

Application:

Dialight introduces the state-of-the-art StreetSENSE LED fixtures designed specifically for "new" and "retrofit" installations of Roadway Sign Lights.

All of Dialight's long life LED luminaires are designed to meet the most demanding specification criteria while offering maximum energy savings, reduced maintenance costs, and a superior quality of light.

Mechanical Information:

Fixture Weight: 25 lbs - Retrofit cover assembly, Halophane
25 lbs - Retrofit cover assembly, GE
32 lbs - Complete fixture

Mounting: Retrofit to Halophane SIGN-VUE enclosure
Retrofit to GE VERSAFLOOD SIGNLIGHTER®
Plate mounting of complete fixture
Pole mounting of complete fixture
(For inverted over head installations, please consult factory.)

Mounting Accessories: Pole mount clamp

Electrical specifications:

System Power Consumption: 70W and 100W versions available

Operating Input Voltage: 120-277 VAC, 50/60 Hz

Transient Protection: ANSI C136.2 (600V) American National Standard for Roadway and Area Lighting Equipment - Luminaires, Voltage Classifications

EMI/RFI (Noise Suppression): FCC Title 47, Subpart B, Section 15, class A devices.

Power Factor: > 0.95

THD (typ): <15%

Operating Temp: -40°F to +135°F (-40°C to +55°C)

Construction:

Body: Powder coated aluminum

Lens: High impact polycarbonate with UV stabilizer and "hard coat" for abrasion resistance

Cover: Powder coated aluminum

Photometric Information:

CCT: 5300K (cool white)
4100K (neutral white)

CRI (typ): 70



StreetSENSE™ RS Series LED Roadway Sign Light

Certifications & Ratings: (pending)

- ▷ Compliant to IES RP-19-01 Roadway Sign Lighting
- ▷ Retrofit Cover Assemblies Recognized to UL-1598 Wet Locations.
- ▷ Complete Fixture Listed to UL-1598 Wet Locations
- ▷ CSA 22.250
- ▷ ANSI C136.31-2001 (vibration)
- ▷ MIL STD 810F (salt / fog)

Features & Benefits:

- ▷ Mercury free
- ▷ Long lasting / low maintenance
- ▷ Low power consumption offers 60-70% energy savings vs. 250W MV
- ▷ Superior color rendition index compared to HPS; LPS; MH; MV
- ▷ Instant on/off operation - no cool down or warm up time required for full illumination
- ▷ Resistant to roadway vibration and shock
- ▷ Universal input (120-277 VAC)
- ▷ Weather/corrosion resistant lamp assembly and housing
- ▷ > 70% lumen maintenance after 60,000 operating hours



Designed in the U.S.A
Meets Buy American requirements under the American Recovery and Reinvestment Act 2009

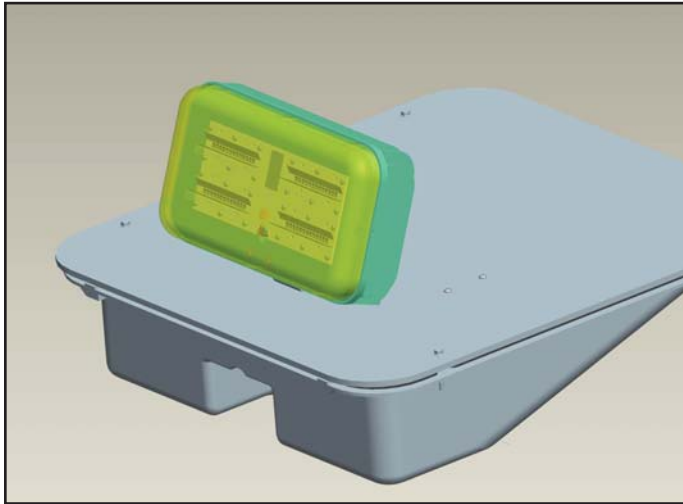
Table 1

| Description | Power (typ) | Color | Part Number |
|---|-------------|---------------|-------------|
| Dialight Complete Fixture *Box and cover assembly includes wiring box and light engine for mounting on a flat plate | 70W | Cool White | RS5C4F-C |
| | 70W | Neutral White | RS5N4F-C |
| | 100W | Cool White | RS5C4K-C |
| | 100W | Neutral White | RS5N4K-C |
| Saddle Mounting Clamp For mounting complete fixture to pipe (conduit) | | | RS5CLAMP |
| Dialight Retrofit Cover Assembly (only) For use on Halophane SIGN-VUE enclosures. | 70W | Cool White | RS5C4F-H |
| | 70W | Neutral White | RS5N4F-H |
| | 100W | Cool White | RS5C4K-H |
| | 100W | Neutral White | RS5N4K-H |
| Dialight Retrofit Cover Assembly (only) For use on GE VERSAFLOOD SIGNLIGHTER® enclosures. | 70W | Cool White | RS5C4F-G |
| | 70W | Neutral White | RS5N4F-G |
| | 100W | Cool White | RS5C4K-G |
| | 100W | Neutral White | RS5N4K-G |

*Fixture mounting plate & mounting bolts provided by others.

