[Only for growers with a legal license!]

LED Marijuana(cannabis) plant light, Large size, High power, High PAR output,Waterproof

MODEL: RX-TP5025T-120Z series www.koraylight.com www.xinelam.com

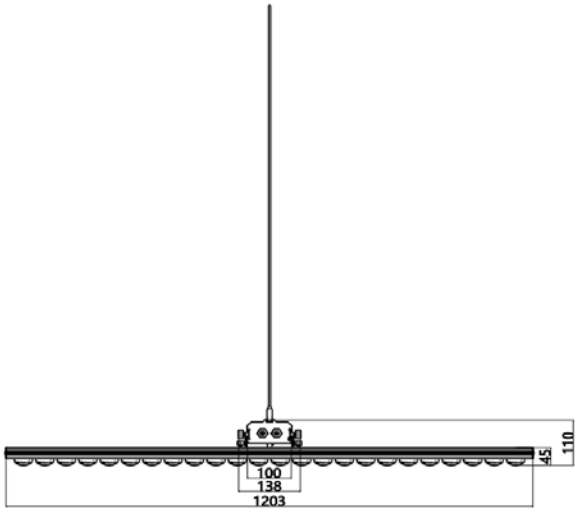
Description: RX-TP5025T-120Z medical plant growth module array lamp, Koray LED Grow Lights, New patent design product with unique lens, Different LED chips in one lens, Concentrating Light efficiently and More uniform spectral radiation, directional light ,higher light utilization efficiency, more efficient comparing with common grow lights. Specially designed for medicinal planting, high PAR output, optimal plant-specific spectrum, from UV to Far red, to meet the light requirements of medicinal plants, fully stimulate medicinal ingredients. It is especially used for indoor planting of medicinal plants, planting planting tents, and scientifically experimenting planting.

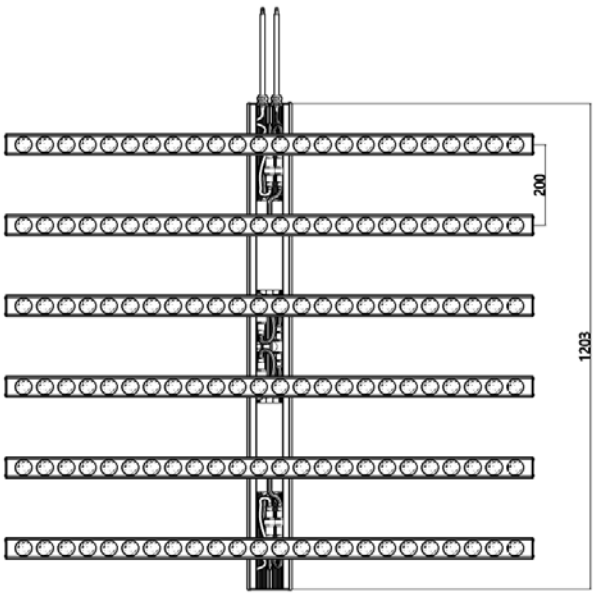
1. Basement, grow tent planting medicinal plants
2. Large size 1.2x1.2m (4'x4'), multiple Bar arrays, uniform spectral radiation
3. High PAR output, PPFD>650μmol/m²/s, 1.2x1.2m Average value
4. Dedicated to medicinal and medical plant growth
5. Dimming Meanwell LED Power, long life more reliable
6. Waterproof IP65, Can be used in humid environments
7. Input: AC100~305V, PF >0.9 Powr:480W
8. Long life up to 50,000 hours
9. CE RoHS FCC

Model	Dimension LxWxH	Spectral Wavelength	Photon PPFD μmol/m²/s	Luminous flux PAR Output	Power Input AC230V	Comment
RX-TP5025T-D90	120x120x11cm	V2	682μmol @0.15m 603μmol @0.2m 541μmol @0.3m	Flux 76600Lm PPF: 1146umol/s PAR: 240000mW	480W	Light emission angle: 90° Recommended irradiation distance 15cm Ra88 2.4umol/J
RX-TP5025T-D60		SV2	878μmol @0.15m * 659μmol @0.2m 541μmol @0.3m	Flux 63500Lm PPF: 1000umol/s PAR: 210000mW	480W	Light emission angle: 60° Recommended irradiation distance 20cm Add small UV spectrum
Surface temperature rise Tc 18° K , Operating temperature: -30° C ~ 40° C , Lifespan: 50,000 hours (Note: Ta ≤ 25° C) Tolerance range for optical and electrical data: ±10 %. Recommended irradiation distance 0.15 ~ 0.3m; PPFD test: Irradiation area 1.2x1.2m, divided into 36 areas, the average value of the test data .* D60 H 0.15m Uniformity is not good!						

