

Lightsource Test Report

Product Information

Product Category: LED-PL-Röhren
 Product Spec: LED-PL-G23-08-NW
 Manufacturer: METOLIGHT
 Buyer: 2320

Product Type: LED-PL-Röhren-G23
 Product Number: 1
 Submitted Unit: 101987

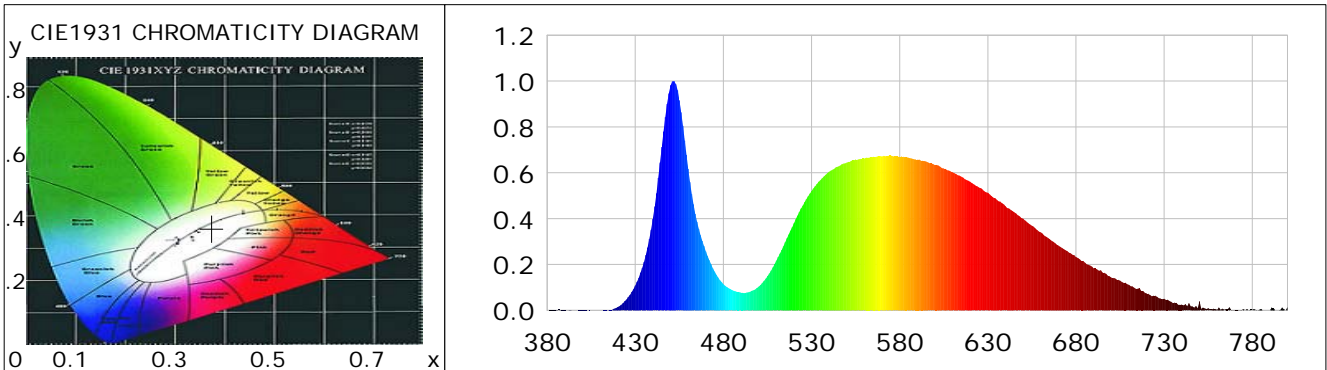
CIE Colorimetric Parameters

Chromaticity coordinates: $x=0.3744$ $y=0.3620$ $u(u')=0.2271$ $v=0.3293$ $v'=0.4940$
 CCT: $T_c=4061K$ ($duv=-0.00526$) Color Ratio: $R=0.176$ $G=0.798$ $B=0.026$
 Peak Wavelength: 451.6nm Half Bandwidth: 20.3nm
 Dominant Wavelength: 582.5nm Color Purity: 0.210
 CRI: $R_a=75.3$, $avgR(1\sim14)=66.1$, $avgR(1\sim15)=66.7$ TM30: $R_f=73$, $R_g=96$
 GAI: $GAI_BB_8=99.0$, $GAI_BB_15=107.5$, $GAI_EES=79.0$

R1 =75	R2 =81	R3 =80	R4 =73	R5 =72	R6 =69	R7 =85	R8 =67
R9 =9	R10=50	R11=64	R12=36	R13=76	R14=88	R15=75	

Color Quality Scale: $Q_a=71.5$, $Q_f=70.0$, $Q_p=75.6$, $Q_g=94.4$

Q1 =84	Q2 =95	Q3 =58	Q4 =52	Q5 =64	Q6 =69	Q7 =74	Q8 =83
Q9 =89	Q10=74	Q11=68	Q12=71	Q13=76	Q14=71	Q15=76	



Photometric Parameters

Luminous Flux: 554.45 lm	Efficiency: 69.65 lm/W	Radiant Power: 1.724 W
Total mains efficacy: 81.91 lm/W	Energy Efficiency Class: G (EU 2019/2015)	
Pupil Flux: 777.80 Plm	Pupil Lumens Per Watt: 97.71 Plm/W	Pupil Factor (Kp): 1.403
Cirtopic Flux: 1507.22 lm		

Electric Parameters

Voltage: 231.10V	Current: 0.0690A	Power: 7.96W
Power Factor: 0.4930	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: 46891 (2756)	CCD Integration Time: 511.59 ms

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

Test Device: Lisun LMS-9000B
 Test Time: 2021-03-03 15:03:51
 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	0.0048	525	0.4572	6.3854	670	0.2833	3.9569
385	0.0020	0.0278	530	0.5205	7.2699	675	0.2588	3.6147
390	0.0016	0.0229	535	0.5680	7.9331	680	0.2325	3.2470
395	0.0003	0.0041	540	0.6050	8.4507	685	0.2087	2.9149
400	0.0013	0.0185	545	0.6271	8.7591	690	0.1835	2.5633
405	0.0002	0.0024	550	0.6448	9.0062	695	0.1653	2.3093
410	0.0005	0.0064	555	0.6577	9.1869	700	0.1437	2.0072
415	0.0028	0.0387	560	0.6620	9.2461	705	0.1296	1.8106
420	0.0142	0.1987	565	0.6695	9.3509	710	0.1113	1.5540
425	0.0468	0.6538	570	0.6715	9.3794	715	0.0949	1.3255
430	0.1081	1.5098	575	0.6753	9.4320	720	0.0740	1.0334
435	0.2114	2.9533	580	0.6697	9.3540	725	0.0635	0.8874
440	0.3987	5.5693	585	0.6653	9.2925	730	0.0505	0.7050
445	0.7126	9.9524	590	0.6576	9.1848	735	0.0316	0.4414
450	0.9818	13.7136	595	0.6498	9.0764	740	0.0257	0.3585
455	0.9164	12.8000	600	0.6338	8.8527	745	0.0186	0.2593
460	0.6172	8.6199	605	0.6191	8.6465	750	0.0395	0.5523
465	0.3866	5.3997	610	0.6024	8.4144	755	0.0092	0.1279
470	0.2570	3.5892	615	0.5831	8.1437	760	0.0033	0.0459
475	0.1693	2.3643	620	0.5609	7.8347	765	0.0050	0.0697
480	0.1143	1.5965	625	0.5356	7.4811	770	0.0027	0.0375
485	0.0882	1.2313	630	0.5125	7.1582	775	0.0044	0.0616
490	0.0770	1.0757	635	0.4831	6.7470	780	0.0037	0.0522
495	0.0806	1.1263	640	0.4542	6.3436	785	0.0060	0.0841
500	0.1037	1.4478	645	0.4275	5.9715	790	0.0000	0.0001
505	0.1500	2.0953	650	0.3998	5.5845	795	0.0011	0.0148
510	0.2165	3.0238	655	0.3689	5.1520	800	0.0152	0.2116
515	0.2973	4.1520	660	0.3402	4.7513			
520	0.3801	5.3091	665	0.3113	4.3481			

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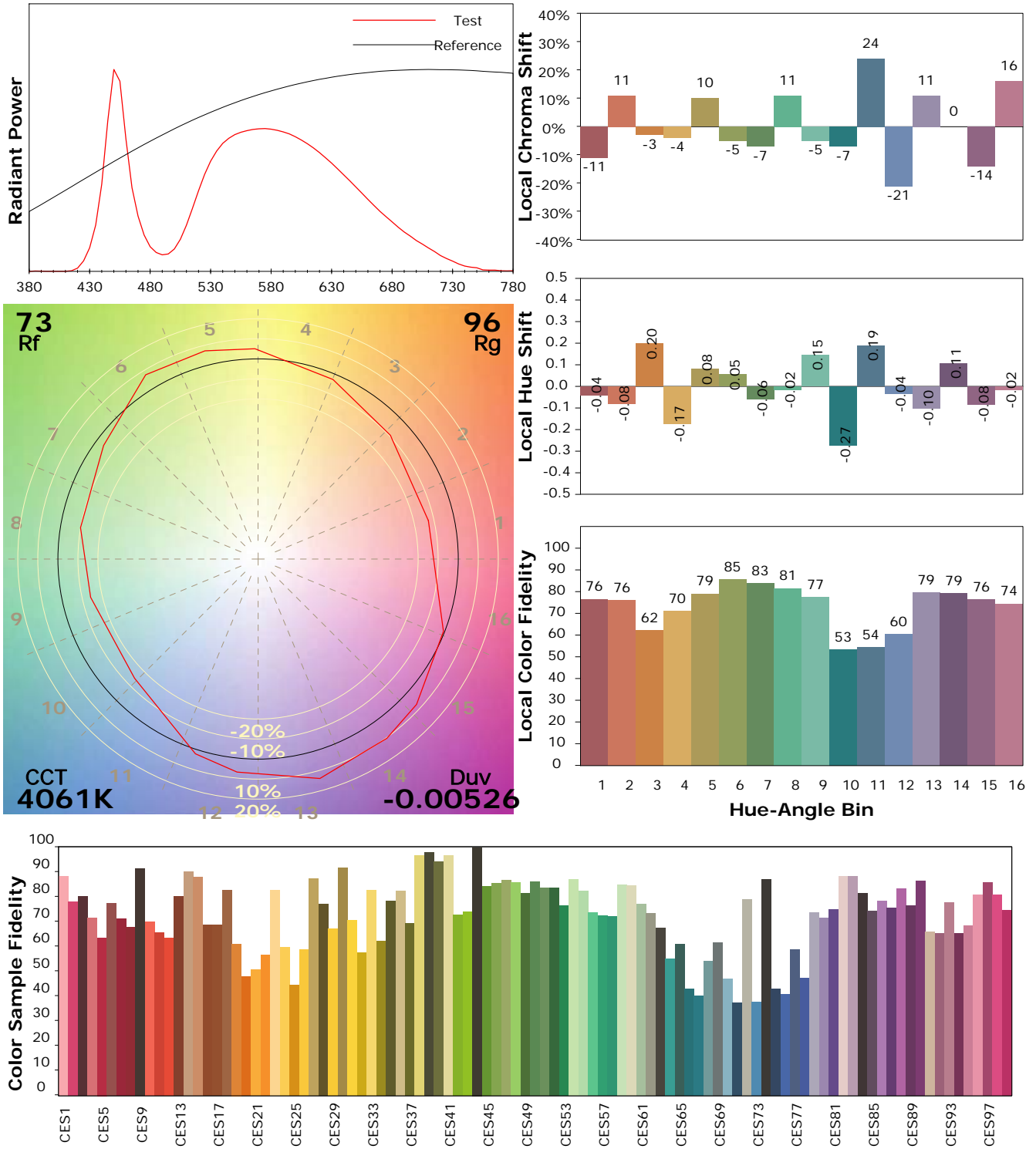
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IES TM-30-18 Color Rendition Report

