

Horticulture LED Module Bar ADJ spectrum - Suitable for all periods of plants growth

MODEL: RX-TP5025-4H series <u>www.koraylight.com</u> <u>www.xinelam.com</u>

Description:

RX-TP5025-4H LED Grow Light Module, 4 individual spectrum channels design, Adjust the spectrum you need, ideal for different kinds of plants all-stage cultivation (including sprout, seedling, vegetative, budding, flowering and ripening). Available For plant factories, home planting, aquarium growth, and particularly suitable for lab plant factory germination and planting



- Different LED chips in one lens, Spectral radiation uniform, Lens + Reflector cup, Concentrating radiation, Energy saving 50%
- Four separate channel dimming control that adjust different spectra to meet different light recipes for plant growth.
- Optimized spectrum combinations: 450nm+white/CH1,660nm/CH2, 730nm/CH3,395nm/CH4
- 4. Plant incubator LED module Growth Chamber Light module, Ideal for lab scientific research, plant factory cultivation and family growth.
- 5. Optional Silicone potting waterproof IP65
- 6. New design, Patent No: 201620887642
- 7. Common anode design, can be driven by ordinary RGBW controller
- 8. CE RoHS FCC

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Model	Dimension	Spectrum and Channel	Photon PPFD µmol/m²/s	Luminous flux PAR Output	Power Input DC24V	Comment
RX-TP5025-4H	1206x50x42mm	CHI 450nm+white	159.6µmol @0.3m 10236Lx	Flux 4340Lm PPF: 70umol/s PAR: 15920mW	37.5W	Tissue culture and nursery Aquarium lighting
		CH2 660nm	61.8µmol @0.3m 788Lx	Flux 385Lm PPF: 3 l umol/s PAR: 5629mW	I5W	CH2 increased by 50° CH1 is suitable for vegetative growth
		CH3 730nm	3.4µmol @0.3m 2.1Lx	Flux 0.8Lm PPF: 0.16umol/s PAR: 28mW	5.5W	730nm adjustment flowering Promote pla stem growth
		CH4 295nm	0.4µmol @0.3m 3.5Lx	Flux 3.6Lm PPF: I.4umol/s PAR: 406mW	4W	Stimulate plant stress response Increase pharmaceutical ingredie
		CHI ~ CH4	216µmol @0.3m 10528Lx	Flux 4565Lm PPF: 99umol/s PAR: 21334mW	61W	Full spectrum, increased 395nm, 730nm suitable f

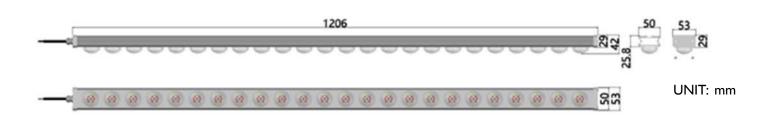
Surface temperature rise Tc 20° K , Operating temperature: -30° C $\sim 40^{\circ}$ C ,

Lifespan: 50,000 hours (Note:Ta \leq 25 $^{\circ}$ C)

Tolerance range for optical and electrical data: ±10 %.

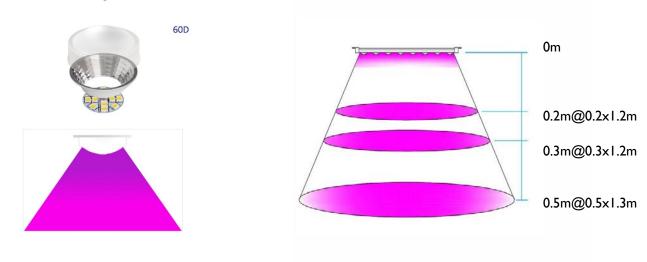
The above data is for reference only!

Dimension:





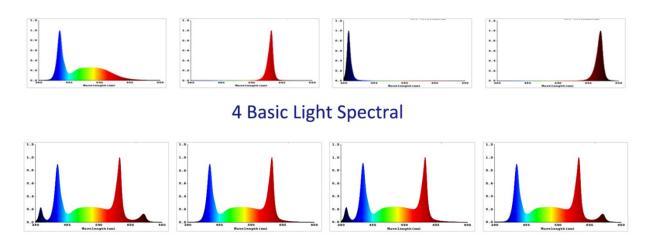
60D Depth distance & Coverage:



 Four independent channels, using different spectra, you can adjust the spectrum and adjust the light intensity according to the plant light recipes. Common anode design, can use a general-purpose PWM constant voltage DC24V dimming controller, such as RGBW dimmer.



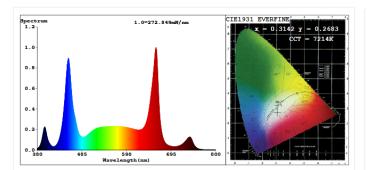
Different LED in one lens More uniform Light Concentrating Light efficiently higher light utilization efficiency



Can adjust light recipes as needed

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测试报告



Color Parameters:

Chromaticity Coordinate:x=0.3142 y=0.2683/u'=0.2248 v'=0.4319CCT=7214K(Duv=-0.0328) Dominant WL:Ld =-565.0nm Purity=25.4% Ratio:R=20.2% G=72.9% B=6.9% Peak WL:Lp=659.6nm FWHM=19.8nm Render Index:Ra=69.6 AvgR=63.6

R1 =63 R2 =82 R3 =77 R4 =69 R5 =69 R6 =83 R7 =80 R10=72 R11=65 R12=69 R8 =34 R9 =0 R13=67 R14=84 R15=40

Photo Parameters:

Flux = 4565 lm Eff. : 75.11 lm/W Fe = 23.00 W Scotopic:11223 S/P:2.4585

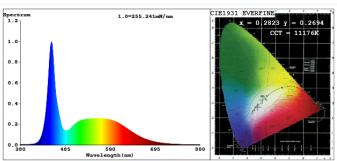
Photosynthetic:PPF:99.19umol/s PAR WATT:21334mW(400-700nm)

Electrical parameters:

v = 23.999 v

I = 2.533 A P = 60.78 W PF = 1.000

E1-49.22 W/III2 Ech-A=9.5796 W/m2 Eb=14.482 W/m2 Ep=39.412 Wphyto/m2 PPFDf=1.2816E+000 μmol/(m2·s)



Color Parameters:

Chromaticity Coordinate:x=0.2823 y=0.2694/u'=0.1992 v'=0.4278 CCT=11176K(Duv=-0.0115) Dominant WL:Ld =471.6nm Purity=23.9% Ratio:R=13.5% G=79.2% B=7.3% Peak WL:Lp=452.9nm FWHM=19.4nm Render Index:Ra=87.9 AvgR=84.1

R1 =89 R2 =91 R3 =85 R4 =91 R5 =87 R6 =80 R7 =92 R8 =88 R9 = 62R10=76 R11=90 R12=52 R13=91 R14=91 R15=96

Photo Parameters:

Flux = 4340 lm Eff. : 115.69 lm/W Fe = 16.14 W

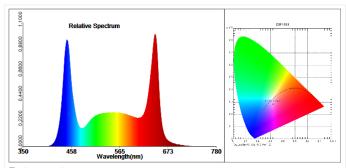
Scotopic:11481 S/P:2.6455

Photosynthetic:PPF:69.897umol/s PAR WATT:15920mW(400-700nm)

Electrical parameters:

I = 1.563 A P = 37.51 W PF = 1.000 v = 24.000 v

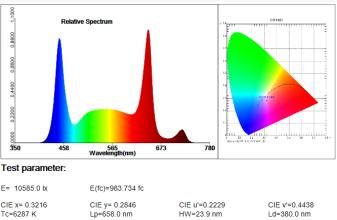
LEVEL: OUT WHITE:OUT



Test parameter: E= 10735.8 lx E(fc)=997.749 fc CIE x= 0.3203 CIE y= 0.2834 CIE u'=0.2224 CIE v'=0.4428 Lp=658.0 nm HW=23.7 nm Ld=380.0 nm Tc=6408 K Pur=14.1 % Ratio_R=19.5 % Ratio_G=74.0 % Ratio_B=6.4 % Duv=-0.02671 Ra=76.4 R4= 77 R2= 87 R6= 86 R3= 80 R7= 84 R5= 77 R9=-42 R10= 80 R14= 87 D8= 48 R11= 74 R12= 72 R13= 75 SDCM=26.7(F5000) White Class:OUT F1=46 22 W/m2 F2=46 432 W/m2 PPFD=215.63 umol/(m·s)

