

Lightsource Test Report

Product Information

Product Category: LED-Lampen
 Product Spec: LED-SLG28-E27-15-360-WW
 Manufacturer: METOLIGHT
 Buyer: 3811

Product Type: LED-Strassenlampen
 Product Number: 1
 Submitted Unit: 100269

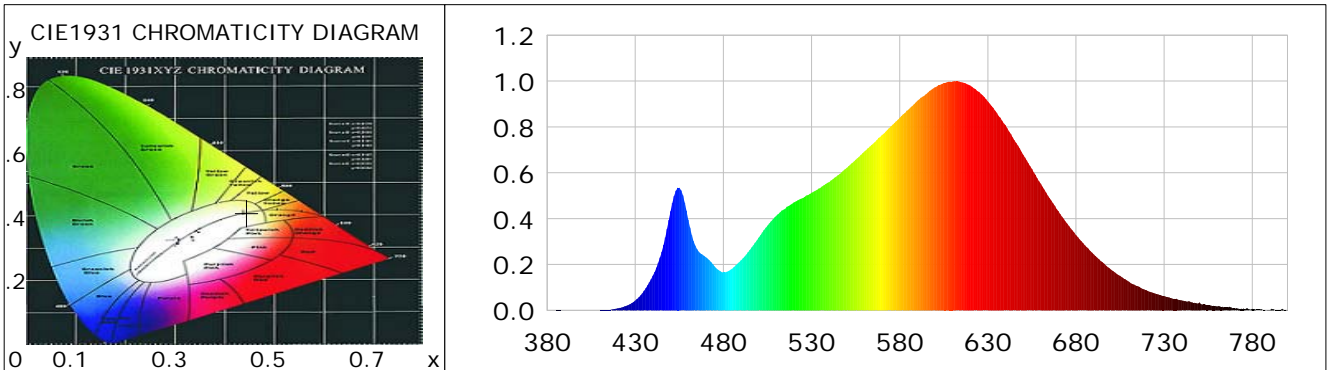
CIE Colorimetric Parameters

Chromaticity coordinates: $x=0.4448$ $y=0.4106$ $u(u')=0.2528$ $v=0.3501$ $v'=0.5251$
 CCT: $T_c=2924K$ ($duv=0.00152$) Color Ratio: $R=0.238$ $G=0.738$ $B=0.024$
 Peak Wavelength: 611.1nm Half Bandwidth: 137.2nm
 Dominant Wavelength: 582.6nm Color Purity: 0.568
 CRI: $R_a=85.7$, $avgR(1\sim14)=80.7$, $avgR(1\sim15)=80.6$ TM30: $R_f=87$, $R_g=96$
 GAI: $GAI_BB_8=90.1$, $GAI_BB_15=98.4$, $GAI_EES=49.8$

R1 =84	R2 =92	R3 =98	R4 =85	R5 =84	R6 =91	R7 =86	R8 =67
R9 =24	R10=81	R11=84	R12=71	R13=86	R14=99	R15=78	

Color Quality Scale: $Q_a=85.4$, $Q_f=87.3$, $Q_p=86.0$, $Q_g=91.6$

Q1 =82	Q2 =95	Q3 =85	Q4 =82	Q5 =85	Q6 =86	Q7 =86	Q8 =89
Q9 =96	Q10=92	Q11=89	Q12=88	Q13=87	Q14=77	Q15=79	



Photometric Parameters

Luminous Flux: 1835.1 lm Efficiency: 125.86 lm/W Radiant Power: 5.670 W
 Total mains efficacy: 148.02 lm/W Energy Efficiency Class: D (EU 2019/2015)
 Pupil Flux: 2276.14 Plm Pupil Lumens Per Watt: 156.11 Plm/W Pupil Factor (Kp): 1.240
 Circopic Flux: 4099.95 lm

Electric Parameters

Voltage: 230.60V Current: 0.1320A Power: 14.58W
 Power Factor: 0.9670 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: 44656 (2669) CCD Integration Time: 121.44 ms