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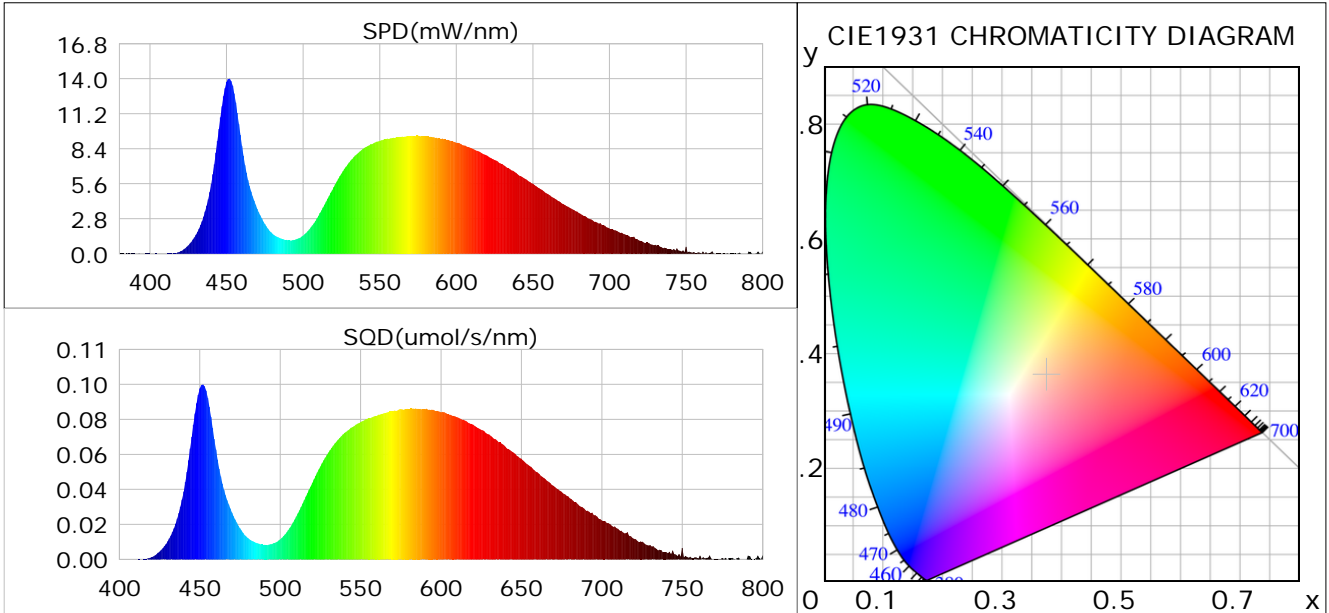
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Test Device: Lisun LMS-9000B
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Plant optical param data

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Plant Optical Param

$ \mu_v(lm): 554.45$	$Q_v(lm.s): 554.45$
$ \mu_e, \dot{E}(W/nm): 1.72$	$Q_e(J): 1.72$
$ \mu_e(W): 1.68$	$ \mu_{fr}(W): 0.05$
$ \zeta_e: 0.21$	$ \zeta_{fr}: 0.01$
$PPE(umol/s/w): 0.99$	$K_{fr}: 0.04$
$Erb_Ratio: 1.50$	$PPF(umol/s): 7.87$
$PF_{uv}(360-400)(umol/s): 0.00$	$PPF(400-500)(umol/s): 1.39$
$PPF(500-600)(umol/s): 3.54$	$PPF(600-700)(umol/s): 2.94$
$PPF_r(700-800)(umol/s): 0.30$	$PPF.t(umol): 7.87$
$ \mu_{ch-A.t}(J): 0.15$	$ \mu_{ch-A}(W): 0.15$
$ \mu_{ch-B.t}(J): 0.08$	$ \mu_{ch-B}(W): 0.08$
$ \mu_b.t(J): 0.37$	$ \mu_b(W): 0.37$
$ \mu_y.t(J): 0.76$	$ \mu_y(W): 0.76$
$ \mu_r.t(J): 0.56$	$ \mu_r(W): 0.56$

Electric Parameters

Voltage: 231.10V	Current: 0.0690A	Power: 7.96W
Power Factor: 0.4930	Frequency: 49.99Hz	

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