



Vigilant® LED Based Obstruction Lights



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#### **About Dialiaht**

As the leader in the LED lighting revolution, Dialight (LSE: DIA.L) continues to innovate light output, efficacy and reliability in their complete line of obstruction lighting fixtures specifically designed for industrial, hazardous, transportation and infrastructure applications. These results are directly due to the company's ongoing 40-year commitment to the advancement of LED lighting solutions that vastly reduce maintenance, improve safety, ease disposal and decrease CO2 emissions.

#### Features & Benefits

- 5 year full performance warranty
- Resistant to shock and vibration
- High impact polycarbonate lens with UV, scratch and chemical resistant coating
- Reduction in tower climbs for lower maintenance costs/unplanned site visits
- Smallest flash head in the Industry
- Community friendly lighting system utilizing patented optics

#### Dialight Timeline

- 1999 → First ever FAA certified LED L810
- 2001 → First ever FAA certified LED L864
- 2007 → First ever FAA certified LED L865/L864
- 2011 → First ever FAA certified LED L856
- 2012 → First ever FAA certified L856/L864

#### Vigilant®

• LED lighting for obstruction applications

#### SafeSite®

• LED lighting for hazardous locations

### Typical Applications

#### Regulated Primary Markets

- Telecom
- Broadcast
- Chimnevs
- Smoke Stacks
- Turbines
- Wire Crossings
- Tall Structures
- Obstruction Areas
- Marine
- Utilities

### Dialight's LED Technology Innovations Over the Years

First ever FAA certified LED obstruction light

#### Vigilant® LED Based High Intensity Strobe







2013 - (White/Red)

### Vigilant® LED Based L-810 Red LED Obstruction Lights

Vigilant® LED Based L-864 Red Beacon



1999





2007

#### Vigilant® LED Based L-865/L-864 Flashing Dual (White/Red) Strobe





2001 2004 2006

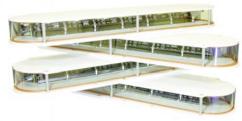


2013

#### View Dialight Case Studies at:

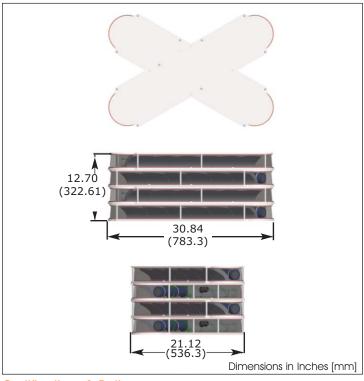
PPL Generation: http://www.dialight.com/Assets/Brochures And Catalogs/Signaling/MDEXMMCMX001.pdf PPL Power Generation: http://www.dialight.com/Assets/Brochures And Catalogs/Signaling/PPL Case Study.pdf Century: http://www.dialight.com/Assets/Brochures And Catalogs/Signaling/MDTFCTRAX001.pdf





US Patent #7,281,821 (other patents pending)

# Vigilant® LED Based L-856 High Intensity (White) Strobe



#### **Certifications & Ratings**

- FAA Approved (Check FAA Website for current certification)
- IP 66

#### **Qualified By**

Intertek ETL

#### **Compliant To**

- Canadian Aviation Regulation CAR 621 (Transport Canada)
- DGAC Mexico

#### Voltage D156-A33-270 Flash Head and Power Supply 208-277V AC FAA (TC) L-856 D156-A33-CTR Base Controller with Display 120V AC FAA (TC) L-856 D156-6000NT Night Photocell 120V AC FAA (TC) L-856 D156-6000TW Twilight Photocell 120V AC FAA (TC) L-856 D156-6001JBX Level Junction Box FAA (TC) L-856 D156-REDINT Kit to Connect a Red System to a High Intensity System FAA (TC) L-856 D156-AL8INT Kit to Connect an Antenna Obstruction Light (AOL) FAA (TC) L-856

#### Application:

The Dialight Vigilant® High Intensity LED White Strobe is the first all LED L-856 unit designed for the lighting of communication towers, chimneys, smoke stacks, broadcast towers and other tall obstructions to aerial navigation, as specified by the FAA. A high intensity system consists of 3 flash heads, 3 power supplies per level and 1 controller for the entire system. The flash heads will be placed on up to six levels of the structure for a maximum of 18 synchronized flash heads for a single tower. The 3 flash heads per level will provide 360 degrees of coverage.

