

# PTBZ1000125S41

## PHANTOM CULTIVAR GL250 LED, 250W, 120V

### S4 SPECTRUM WITH TWO-STEP SPECTRUM SWITCH (TSS)

PHANTOM Cultivar GL 250 is designed for those who take their cultivation seriously, regardless of where they grow. The small footprint of the fixture and the true IP65 rating offer nimbleness and flexibility growers need to push the definition of a "grow room." The 2.5  $\mu\text{mol}/\text{J}$  efficacy and the unibody heatsink empower growers to challenge the performance of the next batch. The state-of-the-art Master-Apprentice Dimmer (MAD) function and Two-Step Spectrum Switch (TSS) put the grower in control. The mission has always been the same since 1977: Cultivate Higher.



### System Overview

Model	PTBZ1000125S41
Fixture Type	Horticultural LED
Spectrum	Veg / Flower (S4)
Photon Flux (PAR 400-700 nm)	625 $\mu\text{mol}/\text{s}$
Photon Flux (PBAR 280-800 nm)	641 $\mu\text{mol}/\text{s}$
Input Power (W)	250
Efficacy (280-800 nm)	2.56 $\mu\text{mol}/\text{J}$
Input Voltage Range	120 VAC
Lifetime	L90: > 50,000hr
Optics	Conformal Coating
Dimmable	0-10 VDC / On-board Knob
Driver	IP67 Driver
Operating Environment	Wet Location
Ingress Protection Rating	IP65
Warranty Period	5 Year Limited

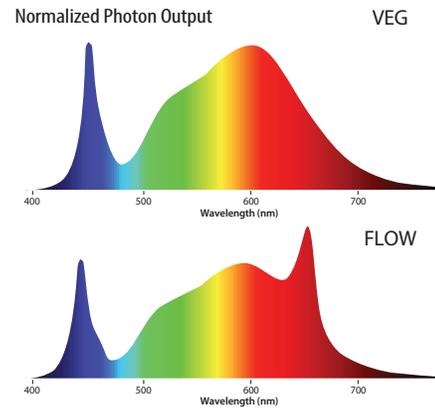
### Electrical Specifications

Model	PTBZ1000125S41
Fixture Power (W)	250
Input Voltage Range	120 VAC
Max Voltage Range	108-132 VAC
Max Input Power	262.5
Power Factor	0.9
Frequency	50/60Hz
Daisy-chain	No

### Input Amperage Reference

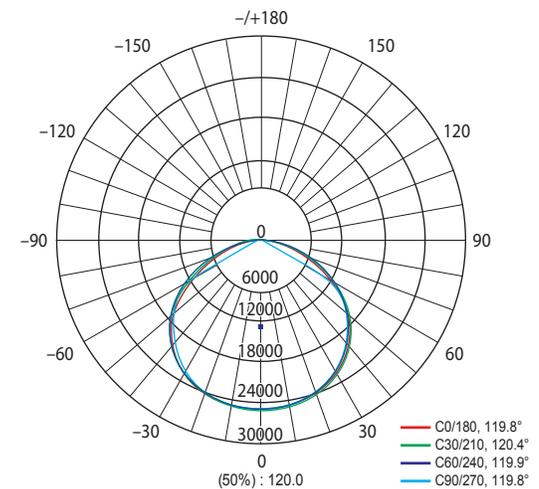
<b>Voltage Input</b>	<b>120V</b>
Typical Amperage	2.08
Max Amperage	2.19

### S4 Spectrum with TSS



**S4 Spectrum with TSS:** Use the IP65-rated TSS to switch between VEG/FLOWER mode. The FLOWER mode offers the classic S4 spectrum, providing a full spectrum with supplemented red LEDs at 660nm. The VEG mode will reduce the red spectral output for early-stage plant development needs.

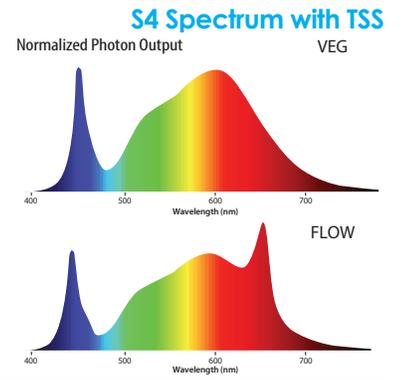
### Photosynthetic Photon Intensity Distribution



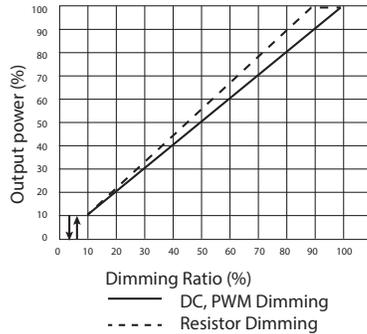
# PTBZ1000125S41

**PHANTOM CULTIVAR GL250 LED  
250W, 120V**

**S4 SPECTRUM WITH TWO-STEP  
SPECTRUM SWITCH (TSS)**



## Dimming Ratio



## Operating Conditions

Rated Operating Temperature	77°F/25°C
Minimum Operating Temperature	-4°F/-20°C
Maximum Operating Temperature	104°F/40°C
Operating Environment	Wet Location
Ingress Protection Rating	IP65

## Optical Specifications

Optics	120 degrees
Total Diode Quantity	1284
Spectrum	Veg / Flower (S4)
Lifetime	> 50,000hr

## Driver Specifications

Open Circuit Protection	Yes
Short Circuit Protection	Yes
Overtemperature Protection	Yes
Over/Undervoltage Protection	Yes
IP Rated Daisy Chain Connector	Yes
Internal EMI Suppression	Yes
Mini 2P Male IP AC Input	Yes

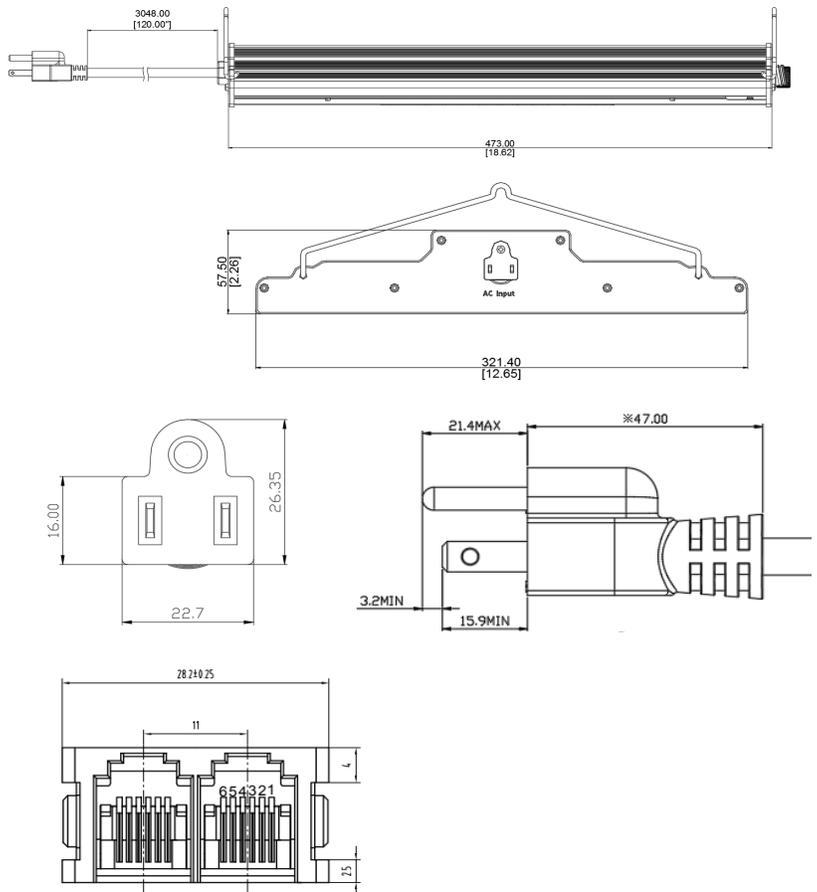
## Safety Certifications

Certification Mark	ETL
Certified to UL 1598	Yes
Certified to CSA C22.2 # 250.0	Yes
Certified to UL 8800	Yes
IEC 62471 Photobiology	
Safety Rating	Risk Group 2
FCC Commercial	Yes
FCC Residential	No

## Mechanical Specification

Dimensions (L x W x H)	473 x 321.4 x 57.5 mm / 18.62 x 12.65 x 2.26 in
Net Weight	5 kg / 11 Lb
Thermal Management	Passive
Material	Aluminum, PC, Anodized

## Dimensional Drawing



## Operation Notes

For use with a generator, line conditioning equipment to control input voltage must be used in order to avoid damage to fixture. Failure to observe this warning will result in void of warranty. Contact us for more information. Clean overspray from lens with a damp microfiber cloth. Product is not designed to use with residential power strip.



**WARNING – POSSIBLE RISK OF INJURY TO EYES AND SKIN**

Hazardous optical UV, HEV, and IR radiation may be emitted from the light source. Always wear personal protective equipment ensuring complete shielding of skin and eyes. Avoid prolonged exposure and looking directly at light source.

