

PHOTONTEK

HORTICULTURAL LIGHTING

SQ300W PRO LED FULL-SPECTRUM LED

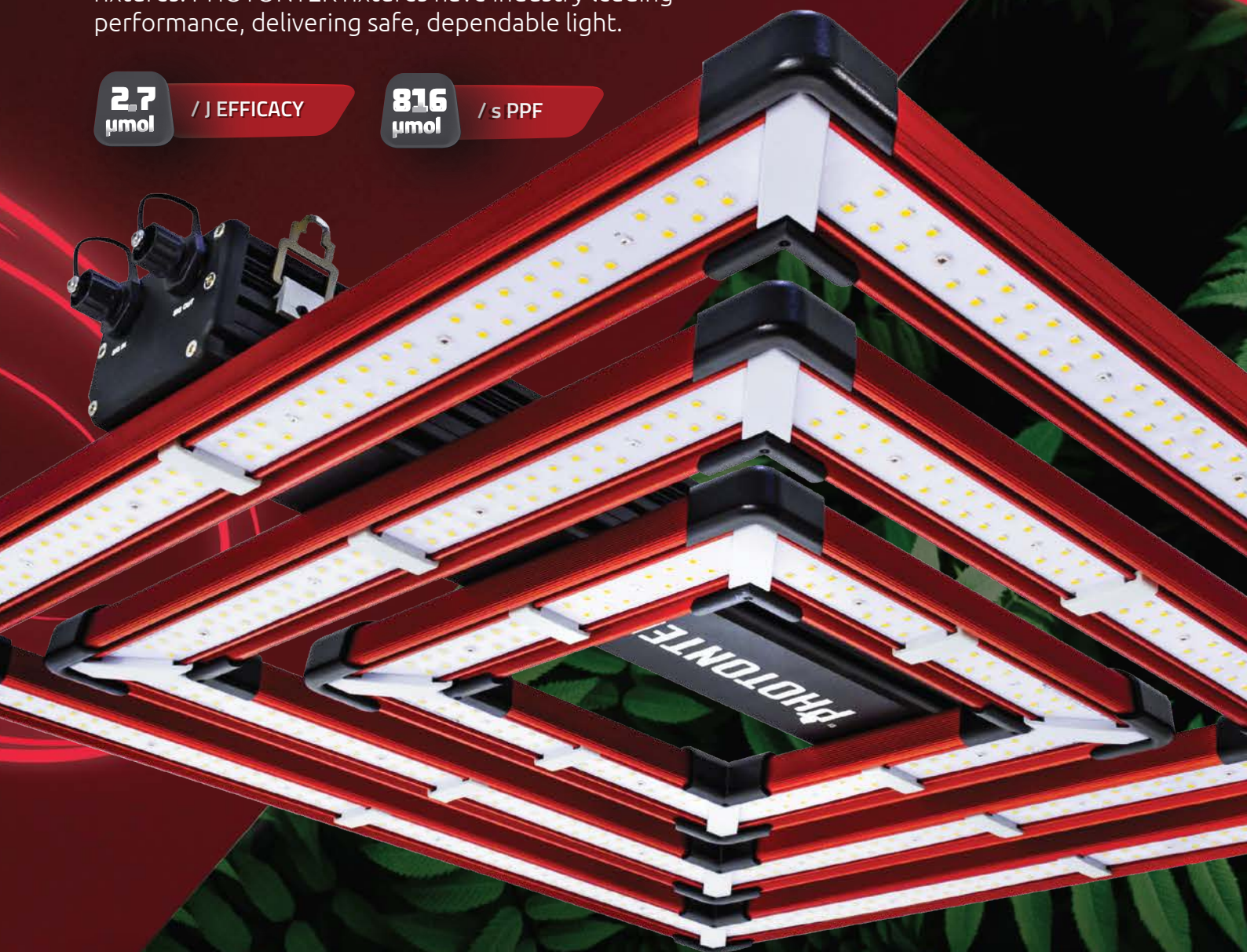
The P-TEK SQ300W PRO Only the highest-grade materials and components are used in PHOTONTEK's LED fixtures. PHOTONTEK fixtures have industry-leading performance, delivering safe, dependable light.

2.7
μmol

/ J EFFICACY

816
μmol

/ s PPF



3

YEAR

WARRANTY

SQ300W PRO LED

FULL-SPECTRUM LED

Product Code: PTEKLED024

Efficacy: 2.7 $\mu\text{mol/J}$

PPF: 816 $\mu\text{mol/s}$

Input Voltage: 120-277V, 50-60Hz

Input Power: 310W (100%)

Input Current (100%): 2.72A (120V); 1.4A (230V); 1.16A (277V)

Footprint: Up to 3.3'x3.3'

Application: Multi-layer, Room, Tent

Waterproof & Dustproof: IP65

Lifetime: 60 000 Hrs

Light Distribution: 120°

Light Source: Higher Spec 4000K White, 660nm Red & 730nm Far Red Diodes

CCT: 4000K

Quantity of Diodes Total: White 576; Red 24; 24 Far Red

Diodes Power Proportion: White 74%; Red 14%; Far Red 12%

Diodes Efficiency: White 2.8 $\mu\text{mol/J}$; Red 3.2 $\mu\text{mol/J}$; Far Red 2.2 $\mu\text{mol/J}$

Dimmable: OFF-25%-50%-75%-100% with 0-10V Light Dimmer (Included)

External Control: With P-Tek Digital Controller or Universal Controller 0-10V

Weight: 11.46 Lbs

Dimensions: 22.08"x22.08"x2.82"

Spectrum: Full Spectrum

Thermal Management: Passive Cooling

Power Factor: 0.95

Max. Ambient Temperature (@ 200W Power): 25°C

BTU: 1051 BTUs/h

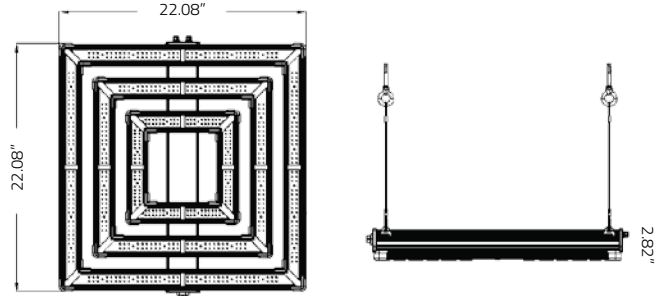
Warranty: 3 Years

Certifications: IP65, Rohs Directive

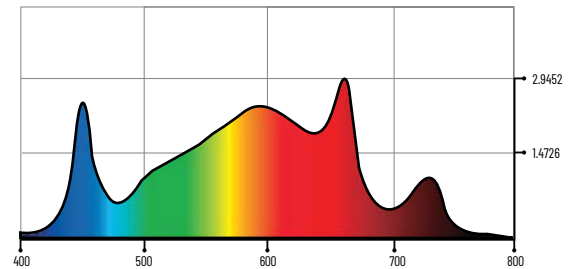
CSA: ANSI/CAN/UL 8800:2019

FCC: FCC PART15 SUBPART B:2017

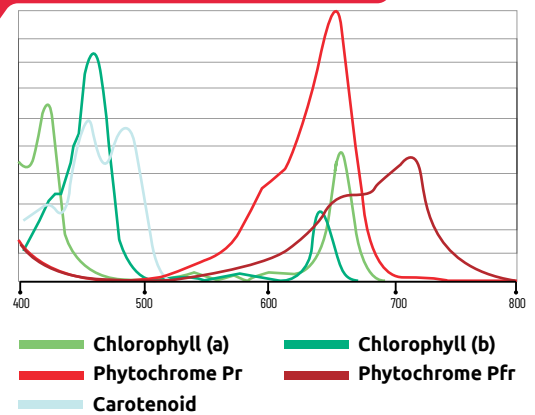
IC: ICES-005 Issue 5:2018



SQD SPECTRUM GRAPH



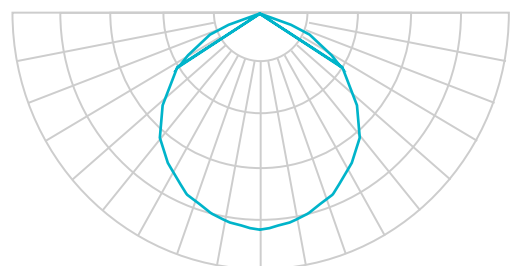
ABSORPTION CURVES OF PLANTS



DISTRIBUTION CURVE FLUX

AVERAGE BEAM ANGLE (50%) : 117.9 DEG

C90/270, 117.9



INPUT CURRENT (A/w) PER DIMMING RANGE

Conditions	Dimming Ratio	Input Power (W)	Current (A)
Vmains=120VAC	100%	315	2.64
	75%	237	1.98
	50%	153	1.29
	25%	80	0.69
	100%	308	1.36
Vmains=240VAC	75%	232	1.03
	50%	152	0.71
	25%	79.5	0.41
	100%	307	1.14
	75%	231	0.87
Vmains=277VAC	50%	151.5	0.61
	25%	79	0.4

FULL CONTROL

PhotonTek Pro LED Fixtures can be fully controlled with either the P-Tek Digital Controller or with any other Control System that utilises 0-10V output signal.



WHAT'S IN THE BOX:

- 1 x SQ300W Pro LED Fixture with Driver
- 1 x Power Cable 120V
- 1 x 0.10V Light Dimmer + Velcro
- 2 x Metal Cable Hangers
- 1 x Manual

PPFD: PHOTOSYNTHETIC PHOTON FLUX DENSITY ($\mu\text{mol}/\text{m}^2/\text{s}$)

ALL TESTS CONDUCTED WITH 100% DRIVER POWER

FACTORS THAT CAN INFLUENCE PPFD TESTS

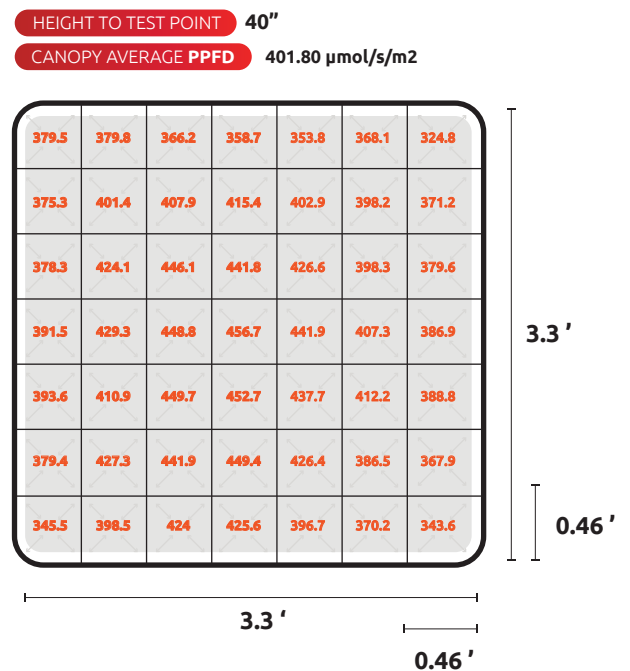
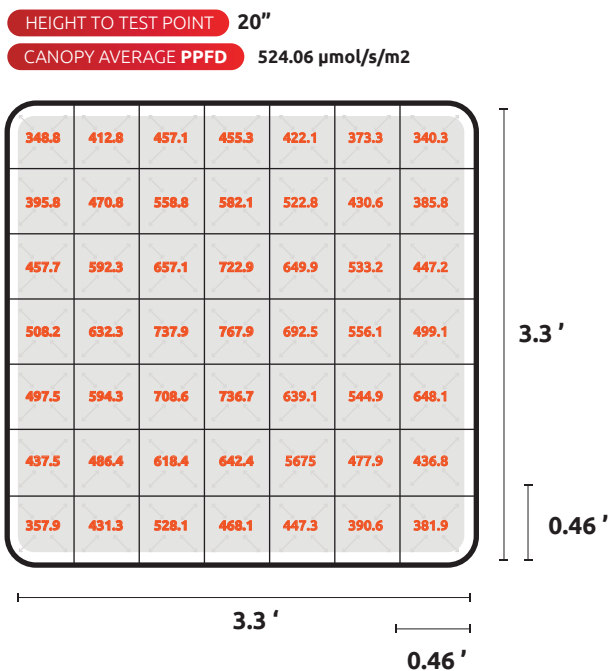
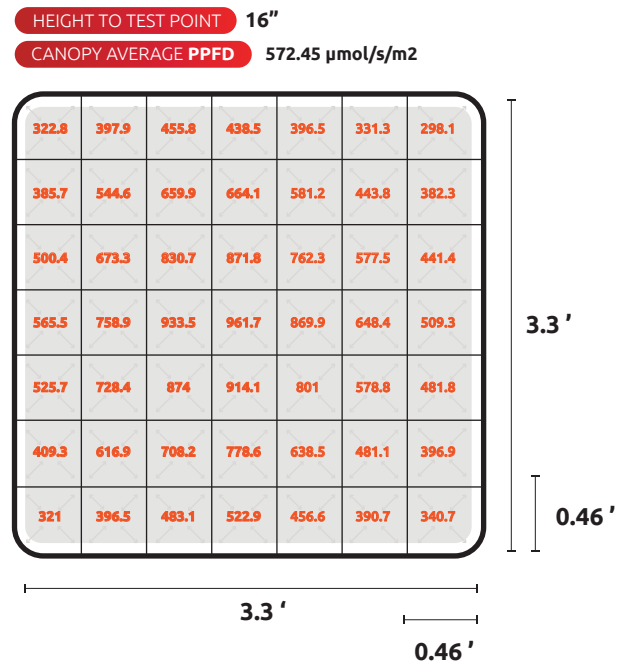
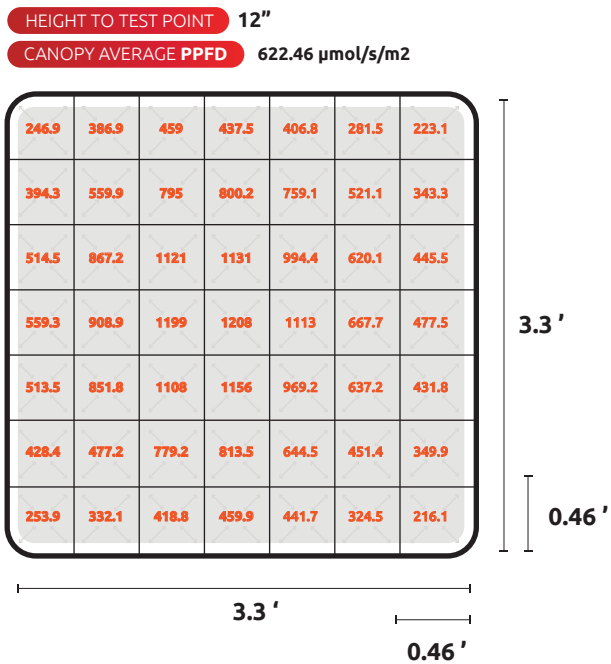
- TEST EQUIPMENT.
- LAMP BEADS DEVIATION
- AMBIENT TEMPERATURE DEVIATION
- PC COVER TRANSMITTANCE DEVIATION
- POWER SOURCE EFFICIENCY DEVIATION
- REFLECTION CONSIDERED OR NOT

RECOMMENDED PPFD ($\mu\text{mol}/\text{m}^2/\text{s}$)

PLANT	SEED	CLONES	VEGETATIVE	FLOWERING
CANNABIS	100-300	75-150	300-550	650+
TOMATOES	150-350	75-150	350-550	650+
CUCUMBERS	100-300	--	300-550	650+
PEPPERS	150-350	--	300-550	650+

PHOTONTEK SQ300W PRO PPFD MAPS

TEST AREA	3.3' X 3.3'
TEST POINTS	49
TEST EQUIPMENT	INTEGRATING 2 METER SPHERE & LI-COR 180
AMBIENT TEMPERATURE	25°
HEIGHT FROM CANOPY	12", 16", 20", 40"
REFLECTION	0%



General contact:
info@photontek-lighting.com

FOR MORE INFORMATION ON LUMATEK PRODUCTS
VISIT WWW.PHOTONTEK-LIGHTING.COM