

## DESCRIPTION

The Verdeon LED roadway luminaire combines optical performance, energy efficiency, and outstanding versatility to meet the requirements of any roadway application. Advanced optical technology delivers unparalleled uniformity, scalability, and budget-beating operating costs for municipal streets and highways. UL/cUL listed for wet locations with an optional IP66 enclosure rating available.

<b>Catalog #</b>		<b>Type</b>	
<b>Project</b>			
<b>Comments</b>		<b>Date</b>	
<b>Prepared by</b>			

## SPECIFICATION FEATURES

### 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 standard in 4000K (+/- 275K) CCT and 70 CRI. Optional 5700K CCT, 5000K CCT and 3000K CCT are available.

### Electrical

120-277V 50/60Hz, 347V 60Hz or 480V 60Hz operation. 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. 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 Eaton for a complete selection of standard colors.

### Warranty

Five-year warranty.



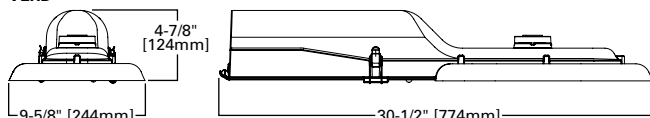
## VERD VERDEON

LED

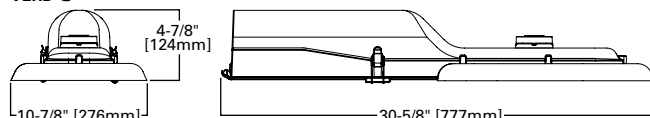
ROADWAY LUMINAIRE

## DIMENSIONS

### VERD

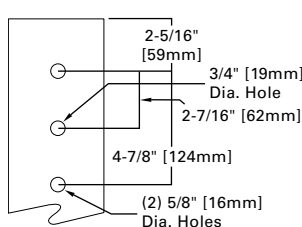


### VERD-G



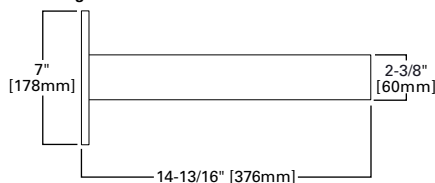
## ARM DRILLING

### TYPE "M"



## OPTIONAL ARM

### 15" Straight Arm



## CERTIFICATION DATA

UL and cUL Wet Location Listed  
IP66-Rated Optics  
3G Vibration Rated  
ISO 9001  
DesignLights Consortium® Qualified\*

## 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

## EPA

Effective Projected Area (Sq. Ft.): 0.5

## SHIPPING DATA

Approximate Net Weight:  
12.5 lbs. (5.7 kgs.)

**POWER AND LUMENS**

Light Engine	A016	A018	A01	A028	A02	G-A028	G-A02	
Power (Watts)	36	51	64	72	92	103	143	
Current (a) @ 120V	0.32	0.45	0.57	0.64	0.81	0.91	1.26	
Current (a) @ 277V	0.15	0.20	0.25	0.29	0.64	0.40	0.53	
Power (Watts)	44	59	--	83	100	113	154	
Current (a) @ 347V	0.13	0.17	--	0.24	0.28	0.33	0.45	
Current (a) @ 480V	0.09	0.13	--	0.17	0.21	0.24	0.33	
<b>Optics</b>								
<b>Type II</b>	Lumens	3,855	4,936	5,839	7,858	9,294	12,064	15,332
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G3
<b>Type III</b>	Lumens	3,775	4,833	5,716	7,693	9,099	11,946	15,182
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2
<b>Type IV</b>	Lumens	3,785	4,846	5,732	7,714	9,123	11,944	15,180
	BUG Rating	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G3	B2-U0-G3	B2-U0-G3	B2-U0-G4
<b>Type V</b>	Lumens	3,864	4,948	5,852	7,876	9,315	12,137	15,425
	BUG Rating	B3-U0-G2	B3-U0-G2	B3-U0-G2	B3-U0-G3	B4-U0-G3	B4-U0-G3	B4-U0-G3

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

**LUMEN MAINTENANCE**

Ambient Temperature	TM-21 Lumen Maintenance (50,000 hours)	Theoretical L70 (Hours)
<b>A01*</b>		
25°C	>88%	>127,000
40°C	>82%	>87,000
<b>A018, A016, A02, &amp; A028</b>		
Ambient Temperature	TM-21 Lumen Maintenance (50,000 hours)	Theoretical L70 (Hours)
25°C	>92%	>200,000
40°C	>90%	>145,000
<b>G-A02 &amp; G-A028</b>		
Ambient Temperature	TM-21 Lumen Maintenance (60,000 hours)	Theoretical L70 (Hours)
25°C	>91%	>250,000
40°C	>90%	>200,000

\* A01 Not available in 347V or 480V.

