




POINT HELIDECK LIGHTS PRL LED v4 HELIDECK SEMIFLUSH 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
 Tested & Certified to IP66, IP67 & IP69 Ingress Protection
 Certified to FAA L-852H(L), L-860H(L), L-861H(L), L-860HR(L), L-860HS(L)
 ICAO Annex 14, Volume II & ICAO Doc 9261
 Registered ISO 9001:2015
 UK CAA CAP 437 ed. 9 (2023), Chapter 4 & Appendix C
 Transport Canada TP14371, AGA 7.17
 American Bureau of Shipping (ABS) Type Approved Product



The PRL LED Point Rollover Light is used for heliports where an omnidirectional inset semi-flush light is required to provide visibility and circling guidance. Only 2.2 watts and 3.5 VA at 120V.

- The castings are copper-free (< 0.25%) aluminum.
- The lens is glass.
- The hardware is 316 (A4) stainless steel.
- The LED's are rated for 100,000 hours.
- Switchable color option available.
- IP66, IP67 & IP69 tested and listed.
- Standard with the exclusive Point Lighting Marine Treatment finish that is bonded to the metal and far exceeds the corrosion resistance of the standard FAA approved finish. See below.
- Six (6) years limited warranty subject to Point Lighting "Terms & Conditions of Sale".

Point Type	Voltage	Array	Color	Mounting & Options
 PRL-97704	1: 120v	C: Helideck	G: Green	VB: Variable Brightness
	2: 220v	N: NVG *	Y: Yellow	PLS: PLS Base w/ 1-in Entries
	3: 12v DC		W: White	M2x: Metric Thread (M20 or M25)
	4: 24v DC		R: Red	CL: Cable Loop & Gland ^
	6: 277v		B: Blue	NC: NVG compatibility**
			IR: Infrared NVG	JB: Junction Box for cable loop

Note: Array C brightness exceeds ICAO Annex 14 & meets CAP 437
 * For NVG tactical use only: PRL-97704-1N-IR-CL
 ** For use with visible (non-IR) array; adds IR LEDs.
 Note: For 11-1/4 inch bolt circle FAA L-868 bases, order as 97804

PRL-97704-2C-G-CL
 WITH MARINE TREATMENT
 & CABLE LOOP



Our Marine Treatment tolerates marine, high salt content air and other corrosive environments. Standard with green finish as shown. The FAA specified finish used by competitors flakes and fails in a short time under such conditions.

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 in color RAL 6003 (FED-STD-595 color #14097) dark green. Powder coating per US Department of Defense MIL-PRF-24712A type VI and oven cured.



PRL LED SPECIFICATIONS

The PRL LED (specify: color), (specify: voltage) 50/60 Hz semiflush 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 board shall be a controlled, stabilized constant current. The light shall be affixed to the metal helideck with six (6) stainless steel screws (by others) evenly spaced centered on a 10-¼ inch bolt circle.

The heliport lights shall be listed *Suitable for Use in Wet Locations* to UL1598A Marine Vessels (for AC), 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 and IP67 ingress protection.

The light shall be compliant and tested to UK CAA CAP 437 ed. 9, Chapter 4 and Appendix C including IP66 & IP67.

The light shall be cast aluminum and assembled with all external hardware grade 316 (A4) stainless steel. The lens and lamp housing (optical assembly) shall be sealed mechanically without the use of chemical sealants. Entry to the light housing shall be by means of conduit or watertight cable compression fitting(s). The manufacturer shall include silicone-filled wire nut connectors for use by the installer for watertight connections.

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

All hardware shall be stainless steel. 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 unit shall be warranted to withstand an ambient temperature range of:
+130 deg F (+55 deg C) to -67 deg F (-55 deg C).

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 in color RAL 6003 (FED-STD-595 color #14097) dark green. Powder coating per US Department of Defense MIL-PRF-24712A type VI and oven cured. The light castings shall be certified by the manufacturer to comply with the US Military Standard Salt Fog Test conducted per MIL-STD-810F, Method 509.4, Procedure I, paragraph 4.5.2.

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. Note: It is strongly recommended that the circuit also be directly protected by a Point Lighting Corporation surge suppression device such as in a PHC, SPU or PRC unit.

Note: The standard PRL-97704 without -PLS option requires a minimum opening in the helideck of 5.9-inches (150mm) diameter either square per side or round diameter.

Option -CL: The fixture shall be supplied with a watertight cable gland and a 1.5 meter jacketed SO cable.

Option -PLS: The PLS aluminum mounting base shall have two (2) 1-inch NPT conduit hubs located at 0 & 180 degrees near the bottom of the 4-inch (102mm) deep base (bottom entries available). Requires a minimum 8.125-inch (207mm) per side square opening or minimum 8.75-inch (222mm) diameter round opening.

The LED aviation inset light shall be POINTSPEC Series PRL-97704 manufactured by Point Lighting Corporation.

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.

RECOMMENDED TOOLS

Point Lighting Corporation recommends return for factory repair and refurbishment of LED PRL lights. In the event of field service, the PL10839 preset torque wrench kit use with the instruction manual is recommended to assure proper resealing of the fixture.



PL10860
Tool, T-handle Wrench
For the three socket head screws fixing the PRL fixture to the PLB mounting base.

PL10839
Tool, Preset Torque Wrench Kit
For the socket head screws fixing the PRL lens clamp ring and for fixing the power supply subassembly.
Consult the factory and the manual before attempting field repair.



Night Vision Goggles (NVG)

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

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Instruction Sheet: IS97704
 LED Life (hours): 100,000
 Projection: 1.63 (41)
 (above deck)
 Base Diameter: 8.0 (203)
 PLS Depth: 4.0 (102)
 Weight: 17.0 lbs 7.7 kg
 Volume: 0.37 ft³ .013 m³

Replacement Parts

PL10523G-C Lens, Clear*
 PL10901-G-C LED Array C, Green
 PL10926-G-C LED Array C, Green with -NC
 PL10530 Gasket, Lens Upper
 PL10531 Gasket, Lens Lower
 PL10532 Gasket, Lamp Housing
 PL10049-4-6 Gasket, Base
 PL10524-125 Screw, Socket Head
 PL10839 Tool, preset torque wrench kit
 PL10860 Tool, T-handle wrench

* All PRL v4 lights use a clear outer lens.



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