

CALIFORNIA
LIGHTWORKS



NEW SOLARSTORM 880



SolarStorm

Highest Performing
LED Grow Light.
GUARANTEED.



SOLARSTORM 220

Highest Quality

Switchable VEG/BLOOM modes
Optimum Spectrum for Highest Quality Harvest

Highest Yield

Highest light output and yield on the market



SOLARSTORM 440

Highest Potency

Built-in supplemental UVB lights boost potency

Highest Reliability

Made in California - 3 year warranty
SATISFACTION GUARANTEED

SolarStorm

HIGH POTENCY

880W & 440W LED GROW LIGHTS



SolarStorm 880W

- 288 OSRAM LEDs
- 2 x 18" T8 UVB
- Veg/Bloom Control

SolarStorm 440W

- 144 OSRAM LEDs
- 2 x 18" T8 UVB
- Veg/Bloom Control



Switchable spectrum between Veg and Bloom. Separate UVB control.

**Supplemental UVB Light In • Maximum Intensity
OSRAM LED Emitters • Switchable Spectrum Control
High Power LED Panel**

**Highest light output on the market delivers
better coverage and yield in both veg and bloom.
SUPPLEMENTAL UVB LIGHT BUILT IN**

**Increases resin development and boosts potency.
MAXIMUM INTENSITY OSRAM LED EMITTERS**

**Better penetration into the canopy, six band spectrum.
SWITCHABLE SPECTRUM CONTROL**

Independent controls for veg, bloom and UVB.

DESIGNED AND MANUFACTURED IN CALIFORNIA

Local support from the people who actually make the light!

Satisfaction Guaranteed - 3 Year Warranty

220W & 110W LED GROW/BLOOM LIGHTS

OSRAM LEDs – Clever Chainable Design

LED Grow Light Technology

Light Emitting Diode (LED) technology is the wave of the future. It is rapidly replacing traditional lighting in every application from street lights to warehouse lights to automotive lights. LED based grow lights can significantly outperform High Intensity Discharge (HID) and fluorescent lights in indoor horticulture.

However, many low quality LED grow lights over promise and under-deliver. Most of them come from the same low cost factories overseas with little R&D behind them and they simply do not work. To be effective, LED grow lights need to target the right parts of the light spectrum at the right intensity. Working with hundreds of growers across the country, we design and manufacture products in the U.S.A. that actually work.

Our maximum intensity 5W diodes combined with our OptiGrow® technology target the parts of the light spectrum where absorption by plants is highest at high levels of intensity. The results is superior quality, higher potency yield and lower power consumption.

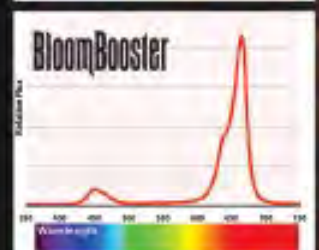
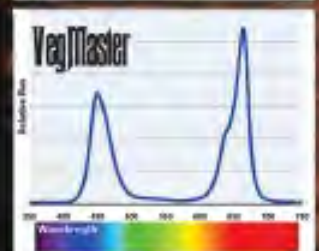
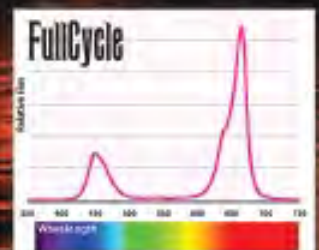
But don't take our word for it. Our products are some of the most widely reviewed grow lights by some of the most discriminating growers.

All Products feature a Satisfaction Guaranteed!



SolarStorm 220W

- 72 OSRAM LEDs
- Clever chainable design, allows up to 10 lights to use single power outlet.
- Available in 3 custom spectral blends:
 - Full Cycle
 - VegMaster
 - BloomBooster



SolarStorm 110W

- 36 OSRAM LEDs
- Clever chainable design, allows up to 20 lights to use single power outlet.
- Available in 2 custom spectral blends:
 - VegMaster
 - BloomBooster

Made in the U.S.A.

Specifications	SOLARSTORM				
	880W	440W	220W	110W	
Electrical Characteristics	90-277 VAC / 50-60Hz				
Operating Voltage	90-277 VAC / 50-60Hz				
Total Power Consumption	Veg Mode: 475W Bloom Mode: 650W Bloom + UVB: 680W	Veg Mode: 235W Bloom Mode: 320W Bloom + UVB: 350W	165W	85W	
Power Factor	0.99	0.99	0.99	0.99	
Max Current at input	7.6 Amps	3.9 Amps	1.85 Amps	1.1 Amps	
LED Characteristics	0.040" Aluminum Metal Core PCB				
LED emitter type	OSRAM SSL	OSRAM SSL	OSRAM SSL	OSRAM SSL	
Total number of LEDs	268	144	72	36	
LED Board	0.040" Aluminum Metal Core PCB				
Number of LED boards	4	2	1	1	
LED Primary Lens Viewing Angle	90 degrees				
LED Total included angle	130 degrees				
LED Color Spectrum	Proprietary Optigrow Color Blend				
	Deep Blue: 440 nm Blue: 470 nm Red: 620 nm Deep Red: 665 nm Warm White: 3100K UV-B: 280-315 nm (T8 Fluorescent)		Deep Blue: 440 nm Blue: 470 nm Red: 620 nm Deep Red: 665 nm Warm White: 3100K		
LED Drivers	Custom Build Constant Current Mode LED drivers				
Total number of drivers	8	4	2	1	
Max power per driver	100W				
Luminous output Characteristics	PAR light output measured in adjusted* $\mu\text{moles/m}^2/\text{s}$ at center				
Distance from light	12 Inches	3694	2570	1773	920
	18 Inches	2439	1389	745	441
	24 Inches	1596	832	420	253
	32 Inches	949	511		
Recommended Coverage Area					
Veg. or supplemental (Max)	7' x 7'	6' x 6'	5' x 5'	4' x 4'	
Bloom (Max)	4' x 4'	3' x 3'	2' x 2'	Not recommended	
Expected Life Span	80,000 Hours				
LED projected life span	80,000 Hours				
LED output after 65,000 hrs	70%				
Cooling fan life span	50,000 MTBF				
Operating Requirements	-15°C to 40°C (5°F to 104°F)				
Operating Ambient Temperature	-15°C to 40°C (5°F to 104°F)				
Operating Position	Light Facing Down				
	23" x 18" x 5"	15" x 18" x 5"	9" x 9" x 4"	9" x 9" x 4"	
	32 lbs	18 lbs	8 lbs	7 lbs	
Safety Features	Fused power input. Over-temperature thermal shut-off. Overvoltage (surge) protection. Three wire grounded power input. All units comply with all UL/ETL safety requirements. (Formal UL listing in progress)				
Manufacturer's Warranty	Limited 3 year warranty				
	* Luminous output measured using a radio-spectrometer with NIST traceable calibration (calibration certificate available upon request.) Measurements are adjusted to account for plant spectral absorption according to DIN 5031-10. For details on our luminous output measurements and calculation techniques please visit our website: www.californialightworks.com				

