

# The Essentials Series



*Today more than ever, it's important to focus on the essentials. For Solar Powered Lighting, the essentials are reliability, efficiency and durability.*

*With SolarOne's field tested, best in class SO-Bright<sup>®</sup> Technology, the new Essentials Series provides just that, plus the option to pick additional features that you can't live without.*

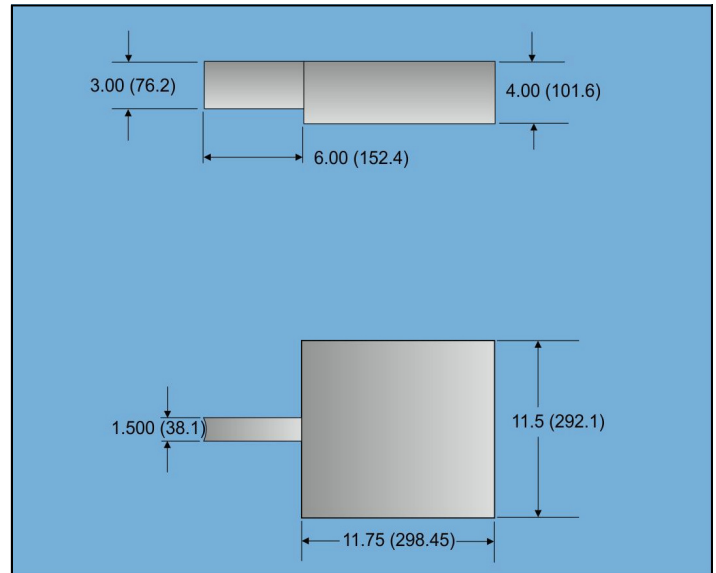
**SolarOne<sup>®</sup>**



SolarOne’s newest and most affordable system offers a solar powered lighting platform that allows the specifier to select from a menu of value-added features based on their environment, design preferences and lighting requirements. Standard configurations feature full energy management, diagnostic capabilities and unfinished materials. Color powder coat option is available upon request.

High-performance options such as Cool Drive™, Snow-coverage protection, and Maximum Power Tracking enhance efficiency and add layers of protection.

This versatile system is suitable for a variety of applications, including: roadways, pathways, sidewalks, waiting areas, parking lots, general site lighting and campuses.



**Benefits of Cool Drive™:** LEDs will produce more lumens as more drive current is applied, reducing the number of LED’s and equipment cost required for a given application. But, as current drive increases, LEDs also become less efficient and generate a higher junction temperature. By limiting the drive current (Cool Drive™), SolarOne delivers more lumens as well as longer LED life.

**Benefits of Maximum Power tracking (MPT):** In cooler temperatures the efficiency of a given solar panel increases, but without the MPT algorithm, this extra energy can’t be captured. The impact is greatest where winter temperatures are lowest. MPT can add 30% or more energy collection to a solar lighting system, allowing you to access more hours of lighting or to reduce the solar array size.

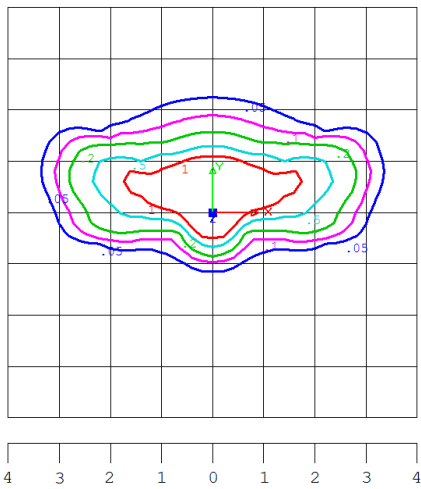
Cool Drive™	Average Lumens (Depending on Distribution)	Rated LED Life *
LOE-3LB50-5MCD583-	4,464	50,000 Hrs
(No Cool Drive™ but still at a lower drive current than most competitors)		
LOE-5LB50-5MCD350-	4,687	70,000+ Hrs
(With Cool Drive™)		

\*(End of Life = 70% Lumen Maintenance) Based on LM-79 IES data

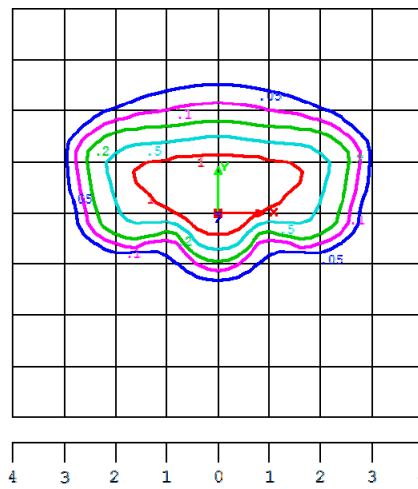
Comparison based on a 135W Solar Array and 2 Hours of Sun in Winter				
Winter High Temperature	70° F	50° F	32° F	-10° F
Energy Collected No MPT	32.9 A-hr	33.6 A-hr	34.2 A-hr	35.8 A-hr
Energy Collected With MPT	40.2 A-hr	42.3 A-hr	44.2 A-hr	48.7 A-hr
Percent Increase With MPT	22%	26%	29%	36%



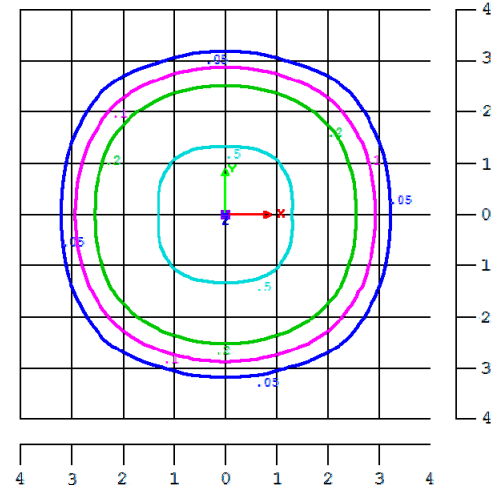
Photometrics



LOE - 3LB50T2-5MCD583  
(mounting height = 20')



LOE - 3LB50T3-5MCD583  
(mounting height = 20')



LOE - 3LB50T5-5MCD583  
(mounting height = 20')

Mounting Height	FC Multiplier
20ft	1
18ft	0.90
17ft	0.85
16ft	0.80
14ft	0.70

Series	Lamp(s)	Distribution	Driver(s)	Current	Control(s)	Voltage	Panel(s)*	Mounting	Battery(s)	Enclosure	Pole Fitting	Finish	Options
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Series	Lamp(s)	Distribution	Driver(s)	Current (mA)	Control	Voltage
LOE - Essentials	LB10 - 10W LED Lightbar	T2	MCD - Max Current	350	MPT15- Max Power Tracking	12V
	LB20 - 20W LED Lightbar	T3	UD - Universal	525	15 amp	24V
	LB30 - 30W LED Lightbar	T5		583	PWM20- Pulse Width Modulation	
	LB40 - 40W LED Lightbar			700	20 amp	
	LB50 - 50W LED Lightbar					

Panel(s)*	Mounting	Battery	Enclosure	Pole Fitting	Finish	Options
P50(x) - 50W Single	TP2 - For P50	B111TA - 111 aHr AGM	EM1 - Holds B111TA, B118CA	T5.9 x 25 - 5.9" OD 25ft.	NA Unfinished (std)	DL - Data Logger
P85(x) - 85W Single	TP4 - For P85, P95, 2P95, P130	B118CA - 118 aHr AGM	IG(1-6) - Holds 1-6 B111TA, 1-6 B118CA, 1-6 B176CA	Tapered pole	*WHT- White	MD - Motion Detector
P95(x) - 95W Single	TP5 - For P180	B176CA - 176 aHr AGM	EL2 - Holds 2 B11TA, 2 B118CA, B176CA		*MDBRNZ - Medium Bronze	
P130(x) - 130W Single	TPT2 - For 2P180		EX4 - Holds 3-4 B11TA, 3-4 B118CA, 2 B176CA		*DKBRNZ - Dark Bronze	
P180(x) - 180W Single	TPT3 - For 2P130				*BLK - Black	
2P95(x) - 190W Double						
2P130(x) - 260W Double						
2P180(x) - 360W Double					*Added charge for color option	

\*(x) Represents Lot Number

Configurations to be determined by SolarOne Engineering for every project, please consult with the factory for details.

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