

LUMATEK
PROFESSIONAL LIGHTING

ZEUS 465W PRO 2.9



The Zeus 465W Pro 2.9 is a very high performance full-cycle LED solution for commercial and hobby horticulture cultivation, with the power and flexibility to scale from vegetative growth to higher light intensities in bloom. Designed for 1.2×1.2m coverage.

up to **2.7 $\mu\text{mol/J}$**

1353 $\mu\text{mol/s}$ total output

Full-Spectrum

Up to
2.9
 $\mu\text{mol/J}$

EFFICACY

1353
 $\mu\text{mol/s}$

PPF



ZEUS 465W PRO 2.9 LED

PRODUCT CODE: LUMLED011

EFFICACY: Up to 2.9 $\mu\text{mol/J}$

PPF: 1353 $\mu\text{mol/s}$

INPUT VOLTAGE: 220-240V, 50-60HZ

DRIVER: 465W 220-240V with Twist Lock Capability

INPUT POWER: 475W ($\pm 5\%$)

FOOTPRINT: 1.2x1.2m

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: 5

QUANTITY OF DIODES TOTAL: WHITE 1200; RED 100

QUANTITY OF DIODES PER LED BAR: WHITE 240; RED 20

DIODES POWER PROPORTION: WHITE 82%; RED 18%

DIODES EFFICIENCY: White Lumileds 3030 HE Plus 2.9 $\mu\text{mol/J}$;
Red Osram SQ3.24 3.8 $\mu\text{mol/J}$

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

EXTERNAL CONTROL: With Lumatek Digital Panel Plus 2.0
or Universal Controller 0-10V

WEIGHT: 10 Kg

DIMENSIONS: 998 x 900 x 51.9mm

SPECTRUM: Full Spectrum F

THERMAL MANAGEMENT: Passive Cooling

POWER FACTOR: 0.95

MAX. AMBIENT TEMPERATURE (@ 475W POWER): 25°C

BTU (WITH DRIVER ATTACHED): 1689 BTUs/h

BTU (WITHOUT DRIVER): 1571 BTUs/h

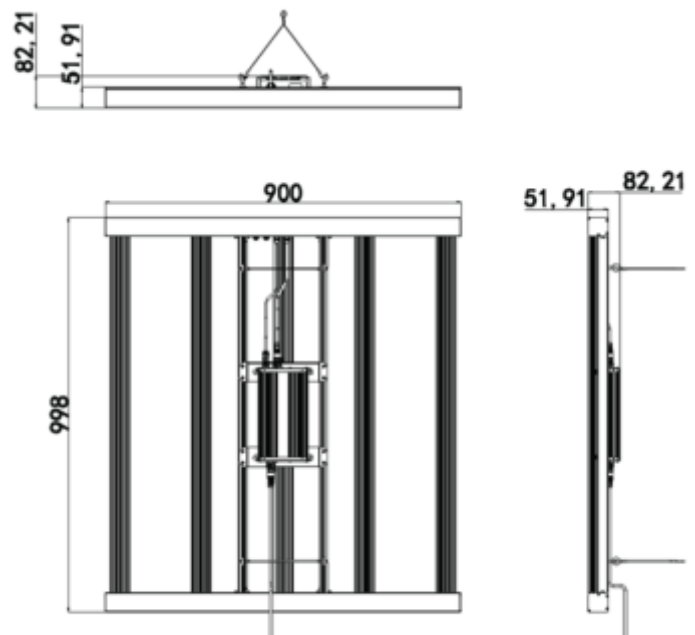
WARRANTY: 5 YEARS

CERTIFICATIONS:

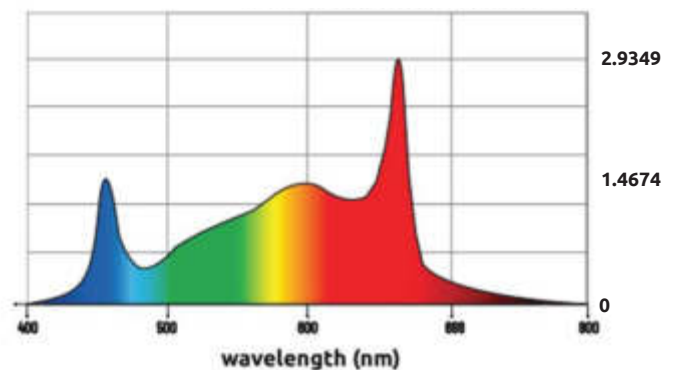
IP65, Rohs Directive 2011/65/EU And (EU)2015/863)

