



# T8 Integrated LED Grow Tube Specification

## Table of Contents

(1)Product features.....	1
(2)Technical parameters.....	2
(3) Outline dimension drawing.....	3
(4)Installation instructions.....	4
(5) Packing size.....	5
(6) Attention Matters.....	6
(7)Spectrum Data (60CM 9W) .....	8



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

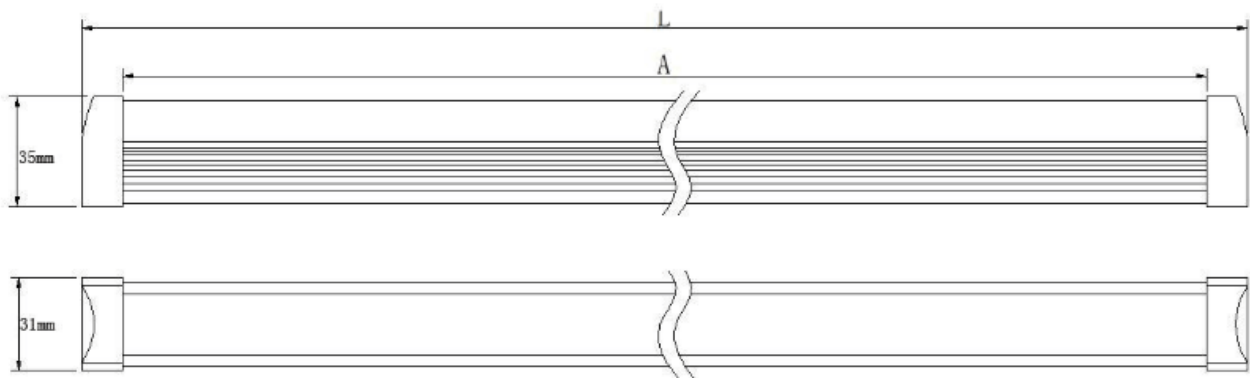
## (2)Technical parameters([90cm Integrated LED Grow Tube Light](#))

Item No.	SC-T8IT-03S	SC-T8IT-03D
Power	Single Row 14W±0.5	Double Row 28W±0.5
Driver Type	Built-in No-isolated	
PF	PF≥0.9	
EF	≥85%	
LED QTY	72PCS	144PCS
Size mm	900mm	900mm
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)	42 $\mu\text{mol}/\text{m}^2\text{s}$	52 $\mu\text{mol}/\text{m}^2\text{s}$
Wave Length	380-840nm	
Spectrum	Full Spectrum	
Application	Any stage of any plants	
Certificate	LVD,CE,&ROHS	

### (3) Outline dimension drawing

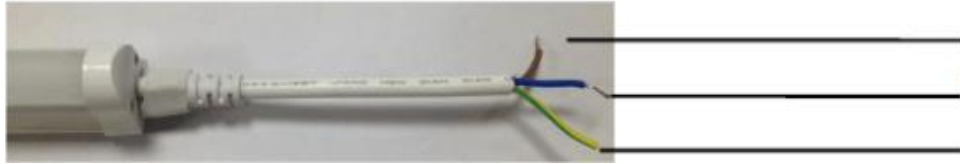


L=300mm,600mm,900mm,1200mm,1500mm

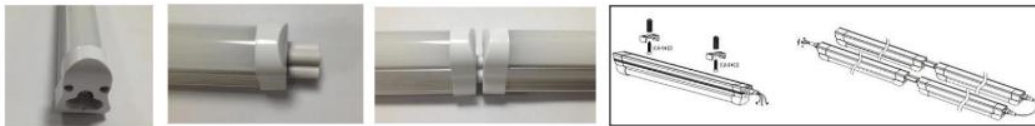
### (4) Installation instructions

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-03S	30pcs	8	9	94X23X20CM
SC-T8IT-03D	30pcs	9	10	94X23X20CM

With Paper Pipe

Item No.	QTY/CNS	N.G(KG)	G.W(KG)	Packing Size(mm)
SC-T8IT-03S	20pcs	9	10	94X23X23CM
SC-T8IT-03D	20pcs	11	12	94X23X23CM

## (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

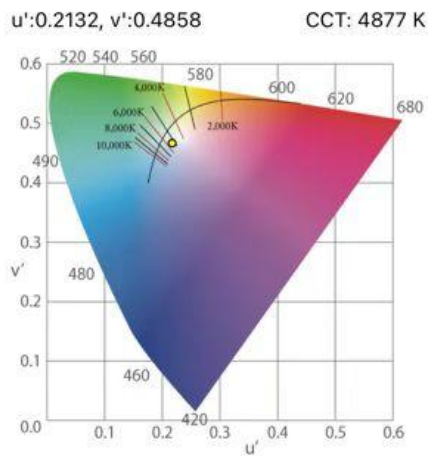


product away from heat sources and use this product in a mild environment.

