

Lightsource Test Report

Product Information

Product Category: LED-HiPower
 Product Spec: LED-FL-050-W2-WW
 Manufacturer: METOLIGHT
 Buyer: 5069

Product Type: LED-HiPower-Fluter
 Product Number: 1
 Submitted Unit: 103582

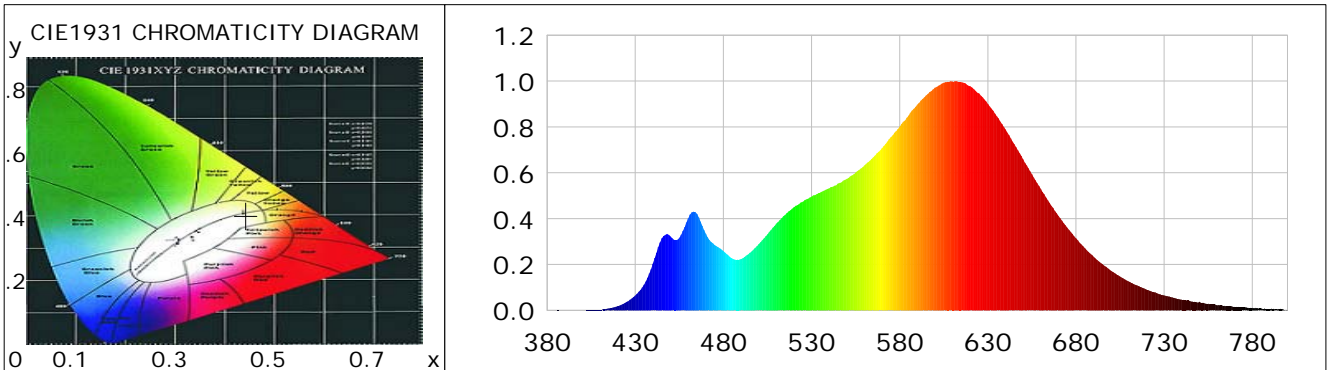
CIE Colorimetric Parameters

Chromaticity coordinates: $x=0.4431$ $y=0.4021$ $u(u')=0.2554$ $v=0.3477$ $v'=0.5215$
 CCT: $T_c=2883K$ ($duv=-0.00157$) Color Ratio: $R=0.246$ $G=0.726$ $B=0.028$
 Peak Wavelength: 611.8nm Half Bandwidth: 131.7nm
 Dominant Wavelength: 583.9nm Color Purity: 0.537
 CRI: $R_a=87.2$, $avgR(1\sim14)=83.5$, $avgR(1\sim15)=83.3$ TM30: $R_f=88$, $R_g=96$
 GAI: $GAI_BB_8=99.1$, $GAI_BB_15=105.7$, $GAI_EES=53.6$

R1 =87	R2 =95	R3 =96	R4 =86	R5 =88	R6 =95	R7 =84	R8 =66
R9 =28	R10=88	R11=86	R12=81	R13=90	R14=99	R15=80	

Color Quality Scale: $Q_a=86.1$, $Q_f=87.7$, $Q_p=88.1$, $Q_g=93.3$

Q1 =82	Q2 =94	Q3 =87	Q4 =84	Q5 =86	Q6 =88	Q7 =88	Q8 =88
Q9 =96	Q10=92	Q11=89	Q12=87	Q13=87	Q14=78	Q15=79	



Photometric Parameters

Luminous Flux: 5685.3 lm	Efficiency: 118.00 lm/W	Radiant Power: 17.962 W
Total mains efficacy: 138.77 lm/W	Energy Efficiency Class: D (EU 2019/2015)	
Pupil Flux: 7192.96 Plm	Pupil Lumens Per Watt: 149.29 Plm/W	Pupil Factor (Kp): 1.265
Cirtopic Flux: 13321.87 lm		

Electric Parameters

Voltage: 231.00V	Current: 0.2180A	Power: 48.18W
Power Factor: 0.9520	Frequency: 49.99Hz	

Test Information

Scan Range: 380~800:1nm	Photometric Method: sphere-spectroradiometer
Stabilization Time: 0 ms ALC.: 1.0000	Photometric Condition: Sphere diameter: 2.00m, 4PI
Max of Signal: 45642 (2635)	CCD Integration Time: 78.89 ms

Condition: Tx:0.0°C, Ti:0.0°C, R.H.:60%
 Test Lab:
 Operator: CRE

Test Device: Lisun LMS-9000B
 Test Time: 2021-08-18 11:00:21
 Inspector:

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WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)
380	0.0001	0.0126	525	0.4736	56.8669	670	0.4129	49.5784
385	0.0006	0.0683	530	0.4962	59.5806	675	0.3613	43.3869
390	0.0006	0.0768	535	0.5140	61.7191	680	0.3142	37.7324
395	0.0003	0.0341	540	0.5322	63.9065	685	0.2711	32.5579
400	0.0008	0.0957	545	0.5531	66.4155	690	0.2338	28.0708
405	0.0008	0.1003	550	0.5734	68.8521	695	0.2017	24.2210
410	0.0031	0.3766	555	0.6009	72.1593	700	0.1718	20.6322
415	0.0086	1.0345	560	0.6322	75.9107	705	0.1475	17.7096
420	0.0182	2.1897	565	0.6680	80.2129	710	0.1263	15.1615
425	0.0363	4.3596	570	0.7085	85.0780	715	0.1079	12.9563
430	0.0648	7.7848	575	0.7555	90.7205	720	0.0904	10.8570
435	0.1118	13.4262	580	0.8016	96.2585	725	0.0785	9.4319
440	0.2038	24.4765	585	0.8493	101.9809	730	0.0651	7.8135
445	0.3146	37.7737	590	0.8971	107.7204	735	0.0563	6.7603
450	0.3222	38.6852	595	0.9379	112.6249	740	0.0463	5.5636
455	0.3164	37.9986	600	0.9714	116.6469	745	0.0397	4.7726
460	0.4014	48.1979	605	0.9927	119.2022	750	0.0371	4.4583
465	0.4206	50.5103	610	0.9981	119.8525	755	0.0287	3.4416
470	0.3340	40.1113	615	0.9954	119.5214	760	0.0220	2.6370
475	0.2850	34.2209	620	0.9774	117.3673	765	0.0186	2.2353
480	0.2586	31.0575	625	0.9463	113.6258	770	0.0151	1.8081
485	0.2267	27.2254	630	0.9004	108.1138	775	0.0129	1.5527
490	0.2236	26.8544	635	0.8474	101.7543	780	0.0111	1.3347
495	0.2507	30.1012	640	0.7889	94.7259	785	0.0085	1.0170
500	0.2888	34.6749	645	0.7250	87.0523	790	0.0060	0.7200
505	0.3320	39.8632	650	0.6583	79.0529	795	0.0063	0.7525
510	0.3784	45.4394	655	0.5937	71.2944	800	0.0039	0.4707
515	0.4165	50.0174	660	0.5300	63.6426			
520	0.4500	54.0315	665	0.4690	56.3118			

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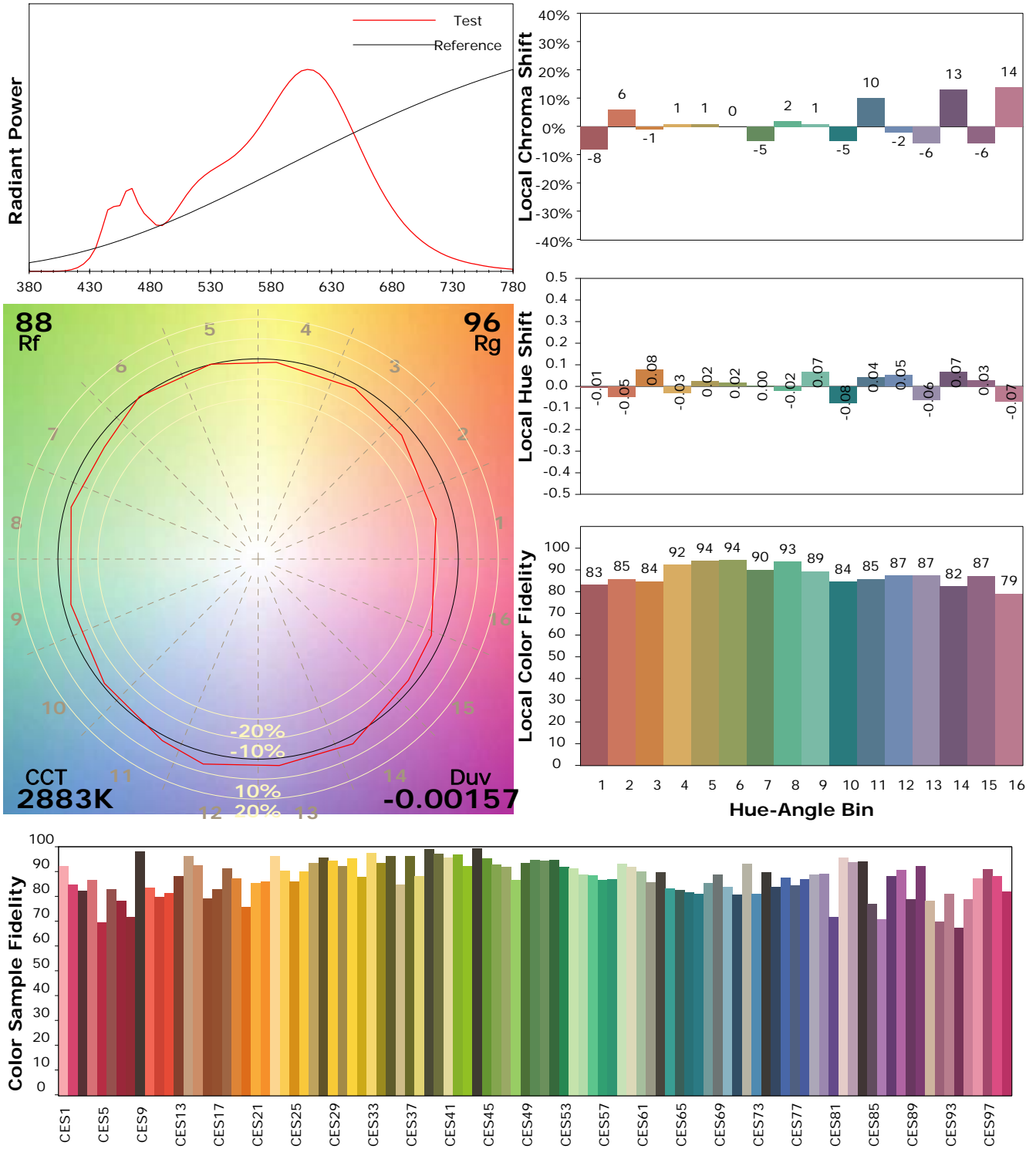
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IES TM-30-18 Color Rendition Report

