

AXON

LED Runway Guard Light, L-852G(L) Unidirectional Inset 8-inch and 12-inch



Compliance with Standards (current version)

FAA AC 150/5345-46 and Engineering Brief No. 67

ICAO Annex 14 Volume 1

IEC 61827

Canada TP 312

CE

Uses

ICAO

- Runway guard light

FAA

- L-852G(L) Runway guard light

Features and Benefits

Efficiency

- Autonomous version for applications where fixtures are not electronically monitored. Synchronization circuitry is contained within each fixture, eliminating the need for any synchronizing Local Control Devices. Fixture connects directly into isolation transformer. Fixtures will ship either flash-on or flash-off as per the ordering code.

- EQ has an integrated ILCMS remote for use with the LINC 360 system providing high data capacity and resisting degradation from various types or radio effects to provide a superior communication platform.

- Precision aimed optics enhancing photometric performance and complementing extended LED life.

- Lowered pan profile enables shallow base can installation.

- LEDs pulse width modulated (PWM) at 400 Hz optimizing LED performance and eliminating perceptible flicker to a moving human observer throughout the range of brightness steps.

- Operates at all steps of constant current regulator technologies designed in compliance with IEC or FAA requirements.

- Fully dimmable lights, conforming to the dimming curve of traditional halogen lights.

- Low protrusion, high-intensity, Style 3 (≤ 6.35 mm) inset light.

- No negative slope in front of the prisms.

Sustainability

- Fully encapsulated all-in-one universal power supplies for Runway, Taxiway, Approach and Omni inset families.
- Latest generation LEDs providing a long-lasting light source with high efficiency and low power consumption.
- Reinforced top cover substantially exceeding standards to improve durability and longevity.
- One single family of fixtures covering all runway, taxiway and approach applications.
- IP68 rated enclosure designed for harsh environments; all fastenings are stainless steel.
- Reinforced prism available as an option.
- Compatible with existing infrastructure allowing for direct replacement of existing LED inset fixtures.

Safety

- Improved mechanical design to strengthen and consolidate components, improving the customer maintenance experience.
- Failed-LED Detection as required by Engineering Brief 67D.
- Robust lightning protection complying with ANSI/IEEE C62.41-1991; Location Category C2 as required by FAA. Eng. Brief 67. Category C2 is defined as a $1.2/50\mu\text{S} - 8/20\mu\text{S}$ combination wave, with a peak voltage of 10,000 V and a peak current of 5,000 A.

Power Supply

- Non-Monitored — Power only with Autonomous Flash-On/Flash-Off programming. Allows for local flash programming via local programming device.
- EQ with integrated ILCMS with OFDM technology for use with LINC 360 system.

Local Programming Device - Part Number 61A0458



A Local Programming Device can be ordered for the autonomous version to change flash programming of an individual fixture to Flash-ON or Flash-OFF. The device can also be used to program variable start up delays on longer circuits. This effectively reduces the load variation on a CCR that powers multiple RGL bars.

Ordering Code

Application

RG= L-852(L) Runway Guard Light

Standards

1 = FAA/ICAO

Market Specific

0 = None

1 = Buy American Preference¹

Dimensions

1 = 8 inch (203 mm) diameter

2 = 12 inch (304 mm) diameter, 11.25 inch BC (285 mm)

3 = 8 inch (203 mm) diameter, 4-bolt²

Prism

S = Standard prism

R = Reinforced prism

Beam Orientation

1 = Unidirectional

Toe-in

N= None

Color (Side 1 – Left)

Y = Yellow

Programming (Side 2 – Right)³

0 = Flash-off

1 = Flash-on

Power and Monitoring

R= 2.8 A - 6.6 A, EQ Integrated - LINC 360

S= 2.8 A - 6.6 A Non-Monitored - Autonomous

Cable and Connector

1 = 1 x Style 6 2-pole plug, 2 individual wires⁴

2 = 1 x Style 1 2-pole plug, jacketed SO 2 core cable^{4,5}

5 = 1 x Flat 3-pole plug, 3 Individual Wires⁴

Options

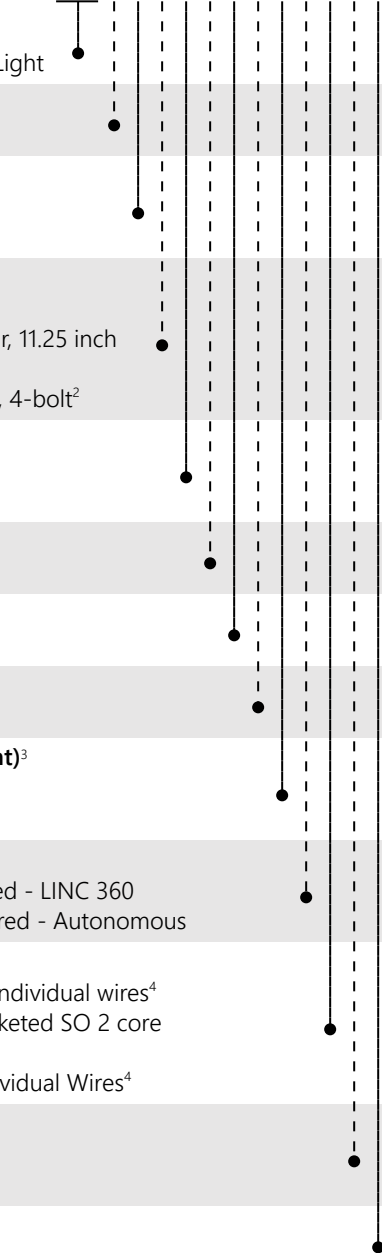
0 = None

1 = Arctic Kit

Version Control

1 = Version 1

RS



¹ Required for USA FAA market.

² 8"- 4 bolt top cover fixtures are not compatible with 8" shallow bases.

³ Side 2 will include a non-light producing window on the autonomous version which provides access to the internal optical sensor, allowing the Local Programming Device to change flash programming. All fixtures must be ordered as either flash-off or flash-on. Typically, it is a 50/50 split between the two options.

⁴ All Style 1 corded fixtures will include a ground lug. All Style 6 or 3-pole corded fixtures will be provided with grounding screw(s).

⁵ Style 1 SO cord-set not compatible with 8" shallow bases using side entry.

Maintenance and Installation

The light fixture can be installed on 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 user manual UM-5055 for the 8-inch or 12-inch lights and to the interoperability information for installation on 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 / 6.6 lb (8 in) 6.8 kg / 15 lb (12 in)

ANNEX

8 and 12-inch light fixtures without Arctic Kit (heater)

Fixture type – 1 cord set	Fixture load	Isolation transformer		CCR load
		Wattage	Load	
Runway Guard Light, L-852(L), Autonomous	26 VA	25 W	8 VA	34 VA
Runway Guard Light, L-852(L), EQ / LINC 360	28 VA	45 W	10 VA	38 VA

8 and 12-inch light fixtures with Arctic Kit (heater)

Fixture type – 1 cord set	Fixture load	Isolation transformer		CCR load
		Wattage	Load	
Runway Guard Light, L-852(L), Autonomous	43 VA	45 W	9 VA	52 VA
Runway Guard Light, L-852(L), EQ / LINC 360	45 VA	45 W	9 VA	54 VA

Note:

- The maximum rating for the isolation transformer is 200W.
- Additional voltage loss when longer secondary cables are used is not included in above table; these additional losses may result in a larger size isolation transformer requirement and must be factored into the circuit load calculation.
- Additional voltage loss in primary cable is not included in above table; this additional loss will result in a higher CCR load and must be factored into the circuit load calculation.
- Efficiency of the isolation transformer depends on the manufacturer of the transformer.

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