP Centerbeam Candlepower



FIXTURE USAGE	LAMP TYPE / PART NUMBER	BEAM SPREAD	CBCP	HORIZONTAL SURFACES										VERTICAL SURFACES									
				0°				30°			0°			30°			60°						
				DH	FC	L	W	FC	L	W	DW	FC	X	L	W	FC	X	L	W	FC	X	L	W

CMH T4.5 LAMPS

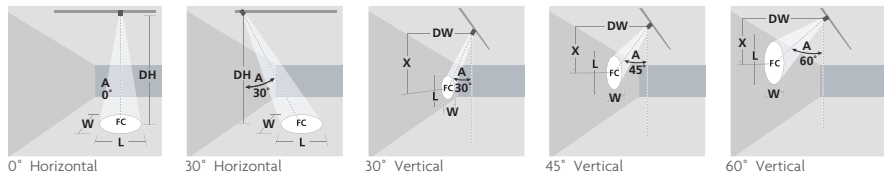
Om CMH T4.5 20w 300BHV401			15°		10106	Horizontal 0°				Horizontal 30°			Vertical 0°					Vertical 30°				Vertical 60°			
		Beam Spread	DH	FC	L	W	FC	L	W	DW	FC	X	L	W	FC	X	L	W	FC	X	L	W			
10106	10	15°	10	101	2.6	2.6	66	3.5	3.0	4	79	6.9	4.4	2.1	223	4.0	2.1	1.5	410	2.3	1.4	1.2			
	12	15°	12	70	3.2	3.2	46	4.2	3.7	6	35	10.4	6.7	3.2	99	6.0	3.2	2.2	182	3.5	2.1	1.8			
	14	15°	14	52	3.7	3.7	33	4.9	4.3	8	20	13.9	8.9	4.2	56	8.0	4.3	3.0	103	4.6	2.8	2.4			
	16	15°	16	39	4.2	4.2	26	5.6	4.8	10	13	17.3	11.1	5.3	36	10.0	5.4	3.7	66	5.8	3.5	3.0			
3331	10	30°	10	33	5.4	5.4	22	7.3	6.2	4	26	6.9	10.9	4.3	74	4.0	4.6	3.0	135	2.3	2.9	2.5			
	12	30°	12	23	6.4	6.4	15	8.8	7.4	6	12	10.4	16.4	6.4	33	6.0	6.9	4.5	60	3.5	4.4	3.7			
	14	30°	14	17	7.5	7.5	11	10.2	8.7	8	7	13.9	21.9	8.6	18	8.0	9.2	6.1	34	4.6	5.9	5.0			
	16	30°	16	13	8.6	8.6	8	11.7	9.9	10	4	17.3	27.3	10.7	12	10.0	11.5	7.6	22	5.8	7.3	6.2			
1420	10	45°	10	14	8.3	8.3	18	11.7	9.6	4	11	6.9	27.3	6.6	31	4.0	8.0	4.7	58	2.3	4.7	3.8			
	12	45°	12	10	9.9	9.9	13	14.1	11.5	6	5	10.4	41.0	9.9	14	6.0	12.0	7.0	26	3.5	7.0	5.7			
	14	45°	14	7	11.6	11.6	9	16.4	13.4	8	3	13.9	54.6	13.3	8	8.0	16.0	9.4	14	4.6	9.4	7.7			
	16	45°	16	6	13.3	13.3	7	18.7	15.3	10	2	17.3	68.3	16.6	5	10.0	20.0	11.7	9	5.8	11.7	9.6			
614	10	60°	10	6	11.5	11.5	4	17.3	13.3	4	5	6.9	*	9.2	14	4.0	13.9	6.5	25	2.3	6.9	5.3			
	12	60°	12	4	13.9	13.9	3	20.8	16.1	6	2	10.4	*	13.9	6	6.0	20.8	9.8	11	3.5	10.4	8.0			
	14	60°	14	3	16.2	16.2	2	24.2	18.7	8	1	13.9	*	18.5	3	8.0	27.7	13.1	6	4.6	13.9	10.7			
	16	60°	16	2	18.5	18.5	2	27.7	21.4	10	1	17.3	*	23.1	2	10.0	34.6	16.3	4	5.8	17.3	13.3			

