

Project		Catalog #		Type	
Prepared by		Notes		Date	



Streetworks

Archeon Small

Roadway Luminaire

Product Features



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Product Certifications



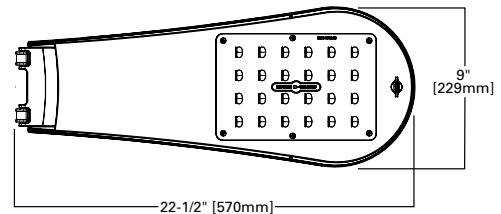
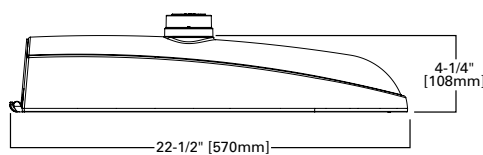
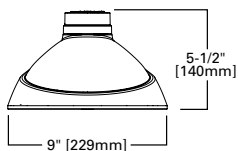
Quick Facts

- 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

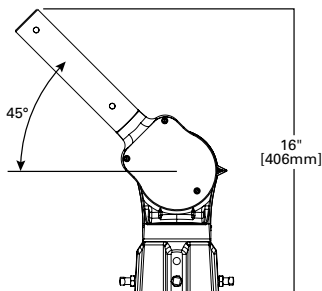
Connected Systems

- WaveLinx
- Enlighted

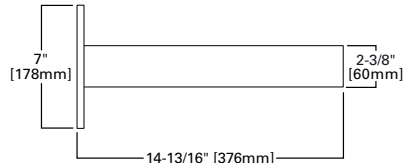
Dimensional Details



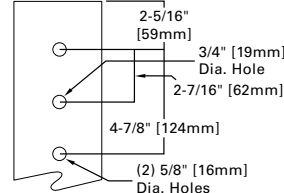
Adjustable Slipfitter Offset Arm



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 Receptacle ⁵ PR7=NEMA 7-PIN Twistlock Photocontrol Receptacle 5LTD=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 whitepaper 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)

Supplemental Performance Guide

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

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%

View Archeon Small IES files

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



Note: +/-5% typical value