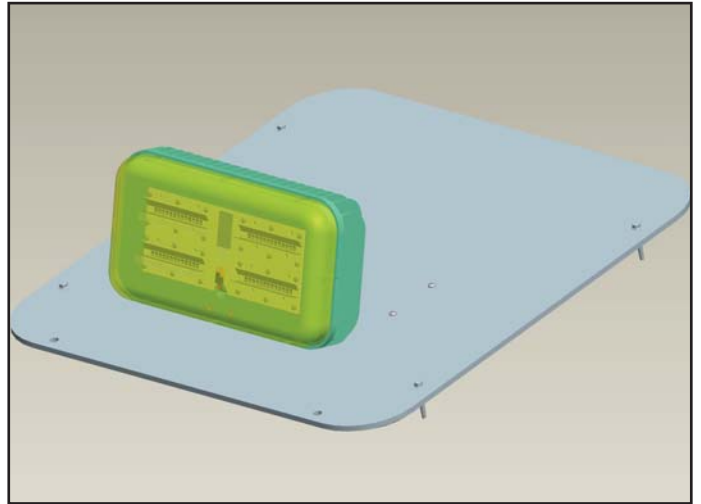
StreetSENSE™ RS Series LED Roadway Sign Light Mounting Configuration

Dialight Complete Fixture



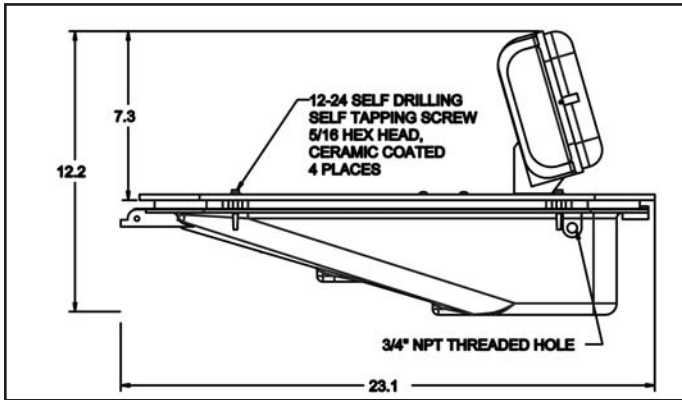
Complete fixture illustrating cover assembly and enclosure.

Dialight Retrofit Cover Assembly

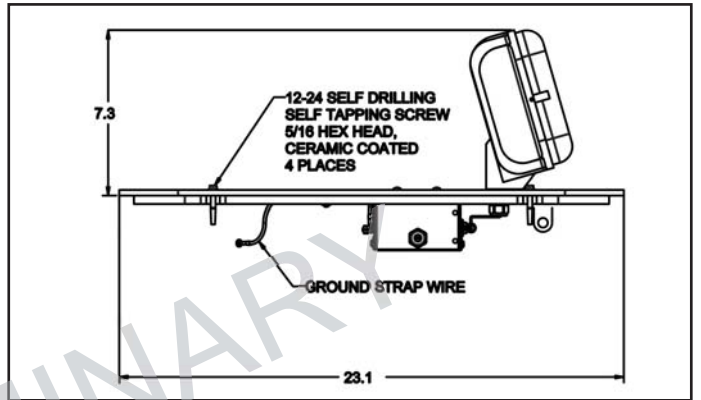


Retrofit assembly showing lid and light engine.

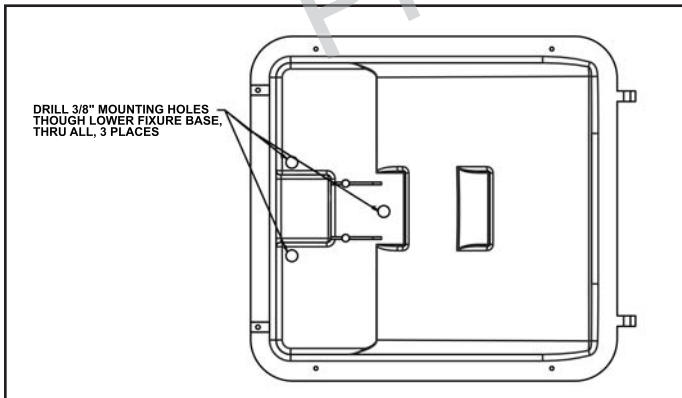
Side View - Complete Fixture



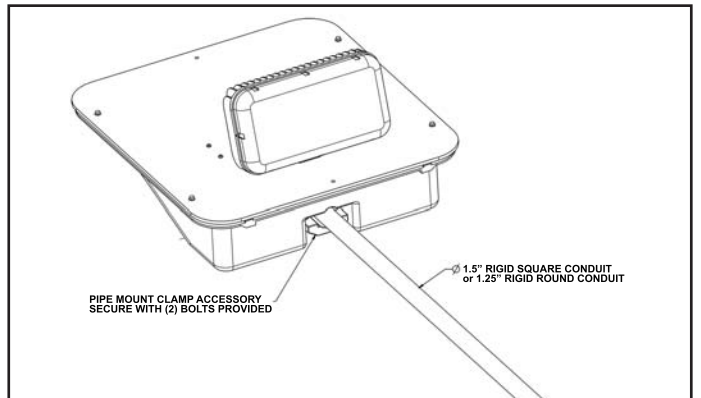
Side View - All Units



Inside box of Dialight Complete Unit



Pipe Clamp and Typical Mount



Designs shown are for reference only.

StreetSENSE™ RS Series LED Roadway Sign Light - Light Measurement Data

Information below shows typical application scenarios. When multiple fixtures are shown, spacing across the sign face is assumed to be equal. Choose the Dialight fixture wattage that closest meets your specific specification for minimum Footcandle (cd), maximum Footcandle (cd) and max/min uniformity ratio.

A detailed photometric layout can be provided which will show the Dialight fixture which best meets your individual roadway sign specifications. Please email us at info@dialight.com and provide the following:

Questions:

- What is the length and width of the sign to be illuminated?
- How many fixtures will be used to illuminate the sign?
- What is the average footcandles (cd) required on the sign?
- What is the max to min uniformity ratio required?
- What is the fixture location? How far from the front of the sign and how far down from the lower edge of the sign?
- If a replacement or retrofit installation;
 - What type of lamp fixture is being replaced (MH, MV, HPS)?
 - Who is the manufacturer (GE, Halophane)?
 - What is the wattage?

