FLIGHT LIGHT INC. ®

HL-690L LED Stainless Steel Helideck/Helipad Semi-Flush Perimeter Inset Light

Compliances
- FAA AC 150/5390-2D Heliport Design Guide
- Exceeds FAA AC 150/5390-2D Appendix G Specifications
- ICAO Annex 14, Volume II for TLOF and FATO
- Transport Canada TP14371, AGA 7.16
- IP68 Ingress Protection
- IK10 Impact Protection
- CE and RoHS Certified

Applications
Semi-flush perimeter light helps mark helipad touchdown and lift-off area (TLOF) and/or final approach and takeoff area (FATO) for metal helidecks and pavement heliports.

Features
- Robust stainless steel construction provides corrosion protection from salt, chemicals, and weather exposure
- IP68 water and dust resistant
- Sealed LED/electronics maximizes LED life
- Snowplow-safe design prevents lens damage
- Lens made from durable, UV-stabilized LEXAN polycarbonate
- Recessed, semi-flush mounted, allows for obstruction-free movement of equipment and personnel
- Rises only 0.6" (15 mm) above surface
- High static load rating (44,000 lb.) reduces likelihood of damage from helicopters
- 360° high intensity, omnidirectional lighting coverage
- With our Dimming Controller option, the lights can be dimmed at night to reduce glare - 3 brightness levels
- Available for FAA (Green) or ICAO (White)
- Cost-saving, energy-efficient LEDs; 50,000 hour LED lifetime
- 850nm infrared LEDs optional
- AC or DC power supply options

Specifications
- Voltage Range: 10-32 VDC or 85-305 VAC
- Power Consumption: DC Input = 14W; IR DC Input = 15W; AC Input = 27W; IR AC Input = 29W

- Requires water resistant UL Cable, OD = 0.24" - 0.47" (6-12mm). Recommended AWG (varies by application): 16-3/C SOOW 600V 90C.
- Temperature Range: -13°F/+185°F (-25°C/+85°C)
- LED Quantity: 6 LEDs (Green, Blue, Red, White, Yellow); optional 3 LEDs (Infrared)
- Infrared Wavelength: 850nm, Night Vision Goggle (NVG) Compatible
- Top Material: Hard duplex stainless steel alloy with high corrosion resistance and hardness
- Bottom Material: Gray painted aluminum AlSi12
- Light Output: Polycarbonate window
- Rising Above Surface: 0.6" (15 mm)
- Static Load: Holds 1,000 PSI
- High Static Load Rating: 44,000 lb. min
- Weight: 11.2 lb. (5.1 kg)
- Diameter: 8.6" (219 mm)
- Bolt Circle: 7.25" (184 mm)
- Protection Index: IP68, IK10

Ordering Codes

Fixture	LED Color	Power	Cable Layout	Options
HL-690L	G: Green[1] B: Blue R: Red W: White Y: Yellow IR: Infrared[2]	AC: 100-240VAC AC3: 277VAC DC: 10-30VDC DCD: 10-30VDC Dimming	G1C: 1 Gland with Cable G2C: 2 Glands with Cable[3] G2NC: 2 Glands with No Cable[4]	NB: No Base[5]

[1] Green is currently the recommended color for heliport perimeter lights.
[2] Infrared must be used in conjunction with visible LEDs. Infrared does not dim with the "DCD" dimming option.
[3] G2C Layout will not support dimming option. Specify cable size so we can quote correct secondary connector.
[4] G2NC Layout: Customer must supply water resistant cable. Cable connections are made inside the fixture.
[5] The fixture will not be mounted to a base can. Please note, the FAA recommends base cans for heliport installations.

Common Replacement Parts

Ref.	Description	Part #
1	Top Casting Stainless Steel	HL-690L-TOP
2	AC Light Module	HL-690/2L-XAC*
	DC Light Module	HL-690/2L-XDC*
	DCD Light Module	HL-690/2L-XDCD*
	AC+IR Light Module	HL-690/2L-XIRAC*
	DC+IR Light Module	HL-690/2L-XIRDC*
	DCD+IR Light Module (infrared does not dim)	HL-690/2L-XIRDCD*
3	O-Ring	HL-690/2L-ORING
4	Bottom Casting	HL-690/2L-BOTTOM
5	2-Pin Male Connector	TRC-10518-114D02
6	3-Pin Male Connector (DCD Dimming only)	80-013031
7	2-Conductor Female Connector	TRC-10519-07-021
8	3-Conductor Female Connector (DCD Dimming only)	80-012022
9	Installation Accessories for Non-base Installation (2 per fixture)	HL-690/2-IA

* For light modules, X = Color (G = Green, B = Blue, R = Red, W = White, Y = Yellow)

Fixture Dimensions

Photometric Comparison with Requirements

FAA

Vertical Angle (Deg)	HL-690L Avg. Intensity (Cd)	FAA Spec (Cd)
0°	22.1	10
15°	162.0	10
16°	181.7	5
60°	52.3	5
90°	18.2	5

ICAO TLOF

Vertical Angle (Deg)	HL-690L Avg. Intensity (Cd)	ICAO Spec (Cd)
2°	42.6	15
5°	74.74	30
10°	107.0	15
13°	137.6	8
20°	178.4	3

ICAO FATO

Vertical Angle (Deg)	HL-690L Avg. Intensity (Cd)	ICAO Spec (Cd)
0°	45.4	10
3°	110.3	100
10°	201.0	100
20°	152.1	100
25°	139.9	50
30°	65.0	10

+1.800.806.3548 USA
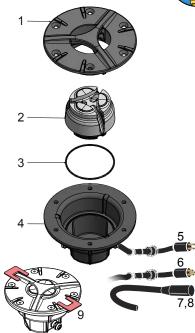+1.916.394.2800 Worldwide
+1.916.394.2809 Fax

www.flightlight.com
sales@flightlight.com

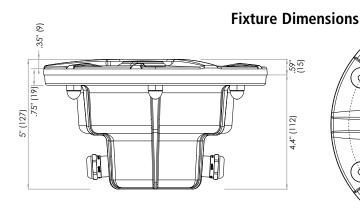Flight Light Inc., 2708 47th Ave. Sacramento, CA, 95822, USA

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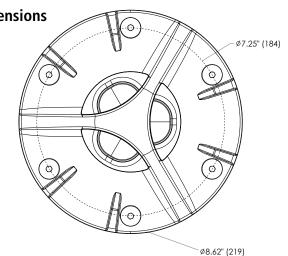
ø6.550 +.010 -.000

ø2.000
Drain Hole
in Bottom

ø8.625 +.050 -.000 O.D. of Top Ring

Flange Flatness is ±.010 [254mm]

Notes:
1.) Grommeted holes are placed at 0° & 180°
2.) 2" drain hole is placed in bottom
3.) One internal strap
4.) Ships with ¾" thick plywood cover

A — A

[12X] ø.375
Drilled Thru Top
Tap 3/8"-16

ø7.250±.010
Bolt Hole Circle

[12x] 30°

Approval

Section
AA

Continuous
Watertight
Weld

.375

.25

.109 Minimum

ø1.688
at 0°-180° for
2x-1" Conduit
Grommet

5.000

1.313

.109
Minimum

Continuous
Watertight
Weld

.25

2.000 Drain

9.000

Ground
Strap[s]
As
Specified

x/x=.030
.xx=.010
.xxx=.005
.xxxx=.0005

All dimensions
in inches
unless otherwise
specified

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SPECIFICATION:				
PART NUMBER:			DATE: 10/11/2012	
REV:		SIZE: A	SCALE: 1:3	SHEET 1	OF 5
DRAWN BY:		ENGINEER:		CHECKED BY:

TITLE:
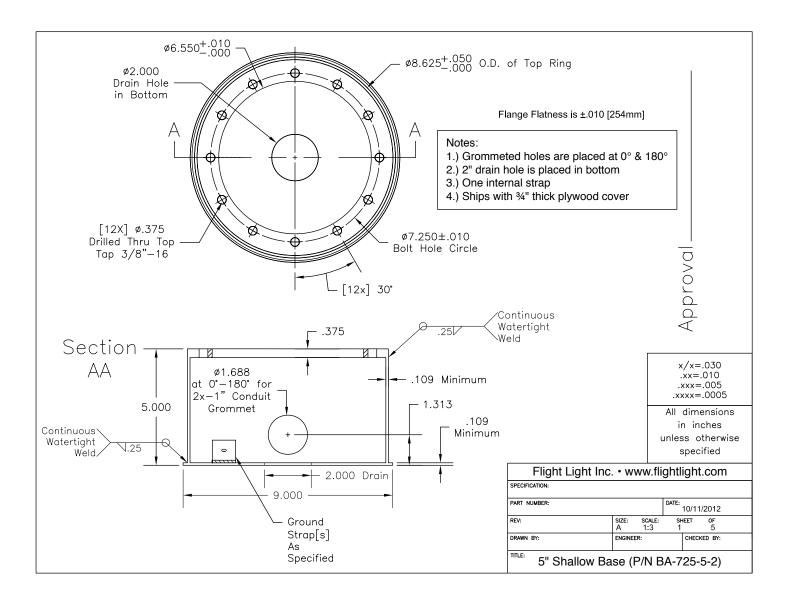5" Shallow Base (P/N BA-725-5-2)

+1.800.806.3548 USA
+1.916.394.2800 Worldwide
+1.916.394.2809 Fax

www.flightlight.com
sales@flightlight.com

Flight Light Inc., 2708 47th Ave.
Sacramento, CA, 95822, USA

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