

L-806 LED and Incandescent Wind Cone



Compliance with Standards

FAA: L-806 AC 150/5345-27 (Current Edition)
ETL Certified

Uses

Provides visual surface wind direction and velocity information to pilots in flight or on the ground at airports and heliports.

Features

- The L-806 wind cone is a low-mass, frangible-designed wind cone available in two styles, lighted or unlighted, with an eight-foot wind sock
- The LED lighted wind cone assemblies may be powered directly from a 2.8-6.6A series circuit using only an isolation transformer. No power adapter is needed, significantly reducing CCR load. It may also be powered from a direct 95-264V AC source. LED light output stays constant regardless of input current range (for series powered) or input voltage level (for voltage powered) wind cones.
- Any AC voltage-powered wind cone may be powered by a 6.6A or 20A series circuit using an ADB power adapter or from a direct 120V AC source
- Sealed bearings allow precision vaning for true wind direction in all types of weather and wind conditions
- Bearing covers are provided for additional bearing protection against dirt and moisture
- Easy installation and maintenance
- The nylon fabric sock is treated for water repellency and resistance to rot and mildew
- The standard color is orange and the colorfastness exceeds Method 5671 of Federal Standard 191. Other colors such as alternate orange/white banded are available as a special order.
- An optional L-810 red LED obstruction light is available. For wind cone configurations available with an LED L-810, see catalog sheet 2063 for more details.

Lighting Assembly - LED

- The internally lighted wind cone provides an average illumination on the top and lateral surface of a fully extended windsock of 10- to 30-ft lamberts. The internally lighted 8-foot wind cone uses one LED optical assembly.

Lighting Assembly - LED (continued)

- The externally lighted wind cone provides a minimum illumination of 2 foot-candles on the upper surface of the fully extended windsock. The externally lighted 8-foot wind cone uses two LED optical assemblies.

Lighting Assembly - Incandescent

The lighting assembly consists of:

- A 69W, 120V AC, L-810 red incandescent obstruction light mounted at the highest point of the wind cone assembly or a 120V AC, 60Hz, L-810 LED red obstruction light and
- A group of four 120W PAR38 floodlights mounted at 90° intervals on a junction box that illuminates the exterior of the wind cone (externally lighted) or two 100W/120V AC reflectorized lamps that illuminate the interior of the wind cone (internally lighted)

The internally lighted wind cone can also be supplied with two 100W/6.6A lamps.

Electrical Supply, LED Current Driven

For 6.6A or 20A, 60Hz circuits, a 200W L-830 transformer with appropriate primary input (i.e. 6.6 or 20A) must be selected. Use 200W L-831 series for 50Hz circuits.

L-806 LED	Fixture Load	Isolation Transfmr.	Isol. XF Load	CCR Load
Internally Lit				
Without LED L-810	79VA	150W	18VA	97VA
With LED L-810	87VA	150W	20VA	107VA
Externally Lit				
Without LED L-810	87VA	200W	26VA	113VA
With LED L-810	102VA	200W	27VA	129VA

