

Project	Catalog #	Type
Prepared by	Notes	Date



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Streetworks

Archeon Nano

Roadway Luminaire

Product Certifications & Features



Product Specifications

OPTICAL

- 5 patented AccuLED high efficiency roadway and area optical distributions
 - 7 color temperature options
 - 70 CRI: 2200K, 2700K, 3000K, 3500K, 4000K, 5000K
 - 80 CRI: 2700K
 - House side shield for spill light control; available factory-installed or as field-installed accessory.
- #### ELECTRICAL
- 120-277V, 240-480V, 347V, and 480V; 50/60Hz
 - Standard 0-10V dimming
 - 10kV and 20kV surge protection options with series or parallel configurations
 - -40°C to 40°C ambient temperature operating range
 - Standard 3-position terminal block

PHYSICAL CHARACTERISTICS

- Heavy-duty die-cast aluminum housing and door
- Lineman-friendly features standard for easy maintenance. Includes tool-less entry and 3-position terminal block with easy access for service wires
- 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
- Housing finished in 5-stage super TGIC polyester powder coat paint, 2.5 mil nominal thickness
- 5 standard color options. RAL and custom colors also available. (Additional charges and lead time apply)

CONTROLS

- Available with ANSI C136.10 3-pin or C136.41 7-pin control receptacle.
- Optional Field Adjustable Dimming Control (FADC) module allows for manual adjustment of lumen output and power usage; factory preset to highest output level. Enables a single SKU to cover multiple field applications
- Optional 4-pin Zhaga Book 18 receptacle for integration of onboard sensors with DALI- and D4i-enabled drivers
- Fully compatible with CLS Trellix Infrastructure UNB

(Ultra Narrow Band) and cellular network lighting controls platforms. Enables wireless collection of luminaire performance and status data and asset management for luminaires installed in the field

COMPLIANCE

- Meets ANSI C136.25 for IP66 optical enclosure rating
- Meets ANSI C136.31 for 3G luminaire vibration. Customer is responsible for engineering analysis to confirm pole and fixture compatibility for all applications
- Meets ANSI C136.15 for luminaire field identification label standard
- Meets ANSI C136.22 internal label standard
- Safety listing - Wet Location UL 1598
- 3,000-hours per ASTM B117, with a scribe rating of 7 per ASTM D1654 for standard color finish
- DarkSky approved for 3000K CCT and warmer, with mounting options less than 10° of tilt.
- DLC and DLC Premium listed – visit designlights.org to confirm listed variations
- BAA domestic preference option meets BAA requirements
- Products that meet BABA Domestic Preference Requirements - This Cooper product is manufactured in the US and meets the BABA cost of components rule. To verify a configured product with specific accessories and options meets BABA Domestic Preference Requirements; submit this catalog number to Cooper Lighting Quotation team for validation by our Engineering and Manufacturing teams. Our BABA designation is based on the minimum compliance requirement for BABA. Individual Government Agencies may have more stringent compliance standards.
- Products that meet BABA through Exemption - Allows any product to satisfy BABA requirements regardless of domestic content manufacturing for projects funded by FHWA through Oct 1st 2025. See notes portion in Ordering Information section for more detail.
- Products that meet BABA through BAA Exemption - FHWA and FTA agencies are utilizing their BAA rules for BABA compliance. Cooper's products with a BAA designation are manufactured in the US and utilize a BAA COTS exemption rule for compliance. To verify a configured product with specific accessories and options meet BABA Domestic Preference Requirements; submit this catalog number to Cooper Lighting Quotation team for validation by our Engineering and Manufacturing teams. See notes portion in Ordering Information section for more detail.

- Please refer to the DOMESTIC.PREFERENCES website or consult the CLS Domestic Preferences team for more information. Components shipped separately may be separately analyzed under domestic preference requirements.

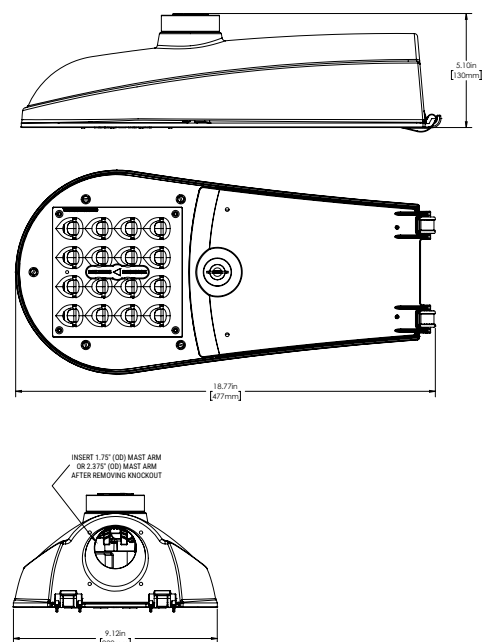
SHIPPING DATA

- Approximate Net Weight: 12 lbs. (5.4 kgs.)
- Effective Projected Area: 0.35 (Sq. Ft.)
- Carton Size: 21" x 8 1/2" x 11"
- Pallet Size: 48" X 48"
- Cartons/Pallet: 40

WARRANTY

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

Dimensional Details



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 BABAE-ARCH-N =Build America Buy America Act (FHWA Exception, for projects funded by Oct 1, 2025) ²⁸ BABAF-ARCH-N =Build America Buy America Act (FHWA Exception, for projects funded between Oct 1, 2025 and Oct 1, 2026, and FTA Buy America) 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) ³	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 ^{10,16} 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) Dxxxx =DOT Configuration - Contact Quotes Team Uxxxx =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					
<p>NOTES:</p> <ol style="list-style-type: none"> Customer is responsible for engineering analysis to confirm pole and fixture compatibility for all applications. Refer to our white paper WPS13001EN for additional support information. DesignLights Consortium® Qualified. Refer to www.designlights.org Qualified Products List under Family Models for details. Only for use with 480V Wye systems. Per NEC, not for use with ungrounded systems, impedance grounded systems or corner grounded systems (commonly known as Three Phase Three Wire Delta, Three Phase High Leg Delta and Three Phase Corner Grounded Delta systems). Use dedicated IES files for 2700K, 3000K, and 5000K when performing layouts. These files are published on the ARCH Archeon luminaire product page on the website. Extended lead times may apply. If "PR" selected, dimming functionality not available, dimming leads will be capped. Round pole adapter and mounting hardware included. "M" drill pattern. Replace XX with color designation. Only available with 50W and 60W skus. Not available with 5WQ. Requires ordering of a twistlock photocontrol (3-PIN or 7-PIN) receptacle (PR or PR7). Not available with "H" High Voltage Driver. The FSIR-100 accessory is required to adjust parameters. This tool enables adjustment of parameters including high and low modes, sensitivity, time delay, cutoff and more. Consult your lighting representative at Cooper Lighting Solutions for more information. Not available for 10W. Not available for 50 or 60 watts. Only available with "U" universal voltage. Extended lead times may apply. Not compatible with Surge options when used with "H" High Voltage Driver. Utilizes internal step-down transformer when 347V or 480V is selected. Controls system is not available with photocontrol receptacle (PR or PR7), or other controls systems (MS, FADC, SPBx & DALI). Replace XX with sensor color (WH, BZ or BK). Sensor passive infrared (PIR) may be overly sensitive with operating below -20°C (-4°F). 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. Cannot be used with PR7, other motion response control options, or 5LTD (DALI). Coastal construction finish salt spray tested to over 5,000-hours per ASTM B117, with a scribe rating of 9 per ASTM D1654. Smart device with Sensor Configuration mobile application by Wattstopper required to change system defaults. Only product configurations with these prefixes are built to be compliant with the Buy American Act of 1933 (BAA) or the Build America Buy America Act (BABA). BABA is the minimum Government compliance requirement for the Build America Buy America standards which is part of the Infrastructure and Investment Jobs Act (IIJA). Individual Government Agencies may have more stringent compliance standards. BABAE designates the product will meet the standards set for FHWA. As noted these projects must receive Government Funding by October 1, 2025. BABAF designates the product will meet the standards set for FHWA and FTA. As noted these projects must receive Government Funding by October 1, 2026. Please refer to the DOMESTIC PREFERENCES website or consult the CLS Domestic Preferences team for more information. Components shipped separately may be separately analyzed under domestic preference requirements. Accessories sold separately will be separately analyzed under domestic preference requirements. Consult factory for further information. 							

Energy and Performance Data

Power and Lumens

 Supplemental Performance Guide

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

2200K CCT, 70 CRI								
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

2700K CCT, 70 CRI								
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

5000K CCT, 70 CRI								
T2R	Lumens	2,267	3,041	3,444	4,429	5,594	6,850	7,706
	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	162	160	143	143	136	132	124
T2U	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
	Lumens per Watt	160	159	142	142	135	131	123
T3	Lumens	2,246	3,012	3,411	4,387	5,541	6,784	7,632
	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	160	159	142	142	135	130	123
T4W	Lumens	2,245	3,012	3,411	4,386	5,540	6,783	7,631
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B2-U0-G2
	Lumens per Watt	160	159	142	141	135	130	123
5WQ	Lumens	2,302	3,088	3,497	4,497	5,680	6,955	7,824
	BUG Rating	B2-U0-G1	B2-U0-G1	B2-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G2	B3-U0-G2
	Lumens per Watt	164	163	146	145	139	134	126

2700K CCT, 80 CRI

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

3000K CCT, 80 CRI

T2R	Lumens	1,802	2,417	2,737	3,520	4,445	5,443	6,124
	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	129	127	114	114	108	105	99
T2U	Lumens	1,785	2,395	2,712	3,487	4,405	5,393	6,067
	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	128	126	113	112	107	104	98
T3	Lumens	1,784	2,394	2,711	3,486	4,403	5,391	6,065
	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	127	126	113	112	107	104	98
T4W	Lumens	1,784	2,393	2,710	3,485	4,402	5,390	6,064
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2
	Lumens per Watt	127	126	113	112	107	104	98
5WQ	Lumens	1,829	2,454	2,779	3,574	4,514	5,527	6,217
	BUG Rating	B2-U0-G1	B2-U0-G1	B2-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G1
	Lumens per Watt	131	129	116	115	110	106	100

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%

[View Archeon Nano IES files](#)

Note: +/-5% typical value

Optical Distributions

