



Pedernales Electric Cooperative
Outdoor Area & Street Lighting Specifications

March 13, 2025

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- 100-watt area light: Streetworks Archeon Small 5WQ (2700K, 70 CRI)
- 100-watt street light: Streetworks Archeon Small T3 (2700K, 70 CRI)

3. [Light Shield Specifications](#)

- For 50-watt area light: DS-HSS-CRTK2
- For 100-watt area light:
 - CLP0013543H01-PK (short)
 - CLP0013543H02-PK (wide)
 - IMI-813

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ubicell Smart Streetlight Controller

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Valmont DS50 25' steel light pole and arm

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The specifications in Section 6 are for previously installed 3000K color temperature, 70 CRI outdoor area and street lighting models. In most current installations – depending on availability – PEC uses the 2700k lights listed in Section 2.

- 50-watt street light: Streetworks Archeon Nano T3 (3000K, 70 CRI)
- 100-watt area light: Streetworks Archeon Small 5WQ (3000K, 70 CRI)
- 100-watt street light: Streetworks Archeon Small T3 (3000K, 70 CRI)

PEC-Owned Outdoor Area and Street Lighting General Information

Who/what these lighting specifications are for

These specifications are for cities, developers, individuals, and other entities in the Pedernales Electric Cooperative service area to follow when selecting materials for installation of outdoor area or street lighting that PEC will own and maintain. The materials listed herein are approved for use in the PEC electric distribution system.

Lights, shields, photocontrols, and steel poles and arms are covered by these specifications. 50- and 100-watt LED lighting options are available to choose from. Shields are optional, installed by PEC only by request, and will be at an additional cost to be paid by the requesting member. Organizations or entities may purchase and install on their property the approved pole and arm listed within these specifications, and PEC will install, maintain, and own the lights.

Organizations, entities, and individual members are free to own, install, and maintain their own area and street lights. Those choosing to do so do not have to follow these specifications, but an active account for billing electricity consumed by outdoor lighting is required whether PEC owns the lighting or not.

Lighting rates

Rates for PEC-owned lighting, as well as unmetered lighting device services, are available in the [PEC Tariff and Business Rules for Electric Service](#). Installation costs vary. Light installations are billed at the Cooperative's discretion under sections 500.3.1 (*Small Power Service*) for metered locations or 500.7.4.1 (*Unmetered Lighting Device Service*).

Dark-sky lighting

All of the outdoor lighting options in these specifications are dark-sky approved. Six of the eight certified International Dark-Sky Communities in Texas are in PEC's service territory, so we know how important preserving the starry night sky is to our members. Nearly all of the PEC-installed street and area lights in the Cooperative's eastern service area are dark-sky compliant.

Installation requests

If you or your organization would like to have outdoor area or street lighting installed and maintained by PEC, or if you have area or street lighting you would like PEC to improve to specifications and maintain, please [contact us](#).



Outdoor Area and Street LED Lighting Specifications

DESCRIPTION

The Caretaker™ LED area and road luminaire combines high performance, low maintenance and easy installation in a simple, extremely economical package. Designed for years of worry-free operation, the Caretaker luminaire is the perfect area lighting solution for both full-cutoff needs or landmark applications where a highly visible light source is desired. The Caretaker luminaire is also ideal for municipal street lighting retrofits requiring superior optical performance and fast payback on capital.

Catalog #		Type
Project		
Comments		Date
Prepared by		

SPECIFICATION FEATURES

Construction

Single heavy-duty die-cast aluminum housing. Access to stamped aluminum door via a single captive screw (tool-less access option available) for easy maintenance and installation. Corrosion resistant hardware.

Optical

Precision molded optics are designed to shape the distribution, maximize efficiency, and application coverage in each T2, T3 and T5R distributions. Available in six lumen packages at 4000K CCT and minimum 70CRI standard. Optional 3000K / 70CRI, 5000K / 70CRI, and 2700K / 80CRI also available. Fully compatible with SR Acrylic refractor and ANSI/NEMA Standard refractor assembly. For spill light control, an optional house side shield can be installed over the T2 or T3 optic or the drop shield house side shield can be used in conjunction with the T5R or SR options. For zero uplight compliant luminaires, the U0 option provides full cutoff with a spun aluminum shield.

Electrical

LED driver is standard universal voltage and 0-10V dimming with integrated 6kV surge protection. DALI compatible driver available. 10kV or 20kV additional surge protection available. Three position tunnel type compression terminal block standard. Luminaire is designed for efficient thermal management; heat is transferred away from the LEDs for optimal efficiency, light output, and life. Lumen maintenance of 92% at 50,000 hours.

Mounting

Two-bolt slipfitter for mounting on 1-1/4" to 2" standard pipe (1-5/8" to 2-3/8" O.D.). Also available with a bracket for mounting to wood poles, square poles, or walls without a pipe.

Controls

NEMA 3-PIN photocontrol receptacle standard. 7-PIN option available. An integrated dimming and occupancy sensor is a standalone control option available in bi-level dimming (MSP/DIM) operation.

Finish

Unfinished raw aluminum standard. Optional 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. Coastal Construction option available.

Warranty

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



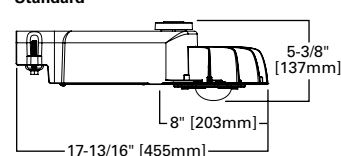
CRTK2 CARETAKER LED

Solid State LED

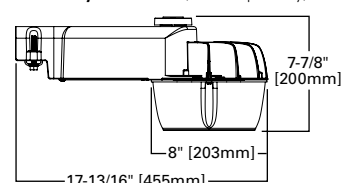
DUSK-TO-DAWN
AREA/ROADWAY LUMINAIRE

DIMENSIONS

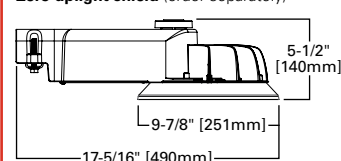
Standard



Small acrylic refractor (order separately)

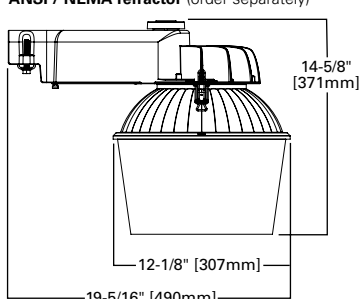


Zero uplight shield (order separately)

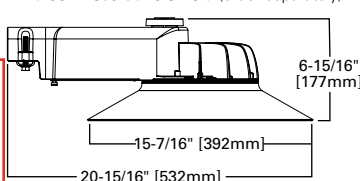


Standard PEC install

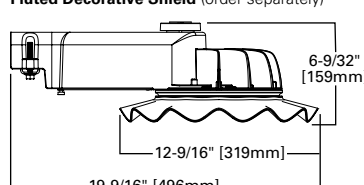
ANSI / NEMA refractor (order separately)



Hillbrook Decorative Shield (order separately)



Fluted Decorative Shield (order separately)



CERTIFICATION DATA

UL/cUL Wet Location Listed
ISO 9001
IP66 Rated (Optic)
3G Vibration Rated
LM79/LM80 Compliant
RoHS Compliant

ENERGY DATA

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

EPA

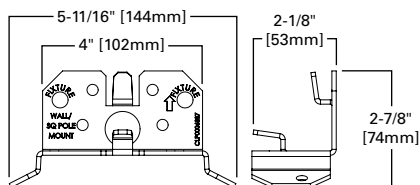
Effective Projected Area (Sq. Ft.)
Standard: 0.49
Full Cutoff: 0.52
Small Acrylic Refractor: 0.58
ANSI/NEMA Refractor: 1.01

SHIPPING DATA

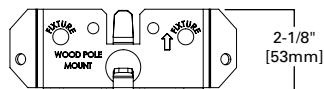
Approximate Net Weight:
7 - 8 lbs. (3.2 - 3.6 kgs.)

OPTIONAL WALL/POLE MOUNTING BRACKET

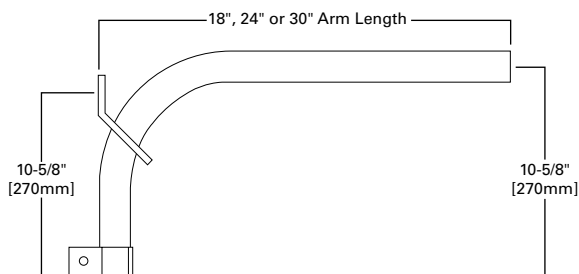
Wall Mount / Square Pole Mount



Pole Mount



OPTIONAL WOOD POLE PIPE ARM



CONTROL OPTIONS

0-10V (D)

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

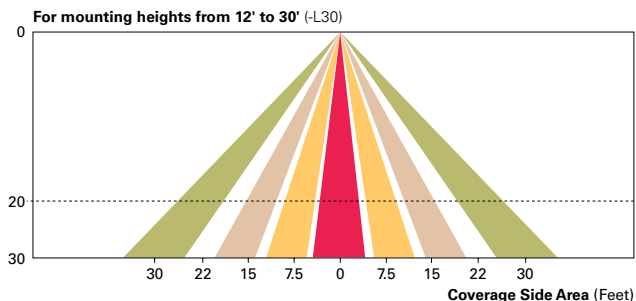
Photocontrol (4N7)

Photocontrol receptacles 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 4N7 receptacle.

Dimming Occupancy Sensor (MSP/DIM-L30)

These sensors are factory installed in the luminaire housing. When the MSP/DIM-L30 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 MSP/DIM sensor is factory preset to dim down to approximately 50 percent power with a time delay of five minutes.

These occupancy sensors includes an integral photocell that can be activated with the ISHH-01 accessory for dusk-to-dawn control or daylight harvesting — the factory preset is OFF. The ISHH-01 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 12'-30'.



POWER AND LUMENS (DALI)

Light Engine		C013	C015	C016	C018	C01	C01H
Power (Watts)		23	33	43	53	60	75
Wattage Label		20	30	40	50	60	80
Input Current @ 120V (A)		0.20	0.28	0.36	0.45	0.50	0.63
Input Current @ 277V (A)		0.09	0.13	0.16	0.19	0.22	0.27
Optics							
T2	4000K Lumens	3,341	4,606	5,790	7,325	8,066	9,523
	BUG Rating	B1-U2-G1	B1-U2-G1	B1-U3-G2	B2-G3-U2	B2-G3-U2	B2-G3-U2
	3000K Lumens	3,212	4,428	5,564	7,128	7,850	9,267
	BUG Rating	B1-U2-G1	B1-U2-G1	B1-U3-G2	B2-G3-U2	B2-U3-G2	B2-G3-U2
T2-U0	4000K Lumens	3,341	4,605	5,788	7,323	8,065	9,521
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2
	3000K Lumens	3,211	4,427	5,564	7,126	7,848	9,265
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2
T3	4000K Lumens	3,240	4,467	5,614	7,103	7,822	9,235
	BUG Rating	B1-U2-G1	B1-U3-G1	B1-U3-G1	B1-U3-G2	B1-U3-G2	B2-U3-G2
	3000K Lumens	3,115	4,294	5,397	6,912	7,612	8,987
	BUG Rating	B1-U2-G1	B1-U2-G1	B1-U3-G1	B1-U3-G2	B1-U3-G2	B2-U3-G2
T3-U0	4000K Lumens	3,243	4,471	5,619	7,109	7,829	9,243
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2
	3000K Lumens	3,118	4,298	5,402	6,918	7,619	8,994
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2
T5R	4000K Lumens	3,526	4,861	6,109	7,730	8,512	10,049
	BUG Rating	B2-U2-G1	B3-U2-G1	B3-U2-G1	B3-U3-G2	B3-U3-G2	B4-U3-G2
	3000K Lumens	3,390	4,673	5,873	7,522	8,283	9,779
	BUG Rating	B2-U2-G1	B3-U2-G1	B3-U2-G1	B3-U3-G2	B3-U3-G2	B4-U3-G2
T5R-U0	4000K Lumens	3,553	4,898	6,156	7,789	8,577	10,126
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G2	B3-U0-G2	B4-U0-G2
	3000K Lumens	3,415	4,708	5,918	7,579	8,347	9,854
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G2	B3-U0-G2	B4-U0-G2
T5R-SR	4000K Lumens	3,489	4,810	6,046	7,649	8,424	9,945
	BUG Rating	B2-U3-G1	B3-U3-G2	B3-U3-G2	B3-U3-G2	B3-U3-G3	B4-U3-G3
	3000K Lumens	3,354	4,624	5,812	7,443	8,197	9,677
	BUG Rating	B2-U3-G1	B3-U3-G2	B3-U3-G2	B3-U3-G2	B3-U3-G3	B4-U3-G3

LUMEN MULTIPLIER

Ambient Temperature	Lumen Multiplier
10°C	1.02
15°C	1.01
25°C	1.00
40°C	0.99

LUMEN MAINTENANCE

Ambient Temperature	TM-21 Lumen Maintenance (50,000 Hours)	Theoretical L70 (Hours)
Up to 40°C	92.30%	>306,000

ORDERING INFORMATION

Product Family	Light Engine	Driver	Voltage	Distribution
CRTK2=Caretaker	C013=1 LED, Approximately 30% Output C015=1 LED, Approximately 50% Output C016=1 LED, Approximately 60% Output C018=1 LED, Approximately 80% Output C01=1 LED, Full Output C01H=1 LED, High Lumen Output	D=Dimming (0-10V) 5LTD=DALI	U=Universal (120-277V)	T2=Type II T3=Type III T5R=Type V Round
Options (Add as Suffix)		Color	Accessories (Order Separately)	
7030=70 CRI / 3000K 7050=70 CRI / 5000K 8027=80 CRI / 2700K SR=Small Acrylic Refractor (Factory Installed) TSR=Tool-less Small Acrylic Refractor (Factory Installed) U0=Zero Uplight Shield ¹ TH=Tool-less Door Hardware 4N7= NEMA 7-PIN Photocontrol Receptacle S=Shorting Cap MSP/DIM-L30=Integrated Sensor for Dimming Operation, 12' - 30' Mounting Height ^{2,3} 10K=10kV UL 1449 Surge Protection Device 10MSP=10kV MOV Surge Protection Device 20K=20kV UL 1449 Surge Protection Device 20MSP=20kV MOV Surge Protection Device CC=Coastal Construction ⁴ V=(3) 5' #14 External Leads B18=18" Wood Pole Pipe Arm B24=24" Wood Pole Pipe Arm WPBKT=Wall or Pole Mounting Bracket 5=120V NEMA Photocontrol Included ⁸		A=Raw Aluminum AP=Grey 10X = 10 year warranty	RMARROA5=ANSI/NEMA Standard Refractor Assembly SR-CARETAKER=Small Acrylic Refractor U0-XX=Zero Uplight Shield ⁵ LLPC=Long-life Photocontrol LLPC-FO=Long-life Photocontrol (Fail Off) HSS-CRTK2=Field Install House Side Shield ⁶ DS-HSS-CRTK2=Drop Shield House Side Shield OA1226=10kV Surge Module Replacement OA/RA1013=Shorting Cap ISHH-01=Integrated Sensor Programming Remote ⁷ HS-VERD=Verdeon House Side Shield ⁸ VGS-F/B=Vertical Glare Shield, Front/Back VGS-SIDE=Vertical Glare Shield, Side FS-XX=Fluted Decorative Shield ⁵ HB-XX=Hillbrook Bell Decorative Shield ⁵ TSR-CARETAKER=Tool-less Small Acrylic Refractor B30=30" Wood Pole Pipe Arm B18PK=18" Wood Pole Pipe Arm B24PK=24" Wood Pole Pipe Arm B30PK=30" Wood Pole Pipe Arm	

NOTE:

1. U0 option not offered with SR option.
2. Integrated Sensor not available with 10K or 20K options or 5LTD driver.
3. MSP option in conjunction with C01H or C01 Light Engine only suitable up to 30°C ambient. All other Light Engines only suitable up to 35°C ambient.
4. Anti-corrosion treatment on external components, external screws/mounting bolts, and standard pipe clamp.
5. Replace XX with color.
6. Not for use on T5R optical distribution.
7. This tool enables adjustment to parameters including high and low modes, sensitivity, time delay, cutoff and more. Consult your lighting representative at Cooper Lighting Solutions for more information.
8. 120V input voltage only required.

