

# Airfield Lighting

Product Description

12" Bidirectional High-Intensity Inset Light  
(IDM 4562)

- Runway Centre Line



**Note:** *This page is blank for convenient double-sided printing.*

## 1. INTRODUCTION

IDM 4562 is a 12" bidirectional high-intensity inset light.

### ***Utilisation***

- Bidirectional runway centre line inset light

### ***Compliance***

- ICAO: Annex 14 Volume I 6<sup>th</sup> edition July 2013
- FAA AC 150 / 5345 - 46D
- Aerodrome Design Manual Part 4 Visual Aids, 4<sup>th</sup> edition 2004

## 2. MAIN ADVANTAGES

- Low protrusion construction only half of the allowed height.
- Ease of installation and maintenance brought even further with optional tools.

### 3. TECHNICAL CHARACTERISTICS

Characteristic	Description
<b>Light dimensions</b>	Protrusion 6.3 mm Diameter 326 mm Depth 150 mm
<b>Weight</b>	6.7 kg 11.7 kg with base receptacle
<b>Ingression Protection</b>	IP67
<b>Materials</b>	Top cover, inner cover and base receptacle: aluminium alloy castings Sheet metal fastening parts and fixing hardware: stainless steel Gaskets: heat resistant silicone rubber
<b>Surface treatment</b>	Top and inner covers anodised
<b>Cables and connectors</b>	Plugs: FAA L-823 Style 6 Receptacles: FAA L-823 Style 12 Secondary cable: FAA 150/5345-70
<b>Light sources</b>	2x105W, 6,6A, Ø50 mm reflector lamp, 130 mm wires and Ø4 mm round female connectors. Average lifetime at rated current 1500 hours.
<b>Packing</b>	Dimensions: 340x340x155 mm Weight: 11.7 kg
<b>Accessories</b>	Alignment device IDM 4306 Lifting hooks Maintenance tool set

Packing Data		
Designation	Dimensions mm	Weight kg
IDM4562	340 x 340 x 155	11.7

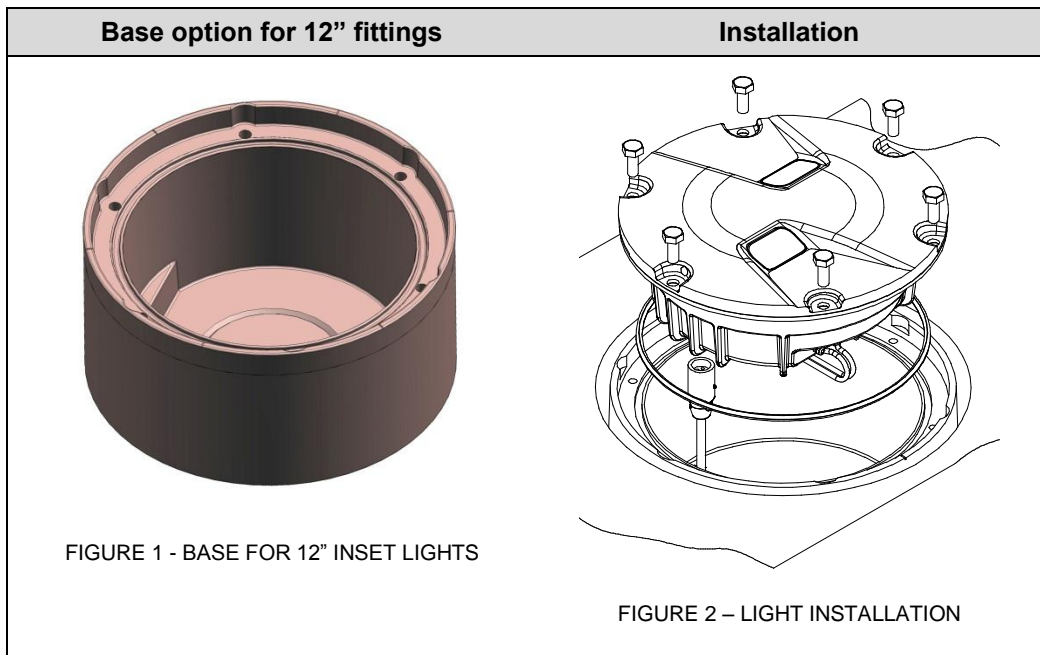
#### 4. INSTALLATION OPTIONS

Inset lights are installed in base receptacles that are stationary installed on the field. The base dimensions are: outer diameter is 345 mm and height is 160 mm.

There are many different installation practices which can be adopted for bases and detailed instructions how to carry out the installation can be found on base manuals.

