

SolarOne's LB800* (Lightbar) Series white LED Lamps are a high-density, high-efficiency light source for solar lighting applications. They are available with Type 3 or Type 5 optics. SolarOne's LED lamps provide long life (50,000+ hours), high color rendering, high reliability, and offers a high level of control to the lighting system designer.

LB Series lamps are designed to be driven from the SO-Bright® Lamp Driver using constant current control method from a 12 or 24VDC power source.

The LB800 offers 10% more lumens than other lamps using the similar LEDs due to SolarOne's patent pending LED drive method. The LB800 has a 90 lumen-per-watt efficiency which is equal to or better than most compact fluorescent light bulbs.

* Also referred to as HL750v2

	Lamping	Lumens	Luminous Efficiency	Optics	Type
actual lamp	LB800	800	90 Lumens per watt	Type 3 (T3) or Type 5 (T5)	single lamp head
designation	2LB800	1,600	90 Lumens per watt	Type 3 (T3) or Type 5 (T5)	double lamp head
designation	3LB800	2,400	90 Lumens per watt	Type 3 (T3) or Type 5 (T5)	triple lamp head
designation	4LB800	3,200	90 Lumens per watt	Type 3 (T3) or Type 5 (T5)	quadruple lamp head
designation	5LB800	4,000	90 Lumens per watt	Type 3 (T3) or Type 5 (T5)	five lamp head

* Does not consider driver efficiency or optical lightloss factor.

** Lumens @ 350 mA. Lumen output will increase 8.6% when driven at 380mA.

Mechanical Specifications

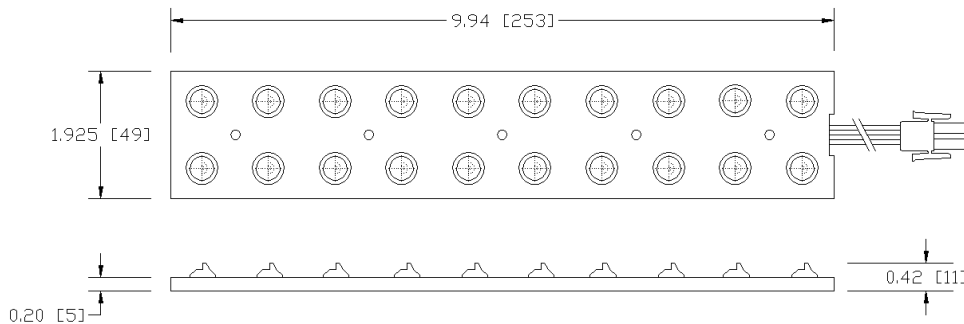
Protection	IP65 Rating
Wire	18 awg, 4 conductors, 15in [381mm]
Base PCB	Aluminum Alloy (MCPCB)
Top Cover	1018 CRS powder coated
Seal	Silicone rubber (UL 94 HB min)
Lens	Clear polymer type 3 or 5
Mounting	Five screws, #6 pan head
Weight	5.6 oz (158g)

Electrical and Optical Specifications

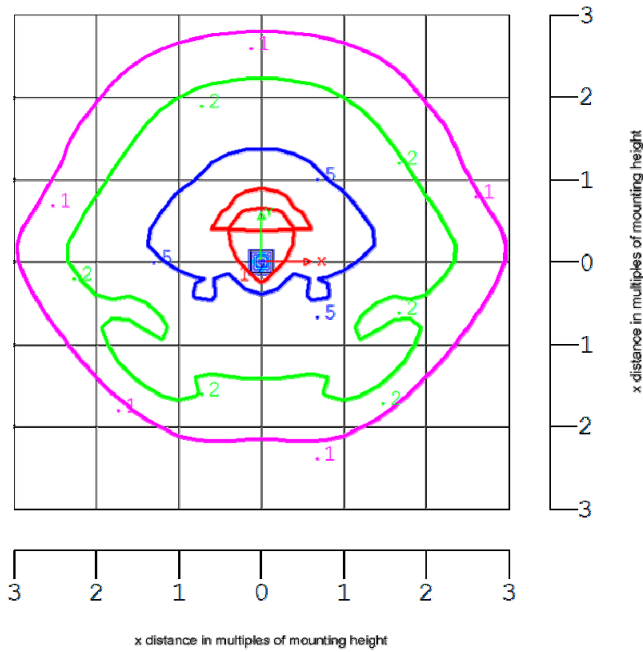
Drive Method	Constant Current Control Required. See MCD Lamp Driver
Limiting Resistors	No limiting resistors
Number of LEDs	20
Number of strings	2
Peak Input Current	350mA or 380mA
LED Type	White, High-Lumen
Color Temperature	6000K
Color Rendering Index	>80

Connections

Wire Colors	Red(2 wires) + Black (2 wires) -
Connector Colors	Black, 2-pole Plug



LB800 Photometry Type 3



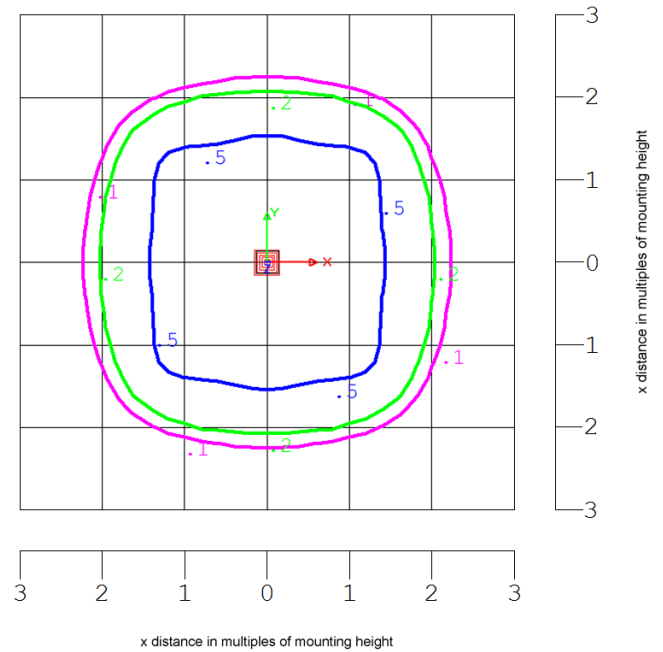
Type 3 Distribution

Calculation Height: 10ft
Number of Lamps: 1
Color Temperature: 6000k
Total Lumens: 800 lm @ 350mA
Aiming: Vertical straight down
Current Draw: 0.85 Amps at 12.5V

Mounting Height	FC Multiplier
10ft	1
12ft	0.69
14ft	0.51
16ft	0.39
18ft	0.31

Lamping	FC Multiplier
LB800T3	1
2LB800T3	2
3LB800T3	3

LB800 Photometry Type 5



Type 5 Distribution

Calculation Height: 10ft
Number of Lamps: 1
Color Temperature: 6000k
Total Lumens: 800 lm @ 350mA
Aiming: Vertical straight down
Current Draw: 0.85 Amps at 12.5V

Mounting Height	FC Multiplier
10ft	1
12ft	0.69
14ft	0.51
16ft	0.39
18ft	0.31

Lamping	FC Multiplier
LB800T5	1
2LB800T5	2
3LB800T5	3