



Datasheet

Taxiway CenterLine Straight (TCL) and Curved Light (TCC)

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

- 8" outer diameter
- 6.35 mm height above surface
- Depth below flange: 35 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): per side: 10W (green/yellow straight); 9W (green/yellow curved)
- 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 per side 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
- Engineering Brief No. 67D
- FAA AC 150/5345-46E
- IEC TS 61827

Variants

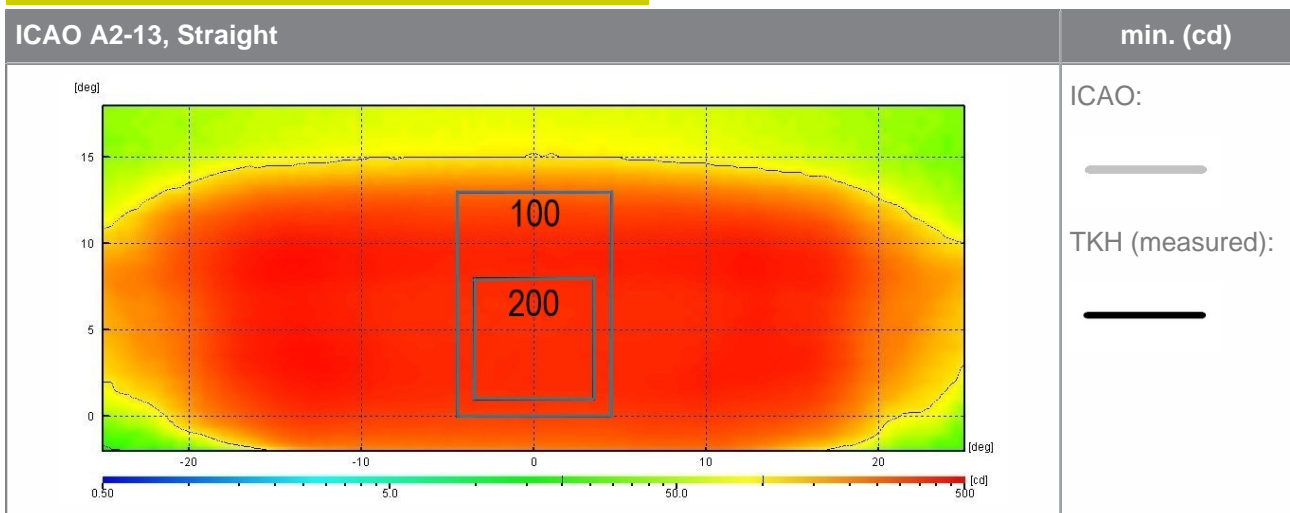
- Taxiway straight: Uni- and Bi-directional
- Taxiway straight configuration B: Uni- and Bi-directional
- Taxiway curve: Uni- and Bi-directional
- L-852C(L)
- L-852K(L)

Colors

- Green
- Yellow
- Blue (non-ICAO/FAA)

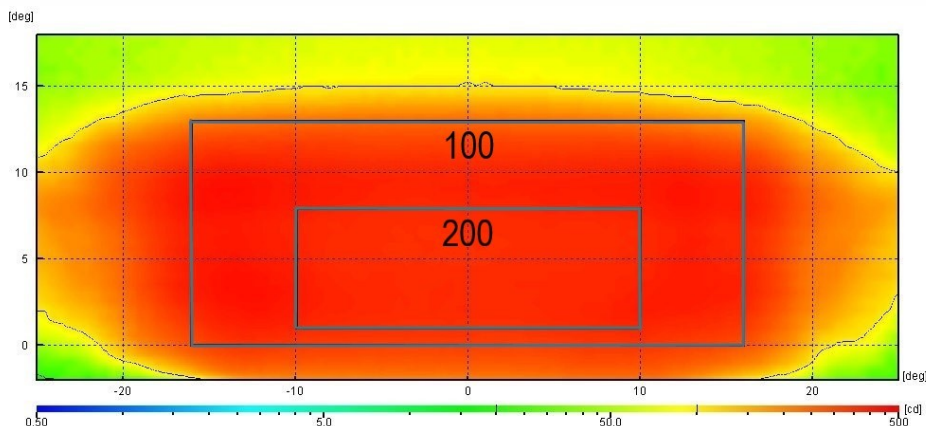
Light distributions

Green, Taxiway Centerline Light



ICAO A2-12, Straight configuration B

min. (cd)



