



Datasheet

Threshold and Threshold Wing Bar (THR & THRW)

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
- 6.35 mm height above surface
- Depth below flange: 50 mm
- Light outlet size 40 mm x 6 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): THR: 53 W, THRW: 108W
- 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. 27W 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

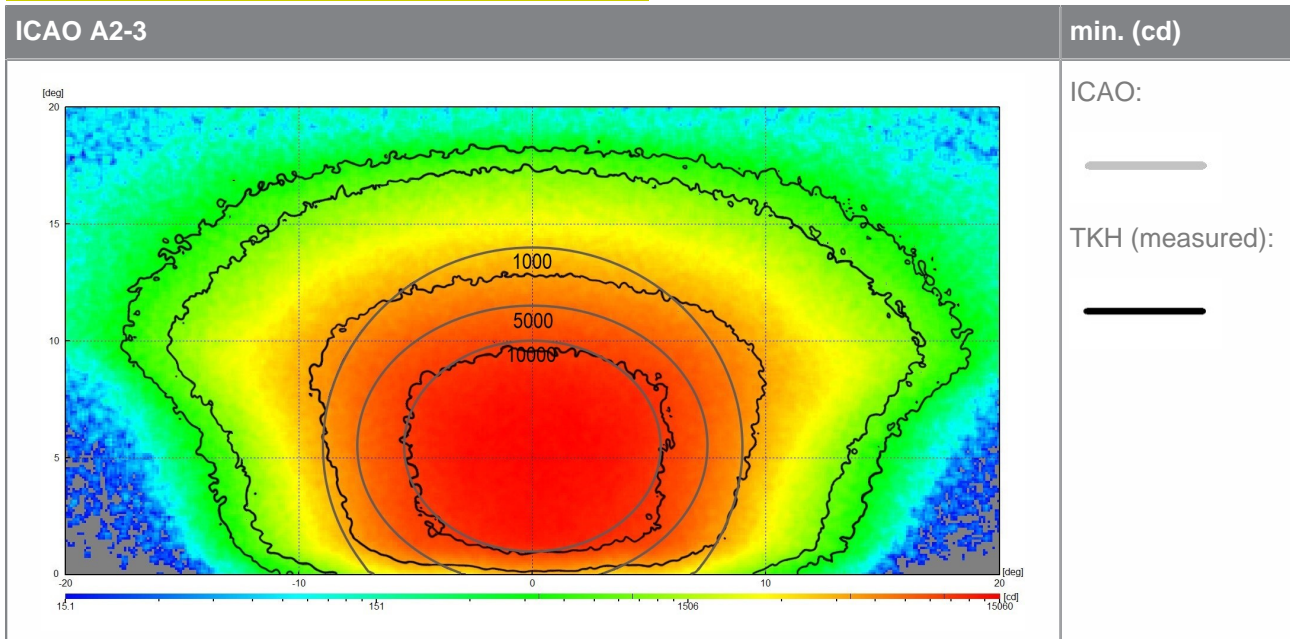
Colors / Variants

Unidirectional Green:

- Threshold
- Threshold Wing Bar
- L-850D(L)
- L-850E(L)

Light distributions

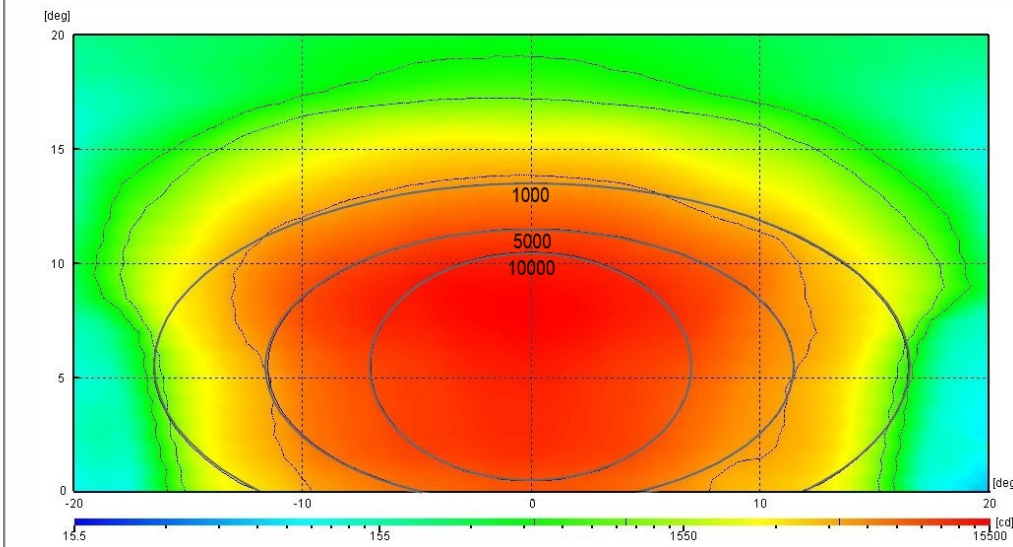
Green, Threshold



Green, Threshold Wing Bar

ICAO A2-4

min. (cd)



ICAO:

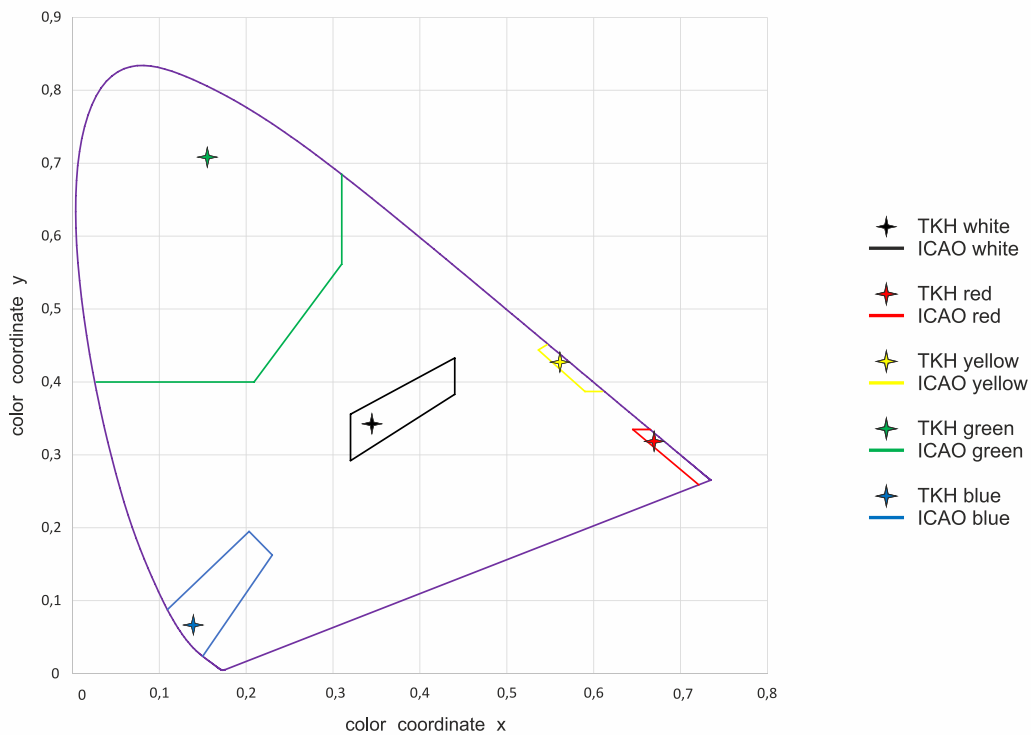


TKH (measured):

