McGraw-Edison

DESCRIPTION

Incorporating modular LED LightBAR™ technology, the Talon luminaire brings outstanding uniformity and energy-conscious illumination to walkways, parking lots, roadways, building areas and any security lighting application. UL/ cUL listed for wet locations.

Catalog #		**Type**
Project		
Comments		**Date**
Prepared by		

SPECIFICATION FEATURES

Construction
One-piece heavy-wall, die-cast aluminum construction with integral reveal channels along top surface of housing. Optimized for reliable operation from 40°C down to -40°C, internal cast-in wall separates optical and electrical chambers allowing components to operate cooler. Stainless steel latches and hinges allow for tool-less opening and removal of door frame.

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.

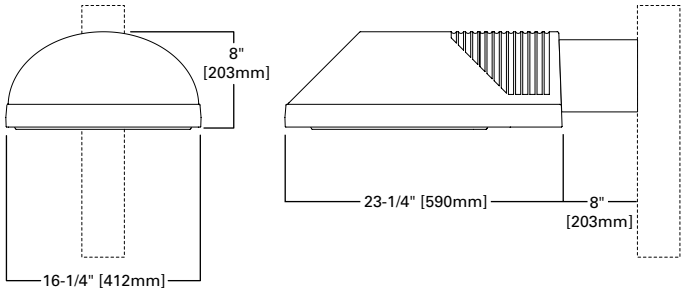
Electrical
LED drivers mount to die-cast aluminum back housing for optimal heat sinking, operation efficacy, and prolonged life. Standard drivers feature electronic universal voltage (120-277V 50/60Hz), 347V 60Hz or 480V 60Hz operation. 480V is compatible for use with 480V Wye systems only. Greater than 0.9 power factor, less than 20% harmonic distortion. 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
Extruded 8" aluminum arm includes internal bolt guides allowing for easy positioning of fixture during installation to pole or wall surface. Standard single carton packaging of housing, square pole arm and round pole adapter for contractor-friendly arrival of product on site. Optional mounting methods include a wall mount plate, an external mast arm that accepts 2-3/8" O.D. horizontal tenons and direct mounting to pole or wall surfaces. Tenon adapters available to slipfit over poles equipped with 2-3/8" or 3-1/2" O.D. tenon. 3G vibration rated.

Finish
Housing and arm finished in a five-stage super TGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear. Standard colors include black, bronze, grey, white, dark platinum and graphite metallic. RAL and custom color matches available. Consult the Product Finishes Selection Guide for complete list of available finishes. Options to meet Buy American Act requirements.

Warranty
Five year limited warranty, consult website for details.
www.cooperlighting.com/legal

DIMENSIONS



TLM
TALON MEDIUM LED

1 - 6 LightBARs

Solid State LED

ARCHITECTURAL AREA LUMINAIRE

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

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.)
1.89 with 8" Arm

SHIPPING DATA
Approximate Net Weight:
42 lbs. (19.09 kgs.)

COOPER Lighting Solutions

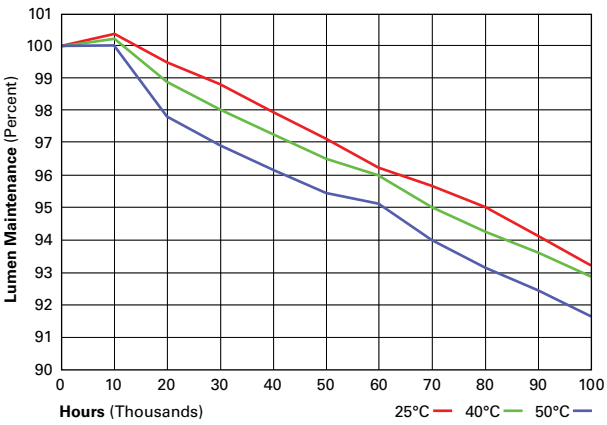
POWER AND LUMENS BY BAR COUNT (21 LED LIGHTBARS)

