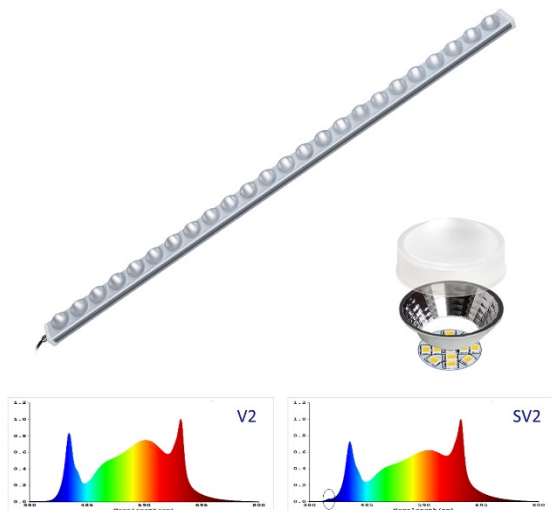


Description:

RX-TP5025 High PPFD Urban agricultural plant factory Indoor Vertical shelf plant Growth Lights, New patent design product with unique lens, Different LED chips in one lens, Concentrating Light efficiently and More uniform spectral radiation, directional light ,higher light utilization efficiency, more efficient comparing with common grow lights. Silicone potting waterproof, more reliable. Suitable for various kinds of plant cultivation and especially for high-density shelf structure Plant Factories , Cupboard Showcase, planting boxes, plant cultivation.



1. Different LED chips in one lens, Spectral radiation uniform, Lens + Reflector cup, Concentrating radiation, PPFD efficiency increased by 74%*
2. High PPFD $610\mu\text{mol}/\text{m}^2/\text{s}$, distance from plant canopy 0.2m
3. Built-in power supply, small size 50x42mm
4. Urban Vertical Agriculture - Horticulture LED Production Module lights
5. Preferred plant-specific spectra, multiple **light-recipe** to meet different plant requirements
6. Waterproof IP64
7. Input: AC100~277V PF >0.9 Power: 80W
8. Meet the safety requirements around the world, CE RoHS FCC

Model	Dimension LxWxH	Spectral Wavelength	Photon PPFD μmol/m²/s	Luminous flux	Power AC230V	Comment
RX-TP5025-80W-60D	1206x50x42mm	V2	610μmol @0.2m 41063Lx	Flux 12063Lm	80W PF >0.9	Illumination angle 60° 2.3μmol/J Ra88 vegetative growth
			401μmol @0.3m 27055Lx	PPF:180umol/s		
			238μmol @0.5m 4758Lx	PAR: 37919mW		
RX-TP5025-80W-90D	1206x50x36mm	V2	448μmol @0.2m 29145Lx	Flux 125591Lm	80W PF >0.9	Illumination angle 90° 2.3μmol/J Ra88 vegetative growth
			301μmol @0.3m 19541Lx	PPF:188umol/s		
			170μmol @0.5m 11018Lx	PAR:39707mW		
RX-TP5025-80W-60D	1206x50x42mm	SV2	547μmol @0.2m 34603Lx	Flux 103661Lm	80W PF >0.9	Illumination angle 60° Add a small 420nm Ra93 vegetative growth
			376μmol @0.3m 23764Lx	PPF:165umol/s		
			228μmol @0.5m 14434Lx	PAR:34715mW		

Surface temperature rise T_c 25 °K

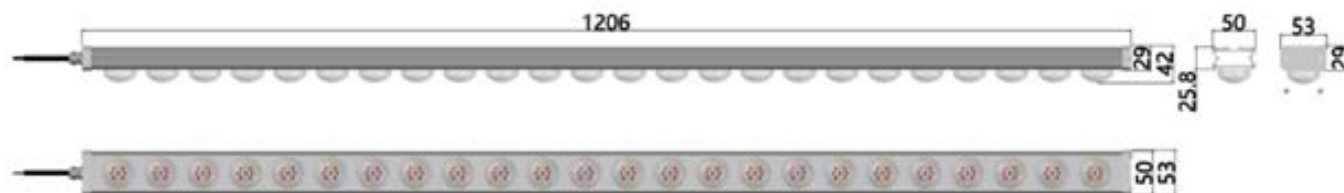
Operating temperature: -30 °C ~ 40°C , Life: 35,000 hours (Note:Ta 25 °C)

