

# ICAO Type A & Type B

## Low Intensity Obstruction Light

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

Optional



GSM



Intertek

Avlite dual 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 which pose a danger to aircraft at night, 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 50/60Hz).

The dual light fixture can be configured to different operational states. Both light fixtures may be set to operate steady-burning. Alternatively, the dual light fixture may consist of a main light and a standby light. If the main light should ever fail the standby light will automatically switch on to ensure the obstacle is always clearly marked.

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. Integrated sensors in the light are able to detect when the ambient light threshold drops sufficiently and the light will begin operation automatically.

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 ICAO model has adjustable intensity settings allowing the user to easily toggle between 10cd (ICAO Type A) and 32cd (ICAO Type B).

All obstruction lights also have 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 dual 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.



### Cost Effective

- Energy efficient lighting solution
- low maintenance costs
- Low LED power consumption

### Features

- Alarm contact for remote monitoring
- Integrated light sensor for day/night operation
- Simultaneous twin operation or redundant failsafe
- Marks obstacles up to 150 feet (45 metres) above ground

### Applications

- Low Intensity Obstruction Light for marking top of obstacles that do not exceed 150 feet (45 metres) in height

### Optional

- Solar power configurations
- Combined visual and Infrared visibility
- GSM monitoring
- Available in universal DC (12-48VDC) or AC (110-240VAC)

### Easy Install

- Adjustable operation mode

### Certifications

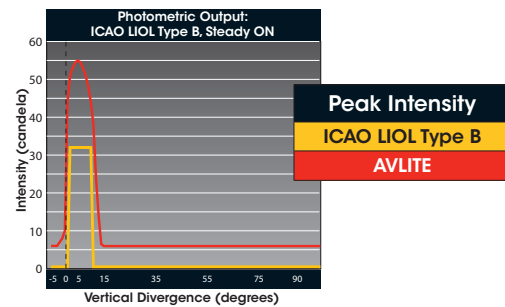
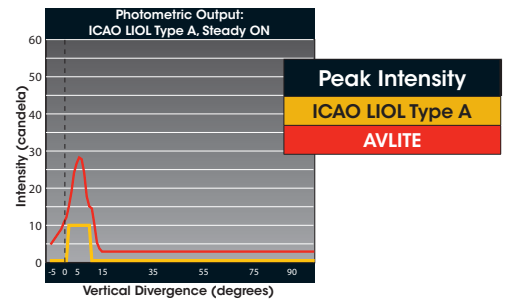
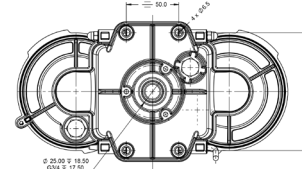
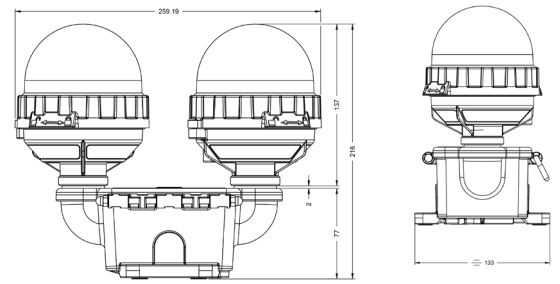
- Low Intensity Type A & B Obstruction Light, ICAO Annex 14, Volume 1, Sixth Edition, July 2016, 'Aerodrome Design and Operations'

## Technical Specifications \*\*

ICAO Type A & Type B LIOL Dual Fixture		
12–48 VDC		110–240 VAC
<b>Light Characteristics</b>		
<b>Light Source</b>	As tested; AV-OL-ILAB-12-R (Type A & Type B)	As tested; AV-OL-ILAB-UM-R (Type A & Type B)
<b>Available Colours</b>	Red as standard. Other colours available on request, including IR	Red as standard. Other colours available on request, including IR
<b>Peak Intensity (cd)†</b>	Complies with ICAO LIOLA & LIOLB: 2013	Complies with ICAO LIOLA & LIOLB: 2013
<b>Horizontal Output (degrees)</b>	360	360
<b>Vertical Divergence (degrees)</b>	as per ICAO Type A/B specification	as per ICAO Type A/B specification
<b>Reflector Type</b>	Single LED Optic	Single LED Optic
<b>Operation Mode Adjustment</b>	User-adjustable between 10cd & 32cd	User-adjustable between 10cd & 32cd
<b>LED Life Expectancy (hours)</b>	>100,000	>100,000
<b>Electrical Characteristics</b>		
<b>Failover Configuration @ 12V: Power (W)‡</b>	ICAO LIOL Type A @ 10cd Steady-on with relay energised: Pmax = 0.9 ICAO LIOL Type B @ 32cd Steady-on with relay energised: Pmax = 2.16	ICAO LIOL Type A @ 10cd Steady-on with relay energised: Pmax = 4.2 ICAO LIOL Type B @ 32cd Steady-on with relay energised: Pmax = 7 Smax = 19VA
<b>Dual Lit Configuration @ 12V: Power (W)‡</b>	ICAO LIOL Type A @ 10cd Steady-on with relay energised: Pmax = 1.8 ICAO LIOL Type B @ 32cd Steady-on with relay energised: Pmax = 4.32	ICAO LIOL Type A @ 10cd Steady-on with relay energised: Pmax = 2.4 ICAO LIOL Type B @ 32cd Steady-on with relay energised: Pmax = 8 Smax = 21.3VA
<b>Circuit Protection</b>	Integrated	Integrated
<b>Operating Voltage</b>	12 – 48 VDC	110 – 240 VAC 50/60Hz
<b>Temperature Range</b>	-40 to 80°C	-40 to 80°C
<b>Physical Characteristics</b>		
<b>Body Material</b>	Reinforced Polycarbonate composite – UV stabilized 4 holes for flat mount	Reinforced Polycarbonate composite – UV stabilized 4 holes for flat mount
<b>Lens Material</b>	LEXAN® Polycarbonate – UV stabilized	LEXAN® Polycarbonate – UV stabilized
<b>Lens Diameter (mm/inches)</b>	100 / 3 1/4	100 / 3 1/4
<b>Lens Design</b>	Single LED Optic	Single LED Optic
<b>Mounting</b>	ICAO Model: 1/2 inch pipe thread	ICAO Model: 1/2 inch pipe thread
<b>Height (mm/inches)</b>	ICAO Model: 216 / 8 1/2	ICAO Model: 216 / 8 1/2
<b>Width (mm/inches)</b>	259.2 / 10 1/4	259.2 / 10 1/4
<b>Depth (mm/inches)</b>	133 / 5 1/4	133 / 5 1/4
<b>Mass (kg/lbs)</b>	1.15 / 2.53	1.15 / 2.53
<b>Product Life Expectancy</b>	12 years plus	12 years plus
<b>Environmental Factors</b>		
<b>Humidity</b>	0 to 100%, MIL-STD-810F	0 to 100%, MIL-STD-810F
<b>Icing</b>	3.41kg per square cm / 48.5lbs per square inch	3.41kg per square cm / 48.5lbs per square inch
<b>Wind Speed</b>	Up to 240kph / 150mph	Up to 240kph / 150mph
<b>Certifications</b>		
<b>CE</b>	EN61000-6-3:2007 EN61000-6-1:2007 FCC 47 CFR Part 15, subpart B	EN61000-6-3:2007 EN61000-6-1:2007 FCC 47 CFR Part 15, subpart B
<b>Quality Assurance</b>	ISO9001:2015	ISO9001:2015
<b>ICAO</b>	Low Intensity Obstruction Light Type A & B	Low Intensity Obstruction Light Type A & B
<b>Waterproof</b>	IP68	IP68
<b>Intellectual Property</b>		
<b>Trademarks</b>	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> </ul>	<ul style="list-style-type: none"> <li>GSM Cell-Phone Monitoring</li> <li>IR LED</li> <li>Dual visual/IR output</li> </ul>

CE • Specifications subject to change or variation without notice  
\* Subject to standard terms and conditions

## Technical Illustration



## HOW TO ORDER

### ICAO Type A & B LIOL Dual Fixture

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

**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

**Fixture Type:**  
D = Dual fixture

**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