Project	PEC	Catalog #	ARCH-N-PA1-50-727-U-T3-AP-20 MSP-PR7-5LTD-10X-U125081 (2700K 50W Type 3)	Type	
Prepared by	Tom Demboski	Notes	10X = 10 Year Warranty	Date	2/3/25



Streetworks

Archeon Nano

Roadway Luminaire

Product Certifications & Features



Interactive Menu

- Ordering Information page 2
- Product Specifications page 2
- Energy and Performance Data page 3

Connected Systems

- WaveLinX PRO Wireless
- TelenSA

Product Specifications

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

Electrical

- 120-277V, 347V, or 480V 50/50Hz operation
- Standard 0-10V dimming
- 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
- Luminaire available with the field adjustable dimming controller (FADC) to manually adjust wattage and reduce the total lumen output and light levels; Comes pre-set to the highest position at the lumen output selected

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

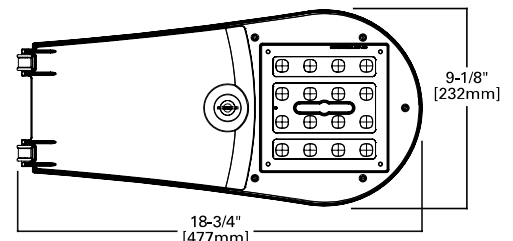
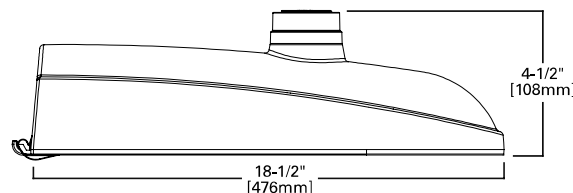
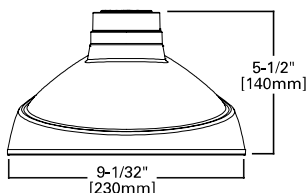
Shipping Data

- Approximate Net Weight: 12 lbs. (5.4 kgs.)
- Effective Projected Area: 0.35 (Sq. Ft.)

Warranty

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

Dimensional Details



NOTES:

1. Visit <https://www.designlights.org/search/> to confirm qualification. Not all product variations are DLC qualified.
2. DarkSky approved for 3000K CCT and warmer, with mounting options less than 10° of tilt.

Ordering Information

SAMPLE ORDER NUMBER: **ARCH-N-PA1-20-D-U-T2R-A15-AP**

Product Family ^{1, 2}	Configuration	Wattage Bucket	Color Temperature	Voltage	Distribution	Finish	
ARCH-N=Archeon Nano BAA-ARCH-N=Archeon Nano Buy American Act Compliant ²⁸ TAA-ARCH-N=Archeon Nano Agreements Act Compliant ²⁸	PA1=Direct Mount Square (16 LED)	10 19 20 30 40 50 60	722=70CRI, 2200K 727=70CRI, 2700K 730=70CRI, 3000K 735=70CRI, 3500K 740=70CRI, 4000K 750=70CRI, 5000K 827=80CRI, 2700K 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 T3=Type III T4W=Type IV Wide 5WQ=Type V Square Wide	AP=Grey BZ=Bronze BK=Black DP=Dark Platinum GM=Graphite Metallic WH=White	
Options (Add as Suffix)				Controls			
10K=Series 10kV UL 1449 Surge Protective Device 20K=Series 20kV UL 1449 Surge Protective Device 20KI=Series 20kV UL 1449 Surge Protective Device with light indicator 10MSP=Parallel 10kV MOV Surge Protective Device 20MSP=Parallel 20kV MOV Surge Protective Device K=Level Indicator 4B=Four-bolt, Two-clamp mounting HA=50°C High Ambient Temperature ¹⁶ HSS=House Side Shield ^{16, 16} PSC=Photocontrol Shorting Cap ¹¹ NPC=NEMA Photocontrol ^{11, 12} LLPC=Longlife Photocontrol Included ^{11, 12} CC=Coastal Construction ²⁶ FADC=Field Adjustable Dimming Controller ²⁵ A15=15" Straight Mast Arm				ASJS15=Adjustable Slipfitter (Factory set at 15° degrees) ASJS25=Adjustable Slipfitter (Factory set at 25° degrees) ASJS45=Adjustable Slipfitter (Factory set at 45° degrees) Dxxxxx=DOT Configuration - Contact Quotes Team Uxxxxx=Utility Configuration - Contact Quotes Team			PR=NEMA 3-PIN Twistlock Photocontrol Receptacle ⁶ PR7=NEMA 7-PIN Twistlock Photocontrol Receptacle 5LTD=DALI ^{12, 15} SPB1=Dimming Occupancy Sensor with Bluetooth Interface, <8' Mounting ²⁷ SPB2=Dimming Occupancy Sensor with Bluetooth Interface, 8'-20' Mounting ²⁷ SPB4=Dimming Occupancy Sensor with Bluetooth Interface, 21'-40' Mounting ²⁷ 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} WPS2-XX=WaveLinX Pro, SR Driver, Dimming Motion and Daylight, WAC Programmable, 7' - 15' Mounting ^{21, 22, 23, 24} WPS4-XX=WaveLinX Pro, SR Driver, Dimming Motion and Daylight, WAC Programmable, 15' - 40' Mounting ^{21, 22, 23, 24}
Accessories (Order Separately) ²⁹							
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, 19} 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: 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. DesignLights Consortium® Qualified. Refer to www.designlights.org Qualified Products List under Family Models for details. 3. 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). 4. 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. 5. Extended lead times may apply. 6. If "PR" selected, dimming functionality not available, dimming leads will be capped. 7. Round pole adapter and mounting hardware included. "M" drill pattern. 8. Replace XX with color designation. 9. Only available with 50W and 60W skus. 10. Not available with 5WQ. 11. Requires ordering of a twistlock photocontrol (3-PIN or 7-PIN) receptacle (PR or PR7). 12. Not available with "H" High Voltage Driver. 13. The FSIR-100 accessory is required to adjust parameters. 14. 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. 15. Not available for 10W. 16. Not available for 50 or 60 watts. 17. Only available with "U" universal voltage. 18. Extended lead times may apply. 19. Not compatible with Surge options when used with "H" High Voltage Driver. 20. Utilizes internal step-down transformer when 347V or 480V is selected. 21. Controls system is not available with photocontrol receptacle (PR or PR7), or other controls systems (MS, FADC, SPBx & DALI). 22. Replace XX with sensor color (WH, BZ or BK). 23. Sensor passive infrared (PIR) may be overly sensitive with operating below -20°C (-4°F). 24. For this device to be field-configurable, requires WAC Gateway components WAC-PoE and WPOE-120 in appropriate quantities. Only compatible with WaveLinX system and software and requires system components to be installed for operation. See website for more WaveLinX application information. 25. Cannot be used with PR7, other motion response control options, or 5LTD (DALI). 26. Coastal construction finish salt spray tested to over 5,000-hours per ASTM B117, with a scribe rating of 9 per ASTM D1654. 27. Smart device with Sensor Configuration mobile application by Wattstopper required to change system defaults. 28. Only product configurations with these designated prefixes are built to be compliant with the Buy American Act of 1933 (BAA) or Trade Agreements Act of 1979 (TAA), respectively. Please refer to DOMESTIC PREFERENCES website for more information. Components shipped separately may be separately analyzed under domestic preference requirements. 29. Accessories sold separately will be separately analyzed under domestic preference requirements. Consult factory for further information.							

Energy and Performance Data

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

FADC Settings

FADC Position	Percent of Typical Lumen Output
1	25%
2	48%
3	56%
4	65%
5	75%
6	80%
7	85%
8	90%
9	95%
10	100%

Note: +/-5% typical value

 [View Archeon Nano IES files](#)

Energy and Performance Data

Nominal Power Lumens (2200K CCT, 70 CRI)

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
Optics								
T2R	Lumens	1,667	2,236	2,532	3,256	4,113	5,036	5,665
	BUG Rating	B0-U0-G1	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1
	Lumens per Watt	119	118	105	105	100	97	91
T2U	Lumens	1,651	2,215	2,509	3,226	4,075	4,989	5,613
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G2
	Lumens per Watt	118	117	105	104	99	96	91
T3	Lumens	1,651	2,214	2,508	3,225	4,073	4,987	5,610
	BUG Rating	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2
	Lumens per Watt	118	117	105	104	99	96	90
T4W	Lumens	1,651	2,214	2,507	3,224	4,072	4,987	5,610
	BUG Rating	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2
	Lumens per Watt	118	117	104	104	99	96	90
5WQ	Lumens	1,692	2,270	2,571	3,306	4,175	5,113	5,752
	BUG Rating	B1-U0-G1	B2-U0-G1	B2-U0-G1	B2-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G1
	Lumens per Watt	121	119	107	107	102	98	93

Nominal Power Lumens (2700K CCT, 70 CRI)

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
Optics								
T2R	Lumens	1,896	2,544	2,880	3,704	4,679	5,729	6,445
	BUG Rating	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1
	Lumens per Watt	135	134	120	119	114	110	104
T2U	Lumens	1,879	2,520	2,854	3,670	4,635	5,676	6,385
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2
	Lumens per Watt	134	133	119	118	113	109	103
T3	Lumens	1,878	2,519	2,853	3,669	4,634	5,674	6,383
	BUG Rating	B0-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2
	Lumens per Watt	134	133	119	118	113	109	103
T4W	Lumens	1,878	2,519	2,852	3,668	4,633	5,673	6,382
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2
	Lumens per Watt	134	133	119	118	113	109	103
5WQ	Lumens	1,925	2,583	2,925	3,761	4,750	5,817	6,543
	BUG Rating	B2-U0-G1	B2-U0-G1	B2-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G2
	Lumens per Watt	138	136	122	121	116	112	106

Energy and Performance Data

Nominal Power Lumens (2200K CCT, 70 CRI)

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

Nominal Power Lumens (2700K CCT, 70 CRI)

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

Nominal Power Lumens (5000K CCT, 70 CRI)

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

Nominal Power Lumens (2700K CCT, 80 CRI)

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

Nominal Power Lumens (3000K CCT, 80 CRI)

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

Project	PEC	Catalog #	ARCH-S-PA1-100-727-U-5WQ-AP-20 MSP-PR7-5LTD-10X-U142284 (2700K 100W Type 5)	Type	
Prepared by	Tom Demboski	Notes	10X = 10 Year Warranty	Date	2/3/2025



Streetworks

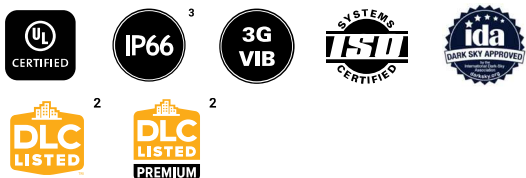
Archeon Small

Roadway Luminaire

Product Features



Product Certifications



Interactive Menu

- Ordering Information page 2
- Product Specifications page 3
- Mounting Details page 3
- Energy and Performance Data page 3

Quick Facts

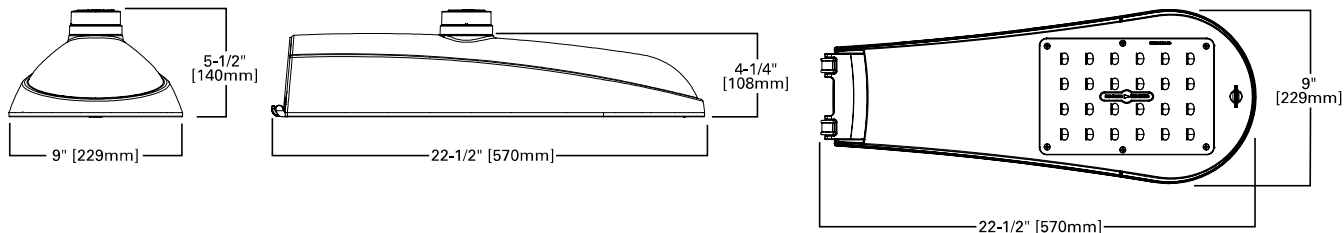
- Die-cast aluminum construction; Single latch tool-less entry
- Replaces up to 250W equivalent HID; -40°C to 40°C with optional 50°C operating range
- Pole-mounted; Optional arm and offset adjustable arm mounting
- 120-277V, 240-480V, 347V, and 480V, 50/60Hz operation

Connected Systems

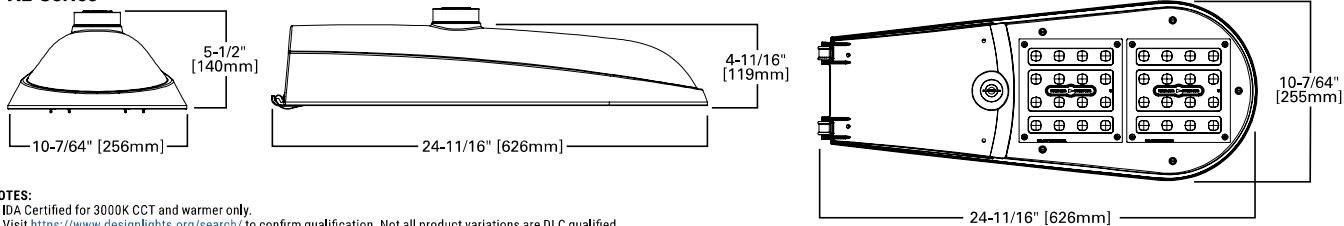
- WaveLinx PRO Wireless
- WaveLinx LITE Wireless
- Telensa

Dimensional Details

PA1 Series



PA2 Series



NOTES:

1. IDA Certified for 3000K CCT and warmer only.
2. Visit <https://www.designlights.org/search/> to confirm qualification. Not all product variations are DLC qualified.
3. IP66 Optic enclosure rated.

Ordering Information

SAMPLE ORDER NUMBER: ARCH-S-PA1-100-740-U-T2R-A15-AP-10K-PR

Product Family ³	Light Engine	Wattage Bucket	Color Temperature	Voltage	Distribution	Mounting	Finish
ARCH-S=Archeon Small BAA-ARCH-S= Archeon Small Buy American Act Compliant ^{1,5} TAA-ARCH-S= Archeon Small Trade Agreements Act Compliant ^{1,5}	PA1 (Only available up to 100W)	30 40 50 60 70 80 90 100	722=70CRI, 2200K 727=70CRI, 2700K 730=70CRI, 3000K 735=70CRI, 3500K 740=70CRI, 4000K 750=70CRI, 5000K 827=80CRI, 2700K ⁵ AMB=Amber 590nm ^{16, 17}	U=Universal (120-277V) 1=120V²¹ 2=208V²¹ 3=240V²¹ 4=277V²¹ 8=480V ^{4, 21} 9=347V ²¹ DV1=240V-480V ^{4, 22}	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 Mast Arm⁹ ASJS15=Adjustable Slipfitter (Factory set at 15° degrees) ASJS25=Adjustable Slipfitter (Factory set at 25° degrees) ASJS45=Adjustable Slipfitter (Factory set at 45° degrees)	AP=Grey BZ=Bronze BK=Black DP=Dark Platinum WH=White
	PA2	20 30 40 50 60 70 80 90 100 110 120 130					
Options (Add as Suffix)		Controls			Accessories (Order Separately) ²		
F= Single Pole Fusing, specify voltage (120V, 277V, 347V) FF= Double Pole Fusing, specify voltage (208V, 240V, 480V) 10MSP= Parallel 10kV MOV Surge Protection Device 10K= Series 10kV UL 1449 Surge Protection Device 20MSP=Parallel 20kV MOV Surge Protection Device 20K= Series 20kV UL 1449 Surge Protection Device 20KI= Series 20kV UL 1449 Surge Protection Device with light indicator L90= PA2 Optics Rotated 90° Left ²³ R90= PA2 Optics Rotated 90° Right ²³ HSS= Factory Installed House Side Shield ^{8, 26} GRSBK= PA2 Glare Reducing Shield Black ²³ GRSWH= PA2 Glare Reducing Shield Black ²³ HA= 50°C High Ambient Temperature ⁷ K= Level Indicator CC= Coastal Construction ¹⁹ LCF= PA2 Trim Painted to Match Housing ²³ Dxxxx= DOT configuration - contact factory quotes team Uxxxx= Utility configuration - contact factory quotes team		PSC= Photocontrol Shorting Cap NPC= NEMA Photocontrol - Multi-Tap LLPC= Longlife Photocontrol Included PR= NEMA 3-PIN Twistlock Photocontrol Receptacle ⁶ PR7= NEMA 7-PIN Twistlock Photocontrol Receptacle FADC= Field Adjustable Dimming Controller ¹⁸ SLTD=DALI SPB1= Dimming Occupancy Sensor with Bluetooth Interface ²⁰ SPB2= Dimming Occupancy Sensor with Bluetooth Interface, 8'-20' Mounting ²⁰ SPB4= Dimming Occupancy Sensor with Bluetooth Interface, 21'-40' Mounting ²⁰ WPS2XX= WaveLinX Pro, SR Driver, Dimming Motion and Daylight, WAC Programmable, 7'- 15' Mounting ^{12, 13, 14, 15} WPS4XX= WaveLinX Pro, SR Driver, Dimming Motion and Daylight, WAC Programmable, 15'- 40' Mounting ^{12, 13, 14, 15} WLS2XX= WaveLinX Lite, SR Driver, Dimming Motion and Daylight, Bluetooth Programmable, 7'- 15' Mounting ^{12, 13, 14} WLS4XX= WaveLinX Lite, SR Driver, Dimming Motion and Daylight, Bluetooth Programmable, 15'- 40' Mounting ^{12, 13, 14}			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) ^{9, 10} ASJS15-XX= Adjustable slipfitter (Factory set at 15 degrees) ¹⁰ ASJS25-XX= Adjustable slipfitter (Factory set at 25 degrees) ¹⁰ ASJS45-XX= Adjustable slipfitter (Factory set at 45 degrees) ¹⁰ HS-ARCH-24= PA1 Field Installed ARCH House Side Shield ^{8, 26} VGS-ARCH= PA1 Short Vertical Drop Shield ²⁷ VGL-ARCH= PA1 Long Vertical Drop Shield ²⁷		
NOTES: 1. Only product configurations with these designated prefixes are built to be compliant with the Buy American Act of 1933 (BAA) or Trade Agreements Act of 1979 (TAA), respectively. Please refer to DOMESTIC PREFERENCES website for more information. Components shipped separately may be separately analyzed under domestic preference requirements. 2. Accessories sold separately will be separately analyzed under domestic preference requirements. Consult factory for further information. 3. 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. 4. 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). 5. Extended lead times may apply. 6. If "PR" selected, dimming functionality not available, dimming leads will be capped. 7. Option not available with PA1-90, PA1-100, PA2-100+. 8. HS-ARCH not available with 5WQ and T2U distribution. 9. Round pole adapter and mounting hardware included. "M" drill pattern. 10. Replace XX with color designation. 11. Only available with "U" universal voltage. Not available with PA2. 12. Controls system is not available with photocontrol receptacles (PR, PR7) or other controls systems (FADC, SPBx). 13. Replace XX with sensor color (WH, BZ or BK). 14. Sensor passive infrared (PIR) may be overly sensitive with operating below -20°C (-4°F). 15. For this device to be field-configurable, requires WAC Gateway components WAC-PoE and WPOE-120 in appropriate quantities. Only compatible with WaveLinX system and software and requires system components to be installed for operation. See website for more WaveLinX application information. 16. Not available with HA option. 17. Amber 590nm +/-5nm for wildlife and observatory use. Supplied in PA1-30 and PA2-40 wattage bucket only. 18. Cannot be used with PR7 or other motion response control options. 19. Coastal construction finish salt spray tested to over 5,000-hours per ASTM B117, with a scribe rating of 9 per ASTM D1654. 20. Smart device with Sensor Configuration mobile application by Wattstopper required to change system defaults. 21. Required for voltage specific options 22. Only available for 80W through 130W. 23. PA2 Only. 24. Utilizes internal step-down transformer when 347V or 480V is selected. 25. Not available with PA1-30, PA1-90, and PA1-100. 26. Not available with PA2-110 through PA2-130. 27. Kit to install one side for one luminaire.							

