Aerodrome Beacon ABN

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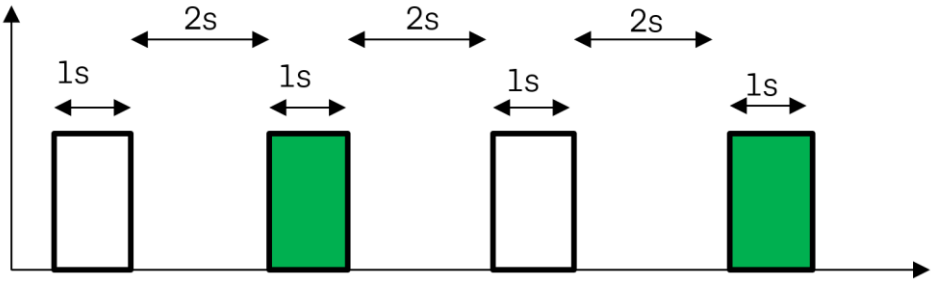
Compliance To Standards	**ICAO:** Annex 14, Volume I - Aerodrome Design and Operations **IEC TS 61827:** Electrical installations for lighting and beaconing of aerodromes. Characteristics of inset and elevated luminaires used on aerodromes and heliports
Application	The Aerodrome Beacon is a powerful, omnidirectional white and green light intended to signal the presence of an Airport.
Features	Designed and built with simplicity and ease of maintenance in mind. High power LED technology. Lightweight, low-energy and environment friendly lighting fitting. Extensive use of aluminum alloys reduces fitting weight and eases handling in the field. **ABN Signals:** Alternating white and green flashes of 1 s with 2 s between flashes 

Product Code

AL - 082 - 84 - WH - 84 - GR

Series Indicator (Airfield Lighting)	**AL**
Product Indicator	**082**
LEDs Number	**84**
LEDs Light Color (WH)	**WH**
LEDs Number	**84**
LEDs Light Color (GR)	**GR**

Description

Light fixture body - Powder coated aluminum RAL 1004 (aviation yellow)

Dispenser - clear polycarbonate

Cable gland - nickel plated brass

Fasteners - stainless steel

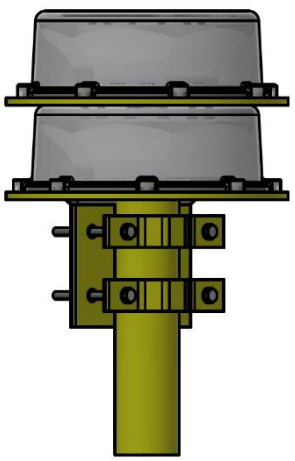
Light fixtures are provided with anti-condensation valve.
Light fixtures are UV protected.

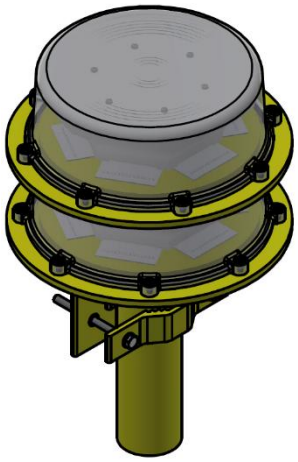
Environment

Temperature range:	-20° to +55°
Degree of protection:	IP65
Ka tested:	in accordance with IEC 60068-2-11 and IEC 60068-2-25

Mounting

The ABN can be mounted on a metal tube with a diameter ranging from 32 mm to 80 mm and should be positioned at a height that ensures visibility from any direction.



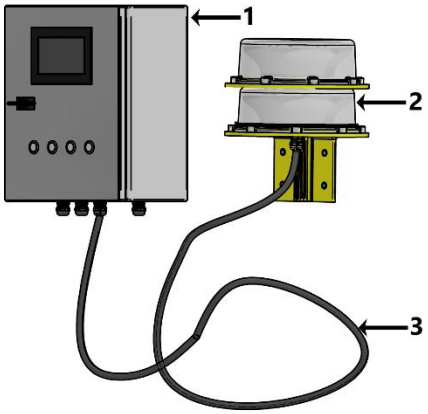


Electrical Characteristics

Average power: 50 W including the controller

Peak power: Max 150 W including the controller

Electrical connections:



1. Controller
2. Beacon pre cabled
3. Flexible cable

Power supply directly from controller with 3 core cable:

V+ (Red)
V - (Black)
GND (Green / Yellow)

