

RELIANCE

Triple Line Taxiway Centerline Light(3C) Uni- and bidirectional inset 8-inch



Compliance with Standards (current version)

ICAO Annex 14 Volume 1

IEC 61827

CE

Uses

The fixture is available as an 8" bi- or unidirectional low-protrusion inset fixture provided with green, yellow, amber or blue LEDs. This fixture has following application areas:

ICAO

- Triple Centerline

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
- 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

Accessories

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

Power Supply

An integrated, encapsulated 6.6 A electronic converter. Two-pole L-823 plug for connection to the transformer. Length of cable 18 inch. No additional electrical components between light fixtures and transformer needed. Power factor typically >0.9 at 6.6 A.

Note: Refer to the appendix in the user manual for 8-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 and 12-inch with adapter ring. Gaskets are sold separately. Check what gasket and bolts to order depending on base and installation.

Note: Refer to the appendix in the user manual for 8-inch RELIANCE inset lights and the complete power table and cable loss formula.

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%

Dimension and Weight

Dimension 203 mm / 8-in

Weight 2.7 kg / 6.0 lb

RELIANCE

Ordering Code

S I 3 C □ □ □ □ □ □ □ □ □ □

Prism

S = Standard prism
R = Reinforced prism

Diameter

1 = 8 in

Type

U = Unidirectional
B = Bidirectional

Toe in / distribution

0 = Narrow
W = Wide
C = Curved (only for bidirectional)
R = Right (only for unidirectional)
L = Left (only for unidirectional)

Options

0 = No options

Colors(B-side)

F = F-Green
B = Blue
A = Amber

Colors(A-side)

F = F-Green
B = Blue
A = Amber
N = Blank

Power & 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 / 2A IQ1 (IQ enabled)

Standards

0 = No standard

Connector type

A = Style 6 plug

Cable leads

2 = 1x 2-Pole Plug
3 = 2x 2-Pole Plugs

Version control

3 = RELIANCE

Note:

- Fixture is compatible with both shallow 8" and 12" and with adapter ring, check base compatibility matrix.
- The IQ - functionality allows control and monitoring of the RELIANCE IQ. IQ1 fittings 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 with connector option 2.
- Amber and blue are not applicable to ICAO chromaticity standard.

ANNEX

8-inch light fixtures

Unidirectional Fixtures – 1 cord set, 25° C	Fixture load	Isolation transformer			CCR load
		Rating	Efficiency	Energy Use	
Taxiway Centerline Curved, Blue	24 VA	25 W	0.7	11 VA	35 VA
Taxiway Centerline Wide, F-Green	17 VA	25 W	0.7	11 VA	28 VA
Taxiway Centerline Wide, Amber	17 VA	25 W	0.7	11 VA	28 VA

Bidirectional Fixtures – 1 cord set, 25° C	Fixture load	Isolation transformer			CCR load
		Rating	Efficiency	Energy Use	
Taxiway Centerline Curved, Blue/Blue	30 VA	45 W	0.85	8 VA	38 VA
Taxiway Centerline Curved, F-Green/Amber	19 VA	25 W	0.7	11 VA	30 VA
Taxiway Centerline Wide, F-Green/F-Green	19 VA	25 W	0.7	11 VA	30 VA
Taxiway Centerline Wide, Amber/Amber	19 VA	25 W	0.7	11 VA	30 VA
Taxiway Centerline Wide, Amber/F-Green	22 VA	25 W	0.7	11 VA	33 VA
Taxiway Centerline Wide, Blue/Blue	23 VA	25 W	0.7	11 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		
Taxiway Centerline Narrow, F-Green/F-Green	10 VA	10 VA	25 W	25 W	0.7	0.7	11 VA	11 VA	21 VA	21 VA
Taxiway Centerline Narrow, Amber / Amber	10 VA	10 VA	25 W	25 W	0.7	0.7	11 VA	11 VA	21 VA	21 VA
Taxiway Centerline Narrow, F-Green/ Amber	10 VA	10 VA	25 W	25 W	0.7	0.7	11 VA	11 VA	21 VA	21 VA
Taxiway Centerline Curved, F-Green/F-Green	11 VA	11 VA	25 W	25 W	0.7	0.7	11 VA	11 VA	22 VA	22 VA
Taxiway Centerline Curved, Amber/Amber	11 VA	11 VA	25 W	25 W	0.7	0.7	11 VA	11 VA	22 VA	22 VA
Taxiway Centerline Curved, Blue/Blue	18 VA	18 VA	25 W	25 W	0.7	0.7	11 VA	11 VA	29 VA	29 VA
Taxiway Centerline Curved, F-Green/Amber	11 VA	11 VA	25 W	25 W	0.7	0.7	11 VA	11 VA	22 VA	22 VA
Taxiway Centerline Wide, F-Green/F-Green	11 VA	11 VA	25 W	25 W	0.7	0.7	11 VA	11 VA	25 VA	25 VA
Taxiway Centerline Wide, Amber/Amber	11 VA	11 VA	25 W	25 W	0.7	0.7	11 VA	11 VA	22 VA	22 VA
Taxiway Centerline Wide, Amber/F-Green	11 VA	11 VA	25 W	25 W	0.7	0.7	11 VA	11 VA	22 VA	22 VA
Taxiway Centerline Wide, Blue/Blue	18 VA	18 VA	25 W	25 W	0.7	0.7	11 VA	11 VA	29 VA	29 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.

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