Om CMH T4.5 39w 300BHV402			15°		20212	Horizontal 0°				Horizontal 30°			Vertical 0°					Vertical 30°				Vertical 60°			
		Beam Spread	DH	FC	L	W	FC	L	W	DW	FC	X	L	W	FC	X	L	W	FC	X	L	W			
20212	10	15°	10	202	2.6	2.6	131	3.5	3.0	4	158	6.9	4.4	2.1	447	4.0	2.1	1.5	821	2.3	1.4	1.2			
	12	15°	12	140	3.2	3.2	91	4.2	3.7	6	70	10.4	6.7	3.2	199	6.0	3.2	2.2	365	3.5	2.1	1.8			
	14	15°	14	103	3.7	3.7	67	4.9	4.3	8	39	13.9	8.9	4.2	112	8.0	4.3	3.0	205	4.6	2.8	2.4			
	16	15°	16	79	4.2	4.2	51	5.6	4.8	10	25	17.3	11.1	5.3	71	10.0	5.4	3.7	131	5.8	3.5	3.0			
6662	10	30°	10	67	5.4	5.4	43	7.3	6.2	4	52	6.9	10.9	4.3	147	4.0	4.6	3.0	270	2.3	2.9	2.5			
	12	30°	12	46	6.4	6.4	30	8.8	7.4	6	23	10.4	16.4	6.4	65	6.0	6.9	4.5	120	3.5	4.4	3.7			
	14	30°	14	34	7.5	7.5	22	10.2	8.7	8	13	13.9	21.9	8.6	37	8.0	9.2	6.1	68	4.6	5.9	5.0			
	16	30°	16	26	8.6	8.6	17	11.7	9.9	10	8	17.3	27.3	10.7	24	10.0	11.5	7.6	43	5.8	7.3	6.2			
2840	10	45°	10	28	8.3	8.3	18	11.7	9.6	4	22	6.9	27.3	6.6	63	4.0	8.0	4.7	115	2.3	4.7	3.8			
	12	45°	12	20	9.9	9.9	13	14.1	11.5	6	10	10.4	41.0	9.9	28	6.0	12.0	7.0	51	3.5	7.0	5.7			
	14	45°	14	14	11.6	11.6	9	16.4	13.4	8	6	13.9	54.6	13.3	16	8.0	16.0	9.4	29	4.6	9.4	7.7			
	16	45°	16	11	13.3	13.3	7	18.7	15.3	10	4	17.3	68.3	16.6	10	10.0	20.0	11.7	18	5.8	11.7	9.6			
1228	10	60°	10	12	11.5	11.5	8	17.3	13.3	4	10	6.9	*	9.2	27	4.0	13.9	6.5	50	2.3	6.9	5.3			
	12	60°	12	9	13.9	13.9	6	20.8	16.1	6	4	10.4	*	13.9	12	6.0	20.8	9.8	22	3.5	10.4	8.0			
	14	60°	14	6	16.2	16.2	4	24.2	18.7	8	2	13.9	*	18.5	7	8.0	27.7	13.1	12	4.6	13.9	10.7			
	16	60°	16	5	18.5	18.5	3	27.7	21.4	10	2	17.3	*	23.1	4	10.0	34.6	16.3	8	5.8	17.3	13.3			

* STEEP AIMING ANGLE, LENGTH OF BEAM EXTENDS BEYOND 25'

Photometrics

- A Aiming angle of fixture, measured from 0°
- DH Vertical distance from fixture to horizontal surface
- DW Distance from fixture to wall
- FC Footcandles at beam center
- X Vertical distance from beam center to ceiling
- L Length of beam
- W Width of beam
- CBCP Centerbeam Candlepower



FIXTURE USAGE	LAMP TYPE / PART NUMBER	BEAM SPREAD	CBCP	HORIZONTAL SURFACES								VERTICAL SURFACES											
				0°				30°				0°				30°				60°			
				DH	FC	L	W	FC	L	W	DW	FC	X	L	W	FC	X	L	W	FC	X	L	W

CMH T4.5 LAMPS (CONTINUED)

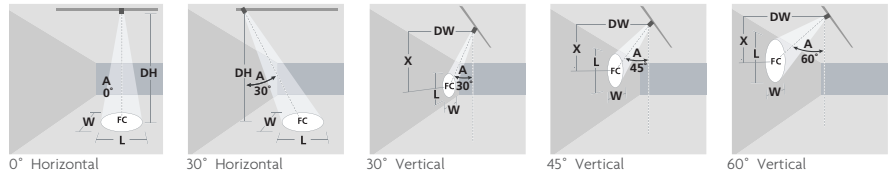
Om CMH T4.5 70w 300BHV403 	15° 	36866	10	369	2.6	2.6	239	3.5	3.0	4	288	6.9	4.4	2.1	815	4.0	2.1	1.5	1497	2.3	1.4	1.2
			12	256	3.2	3.2	166	4.2	3.7	6	128	10.4	6.7	3.2	362	6.0	3.2	2.2	665	3.5	2.1	1.8
			14	188	3.7	3.7	122	4.9	4.3	8	72	13.9	8.9	4.2	204	8.0	4.3	3.0	374	4.6	2.8	2.4
			16	144	4.2	4.2	94	5.6	4.8	10	46	17.3	11.1	5.3	130	10.0	5.4	3.7	239	5.8	3.5	3.0
			18	114	4.7	4.7	74	6.4	5.4	12	32	20.8	13.3	6.3	91	12.0	6.4	4.5	166	6.9	4.2	3.6
	30° 	12151	10	122	5.4	5.4	79	7.3	6.2	4	95	6.9	10.9	4.3	269	4.0	4.6	3.0	493	2.3	2.9	2.5
			12	84	6.4	6.4	55	8.8	7.4	6	42	10.4	16.4	6.4	119	6.0	6.9	4.5	219	3.5	4.4	3.7
			14	62	7.5	7.5	40	10.2	8.7	8	24	13.9	21.9	8.6	67	8.0	9.2	6.1	123	4.6	5.9	5.0
			16	47	8.6	8.6	31	11.7	9.9	10	15	17.3	27.3	10.7	43	10.0	11.5	7.6	79	5.8	7.3	6.2
	45° 	5179	10	14	8.3	8.3	9	11.7	9.6	4	40	6.9	27.3	6.6	114	4.0	8.0	4.7	210	2.3	4.7	3.8
			12	10	9.9	9.9	6	14.1	11.5	6	18	10.4	41.0	9.9	51	6.0	12.0	7.0	93	3.5	7.0	5.7
			14	7	11.6	11.6	5	16.4	13.4	8	10	13.9	54.6	13.3	29	8.0	16.0	9.4	53	4.6	9.4	7.7
			16	6	13.3	13.3	4	18.7	15.3	10	6	17.3	68.3	16.6	18	10.0	20.0	11.7	34	5.8	11.7	9.6
	60° 	2240	10	22	11.5	11.5	15	17.3	13.3	4	18	6.9	*	9.2	49	4.0	13.9	6.5	91	2.3	6.9	5.3
			12	16	13.9	13.9	10	20.8	16.1	6	8	10.4	*	13.9	22	6.0	20.8	9.8	40	3.5	10.4	8.0
			14	11	16.2	16.2	7	24.2	18.7	8	4	13.9	*	18.5	12	8.0	27.7	13.1	23	4.6	13.9	10.7
16			9	18.5	18.5	6	27.7	21.4	10	3	17.3	*	23.1	8	10.0	34.6	16.3	15	5.8	17.3	13.3	
18	7	20.8	20.8	4	31.2	24.0	12	2	20.8	*	27.7	5	12.0	41.6	19.6	10	6.9	20.8	16.0			

