

Lightsource Test Report

Product Information

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

Product Type: LED-PL-Röhren-G23
 Product Number: 1
 Submitted Unit: 102006

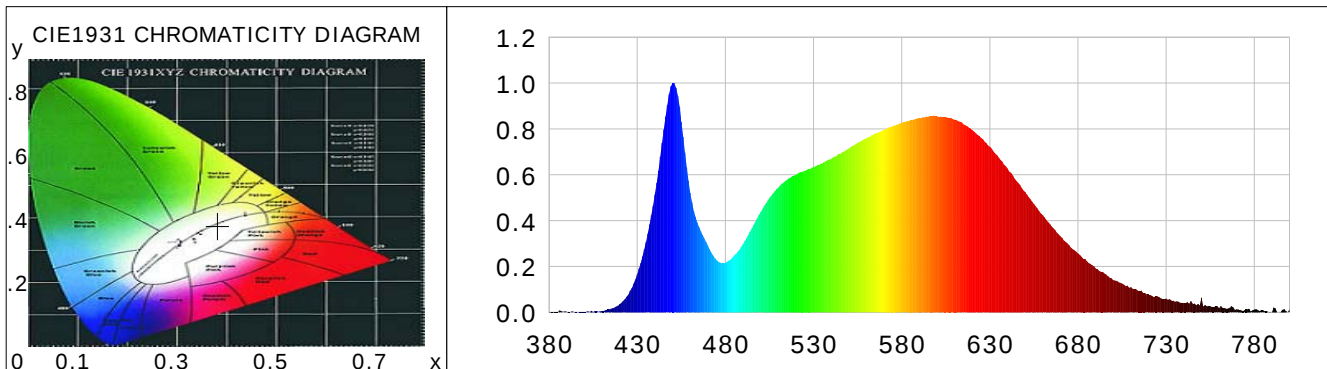
CIE Colorimetric Parameters

Chromaticity coordinates: $x=0.3820$ $y=0.3767$ $u(u')=0.2262$ $v=0.3345$ $v'=0.5018$
 CCT: $T_c=3957K$ ($duv=-0.00050$) Color Ratio: $R=0.189$ $G=0.777$ $B=0.034$
 Peak Wavelength: 450.4nm Half Bandwidth: 20.8nm
 Dominant Wavelength: 579.5nm Color Purity: 0.277
 CRI: $R_a=85.4$, $avgR(1\sim14)=79.7$, $avgR(1\sim15)=79.7$ TM30: $R_f=85$, $R_g=98$
 GAI: $GAI_BB_8=96.2$, $GAI_BB_15=101.7$, $GAI_EES=75.2$

R1 =84	R2 =89	R3 =93	R4 =86	R5 =84	R6 =86	R7 =88	R8 =72
R9 =26	R10=75	R11=85	R12=65	R13=85	R14=96	R15=80	

Color Quality Scale: $Q_a=85.0$, $Q_f=84.8$, $Q_p=86.1$, $Q_g=95.7$

Q1 =85	Q2 =98	Q3 =80	Q4 =79	Q5 =85	Q6 =86	Q7 =87	Q8 =91
Q9 =97	Q10=89	Q11=86	Q12=86	Q13=86	Q14=78	Q15=80	



Photometric Parameters

Luminous Flux: 549.94 lm	Efficiency: 88.13 lm/W	Radiant Power: 1.718 W
Total mains efficacy: 103.64 lm/W	Energy Efficiency Class: F (EU 2019/2015)	
Pupil Flux: 823.65 Plm	Pupil Lumens Per Watt: 131.99 Plm/W	Pupil Factor (Kp): 1.498
Cirtpic Flux: 1651.31 lm		

Electric Parameters

Voltage: 231.00V	Current: 0.0290A	Power: 6.24W
Power Factor: 0.9220	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: 46577 (2813)	CCD Integration Time: 560.40 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 14:52:05
 Inspector:

