



LED AGL Airfield Ground Lighting 03-71028 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

- 8" or 12" outer diameter
- 6.35 mm height above surface
- Depth below flange: 35 mm (for 8"), 50 mm (for 12")
- 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): 38 W
- 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. 14
 W 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

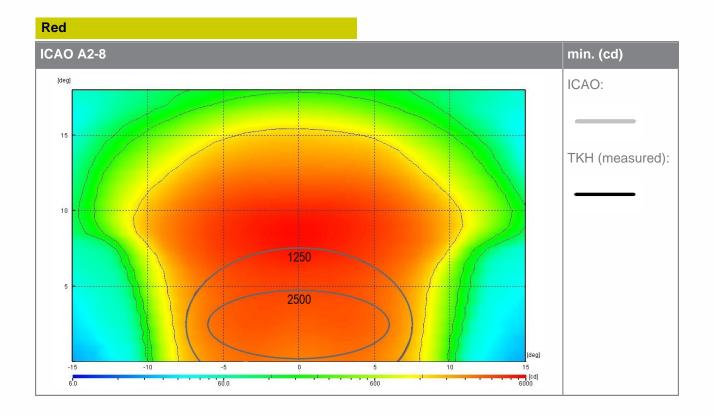
- Engineering Brief No. 67D
- IEC TS 61827



Colors / Variants

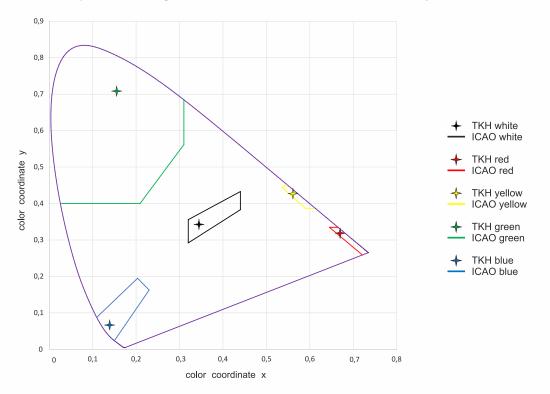
- 8" Unidirectional Red
- 12" Unidirectional Red

Light distributions



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Chromaticities



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

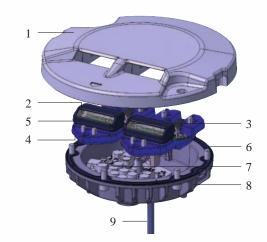
Components

8" Unidirectional variant

- 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

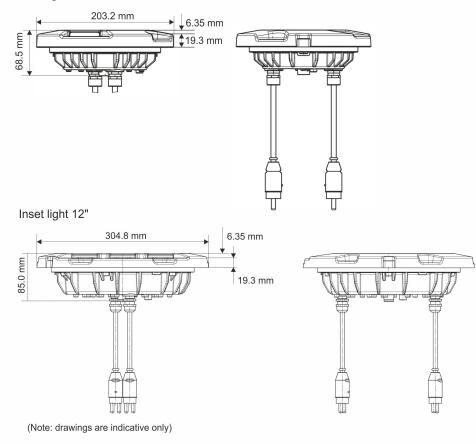
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- 8. Housing (Aluminum, die-cast)
- 9. FAA L-823 plug



Dimensions

Inset light 8"



Accessories

- Transformer
- Shallow base
- Installation tools

Please contact sales@tkh-airportsolutions.com to discuss which accessories are required for your application.

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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
12" Fixture	325 x 325 x 155	6.8	5.8
12" Shallow Base	320 x 320 x 150	7.5	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

Function		
	RWE	Runway End
	850D	L-850D(L)
Direction		
	S	Straight
Regulation		
	F	FAA
	I	
Light Intensity		
	1	CATI
	2	CATII
	3	
	4	FAA
Cover/Size		
	1	8 Inch Cover
	2	12 Inch Cover
	3	8 Inch Flat Cover
Color A		
	R	Red
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
	10 20	250mm One Plug 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

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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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