CMH PAR LAMPS

Om Sportster Tweak CMH MR16 GX10 20w 12° 300BHV440 	12° 	9000	8	140.6	1.7	1.7	91.3	2.3	1.9	4	70.3	6.9	3.5	1.7	196.9	4.0	1.7	1.7	365.4	2.3	1.1	1.0
			10	90.0	2.1	2.1	58.5	2.8	2.4	6	31.3	10.4	5.2	2.5	88.4	6.0	2.6	1.8	162.4	3.5	1.7	1.5
			12	62.5	2.5	2.5	40.6	3.4	2.9	8	17.6	13.9	7.0	3.4	49.7	8.0	3.4	2.4	91.3	4.6	2.3	1.9
			14	45.9	2.9	2.9	29.8	3.9	3.4	10	11.3	17.3	8.7	4.2	31.8	10.0	4.3	3.0	58.5	5.8	2.8	2.4
			16	35.2	3.4	3.4	22.8	4.5	3.9	12	7.8	20.8	10.4	5.0	22.1	12.0	5.1	3.6	40.6	6.9	3.4	2.9
	25° 	2900	8	45.3	3.5	3.5	29.4	4.8	4.1	4	22.7	6.9	8.3	3.5	64.1	4.0	3.7	2.5	117.7	2.3	2.4	2.0
			10	29.0	4.4	4.4	18.8	6.0	5.1	6	10.1	10.4	12.5	5.3	28.5	6.0	5.6	3.8	52.3	3.5	3.6	3.1
			12	20.1	5.3	5.3	13.1	7.2	6.1	8	5.7	13.9	16.6	7.1	16.0	8.0	7.5	5.0	29.4	4.6	4.8	4.1
			14	14.8	6.2	6.2	9.6	8.4	7.2	10	3.6	17.3	20.8	8.9	10.3	10.0	9.3	6.3	18.8	5.8	6.0	5.1
	40° 	1500	8	23.4	5.8	5.8	15.2	8.1	6.7	4	11.7	6.9	19.3	5.8	33.1	4.0	6.7	4.1	60.9	2.3	4.1	3.4
			10	15.0	7.3	7.3	9.7	10.2	8.4	6	5.2	10.4	29.0	8.7	14.7	6.0	10.1	6.2	27.1	3.5	6.1	5.0
			12	10.4	8.7	8.7	6.8	12.2	10.1	8	2.9	13.9	38.7	11.6	8.3	8.0	13.4	8.2	15.2	4.6	8.1	6.7
			14	7.7	10.2	10.2	5.0	14.2	11.8	10	1.9	17.3	48.3	14.6	5.3	10.0	16.8	10.3	9.7	5.8	10.2	8.4
	16	5.9	11.6	11.6	3.8	16.2	13.4	12	1.3	20.8	58.0	17.5	3.7	12.0	20.1	12.4	6.8	6.9	12.2	10.1		

* STEEP AIMING ANGLE, LENGTH OF BEAM EXTENDS BEYOND 25'

- A Aiming angle of fixture, measured from 0°
- DH Vertical distance from fixture to horizontal surface
- DW Distance from fixture to wall
- FC Footcandles at beam center
- X Vertical distance from beam center to ceiling
- L Length of beam
- W Width of beam
- CBCP Centerbeam Candlepower



FIXTURE USAGE	LAMP TYPE / PART NUMBER	BEAM SPREAD	CBCP	HORIZONTAL SURFACES						VERTICAL SURFACES					
				0°		30°		0°		30°		60°			
				DH	FC	L	W	FC	L	W	DW	FC	X	L	W

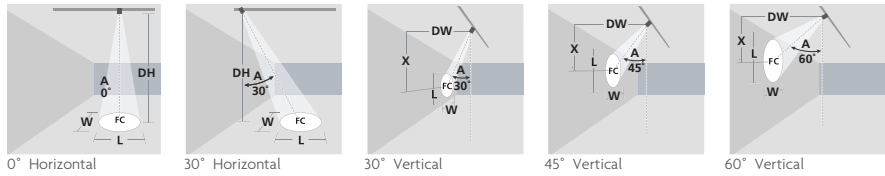
CMH PAR LAMPS (CONTINUED)

