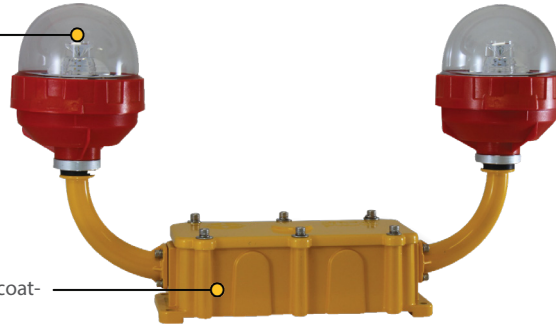




# L-810 Low Intensity Obstruction Light

Combined visual & infrared for visibility to pilots using night vision (optional)

Robust 7-stage powder-coated aluminum housing



## Optional



RS422/485 Port

## Compliances

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



## Application

For marking top of obstacles that do not exceed 150 feet (45 meters) 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 energized 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

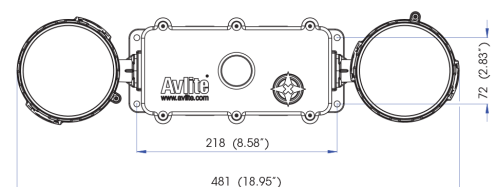
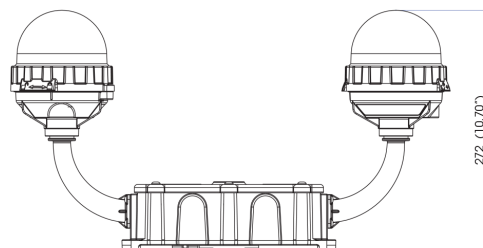
Light Characteristics	12-48 VDC	110-240 VAC
Light Source	As tested: FAA: AV-OL-FL810-12-R LED	As tested: FAA: AV-OL-FL810-UM-R LED
Available Colors	Red as standard. Other colors available on request, including IR	Red as standard. Other colors available on request, including IR
Peak Intensity (cd)*	Complies with FAA L-810 obstruction lights	Complies with FAA L-810 obstruction lights
Horizontal Output	360°	360°
Vertical Divergence	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-till-dawn and 24-hour operation	User-adjustable between dusk-till-dawn and 24-hour operation
LED Life Expectancy	>100,000 hours	>100,000 hours
<b>Electrical Characteristics</b>		
<b>Failover Configuration @ 12V:</b>		
Current Draw (mA)**	FAA L-810 @ 32.5cd Steady-on with relay energized I <sub>max</sub> = 120	N/A
Power (W)**	FAA L-810 @ 32.5cd Steady-on with relay energized and IR: P <sub>max</sub> = 1.44	FAA L-810 @ 32.5cd Steady-on with relay energized and IR: P <sub>max</sub> = 3; S <sub>max</sub> =12V
<b>Dual Lit Configuration @ 12V:</b>		
Current Draw (mA)**	FAA L-810 @ 32.5cd Steady-on with relay energized I <sub>max</sub> = 240	N/A
Power (W)**	FAA L-810 @ 32.5cd Steady-on with relay energized and IR: P <sub>max</sub> = 2.88	FAA L-810 @ 32.5cd Steady-on with relay energized and IR: P <sub>max</sub> = 6; S <sub>max</sub> =24V
Circuit Protection	Integrated	Integrated
Operating Voltage	12 - 48 VDC	110 - 240 VAC 50/60Hz
Temperature Range	~40 to 80°C	~40 to 80°C



Specification 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





# Specifications

	12-48 VDC	110-240 VAC
<b>Physical Characteristics</b>		
Body Material	7-stage powder-coated aluminum	7-stage powder-coated aluminum
Lens Material	LEXAN® Polycarbonate - UV stabilized	LEXAN® Polycarbonate - UV stabilized
Lens Diameter	100 mm / 3 7/8 in.	100 mm / 3 7/8 in.
Lens Design	Single LED Optic	Single LED Optic
Mounting	FAA Model: ¾ inch pipe thread	FAA Model: ¾ inch pipe thread
Height	FAA Model: 272 mm / 10 ¾ in	FAA Model: 272 mm / 10 ¾ in
Width	481 mm / 19 in	481 mm / 19 in
Mass	2.3 kg / 5 lbs	2.3 kg / 5 lbs
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	22 kg per square inch	22 kg per square inch
Wind Speed	Up to 240 kph	Up to 240 kph
<b>Certifications</b>		
CE	EN61000-6-3:2007 EN6100-6-1:2007	EN61000-6-3:2007 EN6100-6-1:2007
Quality Assurance	ISO9001:2008	ISO9001:2008
FAA	L-810 Steady-burning Red Obstruction Light	L-810 Steady-burning Red Obstruction Light
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>	4-year warranty	4-year warranty
<b>Options Available</b>	Variety of solar/battery configurations	Variety of solar/battery configurations
	GSM Cell-Phone Monitoring	Dual visual/IR output
	Dual visual/IR output	IR LED
	IR LED	
	RS422/485 communications port	

*Specification subject to change or variation without notice.*



# Specifications

## General Catalog Numbers

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

### Model

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

### Color

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

### Dual Fixture

### RS Communications Port

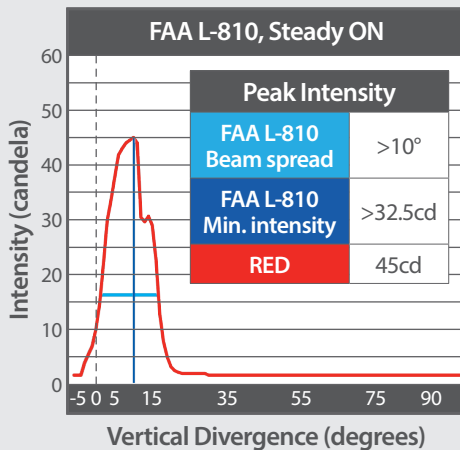
RS = RS communications port (VDC model only)  
[blank] = No RS communications port

### Monitoring & Control

GSM = GSM (VDC model only)  
[blank] = No GSM

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

## Photometric Data



## 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.