

# L-810 Obstruction Light



## Compliances

Certified to FAA AC150/5345-43F 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
- 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 DC version

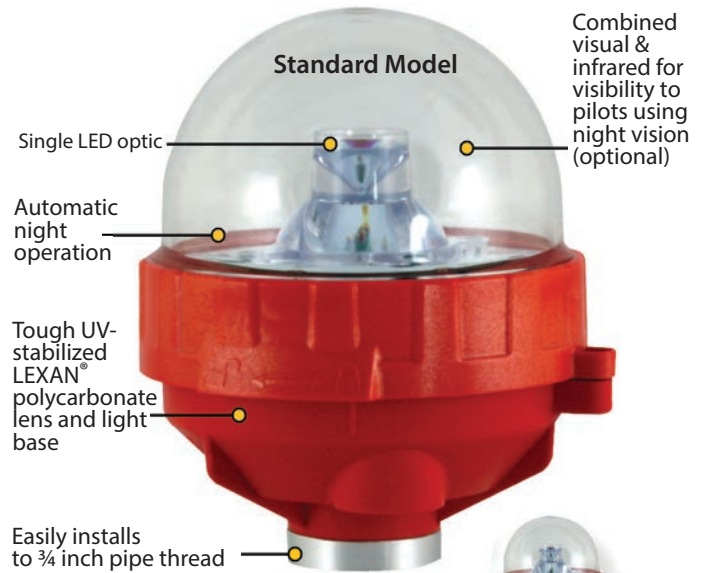
This Avlite light fixture is a steady burning, low intensity LED obstruction light designed to comply with FAA L-810 requirements. The model can be used for marking obstacles which pose a threat to aircraft, such as telecommunication towers, wind turbines, buildings and other tall structures.

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 energized 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.

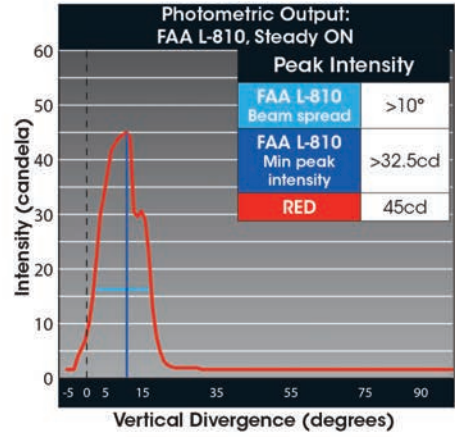


The obstruction light is also available with combined visual and infrared (IR) for visibility to pilots using night vision.

## Optional GSM Monitoring

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.

SPECIFICATIONS * *	FAA L-810 LIOL Single Fixture	
	12-48 VDC	110-240 VAC
<b>Light Characteristics</b>		
Light Source	As tested: FAA: AV-OL-FL810-12-R LED	As tested: FAA: AV-OL-FL810-UM-R LED
Available colors	Red as standard. Other colors available on request, including IR	Red as standard. Other colors available on request, including IR
Peak Intensity (cd)†	Complies with FAA L-810 obstruction lights	Complies with FAA L-810 obstruction lights
Horizontal Output (degrees)	360	360
Vertical Divergence (degrees)	As per FAA L-810 obstruction light specification	As per FAA L-810 obstruction light specification
Reflector Type	Single LED Optic	Single LED Optic
Intensity Adjustments	32.5cd	32.5cd
Operation Mode Adjustment	User-adjustable between dusk-til- dawn & 24 hour operation	User-adjustable between dusk-til- dawn & 24 hour operation
LED Life Expectancy (hours)	>100,000	>100,000
<b>Electrical Characteristics</b>		
Operating Voltage	12 - 48 VDC	110 - 240 VAC
Current Draw (mA)	@ 12V: FAA L-810 @ 32.5cd Steady-on with relay energised: I <sub>max</sub> = 120	n/a
Power (W)	FAA L-810 @ 32.5cd Steady-on with relay energised & IR: P <sub>max</sub> = 1.44	FAA L-810 @ 32.5cd Steady-on with relay energised: P <sub>max</sub> = 3 S <sub>max</sub> = 12VA
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
Mass (kg/lbs)	0.4 / 7/8	0.4 / 7/8
Product Life Expectancy	Up to 12 years	Up to 12 years
<b>Environmental Factors</b>		
Humidity	0 to 100%, MIL-STD-810F	0 to 100%, MIL-STD-810F
Icing	22kg per square inch	22kg per square inch
Wind Speed	Up to 240kph	Up to 240kph
<b>Certifications</b>		
CE	EN61000-6-3:2007 EN61000-6-1:2007	EN61000-6-3:2007 EN61000-6-1:2007
Quality Assurance	ISO9001:2008	ISO9001:2008
FAA	L-810 Steady-burning Red Obstruction Light (Qualified by Intertek)	L-810 Steady-burning Red Obstruction Light (Qualified by Intertek)
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>	3 year warranty	3 year warranty
<b>Options Available</b>	<ul style="list-style-type: none"> <li>Variety of solar/battery configurations</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>Dual visual/IR output</li> <li>IR LED</li> <li>Threaded adaptor to fit one (1) inch pipe</li> </ul>



**HOW TO ORDER**

FAA Compliant

Product No.: AV-OL-FL810-[ ]-[ ]-[ ]

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

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

**RS Communications Port:**  
RS = RS communications port  
[blank] = No RS communications port

**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.

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

