TKH AIRPORT SOLUTIONS

Datasheet

Omnidirectional Inset Light

LED AGL
Airfield Ground Lighting

03-71008
V1.5

General

TKH Airport Solutions inset lights are efficient and high-performing LED lights, providing at least 50,000 hours of service life at full 6.6 A operation. The LED light fixtures have a simplified modular construction, consisting of five main components:

- Aluminum forging cover plate, with mechanical load capabilities exceeding FAA requirements
- Interchangeable LED light module
- Electronic driver board with housing
- Borosilicate glass prism
- Secondary cable in accordance with FAA or ICAO requirements

This means easy maintenance of the lights because of the reduction of the amount of spare parts.

All of our inset lights are also available as part of our CEDD solution. Please note that the specifications of CEDD lights are different from this datasheet. Contact our team for more details.

Key features

- 8" outer diameter
- 4 mm height above surface
- Depth below flange: 35 mm
- Light outlet size Ø 80 mm
- Dust and water tightness: IP68, IP69
- Overall lifetime* > 20 years
- Useful lamp life (LED) up to 50,000 h
- Chromaticity coordinates according to ICAO Annex 14, Vol. 1 or FAA AC 150/5345-46E
- Nominal current: 6.6 A (0 – 100 %)
- Nominal AC frequency: 40-70 Hz
- Power consumption (@6.6 A - fixture only, not including cable losses, transformer efficiency, etc): yellow: 10W, red: 9W, blue: 8W, white: 10W
- Power factor > 95 % at nominal current
- Ambient temperature: -40 °C (-40 °F) / + 75 °C (+167 °F)
- Internal serial interface for diagnostics and parameterization
- Fail/open function (optional)
- De-icing kit/Heater (optional) - additional max. 13W while in operation

*) Apart from wear parts

Standards

This fixture has been developed according to the following standards:

- ICAO Annex 14, Vol. 1 and Vol. 2
- FAA AC 150/5345-46E
- Engineering Brief No. 67D
- IEC TS 61827

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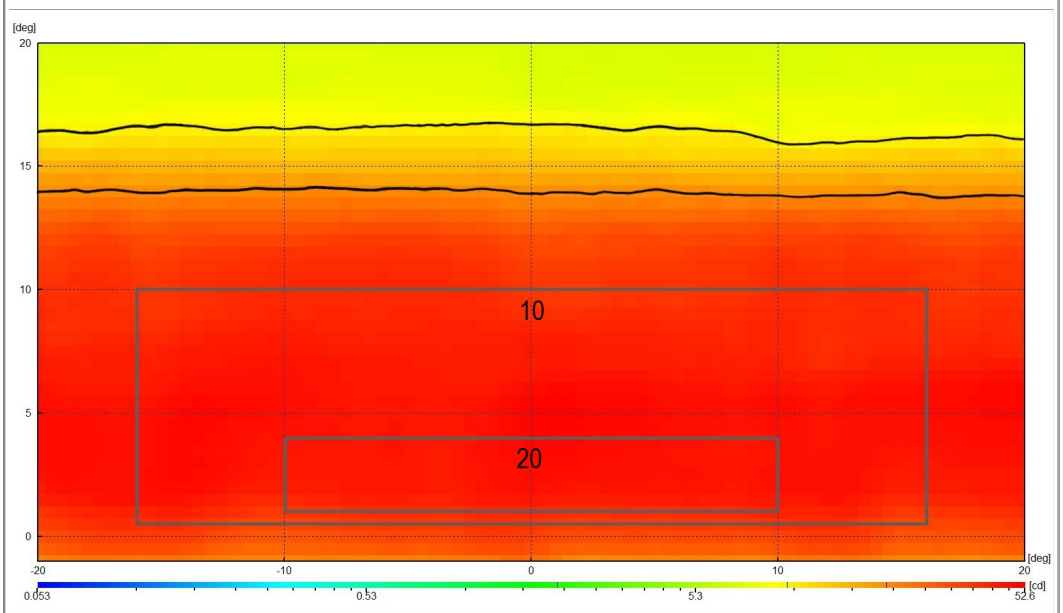
Colors / Variants

