

Lightsource Test Report

Product Information

Product Category: LED-Lampen
 Product Spec: LED-SLG35-E40-110-CW
 Manufacturer: METOLIGHT
 Buyer: 3811

Product Type: LED-Strassenlampen
 Product Number: 1
 Submitted Unit: 103787

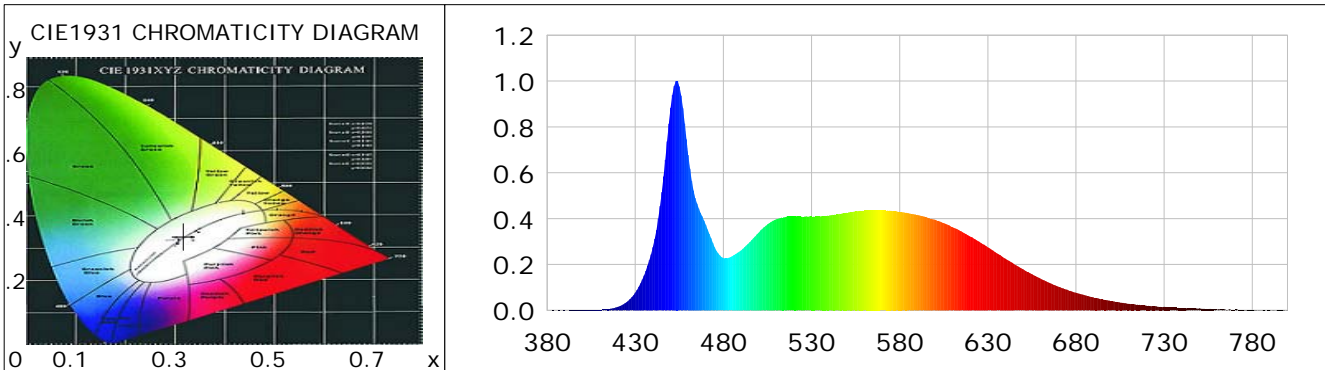
CIE Colorimetric Parameters

Chromaticity coordinates: $x=0.3171$ $y=0.3372$ $u(u')=0.1978$ $v=0.3155$ $v'=0.4733$
 CCT: $T_c=6226K$ ($duv=0.00518$) Color Ratio: $R=0.138$ $G=0.804$ $B=0.058$
 Peak Wavelength: 453.5nm Half Bandwidth: 18.9nm
 Dominant Wavelength: 494.8nm Color Purity: 0.052
 CRI: $R_a=84.8$, $avgR(1\sim14)=78.1$, $avgR(1\sim15)=78.1$ TM30: $R_f=84$, $R_g=94$
 GAI: $GAI_BB_8=89.4$, $GAI_BB_15=95.1$, $GAI_EES=86.1$

R1 =83	R2 =91	R3 =94	R4 =83	R5 =83	R6 =86	R7 =88	R8 =70
R9 =12	R10=78	R11=83	R12=59	R13=86	R14=98	R15=78	

Color Quality Scale: $Q_a=83.2$, $Q_f=83.4$, $Q_p=82.5$, $Q_g=91.1$

Q1 =82	Q2 =98	Q3 =81	Q4 =75	Q5 =80	Q6 =83	Q7 =87	Q8 =90
Q9 =98	Q10=91	Q11=87	Q12=85	Q13=84	Q14=73	Q15=77	



Photometric Parameters

Luminous Flux: 13821 lm	Efficiency: 128.94 lm/W	Radiant Power: 44.121 W
Total mains efficacy: 151.63 lm/W	Energy Efficiency Class: D (EU 2019/2015)	
Pupil Flux: 26090.67 Plm	Pupil Lumens Per Watt: 243.41 Plm/W	Pupil Factor (Kp): 1.888
Cirtopic Flux: 60114.18 lm		

Electric Parameters

Voltage: 230.90V	Current: 0.4642A	Power: 107.19W
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: 48607 (2481)	CCD Integration Time: 32.95 ms

Condition: $T_x=21.3^{\circ}C$, $T_i=0.0^{\circ}C$, R.H.:60%
 Test Lab:
 Operator: CRE

Test Device: Lisun LMS-9000B
 Test Time: 2021-02-12 12:34:42
 Inspector:

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WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)
380	0.0002	0.1123	525	0.4072	195.6489	670	0.1039	49.9315
385	0.0004	0.2095	530	0.4094	196.6928	675	0.0902	43.3233
390	0.0010	0.4633	535	0.4091	196.5758	680	0.0770	36.9927
395	0.0011	0.5160	540	0.4137	198.7798	685	0.0658	31.6325
400	0.0015	0.7069	545	0.4190	201.3366	690	0.0563	27.0727
405	0.0018	0.8680	550	0.4252	204.2720	695	0.0481	23.1323
410	0.0031	1.5124	555	0.4323	207.6904	700	0.0404	19.4167
415	0.0060	2.9042	560	0.4357	209.3642	705	0.0346	16.6368
420	0.0149	7.1356	565	0.4373	210.0967	710	0.0293	14.0694
425	0.0356	17.1049	570	0.4357	209.3424	715	0.0251	12.0645
430	0.0770	36.9935	575	0.4348	208.9293	720	0.0201	9.6772
435	0.1516	72.8277	580	0.4297	206.4516	725	0.0182	8.7497
440	0.2753	132.2515	585	0.4233	203.3598	730	0.0157	7.5486
445	0.5156	247.7502	590	0.4167	200.2089	735	0.0127	6.1023
450	0.8834	424.4443	595	0.4071	195.5893	740	0.0103	4.9614
455	0.9773	469.5571	600	0.3955	190.0260	745	0.0078	3.7697
460	0.6771	325.3468	605	0.3810	183.0377	750	0.0090	4.3100
465	0.4663	224.0224	610	0.3627	174.2451	755	0.0060	2.8942
470	0.3731	179.2439	615	0.3447	165.6156	760	0.0039	1.8730
475	0.2752	132.2070	620	0.3225	154.9316	765	0.0034	1.6360
480	0.2286	109.8533	625	0.2997	144.0173	770	0.0035	1.6831
485	0.2365	113.6482	630	0.2748	132.0383	775	0.0020	0.9720
490	0.2618	125.7731	635	0.2496	119.9114	780	0.0026	1.2353
495	0.2975	142.9226	640	0.2255	108.3236	785	0.0008	0.4041
500	0.3393	163.0053	645	0.2010	96.5632	790	0.0025	1.2236
505	0.3750	180.1728	650	0.1793	86.1281	795	0.0019	0.9227
510	0.3974	190.9465	655	0.1578	75.8053	800	0.0031	1.4979
515	0.4066	195.3563	660	0.1379	66.2455			
520	0.4112	197.5513	665	0.1197	57.4965			

Condition: Tx:21.3'C, Ti:0.0'C, R.H.:60%
 Test Lab:
 Operator: CRE

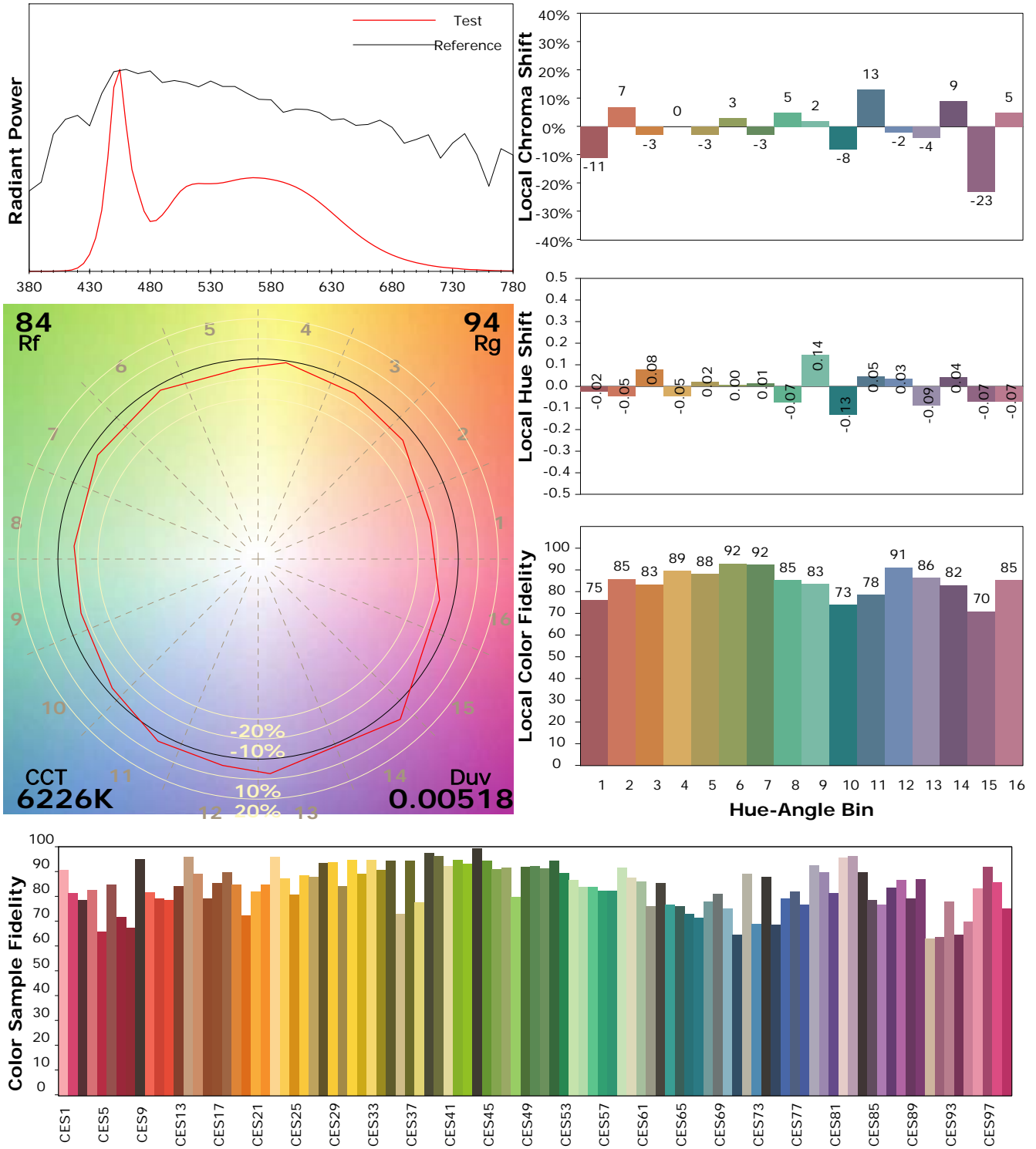
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IES TM-30-18 Color Rendition Report

