HORTIMOL
high quality standards
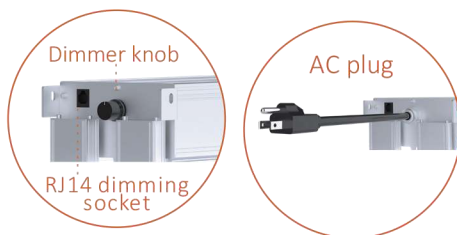
min -4°F -20°C

max 113°F 45°C

MG SERIES
LED GROW LIGHTS

Spec Sheets

General version

Dimmer knob

AC plug

RJ14 dimming socket

Product Description

- Fanless design
- 150 x 150 cm wide coverage
- IP65 waterproof
- Dimmable: 0-10V
- Slim design and 180 degree foldable

- OSRAM LEDS, LM-80
- ETL, DLC, UL8800, CE certification
- Input Voltage:100-277VAC / 277-480VAC
- Replaceable bars and drivers
- Uniform PPFD distribution

Foldable Design

MG8 is 180 degree foldable, easy to handle and save packing space.
Plug and play design. Portable and easy to install.

Easy Maintenance

LED bar and driver are replaceable, easy to maintain.

Application Guide

Vertical Farming and Indoor Facility

To replace 1000W HPS/CMH light.

HORTIMOL led Grow Light is 70% higher in PPFD, 33% lower in power consumption and 33% less in BTU. MG8 is especially suitable for vegetation and flowering periods.

MG8 Performance Summary

| Model	MG8					
Power Consumption (incl. driver)	660W					
Input Voltage	AC100-277V / AC277-480V					
Input Current	Max 7.4 A@100Vac / Max 3.2A@230Vac / Max 2.7A@277Vac / Max 2.2A@347Vac / Max 1.6A@480Vac					
Input Frequency	50/60Hz					
Power Factor	＞0. 9					
Spectrum	FSG		FSM		FSMUV	
PPF(μmol/s)	1716	1848	1650	1782	1584	1716
Efficacy(μmol/J)	2.6	2.8	2.5	2.7	2.4	2.6
Heat Output	2244 BTU/h					
Dimming	0-10V					
Operating Temperature	-4-113℉(-20-45℃)					
Storage Temperature	-40-176℉(-40-80℃)					
Dimensions (L*W*H)	43.0*42.7*2.8inch (1093*1085*72mm)					
Weight	24.3lbs(11.0kg)					
L70 Rating	＞78,000 hrs					
L90 Rating	＞54,000 hrs					
Certification	DLC / ETL / UL 8800 / CE					
DLC Listing Model	MG660A8 FSG 28 D1 XXXXX MG660B8 FSG 28 D1 XXXXX					
Location Rating	Wet					
LVD Certification	IEC/EN 60598-2-1 IEC/EN 60598-1					
AC Voltage	120V	208V	230V	277V	347V	480V
AC Current	5.61A	3.18A	2.89A	2.41A	1.92A	1.40A
AC Power	670W	655W	655W	653W	657W	654W
Power Factor	0.998	0.990	0.987	0.980	0.988	0.972

Spectrum Options

Full Spectrum: FSG

FSG Spectrum, also known as a full Spectrum, 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 Spectrum is highly recommended to most vegetables and crops and could cover the whole growing cycle.

Intensity(a.u.)
FSG
Wavelength(nm)
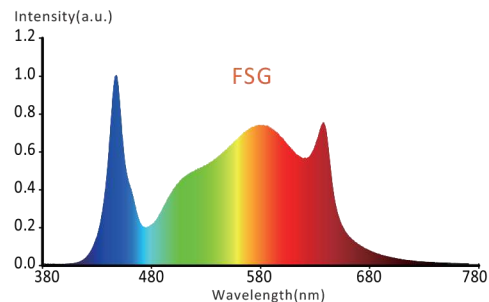
Full Spectrum: FSM

FSM Spectrum is a full Spectrum 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 Spectrum is efficient for rapid growing of cannabis' full phase.