**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

**ORDERING INFORMATION**

Sample Number: VERD-A018-D-U-T2-4N7-AP

Product Family <sup>1,2</sup>	Light Engine <sup>3</sup>	Driver <sup>5</sup>	Voltage	Distribution
VERD=Verdeon	<b>A01</b> =1 LED, Full Output <sup>4</sup> <b>A018</b> =1 LED, Approximately 80% Output <b>A016</b> =1 LED, Approximately 60% Output <b>A02</b> =2 LEDs, Full Output <b>A028</b> =2 LEDs, Approximately 80% Output <b>G-A02</b> =High Lumen, 2 LEDs, Full Output <b>G-A028</b> =High Lumen, 2 LEDs, Approximately 80% Output	<b>E</b> =Non-Dimming <b>D</b> =Dimming (0-10V) <sup>6</sup>	<b>U</b> =Universal (120-277V) <b>8</b> =480V <sup>7,8</sup> <b>9</b> =347V <sup>7</sup>	<b>T2</b> =Type II <b>T3</b> =Type III <b>T4</b> =Type IV <b>T5</b> =Type V
Options (Add as Suffix)			Color	Accessories (Order Separately)
<b>7030</b> =70 CRI / 3000K CCT <sup>9</sup> <b>7060</b> =70 CRI / 5700K CCT <sup>9</sup> <b>4</b> =NEMA Twistlock Photocontrol Receptacle <b>4N7</b> =NEMA 7-PIN Twistlock Photocontrol Receptacle <sup>10</sup> <b>10K</b> =10kV UL 1449 Surge Protective Device <b>10MSP</b> =10kV MOV Surge Protective Device <b>IP66</b> =IP66 Rated Housing <b>HA</b> =50°C High Ambient Temperature <b>MS/DIM-L08</b> =Motion Sensor for Dimming Operation, Maximum 8' Mounting Height <sup>10, 11, 12</sup> <b>MS/DIM-L20</b> =Motion Sensor for Dimming Operation, Maximum 9' - 20' Mounting Height <sup>10, 11, 12</sup> <b>MS/DIM-L40</b> =Motion Sensor for Dimming Operation, Maximum 21' - 40' Mounting Height <sup>10, 11, 12</sup> <b>LWR-LN</b> =Factory Installed LumaWatt RF Dimming Control System (Mounting Height 16' and Up) <sup>13, 14</sup> <b>LWR-LW</b> =Factory Installed LumaWatt RF Dimming Control System (Mounting Height below 16') <sup>13, 14</sup> <b>K</b> =Level Indicator <b>4B</b> =Four-bolt, Two-clamp Mounting <b>A15</b> =Arm Included (15" Straight Arm) <sup>15</sup> <b>HSS</b> =House Side Shield <sup>17</sup>			<b>AP</b> =Grey (Standard) <b>BZ</b> =Bronze <b>BK</b> =Black <b>DP</b> =Dark Platinum <b>GM</b> =Graphite Metallic <b>WH</b> =White	<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>16</sup> <b>HS/VERD</b> =Verdeon House Side Shield <sup>17</sup> <b>VGS-F/B</b> =Vertical Glare Shield, Front/Back <b>VGS-SIDE</b> =Vertical Glare Shield, Side

**NOTES:**

- 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.
- DesignLights Consortium® Qualified. Refer to www.designlights.org qualified products list under family models for details.
- Standard 4000K CCT and 70 CRI.
- Not available in 347V or 480V.
- Consult factory for driver surge protection values.
- Dimming leads will be capped except when 4N7 or motion sensor option is specified.
- Not available with A01 light engine.
- 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).
- Extended lead times apply. Use dedicated IES files for 3000K and 5700K when performing layouts. These files are published on the VERD Verdeon luminaire product page on the website.
- Must specify dimming driver.
- Not available with 4B option. Sensor mounted externally. Consult factory for more information.
- The FSIR-100 accessory is required to adjust parameters.
- LumaWatt wireless sensors are factory installed and require network components RF-EM-1, RF-GW-1 and RF-ROUT-1 in appropriate quantities. See website for LumaWatt application information.
- LumaWatt wireless system is not available with photocontrol receptacle (not required).
- Round pole adapter and mounting hardware included. "M" drill pattern.
- This tool enables adjustment of parameters including high and low modes, sensitivity, time delay, cutoff and more. Consult your lighting representative at Eaton for more information.
- Option will come factory-installed. Must order one per optic as an accessory. House Side Shield not suitable for T5 distribution.