

 Greenshine

OUTDOOR SOLAR LIGHTING SOLUTIONS

BOLLARD

# SOLAR BOLLARD LIGHT

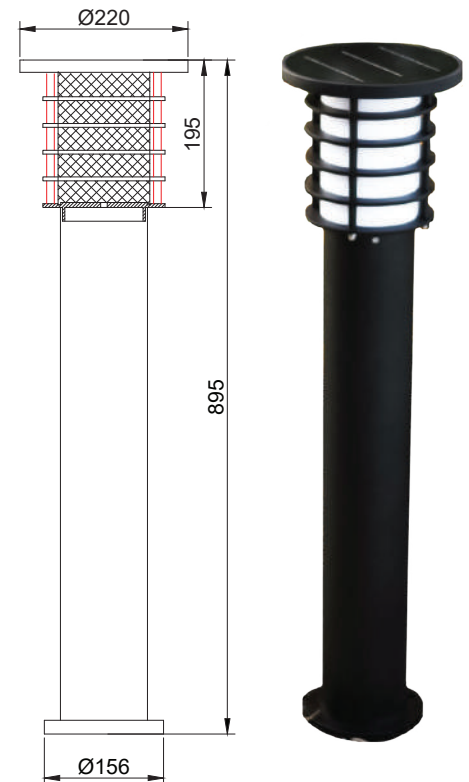


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## BOLLARD (GS-SL-40S)

Solar Bollard Light (GS-SL-40S) is ideal for pathway lighting, private road lighting, area lighting, gate lighting, yard lighting, campus lighting etc.

Solar Panel	3.5W, mono crystalline
Light Source	2.5W, white LED@150lumen per watt, 4000K
Battery	12V 2.6Ah, lithium battery
Work Time	Up to 10 hours
Material	Aluminium
Height	3ft
Working Temperature	0 - 122 Degrees Fahrenheit
Weight	20 lbs.
Finish	Black powder coating



## STANDARD FEATURES

- Solar Panel – Designed for 25+ years of operation
- Super bright white LEDs
- LED lifespan 50,000+ hours
- Solar charge intelligent controller
- Over charging/discharging protection
- Corrosion resistant
- Cast aluminum pole

## APPLICATIONS

- Pathway Lighting
- Area Lighting
- Yard Lighting
- Private Road Lighting
- Fence Lighting
- Farm & Ranch Lighting
- Campus Lighting



