

**Description:** RX-TP5025-120Z-2H Dual-channel plant grow array lights, Designed for medicinal plant growth, CHA vegetative growth, CHA and CHB for Flowering and maturity, The channel APPFD is up to  $500\mu\text{mol}/\text{m}^2/\text{s}$ , suitable for vegetative growth of medicinal plants, the light efficiency is up to  $900\mu\text{mol}/\text{J}$ , and the channel B is specially set with far red lamp beads for inducing flowering. The two channels are simultaneously opened, and the PPFD can be provided up to  $900\mu\text{mol}/\text{m}^2/\text{s}$ , rapid growth of medical plants



1. Plant lamp module for vegetative growth and flowering of medicinal plants
2. Unique lens structure - high efficiency concentrating, uniform spectral radiation, directional illumination, higher light utilization, PPFD increased by 30%, 560W equivalent to 700W
3. Channel A, extra red 660nm, spectrum suitable for vegetative growth
4. Channel B, additional dark red 660nm, far red 730nm, dedicated to flowering maturity
5. Waterproof design, waterproof rating IP65
6. Input voltage: 100-305V, power: 560W / AC230V, 580W / AC115V
7. CE RoHS FCC

Model	Dimension LxWxH	Spectral Wavelength	Photon PPFD $\mu\text{mol}/\text{m}^2/\text{s}$	Luminous flux Radiation Power	Power Input	Comment
RX-TP5025-120Z-2H	120x120x11cm 48" x48" x4.3"	CHA	604 $\mu\text{mol}@0.15\text{m}$ 39179Lm	Flux 53300Lm PPF: 816 $\mu\text{mol}/\text{s}$	335W AC230V	2.4 $\mu\text{mol}/\text{J}$ vegetative stage
			564 $\mu\text{mol}@0.2\text{m}$ 36754Lm			
			540 $\mu\text{mol}@0.3\text{m}$ 35137Lm			
		CHB	367 $\mu\text{mol}@0.15\text{m}$ 22771Lm	Flux 30000Lm PPF: 480 $\mu\text{mol}/\text{s}$	225W AC230V	2.1 $\mu\text{mol}/\text{J}$ flowering
			344 $\mu\text{mol}@0.2\text{m}$ 21411Lm			
			320 $\mu\text{mol}@0.3\text{m}$ 19916Lm			
		CHA+CHB	974 $\mu\text{mol}@0.15\text{m}$ 61988Lm	Flux 83500Lm PPF: 1296 $\mu\text{mol}/\text{s}$	560W AC230V	2.3 $\mu\text{mol}/\text{J}$ flowering stage
			929 $\mu\text{mol}@0.2\text{m}$ 59377Lm			
			855 $\mu\text{mol}@0.3\text{m}$ 54748Lm			

