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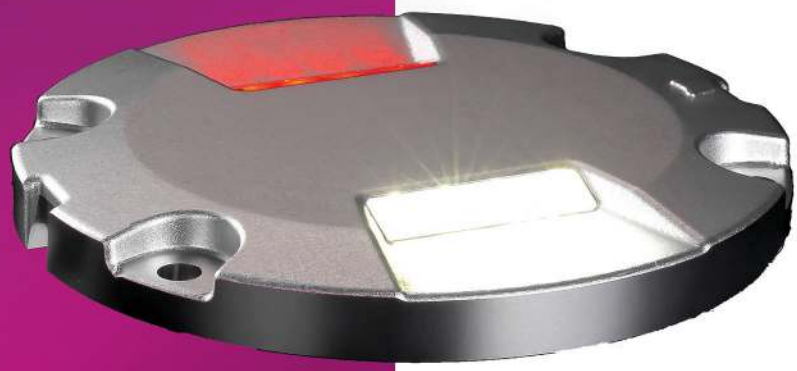

FX850A

Runway Centreline High intensity lighting solutions

Compliant to Latest International Standards*

- ICAO Annex 14. Vol 1
- FAA AC 150/5345-46
- FAA Engineering Brief No.67
- IEC 61827
- EASA
- Stannag 3316 (NATO)

Applications

CAT II/III all weather operation airfield ground lighting (agl) systems.

* As applicable to the application, compliance with other civil aviation and military regulations confirmed on request

† Electrical/Mechanical/Environmental characteristics only

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Electrical Performance

Main Beam Aperture		Colour	Typical Power Consumption - Watts (VA) @ 6.6A				
				Fitting*		Tx Primary**	
Horiz(°)	Vert(°)		Per Beam Watts nominal	Watts (VA)	PF	Watts (VA)	PF
-5 to +5	0 to 9	WHT/WHT	20.0/20.0	51.27 (51.33)	0.999	61.68 (62.16)	0.992
-5 to +5	0 to 9	RED/WHT	7.50/20.0	37.00 (37.16)	0.995	47.94 (48.73)	0.984
-5 to +5	0 to 9	WHT/BLK	20.0/----	27.76 (27.93)	0.993	37.91 (38.85)	0.976
-5 to +5	0 to 9	RED/BLK	7.50/----	13.88 (13.92)	0.995	23.89 (24.68)	0.967

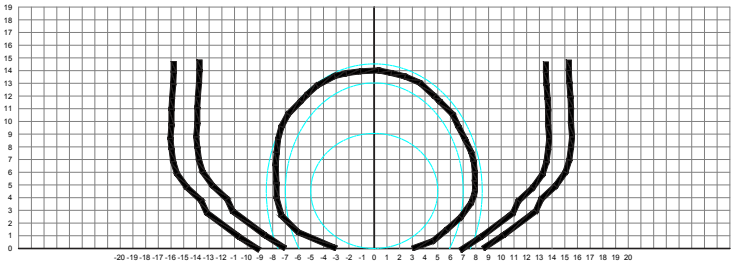
Fixture Operational Current Range: 2.8 to 6.7A RMS

* as measured at the input leads of the fixture.
** as measured across the primary winding of an appropriately sized isolation transformer with a total fixture and transformer secondary length not exceeding ~ 1.85m (72").
*** electrical characteristics measured with 45 watt transformer, fitting can operate from transformers up to 210 watts.
Note: Isolating transformer shall be suitably sized to accommodate specific secondary and other applicable losses.

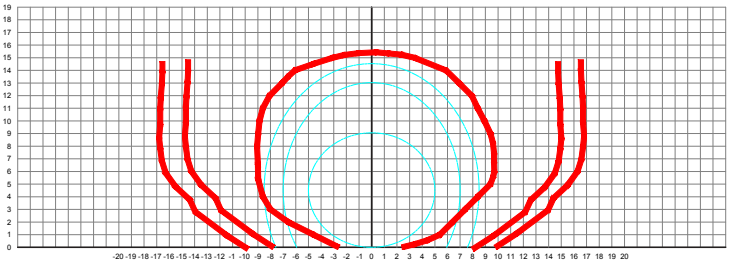
Photometry

Runway Centre Line ICAO Fig A2-7 FAA L-850A	
Colour	White
Max/Min Intensity Ratio	<3.0
Main ellipse average intensity	5000 cds
Main ellipse minimum intensity	2500 cds
Second ellipse minimum intensity	500 cds
Third ellipse minimum intensity	250 cds
Typical Measured Values	
Colour	White
Max/Min Intensity Ratio	2.2
Main ellipse average intensity	5800 cds
Main ellipse maximum intensity	7400 cds
Main ellipse minimum intensity	3300 cds
Second ellipse minimum intensity	2300 cds
Third ellipse minimum intensity	1600 cds
Specification	
Colour	Red
Max/Min Intensity Ratio	<3.0
Main ellipse average intensity	750 cds
Main ellipse minimum intensity	375cds
Second ellipse minimum intensity	75 cds
Third ellipse minimum intensity	37.5 cds
Typical Measured Values	
Colour	Red
Max/Min Intensity Ratio	2.2
Main ellipse average intensity	1050 cds
Main ellipse maximum intensity	1250 cds
Main ellipse minimum intensity	560 cds
Second ellipse minimum intensity	460 cds

Intensity Chart - Runway Centre Line Luminaire - White



Intensity Chart - Runway Centre Line Luminaire - Red



FX850A

LED Inset runway centre line
High intensity lighting solutions

Features

Low energy consumption compared with the tungsten halogen equivalent.

