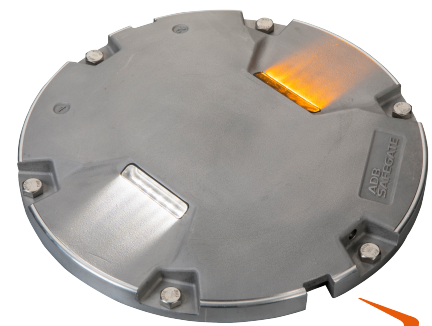


# AXON

LED L-850C(L) Runway Edge  $\leq 45$  m  
Width Runway

Uni and Bidirectional Inset, 12-inch



ADB SAFEGATE  
**AXON**

## Compliance with Standards

<b>FAA</b>	AC 150/5345-46 and FAA Engineering Brief No. 67; ETL Certified
<b>ICAO</b>	Annex 14, Volume 1
<b>IEC</b>	61827
<b>NATO</b>	STANAG 3316
<b>EASA</b>	CS-ADR-DSN
<b>STAC</b>	SPE/STAC/SE/E/VIS/6008
<b>UK</b>	CAP 168
<b>UFC</b>	3-535-01
<b>Canada</b>	TP 312
<b>Australia</b>	MOS 139
<b>CE</b>	

## Uses

### ICAO

- Runway edge  $\leq 45$  m width runway

### FAA

- L-850C(L) runway edge
- L-850C(L) displaced threshold

## Features and Benefits

### Efficiency

- EQ has an integrated ILCMS remote for use with the LINC 360 system providing high data capacity and resisting degradation from various types of radio effects to provide a superior communication platform
- Precision aimed optics enhancing photometric performance and complementing extended LED life
- Reduced bottom pan profile allowing for very shallow base can installation
- LED 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 ( $\leq 6.35$  mm) inset light fixtures
- 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 (directional beams only)
- 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
- Fail-open option for compatibility with legacy monitoring systems and optimization of advanced control and monitoring systems
- 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 Engineering Brief 67 Category C2 is defined as a 1.2/50  $\mu$ S – 8/20  $\mu$ S combination wave, with a peak voltage of 10,000 V and a peak current of 5,000 A

## Ordering Code

Application	Standard(s)	Market Specific	Dimensions	Prism	Beam Orientation	Toe-in	Color - Side 1 (Left)	Color - Side 2 (Right)	Power and Monitoring	Connector and Cable <sup>5</sup>	Options	Version
RS												

### Application

RE = L-850C(L) Runway Edge ≤ 45 m width

### Standard(s)

1 = FAA / ICAO<sup>1</sup>

### Market Specific

0 = None

1 = Buy American Preference (BAP)<sup>1,2</sup>

4 = German MIL 7-step FO<sup>9</sup>

### Dimensions

2 = 12 inch (305 mm) diameter, 11.25 inch BC (285 mm)

### Prism

S = Standard prism

R = Reinforced prism<sup>9</sup>

### Beam Orientation

1 = Unidirectional

2 = Bidirectional

### Toe-in

L = Left Side Toe-in (Unidirectional)

R = Right Side Toe-in (Unidirectional)

C = Both Sides Toe-in (Bidirectional)

### Color - Side 1 (Left)

W = White

Y = Yellow

R = Red

F = F-Green (ICAO, default green)

### Color - Side 2 (Right)

W = White

Y = Yellow

R = Red

F = F-Green (ICAO, default green)

### Power and Monitoring

S = 2.8 - 6.6 A, Non-Monitored — Power Only

M = 2.8 - 6.6 A, Fail-Open Monitoring<sup>9</sup>

R = 2.8 - 6.6 A, EQ Integrated LINC 360<sup>4</sup>

### Connector and Cable<sup>5</sup>

1 = 1 x Style 6 2-Pole Plug, 2 Individual Wires<sup>9</sup>

2 = 1 x Style 1 2-Pole Plug, Jacketed SO 2 Core Cable<sup>8</sup>

3 = 2 x Style 6 2-Pole Plug, 2 Individual Wires<sup>6,9</sup>

4 = 2 x Style 1 2-Pole Plug, Jacketed SO 2 Core Cable<sup>6,8,9</sup>

5 = 1 x Flat 3-Pole Plug, 3 Individual Wires<sup>9</sup>

6 = 2 x Flat 3-Pole Plug, 3 Individual Wires<sup>9</sup>

### Options

0 = None<sup>7</sup>

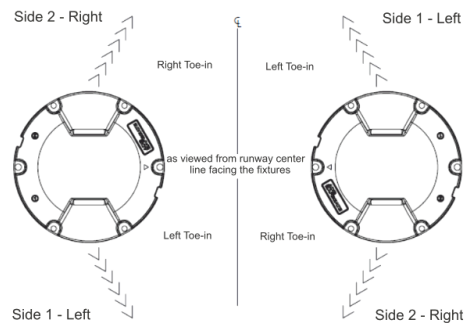
### Version

1 = Version 1

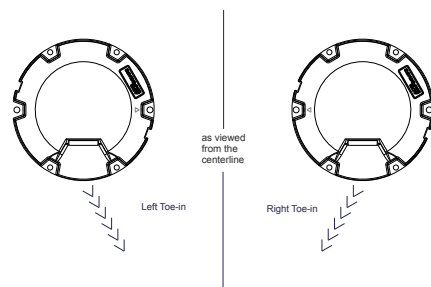
## Ordering Code Notes

- Includes standards NATO, EASA, STAC, CAP 168, TP 312 and MOS 139.
- Required for FAA when funded by AIP.
- If a 2-cord set fixture is required meeting BAP, digit 13, "Power and Monitoring", must be M.
- EQ light fixtures are only available as a one connector option.
- 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).
- Only available in power and monitoring options S and M.
- RE white/white and white/yellow applications meet the heat rise requirements in engineering brief 67D, section 2.13.1, "arctic kit testing requirements" WITHOUT an arctic kit. We do not offer an arctic kit with this configuration as the additional heat would be detrimental to the life of the LEDs.
- SO cord set option is not compatible with shallow bases. If required please contact ADB Safegate.
- Not ETL submitted or not applicable to FAA market.

## Defining left and right side for color placement



## Defining toe direction for unidirectional applications



## Installation and Maintenance

The light fixture can be installed in a 12-inch base. Gaskets are sold separately. Refer to the user manual INTEROPERABILITY appendix to identify the correct gasket and bolts for your specific base and ensure a reliable fit.

## Power Supply Options

- Non-monitored — power only
- Monitored — integrated fail-open technology
- EQ with integrated ILCMS with OFDM technology for use with LINC 360 system

## Operating Conditions

<b>Operating temperature</b>	-55 °C to +55 °C / -67 °F to +131 °F
<b>Storage temperature</b>	-60 °C to +80 °C / -76 °F to +176 °F
<b>Humidity</b>	Up to 100%

## Dimensions and Weight

<b>Dimensions</b>	305 mm (12 in)
<b>Weight</b>	6.8 kg / 15 lb (12 in)

## ANNEX

### 12-inch light fixtures without Arctic Kit (heater)

Fixture type – 1 cord set <sup>1</sup>	Fixture load	Isolation transformer		CCR load
		Wattage	Load	
Runway edge, L-850C(L), bidirectional	50 VA	65 W	13 VA	63 VA

### 12-inch light fixtures with Arctic Kit (heater)

Fixture type – 1 cord set <sup>1</sup>	Fixture load	Isolation transformer		CCR load
		Wattage	Load	
Runway edge, L-850C(L), bidirectional	71.6 VA	65 W	15.7 VA	87.3 VA

<sup>1</sup>Values provided are for the "S" option non-monitored power only.

#### Note:

- EQ fixtures:
  - The isolation transformer must have an additional 8 VA available above the fixture load for communication bandwidth. Size transformer to next size up to assure additional 8 VA coverage
  - Legacy BRITE II or AGLAS 2 systems — Order "M" power supply
- Fail-open fixtures:
  - The maximum rating for the isolation transformer is 150 W (a correctly calibrated CCR is important to achieve an accurate fail open response)
- Additional voltage loss not included in the above table which must be factored into the circuit load calculation:
  - Primary cables will result in a higher CCR load
  - Longer secondary cables may result in a larger size isolation transformer requirement
- Efficiency of the isolation transformer depends on the manufacturer of the transformer
- See runway user manual UM-5055 for other power supplies

For more information about the product, including manuals and certifications, please see our Product Center on the ADB SAFEGATE website: [www.adbsafegate.com](http://www.adbsafegate.com).