

Datasheet

Approach and Side Row Light (APH & SR)

General

TKH Airport Solutions inset lights are efficient and high-performing LED lights, providing at least 50,000 hours of service life at full 6.6A 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 with optional sapphire glass
- 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 in CEDD technology. Please note that the specifications of CEDD lights are different from this datasheet. Contact our team for more details.

Key features

- 12" outer diameter
- 12.5 mm height above surface
- Depth below flange: 50 mm
- Light outlet size 49 mm x 10 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): 94W (APH), 56W (SR)
- 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. 28W while in operation
- Sapphire coated prism (optional)

*) Apart from wear parts

Standards

This fixture has been developed according to the following standards:

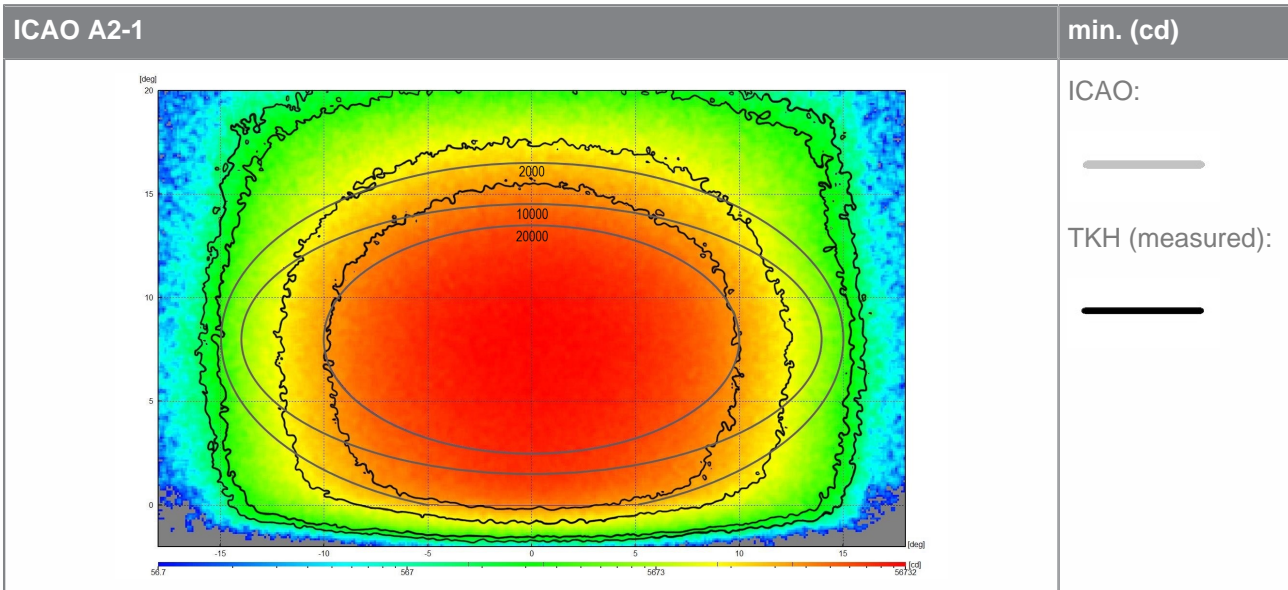
- ICAO Annex 14, Vol. 1 and Vol. 2
- FAA AC 150/5345-46E
- Engineering Brief No. 67D
- IEC TS 61827

