

# ICAO Type A & Type B Low Intensity Obstruction Light



AV-OL Series Universal AC or Universal DC Single Light Fixture



Model shown with optional 1 inch pipe thread adaptor

### Standard Model

#### LED Optic

- Low power consumption
- Combined visual & infrared visibility for pilots using night vision (optional)
- Small form factor, minimal wind loading
- Tough UV-stabilized LEXAN® polycarbonate lens & light base
- Easily installs to 3/4 inch pipe thread
- Monitoring options available

### Features

- Cost effective, energy efficient obstruction lighting solution
- Available in universal DC: will accept between 12-48VDC
- Available in universal AC: will accept between 110-240VAC
- User-adjustable intensity to toggle between ICAO LIOL Type A (10cd) & LIOL Type B (32cd)
- User-adjustable operation mode to toggle between dusk-till-dawn & 24hr operation
- Alarm contact for remote monitoring
- Light sensor for day/night operation
- LED technology reduces maintenance time and costs
- Easily retrofits with existing installations
- Optional solar powered configurations available
- Optional combined visual/IR for pilots using NVG
- Optional RS422/485 communications port for monitoring & synchronisation of DC version
- Available with optional GSM monitoring

**This Avlite light fixture is a steady burning, low intensity LED obstruction light designed to comply with ICAO LIOL Type A & Type B requirements. The model can be used for marking obstacles up to 45 metres above ground, such as telecommunication towers, wind turbines, buildings and other tall structures.**

Avlite's LED obstruction lights offer an ultra bright, energy efficient and cost effective lighting solution. The light fixture is available in two configurations, universal DC (12-48VDC) or universal AC (110-240VAC). The advanced light optic uses a single LED for minimal power consumption. The corrosion resistant, polycarbonate lens is specifically designed for use with LEDs to maximize light intensity and uniformity. The light fixture incorporates internal diagnostic checking and an alarm contact for remote monitoring. The alarm relay is energised in normal operation and is released if there is an LED or power fault. The unit is available with either a 3/4 or 1 inch thread type - making it simple to retrofit with existing installations. The ICAO model has adjustable intensity settings to allow the user to easily toggle between 10cd (ICAO Type A) and 32cd (ICAO Type B) light intensities. The obstruction light also has an adjustable operation mode setting to allow the user to easily toggle between dusk-till-dawn and 24 hour operation modes.

**The obstruction light is also available with combined visual and infrared (IR) visibility for pilots using night vision.**

#### Optional GSM Monitoring & Control

The Avlite single obstruction light is available with GSM Cell-Phone Monitoring, enabling operators to remotely monitor the status of their installation. The system can also be configured to send out SMS text messages or e-mail alerts to designated operators should alarm conditions be triggered, such as low voltage or light failure.

### Applications

Low Intensity Obstruction Light for marking top of obstacles that do not exceed 45 metres in height

### Certifications

Low Intensity Type A & B Obstruction Light, ICAO Annex 14, Volume 1, Sixth Edition, July 2013, 'Aerodrome Design and Operations'



AUSTRALIA  
t: +61 (0)3 5977 6128

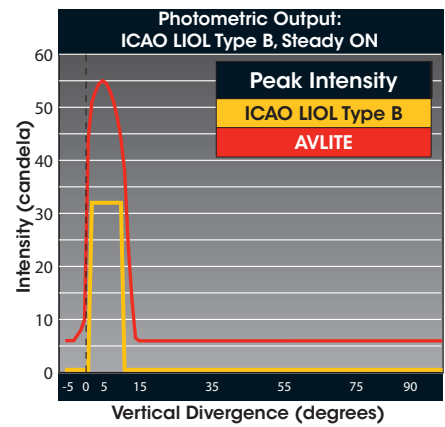
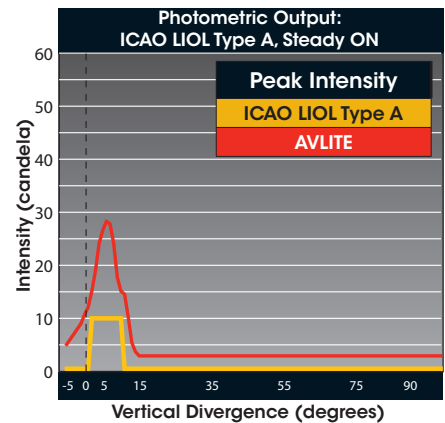
USA  
t: +1 (603) 737 1310

w: [www.avlite.com](http://www.avlite.com)  
e: [info@avlite.com](mailto:info@avlite.com)

| SPECIFICATIONS * *                | ICAO Type A & Type B LIOL Single Fixture  |   |
|-----------------------------------|---|---|
|                                   | 12-48 VDC   | 110-240 VAC   |
| <b>Light Characteristics</b>      |   |   |
| Light Source                      | As tested; AV-OL-ILAB-12-R (Type A & Type B)  | As tested; AV-OL-ILAB-UM-R (Type A & Type B)  |
| Available colours                 | Red as standard. Other colours available on request, including IR   | Red as standard. Other colours available on request, including IR   |
| Peak Intensity (cd) †             | Complies with ICAO LIOLA & LIOLB: 2013  | Complies with ICAO LIOLA & LIOLB: 2013  |
| Horizontal Output (degrees)       | 360   | 360   |
| Vertical Divergence (degrees)     | as per ICAO Type A/B specification  | as per ICAO Type A/B specification  |
| Reflector Type                    | Single LED Optic  | Single LED Optic  |
| Intensity Adjustments             | User-adjustable between 10cd & 32cd   | User-adjustable between 10cd & 32cd   |
| Operation Mode Adjustment         | User-adjustable between dusk-till-dawn & 24 hour operation  | User-adjustable between dusk-till-dawn & 24 hour operation  |
| LED Life Expectancy (hours)       | >100,000  | >100,000  |
| <b>Electrical Characteristics</b> |   |   |
| Operating Voltage                 | 12 - 48 VDC   | 110 - 240 VAC   |
| Power (W)                         | ICAO LIOL Type A @ 10cd Steady-on with relay energised: Pmax = 0.9<br>ICAO LIOL Type B @ 32cd Steady-on with relay energised: Pmax = 2.16   | ICAO LIOL Type A @ 10cd Steady-on with relay energised: Pmax = 1.2<br>ICAO LIOL Type B @ 32cd Steady-on with relay energised: Pmax = 4<br>Smax = 10.6VA                       |
| Circuit Protection                | Integrated  | Integrated  |
| Temperature Range                 | -40 to 80°C   | -40 to 80°C   |
| <b>Physical Characteristics</b>   |   |   |
| Body Material                     | LEXAN® Polycarbonate - UV stabilized  | LEXAN® Polycarbonate - UV stabilized  |
| Lens Material                     | LEXAN® Polycarbonate - UV stabilized  | LEXAN® Polycarbonate - UV stabilized  |
| Lens Diameter (mm/inches)         | 100 / 3 7/8   | 100 / 3 7/8   |
| Lens Design                       | Single LED Optic  | Single LED Optic  |
| Mounting                          | Standard Model: 3/4 inch pipe thread  | Standard Model: 3/4 inch pipe thread  |
| Height (mm/inches)                | Standard Model: 137 / 5 1/2   | Standard Model: 137 / 5 1/2   |
| Width (mm/inches)                 | 121 / 4 3/4   | 121 / 4 3/4   |
| Depth (mm/inches)                 | 121 / 4 3/4   | 121 / 4 3/4   |
| Mass (kg/lbs)                     | 0.4 / 7/8   | 0.4 / 7/8   |
| Product Life Expectancy           | 12 years plus   | 12 years plus   |
| <b>Environmental Factors</b>      |   |   |
| Humidity                          | 0 to 100%, MIL-STD-810F   | 0 to 100%, MIL-STD-810F   |
| Icing                             | 3.41kg per square cm / 48.5lbs per square inch<br>Up to 240kph / 150mph   | 3.41kg per square cm / 48.5lbs per square inch<br>Up to 240kph / 150mph   |
| Wind Speed                        |   |   |
| <b>Certifications</b>             |   |   |
| CE                                | EN61000-6-3:2007<br>EN61000-6-1:2007  | EN61000-6-3:2007<br>EN61000-6-1:2007  |
| Quality Assurance                 | ISO9001:2008  | ISO9001:2008  |
| ICAO                              | Low Intensity Obstruction Light Type A & B - 2013   | Low Intensity Obstruction Light Type A & B - 2013   |
| Waterproof                        | IP67  | IP67  |
| <b>Intellectual Property</b>      |   |   |
| Trademarks                        | AVLITE® is a registered trademark of Avlite Systems   | AVLITE® is a registered trademark of Avlite Systems   |
| <b>Warranty * *</b>               | 5 year warranty   | 5 year warranty   |
| <b>Options Available</b>          | <ul style="list-style-type: none"> <li>Variety of solar/battery configurations</li> <li>GSM Cell-Phone Monitoring</li> <li>Dual visual/IR output</li> <li>IR LED</li> <li>RS422/485 communications port</li> <li>Threaded adaptor to fit one (1) inch pipe</li> </ul> | <ul style="list-style-type: none"> <li>GSM Cell-Phone Monitoring</li> <li>Dual visual/IR output</li> <li>IR LED</li> <li>Threaded adaptor to fit one (1) inch pipe</li> </ul> |



\* Specifications subject to change or variation without notice  
 \* Subject to standard terms and conditions  
 † Intensity setting subject to solar availability



### HOW TO ORDER

ICAO Type A & B LIOL Single Fixture

AV-OL-ILAB-[Model]-[Colour]-[?]-[?]

**Product No.:** \_\_\_\_\_

**Certification:** ILAB = ICAO Type A & B LIOL

**Model:** 12 = 12-48 VDC  
UM = 110-240 VAC

**Colour:** R = Red  
IR = Infrared  
RIR = Combined Red/IR

**Monitoring & Control:** GSM = GSM  
[blank] = No monitoring & control

**RS Communications Port:** RS = RS communications port (VDC Model)  
[blank] = No RS communications port

Note: Please contact your Avlite representative for optional power supply solutions

