

Lightsource Test Report

Product Information

Product Category: LED-Lampen
 Product Spec: LED-SLG39-E40-54-NW
 Manufacturer: METOLIGHT
 Buyer: 3811

Product Type: LED-Strassenlampen
 Product Number: 1
 Submitted Unit: 105236

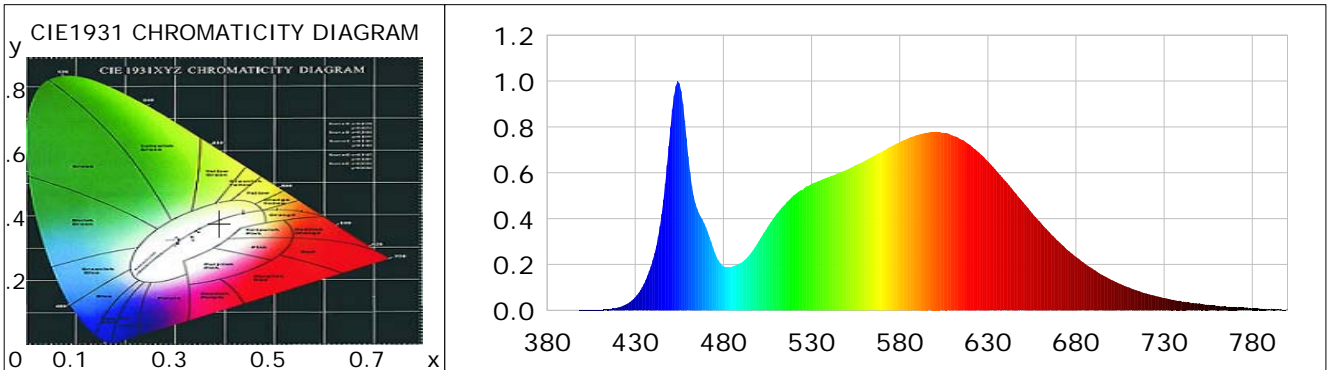
CIE Colorimetric Parameters

Chromaticity coordinates: $x=0.3896$ $y=0.3782$ $u(u')=0.2305$ $v=0.3357$ $v'=0.5036$
 CCT: $T_c=3770K$ ($duv=-0.00185$) Color Ratio: $R=0.196$ $G=0.770$ $B=0.033$
 Peak Wavelength: 454.2nm Half Bandwidth: 16.8nm
 Dominant Wavelength: 580.9nm Color Purity: 0.304
 CRI: $R_a=85.1$, $avgR(1\sim14)=79.1$, $avgR(1\sim15)=79.2$ TM30: $R_f=84$, $R_g=96$
 GAI: $GAI_BB_8=97.0$, $GAI_BB_15=104.9$, $GAI_EES=72.7$

R1 =85	R2 =91	R3 =94	R4 =84	R5 =84	R6 =87	R7 =87	R8 =70
R9 =25	R10=77	R11=82	R12=59	R13=86	R14=97	R15=80	

Color Quality Scale: $Q_a=83.6$, $Q_f=83.3$, $Q_p=84.6$, $Q_g=95.0$

Q1 =85	Q2 =98	Q3 =78	Q4 =74	Q5 =81	Q6 =84	Q7 =86	Q8 =89
Q9 =97	Q10=89	Q11=85	Q12=85	Q13=85	Q14=78	Q15=80	



Photometric Parameters

Luminous Flux: 7956.7 lm Efficiency: 146.34 lm/W Radiant Power: 24.769 W
 Total mains efficacy: 146.34 lm/W Energy Efficiency Class: D (EU 2019/2015)
 Pupil Flux: 11647.30 Plm Pupil Lumens Per Watt: 214.22 Plm/W Pupil Factor (Kp): 1.464
 Circopic Flux: 23331.28 lm

