



FX850B

Runway
Touch Down Zone
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 I/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 | | | | |
|--------------------|---------|---------|---|------------------------|-------|----------------------------|-------|
| Horiz(°) | Vert(°) | | Per Beam Watts nominal | Fitting* Watts (VA) | PF | Tx Primary** Watts (VA) | PF |
| -5 to +5 | 2 to 9 | WHT/BLK | 20.0/---- | 27.76 (27.93) | 0.993 | 37.91 (38.85) | 0.976 |
| -1 to +9 | 2 to 9 | BLK/WHT | ----/20.0 | 27.76 (27.93) | 0.993 | 37.91 (38.85) | 0.976 |

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

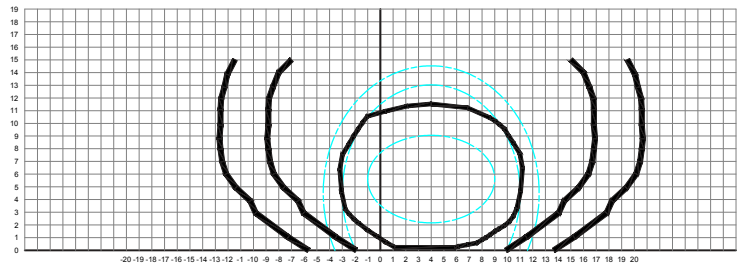
Specification Touch Down Zone ICAO Fig A2-5 FAA L-850B

| | |
|----------------------------------|----------|
| Colour | White |
| Max/Min Intensity Ratio | <3.0 |
| Main ellipse average intensity | 5000 cds |
| Main ellipse minimum intensity | 2500 cds |
| Second ellipse minimum intensity | 1000 cds |
| Third ellipse minimum intensity | 500 cds |

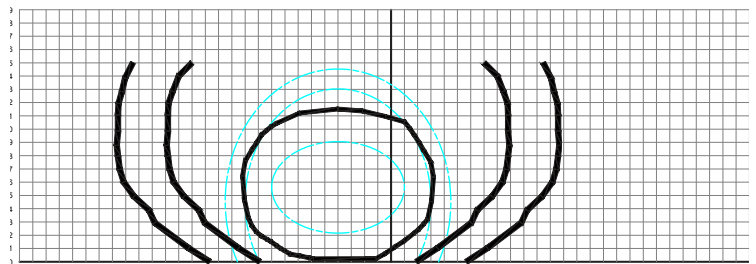
Typical Measured Values

| | |
|----------------------------------|----------|
| Colour | White |
| Max/Min Intensity Ratio | 1.9 |
| Main ellipse average intensity | 5700 cds |
| Main ellipse maximum intensity | 7200 cds |
| Main ellipse minimum intensity | 3900 cds |
| Second ellipse minimum intensity | 2900 cds |
| Third ellipse minimum intensity | 1900 cds |

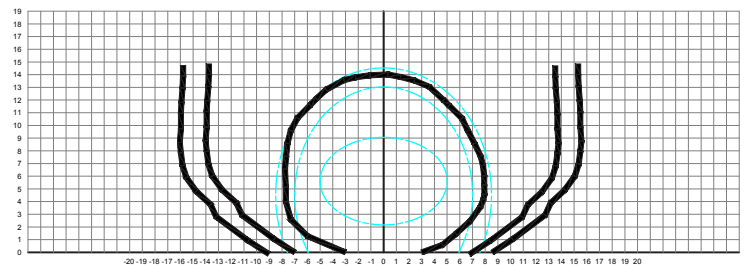
Intensity Chart - Touch Down Zone Luminaire - (toe-in right) White



