

PHOTONTEK

HORTICULTURAL LIGHTING

SQ200W PRO LED FULL-SPECTRUM LED

The P-TEK SQ200W 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.

2.5
μmol

/ J EFFICACY

508
μmol

/ s PPF



3

YEAR

WARRANTY

SQ200W PRO LED

FULL-SPECTRUM LED

Product Code: PTEKLED023

Efficacy: 2.5 $\mu\text{mol}/\text{J}$

PPF: 508 $\mu\text{mol}/\text{s}$

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

Input Power: 205W (100%)

Input Current (100%): 1.76A (120V); 0.9A (230V); 0.75A (277V)

Footprint: Up to 2.6'x2.6'

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 288; Red 12; 24 Far Red

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

Diodes Efficiency: White 2.6 $\mu\text{mol}/\text{J}$; Red 3.0 $\mu\text{mol}/\text{J}$; Far Red 2.2 $\mu\text{mol}/\text{J}$

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: 8.82 Lbs

Dimensions: 20.65"x20.65"x2.82"

Spectrum: Full Spectrum

Thermal Management: Passive Cooling

Power Factor: 0.95

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

BTU: 703 BTUs/h

Warranty: 3 Years

Certifications: IP65, Rohs Directive

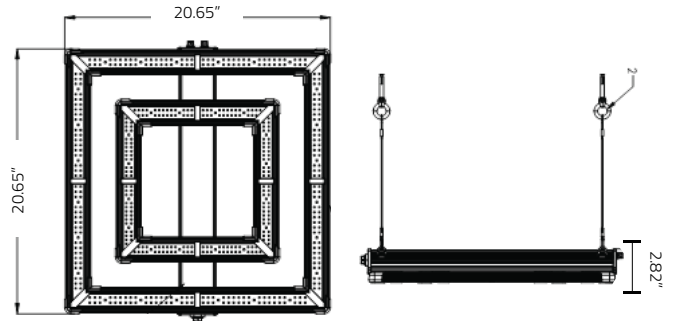
CSA: ANSI/CAN/UL 8800:2019

FCC: FCC PART15 SUBPART B:2017

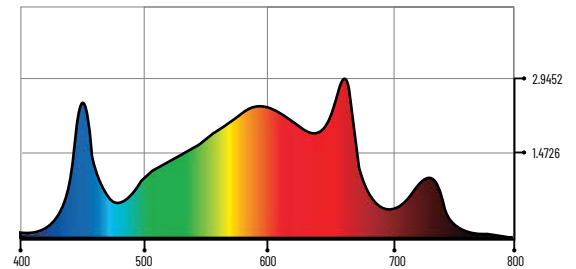
IC: ICES-005 Issue 5:2018

INPUT CURRENT (A/W) PER DIMMING RANGE

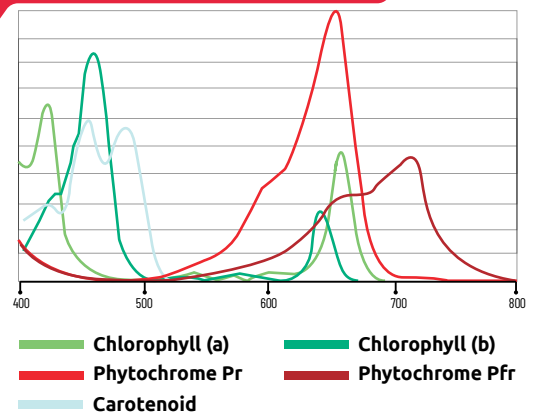
Input Voltage (V)	Dimming Ratio	Input Power (W)	Input Current (A)
Vmains=120VAC	100%	208	1.75
	75%	152	1.3
	50%	99	0.83
	25%	50	0.43
	100%	203	0.9
Vmains=240VAC	75%	150	0.67
	50%	98	0.45
	25%	49.5	0.3
	100%	202	0.76
	75%	149.5	0.6
Vmains=277VAC	50%	97.8	0.45
	25%	49	0.31



SQD SPECTRUM GRAPH



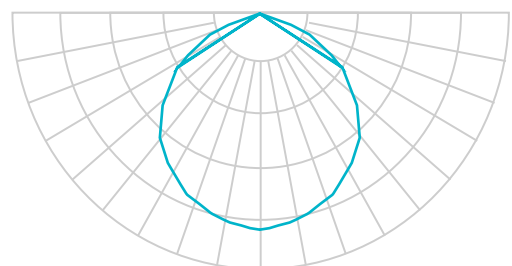
ABSORPTION CURVES OF PLANTS



DISTRIBUTION CURVE FLUX

AVERAGE BEAM ANGLE (50%) : 117.9 DEG

C90/270, 117.9



FULL CONTROL

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



WHAT IN THE BOX:

- 1 x SQ200W 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

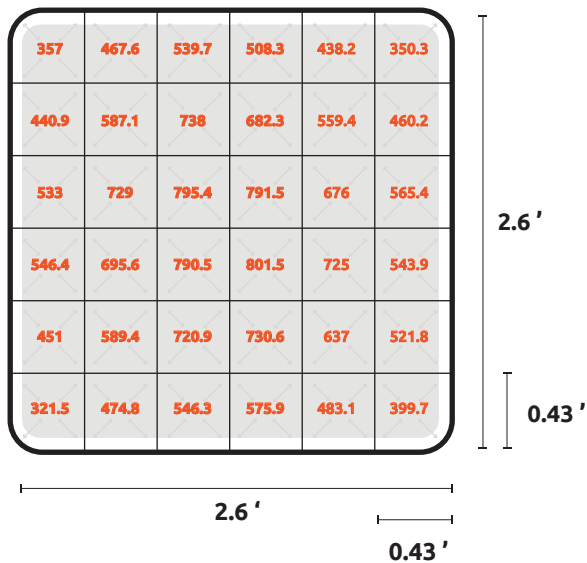
RECOMMENDED PPFD ($\mu\text{mol}/\text{m}^2/\text{s}$)

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+

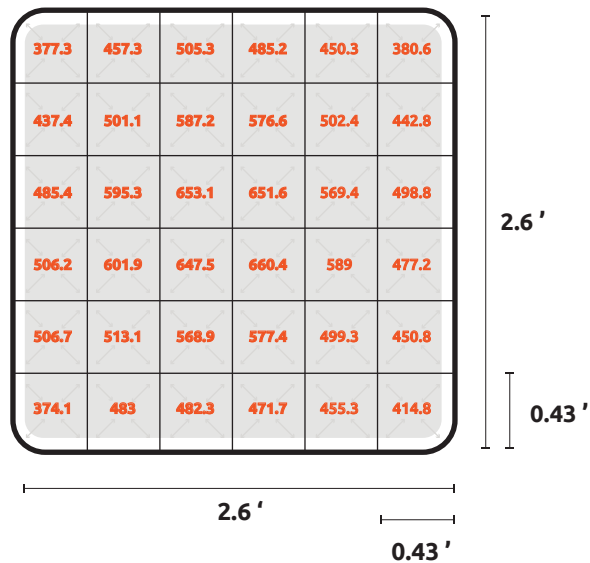
PHOTONTEK SQ200W PRO PPFD MAPS

TEST AREA	2.6' X 2.6'
TEST POINTS	36
TEST EQUIPMENT	INTEGRATING 2 METER SPHERE & LI-COR 180
AMBIENT TEMPERATURE	25°
HEIGHT FROM CANOPY	12", 16", 20", 40"
REFLECTION	0%

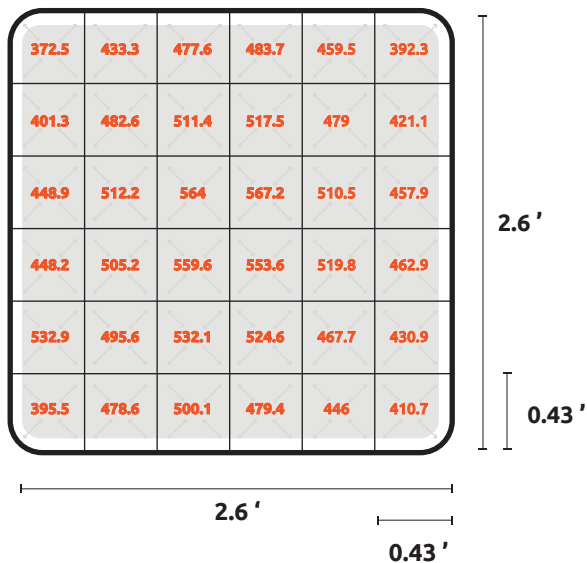
HEIGHT TO TEST POINT 12"
CANOPY AVERAGE PPFD 577.1 $\mu\text{mol/s/m}^2$



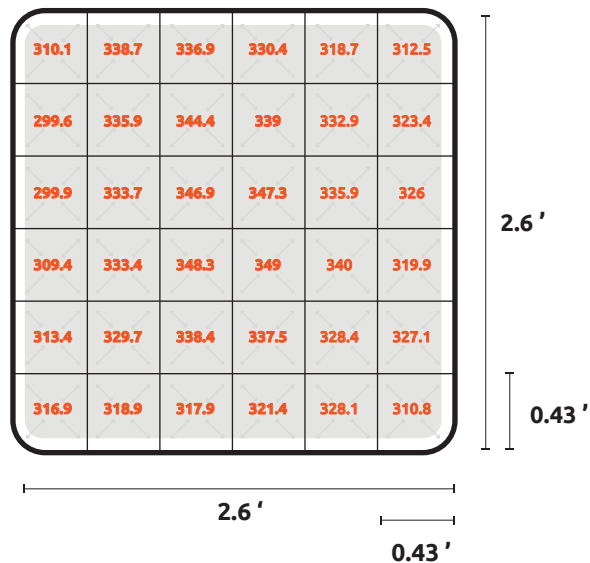
HEIGHT TO TEST POINT 16"
CANOPY AVERAGE PPFD 510.7 $\mu\text{mol/s/m}^2$



HEIGHT TO TEST POINT 20"
CANOPY AVERAGE PPFD 478.8 $\mu\text{mol/s/m}^2$



HEIGHT TO TEST POINT 40"
CANOPY AVERAGE PPFD 327.8 $\mu\text{mol/s/m}^2$



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