

# TAXIWAY LIGHTING

## IRGL-L

### LED In-Pavement Runway Guard Light STYLE 3, MEDIUM-INTENSITY



Top cover for small pan



Top cover for intermediate pan

#### Compliance with Standards

- FAA:** L-852G(L) AC 150/5345-46 (Current Edition) and the FAA Engineering Brief No. 67. Meets the requirements of Low Visibility Taxiway Lighting Systems as specified by FAA AC 150/5340-30. ETL Certified.
- ICAO:** Annex 14, Vol. 1, Ed. 6, Appendix 1, par. 2.1.1 and Fig. A2-20
- T/C:** Transport Canada AC 302-005 par. 4.1.4 and Fig. 9
- CE:** Complies with the requirements of the EMC Directive 2004/108/EC

#### Uses

##### FAA L-852G(L) ICAO & T/C

- Runway guard light
- Runway incursion prevention

#### Features

- FAA Style 3 ( $\leq 0.25$  inch) provides a low protrusion above ground, which reduces vibrations caused by aircraft landing gear in both the light fixture and the landing gear, increasing lamp life.
- Operates on either 3- or 5-step ferroresonant or thyristor CCRs that are designed in compliance with IEC or FAA requirements.
- Can be retrofit on existing 6.6 A or 20 A series circuits using existing CCRs and ADB SAFEGATE Local Control Devices. Requires the addition of a Y-Harness adapter. Adapter connects isolation transformer to both the input of the Local Control Device and the fixture. In electronically monitored applications, fixture opens existing Local Control Device output connection, providing an alarm signal in case of fixture failure.
- An autonomous version is available for applications where fixture failures 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. A simple, separate Remote Control Device is used to set the fixture to Initial ON or Initial OFF. The Remote Control Device can also be optionally used to program variable start up delays (for an entire RGL bar). This effectively reduces the load variation on a CCR that powers multiple RGL bars.
- Thermostatically controlled heater cycles on only when there is a potential for freezing, reducing overall energy consumption. Heater option not available with Style 2 (small pan).

- Light channel in front of prism windows protects prisms from damage and prevents rubber buildup thereby maintaining optimal light output.
- Use of LED light source eliminates filter replacement and color shifts when viewed at various angles or CCR step settings.
- LED photometric performance will be maintained longer due to a cleaner lens. The lower temperature of the lens prevents the “baking effect” that causes contaminants to stick to the surface of the lens.
- Fixture uses aluminum alloy cover and inner cover, stainless steel hardware, and aluminum alloy and stainless steel optical assembly.
- Rugged lightning protection complies with ANSI/IEEE C62.41- 1991 Location Category C2 given in 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.
- Includes a UL 467 rated ground lug, which accepts an AWG 6 earth ground wire.

#### Power Supply

6.6 A from an L-830 (for 60 Hz) or L-831 (for 50 Hz) isolation transformer.

Application <sup>1</sup>	Fixture Load <sup>2</sup>	Isol. XF Size	Isol. XF Load <sup>2</sup>	CCR Load <sup>2</sup>
<b>L-852G(L) without arctic kit</b>				
Autonomous	28 VA	30/45 W	6 VA	34 VA
Local Control <sup>3</sup>	58 VA	65 W	13 VA	71 VA
<b>L-852G(L) with arctic kit</b>				
Autonomous	68 VA	100 W	15 VA	83 VA
Local Control <sup>3</sup>	98 VA	150 W	15 VA	113 VA

#### Notes

- <sup>1</sup> Data is for a ferroresonant CCR only. Contact the ADB SAFEGATE Sales Department for thyristor/SCR CCR data.
- <sup>2</sup> All load data is average load per fixture for applications where the entire load alternately flashes.
- <sup>3</sup> Fixture load includes worst case Local Control Device load.

# TAXIWAY LIGHTING

## IRGL-L

### Ordering Code

IRGL - X X X X 1

#### Power / Control

- 1 = LINC 360 Compatible<sup>1</sup>
- 2 = Autonomous, Initial Flash ON<sup>2</sup>
- 3 = Autonomous, Initial Flash OFF<sup>2</sup>
- 4 = BRITE II Compatible<sup>1</sup>

#### Frequency

- 1 = 60 Hz
- 2 = 50 Hz

#### Arctic Option

- 1 = No<sup>3</sup>
- 2 = Yes<sup>4</sup>

#### Pan Size

- 1 = Intermediate
- 2 = Small<sup>5</sup>

#### Optical Configuration

- 1 = Two window version

#### Notes

- <sup>1</sup> Used on electronically monitored applications. Must be used with a LINC 360 or BRITE II remote device on new or retrofit applications. Requires use of Y-Harness Adapter.
- <sup>2</sup> Used on non-electronically monitored applications without Local Control Devices. Fixture connected directly to L-830/L-831 isolation transformer. Requires use of Remote Programming Device.
- <sup>3</sup> If Power/Control options 2 or 3 are selected, must choose option 2 "Small" under Pan Size option.
- <sup>4</sup> Can only be ordered with intermediate pan size.
- <sup>5</sup> Can only be ordered with Power/Control options 2 or 3 (autonomous).

#### Y-Harness Adapter

70A0761

**Note:** Required to use Runway Guard Light fixture with new or existing Local Control Device

#### Remote Programming Device

61A0458

**Note:** Required with autonomous fixtures to modify initial flash ON or OFF or to adjust CCR loading. One device required per installation.

### Operating Conditions

Temperature: -40 °C to +55 °C / -40 °F to +131 °F  
 Altitude: Sea level to 10,000 feet / 3000 m  
 Relative Humidity: Up to 100%

### Dimensions

Outside diameter: 11.94 in / 30.33 cm  
 Bolt-circle diameter (L-868B): 11.25 in / 28.58 cm

### Packaging

In cardboard box: 7 × 13 × 13 in / 17.8 × 33 × 33 cm  
 Weight with packing: 21 lb / 9.3 kg  
 Weight without packing: 18 lb / 8 kg

### FAA Photometric Data

