ENGLISH EDITION

LUMATEK
PROFESSIONAL LIGHTING

CATALOGUE

Professional Grow Lighting solutions for Indoor and Greenhouse large scale projects.

WEEE CE RoHS EMI EMC CERTIFIED LVD CERTIFIED 208V 400V Plug & Play CONTROL TECHNOLOGY RF SHIELDING DESIGNED & ENGINEERED BY LUMATEK IN THE UNITED KINGDOM 5 YEAR WARRANTY

WELCOME **GROWERS**

2021 Marked the start of a new era for all growers. With major innovation and enhancements in LED technology, pioneered outright by LUMATEK and the introduction of the world-class 'Zeus LED' line up... This finally allowed professional lighting at an unbeatable standard to be accessible and affordable for the home grower.

2022 Was a year in which LUMATEK worked to continue and increase its support of the inspiring growers community it loves being a part of. Developing and providing dynamic and effective tools such as the LED Grow Light Calculator, Grow Light Strategies and many more resources which are readily available to all. Not only continuing to be a reliable community pillar to the experienced, but also striving to usher in and share this knowledge with the new generation of keen hands establishing their roots.

2023 Is set to be the most electrifying year yet! Striving forward with technology at a rate as rapidly as ever, and excited to introduce further additions to our Groundbreaking horticultural LED lighting line up. LUMATEK is now directing its focus on enabling growers to dig even deeper than before, and gain further control over their grow operations. Deeper environmental grow analysis, specialised light spectrums, and regular articles on industry R&D should all be expected in 2023! With the foundations now securely rooted, growers can look to take advantage of LUMATEK's well established LED line-up with the next wave of fixtures and accessories, designed to enhance what they already have and help elevate their craft to another level.

We believe that sharing our passion and knowledge is the key to success not only for growers, but LUMATEK as well. By helping growers grow, this is the only way to ensure the advancement of technology and the development of techniques within the growing community and beyond.

HELPING GROWERS GROW, TOGETHER.

LED RANGE

LED technology has pushed the limits of growth one step further in recent years. Consistently producing '"best harvests" for new and experienced growers alike, **LUMATEK's complete LED Solutions harness the once out of reach performance and quality of the professional grower, and deliver them to the hobby market.**

WHY **LED?**

UNIQUE LIGHT SPREAD, COVERAGE AND UNIFORMITY: Lumatek LEDs will ensure an optimal coverage in which photons are delivered uniformly throughout the entire canopy, avoiding PPFD discrepancies on all footprints.

BENEFITS INCLUDE ENERGY SAVINGS
Lumatek LED solutions demonstrate the potential to save 40-60% on electricity and studies indicate that LED-lit canopies can generate more yield per kWh.

PLANT AND CROP PERFORMANCE
Initial studies indicate growers using LED lighting may experience yield increases and changes in cannabinoid and terpene profiles, leading to more consistent medicinal product profiles from harvest to harvest.

FLEXIBLE LIGHT INTENSITY
Lumatek LEDs can be dimmed to adjust PPF level to suit crop and growth stage without changing spectral power distribution or losing efficiency

FINEST LIGHT SPECTRUM
Light Quality is a crucial area when developing our complete LED range. We offer an outstanding Full-Spectrum for full-cycle indoor solutions and specific Spectrums for Greenhouse, Nurseries, Vertical Farming and Supplemental Light applications.

REDUCED HVAC
Lumatek LEDs are highly efficient and less wattage equals less heat into the space, allowing for potentially lower HVAC loads and operating expense.

SAFETY
Lumatek LED drivers are intelligent and feature full circuit protection including over/under voltage, short circuit and over temperature protection. Lumatek Zeus LED drivers also feature auto-power increase/decrease to match the amount of light bars connected to fixture.
All Lumatek LED fixtures are CE certified LVD and EMC compliant.

LESS MAINTENANCE
Lumatek LEDs are rated for 60,000 hours use supported by a market leading 5 Year warranty.

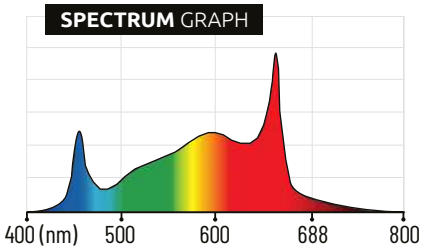
ZEUS LED RANGE

ZEUS 1000W XTREME CO2

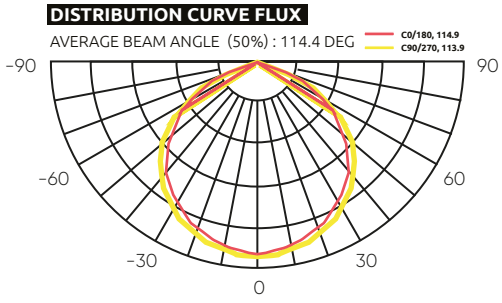
The higher specification Lumatek Zeus 1000W Xtreme PPFD CO2 LED is a linear multi-light bar fixture producing extremely high levels of PPF of 2925 µmol/s and a very high efficacy of up to 2.9 umol/J.

- Interchangeable 100 W Pro 2.9 Magnet light bars with clear glue cover
- Detachable driver for remote use

SPECTRUM GRAPH



DISTRIBUTION CURVE FLUX



HEIGHT TO TEST POINT **52cm**

CANOPY AVERAGE **PPFD** **1031.2 µmol/s/m2**

623	687	794	843	859	852	811	738	682	664
670	796	901	981	1017	983	997	932	799	718
742	880	1054	1233	1223	1230	1167	1075	907	873
855	969	1147	1341	1383	1391	1317	1233	1044	937
955	1054	1222	1429	1455	1472	1405	1276	1077	985
918	1095	1210	1416	1488	1484	1422	1334	1085	989
868	1029	1183	1371	1441	1457	1389	1244	1014	905
810	987	1068	1236	1302	1311	1263	1143	926	808
687	812	926	1087	1132	1103	1075	934	800	718
588	646	821	908	911	945	908	822	745	677

1.5m

0.15m

1.5m

0.15m

- **Walls Reflection 0%**
- **Fixture Power 100%**

PRODUCT CODE LUMLED003

LIGHT DISTRIBUTION 120° (Beam Angle)
LIGHT SOURCE Higher Spec Osram & Lumileds Diodes
INPUT VOLTAGE 220-240 V AC, 50-60 Hz
INPUT POWER 1021 W (4.6 A @230 V AC)
EFFICACY 2.9 µmol/J
PPF 2925 µmol/s
FOOTPRINT 1.5 x 1.5 m with Supp. CO_2 , 1.8 x 1.8 m
without Supp. CO2 used at higher heights.
POWER FACTOR > 0.95
DIMMING OFF-25-50-75-100% with 0-10V Light Dimmer (incl.)
EXTERNAL CONTROL With Lumatek or any Universal Controllers 0-10 V
DAISY CHAIN CAPALIBITY Yes
WEIGHT 18 Kg
DIMMENSIONS 1181 x 1091 x 106 mm
SPECTRUM Full Spectrum F
THERMAL MANAGEMENT Passive
LIFETIME L90 > 60000 hrs
WARRANTY 5 Years
IP RATING IP65
CERTIFICATIONS CE, EMC, LVD

CE · RoHS · EMI EMC CERTIFIED · LVD CERTIFIED · Plug & Play · IP65 · CONTROL TECHNOLOGY · DESIGNED & ENGINEERED IN THE UNITED KINGDOM · 5 YEAR WARRANTY

GROW OPTIMAL
BY REQUESTING
A LIGHT PLAN & REPORT

ZEUS LED RANGE

ZEUS 1000W PRO

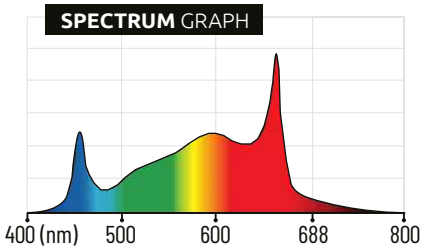
The higher specification Lumatek Zeus 1000W Pro LED is a linear multi-light bar fixture with folding frame producing extremely high levels of PPF of 2925 µmol/s and a Photon Efficacy of up to 2.9 µmol/J.

• Interchangeable 100 W Pro 2.9 Magnet light bars with clear glue cover

PRODUCT CODE **LUMLED009**

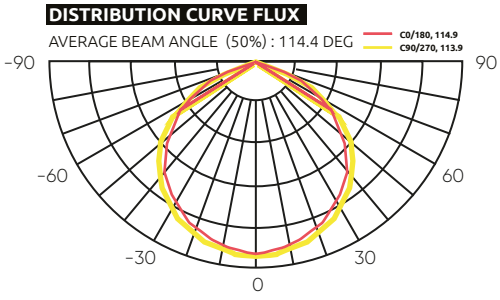
LIGHT DISTRIBUTION 120° (Beam Angle)
LIGHT SOURCE Higher Spec Osram & Lumileds Diodes
INPUT VOLTAGE 220-240 V AC, 50-60 Hz
INPUT POWER 1025 W (4.8 A @230 V AC)
EFFICACY 2.9 µmol/J
PPF 2925 µmol/s
FOOTPRINT 1.5 x 2.0 m
POWER FACTOR > 0.95
DIMMING OFF-25-50-75-100% with 0-10V Light Dimmer (incl.)
EXTERNAL CONTROL With Lumatek or any Universal Controllers 0-10 V
DAISY CHAIN CAPALIBITY Yes
WEIGHT 17.5 Kg
DIMMENSIONS 1700 x 1219 x 62 mm
SPECTRUM Full Spectrum F
THERMAL MANAGEMENT Passive
LIFETIME L90 > 60000 hrs
WARRANTY 5 Years
IP RATING IP65
CERTIFICATIONS CE, EMC, LVD

SPECTRUM GRAPH



DISTRIBUTION CURVE FLUX

AVERAGE BEAM ANGLE (50%) : 114.4 DEG



HEIGHT TO TEST POINT **40cm**
CANOPY AVERAGE **PPFD** **822.2 µmol/s/m2**

328.6	362.8	546	581	554.8	557.6	579.3	496.3	428.3	323.5
490.2	543	702.4	793.1	906.2	975.1	838.7	768.2	542.2	399.6
581.4	735.7	896.2	964	1031	1032	999.4	871.1	699.2	518.9
671.3	761.1	1019	1090	1150	1159	1092	962	766	559.3
711.6	842.9	1050	1142	1199	1144	1000	756.4	592.6	609.8
693.9	828.7	1010	1160	1210	1219	1170	1020	800.1	584.5
710.2	837.8	1046	1133	1197	1210	1152	1055	761.3	619.6
715.7	788.3	983.1	1111	1151	1161	1120	966.7	760.5	577.2
600.8	660.8	839.8	986.4	1010	1027	977.8	908.6	720.6	491.7
527.6	620.4	769.5	833.6	818.8	845	830.3	697.5	559.4	423.7

2m
0.2m
1.5m
0.15m

• **Walls Reflection 0%**
• **Fixture Power 100%**

GROW OPTIMAL

BY REQUESTING
A LIGHT PLAN & REPORT

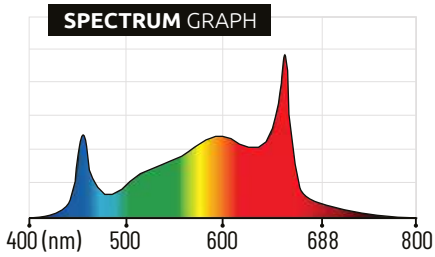
ZEUS LED RANGE

ZEUS 600W PRO 2.9

The higher specification Lumatek Zeus Pro 2.9 is a linear multi-light bar fixture producing very high levels of PPF of 1770 µmol/s and a Photon Efficacy of up to 2.9 µmol/J.

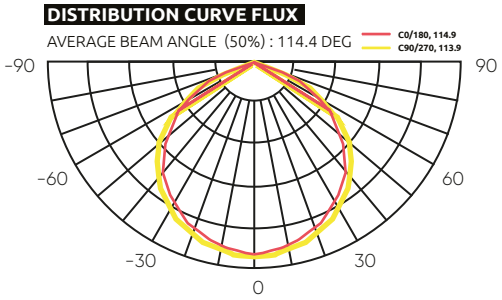
- Interchangeable 100 W Pro 2.9 Magnet light bars with clear glue cover
- Detachable driver for remote use

SPECTRUM GRAPH



DISTRIBUTION CURVE FLUX

AVERAGE BEAM ANGLE (50%) : 114.4 DEG



HEIGHT TO TEST POINT **40cm**

CANOPY AVERAGE **PPFD** **662.2 µmol/s/m²**

339,6	363	460,9	482,2	474,6	479	463	379,5	351,8	369,7
433,9	451,3	532,6	603,4	572,2	616,5	574,7	520,9	445,9	450,4
483,7	562,9	732,4	830,8	850,6	825,4	805,3	753	603	473,7
519,2	691,1	842,9	919,1	938,4	941,3	905,5	820,4	658,3	494,8
561,6	715,8	891,3	956,8	1004	997,7	969,8	862,7	691,5	560,2
518,6	770,3	909,7	979,4	1010	1009	950,5	856,2	678,9	556,5
534,8	750	878	966,9	990,6	981,9	936,3	874,8	723,1	587,1
534,6	621,3	788,9	828	877,8	859,7	829,2	777,7	626,2	592
392	484,9	585,9	623,5	643,6	669,2	667,5	574	534	513,4
322,2	397,4	454,4	511,1	544,3	570,9	496,6	478,5	393	341,3

1.5m

0.15m

1.5m

0.15m

- **Walls Reflection 0%**
- **Fixture Power 100%**

PRODUCT CODE LUMLED010

LIGHT DISTRIBUTION 120° (Beam Angle)
LIGHT SOURCE Higher Spec Osram & Lumileds Diodes
INPUT VOLTAGE 220-240 V AC, 50-60 Hz
INPUT POWER 615 W (2.9 A @230 V AC)
EFFICACY 2.9 µmol/J
PPF 1770 µmol/s
FOOTPRINT 1.4 x 1.4 m
POWER FACTOR > 0.95
DIMMING OFF-25-50-75-100% with 0-10V Light Dimmer (incl.)
EXTERNAL CONTROL With Lumatek or any Universal Controllers 0-10 V
DAISY CHAIN CAPALIBITY Yes
WEIGHT 13.5 Kg
DIMMENSIONS 1091 x 1182 x 52 mm
SPECTRUM Full Spectrum F
THERMAL MANAGEMENT Passive
LIFETIME L90 > 60000 hrs
WARRANTY 5 Years
IP RATING IP65
CERTIFICATIONS CE, EMC, LVD

CE · RoHS · EMI EMC CERTIFIED · LVD CERTIFIED · Plug & Play · IP65 · CONTROL TECHNOLOGY · DESIGNED & ENGINEERED BY LUMATEK IN THE UNITED KINGDOM · 5 YEAR WARRANTY

GROW OPTIMAL

BY REQUESTING
A LIGHT PLAN & REPORT

ZEUS LED RANGE

ZEUS 465W PRO 2.9

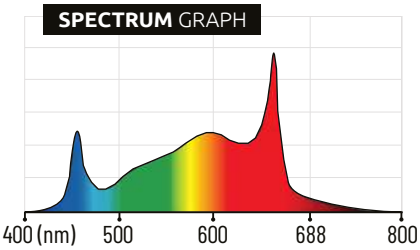
The higher specification Lumatek Zeus 465W Pro 2.9 LED is a linear multi-light bar fixture producing very high levels of PPF of 1353 µmol/s and a Photon Efficacy of up to 2.9 µmol/J.

- Interchangeable 93 W Pro 2.9 Magnet light bars with clear glue cover
- Detachable driver for remote use

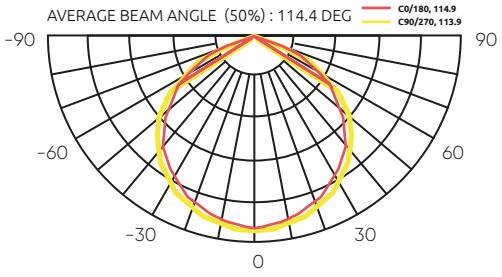
PRODUCT CODE LUMLED011

LIGHT DISTRIBUTION 120° (Beam Angle)
LIGHT SOURCE Higher Spec Osram & Lumileds Diodes
INPUT VOLTAGE 220-240 V AC, 50-60 Hz
INPUT POWER 475 W (2.2 A @230 V AC)
EFFICACY 2.9 µmol/J
PPF 1353 µmol/s
FOOTPRINT 1.2 x 1.2 m
POWER FACTOR > 0.95
DIMMING OFF-25-50-75-100% with 0-10V Light Dimmer (incl.)
EXTERNAL CONTROL With Lumatek or any Universal Controllers 0-10 V
DAISY CHAIN CAPALIBITY Yes
WEIGHT 10 Kg
DIMMENSIONS 998 x 900 x 52 mm
SPECTRUM Full Spectrum F
THERMAL MANAGEMENT Passive
LIFETIME L90 > 60000 hrs
WARRANTY 5 Years
IP RATING IP65
CERTIFICATIONS CE, EMC, LVD

SPECTRUM GRAPH



DISTRIBUTION CURVE FLUX



HEIGHT TO TEST POINT **40cm**
CANOPY AVERAGE **PPFD** **709.7 µmol/s/m²**

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

- **Walls Reflection 0%**
- **Fixture Power 100%**

GROW OPTIMAL

BY REQUESTING
A LIGHT PLAN & REPORT

ZEUS LED RANGE

ZEUS 600W 2.6

The array of the Zeus 600W 2.6 creates a uniform spread of light at short distance to the crop enabling single source grow lighting for multi-layer cultivation systems.

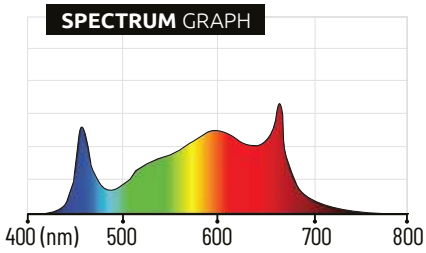
- 400 V Option available for large scale projects
- Interchangeable 100 W 2.6 Magnet light bars with clear glue cover
- Detachable driver for remote use

Our **Zeus Standard range has now been upgraded** for 2.6 µmol/J Efficacy and with clear glue protection cover on the LED bars, while keeping its unique Spectrum

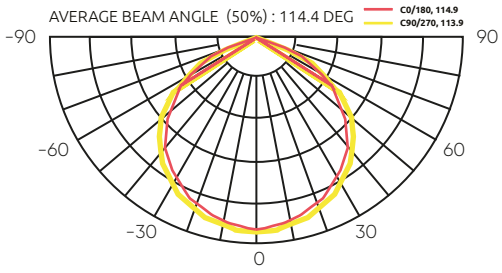
PRODUCT CODE LUMLED020

LIGHT DISTRIBUTION 120° (Beam Angle)
LIGHT SOURCE Higher Spec Osram & Lumileds Diodes
INPUT VOLTAGE 220-240 V AC, 50-60 Hz
INPUT POWER 615 W (2.7 A @230 V AC)
EFFICACY 2.6 µmol/J
PPF 1570 µmol/s
FOOTPRINT 1.4 x 1.4 m
POWER FACTOR > 0.95
DIMMING OFF-25-50-75-100% with 0-10V Light Dimmer (incl.)
EXTERNAL CONTROL With Lumatek or any Universal Controllers 0-10 V
DAISY CHAIN CAPALIBITY Yes
WEIGHT 13.5 Kg
DIMMENSIONS 1091 x 1182 x 52 mm
SPECTRUM Full Spectrum F
THERMAL MANAGEMENT Passive
LIFETIME L90 > 60000 hrs
WARRANTY 5 Years
IP RATING IP65
CERTIFICATIONS CE, EMC, LVD

SPECTRUM GRAPH



DISTRIBUTION CURVE FLUX



HEIGHT TO TEST POINT **40cm**
CANOPY AVERAGE **PPFD** **584.99 µmol/s/m²**

341,5	381,1	439,4	484,8	463	463,7	438,2	368,2	337,6	271,6
344,5	537	600,9	659	641,9	624,9	596	558,2	477,8	329,8
449,2	544,1	679,4	715,3	697,8	668,5	649,6	614,3	489,3	432,2
462,8	688	829,3	876,8	907,8	901,4	877,1	800,3	602,1	495,8
530,8	655,5	781,2	844,3	869,7	852,7	818,9	746,8	596,3	514,6
528	679,8	783,7	842,2	893,3	891,8	809,3	766,5	585,5	501,3
488,7	631,3	761,6	831,3	850,8	855,3	819	738,9	603,2	486,5
481,1	610	706,8	763,2	791,9	778,7	751,8	646,6	519,1	439,3
395,7	469,7	558,6	590,7	634	564,7	566	527,4	418,2	364,2
320,6	376,8	405,2	429,1	435,9	438,8	407,2	408,5	327,8	283,9

1.5m
0.15m
1.5m
0.15m

- **Walls Reflection 0%**
- **Fixture Power 100%**

GROW OPTIMAL
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ATS LED RANGE

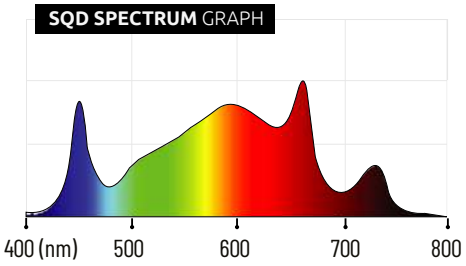
ATS300W PRO

The new Pro line of ATS is built using high quality Lumatek controllable drivers and latest generation higher efficiency top bin White, Red & Far Red Diodes.

PRODUCT CODE **LUMLED300P**

LIGHT DISTRIBUTION 120° (Beam Angle)
LIGHT SOURCE Higher Spec White, Red & Far Red Diodes
INPUT VOLTAGE 220-240 V AC, 50-60 Hz
INPUT POWER 310 W (1.35 A @230 V AC)
EFFICACY 2.7 µmol/J
PPF 816 µmol/s
FOOTPRINT 1 x 1 m
POWER FACTOR > 0.95
DIMMING OFF-25-50-75-100% with 0-10V Light Dimmer (incl.)
EXTERNAL CONTROL With Lumatek or any Universal Controllers 0-10 V
DAISY CHAIN CAPALIBITY Yes
WEIGHT 5.2 Kg
DIMMENSIONS 560 x 560 x 72 mm
SPECTRUM Full Spectrum +
THERMAL MANAGEMENT Passive
LIFETIME L90 > 60000 hrs
WARRANTY 3 Years
IP RATING IP65
CERTIFICATIONS CE, EMC, LVD

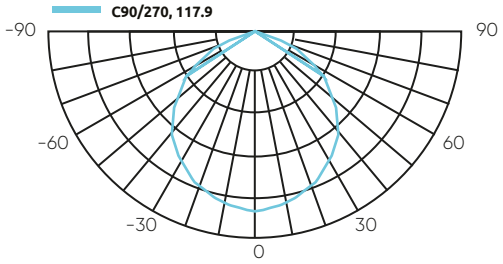
SQD SPECTRUM GRAPH



DISTRIBUTION CURVE FLUX

AVERAGE BEAM ANGLE (50%) : 117.9 DEG

C90/270, 117.9



HEIGHT TO TEST POINT **40cm**

CANOPY AVERAGE **PPFD** **572.45 µmol/s/m2**

322.8	397.9	455.8	438.5	396.5	331.3	296.1
385.7	544.6	659.9	664.1	581.2	443.8	382.3
500.4	673.3	830.7	871.8	762.3	577.5	441.4
565.5	758.9	933.5	961.7	869.9	648.4	509.3
525.7	728.4	874	914.1	801	578.8	481.8
409.3	616.9	708.2	778.6	638.5	481.1	396.9
321	396.5	483.1	522.9	456.6	390.7	340.7

1m

0.14m

1m

0.14m

- **Walls Reflection 0%**
- **Fixture Power 100%**

GROW OPTIMAL

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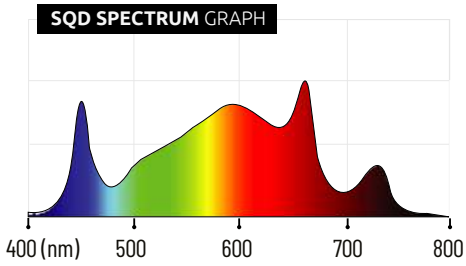
ATS LED RANGE

ATS200W PRO

The new Pro line of ATS is built using high quality Lumatek controllable drivers and latest generation higher efficiency top bin White, Red & Far Red Diodes.

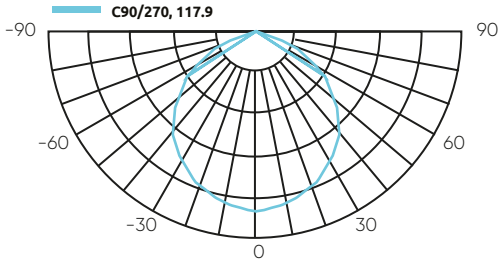
SQD SPECTRUM GRAPH



DISTRIBUTION CURVE FLUX

AVERAGE BEAM ANGLE (50%) : 117.9 DEG

C90/270, 117.9



HEIGHT TO TEST POINT **40cm**

CANOPY AVERAGE **PPFD** **510.7 µmol/s/m2**

377.3	457.3	505.3	485.2	450.3	380.6
437.4	501.1	587.2	576.6	502.4	442.8
485.4	595.3	653.1	651.6	569.4	498.8
506.2	601.9	647.5	660.4	589	477.2
506.7	513.1	568.9	577.4	499.3	450.8
374.1	433	482.3	471.7	455.3	414.8

0.8m

0.13m

0.8m

0.13m

- **Walls Reflection 0%**
- **Fixture Power 100%**

PRODUCT CODE LUMLED200P

LIGHT DISTRIBUTION 120° (Beam Angle)
LIGHT SOURCE Higher Spec White, Red & Far Red Diodes
INPUT VOLTAGE 220-240 V AC, 50-60 Hz
INPUT POWER 208 W (0.92 A @230 V AC)
EFFICACY 2.5 µmol/J
PPF 508 µmol/s
FOOTPRINT Up to 0.8 x 0.8 m
POWER FACTOR > 0.95
DIMMING OFF-25-50-75-100% with 0-10V Light Dimmer (incl.)
EXTERNAL CONTROL With Lumatek or any Universal Controllers 0-10 V
DAISY CHAIN CAPALIBITY Yes
WEIGHT 4 Kg
DIMMENSIONS 525 x 525 x 72mm
SPECTRUM Full Spectrum +
THERMAL MANAGEMENT Passive
LIFETIME L90 > 60000 hrs
WARRANTY 3 Years
IP RATING IP65
CERTIFICATIONS CE, EMC, LVD

CE · RoHS · EMI EMC CERTIFIED · LVD CERTIFIED · Plug & Play · IP65 · CONTROL TECHNOLOGY · DESIGNED & ENGINEERED IN THE UNITED KINGDOM · 3 YEAR WARRANTY

GROW OPTIMAL

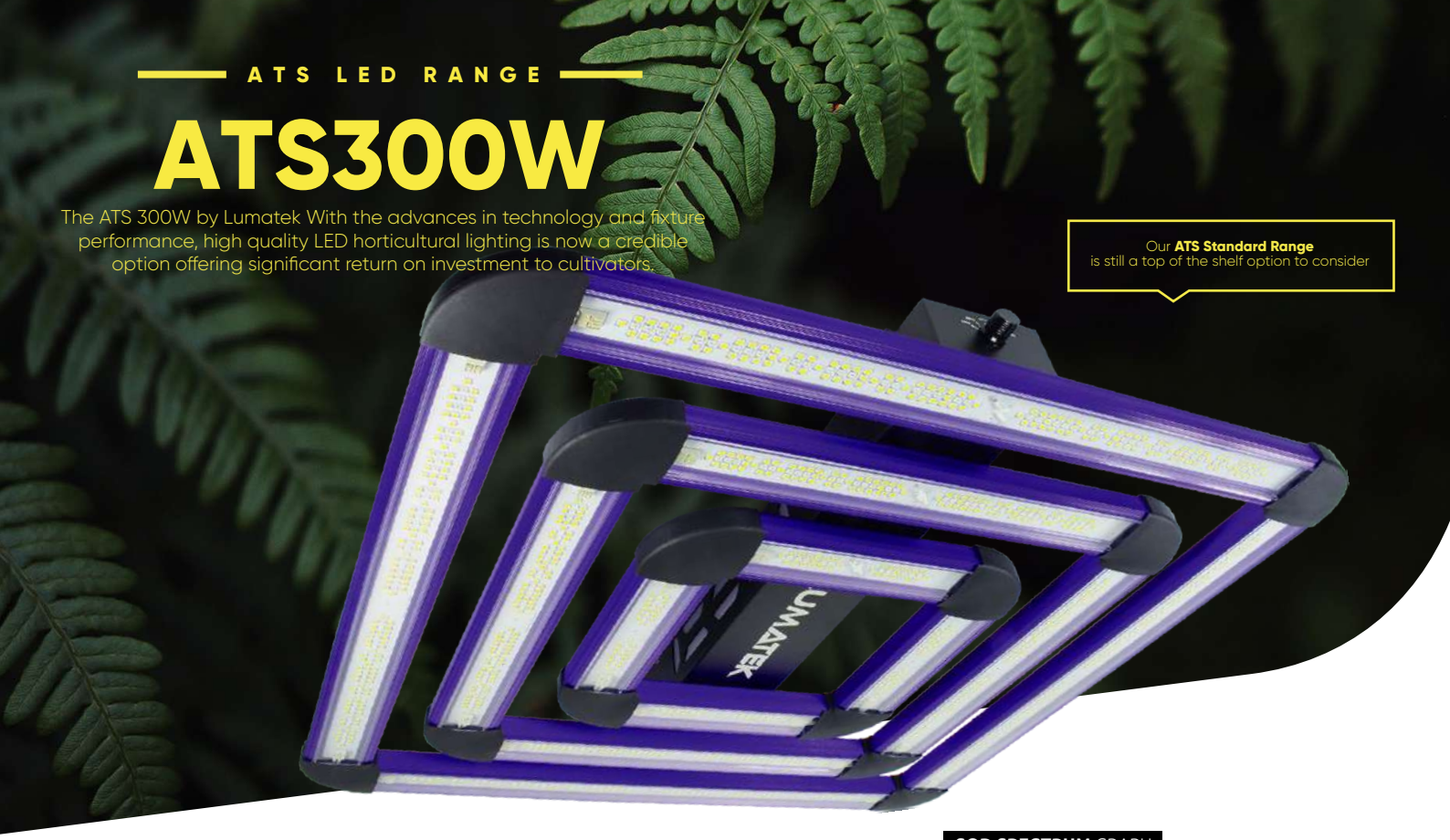
BY REQUESTING
A LIGHT PLAN & REPORT

ATS LED RANGE

ATS300W

The ATS 300W by Lumatek With the advances in technology and fixture performance, high quality LED horticultural lighting is now a credible option offering significant return on investment to cultivators.

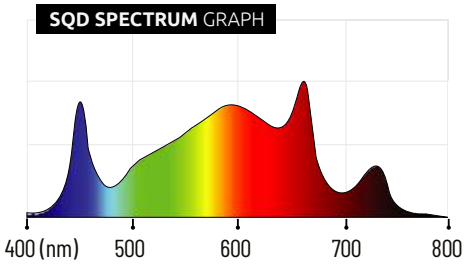
Our **ATS Standard Range** is still a top of the shelf option to consider



PRODUCT CODE **LUMLED300**

LIGHT DISTRIBUTION 110°
LIGHT SOURCE LUMLED Diodes
INPUT VOLTAGE 220-240 V AC, 50-60 Hz
INPUT POWER 300 W (1.44 A @230 V AC)
EFFICACY 2.3 µmol/J
PPF 690 µmol/s
FOOTPRINT 1 x 1 m
POWER FACTOR > 0.95
DIMMING OFF-20-40-60-80-100% with 0-10V Light Dimmer (incl.)
EXTERNAL CONTROL With Lumatek or any Universal Controllers 0-10 V
DAISY CHAIN CAPALIBITY Yes
WEIGHT 5.2 Kg
DIMMENSIONS 558 x 558 x 87 mm
SPECTRUM Full Spectrum +
THERMAL MANAGEMENT Passive
LIFETIME L90 > 60000 hrs
WARRANTY 3 Years
IP RATING IP20
CERTIFICATIONS CE, EMC, LVD

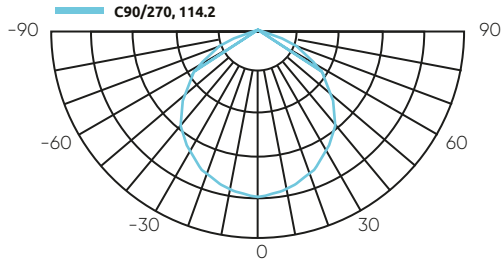
SQD SPECTRUM GRAPH



DISTRIBUTION CURVE FLUX

AVERAGE BEAM ANGLE (50%) : 114.2 DEG

C90/270, 114.2



HEIGHT TO TEST POINT **30cm**

CANOPY AVERAGE **PPFD** **0.8 x 0.8m: 890.17 µmol/s/m2**
1x 1m: 628.9 µmol/s/m2

354.93	498.22	574.91	507.33	369.2
495.33	786.1	937.6	796.88	511.47
563.63	929.36	1118.4	940.7	580.83
488.26	780.42	931.29	790.82	503.50
345.07	490.98	567.74	500.27	358.61

GROW OPTIMAL
BY REQUESTING
A LIGHT PLAN & REPORT

- **Walls Reflection 0%**
- **Fixture Power 100%**

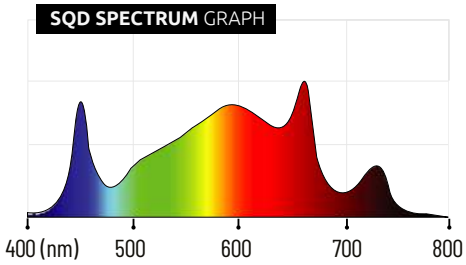
ATS LED RANGE

ATS200W

The ATS 200W by Lumatek With the advances in technology and fixture performance, high quality LED horticultural lighting is now a credible option offering significant return on investment to cultivators.

Our **ATS Standard Range** is still a top of the shelf option to consider

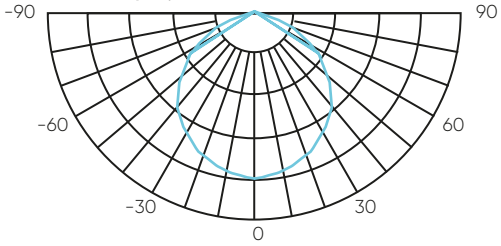
SQD SPECTRUM GRAPH



DISTRIBUTION CURVE FLUX

AVERAGE BEAM ANGLE (50%) : 114.2 DEG

C90/270, 114.2



HEIGHT TO TEST POINT **30cm**

CANOPY AVERAGE **PPFD** **0.8 x 0.8m: 572.45 µmol/s/m2**
1x 1m: 403.87 µmol/s/m2

221.28	312.32	363.344	314.832	225.024
310.864	508.848	620.592	511.2	314.48
358.816	618.224	764.944	620.944	362.608
307.632	506.224	618.512	509.44	311.232
216.272	307.856	359.408	311.488	220.4

- **Walls Reflection 0%**
- **Fixture Power 100%**

PRODUCT CODE LUMLED200

LIGHT DISTRIBUTION 110°
LIGHT SOURCE LUMLED Diodes
INPUT VOLTAGE 220-240 V AC, 50-60 Hz
INPUT POWER 200 W (0.87 A @230 V AC)
EFFICACY 2.3 µmol/J
PPF 460 µmol/s
FOOTPRINT 0.8 x 0.8 m
POWER FACTOR > 0.95
DIMMING OFF-20-40-60-80-100% with 0-10V Light Dimmer (incl.)
EXTERNAL CONTROL With Lumatek or any Universal Controllers 0-10 V
DAISY CHAIN CAPALIBITY Yes
WEIGHT 3.9 Kg
DIMMENSIONS 508 x 508 x 86 mm
SPECTRUM Full Spectrum +
THERMAL MANAGEMENT Passive Cooling
LIFETIME L90 > 60000 hrs
WARRANTY 3 Years
IP RATING IP20
CERTIFICATIONS CE, EMC, LVD

CE · RoHS · EMI EMC CERTIFIED · LVD CERTIFIED · Plug & Play · IP20 · CONTROL TECHNOLOGY · DESIGNED & ENGINEERED BY LUMATEK IN THE UNITED KINGDOM · 3 YEAR WARRANTY

GROW OPTIMAL

BY REQUESTING
A LIGHT PLAN & REPORT

INDOOR SUPPLEMENTAL LIGHT RANGE

100W FULL-SPECTRUM INDIVIDUAL SUPPLEMENTAL LIGHT LED BAR

A flexible and dynamic LED solution to improve your grow results, producing a PPF of 295 µmol/s and a very high efficacy of up to 2.9 µmol/J.

(100W Driver included)

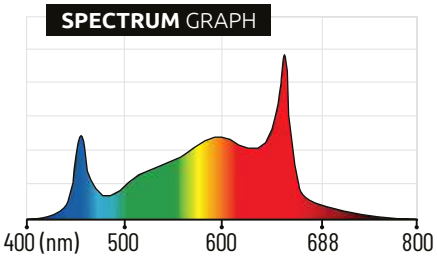
A flexible and dynamic solution to improve your grow results. You can either use it as an add on for your grow space that lacks light intensity, placing it on the top, side or bottom; or just use it as propagator for your clones or seedlings.

PRODUCT CODE LUMLED012

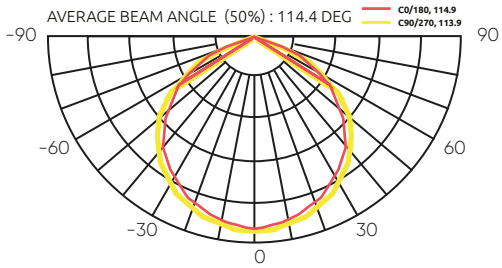
LIGHT DISTRIBUTION 120° (Beam Angle)
LIGHT SOURCE Higher Spec Osram & Lumileds Diodes
INPUT VOLTAGE 220-240 V AC, 50-60 Hz
INPUT POWER 102 W (0.5 A @230 V AC)
EFFICACY 2.9 µmol/J
PPF 295 µmol/s
POWER FACTOR > 0.98
DIMMING OFF-25-50-75-100% with 0-10V Light Dimmer (Sold Separately)
EXTERNAL CONTROL With Lumatek or any Universal Controllers 0-10 V
DAISY CHAIN CAPALIBITY Yes
WEIGHT 1.1 Kg
DIMMENSIONS 1148 x 20 x 53 mm
SPECTRUM Full Spectrum F
THERMAL MANAGEMENT Passive
LIFETIME L90 > 60000 hrs
WARRANTY 5 Years
IP RATING IP65
CERTIFICATIONS CE, EMC, LVD

CE RoHS EMI EMC CERTIFIED LVD CERTIFIED Plug & Play IP65 CONTROL TECHNOLOGY DESIGNED & ENGINEERED IN LUMATEK IN THE UNITED KINGDOM 5 YEAR WARRANTY

SPECTRUM GRAPH



DISTRIBUTION CURVE FLUX



HEIGHT TO TEST POINT **30cm**
CANOPY AVERAGE **PPFD** **1027.84 µmol/s/m²**
(Lumatek Zeus 600W Pro 2.9 + 4 x 100W Ind. Supp. Light LED Bars PPFD Map)

851,7	952,6	1006	1037	984,9	964,7	999	1010	969,4	902,2
965,6	1053	1098	1106	1077	1097	1088	1092	1110	1004
1036	1163	1178	1165	1159	1149	1154	1164	1165	1164
1087	1178	1168	1165	1173	1168	1164	1172	1206	1154
1075	1145	1150	1142	1139	1135	1130	1144	1149	1122
1095	1139	1108	1101	1106	1081	1087	1095	1120	1093
1080	975,4	1029	993,5	994,5	995,8	983,1	984	991,8	1005
961,6	1015	981,2	1004	1009	984,1	984,4	994,3	920,7	963,1
835	927,2	955,8	931,4	934,8	914	912	880,8	829	785,7
659	853,8	962,9	986,3	934,3	912,9	882,6	806,6	640,6	534,1

1.5m
0.15m
1.5m
0.15m

- **Walls Reflection 0%**
- **Fixture Power 100%**

GROW OPTIMAL

BY REQUESTING
A LIGHT PLAN & REPORT

INDOOR SUPPLEMENTAL LIGHT RANGE

30W UV INDIVIDUAL SUPPLEMENTAL LIGHT LED BAR

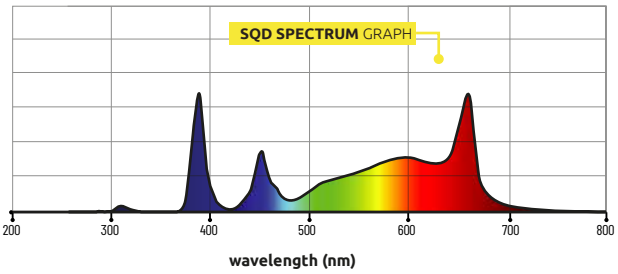
This 30W UV LED bar was designed to fit directly into the Zeus frames or can also be used as a single fixture.

