

Lightsource Test Report

Product Information

Product Category: LED-Lampen
 Product Spec: LED-SLG381-E27-30-NW
 Manufacturer: METOLIGHT
 Buyer: 3811

Product Type: LED-Strassenlampe
 Product Number: 1
 Submitted Unit: 100190

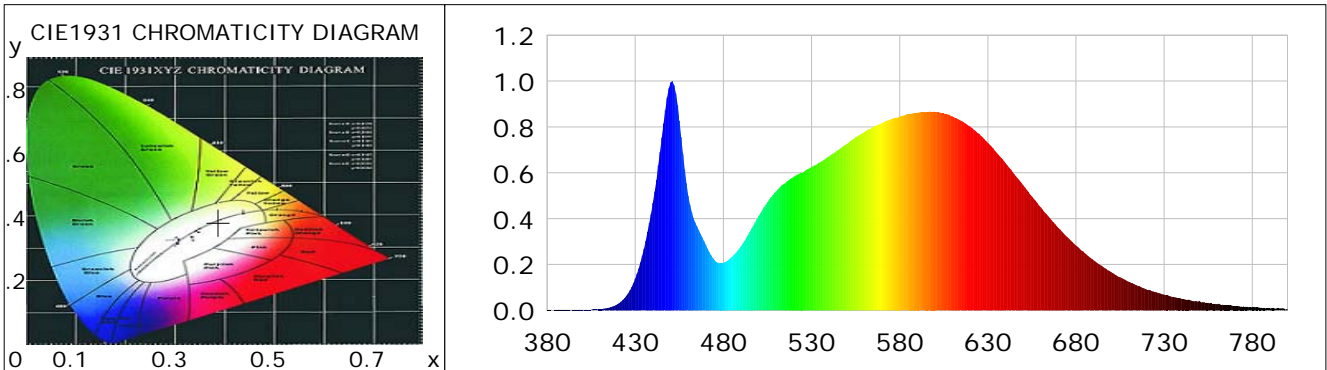
CIE Colorimetric Parameters

Chromaticity coordinates: $x=0.3874$ $y=0.3808$ $u(u')=0.2280$ $v=0.3363$ $v'=0.5044$
 CCT: $T_c=3847K$ ($duv=-0.00007$) Color Ratio: $R=0.190$ $G=0.777$ $B=0.032$
 Peak Wavelength: 450.7nm Half Bandwidth: 19.4nm
 Dominant Wavelength: 579.7nm Color Purity: 0.305
 CRI: $R_a=84.1$, $avgR(1\sim14)=78.1$, $avgR(1\sim15)=78.2$ TM30: $R_f=84$, $R_g=98$
 GAI: $GAI_BB_8=95.1$, $GAI_BB_15=101.2$, $GAI_EES=72.6$

R1 =83	R2 =89	R3 =93	R4 =84	R5 =83	R6 =84	R7 =88	R8 =70
R9 =23	R10=73	R11=83	R12=62	R13=84	R14=96	R15=79	

Color Quality Scale: $Q_a=84.0$, $Q_f=83.8$, $Q_p=84.9$, $Q_g=95.1$

Q1 =85	Q2 =98	Q3 =78	Q4 =77	Q5 =83	Q6 =84	Q7 =85	Q8 =90
Q9 =97	Q10=88	Q11=85	Q12=85	Q13=85	Q14=77	Q15=80	



Photometric Parameters

Luminous Flux: 4364.8 lm Efficiency: 145.01 lm/W Radiant Power: 13.647 W
 Total mains efficacy: 170.53 lm/W Energy Efficiency Class: C (EU 2019/2015)
 Pupil Flux: 6384.14 Plm Pupil Lumens Per Watt: 212.10 Plm/W Pupil Factor (Kp): 1.463
 Circopic Flux: 12621.63 lm

Electric Parameters

Voltage: 231.00V Current: 0.1303A Power: 30.10W
 Power Factor: 0.9460 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: 45987 (2698) CCD Integration Time: 80.25 ms

Condition: Tx:24.3'C, Ti:0.0'C, R.H.:60%
 Test Lab:
 Operator: CRE

Test Device: Lisun LMS-9000B
 Test Time: 2021-02-16 10:58:15
 Inspector:

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WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)
380	0.0013	0.1067	525	0.5995	50.8592	670	0.3597	30.5141
385	0.0014	0.1188	530	0.6247	52.9951	675	0.3202	27.1643
390	0.0012	0.0987	535	0.6456	54.7656	680	0.2832	24.0209
395	0.0012	0.1005	540	0.6722	57.0217	685	0.2486	21.0922
400	0.0018	0.1551	545	0.6987	59.2728	690	0.2180	18.4912
405	0.0029	0.2487	550	0.7261	61.5942	695	0.1919	16.2782
410	0.0055	0.4655	555	0.7548	64.0345	700	0.1665	14.1242
415	0.0118	0.9990	560	0.7781	66.0111	705	0.1441	12.2231
420	0.0273	2.3185	565	0.8011	67.9566	710	0.1248	10.5832
425	0.0637	5.4027	570	0.8169	69.3009	715	0.1072	9.0961
430	0.1386	11.7598	575	0.8339	70.7388	720	0.0914	7.7515
435	0.2689	22.8096	580	0.8456	71.7349	725	0.0806	6.8380
440	0.4687	39.7655	585	0.8555	72.5756	730	0.0690	5.8569
445	0.7545	64.0029	590	0.8624	73.1574	735	0.0587	4.9839
450	0.9940	84.3282	595	0.8651	73.3855	740	0.0500	4.2448
455	0.8273	70.1837	600	0.8658	73.4491	745	0.0438	3.7143
460	0.5012	42.5145	605	0.8591	72.8843	750	0.0417	3.5389
465	0.3661	31.0576	610	0.8457	71.7459	755	0.0322	2.7346
470	0.2862	24.2789	615	0.8267	70.1335	760	0.0266	2.2591
475	0.2186	18.5414	620	0.8020	68.0341	765	0.0225	1.9074
480	0.2075	17.6034	625	0.7702	65.3388	770	0.0184	1.5577
485	0.2344	19.8852	630	0.7308	61.9972	775	0.0174	1.4736
490	0.2793	23.6910	635	0.6871	58.2870	780	0.0146	1.2421
495	0.3424	29.0451	640	0.6417	54.4352	785	0.0113	0.9553
500	0.4123	34.9799	645	0.5934	50.3425	790	0.0080	0.6750
505	0.4723	40.0700	650	0.5455	46.2783	795	0.0095	0.8026
510	0.5196	44.0835	655	0.4970	42.1633	800	0.0076	0.6470
515	0.5542	47.0127	660	0.4497	38.1524			
520	0.5833	49.4824	665	0.4040	34.2730			

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 Test Lab:
 Operator: CRE

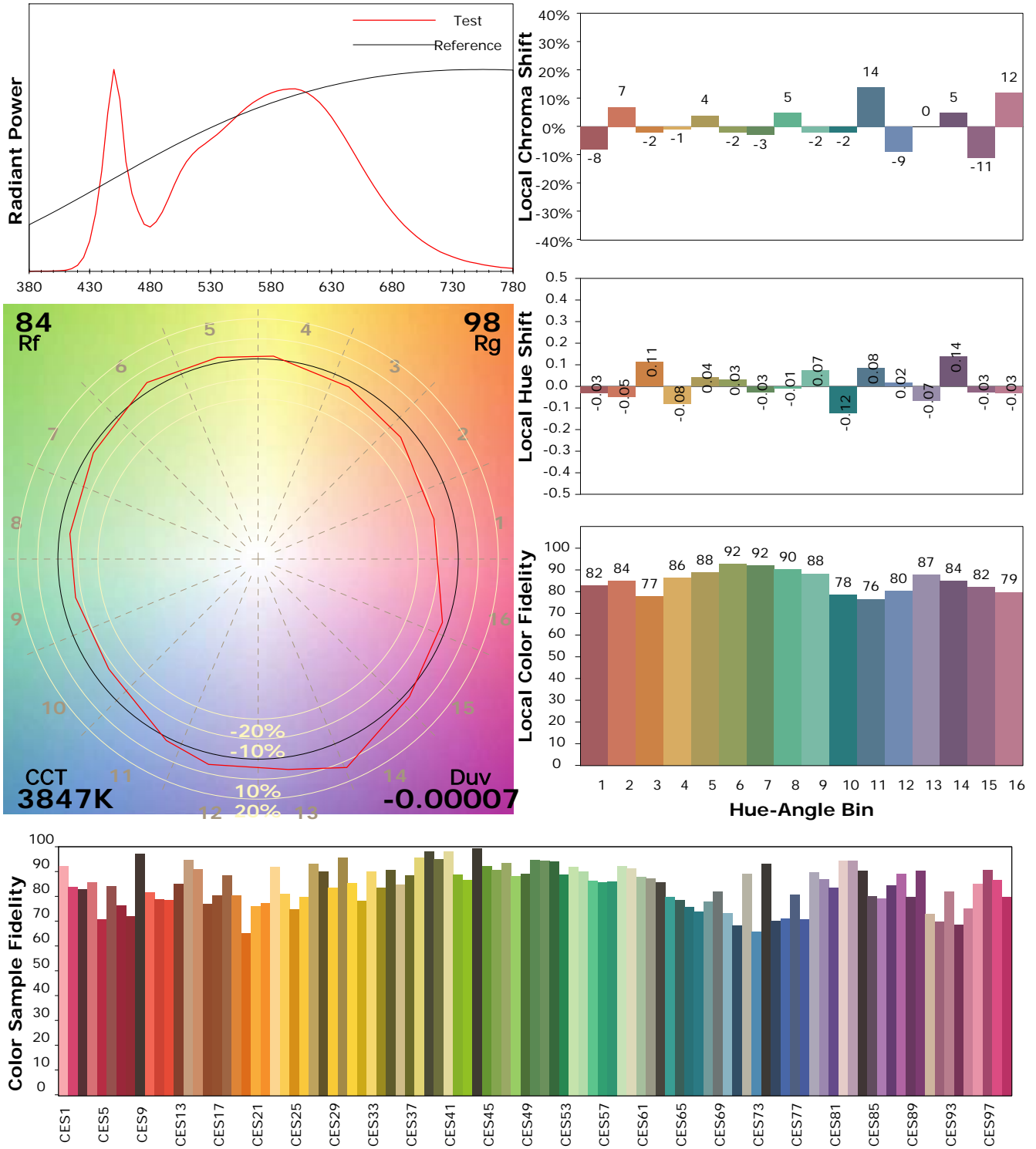
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IES TM-30-18 Color Rendition Report

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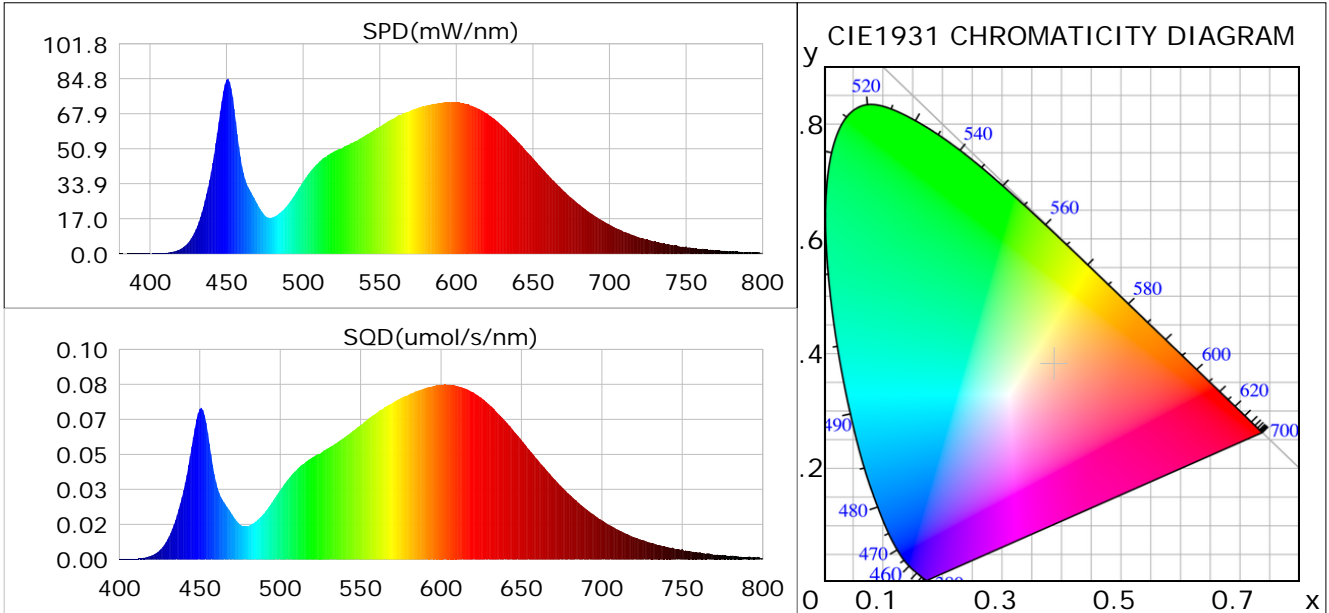
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Test Device: Lisun LMS-9000B
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 Inspector:

Plant optical param data

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 Dominant Wavelength: 579.7nm Color Purity: 0.305
 CRI: $R_a=84.1$



Plant Optical Param

$ \mu_v(lm): 4364.80$	$Q_v(lm.s): 4364.80$
$ \mu_e, \dot{E}(W/nm): 13.65$	$Q_e(J): 13.65$
$ \mu_e(W): 13.22$	$ \mu_{fr}(W): 0.45$
$ \zeta_e: 0.44$	$ \zeta_{fr}: 0.02$
$PPE(umol/s/w): 2.07$	$K_{fr}: 0.09$
$Erb_Ratio: 1.72$	$PPF(umol/s): 62.41$
$PF_{uv}(360-400)(umol/s): 0.01$	$PPF(400-500)(umol/s): 10.17$
$PPF(500-600)(umol/s): 27.99$	$PPF(600-700)(umol/s): 24.25$
$PPF_r(700-800)(umol/s): 2.68$	$PPF.t(umol): 62.41$
$ \mu_{ch-A.t}(J): 1.11$	$ \mu_{ch-A}(W): 1.11$
$ \mu_{ch-B.t}(J): 0.59$	$ \mu_{ch-B}(W): 0.59$
$ \mu_b.t(J): 2.65$	$ \mu_b(W): 2.65$
$ \mu_y.t(J): 6.06$	$ \mu_y(W): 6.06$
$ \mu_r.t(J): 4.62$	$ \mu_r(W): 4.62$

Electric Parameters

Voltage: 231.00V	Current: 0.1303A	Power: 30.10W
Power Factor: 0.9460	Frequency: 49.99Hz	

Condition: $T_x: 24.3^\circ C$, $T_i: 0.0^\circ C$, R.H.: 60%
 Test Lab:
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