

DESCRIPTION

The RL LED luminaire provides uncompromising optical performance and outstanding versatility for a wide variety of area and roadway applications. Patented modular LightBAR™ technology delivers uniform and energy-conscious illumination to walkways, parking lots, and roadways. UL/cUL listed for wet locations.

| | | |
|--------------------|--|-------------|
| Catalog # | | Type |
| Project | | |
| Comments | | Date |
| Prepared by | | |

SPECIFICATION FEATURES

Construction

Heavy-duty cast aluminum housing and removable door. 3G vibration rated to ensure strength of construction and longevity in application. Die-cast aluminum door frame features integral hinges for tool-less maintenance access.

Optics

Choice of twelve patented, high-efficiency AccuLED Optics™ distributions. Optics are precisely designed to shape the light output, maximizing efficiency and application spacing. AccuLED Optics technology creates consistent distributions with the scalability to meet customized application requirements. Offered Standard in 4000K (+/- 275K) CCT and minimum 70 CRI. Optional 3000K CCT, 5000K CCT and 5700K CCT. For the ultimate level of spill light control, an optional house-side shield accessory can be field or factory installed. The house-side shield is designed to seamlessly integrate with the SL2, SL3 or SL4 optics.

Electrical

LED drivers mount to die-cast aluminum back housing for optimal heat sinking, operation efficacy, and prolonged life. Standard drivers feature electronic universal voltage (120-277V 50/60Hz), 347V 60Hz or 480V 60Hz operation. 480V is compatible for use with 480V Wye systems only. Greater than 0.9 power factor, less than 20% harmonic distortion, and is suitable for operation in -40°C to 40°C ambient environments. All fixtures are shipped standard with 10kV/10kA common – and differential – mode surge protection. LightBARs feature an IP66 enclosure rating and maintain greater than 95% lumen maintenance at 60,000 hours per IESNA TM-21. Occupancy sensor and dimming options available.

Mounting

Two-bolt/one-bracket slipfitter with cast-in pipe stop and leveling steps. Fixed-in-place birdguard seals around 1-1/4" or 2" mounting arms.

Finish

Components finished in a standard grey, five-stage super TGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear. Consult your lighting representative at Cooper Lighting Solutions for a complete selection of standard colors including black and bronze. RAL and custom color matches available. Options to meet Buy American and other domestic preference requirements.

Warranty

Five-year warranty.

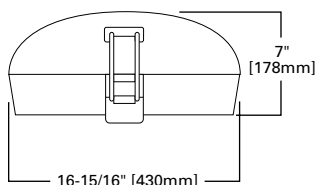
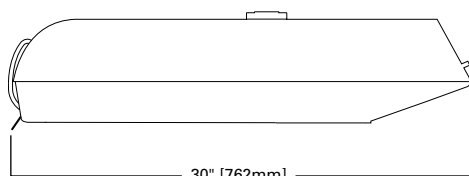


RL LED ROADWAY LARGE COBRAHEAD

1 - 6 LightBARs
LED

ROADWAY LUMINAIRE

DIMENSIONS



CERTIFICATION DATA

UL/cUL Listed
LM79 / LM80 Compliant
ISO 9001
IP66 LightBARs
3G Vibration Rated

ENERGY DATA

Electronic LED Driver
>0.9 Power Factor
<20% Total Harmonic Distortion
120-277V/50 & 60Hz, 347V/60Hz,
480V/60Hz
-40°C Minimum Temperature
40°C Ambient Temperature Rating
50°C [Optional] Ambient Temperature
Rating

EPA

Effective Projected Area: (Sq. Ft.)
0.87

SHIPPING DATA

Approximate Net Weight:
35 lbs. (15.91 kgs.)

POWER AND LUMENS BY BAR COUNT (21 LED LIGHTBARS)

| Number of LightBARs | | E01 | E02 | E03 | E04 | E05 | E06 |
|---------------------------|------------|---------------------|----------|----------|----------|----------|----------|
| Drive Current | | 350mA Drive Current | | | | | |
| Power (Watts) | | 25W | 52W | 75W | 97W | 127W | 149W |
| Current @ 120V (A) | | 0.22 | 0.44 | 0.63 | 0.82 | 1.07 | 1.26 |
| Current @ 277V (A) | | 0.10 | 0.20 | 0.28 | 0.36 | 0.48 | 0.56 |
| Power (Watts) | | 31W | 58W | 82W | 99W | 132W | 159W |
| Current @ 347V (A) | | 0.11 | 0.19 | 0.28 | 0.29 | 0.39 | 0.48 |
| Current @480V (A) | | 0.09 | 0.15 | 0.20 | 0.21 | 0.30 | 0.36 |
| T2 | Lumens | 2,999 | 5,997 | 8,996 | 11,994 | 14,993 | 17,991 |
| | BUG Rating | B1-U0-G1 | B2-U0-G2 | B3-U0-G3 | B3-U0-G3 | B3-U0-G3 | B3-U0-G3 |
| T3 | Lumens | 2,986 | 5,972 | 8,957 | 11,943 | 14,929 | 17,915 |
| | BUG Rating | B1-U0-G1 | B2-U0-G2 | B3-U0-G3 | B3-U0-G3 | B3-U0-G3 | B3-U0-G3 |
| T4 | Lumens | 2,939 | 5,877 | 8,816 | 11,754 | 14,693 | 17,632 |
| | BUG Rating | B1-U0-G1 | B1-U0-G2 | B1-U0-G2 | B2-U0-G3 | B2-U0-G3 | B2-U0-G3 |
| 5MQ | Lumens | 3,108 | 6,215 | 9,323 | 12,431 | 15,538 | 18,646 |
| | BUG Rating | B2-U0-G1 | B3-U0-G1 | B3-U0-G2 | B4-U0-G2 | B4-U0-G2 | B4-U0-G2 |
| 5WQ | Lumens | 3,066 | 6,131 | 9,197 | 12,262 | 15,328 | 18,393 |
| | BUG Rating | B2-U0-G1 | B3-U0-G1 | B3-U0-G2 | B4-U0-G2 | B4-U0-G2 | B4-U0-G2 |
| 5XQ | Lumens | 3,092 | 6,184 | 9,276 | 12,368 | 15,461 | 18,553 |
| | BUG Rating | B2-U0-G1 | B3-U0-G2 | B3-U0-G3 | B4-U0-G3 | B4-U0-G3 | B4-U0-G4 |
| SL2 | Lumens | 2,928 | 5,856 | 8,784 | 11,712 | 14,640 | 17,568 |
| | BUG Rating | B1-U0-G1 | B1-U0-G2 | B2-U0-G2 | B2-U0-G2 | B2-U0-G2 | B3-U0-G3 |
| SL3 | Lumens | 2,969 | 5,937 | 8,906 | 11,875 | 14,843 | 17,812 |
| | BUG Rating | B1-U0-G1 | B1-U0-G2 | B2-U0-G2 | B2-U0-G2 | B2-U0-G3 | B3-U0-G3 |
| SL4 | Lumens | 2,882 | 5,764 | 8,646 | 11,528 | 14,410 | 17,292 |
| | BUG Rating | B1-U0-G1 | B1-U0-G2 | B2-U0-G2 | B2-U0-G2 | B2-U0-G3 | B3-U0-G3 |
| RW | Lumens | 3,004 | 6,007 | 9,011 | 12,015 | 15,018 | 18,022 |
| | BUG Rating | B2-U0-G2 | B3-U0-G3 | B3-U0-G3 | B3-U0-G3 | B4-U0-G4 | B4-U0-G4 |
| SLL/SLR | Lumens | 2,693 | 5,387 | 8,080 | 10,774 | 13,467 | 16,161 |
| | BUG Rating | B1-U0-G2 | B1-U0-G2 | B1-U0-G3 | B2-U0-G3 | B2-U0-G4 | B2-U0-G4 |

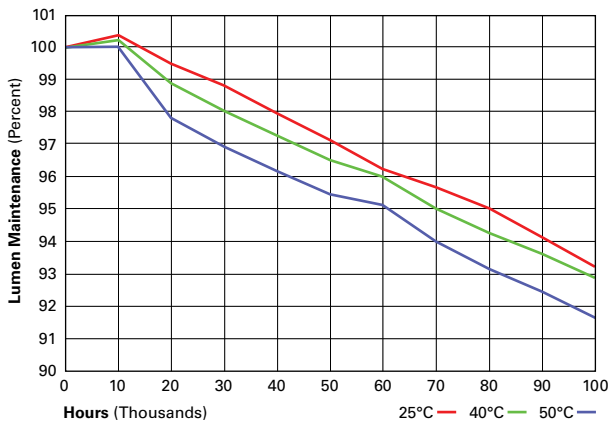
LUMEN MAINTENANCE

| Ambient Temperature | 25,000 Hours* | 50,000 Hours* | 60,000 Hours* | 100,000 Hours | Theoretical L70 (Hours) |
|---------------------|---------------|---------------|---------------|---------------|-------------------------|
| 25°C | > 99% | > 97% | > 96% | > 93% | > 450,000 |
| 40°C | > 98% | > 97% | > 96% | > 92% | > 425,000 |
| 50°C | > 97% | > 96% | > 95% | > 91% | > 400,000 |

* Per IESNA TM-21 data.

LUMEN MULTIPLIER

| Ambient Temperature | Lumen Multiplier |
|---------------------|------------------|
| 10°C | 1.02 |
| 15°C | 1.01 |
| 25°C | 1.00 |
| 40°C | 0.99 |
| 50°C | 0.96 |



POWER AND LUMENS BY BAR COUNT (7 LED LIGHTBARS)

| Number of LightBARs | | F01 | F02 | F03 | F04 | F05 | F06 |
|---------------------|------------|------------------|----------|----------|----------|----------|----------|
| Drive Current | | 1A Drive Current | | | | | |
| Power (Watts) | | 26W | 55W | 78W | 102W | 133W | 157W |
| Current @ 120V (A) | | 0.22 | 0.46 | 0.66 | 0.86 | 1.12 | 1.31 |
| Current @ 277V (A) | | 0.10 | 0.21 | 0.29 | 0.37 | 0.50 | 0.58 |
| Power (Watts) | | 32W | 60W | 85W | 105W | 137W | 164W |
| Current @ 347V (A) | | 0.11 | 0.19 | 0.28 | 0.30 | 0.41 | 0.49 |
| Current @ 480V (A) | | 0.09 | 0.15 | 0.21 | 0.22 | 0.31 | 0.37 |
| T2 | Lumens | 2,475 | 4,951 | 7,426 | 9,902 | 12,377 | 14,852 |
| | BUG Rating | B1-U0-G1 | B2-U0-G2 | B2-U0-G2 | B3-U0-G3 | B3-U0-G3 | B3-U0-G3 |
| T3 | Lumens | 2,465 | 4,930 | 7,395 | 9,859 | 12,324 | 14,789 |
| | BUG Rating | B1-U0-G1 | B2-U0-G2 | B2-U0-G2 | B3-U0-G3 | B3-U0-G3 | B3-U0-G3 |
| T4 | Lumens | 2,426 | 4,852 | 7,278 | 9,704 | 12,129 | 14,555 |
| | BUG Rating | B1-U0-G1 | B1-U0-G2 | B1-U0-G2 | B2-U0-G2 | B2-U0-G3 | B2-U0-G3 |
| 5MQ | Lumens | 2,565 | 5,131 | 7,696 | 10,262 | 12,827 | 15,393 |
| | BUG Rating | B2-U0-G1 | B3-U0-G1 | B3-U0-G1 | B3-U0-G2 | B4-U0-G2 | B4-U0-G2 |
| 5WQ | Lumens | 2,531 | 5,061 | 7,592 | 10,123 | 12,654 | 15,184 |
| | BUG Rating | B2-U0-G1 | B3-U0-G1 | B3-U0-G2 | B4-U0-G2 | B4-U0-G2 | B4-U0-G2 |
| 5XQ | Lumens | 2,553 | 5,105 | 7,658 | 10,210 | 12,763 | 15,316 |
| | BUG Rating | B2-U0-G1 | B3-U0-G2 | B3-U0-G3 | B4-U0-G3 | B4-U0-G3 | B4-U0-G3 |
| SL2 | Lumens | 2,417 | 4,834 | 7,251 | 9,668 | 12,086 | 14,503 |
| | BUG Rating | B1-U0-G1 | B1-U0-G1 | B1-U0-G2 | B2-U0-G2 | B2-U0-G2 | B2-U0-G2 |
| SL3 | Lumens | 2,451 | 4,901 | 7,352 | 9,803 | 12,254 | 14,704 |
| | BUG Rating | B1-U0-G1 | B1-U0-G1 | B1-U0-G2 | B2-U0-G2 | B2-U0-G2 | B2-U0-G3 |
| SL4 | Lumens | 2,379 | 4,758 | 7,138 | 9,517 | 11,896 | 14,275 |
| | BUG Rating | B1-U0-G1 | B1-U0-G2 | B1-U0-G2 | B2-U0-G2 | B2-U0-G2 | B2-U0-G3 |
| RW | Lumens | 2,480 | 4,959 | 7,439 | 9,918 | 12,398 | 14,878 |
| | BUG Rating | B1-U0-G1 | B2-U0-G2 | B3-U0-G3 | B3-U0-G3 | B3-U0-G3 | B4-U0-G4 |
| SLL/SLR | Lumens | 2,224 | 4,447 | 6,671 | 8,894 | 11,118 | 13,341 |
| | BUG Rating | B1-U0-G1 | B1-U0-G2 | B1-U0-G3 | B1-U0-G3 | B2-U0-G3 | B2-U0-G4 |

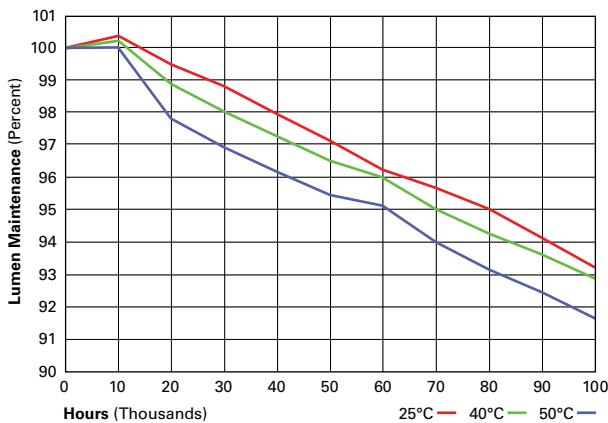
LUMEN MAINTENANCE

| Ambient Temperature | 25,000 Hours* | 50,000 Hours* | 60,000 Hours* | 100,000 Hours | Theoretical L70 (Hours) |
|---------------------|---------------|---------------|---------------|---------------|-------------------------|
| 25°C | > 99% | > 97% | > 96% | > 93% | > 450,000 |
| 40°C | > 98% | > 97% | > 96% | > 92% | > 425,000 |
| 50°C | > 97% | > 96% | > 95% | > 91% | > 400,000 |

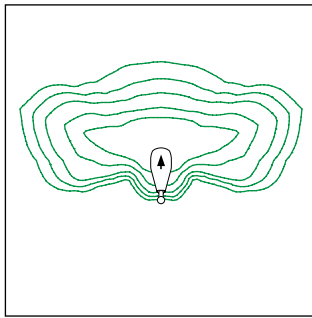
* Per IESNA TM-21 data.

LUMEN MULTIPLIER

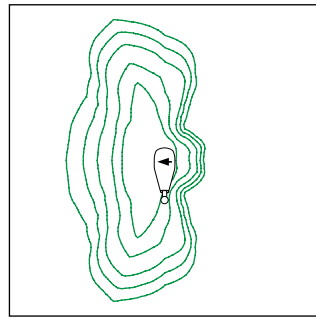
| Ambient Temperature | Lumen Multiplier |
|---------------------|------------------|
| 10°C | 1.02 |
| 15°C | 1.01 |
| 25°C | 1.00 |
| 40°C | 0.99 |
| 50°C | 0.96 |



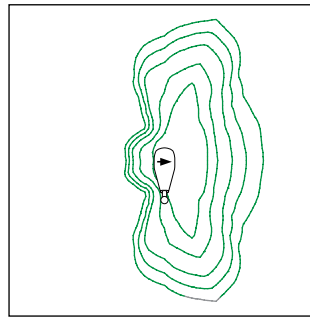
OPTIC ORIENTATION



Standard



Optics Rotated Left @ 90° [L90]



Optics Rotated Right @ 90° [R90]

CONTROL OPTIONS

0-10V (DIM)

This fixture is offered standard with 0-10V dimming driver(s). The DIM option provides 0-10V dimming wire leads for use with a lighting control panel or other control method.

Photocontrol (PER and PER7)

Photocontrol receptacles (PER and PER7) provide a flexible solution to enable “dusk-to-dawn” lighting by sensing light levels. Advanced control systems compatible with NEMA 7-pin standards can be utilized with the PER7 receptacle.

WaveLinx Wireless Outdoor Lighting Control Module (WOLC-7P-10A)

The 7-pin wireless outdoor lighting control module enables WaveLinx to control outdoor area, site and flood lighting. WaveLinx controls outdoor lighting using schedules to provide ON, OFF and dimming controls based on astronomic or time schedules based on a 7 day week.

ORDERING INFORMATION

Sample Number: LDRL-T3-E06-E-AP

| Lamp Type | Product Family ¹ | Distribution | Number of LightBARs ^{2,3} | Voltage |
|--|------------------------------------|---|--|---|
| LD =Solid State Light Emitting Diodes BAA-LD =Solid State Light Emitting Diodes, Buy American Act Compliant ¹⁰ TAA-LD =Solid State Light Emitting Diodes, Trade Agreements Act Compliant ¹⁰ | RL =Roadway Large Cobrahead | T2 =Type II T3 =Type III T4 =Type IV SL2 =Type II w/Spill Control SL3 =Type III w/Spill Control SL4 =Type IV w/Spill Control RW =Rectangular Wide 5MQ =Type V Square Medium 5WQ =Type V Square Wide 5XQ =Type V Square Extra Wide SLL =90° Spill Light Eliminator Left SLR =90° Spill Light Eliminator Right | E01 =(1) 21 LED LightBAR E02 =(2) 21 LED LightBARs E03 =(3) 21 LED LightBARs E04 =(4) 21 LED LightBARs E05 =(5) 21 LightBARs E06 =(6) 21 LightBARs F01 =(1) 7 LED LightBAR F02 =(2) 7 LED LightBARs F03 =(3) 7 LED LightBARs F04 =(4) 7 LED LightBARs F05 =(5) 7 LED LightBARs F06 =(6) 7 LED LightBARs | E =Universal (120-277V) 347 =347V 480 =480V ⁴ |
| Options (Add as Suffix) | | | Accessories (Order Separately)¹¹ | |
| 7030 =70 CRI / 3000K CCT ⁵ 7050 =70 CRI / 5000K CCT ⁵ 7060 =70 CRI / 5700K CCT ⁵ 8030 =80 CRI / 3000K CCT ⁵ HA =50°C High Ambient Temperature Rating PER =NEMA Twistlock Photocontrol Receptacle PER7 =NEMA 7-PIN Twistlock Photocontrol Receptacle DIM =0-10V Dimming Driver 2L =Two Circuits ⁶ L90 =Optics Rotated Left 90° R90 =Optics Rotated Right 90° LCF =LightBAR Cover Plate Matches Housing Finish K =Level Indicator HSS =Factory Installed House Side Shield ⁷ BK =Black BZ =Bronze | | | OA/RA1013 =Photocontrol Shorting Cap OA/RA1014 =NEMA Photocontrol - 120V OA/RA1016 =NEMA Photocontrol - Multi-Tap OA/RA1027 =NEMA Photocontrol - 480V OA/RA1201 =NEMA Photocontrol - 347V MA1252 =10kV Circuit Module Replacement LB/HSS-21 =Field Installed House Side Shield for “E” LightBARs ^{7,8} LB/HSS-07 =Field Installed House Side Shield for “F” LightBARs ^{7,8} WOLC-7P-10A =WaveLinx Outdoor Control Module (7-pin) ⁹ | |

- NOTES:**
- Customer is responsible for engineering analysis to confirm pole and fixture compatibility for all applications. Refer to our white paper WP513001EN for additional support information.
 - Standard 4000K CCT and 70 CRI nominal.
 - 21 LED LightBAR powered at 350mA, 7 LED LightBAR powered at 1A.
 - Only for use with 480V Wye systems. Per NEC, not for use with ungrounded systems, impedance grounded systems or corner grounded systems (commonly known as Three Phase Three Wire Delta, Three Phase High Leg Delta and Three Phase Corner Grounded Delta systems).
 - Extended lead times apply. See website for IES files.
 - Low-level output varies by bar count specified. Consult factory. Not available with 347V or 480V. Requires quantity two or more light bars.
 - Only for use with SL2, SL3 and SL4 distributions. Not available with L90 or R90 options.
 - One required for each light bar. Not available with L90 or R90 options.
 - Requires 7-pin NEMA twistlock photocontrol receptacle. The WOLC-7 cannot be used in conjunction with additional sensors or controls.
 - Only product configurations with these designated prefixes are built to be compliant with the Buy American Act of 1933 (BAA) or Trade Agreements Act of 1979 (TAA), respectively. Please refer to [DOMESTIC PREFERENCES](#) website for more information. Components shipped separately may be separately analyzed under domestic preference requirements.
 - Accessories sold separately will be separately analyzed under domestic preference requirements. Consult factory for further information.