

# Airsafe

■ EUL-TH-LED

■ LED Elevated Runway Threshold Light



## Compliance with Standards

CAAC:AC-137-CA-2015-01 & 03  
 SAC: GB/T 7256  
 ICAO: Annex 14, Volume I  
 IEC: TS 61827  
 FAA: AC 150/5345-46 & EB NO.67  
 NATO: STANAG 3316

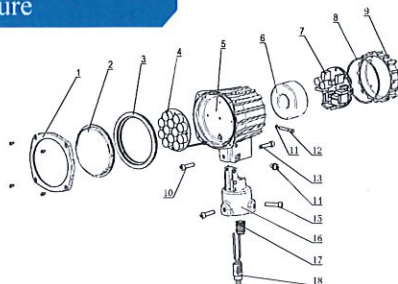
## Application/Use

Runway threshold light

## Features

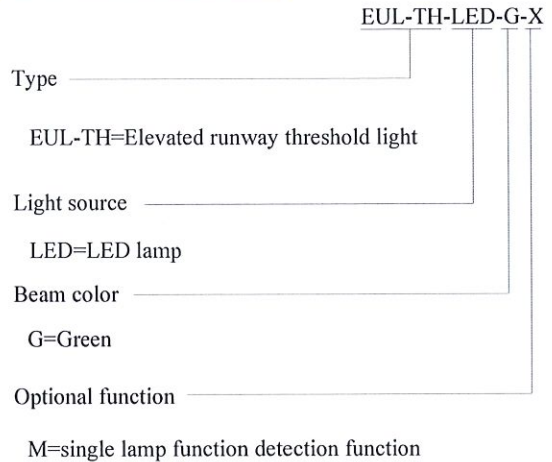
- The LED light is featured by long working life, energy conversation, maintenance-free, which brings enormous economic benefits to customers
- Proprietary optical design to ensure full lighting spot when the glass is partially obscured
- Strict LED color management to ensure premium color consistency
- Light distribution consistent with that of halogen lights, complying with FAA standards
- Proprietary driver circuit and thermal management solution, which greatly improves the reliability and service life of light fixture
- Power factor above 0.9, which minimizes the power network disturbance
- Optional function of single lamp failure detection, which enables the light to simulate open circuit of halogen lamp
- Compact structure and attractive appearance, with small windward area and strong ability against the gales
- The main body is made of aluminum alloy with anti-corrosion surface, all fasteners are made of stainless steel, suitable for harsh environment application
- High-precision parts and components machining to ensure all dimensional quality and precision
- Forged frangible device with precise machining, complying with FAA standards, ensuring good stability and reliability
- IP65-grade protected from total dust ingress
- The fixture can be connected to both one or two-inch extension pole, which ensures convenient and secure installation.
- The calibrator can be installed directly on the body with high precision
- Interchangeable, modular-designed components, applicable for all kinds of elevated unidirectional lights(LED type), which effectively runs down the inventories.

## Structure



- |                         |                           |                          |
|-------------------------|---------------------------|--------------------------|
| 1. front cover          | 7. driver assy            | 13. rear adjusting screw |
| 2. optical cover        | 8. light body gasket      | 14. side locking screw   |
| 3. optical cover gasket | 9. rear cover             | 15. set screw            |
| 4. LED lamp assy        | 10. front adjusting screw | 16. body base            |
| 5. light body           | 11. washer                | 17. waterproof gland     |
| 6. transformer          | 12. hinge pin             | 18. plug                 |

## Ordering Information



\* Please provide detailed installation info while ordering, spare parts and accessories should be separately ordered with specific order no.

## Installation

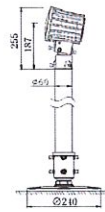


Fig 1. On extension pole.

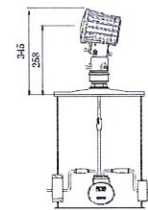


Fig 2. On 12" deep base.

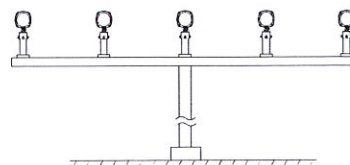


Fig 3. On approach mast.

\* Please find detailed information in installation manual

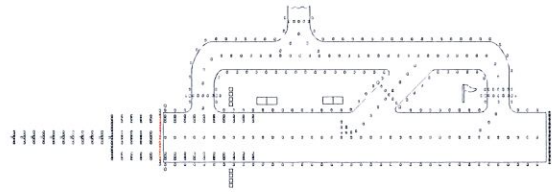
EUL-TH-LED

1  
2

# Airsafe

■ EUL-TH-LED

■ LED Elevated Runway Threshold Light



## Specifications

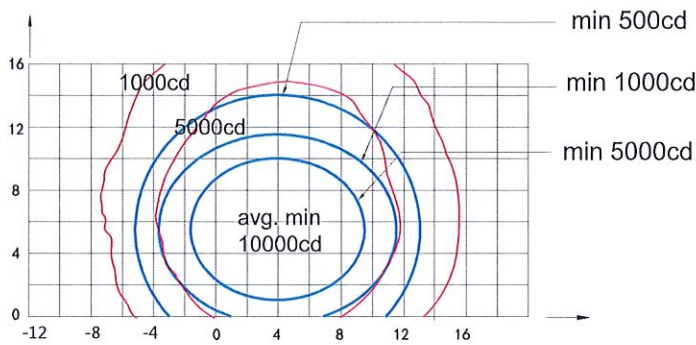
Light source: 12 green LED particles

Power: 36VA

Power factor:  $\geq 0.9$

IP grade: IP65

## Photometric Data



EUL-TH-LED (Green), ICAO Figure A2-3

Application		Main Beam		Color	Required min avg. cd	Actual avg. cd
		H	V			
EUL-TH-LED	ICAO Figure A2-3	$\pm 5.5^\circ$ (Toe-in 3.5°)	1°—10°	Green	10000	13520

## Packing Data

1 light

Size: 220×220×265 mm<sup>3</sup>

Unit net weight: 3.5 kg

Gross weight: 4.0 kg

## Accessories

Description	Order No.
flange 240mm	276A1
flange 304mm (FAA standard)	27683
2" socket frangible coupling assy	924252
2" frangible coupling	924241
45-watt isolation transformer	ITF-045-066
secondary cable receptacle - style 7	70703
calibrator assy	954211
Isolation transformer housing	TJB-12

## Spare Parts

Struc No.	Part Name	Order No.	Description
1	front cover	45515	front cover
2	optical cover	31108	front glass JJD
3	optical cover gasket	41110	front cover strip JJD seal
4	LED lamp assy	79242 -12-G	LED 103 (12-O), green
5	light body	241D1	LED light head assembly
6	transformer	79125	ring transformer(35W)
7	driver assy	979143	PCB-approach light-12X
8	light body gasket	41154	"O" ring seal 102×3
9	rear cover	92410	LED light rear cover
10	front adjusting screw	GB/T70.1 -2000	hex. socket head screws M8×35
11	washer	GB/T896-1986	split washer 4-flat washer
12	hinge pin	45523	pin - head assembly hinge pin
13	rear adjusting screw	GB/T70.1 -2000	hex. socket head screws M8×30
14	side locking screw	GB/T70.1 -2000	hex. socket head screws M8×16
15	set screw	GB/T70.1 -2000	hex. socket head screws M8×16
16	body base	45517	pedestal JJD
17	waterproof gland	48404	metal water joint MG18×1.5
18	plug	HT 70603	secondary cable plug- Style 6

\* All rights reserved, subject to modifications



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## CERTIFICATE OF CONFORMITY

08/X29/1/6346743-1001-9, rev.1

TO:  
ICAO, Annex 14, Volume I, 7<sup>th</sup> Edition  
UNE-IEC/TS 61827, 1<sup>th</sup> Edition  
FAA AC 150/5345-46<sup>E</sup>  
FAA EB 67D  
AENA PPT 015 -06/12

Products: Airfield Lighting Lights EUL-XX-LED  
Manufactured by: Airsafe Airport Equipment Co., Ltd  
Applications:  
LED Elevated approach centerline light  
LED Elevated approach cross-bar light  
LED Elevated approach side-row light  
LED Elevated runway threshold light  
LED Elevated runway threshold wing-bar light  
LED Elevated runway end light  
LED Elevated taxiway stop-bar light

We hereby certify:

That we conducted an inspection, review and documental study of the characteristics of the above mentioned equipment based on the reports of tests carried by the laboratories:

**Intertek and SQI - Shanghai Institute of Quality Inspection and Technical Research,**

as Certified National Certification Body who carried out testing according to the IECEE CB Scheme for the Scope as listed in the relevant part of the IECEE Web Site at [www.iecee.org](http://www.iecee.org).