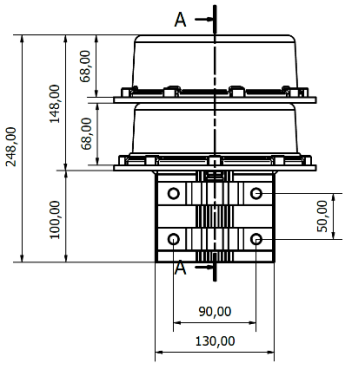
Mechanical Characteristics

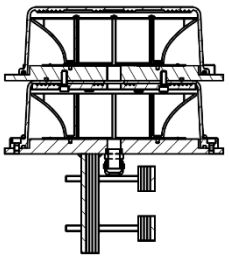
Diameter: 220 mm

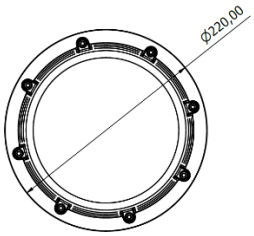
Total height: 248 mm

Weight: 4.4 kg

Fastening system: from Φ32 mm up to Φ80 mm pipe







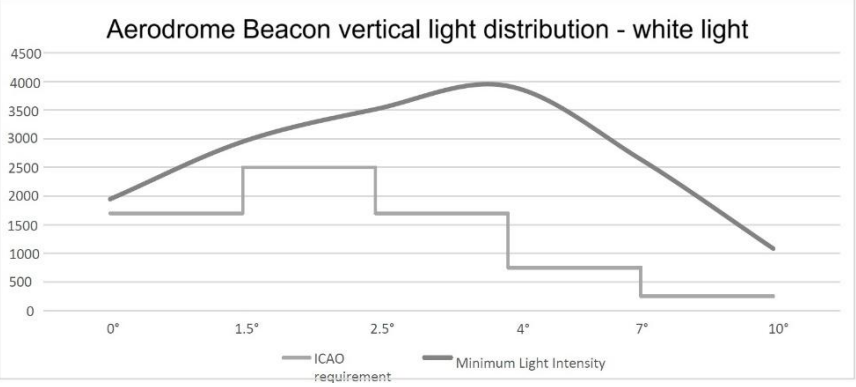
Photometric Characteristics

Intensity level: 100%, 10%, 3% with controller in 48 V DC

Horizontal output: 360°

Light color: White and green light

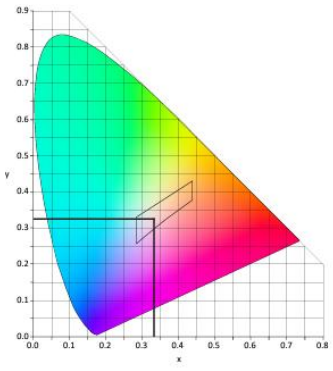
Vertical elevation angle	0°	1.5°	2.5°	4°	7°	10°
Required minimum intensity [cd]	1700	2500	2500	1700	750	250
Measured minimum intensity [cd]	1947	3951	3517	3922	2642	1083



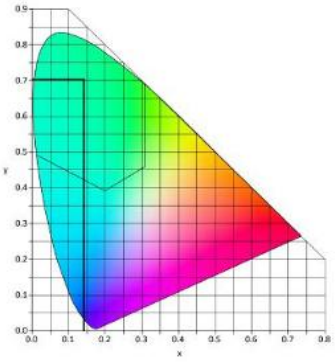
Minimum 2000 effective cd.

The brightness intensity values comply with:
ICAO Annex 14 Vol.2 fig.5-11/1

The light colors emitted by the light fixture are white and green, with the trichromatic coordinates:



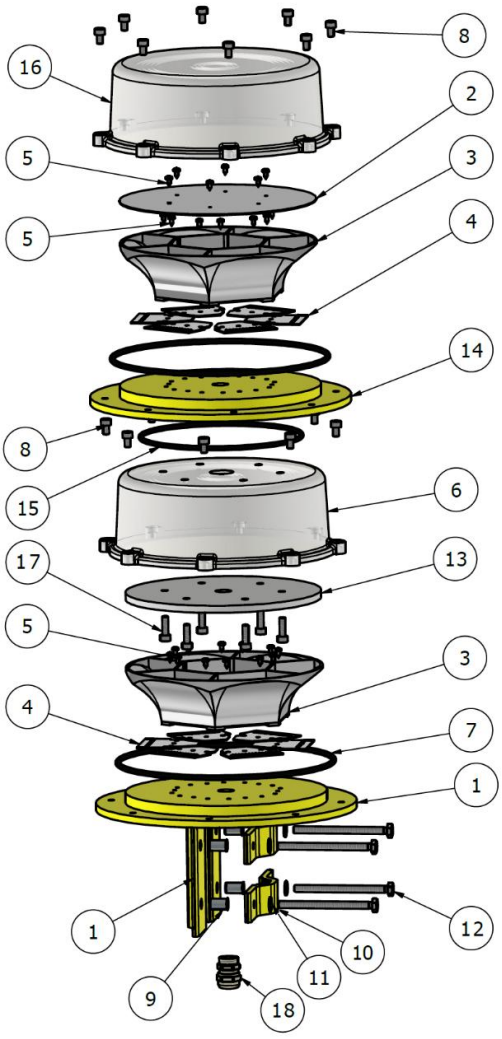
x=0,327
y=0,338
z=0,335



x=0,145
y=0,701
z=0,154

The measured trichromatic coordinates correspond to color range requirements in:
ICAO Annex 14 - Aerodromes Vol.1, fig. A1-1b.
Colors for aeronautical ground lights (solid state lighting)

Spare Parts



1. Aluminum light fixture body
2. 1.5mm Aluminum disk
3. Reflector
4. LEDs PCB
5. 2.9 x 6.5 Pan head tapping screws
6. Polycarbonate disperser
7. Silicone gasket
8. M5 x 8 Hexagon Socket Head Cap Screw
9. Threaded rivet
10. Aluminum clamp
11. Stainless steel spring washer
12. M6 x 80 Hex-Head Bolt
13. 1.5mm Aluminum disk
14. Upper aluminum body
15. Silicone disperser gasket
16. Polycarbonate disperser
17. M5 x 16 Cylinder Head Cap Screw
18. Stainless steel cable gland

Accessory	To order accessories please call our customer support. For contact details please refer to our website - www.signalight.com

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