

Description: RX-GW78-900-LM301 Toplighting medical plant growth module and array lamp, New patent design product with unique lens, Different LED chips in one lens, Concentrating Light efficiently and More uniform spectral radiation, directional light ,high light utilization efficiency, more efficient comparison with Common grow lights. optimal plant-specific spectrum, to meet the light requirements of medicinal plants, fully stimulate medicinal ingredients. It is especially used for indoor planting of medicinal plants



1. Basement, grow tent planting medicinal plants
2. Unique lens structure- high efficiency concentrating, uniform spectral radiation, direct illumination, higher light utilization, PPF up to 1200 $\mu\text{mol}/\text{m}^2/\text{s}$ @0.2m
3. Samsung LM301H and German brand horticulture LED
4. Waterproof IP65, Can be used in humid environments
5. 900Z Array plant light Input:AC100~305V, PF >0.9 Powr:450W
6. 900 LED grow bar Max 3.2A @39V 125W/Bar
7. Long life up to 50,000 hours
8. CE RoHS FCC

Model	Dimension LxWxH	Spectral Wavelength	Photon PPF $\mu\text{mol}/\text{m}^2/\text{s}$	Photosynthetic Photon Flux	Power Test Input	Comment
RX-GW78-900-LM301-90D	915x81x38mm 36"x3.2"x 1.5"	F15 35K24R2	441 μmol @0.2m 28398Lx	125 $\mu\text{mol}/\text{s}$	1.2A @36.2V	43W 2.9 $\mu\text{mol}/\text{J}$
			650 μmol @0.2m 41685Lx	184 $\mu\text{mol}/\text{s}$	1.8A @36.9V	66W 2.8 $\mu\text{mol}/\text{J}$
			958 μmol @0.2m 61140Lx	270 $\mu\text{mol}/\text{s}$	2.7A @37.97	102W 2.6 $\mu\text{mol}/\text{J}$
		F16 35K24R1FR1	418 μmol @0.2m 28474Lx	119 $\mu\text{mol}/\text{s}$	1.2A @36V	43W 2.8 $\mu\text{mol}/\text{J}$
			618 μmol @0.2m 42028Lx	175 $\mu\text{mol}/\text{s}$	1.8A @36.7V	66W 2.7 $\mu\text{mol}/\text{J}$
			905 μmol @0.2m 61400Lx	254 $\mu\text{mol}/\text{s}$	2.7A @37.5	101W 2.5 $\mu\text{mol}/\text{J}$
RX-GW78-900Z-LM301-90D	915x915x100mm 36"x36"x 3.9"	F16	1243 μmol @0.2m 85222Lx	263 $\mu\text{mol}/\text{s}$ X4 1050 $\mu\text{mol}/\text{s}$	450W AC230V	F16 spectrum, far red 730nm 2.3 $\mu\text{mol}/\text{J}$ HLG-480H
			1185 μmol @0.3m 80760Lx			
			945 μmol @0.5m 64295Lx			

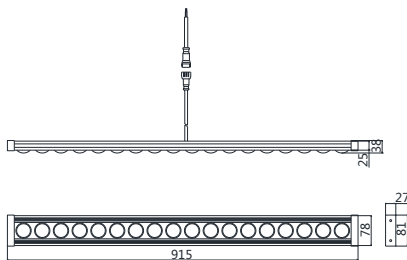
Surface temperature rise Tc 32°K , Operating temperature: -30°C ~ 40°C , Lifespan: 50,000 hours (Note: Ta \leq 25°C)

Tolerance range for optical and electrical data: $\pm 10\%$.Light emitting angle: 90 °

Recommended irradiation distance 0.2 ~ 0.5m for medicinal planting For 48 "X48" Plant tent or Shelf planting

The above data is for reference only!

