

DESCRIPTION

The Archeon™ Nano LED roadway luminaire delivers all the performance benefits of the latest Cooper Lighting Solutions 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 7 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, 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, 3000K, or 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 Cooper Lighting Solutions for a complete selection of standard colors.

Warranty

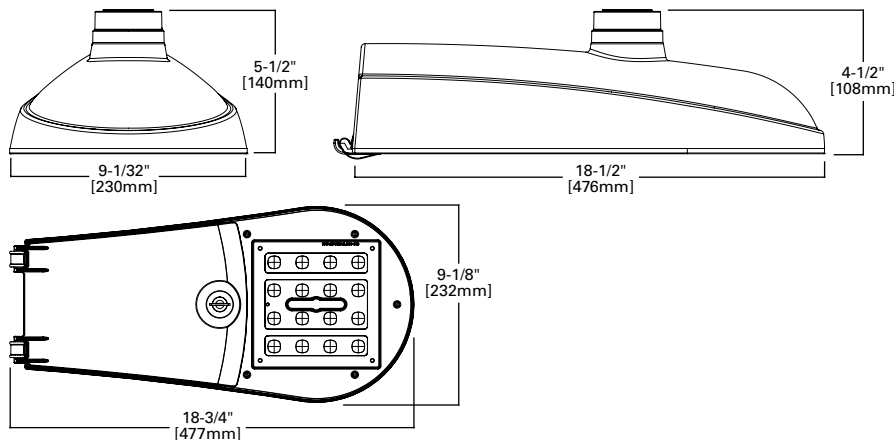
Standard five-year warranty. Optional ten-year warranty, please see your Cooper Lighting Solutions Streetworks sales representative for more information.



ARCH-N ARCHEON NANO LED

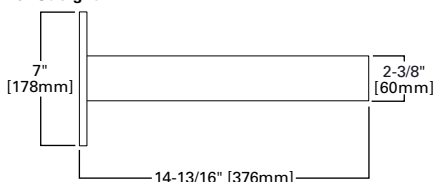
ROADWAY LUMINAIRE

DIMENSIONS

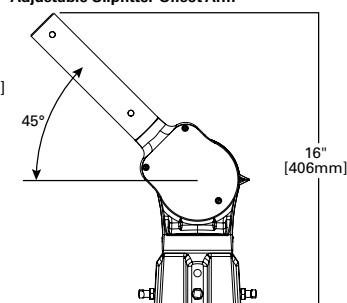


OPTIONAL ARM

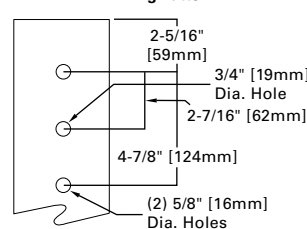
15" Straight Arm



Adjustable Slipfitter Offset Arm



TYPE "M" - Drilling Pattern



CERTIFICATION DATA



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

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.): 0.35

SHIPPING DATA

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

POWER AND LUMENS

Light Engine - PA		10	19	20	30	40	50	60
Power (Watts)		14	19	24	31	41	52	62
Label		10	20	20	30	40	50	60
Input current @ 120V (A)		0.117	0.159	0.201	0.261	0.344	0.438	0.521
Input current @ 277V (A)		0.056	0.074	0.098	0.121	0.155	0.212	0.244
Input current @ 347V (A)		0.045	0.065	0.080	0.100	0.127	0.173	0.200
Input current @ 480V (A)		0.037	0.047	0.058	0.072	0.093	0.126	0.147
Optics								
T2R	4000K/5000K Lumens	2267	3041	3444	4429	5594	6850	7706
	Bug Rating	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2
	3000K Lumens	2065	2770	3137	4034	5095	6238	7018
	Bug Rating	B0-U0-G1	B0-U0-G1	B0-U0-G1	B0-U0-G1	B0-U0-G1	B0-U0-G1	B0-U0-G1
T2U	4000K/5000K Lumens	2,246	3,013	3,413	4,388	5,543	6,787	7,635
	Bug Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2
	3000K Lumens	2,046	2,744	3,108	3,997	5,048	6,181	6,953
	Bug Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2
T3	4000K/5000K Lumens	2246	3012	3411	4387	5541	6784	7632
	Bug Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2
	3000K Lumens	2045	2743	3107	3995	5046	6179	6951
	Bug Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2
T4W	4000K/5000K Lumens	2245	3012	3411	4386	5540	6783	7631
	Bug Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B2-U0-G2
	3000K Lumens	2045	2743	3106	3994	5045	6178	6950
	Bug Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2
5WQ	4000K/5000K Lumens	2302	3088	3497	4497	5680	6955	7824
	Bug Rating	B2-U0-G1	B2-U0-G1	B2-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G2	B3-U0-G2
	3000K Lumens	2096	2812	3185	4095	5173	6334	7125
	Bug Rating	B2-U0-G1	B2-U0-G1	B2-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G2

