APPROACH LIGHTING

REIL-L

LED Runway End Identification Light





REIL-C REIL-AE

Compliance with Standards

FAA: L-849(L) Style A, C or E AC 150/5345-51 (Current Edition) and the FAA Engineering Brief No. 67. ETL Certified.

ICAO: Annex 14, Vol. 1, para. 5.3.8

Uses

LED REIL provides a visual indication to pilots of the runway threshold during an approach.

L-849V

· Powered by a voltage source

I -849T

· Powered by a constant current regulator

Style A

· High-Intensity/Single-Step

Style C

· Low-Intensity/Single-Step

Style E

• High-, Medium-, and Low-Intensity/Three-Step

The L-849(L) Style C is recommended when there are lower levels of background illumination in the surrounding area.

Features

- · Long LED life
- Improved safety Very low voltage internal to LED REIL vs. 2000 VDC in traditional xenon flash lamp units
- Elimination of expensive xenon flash lamp replacement
- Energy savings of up to 33% for L-849A(L)/L-849E(L) voltagedriven, up to 78% for L-849C(L) voltage-driven, and up to 96% for any series circuit application with power adapters. The LED REIL can be driven directly from series circuit via an isolation transformer, no power adapter is required.
- Elimination of ozone, generated by xenon flash lamps, an oxidant that degrades internal component life

- Includes external alarm indication in case of system fault. System fault indication for:
 - Loss of input power
 - > 25% LEDs failed
 - Number of misfires exceeded (switch selectable from 0-7)
- For current sensing applications, the L-849I REIL does not need a separate current sensing isolation transformer
- Due to robust primary to secondary flasher unit trigger signal design, a shielded trigger signal cable is not required
- · Easier to install due to reduced size and weight
- · Easier to service due to much simpler design
- · NEMA 4 rated enclosure
- · Field tested

Operating Conditions

Temperature: -40 °F to +131 °F (-40 °C to +55 °C)

Humidity: 0 to 100% (including conditions where condensation

takes place in the form of water or frost)

Altitude: 0 to 10,000 ft (3,000 m)

Wind: Velocities up to 150 knots

Exposure: Withstands windblown rain, sand, dust particles, and a

salt-laden atmosphere

Optional Features

- On/Off Maintenance Switch for current-driven only is available. Use Part No. 94A0609.
- The L-849 using a single leg enclosure is normally installed onto a threaded coupling which is attached to the end of a conduit elbow. Alternatively, a 6.25-inch (15.88 cm) O.D. floor flange can be bolted over any conduit elbow flush with the top of the pad. Use ADB Part No. 62B0107-3.
- Baffle: If 15° beam axis is operationally objectionable on the L-849 REIL, an optional baffle kit is available. If used, REILs are set at +3° vertical and +10° horizontal. ADB Kit Numbers:
 - Style C: 94A0198-LED

1

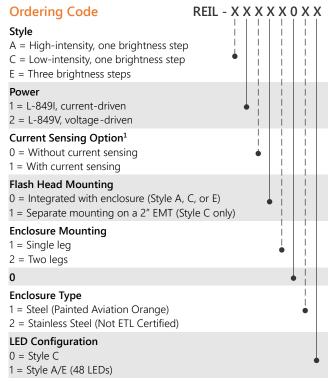
- Style A/E: 94A0658-1 and 94A0658-2



2086 Rev. O

APPROACH LIGHTING

REIL-L



Note

The current sensing option provides ON/OFF control (L -849(L) Style A/Style C) or 3-step intensity control (L -849(L) Style E) of the REIL system depending on the current level in the series lighting circuit. The L -849I (powered by a CCR) doesn't require a separate isolation transformer – The input current from the isolation transformer that powers the Primary cabinet is also used for current sensing control. The current sensing input of an L-849V (voltage-powered) can be connected to 6.6 A or 20 A series circuits with an appropriate 6.6/6.6 A or 20/6.6 A isolation transformer.

Photometric Data

Style	High Intensity (cd)	Medium Intensity (cd)	Low Intensity (cd)
L-849(L) Style A	15,000	N/A	N/A
L-849(L) Style C	N/A	N/A	700
L-849(L) Style E	15,000	1,500	300

Note: Candelas above are within a beam pattern of 10° vertical by 30° horizontal for each flasher. Tolerance of 50% in effective intensity.

Equipment Data

Control	Remote, local, or automatic (when current sensing used)
Flash Rate	120 flashes per minute. Both optical assemblies flash simultaneously with less than a 10-millisecond separation.
Light Beam	Adjustable vertically from 0° to 15° and horizontally 15° each side of the zero reference point. The horizontal scale is in 1° increments and the vertical scale is in 0.5° increments. Nominal setting is +10° vertical and +15° horizontal.
Light Source Locking	A positive locking device prevents accidental movement of LED light assembly after aiming
Mounting	Each REIL cabinet with frangible coupling (supplied) can be mounted on a concrete pad with a 2-inch NPT pipe or with an optional floor flange
Enclosure	The cabinets can be padlocked and include an interlock switch to disconnect input power when the cabinet door is open

Power Supply

The REIL system operates from a 240 VAC (2-wire) or 120/240 VAC (3-wire), ±10%, 50/60 Hz power supply. The REIL system can also operate from a series lighting circuit using a 6.6 A/6.6 A or 20 A/ 6.6 A L-830/L-831 isolation transformer at each unit.

Maximum Power Requirements				
Style	Each Unit	Total		
L-849(L) Type V				
A/E	171 VA	342 VA		
С	45 VA	90 VA		
L-849(L)Type I				
A/E	108 VA ¹	216 VA ²		
C ³	53 VA ⁴	106 VA ²		
C ⁵	86 VA ⁶	172 VA ²		

Notes

2

- ¹ Use 200 W isolation transformer each unit
- ² This is total CCR load and includes isolation transformer losses.
- ³ Without current sensing
- ⁴ Use 30/45 W isolation transformer each unit
- ⁵ With current sensing
- ⁶ Use 100 W isolation transformer each unit



2086 Rev. O

APPROACH LIGHTING

REIL-L

Packaging

L-849 Style A/E			
Weight	46 lb (20.9 kg) each assembly		
REIL Enclosure Dimensions (H x W x D)	16 x 20 x 9 in (40.6 x 50.8 x 22.9 cm)		
Packaging Dimensions	31 x 31 x 35 in (78.74 x 78.74 x 88.9 cm)		
L-849 Style C			
Weight	40 lb (18.1 kg) each assembly		
REIL Enclosure Dimensions (H x W x D)	16 x 16 x 9 in (40.6 x 40.6 x 22.9 cm)		
Packaging Dimensions	31 x 31 x 35 in (78.74 x 78.74 x 88.9 cm)		

Note: Packaging is for information purposes only and is based on one palletized box containing one primary and one secondary cabinet

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