Unlike conventional Xenon flashtube technology, Dialight's LED system provides years of maintenance free service. Working voltages of less than 200V DC are significantly less than those of Xenon flashtube designs. Therefore, this system represents an advance in safety. Use of LED technology also provides a more shock and vibration resistant design, ensuring consistent flash intensity every time.

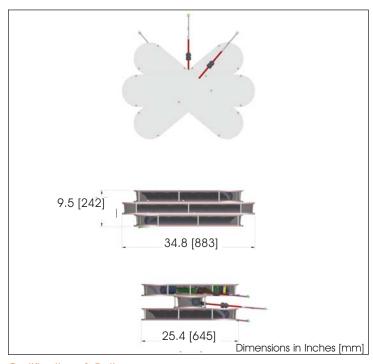
Unit Weight:	85 lbs (38 kg)	
Operating Voltage:	120 - 277V AC 50/60Hz	
Effective Intensity:	White Day White Twilight White Night	20,000 cd
Wattage:	White Day White Twilight White Night	
Power Factor:	>0.9	
Ambient Temp:	-40°F to +131	°F (-40°C to +55°C)
Synchronization:	Multiple unit sync from single controller (Operates with other manufacturers of GP: sync devices)	





US Patent #7,281,821 (other patents pending)

# Vigilant® LED Based L-856 / L-864 High Intensity (White / Red) Strobe



#### **Certifications & Ratings**

- FAA Approved (Check FAA Website for current certification)
- IP 66

#### **Qualified By**

Intertek ETL

#### Compliant To

- Canadian Aviation Regulation CAR 621 (Transport Canada)
- DGAC Mexico

#### Application

The Dialight Vigilant® High Intensity White / Red Strobe is the first all LED L-856 / L-864 unit designed for the lighting of communication towers, Chimney's, smoke stacks, broadcast towers and other tall obstructions to aerial navigation, as specified by the FAA. A high intensity system consists of 3 flash heads, 3 power supplies per level and 1 controller for the entire system. The flash heads will be placed on up to six levels of the structure for a maximum of 18 synchronized flash heads for a single tower. The 3 flash heads per level will provide 360 degrees of coverage.

Unlike conventional Xenon flashtube technology, Dialight's LED system provide years of maintenance free service, drastically reducing costs associated with tower climbs. Working voltages of less than 200V DC are significantly less than those of Xenon flashtube designs and use of LED technology also provides a more shock and vibration resistant design ensure consistent flash intensity every time.

•			
Unit Weight:	63 lbs (30 kg)		
Operating Voltage:	120 - 277V AC 50/60Hz		
Effective Intensity:	White Day White Twilight White Night Red	20,000 cd	
Wattage:	White Day White Twilight White Night Red Night	40W 30W	
Power Factor:	>0.9		
Ambient Temp:	-40°F to +131°F (-40°C to +55°C)		
Synchronization:	Multiple unit sync from single controller (Operates with other manufacturers of GPS sync devices)		

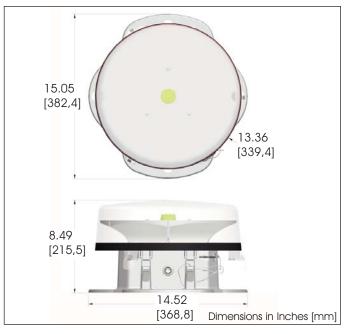
Part Number	Description	Voltage	Certification / Compliance
D266-A57-270	D266-A57-270 Flash Head and Power Supply 2		FAA (TC) L-864 / L-856
D266-A57-CTR	Base Controller with Display	120-277V AC	FAA (TC) L-864 / L-856
D256-6000-PEC	Twilight / Night Photocell with Enclosure and 3/4 inch Conduit Entry		FAA (TC) L-864 / L-856
D156-6001JBX	Level Junction Box		FAA (TC) L-864 / L-856
D1RW-C13-009	Antenna Obstruction Light (AOL) Flash Head and Power Supply - 8 Conductors	120-277V AC	FAA (TC) L-864 / L-865
D1RW-C13-009CVT	Antenna Obstruction Light (AOL) Flash Head and Power Supply - 4 Conductors	120-277V AC	FAA (TC) L-864 / L-865





US Patents #7,208,881 #7,568,821 #7,604,380 #7,777,424

# Vigilant® LED Based L-865 / L-864 Medium Intensity (White / Red) Strobe



#### Certifications & Ratings

• IP 66

#### Qualified By

- Intertek ETL
- CSA

#### Compliant To

- Canadian Aviation Regulation CAR 621 (Transport Canada)
- DGAC Mexico

#### **Application**

The all LED Dialight Vigilant® medium intensity White / Red strobe is designed for the lighting of communication towers, chimneys, smoke stacks, wind generators and other obstructions to aerial navigation. The Dual L-865 / L-864 uses LED technology for light output from both the White / Red strobe.

Unlike conventional Xenon flashtube technology, provides years of maintenance free service. Working voltages of less than 200V DC are significantly less then those of Xenon flashtube designs, therefore, this system represents an advance in safety. The Dialight Dual L-865 / L-864 LED beacon operates from a 48V DC supply.

Unit Weight: 21 lbs (9.5 kg)

Operating Voltage: 120-277V AC 50/60Hz

power factor corrected supply

(see below for options)

Supply Voltage Ranges: Nominal +/- 10%

Effective Intensity: White Day 20,000 cd

White Night 2,000 cd Red Night 2,000 cd

Wattage: White Day 85W White Night 10W

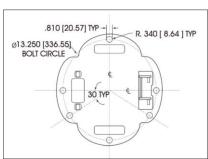
Red Night 25W

Power Factor: >0.9

Operating Temp:  $-40^{\circ}\text{F to } +131^{\circ}\text{F } (-40^{\circ}\text{C to } +55^{\circ}\text{C})$ 

Synchronization: Multiple unit sync from single controller (Operates with other manufacturers of

GPS sync devices)





Flip top design for simple installation

Part Number	Description	Voltage	Certification / Compliance
D1RW-C13-009OEM	Flash Head and Power Supply - 8 Conductors	48V DC	TC L-865 / L-864
D1RW-C13-009OEMTC	Flash Head and Power Supply - 8 Conductors	48V DC	TC L-865 / L-864
D1RW-C13-409OEM	Flash Head and Power Supply - 4 Conductors	48V DC	TC L-865 / L-864
D1RW-C13-409OEMTC	Flash Head and Power Supply - 4 Conductors	48V DC	TC L-865 / L-864
D1RW-9005	Inverter	120-277V AC / 48V DC	

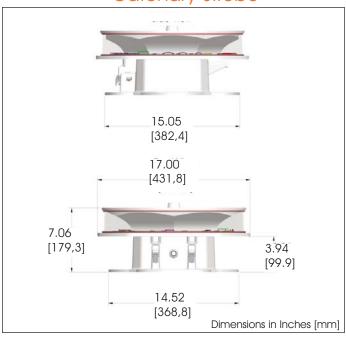




US Patents #7,208,881 #7,568,821 #7,604,380 #7,777,424

# Vigilant® LED Based L-885 / L-866

# Medium Intensity (White / Red) Catenary Strobe



#### **Application**

The Dialight Vigilant® L-885 / L-866 Catenary White / Red Stobe is designed to be incorporated into medium intensity L-866 and flashing red obstruction L-885 systems. Applications include the lighting of structures supporting overhead cables above canyons, valleys and waterways as specified by the FAA. The Dual L-885 / L-866 uses LED technology for light output for both the Red Beacon and White Strobe. Unlike conventional Xenon flashtube technology, Dialigh's Strobe provides years of maintenance free service. Working voltages of less than 200V DC are significantly less than those of Xenon flashtube designs, therefore, this system represents an advance in safety. The Dialight Dual L-885 / L-866 LED Strobe operates from a 120/240V AC, 50/60Hz supply.

Unit Weight: 28 lbs (13 kg)

Operating Voltage: 120-240V AC 50/60Hz

power factor corrected supply

Supply Voltage Ranges: Nominal +/- 10%

Effective Intensity: White Day 20,000 cd White Night 2,000 cd

Red Night 2,000 cd

Wattage: White Day 120W

White Night 20W Red Night 25W

Power Factor: >0.9

Operating Temp:  $-40^{\circ}F$  to  $+131^{\circ}F$  (-40°C to  $+55^{\circ}C$ )

Synchronization: Multiple unit sync from single controller

(Operates with other manufacturers of GPS sync devices)

#### **Certifications & Ratings**

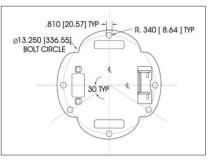
- FAA Approved (Check FAA Website for current certification)
- IP 66

#### **Qualified By**

- Intertek ETL
- CSA

#### **Compliant To**

- Canadian Aviation Regulation CAR 621 (Transport Canada)
- DGAC Mexico





Flip top design for simple installation

Part Number	Description	Voltage	Certification / Compliance
D1RW-L13-008	Flash Head and Power Supply (catenary ) - 8 Conductors	48V DC	FAA (TC) L-885 / L-866
D1RW-9005	Inverter	120-277V AC / 48V DC	

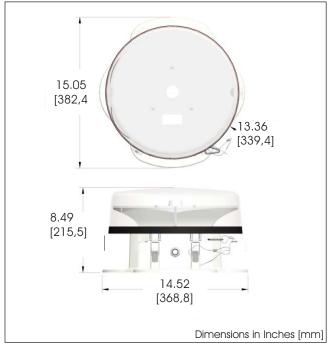




US Patents # 7,281,821#7,568,821 (other patents pending)

# Vigilant® LED Based L-864

# Medium Intensity (Red) Beacon



#### **Certifications & Ratings**

- FAA Approved (Check FAA Website for current certification)
- IP 66

#### Qualified By

- Intertek ETL
- CSA

#### **Compliant To**

- Canadian Aviation Regulation CAR 621(Transport Canada)
- DGAC Mexico

#### Application:

The Dialight Vigilant® L-864 LED based medium intensity red beacon utilizes state-of-the-art optical design to achieve the most compact, efficient, FAA compliant L-864 medium intensity beacon in the market. While it readily interfaces into existing installations, its robust and-low power design will provide years of maintenance free service.

The L-864 has extremely low RF interference and is ideal for the most difficult environments, including "hot" AM towers.

Unit Weight: 18 lbs (8.18 kg)

Operating Voltage: AC: 120-240V AC 50/60Hz power factor

corrected supply

DC: 24-48V DC -/+10%

Supply Voltage Ranges: Nominal +/- 10%

Effective Intensity: 2,000 cd

Wattage: 20W (steady burn)

3.3W (16.7% duty cycle)

20 flashes per minute with 0.5 second on

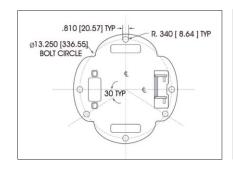
time

Operating Temp:  $-40^{\circ}F$  to  $+131^{\circ}F$  (-40°C to  $+55^{\circ}C$ )

Power Factor: >0.9



Attaches to existing incandescent base (D464-3002)





Flip top design for simple installation

Part Number	Description	Voltage	Certification / Compliance
D564-A13-001	Flash Head	120-240V AC	FAA(TC) L-864
D564-C13-001-TC	Flash Head	120-240V AC	TC only L-864
D464-A54-001	Flash Head	24-48V DC	FAA (TC) L-864
D464-R13-001	Flash Head - Red + Infrared (IR)	120-240V AC	FAA (TC) L-864
D464-3002	Retro-fit Adapter Plate		

Night Vision Goggles (NVG) and Aviator Night Vision Imaging Systems (ANVIS) sense infrared (IR) light at various wavelength ranges. Accordingly, Dialight makes no claim or representation that the IR light emitted by the Vigilant light is visible to any make or model of any NVG or ANVIS. In no event shall Dialight or any of its representatives be liable for any damages, including, without limitation, direct, consequential, indirect, punitive, incidental or special damages, in connection with the IR light emitted by the Vigilant light and/or whether any NVG or ANVIS can sense such IR light or whether the IR light emitted by the Vigilant light is visible to any NVG or ANVIS, regardless of the form of action.

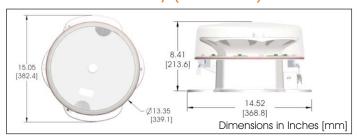




US Patents # 7,281,821 #7,568,821 (other patents pending)

## Vigilant® LED Based L-864

## Medium Intensity (Red + IR) Beacon



#### **Certifications & Ratings**

- FAA Approved (Check FAA Website for current certification)

#### Qualified By

- Intertek ETL
- CSA

#### Compliant To

- Canadian Aviation Regulation CAR 621 (Transport Canada)
- DGAC Mexico

#### Application:

Dialight's Vigilant® LED Based L-864 (Red + IR) Obstruction Lights operates, both Red and IR LEDs in a single fixture allowing visibility for aircraft pilots around military bases, airfield perimeters, buildings, towers and other obstructions.

Unit Weight: 20 lbs (9 kg)

Operating Voltage:

120-240V AC 50/60Hz power factor corrected supply

Supply Voltage Ranges: Nominal +/- 10%

Effective Intensity: 2,000 cd

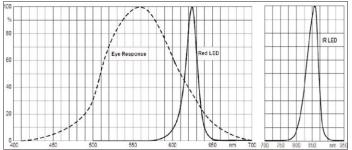
40W (Steady burn) 7W (16.7% duty cycle) 20 flashes per minute with 0.5 second on Wattage:

-40°F to +131°F (-40°C to +55°C) Operating Temp:

**Power Factor:** 

#### Infrared (IR) Spectrum

Provides improved visibility while using night vision goggles



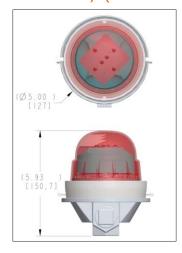
	450 5	550 600	0 650 nm 700 7	00 750 800 850 nm 950
Part Number	Description	Voltage	Certification /	Compliance
464-R13-001	Flash Head - Red + Infrared (IR)	120-240V AC	FAA (TC) L-864	

<sup>\*</sup>For Retrofit adapter see page 6



# Vigilant® LED Based RTO

## Low Intensity (Red + IR) Light



#### Application:

The Dialight Vigilant® RTO L-810 (Red + IR) is the most universal, compact and efficient obstruction light in the world. ETL Certified to the FAA requirements, the RTO signal is also ICAO and Transport Canada compliant.

Unit Weight:

1.25 lbs (0.56 kg) (Retro Unit) 2.00 lbs (0.91 kg) (Single Unit) 4.60 lbs (2.09 kg) (Dual Unit)

Supply Voltage Ranges: Nominal +/- 10%

Input AC Frequency: 50/60Hz

**Power Factor:** >0.9 (All AC units)

Operating Temp: -40°F to +131°F (-40°C to +55°C)

Part Number	Description	Voltage	Certification / Compliance
RTO-CR07-001	Single Light - Red + Infrared (IR)	120-240V AC	FAA (TC) L-810
RTO-CR08-001	Single Light - Red + Infrared (IR)	12-48V DC	FAA (TC) L-810
RTO-CR07-002	Dual Light - Red + Infrared (IR)	120-240V AC	FAA (TC) L-810
RTO-CR08-002	Dual Light - Red + Infrared (IR)	12-48V DC	FAA (TC) L-810
RTO-CR07-004	Single Retro-fit Light - Red + Infrared (IR)	120-240V AC	FAA (TC) L-810
RTO-CR08-004	Single Retro-fit Light - Red + Infrared (IR)	12-48V DC	FAA (TC) L-810
RTO-6CR7-001	Single Light - Red + Infrared (IR)	120-240V AC	TC only L-810
RTO-6CR7-002	Dual Light - Red + Infrared (IR)	120-240V AC	TC only L-810
RTO-6CR7-004	Single Retro-fit Light - Red + Infrared (IR)	120-240V AC	TC only L-810

Night Vision Goggles (NVG) and Aviator Night Vision Imaging Systems (ANVIS) sense infrared (IR) light at various wavelength ranges. Accordingly, Dialight makes no claim or representation that the IR light emitted by the Vigilant light is visible to any make or model of any NVG or ANVIS. In no event shall Dialight or any of its representatives be liable for any damages, including, without limitation, direct, consequential, indirect, punitive, incidental or special damages, in connection with the IR light emitted by the Vigilant light and/or whether any NVG or ANVIS can sense such IR light or whether the IR light emitted by the Vigilant light is visible to any NVG or ANVIS, regardless of the form of action.

