

DESCRIPTION

The Verdeen 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 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

Four-bolt 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.

Warranty

Standard five-year warranty. Optional ten-year warranty, please see your Cooper Lighting Solutions Streetworks sales representative for more information.

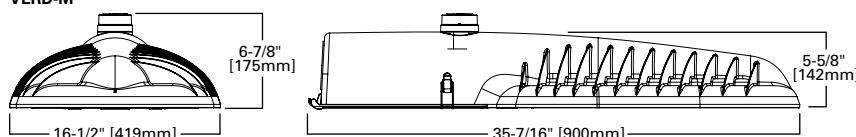


**VERD-M
VERDEON**

ROADWAY LUMINAIRE

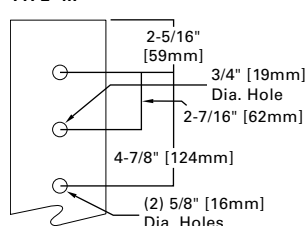
DIMENSIONS

VERD-M



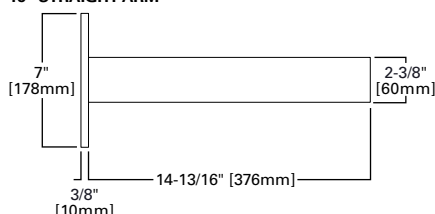
ARM DRILLING

TYPE "M"

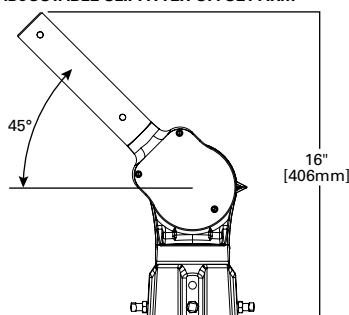


OPTIONAL ARM

15" STRAIGHT ARM



ADJUSTABLE SLIPFITTER OFFSET 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.): 0.8

SHIPPING DATA

Approximate Net Weight:

35 lbs. (15.9 kgs.)

POWER AND LUMENS

| Light Engine | | M-A0385 | M-A03 | M-A0485 | M-A04 |
|--------------------|------------|----------|----------|----------|----------|
| Power (Watts) | | 152 | 182 | 210 | 247 |
| Current (a) @ 120V | | 1.41 | 1.69 | 1.95 | 2.29 |
| Current (a) @ 277V | | 0.61 | 0.74 | 0.85 | 1.00 |
| Power (Watts) | | 167 | 197 | 211 | 255 |
| Current (a) @ 347V | | 0.49 | 0.58 | 0.62 | 0.75 |
| Current (a) @ 480V | | 0.36 | 0.41 | 0.45 | 0.54 |
| Optics | | | | | |
| Type II | Lumens | 19,571 | 22,456 | 26,419 | 29,829 |
| | BUG Rating | B3-U0-G3 | B3-U0-G3 | B3-U0-G3 | B3-U0-G4 |
| Type III | Lumens | 19,380 | 22,236 | 26,161 | 29,537 |
| | BUG Rating | B3-U0-G3 | B3-U0-G3 | B3-U0-G4 | B3-U0-G4 |
| Type IV | Lumens | 19,377 | 22,233 | 26,157 | 29,533 |
| | BUG Rating | B3-U0-G4 | B3-U0-G4 | B3-U0-G5 | B3-U0-G5 |
| Type V | Lumens | 19,690 | 22,592 | 26,579 | 30,010 |
| | BUG Rating | B5-U0-G4 | B5-U0-G4 | B5-U0-G4 | B5-U0-G5 |

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

LUMEN MAINTENANCE

| M-A03, M-A0385, M-A04, M-A485 | | |
|-------------------------------|--|-------------------------|
| Ambient Temperature | TM-21 Lumen Maintenance (60,000 hours) | Theoretical L70 (Hours) |
| 25°C | >92% | >259,000 |
| 40°C | >92% | >259,000 |

* 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-M-A04-D-U-T2-4N7-AP

| Product Family ^{1,2} | Light Engine ³ | Driver ⁴ | Voltage | Distribution |
|--|--|---|---|---|
| VERD=Verdeon | M-A03=3 LEDs, Full Output M-A0385=3 LEDs, Approximately 85% Output M-A04=4 LEDs, Full Output M-A0485=4 LEDs, Approximately 85% Output | E=Non-Dimming D=Dimming (0-10V) 5LTD=DALI | U=Universal (120-277V) 8=480V ⁵ 9=347V | T2=Type II T3=Type III T4=Type IV T5=Type V |
| Options (Add as Suffix) | | | Color ¹³ | Accessories (Order Separately) |
| 7030 =70 CRI / 3000K CCT ⁶ 7050 =70 CRI / 5000K CCT ⁶ 4 =NEMA Twistlock Photocontrol Receptacle 4N7 =NEMA 7-PIN Twistlock Photocontrol Receptacle ⁷ 10K =10kV UL 1449 Surge Protective Device 10MSP =10kV MOV Surge Protective Device IP66 =IP66 Rated Housing HA =50°C High Ambient Temperature ⁸ MS/DIM-L08 =Motion Sensor for Dimming Operation, Maximum 8' Mounting Height ^{7,9,10} MS/DIM-L20 =Motion Sensor for Dimming Operation, Maximum 9' - 20' Mounting Height ^{7,9,10} MS/DIM-L40 =Motion Sensor for Dimming Operation, Maximum 21' - 40' Mounting Height ^{7,9,10} LWR-LN =Factory Installed LumaWatt RF Dimming Control System (Mounting Height 16' and Up) ^{10,11} LWR-LW =Factory Installed LumaWatt RF Dimming Control System (Mounting Height below 16') ^{10,11} K =Level Indicator A15 =Arm Included (15" Straight Arm) ¹² HSS =House Side Shield ¹⁵ 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 (Standard) BZ =Bronze BK =Black DP =Dark Platinum GM =Graphite Metallic WH =White | OA1223 =10kV 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 ¹⁴ HS/VERD =Verdeon House Side Shield ¹⁵ VGS-F/B =Vertical Glare Shield, Front/Back VGS-SIDE =Vertical Glare Shield, Side ASJS15-XX =Adjustable slipfitter (Factory set at 15 degrees) ¹⁶ ASJS25-XX =Adjustable slipfitter (Factory set at 25 degrees) ¹⁶ ASJS45-XX =Adjustable slipfitter (Factory set at 45 degrees) ¹⁶ |

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 model details.
- Standard 4000K CCT and 70 CRI.
- Consult factory for driver surge protection values.
- 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 5000K when performing layouts. These files are published on the VERD-M Verdeon luminaire product page on the website.
- Must specify dimming driver.
- HA option not available for M-A04 light engines.
- The FSIR-100 accessory is required to adjust parameters.
- Not available with photocontrol receptacle (not required).
- 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.
- Round pole adapter and mounting hardware included. "M" drill pattern.
- Standard photometry based on grey housing. Consult web for alternate color data.
- 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.
- Option will come factory-installed. Must order one per optic as an accessory. House Side Shield not suitable for T5 distribution.
- Replace XX with color selection.