

Lightsource Test Report

Product Information

Product Category: LED-Lampen
 Product Spec: LED-SLG28-Plus-E27-27-360-NWM
 Manufacturer: METOLIGHT
 Buyer: 3811

Product Type: LED-Strassenlampen
 Product Number: 1
 Submitted Unit: 101216

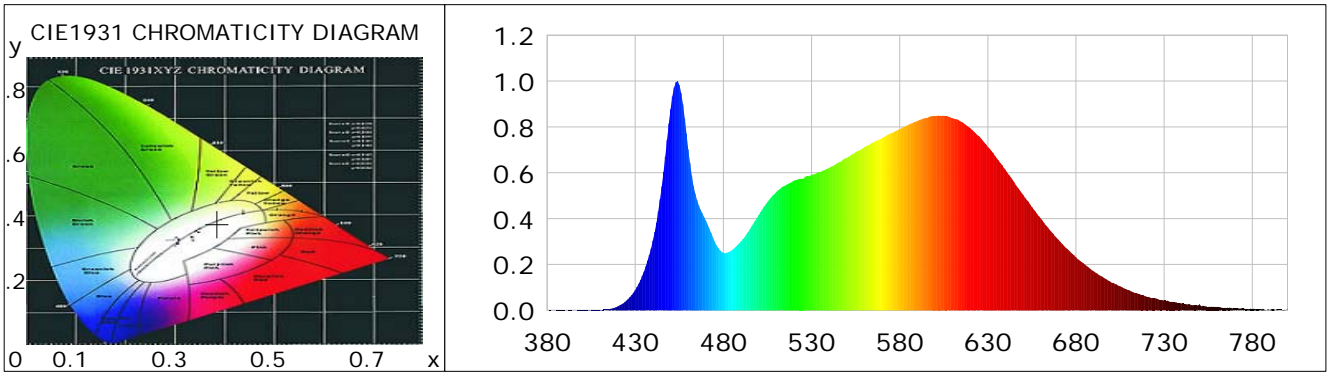
CIE Colorimetric Parameters

Chromaticity coordinates: $x=0.3849$ $y=0.3761$ $u(u')=0.2283$ $v=0.3346$ $v'=0.5020$
 CCT: $T_c=3874K$ ($duv=-0.00159$) Color Ratio: $R=0.196$ $G=0.767$ $B=0.038$
 Peak Wavelength: 453.7nm Half Bandwidth: 20.1nm
 Dominant Wavelength: 580.4nm Color Purity: 0.284
 CRI: $R_a=87.2$, $avgR(1\sim14)=82.1$, $avgR(1\sim15)=82.1$ TM30: $R_f=86$, $R_g=97$
 GAI: $GAI_BB_8=96.7$, $GAI_BB_15=103.4$, $GAI_EES=74.2$

R1 =87	R2 =93	R3 =96	R4 =86	R5 =87	R6 =90	R7 =87	R8 =71
R9 =30	R10=83	R11=86	R12=66	R13=89	R14=98	R15=82	

Color Quality Scale: $Q_a=86.0$, $Q_f=86.0$, $Q_p=86.4$, $Q_g=95.0$

Q1 =85	Q2 =98	Q3 =82	Q4 =79	Q5 =84	Q6 =87	Q7 =89	Q8 =91
Q9 =98	Q10=91	Q11=88	Q12=87	Q13=87	Q14=79	Q15=81	



Photometric Parameters

Luminous Flux: 2965.8 lm Efficiency: 109.08 lm/W Radiant Power: 9.224 W
 Total mains efficacy: 128.27 lm/W Energy Efficiency Class: E (EU 2019/2015)
 Pupil Flux: 4492.55 Plm Pupil Lumens Per Watt: 165.23 Plm/W Pupil Factor (Kp): 1.515
 Circopic Flux: 9185.22 lm

Electric Parameters

Voltage: 230.90V Current: 0.1240A Power: 27.19W
 Power Factor: 0.9470 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: 46230 (2592) CCD Integration Time: 105.37 ms

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WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)
380	0.0005	0.0330	525	0.5737	34.7797	670	0.3086	18.7057
385	0.0007	0.0448	530	0.5902	35.7758	675	0.2682	16.2572
390	0.0011	0.0639	535	0.6029	36.5509	680	0.2311	14.0085
395	0.0006	0.0346	540	0.6212	37.6599	685	0.2003	12.1394
400	0.0012	0.0741	545	0.6431	38.9861	690	0.1706	10.3421
405	0.0010	0.0599	550	0.6653	40.3292	695	0.1461	8.8545
410	0.0020	0.1224	555	0.6894	41.7900	700	0.1216	7.3725
415	0.0056	0.3368	560	0.7116	43.1378	705	0.1052	6.3791
420	0.0171	1.0361	565	0.7328	44.4210	710	0.0881	5.3401
425	0.0423	2.5671	570	0.7514	45.5506	715	0.0736	4.4639
430	0.0883	5.3532	575	0.7725	46.8292	720	0.0599	3.6312
435	0.1690	10.2455	580	0.7908	47.9364	725	0.0525	3.1828
440	0.3041	18.4332	585	0.8096	49.0798	730	0.0432	2.6209
445	0.5417	32.8383	590	0.8257	50.0517	735	0.0370	2.2424
450	0.8774	53.1911	595	0.8397	50.9064	740	0.0298	1.8058
455	0.9833	59.6077	600	0.8474	51.3711	745	0.0240	1.4559
460	0.7029	42.6097	605	0.8491	51.4702	750	0.0261	1.5836
465	0.4815	29.1904	610	0.8381	50.8068	755	0.0160	0.9719
470	0.3922	23.7728	615	0.8230	49.8892	760	0.0149	0.9019
475	0.3005	18.2182	620	0.7948	48.1792	765	0.0104	0.6284
480	0.2511	15.2217	625	0.7590	46.0118	770	0.0081	0.4904
485	0.2633	15.9614	630	0.7122	43.1760	775	0.0088	0.5338
490	0.3004	18.2097	635	0.6636	40.2265	780	0.0066	0.3993
495	0.3532	21.4118	640	0.6126	37.1357	785	0.0044	0.2689
500	0.4153	25.1768	645	0.5579	33.8199	790	0.0020	0.1202
505	0.4731	28.6827	650	0.5036	30.5296	795	0.0038	0.2307
510	0.5171	31.3479	655	0.4507	27.3214	800	0.0054	0.3296
515	0.5439	32.9697	660	0.4010	24.3113			
520	0.5655	34.2820	665	0.3515	21.3071			