Colors / Variants

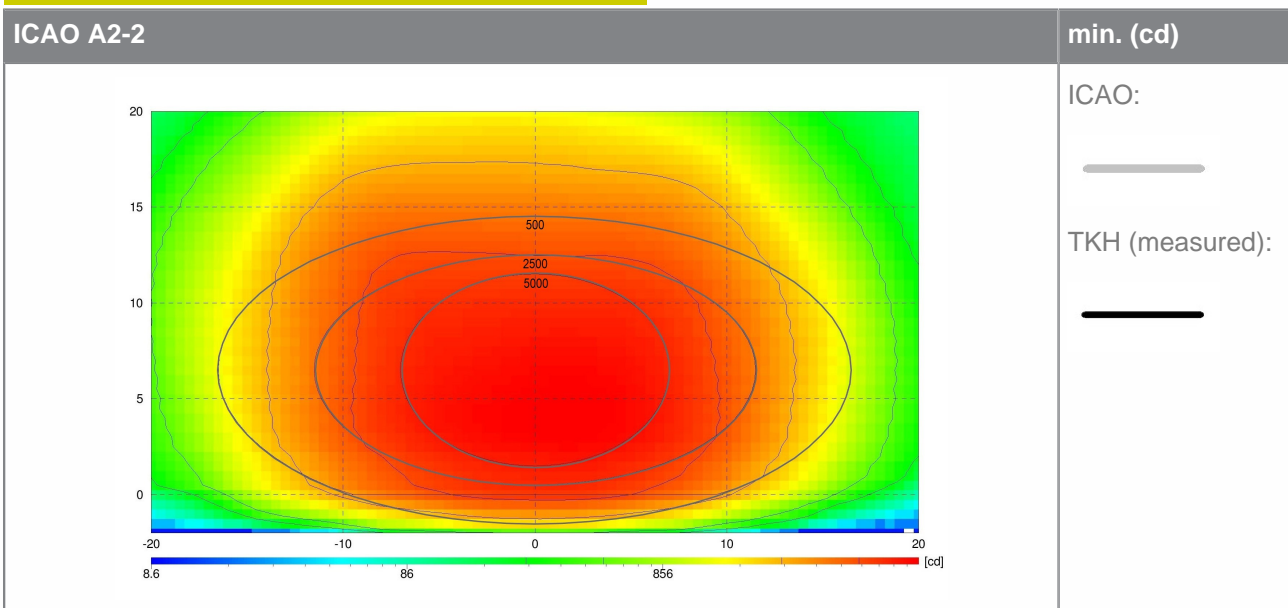
- Unidirectional White (Approach)
- Unidirectional Red (Approach Side Row)

Light distributions

White, Approach Center Line and Crossbars

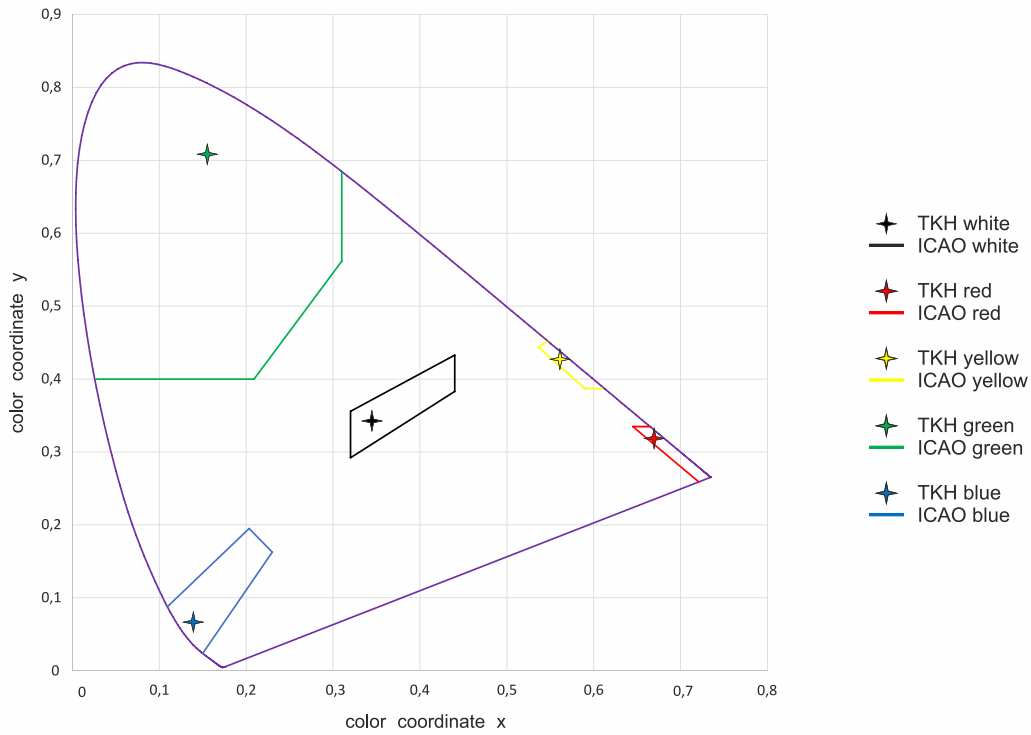


Red, Approach Side Row

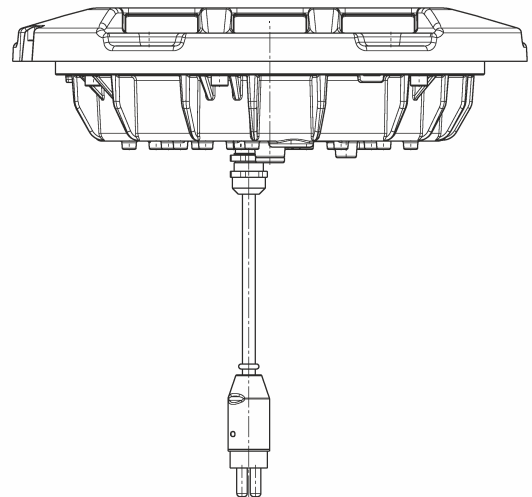
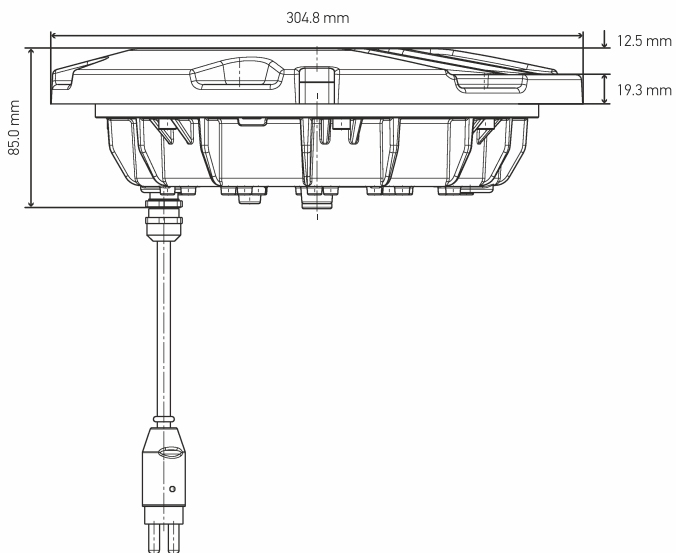


Chromaticities

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



Dimensions



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
12" Fixture	325 x 325 x 155	6.8	5.8
12" Shallow Base	320 x 320 x 150	7.55	7.1

Document Information

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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	APH	-	S	-	I	-	3	2	-	W	00	0	00	-	1	-	10	-	1	0	0	0
Function	APH	Approach																						
	SR	Approach Side Row																						
Direction	S	Straight																						
	L	Left																						
	R	Right																						
Regulation	I	ICAO																						
Light Intensity	1	CAT I																						
	2	CAT II																						
	3	CAT III																						
Cover/Size	2	12 Inch Cover																						
Color A	R	Red																						
	W	White																						
Toe-in A	00	No Toe-In																						
Color B	0	Blank																						
Toe-in B	00	No Toe-In																						
Prism	1	Borosilicate Prism																						
	2	Sapphire Prism																						
Cable	10	250mm One Plug																						
	1T	250mm Two Plugs																						
	20	457mm One Plug																						
	2T	457mm Two Plugs																						
	30	300mm One Plug (combined with 3-pole plug)																						
	3T	300mm Two Plugs (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																						
	5	Special Optics for Hot Ambient Temperatures > 35°C																						



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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