



Lumec RoadStar LED architectural roadway luminaire combines the look of a decorative product with the performance of a roadway or site/area luminaire, resulting in highly effective illumination and a stylish appearance. Featuring two different sizes, RoadStar offers a consistent look across pedestrian, general, and street lighting areas. Includes Service Tag, innovative way to provide assistance throughout the life of the product

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

### Ordering guide

example: GPLM-64L700NW-G3-R3M-UNV-RCD-HS-GY3

Series	LED Module	Board Generation	Optical System	Ballast	Driver & Dimming <sup>2</sup>	Luminaire Options	Accessories <sup>8</sup>	Finish
<b>GPLM</b>								
<b>GPLM</b> RoadStar LED roadway luminaire, medium	<b>Neutral White</b>	<b>G3</b> Gen 3	<b>R2S</b> Type II short (ASYM)  <b>R2M</b> Type II Medium (ASYM)  <b>R3S</b> Type III short (ASYM)  <b>R3M</b> Type III Medium (ASYM)  <b>R3W</b> Type III Wide (ASYM)  <b>4</b> Type IV (ASYM)  <b>5<sup>1</sup></b> Type V (SYMM)	<b>UNV</b> 120-277VAC  <b>HVU</b> 347-480VAC  <b>HVX</b> 277-480VAC	<b>Standard</b>	<b>Standard</b>	<b>OMS<sup>7</sup></b> Outdoor Multi-Sensor  <b>PH8</b> Twist-lock Photoelectric Cell, UNV (120-277VAC)  <b>PH8/347</b> Twist-lock Photoelectric Cell, HVU (347VAC)  <b>PH8/480</b> Twist-lock Photoelectric Cell, HVU (480VAC)  <b>PHXL</b> Twist-lock Photoelectric Cell, extended life, UNV (120-277VAC)  <b>PH9</b> Shorting cap	<b>BK</b> Black finish  <b>BR</b> Bronze finish  <b>GY3</b> Grey finish  <b>WH</b> White finish  <b>Textured Finishes</b>  <b>BKTX</b> Black  <b>BRTX</b> Bronze  <b>GY3TX</b> Gray  <b>WHTX</b> White
	<b>DMG</b> Dimmable driver 0-10V  <b>Optional</b>				<b>RCD7<sup>3</sup></b> Receptacle for twist-lock photocell or shorting cap, 7-pin (standard)  <b>Optional</b>	<b>FAWS<sup>4</sup></b> Field adjustable wattage switch  <b>HS</b> House Side Shield, shield, 1 per 16 LED light engine  <b>SP2</b> 20kV / 20kA Surge Protector (optional)  <b>SP1X</b> Fail-Off 10kV/5kA Surge protector  <b>SP2X</b> Fail-Off 20kV/10kA Surge protector  <b>TLRSR<sup>6,7</sup></b> SR receptacle  <b>BAC*</b> Meets the requirements of the Buy American Act of 1933 (BAA)		
	<b>Warm White</b>							
	64L530NW 64L700NW 64L1050NW 80L530NW 80L700NW 80L1050NW 96L530NW 96L700NW 96L1050NW  64L530WW 64L700WW 64L1050WW 80L530WW 80L700WW 80L1050WW 96L530WW 96L700WW 96L1050WW							

- Not available with HS option.
- Dimming choices: Select either DMG or one of the CDMG options or DALI.
- Use of photoelectric cell or shorting cap is required to ensure proper illumination.
- Only available with DMG driver option.
- Only available with D4i or SRD Driver options.
- TLRSR must be selected with D4i Driver option.
- TLRSR Option and D4i Driver option must be selected with OMS.
- Consult Signify to confirm whether specific accessories are BAA-compliant.

\* Failure to properly select the "BAC" suffix could result in you receiving product that is not BAA compliant product with no recourse for an RMA or refund. This BAC designation hereunder does not address (i) the applicability of, or availability of a waiver under, the Trade Agreements Act, or (ii) the "Buy America" domestic content requirements imposed on states, localities, and other non-federal entities as a condition of receiving funds administered by the Department of Transportation or other federal agencies.