Product Specifications

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 2200K, 2700K, 3000K, 3500K, and 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
- Optics are IP66 enclosure rated
- IDA Certified for 3000K CCT and warmer only

Electrical

- 120-277V, 240-480V, 347V, and 480V; 50/60Hz operation

- Standard 0-10V dimming
- Optional 10kV and 20kV surge common- and differential-mode surge protection available
- 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 97% and 94% lumen maintenance expected at 50,000 and 100,000 hours respectively with calculated L70 greater than 150,000 hours
- Replaces 50W to 250W HID
- Luminaire available with the field adjustable dimming controller (FADC) to manually adjust wattage and reduce the total lumen output and light levels. Comes pre-set to the highest position at the lumen output selected

Mounting

- **PA1 Mounting:** Two-bolt/one-bracket slipfitter with cast-in pipe stop and 2.5° leveling steps
- **PA2 Mounting:** Four-bolt/two-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

Shipping Data

PA1

- Approximate Net Weight: 12 lbs. (5.4 kgs.)
- Effective Projected Area: 0.5 (Sq. Ft.)

PA2

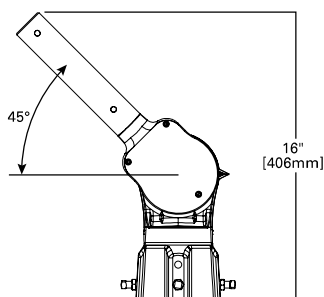
- Approximate Net Weight: 12.25 lbs. (5.6 kgs.)
- Effective Projected Area: 0.7 (Sq. Ft.)

Warranty

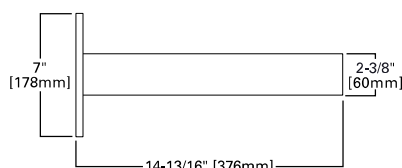
- Five year limited warranty, consult website for details www.cooperlighting.com/legal

Mounting Details

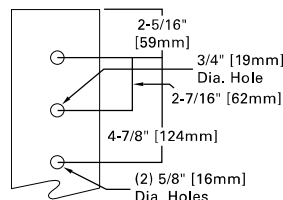
Adjustable Slipfitter Offset Arm



15" Straight Arm



Type "M" - Drilling Pattern



Energy and Performance Data

Lumen Maintenance

Light Engine	Ambient Temperature	25,000 hours*	50,000 hours*	60,000 hours*	100,000 hours*	L70*
PA1	25°C	99.7%	98.2%	97.6%	95.4%	>150,000
	40°C	98.7%	96.4%	95.5%	92.0%	>150,000
	50°C	99.2%	97.3%	96.5%	93.6%	>150,000
PA2	25°C	99.4%	97.8%	97.2%	94.7%	>150,000
	40°C	98.5%	96.0%	95.0%	91.2%	>150,000
	50°C	99.7%	98.5%	97.9%	95.9%	>150,000

Note: * Calculations provided in accordance with IES TM-21-11 using the configuration resulting in highest LED temperature. Previous versions of IES TM-21 where theoretical calculations were used are no longer recommended as a proxy of lumen depreciation.

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



View Archeon Small IES files

FADC Settings

FADC Position	Percent of Typical Lumen Output
1	25%
2	46%
3	55%
4	62%
5	72%
6	77%
7	82%
8	85%
9	90%
10	100%

Note: +/-5% typical value

LED Color Multipliers

CRI	CCT					
	2200	2700	3000	3500	4000	5000
Lumen Multiplier*						
70	0.74	0.84	0.91	0.93	1.00	1.00
80	--	0.75	--	--	--	--

Note: * Estimates, refer to IES files for accuracy.

Energy and Performance Data

Nominal Power Lumens (2200K CCT, 70 CRI)

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
Label		20	30	40	50	60	70	80	90	100
Optics										
T2R	Lumens	2,498	3,496	4,511	5,816	6,677	7,445	8,044	8,622	8,711
	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
	Lumens per Watt	119	113	113	108	104	101	97	92	91
T2U	Lumens	2,488	3,484	4,495	5,796	6,654	7,418	8,016	8,592	8,681
	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
	Lumens per Watt	118	112	112	107	104	100	97	91	90
T3	Lumens	2,483	3,476	4,486	5,784	6,640	7,403	8,000	8,574	8,663
	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
	Lumens per Watt	118	112	112	107	104	100	96	91	90
T4W	Lumens	2,468	3,455	4,456	5,748	6,598	7,356	7,949	8,521	8,608
	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-G3	B2-U0-G3
	Lumens per Watt	118	111	111	106	103	99	96	91	90
5WQ	Lumens	2,538	3,552	4,583	5,910	6,785	7,565	8,175	8,761	8,852
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G2	B3-U0-G2	B3-U0-G2	B3-U0-G2	B3-U0-G2	B3-U0-G2	B4-U0-G2
	Lumens per Watt	121	115	115	109	106	102	98	93	92

Nominal Power Lumens (2700K CCT, 70 CRI)

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
Label		20	30	40	50	60	70	80	90	100
Optics										
T2R	Lumens	2,841	3,977	5,131	6,617	7,595	8,470	9,151	9,808	9,909
	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	B1-U0-G2
	Lumens per Watt	135	128	128	123	119	114	110	104	103
T2U	Lumens	2,832	3,963	5,113	6,593	7,570	8,439	9,118	9,775	9,877
	BUG Rating	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G3
	Lumens per Watt	135	128	128	122	118	114	110	104	103
T3	Lumens	2,825	3,955	5,104	6,580	7,554	8,422	9,101	9,755	9,856
	BUG Rating	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G2	B2-U0-G2	B2-U0-G3	B2-U0-G3	B2-U0-G3
	Lumens per Watt	135	128	128	122	118	114	110	104	103
T4W	Lumens	2,808	3,930	5,069	6,539	7,507	8,368	9,043	9,692	9,794
	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
	Lumens per Watt	134	127	127	121	117	113	109	103	102
5WQ	Lumens	2,887	4,041	5,215	6,724	7,719	8,606	9,300	9,967	10,071
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G2	B3-U0-G2	B3-U0-G2	B3-U0-G2	B4-U0-G2	B4-U0-G3	B4-U0-G3
	Lumens per Watt	137	130	130	125	121	116	112	106	105

Energy and Performance Data

Nominal Power Lumens (2200K CCT, 70 CRI)

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
Label	20	30	40	50	60	70	80	90	100
Input Current @ 120V (A)	0.18	0.26	0.34	0.45	0.53	0.62	0.70	0.78	0.80
Input Current @ 277V (A)	--	0.12	0.16	0.21	0.24	0.28	0.31	0.35	0.35
Input Current @ 347V (A)	--	0.10	0.13	0.16	0.19	0.22	0.24	0.28	0.28
Input Current @ 480V (A)	--	0.07	0.09	0.13	0.15	0.17	0.18	0.21	0.21

Nominal Power Lumens (2700K CCT, 70 CRI)

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
Label	20	30	40	50	60	70	80	90	100
Input Current @ 120V (A)	0.18	0.26	0.34	0.45	0.53	0.62	0.70	0.78	0.80
Input Current @ 277V (A)	--	0.12	0.16	0.21	0.24	0.28	0.31	0.35	0.35
Input Current @ 347V (A)	--	0.10	0.13	0.16	0.19	0.22	0.24	0.28	0.28
Input Current @ 480V (A)	--	0.07	0.09	0.13	0.15	0.17	0.18	0.21	0.21

Nominal Power Lumens (5000K CCT, 70 CRI)

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
Label	20	30	40	50	60	70	80	90	100
Input Current @ 120V (A)	0.18	0.26	0.34	0.45	0.53	0.62	0.70	0.78	0.80
Input Current @ 277V (A)	--	0.12	0.16	0.21	0.24	0.28	0.31	0.35	0.35
Input Current @ 347V (A)	--	0.10	0.13	0.16	0.19	0.22	0.24	0.28	0.28
Input Current @ 480V (A)	--	0.07	0.09	0.13	0.15	0.17	0.18	0.21	0.21

Nominal Power Lumens (2700K CCT, 80 CRI)

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
Label	20	30	40	50	60	70	80	90	100
Input Current @ 120V (A)	0.18	0.26	0.34	0.45	0.53	0.62	0.70	0.78	0.80
Input Current @ 277V (A)	--	0.12	0.16	0.21	0.24	0.28	0.31	0.35	0.35
Input Current @ 347V (A)	--	0.10	0.13	0.16	0.19	0.22	0.24	0.28	0.28
Input Current @ 480V (A)	--	0.07	0.09	0.13	0.15	0.17	0.18	0.21	0.21

Nominal Power Lumens (3000K CCT, 80 CRI)

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
Label	20	30	40	50	60	70	80	90	100
Input Current @ 120V (A)	0.18	0.26	0.34	0.45	0.53	0.62	0.70	0.78	0.80
Input Current @ 277V (A)	--	0.12	0.16	0.21	0.24	0.28	0.31	0.35	0.35
Input Current @ 347V (A)	--	0.10	0.13	0.16	0.19	0.22	0.24	0.28	0.28
Input Current @ 480V (A)	--	0.07	0.09	0.13	0.15	0.17	0.18	0.21	0.21

Project	PEC	Catalog #	ARCH-S-PA1-100-727-U-T3-AP-20MS P-PR7-5LTD-10X-U142285 (2700K 100W Type 3)	Type	
Prepared by	Tom Demboski	Notes	10X = 10 Year Warranty	Date	2/3/25



Streetworks

Archeon Small

Roadway Luminaire

Product Features



Interactive Menu

- Ordering Information page 2
- Product Specifications page 3
- Mounting Details page 3
- Energy and Performance Data page 3

Product Certifications



Quick Facts

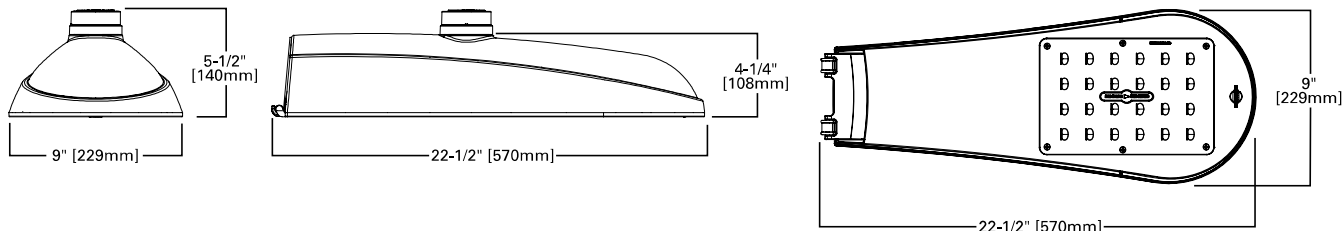
- Die-cast aluminum construction; Single latch tool-less entry
- Replaces up to 250W equivalent HID; -40°C to 40°C with optional 50°C operating range
- Pole-mounted; Optional arm and offset adjustable arm mounting
- 120-277V, 240-480V, 347V, and 480V, 50/60Hz operation

Connected Systems

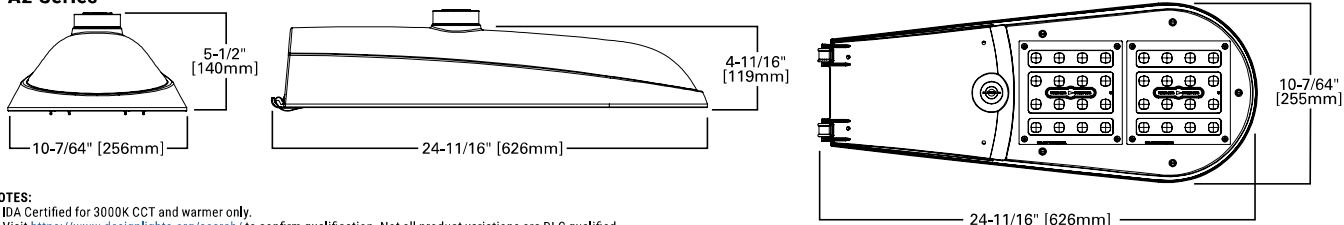
- WaveLinx PRO Wireless
- WaveLinx LITE Wireless
- Telensa

Dimensional Details

PA1 Series



PA2 Series



NOTES:

1. IDA Certified for 3000K CCT and warmer only.
2. Visit <https://www.designlights.org/search/> to confirm qualification. Not all product variations are DLC qualified.
3. IP66 Optic enclosure rated.