Om Sportster Spot	CMH PAR20 39w 10° 300BHV410		22000	10	220	1.7	1.7	143	2.3	2.0	4	172	6.9	2.9	1.4	486	4.0	1.4	1.0	893	2.3	0.9	0.8
				12	153	2.1	2.1	99	2.8	2.4	6	76	10.4	4.3	2.1	216	6.0	2.1	1.5	397	3.5	1.4	1.2
				14	112	2.4	2.4	73	3.3	2.8	8	43	13.9	5.7	2.8	122	8.0	2.8	2.0	223	4.6	1.9	1.6
				16	86	2.8	2.8	56	3.7	3.2	10	28	17.3	7.2	3.5	78	10.0	3.5	2.5	143	5.8	2.3	2.0
				18	68	3.1	3.1	44	4.2	3.6	12	19	20.8	8.6	4.2	54	12.0	4.2	3.0	99	6.9	2.8	2.4
	CMH PAR20 39w 25° 300BHV09		7500	10	75	4.4	4.4	49	6.0	5.1	4	59	6.9	8.3	3.5	166	4.0	3.7	2.5	304	2.3	2.4	2.0
				12	52	5.3	5.3	34	7.2	6.1	6	26	10.4	12.5	5.3	74	6.0	5.6	3.8	135	3.5	3.6	3.1
				14	38	6.2	6.2	25	8.4	7.2	8	15	13.9	16.6	7.1	41	8.0	7.5	5.0	76	4.6	4.8	4.1
				16	29	7.1	7.1	19	9.6	8.2	10	9	17.3	20.8	8.9	27	10.0	9.3	6.3	49	5.8	6.0	5.1
				18	23	8.0	8.0	15	10.8	9.2	12	7	20.8	25.0	10.6	18	12.0	11.2	7.5	34	6.9	7.2	6.1

Om Sportster Tweak	CMH PAR30 LONG 39w 10° 300BHV406		39600	10	396	1.7	1.7	257	2.3	2.0	4	3.9	6.9	2.9	1.4	875	4.0	1.4	1.0	1608	2.3	0.9	0.8
				12	275	2.1	2.1	179	2.8	2.4	6	138	10.4	4.3	2.1	389	6.0	2.1	1.5	714	3.5	1.4	1.2
				14	202	2.4	2.4	131	3.3	2.8	8	77	13.9	5.7	2.8	219	8.0	2.8	2.0	402	4.6	1.9	1.6
				16	155	2.8	2.8	100	3.7	3.2	10	50	17.3	7.2	3.5	140	10.0	3.5	2.5	257	5.8	2.3	2.0
				18	122	3.1	3.1	79	4.2	3.6	12	34	20.8	8.6	4.2	97	12.0	4.2	3.0	179	6.9	2.8	2.4
	CMH PAR30 LONG 39w 15° 300BHV405		11000	10	110	4.4	4.4	71	6.0	5.1	4	86	6.9	8.3	3.5	243	4.0	3.7	2.5	447	2.3	2.4	2.0
				12	76	5.3	5.3	50	7.2	6.1	6	38	10.4	12.5	5.3	108	6.0	5.6	3.8	198	3.5	3.6	3.1
				14	56	6.2	6.2	36	8.4	7.2	8	21	13.9	16.6	7.1	61	8.0	7.5	5.0	112	4.6	4.8	4.1
				16	43	7.1	7.1	28	9.6	8.2	10	14	17.3	20.8	8.9	39	10.0	9.3	6.3	71	5.8	6.0	5.1
				18	34	8.0	8.0	22	10.8	9.2	12	10	20.8	25.0	10.6	27	12.0	11.2	7.5	50	6.9	7.2	6.1
	CMH PAR30 LONG 39w 25° 300BHV407		43000	10	430	2.6	2.6	279	3.5	3.0	4	336	6.9	4.4	2.1	950	4.0	2.1	1.5	1746	2.3	1.4	1.2
				12	299	3.2	3.2	194	4.2	3.7	6	149	10.4	6.7	3.2	422	6.0	3.2	2.2	776	3.5	2.1	1.8
				14	219	3.7	3.7	142	4.9	4.3	8	84	13.9	8.9	4.2	238	8.0	4.3	3.0	436	4.6	2.8	2.4
				16	168	4.2	4.2	109	5.6	4.8	10	54	17.3	11.1	5.3	152	10.0	5.4	3.7	279	5.8	3.5	3.0
				18	133	4.7	4.7	86	6.4	5.4	12	37	20.8	13.3	6.3	106	12.0	6.4	4.5	194	6.9	4.2	3.6
	CMH PAR30 LONG 39w 40° 300BHV408		10000	10	100	7.3	7.3	65	10.2	8.4	4	78	6.9	19.3	5.8	221	4.0	6.7	4.1	406	2.3	4.1	3.4
				12	69	8.7	8.7	45	12.2	10.0	6	35	10.4	29.0	8.7	98	6.0	10.1	6.2	180	3.5	6.1	5.0
				14	51	10.2	10.2	33	14.2	11.8	8	20	13.9	38.7	11.6	55	8.0	13.4	8.2	101	4.6	8.1	6.7
				16	39	11.6	11.6	25	16.2	13.4	10	13	17.3	48.3	14.6	35	10.0	16.8	10.3	65	5.8	10.2	8.4
				18	31	13.1	13.1	20	18.3	15.1	12	9	20.8	58.0	17.5	25	12.0	20.1	12.4	45	6.9	12.2	10.1

Photometrics

- A Aiming angle of fixture, measured from 0°
- DH Vertical distance from fixture to horizontal surface
- DW Distance from fixture to wall
- FC Footcandles at beam center
- X Vertical distance from beam center to ceiling
- L Length of beam
- W Width of beam
- CBCP Centerbeam Candlepower



