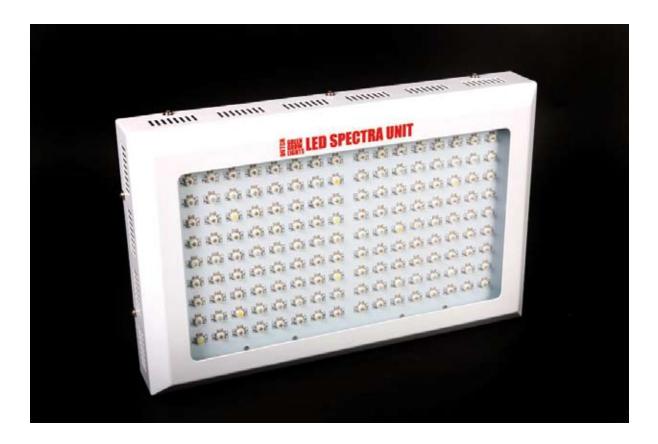
LED SPECTRA UNIT

348 WATT WATERPROOF GREENHOUSE LIGHT



TECHNICAL SPECIFICATION

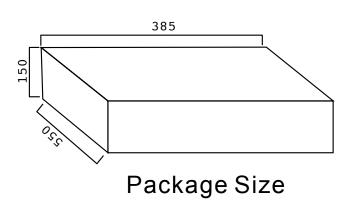


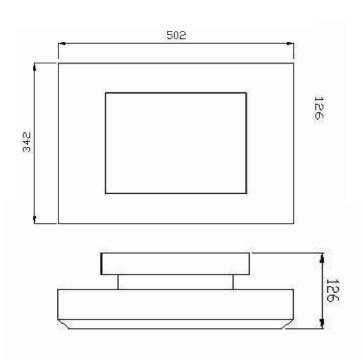
LED SPECTRA UNIT SPECIAL II



Picture of Led Spectra Unit Special II waterproof

348 WATT







Main Advantages Led Spectra Unit Special II waterproof

1. High efficiency and Energy saving

The LED Spectra Unit special II is a high efficiency Full-Spectrum LED grow light. Tests have shown that LED grow lights give plants greater light intensity and grow rates than standard HPS grow lights. The LED Spectra Unit special II - 348 watt produces great effect as 600 watt HPS grow light. It saves 50% - 75% electricity, greatly energy-saving and carbon-reducing.

2. Long life span

The LED Spectra Unit special II has an estimated life span of at least 30.000 hours. The life span of the LED's reaches up to 50,000 hours. The used LED chips are mainly purchased from American chip manufacturer Bridgelux. LED chip wavelengths which are not available at Bridgelux are purchased from quality chip manufacturers like Edison led or Epistar led.

3. Plug and Play

The LED Spectra Unit special II is a plug- and play grow light. Just plug directly into AC110 or AC230 Volts power socket, which makes the installation safe and simple. No setup required; no reflector and ballast are needed.

4. SSP technology and electrical protection

The LED Spectra special II uses the unique SSP technology. The SSP technology restricts the DC output voltage to never be higher than the LED chips voltage. It avoids the LED's from higher voltage shocking. The power design is also lighting- and surge-proof.

5. SPC technology for excellent performance

The LED Spectra Unit special II works more stable by SPC technology. If any of the LED chips does fail, it will not affect other LED's, as it does with standard LED grow lights. The high quality SSP and SPC design makes the LED Spectra Unit special II very stable and safe to use.

6. Flower Booster technology

The LED Spectra Unit special II is provided with 2 pieces switchable Grow and Flower Boosters. This creates an ideal growing and flowering environment, which increases yield and saves energy.

7. Advanced thermal design

The LED chips are directly welded on to an aluminium PCB instead of normal PCB. Aluminium PCB's have excellent passive heat dissipation. The six built-in fans are used for active heat dissipation. Combined passive and active heat dissipation keep the LED chips at the ideal temperature for best light intensity.

8. High powerful chips to attain higher luminescence

The LED Spectra Unit special II uses LED chips with amperage of 800mA. These high quality and High Power LED's have the highest luminescent efficiency and produce less heat.