Tolerance range for optical and electrical data: $\pm 10\%$

Illumination angle 60°, Recommended irradiation distance 0.2~1m; Illumination angle 90°, Recommended irradiation distance 0.2~0.5 m

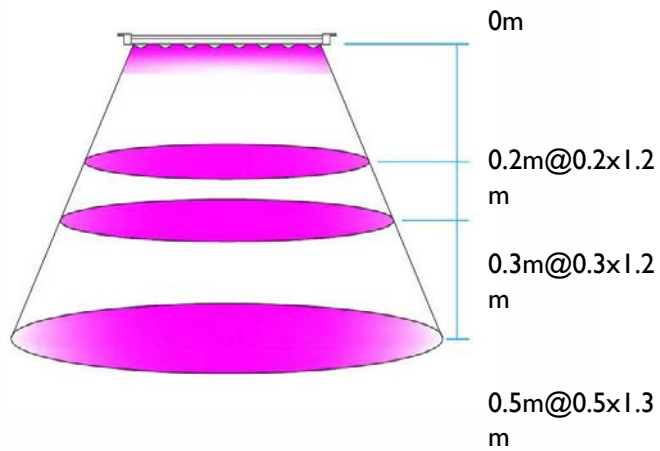
The above data is for reference only! Subject to change without notice

Dimension:

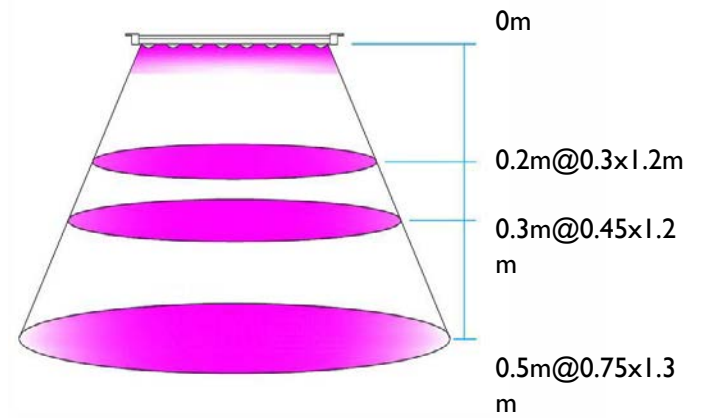


UNIT: mm

60D Depth distance & Coverage:



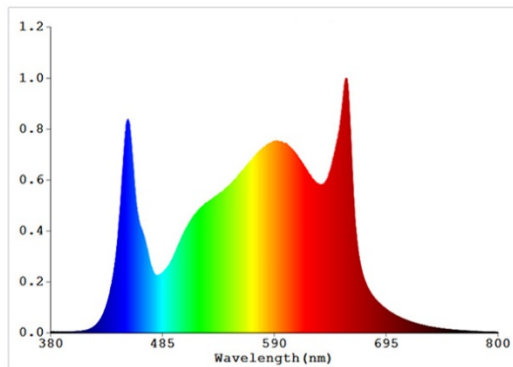
90D Depth distance & Coverage:



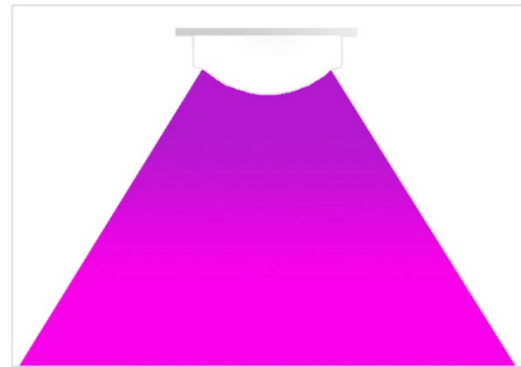
- Different LED chips in one lens, Spectral radiation uniform, Lens + Reflector cup, Concentrating radiation, PPFD efficiency increased by 74%*, The preferred spectrum satisfies plant growth illumination requirements.



