

LED Street & Area Light

LRS1 Series LED Roadway Luminaire

Assembled in the USA using domestic & foreign components.



Description

The LRS1 LED roadway luminaire is a high performance, utility-grade street and area light that is designed to replace and outshine legacy HID products up to 100W while providing significant energy savings, virtually no maintenance, and robust features that linemen and installers have come to expect.

Construction

- Heavy duty die-cast aluminum housing
- Durable powder coat finish
- Corrosion resistant hardware
- Tool-less entry
- Three (3) station terminal block 14 to 6 AWG
- Locking Type photocontrol receptacle with tool-less positioning
- IP54 rated driver chamber
- Self cleaning heat sink
- Robust surge suppression: 10kV standard
- Tenon mount with integral tilt steps (+5° to -5°) and capable of mounting on 1-1/4" NPS to 2" NPS (1.66in to 2.375in)
- Bridge and overpass vibration rated
- Standard Wildlife guard

Options

- Adjustable Output Unit
- Long-Life photocontrol
- Shorting cap
- Glare shield



Visit www.designlights.org for the Qualified Product List



| | |
|--------------|--|
| Project: | |
| Catalog#: | |
| Approved by: | |

Applications

- Parking Areas Roadways Recreation Areas
Walkways

Electrical

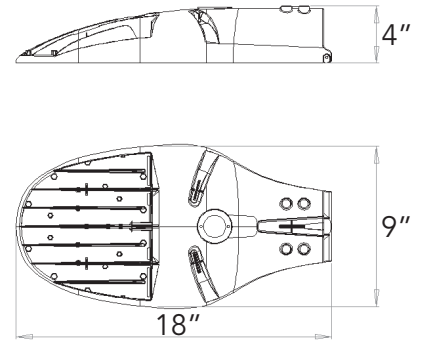
- Driver power factor is > 0.9
- Driver THD < 20%
- Driver voltage 120-277V (50/60Hz)
- 0-10V dimming with 7-pin photo control receptacle standard
- Electronic driver has an expected life of 100,000 hours at 25°C ambient.
- Suitable for ambient temperatures from -40°C/-40°F to +40°C/104°F

Optical

- Delivered lumens greater than 140LPW
- IP66 rated optical chamber
- UV protected lens
- Min 70 CRI
- Type II, Type III, Type IV & Type V available
- Optional glare shield for reduction of light trespass

Dimensions

Weight: 10lbs
EPA: 0.6



Model Selection Guide

| Model | Configuration | Driver | Optics | CCT ² | Housing Color | Surge Protection | Photocontrol Receptacle | Controls | Factory Installed Options | Field Installed Options |
|--|-----------------------------|----------------------------------|---|---|---|---|--|---|---|---|
| LRS1 Small LED Roadway Light | D: 40W, 6,100 Lumens | MV: 120-277V w/ 0-10V DIM | 2: Type II 3: Type III ¹ 4: Type IV ¹ 5: Type V ¹ | 2K: 2700K ¹ 3K: 3000K 4K: 4000K 5K: 5000K ¹ 6K: 5700K ¹ | GY: Gray BR: Bronze ¹ | 1: 10kV 2: 20kV ¹ | P7: 7 Pin Photocontrol Receptacle | N: No Controls S: Shorting Cap 1: Howard LL Photocontrol (HI-LL-127-15-BK-A) 2: Howard LL Photocontrol (HI-LL-127-15-BK-AF) 3: Howard LL Photocontrol (HI-LL-127-15-GN-A) 4: Howard LL Photocontrol (HI-LL-127-15-GN-AF) | (Blank): No Options A#: Adjustable Output Unit, Define# (1-5) Pxx: Programmed Output Unit, Define xx (02-04) | G: Glare Shield ¹ (field Installed) |

¹Non-stocked option ²Other CCTs available upon request.

Performance Data

Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79. Data is considered to be representative of the configurations shown. Actual performance may differ as a result of end user environment and application. Actual wattage may differ by ± 10% when operating between 120-277V ± 10%. Contact factory for performance data on any configurations not shown here.

| Model | Configuration | Factory Installed Options | Wattage | 3K (3000K CCT) | | | | 4K (4000K CCT) | | | |
|-------|---------------|---------------------------|---------|----------------|------|------|------|----------------|------|------|------|
| | | | | T2 | T3 | T4 | T5 | T2 | T3 | T4 | T5 |
| LRS1 | D | P02 | 20 | 2890 | 2890 | 2910 | 2910 | 3070 | 3070 | 3090 | 3080 |
| | | P03 | 30 | 4340 | 4340 | 4370 | 4360 | 4600 | 4600 | 4630 | 4620 |
| | | P04/BLANK | 40 | 5780 | 5780 | 5820 | 5810 | 6130 | 6130 | 6170 | 6160 |

BUG Rating

| Model | Configuration | Factory Installed Options | Wattage | 3K (3000K CCT) | | | | 4K (4000K CCT) | | | |
|-------|---------------|---------------------------|---------|----------------|-------|-------|-------|----------------|-------|-------|-------|
| | | | | T2 | T3 | T4 | T5 | T2 | T3 | T4 | T5 |
| LRS1 | D | P02 | 20 | 1-0-1 | 1-0-1 | 1-0-1 | 2-0-1 | 1-0-1 | 1-0-1 | 1-0-1 | 2-0-1 |
| | | P03 | 30 | 1-0-1 | 1-0-1 | 1-0-1 | 3-0-1 | 1-0-1 | 1-0-1 | 1-0-1 | 3-0-1 |
| | | P04/BLANK | 40 | 2-0-1 | 1-0-1 | 1-0-1 | 3-0-1 | 2-0-1 | 1-0-1 | 2-0-1 | 3-0-1 |

Luminaire Lumen Maintenance Factors (LMF)

Data references the extrapolated performance projections for the platforms noted in a 25°C ambient (tested per IESNA LM-80 and projected per IESNA TM-21). To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

| Model | 10°C (50°F) | | | 25°C (77°F) | | | 40°C (104°F) | | |
|-------|-------------|--------|---------|-------------|--------|---------|--------------|--------|---------|
| | 25kHrs | 50kHrs | 100kHrs | 25kHrs | 50kHrs | 100kHrs | 25kHrs | 50kHrs | 100kHrs |
| LRS1D | 0.94 | 0.88 | 0.76 | 0.94 | 0.88 | 0.76 | 0.93 | 0.86 | 0.74 |

Electrical Data

| Model | Operating Current (A) | | Power (W) | | PF | | THD | |
|---------|-----------------------|------|-----------|------|-------|-------|------|------|
| | 120V | 277V | 120V | 277V | 120V | 277V | 120V | 277V |
| LRS1DMV | 0.35 | 0.16 | 42 | 42 | 0.997 | 0.977 | 4% | 7% |



Adjustable Output Unit

AOU is easily adjusted with a flat-blade screwdriver. Approximate lumen and wattage values are shown in the tables below. The unit consumes no standby power and can be removed to convert the luminaire to standard 0-10V dimming.

Benefits:

This unit allows maintenance departments to carry less inventory through reduced number of unique models. Specific wattages can be achieved to meet required rate structures.

| Model Name | AOU Position | System Watts | NEMA Label | Delivered Lumens | | | | | | | |
|------------|--------------|--------------|------------|------------------|-------|----------|-------|---------|-------|--------|-------|
| | | | | Type II | | Type III | | Type IV | | Type V | |
| | | | | 3000K | 4000K | 3000K | 4000K | 3000K | 4000K | 3000K | 4000K |
| LRS1DMV | 8,7,6 | 42 | 40 | 5780 | 5780 | 5820 | 5810 | 6130 | 6130 | 6170 | 6160 |
| | 5 | 36 | 40 | 5080 | 5080 | 5120 | 5110 | 5390 | 5390 | 5420 | 5410 |
| | 4 | 31 | 30 | 4310 | 4310 | 4340 | 4330 | 4570 | 4570 | 4600 | 4600 |
| | 3 | 26 | 30 | 3570 | 3570 | 3600 | 3590 | 3790 | 3790 | 3810 | 3810 |
| | 2 | 20 | 20 | 2840 | 2840 | 2860 | 2850 | 3010 | 3010 | 3030 | 3020 |
| | 1 | 15 | 20 | 2140 | 2140 | 2150 | 2150 | 2270 | 2270 | 2280 | 2280 |