

# RUNWAY LIGHTING

## INL-RET

Bidirectional Runway End and Threshold  
Inset Light - 12"

HIGH-INTENSITY



### Compliance with Standards

**ICAO:** Annex 14 Volume I Paragraph 5.3.10 and 5.3.11 for use in CAT I, II and III

**NATO:** STANAG 3316

**CAA:** CAP 168

**BSI:** BS 3224

### Uses

INL-RET is a 12" bidirectional high-intensity inset light.

- Runway End and Threshold

### Features & Benefits

- Low power consumption: only 105 Watts for runway end and 2 x 105 Watts for runway threshold in CAT III when the edge lighting is only lit in the direction of travel, otherwise 3 x 105 Watts.
- Lamp life greater than 1,000 hours at 6.6 Amps.
- Low projection: 12.7 mm (1/2").
- Small diameter: 304 mm (12").
- Shallow depth: installation in 150 mm shallow base.
- Excellent photometric performances obtained by the use of reflector lamp:
  - Improved luminous efficacy.
  - Identical lamp performance: Reflector being an integral part of the lamp, hence each time the lamp is changed there will be a new reflector.
  - High optical stability: no internal adjustment needed since the pre-focused lamp is always correctly positioned inside the lamp reflector.
- Very easy and high-speed maintenance: small quantity of components so lights can be easily dismantled.
- Non-sealed prism easy to replace.
- Valve for water-tightness test.
- Many parts common with other lights in the same model range.
- Possibility of separate lighting in both approach directions.
- Fitting installation parallel to approach centre line axis.
- Easy handling and transport due to small size and low weight.

### Technical Data

Component	Description
<b>Lamp:</b>	105 Watts 6.6 Amps pre-focused halogen lamp with an integral dichroic-coated reflector. Lamp life at 6.6 Amps greater than 1,000 hours.
<b>Power Supply:</b>	The fitting is supplied with one (or two) two-pole secondary FAA plug(s) for connection to one (or two) isolating transformer(s).
<b>Photometry:</b>	Distribution and homogeneity comply with Appendix 2 of ICAO Annex 14 Volume I and with FAA L-850D and L-850E.
<b>Color:</b>	Green or Red dichroic filter. Chromaticity complies with Appendix 1 of ICAO Annex 14. Volume I.
<b>Finish:</b>	All external parts are made of anodised tempered aluminium alloy casting. All fixings and fastenings are stainless steel.
<b>Fixing on support:</b>	By six M10 studs and nuts (supplied with the base or the adapter ring).
<b>Projection:</b>	12.7 mm (1/2")
<b>External diameter:</b>	304 mm (12")
<b>Net Weight:</b>	6 kg

