

DATASHEET 2IL5-Series

5" INSET LED-LIGHTS for Heliports

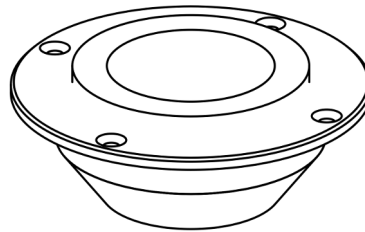


Figure 1: 2IL5 Semi Flush LED-Inset Light

The 2IL5 Series 5" Inset LED-Lights are designated as Visual Aids for Heliports or Helidecks on Land, Offshore and on Vessels

FEATURES

- Optimized light output due to patented optics concept
- Fully compliant to ICAO Annex 14 Vol 2., FAA EB 87 and CAP 437
- Fully resistant against intrusion of liquids, dusts and mechanical shocks due to sealed optics and electronics
- No fogging
- CE Certified
- Compact and low propulsion
- Optimized for integration in elevated Helipads
- Safety Extra Low Voltage compliant
- Enhanced surge current protection
- Corrosion resistant anodized Aluminum-housing
- NVG Option available

PURPOSE

| Function | Abbreviation | Standard | Color | Article |
|--|--------------|-----------------|--------|----------------------|
| Touch Down and Lift Off Area Light | TLOF | ICAO | green | 2IL5-TLOF-SF-24A-0-G |
| Touch Down and Lift Off Area Light | TLOF | FAA | green | 2IL5-TLOF-SF-24A-0-G |
| Final Approach and Take Off Area Light | FATO | FAA | green | 2IL5-TLOF-SF-24A-0-G |
| Flight Path Alignment Light | | FAA | green | 2IL5-TLOF-SF-24A-0-G |
| Perimeter Light Light | | CAA | green | 2IL5-TLOF-SF-24A-0-G |
| Flight Path Alignment Guidance Light | FPALS | ICAO | white | 2IL5-ADI-SF-24A-0-W |
| Final Approach and Take Off Area Light | FATO | ICAO | white | 2IL5-FATO-SF-24A-0-W |
| Aim Point Light | | ICAO | white | 2IL5-FATO-SF-24A-0-W |
| Touch Down and Lift Off Area Light | TLOF | ICAO until 2008 | yellow | 2IL5-TLOF-SF-24A-0-Y |
| Flight Path Alignment Guidance Light | | CASA | yellow | 2IL5-TLOF-SF-24A-0-Y |

| Function | Abbreviation | Standard | Color | Article |
|-------------------------------|--------------|----------|-------|----------------------|
| Helicopter Taxiway Edge Light | | ICAO | blue | 2IL5-TLOF-SF-24A-0-B |
| Multi Purpose Light (Warning) | | | red | 2IL5-TLOF-SF-24A-0-R |

REFERRED STANDARDS

- ICAO Annex 14 Vol 2. Heliports, 4. Edition
- ICAO Annex 14 Vol 1. Aerodrome Design and Operation
- ICAO DOC 9261 Heliport Manual
- ICAO DOC 9157 Aerodrome Design Manual Part 4 (Visual Aids)
- EASA CS HDR DSN
- FAA AC 150/5345-46E Specification for Runway and Taxiway Light Fixtures
- FAA AC 150/5390-2C Heliport Design
- FAA Engineering Brief 87 Heliport Perimeter Light for Visual Metrological Conditions
- FAA Engineering Brief 67D Light Sources others than Incandescent and Xenon
- CAA CAP 437 Standards for Offshore Helicopter Landing Areas
- CASA CAAP 92-2 Guidelines for the establishment and operation of onshore Helicopter Landing Sites
- IEC TS 61827 Electrical Installations for Lighting and Beaconing of Aerodrome

VARIANTS

| Article | Color | Night Vision |
|--------------------------|--------|--------------|
| 2IL5-TLOF-SF-24A-0-G | green | |
| 2IL5-ADI-SF-24A-0-W | white | |
| 2IL5-FATO-SF-24A-0-W | white | |
| 2IL5-TLOF-SF-24A-0-Y | yellow | |
| 2IL5-TLOF-SF-24A-0-B | blue | |
| 2IL5-TLOF-SF-24A-0-R | red | |
| 2IL5-TLOF-SF-24A-0-G-NVG | green | x |
| 2IL5-ADI-SF-24A-0-W-NVG | white | x |
| 2IL5-FATO-SF-24A-0-W-NVG | white | x |
| 2IL5-TLOF-SF-24A-0-Y-NVG | yellow | x |
| 2IL5-TLOF-SF-24A-0-B-NVG | blue | x |
| 2IL5-TLOF-SF-24A-0-R-NVG | red | x |

TECHNICAL DATA

| | | |
|-------------------------|------------------------|-----------------------------|
| Operating Voltage: | | 24V DC |
| Voltage Range: | | 18V to 30V |
| Dimming: | Visible: | 0-100% |
| | If NVG Option selected | IR continuous on |
| Infrared (optional) | 240mW @ 850 nm | |
| Surge Protection | 8/20µs | 5kA 10 times |
| | | 10kA 1 time |
| | | 1.2/50µs |
| Cable | Material | PUR 3 × 0.5 mm ² |
| | Length | 40 cm with ferules |
| Materials | Housing | AlSi hard anodized |
| | Sealant | PUR (UV-resistant) |
| Surface Color (Housing) | | Aluminum nature |
| Operating Temperature | | -40°C to +55°C |
| Solar radiation | | 1 kW/m ² |
| Storage Temperature | | -40°C to +85°C |
| Protection Class | | IP68 |
| Useful Lifetime | | >100'000h |
| Weight | | 0.65 kg |
| Package | Dimensions | 190 X 190 X 160 mm |
| | Weight | 0.9 kg |

Power Consumption

| Idle Mode | Power |
|-------------------------|-------|
| Idle (0% visual output) | 0.3W |
| Idle + with IR | 0.5W |

| Article | Color | Power (100%) |
|--------------------------|--------|--------------|
| 2IL5-TLOF-SF-24A-0-G | green | 5.3W |
| 2IL5-ADI-SF-24A-0-W | white | 5.3W |
| 2IL5-FATO-SF-24A-0-W | white | 9.6W |
| 2IL5-TLOF-SF-24A-0-Y | yellow | 5.3W |
| 2IL5-TLOF-SF-24A-0-B | blue | 5.3W |
| 2IL5-TLOF-SF-24A-0-R | red | 5.3W |
| 2IL5-TLOF-SF-24A-0-G-NVG | green | 5.5W |
| 2IL5-ADI-SF-24A-0-W-NVG | white | 5.5W |
| 2IL5-FATO-SF-24A-0-W-NVG | white | 9.9W |
| 2IL5-TLOF-SF-24A-0-Y-NVG | yellow | 5.5W |
| 2IL5-TLOF-SF-24A-0-B-NVG | blue | 5.5W |
| 2IL5-TLOF-SF-24A-0-R-NVG | red | 5.5W |

Wiring

| # | Function | Color |
|---|-----------|-------|
| 1 | +24V | red |
| 2 | 0V | blue |
| 3 | Dim 10-0V | - |

Dimmcurve

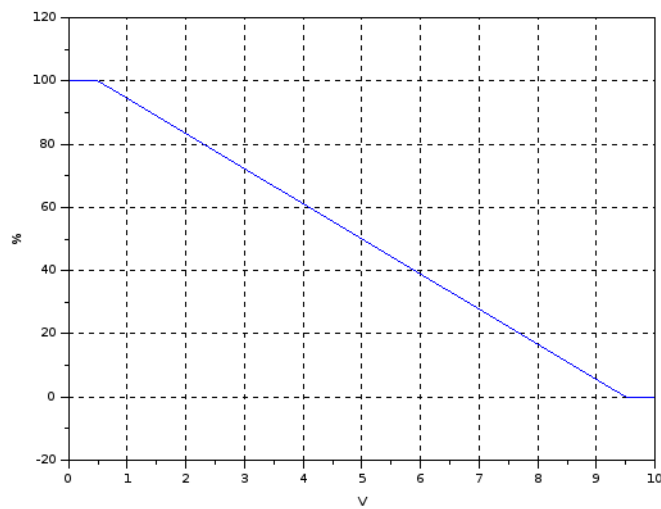


Figure 2: Dimmcurve Light Output vs. Voltage

LIGHT DISTRIBUTION

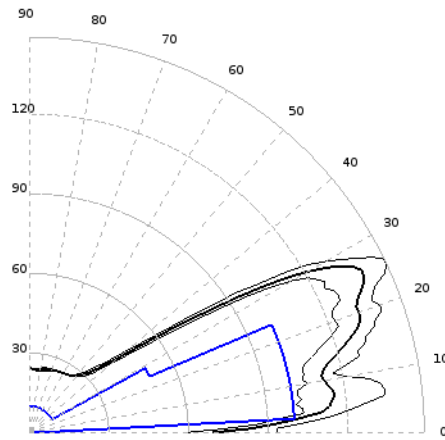


Figure 3: Light distribution FATO (white) ICAO

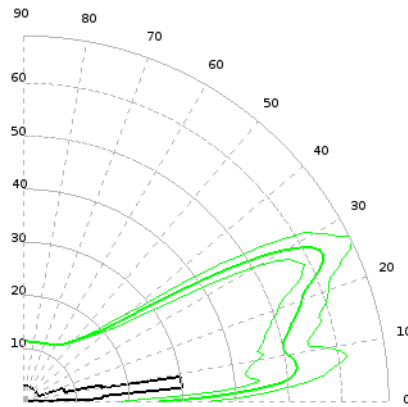


Figure 4: Light distribution TLOF (green) ICAO

AVAILABLE COLORS

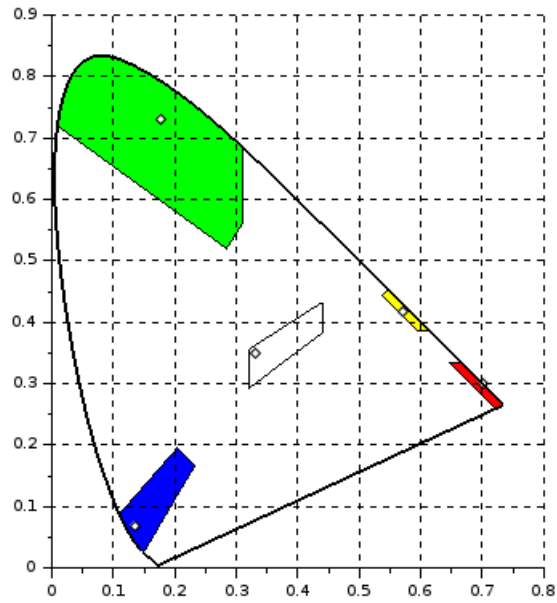


Figure 5: Color Coordinates

DIMENSIONS

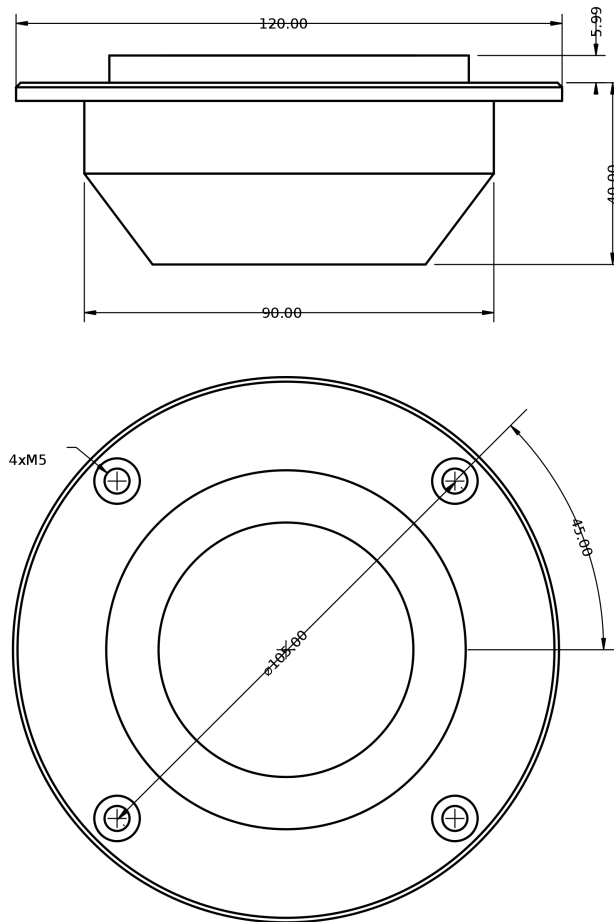


Figure 6: Dimensions

The 2IL5 Light is fixed with 4x M5 Screws, countersunk head, stainless steel (A4 grade)

AUXILIARIES

- Adaptor Plate for mounting in 8" Shallow Bases according to IEC TS 61827 / FAA AC 5439/150-46E
- Shallow Base 180mm dia. X 120mm
- BATTCon Heliport Control System

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