

# Aviation Lighting Equipment Solar Lights



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# A650 Solar LED Aviation and Obstruction Light

Acceptable for use in barricade & construction applications at Commercial Part 139 Airports under FAA Advisory Circular AC 150/5370-2E (Current Edition)



**The Carmanah A650 is a self-contained, high performance, low-maintenance and easy-to-install light source.**

## Benefits

- Quick setup (no specialized crew required) limits air traffic disruption and provides lighting immediately. The A650 can also be easily relocated for temporary or emergency use.
- Simple configuration and programming options with intuitive on-board user interface, infrared remote and Device Manager software through USB connection. Optional programmable external switch.
- Intelligent settings tune the A650 to its location, protecting against improper configuration.
- Energy Management System (EMS) monitors and adapts brightness to environment for consistent operation and long life.
- Green solution: a clean, renewable energy source with the lightest environmental footprint.
- RoHS compliant replaceable and recyclable battery extends service life beyond 5 years, reducing total cost of ownership resulting in significant savings.
- Designed to operate reliably from dusk-to-dawn in the harshest conditions and tested to the toughest industrial standards:

*MIL-STD-202G: Humidity, Immersion, Vibration, Shock  
MILSTD-810G: Solar Radiation, Salt Fog  
EN 60945: ESD, EMI, EMC; IP68; L70*

## Applications

- ☑ Taxiway & apron edge lighting
- ☑ Emergency airfield & helipad lighting
- ☑ Construction barricade lighting
- ☑ Obstruction lighting



**Taxiway Edge Light**

The A650 Blue is compliant with the requirements of ICAO Annex 14, Volume 1, Fourth Edition dated July 2004.

Technical Features and Specifications	
Solar Panel	High-efficiency cells with bypass and blocking diode function. Maximum power point tracking for optimal energy collection.
Battery	Tool-less replaceable and recyclable best-in-class battery pack with extreme temperature range. Battery status feedback of Good, Charge or Bad (Replace).
Light Source	High power LED. Color-specific temperature corrected LED drivers provide consistent intensity in all operating conditions.
Intensity	10 cd intensity, steady-on (see photometric plot on reverse). 18 cd peak intensity, flashing, 12.5% duty cycle (Red LEDs).
Flash Patterns	256+
Construction	Premium UV resistant, polycarbonate/polysiloxane co-polymer body and lens. Double O-ring sealing with waterproof vent.
Colors	Blue, Red, Yellow, Green and White. ICAO and SAE25050 (FAA) compliant chromaticity.
Operating Temperature	-45 to 124 °F (-43 to 51 °C) ambient temperature. Functions in up to 190 °F (88 °C) internal and surface temperatures.
Storage Temperature	-45 to 176 °F (-43 to 80 °C)
Color Indicator	Yes, FAA Eng. Brief 67 compliant.
Weight	3.5 lb (1.58 kg)
Wind Loading	400 mph (180 m/s)
Automatic Light Control (ALC)	When enabled, ALC will dynamically reduce brightness in response to unusually low amounts of sunlight to ensure continued operation.

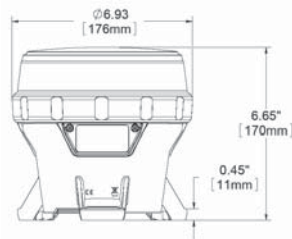
# A650 Solar LED Aviation and Obstruction Light

Whether for permanent, temporary or emergency lighting, the A650 Solar Light offers durability and high performance in an energy efficient design.



## Technical Drawings and Dimensions

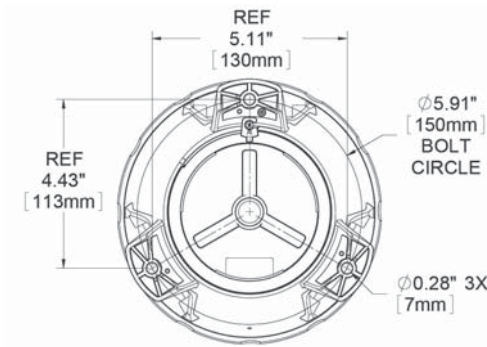
Side View



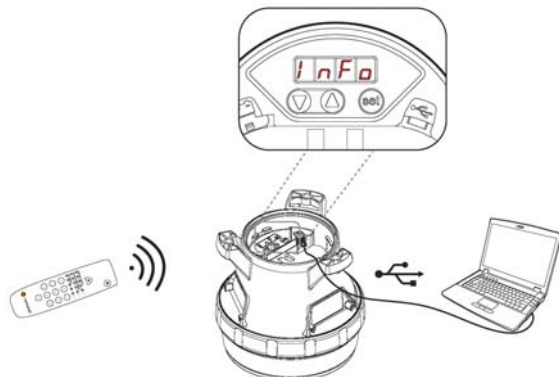
Switched View



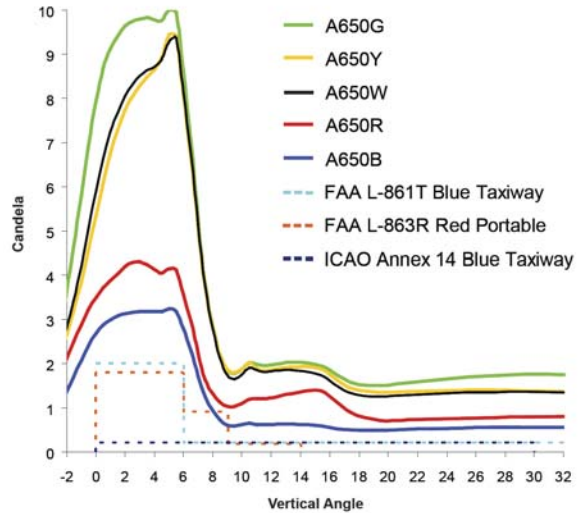
Bottom View



## Programming and Configuration Options



## Photometric Performance



Note: Intensity dependant on location. Based on equatorial location of 12-hour night duration and steady-on (001) flash code.

## Ordering Codes

### LIGHTS

	UNSWITCHED	SWITCHED
A650 Blue	A650B-0000	A650B-0001
A650 Red	A650R-0000	A650R-0001
A650 Yellow	A650Y-0000	A650Y-0001
A650 Green	A650G-0000	A650G-0001
A650 White	A650W-0000	A650W-0001

### Accessories

650 Bird Deterrent - Additional (1 ships with each light)	57003
650 Bottom Cover Replacement Kit	57392 (With Switch) 57393 (Without Switch)
650 Battery Replacement Pack	57383
650 Battery Charger	59648 (110V) 59188 (220V)
650 USB Cable	57394
650 Device Manager Software	CD 61125
IR (Infrared) Programmer	56818

For a complete list of aviation light accessories, including mounting equipment, please contact Airport Lighting Company.