Ordering Information

SAMPLE ORDER NUMBER: ARCH-S-PA1-100-740-U-T2R-A15-AP-10K-PR

Product Family ³	Light Engine	Wattage Bucket	Color Temperature	Voltage	Distribution	Mounting	Finish
ARCH-S=Archeon Small BAA-ARCH-S= Archeon Small Buy American Act Compliant ^{1,5} TAA-ARCH-S= Archeon Small Trade Agreements Act Compliant ^{1,5}	PA1 (Only available up to 100W)	30 40 50 60 70 80 90 100	722=70CRI, 2200K 727=70CRI, 2700K 730=70CRI, 3000K 735=70CRI, 3500K 740=70CRI, 4000K 750=70CRI, 5000K 827=80CRI, 2700K ⁵ AMB=Amber 590nm ^{16, 17}	U=Universal (120-277V) 1=120V ²¹ 2=208V ²¹ 3=240V ²¹ 4=277V ²¹ 8=480V ^{4, 21} 9=347V ²¹ DV1=240V-480V ^{4, 22}	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 Mast Arm ⁹ ASJS15=Adjustable Slipfitter (Factory set at 15° degrees) ASJS25=Adjustable Slipfitter (Factory set at 25° degrees) ASJS45=Adjustable Slipfitter (Factory set at 45° degrees)	AP=Grey BZ=Bronze BK=Black DP=Dark Platinum WH=White
	PA2	20 30 40 50 60 70 80 90 100 110 120 130					
Options (Add as Suffix)		Controls			Accessories (Order Separately) ²		
F =Single Pole Fusing, specify voltage (120V, 277V, 347V) FF =Double Pole Fusing, specify voltage (208V, 240V, 480V) 10MSP =Parallel 10kV MOV Surge Protection Device 10K =Series 10kV UL 1449 Surge Protection Device 20MSP=Parallel 20kV MOV Surge Protection Device 20K =Series 20kV UL 1449 Surge Protection Device 20KI =Series 20kV UL 1449 Surge Protection Device with light indicator L90 =PA2 Optics Rotated 90° Left ²³ R90 =PA2 Optics Rotated 90° Right ²³ HSS =Factory Installed House Side Shield ^{8, 26} GRSBK =PA2 Glare Reducing Shield Black ²³ GRSWH =PA2 Glare Reducing Shield Black ²³ HA =50°C High Ambient Temperature ⁷ K =Level Indicator CC =Coastal Construction ¹⁹ LCF =PA2 Trim Painted to Match Housing ²³ Dxxxxx =DOT configuration - contact factory quotes team Uxxxxx =Utility configuration - contact factory quotes team		PSC =Photocontrol Shorting Cap NPC =NEMA Photocontrol - Multi-Tap LLPC =Longlife Photocontrol Included PR =NEMA 3-PIN Twistlock Photocontrol Receptacle ⁶ PR7 =NEMA 7-PIN Twistlock Photocontrol Receptacle FADC =Field Adjustable Dimming Controller ¹⁸ SLTD=DALI SPB1 =Dimming Occupancy Sensor with Bluetooth Interface ²⁰ SPB2 =Dimming Occupancy Sensor with Bluetooth Interface, 8'-20' Mounting ²⁰ SPB4 =Dimming Occupancy Sensor with Bluetooth Interface, 21'-40' Mounting ²⁰ WPS2XX =WaveLinX Pro, SR Driver, Dimming Motion and Daylight, WAC Programmable, 7'- 15' Mounting ^{12, 13, 14, 15} WPS4XX =WaveLinX Pro, SR Driver, Dimming Motion and Daylight, WAC Programmable, 15'- 40' Mounting ^{12, 13, 14, 15} WLS2XX =WaveLinX Lite, SR Driver, Dimming Motion and Daylight, Bluetooth Programmable, 7'- 15' Mounting ^{12, 13, 14} WLS4XX =WaveLinX Lite, SR Driver, Dimming Motion and Daylight, Bluetooth Programmable, 15'- 40' Mounting ^{12, 13, 14}			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) ^{9, 10} ASJS15-XX =Adjustable slipfitter (Factory set at 15 degrees) ¹⁰ ASJS25-XX =Adjustable slipfitter (Factory set at 25 degrees) ¹⁰ ASJS45-XX =Adjustable slipfitter (Factory set at 45 degrees) ¹⁰ HS-ARCH-24 =PA1 Field Installed ARCH House Side Shield ^{8, 26} VGS-ARCH =PA1 Short Vertical Drop Shield ²⁷ VGL-ARCH =PA1 Long Vertical Drop Shield ²⁷		
NOTES: 1. Only product configurations with these designated prefixes are built to be compliant with the Buy American Act of 1933 (BAA) or Trade Agreements Act of 1979 (TAA), respectively. Please refer to DOMESTIC PREFERENCES website for more information. Components shipped separately may be separately analyzed under domestic preference requirements. 2. Accessories sold separately will be separately analyzed under domestic preference requirements. Consult factory for further information. 3. 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. 4. 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). 5. Extended lead times may apply. 6. If "PR" selected, dimming functionality not available, dimming leads will be capped. 7. Option not available with PA1-90, PA1-100, PA2-100+. 8. HS-ARCH not available with 5WQ and T2U distribution. 9. Round pole adapter and mounting hardware included. "M" drill pattern. 10. Replace XX with color designation. 11. Only available with "U" universal voltage. Not available with PA2. 12. Controls system is not available with photocontrol receptacles (PR , PR7) or other controls systems (FADC, SPBx). 13. Replace XX with sensor color (WH, BZ or BK). 14. Sensor passive infrared (PIR) may be overly sensitive with operating below -20°C (-4°F). 15. For this device to be field-configurable, requires WAC Gateway components WAC-PoE and WPOE-120 in appropriate quantities. Only compatible with WaveLinX system and software and requires system components to be installed for operation. See website for more WaveLinX application information. 16. Not available with HA option. 17. Amber 590nm +/-5nm for wildlife and observatory use. Supplied in PA1-30 and PA2-40 wattage bucket only. 18. Cannot be used with PR7 or other motion response control options. 19. Coastal construction finish salt spray tested to over 5,000-hours per ASTM B117, with a scribe rating of 9 per ASTM D1654. 20. Smart device with Sensor Configuration mobile application by Wattstopper required to change system defaults. 21. Required for voltage specific options 22. Only available for 80W through 130W. 23. PA2 Only. 24. Utilizes internal step-down transformer when 347V or 480V is selected. 25. Not available with PA1-30, PA1-90, and PA1-100. 26. Not available with PA2-110 through PA2-130. 27. Kit to install one side for one luminaire.							

Product Specifications

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 2200K, 2700K, 3000K, 3500K, and 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
- Optics are IP66 enclosure rated
- IDA Certified for 3000K CCT and warmer only

Electrical

- 120-277V, 240-480V, 347V, and 480V; 50/60Hz operation

- Standard 0-10V dimming
- Optional 10kV and 20kV surge common- and differential-mode surge protection available
- 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 97% and 94% lumen maintenance expected at 50,000 and 100,000 hours respectively with calculated L70 greater than 150,000 hours
- Replaces 50W to 250W HID
- Luminaire available with the field adjustable dimming controller (FADC) to manually adjust wattage and reduce the total lumen output and light levels. Comes pre-set to the highest position at the lumen output selected

Mounting

- **PA1 Mounting:** Two-bolt/one-bracket slipfitter with cast-in pipe stop and 2.5° leveling steps
- **PA2 Mounting:** Four-bolt/two-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

Shipping Data

PA1

- Approximate Net Weight: 12 lbs. (5.4 kgs.)
- Effective Projected Area: 0.5 (Sq. Ft.)

PA2

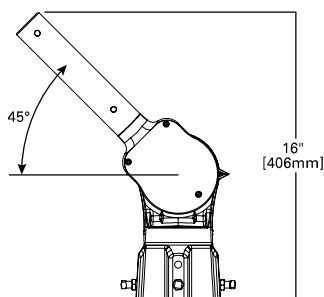
- Approximate Net Weight: 12.25 lbs. (5.6 kgs.)
- Effective Projected Area: 0.7 (Sq. Ft.)

Warranty

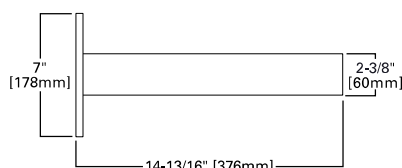
- Five year limited warranty, consult website for details www.cooperlighting.com/legal

Mounting Details

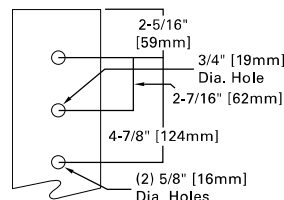
Adjustable Slipfitter Offset Arm



15" Straight Arm



Type "M" - Drilling Pattern



Energy and Performance Data

Lumen Maintenance

Light Engine	Ambient Temperature	25,000 hours*	50,000 hours*	60,000 hours*	100,000 hours*	L70*
PA1	25°C	99.7%	98.2%	97.6%	95.4%	>150,000
	40°C	98.7%	96.4%	95.5%	92.0%	>150,000
	50°C	99.2%	97.3%	96.5%	93.6%	>150,000
PA2	25°C	99.4%	97.8%	97.2%	94.7%	>150,000
	40°C	98.5%	96.0%	95.0%	91.2%	>150,000
	50°C	99.7%	98.5%	97.9%	95.9%	>150,000

Note: * Calculations provided in accordance with IES TM-21-11 using the configuration resulting in highest LED temperature. Previous versions of IES TM-21 where theoretical calculations were used are no longer recommended as a proxy of lumen depreciation.

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



View Archeon Small IES files

FADC Settings

FADC Position	Percent of Typical Lumen Output
1	25%
2	46%
3	55%
4	62%
5	72%
6	77%
7	82%
8	85%
9	90%
10	100%

Note: +/-5% typical value

LED Color Multipliers

CRI	CCT					
	2200	2700	3000	3500	4000	5000
Lumen Multiplier*						
70	0.74	0.84	0.91	0.93	1.00	1.00
80	--	0.75	--	--	--	--

Note: * Estimates, refer to IES files for accuracy.

Energy and Performance Data

Nominal Power Lumens (2200K CCT, 70 CRI)

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
Label		20	30	40	50	60	70	80	90	100
Optics										
T2R	Lumens	2,498	3,496	4,511	5,816	6,677	7,445	8,044	8,622	8,711
	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
	Lumens per Watt	119	113	113	108	104	101	97	92	91
T2U	Lumens	2,488	3,484	4,495	5,796	6,654	7,418	8,016	8,592	8,681
	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
	Lumens per Watt	118	112	112	107	104	100	97	91	90
T3	Lumens	2,483	3,476	4,486	5,784	6,640	7,403	8,000	8,574	8,663
	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
	Lumens per Watt	118	112	112	107	104	100	96	91	90
T4W	Lumens	2,468	3,455	4,456	5,748	6,598	7,356	7,949	8,521	8,608
	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-G3	B2-U0-G3
	Lumens per Watt	118	111	111	106	103	99	96	91	90
5WQ	Lumens	2,538	3,552	4,583	5,910	6,785	7,565	8,175	8,761	8,852
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G2	B3-U0-G2	B3-U0-G2	B3-U0-G2	B3-U0-G2	B3-U0-G2	B4-U0-G2
	Lumens per Watt	121	115	115	109	106	102	98	93	92

Nominal Power Lumens (2700K CCT, 70 CRI)

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
Label		20	30	40	50	60	70	80	90	100
Optics										
T2R	Lumens	2,841	3,977	5,131	6,617	7,595	8,470	9,151	9,808	9,909
	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	B1-U0-G2
	Lumens per Watt	135	128	128	123	119	114	110	104	103
T2U	Lumens	2,832	3,963	5,113	6,593	7,570	8,439	9,118	9,775	9,877
	BUG Rating	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G3
	Lumens per Watt	135	128	128	122	118	114	110	104	103
T3	Lumens	2,825	3,955	5,104	6,580	7,554	8,422	9,101	9,755	9,856
	BUG Rating	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G2	B2-U0-G2	B2-U0-G3	B2-U0-G3	B2-U0-G3
	Lumens per Watt	135	128	128	122	118	114	110	104	103
T4W	Lumens	2,808	3,930	5,069	6,539	7,507	8,368	9,043	9,692	9,794
	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
	Lumens per Watt	134	127	127	121	117	113	109	103	102
5WQ	Lumens	2,887	4,041	5,215	6,724	7,719	8,606	9,300	9,967	10,071
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G2	B3-U0-G2	B3-U0-G2	B3-U0-G2	B4-U0-G2	B4-U0-G3	B4-U0-G3
	Lumens per Watt	137	130	130	125	121	116	112	106	105

Energy and Performance Data

Nominal Power Lumens (2200K CCT, 70 CRI)

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
Label	20	30	40	50	60	70	80	90	100
Input Current @ 120V (A)	0.18	0.26	0.34	0.45	0.53	0.62	0.70	0.78	0.80
Input Current @ 277V (A)	--	0.12	0.16	0.21	0.24	0.28	0.31	0.35	0.35
Input Current @ 347V (A)	--	0.10	0.13	0.16	0.19	0.22	0.24	0.28	0.28
Input Current @ 480V (A)	--	0.07	0.09	0.13	0.15	0.17	0.18	0.21	0.21

Nominal Power Lumens (2700K CCT, 70 CRI)

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
Label	20	30	40	50	60	70	80	90	100
Input Current @ 120V (A)	0.18	0.26	0.34	0.45	0.53	0.62	0.70	0.78	0.80
Input Current @ 277V (A)	--	0.12	0.16	0.21	0.24	0.28	0.31	0.35	0.35
Input Current @ 347V (A)	--	0.10	0.13	0.16	0.19	0.22	0.24	0.28	0.28
Input Current @ 480V (A)	--	0.07	0.09	0.13	0.15	0.17	0.18	0.21	0.21

Nominal Power Lumens (5000K CCT, 70 CRI)

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
Label	20	30	40	50	60	70	80	90	100
Input Current @ 120V (A)	0.18	0.26	0.34	0.45	0.53	0.62	0.70	0.78	0.80
Input Current @ 277V (A)	--	0.12	0.16	0.21	0.24	0.28	0.31	0.35	0.35
Input Current @ 347V (A)	--	0.10	0.13	0.16	0.19	0.22	0.24	0.28	0.28
Input Current @ 480V (A)	--	0.07	0.09	0.13	0.15	0.17	0.18	0.21	0.21

Nominal Power Lumens (2700K CCT, 80 CRI)

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
Label	20	30	40	50	60	70	80	90	100
Input Current @ 120V (A)	0.18	0.26	0.34	0.45	0.53	0.62	0.70	0.78	0.80
Input Current @ 277V (A)	--	0.12	0.16	0.21	0.24	0.28	0.31	0.35	0.35
Input Current @ 347V (A)	--	0.10	0.13	0.16	0.19	0.22	0.24	0.28	0.28
Input Current @ 480V (A)	--	0.07	0.09	0.13	0.15	0.17	0.18	0.21	0.21

Nominal Power Lumens (3000K CCT, 80 CRI)

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
Label	20	30	40	50	60	70	80	90	100
Input Current @ 120V (A)	0.18	0.26	0.34	0.45	0.53	0.62	0.70	0.78	0.80
Input Current @ 277V (A)	--	0.12	0.16	0.21	0.24	0.28	0.31	0.35	0.35
Input Current @ 347V (A)	--	0.10	0.13	0.16	0.19	0.22	0.24	0.28	0.28
Input Current @ 480V (A)	--	0.07	0.09	0.13	0.15	0.17	0.18	0.21	0.21



Light Shield Specifications

Shield Installation Instructions – Caretaker2 Model DS-HSS-CRTK2

Optional Drop Shield House Side Shield

Tools Required: 1/4" Socket or flathead screw driver.

1. Insert provided thread forming screws into house side shield mounting locations and place provided O-rings over screw threads to hold screws within House Side Shield. Install house side shield onto housing. (Figure 12.)

Note: There are four positions for the House Side Shield at 90° increments.

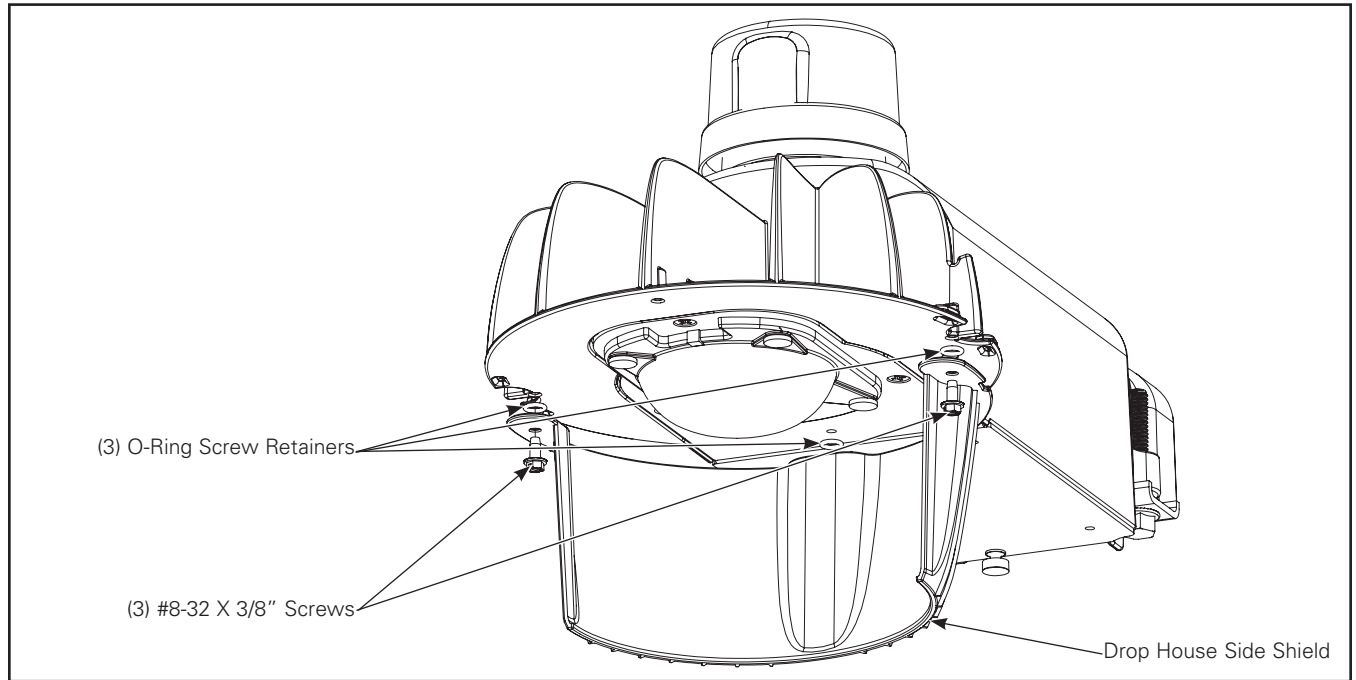


Figure 12

Short shield for ARCH optics = CLP0013543H01-PK (Standard color is black)

B



A

For shield installation remove existing screws from the Archeon optical square where the shield is being installed. Place shield on top of the optical square positioning the shield holes over the optical square holes and re-install the shield. **Do not attempt to remove the optical square from the housing during shield installation.** These shields are not designed to be used with the HS-ARCH House Side Shield.

reserved by Cooper Industries, Inc.

