











SafeSite® LED Area Light - IECEx / ATEX for Indoor and Outdoor Hazardous Areas









Patent Pending

**AUTHORIZED RESELLER** 



## SafeSite® LED Area Light - ATEX / IECEx

for Indoor and Outdoor Hazardous Areas



#### **About Dialight**

Dialight (LSE: DIA.L) is leading the energy efficient LED lighting revolution around the world for industrial and hazardous areas as well as transportation and infrastructure applications. For 40 years it has been committed to the development of LED lighting solutions that enable organisations to vastly reduce energy use and maintenance needs, improve safety, ease disposal and reduce  $CO_2$  emissions.

#### Value Proposition

- Improve safety, colour quality
- Better temperature rating (T-rating)
- · Lower total cost of ownership, quick ROI
- Lower energy consumption by > 50%
- Significantly reduce CO<sub>2</sub> emissions

#### History at a Glance

 $1938 \rightarrow \text{Dialight founded in Brooklyn, NY}$ 

 $1971 \rightarrow \text{LED}$  circuit board indicator

1994 → LED transit behicle signals

 $1995 \rightarrow \text{LED traffic signals}$ 

2000 → FAA certified LED Obstruction Lights

2007 → LED lighting for hazardous locations

2009 → LED High Bay fixtures

2012 → Full performance 10-year warranty

 $2013 \rightarrow$  Controls for LED Lighting

 $2014 \rightarrow 125$  lumens per watt

 $2015 \rightarrow 140$  lumens per watt

#### SafeSite®

• LED lighting for hazardous locations

#### Vigilant®

• LED lighting for general Industrial locations

#### DuroSite®

• LED lighting for general Industrial locations

#### Vertically Focused

#### Regulated Primary Markets

- Oil, Gas & Petrochemical
- Power Generation
- Mining
- Chemical
- Pharmaceutical
- Water Treatment
- Food & Beverage

#### **Secondary Markets**

- Manufacturing
- Warehousing
- Cold StorageData Centers





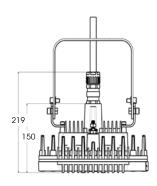


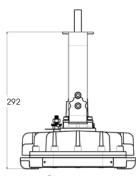




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# SafeSite® LED Area Light - IECEx / ATEX Zone 1, 21





Dimensions in mm

#### Certifications

- Ex II 2GD Ex d IIC T4 Gb (Ta = -40°C to +65°C)
- $\bullet$  Ex t IIIC T135°C Db IP 6X (Ta = -40°C to +65°C)
- Ex II 2GD Ex d IIC T5 Gb ( $Ta = -40^{\circ}C$  to  $+42^{\circ}C$ )
- $\bullet$  Ex t IIIC T100°C Db IP 6X (Ta = -40°C to +42°C)
- Certificate numbers: IECEx SIR 11.0156 SIRA 11ATEX1357
- ATEX Zones 1, 21
- ATEX Zones 2, 22
- ABS Design Assessed: 13-HS1043210C-PDA
- IP66
- RoHS compliant
- IK08 impact rating

#### Features & Benefits

- L70 rated for >100,000 hours @ 25°C ambient
- 5 year full performance warranty
- Instant on/off operation
- Universal input (110-277V AC), 50/60Hz
- Superior colour rendering index compared to HPS, LPS, MV
- Mercury free
- Resistant to shock and vibration
- Temperature compensation technology for longer life
- Factory sealed

#### Application:

The SafeSite® LED area light represents the future of energy efficient facility illumination for hazardous areas worldwide. The ATEX / IECEx area lighting fixture consumes at least 50% less energy compared to traditional HID light sources, while reducing maintenance and carbon emissions. This light incorporates both cutting edge LED technology along with proprietary optics to achieve area lighting comparable with other traditional light sources.

