



Not all roadway applications are created equal. Poles that are mounted farther away from a roadway, multi-lane highways, toll plazas, and additional applications require special needs. Typical optics and mounting configurations will not meet these special requirements. Lumec **RoadView LED** off road luminaire provides a solution to these unique applications.

Project: \_\_\_\_\_  
 Location: \_\_\_\_\_  
 Cat.No: \_\_\_\_\_  
 Type: \_\_\_\_\_  
 Lamps: \_\_\_\_\_ Qty: \_\_\_\_\_  
 Notes: \_\_\_\_\_

### Ordering guide

Series	Apps	LED module	Gen.	Optical system	Voltage	Driver options	Luminaire options	Accessories	Adaptor	Finish
<b>RVM</b>	<input type="checkbox"/>	<input type="checkbox"/>	<b>G2</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>RVM</b>	<b>ORH</b> <sup>6</sup> <b>ORL</b> <sup>7</sup>	<b>3000K</b> 110W96LED3K 125W112LED3K 145W128LED3K 160W144LED3K 160W96LED3K 180W160LED3K 190W112LED3K 215W96LED3K 215W128LED3K 245W144LED3K 270W160LED3K  <b>4000K</b> 110W96LED4K 125W112LED4K 145W128LED4K 160W144LED4K 160W96LED4K 180W160LED4K 190W112LED4K 215W96LED4K 215W128LED4K 245W144LED4K 270W160LED4K	<b>G2</b> Gen2	<b>LE2</b> Type II (ASYM) <b>LE3TM</b> Type III Medium Beam (ASYM)	<b>347</b> <b>480</b> <b>UNV</b> 120-277V	<b>AST</b> <sup>1,4</sup> Pre-set driver for progressive start-up <b>CDMGE25</b> <sup>1,4</sup> 8 hrs. 25% reduction <b>CDMGE50</b> <sup>1,4</sup> 8 hrs. 50% reduction <b>CDMGE75</b> <sup>1,4</sup> 8 hrs. 75% reduction <b>CDMGM25</b> <sup>1,4</sup> 6 hrs. 25% reduction <b>CDMGM50</b> <sup>1,4</sup> 6 hrs. 50% reduction <b>CDMGM75</b> <sup>1,4</sup> 6 hrs. 75% reduction <b>CDMGS25</b> <sup>1,4</sup> 4 hrs. 25% reduction <b>CDMGS50</b> <sup>1,4</sup> 4 hrs. 50% reduction <b>CDMGS75</b> <sup>1,4</sup> 4 hrs. 75% reduction <b>CLO</b> <sup>1,4</sup> Pre-set driver to manage lumen depreciation <b>DMG</b> <sup>5</sup> 0-10V <b>OTL</b> <sup>1,4</sup> Pre-set driver to signal end of life of the lamp	<b>API</b> Factory Installed NEMA label, ANSI C136.15 compliant <b>HS</b> House Side Shield, shield, 1 per 16 LED light engine <b>RC</b> <sup>3</sup> Receptacle for twist-lock photocell or shorting cap, 3-pin <b>SP2</b> 20kV / 20kA Surge Protector (optional)	<b>PH8</b> Twist-lock Photoelectric Cell, UNV (120-277VAC) <b>PH8/347</b> Twist-lock Photoelectric Cell, (347VAC) <b>PH8/480</b> Twist-lock Photoelectric Cell, (480VAC) <b>PHXL</b> Twist-lock Photoelectric Cell, extended life, UNV (120-277VAC) <b>PH9</b> Shorting cap	<b>KAV</b> Vertical post top application <b>KAH</b> Horizontal arm application	<b>Textured</b> <b>BK</b> Black <b>BR</b> Bronze <b>GY3</b> Medium Grey <b>WH</b> White

1. 347V and 480V not available.  
 2. Not available with HS option.  
 3. Use of photoelectric cell or shorting cap is required to ensure proper illumination.  
 4. Dimming choices: Select either DMG or one of the CDMG options.  
 5. Please note this integrated feature come standard with RoadView.  
 6. ORH only available with LE3TM  
 7. ORL only available with LE2  
 Note: If DALI or 5 or 7 pin receptacle is required contact factory