LED Fixture: CE Safety Standard: EN 60598-1:2015+A1:2018, EN 60598-2-1:1989, EN 62031:2020, EN 62493:2015, EN 62471:2008;
CE EMC Standard: EN 55015:2019, EN 61547:2009, EN 61000-3-2:2019, EN 61000-3-3:2013+A1:2019

LED Driver: : CE Safety Standard: EN 60598-1:2015+A1:2018, EN 60598-2-1:1989, EN 62031:2020, EN 62493:2015, EN 62471:2008;
CE EMC Standard: EN 61347-1:2015, EN 61347-2-13:2014+A1:2017, EN 62493:2015

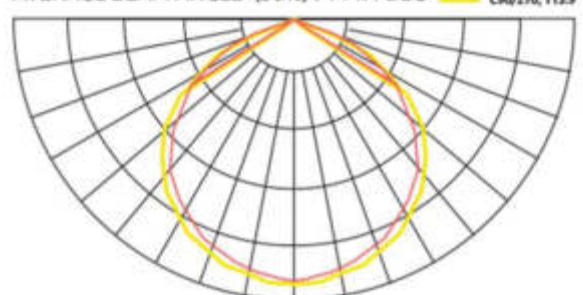


SQD SPECTRUM GRAPH



DISTRIBUTION CURVE FLUX

AVERAGE BEAM ANGLE (50%) : 114.4 DEG



INPUT CURRENT (A/W) PER DIMMING RANGE		
@ 277V		
DIMMING	INPUT POWER (W)	INPUT CURRENT (A)
100%	495	1.85
75%	390	1.48
50%	249	0.99
25%	125	0.59
@ 240V		
DIMMING	INPUT POWER (W)	INPUT CURRENT (A)
100%	495	2.13
75%	392	1.69
50%	250	1.11
25%	126	0.64
@ 230V		
DIMMING	INPUT POWER (W)	INPUT CURRENT (A)
100%	495	2.23
75%	392	1.75
50%	251	1.14
25%	126	0.63

ITEMS INCLUDED IN THE BOX:

- 5 x Lumatek 93W Pro 2.9 Full-Spectrum Magnet Light Bars
- 1 x Lumatek 465W Pro 2.9 Driver with Connecting Cables
- 1 x 0-10V Light Dimmer + Velcro
- 1 x LED Structure with Connecting Cables
- 2 x Metal Cable Hangers
- 1 x Manual

EXTERNAL CONTROL

The Zeus fixture can also be externally controlled with a Lumatek digital lighting controller (Digital Panel Plus 2.0) featuring light timing, automated dimming (1% increments), temperature safety control, Sunrise & Sunset Mode for up to 100 fixtures per controller



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

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+

LUMATEK ZEUS 465W PRO 2.9 PPFD MAPS

TEST AREA 1.2m x 1.2m

TEST POINTS 64

TEST EQUIPMENT Integrating 2 meter sphere & LI-COR 180

AMBIENT TEMPERATURE 25°

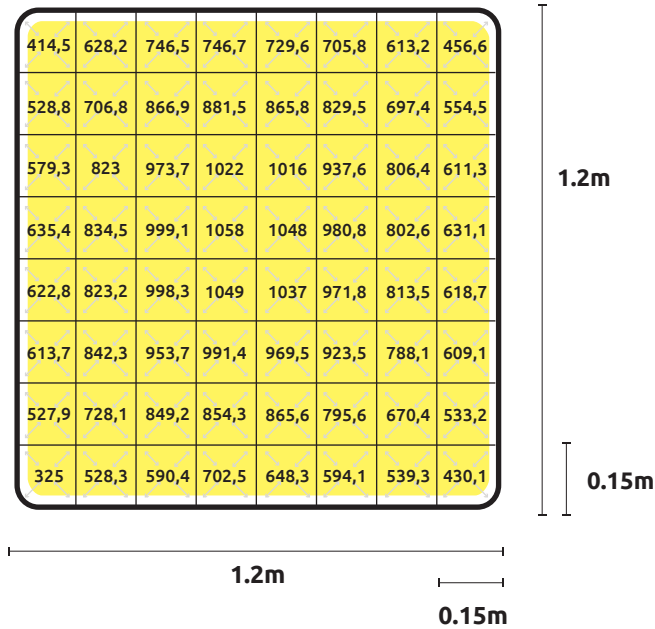
HEIGHT FROM CANOPY 30cm, 40cm, 50cm, 100cm

