

# PHOTONTEK

HORTICULTURAL LIGHTING

## P-TEK XT 1000W CO2 PRO LED FULL-SPECTRUM

The **P-TEK XT 1000W CO2 PRO** Only the highest-grade materials and components are used in P-TEK's LED fixtures. P-TEK fixtures have industry-leading performance, delivering safe, dependable light.

2.9  
μmol

/ J EFFICIENCY

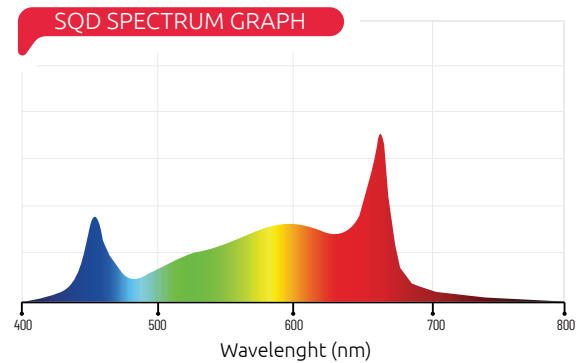
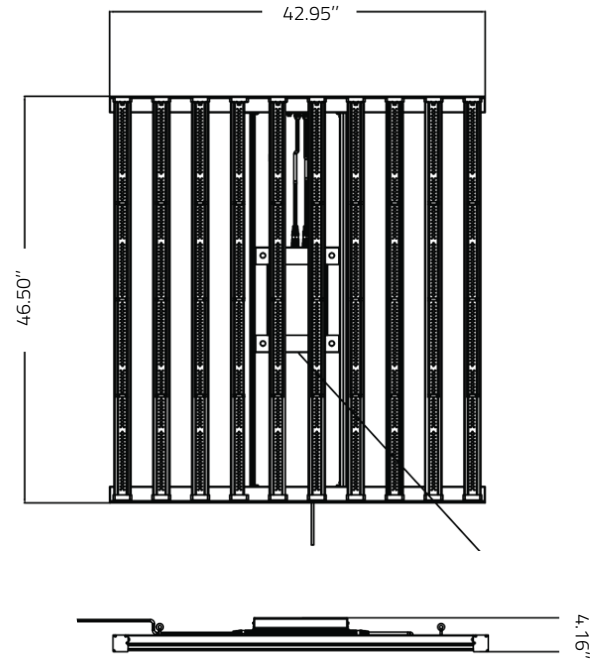
2925  
μmol

/ s PPF



# P-TEK XT 1000W CO2 PRO LED FULL-SPECTRUM

- Product Code: PTEKLED020
- Efficacy: 2.9  $\mu\text{mol}/\text{J}$
- PPF: 2925  $\mu\text{mol}/\text{s}$
- Input Voltage: 120-277V, 50-60Hz
- Driver: 1000W 120V-277V with Twist Lock capability
- Input Power: 1025W (100% 120V); 988W (100% 240V); 986W (100% 277V)
- Footprint: 5'x5' with Supp. CO2; 6'x6' without Supp. CO2 used at higher heights.
- CO2 Supplemental: 1:1 Ratio CO2 PPM should be added once a PPF of 1000  $\mu\text{mol}/\text{s}/\text{m}^2$  is exceeded
- Application: Multi-layer, Room, Tent
- Waterproof & Dustproof: IP65
- Lifetime (LED Bars): 60 000 Hrs
- Light Distribution: 120°
- Light Source: 4000K White Diodes Lumileds 3030 HE Plus; 660nm Red Diodes Osram SQ3.24
- CCT: 3800K
- Quantity of LED Bars: 10
- Quantity of Diodes Total: White 2880; Red 240
- Quantity of Diodes per LED Bar: White 288; Red 24
- Diodes Power Proportion: White 82%; Red 18%
- Diodes Efficiency: White Lumileds 3030 HE Plus 2.9  $\mu\text{mol}/\text{J}$ ; Red Osram SQ3.24 3.8  $\mu\text{mol}/\text{J}$
- Dimmable: OFF-25%-50%-75%-100% with 0-10V Light Dimmer (Included)
- External Control: With P-Tek Digital Controller (Up to 100 fixtures)
- Weight: 39.68 Lbs
- Dimensions: 46.50" x 42.95" x 4.16"
- Spectrum: Full Spectrum
- Thermal Management: Passive Cooling
- Power Factor: 0.95
- Driver Location: Fixed in structure or detachable for remote use (Extension Cables Sold Separately)
- Max. Ambient Temperature (@ 1000W Power): 25°C
- BTU (With Driver Attached): 3497
- BTU (Without Driver): 3180
- Warranty: 5 Years
- Certifications: IP65, Rohs Directive  
CSA: ANSI/CAN/UL 8800:2019  
FCC: FCC PART 15 SUBPART B:2017  
IC: ICES-005 Issue 5:2018

