



# 中山市科瑞光电有限公司 Koray Opto-Electronic Co., Ltd.

www.koraylight.com







#### **ABOUT US**

Koray Opto-electronic Co. Ltd., its predecessor Ruixian Electronics established in 2004. Has been committed to the research and development of green lighting products, production, sales. Has more than 20 patents, including invention patents, utility model patents, and appearance patents etc.

Koray offers Horticulture LED Lighting Solutions. Main products includes: Waterproof LED Grow Light Bar, High Power LED Grow Lights, LED Tissue Culture Module, LED Production Module, LED Research Module, Plant LED Top lighting, and Medicinal Plant LED Grow Lights.

XineLam is mainly engaged in production of LED Backlight Advertising Light Source.

Our products for high-end customers demand, the main customers in Europe and United States, Japan and other developed countries, which: Germany, UK, Japan and US accounted for 80% of the proportion of customers.

We have always insisted on doing the real green lighting products. Complete green lighting contains: comfortable, efficient and energy saving, environmental protection, safety, long life, these 5 indicators are indispensable!

We meet customer needs as our own responsibility, products fully compliant the requirements of the world certification, to compliant the most stringent 'Energy Star' standards.

Perfect traceability mechanism and advanced testing equipments, even if only to order a sample, can clearly check the production of each link, to guarantee product quality!

Honesty, responsibility, pragmatic and enterprising is our work attitude! Would like to work with you together to create a green future!

中山市科瑞光电有限公司,其前身瑞贤电子成立于2004年。

一直致力于绿色照明产品的研发、生产、销售。已拥有专利二十多项,

其中包括发明专利、实用新型专利、外观专利。

Koray主要生产LED植物灯,包括植物组培模组、生产模组、顶光模组,花期灯,园艺实验模组等。 以及特种用途的LED光源等。XineLam主要致力于广告光源的生产制造。

我们面向高端客户,主要客户分布在欧美日等发达国家,其中: 德国、英国、 日本、美国客户所占比例 达到80%, 我们一直坚持做真正的绿色照明产品,

完整的绿色照明包含:舒适、高效节能、环保、安全、长寿命,五项指标缺一不可! 我们以满足客户需求为己任,产品完全符合世界各国认证要求,满足最严苛的能源之星标准。 完善的可追溯机制,哪怕只订购一个样品,都能清楚查询生产制造的每个环节,确保产品质量!

诚信,责任,务实进取,是我们的工作态度! 愿与您一起共创绿色未来!



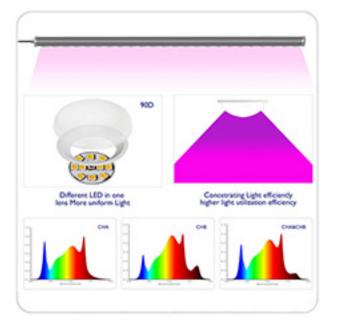




- I. High power plant light bar, plant array lamp
- 2. High efficiency plant growth module, efficiency up to 3.2μmol/J, 6 bars in 600W, efficiency up to 2.9μmol/J
- 3. Dual-channel type, channel A for seedling and vegetative growth, dual channel A and B for flowering and maturity
- 4. Universal type: with Samsung and Osram horticultural LED chips, efficiency up to  $2.5\mu mol/J$
- 5. High efficiency type: efficiency up to 3µmol/J

Four series of choices: high efficiency type, dual-channel type, universal type, red and blue ratio type; They are mainly used for medicinal plant cultivation, plant factory cultivation which is required high product requirements, and large-scale of medicinal plants cultivation.







Model	Dimension LxWxH	Spectral Wavelength	Photon PPFD µmol/m²/s	Luminous flux PAR output	Power Input	Comment
RX-GW78-LM301-K6 -F15	1215×1100×103mm	F15	I 600µmol @0.2m 8"	2200µmol/s	900W/AC230V 920W/AC100V	Universal type 2.4µmol/J 900W 2.5µmol/J 600W
RX-GW78-LM301-K6 -F16	48"x44"x 4"	F16	I 500µmol @0.2m 8"	2100μmol/s	900W/AC230V 920W/AC100V	Add FR red 730nm 2.3µmol/J 900W 2.4µmol/J 600W
DV CV4/70 100 011	1215x900x100mm	CHA V5	790µmol @0.2m 8"	820µmol/s	345W/AC230V	Dual-channel, suitable for experimental planting and lifting plant cultivation
RX-GW78-120-2H	48"x35"x 4"	CHA+CHB V5 F6	I 300µmol @0.2m 8"	I 300umol/s	245W/AC230V	Channel A and B for flowering and maturity
RX-GW78-LM301-H	1215x81x38mm 48"x3.2"x 1.5"	F18	I 300µmol @0.2m 8"	324umol/s	3.5A @29.65V 103VV	3.1 µmol/J ultra high efficiency single plant light, reflective cup and spray protection
RX-GW78-120Z	1213×900×110mm 48"×35"× 4"	D6	700μmol @0.5m 20"	I 000μmol/s	480W/AC230V	With UVA and FR

The above data is for reference only!

### Tips:



GW78-LM301 Dimmable general purpose high power plant light strip, max 900W, suggested F16 spectrum, adding far red spectrum, suitable for medicinal plants to bloom and mature.

GW78-120-2H dual channel is suitable for experimental planting. When the distance between lamp and plant canopy is equal, different irradiation channels are used in seedling stage, flowering and mature stage. Can save energy significantly. GW78-LM301-H high power and high efficiency plant light bar, PPF light efficiency up to 3umol/J.

GW78-120Z Full spectrum enhanced with UVA and FR wavelength, made of Osram horticultural LED, except UVA LEDs, high reliability.

### High Power Grow Lights and Arrays Grow Lights: G5025 Series

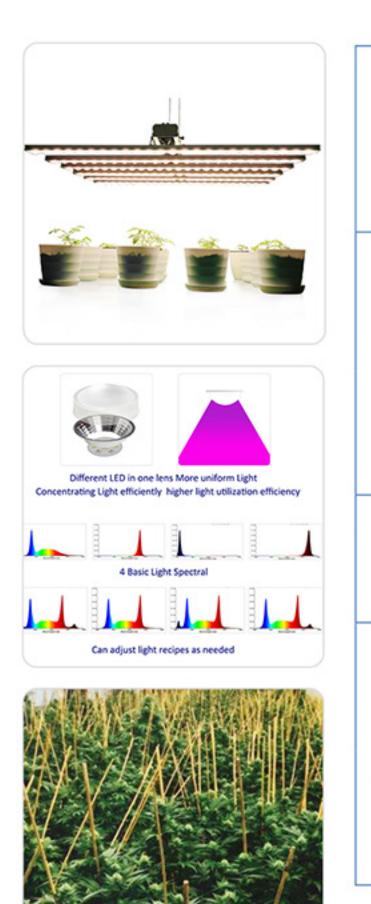




- I. RX-G5025-K6 Low-cost, economical and high-power 600W medical grow light module, PPF up to 1500umol/S, PPF efficiency 2.5umol/J Unique reflective structure, directional irradiation, higher light utilization, PPFD up to 1100 mol@0.15m

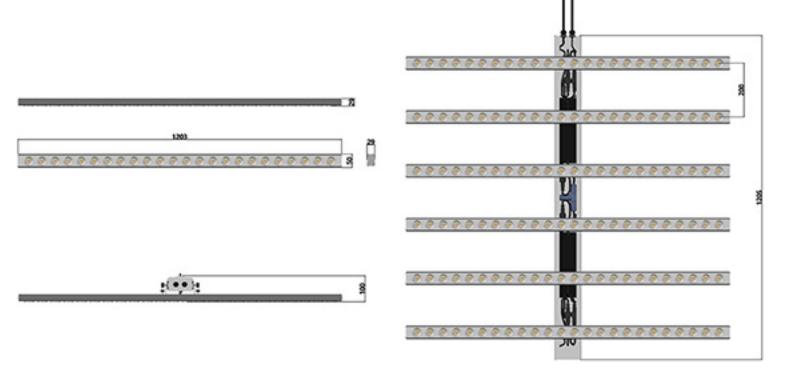
  \*Reflective cup structure and non-waterproof as Standard
- RX-G5025-K6-2H 2H stand for Dual channel design:
   Channel A: with an additional deep red 660nm for vegetative growth;
   Channel B: with additional deep red 660nm and far red 730nm,
   specially designed for flowering and maturation
   Patent designLens + reflective cup, waterproof IP65

RX-G5025-K6, Low-cost, economical and high-efficiency LED grow light bar module, 600W for medicinal plant cultivation RX-TP5025-I20Z-2H (RX-G5025-K6-2H) dual-channel, suitable for experimental planting. Different irradiation channels are used in seedling stage and flowering mature stage when the distance between lamp and plant canopy is equal. It can save energy greatly.



Model	Dimension LxWxH	Spectral Wavelength	Photon PPFD µmol/m²/s	Luminous flux PAR output	Power Input	Comment
RX-G5025	1203×50×29mm	F15	623μmol@0.2m 8" 39343Lx	287umol/s	2.8A @38.73V 108VV	Universal type: 2.7µmol/J
	47"x1.9"x 1.1"	F16	565μmol@0.2m 8" 37607Lx	270μmol/s	2.8A @ 39.1V 109VV	Adding FR 2.5µmol/J
RX-G5025-K6	1205×1203×100mm 47"×47"× 3.9"	F16	I 100μmol@0.15 m 6" 68559LX	I 500μmol/s	610W AC230V	2.5µmol/J
RX-G5025-K6-2H (RX-TP5025-120Z-2H)	1203×1203×103mm 48"×48"×4"	CHA	564μmol@0.2m 8" 36754Lm	I 300umol/s	245W/AC230V	Channel A : vegetative growth
		CHA+CHB	929μmol@0.2m 8" 59377Lm	324umol/s	3.5A @29.65V 103VV	Channel A&B: flowering and harvest





### Tips:

G5025 is a low-cost, economical LED grow light bar module. Multiple mounting slots easily extendable from light bar to multiple bar arrays. White LED are Seoul brand LEDs, which is high cost performance. Please contact Koray sales for G5025 multi-channel models.

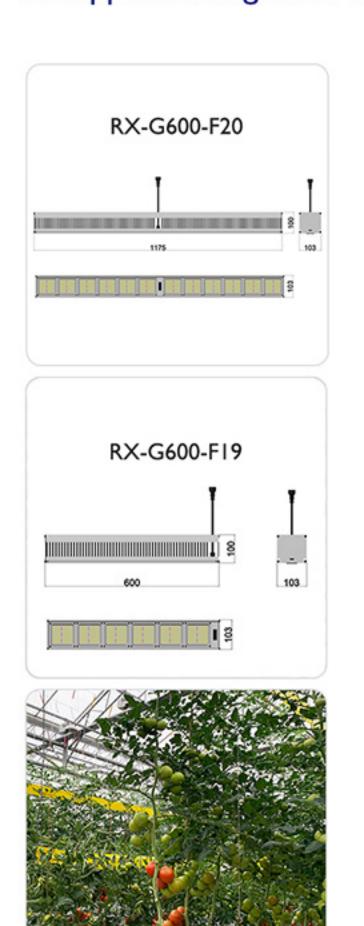
### G600 High-Power Toplight Grow Light Module





- I.G600-ORI series, Red/Blue Toplight greenhouse supplement plant lights. Power: 500W. Added lots of deep red, matching far red and deep blue spectrum, higher absorption efficiency.sppectrum can be customized as per request. Customized 600W, efficiency 3.0umol/J.
- 2.G600-F20 series with Samsung LM301 and Osram red LED chips. PPF up to 1700 umol/s, PPFD is up to 1200 mol/m/s@0.5m, PPF efficiency is 2.8 umol/J.
- 3.G600L is Low-cost economic type, with Seoul and Osram chips, high cost performance
- 4.Input voltage: 100-305 VAC, 127-431 VAC depending on power supply, PF > 0.9
- 5. Lifespan 50,000 hours
- 6.CE RoHS FCC.

RX-G600 greenhouse high power toplighting grow lights supplement module, unique reflection structure, uniform spectral radiation, directional irradiation, higher light utilization efficiency, more energy-saving than ordinary grow lights. Spray waterproof, optimize plant-specific spectrum, can be customized the spectrum you need; Suitable for tomatoes, cucumbers, vegetable and flower planting. Or ornamental plant cultivation, fleshy plant cultivation and medicinal plant cultivation, especially for greenhouse plant cultivation and as supplement light for tall plants.





Model	Dimension LxWxH	Spectral Wavelength	Photon PPFD µmol/m²/s	Luminous flux Radiation Power	Power Test Input voltage	Comment
		ORI	590µmol @0.5m 10700Lx	Flux: 12167Lm PPF: 599umol/s	5.7A @38V 217W	Recommended driver: HLG-240H-42
RX-G600-ORI- M	1175×103×100mm 47"×4"×4"	6KIR6BIFRI	790µmol @0.5m 14100Lx	Flux: 15821Lm PPF: 799umol/s	7.7A @39V 300VV	Recommended driver: HLG-320H-42
			1060μmol @0.5m 19100Lx	Flux: 20743Lm PPF: 1070umol/s	10.5A @41V 430VV	Recommended driver: HLG-480H-42
RX-G600-ORI	1175×103×100mm 47"x4"x4"	ORI 6KIR6BIFRI	1200µmol @0.5m 21500Lx 450µmol @1m 39" 7800Lx 130µmol @2m 79" 2200Lx	Flux: 22692Lm PPF: I 202umol/s	510W/AC230V	Meanwell HLG-480H-42B OSRAM LEDs Red & Blue spectrum, Higher light absorption
RX-G600-F20	1175×103×100mm 47"×4"×4"	F20 3K511R2	1228µmol @0.5m 78051Lx 420µmol @1m 26768Lx 127µmol @2m 8163Lx	Flux: 111547Lm PPF:1748umol/s	600W/AC230V	Beam angle 90° Samsung and OSRAM LEDs Full spectrum
			356µmol @0.5m 22760Lx	Flux: 22383Lm PPF: 338umol/s	3.6A @34V 123W	Recommended power driver: HLG-150-42
RX-G600L-1P- M-F19	600×103×100mm 24"×4"×4"		554µmol @0.5m 35382Lx	Flux: 34685Lm PPF: 172umol/s	5.7A @35V 200VV	Recommended power driver: HLG-240H-42
			727µmol @0.5m 46264Lx	Flux: 450 I 5Lm PPF: 682umol/s	7.6A @36V 275W	Recommended power driver: HLG-320H-42
RX-G600L-1P-F 19	600×103×100mm 24"x4"x4"	FI9	1630µmol @0.3m 104088Lx 728µmol @0.5m 46322Lx 207µmol @1m 13130Lx	Flux: 46000Lm PPF:700umol/s	300W AC230/277V	Beam angle 90° Added FR
RX-G600L- F19	1175×103×100mm 47"x4"x4"	FI9	1007µmol @0.5m 64001Lx 344µmol @1m 21950Lx 104µmol @2m 5054Lx	Flux: 92000Lm PPF: I 400umol/s	600W AC230/277V	Beam angle 90° Added FR

Surface temperature rise Tc 35  $^{\circ}$ K , Operating temperature: -30  $^{\circ}$ C  $\sim$  40 $^{\circ}$ C , Lifespan: 50,000 hours (Note: Ta 25  $^{\circ}$ C) Tolerance range for optical and electrical data:  $\pm$ 10 %.

Beam angle: (Optional), Recommended irradiation distance 0.5~3m;

The above data is for reference only!

## GWOS Series LED Supplement Grow Light Bar





- 1. Special spectral horticultural LED supplementary lamp
- 2. 140 degree angle lens, wider radiation (Optional 60 degree lens)
- 3. Osram Plant-specific horticultural LED
- 4. Main wavelength: 450nm, 660nm, 730nm, 4000K
- 5. Waterproof IP67
- 6. Input voltage: DC24V, power 50W
- 7. Lifespan 50,000 hours
- 8. CE RoHS FCC

RX-GWOS Series LED Supplement Grow Light Bar, using Osram LED chips. Single or combined spectral fill light, mainly used to supplement the special spectrum deficiency of traditional plant lights, 730nm far red, 660nm deep red, 450nm royal blue, and UVA395nm, etc.









Model	Dimension LxWxH	Spectral Wavelength	Photon PPFD µmol/m²/s	Luminous flux Radiation Power	Power Test Input(DC24V)	Comment				
		.: 450nm	608µmol @0.1m	Flux: 736Lm						
RX-GWOS-DB	1206×50×30mm		264µmol @0.2m	PPF:98umol/s	48W	Royal blue (450 nm)				
			80µmol @0.3m	FFF.70uill0//3						
RX-GWOS-DR						660nm (	608µmol @0.1m	FL 15741		
	1206x50x30mm	3	264µmol @0.2m	Flux: I 564Lm	47W	hyper red (660 nm)				
			80μmol @0.3m	PPF:124umol/s						
		730nm 🛦	608µmol @0.1m	FI 211						
RX-GWOS-FR	1206x50x30mm	7301111	264µmol @0.2m	Flux: 31Lm	48W	Far red (730 nm)				
		1 10 20 10 10	80µmol @0.3m	PPF:9umol/s						
		4000K	608µmol @0.1m	FI (120)						
RX-GWOS-4K	1206x50x30mm		264µmol @0.2m	Flux: 6120Lm	46W	4000K				
			80µmol @0.3m	PPF:84umol/s						

Surface temperature rise Tc 20  $^{\circ}$ K Operating temperature: -30  $^{\circ}$ C  $\sim$  40 $^{\circ}$ C , Lifespan: 50,000 hours (Note: Ta 25  $^{\circ}$ C) Tolerance range for optical and electrical data:  $\pm 10 \%$ .

Beam angle 140°, Recommended irradiation distance 0.1~0.5m;

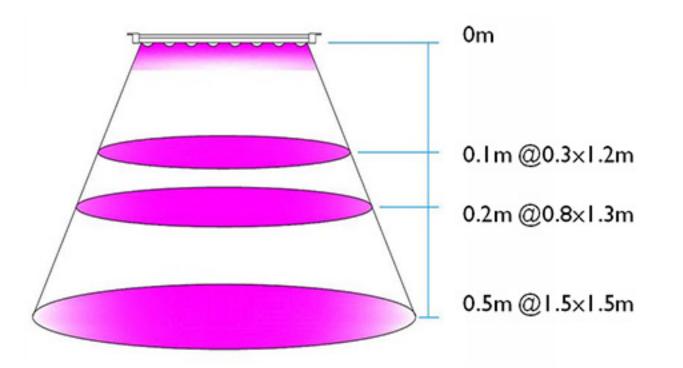
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Dimension:

1206
WNIT: mm

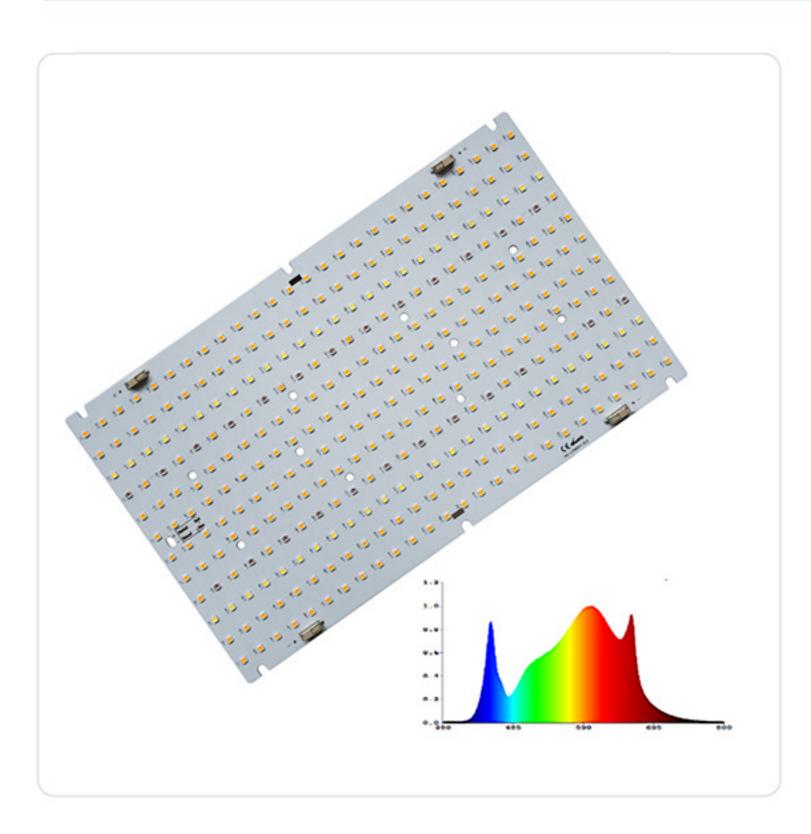
RX-GWOS

### Depth distance & Coverage:



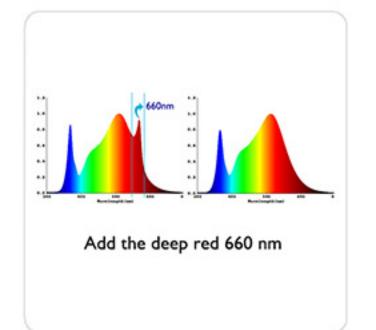
### LM301 LED Grow Light Quantum Board Module Kit





- I. High efficiency grow light module kit, PPF efficiency up to 3.0 μmol/J
- 2. Samsung LM301b led chip, high efficiency and reliability
- 3. Additional 660nm deep red led chip, efficiency 3.4µmol/J, suitable for plant growth
- 4. Aluminum substrate size: I I" x6.9" (286x175mm)
- 5. Size, power, spectrum, PAR output, PPFD output can be customized
- 6. Lifespan 50,000 hours
- 7. CE RoHS FCC.

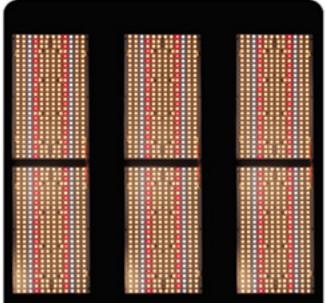
RX-LM301-312high PAR output grow tent medicinal grow light module kit for Balanced growth. Samsung LM301 high efficiency led chip, and add the deep red 660 nm. More effective spectra for medicinal plants, full spectrum is Ideal Medicinal plants LED grow light which can obviously improve the quality and harvest. Suitable for basement planting, plant tent planting, experimental planting and greenhouse planting.





Samsung LM301 led chip + deep red 660 nm





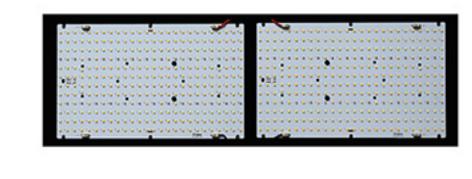
Madal	Dimension Spectral Photon PPFD Luminous flux Power	Power Test	Comment				
Model	LxWxH	Wavelength	μmol/m²/s	Radiation Power	Input	Comment	
	204 175 40	SIO	454.7µmol @0.3m 30837Lx	10861Lm 162umol/s	1.6A @31.5V	50W 3.2μmol/J	
RX-LM301-312	286x175x68mm	\$10	727.5µmol @0.3m 49248Lx	17348Lm 259umol/s	2.6A @32.3V	84W 3.1 µmol/J	
	11"x6.9"x 2.7"		1069.8μmol@0.3m72320Lx	25300Lm 378umol/s	3.9A @33.1V	2.9µmol/J need extra heat sinl	
RX-LM301-312-K1	325×200×68mm 12.8"×7.9"× 2.7"	\$10	821.2µmol @0.3m 54928.2Lx	24378Lm 366.04umol/s	125W	Includes heatsink & Meanwell ELG-150H-42B	
RX-LM301-312-K2	630x200x68mm*	\$10	1397.6μmol @0.3m 93525.5Lx	Flux: 43409Lm	240W	Meanwell HLG-240H/ELG-240 24"x24" grow tents	
	24.8"×7.9"× 2.7"		907.66µmol @0.4m 60815.2Lx	PPF:647.15umol/s			
	900x300x68mm 35.4"x11.8"x 2.7"			1439.2μmol @0.3m 97047.5Lx			Maaring II III C 220II 24B
RX-LM301-312-K3			730.2µmol @0.5m 49145.1Lx	73134Lm 1098umol/s	320VV	Meanwell HLG-320H-36B	
			235.5µmol @1m 15991Lx			48" x24" Grow tent	
RX-LM301-312-K4	600×600×68mm 23.6"×23.6"× 2.7"	\$10	1493μmol @0.3m 187261.5Lx	Flux: 86821Lm PPF:1294.3umol/s	480W	Meanwell HLG-480H-36B 36″ x36″ grow tent	
030	1200×300×68mm	1607.9μmol @0.3m 00x300x68mm S10 Flux: 86821Lm	480W	Meanwell HLG-480H-36B 60" x24" Grow tent,			
	47.2"×11.8"× 2.7"		863.46µmol @0.5m 58573.1Lx	PPF:1294.3umol/s		dimmable current I 3.3A	
RX-LM301-312-K6	900×900×68mm 35.4"×35.4"× 2.7"	S10	4192.8µmol @0.3m 280576.5Lx	Flux: 130227Lm PPF:1941.45umol/s	600W	Meanwell HLG-600H-36B 48"x48" grow tents	

Surface temperature rise Tc 28°K, Operating temperature:-30°C~40°C, Lifespan:50,000 hours (Note: Ta 25°C) Tolerance range for optical and electrical data:±10%. Beam angle 120°, Recommended irradiation distance:0.3~0.5m

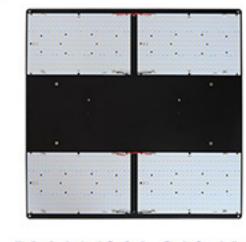
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Quantum boards with Osram deep red horticultural LED can be customized









RX-LM301-312-K1

RX-LM301-312-K2

RX-LM301-312-K3

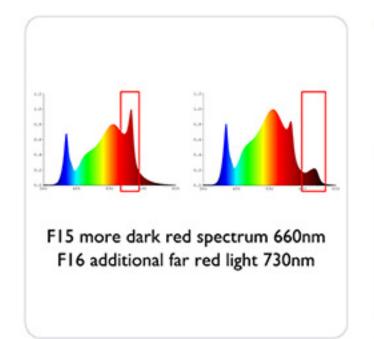
RX-LM301-312-K4

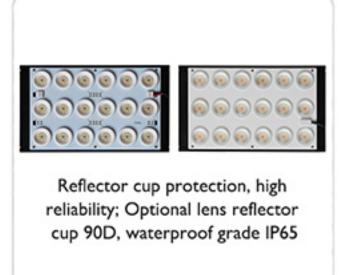


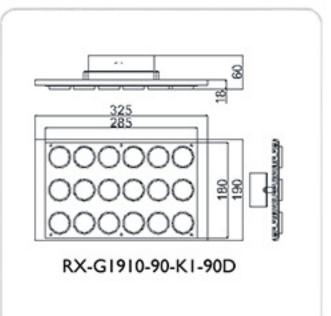


- 1. 90 Type Reflective cup protection, PPF efficiency up to 3.0 µmol/J
- 2. 90D Type unique lens structure, high efficiency concentrating, uniform spectral radiation, direct illumination, higher light utilization,
- 3. Waterproof LED quantum board High efficiency grow light module kit,
- 4. Samsung LM301H and Osram horticulture LED
- 5. Aluminum substrate size: I I x7. I (285x 180mm)
- 6. Size, power, spectrum, PAR output, PPFD output can be customized
- 7. Lifespan 50,000 hours
- 8. CE RoHS FCC.

RX-G1910-90 series, Has applied for multinational patents! High PAR output grow tent medicinal grow light module kit for Balanced growth. Samsung LM301 high efficiency LED chip, and add Osram horticulture LED deep red 660nm, Far red 730nm (F16 spectrum). More effective spectra for medicinal plants, full spectrum is Ideal Medicinal plants LED grow light which can obviously improve the quality and harvest. Suitable for basement, grow tents, experimental planting and greenhouse etc.







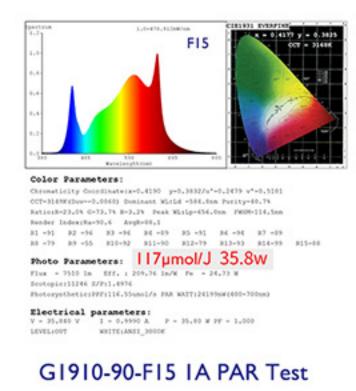


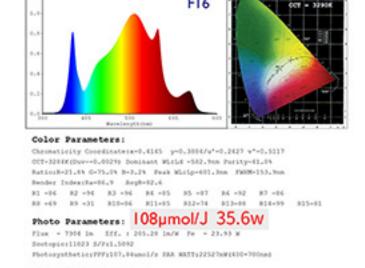
Model	Dimension LxWxH	Spectral Wavelength	Photon PPFD µmol/m²/s	Luminous flux Radiation Power	Power Test Input	Comment
		F15	369µmol @0.3m 22877Lx	7510Lm 117umol/s	IA @36V	3.2µmol/J
RX-G1910-90		35K24R2	656µmol @0.3m 40555Lx	13143Lm 205umol/s	1.8A @37V	
			1011μmol @0.3m 62259Lx	19791Lm 309umol/s	2.8A @38V	
	286×180×14mm 11.3"×7"× 0.6"	F16 35K24R1FR1	433μmol @0.3m 28753Lx	7304Lm 108umol/s	IA @36V	3µmol/J
			767µmol @0.3m 50827Lx	12782Lm 189umol/s	I.8A @37V	2.8µmol/J
			l 164μmol @0.3m 76888Lx	19361Lm 286umol/s	2.8A @38V	9999 - 200 -
		F16	2400μmol @0.2m 159353Lx			
RX-G1910-90-K1	325x190x70mm	35K24R1FR1	1229μmol @0.3m 80975Lx	19300Lm 280umol/s	120W	2000 TO 2000 T
	12.8"×7.5"× 2.8"		466µmol @0.5m 30700Lx		AC230V	(Optional HLG-120H-42B)

Maximum operating temperature:Tcp < 75°C, lifespan: 50,000 hours (Note:Tcp < 55 °C)

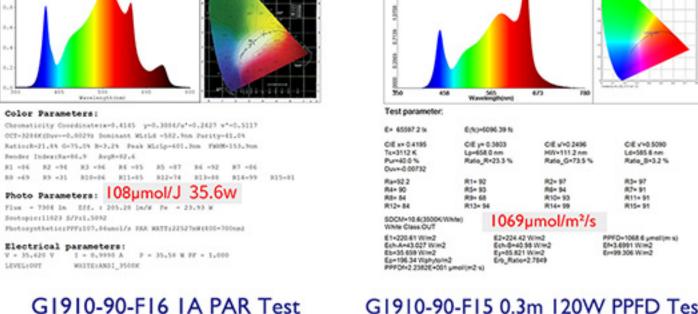
Tolerance range for optical and electrical data: ±10 %. Bean angle: 90°, Recommended irradiation distance: 0.2~0.5m; \* Size: refers to the size of heat sink

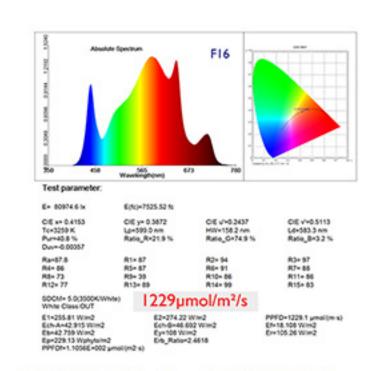
The above data is for reference only!





LEVELHOOT WHITE:ANDI\_MODE





G1910-90-F15 0.3m 120W PPFD Test G1910-90-F16 0.3m 120W PPFD Test

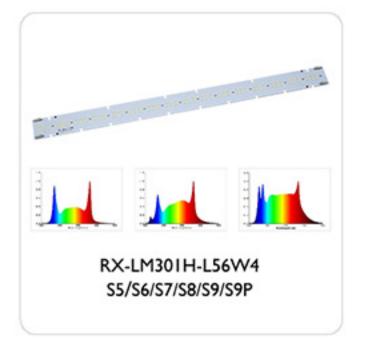
### LED Grow Light Modules & Light engine Series

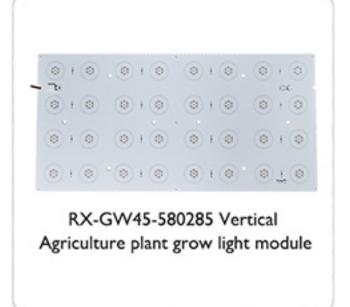


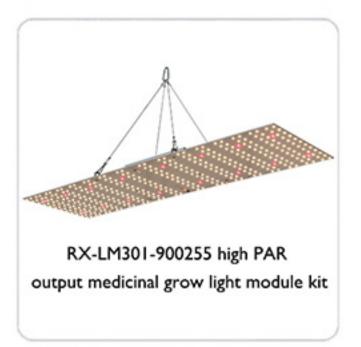


- High Efficiency LED Grow Light Module, Medicinal Plant Quantum Board
- 2. Ornamental & Succulents Plant Lights module
- 3. Vegetable & Fruit Plant Lights module
- 4. Medicinal plant Lights module
- 5. PPF efficiency up to 2.9µmol/J
- 6. Size, power, spectrum, PAR output, PPFD output can be customized
- 7. Lifespan: 50,000 hours
- 8. CE RoHS FCC

Koray LED Grow Light Modules & Light engine series. Different sizes, spectrum, power and illumination can be selected. You can also customize the size, power, spectrum, PAR output and PPFD output.





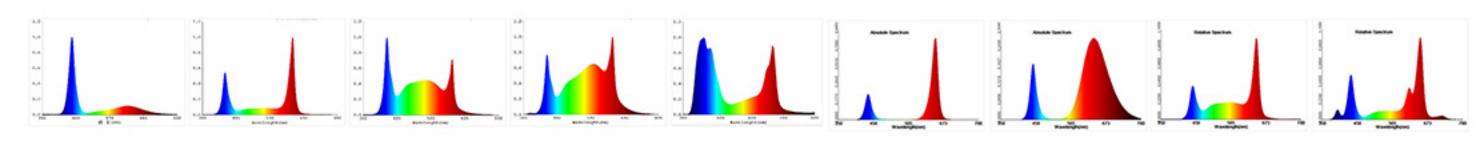




Madal	Dimension	Spectral	Photon PPFD	Luminous flux	Power Test	C
Model	LxWxH	Wavelength	µmol/m²/s	Radiation Power	Input	Comment
LM301H-L56W4	561x41x6mm 22"x3.8"x 2.4"		425μmol @0.2m 25579Lx	7024Lm 122umol/s	IA @42.6V	43W 2.8μmol/JTcp60 °C
GW45-50042	500x42x3.5mm		78μmol @0.2m 4343Lx	Flux 921Lm Fe 3.8VV	8.5W DC24V	Tissue culture
GW45-K330-B	330x330x68mm 13"x13"x 2.6"		800mol @0.3m 50000Lx	Flux: 19000Lm PPF:300umol/s	120W AC230V	Individually UV Switch
GW45-295475	295x475x3mm		298μmol @0.2m 16587Lx	Flux 2833Lm Fe 12W	33W DC24V	Ra 88 seedlings
GW45-580285	580×285×3mm		295μmol @0.3m 4002Lx	PPF:180umol/s	2A @29V 58W	3. I umol/J vegetative growth
GW45-330H-D5	330x330x61mm		1200μmol @0.3m 44000Lx	Flux 5394Lm Fe 31W	4.5A DC24V	Added UV& FR
GW78-LM301-H	1215x81x27mm 48"x3.2"x 1.1"		1002μmol@0.2m 8" 67975Lx	452umol/s 30394Lm	5A @ 30V 150W	3μmol/J
LM301-900255-K1	890x255x62mm 35"x10"x 2.4"		1353µmol @0.2m 90141Lx	Flux: 41389Lm PPF:612umol/s	238W AC230V	Added FR730nm Samsung & OSRAM LED
RX-LM301-128	355x255x2mm 14"x10"x 0.8"		473.7μmol @0.3m 31063Lx	11873Lm 183umol/s	I.5A @43.6V	65W 2.8μmol/J
RX-G30090-90	300x90x7.5mm	F23	425μmol @0.3m 24597Lx	12966Lm 227umol/s 3.0umol/J	2.4A @31V	Optional spectrum F24

Surface temperature rise Tc 28  $^{\circ}$ K Operating temperature: -30  $^{\circ}$ C  $\sim$  40 $^{\circ}$ C , lifespan: 50,000 hours (Note: Ta 25  $^{\circ}$ C) Tolerance range for optical and electrical data:  $\pm$ 10 %.

The above data is for reference only!



Multi-channel adjustable spectrum LED module, can be customized according to your needs.





- I. Urban Vertical Agriculture High cost performance plant factory grow tube, Patented one-piece condenser lens, Patent No.: ZL201820677848
- 2. PPFD increased by 80% with our patent design 60 degree lens, PPFD increased by 50% with our patent 90 degree lens, increased by 30%
- 3. with 100 degree model, building the same plant factory with fewer Koray grow lights, save much cost and energy)
- 4. No flicker, long-life LED power supply, PF> 0.9, Meet the safety requirements around the world
- Waterproof IP64, Water splashing against the enclosure from shall have no harmful effect
- 6. Input: ACI00 ~240V, Rated power I8W
- 7. CE RoHS FCC
- 8. Warranty: 2 years

RX-PT5-100D plant factory special economic plant light tube, used for shelf structure plant factory. With an irradiation height 0.2m and an irradiation area 0.3x1.2m, PPFD is increased by 30% compared to T5 and T8 tubes. Build your plant farm with fewer lights! New design patent product waterproof IP64, suitable for seedlings cultivation and vegetable vegetative growth, is ideal for plant factories and home planting.







