

# LIRH

## LED INSET THRESHOLD/END LIGHT



### COMPLIANCES

**ICAO:** Annex 14 - Volume I Fig. A2-3, A2-8  
**EASA:** CS-ADR-DSN, Book 1, Fig. U-7 and U-12  
**FAA:** L-850D(L) AC150/5345-46 and EB No.67  
**IEC:** TS 61827  
**NATO:** STANAG 3316  
**CAA:** CAP 168  
**IAAE:** TP312

### APPLICATIONS

Threshold/Runway End for ICAO CAT I,II and III, FAA and military runways

### BENEFITS

- 60000 hours LED rated life at full intensity, but over 100000 hours in field operating conditions
- In new installation, LED lights mean lower loads, lower size of CCRs and transformers, thus low life cycle costs
- The light output is variable like a traditional halogen lamp, as indicated by the FAA "Engineering Briefing No.67"
- Colour emitted directly by LEDs: absence of coloured filters ensures no energy losses and no colour shifts
- Fully compatible with existing AFL infrastructure\*
- Designed with simplicity allowing longer maintenance intervals and fewer spare parts
- No use of sealant to fix the prisms in the dome thanks to customized gaskets, making their replacement quick and easy
- No optical adjustment after LED module or prism replacement
- Valve for watertightness test after overhaul
- Operating with any topology of CCRs designed in compliance with IEC or FAA requirements

\* For monitored fixtures, isolation transformer max size: 200VA

### PERFORMANCES

- The electronic is strong-built and highly resistant to shock and vibration
- Automatic adaptation to the frequency of the supply current
- A surge protection device is provided in the electronics as required by the FAA "Engineering Briefing No.67"
- Immediate detection of an internal fault
- 6.35 mm protrusion strongly reduces vibrations to aircrafts and to light itself, increasing its lifetime
- Dome smooth outer profile makes the light less sensitive to snowplough blades
- Bidirectional or unidirectional, 12" dia.
- Drop-forged dome and cast aluminium lower cover make the fitting sturdy, but lightweight too for ease handling in the field
- Light output practically not affected by heavy rainfall thanks to the shallow channel in front of the prism windows
- O-Ring placed outside the dome to avoid dirt deposits between light and base
- Protection degree: IP68
- Temperature range: -55°C to +55°C

### INSTALLATION

- Suitable for 12" dia. bases
- Specific tools available for easy and precise installation

**PHOTOMETRIC PERFORMANCES**

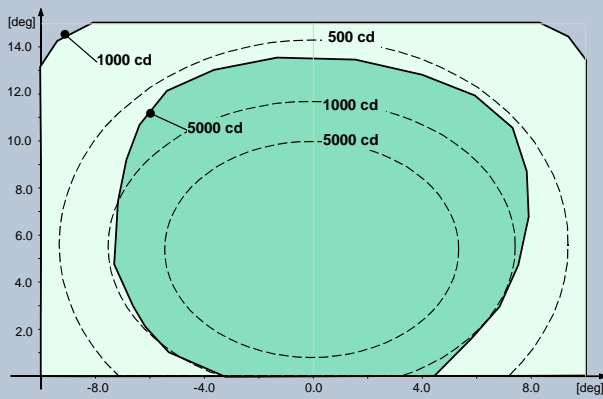


Fig. 1 ICAO A2-3 – Green

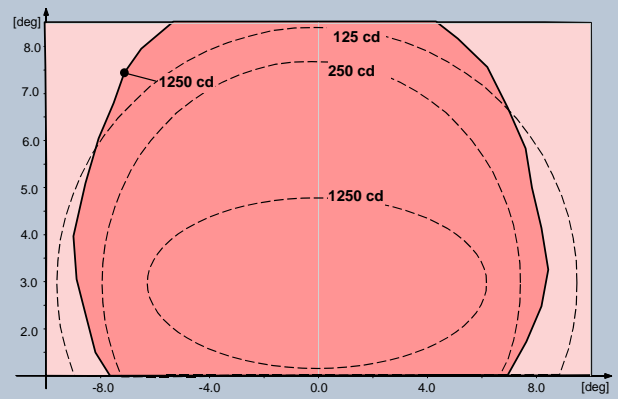


Fig. 2 ICAO A2-8 – Red

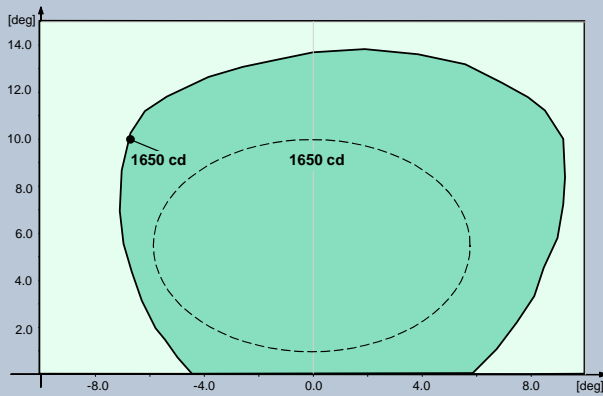


Fig. 3 FAA L-850D – Green

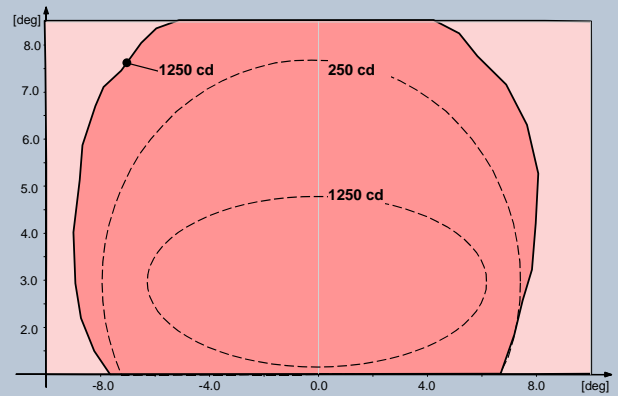


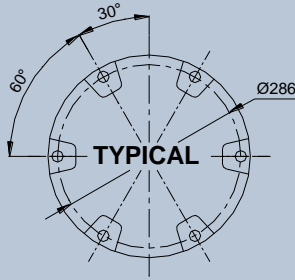
Fig. 4 FAA L-850D – Red

**TABLES**

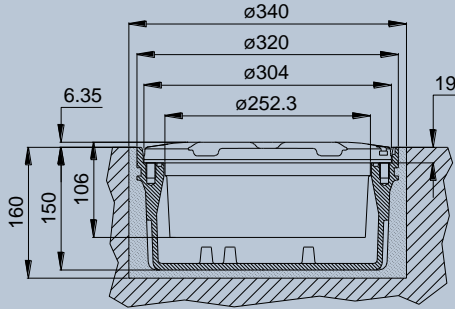
<b>POWER CONSUMPTION *</b>				
	<b>ICAO</b>		<b>FAA</b>	
<b>Electrical System</b>	<b>1 Plug</b>	<b>2 Plugs</b>	<b>1 Plug</b>	<b>2 Plugs</b>
<b>Unidirectional (w/o Arctic Kit)</b>	-	-	22 VA	-
<b>Unidirectional (with Arctic Kit)</b>	-	-	62 VA	-
<b>Bidirectional (w/o Arctic Kit)</b>	54 VA	54 VA	40 VA	40 VA
<b>Bidirectional (with Arctic Kit)</b>	94 VA	134 VA	80 VA	120 VA

\* Measured at 6.6 A and referred to the highest consumption configuration

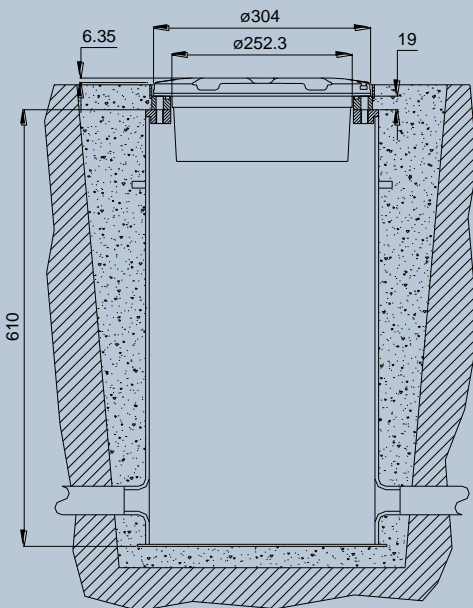
<b>POWER FACTOR</b>		
<b>Input Step</b>	<b>2.8 A</b>	<b>6.6 A</b>
<b>Power Factor</b>	0.96	0.98



Light Fixture 12" dia.



Shallow Base 12" dia.



L-868 Deep Base 12" dia.

**LIRH- F - GR - L - 2P - M - A**

Basic P/N: \_\_\_\_\_

Compliance: \_\_\_\_\_

I = ICAO  
F = FAA (L-850D)

Colour(Side A)/(Side B): \_\_\_\_\_

G = Green  
R = Red  
M = Blank (unidirectional dome - FAA only)\*

Toe-in (threshold side)\*\*: \_\_\_\_\_

L = Right  
R = Left  
S = Straight

Electrical System: \_\_\_\_\_

1P = One Plug  
2P = Two Plugs

Monitoring: \_\_\_\_\_

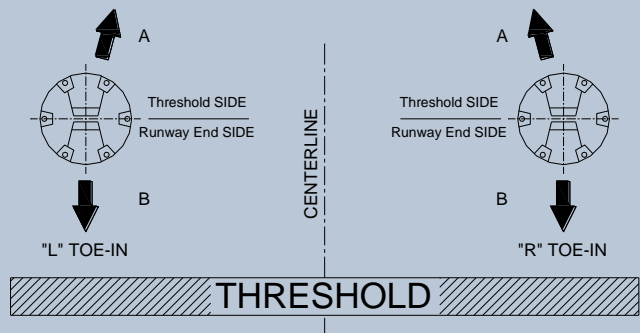
0 = Without Monitoring  
M = With Monitoring

Arctic Kit: \_\_\_\_\_

0 = Without Arctic Kit  
A = With Arctic Kit

\* The aperture not finished "M" will be always on side "B"

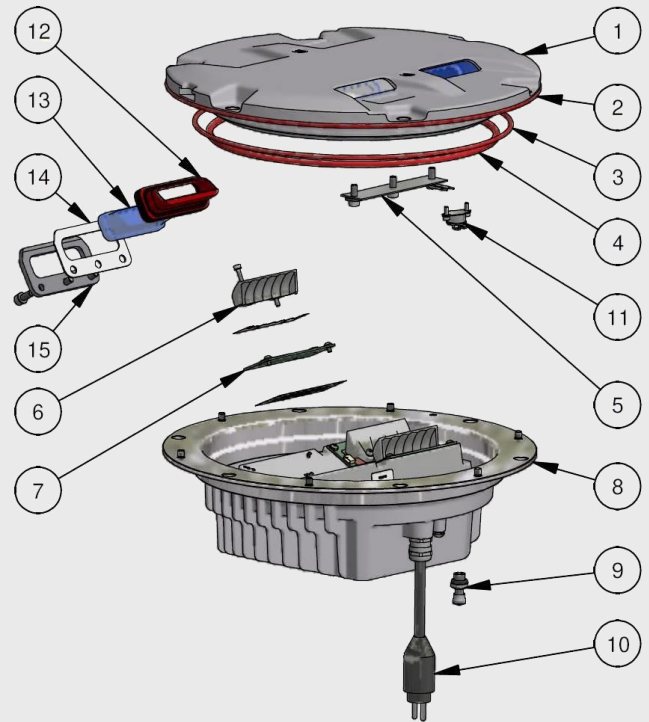
\*\* The beams aiming is not field adjustable



## MAIN COMPONENTS OF THE LIGHT UNIT

- 1 Dome with prisms and gaskets
- 2 O-Ring for dome (external)
- 3 O-Ring for dome (internal)
- 4 O-Ring for lower cover
- 5 Arctic Kit heater
- 6 Reflector with hardware
- 7 LED module with accessories
- 8 Lower cover with electronic, plug and valve
- 9 Valve for watertightness test
- 10 FAA L-823 plug
- 11 Arctic Kit thermostat
- 12 Prism Gasket
- 13 Prism
- 14 Prism holder gasket
- 15 Mounting plate

Refer to the relevant technical manual for the complete list of the available spare parts



## ACCESSORIES

- |          |  |
|----------|--|
| 315.1230 | Base L-868 type, class IA, size B, 24" deep *  |
| 315.1420 | Flange ring with pavement dam for L-868 base, size B, with O-Ring and bolts                  |
| 152.8110 | Shallow base, 12" dia., one cable lead, with gasket and hardware                             |
| 153.1110 | Shallow base, 12" dia., two cable leads, with gasket and hardware                            |
| 712.1034 | Setting material for shallow base, 10 lt   |
| 712.1035 | Quartz for shallow base, 25 kg   |
| 332.4301 | Positioning jig for 8"-12" dia. shallow base, without optical device                         |
| 332.4351 | Optical device for positioning jig to allow a very precise light unit orientation            |
| 332.4330 | Watertight/shockproof plastic case complete with positioning jig for base and optical device |
| 332.4140 | Lifting tool (2 pieces to work properly)   |
| 332.4230 | Lifting tool with double hook  |

\* Sectional bases may be required depending upon the paving technique

For any information about isolating transformers and connectors, please see the specific catalogue pages

## Shipping Weights and Volumes

	Light Unit	Shallow Base
Weight (kg)	9.1	7.3
Volume (m <sup>3</sup> )	0.022	0.022

We reserve the right to change the design or specification data without notice

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