

RUNWAY LIGHTING

EREL / ERES

LED Elevated Runway Edge, Threshold/
End, Threshold and End Light
HIGH-INTENSITY



Compliance with Standards

- ICAO:** Annex 14, Volume I (Current Edition).
- FAA:** L-862(L) and L-862E(L) AC 150/5345-46 and the FAA Engineering Brief No. 67. ETL certified.
- TP 312:** Transport Canada TP 312, para. 5.3.10, 5.3.11 and 5.3.12
- NATO:** STANAG 3316

Uses

ICAO

- Runway Edge for runways up to 60 m wide (ICAO §5.3.9)
- Runway End (ICAO §5.3.11)
- Runway Threshold (ICAO §5.3.10)
- Runway Threshold/End (ICAO §5.3.10)

FAA

- Runway Edge L-862(L)
- Runway End L-862E(L)
- Runway Threshold L-862E(L)
- Runway Threshold/End L-862E(L)

Features

- Available in three versions:
 - IQ with integrated ILCMS
 - Monitored with integrated fail-open technology
 - Non-Mon without monitoring functionality
- Very low energy consumption (typically 30 W for a bidirectional light, and 25 W for an unidirectional light, compared to 120, 150 or 200 W for tungsten halogen lights).
- Greatly reduced maintenance: calculated MTBF of 56,000 hours at 6.6A.
- Increased availability of the runway thanks to the reduction of maintenance.
- Optimum and homogenous light distribution along the lights installed on the same runway.
- High discrimination between functions thanks to the saturated colours, their stability at the different brightness steps and under all viewing angles.

- Full compatibility with existing airfield lighting series circuits. No need to replace the CCRs, series transformers, or cables.
- Fully dimmable lights, respecting the response curve of traditional halogen lights. Operates on the full range of 2.8 A to 6.6 A.
- Installation on same mounting device as most elevated halogen lights, for a straightforward replacement.
- Substantial investment reduction for new installations, resulting from a lower installed load.
- Very low working temperature, ensuring longer component life.
- Rugged lightning protection that complies with ANSI/IEEE C62.41 -1991 Location Category C2 given in FAA Eng. Brief 67. Category C2 is defined as a 1.2/50µS - 8/20 µS combination wave, with a peak voltage of 10,000 V and a peak current of 5,000 A.
- Available in IQ 2A functionality for use in ASP (ILCMS) for further power savings and individual intensity control
- When turned on, light rise time is low. The light is perfectly adapted for any incursion protection system.
- Optional monitoring function of the individual light source. In case of a defect, the LED light automatically disconnects from the secondary side of the isolation transformer, resulting in an open circuit condition.
- Low-profile and small in size to withstand heaviest jet blast, even when installed at threshold/runway end
- Options for either glass or UV-resistant polycarbonate outer lens.
- Leveling and aiming in azimuth of the fixture are easily performed with the dedicated aiming device.
- Three screws allow a 4° leveling adjustment of the fixture after installation.
- Use of LED light source eliminates filter replacement and colour shifts when viewed at various angles or CCR step settings.
- Upper body can be replaced without realignment of the fixture.
- Sealed entry at cord set to optical assembly interface prevents insect entry. IP 55 protection degree.
- Omnidirectional beam for circular guidance is standard for bidirectional Runway Edge fixture. No need for additional optical system.
- Finish: stainless steel hardware, phosphating and baked polyester electrostatic powder coating, aviation yellow color.

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Ordering Code

Elevated LED light

Application

RE = Runway Edge, Threshold End, Threshold⁵ and End

Cover

L = UV-resistant polycarbonate
S = Glass

Cable and Connectors

2 = 1 FAA L823 plug (2-pins)
6 = 1 plug (2-pins) w/Earth ground
8 = 1 external connected plug (2-pins)^{1,7}

Color Left Side

W = White
R = Red
G = Green^{3,4}
Y = Yellow
N = None (Obscured)

Color Right Side

W = White
R = Red
G = Green^{3,4}
Y = Yellow
N = None (Obscured)

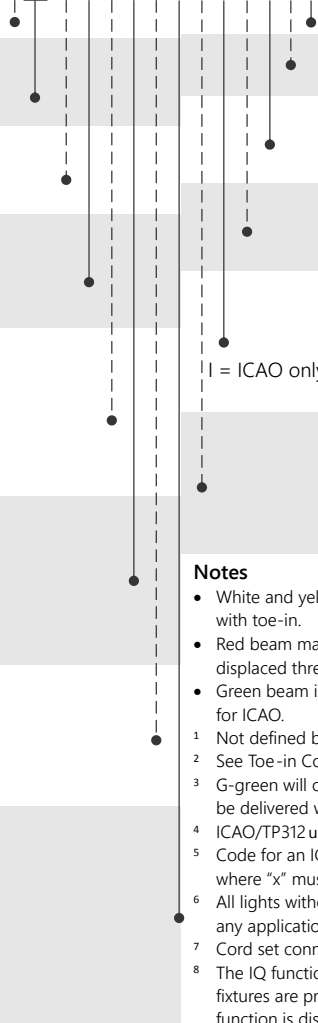
Toe-in²

0 = No toe-in⁴
1 = Left side with toe-in
2 = Right side with toe-in
3 = Both sides with toe-in

Overall Fixture Height/Coupling

1 = 14 in (35.6 cm) with 1.5" coupling, 12 TPI
2 = 20 in (50.8 cm) with 1.5" coupling, 12 TPI
3 = 24 in (61.0 cm) with 1.5" coupling, 12 TPI
5 = 14 in (35.6 cm) with 2" coupling, 11.5 TPI
6 = 20 in (50.8 cm) with 2" coupling, 11.5 TPI
7 = 24 in (61.0 cm) with 2" coupling, 11.5 TPI
9 = 12 in (30 cm) with 2" coupling, 11 TPI^{1,7}

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Version

2 = Improved mechanics

Enhanced Corrosion Resistance

0 = Fixed digit

Arctic Kit

0 = W/out arctic kit
1 = With arctic kit⁹

Options

0 = No option
1 = With bracket for snow rod

Standard

0 = ICAO- and FAA-compliant⁶
F = FAA only (for threshold application only)
I = ICAO only (for threshold/end and threshold application only)⁴
K = Australian (color to MOS 139)

Power Supply and Monitoring

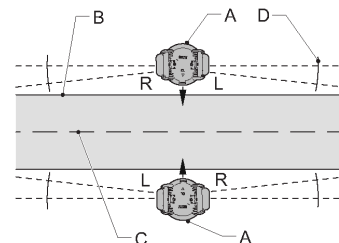
S = 6.6A - 50/60Hz series supply, w/out monitoring
M = 6.6A - 50/60Hz series supply, with monitoring
P = IQ0 version⁸
Q = IQ1 version⁸

Notes

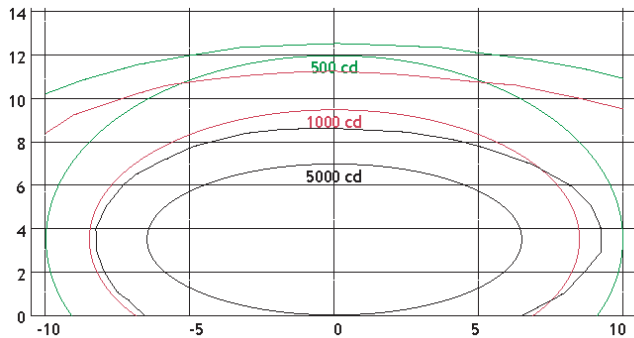
- White and yellow beams are for runway edge application and are always with toe-in.
 - Red beam may be with toe-in for runway edge application (e.g. displaced threshold) or without toe-in for runway end application.
 - Green beam is always with toe-in for FAA applications. See note 4 below for ICAO.
- 1 Not defined by FAA, hence not ETL Certified.
 - 2 See Toe-in Coding diagram for more information.
 - 3 G-green will only be delivered if Standard = K. All other applications will be delivered with F-green (ICAO/FAA).
 - 4 ICAO/TP312 unidirectional threshold light is always without toe-in.
 - 5 Code for an ICAO unidirectional threshold light is ERExxGN0xxlxxx, where "x" must be selected according to the table.
 - 6 All lights without green beam are compliant to ICAO and FAA. Use 0 for any application (FAA, ICAO, TP 312) that does not use green.
 - 7 Cord set connected external to column.
 - 8 The IQ functionality allows control and monitoring of the fixture. IQ1 fixtures are pre-configured for the specific position at delivery. This function is disabled in IQ0 fixtures but could be enabled later.
 - 9 Not with IQ fixtures.

Toe-in Color Coding

For toe-in, the part number scheme assumes the observer is facing both the light and the runway centerline. For example, toe-in option 3 means that both the left and right side are toed in the direction of the centerline. If the equipment (A) has a toe-in (D), the toe-in is in compliance with the relevant ICAO or FAA requirements. The indication left side (L) or right side (R) always refers from the equipment to the centerline (C) of the runway (B).



Photometric Curves



Photometry - Runway Edge 60 meters (white light)

Additional photometric performance data and curves can be found in the Product Center on our website (www.adbsafegate.com) under the "Photometric Data" tab or by contacting your local ADB SAFEGATE representative.

Dimensions and Weight

Diameter and height:	166 × 233 mm (6.54 × 9.17 in) Without mounting interface
Weight:	3.36 kg (7.41 lb)

Accessories

Aiming Device 1408.35.130

Power Supply

Lights have been designed to work with any IEC or FAA compliant transformer up to 150 W. See the manual for calculation of actual circuit VA loads.

Fixture Type	Fixture Load
Without arctic kit	
Bidirectional	33 VA
Unidirectional	29 VA
With arctic kit	
Bidirectional	38 VA
Unidirectional	31 VA