

Lightsource Test Report

Product Information

Product Category: LED-Lampen
 Product Spec: LED-SLG381-E27-20-DW
 Manufacturer: METOLIGHT
 Buyer: 3811

Product Type: LED-Strassenlampen
 Product Number: 1
 Submitted Unit: 102934

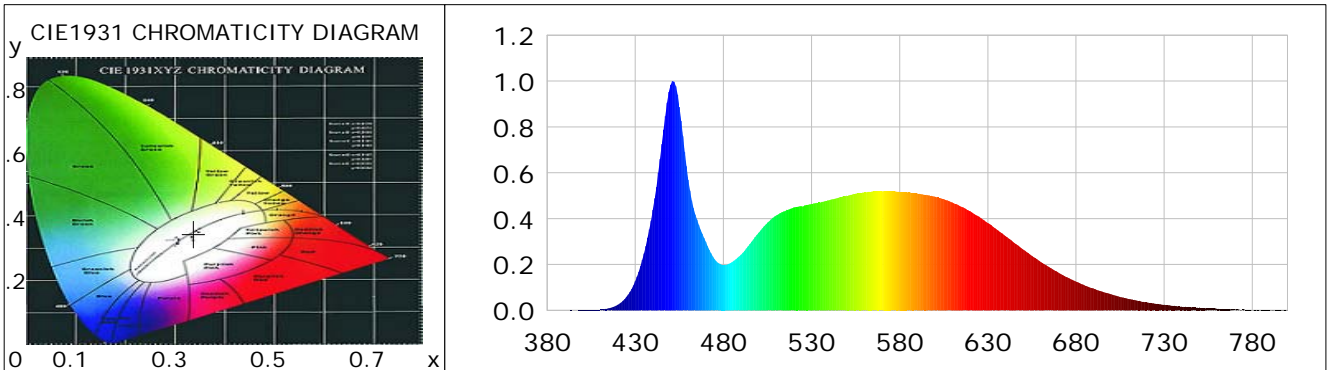
CIE Colorimetric Parameters

Chromaticity coordinates: $x=0.3373$ $y=0.3451$ $u(u')=0.2086$ $v=0.3202$ $v'=0.4803$
 CCT: $T_c=5298K$ ($duv=-0.00003$) Color Ratio: $R=0.157$ $G=0.797$ $B=0.047$
 Peak Wavelength: 451.4nm Half Bandwidth: 20.3nm
 Dominant Wavelength: 566.1nm Color Purity: 0.048
 CRI: $R_a=85.2$, $avgR(1\sim14)=79.1$, $avgR(1\sim15)=79.3$ TM30: $R_f=84$, $R_g=98$
 GAI: $GAI_BB_8=96.6$, $GAI_BB_15=101.4$, $GAI_EES=87.4$

R1 =85	R2 =89	R3 =91	R4 =86	R5 =85	R6 =84	R7 =88	R8 =74
R9 =24	R10=73	R11=86	R12=63	R13=86	R14=95	R15=81	

Color Quality Scale: $Q_a=82.8$, $Q_f=82.3$, $Q_p=84.4$, $Q_g=95.2$

Q1 =87	Q2 =97	Q3 =76	Q4 =74	Q5 =82	Q6 =85	Q7 =88	Q8 =91
Q9 =96	Q10=86	Q11=82	Q12=82	Q13=83	Q14=76	Q15=80	



Photometric Parameters

Luminous Flux: 2942.0 lm	Efficiency: 146.37 lm/W	Radiant Power: 9.394 W
Total mains efficacy: 172.13 lm/W	Energy Efficiency Class: C (EU 2019/2015)	
Pupil Flux: 5096.72 Plm	Pupil Lumens Per Watt: 253.57 Plm/W	Pupil Factor (Kp): 1.732
Cirtopic Flux: 11154.72 lm		

Electric Parameters

Voltage: 231.00V	Current: 0.9460A	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: 55424 (2001)	CCD Integration Time: 90.28 ms

Condition: Tx:14.2'C, Ti:0.0'C, R.H.:60%
 Test Lab:
 Operator: CRE

Test Device: Lisun LMS-9000B
 Test Time: 2021-02-12 09:45:16
 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	0.0353	525	0.4527	39.4351	670	0.1650	14.3717
385	0.0007	0.0639	530	0.4641	40.4290	675	0.1440	12.5432
390	0.0006	0.0523	535	0.4703	40.9716	680	0.1263	11.0031
395	0.0005	0.0407	540	0.4803	41.8436	685	0.1085	9.4561
400	0.0013	0.1168	545	0.4904	42.7246	690	0.0953	8.3007
405	0.0019	0.1622	550	0.5002	43.5719	695	0.0816	7.1107
410	0.0035	0.3049	555	0.5088	44.3267	700	0.0701	6.1041
415	0.0091	0.7943	560	0.5149	44.8578	705	0.0586	5.1034
420	0.0242	2.1041	565	0.5195	45.2512	710	0.0498	4.3392
425	0.0588	5.1260	570	0.5193	45.2341	715	0.0416	3.6234
430	0.1274	11.0955	575	0.5196	45.2653	720	0.0354	3.0796
435	0.2481	21.6125	580	0.5165	44.9985	725	0.0293	2.5482
440	0.4387	38.2205	585	0.5143	44.7992	730	0.0246	2.1466
445	0.7249	63.1476	590	0.5098	44.4130	735	0.0197	1.7121
450	0.9832	85.6529	595	0.5038	43.8916	740	0.0162	1.4141
455	0.8870	77.2725	600	0.4963	43.2340	745	0.0141	1.2272
460	0.5703	49.6790	605	0.4854	42.2889	750	0.0125	1.0901
465	0.3959	34.4871	610	0.4698	40.9289	755	0.0088	0.7645
470	0.2991	26.0523	615	0.4521	39.3798	760	0.0070	0.6076
475	0.2232	19.4405	620	0.4322	37.6513	765	0.0055	0.4814
480	0.1978	17.2347	625	0.4088	35.6095	770	0.0040	0.3485
485	0.2113	18.4064	630	0.3808	33.1758	775	0.0042	0.3659
490	0.2428	21.1524	635	0.3531	30.7591	780	0.0010	0.0870
495	0.2897	25.2370	640	0.3238	28.2071	785	0.0013	0.1167
500	0.3390	29.5272	645	0.2944	25.6421	790	0.0009	0.0752
505	0.3829	33.3533	650	0.2657	23.1462	795	0.0011	0.0948
510	0.4145	36.1069	655	0.2380	20.7302	800	0.0037	0.3208
515	0.4333	37.7453	660	0.2115	18.4256			
520	0.4490	39.1113	665	0.1876	16.3387			

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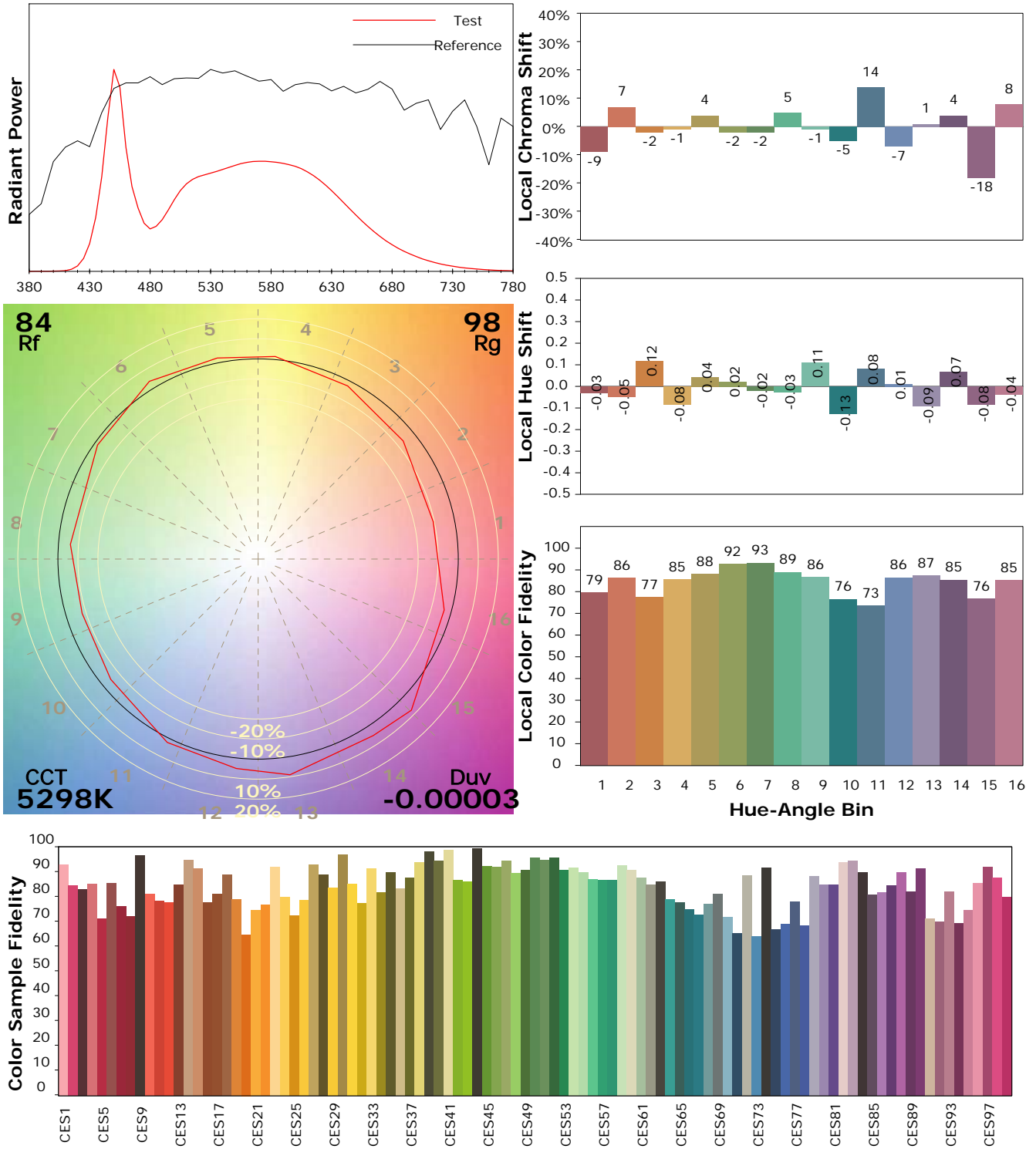
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IES TM-30-18 Color Rendition Report

