HORTIMOL

high quality standards

MXH4

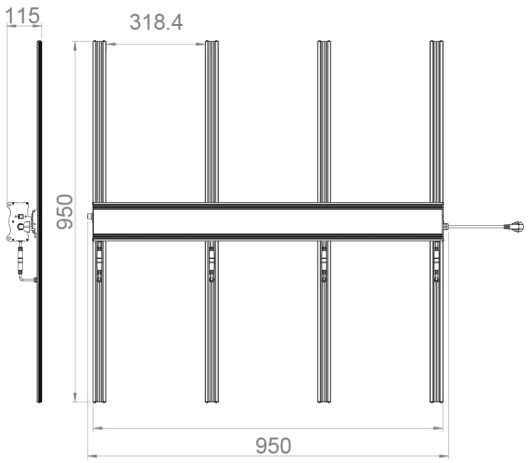
LED GROW LIGHTS

Spec Sheets

Product Description

- Fanless Design
- IP65 Waterproof
- Dimmable: 0-10V Dimming
- Bars design makes it with good air fluidity and great heat dissipation
- Uniform PPFD distribution

Dimension



backside of the fixture

MXH4 330W Performance Summary

Optical Specifications							
Model No.	Power	Spectrum	Efficacy				PPF μmol/s
			2.5 μmol/J	2.6 μmol/J	2.7 μmol/J	2.8 μmol/J	
MXH4	330W	FSM	√		√		825/891
		FSG		√		√	858/924

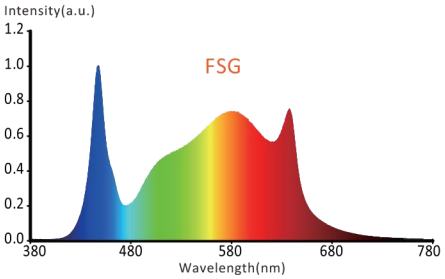
Electrical Specifications	
Heat Output	1125 BTU/h
Input Current	Max 4.0A@120Vac; Max 1.6A@230Vac; Max 1.4A@277Vac
Input Voltage	AC100-277V
Input Frequency	50/60Hz
Power Factor	>0.9
Diming	0-10V

Model Specifications	
Dimensions(L x W x H)	37.4*37.4*4.5inch / 950*950*115mm
Weight	6.5kg/14.3lbs
IP Rate	IP65
Operating Temperature	-4-113℉ (-20-45℃)
Storage Temperature	-40-176℉ (-20-40℃)
L70 Rating	>78,000 hrs
L90 Rating	>54,000 hrs
Location Rating	Damp
LVD Certification	IEC/EN 60598-2-1 ; ICE/EN 60598-1

Spectrum Options

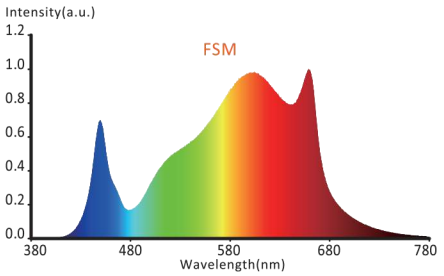
Spectra FSG

FSG Spectra, also known as a full spectra, offers photon emission across the PAR 400-700nm continuous wavelength range. The overall color temperature is controlled at natural white 4000K. With high blue and red, this tuneful spectra is highly recommended to most vegetables and crops and could cover the whole growing cycle.



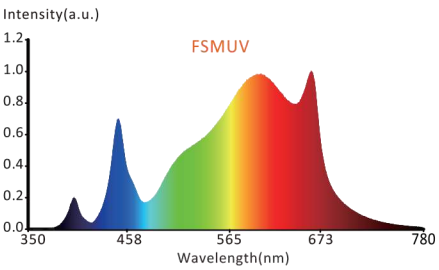
Spectra FSM

FSM Spectra is a full spectra with high red at 660nm which could highly encourage stem growth, flowering and fruit production, and chlorophyll production while retains a good performance on vegetative stage with 450nm blue. The overall color temperature is 3200K. FSM spectra is efficient for rapid growing of cannabis' full phase.



