

# FIRSTLIGHT

TECHNOLOGIES

Making Solar Lighting Simple™



## PLB Series Solar Powered LED Bollard

Project: \_\_\_\_\_

Type: \_\_\_\_\_

Quantity: \_\_\_\_\_

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The PLB series solar powered LED bollard has been approved by the Florida Fish and Wildlife Conservation Committee for safe installation near turtle nesting beaches. First Light's PLB amber LED and the 180 degree backlight shield creates low wavelengths for necessary lighting for pathway and landscape lighting of beachfront properties near marine turtle habitats. The low mounting height options of 14" and 36" ensures minimal affect on sea turtles making the PLB an ideal choice where turtle friendly lighting is required.

Utilizing solar power and LED lighting the PLB bollards are fully self-contained and offer significant benefits over typical wired bollards especially within sensitive ecosystems:

- Low installed costs and minimal site impacts with no trenching, cabling or wiring
- Minimal ongoing costs with no electricity bills or bulbs to change
- Not susceptible to power outages
- Provide a visibly green statement with no ongoing carbon emissions

Visual appeal and high quality construction combined with the unequalled performance of the use of proprietary Energy Management System (EMS) technology that allows the luminaire to function in harmony with its environment.

The EMS ensures that regardless of low-solar weather patterns or unusual charging conditions such as shading, the bollard continues to provide useable light that enhances the appeal and safety of the night time environment.



## TECHNICAL SPECIFICATIONS

### Solar Module:

- High impact, UV resistant, polycarbonate encapsulation
- High-efficiency mono-crystalline cells
- Integrated into bollard housing
- Used for day/night detection (no photocell required)

### Energy Management System (EMS):

- High efficiency Maximum Power Point Tracking (MPPT) charge controller
- Micro-controller based technology
- Includes high-efficiency LED driver
- Integrated into bollard housing
- Designed to automatically manage lighting performance based on environmental conditions and lighting requirements
- Patent pending

### Battery:

- Pure lead, spiral wound, absorbed glass mat (AGM)
- Superior cyclic performance
- High temperature tolerance
- 10 year design life
- Contained within bollard post
- Simple battery changes when required

### LEDs and Optics:

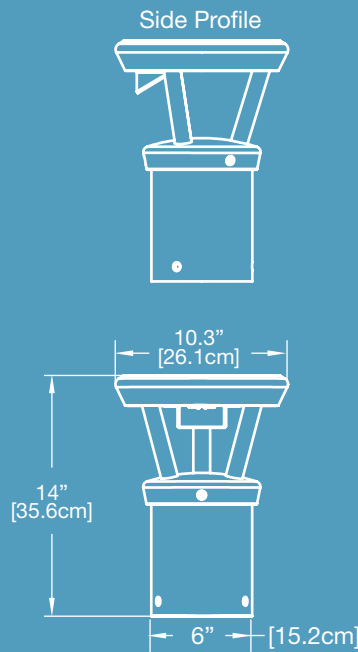
- Three high-output Cree LEDs
- High Efficiency Optics
- 50,000 hour L70 lifetime
- Amber LED (585nm to 595nm)
- Type III with 180° backlight shield

### Mechanical Construction:

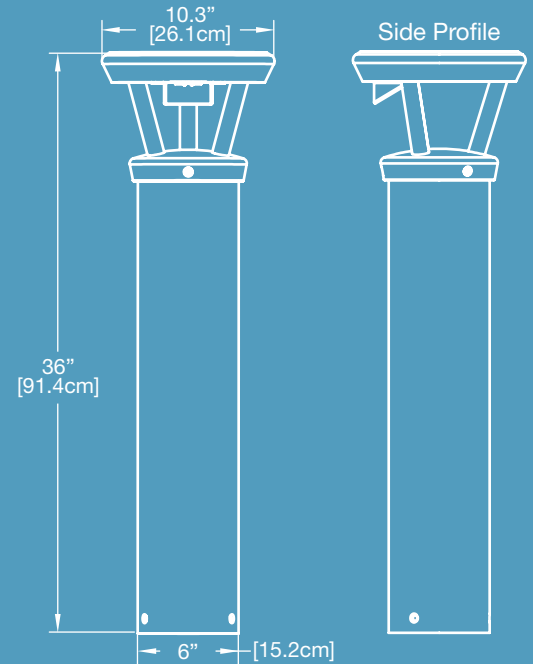
- Cast, low copper aluminum housing
- Extruded, low copper aluminum post
- Stainless fasteners with security fastener option
- High strength mounting plate
- Architectural grade, super durable, TGIC powder coat with Alodine undercoat
- Four standard colors with custom colors available

### Factory Set Lighting Profiles:

- On at dusk off at dawn
- On at dusk, turn off after 6 hours
- On at dusk, dim to 30% after 6 hours till dawn
- On at dusk, off after 5 hours, on 1 hour before dawn
- On at dusk, dim to 30% after 5 hours, on 1 hour before dawn

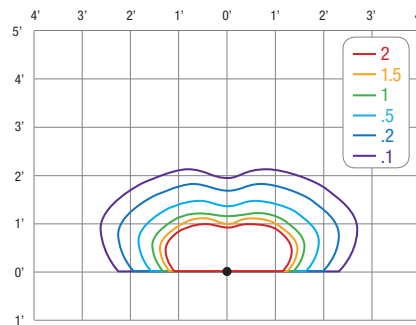


PLB - 101 (Front & Side Profile)

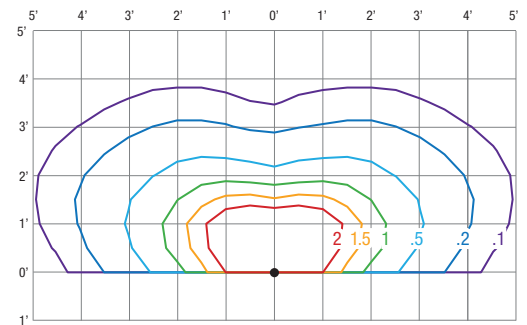


PLB - 102 (Front & Side Profile)

## PHOTOMETRICS



PLB - 101 Type III



PLB - 102 Type III

## ORDER MATRIX

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Series	Height	Finish	Distribution	LED Color	Lighting Profile	Options
PLB	101 - 14"	BK - Black	ASM - Type III	AMB - Amber	00 - Dusk till dawn	BLS - Backlight Shield
	102 - 36"	BZ - Bronze			01 - Dark +6 hours then off	WOB - Ship Without Battery
		SV - Silver			02 - Dark +6 hours then 30%	SEC - Security Fasteners
		WH - White			03 - Dark +5 hours, off, Dawn -1 hour	
		CC - Custom			04 - Dark +5 hours, 30%, Dawn -1 hour (DEFAULT)	

### Notes:

- Specifications subject to change without notice
- All light levels in foot candles (fc) with Amber LEDs and 65 lumen output
- To convert to lux multiply light level by 10.7