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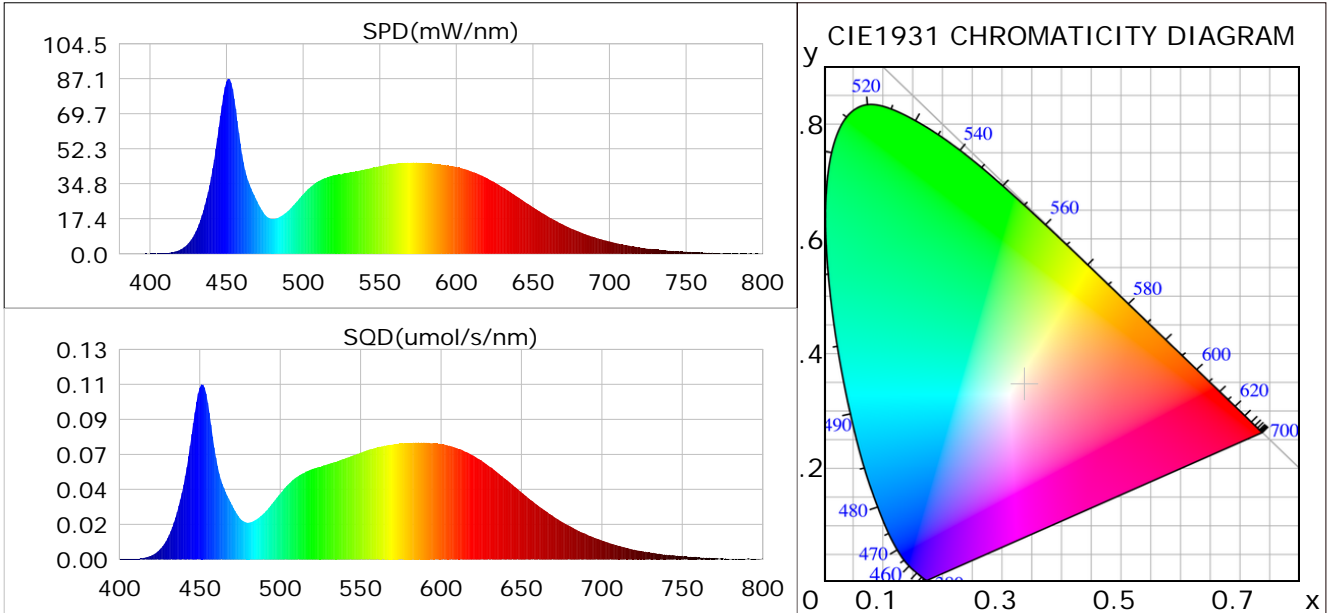
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Plant optical param data

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 CRI: $R_a=85.2$



Plant Optical Param

$ \mu_v(lm): 2942.00$	$Q_v(lm.s): 2942.00$
$ \mu_e, \dot{E}(W/nm): 9.39$	$Q_e(J): 9.39$
$ \mu_e(W): 9.24$	$ \mu_{fr}(W): 0.17$
$ \zeta_e: 0.46$	$ \zeta_{fr}: 0.01$
$PPE(umol/s/w): 2.10$	$K_{fr}: 0.05$
$Erb_Ratio: 0.89$	$PPF(umol/s): 42.24$
$PF_{uv}(360-400)(umol/s): 0.00$	$PPF(400-500)(umol/s): 10.26$
$PPF(500-600)(umol/s): 19.33$	$PPF(600-700)(umol/s): 12.65$
$PPF_{fr}(700-800)(umol/s): 0.97$	$PPF.t(umol): 42.24$
$ \mu_{ch-A.t}(J): 0.79$	$ \mu_{ch-A}(W): 0.79$
$ \mu_{ch-B.t}(J): 0.49$	$ \mu_{ch-B}(W): 0.49$
$ \mu_b.t(J): 2.67$	$ \mu_b(W): 2.67$
$ \mu_y.t(J): 4.21$	$ \mu_y(W): 4.21$
$ \mu_r.t(J): 2.42$	$ \mu_r(W): 2.42$

Electric Parameters

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Power Factor: 0.9460	Frequency: 49.99Hz	

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