

DESCRIPTION

The VRDN LED area, site and roadway luminaire combines optical performance, energy efficiency and versatility in a low cost solution. Advanced optical technology delivers unparalleled uniformity and scalability. Heavy-duty construction and ease of installation features make the VRDN luminaire the choice for parking area, walkway and roadway applications. The VRDN luminaire is UL/cUL listed for wet locations. An optional IP66 enclosure rating is 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 to insure strength of construction and longevity in selected application.

Optics

High efficiency AccuLED Optics™ technology creates consistent distributions with the scalability to meet customized application requirements. 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

LED drivers are mounted to the removable aluminum door for optimal heat sinking and ease of maintenance. 120-277V 50/60Hz, 347V 60Hz or 480V 60Hz operation. 480V is compatible for use with 480V Wye systems only. 10kV/10 kA common- and differential- mode surge protection available. 0-10V dimming driver available. Thermal management incorporates both conduction and convection to transfer heat rapidly away from the LED source for optimal efficiency and light output. Suitable for ambient temperatures from -40°C to 40°C. Optional 50°C HA (high ambient) available. 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.

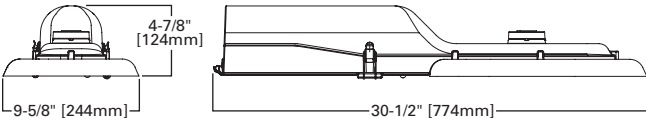


VRDN

LED

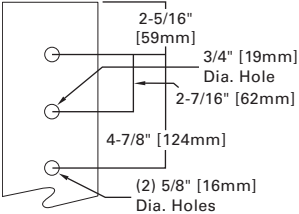
AREA / SITE / ROADWAY
LUMINAIRE

DIMENSIONS



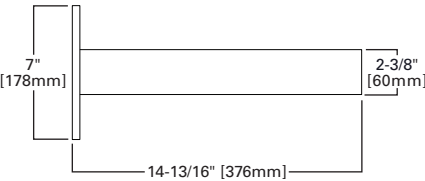
ARM DRILLING

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
Nominal Power (Watts)		36W	51W	64W	72W	92W
Input Current @ 120V (A)		0.30A	0.42A	0.53A	0.60A	0.77A
Input Current @ 277V (A)		0.15A	0.19A	0.24A	0.28A	0.34A
Nominal Power (Watts)		42W	57W	69W	80W	99W
Input Current @ 347V (A)		0.13A	0.17A	0.20A	0.23A	0.28A
Input Current @ 480V (A)		0.09A	0.12A	0.15A	0.17A	0.21A
Type II	Lumens ¹	3,855	4,937	5,839	7,858	9,294
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2
Type III	Lumens ¹	3,775	4,833	5,716	7,693	9,099
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2
Type V	Lumens ¹	3,864	4,948	5,852	7,876	9,315
	BUG Rating	B3-U0-G2	B3-U0-G2	B3-U0-G2	B3-U0-G3	B4-U0-G3

NOTE: 1 Lumen output is for 4000K CCT and AP Grey finish.

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		
25°C	>92%	>200,000
40°C	>90%	>145,000

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: VRDN-A02-E-UNV-T3-PER-AP

Product Family ^{1,2}	Light Engine ³	Driver ⁴	Voltage	Distribution
VRDN	A01=1 LED, Full Output A018=1 LED, Approximately 80% Output A016=1 LED, Approximately 60% Output A02=2 LEDs, Full Output A028=2 LEDs, Approximately 80% Output	E=Non-Dimming D=Dimming (0-10V)	UNV=Universal (120-277V) 347=347V 480=480V ⁵	T2=Type II T3=Type III T5=Type V
Options (Add as Suffix)		Color	Accessories (Order Separately)	
7030 =70 CRI / 3000K ⁶ 7060 =70 CRI / 5700K ⁶ PER =NEMA Twistlock Photocontrol Receptacle ⁷ PER7 =NEMA 7-PIN Twistlock Photocontrol Receptacle ^{7,8} 10K =10kV/10kA UL 1449 Surge Protective Device IP66 =IP66 Rated Housing HA =50°C High Ambient Temperature MS/DIM-L08 =Motion Sensor for Dimming Operation, Maximum 8' Mounting Height ^{8,9,10} MS/DIM-L20 =Motion Sensor for Dimming Operation, 9' - 20' Mounting Height ^{8,9,10} MS/DIM-L40 =Motion Sensor for Dimming Operation, 21' - 40' Mounting Height ^{8,9,10} LWR-LN =LumaWatt Pro Wireless Sensor, Wide Lens for 8' - 16' Mounting Height ^{11,12} LWR-LW =LumaWatt Pro Wireless Sensor, Narrow Lens for 16' - 40' Mounting Height ^{11,12} K =Level Indicator 4B =Four-bolt, Two-clamp Mounting A15 =Arm Included (15" Straight Arm) ¹³		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 ¹⁴ A15-XX =15" Straight Arm ¹⁵ HS-VERD =Verdeon House Side Shield	

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.
- 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 5700K when performing layouts. These files are published on the VRDN luminaire product page on the website.
- Not available with MS/DIM or DIMRF options.
- Must specify dimming drive.
- 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 LWP-EM-1, LWP-GW-1, and LWP-PoE8 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.
- Replace XX with paint color.