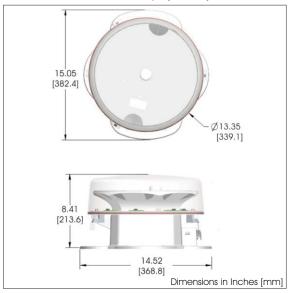




US Patents # 7,281,821#7,568,821 (other patents pending)

## Vigilant® LED Based L-864

# Medium Intensity (Red) GPS Wind Beacon



#### **Certifications & Ratings**

- FAA Approved (Check FAA Website for current certification)
- IP 66

#### **Qualified By**

Intertek ETL

#### Compliant To:

- Canadian Aviation Regulation CAR 621 (Transport Canada)
- DGAC Mexico

#### Application:

The Vigilant® LED Based L-864 Medium Intensity Wind Beacon with GPS technology, when utilized with multiple SFM's (Synchronized Flashing Modules), provides the synchronized flashing function (proper sequence of ON / OFF time) for multiple LED Beacons or LED obstruction lights.

Unit Weight: 20 lbs (9 kg)

Operating Voltage: 120-240V AC, 50/60Hz; Switch Selectable

Flash Rate: 20, 30, or 40 (+/- 1%) flashes per minute

(switch selectable); (½ ON and ½ OFF)

Effective Intensity: 2,000 cd

Wattage: 20W (Steady burn)

3.3W (16.7% duty cycle)

20 flashes per minute with 0.5 second on

time

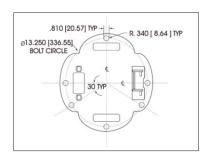
Power Factor: >0.9

Operating Temp:  $40^{\circ}\text{F to } +131^{\circ}\text{F } (-40^{\circ}\text{C to } +55^{\circ}\text{C})$ 

#### **Patented Optics**

Minimum ground scatter for a "community-friendly" lighting system







Flip top design for simple installation

Part Number	Description	Voltage	Certification / Compliance
D464-A13-001-GPS	Flash Head - Integrated GPS, Photocell, Monitoring	120-240V AC	FAA (TC) L-864
	Also Available - L-810	RTO	
RTO-1R06-001	Single Light	277V AC	FAA (TC) L-864
RTO-1R07-001	Single Light	120-240V AC	FAA (TC) L-864
RTO-1R08-001	Single Light	12-48V DC	FAA (TC) L-864
RTO-1R18-001	Single Light - Low Power	12-48V DC	FAA (TC) L-864

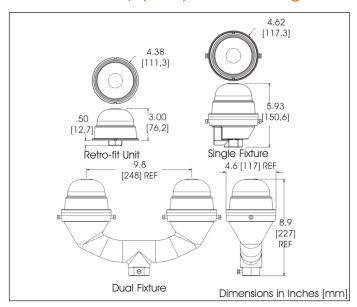




US Patent #7,604,384

# Vigilant® LED Based L-810

# Low Intensity (Red) RTO Side Light



#### Application:

The Dialight Vigilant® RTO L-810 is the most universal, compact and efficient obstruction light in the world. ETL Certified to the FAA requirements, the RTO signal is also ICAO and Transport Canada compliant. A variety of mounting options are available, including a single signal for direct replacement of incandescent lamp/lens technology.

Unit Weight: 1.25 lbs (0.56 kg) (Retro Unit)

2.00 lbs (0.91 kg) (Single Unit) 4.60 lbs (2.09 kg) (Dual Unit)

Supply Voltage Ranges: Nominal +/- 10%

Input AC Frequency: 50/60Hz

Power Factor: >0.9 (All AC units)

Operating Temp:  $-40^{\circ}F$  to  $+131^{\circ}F$  (-40°C to  $+55^{\circ}C$ )

#### **Certifications & Ratings**

 FAA Approved (Check FAA Website for current certification)

- DGAC Mexico
- IP 66
- NEMA 4X

#### Qualified By

- Intertek ETL
- Lighting Sciences Canada

#### **Compliant To**

- ICAO Annex 14, 5th Edition, July 2009
- ICAO Aerodromes Design Manual, Chapter 18
- Canadian Aviation Regulation CAR 621 (Transport Canada)
- Nachrichten für Luftfahrer Teil I Langen, 6. Januar 2005
- German Air Traffic Control Notices For Pilots Part I 6, January 2005

