

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.

Catalog #		Type
Project		
Comments		Date
Prepared by		

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 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.



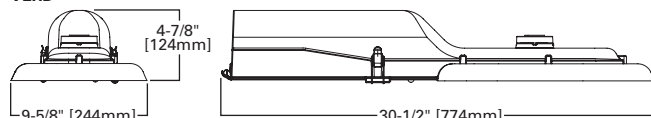
VERD VERDEON

LED

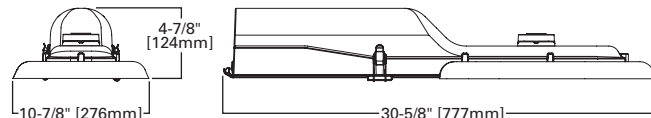
ROADWAY LUMINAIRE

DIMENSIONS

VERD

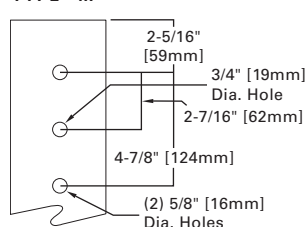


VERD-G



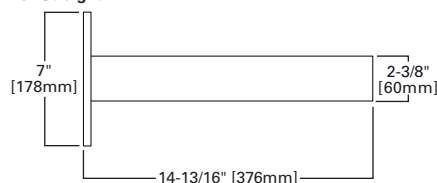
ARM DRILLING

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:
20 lbs. (9.1 kgs.)

POWER AND LUMENS

Light Engine	A016	A018	A01	A028	A02	G-A028	G-A02
Nominal Power (Watts) @ 120V	36W	51W	64W	72W	92W	103W	143W
Nominal Power (Watts) @ 277V	36W	51W	64W	72W	92W	103W	143W
Nominal Power (Watts) @ 347V	40W	56W	N/A	79W	101W	113W	154W
Nominal Power (Watts) @ 480V	40W	56W	N/A	79W	101W	113W	154W
Optics							
Type II	Lumens	3,855	4,936	5,839	7,858	9,294	12,064
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2
Type III	Lumens	3,775	4,833	5,716	7,693	9,099	11,946
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2
Type IV	Lumens	3,785	4,846	5,732	7,714	9,123	11,944
	BUG Rating	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G3	B2-U0-G3	B2-U0-G3
Type V	Lumens	3,864	4,948	5,852	7,876	9,315	12,137
	BUG Rating	B3-U0-G2	B3-U0-G2	B3-U0-G2	B3-U0-G3	B4-U0-G3	B4-U0-G3

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

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 ^{1,2}	Light Engine ³	Driver ⁵	Voltage	Distribution
VERD=Verdeon	A01=1 LED, Full Output ⁴ A018=1 LED, Approximately 80% Output A016=1 LED, Approximately 60% Output A02=2 LEDs, Full Output A028=2 LEDs, Approximately 80% Output G-A02=High Lumen, 2 LEDs, Full Output G-A028=High Lumen, 2 LEDs, Approximately 80% Output	E=Non-Dimming D=Dimming (0-10V) ⁶	U=Universal (120-277V) 8=480V ^{7,8} 9=347V ⁷	T2=Type II T3=Type III T4=Type IV T5=Type V
Options (Add as Suffix)			Color	Accessories (Order Separately)
7030 =70 CRI / 3000K CCT ⁹ 7060 =70 CRI / 5700K CCT ⁹ 4 =NEMA Twistlock Photocontrol Receptacle 4N7 =NEMA 7-PIN Twistlock Photocontrol Receptacle ⁹ 10K =10kV UL 1449 Surge Protective Device 10MSP =10kV MOV Surge Protective IP66 =IP66 Rated Housing HA =50°C High Ambient Temperature MS/DIM-L08 =Motion Sensor for Dimming Operation, Maximum 8' Mounting Height ^{10,11,12} MS/DIM-L20 =Motion Sensor for Dimming Operation, Maximum 9' - 20' Mounting Height ^{10,11,12} MS/DIM-L40 =Motion Sensor for Dimming Operation, Maximum 21' - 40' Mounting Height ^{10,11,12} DIMRF-LN =Factory Installed LumaWatt RF Dimming Control System (Mounting Height 16' and Up) ^{13,14} DIMRF-LW =Factory Installed LumaWatt RF Dimming Control System (Mounting Height below 16') ^{13,14} K =Level Indicator 4B =Four-bolt, Two-clamp Mounting A15 =Arm Included (15" Straight Arm) ¹⁵			AP =Grey (Standard) BZ =Bronze BK =Black DP =Dark Platinum GM =Graphite Metallic WH =White	OA1223 =10kV/10kA UL 1449 Surge Module Replacement OA/RA1013 =Photocontrol Shorting Cap OA/RA1014 =NEMA Photocontrol - 120V OA/RA1016 =NEMA Photocontrol - Multi-Tap OA/RA1027 =NEMA Photocontrol - 480V OA/RA1201 =NEMA Photocontrol - 347V FSIR-100 =Wireless Configuration Tool for Motion Sensor ¹⁶ HS-VERD =Verdeon House Side Shield VGS-F/B =Vertical Glare Shield, Front/Back VGS-SIDE =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.
- Must specify 4N7 option.
- 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 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 needed).
- 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.

LUMEN MAINTENANCE

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