

Lightsource Test Report

Product Information

Product Category: LED-Lampen
 Product Spec: LED-SLG381-E40-60-NW
 Manufacturer: METOLIGHT
 Buyer: 3811

Product Type: LED-streetbulb
 Product Number: 1
 Submitted Unit: 102944

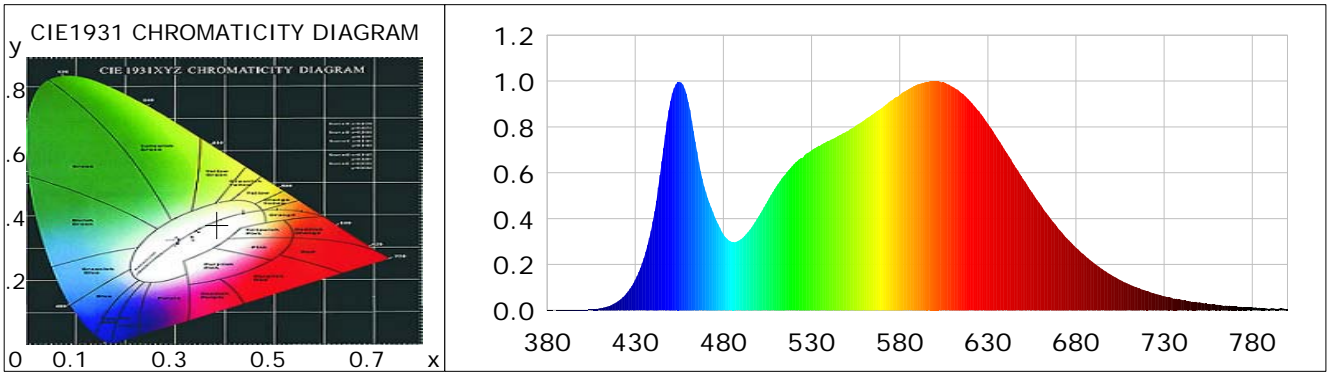
CIE Colorimetric Parameters

Chromaticity coordinates: $x=0.3846$ $y=0.3736$ $u(u')=0.2291$ $v=0.3339$ $v'=0.5008$
 CCT: $T_c=3863K$ ($duv=-0.00269$) Color Ratio: $R=0.194$ $G=0.769$ $B=0.037$
 Peak Wavelength: 599.8nm Half Bandwidth: 149.5nm
 Dominant Wavelength: 581.1nm Color Purity: 0.275
 CRI: $R_a=85.6$, $avgR(1\sim14)=80.1$, $avgR(1\sim15)=80.1$ TM30: $R_f=85$, $R_g=96$
 GAI: $GAI_BB_8=97.4$, $GAI_BB_15=104.2$, $GAI_EES=74.6$

R1 =85	R2 =92	R3 =95	R4 =84	R5 =85	R6 =88	R7 =86	R8 =69
R9 =24	R10=80	R11=82	R12=65	R13=87	R14=98	R15=81	

Color Quality Scale: $Q_a=83.9$, $Q_f=83.8$, $Q_p=84.6$, $Q_g=94.5$

Q1 =84	Q2 =98	Q3 =80	Q4 =76	Q5 =81	Q6 =84	Q7 =87	Q8 =89
Q9 =98	Q10=89	Q11=86	Q12=85	Q13=85	Q14=77	Q15=80	



Photometric Parameters

Luminous Flux: 8817.3 lm	Efficiency: 145.96 lm/W	Radiant Power: 27.540 W
Total mains efficacy: 145.96 lm/W	Energy Efficiency Class: D (EU 2019/2015)	
Pupil Flux: 13213.96 Plm	Pupil Lumens Per Watt: 218.74 Plm/W	Pupil Factor (Kp): 1.499
Cirtopic Flux: 26953.43 lm		

Electric Parameters

Voltage: 230.90V	Current: 0.2720A	Power: 60.41W
Power Factor: 0.9600	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: 46194 (2571)	CCD Integration Time: 42.07 ms

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: 2021-02-16 10:30:03
 Inspector:

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WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)
380	0.0007	0.1091	525	0.6659	103.0202	670	0.3567	55.1780
385	0.0007	0.1121	530	0.6977	107.9407	675	0.3132	48.4466
390	0.0012	0.1789	535	0.7197	111.3381	680	0.2732	42.2648
395	0.0017	0.2579	540	0.7397	114.4317	685	0.2388	36.9379
400	0.0025	0.3900	545	0.7607	117.6786	690	0.2072	32.0622
405	0.0045	0.6931	550	0.7807	120.7818	695	0.1791	27.7000
410	0.0096	1.4853	555	0.8054	124.5957	700	0.1545	23.9041
415	0.0188	2.9079	560	0.8298	128.3657	705	0.1325	20.4978
420	0.0387	5.9872	565	0.8572	132.6125	710	0.1140	17.6365
425	0.0744	11.5023	570	0.8837	136.7134	715	0.0984	15.2157
430	0.1335	20.6497	575	0.9149	141.5391	720	0.0842	13.0202
435	0.2286	35.3587	580	0.9399	145.4127	725	0.0720	11.1370
440	0.3878	59.9971	585	0.9645	149.2075	730	0.0615	9.5134
445	0.6505	100.6286	590	0.9853	152.4329	735	0.0518	8.0138
450	0.9131	141.2564	595	0.9965	154.1544	740	0.0455	7.0429
455	0.9967	154.1896	600	1.0000	154.7029	745	0.0386	5.9729
460	0.9095	140.7033	605	0.9942	153.8114	750	0.0355	5.4884
465	0.6919	107.0433	610	0.9748	150.8029	755	0.0279	4.3133
470	0.5164	79.8878	615	0.9486	146.7579	760	0.0245	3.7972
475	0.4091	63.2833	620	0.9122	141.1244	765	0.0213	3.2905
480	0.3321	51.3775	625	0.8679	134.2605	770	0.0176	2.7212
485	0.2978	46.0743	630	0.8135	125.8577	775	0.0135	2.0894
490	0.3103	48.0012	635	0.7548	116.7698	780	0.0136	2.0976
495	0.3515	54.3820	640	0.6941	107.3727	785	0.0094	1.4485
500	0.4099	63.4141	645	0.6333	97.9788	790	0.0073	1.1321
505	0.4766	73.7238	650	0.5718	88.4624	795	0.0074	1.1488
510	0.5405	83.6097	655	0.5147	79.6206	800	0.0062	0.9658
515	0.5916	91.5192	660	0.4594	71.0731			
520	0.6376	98.6358	665	0.4061	62.8208			

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

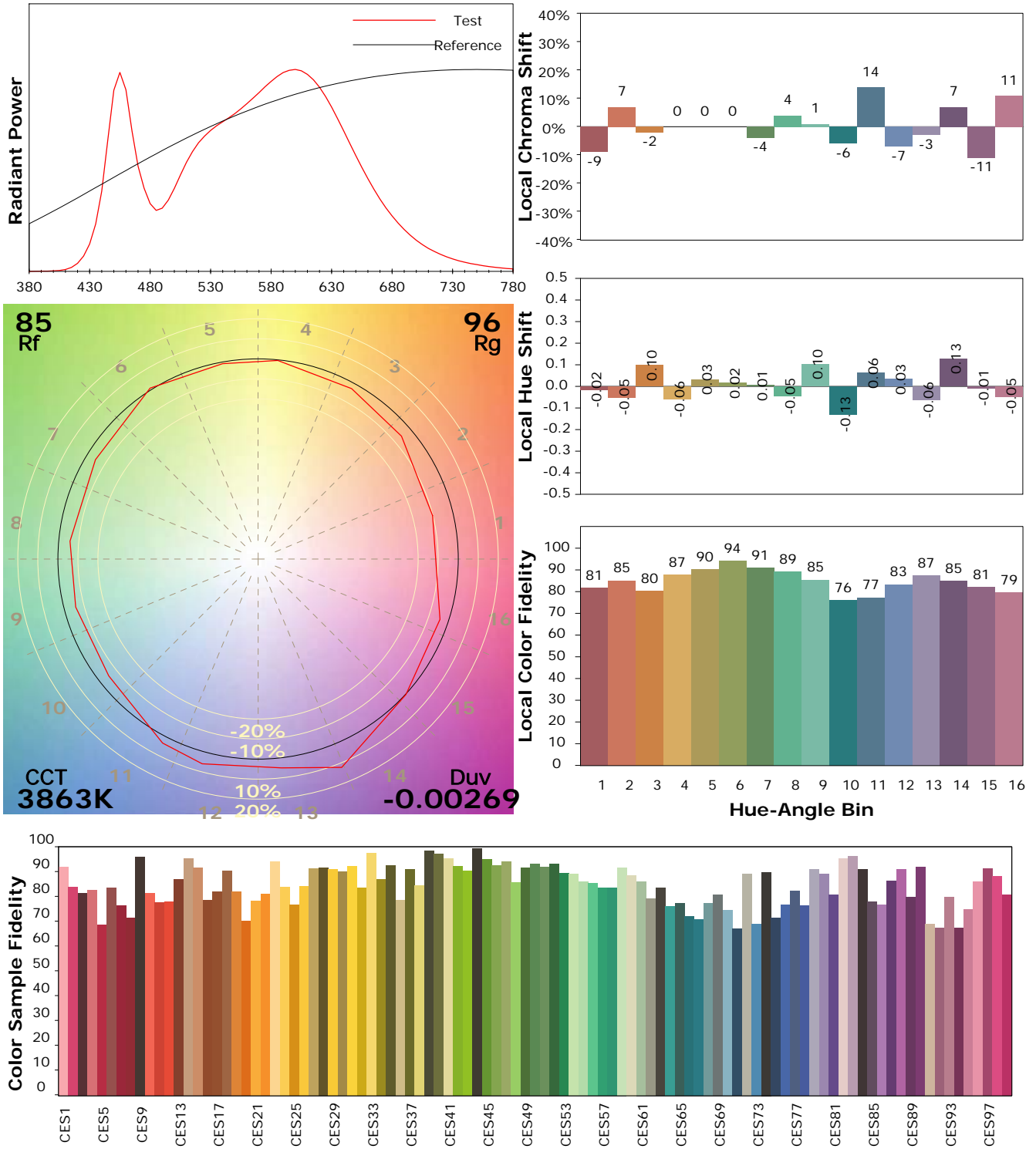
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IES TM-30-18 Color Rendition Report