ICAO:

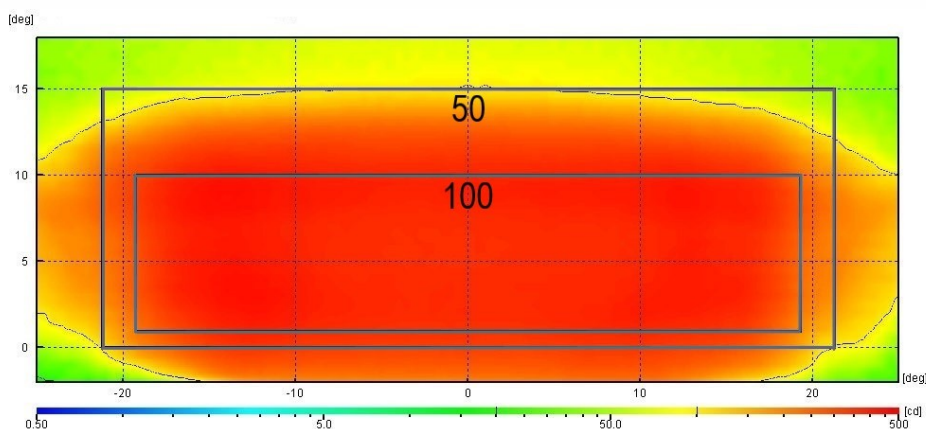


TKH (measured):



ICAO A2-14, Curved

min. (cd)



ICAO:



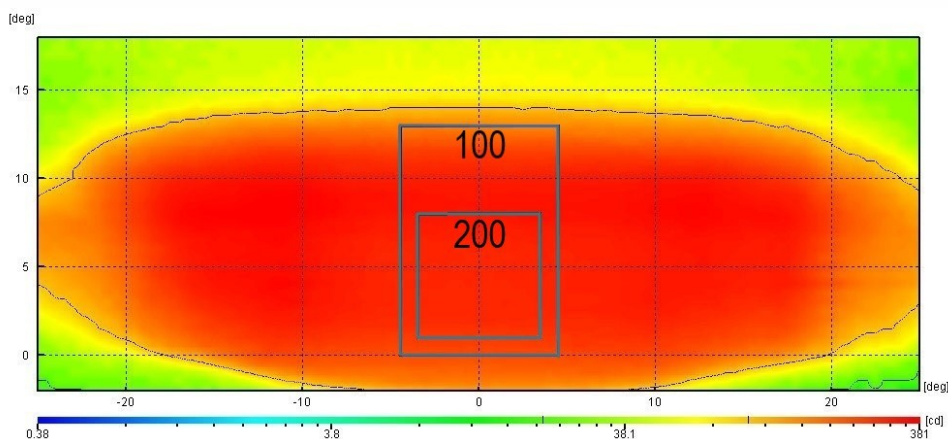
TKH (measured):



Yellow, Taxiway Centerline Light

ICAO A2-13, Straight

min. (cd)



ICAO:

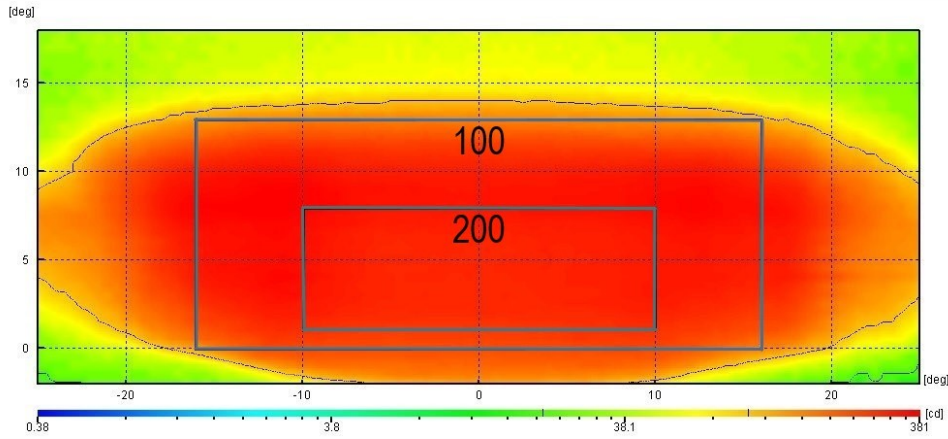


TKH (measured):