**Note:** GPLM is compatible to accept the Interact City wireless lighting control device



# GPLM RoadStar LED luminaire (medium)

## Roadway

### 3000K LED Lumen Values

Ordering Code	LED QTY	System Current (mA)	Avg System Wattage (W)	R2M			R2S			R3M			R3S		
				Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)
GPLM-64L530WW-G3	64	530	105	15565	B3-U0-G3	148	15887	B3-U0-G2	151	15432	B3-U0-G2	147	15707	B2-U0-G2	150
GPLM-64L700WW-G3	64	700	141	19463	B3-U0-G3	138	19865	B3-U0-G2	141	19296	B3-U0-G3	137	19639	B3-U0-G3	139
GPLM-64L1050WW-G3	64	1050	217	26054	B3-U0-G3	120	26592	B4-U0-G2	123	25831	B3-U0-G3	119	26291	B3-U0-G4	121
GPLM-80L530WW-G3	80	530	132	19376	B3-U0-G3	147	19776	B3-U0-G2	150	19210	B3-U0-G3	146	19551	B3-U0-G3	148
GPLM-80L700WW-G3	80	700	180	24154	B3-U0-G3	134	24652	B3-U0-G2	137	23947	B3-U0-G3	133	24373	B3-U0-G4	135
GPLM-80L1050WW-G3	80	1050	270	31947	B4-U0-G4	118	32607	B4-U0-G3	121	31674	B4-U0-G4	117	32237	B3-U0-G4	119
GPLM-96L530WW-G3	96	530	158	23153	B3-U0-G3	147	23632	B3-U0-G2	150	22955	B3-U0-G3	145	23364	B3-U0-G3	148
GPLM-96L700WW-G3	96	700	213	28763	B4-U0-G3	135	29357	B4-U0-G3	138	28517	B3-U0-G3	134	29024	B3-U0-G4	136
GPLM-96L1050WW-G3	96	1050	320	37435	B4-U0-G4	117	38208	B4-U0-G3	119	37115	B4-U0-G4	116	37775	B3-U0-G4	118

Ordering Code	LED QTY	System Current (mA)	Avg System Wattage (W)	R3W			4			5		
				Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)
GPLM-64L530WW-G3	64	530	105	15063	B2-U0-G3	143	15412	B2-U0-G3	147	15841	B4-U0-G2	151
GPLM-64L700WW-G3	64	700	141	18835	B3-U0-G3	134	19271	B3-U0-G3	137	19807	B4-U0-G3	140
GPLM-64L1050WW-G3	64	1050	217	25214	B3-U0-G4	116	25798	B3-U0-G4	119	26515	B5-U0-G3	122
GPLM-80L530WW-G3	80	530	132	18750	B3-U0-G3	142	19185	B3-U0-G3	145	19718	B4-U0-G3	149
GPLM-80L700WW-G3	80	700	180	23374	B3-U0-G4	130	23916	B3-U0-G4	133	24581	B5-U0-G3	137
GPLM-80L1050WW-G3	80	1050	270	30917	B3-U0-G4	115	31633	B3-U0-G5	117	32513	B5-U0-G4	120
GPLM-96L530WW-G3	96	530	158	22406	B3-U0-G4	142	22926	B3-U0-G4	145	23563	B5-U0-G3	149
GPLM-96L700WW-G3	96	700	213	27835	B3-U0-G4	131	28480	B3-U0-G4	134	29272	B5-U0-G4	137
GPLM-96L1050WW-G3	96	1050	320	36227	B3-U0-G5	113	37067	B3-U0-G5	116	38098	B5-U0-G4	119

### 4000K LED Lumen Values

Ordering Code	LED QTY	System Current (mA)	Avg System Wattage (W)	R2M			R2S			R3M			R3S		
				Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)
GPLM-64L530NW-G3	64	530	105	17278	B3-U0-G3	165	17634	B3-U0-G2	168	17130	B3-U0-G3	163	17434	B2-U0-G3	166
GPLM-64L700NW-G3	64	700	141	21604	B3-U0-G3	153	22050	B3-U0-G2	156	21419	B3-U0-G3	152	21800	B3-U0-G3	155
GPLM-64L1050NW-G3	64	1050	217	28920	B4-U0-G3	133	29517	B4-U0-G3	136	28673	B3-U0-G3	132	29183	B3-U0-G4	134
GPLM-80L530NW-G3	80	530	132	21507	B3-U0-G3	163	21951	B3-U0-G2	166	21323	B3-U0-G3	162	21702	B3-U0-G3	164
GPLM-80L700NW-G3	80	700	180	26811	B3-U0-G3	149	27364	B4-U0-G2	152	26581	B3-U0-G3	148	27054	B3-U0-G4	150
GPLM-80L1050NW-G3	80	1050	270	35461	B4-U0-G4	131	36194	B4-U0-G3	134	35158	B4-U0-G4	130	35783	B3-U0-G4	133
GPLM-96L530NW-G3	96	530	158	25700	B3-U0-G3	163	26231	B4-U0-G2	166	25481	B3-U0-G3	161	25934	B3-U0-G4	164
GPLM-96L700NW-G3	96	700	213	31927	B4-U0-G4	150	32586	B4-U0-G3	153	31654	B4-U0-G4	149	32217	B3-U0-G4	151
GPLM-96L1050NW-G3	96	1050	320	41553	B4-U0-G4	130	42411	B4-U0-G3	133	41198	B4-U0-G4	129	41930	B3-U0-G5	131