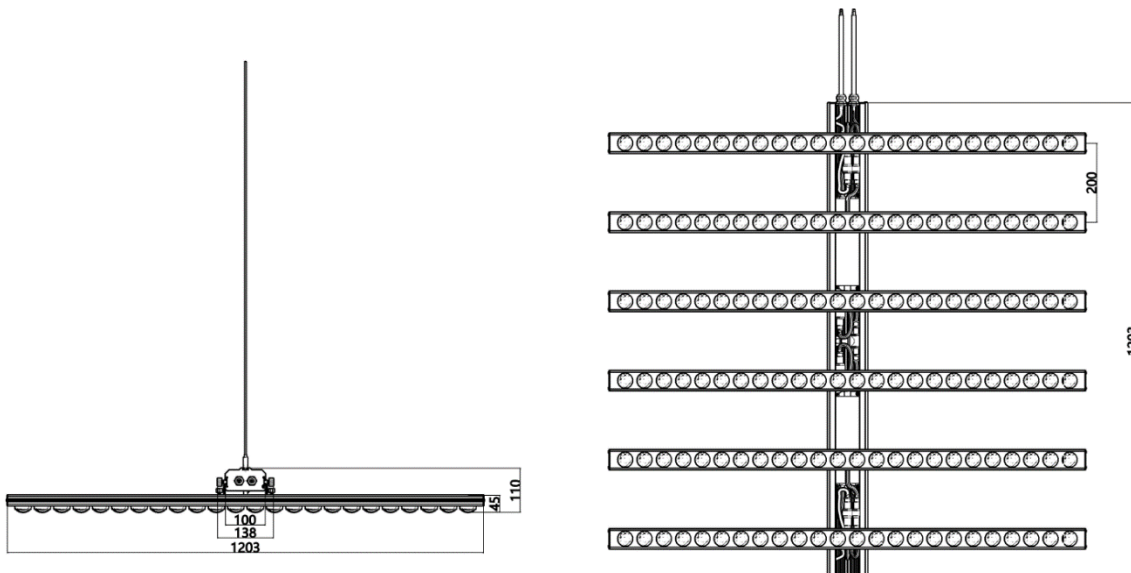
Surface temperature rise  $T_c$  20°K, Operating temperature: -30°C~40°C, Lifespan: 50,000 hours (Note:  $T_a$  25°C)

Tolerance range for optical and electrical data:  $\pm 10\%$ . PPF data is calculated for a single module test (1/6 Bar data)

Beam angle 90°, Recommended irradiation distance: 0.15~0.3m, illumination area 1.2x1.2m.

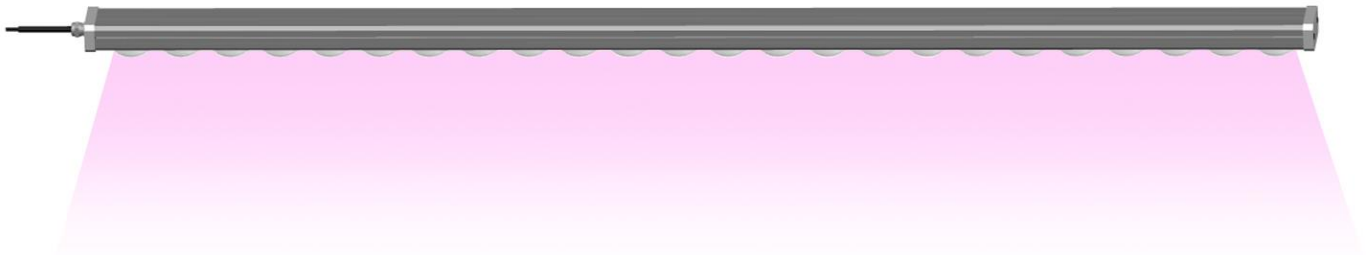
The above data is for reference only!

Dimension:



UNIT: mm

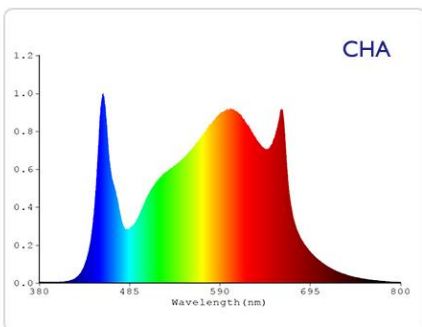
- Different LED chips in one lens, Spectral radiation uniform, Lens + Reflector cup, Concentrating radiation, Higher light utilization, energy saving 10-50%



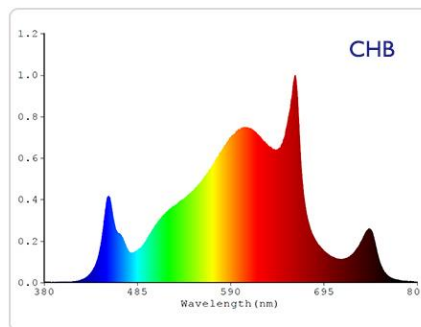
Different LED in one lens More uniform Light



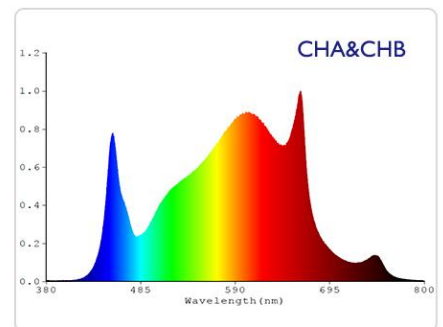
Concentrating Light efficiently higher light utilization effici



Vegetative growth

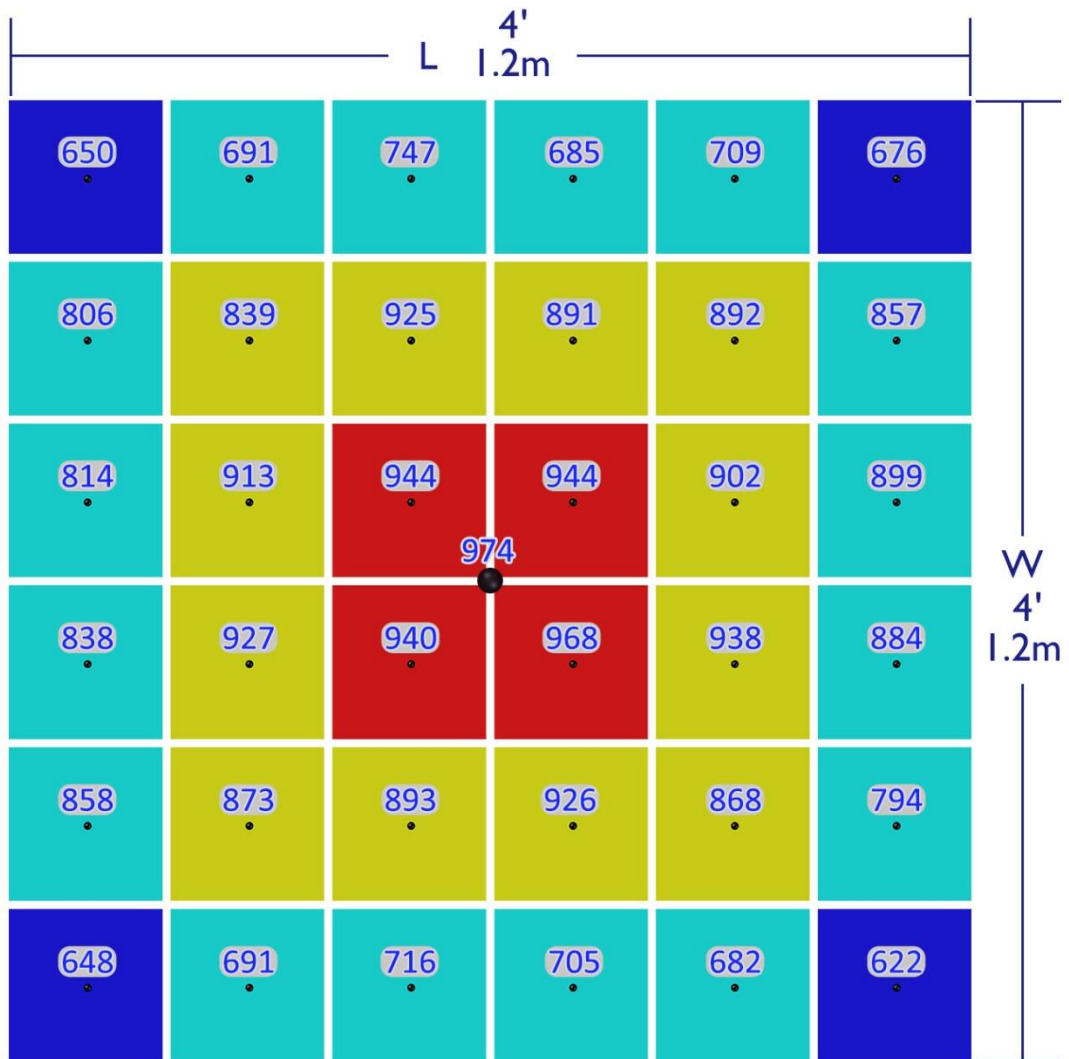
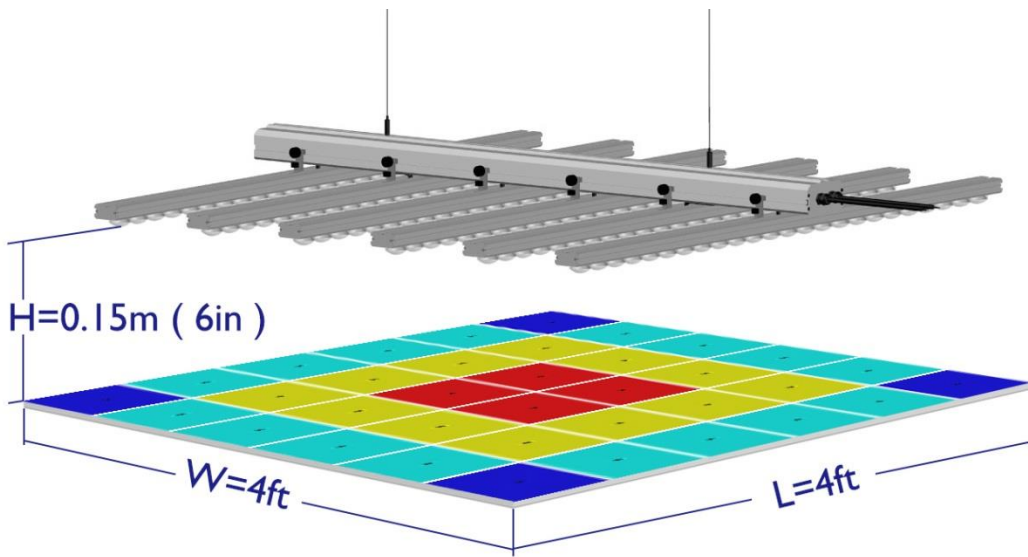


flowering



flowering stage

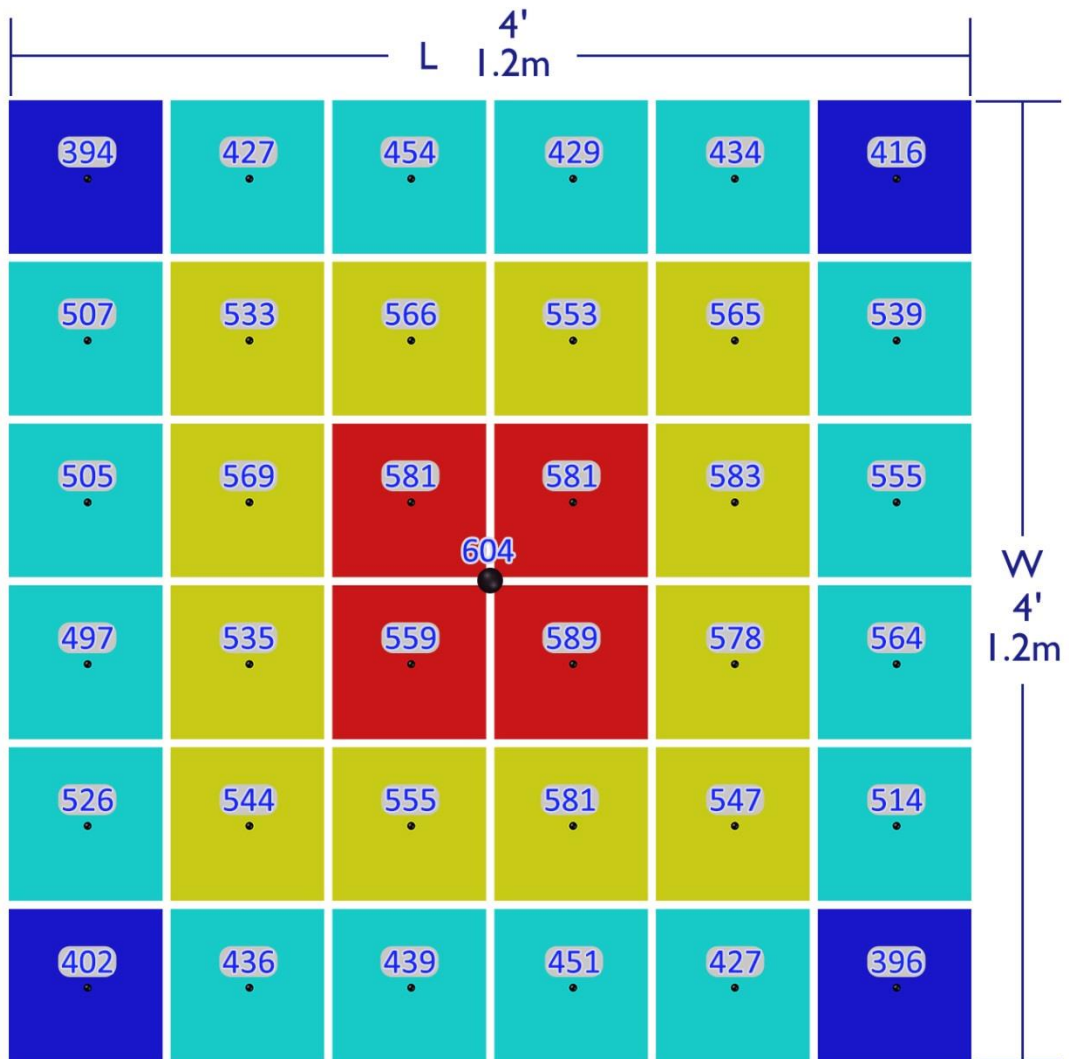
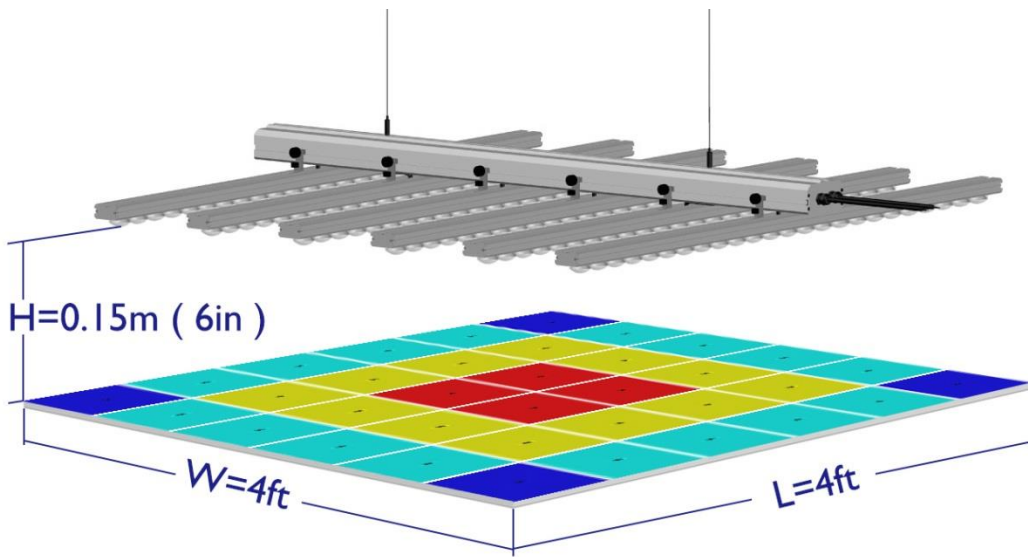
- RX-TP5025-120Z-2H CHA&CHB PPFD 36-point test, Coverage area: 48'' x 48'' (1.2m x 1.2m), Test height: 6'' (0.15m)



