



StreetSense™ RS Series LED Roadway Sign Light

Certifications & Ratings:

- ▷ Recommended design practice - IES RP-19-01 roadway sign lighting
- ▷ Retrofit cover assemblies compliant to UL-1598 wet locations
- ▷ Complete fixture compliant to UL-1598 wet locations
- ▷ CSA 22.250
- ▷ ANSI C136.31-2001 (vibration)
- ▷ MIL STD 810F (salt / fog)

Features & Benefits:

- ▷ Complete performance 5 year warranty
- ▷ Mercury free
- ▷ >70% lumen maintenance after 60,000 operating hours
- ▷ 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 100-277 VAC (480VAC versions available)
- ▷ Weather/corrosion resistant lamp assembly and housing



Meets Buy American
For projects requiring
Buy American certification,
consult factory for additional
information and details

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, Holophane
25 lbs - Retrofit cover assembly, GE
32 lbs - Complete fixture

Mounting (see pages 2-3 for specific details):

Dialight complete unit including box and cover (22.7" x 20.5" x 12.3")
Holophane SIGN-VUE enclosure box (22.7" x 20.5" x 5.5") (supplied by others)
GE VERSAFLOOD II SIGNLITER® box (19" x 17.37" x 9") (supplied by others)

Electrical specifications:

System Power Consumption (nom +/- 10%): 63W
100W

Initial lumens: 4,000 (63W)
4,900 (100W)

Operating Voltage: 100-277 VAC, 50/60 Hz
347, 480VAC (consult factory)

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: > 0.90

THD (typ): 10% @ 100-240 VAC
20% @ 277 VAC

Operating Temp: -40°F to +165°F (-40°C to +74°C)

Construction:

Body: Polyester / epoxy powder coat gray RAL 7040

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

Cover: Polyester / epoxy powder coat gray RAL 7040

Photometric Information:

CCT: 5300K (cool white)

CRI: < 70

All values typical unless otherwise state

Ordering Information

Part Number	Color	Description	System Power Consumption (nom +/- 10%)
RS5C4F-C	Cool White	Dialight Complete Fixture¹ Box and cover assembly includes wiring box and light engine for mounting on a flat plate	63W
RS5C4K-C	Cool White	Dialight Complete Fixture¹ Box and cover assembly includes wiring box and light engine for mounting on a flat plate	100W
RS5C4F-H	Cool White	Dialight Retrofit Cover Assembly (only) For use on Holophane SIGN-VUE enclosures (see page 2 for detail)	63W
RS5C4K-H	Cool White		100W
RS5C4F-G	Cool White	Dialight Retrofit Cover Assembly (only) For use on GE VERSAFLOOD II SIGNLITER® enclosures (see page 2 for detail)	63W
RS5C4K-G	Cool White		100W

¹All units above intended to be mounted under sign only and on a fixed plate mounting structure. Not intended to be mounted inverted on top of sign or pipe or pole mount.

Note: Mounting Plate provided by others



Typical CCT Values	
High Pressure Sodium	2100K
Incandescent	2800K
Halogen	3100K
Fluorescent (standard)	3500K
Direct Sunlight	4900K
Metal Halide	5000K
Dialight LED RS Series (Cool)	5300K
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 ballasts were mandated to be substituted with more energy efficient alternatives.

Going GREEN

The 63 or 100W StreetSense LED fixture can typically replace a 250W or higher mercury vapor / metal halide 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

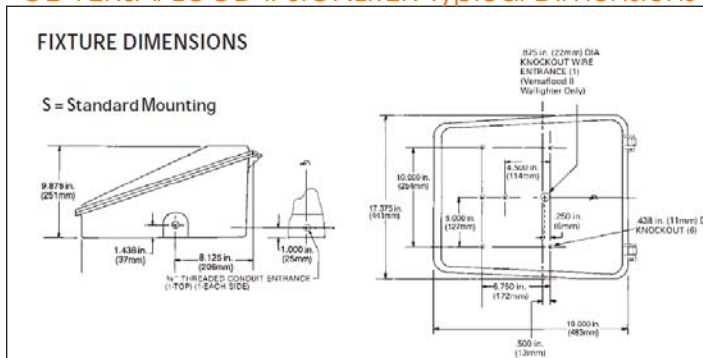
The rugged, solid state StreetSense fixture is not only an energy efficient alternative, but its projected fixture service life of ten years (50% on-time, >70% lumen maintenance after 60K hours) also brings other significant benefits. These include the elimination of frequent lamp changes and reduction 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