ICAO A2-12, Straight, configuration B

min. (cd)



ICAO:

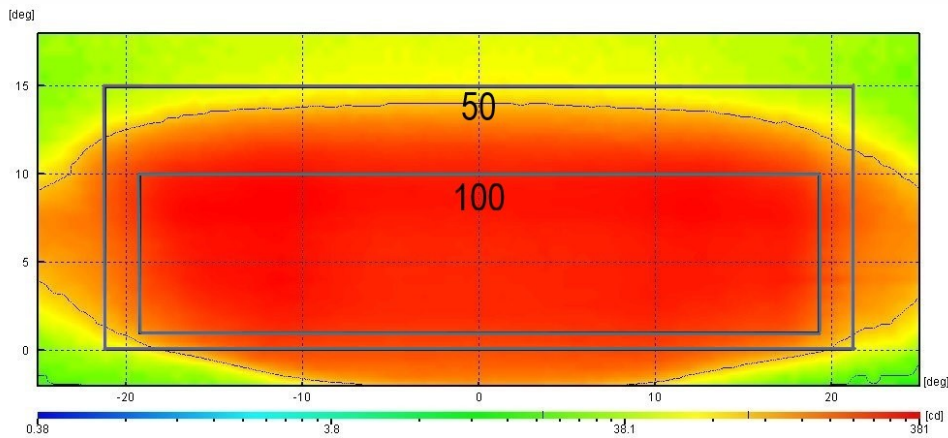


TKH (measured):



ICAO A2-14, Curved

min. (cd)



ICAO:

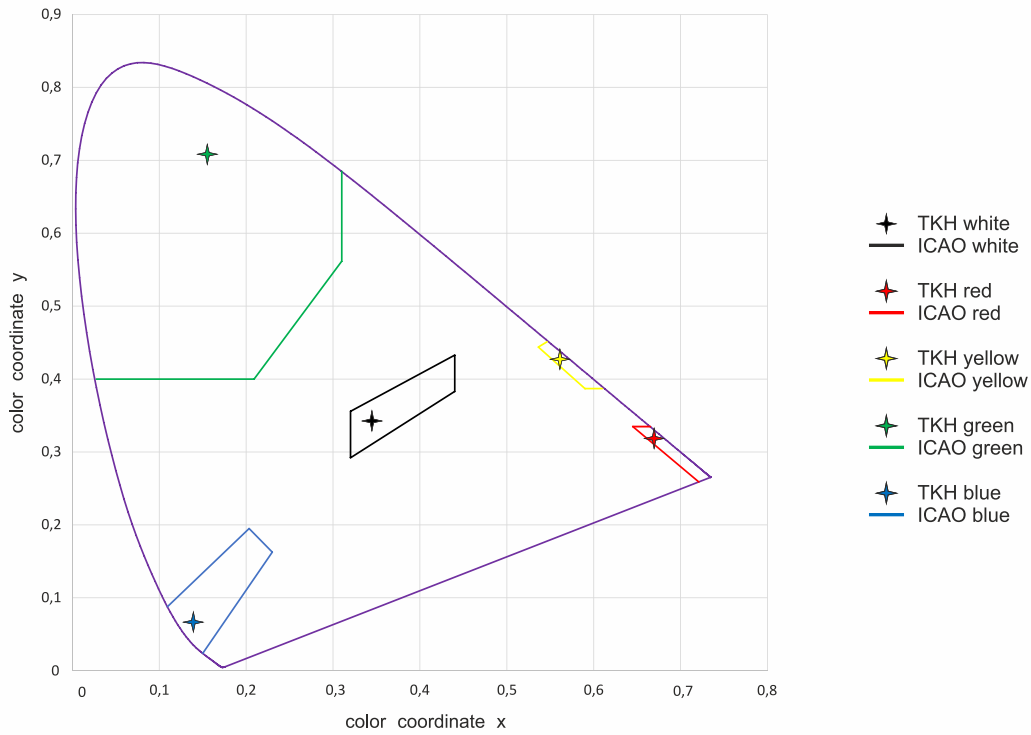


TKH (measured):