● PPFD Test Point

Center point PPFD: 974  $\mu\text{mol}/\text{m}^2/\text{s}$ , average PPFD: 825  $\mu\text{mol}/\text{m}^2/\text{s}$

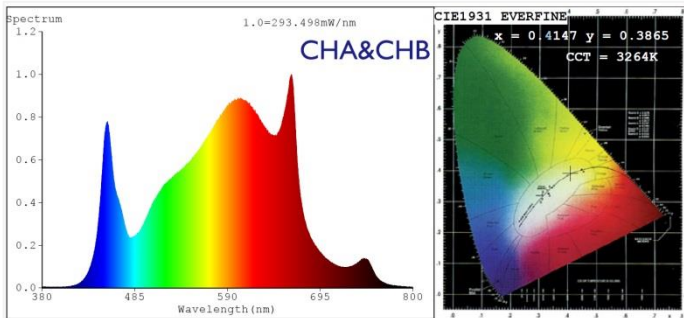
- RX-TP5025-120Z-2H CHA PPFD 36-point test,  
Coverage area: 48'' x 48'' (1.2m x 1.2m), Test height: 6'' (0.15m)



● PPFD Test Point

Center point PPFD:  $604 \mu\text{mol}/\text{m}^2/\text{s}$  , average PPFD:  $512 \mu\text{mol}/\text{m}^2/\text{s}$

### ● RX-TP5025-120Z-2H Testing report



#### Color Parameters:

Chromaticity Coordinate:  $x=0.4147$   $y=0.3865$   $u'=0.2436$   $v'=0.5109$   
 CCT=3264K (Duv=-0.0038) Dominant WL:Ld =583.4nm Purity=40.5%  
 Ratio:R=22.3% G=74.4% B=3.3% Peak WL:Lp=662.6nm FWHM=148.7nm  
 Render Index:Ra=89.9 AvgR=86.5  
 R1 =90 R2 =96 R3 =97 R4 =88 R5 =90 R6 =93 R7 =89  
 R8 =77 R9 =50 R10=89 R11=88 R12=74 R13=92 R14=99 R15=87

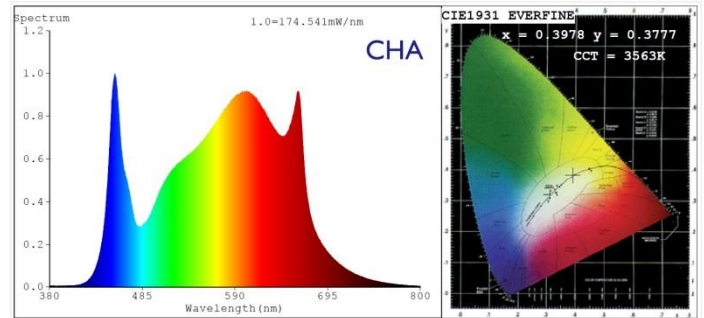
#### Photo Parameters:

Flux = 13924 lm Eff. : 24.77 lm/W Fe = 46.97 W  
 Scotopic:21232 S/P:1.5249  
 Photosynthetic:PPF:215.99umol/s PAR WATT:44824mW(400-700nm)

