

SafeSite[®] LED RTO Area Light - UL844

CONTRACTOR OF

for Indoor and Outdoor Industrial Applications

On when it matters most.

Products and solutions that protect your business





Features & Benefits

- 5 year full performance warranty
- L70 rated for >100,000 hours @ 25°C ambient
- Low T rating compared to traditional fixtures
- Resistant to shock and vibration
- Weather/corrosion resistant lamp assembly and housing
- Temperature compensation technology for longer life
- Factory sealed

Application

Dialight introduces the new stateof-the-art fixture SafeSite LED Down light for hazardous location lighting. Whether your application is in a refinery, oil platform, chemical plant or any other hazardous area application, this fixture offers improved performance across the board. All of Dialight's long life LED luminaires are designed to meet the most demanding specification criteria while offering maximum energy savings and reduced maintenance.

SafeSite

Hazardous Locations Ratings

Fixed and portable fixtures for installation and use in hazardous (classified) locations Class I, Divisions 1 and 2, Groups A, B, C, and D; Class II, Division 1, Groups E, F, and G; Class II, Division 2, Groups F and G; and Class III, Divisions 1 and 2, in accordance with the National Electrical Code, NFPA 70

Classes

The classes define the general nature of hazardous material in the surrounding atmosphere.

| Class | Hazardous Material in Surrounding Atmosphere |
|-----------|---|
| Class I | Hazardous because flammable gases or vapors are present in the air in quantities sufficient to produce explosive or ignitable mixtures. |
| Class II | Hazardous because combustible or conductive dusts are present. |
| Class III | Hazardous because ignitable fibers or flying's are present, but not likely to be in suspension in sufficient quantities to produce ignitable mixtures. Typical wood chips, cotton, flax and nylon. Group classifications are not applied to this class. |

Divisions

The division defines the probability of hazardous material being present in an ignitable concentration in the surrounding atmosphere.

| Division | Presence of Hazardous Material |
|------------|---|
| Division 1 | The substance referred to by class is present during normal conditions. |
| Division 2 | The substance referred to by class is present only in abnormal conditions, such as a container failure or system breakdown. |

Groups

The group defines the hazardous material in the surrounding atmosphere.

| Group | Hazardous Material in Surrounding Atmosphere |
|---------|---|
| Group A | Acetylene |
| Group B | Hydrogen, fuel and combustible process gases containing more than 30% hydrogen by volume or gases of equivalent hazard such as butadiene, ethylene, oxide, propylene oxide and acrolein. |
| Group C | Carbon monoxide, ether, hydrogen sulfide, morphline, cyclopropane, ethyl and ethylene or gases of equivalent hazard. |
| Group D | Gasoline, acetone, ammonia, benzene, butane, cyclopropane, ethanol, hexane, methanol, methane, vinyl chloride, natural gas, naph- tha, propane or gases of equivalent hazard. |
| Group E | Combustible metal dusts, including aluminum, magnesium and their commercial alloys or other combustible dusts whose particle size, abrasiveness and conductivity present similar hazards in connection with electrical equipment. |
| Group F | Carbonaceous dusts, carbon black, coal black, charcoal, coal or coke dusts that have more than 8% total entrapped volatiles or dusts that have been sesitized by other material so they present an explosion hazard. |
| Group G | Flour dust, grain dust, flour, starch, sugar, wood, plastic and chemicals. |

Reference:

http://www.engineeringtoolbox.com/hazardous-areas-classification-d_347.html

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Standard Models



Certifications & Ratings

- Class I, Div 2 Groups A,B,C,D
- Class II, Div 1 Groups E,F,G
- Class II, Div 2 Groups E,F,G
- UL 844
- UL 1598

- UL 50/E
- CSA C22.2 #250
- CSA C22.2 #13
- IP 66

| Mechanical Information: | | | | | | | | | |
|--|---|--|--|--|--|--|--|--|--|
| Fixture weight: | RTO0Wxx001: 2.5 lbs (1.13 kg) RTO0Wxx005: 3.2 lbs (1.45 kg) RTO0Wxx004: 0.8 lbs (0.36 Kg) | | | | | | | | |
| Shipping weight: | RTO0Wxx001: 3.0 lbs (1.36 kg) RTO0Wxx005: 4.5 lbs (2.04 kg) RTO0Wxx004: 1.4 lbs (0.64 Kg) | | | | | | | | |
| Mounting: | | | | | | | | | |
| Pendant Mount: Ceiling Mount: Pendant Mount: | 1" & 3/4" NPT reducer bi-directional 3/4" NPT 5-way surfac 3/4" NPT threaded conduit | | | | | | | | |
| Electrical specifications: | | | | | | | | | |
| Operating Voltage: | 100 - 277V AC, 50/60 Hz 12 - 48V DC | | | | | | | | |
| Total system power consumption: | See table | | | | | | | | |
| Operating Temp: | -40°F to +133°F (-40°C to +55°C) | | | | | | | | |
| Harmonics: | IEC 61000-3-2 | | | | | | | | |
| Noise requirement /EMC: | FCC Title 47, Subpart B, Section 15, class A device. RF Immunity; 10V/m, 80MHz-1GHz | | | | | | | | |
| Transient protection: | 1 kV line to line 2 kV line to ground | | | | | | | | |
| THD: | <20% | | | | | | | | |
| Power Factor: | > 0.9 | | | | | | | | |
| Construction: | | | | | | | | | |
| Housing: | Copper free aluminum | | | | | | | | |
| Finish: | Superior dual coat finish - Sealed polyester topcoat - Chemical-resistant epoxy primer | | | | | | | | |
| Lens: | UV stabilized abrasion resistant polycarbonate | | | | | | | | |
| Photometric Information | on: | | | | | | | | |
| CRI: | 75 | | | | | | | | |
| CCT: | 6000K (cool white) | | | | | | | | |
| All values typical unless otherwise stated Lumen values are typical (tolerance +/- 10%) | | | | | | | | | |

SafeSite

Industrial Applications | Area Light



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SafeSite LED RTO Area Light Ordering Information and Mounting Accessories

Classifications: CID2 A,B,C,D • CIID1 E,F,G • CIID2 E,F,D

| Part Number ¹ | Туре | CID1 | CID2 | CIID1 | CIID2 | CIII | Voltage | Lens | CCT | Fixture Lumens | Watt | LPW | Optical Pattern |
|---------------------------------|---------------------------------|------|------|-------|-------|------|-------------|---------------|--------------------|-------------------|------|-----|--------------------|
| Standard Models - 100 - 277V AC | | | | | | | | | | | | | |
| RTODW17005 | Ceiling mount with junction box | | | • | • | | 100-277V AC | Polycarbonate | 6000K (cool white) | 800 | 8 | 100 | Circular |
| RTODW17004 | Pendant mount | | | • | • | | 100-277V AC | Polycarbonate | 6000K (cool white) | 800 | 8 | 100 | Circular |
| RTODW17001 | Pendant mount with junction box | | | • | • | | 100-277V AC | Polycarbonate | 6000K (cool white) | 800 | 8 | 100 | Circular |
| RTO2W17005 | Ceiling mount with junction box | | • | | | | 100-277V AC | Polycarbonate | 6000K (cool white) | 800 | 8 | 100 | Circular |
| RTO2W17004 | Pendant mount | | • | | | | 100-277V AC | Polycarbonate | 6000K (cool white) | 800 | 8 | 100 | Circular |
| RTO2W17001 | Pendant mount with junction box | | • | | | | 100-277V AC | Polycarbonate | 6000K (cool white) | 800 | 8 | 100 | Circular |
| RTODW07005 | Ceiling mount with junction box | | | • | • | | 100-277V AC | Polycarbonate | 6000K (cool white) | 470 | 8 | 59 | Circular |
| RTODW07004 | Pendant mount | | | • | • | | 100-277V AC | Polycarbonate | 6000K (cool white) | 470 | 8 | 59 | Circular |
| RTODW07001 | Pendant mount with junction box | | | • | • | | 100-277V AC | Polycarbonate | 6000K (cool white) | 470 | 8 | 59 | Circular |
| RTO2W07005 | Ceiling mount with junction box | | • | | | | 100-277V AC | Polycarbonate | 6000K (cool white) | 470 | 8 | 59 | Circular |
| RTO2W07004 | Pendant mount | | • | | | | 100-277V AC | Polycarbonate | 6000K (cool white) | 470 | 8 | 59 | Circular |
| RTO2W07001 | Pendant mount with junction box | | • | | | | 100-277V AC | Polycarbonate | 6000K (cool white) | 470 | 8 | 59 | Circular |
| Standard models - 24 - 48V DC | | | | | | | | | | | | | |
| RTODW18005 | Ceiling mount with junction box | | | • | • | | 24 - 48V DC | Polycarbonate | 6000K (cool white) | 800 | 8 | 100 | Circular |
| RTODW18004 | Pendant mount | | | • | • | | 24 - 48V DC | Polycarbonate | 6000K (cool white) | 800 | 8 | 100 | Circular |
| RTODW18001 | Pendant mount with junction box | | | • | • | | 24 - 48V DC | Polycarbonate | 6000K (cool white) | 800 | 8 | 100 | Circular |
| RTO2W18005 | Ceiling mount with junction box | | • | | | | 24 - 48V DC | Polycarbonate | 6000K (cool white) | 800 | 8 | 100 | Circular |
| RTO2W18004 | Pendant mount | | • | | | | 24 - 48V DC | Polycarbonate | 6000K (cool white) | 800 | 8 | 100 | Circular |
| RTO2W18001 | Pendant mount with junction box | | • | | | | 24 - 48V DC | Polycarbonate | 6000K (cool white) | 800 | 8 | 100 | Circular |
| RTODW08005 | Ceiling mount with junction box | | | • | • | | 24 - 48V DC | Polycarbonate | 6000K (cool white) | 470 | 8 | 59 | Circular |
| RTODW08004 | Pendant mount | | | • | • | | 24 - 48V DC | Polycarbonate | 6000K (cool white) | 470 | 8 | 59 | Circular |
| RTODW08001 | Pendant mount with junction box | | | • | • | | 24 - 48V DC | Polycarbonate | 6000K (cool white) | 470 | 8 | 59 | Circular |
| RTO2W08005 | Ceiling mount with junction box | | • | | | | 24 - 48V DC | Polycarbonate | 6000K (cool white) | 470 | 8 | 59 | Circular |
| RTO2W08004 | Pendant mount | | • | | | | 24 - 48V DC | Polycarbonate | 6000K (cool white) | 470 | 8 | 59 | Circular |
| RTO2W08001 | Pendant mount with junction box | | • | | | | 24 - 48V DC | Polycarbonate | 6000K (cool white) | 470 | 8 | 59 | Circular |

All values typical unless otherwise stated, Lumen values are typical (tolerance +/- 10%).

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