

Lightsource Test Report

Product Information

Product Category: LED-PL-Röhren
 Product Spec: LED-PL-G23-06-WW
 Manufacturer: METOLIGHT
 Buyer: 2320

Product Type: LED-PL-Röhren-G23
 Product Number: 1
 Submitted Unit: 102005

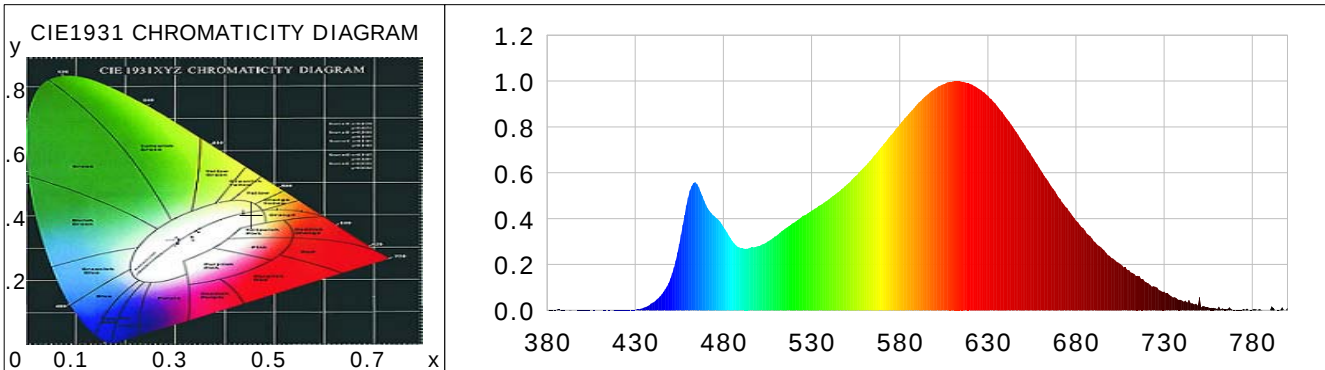
CIE Colorimetric Parameters

Chromaticity coordinates: $x=0.4543$ $y=0.4055$ $u(u')=0.2612$ $v=0.3497$ $v'=0.5246$
 CCT: $T_c=2739K$ ($duv=-0.00142$) Color Ratio: $R=0.256$ $G=0.711$ $B=0.033$
 Peak Wavelength: 613.7nm Half Bandwidth: 127.1nm
 Dominant Wavelength: 584.5nm Color Purity: 0.581
 CRI: $R_a=85.9$, $avgR(1\sim14)=82.9$, $avgR(1\sim15)=82.8$ TM30: $R_f=83$, $R_g=91$
 GAI: $GAI_BB_8=94.5$, $GAI_BB_15=104.7$, $GAI_EES=47.0$

R1 =88	R2 =99	R3 =90	R4 =81	R5 =88	R6 =96	R7 =80	R8 =66
R9 =33	R10=96	R11=80	R12=78	R13=91	R14=96	R15=81	

Color Quality Scale: $Q_a=84.4$, $Q_f=86.5$, $Q_p=85.9$, $Q_g=89.1$

Q1 =79	Q2 =90	Q3 =91	Q4 =82	Q5 =79	Q6 =78	Q7 =84	Q8 =88
Q9 =93	Q10=96	Q11=91	Q12=87	Q13=86	Q14=80	Q15=80	



Photometric Parameters

Luminous Flux: 543.30 lm	Efficiency: 88.20 lm/W	Radiant Power: 1.780 W
Total mains efficacy: 103.72 lm/W	Energy Efficiency Class: F (EU 2019/2015)	
Pupil Flux: 682.47 Plm	Pupil Lumens Per Watt: 110.79 Plm/W	Pupil Factor (Kp): 1.256
Cirtpic Flux: 1288.84 lm		

Electric Parameters

Voltage: 230.80V	Current: 0.0510A	Power: 6.16W
Power Factor: 0.5150	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: 46795 (2894)	CCD Integration Time: 763.50 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 14:48:33
 Inspector:

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WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)
380	0.0013	0.0151	525	0.4125	4.8181	670	0.4937	5.7675
385	0.0020	0.0234	530	0.4348	5.0792	675	0.4459	5.2081
390	0.0011	0.0127	535	0.4590	5.3613	680	0.3911	4.5684
395	0.0000	0.0004	540	0.4855	5.6716	685	0.3485	4.0706
400	0.0013	0.0148	545	0.5146	6.0106	690	0.3021	3.5283
405	0.0001	0.0016	550	0.5481	6.4023	695	0.2674	3.1240
410	0.0006	0.0070	555	0.5864	6.8492	700	0.2293	2.6786
415	0.0016	0.0192	560	0.6256	7.3077	705	0.2026	2.3661
420	0.0016	0.0185	565	0.6705	7.8325	710	0.1754	2.0491
425	0.0010	0.0119	570	0.7153	8.3549	715	0.1504	1.7573
430	0.0028	0.0325	575	0.7639	8.9225	720	0.1215	1.4193
435	0.0122	0.1424	580	0.8109	9.4718	725	0.1027	1.1991
440	0.0335	0.3915	585	0.8554	9.9914	730	0.0817	0.9542
445	0.0699	0.8168	590	0.8997	10.5098	735	0.0560	0.6540
450	0.1393	1.6274	595	0.9362	10.9362	740	0.0434	0.5074
455	0.2893	3.3797	600	0.9663	11.2873	745	0.0315	0.3677
460	0.4918	5.7442	605	0.9870	11.5292	750	0.0574	0.6703
465	0.5509	6.4348	610	0.9980	11.6580	755	0.0132	0.1540
470	0.4611	5.3865	615	0.9982	11.6593	760	0.0057	0.0664
475	0.4102	4.7917	620	0.9876	11.5360	765	0.0053	0.0621
480	0.3643	4.2554	625	0.9649	11.2711	770	0.0016	0.0192
485	0.3026	3.5351	630	0.9358	10.9307	775	0.0059	0.0684
490	0.2705	3.1602	635	0.8929	10.4304	780	0.0038	0.0445
495	0.2725	3.1834	640	0.8432	9.8496	785	0.0035	0.0406
500	0.2811	3.2831	645	0.7898	9.2252	790	0.0010	0.0121
505	0.3000	3.5042	650	0.7314	8.5438	795	0.0016	0.0186
510	0.3248	3.7938	655	0.6714	7.8422	800	0.0125	0.1458
515	0.3562	4.1608	660	0.6110	7.1370			
520	0.3819	4.4607	665	0.5524	6.4527			

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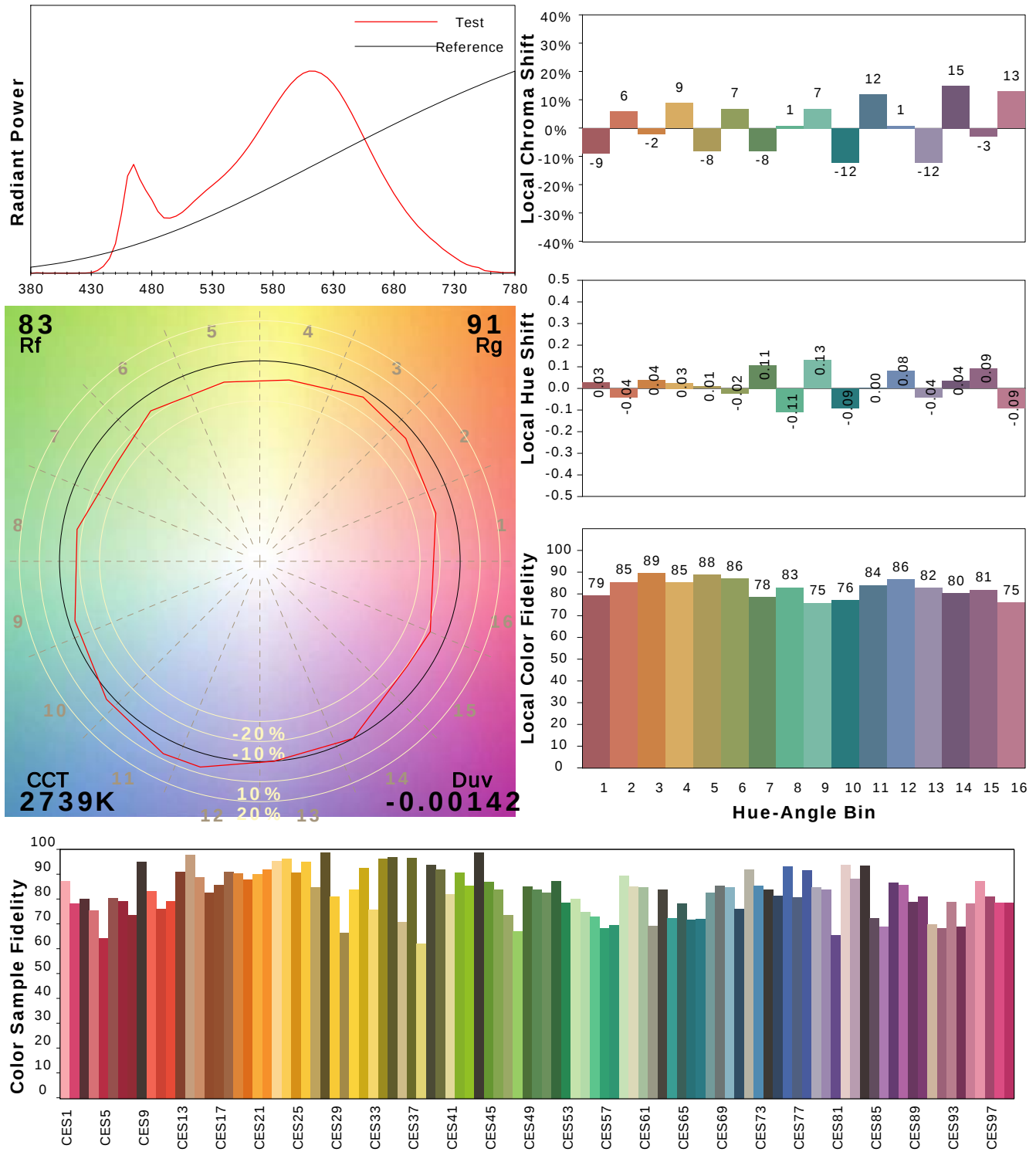
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IES TM-30-18 Color Rendition Report

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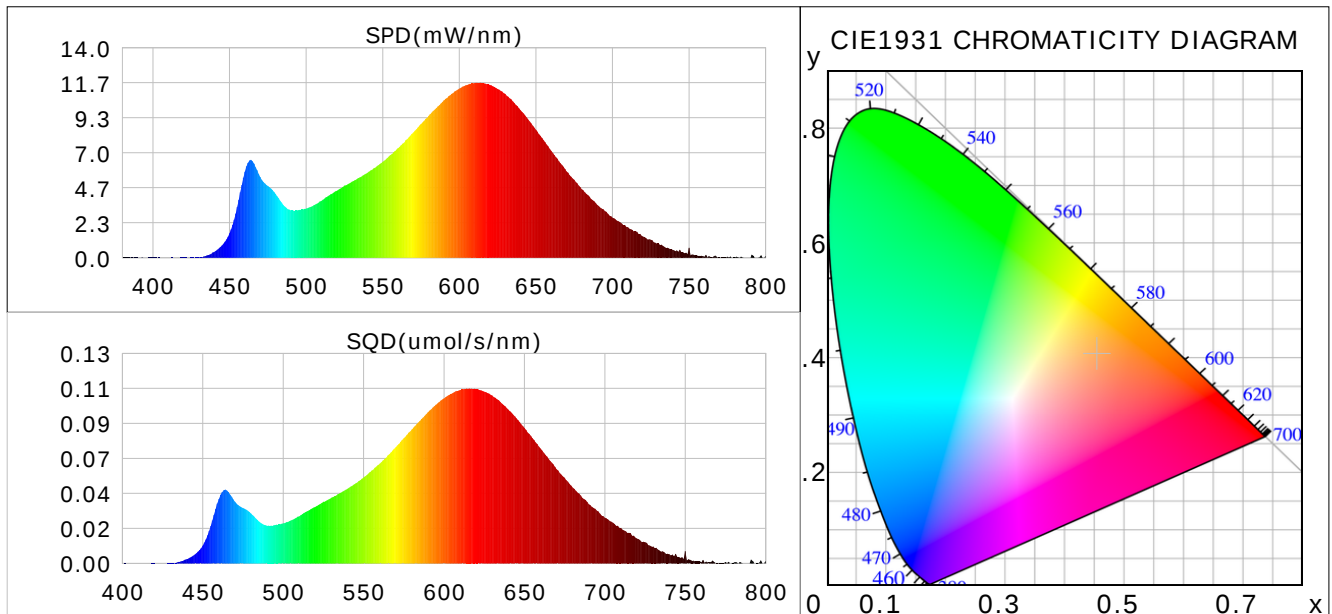
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Test Device: Lisun LMS-9000B
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Plant optical param data

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 CRI: Ra= 85.9



Plant Optical Param

$\mu_v(lm): 543.30$	$Q_v(lm.s): 543.30$
$\mu_e, \dot{E}(W/nm): 1.78$	$Q_e(J): 1.78$
$\mu_e(W): 1.71$	$\mu_{fr}(W): 0.07$
$\dot{C}_e: 0.28$	$\dot{C}_{fr}: 0.01$
$PPE(umol/s/w): 1.36$	$K_{fr}: 0.06$
$Erb_Ratio: 3.57$	$PPF(umol/s): 8.40$
$PF_{uv}(360-400)(umol/s): 0.00$	$PPF(400-500)(umol/s): 0.89$
$PPF(500-600)(umol/s): 3.22$	$PPF(600-700)(umol/s): 4.29$
$PF_{fr}(700-800)(umol/s): 0.40$	$PPF.t(umol): 8.40$
$\mu_{ch-A.t}(J): 0.14$	$\mu_{ch-A}(W): 0.14$
$\mu_{ch-B.t}(J): 0.07$	$\mu_{ch-B}(W): 0.07$
$\mu_b.t(J): 0.22$	$\mu_b(W): 0.22$
$\mu_y.t(J): 0.69$	$\mu_y(W): 0.69$
$\mu_r.t(J): 0.81$	$\mu_r(W): 0.81$

Electric Parameters

Voltage: 230.80V	Current: 0.0510A	Power: 6.16W
Power Factor: 0.5150	Frequency: 50.00Hz	