

Lightsource Test Report

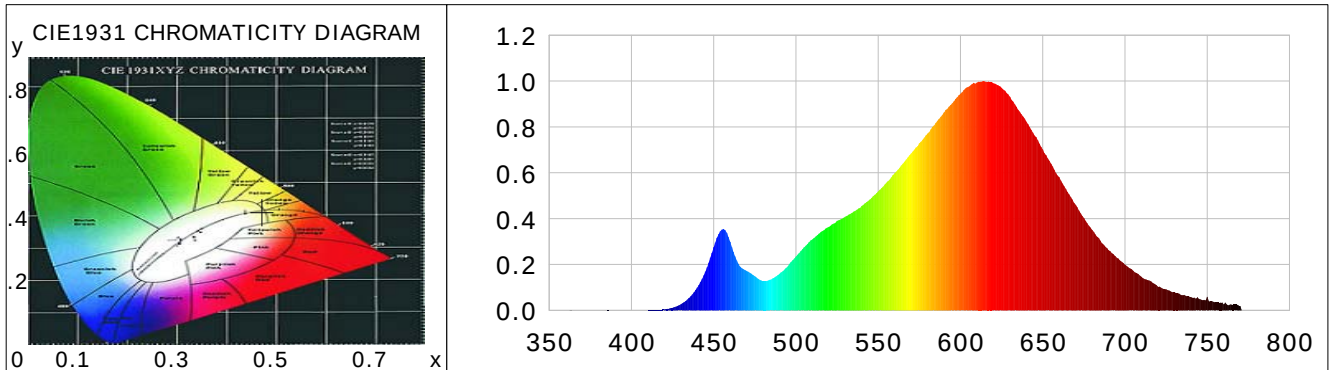
Product Information

Product Category: LED-Lampen
 Product Spec: LED-SLG22-E27-16-360-WW
 Manufacturer: METOLIGHT
 Buyer: 3811

Product Type: LED-Strassenlampen
 Product Number: 1
 Submitted Unit: 104216

CIE Colorimetric Parameters

Chromaticity coordinates: $x=0.4721$ $y=0.4138$ $u(u')=0.2690$ $v=0.3536$ $v'=0.5304$
 CCT: $T_c=2562K$ ($duv=0.00030$) Color Ratio: $R=0.267$ $G=0.713$ $B=0.020$
 Peak Wavelength: 614.0nm Half Bandwidth: 119.3nm
 Dominant Wavelength: 584.8nm Color Purity: 0.660
 CRI: $R_a=84.7$, $avgR(1\sim14)=80.3$, $avgR(1\sim15)=80.0$ TM30: $R_f=86$, $R_g=97$
 GAI: $GAI_BB_8=93.4$, $GAI_BB_15=102.1$, $GAI_EES=41.2$
 R1 =83 R2 =92 R3 =97 R4 =83 R5 =84 R6 =92 R7 =83 R8 =63
 R9 =21 R10=83 R11=82 R12=75 R13=85 R14=99 R15=77
 Color Quality Scale: $Q_a=83.8$, $Q_f=86.7$, $Q_p=86.2$, $Q_g=90.7$
 Q1 =80 Q2 =93 Q3 =85 Q4 =81 Q5 =84 Q6 =84 Q7 =84 Q8 =86
 Q9 =94 Q10=90 Q11=88 Q12=86 Q13=84 Q14=76 Q15=77



Photometric Parameters

Luminous Flux: 1973.1 lm Efficiency: 118.58 lm/W Radiant Power: 6.301 W
 Total mains efficacy: 118.58 lm/W Energy Efficiency Class: E (EU 2019/2015)
 Pupil Flux: 2209.10 Plm Pupil Lumens Per Watt: 132.76 Plm/W Pupil Factor (Kp): 1.120
 Cirtopic Flux: 3758.32 lm

Electric Parameters

Voltage: 230.60V Current: 0.0760A Power: 16.64W
 Power Factor: 0.9470 Frequency: 50.00Hz

Test Information

Scan Range: 350~800:1nm Photometric Method: sphere-spectroradiometer
 Stabilization Time: 0 ms ALC.: 1.0000 Photometric Condition: Sphere diameter: 2.00m, 4PI
 Max of Signal: 45925 (2627) CCD Integration Time: 232.88 ms

Condition: Tx:20.8'C, Ti:0.0'C, R.H.:60%
 Test Lab:
 Operator: CRE

Test Device: Lisun LMS-9000B
 Test Time: 2021-02-11 13:24:14
 Inspector:

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WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)
380	0.0005	0.0210	525	0.1920	8.5847	670	0.8242	36.8592
385	0.0002	0.0096	530	0.2351	10.5144	675	0.7629	34.1207
390	0.0003	0.0139	535	0.2753	12.3138	680	0.7018	31.3868
395	0.0001	0.0058	540	0.3097	13.8497	685	0.6395	28.6001
400	0.0003	0.0123	545	0.3403	15.2185	690	0.5810	25.9827
405	0.0001	0.0039	550	0.3644	16.2958	695	0.5172	23.1329
410	0.0004	0.0174	555	0.3906	17.4671	700	0.4605	20.5944
415	0.0001	0.0041	560	0.4084	18.2669	705	0.4032	18.0328
420	0.0003	0.0153	565	0.4304	19.2480	710	0.3507	15.6825
425	0.0001	0.0031	570	0.4552	20.3568	715	0.3041	13.6010
430	0.0003	0.0133	575	0.4839	21.6403	720	0.2629	11.7597
435	0.0001	0.0066	580	0.5189	23.2067	725	0.2296	10.2678
440	0.0007	0.0322	585	0.5566	24.8922	730	0.1994	8.9173
445	0.0020	0.0887	590	0.5977	26.7307	735	0.1725	7.7162
450	0.0048	0.2165	595	0.6401	28.6276	740	0.1461	6.5351
455	0.0111	0.4964	600	0.6848	30.6264	745	0.1298	5.8036
460	0.0265	1.1849	605	0.7292	32.6108	750	0.1039	4.6489
465	0.0543	2.4301	610	0.7710	34.4837	755	0.0918	4.1042
470	0.0996	4.4561	615	0.8180	36.5851	760	0.0800	3.5775
475	0.1693	7.5706	620	0.8633	38.6087	765	0.0656	2.9353
480	0.2753	12.3140	625	0.9038	40.4208	770	0.0584	2.6140
485	0.3525	15.7661	630	0.9447	42.2511	775	0.0501	2.2398
490	0.2990	13.3712	635	0.9754	43.6210	780	0.0589	2.6356
495	0.2026	9.0627	640	0.9938	44.4471	785	0.0349	1.5614
500	0.1718	7.6844	645	0.9986	44.6592	790	0.0265	1.1853
505	0.1489	6.6606	650	0.9899	44.2721	795	0.0248	1.1071
510	0.1282	5.7349	655	0.9710	43.4271	800	0.0183	0.8188
515	0.1353	6.0515	660	0.9319	41.6791			
520	0.1596	7.1373	665	0.8750	39.1343			

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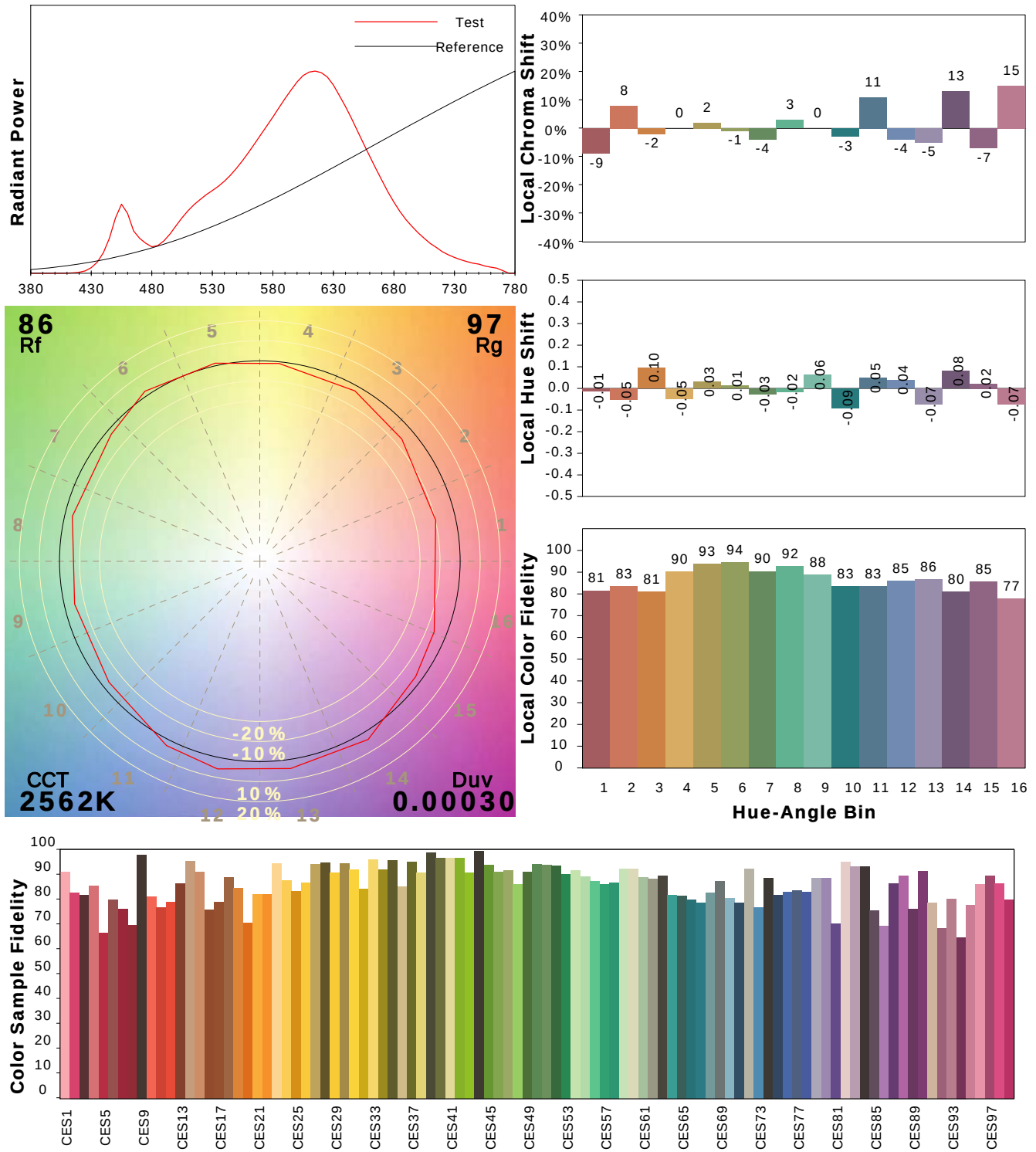
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IES TM-30-18 Color Rendition Report

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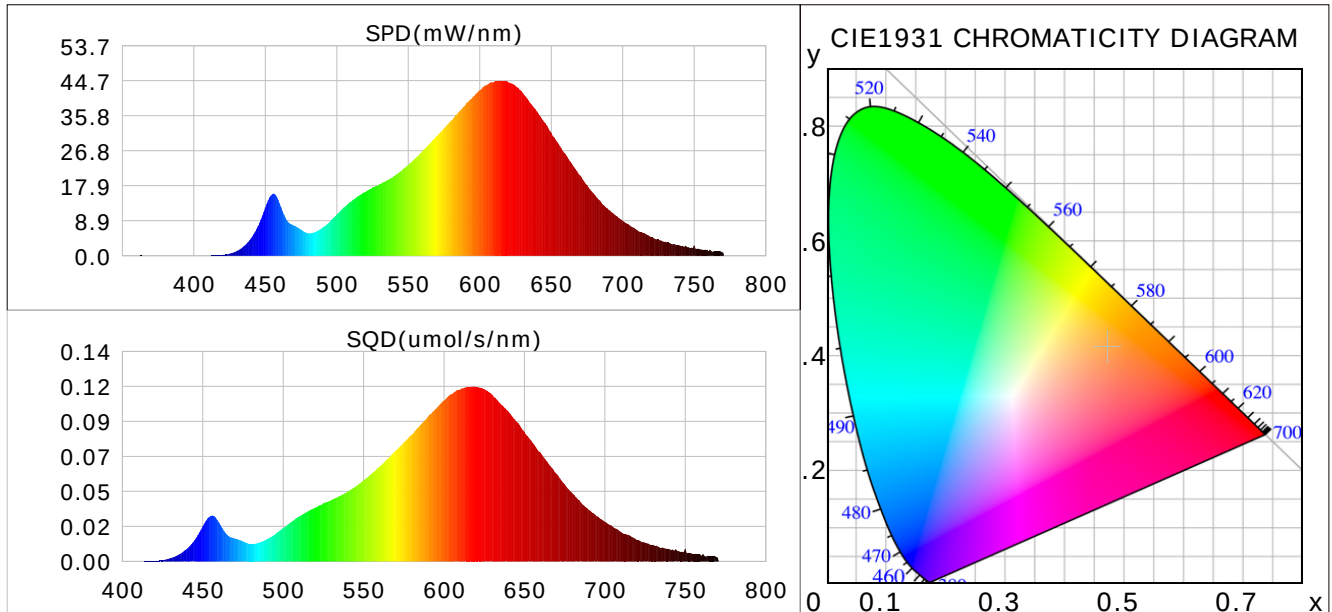
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Plant optical param data

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 CRI: Ra= 84.7



Plant Optical Param

$\mu_v(lm): 1973.10$	$Q_v(lm.s): 1973.10$
$\mu_e, \dot{E}(W/nm): 6.30$	$Q_e(J): 6.30$
$\mu_e(W): 8.26$	$\mu_{fr}(W): 0.36$
$\dot{Q}_e: 0.50$	$\dot{Q}_{fr}: 0.02$
$PPE(umol/s/w): 1.79$	$K_{fr}: 0.09$
$E_{rb_Ratio}: 5.16$	$PPF(umol/s): 29.83$
$PF_{uv}(360-400)(umol/s): 0.00$	$PPF(400-500)(umol/s): 2.24$
$PPF(500-600)(umol/s): 11.74$	$PPF(600-700)(umol/s): 15.85$
$PF_{fr}(700-800)(umol/s): 1.52$	$PPF.t(umol): 29.83$
$\mu_{ch-A.t}(J): 0.50$	$\mu_{ch-A}(W): 0.50$
$\mu_{ch-B.t}(J): 0.22$	$\mu_{ch-B}(W): 0.22$
$\mu_{b.t}(J): 0.79$	$\mu_b(W): 0.79$
$\mu_{y.t}(J): 3.43$	$\mu_y(W): 3.43$
$\mu_{r.t}(J): 4.11$	$\mu_r(W): 4.11$

Electric Parameters

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Power Factor: 0.9470	Frequency: 50.00Hz	

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