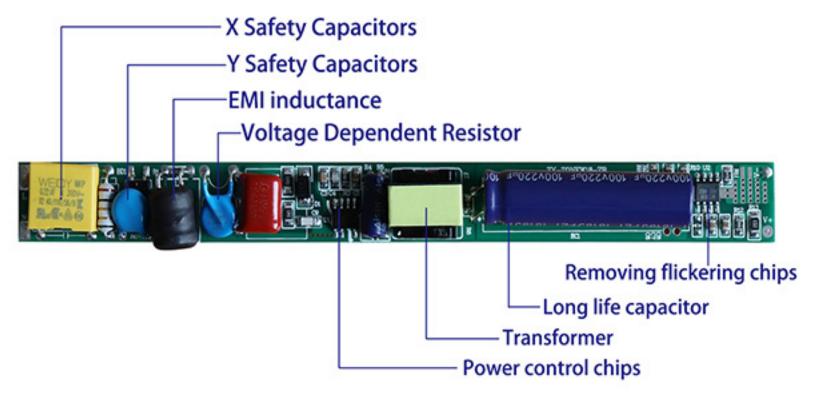


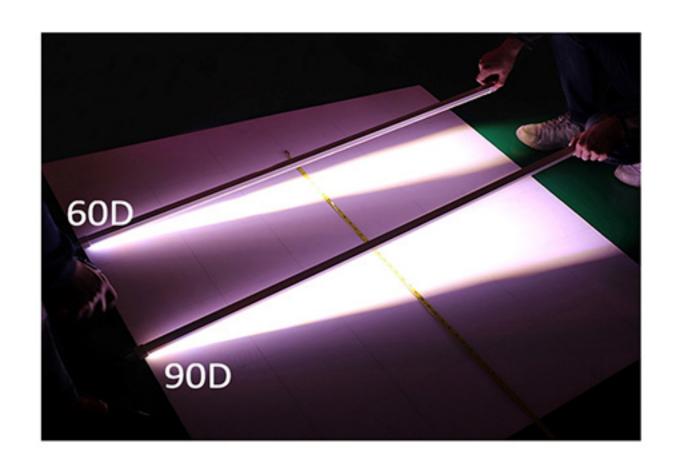
Model	Dimension	CRI & Color temperature	Photon PPFD µmol/m²/s	Luminous flux Radiation Power	Power Test Input	Comment
			84µmol @0.2m	Flux: 2087Lm		Tissue culture, seedling, ornamental plants  Seedling Rhizome Plants Succulent,Aquarium ornamental plants  Ornamental plants
RX-PT5-100D-6K6R1B1	22x25x1183mm	Ra 90 9000K	<mark>56</mark> μmol @0.3m	PPF: 36umol/s	18W AC230V	
		700010	30μmol @0.5m	PAR: 8039mW		
			106μmol @0.2m 6164Lx	Flux: 2069Lm		Seedling
RX-PT5-90D-6K6RIBI	22x25x1183mm	Ra 90 9000K	68μmol @0.3m 4040Lx	PPF: 36umol/s	18W AC230V	
			36μmol @0.5m 2119Lx	PAR: 7949mW	7102301	
			74μmol @0.2m 2059Lx	Flux: 727Lm		Ornamental plant
RX-PT5-90D-G1	22x25x1183mm	Ra 12 10000K	46μmol @0.3m 1273Lx	PPF: 25umol/s	16W AC230V	More redder, greener
			25μmol @0.5m 705Lx	PAR: 5190mW		and bluer

Surface temperature rise Tc 15  $^{\circ}$ K, Operating temperature: -30  $^{\circ}$ C  $\sim$  40 $^{\circ}$ C, Lifespan: 25,000 hrs (Note: Tc < 55  $^{\circ}$ C), Tolerance range for optical and electrical data:  $\pm 10 \%$ 

Bean angle 70°, Recommended irradiation distance 0.1 ~0.3m (VEG), 0.2 ~0.5m (Seeding)

The above data is for reference only!







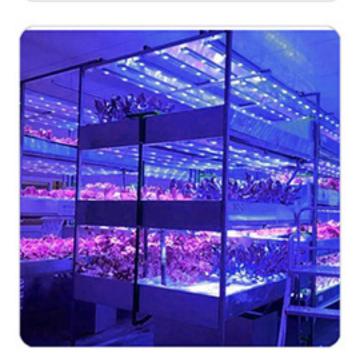




- 1. Vertical agricultural gardening LED for shelf structure plant factories, home indoor plant farms
- 2. 60D and 90D unique lens structure, uniform spectral radiation, lens + reflector, directional illumination, higher light utilization, energy saving 30-50%
- 3. Type 90 adopts reflective cup method, PPF efficiency is up to 3.0µmol/J (CC type)
- 4. Waterproof rating IP67 for harsh environments
- 5. Preferred plant-specific full spectrum, higher light absorption rate
- 6. Input voltage: DC24V, safe and reliable
- 7. Service life 50,000 hours
- 8. CE RoHS FCC

RX-G45-120H Version 3.0 Horticulture LED module, Indoor Agriculture - LED plant lights, Efficiency up to 3.0 umol/J, saving energy 50%, 60D and 90D Newly designed patented product, unique reflection and lens structure - high efficiency concentrating, uniform spectral radiation, directional illumination, higher light utilization, energy saving at least 50% compared to similar LEDs; It means building your plant farm with fewer lights, Especially suitable for plant factories with high-density shelf structures.

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Model	Dimension LxWxH	Spectral Wavelength	Photon PPFD µmol/m²/s	Luminous flux PAR Output	Power Input	Comment
RX-G45-120H-90	1205x45x12mm	F22	200μmol @0.2m 11442Lx 133μmol @0.3m 7635Lx 75μmol @0.5m 4335Lx	101µmol/s 5888Lm	40W DC24V	Constant voltage Input  2.5umol/J  General spectrum  Reflective cup protection
RX-G45-120H-90D	1205×45×19mm	F22	254μmol @0.2m I5234Lx 172μmol @0.3m 10136Lx 98μmol @0.5m 5769Lx	93µmol/s 5300Lm	40W DC24V	Constant voltage Input  2.3umol/J  General spectrum  90D lens reflector
RX-G45-120H-60D	1205×45×25mm	F22	310µmol @0.2m 17753Lx 211µmol @0.3m 12109Lx 129µmol @0.5m 7434Lx	93µmol/s 5300Lm	40W DC24V	Ra90 5800K Tissue Culture, Seedling Ornamental Plants, Succulent
RX-G45-120H-90-CC	1205×45×12mm	F22	114μmol @0.2m 6560Lx 171μmol @0.2m 9861Lx 229μmol @0.2m 13141Lx	61µmol/s 3501Lm 89µmol/s 5141Lm 121µmol/s 6925Lm	IA @ 19.9V I.5A @20.4V 2A @20.9V	2.8-3.1 umol/j more efficient.  Constant current power supply must be used
RX-GW45-DC515-K6	515x48x21mm	K6	195μmol @0.2m 10115Lx 129μmol @0.3m 6711Lx 63μmol @0.5m 3294Lx	Flux 3000Lm Fe 12VV	I2W	Full spectrum
RX-GW45-DC120-V3	1200x48x21mm	V3	272μmol @0.2m 12991Lx 183μmol @0.3m 8840Lx 111μmol @0.5m 5363Lx	Flux 3800 Lm	17W (AC230V)	2.5µmol/J
RX-GW45-AC120-F22	1200x48x21mm	F22	152μmol @0.2m 8681Lx 104μmol @0.3m 60921Lx 62μmol @0.5m 5363Lx	Flux 2558Lm Fe 17W	1.6A@ 20V	2.65µmol/J

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

For other spectra, please contact Koray Sales

The above data is for reference only!







- LED interlighting Module for filling light between tall plants such as tomatoes and cucumbers
- 2. Low temperature rise, surface temperature rise Tc 15 °K, will not burn the blade
- 3. Waterproof rating IP65
- 4. High efficiency, 2.5µmol/J
- 5. Length 1.2m, can be customized 2.4m
- 6. Preferred plant spectrum, Can be customized as you need
- 7. Input voltage: AC100~277V, PF>0.9, Power: 60W
- 8. Service life 35,000 hours
- 9. CE RoHS FCC

RX-GW6350 LED interlighting Module, system boosts high-wire plants yield during the darker periods of the year, with sideways-facing LEDs focusing growth-stimulating light on the most vital parts of crops. The original shaded leaves are re-used for photosynthesis, which stimulates the growth potential of the plants and is suitable for the cultivation of tall plants such as tomatoes, cucumbers and roses.



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Model	Dimension LxWxH	Spectral Wavelength	Photon PPFD  µmol/m²/s  Single-sided  luminescence data	Luminous flux Radiation Power	Power Input	Comment
			262µmol @0.1m 8791Lx	FI 40001		Soules august EA
RX-GW6350-120	1206×63×50mm	6K2R4BI	13   μmol @0.2m 4406Lx	Flux 4900Lm	60W	Series current 5A  Can be serially connected
			46μmol @0.5m 1555Lx	I 50µmol/s		in series of 18pcs/230V

Surface temperature rise Tc 15  $^{\circ}$ K

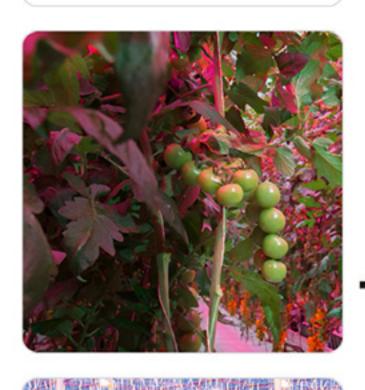
Operating temperature: -30 °C ~ 40°C , Life: 25,000 hours (Note: Ta 25 °C)

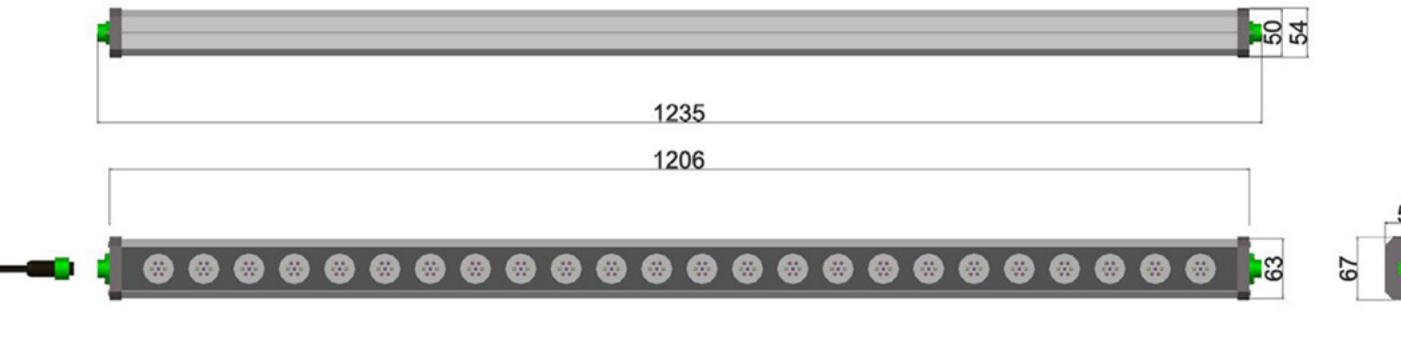
Tolerance range for optical and electrical data:  $\pm 10~\%$ 

Illumination angle 120°, Recommended irradiation distance 0.1~0.5 m

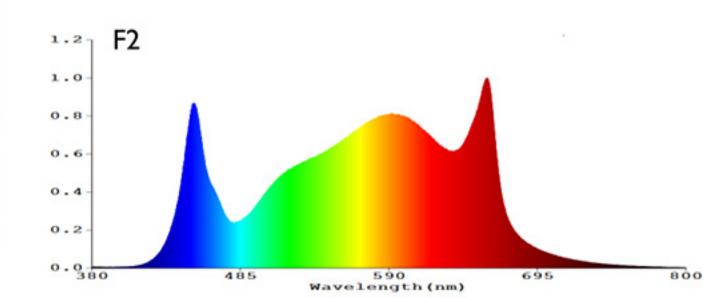
The above data is for reference only! Subject to change without notice

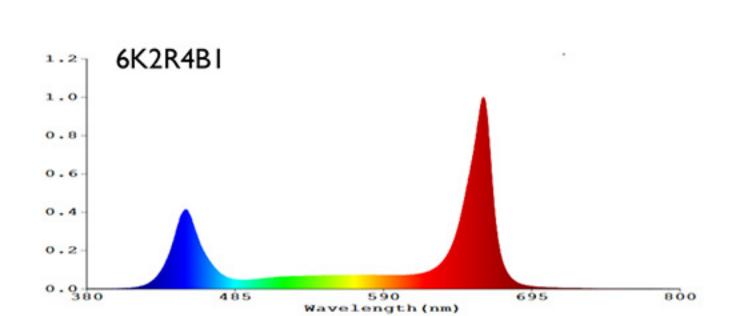
#### Dimension:







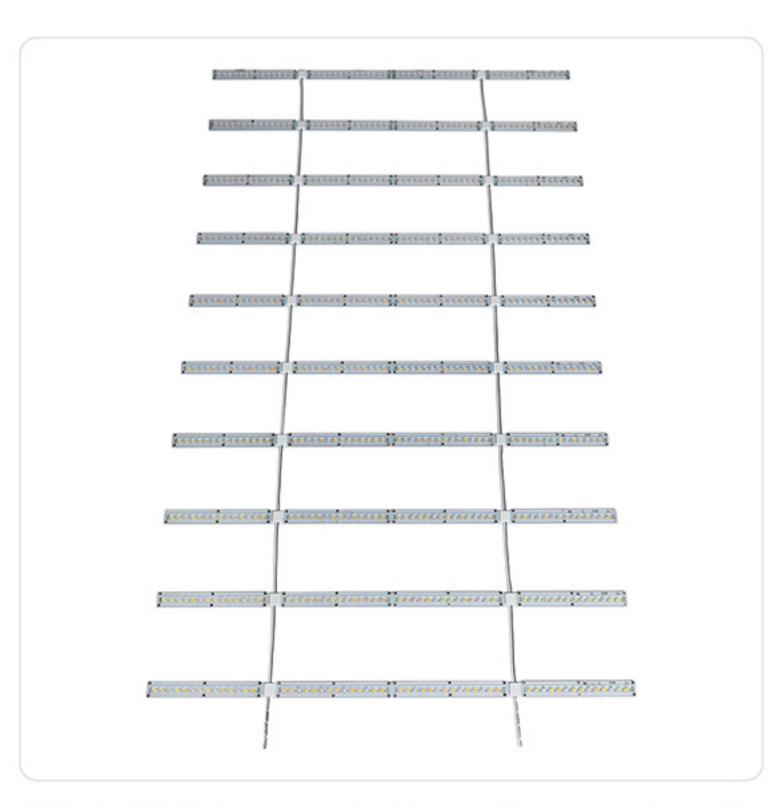




Unit: mm

# GWBK Economical LED Growth Light Curtain





- I. Economical LED Growth Light Curtain
- Vertical agricultural planting lamp for shelf structure plant factory, home indoor plant farm
- 3. The T series adopts a conjoined lens structure, which has a higher light utilization rate and is planted on a 0.6m wide shelf. Energy saving 50%. Patents multiple countries and regions are pending
- 4. High efficacy, with lens 2.3µmol/J, no lens 2.4µmol/J
- Optimized plant-specific full spectrum to meet different needs, B1 spectrum for seedling and tissue culture, B2 spectrum for plant vegetative growth.
- 6. Input voltage: DC48V, single rated power I2W
- 7. Lifespan: 50000hours
- 8. CE RoHS FCC

RX-GWBK, Economical LED Growth Light Curtain, LED Matrix, LED Grid, Led Ladder, New design, has applied for international patents, optional lens structure - efficient concentrating, uniform spectral radiation, directional illumination, higher light utilization, energy saving at least 50% compared to similar LEDs; meaning using less lights to build your Vertical plant farms; Products without lenses, PPF is more efficient and suitable for larger width planting areas; Especially for plant factories with high-density shelf structures.



Model	Dimension LxWxH	Spectral Wavelength	Photon PPFD µmol/m²/s	Luminous flux PAR Output	Power Input	Comment
DV CW/DV 40000T		ВІ	171μmol @0.2m 10327Lx	Flux: I 594Lm PPF: 27umol/s	11.6W	Ra 89 9000K  Seedlings and Rhizome  Max series connection 30pcs
RX-GWBK-60020T	600x20x7mm	B2	l 72μmol @0.2m 9947Lx	Flux: I 470Lm PPF: 26umol/s	11.7W	Ra 95 3000K  vegetative growth  Max series connection 30pcs

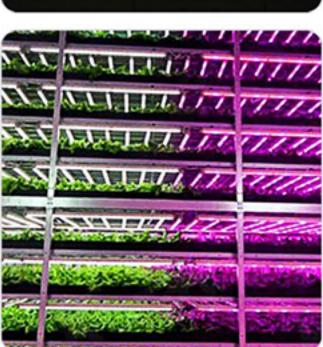


Surface temperature rise Tc 15  $^{\circ}$ K Operating temperature: -30  $^{\circ}$ C  $\sim$  40 $^{\circ}$ C, Lifespan: 50,000 hours (Note:Tc < 55  $^{\circ}$ C) Tolerance range for optical and electrical data :  $\pm$ 10  $^{\circ}$ K.

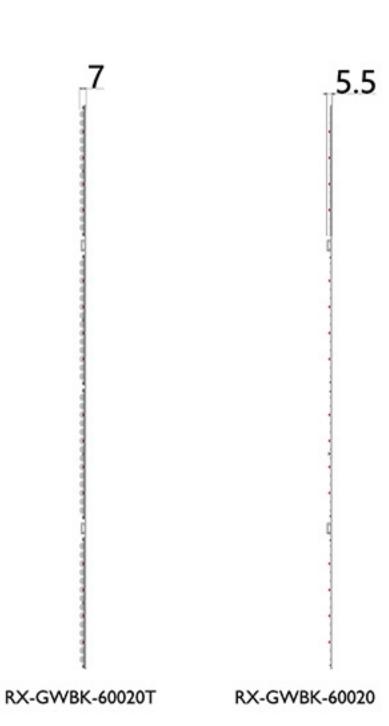
The above data is for reference only!

#### Dimension:





298



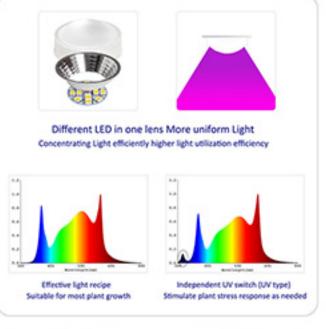
### 200W Toplighting LED Grow Light Module





- 1. PPFD up to 1450µmol @0.2m, Hanging installation in greenhouses and basement plant growth lights
- 2. 3 mounting slots and bolts for easy expansion and fixation
- 3. DM mode option with built-in dimmer. (Can be customized for external lighting, use PWM, 0-10V dimming, additional purchase required)
- 4. UV mode option, separately controlled UV spectrum switch, you can turn on the UV wavelength LED at the appropriate time to stimulate the plant's stress response and generate more medicinal ingredients.
- UV-DM mode option, individually controlled UV spectrum switch, additional dimming potentiometer
- 6. Input voltage: 100~305VAC, PF >0.9 Power: 200W
- 7. Recommended irradiation distance 0.2~2m, suitable for greenhouses, basements and indoor light-free environments.
- 8. Service life 35,000 hours
- 9. CE RoHS FCC

RX-TP10058 200W 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) Applicable to vegetable cultivation, flower cultivation, ornamental plant cultivation, succulent plant cultivation and medicinal plant cultivation etc.







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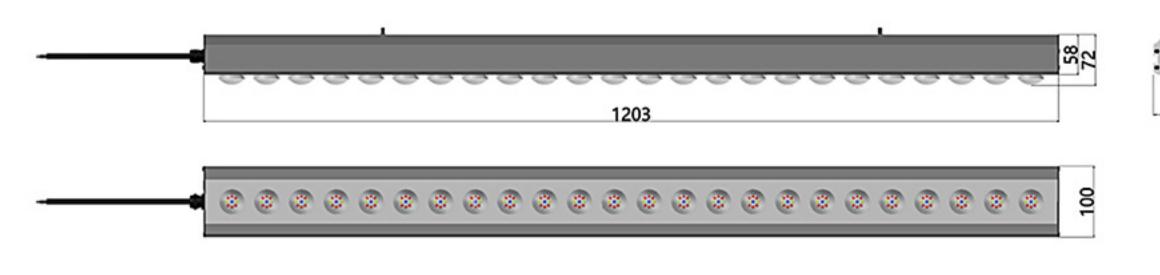
Model	Dimension LxWxH	Spectral Wavelength	Photon PPFD µmol/m²/s	Luminous flux Radiation Power	Power Input	Comment
RX-TP10058-A	1203×100×72mm	V2	1173μmol @0.2m 75874Lx 493μmol @0.5m 31948Lx 226μmol @1m 14529Lx	Flux 26479Lm PPF:418umol/s PAR: 87953mW	200W	Waterproof IP65  2. I umol/J  Ra88, vegetative growth
RX-TP10058-DM	1203×100×72mm	V2	1391μmol @0.2m 90108Lx 530μmol @ <mark>0.5m</mark> 34474Lx 219μmol @1m 14170Lx	Flux 26479Lm PPF:418umol/s PAR: 87953mW	200W	Dimming IP64 PPFD 107W test 2.1umol/J Ra88, vegetative growth
RX-TP10058-UV	1203×100×72mm	V2 + UV	1452μmol @0.2m 92548Lx 545μmol @0.5m 34724Lx 235μmol @1m 14978Lx	Flux 25808Lm PPF:406umol/s PAR: 85004mW	200W	Waterproof IP64  2umol/J(without UV)  Ra88, vegetative growth
RX-TP10058-UV-DM	1203×100×72mm	V2 + UV	1432μmol @0.2m 91485Lx 545μmol @0.5m 34650Lx 232μmol @1m 14752Lx	Flux 25636Lm PPF:404umol/s PAR: 84660mVV	200W	Waterproof IP64  2.1 umol/J(with UV)  Ra88, vegetative growth

Surface temperature rise Tc 30  $^{\circ}$ K Operating temperature:: -30  $^{\circ}$ C  $\sim$  40 $^{\circ}$ C , Lifespan: 35,000 hours (Note:Ta 25  $^{\circ}$ C) Tolerance range for optical and electrical data:  $\pm 10~\%$ .

Bean angle  $60^{\circ}$ , Recommended irradiation distance  $0.2{\sim}2m$ ;

The above data is for reference only!

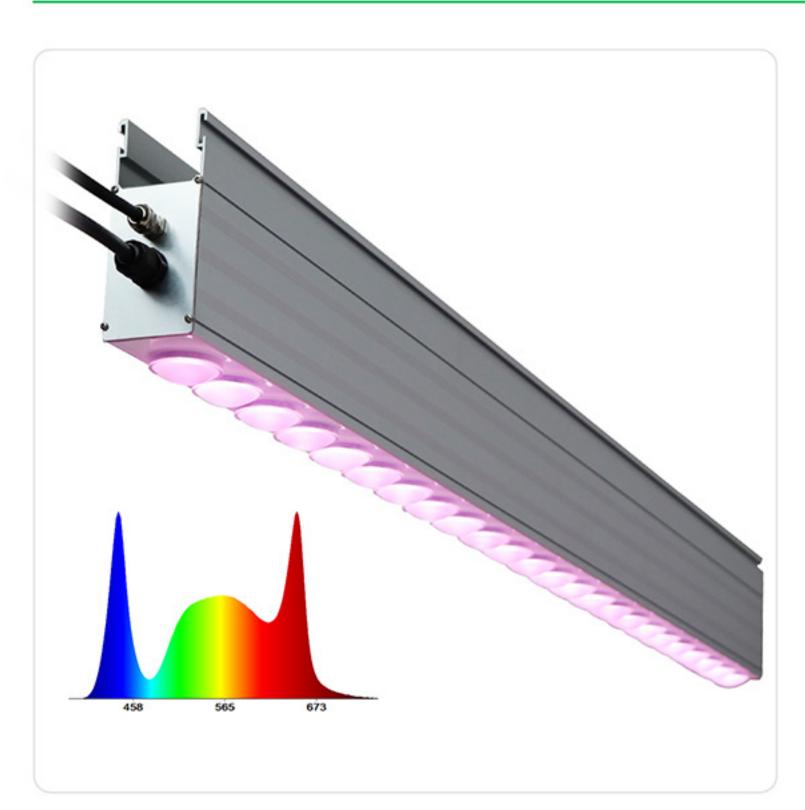
Dimension:



UNIT:mm







- I. 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. Osram horticulture LED, High efficiency 2.3umol/J
- 4. Meanwell power supply, dimmable, long life and more reliable
- 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)
- 7. Waterproof IP65
- 8. Input: AC100~305V PF > 0.9
- 9. Meet the safety requirements around the world, CE RoHS FCC

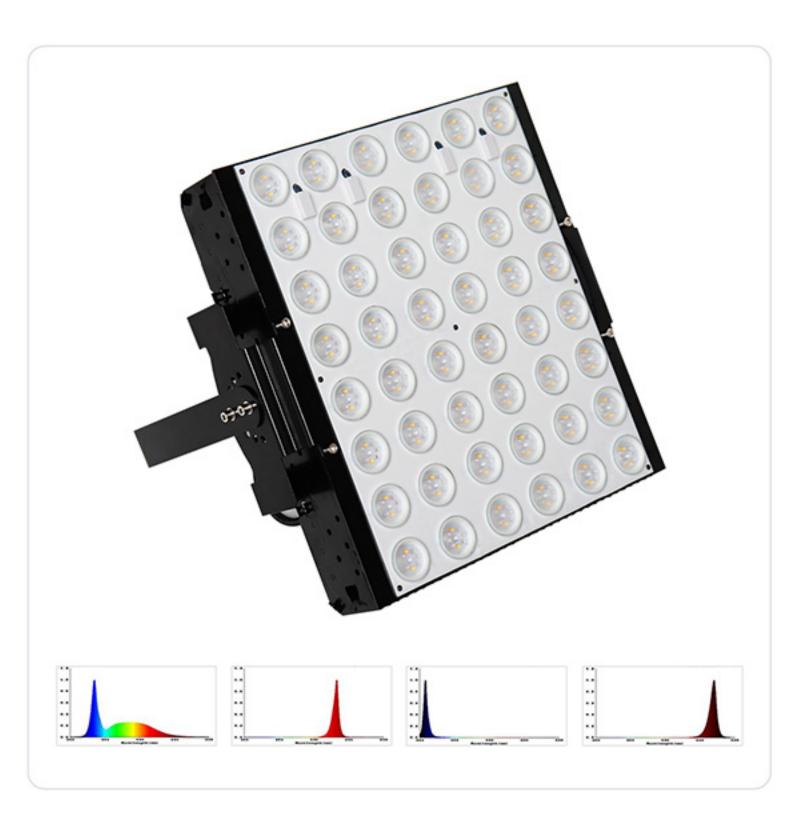
RX-TP12050 Toplighting LED Grow Module, New patent design product with unique lens, Different LED chips in one lens, Concentrating Light efficiently and More uniform spectral radiation, directional light, higher light utilization efficiency, more efficient comparing with common grow lights. Silicone 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 and medicinal plant cultivation etc.

	Model	Dimension LxWxH	Spectral Wavelength	Photon PPFD µmol/m²/s	Luminous flux Radiation Power	
			14 E4	608µmol @0.5m 37509Lx	Flux: 27274Lm	
	RX-TP12050-F4	1206×51×122mm	F4	264μmol @Im 16104Lx	PPF:428umol/s	
			1 No. 100 Co.	80μmol @2m 4757Lx	PAR: 91806mW	
			"	750µmol @0.5m 20500Lx*	Flux: 13211Lm	
	RX-TP12050-F5	1206×51×122mm	F5	328μmol @Im 8949Lx	PPF:469umol/s	
				102μmol @2m 2555Lx	PAR: 97334mW	
			· ·	730µmol @0.5m 18300Lx*	Flux: I 1553Lm	
	RX-TP12050-F6	1206x51x122mm	F6	318μmol @1m 7968Lx	PPF: 465umol/s	
MENT			A. Law and and and and	100μmol @2m 2285Lx	PAR: 95893mW	
			:: R2B5	174μmol @1.5m 1423Lx		
	RX-TP12050- R2B5	1206×51×135mm	K263	106μmol @2m 893Lx	Flux: 3859Lm PPF:464umol/s	
	1,255		1. No. 100 100 100	52μmol @3m 476Lx		
THE PARTY OF THE P	DV TD120F0		R6BI	374µmol @1m 4061Lx	FI F2201	
	RX-TP12050- R6B1	1206×51×135mm		124μmol @2m 1358Lx	Flux: 5220Lm PPF:509umol/s	
	KODI		1.0	60μmol @3m 689Lx	PPT.507umoi/s	
The second secon	RX-TP12050-R5B		RSBIFRI	352μmol @1m 3626Lx	Flux: 4563Lm	
	IFRI	1206×51×135mm	ä	112μmol @2m 1188Lx	PPF: 459umol/s	
	IIKI			54µmol @3m 605Lx	111.437dillol/s	
	Tolerance range for	e rise Tc 33°K Operat optical and electrical commended irradiatio	data: ±10 %。	0°C ~ 40°C , Lifespan: 35,000	hours (Note:Ta 25 °C)	)
	The above data is for refe	rence only!				

**Power Test** Comment Input AC230V 2umol/J XTE White LED Chips 220W Ra 80, seedling, rhizome 2.3umol/J Red & Blue 4:1 200W Tomato, cucumber, flowers 2.3umol/J 200W Added FR730nm 2.3umol/J 200W Seedling Supplement light 2.6umol/] Plant growth, 200W Supplement light 2.3umol/J 200W Flowers, supplement light

The above data is for reference only!

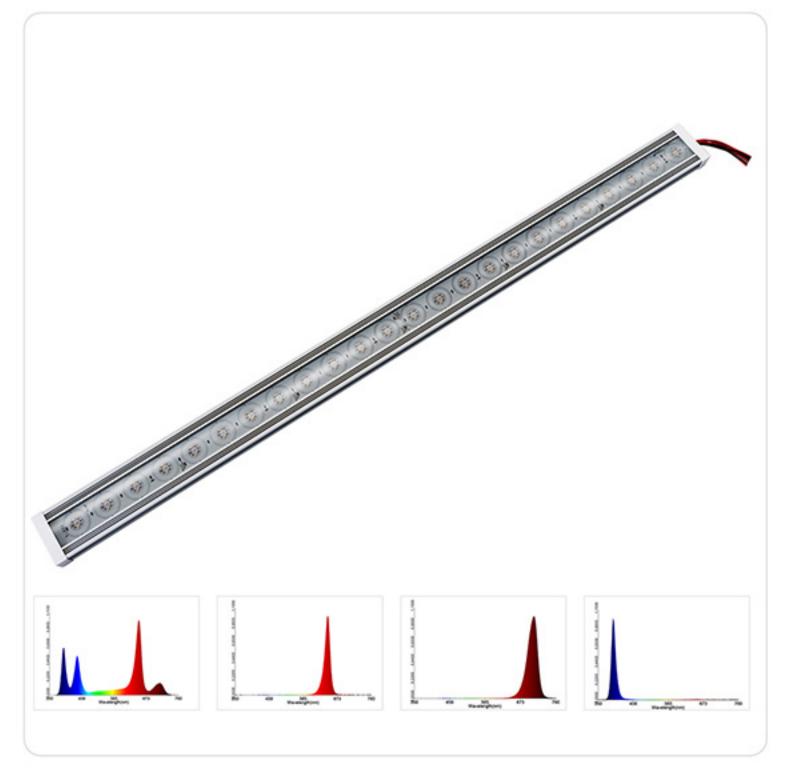




### RX-G3740-4H 450W high-power plant light module

- 1. Four-channel spectrum is adjustable, 0.5m PPFD up to 1300µmol/m²/s
- 2. Osram horticulture LED (except UV LED)
- 3. Applicable to high-powered male plants, high-light medicinal plants, research institutes, laboratories, plant factories, family science planting
- Lens reflector, high efficiency concentrating, PPFD increased by 30%, waterproof IP65
- Preferred spectra and combinations: 450nm+white/CH1, 660nm/CH2, 730nm/CH3,395nm/CH4, UV, BW, DR, FR multiple spectra can be adjusted as needed
- 6. Power: rated total power 450W
- 7. CE RoHS FCC

RX-G3740-4H 450W high-power plant light module, four channels of four different spectra, can control dimming separately, combine more spectrum, meet the illumination needs of different plants and different growth periods, and can be better applied by adjusting different spectra. Plant germination, group cultivation, growth, flowering, fruiting, harvesting and other lighting requirements at different stages; suitable for planting all kinds of plants, aquarium, especially suitable for experimental planting, plant nursery, plant factory, plant incubator special light source.



# RX-GW78-4H High power 4-channel individual dimming control LED plant light module Horticulture Light LED Bar

- I. Four separate channel dimming control that adjust different spectra to meet different light recipes for plant growth., Max power 200W
- 2. German brand Horticulture LED (except UV LED)
- 3. 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 60D Silicone potting waterproof IP65
- 6. New design, Patent No: 201620887642
- 7. Each channel is powered by a separate positive and negative pole and does not interfere with each other. Can be driven by multiple dimming power supplies
- 8.CE RoHS FCC

RX-GW78-4H LED Grow Light Module, High power 200W, high PPFD µmol/m²/s, 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

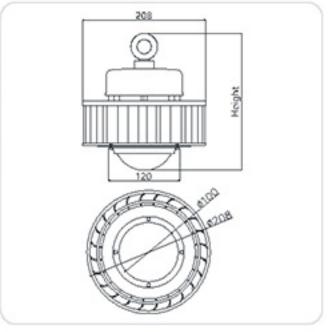






- I. Basement, plant tents for growing medicinal plants
- 2. High PAR output, PPFD> 1200µmol @ 0.3m
- 3. Preferred medical medicinal plant growth spectrum, you can customize the spectrum you need
- 4. Glass lens, High efficient copper heat pipe directly with the zero-distance heat bonded, higher reliability
- Use Meanwell power supply HBG, optional low-cost Square power supply
- 6. life 50,000 hours
- 7. CE RoHS FCC

KR-G100T series ultra high PAR output medicinal plant UFO waterproof plant lamp, Samsung and Osram LED, full spectrum, can be customized to include UV and FR, is ideal for medical planting lamps, PAR output, PPFD>1200µmol/m²/s at 0.3m, the special medicinal plant planting light source, after extensive practical planting, can significantly improve the quality and harvest. Suitable for basement planting, plant tent planting, experimental planting, greenhouse planting.





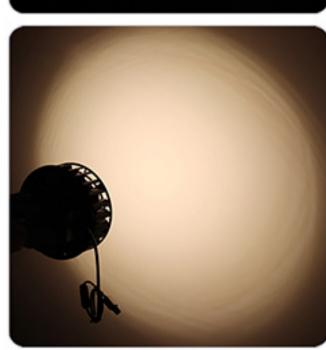
Model	Dimension	Light recipe Peak Wavelength	Photon PPFD µmol/m²/s	Luminous flux Radiation Power	Power Input	Comment
KR-G100T	Ø21cm H25cm 2.5Kg	\$15	133 I μmol @0.3m 86277Lx 457μmol @0.5m 29523Lx 114μmol @1m 7338Lx	Flux 16794Lm 250µmol/s	II0W ACII0V	Illumination angle: 100° Samsung LM301 Osram gardening LED
KR-GI00T-F	Ø21cm H25cm 2.5Kg	\$15	1350μmol @0.3m 87896Lx 462μmol @0.5m 29967Lx 115μmol @1m 7441Lx	Flux 17348Lm 258µmol/s	II0W ACII0V	Illumination angle: 100°  LM301 And German brand  Square power supply

Surface temperature rise Tc 30  $^{\circ}$ K, Operating temperature: -30  $^{\circ}$ C  $\sim$  40  $^{\circ}$ C, Service life: 50,000 hrs (Note:Ta < 25  $^{\circ}$ C)

Photoelectric error range:  $\pm 10~\%$ 

Recommended illumination distance of  $0.2\sim2$  m, suitable for indoor and basement indoor light-free environment

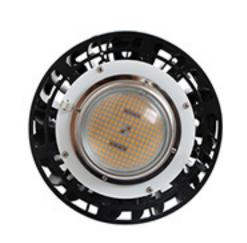
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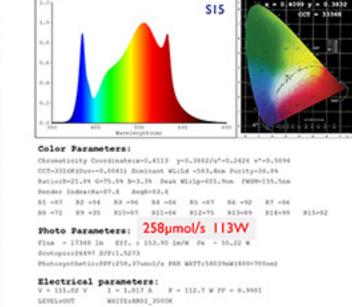




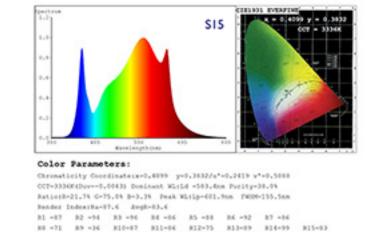








G100T-F-S15 110V PPF Output Test

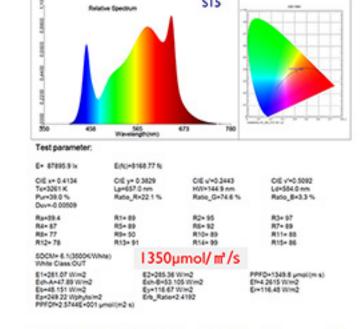


GI00T-SI5 II0V PPF Output Test

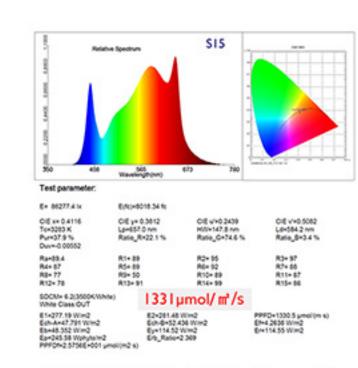
Photo Parameters: 250µmol/s 110W

Flux - 16794 in Eff. | 152.05 in/W Fe - 53.56 W

WRITELANDI\_3500K



G100T-F-S15 0.3m PPFD Output Test



G100T-S15-0.3m PPFD Output Test

### RX-A18-V Aquarium Light Submersible Fish Tank Light





- I. RGBW Aquarium Lights, double the brightness (than RGB Submersible Fish Tank Lamp)
- 2. The latest upgrade, colorful dimming, intelligent control aquarium lights
- 3. Waterproof IP68, can be soaked in water
- Smartphone Control, Timing switch, RGB dimming, white light dimming,
   built-in modes, scene settings
- 5. Highly Transparent PMMA Tube(Optional glass tube)
- 6. Lifespan: 25,000 hours
- 7. Warranty I years
- 8. CE RoHS FCC

RX-A18-V RGBW 4 channel Bluetooth Controller Underwater LED Aquarium Light Submersible Fish Tank Light. High brightness, double the brightness compared to RGB color aquarium lights, more penetrating. Bluetooth RGBW LED Controller, It supports a color palette of over 16 million colors and also different tones of white light-from warm yellow light to vibrant blue light. The APP is with timer, music control and group control function and 20 built-in modes and DIY mode, Easily bring up the colors you need, Suitable for fish tanks Aquarium lighting!



