

## DESCRIPTION

The OVF LED roadway 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" to 2" (1-5/8" to 2-3/8" O.D.) 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.

### Warranty

Five-year warranty.

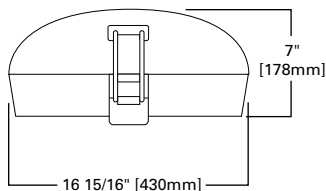
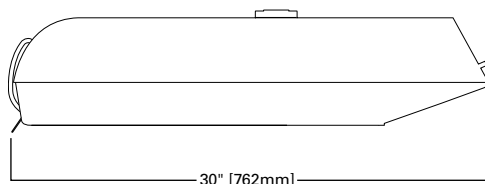


## OVF LED ROADWAY LARGE COBRAHEAD

1 - 6 LightBARs  
LED

ROADWAY LUMINAIRE

## DIMENSIONS



### CERTIFICATION DATA

UL/cUL Listed  
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

### EPA

**Effective Projected Area:** (Sq. Ft.)  
0.87

### SHIPPING DATA

**Approximate Net Weight:**  
35 lbs. (15.87 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

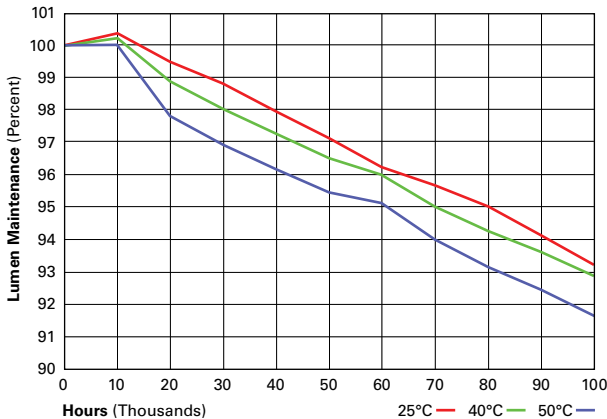
**LUMEN MAINTENANCE**

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
<b>Drive Current</b>		1A Drive Current					
<b>Power (Watts)</b>		26W	55W	78W	102W	133W	157W
<b>Current @ 120V (A)</b>		0.22	0.46	0.66	0.86	1.12	1.31
<b>Current @ 277V (A)</b>		0.10	0.21	0.29	0.37	0.50	0.58
<b>Power (Watts)</b>		32W	60W	85W	105W	137W	164W
<b>Current @ 347V (A)</b>		0.11	0.19	0.28	0.30	0.41	0.49
<b>Current @ 480V (A)</b>		0.09	0.15	0.21	0.22	0.31	0.37
<b>T2</b>	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
<b>T3</b>	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
<b>T4</b>	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
<b>5MQ</b>	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
<b>5WQ</b>	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
<b>5XQ</b>	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
<b>SL2</b>	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
<b>SL3</b>	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
<b>SL4</b>	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
<b>RW</b>	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
<b>SLL/SLR</b>	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

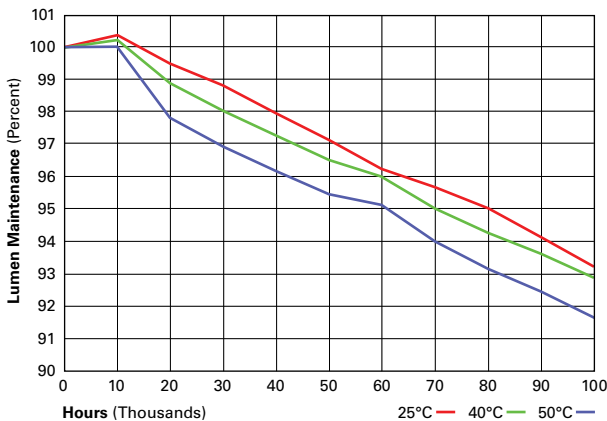
**LUMEN MAINTENANCE**

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**

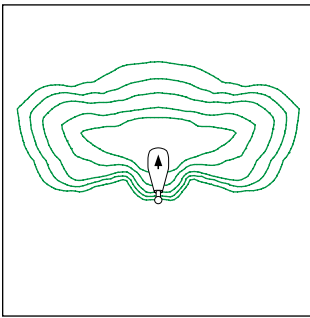
Ambient Temperature	Lumen Multiplier
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15°C	1.01
25°C	1.00
40°C	0.99
50°C	0.96



