

Lightsource Test Report

Product Information

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

Product Type: LED-HiPower-Fluter
 Product Number: 1
 Submitted Unit: 103450

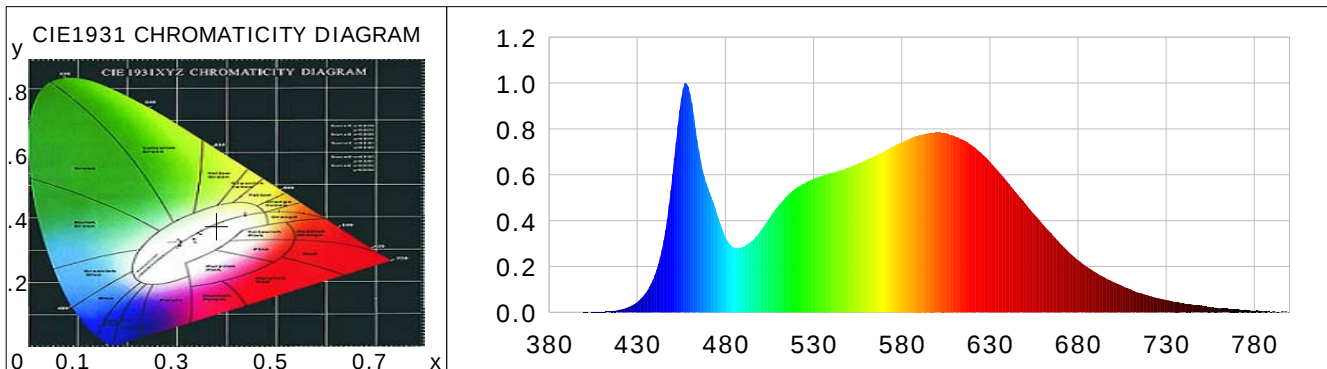
CIE Colorimetric Parameters

Chromaticity coordinates: $x=0.3801$ $y=0.3763$ $u(u')=0.2251$ $v=0.3342$ $v'=0.5013$
 CCT: $T_c=4006K$ ($duv=-0.00011$) Color Ratio: $R=0.191$ $G=0.767$ $B=0.042$
 Peak Wavelength: 457.4nm Half Bandwidth: 23.7nm
 Dominant Wavelength: 579.1nm Color Purity: 0.270
 CRI: $R_a=87.3$, $avgR(1\sim14)=82.3$, $avgR(1\sim15)=82.3$ TM30: $R_f=84$, $R_g=93$
 GAI: $GAI_BB_8=92.5$, $GAI_BB_15=100.7$, $GAI_EES=73.1$

R1 =88	R2 =95	R3 =97	R4 =84	R5 =86	R6 =91	R7 =86	R8 =72
R9 =33	R10=86	R11=83	R12=62	R13=90	R14=99	R15=83	

Color Quality Scale: $Q_a=85.6$, $Q_f=85.8$, $Q_p=84.7$, $Q_g=92.9$

Q1 =83	Q2 =96	Q3 =84	Q4 =77	Q5 =80	Q6 =83	Q7 =88	Q8 =91
Q9 =98	Q10=94	Q11=90	Q12=89	Q13=88	Q14=80	Q15=82	



Photometric Parameters

Luminous Flux: 6057.5 lm	Efficiency: 120.64 lm/W	Radiant Power: 19.052 W
Total mains efficacy: 141.88 lm/W	Energy Efficiency Class: D (EU 2019/2015)	
Pupil Flux: 9447.17 Plm	Pupil Lumens Per Watt: 188.15 Plm/W	Pupil Factor (Kp): 1.560
Cirtpic Flux: 19812.63 lm		

Electric Parameters

Voltage: 230.00V	Current: 0.2180A	Power: 50.21W
Power Factor: 0.9480	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: 46423 (2536)	CCD Integration Time: 71.42 ms