On the base of all the foregoing, and in view of the results obtained; we confirm that: the elevated lights model **EUL-AP-LED, EUL-CB-LED, EUL-SR-LED, EUL-TH-LED, EUL-THW-LED, EUL-ED-LED and EUL-SB-LED** above referenced, manufactured by Airsafe Airport Equipment Co.Ltd., designed for airfield ground lighting applications,

### FULFIL SATISFACTORILY

the demands and requirements of the above mentioned standards and of technical provisions of AENA referred in the present document, and specifically the specifications of the UNE-IEC/TS 61827 and AENA PPT 015 -06/12.

Test	Elevated lights	Result
	Type	It fulfils
<u>a. Dimensional test</u>	6.2	Satisfactory
<u>b. Test Environmental</u>		
High temperature	6.3.1.1	Satisfactory
Low temperature	6.3.1.2.2	Satisfactory
Thermal shock	6.3.2.2	Satisfactory
Corrosion (saline sprayed)	6.3.3.2	Satisfactory
Electromagnetic compatibility	6.3.6	Satisfactory
Moisture	6.3.4.	Satisfactory

Certificate nº08/X29/1/6346743-1001-9, rev.1

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This certificate cancels and replaces the certificate with number 08/X29/1/6346743-1001-9



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<b>c. Test Structural</b> Jet blast Frangibility	6.4.2.1 6.4.2.2	Satisfactory Satisfactory
<b>d. Test Electrical</b> Dielectric rigidity Creepage and clearance Resistance of isolation Electrical shock	6.5.1 6.5.2 6.5.3 6.5.4	Satisfactory Satisfactory Satisfactory Satisfactory
<b>e. Functional test</b> Photometry Chromaticity	6.6.1.1 6.6.2	Satisfactory Satisfactory
<b>f. Endurance Test</b> Accelerated life Test of useful rated life of LED's (10 lights)	6.7.1.2 6.7.2	Satisfactory Satisfactory

As well as the requirements listed to in ICAO Annex 14, Volume I, detailed below:

Elevated lights	Test	Test	Result
	Photometry	Chromaticity	It fulfils
EUL-AP-LED	Figure A2-1 -Appendix 2-	Figure A1-1b -Appendix 1-	Satisfactory
EUL-CB-LED	Figure A2-1 -Appendix 2-	Figure A1-1b -Appendix 1-	Satisfactory
EUL-SR-LED	Figure A2-2 -Appendix 2-	Figure A1-1b -Appendix 1-	Satisfactory
EUL-TH-LED	Figure A2-3 -Appendix 2-	Figure A1-1b -Appendix 1-	Satisfactory
EUL-THW-LED	Figure A2-4 -Appendix 2-	Figure A1-1b -Appendix 1-	Satisfactory
EUL-ED-LED	Figure A2-8 -Appendix 2-	Figure A1-1b -Appendix 1-	Satisfactory
EUL-SB-LED	Figure A2-12 -Appendix 2-	Figure A1-1b -Appendix 1-	Satisfactory

As well as the requirements listed to in Annex A of the Technical Specification Sheets of Aena, specific for lights that employ LED technology, detailed below:

Essay	Elevated lights	Result
	Type	It fulfils
a. Low Temperature	A.3.1.1	Satisfactory
b. Electromagnetic compatibility. Immunity to the Perturbations	A.3.1.2	Satisfactory
c. Intensity ratio	A.3.1.3	Satisfactory
d. High Temperature	A.3.1.4	Satisfactory
e. Electrical parameters	A.3.1.5	Satisfactory
f. Faults Monitoring System	A.3.1.6	Satisfactory



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g. Optional antifreeze	A.3.1.7	Satisfactory
h. Accelerated life	A.3.1.8	Satisfactory
i. Useful rated life of LED	A.3.1.9	Satisfactory
j. Test of Life of the Sources of Light	A.3.1.9.1	Satisfactory
k. Test of Colour Maintenance of the Sources of Light	A.3.1.9.2	Satisfactory
l. Flicker	A.3.1.10	Satisfactory
m. Photobiological Safety	A.3.1.11	Satisfactory

And for the record for the appropriate purposes we issue and sign this Certification in Barcelona, on December 11 of 2017.

Inspector Bureau Veritas

Laura Arcas