Part Number	Description	Voltage	Certification / Compliance	Wattage
RTO-1R06-001	Single Light	277V AC	FAA (TC) L-810	8.0
RTO-1R07-001	Single Light	120-240V AC	FAA (TC) L-810	6.5
RTO-1R08-001	Single Light	12-48V DC	FAA (TC) L-810	3.5
RTO-1R18-001	Single Light - Low Power	12-48V DC	FAA (TC) L-810	1.5
RTO-1R06-002	Dual Light	277V AC	FAA (TC) L-810	8.0
RTO-1R07-002	Dual Light	120-240V AC	FAA (TC) L-810	6.5
RTO-1R08-002	Dual Light	12-48V DC	FAA (TC) L-810	3.5
RTO-1R18-002	Dual Light - Low Power	12-48V DC	FAA (TC) L-810	1.5
RTO-1R06-004	Single Retro-fit Light	277V AC	FAA (TC) L-810	8.0
RTO-1R07-004	Single Retro-fit Light	120-240V AC	FAA (TC) L-810	6.5
RTO-1R08-004	Single Retro-fit Light	12-48V DC	FAA (TC) L-810	3.5
RTO-1R18-004	Single Retro-fit Light - Low Power	12-48V DC	FAA (TC) L-810	1.5
RTO-CR07-001	Single Light Red / Infrared (IR)	120-240V AC	FAA (TC) L-810	5.5
RTO-CR08-001	Single Light Red / Infrared (IR)	12-48V DC	FAA (TC) L-810	5.0
RTO-CR07-002	Dual Light Red / Infrared (IR)	120-240V AC	FAA (TC) L-810	5.5
RTO-CR08-002	Dual Light Red / Infrared (IR)	12-48V DC	FAA (TC) L-810	5.0
RTO-CR07-004	Single Retro-fit Light Red / Infrared (IR)	120-240 V AC	FAA (TC) L-810	5.5
RTO-CR08-004	Single Retro-fit Light Red / Infrared (IR)	12-48V DC	FAA (TC) L-810	5.0
RTO-1R07-001-EU	Single Light	120-240V AC	ICAO only, 32cd	6.5
RTO-1R07-002-EU	Dual Light	120-240V AC	ICAO only, 32cd	6.5
RTO-1R07-004-EU	Single Retro-fit Light	120-240V AC	ICAO only, 32cd	6.5
RTO-6CR7-001	Single Light Red / Infrared (IR)	120-240V AC	TC only L-810	9.0
RTO-6CR7-002	Dual Light Red / Infrared (IR)	120-240V AC	TC only L-810	9.0
RTO-6CR7-004	Single Retro-fit Light Red / Infrared (IR)	120-240V AC	TC only L-810	9.0

Night Vision Goggles (NVG) and Aviator Night Vision Imaging Systems (ANVIS) sense infrared (IR) light at various wavelength ranges. Accordingly, Dialight makes no claim or representation that the IR light emitted by the Vigiliant light is visible to any make or model of any NVG or ANVIS. In no event shall Dialight or any of its representatives be liable for any damages, including, without limitation, direct, pointlye, incidental or special damages, in connection with the IR light emitted by the Vigilant light and/or whether any NVG or ANVIS can sense such IR light or whether the IR light emitted by the Vigilant light is visible to any NVG or ANVIS, regardless of the form of action.

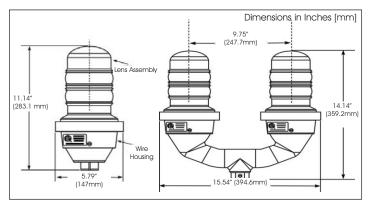




US Patent #6,425,678 (other patents pending)

# Vigilant® LED Based L-810

## Low Intensity (Red) Light



#### **Certifications & Ratings**

- FAA Approved (Check FAA Website for current certification)
- DGAC Mexico
- IP 66
- NEMA 4X

#### Qualified By

- Intertek ETL
- · Lighting Sciences Canada

#### **Compliant To**

- ICAO Annex 14, 5th Edition, July 2009
- ICAO Aerodromes Design Manual, Chapter 18
- Canadian Aviation Regulation CAR 621 (Transport Canada)
- Nachrichten für Luftfahrer Teil I Langen, 6. Januar 2005
- German Air Traffic Control Notices For Pilots Part I 6, January 2005
- CASA

#### Application:

The Dialight Vigilant® L-810 is a red LED side light. Designed for steady burning, this fixture is used to mark any obstacle that may present hazards to aircraft navigation.

