

Lightsource Test Report

Product Information

Product Category: LED-Lampen
 Product Spec: LED-SLG371-E40-45-NW
 Manufacturer: METOLIGHT
 Buyer: 3811

Product Type: LED-Strassenlampe
 Product Number: 1
 Submitted Unit: 102929

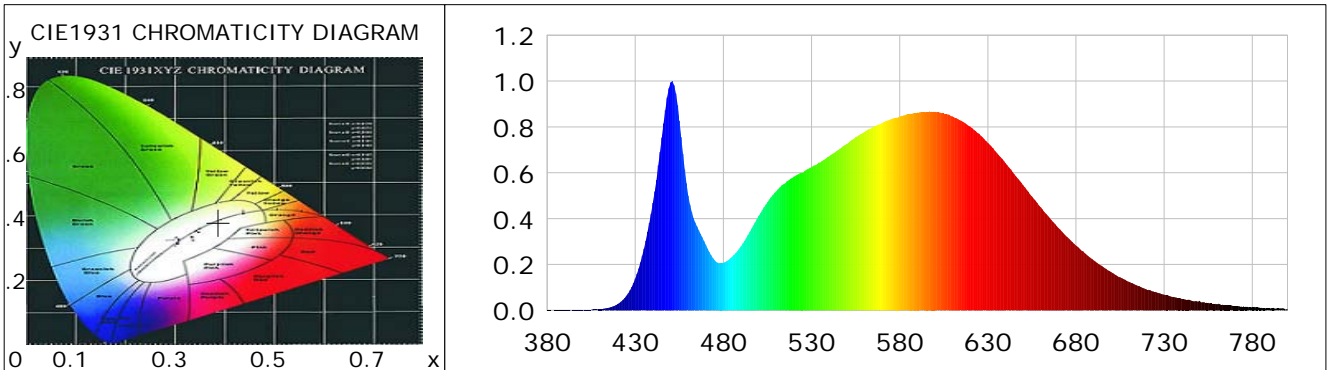
CIE Colorimetric Parameters

Chromaticity coordinates: $x=0.3874$ $y=0.3808$ $u(u')=0.2280$ $v=0.3363$ $v'=0.5044$
 CCT: $T_c=3847K$ ($duv=-0.00007$) Color Ratio: $R=0.190$ $G=0.777$ $B=0.032$
 Peak Wavelength: 450.7nm Half Bandwidth: 19.4nm
 Dominant Wavelength: 579.7nm Color Purity: 0.305
 CRI: $R_a=84.1$, $avgR(1\sim14)=78.1$, $avgR(1\sim15)=78.2$ TM30: $R_f=84$, $R_g=98$
 GAI: $GAI_BB_8=95.1$, $GAI_BB_15=101.2$, $GAI_EES=72.6$

R1 =83	R2 =89	R3 =93	R4 =84	R5 =83	R6 =84	R7 =88	R8 =70
R9 =23	R10=73	R11=83	R12=62	R13=84	R14=96	R15=79	

Color Quality Scale: $Q_a=84.0$, $Q_f=83.8$, $Q_p=84.9$, $Q_g=95.1$

Q1 =85	Q2 =98	Q3 =78	Q4 =77	Q5 =83	Q6 =84	Q7 =85	Q8 =90
Q9 =97	Q10=88	Q11=85	Q12=85	Q13=85	Q14=77	Q15=80	



Photometric Parameters

Luminous Flux: 6416.2 lm	Efficiency: 142.30 lm/W	Radiant Power: 20.060 W
Total mains efficacy: 167.34 lm/W	Energy Efficiency Class: C (EU 2019/2015)	
Pupil Flux: 9384.60 Plm	Pupil Lumens Per Watt: 208.13 Plm/W	Pupil Factor (Kp): 1.463
Cirtopic Flux: 18553.63 lm		

Electric Parameters

Voltage: 230.70V	Current: 0.2080A	Power: 45.09W
Power Factor: 0.9390	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: 45987 (2698)	CCD Integration Time: 80.25 ms

Condition: $T_x=24.3^{\circ}C$, $T_i=0.0^{\circ}C$, R.H.: 60%
 Test Lab:
 Operator: CRE

Test Device: Lisun LMS-9000B
 Test Time: 2021-02-16 10:58:15
 Inspector:

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WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)
380	0.0013	0.1569	525	0.5995	74.7624	670	0.3597	44.8553
385	0.0014	0.1746	530	0.6247	77.9021	675	0.3202	39.9312
390	0.0012	0.1451	535	0.6456	80.5048	680	0.2832	35.3104
395	0.0012	0.1478	540	0.6722	83.8212	685	0.2486	31.0052
400	0.0018	0.2279	545	0.6987	87.1302	690	0.2180	27.1819
405	0.0029	0.3656	550	0.7261	90.5427	695	0.1919	23.9287
410	0.0055	0.6843	555	0.7548	94.1299	700	0.1665	20.7624
415	0.0118	1.4685	560	0.7781	97.0354	705	0.1441	17.9679
420	0.0273	3.4082	565	0.8011	99.8954	710	0.1248	15.5572
425	0.0637	7.9419	570	0.8169	101.8714	715	0.1072	13.3711
430	0.1386	17.2867	575	0.8339	103.9851	720	0.0914	11.3947
435	0.2689	33.5298	580	0.8456	105.4494	725	0.0806	10.0518
440	0.4687	58.4548	585	0.8555	106.6852	730	0.0690	8.6096
445	0.7545	94.0834	590	0.8624	107.5404	735	0.0587	7.3263
450	0.9940	123.9614	595	0.8651	107.8757	740	0.0500	6.2397
455	0.8273	103.1691	600	0.8658	107.9693	745	0.0438	5.4600
460	0.5012	62.4958	605	0.8591	107.1390	750	0.0417	5.2021
465	0.3661	45.6543	610	0.8457	105.4656	755	0.0322	4.0198
470	0.2862	35.6896	615	0.8267	103.0953	760	0.0266	3.3209
475	0.2186	27.2556	620	0.8020	100.0092	765	0.0225	2.8039
480	0.2075	25.8767	625	0.7702	96.0471	770	0.0184	2.2899
485	0.2344	29.2310	630	0.7308	91.1350	775	0.0174	2.1661
490	0.2793	34.8254	635	0.6871	85.6812	780	0.0146	1.8259
495	0.3424	42.6960	640	0.6417	80.0190	785	0.0113	1.4043
500	0.4123	51.4200	645	0.5934	74.0029	790	0.0080	0.9922
505	0.4723	58.9024	650	0.5455	68.0285	795	0.0095	1.1799
510	0.5196	64.8022	655	0.4970	61.9795	800	0.0076	0.9511
515	0.5542	69.1080	660	0.4497	56.0836			
520	0.5833	72.7384	665	0.4040	50.3808			

Condition: Tx:24.3'C, Ti:0.0'C, R.H.:60%
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 Operator: CRE

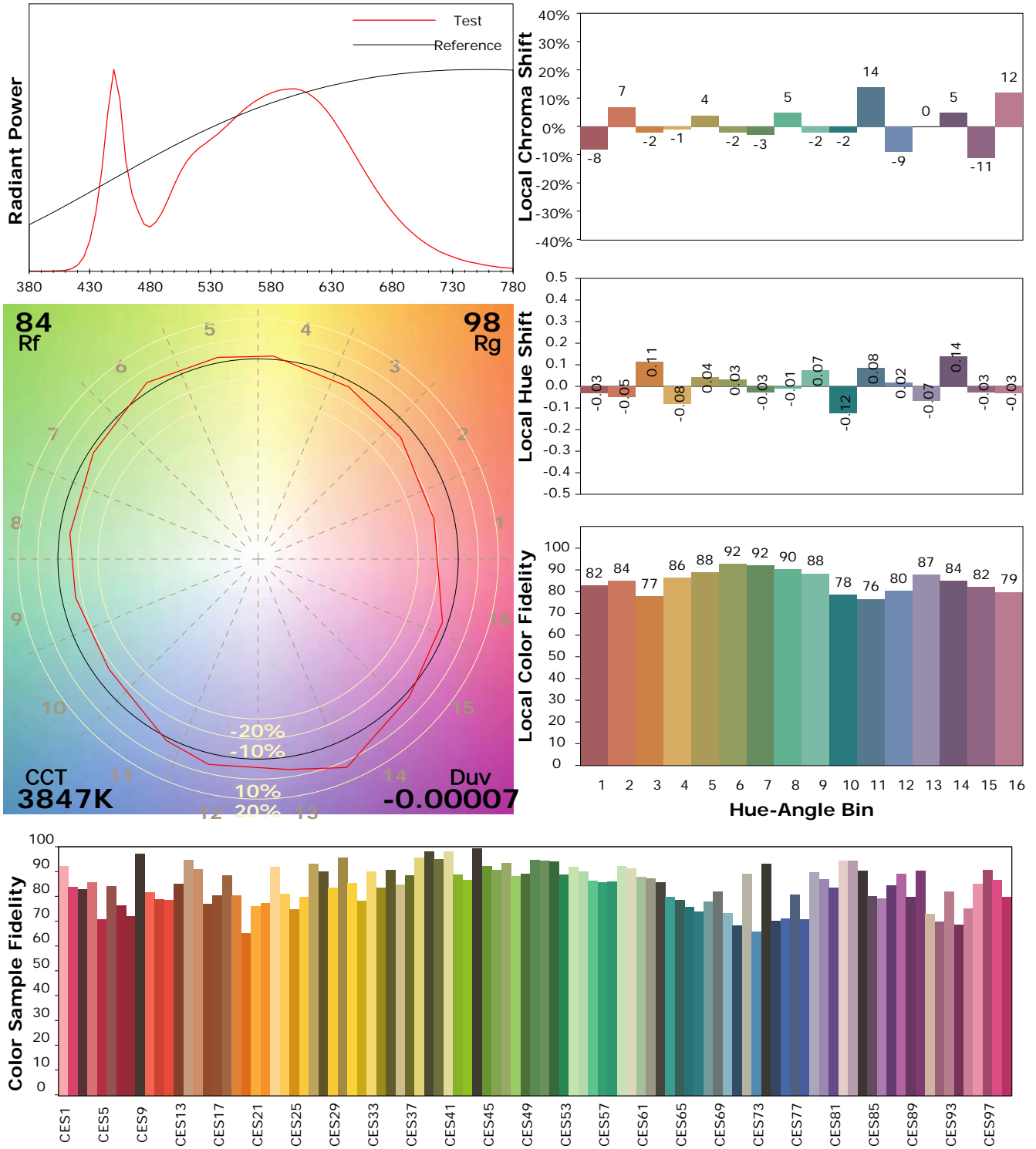
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IES TM-30-18 Color Rendition Report

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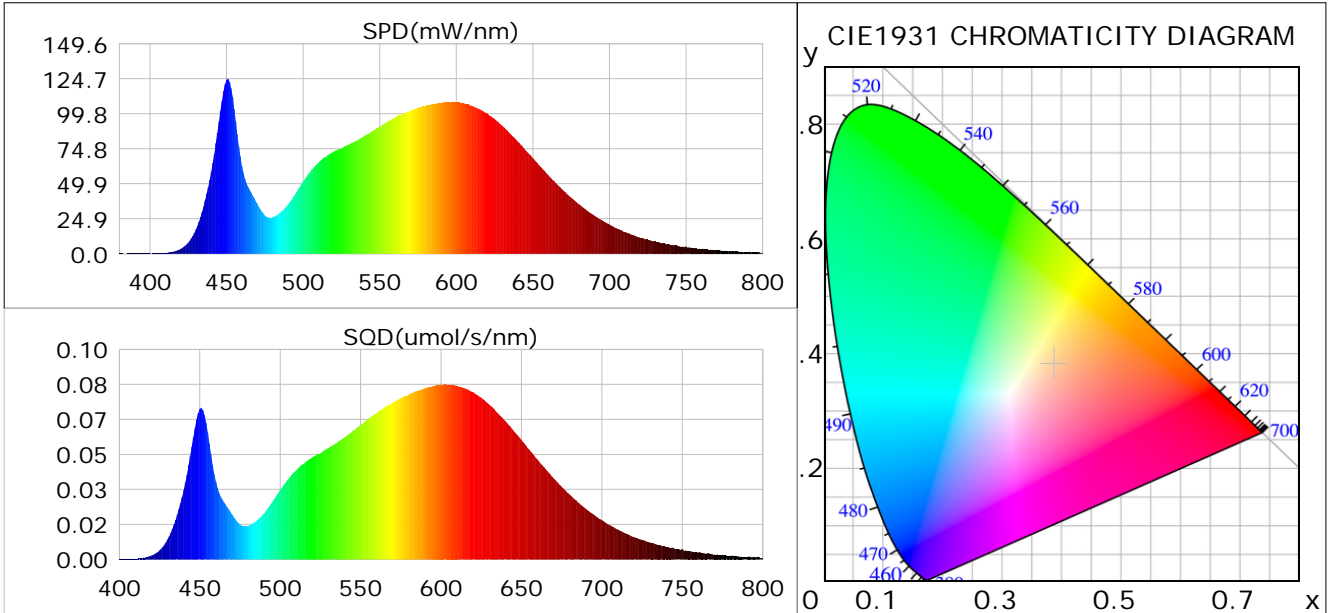
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Plant optical param data

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 CRI: $R_a=84.1$



Plant Optical Param

$ \mu_v(lm): 6416.20$	$Q_v(lm.s): 6416.20$
$ \mu_e, \dot{E}(W/nm): 20.06$	$Q_e(J): 20.06$
$ \mu_e(W): 19.43$	$ \mu_{fr}(W): 0.67$
$ \zeta_e: 0.43$	$ \zeta_{fr}: 0.01$
$PPE(umol/s/w): 2.03$	$K_{fr}: 0.09$
$Erb_Ratio: 1.72$	$PPF(umol/s): 91.75$
$PF_{uv}(360-400)(umol/s): 0.01$	$PPF(400-500)(umol/s): 14.95$
$PPF(500-600)(umol/s): 41.14$	$PPF(600-700)(umol/s): 35.65$
$PPF_{fr}(700-800)(umol/s): 3.94$	$PPF.t(umol): 91.75$
$ \mu_{ch-A.t}(J): 1.63$	$ \mu_{ch-A}(W): 1.63$
$ \mu_{ch-B.t}(J): 0.87$	$ \mu_{ch-B}(W): 0.87$
$ \mu_b.t(J): 3.89$	$ \mu_b(W): 3.89$
$ \mu_y.t(J): 8.91$	$ \mu_y(W): 8.91$
$ \mu_r.t(J): 6.79$	$ \mu_r(W): 6.79$

Electric Parameters

Voltage: 230.70V	Current: 0.2080A	Power: 45.09W
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