



FX850AP

Runway Approach High intensity lighting solutions

Compliant to Latest International Standards^{*}

- ▶ ICAO Annex 14. Vol 1
- ▶ FAA AC 150/5345-46[†]
- ▶ FAA Engineering Brief No.67
- TP312
- MOS139
- ▶ IEC 61827
- ► EASA
- Stannag 3316 (NATO)

Applications

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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

📞 UK: +44 (0) 1942 68 5555 | USA: +1 (239) 985-9406

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Electrical Performance

Main Beam Aperture		Colour	Typical Power Consumption - Watts (VA) @ 6.6A				
Horiz(°)	Vert(°)		Per Beam Watts nominal	Watts (VA)	PF	Watts (VA) PF	
-10 to +10	0 to 11	WHT/BLK	111/-	147.8 (148.4)	0.99	193.6 (194.9) 0.99	

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					
Runway Approach ICAO Fig. A2-1					
Colour	White				
Max/Min Intensity ratio	<3.0				
Main ellipse average intensity	20000cds				
Main ellipse minimum intensity	10000cds				
Second ellipse minimum intensity	2000cds				
Third ellipse minimum intensity	1000cds				
Typical Measured Values					
Colour	White				
Max/Min Intensity ratio	4.4				
Main ellipse average intensity	20827cds				
Main ellipse maximum intensity	34041cds				
Main ellipse minimum intensity	7632cds				
	3261cds				
Second ellipse minimum intensity	3261cds				
Second ellipse minimum intensity Third ellipse minimum intensity	3261cds 1632cds				

Intensity Chart - Runway Approach Luminaire - White



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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 6.0 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)

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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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Additional optional features may be available upon request

Beam Options



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Dimensions





Packaging

▶ Net weight 8.9Kg → Gross weight 9.5 (boxed) → Box 220mm (L) x 220mm (W) x 225mm (H)

weights and dimentions 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 occured

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