

Lightsource Test Report

Product Information

Product Category: LED-Lampen
 Product Spec: LED-SLG12-E40-40-180-WW
 Manufacturer: METOLIGHT
 Buyer: 3811

Product Type: LED-Strassenlampen
 Product Number: 1
 Submitted Unit: 100201

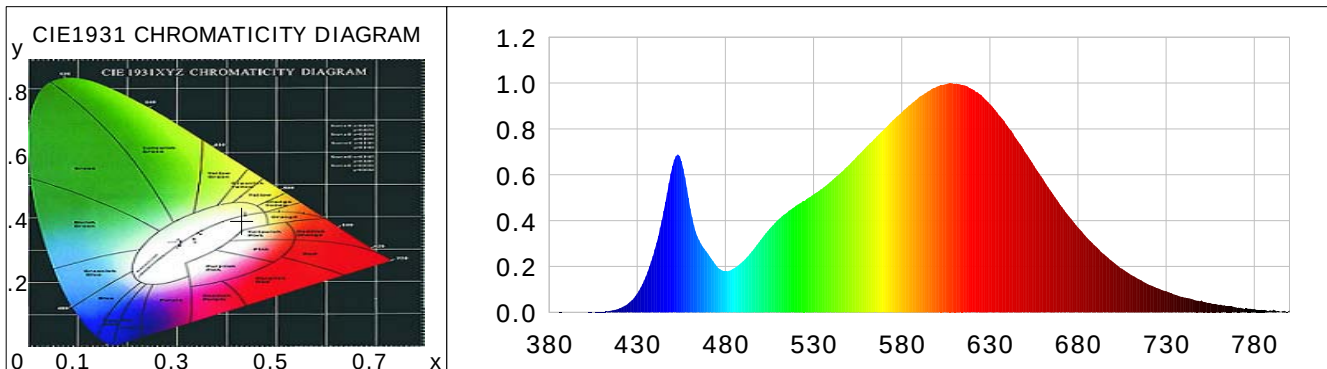
CIE Colorimetric Parameters

Chromaticity coordinates: $x=0.4309$ $y=0.3925$ $u(u')=0.2517$ $v=0.3439$ $v'=0.5158$
 CCT: $T_c=3007K$ ($duv=-0.00387$) Color Ratio: $R=0.234$ $G=0.740$ $B=0.026$
 Peak Wavelength: 607.5nm Half Bandwidth: 140.0nm
 Dominant Wavelength: 584.3nm Color Purity: 0.471
 CRI: $R_a=85.1$, $avgR(1\sim14)=80.6$, $avgR(1\sim15)=80.5$ TM30: $R_f=85$, $R_g=99$
 GAI: $GAI_BB_8=106.3$, $GAI_BB_15=112.3$, $GAI_EES=61.2$

R1 =84	R2 =92	R3 =96	R4 =83	R5 =84	R6 =90	R7 =84	R8 =67
R9 =27	R10=81	R11=82	R12=73	R13=86	R14=98	R15=80	

Color Quality Scale: $Q_a=83.0$, $Q_f=83.3$, $Q_p=87.3$, $Q_g=96.0$

Q1 =82	Q2 =97	Q3 =80	Q4 =78	Q5 =83	Q6 =84	Q7 =82	Q8 =85
Q9 =96	Q10=88	Q11=84	Q12=82	Q13=83	Q14=78	Q15=79	



Photometric Parameters

Luminous Flux: 4029.8 lm	Efficiency: 98.10 lm/W	Radiant Power: 12.986 W
Total mains efficacy: 98.10 lm/W	Energy Efficiency Class: F (EU 2019/2015)	
Pupil Flux: 5141.86 Plm	Pupil Lumens Per Watt: 125.17 Plm/W	Pupil Factor (Kp): 1.276
Cirtpic Flux: 9523.77 lm		

Electric Parameters

Voltage: 231.10V	Current: 0.1880A	Power: 41.08W
Power Factor: 0.9400	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: 45695 (2597)	CCD Integration Time: 106.61 ms

Condition: Tx:22.7'C, Ti:0.0'C, R.H.:60%
 Test Lab:
 Operator: CRE

Test Device: Lisun LMS-9000B
 Test Time: 2021-02-12 11:57:48
 Inspector:

Lightsource Test Report

Product Information

Product Category: LED-Lampen
 Product Spec: LED-SLG12-E40-40-180-WW
 Manufacturer: METOLIGHT
 Buyer: 3811

Product Type: LED-Strassenlampen
 Product Number: 1
 Submitted Unit: 100201

WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)
380	0.0005	0.0380	525	0.4864	38.9072	670	0.4682	37.4506
385	0.0007	0.0548	530	0.5139	41.1003	675	0.4180	33.4311
390	0.0006	0.0488	535	0.5403	43.2162	680	0.3704	29.6293
395	0.0003	0.0220	540	0.5713	45.6935	685	0.3259	26.0699
400	0.0007	0.0526	545	0.6059	48.4590	690	0.2877	23.0147
405	0.0006	0.0470	550	0.6419	51.3391	695	0.2516	20.1218
410	0.0023	0.1869	555	0.6833	54.6514	700	0.2187	17.4951
415	0.0072	0.5733	560	0.7220	57.7509	705	0.1901	15.2045
420	0.0175	1.4018	565	0.7599	60.7825	710	0.1637	13.0943
425	0.0395	3.1580	570	0.7983	63.8513	715	0.1427	11.4115
430	0.0823	6.5856	575	0.8378	67.0115	720	0.1208	9.6615
435	0.1576	12.6025	580	0.8724	69.7757	725	0.1060	8.4813
440	0.2750	21.9982	585	0.9055	72.4281	730	0.0924	7.3882
445	0.4427	35.4125	590	0.9400	75.1884	735	0.0773	6.1815
450	0.6385	51.0686	595	0.9642	77.1241	740	0.0650	5.1999
455	0.6598	52.7747	600	0.9843	78.7297	745	0.0565	4.5230
460	0.4536	36.2836	605	0.9952	79.5983	750	0.0519	4.1516
465	0.3152	25.2076	610	0.9971	79.7532	755	0.0409	3.2707
470	0.2565	20.5189	615	0.9908	79.2472	760	0.0331	2.6514
475	0.2018	16.1399	620	0.9738	77.8887	765	0.0279	2.2300
480	0.1789	14.3067	625	0.9481	75.8325	770	0.0206	1.6506
485	0.1921	15.3650	630	0.9082	72.6399	775	0.0170	1.3626
490	0.2222	17.7730	635	0.8614	68.8959	780	0.0153	1.2241
495	0.2656	21.2444	640	0.8122	64.9635	785	0.0099	0.7946
500	0.3160	25.2752	645	0.7573	60.5735	790	0.0068	0.5433
505	0.3639	29.1076	650	0.6976	55.7994	795	0.0026	0.2113
510	0.4043	32.3390	655	0.6398	51.1720	800	0.0086	0.6919
515	0.4354	34.8240	660	0.5829	46.6238			
520	0.4651	37.2033	665	0.5245	41.9536			

