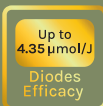
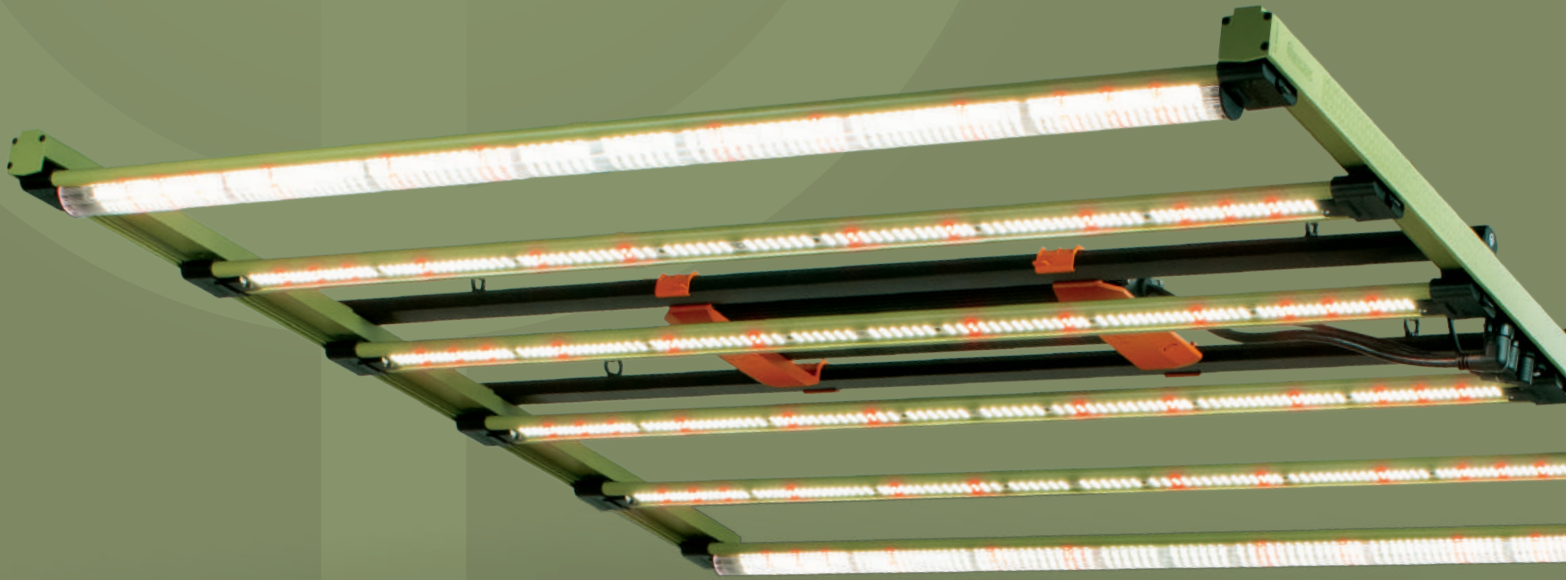


# TREEGERS GL650W+ LED FIXTURE

TREEGERS GL650W+ LED FIXTURE - PERFORMANCE DATA

Unleash the full potential of your grow area with our revolutionary multi-linear GL650W+ LED fixture. With a huge amount of usable photon efficacy, market leading uniformity and unmatched modularity, this light is perfect for an area of up to 1.5x1.5m in coverage.

## PERFORMANCE DATA



[treegers.com](http://treegers.com)

## SPECIFICATIONS:

**Product Code:** TGL0003

**EAN/GTIN:** 9309001188054

**Power Consumption:** 650W ±5%

**Light Output PPF:** 2009 µmol/s

**Fixture Efficacy:** 3.1 µmol/J

**Coverage Area:** Minimum 1.2x1.2m up to Maximum 1.5x1.5 m

**Application:** Grow Tent, Grow Room, Multi-layer

**Thermal Management:** Passive Cooling

**Input Voltage:** 120-277V, 50/60 Hz

**Max. Ambient Temperature/Humidity:** 45°C / 90%

**CCT:** 3800K

**CRI:** +85

**Power Factor:** >0.95

**THD:** 20% max

**Light Source:** Ledestar 4000K & 5000K White 3030; Ledestar 660nm Red 3535

**No of LED Bars:** 6

**No of Diodes Total:** White 2016; Red 144

**No of Diodes per LED Bar:** White 336; Red 24

**Diodes Efficacy:** White 3030 3.25 µmol/J; Red 3535 4.35µmol/J

**Driver:** Sosen

**Ingress Protection:** IP66

**Lifetime LED Bars:** +60 000Hrs

**Lifetime Driver:** +80 000Hrs under 80% loading

**Dimming:**

0-10-20-30-40-50-60-70-80-90-100% (w/ Treegers Precise T Dimmer 0-10V)

**External Control:** w/ Treegers Growcast or any Universal Controller

**BTUs/h with Driver:** 2217.6

**BTUs/h without Driver:** 2084

**Fixture Dimensions:** 1090x1090x100 mm

**Fixture Weight:** 11.35 Kg

**Driver Dimensions & Weight:** 430x89.5x44.5 mm & 3.4 Kg

**Carton Dimensions:** 1170x353x157 mm

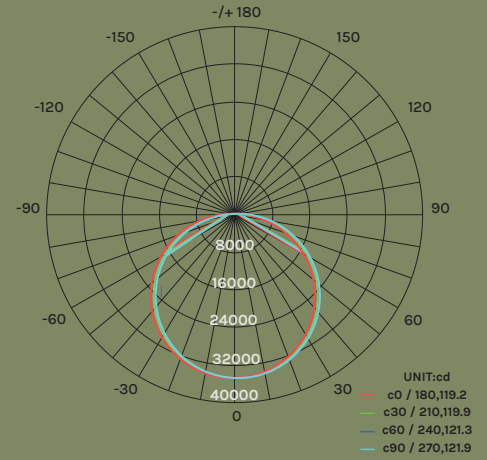
**Gross Weight:** 12.5 Kg

**Certifications:** CE, UKCA, RCM, RoHS, SAA

**Warranty:** 5 Years

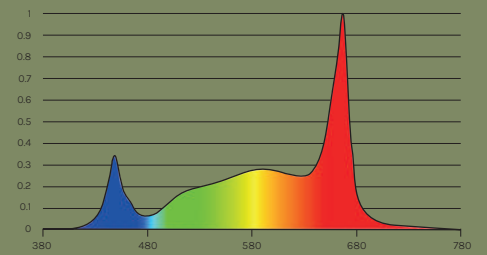
**Light Distribution:** 120°

**AVERAGE BEAM ANGLE (50%) : 120.6 DEG**



**SQD SPECTRUM GRAPH:**

**Full-Spectrum HybridF+ by TREGERS**



Full-Spectrum HybridF+, used on our powerful GL+ series of LEDs, provides balance for Full-Cycle growing, with a focus on Flowering due to its Deep Red enhancement. An ideal choice for growers who want to boost their yields with one of the highest photon efficacy fixtures on the market.

## GL650W+ - MAXIMUM INPUT CURRENT

Input Volt	DIMMING	INPUT POWER (W)	INPUT CURRENT (A)
120VAC	100%	657.4W	5.90
230VAC	100%	651.0W	3.44
240VAC	100%	650.8W	3.36
277VAC	100%	651.3W	2.68

## TESTING PARAMETERS

**Tested Product:** Treegers GL650W+ LED Fixture (with Optical Lens)

**Distance from Canopy:** 30cm, 40cm, 50cm, 80cm, 100cm

**Area:** 1.2x1.2m for 30cm, 40cm & 50cm; 1.5x1.5m for 80cm & 100cm

**Points:** 64 (8x8) for 1.2x1.2m; 100 (10x10) for 1.5x1.5m

**Testing Equipment:** Integrated 2m Sphere, Apogee & Treegers Quantum PAR Meters

**Reflection:** 0%

**Fixture Power Intensity:** 100%

**Fixture orientation:**



## PPFD MAPS PER CANOPY TO LIGHT DISTANCE

PPFD Map at 30cm

587	612	704	725	727	705	618	582
889	947	1069	1100	1106	1068	941	891
994	1036	1183	1223	1224	1190	1030	998
962	1012	1141	1186	1184	1134	1007	955
961	1014	1132	1180	1178	1130	1007	957
998	1029	1175	1211	1211	1173	1026	1002
885	952	1070	1097	1100	1073	948	892
589	612	699	720	730	710	612	592