# RVM RoadView LED Off Road (medium)

## Roadway

### LED Wattage and Lumen Values

LED Module: 3000K	Total LEDs	LED Current (mA)	Average System Wattage <sup>1</sup>	Type LE2			Type LE3TM		
				Delivered Lumens <sup>2</sup>	Efficacy (LPW)	BUG Rating	Delivered Lumens <sup>2</sup>	Efficacy (LPW)	BUG Rating
RVM-110W96LED3K-G2	96	350	103	10496	102	B2-U0-G2	10648	104	B3-U0-G1
RVM-160W96LED3K-G2	96	530	160	14724	92	B3-U0-G2	15273	95	B3-U0-G2
RVM-215W96LED3K-G2	96	700	212	18282	86	B3-U0-G2	19262	91	B3-U0-G2
RVM-125W112LED3K-G2	112	350	119	12199	102	B3-U0-G2	12423	104	B3-U0-G2
RVM-190W112LED3K-G2	112	530	184	17498	95	B3-U0-G2	17819	97	B3-U0-G2
RVM-145W128LED3K-G2	128	350	136	13942	102	B3-U0-G2	14197	104	B3-U0-G2
RVM-215W128LED3K-G2	128	530	211	19998	95	B3-U0-G2	20364	97	B3-U0-G2
RVM-160W144LED3K-G2	144	350	153	15685	102	B3-U0-G2	15972	104	B3-U0-G2
RVM-245W144LED3K-G2	144	530	237	22498	95	B3-U0-G2	22910	97	B4-U0-G2
RVM-180W160LED3K-G2	160	350	171	17422	102	B3-U0-G2	17747	104	B3-U0-G2
RVM-270W160LED3K-G2	160	530	260	24662	95	B3-U0-G3	25455	98	B4-U0-G3

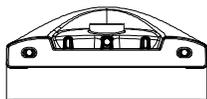
LED Module: 4000K	Total LEDs	LED Current (mA)	Average System Wattage <sup>1</sup>	Type LE2			Type LE3TM		
				Delivered Lumens <sup>2</sup>	Efficacy (LPW)	BUG Rating	Delivered Lumens <sup>2</sup>	Efficacy (LPW)	BUG Rating
RVM-110W96LED4K-G2	96	350	103	11962	116	B2-U0-G2	12180	119	B3-U0-G1
RVM-160W96LED4K-G2	96	530	160	17158	107	B3-U0-G2	17470	109	B3-U0-G2
RVM-215W96LED4K-G2	96	700	212	21639	102	B3-U0-G2	22033	104	B4-U0-G2
RVM-125W112LED4K-G2	112	350	119	13956	117	B3-U0-G2	14209	119	B3-U0-G2
RVM-190W112LED4K-G2	112	530	184	20018	109	B3-U0-G2	20382	111	B3-U0-G2
RVM-145W128LED4K-G2	128	350	136	15949	117	B3-U0-G2	16239	119	B3-U0-G2
RVM-215W128LED4K-G2	128	530	211	22877	109	B3-U0-G2	23293	111	B4-U0-G2
RVM-160W144LED4K-G2	144	350	153	17943	117	B3-U0-G2	18269	119	B3-U0-G2
RVM-245W144LED4K-G2	144	530	237	25737	109	B3-U0-G3	26205	111	B4-U0-G3
RVM-180W160LED4K-G2	160	350	171	19936	117	B3-U0-G2	20299	119	B3-U0-G2
RVM-270W160LED4K-G2	160	530	260	28596	110	B3-U0-G3	29117	112	B4-U0-G3

1. Wattage may vary by +/- 8% due to LED manufacturer forward volt specification and ambient temperature. Wattage shown is average for 120V through 277V input. Actual wattage may vary by an additional +/- 10% due to actual input voltage.
2. Lumen values based on tests performed in compliance with IESNA LM-79.

