

Lightsource Test Report

Product Information

Product Category: LED-Lampen
 Product Spec: LED-E27-G95-2FS-4W-WWC
 Manufacturer: METOLIGHT
 Buyer: 5841

Product Type: LED-Lampen-E27
 Product Number: 1
 Submitted Unit: 101009

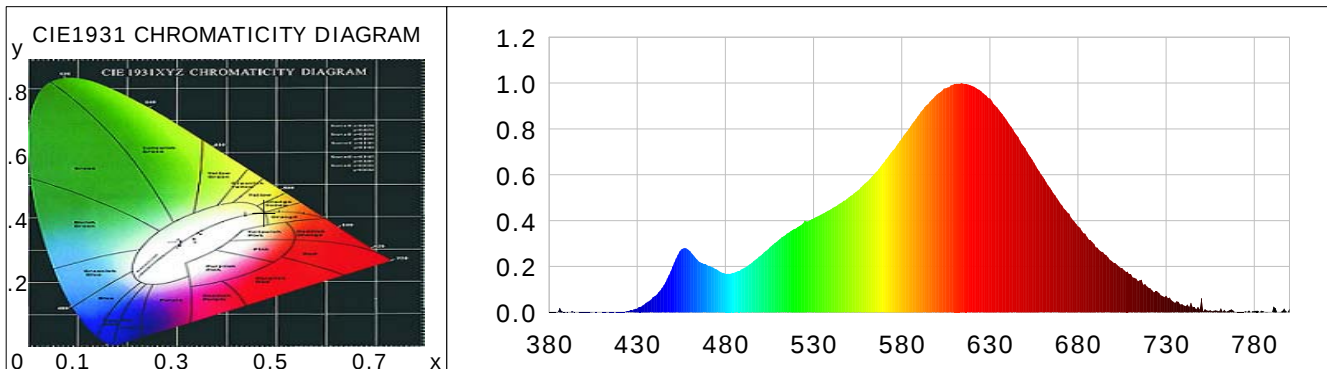
CIE Colorimetric Parameters

Chromaticity coordinates: $x=0.4760$ $y=0.4179$ $u(u')=0.2696$ $v=0.3550$ $v'=0.5325$
 CCT: $T_c=2543K$ ($duv=0.00150$) Color Ratio: $R=0.270$ $G=0.708$ $B=0.022$
 Peak Wavelength: 614.0nm Half Bandwidth: 118.1nm
 Dominant Wavelength: 584.6nm Color Purity: 0.683
 CRI: $R_a = 86.1$, $avgR(1\sim14) = 82.3$, $avgR(1\sim15) = 81.9$ TM30: $R_f = 87$, $R_g = 94$
 GAI: $GAI_BB_8=86.5$, $GAI_BB_15=95.9$, $GAI_EES=37.7$

R1 = 85	R2 = 94	R3 = 96	R4 = 85	R5 = 86	R6 = 95	R7 = 83	R8 = 64
R9 = 24	R10 = 87	R11 = 85	R12 = 80	R13 = 88	R14 = 99	R15 = 78	

Color Quality Scale: $Q_a = 85.4$, $Q_f = 88.8$, $Q_p = 86.5$, $Q_g = 88.0$

Q1 = 80	Q2 = 92	Q3 = 89	Q4 = 85	Q5 = 85	Q6 = 86	Q7 = 86	Q8 = 89
Q9 = 93	Q10 = 92	Q11 = 90	Q12 = 88	Q13 = 86	Q14 = 76	Q15 = 78	



Photometric Parameters

Luminous Flux: 371.26 lm	Efficiency: 112.84 lm/W	Radiant Power: 1.192 W
Total mains efficacy: 132.71 lm/W	Energy Efficiency Class: E (EU 2019/2015)	
Pupil Flux: 420.35 Plm	Pupil Lumens Per Watt: 127.77 Plm/W	Pupil Factor (Kp): 1.132
Cirtpic Flux: 723.18 lm		

Electric Parameters

Voltage: 231.10V	Current: 0.0170A	Power: 3.29W
Power Factor: 0.8190	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: 45733 (3316)	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: 2021-08-09 16:00:44
 Inspector:

Lightsource Test Report

Product Information

Product Category: LED-Lampen
 Product Spec: LED-E27-G95-2FS-4W-WWC
 Manufacturer: METOLIGHT
 Buyer: 5841

Product Type: LED-Lampen-E27
 Product Number: 1
 Submitted Unit: 101009

WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)
380	0.0023	0.0200	525	0.3994	3.3935	670	0.4753	4.0383
385	0.0029	0.0249	530	0.4097	3.4808	675	0.4304	3.6574
390	0.0019	0.0157	535	0.4299	3.6524	680	0.3749	3.1852
395	0.0002	0.0016	540	0.4509	3.8315	685	0.3296	2.8003
400	0.0020	0.0168	545	0.4752	4.0373	690	0.2848	2.4195
405	0.0002	0.0021	550	0.5016	4.2616	695	0.2532	2.1516
410	0.0013	0.0113	555	0.5309	4.5109	700	0.2171	1.8448
415	0.0020	0.0172	560	0.5675	4.8215	705	0.1928	1.6382
420	0.0032	0.0276	565	0.6092	5.1761	710	0.1654	1.4055
425	0.0043	0.0363	570	0.6548	5.5632	715	0.1401	1.1906
430	0.0173	0.1467	575	0.7071	6.0082	720	0.1069	0.9082
435	0.0414	0.3515	580	0.7581	6.4414	725	0.0909	0.7722
440	0.0711	0.6038	585	0.8107	6.8880	730	0.0721	0.6122
445	0.1180	1.0026	590	0.8640	7.3410	735	0.0415	0.3523
450	0.1996	1.6960	595	0.9086	7.7201	740	0.0303	0.2572
455	0.2747	2.3341	600	0.9508	8.0783	745	0.0226	0.1919
460	0.2663	2.2627	605	0.9777	8.3070	750	0.0618	0.5254
465	0.2208	1.8757	610	0.9966	8.4675	755	0.0095	0.0810
470	0.2044	1.7367	615	0.9975	8.4754	760	0.0045	0.0384
475	0.1874	1.5927	620	0.9874	8.3900	765	0.0057	0.0481
480	0.1686	1.4323	625	0.9644	8.1942	770	0.0023	0.0200
485	0.1730	1.4698	630	0.9327	7.9247	775	0.0048	0.0404
490	0.1912	1.6246	635	0.8838	7.5092	780	0.0057	0.0487
495	0.2159	1.8345	640	0.8315	7.0646	785	0.0054	0.0462
500	0.2477	2.1043	645	0.7755	6.5887	790	0.0003	0.0027
505	0.2826	2.4014	650	0.7164	6.0873	795	0.0021	0.0178
510	0.3144	2.6713	655	0.6531	5.5489	800	0.0165	0.1400
515	0.3445	2.9272	660	0.5923	5.0326			
520	0.3659	3.1091	665	0.5327	4.5264			

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

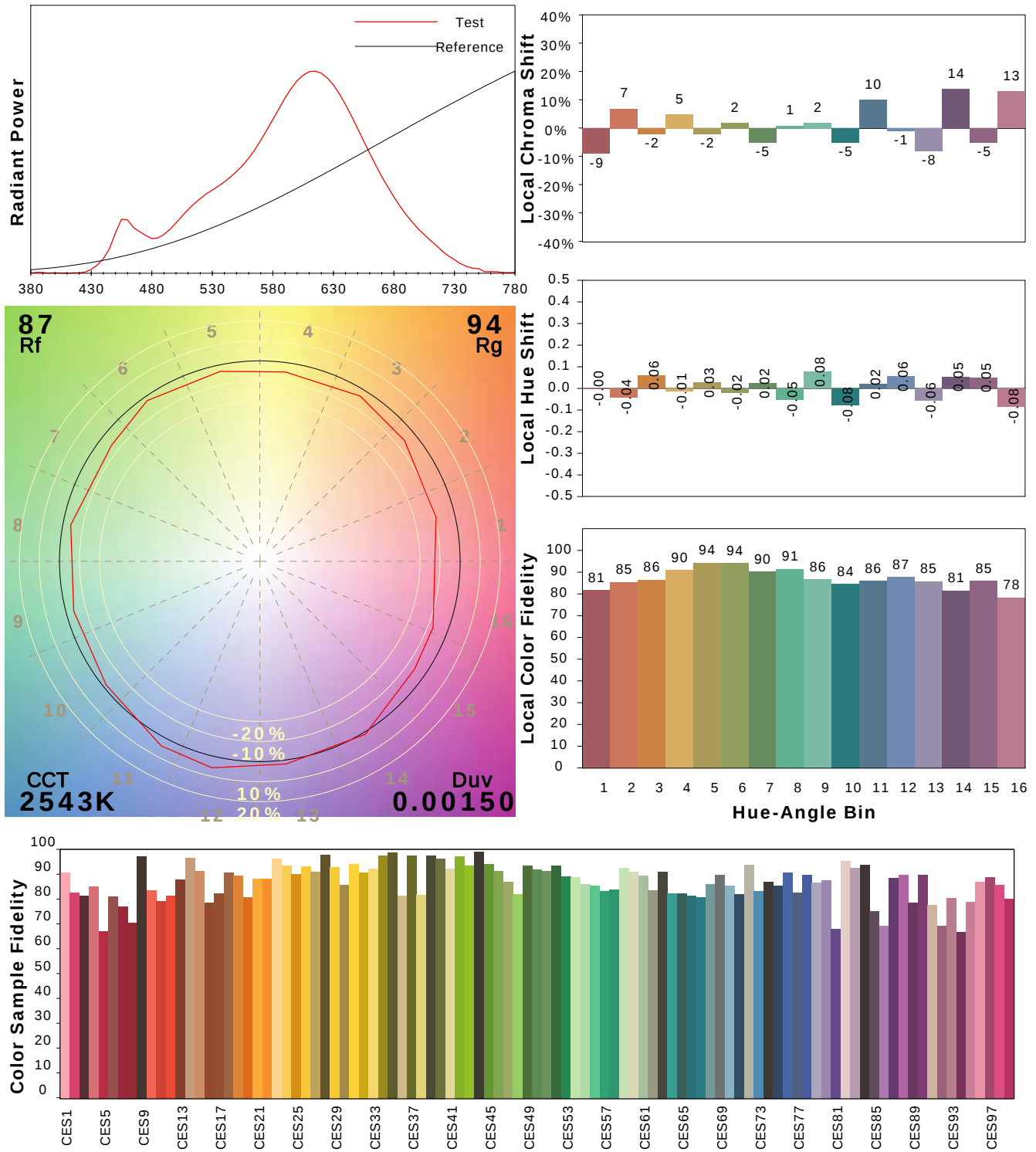
Test Device: Lisun LMS-9000B
 Test Time: 2021-08-09 16:00:44
 Inspector:

IES TM-30-18 Color Rendition Report

Product Information

Product Category: LED-Lampen
 Product Spec: LED-E27-G95-2FS-4W-WWC
 Manufacturer: METOLIGHT
 Buyer: 5841

