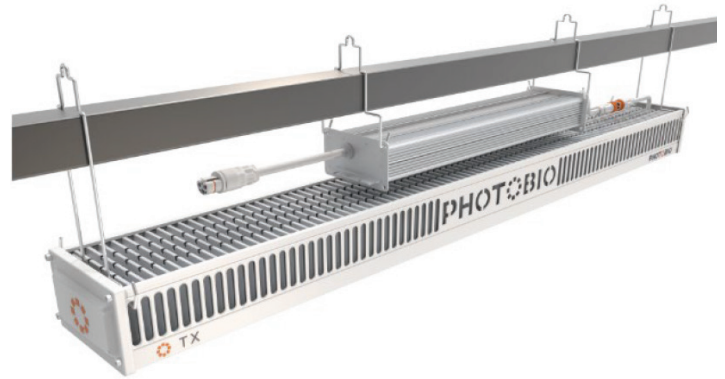# PTBZ1000580S5X

PHOTOBIO•TX2 LED, 800W, 200–480V

S5 SPECTRUM

PHOTOBIO•TX2 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 high efficiency S5 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	PTBZ1000580S5X
Fixture Type	Linear Horticultural LED
Spectrum	S5
Photon Flux (PAR 400-700 nm)	2400 µmol/s
Photon Flux (PBAR 280-800 nm)	2423 µmol/s
Input Power (W)	800
Efficacy (280-800 nm)	3.0 µmol/J
Input Voltage Range	200-480 VAC Auto Recognition
Lifetime	L90: > 50,000hr
Optics	Conformal Coating
Dimmable	0-10 VDC
Driver	Detached Driver - Remotely Mountable
Operating Environment	Wet Location
Ingress Protection Rating	IP65
Warranty Period	5 Year Limited

Ballast Electrical Specifications

Model	PTBZ1000580S5X
Fixture Power (W)	800
Input Voltage Range	200-480 VAC
Max Voltage Range	180-528 VAC
Max Input Power	840
Power Factor	0.96
Frequency	50/60Hz
THD	<10%
ta	-40
tc	90

Ballast Input Amperage Reference

Voltage Input	240V	277V	480V
Typical Amerage	3.33	2.89	1.67
Max Amperage	3.50	3.03	1.75

Operating Conditions

|	
Rated Operating Temprature	77°F/25°C
Minimum Operating Temprature	-4°F/-20°C
Maximum Operating Temprature	104°F/40°C
Operating Environment	Wet Location
Ingress Protection Rating	IP65
Material	N/A

S5 Spectrum

Normalized Photon Output
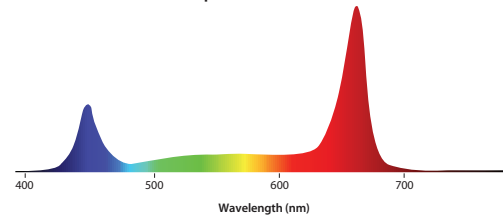
S5 Spectrum: Provides highly efficient full spectrum with an enhanced red-to-blue ratio to drive photosynthesis and improve efficacy. Light energy between 500–599nm, previously thought wasted, penetrates deeper into the plant canopy promoting photomorphogenic responses. High color rendering "white" light 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.
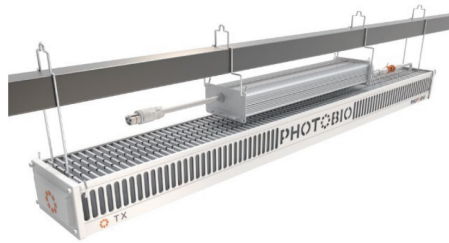
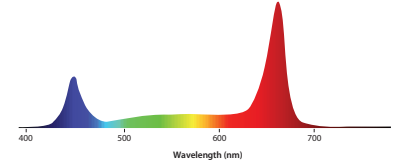## Photosynthetic Photon Intensity Distribution
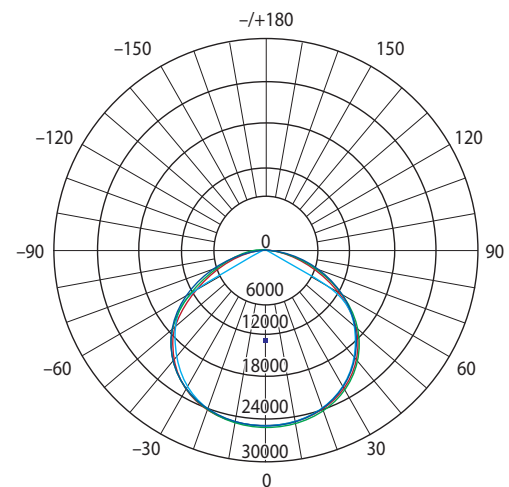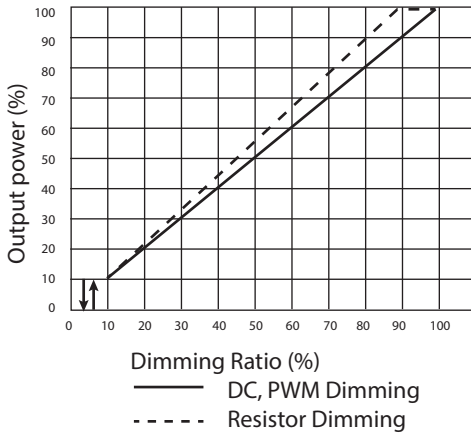
PTBZ1000580S5X

PHOTOBIO·TX2 LED, 800W, 200–480V

S5 SPECTRUM

S5 Spectrum

Normalized Photon Output

Dimming Ratio

Dimming Ratio (%)

—— DC, PWM Dimming
- - - - Resistor Dimming

Optical Specifications

Optics	120 degrees
Spectrum	S5
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	cETLus
Certified to UL 8800	Yes
Certifiied to CSA C22.2 # 250.0	Yes
IEC 62471 Photobiobilogy Safety Rating	Risk Group 2
FCC Commercial	Yes
FCC Residential	Yes

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

Mechanical Specification

Dimensions (L x W x H)	1073 x 128 x 84 mm / 42.2 x 5 x 3.3 in
Net Weight	10.7 kg / 23.5 Lb
Thermal Management	Passive
Material	Aluminum, PC, Anodized

Dimensional Drawing

Fixture

Driver
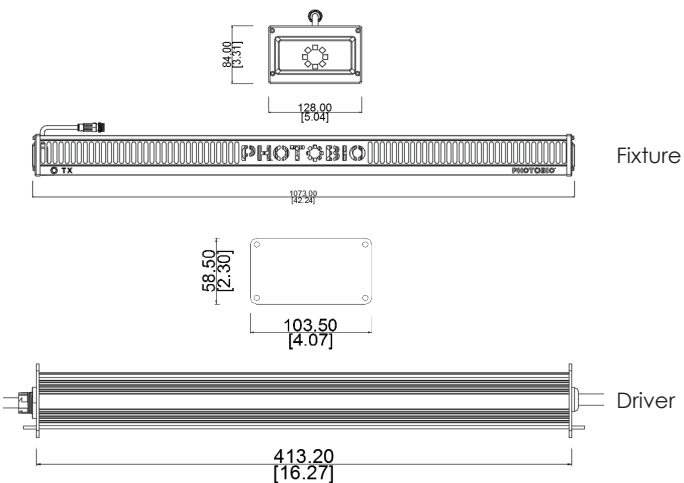
Operation Notes

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.

PHOTOBIO 1510 Main St, Shoemakersville, PA 19555, USA | 888.780.4567 | **PhantomBio.com**