

| | | | | | |
|-------------|--|-----------|--|------|--|
| Project | | Catalog # | | Type | |
| Prepared by | | Notes | | Date | |



Streetworks

VERD-M VERDEON

Roadway Luminaire

Product Features



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Product Certifications



Quick Facts

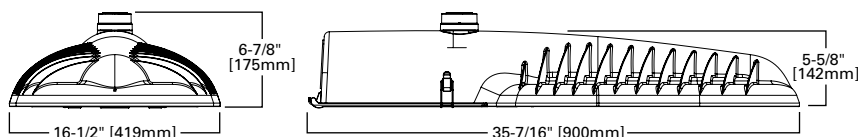
- Ideal replacement for 50W - 250W+ HPS luminaires
- UL/cUL listed for wet locations
- Optional IP66 enclosure rating available
- Tool-less removable power door for easy maintenance
- Series or parallel surge protection available (10kV or 20kV)
- 3G vibration rated

Connected Systems

- WaveLinx Lite

Dimensional Details

VERD-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-M-CA3-180-740-U-T2-AP-10K-PR7**

| Product Family ^{1,2} | Configuration | Wattage Bucket | Color Temperature | Voltage | Distribution | Mounting | Color | |
|--|---|------------------|--|--|---------------------|--|------------------------------|--|
| VERD-M =Verdeon Maximus BAA-VERD-M =Verdeon Maximus Buy American Act Compliant ¹² TAA-VERD-M =Verdeon Maximus Trade Agreements Act Compliant ¹² | CA3 =3 COB Light Engine | 150 =150W | 740 =70CRI, 4000K | U =Universal (120-277V) | T1 =Type I | [Blank] =None | AP =Grey | |
| | CA4 =4 COB Light Engine | 160 =160W | 727 =70CRI, 2700K | 8 =480V ⁴ | T2 =Type II | A15 =15" Straight Mast Arm ⁶ | BZ =Bronze | |
| | | 170 =170W | 722 =70CRI, 2200K | 9 =347V | T3 =Type III | ASJS15 =Adjustable Slipfitter (Factory set at 15° degrees) | BK =Black | |
| | | 180 =180W | 730 =70CRI, 3000K | HV =High Voltage Driver (347V - 480V) | T4 =Type IV | ASJS25 =Adjustable Slipfitter (Factory set at 25° degrees) | DP =Dark Platinum | |
| | | 190 =190W | 750 =70CRI, 5000K | | T5 =Type V | ASJS45 =Adjustable Slipfitter (Factory set at 45° degrees) | GM =Graphite Metallic | |
| | | 200 =200W | | | | | WH =White | |
| | | 210 =210W | | | | | | |
| | | 220 =220W | | | | | | |
| | | 230 =230W | | | | | | |
| | | 240 =240W | | | | | | |
| | | 250 =250W | | | | | | |
| | Options (Add as Suffix) | | Controls | | | Accessories (Order Separately) ¹³ | | |
| | 10MSP =Parallel 10kV MOV Surge Protective Device 20MSP =Parallel 20kV MOV Surge Protective Device 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 K =Level Indicator 4B =Four-bolt, Two-clamp mounting HA =50°C High Ambient Temperature HSS =Factory Install House Side Shield IP66 =IP66 Rated Housing FADC =Field Adjustable Dimming Controller ¹¹ DXXXX =Department of Transportation - Customer specific details ¹⁴ UXXXX =Utility - Customer specific details ¹⁴ | | PSC =Photocontrol Shorting Cap NPC =NEMA Photocontrol - Multi-Tap LLPC =Longlife Photocontrol Included PR =NEMA 3-PIN Twistlock Photocontrol Receptacle PR7 =NEMA 7-PIN Twistlock Photocontrol Receptacle MS/DIM-L08 =Motion Sensor for Dimming Operation, Maximum 8' Mounting Height ⁵ MS/DIM-L20 =Motion Sensor for Dimming Operation, Maximum 9' - 20' Mounting Height ⁵ MS/DIM-L40 =Motion Sensor for Dimming Operation, Maximum 21' - 40' Mounting Height ⁵ 5LTD =DALI SPB1 =Dimming Occupancy Sensor with Bluetooth Interface, <8' Mounting SPB2 =Dimming Occupancy Sensor with Bluetooth Interface, 8'-20' Mounting SPB4 =Dimming Occupancy Sensor with Bluetooth Interface, 21'-40' Mounting | | | 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 ⁷ HS/VERD =Verdeon House Side Shield ⁹ VGS-F/B =Vertical Glare Shield, Front/Back ⁸ VGS-SIDE =Vertical Glare Shield, Side ASJS15-XX =Adjustable slipfitter (Factory set at 15 degrees) ¹⁰ ASJS25-XX =Adjustable slipfitter (Factory set at 25 degrees) ¹⁰ ASJS45-XX =Adjustable slipfitter (Factory set at 45 degrees) ¹⁰ | | |
| NOTES: 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. DesignLights Consortium® Qualified. Refer to www.designlights.org qualified products list under family model details. 3. Reserved. 4. 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). 5. The FSIR-100 accessory is required to adjust parameters. 6. Round pole adapter and mounting hardware included. "M" drill pattern. 7. 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. 8. VGS-F/B not compatible with T1 or T5 distribution. 9. Option will come factory-installed. Must order one per optic as an accessory. House Side Shield not suitable for T5 distribution. 10. Replace XX with color selection. 11. Cannot be used with PR7 or other motion response control options. 12. 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 DOMESTIC.PREFERENCES website for more information. Components shipped separately may be separately analyzed under domestic preference requirements. 13. Accessories sold separately will be separately analyzed under domestic preference requirements. Consult factory for further information. 14. Customer specific specifications utilizes standard products with small adjustments to meet unique requirements such as packaging, labels, wattage adjustments, etc. | | | | | | | | |

