

LED Outdoor Summer 2013 Catalog

# Designed beyond standards

Great Design: RAB LED luminaries are timeless, elegant designs that look great in any setting with light output that's smooth, powerful and makes colors pop. Product quality is second to none. Installation is fast and easy.

Affordability: You will get payback on investment in approximately 2 years based on national average electricity rates of \$.10/kWh. With utility rebates available in many areas, RAB LED products become even more affordable.

**Durability:** 100,000-hour LED lifespan based on IES TM-21 calculations backed by a 5-year warranty on the complete product from a company that has earned trust since 1946.

**Energy Efficiency:** With energy savings of up to 85%, RAB LED products are extraordinarily efficient. There is no better investment you can make in saving energy.

To learn more about saving money with RAB LED, visit rabweb.com/stories



# Contents

Introduction
Go beyond footcandles
Engineered to perform6
Priced for payback8
Color temperature made easy
LED case studies
Wallpacks16
Area Lights
Square Poles & Brackets
Garage Lights
High Bays26
Ceiling Lights
Pendants
Floodlights
Sensors
Bollards
Vaporproof40
Goosenecks
Step Lights44
Brackets
LED photometrics 46

# Over 67 years of innovation and still breaking ground

Four generations of family ownership has given RAB a continuous history of lighting advances. In the 40s, RAB invented the first floodlight with enclosed wiring. In the 50s, it was first with unbreakable Lexan\* lighting. RAB improved lighting efficiency and convenience forever with the first motion sensor light control in the 80s. The 90s saw industry firsts in lighting packaging, merchandising and "friendly" cutoff lighting...



...And now, over 50 affordable LED lighting breakthroughs.























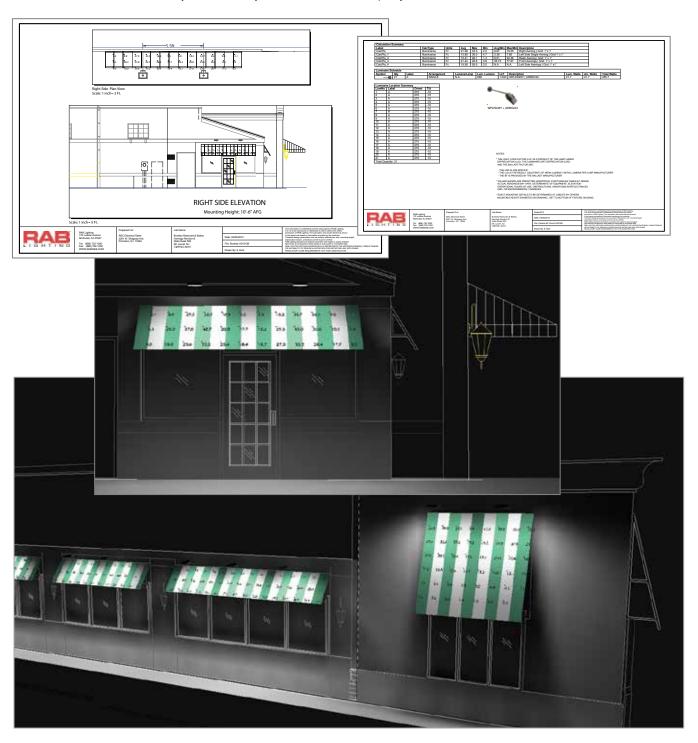


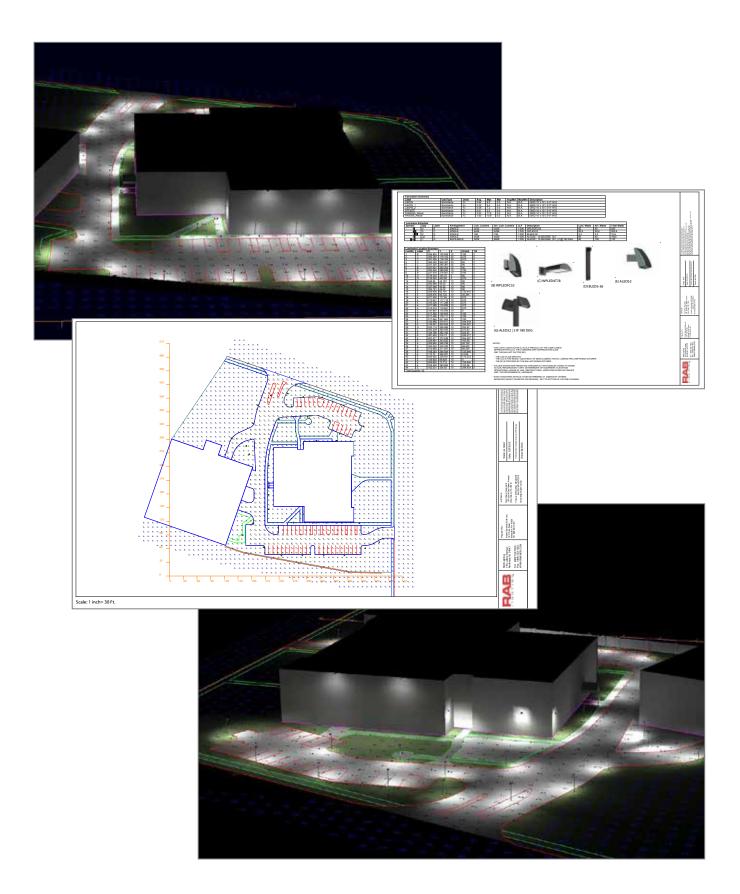




# Go beyond footcandles and see your project come to life.

RAB's free lighting layout service includes nighttime simulations to show the finished installation. You get free and fast design services including photo-realistic renderings, energy engineering payback analysis, plus traditional point-by-point layouts, fixture schedules and specification sheets. Just call **888 722-1000**, or visit **rabweb.com** to do your own layouts online for simple jobs.





Point-by-point layouts, energy engineering payback analyses, fixture schedules and more...all at your fingertips for free!

# Engineered to perform.

# A no-compromise warranty you'll find nowhere else

RAB warrants that our LED products will be free from defects in materials and workmanship for a period of five years from the date of delivery to the end user, including coverage of:

- LED light output (maintained above 70% of initial output)
- LED color temperature will not shift more than 200K CCT
- LED driver will operate within RAB specifications
- Fixture finish will not crack, peel, fade or corrode excessively



## Testing beyond industry standards

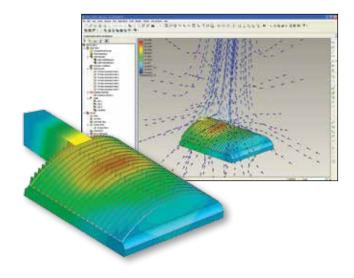
RAB goes beyond the highest industry standards in LED testing and performance certification. All RAB LED products are tested to LM-79, LM-80, UL and Lighting Facts standards. RAB also has an industry-leading 100% test regimen 3X during the manufacturing process. First at the LED fabrication level, then after LED Module assembly, followed by a full two-hour burn-in that ensures the entire fixture is operating to specifications before releasing it to the wild.



Two-hour burn-in test rack

## Engineered thermal management

LED and driver lifespan is dependent on temperature. The cooler the LED, the longer its useful life. RAB uses computational fluid dynamics optimization of heat movement and air flow to maximize thermal management in our LED products, so our LEDs and drivers stay crazy cool.



# Cutting-edge driver technology

With reliable power conversion and superb specifications in every aspect of performance, RAB's innovative patent-pending driver design concepts offer protection from the harsh reality of the electrical grid. Our rigorous LED driver manufacturing test program ensures 100% reliability.



# Optimized optical design

RAB designs all of our LED optics in-house, using software to model reflectors and lens assemblies to give you maximally effective and efficient lighting. Our in-house testing laboratories, with sophisticated test equipment like the goniophotometer pictured on the right, confirm that real-world fixture performance matches our digital models.



Precision optics optimize fixture performance.



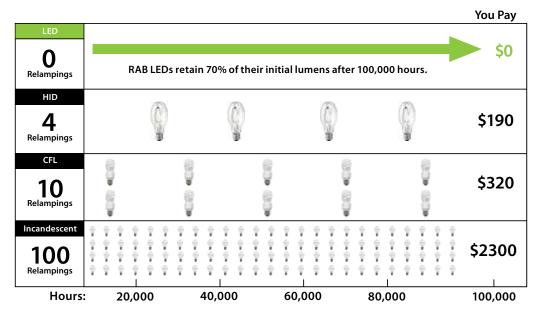
RAB's on-site Goniophotometer provides precision measurement of light output.

# Priced for payback.

You can't afford *not* to buy LED lighting. Most installations pay back their initial cost through energy and maintenance savings in less than two years.

# The end of relamping

Your savings on lamps and relamping labor over 100,000 hours add up fast.



Labor calculated at \$90/hr. @ 15 minutes per fixture relamped

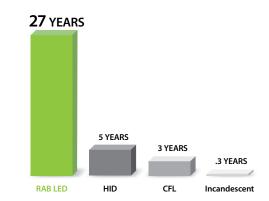
# Energy savings and payback calculation

We crunch the numbers for you and provide a single-page analysis that shows how much energy you can save, and how quickly your investment in RAB LED technology will payback.



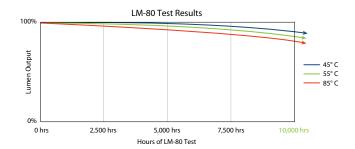
## 100,000-Hour lifespan

The new TM-21 industry standard lifespan calculation method reveals the true high-performance of RAB LEDs. Now that LM-80 testing has exceeded 10,000 hours, RAB LED fixtures have an L70 Lifespan of 100,000 hours based on TM-21 calculations.



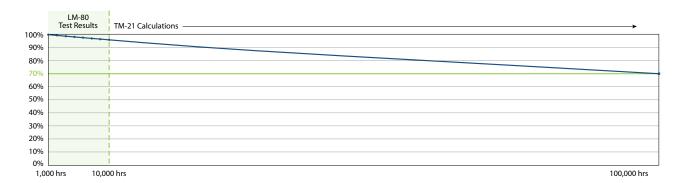
#### 1. THE TEST: LM-80

LM-80 is a *method for measuring light output* of LEDs over time, created by the IES (Illuminating Engineering Society). LM-80 tests are run at three different temperatures so results can be applied to specific fixtures and environments.



#### 2. THE CALCULATION: TM-21

TM-21 is an IES 2012 standard that uses LM-80 data (for 10,000 hours) to *calculate* lifespan for a specific LED fixture. The UL temperature test results for a fixture are used to choose one of the three temperature curves to project what the LED's lifespan will be.



#### 3. THE RESULTS: L70 Lifespan

L70 Lifespan (the result from the TM-21 calculation above) is the industry standard for the useful lifespan of an LED. It specifies the *hours of operation before light output drops to 70% of initial output*. In the example below, at 70% of initial lumens, the difference in output is only subtly discernable to the human eye.



100% Lumen Output



70% Lumen Output

# Color temperature made easy

## Color temperature

The color of light is measured in degrees kelvin (K). The correlation of LED color to incandescent color is called CCT (Correlated Color Temperature). Light that appears more yellow (warm) is 2500 - 3000K. Light that is more white or blue (cool) is 3500 - 5000K.

Because the exact kelvin value of each LED can vary slightly, the American National Standards Institute (ANSI) defined an allowable range of variation called Nominal CCT. These variations are so slight that they are hardly noticeable to the human eye. For example, an LED with a CCT of 3045K, and another with a CCT of 3220K would both have a nominal CCT of 3000K.

## Color consistency

RAB LED color consistency is reported in MacAdam ellipses (e.g. 3-step MacAdam ellipse). Typically, outdoor fixtures are 7 step or less and indoor fixtures are 4 step or less. Lower step numbers correspond with less color variation. All RAB fixtures meet are exceed industry standards for color consistency. MacAdam steps for RAB products can be found in this catalog and online at rabweb.com.

# Color stability

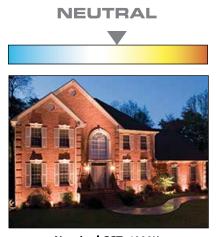
Color properties of light sources often change over time, even when they are manufactured with consistent CCT. Color stability describes the ability of a light source to maintain its color properties over time and is therefore an important consideration for lighting designers and others who specify lighting solutions. All RAB LED products are warrantied to shift no more than 200K CCT for the 5 years following delivery to the end user.

## Color Rendering Index (CRI)

CRI measures a light source's ability to show colors "realistically" compared to a standard reference source. CRI is represented by an index number between 0 - 100 and is measured against different reference sources for daylight or incandescent light. LEDs with the maximum CRI value of 100 would produce a natural-looking environment while LEDs with a CRI under 50 would produce poor color quality.



Nominal CCT: 5000K CRI: 66

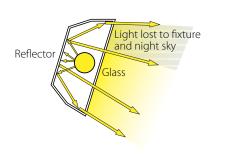


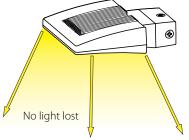
Nominal CCT: 4000K CRI: 86

WARM

Nominal CCT: 3000K CRI: 87

# HID vs. LED





# 175W HID Wallpack

26W LED LPACK

13,500 Initial Lumens 1,816 8,800 Mean Lumens 1,816 4,736 Fixture Lumens 1,816 1,301 Delivered 1,816

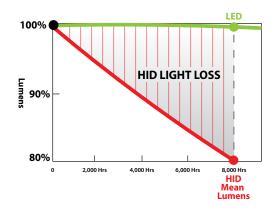
Lumens

# Mean lumens

Mean Lumens are the light output at 40% of rated life (8,000 hrs. for HID\*). At 8,000 hours, LED is still near 100% light output.

# Delivered lumens HID luminaires lose a great dea

HID luminaires lose a great deal of light to the fixture itself and the night sky. Only a small fraction of the lumens end up on the ground. RAB LED fixtures, however, deliver ALL the light from the fixture to where you need it.



## Equivalency

Equivalency is specific to each fixture type and application, not wattage. Equivalency is the closest match of an LED light source calculated based on lumens (light) delivered to the appropriate area based on application. This calculation is then confirmed by real world testing and observation with the human eye.

Equivalencies for different fixture types vary even at the same LED wattage. For example, HID Area Lights are more efficient than the same HID wattage Wallpack, with a 20W LED Wallpack replacing a 150W Metal Halide and a 20W LED Area Light replacing a 50W Metal Halide Area Light.

## Replacement range

A suggested range of wattages that can be replaced by RAB LED based on equivalency, nighttime simulations and confirmation by real-world testing and observation with the human eye.

# Application equivalency

Some RAB LED products are designed to have a specific Application Equivalency. The 52W LPACK is a great example. Looking at the photometrics shown to the right, the .5fc and forward throw are nearly the same between the 52W LPACK and a 250W Metal Halide Wallpack, allowing one-for-one replacement with the same mounting and spacing. This is how Application Equivalency is determined.





Multiples of Mounting Height • Values shown in Footcandles

# RAB Lighting helps BMW car dealership's true colors shine through

## Project Details

#### **Project Site**

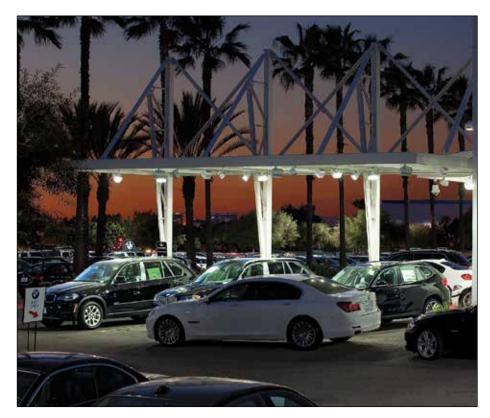
BMW car dealership in Irvine, CA. RAB fixtures illuminate canopies, trellis and freeway display areas.

#### **Project Scope**

(120) RAB 39W FFLED floodlights replaced (156) 175W metal halide floods

#### **Energy and Cost Savings**

Five-year projected savings estimate, net equipment and installation costs, is \$80,500. Used 36 fewer fixtures to achieve the same light output and greater energy efficiency. The fixtures paid for themselves in less than two years.



# Penn State student housing complex roars ahead with RAB LED

## **Project Details**

#### **Project Site**

Lion's Crossing Student Housing Complex, located two miles off the Penn State University campus (State College, PA). 17 buildings containing 204 separate residential apartments on a 17-acre property.

#### Project Scope

(28) 20 Watt RAB ALED (LED area light) fixtures illuminate the pathways between and around buildings, enhance comfort and peace of mind for residents and visitors, reduce energy costs, and minimize maintenance costs.

#### **Energy and Cost Savings**

Over 80% energy savings relative to 100 Watt incandescent bulbs previously used



# RAB Lighting's LED fixtures are helping museum achieve LEED Certification



### **Project Details**

#### **Project Site**

The grounds of the Museum of Clean in Pocatello, Idaho, including a parking lot, a small park, walkways, the building perimeter and a clock tower that's illuminated from the inside out

#### **Project Scope**

A variety of 84 different RAB Lighting LED products, such as area lights, bollards, floodlights, wallpacks and motion sensors. Energy efficient RAB LED fixtures were selected to help the building achieve LEED certified status.

#### **Energy and Cost Savings**

\$20,000 savings over five years

# RAB's LED garage luminaires reduce energy costs and return \$18,000 in utility rebates to parking facility



## Project Details

#### **Project Site**

Lincoln Property Company's parking garages at 425-475 Woodfield Corporate Center in Schaumburg, IL. Three- and five-story garage complexes with 1,950 parking space capacity anchoring both sides of the Corporate Center

#### **Project Scope**

One-for-one upgrade of 397 outdated 150 Watt High Pressure Sodium fixtures to 78 Watt RAB GLED fixtures to enhance visibility and safety, reduce energy consumption and cost, and minimize maintenance concerns.

#### **Energy and Cost Savings**

50% energy savings relative to the previous 150 Watt High Pressure Sodium lamp technology; annual energy savings combined with \$18,000 in utility rebates will help deliver payback in approximately three years.

# RAB LED shines on Irish Pub

## **Project Details**

#### **Project Site**

Thatcher McGhee's Irish Pub & Eatery in Denville, NJ. RAB fixtures installed on the front and back of the restaurant to highlight Thatcher McGhee's signage and thatched roof

#### **Project Scope**

(11) 13 Watt LGOOSE LED fixtures draw attention to the restaurant and create a warm and inviting ambiance while minimizing energy and maintenance costs

#### **Energy and Cost Savings**

Over 80% energy savings relative to equivalent 75 Watt incandescent fixtures



# Affordable LED lighting at Illinois school district

## **Project Details**

#### **Project Site**

James B. Conant High School in Hoffman Estates, IL. Fixtures illuminate a  $20^{\circ} \times 70^{\circ}$  canopy at the entrance to the school.

#### **Project Scope**

(20) 20 Watt LPACK LED fixtures replaced existing 175 Watt Metal Halide wallpacks.

#### **Energy and Cost Savings**

Annual energy cost savings of \$5,000. Government sponsored green energy grant helped offset 90 percent of the initial cost of the fixtures. The payback period was less than six months.



# RAB LEDs help a racetrack sparkle



## **Project Details**

#### **Project Site**

NOLA Motorsports, a 750-acre auto racing facility in New Orleans. Fixtures are positioned as direct wall mounts under soffits and along walkways on stanchions at the various buildings.

#### **Project Scope**

(415) 20 Watt WPLED fixtures illuminate pathways and enhance the sleek lines of the facility's modern design.

#### **Energy and Cost Savings**

Annual energy cost savings of \$20,000

# Restaurant chain saves \$1,200 annually in energy costs



## Project Details

#### **Project Site**

Wisconsin-based Culver's has over 450 restaurants in 19 states and are opening two or three new restaurants every month.

RAB fixtures illuminate canopies, walkways and outdoor dining areas.

#### Project Scope

(18 to 25) RAB LED gooseneck fixtures per restaurant depending on building size. RAB provides fixtures for all new Culver's locations.

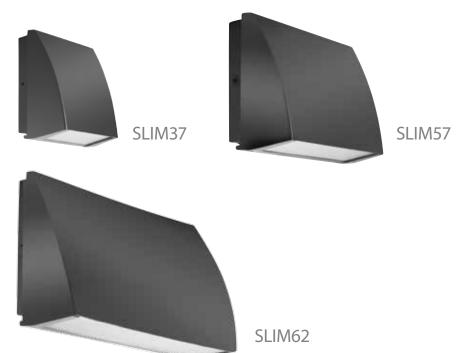
#### **Energy and Cost Savings**

90% improved energy efficiency and over \$1,200 per year in energy cost savings per restaurant vs. equivalent incandescent lighting systems. Maintenance and re-lamping costs are also significantly reduced.





Low-Profile Wallpack



Fills the footprint of most traditional wallpacks!

**UL Listing SLIM12, 18 & 26:** Suitable for wet locations as downlight. Suitable for mounting within 4' of the ground.

SLIM37, 57, & 62: Suitable for wet locations as uplight or downlight.

SLIM12, 18 & 26: Multi-chip, long-life LEDs

SLIM37, 57, & 62: Long-life, high-efficiency, micropower, surface mount LEDs; binned and mixed for uniform light output and color.

#### **Lumen Maintenance**

100,000-hour LED lifespan based on IES LM-80 results and TM-21 calculations\*.

SLIM12: Constant Current, Class 2, 100-277V, 50/60 Hz., 4KV surge protection, 350mA, 100-240VAC: 0.3 - 0.15 Amps, 277VAC: 0.15 Amps, THD<20%, Power</li> Factor: 99%

SLIM18: Constant Current, Class 2, 100-277V, 50/60 Hz., 4KV surge protection, 500mA, 100-240VAC: 0.3 - 0.15 Amps, 277VAC: 0.15 Amps, THD<20%, Power

SLIM26: Constant Current, Class 2, 100-277V, 50/60 Hz., 6KV surge protection, 720mA, 100-277VAC: 0.4 Amps, THD≤20%, Power Factor: 99%

**SLIM37:** Constant Current, Class 2, 100-277V, 50/60HZ, 100-277VAC: 0.6A,4 kV Surge Protection, 700mA, THD <10%, Power Factor: 99%

SLIM57: Two Drivers, Constant Current, Class 2, 100-277V, 50/60Hz, 720mA, 100-277VAC: 0.8A, 6kV Surge Protection, THD <20%, Power Factor 99%

SLIM62: Two Drivers, Constant Current, Class 2, 100-277V, 50/60Hz, 700mA, 100-277VAC: 0.6A, 4kV Surge Protection, THD <10%, Power Factor 99%

#### **Cold Weather Starting**

Minimum starting temperature is -40°C (-40°F).

#### **Ambient Temperature**

Suitable for use in 40°C (104°F)

#### Thermal Management

Die-cast aluminum thermal management system for optimal heat dissipation

#### Housing

Precision die-cast aluminum housing

#### Mounting

SLIM12, 18 & 26: Heavy-duty mounting bracket with hinged housing for easy installation. SLIM37, 57 & 62: Die-cast back box with four (4) conduit entry points and knockout pattern for junction box or direct wall mounting. Hinged housing for easy installation.

SLIM12, 18 & 26: Tempered glass SLIM37, 57 & 62: Micro prismatic diffusion lens for smooth and even light distribution

SLIM12, 18 & 26: Specular thermoplastic SLIM37, 57 & 62: Polycarbonate vacuum metalized specular reflector

High-temperature silicone. O-Ring gasketed close-up plug

White or bronze chip and fade resistant polyester powder coat finish

#### **Color Consistency and Stability**

RAB LED Color consistency is reported in MacAdam ellipses and is shown on the table to the right. RAB LED Color Stability is measured based on LM-80 testing and is available upon request.

### **Green Technology**

Mercury and UV free, and RoHS compliant

#### IESNA LM-79 & LM-80 Testing

RAB LED luminaires have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80, and have received the Department of Energy "Lighting Facts" label.

#### **IP Rating**

Please visit rabweb.com for IP Ratings

#### Dark Sky Approved

The International Dark Sky Association has approved all SLIM™ products as full cutoff, fully shielded luminaires except for the SLIM37, 57 & 62 Cutoff (7.5°).

#### **Cutoff Options**

Full Cutoff (0°) - SLIM12, SLIM18 and SLIM26; SLIMFC37, SLIMFC57 and SLIMFC62. Cutoff (7.5°) - SLIM37, SLIM47 and SLIM62

RAB LED SLIM™ Wallpacks are protected by U.S. patents and patents pending in U.S., Canada, China, . Taiwan and Mexico.



# Ultra performance wallpacks for a variety of applications

## PERFORMANCE COMPARISON

	SLIM12	SLIM18	SLIM26	SLIM37	SLIM57	SLIM62
LED Watts / Input Watts	12W / 14.5W	18W / 20.9W	26W / 31.4W	35W / 37W	47W / 57W	56W / 62W
Lumen Output	1401	1909	2648	2688	4262	4775
Lumens Per Watt	97	91	84	73	75	78
Wallpack Equivalency	70W MH	100W MH	175W MH	200W MH	250W MH	320W MH
HID Replacement Range	50-70W	70-100W	100-175W	150-200W	175-250W	175-320WW
Surge Protection	4000 Volts	4000 Volts	6000 Volts	4000 Volts	6000 Volts	4000 Volts
Mounting	Junction Box	Junction Box	Junction Box	Die-cast Back Box	Die-cast Back Box	Die-cast Back Box

### **CATALOG NUMBERS**

Catalog # Bronze	Cutoff	LED Watts	Input Watts	Color Temp/ Uniformity <sup>†</sup>	Color Accuracy	Lumen Output	Lumens per Watt	Mounting Height Range	Voltage
SLIM12	Full Cutoff (0°)	12	14.5	Cool (5100K) / 3 Step1	69 CRI	1401	97	1.5-8'	100-277V
SLIM18	Full Cutoff (0°)	18	20.9	Cool (5100K) / 3 Step <sup>1</sup>	69 CRI	1909	91	8-14'	100-277V
SLIM26	Full Cutoff (0°)	26	31.4	Cool (5100K) / 3 Step <sup>1</sup>	68 CRI	2648	84	15-22′	100-277V
SLIM37	Cutoff (7.5°)	35	37.0	Cool (5000K) / 7 Step <sup>2</sup>	75 CRI	2688	73	10-20'	100-277V
SLIMFC37	Full Cutoff (0°)	35	37.0	Cool (5000K) / 7 Step <sup>2</sup>	75 CRI	2480	67	10-20′	100-277V
SLIM57	Cutoff (7.5°)	47	57.0	Cool (5000K) / 7 Step <sup>2</sup>	73 CRI	4262	75	12-25'	100-277V
SLIMFC57	Full Cutoff (0°)	47	57.0	Cool (5000K) / 7 Step <sup>2</sup>	73 CRI	4096	72	12-25′	100-277V
SLIM62	Cutoff (7.5°)	56	62.0	Cool (5000K) / 7 Step <sup>2</sup>	74 CRI	4775	78	15-30'	100-277V
SLIMFC62	Full Cutoff (0°)	56	62.0	Cool (5000K) / 7 Step <sup>2</sup>	74 CRI	4444	72	15-30′	100-277V

 $\textit{Values shown for cool temperature. Please \textit{visit rabweb.} com \textit{ for details on neutral and warm.} \\$ 

For Neutral White Light (4000K) - add "N" to Catalog Number (Example: SLIM26N). For Warm Light (3000K) - add "Y" to Catalog Number (Example: SLIM57V).

Finishes: For White finish, add suffix W at the end of the Catalog number (Example: SLIM12W).

For Photocell option add "/PC" for 120V, "/PC2" suffix for 277V after color suffix (Example: SLIM12/PC).

 $For Swivel\ Photocell\ option\ -\ add\ ''/PCS''\ suffix\ for\ 120V,\ ''/PCS2''\ suffix\ for\ 277V\ after\ color\ suffix\ (Example:\ SLIM57N/PCS).$ 





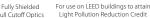












 $<sup>^{1}3000</sup>K/3\ Step\ MacAdam\ Ellipse-4000K/3\ Step\ MacAdam\ Ellipse.$ 

<sup>&</sup>lt;sup>2</sup>3000K/7 Step MacAdam Ellipse - 4000K/3 Step MacAdam Ellipse.

<sup>†</sup> In addition to using ANSI standards for reporting Correlated Color Temperature, the color consistency of this product is reported in MacAdam ellipses, which is a standardized method of defining color variation that corresponds to the ability of the human eye to distinguish color differences. Typically outdoor products are 7 step or less and indoor products are 4 step or less. Lower step numbers correspond with less color variation.







WPI FD10



WPLED26





#### **SPECIFICATIONS**

#### **UL Listing**

ENTRA12; WPLED5, 20 & 26: Suitable for wet locations as Downlight. Suitable for mounting within 4' of the ground. DC fixtures not UL Listed. WPLED10 & 13: Suitable for wet locations as a Downlight. Suitable for damp locations as an Uplight. Wall mount only. Suitable for mounting within 4ft. of ground.

WPLED52: Suitable for wet locations. WPLED78: Suitable for wet locations as

WPLED104: Suitable for wet locations as Uplight and Downlight, wall mount only.

Multi-chip 5, 10 and 13 Watt high-output, longlife LEDs

#### Lumen Maintenance

100,000-hour LED lifespan based on IES LM-80 results and TM-21 calculations\*.

ENTRA12: Constant Current, Class 2, 100-277V, 50/60HZ, 4 kV Surge Protection, 350mA, 100-240VAC: 0.3 - 0.15 A, 277VAC: 0.15 A, THD<20%, Power Factor: 99% WPLED5: Constant Current, Class 2, 100V-240V, 50/60 Hz, 1kV Surge Protection, 350mA, 0.18 Amps, Power Factor: 44% WPLED10: Constant Current, Class 2, 100V-240V, 50/60 Hz, 1kV Surge Protection, 350mA, 0.3 Amps, Power Factor: 57% WPLED13: Constant Current, Class 2, 720mA, 100-240VAC: 0.3-0.15 Amps, 277VAC: 0.15 Amps THD ≤ 20%, Power Factor: 98% WPLED20: Constant Current, Class 2, 100V-277V, 50/60 Hz, 6kV Surge Protection, 1000mA, 100-240VAC: 0.5 Amps, 277VAC: 0.125 Amps, THD ≤ 10%, Power Factor: 98%

WPLED26: Constant Current, Class 2, 100V-277V, 50/60 Hz, 6kV Surge Protection, 720mA, 100-277VAC: 0.4 Amps., THD ≤ 20%, Power Factor: 99%

WPLED52 (2 drivers) & 78 (3 drivers): Constant Current, Class 2, 100V-277V, 50/60 Hz, 6kV Surge Protection, 720mA, 100-277VAC: 0.4 Amps, THD ≤ 20%, Power Factor: 99%

WPLED104: Constant Current, 100-277V, 50/60 Hz, 4kV Surge Protection, 700mA, 100-277V: 0.95 A, THD <10%, Power Factor: 99% WPLED104/480: Constant current, Class 1, 100V-480V, 50/60 Hz, 4KV Surge Protection, 700mA, 347V-480V = 0.3-0.4A, THD<20%, Power Factor: 95%

#### **Cold Weather Starting**

Minimum starting temperature is -40°C (-40°F).

#### **Ambient Temperature**

WPLED13 and WPLED20: Suitable for use

ENTRA12; WPLED5, 10, 26, 52, 78 and 104: Suitable for use in 40°C (104°F)

#### **Thermal Management**

ENTRA12: Superior thermal management with internal Air-Flow fins

All WPLEDs: Die-cast aluminum system for optimal heat dissipation

#### Housing

Precision die-cast aluminum housing

ENTRA12: Heavy die-cast aluminum with 1/2" back knockout and mounting template for mounting to 4" box WPLED10, 13, 20 & 26: Junction Box or

Surface Plate.

WPLED52, 78 & 104: Die-cast aluminum wall bracket with (5) 1/2" conduit openings with plugs. Two-piece bracket with tether for ease of installation and wiring

#### Reflector

ENTRA12 (2): White aluminum reflector topped with vacuum metalized polycarbonate LED reflector WPLED10, 13, & 20, 52 & 78: Hydroformed aluminum WPLED26: Semi-specular vacuum hydroformed polycarbonate

WPLED104: Specular vacuum metalized polycarbonate

#### Gaskets

High-temperature silicone. O-Ring gasketed plug.

#### **Finish**

White or bronze chip and fade resistant polyester powder coat finish

#### **Color Consistency and Stability**

RAB LED Color consistency is reported in MacAdam ellipses and is shown on the table to the right. RAB LED Color Stability is measured based on LM-80 testing and is available upon request.

#### Green Technology

Mercury and UV free, and RoHS compliant

#### IESNA LM-79 & LM-80 Testing

RAB LED luminaires have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80, and have received the Department of Energy "Lighting Facts" label.

#### IP Rating

Please visit rabweb.com for IP Ratings

#### Dark Sky Approved

The International Dark Sky Association has approved all WPLED products as full cutoff, fully shielded luminaires except for the WPLED52 & WPLED104 (15°).

#### **Cutoff Options**

Full Cutoff (0°) - WPLEDFC52, WPLED78 & WPLEDFC104 Cutoff (7.5°) - WPLED5, 10, 13, 20 & 26; WPLEDC52 & WPLEDC104. Standard (15°) - WPLED52 & WPLED104

RAB LED Wallpacks are protected by U.S. patents and patents pending in U.S., Canada, China, Taiwan and Mexico.