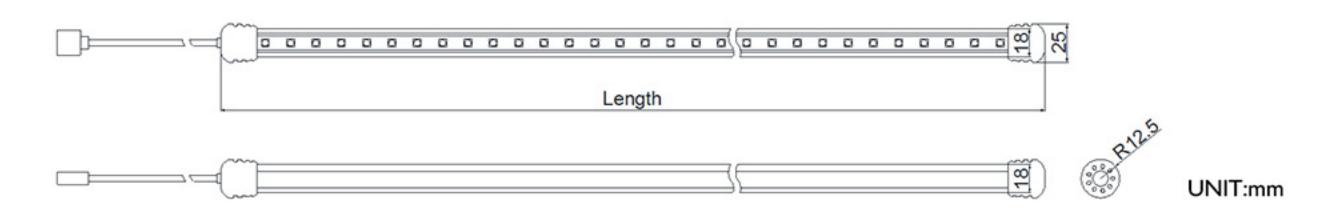


Model	Dimension	Fit for Aquarium Length	Illuminance 10cm Lx (RGBW)	Luminous flux PAR Output (RGBW)	Max Power Input	Comment	
RX-A18-V23	23cm	>25cm	3513Lx 64µmol/m²/s	I 74Lm	3.8\\		
RX-A18-V53	53cm	>55cm	4539Lx 81µmol/m²/s	I 66Lm	9.5W	Please use DC24V driver and leave	
RX-A18-V103	I03cm	>105cm	4647Lx 84µmol/m²/s	860Lm	18.3W	enough power	
RX-A18-V113	I I 3cm	>115cm	4730Lx 85µmol/m²/s	958Lm	20.2W		

The above data is for reference only!















# D60 with 360-degree flexible neck for household Plant Grow Lamp Koray





- 1. Dual Head Bulbs Gooseneck 360-degree easy to adjust and place anywhere.
- 2. High PPFD > 300umol @0.3m (one bulbs)
- 3. USB connection function provides easy way to connect a wall outlet or an USB interface like computer
- 4. 4 Dimmable Brightness Levels 25%,50%,75%,100%
- 5. Timing Function working time for 3 hours, 6 hours, 12 hours according to plants need. Note: After time setting, the light will turn off automatically, But you need to turn it on manually every day.
- 6. The preferred plant light spectrum, Customize the spectrum you need (for specialized companies only)
- 7. Lifespan: 50000hours, Warranty: 2 years
- 8. CE RoHS FCC

RX-GW-D60-2T USB LED Grow Light bulbs, Dual Head Timing Grow Light 4 Dimmable Levels 3 Modes Timing (3H/6H/9H) Plant Grow Lamp with 360 Degree Adjustable Gooseneck for Indoor Plants Garden Greenhouse Potted, can be conveniently controlled the house plant lamp depending on your needs and quickly serve your plants. The preferred plant growth special lighting spectrum. Suitable for indoor use, starting seedlings, potted plants follage plants, flowering plants, succulent and Venus flytrap (Dionaea muscipula) plants.



Model	Dimension	Spectral Wavelength	Photon PPFD µmol/m²/s	Luminous flux Radiation Power	Power Input DC5V	Comment
	Bulb Ø62mm	K15B2	460μmol @0.2m 17948Lx	Flux 254Lm Fe 1.7W	8.5W	Succulents plants rhizome growth
RX-GW-D60-2T	H63mm Gooseneck 380mm	K6	326μmol @0.2m 15273Lx	Flux 335Lm Fe 1.6W	8.5W	Strawberry, Flower Pot, Venus flytrap plants, Ornamental Plants

350

458

565

Wavelength (nm)

780





350

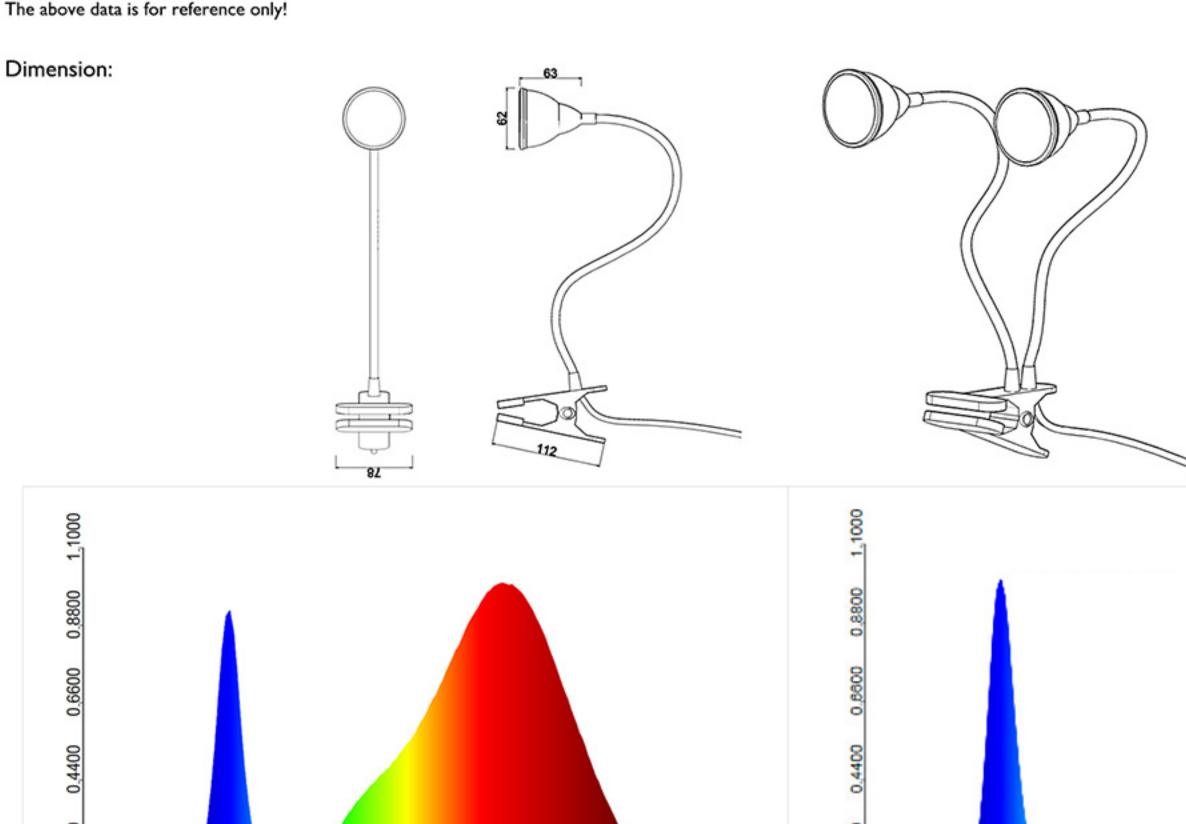
458

565

Wavelength (nm)







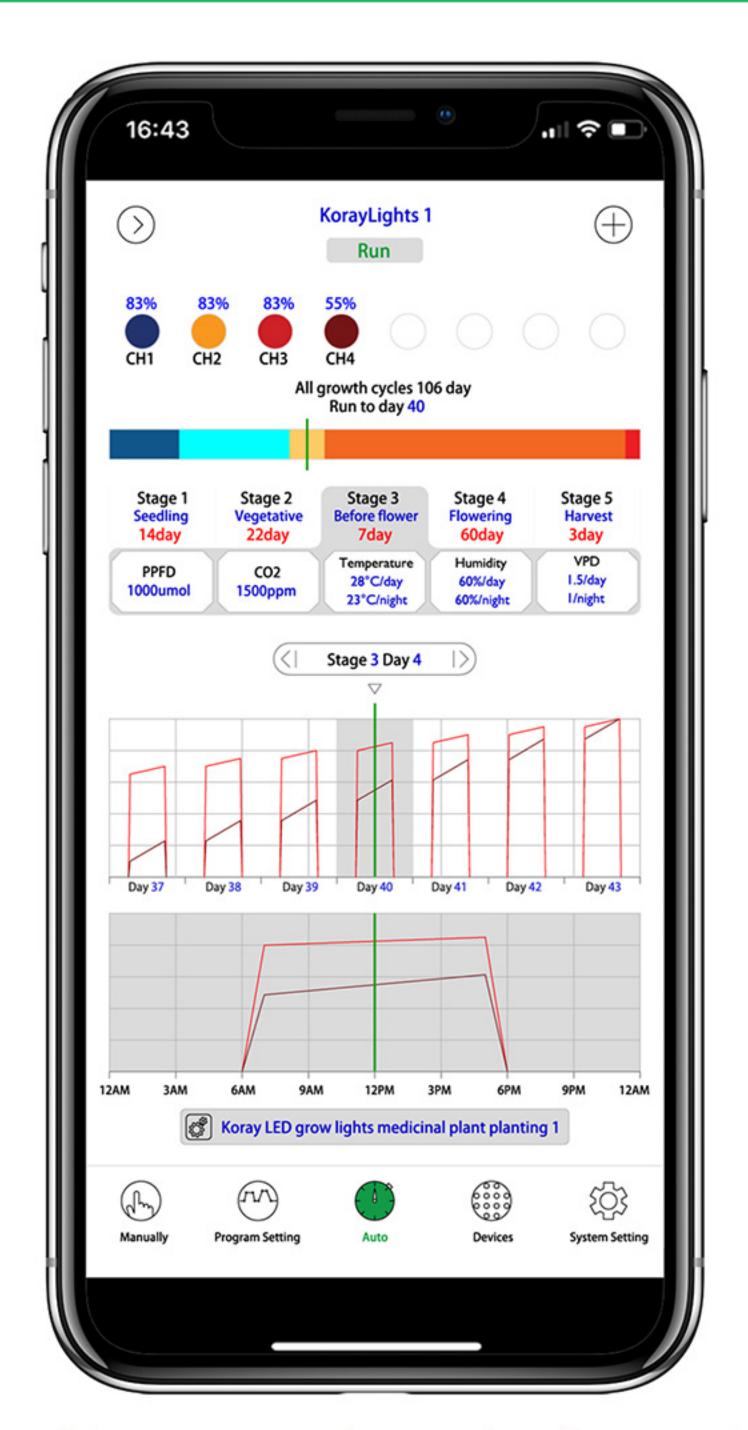
673

780

UNIT:mm

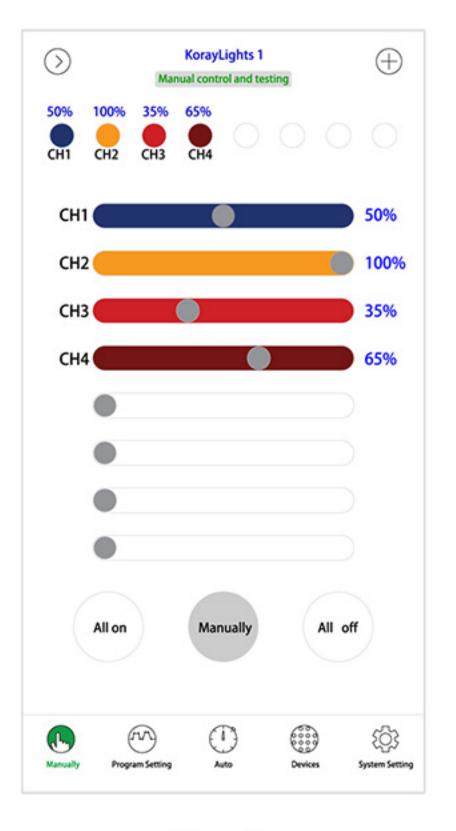
673

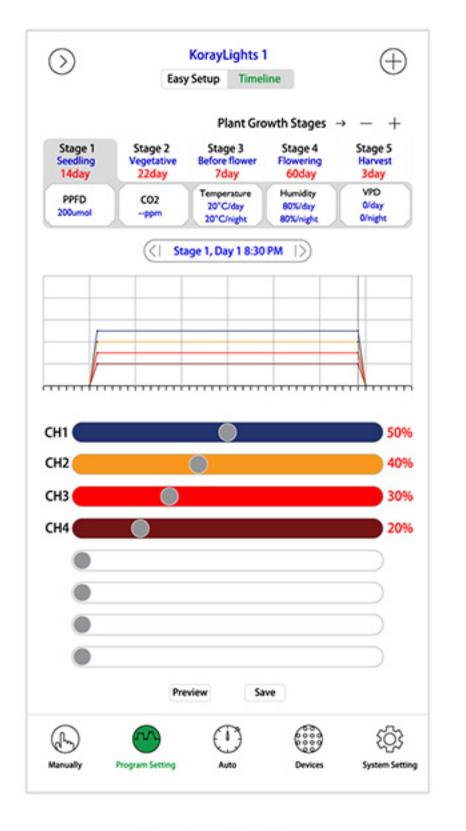


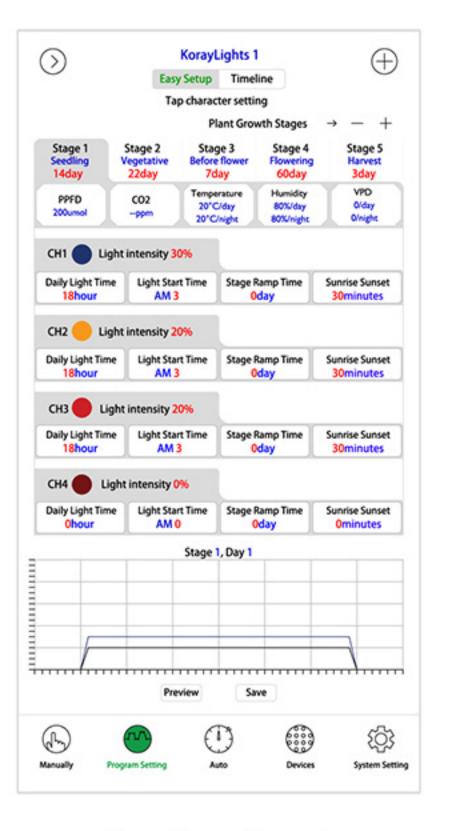


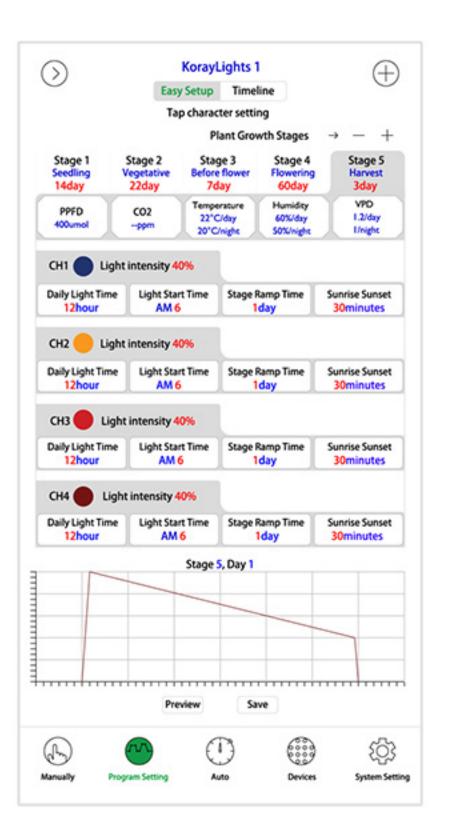
### LED grow light smart control system interface - coming soon

Used for LED plant light control, setting the plant growth stage, setting the time switch, timing dimming to adjust the light intensity, adjusting the light spectrum, and running according to the set timeline.









Manually Set by timeline Easy Setup Stage I Easy Setup Stage 5

18



### Horticulture Lighting Terms: Understand Grow Lights

When searching for the best grow lighting solutions it is important to know that not all light specifications are relative in determining the effectiveness of a horticulture lamp or luminaire. Lumens, LUX, candela and wattage are metrics used to discern light efficiency and intensity in commercial and residential lighting applications. Instead, the terms PAR, PBAR, PPF, photon electrical efficiency, PPFD and DLI are all important metrics to understand when making a lighting choice for horticulture specific applications.

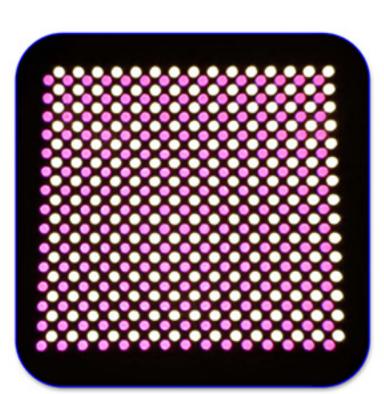
Common Nomenclature	Notation Unit	Comment
PAR	/	PAR (Photosynthetically Active Radiation) is a region of the light spectrum (400 to 700 nm) that plants utilize for the process of photosynthesis. PAR is not a measurement or metric but defines the range of light needed to support photosynthesis.
PPF	µmol/s	PPF (Photosynthetic Photon Flux) is a measure of the total amount of light within PAR that a light source emits each second. The unit used to express PPF is micromoles of photons per second (µmol/s).PPF is an important metric for calculating how efficient a lamp is at converting electrical energy into photons of PAR. Nonetheless, it is of essence to note that PPF does not tell you how much of the measured light actually arrives at the plant canopy. PPF measurements used to describe light sources should be done in specialized light laboratories using appropriate equipment such as light sensors connected to integrating spheres or goniometers.
PPFD	µmol/m²/s	PPFD (Photosynthetic Photon Flux Density) measures the amount of light within PAR that actually falls on a given surface (the plant canopy area) each second. The unit used to express PPFD is micromoles of photons per square meter per second (µmol/m2/s). This measurement is done using a specialized instrument called PAR Light Meter or a properly calibrated spectrometer, which captures, and measures photons emitted by a light source.
PPE	/	PPE (Photosynthetic Photon Efficacy) is the PAR photon output of a light source (measured in micromoles per second or µmol/s) divided by the input power (Watt) to produce that light.
Photon Efficacy	µmol/j	Photon Efficacy refers to how efficient a horticulture lighting system is at converting electrical energy into photons of PAR. Many horticulture lighting manufacturers use total electrical watts or watts per square foot as a metric to describe light intensity. However, these metrics really don't tell you anything since watts are a measurement describing electrical input, not light output. If the PPF of the light is known along with the input wattage, you can calculate how efficient a horticulture lighting system is at converting electrical energy into PAR. The unit for PPF is µmol/s, and the unit to measure watts is Joule per second (J/s), therefore, the seconds in the numerator and denominator cancel out, and the unit becomes µmol/J. The higher this number is, the more efficient a lighting system is at converting electrical energy into photons of PAR.

# SMD5050 Waterproof Large size LED module Xinel













- I. The world's only large size LED module
- 2. Customize the size, shape, RGB, CCT, RGBW, Maximum size 1x1m
- 3. Waterproof rating IP67
- 4.9 years of practical application
- 5. High CRI > 80 (Optional: > 90)
- 6. High efficiency 110Lm/W DC12V or DC24V
- 7. Patent No.:ZL200820131053, ZL200820132702.
- 8. Ultra-thin 3mm
- 9. Warranty 3 years
- 10. CE RoHS FCC

RX-ALF5050 waterproof LED aluminum panel, Patent No.:ZL200820131053, ZL200820132702. With top SMD5050, unique waterproof design, the world's first, holds several patents, has a slim, low temperature rise, waterproof, safe, reliable, long life; strength over 50,000 hours aging test; Around the world, more than 9 years practical application, to good effect. Used in place of large-scale projects, shopping malls, railway stations, airport, high-brightness lighting, a variety of sizes optional, you can also customize the size and Outer shape, do your own energy-saving lighting project.

MODEL	Dimension LED QTY	Lumen	Power DC12V	Life-Span	LED spacing Brightness/ m <sup>2</sup>	Comment
RX-ALF5050-33-RGBW-5050	500x500mm 225pcs RGB LED 225pcs WW LED	4000Lm/WWV 1060Lm/RGB	40W/ww 40W/RGB	>40000hours	33.33mm  Min. Cabinet  Depth* 48mm  RGB:  Max160W / m2	Max Temperature rise + 180 Operating Temperature (-30~50oC) high brightness
RX-ALF5050-33-RGBW-6060	600x600mm 324pcs RGB LED 324pcs WW LED	5700Lm/WW I 500Lm/RGB	57W/ww 57W/RGB	>40000hours	4400Lm / m2 White: 160W / m2 16100Lm / m2	60% energy saving compare  3 LED a group  Lighting-source  light boxes backlight.

MODEL	Diameter LED QTY	Lumen	Power DC12V	Life-Span	Temperature rise	Comment
RX-ALF5050-25-F30	Ø300mm 112LED	2350Lm	23.5W	>50000hours	+ 25 °C	
RX-ALF5050-25-F40	Ø400mm 192LED	4000Lm	40VV	>50000hours	+ 25 °C	
RX-ALF5050-25-F50	Ø500mm 300LED	6000Lm	60W	>50000hours	+ 25 °C	Lighting-source
RX-ALF5050-25-F60	Ø600mm 440LED	9000Lm	90\\	>50000hours	+ 25 °C	Replacement Circular fluorescent Lighting Project
RX-ALF5050-33-F80	Ø800mm 446LED	9000Lm	90\	>50000hours	+ 10°C	
RX-ALF5050-25-F80	Ø800mm 788LED	13000Lm	130VV	>50000hours	+ 25 °C	

MODEL	Dimension LED QTY	Lumen	Power DC12V	Life-Span	LED spacing Brightness/ m <sup>2</sup>	Comment
RX-ALF5050-33-6060	600×600mm 324LED	5800Lm	58W	>50000hours	33.33mm Min. Cabinet Depth* 48mm	Temperature rise + 10K
RX-ALF5050-25-6060	600×600mm 576LED	10000Lm	1000	>40000hours	25mm Min. Cabinet Depth* 36mm	Temperature rise + 25K
RX-ALF5050-16-6060	600x600mm 1296LED	20000Lm	200W	>36000hours	I 6mm Min. Cabinet Depth* 25mm	Top brightness  Temperature rise + 35K  Requires additional heat sin

The above table data testing at room temperature is 25 °C, test voltage DCI2V; LED color temperature 6000-6500K, CRI > 80

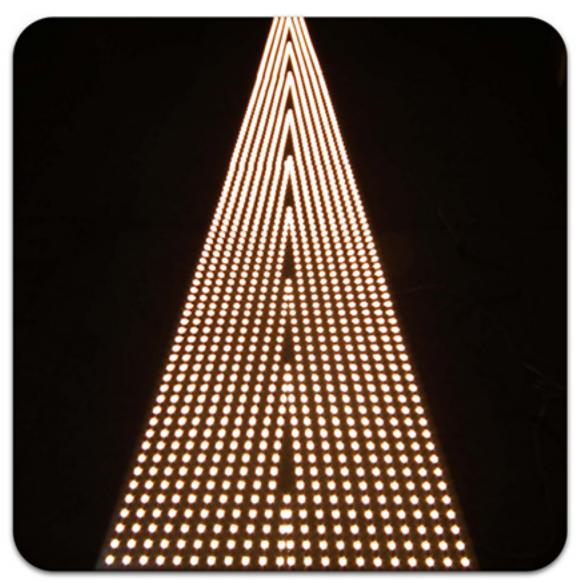
\*Minimum distance required from panel to face. Calculated with 2447 milky white acrylic with no graphics, Depth on faces with graphics can nave thinner cabinet depths, Consult with XineLam for samples and depth demonstrations. Special sizes, Consult with XineLam Reps and Distributors



# SMD3528 Large size waterproof LED Module

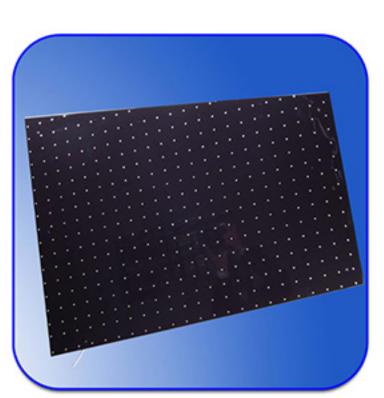


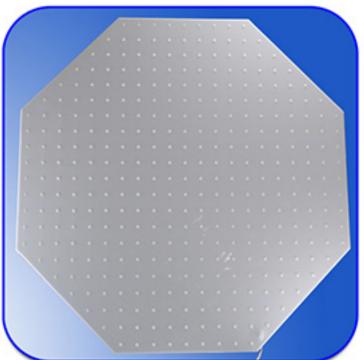
- I. Large size LED Module Max Custom size: IxIm
- 2. Waterproof IP67
- 3. Up to 9 years of aging test, the real test of time.
- 4. Option LED Spacing: 16,25,30,33,45,50mm
- 5. Ultra-thin 3mm
- 6. Luminous efficiency 100Lm/W DC12V
- 7. High color rendering index Ra >80
- 8. Patent No.:ZL200820131053, L200820132702
- 9. Warranty 3 years

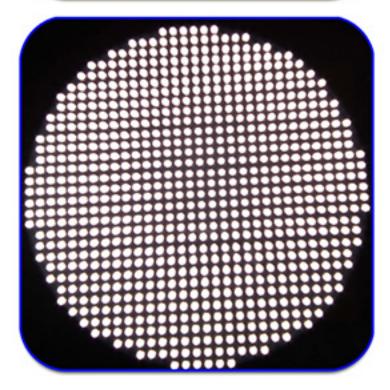


### Description:

RX-ALF3528 waterproof LED aluminum panel, Patent No.:ZL200820131053, ZL200820132702. With the top SMD3528 LED, unique waterproof design, the world's first, holds several patents, has a slim, low temperature rise, waterproof, safe, reliable, long life; strength over 60,000 hours aging test; Around the world, more than 6 years practical application, to good effect. Mainly used for light boxes backlight, large-scale projects, shopping malls, railway stations, airports and other high-end places lighting, a variety of power, in various sizes, you can also customize the size, the professional energy-saving lighting project.







MODEL	Dimension LED QTY	Lumen	Power DC12V	Series connection TYPE B max 5A	LED spacing Brightness/ m <sup>2</sup>	Comment
RX-ALF3528-33-1060	100x600mm 54LED	420Lm	4.2W	14pcs		Temperature rise <5 oC
RX-ALF3528-33-3030	300x300mm 81LED	550Lm	5.5W	10pcs	33.33mm	Standard brightness
RX-ALF3528-33-3060	300x600mm 162LED	1100Lm	11W	5pcs	Min. Cabinet Depth* 48mm	60% energy saving compared with fluorescent tubes.
RX-ALF3528-33-5050	500x500mm 225LED	1520Lm	15.2W	4pcs	60W / m <sup>2</sup> 6000Lm / m <sup>2</sup>	Mainly used for advertising
RX-ALF3528-33-6060	600x600mm 324LED	2200Lm	22W	3pcs		light boxes backlight.
RX-ALF3528-25-3030	300x300mm 144LED	1100Lm	11W	5pcs	25mm	Temperature rise <10 °C high brightness light boxes backlight. Replace fluorescent tubes
RX-ALF3528-25-20120	200x1200mm 384LED	2900Lm	29W	2pcs	Min. Cabinet Depth* 36mm	
RX-ALF3528-25-6060	600x600mm 576LED	3900Lm	39VV		10830Lm / m <sup>2</sup>	
RX-ALF3528-16-3030	300x300mm 324LED	2200Lm	22W	3pcs	16.66mm	Temperature rise <15 °C Ultra high brightness
RX-ALF3528-16-2050	200x500mm 360LED	2400Lm	24W	2pcs	Min. Cabinet Depth* 25mm	light boxes backlight. Lighting-source
RX-ALF3528-16-6060	600x600mm 1296LED	8200Lm	82W		22770Lm / m <sup>2</sup>	Replace H type fluorescent tubes
RX-ALF3528-X66-3060	300x600mm 81LED	600Lm	6W	10pcs	47.1mm Min. Cabinet	Temperature rise <3 °C
RX-ALF3528-X66-6060	600x600mm 162LED	1200Lm	12W	5pcs	Depth* 67mm 3330Lm / m <sup>2</sup>	Low brightness

The above table data testing at room temperature is 25 °C, test voltage DC12V; LED color temperature 6000-6500K, CRI > 80

\*Minimum distance required from Panel to face. Calculated with 2447 milky white acrylic with no graphics, Depth on faces with graphics can nave thinner cabinet depths, Consult with XineLam for samples and depth demonstrations. Special sizes, Consult with XineLam Reps and Distributors

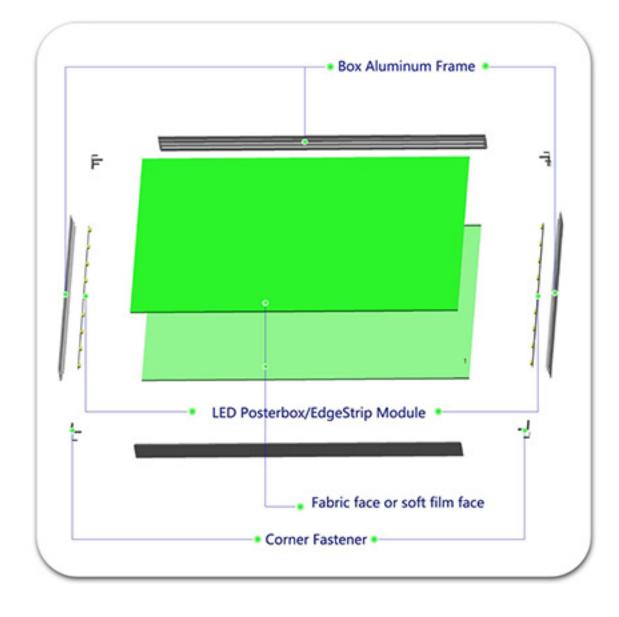
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# LED EdgeStrip Module - Posterbox Module





- I. RX-BKT35-110 920mm 1x2m Light-box, requires only one LED module.
  For 120mm lightbox
- RX-BKT35-53 460mm High brightness, ultra-thin light box,
   Applies to Lightbox min 60mm thickness.
   High Power 22.5W @ 0.5M
- 3. OSRAM LED chip (Optional: Cree XTE XPE)
- 4. Light uniformity, no dark areas



#### Description:

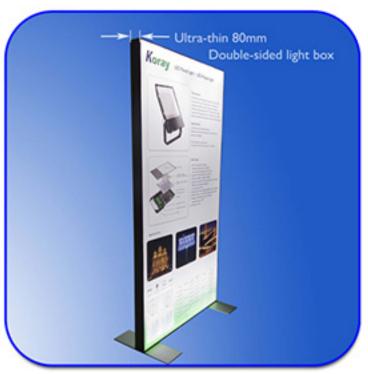
RX-BKT35 LED EdgeStrip Module (BoxLED Side/ Posterbox Module ) New design high flux products, Ix2m Light-box, requires only one LED module.
OSRAM LED chip; Slim washes light across single-sided and double-sided displays using LED lens technology that optimizes the light inside the box. The result is uniform light without the stripes associated with fluorescent tubes.

The narrow silhouette of the side mounted modules makes Poster-box

Slim an excellent option for single-sided sign. LED modules for light
advertising and backlighting. applicable thickness more 120mm fabric face light boxes
or soft film light boxes.





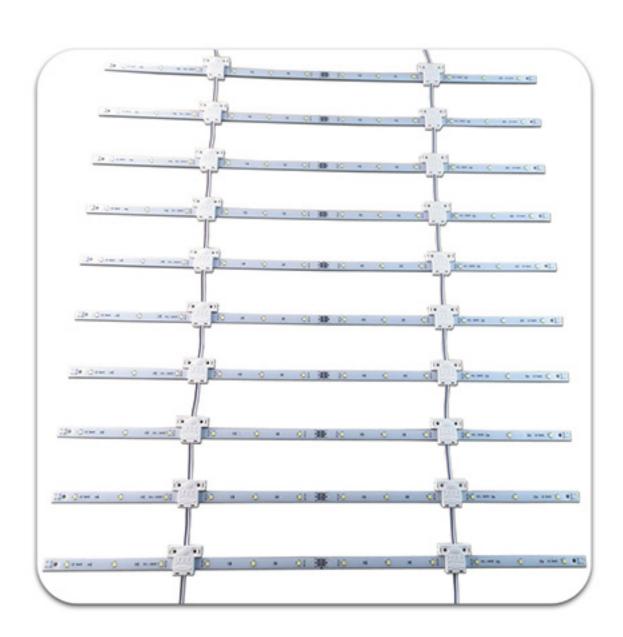


Model	Dimension Net weight	CRI @ Color Tempe	Luminous Flux / Efficiency	Rated Power	Comment
RX-BKT35-110-920-1 050D-NW3	920×26×14mm	Ra>80 4000K	2700Lm 108Lm/W	25)A/ DC24)/	Edge-lit, poster boxes
RX-BKT35-110-920-1 050D-CW	80g	Ra>70 6000K	2950Lm     18Lm/W	25W DC24V	LED module. For 120mm lightbox
RX-BKT35-53-460-10 50D-NW3	460×26×14mm	Ra>80 4000K	2178Lm 99Lm/W DC24V 22W	Power: 22.5W	High brightness, ultra-thin light
RX-BKT35-53-460-10 50D-CW	100g	Ra>70 6000K	2450Lm 110Lm/W DC24V 22.3W	Input: DC12 ~24V	box,Applies to Lightbox min 60mm thickness.
RX-BKT35-53-145-10 50D-NW3	145×26×14mm 40g	Ra>80 4000K	705Lm 98Lm/W DC24V 7.2W	Power: 7.5W	Viewing Angle: 10x50°
RX-BKT35-53-145-10 50D-CW		Ra>70 6000K	810Lm 108Lm/W DC24V 7.5W	Input: DC12 ~24V	Edge-lit, poster boxes
RX-BKT35-118-516 -0875D-NW3	516x26x13mm	Ra>80 4000K	998Lm 83Lm/W DC24V 12.08W	Power: I2.5W	Viewing Angle: 8x75°
RX-BKT35-118-516 -0875D-CW	70g	Ra>70 6000K	1283Lm 104Lm/W DC24V 12.37W	Input: DC24V	Edge-lit, poster boxes
RX-BKT35-118-280 -0875D-NW3	280×26×13mm	Ra>80 4000K	624Lm 82Lm/W 7.65W DC24V	Power: 7.5W	Viewing Angle: 8x75°
RX-BKT35-118-280 -0875D-CW	40g	Ra>70 6000K	786Lm 7.66W DC24V 103Lm/W	Input: DC12~24V	Edge-lit, poster boxes

The above table data testing at Ambient temperature is 30 °C, Cooling by free air convection. Operation Temperature: -25 °C ~ 90°C At the Tc point Tolerance range for optical and electrical data:  $\pm 10$  %. Lifetime: 50,000 hrs (Note:Tcp < 65 °C)



# LED Lattices - LED Curtains - for backlight



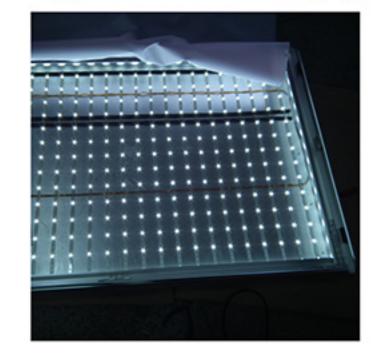


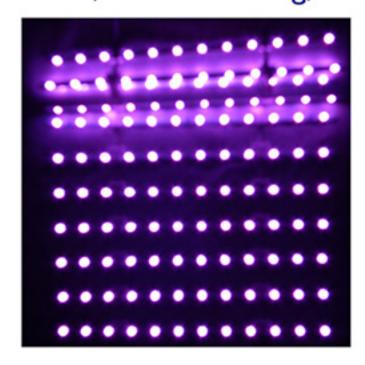


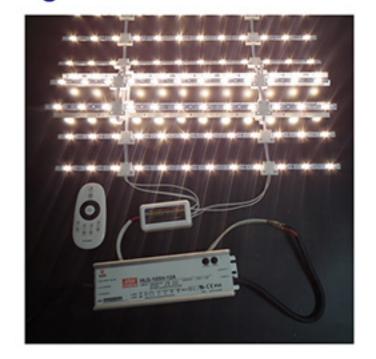
- 2. Can cut one LED, easy to shape
- 3. High efficiency 158Lm / W(CC TYPE  $0\Omega$  resistance)
- 4. High CRI>80, Optional CRI>90
- 5. Recommended RX-BKT35-81 930mm, diffuse lens LED Curtains
- 6. Recommended RX-BKT41-33 600mm can be cut shape

#### Description:

RX-BKT41-33 LED Lattices High-voltage LED lamp, can cut one LED, easy to shape. High CRI>80, High efficiency 158Lm / W, 50% higher than the peer products. For large size indoor ceiling light, Advertising light boxes backlight, Grille light source. RX-BKT35-81-930 Direct-lit light Module features outstanding lumen output with low power consumption. With secondary optical lens on LED, the emitting angle can be widened so that the light bar presents excellent light uniformity. It can be easily connected to a curtain(ladder, bamboo, Lattices). For large direct-lit backlight. Applies to: advertising light boxes, soft film ceiling, other light Source.

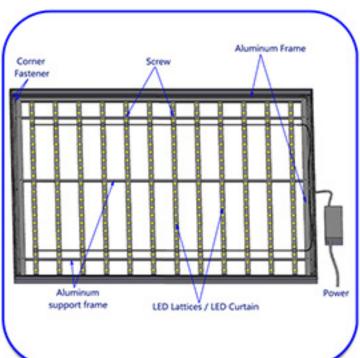












Model	Dimension Net weight	CRI & Color Tempe	Luminous Flux Efficiency	Current & Typ Vf Rated power	Comment
RX-BKT35-81-930	930×18×7mm	>00 (000)	I I 40Lm 95Lm/VV	12W DC24V	Connected Curtain Max 20pcs/Roll PH2.0 Terminals : Series connection Max 4pcs
RX-BKT35-81-930-0Ω	75g	>80 6000K	1140Lm 120Lm/W	0.5A @19V 9.5W	Constant current drive power must be used. Max 0.7A; Not connect curtain
RX-BKT41X2-50018	496×18×7mm 40g	>80 6000K	400Lm 95Lm/W	4.2W DC24V	Connected Curtain Max 50pcs/Roll
RX-BKT28-18-50	1100×18×7.2mm 120g	>80 6000K	1470Lm 95Lm/VV	15.5W DC24V	Connected Curtain Max 15pcs/Roll
RX-BKT41-33-24V	600×10×2.6mm		720Lm 100Lm/w	7.2W DC24V	Connected Curtain Max 32pcs/Roll
RX-BKT41-33-CC	35g	>80 6000K	570Lm   158Lm/VV	0.2A @18V	Max:0.4A @18 ~21V  Maximum connection 150W
RX-BKT41S-60	600×10×2.6mm 30g	>80 6000K	270Lm 100Lm/VV	2.7W DC12V	Connected Curtain Max 48pcs/Roll

The above table data testing at room temperature is 25 °C, Cooling by free air convection.