### Installation

#### Options:

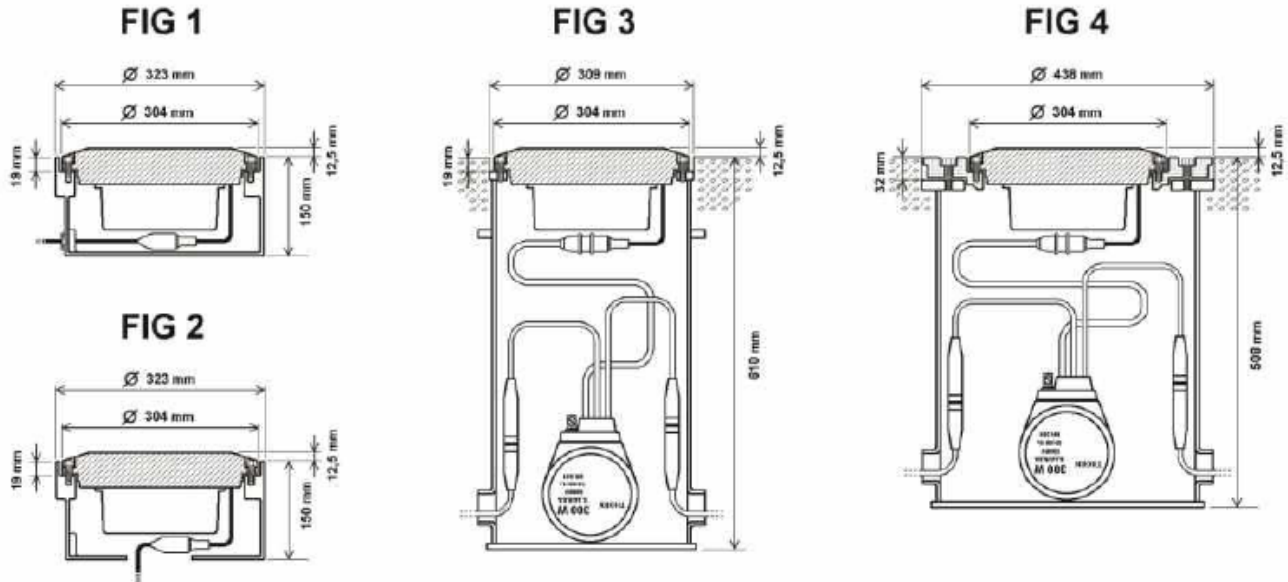
- On 12" shallow base 150 mm deep with side access (see FIG 1).
- On 12" shallow base 150 mm deep with bottom access (see FIG 2).
- On FAA L-868B deep base (see FIG 3).
- On FAA L-868C or FAA LB-1 deep base with 16"/12" adapter ring (see FIG 4).
- On SR9 seating ring by means of SR9/12" adapter ring.

*Fitting installation is always parallel to approach centre line axis. For fittings where toe-in is required coloured filters are replaced by deviators with coloured dichroic coating. For more information, see the Design section.*

# RUNWAY LIGHTING

## INL-RET

### Installation Diagrams



### Photometric Data

This section includes photometric examples of different light configurations.

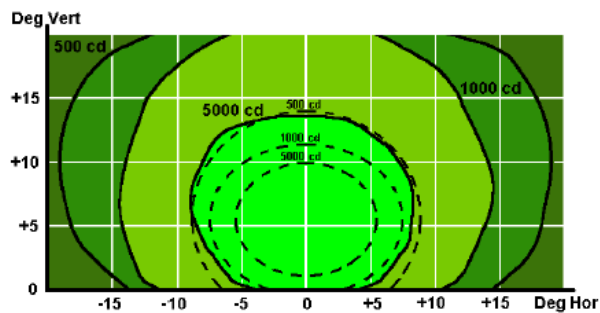
#### Runway Threshold

INL-RET (2 x 105 Watts) - Green Light

Toe-in : 3.5°

I average : 11,200 cd

I max / I min : 2.25

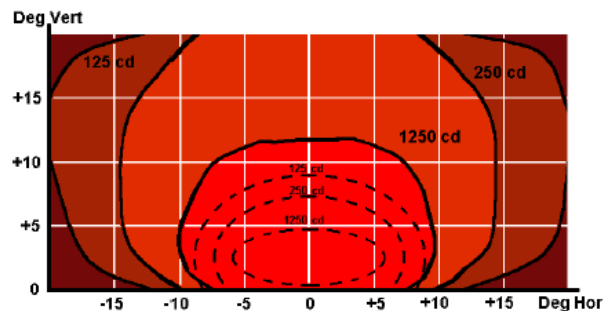


#### Runway End

INL-RE (1 x 105 Watts) - Red Light

I average : 2,900 cd

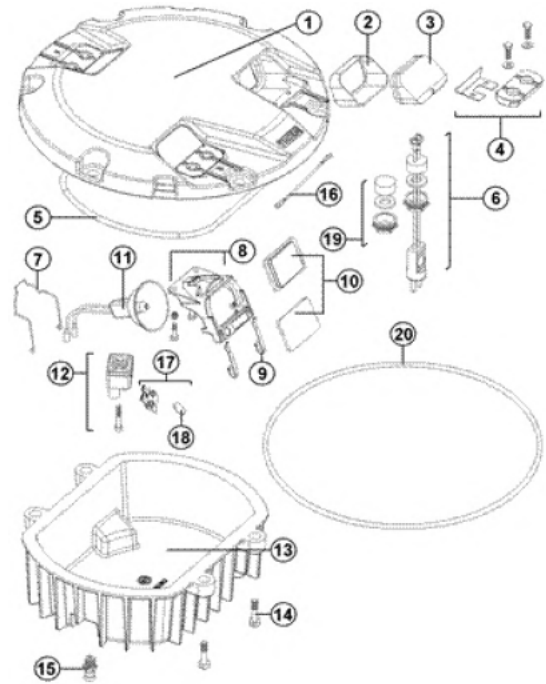
I max / I min : 1.75



**Construction**

**Components**

1. Body of the Fitting
2. Silicone Prism Gasket
3. Non Sealed Prism
4. Prism Clamp with Screws
5. Cover Gasket
6. Cable with FAA Secondary Plug and Compression Packer
7. Lamp Spring
8. Lamp Support
9. Filter Spring
10. Dichroic Filter or screen
11. Pre-focused Halogen Dichroic Reflector Lamp 105 Watts at 6.6 Amp
12. Cable Terminal
13. Cover of the Fitting
14. Cover Screws
15. Valve for Water tightness Test
16. Cable for Connection Between Terminals
17. Film Disk Cut-Out Holder
18. Film Disk Cut-Out
19. Plug (For One Connector Version)
20. O ring gasket for THORN 8" shallow base



INL-RET

**Packaging**

Designation	Volume m <sup>3</sup>	Dimensions mm	Weight kg
INL-RET	0.019	350 x 350 x 155	7.0

# RUNWAY LIGHTING

## INL-RET

### Ordering Code

The table below is a guide to order codes for a fitting with available component parts.

Description	Components	INL-RET	L	2C	SC	FD
<b>Type</b>						
No toe-in	S					
Toe-in right	R					
Toe-in left	L					
<b>Connection</b>						
To one isolating transformer	1C					
To two isolating transformers	2C					
<b>Cover size</b>						
Short Cover	SC					
Long Cover	LC					
<b>Cut out device (option)</b>						
Two cut out film disk (x3)	FD					
<b>Additional</b> 12" shallow base and Adapter ring For more information, contact ADB Safegate or see <a href="http://www.adbsafegate.com">www.adbsafegate.com</a> .						

### Specification

- The runway end and threshold inset light shall be bi-directional high intensity complying with ICAO recommendations in Annex 14, Volume I, paragraphs 5.3.10 and 5.3.11, with FAA L-850D and L-850E standards, and STANAG 3316 standards, CAP168 and British Standards BS 3224.
- It shall be equipped with three 105 Watts 6.6 Amps halogen pre-focused dichroic reflector lamps. Lamp life shall be at full intensity greater than 1,000 hours.
- Its design shall allow separate lighting in both approach direction.
- All external parts shall be made of anodised tempered aluminium alloy casting. All fixings and fastenings shall be stainless steel.
- It shall have a maximum outer diameter of 304 mm (12") and its projection shall not exceed 12.7 mm (1/2").
- It must be able to be installed directly on a 12" shallow base, on a FAA L-868B deep base or by means of adapter ring on a FAA L-868C or FAA LB deep base or a seating ring.
  - It will be designed to allow easy maintenance.
  - The prisms shall not be sealed.
  - The filters shall be dichroic.
  - The fittings in this model range share many of the same components.
  - No internal adjustment shall be needed.

*All descriptions and photometric characteristics in this publication present only general particulars and shall not form part of any contract. The right is reserved to change them without prior notification.*