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	3,064	6,128	9,192	12,255	15,319	18,383
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3
T3	Lumens	3,084	6,168	9,252	12,336	15,420	18,504
	BUG Rating	B1-U0-G1	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3
T4	Lumens	3,022	6,044	9,066	12,088	15,110	18,132
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G3
5MQ	Lumens	3,224	6,448	9,672	12,896	16,120	19,344
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2
5WQ	Lumens	3,184	6,368	9,551	12,735	15,919	19,103
	BUG Rating	B2-U0-G1	B3-U0-G1	B4-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3
5XQ	Lumens	3,181	6,361	9,542	12,722	15,903	19,083
	BUG Rating	B2-U0-G2	B3-U0-G2	B3-U0-G3	B4-U0-G3	B4-U0-G4	B4-U0-G4
SL2	Lumens	3,055	6,110	9,165	12,220	15,275	18,331
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3
SL3	Lumens	3,036	6,072	9,108	12,145	15,181	18,217
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G3
SL4	Lumens	2,954	5,908	8,862	11,816	14,771	17,725
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G3
RW	Lumens	3,124	6,248	9,372	12,496	15,620	18,744
	BUG Rating	B2-U0-G2	B3-U0-G3	B3-U0-G3	B4-U0-G4	B4-U0-G4	B4-U0-G4
SLL/SLR	Lumens	2,782	5,565	8,347	11,130	13,912	16,695
	BUG Rating	B1-U0-G1	B1-U0-G2	B1-U0-G3	B2-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

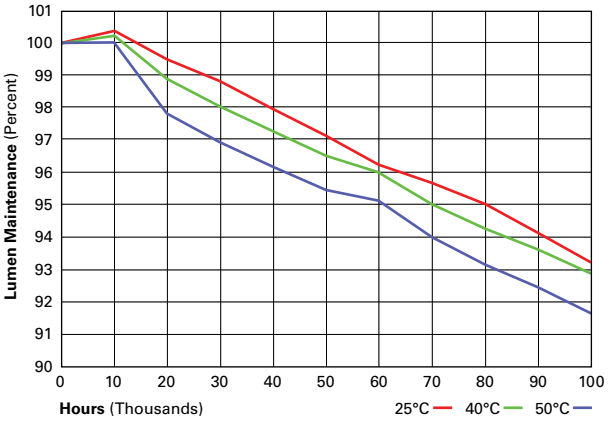
POWER AND LUMENS BY BAR COUNT (7 LED LIGHTBARS)

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	2,529	5,059	7,588	10,117	12,646	15,176
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3
T3	Lumens	2,546	5,092	7,638	10,183	12,729	15,275
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3
T4	Lumens	2,495	4,990	7,484	9,979	12,474	14,969
	BUG Rating	B1-U0-G1	B1-U0-G2	B1-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G3
5MQ	Lumens	2,662	5,323	7,985	10,646	13,308	15,969
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2
5WQ	Lumens	2,628	5,257	7,885	10,513	13,142	15,770
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2
5XQ	Lumens	2,626	5,251	7,877	10,502	13,128	15,754
	BUG Rating	B2-U0-G1	B3-U0-G2	B3-U0-G3	B4-U0-G3	B4-U0-G3	B4-U0-G4
SL2	Lumens	2,522	5,044	7,566	10,088	12,610	15,132
	BUG Rating	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G3
SL3	Lumens	2,506	5,013	7,519	10,026	12,532	15,039
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G3
SL4	Lumens	2,439	4,877	7,316	9,755	12,193	14,632
	BUG Rating	B1-U0-G1	B1-U0-G2	B1-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G3
RW	Lumens	2,579	5,158	7,737	10,316	12,894	15,473
	BUG Rating	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B4-U0-G4	B4-U0-G4
SLL/SLR	Lumens	2,297	4,594	6,891	9,188	11,485	13,782
	BUG Rating	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G3	B2-U0-G3	B2-U0-G3

