

L-810 Low Intensity Obstruction Light



Compliances

FAA AC150/5345-43G for L-810 Steady-burning
Red Obstruction Light
FAA Engineering Brief No. 67D



Application

For marking top of obstacles that do not exceed 150 feet (45 metres) in height

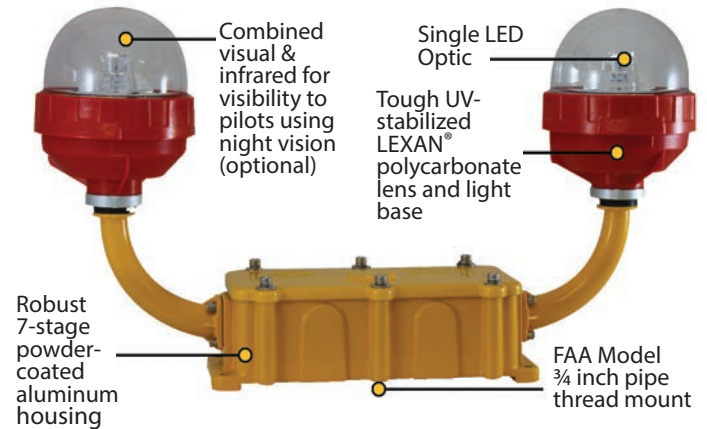
Key Features

- Available in universal DC: will accept between 12-48VDC
- Available in universal AC: will accept between 110-240VAC 50/60Hz
- User-adjustable operation mode to toggle between dusk-till-dawn & 24hr operation
- Dual light fixture enables simultaneous twin operation or redundant failsafe
- Alarm contact for remote monitoring
- Light sensor for day/night operation
- Optional RS422/485 communications port available
- Optional combined visual/IR for pilots using NVG

This dual light fixture is a steady burning, low intensity LED obstruction light that complies with FAA L-810 requirements. It can be used to mark obstacles up to 150 feet above ground which pose a danger to aircraft at night, such as telecommunication towers, wind turbines, buildings and other tall structures.

Both lights can be set to steady-burning or as a main light with a standby light. If the main light fails, the standby will automatically switch on to ensure the obstacle is always clearly marked.

An advanced 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. Typically the alarm relay is energised in normal operation and is released if there is an LED or power fault.

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) for visibility to pilots using night vision.

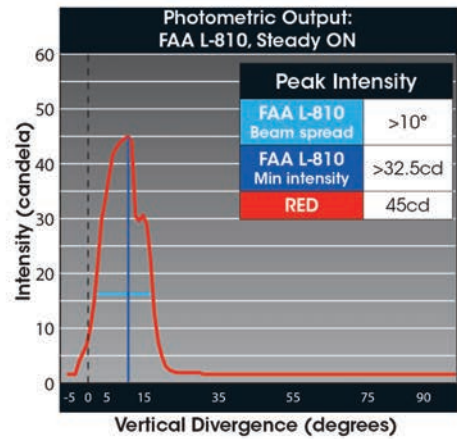
Optional GSM Monitoring

The Avlite dual obstruction light (VDC model) is available with GSM Cell-Phone Monitoring, to enable remote monitoring of light status. The system can also be configured to send out SMS text messages or e-mail alerts should alarm conditions be triggered, such as low voltage or light failure.



SPECIFICATIONS* * FAA L-810 LIOL Dual Fixture	12-48 VDC	110-240 VAC
	<p>Light Characteristics</p> <p>Light Source: As tested; FAA: AV-OL-FL810-12-R LED</p> <p>Available colors: Red as standard. Other colors available on request, including IR</p> <p>Peak Intensity (cd) †: Complies with FAA L-810 obstruction lights</p> <p>Horizontal Output (degrees): 360</p> <p>Vertical Divergence (degrees): as per FAA L-810 obstruction light specification</p> <p>Reflector Type: Single LED Optic</p> <p>Intensity Adjustments: 32.5cd</p> <p>Operation Mode Adjustment: User-adjustable between dusk-till-dawn & 24 hour operation</p> <p>LED Life Expectancy (hours): >100,000</p> <p>Electrical Characteristics</p> <p>Failover Configuration @ 12V: Current Draw (mA) ‡: FAA L-810 @ 32.5cd Steady-on with relay energised: I_{max} = 120</p> <p>Power (W) ‡: FAA L-810 @ 32.5cd Steady-on with relay energised & IR: P_{max} = 1.44</p> <p>Dual Lit Configuration @ 12V: Current Draw (mA) ‡: FAA L-810 @ 32.5cd Steady-on with relay energised: I_{max} = 240</p> <p>Power (W) ‡: FAA L-810 @ 32.5cd Steady-on with relay energised & IR: P_{max} = 2.88</p> <p>Circuit Protection: Integrated</p> <p>Operating Voltage: 12 - 48 VDC</p> <p>Temperature Range: -40 to 80°C</p> <p>Physical Characteristics</p> <p>Body Material: 7-stage powder-coated aluminium</p> <p>Lens Material: LEXAN® Polycarbonate - UV stabilized</p> <p>Lens Diameter (mm/inches): 100 / 3 7/8</p> <p>Lens Design: Single LED Optic</p> <p>Mounting: FAA Model: 3/4 inch pipe thread</p> <p>Height (mm/inches): FAA Model: 272 / 10 3/4</p> <p>Width (mm/inches): 481 / 19</p> <p>Mass (kg/lbs): 2.3 / 5</p> <p>Product Life Expectancy: Up to 12 years</p> <p>Environmental Factors</p> <p>Humidity: 0 to 100%, MIL-STD-810F</p> <p>Icing: 22kg per square inch</p> <p>Wind Speed: Up to 240kph</p> <p>Certifications</p> <p>CE: EN61000-6-3:2007 EN61000-6-1:2007 ISO9001:2008</p> <p>Quality Assurance: L-810 Steady-burning Red Obstruction Light</p> <p>Waterproof: IP67</p> <p>Intellectual Property</p> <p>Trademarks: AVLITE® is a registered trademark of Avlite Systems</p> <p>Warranty *</p> <p>Options Available</p> <ul style="list-style-type: none"> Variety of solar/battery configurations GSM Cell-Phone Monitoring Dual visual/IR output IR LED RS422/485 communications port 	<p>As tested; FAA: AV-OL-FL810-UM-R LED</p> <p>Red as standard. Other colors available on request, including IR</p> <p>Complies with FAA L-810 obstruction lights</p> <p>360</p> <p>as per FAA L-810 obstruction light specification</p> <p>Single LED Optic</p> <p>32.5cd</p> <p>User-adjustable between dusk-till-dawn & 24 hour operation</p> <p>>100,000</p> <p>n/a</p> <p>FAA L-810 @ 32.5cd Steady-on with relay energised: P_{max} = 3 S_{max} = 12VA</p> <p>FAA L-810 @ 32.5cd Steady-on with relay energised: P_{max} = 6 S_{max} = 24VA</p> <p>Integrated</p> <p>110 - 240 VAC 50/60Hz</p> <p>-40 to 80°C</p> <p>7-stage powder-coated aluminium</p> <p>LEXAN® Polycarbonate - UV stabilized</p> <p>100 / 3 7/8</p> <p>Single LED Optic</p> <p>FAA Model: 3/4 inch pipe thread</p> <p>FAA Model: 272 / 10 3/4</p> <p>481 / 19</p> <p>2.3 / 5</p> <p>Up to 12 years</p> <p>0 to 100%, MIL-STD-810F</p> <p>22kg per square inch</p> <p>Up to 240kph</p> <p>EN61000-6-3:2007 EN61000-6-1:2007 ISO9001:2008</p> <p>L-810 Steady-burning Red Obstruction Light</p> <p>IP67</p> <p>AVLITE® is a registered trademark of Avlite Systems</p> <p>4 year warranty</p> <ul style="list-style-type: none"> Variety of solar/battery configurations Dual visual/IR output IR LED

* Specifications subject to change or variation without notice
 • Subject to standard terms and conditions
 † Intensity setting subject to solar availability
 ‡ When used in redundant failsafe mode



HOW TO ORDER

FAA Compliant Dual Light Fixture

AV-OL-FL810-[]-[]-[]-[]-[]

Product No.: _____

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

Color:
 R = Red
 IR = Infrared
 RIR = Combined Red/IR

Dual Fixture:
 [D] = Dual light fixture

Monitoring & Control:
 GSM = GSM (VDC model only)
 [blank] = No GSM

RS Communications Port:
 RS = RS communications port (VDC model only)
 [blank] = No RS communications port

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

i FAA Monitoring Requirement

The FAA states that 'conspicuity is achieved only when all recommended lights are working' and 'any outage should be corrected as soon as possible'. The operational status of all lights should be confirmed at least once every 24 hours. If a structure is not easily inspected by visual observation, an automatic monitoring system should be used.

Avlite has a selection of automatic monitoring systems available for use with their obstruction light range to comply with FAA requirements.