Operation Temperature: -30  $^{\circ}$ C  $\sim$  70 $^{\circ}$ C At the Tc point

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

Lifetime: 50,000 hrs (Note:Tcp < 60 °C)

Test LED color temperature 5800-6250K, CRI: >80, (WW2800~3200K 92% brightness; NW3800~4200K 96% brightness)

\*0 ohm products, Proper current derating must be observed to maintain junction temperature below the maximum at all time.



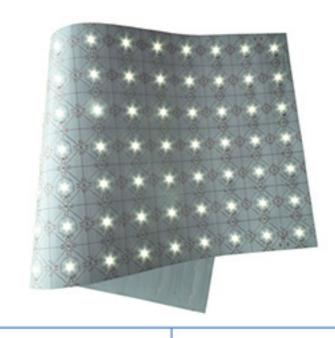


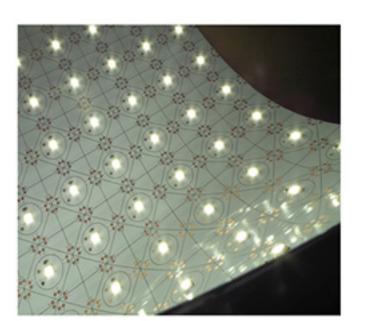


- 2. Slim light box LED sheet module, depth 30mm
- 3. RX-BKT28-500240 500x240mm 300LED
- 4. RX-BKT28T-500235D 500x235mm 105LED With 160° TV Lens
- 5. High efficiency 108Lm / W DC24V Input
- 6. High CRI > 80 (Optional: > 90)
- 7. Patent: ZL201420249938.2
- 8. CV input DC24V(Optional: 12V), Easy to expand installation
- 9. Warranty 3 years

### Description:

LED Sheet, Patent: ZL201420249938.2, Flexible LED modules; you can cut and splice, making any shape LED module, High efficiency 108Lm / W @ constant voltage drive, Ideal for Light source, Backlighting for advertising, Blister words backlit, LED signs Do your own. energy-saving lighting project.











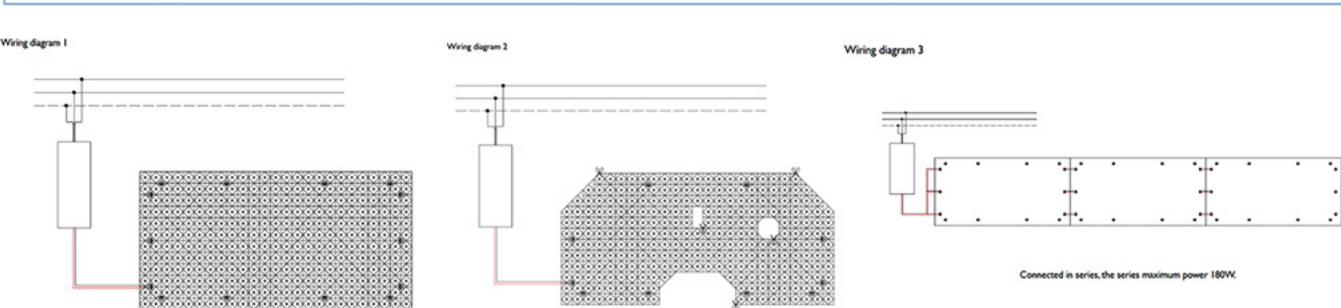


Model	Dimension Net weight	Luminous Flux	Efficacy Typ	Continuous connection QTY	Rated Power	Comment
RX-BKT28-500240	500×240mm	6929Lm	I00Lm/W	3pcs (180W) Parallel and series	68W IN DC24V	Tcp 46°C
RX-BKT28-500240L	110g	3802Lm	103Lm/W	6pcs (180W) Parallel and series	36W IN DC24V	Tcp 39°C
RX-BKT28-500240 -CC	300LED 0.5W SMD2835 18V	IA @I8V 2567Lm	I43Lm/VV		Drivers Current determined power Max 3A 10mA/LED	Tcp 36°C 0Ω resistance
RX-BKT28-500235D	500×235×1mm 105LED 100g	3480Lm	108Lm/W	6pcs (180W) Parallel and series	32W DC24V	Tcp 45 °C
RX-BKT28T-500235D	500×235×5.8mm 105LED 185g	3120Lm	98Lm/W	6pcs (180W) Parallel and series	32W DC24V	Mini bend diameter 50mm With 160° Lens Uniform light!

The above table data testing at room temperature is 25 °C, Cooling by free air convection. Lifetime: 40,000 hrs (Note:Tcp < 60 °C) Operation Temperature:  $-30 \text{ °C} \sim 70 \text{ °C}$  At the Tc point

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

Test LED color temperature 5800-6250K, (WW2800~3200K 92% brightness; NW3800~4200K 96% brightness)







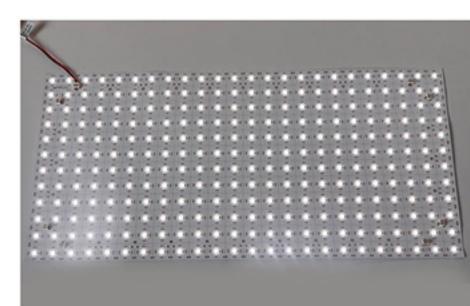
- I. One LED cut, It can be cut into any shape!
- 2. Slim light box LED sheet module, depth 40mm
- 3. High efficiency I25Lm / W DC24V Input
- 4. High CRI > 80 (Optional: > 90)
- 5. Size 600x300mm(2ft x 1ft), LED spacing 25mm, LED QTY 288pcs
- 6. Patent: ZL201420249938.2
- 7. CV input DC24V(Optional: 12V), Easy to expand installation
- 8. Warranty 3 years
- 9. CE RoHS FCC PSE

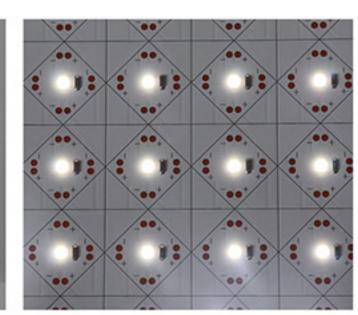


#### Description:

RX-BKT600300 LED Sheet, Patent: ZL201420249938.2, Flexible LED modules; you can cut and splice, making any shape LED module, High efficiency 125Lm / W @ constant voltage drive, Ideal for Light source, Backlighting for advertising, Blister words backlit, LED signs Do your own. energy-saving lighting project.











The above table data testing at room temperature is 25  $^{\circ}$ C, Cooling by free air convection. Lifetime: 40,000 hrs (Note:Tcp < 60  $^{\circ}$ C)

Operation Temperature: -30  $^{\circ}$ C  $\sim$  70 $^{\circ}$ C At the Tc point

power supply is 120% LED module power

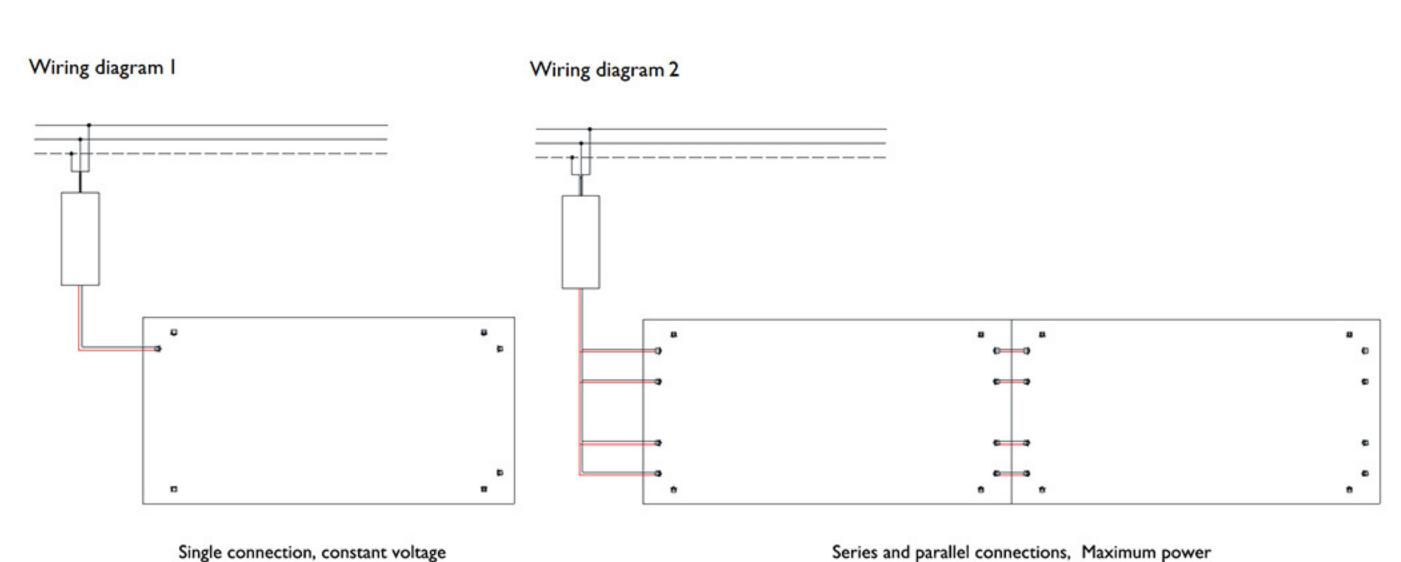
Tolerance range for optical and electrical data: ±10 %

Test LED color temperature 5800-6500K

Customize the power you need, power range 10-100W. Customizing power requires extra cost!









# LED strip - Ambient Light Engine



#### Description:

RX-BKT28-4M series Mini LED strip, Width is only 4mm; length can be cut needed. High CRI >80, high luminous efficiency, LED chip efficiency up to I 58Lm/W. FR4 Rigid Strip, can 3LED cut, for edge-lit LED panel and light boxes.

- 1.4mm or 5mm width LED Strip,
- 2. Length 1000mm, 72LED or 90LED or 120LED
- 3. Can 3LED Cut, Easy to install
- 4. Optional: DC12V or DC24V
- 5. For LGP light box



#### Description:

RX-BKT28-56040, LED module - Ideal for linear lights. The LED Line high flux systems consist of linear white light LED modules with high flux, high energy efficiency, and high quality of light. The LED Line high flux systems are designed to replace fluorescent lighting in higher application heights, such as trunking, high bay and battens in warehouses, factories, and big retail stores.

- I. High brightness, more than 4000Lm (4500Lm 0.9A 31.7V)
- 2. WAGO2060 Terminal Block, very easy to connect and remove the conductors
- 3. High CRI > 80 (Optional CRI > 90)
- 4 560x40mm SMD2835 IW 44LED







Model	Dimension Net weight	LED QTY	Luminous Flux Efficiency Test	Rated Datasheet	Comment
RX-BKT28-4M72	1000x4x2.6mm 18g	72LED	1358Lm 122Lm/W DC12V 11.14W	12W DC12V	Tcp 40 °C
RX-BKT28-4M90	1000×4×2.6mm 19g	90LED	1610Lm 121Lm/W DC12V 13.29W	I4W DCI2V	Tcp 47 °C
RX-BKT28-5M120	1000×5×2.6mm 21g	120LED	2024Lm   122Lm/W DC12V   16.6W	18W DC12V	Tcp 60 °C
RX-BKT28-6-1196	1196×6×2.6mm 30g	72LED	884Lm 125Lm/W DC12V 7.12W	7W DCI2V	Tcp 35 °C
RX-FPC10-3528	480x3x2mm	18LED	380Lm	3.8W DC12V	3mm Flexible strip Tcp 40 °C
RX-RGB-568	568×6.2X2mm	42LED	250Lm	Max10W DC12V	6mm RGB Flexible strip Tcp 50 °C
RX-BKT28-56040	560×40mm 90g	44LED	4500Lm	0.9A @31.7V	IW SMD2835 Tcp 58°C
RX-BKT57-56025	560×25mm 65g	44LED	2360Lm	0.6A @33.7V	0.5W SMD5730 Tcp 65°C

The above table data testing at room temperature is 25 °C, Cooling by free air convection.

Operation Temperature: -30 °C ~ 70°C At the Tc point

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

Lifetime: 50,000 hrs (Note:Tcp < 60 °C)

Test LED color temperature 5800-6250K, (WW2800~3200K 92% brightness; NW3800~4200K 96% brightness)

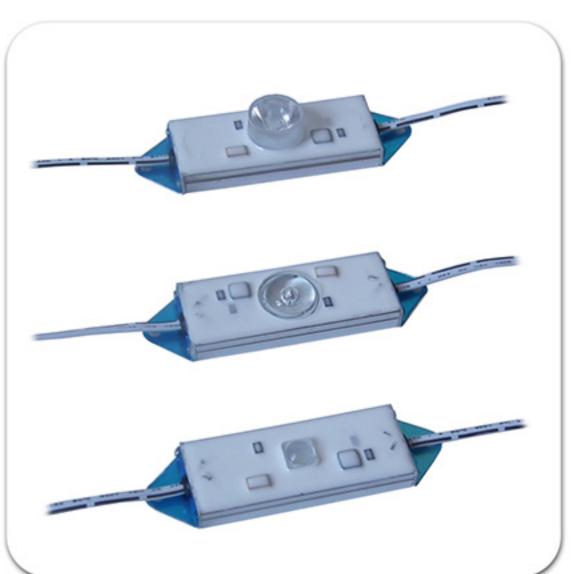
# LED Grow Light Bar & One LED Module





#### Description:

RX-BKT35 Series LED Grow Light Bar, Waterproof design, protection class IP67, Discard the traditional fan cooling solution (as a result of fan lights affect the life span of life), Comprehensive aluminum heat dissipation, Cooling mode solutions, Low temperature rise, that enable lights live longer. Mainly used for: aquarium plant cultivation, organic vegetable, Mushroom cultivation, man-made greenhouse, home potted plants, flower pots, etc. to use Can promote plant growth, and also extend the flowering period to improve the quality of flowers.



- I. Top lighting, inter lighting and multilayer cultivation
- 2. OSRAM Horticulture LED, high efficiency.
- 3. Waterproof IP67 LED Grow Light, 0.5m or Im LED Module
- 4. Deep Red 660nm and Blue 450nm, 8:1.

Optional: 450nm,465nm,630nm,660nm,730nm

5. Optional power & Size: 15W/490mm, 22W/1000mm,

6. Optional Lens: 140°, 60°

7. Recommend Meanwell power supply ELG series







Model	Dimension	LED QTY Peak Wavelength	Photon PPFD µmol/m²/s	Luminous flux Radiation Power	Power Input DC24V	Comment
RX-BKT35-53-90D-DR		Red 660nm 9pcs	50μmol @ 0.5M	Flux 200Lm Fe 4.1VV	12W	
RX-BKT35-53-90D-DB	490x29x14mm	Blue 450nm 9pcs	46µmol @ 0.5M	Flux 180Lm Fe 7.2VV	15W	Tcp 61°C, 90° Lens  Maximum connections 6pcs
RX-BKT35-53-90D-R8B1		Red 660nm 8pcs Blue 450nm 1pcs	48µmol @ 0.5M	Flux 176Lm Fe 4.3VV	I2W	
RX-BKT35-53-140D-CW		6500K 9pcs	12μmol @ 0.5M	Flux 1780Lm Fe 0.7VV	15W	Tcp 61°C, 140° Lens  Maximum connections 6pcs
RX-BKT35-110-140D-R8B1		Red 660nm 8pcs Blue 450nm 1pcs	14μmol @ 0.5M	Flux 178Lm Fe 4.5VV	12W	Tcp 45°C, I40° Lens
RX-BKT35-110-140D-CW	960x29x14mm	6500K 9pcs	I I μmol @ 0.5M	Flux 1720Lm Fe 5.1VV	15W	Maximum connections 6pcs
RX-BKT35-55-140D-R16B2	L: 1000mm(1030) W:29mmH:14mm	Red 660nm 16pcs Blue 450nm 2pcs	24.2µmol @ 0.5M 33.9µmol @ 0.4M	Flux 402Lm Fe 8.8VV	22W	Tcp 47 °C , 140° Lens  Maximum connections 5pcs
RX-BKT35-10028-60D-CW			80μmol @ 0.2M 5516Lx		2.5W	
RX-BKT35-10028-60D-CW	100×29×14mm	6000K Ipcs	37μmol @ 0.3M 2512Lx	Flux 250Lm Fe 0.8VV	2.5₩	Tcp 50°C , 60° Lens 10X10  Maximum connections20pcs
RX-BKT35-10028-60D-CW			13μmol @0.5M 868Lx		2.5W	

The above table data testing at room temperature is 25 °C, Cooling by free air convection.

Operation Temperature: -30  $^{\circ}$ C  $\sim$  90 $^{\circ}$ C At the Tc point; Lifetime: 50,000 hrs (Note: Tcp < 60  $^{\circ}$ C)

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

Im LED bar Coverage Area: 2m2 @140° Lens 40cm Depth distance; Im2 @90° Lens 50cm Depth distance

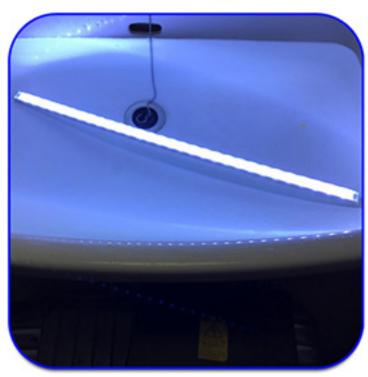
0.5m LED bar Coverage Area: Im² @140° Lens 40cm Depth distance; 0.5m² @90° Lens 50cm Depth distance



# Waterproof LED Tube - LED bar











- I. Plant tissue culture and nursery, Car decorative lighting, showroom.
- 2. Top SMD5050, High light efficiency I I0Lm/W CRI > 85 (CW)
- 3.6K8RI and 6KIRI for Tissue culture and nursery
- 4. CW6000K for Car decorative lighting
- 5. Tube Diameter: Ø16mm T5
- 6. Waterproof IP65
- 7. CE RoHS FCC

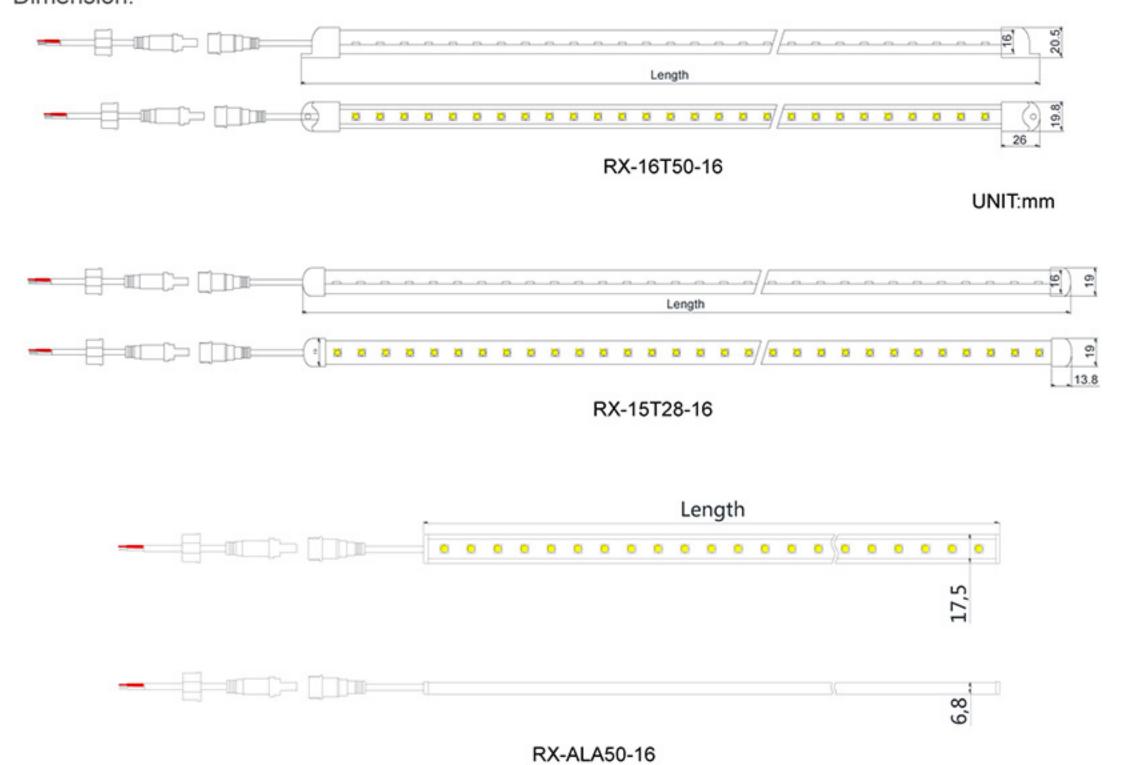
#### Description:

DC input LED Bar, Double waterproof potting, protection class up to IP68.Use Top SMD5050 LED, light efficiency 50% higher than similar products. Mainly used for: Car decorative lighting, showroom, Aquarium Lighting, plant tissue culture and nursery, your own ideas!

