

POINT ELEVATED LIGHTS PEL LED v7 HELIPORT & VERTIPOINT PERIMETER LIGHT

Compliances: FAA L-860H & L-861H; Tested to -40 deg C to +55 deg C
 FAA Engineering Briefs 67D Heliports & 105 Vertipoints
 FAA AC 150/5390-2D Helipoint Design Guide
 ICAO Annex 14, Volumes I & II, 2022
 ICAO Doc 9261, Part II, Fifth Edition, 2021
 UL Tested & Certified to IP66 & IP67 Ingress Protection
 Registered ISO 9001: 2015



- The hardware is 316 (A4) stainless steel.
- The LED's are rated for 100,000 hours.
- Less than 2.5 watts per light.
- NVG Compatibility is standard.
- The casting & lens are specially engineered forms of polycarbonate materials.
- Marine Treatment standard for all painted accessories: baseplate, junction box, LSM base.
- Suitable for outdoor use with respect to exposure to ultraviolet light, water exposure & immersion in accordance with UL 746C (f1).
- Six (6) years limited warranty subject to Point Lighting "Terms & Conditions of Sale".

Point Type	— Voltage	Array	— Color	— Mounting	— Options
PEL-57007	1: 96-305v AC 5: 10.8v DC to 52.8v DC	C: ICAO TLOF C: FAA L-860/1H N: NVG *	G: Green B: Blue Y: Yellow R: Red IR: Infrared	See Chart on Page 4	VB: Variable Brightness TW: Taxiway (blue only) SOL: Solar Powered CF: Cable Fitting (-xxB) DH: Drain Hole in PLS GR: Ground Lug LSM/PLS BP: Baseplate Only

Note: For ICAO FATO white lights, see file HL139.
 * For infrared NVG tactical use only:
 PEL-57007-1N-IR-xxx-MT

PEL-57007-1C-G-PLS
 FRANGIBLE & BASE-MOUNTED
 INCLUDES PL40301-10T BASEPLATE
 & PLS-40304 MOUNTING BASE
 TO BE RECESSED IN PAVEMENT



PEL-57007-1C-G-34B
 FOR DIRECT MOUNT ON
 3/4-INCH NPT CONDUIT
 NOTE: M20 & M25 METRIC AVAILABLE



PEL-57007-1C-G-JBPF
 FRANGIBLE & SIDE-WALL MOUNT



POINT LIGHTING

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PEL-57007-1C-G-14-PLS
NOMINAL 14-INCH HEIGHT WITH
FRANGIBLE EXTENSION
& PL40301-34T BASEPLATE
NOT SHOWN: PLS-40304 SHALLOW BASE



PEL-57007-1C-G-JBSF
SURFACE JUNCTION BOX
TWO 3/4-INCH NPT SIDE ENTRIES
MAY BE ORDERED WITH BOTTOM ENTRY
OPTIONAL 1-INCH NPT OR METRIC ENTRIES*



PEL-57007-1C-G-LSM
WITH LOW SURFACE MOUNT BASE
EXTRA-LARGE WIRING BOX
TWO 1-INCH NPT SIDE ENTRIES
MAY BE ORDERED WITH BOTTOM ENTRY
OPTIONAL 3/4-INCH NPT OR METRIC ENTRIES*

* Requested box entries that vary from the standard may be added to the catalog number as in these examples: PEL-57007-1C-G-JBSF-10(2) for 2 x 1-inch entries
PEL-57007-1C-G-JBSF-34(4) for 4-way 3/4-inch entries

PHL-57007-1C-G-53063-PLS
COMBINATION WITH SURFACE FLOODLIGHT
PHL IS SHOWN WITH
PL40301-10T BASEPLATE



PEL-57007-1C-G
WITH FRANGIBLE ADAPTER
THREADED FOR 1-INCH NPT



PEL-57007-1C-G-BP
FRANGIBLE WITH BASEPLATE ONLY
INCLUDES PL40301-10T
BASEPLATE & GASKET



PLS-40304 SHALLOW BASE
NOT SHOWN



PEL-57007-1C-G-10B
FOR DIRECT MOUNT ON
1-INCH NPT CONDUIT
USE -M20 OR -M25 FOR METRIC

POWER CONSUMPTION

Code	Color	Type	Voltage	Frequency	Watts*	VA*
-1C	Green	Array C	120 AC	50/60 Hz	2.41	4.3
-1C	Green	Array C	220 AC	50/60 Hz	2.44	5.1
-1C	Green	Array C	277 AC	50/60 Hz	2.51	5.4
-5C	Green	Array C	12 DC	---	2.17	---
-5C	Green	Array C	24 DC	---	2.28	---
-5C	Green	Array C	48 DC	---	2.59	---

*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.

PEL-57007 SPECIFICATIONS

The PEL LED (specify: color) airfield elevated light shall operate properly within an input voltage supply range of 96V to 250V, 50/60 Hz. Within the preceding ranges, the output to the LED array shall be a controlled, stabilized constant current.

The light shall be listed *Suitable for Use in Wet Locations* to UL1598A Marine Vessels (for AC), UL1598 2nd Edition Luminaries and CSA C22.2 No. 250.0-08 No. 137-M1981 for use at -40 deg C to +55 deg C and sealed and tested to IP66 & IP67 ingress protection. The PEL head casting & lens are specially engineered forms of polycarbonate materials. This material is suitable for outdoor use with respect to exposure to ultraviolet light, water exposure & immersion in accordance with UL 746C (f1).

Painted products such as baseplates & junction boxes include 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.*

Photometric performance shall comply with FAA Engineering Briefs 87 Heliports & 105 Vertiports; ICAO Doc 9261, Helipoint Manual, 5th edition 2021, Part II, Figure II-5-22, Illustration 5 TLOF perimeter lights (array C in green); shall comply with FAA L-860H & L-861H perimeter lights (array C in green); shall comply with FAA Advisory Circular 150/5390-2D, Appendix G and FAA Engineering Brief #67D.

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 -40 deg F (-40 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 fixture shall have been tested 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 clear outer lens shall be smooth to reduce the adhesion of dirt, ice and snow and maximize light transmissivity. The color emitting LED shall meet the chromaticity requirements of US MIL-C-25050. The high output LED shall be the latest technology providing uniform light output. The LED average life shall exceed 100,000 hours. The LED and proprietary lens shall be printed circuit board mounted in a factory set position to insure consistent light output.

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-57007 manufactured by Point Lighting Corporation.

MOUNTING OPTIONS

JBSF	Junction Box, Surface; Frangible	Detail H09.7	JBPF	Junction Box, Parapet-Wall; Frangible	Detail H11.7
34B	Mount to ¾-inch NPT conduit; Rigid		10B	Mount to 1-inch NPT conduit; Rigid	
M20B	Mount to M20 metric conduit; Rigid		M25B	Mount to M20 metric conduit; Rigid	
PLS	Inpavement Base; Frangible	Detail H01.7	LSM	Low Surface Base; Frangible	Detail H05.7
-14-PLS	As above except Airport Height	Detail H03.7	BP	Baseplate only; Frangible	Detail H08.7

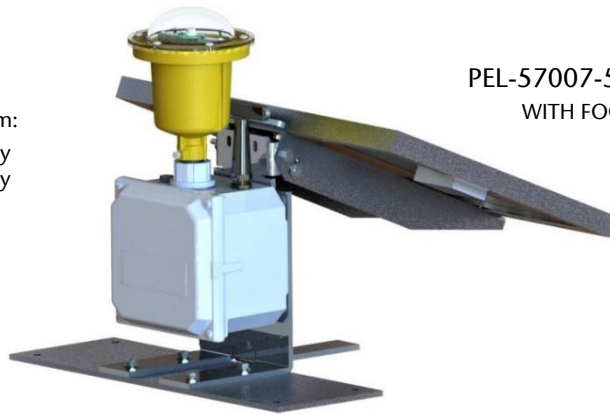
PEL-57007 SOLAR POWERED PERIMETER & RUNWAY LIGHT

OPERATES ALL NIGHT YEAR ROUND WITH 4 DAYS* BATTERY AUTONOMY

OPTIONAL WIRELESS SWITCHING AT UP TO 4,000 METERS

* Site solar insolation minimum:

- SOL 2.2 kWh/m2/day
- SOLX 1.5 kWh/m2/day



PEL-57007-5C-G-SOL-FP
WITH FOOT-PLATE

TYPICAL APPLICATIONS

Operates automatically all night, year round:

- PEL-57007-5C-(color)-SOL Solar powered light for bolting in place
- PEL-57007-5C-(color)-SOL-FP Solar powered light with foot-plate for stacks or weights

Optional wireless switching:

- PEL-57007-5C-(color)-SOL-C094 Solar powered light with key fob wireless operation at site**
- PEL-57007-5C-(color)-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.

Minimum solar insolation requirements provided are based on a temperature of 32-deg F (0-deg C). Locations with temperatures below freezing will have a reduced battery capacity and will require higher solar insolation values. Extremely low temperature sites may not be compatible with solar power. Consult the factory for assistance.

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Visibility Range as Tested:

Visible Color > 8 nautical miles
NVG (Infrared)^ > 3 nautical miles

^ Night Vision Goggles (NVG)

Instruction Sheet: IS57007

LED Life (hours): 100,000

PEL-57007-1C-G-BP & -PLS:

Height above grade: 7.9 (200)

Height above baseplate: 7.4 (188)

Weight: 1.0 lb 0.45 kg

Replacement Parts

Note: The PEL optical subassembly is sealed to prevent moisture penetration. Contact Point before attempting service.

PL11628-5	Frangible Adapter
PL10166-241-S	O-Ring Seal; Lens
PL11633	Base, Yellow
PL11634-S	Lens, Spare
PL10049-4-6	Gasket, Baseplate
PL40301-10T	Baseplate, 1-inch NPT
PL40301-34T	Baseplate, ¾-inch NPT



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