

Lightsource Test Report

Product Information

Product Category: LED-Lampen
 Product Spec: LED-SLG28-E27-19-360-WW
 Manufacturer: METOLIGHT
 Buyer: 3811

Product Type: LED-Strassenlampen
 Product Number: 1
 Submitted Unit: 100272

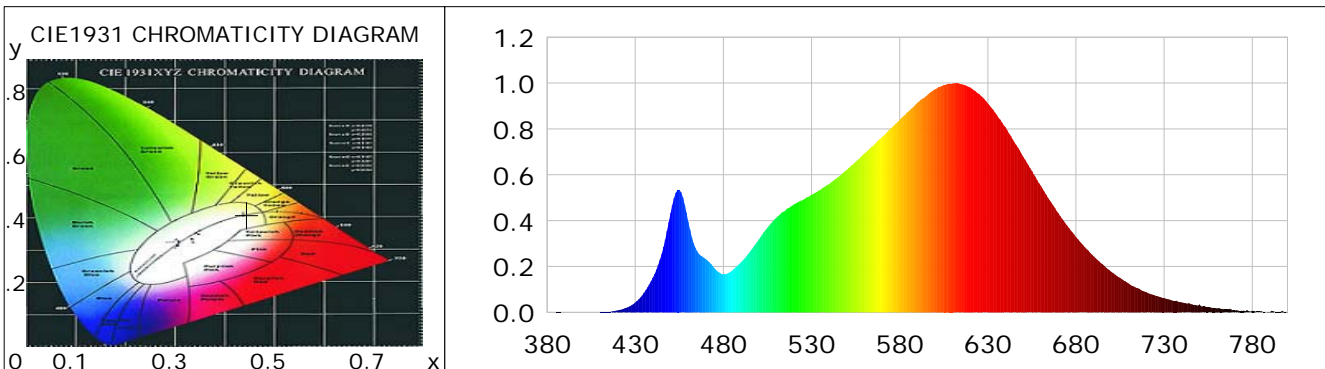
CIE Colorimetric Parameters

Chromaticity coordinates: $x=0.4448$ $y=0.4106$ $u(u')=0.2528$ $v=0.3501$ $v'=0.5251$
 CCT: $T_c=2924K$ ($duv=0.00152$) Color Ratio: $R=0.238$ $G=0.738$ $B=0.024$
 Peak Wavelength: 611.1nm Half Bandwidth: 137.2nm
 Dominant Wavelength: 582.6nm Color Purity: 0.568
 CRI: $R_a=85.7$, $avgR(1\sim14)=80.7$, $avgR(1\sim15)=80.6$ TM30: $R_f=87$, $R_g=96$
 GAI: $GAI_BB_8=90.1$, $GAI_BB_15=98.4$, $GAI_EES=49.8$

R1 =84	R2 =92	R3 =98	R4 =85	R5 =84	R6 =91	R7 =86	R8 =67
R9 =24	R10=81	R11=84	R12=71	R13=86	R14=99	R15=78	

Color Quality Scale: $Q_a=85.4$, $Q_f=87.3$, $Q_p=86.0$, $Q_g=91.6$

Q1 =82	Q2 =95	Q3 =85	Q4 =82	Q5 =85	Q6 =86	Q7 =86	Q8 =89
Q9 =96	Q10=92	Q11=89	Q12=88	Q13=87	Q14=77	Q15=79	



Photometric Parameters

Luminous Flux: 2435.1 lm	Efficiency: 127.36 lm/W	Radiant Power: 7.524 W
Total mains efficacy: 149.77 lm/W	Energy Efficiency Class: D (EU 2019/2015)	
Pupil Flux: 3020.34 Plm	Pupil Lumens Per Watt: 157.97 Plm/W	Pupil Factor (Kp): 1.240
Cirtopic Flux: 5440.46 lm		

Electric Parameters

Voltage: 230.20V	Current: 0.0830A	Power: 19.12W
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: 44656 (2669)	CCD Integration Time: 121.44 ms

