

Lightsource Test Report

Product Information

Product Category: LED-Lampen
 Product Spec: LED-SLG381-E40-20-WW
 Manufacturer: METOLIGHT
 Buyer: 3811

Product Type: LED-Strassenlampen
 Product Number: 1
 Submitted Unit: 102939

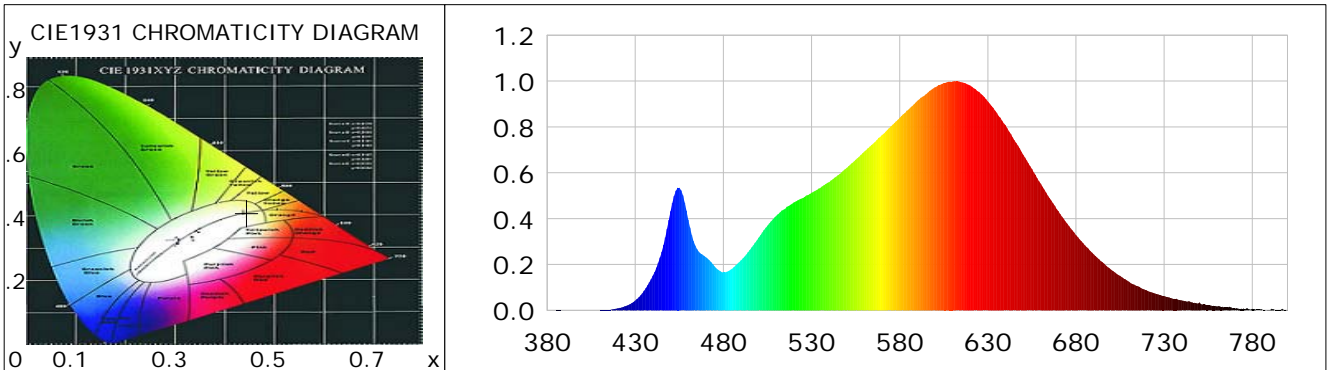
CIE Colorimetric Parameters

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: 2946.0 lm	Efficiency: 146.57 lm/W	Radiant Power: 9.102 W
Total mains efficacy: 172.36 lm/W	Energy Efficiency Class: C (EU 2019/2015)	
Pupil Flux: 3654.02 Plm	Pupil Lumens Per Watt: 181.79 Plm/W	Pupil Factor (Kp): 1.240
Cirtpopic Flux: 6581.90 lm		

Electric Parameters

Voltage: 231.00V	Current: 0.0910A	Power: 20.10W
Power Factor: 0.9460	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

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:

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WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)
380	0.0004	0.0230	525	0.4899	29.2955	670	0.4334	25.9195
385	0.0008	0.0481	530	0.5129	30.6741	675	0.3784	22.6293
390	0.0007	0.0432	535	0.5345	31.9658	680	0.3287	19.6595
395	0.0001	0.0051	540	0.5598	33.4773	685	0.2838	16.9732
400	0.0004	0.0262	545	0.5894	35.2458	690	0.2445	14.6193
405	0.0000	0.0026	550	0.6216	37.1743	695	0.2097	12.5395
410	0.0009	0.0517	555	0.6567	39.2746	700	0.1767	10.5660
415	0.0032	0.1888	560	0.6929	41.4394	705	0.1502	8.9835
420	0.0087	0.5218	565	0.7281	43.5423	710	0.1252	7.4880
425	0.0200	1.1962	570	0.7656	45.7867	715	0.1056	6.3161
430	0.0427	2.5552	575	0.8026	47.9992	720	0.0874	5.2281
435	0.0854	5.1059	580	0.8403	50.2538	725	0.0737	4.4071
440	0.1513	9.0454	585	0.8761	52.3924	730	0.0626	3.7433
445	0.2557	15.2902	590	0.9140	54.6585	735	0.0506	3.0291
450	0.4325	25.8646	595	0.9433	56.4112	740	0.0433	2.5887
455	0.5343	31.9546	600	0.9727	58.1707	745	0.0363	2.1719
460	0.3959	23.6753	605	0.9914	59.2922	750	0.0349	2.0858
465	0.2672	15.9811	610	0.9981	59.6902	755	0.0225	1.3477
470	0.2321	13.8782	615	0.9951	59.5113	760	0.0173	1.0318
475	0.1917	11.4642	620	0.9808	58.6574	765	0.0125	0.7490
480	0.1654	9.8941	625	0.9525	56.9657	770	0.0082	0.4910
485	0.1821	10.8903	630	0.9106	54.4603	775	0.0079	0.4729
490	0.2183	13.0582	635	0.8618	51.5388	780	0.0067	0.4001
495	0.2632	15.7423	640	0.8076	48.2956	785	0.0052	0.3129
500	0.3173	18.9777	645	0.7422	44.3859	790	0.0017	0.1025
505	0.3698	22.1131	650	0.6792	40.6172	795	0.0021	0.1239
510	0.4130	24.7007	655	0.6166	36.8751	800	0.0037	0.2241
515	0.4432	26.5027	660	0.5522	33.0260			
520	0.4708	28.1535	665	0.4899	29.2972			

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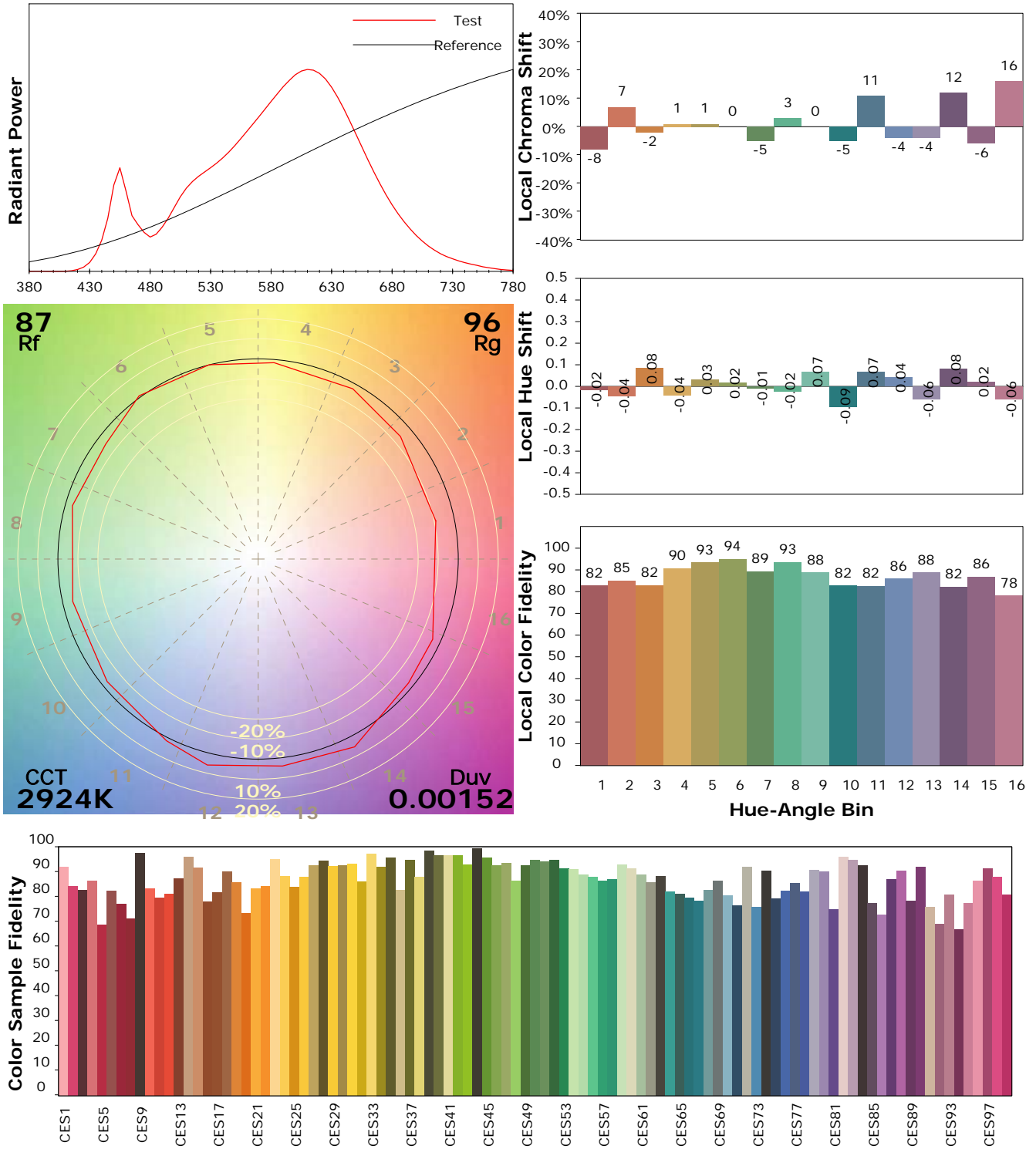
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IES TM-30-18 Color Rendition Report

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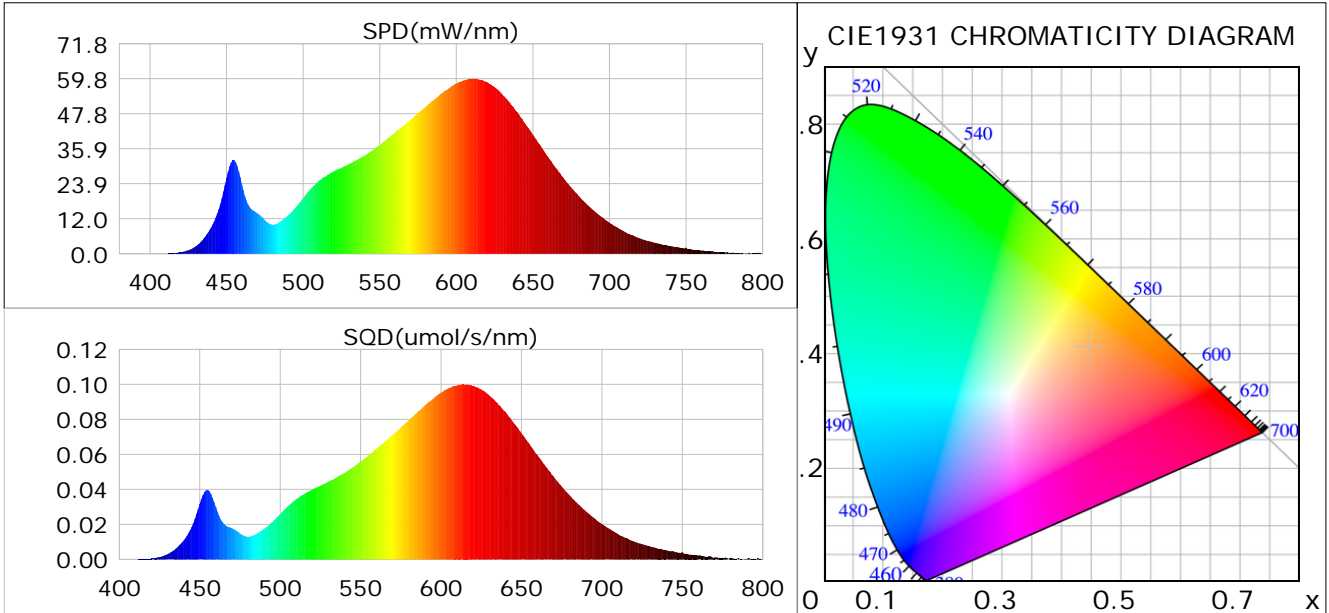
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Plant optical param data

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 Dominant Wavelength: 582.6nm Color Purity: 0.568
 CRI: $R_a=85.7$



Plant Optical Param

$ \mu_v(lm): 2946.00$	$Q_v(lm.s): 2946.00$
$ \mu_e, \dot{E}(W/nm): 9.10$	$Q_e(J): 9.10$
$ \mu_e(W): 8.83$	$ \mu_{fr}(W): 0.29$
$ \zeta_e: 0.44$	$ \zeta_{fr}: 0.01$
$PPE(umol/s/w): 2.14$	$K_{fr}: 0.08$
$Erb_Ratio: 3.56$	$PPF(umol/s): 42.96$
$PF_{uv}(360-400)(umol/s): 0.00$	$PPF(400-500)(umol/s): 4.23$
$PPF(500-600)(umol/s): 18.07$	$PPF(600-700)(umol/s): 20.65$
$PPF_{fr}(700-800)(umol/s): 1.66$	$PPF.t(umol): 42.96$
$ \mu_{ch-A.t}(J): 0.71$	$ \mu_{ch-A}(W): 0.71$
$ \mu_{ch-B.t}(J): 0.34$	$ \mu_{ch-B}(W): 0.34$
$ \mu_b.t(J): 1.09$	$ \mu_b(W): 1.09$
$ \mu_y.t(J): 3.89$	$ \mu_y(W): 3.89$
$ \mu_r.t(J): 3.93$	$ \mu_r(W): 3.93$

Electric Parameters

Voltage: 231.00V	Current: 0.0910A	Power: 20.10W
Power Factor: 0.9460	Frequency: 49.99Hz	

Condition: $T_x: 23.2^\circ C$, $T_i: 0.0^\circ C$, R.H.: 60%
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