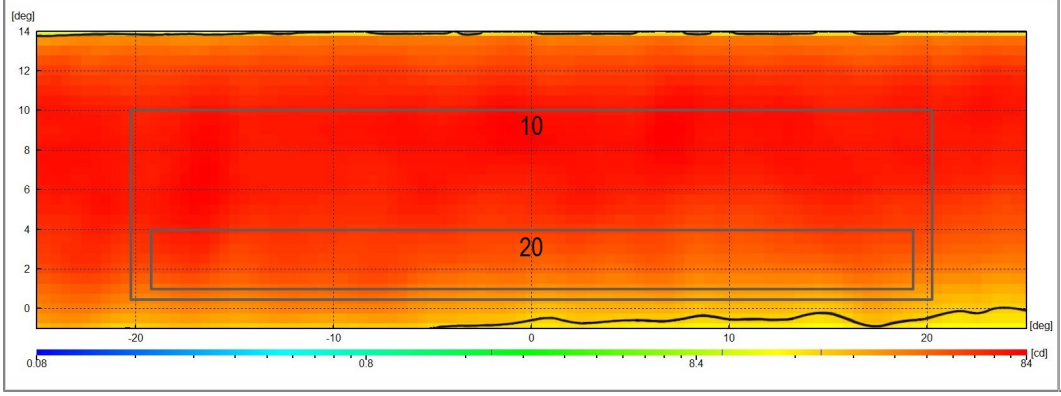
- Omnidirectional Yellow (Intermediate Holding Position Omni)
- Omnidirectional Red (Stop Bar Omni)
- Omnidirectional Blue (Taxiway Edge Omni) / L-852T(L)
- Omnidirectional White (Runway Edge Omni)

Light distributions

Yellow

ICAO A2-15	min. (cd)
	ICAO: — TKH (measured): —

Red

ICAO A2-16	min. (cd)
	ICAO: — TKH (measured): —

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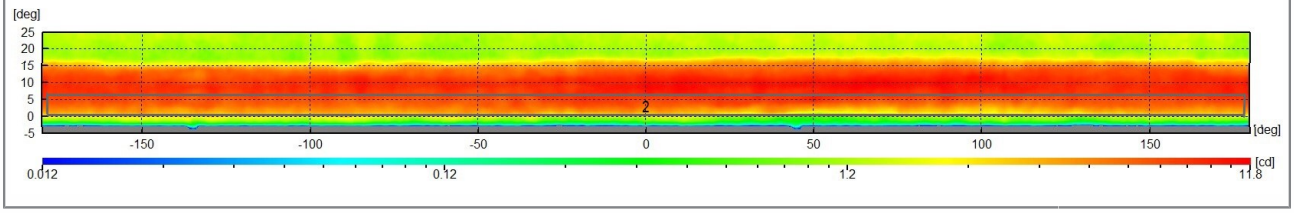
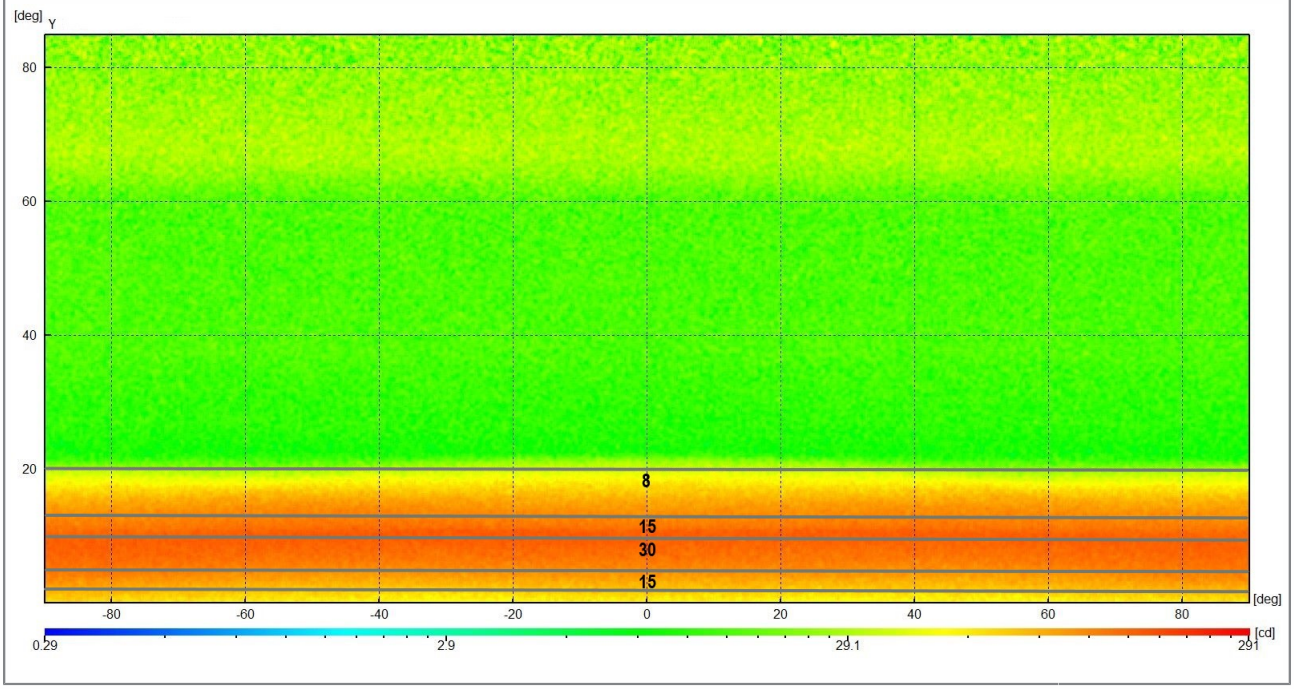
Blue