NOTE: Power Cable (LUMM0032) and UV Bar Daisy Chain Cable (LUMM0033) sold separately.

RECOMMENDED UV-B + UV-A RADIATION APPLICATION

Always mix the supplemental UVB + UVA radiation with the previously mentioned Lumatek Zeus Full Spectrum LED Range, starting from 12 hours photoperiod to less during the Flowering grow stage, at least 4 weeks before harvest.

For a good UV radiation spread, ensure to install the recommended minimum units and follow the distance to canopy referenced on the Grow Light Strategies table.
If you notice plant damage, we recommend to increase the distance between fixture and canopy or decrease the UV light output delivered to your plants by reducing the photoperiodic time.



PRODUCT CODE LUMLED013

LIGHT DISTRIBUTION 120° (Beam Angle)
LIGHT SOURCE UVB + UVA Domestic Diodes
INPUT VOLTAGE 220-240 V AC, 50-60 Hz
INPUT POWER 30 W
POWER FACTOR > 0.98
DIMMING No
EXTERNAL CONTROL No
DAISY CHAIN CAPALIBITY Yes
WEIGHT 1.2 Kg
DIMMENSIONS 1000 x 48 x 42 mm
SPECTRUM UVB + UVA
THERMAL MANAGEMENT Passive
LIFETIME L90 > 8500 hrs
WARRANTY 1 Years
IP RATING IP65
CERTIFICATIONS CE, EMC, LVD

RECOMMENDED COVERAGE

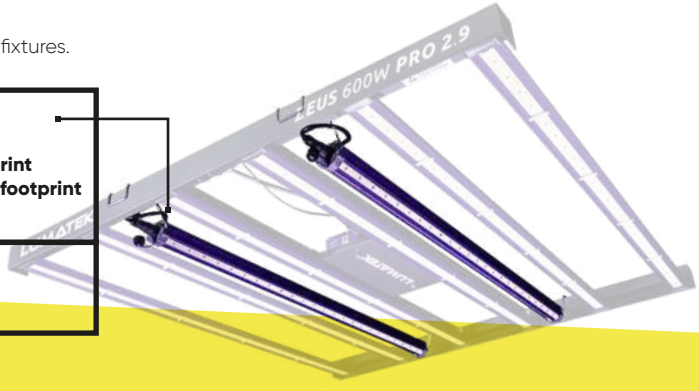
The Lumatek 30W UV Supplemental LED Bar was designed to fit directly into the Zeus fixtures.
To make sure you achieve the best light spread over the canopy.

Integrate a minimum of **2 units** of 30W UV Supplemental Light LED Bar, with:

- **ZEUS 600W 2.6 | 1.4 x 1.4 m footprint**
- **ZEUS 465W PRO 2.9 | 1.2 x 1.2 m footprint**
- **ZEUS 600W PRO 2.9 | 1.4 x 1.4 m footprint**
- **ZEUS 1000W Xtreme CO2 | 1.5 x 1.5 m footprint w/ CO2 Supplement**

Integrate a minimum **3 units** of 30W UV Supplemental Light LED Bar, with:

- **ZEUS 1000W PRO | 1.5 x 2.0 m footprint**



GROW OPTIMAL
BY REQUESTING
A LIGHT PLAN & REPORT

650 W driver to run VF fixtures is sold separately.
Each one can run up to 5 x VF120W

If you want to extend the distance between VF fixtures it is required to add on an **Extension Cable for VF Fixtures (Female-Male) 1 m, Product Code: LUMM0049**

VF RANGE

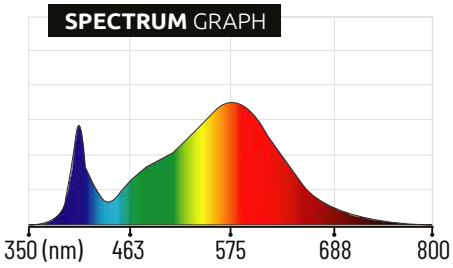
VF120W

These versatile high efficacy fixtures will ensure you reach your goals when used in Vertical Farming applications.

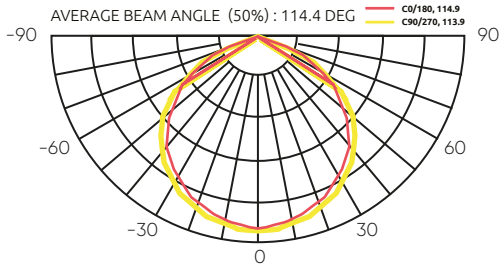
PRODUCT CODE LUMLED015

LIGHT DISTRIBUTION 120° (Beam Angle)
LIGHT SOURCE Higher Spec Osram & Lumileds Diodes
INPUT VOLTAGE 220-240 V AC, 50-60 Hz
INPUT POWER 130 W (0.6 A @230 V AC)
EFFICACY 2.4 µmol/J
PPF 308 µmol/s
DIMMING OFF-25-50-75-100%
with Knob on the main 650 W driver (Sold Separately)
EXTERNAL CONTROL With Lumatek or any Universal Controllers 0-10 V
DAISY CHAIN CAPALIBITY Yes
WEIGHT 2.1 Kg
DIMMENSIONS 1207 x 521 x 21 mm
SPECTRUM Spectrum G
THERMAL MANAGEMENT Passive
LIFETIME L90 > 60000 hrs
WARRANTY 3 Years
IP RATING IP65
CERTIFICATIONS CE, EMC, LVD

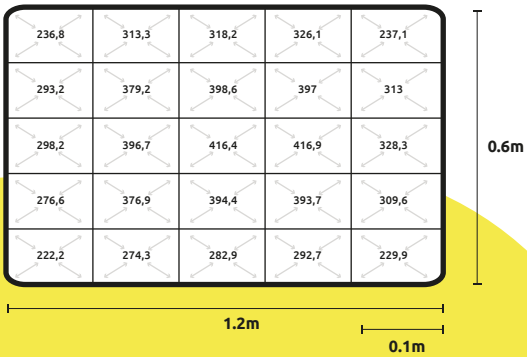
SPECTRUM GRAPH



DISTRIBUTION CURVE FLUX



HEIGHT TO TEST POINT **20cm**
CANOPY AVERAGE **PPFD** **324.9 µmol/s/m²**



- **Walls Reflection 0%**
- **Fixture Power 100%**

GROW OPTIMAL

BY REQUESTING
A LIGHT PLAN & REPORT

V F R A N G E

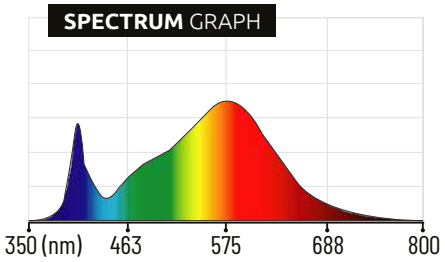
VF90W

These versatile high efficacy fixtures will ensure you reach your goals when used in Vertical Farming applications.

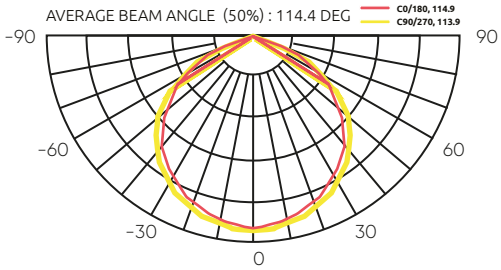
650 W driver to run VF fixtures is sold separately. Each one can run up to 5 x VF90W

If you want to extend the distance between VF fixtures it is required to add on an **Extension Cable for VF Fixtures (Female-Male) 1 m, Product Code: LUMM0049**

SPECTRUM GRAPH



DISTRIBUTION CURVE FLUX



HEIGHT TO TEST POINT **20cm**

CANOPY AVERAGE **PPFD** **291.5 µmol/s/m²**

184,7	245,3	255,4	256,5	198,1
185,2	253,3	264,6	260,6	205,6
205,6	278,7	291,5	290,6	226
180,7	250,2	260,2	261,3	201
165,4	212,8	231,2	237,7	185,1

0.6m

1.2m

0.1m

- **Walls Reflection 0%**
- **Fixture Power 100%**

PRODUCT CODE LUMLED019

LIGHT DISTRIBUTION 120° (Beam Angle)
LIGHT SOURCE Higher Spec Osram & Lumileds Diodes
INPUT VOLTAGE 220-240 V AC, 50-60 Hz
INPUT POWER 103 W (0.4 A @230 V AC)
EFFICACY 2.4 µmol/J
PPF 244 µmol/s
DIMMING OFF-25-50-75-100%
with Knob on the main 650 W driver (Sold Separately)
EXTERNAL CONTROL With Lumatek or any Universal Controllers 0-10 V
DAISY CHAIN CAPALIBITY Yes
WEIGHT 1.7 Kg
DIMMENSIONS 1207 x 521 x 21 mm
SPECTRUM Spectrum G
THERMAL MANAGEMENT Passive
LIFETIME L90 > 60000 hrs
WARRANTY 3 Years
IP RATING IP65
CERTIFICATIONS CE, EMC, LVD

CE · RoHS · EMI EMC CERTIFIED · LVD CERTIFIED · Plug & Play · IP65 · CONTROL TECHNOLOGY · DESIGNED & ENGINEERED BY LUMATEK IN THE UNITED KINGDOM · 3 YEAR WARRANTY

GROW OPTIMAL

BY REQUESTING
A LIGHT PLAN & REPORT

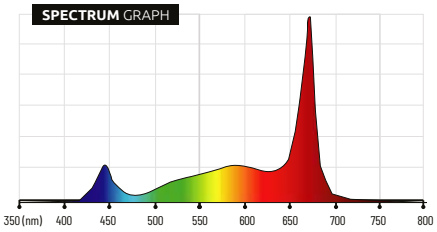
INDOOR RANGE

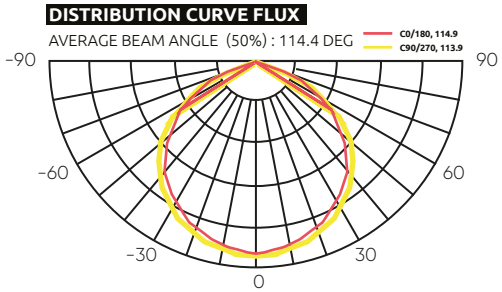
i850W TOP LIGHT FULL-SPECTRUM LED 400V

Meet the i850W TOP LIGHT FULL-SPECTRUM LED 400V. Innovative, Slim, Compact, Powerful and Efficient Top Light LED fixture, designed specifically for Indoor use.

FACTORY ORDER

The perfect solution if you are looking for a high intensity and compact LED Top Light fixture, to replace and upgrade HPS systems or to start a new large scale indoor project where canopy uniformity is key.





PRODUCT CODE LUMLED022

LIGHT DISTRIBUTION 115° (Beam Angle)
LIGHT SOURCE Higher Spec Osram & Domestic Diodes
INPUT VOLTAGE 208-400 V AC, 50-60 Hz
INPUT POWER 860 W (3.7 A @230 V AC), 850 W (2.2 A @400 V AC)
EFFICACY 2.6 µmol/J (230 V AC), 2.7 µmol/J (400 V AC)
PPF 2250 µmol/s (230 V AC), 2295 µmol/s (400 V AC)
POWER FACTOR > 0.95 (230 V AC), > 0.98 (400 V AC)
DIMMING 20% - 100%
EXTERNAL CONTROL With Lumatek or any Universal Controllers 0-10 V
DAISY CHAIN CAPALIBITY Yes
WEIGHT 13 Kg
DIMMENSIONS 730 x 325 x 112 mm
SPECTRUM Full Spectrum
THERMAL MANAGEMENT Passive
LIFETIME L90 > 50000 hrs
WARRANTY 5 Years
IP RATING IP65
CERTIFICATIONS CE, EMC, LVD

CE · RoHS · EMI EMC CERTIFIED · LVD CERTIFIED · 208V 400V · Plug & Play · IP65 · CONTROL TECHNOLOGY · DESIGNED & ENGINEERED IN THE UNITED KINGDOM · 5 YEAR WARRANTY

GROW OPTIMAL

BY REQUESTING
A LIGHT PLAN & REPORT

GREENHOUSE RANGE

1050W GH TOP LIGHT LED (RED+BLUE)

Our most powerful LED unit offering an outstanding photon efficacy of 3.5 umol/J and a total PPF output of 3675 umol/s.

FACTORY ORDER

PRODUCT CODE **LUMLED023**

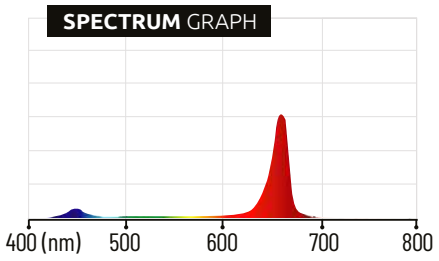
LIGHT DISTRIBUTION 120° (Beam Angle)
LIGHT SOURCE Higher Spec Osram
INPUT VOLTAGE 208-400 V AC, 50-60 Hz
INPUT POWER 1061 W (4.6 A @230 V AC), 1054 W (2.7 A @400 V AC)
EFFICACY 3.4 µmol/J (230 V AC), 3.5 µmol/J (400 V AC)
PPF 3600 µmol/s (230 V AC), 3675 µmol/s (400 V AC)
POWER FACTOR > 0.98 (230 V AC), > 0.98 (400 V AC)
DIMMING 20% - 100%
EXTERNAL CONTROL With Lumatek or any Universal Controllers 0-10 V
DAISY CHAIN CAPALIBITY Yes
WEIGHT 13 Kg
DIMMENSIONS 730 x 325 x 112 mm
SPECTRUM Red + Blue
THERMAL MANAGEMENT Passive
LIFETIME L90 > 50000 hrs
WARRANTY 3 Years
IP RATING IP65
CERTIFICATIONS CE, EMC, LVD

Specifically designed for high PPFD target flowering crops for growers who prioritize or demand efficient growth at an industrial scale.

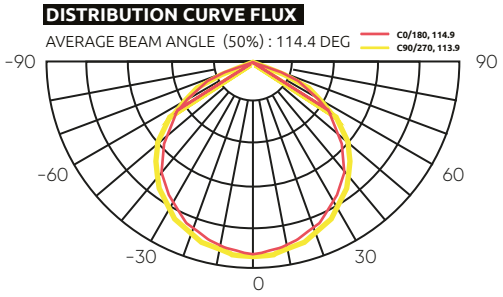
This fixture will provide double the light levels and improved Spectrum when comparing to a traditional 1000W HPS unit. In fact, this product will be equivalent to two 1000W HPS fixtures in regards to light output, plus the extra feature of having an optimized balanced spectrum.

Thanks to the quality of the components and the gaps between the fin's lines, the 1050W will offer an incredible passive cooling heat dissipation through the help of the created convective airflow, ensuring a long lifetime and world class performance at low maintenance.

SPECTRUM GRAPH



DISTRIBUTION CURVE FLUX



GROW OPTIMAL

BY REQUESTING
A LIGHT PLAN & REPORT

GREENHOUSE RANGE

680W GH TOP LIGHT LED (RED + BLUE)

The true 1 HPS to 1 LED replacement, reaching photon efficacy levels up to 3.4 µmol/J and a total PPF output of 2285 umol/s.

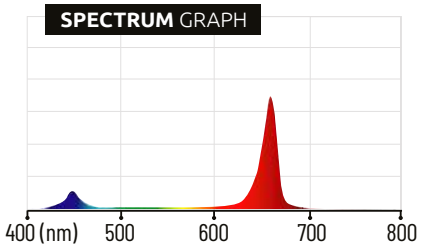
FACTORY ORDER

Planning to switch from HPS to LED top light maintaining light levels but drastically reducing operational costs?

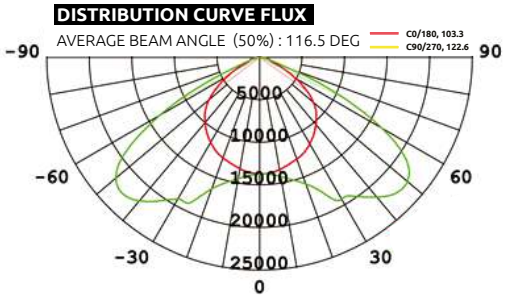
Lumatek has created the perfect solution for that, the compact and efficient 680W GH TOP LIGHT LED Red +Blue. The true 1 HPS to 1 LED replacement, reaching photon efficacy levels up to 3.4 µmol/J and a total PPF output of 2285 umol/s.

This very efficient fixture will help to reduce energy consumption up to 40% and lower maintenance operational costs. In addition, the special integrated optics will improve uniformity and light spread across your canopies.

SPECTRUM GRAPH



DISTRIBUTION CURVE FLUX



PRODUCT CODE LUMLED016

LIGHT DISTRIBUTION 100° - 120° (Beam Angle)
LIGHT SOURCE Osram & Seoul Z Power
INPUT VOLTAGE 200-400 V AC, 50-60 Hz
INPUT POWER 680 W (1.98 A @380 V AC)
EFFICACY 3.4 µmol/J
PPF 2285 µmol/s
POWER FACTOR > 0.98
DIMMING With 0-10 V Dimmer
EXTERNAL CONTROL With Lumatek or any Universal Controllers 0-10 V
DAISY CHAIN CAPALIBITY Yes
WEIGHT 8.8 Kg
DIMMENSIONS 654 x 254 x 118 mm
SPECTRUM Red + Blue
THERMAL MANAGEMENT Passive
LIFETIME L90 > 50000 hrs
WARRANTY 3 Years
IP RATING IP65
CERTIFICATIONS CE, EMC, LVD

CE · RoHS · EMI EMC CERTIFIED · LVD CERTIFIED · Plug & Play · IP65 · CONTROL TECHNOLOGY · DESIGNED & ENGINEERED BY LUMATEK IN THE UNITED KINGDOM · 3 YEAR WARRANTY

GROW OPTIMAL
BY REQUESTING
A LIGHT PLAN & REPORT

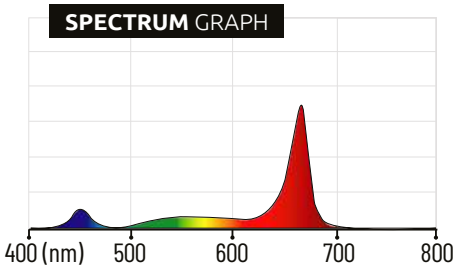
GREENHOUSE RANGE

680W GH TOP LIGHT LED (WHITE +RED)

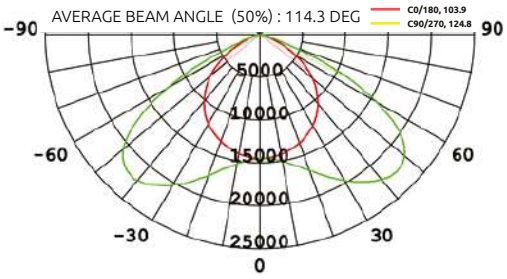
In line and with an identical casing design as the 680W GH Red + Blue, the White + Red model has an optimized Spectrum for Vegetative grow stages or low PPFD target flowering or vinery crops.

The 2.7 umol/J efficacy, 1805 umol/s PPF output and the balanced Blue, Red and beneficial Green Spectrum will help to obtain a deeper canopy penetration throughout the year.