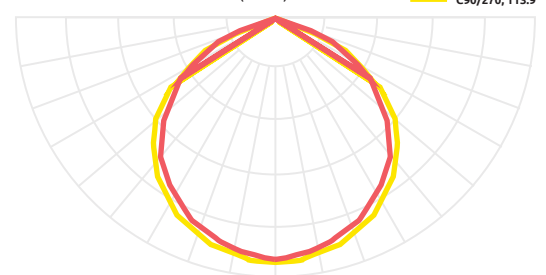


## INPUT CURRENT (A/W) PER DIMMING RANGE

Input Voltage (V)	Dimming Ratio	Input Power (W)	Input Current (A)
Vmains=120VAC	100%	1025	8.56
	75%	773	6.45
	50%	500	4.20
	25%	250	2.13
Vmains=240VAC	100%	988	4.28
	75%	753	3.29
	50%	494	2.22
	25%	250	1.25
Vmains=277VAC	100%	986	3.79
	75%	752	2.94
	50%	494	2.00
	25%	250	1.16

## DISTRIBUTION CURVE FLUX

AVERAGE BEAM ANGLE (50%) : 114.4 DEG





## FULL CONTROL

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

### ITEMS INCLUDED IN THE BOX:

- 10 x 100W 2.9 Full-Spectrum Magnet LED Bars
- 1 x 1000W Driver with Connecting Cables
- 1 x LED Structure with Connecting Cables
- 1 x Power Cable with NEMA 5-15P 120V Plug (NEMA 6-15P 240V also available)
- 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+

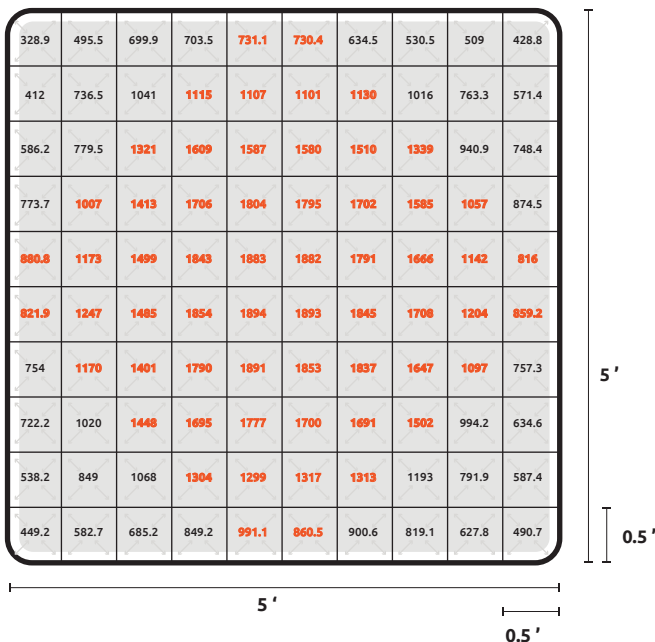
### P-TEK XT 1000W CO2 PRO PPFD MAPS

- TEST AREA 5' X 5'
- TEST POINTS 100
- TEST EQUIPMENT INTEGRATING 2 METER SPHERE & EVERFINE PLA20
- AMBIENT TEMPERATURE 25°
- HEIGHT FROM CANOPY 12", 16", 20.5", 40", 60"
- REFLECTION 0%

### PRIMARY TESTS WITH 10 BARS AT 100% POWER

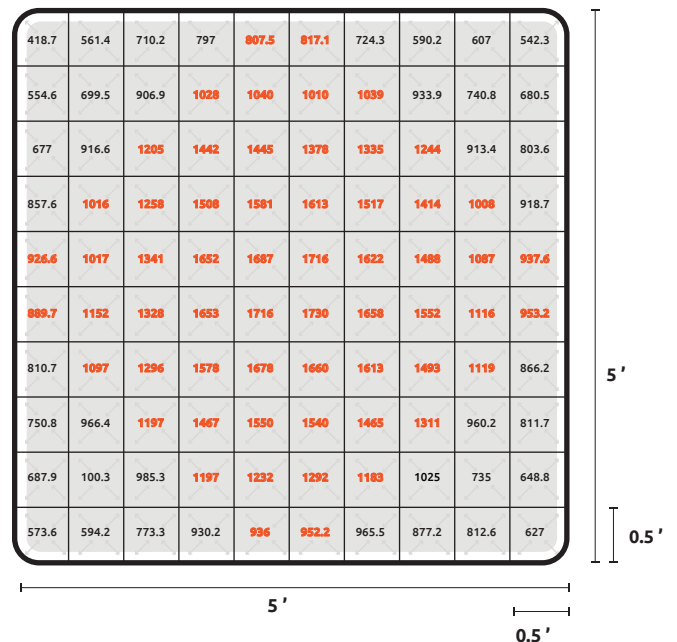
HEIGHT TO TEST POINT **12"**

CANOPY AVERAGE PPFD **5'x5': 1148  $\mu\text{mol}/\text{s}/\text{m}^2$**



HEIGHT TO TEST POINT **16"**

CANOPY AVERAGE PPFD **5'x5': 1095,4  $\mu\text{mol}/\text{s}/\text{m}^2$**



HEIGHT TO TEST POINT 20.5"