Unit Weight: 7.14 lbs (3.23 kg) (Single Unit)

16.06 lbs (7.28 kg) (Dual Unit)

Wattage: 15W / 120mA (120V AC Units) (+/- 10%)

16W / 120mA (230V AC Units - 60 Hz) (+/- 15%)

16W / (230V AC Units - 50 Hz) 24W / 2.0A (12V DC Units - Standard)

20W / 920mA (24V DC Units) 13W / 275mA (48V DC Units)

**Voltage Amp:** 44 VA (120V AC Units) -+10%

67 VA (230V AC Units) -+15%

Operating Temp:  $-67^{\circ}F$  to  $+131^{\circ}F$  (-55°C to  $+55^{\circ}C$ )

Part Number	Description	Voltage	Certification /
Tail Nullibel	Description	vollage	Compliance
860-1R01-001	Single Light	120V AC	FAA (TC) L-810
860-1R02-001	Single Light	230V AC	FAA (TC) L-810
860-1R03-001	Single Light	12V DC	FAA (TC) L-810
860-1R04-001	Single Light	48V DC	FAA (TC) L-810
860-1R05-001	Single Light	24V DC	FAA (TC) L-810
860-1R01-002	Dual Light	120V AC	FAA (TC) L-810
860-1R02-002	Dual Light	230V AC	FAA (TC) L-810
860-1R03-002	Dual Light	12V DC	FAA (TC) L-810
860-1R04-002	Dual Light	48V DC	FAA (TC) L-810
860-1R05-002	Dual Light	24V DC	FAA (TC) L-810
860-5R02-001	Single Light	230V AC	ICAO only, 10cd
860-5R02-002	Dual Light	230V AC	ICAO only, 10cd
860-4R02-001-EU	Single Light	230V AC	ICAO only, 50cd
860-4R02-002-EU	Dual Light	230V AC	ICAO only, 50cd
860-1R02-001-EU	Single Light	230V AC	ICAO only, 32cd
860-1R02-002-EU	Dual Light	230V AC	ICAO only, 32cd
860-6R01-001	Single Light	120V AC	TC only L-810
860-6R01-002	Dual Light	120V AC	TC only L-810
860-7R02-002	Dual Light	230V AC	CASA only, 100cd

All candela's are minimums
See www.dialight.com for more information

### Dialight also offers these LED obstruction lights for use in Hazardous Locations (Class I, Div. 2)



SafeSite® L-810 Red LED Side Light



SafeSite® L-810 LED Steady Burn Visual Signals



SafeSite® FLS Flashing Visual Signals

# SafeSite® LED Based Obstruction Lighting Products

Dialight also offers these Class I Div. 2 and ATEX Rated Obstruction Lights for Hazardous Locations

Dialight's LED Obstruction Lights for Hazardous locations are designed for long life, high brightness and energy efficiency. These products will provide years of cost-effective and no maintenance operation. Dialight's LED obstruction lights, beacons and visual signals contain the most advanced solid state technology meeting safety standards for the most demanding environments. Dialight's Obstruction Lights are designed for chimneys, flare stacks, and any other type of obstruction to aviation in hazardous areas.



SafeSite® L-865 / L-864 Flashing Dual LED (White / Red) Strobe



SafeSite® L-864 Red LED Medium Intensity Beacon



SafeSite FLS Flashing Colored Visual Signal Lights



SafeSite L-810 Red LED Side Lights



SafeSite® L-810 LED Steady Burn Colored Visual Signal Lights



Dialight reserves the right to make changes at any time in order to supply the best product possible. The most current version of this document will always be available at: http://www.dialight.com/Assets/Brochures\_And\_Catalogs/Illumination/Obstruction\_Brochure.pdf

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