Intensity(a.u.)
FSM
Wavelength(nm)
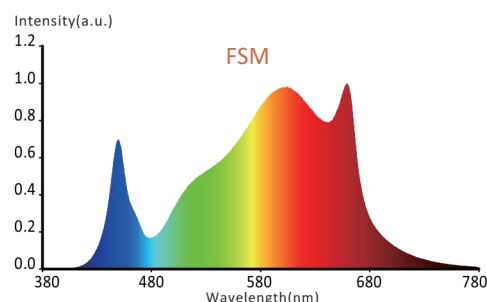
Full Spectrum: FSMUV

FSMUV is a full Spectrum 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.

Intensity(a.u.)
FSMUV
Wavelength(nm)
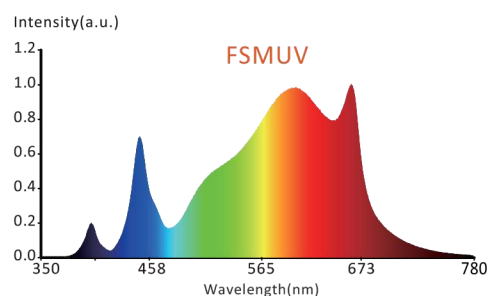
Adjustable Spectrum:

Adding supplemental bars with UV / Red / Blue / FR 730nm spectrum on a full spectrum light fixture, is what we call an adjustable spectrum. It is specially suitable for vegetation and flowering periods to accelerate growth and increase THC content.

It is suggested to add two supplemental bars on a MG8 light if required.

UV /
Red / Blue / FR

Just Hang Up
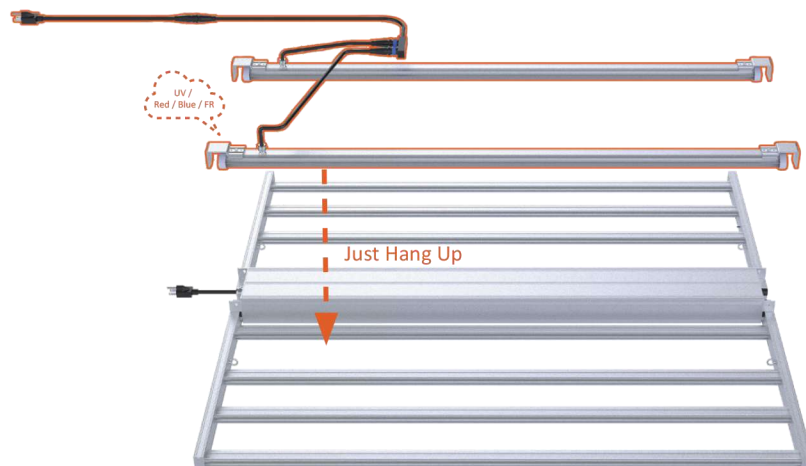
LM-80 Report Of OSRAM

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
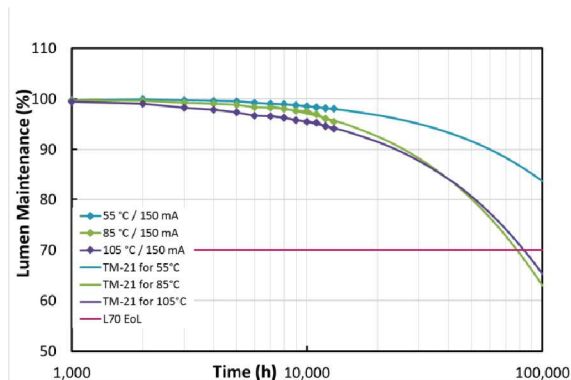
OSRAM
Opto Semiconductors

Photon Flux Distribution

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

660W MG8 PPFD Distribution[1,2] FSG 2.6μmol/J

4′x4′ 1219x1219mm

682	694	719	734	737	717	695	679
1278	1311	1344	1388	1384	1348	1303	1282
1292	1388	1451	1489	1493	1447	1384	1291
1280	1324	1344	1506	1499	1345	1318	1275
1273	1329	1347	1498	1502	1348	1333	1272
1293	1386	1449	1495	1497	1452	1390	1301
1274	1301	1342	1380	1388	1335	1310	1285
675	696	721	733	739	716	693	676

6″/152mm Height

4′x4′ 1219x1219mm

461	579	603	618	626	612	579	465
724	906	932	951	951	928	902	728
784	1028	1084	1094	1096	1083	1029	789
776	1035	1108	1119	1121	1105	1033	779
783	1032	1107	1121	1124	1111	1030	786
782	1025	1078	1096	1100	1089	1032	778
730	908	928	952	957	933	911	732
463	577	604	620	630	608	581	557