Intensity Chart - Touch Down Zone Luminaire - (toe-in left) White



Intensity Chart - Touch Down Zone Luminaire - (straight axial) White



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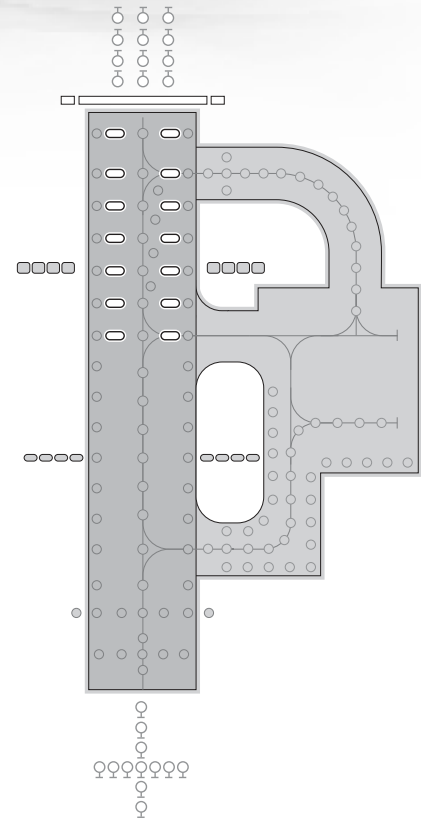
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Features

- 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 |
| | |
| | |
| | |

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Ordering Codes:



Application
L-850B (L) Touch Down Zone

Beam Type
A Side
 1 = Straight
 3 = Toe in right
 0 = Blank

B Side
 1 = Straight
 2 = Toe in left
 0 = Blank

Colour
A Side
 W = White
 N = Not applicable

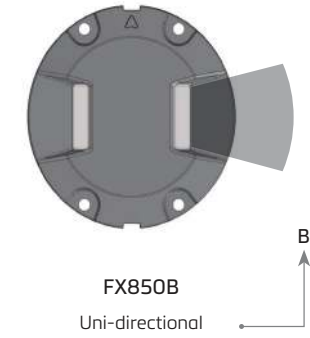
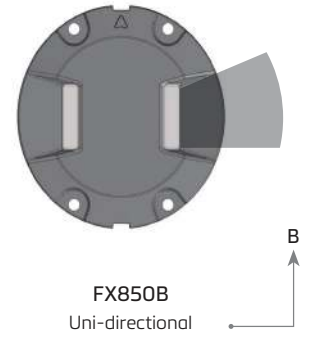
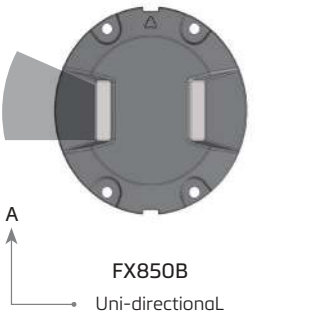
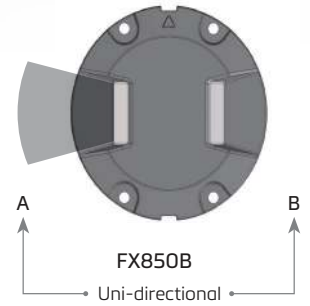
B Side
 W = White
 N = Not applicable

Specification
 1 = FAA
 2 = ICAO

Connections
 1 = 1 x Bi-pin plug

Additional optional features may be available upon request

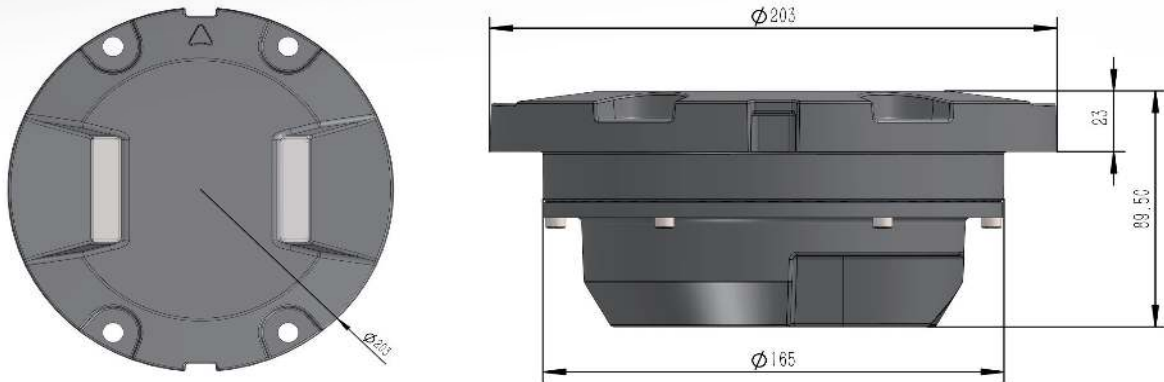
Beam Options



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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 dimensions are nominal



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atg airports reserve the right to change technical data and details at any point in time. Errors may have occurred



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