



OREON GROW LIGHT 2.1

TECHNICAL DATASHEET - US/CA

Product features

Housing material	Aluminium
Finishing	Anodized/ Antifouling powder coating RAL 9010 (dirt repellent)
Optics materials	High transmission glass with AR coating on both sides (transmission >98%)
Radiation angle	140°
Protection degree LED compartment	IP67 (dust and watertight)
	Lamps can be cleaned by using pressurized water, the complete electrical circuit is sealed waterproof.
Impact resistance housing	IK10
Impact resistance glass	IK07

Technical data

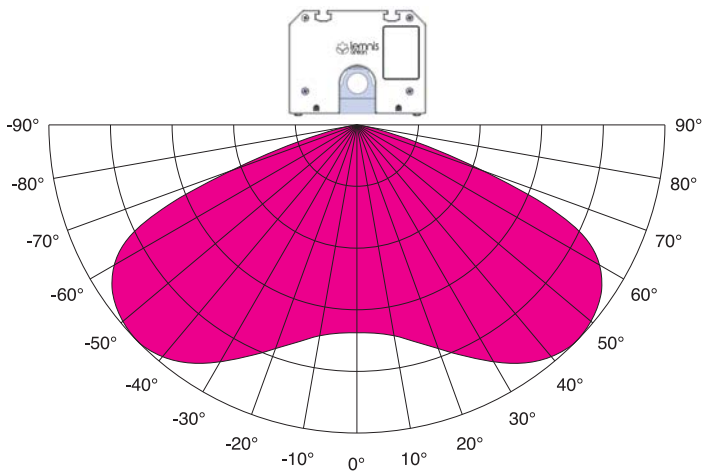
Power*	585 Watt (± 5%)
Cos(phi)	> 0.95
Voltage range	100-280 VAC
Current range	6.0A - 2.3A
Frequency range	50/60 Hz
Inrush current	< max. 70A (t< 1 msec)
Isolation class	Class I
Connector	Integrated: 3 pole connector Male (Wieland 96.032.5053.1) Connects to: 3 pole connector Female (Wieland 96.031.4553.1)
Operation conditions	0 - 113°F / 95% RH
Storage conditions	0 - 140°F / 85% RH

Optical properties

Light colors	Red	Low Blue	Medium Blue	High Blue	Extreme Blue
Photon flux (µMol/s)*	1589	1562	1534	1507	1425
Percentage of blue (% µMol/s)	0	3.2	6.6	10	21.5
Efficacy (µMol/J)	2.72	2.67	2.62	2.58	2.44
Lifespan	L90 - 35,000 hours				

Customized lens

The customized lens ensures an ideal light distribution for maximum uniformity. See image below.



Cooling liquid and circuit

Cooling liquid	Water				
Cooling liquid temperature	68°F to 95°F				
Power to be dissipated per lamp by cooling system	Red	Low Blue	Medium Blue	High Blue	Extreme Blue
	294 W	305 W	316 W	327 W	361 W
Water connection	Pipe thread ISO 228-G 3/4" (2x)				

Weight and dimensions

Nett weight	18.3 lb
Gross weight (approx.)	22.0 lb (including mounting brackets, connectors, pipes)
Product dimensions (L x W x H)	15.28" x 6.3" x 4.8"
Carton dimensions (L x W x H)	21.65" x 8.66" x 6.89"

Mounting

Fixture mounting interface 4x M6 T-nut (maximum depth for the bolt is 3/8 inch). The four T-nuts are included in the delivery.

Drawings



Logistic specifications

Quantity per pallet	49 pcs.
Gross weight per pallet	1080.3 lb
Pallet dimensions (EUR)	31.5" x 47.24" x 40.94"

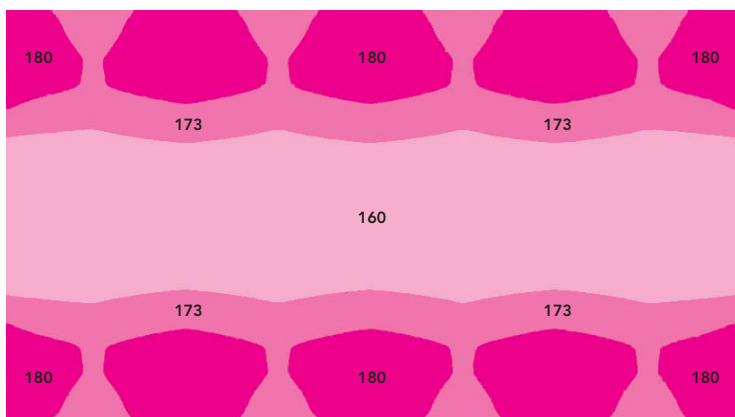
Compliance

- cMETus listed (ANSI/UL)
- UL 1598
- CSA C22.2 No. 250.0-08
- CE (tested by accredited certification body DEKRA)
- Low Voltage Directive (LVD) 2014/35/EU
- Electromagnetic Compatibility Directive (EMC) 2014/30/EU
- Restriction of Hazardous Substances (RoHS) Directive 2011/65/EU

PPFD map - Oreon Grow Light 2.1

Greenhouse

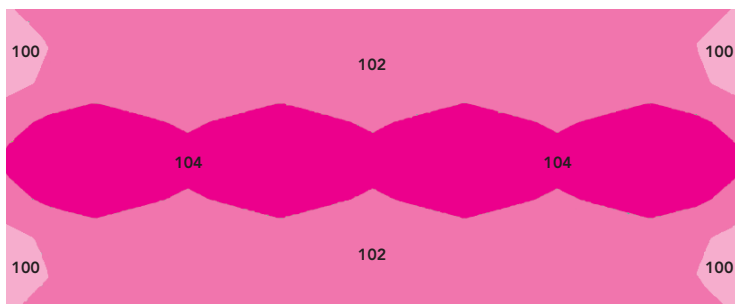
Measurements: 25' x 15'
Height fixture above canopy: 8'
1 fixture needed for: 94 sqft.
Spectrum: Low Blue



Average: 172 $\mu\text{Mol/s}$
Maximum: 181 $\mu\text{Mol/s}$
Minimum: 166 $\mu\text{Mol/s}$
Uniformity: 92%

Greenhouse

Measurements: 40' x 16'
Height fixture above canopy: 12'
1 fixture needed for: 160 sqft.
Spectrum: Medium Blue



Average: 102 $\mu\text{Mol/s}$
Maximum: 104 $\mu\text{Mol/s}$
Minimum: 100 $\mu\text{Mol/s}$
Uniformity: 96.1%

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