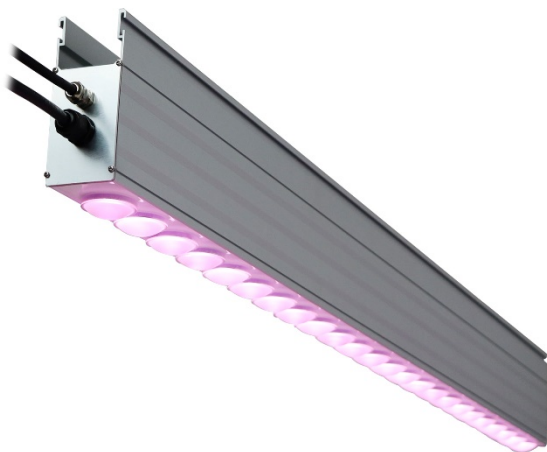


Description: RX-TP12050 Toplighting LED Grow Module, New patent design product with unique lens, Different LED chips in one lens, Concentrating Light efficiently and More uniform spectral radiation, directional light ,higher light utilization efficiency, more efficient comparing with common grow lights. Silicone Potted waterproof, more reliable. Suitable for various kinds of plant cultivation (dedicated light recipes) , High wire vegetables, vegetable cultivation, flower cultivation, ornamental plant cultivation, succulent plant cultivation, medicinal plant cultivation.



1. LED toplighting solution for greenhouse growers, 40x40mm C-profile for easy installation
2. Different LED chips in one lens, More uniform spectral radiation, higher light utilization efficiency
3. German brand horticulture LED, Whole lights effect 2.3umol/J, High efficiency and more reliable
4. Meanwell power supply for longer life and reliability, Dimmable plant light
5. Preferred plant-specific spectra, multiple light-recipe to meet different plant requirements. (Customize the spectrum you need)
6. Discard the traditional fan cooling solution (as a result of fan lights affect the life span of life)
7. Waterproof IP65
8. Input: AC100~305V PF >0.9
9. Meet the safety requirements around the world, CE RoHS FCC

Model	Dimension LxWxH	Spectral Wavelength	Photon PPFD μmol/m²/s	Luminous flux Radiation Power	Power Input	Comment
RX-TP12050-F4	1206x51x122mm	F4	608μmol @0.5m 37509Lx	Flux: 27274Lm	220W	2umol/J White LED use XTE lamp seedling, rhizome plants
			264μmol @1m 16104Lx	PPF:428umol/s		
			80μmol @2m 4757Lx	PAR: 91806mW		
RX-TP12050-F5	1206x51x122mm	F5	750μmol @0.5m 20500Lx*	Flux: 13211Lm	200W	2.3umol/J Red and blue 4:1 universal tomato, loofah, flower
			328μmol @1m 8949Lx	PPF:469umol/s		
			102μmol @2m 2555Lx	PAR: 97334mW		
RX-TP12050-F6	1206x51x122mm	F6	730μmol @0.5m 18300Lx*	Flux: 11553Lm	200W	2.3umol/J Red and blue 4:1 Add far red FR730nm spectrum
			318μmol @1m 7968Lx	PPF: 465umol/s		
			100μmol @2m 2285Lx	PAR: 95893mW		

Surface temperature rise Tc 31K , Operating temperature: -30°C ~ 40°C , Lifespan: 35,000 hours (Note: Ta 25°C)