（Total PAR output: It is calculated by a single LED module）The above data is for reference only!

Dimension:

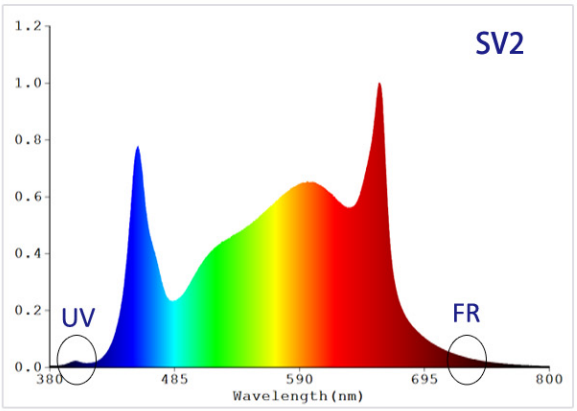




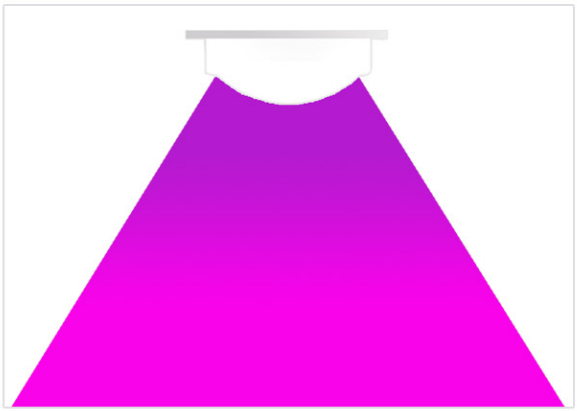
Unit:mm

- Different LED chips in one lens, Spectral radiation uniform, Lens + Reflector cup, Concentrating radiation, Higher light utilization, energy saving 10-50%

Different LED in one lens More uniform Light



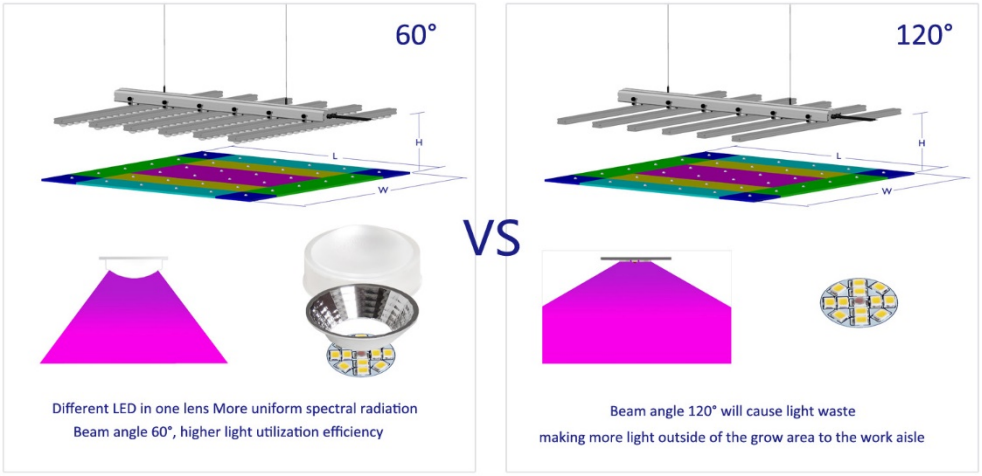
Effective light recipe covers UV~FR
Creating more medicinal ingredients

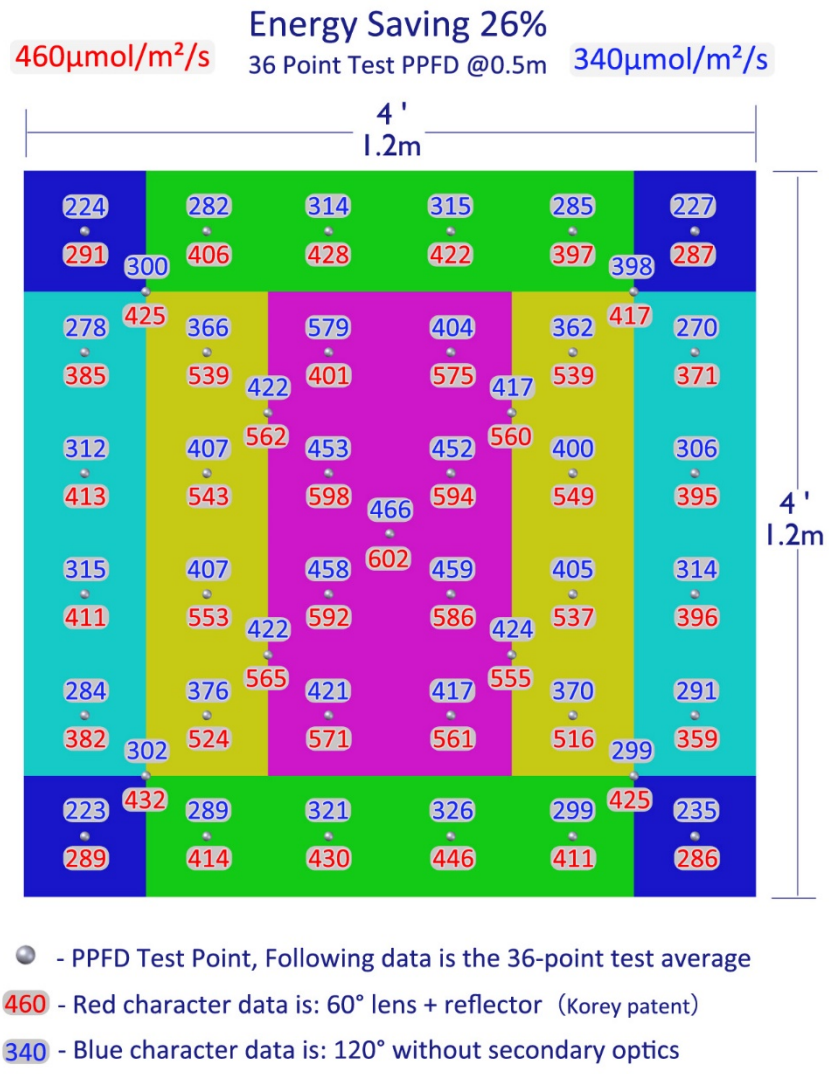


Concentrating Light efficiently
higher light utilization efficiency

Note:The preferred Plant light recipes more effective nutrients for plants
Different LED in one lens more uniform light
Effective light recipe covers UV~FR creating more medicinal ingredients
Concentrating light efficiently higher utilization efficiency

- Comparative test, test height 0.5M, cover area 1.2x1.2m; Koray lens reflector cup structure plant grow lamp, PPFD average, compared with of no reflector lens LED grow light, energy saving 26%





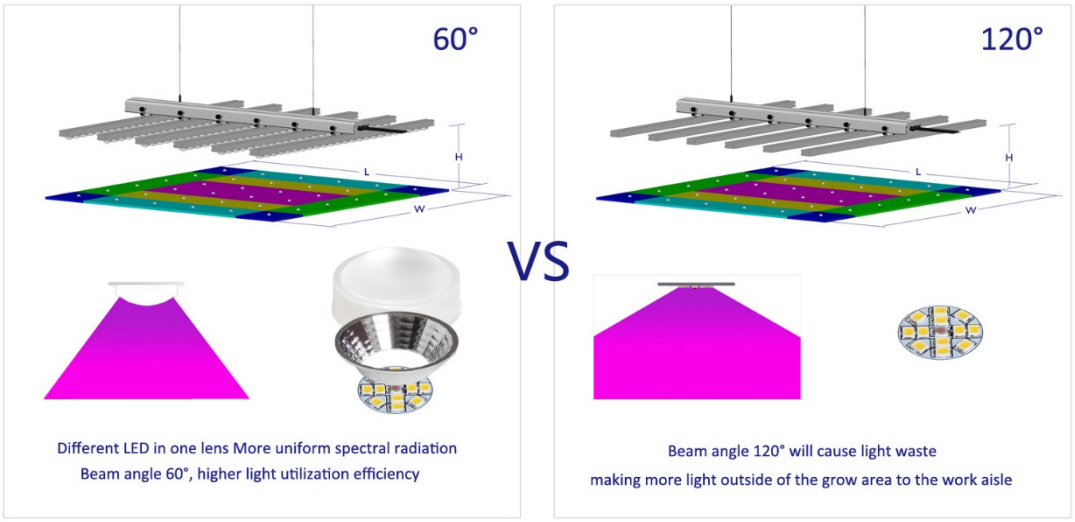
Note: The test luminaire power is the same as 480W, the spectrum is the same as SV2; the lens-free reflector plant light effect is up to 2.5umol / J, which is higher than the lens reflector product, but within the same illumination Range, the plant needs PPFD Photosynthetic photon flux density is much lower than lens reflector products.