ICAO §5.3.18



White

ICAO Vol.2, Fig. 5-12, Illustration 5



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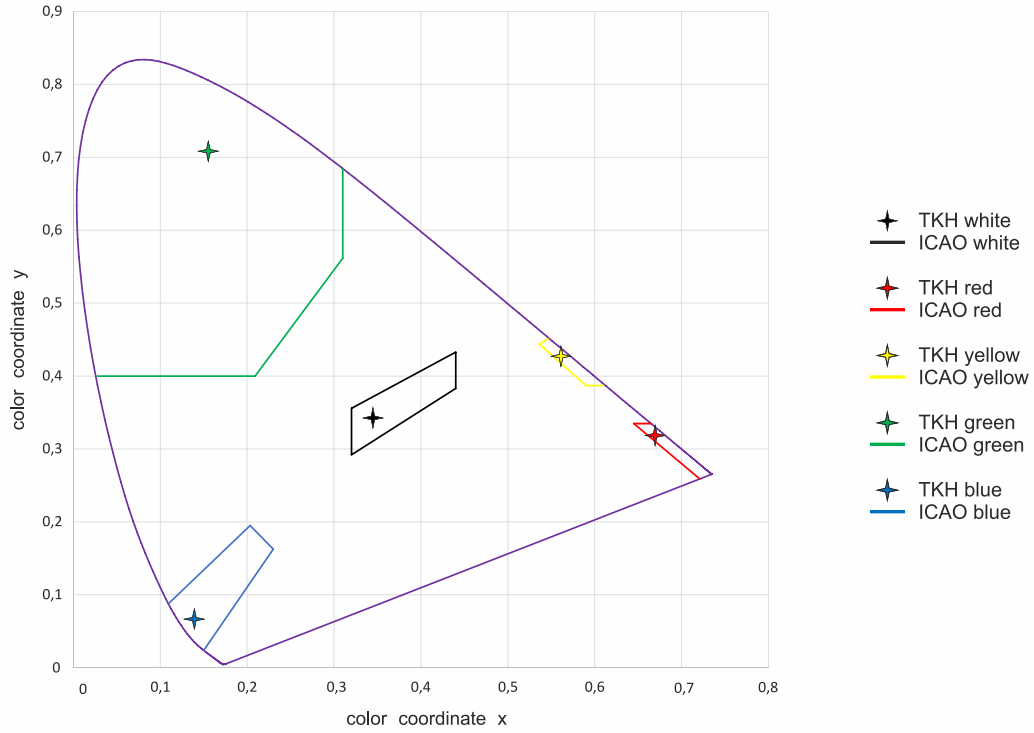
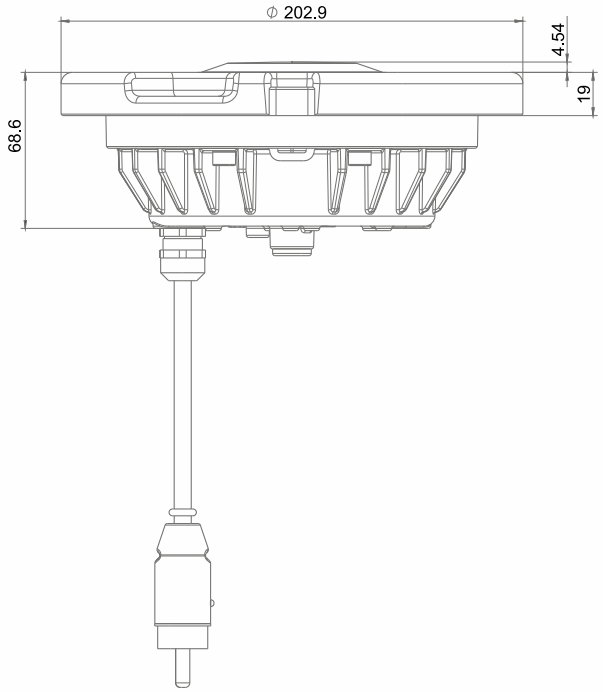
Chromaticities

Areas description according to ICAO Annex 14, Volume I, Edition 8, July 2018



Dimensions (mm)



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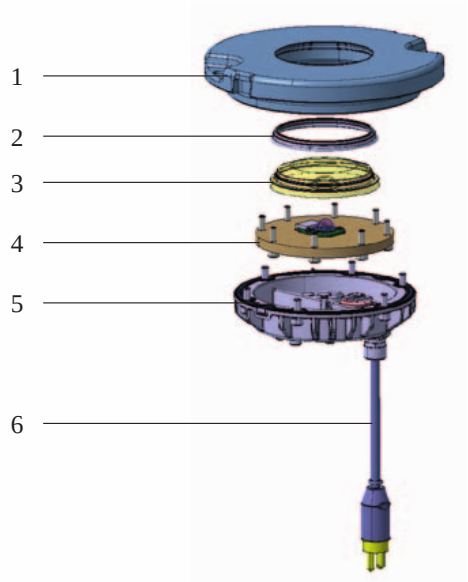
Components

Omnidirectional

1. Cover (drop forged AL, anodized)
2. Sealing (Fluor silicate)
3. Prism (Borosilicate glass)
4. High power LED module
5. Housing (Aluminum, die-cast)
6. FAA L-823 plug



Accessories

- Transformer
- Shallow base
- Installation tools

Please contact sales@tkh-airportsolutions.com to discuss which accessories are required for your application.

Packing data

Variant	Dimensions (L x W x H) in mm	Gross weight in kg	Net weight in kg
8" Fixture	250 x 250 x 105	2.8	2.5
8" Shallow Base	215 x 215 x 130	2.7	2.5

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Ordering code

TXO - O - I - 3 1 - Y 00 0 00 - 1 - 1O - 1 0 0 0

Option	Key	Description
Function		
	STB	Stop Bar
	RE	Runway Edge
	TXE	Taxiway Edge Omni
	TXO	Omnidirectional Inset
	852T	L-852T(L)
Direction		
	O	Omni
Regulation		
	F	FAA
	I	ICAO
Light Intensity		
	1	CAT I
	2	CAT II
	3	CAT III
	4	FAA
Cover/Size		
	1	8 Inch Cover
Color A		
	B	Blue
	R	Red
	W	White
	Y	Yellow
Toe-in A		
	00	No Toe-In
Color B		
	0	Blank
Toe-in B		
	00	No Toe-In
Prism		
	1	Borosilicate Prism
Cable		
	1O	250mm One Plug
	2O	457mm One Plug
	3O	300mm One Plug (combined with 3-pole plug)
Plug type		
	1	Standard FAA 2-Pole-Plug
	2	Special 3-Pole-Plug
Fail-open		
	0	Without Fail-Open
	1	With Fail-Open Hardware Relais
	2	With Fail-Open Signal Interface
Heater		
	0	No Heater
	1	With Heater
Special options		
	0	No Special Options
	1	Overheat Protection

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Document Information

Name	: 04_LED-AGL_Omnidirectional_Inset_Light_03-71008
Version	: V1.5
Language	: English (Original manual)

For the latest version of this document see *https://www.tkh-airportsolutions.com/airfield-products/* or scan

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TKH AIRPORT SOLUTIONS

Company profile:

TKH Airport Solutions offers a complete range of LED-based airfield ground lighting products that are designed to be easy to install, operate, and maintain, and are compliant with international aviation standards.Our products meet the needs of our customers and contribute to a better future for the aviation industry. Being part of the TKH Group, our company can build on a history of more than 90 years in smart connectivity, energy distribution and AGL.

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