



# Datasheet

## Approach and Side Row Light (APH & SR)

### LED AGL

Airfield Ground Lighting

03-71020

V2.4

## 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): 93.4W (APH), 48.6W (SR)
- Rated Voltage  $U_{\max}(100\%)$ : 14.7 V / 7.6 V
- Rated Voltage  $U_{\min}(0.1\%)$ : 1.7 V
- 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 (optional). Additional min. 14 W while in operation
- Sapphire coated prism (optional)
- Integrated single lamp control (optional with CEDD®)

\*) 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

- Unidirectional

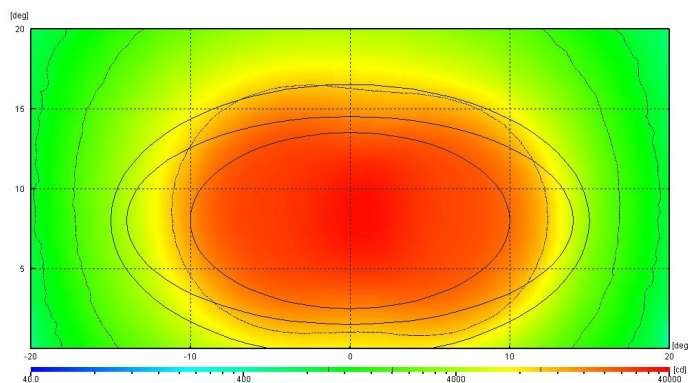
## Colours

- White
- Red

## Light distributions

### White, Approach Center Line and Crossbars

#### ICAO A2-1



ICAO

TKH

min. average (cd)

20000

29426

min. (cd)

10000

17650

2000

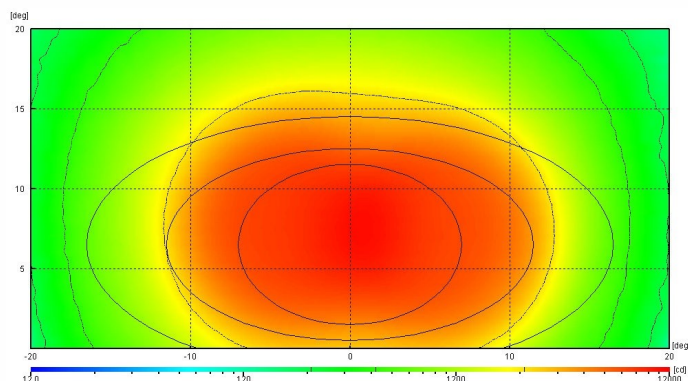
6667

1000

4646

### Red, Approach Side Row

#### ICAO A2-2



ICAO

TKH

min. average (cd)

5000

10144

min. (cd)

2500

7675

500

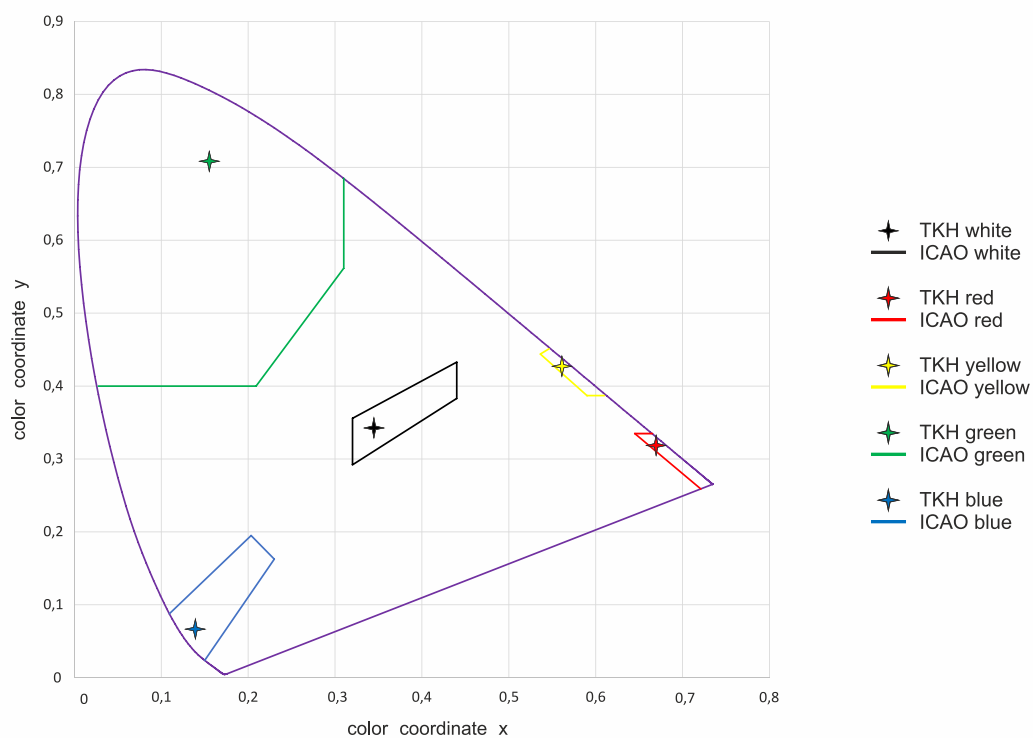
3032

250

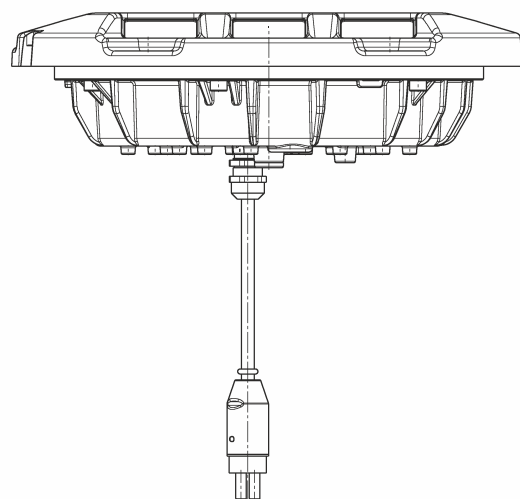
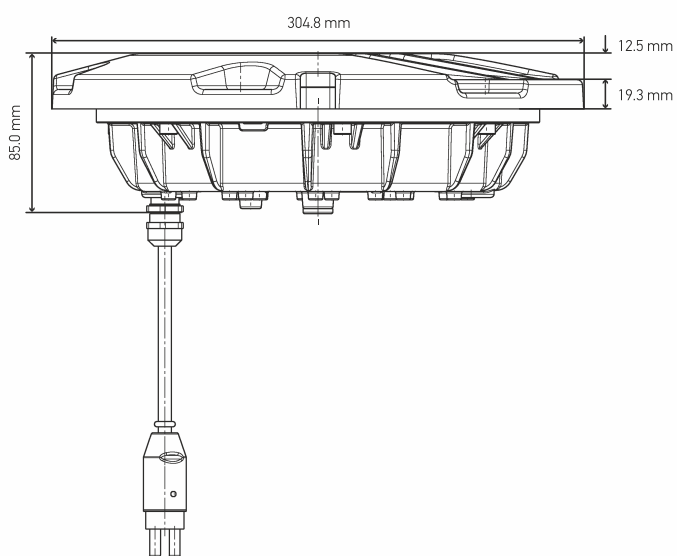
780

## Chromaticities

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



## Dimensions



## 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
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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Version : V2.4

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
<b>Function</b>																								
	APH	Approach																						
	SR	Approach Side Row																						
<b>Direction</b>																								
	S	Straight																						
	L	Left																						
	R	Right																						
<b>Regulation</b>																								
	I	ICAO																						
<b>Light Intensity</b>																								
	1	CAT I																						
	2	CAT II																						
	3	CAT III																						
<b>Cover/Size</b>																								
	2	12 Inch Cover																						
<b>Color A</b>																								
	R	Red																						
	W	White																						
<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																						
	2	Sapphire Prism																						
<b>Cable</b>																								
	10	250mm One Plug																						
	1T	250mm Two Plugs																						
	20	457mm One Plug																						
	2T	457mm Two Plugs																						
	30	300mm One Plug																						
	3T	300mm Two Plugs																						
<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>Heater</b>																								
	0	No Heater																						
	1	With Heater																						
<b>Special options</b>																								
	0	No Special Options																						
	1	Temperature Compensation																						
	5	Glass Optics for Hot Ambient Temperatures > 35C																						



### 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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