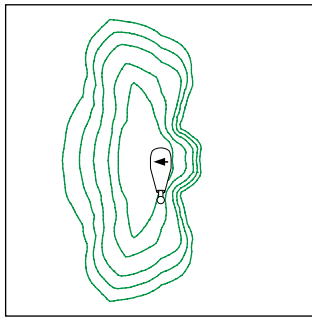
Cooper Lighting Solutions  
 1121 Highway 74 South  
 Peachtree City, GA 30269  
 P: 770-486-4800  
 www.cooperlighting.com

Specifications and dimensions subject to change without notice.

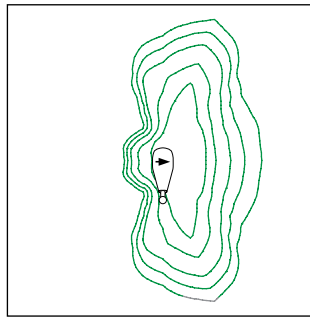
**OPTIC ORIENTATION**



**Standard**



**Optics Rotated Left @ 90° (L90)**



**Optics Rotated Right @ 90° (R90)**

**ORDERING INFORMATION**

Sample Number: OVF-E01-LED-E-U-T3-AP

Product Family <sup>1</sup>	Number of LightBARs <sup>2,3</sup>	Lamp Type	Ballast Type	Voltage	Distribution	Color
OVF=Roadway Large Cobrahead	E01=(1) 21 LED LightBAR E02=(2) 21 LED LightBARs E03=(3) 21 LED LightBARs E04=(4) 21 LED LightBARs E05=(5) 21 LED LightBARs E06=(6) 21 LED 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	LED=Solid State Light Emitting Diodes	E=Electronic	U=Universal 120-277V 8=480V <sup>4</sup> 9=347V	T2=Type II T3=Type III T4=Type IV SL2=Type II with Spill Control SL3=Type III with Spill Control SL4=Type IV with 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	AP=Grey BZ=Bronze BK=Black WH=White A=Raw Aluminum Unfinished
<b>Options (Add as Suffix)</b>					<b>Accessories (Order Separately)</b>	
4=NEMA Twistlock Photocontrol Receptacle 4N7=NEMA 7-PIN Twistlock Photocontrol Receptacle U=UL and cUL Listed K=Level Indicator 2L=Two Circuits <sup>5</sup> LCF=LightBAR Cover Plate Matches Housing Finish HSS=Factory Installed House Side Shield <sup>6</sup>			R90=Optics Rotated Right 90° L90=Optics Rotated Left 90° 7030=70 CRI / 3000K <sup>7</sup> 7050=70 CRI / 5000K <sup>7</sup> 7060=70 CRI / 5700K <sup>7</sup> 8030=80 CRI / 3000K <sup>7</sup> HA=50°C High Ambient		OA/RA1016=NEMA Photocontrol Multi-Tap OA/RA1014=NEMA Twistlock Photocontrol - 120V OA1223=10kV Circuit Module Replacement OA/RA1013=Photocontrol Shorting Cap LB/HSS-21=Field Installed House Side Shield for "E" LightBARs <sup>6,8</sup> LB/HSS-07=Field Installed House Side Shield for "F" LightBARs <sup>6,8</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.
  - 21 LED LightBAR powered at 350mA, 7 LED LightBAR powered at 1A.
  - Standard 4000K CCT and nominal 70 CRI.
  - 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).
  - 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 and R90 options.
  - Extended lead times apply. See website for IES files.
  - One required for each light bar. Not available with L90 and R90 options.