



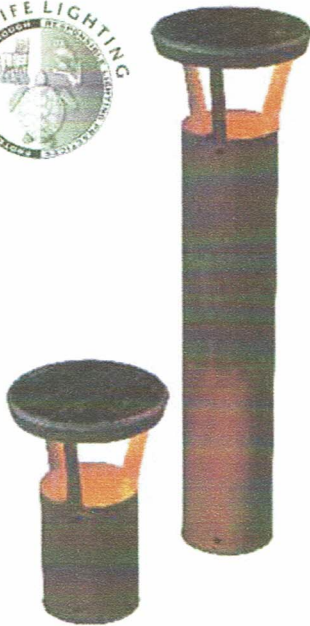
# PLB Amber Series

## 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 beachfront 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
  - 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:**
- High performance lithium (LiFePO<sub>4</sub>)
  - Exceptional 8-10 year lifecycle
  - High temperature tolerance
  - Contained within bollard post
  - Designed for easy battery changes when required

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

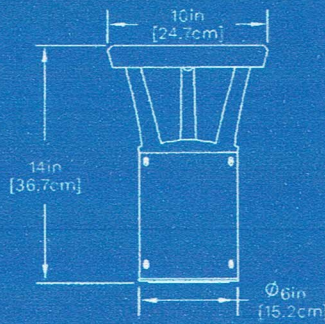
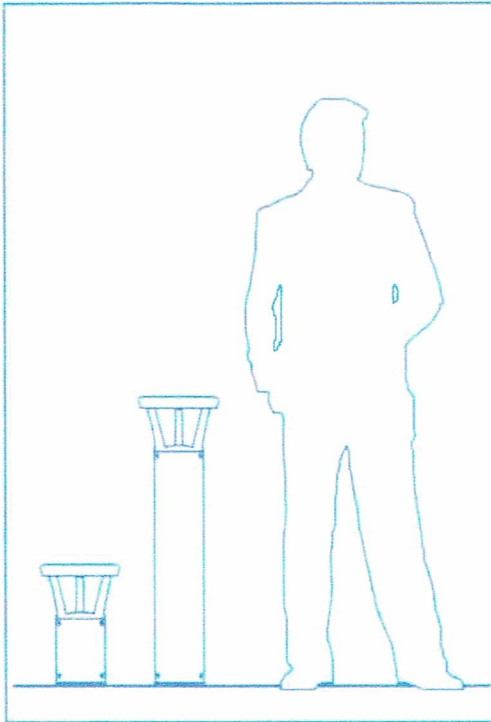
- Mechanical Construction:**
- Cast, low copper aluminum housing
  - Extruded, low copper aluminum post
  - Stainless fasteners with security fastener option
  - High-strength mounting base
  - Architectural grade, super-durable, TIG powder coat
  - Four standard colors with custom colors available

- 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 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

