SafeSite® LED RTO Area Light - UL844
for Indoor and Outdoor Industrial Applications
Dialight introduces the new state-of-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.

**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
## 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.

<table>
<thead>
<tr>
<th>Class</th>
<th>Hazardous Material in Surrounding Atmosphere</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class I</td>
<td>Hazardous because flammable gases or vapors are present in the air in quantities sufficient to produce explosive or ignitable mixtures.</td>
</tr>
<tr>
<td>Class II</td>
<td>Hazardous because combustible or conductive dusts are present.</td>
</tr>
<tr>
<td>Class III</td>
<td>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.</td>
</tr>
</tbody>
</table>

### Divisions

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

<table>
<thead>
<tr>
<th>Division</th>
<th>Presence of Hazardous Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>Division 1</td>
<td>The substance referred to by class is present during normal conditions.</td>
</tr>
<tr>
<td>Division 2</td>
<td>The substance referred to by class is present only in abnormal conditions, such as a container failure or system breakdown.</td>
</tr>
</tbody>
</table>

### Groups

The group defines the hazardous material in the surrounding atmosphere.

<table>
<thead>
<tr>
<th>Group</th>
<th>Hazardous Material in Surrounding Atmosphere</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group A</td>
<td>Acetylene</td>
</tr>
<tr>
<td>Group B</td>
<td>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.</td>
</tr>
<tr>
<td>Group C</td>
<td>Carbon monoxide, ether, hydrogen sulfide, morphline, cyclopropane, ethyl and ethylene or gases of equivalent hazard.</td>
</tr>
<tr>
<td>Group D</td>
<td>Gasoline, acetone, ammonia, benzene, butane, cyclopropane, ethanol, hexane, methanol, methane, vinyl chloride, natural gas, naphtha, propane or gases of equivalent hazard.</td>
</tr>
<tr>
<td>Group E</td>
<td>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.</td>
</tr>
<tr>
<td>Group F</td>
<td>Carbonaceous dusts, carbon black, coal black, charcoal, coal or coke dusts that have more than 8% total entrapped volatiles or dusts that have been sensitized by other material so they present an explosion hazard.</td>
</tr>
<tr>
<td>Group G</td>
<td>Flour dust, grain dust, flour, starch, sugar, wood, plastic and chemicals.</td>
</tr>
</tbody>
</table>

Reference:
http://www.engineeringtoolbox.com/hazardous-areas-classification-d_347.html
SafeSite® LED RTO Area Light - UL844

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 1508
- UL 50/E
- CSA C22.2 #250
- CSA C22.2 #13
- IP66

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: 1" & 3/4" NPT reducer bi-directional
- Ceiling Mount: 3/4" NPT 5-way surface
- Pendant Mount: 3/4" NPT threaded conduit

Electrical Specifications:
Operating Voltage:
- 100-277 VAC, 50/60 Hz
- 12-48 VDC
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:
- CRI: 75
- CCT: 6000K (cool white)

All values typical unless otherwise stated (tolerance +/- 10%)
# SafeSite® LED RTO Area Light