12″/305mm Height

4′x4′ 1219x1219mm

436	511	519	558	563	516	513	441
576	667	737	744	749	739	670	578
659	764	847	877	875	847	765	666
687	829	913	926	925	914	835	695
694	829	918	928	928	910	828	693
660	767	855	875	872	850	771	662
571	675	743	748	747	733	665	573
434	514	521	557	561	522	514	438

18″/457mm Height

4′x4′ 1219x1219mm

433	498	525	530	532	527	500	441
516	576	623	651	648	624	581	519
586	647	713	728	731	701	650	593
601	687	751	779	777	753	689	599
603	685	752	774	774	751	689	599
585	651	707	732	727	704	649	587
510	574	615	647	650	619	579	516
436	497	523	531	530	524	494	438

24″/610mm Height

4′x4′ 1219x1219mm

433	472	492	503	502	494	470	432
485	519	567	570	571	564	518	489
515	564	614	635	635	607	566	510
530	592	634	659	656	633	592	532
527	616	631	653	658	629	591	531
518	565	611	633	634	603	5644	525
481	521	564	571	573	570	517	484
436	473	491	505	499	491	473	439

30 ″/762mm Height

4′x4′ 1219x1219mm

422	449	459	465	466	460	452	420
459	498	498	515	509	499	498	460
482	510	553	568	564	554	513	482
490	524	562	581	577	560	529	487
490	527	561	578	578	558	522	489
480	511	553	566	562	554	509	481
458	495	498	516	515	496	498	457
423	447	458	467	465	457	449	424

36″/914mm Height

660W MG8 PPFD Distribution[1,2] FSG 2.8µmol/J

4'x4'   1219x1219mm

766	780	808	825	828	806	781	763
1436	1473	1510	1560	1555	1515	1464	1440
1452	1560	1630	1673	1677	1626	1555	1450
1438	1488	1510	1692	1684	1511	1481	1433
1430	1493	1513	1683	1688	1515	1498	1429
1453	1557	1628	1680	1682	1631	1562	1462
1432	1462	1508	1551	1559	1500	1472	1444
758	782	810	824	830	804	779	760

6″/152mm Height

4'x4'   1219x1219mm

518	651	677	694	703	688	650	522
814	1018	1047	1069	1068	1043	1013	818
881	1155	1218	1229	1232	1217	1156	886
872	1163	1245	1257	1259	1242	1161	875
880	1159	1244	1260	1263	1248	1157	883
879	1152	1211	1231	1236	1224	1159	874
820	1020	1043	1070	1075	1048	1024	822
520	648	679	697	708	683	653	626

12″/305mm Height

4'x4'   1219x1219mm

490	574	583	627	633	580	576	495
647	749	828	836	842	830	753	649
740	858	952	985	983	952	860	748
772	931	1026	1041	1039	1027	938	781
780	932	1032	1043	1043	1022	930	779
742	862	961	983	980	955	866	744
642	758	835	841	839	824	747	644
488	578	585	626	630	587	577	492

18″/457mm Height

4'x4'   1219x1219mm

487	560	590	596	598	592	562	495
580	647	700	732	728	701	653	583
658	727	801	818	821	788	730	666
675	772	844	875	873	846	774	673
677	770	845	870	870	844	774	673
657	731	794	822	817	791	729	660
573	645	691	727	730	696	650	580
490	558	588	597	595	589	555	492

24″/610mm Height

4'x4'   1219x1219mm

487	530	553	565	564	555	528	485
545	583	637	640	642	634	582	549
579	634	690	714	713	682	636	573
595	665	712	741	737	711	665	598
592	692	709	734	739	707	664	597
582	635	686	711	712	677	634	590
541	585	634	642	644	640	581	544
490	531	552	567	561	552	532	493

30 ″/762mm Height

4'x4'   1219x1219mm

474	505	516	523	524	517	508	472
516	559	560	579	572	561	560	517
542	573	621	638	634	622	576	542
550	589	631	653	648	629	594	547
551	592	630	649	649	627	587	549
539	574	621	636	632	622	572	541
515	556	559	580	579	557	559	513
475	502	515	525	523	514	504	476