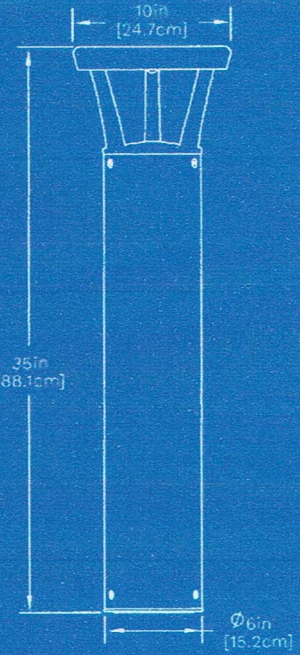


# PLB Amber Series

## SOLAR POWERED AMBER LED BOLLARD



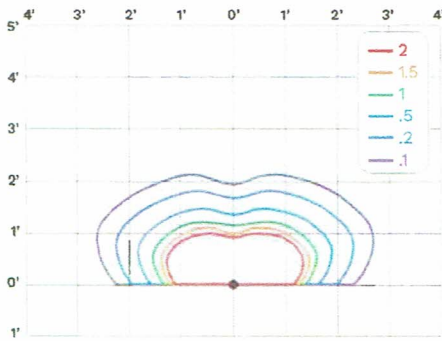
PLB - 101



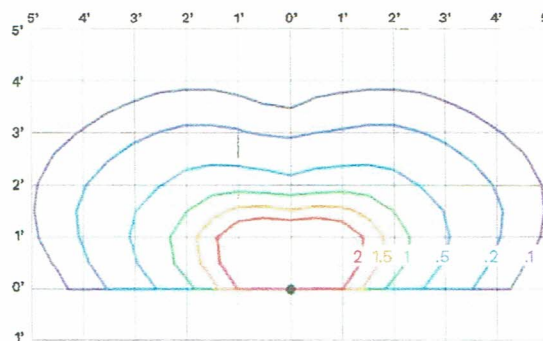
PLB - 102

### PHOTOMETRICS (IES files available on request)

If you have any questions, please don't hesitate to call us toll-free at 1.844.279.8754 (USA & Canada)



PLB - 101 Type 3



PLB - 102 Type 3

Represented by:

### 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 - 36"			BZ - Bronze	01 - Dark +6 hours then off
	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)		

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



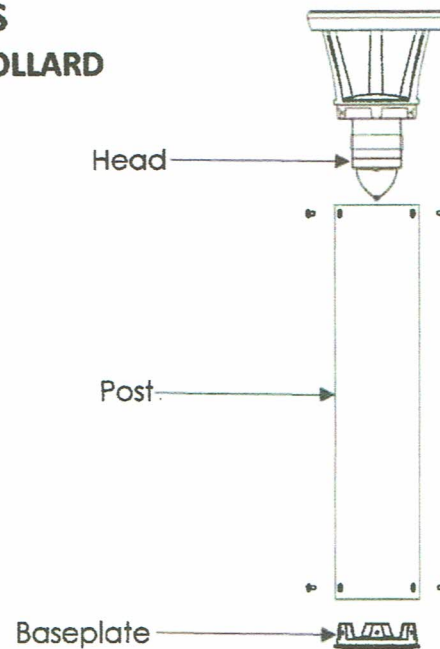
## INSTALL INSTRUCTIONS PLB SERIES - SOLAR LED BOLLARD

### PRIOR TO INSTALL

Ensure install location receives at least 2 to 3 hours of midday sun on average. Please handle bollard with care as scratches will affect appearance and powder coat durability.

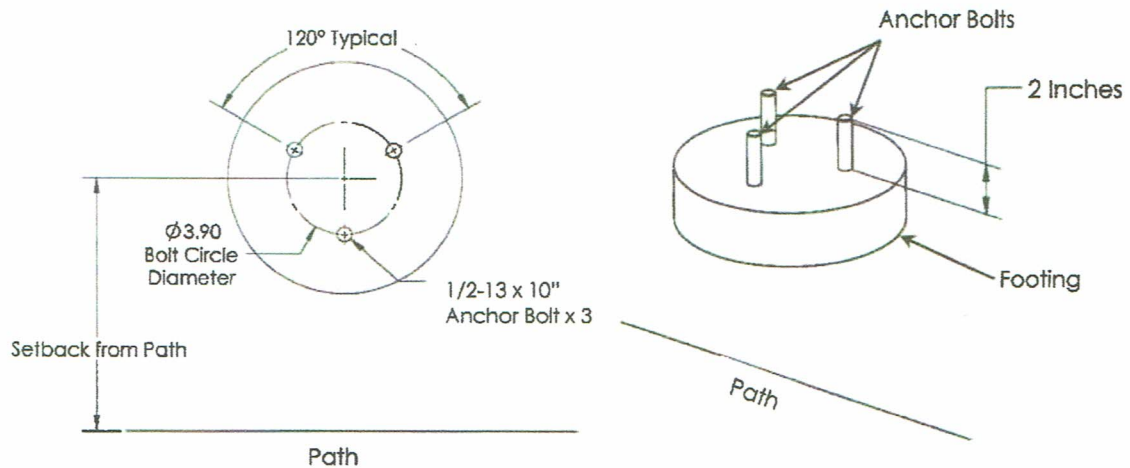
### TOOLS REQUIRED

- 5/32 inch hex key
- 3/4 inch wrench or deep socket



### TO INSTALL

- 1. INSTALL ANCHOR BOLTS.** With a one to two foot setback from the path or area to be illuminated, install concrete footing with supplied anchor bolts. Align anchor bolts to path as shown below using the supplied cardboard template to hold the bolts in position.

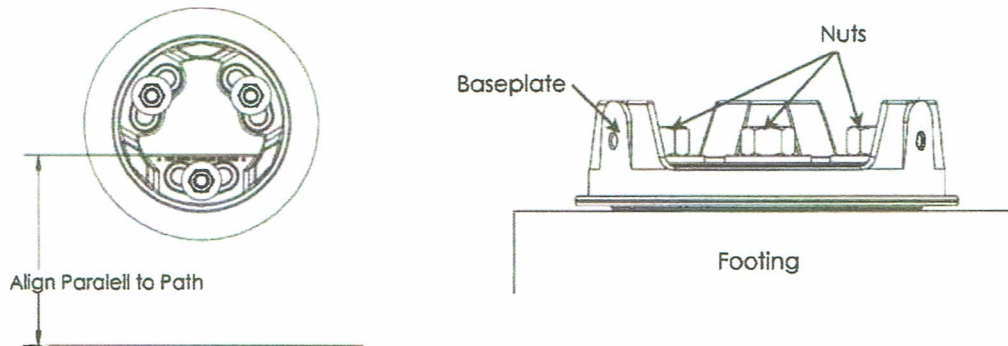




## INSTALL INSTRUCTIONS

### PLB SERIES - SOLAR LED BOLLARD

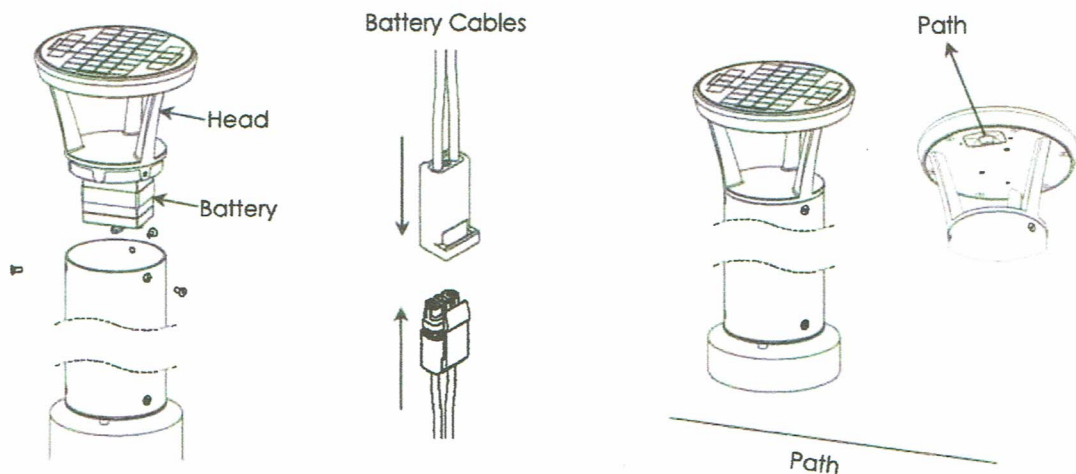
- 2. INSTALL BASEPLATE.** Remove the baseplate from the bottom of the bollard and place it on the footing. Ensure the base plate is aligned to the path as shown and tighten to 45 ft-lbs.  
\*Supplied levelling nuts can be placed below the baseplate but are optional.



- 3. MOUNT BOLLARD.** Mount the bollard onto the baseplate, with the supplied 1/4 - 20 screws and tighten to 65 in-lbs.

- 4. CONNECT BATTERY.** Remove the head of the bollard from the post and connect the battery cables. Observe the light to ensure it illuminates for approximately 20 seconds after connecting the battery. If the light does not illuminate after connecting the battery, please call us at 1 (844) 279-8754.

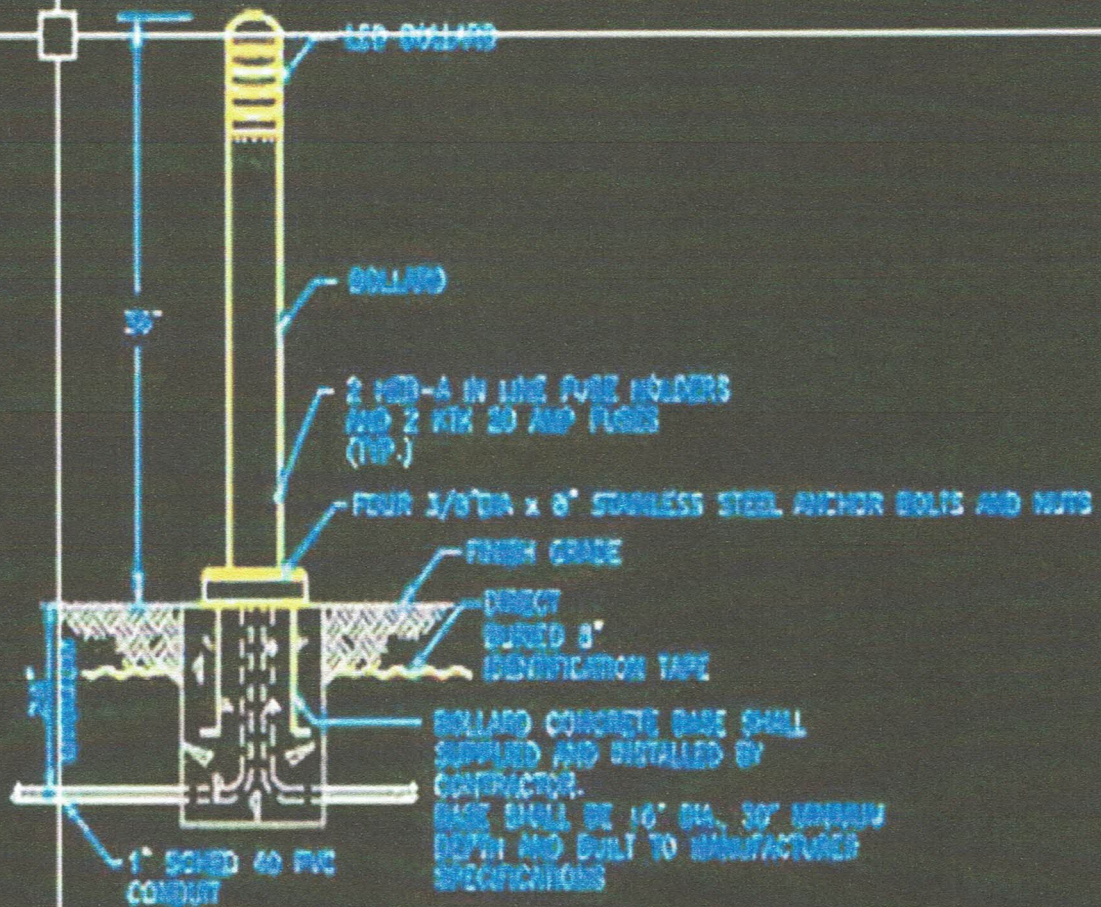
Note: There is a small cable that is not connected to anything which is for factory use and can be ignored.



- 5. PUT BACK HEAD.** Place the head back on the post and fasten with the supplied 1/4 - 20 screws and tighten to 65 in-lbs.

- 6. INSTALL COMPLETE.**





**LIMITED METAL DETAIL**

NOT TO SCALE  
TYPICAL

**MANUFACTURING NOTE:**

1. ALL POLE & BOLLARD INSTALLATIONS SHALL BE SUITABLE FOR 170 MPH WIND WITH APPROXIMATE GUST FACTOR PER APPLICABLE ZONE OF INSTALLATION AS DEFINED IN THE FLORIDA BUILDING CODE. THE CONTRACTOR SHALL INCLUDE WITH THE SHOP DRAWING SUBMITTAL, A POLE & SERVICE WIND LOADING CALCULATION SIGNED & SEALED BY A STRUCTURAL ENGINEER REGISTERED IN FLORIDA SHOWING THAT THE PROPOSED INSTALLATIONS WILL MEET THE GIVEN WIND LOADING REQUIREMENT. CONTRACTOR SHALL ADJUST THE SIZE OF BASES AT NO ADDITIONAL COST TO MEET THE REQUIRED WINDLOADING.