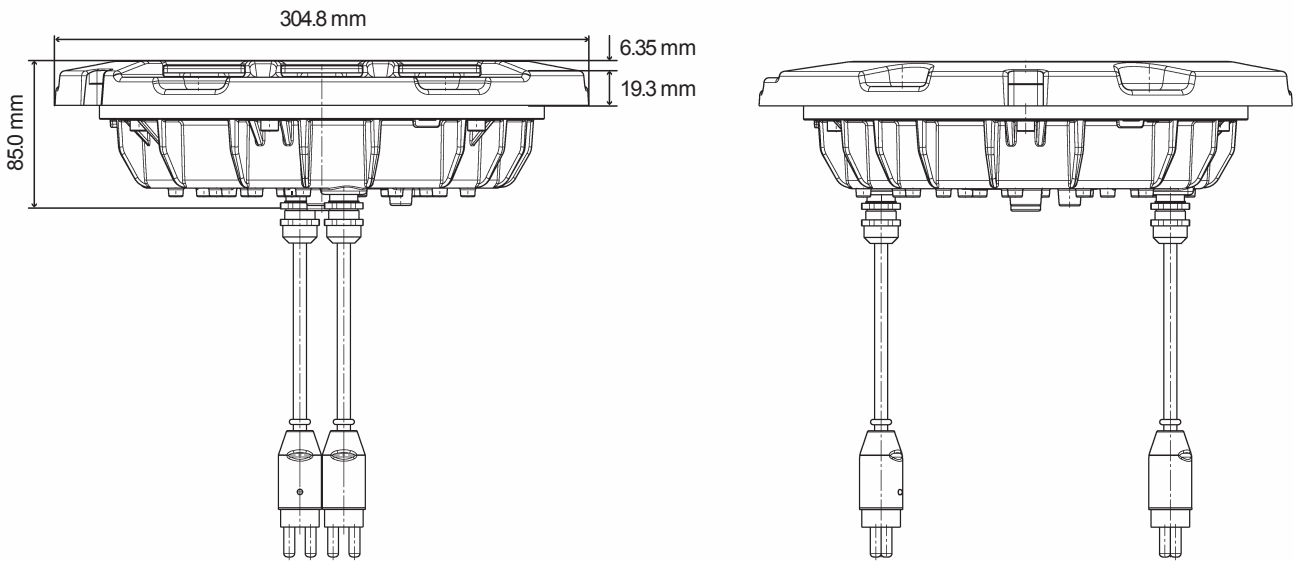


Chromaticities

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



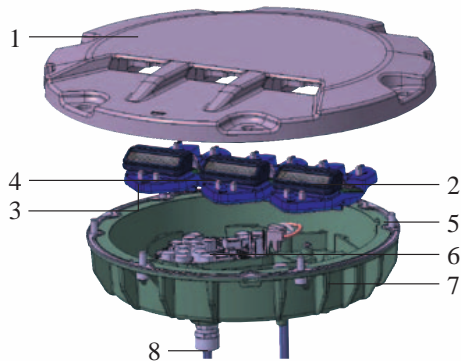
Dimensions



Components

Uni-directional straight variant

1. Cover (drop forged AL, anodized)
2. High power LED module 1, 2 and 3
3. Prism (borosilicate glass)
4. Sealing - aperture (Fluor silicate)
5. Sealing - housing (Fluor silicate)
6. Electronics
7. Housing (Aluminum, die-cast)
8. 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 |
|------------------|------------------------------|--------------------|-------------------|
| 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

Name : 04_LED_Threshold_and_Threshold_Wingbar_Light_THR_THRW_03-71021

Version : V2.2

Language : English (Original manual)



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

Ordering code THR(W)

| Option | Key | Description | THR | - | S | - | I | - | 3 | 2 | - | G | 00 | 0 | 00 | - | 1 | - | 10 | - | 1 | 0 | 0 | 0 |
|------------------------|------|--|-----|---|---|---|---|---|---|---|---|---|----|---|----|---|---|---|----|---|---|---|---|---|
| Function | | | | | | | | | | | | | | | | | | | | | | | | |
| | THR | Threshold | | | | | | | | | | | | | | | | | | | | | | |
| | THRW | Threshold Wingbar | | | | | | | | | | | | | | | | | | | | | | |
| | 850D | L-850D(L) | | | | | | | | | | | | | | | | | | | | | | |
| | 850E | L-850E(L) | | | | | | | | | | | | | | | | | | | | | | |
| Direction | | | | | | | | | | | | | | | | | | | | | | | | |
| | S | Straight | | | | | | | | | | | | | | | | | | | | | | |
| | L | Left Direction | | | | | | | | | | | | | | | | | | | | | | |
| | R | Right Direction | | | | | | | | | | | | | | | | | | | | | | |
| Regulation | | | | | | | | | | | | | | | | | | | | | | | | |
| | F | FAA | | | | | | | | | | | | | | | | | | | | | | |
| | I | ICAO | | | | | | | | | | | | | | | | | | | | | | |
| Light Intensity | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 | ICAO CAT I | | | | | | | | | | | | | | | | | | | | | | |
| | 2 | ICAO CAT II | | | | | | | | | | | | | | | | | | | | | | |
| | 3 | ICAO CAT III | | | | | | | | | | | | | | | | | | | | | | |
| | 4 | FAA | | | | | | | | | | | | | | | | | | | | | | |
| Cover/Size | | | | | | | | | | | | | | | | | | | | | | | | |
| | 2 | 12 Inch Cover | | | | | | | | | | | | | | | | | | | | | | |
| Color A | | | | | | | | | | | | | | | | | | | | | | | | |
| | G | Green | | | | | | | | | | | | | | | | | | | | | | |
| 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 | | | | | | | | | | | | | | | | | | | | | | |
| | 20 | 457mm One Plug | | | | | | | | | | | | | | | | | | | | | | |
| | 30 | 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 | | | | | | | | | | | | | | | | | | | | | | |



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.

More information:

TKH Airport Solutions
sales@tkh-airportsolutions.com
www.tkh-airportsolutions.com
+31 (0)53 57 414 56

Visiting address:

Elektrostraat 17
7483 PG Haaksbergen
The Netherlands