Condition: Tx:22.6'C, Ti:0.0'C, R.H.:60%
 Test Lab:
 Operator: CRE

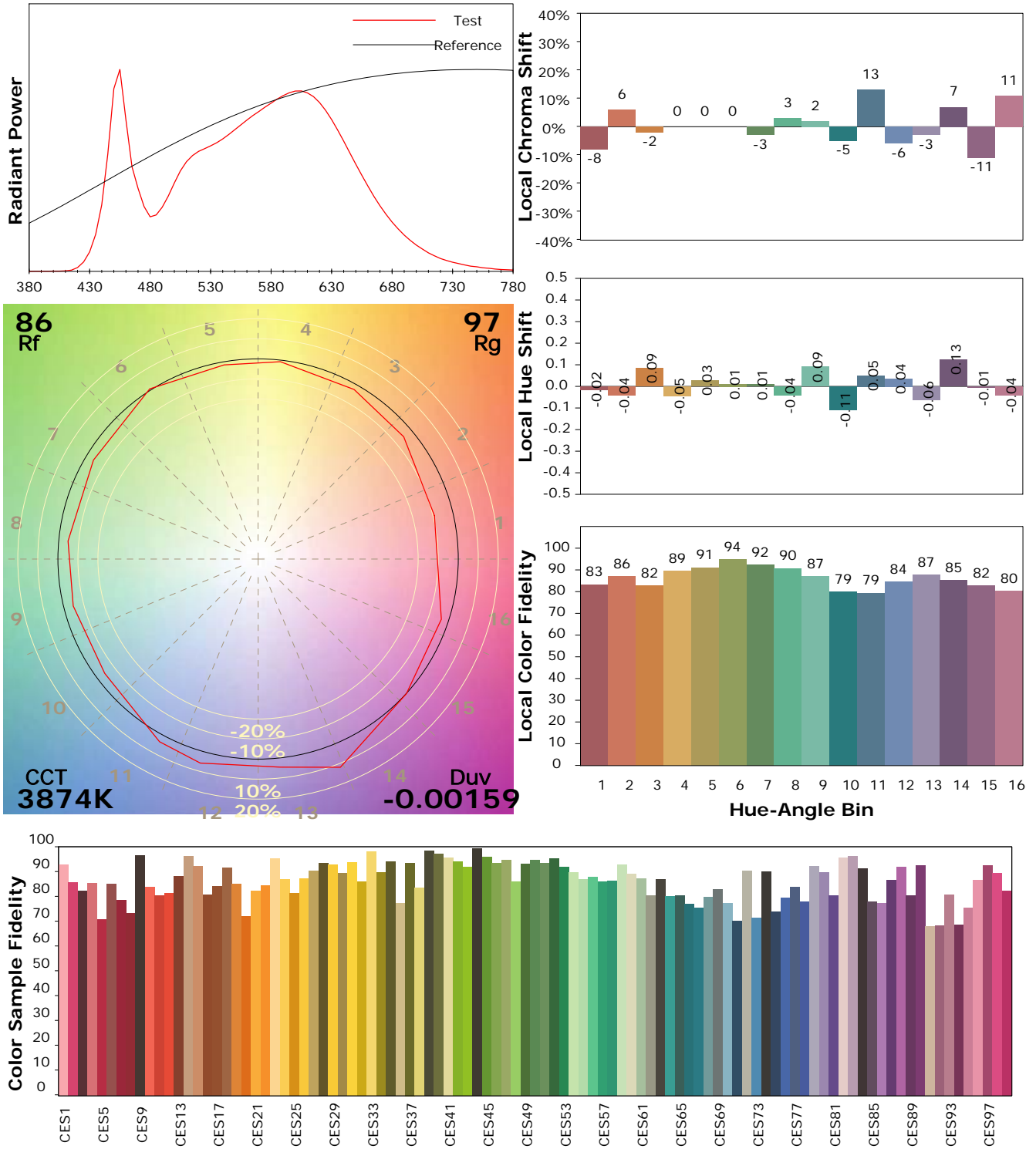
Test Device: Lisun LMS-9000B
 Test Time: 2021-02-12 11:38:57
 Inspector:

IES TM-30-18 Color Rendition Report

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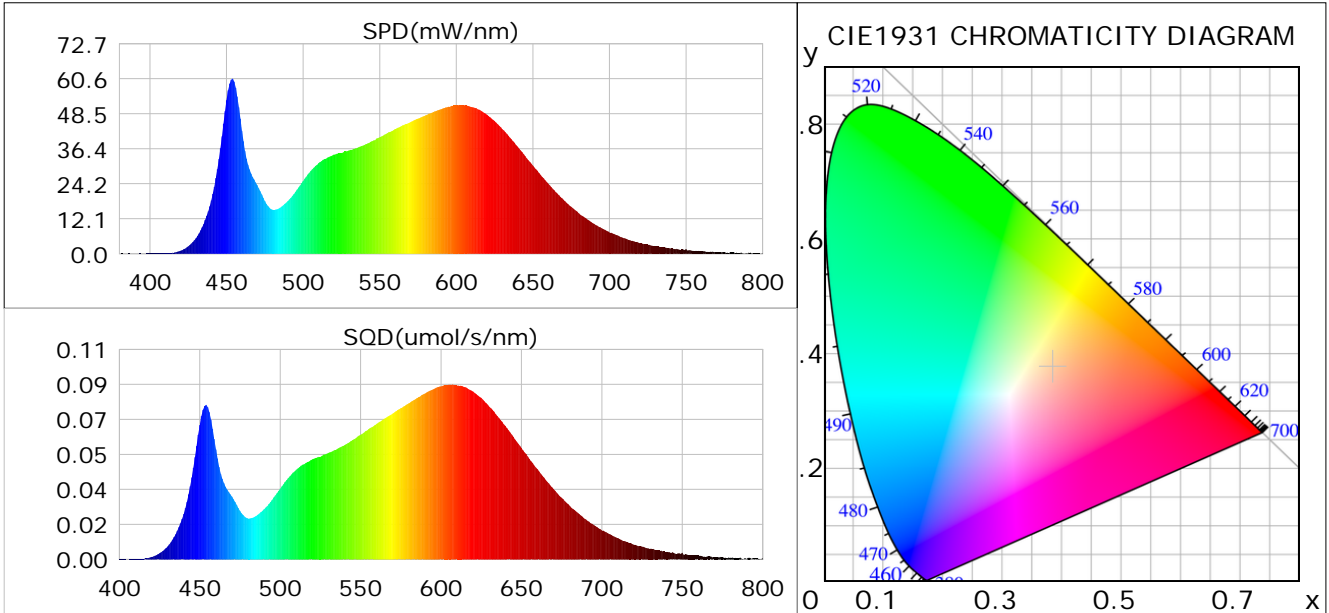
Condition: Tx:22.6°C, Ti:0.0°C, R.H.:60%
 Test Lab:
 Operator: CRE

Test Device: Lisun LMS-9000B
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 Inspector:

Plant optical param data

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Chromaticity coordinates: $x=0.3849$ $y=0.3761$ $u(u')=0.2283$ $v=0.3346$ $v'=0.5020$
 CCT: $T_c=3874K$ ($duv=-0.00159$) Color Ratio: $R=0.196$ $G=0.767$ $B=0.038$
 Peak Wavelength: 453.7nm Half Bandwidth: 20.1nm
 Dominant Wavelength: 580.4nm Color Purity: 0.284
 CRI: $R_a=87.2$



Plant Optical Param

$ \mu_v(lm): 2965.80$	$Q_v(lm.s): 2965.80$
$ \mu_e, \dot{E}(W/nm): 9.22$	$Q_e(J): 9.22$
$ \mu_e(W): 9.03$	$ \mu_{fr}(W): 0.21$
$ \zeta_e: 0.33$	$ \zeta_{fr}: 0.01$
$PPE(umol/s/w): 1.56$	$K_{fr}: 0.04$
$Erb_Ratio: 1.59$	$PPF(umol/s): 42.48$
$PF_{uv}(360-400)(umol/s): 0.00$	$PPF(400-500)(umol/s): 7.41$
$PPF(500-600)(umol/s): 18.86$	$PPF(600-700)(umol/s): 16.21$
$PPF_{fr}(700-800)(umol/s): 1.22$	$PPF.t(umol): 42.48$
$ \mu_{ch-A.t}(J): 0.72$	$ \mu_{ch-A}(W): 0.72$
$ \mu_{ch-B.t}(J): 0.42$	$ \mu_{ch-B}(W): 0.42$
$ \mu_b.t(J): 1.92$	$ \mu_b(W): 1.92$
$ \mu_y.t(J): 4.09$	$ \mu_y(W): 4.09$
$ \mu_r.t(J): 3.10$	$ \mu_r(W): 3.10$

Electric Parameters

Voltage: 230.90V	Current: 0.1240A	Power: 27.19W
Power Factor: 0.9470	Frequency: 49.99Hz	

Condition: $T_x: 22.6^\circ C$, $T_i: 0.0^\circ C$, R.H.: 60%
 Test Lab:
 Operator: CRE

Test Device: Lisun LMS-9000B
 Test Time: 2021-02-12 11:38:57
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