



# T8 Integrated LED Grow Tube Specification

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Please refer to: <https://www.7colorstek.com/how-to-select-t8-led-grow-lights/>



## (1) Product features

※Adopting advanced LED semiconductor lighting technology, 70% energy saving than traditional fluorescent lamps;

※Using imported high-efficiency SMD LED lamp beads;

※The lamp body is made of high-purity aluminum and anodized after finishing. The appearance is simple and fashionable. Does not change color.

※Excellent thermal management can effectively ensure the long-term stable operation of LED lights and effectively control light attenuation problems.

※Power overload protection design, low current and low voltage operation, higher safety performance;

※Ultra-long life design, can reach 30,000 hours, which is 17 times the life of traditional fluorescent lamps;

※Easy to install, convenient to use, no need to replace the lamp, can be directly replaced Traditional fluorescent lamps;

※green products, do not contain lead, mercury and other heavy metals and harmful gases;

※use DC drive, no flicker, effectively protect eyesight;

※no ultraviolet radiation and electromagnetic radiation, safer to the human body.



※Products are widely used in indoor lighting in factories, workshops, offices, shopping malls, supermarkets, underground parking lots, hospitals, schools, etc., and are ideal substitutes for traditional fluorescent lamps.

### ※LED Grow Light Knowledge

※ 1.Different wavelengths of light have different effects on plant photosynthesis. The light required for plant photosynthesis has a wavelength of about 400-700nm. 400-500nm (blue) light and 610-720nm (red) contribute the most to photosynthesis.

※2. Just use these two color combinations. In terms of visual effects, the red and blue plant lights are pink. Our full spectrum led grow lights just base on these main wave length, and the wave peak is 650nm. We also add some other useful spectrum like 380nm UV, 570nm Green,730nm IR in to make it wide enough to fit for any stages of every plants.

※3. Blue light can promote the growth of green leaves; red light can help blossom and fruit and prolong the flowering period!

※4. When plant lights are used to supplement light for plants, the height from the leaves is generally about 0.5 meters, and continuous exposure for 12-16 hours a day can completely replace the sun

### ※Special Feature



- ※ ◎Reduce cultivation costs and extend flowering period
- ※ ◎Promote early maturity of plants, increase production, and improve the quality of fruits
- ※ ◎Ensure the taste of greenhouse vegetables and realize off-season cultivation
- ※ ◎Inhibit the reproduction of germs and pests, reduce the amount of pesticides, green and pollution-free

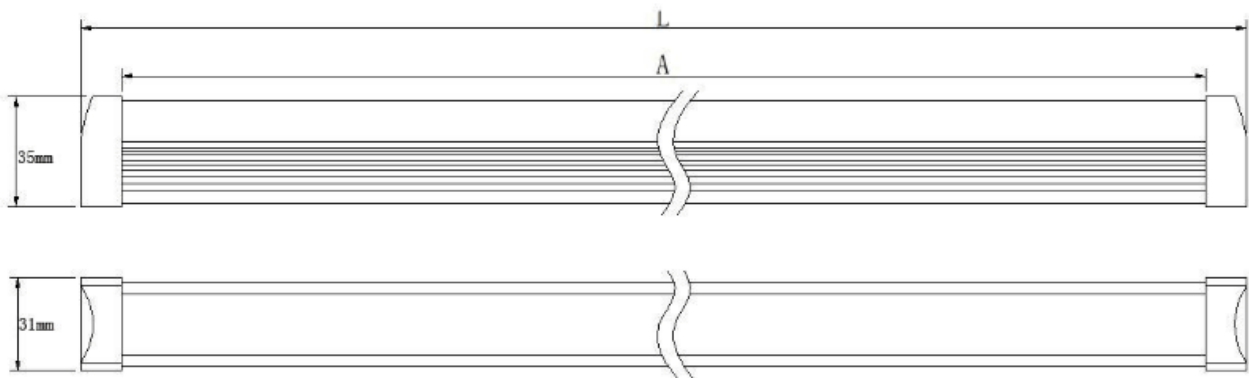
## (2)Technical parameters([120cm Integrated LED Grow Tube Light](#))

Item No.	SC-T8IT-04S	SC-T8IT-04D
Power	Single Row 20W±0.5	Double Row 36W±0.5
Driver Type	Built-in No-isolated	
PF	PF≥0.9	
EF	≥85%	
LED QTY	96PCS	192PCS
Size mm	1200mm	1200mm
Material	AL+Transparent PC	
Working Temp	-20~50℃	
Storage Temp	-30~50℃	
Input Voltage	AC100-240V,47Hz to 63Hz	
Lighting View	120°	120°



IP Rating	IP40	
Warranty	TWO YEARS	
PPFD(20cm Height)	56 $\mu\text{mol}/\text{m}^2\text{s}$	94 $\mu\text{mol}/\text{m}^2\text{s}$
Wave Length	380-840nm	
Spectrum	Full Spectrum	
Application	Any stage of any plants	
Certificate	LVD,CE,&ROHS	

### (3) Outline dimension drawing



L=300mm,600mm,900mm,1200mm,1500mm

### (4) Installation instructions

For T8 integrated LED Grow Lights, it is very easy to install.

1. You just need to take the traditional tube fixtures first.
2. Fix the clips with screws
3. Install the integrated tube lights on the clips
4. Wire the cable to the power and finish



Brown cable for L, Blue one for N, and Yellow for Ground



You can also connect them in series

## (5) Packing size

With Color Box

Item No.	QTY/CNS	N.G(KG)	G.W(KG)	Packing Size(mm)
SC-T8IT-04S	30pcs	9	10	124X23X20CM
SC-T8IT-04D	30pcs	10	11	124X23X20CM

With Paper Pipe

Item No.	QTY/CNS	N.G(KG)	G.W(KG)	Packing Size(mm)
SC-T8IT-04S	20pcs	10	11	124X23X23CM
SC-T8IT-04D	20pcs	12	13	124X23X23CM

## (6) Attention Matters

※The working voltage of the lamp is AC100-240V, please make sure that the working voltage is within this range when connected to



the power supply. Connecting to a higher voltage will cause permanent damage to the lamp.

※After connecting the power supply, prohibit any contact metal from touching the bottom of the bulb to avoid electric shock

※After unpacking or before use, please check whether the lamp is damaged due to transportation. If so, please stop the application and notify the supplier, this product can only be used in perfect condition

※In order to ensure the safe and normal use of the product, please strictly abide by the explanations and precautions in the manual, and the supplier shall not be liable for any losses caused by illegal operations.

※When in high heat environment, please do not connect the bulb and power supply, and when the working temperature exceeds a certain temperature, its life will be greatly shortened, it is recommended to use this product at room temperature

※Before installation, please ensure that the local installation environment supports this product. It is recommended to install it in a stable place to prevent vibration and shaking.

※Since the surface temperature of the lamp can reach 50° C, it is recommended that there is no heat sensitive equipment around the lamp. To ensure proper working temperature, please keep the



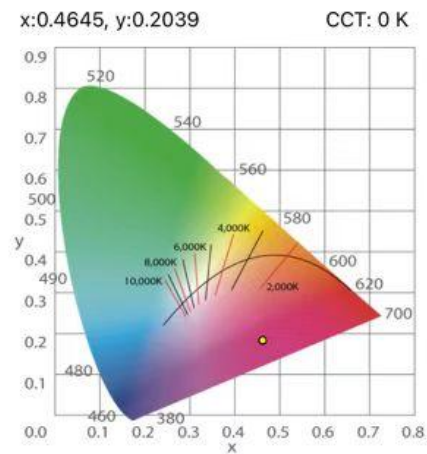
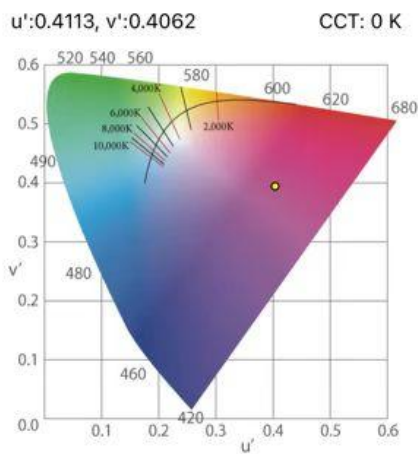
product away from heat sources and use this product in a mild environment.