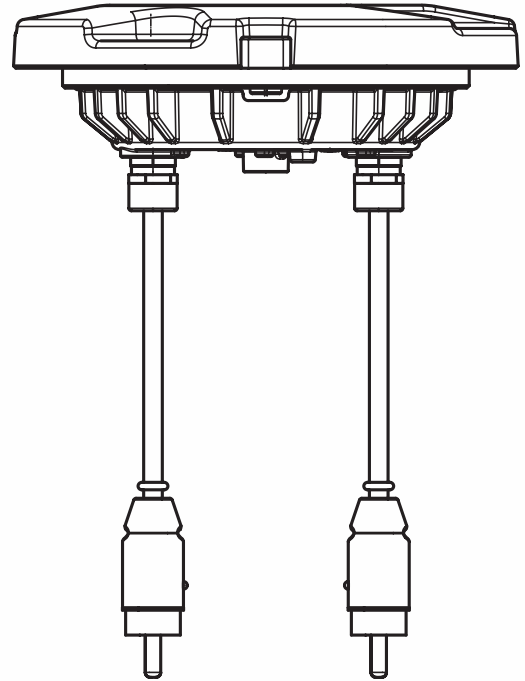
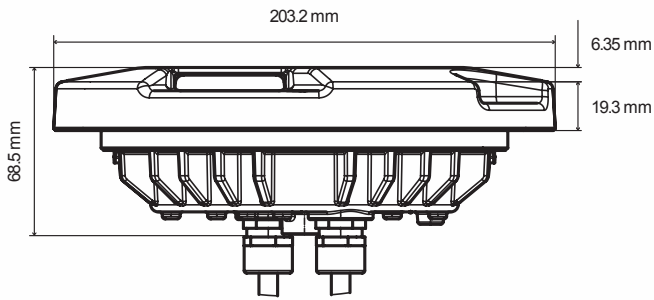


Chromaticities

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



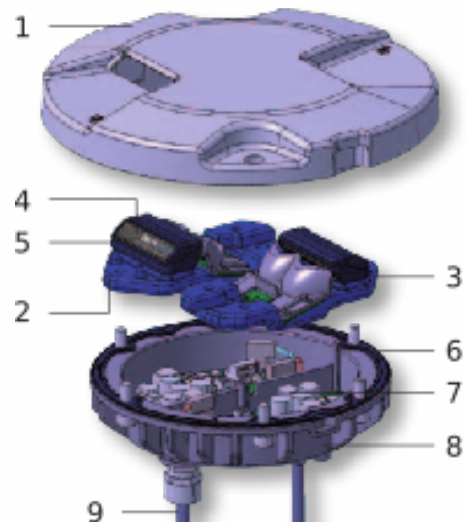
Dimensions



Components

Straight configuration B

1. Cover (drop forged AL, anodised)
2. High power LED module 1
3. High power LED module 2
4. Prism (borosilicate glass)
5. Sealing aperture (Fluor silicate)
6. Sealing - housing ((Fluor silicate)
7. Electronics
8. Housing (Aluminum, die-cast)
9. 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

Document Information

Name : 04_LED_Taxiway_Centerline_Straight_Type_TCL_and_Curved
Light_Type_TCC_03-71032

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	TCL	-	S	-	I	-	3	1	-	G	00	0	00	-	1	-	10	-	1	0	0	0
Function	TCL	Taxiway Centerline																						
	TCC	Taxiway Centerline Curved																						
	852C	L-852C(L)																						
	852K	L-852K(L)																						
Direction	S	Straight																						
	L	Left																						
	R	Right																						
Regulation	F	FAA																						
	I	ICAO																						
Light Intensity	1	CAT I																						
	2	CAT II																						
	3	CAT III																						
	4	FAA																						
Cover/Size	1	8 Inch Cover																						
	3	8 Inch Flat Cover																						
Color A	G	Green																						
	Y	Yellow																						
	B	Blue (no ICAO/FAA function)																						
	0	Blank																						
Toe-in A	00	No Toe-In																						
Color B	G	Green																						
	Y	Yellow																						
	B	Blue (no ICAO/FAA function)																						
	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																						



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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