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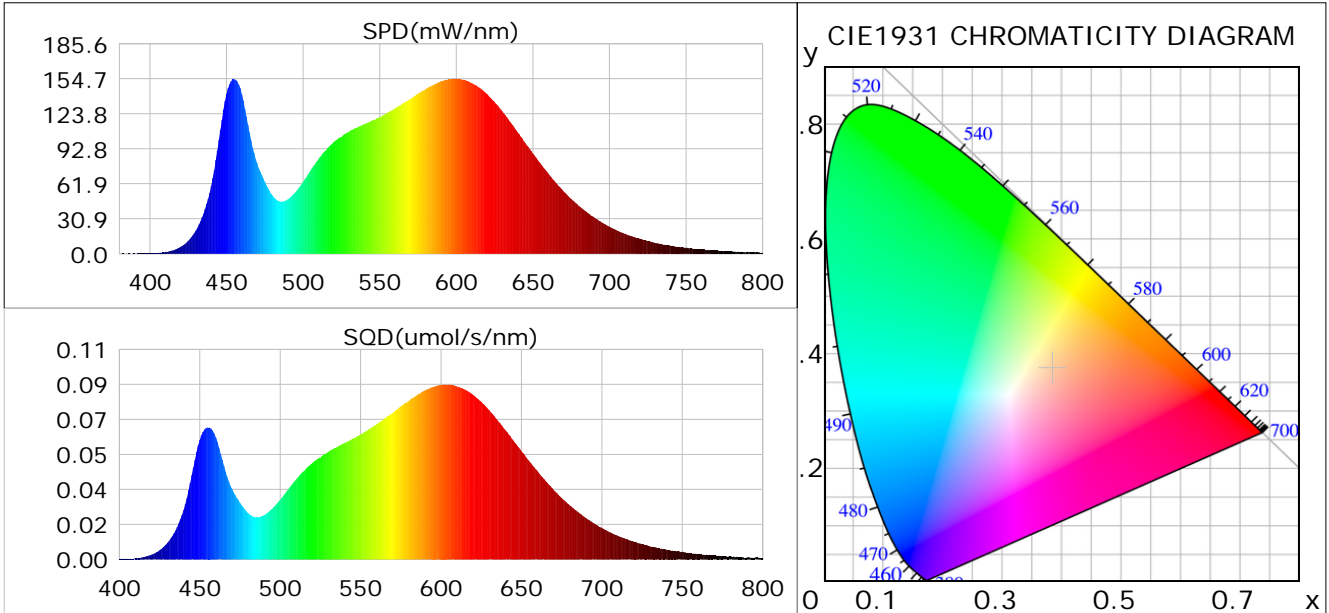
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Test Device: Lisun LMS-9000B
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Plant optical param data

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 CRI: $R_a=85.6$



Plant Optical Param

$ \mu_v(lm)$: 8817.30	$Q_v(lm.s)$: 8817.30
$ \mu_e, \dot{E}(W/nm)$: 27.54	$Q_e(J)$: 27.54
$ \mu_e(W)$: 26.83	$ \mu_{fr}(W)$: 0.75
$ \zeta_e$: 0.44	$ \zeta_{fr}$: 0.01
PPE(umol/s/w): 2.09	Kfr: 0.07
Erb_Ratio: 1.54	PPF(umol/s): 126.20
PFuv(360-400)(umol/s): 0.02	PPF(400-500)(umol/s): 22.44
PPF(500-600)(umol/s): 55.98	PPF(600-700)(umol/s): 47.78
PPfr(700-800)(umol/s): 4.44	PPF.t(umol): 126.20
$ \mu_{ch-A.t}(J)$: 2.17	$ \mu_{ch-A}(W)$: 2.17
$ \mu_{ch-B.t}(J)$: 1.28	$ \mu_{ch-B}(W)$: 1.28
$ \mu_b.t(J)$: 5.81	$ \mu_b(W)$: 5.81
$ \mu_y.t(J)$: 12.10	$ \mu_y(W)$: 12.10
$ \mu_r.t(J)$: 9.14	$ \mu_r(W)$: 9.14

Electric Parameters

Voltage: 230.90V	Current: 0.2720A	Power: 60.41W
Power Factor: 0.9600	Frequency: 49.99Hz	

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