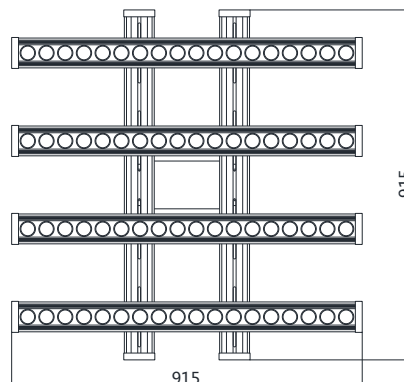
Dimension:



Unit: mm

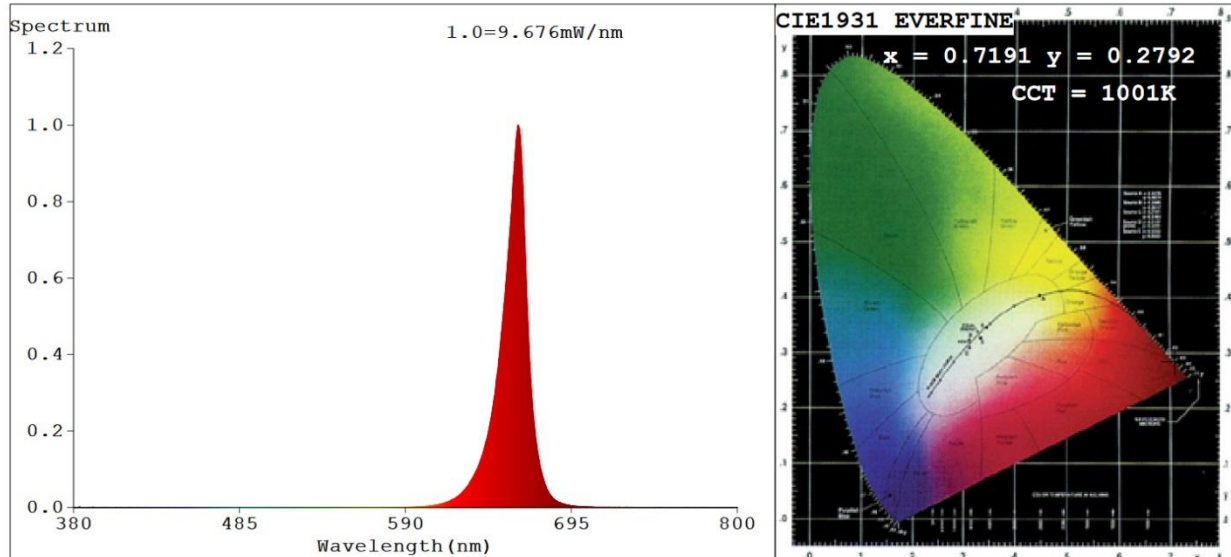
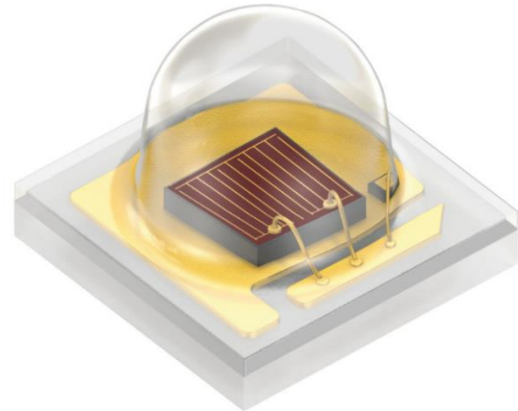
RX-GW78-900-LM301-90D

Only LED grow Bar



RX-GW78-900Z-LM301-90D array LED grow light

- High efficiency and energy saving, Samsung LM301H led chip, add German brand deep red 660nm and Hyper red 730nm lamp beads



Color Parameters:

Chromaticity Coordinate: $x=0.7191$ $y=0.2792$ / $u'=0.5855$ $v'=0.5115$

CCT=1001K (Duv=-0.1383) Dominant WL:Ld =642.3nm Purity=99.5%

Ratio:R=98.6% G=1.4% B=0.0% Peak WL:Lp=661.3nm FWHM=15.8nm

Render Index:Ra=31.5 AvgR=35.0

R1 =16 R2 =82 R3 =37 R4 =0 R5 =16 R6 =85 R7 =16

R8 =0 R9 =0 R10=83 R11=7 R12=81 R13=40 R14=62 R15=0

Photo Parameters:

3.4 μ mol/J

Flux = 11.29 lm Eff. : 36.60 lm/W Fe = 192.7 mW

Scotopic:0.43088 S/P:0.038154

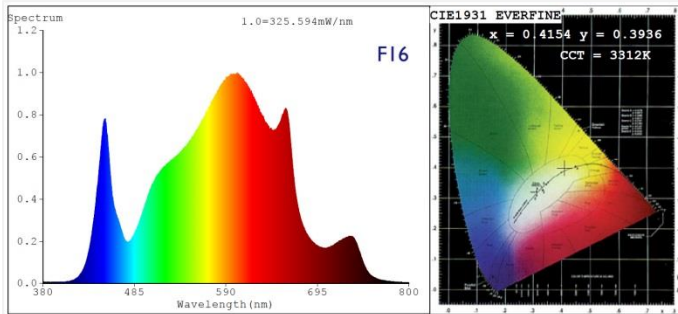
Photosynthetic:PPF:1.0551 μ mol/s PAR WATT:192.26mW(400-700nm)

Electrical parameters:

V = 2.0585 V I = 0.1499 A P = 0.3086 W PF = 1.000

LEVEL:Class1 WHITE:OUT

● Testing Report

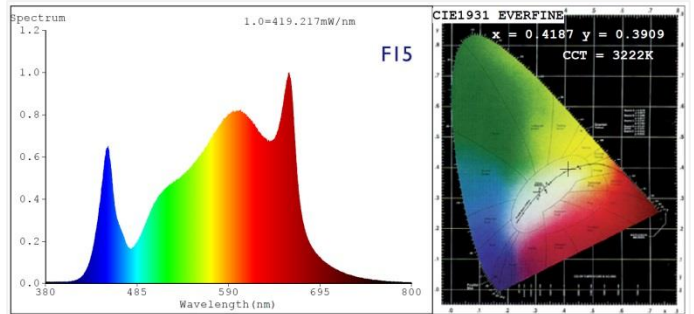


Color Parameters:
 Chromaticity Coordinate: $x=0.4154$ $y=0.3936/u'=0.2411$ $v'=0.5139$
 CCT=3312K (Duv=-0.0008) Dominant WL:Ld =581.9nm Purity=42.8%
 Ratio:R=21.4% G=75.7% B=2.9% Peak WL:Lp=603.6nm FWHM=159.0nm
 Render Index:Ra=86.0 AvgR=81.1
 R1 =84 R2 =91 R3 =97 R4 =85 R5 =85 R6 =89 R7 =87
 R8 =69 R9 =28 R10=81 R11=85 R12=72 R13=86 R14=98 R15=79

Photo Parameters: **254 μ mol/s 101W**
 Flux = 17299 lm Eff. : 170.70 lm/W Fe = 56.27 W
 Scotopic:25617 S/P:1.4808
 Photosynthetic:PPF:253.63 μ mol/s PAR WATT:52932mW(400-700nm)

Electrical parameters:
 V = 37.570 V I = 2.699 A P = 101.3 W PF = 1.000
 LEVEL:OUT WHITE:ANSI_3500K

RX-GW78-900-LM301-90D-F16 PPF output test

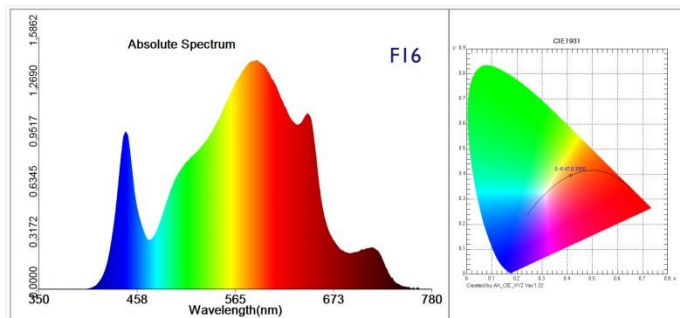


Color Parameters:
 Chromaticity Coordinate: $x=0.4187$ $y=0.3909/u'=0.2444$ $v'=0.5133$
 CCT=3222K (Duv=-0.0026) Dominant WL:Ld =583.0nm Purity=43.0%
 Ratio:R=22.1% G=75.0% B=2.9% Peak WL:Lp=659.3nm FWHM=135.0nm
 Render Index:Ra=88.6 AvgR=85.0
 R1 =88 R2 =93 R3 =96 R4 =88 R5 =88 R6 =90 R7 =90
 R8 =77 R9 =47 R10=84 R11=88 R12=76 R13=89 R14=98 R15=84

Photo Parameters: **284 μ mol/s 102W**
 Flux = 18495 lm Eff. : 181.90 lm/W Fe = 60.18 W
 Scotopic:27180 S/P:1.4696
 Photosynthetic:PPF:283.79 μ mol/s PAR WATT:58868mW(400-700nm)

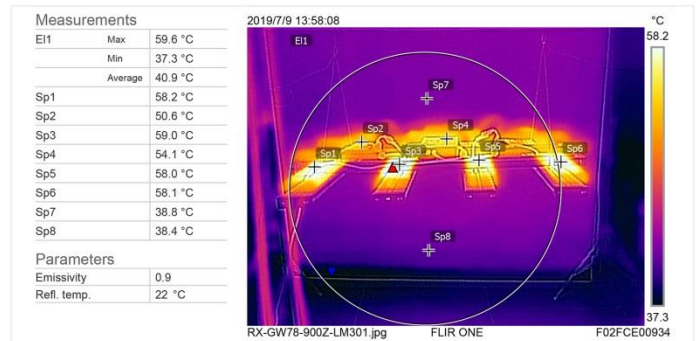
Electrical parameters:
 V = 37.700 V I = 2.699 A P = 101.7 W PF = 1.000
 LEVEL:OUT WHITE:ANSI_3500K

RX-GW78-900-LM301-90D-F15 PPF output test



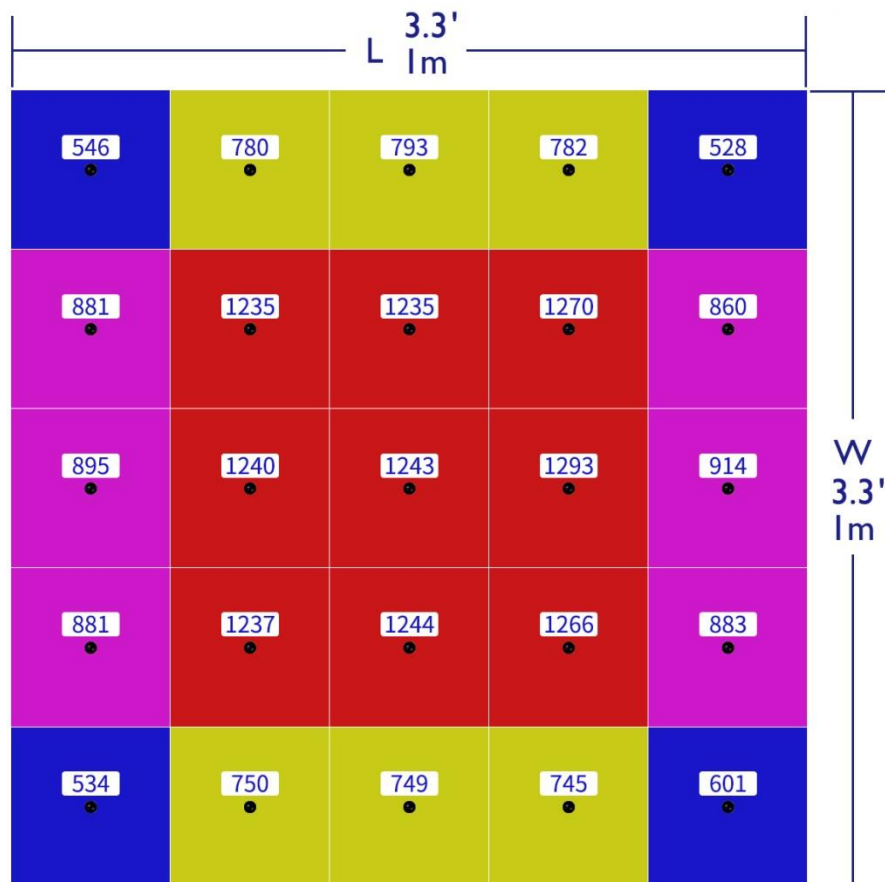
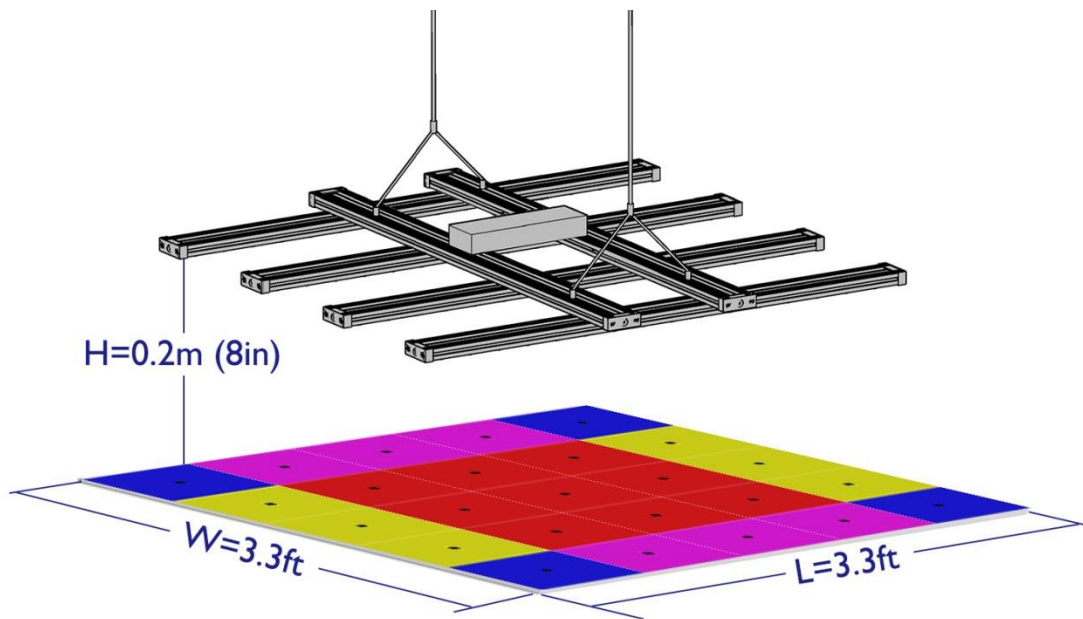
Test parameter:
 E= 85221.6 lx E(fc)=7920.22 fc
 CIE x= 0.4147 CIE y= 0.3950 CIE u'=0.2400 CIE v'=0.5144
 Tc=3337 K Lp=599.0 nm HW=160.5 nm Ld=581.5 nm
 Pur=43.0 % Ratio_R=21.0 % Ratio_G=76.1 % Ratio_B=3.0 %
 Duv=-0.00010
 Ra=85.0 R1= 83 R2= 91 R3= 97
 R4= 84 R5= 83 R6= 88 R7= 87
 R8= 68 R9= 24 R10= 79 R11= 84
 R12= 72 R13= 85 R14= 98 R15= 78
 SDCM= 1.8(3500K/White)
 White Class:OUT
1243 μ mol/ m² / s
 E1=259.6 W/m2 E2=273.14 W/m2 PPF=1243.2 μ mol/(m·s)
 Ech-A=41.983 W/m2 Ech-B=45.759 W/m2 Er=13.219 W/m2
 Eb=42.502 W/m2 Ey=115.24 W/m2 Er=102.08 W/m2
 Ep=231.53 W/m2 Erb_Ratio=2.4019

RX-GW78-900-LM301-90D-F16 H20 PPF output test



RX-GW78-900-LM301-90D-F16 Surface temperature test

- RX-GW78-900Z-LM301 25-point test,
Coverage area: 40'' x 40'' (1m x 1m), Test height: 8'' (0.2m)



- PPFD Test Point

RX-GW78-900Z-LM301-90D 20cm test

Center point PPFd: $1243 \mu\text{mol}/\text{m}^2 / \text{s}$ The PPFd average is $933.4 \mu\text{mol}/\text{m}^2 / \text{s}$