



# POINT ELEVATED LIGHTS PEL LP LED v5 HELIPORT PERIMETER LIGHT

Compliances: ETL Listed to UL 1598A Marine Vessels at -40 deg C to +55 deg C  
 ETL Listed to CSA C22.2 No. 137-M1981 & No. 250.0-08 Canada  
 ETL Listed to UL 1598 at -40 deg C to +55 deg C  
 FAA AC 150/5390-2B Heliport Design Guide  
 Registered ISO 9001:2015  
 ICAO Annex 14, Volume II  
 UK CAA CAP 437, Chapter 4, paragraph 3.1  
 Transport Canada TP14371, AGA 7.17  
 American Bureau of Shipping (ABS) Type Approved Product



The PEL AC and DC voltage powered elevated LED lights mark the FATO perimeter of a heliport and mark the preferred direction of helicopter approach. The FAA and ICAO recommended color is green. Our yellow Marine Treatment finish is standard (see below). Only 2.2 watts at 120V.

Point Type	Voltage	Array	Color	Mounting	Options
PEL-57005	1: 120v	C: Heliport	G: Green	JBS3: Surface J-Box	VB: Variable Brightness
	2: 220v	N: NVG *	Y: Yellow	JBP3: Parapet J-Box	CF: Cable Fitting
	3: 12v DC	H: ICAO	W: White	LP34: 3/4-inch NPT	MT: Green Marine Treatment
	4: 24v DC	FATO	R: Red	LP10: 1-inch NPT	NC: NVG compatibility**
	5: 48v DC		B: Blue	LSM: Surface Mount (see Detail H05)	DH: Drain Hole in LSM/PLS
	6: 277v		IR: Infrared	LP34-LSM: Surface (see Detail H06)	GR: Ground Lug LSM/PLS
				LP34-PLS: Shallow (see Detail H36)	Fxxx: Flashing (fpm)
				LPM20: Metric, Bottom	

Note: Array C brightness exceeds ICAO Annex 14  
 \* For NVG tactical use only: PEL-57005-1N-IR-xxxx-MT  
 \*\* For use with visible (non-IR) array; adds infrared LEDs.

PEL-57005-1C-Y-JBS3  
SHOWN WITH  
SURFACE JUNCTION BOX



PEL-57005-1C-G-LP10-MT  
FOR DIRECT MOUNT ON  
1-INCH NPT CONDUIT  
NOTE: USE -LPM20 FOR METRIC  
GREEN MARINE TREATMENT

PEL-57005-1C-G-JBP3  
SIDE-WALL MOUNT



PEL-57005-1C-G-LP34-PLS  
WITH BASE RECESSED IN PAVEMENT



Includes our standard yellow Marine Treatment finish at no additional charge which tolerates marine, high salt content air and other corrosive environments. The FAA specified finish used by competitors flakes and fails in a short time under such conditions.

Point Lighting Marine Treatment: *Our paint finish is bonded to the metal and far exceeds the corrosion resistance of the standard FAA approved finish. The fixture shall be treated for marine conditions by cleaning per US Department of Defense TT-C-490 method III, pretreated with chrome-free aluminum conversion coating per US MIL-C-5541 type II, epoxy powder base coat primer and glossy polyester powder coat finish. Powder coating per US Department of Defense MIL-PRF-24712A type VI and oven cured.*



### POWER CONSUMPTION

Code	Type	Voltage	Frequency	Watts*	VA*
-1C	Array C	120 AC	50/60 Hz	2.2	3.5
-2C	Array C	220 AC	50/60 Hz	2.5	5.8
-3C	Array C	12 DC	---	2.1	---
-4C	Array C	24 DC	---	2.5	---

Option -NC Add 1.0 watt and 1.1 VA

\*Power consumption for AC units includes the effect of the unit's power factor which accounts for the difference between watts and volt-amperes. Measurements were made at the nominal AC voltages. The operating range for 120v units is 93 - 144v. The operating range for 220v units is 176 - 250v.

### PEL LP LED SPECIFICATIONS

The PEL LP LED (specify: color), (specify: voltage) 50/60 Hz aviation elevated light shall operate properly within an input voltage supply range of 93V to 144V for 120V units and for 176V to 250V for 220V units. Within the preceding ranges, the output to the LED array shall be a controlled, stabilized constant current.

The heliport lights shall be listed *Suitable for Use in Wet Locations* to UL1598A Marine Vessels (for AC), UL1598 2nd Edition Luminaires; CSA C22.2 No. 250.0-08, 2nd Edition; UL50 11th Edition Standard for Enclosures for Electrical Equipment and CSA C22.2 No. 94-M91 Special Purpose Enclosures for use at -40 deg C to +55 deg C and sealed to IP66 ingress protection.

The LED lighting circuits shall be remotely dimmable, if specified, by means of a heliport controller designed and produced by the lighting manufacturer. Option -VB variable brightness requires installing the PHC-66002 heliport controller. The PHC Heliport Lighting Controller shall incorporate an IEC approved surge suppressor and current limiting circuit breakers on each load output.

The LED light shall have a tested and verified power consumption not to exceed (see chart above).

The unit shall have passed the US Military Standard tests: the constant high temperature test to +130 deg F (+55 deg C) and the constant low temperature test to -67 deg F (-55 deg C) conducted in accordance with US MILSTD-810F, Method 501.3, Procedure II; the wind-blown rain test that has been conducted in accordance with US MIL-STD-810F, Method 506.3, Procedure I; and the humidity test shall be in accordance with US MIL-STD-810F, Method 507.3, Procedure I. The complete test regime shall exceed the requirements of NEMA 4X and IP 66. The light head casting shall be Marine Treatment aviation yellow for corrosion resistance certified by the manufacturer to comply with the US Military Standard Salt Fog Test conducted MIL-STD-810F, Method 509.4, Procedure I, paragraph 4.5.2.

Per ICAO Annex 14, Volume II, Figure 5-9, Array C complies with a minimum of 15 candelas in green under 5-degrees vertical and a minimum of 30 candelas at the peak beam range. Array C also complies with UK CAP 437.

The outer glass lens shall be smooth and rounded to reduce the adhesion of dirt, ice and snow. The glass shall be clear to maximize light transmissivity. The color emitting LEDs shall meet the chromaticity requirements of US MIL-C-25050. The high output LED's shall be the latest technology providing uniform light output. The LED average life shall exceed 100,000 hours. The LEDs shall be soldered in a factory set position to insure consistent light output. Wire mounted raised LEDs that can be bent out of position shall be unacceptable and cause for rejection.

The LED board shall be treated with a protective dielectric conformal coating for protection from moisture and corrosion. The power supply board shall include short circuit and open circuit protection and the unit shall be protected from line surges by metal oxide varistors (MOVs). There shall be a clear design element for the dissipation of LED heat to insure the LEDs do not fail prematurely. DC light fixtures shall be reverse polarity protected.

The LED aviation elevated light shall be POINTSPEC Series PEL-57005 manufactured by Point Lighting Corporation.



Use with Night Vision Goggles (NVG)

Point Lighting Corporation offers an option for combining infrared and color LEDs to render our lights visible with and without NVG. Please specify option -NC.

Instruction Sheet: IS57005

LED Life (hours): 100,000

Height (JBS3): 11.7 (296)

Height (JBP3): 8.0 (203)  
above wall

Weight: 4.0 lbs 1.8 kg  
Volume: 0.5 ft<sup>3</sup> .014 m<sup>3</sup>

### Replacement Parts & Tools

Note: The PEL optical subassembly is permanently sealed to prevent moisture penetration and it is not serviceable.

PL10038	Pipe Extension
PL10040	Breakable Coupling
PL10049-4-6	Gasket, Baseplate
PL10192-75	Circular Bubble Level



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