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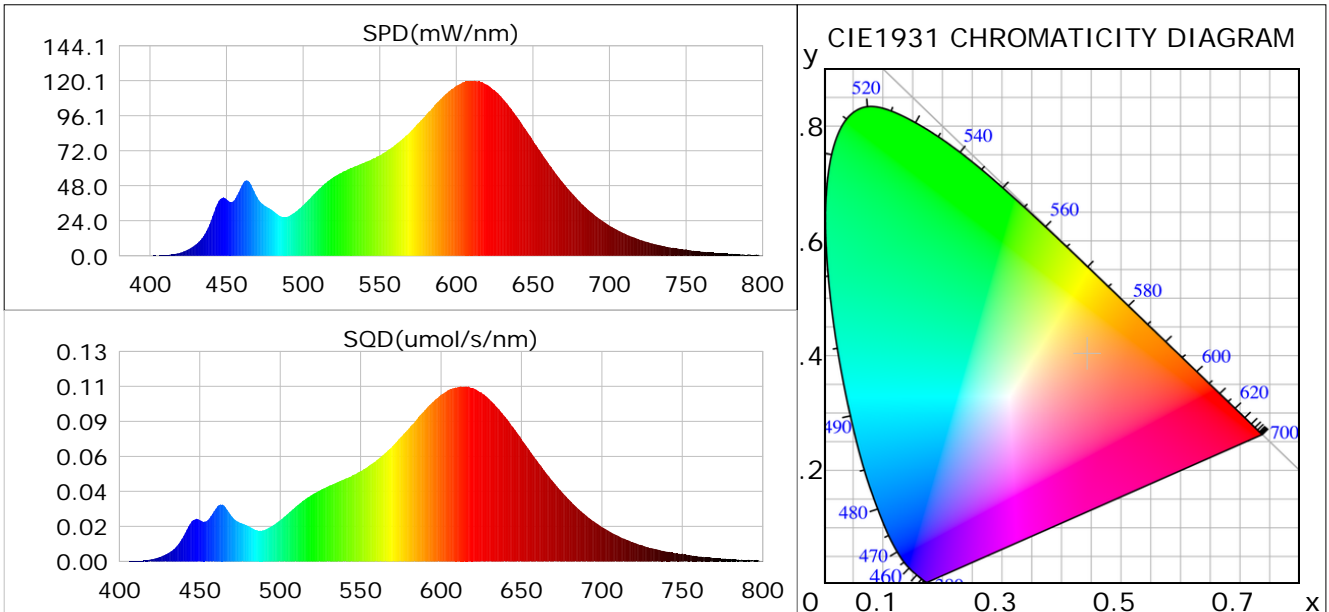
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Plant optical param data

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Plant Optical Param

$ \mu_v(lm)$: 5685.30	$Q_v(lm.s)$: 5685.30
$ \mu_e, \dot{E}(W/nm)$: 17.96	$Q_e(J)$: 17.96
$ \mu_e(W)$: 17.38	$ \mu_{fr}(W)$: 0.62
$ \zeta_e$: 0.36	$ \zeta_{fr}$: 0.01
PPE(umol/s/w): 1.75	Kfr: 0.07
Erb_Ratio: 3.20	PPF(umol/s): 84.37
PFuv(360-400)(umol/s): 0.00	PPF(400-500)(umol/s): 9.27
PPF(500-600)(umol/s): 34.43	PPF(600-700)(umol/s): 40.67
PPfr(700-800)(umol/s): 3.61	PPF.t(umol): 84.37
$ \mu_{ch-A.t}(J)$: 1.42	$ \mu_{ch-A}(W)$: 1.42
$ \mu_{ch-B.t}(J)$: 0.70	$ \mu_{ch-B}(W)$: 0.70
$ \mu_b.t(J)$: 2.38	$ \mu_b(W)$: 2.38
$ \mu_y.t(J)$: 7.40	$ \mu_y(W)$: 7.40
$ \mu_r.t(J)$: 7.75	$ \mu_r(W)$: 7.75

Electric Parameters

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