Product Type: LED-Lampen-E27
 Product Number: 1
 Submitted Unit: 101009



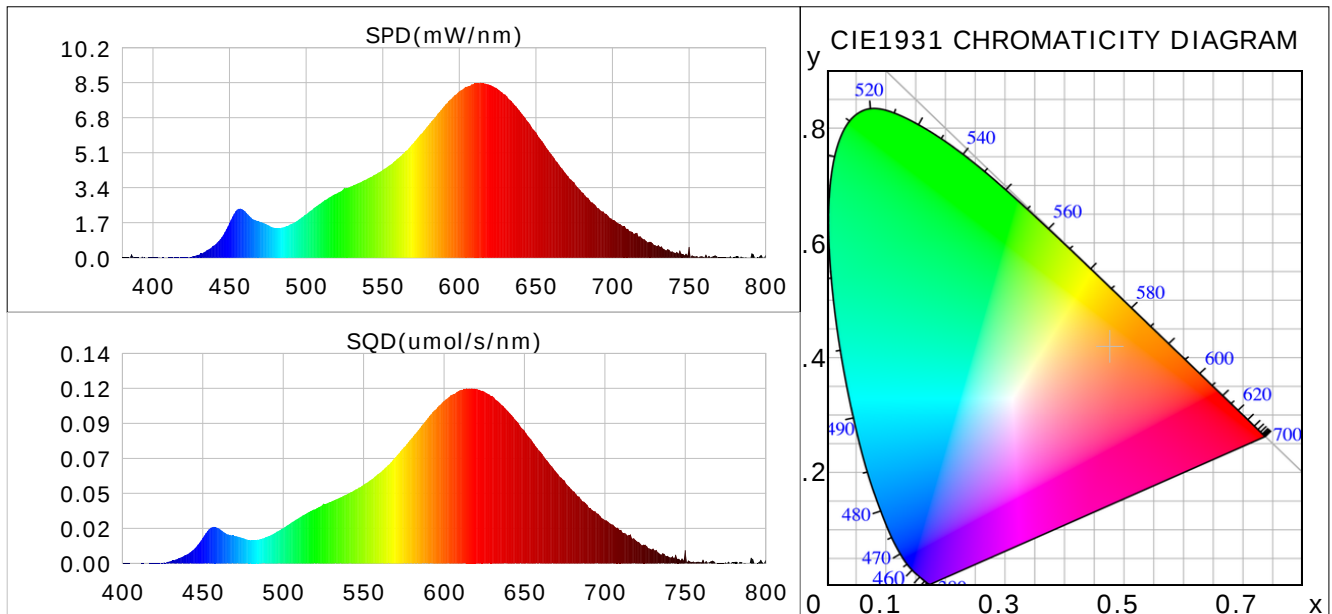
Condition: Tx:0.0°C, Ti:0.0°C, R.H.:60%
 Test Lab:
 Operator: CRE

Test Device: Lisun LMS-9000B
 Test Time: 2021-08-09 16:00:44
 Inspector:

Plant optical param data

CIE Colorimetric Parameters

Chromaticity coordinates: $x=0.4760$ $y=0.4179$ $u(u')=0.2696$ $v=0.3550$ $v'=0.5325$
 CCT: $T_c=2543K$ ($duv=0.00150$) Color Ratio: $R=0.270$ $G=0.708$ $B=0.022$
 Peak Wavelength: 614.0nm Half Bandwidth: 118.1nm
 Dominant Wavelength: 584.6nm Color Purity: 0.683
 CRI: Ra= 86.1



Plant Optical Param

$\mu_v(lm)$: 371.26	$Q_v(lm.s)$: 371.26
$\mu_e, \dot{E}(W/nm)$: 1.19	$Q_e(J)$: 1.19
$\mu_e(W)$: 1.15	$\mu_{fr}(W)$: 0.05
$\dot{C}_e$: 0.35	$\dot{C}_{fr}$: 0.01
$PPE(umol/s/w)$: 1.73	K_{fr} : 0.08
E_{rb_Ratio} : 5.38	$PPF(umol/s)$: 5.68
$PF_{uv}(360-400)(umol/s)$: 0.00	$PPF(400-500)(umol/s)$: 0.42
$PPF(500-600)(umol/s)$: 2.20	$PPF(600-700)(umol/s)$: 3.06
$PF_{fr}(700-800)(umol/s)$: 0.26	$PPF.t(umol)$: 5.68
$\mu_{ch-A.t}(J)$: 0.09	$\mu_{ch-A}(W)$: 0.09
$\mu_{ch-B.t}(J)$: 0.04	$\mu_{ch-B}(W)$: 0.04
$\mu_{b.t}(J)$: 0.11	$\mu_b(W)$: 0.11
$\mu_{y.t}(J)$: 0.47	$\mu_y(W)$: 0.47
$\mu_{r.t}(J)$: 0.58	$\mu_r(W)$: 0.58

Electric Parameters

Voltage: 231.10V	Current: 0.0170A	Power: 3.29W
Power Factor: 0.8190	Frequency: 49.99Hz	

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

Test Device: Lisun LMS-9000B
 Test Time: 2021-08-09 16:00:44
 Inspector: