

Lightsource Test Report

Product Information

Product Category: LED-Lampen
 Product Spec: LED-SLG28-Plus-E27-45-360-NWM
 Manufacturer: METOLIGHT
 Buyer: 3811
 Product Type: LED-Strassenlampe
 Product Number: 1
 Submitted Unit: 102170

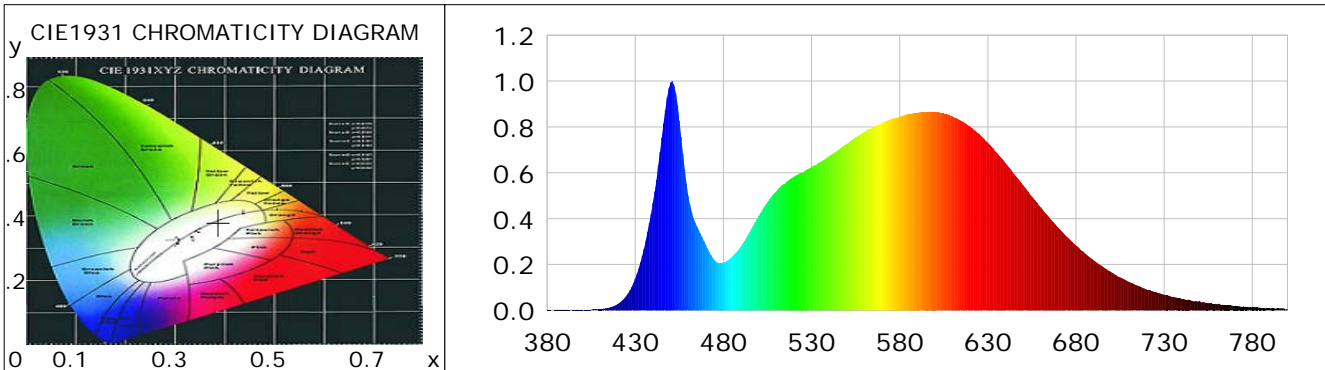
CIE Colorimetric Parameters

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: 5016.2 lm Efficiency: 111.25 lm/W Radiant Power: 15.683 W
 Total mains efficacy: 111.25 lm/W Energy Efficiency Class: E (EU 2019/2015)
 Pupil Flux: 7336.90 Plm Pupil Lumens Per Watt: 162.72 Plm/W Pupil Factor (Kp): 1.463
 Circopic Flux: 14505.27 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: Tx:24.3'C, Ti:0.0'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	0.1226	525	0.5995	58.4494	670	0.3597	35.0680
385	0.0014	0.1365	530	0.6247	60.9041	675	0.3202	31.2183
390	0.0012	0.1135	535	0.6456	62.9388	680	0.2832	27.6057
395	0.0012	0.1155	540	0.6722	65.5316	685	0.2486	24.2400
400	0.0018	0.1782	545	0.6987	68.1186	690	0.2180	21.2509
405	0.0029	0.2858	550	0.7261	70.7865	695	0.1919	18.7075
410	0.0055	0.5350	555	0.7548	73.5910	700	0.1665	16.2321
415	0.0118	1.1481	560	0.7781	75.8625	705	0.1441	14.0473
420	0.0273	2.6646	565	0.8011	78.0984	710	0.1248	12.1627
425	0.0637	6.2090	570	0.8169	79.6433	715	0.1072	10.4536
430	0.1386	13.5148	575	0.8339	81.2958	720	0.0914	8.9084
435	0.2689	26.2137	580	0.8456	82.4406	725	0.0806	7.8585
440	0.4687	45.7001	585	0.8555	83.4067	730	0.0690	6.7310
445	0.7545	73.5546	590	0.8624	84.0753	735	0.0587	5.7277
450	0.9940	96.9133	595	0.8651	84.3375	740	0.0500	4.8782
455	0.8273	80.6578	600	0.8658	84.4107	745	0.0438	4.2687
460	0.5012	48.8594	605	0.8591	83.7615	750	0.0417	4.0670
465	0.3661	35.6926	610	0.8457	82.4532	755	0.0322	3.1427
470	0.2862	27.9022	615	0.8267	80.6001	760	0.0266	2.5963
475	0.2186	21.3085	620	0.8020	78.1874	765	0.0225	2.1921
480	0.2075	20.2305	625	0.7702	75.0899	770	0.0184	1.7902
485	0.2344	22.8529	630	0.7308	71.2496	775	0.0174	1.6935
490	0.2793	27.2266	635	0.6871	66.9857	780	0.0146	1.4275
495	0.3424	33.3798	640	0.6417	62.5591	785	0.0113	1.0979
500	0.4123	40.2002	645	0.5934	57.8556	790	0.0080	0.7757
505	0.4723	46.0500	650	0.5455	53.1849	795	0.0095	0.9224
510	0.5196	50.6625	655	0.4970	48.4557	800	0.0076	0.7435
515	0.5542	54.0288	660	0.4497	43.8463			
520	0.5833	56.8671	665	0.4040	39.3878			

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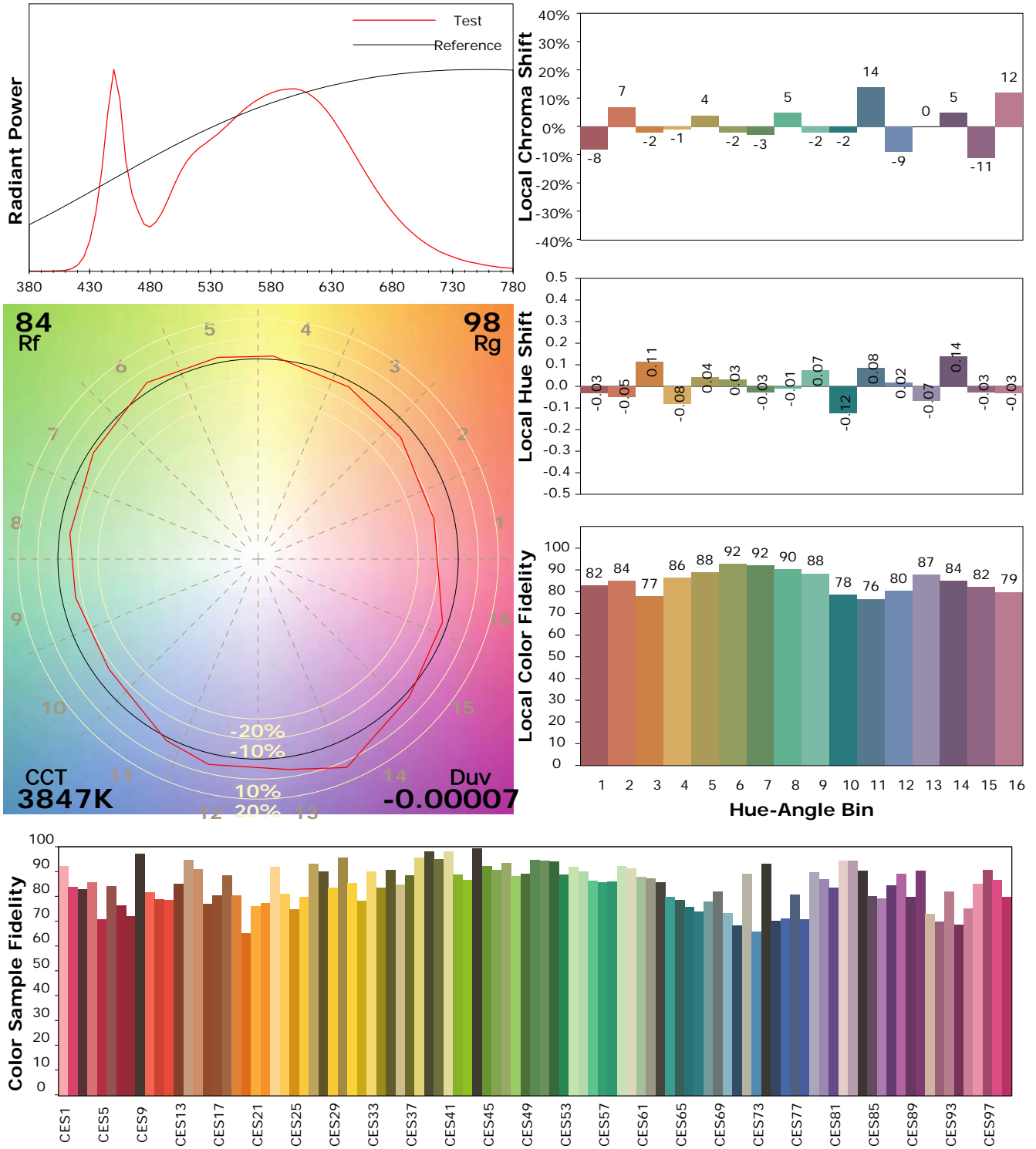
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IES TM-30-18 Color Rendition Report

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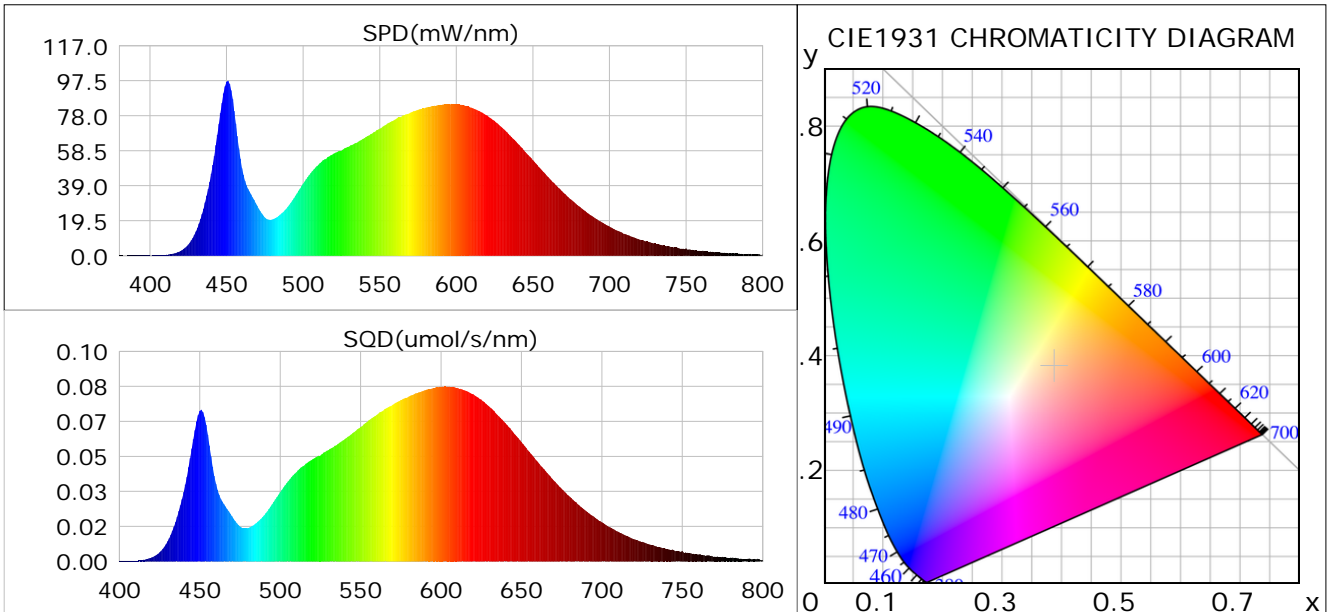
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Plant optical param data

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 Dominant Wavelength: 579.7nm Color Purity: 0.305
 CRI: $R_a=84.1$



Plant Optical Param

$ \mu_v(lm): 5016.20$	$Q_v(lm.s): 5016.20$
$ \mu_e, \dot{E}(W/nm): 15.68$	$Q_e(J): 15.68$
$ \mu_e(W): 15.19$	$ \mu_{fr}(W): 0.52$
$ \zeta_e: 0.34$	$ \zeta_{fr}: 0.01$
$PPE(umol/s/w): 1.59$	$K_{fr}: 0.07$
$Erb_Ratio: 1.72$	$PPF(umol/s): 71.73$
$PF_{uv}(360-400)(umol/s): 0.01$	$PPF(400-500)(umol/s): 11.69$
$PPF(500-600)(umol/s): 32.17$	$PPF(600-700)(umol/s): 27.87$
$PPF_{fr}(700-800)(umol/s): 3.08$	$PPF.t(umol): 71.73$
$ \mu_{ch-A.t}(J): 1.27$	$ \mu_{ch-A}(W): 1.27$
$ \mu_{ch-B.t}(J): 0.68$	$ \mu_{ch-B}(W): 0.68$
$ \mu_b.t(J): 3.04$	$ \mu_b(W): 3.04$
$ \mu_y.t(J): 6.97$	$ \mu_y(W): 6.97$
$ \mu_r.t(J): 5.31$	$ \mu_r(W): 5.31$

Electric Parameters

Voltage: 230.70V	Current: 0.2080A	Power: 45.09W
Power Factor: 0.9390	Frequency: 49.99Hz	

Condition: $T_x: 24.3^\circ C$, $T_i: 0.0^\circ C$, R.H.: 60%
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