Ech-B=12.812 W/m2 Ey=14.155 W/m2 Erb_Ratio=1.2157

Ff=0 21385 W/m2 Er=17.606 W/m2



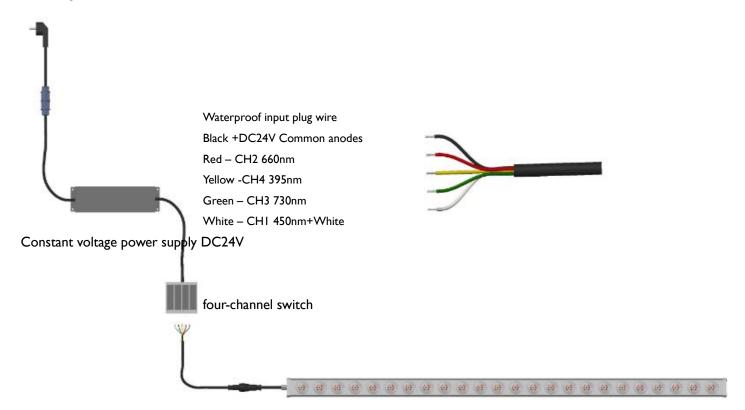
CIE x= 0.3216 Tc=6287 K Pur=13.7 % Duv=-0.02669	CIE y= 0 Lp=658.0 Ratio_R=	nm (CIE u'=0.2229 HW=23.9 nm Ratio_G=74.0 %		CIE v'=0.4438 Ld=380.0 nm Ratio_B=6.4 %	
Ra=76.3 R4= 76 R8= 48 R12= 72	R1= 73 R5= 77 R9=-43 R13= 75		R2= 87 R6= 86 R10= 80 R14= 87		R3= 81 R7= 84 R11= 74 R15= 54	
SDCM=26.4(F5000) White Class:OUT						
E1=45.764 W/m2 Ech-A=9.6561 W/m2 Eb=14.157 W/m2 Ep=39.279 Wphyto/m2 PPFDf=1.0741E+001 µmc	ıl/(m2·s)	E2=47.516 W/m: Ech-B=12.541 W Ey=13.936 W/m: Erb_Ratio=1.25	//m2	Ef=1.7	-213.92 μmol/(m·s) 503 W/m2 695 W/m2)



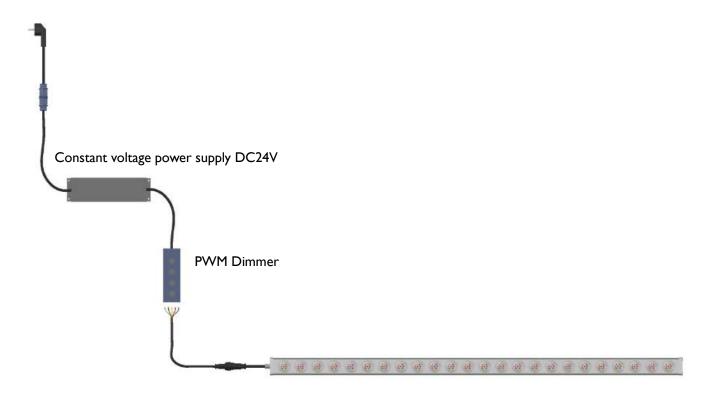
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Wiring diagram

Switching connection



Four channel dimmer connection



Make sure that the power and dimmer power is greater than the power consumption of the plant light module and leave a 20% margin.