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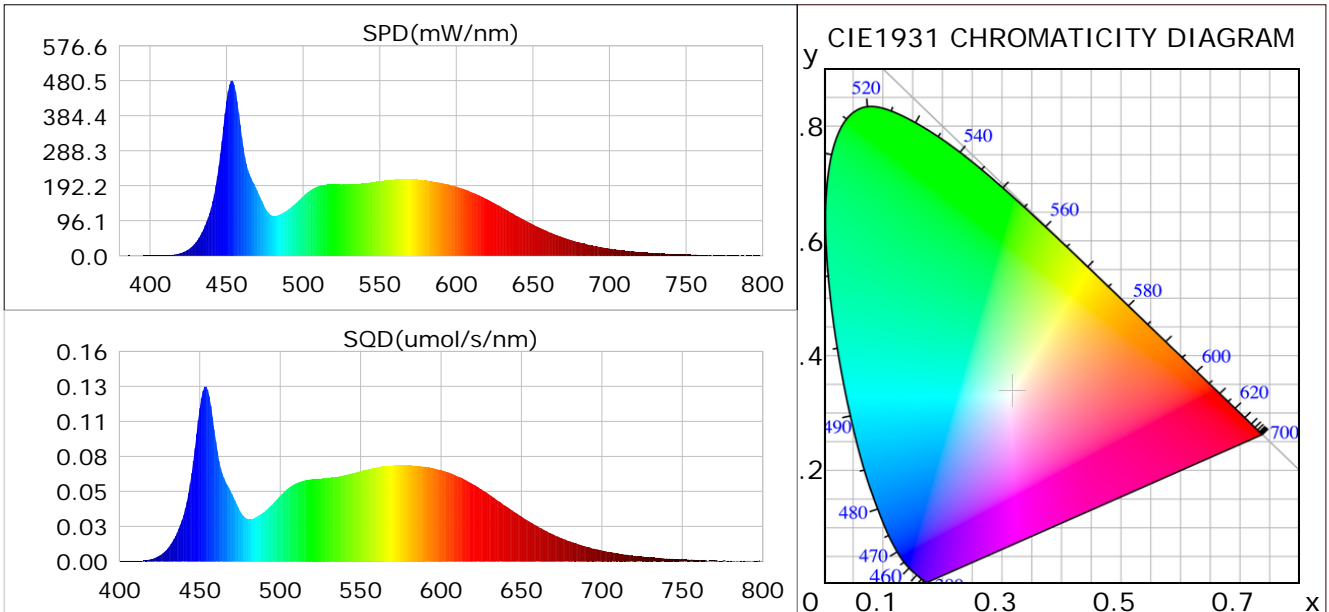
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Plant optical param data

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 CRI: $R_a=84.8$



Plant Optical Param

$ \mu_v(lm): 13821.00$	$Q_v(lm.s): 13821.00$
$ \mu_e, \dot{E}(W/nm): 44.12$	$Q_e(J): 44.12$
$ \mu_e(W): 43.59$	$ \mu_{fr}(W): 0.56$
$ \zeta_e: 0.41$	$ \zeta_{fr}: 0.01$
$PPE(umol/s/w): 1.83$	$K_{fr}: 0.03$
$Erb_Ratio: 0.65$	$PPF(umol/s): 196.60$
$PF_{uv}(360-400)(umol/s): 0.03$	$PPF(400-500)(umol/s): 55.29$
$PPF(500-600)(umol/s): 91.94$	$PPF(600-700)(umol/s): 49.36$
$PPF_r(700-800)(umol/s): 3.29$	$PPF.t(umol): 196.60$
$ \mu_{ch-A.t}(J): 3.44$	$ \mu_{ch-A}(W): 3.44$
$ \mu_{ch-B.t}(J): 2.50$	$ \mu_{ch-B}(W): 2.50$
$ \mu_b.t(J): 14.32$	$ \mu_b(W): 14.32$
$ \mu_y.t(J): 20.12$	$ \mu_y(W): 20.12$
$ \mu_r.t(J): 9.51$	$ \mu_r(W): 9.51$

Electric Parameters

Voltage: 230.90V	Current: 0.4642A	Power: 107.19W
Power Factor: 0.9460	Frequency: 49.99Hz	

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