carmanah®

A650
SOLAR AIRFIELD LIGHT

Meets traditional airfield requirements for taxiways and general purpose marking.

- ICAO and FAA compliant
- Greater than 10 cd of intensity
- Dusk-to-dawn or on-demand operation
- NVG compatible IR LEDs available

Applications

Taxiway and apron edge

Construction, barricades and fences

Temporary or permanent markings

Helipads

Hazard marking

Compliant Output
FAA L-861T and ICAO Annex 14. The A650 Wireless Blue is compliant with the requirements of ICAO Annex 14, Volume 1, Sixth Edition (2013).

Easy Installation and Relocation
No specialized work crew required. Lights are immediately operational with limited air traffic disruption. The A650 can be quickly relocated for temporary or emergency applications.

Self-contained and Low Maintenance
All components are incorporated within a compact, stand-alone unit. The A650 features a replaceable battery pack that extends the service life beyond five years, reducing the total cost of ownership and resulting in significant cost savings.

Unprecedented Reliability
Energy Management System (EMS) monitors and adapts the brightness to environmental conditions for consistent operation and long life under the toughest conditions.

Designed and Tested to Tough Industrial Standards
MIL-STD-202G Humidity, Immersion, Vibration, Shock; MIL-STD-810G: Solar Radiation, Salt Fog; EN 60945: ESD, EMI, EMC; IP68; L70. The A650 is acceptable for barricade and construction applications at Commercial Part 139 Airports under FAA Advisory Circular AC 150/5370-2E.

User Friendly
Easy configuration and programming options including: on-board user interface, infrared remote and device manager software through USB connection or optional wireless control system offering secure 900 MHz.
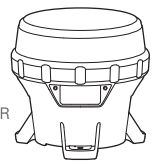
Wireless

Non-wireless

REPRESENTED IN YOUR REGION BY:

LED→Airport Lighting

OPTIONAL INFRARED PROGRAMMER

NON-WIRELESS A650

WIRELESS A650

OPTIONAL HANDHELD CONTROLLER
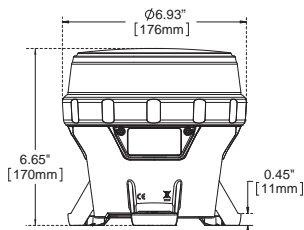
- 4 km (2.5 m) control range
- 900 MHz with encrypted signal
- Control 8 groups of lights independently

A650
SOLAR AIRFIELD LIGHT

SPECIFICATIONS

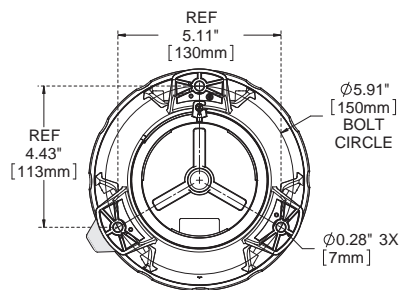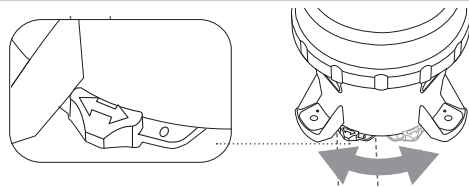|	
Solar Panel	High-efficiency cells with bypass and blocking diode function Maximum power point tracking (MPPT) for optimal energy collection
Battery	Tool-less, replaceable and recyclable best-in-class battery pack with extreme temperature range Battery status feedback of Good, Charge or Bad (Replace)
Light Source	High power LED Colour-specific temperature corrected LED drivers provide consistent intensity under all operating conditions
Intensity	Greater than 10 cd intensity, steady-on (see photometric plots)
Flash Patterns	256+ (non-wireless)
	Steady-on mode and flash patterns (wireless)
Construction	Premium grade UV resistant, polycarbonate/polysiloxane co-polymer body and lens material Double O-ring sealing with waterproof vent
Colours	Blue, Red, Yellow, Green and White ICAO and SAE25050 (FAA) compliant chromaticity NVG-compatible infrared (IR) LEDs (wireless only)
Operating Temperature	-43 to 51 °C (-45 to 124 °F) ambient temperature The A650 will function up to 190 °F (88 °C) internal and surface temperatures
Storage Temperature	-43 to 80 °C (-45 to 176 °F)
Colour Indicator	Yes, FAA Eng. Brief 67 compliant
Weight	1.6 kg (3.5 lb)
Wind Loading	644 kph (400 mph)
Automatic Light Control (ALC)	When enabled, ALC will dynamically reduce brightness in response to unusually low amounts of sunlight to ensure continued operation
Radio Receiver	900 MHz ISM (wireless)
Range	Up to 4 km (2.5 m) (wireless)

DIMENSIONS

SIDE VIEW	BOTTOM VIEW

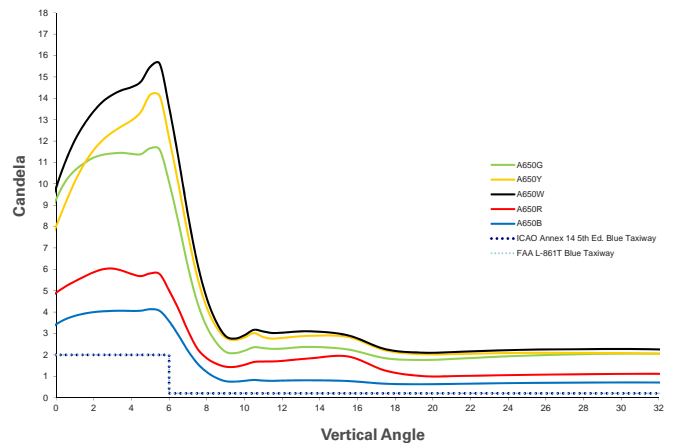Total height including wireless antenna is 10.9" (276 mm)

Also available with 7⁷/₈" (200 mm) bolt circle adapter

SWITCHED VIEW*

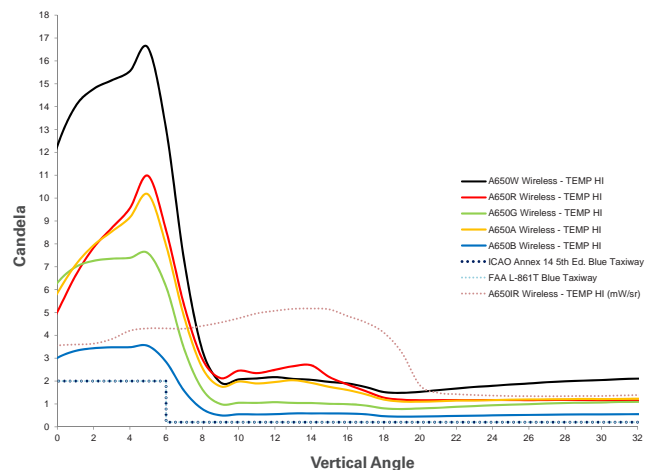## PHOTOMETRICS

A650 NON-WIRELESS

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

A650 WIRELESS

CONFIGURATION

MODEL	OUTPUT ▼	SWITCH ▼	CONTROL ▼
A650	RED GREEN WHITE YELLOW BLUE	NON-SWITCHED SWITCHED*	NON-WIRELESS WIRELESS*

*A650 Wireless version must have switch.

The management system governing the manufacture of this product is ISO 9001:2008 certified.

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Specifications may be subject to change.
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