

Lightsource Test Report

Product Information

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

Product Type: LED-Strassenlampen
 Product Number: 1
 Submitted Unit: 100249

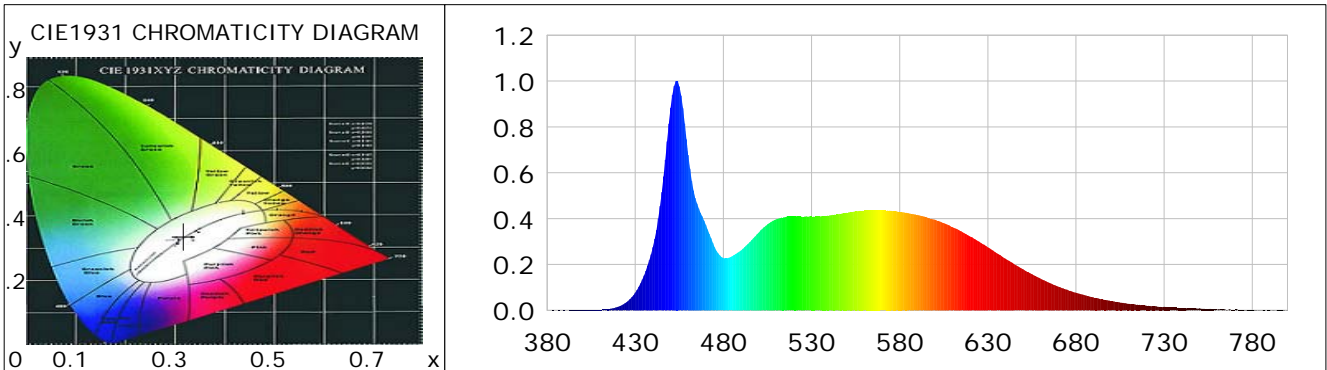
CIE Colorimetric Parameters

Chromaticity coordinates: $x=0.3171$ $y=0.3372$ $u(u')=0.1978$ $v=0.3155$ $v'=0.4733$
 CCT: $T_c=6226K$ ($duv=0.00518$) Color Ratio: $R=0.138$ $G=0.804$ $B=0.058$
 Peak Wavelength: 453.5nm Half Bandwidth: 18.9nm
 Dominant Wavelength: 494.8nm Color Purity: 0.052
 CRI: $R_a=84.8$, $avgR(1\sim14)=78.1$, $avgR(1\sim15)=78.1$ TM30: $R_f=84$, $R_g=94$
 GAI: $GAI_BB_8=89.4$, $GAI_BB_15=95.1$, $GAI_EES=86.1$

R1 =83	R2 =91	R3 =94	R4 =83	R5 =83	R6 =86	R7 =88	R8 =70
R9 =12	R10=78	R11=83	R12=59	R13=86	R14=98	R15=78	

Color Quality Scale: $Q_a=83.2$, $Q_f=83.4$, $Q_p=82.5$, $Q_g=91.1$

Q1 =82	Q2 =98	Q3 =81	Q4 =75	Q5 =80	Q6 =83	Q7 =87	Q8 =90
Q9 =98	Q10=91	Q11=87	Q12=85	Q13=84	Q14=73	Q15=77	



Photometric Parameters

Luminous Flux: 3524.0 lm Efficiency: 129.61 lm/W Radiant Power: 11.250 W
 Total mains efficacy: 152.42 lm/W Energy Efficiency Class: D (EU 2019/2015)
 Pupil Flux: 6652.45 Plm Pupil Lumens Per Watt: 244.67 Plm/W Pupil Factor (Kp): 1.888
 Circopic Flux: 15327.57 lm

Electric Parameters

Voltage: 230.90V Current: 0.1240A Power: 27.19W
 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: 48607 (2481) CCD Integration Time: 32.95 ms

Condition: $T_x=21.3^{\circ}C$, $T_i=0.0^{\circ}C$, R.H.:60%
 Test Lab:
 Operator: CRE

Test Device: Lisun LMS-9000B
 Test Time: 2021-02-12 12:34:42
 Inspector:

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WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)
380	0.0002	0.0286	525	0.4072	49.8854	670	0.1039	12.7313
385	0.0004	0.0534	530	0.4094	50.1516	675	0.0902	11.0463
390	0.0010	0.1181	535	0.4091	50.1218	680	0.0770	9.4322
395	0.0011	0.1316	540	0.4137	50.6838	685	0.0658	8.0655
400	0.0015	0.1802	545	0.4190	51.3357	690	0.0563	6.9028
405	0.0018	0.2213	550	0.4252	52.0841	695	0.0481	5.8981
410	0.0031	0.3856	555	0.4323	52.9557	700	0.0404	4.9508
415	0.0060	0.7405	560	0.4357	53.3825	705	0.0346	4.2420
420	0.0149	1.8194	565	0.4373	53.5693	710	0.0293	3.5873
425	0.0356	4.3613	570	0.4357	53.3769	715	0.0251	3.0761
430	0.0770	9.4324	575	0.4348	53.2716	720	0.0201	2.4674
435	0.1516	18.5692	580	0.4297	52.6399	725	0.0182	2.2309
440	0.2753	33.7207	585	0.4233	51.8515	730	0.0157	1.9247
445	0.5156	63.1699	590	0.4167	51.0481	735	0.0127	1.5559
450	0.8834	108.2224	595	0.4071	49.8702	740	0.0103	1.2650
455	0.9773	119.7250	600	0.3955	48.4517	745	0.0078	0.9612
460	0.6771	82.9551	605	0.3810	46.6699	750	0.0090	1.0989
465	0.4663	57.1200	610	0.3627	44.4280	755	0.0060	0.7379
470	0.3731	45.7026	615	0.3447	42.2277	760	0.0039	0.4776
475	0.2752	33.7094	620	0.3225	39.5036	765	0.0034	0.4171
480	0.2286	28.0098	625	0.2997	36.7207	770	0.0035	0.4292
485	0.2365	28.9774	630	0.2748	33.6664	775	0.0020	0.2478
490	0.2618	32.0689	635	0.2496	30.5743	780	0.0026	0.3150
495	0.2975	36.4416	640	0.2255	27.6197	785	0.0008	0.1030
500	0.3393	41.5622	645	0.2010	24.6211	790	0.0025	0.3120
505	0.3750	45.9394	650	0.1793	21.9604	795	0.0019	0.2353
510	0.3974	48.6865	655	0.1578	19.3284	800	0.0031	0.3819
515	0.4066	49.8108	660	0.1379	16.8909			
520	0.4112	50.3705	665	0.1197	14.6601			

Condition: Tx:21.3'C, Ti:0.0'C, R.H.:60%
 Test Lab:
 Operator: CRE

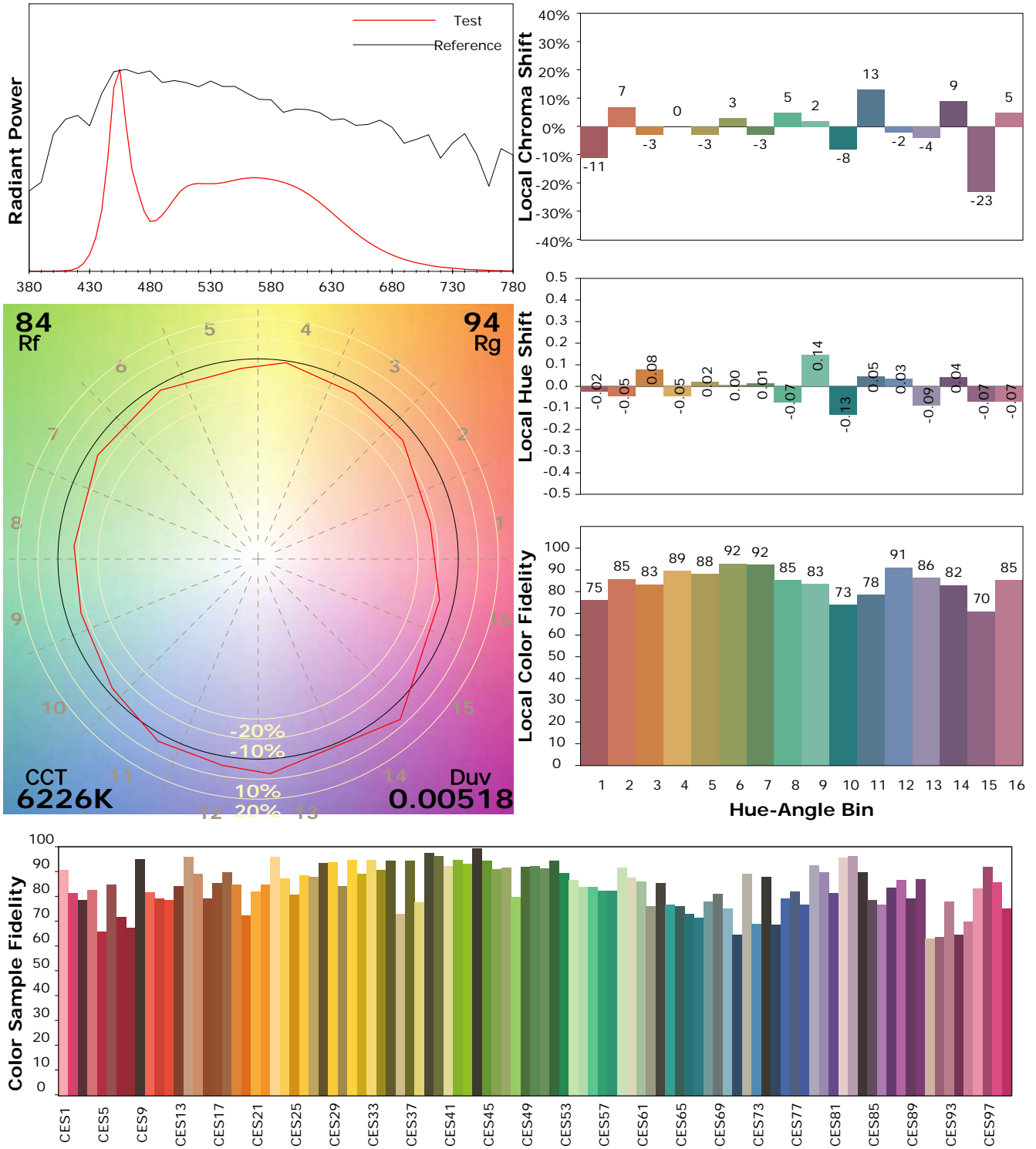
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IES TM-30-18 Color Rendition Report

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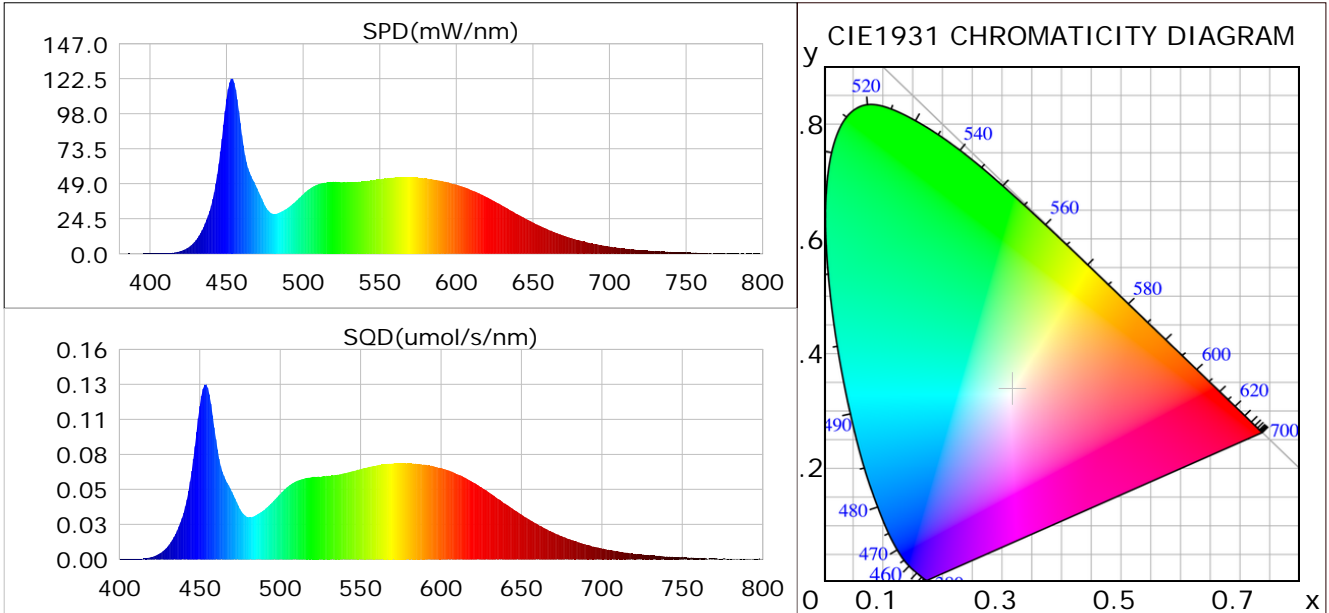
Condition: Tx:21.3°C, Ti:0.0°C, R.H.:60%
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Test Device: Lisun LMS-9000B
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Plant optical param data

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 Dominant Wavelength: 494.8nm Color Purity: 0.052
 CRI: $R_a=84.8$



Plant Optical Param

$ \mu_v(lm)$: 3524.00	$Q_v(lm.s)$: 3524.00
$ \mu_e, \dot{E}(W/nm)$: 11.25	$Q_e(J)$: 11.25
$ \mu_e(W)$: 11.11	$ \mu_{fr}(W)$: 0.14
$ \zeta_e$: 0.41	$ \zeta_{fr}$: 0.01
PPE(umol/s/w): 1.84	Kfr: 0.03
Erb_Ratio: 0.65	PPF(umol/s): 50.13
PFuv(360-400)(umol/s): 0.01	PPF(400-500)(umol/s): 14.10
PPF(500-600)(umol/s): 23.44	PPF(600-700)(umol/s): 12.59
PPfr(700-800)(umol/s): 0.84	PPF.t(umol): 50.13
$ \mu_{ch-A.t}(J)$: 0.88	$ \mu_{ch-A}(W)$: 0.88
$ \mu_{ch-B.t}(J)$: 0.64	$ \mu_{ch-B}(W)$: 0.64
$ \mu_b.t(J)$: 3.65	$ \mu_b(W)$: 3.65
$ \mu_y.t(J)$: 5.13	$ \mu_y(W)$: 5.13
$ \mu_r.t(J)$: 2.42	$ \mu_r(W)$: 2.42

Electric Parameters

Voltage: 230.90V	Current: 0.1240A	Power: 27.19W
Power Factor: 0.9670	Frequency: 49.99Hz	

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