

Lightsource Test Report

Product Information

Product Category: LED-Lampen
 Product Spec: LED-SLG28-Plus-E40-54-360-NWM
 Manufacturer: METOLIGHT
 Buyer: 3811

Product Type: LED-Strassenlampen
 Product Number: 1
 Submitted Unit: 104324

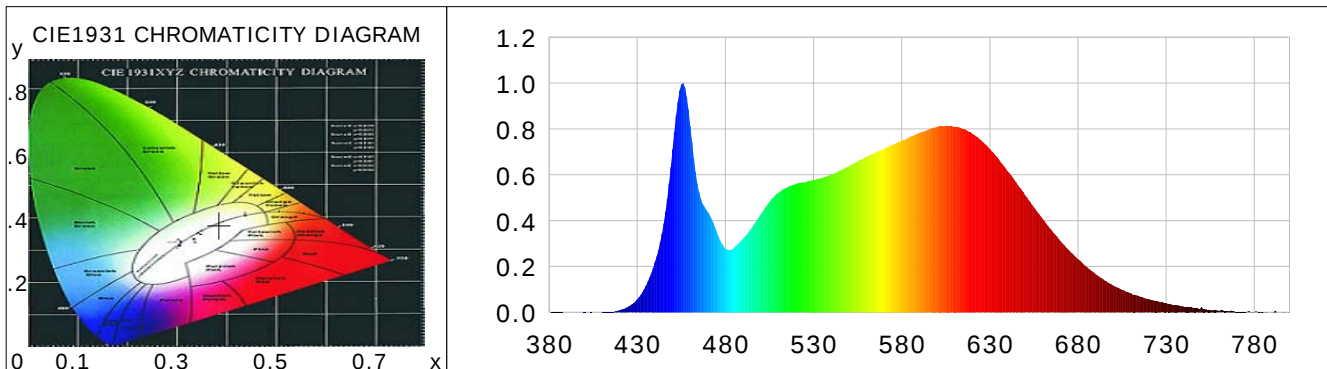
CIE Colorimetric Parameters

Chromaticity coordinates: $x=0.3849$ $y=0.3787$ $u(u')=0.2272$ $v=0.3354$ $v'=0.5031$
 CCT: $T_c=3896K$ ($duv=-0.00036$) Color Ratio: $R=0.198$ $G=0.762$ $B=0.040$
 Peak Wavelength: 455.8nm Half Bandwidth: 18.8nm
 Dominant Wavelength: 579.6nm Color Purity: 0.292
 CRI: $R_a=89.3$, $avgR(1\sim14)=84.9$, $avgR(1\sim15)=84.9$ TM30: $R_f=87$, $R_g=96$
 GAI: $GAI_BB_8=94.8$, $GAI_BB_15=102.0$, $GAI_EES=73.1$

R1 =89	R2 =95	R3 =97	R4 =88	R5 =89	R6 =93	R7 =88	R8 =75
R9 =39	R10=88	R11=89	R12=67	R13=91	R14=99	R15=85	

Color Quality Scale: $Q_a=88.2$, $Q_f=88.3$, $Q_p=87.8$, $Q_g=94.6$

Q1 =85	Q2 =97	Q3 =86	Q4 =82	Q5 =86	Q6 =88	Q7 =91	Q8 =93
Q9 =98	Q10=95	Q11=92	Q12=91	Q13=90	Q14=82	Q15=84	



Photometric Parameters

Luminous Flux: 6065.1 lm	Efficiency: 111.61 lm/W	Radiant Power: 18.965 W
Total mains efficacy: 111.61 lm/W	Energy Efficiency Class: E (EU 2019/2015)	
Pupil Flux: 9371.16 Plm	Pupil Lumens Per Watt: 172.45 Plm/W	Pupil Factor (Kp): 1.545
Cirtpic Flux: 19436.27 lm		

Electric Parameters

Voltage: 230.10V	Current: 0.9560A	Power: 54.34W
Power Factor: 0.9560	Frequency: 50.00Hz	

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: 44418 (2569)	CCD Integration Time: 131.96 ms

Condition: Tx:22.1'C, Ti:0.0'C, R.H.:60%
 Test Lab:
 Operator: CRE

Test Device: Lisun LMS-9000B
 Test Time: 2021-02-11 14:37:55
 Inspector:

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WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)
380	0.0001	0.0161	525	0.5659	72.4545	670	0.3119	39.9374
385	0.0012	0.1531	530	0.5773	73.9224	675	0.2705	34.6307
390	0.0002	0.0256	535	0.5869	75.1466	680	0.2324	29.7575
395	0.0005	0.0585	540	0.5997	76.7933	685	0.1979	25.3335
400	0.0008	0.1072	545	0.6180	79.1297	690	0.1667	21.3383
405	0.0002	0.0209	550	0.6372	81.5858	695	0.1394	17.8467
410	0.0009	0.1105	555	0.6581	84.2689	700	0.1167	14.9439
415	0.0028	0.3548	560	0.6792	86.9721	705	0.0980	12.5430
420	0.0096	1.2273	565	0.6968	89.2193	710	0.0831	10.6438
425	0.0251	3.2122	570	0.7139	91.4147	715	0.0697	8.9207
430	0.0568	7.2784	575	0.7311	93.6104	720	0.0579	7.4124
435	0.1166	14.9344	580	0.7496	95.9788	725	0.0493	6.3147
440	0.2178	27.8900	585	0.7662	98.1023	730	0.0403	5.1568
445	0.3885	49.7501	590	0.7839	100.3777	735	0.0308	3.9405
450	0.7100	90.9144	595	0.7967	102.0152	740	0.0252	3.2240
455	0.9935	127.2165	600	0.8086	103.5362	745	0.0201	2.5702
460	0.8137	104.1839	605	0.8147	104.3137	750	0.0242	3.0925
465	0.5252	67.2493	610	0.8090	103.5906	755	0.0108	1.3797
470	0.4377	56.0442	615	0.8001	102.4486	760	0.0067	0.8583
475	0.3519	45.0576	620	0.7791	99.7643	765	0.0048	0.6187
480	0.2782	35.6236	625	0.7502	96.0514	770	0.0030	0.3901
485	0.2822	36.1312	630	0.7125	91.2324	775	0.0023	0.2908
490	0.3214	41.1575	635	0.6686	85.6134	780	0.0014	0.1780
495	0.3689	47.2306	640	0.6154	78.7979	785	0.0022	0.2773
500	0.4270	54.6776	645	0.5664	72.5218	790	0.0009	0.1151
505	0.4818	61.6877	650	0.5110	65.4238	795	0.0002	0.0275
510	0.5217	66.8021	655	0.4585	58.7116	800	0.0038	0.4887
515	0.5438	69.6304	660	0.4076	52.1855			
520	0.5604	71.7608	665	0.3582	45.8676			

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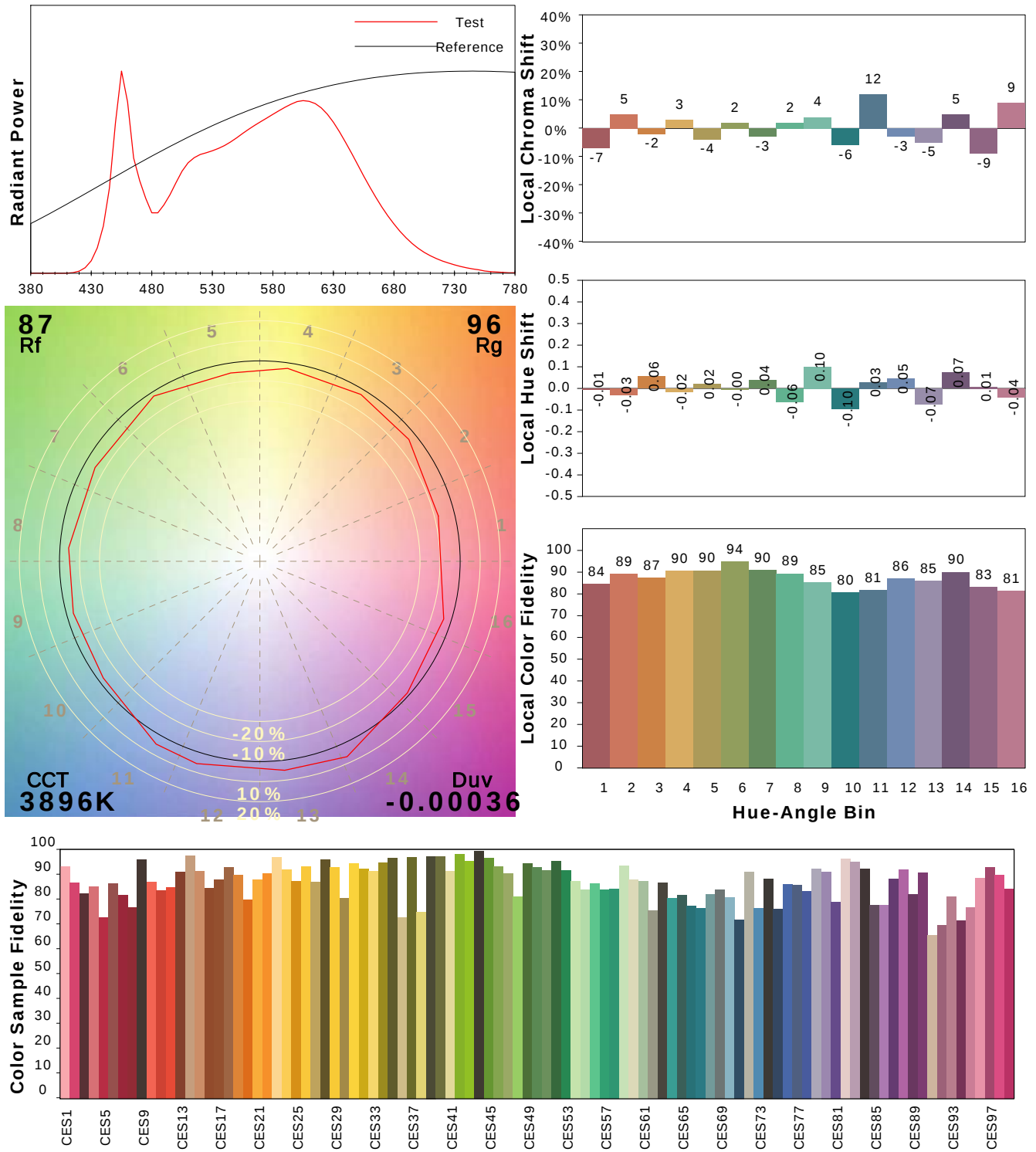
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IES TM-30-18 Color Rendition Report

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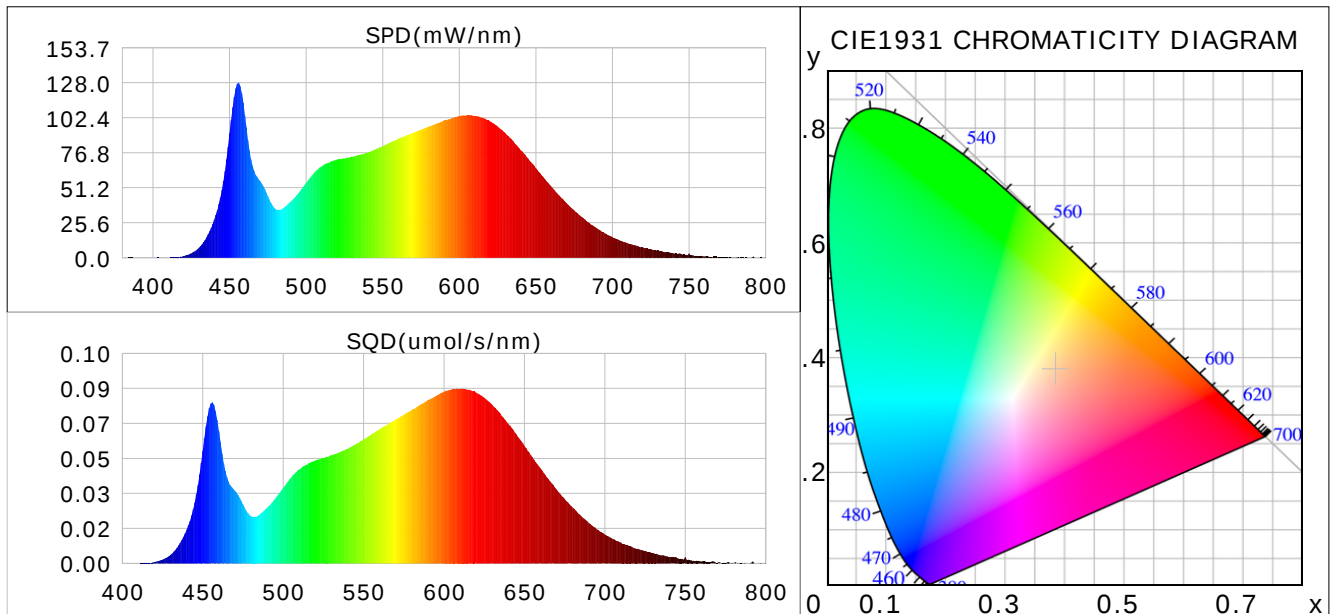
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Plant optical param data

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 CRI: Ra= 89.3



Plant Optical Param

$\mu_v(lm): 6065.10$	$Q_v(lm.s): 6065.10$
$\mu_e, \dot{E}(W/nm): 18.97$	$Q_e(J): 18.97$
$\mu_e(W): 18.60$	$\mu_{fr}(W): 0.38$
$\dot{C}_e: 0.34$	$\dot{C}_{fr}: 0.01$
$PPE(umol/s/w): 1.61$	$K_{fr}: 0.04$
$Erb_Ratio: 1.62$	$PPF(umol/s): 87.66$
$PF_{uv}(360-400)(umol/s): 0.01$	$PPF(400-500)(umol/s): 15.30$
$PPF(500-600)(umol/s): 38.40$	$PPF(600-700)(umol/s): 33.96$
$PF_{fr}(700-800)(umol/s): 2.23$	$PPF.t(umol): 87.66$
$\mu_{ch-A.t}(J): 1.44$	$\mu_{ch-A}(W): 1.44$
$\mu_{ch-B.t}(J): 0.88$	$\mu_{ch-B}(W): 0.88$
$\mu_b.t(J): 3.94$	$\mu_b(W): 3.94$
$\mu_y.t(J): 8.33$	$\mu_y(W): 8.33$
$\mu_r.t(J): 6.48$	$\mu_r(W): 6.48$

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