4

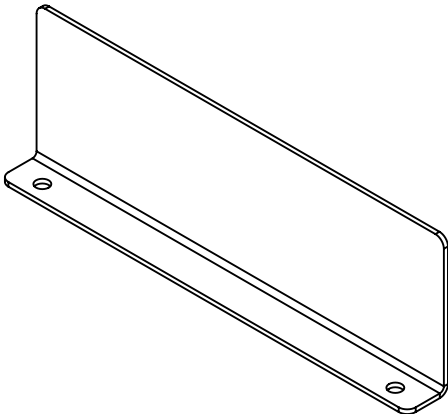
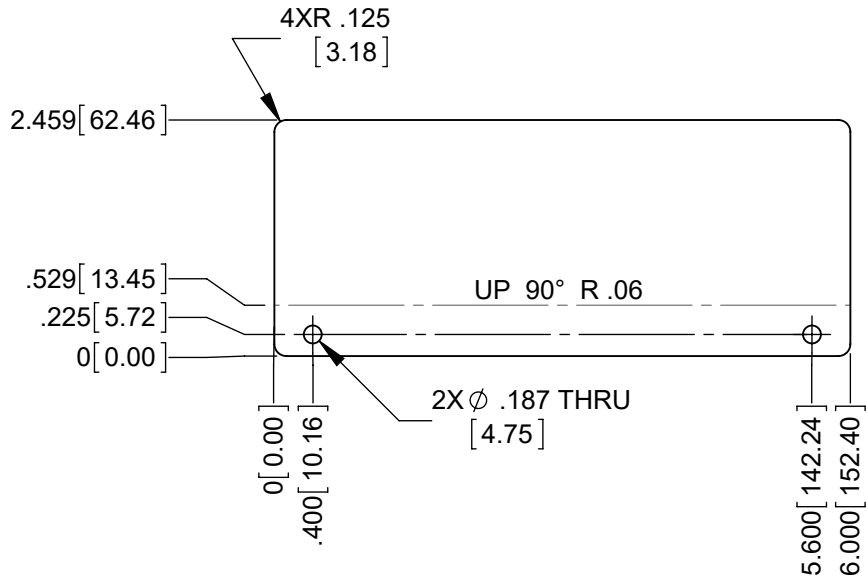
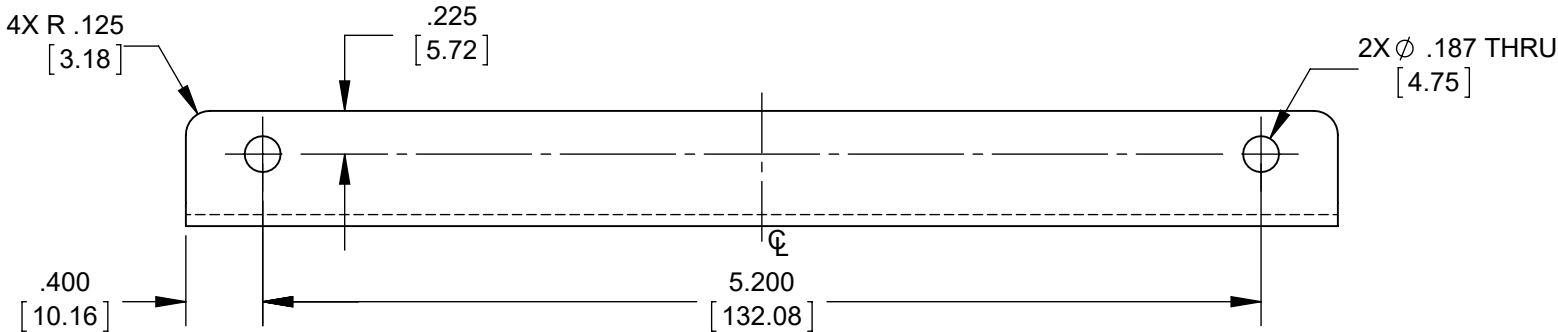
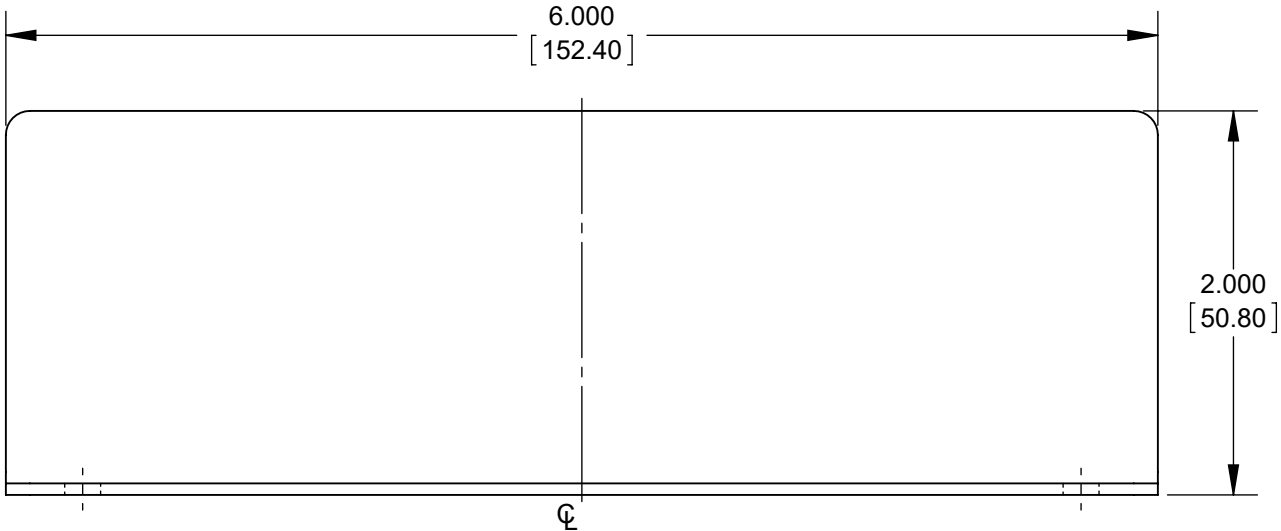
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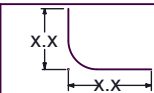
REVISIONS					
REV.	DESCRIPTION	DATE	CHANGE_NUMBER	BY	APPROVED
1	INITIAL RELEASE	5/4/2018		LNT/SD	WFB



ISOMETRIC VIEW
SCALE 1:2

FLAT PATTERN VIEW ONLY FOR REFERENCE
SCALE 1:2

USE WITH MULTI-SHEET DRAWINGS

20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	REV		
ELECTRONIC CAD DRAWING. DO NOT REVISE MANUALLY.					S DIMENSIONS THAT AFFECT SAFE HANDLING OR OPERATION	C DENOTES CRITICAL DIMENSIONS AND GAUGE CHECK POINTS							P DENOTES FIRST PIECE AND IN-PROCESS INSPECTION				F DENOTES FIRST PIECE INSPECTION ONLY				PAGE
DIMENSIONS ARE IN INCHES DIMENSIONS IN [] ARE IN MM																					
TOLERANCE		GENERAL		SHEET METAL	APPROVALS			DATE		EAT•N Powering Business Worldwide Peachtree City, GA TITLE: L BRACKET LIGHT SHIELD AF24 BOARD END											
ENGLISH (IN)		X .XX XXX	±0.030 ±0.010 ±0.005	XX XXX																±0.03 ±0.015	
METRIC (MM)		.X .XX XXX	±0.75 ±0.25 ±0.12	.XX XXX	±0.75 ±0.38																
SHEET METAL PIERCED, EXTRUDED, NAIL PUNCH HOLE				ENGLISH (IN) METRIC (MM)	±0.000 ±0.005 ±0.00 ±0.13																
ANGLES		ALL ±1.0																			
THIRD ANGLE PROJECTION					DRWN: LNT/SD			5/3/2018													
MATERIAL: .060" THK ALUMINUM					CHKD: WFB					5/3/2018											
					APPR: WFB					5/3/2018											
					L MOD: C9904693					5/25/2018											
FINISH: POWDER PAINT BLACK					SIZE: B					DWG NO: CLP0013543										REV: 1	
										DEV/ZINT NO:											
DO NOT SCALE DRAWING					SURFACE AREA: 47.20 IN2					SCALE: 1:1			WT: 0.13 LB			VOL: 1.37 IN3			SHEET 1 OF 2		

CLP0013543

A

Wide shield for ARCH optics = CLP0013543H02-PK (Standard color is black)

B

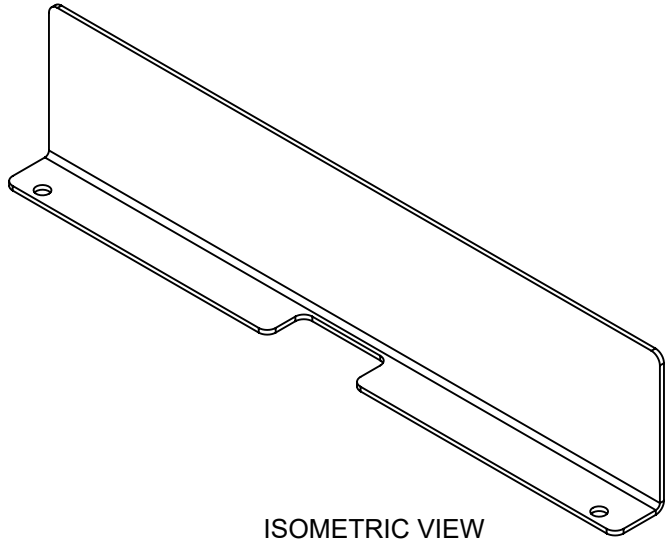
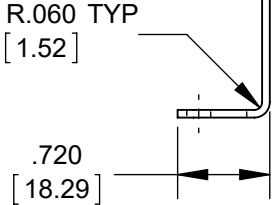
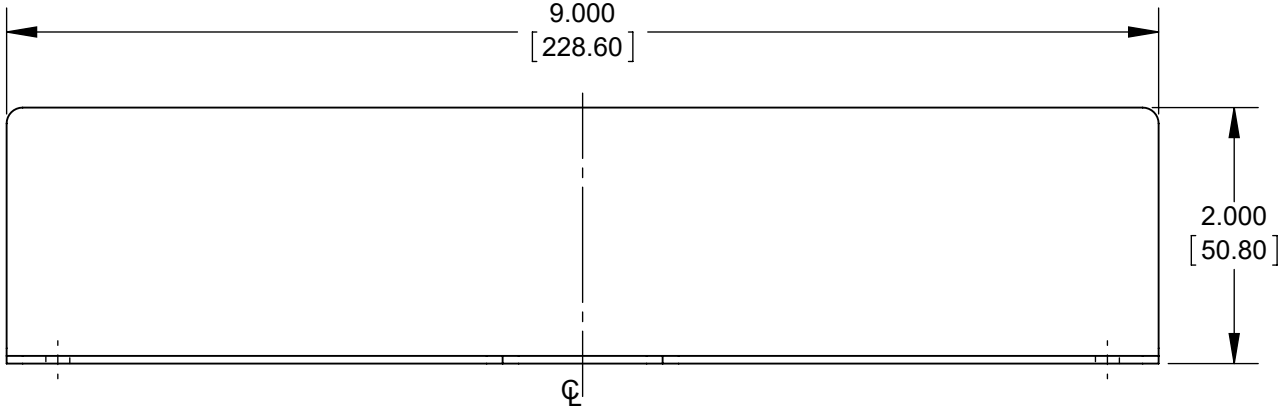
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A

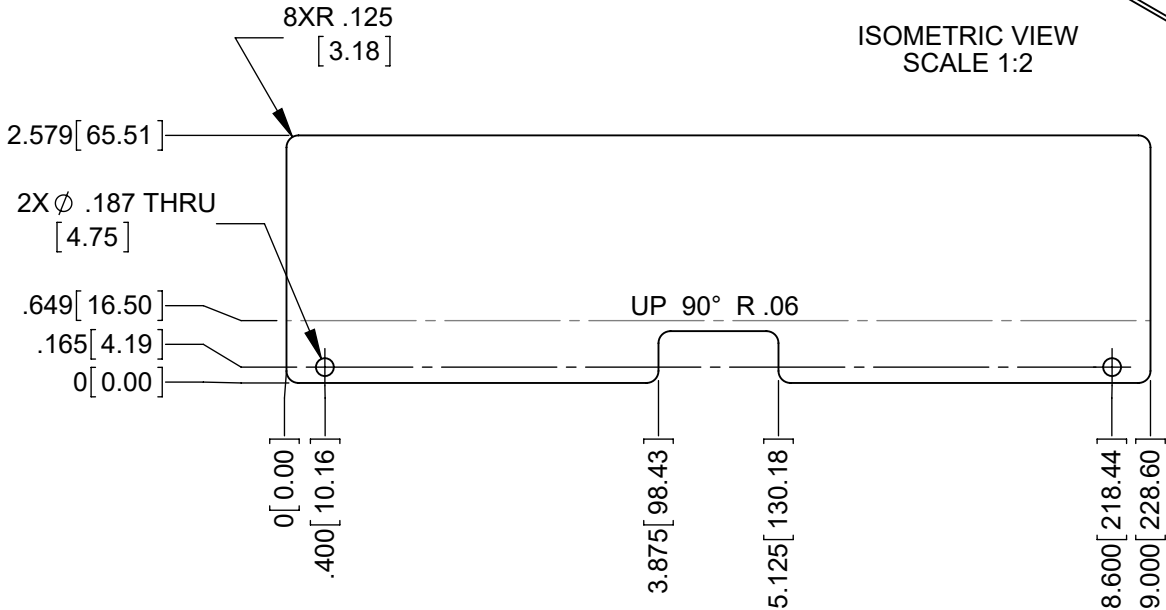
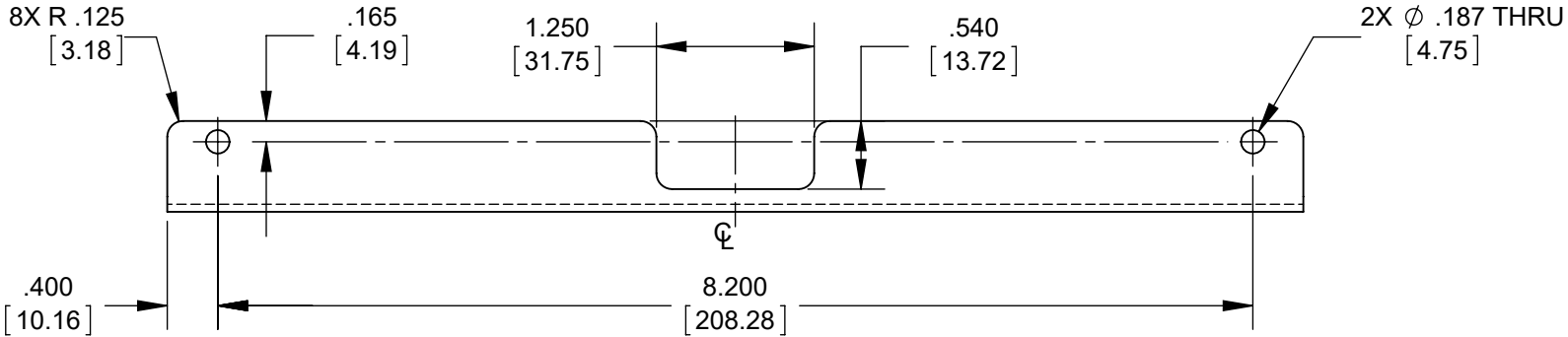
B

A

For shield installation remove existing screws from the Archeon optical square where the shield is being installed. Place shield on top of the optical square positioning the shield holes over the optical square holes and re-install the shield. **Do not attempt to remove the optical square from the housing during shield installation.** These shields are not designed to be used with the HS-ARCH House Side Shield.



