RELIANCE

LED L-850A(L) Runway Centerline, L-850B(L) Touch Down Zone and RETIL 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/6008

UK CAP 168
Canada TP312
Australia MOS 139

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Uses

ICAO

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

FAA

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

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

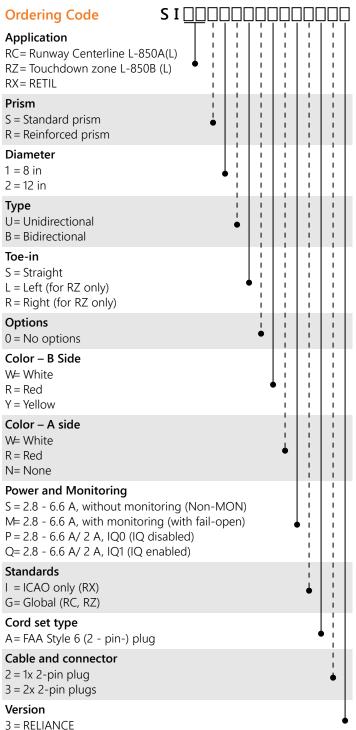
- Fully encapsulated all-in-one electronics
- IP68 protected, aluminum housing designed for harsh weather environments, all fastenings in stainless steel
- · Reinforced prism available as an option
- Operates on 3- or 5-step ferroresonant or thyristor CCRs designed in compliance with IEC or FAA requirements
- 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



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.

Accessories

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

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.

Power Supply

An integrated, encapsulated 6.6A electronic converter. One or two pin L-823 plugs for connection to the transformer(s). 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.

Operating Conditions

Operating temperature $-60 \,^{\circ}\text{C}$ to $+55 \,^{\circ}\text{C}$ / $-76 \,^{\circ}\text{F}$ to $+131 \,^{\circ}\text{F}$ Storage temperature $-60 \,^{\circ}\text{C}$ to $+80 \,^{\circ}\text{C}$ / $-76 \,^{\circ}\text{F}$ to $+176 \,^{\circ}\text{F}$

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



ANNEX

12- and 8- inch inch light fixtures

Unidirectional Fixtures – 1 cord set, 25° C	Fixture load	I	CCR load		
		Rating	Efficiency	Energy Use	CCK load
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	I	CCR load		
		Rating	Efficiency	Energy Use	CCK load
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-Sid	A Sido	Rating		Efficiency		Energy Use		CCK IOdu	
		A-Side	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

Note:

- Additional voltage loss not included in the above table:
 - Primary cables will result in a higher CCR load
 - Longer secondary cables may result in a larger size isolation transformer requirement
 - Loads due to extra equipment on the circuit (e.g. ILCMS equipment)
 - Spare CCR load
- The Isolation transformer efficiency is estimated and values can vary depending on supplier
- For IQ fixtures:
 - The minimum isolation transformer rating is 65W
 - An overhead of 12VA should be considered when determining the isolation transformer rating, to allow for communication bandwidth
- For fail-open fixtures, the maximum isolation transformer rating is 200W
- The Reliance 2A system does not conform to the above data (contact your local ADB Safegate representative)

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

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