

DESCRIPTION

The Archeon™ Medium LED roadway luminaire delivers all the performance benefits of the latest Eaton LED platforms and technologies with a modern, yet familiar cobrahead form factor. This discrete LED solution with the patented, high-efficiency AccuLED Optics™ system, provides uniform and energy conscious illumination for municipal streets and highways. Our customer focused features include single latch tool-less entry, industry leading surge protection options and superior lumen maintenance and performance, all in an economical design. Available in 13 standard lumen packages per optic.

SPECIFICATION FEATURES

Construction

Heavy-duty die-cast aluminum housing and door. Tool-less entry, hinged removable door for easy access to terminal block, mounting bolts, and optional surge module. 3G vibration rated.

Optics

Choice of four patented, high-efficiency AccuLED Optics. Available in Type IIR, III, IV wide and V square wide the optics are precisely designed to shape the distribution maximizing efficiency and application spacing. Offered standard in 4000K (+/- 275K) CCT and minimum 70 CRI. Optional 2700K (80 CRI), 3000K (70 CRI), 5000K (70 CRI) CCT are available. For the ultimate level of spill light control, an optional house side shield accessory is available and can be field or factory installed. The house side shield is designed to seamlessly integrate with the

T2R, T3, and T4W optics.

Optics are IP66 enclosure rated.

Electrical

120-277V 50/60Hz, 347V 60Hz or 480V 60Hz operation. Standard 0-10V dimming with 6kV/3kA and 10kV/10kA common- and differential- mode surge protection available. Thermal management transfers heat away from the LED source for optimal efficiency, light output and lumen maintenance. Ambient operating temperature from -40°C to 40°C; 50°C HA, high ambient, capability available. Standard with three-position tunnel type compression terminal block. Greater than 90% lumen maintenance expected at 50,000 hours.

Mounting

Standard four-bolt/two-bracket slipfitter with cast-in pipe stop and 2.5° leveling steps, and door

Catalog #		Type
Project		
Comments		Date
Prepared by		

tether. Fixed-in-place bird guard seals around 1-1/4" to 2" (1-5/8" to 2-3/8" O.D.) mounting arms. Optional 15" pole mount arm available with round pole adapter and mounting hardware included.

Finish

Housing and cast parts finished in 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 Eaton for a complete selection of standard colors.

Warranty

Standard five-year warranty. Optional ten-year warranty, please see your Eaton Streetworks sales representative for more information.

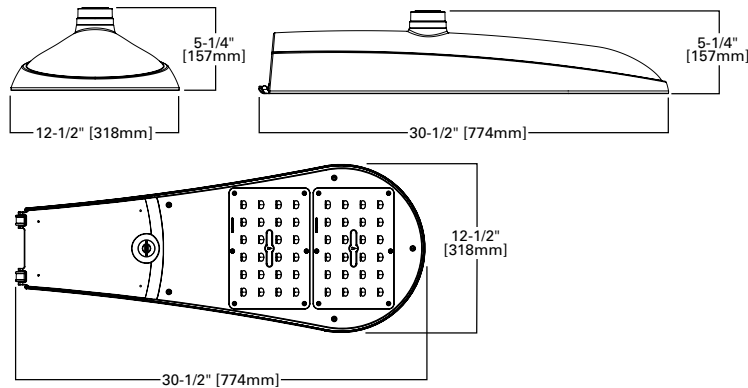


ARCH-M ARCHEON MEDIUM

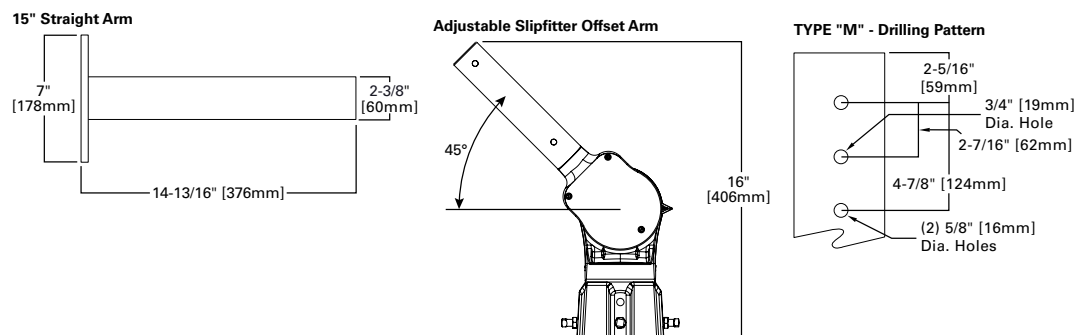
LED

ROADWAY LUMINAIRE

DIMENSIONS



OPTIONAL ARM



CERTIFICATION DATA

UL and cUL Wet Location Listed
IP66-Rated Optics
3G Vibration Rated
ISO 9001
DesignLights Consortium® Qualified*
Dark Sky Approved (3000K CCT and warmer only)

ENERGY DATA

Electronic LED Driver
0.9 Power Factor
<20% Total Harmonic Distortion
120-277V 50/60Hz
-40°C Minimum Temperature Rating
+40°C Ambient Temperature Rating

EPA

Effective Projected Area (Sq. Ft.): 0.71

SHIPPING DATA

Approximate Net Weight:
18 lbs. (8.16 kgs.)

POWER AND LUMENS

Light Engine - PA2*	PA2-40	PA2-50	PA2-60	PA2-70	PA2-80	PA2-90	PA2-100	PA2-110	PA2-120	PA2-130	PA2-140	PA2-150	PA2-160	
Power (Watts)	38	48	63	73	83	92	101	111	122	131	141	151	161	
Wattage Label	40	50	60	70	80	90	100	110	120	130	140	150	160	
Current (A) @ 120V	0.318	0.399	0.527	0.609	0.693	0.768	0.846	0.925	1.020	1.100	1.180	1.260	1.340	
Current (A) @ 277V	0.145	0.178	0.243	0.275	0.309	0.342	0.374	0.407	0.453	0.486	0.518	0.553	0.586	
Current (A) @ 347V	--	--	0.188	0.216	0.245	0.271	0.298	0.325	0.371	0.400	0.428	0.458	0.487	
Current (A) @ 480V	--	--	0.146	0.165	0.185	0.203	0.222	0.240	0.286	0.304	0.323	0.344	0.363	
Optics														
T2R	4000K/5000K	6,489	8,063	10,434	11,891	13,299	14,714	15,925	17,033	18,278	19,311	20,317	21,323	22,189
	BUG Rating	B1-U0-G1	B1-U0-G2	B1-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G3	B2-U0-G3	B2-U0-G3	B2-U0-G3
	3000K	5,911	7,342	9,502	10,829	12,111	13,400	14,501	15,512	16,646	17,586	18,502	19,418	20,206
T3	4000K/5000K	6,649	8,013	10,367	11,816	13,216	14,621	15,825	16,926	18,164	19,190	20,190	21,189	22,050
	BUG Rating	B1-U0-G2	B1-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G3	B2-U0-G3	B2-U0-G3	B2-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3
	3000K	5,873	7,297	9,441	10,761	12,036	13,317	14,410	15,415	16,542	17,476	18,388	19,297	20,081
T4W	4000K/5000K	6,416	7,971	10,313	11,756	13,147	14,547	15,742	16,839	18,070	19,091	20,085	21,080	21,936
	BUG Rating	B1-U0-G2	B1-U0-G2	B2-U0-G3	B2-U0-G3	B2-U0-G3	B2-U0-G3	B2-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4
	3000K	5,843	7,259	9,392	10,706	11,973	13,247	14,336	15,334	16,455	17,385	18,292	19,197	19,977
5WQ	4000K/5000K	6,619	8,223	10,640	12,127	13,563	15,007	16,241	17,372	18,642	19,694	20,721	21,747	22,629
	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G3	B4-U0-G3	B4-U0-G3	B4-U0-G3	B5-U0-G3	B5-U0-G3	B5-U0-G3
	3000K	6,029	7,489	9,690	11,043	12,353	13,666	14,789	15,820	16,977	17,935	18,870	19,804	20,609
T2U	4000K/5000K	6,411	7,965	10,306	11,747	13,138	14,535	15,731	16,826	18,056	19,076	20,070	21,064	21,918
	3000K	5,838	7,253	9,385	10,698	11,963	13,238	14,325	15,323	16,443	17,373	18,277	19,182	19,961
	BUG Rating	B2-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3

LUMEN MAINTENANCE

Light Engine	Ambient Temperature	TM-21 Lumen Maintenance (60,000 Hours)	Theoretical L70 (Hours)
PA2-40 to PA2-160	Up to 50°C	>95%	416,000

LUMEN MULTIPLIER

Ambient Temperature	0°C	10°C	25°C	40°C	50°C
Lumen Multiplier	1.02	1.01	1.00	0.99	0.97

CONTROL OPTIONS

Photocontrol (4 and 4N7)

Photocontrol receptacles (4 and 4N7) provide a flexible solution to enable “dusk-to-dawn” lighting by sensing light levels. Advanced control systems compatible with ANSI C136.41 7-pin standards can be utilized with the 4N7 receptacle.

Dimming Occupancy Sensor (MS/DIM-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. These occupancy sensors include 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'.

LumaWatt Pro Wireless Control and Monitoring (LWR-LW and LWR-LN)

Eaton’s LumaWatt Pro powered by Enlighted is a connected lighting solution that combines a broad selection of energy-efficient LED luminaires with a powerful integrated wireless sensor system. The sensor controls the lighting system in compliance with the latest energy codes and collects valuable data about building performance and use. Software applications turn the granular data into information through energy dashboards and specialized apps that make it simple and help optimize the use of building resources, beyond lighting. For additional details, refer to the LumaWatt Pro product guides.

ORDERING INFORMATION

Sample Number: ARCH-M-PA2-40-740-U-T2R-A15-AP-10K-PR

Product Family	Light Engine	Wattage Bucket	CCT	Voltage	Distribution	Mounting	Color
ARCH-M	PA2 = (2) Direct Mount Rectangle (48 LED)	40	740 = 70 CRI / 4000K	U=Universal (120-277V)	T2R=Type II Roadway	[BLANK] = None A15 = 15" Straight Arm (Included)	AP=Grey (Standard) BZ=Bronze BK=Black DP=Dark Platinum WH=White
		50			T2U=Type II Urban		
		60	727 = 70 CRI / 2700K	1 = 120V	T3=Type III		
		70		2 = 208 - 277V	T4W=Type IV Wide		
		80	827 = 80 CRI / 2700K	8=480V	5WQ=Type V Square Wide		
		90		9=347V			
		100	730 = 70 CRI / 3000K	H = High Voltage Driver (347V - 480V)			
		110					
		120	750 = 70 CRI / 5000K				
		130					
		140					
		150					
		160					

Options	Controls
<p>10K = 10kV UL 1449 Surge Protective Device 20K = 20kV UL 1449 Surge Protective Device 10MSP = 10kV MOV Surge Protective Device 20MSP = 20kV MOV Surge Protective Device K = Level Indicator HA = 50C High Ambient Temperature HSS = Factory Install House Side Shield PSC = Photocontrol Shorting Cap NPC = NEMA Photocontrol - Multi-Tap LLPC = Longlife Photocontrol Included IP66 = IP66 Rated Housing</p>	<p>PR = NEMA 3-PIN Twistlock Photocontrol Receptacle PR7 = NEMA 7-PIN Twistlock Photocontrol Receptacle MS/DIM-L08 = Motion Sensor for Dimming Operation, Maximum 8' Mounting Height MS/DIM-L20 = Motion Sensor for Dimming Operation, Maximum 9' - 20' Mounting Height MS/DIM-L40 = Motion Sensor for Dimming Operation, Maximum 21' - 40' Mounting Height LWR-LW= LumaWatt Pro Wireless Sensor, Wide Lens for 8' - 16' Mounting Heights LWR-LN= LumaWatt Pro Wireless Sensor, Narrow Lens for 16' - 40' Mounting Heights 5LTD = DALI</p>

Accessories
<p>OA / RA1013 = Photocontrol Shorting Cap OA1223 = 10kV Surge Module Replacement OA/RA1014 = NEMA Photocontrol - 120V OA/RA1016 = NEMA Photocontrol - Multi-Tap OA/RA1027 = NEMA Photocontrol - 480V OA/RA1201 = NEMA Photocontrol - 347V A15-XX = Arm (15" Straight Arm) 13, 14 FSIR-100 = Wireless Configuration Tool for Occupancy Sensor HS-ARCH = Factory Install ARCH House Side Shield</p>



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

Canada Sales
 5925 McLaughlin Road
 Mississauga, Ontario L5R 1B8
 P: 905-501-3000
 F: 905-501-3172

Specifications and dimensions subject to change without notice.