Model	Dimension	LED QTY Peak Wavelength	Photon PPFD µmol/m²s¹	Luminous flux Radiation Power	Power Input 100~240VAC	Comment
			38µmol @0.2m 2710Lx			Can decomplise liabeles
RX-15T50-16-120-CW		6000K	25µmol @0.3m 1751Lx	Flux 1330Lm	13W	Car decorative lighting, showroom.
			15µmol @0.5m 1050Lx			
	Ø16mm L120cm	6K 27μmol @0.3 R660nm	39µmol @0.2m 2659Lx	Flux 1290Lm	16W	CRI Ra90 Tissue culture and nursery
RX-15T50-16-120-6K8R1			27µmol @0.3m 1788Lx			
			16µmol @0.5m 1037Lx			
		6K R660nm	36µmol @0.2m 2032Lx	Flux 932Lm	16W	Tissue culture and nursery
RX-15T50-16-120-6K1R1			23µmol @0.3m 1350Lx			
			12μmol @0.5m 672Lx			
RX-15T50-16CC-60-CW	01/		38µmol @0.2m 2675Lx		5.4W	Step-down constant current High light efficiency
	Ø16mm	6000K	22µmol @0.3m 1535Lx	Flux 673Lm		
	L60cm		10µmol @0.5m 716Lx	1		

### Dimension:

Tolerance range for optical and electrical data: ±10 %









- 2. 4 sizes of interlocking and connectable
- 3. Stitching Size 2m2 No additional connection wires
- 4. High CRI > 80 (Optional: > 90)
- 5. Luminous efficiency I I0Lm/W DC24V
- 6. Patent No: ZL201420368832.4
- 7. Optional 160° TV lens, presents excellent light uniformity
- 8. Warranty 3 years



#### Description:

RX-BKT28 Series Non waterproof LED module, new version, using MCPCB, no distortion, better heat dissipation, and patented ultra-thin welding machine terminals. Hand-tighten the screws easier to splice installation,

High luminous efficiency up to 110Lm / W; low prices.

4 sizes of interlocking and connectable panels allows for variety of designs to be configured. Mainly used for light boxes backlight, large-scale projects, shopping malls, railway stations, airports and other high-end places lighting, Ideal backlight-light source, also be used for home decorative lighting, Do your own energy-saving lighting project.





MODEL	Dimension LED QTY	Lumen	Power DC 24V	Stitching Size  No additional  connection wires	LED spacing Brightness/ m <sup>2</sup>	Comment
RX-BKT28-AL-120LED	304x304mm 120LED	960Lm	9.6W	Max 25pcs 2.2m <sup>2</sup>	30mm	Temperature rise +10 °C
RX-BKT28-DL-24LED	60x304mm 24LED	192Lm	1.9W	Max 60pcs Im <sup>2</sup>	Min. Cabinet	Cooling by free air convection
RX-BKT28-CL-20LED	304×50mm 20LED	160Lm	I.6W	Max 60pcs Im <sup>2</sup>	Depth* 38mm 106W / m <sup>2</sup>	No additional heatsink
RX-BKT28-FL-4LED	60x50mm 4LED	32Lm	0.32VV	Max 240pcs 0.7m <sup>2</sup>	10600Lm / m <sup>2</sup>	Normal brightness light source
RX-BKT28-A-120LED	304x304mm 120LED	3120Lm	28.8VV	Max 8pcs 0.7m <sup>2</sup>	30mm	Temperature rise +25 ° C
RX-BKT28-D-24LED	60x304mm 24LED	620Lm	5.8W	Max 20pcs 0.36m <sup>2</sup>	Min. Cabinet	Cooling by free air convection
RX-BKT28-C-20LED	304×50mm 20LED	520Lm	4.8W	Max 28pcs 0.42m <sup>2</sup>	Depth* 38mm	No additional heatsink
RX-BKT28-F-4LED	60×50mm 4LED	100Lm	IW	Max 85pcs 0.25m <sup>2</sup>	320W / m <sup>2</sup> 34000Lm / m <sup>2</sup>	High brightness light source

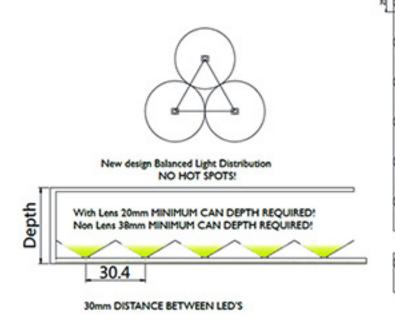
The above table data testing at room temperature is 25  $^{\circ}$ C, test voltage DC24V

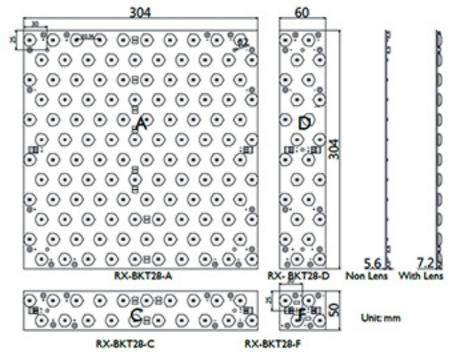
 $LED\ color\ temperature\ 6000-6500K, CRI > 80,\ Life\ 50000hours@25\ ^{\circ}C \quad (WW2800\sim3200K\ 96\%\ brightness\ ;\ NW3800\sim4200K\ 92\%\ brightness)$ 

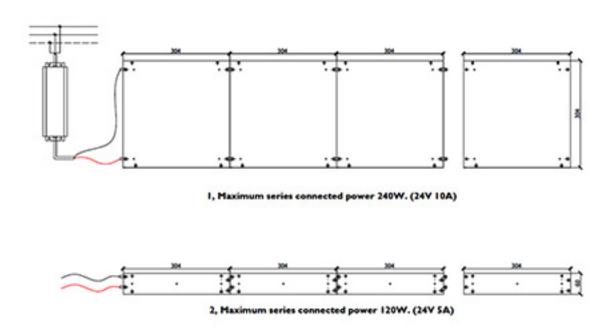
\*Minimum distance required from Panel to face. Calculated with Calculated with ISM-0475 PC light diffusion board with no graphics, Depth on faces with graphics can nave thinner cabinet depths, Consult with XineLam for samples and depth demonstrations. Special sizes, Consult with XineLam Reps and Distributors

Dimension











# Light Box Aluminum Frame

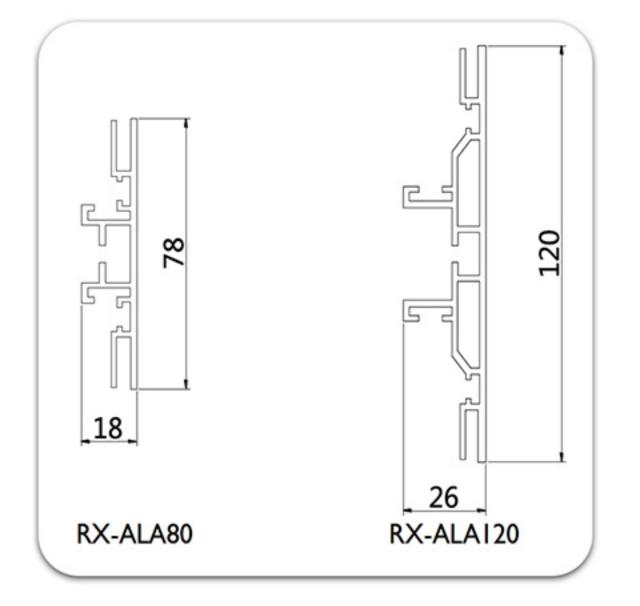




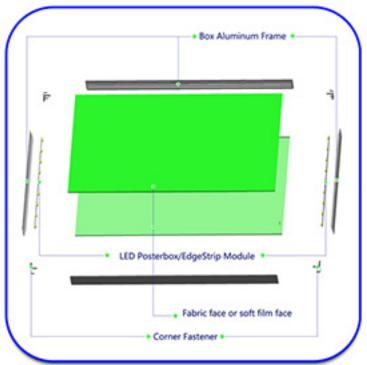
### Description:

RX-ALA, Designed for double-sided Fabric light box, Slim 78mm and 120mm, can be edge-lit LED light source module; can also be used direct type LED modules.

- I. Double-sided fabric face or soft film light boxes
- 2.78mm and 120mm Slim Double sided Poster lightboxs
- 3. Free Corner Fastener 4set/Box
- 4. 78mm Recommended RX-BKT 35-53 series edge-lit module
- 5. I 20mm Recommended RX-BKT 35-II0 series edge-lit module
- 6. Recommend Meanwell power supply LPV or ELG series
- 7. Other accessories: fixed foot



Model	Thickness	Corner Fastener	Optional fixed foot	Recommended LED module	Comment
RX-ALA80	78mm	8pcs/SET	2pcs/SET	RX-BKT 35-53 edge-lit	Thinnest double-sided light emitting poster light-boxes Only edge-lit LED module
RX-ALA120	I 20mm	12pcs/SET	2pcs/SET	RX-BKT 35-53 edge-lit RX-BKT 35-110 edge-lit RX-BKT28-81-930 Direct type	Double-sided light emitting poster light-boxes





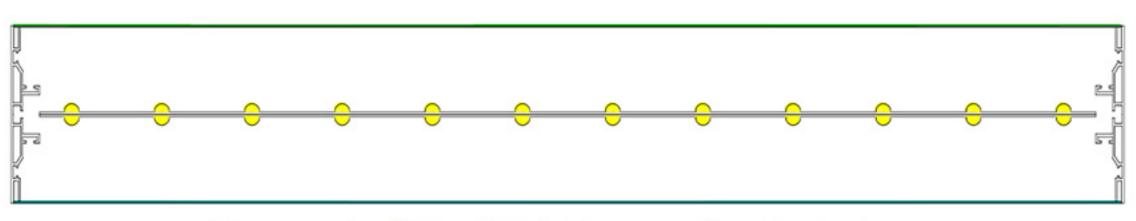
Single-sided projection LED module - Low price, easy to install





Double-sided lit LED module - Economical Easy installation





Direct type backlight - High brightness, uniform illuminatio

# About Us - Honorary Certificate



### **Honorary Certificate**

Already 20 Patents All Products - Meet Certification Requirements of All Countries



An LED Light Emitting Device ZL200810029186.8



**LED Aluminum Panel** ZL200820132702.5



**LED Flexible Strip** ZL200620123255.8



Slim LED Panel Light ZL201220278255.0



LED Lattice / Curtain ZL201220134846.0



XineLam **Registered Trademark** 



Waterproof LED module ZL200820131053.7



**High Current Splicing Module** ZL201420368832.4



**LED Ceiling Light Source** ZL201320565021.9



Lens Waterproof LED Module ZL201420209391.3



Can Cut LED sheet ZL201420249938.2



Certification TUV Suppliers Report No.: 10740787



**LED Aluminum Panel CE** 



**LED Drivers CE** 



LED Module RoHS



**LED Drivers RoHS** 



LED Drivers CE



LED Lattice/Curtain CE



Waterproof Rating IP67

### Our Suppliers





















### **Our Customers**



















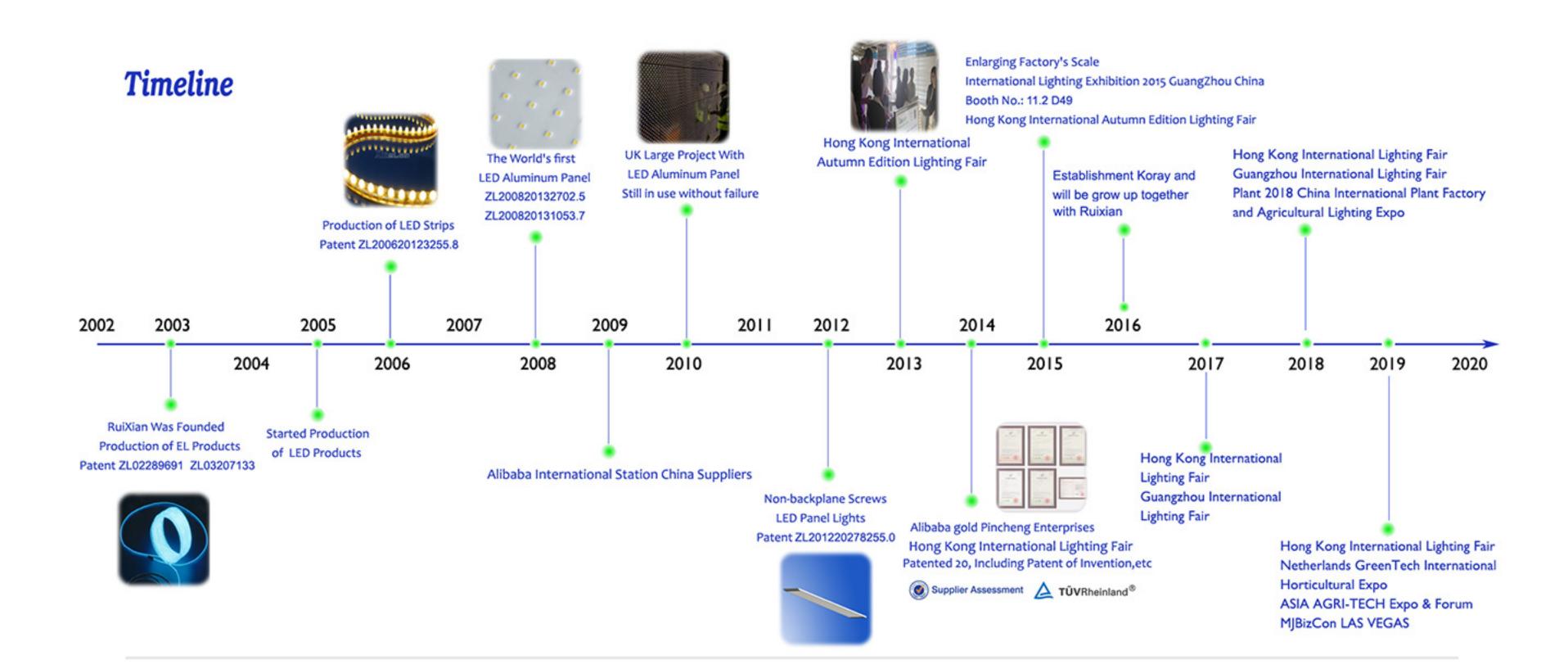








# About Us - Company History, Our Team



### Our Team



20 Years of senior Engineer Has a number of Patents **No Flicker Lighting Advocates** 

Implement your own ideas Make the perfect light source



**Quality Control Production Control** Perfect traceability mechanism, even if it is small orders, can be traced in every aspect of manufacturing!





**Team Activities** 

### **Our Factory**

















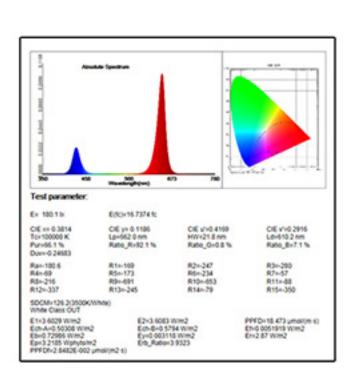
# Horticulture Lighting &

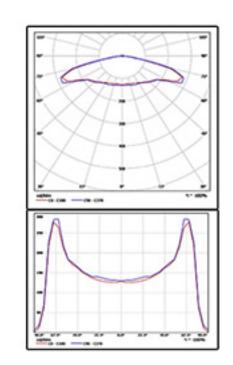
## Special Light-Source Manufacturer

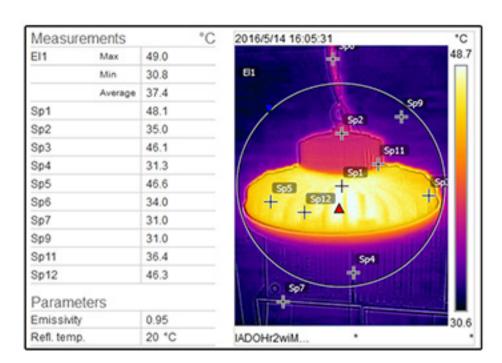












Meet to the latest 'energy star' standards

Perfect and advanced testing equipments and accurate test report

### LED lighting terms

Common nomenclature	Notation Unit	Comment
Luminance	L cd/m	A measure of the brightness or luminous intensity of light, usually expressed in units of Candelas per square meter (cd/m2) or foot Lamberts. 1 FL = 3.426
Luminous intensity	I cd	Intensity Refers to the bright level of light, the luminous intensity per unit area.
Luminous flux	Φ Lm	The total amount of visible light produced by lighting source per second. Unit: lumen [lm]
Illuminance	E Lx	illuminance is the total luminous flux incident on a surface, per unit area. It is a measure of how much the incident light illuminates the surface, wavelength-weighted by the luminosity function to correlate with human brightness perception.  Illuminance is measured in either lux or lumens per square meter. The SI unit of illuminance is cd.sr.m-2.
Wavelength	λnm	The changes of light color Strength can be described through data, we call this data wavelength. The light wavelength we can see is in the range between 380 to 780 nm. Unit: nanometer (nm)
Light efficacy	η Lm/W	Refers to the luminous flux divided by the lighting power source. It is an important indicator to measure the energy source. Unit: Watts per lumen (Lm/w).
Color rendering index	CRI Ra	Color performance Refers to the showing extent on objects of the lighting source, in other words, the real degree of color, usually called "color-rendering" Units: Ra
Glare	UGR	The International Commission on Illumination (CIE) defines glare as: visual conditions in which there is excessive contrast or an inappropriate distribution of light sources that disturbs the observer or limits the ability to distinguish details and objects.
Color temperature	Tc K	When the lighting source color is the same as the radiator at certain temperature, the temperature of the black body is the color temperature of the lighting source, it describes the color of a light source by comparing it to the color of a blackbody radiator at a given temperature. Unit: Kelvin (k).
Protection level	IPxx	The IP level is described by two figures: the first one refers to the protection level against dust(from 0 to grade 6), the second against water(from 0 to grade8). Devices with a higher IP level keep the internal components safe and clean









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