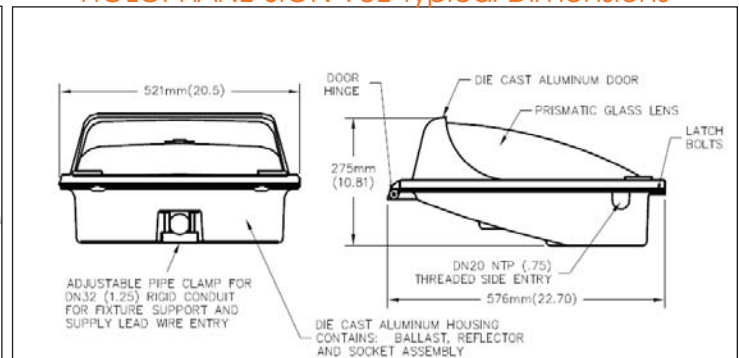
Dialight offers fixture assemblies for new applications as well as retrofit applications. A unique LED retrofit cover assembly kit option will adapt to most GE or Holophane boxes shown below. The retrofit involves only the removal of the existing fixture's cover, lamp and reflector which is then replaced with the Dialight LED cover assembly. Most of the existing wiring connections remain untouched, so the conversion is quick, simple and easy. Thus installation time both time and money.

The Dialight LED retro-fit cover assemblies for GE VERSAFLOOD II SIGNLITE and HOLOPHANE SIGN-VUE

GE VERSAFLOOD II SIGNLITE Typical Dimensions



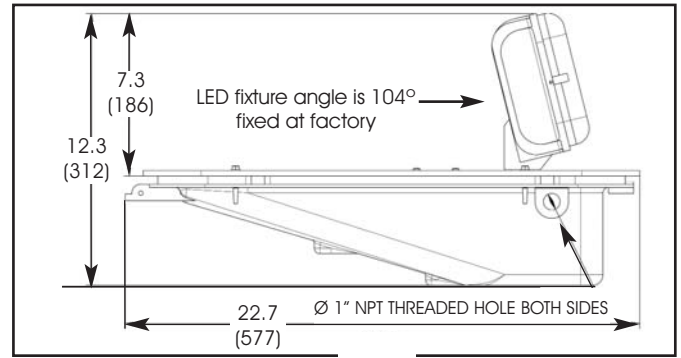
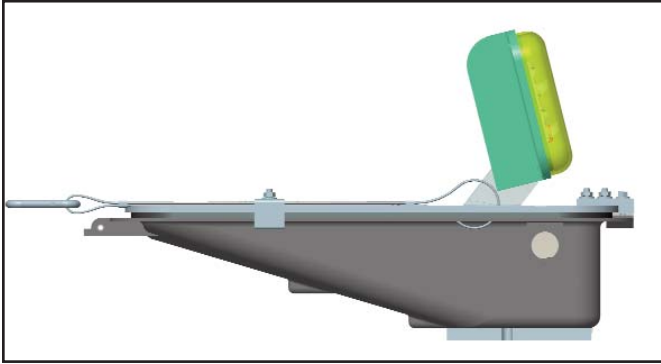
HOLOPHANE SIGN-VUE Typical Dimensions



StreetSense™ RS Series LED Roadway Sign Light Mechanical Dimensions

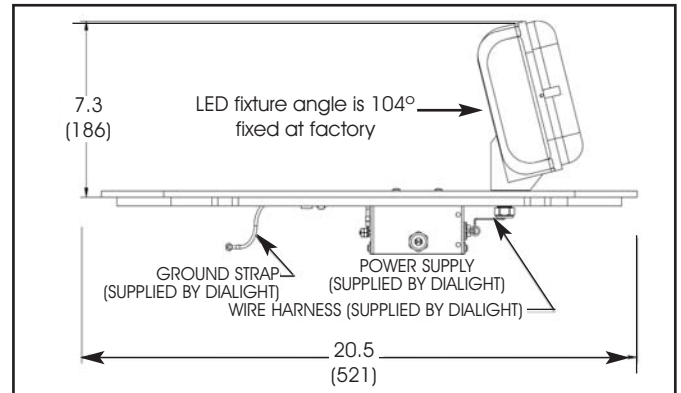
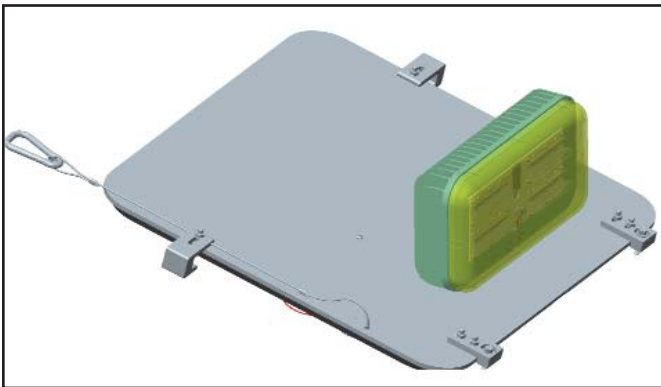
Dialight Complete Fixtures

Dialight Part Numbers RS5C4F-C and RS5C4K-C



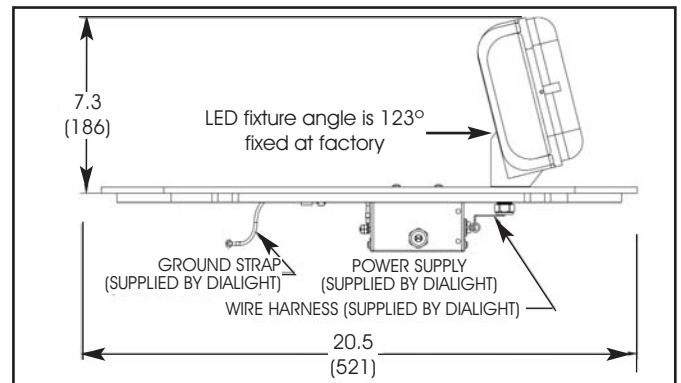
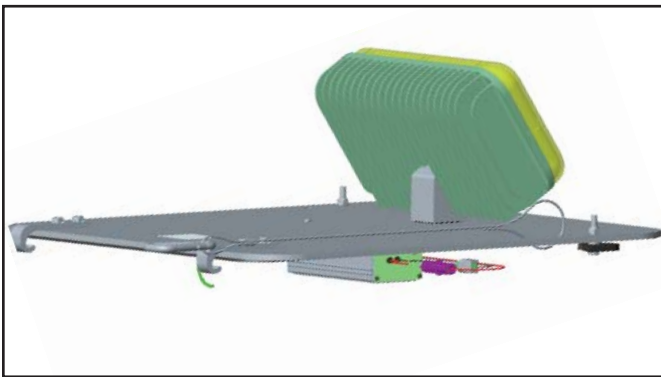
Retrofit Cover Assembly for Use on Holophane SIGN-VUE® Enclosures

