

Lightsource Test Report

Product Information

Product Category: LED-Lampen
 Product Spec: LED-SLG10-E27-12-360-NW
 Manufacturer: METOLIGHT
 Buyer: 3811

Product Type: LED-Strassenlampen
 Product Number: 1
 Submitted Unit: 100265

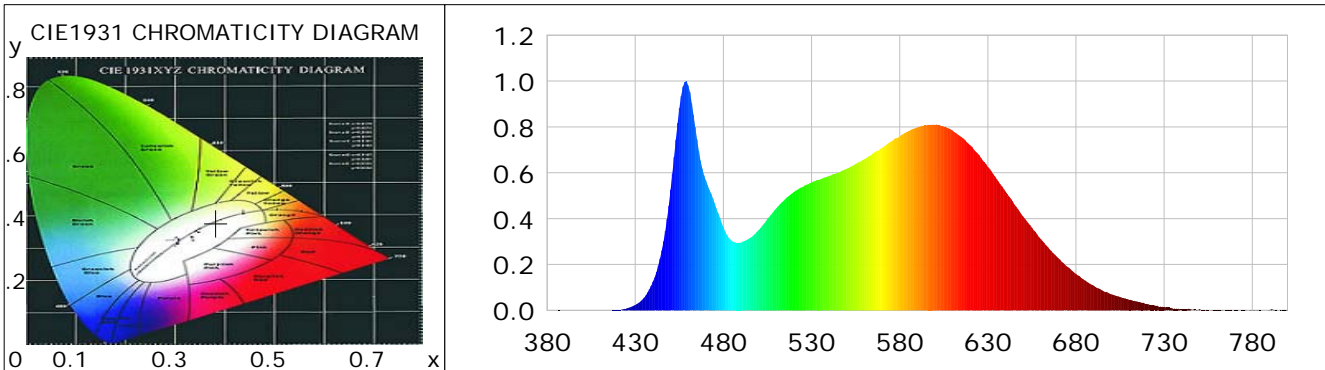
CIE Colorimetric Parameters

Chromaticity coordinates: $x=0.3825$ $y=0.3787$ $u(u')=0.2257$ $v=0.3352$ $v'=0.5027$
 CCT: $T_c=3959K$ ($duv=0.00031$) Color Ratio: $R=0.189$ $G=0.767$ $B=0.043$
 Peak Wavelength: 458.7nm Half Bandwidth: 23.9nm
 Dominant Wavelength: 579.1nm Color Purity: 0.285
 CRI: $R_a=84.5$, $avgR(1\sim14)=78.9$, $avgR(1\sim15)=78.9$ TM30: $R_f=82$, $R_g=91$
 GAI: $GAI_BB_8=89.3$, $GAI_BB_15=98.2$, $GAI_EES=69.9$

R1 =85	R2 =95	R3 =95	R4 =80	R5 =84	R6 =91	R7 =82	R8 =64
R9 =16	R10=86	R11=79	R12=61	R13=88	R14=98	R15=78	

Color Quality Scale: $Q_a=83.2$, $Q_f=83.6$, $Q_p=81.5$, $Q_g=90.2$

Q1 =78	Q2 =94	Q3 =85	Q4 =76	Q5 =78	Q6 =79	Q7 =85	Q8 =90
Q9 =97	Q10=94	Q11=89	Q12=87	Q13=86	Q14=75	Q15=77	



Photometric Parameters

Luminous Flux: 1337.6 lm Efficiency: 105.74 lm/W Radiant Power: 4.005 W
 Total mains efficacy: 105.74 lm/W Energy Efficiency Class: F (EU 2019/2015)
 Pupil Flux: 2074.66 Plm Pupil Lumens Per Watt: 164.00 Plm/W Pupil Factor (Kp): 1.551
 Circopic Flux: 4360.20 lm

Electric Parameters

Voltage: 230.70V Current: 0.0600A Power: 12.65W
 Power Factor: 0.9090 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: 51470 (1985) CCD Integration Time: 231.54 ms

Condition: Tx:13.4'C, Ti:0.0'C, R.H.:60%
 Test Lab:
 Operator: CRE

Test Device: Lisun LMS-9000B
 Test Time: 2021-02-12 09:34:06
 Inspector:

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WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)
380	0.0003	0.0094	525	0.5378	15.6930	670	0.2279	6.6489
385	0.0002	0.0073	530	0.5577	16.2729	675	0.1908	5.5670
390	0.0004	0.0116	535	0.5711	16.6647	680	0.1590	4.6393
395	0.0003	0.0086	540	0.5857	17.0917	685	0.1307	3.8133
400	0.0003	0.0077	545	0.5996	17.4969	690	0.1080	3.1520
405	0.0005	0.0133	550	0.6181	18.0350	695	0.0865	2.5238
410	0.0002	0.0060	555	0.6386	18.6357	700	0.0705	2.0567
415	0.0005	0.0134	560	0.6591	19.2337	705	0.0584	1.7029
420	0.0023	0.0665	565	0.6857	20.0080	710	0.0467	1.3619
425	0.0083	0.2422	570	0.7082	20.6670	715	0.0380	1.1096
430	0.0234	0.6841	575	0.7360	21.4781	720	0.0281	0.8203
435	0.0546	1.5924	580	0.7588	22.1410	725	0.0204	0.5939
440	0.1247	3.6401	585	0.7813	22.7979	730	0.0151	0.4414
445	0.2613	7.6237	590	0.7984	23.2970	735	0.0073	0.2128
450	0.5259	15.3469	595	0.8065	23.5336	740	0.0053	0.1539
455	0.8819	25.7338	600	0.8094	23.6187	745	0.0042	0.1240
460	0.9813	28.6354	605	0.8021	23.4045	750	0.0046	0.1335
465	0.7462	21.7738	610	0.7844	22.8900	755	0.0014	0.0415
470	0.5678	16.5699	615	0.7566	22.0789	760	0.0013	0.0389
475	0.4672	13.6337	620	0.7198	21.0030	765	0.0015	0.0424
480	0.3627	10.5838	625	0.6776	19.7717	770	0.0016	0.0456
485	0.3012	8.7903	630	0.6253	18.2474	775	0.0021	0.0603
490	0.2958	8.6311	635	0.5728	16.7152	780	0.0009	0.0270
495	0.3158	9.2156	640	0.5185	15.1311	785	0.0010	0.0299
500	0.3499	10.2112	645	0.4627	13.5014	790	0.0024	0.0705
505	0.3995	11.6584	650	0.4097	11.9539	795	0.0003	0.0088
510	0.4448	12.9786	655	0.3606	10.5230	800	0.0036	0.1060
515	0.4847	14.1437	660	0.3119	9.1005			
520	0.5160	15.0556	665	0.2666	7.7790			

Condition: Tx: 13.4'C, Ti: 0.0'C, R.H.: 60%
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 Operator: CRE

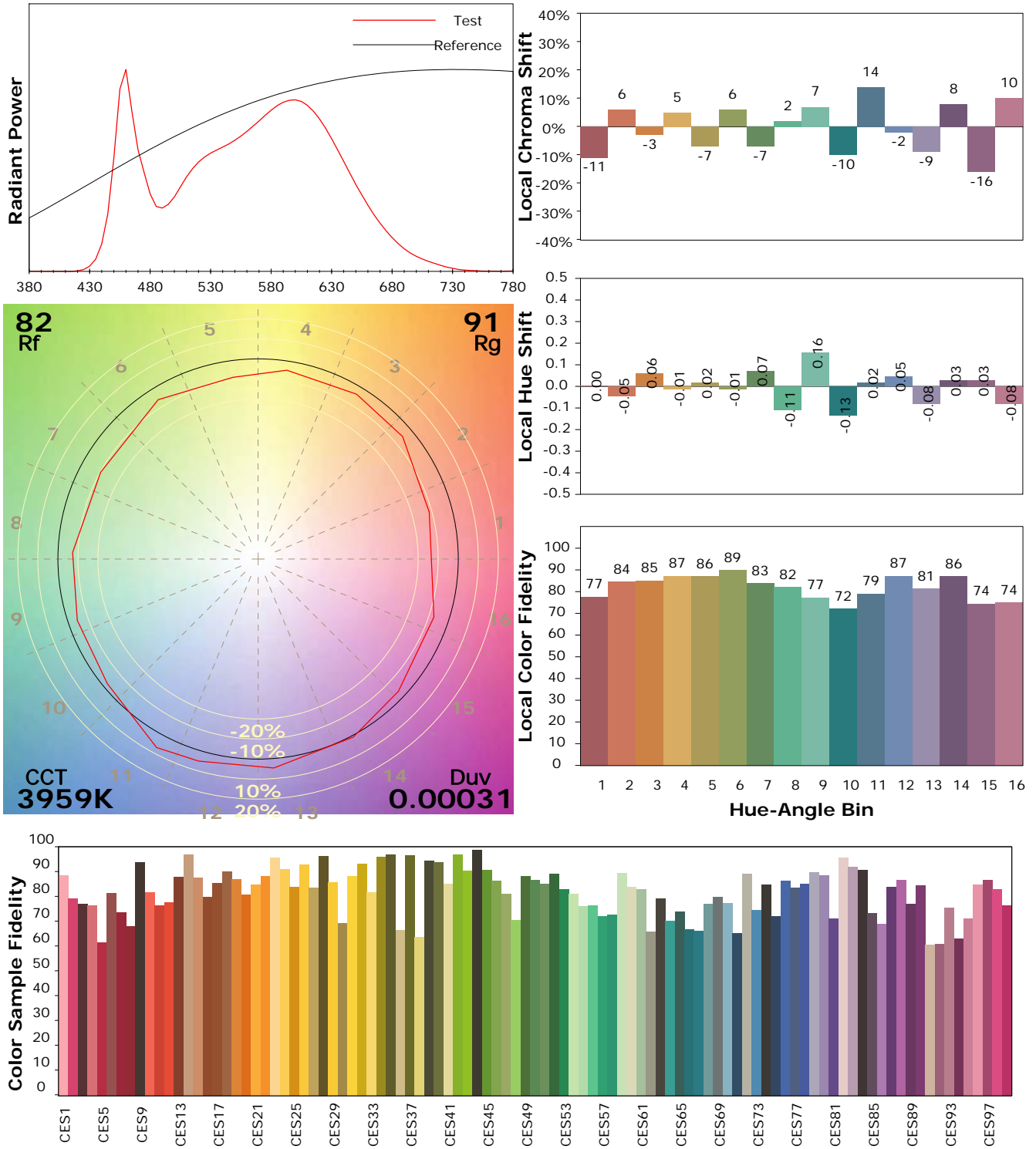
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I ES TM-30-18 Color Rendition Report

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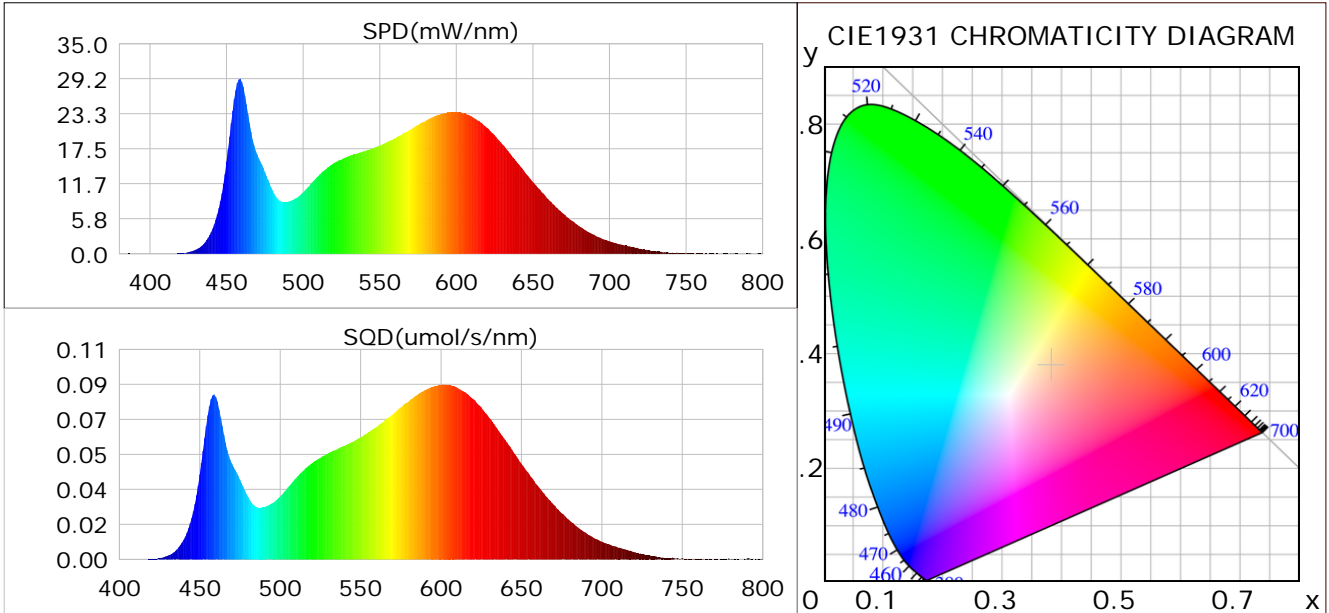
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Plant optical param data

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 Dominant Wavelength: 579.1nm Color Purity: 0.285
 CRI: $R_a=84.5$



Plant Optical Param

$ \mu_v(lm): 1337.60$	$Q_v(lm.s): 1337.60$
$ \mu_e, \dot{E}(W/nm): 4.01$	$Q_e(J): 4.01$
$ \mu_e(W): 3.97$	$ \mu_{fr}(W): 0.04$
$ \zeta_e: 0.31$	$ \zeta_{fr}: 0.00$
$PPE(umol/s/w): 1.47$	$K_{fr}: 0.02$
$Erb_Ratio: 1.39$	$PPF(umol/s): 18.58$
$PF_{uv}(360-400)(umol/s): 0.00$	$PPF(400-500)(umol/s): 3.49$
$PPF(500-600)(umol/s): 8.50$	$PPF(600-700)(umol/s): 6.60$
$PPF_{fr}(700-800)(umol/s): 0.24$	$PPF.t(umol): 18.58$
$ \mu_{ch-A.t}(J): 0.29$	$ \mu_{ch-A}(W): 0.29$
$ \mu_{ch-B.t}(J): 0.20$	$ \mu_{ch-B}(W): 0.20$
$ \mu_b.t(J): 0.89$	$ \mu_b(W): 0.89$
$ \mu_y.t(J): 1.84$	$ \mu_y(W): 1.84$
$ \mu_r.t(J): 1.27$	$ \mu_r(W): 1.27$

Electric Parameters

Voltage: 230.70V	Current: 0.0600A	Power: 12.65W
Power Factor: 0.9090	Frequency: 49.99Hz	

Condition: $T_x: 13.4^\circ C$, $T_i: 0.0^\circ C$, R.H.: 60%
 Test Lab:
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