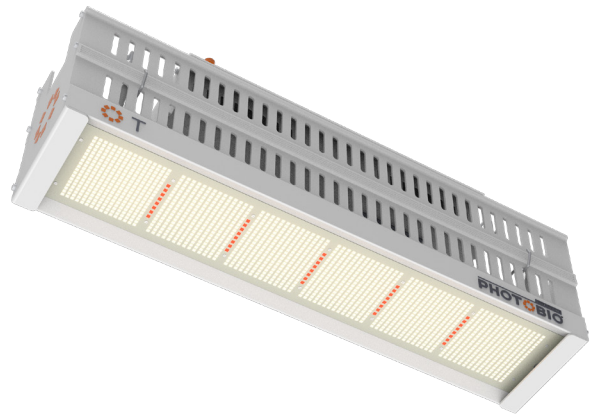


PTB3330LS4X

PHOTOBIO•T LED, 330W, 100–277V

S4 SPECTRUM

PHOTOBIO•T high efficiency LED top light is designed for greenhouse and indoor applications. The slim design minimizes sun interference while providing greater access to the plant canopy. The ultra-effective commercial design utilizes a closed loop heat pipe cooling system to rapidly wick heat from diodes, providing superior heat dissipation and longevity. The high efficiency S4 spectrum provides ideal conditions for both human and plant health to deliver better working conditions and consistent crop quality. This fixture allows horticulture professionals increased performance and yields while maximizing ROI.



System Overview

Model	PTB3330LS4X
Fixture Type	Horticultural LED
Spectrum	S4 Spectrum
Typical Photon Flux Output	858 $\mu\text{mol/s}$
Input Power	330W
Efficacy	2.6 $\mu\text{mol/joule}$
Input Voltage Range	100–277V
Lifetime	Q90: > 50,000hr
Optics	120° Primary Optics
Dimmable	0–10V
Driver	IP67 Driver
Operating Environment	Wet Location
Ingress Protection Rating	IP65
Warranty Period	5 Years

Ballast Electrical Specifications

Model	Phantom 330 PSU
Fixture Power	330W
Input Voltage Range	100–277V
Max Voltage Range	90–305V
Max Input Power	345W
Power Factor	0.95
Frequency	50/60Hz
THD	<10%
t _a	-40
t _c	90

Ballast Input Amperage Reference

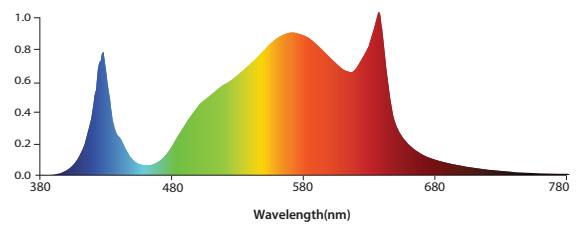
Voltage Input	120V	208V	240V	277V
Typical Amperage	2.75	1.59	1.38	1.2
Max Amperage	2.9	1.7	1.45	1.25

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
Material	N/A

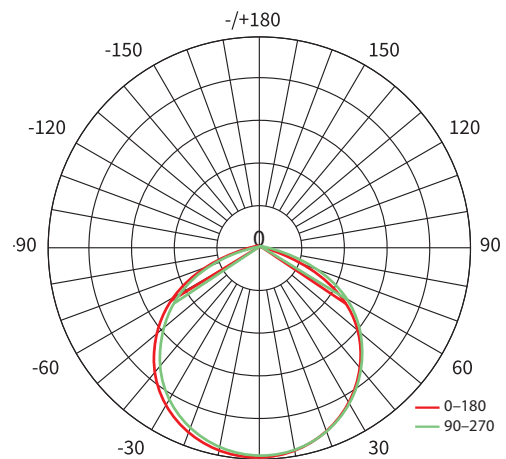
S4 Spectrum

Normalized Photon Output



S4 Spectrum: Provides highly efficient full spectrum with a healthy red-to-blue ratio to drive photosynthesis. Light energy between 500–599nm, previously thought wasted, penetrates deeper into the plant canopy promoting photomorphogenic responses. High color rendering “white” light aids to rapidly identify potential threats to your crop and provides superior working conditions and safety for personnel. Ideal for both flowering and vegetative production.