| Sign Width (ft) | Sign Height (ft) | # of Fixtures | Fixture placement out from front of sign (ft) / Down from lower bottom edge or up from top edge (ft) | Wattage (W) | Average Illuminance Footcandles (FC) | Illuminance Uniformity max/min |
|-----------------|------------------|---------------|--|-------------|--------------------------------------|--------------------------------|
| 8 | 8 | 1 | 4.5 ft / 1 ft | 100 | 25.038 | 5.05 |
| 8 | 8 | 1 | 4.5 ft / 1 ft | 70 | 19.26 | 5.05 |
| 8 | 8 | 1 | 6 ft / 1.5 ft | 100 | 14.846 | 4.46 |
| 8 | 8 | 1 | 6 ft / 1.5 ft | 70 | 11.42 | 4.46 |
| 5 | 6 | 1 | 4.5 ft / 1 ft | 100 | 33.28 | 3.48 |
| 5 | 6 | 1 | 4.5 ft / 1 ft | 70 | 25.6 | 3.48 |
| 5 | 6 | 1 | 6 ft / 1.5 ft | 100 | 18.616 | 2.56 |
| 5 | 6 | 1 | 6 ft / 1.5 ft | 70 | 14.32 | 2.56 |
| 10 | 12 | 2 | 4.5 ft / 1 ft | 100 | 28.6 | 4.15 |
| 10 | 12 | 2 | 4.5 ft / 1 ft | 70 | 22 | 4.15 |
| 10 | 12 | 2 | 6 ft / 1.5 ft | 100 | 20.8 | 4.36 |
| 10 | 12 | 2 | 6 ft / 1.5 ft | 70 | 16 | 4.36 |
| 10 | 14 | 2 | 4.5 ft / 1 ft | 100 | 26.26 | 5.30 |
| 10 | 14 | 2 | 4.5 ft / 1 ft | 70 | 20.2 | 5.30 |
| 10 | 14 | 2 | 6 ft / 1.5 ft | 100 | 19.5 | 4.20 |
| 10 | 14 | 2 | 6 ft / 1.5 ft | 70 | 15 | 4.20 |
| 14 | 14 | 3 | 4.5 ft / 1 ft | 100 | 31.2 | 4.57 |
| 14 | 14 | 3 | 4.5 ft / 1 ft | 70 | 24 | 4.57 |
| 14 | 14 | 3 | 6 ft / 1.5 ft | 100 | 29.9 | 4.00 |
| 14 | 14 | 3 | 6 ft / 1.5 ft | 70 | 23 | 4.00 |
| 25 | 15 | 3 | 6 ft / 1.5 ft | 100 | 17.16 | 8.11 |
| 25 | 15 | 3 | 6 ft / 1.5 ft | 70 | 13.2 | 8.11 |
| 25 | 15 | 3 | 4.5 ft / 1 ft | 100 | 22.1 | 13.44 |
| 25 | 15 | 3 | 4.5 ft / 1 ft | 70 | 17 | 13.44 |
| 25 | 15 | 5 | 4.5 ft / 1 ft | 100 | 33.8 | 5.87 |
| 25 | 15 | 5 | 4.5 ft / 1 ft | 70 | 26 | 5.87 |
| 25 | 15 | 4 | 6 ft / 1.5 ft | 100 | 26.52 | 4.27 |
| 25 | 15 | 4 | 6 ft / 1.5 ft | 70 | 20.4 | 4.27 |
| 24 | 17 | 5 | 4.5 ft / 1 ft | 100 | 34.255 | 6.29 |
| 24 | 17 | 5 | 4.5 ft / 1 ft | 70 | 26.35 | 6.29 |
| 24 | 17 | 5 | 6 ft / 1.5 ft | 100 | 26 | 4.18 |
| 24 | 17 | 5 | 6 ft / 1.5 ft | 70 | 20 | 4.18 |

Notes:

- Above data calculated with 15% thermal loss & optical loss attributed to the fixture lens.
- IES files available upon request



StreetSENSE™ RS Series LED Roadway Sign Light

| Typical CCT Values | |
|---|--------------|
| High Pressure Sodium | 2100K |
| Incandescent | 2800K |
| Halogen | 3100K |
| Fluorescent (standard) | 3500K |
| Dialight LED RS Series (Neutral) | 4300K |
| Direct Sunlight | 4900K |
| Metal Halide | 5000K |
| Natural Daylight | 6500K |
| Indirect Sunlight | 6700K |



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DOTs and other agencies must now choose alternative lamp sources for the replacement of these fixtures and for new construction or additions. Under the Federal Energy Policy Act (EPACT 2005) and the Energy Independence and Security Act, conventional mercury vapor lamps and all 150-500 watt metal halide probe start ballasts were mandated to be substituted with more energy efficient alternatives.

Going **GREEN**

The 70 or 100W StreetSENSE RS series LED fixture can typically replace a 250W mercury vapor unit while still meeting or exceeding the Roadway Sign Light Specifications, so it delivers CO₂ reduction and energy savings of 60-70% over conventional lights. This efficiency is further enhanced by its instant-on/off ability with no necessary warm up to achieve full illumination. In addition its 'green' credentials are assured by the fact that it is **100% mercury free** and dark skies friendly; this is assured by its highly efficient optics that focus the light just where it's needed, avoiding light spill.

Maintenance Free

The rugged, solid state StreetSENSE RS series fixture is not only an energy efficient alternative, but its projected fixture service life of ten years (50% on-time, >70% lumen maintenance after 60K hours) also brings other significant benefits. These include the elimination of frequent lamp changes and reduction of overall maintenance costs as well as reducing exposure of maintenance workers to dangerous highway traffic. For road users they deliver added safety by producing a quality of light that is vastly superior to conventional sources and by eliminating dark road signs resulting from burned out conventional lamps.

Ease of installation

Dialight offers complete fixture assemblies for new, retrofit or complete replacement applications including a unique LED retrofit cover assembly kit option that will adapt to most installed conventional fixture boxes. The retrofit involves only the removal of the existing fixture's cover, lamp and reflector which is then replaced with the Dialight LED cover assembly, leaving most of the existing wiring connections untouched, so the conversion is simple and easy, saving both time and money.

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