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

MOUNTING CONFIGURATIONS

Wall Mount

Arm Mount Single
EPA 1.89

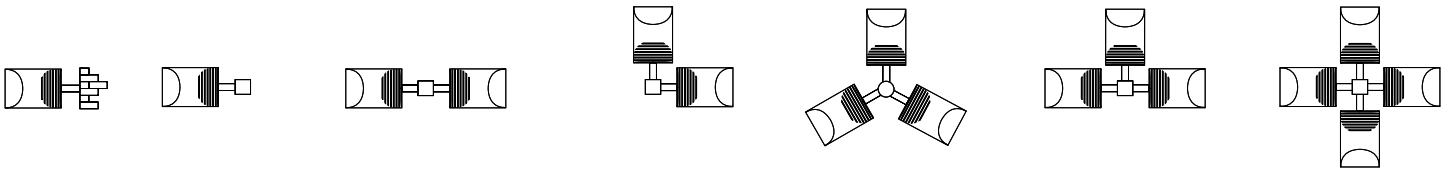
Arm Mount 2 @ 180°
EPA 3.55

Arm Mount 2 @ 90°
EPA 3.43

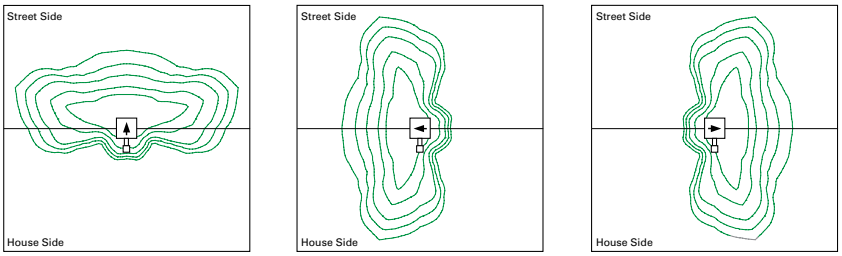
Arm Mount 3 @ 120°
(Round Pole Only)
EPA 3.69

Arm Mount 3 @ 90°
EPA 3.92

Arm Mount 4 @ 90°
EPA 4.17



OPTIC ORIENTATION



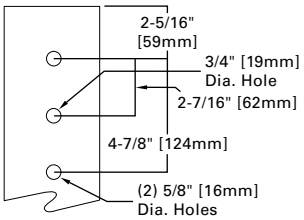
Standard

Optics Rotated Left @ 90° [L90]

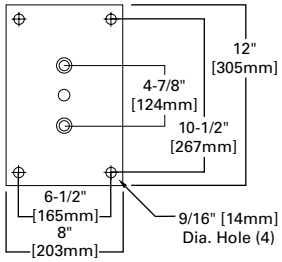
Optics Rotated Right @ 90° [R90]

ARM DRILLING

TYPE "M"



WALL MOUNT



CONTROL OPTIONS

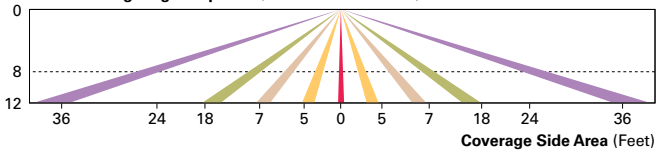
0-10V (DIM)
This fixture is offered standard with 0-10V dimming driver(s). The DIM option provides 0-10V dimming wire leads for use with a lighting control panel or other control method.

Photocontrol (P, R and PER7)
Optional button-type photocontrol (P) and photocontrol receptacles (R 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.

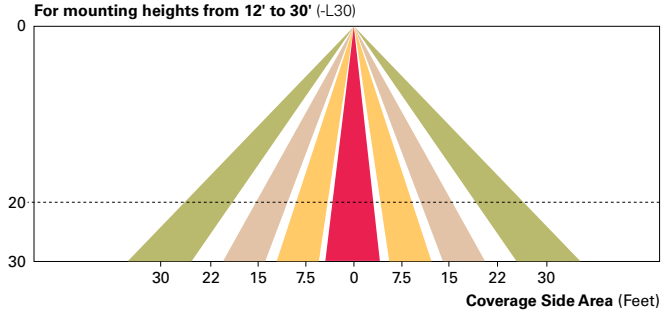
Dimming Occupancy Sensor (MS/DIM-LXX, MS/X-LXX and MS-LXX)
These sensors are factory installed in the luminaire housing. When the MS/DIM-LXX sensor option is selected, the occupancy sensor is connected to a dimming driver and the entire luminaire dims when there is no activity detected. When activity is detected, the luminaire returns to full light output. The MS/DIM sensor is factory preset to dim down to approximately 50 percent power with a time delay of five minutes. The MS-LXX sensor is factory preset to turn the luminaire off after five minutes of no activity. The MS/X-LXX is also preset for five minutes and only controls the specified number of light engines to maintain steady output from the remaining light engines.