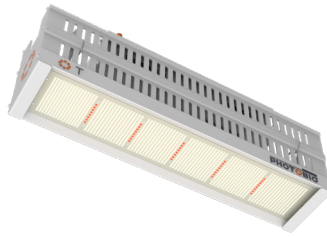
Photosynthetic Photon Intensity Distribution



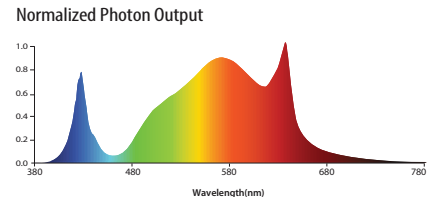
PTB3330LS4X

PHOTOBIO-T LED, 330W, 100-277V

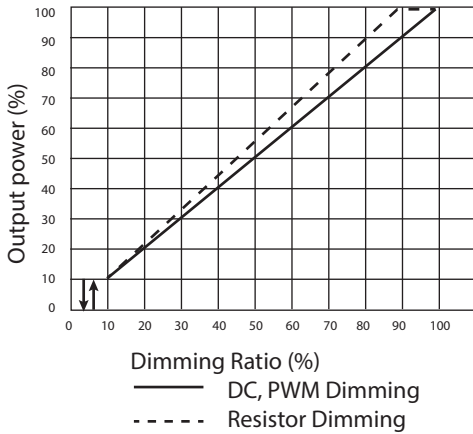
S4 SPECTRUM



S4 Spectrum



Dimming Ratio



Power Harness Options

Specific cable harnesses based on facility requirements.

- CHE1063000W 10' F 16AWG WT w/leads, Harness
- CHE1063010W 10' F 16AWG WT 110-120V Plug, 5-15P, Harness
- CHE1063015W 10' F 16AWG WT 208-240V Plug, 5-15P, Harness
- CHE1083020W 10' F 18AWG WT 277V, L7-15P, Harness

PHOTOBIO AC Power Distribution Tree Cabling Options

Plug and play power cables that allow interconnectivity of multiple fixtures on a single circuit.

- PTBAC40APM PHOTOBIO AC Female Panel Mount, 40A M25, Pigtail 6" 10AWG
- PTBAC40AJ10 PHOTOBIO AC Power Link Cable, 40A M25 Connector, 10'
- PTBAC40A1T4 PHOTOBIO AC Power T Cable, 40A M25 to EN100, 1-T, Ferrite, 4.5'
- PTBAC40A1T6 PHOTOBIO AC Power T Cable, 40A M25 to EN100, 1-T, Ferrite, 6.0'

PHOTOBIO Communication Tree Cabling Options

Plug and play communications cables that allow interconnectivity from a centralized controller.

- PTBCC8850W PHOTO LOC 0-10V Control Cable 8' Trunk + 5' Branch
- PTBCCJ16W PHOTO LOC 0-10V Control Cable 16' Jumper
- PTBCC8300 PHOTO LOC 0-10V Control Cable, 300' 3P-2P
- PTBC4RJ112P20 PHOTO LOC 0-10V TM Adapter Cable, RJ11-2P 20'
- PTBXRC PHOTO LOC 0-10V Signal Repeater

Optical Specifications

Optics	120 degrees
Total Diode Quantity	1655
Diode Brand	Lumiled
Spectrum	S4
Lifetime	> 50,000hr

Driver Specifications

Microprocessor Control	Yes
Open Circuit Protection	Yes
Short Circuit Protection	Yes
Overtemperature Protection	Yes
Over/Undervoltage Protection	Yes
Over/Undervoltage Indicator	Yes
Output Compensation	Yes
IP Rated 0-10V	Yes
Internal EMI Suppression	Yes
AC Input	Yes

Safety Certifications

UL	N/A
ETL	Yes
CE	Yes
FCC Commercial	Yes
FCC Residential	Yes

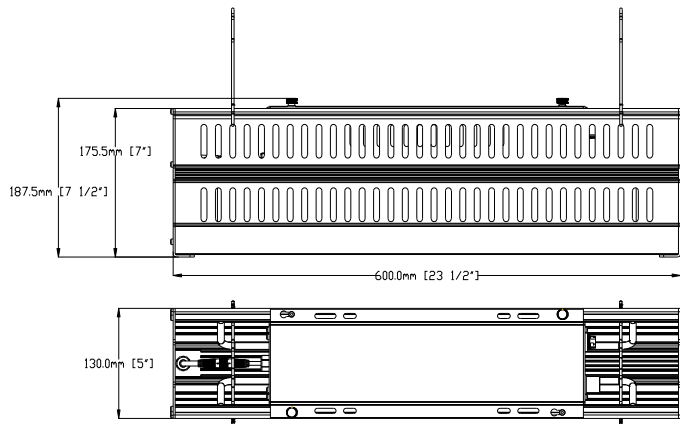


H-3WUMH6G

Mechanical Specification

Dimensions (L x W x H)	600 x 130 x 187.5 mm / 23.5" x 5.0" x 7.5"
Net Weight	8.25 kg / 18.18 Lb
Thermal Management	Passive + Heat pipe
Material	Aluminum, Copper

Dimensional Drawing



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.