Lightsource Test Report

Product Information

Product Category: LED-Lampen
 Product Spec: LED-SLG28-E27-19-360-WW
 Manufacturer: METOLIGHT
 Buyer: 3811

Product Type: LED-Strassenlampen
 Product Number: 1
 Submitted Unit: 100272

WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)
380	0.0004	0.0190	525	0.4899	24.2151	670	0.4334	21.4245
385	0.0008	0.0397	530	0.5129	25.3545	675	0.3784	18.7049
390	0.0007	0.0357	535	0.5345	26.4223	680	0.3287	16.2501
395	0.0001	0.0043	540	0.5598	27.6716	685	0.2838	14.0296
400	0.0004	0.0217	545	0.5894	29.1334	690	0.2445	12.0840
405	0.0000	0.0022	550	0.6216	30.7275	695	0.2097	10.3648
410	0.0009	0.0428	555	0.6567	32.4635	700	0.1767	8.7337
415	0.0032	0.1560	560	0.6929	34.2529	705	0.1502	7.4256
420	0.0087	0.4313	565	0.7281	35.9911	710	0.1252	6.1894
425	0.0200	0.9888	570	0.7656	37.8463	715	0.1056	5.2207
430	0.0427	2.1121	575	0.8026	39.6751	720	0.0874	4.3214
435	0.0854	4.2204	580	0.8403	41.5387	725	0.0737	3.6428
440	0.1513	7.4768	585	0.8761	43.3064	730	0.0626	3.0941
445	0.2557	12.6386	590	0.9140	45.1795	735	0.0506	2.5038
450	0.4325	21.3791	595	0.9433	46.6283	740	0.0433	2.1397
455	0.5343	26.4130	600	0.9727	48.0827	745	0.0363	1.7953
460	0.3959	19.5695	605	0.9914	49.0097	750	0.0349	1.7241
465	0.2672	13.2096	610	0.9981	49.3386	755	0.0225	1.1140
470	0.2321	11.4714	615	0.9951	49.1907	760	0.0173	0.8528
475	0.1917	9.4761	620	0.9808	48.4849	765	0.0125	0.6191
480	0.1654	8.1782	625	0.9525	47.0866	770	0.0082	0.4059
485	0.1821	9.0017	630	0.9106	45.0157	775	0.0079	0.3909
490	0.2183	10.7936	635	0.8618	42.6009	780	0.0067	0.3307
495	0.2632	13.0122	640	0.8076	39.9201	785	0.0052	0.2586
500	0.3173	15.6866	645	0.7422	36.6885	790	0.0017	0.0848
505	0.3698	18.2782	650	0.6792	33.5733	795	0.0021	0.1024
510	0.4130	20.4171	655	0.6166	30.4802	800	0.0037	0.1852
515	0.4432	21.9065	660	0.5522	27.2986			
520	0.4708	23.2711	665	0.4899	24.2164			