ISOMETRIC VIEW
SCALE 1:2



FLAT PATTERN VIEW ONLY FOR REFERENCE
SCALE 1:2

USE WITH MULTI-SHEET DRAWINGS

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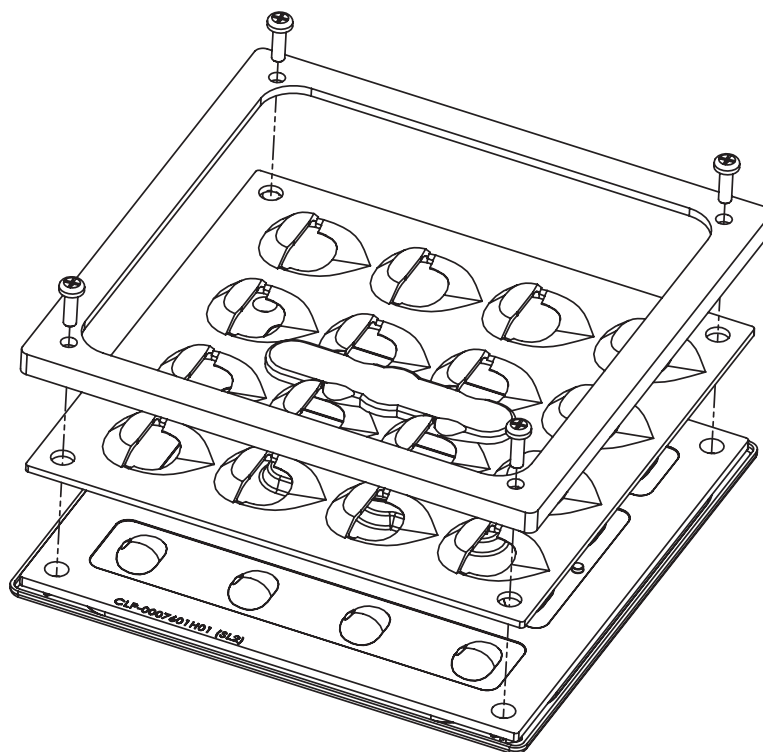
CLP0013543

IMI-813

LED Light Square House Side Shield Installation Instructions

Feuillet d'instructions pour l'installation du pare-lumière latéral carré côté édifice du luminaire à DEL

Instrucciones de instalación del escudo lateral de la carcasa cuadrada de la luz LED



Cooper Lighting

by **EAT•N**

LED Light Square House Side Shield Installation Instructions



SAFETY

This fixture must be wired in accordance with the National Electrical Code and applicable local codes and ordinances. Proper grounding is required to insure personal safety. Carefully observe grounding procedure under installation section.



WARNING

Make certain power is **OFF** before starting installation or attempting any maintenance. Risk of fire/electric shock. If not qualified, consult an electrician.

- **RISK OF ELECTRIC SHOCK**—Disconnect power at fuse or circuit breaker before installing or servicing.
- **RISK OF BURN**—Disconnect power and allow fixture to cool before servicing.
- **RISK OF PERSONAL INJURY**—Fixture may become damaged and/or unstable if not installed properly. Tighten all fixture components to their recommended torque values. Do not lift pole into place by securing lifting device to lighting fixture or mounting arm.



IMPORTANT

Read before installing fixture. Retain for future reference.

NOTE

These instructions do not claim to cover all details or variations in the equipment, procedure, or process described, nor to provide directions for meeting every possible contingency during installation, operation or maintenance. When additional information is desired to satisfy a problem not covered sufficiently for user's purpose, please contact your nearest representative. NOTE: Specifications and dimensions subject to change without notice.



WARRANTY/LIABILITY

Consult www.cooperlighting.com for current Limited Warranty and Limitations of Liability information.

Installation Instructions

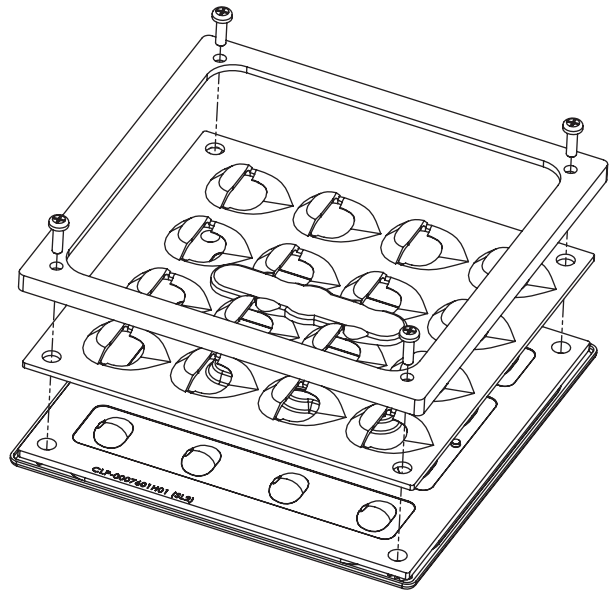
Tools Required

Phillips head screwdriver.

1. Remove the four screws which secure the light square to the fixture. Retain screws for re-use in step 3.
2. Place the light shield over the light square as shown. FIG. 1
3. Re-insert the four Philips head screws from step 1 back through the light shield, light square and into the fixture. Make sure the flange of the light shield is facing the proper direction to shield the light from it's intended source.

Note: One house side shield is required per LED Light Square (e.g. GLEON-AE-04 or GAN-AE-04 require four house side shields).

FIG. 1



SÉCURITÉ

Le câblage du luminaire doit être conforme au Code national de l'électricité, les lois et ordonnances locales en vigueur. Une mise à la terre adéquate est requise afin d'assurer votre sécurité. Respectez soigneusement la procédure de mise à la terre du chapitre d'installation.

AVERTISSEMENT

Assurez-vous que l'alimentation électrique est coupée avant de commencer l'installation ou de procéder à tout entretien. Risque d'incendie ou de décharge électrique. Si vous n'êtes pas qualifié, consultez un électricien.

- **RISQUE DE DÉCHARGE ÉLECTRIQUE** - Débranchez la source d'alimentation en enlevant le fusible ou en déclenchant le disjoncteur avant l'installation ou l'entretien.
- **RISQUE DE BRÛLURE** - Débranchez la source d'alimentation et laissez refroidir le luminaire avant de procéder à son entretien.
- **RISQUE DE BLESSURES** - Ce luminaire peut s'endommager s'il n'est pas installé correctement ou s'il est instable. Serrez tous les composants du luminaire selon les valeurs de couple recommandées. Ne maintenez pas le poteau en place en le sécurisant avec un dispositif de levage au luminaire ou au bras de montage.

IMPORTANT

Lisez ce document avant d'installer le luminaire. Conservez-le pour consultation ultérieure.

NOTE

Ces instructions ne couvrent pas toutes les caractéristiques et variantes de l'équipement, des procédures ou des procédés décrits, et ne parent pas à toutes les

éventualités pouvant survenir lors de l'installation, du fonctionnement ou de l'entretien de l'appareil.

Si des renseignements additionnels sont nécessaires afin de résoudre un problème insuffisamment décrit pour l'utilisation, veuillez communiquer avec votre représentant le plus près de chez vous.

REMARQUE: Les caractéristiques techniques et les dimensions sont sujettes à modifications sans préavis.

GARANTIE ET RESPONSABILITÉ

Visitez le site www.cooperlighting.com pour obtenir les renseignements de la garantie limitée et les limitations de responsabilité.

Instructions d'installation

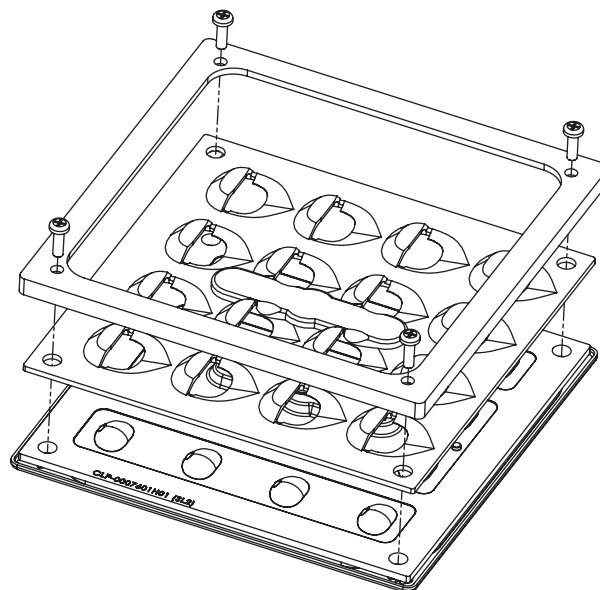
Outils requis

Tournevis à tête cruciforme.

1. Retirez les quatre vis du luminaire carré fixant le luminaire. Conservez les vis pour l'étape 3.
2. Placez le pare-lumière sur le luminaire carré, comme montré à l'III. 1
3. Réinsérez les quatre vis à tête cruciformes de l'étape 1 dans le pare-lumière, le luminaire carré et le luminaire. Assurez-vous que le rebord du pare-lumière est dirigé correctement afin d'empêcher l'émission de lumière vers l'endroit choisi.

Remarque: Un pare-lumière côté édifice est requis par luminaire carré DEL (par ex. : les modèles GLEON-AE-04 ou GAN-AE-04 nécessitent quatre pare-lumières côté édifice.)

III. 1



SEGURIDAD

Este accesorio debe cablearse según el Código Nacional Eléctrico y los códigos y ordenanzas locales aplicables. Se requiere una conexión a tierra adecuada para garantizar la seguridad personal. Observe con atención el procedimiento de conexión a tierra en la sección de instalación.

ADVERTENCIA

Asegúrese de que la alimentación esté **APAGADA** antes de iniciar la instalación o de intentar realizar el mantenimiento. Riesgo de incendio/descarga eléctrica. Si no está calificado, consulte con un electricista.

- **RIESGO DE DESCARGA ELÉCTRICA:** Corte la alimentación desde el fusible o el disyuntor antes de realizar tareas de instalación o mantenimiento.
- **RIESGO DE QUEMADURAS:** Corte la alimentación y permita que el accesorio se enfríe antes de realizar el mantenimiento.
- **RIESGO DE LESIONES PERSONALES:** El accesorio puede dañarse y/o volverse inestable si no se instala correctamente. Ajuste todos los componentes del accesorio según los valores de torque recomendados. No eleve el polo en su lugar asegurando el dispositivo de elevación al accesorio de iluminación o al brazo de montaje.

IMPORTANTE

Lea Antes De Instalar El Accesorio. Conserve Para Referencia Futura.

NOTA

Estas instrucciones no tienen por objetivo cubrir todos los detalles o variaciones del equipo, los procedimientos o procesos descriptos, ni proveer directivas para gestionar cualquier posible contingencia durante la instalación, el funcionamiento o el mantenimiento. Cuando necesite información adicional para satisfacer un problema que no tenga la cobertura suficiente para el objetivo del usuario, comuníquese con su representante más cercano. **NOTA:** Las especificaciones y dimensiones están sujetas a cambios sin previo aviso.

GARANTÍA/RESPONSABILIDAD

Consulte en www.cooperlighting.com para obtener información actual sobre la Garantía Limitada y las Limitaciones de Responsabilidad.

Instrucciones de Instalación

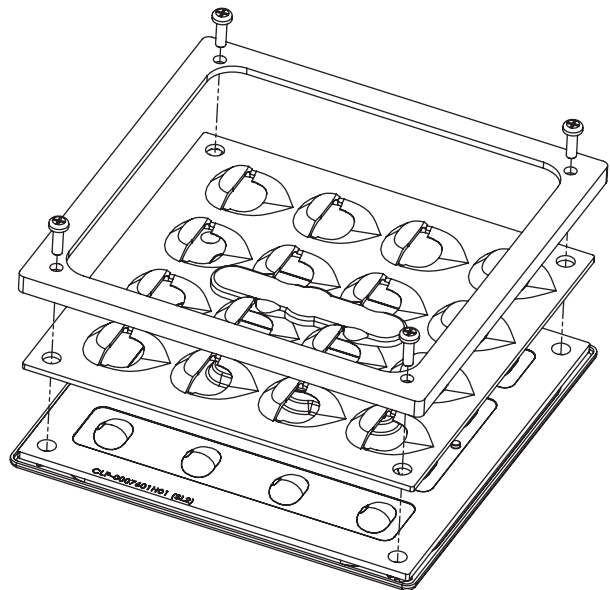
Herramientas necesarias

Destornillador de cabeza en cruz.

1. Extraiga los cuatro tornillos que sujetan la luz cuadrada a su soporte. Guarde los tornillos para volver a utilizarlos en el paso 3.
2. Coloque la cubierta de la luz por encima de la luz cuadrada como se muestra en la FIG. 1.
3. Vuelva a insertar los cuatro tornillos de cabeza en cruz del paso 1 a través del protector de la luz, a través de la luz cuadrada y hacia adentro del soporte. Asegúrese de que la junta de la cubierta de la luz quede hacia el frente correctamente para cubrir a la luz de su correspondiente fuente.

Nota: Se requiere una cubierta para luces para exteriores por cada Luz Cuadrada LED (por ejemplo: las GLEON-AE-04 o GAN-AE-04 requieren cuatro cubiertas para luces para exteriores).

FIG. 1





Eaton
1000 Eaton Boulevard
Cleveland, OH 44122
United States
Eaton.com

Eaton's Cooper Lighting Business
1121 Hwy 74 South
Peachtree City, GA 30265
cooperlighting.com

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Publication No. ADH140467

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All trademarks are property
of their respective owners.



House side orientation

Each shield
shows
proper
orientation
for house-
side

But the
screw holes
line up if you
rotate the
shield



Turned 90 degrees



Photocontrol Specifications



Smart Streetlight Controller

SPECIFICATIONS

Dimensions:	103.5mm tall, 88mm diameter
Weight:	375g
Lamp Interface	LED, CF, HID and HPS
Voltage Range	110V to 480V auto-ranging
Power Supply	90V to 506V
Lamp Power	1200W (1800VA)
Energy Consumption	Watt-hour resolution
Lamp On/Off	Photocell control, software programmable scheduling
Dimming Controls	Auto-select between 0-10V, DALI/DALI2
Ext. Sensor Interface	DALI/DALI 2
Comm. Module	LTE: Cat1, Cat M1, NB-IOT
Location Based Services	WiFi Mesh (Q1 2022 via OTA update), Bluetooth beacons, and high accuracy GPS
Firmware Updates:	OTA upgrades
Power Surge Protection	20kV/10kA-Extreme
Average Power Consumption	1W Typical

IP Ratings	IP66
Impact Rating	IK07
Operating Temp. Range	-40C to + 70C
Network Protocol	IPv4 and IPV6 network compliant
Impact & Tilt Detection	0 to 90° with 1° resolution and knock down alarm
Vibration Detection	Configurable roadway and bridge modes at 2g/3g detection

POWER METER SPECIFICATIONS

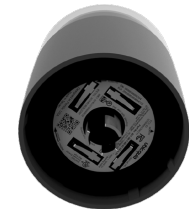
Metrology Accuracy	ANSI C12.20 Class 0.5
Accuracy Verification	Optical infrared pulse
Line Voltage	90V to 506V (50/60Hz)
Accuracy	+/- 0.5%
Power	Active power with PF
Energy Consumption	kWh
Life Cycle Tracking	Cycle count, burn hours tracking, and fault detection

PROGRAMMABLE FEATURES

- Customer asset management
- Scheduling controls
- Alert thresholds
- Astronomical scheduling with adjustable offsets
- Photocell thresholds
- Luminaire fault detection
- Voltage sag and swell detection
- Tilt detection and alert
- Power loss detection and alert
- Network communication failure
- Group devices by tag for mass control

WARRANTY

5-Year Warranty, Optional 10-Year Warranty





Steel Pole and Arm Specifications

Job Name: _____	Client Name: _____
Job Location - City: _____ State: _____	Created By: _____ Date: _____
Product: DS50 --- Quote: _____	Customer Approval: _____ Date: _____

SPECIFICATIONS

Pole - The pole shaft conforms to ASTM A595 Grade A with a constant linear taper of 0.14 in/ft.

Pole Top - A removable pole cap with hardware is provided.

Luminaire Arm - Luminaire arms are made from 2" schedule 40 pipe (2.38" OD) with a minimum yield strength of 36,000 psi. Double luminaire arms are oriented 180° apart. For other orientations please consult factory.

Luminaire Arm Attachment - Connection allows arm to be erected and held in place by gravity and secured by a single bolt.

Handhole - A covered handhole and grounding provision with hardware is provided.

Nut Covers - Anchor bolt nut covers with hardware are provided.

Full Base Cover - Optional two-piece full base cover is fabricated from ABS plastic. Valmont reserves the right to provide an optional two-piece steel full base cover on some applications depending upon the finish requirement and/or pole base diameter.

Anchor Base - The anchor base (base plate) conforms to ASTM A36.

Anchor Bolts - Anchor bolts conform to ASTM F1554 Grade 55 and are provided with two hex nuts and two flat washers. Bolts have an "L" bend on one end and are galvanized a minimum of 12" on the threaded end.

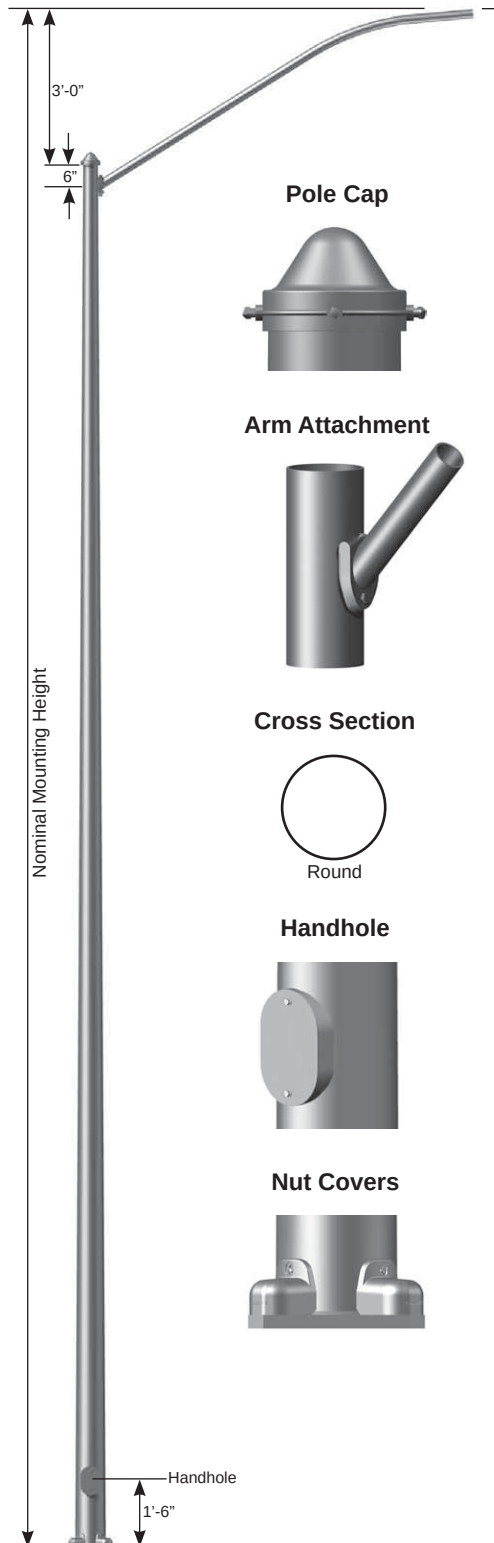
Hardware - All structural fasteners are galvanized high strength carbon steel. All non-structural fasteners are galvanized or zinc-plated carbon steel or stainless steel.

Finish - Standard finishes are galvanized, prime painted or any of Valmont's V-PRO™ Protection Systems. Additional finish options available upon request.

Design Criteria - Please reference Design Criteria Specification for appropriate design conditions.

ARM DATA

Double Arm Arrangement



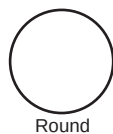
Pole Cap



Arm Attachment



Cross Section



Round

Handhole



Nut Covers



ROUND TAPERED STEEL

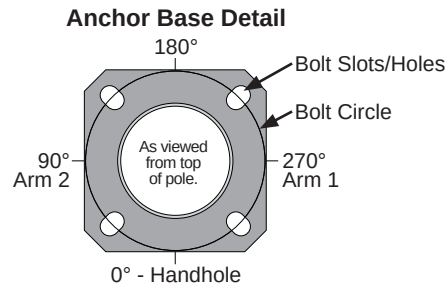
Smooth

DS50 / 20'-30'

Job Name: _____	Client Name: _____
Job Location - City: _____ State: _____	Created By: _____ Date: _____
Product: DS50 ---- Quote: _____	Customer Approval: _____ Date: _____

ANCHORAGE DATA

POLE BASE OD (IN)	BASE PLATE				ANCHOR BOLTS		
	BOLT CIRCLE DIA (IN)	± (IN)	SQUARE (IN)	THK (IN)	DIA x LENGTH x HOOK (IN)	PROJECTION (IN)	± (IN)
5.90	9.00	0.50	10.00	0.875	1.00 x 36.00 x 4.00	4.13	0.25
6.50	9.50	0.50	10.50	0.875	1.00 x 36.00 x 4.00	4.13	0.25
6.60	9.50	0.50	10.50	0.875	1.00 x 36.00 x 4.00	4.13	0.25
7.00	10.00	0.50	10.88	0.875	1.00 x 36.00 x 4.00	4.13	0.25
7.50	10.50	0.50	11.25	0.875	1.00 x 36.00 x 4.00	4.13	0.25



LOAD AND DIMENSIONAL DATA

DESIGN INFORMATION					POLE DIMENSIONS				MODEL NUMBER
NOMINAL MOUNTING HEIGHT	QUANTITY OF ARMS	MAX ARM LENGTH (FT)	100 MPH w/1.3 GUST		BASE OD (IN)	TOP OD (IN)	WALL THK (GA)	STRUCTURE WEIGHT ² (LBS)	
			MAX LUMINAIRE EPA ¹ (SQFT)	MAX LUMINAIRE WEIGHT ¹ (LBS)					
20'-0"	Single	8	2.0	75	5.90	3.52	11	160	R590A170
	Single	8	2.0	75	6.50	4.12	11	180	R650A170
	Double	8	2.0	75	5.90	3.52	11	200	R590A170
25'-0"	Single	8	2.0	75	5.90	2.82	11	185	R590A220
	Single	8	2.0	75	7.00	3.92	11	220	R700A220
	Double	8	2.0	75	5.90	2.82	11	220	R590A220
	Double	8	2.0	75	7.00	3.92	11	255	R700A220
30'-0"	Single	6	2.0	75	6.60	2.82	11	230	R660A270
	Single	8	2.0	68	6.60	2.82	11	232	R660A270
	Single	8	2.0	75	7.50	3.72	11	260	R750A270
	Double	6	2.0	75	6.60	2.82	11	265	R660A270
	Double	8	2.0	75	7.50	3.72	11	300	R750A270

DS50 32'-45'
Mounting Heights
available at
valmontstructures.com

- EPA represents the Effective Projected Area of each luminaire. Designs are limited to one luminaire per arm. Variations from sizes above are available upon inquiry at the factory. Satisfactory performance of poles is dependent upon the pole being properly attached to a supporting foundation of adequate design.
- Structure Weight is a nominal value which includes the pole shaft, base plate and luminaire arm(s) only.

PRODUCT ORDERING CODES

DESIGN SERIES	MODEL NUMBER	FIXTURE MOUNTING	FINISH	COLOR	V-PRO™ PROTECTION SYSTEM	OPTIONS
DS50				--	--	
	R590A170 R650A170 R590A220 R700A220 R660A270 R750A270	4S = 4' Single 4D = 4' Double 6S = 6' Single 6D = 6' Double 8S = 8' Single 8D = 8' Double	GV = Galvanize PP = Prime Paint FP = Finish Paint GF = Galvanized + Finish Paint	-- = Galvanize -- = Prime Paint WH = White ST = Sandstone BK = Black SM = Silver Metallic SL = Silver LG = Light Gray SG = Slate Gray DT = Dark Tan MB = Medium Bronze CB = Bronze DB = Dark Bronze BN = Brown HG = Hunter Green DG = Dark Green RD = Red SC = Special Color (Contact Factory)	-- = Galvanize -- = Prime Paint V1 = V-PRO 1 Basic 1 Coat Powder. V2 = V-PRO 2 2 Coat Powder or Liquid. Includes epoxy primer & top coat. V3 = V-PRO 3 2 Coat Powder or Liquid. Includes zinc primer & top coat. V4 = V-PRO 4 2 Coat Powder or Liquid. Includes zinc primer & premium top coat.	See Accessories at valmontstructures.com (Please Specify)



Legacy Outdoor Area and Street LED Lighting Specifications

Project		Catalog #		Type	
Prepared by		Notes		Date	



Streetworks

Archeon Nano

Roadway Luminaire

Product Features



Interactive Menu

- Ordering Information page 2
- Product Specifications page 2
- Energy and Performance Data page 3

Product Certifications



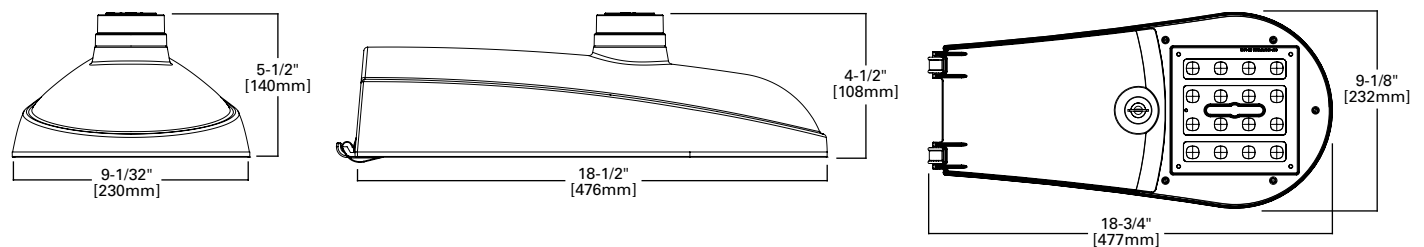
Quick Facts

- Up to 164 lumens per watt
- Five optical distributions (Type II, III, IV and V)
- Multiple lumen packages ranging from 2,000 - 7,800 delivered lumens
- 4000K CCT standard, optional 2700K CCT, 3000K CCT, 5000K CCT

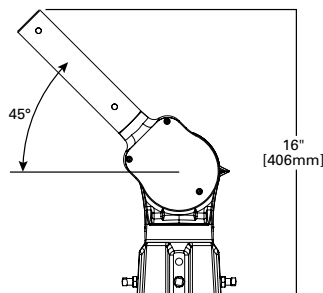
Connected Systems

- WaveLinx
- Enlighted

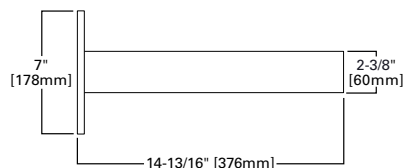
Dimensional Details



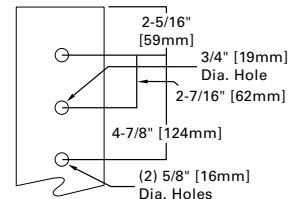
Adjustable Slipfitter Offset Arm



15" Straight Arm



Type "M" - Drilling Pattern



Ordering Information

SAMPLE ORDER NUMBER: ARCH-N-PA1-20-D-U-T2R-A15-AP

Product Family ^{1, 2}	Configuration	Wattage Bucket	Color Temperature	Voltage	Distribution	Finish
ARCH-N=Archeon Nano	PA1=Direct Mount Rectangle (16 LED)	10 19 20 30 40 50 60	722=70CRI, 2200K 727=70CRI, 2700K 730=70CRI, 3000K 735=70CRI, 3500K 740=70CRI, 4000K 750=70CRI, 5000K 827=80CRI, 2700K 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 T3=Type III T4W=Type IV Wide 5WQ=Type V Square Wide	AP=Grey BZ=Bronze BK=Black DP=Dark Platinum GM=Graphite Metallic WH=White
Options (Add as Suffix)					Controls	
10K=10kV UL 1449 Surge Protective Device 20K=Series 20kV UL 1449 Surge Protective Device¹⁷ 10MSP=10kV MOV Surge Protective Device 20MSP=20kV MOV Surge Protective Device K=Level Indicator HA=50°C High Ambient Temperature HSS=House Side Shield¹⁰ PSC=Photocontrol Shorting Cap¹¹ NPC=NEMA Photocontrol^{11, 12} LLPC=Longlife Photocontrol Included^{11, 12} IP66=IP66 Rated Housing ZD=DALI-enabled 4-PIN Twistlock Receptacle^{21, 22} ZW=WaveLinX-enabled 4-PIN Twistlock Receptacle^{21, 22} SWPD4XX=WaveLinX Wireless Sensor, 7' - 15' Mounting Height^{23, 24, 25, 26} SWPD5XX=WaveLinX Wireless Sensor, 15' - 40' Mounting Height^{23, 24, 25, 26} CC=Coastal Construction²⁸			FADC=Field Adjustable Dimming Controller²⁷ A15=15" Straight Mast Arm ASJS15=Adjustable Slipfitter (Factory set at 15° degrees) ASJS25=Adjustable Slipfitter (Factory set at 25° degrees) ASJS45=Adjustable Slipfitter (Factory set at 45° degrees)		PR=NEMA 3-PIN Twistlock Photocontrol Receptacle⁴ PR7=NEMA 7-PIN Twistlock Photocontrol Receptacle SLTD=DALI^{12, 15, 18} SPB1=Dimming Occupancy Sensor with Bluetooth Interface, <8' Mounting²⁹ SPB2=Dimming Occupancy Sensor with Bluetooth Interface, 8'-20' Mounting²⁹ SPB4=Dimming Occupancy Sensor with Bluetooth Interface, 21'-40' Mounting²⁹ 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}	
10X = 10 year warranty						
Accessories (Order Separately)						
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 Shield¹⁰			FSIR-100=Wireless Configuration Tool for Occupancy Sensor¹⁴ 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 SWPD4-XX=WaveLinX Wireless Sensor, 7' - 15' Mounting Height^{23, 24, 25, 26} SWPD5-XX=WaveLinX Wireless Sensor, 15' - 40' Mounting Height^{23, 24, 25, 26}			
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. DesignLights Consortium® Qualified. Refer to www.designlights.org Qualified Products List under Family Models for details. 3. 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). 4. 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. 5. Extended lead times may apply. 6. If "PR" selected, dimming functionality not available, dimming leads will be capped. 7. Round pole adapter and mounting hardware included. "M" drill pattern. 8. Replace XX with color designation. 9. Only available with 50W and 60W skus. 10. Not available with 5WQ. 11. Requires ordering of a twistlock photocontrol (3-PIN or 7-PIN) receptacle (PR or PR7). 12. Not available with "H" High Voltage Driver. 13. The FSIR-100 accessory is required to adjust parameters. 14. 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. 15. Not available for 10W. 16. Not available for 50 or 60 watts. 17. Only available with "U" universal voltage. 18. Not available with any sensor options. 19. Extended lead times may apply. 20. Not compatible with Surge options when used with "H" High Voltage Driver. 21. Utilizes internal step-down transformer when 347V or 480V is selected. 22. Controls system is not available with photocontrol (BPC), photocontrol receptacle (PR or PR7), or other controls systems (MS, ZD, ZW, LWR, DALI, or DIM). 23. Requires 4-PIN twistlock receptacle (ZD or ZW) option. 24. Replace XX with sensor color (WH, BZ or BK). 25. Sensor passive infrared (PIR) may be overly sensitive with operating below -20°C (-4°F). 26. For this device to be field-configurable, requires WAC Gateway components WAC-PoE and WPOE-120 in appropriate quantities. Only compatible with WaveLinX system and software and requires system components to be installed for operation. See website for more WaveLinX application information. 27. Cannot be used with motion response control options. 28. Coastal construction finish salt spray tested to over 5,000-hours per ASTM B117, with a scribe rating of 9 per ASTM D1654. 29. Smart device with Sensor Configuration mobile application by Wattstopper required to change system defaults.						

Product Specifications

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
- 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
- Luminaire available with the field adjustable dimming controller (FADC) to manually adjust wattage and reduce the total lumen output and light levels. Comes pre-set to the highest position at the lumen output selected.

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

Shipping Data

- Approximate Net Weight: 12 lbs. (5.4 kgs.)
- Effective Projected Area: 0.35 (Sq. Ft.)