SPECTRUM GRAPH



DISTRIBUTION CURVE FLUX



PRODUCT CODE **LUMLED017**

LIGHT DISTRIBUTION 100° - 120° (Beam Angle)
LIGHT SOURCE Osram & Seoul Z Power
INPUT VOLTAGE 200-400 V AC, 50-60 Hz
INPUT POWER 680 W (1.98 A @380 V AC)
EFFICACY 2.7 µmol/J
PPF 1805 µmol/s
POWER FACTOR > 0.98
DIMMING With 0-10 V Dimmer
EXTERNAL CONTROL With Lumatek or any Universal Controllers 0-10 V
DAISY CHAIN CAPALIBITY Yes
WEIGHT 8.8 Kg
DIMMENSIONS 654 x 254 x 118 mm
SPECTRUM White + Red
THERMAL MANAGEMENT Passive
LIFETIME L90 > 50000 hrs
WARRANTY 3 Years
IP RATING IP65
CERTIFICATIONS CE, EMC, LVD

CE RoHS EMI EMC CERTIFIED LVD CERTIFIED Plug & Play IP65 CONTROL TECHNOLOGY DESIGNED & ENGINEERED BY LUMATEK IN THE UNITED KINGDOM 3 YEAR WARRANTY

GROW OPTIMAL
BY REQUESTING
A LIGHT PLAN & REPORT

GRENHOUSE RANGE

300W GH TOP LIGHT LED (RED + BLUE)

A special slim and compact LED fixture characterized by its flexibility in Greenhouse applications

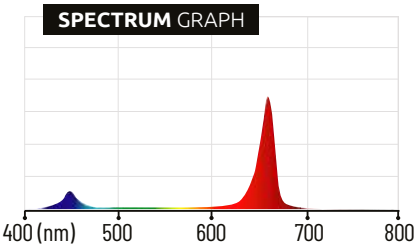
PRODUCT CODE **LUMLED018**

LIGHT DISTRIBUTION 100° - 120° (Beam Angle)
LIGHT SOURCE Osram & Domestic Diodes
INPUT VOLTAGE 200-400 V AC, 50-60 Hz
INPUT POWER 310 W (0.78 A @400 V AC)
EFFICACY 3.2 µmol/J
PPF 985 µmol/s
POWER FACTOR > 0.98
DIMMING No
EXTERNAL CONTROL No
DAISY CHAIN CAPALIBITY Yes
WEIGHT 4.2 Kg
DIMMENSIONS 1281 x 59 x 89 mm
SPECTRUM Red + Blue
THERMAL MANAGEMENT Passive
LIFETIME L90 > 50000 hrs
WARRANTY 3 Years
IP RATING IP65
CERTIFICATIONS CE, EMC, LVD

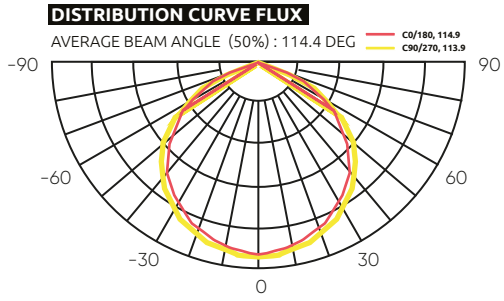
The Lumatek 300W GH Top Light LED Red+Blue with its 3.2 umol/J photon efficacy and 985 umol/s total PPF output has a linear configuration ideal for hybrid projects mixed with other LED or HID fixtures.

This units main features are uniformity improvement, light level target increase or for projects with ceiling limitations. Most commonly used in C-profile Greenhouses and for operations requiring fixture positioning adaptability.

SPECTRUM GRAPH



DISTRIBUTION CURVE FLUX



GROW OPTIMAL

BY REQUESTING
A LIGHT PLAN & REPORT

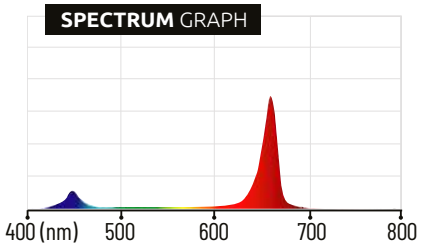
GREENHOUSE RANGE

100W GH INTERLIGHT LED (RED + BLUE)

This inter light LED Grow fixture is a very slim, creative and lean solution to install in-between your plants thanks to its bidirectional light output.

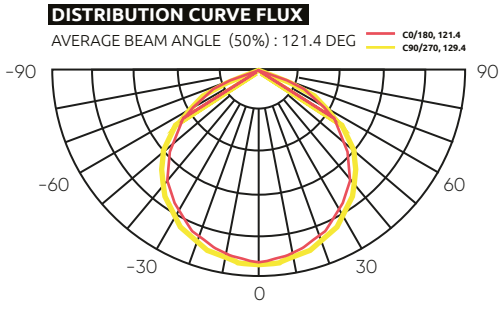
The special design will allow the under canopy individual leaves to absorb more light intensity and light quality, helping to boost and increase yield and crop quality. This 3.0 umol/J efficacy LED unit can be applied as a supplemental light between tall crops, encouraging shaded leaves, flowers and vineries to increase the rate of photosynthesis and stimulate growth efficiency. The 100W GH Interlight has plug and play installation, daisy chain capability and allows easy adjustments for optimal uniformity across each crop row.

SPECTRUM GRAPH



DISTRIBUTION CURVE FLUX

AVERAGE BEAM ANGLE (50%) : 121.4 DEG



PRODUCT CODE **LUMLED024**

LIGHT DISTRIBUTION 100° - 120° (Beam Angle)
LIGHT SOURCE Higher Spec Osram & Domestic Diodes
INPUT VOLTAGE 200-400 V AC, 50-60 Hz
INPUT POWER 105 W (0.3 A @380 V AC)
EFFICACY 3.0 µmol/J
PPF 300 µmol/s
POWER FACTOR > 0.98
DIMMING No
EXTERNAL CONTROL No
DAISY CHAIN CAPALIBITY Yes
WEIGHT 2.8 Kg
DIMMENSIONS 2300 x Ø61 mm
SPECTRUM Red + Blue
THERMAL MANAGEMENT Passive
LIFETIME L90 > 50000 hrs
WARRANTY 3 Years
IP RATING IP66
CERTIFICATIONS CE, EMC, LVD

CE · RoHS · EMI EMC CERTIFIED · LVD CERTIFIED · Plug & Play · IP66 · CONTROL TECHNOLOGY · DESIGNED & ENGINEERED BY LUMATEK IN THE UNITED KINGDOM · 3 YEAR WARRANTY

GROW OPTIMAL

BY REQUESTING
A LIGHT PLAN & REPORT

LED ACCESSORIES

LUMATEK **CONTROL PANEL PLUS** 2.0

Dual signal digital lighting controller (HID + LED) that offers precise external control of your Lumatek lighting fixtures, drivers and ballasts.

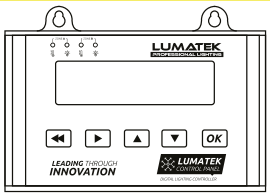
PRODUCT CODE LUMM019

FEATURES

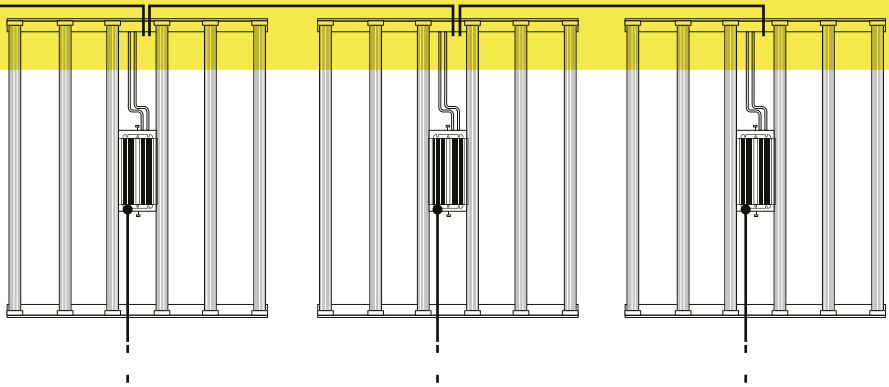
- DIMMING (1% Increments)
- Digital timing, safety control and automation
- Temperature room maintenance
- Sunrise/Sunset
- Up to 400 ballasts
- Memory backup & more...

ITEMS INCLUDED

1 x Lumatek Control Panel Plus 2.0
1 x Power adaptor and cable
2 x Temperature sensor 5 m cable
2 x HID control link cable 5 m
2 x LED control link cable



DIGITAL PANEL PLUS 2.0



Lumatek LED Driver Remote Use 5 m Extension Cables (x3) for Zeus 1000W Xtreme

PRODUCT CODE LUMM0031

Designed to connect the Zeus 1000W Xtreme PPFD CO2 driver and the LED fixture, in case the driver is used remotely and away from the fixture.

Lumatek RJ Ethernet

PRODUCT CODE LUMM0028

Designed to connect our LEDs to any Universal Controller with RJ port interface, through a signal converter 0-10 V to RJ control adaptor.

LED ACCESSORIES

LUMATEK **MASTER CONTROLLER** 3.0

Take control of your environmental grow stages to the next level. Ensure the right light quantity and intensity adjustments to maximize crop quality and yields.

PREDICTED RELEASE DATE
AUGUST 2023

PRODUCT CODE LUMM057

FEATURES

- Two Channels (Zone A & Zone B).
- 24 Hr Light Scheduler.
- Dimming Control of 1% increments (OFF, 20-100%).
- Simulate sunrise and sunset to lessen plant stress.
- Temperature sensor monitoring and control.
- Light Intensity Scheduler Mode.
- Actively increase or decrease the output light intensity (PPFD) mode.
- Temperature and humidity chart history and notification record data.
- CO2 chart history and notification record data.
- PPFD measurements, PPFD chart history and date record notification.
- SD Card for software update versions, save data and configurations.
- 3 Years Warranty.

MASTER CONTROLLER 3.0

Lumatek LED Driver Remote Use 5 m Extension Cables (x2)

PRODUCT CODE LUMM0016

Designed to connect the driver and the LED fixture, in case the driver is used remotely and away from the fixture.

Lumatek LED Daisy Chain 5 m Control Cable

PRODUCT CODE LUMM0015

Designed to link Lumatek Zeus LED fixtures together in series to be externally controlled with the Lumatek Control Panel Plus 2.0.

LED/HID PRODUCT OVERVIEW

	@230 V AC				@400 V AC								
INDOOR LED	**Efficacy [µmol/J]**	**Output PPF [µmol/s]**	**AC Power [W]**	**AC Current [A]**	**Efficacy [µmol/J]**	**Output PPF [µmol/s]**	**AC Power [W]**	**AC Current [A]**	**L x W x H [mm]**	**Weight [Kg]**	**Ingress Protection**	**Lifetime [L90]**	**Warranty [Years]**
i850W Top Light Full -Spectrum LED	2.6	2250	857	3.7	2.7	2295	850	2.1	730 x 325 x 112	13.0	IP65	>60000	5
ZEUS 1000W Xtreme CO2	2.9	2925	1021	4.6	3.0	3113	1020	2.7	1091 x 1182 x 106	18.0	IP65	>60000	5
ZEUS 1000W PRO	2.9	2945	1025	48	3.0	3113	1023	2.9	1700 x 1219x 48	13.5	IP65	>60000	5
ZEUS 600W PRO 2.9	2.9	1770	615	2.9	3.0	1875	612	1.6	1091 x 1182 x 52	13.5	IP65	>60000	5
ZEUS 465W PRO 2.9	2.9	1353	475	2.2	3.0	1395	465	1.2	998 x 900 x 52	10.0	IP65	>60000	5
ZEUS 600W 2.6	2.6	1570	615	2.7	2.7	1650	612	1.7	1091 x 1182 x 52	13.5	IP65	>60000	5
ATS300W PRO	2.7	816	310	1.3	-	-	-	-	560 x 560 x 72	5.20	IP65	> 60000	3
ATS200W PRO	2.5	508	205	0.9	-	-	-	-	525 x 525 x 72	4.00	IP65	> 60000	3
100W Full-Spectrum Individual Bar	2.9	295	102	0.5	-	-	-	-	1148 x 20 x 53	1.10	IP65	>60000	5
30W UV LED Bar	-	-	30	0.1	-	-	-	-	1000 x 48 x 42	1.20	IP65	>8500	1
VF120W	2.4	308	130	0.6	2.5	320	128	0.3	1207 x 521 x 21	2.10	IP65	> 60000	3
VF90W	2.4	244	103	0.4	2.5	250	100	0.2	1207 x 521 x 21	1.72	IP65	> 60000	3

GREENHOUSE LED	**Efficacy [µmol/J]**	**Output PPF [µmol/s]**	**AC Power [W]**	**AC Current [A]**	**Efficacy [µmol/J]**	**Output PPF [µmol/s]**	**AC Power [W]**	**AC Current [A]**	**L x W x H [mm]**	**Weight [Kg]**	**Ingress Protection**	**Lifetime [L90]**	**Warranty [Years]**
1050W GH TOP LIGHT LED (Red + Blue)	-	-	-	-	3.5	3675	1054	2.7	730 x 325 x 112	13.0	IP65	>50000	3
680W GH TOP LIGHT LED (Red + Blue)	-	-	-	-	3.4	2285	670	2.0	654 x 254 x 118	8.80	IP65	>50000	3
680W GH TOP LIGHT LED (White + Red)	-	-	-	-	2.7	1805	670	2.0	654 x 254 x 118	8.80	IP65	>50000	3
300W GH TOP LIGHT LED (Red + Blue)	-	-	-	-	3.2	985	310	0.8	1281 x 59 x 89	4.20	IP65	>50000	3
100W GH INTER LIGHT LED (Red + Blue)	-	-	-	-	3.0	300	105	0.3	2300 xØ61	2.80	IP66	>50000	3

HID RANGE	**Efficacy [µmol/J]**	**Output PPF [µmol/s]**	**AC Power [W]**	**AC Current [A]**	**Efficacy [µmol/J]**	**Output PPF [µmol/s]**	**AC Power [W]**	**AC Current [A]**	**L x W x H [mm]**	**Weight [Kg]**	**Ingress Protection**	**Lifetime [L90]**	**Warranty [Years]**
AURORA 315W FIXTURE													
CMH LAMP CTT 3100 K	2.1	650	315	1.5	-	-	-	-	241 x 120 x 496	3.1	IP20	14000	3
CMH LAMP CTT 4200 K	2.0	615	315	1.5	-	-	-	-					
1000W 400V HPS DE C FIXTURE													
1000W HPS DE LAMP	-	-	-	-	2.1	2100	1000	2.6	279 x 231 x 469	4.7	IP20	24000	3
600W/630W 400V HPS/CMHDE C Fixture													
600W HPS DE LAMP	-	-	-	-	2.0	1200	610	1.6					
630W CMH DE LAMP CTT 3100 K	-	-	-	-	2.0	1250	630	1.7	279 x 231 x 469	4.4	IP20	12000	3
630W CMH DE LAMP CTT 4200 K	-	-	-	-	1.9	1200	630	1.7					

FIND OUT MORE AT

WWW.LUMATEK-LIGHTING.COM

LUMATEK

GROW LIGHT STRATEGIES

The Lumatek **"LED Grow Light Strategies"** is an extensive, in-depth and **comprehensive document made by our experienced light planners and product development department**, to ensure you are making the most out of your Lumatek set-up performance for every product and growth stage.

This detailed grow strategy blueprint was designed by Lumatek for more experienced growers that aim for continuous process perfection and growth efficiency, as well as for the hobby grower that is just starting out. In both cases, to help growers grow with the best Led Grow Lights in the market. Lumatek of course!

SCAN TO KNOW MORE

GROW LIGHT STRATEGIES

Medical Cannabis

Indoor Top and Supplemental Light Growing Stages LED Grow Light Strategies

By LUMATEK

		i850W Top Light Full -Spectrum LED (400V)		100W Full -Spectrum Individual Supplemental Light LED Bar		LUMATEK 30W UV LED Bar *(To apply at the final flowering stage.)*	
							
	Efficacy | PPF	2.7 $\mu mol.J^{-1}$	2295 $\mu mol.s^{-1}$	2.9 $\mu mol.J^{-1}$	295 $\mu mol.s^{-1}$	NA	NA
	Footprint	1.2 x 2.4 m (*) (4 units)		1.2 x 0.25 m (*) (1 units)		Minimum 2 units in grow areas above 1.4 x 1.4 m .	
Seedling Light Duration 24 ON / 0 OFF until cotyledons are open. 18 ON / 6 OFF seedlings.	Intensity (PPFD)	NA	NA	100-300 $\mu mol.m^{-2}s^{-1}$	500-800 $\mu mol.m^{-2}s^{-1}$	NA	NA
	Distance canopy to the light	NA	NA	0.5 m	0.3 m	NA	NA
	Dimming (Power Consumption)	NA	NA	100% (103 W)	100% (103 W)	NA	NA
	Supplemental CO_2 (ppm)	NA	NA	No	Yes (± 800 ppm)	NA	NA
Clones Stage Light Duration 18 ON / 6 OFF	Intensity (PPFD)	NA	NA	75-150 $\mu mol.m^{-2}s^{-1}$	500-800 $\mu mol.m^{-2}s^{-1}$	NA	NA
	Distance canopy to the light	NA	NA	0.5 m	0.3 m	NA	NA
	Dimming (Power Consumption)	NA	NA	50% (51 W)	100% (103 W)	NA	NA
	Supplemental CO_2 (ppm)	NA	NA	No	Yes (± 800 ppm)	NA	NA
Mother´s Light Duration 18 ON / 6 OFF	Intensity (PPFD)	400-500 $\mu mol.m^{-2}s^{-1}$	500-600 $\mu mol.m^{-2}s^{-1}$	400-500 $\mu mol.m^{-2}s^{-1}$	500-600 $\mu mol.m^{-2}s^{-1}$	NA	NA
	Distance canopy to the light	1 m	0.8 m	NA	NA	NA	NA
	Dimming (Power Consumption)	25% -852 W (4 x 213 W)	25% -852 W (4 x 213 W)	NA	NA	NA	NA
	Supplemental CO_2 (ppm)	No	No	NA	NA	NA	NA
Vegetative Stage Light Duration 18 ON / 6 OFF	Intensity (PPFD)	400-600 $\mu mol.m^{-2}s^{-1}$	800-1000 $\mu mol.m^{-2}s^{-1}$	400-600 $\mu mol.m^{-2}s^{-1}$	800-1000 $\mu mol.m^{-2}s^{-1}$	NA	NA
	Distance canopy to the light	1 m	1 m	NA	NA	NA	NA
	Dimming (Power Consumption)	25% -852 W (4 x 213 W)	50% -1700 W (4 x 425W)	NA	NA	NA	NA
	Supplemental CO_2 (ppm)	No	Yes (± 1100 ppm)	NA	NA	NA	NA
Flowering Stage Light Duration 12 ON / 12 OFF	Intensity (PPFD)	800-1000 $\mu mol.m^{-2}s^{-1}$	1000-1400 $\mu mol.m^{-2}s^{-1}$	800-1000 $\mu mol.m^{-2}s^{-1}$	1000-1400 $\mu mol.m^{-2}s^{-1}$	Install together with Zeus 600W 2.6 or above models.	
	Distance canopy to the light	1 m	1 m	NA	NA	Same height as the installed Zeus 600W or above models.	
	Dimming (Power Consumption)	75% -2552 W (4 x 638 W)	100% -3400 W (4 x 850 W)	NA	NA	NA	NA
	Supplemental CO_2 (ppm)	No	Yes (± 1800 ppm)	NA	NA	NA	NA

(*) For higher coverage areas and higher heights, supplemental CO_2 may not be necessary.

Greenhouse Growing Stages LED Grow Light Strategies

By LUMATEK

		1050W GH TOP LIGHT LED (Red + Blue)		680W GH TOP LIGHT LED (Red + Blue)		680W GH TOP LIGHT LED (White + Red)		300W GH TOP LIGHT LED (Red + Blue)		100W GH Inter Light LED R+B	
											
	Efficacy | PPF	3.4 $\mu mol.J^{-1}$	3570 $\mu mol.s^{-1}$	3.4 $\mu mol.J^{-1}$	2285 $\mu mol.s^{-1}$	2.9 $\mu mol.J^{-1}$	1945 $\mu mol.s^{-1}$	3.2 $\mu mol.J^{-1}$	985 $\mu mol.s^{-1}$	3.0 $\mu mol.J^{-1}$	300 $\mu mol.s^{-1}$
	Footprint	1.2 x 2.4 m (*)		1.2 x 2.4 m (*)		1.2 x 2.4 m (*)		1.2 x 2.4 m (*)		1.2 x 2.4 m	
Mother´s Light Duration 18 ON / 6 OFF	Intensity (PPFD)	400-500 $\mu mol.m^{-2}s^{-1}$	500-600 $\mu mol.m^{-2}s^{-1}$	400-500 $\mu mol.m^{-2}s^{-1}$	500-600 $\mu mol.m^{-2}s^{-1}$	400-500 $\mu mol.m^{-2}s^{-1}$	500-600 $\mu mol.m^{-2}s^{-1}$	400-500 $\mu mol.m^{-2}s^{-1}$	500-600 $\mu mol.m^{-2}s^{-1}$	400-500 $\mu mol.m^{-2}s^{-1}$	500-600 $\mu mol.m^{-2}s^{-1}$
	Number of fixtures	2	2	4	4	6	6	8	8	Between plants and the leaves	Between plants and the leaves
	Distance canopy to the light	1 m	0.8 m	1 m	0.8 m	1 m	0.8 m	0.6 m	0.5 m	NA	NA
	Dimming (Power Consumption)	25% -526 W (2 x 263 W)	25% -526 W (2 x 263 W)	25% -680 W (4 x 170 W)	25% -680 W (4 x 170 W)	25% -1020 W (6 x 170 W)	25% -1020 W (6 x 170 W)	50% -1240 W (8 x 155 W)	50% -1240 W (8 x 155 W)	NA	NA
Vegetative Stage Light Duration 18 ON / 6 OFF	Intensity (PPFD)	400-600 $\mu mol.m^{-2}s^{-1}$	800-1000 $\mu mol.m^{-2}s^{-1}$	400-600 $\mu mol.m^{-2}s^{-1}$	800-1000 $\mu mol.m^{-2}s^{-1}$	400-600 $\mu mol.m^{-2}s^{-1}$	800-1000 $\mu mol.m^{-2}s^{-1}$	400-600 $\mu mol.m^{-2}s^{-1}$	800-1000 $\mu mol.m^{-2}s^{-1}$	400-600 $\mu mol.m^{-2}s^{-1}$	800-1000 $\mu mol.m^{-2}s^{-1}$
	Number of fixtures	2	2	4	4	6	6	8	8	1	1
	Distance canopy to the light	1 m	1 m	1 m	1 m	1 m	1 m	0.6 m	0.6 m	Between plants and the leaves	Between plants and the leaves
	Dimming (Power Consumption)	25% -526 W (2 x 263 W)	75% -1576 W (2 x 788 W)	25% -680 W (4 x 170 W)	75% -2040 W (4 x 510 W)	25% -1020 W (6 x 170 W)	75% -3060 W (6 x 510 W)	50% -1240 W (8 x 155 W)	100% -2480 W (8 x 310 W)	NA	NA
	Supplemental CO_2 (ppm)	No	Yes (± 1300 ppm)	No	Yes (± 1300 ppm)	No	Yes (± 1400 ppm)	No	Yes (± 1100 ppm)	NA	NA
Flowering Stage Light Duration 12 ON / 12 OFF	Intensity (PPFD)	800-1000 $\mu mol.m^{-2}s^{-1}$	1000-1400 $\mu mol.m^{-2}s^{-1}$	800-1000 $\mu mol.m^{-2}s^{-1}$	1000-1400 $\mu mol.m^{-2}s^{-1}$	800-1000 $\mu mol.m^{-2}s^{-1}$	1000-1400 $\mu mol.m^{-2}s^{-1}$	800-1000 $\mu mol.m^{-2}s^{-1}$	1000-1400 $\mu mol.m^{-2}s^{-1}$	800-1000 $\mu mol.m^{-2}s^{-1}$	1000-1400 $\mu mol.m^{-2}s^{-1}$
	Number of fixtures	2	2	4	4	6	6	8	8	1	1
	Distance canopy to the light	1 m	1 m	1 m	1 m	1 m	1 m	0.6 m	0.4 m	Between plants and the leaves	Between plants and the leaves
	Dimming (Power Consumption)	50% -1050 W (2 x 525 W)	100% -2100 W (2 x 1050 W)	50% -1360 W (4 x 340 W)	100% -2720 W (4 x 680 W)	50% -2040 W (6 x 340 W)	100% -4080 W (6 x 680 W)	100% -2480 W (8 x 310 W)	100% -2480 W (8 x 310 W)	NA	NA
	Supplemental CO_2 (ppm)	No	Yes (± 1700 ppm)	No	Yes (± 2000 ppm)	No	Yes (± 2000 ppm)	No	Yes (± 1500 ppm)	NA	NA

(*) For higher coverage areas and higher heights, supplemental CO_2 may not be necessary.

Indoor Growing Stages LED Grow Light Strategies *By LUMATEK*		Zeus 1000W Xtreme CO2		Zeus 1000W PRO		Zeus 600W PRO 2.9		Zeus 600W 2.6		Zeus 465W PRO 2.9	
											
	Efficacy | PPF	$2.9\ \mu mol.J^{-1}$	$2925\ \mu mol.s^{-1}$	$2.9\ \mu mol.J^{-1}$	$2925\ \mu mol.s^{-1}$	$2.9\ \mu mol.J^{-1}$	$1770\ \mu mol.s^{-1}$	$2.6\ \mu mol.J^{-1}$	$1570\ \mu mol.s^{-1}$	$2.9\ \mu mol.J^{-1}$	$1353\ \mu mol.s^{-1}$
	Footprint	1.5 x 1.5 m (*)		1.5 x 2.0 m (*)		1.4 x 1.4 m (*)		1.4 x 1.4 m (*)		1.2 x 1.2 m (*)	
Seedling	Intensity (PPFD)	100-300 $\mu mol.m^{-2}s^{-1}$	500-800 $\mu mol.m^{-2}s^{-1}$	100-300 $\mu mol.m^{-2}s^{-1}$	500-800 $\mu mol.m^{-2}s^{-1}$	100-300 $\mu mol.m^{-2}s^{-1}$	500-800 $\mu mol.m^{-2}s^{-1}$	100-300 $\mu mol.m^{-2}s^{-1}$	500-800 $\mu mol.m^{-2}s^{-1}$	100-300 $\mu mol.m^{-2}s^{-1}$	500-800 $\mu mol.m^{-2}s^{-1}$
Light Quality Full Spectrum	Distance canopy to the light	1.5 m	1.5 m	1.5 m	1.5 m	1 m	1 m	1 m	0.5 m	1 m	<0.3 m
Light Duration 24 ON / 0 OFF until cotyledons are open.	Dimming (Power Consumption)	25% (256 W)	75% (769 W)	25% (256 W)	100% (1025 W)	25% (155 W)	100% (620 W)	25% (155 W)	100% (620W)	25% (119 W)	75% (356 W)
18 ON / 6 OFF seedlings.	Supplemental CO_2 (ppm)	No	Yes (± 800 ppm)	No	Yes (± 800 ppm)	No	Yes (± 800 ppm)	No	Yes (± 800 ppm)	No	Yes (± 800 ppm)
Clones	Intensity (PPFD)	75-150 $\mu mol.m^{-2}s^{-1}$	500-800 $\mu mol.m^{-2}s^{-1}$	75-150 $\mu mol.m^{-2}s^{-1}$	500-800 $\mu mol.m^{-2}s^{-1}$	75-150 $\mu mol.m^{-2}s^{-1}$	500-800 $\mu mol.m^{-2}s^{-1}$	75-150 $\mu mol.m^{-2}s^{-1}$	500-800 $\mu mol.m^{-2}s^{-1}$	75-150 $\mu mol.m^{-2}s^{-1}$	500-800 $\mu mol.m^{-2}s^{-1}$
Light Quality Full Spectrum	Distance canopy to the light	1.5 m	1.5 m	1.5 m	1.5 m	0.8 m	1 m	0.8 m	0.5 m	1 m	<0.3 m
Light Duration 18 ON / 6 OFF	Dimming (Power Consumption)	25% (256 W)	100% (1025 W)	25% (256 W)	100% (1025 W)	25% (155 W)	100% (620 W)	25% (155 W)	100% (620W)	25% (119 W)	75% (356 W)
	Supplemental CO_2 (ppm)	No	Yes (± 800 ppm)	No	Yes (± 800 ppm)	No	Yes (± 800 ppm)	No	Yes (± 800 ppm)	No	Yes (± 800 ppm)
Mother's	Intensity (PPFD)	400-500 $\mu mol.m^{-2}s^{-1}$	500-600 $\mu mol.m^{-2}s^{-1}$	400-500 $\mu mol.m^{-2}s^{-1}$	500-600 $\mu mol.m^{-2}s^{-1}$	400-500 $\mu mol.m^{-2}s^{-1}$	500-600 $\mu mol.m^{-2}s^{-1}$	400-500 $\mu mol.m^{-2}s^{-1}$	500-600 $\mu mol.m^{-2}s^{-1}$	400-500 $\mu mol.m^{-2}s^{-1}$	500-600 $\mu mol.m^{-2}s^{-1}$
Light Quality Full Spectrum	Distance canopy to the light	1 m	0.50 m	1 m	0.5 m	0.5 m	1 m	0.5 m	0.5 m	0.5 m	0.5 m
Light Duration 18 ON / 6 OFF	Dimming (Power Consumption)	50% (512 W)	50% (512 W)	75% (769 W)	75% (769 W)	75% (465 W)	100% (620 W)	75% (465 W)	100% (620W)	75% (356 W)	100% (475 W)
Vegetative	Intensity (PPFD)	400-600 $\mu mol.m^{-2}s^{-1}$	800-1000 $\mu mol.m^{-2}s^{-1}$	400-600 $\mu mol.m^{-2}s^{-1}$	800-1000 $\mu mol.m^{-2}s^{-1}$	400-600 $\mu mol.m^{-2}s^{-1}$	800-1000 $\mu mol.m^{-2}s^{-1}$	400-600 $\mu mol.m^{-2}s^{-1}$	800-1000 $\mu mol.m^{-2}s^{-1}$	400-600 $\mu mol.m^{-2}s^{-1}$	800-1000 $\mu mol.m^{-2}s^{-1}$
Light Quality Full Spectrum	Distance canopy to the light	1 m	0.52 m	1 m	0.5 m	0.5 m	0.3 m	0.5 m	<0.3 m	0.5 m	<0.3 m
Light Duration 18 ON / 6 OFF	Dimming (Power Consumption)	50% (512 W)	75% (769 W)	75% (769 W)	100% (1025 W)	75% (465 W)	100% (620 W)	75% (465 W)	100% (620 W)	75% (356 W)	100% (475 W)
	Supplemental CO_2 (ppm)	No	Yes (± 1100 ppm)	No	Yes (± 1100 ppm)	No	Yes (± 1100 ppm)	No	Yes (± 1100 ppm)	No	Yes (± 1100 ppm)
Flowering	Intensity (PPFD)	800-1000 $\mu mol.m^{-2}s^{-1}$	1000-1400 $\mu mol.m^{-2}s^{-1}$	800-1000 $\mu mol.m^{-2}s^{-1}$	1000-1400 $\mu mol.m^{-2}s^{-1}$	800-1000 $\mu mol.m^{-2}s^{-1}$	1000-1400 $\mu mol.m^{-2}s^{-1}$	800-1000 $\mu mol.m^{-2}s^{-1}$	1000-1400 $\mu mol.m^{-2}s^{-1}$	800-1000 $\mu mol.m^{-2}s^{-1}$	1000-1400 $\mu mol.m^{-2}s^{-1}$
Light Quality Full Spectrum	Distance canopy to the light	1 m	0.3 m	0.6 m	0.3 m	0.4 m	<0.3 m	0.3 m	0.1 m	0.3 m	<0.3 m
Light Duration 12 ON /12 OFF	Dimming (Power Consumption)	100% (1025 W)	100% (1025 W)	100% (1025 W)	100% (1025 W)	100% (620 W)	100% (620 W)	100% (620 W)	100% (620 W)	100% (475 W)	100% (475 W)
	Supplemental CO_2 (ppm)	No	Yes (± 1900 ppm)	No	Yes (± 1300 ppm)	No	Yes (± 1300 ppm)	No	Yes (± 1200 ppm)	No	Yes (± 1200 ppm)

(*) For higher coverage areas and higher heights, supplemental CO_2 may not be necessary.

Indoor Growing Stages LED Grow Light Strategies *By LUMATEK*		ATS300W PRO		ATS200W PRO		ATS300W		ATS200W		VF120W		VF90W	
													
	Efficacy | PPF	$2.7\ \mu mol.J^{-1}$	$816\ \mu mol.s^{-1}$	$2.5\ \mu mol.J^{-1}$	$508\ \mu mol.s^{-1}$	$2.3\ \mu mol.J^{-1}$	$690\ \mu mol.s^{-1}$	$2.3\ \mu mol.J^{-1}$	$460\ \mu mol.s^{-1}$	$2.4\ \mu mol.J^{-1}$	$308\ \mu mol.s^{-1}$	$2.4\ \mu mol.J^{-1}$	$244\ \mu mol.s^{-1}$
	Footprint	Up to 1 x 1 m (*)		Up to 0.8 x 0.8 m (*)		0.8 x 0.8 m (*)		0.8 x 0.8m (*)		1.2 x 0.6 m (*)		1.2 x 0.6 m (*)	
Seedling Stage	Intensity (PPFD)	100-300 $\mu mol.m^{-2}s^{-1}$	500-800 $\mu mol.m^{-2}s^{-1}$	100-300 $\mu mol.m^{-2}s^{-1}$	500-800 $\mu mol.m^{-2}s^{-1}$	100-300 $\mu mol.m^{-2}s^{-1}$	500-800 $\mu mol.m^{-2}s^{-1}$	100-300 $\mu mol.m^{-2}s^{-1}$	500-800 $\mu mol.m^{-2}s^{-1}$	100-300 $\mu mol.m^{-2}s^{-1}$	500-800 $\mu mol.m^{-2}s^{-1}$	100-300 $\mu mol.m^{-2}s^{-1}$	500-800 $\mu mol.m^{-2}s^{-1}$
Light Quality Full Spectrum	Distance canopy to the light	1 m	0.5 m	1 m	0.3 m	0.7 m	0.3 m	0.7 m	0.3 m	0.5 m	<0.1 m	0.5 m	<0.1 m
Light Duration 24 ON / 0 OFF until cotyledons are open.	Dimming (Power Consumption)	50% (155 W)	100% (310 W)	50% (104 W)	100% (208 W)	50% (150 W)	75% (225 W)	100% (200 W)	100% (200 W)	100% (130 W)	100% (130 W)	100% (90 W)	100% (90 W)
18 ON / 6 OFF seedlings.	Supplemental CO_2 (ppm)	No	Yes (± 800 ppm)	No	Yes (± 800 ppm)	No	Yes (± 800 ppm)	No	Yes (± 800 ppm)	No	Yes (± 600 ppm)	No	Yes (± 600 ppm)
Clones Stage	Intensity (PPFD)	75-150 $\mu mol.m^{-2}s^{-1}$	500-800 $\mu mol.m^{-2}s^{-1}$	75-150 $\mu mol.m^{-2}s^{-1}$	500-800 $\mu mol.m^{-2}s^{-1}$	75-150 $\mu mol.m^{-2}s^{-1}$	500-800 $\mu mol.m^{-2}s^{-1}$	75-150 $\mu mol.m^{-2}s^{-1}$	500-800 $\mu mol.m^{-2}s^{-1}$	75-150 $\mu mol.m^{-2}s^{-1}$	500-800 $\mu mol.m^{-2}s^{-1}$	75-150 $\mu mol.m^{-2}s^{-1}$	500-800 $\mu mol.m^{-2}s^{-1}$
Light Quality Full Spectrum	Distance canopy to the light	1 m	0.5 m	1 m	0.3 m	0.7 m	0.3 m	0.7 m	0.3 m	0.3 m	<0.1 m	0.3 m	<0.1 m
Light Duration 18 ON / 6 OFF	Dimming (Power Consumption)	25% (78 W)	100% (310 W)	25% (52 W)	100% (208 W)	50% (150 W)	75% (225 W)	100% (200 W)	100% (200 W)	50% (65 W)	100% (130 W)	100% (90 W)	100% (90 W)
	Supplemental CO_2 (ppm)	No	Yes (± 800 ppm)	No	Yes (± 800 ppm)	No	Yes (± 800 ppm)	No	Yes (± 800 ppm)	No	Yes (± 600 ppm)	No	Yes (± 600 ppm)
Mother's	Intensity (PPFD)	400-500 $\mu mol.m^{-2}s^{-1}$	500-600 $\mu mol.m^{-2}s^{-1}$	400-500 $\mu mol.m^{-2}s^{-1}$	500-600 $\mu mol.m^{-2}s^{-1}$	400-500 $\mu mol.m^{-2}s^{-1}$	500-600 $\mu mol.m^{-2}s^{-1}$	400-500 $\mu mol.m^{-2}s^{-1}$	500-600 $\mu mol.m^{-2}s^{-1}$	400-500 $\mu mol.m^{-2}s^{-1}$	500-600 $\mu mol.m^{-2}s^{-1}$	400-500 $\mu mol.m^{-2}s^{-1}$	500-600 $\mu mol.m^{-2}s^{-1}$
Light Quality Full Spectrum	Distance canopy to the light	0.5 m	0.5 m	0.3 m	0.3 m	0.3 m	0.3 m	0.3 m	0.3 m	NA	NA	NA	NA
Light Duration 18 ON / 6 OFF	Dimming (Power Consumption)	50% (155 W)	100% (310 W)	50% (104 W)	100% (208 W)	50% (150 W)	75% (225 W)	75% (150 W)	100% (200 W)	NA	NA	NA	NA
Vegetative Stage	Intensity (PPFD)	400-600 $\mu mol.m^{-2}s^{-1}$	800-1000 $\mu mol.m^{-2}s^{-1}$	400-600 $\mu mol.m^{-2}s^{-1}$	800-1000 $\mu mol.m^{-2}s^{-1}$	400-600 $\mu mol.m^{-2}s^{-1}$	800-1000 $\mu mol.m^{-2}s^{-1}$	400-600 $\mu mol.m^{-2}s^{-1}$	800-1000 $\mu mol.m^{-2}s^{-1}$	400-600 $\mu mol.m^{-2}s^{-1}$	800-1000 $\mu mol.m^{-2}s^{-1}$	400-600 $\mu mol.m^{-2}s^{-1}$	800-1000 $\mu mol.m^{-2}s^{-1}$
Light Quality Full Spectrum	Distance canopy to the light	0.5 m	0.3 m	0.5 m	<0.2 m	0.5 m	0.3 m	0.3 m	0.15 m	NA	NA	NA	NA
Light Duration 18 ON /6 OFF	Dimming (Power Consumption)	100% (310 W)	100% (310 W)	100% (208 W)	100% (208 W)	100% (300 W)	100% (300 W)	100% (200 W)	100% (200 W)	NA	NA	NA	NA
	Supplemental CO_2 (ppm)	No	Yes (± 1200 ppm)	No	Yes (± 1100 ppm)	No	Yes (± 1100 ppm)	No	Yes (± 1200 ppm)	NA	NA	NA	NA
Flowering Stage	Intensity (PPFD)	800-1000 $\mu mol.m^{-2}s^{-1}$	1000-1400 $\mu mol.m^{-2}s^{-1}$	800-1000 $\mu mol.m^{-2}s^{-1}$	1000-1400 $\mu mol.m^{-2}s^{-1}$	800-1000 $\mu mol.m^{-2}s^{-1}$	1000-1400 $\mu mol.m^{-2}s^{-1}$	800-1000 $\mu mol.m^{-2}s^{-1}$	1000-1400 $\mu mol.m^{-2}s^{-1}$	800-1000 $\mu mol.m^{-2}s^{-1}$	1000-1400 $\mu mol.m^{-2}s^{-1}$	800-1000 $\mu mol.m^{-2}s^{-1}$	1000-1400 $\mu mol.m^{-2}s^{-1}$
Light Quality Full Spectrum	Distance canopy to the light	0.4 m	<0.3 m	0.3 m	0.1 m	0.4 m	0.15 m	0.3 m	<0.1 m	NA	NA	NA	NA
Light Duration 12 ON /12 OFF	Dimming (Power Consumption)	100% (310 W)	100% (310 W)	100% (208 W)	100% (208 W)	100% (300 W)	100% (300 W)	100% (200 W)	100% (200 W)	NA	NA	NA	NA
	Supplemental CO_2 (ppm)	No	Yes (± 1400 ppm)	No	Yes (± 1200 ppm)	No	Yes (± 1700 ppm)	No	Yes (± 1400 ppm)	NA	NA	NA	NA

(*) For higher coverage areas and higher heights, supplemental CO_2 may not be necessary.

GROW LIGHT STRATEGIES

Tomatoes

Greenhouse Growing Tomato Stages LED Grow Light Strategies

By LUMATEK

		1050W GH TOP LIGHT LED (Red + Blue)		680W GH TOP LIGHT LED (Red + Blue)		680W GH TOP LIGHT LED (White + Red)		300W GH TOP LIGHT LED (Red + Blue)		100W GH Inter Light LED (Red + Blue)	
											
Efficacy | PPF		3.4 $\mu mol.J^{-1}$	3570 $\mu mol.s^{-1}$	3.4 $\mu mol.J^{-1}$	2285 $\mu mol.s^{-1}$	2.9 $\mu mol.J^{-1}$	1945 $\mu mol.s^{-1}$	3.2 $\mu mol.J^{-1}$	985 $\mu mol.s^{-1}$	3.0 $\mu mol.J^{-1}$	300 $\mu mol.s^{-1}$
Average Inside Greenhouse DLI (Winter)		2 $mol.m^{-2}d^{-1}$ *Netherlands*	20 $mol.m^{-2}d^{-1}$ *Spain*	2 $mol.m^{-2}d^{-1}$ *Netherlands*	20 $mol.m^{-2}d^{-1}$ *Spain*	2 $mol.m^{-2}d^{-1}$ *Netherlands*	20 $mol.m^{-2}d^{-1}$ *Spain*	2 $mol.m^{-2}d^{-1}$ *Netherlands*	20 $mol.m^{-2}d^{-1}$ *Spain*	NA	NA
Seedling Supplemental Light Duration 18 ON / 6 OFF	Daily Light Integral (DLI) Tomato requirements (Min. | Max.)	13 $mol.m^{-2}d^{-1}$	16 $mol.m^{-2}d^{-1}$	13 $mol.m^{-2}d^{-1}$	16 $mol.m^{-2}d^{-1}$	13 $mol.m^{-2}d^{-1}$	16 $mol.m^{-2}d^{-1}$	13 $mol.m^{-2}d^{-1}$	16 $mol.m^{-2}d^{-1}$	NA	NA
	Supplemental DLI Needed	11 $mol.m^{-2}d^{-1}$	No need	11 $mol.m^{-2}d^{-1}$	No need	11 $mol.m^{-2}d^{-1}$	No need	11 $mol.m^{-2}d^{-1}$	No need	NA	NA
	Supplemental Light Intensity Needed (PPFD)	170 $\mu mol.m^{-2}s^{-1}$	No need	170 $\mu mol.m^{-2}s^{-1}$	No need	170 $\mu mol.m^{-2}s^{-1}$	No need	170 $\mu mol.m^{-2}s^{-1}$	No need	NA	NA
	Measured Field (*)	4 (A) x 3 (B) m	NA	4 (A) x 2 (B) m	NA	4 (A) x 1.4 (B) m	NA	1.3 (A) x 2.5 (B) m	NA	NA	NA
	Canopy Distance | Uniformity	3 (C) m | 94%	NA	2 (C) m | 96%	NA	2 (C) m | 98%	NA	2 (C) m | 98%	NA	NA	NA
	Dimming (Power Consumption)	60% - 630 W	0% - 0 W	60% - 410 W	NA	60% - 410 W	NA	60% - 186 W	NA	NA	NA
Grafting Supplemental Light Duration 18 ON /6 OFF	Daily Light Integral (DLI) requirements (Min. | Max.)	5 $mol.m^{-2}d^{-1}$	7 $mol.m^{-2}d^{-1}$	5 $mol.m^{-2}d^{-1}$	7 $mol.m^{-2}d^{-1}$	5 $mol.m^{-2}d^{-1}$	7 $mol.m^{-2}d^{-1}$	5 $mol.m^{-2}d^{-1}$	7 $mol.m^{-2}d^{-1}$	NA	NA
	Supplemental DLI Needed	3 $mol.m^{-2}d^{-1}$	No need	3 $mol.m^{-2}d^{-1}$	No need	3 $mol.m^{-2}d^{-1}$	No need	3 $mol.m^{-2}d^{-1}$	No need	NA	NA
	Supplemental Light Intensity Needed (PPFD)	50 $\mu mol.m^{-2}s^{-1}$	No need	50 $\mu mol.m^{-2}s^{-1}$	No need	50 $\mu mol.m^{-2}s^{-1}$	No need	50 $\mu mol.m^{-2}s^{-1}$	No need	NA	NA
	Measured Field (*)	4 (A) x 3 (B) m	NA	4 (A) x 2 (B) m	NA	4 (A) x 1.4 (B) m	NA	1.3 (A) x 2.5 (B) m	NA	NA	NA
	Canopy Distance | Uniformity	3 (C) m | 94%	NA	2 (C) m | 96%	NA	2 (C) m | 98%	NA	2 (C) m | 98%	NA	NA	NA
	Dimming (Power Consumption)	20% - 210 W	0% - 0 W	20% - 136 W	0% - 0 W	20% - 136 W	0% - 0 W	20% - 62 W	0% - 0 W	NA	NA
Production Supplemental Light Duration 18 ON / 6 OFF	Daily Light Integral (DLI) requirements (Min. | Max.)	20 $mol.m^{-2}d^{-1}$	50 $mol.m^{-2}d^{-1}$	20 $mol.m^{-2}d^{-1}$	50 $mol.m^{-2}d^{-1}$	20 $mol.m^{-2}d^{-1}$	50 $mol.m^{-2}d^{-1}$	20 $mol.m^{-2}d^{-1}$	50 $mol.m^{-2}d^{-1}$	20 $mol.m^{-2}d^{-1}$	50 $mol.m^{-2}d^{-1}$
	Supplemental DLI Needed	18 $mol.m^{-2}d^{-1}$	30 $mol.m^{-2}d^{-1}$	18 $mol.m^{-2}d^{-1}$	30 $mol.m^{-2}d^{-1}$	18 $mol.m^{-2}d^{-1}$	30 $mol.m^{-2}d^{-1}$	18 $mol.m^{-2}d^{-1}$	30 $mol.m^{-2}d^{-1}$	18 $mol.m^{-2}d^{-1}$	30 $mol.m^{-2}d^{-1}$
	Supplemental Light Intensity Needed (PPFD)	280 $\mu mol.m^{-2}s^{-1}$	450 $\mu mol.m^{-2}s^{-1}$	280 $\mu mol.m^{-2}s^{-1}$	450 $\mu mol.m^{-2}s^{-1}$	280 $\mu mol.m^{-2}s^{-1}$	450 $\mu mol.m^{-2}s^{-1}$	280 $\mu mol.m^{-2}s^{-1}$	450 $\mu mol.m^{-2}s^{-1}$	280 $\mu mol.m^{-2}s^{-1}$	450 $\mu mol.m^{-2}s^{-1}$
	Measured Field (*)	4 (A) x 3 (B) m	4 (A) x 1.5 (B) m	4 (A) x 2 (B) m	4 (A) x 1 (B) m	4 (A) x 1.4 (B) m	4 (A) x 0.6 (B) m	1.3 (A) x 2.5 (B) m	1.3 (A) x 1.5 (B) m	NA	NA
	Canopy Distance | Uniformity	3 (C) m | 94%	3 (C) m | 93%	2 (C) m | 96%	2(C) m | 97%	2 (C) m | 98%	2 (C) m | 97%	2 (C) m | 98%	1 (C) m | 94%	To install in canopies	To install in canopies
	Dimming (Power Consumption)	100% - 1050 W	100% - 1050 W	100% - 680 W	100% - 680 W	100% - 680 W	100% - 680 W	100% - 310 W	100% - 310 W	100% - 100 W	100% - 100 W

Indoor Growing Tomato Stages LED Grow Light Strategies

By LUMATEK

		i850W Top Light Full-Spectrum LED (400V)		ZEUS 600W PRO 2.9		ZEUS 600W 2.6		ZEUS 465W PRO 2.9	
									
Efficacy | PPF		3.4 $\mu mol.J^{-1}$	3570 $\mu mol.s^{-1}$	2.9 $\mu mol.J^{-1}$	1770 $\mu mol.s^{-1}$	2.6 $\mu mol.J^{-1}$	1570 $\mu mol.s^{-1}$	2.9 $\mu mol.J^{-1}$	1353 $\mu mol.s^{-1}$
Seedling Supplemental Light Duration 18 ON / 6 OFF	Light Intensity Needed (PPFD) (Min. | Max.)	200 $\mu mol.m^{-2}s^{-1}$	250 $\mu mol.m^{-2}s^{-1}$	200 $\mu mol.m^{-2}s^{-1}$	250 $\mu mol.m^{-2}s^{-1}$	200 $\mu mol.m^{-2}s^{-1}$	250 $\mu mol.m^{-2}s^{-1}$	200 $\mu mol.m^{-2}s^{-1}$	250 $\mu mol.m^{-2}s^{-1}$
	Dimming (Power Consumption)	70% - 595 W	40% - 340 W	70% - 430 W	40% - 246 W	70% - 430 W	70% - 430 W	70% - 330 W	70% - 330 W
Grafting Supplemental Light Duration 18 ON /6 OFF	Light Intensity Needed (PPFD) (Min. | Max.)	100 $\mu mol.m^{-2}s^{-1}$	120 $\mu mol.m^{-2}s^{-1}$	100 $\mu mol.m^{-2}s^{-1}$	120 $\mu mol.m^{-2}s^{-1}$	100 $\mu mol.m^{-2}s^{-1}$	120$\mu mol.m^{-2}s^{-1}$	100 $\mu mol.m^{-2}s^{-1}$	120 $\mu mol.m^{-2}s^{-1}$
	Dimming (Power Consumption)	30% - 255 W	20% - 130 W	30% - 195 W	25% - 154 W	30% - 185 W	30% - 185 W	30% - 140 W	30% - 140 W
Production Supplemental Light Duration 18 ON / 6 OFF	Light Intensity Needed (PPFD) (Min. | Max.)	300 $\mu mol.m^{-2}s^{-1}$	650 $\mu mol.m^{-2}s^{-1}$	300 $\mu mol.m^{-2}s^{-1}$	650 $\mu mol.m^{-2}s^{-1}$	300 $\mu mol.m^{-2}s^{-1}$	650 $\mu mol.m^{-2}s^{-1}$	300 $\mu mol.m^{-2}s^{-1}$	650 $\mu mol.m^{-2}s^{-1}$
	Dimming (Power Consumption)	100% - 850 W	100% - 850 W	100% - 615 W	100% - 615 W	100% - 615 W	100% - 615 W	100% - 475 W	100% - 475 W
Measured Field (*)		4 (A) x 1.8 (B) m	4 (A) x 0.5 (B) m	2 (A) x 2.5 (B) m	2 (A) x 1.4 (B) m	2 (A) x 2.2 (B) m	2 (A) x 1.2 (B) m	2 (A) x 1.8 (B) m	2 (A) x 1.0 (B) m
Canopy Distance to Fixture | Uniformity		2 (C) m | 98%	2 (C) m | 97%	2 (C) m | 95%	1 (C) m | 90%	2 (C) m | 97%	1 (C) m | 90%	2 (C) m | 98%	1 (C) m | 90%

(*) referenced to the measured field (A x B) image when a minimum of 4 fixtures units are installed at a certain height (C), for indoor growing operations with an excellent light uniformity of >90%.

GROW LIGHT STRATEGIES

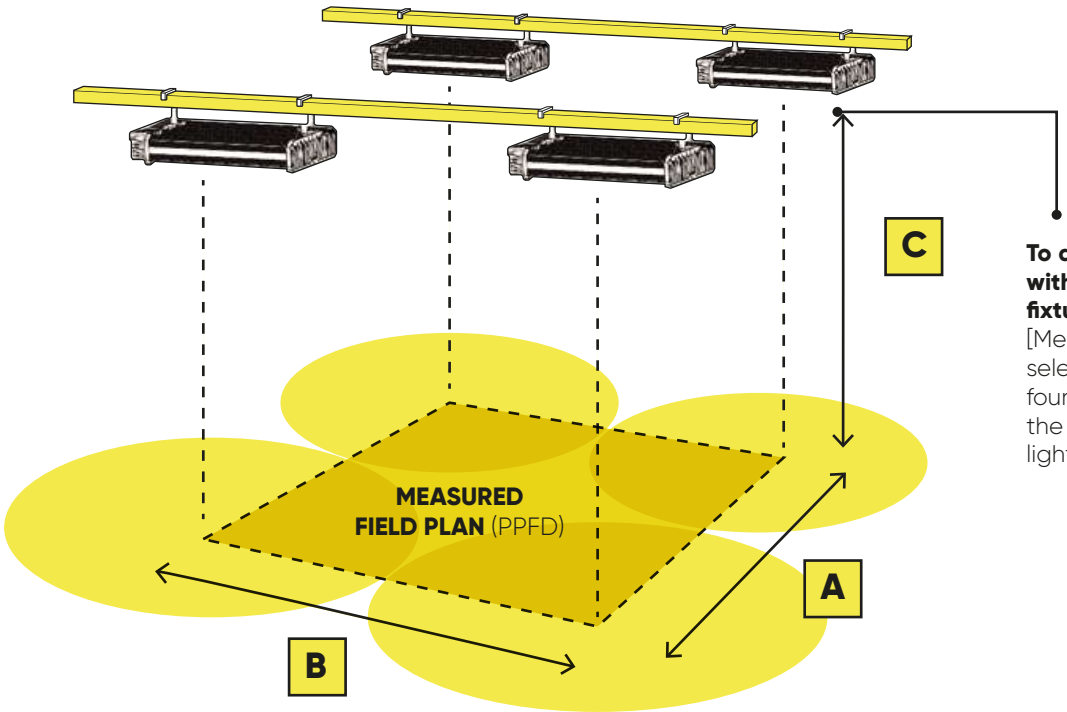
Micro Greens

Greenhouse Growing Micro Greens Stages LED Grow Light Strategies *By LUMATEK*		**1050W GH TOP LIGHT LED (Red + Blue)**		**680W GH TOP LIGHT LED (Red + Blue)**		**680W GH TOP LIGHT LED (White + Red)**		**300W GH TOP LIGHT LED (Red + Blue)**		**100W GH Inter Light LED (Red + Blue)**	
											
Efficacy | PPF		3.4 $\mu mol.J^{-1}$	3570 $\mu mol.s^{-1}$	3.4 $\mu mol.J^{-1}$	2285 $\mu mol.s^{-1}$	2.9 $\mu mol.J^{-1}$	1945 $\mu mol.s^{-1}$	3.2 $\mu mol.J^{-1}$	985 $\mu mol.s^{-1}$	3.0 $\mu mol.J^{-1}$	300 $\mu mol.s^{-1}$
Average Inside Greenhouse DLI (Winter)		2 $mol.m^{-2}d^{-1}$ *Netherlands*	20 $mol.m^{-2}d^{-1}$ *Spain*	2 $mol.m^{-2}d^{-1}$ *Netherlands*	20 $mol.m^{-2}d^{-1}$ *Spain*	2 $mol.m^{-2}d^{-1}$ *Netherlands*	20 $mol.m^{-2}d^{-1}$ *Spain*	2 $mol.m^{-2}d^{-1}$ *Netherlands*	20 $mol.m^{-2}d^{-1}$ *Spain*	NA	NA
Sow to Production **Supplemental Light Duration** 16 ON / 8 OFF	**Daily Light Integral (DLI) requirements (Min. | Max.)**	10 $mol.m^{-2}d^{-1}$	20 $mol.m^{-2}d^{-1}$	10 $mol.m^{-2}d^{-1}$	20 $mol.m^{-2}d^{-1}$	10 $mol.m^{-2}d^{-1}$	20 $mol.m^{-2}d^{-1}$	10 $mol.m^{-2}d^{-1}$	20 $mol.m^{-2}d^{-1}$	10 $mol.m^{-2}d^{-1}$	20 $mol.m^{-2}d^{-1}$
	Supplemental DLI Needed	8 $mol.m^{-2}d^{-1}$	0 $mol.m^{-2}d^{-1}$	8 $mol.m^{-2}d^{-1}$	0 $mol.m^{-2}d^{-1}$	8 $mol.m^{-2}d^{-1}$	0 $mol.m^{-2}d^{-1}$	8 $mol.m^{-2}d^{-1}$	0 $mol.m^{-2}d^{-1}$	8 $mol.m^{-2}d^{-1}$	0 $mol.m^{-2}d^{-1}$
	Supplemental Light Intensity Needed (PPFD)	140 $\mu mol.m^{-2}s^{-1}$	0 $\mu mol.m^{-2}s^{-1}$	140 $\mu mol.m^{-2}s^{-1}$	0 $\mu mol.m^{-2}s^{-1}$	140 $\mu mol.m^{-2}s^{-1}$	0 $\mu mol.m^{-2}s^{-1}$	140 $\mu mol.m^{-2}s^{-1}$	0 $\mu mol.m^{-2}s^{-1}$	140 $\mu mol.m^{-2}s^{-1}$	0 $\mu mol.m^{-2}s^{-1}$
	Measured Field (*)	4 (A) x 6 (B) m	NA	4 (A) x 4 (B) m	NA	4 (A) x 3 (B) m	NA	4 (A) x 1.5 (B) m	NA	NA	NA
	Canopy Distance | Uniformity	4 (C) m | 91%	NA	3 (C) m | 96%	NA	3 (C) m | 98%	NA	3 (C) m | 91%	NA	To install in canopies	To install in canopies
	Dimming (Power Consumption)	100% - 1050 W	0% - 0 W	100% - 680 W	0% - 0 W	100% - 680 W	0% - 0 W	100% - 310 W	0% - 0 W	100% - 100 W	100% - 100 W

(*) referenced to the measured field image when a minimum of 4 fixtures units are installed.

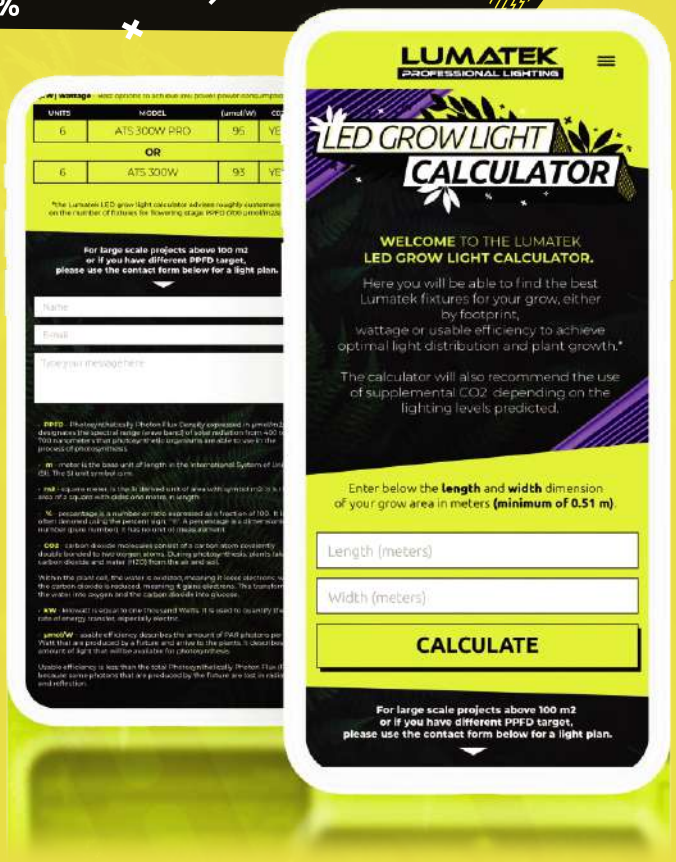
Indoor Growing Micro Greens Stages LED Grow Light Strategies *By LUMATEK*		**i850W Top Light Full-Spectrum LED (400V)**		**ZEUS 600W PRO 2.9**		**ZEUS 600W 2.6**		**ZEUS 465W PRO 2.9**	
									
Efficacy | PPF		3.4 $\mu mol.J^{-1}$	3570 $\mu mol.s^{-1}$	2.9 $\mu mol.J^{-1}$	1770 $\mu mol.s^{-1}$	2.6 $\mu mol.J^{-1}$	1570 $\mu mol.s^{-1}$	2.9 $\mu mol.J^{-1}$	1353 $\mu mol.s^{-1}$
Sow to Production **Supplemental Light Duration** 16 ON / 8 OFF	**Light Intensity Needed (PPFD) (Min. | Max.)**	180 $\mu mol.m^{-2}s^{-1}$	350 $\mu mol.m^{-2}s^{-1}$	180 $\mu mol.m^{-2}s^{-1}$	350 $\mu mol.m^{-2}s^{-1}$	180 $\mu mol.m^{-2}s^{-1}$	350 $\mu mol.m^{-2}s^{-1}$	180 $\mu mol.m^{-2}s^{-1}$	350 $\mu mol.m^{-2}s^{-1}$
	Dimming (Power Consumption)	100% - 850 W	100% - 850 W	100% - 615 W	100% - 615 W	100% - 615 W	100% - 615 W	100% - 475 W	100% - 475 W
Measured Field (*)		4 (A) x 4 (B) m	4 (A) x 1.5 (B) m	4 (A) x 2.5 (B) m	2 (A) x 2 (B) m	2 (A) x 3.5 (B) m	2 (A) x 1.5 (B) m	2 (A) x 3 (B) m	2 (A) x 1.2 (B) m
Canopy Distance to Fixture | Uniformity		3 (C) m | 98%	2 (C) m | 97%	2.5 (C) m | 95%	2.5 (C) m | 98%	2.5 (C) m | 90%	2.5 (C) m | 95%	2 (C) m | 92%	2 (C) m | 95%

(*) referenced to the measured field (A x B) image when a minimum of 4 fixtures units are installed at a certain height (C), for greenhouse growing operations with an excellent light uniformity of >90%.



To determine the average light intensity with an excellent uniformity for the total fixtures assembly, a representative plan [Measured Field Plan, A x B (PPFD)] is selected underneath under a minimum of four centrally located fixtures, whereby the influence surrounding supplemental lighting is considered.

LED GROW LIGHT CALCULATOR



Now available to all, ready to calculate and Help Growers Grow!

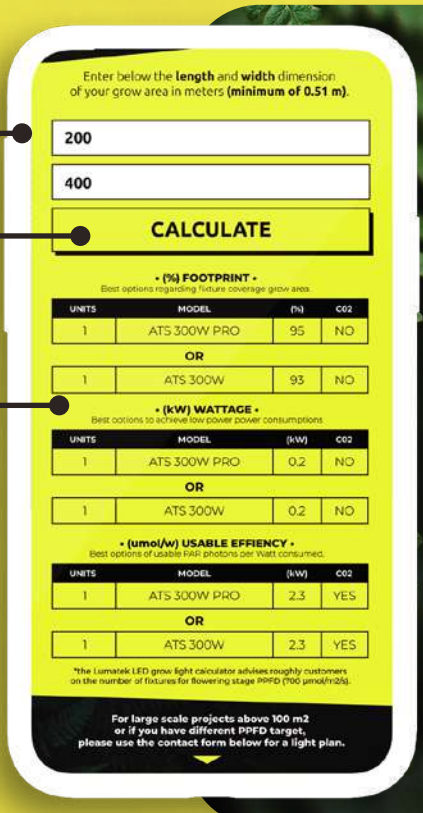
Here you will be able to find the best Lumatek fixtures for your grow, either by footprint, wattage or usable efficiency to achieve optimal light distribution and plant growth. Its an easy to use tool, designed with growers in mind, where you just have to enter the length and width dimensions of your grow area. Fully linked to our website, find product information, specsheets and useful videos!

ALSO FEATURING A USEFUL GLOSSARY

1. Insert **length & width** of your grow space

2. Calculate

3. Find the **best setup** for you



- **WHAT IS PPFD ?**

PPFD stands for photosynthetically Photon Flux Density expressed in µmol/m2/s, designates the spectral range (wave band) of solar radiation from 400 to 700 nanometers that photosynthetic organisms are able to use in the process of photosynthesis.

- **WHAT IS CO_2 ?**

CO_2 stands for carbon dioxide molecules consist of a carbon atom covalently double bonded to two oxygen atoms. During photosynthesis, plants take in carbon dioxide and water (H_2O) from the air and soil. Within the plant cell, the water is oxidized, meaning it loses electrons, while the carbon dioxide is reduced, meaning it gains electrons. This transforms the water into oxygen and the carbon dioxide into glucose.

- **WHAT IS µmol/W ?**

µmol/W stands for usable efficiency and it describes the amount of PAR photons per Watt that are produced by a fixture and arrive to the plants. It describes the amount of light that will be available for photosynthesis. Usable efficiency is less than the total Photosynthetically Photon Flux (PPF) because some photons that are produced by the fixture are lost in radiance and reflection.

and more...

GROW OPTIMAL

LUMATEK LIGHTING PLANS

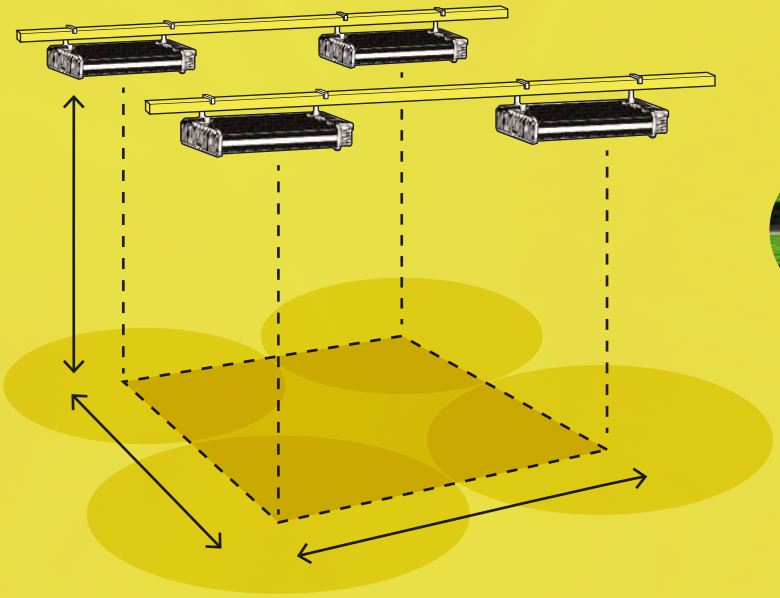
Lumatek supports each project with a detailed, tailor-made, light planning report including the recommended Lumatek fixture, the optimal number of fixtures with the correct PPFD levels depending on your plant variety, their exact hanging location for an efficient light uniformity and the exact distance between fixtures and crop to get the most use of every installed Watt.

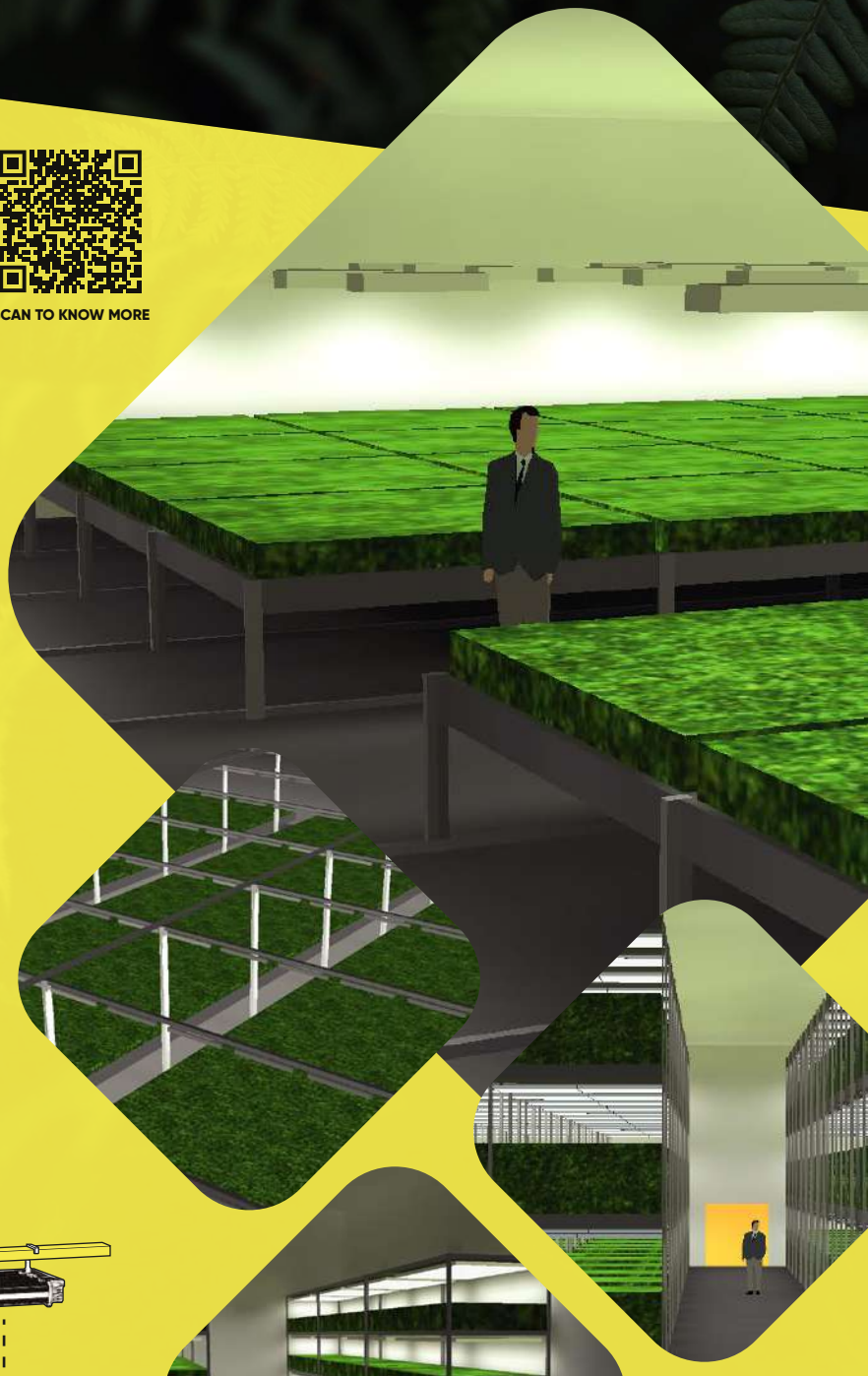
SCAN TO KNOW MORE

Know how to meet your PPFD requirements for each grow stage with the optimal number of fixtures, get the maximum light uniformity and make sure your crop will be covered with the best light levels, and lower the light losses by optimizing the fixtures pattern and installation height.

Requesting a Light Plan is vital when so many variables affect how much light plants will receive from fixtures. Those variables include type of crop, grow stage, type of grow system (greenhouse, indoor, multilayer, grow chamber), greenhouse location, available hanging location, grow system dimensions, surrounding reflective materials, plant height, potential light obstacles and many others which means that the optimal light plan must be tailor-made.

Request your Lumatek Lighting Plan today!
Grow Optimal, Grow with Lumatek!





THE NEW **LUMATEK** EDUCATION SECTION

2022 brings a great new addition to one of the most complete websites on the horticultural market.

The Lumatek Education section is specially created for the grower community. Here Lumatek regularly shares insightful and useful content.

Here you will find educational posts, rich technical content, horticultural market latest news, that will certainly be useful both for the experienced grower and to the hobby grower alike.

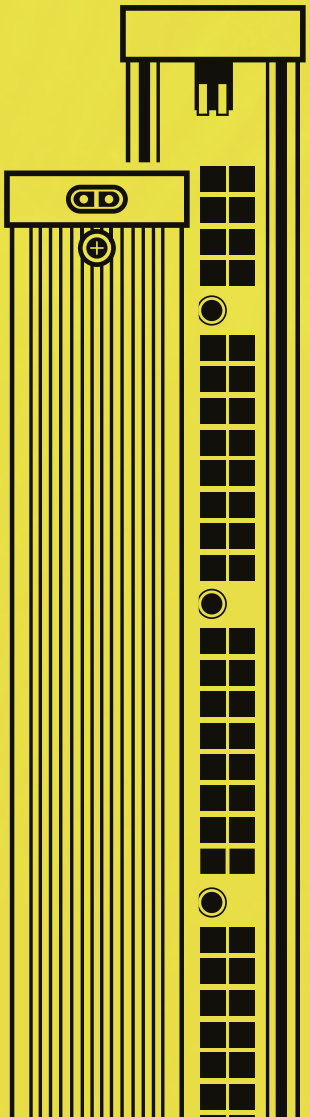
Helping Growers Grow is our mission as well as the betterment of our customers growing skills. This new and regularly updated area is designed to achieve the important goal of sharing important knowledge, both as leading horticulture lighting manufacturers and - most importantly - together with the grower community that we respect and admire!

FIND OUT MORE AT

WWW.LUMATEK-LIGHTING.COM

MAGNETIC LED LIGHT BAR DESIGN

Our linear multi-light bar design makes our fixtures incredibly versatile with magnetic interchangeable and modular light bars.



Lumatek is the pioneer of the innovative, modular, magnetic LED light bar design when back in 2020, the Lumatek Zeus 600W Pro took the grow lighting industry and grow community by surprise with its power, practicality and sheer beauty.

This technology and design, allows growers to operate as many light bars as needed, to change or even upgrade individual light bars as well as having a secure and compact design that helps ensure more secure packaging and protective shipping.

MANUFACTURER **WARRANTY**

LED ZEUS
5 YEAR WARRANTY

LED GREENHOUSE
3 YEAR WARRANTY

LED ATS
3 YEAR WARRANTY

LAMPS
1 YEAR WARRANTY

CONTROLLERS
3 YEAR WARRANTY

HID FIXTURES
3 YEAR WARRANTY

As one of the highest warranties on the market, the warranty on Lumatek products attests to our commitment and trust in the outstanding quality of the manufacturing process, high end components and secure packaging.
All widely recognized by the grower community around the world.

HID RANGE

The Lumatek digital ballasts and HID fixtures provide a stable precise voltage to the lamp creating a higher PAR/PPF output and yet is far more energy efficient than most other ballasts on the market. Featuring intelligent start up and soft-dimming facility, our HID units run extremely efficiently, generating much less heat than other conventional ballasts and run silently. It also features full circuit protection, including open/short circuit, over temperature, over/low voltage, end of lamp life/rectification, EMI/EMC suppression and CE certification.

WHY **HID?**

PRODUCE LESS HEAT
Less heat generated by the E-Ballasts /Fixtures makes temperature control easier and allows cooler running of the environment.

FAST START-UP
Lumatek E-Ballasts/Fixtures will reach full brightness in under one minute.

LONGER BULB LIFE
Lumatek E-Ballasts/Fixtures output over time, will preserve the lamp's lifetime.

FULLY INTERCHANGEABLE
Lumatek E-Ballasts can light HPS, MH and CMH bulbs up to 1000 W.

STABLE LIGHT OUTPUT
Excellent for pharmaceutical-agriculture, laboratories and other uses where precise regularized output is essential.

FULL CIRCUIT PROTECTION
Automatically monitor and protect against open/short circuit, over temperature, over/low voltage, end of lamp life/rectification for ultimate safety.

SMALL COMPACT DESIGN
Lumatek 600 W 240 V E-Ballast only weighs 3 Kg.

COMPLETELY SILENT
No noise or vibration of any kind.

240 V HID FIXTURES

Available with or without lamps, these HID fixture's ballast can also be disconnected from the reflector and used remotely for more flexibility.

AURORA 315W

PRODUCT CODE **LUMLCK001**

LIGHT DISTRIBUTION 135° (Beam Angle)
LIGHT SOURCE CMH LAMP
INPUT VOLTAGE 220-240 V AC, 50-60 Hz
INPUT POWER 315 W (1.5 A @230 V AC)
EFFICACY (CMH LAMP CTT 3100 K) 2.1 µmol/J
EFFICACY (CMH LAMP CTT 4200 K) 2.0 µmol/J
PPF (CMH LAMP CTT 3100 K) 650 µmol/s
PPF (CMH LAMP CTT 4200 K) 615 µmol/s
FOOTPRINT 1 x 1 m
POWER FACTOR > 0.97
DIMMING 50% - 60% - 70% - 80% - 90% - 100%
EXTERNAL CONTROL With Lumatek Digital Panel Plus 2.0
DAISY CHAIN CAPILIBITY Yes
WEIGHT 3 Kg
DIMMENSIONS 241 x 120 x 496 mm
SPECTRUM CMH LAMP CTT 3100 K/4200 K
THERMAL MANAGEMENT Passive
WARRANTY 3 Years
IP RATING IP20
CERTIFICATIONS CE, EMC, LVD

- Fixture to be ordered with or without lamp (3100 K or 4200 K)
- Replacement reflector available
- Accessories also available (Hangers, Control Link Cable, etc)
- Controllable with Lumatek Digital Panel Plus 2.0

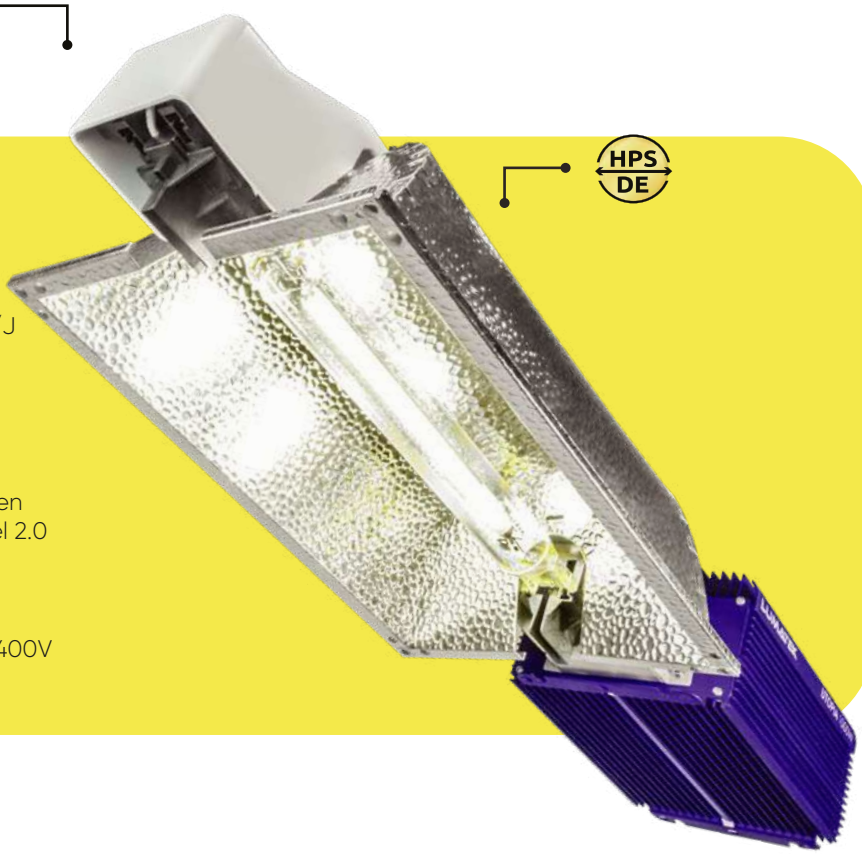
Lumatek continue to innovate by introducing the next generation of 2 in 1 digital ballast technology for the horticultural lighting sector, featured in the new Lumatek Utopia series for firing CMH and HPS grow lamps.

240 V UTOPIA RANGE

CMH + HPS

UTOPIA 1000W DE HPS

PRODUCT CODE **LUMFK012**



LIGHT DISTRIBUTION 140°
LIGHT SOURCE DE HPS LAMP
INPUT VOLTAGE 220-240 V, 50-60 Hz
INPUT POWER 1150 W (4.8 - 5.3 A @230 V AC)
EFFICACY (1000W HPS DE 400V LAMP) 2.1 µmol/J
EFFICACY (600W HPS DE 400V LAMP) 2 µmol/J
PPF (1000W HPS DE 400V LAMP) 2100 µmol/s
PPF (600W HPS DE 400V LAMP) 1200 µmol/s
FOOTPRINT 1.5 x 1.5 m
POWER FACTOR > 0.98
DIMMING 600W – 750W – 1000W – Super Lumen
EXTERNAL CONTROL With Lumatek Digital Panel 2.0
DAISY CHAIN CAPILIBITY Yes
WEIGHT 4.65 Kg
DIMMENSIONS 712 x 251 x 108 mm
SPECTRUM DE HPS LAMP 600W/750W/1000W 400V
THERMAL MANAGEMENT Passive
WARRANTY 3 Years
IP RATING IP20
CERTIFICATIONS CE, EMC, LVD

UTOPIA 630/600W DE CMH/HPS

PRODUCT CODE **LUMFK011**

LIGHT DISTRIBUTION 140°
LIGHT SOURCE DE CMH/HPS LAMP
INPUT VOLTAGE 220-240 V, 50-60 Hz
INPUT POWER 660 W (2.7 – 3.0 A @230 V AC)
EFFICACY (600W HPS DE 400V LAMP) 2 µmol/J
EFFICACY (630W CMH DE 240V 3100K LAMP) 2 µmol/J
EFFICACY (630W CMH DE 240V 4200K LAMP) 1.9 µmol/J
PPF (600W HPS DE 400V LAMP) 1200 umol/s
PPF (630W CMH DE 240V 3100K LAMP) 1250 umol/s
PPF (630W CMH DE 240V 4200K LAMP) 1200 umol/s
FOOTPRINT 1.2 x 1.2 m
POWER FACTOR > 0.98
DIMMING 80% - 90% - 100%
EXTERNAL CONTROL With Lumatek Digital Panel 2.0
DAISY CHAIN CAPILIBITY Yes
WEIGHT 4.35 Kg
DIMMENSIONS 712 x 251 x 108 mm
SPECTRUM DE HPS LAMP 600W/CMH LAMP 630W 3100/4200 K
THERMAL MANAGEMENT Passive
WARRANTY 3 Years
IP RATING IP20
CERTIFICATIONS CE, EMC, LVD

400 V HID FIXTURES

Ideal for large Commercial Greenhouse Projects, our versatile 400V Current Fixtures range will surely satisfy your needs. From the most basic and simple fixture (SEB) to a more innovative one that can be Dimmed and Controlled with our Digital Panel Plus 2.0 (Commercial Fixtures), or even a tailored product, we will achieve the final goal, results! These products are available for direct factory orders.