LUMEN MAINTENANCE

Light Engine	Ambient Temperature	TM-21 Lumen Maintenance (60,000 Hours)	Theoretical L70 (Hours)
PA1	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-N-PA1-20-D-U-T2R-A15-AP

Product Family ^{1,2}	Configuration	Wattage	Color Temperature	Voltage	Distribution	Finish	Options (Add as Suffix)
ARCH-N=Archeon Nano	PA1=Direct Mount Square (16 LED)	10 19 20 30 40 50 60	740=70CRI / 4000K 727=70CRI / 2700K ⁵ 827=80CRI / 2700K ⁵ 730=70CRI / 3000K ⁴ 750=70CRI / 5000K ⁴	U=Universal (120-277V) 8=480V ³ 9=347V H=High Voltage Driver (347V-480V) ⁹	T2R=Type II Roadway T2U=Type II Urban ¹⁹ T3=Type III T4W=Type IV Wide 5WQ=Type V Square Wide	AP=Grey (Standard) BZ=Bronze BK=Black DP=Dark Platinum GM=Graphite Metallic WH=White	10K=10kV UL 1449 Surge Protective Device 20K=20kV UL 1449 Surge Protective Device ¹⁷ 10MSP=10kV MOV Surge Protective Device 20MSP=20kV MOV Surge Protective Device K=Level Indicator HA=50°C High Ambient Temperature HSS=House Side Shield ¹⁰ PSC=Photocontrol Shorting Cap ¹¹ NPC=NEMA Photocontrol ^{11,12} LLPC=Longlife Photocontrol Included ^{11,12} IP66=IP66 Rated Housing
Controls					Accessories (Order Separately)		
PR=NEMA 3-PIN Twistlock Photocontrol Receptacle ⁶ PR7=NEMA 7-PIN Twistlock Photocontrol Receptacle 5LTD=DALI ^{12,15,18} MS/DIM-L08=Motion Sensor for Dimming Operation, Maximum 8' Mounting Height ^{12,13} MS/DIM-L20=Motion Sensor for Dimming Operation, 9'-20' Mounting Height ^{12,13} MS/DIM-L40=Motion Sensor for Dimming Operation, 21'-40' Mounting Height ^{12,13}					OA / RA1013=Photocontrol Shorting Cap OA1223=10kV Surge Module Replacement OA/RA1014=NEMA Photocontrol - 120V ¹¹ OA/RA1016=NEMA Photocontrol - Multi-Tap ¹¹ OA/RA1027=NEMA Photocontrol - 480V ¹¹ OA/RA1201=NEMA Photocontrol - 347V ^{11,20} HS-ARCHN=Field Install ARCHN House Side Shield ¹⁰ FSIR-100=Wireless Configuration Tool for Occupancy Sensor ¹⁴ A15-XX=Arm (15" Straight Arm) ^{7,8} ASJS15-XX=Adjustable slipfitter (Factory set at 15 degrees) ⁸ ASJS25-XX=Adjustable slipfitter (Factory set at 25 degrees) ⁸ ASJS45-XX=Adjustable slipfitter (Factory set at 45 degrees) ⁸		

- 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.
 - DesignLights Consortium® Qualified. Refer to www.designlights.org Qualified Products List under Family Models for details.
 - 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).
 - Use dedicated IES files for 2700K, 3000K, and 5000K when performing layouts. These files are published on the ARCH Archeon luminaire product page on the website.
 - Extended lead times may apply.
 - If "PR" selected, dimming functionality not available, dimming leads will be capped.
 - Round pole adapter and mounting hardware included. "M" drill pattern.
 - Replace XX with color designation.
 - Only available with 50W and 60W skus.
 - Not available with 5WQ.
 - Requires ordering of a twistlock photocontrol (3-PIN or 7-PIN) receptacle (PR or PR7).
 - Not available with "H" High Voltage Driver.
 - The FSIR-100 accessory is required to adjust parameters.
 - This tool enables adjustment of parameters including high and low modes, sensitivity, time delay, cutoff and more. Consult your lighting representative at Cooper Lighting Solutions for more information.
 - Not available for 10W or 60W.
 - Not available for 50 or 60 watts.
 - Only available with "U" universal voltage.
 - Not available with any sensor options.
 - Extended lead times may apply.
 - Not compatible with Surge options when used with "H" High Voltage Driver.

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Specifications and dimensions subject to change without notice.

