



# Datasheet

## Omnidirectional Inset Light (TXO)

## 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<sup>®</sup> 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: IP 68
- 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 %)
- Power consumption (@6.6 A): yellow: 10 W, red: 9 W, blue: 8 W, white: 10 W
- $U_{max}(100\%)$ : 1.5 V
- $U_{min}(0.1\%)$ : 0.9 V
- Power factor > 95 % at nominal current
- Ambient temperature: -55 °C (-67 °F) / + 85 °C (+185 °F)
- Internal serial interface for diagnostics and parameterization
- Fail/open function (optional)
- Integrated single lamp control (optional with CEDD<sup>®</sup>)

\*) 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

## Variants

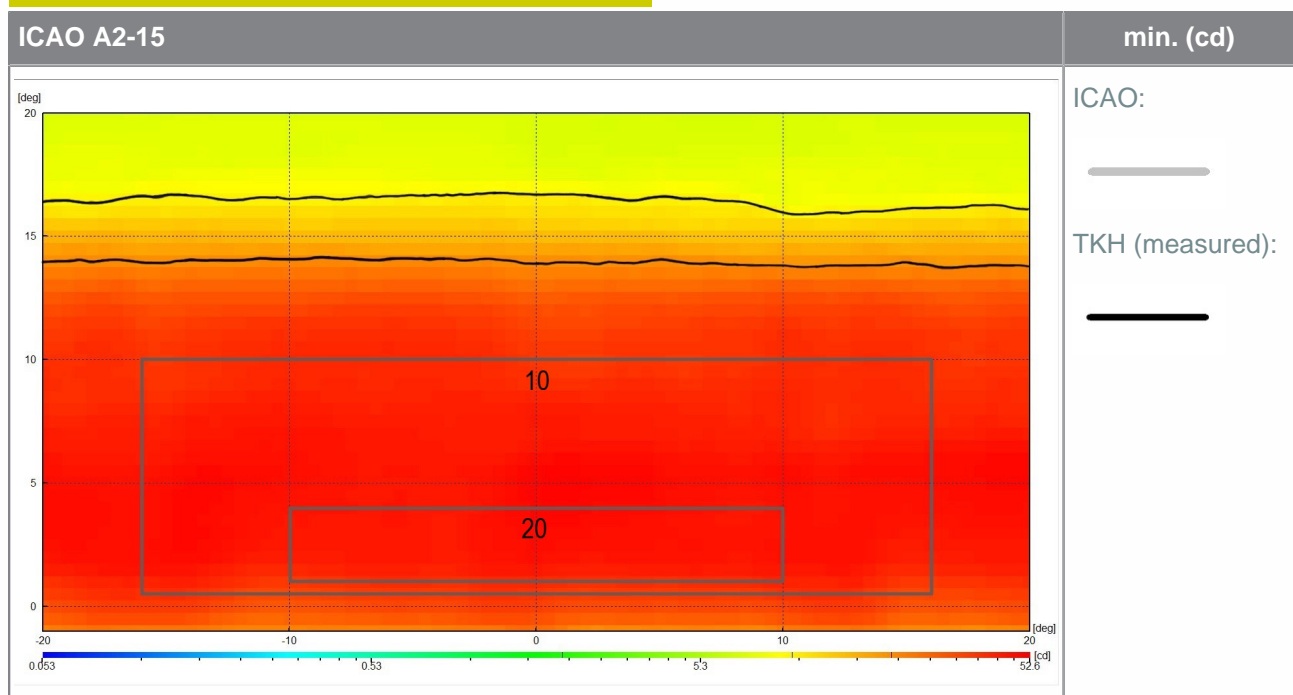
- Omnidirectional
- L-852T

## Colors

- Yellow (Intermediate Holding Position Omni)
- Red (Stop Bar Omni)
- Blue (Taxiway Edge Omni)
- White (Runway Edge Omni)

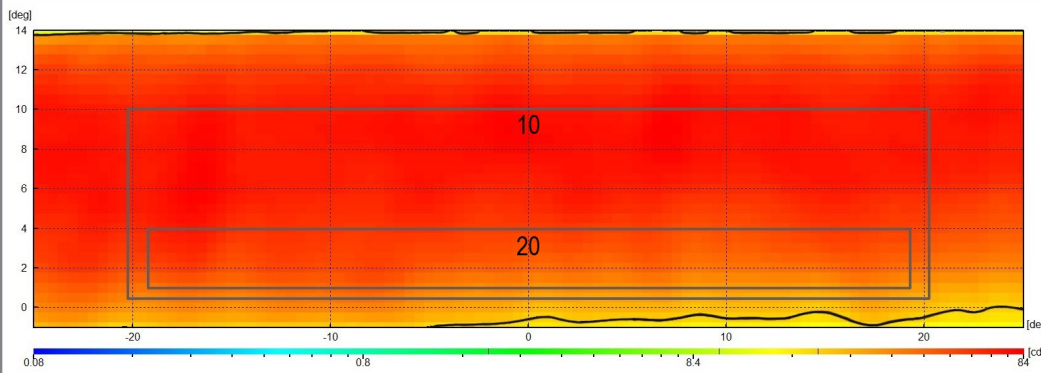
## Light distributions

### Yellow



## Red

ICAO A2-16



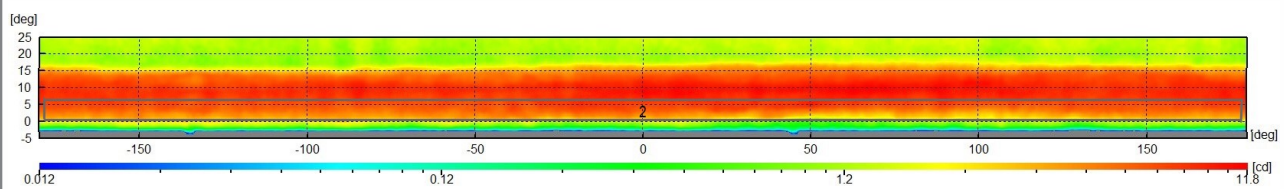
min. (cd)

ICAO:

TKH (measured):