Greatly reduced maintenance: calculated MTBF of 75,000 hours at 6.6A.

Operates on the full range of 2.8A to 6.6A on either 3 or 5 step IGBT, ferroresonant or thyristor CCRs that are designed in compliance with IEC or FAA requirements.

Fully dimmable lights, replicating the response curve of traditional halogen lights.

Full compatibility with existing airfield lighting series circuits. Installation on same mounting device as most conventional lights, for a straightforward replacement.

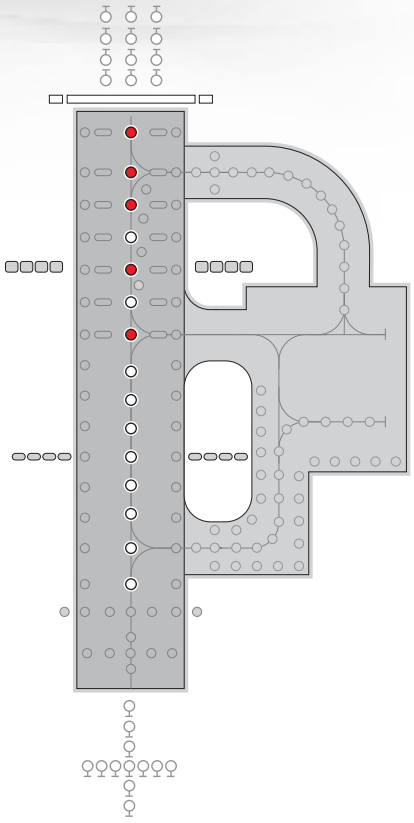
Monitoring function of the individual light arrays for open circuit, short circuit, and over temperature. The LED light automatically disconnects from the secondary side of the isolation transformer, resulting in an open circuit condition.

Low operating temperature, ensuring longer component life.

FAA style 3, ICAO style 4 fixture with a 3.5 mm profile above gradient

L-823 connectors

Integral surge protection



Environmental Conditions

- Ambient Temperature -55 °C to +55°C (-67 °F to +131°F)
- Storage Temperature -55°C to +70°C (-67 °F to +158°F)
- Atmospheric Altitude up to 10,000 feet (3000m)
- Relative Humidity 0-100% (sealed unit)

Standards	
EMC protection	Immunity IEC 61000-4 Emission IEC 61000-2
Ingress protection class dust/liquids	IP68 (IEC69598-1)
Vibration resistance	IEC60068-2-6

FX850A

LED Inset runway centre line
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Ordering Codes:

FX 850A8 ○ ○ ○ ○ ○ ○ ○

Application
L-850A (L) Runway Centreline

Beam Type
A Side
1 = Straight
0 = Blank

B Side
1 = Straight
0 = Blank

Colour
A Side
W = White
R = Red
N = Not alppicable

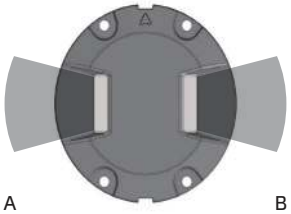
B Side
W = White
R = Red
N = Not alppicable

Specification
1 = FAA
2 = ICAO

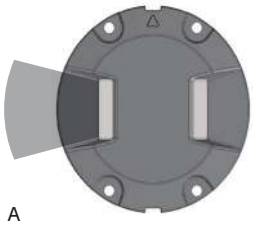
Connections
1 = 1 x Bi-pin plug
2 = 2 x Bi-pin plug

Additional optional features may be available upon request

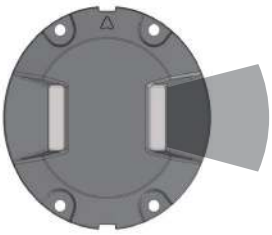
Beam Options



FX850A
Bi-directional



FX850A
Uni-directionaL



FX850A
Uni-directional

FX850A

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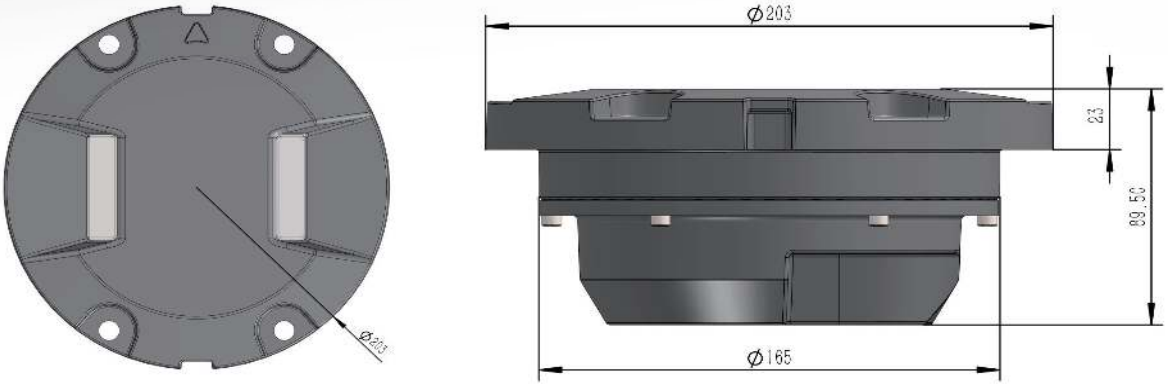
Dimensions



Packaging

- Net weight 2.5Kg
- Gross weight 2.9 (boxed)
- Box 220mm (L) x 220mm (W) x 225mm (H)

weights and dimentions are nominal

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bsi. ISO 9001:2015 Quality Management

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