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WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)
380	0.0023	0.0247	525	0.6167	6.6377	670	0.3324	3.5774
385	0.0023	0.0247	530	0.6325	6.8079	675	0.2926	3.1492
390	0.0028	0.0305	535	0.6513	7.0095	680	0.2572	2.7682
395	0.0009	0.0100	540	0.6693	7.2040	685	0.2228	2.3982
400	0.0022	0.0239	545	0.6899	7.4252	690	0.1914	2.0605
405	0.0017	0.0183	550	0.7145	7.6897	695	0.1694	1.8235
410	0.0062	0.0668	555	0.7405	7.9703	700	0.1410	1.5175
415	0.0156	0.1679	560	0.7594	8.1730	705	0.1258	1.3537
420	0.0356	0.3836	565	0.7808	8.4035	710	0.1097	1.1808
425	0.0781	0.8402	570	0.7957	8.5635	715	0.0941	1.0124
430	0.1660	1.7869	575	0.8141	8.7623	720	0.0782	0.8415
435	0.3065	3.2988	580	0.8274	8.9049	725	0.0703	0.7564
440	0.5141	5.5337	585	0.8380	9.0196	730	0.0603	0.6485
445	0.7979	8.5878	590	0.8475	9.1221	735	0.0462	0.4970
450	1.0000	10.7629	595	0.8525	9.1755	740	0.0407	0.4380
455	0.8319	8.9536	600	0.8545	9.1965	745	0.0380	0.4091
460	0.5216	5.6137	605	0.8510	9.1591	750	0.0637	0.6855
465	0.3725	4.0095	610	0.8398	9.0381	755	0.0266	0.2861
470	0.2912	3.1337	615	0.8207	8.8333	760	0.0188	0.2026
475	0.2282	2.4563	620	0.7956	8.5624	765	0.0172	0.1850
480	0.2160	2.3253	625	0.7607	8.1873	770	0.0137	0.1479
485	0.2472	2.6609	630	0.7221	7.7720	775	0.0135	0.1455
490	0.2970	3.1969	635	0.6755	7.2701	780	0.0124	0.1338
495	0.3657	3.9360	640	0.6273	6.7518	785	0.0084	0.0902
500	0.4370	4.7038	645	0.5741	6.1785	790	0.0002	0.0021
505	0.4993	5.3735	650	0.5253	5.6534	795	0.0029	0.0311
510	0.5436	5.8512	655	0.4722	5.0817	800	0.0147	0.1577
515	0.5785	6.2263	660	0.4239	4.5623			
520	0.5991	6.4479	665	0.3751	4.0373			

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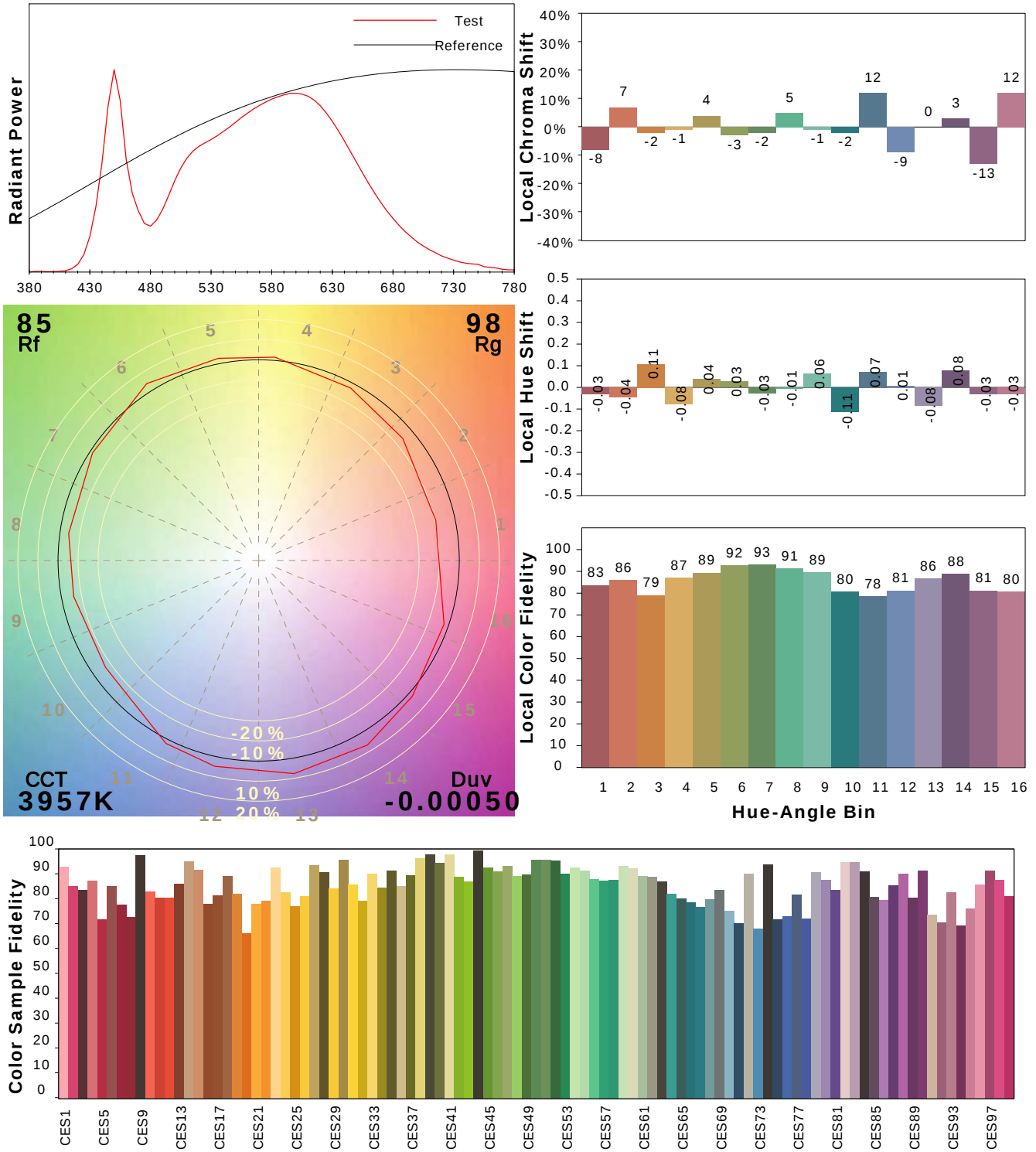
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IES TM-30-18 Color Rendition Report

