

Airfield Lighting

Product Description

Bidirectional High-Intensity Elevated Light
(IDM 5848)

- Runway Edge



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1. INTRODUCTION

IDM 5848 is a high-intensity bidirectional elevated light.

Utilisation

- Runway Edge
- Threshold and end light (non-precision approach runways)

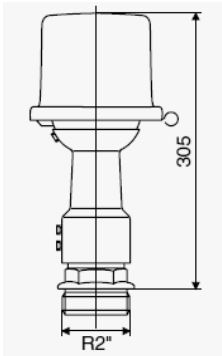
Compliance

- ICAO: Annex 14 Volume I 6th edition July 2013
- Aerodrome Design Manual Part 4 Visual Aids, 4rd edition
- FAA AC 150/5345-46D L-862

2. MAIN ADVANTAGES

- Fulfils ICAO and FAA standards in categories I, II and III
- Effective and accurate light distribution
- Corrosion resistant materials
- Light weight
- Modularity reduces spare parts stocking needs and costs
- Simple construction, reliable and easy to maintain

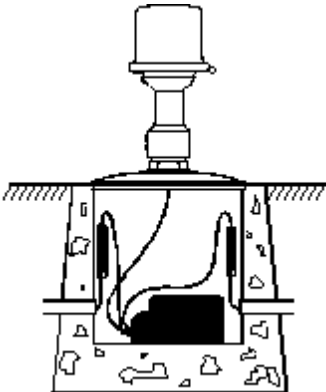
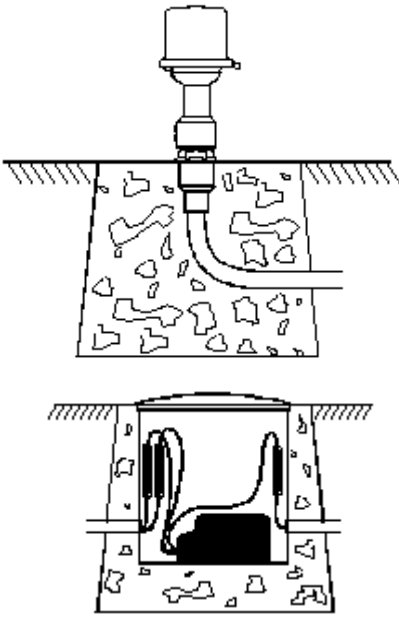
3. TECHNICAL CHARACTERISTICS

Characteristic	Description
Light dimensions	
Weight	2.1 kg
Materials	<p>Body corrosion resistant aluminium alloy.</p> <p>Silicone rubber gaskets.</p> <p>Anti-acid steel hardware.</p> <p>Bowl fastening ring UV resistant fibreglass-reinforced plastic.</p>
Surface treatment	<p>Chromatized undercoat.</p> <p>Aviation yellow powder painting.</p>
Cables and connectors	<p>Plugs: FAA L-823 Style 5</p> <p>Receptacles: FAA L-823 Style 12</p> <p>Secondary cable: FAA 150/5345-70</p>
Light sources	Pre-focused 6,6A constant current halogen lamp, Pk30D base. Power rating 150W or 200W. Average lifetime 1500 hours at rated current.
Packing	Dimensions: 340x150x150 mm
Accessories	<p>Base plate IDM 5838</p> <p>Curve tube IDM 5839</p> <p>Transformer case IDM 5448/350</p> <p>Extension tube</p>

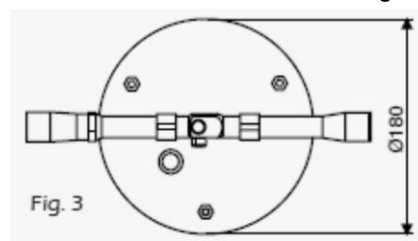
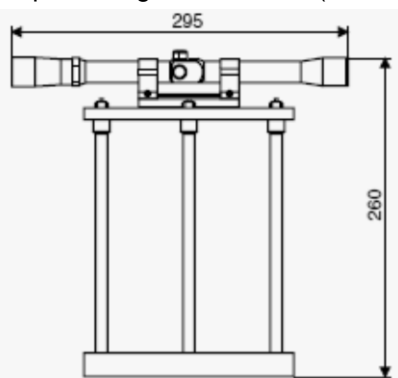
Packing Data		
Designation	Dimensions mm	Weight kg
IDM5848	340 x 150 x 150	2.1

4. INSTALLATION OPTIONS

The fittings can be installed in two different ways:

Description	Image examples
<p>(a) With a frangible coupling IDM 5840 on a base plate which is mounted on a transformer case IDM 5448.</p>	 <p>FIGURE 1 – INSTALLATION ON A TRANSFORMER CASE</p>
<p>(b) With a frangible coupling IDM 5840 on a curve tube IDM 5839. Note: Separated transformers case IDM 5848 with case plate IDM 5841 is needed.</p>	 <p>FIGURE 2 – INSTALLATION ON A CURVE TUBE</p>

A special alignment device (IDM 5847) is used for horizontal and vertical alignment.

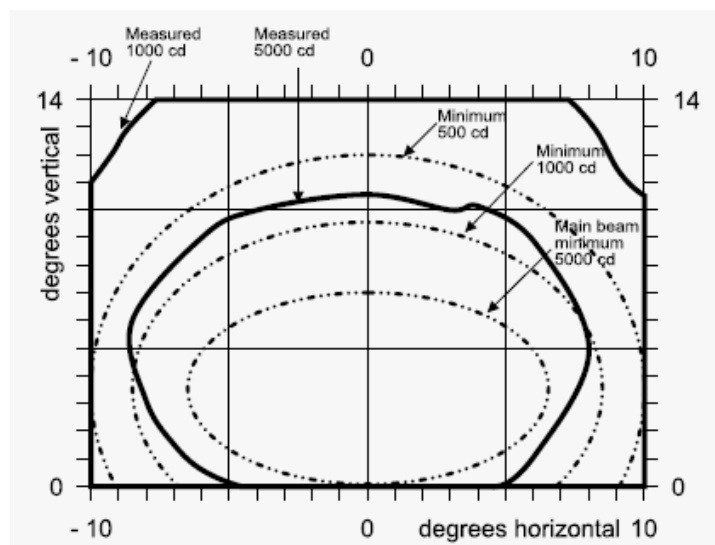


5. PHOTOMETRICS

Application	Requirements Annex 14, Appendix 2			Measured main beam intensities (kdc)			
	fig.	Imin	Iave	Iave	Imin	Imax	Uniformity ratio
Runway edge 150W, clear	2.11	5	10	12,1	7,2	15,9	1:2,2
Runway edge 200W, clear	2.10	5	10	12,5	7	17,4	1:2,5

Intensity Distribution

150W, clear



6.

DESIGN

Mechanical construction

- Body special corrosion resistant aluminium alloy
- Aviation yellow powder painting
- Stainless steel hardware
- Silicone rubber gaskets
- Bowl fastening ring UV resistant fibreglass-reinforced plastic

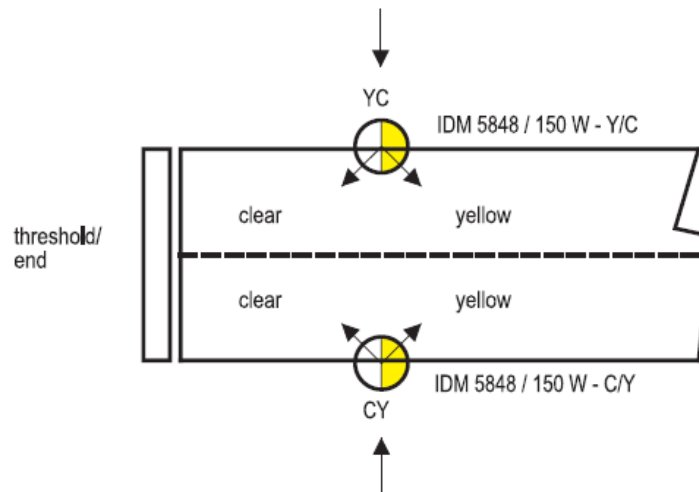
Optical construction

- Clear outer refractor bowl heat resistant pressed glass
- Inner refractor bowl(s) heat resistant pressed glass
- Coloured inner bowls available
- 150 W / 6,6 A or 200 W / 6,6 A pre-focused halogen lamp, Pkx30d or Pk30d base
- Average lifetime 1500 hours at rated current

Accessories

- Base plate IDM 5838
- Curve tube IDM 5839
- Transformer case IDM 5448/ 350
- Extension tube

Colour Code Specification



7. ORDER CODES

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

IDM	5848/	150W	-CY
5848			
150W			
200W			
C=Clear			
G=Green			
R=Red			
Y=Yellow			

Note: Mechanically breakable coupling and FAA-type secondary plug included.

Note: On request equipped with longer secondary cables c/w plugs. Length must be specified when ordering.

For more information, contact Safegate Group or see www.safegate.com.

8.

SPECIFICATION

- Compliance with ICAO: Annex 14 Volume I 6th edition July 2013
- Aerodrome Design Manual Part 4 Visual Aids, 4rd edition 2004
- FAA AC 150/5345-46D L-862
- High intensity bidirectional elevated light for:
 - Runway Edge
 - Threshold and end light (non-precision approach runways)

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.

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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