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

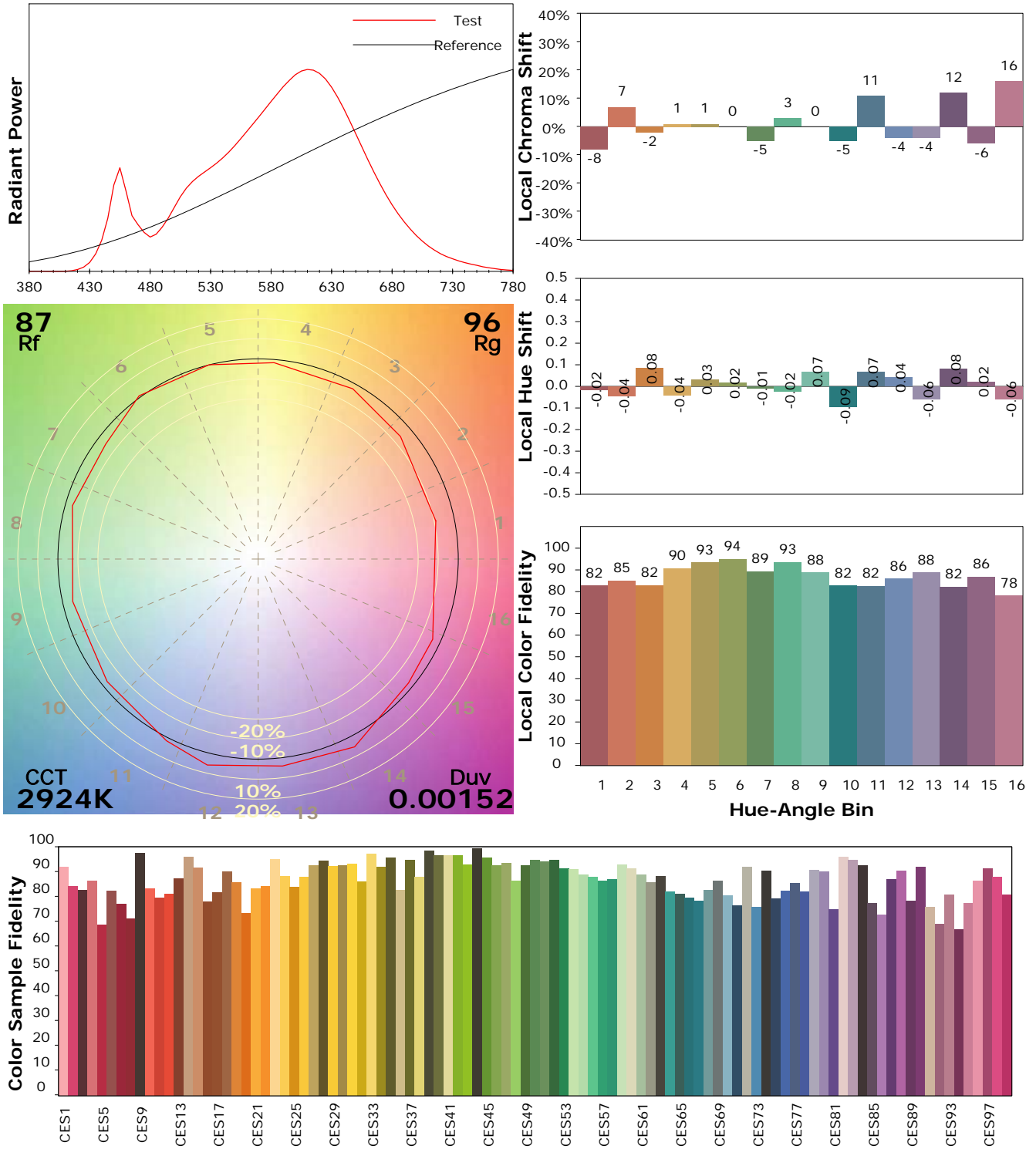
Test Device: Lisun LMS-9000B
 Test Time: 2021-02-11 12:08:37
 Inspector:

IES TM-30-18 Color Rendition Report

Product Information

Product Category: LED-Lampen
 Product Spec: LED-SLG28-E27-19-360-WW
 Manufacturer: METOLIGHT
 Buyer: 3811

