FIRSTLIGHT TECHNOLOGIES

PLB Amber Series

SOLAR POWERED AMBER LED BOLLARD

Project:

Type: Quantity:

Approved by the Florida Fish and Wildlife Conservation Committee for safe installation near turtle nesting beaches, the PLB amber series provides reliable, off-grid light for beach front properties. The amber LED, 180 degree back light shield and low mounting height options help to ensure baby turtles do not become disorientated while migrating to the water.

Using the latest solar and LED technology, the PLB amber bollards are fully self-contained and offer significant benefits over typical wired bollards, especially within sensitive ecosystems:

- No trenching, cabling or wiring requirements lowers install costs and site disruption
- Minimal ongoing costs with no electricity bills or bulbs to change
- Not susceptible to power outages
- Provides a visibly green statement with no ongoing carbon emissions

To provide a level of lighting performance and reliability unavailable in other solar lighting products, all First Light solar powered products are enabled by an innovative Solar Lighting Controller (SLC). The SLC in each light “learns” so that the lights predictively adapt to the variability of their surroundings.

TECHNICAL SPECIFICATIONS

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

Solar Lighting Controller (SLC):
- High efficiency Maximum Power Point Tracking (MPPT) charge controller
- Micro-controller based technology
- High-efficiency LED driver
- Integrated into bollard housing
- Designed to automatically manage lighting performance based on environmental conditions and lighting requirements

Battery:
- High-performance lithium ($LiFePO_4$)
- Exceptional 10+ year lifecycle
- High-temperature tolerance
- Contained within bollard post
- Designed for easy battery changes when required
- Plug-and-play, sealed connector

LEDs and Optics:
- High-output Cree LEDs
- High-efficiency optics
- 100,000 hour L70 lifetime
- Amber LED (585nm to 595nm)
- Full cut-off Type 3 optic with 180° backlight shield

Mechanical Construction:
- Cast, marine-grade, corrosion resistant aluminum housing
- IP67 protection
- Extruded, low copper aluminum post
- Stainless fasteners with security fastener option
- High-strength mounting base
- Architectural grade, super durable, TGIC powder coat
- 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, off at dawn
- On at dusk, off after 5 hours, on 1 hour before dawn, off at dawn
- On at dusk, dim to 30% after 5 hours, on 1 hour before dawn, off at dawn (default)

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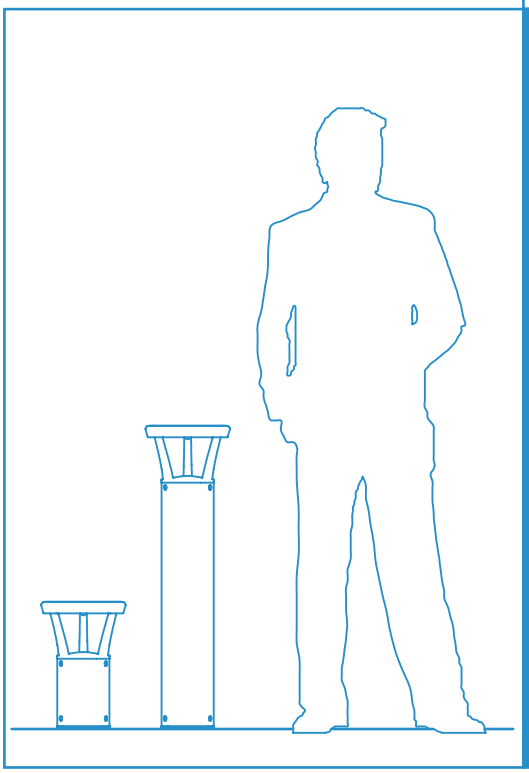
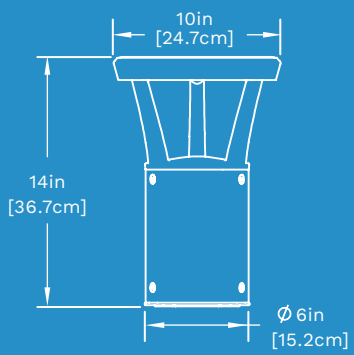
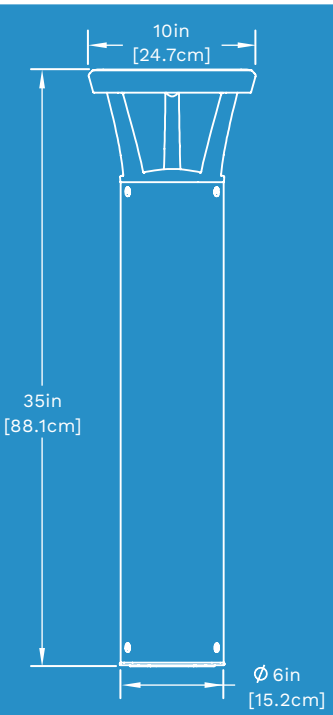


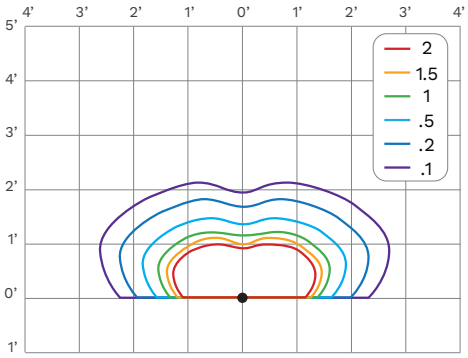


PLB – 101

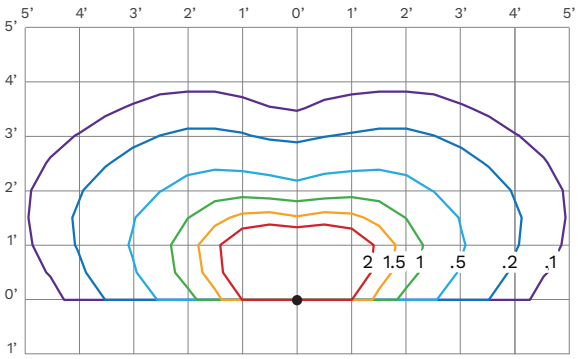


PLB – 102

PHOTOMETRICS (IES files available on request)



PLB - 101 Type 3



PLB - 102 Type 3

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

ORDER MATRIX

Series	Height	Finish	Distribution	LED Color	Lighting Profile	Options
PLB	**101** - 14”	**BK** - Black	**ASM** - Type 3	**AMB** - Amber	**00** - Dusk till dawn	**BLS** - Backlight Shield
	102 - 35”	**BZ** - Bronze			**01** - Dark +6 hours then off	**SEC** - Security Fasteners
		SV - Silver			**02** - Dark +6 hours then 30%	**PA** - Pre-ship Anchor Bolts
		WH - White			**03** - Dark +5 hours, off, dawn -1 hour	
		CC - Custom			**04** - Dark +5 hours, 30%, dawn -1 hour (default)	

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