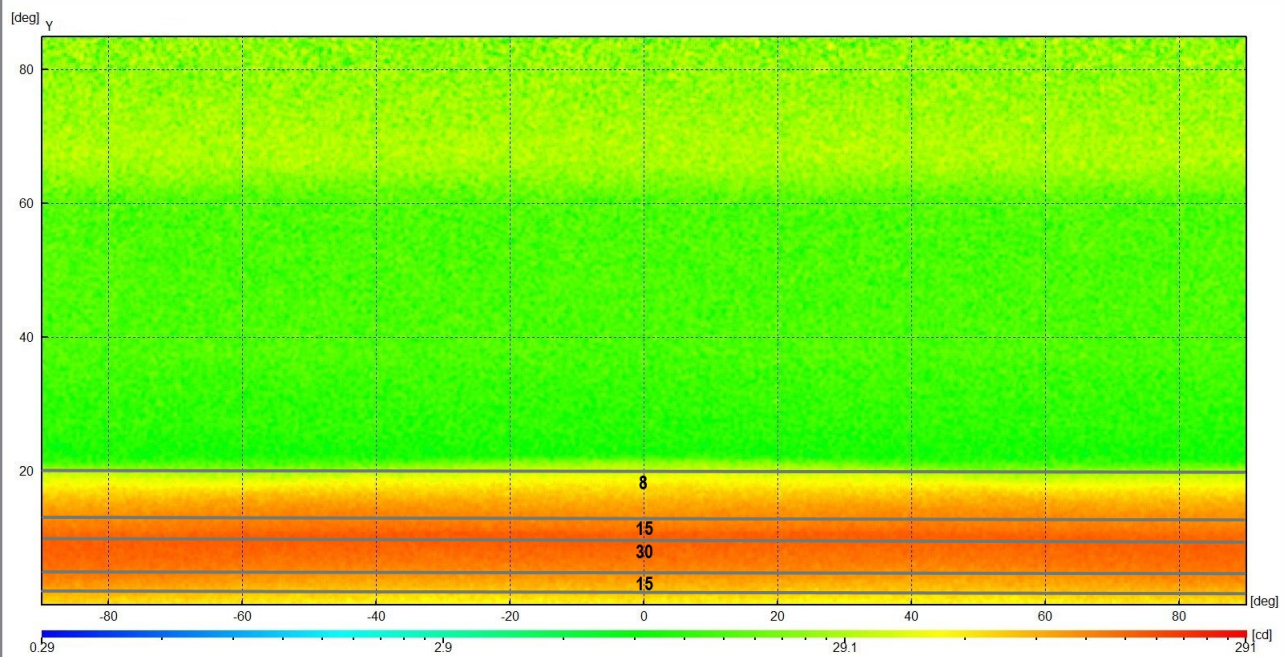
## Blue

ICAO §5.3.18



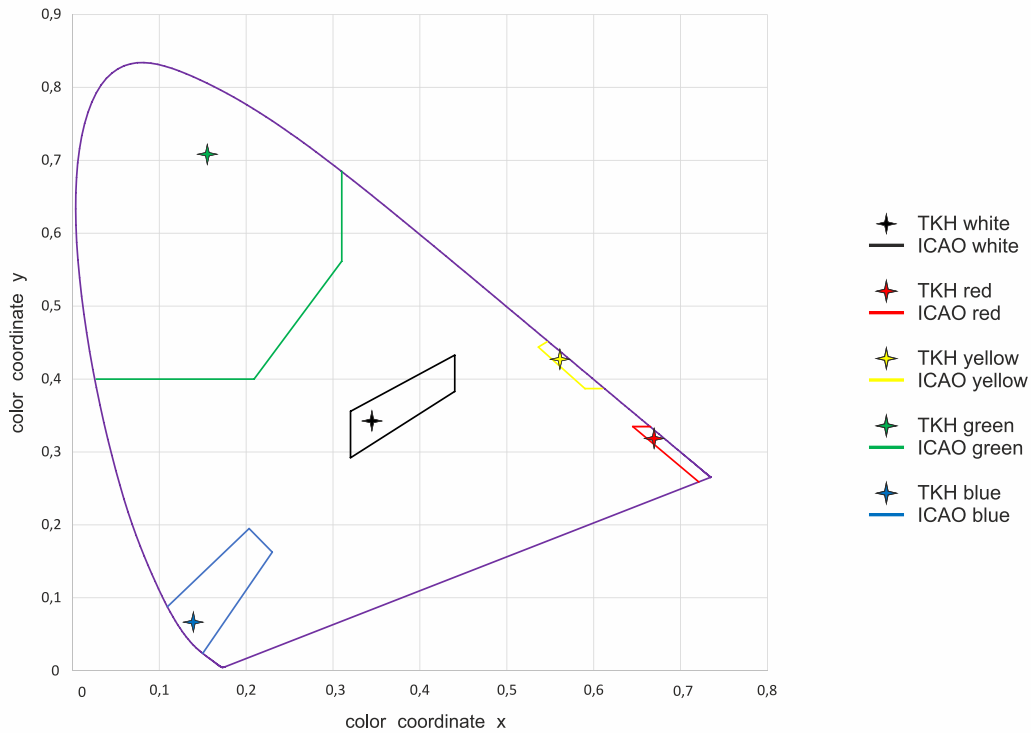
## White

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

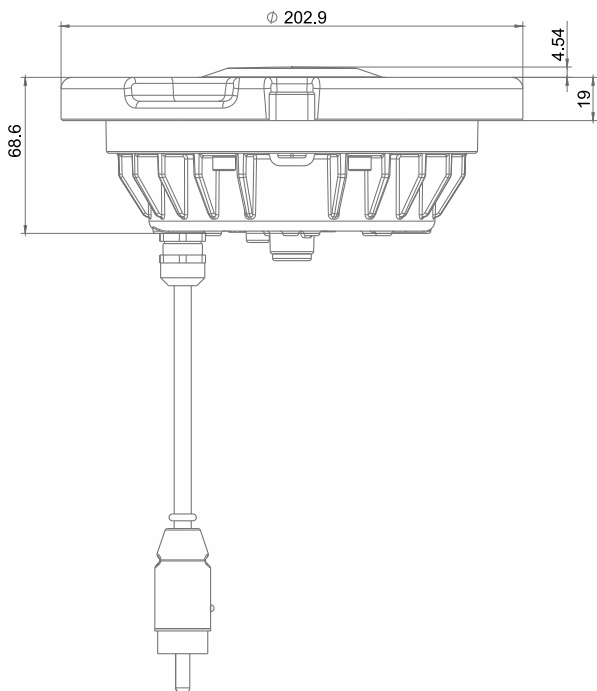


## Chromaticities

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



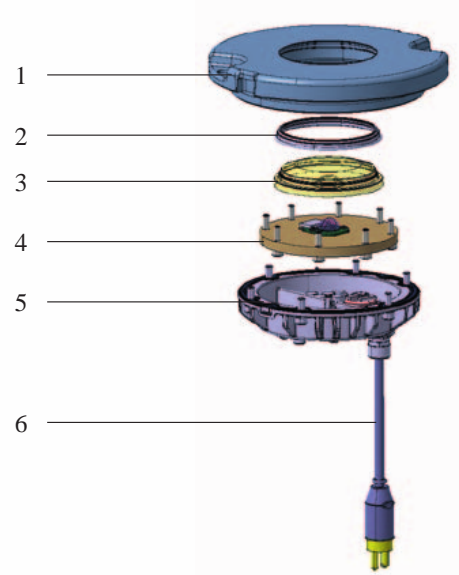
## Dimensions (mm)



## 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

Please contact our sales team to know 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

## Document Information

Name : 04\_LED-AGL\_Omnidirectional\_Inset\_Light\_Type\_TXO\_03-71008  
Version : V1.3  
Language : English (Original manual)

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



## Ordering code

Option	Key	Description	TXO	-	O	-	I	-	3	1	-	B	00	0	00	-	1	-	10	-	1	0	0	0
<b>Version</b>	TXO	Taxiway Omni Light																						
<b>Direction</b>	O	Omni																						
<b>Regulation</b>	F	FAA																						
	I	ICAO																						
<b>Light Intensity</b>	1	CAT I																						
	2	CAT II																						
	3	CAT III																						
<b>Cover/Size</b>	1	8 Inch Cover																						
	3	8 Inch Flat Cover																						
<b>Color A</b>	B	Blue																						
	R	Red																						
	W	White																						
	Y	Yellow																						
<b>Toe-in A</b>	00	No Toe-In																						
<b>Color B</b>	0	Blank																						
<b>Toe-in B</b>	00	No Toe-In																						
<b>Prism</b>	1	Borosilicate Prism																						
<b>Cable</b>	10	250mm One Plug																						
	20	457mm One Plug																						
	30	300mm One Plug																						
<b>Plug type</b>	1	Standard FAA 2-Pole-Plug																						
	2	Special 3-Pole-Plug																						
<b>Fail-open</b>	0	Without Fail-Open																						
	1	With Fail-Open Hardware Relais																						
	2	With Fail-Open Signal Interface																						
<b>Deicing-Kit</b>	0	Without De-icing																						
<b>Special options</b>	0	No Special Options																						





### Company profile:

TKH Airport Solutions is an innovator in airfield ground lighting, offering a complete range of LED AGL products. We build upon the know-how from a long and successful tradition of pioneering developments in the AGL and connectivity 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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