Actual performance may vary due to installation variables including optics, mounting/ceiling height, dirt depreciation, light loss factor, etc.; highly recommended to confirm performance with a layout - contact Applications: [signify.com/outdoorluminaire](http://signify.com/outdoorluminaire).

**Note:** Some data may be scaled based on tests of similar. But not identical luminaires

### Dimensions



15.38" (391mm)

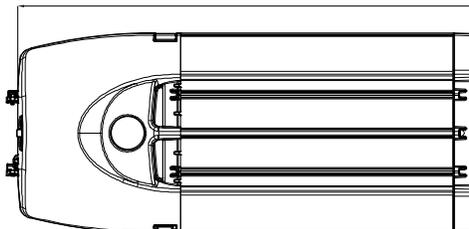
4.66" (118mm)



2.38" (61mm)

31.25" (794mm) min. – 35.25" (895mm) max.

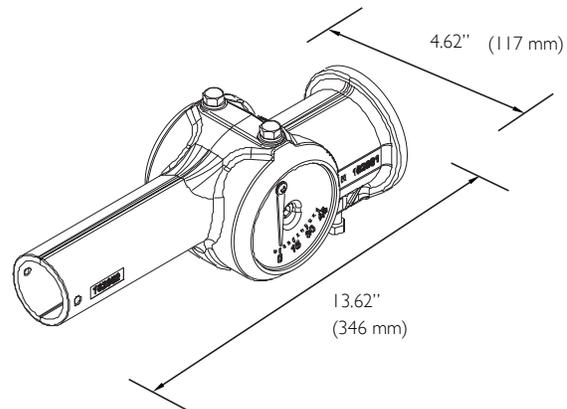
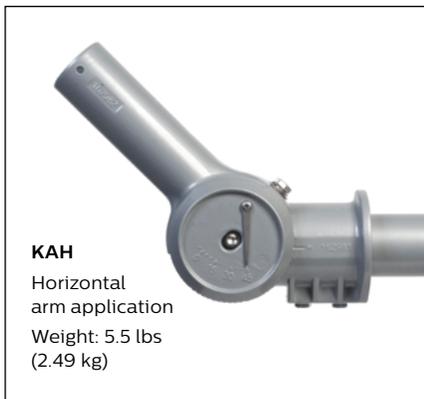
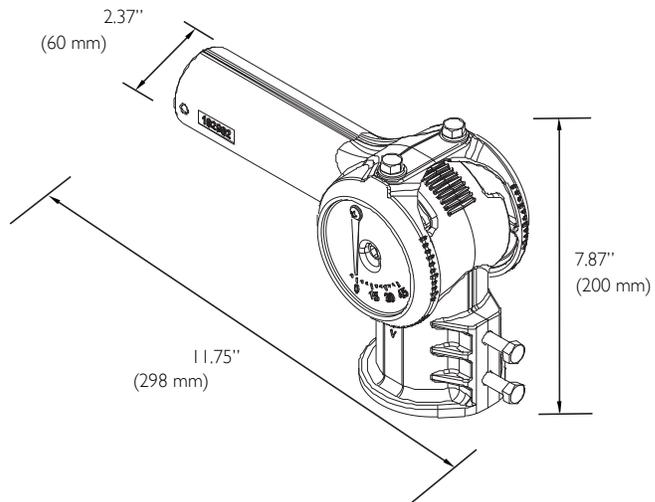
Weight: 34 to 37 lbs  
(15.4 to 16.8 kg)



# RVM RoadView LED Off Road (medium)

## Roadway

### Adaptors



### Tilt



# RVM RoadView LED Off Road (medium)

## Roadway

### Specifications

#### Housing

Made of a low copper die cast A360 Aluminum alloy 0.090 (2.4mm) minimum thickness. Fits on a 1.66" (42mm) to 2 3/8" (60mm) OD by 6" (152mm) long tenon. Comes with an easy step adjustable reversible zinc plated clamping system with 4 zinc plated hexagonal bolts 3/8 16 UNC for ease of maintenance and installation. Provide an easy step adjustment of +/- 5°. The housing is complete with a tool free removable and secured power door avoiding accidental dropping giving access to electronics components and to a terminal block that accepts (#2 max.) wires from the primary circuit. A clearance of 13"(330mm) at the rear is required in order to remove the door. Complete with a bird guard protecting against birds and similar intruders. ANSI label to identify wattage and source optional.

#### Light Engine

LEDgine composed of 4 main components: Heat Sink / LED Module / Optical System / Driver Electrical components are RoHS compliant.

#### Heat Sink

Made of 6063 T5 extruded aluminum optimising the LEDs efficiency and life. Product does not use any cooling device with moving parts (only passive cooling device).

#### Lens

Made of soda lime tempered glass lens, mechanically assembled and sealed onto the lower part of the heat sink.

#### LED Module

Composed of high performance white LEDs. Color temperature as per ANSI/NEMA bin Neutral White, 3000 Kelvin nominal (3045K +/- 175K) or 4000 Kelvin nominal (3985K +/- 275K), CRI 70 Min. 75 Typical.

#### Optical System

Composed of high performance UV stabilized optical grade polymer refractor lenses to achieve desired distribution optimized to get maximum spacing, target lumens and a superior lighting uniformity. System is rated IP66. Performance shall be tested per LM 63, LM 79 and TM 15 (IESNA) certifying its photometric performance. 0% uplight and U0 per IESNA TM 15.

#### End Cap

Made of low copper die cast A360.1 Aluminum alloy 0.100 (2.5mm) minimum thickness, mechanically assembled to the heat sink.

#### Driver

High power factor of 90% minimum. Electronic driver, operating range 50/60 Hz. Auto adjusting universal voltage input from 120 to 277 VAC or 347 to 480 VAC rated for both application line to line or line to neutral, Class I, THD of 20% max. Driver comes with dimming compatible 0-10 volts. The current supplying the LEDs will be reduced by the driver if the driver experiences internal overheating as a protection to the LEDs and the electrical components. Output is protected from short circuits, voltage overload and current overload. Automatic recovery after correction. Standard built in driver surge protection of 2.5kV (min).

#### Surge Protector

Surge protector tested in accordance with ANSI/IEEE C62.45 per ANSI/IEEE C62.41.2 Scenario I Category C High Exposure 10kV/10kA waveforms for Line Ground, Line Neutral and Neutral Ground, and in accordance with U.S. DOE (Department of Energy) MSSLC (Municipal Solid State Street Lighting Consortium) model specification for LED roadway luminaires electrical immunity requirements for High Test Level 10kV / 10kA

#### Driver and Luminaire Options

**AST\***: Pre-set driver for progressive start-up of the LED module(s) to optimize energy management and enhance visual comfort at start-up.

**CLO\***: Pre-set driver to manage the lumen depreciation by adjusting the power given to the LEDs offering the same lighting intensity during the entire lifespan of the LED module.

**OTL\***: Pre-set driver to signal end of life of the LED module(s) for better fixture management.

**CDMG\***: Dynadimmer standard dimming functionalities including pre-programmed scenarios to suit many applications and needs from safety to maximum energy savings.

#### Safety Mode:

**CDMG25**: 4 hours 25% power dimming

**CDMG50**: 4 hours 50% power dimming

**CDMG75**: 4 hours 75% power dimming

#### Median Mode:

**CDMGM25**: 6 hours 25% power dimming

**CDMGM50**: 6 hours 50% power dimming

**CDMGM75**: 6 hours 75% power dimming

#### Economy Mode:

**CDMGE25**: 8 hours 25% power dimming

**CDMGE50**: 8 hours 50% power dimming

**CDMGE75**: 8 hours 75% power dimming

#### Luminaire Options

**HS**: House side shield, 1 per 16 LED light engine.

**SP2**: 20kV / 20kA surge protection device that provides extra protection beyond the SP1 10kV/10kA level.

**RC\***: (standard): Receptacle with 3 pins enabling dimming and additional functionality (to be determined), can be used with a twist lock CityTouch node or photoelectric cell or a shorting cap.

\* Use of photoelectric cell or shorting cap is required to ensure proper illumination.