# BOLLARD

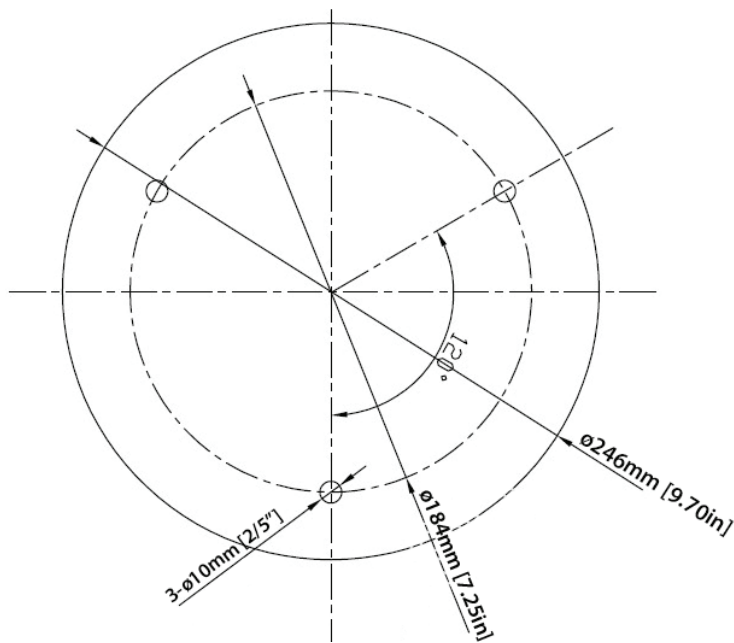
Solar Powered LED Lighting System



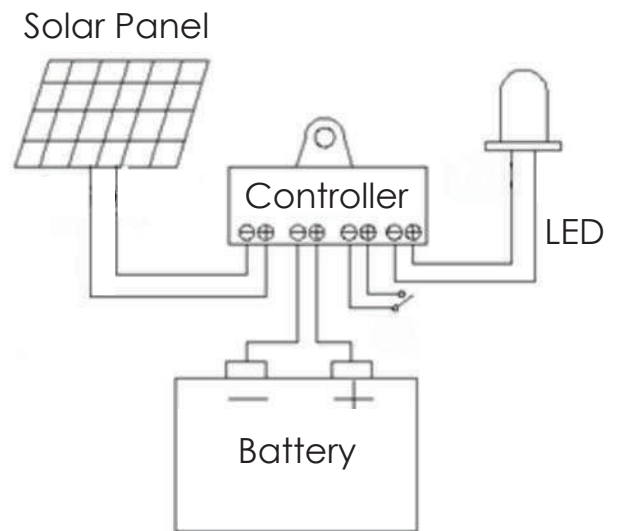
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## INSTALLATION

Please fix the lamp body, make an opening at the concrete road or concrete foundations according to the lamp's fixed hole before the installation, then fix the lamp on the foundation (refer to below installation diagram).



**Bottom Flange**



**System Connection**

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Website: [streetlights-solar.com](http://streetlights-solar.com)