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WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)
380	0.0004	0.0143	525	0.4899	18.2486	670	0.4334	16.1456
385	0.0008	0.0299	530	0.5129	19.1073	675	0.3784	14.0961
390	0.0007	0.0269	535	0.5345	19.9119	680	0.3287	12.2461
395	0.0001	0.0032	540	0.5598	20.8534	685	0.2838	10.5728
400	0.0004	0.0163	545	0.5894	21.9551	690	0.2445	9.1066
405	0.0000	0.0016	550	0.6216	23.1563	695	0.2097	7.8110
410	0.0009	0.0322	555	0.6567	24.4646	700	0.1767	6.5817
415	0.0032	0.1176	560	0.6929	25.8131	705	0.1502	5.5959
420	0.0087	0.3251	565	0.7281	27.1231	710	0.1252	4.6644
425	0.0200	0.7451	570	0.7656	28.5211	715	0.1056	3.9344
430	0.0427	1.5917	575	0.8026	29.8993	720	0.0874	3.2567
435	0.0854	3.1805	580	0.8403	31.3037	725	0.0737	2.7452
440	0.1513	5.6345	585	0.8761	32.6359	730	0.0626	2.3317
445	0.2557	9.5245	590	0.9140	34.0474	735	0.0506	1.8868
450	0.4325	16.1114	595	0.9433	35.1393	740	0.0433	1.6125
455	0.5343	19.9049	600	0.9727	36.2353	745	0.0363	1.3529
460	0.3959	14.7476	605	0.9914	36.9338	750	0.0349	1.2993
465	0.2672	9.9548	610	0.9981	37.1818	755	0.0225	0.8395
470	0.2321	8.6449	615	0.9951	37.0703	760	0.0173	0.6427
475	0.1917	7.1412	620	0.9808	36.5384	765	0.0125	0.4665
480	0.1654	6.1631	625	0.9525	35.4846	770	0.0082	0.3059
485	0.1821	6.7837	630	0.9106	33.9240	775	0.0079	0.2946
490	0.2183	8.1341	635	0.8618	32.1042	780	0.0067	0.2492
495	0.2632	9.8060	640	0.8076	30.0839	785	0.0052	0.1949
500	0.3173	11.8215	645	0.7422	27.6486	790	0.0017	0.0639
505	0.3698	13.7745	650	0.6792	25.3010	795	0.0021	0.0772
510	0.4130	15.3864	655	0.6166	22.9700	800	0.0037	0.1396
515	0.4432	16.5088	660	0.5522	20.5723			
520	0.4708	17.5372	665	0.4899	18.2496			

