

LIRE

LED INSET RUNWAY EDGE LIGHT



COMPLIANCES

ICAO: Annex 14 - Volume I Fig. A2-9, A2-10
EASA: CS-ADR-DSN, Book 1, Fig. U-13, U-14
FAA: L-850C(L) AC150/5345-46 and EB No.67
IEC: TS 61827
NATO: STANAG 3316
CAA: CAP 168
IAAE: TP312
CASA: Manual of Standards Part 139

APPLICATIONS

Runways edge 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

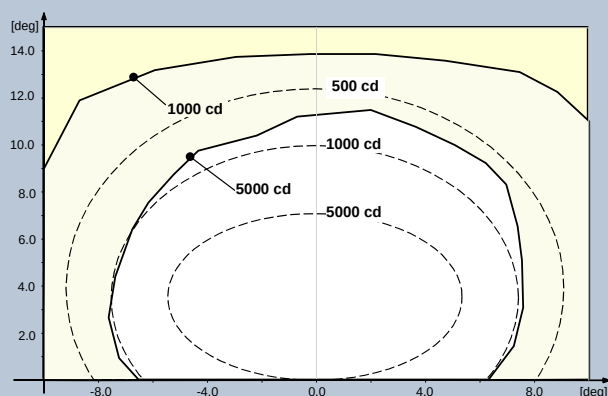


Fig. 1 ICAO A2-9 45 m – White

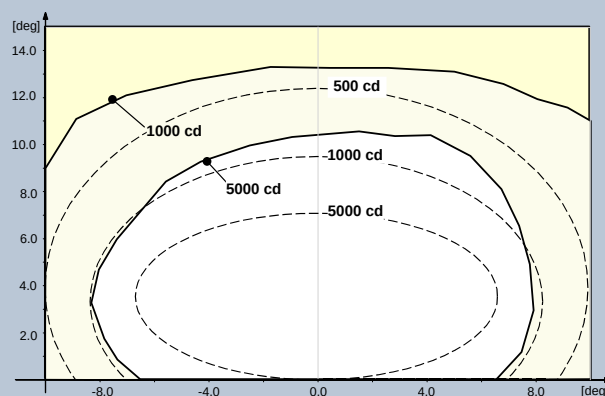


Fig. 2 ICAO A2-10 60 m – White

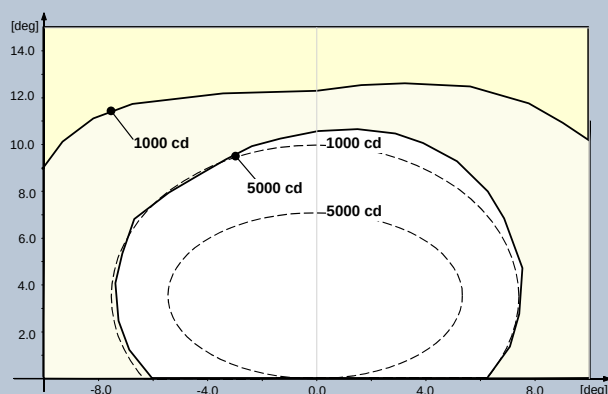


Fig. 3 FAA L-850C – White

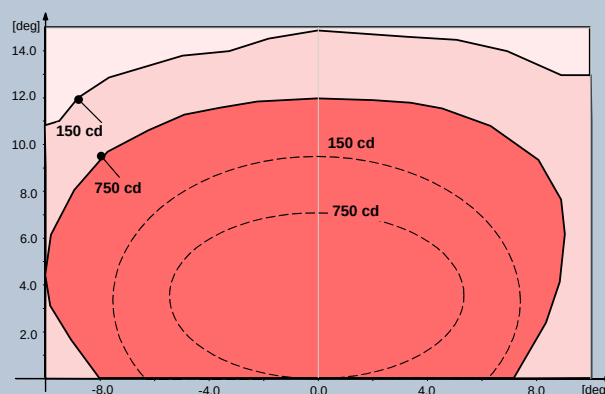


Fig. 4 FAA L-850C – Red

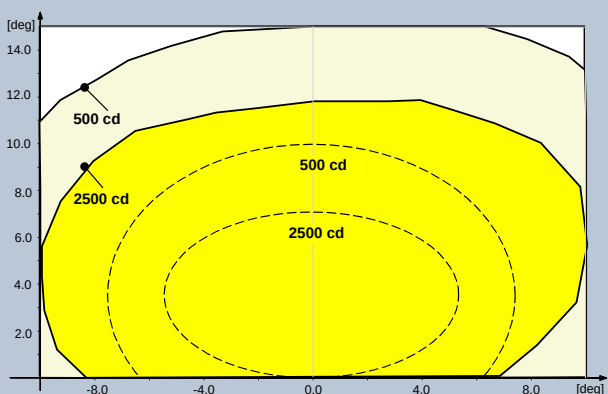


Fig. 5 FAA L-850C – Yellow

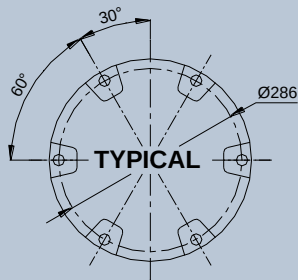
TABLES

POWER CONSUMPTION (WORST CASE)*

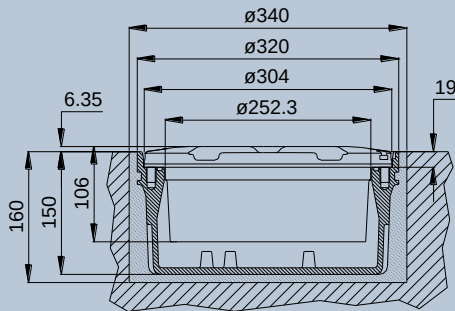
Power factor** >0,98		Primary Conductor Isolation Transformer		FIXTURE	
1IN/1OUT	Without Arctic Kit	34 W	34,3 VA	25,7 W	26,1 VA
	With Arctic Kit	57,9 W	58,1 VA	51,1 W	51,3 VA
1IN/2OUT	Without Arctic Kit	67,9 W	68,5 VA	51,3 W	52,2 VA
	With Arctic Kit	115,7 W	116,1 VA	102,1 W	102,6 VA
2IN/2OUT	Without Arctic Kit	67,9 W	68,5 VA	51,3 W	52,2 VA
	With Arctic Kit	115,7 W	116,1 VA	102,1 W	102,6 VA

* | Measured at 6,6 A with toroidal isolation transformer 150 W. The values reported refer to the maximum power absorbed between configurations and available colours (worst case). For further detail please refer to the product manual.

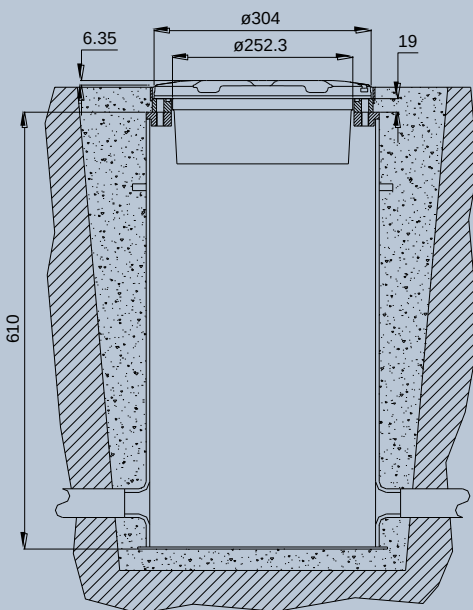
** | Measured at 6,6 A. The value reported refers to the minimum value between the configurations and the available options (worst case).



Light Fixture 12" dia.



Shallow Base 12" dia.



L-868 Deep Base 12" dia.

LIRE - F - WY - 2P - M - A

Basic P/N: _____

Compliance: _____

I = ICAO 60 m

S = ICAO 45 m

F = FAA

Colour(Side L)/(Side R): _____

W = White

Y = Yellow

G = Green (FAA)

R = Red

M = Blank (unidirectional dome)

Cable and connectors: _____

1P = One Plug

2P = Two Plugs

Monitoring: _____

0 = Without Monitoring

M = With Monitoring

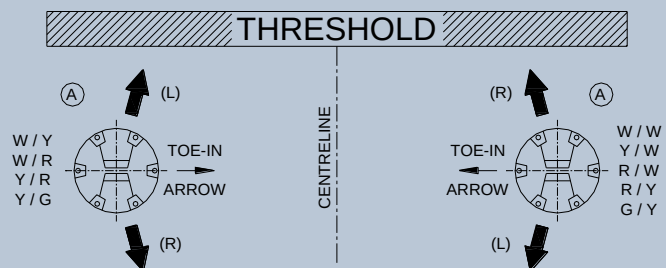
Arctic Kit: _____

0 = Without Arctic Kit

A = With Arctic Kit

"Special versions are also available, such as LIRE with IR component for NVG compatibility. Please contact OCEM for more information."

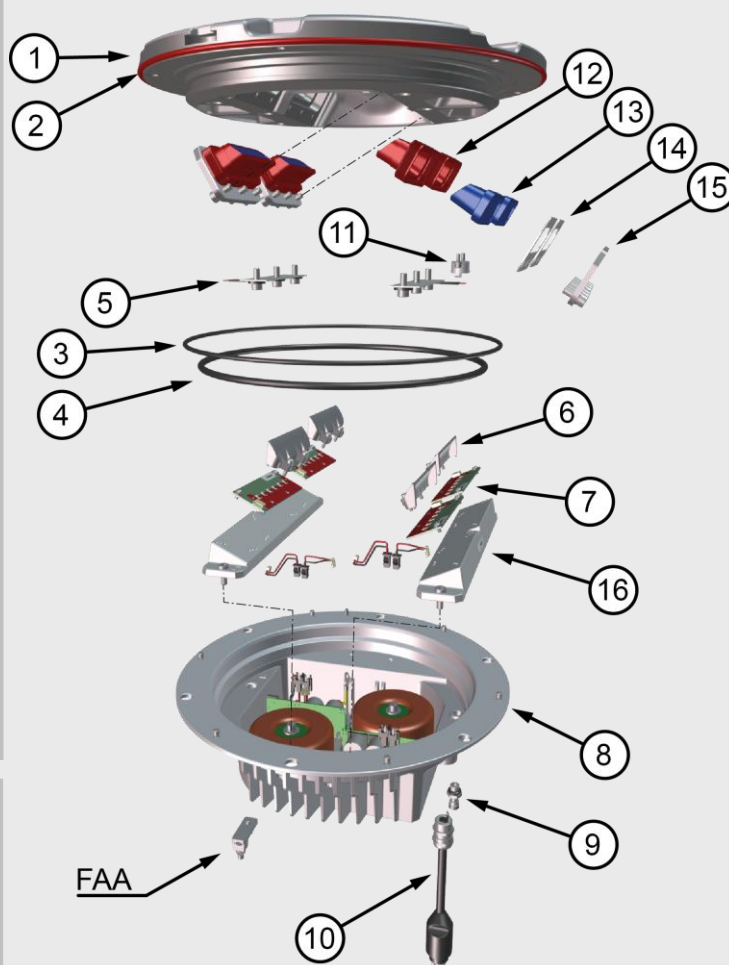
* The beams aiming is not field adjustable



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
- 16 LED module support with hardware

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 ³)	0.022	0.022

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

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