Different LED in one lens More uniform Light



Effective light recipe
Suitable for most plant growth



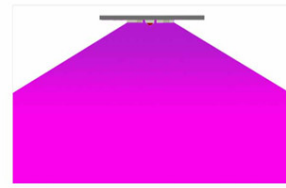
Concentrating Light efficiently
higher light utilization efficiency

- Comparative test, test height 0.3m(12inch), cover area 0.3x1.2m(12x47inch); Koray lens reflector cup structure plant grow lights, RX-TP5025-80W-60D-V2 PPFD average, compared with of no reflector lens LED grow light, PPFD increased by 123 μ mol/m²/s and efficiency increased by 65%

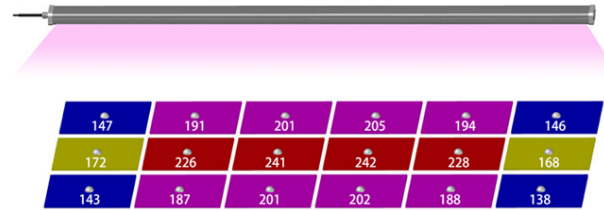
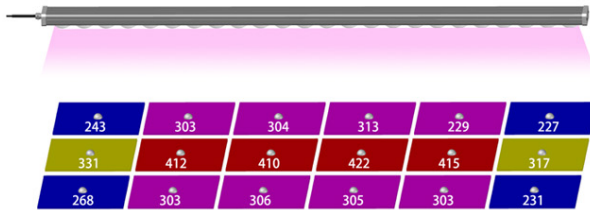


Irradiation coverage area 0.3x1.2m (12x47inch)
18 Point Test PPFD average **313** $\mu\text{mol}/\text{m}^2/\text{s}$ @0.3m 12inch

VS



Irradiation coverage area 0.3x1.2m (12x47inch)
18 Point Test PPFD average **190** $\mu\text{mol}/\text{m}^2/\text{s}$ @0.3m 12inch



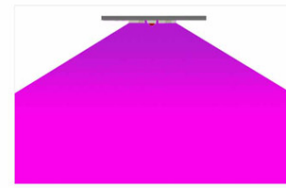
Irradiation height 0.3m: PPFD efficiency increased by **65%**

Irradiation height 0.5m: PPFD efficiency increased by **74%**

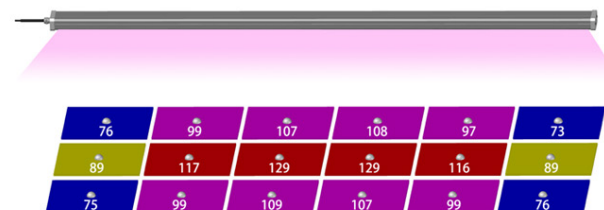
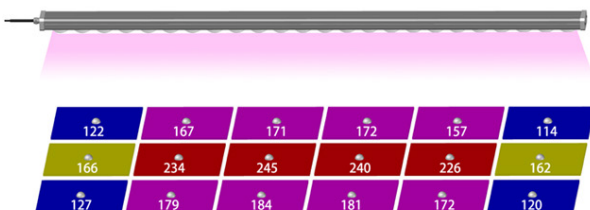


Irradiation coverage area 0.5x1.3m (1.6x4.3ft)
18 Point Test PPFD average **174** $\mu\text{mol}/\text{m}^2/\text{s}$ @0.5m 1.6ft

VS



Irradiation coverage area 0.5x1.3m (1.6x4.2ft)
18 Point Test PPFD average **100** $\mu\text{mol}/\text{m}^2/\text{s}$ @0.5m 1.6ft