#### Electrical parameters:

V = 220.96 V I = 2.582 A P = 562.0 W PF = 0.9849  
 LEVEL:OUT WHITE:ANSI\_3500K

RX- TP5025-120Z-2H-CHA&CHB 1/6 PAR TEST



#### Color Parameters:

Chromaticity Coordinate:  $x=0.3978$   $y=0.3777$   $u'=0.2362$   $v'=0.5046$   
 CCT=3563K (Duv=-0.0041) Dominant WL:Ld =582.7nm Purity=32.7%  
 Ratio:R=21.0% G=75.3% B=3.7% Peak WL:Lp=454.3nm FWHM=22.4nm  
 Render Index:Ra=89.9 AvgR=86.3  
 R1 =90 R2 =96 R3 =97 R4 =88 R5 =90 R6 =92 R7 =89  
 R8 =78 R9 =49 R10=89 R11=88 R12=71 R13=92 R14=99 R15=87

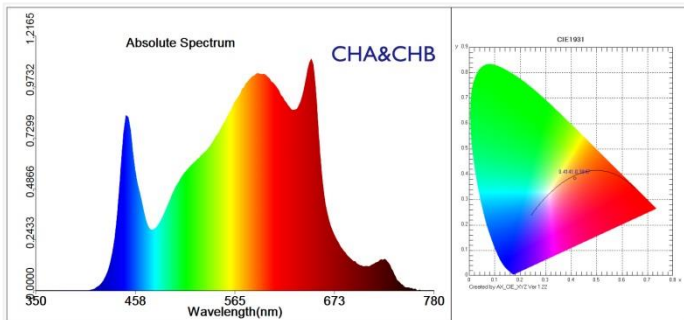
#### Photo Parameters:

Flux = 8910 lm Eff. : 25.55 lm/W Fe = 29.27 W  
 Scotopic:14600 S/P:1.6387  
 Photosynthetic:PPF:135.97umol/s PAR WATT:28515mW(400-700nm)