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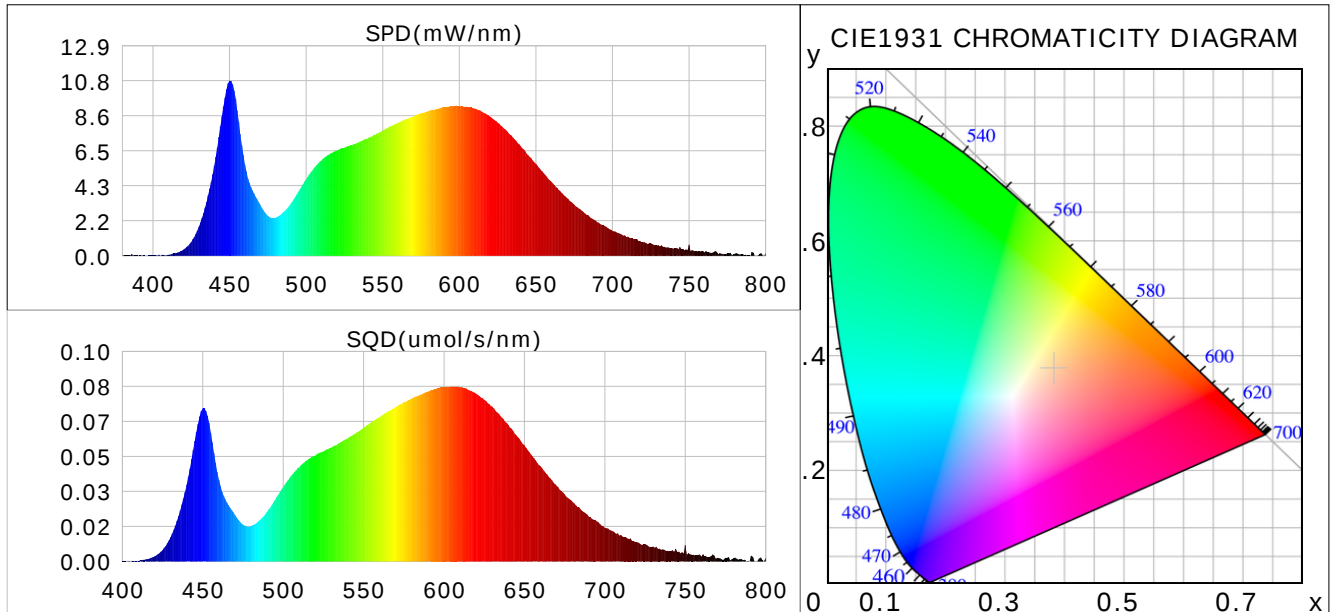
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Test Device: Lisun LMS-9000B
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Plant optical param data

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 CRI: Ra= 85.4



Plant Optical Param

$\mu_v(lm)$: 549.94	$Q_v(lm.s)$: 549.94
$\mu_e, \dot{E}(W/nm)$: 1.72	$Q_e(J)$: 1.72
$\mu_e(W)$: 1.67	$\mu_{fr}(W)$: 0.05
$\dot{C}_e$: 0.27	$\dot{C}_{fr}$: 0.01
$PPE(umol/s/w)$: 1.26	K_{fr} : 0.05
E_{rb_Ratio} : 1.58	$PPF(umol/s)$: 7.86
$PF_{uv}(360-400)(umol/s)$: 0.00	$PPF(400-500)(umol/s)$: 1.35
$PPF(500-600)(umol/s)$: 3.53	$PPF(600-700)(umol/s)$: 2.97
$PF_{fr}(700-800)(umol/s)$: 0.29	$PPF.t(umol)$: 7.86
$\mu_{ch-A.t}(J)$: 0.14	$\mu_{ch-A}(W)$: 0.14
$\mu_{ch-B.t}(J)$: 0.08	$\mu_{ch-B}(W)$: 0.08
$\mu_b.t(J)$: 0.35	$\mu_b(W)$: 0.35
$\mu_y.t(J)$: 0.77	$\mu_y(W)$: 0.77
$\mu_r.t(J)$: 0.57	$\mu_r(W)$: 0.57

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