REFLECTION 0%

FIXTURE POWER 100%

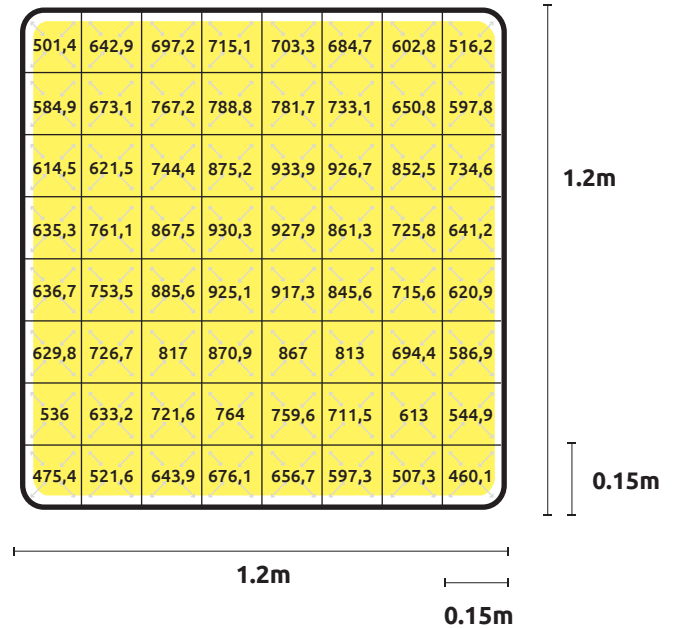
HEIGHT TO TEST POINT **30cm**

CANOPY AVERAGE PPFD **758.42 $\mu\text{mol/s/m}^2$**



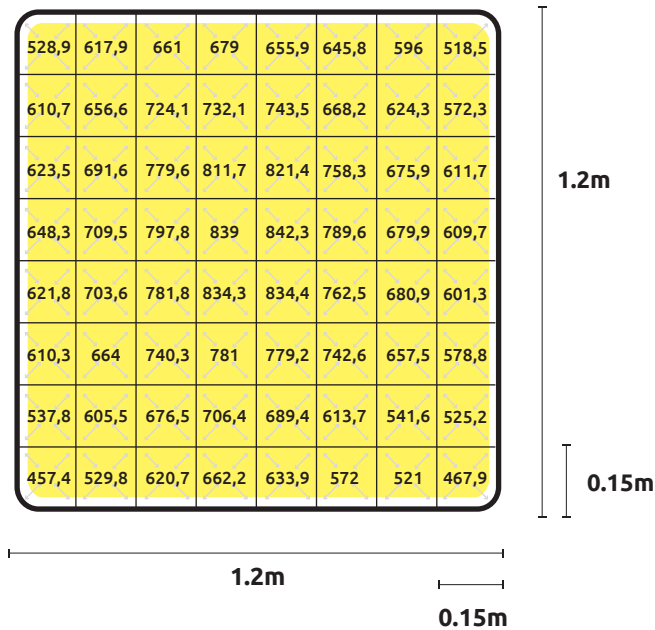
HEIGHT TO TEST POINT **40cm**

CANOPY AVERAGE PPFD **709.7 $\mu\text{mol/s/m}^2$**



HEIGHT TO TEST POINT **50cm**

CANOPY AVERAGE PPFD **666.6 $\mu\text{mol/s/m}^2$**



HEIGHT TO TEST POINT **100cm**

CANOPY AVERAGE PPFD **593.1 $\mu\text{mol/s/m}^2$**