#### Electrical parameters:

V = 115.47 V I = 3.022 A P = 348.7 W PF = 0.9995  
 LEVEL:OUT WHITE:ANSI\_3500K

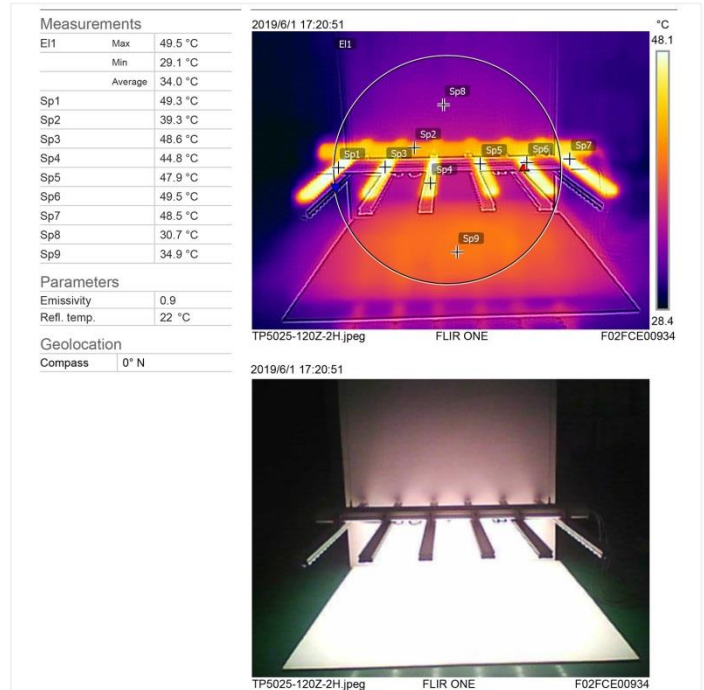
RX- TP5025-120Z-2H-CHA 1/6 PPF PAR TEST



#### Test parameter:

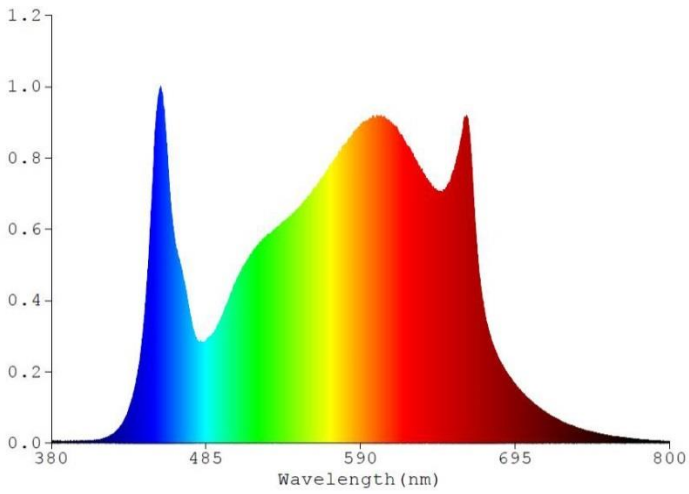
E= 61987.7 lx E(fc)=5760.94 fc  
 CIE x=0.4116 CIE y=0.3827 CIE u'=0.2432 CIE v'=0.5088  
 Tc=3296 K Lp=663.0 nm HW=159.9 nm Ld=583.8 nm  
 Pur=38.4 % Ratio\_R=22.2 % Ratio\_G=74.3 % Ratio\_B=3.4 %  
 Duv=-0.00485  
 Ra=90.3 R1= 90 R2= 96 R3= 97  
 R4= 88 R5= 90 R6= 93 R7= 89  
 R8= 78 R9= 52 R10= 91 R11= 88  
 R12= 77 R13= 92 R14= 99 R15= 88  
 SDCM= 5.4(3500K/White)  
 White Class:OUT  
**974 μmol/ m<sup>2</sup>/s**  
 E1=202.11 W/m<sup>2</sup> E2=211.24 W/m<sup>2</sup> PPF=973.57 μmol/(m<sup>2</sup>·s)  