FITTURE USAGE	LAMP TYPE / PART NUMBER	BEAM SPREAD	CBCP	HORIZONTAL SURFACES								VERTICAL SURFACES											
				0°				30°				0°				30°				60°			
				DH	FC	L	W	FC	L	W	DW	FC	X	L	W	FC	X	L	W	FC	X	L	W

INCANDESCENT PAR LAMPS

Om Sportster Tweak	PAR16 GUI10 50w 40° 300BHV411	40°	800	8 13 5.8 5.8	8 8.1 6.7	4 6 6.9 19.3 5.8	18 4.0 6.7 4.1	32 2.3 4.1 3.4
				10 8 7.3 7.3	5 10.2 8.4	6 3 10.4 29.0 8.7	8 6.0 10.1 6.2	14 3.5 6.1 5.0
				12 6 8.7 8.7	4 12.2 10.0	8 2 13.9 38.7 11.6	4 8.0 13.4 8.2	8 4.6 8.1 6.7
				14 4 10.2 10.2	3 14.2 11.8	10 1 17.3 48.3 14.6	3 10.0 16.8 10.3	5 5.8 10.2 8.4
				16 3 11.6 11.6	2 16.2 13.4	12 1 20.8 58.0 17.5	2 12.0 20.1 12.4	4 6.9 12.2 10.1

Om Sportster Tweak	PAR30 SHORT 50w 9° 300BHV418	9°	8800	8 138 1.3 1.3	89 1.7 1.5	4 69 6.9 2.6 1.3	194 4.0 1.3 0.9	357 2.3 0.8 0.7
				10 88 1.6 1.6	57 2.1 1.8	6 31 10.4 3.8 1.9	86 6.0 1.9 1.3	159 3.5 1.3 1.1
				12 61 1.9 1.9	40 2.5 2.2	8 17 13.9 5.1 2.5	49 8.0 2.5 1.8	89 4.6 1.7 1.5
				14 45 2.2 2.2	29 2.9 2.5	10 11 17.3 6.4 3.1	31 10.0 3.2 2.2	57 5.8 2.1 1.8
				16 34 2.5 2.5	22 3.4 2.9	12 8 20.8 7.7 3.8	22 12.0 3.8 2.7	40 6.9 2.5 2.2

	PAR30 SHORT 50w 25° 300BHV419	25°	2300	8 36 3.5 3.5	23 4.8 4.0	4 18 6.9 8.3 3.5	51 4.0 3.7 2.5	93 2.3 2.4 2.0
				10 23 4.4 4.4	15 6.0 5.1	6 8 10.4 12.5 5.3	23 6.0 5.6 3.8	41 3.5 3.6 3.1
				12 16 5.3 5.3	10 7.2 6.1	8 4 13.9 16.6 7.1	13 8.0 7.5 5.0	23 4.6 4.8 4.1
				14 12 6.2 6.2	8 8.4 7.2	10 3 17.3 20.8 8.9	8 10.0 9.3 6.3	15 5.8 6.0 5.1
				16 9 7.1 7.1	6 9.6 8.2	12 2 20.8 25.0 10.6	6 12.0 11.2 7.5	10 6.9 7.2 6.1

	PAR30 SHORT 50w 40° 300BHV420	40°	1300	10 20 5.8 5.8	13 8.1 6.7	4 10 6.9 19.3 5.8	29 4.0 6.7 4.1	53 2.3 4.1 3.4
				12 13 7.3 7.3	8 10.2 8.4	6 5 10.4 29.0 8.7	13 6.0 10.1 6.2	23 3.5 6.1 5.0
				14 9 8.7 8.7	6 12.2 10.0	8 3 13.9 38.7 11.6	7 8.0 13.4 8.2	13 4.6 8.1 6.7
				16 7 10.2 10.2	4 14.2 11.8	10 2 17.3 48.3 14.6	5 10.0 16.8 10.3	8 5.8 10.2 8.4
				18 5 11.6 11.6	3 16.2 13.4	12 1 20.8 58.0 17.5	3 12.0 20.1 12.4	6 6.9 12.2 10.1

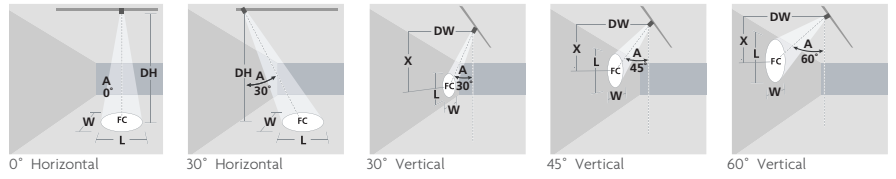
Om Sportster Tweak	PAR30 LONG 50w 9° 300BHV424	9°	8800	8 138 1.3 1.3	89 1.7 1.5	4 69 6.9 2.6 1.3	194 4.0 1.3 0.9	357 2.3 0.8 0.7
				10 88 1.6 1.6	57 2.1 1.8	6 31 10.4 3.8 1.9	86 6.0 1.9 1.3	159 3.5 1.3 1.1
				12 61 1.9 1.9	40 2.5 2.2	8 17 13.9 5.1 2.5	49 8.0 2.5 1.8	89 4.6 1.7 1.5
				14 45 2.2 2.2	29 2.9 2.5	10 11 17.3 6.4 3.1	31 10.0 3.2 2.2	57 5.8 2.1 1.8
				16 34 2.5 2.5	22 3.4 2.9	12 8 20.8 7.7 3.8	22 12.0 3.8 2.7	40 6.9 2.5 2.2

	PAR30 LONG 50w 25° 300BHV425	25°	2300	8 36 3.5 3.5	23 4.8 4.0	4 18 6.9 8.3 3.5	51 4.0 3.7 2.5	93 2.3 2.4 2.0
				10 23 4.4 4.4	15 6.0 5.1	6 8 10.4 12.5 5.3	23 6.0 5.6 3.8	41 3.5 3.6 3.1
				12 16 5.3 5.3	10 7.2 6.1	8 4 13.9 16.6 7.1	13 8.0 7.5 5.0	23 4.6 4.8 4.1
				14 12 6.2 6.2	8 8.4 7.2	10 3 17.3 20.8 8.9	8 10.0 9.3 6.3	15 5.8 6.0 5.1
				16 9 7.1 7.1	6 9.6 8.2	12 2 20.8 25.0 10.6	6 12.0 11.2 7.5	10 6.9 7.2 6.1

Sportster Tweak	PAR38 60w 9° 300BHV430	9°	16000	8 250 1.3 1.3	162 1.7 1.5	4 125 6.9 2.6 1.3	354 4.0 1.3 0.9	650 2.3 0.8 0.7
				10 160 1.6 1.6	104 2.1 1.6	6 56 10.4 3.8 1.9	157 6.0 1.9 1.3	289 3.5 1.3 1.1
				12 111 1.9 1.9	72 2.5 1.9	8 31 13.9 5.1 2.5	88 8.0 2.5 1.8	162 4.6 1.7 1.5
				14 82 2.2 2.2	53 2.9 2.2	10 20 17.3 6.4 3.1	57 10.0 3.2 2.2	104 5.8 2.1 1.8
				16 63 2.5 2.5	41 3.4 2.5	12 14 20.8 7.7 3.8	39 12.0 3.8 2.7	72 6.9 2.5 2.2

	PAR38 60w 30° 300BHV431	30°	2500	8 39 4.3 4.3	25 5.9 5.0	4 20 6.9 10.9 4.3	55 4.0 4.6 3.0	101 2.3 2.9 2.5
				10 25 5.4 5.4	16 7.3 6.2	6 9 10.4 16.4 6.4	25 6.0 6.9 4.5	45 3.5 4.4 3.7
				12 17 6.4 6.4	11 8.8 7.4	8 5 13.9 21.9 8.6	14 8.0 9.2 6.1	25 4.6 5.9 5.0
				14 13 7.5 7.5	8 10.2 8.7	10 3 17.3 27.3 10.7	9 10.0 11.5 7.6	16 5.8 7.3 6.2
				16 10 8.6 8.6	6 11.7 9.9	12 2 20.8 32.8 12.9	6 12.0 13.9 9.1	11 6.9 8.8 7.4

- A Aiming angle of fixture, measured from 0°
- DH Vertical distance from fixture to horizontal surface
- DW Distance from fixture to wall
- FC Footcandles at beam center
- X Vertical distance from beam center to ceiling
- L Length of beam
- W Width of beam
- CBCP Centerbeam Candlepower



FIXTURE USAGE	LAMP TYPE / PART NUMBER	BEAM SPREAD	CBCP	HORIZONTAL SURFACES						VERTICAL SURFACES					
				0°		30°		0°		30°		60°			
				DH	FC	L	W	FC	L	W	DW	FC	X	L	W

INCANDESCENT PAR LAMPS (CONTINUED)

