

DESCRIPTION

The Archeon™ Small 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 14 standard lumen packages per optic making it the ideal LED replacement for any application of 50W to 150W HPS cobraheads.

SPECIFICATION FEATURES

Construction

Heavy-duty die-cast aluminum housing and door. Tool-less entry, hinged removable door for easy maintenance. 3G vibration rated.

Optics

Choice of four patented, high-efficiency AccuLED Optics. Available in Type IIR, IIU, 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 3000K, 5000K CCT. 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 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 60,000 hours.

Mounting

Two-bolt/one-bracket slipfitter with cast-in pipe stop and 2.5° leveling steps. 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.

Catalog #		Type	
Project			
Comments		Date	
Prepared by			

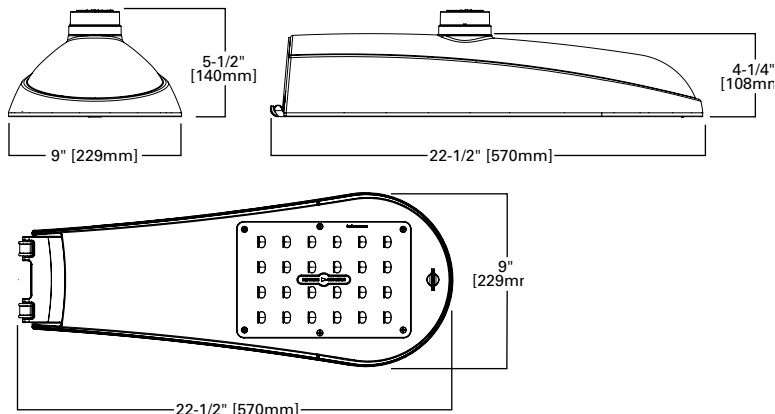


ARCH ARCHEON SMALL

LED

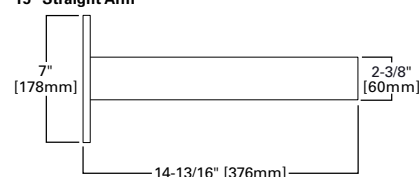
ROADWAY LUMINAIRE

DIMENSIONS

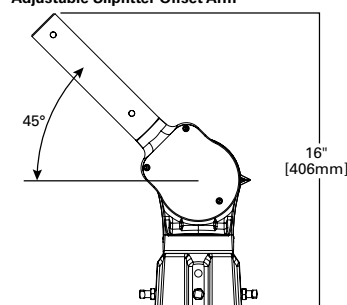


OPTIONAL ARM

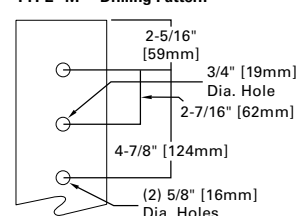
15" Straight Arm



Adjustable Slipfitter Offset Arm



TYPE "M" - Drilling Pattern



CERTIFICATION DATA

UL/cUL Wet Location Listed
IP66-Rated Optics
3G Vibration Rated
ISO 9001
DesignLights Consortium® Qualified*
Dark Sky Approved (3000K and warmer CCTs 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.): 0.5

SHIPPING DATA

Approximate Net Weight:
12 lbs. (5.4 kgs.)

POWER AND LUMENS (PA1 LIGHT ENGINE)

Light Engine - PA1	PA1-20	PA1-30	PA1-40	PA1-50	PA1-60	PA1-70	PA1-80	PA1-90	PA1-100	
Power (Watts)	21	31	40	54	64	74	83	94	96	
Wattage Label	20	30	40	50	60	70	80	90	100	
Input Current @ 120V (A)	0.179	0.257	0.338	0.450	0.534	0.619	0.695	0.783	0.798	
Input Current @ 277V (A)	--	0.122	0.155	0.212	0.244	0.279	0.312	0.347	0.354	
Input Current @ 347V(A)	--	0.100	0.125	0.161	0.187	0.217	0.244	0.275	0.280	
Input Current @ 480V (A)	--	0.073	0.094	0.127	0.145	0.165	0.184	0.205	0.209	
Optics										
T2R	4000K/5000K Lumens	3,398	4,756	6,137	7,912	9,083	10,127	10,942	11,729	11,850
	Bug Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G2	B2-U0-G2
	3000K Lumens	3,094	4,331	5,588	7,206	8,271	9,223	9,966	10,681	10,791
	Bug Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G2
T2U	4000K/5000K Lumens	3,385	4,739	6,114	7,884	9,052	10,091	10,905	11,688	11,809
	Bug Rating	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3
	3000K Lumens	3,084	4,316	5,568	7,180	8,243	9,189	9,930	10,644	10,755
	Bug Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2
T3	4000K/5000K Lumens	3,378	4,729	6,102	7,868	9,033	10,071	10,882	11,664	11,785
	Bug Rating	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2
	3000K Lumens	3,077	4,307	5,558	7,165	8,226	9,172	9,911	10,623	10,732
	Bug Rating	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2
T4W	4000K/5000K Lumens	3,357	4,700	6,062	7,819	8,976	10,006	10,813	11,591	11,710
	Bug Rating	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B2-U0-G2	B2-U0-G3	B2-U0-G3	B2-U0-G3	B2-U0-G3
	3000K Lumens	3,058	4,280	5,521	7,121	8,175	9,112	9,847	10,554	10,665
	Bug Rating	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G3	B2-U0-G3	B2-U0-G3
5WQ	4000K/5000K Lumens	3,452	4,832	6,234	8,040	9,230	10,291	11,120	11,918	12,042
	Bug Rating	B2-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G2	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2
	3000K Lumens	3,144	4,401	5,678	7,322	8,406	9,372	10,127	10,854	10,967
	Bug Rating	B2-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G2	B3-U0-G2	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2

LUMEN MAINTENANCE

Light Engine	Ambient Temperature	TM-21 Lumen Maintenance (60,000 Hours)	Theoretical L70 (Hours)
AF16-20 to AF16-50 & PA1-20 to PA1-80	Up to 50°C	>95%	416,000

LUMEN MULTIPLIER

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

ORDERING INFORMATION

Sample Number: ARCH-S-PA1-20-740-U-T2R-A15-AP-10K-PR

Product Family	Light Engine	Wattage Bucket	CCT	Voltage	Distribution	Mounting	Color
ARCH-S	PA1=Direct Mount Rectangle (24 LED)	20 30 40 50 60 70 80 90 100	740=70 CRI / 4000K 727=70 CRI / 2700K 827=80 CRI / 2700K 730=70 CRI / 3000K 750=70 CRI / 5000K	U=UNIVERSAL 1=120V 2=208 - 277V 8=480V 9=347V H=High Voltage Driver (347V-480V)	T2R=Type II Roadway T2U=Type II Urban T3=Type III T4W=Type IV Wide 5WQ=Type V Square Wide	[BLANK]=None A15=15" Straight Arm (Included)	AP=Grey (Standard) BZ=Bronze BK=Black DP=Dark Platinum WH=White
Options			Controls		Accessories		
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			PR=NEMA 3-PIN Twistlock Photocontrol Receptacle PR7=NEMA 7-PIN Twistlock Photocontrol Receptacle 5LTD=DALI		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 HS-ARCH-24=Factory Install ARCH House Side Shield for PA1		



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Specifications and dimensions subject to change without notice.

