

RELIANCE

LED Taxiway Centerline, Lead-on/Exit,
Apron Lead-in, L-852C(L), L-852D(L),
L-852K(L)

Uni- and bidirectional inset 8-inch and
12-inch



Compliance with Standards (current version)

FAA	AC 150/5345-46 and the 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

- Taxiway centerline
- Lead-on/exit taxiway
- Intermediate holding position

FAA

- Taxiway centerline L-852C(L), L-852D(L), L-852K(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 8-inch and 12-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 and 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.

Note: Refer to the appendix in the user manual for 8-inch and 12-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	304 mm / 12-in
Weight	2.7 kg / 6.0 lb	6.3 kg / 13.9 lb

Ordering Code

Prism

S = Standard prism
R = Reinforced prism

Diameter

1 = 8 in
2 = 12 in

Type

U = Unidirectional
B = Bidirectional

Light Distribution

N = Narrow
W = Wide (ICAO)
C = Curved (bidirectional)
R = Right (unidirectional)
L = Left (unidirectional)
D = L-852D

Options

0 = No options

Color – B Side

G = G-Green (ICAO and MOS)
F = F-Green (ICAO and FAA)
Y = Yellow
R = Red
B = Blue

Color – A side

G = G-Green (MOS and ICAO)
F = F-Green (standard green for ICAO and FAA)
Y = Yellow
R = Red
B = Blue
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
G = Global

Cord set type

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

Cable and connector

2 = 1x 2-pin plug
3 = 2x 2-pin plug
4 = 1x 3-pin plug
5 = 2x 3-pin plug

Version

3 = RELIANCE

S I T C

Note:

- Fixture is compatible with both shallow 8" and 12" and deep 12" bases, 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.
- Red is only available in 8 inch.
- Blue is only available in 8 inch.
- For global standard, the following color codes are used -
 - Narrow color combinations : FF, FY, YF, YY, FN and YN
 - Curved (C,R,L,D) color combinations : FF, YY, FN, and YN
- A 3-pin cable and connector are only available for the ICAO standard regardless of the color combination.

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ANNEX

12- and 8-inch light fixtures

Unidirectional Fixtures – 1 cord set, 25° C	Fixture load	Isolation transformer			CCR load
		Rating	Efficiency	Energy Use	
Taxiway Centerline Narrow, L-852C(L), F-Green	16 VA	25 W	0.7	11 VA	27 VA
Taxiway Centerline Narrow, L-852C(L), Yellow	16 VA	25 W	0.7	11 VA	27 VA
Taxiway Centerline Narrow, G-Green	18 VA	25 W	0.7	11 VA	29 VA
Taxiway Centerline Curved, L-852K(L), F-Green	17 VA	25 W	0.7	11 VA	28 VA
Taxiway Centerline Curved, L-852K(L), Yellow	17 VA	25 W	0.7	11 VA	28 VA
Taxiway Centerline Curved, G-Green	20 VA	25 W	0.7	11 VA	31 VA
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, Yellow	17 VA	25 W	0.7	11 VA	28 VA
Taxiway Centerline Wide, G-green	18 VA	25 W	0.7	11 VA	29 VA
Taxiway Centerline L-852D(L), F-Green	19 VA	25 W	0.7	11 VA	30 VA
Taxiway Centerline L-852D(L), Yellow	18 VA	25 W	0.7	11 VA	29 VA

Bidirectional Fixtures – 1 cord set, 25° C	Fixture load	Isolation transformer			CCR load
		Rating	Efficiency	Energy Use	
Taxiway Centerline Narrow, G-Green/G-Green	19 VA	25 W	0.7	11 VA	30 VA
Taxiway Centerline Narrow, L-852C(L), F-Green/F-Green	16 VA	25 W	0.7	11 VA	27 VA
Taxiway Centerline Narrow, L-852C(L), Yellow/Yellow	16 VA	25 W	0.7	11 VA	27 VA
Taxiway Centerline Narrow, L-852C(L), F-Green/Yellow	16 VA	25 W	0.7	11 VA	27 VA
Taxiway Centerline Narrow, G-Green/Yellow	18 VA	25 W	0.7	11 VA	29 VA
Taxiway Centerline Curved, G-Green/G-Green	24 VA	25 W	0.7	11 VA	35 VA
Taxiway Centerline Curved, L-852K(L), F-Green/F-Green	19 VA	25 W	0.7	11 VA	30 VA
Taxiway Centerline Curved, L-852K(L), Yellow/Yellow	19 VA	25 W	0.7	11 VA	30 VA
Taxiway Centerline Curved, Red/Red	22 VA	25 W	0.7	11 VA	33 VA
Taxiway Centerline Curved, Blue/Blue	30 VA	45 W	0.85	8 VA	38 VA
Taxiway Centerline Curved, F-Green/Yellow	19 VA	25 W	0.7	11 VA	30 VA
Taxiway Centerline Curved, G-Green/Yellow	22 VA	25 W	0.7	11 VA	33 VA
Taxiway Centerline Wide, G-Green/G-Green	24 VA	25 W	0.7	11 VA	35 VA
Taxiway Centerline Wide, F-Green/F-Green	19 VA	25 W	0.7	11 VA	30 VA
Taxiway Centerline Wide, Yellow/Yellow	19 VA	25 W	0.7	11 VA	30 VA
Taxiway Centerline Wide, Yellow/F-Green	22 VA	25 W	0.7	11 VA	33 VA
Taxiway Centerline Wide, Yellow/G-Green	30 VA	45 W	0.85	8 VA	38 VA
Taxiway Centerline Wide, Blue/Blue	23 VA	25 W	0.7	11 VA	34 VA
Taxiway Centerline L-852D(L), F-Green/F-Green	21 VA	25 W	0.7	11 VA	32 VA
Taxiway Centerline L-852D(L), Yellow/Yellow	22 VA	25 W	0.7	11 VA	33 VA
Taxiway Centerline L-852D(L), Yellow/F-Green	22 VA	25 W	0.7	11 VA	33 VA
Taxiway Centerline extra wide, Red/Yellow	22 VA	25 W	0.7	11 VA	33 VA
Taxiway Centerline L-852D(L), Red/Red	24 VA	25 W	0.7	11 VA	35 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, G-Green/G-Green	12 VA	12 VA	25 W	25 W	0.7	0.7	11 VA	11 VA	23 VA	23 VA
Taxiway Centerline Narrow, L-852C(L), 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, L-852C(L), Yellow/Yellow	10 VA	10 VA	25 W	25 W	0.7	0.7	11 VA	11 VA	21 VA	21 VA
Taxiway Centerline Narrow, L-852C(L), F-Green/Yellow	10 VA	10 VA	25 W	25 W	0.7	0.7	11 VA	11 VA	21 VA	21 VA
Taxiway Centerline Narrow, G-Green/Yellow	12 VA	10 VA	25 W	25 W	0.7	0.7	11 VA	11 VA	23 VA	21 VA
Taxiway Centerline Curved, G-Green/G-Green	14 VA	14 VA	25 W	25 W	0.7	0.7	11 VA	11 VA	25 VA	25 VA
Taxiway Centerline Curved, L-852K(L), 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, L-852K(L), Yellow/Yellow	11 VA	11 VA	25 W	25 W	0.7	0.7	11 VA	11 VA	22 VA	22 VA
Taxiway Centerline Curved, Red/Red	13 VA	11 VA	25 W	25 W	0.7	0.7	11 VA	11 VA	24 VA	24 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/Yellow	11 VA	11 VA	25 W	25 W	0.7	0.7	11 VA	11 VA	22 VA	22 VA
Taxiway Centerline Curved, G-Green/Yellow	14 VA	11 VA	25 W	25 W	0.7	0.7	11 VA	11 VA	25 VA	22 VA
Taxiway Centerline Wide, G-Green/G-Green	14 VA	14 VA	25 W	25 W	0.7	0.7	11 VA	11 VA	25 VA	25 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, Yellow/Yellow	11 VA	11 VA	25 W	25 W	0.7	0.7	11 VA	11 VA	22 VA	22 VA
Taxiway Centerline Wide, Yellow/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, Yellow/G-Green	14 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
Taxiway Centerline L-852D(L), F-Green/F-Green	13 VA	13 VA	25 W	25 W	0.7	0.7	11 VA	11 VA	24 VA	24 VA
Taxiway Centerline L-852D(L), Yellow/Yellow	12 VA	12 VA	25 W	25 W	0.7	0.7	11 VA	11 VA	23 VA	23 VA
Taxiway Centerline L-852D(L), Yellow/F-Green	13 VA	12 VA	25 W	25 W	0.7	0.7	11 VA	11 VA	24 VA	23 VA
Taxiway Centerline extra wide, Red/Yellow	14 VA	12 VA	25 W	25 W	0.7	0.7	11 VA	11 VA	25 VA	23 VA
Taxiway Centerline L-852D(L), Red/Red	14 VA	14 VA	25 W	25 W	0.7	0.7	11 VA	11 VA	25 VA	25 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 ADB SAFEGATE Product Center at www.adbsafegate.com.