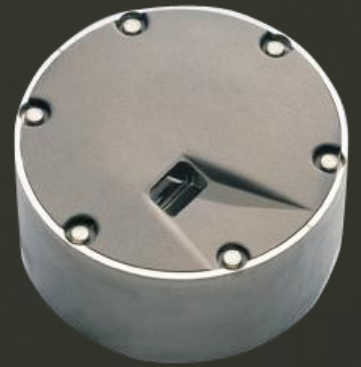


# Airfield Lighting

Product Description

## 12" Unidirectional High-Intensity Inset Light (IDM 4661)

- Unidirectional Touchdown Zone
- Rapid Exit Taxiway Indicator Light (RETIL)



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

## 1. INTRODUCTION

IDM 4661 is a 12" unidirectional high-intensity inset light.

### **Utilisation**

- Unidirectional touchdown zone and runway centre line inset light, clear
- Unidirectional runway centre line inset light, red

### **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>	1x105W, 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
IDM4661	340 x 340 x 155	11.7

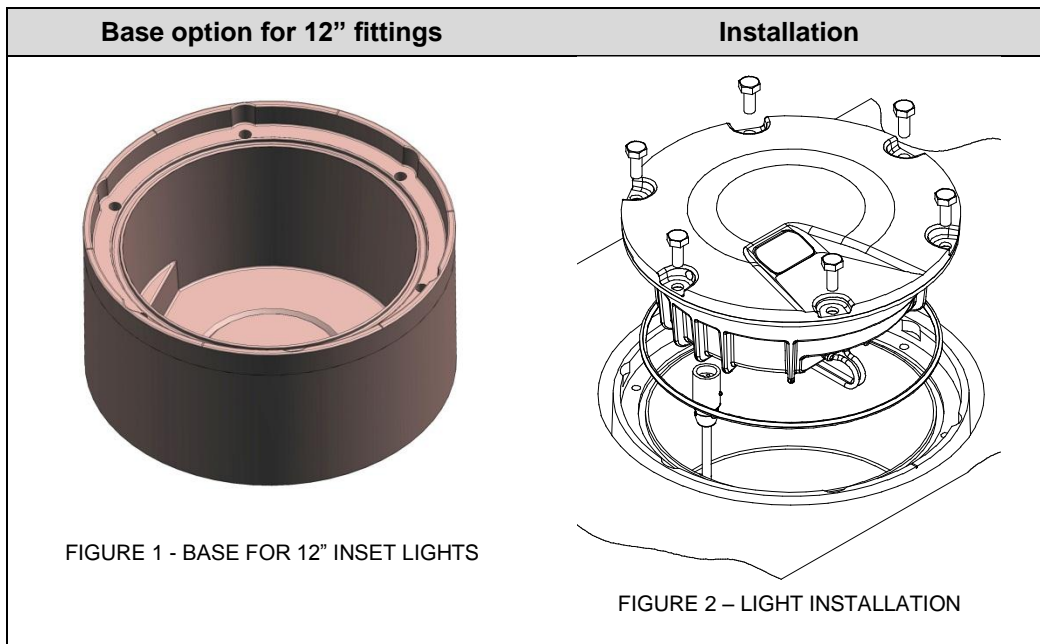
#### 4. INSTALLATION OPTIONS

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:

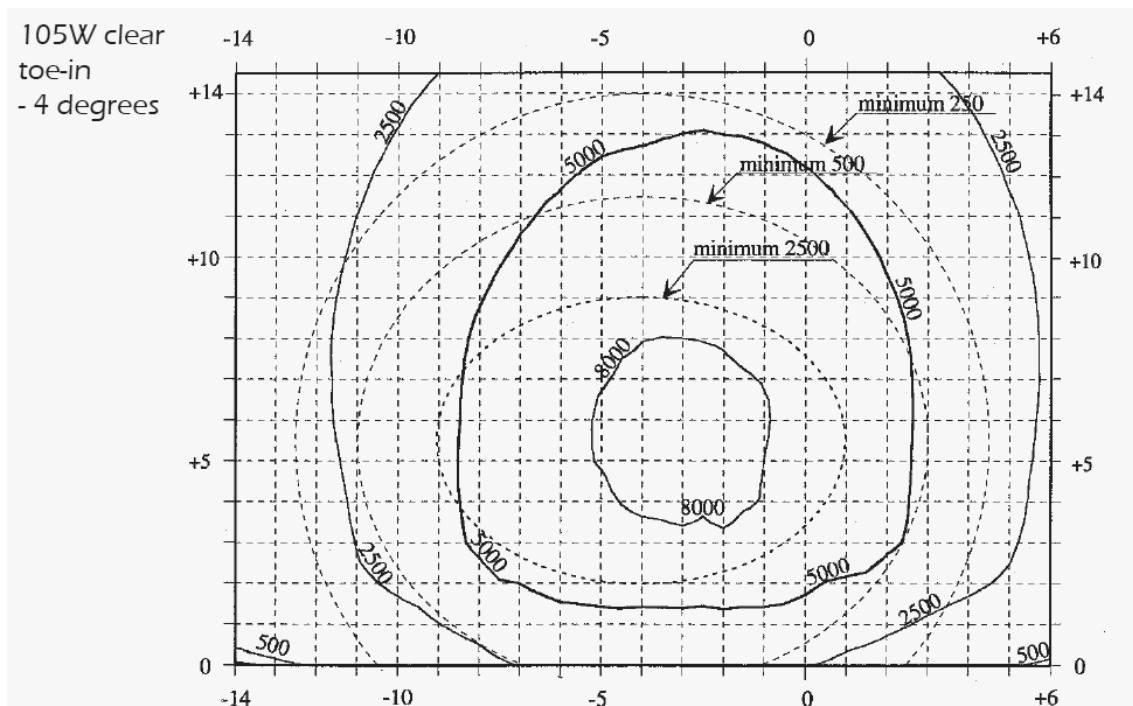
- ICAO: Annex 14 Volume I 5th edition 2009
- All drawings and design plans, for the particular project, to guarantee correct location for each fixture.



**5. PHOTOMETRICS**

Application	Requirements Annex 14, Appendix 2			Measured main beam intensities (kdc)			
	fig.	Imin	lave	lave	Imin	Imax	Uniformity ratio
Touchdown zone 105W, clear	2.5	2.5	5	7.4	4.4	8.7	1:2,0

**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.
- Toe-in achieved by using different assembly plates, luminaire installed parallel to runway centre line.
- 48W or 105W / 6,6 A ø50mm reflector lamp.
- 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	4661/	105W	-C	-0
4661				
105W				
C=Clear				
Y=Yellow				
0=No toe-in				
L=Toe-in left				
R=Toe-in right				

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 unidirectional inset light for:
  - Unidirectional touchdown zone and runway centre line inset light, clear
  - Unidirectional runway centre line inset light, red

**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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# Check in to the future

How many aircraft can your airport handle today? Can this number be increased without adverse effects on the airport's safety level? It is a known fact that traffic volume will rise in the foreseeable future. More movements will demand monitoring of the entire airport. Requirements will be sharpened and the development of an integrated system

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.

To a larger extent than today's systems, A-SMGCS will rely on automated processes to give both pilots and traffic controllers exact information about positions and directions. Safegate Group delivers complete A-SMGCS solutions already, as well as all vital parts relating to it. Safegate Group can check your airport into the future – today!



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Safegate Group offers solutions for increased safety, efficiency and environmental benefits to airports worldwide. The company was founded in 1973 and has its headquarters in Malmö, Sweden. Safegate Group has more than 70 partners around the globe in order to be close to its customers. Earlier members of Safegate Group include Thorn AFL and Idman, who both have over 40 years of experience in airfield lighting solutions for airports and heliports. The latest member of Safegate Group is Avibit, a leading provider of next generation software applications and integration of efficient air traffic control systems. Safegate Group's complete range of products and services, a "one-stop shop", provides solutions to customers and airborne travellers around the globe.

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