9. Environment friendly

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

10.Easy maintenance

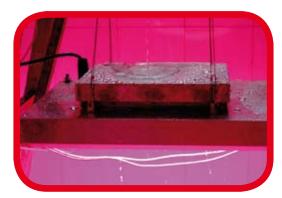
All electrical parts are wired with standard connectors, which make maintenance simple. When the warranty is expired, the maintenance can easily be done by customer.



LED SPECTRA UNIT SPECIAL II

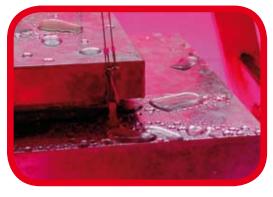


Application of Led Spectra Unit Special II waterproof











Technical Specification of Led Spectra Unit Special II Waterproof

1. Power Factor(PF): AC220V PF> 9 0 % , AC1 1 0 V PF> 9 7 %

Total Harmonic Distortion: <15%
Input AC: AC85-265V, 5 0 Hz/ 6 0 Hz

4. Input Power: 240-300W, depend on different Color Ratio

5. The number of LED: 144 PCS

6. Working environment temperature: - 2 0 C~ 4 0

7. Working environment humidity: <90%8. Storage temperature: -40 ~ 6 0

9. Level: lp35

10. Working time: 10-14Hours /day

11. Package Size: 550mm*385mm*160mm 12. Gross Weight: 9.2KG Net Weight: 8.25KG

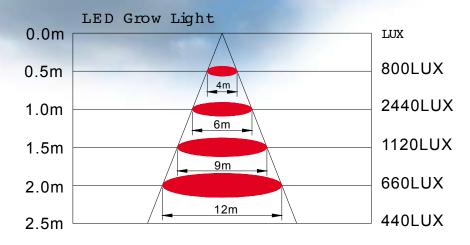
Thermal Test results of Led Spectra Unit Special II Waterproof 600 mA LED driver

Thermal Test of Led Spectra Unit Special II Waterproof													
Date	Time	Heat Sink		AL-PCB		Leg of LED		Air		LED to Air			
		°F	°C	°F	°C	°F	°C	°F	°C	°F	°C		
30th DEC	13:30	107.6	42	109.4	43	118.4	48	82.4	28	36	20		
	14:00	105.8	41	113	45	122	50	90.5	32.5	31.5	17.5		
	14:30	107.6	42	114.8	46	120.2	49	89.6	32	30.6	17		
	15:00	109.4	43	113	45	120.2	49	89.6	32	30.6	17		
	15:30	111.2	44	113	45	123.8	51	84.2	29	39.6	23		
	16:00	114.8	44	114.8	46	122	50	86	30	36	20		
	16:30	114.8	44	114.8	46	120.2	49	87.8	31	32.4	18		
	17:00	114.8	44	116.6	47	125.6	52	86	30	39.6	22		
	17:30	114.8	44	114.8	46	122	50	86	30	36	20		
31st	08:30	104	40	109.4	43	116.6	47	78.8	26	37.8	21		
DEC	09:00	102.2	39	104	40	114.8	46	77	25	37.8	21		



LED SPECTRA UNIT SPECIAL II

Parameter of Led Spectra Unit Special II Waterproof



Parameter Comparison of Led Spectra Unit Special II Waterproof

Туре	LED Grow Light	Incandescent	Fluorescent	Metal Halide	
Items		Lamp	Lamp		
Visible light	15-20%	5%	23%	27%	
radiation energy	10 20 70	070	2070		
Infrared	0%	90%	36%	17%	
radiation energy	0 70	3070	0070		
UV	0%	0%	0%	19%	
radiation energy	0 70	0 70	070	1970	
Physiological	15-20%	<0.1%	<1%	<0.5%	
effective energy	15-20%	~ 0.1%	~170		
Conclusion	Most Suitable	Suitable	Little suitable	Not Suitable	







The LED Spectra Unit is registered in all the European countries. EEC nr: 008413932

