**Purchase Specifications for a   
Solar Powered Complete Light Assembly   
ICAO LIOL Type B Obstruction Light**

**Overview**

This specification is for a solar powered, complete light assembly, steady burning, ICAO LIOL Type B obstruction light.

The light shall have adjustable intensity settings to allow the user to select either ICAO LIOL Type A (10cd) or ICAO LIOL Type B (32cd).

The light shall have and integrated solar/battery system.

The light shall be available in two power supply sizes.

The light shall have a light sensor for day/night operation.

The lights shall be delivered ready to install. The only assembly required will be activation of each individual light and optional mounting accessories.

**1.0 Light Characteristics**

The light shall use 1 visible LED.

The light output shall be available in red. Other colours, including IR, shall also be available on request.

The light shall have a peak intensity which complies with ICAO LIOL Type A & ICAO LIOL Type B.

The light shall have a horizontal output of 360 degrees.

The light shall have a vertical divergence as per ICAO Type A/B specification.

The intensity of the light shall be adjustable between 10cd and 32cd.

**2.0 Electrical Characteristics**

When set to ICAO LIOL Type A intensity the light shall have a current draw of 65mA steady-on with relay energised.

When set to ICAO LIOL Type B intensity the light shall have a current draw of 120mA steady-on with relay energised.

The light shall have integrated circuit protection.

The light shall have an operating voltage of 12-48VDC.

The light shall have an operating temperature range between -40 to 80°C.

**3.0 Solar/Battery Configurations**

The manufacturer will be able to provide the choice of two self-contained, solar powered assemblies housed in a weatherproof enclosure including solar array, sealed battery and charge controller.

Type 1

* 20watt multicrystalline solar module
* 26Ah 12v SLA (Sealed Lead Acid) battery
* An autonomy of at least 10 nights steady-on
* Housed in a 7-stage powder-coated aluminium enclosure
* Mounting will be 200mm base pattern
* Height: 606mm (23⅞ inches)
* Width: 656mm (25¾ inches)
* Mass: 30.5kg (67¼ lbs)

Type 2

* 40watt multicrystalline solar module
* 55Ah 12v SLA (Sealed Lead Acid) battery
* An autonomy of at least 20 nights steady-on
* Housed in a 7-stage powder-coated aluminium enclosure
* Mounting will be 200mm base pattern
* Height: 646mm (25½ inches)
* Width: 665mm (26¼ inches)
* Mass: 55.5kg (122¼ lbs)
* Optional 100Ah battery
* Optional 60watt solar module

**4.0 Physical Characteristics**

The body of the light shall be manufactured from 7-stage powder-coated.

The light lens shall be manufactured from UV-stabilised LEXAN® polycarbonate.

The light shall have a lens diameter of 100mm (3⅞ inches).

The light shall have a single LED optic.

**5.0 Options**

The light shall be offered with the following options available from the manufacturer:

* Radio Controlled
* Pilot Activated Lighting Control
* GSM Cell-Phone Monitoring
* Dual visual/IR output
* IR LED
* RS422/485 communications port
* Dual light fixture

**6.0 Certifications**

The light shall meet the requirements for ICAO Low Intensity Obstruction Light Type A and B.

The light shall be IP67 waterproof.

The light shall meet CE EN61000-6-3:1997. EN61000-6-1:1997

The manufacturer shall be ISO9001:2008 certified.

**7.0 Compliance**

The light shall be supplied with an optic to meet:

* Photometrics for Low Intensity Type A and B Obstruction Light, ICAO Annex 14 Volume 1, ‘Aerodrome Design and Operations’, Forth edition July 2004, table 6.3.

**8.0 Warranty**

The light shall have a three (3) year warranty.