

EMPRESS

THE DUTCH POWERHOUSE



TECHNICAL DATASHEET

Product features

Housing material	Aluminium
Finishing	Anodized / Antifouling powder coating RAL 9010 (dirt repellent)
LED protection cover	High transmission glass (transmission >98%)
Beam angle	Narrow Beam: 120° Wide Beam: 140°
Ingress Protection LED compartment	IP67 (dust- and watertight). Fixtures can be cleaned by using pressurized water, the complete electrical circuit is sealed waterproof.
Impact resistance housing	IK10
Impact resistance glass	IK07
Lifespan	L90 B05 - 50,000 hours
Warranty	5 years

Narrow Beam

Light spectra

Red
Low Blue
Medium Blue
High Blue
Broad Spectrum
Low Blue + White
Medium Blue + White
High Blue + White

Optical properties*

Photon Flux (μMol/s)**	Consumed Power (W)	Efficacy (μMol/J)
2130	670	3.2
2090	670	3.1
2060	670	3.1
2060	670	3.1
1740	670	2.6
2020	670	2.9
1970	670	2.9
1990	670	2.9

Spectral specifications*

blue 400-500	mid 500-600	red 600-700	farred >700
0	0	100	0
4.4	0	95.6	0
6.7	0	93.3	0
8.8	0	91.2	0
6.9	23.6	68	1.5
5	5.2	89.4	0.4
6.2	6.3	87	0.5
9.4	5.2	85	0.4

Other spectrum varieties on request.

Wide Beam

Light spectra

Red
Low Blue
Medium Blue
High Blue
Broad Spectrum
Low Blue + White
Medium Blue + White
High Blue + White

Optical properties*

Photon Flux (μMol/s)**	Consumed Power (W)	Efficacy (μMol/J)
2260	665	3.4
2230	665	3.4
2215	665	3.3
2195	665	3.3
1770	665	2.7
2160	665	3.2
2090	665	3.1
2100	665	3.2

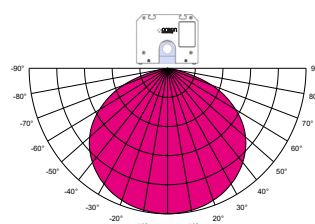
Spectral specifications*

blue 400-500	mid 500-600	red 600-700	farred >700
0	0	100	0
4.3	0	95.7	0
6.6	0	93.4	0
8.5	0	91.5	0
12.3	21.5	65.1	1.1
4.9	4.9	89.8	0.4
7.4	5.6	86	0.3
9	4.7	86	0.3

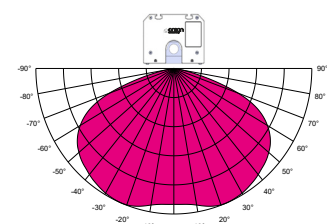
Other spectrum varieties on request.

Light distribution

Narrow Beam



Wide Beam



Technical data

Power factor	> 0.96 @ 400 VAC
Total Harmonic Distortion (THD)	< 11%
Voltage range	200 - 480 VAC
Current range	3.5 - 1.5 A
Frequency range	50/60 Hz
Inrush current	max. 11A (t < 2.5ms) @ 480 VAC
Leakage current	< 0.75 mA @ 480 VAC
Isolation class	Class I
Connector	Integrated: 3 pole connector Male (Wieland RST20i3 black)
Operation conditions	32 to 113°F 0 to 45°C / 95% RH
Storage conditions	32 to 140°F 0 to 60°C / 85% RH

Cooling liquid and circuit

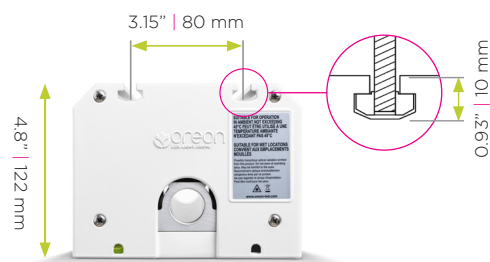
Cooling liquid	Water (pH 4-8)
Cooling liquid temperature	From dew point to 113°F 45°C
Cooling liquid flow rate	> 21 l/min
Imparted heat into cooling system	± 275 W per fixture (Btu/h ± 938) ± 340 W per fixture (Btu/h ± 1160) Broad Spectrum
Water connection	Pipe thread ISO 228-G 3/4" (2x)

Mounting

Fixture mounting interface 4x M6 T-nut (maximum depth for the bolt is 3/8 inch | 10 mm).
The four T-nuts are included in the delivery.

Weight and dimensions

Nett weight	19.0 lb 8,6 kg
Gross weight (approx.)	22.7 lb 10,3 kg (including mounting brackets, connectors, pipes)
Product dimensions (L x W x H)	15.35" x 6.3" x 4.8" 390 mm x 160 mm x 122 mm
Carton dimensions (L x W x H)	21.65" x 8.66" x 6.89" 550 mm x 220 mm x 175 mm



Logistic specifications

Quantity per pallet	49 pcs.
Gross weight per pallet	1069.2 lb 485 kg
Pallet dimensions (EUR)	31.5" x 47.24" x 56.69" 800 x 1200 x 1440 mm
HS-code	9405 4099 90

Air freight

Quantity per pallet	49 pcs.
Gross weight per pallet	1069.2 lb 485 kg
Pallet dimensions (EUR)	31.5" x 47.24" x 56.69" 800 x 1200 x 1440 mm
HS-code	9405 4099 90

Sea/Road freight

Quantity per pallet	63 pcs.
Gross weight per pallet	1358 lb 616 kg
Pallet dimensions (EUR)	31.5" x 47.24" x 71.26" 800 x 1200 x 1810 mm
HS-code	9405 4099 90

Compliance

cMETus listed (ANSI/UL+CSA)

- UL 1598
- CSA C22.2 No. 250.0-08

CE

- LVD 2014/35/EU
- EMC 2014/30/EU
- RoHS 2011/65/EU



V201009E

Oreon

Lorentzlaan 6
3401 MX IJsselstein
The Netherlands

T +31 30 760 0660
E info@oreon-led.com
W www.oreon-led.com