## Ordering Information & Mounting Accessories

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

### Part Number | Type | CID2 | CIID1 | CIID2 | Voltage | Lens | CCT | Lumens | Watt | LPW | Beam Distribution
---|---|---|---|---|---|---|---|---|---|---|---
### Standard Models - 100-277 VAC
- RTODW17005 Ceiling mount with junction box • • 100-277 VAC Polycarbonate 6000K (cool white) 800 8 100 Circular
- RTODW17004 Pendant mount • • 100-277 VAC Polycarbonate 6000K (cool white) 800 8 100 Circular
- RTODW17001 Pendant mount with junction box • • 100-277 VAC Polycarbonate 6000K (cool white) 800 8 100 Circular
- RTO2W17005 Ceiling mount with junction box • 100-277 VAC Polycarbonate 6000K (cool white) 800 8 100 Circular
- RTO2W17004 Pendant mount • 100-277 VAC Polycarbonate 6000K (cool white) 800 8 100 Circular
- RTO2W17001 Pendant mount with junction box • • 100-277 VAC Polycarbonate 6000K (cool white) 470 8 59 Circular
- RTODW07005 Ceiling mount with junction box • • 100-277 VAC Polycarbonate 6000K (cool white) 470 8 59 Circular
- RTODW07004 Pendant mount • • 100-277 VAC Polycarbonate 6000K (cool white) 470 8 59 Circular
- RTODW07001 Pendant mount with junction box • • 100-277 VAC Polycarbonate 6000K (cool white) 470 8 59 Circular
- RTO2W07005 Ceiling mount with junction box • 100-277 VAC Polycarbonate 6000K (cool white) 470 8 59 Circular
- RTO2W07004 Pendant mount • 100-277 VAC Polycarbonate 6000K (cool white) 470 8 59 Circular
- RTO2W07001 Pendant mount with junction box • 100-277 VAC Polycarbonate 6000K (cool white) 470 8 59 Circular
### Standard Models - 12-48 VDC
- RTODW18005 Ceiling mount with junction box • • 12-48 VDC Polycarbonate 6000K (cool white) 800 8 100 Circular
- RTODW18004 Pendant mount • • 12-48 VDC Polycarbonate 6000K (cool white) 800 8 100 Circular
- RTODW18001 Pendant mount with junction box • • 12-48 VDC Polycarbonate 6000K (cool white) 800 8 100 Circular
- RTO2W18005 Ceiling mount with junction box • 12-48 VDC Polycarbonate 6000K (cool white) 800 8 100 Circular
- RTO2W18004 Pendant mount • 12-48 VDC Polycarbonate 6000K (cool white) 800 8 100 Circular
- RTO2W18001 Pendant mount with junction box • 12-48 VDC Polycarbonate 6000K (cool white) 800 8 100 Circular
- RTODW08005 Ceiling mount with junction box • • 12-48 VDC Polycarbonate 6000K (cool white) 470 8 59 Circular
- RTODW08004 Pendant mount • • 12-48 VDC Polycarbonate 6000K (cool white) 470 8 59 Circular
- RTODW08001 Pendant mount with junction box • • 12-48 VDC Polycarbonate 6000K (cool white) 470 8 59 Circular
- RTO2W08005 Ceiling mount with junction box • 12-48 VDC Polycarbonate 6000K (cool white) 470 8 59 Circular
- RTO2W08004 Pendant mount • 12-48 VDC Polycarbonate 6000K (cool white) 470 8 59 Circular
- RTO2W08001 Pendant mount with junction box • 12-48 VDC Polycarbonate 6000K (cool white) 470 8 59 Circular

All values typical unless otherwise stated (tolerance +/− 10%).

---

**DISCLAIMER.** All product information provided is, to the best of Dialight’s knowledge, accurate as of the date of publication. When ordering, refer to www.dialight.com for current versions of: (a) relevant product documentation (including the relevant product data sheets); (b) Dialight terms and conditions of sale; and, (c) the relevant product warranty. To the extent that any contract is deemed formed between Dialight and the purchaser of Dialight products and/or an end-user, versions of documents available at www.dialight.com as at the date of sale shall be the versions incorporated therein. In the event of any discrepancy between this document or information provided at www.dialight.com, the latter shall prevail.

www.dialight.com
WARNING / DISCLAIMERS:

Installation & secondary retention. The use of this product without proper installation (including secondary retention / netting) and periodic inspections, could cause severe injury or death. Dialight recommends that all installations should use secondary retention / netting (appropriate to the installation environment) as applicable. Dialight products are intended for ultimate purchase, installation and operation by knowledgeable persons trained in the functional assessment, installation, use and maintenance of such products and all customers (including but not limited to end customers) are responsible for assessing the suitability of Dialight products for any given installation requirement. It is the exclusive responsibility of the contractor, installer and/or end-user to: (a) determine the suitability of the product for its intended application; and, (b) ensure that the product is safely installed (with secondary retention / netting as appropriate) and in compliance with all applicable laws and regulations.

Product specifications & warranties.

All product information provided is, to the best of Dialight's knowledge, accurate as of the date of publication. All values and performance data herein are design or typical values when measured under laboratory conditions. The information herein is subject to change without notice. The products / software detailed herein are subject to applicable warranties and terms and conditions of use/purchase. Unless agreed otherwise in writing by an authorized representative of Dialight, Dialight does not represent that its products are fit for any particular purpose and accepts no liability for the installation and/or unauthorised use of its products. When ordering, refer to www.dialight.com for current versions of: (a) relevant product documentation (including relevant product data sheets); (b) Dialight terms and conditions of sale; and, (c) the relevant product warranties. To the extent that any contract is deemed formed between Dialight and the purchaser of Dialight products and/or an end-user, versions of documents available at www.dialight.com as at the date of sale shall be the versions incorporated therein. In the event of any discrepancy between this document and information provided at www.dialight.com, the latter shall prevail.

Exclusion of liability. To the extent permissible under the relevant law, Dialight disclaims all liability for personal injury and/or other damage resulting from any dislodgment or other dislocation of its products. Whilst Dialight has used its reasonable endeavours to ensure the completeness and accuracy of information herein, Dialight does not assume any liability for damages resulting from use of this information or for any third-party representations made in relation to Dialight products.