Sportster Tweak	PAR38 90w 9° 300BH432	9°	22000	8	347	1.3	1.3	225	1.7	1.5	4	173	6.9	2.6	1.3	491	4.0	1.3	0.9	901	2.3	0.8	0.7
				10	222	1.6	1.6	144	2.1	1.8	6	77	10.4	3.8	1.9	218	6.0	1.9	1.3	401	3.5	1.3	1.1
				12	154	1.9	1.9	100	2.5	2.2	8	43	13.9	5.1	2.5	123	8.0	2.5	1.8	225	4.6	1.7	1.5
				14	113	2.2	2.2	74	2.9	2.5	10	28	17.3	6.4	3.1	78	10.0	3.2	2.2	144	5.8	2.1	1.8
				16	87	2.5	2.5	56	3.4	2.9	12	19	20.8	7.7	3.8	55	12.0	3.8	2.7	100	6.9	2.5	2.2
	PAR38 90w 30° 300BH433	30°	3500	8	55	4.3	4.3	36	5.9	5.0	4	27	6.9	10.9	4.3	77	4.0	4.6	3.0	142	2.3	2.9	2.5
				10	35	5.4	5.4	23	7.3	6.2	6	12	10.4	16.4	6.4	34	6.0	6.9	4.5	63	3.5	4.4	3.7
				12	24	6.4	6.4	16	8.8	7.4	8	7	13.9	21.9	8.6	19	8.0	9.2	6.1	36	4.6	5.9	5.0
				14	18	7.5	7.5	12	10.2	8.7	10	4	17.3	27.3	10.7	12	10.0	11.5	7.6	23	5.8	7.3	6.2
				16	14	8.6	8.6	9	11.7	9.9	12	3	20.8	32.8	12.9	9	12.0	13.9	9.1	16	6.9	8.8	7.4
	PAR38 90w 50° 300BH434	50°	1600	8	25	7.5	7.5	16	10.7	8.7	4	13	6.9	42.9	7.5	35	4.0	9.5	5.3	65	2.3	5.4	4.3
				10	16	9.3	9.3	10	13.4	10.7	6	6	10.4	64.4	11.2	16	6.0	14.3	7.9	29	3.5	8.0	6.5
				12	11	11.2	11.2	7	16.1	12.9	8	3	13.9	85.8	14.9	9	8.0	19.1	10.6	16	4.6	10.7	8.6
				14	8	13.1	13.1	5	18.8	15.1	10	2	17.3	107.3	18.7	6	10.0	23.8	13.2	10	5.8	13.4	10.8
				16	6	14.9	14.9	4	21.5	17.2	12	1	20.8	128.8	22.4	4	12.0	28.6	15.8	7	6.9	16.1	12.9
	PAR38 120w 10° 300BH435	10°	22500	8	352	1.4	1.4	228	1.9	1.6	4	176	6.9	2.9	1.4	497	4.0	1.4	1.0	913	2.3	0.9	0.8
				10	225	1.7	1.7	146	2.3	2.0	6	78	10.4	4.3	2.1	221	6.0	2.1	1.5	406	3.5	1.4	1.2
				12	156	2.1	2.1	101	2.8	2.4	8	44	13.9	5.7	2.8	124	8.0	2.8	2.0	228	4.6	1.9	1.6
				14	115	2.4	2.4	75	3.3	2.8	10	28	17.3	7.2	3.5	80	10.0	3.5	2.5	146	5.8	2.3	2.0
				16	88	2.8	2.8	57	3.7	3.2	12	20	20.8	8.6	4.2	55	12.0	4.2	3.0	101	6.9	2.8	2.4
	PAR38 120w 30° 300BH436	25°	4600	8	72	4.3	4.3	47	5.9	5.0	4	36	6.9	10.9	4.3	102	4.0	4.6	3.0	187	2.3	2.9	2.5
				10	46	5.4	5.4	30	7.3	6.2	6	16	10.4	16.4	6.4	45	6.0	6.9	4.5	83	3.5	4.4	3.7
				12	32	6.4	6.4	21	8.8	7.4	8	9	13.9	21.9	8.6	25	8.0	9.2	6.1	47	4.6	5.9	5.0
				14	23	7.5	7.5	15	10.2	8.7	10	6	17.3	27.3	10.7	16	10.0	11.5	7.6	30	5.8	7.3	6.2
				16	18	8.6	8.6	12	11.7	9.9	12	4	20.8	32.8	12.9	11	12.0	13.9	9.1	21	6.9	8.8	7.4
	PAR38 120w 55° 300BH437	40°	2000	8	31	8.3	8.3	20	12.2	9.6	4	16	6.9	89.1	8.3	44	4.0	11.4	5.9	81	2.3	6.1	4.8
				10	20	10.4	10.4	13	15.3	12.0	6	7	10.4	133.6	12.5	20	6.0	17.1	8.8	36	3.5	9.2	7.2
				12	14	12.5	12.5	9	18.3	14.4	8	4	13.9	178.1	16.7	11	8.0	22.9	11.8	20	4.6	12.2	9.6
				14	10	14.6	14.6	7	21.4	16.9	10	3	17.3	222.7	20.8	7	10.0	28.6	14.7	13	5.8	15.3	12.0
				16	8	16.7	16.7	5	24.4	19.3	12	2	20.8	267.2	25.0	5	12.0	34.3	17.7	9	6.9	18.3	14.4

Transformer Information

SELECTING A TRANSFORMER

The transformer is the key to a low-voltage system. It reduces standard line-voltage to 12 or 24 volts, which is safe to the touch. The total output wattage of the transformers determines the total wattage of the elements that can be used on the system. For example, a 300 watt transformer can power up to six 50 watt heads ($6 \times 50 = 300$). There are several transformer options from which to choose. Knowing the advantages of each will help you to select the best transformer for your application.

REMOTE

Remote transformers are preferred for their clean look and range of power feed options. They are mounted in accessible locations, but out of view. Power is brought to the rail or cable system through a low-profile power feed canopy or other power feed option (sold separately).



VS.

SURFACE

Surface transformers are decorative and will be visible in the room. They are best suited for applications where there is an existing junction box in a finished ceiling. The surface transformer has an integral power feed—there is no need for a separate power feed; however, the surface transformer must be placed within range of the rail or cable run.



VS.

REMODEL RECESSED

Remodel Recessed Transformers look similar from below the ceiling to the power feed canopies used with remote transformers and are preferred for their clean look. An additional benefit they have over remote transformers is that they do not require access to a remote location because the transformer sits just above the ceiling. However, they are not compatible with all finished ceilings because an electrician will need to install the Remodel Recessed Transformer in close proximity to an existing junction box, drill through the finished ceiling in the location where the Remodel Recessed Transformer will be installed, and cover the existing junction box with the field-paintable provided metal cover. The Remodel Recessed Transformer has an integral power feed – there is no need for a separate power feed; however, the transformer must be installed directly above the rail run.



MAGNETIC

Magnetic transformers have historically been the choice of lighting professionals due to their reliability and can be used to power both halogen and LED elements. We offer a wide range of output wattages for magnetic transformers. When dimming a magnetic transformer, it is important to use a low-voltage magnetic dimmer.



VS.

ELECTRONIC

Electronic transformers are much smaller and lighter than their magnetic counterparts and have the advantage of being resettable at the wall switch in the event of a system short circuit. We offer 12 volt electronic remote and surface transformers in a variety of output options. Not all electronic transformers can be used to power LED elements. Any electronic transformer with an LED icon is compatible with our LED elements. When dimming an electronic transformer, it is important to use a low-voltage electronic dimmer.



