

Project		Catalog #		Type	
Prepared by		Notes		Date	



# Streetworks

## VERD VERDEON (CA-SERIES)

Roadway Luminaire

### Product Features



### Product Certifications



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### Quick Facts

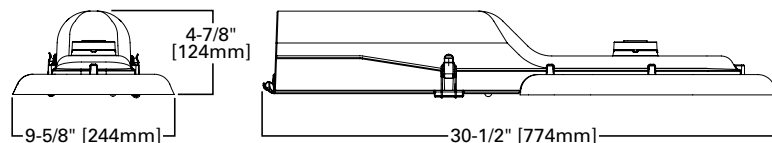
- Ideal replacement for 50W-250W+ HPS luminaires
- UL/cUL listed for wet locations
- Optional IP66 enclosure rating available
- Tool-less removable power door for easy maintenance
- Parallel and series surge protection available (10kV or 20kV)
- 3G vibration rated

### Connected Systems

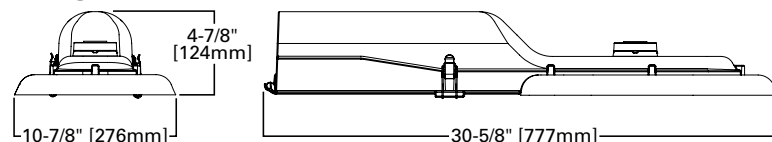
- WaveLinx Lite

### Dimensional and Mounting Details

#### VERD

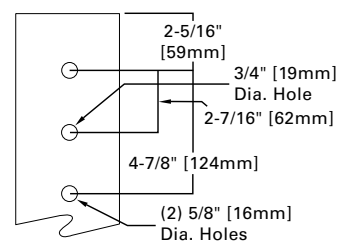


#### VERD-G



#### ARM DRILLING

##### TYPE "M"



#### NOTES:

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

## Ordering Information

SAMPLE NUMBER: **VERD-CA2-130-740-U-T2-AP-10K-PR7**

Product Family <sup>1</sup>	Configuration	Wattage Bucket	Color Temperature	Voltage	Distribution	Mounting	Color
<b>VERD</b> =Verdeon <b>BAA-VERD</b> =Verdeon Buy American Act Compliant <sup>11</sup> <b>TAA-VERD</b> =Verdeon Trade Agreements Act Compliant <sup>11</sup>	CA2=2 COB Light Engine	<b>60</b> =60W <b>70</b> =70W <b>80</b> =80W <b>90</b> =90W <b>100</b> =100W <b>110</b> =110W <b>120</b> =120W <b>130</b> =130W	<b>740</b> =70CRI, 4000K <b>727</b> =70CRI, 2700K <b>722</b> =70CRI, 2200K <b>730</b> =70CRI, 3000K <b>750</b> =70CRI, 5000K	<b>U</b> =Universal (120-277V) <b>8</b> =480V <sup>2</sup> <b>9</b> =347V <b>HV</b> =High Voltage Driver (347V - 480V)	<b>T1</b> =Type I <b>T2</b> =Type II <b>T3</b> =Type III <b>T4</b> =Type IV <b>T5</b> =Type V	<b>[Blank]</b> =None <b>A15</b> =15" Straight Mast Arm <sup>5</sup> <b>ASJS15</b> =Adjustable Slipfitter (Factory set at 15° degrees) <b>ASJS25</b> =Adjustable Slipfitter (Factory set at 25° degrees) <b>ASJS45</b> =Adjustable Slipfitter (Factory set at 45° degrees)	<b>AP</b> =Grey <b>BZ</b> =Bronze <b>BK</b> =Black <b>DP</b> =Dark Platinum <b>GM</b> =Graphite Metallic <b>WH</b> =White
<b>VERD-G</b> =Verdeon Grande <b>BAA-VERD-G</b> =Verdeon Grande Buy American Act Compliant <sup>11</sup> <b>TAA-VERD-G</b> =Verdeon Grande Trade Agreements Act Compliant <sup>11</sup>		<b>100</b> =100W <b>110</b> =110W <b>120</b> =120W <b>130</b> =130W <b>140</b> =140W <b>150</b> =150W <b>160</b> =160W					
Options (Add as Suffix)		Controls			Accessories (Order Separately) <sup>12</sup>		
<b>10MSP</b> =Parallel 10kV MOV Surge Protective Device <b>20MSP</b> =Parallel 20kV MOV Surge Protective Device <b>10K</b> =Series 10kV UL 1449 Surge Protective Device <b>20K</b> =Series 20kV UL 1449 Surge Protective Device <b>20KI</b> =Series 20kV UL 1449 Surge Protective Device with light indicator <b>K</b> =Level Indicator <b>4B</b> =Four-bolt, Two-clamp mounting <b>HA</b> =50°C High Ambient Temperature <b>HSS</b> =Factory Install House Side Shield <sup>4</sup> <b>IP66</b> =IP66 Rated Housing <b>FADC</b> =Field Adjustable Dimming Controller <sup>10</sup> <b>Dxxxxx</b> =DOT Configuration - Contact Quotes Team <b>Uxxxxx</b> =Utility Configuration - Contact Quotes Team		<b>PSC</b> =Photocontrol Shorting Cap <b>NPC</b> =NEMA Photocontrol - Multi-Tap <b>LLPC</b> =Longlife Photocontrol Included <b>PR</b> =NEMA 3-PIN Twistlock Photocontrol Receptacle <b>PR7</b> =NEMA 7-PIN Twistlock Photocontrol Receptacle <b>MS/DIM-L08</b> =Motion Sensor for Dimming Operation, Maximum 8' Mounting Height <sup>4</sup> <b>MS/DIM-L20</b> =Motion Sensor for Dimming Operation, Maximum 9' - 20' Mounting Height <sup>4</sup> <b>MS/DIM-L40</b> =Motion Sensor for Dimming Operation, Maximum 21' - 40' Mounting Height <sup>4</sup> <b>SPB1</b> =Dimming Occupancy Sensor with Bluetooth Interface, <8' Mounting <b>SPB2</b> =Dimming Occupancy Sensor with Bluetooth Interface, 8'-20' Mounting <b>SPB4</b> =Dimming Occupancy Sensor with Bluetooth Interface, 21'-40' Mounting <b>SLTD</b> =DALI			<b>OA1223</b> =10kV UL 1449 Surge Module Replacement <b>OA/RA1013</b> =Photocontrol Shorting Cap <b>OA/RA1014</b> =NEMA Photocontrol - 120V <b>OA/RA1016</b> =NEMA Photocontrol - Multi-Tap <b>OA/RA1027</b> =NEMA Photocontrol - 480V <b>OA/RA1201</b> =NEMA Photocontrol - 347V <b>FSIR-100</b> =Wireless Configuration Tool for Motion Sensor <sup>8</sup> <b>HS/VERD</b> =Verdeon House Side Shield <sup>8</sup> <b>VGS-F/B</b> =Vertical Glare Shield, Front/Back <sup>7</sup> <b>VGS-SIDE</b> =Vertical Glare Shield, Side <b>ASJS15-XX</b> =Adjustable slipfitter (Factory set at 15 degrees) <sup>9</sup> <b>ASJS25-XX</b> =Adjustable slipfitter (Factory set at 25 degrees) <sup>9</sup> <b>ASJS45-XX</b> =Adjustable slipfitter (Factory set at 45 degrees) <sup>9</sup>		
<b>NOTES:</b> 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. 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). 3. Reserved. 4. The FSIR-100 accessory is required to adjust parameters. 5. Round pole adapter and mounting hardware included. "M" drill pattern. 6. 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. 7. VGS-F/B not compatible with T1 or T5 distribution. 8. Option will come factory-installed. Must order one per optic as an accessory. House Side Shield not suitable for T5 distribution. 9. Replace XX with color selection. 10. Cannot be used with PR7 or other motion response control options. 11. 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 <a href="#">DOMESTIC PREFERENCES</a> website for more information. Components shipped separately may be separately analyzed under domestic preference requirements. 12. Accessories sold separately will be separately analyzed under domestic preference requirements. Consult factory for further information.							

## Product Specifications

### Construction

- Heavy-duty die-cast aluminum housing and door.
- Tool-less entry, hinged removable door for easy maintenance. 3G vibration rated.

### Optics

- Optics are precisely designed to shape the distribution maximizing efficiency and fixture spacing.
- Offered in 2200K, 2700K, 3000K, 4000K, and 5000K CCTs ; 70CRI
- IDA Certified for 3000K CCT and warmer with Fixed mount only

### Electrical

- 120-277V 50/60Hz, 347V 60Hz or 480V 60Hz operation.
- Standard 0-10V dimming with 6kV/3kA, and optional series or parallel surge protection (10kV or 20kV)

- Thermal management transfers heat away from the LED source for optimal efficiency, light output and lumen maintenance.
- Operates in ambient temperatures from -40°C to 40°C. 50°C HA (high ambient) option available.
- Standard three-position tunnel type terminal block.
- LED modules are IP66 rated.

### Mounting

- Two-bolt/one-bracket slipfitter with cast-in pipe stop and 2.5" leveling steps.
- Four-bolt/two-clamp mounting option.
- Fixed-in-place bird guard seals around 1-1/4" to 2" (1-5/8" to 2-3/8" O.D.) mounting arms.
- Optional 15" pole mount arm available with round pole adapter and mounting hardware included.

### Finish

- Housing and cast parts finished in five-stage super TGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear.
- Consult your lighting representative at Cooper Lighting Solutions for a complete selection of standard colors.

### Warranty

- Five year limited warranty, consult website for details. [www.cooperlighting.com/legal](http://www.cooperlighting.com/legal)

## Energy and Performance Data

[View VERD Verdeon IES files](#)

### Power and Lumens - VERD

Light Engine		CA2							
Power (Watts)	63	74	82	94	103	114	123	132	
Wattage Label	60	70	80	90	100	110	120	130	
Current (A) @ 120V	0.531	0.616	0.689	0.787	0.863	0.948	1.02	1.10	
Current (A) @ 277V	0.24	0.28	0.31	0.35	0.39	0.42	0.45	0.48	
Power (Watts)	72	82	92	104	113	120	130	139	
Wattage Label	70	80	90	100	110	120	130	140	
Current (A) @ 347V	0.21	0.24	0.26	0.30	0.33	0.35	0.37	0.40	
Current (A) @ 480V	0.15	0.17	0.19	0.22	0.24	0.25	0.27	0.29	
Optics									
T1	4000K	9,817	11,194	12,364	13,785	14,838	17,109	18,251	19,420
	BUG Rating	B3-U0-G1	B3-U0-G2	B3-U0-G2	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2
	3000K	9,639	10,991	12,140	13,536	14,570	16,799	17,921	19,068
	BUG Rating	B3-U0-G1	B3-U0-G2	B3-U0-G2	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2
	2700K	8,313	9,479	10,469	11,673	12,565	14,488	15,455	16,445
	BUG Rating	B3-U0-G1	B3-U0-G1	B3-U0-G2	B3-U0-G2	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2
T2	4000K	9,171	10,457	11,550	12,878	13,862	15,983	17,050	18,142
	BUG Rating	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3
	3000K	9,005	10,268	11,341	12,645	13,611	15,694	16,741	17,814
	BUG Rating	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3
	2700K	7,766	8,855	9,781	10,905	11,738	13,534	14,438	15,363
	BUG Rating	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3
T3	4000K	9,234	10,529	11,629	12,966	13,957	16,093	17,167	18,267
	BUG Rating	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G2	B3-U0-G3	B3-U0-G3
	3000K	9,067	10,338	11,419	12,732	13,705	15,801	16,856	17,936
	BUG Rating	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G2	B3-U0-G2	B3-U0-G3
	2700K	7,819	8,916	9,848	10,980	11,819	13,627	14,537	15,468
	BUG Rating	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G2
T4	4000K	9,277	10,578	11,683	13,027	14,022	16,168	17,247	18,352
	BUG Rating	B2-U0-G3	B2-U0-G3	B2-U0-G3	B2-U0-G3	B2-U0-G3	B2-U0-G3	B2-U0-G3	B2-U0-G3
	3000K	9,109	10,386	11,472	12,791	13,768	15,875	16,935	18,019
	BUG Rating	B2-U0-G3	B2-U0-G3	B2-U0-G3	B2-U0-G3	B2-U0-G3	B2-U0-G3	B2-U0-G3	B2-U0-G3
	2700K	7,856	8,957	9,894	11,031	11,874	13,691	14,605	15,540
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G3	B2-U0-G3	B2-U0-G3	B2-U0-G3	B2-U0-G3	B2-U0-G3
T5	4000K	9,517	10,852	11,986	13,364	14,385	16,586	17,693	18,826
	BUG Rating	B4-U0-G2	B4-U0-G2	B4-U0-G3	B4-U0-G3	B4-U0-G3	B4-U0-G3	B4-U0-G3	B5-U0-G3
	3000K	9,345	10,655	11,769	13,122	14,125	16,286	17,373	18,486
	BUG Rating	B4-U0-G2	B4-U0-G2	B4-U0-G3	B4-U0-G3	B4-U0-G3	B4-U0-G3	B4-U0-G3	B5-U0-G3
	2700K	8,059	9,189	10,149	11,316	12,181	14,045	14,983	15,942
	BUG Rating	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G3	B4-U0-G3	B4-U0-G3	B4-U0-G3	B4-U0-G3

NOTE: Lumen output for AP Grey fixture color, 120-277V.

Power and Lumens - VERD-G

Light Engine		CA2						
Power (Watts)		103	113	124	134	142	152	163
Wattage Label		100	110	120	130	140	150	160
Current (A) @ 120V		0.857	0.947	1.04	1.12	1.19	1.27	1.36
Current (A) @ 277V		0.38	0.42	0.46	0.49	0.53	0.57	0.60
Power (Watts)		111	120	132	142	152	163	174
Wattage Label		110	120	130	140	150	160	170
Current (A) @ 347V		0.32	0.35	0.38	0.41	0.44	0.47	0.50
Current (A) @ 480V		0.23	0.25	0.28	0.30	0.32	0.34	0.37
Optics								
T1	4000K	16,203	17,614	18,995	20,086	21,988	2,311	24,382
	BUG Rating	B4-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2
	3000K	15,910	17,295	18,651	19,723	21,590	22,771	23,941
	BUG Rating	B4-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2
	2700K	13,721	14,915	16,085	17,009	18,620	19,638	20,647
	BUG Rating	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2
T2	4000K	15,250	16,578	17,878	18,905	20,695	21,827	22,948
	BUG Rating	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3
	3000K	14,974	16,278	17,554	18,563	20,320	21,432	22,533
	BUG Rating	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3
	2700K	12,914	14,038	15,139	16,009	17,524	18,483	19,432
	BUG Rating	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3
T3	4000K	15,096	16,411	17,697	18,714	20,486	21,607	22,716
	BUG Rating	B2-U0-G2	B3-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3
	3000K	14,823	16,113	17,377	18,375	20,115	21,215	22,305
	BUG Rating	B2-U0-G2	B3-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3
	2700K	12,783	13,869	14,986	15,847	17,347	18,296	19,236
	BUG Rating	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3
T4	4000K	15,049	16,359	17,642	18,656	20,422	21,539	22,646
	BUG Rating	B2-U0-G3	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G4
	3000K	14,777	16,063	17,323	18,318	20,052	21,149	22,236
	BUG Rating	B2-U0-G3	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G4
	2700K	12,743	13,853	14,939	15,798	17,293	18,239	19,176
	BUG Rating	B2-U0-G3	B2-U0-G3	B2-U0-G3	B2-U0-G3	B2-U0-G4	B2-U0-G4	B3-U0-G4
T5	4000K	15,560	16,915	18,241	19,289	21,116	22,271	23,414
	BUG Rating	B4-U0-G3	B4-U0-G3	B4-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4
	3000K	15,278	16,609	17,911	18,940	20,733	21,867	22,991
	BUG Rating	B4-U0-G3	B4-U0-G3	B4-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4
	2700K	13,176	14,324	15,447	16,334	17,881	18,859	19,827
	BUG Rating	B4-U0-G3	B4-U0-G3	B4-U0-G3	B4-U0-G3	B4-U0-G3	B5-U0-G4	B5-U0-G4

### Lumen Maintenance

Ambient Temperature	TM-21 Lumen Maintenance (50,000 Hours)	TM-21 Lumen Maintenance (75,000 Hours)	Theoretical L70 (Hours)
20°C - 50°C	> 88%	> 82%	> 140,000

### EPA

Effective Projected Area (Sq. Ft.)
0.5

### Shipping Data

Approximate Net Weight
12.5lbs (5.7 kgs.)

### 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

### Energy Data

Electronic LED Driver
0.9 Power Factor
<20% Total Harmonic Distortion
120-277V/50 and 60Hz,
347V/60Hz, 480V/60Hz
-40°C Minimum Temperature Rating
+40°C Ambient Temperature Rating

### FADC Settings (Verdeon)

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

### FADC Settings (Verdeon Grande)

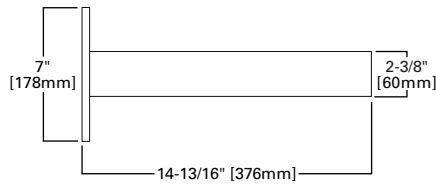
FADC Position	Percent of Typical Lumen Output
1	25%
2	48%
3	56%
4	65%
5	75%
6	80%
7	85%
8	90%
9	95%
10	100%

Note: +/-5% typical value

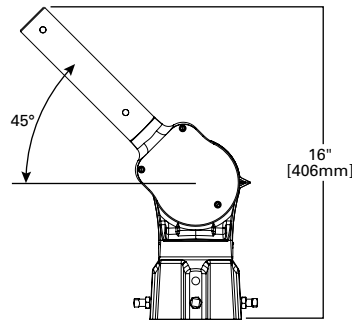
## Dimensional and Mounting Details

### Optional Arms

#### 15" STRAIGHT ARM



#### ADJUSTABLE SLIPFITTER OFFSET ARM



## Control Options

### Photocontrol (PR and PR7)

Photocontrol (PR and PR7) Photocontrol receptacles (PR and PR7) provide a flexible solution to enable "dusk-to-dawn" lighting by sensing light levels. Advanced control systems compatible with ANSI C136.41 7-pin standards can be utilized with the PR7 receptacle.

### Dimming Occupancy Sensor (MS/DIM-LXX)

These sensors are factory installed in the luminaire housing. When the MS/DIM-LXX 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 MS/DIM sensor is factory preset to dim down to approximately 50 percent power with a time delay of five minutes. These occupancy sensors include an integral photocell that can be activated with the FSIR-100 accessory for "dusk-to-dawn" control or daylight harvesting - the factory preset is OFF. The FSIR-100 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 8' - 40'.

### Dimming Occupancy Sensor (SPB)

These passive infrared (PIR) sensors are factory installed in the luminaire housing. When the SPB sensor option is selected, the occupancy sensor is connected to a dimming driver and the entire luminaire dims when no motion is detected. After a period of time, the luminaire turns off, and when motion is detected, the luminaire returns to full light output. The SPB sensor default parameters are listed in the table below, and can be configured utilizing the Sensor Configuration mobile application for iOS and Android devices. An integral photocontrol can be activated with the app for "dusk-to-dawn" control or daylight harvesting - the factory default is off. Three sensor lenses are available to optimize the coverage pattern for mounting heights from 8'-40'. Four sensor colors are available; Bronze, Black, Gray and White, and are automatically selected based on the luminaire finish as indicated by the table below.

SPB sensor finish matched to luminaire finish		
Luminaire Finish		SPB Sensor Finish
WH	White	White
BK	Black	Black
GM	Graphite Metallic	Black
BZ	Bronze	Bronze
AP	Gray	Gray
DP	Dark Platinum	Gray