36″/914mm Height

Dimension

MG8 660W

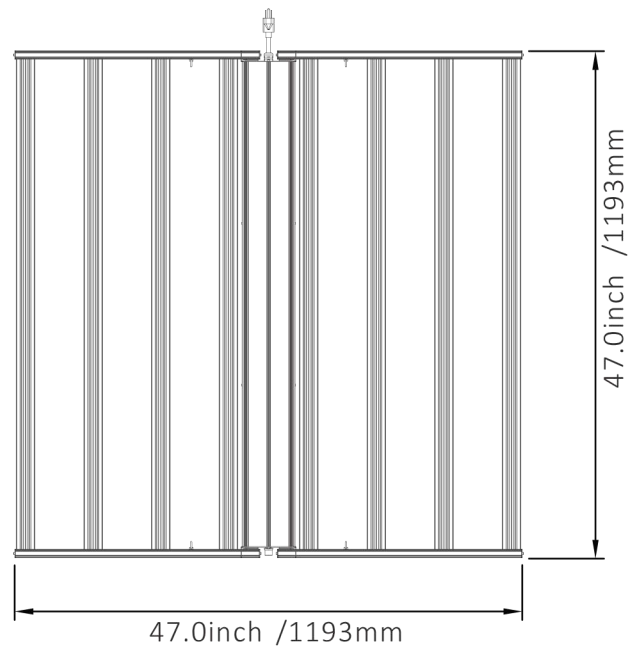
43.0inch /1093mm

42.7inch /1085mm

MG8 850W

47.0inch /1193mm

47.0inch /1193mm
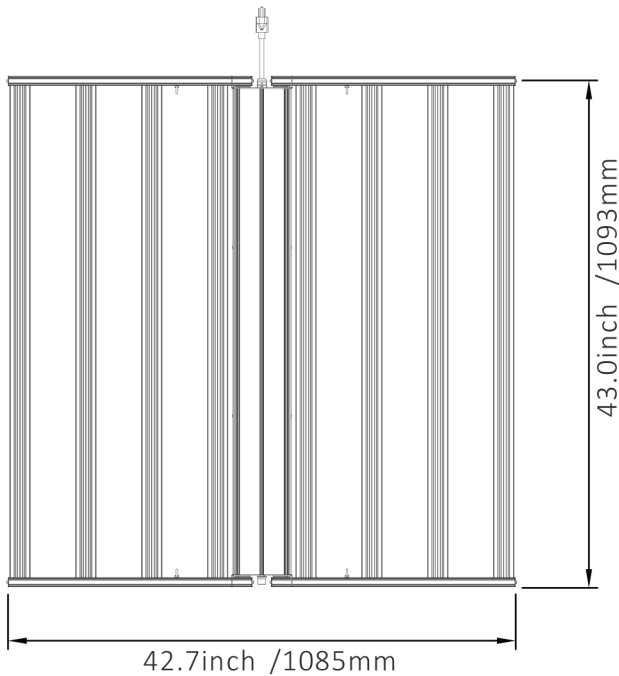
Plug Specifications

Plug for the US and Canada

- Plug type: NEMA 5-15P
- 120V AC

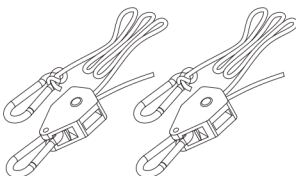- Plug type: NEMA 6-15P
- 240V AC

- Plug type: NEMA L7-15P
- 277V AC

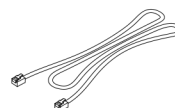## Plug for the EU

- Plug type: CEE 7/7
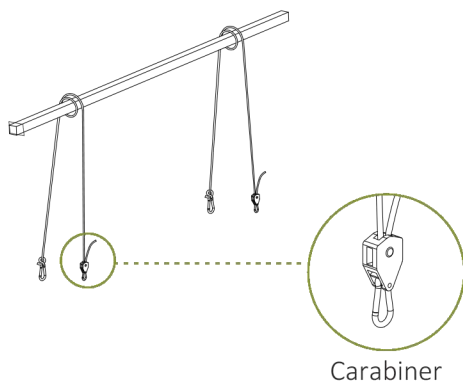- 230V AC

Installation

Accessories:

Ratchet Ropes

Dimming Cord

Dimming
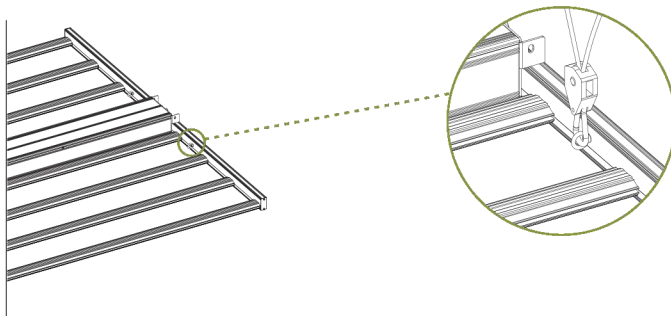Connection Cord

1. Hang the ratchet ropes on the beam (picture 1)

2. Use the ratchet ropes to adjust the mounting height of the fixture (picture 2)

Carabiner
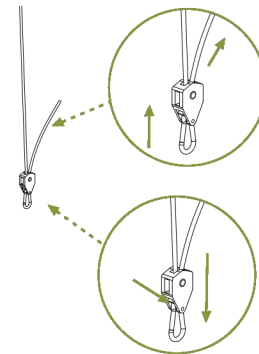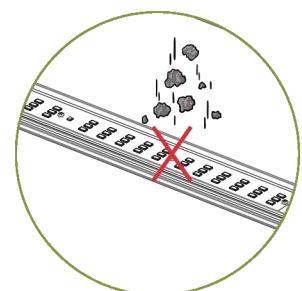
picture 1

picture 2

3. Lock the carabiners into the rings on the light.

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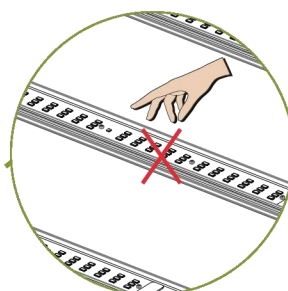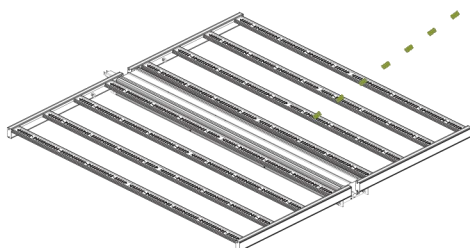
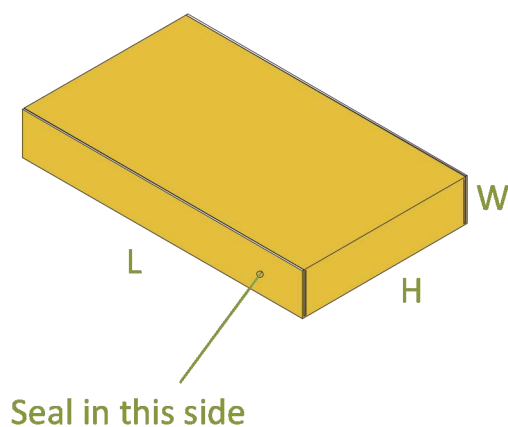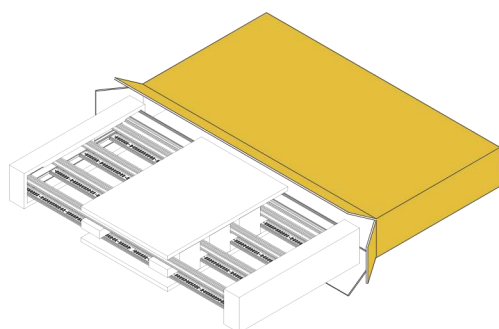**1.Please do not press on the surface of LEDs to avoid damaging when installing the luminaire**

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

Packing

Type	Carton Size	G.W per Carton	Quantity per Carton
MG8(660W)	L45.7*W7.5*H24.3inch (L1160*W190*H615mm)	29.1lbs (13.2kg)	1 PCS

MG8

W

L

H

Seal in this side

Manufacturer's Recommendations

1. Risk of fire or electric shock: turn off power before installing.
2. Always use product within Safe Working Load.
3. Designed for statically positioned hanging. Do not use for lifting or with dynamic positioning.
4. Do not walk or stand on product.
5. Always use manufacturer supplied and specified cables. Never use uncoated cables.
6. Do not apply oil or any other lubricant to the fastener or any other part of the cable assembly.

HORTIMOL
high quality standards