

**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 **2.9**  $\mu\text{mol}/\text{J}$

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

**Full-Spectrum**

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

EFFICACY

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

PPF



# ZEUS 465W PRO 2.9 LED

**PRODUCT CODE:** LUMLED011

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

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

**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  $\mu\text{mol}/\text{J}$ ;  
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 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

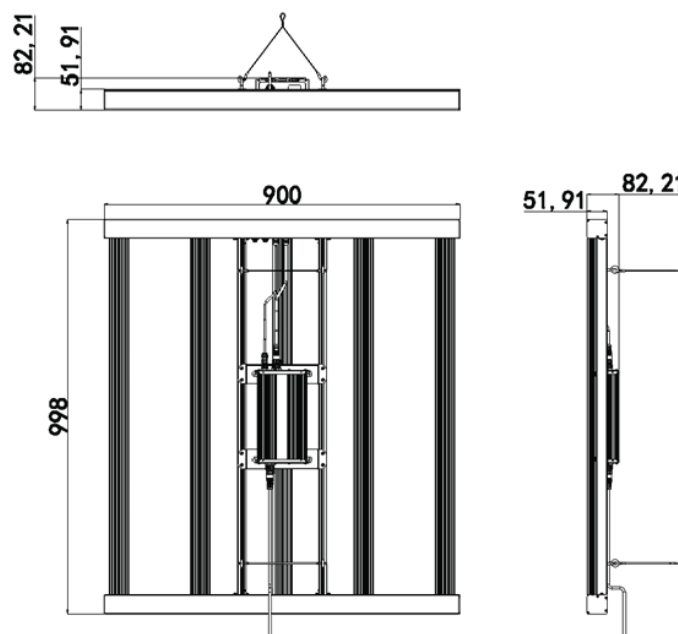
**WARRANTY:** 5 YEARS

**CERTIFICATIONS:**

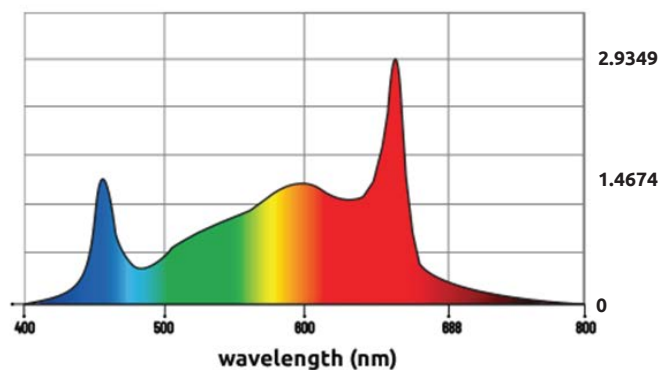
IP65, Rohs Directive 2011/65/EU And (EU)2015/863)

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

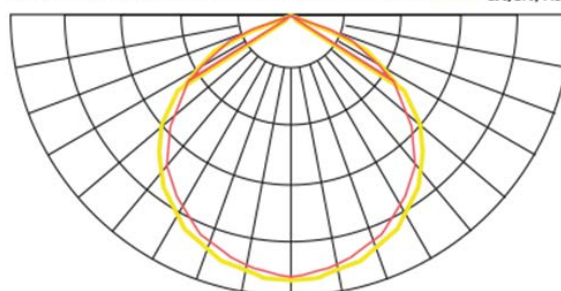


## SQD SPECTRUM GRAPH



## 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 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  $\mu\text{mol/s/m}^2$**

414,5	628,2	746,5	746,7	729,6	705,8	613,2	456,6
528,8	706,8	866,9	881,5	865,8	829,5	697,4	554,5
579,3	823	973,7	1022	1016	937,6	806,4	611,3
635,4	834,5	999,1	1058	1048	980,8	802,6	631,1
622,8	823,2	998,3	1049	1037	971,8	813,5	618,7
613,7	842,3	953,7	991,4	969,5	923,5	788,1	609,1
527,9	728,1	849,2	854,3	865,6	795,6	670,4	533,2
325	528,3	590,4	702,5	648,3	594,1	539,3	430,1

1.2m

0.15m

1.2m

0.15m

HEIGHT TO TEST POINT **40cm**

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

501,4	642,9	697,2	715,1	703,3	684,7	602,8	516,2
584,9	673,1	767,2	788,8	781,7	733,1	650,8	597,8
614,5	621,5	744,4	875,2	933,9	926,7	852,5	734,6
635,3	761,1	867,5	930,3	927,9	861,3	725,8	641,2
636,7	753,5	885,6	925,1	917,3	845,6	715,6	620,9
629,8	726,7	817	870,9	867	813	694,4	586,9
536	633,2	721,6	764	759,6	711,5	613	544,9
475,4	521,6	643,9	676,1	656,7	597,3	507,3	460,1

1.2m

0.15m

1.2m

0.15m

HEIGHT TO TEST POINT **50cm**

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

528,9	617,9	661	679	655,9	645,8	596	518,5
610,7	656,6	724,1	732,1	743,5	668,2	624,3	572,3
623,5	691,6	779,6	811,7	821,4	758,3	675,9	611,7
648,3	709,5	797,8	839	842,3	789,6	679,9	609,7
621,8	703,6	781,8	834,3	834,4	762,5	680,9	601,3
610,3	664	740,3	781	779,2	742,6	657,5	578,8
537,8	605,5	676,5	706,4	689,4	613,7	541,6	525,2
457,4	529,8	620,7	662,2	633,9	572	521	467,9

1.2m

0.15m

1.2m

0.15m

HEIGHT TO TEST POINT **100cm**

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

480,7	515	507,9	495,6	499,5	500,6	505,5	487
522,2	524,5	529,2	544,8	544	533	523,9	505,4
516,4	534,7	557,8	570,3	572,7	557,3	536	507,4
500,1	539,1	567,6	583,2	585	571,1	533,5	593,1
497,1	527,2	557,1	573,9	576,5	565	534,4	501,4
499,7	525,8	551,4	566,1	567,5	542,9	531,8	507,3
452,2	495,8	522,5	536,5	536,4	533,3	505,6	467,4
421,3	469,7	505,9	515	516	482,1	477,2	459,7

1.2m

0.15m

1.2m

0.15m