Spectra FSMUV

FSMUV is a full spectra for flowering stage with peak of 400nm ultraviolet radiation. Studies show that THC content can be increased in cannabis plants if UV is operated properly. UV supplementation not only stimulates biomass production in controlled environments, but also enhances secondary metabolite accumulation.



LM-80 Report Of OSRAM

Appendix A:
Lumen Maintenance Projection (IES TM-21-11)

For Information Only!

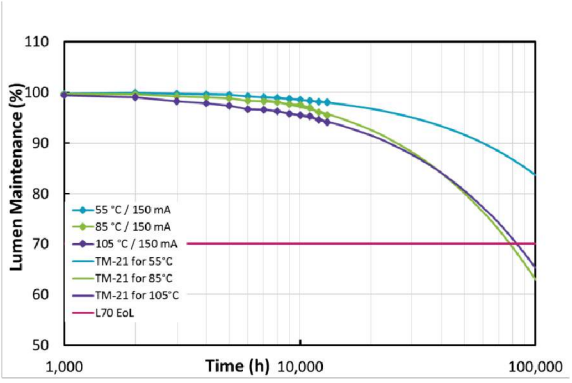
1. General Information

Description of LED light source tested	DURIS E 5 GW JDSRS1.EC
Sample size per temperature	30
LED drive current used in the test	150 mA
Test duration	13,000 hours
Test duration used for projection	8,000 hours to 13,000 hours

2. Projection Data

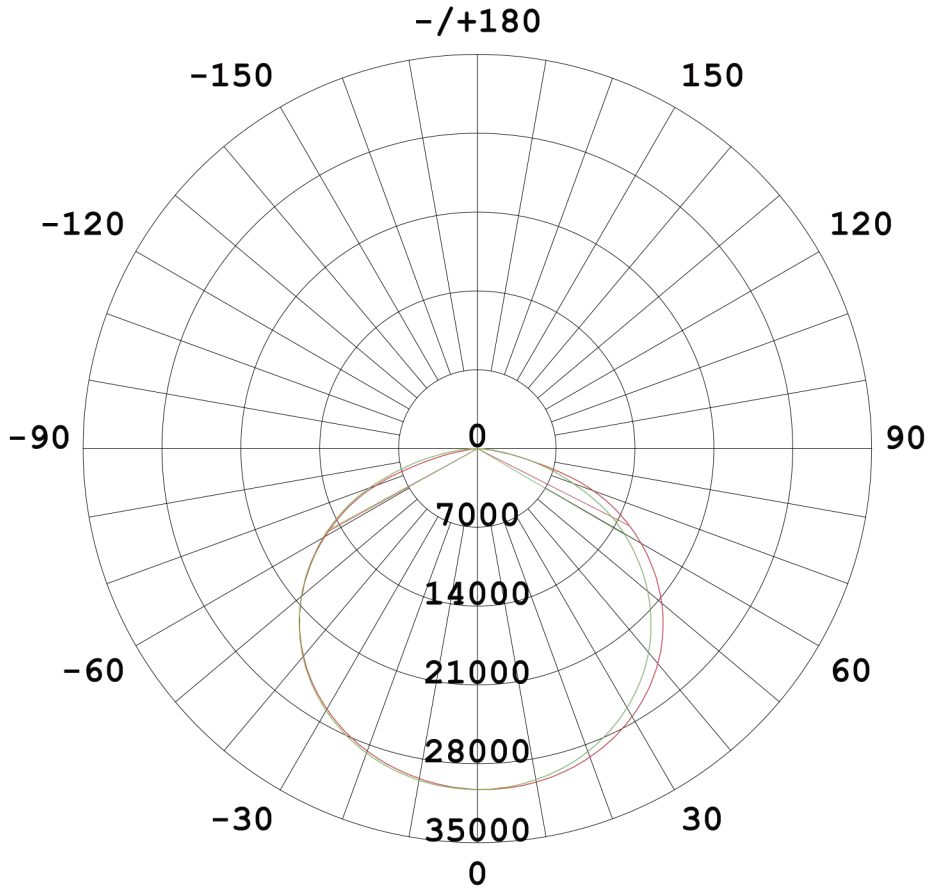
	I	II	III
Case temperature (solder point)	T_S = 55 °C	T_S = 85 °C	T_S = 105 °C
α	1.818E-06	4.821E-06	4.227E-06
B	1.004E+00	1.019E+00	9.957E-01
Reported L70	>78,000 hours	77,955 hours	>78,000 hours

3. Graphic chart



OSRAM
Opto Semiconductors

IES



UNIT:cd

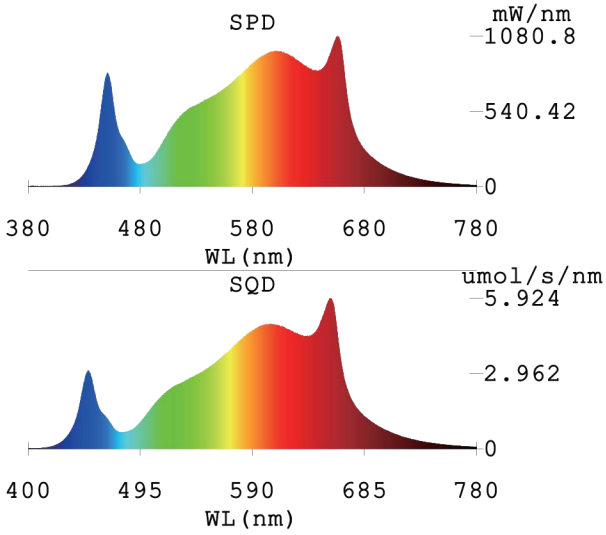
C0/180,124.0

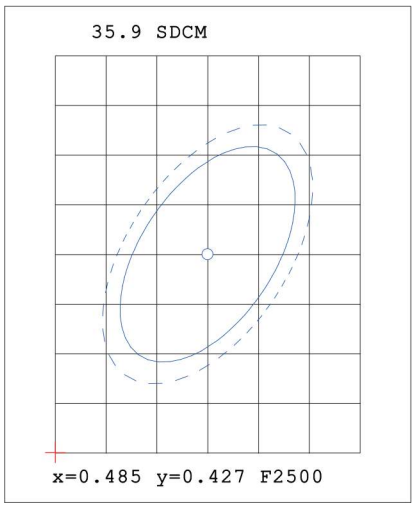
C90/270,121.1

Beam Angle(50%Imax):C0/180Left:62.0 Right:62.0 [C0/180]Total=124.0
:C90/270Left:60.5 Right:60.5 [C90/270]Total=121.1

Spectrum Test Report

Spectrum Test Report





Plant Parameters:

Radiometry System:

Φv(lm): 51986	Qv(lm.s): 51986
Φe,λ(W): 0.3197	Qe(J): 162.2
Φe(W): 162.2	ηb: 0.5036
ηuv: 0.0001733	ηe: 0.4914
ηfr: 0.01206	Φrb_Ratio: 0.04174
Φe,b(W): 166.2	Φe,uv(W): 0.05723
Φe,fr(W): 3.982	Φr(W): 166.2
Φch-A(W): 27.41	Qch-A(J): 27.41
Φch-B(W): 30.16	Qch-B(J): 30.16
Φb-p(W): 69.04	Qb-p(J): 69.04
Φy-g(W): 69.29	Qy-g(J): 69.29
Φr-o(W): 2.882	Qr-o(J): 2.882

Quantum System:

PPF(umol/s): 783.1	PPF(400-500)(umol/s): 92.3
PPF(500-600)(umol/s): 321.5	PPF(600-700)(umol/s): 369.9
Numol(umol): 783.1	PPE(umol/s/W): 2.371

Color Parameters:

Chromaticity Coordinate: x = 0.4231 y = 0.3923 u' = 0.2467 v' = 0.5146
CCT = 3148K(Duv = -0.0028) Dominant WL:Ld = 583.3nm
Purity = 44.7% Ra = 87.1
R1 = 86.6 R2 = 91.5 R3 = 94.3 R4 = 86.2 R5 = 85.9
R6 = 87.7 R7 = 89.2 R8 = 75.5 R9 = 43.1 R10 = 79.6
R11 = 85.8 R12 = 69.4 R13 = 87.7 R14 = 96.4 R15 = 83.4
Electric:U = 229.58 V I = 1.456 A P = 330.2 W PF = 0.9875 Eff = 157.5 lm/W
λp = 655.8nm FWHM = 146.4nm
LEVEL: OUT WHITE: ANSI_3000K
Status: Integral T = 817 ms Ip = 50379 (77%)

Photon Flux Distribution

Measured in isolation at 100% light intensity with fixture centrally hanging at pre-determined height above a 4'x4' grow area.

MXH4 330W PPFD Distribution FSM 2.5umol/J

4'x4' 1219x1219mm

181	378	405	473	484	412	380	178
270	599	672	761	774	675	603	271
253	534	570	606	609	579	537	258
258	562	639	688	690	641	566	263
257	560	635	686	685	637	564	259
250	532	568	601	603	572	526	249
266	608	664	762	764	667	594	262
185	374	408	480	478	401	362	170

6″/152mm Height

4'x4' 1219x1219mm

207	326	399	416	418	403	328	211
259	401	496	535	537	499	408	262
284	446	540	580	583	548	448	292
291	451	553	601	599	557	456	293
290	453	555	598	595	551	450	289
290	442	542	582	578	539	440	282
260	405	497	532	530	492	398	256
208	322	401	413	412	396	325	205

12″/305mm Height

4'x4' 1219x1219mm

220	275	319	340	342	322	279	218
247	327	391	416	418	392	329	250
274	366	431	462	466	435	367	277
288	375	451	487	488	453	378	293
285	376	450	486	484	449	374	281
275	365	432	464	460	430	362	273
248	325	390	415	411	386	324	246
217	274	320	338	335	317	272	211

18″/457mm Height

4'x4' 1219x1219mm

217	246	271	274	273	270	250	218
247	275	310	330	334	314	279	243
262	307	344	367	369	348	309	268
267	315	362	387	388	364	317	269
268	316	360	386	384	359	314	266
264	305	346	368	366	344	304	260
240	276	311	332	327	308	275	238
219	248	268	272	271	265	246	215

24″/610mm Height

4'x4' 1219x1219mm

206	226	238	239	239	239	227	208
221	245	265	275	277	266	247	224
240	264	292	304	305	293	265	242
242	271	300	318	320	298	273	243
242	271	302	319	317	299	270	241
242	266	290	303	302	289	263	239
223	246	265	274	274	263	243	220
206	226	238	239	238	235	225	204

30″/762mm Height

4'x4' 1219x1219mm

206	213	214	216	215	214	214	207
215	226	235	239	239	237	227	215
227	241	252	258	258	253	242	228
230	242	262	270	271	262	244	231
230	242	261	270	269	259	241	229
227	240	251	256	257	250	239	226
214	226	236	238	238	234	225	213
206	212	214	215	216	213	212	205

36″/914mm Height

1. At 100% light intensity
2. Measured in isolation, no adjacent grow lights, no reflective walls

Plug Specifications

Plug for the US and Canada

- NEMA 5-15P 120V/60Hz UL certified

- NEMA L7-15P 277V/60Hz UL certified

- NEMA 6-15P 208V/60Hz UL certified

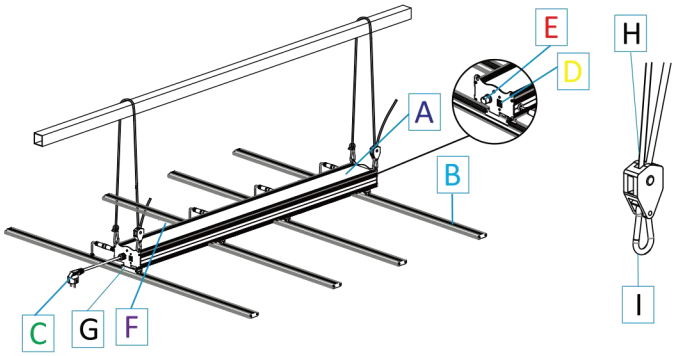
Plug for the EU

- EU Plug 230V/50Hz CE certified

- Switzerland Plug 230V/50Hz CE certified

- UK Plug 230V/50Hz CE certified

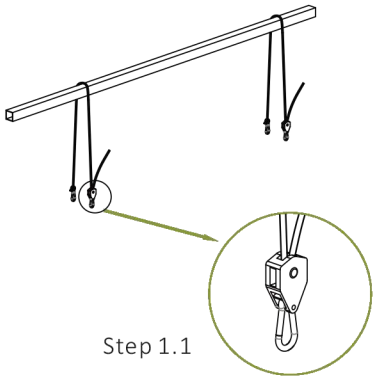
System Hardware & Accessories



A : Driver Box
B : Bar
C : AC cable
D : Dimming Socket
E : Dimming Dial
F : DC Connector
G: Plastic Buckle (to fix light bar on the beam)
H: Ratchet Rope
I : Carabiner Clip

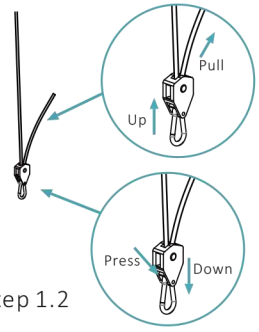
Installation

1 1.1 Hang the ratchet ropes on the beam



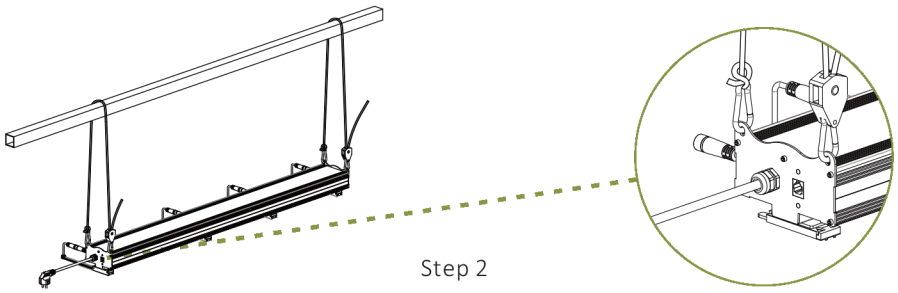
Step 1.1

1.2 Pull the rope to adjust the fixture up; or press the lock to release or lower the fixture



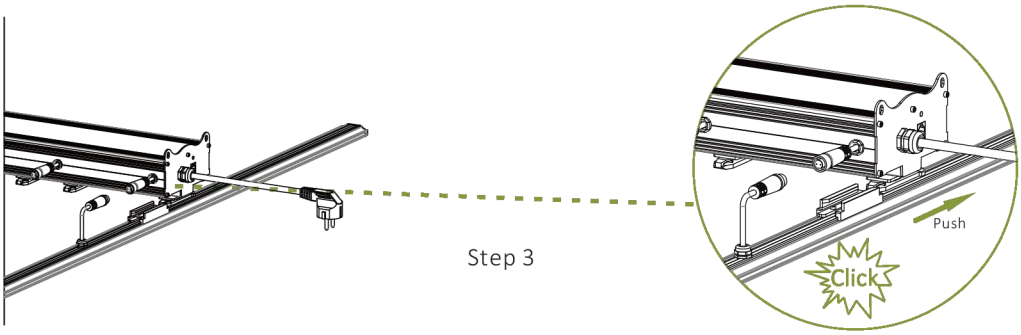
Step 1.2

2 Hang the driver box with the carabiner clip of ratchet ropes



Step 2

3 Push the light bar into the plastic buckle in the direction of the arrowhead until the buckle has a slight voice



Step 3

⚠ Please avoid touching the LED.

4 4.1 Connect the male plug of light bar to female plug of the driver box

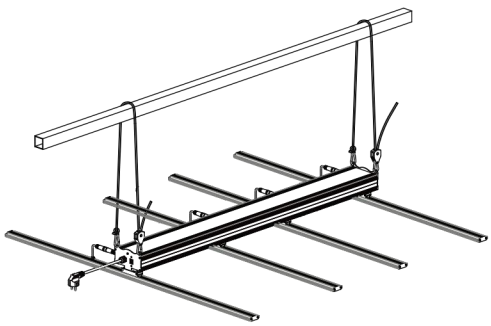
Step 4.1

4.2 Hold the slim locking ring of male plug and screw the wide one of the female plug in the clockwise direction until it is tighten up

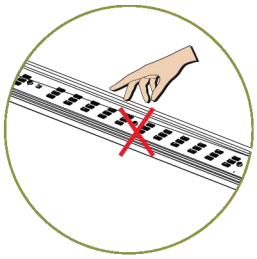
Step 4.2

*It is normal that there is a 2mm gap between two locking rings when it is tighten up

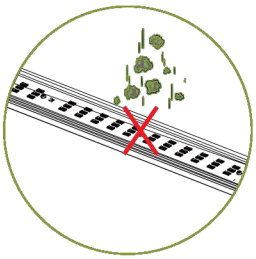
5 Push all the bars in the buckle and screw the connectors as step3&4



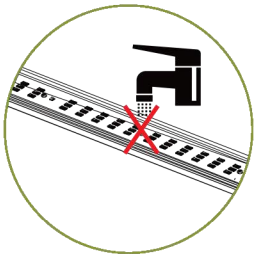
Warning



1.Please do not press the surface of LEDs to avoid damaging when installing the luminaire



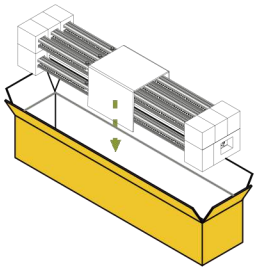
2.Please do not put anything on the surface of the LEDs to prevent damaging of the luminaire

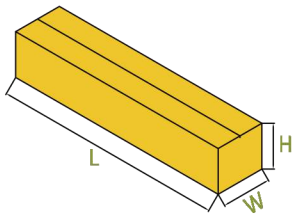


3. Please do not flush the LED surface to prevent damaging of LEDs.

Packing

Type	Carton Size	G.W per Carton	Quantity per Carton
MXH4	L49.6*W11*H10.2inch (L1010*W210*H260mm)	14.3lbs (6.5kg)	1 PCS





Manufacturer's Recommendations

1. Risk of fire or electric shock,please turn off power before installing.
2. Always use product within its stated Safe Working Load.
3. Do not use for lifting, such as in a crane or pulley situation, or for hanging services exhibiting movement or dynamic behavior. Designed for hanging statically positioned services only.
4. Do not walk or stand on product installation.
5. Always use manufacturer supplied and specified cable. Never use uncoated cable or other cable.
6. Do not apply oil or any other lubricant to the fastener or any other part of the cable assembly.

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Europe Head of distribution
FOX LIGHTING B.V. (The Netherlands)
Mail : sales @fox-lighting.eu
Phone : +31 6 14636545
www.hortimol.net