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

Test Device: Lisun LMS-9000B
 Test Time: 2021-08-11 11:25:38
 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	0.0130	525	0.5619	73.6792	670	0.2999	39.3214
385	0.0007	0.0859	530	0.5819	76.2991	675	0.2611	34.2326
390	0.0004	0.0528	535	0.5955	78.0802	680	0.2270	29.7596
395	0.0003	0.0452	540	0.6067	79.5515	685	0.1989	26.0855
400	0.0008	0.1086	545	0.6199	81.2748	690	0.1739	22.8033
405	0.0011	0.1417	550	0.6317	82.8305	695	0.1523	19.9723
410	0.0025	0.3325	555	0.6486	85.0465	700	0.1328	17.4157
415	0.0052	0.6782	560	0.6665	87.3867	705	0.1158	15.1779
420	0.0114	1.4913	565	0.6824	89.4736	710	0.0999	13.0952
425	0.0233	3.0569	570	0.7022	92.0702	715	0.0848	11.1142
430	0.0452	5.9224	575	0.7232	94.8273	720	0.0732	9.5991
435	0.0859	11.2619	580	0.7401	97.0398	725	0.0633	8.2977
440	0.1631	21.3795	585	0.7583	99.4309	730	0.0541	7.0966
445	0.3147	41.2574	590	0.7732	101.3807	735	0.0450	5.9051
450	0.6019	78.9223	595	0.7816	102.4817	740	0.0394	5.1611
455	0.9354	122.6413	600	0.7847	102.8879	745	0.0330	4.3221
460	0.9510	124.6967	605	0.7824	102.5861	750	0.0314	4.1199
465	0.7050	92.4333	610	0.7682	100.7255	755	0.0239	3.1387
470	0.5448	71.4364	615	0.7520	98.5948	760	0.0174	2.2777
475	0.4336	56.8534	620	0.7269	95.3073	765	0.0172	2.2511
480	0.3286	43.0820	625	0.6963	91.2994	770	0.0138	1.8044
485	0.2832	37.1331	630	0.6564	86.0689	775	0.0124	1.6202
490	0.2852	37.3894	635	0.6133	80.4123	780	0.0073	0.9544
495	0.3112	40.7984	640	0.5681	74.4860	785	0.0046	0.6014
500	0.3558	46.6560	645	0.5215	68.3818	790	0.0033	0.4355
505	0.4118	53.9984	650	0.4753	62.3236	795	0.0034	0.4450
510	0.4654	61.0158	655	0.4291	56.2664	800	0.0041	0.5379
515	0.5073	66.5198	660	0.3845	50.4178			
520	0.5416	71.0140	665	0.3446	45.1856			

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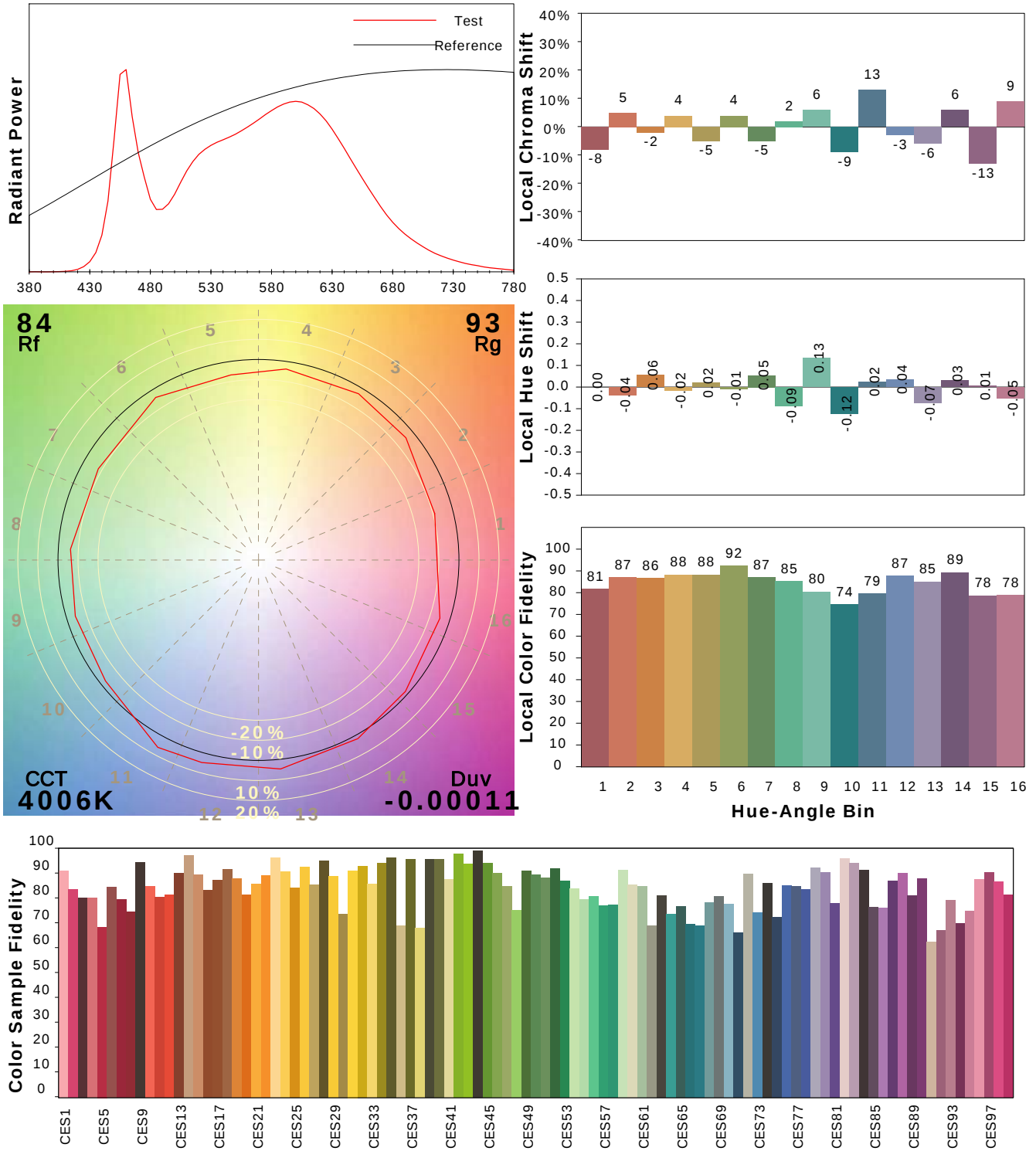
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IES TM-30-18 Color Rendition Report

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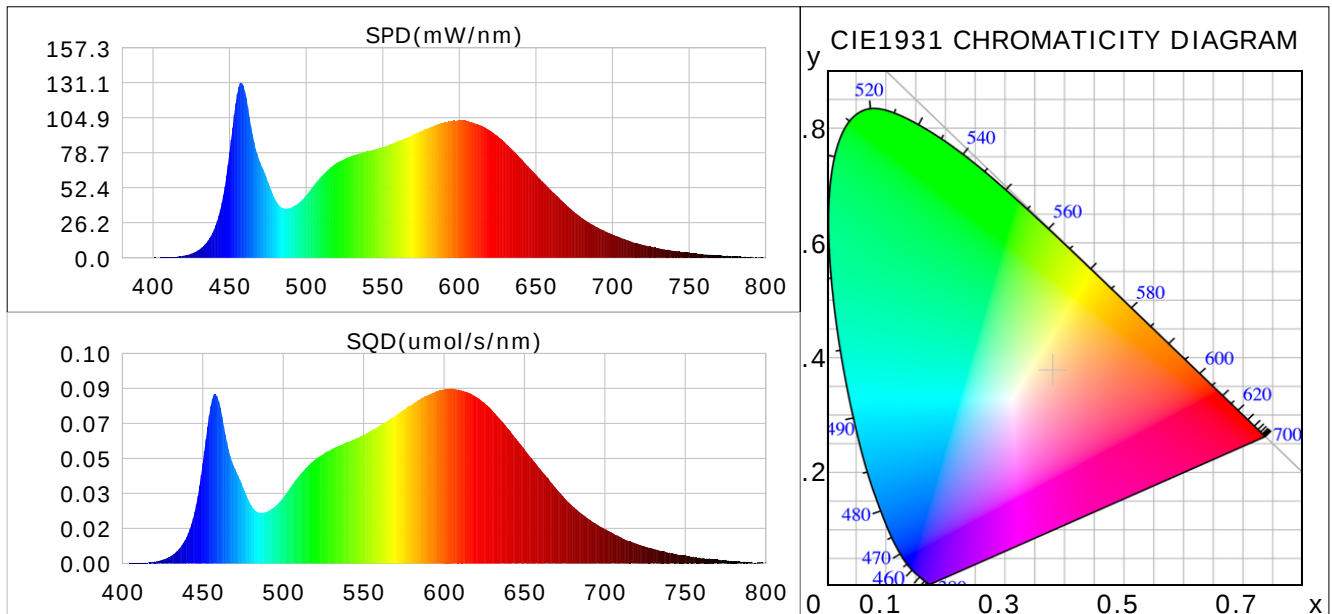
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Plant optical param data

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Plant Optical Param

$\mu_v(lm)$: 6057.50	$Q_v(lm.s)$: 6057.50
$\mu_e, \dot{E}(W/nm)$: 19.05	$Q_e(J)$: 19.05
$\mu_e(W)$: 18.54	$\mu_{fr}(W)$: 0.54
$\dot{C}_e$: 0.37	$\dot{C}_{fr}$: 0.01
$PPE(umol/s/w)$: 1.74	K_{fr} : 0.06
Erb_Ratio : 1.51	$PPF(umol/s)$: 87.22
$PF_{uv}(360-400)(umol/s)$: 0.00	$PPF(400-500)(umol/s)$: 15.92
$PPF(500-600)(umol/s)$: 38.41	$PPF(600-700)(umol/s)$: 32.90
$PF_{fr}(700-800)(umol/s)$: 3.16	$PPF.t(umol)$: 87.22
$\mu_{ch-A.t}(J)$: 1.41	$\mu_{ch-A}(W)$: 1.41
$\mu_{ch-B.t}(J)$: 0.91	$\mu_{ch-B}(W)$: 0.91
$\mu_b.t(J)$: 4.09	$\mu_b(W)$: 4.09
$\mu_y.t(J)$: 8.32	$\mu_y(W)$: 8.32
$\mu_r.t(J)$: 6.28	$\mu_r(W)$: 6.28

Electric Parameters

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