

## 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.

<b>Catalog #</b>		<b>Type</b>
<b>Project</b>		
<b>Comments</b>		<b>Date</b>
<b>Prepared by</b>		

## 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.

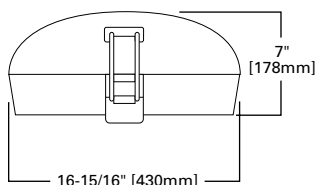
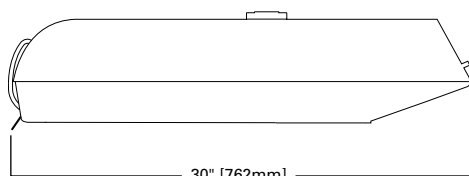


## RL LED ROADWAY LARGE COBRAHEAD

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
<b>Drive Current</b>		350mA Drive Current					
<b>Power (Watts)</b>		25W	52W	75W	97W	127W	149W
<b>Current @ 120V (A)</b>		0.22	0.44	0.63	0.82	1.07	1.26
<b>Current @ 277V (A)</b>		0.10	0.20	0.28	0.36	0.48	0.56
<b>Power (Watts)</b>		31W	58W	82W	99W	132W	159W
<b>Current @ 347V (A)</b>		0.11	0.19	0.28	0.29	0.39	0.48
<b>Current @480V (A)</b>		0.09	0.15	0.20	0.21	0.30	0.36
<b>T2</b>	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
<b>T3</b>	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
<b>T4</b>	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
<b>5MQ</b>	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
<b>5WQ</b>	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
<b>5XQ</b>	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
<b>SL2</b>	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
<b>SL3</b>	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
<b>SL4</b>	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
<b>RW</b>	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
<b>SLL/SLR</b>	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

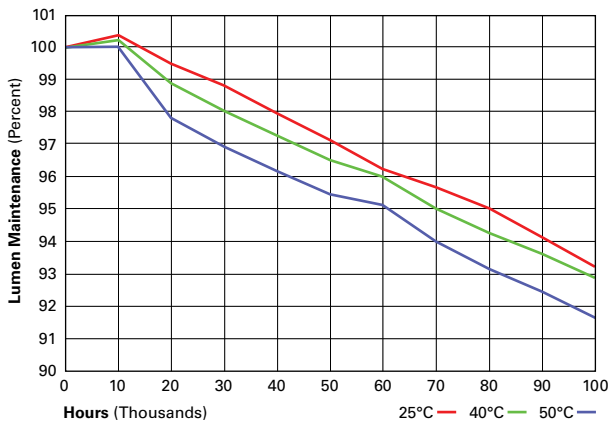
**LUMEN MAINTENANCE**

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

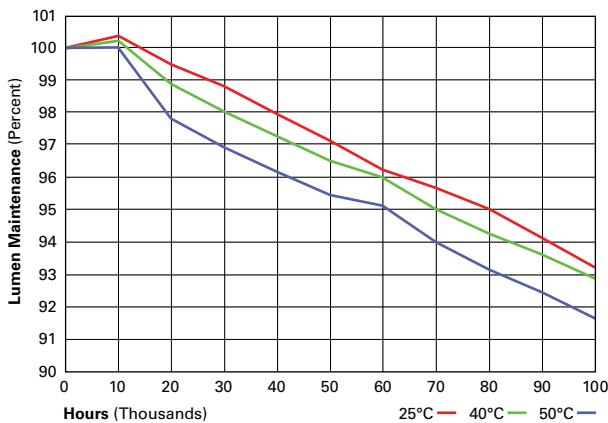
**LUMEN MAINTENANCE**

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

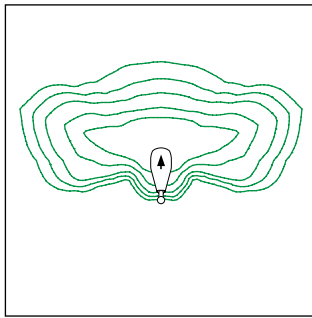
\* Per IESNA TM-21 data.

**LUMEN MULTIPLIER**

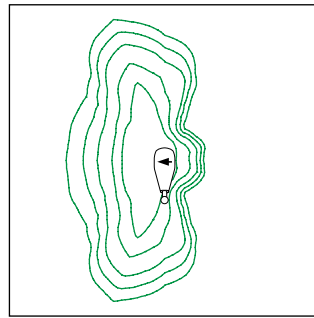
Ambient Temperature	Lumen Multiplier
10°C	1.02
15°C	1.01
25°C	1.00
40°C	0.99
50°C	0.96



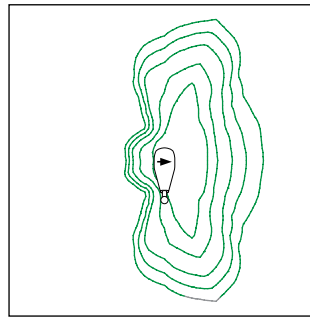
**OPTIC ORIENTATION**



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

- 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.