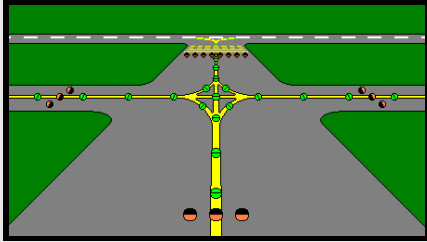


THORN

Airfield Lighting



Bi or Unidirectional Very Low Projection Inset Light

ILD

DOC 1311.E

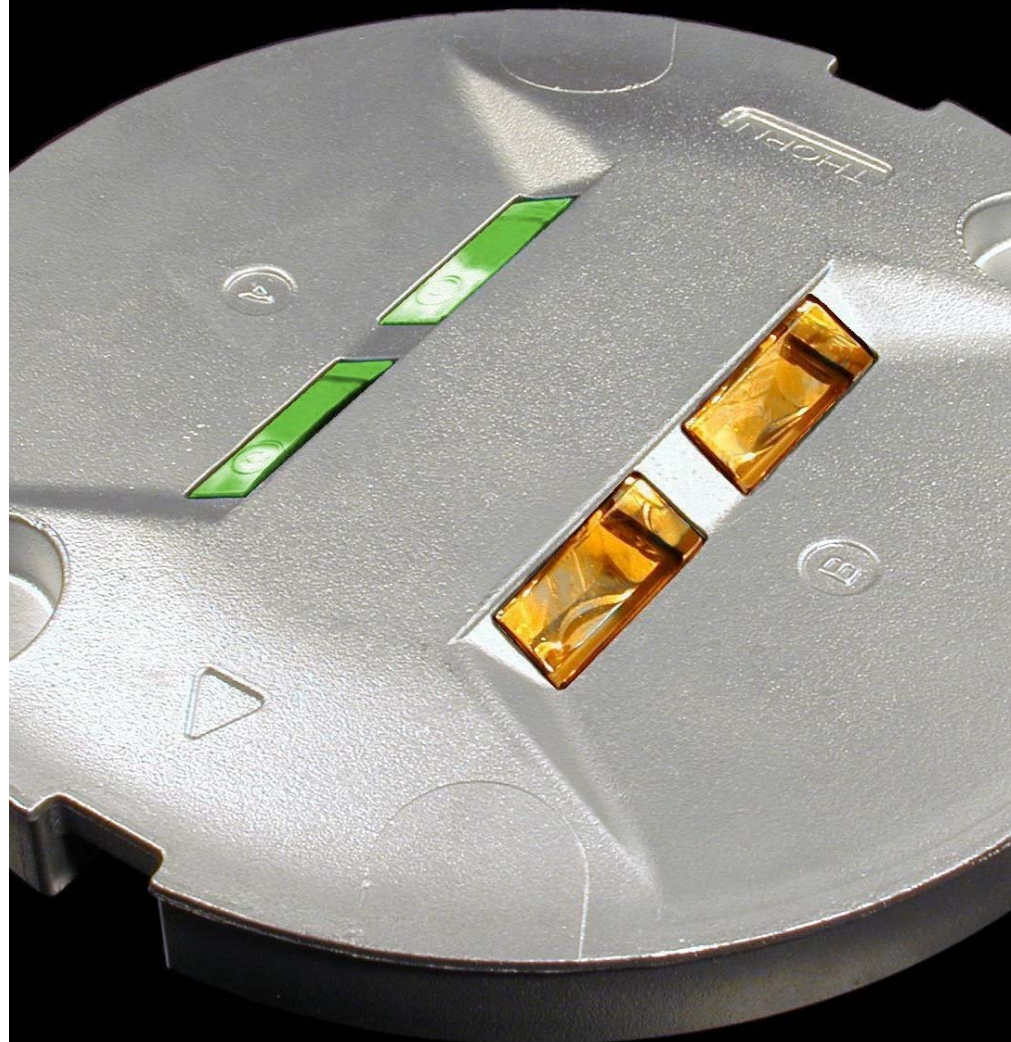
Revision 2.D 01/10/02

Utilisation

- Taxiway Centre Line
- Exit Taxiway Centre Line and Rapid Exit Taxiway Centre Line
- Stopbar
- Clearance Bars

Compliance with Standards

- ICAO : Annex 14 Volume I Paragraphs 5.3.15 and 5.3.17 for use in CAT I, II and III
- FAA : L- 852A/B/C/D AC150/5345-46B
- NATO : STANAG 3316
- French STNA
- CAP 168
- BS 3224



ILD Bi or Unidirectional Very Low Projection Inset LED Light

Main Advantages

- Very low power consumption : less than 15 Watts.
- LEDs life greater than 100,000 hours.
- Very low projection : 6,35 mm (1/4")
- Small diameter : 203 mm (8")
- Shallow depth : installation in 100 mm shallow base.
- Electrical and mechanical compatibility with existing installations
- Supplied with one or two FAA connectors.
- Possibility of separate directional lighting for bi-directional lights.
- 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
- Easy handling and transport due to small size and low weight.

Technical Characteristics

LED :	The ILD is equipped of 2, 4 or 8 LED's. The LED's life is greater than 100,000 hrs providing a long life fitting.
Electrical Power Supply :	One (or two) two-poles FAA type plug(s) is(are) provided to connect the fitting directly to one (or two) standard isolating transformer(s). An electronic block converts the current of the secondary circuit into the supply required by the LEDs.
Photometry :	Distribution and homogeneity comply with Appendix 2 of ICAO Annex 14 Volume I and with FAA L-852A, L-852B, L-852C and L-852D.
Colour :	Green, Yellow and Red. Obtained directly by the LED's complying with Appendix 1 of ICAO Annex 14 Volume I.
Finish :	All external parts are made of anodised tempered aluminium alloy casting. All fixings and fastenings. are stainless steel.
Fixing on support :	By two M10 studs and nuts (supplied with the base or the adapter ring). On request the fitting can be supplied for a CAA or a SR19 mounting in this case the fixing is made by four M10 studs and nuts.
Projection :	6.35 mm (1/4").
External diameter :	203 mm (8").
Net Weight :	3 kg.

Different Types of Fitting

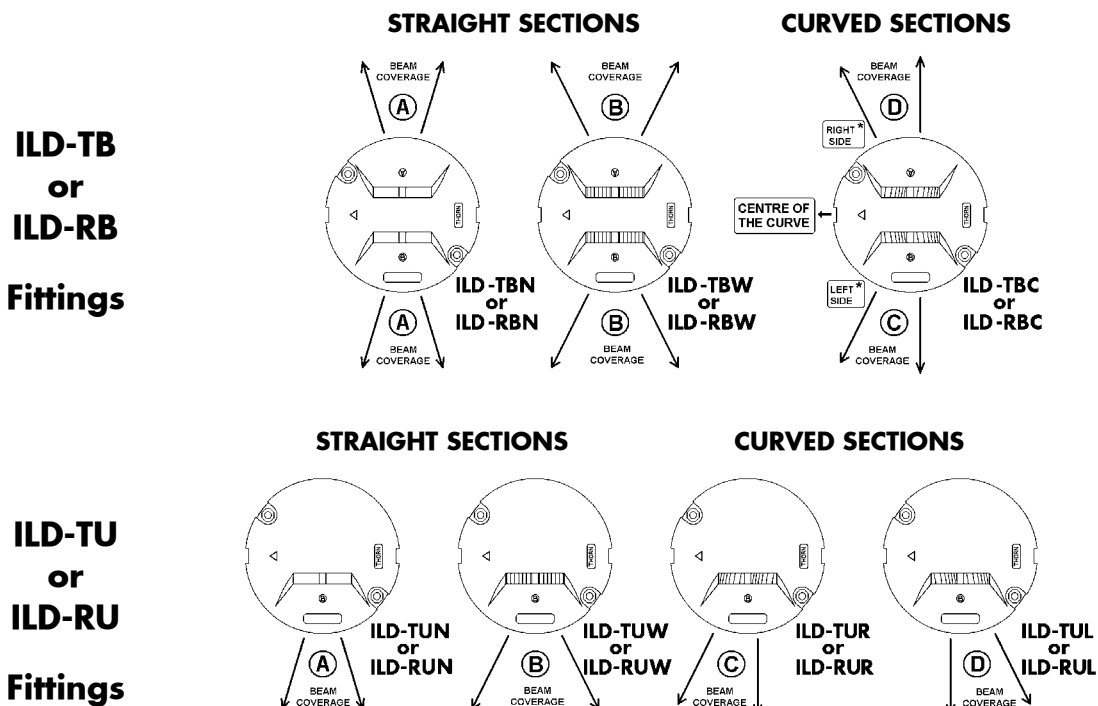
Functions	Unidirectional or Bi-directional	Colours	Number of LED Module(s)	Type of Taxiway Sections	Type of Beams	Names
Taxiway centre line	Bi-directional	Green and Green	One	Straight	Narrow	ILD-TBN
					Wide	ILD-TBW
			Curved	Curved	ILD-TBC	
	Unidirectional	Green	One	Straight	Narrow	ILD-TUN
					Wide	ILD-TUW
			Curved	Right	ILD-TUR	
				Left	ILD-TUL	
Exit taxiway centre line	Bi-directional	Green and Green or Green and Yellow	One	Straight	Narrow	ILD-TBN
					Wide	ILD-TBW
			Curved	Curved	ILD-TBC	
	Unidirectional	Green Or Yellow	One	Straight	Narrow	ILD-TUN
					Wide	ILD-TUW
			Curved	Right	ILD-TUR	
				Left	ILD-TUL	
Stopbar (1) and Clearance bar (2)	Unidirectional	Red (1) yellow (2)	One	Straight	Narrow	ILD-TUN
					Wide	ILD-TUW
			Curved	Right	ILD-TUR	
				Left	ILD-TUL	

ILD Bi or Unidirectional Very Low Projection Inset LED Light

Different Types of Beam

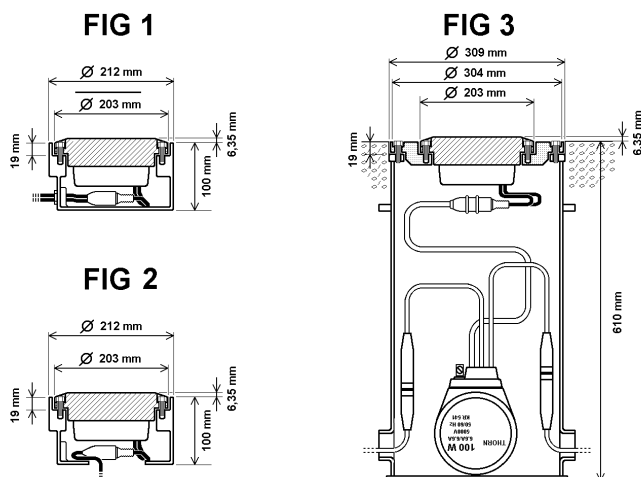
In order to cover all the functions describe in the previous chart the ILD fittings are equipped with different prisms which achieve the different light beams : Narrow straight (A), Large straight (B), deviated on the right (C) and deviated on the right (D). Drawings here under shows the different types of light beam (A, B, C, D) corresponding to the different types of fitting (N, W, C, R). For the ILD installed in curved sections, please take into account the position of the **Right** and **Left Side** for the ordering codes (See * on the drawing).

Note : In order to assist with the installation in Curved Sections of the fitting on the its support (e.g. Shallow Base, Deep Can, Others), the top of The ILD Fitting is marked with an Arrow which must always point to the Centre of the Curve.



Installation

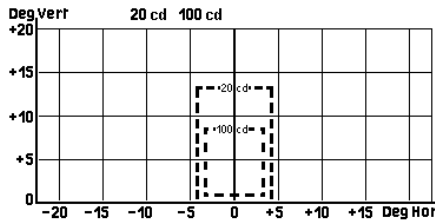
- On 8" shallow base 100 mm deep with side access (Fig 1) or with bottom access (Fig 2).
- On FAA L-868B deep base by means of 12"/ 8" adapter ring (Fig 3).
- On SR8 seating ring by means of SR8/8" adapter ring.



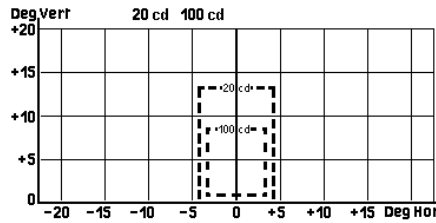
ILD Bi or Unidirectional Very Low Projection Inset LED Light

Photometrics

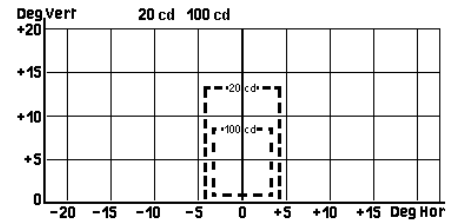
Green Light Narrow Beam
for Straight Sections
I average : cd I max / I min :



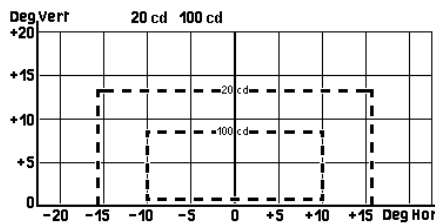
Yellow Light Narrow Beam
for Straight Sections
I average : cd I max / I min :



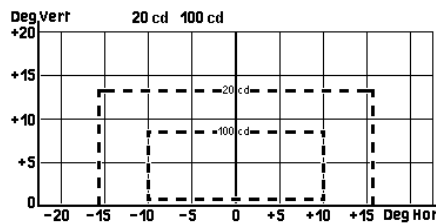
Red Light Narrow Beam
for Straight Sections
I average : cd I max / I min :



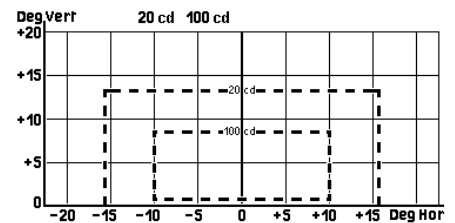
Green Light Wide Beam
for Straight Sections
I average : cd I max / I min :



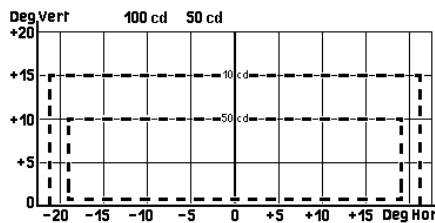
Yellow Light Wide Beam
for Straight Sections
I average : cd I max / I min :



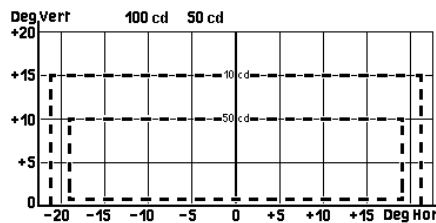
Red Light Wide Beam
for Straight Sections
I average : cd I max / I min :



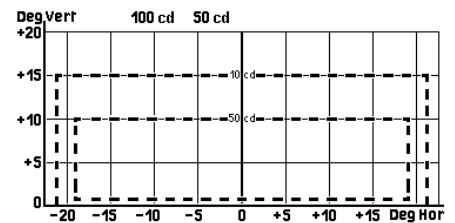
Green Light Beam Curved on the Left
for Curved Sections
I average : cd I max / I min :



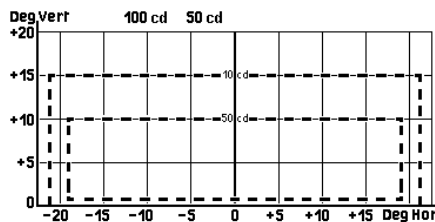
Yellow Light Beam Curved on the Left
for Curved Sections
I average : cd I max / I min :



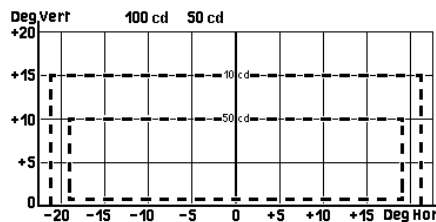
Red Light Beam Curved on the Left
for Curved Sections
I average : cd I max / I min :



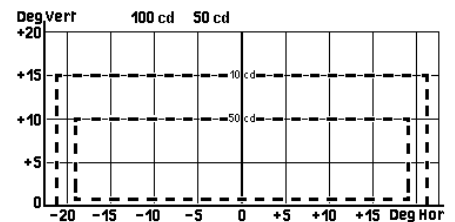
Green Light Beam Curved on the Right
for Curved Sections
I average : cd I max / I min :



Yellow Light Beam Curved on the Right
for Curved Sections
I average : cd I max / I min :



Red Light Beam Curved on the Right
for Curved Sections
I average : cd I max / I min :



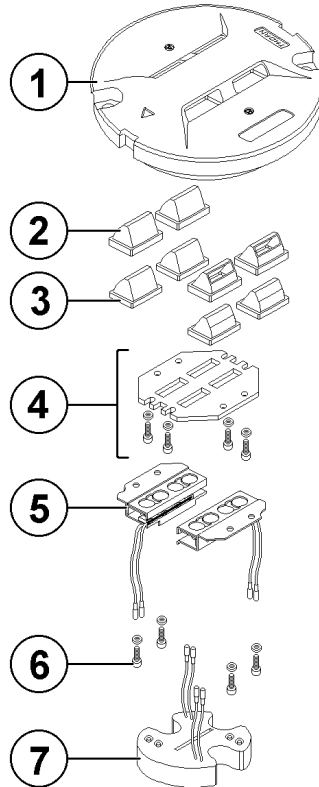
ILD Bi or Unidirectional Very Low Projection Inset LED Light

Design

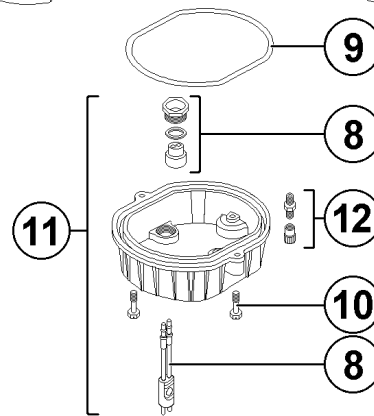
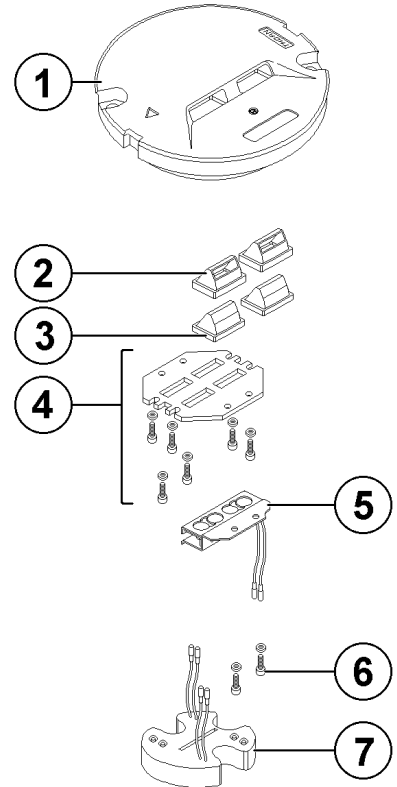
- 1) Body
- 2) Silicone prism gasket
- 3) Non-sealed prism
- 4) Prism support with fixing screws
- 5) LEDs module
- 6) LEDs module fixing screws
- 7) Power supply converter
- 8) Cable subassembly for short cover
- 9) Cover gasket
- 10) Cover screw
- 11) Complete short cover
- 12) Valve for watertightness tests

Note : The complete fitting is delivered with watertightness O ring gasket for THORN 8" shallow base.

ILD-TB or ILD-RB



ILD-TU or ILD-RU

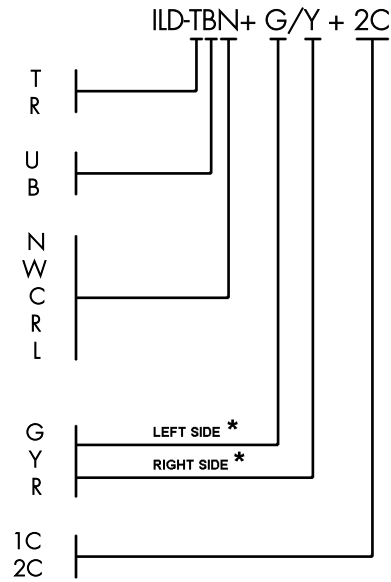


ILD Fittings

Ordering Code

ILD FITTING

- Function
 - Taxiway
 - Runway
- Type of fitting
 - Unidirectional
 - Bi-directional
- Type of Light beam(s)
 - Narrow beam for straight section
 - Wide beam for straight section
 - Curved sections
 - Deviated on the right (for unidirectional)
 - Deviated on the left (for bi-directional)
- Colours (only one for unidirectional e.g. G)
 - (Two for bi-directional e.g. G/Y)
 - Green
 - Yellow
 - Red
- Connection
 - To one isolating transformer
 - To one isolating transformers



(*) See paragraph "Different types of light beams"

FITTING SUPPORTS

8" shallow base and Adapter ring

See DOC 1402.E

Cardboard Packing Data

Designation	Volume in m ³	Dimensions in mm	Weight in kg
ILD Fitting	0,007	230 x 230 x 140	3,5

Specification

The taxiway centre line and stopbar inset LED lights shall be bi or unidirectional complying with ICAO recommendations in Annex 14, Volume 1, paragraphs 5.3.15 and 5.3.17, with FAA L-852A, L-852B, L-852C and L-852D standards, and STANAG 3316 standards, CAP168 and British Standards BS 3224.

Their electrical consumption of the fitting shall be lower than 15 Watts.

They shall be fitted with powerful coloured LEDs. LEDs life shall be greater than 100,000 hours and provide a long life fitting.

The photometrics and colours obtain with LED shall comply with recommendations in Appendix 1 and 2 of ICAO Annex 14 Volume 1.

Due to its internal converter the ILD fitting can be supplied by an isolating transformer on a standard 6.6 A AGL primary loop.

The design of bi-directional ILD shall allow separate lighting of the directions.

All external parts shall be made of anodised tempered aluminium alloy casting. All fixings and fastenings shall be stainless steel.

They shall have a maximum outer diameter of 203 mm (8") and its projection shall not exceed 6.25 mm (1/4").

They must be able to be installed directly on an 8" shallow base, or by means of adapter on a FAA L-868B deep base or a seating ring.

They shall be designed to allow easy maintenance.

- The prisms shall not be sealed.
- The fittings in this model range share many of the same components.
- No internal adjustment shall be needed.
- The weight of the fitting shall be lower than 3 kg.

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.

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