For correct light location, it is recommended to read and comply with the following:

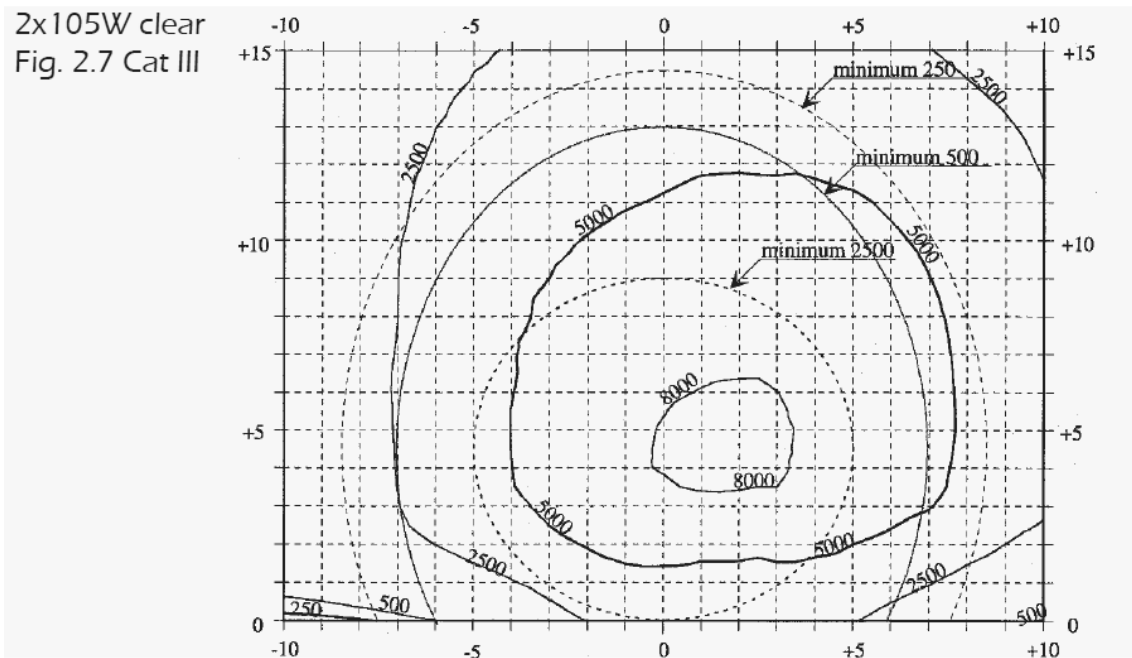
- ICAO: Annex 14 Volume I 5th edition 2009
- All drawings and design plans, for the particular project, to guarantee correct location for each fixture.



**5. PHOTOMETRICS**

Application	Requirements Annex 14, Appendix 2			Measured main beam intensities (kdc)			
	fig.	Imin	Iave	Iave	Imin	Imax	Uniformity ratio
Runway centre line 105W, clear	2.6	2,5	5	6,3	2,9	8,6	1:3,0
Runway centre line 105W, red	2.6	0,375	0,75	2,2	1,1	2,9	1:2,7
Runway centre line 105W, clear, Cat III	2.7	2,5	5	6,3	2,9	8,6	1:3,0

**Intensity Distribution**



**6. DESIGN**

**Mechanical construction**

- Top cover, inner cover and base receptacle special corrosion resistant anodized aluminium alloy castings.
- Prisms sealed with gasket.
- Water tightness ensured by heat resistant silicone rubber gaskets.
- Stainless steel hardware.
- Improved vibration insulation for longer lamp lifetime.
- Inner cover equipped with rubber moulded plug KDC506 and seal integrity testing valve.



**Optical construction**

- Prisms specially heat resistant high quality borosilicate glass.
- Dichroic colour prisms, no separate filters.
- 2x105W / 6,6 A ø50mm reflector lamps.
- Average lifetime 1500 hours at rated current.

**Accessories**

- Alignment device IDM 4306
- Lifting hooks
- Set of maintenance tools

**7. ORDER CODES**

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

IDM	4562/	2x105W	-C/R
4562			
105W			
C=Clean			
R=Red			

For more information, contact Safegate Group or see [www.safegate.com](http://www.safegate.com).

## 8. SPECIFICATION

- Compliance with:
  - ICAO: Annex 14 Volume I 6th edition July 2013
  - FAA AC 150 / 5345 - 46D
  - Aerodrome Design Manual Part 4 Visual Aids, 4rd edition 2004
- High-intensity bidirectional inset light for:
  - Bidirectional runway centre line

**Note:** *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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controlling not only ground movements but also air traffic close to the airport is of the highest interest. The International Civil Aviation Organization (ICAO) already describes A-SMGCS, Advanced Surface Movement Guidance and Control System, as the answer to the future modern airport need to control the entire airport space in one superior system.

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