## (7) Spectrum Data (90CM) Tested by Taiwan Asensetek Lighting Passport 90cm white 5000-5500K single row 14W

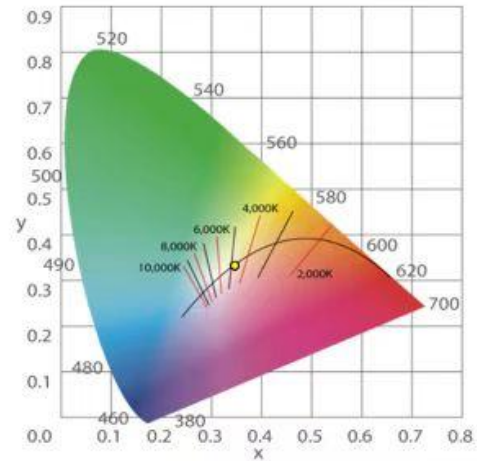
CIE1931

CIE1976



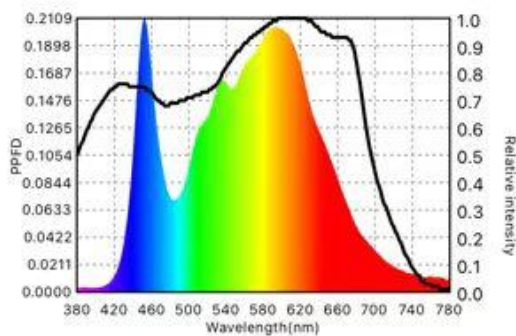
x:0.3485, y:0.3529

CCT: 4877 K



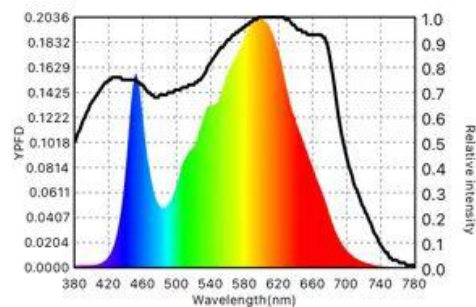
### PPFD 光谱

Ref.: 光合作用有效光谱



### 加权后光谱

Ref.: 光合作用有效光谱

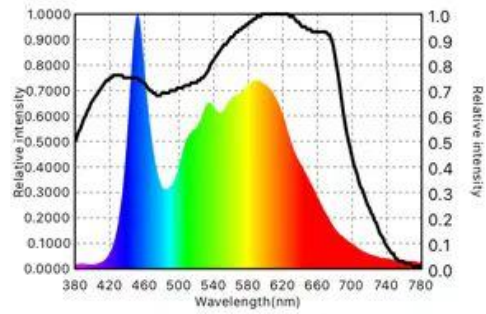






## 原始光谱

Ref.: 光合作用有效光谱



0. 量测时间: 2022/10/27 20:57:09

1. 产品名称\*: t8 90cm white

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):

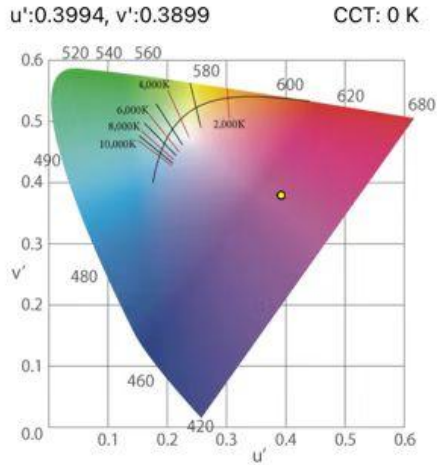
10. 笔记:

量测参数	数值
PPFD (400 - 700 nm)	35.890
PPFD 远红 (701 - 780 nm)	1.2984
PPFD 红 (600 - 700 nm)	11.108
PPFD 绿 (500 - 599 nm)	16.426
PPFD 蓝 (400 - 499 nm)	8.3545
PPFD 紫外 (380 - 399 nm)	0.0712
YPPFD (400 - 700 nm)	30.930
YPPFD (380 - 780 nm)	31.213
YPPFD 远红 (701 - 780 nm)	0.2412
YPPFD 红 (600 - 700 nm)	10.544
YPPFD 绿 (500 - 599 nm)	14.328
YPPFD 蓝 (400 - 499 nm)	6.0565
YPPFD 紫外 (380 - 399 nm)	0.0416
红光/蓝光比 R/B	1.33
红光/远红光比 R/FR	8.55
DLI	3.1009
照度	2523
峰值波长 (380~780 nm)	452
主波长 (380~780 nm)	575
相关色温 CCT	4877
演色指数 CRI(Ra)	85

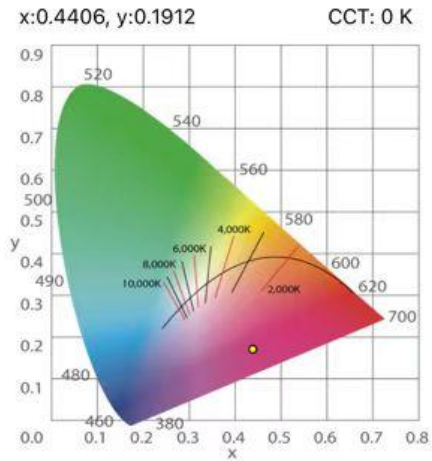


# 90cm full spectrum double row 28W

## CIE1976

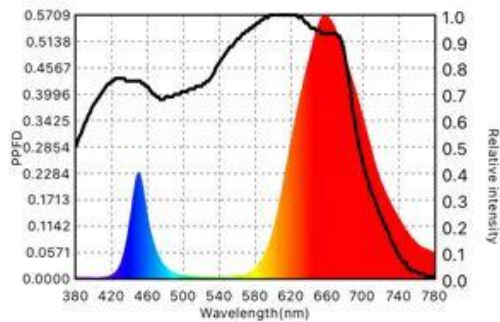


## CIE1931



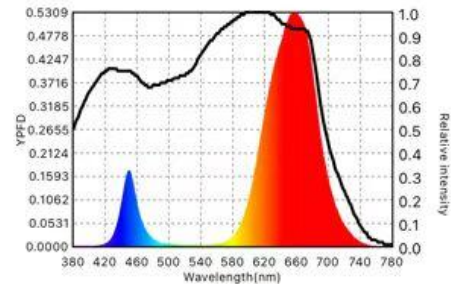
## PPFD 光谱

Ref.: 光合作用有效光谱



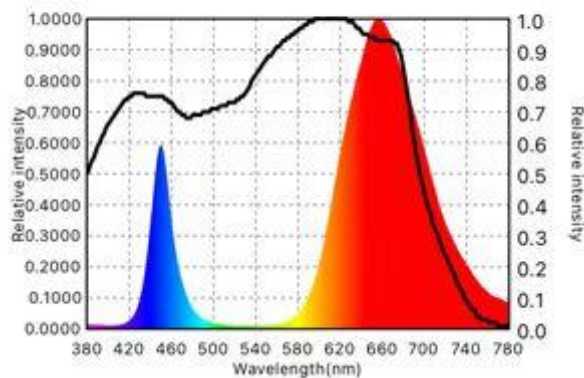
## 加权后光谱

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 17:59:21

1. 产品名称\*: t8 90cm 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)	50.319
PPFD 远紅 (701 - 780 nm)	12.461
PPFD 紅 (600 - 700 nm)	41.904
PPFD 绿 (500 - 599 nm)	1.7422
PPFD 蓝 (400 - 499 nm)	6.6728
PPFD 紫外 (380 - 399 nm)	0.0912
YPPD (400 - 700 nm)	43.734
YPPD (380 - 780 nm)	46.383
YPPD 远紅 (701 - 780 nm)	2.5957
YPPD 紅 (600 - 700 nm)	37.188
YPPD 绿 (500 - 599 nm)	1.6460
YPPD 蓝 (400 - 499 nm)	4.9040
YPPD 紫外 (380 - 399 nm)	0.0530
红光/蓝光比 R/B	6.28
紅光/远红光比 R/FR	3.36
DLI	4.3475
照度	987
峰值波长 (380~780 nm)	655
主波长 (380~780 nm)	0
相关色温 CCT	0
演色指數 CRI(Ra)	0