# Switch to LED wallpacks for 80% energy savings.

### PERFORMANCE COMPARISON

	ENTRA12	WPLED5	WPLED10	WPLED13	WPLED20	WPLED26	WPLED52	WPLED78	WPLED104
LED Watts / Input Watts	12W / 14.4W	5W / 5.3W	10W / 13.2W	13W / 14.9W	20W / 21.5W	26W / 30W	52W / 61W	78W / 91W	104W / 113W
Lumen Output	1284	196	547	1064	1401	1816	3884	5456	8902
Lumens Per Watt	89	7	341	71	65	61	64	60	79
Wallpack Equivalency	70W MH	13W CFL/ 60W Incan.	70W MH	100W MH	150W MH	175W MH	250W MH	400W MH	400W MH
HID Replacement Range	50-70W MH	13W CFL/ 60W Incan.	35-100W MH	70-150W MH	100-175W MH	150-200W MH	250W MH	200-400W MH	200-400W
Surge Protection	4000 Volts	1000 Volts	1000 Volts	4000 Volts	6000 Volts	6000 Volts	4000 Volts	6000 Volts	6000 Volts
Mounting	Junction Box	Junction Box	Junction Box or Surface Plate	Wall Bracket	Wall Bracket	Wall Bracket			

#### **CATALOG NUMBERS**

Catalog # Bronze	Cutoff	LED Watts	Input Watts	Color Temp/ Uniformity <sup>†</sup>	Color Accuracy	Lumen Output	Lumens per Watt	Mounting Height Range	Voltage
ENTRA12	Standard (15°)	12	14.4	Cool (5000K) / 3 Step <sup>2</sup>	70 CRI	1284	89	5-10'	100-277V
WPLED5	Full Cutoff (0°)	5	5.3	Cool (5000K) / 7 Step <sup>1</sup>	69 CRI	196	37	5-10′	100-240V
Surface Plate*									
WPLED10S	Full Cutoff (0°)	10	13.2	Cool (5000K) / 7 Step <sup>1</sup>	92 CRI	547	41	8-12'	100-240V
WPLED10SDC	Full Cutoff (0°)	10	13.2	Cool (5000K) / 7 Step <sup>1</sup>	92 CRI	547	41	8-12'	10-30VDC
Junction Box*									
WPLED10	Full Cutoff (0°)	10	13.2	Cool (5000K) / 7 Step <sup>1</sup>	92 CRI	547	41	8-12'	100-240V
WPLED10DC	Full Cutoff (0°)	10	13.2	Cool (5000K) / 7 Step <sup>1</sup>	92 CRI	547	41	8-12'	10-30VDC
WPLED13	Full Cutoff (0°)	13	14.9	Cool (5000K) / 7 Step <sup>2</sup>	66 CRI	1064	71	8-20'	100-277V
WPLED13DC	Full Cutoff (0°)	13	14.9	Cool (5000K) / 7 Step <sup>2</sup>	66 CRI	1064	71	8-20'	10-30VDC
WPLED20	Full Cutoff (0°)	20	21.5	Cool (5000K) / 7 Step <sup>1</sup>	70 CRI	1401	64	10-20'	100-277V
WPLED20DC	Full Cutoff (0°)	20	21.5	Cool (5000K) / 7 Step <sup>1</sup>	70 CRI	1401	64	10-20'	10-30VDC
WPLED26	Full Cutoff (0°)	26	30.0	Cool (5000K) / 7 Step <sup>2</sup>	66 CRI	1816	61	10-25'	100-277V
WPLED26DC	Full Cutoff (0°)	26	30.0	Cool (5000K) / 7 Step <sup>2</sup>	66 CRI	1816	61	10-25'	10-30VDC
WPLED52	Standard (15°)	52	61.0	Cool (5000K) / 7 Step <sup>2</sup>	67 CRI	3884	64	20-35'	100-277V
WPLEDC52	Cutoff (7.5°)	52	61.0	Cool (5000K) / 7 Step <sup>2</sup>	67 CRI	3888	64	20-35'	100-277V
WPLEDFC52	Full Cutoff (0°)	52	61.0	Cool (5000K) / 7 Step <sup>2</sup>	67 CRI	3890	64	20-35'	100-277V
WPLED2T78	Full Cutoff (0°)	78	90.0	Cool (5100K) / 7 Step <sup>2</sup>	68 CRI	5263	58	20-35'	100-277V
WPLED3T78	Full Cutoff (0°)	78	91.0	Cool (5100K) / 7 Step <sup>2</sup>	68 CRI	4959	55	20-35'	100-277V
WPLED4T78	Full Cutoff (0°)	78	91.0	Cool (5100K) / 7 Step <sup>2</sup>	68 CRI	5456	60	20-35'	100-277V
WPLED104	Standard (15°)	104	113.0	Cool (5100K) / 7 Step <sup>2</sup>	70 CRI	8902	79	20-35'	100-277V
WPLEDC104	Cutoff (7.5°)	104	113.0	Cool (5100K) / 7 Step <sup>2</sup>	70 CRI	8916	79	20-35'	100-277V
WPLEDFC104	Full Cutoff (0°)	104	113.0	Cool (5100K) / 7 Step <sup>2</sup>	70 CRI	8916	79	20-35'	100-277V
WPLED104/480	Standard (15°)	104	113.0	Cool (5100K) / 7 Step <sup>2</sup>	70 CRI	8902	79	20-35'	100-480V
WPLEDC104/480	Cutoff (7.5°)	104	113.0	Cool (5100K) / 7 Step <sup>2</sup>	70 CRI	8916	79	20-35'	100-480V
WPLEDFC104/480	Full Cutoff (0°)	104	113.0	Cool (5100K) / 7 Step <sup>2</sup>	70 CRI	8916	79	20-35'	100-480V

Values shown for cool temperature. Please visit rabweb.com.ca for details on neutral and warm, and other cutoff options.

Finishes: For White finish, add suffix W at the end of the Catalog number (Example: WPLED26W).

 $*WPLED 13, 20 \& 26 \,models \,include \,2 \,mounting \,options; Surface \,Plate \,for \,recessed \,junction \,box, \,and \,Junction \,Box.$ 

For Photocell option - add "/PC" for 120V, "/PC2" suffix for 277V after color suffix (Example: WPLED52/PC).

 $For Swivel\ Photocell\ option\ -\ add\ ''/PCS''\ suffix\ for\ 120V,\ ''/PCS2''\ suffix\ for\ 277V\ after\ color\ suffix\ (Example:\ WPLED26/PCS).$ 

For Flat Wall Mount option for WPLED78 - add "FX" after color suffix (Example: WPLED2T78FX).







and WPLED104









Fully Shielded Full Cutoff
Optics except for SLIM37,
SLIM57, SLIM62, WPLED52

For use on LEED buildings to attain
Light Pollution Reduction Credit

<sup>&</sup>lt;sup>1</sup>3000K/7 Step MacAdam Ellipse - 4000K/7 Step MacAdam Ellipse. <sup>2</sup>3000K/7 Step MacAdam Ellipse - 4000K/3 Step MacAdam Ellipse.

<sup>†</sup> In addition to using ANSI standards for reporting Correlated Color Temperature, the color consistency of this product is reported in MacAdam ellipses, which is a standardized method of defining color variation that corresponds to the ability of the human eye to distinguish color differences. Typically outdoor products are 7 step or less and indoor products are 4 step or less. Lower step numbers correspond with less color variation. For Neutral White Light (4000K) - add "N" to Catalog Number (Example: WPLED13N). For Warm Light (3000K) - add "Y" to Catalog Number (Example: WPLED104Y).



#### **UL Listing**

Suitable for wet locations.

#### LEDs

Multi-chip 10 and 13W high-output, long-life LEDs

#### **Lumen Maintenance**

100,000-hour LED lifespan based on IES LM-80 results and TM-21 calculations\*.

#### Drivers

ALED10: Constant Current, Class 2, 100V-240V, 50/60 Hz, 1kV Surge Protection, 350mA, 0.3 Amps, Power Factor: 57%

**ALED13:** Constant Current, Class 2, 100V-277V, 50/60 Hz, 4kV Surge Protection, 720mA, 100-240VAC: 0.3-0.15 Amps, 277VAC: 0.15 Amps, THD ≤ 20%, Power Factor: 98%

**ALED20:** Constant Current, Class 2, 100V-277V, 50/60 Hz, 4kV Surge Protection, 1000mA, 100-240VAC: 0.5 Amps, 277VAC: 0.125 Amps, THD ≤ 10%, Power Factor: 98%

**ALED26:** Constant Current, Class 2, 100V-277V, 50/60 Hz, 6kV Surge Protection, 720mA, 100-277VAC: 0.4 Amps, THD  $\leq$  20%, Power Factor: 99%

ALED52: (2) Constant Current, 720mA, Class 2 with 6 KV surge protection, 100 -240VAC, 50/60 Hz, Power Factor: 99%

ALED5T52: (2) Constant Current, 720mA, Class 2 with 6 KV surge protection, 100 -240VAC, 50/60 Hz, Power Factor: 99%

ALED78: (3) Constant Current, 720mA, Class 2 with 6 KV surge protection, 100 -240VAC, 50/60 Hz, Power Factor: 99%

ALED5T78: (3) Constant Current, 720mA, Class 2 with 6 KV surge protection, 100 -240VAC, 50/60 Hz, Power Factor: 99%

ALED104: Constant Current, 100-277V, 50/60 Hz, 4kV Surge Protection, 700mA, 100-277V: 0.95 A, THD <10%, Power Factor 99% **ALED104/480:** Constant current, Class 1, 100V-480V, 50/60 Hz, 4KV Surge Protection, 700mA, 347V-480V =0.3-0.4A, THD<20%, Power Factor 95%

#### **Cold Weather Starting**

Minimum starting temperature is -40°C (-40°F).

#### **Ambient Temperature**

ALED10, 26, 52, 78, ALED5T52, ALED5T78 & ALED104: Suitable for use in  $40^{\circ}$ C ( $104^{\circ}$ F) ALED13 & ALED20: Suitable for use in  $50^{\circ}$ C ( $122^{\circ}$ F)

#### **Thermal Management**

Die-cast aluminum thermal management system for optimal heat dissipation

#### Housing

Precision die-cast aluminum housing, lens frame and mounting plate

#### Reflector

ALED10, 13, & 20: Specular aluminum ALED26: Semi-specular vacuum metalized polycarbonate

ALED52 & 78: Hydroformed aluminum ALED5T52 & ALED5T78:

Semi-specular anodized aluminum **ALED104:** Specular vacuum metalized polycarbonate

#### Gaskets

High-temperature silicone. O-Ring gasketed close-up plug

#### Finish

White or bronze chip and fade resistant polyester powder coat finish

#### **Color Consistency and Stability**

RAB LED Color consistency is reported in MacAdam ellipses and is shown on the table to the right. RAB LED Color Stability is measured based on LM-80 testing and is available upon request.

#### **Green Technology**

Mercury and UV free, and RoHS compliant

#### IESNA LM-79 & LM-80 Testing

RAB LED luminaires have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80, and have received the Department of Energy "Lighting Facts" label.

#### **IP Rating**

Please visit rabweb.com for IP Ratings

#### Dark Sky Approved

The International Dark Sky Association has approved all ALED products as full cutoff, fully shielded luminaires except for the ALED52 Standard (15°), ALED5T52, ALED5T78 & ALED104 Standard (15°).

#### **Patents**

The ALED is protected by U.S. patent and patents pending in U.S., Canada, China, Taiwan and Mexico.

#### ALED Accessories

Round Pole Adapter: ALED 10, 13, 20 & 26W

Catalog#: RPA3L; RPA3.5L; RPA4L; RPA5L; RPA6L **ALED 52, 78 & 104W** 

Catalog#: RPA3; RPA3.5; RPA4; RPA5 and RPA6

#### Pole Size for each Adapter:

RPA3; RPA3L = 3" Diameter Round Pole RPA3.5; RPA3.5L = 3.5" Diameter Round Pole RPA4; RPA4L = 4" Diameter Round Pole RPA5; RPA5L = 5" Diameter Round Pole RPA6; RPA6L = 6" Diameter Round Pole

#### **Poles and Anchor Bolts:**

Poles and Anchor Bolts sold separately. Visit rabweb.com for details.



# Affordable, energy-saving, LED area lights.

#### PERFORMANCE COMPARISON

	ALED10	ALED13	ALED20	ALED26	ALED52	ALED78	ALED5T52	ALED5T78	ALED104
LED Watts / Input Watts	10W / 13.2W	13W / 14.9W	20W / 21.7W	26W / 30W	52W / 61W	78W / 91W	52W / 61.4W	78W / 91.4W	104W / 113W
Delivered Lumens	547	1064	1401	1816	3884	4959*	3089	4724	8902
Equivalent MH Area Light	35W	50W	50W	70W	150W	250W	175W	250W	400W
Replacement Range	30-50W	35-70W	35-70W	42-100W	175-275W	200-400W	175W	250W	200-400W
Weight	3.2 lbs.	3.3 lbs.	5.1 lbs.	6.5 lbs.	16.45 lbs.	32 lbs.	21.8 lbs.	21.8 lbs.	26 lbs.
EPA	0.2	0.2	0.25	0.27	1.5	0.75	1.2	1.2	2.0

<sup>\*</sup>Refers to lumen output of the ALED3T78. **Pole Configuration:** For Pole Configurations, go to rabweb.com.

#### SPECIFICATION-GRADE OPTICS

Type II: Ideal for wide walkways, on ramps, bike/jogging paths and other long and narrow applications. Meant for lighting larger areas and usually located near the roadside.

Type III: Ideal for roadway, general parking, and other applications where a larger pool of lighting is required. Usually located near the side of the area, allowing light to project outward and fill area.

Type IV: "Forward Throw" is especially suited for mounting on the sides of buildings and walls, and for illuminating the perimeter of parking areas. It produces a semicircular distribution.

Type V: Ideal for general parking and area lighting. Intended to be located at or near the center of an intersection or in a large area, since it produces a circular distribution.

For assistance in choosing the distribution to match your application, please contact RAB Lighting Design by emailing lightingdesign@rabweb.com or calling 888 722-1000.

#### CATALOG NUMBERS

Catalog Number	LED Watts	Input Watts	Color Temp/ Uniformity <sup>†</sup> C	IES Classification	BUG Rating B U G	Color Accuracy	Lumen Output	Lumens per Watt	Mounting Height	Voltage
ALED10	10	13.2	Cool (5000K) / 7 Step <sup>1</sup>	III	0 0 0	92 CRI	547	41	10-15'	100-240V
ALED13	13	14.9	Cool (5000K) / 7 Step <sup>2</sup>	III	1 0 0	66 CRI	1064	71	10-20′	100-277V
ALED20	20	21.7	Cool (5000K) / 7 Step <sup>1</sup>	III	1 0 0	70 CRI	1401	65	10-25'	100-277V
ALED26	26	30.0	Cool (5000K) / 7 Step <sup>2</sup>	IV	0 1 0	66 CRI	1816	61	15-25'	100-277V
ALED52	52	61.0	Cool (5000K) / 7 Step <sup>2</sup>	IV	0 1 1	67 CRI	3884	64	25-35'	100-277V
ALEDC52	52	61.0	Cool (5000K) / 7 Step <sup>2</sup>	III	0 1 1	67 CRI	3888	64	25-35'	100-277V
ALEDFC52	52	61.0	Cool (5000K) / 7 Step <sup>2</sup>	III	0 1 1	67 CRI	3890	64	25-35'	100-277V
ALED5T52	52	61.4	Cool (5100K) / 7 Step <sup>2</sup>	V	2 3 1	66 CRI	3089	50	8-12'	100-277V
ALED2T78	78	90.0	Cool (5100K) / 7 Step <sup>2</sup>	II	1 0 1	68 CRI	5263	58	25-35'	100-277V
ALED3T78	78	91.0	Cool (5100K) / 7 Step <sup>2</sup>	III	1 0 1	68 CRI	4959	55	25-35'	100-277V
ALED4T78	78	91.0	Cool (5100K) / 7 Step <sup>2</sup>	IV	1 0 2	68 CRI	5456	60	25-35'	100-277V
ALED5T78	78	91.4	Cool (5100K) / 7 Step <sup>2</sup>	V	3 3 1	66 CRI	4724	52	8-18'	100-277V
ALED104	104	113.0	Cool (5000K) / 7 Step <sup>2</sup>	IV	1 0 1	70 CRI	8902	79	20-35'	100-277V
ALEDC104	104	113.0	Cool (5000K) / 7 Step <sup>2</sup>	III	1 0 1	70 CRI	8916	79	20-35'	100-277V
ALEDFC104	104	113.0	Cool (5000K) / 7 Step <sup>2</sup>	III	1 0 1	70 CRI	8916	79	20-35'	100-277V
ALED104/480	104	113.0	Cool (5000K) / 7 Step <sup>2</sup>	IV	1 0 1	70 CRI	8902	79	20-35'	100-480V
ALEDC104/480	104	113.0	Cool (5000K) / 7 Step <sup>2</sup>	III	1 0 1	70 CRI	8916	79	20-35'	100-480V
ALEDFC104/480	104	113.0	Cool (5000K) / 7 Step <sup>2</sup>	III	1 0 1	70 CRI	8916	79	20-35'	100-480V

Values shown for cool temperature. Please visit rabweb.com for details on neutral and warm.

For Photocell option for ALED20 & 26 - add "/PC" for 120V, "/PC2" suffix for 277V after color suffix (Example: ALED20/PC, ALED26/PC2). For Swivel Photocell option for ALFDS2 - add "/PCS" suffix for 120V. "/PCS2" suffix for 277V after color suffix (Example: ALFDC52/PCS).

For Twistlock Photocell option for ALED104 - add "/PCT" after color suffix (Example: ALED104/PCT, ALED104/480/PCT4).







Full Cutoff Optics

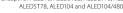










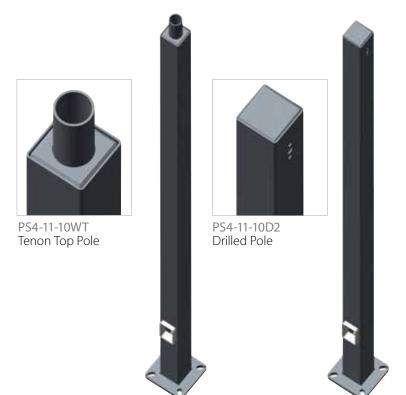


<sup>&</sup>lt;sup>1</sup>3000K/7 Step MacAdam Ellipse - 4000K/7 Step MacAdam Ellipse. <sup>2</sup>3000K/3 Step MacAdam Ellipse - 4000K/3 Step MacAdam Ellipse.

<sup>†</sup> In addition to using ANSI standards for reporting Correlated Color Temperature, the color consistency of this product is reported in MacAdam ellipses, which is a standardized method of defining color variation that corresponds to the ability of the human eye to distinguish color differences. Typically outdoor products are 7 step or less and indoor products are 4 step or less. Lower step numbers correspond with less color variation. For Neutral White Light (4000K) - add "N" to Catalog Number (Example: ALED26N) for all wattages except ALED10. For Warm Light (3000K) - add "Y" to Catalog Number (Example: ALED26N). For Photocell option for ALED10 & 13 - add "/PC" for 120V after color suffix (Example: ALED10/PC).

# Square Poles & Brackets

- Reinforced steel construction
- Polyester powder coat finish
- Poles have reinforced hand holes
- Galvanized anchor bolts & hardware
- Poles meet or exceed the AASHTO Manual LTS-5 Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals



#### **SPECIFICATIONS**

#### **Powder Coating**

Polyester powder coating resists chipping and scratching. It's electrostatically applied and oven cured to powder manufacturer's specifications. Excellent color retention.

#### **Hand Holes**

- Reinforced with steel cover
- Powder coated hand hole covers
- Finished interior to avoid hand scratches and cuts.

#### **Shipping Protection**

RAB Poles are wrapped in heavy corrugated cardboard. Bases and ends have additional protection to prevent damage during shipment.

Shaft: 46,000 p.s.i. minimum yield. Base Plates: Slotted base plates 36,000 p.s.i.

### **CATALOG NUMBERS**

POLES	Ch - fo Ci		D-I-	Hem dillete		POLE CAPACIT Max. EPAs (sf)	Y / Max. Weights (lb	) ft² with 1.3 gust
Catalog #	Shaft Size SQ(in)	Gauge	Pole Height (ft)	Hand Hole Dimensions	Anchor Belt Dimensions	70 MPH	80 MPH	100 MPH
<b>Tenon Poles</b>								
PS4-11-10WT	4	11	10	3" x 5"	3/4" x 17"x3"	27.6 / 690	21.1 / 530	13.1 / 330
PS4-11-15WT	4	11	15	3" x 5"	3/4" x 17"x3"	14.0 / 400	10.2 / 295	5.6 / 165
PS4-07-20WT	4	7	20	3" x 5"	3/4" x 30"x3"	16.2 / 390	11.8 / 285	6.3 / 150
PS4-11-20WT	4	11	20	3" x 5"	3/4" x 17"x3"	8.3 / 240	5.6 / 165	2.2 / 75
PS4-07-25WT	4	7	25	3" x 5"	3/4" x 30"x3"	10.7 / 245	7.2 / 165	2.9 / 65
PS4-11-25WT	4	11	25	3" x 5"	3/4" x 17"x3"	4.5 / 135	2.3 / 80	
PS5-07-20WT	5	7	20	3" x 5"	1" x 36"x3"	28.2 / 670	20.9 / 495	11.8 / 280
PS5-07-25WT	5	7	25	3" x 5"	1" x 36"x3"	19.6 / 450	13.9 / 320	6.7 / 155
PS5-07-30WT	5	7	30	3" x 5"	1" x 36"x3"	12.1 / 300	7.8 / 195	2.4 / 60
Drilled Poles								
PS4-11-10D2	4	11	10	3" x 5"	3/4" x 17"x3"	27.6 / 690	21.1 / 530	13.1 / 330
PS4-11-15D2	4	11	15	3" x 5"	3/4" x 17"x3"	14.0 / 400	10.2 / 295	5.6 / 165
PS4-11-20D2	4	11	20	3" x 5"	3/4" x 17"x3"	8.3 / 240	5.6 / 165	2.2 / 75
PS4-11-25D2	4	11	25	3" x 5"	3/4" x 17"x3"	4.5 / 135	2.3 / 80	0.8 / 35
PS4-07-25D2	4	7	25	3" x 5"	3/4" x 30"x3"	10.7 / 245	7.2 / 165	2.9 / 65
PS5-07-20D2	5	7	20	3" x 6"	1" x 36"x3"	28.2 / 670	20.9 / 495	11.8 / 280
PS5-07-25D2	5	7	25	3" x 6"	1" x 36"x3"	19.6 / 450	13.9 / 320	6.7 / 155
PS5-07-30D2	5	7	30	3" x 6"	1" x 36"x3"	12.1 / 300	7.8 / 195	2.4 / 60

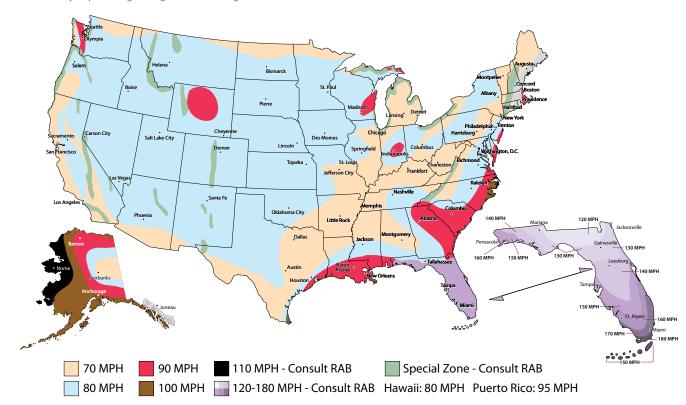
# High quality construction for all applications.

### **BRACKETS & ADAPTERS**



## WIND ZONE MAP

Local codes may require design to higher wind loading.





#### GPLED78

78W Garage Luminaire with Pendant Mount (Pendant by others)





GLED52W 52W Garage Luminaire with Ceiling Mount

#### **SPECIFICATIONS**

#### **UL Listing**

Ceiling Mount - Suitable for wet locations with covered ceiling.
Pendant Mount - Suitable for wet locations.

#### LEDS

Four (52W) or six (78W) multi-chip, 13W high-output, long-life LEDs

#### **Lumen Maintenance**

100,000-hour LED lifespan based on IES LM-80 results and TM-21 calculations\*.

#### Drivers

Constant Current, 720mA, Class 2 with 6 KV surge protection, 100 -277VAC, 50/60 Hz (52W: 2 drivers; 78W: 3 drivers)

#### **Cold Weather Starting**

Minimum starting temperature is -40°C (-40°F).

#### **Ambient Temperature**

Suitable for use in 40°C (104°F)

#### **Thermal Management**

Superior heat sinking with integrated Air-Flow fins

### Housing

Precision die-cast aluminum housing and door frame

#### Mounting

Easy hanging plate with hooks for ceiling mount

#### Lens

Prismatic polycarbonate lens

#### Reflecto

Semi-specular anodized aluminum with ultra-white, 97% reflective optics

#### Gaskets

High-temperature silicone

#### Finis

White or bronze chip and fade resistant polyester powder coat finish

#### **Color Consistency and Stability**

RAB LED Color consistency is reported in MacAdam ellipses and is shown on the table to the right. RAB LED Color Stability is measured based on LM-80 testing and is available upon request.

#### **Green Technology**

Mercury and UV free, and RoHS compliant

#### IESNA LM-79 & LM-80 Testing

RAB LED luminaires have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80, and have received the Department of Energy "Lighting Facts" label.

#### Patents

The designs of the GLED™ and GPLED™ are protected by patents pending in US, Canada, China, Taiwan and Mexico.



# Low profile. High performance. 52W & 78W garage luminaires.

### **FEATURES**

- Low-Profile Design Ideal for Parking Garages
- 52W Replaces 175W MH Luminaires and 78W Replaces 250W MH Luminaires
- 100,000-Hour LED Life

- Up to 25% Reduction in Fixture Count
- Hanging Plate with Hooks Included for Easy Wiring
- 5-Year Warranty



#### **CATALOG NUMBERS**

Catalog # Bronze	Catalog # White	LED Watts	Input Watts	Color Temp/ Uniformity <sup>†</sup>	Color Accuracy	Lumen Output	Lumens per Watt	Mounting Height Range	Voltage
GLED52	GLED52W	52	60	Cool (5000K) / 7 Step	67 CRI	3644	60	8-12'	100-277V
GLED52N	GLED52NW	52	61	Neutral (4000K) / 3 Step	88 CRI	2627	43	8-12'	100-277V
GLED52Y	GLED52YW	52	61	Warm (3000K) / 3 Step	86 CRI	2412	40	8-12′	100-277V
GLED78	GLED78W	78	90	Cool (5000K) / 7 Step	68 CRI	5668	63	8-12′	100-277V
GLED78N	GLED78NW	78	91	Neutral (4000K) / 3 Step	88 CRI	4084	45	8-12'	100-277V
GLED78Y	GLED78YW	78	90	Warm (3000K) / 3 Step	86 CRI	3681	41	8-12′	100-277V
GPLED52	GPLED52W	52	60	Cool (5000K) / 7 Step	67 CRI	3644	60	8-12'	100-277V
GPLED52N	GPLED52NW	52	61	Neutral (4000K) / 3 Step	88 CRI	2627	43	8-12'	100-277V
GPLED52Y	GPLED52YW	52	61	Warm (3000K) / 3 Step	86 CRI	2412	40	8-12′	100-277V
GPLED78	GPLED78W	78	90	Cool (5000K) / 7 Step	68 CRI	5668	63	8-12′	100-277V
GPLED78N	GPLED78NW	78	91	Neutral (4000K) / 3 Step	88 CRI	4084	45	8-12'	100-277V
GPLED78Y	GPLED78YW	78	90	Warm (3000K) / 3 Step	86 CRI	3681	41	8-12'	100-277V

<sup>†</sup> In addition to using ANSI standards for reporting Correlated Color Temperature, the color consistency of this product is reported in MacAdam ellipses, which is a standardized method of defining color variation that  $corresponds \ to \ the \ ability of the \ human \ eye \ to \ distinguish \ color \ differences. \ Typically \ outdoor \ products \ are \ 7 \ step \ or \ less. \ Lower \ step \ numbers \ correspond \ with \ less \ color \ variation.$ 

#### **ACCESSORIES**

Catalog #

HS90-A Hang Straight 90° ½" NPS Swivel Mount - Bronze HS90-W Hang Straight 90° ½" NPS Swivel Mount - White GLEDMP Ceiling Mounting Plate

LFGLED Replacement Prismatic Lens & Door, Bronze

HS45-A Hang Straight 45° ½" NPS Swivel Mount - Bronze HS45-W Hang Straight 45° ½" NPS Swivel Mount - White

**LFGLEDW** Replacement Prismatic Lens & Door, White

**BUY WITH CONFIDENCE** 

















#### **UL Listing**

Suitable for damp locations with cord and hook. Suitable for wet locations with ¾" pendant stem.

Three multi-chip, 26W high-output, long-life LEDs

#### **Lumen Maintenance**

100,000-hour LED lifespan based on IES LM-80 results and TM-21 calculations\*.

Constant Current, 720mA, Class 2 with 6 KV surgeprotection, 100 - 277VAC, 50/60 Hz

#### **Cold Weather Starting**

Minimum starting temperature is -40°C (-40°F).

#### **Ambient Temperature**

Suitable for use in 55°C (131°F)

#### **Thermal Management**

Superior heat sinking with external Air-Flow fins

Precision die-cast aluminum housing and door frame with 3-foot 600V power cord

#### Mounting

Heavy-duty 3/4" NPS hook and 3-foot safety chain

#### Lens

Tempered glass

#### Reflector

Specular vacuum metallized polycarbonate. AISLED78 reflector provides supérior rectangular distribution pattern specifically designed for aisle lighting.

#### Gaskets

High-temperature silicone

White chip and fade resistant polyester powder coat finish

**Color Consistency and Stability**RAB LED Color consistency is reported in MacAdam ellipses and is shown on the table to the right. RAB LED Color Stability is measured based on LM-80 testing and is available upon request.

#### **Green Technology**

Mercury and UV free, and RoHS compliant

#### IESNA LM-79 & LM-80 Testing

RAB LED luminaires have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80, and have received the Department of Energy "Lighting Facts" label.

#### **Patents**

The design of the BAYLED™ is protected by patents pending in US, Canada, China, Taiwan and Mexico.



# Replaces 250W metal halide high bays & reduces energy consumption by 70%.

#### **FEATURES**

#### BAYLED78 78W High Bay



High-output. High-efficiency. Designed for delivering uniform light distribution in large areas.

#### AISLED78 78W Aisle Lighter



Aisle model delivers uniform vertical light distribution that is much more effective than the uneven "scallop" effect produced by most high bays.



Mounting: Heavy-duty 3/4" NPS hook and 3-foot safety chain



Optional: high bay occupancy sensor and mounting hardware

## **CATALOG NUMBERS**

Catalog #	LED Watts	Input Watts	Color Temp/ Uniformity <sup>†</sup>	Color Accuracy	Lumen Output	Lumens per Watt	Mounting Height Range	Voltage
BAYLED78W	78	96	Cool (5000K) / 7 Step	68 CRI	7612	79	15-25'	100-277V
BAYLED78NW	78	96	Neutral (4000K) / 3 Step	84 CRI	6461	69	15-25'	100-277V
BAYLED78YW	78	96	Warm (3000K) / 3 Step	82 CRI	5713	59	15-25′	100-277V
AISLED78W	78	96	Cool (5000K) / 7 Step	68 CRI	6322	66	15-25′	100-277V
AISLED78NW	78	96	Neutral (4000K) / 3 Step	85 CRI	5453	58	15-25'	100-277V
AISLED78YW	78	96	Warm (3000K) / 3 Step	82 CRI	4971	52	15-25'	100-277V

† In addition to using ANSI standards for reporting Correlated Color Temperature, the color consistency of this product is reported in MacAdam ellipses, which is a standardized method of defining color variation that corresponds to the ability of the human eye to distinguish color differences. Typically outdoor products are 7 step or less and indoor products are 4 step or less. Lower step numbers correspond with less color variation.

#### **ACCESSORIES**

Catalog # GDBAYLED78W Wire Guard, Chrome LFBAYLED78W Replacement Lens & Frame, White

GDBAYLED78P Polyshield Guard, Clear LOSBAY800 High Bay Occupancy Sensor, White GDBAYLED78FP Polyshield Guard, Frosted LOSBAYMK Mounting Kit (For AISLELED78 Only)















#### **UL Listing**

Suitable for wet locations.

CLED2x10, 2x13, 2x20, 2x26: Multi-chip 10 and 13W high-output long-life LEDs

CLED52: Four multi-chip, 13W high-output, long-life LEDs

CLED78: Six multi-chip, 13W high-output, long-life LEDs

#### Lumen Maintenance

100,000-hour LED lifespan based on IES LM-80 results and TM-21 calculations\*.

CLED 2x10: Constant Current, Class 2, 100V-240V, 50/60 Hz, 1kV Surge Protection, 350mA, 0.6 Amps, Power Factor: 57%

CLED 2x13: Constant Current, Class 2, 100V-277V, 50/60 Hz, 4kV Surge Protection, 720mA,100-240VAC: 0.3-0.15 Amps, 277VAC: 0.3 Amps, THD ≤ 20%, Power Factor: 98%

CLED 2x20: Constant Current, Class 2, 100V-277V, 50/60 Hz, 4kV Surge Protection, 1000mA, 100-240VAC: 0.5 Amps, 277VAC: 0.25 Amps, THD ≤ 10%, Power Factor: 98%

**CLED 2x26:** Constant Current, Class 2, 100V-277V, 50/60 Hz, 6kV Surge Protection, 720mA, 100-277VAC: 0.8 Amps, THD ≤ 20%, Power Factor: 99%

CLED52 Drivers (2): Constant Current, 720mA, Class 2 with 6 KV surge protection, 100 -277VAC, 50/60 Hz, Power Factor: 99%

CLED78 Drivers (3): Constant Current, 720mA, Class 2 with 6 KV surge protection, 100 -277VAC, 50/60 Hz, Power Factor: 99%

#### **Cold Weather Starting**

Minimum starting temperature is -40°C (-40°F).

#### **Ambient Temperature**

Suitable for use in 40°C (104°F)

#### **Thermal Management**

CLED2x10, 2x13, 2x20, 2x26: Die-cast aluminum thermal management system for optimal heat dissipation

CLED52 & 78: Superior heat sinking with integrated Air-Flow fins

Precision die-cast aluminum housing and lens framing

#### Reflector

CLED2x10, 2x13 & 2x20: Specular aluminum CLED2x26: Vacuum metalized polycarbonate CLED52 & 78: Semi-specular anodized aluminum

#### Gaskets

High-temperature silicone

White or bronze chip and fade resistant polyester powder coat finish

Color Consistency and Stability
RAB LED Color consistency is reported in
MacAdam ellipses and is shown on the table
to the right. RAB LED Color Stability is measured based on LM-80 testing and is available upon request.

#### Green Technology

Mercury and UV free, and RoHS compliant

IESNA LM-79 & IESNA LM-80 Testing RAB LED luminaires have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80, and have received the Department of Energy "Lighting Facts" label.

RAB LED Ceiling fixtures are protected by patents pending in U.S., Canada, China, Taiwan and Mexico.



# High quality, high performance. Reduces operating and maintenance costs.

### PERFORMANCE COMPARISON







	CLED2x10	CLED2x13	CLED2x20	CLED2x26	CLED52	CLED78
LED Watts / Input Watts	20W / 25.7W	26W / 30.3W	40W / 43W	52W / 59.1W	52W / 60.5W	78W / 90.3W
Delivered Lumens	1045	2006	2746	3652	3485	5238
Equivalency	32W CFL	70W MH	100W MH	175W MH	175W MH	200W MH
Replacement Range	32-42W CFL up to 70W MH	70-100W MH	100-150W MH	100-250W MH	100-175W MH	150-200W MH

#### **CATALOG NUMBERS**

Catalog # CLED2x10	<b>LED Watts</b> 2 x 10 (20W)	Input Watts 26	Color Temp/ Uniformity <sup>†</sup> Cool (5000K) / 7 Step <sup>1</sup>	<b>Color</b> <b>Accuracy</b> 75 CRI	Lumen Output 1045	Lumens per Watt	Mounting Height Range 8'-15'	Voltage 100-240V
CLED2x13	2 x 13 (26W)	30	Cool (5000K) / 7 Step <sup>2</sup>	67 CRI	2006	66	8′-15′	100-277V
CLED2x20	2 x 20 (40W)	43	Cool (5000K) / 7 Step <sup>1</sup>	66 CRI	2746	64	8′-15′	100-277V
CLED2x26	2 x 26 (52W)	59	Cool (5100K) / 7 Step <sup>2</sup>	69 CRI	3652	62	15′-25′	100-277V
CLED52	52	62	Cool (5000K) / 7 Step <sup>2</sup>	66 CRI	3485	57	15′-25′	100-277V
CLED78	78	91	Cool (5000K) / 7 Step <sup>2</sup>	66 CRI	5238	58	15′-25′	100-277V

Values shown for cool temperature. Please visit rabweb.com for details on neutral and warm.

 $\textbf{\it Finishes:}\ \ \textit{For White finish, add suffix W at the end of the Catalog number (Example: CLED2x26W)}.$ 

#### **ACCESSORIES**

Catalog #

CLEDBB Surface Mounting Box for CLED 2x10, 13, 20 & 26.















 $<sup>^{1}3000</sup>K/7\,Step\,MacAdam\,Ellipse-4000K/7\,Step\,MacAdam\,Ellipse.\,^{2}3000K/3\,Step\,MacAdam\,Ellipse-4000K/3\,Step\,MacAdam\,Ellipse.$ 

<sup>†</sup> In addition to using ANSI standards for reporting Correlated Color Temperature, the color consistency of this product is reported in MacAdam ellipses, which is a standardized method of defining color variation that corresponds to the ability of the human eye to distinguish color differences. Typically outdoor products are 7 step or less and indoor products are 4 step or less. Lower step numbers correspond with less color variation. For Warm light (3000K) add "Y" before color suffix (Example: CLED2x10YW) - For Neutral White Light (4000K) - add "N" before color suffix (Example: CLED2x26NW).



PLED2x20 & 2x26: Suitable for wet locations as Uplight.

PLED2x10 & 2x13: Suitable for damp locations. PLED52 & 78: Suitable for wet locations.

PLED2x10, 2x13, 2x20, 2x26: Multi-chip 10 and 13W high-output long-life LEDs

PLED52: Four multi-chip, 13W high-output, long-life LEDs

PLED78: Six multi-chip, 13W high-output, long-life LEDs

#### **Lumen Maintenance**

100,000-hour LED lifespan based on IES LM-80 results and TM-21 calculations\*.

#### Drivers

PLED 2x10: Constant Current, Class 2, 100V-240V, 50/60 Hz, 1kV Surge Protection, 350mA, 0.6 Amps, Power Factor: 57%

PLED 2x13: Constant Current, Class 2, 100V-277V, 50/60 Hz, 4kV Surge Protection, 720MA,100-240VAC: 0.3-0.15 Amps, 277VAC: 0.3 Amps, THD ≤ 20% Power Factor: 98%

PLED 2x20: Constant Current, Class 2, 100V-277V, 50/60 Hz, 4kV Surge Protection, 1000mA, 100-240VAC: 0.5 Amps, 277VAC: 0.25 Amps, THD ≤ 10%, Power Factor: 98%

PLED 2x26: Constant Current, Class 2, 100V-277V, 50/60 Hz, 6kV Surge Protection, 720mA, 100-277VAC: 0.8 Amps, THD  $\leq$  20%, Power Factor: 99%

PLED52 Drivers (2): Constant Current, 720mA, Class 2 with 6 KV surge protection, 100 -277VAC, 50/60 Hz, Power Factor: 99%

PLED78 Drivers (3): Constant Current, 720mA, Class 2 with 6 KV surge protection, 100 -277VAC, 50/60 Hz, Power Factor: 99%

#### **Cold Weather Starting**

Minimum starting temperature is -40°C (-40°F).

#### **Ambient Temperature**

Suitable for use in 40°C (104°F)

Thermal Management PLED2x10, 2x13, 2x20, 2x26: Die-cast aluminum thermal management system for optimal heat dissipation. PLED52 & 78: Superior heat sinking with external

Air-Flow fins

#### Housing

Precision die-cast aluminum housing and lens framing

#### Reflector

PLED2x10, 2x13, 2x20, 2x26: Specular aluminum PLED52 & 78: Semi-specular anodized aluminum

#### Gaskets

High-temperature silicone

#### Finish

White or bronze chip and fade resistant polyester powder coat finish

#### **Color Consistency and Stability**

RAB LED Color consistency is reported in MacAdam ellipses and is shown on the table to the right. RAB LED Color Stability is measured based on LM-80 testing and is available upon request.

#### **Green Technology**

Mercury and UV free, and RoHS compliant

#### IESNA LM-79 & IESNA LM-80 Testing

RAB LED luminaires have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80, and have received the Department of Energy "Lighting Facts" label.

### **IP Rating**

Please visit rabweb.com for IP Ratings

#### **Pendants**

PLED2x10, 13 20 & 26: Includes 6", 12" and 18" Pendant tubes with hang straight swivel. Can be joined for up to 36" length 3/8" NPS.

PLED52 & PLED78: Pendants for the are supplied by others 1/2" NPS.

RAB LED Pendant fixtures are protected by patents pending in U.S., Canada, China, Taiwan and Mexico.



# High quality, high performance. Reduces operating and maintenance costs.

### PERFORMANCE COMPARISON







	PLED2x10	PLED2x13	PLED2x20	PLED2x26	PLED52	PLED78
LED Watts / Input Watts	20W / 25.7W	26W / 30.3W	40W / 43W	52W / 59.1W	52W / 60.5W	78W / 90.3W
Delivered Lumens	1045	2006	2746	3652	3485	5238
Equivalency	32W CFL	70W MH	100W MH	175W MH	175W MH	200W MH
Replacement Range	32-42W CFL up to 70W MH	70-100W MH	100-150W MH	100-250W MH	100-175W MH	150-200W MH

#### **CATALOG NUMBERS**

Catalog #	LED Watts	Input Watts	Color Temp/ Uniformity <sup>†</sup>	Color Accuracy	Lumen Output	Lumens per Watt	Mounting Height Range	Voltage
PLED2x10	2 x 10 (20W)	25.7	Cool (5000K) / 7 Step <sup>1</sup>	75 CRI	1045	41	8'-15'	100-240V
PLED2x13	2 x 13 (26W)	30.3	Cool (5000K) / 7 Step <sup>2</sup>	67 CRI	2006	66	8'-15'	100-277V
PLED2x20	2 x 20 (40W)	43.0	Cool (5000K) / 7 Step <sup>1</sup>	66 CRI	2746	64	8'-15'	100-277V
PLED2x26	2 x 26 (52W)	59.1	Cool (5100K) / 7 Step <sup>2</sup>	69 CRI	3652	62	15′-25′	100-277V
PLED52	52	61.7	Cool (5000K) / 7 Step <sup>2</sup>	66 CRI	3485	57	15′-25′	100-277V
PLED78	78	90.3	Cool (5000K) / 7 Step <sup>2</sup>	66 CRI	5238	58	15′-25′	100-277V

 $<sup>\</sup>textit{Values shown for cool temperature. Please visit rabweb.com for details on neutral and warm.}$ 

Finishes: For White finish, add suffix W at the end of the Catalog number (Example: PLED2x26W).

Catalog #	Description	Thread	Color
PAD2	Pendant 2X Adaptor	1/2" NPS	Bronze
PAD2W	Pendant 2X Adaptor	1/2" NPS	White
PAD2-3/4	Pendant 2X Adaptor	3/4" NPS	Bronze
PAD2W-3/4	Pendant 2X Adaptor	3⁄4" NPS	White
PAD4	Pendant 4X Adaptor	1/2" NPS	Bronze
PAD4W	Pendant 4X Adaptor	1/2" NPS	White
PAD4-3/4	Pendant 4X Adaptor	3/4" NPS	Bronze
PAD4W-3/4	Pendant 4X Adaptor	3/4" NPS	White

All PAD2 and PAD4 Adaptors are to be used with ALED luminaires only. Pendant supplied by others.

#### **ACCESSORIES**

Catalog #

**HS45-A** Hang Straight 45° ½" NPS Swivel Mount - Bronze **HS45-W** Hang Straight 45° ½" NPS Swivel Mount - White **HS90-A** Hang Straight 90° ½" NPS Swivel Mount - Bronze **HS90-W** Hang Straight 90° ½" NPS Swivel Mount - White













<sup>&#</sup>x27;3000K/7 Step MacAdam Ellipse - 4000K/7 Step MacAdam Ellipse. 23000K/3 Step MacAdam Ellipse - 4000K/3 Step MacAdam Ellipse.

<sup>†</sup> In addition to using ANSI standards for reporting Correlated Color Temperature, the color consistency of this product is reported in MacAdam ellipses, which is a standardized method of defining color variation that corresponds to the ability of the human eye to distinguish color differences. Typically outdoor products are 7 step or less and indoor products are 4 step or less. Lower step numbers correspond with less color variation. For Warm light (3000K) add "Y" before color suffix (Example: PLED2x10YW) • For Neutral White Light (4000K) - add "N" before color suffix (Example: PLED2x26NW). For Uplight Pendant Fixtures, add suffix /UP after Catalog # (Example: PLED2x10YUP) • 10W and 13W suitable for damp locations in uplight position.





#### **UL Listing**

Suitable for wet locations. Suitable for mounting within 4' of the ground. DC fixtures not UL Listed.

#### **LEDs**

LFLED5: Multi-chip 5W high-output, long-life LED

HBLED10: Multi-chip 10W high-output, long-life LED

HBLED13: Multi-chip 13W high-output, long-life LED

HSLED13: Multi-chip 13W high-output, long-life LED

#### **Lumen Maintenance**

100,000-hour LED lifespan based on IES LM-80 results and TM-21 calculations\*.

**LFLED5:** Constant Current, Class 2, 50/60 Hz, 100 - 240VAC: 0.18 Amps.

**HBLED10:** Constant Current, Class 2, 100V-240V, 50/60 Hz, 1kV Surge Protection, 350mA, 0.3 Amps.

HBLED13: Constant Current, Class 2, 100V-277V, 50/60 Hz, 4kV Surge Protection, 720mA, 100-240VAC: 0.3-0.15 Amps, 277VAC: 0.15 Amps, THD ≤ 20%, Power Factor: 96%

**Cold Weather Starting**Minimum starting temperature is -40°C (-40°F).

**Ambient Temperature** Suitable for use in 40°C (104°F)

#### **Thermal Management**

Die-cast aluminum thermal management system for optimal heat dissipation

Precision die-cast aluminum housing, lens frame and mounting arm

#### Reflector

Specular aluminum

#### Gaskets

High-temperature silicone

White, Bronze, Black or Verde Green chip and fade resistant polyester powder coat finish. LFLED5 also available in Brass designed for marine use.

#### **Color Consistency and Stability**

RAB LED Color consistency is reported in MacAdam ellipses and is shown on the table to the right. RAB LED Color Stability is measured based on LM-80 testing and is available upon request.

#### **Green Technology**

Mercury and UV free, and RoHS compliant

#### IESNA LM-79 & LM-80 Testing

RAB LED luminaires have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80, and have received the Department of Energy "Lighting Facts" label.

Patents
RAB LED Floodlight designs are protected by patents pending in U.S., Canada, China, and Taiwan.



# Landscape lighting that is always spot on.

#### **FEATURES**

#### LFLED5

- · Microprismatic diffusion lens for smooth and even light distribution
- · Available in five finishes
- Brass fixture combined with brass junction box is UL Marine Listed (LFLEDSYMBR, LFLEDSNMBR, LFLEDSNMBR)
- · Optional spot hood reflector available



#### HSLED13

- Spot lighting for over 40 feet away
- · Perfect for flag lighting
- Available in four finishes



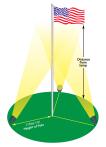
### **HBLED**

- Comes with both spot and flood reflectors
- · Available in 10 and 13 Watt
- Glare shield for effective light control
- · Available in four finishes

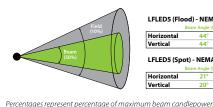


#### FLAG LIGHTING TIPS

- Use at least 2, preferably 3 lights in a triangle so the flag is well lit no matter which direction the wind is blowing.
- Install fixtures away from the flag pole about 1/3 to 1/2 the height of the pole.



#### FIELD & BEAM ANGLES



	Beam Angle (50%)	Field Angle (10%
Horizontal	44°	65°
Vertical	44°	64°

vertical	***	04						
LFLED5 (Spot) - NEMA Type 3H x 3V								
Li LLD3 (3)		Field Angle (10%)						
Horizontal	21°	40°						
Vertical	20°	39°						

HBLED10 (Flood) - NEMA Type 5H x 5V								
	Beam Angle (50%)	Field Angle (10%)						
Horizontal	76°	96°						
		0.40						

HBLED10 (Spot) - NEMA Type 4H x 4V								
	Beam Angle (50%)	Field Angle (10%)						
Horizontal	29°	75°						
Vertical	29°	75°						

HBLED13 (Spot) - NEMA Type 4H x 4V Horizonta

HSLED13 - NEMA Type 2H x 2V

	Beam Angle (50%)	Field Angle (10%)
Horizontal	11°	24°
Vertical	12°	24°

#### **CATALOG NUMBERS**

Catalog #	LED Watts	Input Watts	Color Temp/ Uniformity <sup>†</sup>	CRI	Lumens	Spot — Lumens per Watt	NEMA Type <sup>††</sup>	Lumens	– Flood – Lumens per Watt	NEMA Type <sup>+†</sup>	Mounting Height Range	Voltage
LFLED5A	5	5.1	Cool (5000K) / 7 Step <sup>1</sup>	68	250+++	49†††	3H x 3V <sup>†††</sup>	299	59	4H x 4V	Ground - 10'	100-240V
LFLED5BR	5	5.1	Cool (5000K) / 7 Step1	68	250+++	49†††	3H x 3V***	299	59	4H x 4V	Ground - 10'	100-240V
LFLED5MBR	5	5.1	Cool (5000K) / 7 Step <sup>1</sup>	68	250†††	49†††	3H x 3V***	299	59	4H x 4V	Ground - 10'	100-240V
HBLED10A	10	13.3	Cool (5200K) / 7 Step <sup>1</sup>	61	400	31	4H x 4V	338	25	5H x 5V	Ground - 15'	100-240V
HBLED10DCA	10	13.3	Cool (5200K) / 7 Step <sup>1</sup>	61	400	31	4H x 4V	338	25	5H x 5V	Ground - 15'	10-30VDC
HBLED13A	13	15.3	Cool (5000K) / 7 Step <sup>2</sup>	69	820	54	5H x 5V	724	47	5H x 5V	Ground - 15'	100-277V
HBLED13DCA	13	15.3	Cool (5000K) / 7 Step <sup>2</sup>	69	820	54	5H x 5V	724	47	5H x 5V	Ground - 15'	10-30VDC
HSLED13	13	15.2	Cool (5100K) / 7 Step <sup>2</sup>	52	787	52	2H x 2V				Ground - 15'	100-277V
HSLED13DCA	13	15.2	Cool (5100K) / 7 Step <sup>2</sup>	52	787	52	2H x 2V				Ground - 15'	10-30VDC

Values shown for cool temperature. Please visit rabweb.com for details on neutral and warm.

<sup>1</sup>3000K/7 Step MacAdam Ellipse - 4000K/7 Step MacAdam Ellipse. <sup>2</sup>3000K/3 Step MacAdam Ellipse - 4000K/3 Step MacAdam Ellipse.

† In addition to using ANSI standards for reporting Correlated Color Temperature, the color consistency of this product is reported in MacAdam ellipses, which is a standardized method of defining color variation that corresponds to the ability of the human eye to distinguish color differences. Typically outdoor products are 7 step or less and indoor products are 4 step or less. Lower step numbers correspond with less color variation. ††For beam field & angle information, see chart on page 50. †††With optional Spot Hood Reflector Kit

Finishes: For Black, White or Verde Green finish, add suffix B, W, or VG in place of Bronze (A) Catalog number (Example: HSLED13YB). LFLED5 - For Brass finish, add suffix BR at the end of the Catalog number (Example: LFLED5YBR).

#### ACCESSORIES FOR LFLED5

#### Catalog #

LSLFLEDW Bronze Spot Reflector Kit LSLFLEDB Black Spot Reflector Kit LSLFLEDW White Spot Reflector Kit LSLFLEDVG Verde Green Spot Reflector Kit LSLFLEDBR Brass Spot Reflector Kit MMCAP2BR 2" Brass Mighty Post Cap MMCAP3BR 3" Brass Mighty Post Cap VXJ1BR 4" Junction Box w/cover, 1/2"



















#### **UL Listing**

Suitable for wet locations. Suitable for mounting within 4' of the ground. DC fixtures not UL Listed.

#### **LEDs**

FFLED18: 6 Watt high-output long-life LEDs FFLED39 & FXLED78: 13 Watt high-output Iona-life I FDs

EZLED78: 26 Watt high-output long-life LEDs

#### **Lumen Maintenance**

100,000-hour LED lifespan based on IES LM-80 results and TM-21 calculations\*.

#### Drivers

13W Driver: Constant Current, Class 2, 100V-277V, 50/60 Hz, 6kV Surge Protection, 700mA, 100-277VAC: 0.4 Amps, THD ≤ 20% Power Factor: 99%

26W Driver: Constant Current, Class 2, 100V-277V, 50/60 Hz, 6kV Surge Protection, 720mA, 100-277VAC: 0.4 Amps, THD ≤ 20%, Power Factor: 99%

FFLED39: (1) 13W Driver plus (1) 26W Driver. See 13W and 26W Driver details.

FFLED78: (3) 26W Drivers. See 26W Driver details.

EZLED78: (3) 26W Drivers. See 26W Driver details

#### **Cold Weather Starting**

Minimum starting temperature is -40°C (-40°F).

#### **Ambient Temperature**

Suitable for use in 40°C (104°F)

### **Thermal Management**

Superior heat sinking with external Air-Flow fins (Patent Pending)

#### Housing

Precision die-cast aluminum housing and hood

# Reflector FFLED18, 39 & FX78:

Semi-specular anodized aluminum EZLED78:

Specular vacuum metalized polycarbonate

#### Gaskets

High-temperature silicone

#### Finish

White or bronze chip and fade resistant polyester powder coat finish

Color Consistency and Stability
RAB LED Color consistency is reported in
MacAdam ellipses and is shown on the
table to the right. RAB LED Color Stability
is measured based on LM-80 testing and is available upon request.

**Green Technology**Mercury and UV free, and RoHS compliant

#### IESNA LM-79 & LM-80 Testing

RAB LED luminaires have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80, and have received the Department of Energy "Lighting Facts" label.

RAB LED Floodlight designs are protected by patents pending in U.S., Canada, China, and Taiwan.



# Move over HID... meet the new faces of floodlights!

#### PERFORMANCE COMPARISON



FFLED18\*

4.8 lbs.



38W / 45W

2991



FXLED78 (Trunnion mount shown)



78W / 94W

5765

250W MH

78W / 91W 5927 250W MH

27.5 lbs.



Replacement

Range Weight

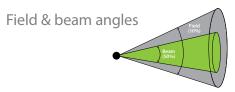
150W MH 35-150W MH 100-175W MH

150-320W MH 12.5 lbs. 24 lbs.

Vertical

150-320W MH

\*It is recommended that the FFLED18 and FFLED39 be mounted with the RAB XC1 Heavy Duty Cover and the RAB VXC.



FFLED18 -	NEMA Type 7H	x 6V
	Beam Angle (50%)	Field An
Horizontal	102°	15

Vertical	66°	108°
FFLED39 -	NEMA Type 7H	x 6V
	Beam Angle (50%)	Field Angle (10%)
Horizontal	136°	161°

FXLED78 - NEMA Type 6H x 5V								
	Beam Angle (50%)	Field Angle (10%)						
Horizontal	96°	127°						
Vertical	59°	94°						

ontal	96°	127°	Horizontal
:al	59°	94°	Vertical
D78 - NE	MA Type 3F	1 x 3V	

EZLED78 - NEMA Type 4H x 4V							
	Beam Angle (50%)	Field Angle (10%)					
Horizontal	37°	55°					
Vertical	37°	55°					

Percentages represent percentage of maximum beam candlepower.

#### CATALOG NUMBERS

Floodlight Catalog #	LED Watts	Input Watts	Color Temp/ Uniformity <sup>†</sup>	CRI	Lumen Output	Lumens per Watt	NEMA Type <sup>††</sup>	Mounting Height Range	Voltage
FFLED18	18	22.4	Cool (5100K) / 7 Step1	70	1624	73	7H x 6V	Ground-15'	100-277V
FFLED18DC	18	22.4	Cool (5100K) / 7 Step <sup>1</sup>	70	1624	73	7H x 6V	Ground-15'	10-30VDC
FFLED39	38	45.0	Cool (5100K) / 7 Step <sup>1</sup>	68	2991	66	7H x 6V	Ground-20'	100-277V
FFLED39T*	38	45.0	Cool (5100K) / 7 Step1	68	2991	66	7H x 6V	Ground-20'	100-277V
FFLED39SF**	38	45.0	Cool (5100K) / 7 Step <sup>1</sup>	68	2991	66	7H x 6V	Ground-20'	100-277V
FXLED78T*	78	91.0	Cool (5100K) / 7 Step <sup>1</sup>	67	5927	65	6H x 5V	Ground-35'	100-277V
FXLED78SF**	78	91.0	Cool (5100K) / 7 Step1	67	5927	65	6H x 5V	Ground-35'	100-277V
Spotlight									
EZLED78T*	78	94.4	Cool (5100K) / 7 Step1	66	5765	61	3H x 3V	Ground-35'	100-277V
EZLED78SF**	78	94.4	Cool (5100K) / 7 Step <sup>1</sup>	66	5765	61	3H x 3V	Ground-35'	100-277V
EZLED78TB44*	78	94.4	Cool (5100K) / 7 Step <sup>1</sup>	66	5765	61	4H x 4V	Ground-35'	100-277V
EZLED78SFB44**	78	94.4	Cool (5100K) / 7 Step <sup>1</sup>	66	5765	61	4H x 4V	Ground-35'	100-277V

Values shown for cool temperature. Please visit rabweb.com for details on neutral and warm. 13000K/3 Step MacAdam Ellipse - 4000K/3 Step MacAdam Ellipse.

† In addition to using ANSI standards for reporting Correlated Color Temperature, the color consistency of this product is reported in MacAdam ellipses, which is a standardized method of for defining color variation that corresponds to the ability of the human eye to distinguish color differences. Typically outdoor products are 7 step or less and indoor products are 4 step or less. Lower step numbers correspond with less color variation. † For beam field & angle information, see chart on page 46. \*T designates Trunnion Mount. \*\*SF designates Slipfitter Mount.

Finishes: For White finish, add suffix W at the end of the Catalog number (Example: FXLED78TYW).

For Photocell option for FFLED18, 39 - add "/PC" for 120V, "/PC2" suffix for 277V after color suffix (Example: FFLED18/PC, FFLED39/PC2)

For Swivel Photocell option for FXLED78SF - add "/PCS" suffix for 120V, "/PCS2" suffix for 277V after color suffix (Example: FXLED78SF/PCS, FXLED78SF/PCS2).

Catalog #

FFLED18/EC 120V-277V Standard Emergency Battery Backup FFLED18/EC 120V-277V Cold Weather Emergency Battery Backup

#### **ACCESSORIES**

#### Catalog #

GDFFLED18W Wire Guard GDFFLED18P Shield GDFFLED39W Wire Guard GDFFLED39P Shield GDFXLED78W Wire Guard GDFXLED78P Shield GDEZLED78W Wire Guard GDEZLED78P Shield LFFLED18 Replacement lens and doorframe LFFLED18W Replacement lens and doorframe, White LFFLED39 Replacement lens and doorframe LFFLED39W Replacement lens and doorframe, White LEZLED78 Replacement lens and doorframe LEXLED78 Replacement lens and doorframe, White LFXLED78 Replacement lens and doorframe LFXLED78W Replacement lens and doorframe, White

















STL3FFLED18

(FFLED18 + STL360)

STL1HBLED2x13W (HBLED13 + STL110)

#### **SPECIFICATIONS**

#### **UL Listing**

Suitable for wet locations.

#### Sensors

SMS500: Switching Capacity: 5 Amps; 500W Incandescent @120V, 250W Fluorescent; 750 Watts LED @120 Volts 0.8pF Driver; 8 Amps, 300 Watts LED @120 Volts 0.5pF Driver; 120V AC 60HZ; Power Consumption 1W; Time Adjustment 5 Sec. to 15 Min; Surge Protection up to 3000V.

STL110: Switching Capacity: 8 Amps; 1000W Incandescent @120V, 250W Fluorescent; 750 Watts LED @120 Volts 0.8pF Driver; 8 Amps, 500 Watts LED @120 Volts 0.5pF Driver; 120V AC 60HZ; Power Consumption 1W; Time Adjustment 5 Sec. to 12 Min; Surge Protection up to 6000V.

STL200: Switching Capacity: 8 Amps; 1000W Incandescent @120V, 250W Fluorescent; 750 Watts LED @120 Volts 0.8pF Driver; 8 Amps, 500 Watts LED @120 Volts 0.5pF Driver; 120V AC 60HZ; Power Consumption 1W; Time Adjustment 5 Sec. to 12 Min; Surge Protection up to 6000V.

STL360: Switching Capacity: 8 Amps, 750 Watts LED @120 Volts 0.8pF Driver; 8 Amps, 500 Watts LED @120 Volts 0.5pF Driver; 120V AC 60HZ; Power Consumption 1W; Time Adjustment 5 Sec. to 12 Min; Surge Protection up to 6000V.

#### **Lumen Maintenance**

100,000-hour LED lifespan based on IES LM-80 results and TM-21 calculations\*.

#### **Ambient Temperature**

Suitable for use in 40°C (104°F)

#### Housing

Precision die-cast aluminum housing, lens frame, mounting arm

#### Reflector

Specular aluminum except for FFLED18MS and STL3FFLED18: Semi-specular anodized aluminum. WPLED26MS: Semi-specular vacuum metalized polycarbonate.

#### Gaskets

High-temperature silicone

#### Finish

White or bronze chip and fade resistant polyester powder coat finish

#### Color Consistency and Stability

RAB LED Color consistency is reported in MacAdam ellipses and is shown on the table to the right. RAB LED Color Stability is measured based on LM-80 testing and is available upon request.

#### **Green Technology**

Mercury and UV free, and RoHS compliant

#### IESNA LM-79 & LM-80 Testing

RAB LED luminaires have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80, and have received the Department of Energy "Lighting Facts" label.

#### **Patents**

RAB LSTEALTH designs are protected by patents pending in U.S., Canada, China, and Taiwan.



# The sensor you trust now in LED! LED and best-in-class sensor technology.

#### SENSOR DETECTION PATTERNS



STEALTH Performance in a Cost-Effective Package SMS500 - Small sensor. Full 180° coverage with universal swivel





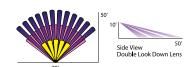


High Quality, Low Maintenance, No Callbacks

STL110 - 110° view, double look-down lens, reaches 70′ wide and 50′ out

STL200 - 200° view, double look-down lens, reaches 100' wide and 30' out

STL360 - Security-grade sensor has two detectors for 360° downward and 180° forward coverage.











#### **CATALOG NUMBERS**

Wallpacks Catalog #	LED Watts	Input Watts	Color Temp/ Uniformity†	CRI	Lumen Output	Voltage
WPLED10MS	10	13	Cool (5000K) / 7 Step <sup>1</sup>	92	547	120V
WPLED13MS	13	15	Cool (5000K) / 7 Step <sup>2</sup>	66	1064	120V
WPLED20MS	20	22	Cool (5000K) / 7 Step <sup>1</sup>	70	1401	120V
WPLED26MS	26	30	Cool (5000K) / 7 Step <sup>2</sup>	66	1816	120V

Floodlights	LED	Input	Color Temp/			Spot -			Flood		
Catalog #	Watts	Watts	Uniformity <sup>†</sup>	CRI	Lumens	per Watt	NEMA Type	Lumens	per Watt	NEMA Type	Voltage
STL1HBLED10	10	13	Cool (5200K) / 7 Step1	61	400	30	4H x 4V	338	25	5H x 5V	120V
STL1HBLED2x10	20	26	Cool (5200K) / 7 Step1	61	800	30	4H x 4V	676	25	5H x 5V	120V
STL2HBLED10	10	13	Cool (5200K) / 7 Step1	61	400	30	4H x 4V	338	25	5H x 5V	120V
STL2HBLED2x10	20	26	Cool (5200K) / 7 Step1	61	800	30	4H x 4V	676	25	5H x 5V	120V
STL3HBLED10	10	13	Cool (5200K) / 7 Step1	61	400	30	4H x 4V	338	25	5H x 5V	120V
STL3HBLED2x10	20	26	Cool (5200K) / 7 Step <sup>1</sup>	61	800	30	4H x 4V	676	25	5H x 5V	120V
STL1HBLED13	13	15	Cool (5000K) / 7 Step <sup>2</sup>	69	820	54	4H x 4V	724	47	5H x 5V	120V
STL1HBLED2x13	26	30	Cool (5000K) / 7 Step <sup>2</sup>	69	1640	54	4H x 4V	1448	47	5H x 5V	120V
STL2HBLED13	13	15	Cool (5000K) / 7 Step <sup>2</sup>	69	820	54	4H x 4V	724	47	5H x 5V	120V
STL2HBLED2x13	26	30	Cool (5000K) / 7 Step <sup>2</sup>	69	1640	54	4H x 4V	1448	47	5H x 5V	120V
STL3HBLED13	13	15	Cool (5000K) / 7 Step <sup>2</sup>	69	820	54	4H x 4V	724	47	5H x 5V	120V
STL3HBLED2x13	26	30	Cool (5000K) / 7 Step <sup>2</sup>	69	1640	54	4H x 4V	1448	47	5H x 5V	120V
FFLED18MS	18	22	Cool (5100K) / 7 Step <sup>2</sup>	70				1624	73	7H x 6V	120V
STL3FFLED18	18	22	Cool (5100K) / 7 Step <sup>2</sup>	70				1624	73	7H x 6V	120V

Values shown for cool temperature. Please visit rabweb.com for details on neutral and warm.

<sup>1</sup>3000K/7 Step MacAdam Ellipse - 4000K/7 Step MacAdam Ellipse. <sup>2</sup>3000K/3 Step MacAdam Ellipse - 4000K/3 Step MacAdam Ellipse.

Finishes: For White finish, add suffix W at the end of the Catalog number (Example: STL3FFLED18W).

For Warm light (3000K) add "Y" before color suffix (Example: STL1HBLED2x10YW) • For Neutral White Light (4000K) add "N" before color suffix (Example: WPLED26MSNW).

ACCESSORIES Catalog # GDFFLED18W Wire Guard GDFFLED18P Shield

#### **BUY WITH CONFIDENCE**















<sup>†</sup> In addition to using ANSI standards for reporting Correlated Color Temperature, the color consistency of this product is reported in MacAdam ellipses, which is a standardized method of defining color variation that corresponds to the ability of the human eye to distinguish color differences. Typically outdoor products are 7 step or less and indoor products are 4 step or less. Lower step numbers correspond with less color variation.



#### **SPECIFICATIONS**

#### **UL Listing**

Suitable for wet locations. Suitable for mounting within 4' of the ground.

#### **LEDs**

Multi-chip 5, 10 and 13W high-output long-life LEDs

#### Lumen Maintenance

100,000-hour LED lifespan based on IES LM-80 results and TM-21 calculations\*.

#### Drivers

BLEDS: Constant Current, Class 2, 100V-240V, 50/60 Hz, 1kV Surge Protection 350mA, 0.18 Amps.

#### BLED2x5: 0.36 Amps.

BLED10: Constant Current, Class 2, 100V-240V, 50/60 Hz, 1kV Surge Protection, 350mA, 0.3 Amps.

#### BLED2x10: 0.6 Amps

**BLED13:** Constant Current, Class 2, 100V-277V, 50/60 Hz, 4kV Surge Protection, 720mA, 100-240VAC: 0.3-0.15 Amps, 277VAC: 0.15 Amps, THD ≤ 20% Power Factor: 98%

BLED2x13: 0.6 - 0.3 Amps, 277VAC: 0.3 Amps.

#### **Cold Weather Starting**

Minimum starting temperature is -40°C (-40°F).

#### **Ambient Temperature**

BLED5 & 10: Suitable for use in 40°C (104°F)

BLED13: Suitable for use in 50°C (122°F)

#### Thermal Management

Die-cast aluminum thermal management system for optimal heat dissipation

#### Housing

Precision die-cast aluminum housing, lens frame

#### Reflector

Specular aluminum except for BLED5.

#### Gaskets

High-temperature silicone

#### Finish

White or bronze chip and fade resistant polyester powder coat finish

#### **Color Consistency and Stability**

RAB LED Color consistency is reported in MacAdam ellipses and is shown on the table to the right. RAB LED Color Stability is measured based on LM-80 testing and is available upon request.

#### **Green Technology**

Mercury and UV free, and RoHS compliant

#### IESNA LM-79 & LM-80 Testing

RAB LED luminaires have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80, and have received the Department of Energy "Lighting Facts" label.

#### Bollard

18", 36" and 42" lengths available for 5 Watt Bollard. 42" length for 10 and 13 Watt Bollards.

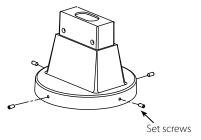
#### **Patents**

RAB LED BLED designs are protected by U.S. patents and patents pending in U.S., Canada, China, Taiwan and Mexico.

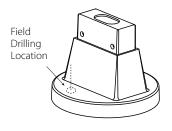


# Affordable LED pathway lighting

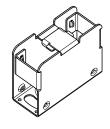
#### **MOUNTING OPTIONS**



BOLBASE (For New Construction)



BOLBASE RETRO For Retrofit (Existing Non-RAB bollard bases)



IMPROVED BOLLARD (Standard Mounting Plate for Stability)

#### **CATALOG NUMBERS**

Catalog # Bronze 1 FIXTURE	Catalog # White 1 FIXTURE	LED Watts	Input Watts	Color Temp/ Uniformity <sup>†</sup>	Lumen Output	Lumens per Watt	Voltage
BLED5-18* BLEDR5-18*	BLED5-18W* BLEDR5-18W*	5 5	5 5	Cool (5000K) / 7 Step Cool (5000K) / 7 Step	196 213	37 41	100-240V 100-240V
2 FIXTURE BLED2x5-18* BLEDR2x5-18*	<b>2 FIXTURE</b> BLED2x5-18W* BLEDR2x5-18W*	5 5	11 11	Cool (5000K) / 7 Step Cool (5000K) / 7 Step	392 426	37 41	100-240V 100-240V

Values shown for cool temperature. Please visit rabweb.com for details on neutral and warm.

th addition to using ANSI standards for reporting Correlated Color Temperature, the color consistency of this product is reported in MacAdam ellipses, which is a standardized method of defining color variation that corresponds to the ability of the human eye to distinguish color differences. Typically outdoor products are 7 step or less and indoor products are 4 step or less. Lower step numbers correspond with less color variation. \*Also Available in 36" and 42" Bollard lengths - Replace suffix 18 with 36 or 42 (Example: BLED5-36).

For Warm light (3000K) add "Y" before color suffix (Example: BLED5-18YW) • For Neutral White Light (4000K) - add "N" before color suffix (Example: BLED5-18NW).

1 FIXTURE BLED10 BLED10Y	<b>1 FIXTURE</b> BLED10W BLED10YW	10 10	13 13	Cool (5000K) / 7 Step Warm (3000K) / 7 Step	547 410	41 31	100-240V 100-240V
2 FIXTURE	2 FIXTURE			·			
BLED2x10	BLED2x10W	20	27	Cool (5000K) / 7 Step	1094	41	100-240V
BLED2x10Y	BLED2x10YW	20	27	Warm (3000K) / 7 Step	820	31	100-240V
1 FIXTURE	1 FIXTURE						
BLED13	BLED13W	13	15	Cool (5000K) / 7 Step	1064	71	100-277V
BLED13Y	BLED13YW	13	15	Warm (3000K) / 3 Step	662	44	100-277V
2 FIXTURE	2 FIXTURE						
BLED2x13	BLED2x13W	26	30	Cool (5000K) / 7 Step	2128	71	100-277V
BLED2x13Y	BLED2x13YW	26	30	Warm (3000K) / 3 Step	1324	44	100-277V
1 FIXTURE	1 FIXTURE						
BLED20	BLED20W	20	22	Cool (5000K) / 7 Step	1401	65	100-277V
BLED20Y	BLED20YW	20	22	Warm (3000K) / 7 Step	662	44	100-277V
2 FIXTURE	2 FIXTURE						
BLED2x20	BLED2x20W	40	44	Cool (5000K) / 7 Step	2802	65	100-277V
BLED2x20Y	BLED2x20YW	40	44	Warm (3000K) / 7 Step	1970	45	100-277V

Please visit rabweb.com for details on neutral.

th addition to using ANSI standards for reporting Correlated Color Temperature, the color consistency of this product is reported in MacAdam ellipses, which is a standardized method of defining color variation that corresponds to the ability of the human eye to distinguish color differences. Typically outdoor products are 7 step or less and indoor products are 4 step or less. Lower step numbers correspond with less color variation.

For Neutral White Light (4000K) - add "N" before color suffix (Example: BLED13NW).























VXBRLED13DG VXBRLED26DG



VXLED13DG/UP VXLED26DG/UP



VXBRLED13DG/UP BLU

#### **SPECIFICATIONS**

Suitable for wet locations. Suitable for mounting within 4' of the ground.

Multi-chip single 13W or 26W high-output long-life LEDs

#### **Lumen Maintenance**

100,000-hour LED lifespan based on IES LM-80 results and TM-21 calculations\*.

**VXLED13:** Constant Current, 100V-277V, 50/60 Hz, 100-240VAC: 0.3-0.15 Amps, 277VAC: 0.15 Amps, THD ≤ 20%Power Factor: 98%

**VXLED26:** Constant Current, Class 2, 100V-277V, 50/60 Hz, 4kV Surge Protection, 700mA, 100-277VAC: 0.4 Amps, THD ≤ 20%, Power Factor: 97.9%

#### **Cold Weather Starting**

Minimum starting temperature is -40°C (-40°F).

#### **Ambient Temperature**

Suitable for use in 40°C (104°F)

#### Thermal Management (Patent Pending)

Die-cast LED housing designed for maximum heat dissipation

#### Housing

Precision die-cast aluminum housing, lens frame

**Mounting** (3) 1/2" NPS conduit entry points. Also available as an uplight.

#### Gaskets

High-temperature silicone

#### **Finish**

Natural shot blasted aluminum

Color Consistency and Stability
RAB LED Color consistency is reported in
MacAdam ellipses and is shown on the table
to the right. RAB LED Color Stability is
measured based on LM-80 testing and is available upon request.

**Green Technology** Mercury and UV free, and RoHS compliant

#### IESNA LM-79 & LM-80 Testing

RAB LED luminaires have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80, and have received the Department of Energy "Lighting Facts" label.

#### **Guard and Globe**

Shot blasted guard with frosted globe

RAB LED Vaporproofs are protected by patents pending in U.S., Canada, China and Taiwan.



# Traditional look with cutting-edge technology.

#### MOUNTING FLEXIBILITY



VXLED13DG VXLED26DG Ceiling Mount







VXBRLED13DG VXBRLED26DG

- Wall Mount
- · Cool Light





VXLED13DG/UP BLU

- · Ceiling Mount
- Blue Light

Designed For Beacon Applications

VXLED13, VXLED26, VXBRLED13 and VXBRLED26 must be customized with globes below

#### **ACCESSORIES**

#### **Round Bottom Glass**



Blue GL100B









Heat

Resistant





GL100PRIS





Reflectors

Dome Reflector RV100ST

Angle Reflector

#### Permaglobes, Unbreakable Polycarbonate



Amber GL100PGA



GL100PGB



Green GL100PGG



Ruby GL100PGR



Opal GL100PGW



Clear Prismatic GL100PG



Die-Cast Aluminum Guard (Glass Globes Only) GD100DG

RV100A

Wire Guards



Wire Clamp Guard Flat Bottom GP100CL



Wire Guard (Polycarbonate Globes Only) GD100BAR

NOTE: Replacement Frosted Globe: GL100FR

#### **CATALOG NUMBERS**

Catalog Number	LED Watts	Input Watts	Color Temp/ Uniformity <sup>†</sup>	Lumen Output*	Lumens per Watt*	Voltage
VXLED13DG	13	15	Cool (5000K) / 7 Step1	729	48	100-277V
VXLED13DG/UP	13	15	Cool (5000K) / 7 Step1	729	48	100-277V
VXBRLED13DG	13	15	Cool (5000K) / 7 Step1	729	48	100-277V
VXBRLED13DG/UP	13	15	Cool (5000K) / 7 Step <sup>1</sup>	729	48	100-277V
VXLED26DG	26	30	Cool (5000K) / 7 Step1	1955	66	100-277V
VXLED26DG/UP	26	30	Cool (5000K) / 7 Step1	1955	66	100-277V
VXBRLED26DG	26	30	Cool (5000K) / 7 Step1	1955	66	100-277V
VXBRLED26DG/UP	26	30	Cool (5000K) / 7 Step <sup>1</sup>	1955	66	100-277V
VXLED13DG/UP BLU	13	15			48	100-277V
VXRRI FD13DG/LIP BLLI	13	15			48	100-277V

<sup>\*</sup>NOTE: These values pertain only to fixtures installed with standard frosted globe and will vary if installed with optional globes

#### **BUY WITH CONFIDENCE**









 $Values shown for cool temperature. Please visit rabweb.com for details on neutral and warm. \\ ^{1}3000K/3 Step MacAdam Ellipse-4000K/3 Step MacAdam Ellipse-100K/3 Step$ † In addition to using ANSI standards for reporting Correlated Color Temperature, the color consistency of this product is reported in MacAdam ellipses, which is a standardized method of defining color variation that corresponds to the ability of the human eye to distinguish color differences. Typically outdoor products are 7 step or less and indoor products are 4 step or less. Lower step numbers correspond with less color variation. For Warm light (3000K) add "Y" before color suffix (Example: VXLED13YDG) • For Neutral White Light (4000K) add "N" before color suffix (Example: VXLED13NDG).





GOOSE4R (20" red gooseneck arm) 13W LED head and 11" Angled Cone Shade GOOSE3Y (30" yellow gooseneck arm) 13W LED head and 11" Straight Shade GOOSE2RB (24" royal blue gooseneck arm) 13W LED head and 15" Dome Cone Shade

#### **SPECIFICATIONS**

#### **UL Listing**

Suitable for wet locations. Suitable for mounting within 4' of the ground.

#### LED

GNLED13W: Single multi-chip, 13 Watt high-output long-life LED GNLED26W: Single multi-chip, 26W high-output, long-life LED

#### **Lumen Maintenance**

100,000-hour LED lifespan based on IES LM-80 results and TM-21 calculations\*.

#### Drivers

13W Driver: Constant Current, Class 2, 100 - 277V, 50/60 Hz, 100 - 240VAC: 0.3 - 0.15A, 277VAC: 0.15A 26W Driver: Constant Current, Class 2, 100 - 277V, 50/60 Hz, 100 - 240VAC: 0.3 - 0.15A, 277VAC: 0.15A

#### **Cold Weather Starting**

Minimum starting temperature is -40°C (-40°F).

#### Ambient Temperature

Suitable for use in 40°C (104°F)

#### **Thermal Management**

Custom heat sink assembly in thermal contact with die-cast aluminum housing for superior heat sinking

#### Housing

Precision die-cast aluminum housing, lens frame and mounting plate

#### Mountine

Heavy-duty mounting arm with "O" ring seal and stainless steel screw

#### Lens

Glare-reducing frosted glass lens

#### Gaskets

High-temperature silicone

#### Finish

Chip and fade resistant polyester powder coat finish

#### Color Stability

RAB LED Color consistency is reported in MacAdam ellipses and is shown on the table to the right. RAB LED Color Stability is measured based on LM-80 testing and is available upon request.

#### **Green Technology**

Mercury and UV free, and RoHS compliant

#### IESNA LM-79 & LM-80 Testing

RAB LED luminaires have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80, and have received the Department of Energy "Lighting Facts" label.

#### Shades

Angled Cone, Angled Dome or Straight Shade offered in 11" or 15"

#### Patents

RAB LED Gooseneck design is protected by patents pending in U.S., Canada and China.



# Main street just got brighter... and greener.

#### BUILD YOUR OWN FIXTURE (Choose one from each section and choose your color)



^Contact your local KAB rep to view actual sample color chips

#### COMPLETE FIXTURE CATALOG NUMBER MATRIX

Family Name	Arm	LED	Wattage	Color Temp	Reflector	Shade	Color
GN	3	LED	13	N	S	AC	R
	Blank = No arm 1 = GOOSE1 2 = GOOSE2 3 = GOOSE3 4 = GOOSE4 5 = GOOSE5		13 = 13W 26 = 26W	N = Neutral (4000K) Y = Warm (3000K)	Blank = Flood reflector + frosted lens S = Spot reflector + clear lens R = Rectangular reflector + clear lens	Blank = No Shade AC = 15" Angled Cone AC11 = 11" Angled Cone AD = 15" Angled Dome AD11 = 11" Angled Dome ST = 15" Straight Shade ST11 = 11" Straight Shade	B = Black W = White A = Archit. Bronze S = Metallic Silver G = Hunter Green YL = Yellow R = Red LB = Light Blue BL = Royal Blue BWN = Brown
DEDEODA	AANICE						I = Ivory

#### **PERFORMANCE**

Catalog # Black	Description	LED Watts	Input Watts	Color Temp/ Uniformity <sup>†</sup>	Lumen Output	Lumens per Watt	Voltage
GNLED13NB	13W LED Head	13	16	Neutral (4000K) / 3 Step	643	43	100-277V
GNLED26NB	26W LED Head	26	30	Neutral (4000K) / 3 Step	1690	58	100-277V

th addition to using ANSI standards for reporting Correlated Color Temperature, the color consistency of this product is reported in MacAdam ellipses, which is a standardized method of defining color variation that corresponds to the ability of the human eye to distinguish color differences. Typically outdoor products are 7 step or less and indoor products are 4 step or less. Lower step numbers correspond with less color variation.

#### **ACCESSORIES**

Catalog # Description Catalog # Description

**LRFGNLEDB** Clear Lens and Reflector Kit w/Door Frame, Black **LFGNLEDB** Frosted Lens and Door Frame Replacement, Black

Finishes: For color finish, add suffix listed above (i.e. YL) in place of B (Black) at the end of the Catalog number (Example: LRFGNLEDYL).





























#### **SPECIFICATIONS**

#### **UL Listing**

Suitable for wet locations. Suitable for mounting within 4' of the ground.

#### LED

5W high output long life LED

#### Lumen Maintenance

100,000-hour LED lifespan based on IES LM-80 results and TM-21 calculations\*.

#### Driver

Constant Current, Class 2, 100V-240V, 50/60 Hz, 1kV Surge Protection, 350mA, 0.18 Amps.

#### **Cold Weather Starting**

Minimum starting temperature is -40°C (-40°F).

#### **Ambient Temperature**

Suitable for use in 40°C (104°F)

#### Thermal Management

Integral cast aluminum mounting pad for optimum heat sinking to ensure cool operation with maximum LED life and light output

#### Housing

Precision die-cast aluminum housing and mounting plate (Junction box not included).

#### Gaskets

High-temperature silicone

#### Finish

White or bronze chip and fade resistant polyester powder coat finish

#### **Color Consistency and Stability**

RAB LED Color consistency is reported in MacAdam ellipses and is shown on the table to the right. RAB LED Color Stability is measured based on LM-80 testing and is available upon request.

#### **Green Technology**

Mercury and UV free, and RoHS compliant

#### IESNA LM-79 & LM-80 Testing

RAB LED luminaires have been tested by an independent laboratory in accordance with IESNA LM-79 and 80, and have received the Department of Energy "Lighting Facts" label.

#### Patents

RAB LED STEP Lights are protected by U.S. patents and patents pending in Canada and China.

\*See TM-21 explanation on page 8.

#### CATALOG NUMBERS

Catalog #	Description	LED Watts	Input Watts	Color Temp/ Uniformity <sup>†</sup>	Lumen Output	Lumens per Watt	Voltage
SLED5	Square Bronze	5	5	Cool (5000K) / 7 Step	196	37	100-240V
SLED5W	Square White	5	5	Cool (5000K) / 7 Step	196	37	100-240V
SLED5Y	Square Bronze	5	5	Warm (3000K) / 7 Step	128	24	100-240V
SLED5YW	Square White	5	5	Warm (3000K) / 7 Step	128	24	100-240V
SLEDR5	Round Bronze	5	5	Cool (5000K) / 7 Step	213	41	100-240V
SLEDR5W	Round White	5	5	Cool (5000K) / 7 Step	213	41	100-240V
SLEDR5Y	Round Bronze	5	5	Warm (3000K) / 7 Step	133	25	100-240V
SLEDR5YW	Round White	5	5	Warm (3000K) / 7 Step	133	25	100-240V

Please visit rabweb.com for details on neutral.

th addition to using ANSI standards for reporting Correlated Color Temperature, the color consistency of this product is reported in MacAdam ellipses, which is a standardized method of defining color variation that corresponds to the ability of the human eye to distinguish color differences. Typically outdoor products are 7 step or less and indoor products are 4 step or less. Lower step numbers correspond with less color variation.

For Neutral White Light - add "N" before color suffix (Example: SLED5NW).



# Brackets



#### **SPECIFICATIONS**

#### **Gooseneck and Straight Arms**

Use to extend fixtures away from wall

#### Mounting

Die-cast aluminum wall mounting plate. Fits over recessed junction box (not included) and mounts to wall. Mounts any fixture with ½" NPS threaded hole.

#### Weight capacity

7 lbs.

#### Construction

All aluminum construction 1" diameter, ¼" thick extension rod with ½" NPS threaded end with EZ locknut. Secures to wall mounting plate with (2) stainless steel set screws.\*

#### Swivel Arm

Directs light where you want it and adjusts 30° in both directions

#### Finish

Black or white weather resistant polyester powder coat finish

#### **CATALOG NUMBERS**

Catalog #	Description	Use With:
GOOSE1	Gooseneck Fixed Arm Bracket 24" From Wall, 1/2" NPS Thread - Bronze	WPLED20, WPLED26
GOOSE2	Gooseneck Fixed Arm Bracket 35" From Wall, 1/2" NPS Thread - Bronze	WPLED20, WPLED26
GOOSE3	Gooseneck Fixed Arm Bracket 30" Upcurve - 25" High From Wall, 1/2" NPS Thread - Bronze	WPLED20, WPLED26
GOOSE4	Gooseneck Fixed Arm Bracket 20" High - From Wall, 1/2" NPS Thread - Bronze	WPLED20, WPLED26
GOOSE5	Gooseneck Fixed Arm Bracket 20" High Pole Mount- 19" From Pole, ½" NPS Thread - Bronze	WPLED20, WPLED26
ARM24	Straight Arm Bracket 24" From Wall with Round Wallplate, ½" NPS Thread - Bronze	WPLED10, WPLED13, WPLED20 and WPLED26
SWIVEL30	30° Swivel Bracket - Bronze 5" x 2-1/2" x 2-1/4"	WPLED10, WPLED13, WPLED20 and WPLED26
ARMSV24	Straight Arm Bracket 24" From Wall with 30° Swivel - Bronze	WPLED10, WPLED13, WPLED20 and WPLED26

Finishes: For Black or White finish, add suffix B or W in place of Bronze Catalog number (Example: ARM24W).

For Unfinished, add suffix U at the end of the Catalog number (Example: GOOSEIU).

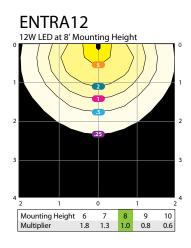
<sup>\*</sup>Mounting for all brackets except GOOSE4 and GOOSE5.

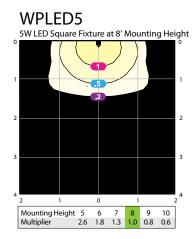
# Photometrics

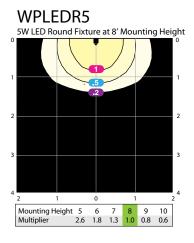
Layout grid represents multiples of mounting height. Values shown in Footcandles.

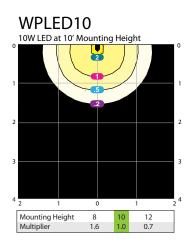
Values shown are for cool light only. For neutral and warm, or to design your own custom lighting layout, visit **rabweb.com**, search for the product you are interested in, and use the EZ Layout tool.

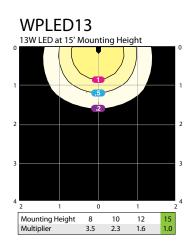
In addition, our application engineers can help you create a custom lighting layout for your job. For Free.

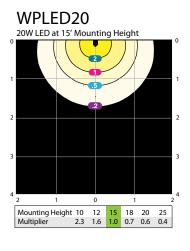


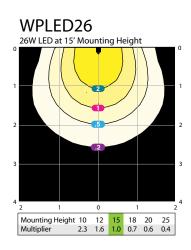


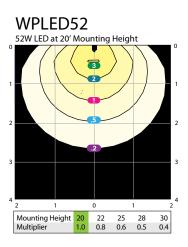


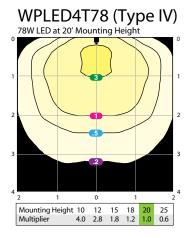




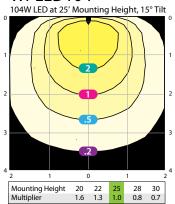




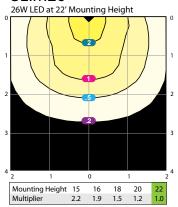




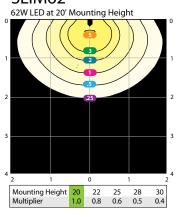
#### WPLED104



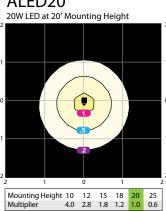
#### SLIM26



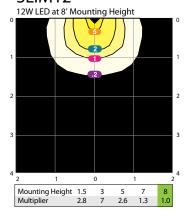
#### SLIM62



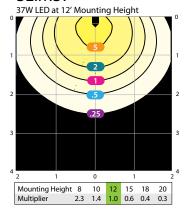
#### ALED20



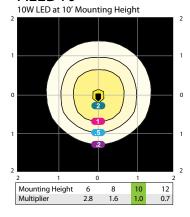
#### SLIM12



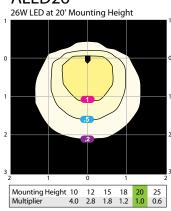
#### SLIM37



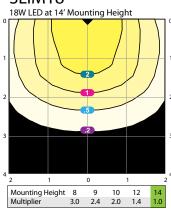
#### ALED10



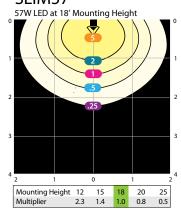
#### ALED26



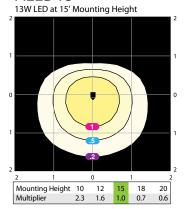
#### SLIM18



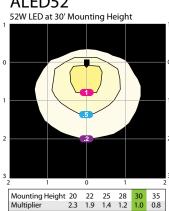
#### SLIM57



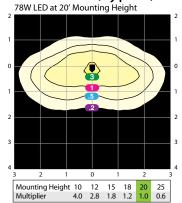
#### ALED13



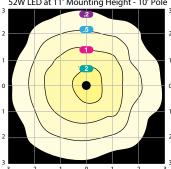
#### ALED52



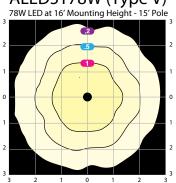
#### ALED2T78 (Type II)



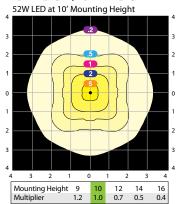
#### ALED5T52W (Type V)



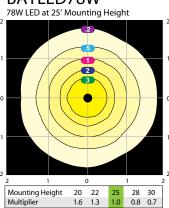
#### 52W LED at 11' Mounting Height - 10' Pole



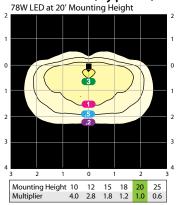
#### GLED52/GPLED52



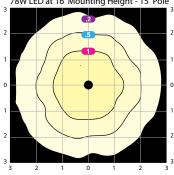
#### BAYLED78W



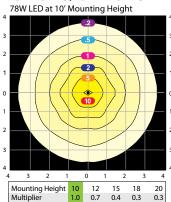
#### ALED3T78 (Type III)



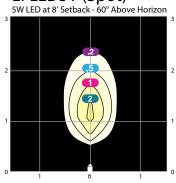
#### ALED5T78W (Type V)



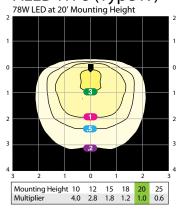
#### GLED78/GPLED78



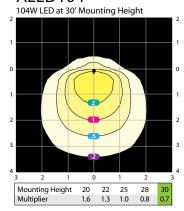
#### LFLED5Y (Spot)



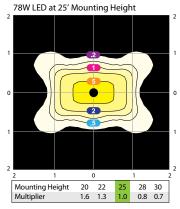
#### ALED4T78 (Type IV)



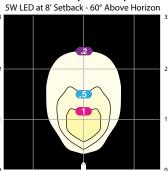
#### ALED104



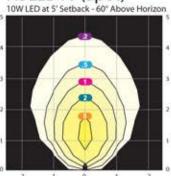
#### AISLED78W



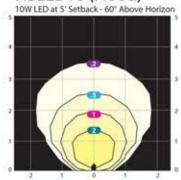
#### LFLED5Y (Flood)

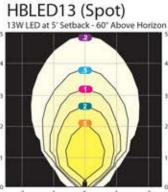


#### HBLED10 (Spot)

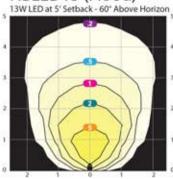


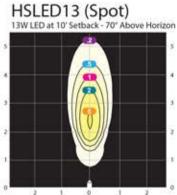
#### HBLED10 (Flood)



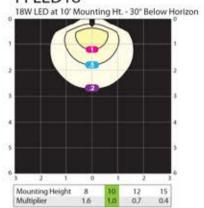


#### HBLED13 (Flood)

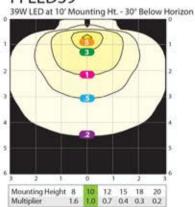




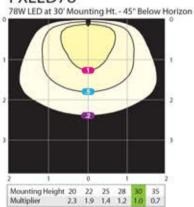
#### FFLED18



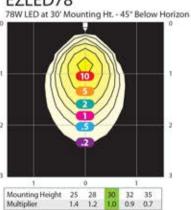
#### FFLED39



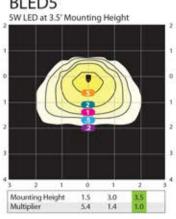
#### FXLED78

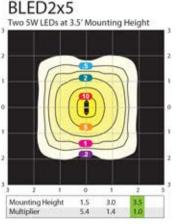


#### EZLED78

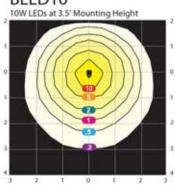


#### BLED5

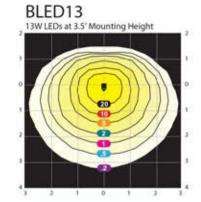


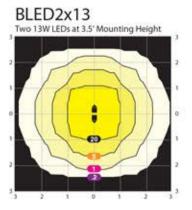


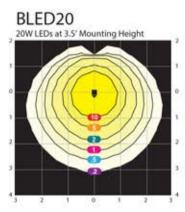
#### BLED10

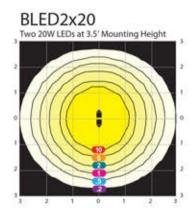


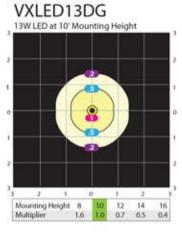
# BLED2x10 Two 10W LEDs at 3.5' Mounting Height



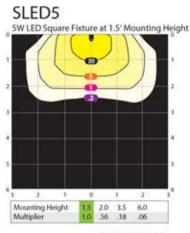


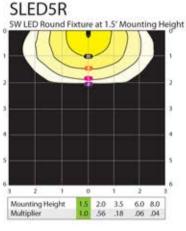


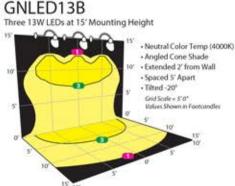


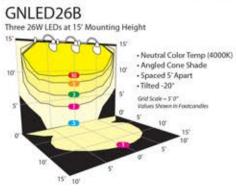












# engineered to perform.

	Product	Equivalency	Replacement Range	Delivered Lumens	Mounting Height	Voltage
	ENTRA12	70W MH	50-70W MH	1284	8 - 10'	100-277
LPACK	WPLED5	13W CFL or 60W Incan.	13-26W CFL, 13-60W Incan.	196	8 - 10'	100-240
CED WALLPACKS	WPLED10	70W MH	35-100W MH	547	8 - 12'	100-240
	WPLED13	100W MH	70-150W MH	1064	8 - 20"	100-277
Bronze	WPLED20	150W MH	100-175W MH	1401	10 - 25"	100-277
Whate -	WPLED26	175W MH	150-200W MH	1816	10 - 25'	100-277
	WPLED52	250W MH	250W MH	3884	20 - 35"	100-277
	WPLED78	400W MH	200-400W MH	5456	20 - 351	100-277
	WPLED104	400W MH	200-400W MH	8902	20 - 35'	100-277
	WPLED104/480	400W MH	200-400W MH	8902	20 - 35"	347-480
EL OOD	LFLED5	35W MR16	35W MR16	2081	22-111	100-240
SD FLOODLIGHTS Bronze	HBLED10	45W PAR	45-75W PAR	3381	10000	100-240
White -	HBLED13	90W PAR	90-100W PAR	7241		100-277
Back*	HSLED13	90W PAR	90-100W PAR	787		100-277
Verde Green*	FFLED18	70W MH	35-150W MH	1624	8 - 15'	100-277
Brass**	FFLED39	150W MH	100-175W MH	2999	10+20'	100-277
Marchitol Million	FXLED78	250W MH	150-320W MH	5927	0 - 35'	100-277
military Articles and Articles	EZLED78	250W MH	150-320W MH	5765	0 - 35'	100-277
ALED:	ALED10	35W MH	35-50W MH	547	10 - 15'	100-240
ALED LED ARIA LIGHTS	ALED13	50W MH	3S-70W MH	1064	10 - 20'	100-277
APER CIGHTS	ALED20	50W MH	35-70W MH	1401	10 - 25'	100-277
	ALED26	70W MH	42W CFL, up to 100W MH	1816	15+25"	100-277
Bronze Bronze	ALED52	100W MH	70-150W MH	3884	25 - 35'	100-277
White*	ALEDSTS2	175W MH	100-175W MH	3089	8 - 12'	100-277
200000000000000000000000000000000000000	ALED78*	250W MH	200-400W MH	4959	25 - 35'	100-277
Yer ALBSTS, ALBSTS ALBSTS, ALBSTS and cody	ALED5T78	250W MH	150-200W MH	4724	8 - 18'	100-277
	ALED104	400W MH	200-400W MH	8902	25 - 35'	100-277
	ALED104/480	400W MH	200-400W MH	8902	25 - 35'	347-480
	SLIM12	70W MH	50-70W MH	1401	1.5 - 8'	100-240
SLIM SE WALL PACE	SLIM18	100W MH	70-100W MH	1909	8 - 14'	100-277
Bronze -	SLIM26	17SW MH	100-175W MH	2648	15-22	100-277
White	SLIM37	200W MH	150-200W MH	2688	10 - 20'	100-277
	SLIM57	250W MH	175-250W MH	4262	12-25	100-277
	SLIM62	320W MH	175-320W MH	4775	15 - 30'	100-277
GLED'						
NEW MARRIAGE	GLED52	175W MH	100-175W MH	3644	9 - 15'	100-277
Bronze	GPLED52	175W MH	100-175W MH	3644	9 - 15	100-277
White	GLED78	250W MH	150-250W MH	5668	10 - 20"	100-277
	GPLED78	250W MH	150-250W MH	5668	10 - 20'	100-277

Values shown for cool temperature. Please visit rabweb.com for details on neutral and warm.

#### LED indoor also available.







REMODELER DOWNLIGHTS



NEW CONSTRUCTION DOWNLIGHTS



PANELS

To see our complete line of LED luminares visit rabweb.com



RAB is continually improving our products. Specifications may change without notice.

The designs of RAB fixtures are protected under U.S. and international intellectual property laws. Printed in the United States of America.