Electric Parameters

Voltage: 231.10V Current: 0.2450A Power: 54.37W
 Power Factor: 0.9560 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: 47339 (2528) CCD Integration Time: 39.28 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	0.0938	525	0.5256	93.9268	670	0.3010	53.7873
385	0.0001	0.0123	530	0.5513	98.5173	675	0.2644	47.2571
390	0.0005	0.0831	535	0.5668	101.2973	680	0.2334	41.7144
395	0.0003	0.0541	540	0.5814	103.9005	685	0.2035	36.3682
400	0.0010	0.1829	545	0.5979	106.8567	690	0.1774	31.7082
405	0.0017	0.3119	550	0.6133	109.5999	695	0.1538	27.4818
410	0.0028	0.5059	555	0.6333	113.1737	700	0.1331	23.7928
415	0.0055	0.9841	560	0.6518	116.4811	705	0.1155	20.6410
420	0.0125	2.2374	565	0.6728	120.2288	710	0.1004	17.9354
425	0.0272	4.8591	570	0.6924	123.7384	715	0.0856	15.3014
430	0.0573	10.2354	575	0.7147	127.7269	720	0.0740	13.2238
435	0.1158	20.6910	580	0.7339	131.1537	725	0.0632	11.3009
440	0.2198	39.2785	585	0.7500	134.0311	730	0.0543	9.7019
445	0.4211	75.2477	590	0.7652	136.7435	735	0.0461	8.2462
450	0.7991	142.8045	595	0.7746	138.4342	740	0.0388	6.9312
455	0.9900	176.9242	600	0.7783	139.0830	745	0.0327	5.8477
460	0.6717	120.0460	605	0.7754	138.5631	750	0.0310	5.5389
465	0.4445	79.4367	610	0.7625	136.2642	755	0.0247	4.4151
470	0.3632	64.9032	615	0.7451	133.1512	760	0.0202	3.6020
475	0.2540	45.3960	620	0.7209	128.8369	765	0.0174	3.1105
480	0.1926	34.4120	625	0.6881	122.9793	770	0.0149	2.6593
485	0.1908	34.1018	630	0.6494	116.0521	775	0.0132	2.3605
490	0.2072	37.0367	635	0.6068	108.4365	780	0.0092	1.6465
495	0.2433	43.4736	640	0.5635	100.6952	785	0.0074	1.3155
500	0.3005	53.6982	645	0.5173	92.4421	790	0.0041	0.7322
505	0.3629	64.8512	650	0.4716	84.2809	795	0.0041	0.7373
510	0.4190	74.8846	655	0.4250	75.9595	800	0.0043	0.7655
515	0.4618	82.5315	660	0.3821	68.2878			
520	0.5019	89.7022	665	0.3400	60.7660			

Condition: Tx:22.4'C, Ti:0.0'C, R.H.:60%
 Test Lab:
 Operator: CRE

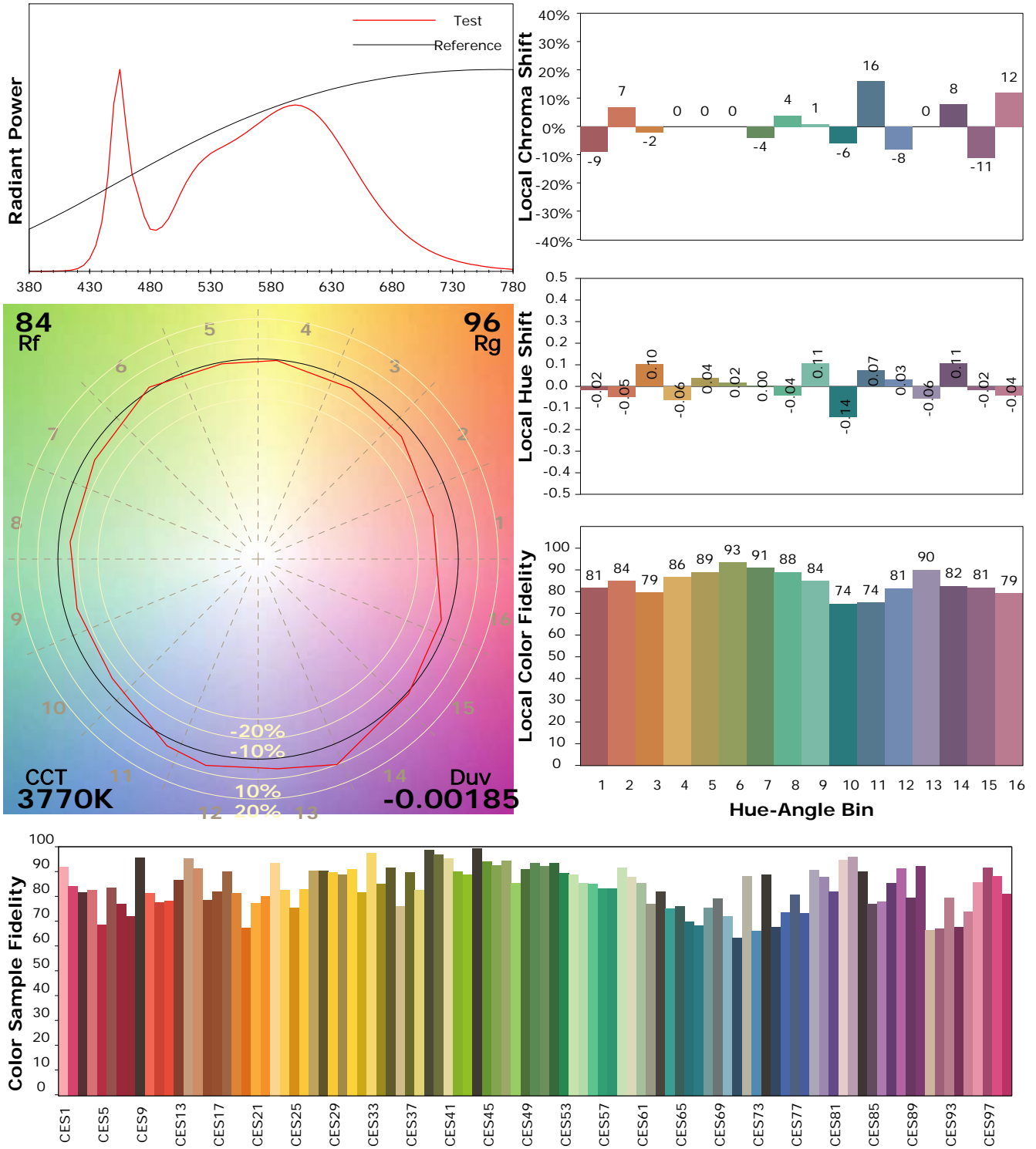
Test Device: Lisun LMS-9000B
 Test Time: 2021-02-11 14:56:30
 Inspector:

IES TM-30-18 Color Rendition Report

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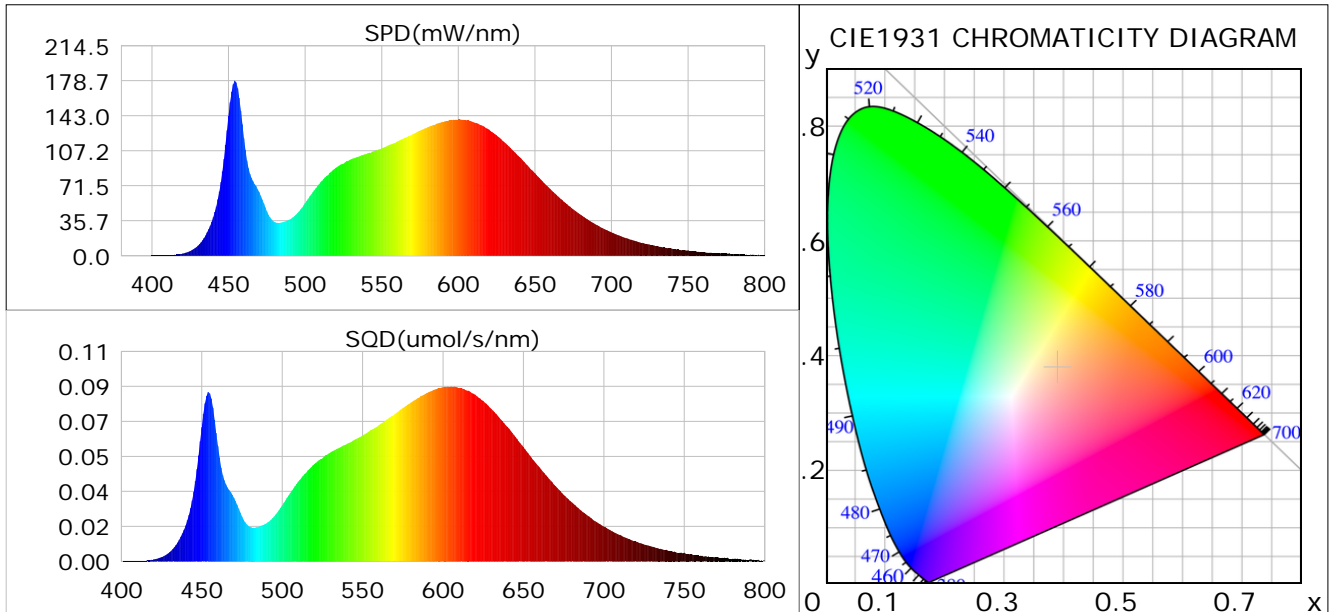
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Plant optical param data

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 CRI: $R_a=85.1$



Plant Optical Param

$ \mu_v(lm): 7956.70$	$Q_v(lm.s): 7956.70$
$ \mu_e, \dot{E}(W/nm): 24.77$	$Q_e(J): 24.77$
$ \mu_e(W): 24.07$	$ \mu_{fr}(W): 0.74$
$ \zeta_e: 0.44$	$ \zeta_{fr}: 0.01$
$PPE(\mu mol/s/w): 2.09$	$K_{fr}: 0.08$
$Erb_Ratio: 1.74$	$PPF(\mu mol/s): 113.77$
$PF_{uv}(360-400)(\mu mol/s): 0.01$	$PPF(400-500)(\mu mol/s): 18.62$
$PPF(500-600)(\mu mol/s): 50.55$	$PPF(600-700)(\mu mol/s): 44.61$
$PPF_{fr}(700-800)(\mu mol/s): 4.37$	$PPF.t(\mu mol): 113.77$
$ \mu_{ch-A.t}(J): 1.90$	$ \mu_{ch-A}(W): 1.90$
$ \mu_{ch-B.t}(J): 1.12$	$ \mu_{ch-B}(W): 1.12$
$ \mu_b.t(J): 4.82$	$ \mu_b(W): 4.82$
$ \mu_y.t(J): 10.92$	$ \mu_y(W): 10.92$
$ \mu_r.t(J): 8.51$	$ \mu_r(W): 8.51$

Electric Parameters

Voltage: 231.10V	Current: 0.2450A	Power: 54.37W
Power Factor: 0.9560	Frequency: 49.99Hz	