Ordering Code	LED QTY	System Current (mA)	Avg System Wattage (W)	R3W			4			5		
				Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)
GPLM-64L530NW-G3	64	530	105	16720	B2-U0-G3	159	17108	B3-U0-G3	163	17583	B4-U0-G2	167
GPLM-64L700NW-G3	64	700	141	20907	B3-U0-G4	148	21391	B3-U0-G4	152	21986	B5-U0-G3	156
GPLM-64L1050NW-G3	64	1050	217	27987	B3-U0-G4	129	28636	B3-U0-G4	132	29432	B5-U0-G4	136
GPLM-80L530NW-G3	80	530	132	20813	B3-U0-G3	158	21295	B3-U0-G4	161	21887	B5-U0-G3	166
GPLM-80L700NW-G3	80	700	180	25946	B3-U0-G4	144	26547	B3-U0-G4	147	27285	B5-U0-G3	152
GPLM-80L1050NW-G3	80	1050	270	34317	B3-U0-G5	127	35113	B3-U0-G5	130	36089	B5-U0-G4	134
GPLM-96L530NW-G3	96	530	158	24871	B3-U0-G4	157	25447	B3-U0-G4	161	26155	B5-U0-G3	166
GPLM-96L700NW-G3	96	700	213	30897	B3-U0-G4	145	31613	B3-U0-G5	148	32492	B5-U0-G4	153
GPLM-96L1050NW-G3	96	1050	320	40212	B3-U0-G5	126	41144	B4-U0-G5	129	42288	B5-U0-G4	132

1. L<sub>70</sub> = 100,000 hrs (at ambient temperature = 25°C).

2. System wattage or total luminaire wattage includes the LED module and the LED driver.

Notes: Due to rapid and continuous advances in LED technology, LED luminaire data is subject to change without notice and at the discretion of Signify.

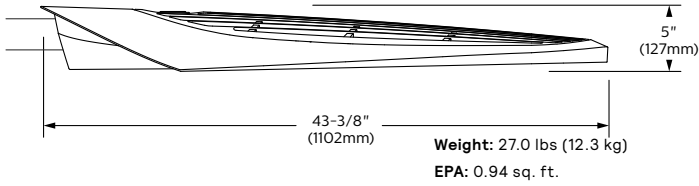
IES files with HS house side shield and/or Warm White options are also available - contact the factory.

# GPLM RoadStar LED luminaire (medium)

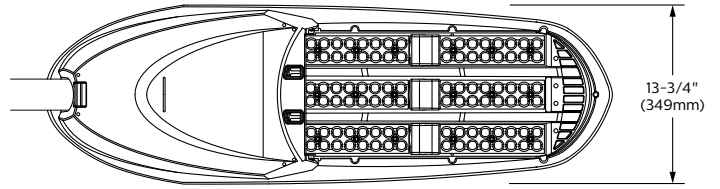
## Roadway

### Dimensions

Side View



Bottom View



### Predicted Lumen Depreciation Data

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. L70 is the predicted time when LED performance depreciates to 70% of initial lumen output. Calculated per IESNA TM21-21.

Ambient Temperature	Driver mA	Calculated L70 hours	L70 per TM-21	Lumen Maintenance % at 60,000 hrs
25°C	up to 1050mA	>100,000 hrs	>60,000 hrs	>89%
25°C	1050mA	>93,200 hours	>60,000 hrs	>81%

Catalog Logic	Light Engine Configuration	Avg System Wattage (W)
GPLM-64L530	4x16LED	105
GPLM-64L700	4x16LED	141
GPLM-64L1050	4x16LED	217
GPLM-80L530	5x16LED	132
GPLM-80L700	5x16LED	180
GPLM-80L1050	5x16LED	270
GPLM-96L530	6x16LED	158
GPLM-96L700	6x16LED	213
GPLM-96L1050	6x16LED	320

# GPLM RoadStar LED luminaire (medium)

## Roadway

### Specifications

#### Housing

The upper grid and lower part of the housing are made of a low copper die cast Aluminum alloy (A360), 0.100" (2.5mm) minimum thickness. Fits on a 1.66" (42mm) O.D. (1.25" NPS), 1.9" (48mm) O.D. (1.5" NPS) or 2 3/8" (60mm) O.D. (2" NPS) by 7 3/4" (197mm) minimum long tenon. Comes with two zinc plated clamps fixed by 4 zinc plated hexagonal bolts 3/8 16 UNC for ease of installation. Provides an easy step adjustment of +/- 5° tilt in 2.5° increments. Includes integral bubble level standard (always included). A quick release, tool less entry, single latch, hinged, removable door opens downward to provide access to electronic components and to a terminal block. Door is secured to prevent accidental dropping or disengagement. Complete with a bird guard protecting against birds and similar intruders. ANSI label to identify wattage and source included in box.

#### Light Engine

Composed of 4 main components: Heat Sink / LED Module / Optical System / Driver

Electrical components are RoHS compliant, IP66 sealed light engine. LEDs tested by ISO 17025 2005 accredited lab in accordance with IESNA LM 80 guidelines in compliance with EPA ENERGY STAR, extrapolations in accordance with IESNA TM 21. Metal core board ensures greater heat transfer and longer lifespan.

**Heat Sink:** Built in the housing, designed to ensure high efficacy and superior cooling by natural convection air flow pattern always close to LEDs and driver optimizing their efficiency and life. Product does not use any cooling device with moving parts (only passive cooling). Entire luminaire is rated for operation in ambient temperature of 40°C / 40°F up to +40°C / +104°F.

**LED Module:** Composed of high performance white LEDs. Color temperature as per ANSI/NEMA bin Neutral White, 4000 Kelvin nominal (3985K +/- 275K or 3710K to 4260K), CRI 70 Min. 75 Typical. 3000 Kelvin also available

**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. Dark Sky compliant when 3000K option selected.

**Driver:** High power factor of 95%. 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 Options

**D4I:** Zhaga-D4i compliant fixture

**DALI:** Pre-set driver compatible with the DALI control system.

**SRD:** Sensor Ready Driver including SR communication (used for dimming and other functionalities), 24V auxiliary supply and a logical signal input (LSI) connected to the top NEMA twist lock receptacle and bottom TLRSR receptacle, if this option included/ chosen. This configuration is compatible with Interact City controllers.

#### Luminaire Options

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

**FAWS:** Field Adjustable Wattage Selector, pre-set to the highest position, can be easily switched in the field to the required position. This reduces total luminaire wattage consumption and reduces the light level – see the FAWS multiplier chart for more details.

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

**SP1X:** Fail-Off Surge protection device tested in accordance with ANSI/IEEE C62.45 per ANSI/IEEE C62.41.2 Scenario I Category C High Exposure 10kV/5kA waveforms for Line-Ground, Line-Neutral and Neutral-Ground.

**SP2X:** Fail-Off 20kV /10kA surge protection device that provides extra protection beyond the SP1X 10kV/5kA level.

**RCD7\* (standard):** Receptacle with 7 pins enabling dimming and additional functionality (to be determined), can be used with a twist lock node or photoelectric cell or a shorting cap.

Please note: Additional hardware will be required to utilize the additional 2 pins on this receptacle.

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

#### Accessories

**OMS:** Outdoor Multi Sensor

**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.

#### 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 Lumileds LM-80/TM-21 data, expected to reach 100,000 + hours with  $>L_{70}$  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

In accordance with the AAMA 2603 standard. Application of polyester powder coat paint (4 mils/100 microns) with  $\pm 1$  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 3000 hours for salt spray resistant finish in accordance with testing performed and per ASTM B117 standard.

# GPLM RoadStar LED luminaire (medium)

## Roadway

### Specifications (continued)

#### 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.

#### Vibration Resistance

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

#### 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.

#### Service Tag

Each individual luminaire is uniquely identifiable, thanks to the Service tag application. With a simple scan of a QR code, placed on the inside of the mast door, you gain instant access to the luminaire configuration, making installation and maintenance operations faster and easier, no matter what stage of the luminaire's lifetime.

Just download the APP and register your product right away.

For more details visit: [signify.com/servicetag](https://signify.com/servicetag)

#### Limited Warranty

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