

SolarOne's® LB800 (High Lumen) Series white LED Lamps are a high-density, high-efficiency light source for solar lighting applications. They are available with Type 2, Type 3 or Type 5 optics. SolarOne's LED lamps provide long life (50,000+ hours), high color rendering, high reliability, and offer 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 similar LEDs due to SolarOne's patent pending LED drive method. The LB800 has a 90 lumen-per-watt efficiency.

| Lamping | Lumens* | Luminous Efficiency | Optics | Type |
|----------|---------|---------------------|--------------|---------------------|
| LB800T3 | 900 | 90 Lumens per watt | Type 2, 3, 5 | single lamp head |
| 2LB800T3 | 1,800 | 90 Lumens per watt | Type 2, 3, 5 | double lamp head |
| 3LB800T3 | 2,700 | 90 Lumens per watt | Type 2, 3, 5 | triple lamp head |
| 4LB800T3 | 3,600 | 90 Lumens per watt | Type 2, 3, 5 | quadruple lamp head |
| 5LB800T3 | 4,500 | 90 Lumens per watt | Type 2, 3, 5 | five lamp head |

* Does not consider driver efficiency or optical lightloss factor. Contact factory for actual lumen output calculations and independent reports

** Lumens @ 350 mA. Lumen output will increase when driven at higher amperage.

Mechanical Specifications

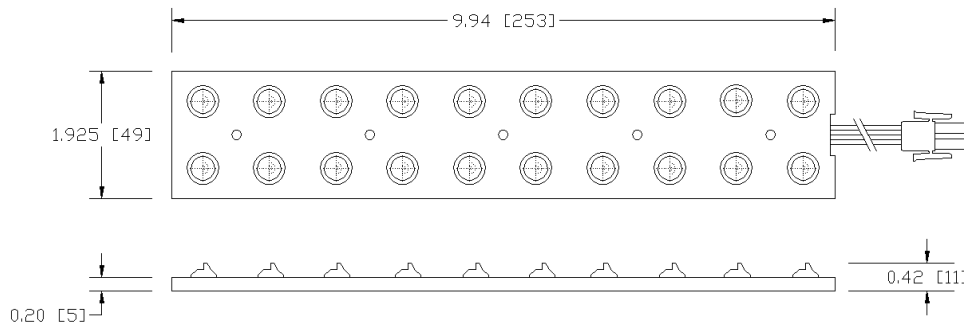
| | |
|------------|------------------------------------|
| Protection | IP66 Rating |
| Wire | 18 awg, 4 conductors, 15in [381mm] |
| Base PCB | Aluminum Alloy (MCPCB) |
| Top Cover | 1018 CRS powder coated |
| Seal | Silicone rubber (UL 94 HB min) |
| Lens | Clear polymer type 3 or 5 |
| Mounting | Five screws, #6 pan head |
| Weight | 5.6 oz (158g) |

Electrical and Optical Specifications

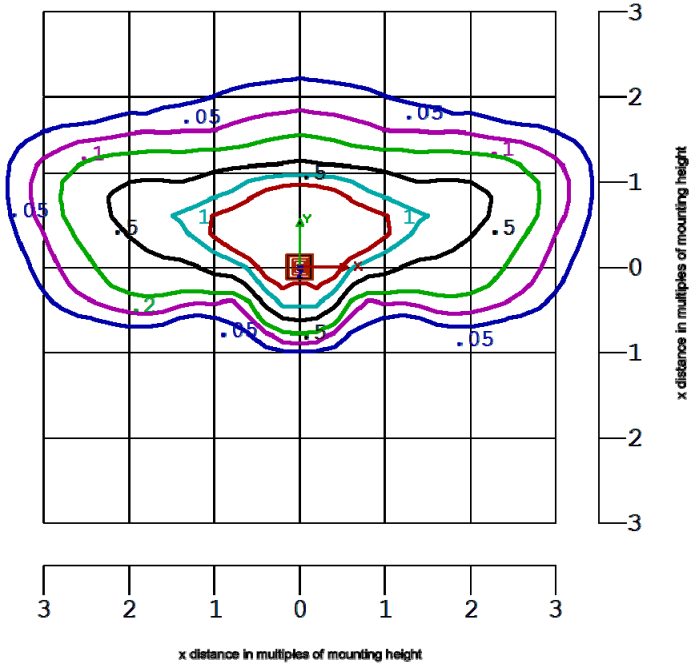
| | |
|-----------------------|--------------------------------------------------------|
| Drive Method | Constant Current Control Required. See MCD Lamp Driver |
| Limiting Resistors | No limiting resistors |
| Number of LEDs | 20 |
| Number of strings | 2 |
| Peak Input Current | 350mA or 380mA |
| 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 |

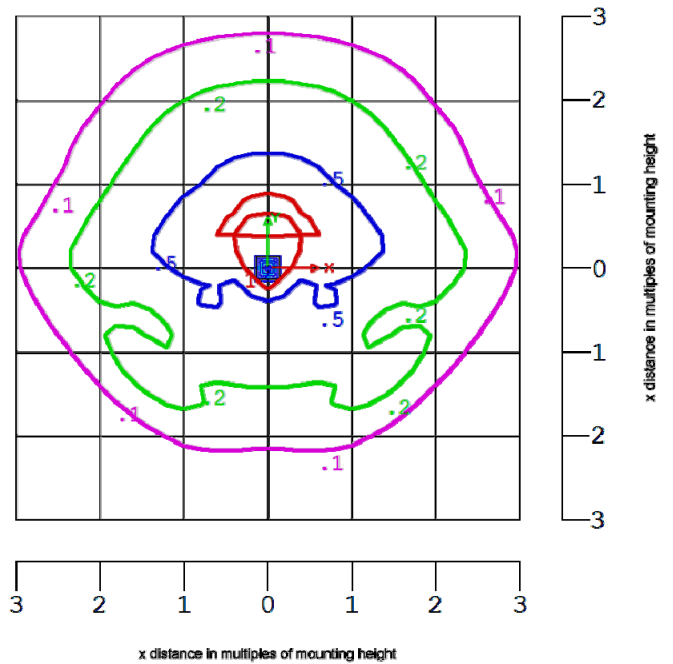


LB800 Photometry Type 2



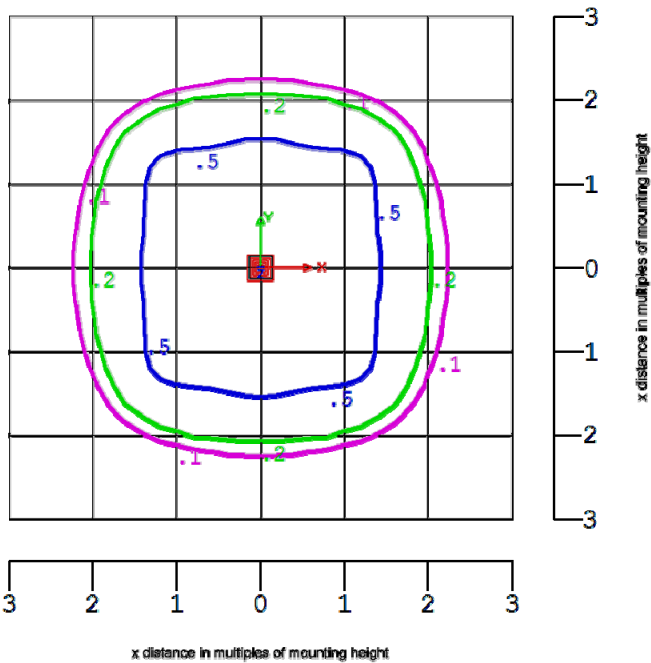
Color Temperature: 6144k
***Total Lumens:** 900 lm
Current Draw: 0.81 Amps at 12.5V

LB800 Photometry Type 3



Color Temperature: 5873k
***Total Lumens:** 900 lm
Current Draw: 0.81 Amps at 12.5V

LB800 Photometry Type 5



Color Temperature: 5799k
***Total Lumens:** 900 lm
Current Draw: 0.84 Amps at 12.5V

| | |
|----------------------------|------------------------|
| Calculation Height: | 10ft |
| Number of Lamps: | 1 |
| Aiming: | Vertical straight down |

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

| Lamping | FC Multiplier |
|---------|---------------|
| LB800 | 1 |
| 2LB800 | 2 |
| 3LB800 | 3 |

* Minimum lumen level assumptions, contact factory for actual lumen output calculations and independent reports.