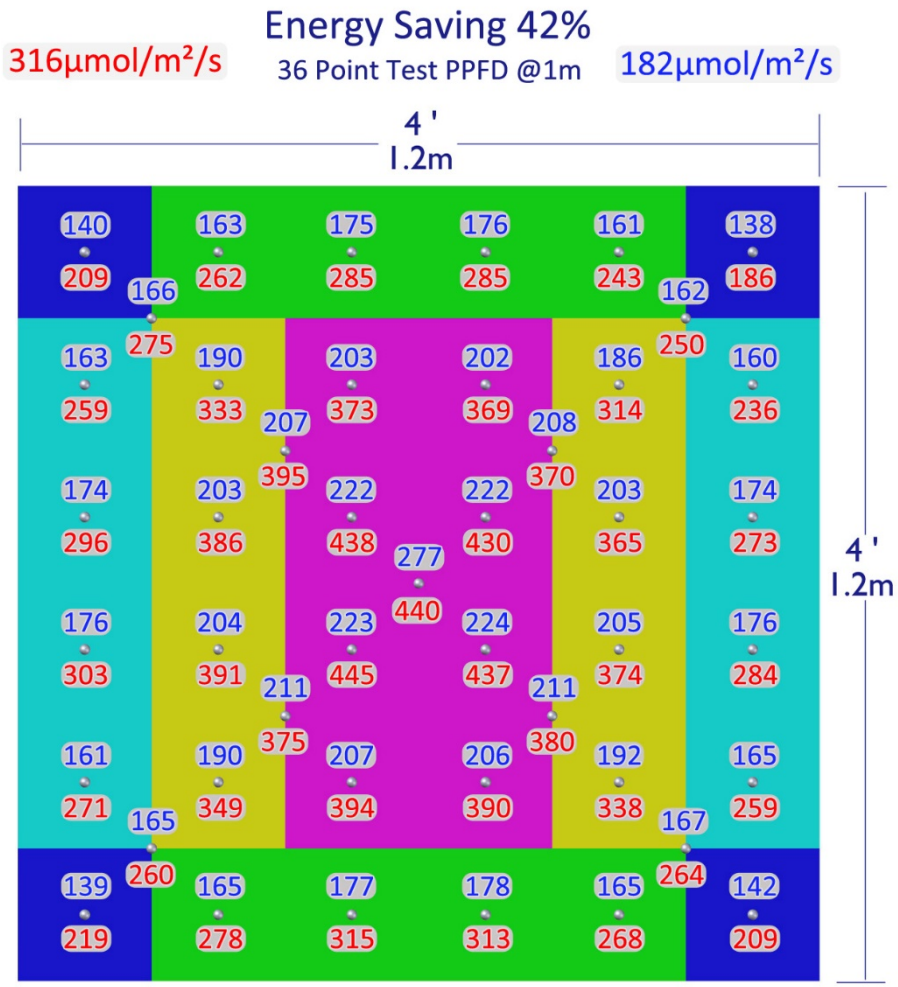
PPF is high, if the photon can not be more exposed to the plant canopy, then high PPF is useless; PPFD is the key parameter to

measure the effectiveness of plant lights!

The IES photometric test can calculate the illuminance value of each point, and we still use a more intuitive test method to compare. More in line with the actual planting environment.

- Comparative test, test height 1M, cover area 1.2x1.2m; Koray lens reflector cup structure plant grow lamp, PPFD average, compared with of no reflector lens LED grow light, energy saving 42%



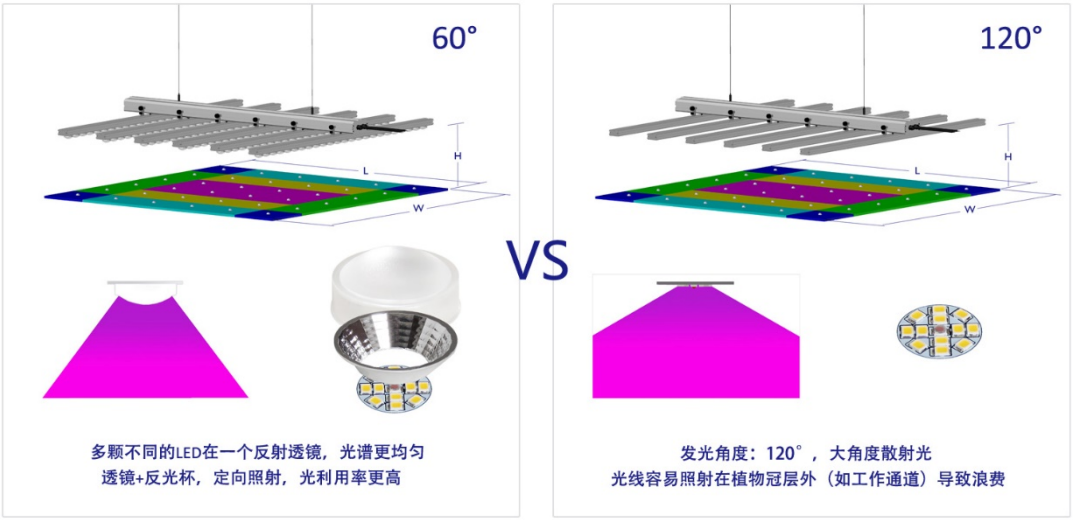


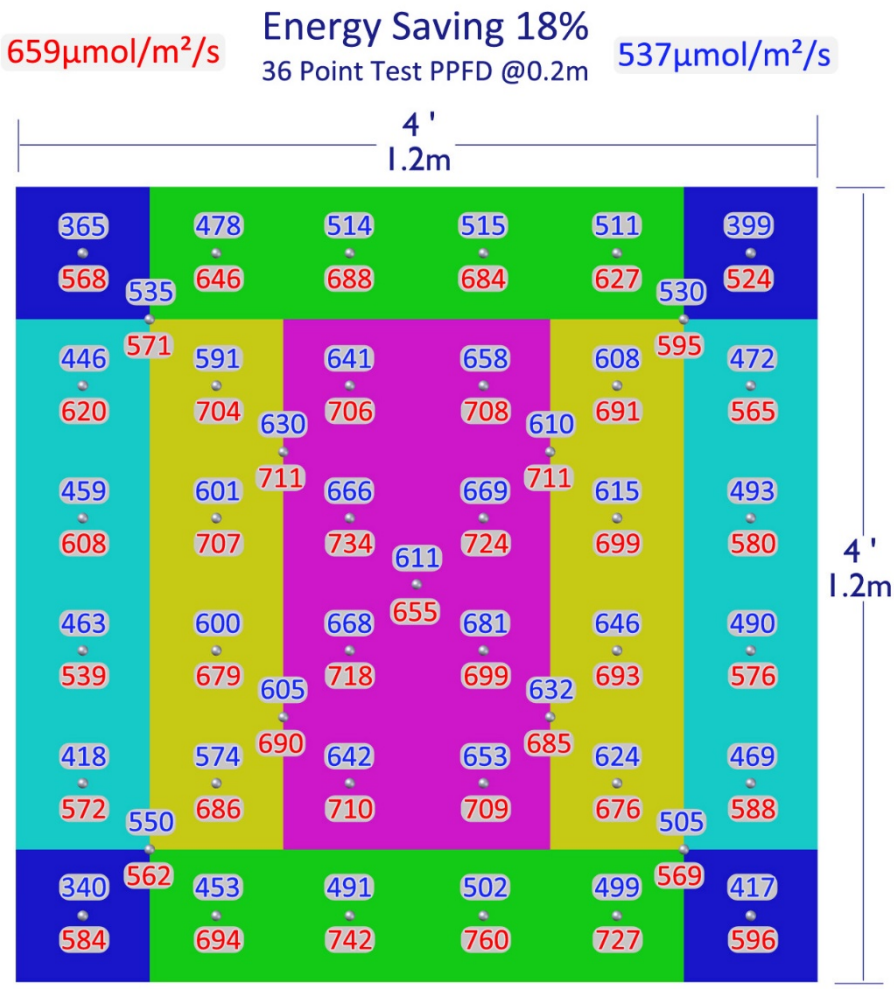
Koray LED grow plant light, using multiple different LEDs in a reflective lens, more uniform spectrum, lens + reflector, directional

illumination, higher light utilization

Traditional grow plant lights, angle of illumination: 120°, large angles of scattered light, light easily illuminate outside the canopy of the plant (such as the working channel) resulting in waste.

- Comparative test, test height 0.2M, cover area 1.2x1.2m; Koray lens reflector cup structure plant grow lamp, PPFD average, compared with of no reflector lens LED grow light, energy saving 42%





- PPFD Test Point, Following data is the 36-point test average

659 - Red character data is: 60° lens + reflector (Korey patent)

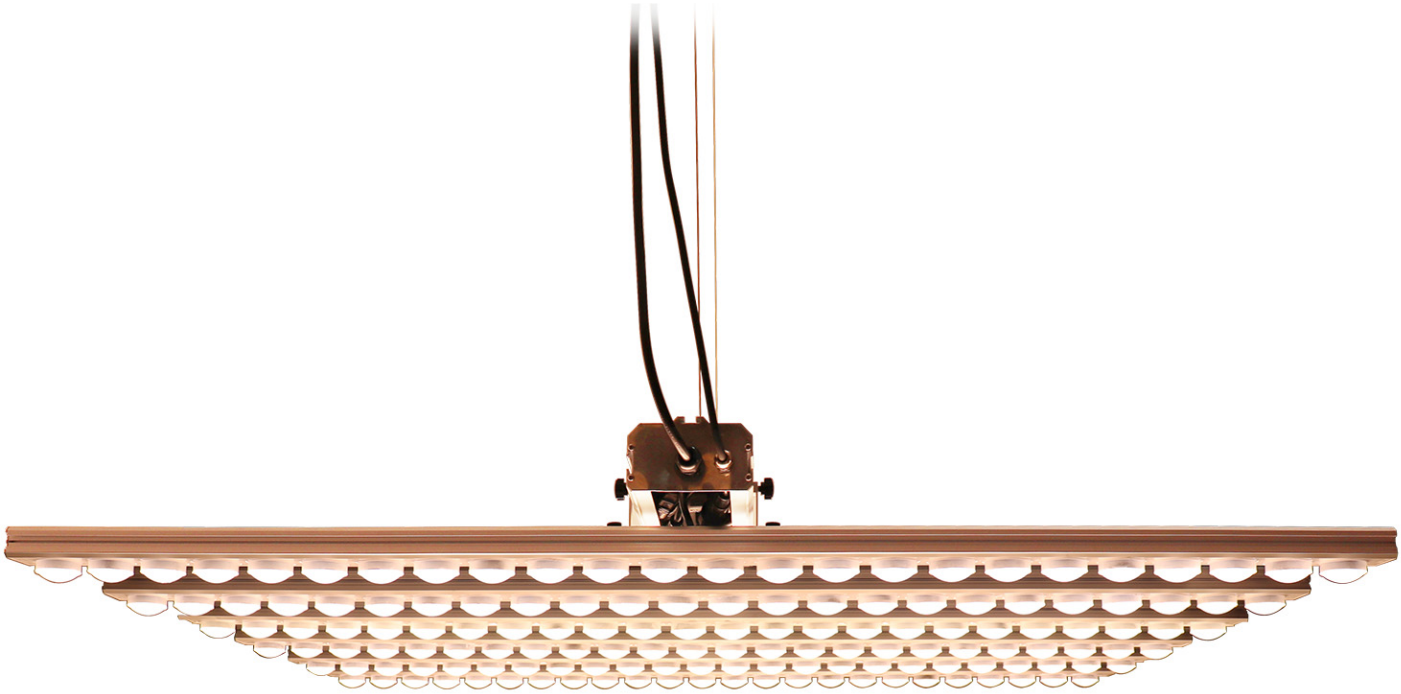
537 - Blue character data is: 120° without secondary optics

Koray LED grow plant light, using multiple different LEDs in a reflective lens, more uniform spectrum, lens + reflector, directional

illumination, higher light utilization

Traditional grow plant lights, angle of illumination: 120°, large angles of scattered light, light easily illuminate outside the canopy of the plant (such as the working channel) resulting in waste.

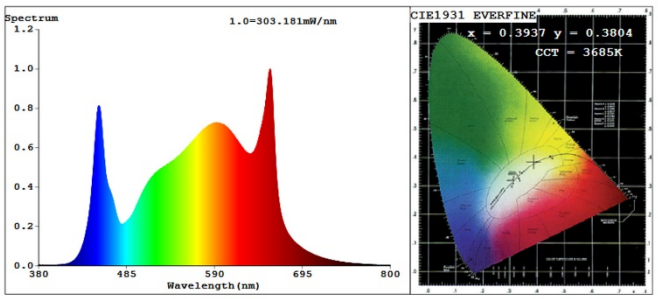
- High efficiency, large size, waterproof, suitable for basement, plant tents, multi-layer planting medicinal plants



This Products is intended for those people who have a valid license from their government to grow Medicinal plants for medical use.

- High efficiency up to 2.4μmol/J, High PAR output, PPFD>600μmol@ 8" (20cm) dedicated to medical medicinal plant growth

Testing report



Color Parameters:

Chromaticity Coordinate:x=0.3937 y=0.3804/u'=0.2324 v'=0.5051
CCT=3685K(Duv=-0.0019) Dominant WL:Ld =581.2nm Purity=32.3%
Ratio:R=19.9% G=76.6% B=3.5% Peak WL:Lp=656.7nm FWHM=135.7nm
Render Index:Ra=88.7 AvgR=84.7

R1 =88	R2 =93	R3 =95	R4 =87	R5 =87	R6 =89	R7 =91	
R8 =80	R9 =52	R10=83	R11=87	R12=68	R13=89	R14=97	R15=85

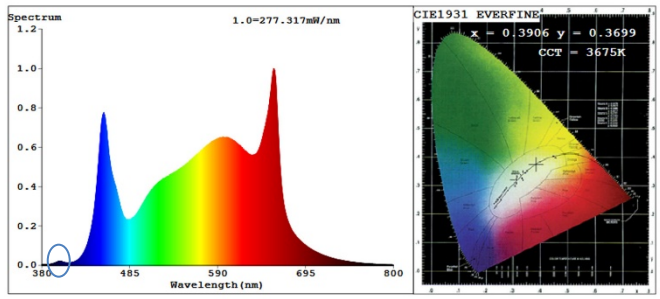
Photo Parameters:

Flux = 12780 lm Eff 191μmol/s 80W 97 W
Scotopic:20933 S/P:1.6
Photosynthetic:PPF:191.41umol/s PAR WATT:40275mW(400-700nm)

Electrical parameters:

V = 220.80 V I = 0.3891 A P = 80.32 W PF = 0.9350
LEVEL:OUT WHITE:ANSI_3500K

RX-TP5025T-D60-V2 80W/One Module TEST



Color Parameters:

Chromaticity Coordinate:x=0.3906 y=0.3699/u'=0.2347 v'=0.5001
CCT=3675K(Duv=-0.0060) Dominant WL:Ld =583.6nm Purity=28.2%
Ratio:R=20.8% G=75.2% B=4.0% Peak WL:Lp=657.0nm FWHM=116.7nm
Render Index:Ra=93.3 AvgR=91.1

R1 =94	R2 =97	R3 =97	R4 =91	R5 =93	R6 =93	R7 =93	
R8 =88	R9 =75	R10=93	R11=91	R12=74	R13=95	R14=98	R15=94

Photo Parameters:

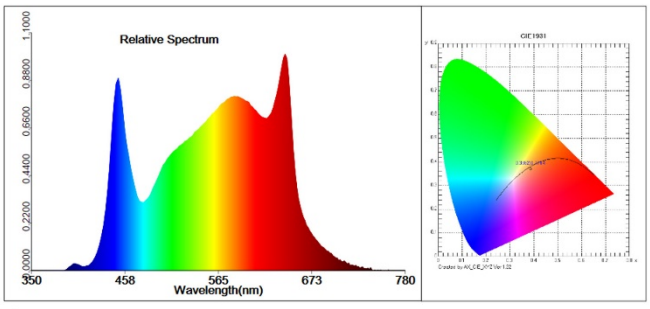
Flux = 10595 lm Eff 167μmol/s 80W 36 W
Scotopic:18045 S/P:1.7
Photosynthetic:PPF:167.13umol/s PAR WATT:35101mW(400-700nm)

Electrical parameters:

V = 231.73 V I = 0.3731 A P = 79.98 W PF = 0.9251
LEVEL:OUT WHITE:ANSI_3500K

RX-TP5025T-D90-SV2 80W/One Module TEST

SV2 Spectrum (Compared with V2 spectra, a small amount of UV was added)



Test parameter:

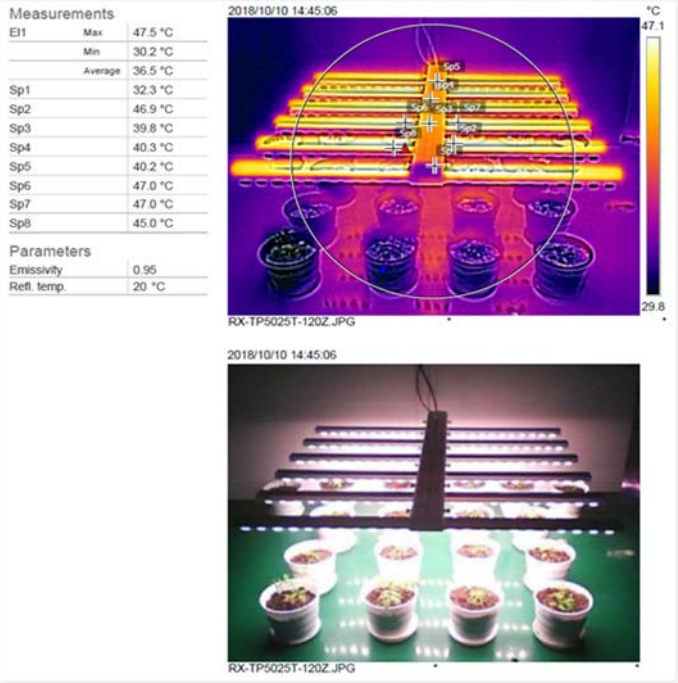
E= 70869.4 lx E(fc)=6586.38 fc

CIE x= 0.3862	CIE y= 0.3714	CIE u'=0.2311	CIE v'=0.5000
Tc=3802 K	Lp=656.0 nm	HW=155.6 nm	Ld=582.2 nm
Pur=27.3 %	Ratio_R=20.2 %	Ratio_G=75.6 %	Ratio_B=4.1 %
Duv=-0.00418			
Ra=92.8	R1= 93	R2= 97	R3= 97
R4= 91	R5= 92	R6= 93	R7= 93
R8= 86	R9= 70	R10= 91	R11= 91
R12= 73	R1	1098μmol/m²/s	R15= 92

SDCM= 7.6(F4000)
White Class:OUT

E1=231.54 W/m2	E2=235.46 W/m2	PPFD=1098.1 μmol/(m·s)
Ech-A=0.15906 W/m2	Ech-B=0.35924 W/m2	Ef=3.7335 W/m2
Eb=48.597 W/m2	Ey=95.424 W/m2	Er=87.696 W/m2
Ep=202.46 Wphyto/m2	Erb_Ratio=1.8045	
PPFDf=2.2551E+001 μmol/(m2·s)		

RX-TP5025-D60-SV2 PPFD TEST



Surface temperature Test

- 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

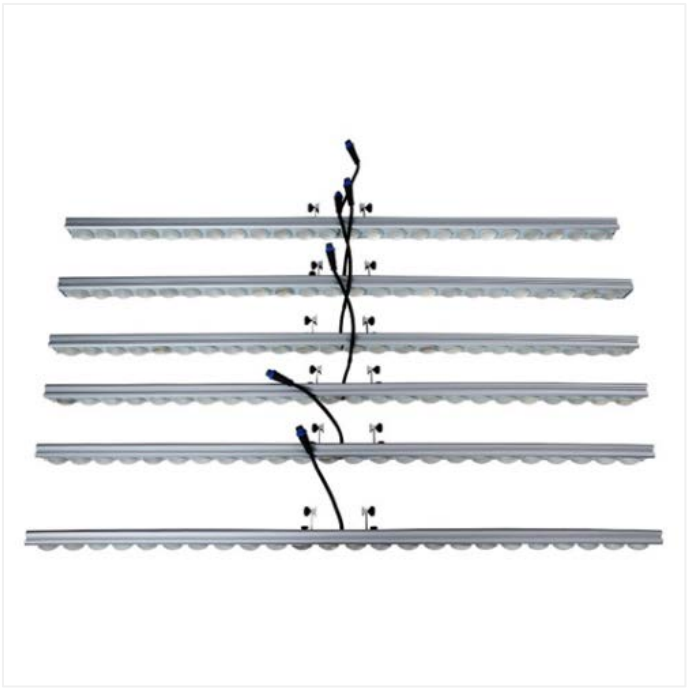
Koray LED grow lights - Waterproof design for indoor and outdoor use, also for wet environments
A fixture with an IP rating of 65 is protected against multi-directional, low-pressure water jets. In order to pass testing and achieve an IP65 rating, fixtures must be able to withstand water projected by a 0.25-inch nozzle. To achieve satisfactory results, this test must be run for a minimum of fifteen minutes, with the water source placed three yards from the fixture. Additionally,

the water pressure must be 30 kPa with water volume of 3.3 gallons per minute.

- Free dimmers 0-10V dimmer, note that the dimmer is not waterproof

If you need to connect to other dimming devices, you can cut the connecting wires, the blue wire is DIM+, and the gray wire is DIM-

Packing List Package includes the following items



LED grow light bar 6pcs

Power supply box & Lights bracket 1set

L-type hex wrench 1pcs
Plastic Wire Cable - Cable finishing and fixing 6pcs

Hang kits（Hanging installation kits）2set
1.5m Steel cable 2pcs
Side Exit Grippers 2pcs
Double hole wire rope lock 2pcs
Suspension bolts 2pcs

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

3. Wire rope inserted into Side Exit Grippers

4. Hanging on the beam frame

5. The connector of the LED plant light bar is inserted into the Power supply box & Lights bracket

6. Slide to the appropriate position and tighten the screws

7. Plug the LED plant light bar input plug into the power output plug. Tighten the waterproof plug wire nut.

8. Install 3 LED grow light bar on one side

9. Then carry out 3 LED plant light strips on the other side, tighten all the screws, and install them.

Plug cable selection

Note: Please select the appropriate power plug when ordering, please contact koray.

Turn on the lights renderings

No Flicker