

SolarLUX Lighting Solutions

# 45W LED Bar

Technical Specification

Release Version: V1.0

Release Date: 2021/01/01

## Main advantages LED Bar

### 1. High efficiency and Energy saving

The LED Bar is a high efficiency LED grow light. Tests have shown that LED grow lights give plants greater light intensity and grow rates than standard HPS grow lights, yet using only 30% to 50% of the electricity.

### 2. Long lifespan

The LEDs used for the LED Bar are SMD LEDs for Horticulture environment, like high humidity and severe temperature. The LEDs are also computer SMT mounted to the PCB, which guarantees high quality and high reliability with a lifespan up to 35.000 hours (50.000 hours under lab conditions).

### 3. Setup required

The LED Bar requires a simple setup. The LED Driver needs to be mounted on the LED Bar. After connecting the LED Driver to the LED Bar, the LED Bar can be plugged directly into AC100 to AC277 Volts power socket.

### 4. Waterproof

The LED Driver, LED Bar and wire connectors are IP65 waterproof. The LEDs are attached to the aluminum frame and waterproof sealed.

### 5. SSP technology and electrical protection

The LED Bar uses SSP technology. SSP technology restricts the DC output voltage to never be higher than the LED chips Voltage. It avoids the LEDs from higher voltage shocking. The power design is also lightning- and surge-proof.

### 6. SPC technology for excellent performance

SPC technology guarantees the LED bar is more stable. If any of the LED chips does fault, it will not affect other LEDs. The high quality SSP and SPC design makes the LED Bar solid and safe.

### 7. Advanced thermal design

The LEDs are passively cooled by the aluminum frame of the LED Bar. The aluminum PCB is directly attached to the aluminum body of the LED Bar for excellent heat dissipation. Passive LED cooling is preferred above active cooling. No moving parts are needed, which is energy efficient and requires no maintenance.

### 8. Powerful full spectrum

The LED Bar is provided with SMD LEDs. The LEDs do have a high PPF per Watt efficiency. The LEDs are waterproof sealed and not covered by glass, which does improve the efficiency by 10%. This is why the LED Bar does have an efficiency of over 2,1  $\mu\text{mol}/\text{J}$ , which is very high in this price range.

### 9. Environment friendly

A LED Bar doesn't contain the harmful substance HPS & MH have; no hazardous waste to deal with which makes our earth cleaner and greener. LEDs are superior in comparison to other lighting technologies in terms of negative environmental and health effects during the manufacturing process. Producing LEDs consumes far less energy than manufacturing other lighting and it was noted the LEDs contain no mercury and few if any toxins such as iodine and lead.

## Pictures 45W LED Bar

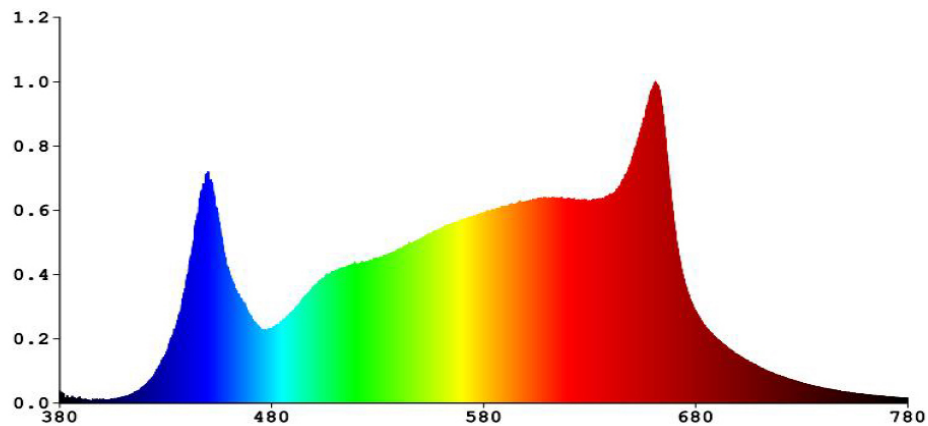


1. *A SolarLUX LED Bar is suitable for indoor and greenhouse lighting.*
2. *The 45W LED Bar replaces 90W HPS grow light.*
3. *Ideal for all phases of plant growth and works well in any garden, either hydroponics or soil based.*
4. *Uses a broad light spectrum required for plants photosynthesis.*
5. *OEM/ODM or customized integrated grow lighting solutions are available on request.*

## Setup & hanging fixture



## Spectrum LED Bar



## Technical specification 45W LED Bar

Item	Value	Item	Value
LED diodes	SMD	HPS equivalent	90 Watt
LED amount	234 pieces	Power factor	> 95%
LED wavelength	Full-spectrum	Power consumption	~ 45 Watt
Light distribution	120° beam angle	Dim control	No
Lifespan	> 30.000 hour	Voltage AC	100V – 277V
Height above plants	> 10cm	Work frequency	50Hz / 60Hz
Lighting area	0,30 to 1,30 m2	Working environment	-20 ~ + 40°C
PAR Photon flux	2,30 μmol / J	Waterproof level	IP65
LED Bar size	590*56*18 mm	Weight	1,3 Kg

## Certification and Warranty of LED Bar Series



## Note:

1. Select different lighting time depending on plant species.
2. Don't look into the LED light directly without wearing sunglasses.
3. Power socket should be connected to the ground/earth.
4. Good after sales service; 2 year warranty\*.

\* Warranty according EU directive 2009/125/EG.