Product Type: LED-Strassenlampen
 Product Number: 1
 Submitted Unit: 100272



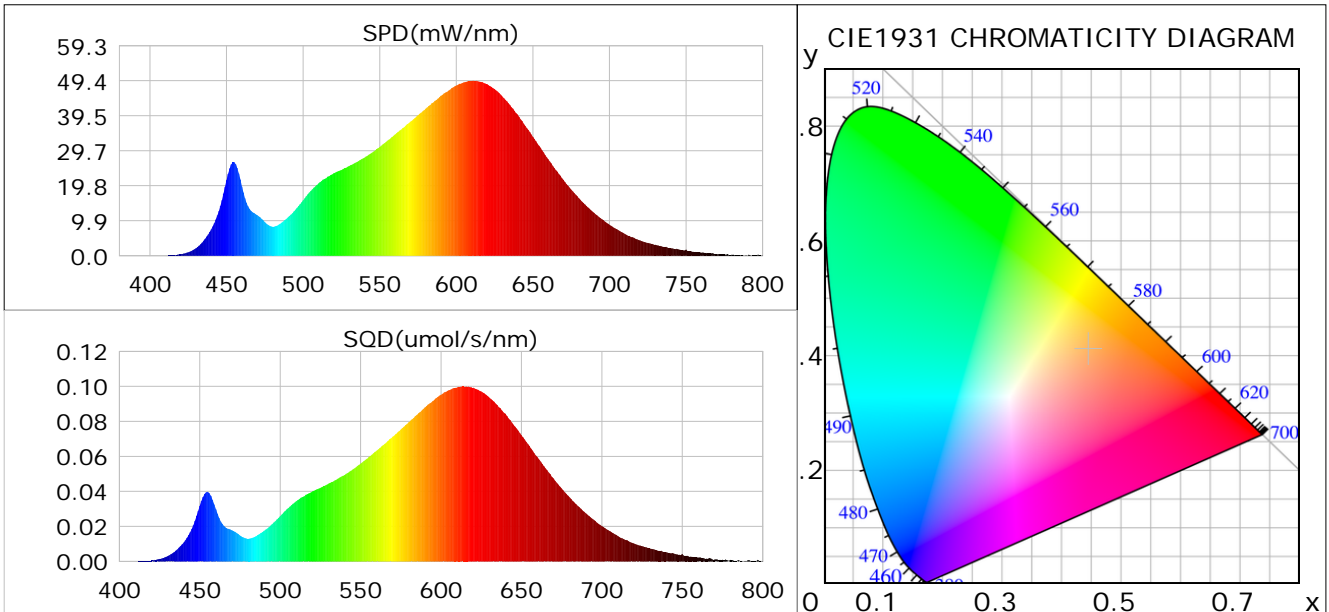
Condition: Tx:23.2°C, Ti:0.0°C, R.H.:60%
 Test Lab:
 Operator: CRE

Test Device: Lisun LMS-9000B
 Test Time: 2021-02-11 12:08:37
 Inspector:

Plant optical param data

CIE Colorimetric Parameters

Chromaticity coordinates: $x=0.4448$ $y=0.4106$ $u(u')=0.2528$ $v=0.3501$ $v'=0.5251$
 CCT: $T_c=2924K$ ($duv=0.00152$) Color Ratio: $R=0.238$ $G=0.738$ $B=0.024$
 Peak Wavelength: 611.1nm Half Bandwidth: 137.2nm
 Dominant Wavelength: 582.6nm Color Purity: 0.568
 CRI: $R_a=85.7$



Plant Optical Param

$ \mu_v(lm)$: 2435.10	$Q_v(lm.s)$: 2435.10
$ \mu_e, \dot{E}(W/nm)$: 7.52	$Q_e(J)$: 7.52
$ \mu_e(W)$: 7.30	$ \mu_{fr}(W)$: 0.24
$ \zeta_e$: 0.38	$ \zeta_{fr}$: 0.01
$PPE(umol/s/w)$: 1.86	K_{fr} : 0.07
Erb_Ratio : 3.56	$PPF(umol/s)$: 35.51
$PF_{uv}(360-400)(umol/s)$: 0.00	$PPF(400-500)(umol/s)$: 3.50
$PPF(500-600)(umol/s)$: 14.94	$PPF(600-700)(umol/s)$: 17.07
$PPF_r(700-800)(umol/s)$: 1.38	$PPF.t(umol)$: 35.51
$ \mu_{ch-A.t}(J)$: 0.58	$ \mu_{ch-A}(W)$: 0.58
$ \mu_{ch-B.t}(J)$: 0.28	$ \mu_{ch-B}(W)$: 0.28
$ \mu_b.t(J)$: 0.90	$ \mu_b(W)$: 0.90
$ \mu_y.t(J)$: 3.21	$ \mu_y(W)$: 3.21
$ \mu_r.t(J)$: 3.25	$ \mu_r(W)$: 3.25

Electric Parameters

Voltage: 230.20V	Current: 0.0830A	Power: 19.12W
Power Factor: 0.9670	Frequency: 49.99Hz	

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: 2021-02-11 12:08:37
 Inspector: