

# HL-580L Stainless Steel Water Resistant LED Helideck/Helipad Surface Mount Perimeter Light

#### **Compliance and Applications**

- FAA AC 150/5390-2D Heliport Design Guide
- Exceeds FAA AC 150/5390-2D Appendix G Specifications
- Transport Canada TP14371, AGA 7.16
- IP68 Compliant (tested to a depth of 1 meter for 1 hour)
- Buy American Act Compliant

Our completely sealed, water resistant HL-580L surface mount stainless steel perimeter light helps mark the helipad Final Approach and Takeoff (FATO) area for metal helidecks and pavement heliports. Ideal for portable heliport applications and flood-prone areas.

# Why Our HL-580L is Better: Superior Design and Construction

- IP68 compliant, water resistant fixture can be submerged in water for several days and still function properly.
- Impenetrable, factory epoxy potted LED driver and LED board cavity maximizes LED life.
- Waterproof gel wire connectors eliminate the need for crimping tools.
- Corrosive resistant stainless steel construction stands up to salt, chemicals, and weather.
- Exposed to nitric acid passivation to maximize the essential corrosion resistance.
- Low profile, 5" [12.7 cm], reduces the risk of damage to the fixture
- Sturdy stainless steel construction, 10 lb. [4.5 kg], stands up to heavy use.

### **Easy Installation and Maintenance**

- Easy installation, light fixture body serves as junction box for electrical connections.
- Preconfigured, only add the desired cable length.
- Only two main replacement parts.
- Low maintenance LED light source has 50,000 hour lifetime (50X longer than halogen).
- Integrated mounting plate allows simple 4-bolt installation.

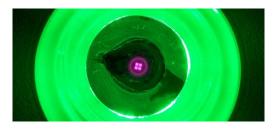
#### **Optical Performance**

- Optical performance exceeds FAA AC 150/5390-2D Appendix G specifications.
- 3-Step Dimming Controller to minimize nighttime glare available.
- Monochromatic output of LEDs is more conspicuous than halogen.



# **Specifications**

- Construction: 304 stainless steel with nitric acid passivation.
- 316 stainless steel hardware.
- Height: 5" [12.7 cm]
- Mounting plate: 6" x 6" x .19" [15.2 x 15.2 x .48 cm]
- Weight: 10 lb. [4.5 kg]
- Power consumption: AC input = 7.2VA; DC input = 4W; IR AC input = 10.8VA; IR DC input = 7.2W
- Available in 10-30VDC, 100-240VAC, or 277VAC versions.
- Fixture grounding: internal.
- Requires water resistant UL Cable, OD = 0.24" 0.47" (6-12mm). Recommended AWG (varies by application): 16-3/C SOOW 600V 90C.
- Installation requires four 3/8" [9.5 mm] bolts (not provided).
- Temperature range: -4°F/+131°F (-20°C/+55°C).
- Carton size: 0.3 cu. ft. (0.01 cu. meters); 8" x 8" x 8" (20.32 x 20.32 x 20.32cm)



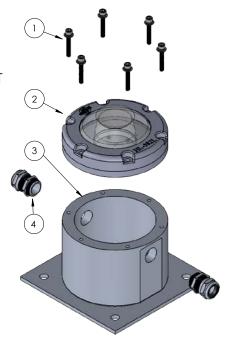
#### **Visible/Infrared LED Option**

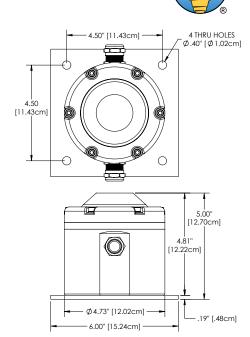
- Night Vision Goggle (NVG) compatible.
- Infrared Output:
  - Exceeds SAE Aerospace recommendations for Landing/Taxi Lights.
  - Usable beam width: 55° to 125° vertical, 360° horizontal.
  - Output wavelength: 850nm.
  - Infrared does not dim with the "DCD" dimming option.
- Visible Output:
  - Usable beam width: 30° vertical, 360° horizontal.
  - Output wavelength: 530nm.

# **Common Replacement Parts**

1..... Screw Kit......HL-580SCREWKIT 2..... Upper Assembly...... HL-580TOPKIT 3...... Lower Assembly....... HL-580BOTTOMKIT 4..... Cord Grip ...... 27-CD20DA-BR

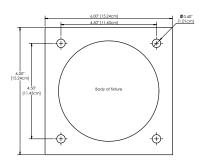
NA... Gel Connector Kit.... HL-580GCK





## **Photometric Comparison with FAA Requirements**

Vertical Angle (Deg)	FAA Spec (Cd) Min.	HL-580L Avg. Intensity (Cd)
2	15	70.8
5	15	66.5
10	15	48.3
13	15	36.6
20	5	23.9



Download a mounting plate template from our website.

# **Ordering Codes**

9.0.09			
Fixture	<b>LED Color</b>	Power	Cable Layout
HL-580L	G: Green (std) <sup>1</sup> B: Blue R: Red W: White Y: Yellow IR: Infrared <sup>2</sup>	AC: 100-240VAC AC3: 277VAC DC: 10-30VDC DCD: 10-30VDC Dimming	G1C: 1 Gland with Cable <sup>3</sup> G2C: 2 Glands with Cable <sup>4</sup> G2NC: 2 Glands with No Cable <sup>5</sup>

<sup>&</sup>lt;sup>1</sup> Green is currently the recommended color for heliport perimeter lights.
<sup>2</sup> Infrared must be used in conjunction with visible LEDs. Infrared does not dim with the "DCD" dimming option.
<sup>3</sup> G1C Layout will have a plug covering the second M20 hole.
<sup>4</sup> G2C Layout will not support dimming option. Specify cable size so we can quote correct secondary connector.
<sup>5</sup> G2NC Layout: Customer must supply water resistant cable. Cable connections are made inside the fixture.





# How to Specify the HL-580L LED Helideck/Helipad Surface Mount Perimeter Light

The fixture shall be model HL-580L-(LED color)-(voltage) as marked by Flight Light Inc.

#### **Construction:**

- The fixture height shall not exceed 5" [12.7 cm].
- The fixture shall be omnidirectional.
- The fixture shall be 304 stainless steel with nitric acid passivation.
- Hardware shall be 316 stainless steel.
- The fixture shall have a modular design comprised of 3 major parts: Mounting Plate, Bottom Casting and Top Casting.
- The Mounting Plate shall be square 6" x 6" [15.2 x 15.2 cm] and .19" [.48 cm] thick.
- Fixture shall be ground mounted.

### LED/Light Cavity:

- LED lifetime expectancy: 50,000 hours.
- Power consumption shall not exceed 7.2VA for AC lights, 4W for DC lights, 10.8VA for IR AC lights and 7.2W for IR DC lights.
- Infrared output wavelength: 850nm
- Infrared output usable beam width: 55° to 125° vertical, 360° horizontal
- Visible output wavelength: 530nm
- Visible output beam width: 30° vertical, 360° horizontal

#### **Compliances:**

- IP68 Compliant (tested to a depth of 1 meter for 1 hour)
- Buy American Act Compliant
- FAA AC 150/5390-2D Heliport Design Guide
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#### Options (to be specified per each project):

- Infrared (must be used in conjunction with visible LEDs)
- Dimming (only available with the Flight Light controller)