These occupancy sensors includes an integral photocell that can be activated with the FSIR-100 accessory for "dusk-to-dawn" control or daylight harvesting -- the factory preset is OFF. The FSIR-100 is a wireless tool utilized for changing the dimming level, time delay, sensitivity and other parameters. A variety of sensor lens are available to optimize the coverage pattern for mounting heights from 8'-40'.

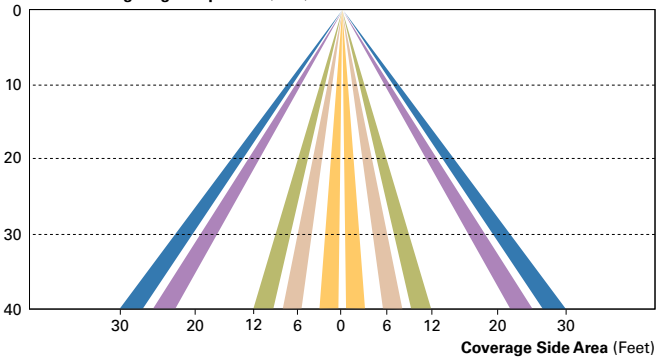
For mounting heights up to 8' (-L08 - Cutoff 8' to 24')



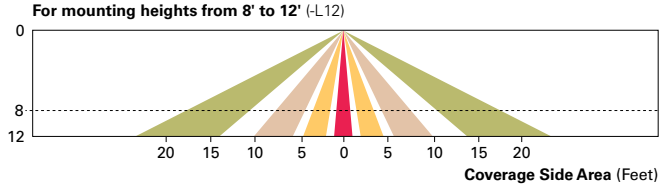
For mounting heights from 12' to 30' (-L30)



For mounting heights up to 40' (-L40)



For mounting heights from 8' to 12' (-L12)



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: TLM-E03-LED-E1-T3-BK

Product Family [1, 2]	Number of LightBARs [3, 4]	Lamp Typ	Voltage	Distribution	Color [7]
TLM=Talon Medium **BAA-TLM**= Talon Medium, Buy American Act Compliant [24]	**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	**E1**=Electronic (120-277V) **347**=347V **480**=480V [5]	**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 **5MQ**=Type V Square Medium **5WQ**=Type V Square Wide **5XQ**=Type V Square Extra Wide **RW**=Rectangular Wide **SLL**=90° Spill Light Eliminator Left **SLR**=90° Spill Light Eliminator Right	**AP**=Grey **BZ**=Bronze **BK**=Black **DP**=Dark Platinum **GM**=Graphite Metallic **WH**=White