Warranty

- Five year limited warranty, consult website for details. www.cooperlighting.com/legal
- Optional ten-year warranty, please see your Cooper Lighting Solutions Streetworks sales representative for more information

Energy and Performance Data

 View Archeon Nano IES files

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

FADC Settings

FADC Position	Percent of Typical Lumen Output
1	25%
2	48%
3	56%
4	65%
5	75%
6	80%
7	85%
8	90%
9	95%
10	100%

Note: +/-5% typical value

Project	PEC	Catalog #	ARCH-S-PA1-100-730-U-5WQ-AP-20MS P-PR7-5LTD-10X	Type	
Prepared by	Bob Ebbert	Notes		Date	6-10-2021



Streetworks

Archeon Small

Roadway Luminaire

Product Features



Product Certifications



Interactive Menu

- Ordering Information page 2
- Product Specifications page 2
- Energy and Performance Data page 3

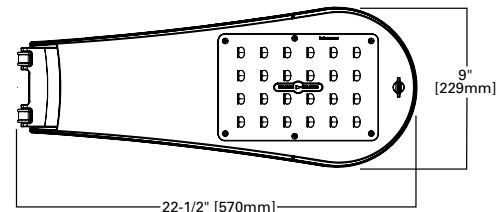
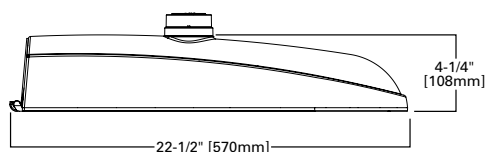
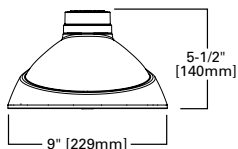
Quick Facts

- Die-cast aluminum construction; Single latch tool-less entry
- Replaces up to 200W equivalent HID; -40°C to 40°C operating range
- Pole-mounted; Optional arm and offset adjustable arm mounting
- 120-277V 50/60Hz, 347V 60Hz or 480V 60Hz operation; IP66 rated

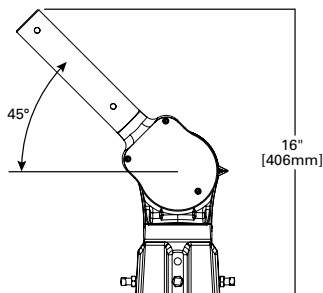
Connected Systems

- WaveLinx
- Enlighted

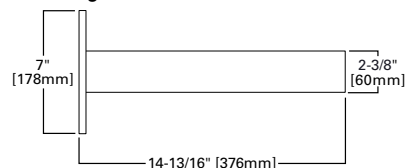
Dimensional Details



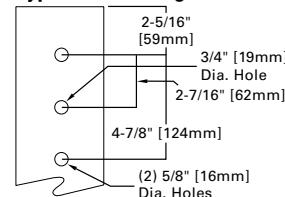
Adjustable Slipfitter Offset Arm



15" Straight Arm



Type "M" - Drilling Pattern



Ordering Information

SAMPLE ORDER NUMBER: ARCH-S-PA1-20-740-U-T2R-A15-AP-10K-PR

Product Family ^{1, 2}	Light Engine	Wattage Bucket	Color Temperature	Voltage	Distribution	Mounting	Finish
ARCH-S=Archeon Small	PA1=Direct Mount Rectangle (24 LED)	20 30 40 50 60 70 80 90 100	722=70CRI, 2200K 727=70CRI, 2700K 730=70CRI, 3000K 735=70CRI, 3500K 740=70CRI, 4000K 750=70CRI, 5000K 827=80CRI, 2700K ⁴ AMB=Amber 590nm ^{16, 17}	U=Universal 8=480V ^{2, 3} 9=347V ²	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 Mast Arm ASJS15=Adjustable Slipfitter (Factory set at 15° degrees) ⁹ ASJS25=Adjustable Slipfitter (Factory set at 25° degrees) ⁹ ASJS45=Adjustable Slipfitter (Factory set at 45° degrees) ⁹	AP=Grey BZ=Bronze BK=Black DP=Dark Platinum WH=White
Options (Add as Suffix)				Controls			
10K=Series 10kV UL 1449 Surge Protective Device 20K=Series 20kV UL 1449 Surge Protective Device 20KI=Series 20kV UL 1449 Surge Protective Device with light indicator 10MSP=Parallel 10kV MOV Surge Protective Device 20MSP=Parallel 20kV MOV Surge Protective Device K=Level Indicator HA=50°C High Ambient Temperature ⁶ HSS=Factory Install House Side Shield ⁷ PSC=Photocontrol Shorting Cap NPC=NEMA Photocontrol - Multi-Tap LLPC=Longlife Photocontrol Included FADC=Field Adjustable Dimming Controller ¹⁸ CC=Coastal Construction ¹⁹				PR=NEMA 3-PIN Twistlock Photocontrol Receptacle ⁵ PR7=NEMA 7-PIN Twistlock Photocontrol Receptacle SLTD=DALI SPB1=Dimming Occupancy Sensor with Bluetooth Interface, <8' Mounting ²⁰ SPB2=Dimming Occupancy Sensor with Bluetooth Interface, 8'-20' Mounting ²⁰ SPB4=Dimming Occupancy Sensor with Bluetooth Interface, 21'-40' Mounting ²⁰ ZD=DALI-enabled 4-PIN Twistlock Receptacle ^{10, 11} ZW=WaveLinx-enabled 4-PIN Twistlock Receptacle ^{10, 11} SWPD4XX=WaveLinx Wireless Sensor, 7' - 15' Mounting Height ^{12, 13, 14, 15} SWPD5XX=WaveLinx Wireless Sensor, 15' - 40' Mounting Height ^{12, 13, 14, 15}			
Accessories (Order Separately) ¹⁷							
OA / RA1013=Photocontrol Shorting Cap OA/RA1201=NEMA Photocontrol - 347V 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) ^{8,9} ASJS15-XX=Adjustable slipfitter (Factory set at 15 degrees) ⁹ ASJS25-XX=Adjustable slipfitter (Factory set at 25 degrees) ⁹ ASJS45-XX=Adjustable slipfitter (Factory set at 45 degrees) ⁹ HS-ARCH-24=Field Install ARCH House Side Shield			VGS-ARCH=Short Vertical Drop Shield VGL-ARCH=Long Vertical Drop Shield SWPD4-XX=WaveLinx Wireless Sensor, 7' - 15' Mounting Height ^{12,13,14,15} SWPD5-XX=WaveLinx Wireless Sensor, 15' - 40' Mounting Height ^{12,13,14,15}	
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. Not available with PA1-20. 3. 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). 4. Extended lead times may apply. 5. If "PR" selected, dimming functionality not available, dimming leads will be capped. 6. Option not available with PA1-90 or PA1-100. 7. HS-ARCH not available with 5WQ and T2U distribution. 8. Round pole adapter and mounting hardware included. "M" drill pattern. 9. Replace XX with color designation. 10. Utilizes internal step-down transformer when 347V or 480V is selected. 11. Controls system is not available with photocontrol (BPC), photocontrol receptacle (PR or PR7), or other controls systems (MS,ZD, ZW, LWR, DALI, or DIM). 12. Requires 4-PIN twistlock receptacle (ZD or ZW) option. 13. Replace XX with sensor color (WH, BZ or BK). 14. Sensor passive infrared (PIR) may be overly sensitive with operating below -20°C (-4°F). 15. For this device to be field-configurable, requires WAC Gateway components WAC-PoE and WPOE-120 in appropriate quantities. Only compatible with WaveLinx system and software and requires system components to be installed for operation. See website for more WaveLinx application information. 16. Not available with HA option. 17. Amber 590nm +/-5nm for wildlife and observatory use. Supplied in PA1 30 wattage bucket only. 18. Cannot be used with motion response control options. 19. Coastal construction finish salt spray tested to over 5,000-hours per ASTM B117, with a scribe rating of 9 per ASTM D1654. 20. Smart device with Sensor Configuration mobile application by Wattstopper required to change system defaults.							

Product Specifications

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 2200K, 2700K, 3000K, and 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
- Optics are IP66 enclosure rated
- IDA Certified for 3000K CCT and warmer only.

Electrical

- 120-277V 50/60Hz, 347V 60Hz or 480V 60Hz operation
- Standard 0-10V dimming
- 10kV/10kA common- and differential- mode surge protection available

- 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 98% lumen maintenance expected at 60,000 hours
- Replaces 50W to 150W HID
- Luminaire available with the field adjustable dimming controller (FADC) to manually adjust wattage and reduce the total lumen output and light levels. Comes pre-set to the highest position at the lumen output selected.

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

Shipping Data

- Approximate Net Weight: 12 lbs. (5.4 kgs.)
- Effective Projected Area: 0.5 (Sq. Ft.)

Warranty

- Five year limited warranty, consult website for details. www.cooperlighting.com/legal
- Optional ten-year warranty, please see your Cooper Lighting Solutions Streetworks sales representative for more information

Energy and Performance Data

Power and Lumens (PA1 Light Engine)

 View Archeon Small IES files

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)
PA1	40°C	98%	> 800,000 @ 40°C

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

FADC Settings

FADC Position	Percent of Typical Lumen Output
1	25%
2	46%
3	55%
4	62%
5	72%
6	77%
7	82%
8	85%
9	90%
10	100%

Note: +/-5% typical value

Project	PEC	Catalog #	ARCH-S-PA1-100-730-U-T3-AP-20MSP-PR7-5LTD-10X	Type	
Prepared by	Bo	Notes		Date	6-10-2021



Streetworks

Archeon Small

Roadway Luminaire

Product Features



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- Ordering Information page 2
- Product Specifications page 2
- Energy and Performance Data page 3

Product Certifications



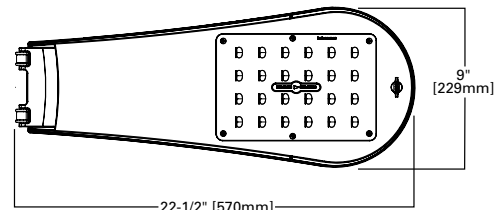
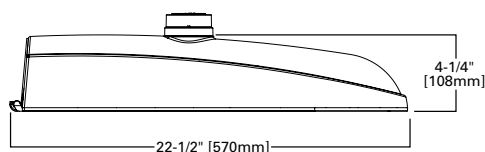
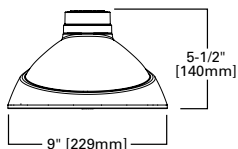
Quick Facts

- Die-cast aluminum construction; Single latch tool-less entry
- Replaces up to 200W equivalent HID; -40°C to 40°C operating range
- Pole-mounted; Optional arm and offset adjustable arm mounting
- 120-277V 50/60Hz, 347V 60Hz or 480V 60Hz operation; IP66 rated

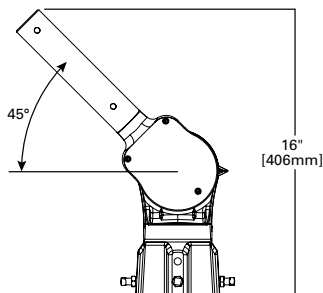
Connected Systems

- WaveLinx
- Enlighted

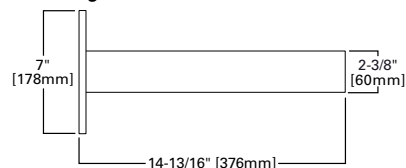
Dimensional Details



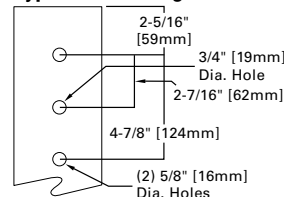
Adjustable Slipfitter Offset Arm



15" Straight Arm



Type "M" - Drilling Pattern



Ordering Information

SAMPLE ORDER NUMBER: ARCH-S-PA1-20-740-U-T2R-A15-AP-10K-PR

Product Family ^{1, 2}	Light Engine	Wattage Bucket	Color Temperature	Voltage	Distribution	Mounting	Finish
ARCH-S=Archeon Small	PA1=Direct Mount Rectangle (24 LED)	20 30 40 50 60 70 80 90 100	722=70CRI, 2200K 727=70CRI, 2700K 730=70CRI, 3000K 735=70CRI, 3500K 740=70CRI, 4000K 750=70CRI, 5000K 827=80CRI, 2700K ⁴ AMB=Amber 590nm ^{16, 17}	U=Universal 8=480V ^{2, 3} 9=347V ²	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 Mast Arm ASJS15=Adjustable Slipfitter (Factory set at 15° degrees) ⁹ ASJS25=Adjustable Slipfitter (Factory set at 25° degrees) ⁹ ASJS45=Adjustable Slipfitter (Factory set at 45° degrees) ⁹	AP=Grey BZ=Bronze BK=Black DP=Dark Platinum WH=White
Options (Add as Suffix)				Controls			
10K=Series 10kV UL 1449 Surge Protective Device 20K=Series 20kV UL 1449 Surge Protective Device 20KI=Series 20kV UL 1449 Surge Protective Device with light indicator 10MSP=Parallel 10kV MOV Surge Protective Device 20MSP=Parallel 20kV MOV Surge Protective Device K=Level Indicator HA=50°C High Ambient Temperature ⁶ HSS=Factory Install House Side Shield ⁷ PSC=Photocontrol Shorting Cap NPC=NEMA Photocontrol - Multi-Tap LLPC=Longlife Photocontrol Included FADC=Field Adjustable Dimming Controller ¹⁸ CC=Coastal Construction ¹⁹				PR=NEMA 3-PIN Twistlock Photocontrol Receptacle⁵ PR7=NEMA 7-PIN Twistlock Photocontrol Receptacle SLTD=DALI SPB1=Dimming Occupancy Sensor with Bluetooth Interface, <8' Mounting ²⁰ SPB2=Dimming Occupancy Sensor with Bluetooth Interface, 8'-20' Mounting ²⁰ SPB4=Dimming Occupancy Sensor with Bluetooth Interface, 21'-40' Mounting ²⁰ ZD=DALI-enabled 4-PIN Twistlock Receptacle ^{10, 11} ZW=WaveLinx-enabled 4-PIN Twistlock Receptacle ^{10, 11} SWPD4XX=WaveLinx Wireless Sensor, 7' - 15' Mounting Height ^{12, 13, 14, 15} SWPD5XX=WaveLinx Wireless Sensor, 15' - 40' Mounting Height ^{12, 13, 14, 15}			
10X = 10 year warranty							
Accessories (Order Separately) ¹⁷							
OA / RA1013=Photocontrol Shorting Cap OA/RA1201=NEMA Photocontrol - 347V 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)^{8,9} ASJS15-XX=Adjustable slipfitter (Factory set at 15 degrees) ⁹ ASJS25-XX=Adjustable slipfitter (Factory set at 25 degrees) ⁹ ASJS45-XX=Adjustable slipfitter (Factory set at 45 degrees) ⁹ HS-ARCH-24=Field Install ARCH House Side Shield			VGS-ARCH=Short Vertical Drop Shield VGL-ARCH=Long Vertical Drop Shield SWPD4-XX=WaveLinx Wireless Sensor, 7' - 15' Mounting Height ^{12,13,14,15} SWPD5-XX=WaveLinx Wireless Sensor, 15' - 40' Mounting Height ^{12,13,14,15}	
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. Not available with PA1-20. 3. 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). 4. Extended lead times may apply. 5. If "PR" selected, dimming functionality not available, dimming leads will be capped. 6. Option not available with PA1-90 or PA1-100. 7. HS-ARCH not available with 5WQ and T2U distribution. 8. Round pole adapter and mounting hardware included. "M" drill pattern. 9. Replace XX with color designation. 10. Utilizes internal step-down transformer when 347V or 480V is selected. 11. Controls system is not available with photocontrol (BPC), photocontrol receptacle (PR or PR7), or other controls systems (MS,ZD, ZW, LWR, DALI, or DIM). 12. Requires 4-PIN twistlock receptacle (ZD or ZW) option. 13. Replace XX with sensor color (WH, BZ or BK). 14. Sensor passive infrared (PIR) may be overly sensitive with operating below -20°C (-4°F). 15. For this device to be field-configurable, requires WAC Gateway components WAC-PoE and WPOE-120 in appropriate quantities. Only compatible with WaveLinx system and software and requires system components to be installed for operation. See website for more WaveLinx application information. 16. Not available with HA option. 17. Amber 590nm +/-5nm for wildlife and observatory use. Supplied in PA1 30 wattage bucket only. 18. Cannot be used with motion response control options. 19. Coastal construction finish salt spray tested to over 5,000-hours per ASTM B117, with a scribe rating of 9 per ASTM D1654. 20. Smart device with Sensor Configuration mobile application by Wattstopper required to change system defaults.							

Product Specifications

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 2200K, 2700K, 3000K, and 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
- Optics are IP66 enclosure rated
- IDA Certified for 3000K CCT and warmer only.

Electrical

- 120-277V 50/60Hz, 347V 60Hz or 480V 60Hz operation
- Standard 0-10V dimming
- 10kV/10kA common- and differential- mode surge protection available

- 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 98% lumen maintenance expected at 60,000 hours
- Replaces 50W to 150W HID
- Luminaire available with the field adjustable dimming controller (FADC) to manually adjust wattage and reduce the total lumen output and light levels. Comes pre-set to the highest position at the lumen output selected.

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

Shipping Data

- Approximate Net Weight: 12 lbs. (5.4 kgs.)
- Effective Projected Area: 0.5 (Sq. Ft.)

Warranty

- Five year limited warranty, consult website for details. www.cooperlighting.com/legal
- Optional ten-year warranty, please see your Cooper Lighting Solutions Streetworks sales representative for more information

Energy and Performance Data

Power and Lumens (PA1 Light Engine)

[View Archeon Small IES files](#)

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)
PA1	40°C	98%	> 800,000 @ 40°C

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

FADC Settings

FADC Position	Percent of Typical Lumen Output
1	25%
2	46%
3	55%
4	62%
5	72%
6	77%
7	82%
8	85%
9	90%
10	100%

Note: +/-5% typical value



Pedernales Electric Cooperative