Dialight Part Numbers RS5C4F-H and RS5C4K-H

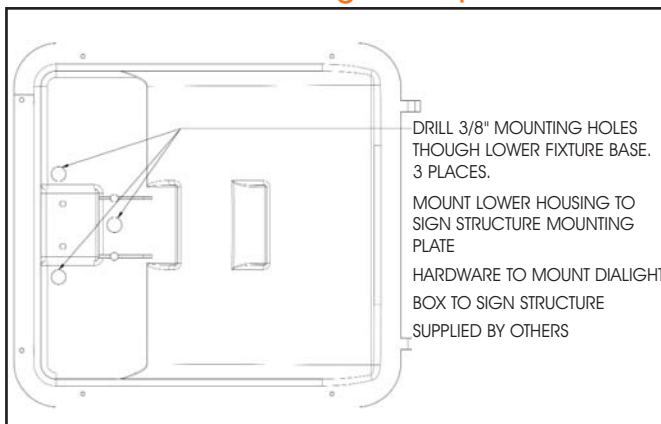


Retrofit cover assembly for use on GE VERSAFLOOD II SIGNALITER®

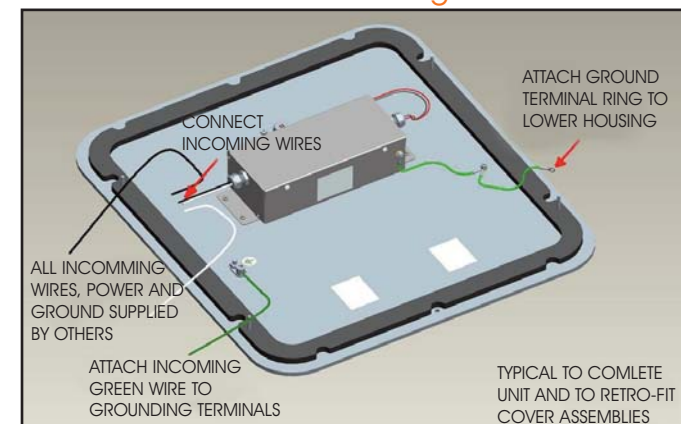
Dialight Part Numbers RS5C4F-G RS5C4K-G



Inside box of Dialight complete unit



Internal wiring



Designs shown are for reference only. Power supply shown above is for wiring purpose only. Actual PS in unit may vary.

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Light Measurement Data

Photometric calculations below have been simulated based on Dialight fixture IES files. Scenarios provided are given to show projected future capabilities to meet various specifications. For accurate light output levels, a detailed photometric layout should be provided by Dialight 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:

- What is the width and height of the sign to be illuminated?
 - Confirm the fixture will be located on a fixed plate mounted to the sign structure below the sign face
 - How many fixtures will be used to illuminate the sign?
 - What is the fixtures for spacing required for each sign size?
 - What is the average footcandles (cd) required on the sign?
 - What is the max to min uniformity ratio required?
 - What is the fixture mounting plate location relative to the bottom edge of the sign will each fixture be placed?
- Example: How far out from the front of the sign face and how far down from the bottom edge of the sign?

If a retrofit installation provide all of the information below plus the following:

- What type of lamp fixture is being replaced (MH, MV, HPS)?
- Who is the manufacturer of the currently installed fixture GE or Halophane?
What is the GE or Halophane Part number
- What is the wattage or the fixture currently installed?

Some typical photometric specification scenerios using Dialight's complete fixtures

RS5C4F-C - 63W complete fixture

RS5C4K-C - 100W complete fixture

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) ¹	Wattage (W)	Average Illuminace Footcandles (FC)	Illuminance Uniformity max/min
8	8	1	4 ft / 1 ft	100	41.64	3.56
8	8	1	4 ft / 1 ft	63	31.5	3.98
8	8	1	6 ft / 1.5 ft	100	24.85	2.41
8	8	1	6 ft / 1.5 ft	63	18.16	2.65
10	12	2	4 ft / 1ft	100	52.97	6.97
10	12	2	4 ft / ft	63	37.50	5.92
10	12	2	4.5 ft / 1 ft	100	48.7	5.08
10	12	2	4.5 ft / 1 ft	63	34.51	3.98
10	14	2	4 ft / 1 ft	100	44.2	6.91
10	14	2	4 ft / 1 ft	63	34.37	6.03
10	14	2	4.5 ft / 1 ft	100	40.71	4.37
10	14	2	4.5 ft / 1 ft	63	32.85	4.22
10	14	2	6 ft / 1.5 ft	100	31.2	2.65
10	14	2	6 ft / 1.5 ft	63	24.4	2.67
14	14	3	4.5 ft / 1 ft	100	47.0	15.63
14	14	3	4.5 ft / 1 ft	63	36.65	14.96
14	14	3	6 ft / 1.5 ft	100	39.88	5.43
14	14	3	6 ft / 1.5 ft	63	30.33	5.22

¹Where 1 fixture is shown for the 8' sign, placement of the fixture is on center of sign.

Where 2 fixtures are shown for the 10' sign, placement of the fixtures is 1.5' from left edge and 1.5' from the right edge of the sign.

Where 3 fixtures are shown for the 14' sign, placement is as follows: one fixture is 2" from the left edge second fixture center of sign, Third fixture is 2' from right edge.

Dialight reserves the right to make changes at any time in order to supply the best product possible.

The most current version of this document will always be available at:

www.dialight.com/Assets/Brochures_And_Catalogs/Illumination/MDTFL3X001.pdf