### Predicted Lumen Depreciation Data

Ambient Temperature °C	LED Current	Calculated L <sub>70</sub> hrs <sup>1,2</sup>	L <sub>70</sub> per TM21 <sup>2,3</sup>	Lumen Maintenance @ 60,000hrs
25 °C	700 mA	>100,000	>60,000	94%

1. Predicted performance derived from LED manufacturer's data and engineering design estimates, based on IESNA LM-80 methodology. Actual experience may vary due to field application conditions.

2. L<sub>70</sub> is the predicted time when LED performance depreciates to 70% of initial lumen output.

3. Calculated per IESNA TM 21-11. Published L<sub>70</sub> hours limited to 6 times actual LED test hours.

# RVM RoadView LED Off Road (medium)

## Roadway

### Specifications

#### Accessories

**PH8:** Twist-lock Photoelectric Cell, UNV (120-277VAC).

**PH8/347:** Twist-lock Photoelectric Cell, HVU (347VAC).

**PH8/480:** Twist-lock Photoelectric Cell, HVU (480VAC).

**PHXL:** Twist-lock Photoelectric Cell, extended life, UNV (120-277VAC).

**PH9:** Shorting cap.

#### Adaptor

**KAV:** Vertical post top application

**KAH:** Horizontal arm application

#### Luminaire Useful Life

Refer to IES files for energy consumption and delivered lumens for each option. Based on ISTMT in situ thermal testing in accordance with UL1598 and UL8750, System Reliability Tool, Advance data and LEDs LM-80/TM-21 data, expected to reach 100,000 + hours with >L70 lumen maintenance @ 25°C.

Luminaire Useful Life accounts for LED lumen maintenance AND all of these additional factors including: LED life, driver life, PCB substrate, solder joints, on/off cycles, burning hours and corrosion.

#### Wiring

The connection of the luminaire is done using a terminal block connector 600V, 85A for use with #2 14 AWG. wires from the primary circuit, located inside the housing. Due to the inrush current that occurs with electronic drivers, recommend using a 10Amp time delay fuse to avoid unwanted fuse blowing (false tripping) that can occur with normal or fast acting fuses.

#### Hardware

All exposed screws shall be complete with Ceramic primer seal basecoat to reduce seizing of the parts and offers a high resistance to corrosion. All seals and sealing devices are made and/or lined with EPDM and/or silicone and/or rubber.

#### Finish

Color to be in accordance with the AAMA 2603 standard. Application of polyester powder coat paint (4 mils/100 microns) with ± 1 mils/24 microns of tolerance. The Thermosetting resins provides a discoloration resistant finish in accordance with the ASTM D2244 standard, as well as luster retention in keeping with the ASTM D523 standard and humidity proof in accordance with the ASTM D2247 standard.

The surface treatment achieves a minimum of 2000 hours for salt spray resistant finish in accordance with testing performed and per ASTM B117 standard.

#### LED products manufacturing standard

The electronic components sensitive to electrostatic discharge (ESD) such as light emitting diodes (LEDs) are assembled in compliance with IEC61340 5 1 and ANSI/ESD S20.20 standards so as to eliminate ESD events that could decrease the useful life of the product.

#### Quality Control

The manufacturer must provide a written confirmation of its ISO 9001 2008 and ISO 14001 2004 International Quality Standards Certification.

#### Vibration Resistance

The RVM meets the ANSI C136.31, American National Standard for Roadway Luminaire Vibration specifications for Bridge/overpass applications (Tested for 3G over 100 000 cycles).

The RVM meets the California Test 611, Testing durability of mast arm mounted luminaires, specifications (a 2 000 000 cycles test).

#### Certifications and Compliance

cULus Listed for Canada and USA. Luminaire meets DOE and MSSLC Model Specification for LED Roadway Luminaires. RoadStar LED roadway luminaires are DesignLights Consortium qualified. Luminaire complies with or exceeds the following ANSI C136 standards: .2, .3, .10, .14, .15, .22, .25, .31, .37, .41.

#### Limited Warranty

10-year limited warranty.  
See [signify.com/warranties](http://signify.com/warranties) for details and restrictions.