CANOPY AVERAGE PPF 5'x5': 1031.2  $\mu\text{mol/s/m}^2$

623	687	794	843	859	852	811	738	682	664
670	796	901	981	1017	983	997	932	799	718
742	880	1054	1233	1223	1230	1167	1075	907	873
855	969	1147	1341	1383	1391	1317	1233	1044	937
955	1054	1222	1429	1455	1472	1405	1276	1077	985
918	1095	1210	1416	1488	1484	1422	1334	1085	989
868	1029	1183	1371	1441	1457	1389	1244	1014	905
810	987	1068	1236	1302	1311	1263	1143	926	808
687	812	926	1087	1132	1103	1075	934	800	718
588	646	821	908	911	945	908	822	745	677

5'

0.5'

HEIGHT TO TEST POINT 40"

CANOPY AVERAGE PPF 5'x5': 846.3  $\mu\text{mol/s/m}^2$

744.8	749.2	798	795.3	734.4	756.3	731.7	682.7	757.8	762.5
738.8	796.5	876.7	830.7	821	813.4	822.5	813.4	774.3	752.4
781	831	869.1	907.4	903.6	890.8	880.5	864.4	801.1	826.2
829.3	852.6	895.2	934	948.1	933.7	937.3	911.1	838.3	855.3
840.4	889.6	903.2	956.7	979.9	961.9	957.4	940	871.3	880.1
857	891.8	900.4	956.4	967.6	981	966.3	945.4	880.5	886.9
775.7	839	855.1	924.4	962.3	964.3	951.7	930.2	865.2	825.2
740.2	804.6	828	910.1	943.7	937.6	941.9	896.7	802	770.8
663.2	732.7	824.4	894.8	916.1	894.7	902.5	831.6	739.9	658
563.7	687.1	728.8	859.9	891.7	889	813.5	763	745.6	702.8

5'

0.5'

HEIGHT TO TEST POINT 60"

CANOPY AVERAGE PPF 5'x5': 708  $\mu\text{mol/s/m}^2$

670.8	693.4	701.7	694.2	652.8	665	650.7	651.3	670	664.6
667.1	709	720.7	706.5	690.9	700.9	702.9	684.6	685.6	658.3
670.5	717.9	729.3	737.7	747.4	737	728.3	723.6	679.3	692.5
693.9	729.5	733	742.1	752.4	740.2	736.8	730.9	683.9	707.7
709.8	739.9	728.4	749.6	756.7	741	753.1	739.5	726.1	721.3
724.9	765.7	720	754.9	755.6	760.8	761.7	748.8	749.4	735.9
681.2	705.4	699.4	737.3	763.3	754.6	771.7	762.3	733.5	715.1
623.6	668.7	668.2	741.1	764.1	727.6	764.2	746.2	703.2	730.7
566.2	640.1	699.9	740.7	744.9	756.8	747.8	730.8	657.8	580.2
544.1	593.1	680.3	707.7	760.7	733.1	655.3	686.8	625.8	593.1

5'

0.5'

SECONDARY TEST

- 10 Bars at 75% Power
- Max 1000  $\mu\text{mol/s/m}^2$  PPF
- 26.4" Height to Test Point
- Area: 5'x5'

648	662	714	749	773	761	741	693	651	618
669	701	757	798	817	806	779	732	678	645
718	760	824	873	894	885	851	794	732	699
770	814	883	939	961	952	911	848	777	738
795	839	911	971	997	987	945	879	805	766
792	837	912	970	996	986	943	879	804	750
774	817	883	936	960	949	907	848	782	746
729	762	824	870	891	882	848	795	732	695
668	701	754	794	814	806	775	732	677	648
652	668	716	753	769	760	737	693	637	618

5'

0.5'

SECONDARY TEST

- 8 Bars at 100% Power
- Max 1000  $\mu\text{mol/s/m}^2$  PPF
- 25.8" Height to Test Point
- Area: 5'x5'



681	697	759	800	826	815	795	743	692	654
696	734	797	848	868	860	830	775	718	681
734	777	849	906	930	923	887	828	763	727
769	819	890	948	974	967	928	865	795	753
781	825	802	964	994	987	947	884	813	771
782	832	906	967	995	986	945	886	807	754
775	823	892	948	974	965	925	863	799	760
745	779	848	901	925	917	883	827	761	723
695	726	792	837	861	854	824	772	713	682
672	695	755	799	819	810	786	737	677	652

5'

0.5'

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