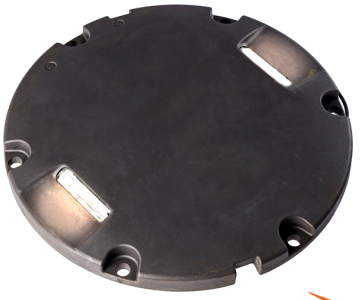
RELIANCE

LED Runway Edge, L-850C(L)

Bidirectional inset 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/VIS
Canada	TP 312
Australia	MOS 139

CE

Uses

ICAO

- Runway edge

FAA

- Runway edge L-850C(L)
- Displaced threshold L-850C(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 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 >0.95 @ 6.6A.

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

Maintenance and Installation

The light fixture can be installed in a 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 12-inch RELIANCE lights and 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	304 mm / 12-in
Weight	6.3 kg / 13.9 lb

Ordering Code

S I R E □□□□□□□□□□□□

Prism
S = Standard prism
R = Reinforced prism

Diameter
2 = 12 in

Type
U = Unidirectional
B = Bidirectional

Toe-in
R = Right (for unidirectional)
L = Left (for unidirectional)
C = Curved (for bidirectional)

Options
0 = No options

Color — B-side
R = Red (for bidirectional)
W= White
Y = Yellow
F = F-Green

Color — A-side
R = Red
W= White
Y = Yellow
F = F-Green
N = Blank

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
F = FAA
G = Global

Cord Set Style
A = Style 6 (2 - pin) plug
F = Flat 3-pin plug (French, only for ICAO standard)

Cable and Connector
2 = 1x 2-pin plug
3 = 2x 2-pin plug (for bidirectional)
4 = 1x 3-pin plug
5 = 2x 3-pin plug (for bidirectional)

Version
3 = RELIANCE

- Fixture supports: Compatible with both shallow and deep 12-inch bases.
- 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.
- A 3-pin cable and connector are only available for the ICAO standard regardless of the color combination.

Note:

ANNEX

Unidirectional Fixtures – 1 cord set, 25° C	Fixture load	Isolation transformer			CCR load
		Rating	Efficiency	Energy Use	
Runway Edge, L-850C(L), White	41 VA	45 W	0.85	8 VA	49 VA
Runway Edge, L-850C(L), Yellow	41 VA	45 W	0.85	8 VA	49 VA
Runway Edge, L-850C(L), F-Green	34 VA	45 W	0.85	8 VA	42 VA

Bidirectional Fixtures – 1 cord set, 25° C	Fixture load	Isolation transformer			CCR load
		Rating	Efficiency	Energy Use	
Runway Edge, L-850C(L), White/White	62 VA	65 W	0.85	11 VA	73 VA
Runway Edge, L-850C(L), White/Yellow	62 VA	65 W	0.85	11 VA	73 VA
Runway Edge, L-850C(L), White/Red	46 VA	65 W	0.85	11 VA	57 VA
Runway Edge, L-850C(L), White/F-Green	54 VA	65 W	0.85	11 VA	65 VA
Runway Edge, L-850C(L), Yellow/F-Green	54 VA	65 W	0.85	11 VA	65 VA
Runway Edge, L-850C(L), Yellow/Red	46 VA	65 W	0.85	11 VA	57 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 Edge, L-850C(L), White/White	35 VA	35 VA	45 W	45 W	0.85	0.85	8 VA	8 VA	43 VA	43 VA
Runway Edge, L-850C(L), White/Yellow	35 VA	35 VA	45 W	45 W	0.85	0.85	8 VA	8 VA	43 VA	43 VA
Runway Edge, L-850C(L), White/Red	35 VA	13 VA	45 W	25 W	0.85	0.7	8 VA	11 VA	43 VA	24 VA
Runway Edge, L-850C(L), White/F-Green	35 VA	28 VA	45 W	45 W	0.85	0.85	8 VA	8 VA	43 VA	36 VA
Runway Edge, L-850C(L), Yellow/F-Green	35 VA	28 VA	45 W	45 W	0.85	0.85	8 VA	8 VA	43 VA	36 VA
Runway Edge, L-850C(L), Yellow/Red	35 VA	13 VA	45 W	25 W	0.85	0.7	8 VA	11 VA	43 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 our website: www.adbsafegate.com.