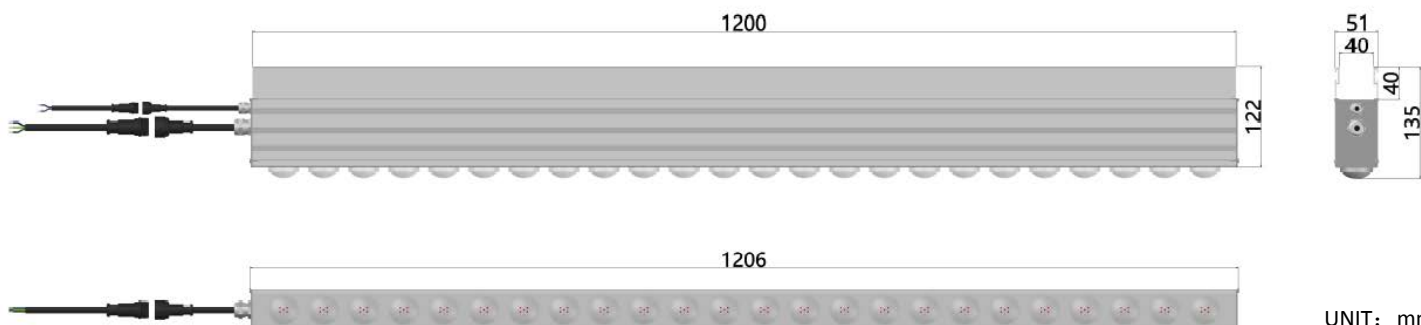
Tolerance range for optical and electrical data: ±10 % . Light emitting angle: 60 °

Recommended irradiation distance 0.5 ~ 2m

The above data is for reference only!

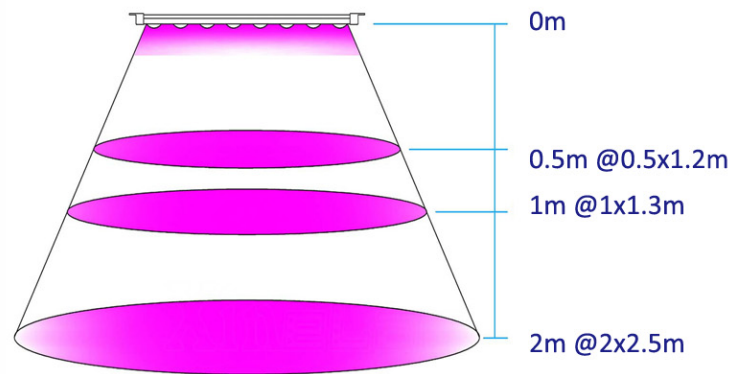
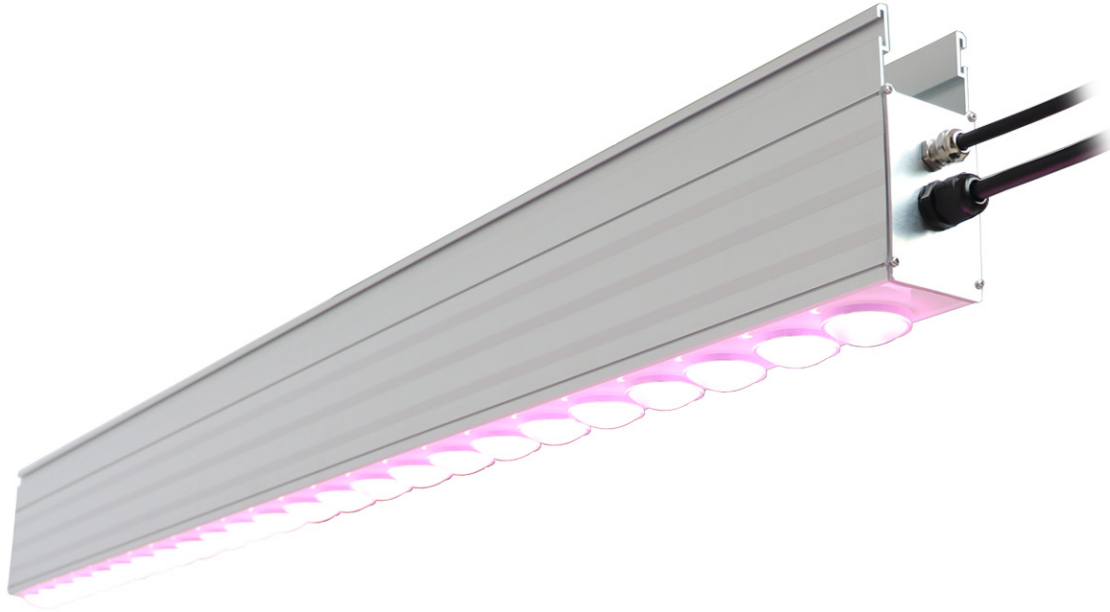
*Exceed the test equipment test range, estimated value!

