

Lightsource Test Report

Product Information

Product Category: LED-Lampen
 Product Spec: LED-E14-G45-2FS-2W-WWC
 Manufacturer: METOLIGHT
 Buyer: 4545

Product Type: LED-Lampen-E14
 Product Number: 1
 Submitted Unit: 100923

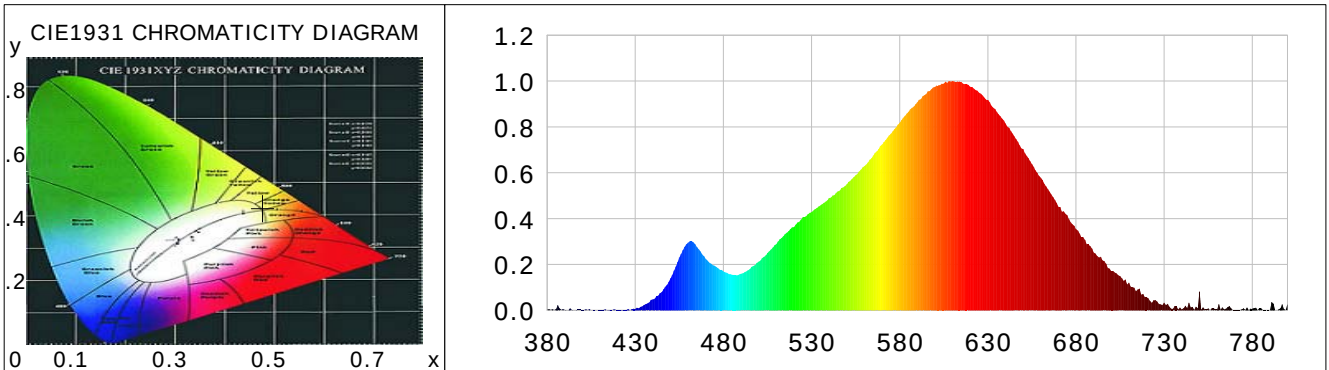
CIE Colorimetric Parameters

Chromaticity coordinates: $x=0.4773$ $y=0.4262$ $u(u')=0.2667$ $v=0.3572$ $v'=0.5357$
 CCT: $T_c=2588K$ ($duv=0.00429$) Color Ratio: $R=0.258$ $G=0.723$ $B=0.019$
 Peak Wavelength: 610.1nm Half Bandwidth: 124.6nm
 Dominant Wavelength: 583.5nm Color Purity: 0.712
 CRI: $R_a=82.1$, $avgR(1\sim14)=76.3$, $avgR(1\sim15)=76.1$ TM30: $R_f=83$, $R_g=90$
 GAI: $GAI_BB_8=73.4$, $GAI_BB_15=85.1$, $GAI_EES=33.0$

R1 =80	R2 =90	R3 =98	R4 =78	R5 =79	R6 =89	R7 =83	R8 =60
R9 =12	R10=77	R11=76	R12=66	R13=82	R14=99	R15=73	

Color Quality Scale: $Q_a=81.4$, $Q_f=84.6$, $Q_p=81.1$, $Q_g=83.5$

Q1 =78	Q2 =92	Q3 =86	Q4 =79	Q5 =79	Q6 =79	Q7 =81	Q8 =88
Q9 =89	Q10=85	Q11=84	Q12=84	Q13=83	Q14=72	Q15=76	



Photometric Parameters

Luminous Flux: 251.61 lm	Efficiency: 111.83 lm/W	Radiant Power: 0.768 W
Total mains efficacy: 131.51 lm/W	Energy Efficiency Class: E (EU 2019/2015)	
Pupil Flux: 276.37 Plm	Pupil Lumens Per Watt: 122.83 Plm/W	Pupil Factor (Kp): 1.098
Cirtpic Flux: 461.79 lm		

Electric Parameters

Voltage: 230.60V	Current: 0.0220A	Power: 2.25W
Power Factor: 0.4390	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: 28796 (3266)	CCD Integration Time: 1000.00 ms

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

Test Device: Lisun LMS-9000B
 Test Time: 2021-04-28 11:15:08
 Inspector:

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WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)
380	0.0031	0.0169	525	0.4061	2.2374	670	0.4528	2.4950
385	0.0055	0.0305	530	0.4282	2.3593	675	0.4149	2.2861
390	0.0027	0.0146	535	0.4574	2.5202	680	0.3543	1.9520
395	0.0003	0.0017	540	0.4902	2.7007	685	0.3078	1.6960
400	0.0035	0.0191	545	0.5192	2.8607	690	0.2525	1.3911
405	0.0004	0.0021	550	0.5497	3.0288	695	0.2183	1.2028
410	0.0016	0.0087	555	0.5887	3.2435	700	0.1707	0.9405
415	0.0039	0.0215	560	0.6290	3.4659	705	0.1487	0.8196
420	0.0040	0.0221	565	0.6752	3.7204	710	0.1201	0.6618
425	0.0020	0.0109	570	0.7239	3.9887	715	0.0911	0.5020
430	0.0068	0.0375	575	0.7704	4.2449	720	0.0577	0.3176
435	0.0236	0.1303	580	0.8188	4.5115	725	0.0448	0.2470
440	0.0479	0.2639	585	0.8660	4.7714	730	0.0328	0.1809
445	0.0802	0.4421	590	0.9077	5.0014	735	0.0073	0.0402
450	0.1397	0.7699	595	0.9437	5.1996	740	0.0046	0.0252
455	0.2307	1.2711	600	0.9746	5.3702	745	0.0133	0.0732
460	0.2955	1.6280	605	0.9898	5.4539	750	0.0821	0.4521
465	0.2756	1.5186	610	1.0000	5.5099	755	0.0085	0.0467
470	0.2240	1.2340	615	0.9959	5.4871	760	0.0042	0.0232
475	0.1945	1.0718	620	0.9757	5.3763	765	0.0075	0.0413
480	0.1700	0.9366	625	0.9492	5.2299	770	0.0012	0.0069
485	0.1555	0.8568	630	0.9173	5.0544	775	0.0088	0.0483
490	0.1598	0.8803	635	0.8663	4.7731	780	0.0071	0.0392
495	0.1795	0.9889	640	0.8152	4.4915	785	0.0087	0.0479
500	0.2129	1.1729	645	0.7595	4.1848	790	0.0001	0.0003
505	0.2506	1.3806	650	0.7032	3.8743	795	0.0043	0.0235
510	0.2894	1.5943	655	0.6378	3.5141	800	0.0287	0.1583
515	0.3337	1.8385	660	0.5781	3.1855			
520	0.3636	2.0033	665	0.5174	2.8509			

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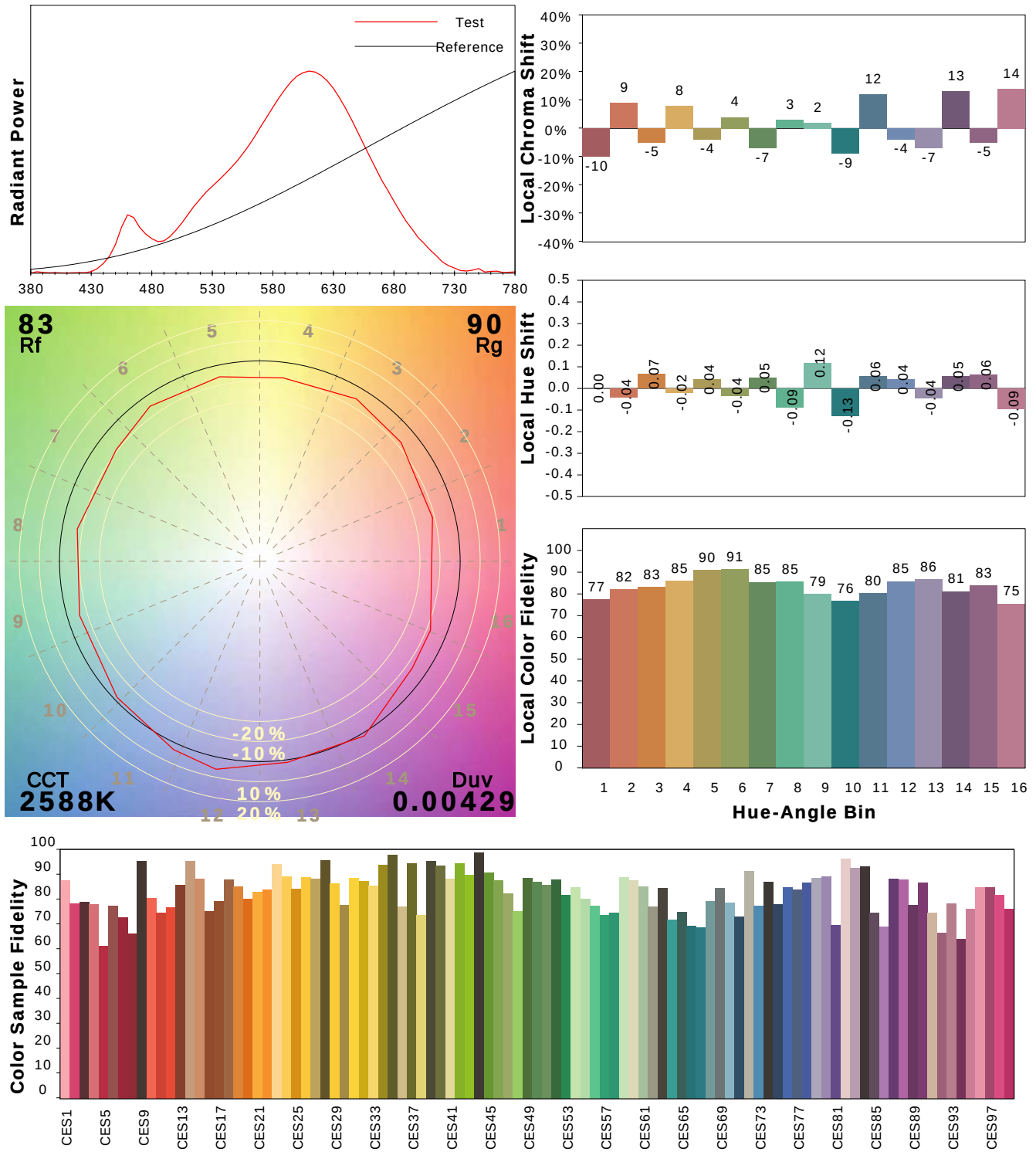
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IES TM-30-18 Color Rendition Report

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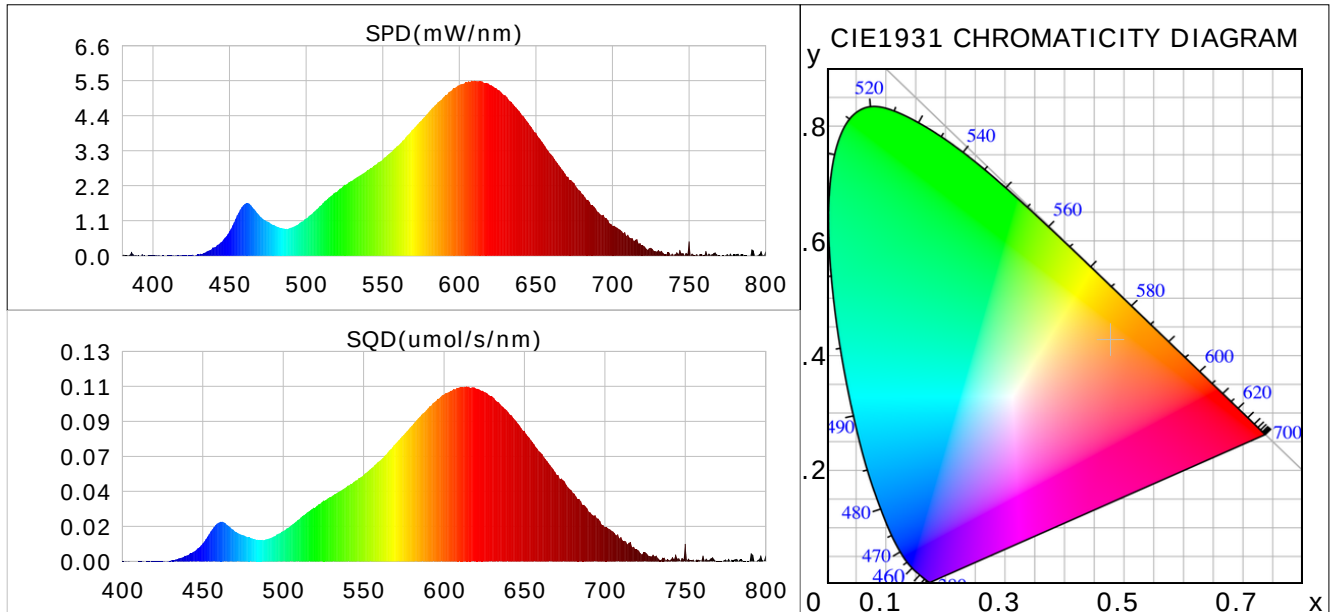
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Plant optical param data

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 CRI: Ra= 82.1



Plant Optical Param

$\mu_v(lm): 251.61$	$Q_v(lm.s): 251.61$
$\mu_e, \dot{E}(W/nm): 0.77$	$Q_e(J): 0.77$
$\mu_e(W): 0.75$	$\mu_{fr}(W): 0.02$
$\dot{C}_e: 0.33$	$\dot{C}_{fr}: 0.01$
$PPE(umol/s/w): 1.65$	$K_{fr}: 0.05$
$Erb_Ratio: 5.68$	$PPF(umol/s): 3.70$
$PF_{uv}(360-400)(umol/s): 0.00$	$PPF(400-500)(umol/s): 0.25$
$PPF(500-600)(umol/s): 1.51$	$PPF(600-700)(umol/s): 1.94$
$PF_{fr}(700-800)(umol/s): 0.11$	$PPF.t(umol): 3.70$
$\mu_{ch-A.t}(J): 0.06$	$\mu_{ch-A}(W): 0.06$
$\mu_{ch-B.t}(J): 0.03$	$\mu_{ch-B}(W): 0.03$
$\mu_b.t(J): 0.06$	$\mu_b(W): 0.06$
$\mu_y.t(J): 0.32$	$\mu_y(W): 0.32$
$\mu_r.t(J): 0.37$	$\mu_r(W): 0.37$

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