• Reflector 95% Reflective Options: Focal or Wide • Commercial matching Lamps also available • Light Weight, Very High Efficiency & Energy Saving • Very Effective Light Distribution • Completely Silent and Maximum Heat Distribution • Automatic Frequency Adjustment and Long Operating Life • Soft Start and Random Start Technology • Protection: Open Circuit/Short Circuit/Over Temperature/Lamp End of Life/Rectification/Over-Voltage/Low-Voltage

1000W 400V HPS DE Commercial Fixture

PRODUCT CODE **LUMCGF002**

LIGHT DISTRIBUTION 160° (Beam Angle)
LIGHT SOURCE 1000 W 400 V HPS DE LAMP
INPUT VOLTAGE 400 V AC, 50-60 Hz
INPUT POWER 1000 W
EFFICACY 2.1 µmol/J
PPF 2100 µmol/s
POWER FACTOR > 0.97
DIMMING 60% - 70% - 80% - 90% - 100%
EXTERNAL CONTROL With Lumatek Digital Panel 2.0
DAISY CHAIN CAPILIBITY Yes
WEIGHT 4.7 Kg
DIMMENSIONS 279 x 231 x 469 mm
SPECTRUM HPS LAMP CTT 2000 K
THERMAL MANAGEMENT Passive
WARRANTY 3 Years
IP RATING IP20
CERTIFICATIONS CE, EMC, LVD

600W /630W 400V HPS / CMH DE Commercial Fixture

PRODUCT CODE **LUMCGF001**

LIGHT DISTRIBUTION 160° (Beam Angle)
LIGHT SOURCE HPS/CMH LAMP
INPUT VOLTAGE 400 V AC, 50-60 Hz
INPUT POWER 610 W (1.4 A, HPS) 630 W (1.7 A, CMH)
EFFICACY (HPS LAMP CTT 2000 K) 2.0 µmol/J
EFFICACY (CMH LAMP CTT 3100/4200 K) 2.0/1.9 µmol/J
PPF (HPS LAMP CTT 2000 K) 1200 µmol/s
PPF (CMH LAMP CTT 3100/4200 K) 1250/1200 µmol/s
POWER FACTOR > 0.97
DIMMING 50% - 60% - 70% - 80% - 90% - 100%
EXTERNAL CONTROL With Lumatek Digital Panel 2.0
DAISY CHAIN CAPILIBITY Yes
WEIGHT 4.4 Kg
DIMMENSIONS 279 x 231 x 469 mm
SPECTRUM HPS LAMP CTT 2000 K | CMH LAMP CTT 3100/4200 K
THERMAL MANAGEMENT Passive
WARRANTY 3 Years
IP RATING IP20
CERTIFICATIONS CE, EMC, LVD

CONTROLLABLE RANGE

Features of our Lumatek controllable range

The Control capability allows you to smartly monitor your room temperatures, light timing, automation, safety control, sunset/sunrise and dimming. By simply connecting the Lumatek Digital Panel Plus 2.0 (sold separately) into the TRS "Link" port on your controllable ballast.

HYBRID RANGE
CMH + HPS

Lumatek continue to innovate by introducing the next generation of 2 in 1 digital ballast technology for the horticultural lighting sector, featured in the new Lumatek Utopia series for firing CMH and HPS grow lamps.

UTOPIA 630/600W DE CMH HPS

PRODUCT CODE LUMBC007
INPUT VOLTAGE 220-240 V, 50/60 Hz
INPUT CURRENT 2.7 - 3.0 A
POWER CONSUMPTION (100%) 660 W
DIMMING 80% - 90% - 100%
LAMPS 630W DE CMH 24 & 600W HPS DE 400V
EFFICIENCY 95%

CMH RANGE

Lumatek Ceramic Metal Halide (CMH) technology has a notorious and wide light spectrum, being more similar to the sun itself than any other form of HID lamp.

- **Full-Spectrum**
- **Higher Quality Flower**
- **Less Power Consumed**
- **Less Heat**
- **Very high efficiency in PAR/Watt**

315W CMH + E40 ADAPTOR

PRODUCT CODE LUMBC001
INPUT VOLTAGE 195-240 V, 50/60 Hz
INPUT CURRENT 1.30 - 1.50 A
DIMMING 50% - 60% - 70% - 80% - 90% - 100%
LAMP 315W CMH
EFFICIENCY 92%

630W CMH

LUMBC004 **PRODUCT CODE**
195-240 V, 50/60 Hz **INPUT VOLTAGE**
2.60 - 2.90 A **INPUT CURRENT**
80% - 90% - 100% **DIMMING**
630W CMH DE **LAMP**
96% **EFFICIENCY**

Intelligent digital ballasts to power, control and boost 240 V HPS & MH grow lamps
It also features full circuit protection including open/short circuit, over temperature, over/low voltage, end of lamp life/rectification and EMI suppression.

240 V RANGE

600W 240V

PRODUCT CODE LUMBC002
INPUT VOLTAGE 195-240 V, 50/60 Hz
INPUT CURRENT 2.8 - 3.0 A
DIMMING 250W - 400W - 600W - 660W SL
LAMP 250W, 400W, 600W MH/HPS
EFFICIENCY 95%

1000W 240V

LUMBC005 **PRODUCT CODE**
195-240 V, 50/60 Hz **INPUT VOLTAGE**
4.7 - 5.1 A **INPUT CURRENT**
600W - 750W - 1000W - 1000W SL **DIMMING**
600W, 750W, 1000W, 1000W MH/HPS **LAMP**
95% **EFFICIENCY**

Offering 10% - 15% more PAR light than standard 240 V ballasts. The 400 V lamps also feature full circuit protection including open/short circuit, over temperature, over/low voltage, end of lamp life/rectification and EMI supression.

400 V RANGE

PRO 1000W 400V

Connects to 240 V supply & drives 600W, 750W & 1000W 400 V grow lamps

PRODUCT CODE LUMBC006
INPUT VOLTAGE 240 V, 50/60 Hz
INPUT CURRENT 4.8 - 5.3 A
DIMMING 600W - 750W - 1000W - 1000W SL
LAMP 600W, 750W, 1000W, 1000W 400V
EFFICIENCY 96%

ULTIMATE PRO 600W 400V

Automatically detects and powers 240 V and 400 V MH/HPS grow lamps

LUMBC003 **PRODUCT CODE**
240 V, 50/60 Hz **INPUT VOLTAGE**
2.5 - 3.0 A **INPUT CURRENT**
400W - 400W SL - 600W - 600W SL **DIMMING**
400W, 600W MH/HPS 240 V & 400 V **LAMP**
95% **EFFICIENCY**

STANDARD DIMMABLE RANGE

Our standard dimmable range of digital ballasts is also available without the Control capability.

5 YEAR WARRANTY

240 V RANGE

Intelligent digital ballasts to power, control and boost 240 V HPS & MH grow lamps

250W 240V

LUMB0001	PRODUCT CODE
215-240 V, 50/60 Hz	INPUT VOLTAGE
1.10 - 1.30 A	INPUT CURRENT
150W - 175W - 250W - 250W SL	DIMMING
150W, 250W MH/HPS	LAMP
94%	EFFICIENCY

400W 240V

PRODUCT CODE	LUMB0002
INPUT VOLTAGE	215-240 V, 50/60 Hz
INPUT CURRENT	1.80 - 2.10 A
DIMMING	250W - 250W SL - 400W - 400W SL
LAMP	250W, 400W MH/HPS
EFFICIENCY	94%

600W TWIN 240V

LUMB0004	PRODUCT CODE
195-240 V, 50/60 Hz	INPUT VOLTAGE
2.8 - 3.0 A (x2)	INPUT CURRENT
250W - 400W - 600W - 660W SL	DIMMING
250W, 400W, 600W MH/HPS	LAMP
95%	EFFICIENCY

CMH/HPS/MH LAMPS RANGE

Lumatek lamps are produced using high-grade ceramic arc tube technology and specific horticultural gas blends that create optimal spectral output for plant growth.

1 YEAR WARRANTY

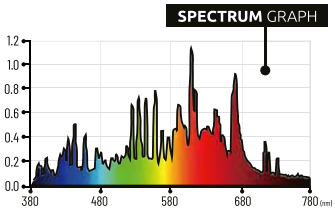
CMH LAMPS

Lumatek Ceramic Metal Halide (CMH) technology has a notorious and wide light spectrum, being more similar to the sun itself than any other form of HID lamp.

315 W 3100/4200 K

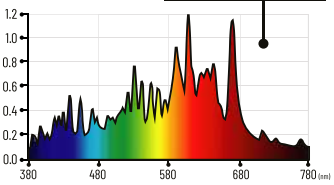
PRODUCT CODE	LUML0300/3001
POWER VOLTAGE	240 V 50 Hz
LUMINOUS FLUX	37000/38000 lm
RATED LIFE	14000 Hrs
CTT	3100/4200 K
PAR	650/615 µmol/s
CRI	>94%
BASE	PGZX18

SPECTRUM GRAPH



*Spectrum Graph of **315W 3100 K***

SPECTRUM GRAPH



*Spectrum Graph of **630 W 3100 K***

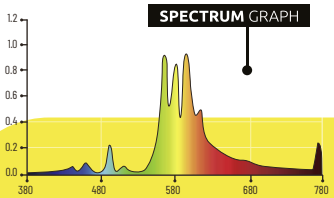
630 W 3100/4200 K

PRODUCT CODE	LUML0302/303
POWER VOLTAGE	240 V 50 Hz
LUMINOUS FLUX	70000/72000 lm
RATED LIFE	12000 Hrs
CTT	3100/4200 K
PAR	1250/1200 µmol/s
CRI	>94%
BASE	DE

HPS 240V LAMPS

High Pressure Sodium E40-Base High-PAR Grow Lamps

SPECTRUM GRAPH



*Spectrum Graph of **250 W HPS***

250W HPS

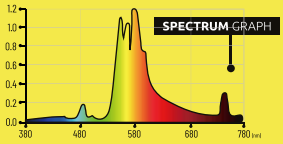
LUML0001	PRODUCT CODE
230V 50 Hz	POWER VOLTAGE
32000 lm	LUMINOUS FLUX
24000 Hrs	RATED LIFE
2050 K	CTT
400 µmol/s	PAR
20	CRI
E40	BASE

400W HPS

LUML0002	PRODUCT CODE
230V 50 Hz	POWER VOLTAGE
55000 lm	LUMINOUS FLUX
24000 Hrs	RATED LIFE
2100 K	CTT
700 µmol/s	PAR
20	CRI
E40	BASE

600W HPS

PRODUCT CODE LUML0003
POWER VOLTAGE 230 V 50 Hz
LUMINOUS FLUX 90000 lm
RATED LIFE 24000 Hrs
CTT 2100 K
PAR 1000 µmol/s
CRI 20
BASE E40



*Spectrum Graph of **600W HPS***

1000W HPS

PRODUCT CODE LUML0004
POWER VOLTAGE 230 V 50 Hz
LUMINOUS FLUX 130000 lm
RATED LIFE 24000 Hrs
CTT 2000 K
PAR 1850 µmol/s
CRI 20
BASE E40

Offers 10% - 15% more PAR light than standard 240 V grow lamps.

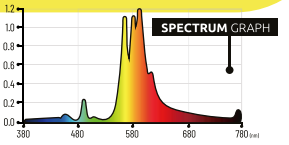
HPS 400V LAMPS

600W HPS DE

PRODUCT CODE LUML0102
POWER VOLTAGE 190V 50 Hz
LUMINOUS FLUX 986000 lm
RATED LIFE 12000 Hrs
CTT 2100 K
PAR 1200 µmol/s
CRI 30
BASE DE

1000W HPS DE

PRODUCT CODE LUML0101
POWER VOLTAGE 230V 50 Hz
LUMINOUS FLUX 146000 lm
RATED LIFE 24000 Hrs
CTT 2000 K
PAR 2100 µmol/s
CRI 20
BASE DE



*Spectrum Graph of **1000W DE HPS***

600W HPS SE

PRODUCT CODE LUML0100
POWER VOLTAGE 230 V 50 Hz
LUMINOUS FLUX 90000 lm
RATED LIFE 24000 Hrs
CTT 2000 K
PAR 1100 µmol/s
CRI 20
BASE E40

MH 240V LAMPS

Metal Halide E-40 Base grow lamps for the vegetative cycle

250W MH

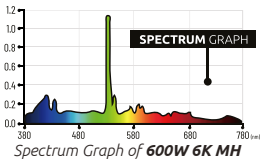
PRODUCT CODE LUML0200
POWER VOLTAGE 240 V 50 Hz
LUMINOUS FLUX 21000 lm
RATED LIFE 10000 Hrs
CTT 4200 K
PAR 323 µmol/s
CRI 65
BASE E40

400W MH 4K/6K

PRODUCT CODE LUML0201/0202
POWER VOLTAGE 240 V 50 Hz
LUMINOUS FLUX 40000/35000 lm
RATED LIFE 10000 Hrs
CTT 4200/6000 K
PAR 518/500 µmol/s
CRI 65/70
BASE E40

600W MH 4K/6K

PRODUCT CODE LUML0203/0204
POWER VOLTAGE 240 V 50 Hz
LUMINOUS FLUX 50000/58000 lm
RATED LIFE 10000 Hrs
CTT 4200/6000 K
PAR 729/750 µmol/s
CRI 65/70
BASE E40



*Spectrum Graph of **600W 6K MH***

1000W MH

PRODUCT CODE LUML0205
POWER VOLTAGE 240 V 50 Hz
LUMINOUS FLUX 92000 lm
RATED LIFE 10000 Hrs
CTT 6000 K
PAR 1430 µmol/s
CRI 65
BASE E40

DOUBLE ENDED RANGE

In Miro or Hammertone Aluminium versions. High performance "plug & play" double ended reflector with innovative SPPDS-A lamp sockets designed for use with Double Ended lamps rated up to 1000 W. For grow room or grow tent use.

TEKKEN PRO DE MIRO

PRODUCT CODE	LUMR0008
MATERIAL	MIRO®ALUMINIUM
REFLECTIVITY	95%
FOOTPRINT	1.5 x 1.5m
DIMENSIONS	615 x 615 x 220 mm
LAMPHOLDER	DE

TEKKEN PRO DE HAMMERTONE

PRODUCT CODE	LUMR0007
MATERIAL	HAMMERTONE ALUMINIUM
REFLECTIVITY	92%
FOOTPRINT	1.5 x 1.5m
DIMENSIONS	615 x 615 x 220 mm
LAMPHOLDER	DE

TEKKEN PRO SE MIRO

PRODUCT CODE	LUMR0021
MATERIAL	MIRO® ALUMINIUM
REFLECTIVITY	95%
FOOTPRINT	1.2 x 1.2m , 1.5 x 1.5m
LAMPHOLDER	E40

SINGLE ENDED E40 RANGE

Lumatek is bringing the remarkable Tekken reflector specifically designed for E40 Single Ended lamps, rated up to 600 W, in MIRO®ALUMINIUM, ideal for grow room and grow tent use.

FIXTURES REPLACEMENT REFLECTORS RANGE

Change your light spread or simply replace your used reflector with one of the following 95% reflective options. Our bracket is designed to allow you to change your reflector quickly.

REPLACEMENT FOCAL DE REFLECTOR

PRODUCT CODE LUMR0022

- Ideal for high ceilings
- Concentrated light spread
- Increased light penetration
- 95% Reflective Hammertone
- Suitable for Utopia 630W/600W & Utopia 1000W Fixtures

REPLACEMENT WIDE DE REFLECTOR

LUMR0023 **PRODUCT CODE**

- Ideal for low ceilings
- Wide light spread
- Hangs closer to canopy
- 95% Reflective Hammertone
- Suitable for Utopia 630W/600W & Utopia 1000W Fixtures

AURORA 315W REPLACEMENT FOCAL SE REFLECTOR

PRODUCT CODE LUMR0020

95% Reflective Hammertone

HID ACCESSORIES & ADD-ON'S

Have maximum power over your Lumatek LED Range with the right accessories and add-on's.

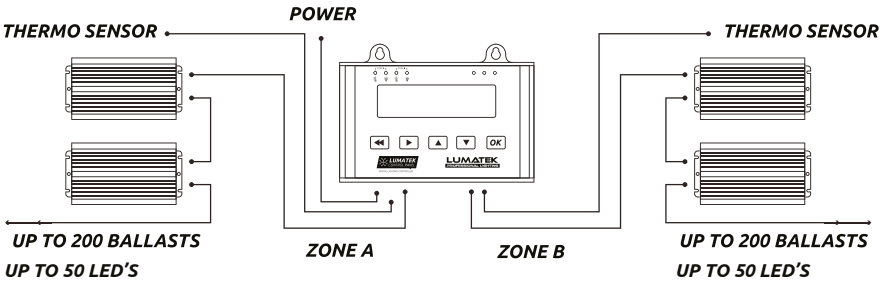
LUMATEK CONTROL PANEL PLUS 2.0

Dual signal digital lighting controller (HID + LED) that offers precise external control of your Lumatek lighting fixtures, drivers and ballasts.

PRODUCT CODE LUMM019

FEATURES

- DIMMING (1% Increments)
- Digital timing, safety control and automation
- Temperature room maintenance
- Sunrise/Sunset
- Up to 400 ballasts
- Memory backup
- & more...



ITEMS INCLUDED

- 1 x Lumatek Control Panel Plus 2.0
- 1 x Power adaptor and cable
- 2 x Temperature sensor 5 m cable
- 2 x HID control link cable 5m
- 2 x LED control link cable

HID 4 m EXTENSION CABLE

PRODUCT CODE LUMM0014

4 m ballast to reflector extension cable (HID)

E40 ADAPTOR

PRODUCT CODE LUMM0006

Ceramic adaptor for use with 315W lamps with PGZX18 Base

CONTROL LINK CABLE

PRODUCT CODE LUMM0011

Designed to transmit the signal between your Lumatek controllable ballasts and digital controller. 5 m Length.

ARTIFICIAL LIGHT SOURCE **NOMENCLATURE**

DLI [mol/m²/d] – Daily Light Integral, relation with light intensity (PPFD) with the lighting duration (photoperiod) over a day. Used to measure PAR per area per day.

Efficacy – It traduces the ability of grow light´s to turn electricity into usable photons to trigger plants photosynthesis.

Photosynthesis – Physical and chemical process where plant convert light, water and carbon dioxide into oxygen and energy in the form of sugar.

Photoperiod – duration of the daily light perceived by a plant, commonly used to describe the light schedules to be used on short, long, or neutral day plants.

PAR – Photosynthetically Active Radiation referred to the region where plants perceived light with wavelengths from 400 nm to 700 nm.

PPF [µmol/s] – Photosynthetic Photon Flux describes the total amount of photons within the PAR spectrum produced by a light source.

PPFD [mol/m²/s] - Photosynthetic Photon Flux Density describes the total amount of produced photons from a light source within the PAR region that falls in a square meter per each second.

PPE [µmol/J] – Photosynthetic Photon Efficacy it specifies PAR per Joule or PAR per Watt per second.

Power Consumption [kW/h] – electrical power of a light source consumed to convert electricity into usable photons in one hour. A light source that consumes 1000 W (1 kW – kilo Watt) for an hour.

Spectrum – Describes the ration of the different wavelengths (or colours) produced by a light source.

Ultraviolet [UV] – Range of wavelengths between 100 nm and 400 nm that is divided into three bands, UVC (100-280 nm), UVB (280-315 nm) and UVA (315-400 nm).

WHY **LUMATEK?**

We offer **product quality, reliability and high standard services** to professional, hobby and beginner growers.

Horticultural Path

Lumatek is one of the largest specialized manufacturers in the horticultural lighting industry. Since 2004 our experienced team have focused on the research, design, development and manufacturing of the most advanced and efficient grow lighting solutions.

High Standard Service

Our service and support department will handle whatever your issue may be promptly and efficiently. Technical consultancy, customization, repair, project and product development, distribution, sales or any other general enquiry, we will do our best to assist you.

Product Reliability

Our proven lighting solutions are designed and engineered to the highest test standards and fulfill all respective legal certifications. Our products are regularly laboratory-tested for development and to ensure best performance and durability.

Professional Horticulture

We offer solutions and services for professional large scale horticultural projects such as Greenhouse, Vertical Farming, Indoor, Growth Chambers and Research Programs.

- Project Management
- Product Customization
- Light Planning & Report
- Implementation & Installation Support
- Software

WHE ARE PROUD TO HAVE THE FOLLOWING USP'S

- One of the highest REAL industry efficacies (µmol/J)
- Lowest cost per µmol
- High PPF output
- World class diodes and drivers
- Full-spectrum for full-cycle indoor solutions
- Specific spectrums for Greenhouse, Nurseries, Vertical Farming and Supplemental Light applications
- Electricity savings around 60-80%
- Yield production increases up to 100%
- 5-year warranty for LED Zeus range and HID ballasts
- 3-year warranty for LED ATS range and reflectors
- +60.000 hours lifespan
- Heat control technology
- CE certified LVD and EMC compliant
- Unique light spread, coverage and uniformity
- Full circuit protection
- Interchangeable and removable magnet LED Bars
- Detachable driver
- Fully dimmable
- User friendly and easy set-up
- Controllable with any Universal Controller 0-10V

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