Electrical Supply, LED Voltage Driven

Input voltage: 95V AC (min.) - 264V AC (max.), 50/60Hz

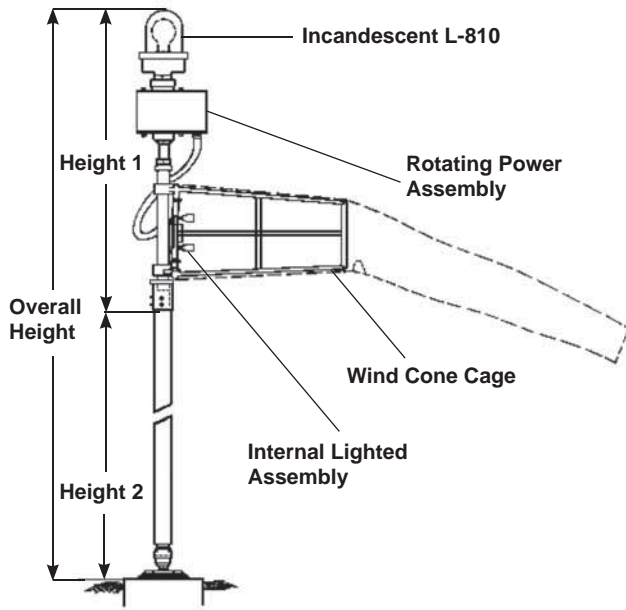
Internally Lit

Maximum input power:	
Without LED L-810	69VA
With LED L-810	75VA

Externally Lit

Maximum input power:	
Without LED L-810	80VA
With LED L-810	87VA

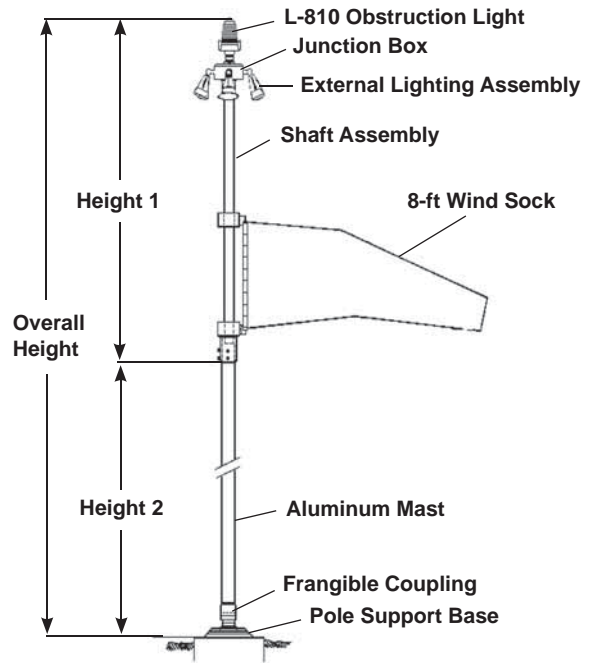
Incandescent Internally Lighted Wind Cone Assembly



Dimensions - Internally Lighted

Wind Cone Type	Overall Height	Height 1	Height 2
Incandescent	112.75 in (286.4 cm)	40.75 in (103.5 cm)	72 in (182.9 cm)
LED	127.6 in (324.1 cm)	55.6 in (141.2 cm)	72 in (182.9 cm)

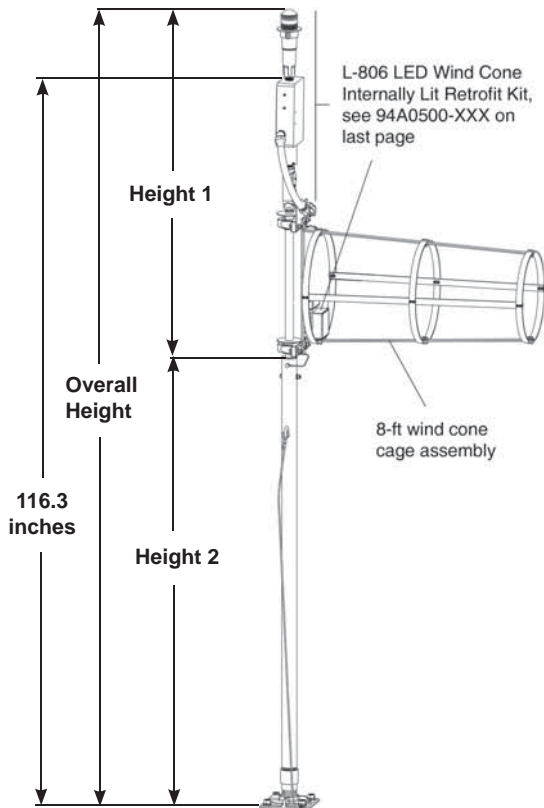
Incandescent Externally Lighted Wind Cone Assembly



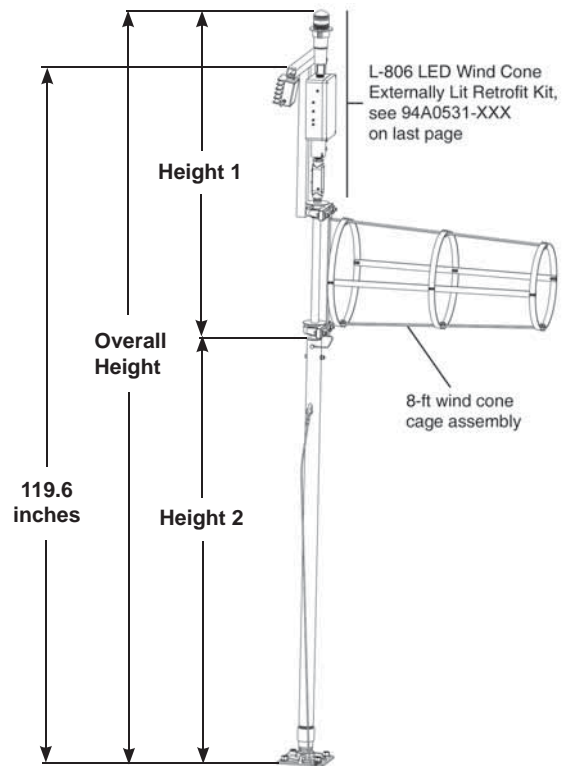
Dimensions - Externally Lighted

Wind Cone Type	Overall Height	Height 1	Height 2
Incandescent	120 in (304.8 cm)	48 in (121.9 cm)	72 in (182.9 cm)
LED	127.6 in (324.1 cm)	55.6 in (141.2 cm)	72 in (182.9 cm)

LED Internally Lighted Wind Cone Assembly



LED Externally Lighted Wind Cone Assembly



Operation

The operation of the wind cone is entirely dependent on the direction and relative velocity of the surface wind. Movement of the wind through the open throat of the cage and into the sock causes the tail to inflate. The tail of the inflated sock indicates true wind direction for velocities as low as three knots through a 360° circle about the vertical shaft.

Packaging

Description	Quantity Per Box	Dimensions (H x W x D)	Weight
8-ft. Wind Cone	1 Pole	72 x 4 x 4 in	15 lb
		182.8 x 10.2 x 10.2 cm	6.8 kg
Lighted	1 Basket	24 x 24 x 13 in	45 lb
		61 x 61 x 33 cm	20.4 kg
8-ft. Wind Cone	1 Pole	72 x 4 x 4 in	15 lb
		182.9 x 10.2 x 10.2 cm	6.8 kg
Unlighted	1 Basket	24 x 24 x 13 in	40 lb
		61 x 61 x 33 cm	8.1 kg

Spare Components (Incandescent)

Description	Part No.
Cage assembly, 8 ft	44A6454-8
Cage bearings	75A0027
Cage bearing (weather) shields	63A0332-1
External light assembly, 8 ft	44A5902
Glassware, red, incandescent, L-810	63A0149
Glassware assembly, red, LED	44A6334-1S
Lamp, 120W, 120V AC Par 38 (External)	48A0078
Lamp, bi-pin 100W, 120V AC (Internal)	48A0375
L-810 incandescent obstruction light (69W, 120V AC) and mounting assembly	44B0936S
L-810 incandescent lamp, 69W, 120V AC	48A0009
L-810 LED assembly, red	44A6369-01
L-810 LED obstruction light	SBOL-1110
Pole assembly, 8 ft	44A6457-8
Rope cleat	62B0319S
Sock, orange, nylon, 8 ft	77C0061-1

Spare Components (LED Internally Lighted)

Description	Part No.
LED and mount assembly, obstruction light	44A6662-021W
Surge protection assembly (voltage)	44A6815-VD
Surge protection assembly (current)	44A6815-CD
Light engine assembly	44A6786
Power supply PCB/mounting assembly, current-driven	44A6683-4
Power supply PCB/mounting assembly, voltage-driven	44A66454-WCS
Rotating power assy (current), 2.8-6.6A without L-810 LED	44A6790-103
Rotating power assy (voltage), 95-264V AC without L-810 LED	44A6790-203
Rotating power assy (current), 2.8-6.6A with FAA L-810 LED	44A6790-113
Rotating power assy (voltage), 95-264V AC with FAA L-810 LED	44A6790-213

FAA Wind Cone Classifications

Size 1:	8 foot
Style I-A:	Externally Lighted
Style I-B:	Internally Lighted
Style II:	Unlighted

L-806 LED Wind Cone Internally Lit Retrofit Kit 94A0500-XXX

Power
 1 = Current-driven 2.8-6.6A, 50/60Hz
 2 = Voltage-driven 95-264V AC, 50/60Hz

Obstruction Light
 0 = Without L-810 LED Obstruction Light
 1 = With FAA L-810 LED Obstruction Light
 2 = With ICAO L-810 LED Obstruction Light

Cage Type¹
 2 = Retrofit to bolted cage, 8-foot²
 4 = Retrofit to welded cage, 8-foot³

Note: This kit may be used to retrofit existing ADB incandescent wind cones.

- ¹ Internally lit 8-foot wind cone uses one LED optical assembly. See drawings on page 2.
- ² Bolted cage, ADB PN 44A6454
- ³ Welded cage, ADB PN 44D0923S

L-806 LED Wind Cone Externally Lit Retrofit Kit 94A0531-XXX

Power
 1 = Current-driven 2.8-6.6A, 50/60Hz
 2 = Voltage-driven 95-264V AC, 50/60Hz

Obstruction Light
 0 = Without L-810 LED Obstruction Light
 1 = With FAA L-810 LED Obstruction Light
 2 = With ICAO L-810 LED Obstruction Light

Cage Type¹
 4 = Retrofit to bolted cage, 8-foot²
 6 = Retrofit to welded cage, 8-foot³

Note: This kit may be used to retrofit existing ADB incandescent wind cones.

- ¹ Externally lit 8-foot wind cone uses two LED optical assemblies. See drawings on page 2.
- ² Bolted cage, ADB PN 44A6454
- ³ Welded cage, ADB PN 44D0923S

L-806 Ordering Code WC806-XXXX

Size 1 = 8-foot cage	
Style 0 = Unlit cage ² 1 = Internally lit LED, 2.8-6.6A, 50/60Hz ¹ 2 = Externally lit LED, 2.8-6.6A, 50/60Hz 3 = Internally lit LED, 95-264V AC, 50/60Hz ¹ 4 = Externally lit LED, 95-264V AC, 50/60Hz 7 = Internally lit incandescent, 120V AC ¹ 8 = Externally lit incandescent, 120V AC	
Obstruction Light 0 = No obstruction light 1 = FAA LED L-810 integral with LED cage lighting assembly ³ 3 = FAA LED L-810, 95-264V AC, 50/60Hz ⁴ 5 = FAA LED L-810, 2.8-6.6A, 50/60Hz ⁵ 9 = FAA incandescent L-810, 120V AC	
Special Applications 0 = No components removed (standard) 1 = No wind sock ⁶	

- Notes**
- ¹ Internally lighted 8-foot L-806 is a non-FAA configuration.
 - ² Unlit cage can be used with no obstruction light or obstruction light options 3 through 9.
 - ³ Used only on internally or externally lit LED wind cones (Style options 1 through 4)
 - ⁴ Available only on unlit or internally/externally lit incandescent wind cones (Style options 0, 7, or 8)
 - ⁵ Available only with unlit wind cone cages (Style option 0)
 - ⁶ For applications where wind socks other than orange are used. Special wind sock colors supplied separately. Contact the ADB Airfield Solutions Sales Department for availability of 12V DC options.

The information contained in this document is subject to change without notice. ADB reserves the right to make changes and improvements to its products and assumes no responsibility for making these modifications on any equipment previously sold.

ADB Airfield Solutions, LLC
 977 Gahanna Parkway
 Columbus, OH 43230

Telephone: 614-861-1304
 Fax: 614-864-2069
 www.adb-airfieldsolutions.com

ADB Airfield Solutions, Ltd.
 5500 North Service Road, Suite 1108
 Burlington, Ontario
 L7L 6W6 Canada

Telephone: (905) 331-6887
 Fax: (905) 331-9389