Options (Add as Suffix)	**Accessories** (Order Separately) [17, 25]
P=Button Type Photocontrol (120, 208, 240 or 277V. Must Specify Voltage) **R**=NEMA Twistlock Photocontrol Receptacle **PER7**=NEMA 7-PIN Twistlock Photocontrol Receptacle [7] **PT**=Electrical Power Tray **2L**=Two Circuits [8] **7030**=70 CRI / 3000K CCT [9] **7050**=70 CRI / 5000K CCT [9] **7060**=70 CRI / 5700K CCT [9] **8030**=80 CRI / 3000K CCT [9] **LCF**=LightBAR Cover Plate Matches Housing Finish **WM**=Wall Mount with Arm **DM**=Direct Mount for Round or Square Pole **DW**=Direct Wall Mount **ICP**=Integral Cold Weather Battery Pack (Specify 120V or 277V) [6, 10] **MS-LXX**=Motion Sensor for On/Off Operation [11] **MS/X-LXX**=Motion Sensor for Bi-Level Operation [12] **MS/DIM-LXX**=Motion Sensor for Dimming Operation [13, 14] **DIM**=0-10V Dimming Drivers [15] **HSS**=Factory Installed House Side Shield [16] **WPS2XX**=WaveLinx Pro, SR Driver, Dimming Motion and Daylight, WAC Programmable, 7′ - 15′ Mounting [22, 23] **WPS4XX**=WaveLinx Pro, SR Driver, Dimming Motion and Daylight, WAC Programmable, 15′ - 40′ Mounting [22, 23]	**MA1010-XX**=Single Tenon Adapter for 3-1/2" O.D. Tenon **MA1011-XX**=2@180° Tenon Adapter for 3-1/2" O.D. Tenon **MA1012-XX**=3@120° Tenon Adapter for 3-1/2" O.D. Tenon **MA1013-XX**=4@90° Tenon Adapter for 3-1/2" O.D. Tenon **MA1014-XX**=2@90° Tenon Adapter for 3-1/2" O.D. Tenon **MA1015-XX**=2@120° Tenon Adapter for 3-1/2" O.D. Tenon **MA1016-XX**=3@90° Tenon Adapter for 3-1/2" O.D. Tenon **MA1017-XX**=Single Tenon Adapter for 2-3/8" O.D. Tenon **MA1018-XX**=2@180° Tenon Adapter for 2-3/8" O.D. Tenon **MA1019-XX**=3@120° Tenon Adapter for 2-3/8" O.D. Tenon **MA1045-XX**=4@90° Tenon Adapter for 2-3/8" O.D. Tenon **MA1048-XX**=2@90° Tenon Adapter for 2-3/8" O.D. Tenon **MA1049-XX**=3@90° Tenon Adapter for 2-3/8" O.D. Tenon **FSIR-100**=Wireless Configuration Tool for Occupancy Sensor [18] **OA/RA1016**=NEMA Twistlock Photocontrol - Multi-Tap **OA/RA1027**=NEMA Twistlock Photocontrol - 480V **OA/RA1201**=NEMA Twistlock Photocontrol - 347V **OA/RA1013**=Photocontrol Shorting Cap **MA1253**=10kV Circuit Module Replacement **LB/HSS-21**=Field Installed House Side Shield for "E" LightBARS [19] **LB/HSS-07**=Field Installed House Side Shield for "F" LightBARS [19] **WOLC-7P-10A**=WaveLinx Outdoor Control Module (7-pin) [20]

NOTES:
1. 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.
2. 8" arm and round pole adapter included with fixture.
3. Standard 4000K CCT and minimum 70 CRI.
4. 21 LED LightBAR powered at 350mA, 7 LED LightBAR powered at 1A.
5. 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).
6. Custom and RAL color matching available upon request. Consult your lighting representative at Cooper Lighting Solutions for more information.
7. Must order dimming driver.
8. Low-Level output varies by bar count specified. Consult Factory.
9. Extended lead times apply. See website for IES files.
10. Available with E01-E04 or F01-F04 configurations only. Rated for 25°C ambient.
11. Sensor housed in external box mounted to the luminaire. Available in E02-E6 and F02-F6 configurations. Replace XX with mounting height in feet for proper lens selection, (e.g., MS-L25). Consult factory for additional information.
12. Sensor housed in external box mounted to the luminaire. Available in E02-E6 and F02-F6 configurations. Replace X with number of bars operating in low output mode and replace XX with mounting height for proper lens selection, (e.g., MS/3-L25). Maximum 4 bars in low output mode. Consult factory for additional information.
13. Only available in E02-E06 and F02-F06. Includes Dimming Drivers. Not available in 347V or 480V.
14. Replace XX with mounting height in feet for proper lens selection, (e.g., MS/DIM-L25).
15. Available in E02-E06 and F02-F06 only.
16. Only for use with SL2, SL3 and SL4 distributions. Not available with L90 or R90 options.
17. Replace XX with color suffix.
18. Only compatible with MS/DIM-LXX motion sensor.
19. One required for each LightBAR. Not available with L90 or R90 options.
20. PER7 is required for use with WOLC-7P-10A. The WOLC-7 cannot be used in conjunction with additional sensors or controls.
21. Cannot be used in conjunction with photocontrol or other controls systems (P, R, MS, LWR).
22. WAC Gateway required to enable field-configurability: Order WAC-PoE and WPOE-120 (10V to PoE injector) power supply if needed.
23. Replace XX with sensor color (WH, BZ or BK.)
24. Only product configurations with this designated prefix are built to be compliant with the Buy American Act of 1933 (BAA). Please refer to DOMESTIC PREFERENCES website for more information. Components shipped separately may be separately analyzed under domestic preference requirements.
25. Accessories sold separately will be separately analyzed under domestic preference requirements. Consult factory for further information.