 Ech-A=36.147 W/m<sup>2</sup> Ech-B=37.074 W/m<sup>2</sup> Ef=8.6816 W/m<sup>2</sup>  
 Eb=34.64 W/m<sup>2</sup> Ey=81.923 W/m<sup>2</sup> Er=85.711 W/m<sup>2</sup>  
 Ep=179.45 Wphyto/m<sup>2</sup> Erb\_Ratio=2.4743

RX-TP5025-120Z-2H-CHA&CHB 560W PPF 0.15m TEST

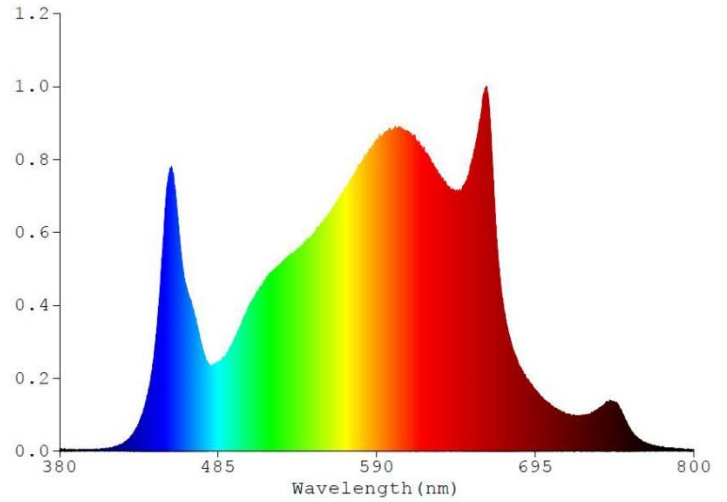


Surface temperature Test

- Preferred spectrum, higher PPFD, suitable for medicinal plant growth



CHA spectrum,  $597\mu\text{mol}/\text{m}^2/\text{s}$   
vegetative growth



CHA+CHB spectrum,  $962\mu\text{mol}/\text{m}^2/\text{s}$   
flowering stage

- Just add WIFI socket, you can realize timed switching power supply to achieve intelligent control



Note: Standard does not include WIFI socket