

### SafeSite<sup>®</sup> LED RTO Area Light - UL844

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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

#### 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 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 <sup>1</sup>	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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