Dialight

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

Patent Pending

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_2 emissions

History at a Glance

1938 → Dialight founded in Brooklyn, NY
1971 → LED circuit board indicator
1994 → LED transit behicle signals
1995 → 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 → Controls for LED Lighting
2014 → 125 lumens per watt
2015 → 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

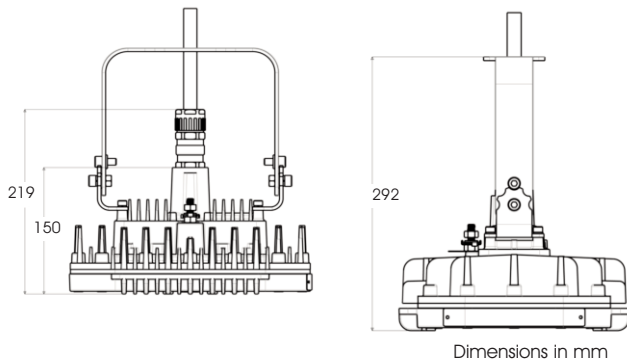- Manufacturing
- Warehousing
- Cold Storage
- Data Centers

Patent Pending

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)
- Ex t IIIC T135°C Db IP 6X (Ta = -40°C to +65°C)
- Ex II 2GD Ex d IIC T5 Gb (Ta = -40°C to +42°C)
- 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
- IP 66
- 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.

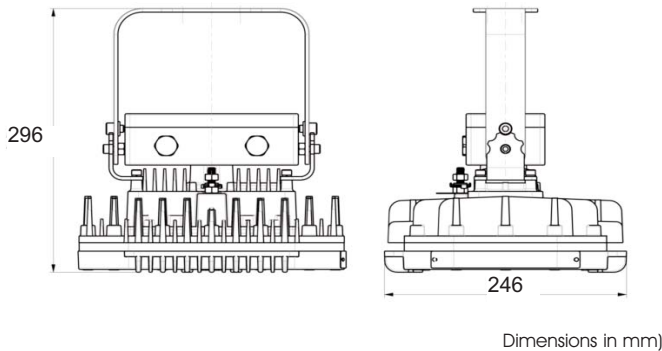| Mechanical Information	
Fixture Weight:	9.53kg (21lb)
Shipping Weight:	10.43kg (23lb)
Mounting:	Supplied with stirrup mounting bracket
Wiring:	Factory installed 3 meter 3 core armored cable
Electrical specifications	
Operating Voltage:	110-277V AC, 50/60 Hz
Power Consumption:	See table
Operating Temp:	-40°C to +65°C (-40°F to +149°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:	5,000K (cool white) 4,000K (neutral white)
Optics:	180° and 360° distribution available
IES Files:	Available upon request

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

Patent Pending

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

296

246

Dimensions in mm)

Certifications
- Ex II 2GD Ex d IIC T4 Gb (Ta = -20°C to +65°C)
- Ex II 2GD Ex d IIC T5 Gb (Ta = -20°C to +42°C)
- Ex t 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
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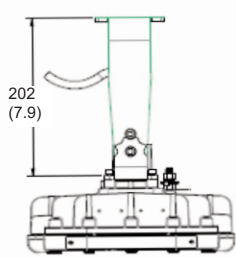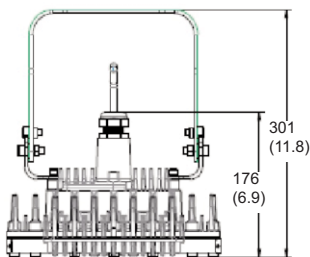| Mechanical Information	
Fixture Weight:	9.07kg (20lb)
Shipping Weight:	9.98kg (22lb)
Mounting:	Supplied with stirrup mounting bracket
Wiring:	Factory installed junction box
Electrical specifications	
Operating Voltage:	110-277V AC, 50/60 Hz
Power Consumption:	See table
Operating Temp:	-40°C to +65°C (-40°F to +149°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:	5,000K (cool white) 4,000K (neutral white)
Optics:	180° and 360° distribution available
IES Files:	Available upon request

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

Patent Pending

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 tc IIIC T130C Dc [Ta = -40C to +65C]
- Certificate numbers: IECEx SIR 14.0042X
                         Sira 14ATEX4097X
- ATEX Zones 2, 22
- IP 66
- 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 armored cable
Electrical specifications	
Operating Voltage:	110-277V AC, 50/60 Hz
Power Consumption:	See table
Operating Temp:	-40°C to +65°C (-40°F to +149°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:	5,000K (cool white)
4,000K (neutral white)
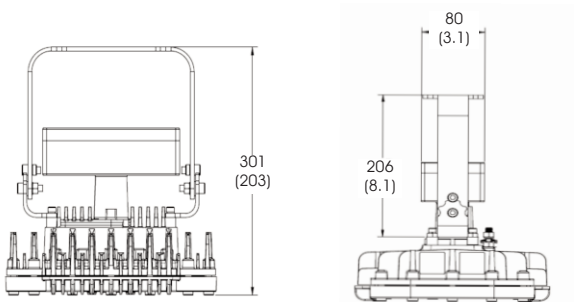| Optics:	180° and 360° distribution available
IES Files:	Available upon request