## (7) Spectrum Data (120CM) Tested by Taiwan Asensetek Lighting Passport

### 120cm Full Spectrum single row 20W

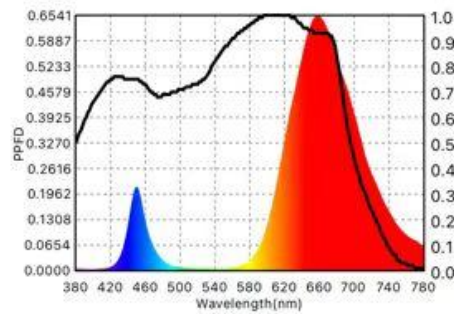
CIE1976

CIE1931



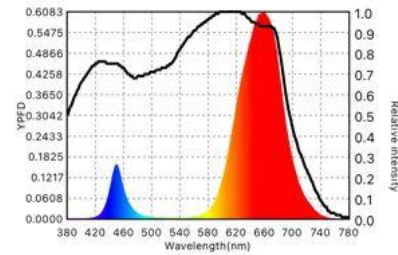
### PPFD 光谱

Ref.: 光合作用有效光谱



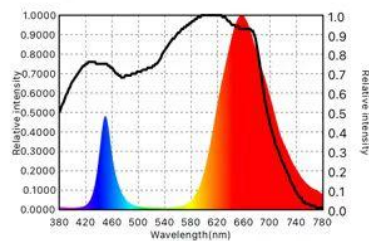
### 加权后光谱

Ref.: 光合作用有效光谱



### 原始光谱

Ref.: 光合作用有效光谱







0. 量测时间: 2022/10/27 21:15:39

1. 产品名称\*: t8 120cm single pink

2. 制造商: seven colors

3. 植物名称: 青菜

4. 使用者: win

5. 温度 (°C): 29

6. 湿度 (%):

7. 量测距离 (m): 0.2

8. 暖灯时间 (min):

9. 植物高度 (mm):

10. 笔记:

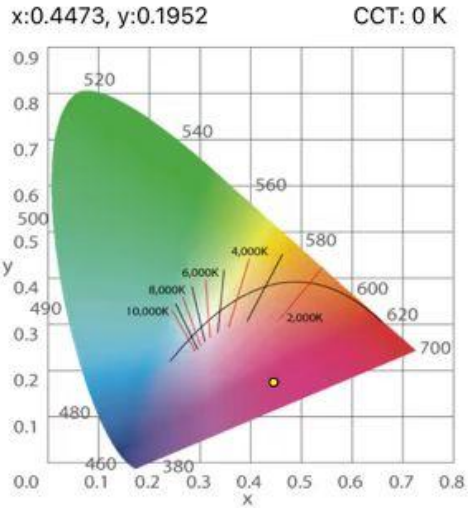
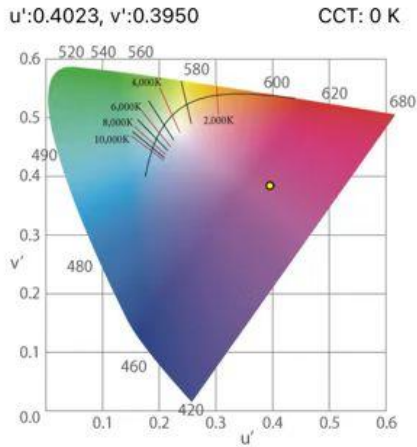
量测参数	数值
PPFD (400 - 700 nm)	55.511
PPFD 远红 (701 - 780 nm)	14.389
PPFD 红 (600 - 700 nm)	47.419
PPFD 绿 (500 - 599 nm)	1.8832
PPFD 蓝 (400 - 499 nm)	6.2089
PPFD 紫外 (380 - 399 nm)	0.0914
YPPFD (400 - 700 nm)	48.383
YPPFD (380 - 780 nm)	51.432
YPPFD 远红 (701 - 780 nm)	2.9960
YPPFD 红 (600 - 700 nm)	42.044
YPPFD 绿 (500 - 599 nm)	1.7807
YPPFD 蓝 (400 - 499 nm)	4.5613
YPPFD 紫外 (380 - 399 nm)	0.0530
红光 / 蓝光比 R/B	7.64
红光 / 远红光比 R/FR	3.30
DLI	4.7962
照度	1083
峰值波长 (380~780 nm)	657
主波长 (380~780 nm)	0
相关色温 CCT	0
演色指数 CRI(Ra)	0



# 120cm full spectrum double row 36W

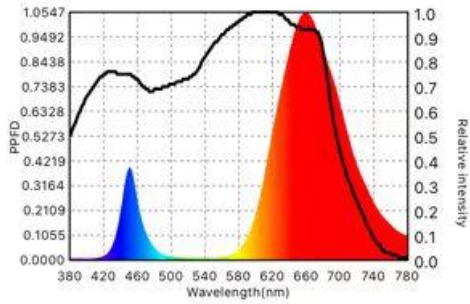
## CIE1931

### CIE1976



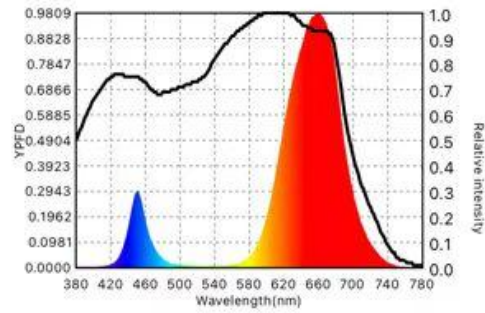
### PPFD 光谱

Ref.: 光合作用有效光谱



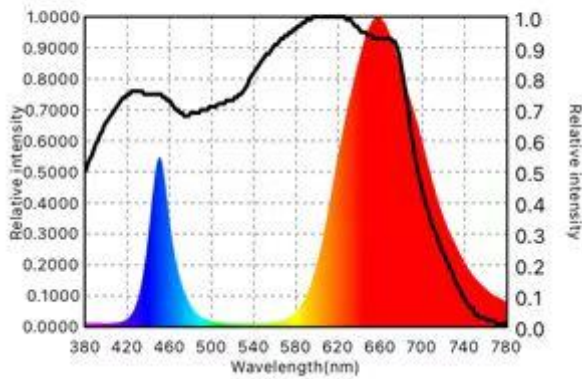
### 加权后光谱

Ref.: 光合作用有效光谱



### 原始光谱

Ref.: 光合作用有效光谱





0. 量测时间: 2022/10/27 18:24:44

1. 产品名称\*: t8 120cm double

2. 制造商: seven colors

3. 植物名称: 青菜

4. 使用者: win

5. 温度 (°C): 29

6. 湿度 (%):

7. 量测距离 (m): 0.2

8. 暖灯时间 (min):

9. 植物高度 (mm):

10. 笔记:

量测参数	数值
PPFD (400 - 700 nm)	92.139
PPFD 远紅 (701 - 780 nm)	23.469
PPFD 紅 (600 - 700 nm)	77.375
PPFD 绿 (500 - 599 nm)	3.1471
PPFD 蓝 (400 - 499 nm)	11.619
PPFD 紫外 (380 - 399 nm)	0.1637
YPPFD (400 - 700 nm)	80.038
YPPFD (380 - 780 nm)	85.051
YPPFD 远紅 (701 - 780 nm)	4.9184
YPPFD 紅 (600 - 700 nm)	68.544
YPPFD 绿 (500 - 599 nm)	2.9745
YPPFD 蓝 (400 - 499 nm)	8.5267
YPPFD 紫外 (380 - 399 nm)	0.0955
红光/蓝光比 R/B	6.66
紅光/远紅光比 R/FR	3.30
DLI	7.9608
照度	1791
峰值波长 (380~780 nm)	658
主波长 (380~780 nm)	0
相关色温 CCT	0
演色指數 CRI(Ra)	0