

RELIANCE

Runway Edge, Stopway and Threshold/
End, L-862(L) and L-862E(L)
Bidirectional elevated



Compliance with Standards

ICAO:	Annex 14, Volume I (Current Edition)
EASA:	CS-ADR-DSN
FAA:	L-862(L) and L-862E(L) AC 150/5345-46 and the FAA Engineering Brief No. 67. ETL certified.
T/C:	Transport Canada TP 312, para. 5.3.7, 5.3.8, 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)
- Runway Stopway (ICAO §5.3.16)

FAA

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

Features & Benefits

- Available in three versions:
 - RELIANCE® 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 homogeneous light distribution along the lights installed on the same runway.
- High discrimination between functions thanks to the saturated colors, their stability at the different brightness steps and under all viewing angles.

- Circular guidance achieved by LED closest to the top on each side for applicable applications.
- 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.
- Compatibility between RELIANCE IQ version and RELIANCE Intelligent Lighting 2A system for further power savings and ILCMS.
- 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 color 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.

Ordering Code

Elevated LED light

Application

RE = Runway Edge, Threshold End, Threshold⁵, End, and Stopway¹⁰

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)

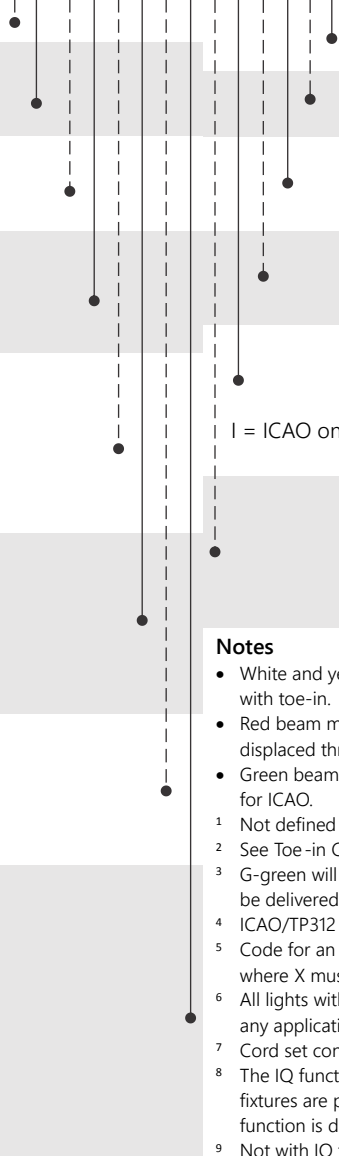
Toe-in²

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
4 = 30 in (76.2 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
8 = 30 in (76.2 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

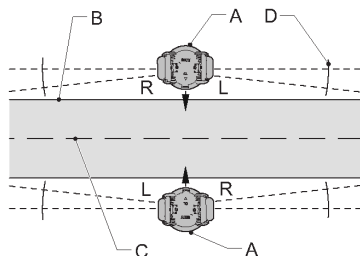
S = 6.6A - 50/60Hz series supply, w/out monitoring
M = 6.6A - 50/60Hz series supply, with monitoring
P = IQ0 version⁸
Q = IQ1 version⁸

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 EREXXGN0XXIXXXX, 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.
 - 10 ICAO Stopway is always unidirectional, red and with toe-in.

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).



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	Isolation Transformer Size	Isol. XF Load	CCR Load
Without Arctic Kit				
Bidirectional	33 VA	30/45 W or 45 W	10 VA	43 VA
Unidirectional	29 VA	20/25 W or 30/45 W	10 VA	39 VA
With Arctic Kit				
Bidirectional	38 VA	30/45 W or 45 W	10 VA	48 VA
Unidirectional	41 VA	30/45 W or 45 W	10 VA	41 VA

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

For more information about the product, including manuals, certifications and photometric data, please see our Product Center on the ADB SAFEGATE website, www.adbsafegate.com.