**Mechanical Information** 

Fixture Weight: 9.53kg (21lb)

Shipping Weight: 10.43kg (23lb)

Mounting: Supplied with stirrup mounting bracket

Wiring: Factory installed 3 meter 3 core armored

cable

**Electrical specifications** 

Operating Voltage: 110-277V AC, 50/60 Hz

Power Consumption: See table

Operating Temp:  $-40^{\circ}\text{C to } +65^{\circ}\text{C } (-40^{\circ}\text{F to } +149^{\circ}\text{F})$ 

Surge Protection: 1 kV line to line

2 kV line to ground

THD: <20%

Power Factor: > 0.9

Construction

Housing: Copper free aluminum (A360)

Finish: Superior dual coat finish

Sealed polyester topcoat Chemical-resistant epoxy primer

Lens: Toughened glass

**Photometric Information** 

**CRI**: 75

CCT: 5000K (cool white)

4000K (neutral white)

Optics: 180° distribution

360° distribution

IES Files: available at www.dialight.com

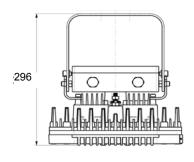
All values typical unless otherwise stated All lumen values are typical (tolerance +/- 10%)

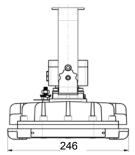




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### SafeSite® LED Area Light - IECEx / ATEX Junction Box - Zone 1, 21





Dimensions in mm)

#### **Certifications**

- Ex II 2GD Ex d IIC T4 Gb (Ta =  $-20^{\circ}$ C to  $+65^{\circ}$ C)
- Ex II 2GD Ex d IIC T5 Gb (Ta =  $-20^{\circ}$ C to  $+42^{\circ}$ C)
- Ext IIIC T135°C Db IP 6X (Ta = -20°C to +65°C)
- Ex t IIIC T100°C Db IP 6X (Ta = -20°C to +42°C) -40°C variants available for all the above
- Certificate numbers: IECEx SIR 11.0156 SIRA 11ATEX1357
- ATEX Zones 1, 21
- ATEX Zones 2, 22
- IP66
- RoHS compliant
- IK08 impact rating

#### Features & Benefits

- L70 rated for >100,000 hours @ 25°C ambient
- 5 year full performance warranty
- Instant on/off operation
- Universal input (110-277V AC), 50/60Hz
- Superior colour rendition index compared to HPS, LPS, MV
- Mercury free
- Resistant to shock and vibration
- Temperature compensation technology for longer life
- Factory sealed

#### Application:

The SafeSite® LED area light represents the future of energy efficient facility illumination for hazardous areas worldwide. The ATEX /IECEx area lighting fixture consumes at least 50% less energy compared to traditional HID light sources, while reducing maintenance and carbon emissions. This light incorporates both cutting edge LED technology along with proprietary optics to achieve area lighting comparable with other traditional light sources.

**Mechanical Information** 

Fixture Weight: 9.07kg (20lb)

Shipping Weight: 9.98kg (22lb)

Mounting: Supplied with stirrup mounting bracket

Factory installed junction box Wiring:

**Electrical specifications** 

Operating Voltage: 110-277V AC, 50/60 Hz

Power Consumption: See table

Operating Temp:  $-40^{\circ}$ C to  $+65^{\circ}$ C ( $-40^{\circ}$ F to  $+149^{\circ}$ F)

Surge Protection: 1 kV line to line

2 kV line to ground

THD: <20%

Power Factor: > 0.9

Construction

Housing: Copper free aluminum (A360)

Finish: Superior dual coat finish

Sealed polyester topcoat Chemical-resistant epoxy primer

Lens: Toughened glass

**Photometric Information** 

CRI: 75

CCT: 5000K (cool white)

4000K (neutral white)

Optics: 180° distribution

360° distribution

IES Files: available at www.dialight.com

All values typical unless otherwise stated All lumen values are typical (tolerance +/- 10%)

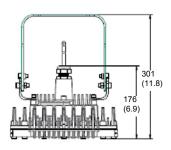


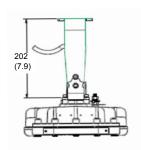


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# SafeSite® LED Area Light - IECEx / ATEX

Zone 2, 22





Dimensions in mm (inches)

#### **Certifications**

- Ex II 3GD Ex nA nC IIC T4 Gc [Ta = -40C to +65C]
- Ex to IIIC T130C Dc [Ta = -40C to +65C]
- Certificate numbers: IECEx SIR 14.0042X Sira 14ATEX4097X
- ATEX Zones 2, 22
- IP66
- RoHS compliant

#### Features & Benefits

- L70 rated for >100,000 hours @ 25°C ambient
- 5 year full performance warranty
- Instant on/off operation
- Universal input (110 277V AC), 50/60Hz
- Superior colour rendering index compared to HPS, LPS, MV
- Mercury free
- Resistant to shock and vibration
- Temperature compensation technology for longer life
- Factory sealed

#### Application:

The SafeSite® LED area light represents the future of energy efficient facility illumination for hazardous areas worldwide. The ATEX / IECEx area lighting fixture consumes at least 50% less energy compared to traditional HID light sources, while reducing maintenance and carbon emissions. This light incorporates both cutting edge LED technology along with proprietary optics to achieve area lighting comparable with other traditional light sources.

**Mechanical Information** 

Fixture Weight: 7.5kg (16.5lb)

Shipping Weight: 8.16kg (18.5lb)

Mounting: Supplied with stirrup mounting bracket

Wiring: Factory installed 3 meter 3 core cable

**Electrical specifications** 

Operating Voltage: 110-277V AC, 50/60 Hz

Power Consumption: See table

Operating Temp:  $-40^{\circ}\text{C to } +65^{\circ}\text{C } (-40^{\circ}\text{F to } +149^{\circ}\text{F})$ 

Surge Protection: 1 kV line to line

2 kV line to ground

THD: <20%

Power Factor: > 0.9

Construction

Housing: Copper free aluminum (A360)

Finish: Superior dual coat finish

Sealed polyester topcoat Chemical-resistant epoxy primer

Lens: Toughened glass

**Photometric Information** 

**CRI**: 75

CCT: 5000K (cool white)

4000K (neutral white)

Optics: 180° distribution

360° distribution

IES Files: available at www.dialight.com

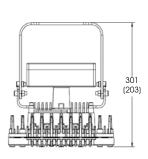
All values typical unless otherwise stated All lumen values are typical (tolerance +/- 10%)

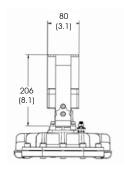




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# SafeSite® LED Area Light - IECEx / ATEX Junction Box - Zone 2, 22





Dimensions in mm (inches)

#### Certifications

- Ex II 3GD Ex nA nC IIC T4 Gc [Ta = -40C to +65C]
- Ex to IIIC T130C Dc [Ta = -40C to +65C]
- Certificate numbers: IECEx SIR 14.0042X Sira 14ATEX4097X
- ATEX Zones 2, 22
- IP66
- RoHS compliant

#### Features & Benefits

- L70 rated for >100,000 hours @ 25°C ambient
- 5 year full performance warranty
- Instant on/off operation
- Universal input (110 277V AC), 50/60Hz
- Superior colour rendering index compared to HPS, LPS, MV
- Mercury free
- Resistant to shock and vibration
- Temperature compensation technology for longer life
- Factory sealed

#### Application:

The SafeSite® LED area light represents the future of energy efficient facility illumination for hazardous areas worldwide. The ATEX / IECEx area lighting fixture consumes at least 50% less energy compared to traditional HID light sources, while reducing maintenance and carbon emissions. This light incorporates both cutting edge LED technology along with proprietary optics to achieve area lighting comparable with other traditional light sources.

**Mechanical Information** 

Fixture Weight: 7.67kg (16.9lb)

Shipping Weight: 8.57kg (18.9lb)

Mounting: Supplied with stirrup mounting bracket

Wiring: Factory installed junction box

**Electrical specifications** 

Operating Voltage: 110-277V AC, 50/60 Hz

Power Consumption: See table

Operating Temp:  $-40^{\circ}\text{C} \text{ to } +65^{\circ}\text{C} \text{ (}-40^{\circ}\text{F to } +149^{\circ}\text{F)}$ 

Surge Protection: 1 kV line to line 2 kV line to ground

THD: <20%

Power Factor: > 0.9

Construction

Housing: Powder coated A360 alum.

Finish: Polyester / epoxy powder coat gray RAL

7040 for superior corrosion resistance

Lens: Toughened glass

Photometric Information

**CRI**: 75

CCT: 5000K (cool white)

4000K (neutral white)

Optics: 180° and 360° distribution available

IES Files: available at www.dialight.com

All values typical unless otherwise stated All lumen values are typical (tolerance +/- 10%)

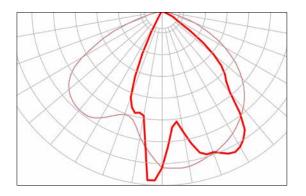
# SafeSite® LED Area Light - ATEX / IECEx

## Ordering Information

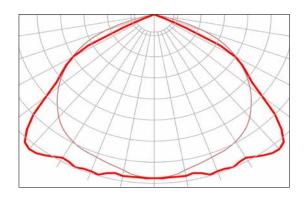
Part Number	Optical Pattern	Colour <sup>2</sup>	Lumens	Watts	Lumens Per Watt	Junction Box	Multi Area Light
IECEx / ATEX Zone 1, 21							
HZA0C2N	180	5000K (cool white)	2,200	21	105		
HZA1C2N	360	5000K (cool white)	2,200	21	105		
HZA2C2N	180	5000K (cool white)	3,600	38	95		
HZA3C2N	360	5000K (cool white)	4,000	38	105		
HZA4C2N	180	5000K (cool white)	4,600	47	97		
HZA5C2N	360	5000K (cool white)	5,100	47	108		
HZA8C2N	180	5000K (cool white)	5,600	58	97		
HZA9C2N	360	5000K (cool white)	6,000	58	103		
IECEx / ATEXZone 1, 21 - Junction Box							
HZJA8C2N	180	5000K (cool white)	5,600	58	96	•	
HZJA9C2N	360	5000K (cool white)	6,000	58	103	•	
HZJA8C2N-2	180	5000K (cool white)	11,200	116	96	•	2
HZJA9C2N-2	360	5000K (cool white)	12,000	116	103	•	2
HZJA8C2N-3	180	5000K (cool white)	16,800	174	96	•	3
HZJA9C2N-3	360	5000K (cool white)	18,000	174	103	•	3
IECEx / ATEX Zone 2, 22							
HZB0C2N	180	5000K (cool white)	2,000	21	95		
HZB1C2N	360	5000K (cool white)	2,500	21	105		
IECEx / ATEX Zone 2, 22 - Junction Box							
HZJB0C2N	180	5000K (cool white)	2,000	21	95	•	
HZJB1C2N	360	5000K (cool white)	2,500	21	119	•	
HZJB2C2N	180	5000K (cool white)	3,000	38	78	•	
HZJB3C2N	360	5000K (cool white)	3,500	38	92	•	
HZJB4C2N	180	5000K (cool white)	5,000	47	106	•	
HZJB5C2N	360	5000K (cool white)	5,500	47	117	•	
HZJB8C2N	180	5000K (cool white)	6,000	58	103	•	
HZJB9C2N	360	5000K (cool white)	6,500	58	112	•	
HZJBEC2N	180	5000K (cool white)	7,000	68	102	•	
HZJBFC2N	360	5000K (cool white)	7,500	68	110	•	

# Light Distribution Patterns

180° light distribution



360° light distribution

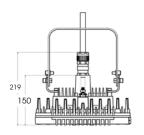


<sup>180°</sup> optical pattern models are optimized for a 45° mounting angle
Part numbers listed in the above table are 5000K (cool white) . For neutral white models replace the first **C** in the part code with an **N** Ex: HZA2**C**2N becomes HZA2**N**2N When changing to neutral white there is an approximate 7% drop in lumen output

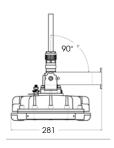
# SafeSite® LED Area Light - ATEX / IECEx

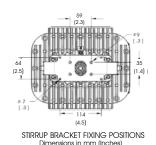
## Dimensions with Stirrup Bracket

### Zone 1



292





Supplied with Stirrup Mounting bracket as shown

Zone 1 with Junction Box

Multi Area Light x 2

## Multi Area Light x 3

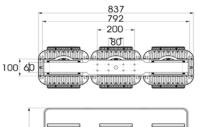
#### Junction Box



301 (11.8)

176 (6.9)





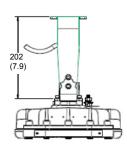


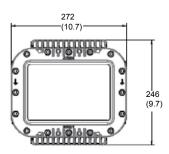
Dimensions in mm

296 296 246

-

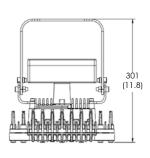
Zone 2

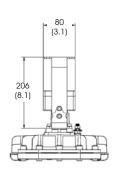


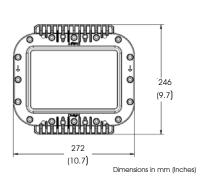


Dimensions in mm (Inches)

#### Zone 2 with Junction Box







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