Recommended Coverage: 1.2x1.2m  
Uniformity Ratio: 0.61  
Canopy Average PPFD: 959.27 µmol/s/m2

PPFD Map at 40cm

510	611	631	647	648	632	610	509
700	861	869	909	907	875	866	705
793	979	992	1032	1040	985	984	794
820	1001	1008	1055	1061	1018	1009	818
820	995	999	1048	1056	1012	1011	812
798	972	995	1037	1033	996	972	794
694	861	868	904	912	863	866	701
507	614	627	648	651	625	606	508

Recommended Coverage: 1.2x1.2m  
Uniformity Ratio: 0.60  
Canopy Average PPFD: 838.91 µmol/s/m2

PPFD Map at 50cm

451	568	553	597	603	551	564	454
589	744	727	789	797	727	749	588
671	852	834	895	895	839	859	675
706	890	865	932	941	870	893	713
703	896	863	933	923	864	886	699
667	852	833	896	896	827	856	670
594	739	730	784	784	723	742	590
449	571	557	602	595	555	567	454

Recommended Coverage: 1.2x1.2m  
Uniformity Ratio: 0.62  
Canopy Average PPFD: 729.39 µmol/s/m2

PPFD Map at 80cm

238	268	319	330	329	330	320	269	239	
298	336	402	429	423	421	428	405	333	295
353	402	476	515	509	507	513	475	398	353
391	446	535	574	565	567	570	540	445	391
409	468	559	603	592	593	599	561	466	410
412	468	559	598	594	596	607	555	466	410
391	445	536	576	570	564	574	530	446	388
352	402	479	515	511	506	516	472	400	355
297	339	405	428	419	420	426	398	337	299
241	269	316	332	331	328	331	319	268	238

Recommended Coverage: 1.5x1.5m  
Uniformity Ratio: 0.55  
Canopy Average PPFD: 430.63 µmol/s/m2

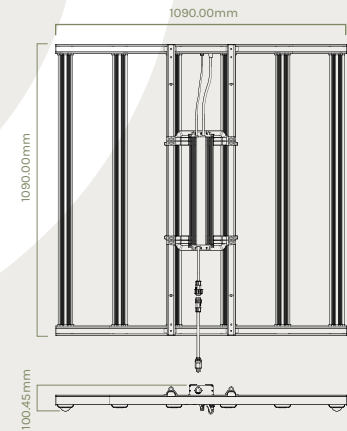
PPFD Map at 100cm

217	235	270	293	280	281	294	272	237	217
256	281	323	356	339	338	353	324	283	255
293	320	369	408	389	391	405	371	317	294
316	348	400	444	423	424	442	400	349	315
331	363	417	464	441	440	463	421	360	328
331	363	418	465	442	438	468	418	361	330
313	348	400	440	424	419	441	402	347	318
290	318	373	407	387	388	405	367	322	291
259	282	322	356	338	340	356	322	282	257
216	236	272	294	282	279	294	270	237	216

Recommended Coverage: 1.5x1.5m  
Uniformity Ratio: 0.63  
Canopy Average PPFD: 342.95 µmol/s/m2

## WHAT'S IN THE BOX?

- 6 x High Powered LED Bars
- 1 x 650W High Grade Driver
- 1 x Frame Kit (w/ 4 frame items + cabling)
- 2 x Driver Support Brackets
- 1 x Power Cable (w/ 1.8 m length, plug & Jnicon connector)
- 2 x Stainless Cable Hangers (D2 x 105mm)
- 1 x User Guide



**TREGERS**

TACTICAL GROW GEAR

For more please visit [treegers.com](http://treegers.com) or Contact us at [support@treegers.com](mailto:support@treegers.com)