Condition: Tx:23.2'C, Ti:0.0'C, R.H.:60%
 Test Lab:
 Operator: CRE

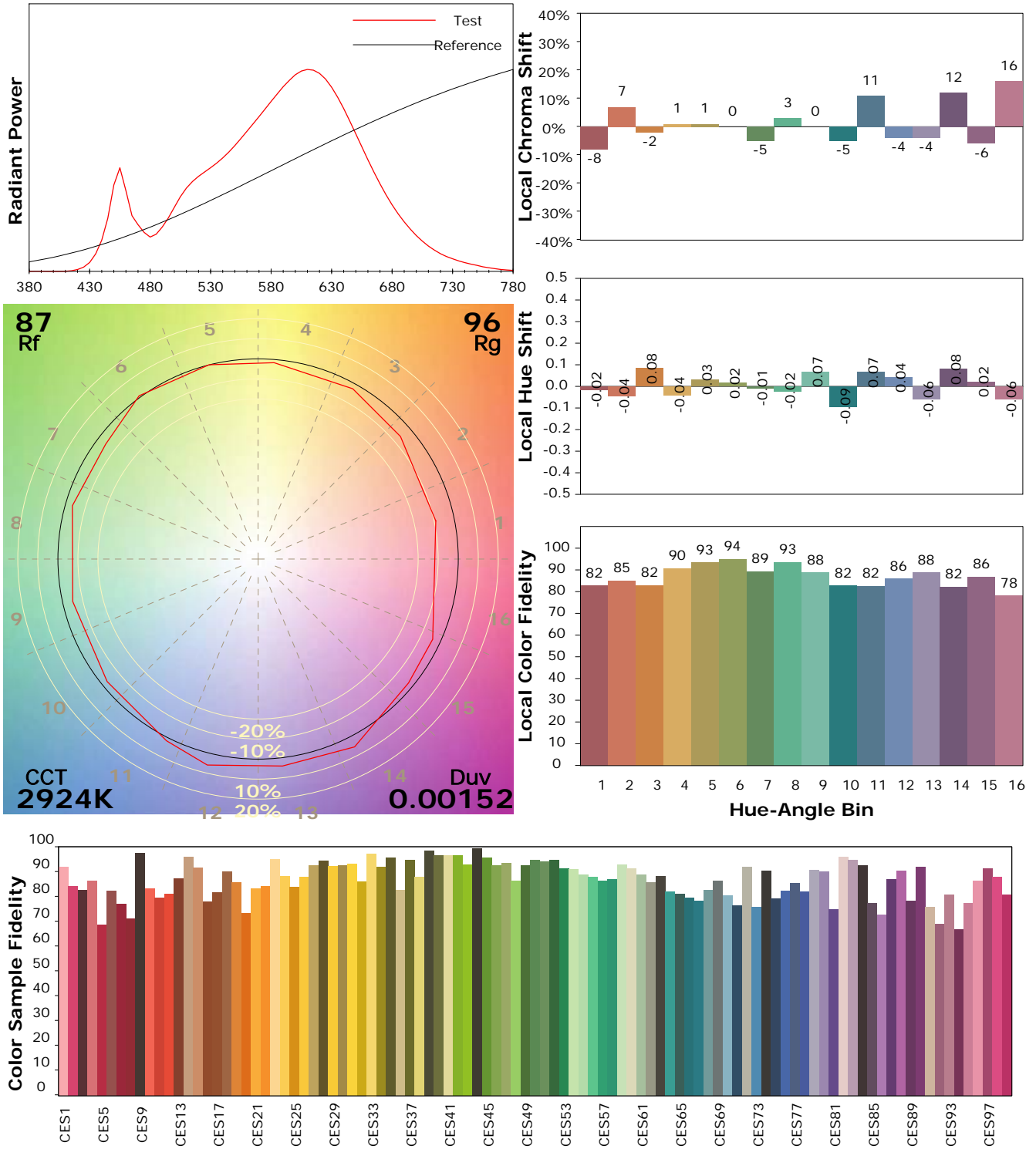
Test Device: Lisun LMS-9000B
 Test Time: 2021-02-11 12:08:37
 Inspector:

IES TM-30-18 Color Rendition Report

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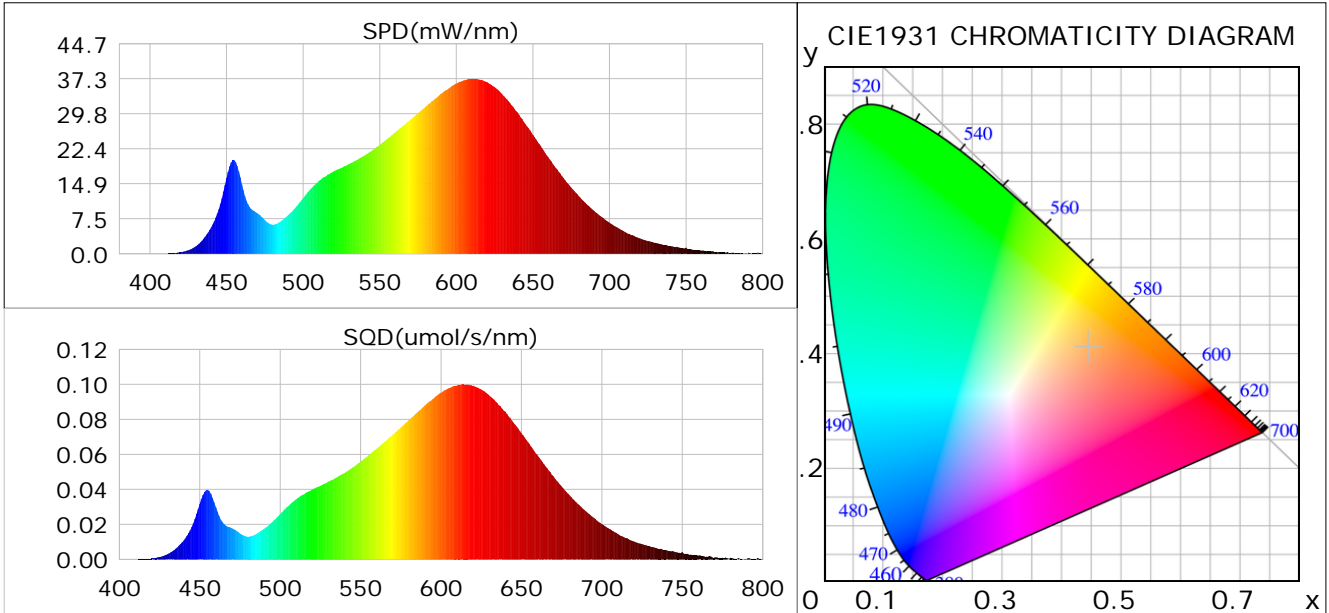
Condition: Tx:23.2°C, Ti:0.0°C, R.H.:60%
 Test Lab:
 Operator: CRE

Test Device: Lisun LMS-9000B
 Test Time: 2021-02-11 12:08:37
 Inspector:

Plant optical param data

CIE Colorimetric Parameters

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 Peak Wavelength: 611.1nm Half Bandwidth: 137.2nm
 Dominant Wavelength: 582.6nm Color Purity: 0.568
 CRI: $R_a=85.7$



Plant Optical Param

$ \mu_v(lm): 1835.10$	$Q_v(lm.s): 1835.10$
$ \mu_e, \dot{E}(W/nm): 5.67$	$Q_e(J): 5.67$
$ \mu_e(W): 5.50$	$ \mu_{fr}(W): 0.18$
$ \zeta_e: 0.38$	$ \zeta_{fr}: 0.01$
$PPE(umol/s/w): 1.84$	$K_{fr}: 0.07$
$Erb_Ratio: 3.56$	$PPF(umol/s): 26.76$
$PF_{uv}(360-400)(umol/s): 0.00$	$PPF(400-500)(umol/s): 2.64$
$PPF(500-600)(umol/s): 11.26$	$PPF(600-700)(umol/s): 12.87$
$PPF_r(700-800)(umol/s): 1.04$	$PPF.t(umol): 26.76$
$ \mu_{ch-A.t}(J): 0.44$	$ \mu_{ch-A}(W): 0.44$
$ \mu_{ch-B.t}(J): 0.21$	$ \mu_{ch-B}(W): 0.21$
$ \mu_b.t(J): 0.68$	$ \mu_b(W): 0.68$
$ \mu_y.t(J): 2.42$	$ \mu_y(W): 2.42$
$ \mu_r.t(J): 2.45$	$ \mu_r(W): 2.45$

Electric Parameters

Voltage: 230.60V	Current: 0.1320A	Power: 14.58W
Power Factor: 0.9670	Frequency: 49.99Hz	

Condition: $T_x: 23.2^\circ C$, $T_i: 0.0^\circ C$, R.H.: 60%
 Test Lab:
 Operator: CRE

Test Device: Lisun LMS-9000B
 Test Time: 2021-02-11 12:08:37
 Inspector: