



POINT ELEVATED LIGHTS PEL LED v5 HELIPORT PERIMETER & LEAD-IN 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 150/5390-2D Heliport Design Guide
 ICAO Annex 14, Volume II
 Registered ISO 9001:2015
 UK CAA CAP 437, Chapter 4, paragraph 3.1
 American Bureau of Shipping (ABS) Type Approved Product



The PEL AC or 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. The fixture consists of an outer glass lens mounted on a yellow marine treated cast aluminum housing secured by a gasket and permanently sealed. The PEL's upper assembly mounts on an aluminum machined frangible (breakaway) adapter. The electronic power supply is sealed to be watertight in the fixture head assembly. Almost any mounting requirement can be accommodated by POINT LIGHTING CORPORATION. The installed height with baseplate is 9.8-inches (249mm). See file 0MOUNTINGS for mounting details.

Point Type — Voltage — Array — Color — Height — Mounting & Options

PEL-57005	1: 120v 2: 220v 3: 12v DC 4: 24v DC 6: 277v	C: Heliport N: NVG * H: ICAO FATO	G: Green Y: Yellow (Blank)^ W: White R: Red B: Blue GR: Green-Red IR: Infrared	14	VB: Variable Brightness PLS: Shallow Base & Gasket BP: Baseplate Only GR: Ground Lug in Base MT: Green Marine Treatment NC: NVG compatibility** TW: Taxiway - Reduced Intensity (blue) SOL-C094A: Solar Powered & Wireless Operation DH: Drain Hole in Base
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The PEL v5 C array is 2.2 watts at 120V

Note: Array C brightness exceeds ICAO Annex 14 & meets CAP 437

* For NVG tactical use only: PEL-57005-1N-IR-PLS-MT

** For use with visible (non-IR) array; adds IR LEDs.



^ If left blank, the height will be 9.8-in

PEL-57005-1C-G-14
WITH TRADITIONAL FAA
FRANGIBLE COUPLING



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.*

PEL-57005-1C-G

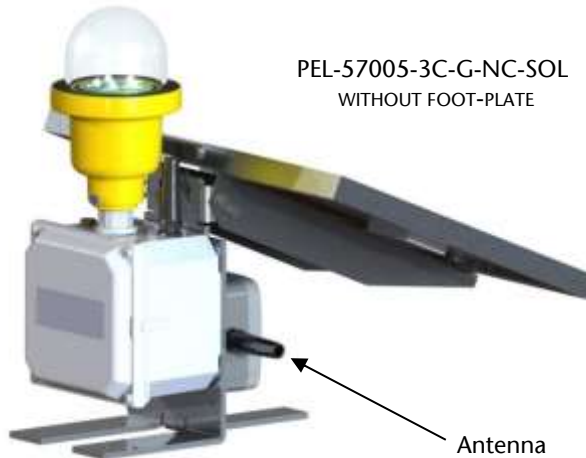


CLEAR LENS BUT GREEN LIGHT PRODUCED
COLOR CODED LED BOARD

PEL-57005 SOLAR POWERED PERIMETER & RUNWAY LIGHT

OPERATES ALL NIGHT YEAR ROUND WITH 7 DAYS BATTERY AUTONOMY

OPTIONAL WIRELESS SWITCHING AT UP TO 4,000 METERS



TYPICAL APPLICATIONS

Operates automatically all night, year round:

- | | |
|--------------------------------|---|
| PEL-57005-3C-(color)-NC-SOL | Solar powered light for bolting in place |
| PEL-57005-3C-(color)-NC-SOL-FP | Solar powered light with foot-plate for stacks or weights |

Optional wireless switching:

- | | |
|-----------------------------------|--|
| PEL-57005-3C-(color)-NC-SOL-C094 | Solar powered light with key fob wireless operation at site* |
| PEL-57005-3F-(color)-NC-SOL-C094A | Solar powered light with handheld wireless operation to 4 km*^ |

Includes option -NC: NVG compatibility. For use with visible (non-IR) array; adds an infrared LED.

* Option -C094A for long range operation up to 4,000 meters. Option -C094 is for on-site local operation only.

Onboard wireless signal receiver & antenna for ON-OFF operation.

Wireless activation with handheld device PL11572-TRANS (-C-094A) or key fob included with -C094.

^ Note: PL11572-TRANS must be ordered separately one per site for any -C094A system.

May be factory set in groups with separate transmitters such as two helipads.



Visibility Range as Tested:

- | | |
|---------------|--------------------|
| Visible Color | > 8 nautical miles |
| Option -NC^ | > 3 nautical miles |

^ For Night Vision Goggles (NVG)



PEL LED SPECIFICATIONS

The PEL 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 nominal 120V units and 176V to 250V for nominal 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, UL1598 2nd Edition Luminaries; 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 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 photometric performance shall exceed a range defined by ICAO Annex 14, Volume II, Figure 5-9. The LED light shall have a tested and verified power consumption not to exceed:

2.2-watts and 3.5 VA at 120v AC (Array C)
2.5-watts and 5.8 VA at 220v AC (Array C)

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.

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 frangible adapter shall be threaded 1-inch NPT to interface with the PL40301-10T baseplate.

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 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 ensure the LEDs do not fail prematurely. DC light fixtures shall be reverse polarity protected.

The aluminum mounting base shall be PLS-40304 (option -PLS) with two (2) 1-inch NPT hubs located at 0 & 180 degrees on the sides of the 4-inch deep base. The base shall have an option for 4-way hubs or bottom hubs in place of the standard two side hubs. The PL40301-10T baseplate shall be powdercoat painted to match the light fixture. The baseplate shall be affixed to the base by three (3) stainless steel screws.

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

Note: For taller lights, order PEL-57005-1C-G-xx-PLS with traditional frangible coupling and pipe extension.
Available heights (-xx) in inches are: -14, -18, -24 and -30.

Myth: All LED's have a useful life of 100,000 hours

The amount of useable light—about 70% of original light output—from some LED's has been shown to be very short depending on the color and manufacturer of the LED. That is why the quality of the LED array and power supply is very important and they should be of the latest technology as used by Point Lighting Corporation.

Myth: LED's do not create heat

LED's do create heat, but the heat generated is retained within the LED array and needs to be dissipated. Without a proper design, the LED will fail very early in life. The PEL LED array design incorporates an aluminum heat sink to dissipate the heat. Some competitors' lights—by design—cannot handle the heat.



Instruction Sheet: IS57005
LED Life (hours): 100,000

PEL Height: 9.7 (249)
Base Diameter: 8.0 (203)
PLS Depth: 4.0 (102)

Weight: 4.0 lbs 1.8 kg
Volume: 0.5 ft³ .014 m³

Replacement Parts & Tools

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

- | | |
|-------------|--------------------------|
| PL10040 | Frangible Coupling (-14) |
| PL11628-1 | Frangible Adapter |
| PL40301 | Baseplate (-14) |
| PL40301-10T | Baseplate |
| PL10049-4 | Gasket, Baseplate |
| PL10192-75 | Circular Bubble Level |



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