12 VOLT

12 volt transformers are most common. A 12 volt system requires that the elements on the system have 12 volt lamps, which are readily available in a range of wattages and beam spreads. A 12 volt transformer can power a run with 300 watts per power feed (600 watts for a dual-feed), running up to thirty feet in each direction from the power feed.



VS.

24 VOLT

24 volt transformers are best suited for installations with limited power feed locations. The elements on the system must have 24 volt lamps, which are not as widely available and offer fewer beam spreads. A 24 volt transformer can power a run with 600 watts per power feed (1200 watts for a dual feed canopy), running up to sixty feet in each direction from the power feed. 24 volt transformers cannot be used on Two-Circuit MonoRail.



ALL OF OUR TRANSFORMERS COMPLY WITH GUIDELINES ESTABLISHED BY THE NATIONAL ELECTRICAL CODE, WITH A MAXIMUM WATTAGE ON A 12 VOLT SYSTEM AT 300 WATTS PER FEED AND A MAXIMUM WATTAGE ON A 24 VOLT SYSTEM AT 600 WATTS PER FEED.

ABOUT SURFACE TRANSFORMERS

Surface transformers mount to a standard 4" junction box with round plaster ring (provided by electrician) and are best suited for applications where there is an existing junction box. The magnetic or electronic transformer is concealed inside a decorative housing with an integral power feed—there is no need to purchase a separate power feed. The surface transformer for a MonoRail or Two-Circuit MonoRail system must be placed directly above the system. The surface transformer for a Kable Lite system must be placed within two feet of the system. Surface transformers have a specific minimum drop depending on the wattage of the transformer—this dimension must be considered in determining how far the run will drop from the ceiling. Longer drops can be achieved by adding a power extender (for MonoRail or Two-Circuit MonoRail), or hardwire feeds or center power feeds (for Kable Lite).

Tech Lighting's magnetic surface transformers come standard with a debuzzing dimming coil to reduce noise when using a low-voltage magnetic dimmer.

ABOUT REMODEL RECESSED TRANSFORMERS

Remodel recessed transformers provide a clean, minimal look because the transformer is installed above the ceiling out of view. Power is brought to the system through the integral power feed. In a remodel situation, the remodel recessed transformer should be installed within close proximity to an existing junction box. UL requires that the existing junction box still be accessible, so we include a removable, field-paintable cover. In new construction, an electrician can simply bring power to the remodel recessed transformer directly. In either situation, the remodel recessed transformer must be placed directly above the system. At this time, we are only offering electronic remodel recessed transformers which can easily be reset at the wall switch in the event of a system short circuit.

ABOUT REMOTE TRANSFORMERS

Remote transformers provide a clean, minimal look because the transformer is installed in a remote, accessible location (such as above the ceiling or in a closet) out of view. Power is brought to the system with a system-compatible power feed canopy or other power feed option (sold separately).

The remote transformer can be anchored to the wall or ceiling with screws or toggle bolts and should be installed no more than twenty feet from the power feed. It is important that the electrician supply the correct gauge of THHN wire from the transformer to the junction box to prevent voltage drop, which can cause fixtures to appear dim. See the chart below for proper wire gauge. For optimum performance, remote transformers should be loaded to at least 80 percent of capacity.

Power Taps

Magnetic remote transformers have multiple secondary power taps to compensate for variations in voltage. An input voltage exceeding 120 volts may result in more than 12 or 24 volts on the system, which can shorten lamp life. Follow the installation instructions packaged with the transformer to determine which power tap to use.

Voltages

Tech Lighting transformers are standard for 120 volt input and for 277 volt input where noted. Other input voltages are available upon request.

LOW-VOLTAGE WIRE SIZE TABLE

Use to determine the correct THHN wire size for a recommended 3 percent drop in voltage at the specified wattage. The length shown is the length of wire from the transformer to the power feed.

12 VOLT	5 ft.	6-15 ft.	16-20 ft.	21-40 ft.	41-60 ft.	61-90 ft.
150 watt	#12 GA	#8 GA	#6 GA	#4 GA	#2 GA	#1 GA
300 watt	#10 GA	#6 GA	#4 GA	#1 GA	1/0	3/0
24 VOLT	5 ft.	6-15 ft.	16-20 ft.	21-40 ft.	41-60 ft.	61-90 ft.
300 watt	#14 GA	#12 GA	#10 GA	#6 GA	#6 GA	#4 GA
600 watt	#12 GA	#8 GA	#6 GA	#4 GA	#2 GA	#1 GA

DIMMING

All Tech Lighting transformers may be dimmed with the appropriate dimmer: a low voltage magnetic dimmer for a magnetic transformer; a low voltage electronic dimmer for an electronic transformer, or a standard incandescent dimmer where indicated. The dimmer is placed on the line voltage side of the input line. Consult the transformer charts in each system section of the catalog for the compatible dimmer type. It is very important to use the compatible dimmer type: failure to do so will substantially shorten the useful life of the transformer. Remote transformers are generally placed outside the room, so any buzzing that may be caused by dimming is not noticeable. If using a remote magnetic transformer and a buzzing noise is apparent, a debuzzing dimming coil may be wired in series on one of the 120 volt input lines. Select the correct dimming coil (see below) based on the wattage of your transformer.

DEBUZZING DIMMING COIL ALONE

	DIAMETER	DEPTH
700DIM150	1.75"	.75"
700DIM300	2.25"	1"
700DIM600	2.5"	1"