● Dimension:



UNIT: mm

- 60D Depth distance & Coverage:



Note: The illuminance at the edge of the coverage area is approximately 50% of the center value.

- Different LED chips in one lens, More uniform spectral radiation, higher light utilization efficiency; C-profile design, used for plant greenhouse toplighting, easy to install, German brand plant lights dedicated horticulture LED, high efficiency and high reliability.



Different LED in one lens More uniform Light
Concentrating Light efficiently higher light utilization efficiency

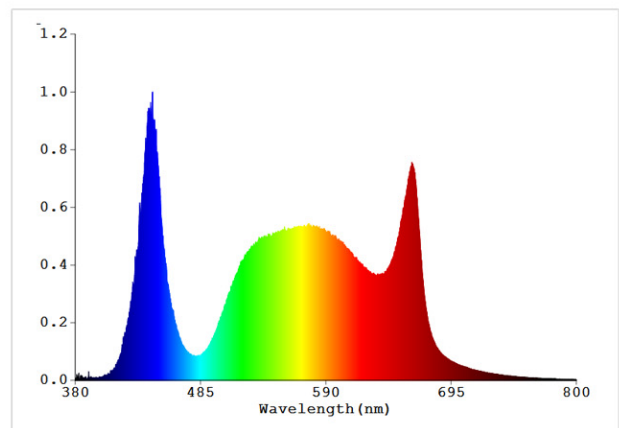
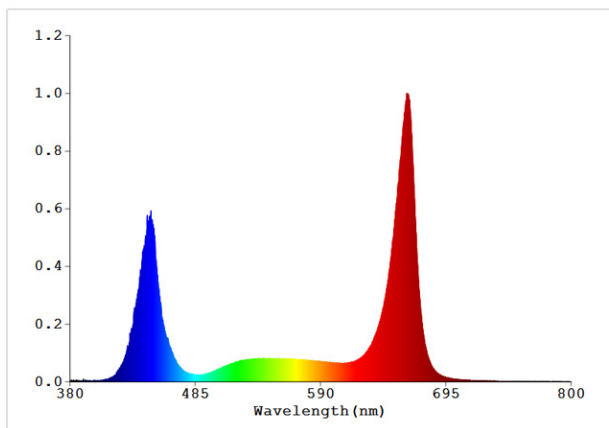
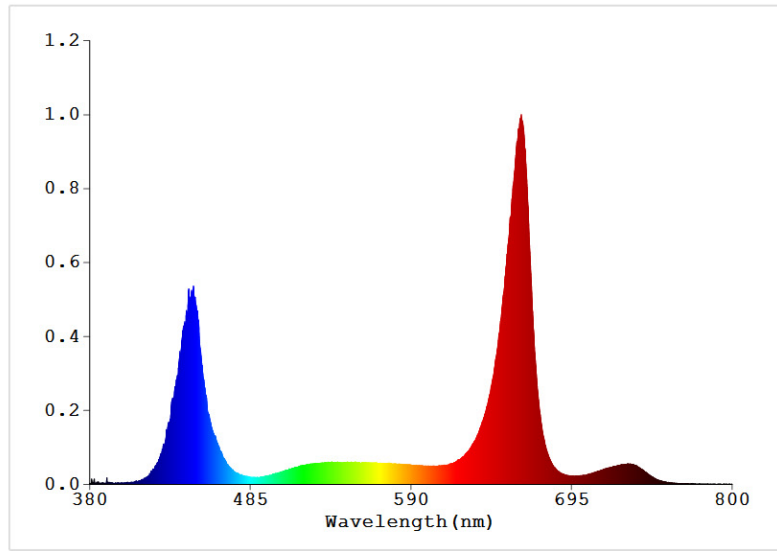


C-profile design
Greenhouse toplighting

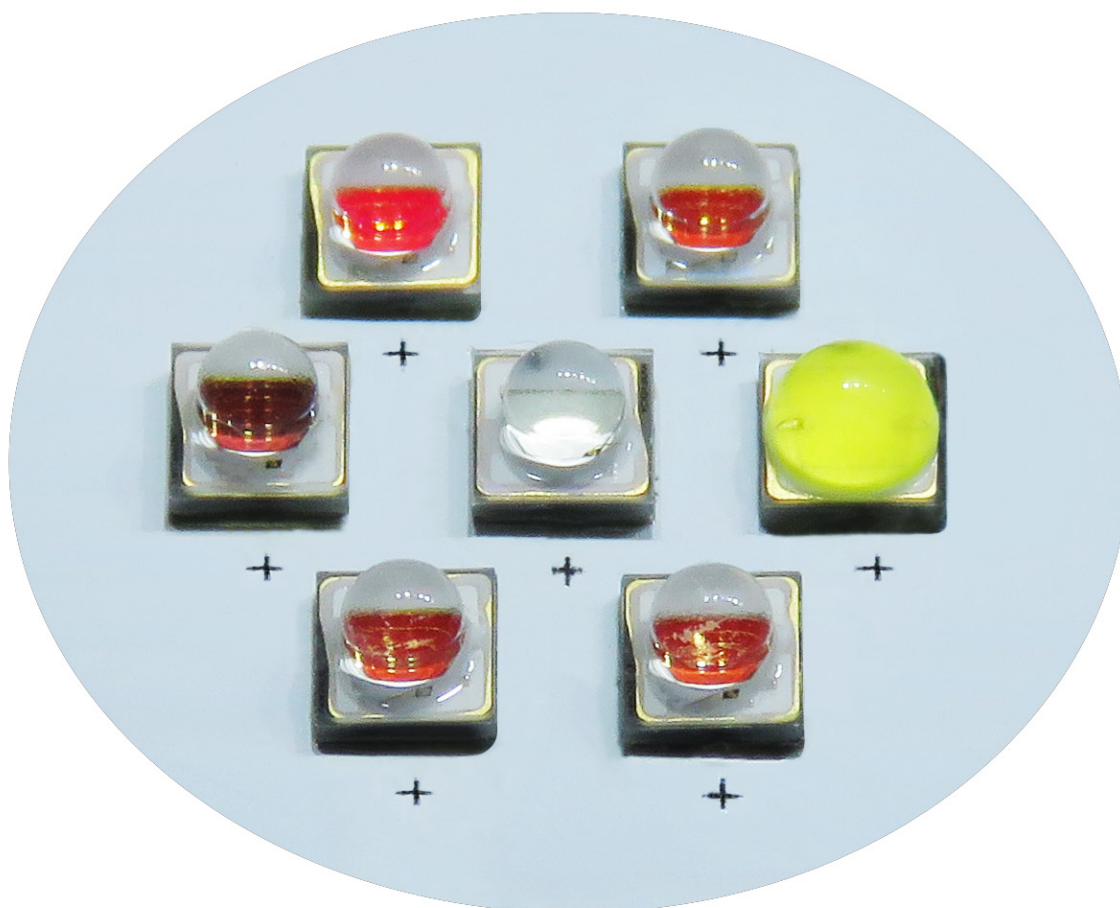


German brand horticulture LED

- Preferred plant-specific spectra, multiple light-recipe to meet different plant requirements. (Customize the spectrum you need); F4 spectrum is used for seedling, which is good for root growth, F5 spectrum is suitable for most plant vegetative growth, F6 spectrum increases far red FR730nm spectrum, regulates Plant photoperiod, Can be used for flower plants.



- German brand horticultural LED(Deep Blue,Far Red, Hyper Red), high efficiency and high reliability



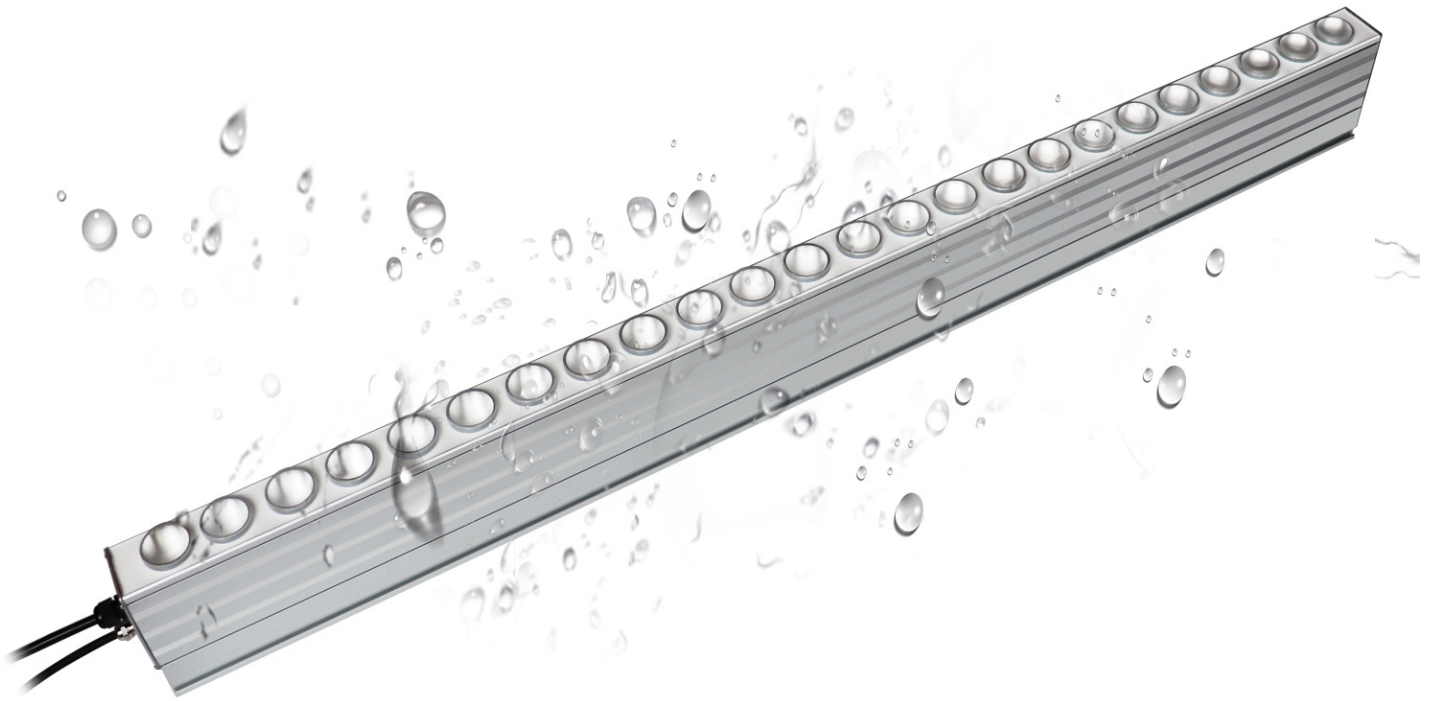
German brand horticultural LED(Deep Blue,Far Red, Hyper Red)
high efficiency and high reliability

- Built-in Meanwell power supply, dimmable, waterproof, high reliability, 3 in 1 dimming function (0~10VDC, PWM signal, or resistance) Input 100 ~305VAC



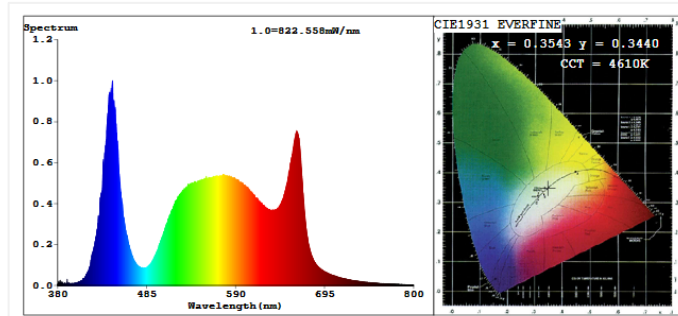
Meanwell power supply, dimmable, waterproof, high reliability
3 in 1 dimming function (0~10VDC, PWM signal, or resistance)

- Waterproof IP65



Waterproof IP65, Protected against dust ingress, Protected against low pressure water jets from any direction, Limited ingress permitted.

Testing report



Color Parameters:

Chromaticity Coordinate: $x=0.3543$ $y=0.3440$ $u'=0.2208$ $v'=0.4823$
 CCT=4610K (Duv=-0.0075) Dominant WL:Ld=586.5nm Purity=9.5%
 Ratio:R=16.8% G=80.4% B=2.8% Peak WL:Lp=444.7nm FWHM=21.3nm
 Render Index:Ra=79.8 AvgR=75.5
 R1=83 R2=81 R3=76 R4=81 R5=82 R6=72 R7=82
 R8=81 R9=53 R10=54 R11=81 R12=54 R13=81 R14=86 R15=85

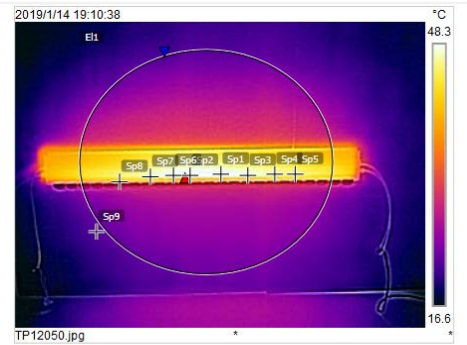
Photo Parameters:

Flux = 27274 lm Eff. : 123.23 lm/W Fe = 93.45 W
 Scotopic:46718 S/P:1.7129
 Photosynthetic:PPF:427.57umol/s PAR WATT:91806mW (400-700nm)

Electrical parameters:

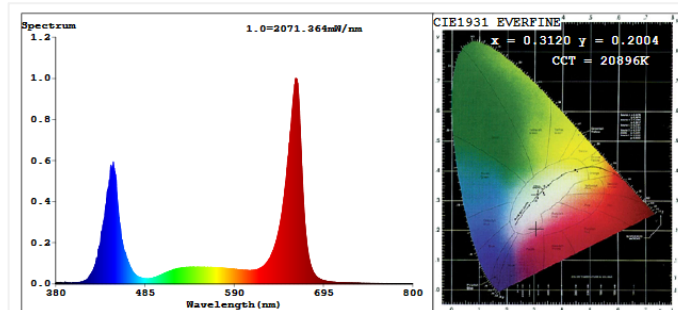
V = 231.53 V I = 0.9714 A P = 221.3 W PF = 0.9840
 LEVEL:OUT WHITE:OUT

Measurements		
EI1	Max	48.9 °C
	Min	18.0 °C
	Average	24.5 °C
Sp1		48.4 °C
Sp2		48.7 °C
Sp3		47.4 °C
Sp4		46.4 °C
Sp5		45.5 °C
Sp6		48.3 °C
Sp7		46.8 °C
Sp8		26.4 °C
Sp9		18.1 °C
Parameters		
Emissivity		0.95



RX-TP12050-F4 PPF PAR Test

Surface temperature Test



Color Parameters:

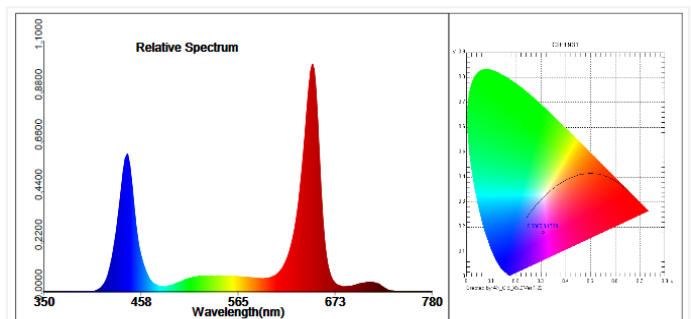
Chromaticity Coordinate: $x=0.3120$ $y=0.2004$ $u'=0.2611$ $v'=0.3772$
 CCT=20896K (Duv=-0.0814) Dominant WL:Ld=560.8nm Purity=46.6%
 Ratio:R=29.6% G=64.0% B=6.4% Peak WL:Lp=662.2nm FWHM=19.5nm
 Render Index:Ra=19.5 AvgR=19.3
 R1=0 R2=55 R3=5 R4=0 R5=8 R6=64 R7=24
 R8=0 R9=0 R10=31 R11=0 R12=60 R13=3 R14=40 R15=0

Photo Parameters:

Flux = 13211 lm Eff. : 66.88 lm/W Fe = 98.06 W
 Scotopic:33526 S/P:2.5378
 Photosynthetic:PPF:469.32umol/s PAR WATT:97334mW (400-700nm)

Electrical parameters:

V = 231.52 V I = 0.8697 A P = 197.5 W PF = 0.9810
 LEVEL:OUT WHITE:OUT



Test parameter:

E = 7968.3 lx E(fc) = 740.551 fc
 CIE x = 0.3085 CIE y = 0.1789 CIE u' = 0.2724 CIE v' = 0.3555
 Tc = 100000 K Lp = 661.0 nm HW = 22.3 nm Ld = 380.0 nm
 Pur = 42.9 % Ratio_R = 34.0 % Ratio_G = 58.7 % Ratio_B = 7.3 %
 Duv = -0.09626
 Ra = -17.6 R1 = -42 R2 = 36 R3 = -2
 R4 = -45 R5 = -16 R6 = 52 R7 = 18
 R8 = -141 R9 = -543 R10 = -7 R11 = -56
 R12 = 47 R13 = -27 R14 = 34 R15 = -124
 SDCM = 69.8 (F5000) White Class: OUT
 E1 = 66.007 W/m2 E2 = 68.02 W/m2 PPFD = 318.47 umol/(m·s)
 Ech-A = 24.77 W/m2 Ech-B = 18.907 W/m2 Ef = 2.0154 W/m2
 Eb = 20.666 W/m2 Ey = 8.1998 W/m2 Er = 37.152 W/m2
 Ep = 57.479 W/m2 Erb_Ratio = 1.7977
 PPFDf = 1.2284E+001 umol/(m2·s)

RX-TP12050-F5 PPF PAR Test

318umol/m²/s RX-TP12050-F6 1m PPFD Test

● Packing List Package includes the following items



Koray LED grow toplighting bar 1pcs



Stainless steel cable ties 2pcs

Plastic Wire Cable 2pcs It is only for fixed use during installation, not for long-term fixture.

● Type description



TYPE A

One input wire

three core input waterproof plug wire; two core dimming waterproof plug wire



TYPE B

Head and tail wires for series connection, maximum series current 14A, AC120V input, maximum series connection number 6pcs. AC230V input, maximum number of series 12 pcs.

- Optional accessories(Need extra purchase)



T Type waterproof IP68 Electrical Cable Wire 3-pin Connector

Waterproof IP68 Electrical Cable Wire 3-pin Connector

Waterproof IP68 Electrical Cable Wire 2-pin Connector

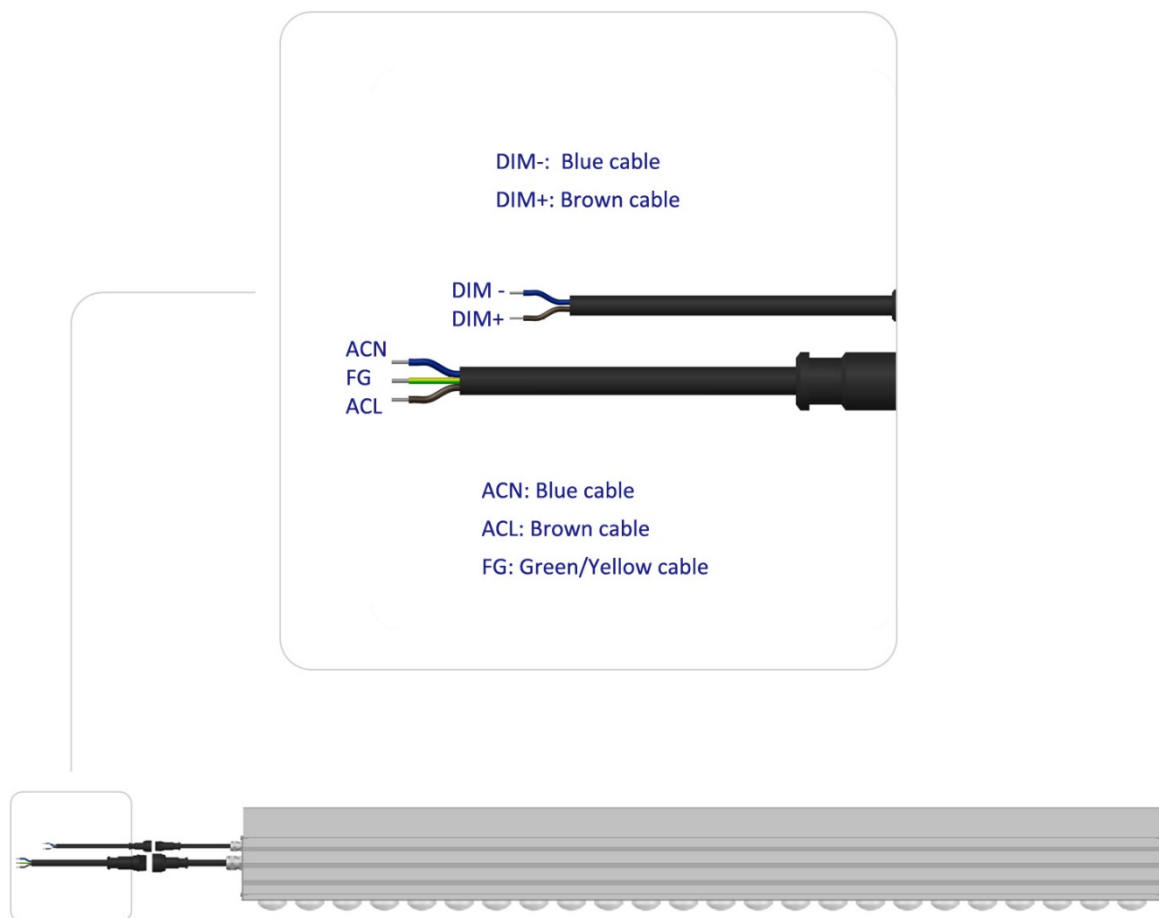
- Installation diagram, for reference only



Installed with Stainless Steel Square Clamp Bolt

● Electronic 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.