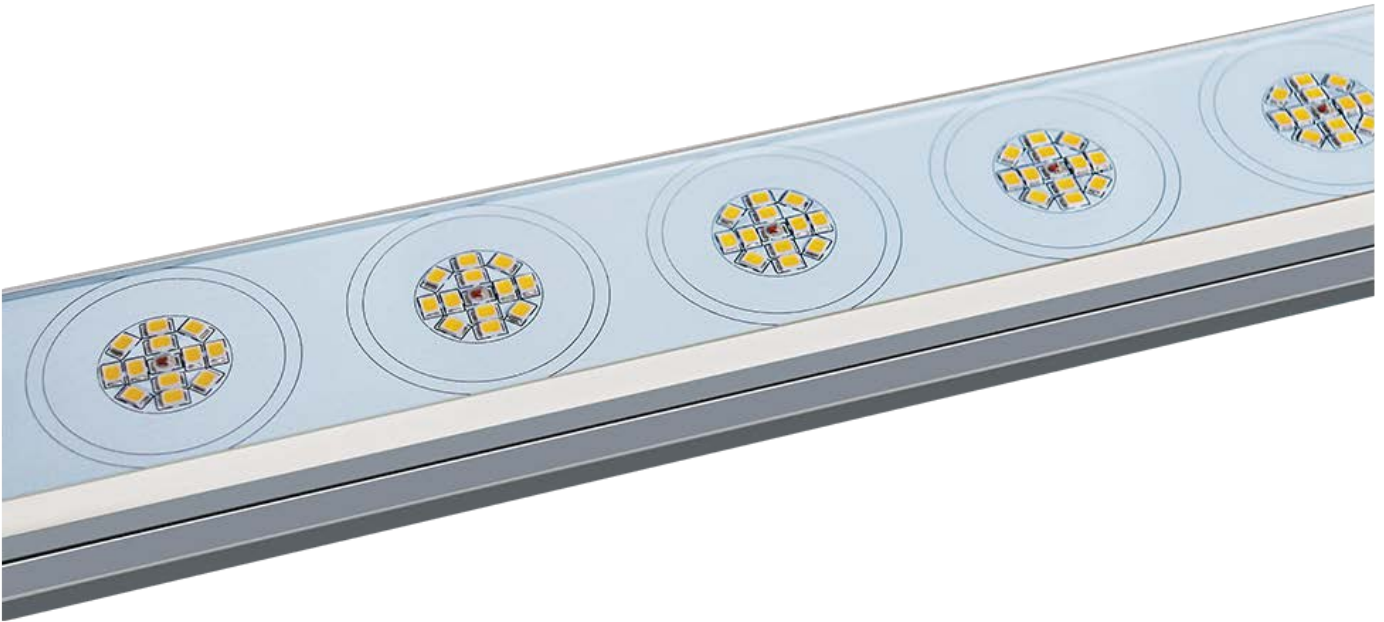


Comparative test, test height 0.5m / 1.6ft, cover area 0.5x1.3m (1.6x4.2ft); Koray lens reflector cup structure plant grow lamp, RX-TP5025-80W-60D-V2 PPFD average, compared with of no reflector lens LED grow light, PPFD increased by 74 $\mu\text{mol}/\text{m}^2/\text{s}$ and efficiency increased by 74%

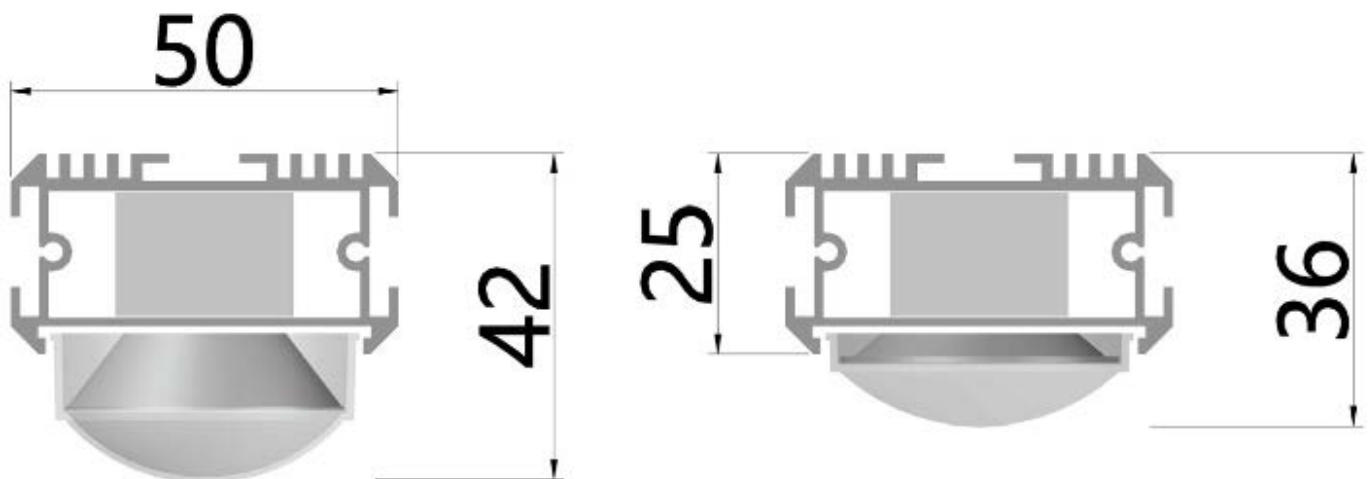
The above is the same spectrum, the same power test, 120D FFP: 197 $\mu\text{mol} / \text{s}$ light efficiency up to 2.5 $\mu\text{mol} / \text{J}$, 60D PPF 180 $\mu\text{mol} / \text{s}$ light effect 2.3 $\mu\text{mol} / \text{J}$

High light efficiency, high PPF, but the light does not reach the canopy of the plant, and the high efficiency is of no practical use. Therefore, the koray plant grow lamp enhances the efficiency and, in the case of the same power consumption, increases the average PPFD of the required illumination area, and makes the illumination uniform and the spectrum uniform.

- Use 312 IW high-power LED lamp beads to reduce the amount of use, improve PPF efficiency, more reliable, longer service life.



- Small size, high power 80W , built-in power supply

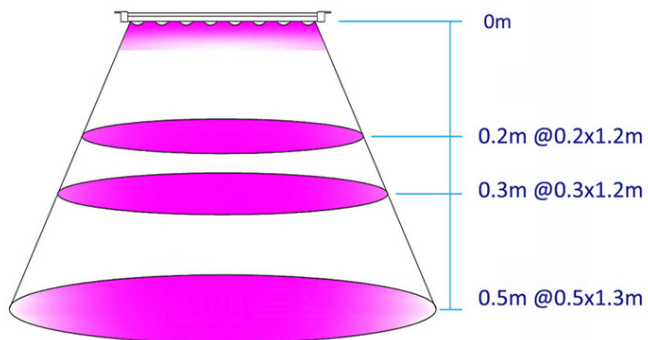


Small size, high power, built-in power supply

- Optional lens angle:

60D 60° lens reflector

60D



60D 60° lens reflector

Plant canopy height 0.2m, coverage 0.2x1.2m

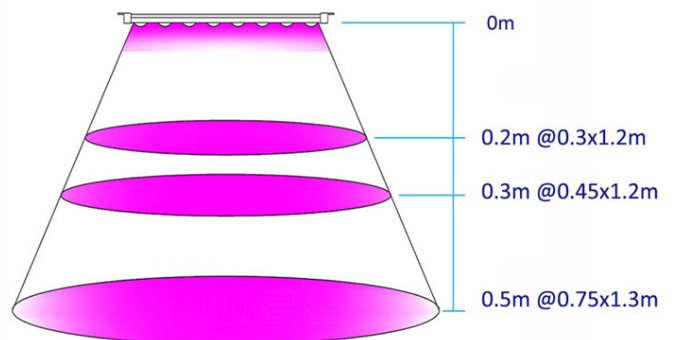
LED plant grow bars with a spacing of 0.2m for uniform illumination

The same distance from the plant canopy 0.5m, coverage 0.5x1.3m

LED plant grow bars with a pitch of 0.5m can achieve uniform illumination

90D 90° lens reflector

90D



90D 90° lens reflector

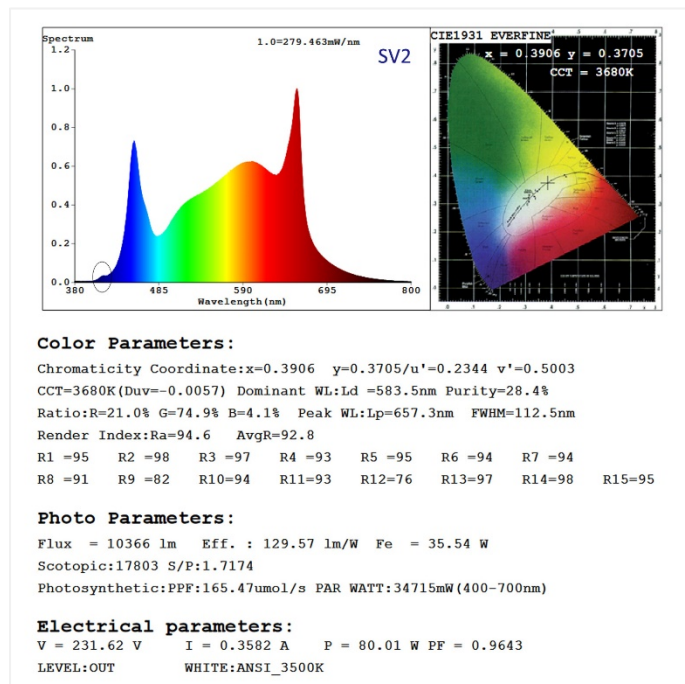
Plant canopy height 0.2m, coverage 0.3x1.2m

LED plant grow bars with a spacing of 0.3m for uniform illumination

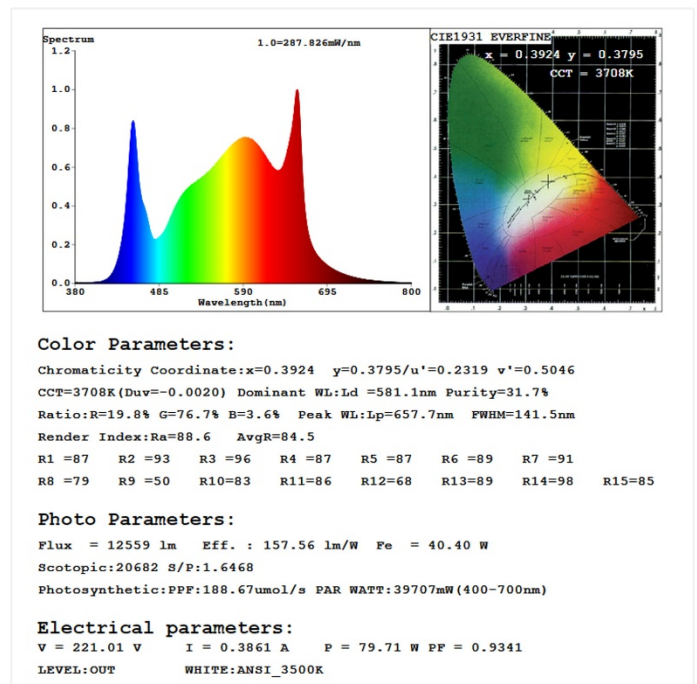
The same distance from the plant canopy 0.5m, coverage 0.75x1.3m

LED plant grow bars with a pitch of 0.75m can achieve uniform illumination

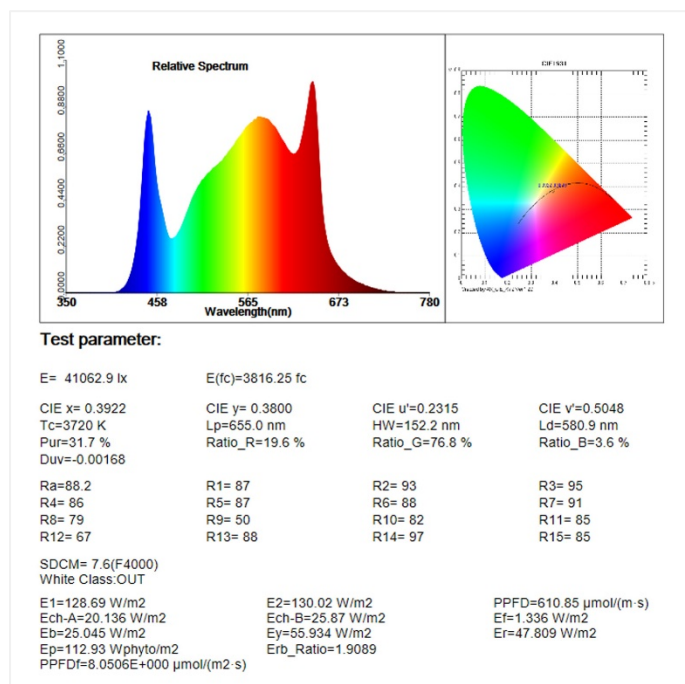
● Testing report



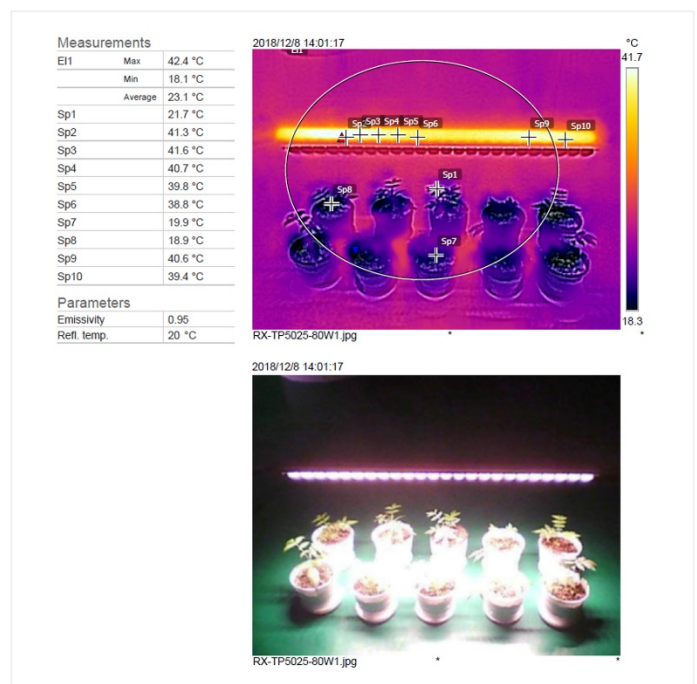
RX-TP5025-60D-80W-SV2 PPF PAR TEST



RX-TP5025-80W-90D-V2 PPF PAR TEST



RX-TP5025-80W-60D V2 0.2m PPFD TEST



Surface temperature Test

- Packing List Package includes the following items



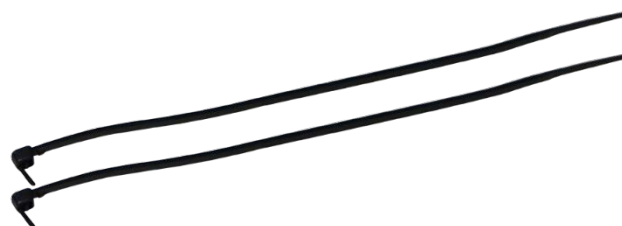
LED grow light bar 1pcs



L-type hex wrench 1pcs
Suspension bolts 2pcs



1.5m Steel cable 2pcs
Side Exit Grippers 2pcs
Double hole wire rope lock 2pcs



Plastic Wire Cable - Cable finishing and fixing 2pcs

● Suspension installation



1. The wire rope passes through the beam and is fixed by the Double hole wire rope lock (Cable Looping Gripper)



2. Rotate Fixed Side Exit Grippers to cable suspension bolts, Wire rope inserted into Side Exit Grippers



3. Hanging installation completed

Electrical installation instructions

1. When open the package, please check whether the inside is including product, accessory, label, certificate quality. And please assure that the light is perfect without any damage.
2. The wires of LED Light is three-core, the standard size of the wire is $3 \times 1\text{mm}^2$ or $3 \times 1.5\text{mm}^2$ and the outer diameter is $\Phi 7 \sim 12\text{mm}$, brown wire is live line, blue wire is null line, yellow & green is ground line.
3. LED Light will work when the voltage up to rated voltage, so please be sure the voltage within the requested range, or it will damage the light which can't be repaired.
4. when the electrical continuity is connected, the lead wire should be in electric insulating The way of connect wire:



Attention

1. In order to make sure the light can work safety and stability, the ground line should be connected the earth.
2. When connecting the wires please turn off the power, and check whether the wires are connected correctly. Never connect the wires in opposite way, or the power should not be turned on.
3. Please keeping the trip bolt being fastening and reliable, in case of the light fall down of looseness.
4. When finishing connect the wires, please use the insulation gummed tape to convolve the wires, confirm the insulation and solve the waterproof problem.