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

- Parallel and series surge protection available (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

- 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

Energy and Performance Data

[View VERD-M IES files](#)

Power and Lumens - VERD-M

| Light Engine | CA3 | | | | CA4 | | | | | | | |
|--------------------|----------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Power (Watts) | 153 | 163 | 173 | 183 | 193 | 202 | 214 | 223 | 233 | 242 | 252 | |
| Wattage Label | 150 | 160 | 170 | 180 | 190 | 200 | 210 | 220 | 230 | 240 | 250 | |
| Current (A) @ 120V | 1.28 | 1.36 | 1.44 | 1.53 | 1.61 | 1.68 | 1.78 | 1.86 | 1.95 | 2.02 | 2.10 | |
| Current (A) @ 277V | 0.56 | 0.59 | 0.63 | 0.66 | 0.73 | 0.76 | 0.80 | 0.83 | 0.87 | 0.90 | 0.93 | |
| Power (Watts) | 162 | 173 | 183 | 194 | 206 | 216 | 223 | 232 | 244 | 254 | 264 | |
| Wattage Label | 160 | 170 | 180 | 190 | 210 | 220 | 220 | 230 | 240 | 250 | 260 | |
| Current (A) @ 347V | 0.47 | 0.50 | 0.53 | 0.56 | 0.60 | 0.63 | 0.65 | 0.68 | 0.72 | 0.74 | 0.77 | |
| Current (A) @ 480V | 0.34 | 0.36 | 0.39 | 0.41 | 0.44 | 0.46 | 0.47 | 0.49 | 0.52 | 0.53 | 0.56 | |
| Optics | | | | | | | | | | | | |
| Type I | 4000K | 23,480 | 24,742 | 25,924 | 27,037 | 29,335 | 30,522 | 31,948 | 33,103 | 34,384 | 35,483 | 36,673 |
| | BUG Rating | B4-U0-G2 | B4-U0-G2 | B4-U0-G2 | B4-U0-G2 | B5-U0-G3 | B5-U0-G3 | B5-U0-G3 | B5-U0-G3 | B5-U0-G3 | B5-U0-G3 | B5-U0-G3 |
| | 3000K | 23,055 | 24,294 | 25,454 | 26,583 | 28,804 | 29,970 | 31,370 | 32,503 | 33,762 | 34,840 | 36,009 |
| | BUG Rating | B4-U0-G2 | B4-U0-G2 | B4-U0-G2 | B4-U0-G2 | B5-U0-G3 | B5-U0-G3 | B5-U0-G3 | B5-U0-G3 | B5-U0-G3 | B5-U0-G3 | B5-U0-G3 |
| | 2700K | 19,883 | 20,951 | 21,952 | 22,925 | 24,841 | 25,846 | 27,054 | 28,031 | 29,117 | 30,047 | 31,055 |
| | BUG Rating | B4-U0-G2 | B4-U0-G2 | B4-U0-G2 | B4-U0-G2 | B4-U0-G2 | B4-U0-G2 | B4-U0-G2 | B5-U0-G3 | B5-U0-G3 | B5-U0-G3 | B5-U0-G3 |
| Type II | 4000K | 22,129 | 23,318 | 24,432 | 25,515 | 27,647 | 28,766 | 30,110 | 31,198 | 32,406 | 33,441 | 34,563 |
| | BUG Rating | B3-U0-G3 | B3-U0-G3 | B3-U0-G3 | B3-U0-G3 | B3-U0-G3 | B3-U0-G3 | B3-U0-G4 | B3-U0-G4 | B3-U0-G4 | B3-U0-G4 | B3-U0-G4 |
| | 3000K | 21,728 | 22,896 | 23,990 | 25,053 | 27,146 | 28,245 | 29,565 | 30,633 | 31,819 | 32,836 | 33,937 |
| | BUG Rating | B3-U0-G3 | B3-U0-G3 | B3-U0-G3 | B3-U0-G3 | B3-U0-G3 | B3-U0-G3 | B3-U0-G4 | B3-U0-G4 | B3-U0-G4 | B3-U0-G4 | B3-U0-G4 |
| | 2700K | 18,739 | 19,746 | 20,689 | 21,606 | 23,411 | 24,359 | 25,497 | 26,418 | 27,441 | 28,318 | 29,268 |
| | BUG Rating | B3-U0-G3 | B3-U0-G3 | B3-U0-G3 | B3-U0-G3 | B3-U0-G3 | B3-U0-G3 | B3-U0-G3 | B3-U0-G3 | B3-U0-G3 | B3-U0-G3 | B3-U0-G3 |
| Type III | 4000K | 22,178 | 23,370 | 24,486 | 25,571 | 27,708 | 28,830 | 30,177 | 31,267 | 32,478 | 33,515 | 34,640 |
| | BUG Rating | B3-U0-G3 | B3-U0-G3 | B3-U0-G3 | B3-U0-G4 | B3-U0-G4 | B3-U0-G4 | B3-U0-G4 | B3-U0-G4 | B3-U0-G4 | B3-U0-G4 | B3-U0-G4 |
| | 3000K | 21,776 | 22,947 | 24,043 | 25,109 | 27,207 | 28,308 | 29,630 | 30,701 | 31,890 | 32,908 | 34,012 |
| | BUG Rating | B3-U0-G3 | B3-U0-G3 | B3-U0-G3 | B3-U0-G4 | B3-U0-G4 | B3-U0-G4 | B3-U0-G4 | B3-U0-G4 | B3-U0-G4 | B3-U0-G4 | B3-U0-G4 |
| | 2700K | 18,780 | 19,789 | 20,735 | 21,654 | 23,463 | 24,413 | 25,554 | 26,477 | 27,502 | 28,380 | 29,333 |
| | BUG Rating | B3-U0-G3 | B3-U0-G3 | B3-U0-G3 | B3-U0-G3 | B3-U0-G3 | B3-U0-G3 | B3-U0-G4 | B3-U0-G4 | B3-U0-G4 | B3-U0-G4 | B3-U0-G4 |
| Type IIII | 4000K (70 CRI) | 22,095 | 23,282 | 24,394 | 25,476 | 27,605 | 28,722 | 30,064 | 31,150 | 32,356 | 33,390 | 34,510 |
| | BUG Rating | B3-U0-G5 | B3-U0-G5 | B3-U0-G5 | B3-U0-G5 | B3-U0-G5 | B3-U0-G5 | B3-U0-G5 | B3-U0-G5 | B3-U0-G5 | B3-U0-G5 | B3-U0-G5 |
| | 3000K | 21,695 | 22,861 | 23,953 | 25,015 | 27,105 | 28,202 | 29,519 | 30,586 | 31,770 | 32,785 | 33,885 |
| | BUG Rating | B3-U0-G5 | B3-U0-G5 | B3-U0-G5 | B3-U0-G5 | B3-U0-G5 | B3-U0-G5 | B3-U0-G5 | B3-U0-G5 | B3-U0-G5 | B3-U0-G5 | B3-U0-G5 |
| | 2700K | 18,710 | 19,715 | 20,657 | 21,573 | 23,375 | 24,322 | 25,458 | 26,378 | 27,399 | 28,274 | 29,223 |
| | BUG Rating | B2-U0-G4 | B2-U0-G4 | B2-U0-G4 | B2-U0-G4 | B3-U0-G5 | B3-U0-G5 | B3-U0-G5 | B3-U0-G5 | B3-U0-G5 | B3-U0-G5 | B3-U0-G5 |
| Type V | 4000K | 22,787 | 24,011 | 25,158 | 26,274 | 28,469 | 29,621 | 31,005 | 32,126 | 33,370 | 34,435 | 35,591 |
| | BUG Rating | B5-U0-G4 | B5-U0-G4 | B5-U0-G4 | B5-U0-G4 | B5-U0-G4 | B5-U0-G5 | B5-U0-G5 | B5-U0-G5 | B5-U0-G5 | B5-U0-G5 | B5-U0-G5 |
| | 3000K | 22,374 | 23,577 | 24,703 | 25,798 | 27,954 | 29,085 | 30,444 | 31,544 | 32,765 | 33,812 | 34,946 |
| | BUG Rating | B5-U0-G4 | B5-U0-G4 | B5-U0-G4 | B5-U0-G4 | B5-U0-G4 | B5-U0-G4 | B5-U0-G5 | B5-U0-G5 | B5-U0-G5 | B5-U0-G5 | B5-U0-G5 |
| | 2700K | 19,296 | 20,333 | 21,304 | 22,248 | 24,108 | 25,083 | 26,255 | 27,204 | 28,257 | 29,160 | 30,138 |
| | BUG Rating | B5-U0-G3 | B5-U0-G4 | B5-U0-G4 | B5-U0-G4 | B5-U0-G4 | B5-U0-G4 | B5-U0-G4 | B5-U0-G4 | B5-U0-G4 | B5-U0-G4 | B5-U0-G5 |

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

Energy and Performance Data

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 |

Lumen Maintenance

| Ambient Temperature | TM-21 Lumen Maintenance (60,000 hours) | Theoretical L70 (Hours) |
|---------------------|--|-------------------------|
| 40°C | > 85% | > 140,000 |

EPA

| Effective Projected Area (Sq. Ft.) |
|------------------------------------|
| 0.8 |

Shipping Data

| Approximate Net Weight |
|------------------------|
| 35 lbs (15.9 kgs.) |

FADC Settings

| FADC Position | Percent of Typical Lumen Output |
|---------------|---------------------------------|
| 1 | 25% |
| 2 | 46% |
| 3 | 55% |
| 4 | 62% |
| 5 | 72% |
| 6 | 77% |
| 7 | 82% |
| 8 | 85% |
| 9 | 90% |
| 10 | 100% |

Note: +/-5% typical value

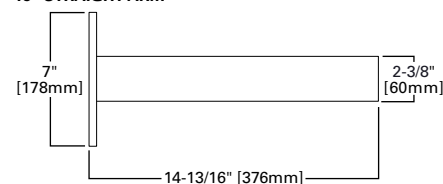
Lumen Multiplier

| Ambient Temperature | Lumen Multiplier |
|---------------------|------------------|
| 0°C | 1.02 |
| 10°C | 1.01 |
| 25°C | 1.00 |
| 40°C | 0.99 |
| 50°C | 0.97 |

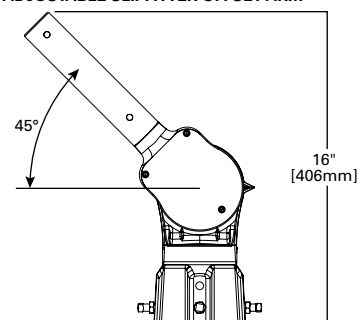
Mounting Details

Optional Arms

15" STRAIGHT ARM

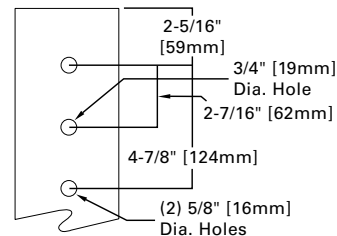


ADJUSTABLE SLIPFITTER OFFSET ARM



Arm Drilling

TYPE "M"



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 |