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

Patent Pending

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

80
(3.1)

301
(203)

206
(8.1)

Dimensions in mm (inches)

Certifications
- Ex II 3GD Ex nA nC IIC T4 Gc [Ta = -40C to +65C]
- Ex tc IIIC T130C Dc [Ta = -40C to +65C]
- Certificate numbers: IECEx SIR 14.0042X
                          Sira 14ATEX4097X
- ATEX Zones 2, 22
- IP 66
- RoHS compliant

Features & Benefits
- L70 rated for >100,000 hours @ 25°C ambient
- 5 year full performance warranty
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- Universal input (110 - 277V AC), 50/60Hz
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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°C to +65°C (-40°F to +149°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:	5,000K (cool white) 4,000K (neutral white)
Optics:	180° and 360° distribution available
IES Files:	Available upon request

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

SafeSite® LED Area Light

Ordering Information

Part Number	Optical Pattern	Colour	Lumens	Watts	Lumens Per Watt	Junction Box	Multi Area Light
IECEx / ATEX Zone 1, 21							
HZA0C2N	180	Cool White	2,200	21	105		
HZA1C2N	360	Cool White	2,200	21	105		
HZA2C2N	180	Cool White	3,600	38	95		
HZA3C2N	360	Cool White	4,000	38	105		
HZA4C2N	180	Cool White	4,600	47	96		
HZA5C2N	360	Cool White	5,100	47	106		
HZA8C2N	180	Cool White	5,600	58	97		
HZA9C2N	360	Cool White	6,000	58	103		
IECEx / ATEXZone 1, 21 - Junction Box							
HZJA8C2N	180	Cool White	5,600	58	96	•	
HZJA9C2N	360	Cool White	6,000	58	103	•	
HZJA8C2N-2	180	Cool White	11,200	116	96	•	2
HZJA9C2N-2	360	Cool White	12,000	116	103	•	2
HZJA8C2N-3	180	Cool White	16,800	174	96	•	3
HZJA9C2N-3	360	Cool White	18,000	174	103	•	3
IECEx / ATEX Zone 2, 22							
HZB0C2N	180	Cool White	2,000	21	95		
HZB1C2N	360	Cool White	2,500	21	105		
IECEx / ATEX Zone 2, 22 - Junction Box							
HZJB0C2N	180	Cool White	2,000	21	95	•	
HZJB1C2N	360	Cool White	2,500	21	119	•	
HZJB2C2N	180	Cool White	3,000	38	78	•	
HZJB3C2N	360	Cool White	3,500	38	92	•	
HZJB4C2N	180	Cool White	5,000	48	104	•	
HZJB5C2N	360	Cool White	5,500	48	114	•	
HZJB8C2N	180	Cool White	6,000	58	103	•	
HZJB9C2N	360	Cool White	6,500	58	112	•	
HZJBEC2N	180	Cool White	7,000	68	102	•	
HZJBFC2N	360	Cool White	7,500	68	110	•	

[1]180° optical pattern models are optimized for a 45° mounting angle
[2]Part numbers listed in the above table are 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
[3]When changing to neutral white there is an approximate 7% drop in lumen output

Light Distribution Patterns

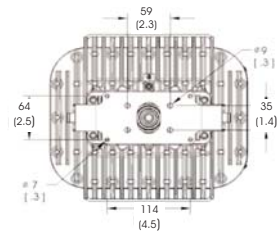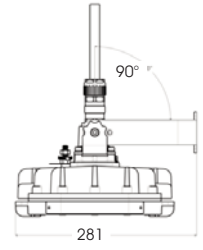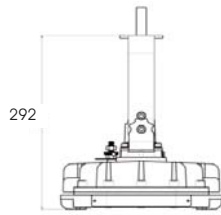### 180° light distribution
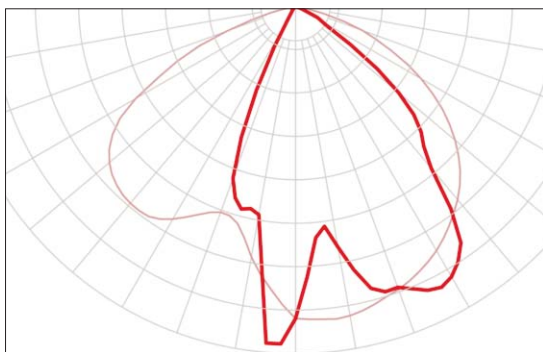
360° light distribution
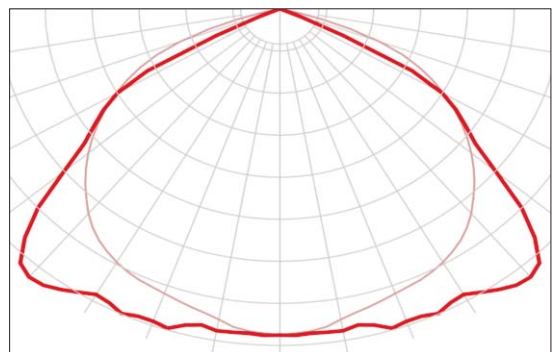
SafeSite® LED Area Light
Dimensions with Stirrup Bracket
Zone 1
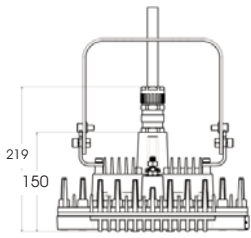
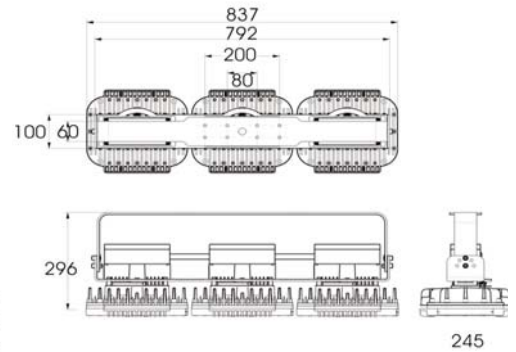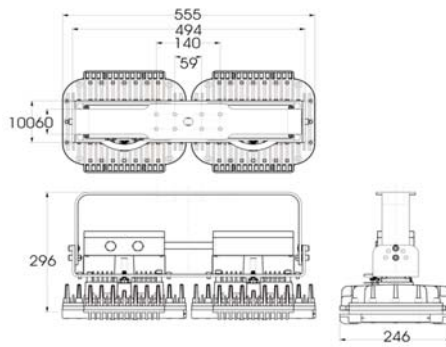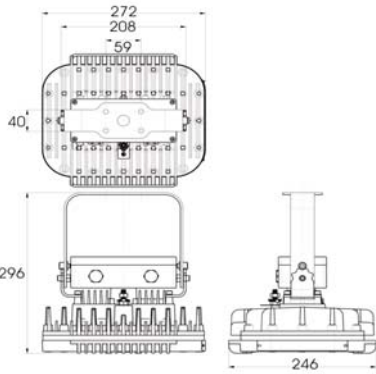Supplied with Stirrup Mounting bracket as shown

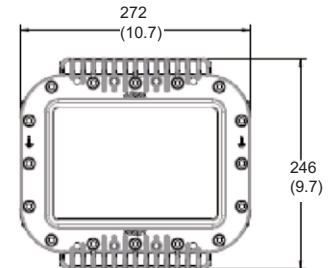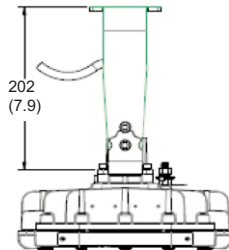STIRRUP BRACKET FIXING POSITIONS
Dimensions in mm (Inches)

Zone 1 with Junction Box
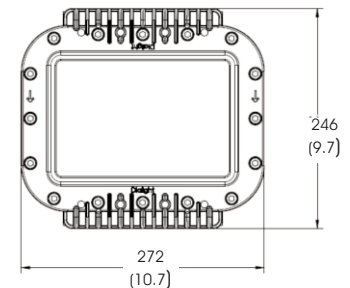
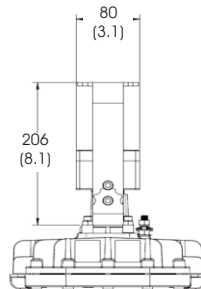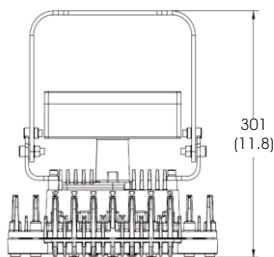| Junction Box	Multi Area Light x 2	Multi Area Light x 3

Dimensions in mm

Zone 2
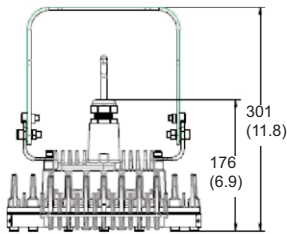
Dimensions in mm (Inches)

Zone 2 with Junction Box

Dimensions in mm (Inches)

www.dialight.com

MDTFHZSALEUX001_G