

RELIANCE

LED Runway Centerline, Touch Down Zone and RETIL, L-850A(L), L-850B(L)
Uni- and bidirectional inset 8-inch and 12-inch



Compliance with Standards (current version)

| | |
|------------------|---|
| FAA | AC 150/5345-46 and FAA Engineering Brief No. 67 |
| ICAO | Annex 14, Volume 1 |
| IEC | 61827 |
| NATO | STANAG 3316 |
| EASA | CS-ADR-DSN |
| STAC | PRO/STAC/SE/ENIS/600S |
| UK | CAP 168 |
| Canada | TP312 |
| Australia | MOS 139 |
| CE | |

Uses

ICAO

- Runway centerline
- Touchdown zone
- RETIL - Rapid Exit Taxiway Indicator Light

FAA

- Runway centerline L-850A(L)
- Touchdown zone L-850B(L)

Features and Benefits

Efficiency

- Available in three versions:
 - RELIANCE™ IQ with integrated intelligence
 - RELIANCE with integrated fail-open (Mon) technology. Fuse resistors are part of the Mon-functionality and spares needs to be ordered separately.
 - RELIANCE Non-MON, non-monitored lights
- Light Emitting Diode (LED) technology that offers a long-lasting light source with low power consumption
- Compatibility between RELIANCE IQ version and RELIANCE Intelligent Lighting 2A system for further power savings and ILCMS
- No visual flicker. PWM is used for some applications to optimize the LED performance and light fixtures show no visual flickering.

Sustainability

- Fully encapsulated all-in-one electronics
- IP68 protected, aluminum housing designed for harsh weather environments, all fastenings in stainless steel
- Reinforced prism available as an option
- Operates on 3- or 5-step ferroresonant or thyristor CCRs designed in compliance with IEC or FAA requirements
- Easy handling and maintenance by modular design with few mechanical parts
- Compatible with existing infrastructure

Safety

- Built-in voltage surge and lightning protection
- Fully dimmable lights, respecting the response curve of traditional halogen lights
- Low protrusion, high-intensity, Style 3 inset light fixtures
- No negative slope in front of the prisms

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Accessories

Refer to the user manual for the 8-inch or 12-inch RELIANCE inset lights.

Power Supply

An integrated, encapsulated 6.6A electronic converter. Two-pole L-823 plug for connection to the transformer. Power factor typically >0.9 at 6.6A.

Refer to the user manual for the 8-inch or 12-inch RELIANCE inset lights and the complete power table and cable loss formula.

Maintenance and Installation

The light fixture can be installed in an 8-inch or 12-inch base. Gaskets are sold separately. Check what gasket and bolts to order depending on base and installation.

Refer to the user manual for the 8-inch or 12-inch RELIANCE lights and to the interoperability information for installation in a specific base.

Operating Conditions

| | | |
|------------------------------|--------------------------------------|--|
| Operating temperature | -60 °C to +55 °C / -76 °F to +131 °F | |
| Storage temperature | -60 °C to +80 °C / -76 °F to +176 °F | |
| Humidity | Up to 100% | |

Dimensions and Weight

| | | |
|-------------------|-----------------|------------------|
| Dimensions | 203 mm / 8-in | 304 mm / 12-in |
| Weight | 3.0 kg / 6.7 lb | 6.3 kg / 13.9 lb |

Ordering Code

Application

RC = Runway Centerline L-850A(L)
 RZ = Touchdown zone L-850B (L)
 RX = RETIL

Prism

S = Standard prism
 R = Reinforced prism

Diameter

1 = 8 in
 2 = 12 in

Type

U = Unidirectional
 B = Bidirectional

Toe-in

S = Straight
 L = Left (for RZ only)
 R = Right (for RZ only)

Options

0 = No options

Color – B Side

W= White
 R = Red
 Y = Yellow

Color – A side

W= White
 R = Red
 N= None

Power and Monitoring

S = 2.8 - 6.6 A, without monitoring (Non-MON)
 M= 2.8 - 6.6 A, with monitoring (with fail-open)
 P = 2.8 - 6.6 A/ 2 A, IQ0 (IQ disabled)
 Q= 2.8 - 6.6 A/ 2 A, IQ1 (IQ enabled)

Standards

I = ICAO only (RX)
 G= Global (RC, RZ)

Cord set type

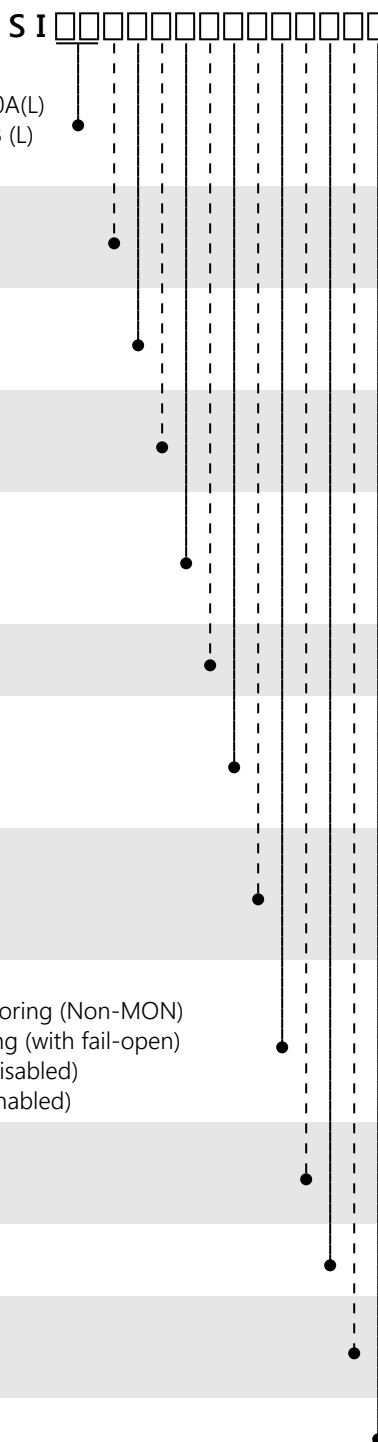
A = FAA Style 6 (2 - pin-) plug

Cable and connector

2 = 1x 2-pin plug
 3 = 2x 2-pin plugs

Version

3 = RELIANCE



Note:

- Toe-in options only affect the touchdown zone L - 850B(L) fixtures
- The IQ functionality allows control and monitoring of the RELIANCE IQ. IQ1 fixtures are pre - configured for the specific position at delivery. This function is disabled in IQ0 fixtures but could be enabled later. IQ light fixtures are only available as a one connector option.

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ANNEX

12- and 8- inch inch light fixtures

| Unidirectional Fixtures – 1 cord set, 25° C | Fixture load | Isolation transformer | | | CCR load |
|---|--------------|-----------------------|------------|------------|----------|
| | | Rating | Efficiency | Energy Use | |
| Runway Centerline, L-850A(L), Red | 19 VA | 25 W | 0.7 | 11 VA | 30 VA |
| Runway Touchdown Zone, L-850B(L), White | 23 VA | 25 W | 0.7 | 11 VA | 34 VA |
| Runway RETIL, Yellow | 19 VA | 25 W | 0.7 | 11 VA | 30 VA |

| Bidirectional Fixtures – 1 cord set, 25° C | Fixture load | Isolation transformer | | | CCR load |
|--|--------------|-----------------------|------------|------------|----------|
| | | Rating | Efficiency | Energy Use | |
| Runway Centerline, L-850A(L), White/White | 31 VA | 45 W | 0.85 | 8 VA | 39 VA |
| Runway Centerline, L-850A(L), White/Red | 26 VA | 45 W | 0.85 | 8 VA | 34 VA |

| Bidirectional Fixtures – 2 cord sets, 25° C | Fixture load | | Isolation transformer | | | | | | CCR load | |
|---|--------------|--------|-----------------------|--------|------------|--------|------------|--------|----------|--------|
| | B-side | A-Side | Rating | | Efficiency | | Energy Use | | B-Side | A-Side |
| | | | B-Side | A-Side | B-side | A-Side | B-Side | A-Side | | |
| Runway Centerline, L-850A(L), White/White | 18 VA | 18 VA | 25 W | 25 W | 0.7 | 0.7 | 8 VA | 11 VA | 29 VA | 29 VA |
| Runway Centerline, L-850A(L), White/Red | 18 VA | 13 VA | 25 W | 25 W | 0.7 | 0.7 | 8 VA | 11 VA | 29 VA | 24 VA |

NOTICE:

- No losses in the secondary cables are considered in the above table(s).
- No losses in the primary cables are considered in the above table(s).
- No spare CCR load has been considered in the above table(s).
- The Isolation transformer efficiency considered in the above table(s) is estimated. These efficiency values depend on the isolating transformer supplier.
- No loads due to extra equipment on the circuit (e.g. ILCMS equipment) are considered in the above table(s).

- For Reliance IQ version:
The minimum Isolation Transformer rating is 65W. To allow for communication bandwidth, an overhead of 12VA should be considered when determining the Isolation Transformer rating.
- For Reliance Fail-open version:
The maximum Isolation Transformer rating is 200W.
- If part of a Reliance 2A system:
The data provided in the above table(s) is not applicable if part of a 2A reliance system. In this case, please contact your local ADB Safegate representative.

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

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Product specifications may be subject to change, and specifications listed here are not binding. Confirm current specifications at time of order.