

Project		Catalog #		Type	
Prepared by		Notes		Date	



Streetworks

Archeon Small

Roadway Luminaire

Product Features



Product Certifications



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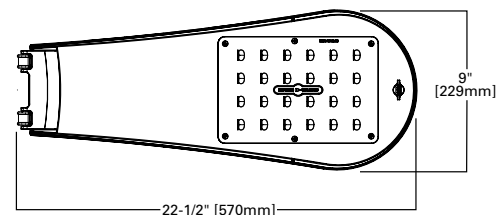
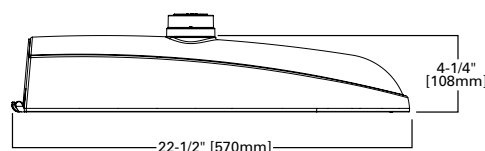
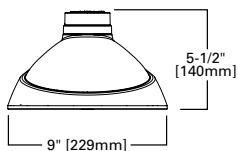
Quick Facts

- 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

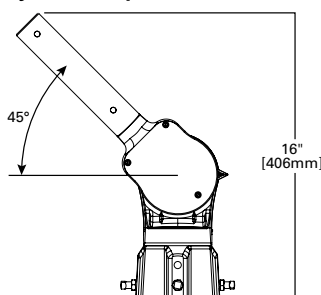
Connected Systems

- WaveLinX
- Enlighted

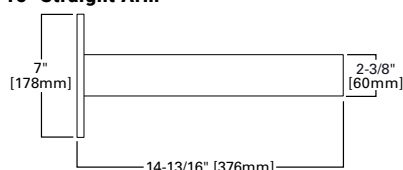
Dimensional Details



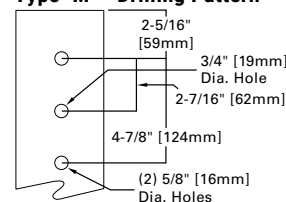
Adjustable Slipfitter Offset Arm



15" Straight Arm



Type "M" - Drilling Pattern



NOTES:
2. IDA Certified for 3000K CCT and warmer only.

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 (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 AMB=Amber 590nm	U=Universal 8=480V 9=347V	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) 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			
<p>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 HSS=Factory Install House Side Shield GRSBK=Glare Reducing Shield Black (Lightsquares only) GRSWH=Glare Reducing Shield White (Lightsquares only) LCF=Light Square Trim Painted to Match Housing (LightSquares only) CC=Coastal Construction Finish L90=Optics Rotated 90 degrees Left R90=Optics Rotated 90 degrees Right FADC=Field Adjustable Dimming Controller</p>				<p>PSC=Photocontrol Shorting Cap NPC=NEMA Photocontrol - Multi-Tap LLPC=Longlife Photocontrol Included PR=NEMA 3-PIN Twistlock Photocontrol Receptacle PR7=NEMA 7-PIN Twistlock Photocontrol Receptacle FADC=Field Adjustable Dimming Controller 5LTD=DALI SPB1=Dimming Occupancy Sensor with Bluetooth Interface SPB2=Dimming Occupancy Sensor with Bluetooth Interface, 8'-20' Mounting SPB4=Dimming Occupancy Sensor with Bluetooth Interface, 21'-40' Mounting ZD=DALI-enabled 4-PIN Twistlock Receptacle ZW=WaveLinX-enabled 4-PIN Twistlock Receptacle SWPD4XX=WaveLinX Wireless Sensor, 7' - 15' Mounting Height SWPD5XX=WaveLinX Wireless Sensor, 15' - 40' Mounting Height</p>			
<p>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.</p>				<p>9. XX with color designation. 10. Only available with "U" universal voltage. 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.</p>			

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)

Light Engine - PA1		PA1-30	PA1-40	PA1-50	PA1-60	PA1-70	PA1-80	PA1-90	PA1-100
Power (Watts)		33	43	53	63	73	83	93	103
Wattage Label		30	40	50	60	70	80	90	100
Input Current @ 120V (A)		0.28	0.37	0.45	0.54	0.62	0.70	0.78	0.85
Input Current @ 277V (A)		0.13	0.17	0.21	0.24	0.27	0.31	0.34	0.38
Input Current @ 347V (A)		0.11	0.13	0.16	0.19	0.21	0.24	0.27	0.27
Input Current @ 480V (A)		0.08	0.10	0.12	0.14	0.16	0.18	0.12	0.22
Optics									
T2R	Lumens	4,943	6,424	7,640	8,855	9,879	10,852	11,740	12,517
	Lumens Per Watt	146	145	142	138	134	130	127	122
	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
T2U	Lumens	4,959	6,443	7,664	8,882	9,909	10,885	11,776	12,555
	Lumens Per Watt	147	145	142	138	135	131	127	123
	Bug Rating	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3
T3	Lumens	4,945	6,425	7,642	8,857	9,881	10,855	11,743	12,520
	Lumens Per Watt	146	145	142	138	134	130	127	122
	Bug Rating	B1-U0-G2	B1-U0-G2	B1-U0-G2	B2-U0-G2	B2-U0-G3	B2-U0-G3	B2-U0-G3	B2-U0-G3
T4W	Lumens	4,883	6,345	7,547	8,746	9,758	10,719	11,596	12,363
	Lumens Per Watt	144	143	140	136	133	129	125	121
	Bug Rating	B1-U0-G2	B1-U0-G2	B2-U0-G2	B2-U0-G3	B2-U0-G3	B2-U0-G3	B2-U0-G3	B2-U0-G3
5WQ	Lumens	5,039	6,548	7,788	9,026	10,070	11,062	11,967	12,759
	Lumens Per Watt	149	147	144	140	137	133	129	125
	Bug Rating	B3-U0-G2	B3-U0-G2	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G3	B4-U0-G3	B4-U0-G3

Power and Lumens (PA2 Light Engine)

Light Engine - PA1		PA2-20	PA2-30	PA2-40	PA2-50	PA2-60	PA2-70	PA2-80	PA2-90	PA2-100	PA2-110	PA2-120	PA2-130
Power (Watts)		23	33	43	53	63	73	83	93	103	113	123	133
Wattage Label		20	30	40	50	60	70	80	90	100	110	120	130
Input Current @ 120V (A)		0.20	0.28	0.36	0.45	0.53	0.61	0.69	0.77	0.86	0.96	1.02	1.10
Input Current @ 277V (A)		0.09	0.13	0.16	0.20	0.24	0.27	0.31	0.34	0.38	0.42	0.46	0.49
Input Current @ 347V (A)		0.07	0.10	0.13	0.16	0.18	0.21	0.24	0.27	0.30	0.33	0.36	0.39
Input Current @ 480V (A)		0.06	0.08	0.09	0.11	0.13	0.16	0.17	0.19	0.22	0.24	0.26	0.28
Optics													
T2R	Lumens	3,706	5,265	6,723	8,043	9,495	10,744	11,875	12,883	13,956	15,091	15,688	16,268
	Lumens Per Watt	158	157	155	150	150	147	143	139	135	132	128	124
	Bug Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2
T2U	Lumens	3,648	5,183	6,618	7,917	9,346	10,576	11,689	12,682	13,738	14,854	15,442	16,014
	Lumens Per Watt	155	155	152	148	148	144	141	137	133	130	126	122
	Bug Rating	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3
T3	Lumens	3,693	5,247	6,700	8,015	9,461	10,707	11,833	12,838	13,907	15,038	15,633	16,211
	Lumens Per Watt	157	157	154	150	150	146	143	139	135	132	128	123
	Bug Rating	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G3	B2-U0-G3
T4W	Lumens	3,680	5,228	6,676	7,987	9,428	10,669	11,791	12,793	13,858	14,985	15,578	16,154
	Lumens Per Watt	157	156	153	149	149	146	142	138	134	131	127	123
	Bug Rating	B1-U0-G1	B1-U0-G2	B1-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G3	B2-U0-G3	B2-U0-G3	B3-U0-G3
5WQ	Lumens	3,810	5,413	6,912	8,269	9,761	11,046	12,208	13,245	14,348	15,514	16,128	16,725
	Lumens Per Watt	162	162	159	154	155	151	147	143	139	136	132	127
	Bug Rating	B3-U0-G1	B3-U0-G1	B3-U0-G2	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B4-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

 [View Archeon Small IES files](#)