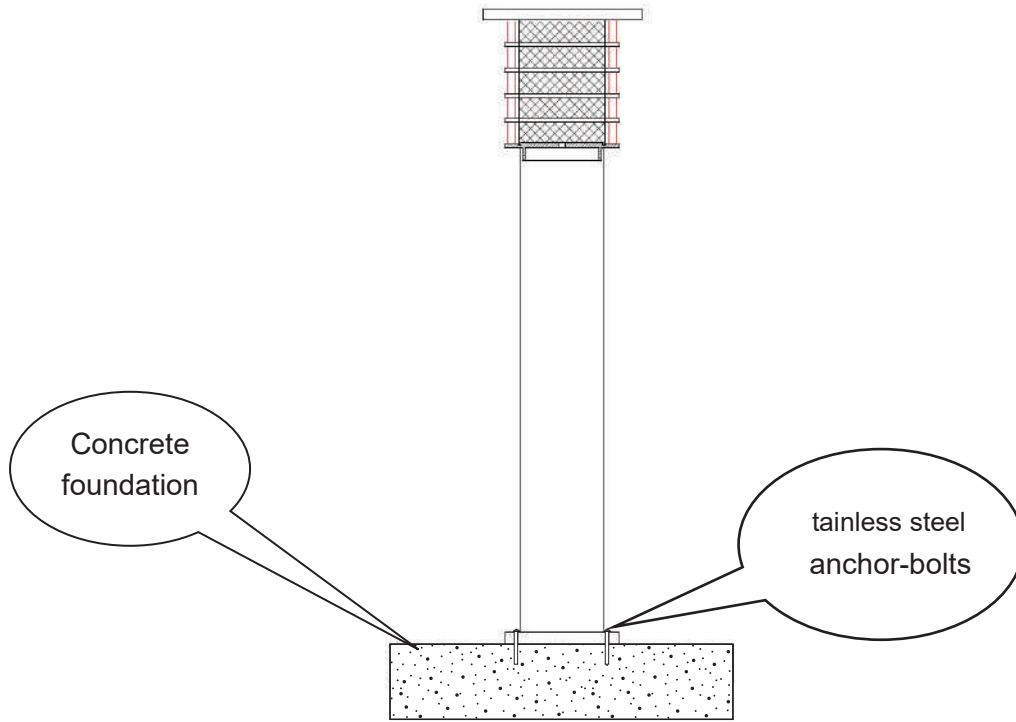


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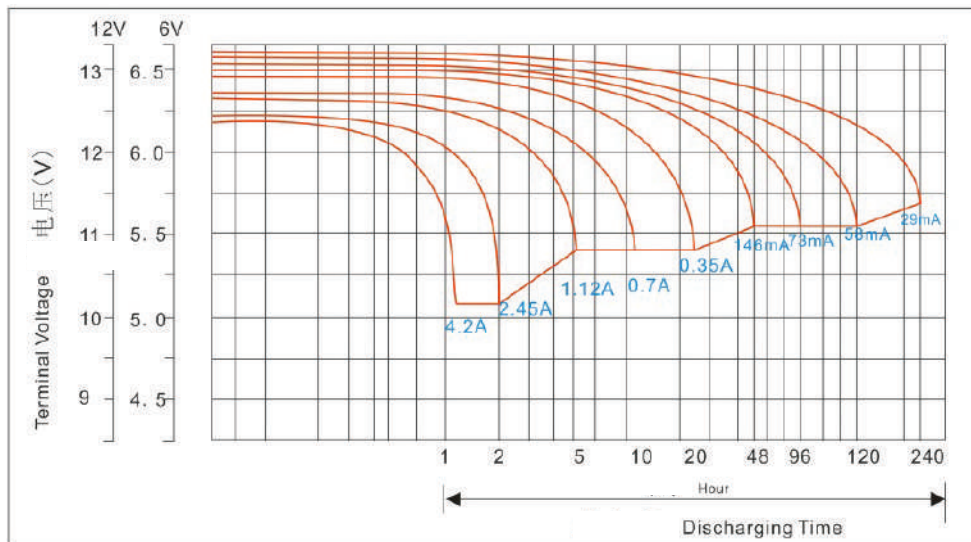
Solar Powered LED Lighting System



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Installation Diagram



Discharging Characteristics curve graph (25°C/77°F)

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# BOLLARD

Solar Powered LED Lighting System



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## TROUBLESHOOTING

POSSIBLE ISSUES	CAUSES	SOLUTIONS
<b><u>Testing</u></b>  <b>The light doesn't work when the solar panel is covered.</b>	The switch is off	Please turn on the switch.
	Poor connection	Please make sure the wires are correctly connected to the controller.
	The controller is damaged	Repair the controller or replace it with the same model controller.
<b>The light fails to turn off</b>	Ambient light is much weaker	The light source will start automatically when the ambient light is strong enough.
	Poor connection	Check the connection between solar panel and controller to make sure wire interface is under normal situation.
	The controller is damaged.	Repair the controller or replace it with the same model controller.
<b>Lights shut off too soon</b>	The solar panel is covered by other	Clean the solar panel.
	Poor connection	Check the connection between the battery and the controller to make sure wire interference is in good condition.
	The voltage of the battery is low	If the low voltage is caused by too many rainy days, it will recover automatically when weather improves.

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**Project 1**



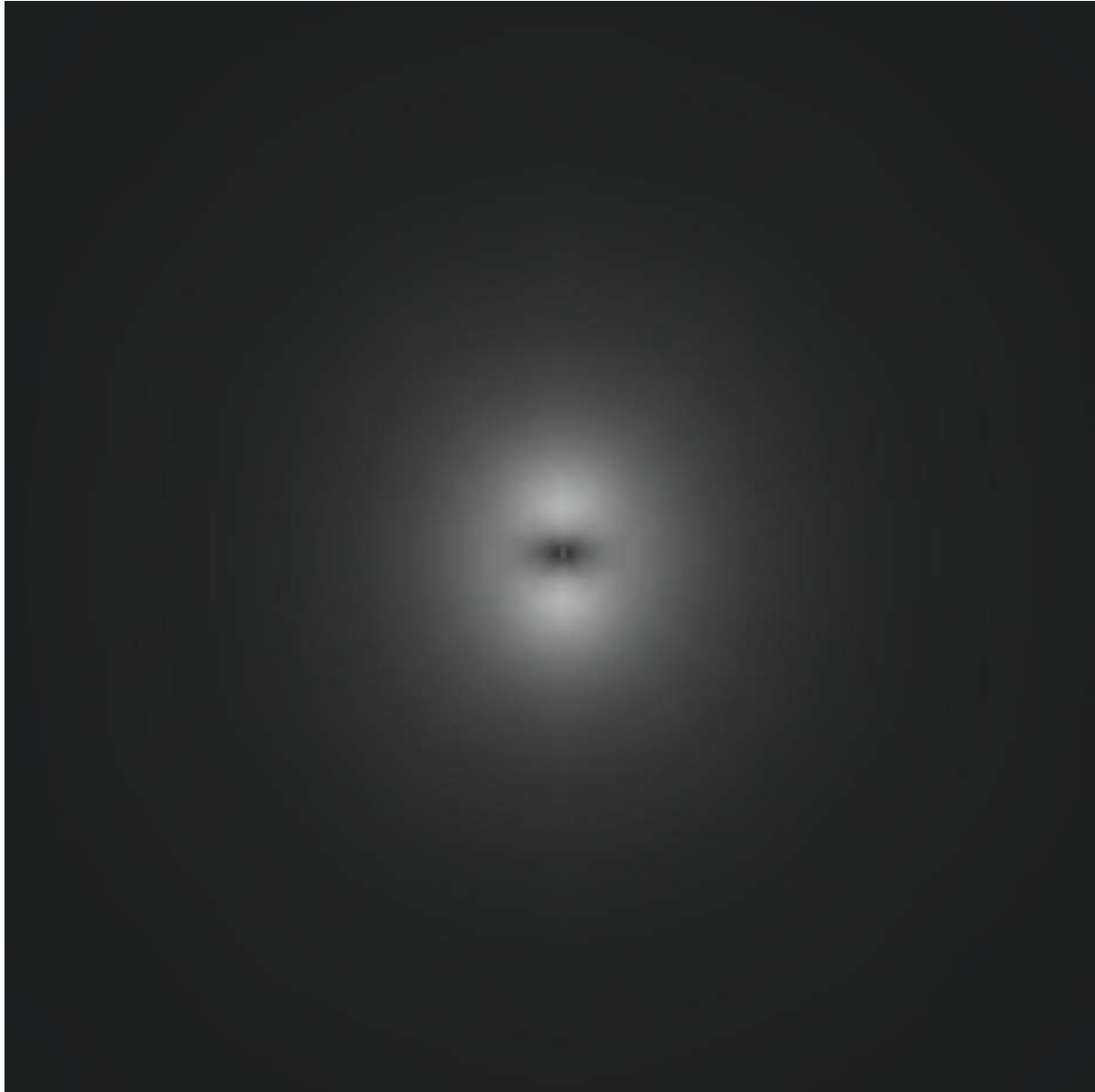
03 / 23 / 2020

Greenshine New Energy

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**BOLLARD 3W - 3' POLE / 3D Rendering**

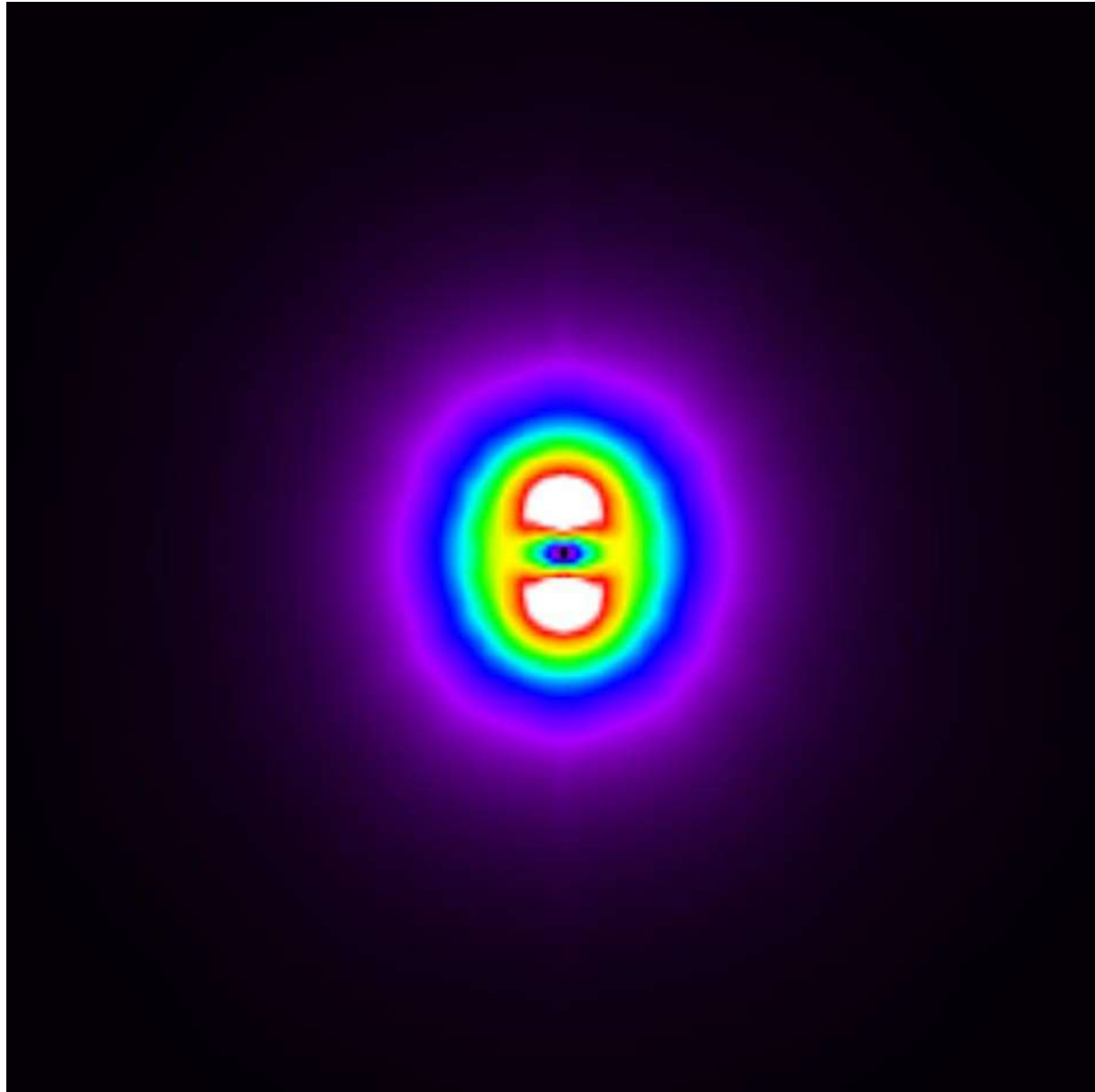




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### BOLLARD 3W - 3' POLE / False Color Rendering

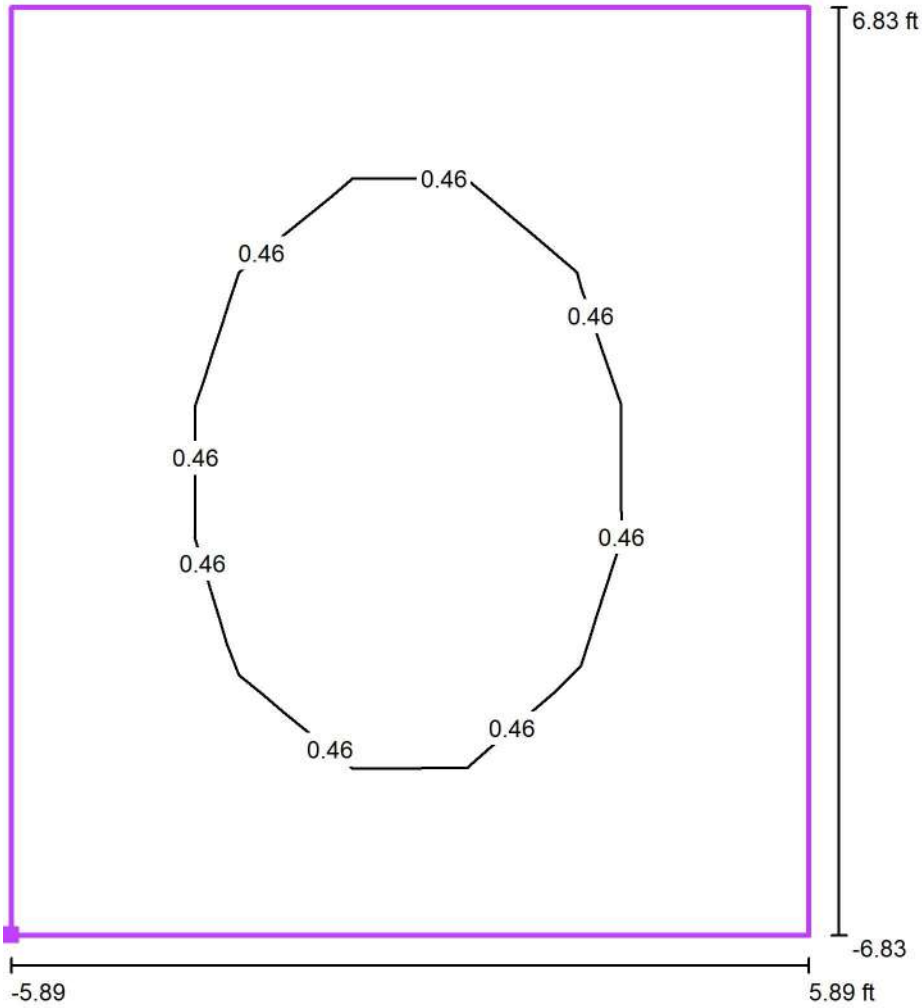


0 0.13 0.25 0.38 0.50 0.63 0.75 0.88 1.00 fc

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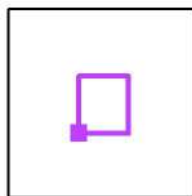
Operator Luis Jimenez  
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### BOLLARD 3W - 3' POLE / Calculation Grid 1 / Isolines (E, Perpendicular)



Values in Footcandles, Scale 1 : 34

Position of surface in external scene:  
Marked point: (165.881 ft, 164.942 ft,  
0.000 ft)



Grid: 7 x 7 Points

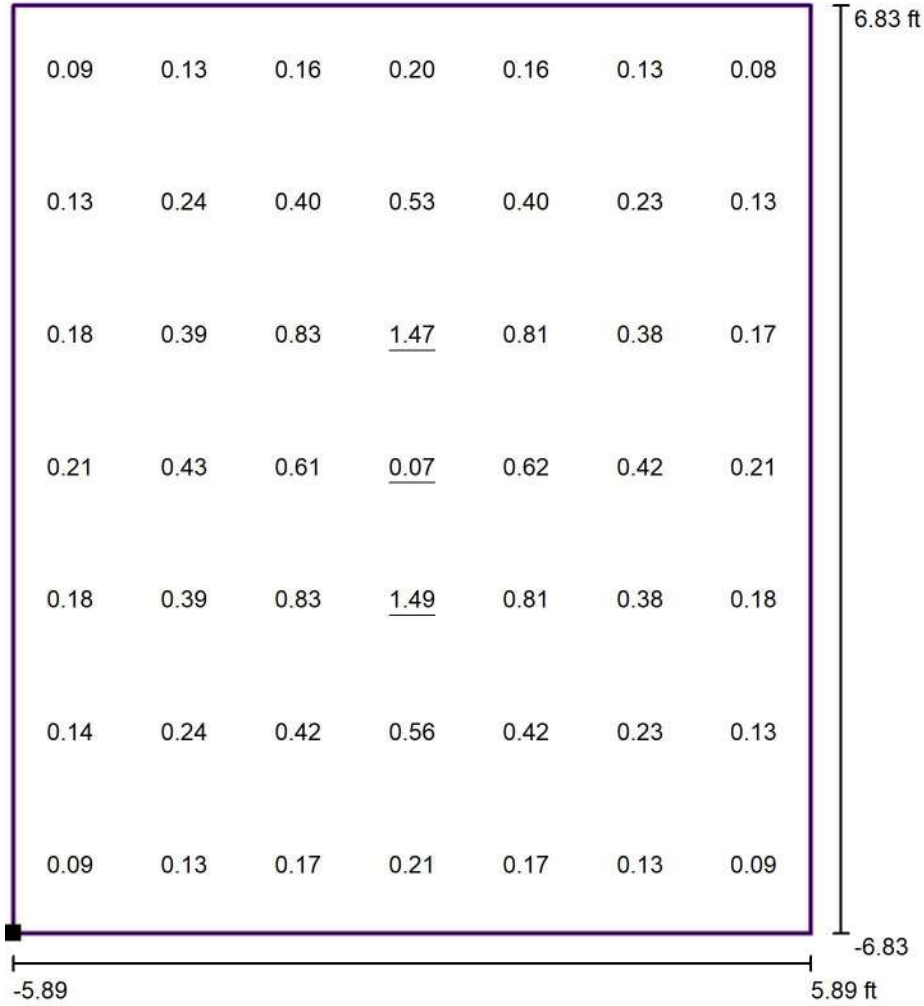
$E_{av}$ [fc]	$E_{min}$ [fc]	$E_{max}$ [fc]	u0	$E_{min} / E_{max}$
0.35	0.07	1.49	0.20	0.05



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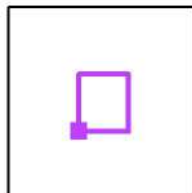
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### BOLLARD 3W - 3' POLE / Calculation Grid 1 / Value Chart (E, Perpendicular)



Values in Footcandles, Scale 1 : 34

Position of surface in external scene:  
 Marked point: (165.881 ft, 164.942 ft,  
 0.000 ft)



Grid: 7 x 7 Points

$E_{av}$ [fc]	$E_{min}$ [fc]	$E_{max}$ [fc]	u0	$E_{min} / E_{max}$
0.35	0.07	1.49	0.20	0.05

# GREENSHINE NEW ENERGY



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## 5 YEAR LIMITED WARRANTY

Greenshine New Energy provides a 5 year limited warranty on its solar lighting system. Greenshine will, at its option, repair or replace any Greenshine system that is defective. Additionally, certain components within Greenshine's system have extended warranty protection against failure as defined below:

COMPONENT	WARRANTY
*Solar Panel	20 Years
Pole and Mounting Brackets	5 Years
LED Light Fixture	5 Years
Electronics (Controller, driver)	5 Years
**Battery	5 Years

\* Greenshine New Energy warrants that the power output of the PV Modules will be at least 80% of the minimum Peak Power rating for 20 years, and warrants that for 20 years beginning on the Warranty Start Date, its photovoltaic modules, shall be free from defects in materials and workmanship under normal application, installation, use and service conditions.

Specific restrictions may apply due to site-specific conditions, please check quote's details for more information.

This warranty does not cover damage or malfunction, as determined by Greenshine service technicians or engineers, due to abuse, misuse, incorrect installation, or accident such as, but not limited to:

- Failure to follow storage, installation, operation, and maintenance instructions provided by Greenshine
- Vandalism, theft, lightning, flood, "Acts of God", and other problems beyond the control of Greenshine
- Unauthorized or improper repairs or adjustments including use of any replacement parts not provided by Greenshine.
- Deployed in an abnormal or inconsistent manner from Greenshine New Energy written and verbal instructions
- Greenshine New Energy liability and Purchaser's remedy under Greenshine New Energy warranty is limited to the replacement of any defective item, but under no circumstance shall exceed the purchase price of the goods. Other warranties may be available for an additional cost with additional coverage and/or labor allowance included.
- Any repair cost not approved by Greenshine New Energy will not be reimbursed.
- Purchaser is responsible for any and all costs involved to service and/or replace defective good including labor, shipping, and rental of equipment.

\*\*Greenshine New Energy provides a limited warranty for battery replacement with the following prorated coverage:

- 0 to 2 years: 100% credit (user pays 0% of the replacement battery price)
- 2 to 3 years: 60% credit (user pays 40% of the replacement battery price)
- 3 to 4 years: 40% credit (user pays 60% of the replacement battery price)
- 4 to 5 years: 20% credit (user pays 80% of the replacement battery price)