Condition: Tx:22.7'C, Ti:0.0'C, R.H.:60%
 Test Lab:
 Operator: CRE

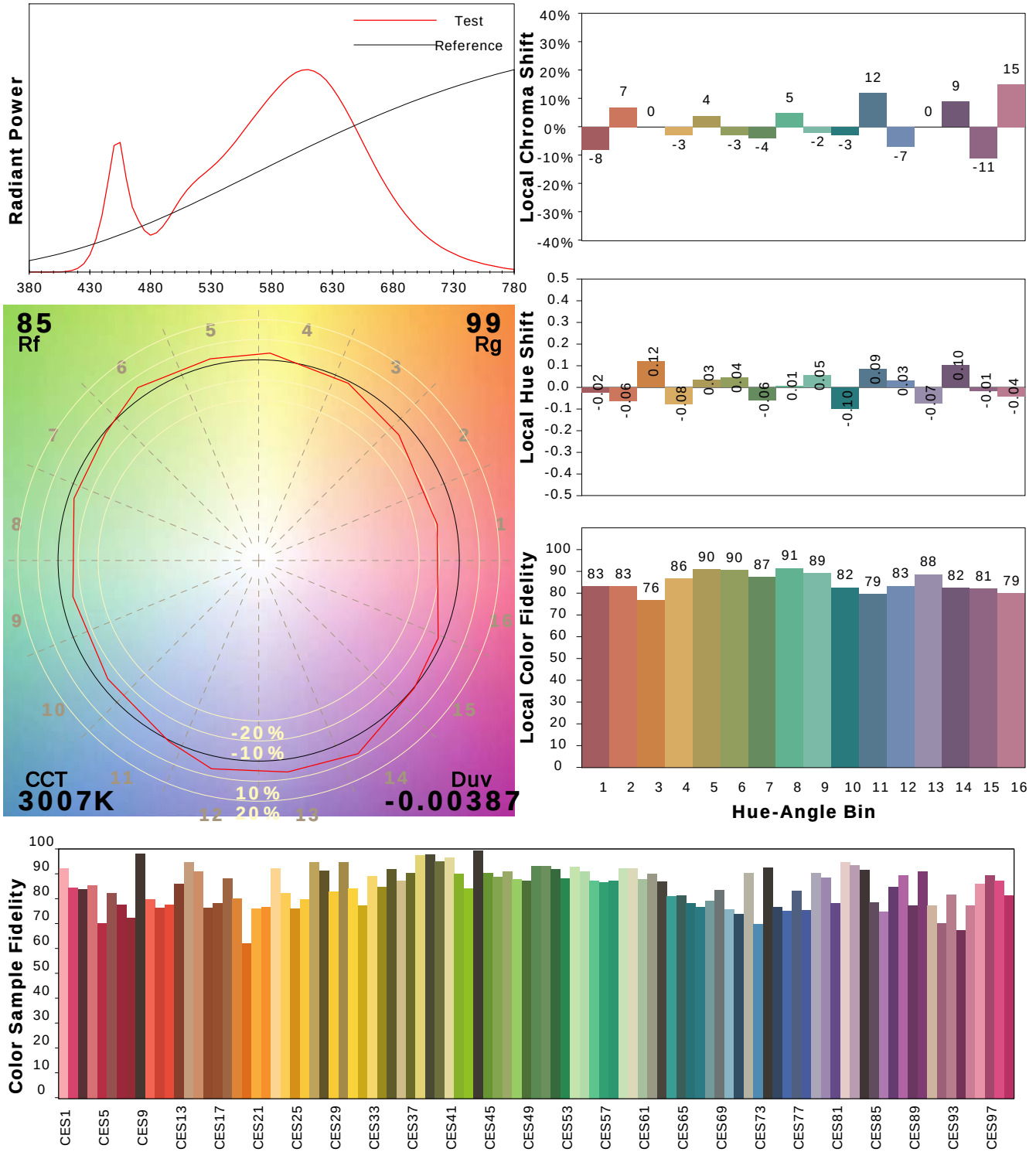
Test Device: Lisun LMS-9000B
 Test Time: 2021-02-12 11:57:48
 Inspector:

IES TM-30-18 Color Rendition Report

Product Information

Product Category: LED-Lampen
 Product Spec: LED-SLG12-E40-40-180-WW
 Manufacturer: METOLIGHT
 Buyer: 3811

Product Type: LED-Strassenlampen
 Product Number: 1
 Submitted Unit: 100201



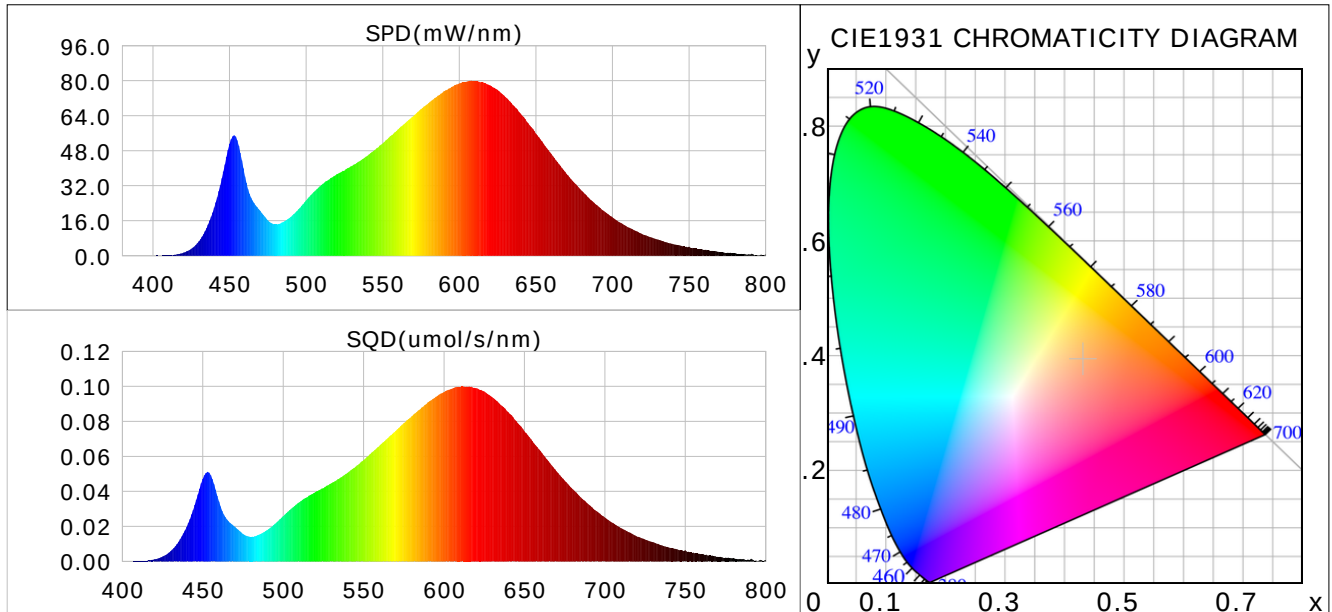
Condition: Tx:22.7'C, Ti:0.0'C, R.H.:60%
 Test Lab:
 Operator: CRE

Test Device: Lisun LMS-9000B
 Test Time: 2021-02-12 11:57:48
 Inspector:

Plant optical param data

CIE Colorimetric Parameters

Chromaticity coordinates: $x=0.4309$ $y=0.3925$ $u(u')=0.2517$ $v=0.3439$ $v'=0.5158$
 CCT: $T_c=3007K$ ($duv=-0.00387$) Color Ratio: $R=0.234$ $G=0.740$ $B=0.026$
 Peak Wavelength: 607.5nm Half Bandwidth: 140.0nm
 Dominant Wavelength: 584.3nm Color Purity: 0.471
 CRI: Ra= 85.1



Plant Optical Param

$\mu_v(lm): 4029.80$	$Q_v(lm.s): 4029.80$
$\mu_e, \dot{E}(W/nm): 12.99$	$Q_e(J): 12.99$
$\mu_e(W): 12.47$	$\mu_{fr}(W): 0.55$
$\dot{Q}_e: 0.30$	$\dot{Q}_{fr}: 0.01$
$PPE(umol/s/w): 1.47$	$K_{fr}: 0.08$
$Erb_Ratio: 2.90$	$PPF(umol/s): 60.33$
$PF_{uv}(360-400)(umol/s): 0.00$	$PPF(400-500)(umol/s): 7.09$
$PPF(500-600)(umol/s): 24.73$	$PPF(600-700)(umol/s): 28.51$
$PF_{fr}(700-800)(umol/s): 3.22$	$PPF.t(umol): 60.33$
$\mu_{ch-A.t}(J): 1.05$	$\mu_{ch-A}(W): 1.05$
$\mu_{ch-B.t}(J): 0.51$	$\mu_{ch-B}(W): 0.51$
$\mu_b.t(J): 1.84$	$\mu_b(W): 1.84$
$\mu_y.t(J): 5.32$	$\mu_y(W): 5.32$
$\mu_r.t(J): 5.42$	$\mu_r(W): 5.42$

Electric Parameters

Voltage: 231.10V	Current: 0.1880A	Power: 41.08W
Power Factor: 0.9400	Frequency: 49.99Hz	

Condition: Tx:22.7'C, Ti:0.0'C, R.H.:60%
 Test Lab:
 Operator: CRE

Test Device: Lisun LMS-9000B
 Test Time: 2021-02-12 11:57:48
 Inspector: