

Lightsource Test Report

Product Information

Product Category: LED-PL-Röhre	Product Type: LED-PL-Röhre-2G11
Product Spec: LED-PL-2G11-26W-WWM-TRF	Product Number: 1
Manufacturer: METOLIGHT	Submitted Unit: 104980
Buyer: 6852	

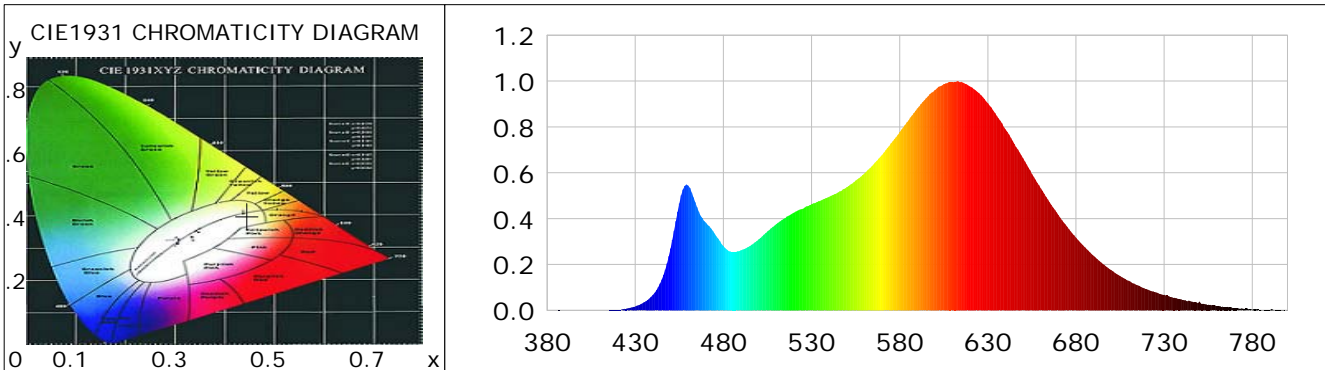
CIE Colorimetric Parameters

Chromaticity coordinates: $x=0.4453$ $y=0.4007$ $u(u')=0.2575$ $v=0.3475$ $v'=0.5213$
 CCT: $T_c=2836K$ ($duv=-0.00237$) Color Ratio: $R=0.253$ $G=0.716$ $B=0.031$
 Peak Wavelength: 612.9nm Half Bandwidth: 121.6nm
 Dominant Wavelength: 584.4nm Color Purity: 0.539
 CRI: $R_a=87.4$, $avgR(1\sim14)=84.6$, $avgR(1\sim15)=84.4$ TM30: $R_f=86$, $R_g=94$
 GAI: $GAI_BB_8=99.8$, $GAI_BB_15=108.6$, $GAI_EES=52.6$

R1 =90	R2 =99	R3 =92	R4 =86	R5 =90	R6 =95	R7 =81	R8 =67
R9 =32	R10=97	R11=88	R12=79	R13=93	R14=96	R15=82	

Color Quality Scale: $Q_a=86.6$, $Q_f=88.3$, $Q_p=88.6$, $Q_g=92.2$

Q1 =81	Q2 =92	Q3 =90	Q4 =85	Q5 =85	Q6 =86	Q7 =89	Q8 =89
Q9 =94	Q10=95	Q11=92	Q12=88	Q13=87	Q14=80	Q15=80	



Photometric Parameters

Luminous Flux: 2474.2 lm	Efficiency: 98.97 lm/W	Radiant Power: 7.922 W
Total mains efficacy: 116.39 lm/W	Energy Efficiency Class: E (EU 2019/2015)	
Pupil Flux: 3193.23 Plm	Pupil Lumens Per Watt: 127.73 Plm/W	Pupil Factor (Kp): 1.291
Cirtopic Flux: 6071.20 lm		

Electric Parameters

Voltage: 230.70V	Current: 0.1100A	Power: 25.00W
Power Factor: 0.9780	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: 46449 (2489)	CCD Integration Time: 152.89 ms

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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	0.0174	525	0.4427	23.8054	670	0.4163	22.3857
385	0.0006	0.0320	530	0.4627	24.8798	675	0.3646	19.6040
390	0.0004	0.0238	535	0.4776	25.6819	680	0.3173	17.0596
395	0.0000	0.0015	540	0.4952	26.6266	685	0.2755	14.8140
400	0.0005	0.0250	545	0.5141	27.6407	690	0.2374	12.7671
405	0.0001	0.0033	550	0.5375	28.8994	695	0.2036	10.9498
410	0.0001	0.0072	555	0.5656	30.4130	700	0.1752	9.4226
415	0.0011	0.0593	560	0.5971	32.1061	705	0.1496	8.0419
420	0.0028	0.1493	565	0.6355	34.1728	710	0.1285	6.9095
425	0.0074	0.3985	570	0.6784	36.4748	715	0.1092	5.8706
430	0.0173	0.9328	575	0.7287	39.1820	720	0.0923	4.9653
435	0.0349	1.8775	580	0.7777	41.8146	725	0.0791	4.2515
440	0.0675	3.6308	585	0.8285	44.5455	730	0.0683	3.6712
445	0.1346	7.2367	590	0.8804	47.3355	735	0.0556	2.9902
450	0.2698	14.5087	595	0.9255	49.7633	740	0.0475	2.5522
455	0.4670	25.1089	600	0.9608	51.6619	745	0.0393	2.1111
460	0.5442	29.2637	605	0.9869	53.0637	750	0.0380	2.0425
465	0.4502	24.2094	610	0.9947	53.4830	755	0.0245	1.3199
470	0.3826	20.5741	615	0.9964	53.5764	760	0.0182	0.9785
475	0.3349	18.0080	620	0.9762	52.4908	765	0.0146	0.7848
480	0.2806	15.0895	625	0.9473	50.9327	770	0.0099	0.5307
485	0.2545	13.6848	630	0.9033	48.5689	775	0.0066	0.3564
490	0.2619	14.0838	635	0.8487	45.6329	780	0.0041	0.2228
495	0.2803	15.0693	640	0.7893	42.4394	785	0.0030	0.1602
500	0.3097	16.6510	645	0.7265	39.0639	790	0.0021	0.1106
505	0.3448	18.5415	650	0.6627	35.6349	795	0.0016	0.0863
510	0.3763	20.2357	655	0.5947	31.9766	800	0.0031	0.1647
515	0.4025	21.6397	660	0.5323	28.6189			
520	0.4264	22.9279	665	0.4714	25.3472			

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

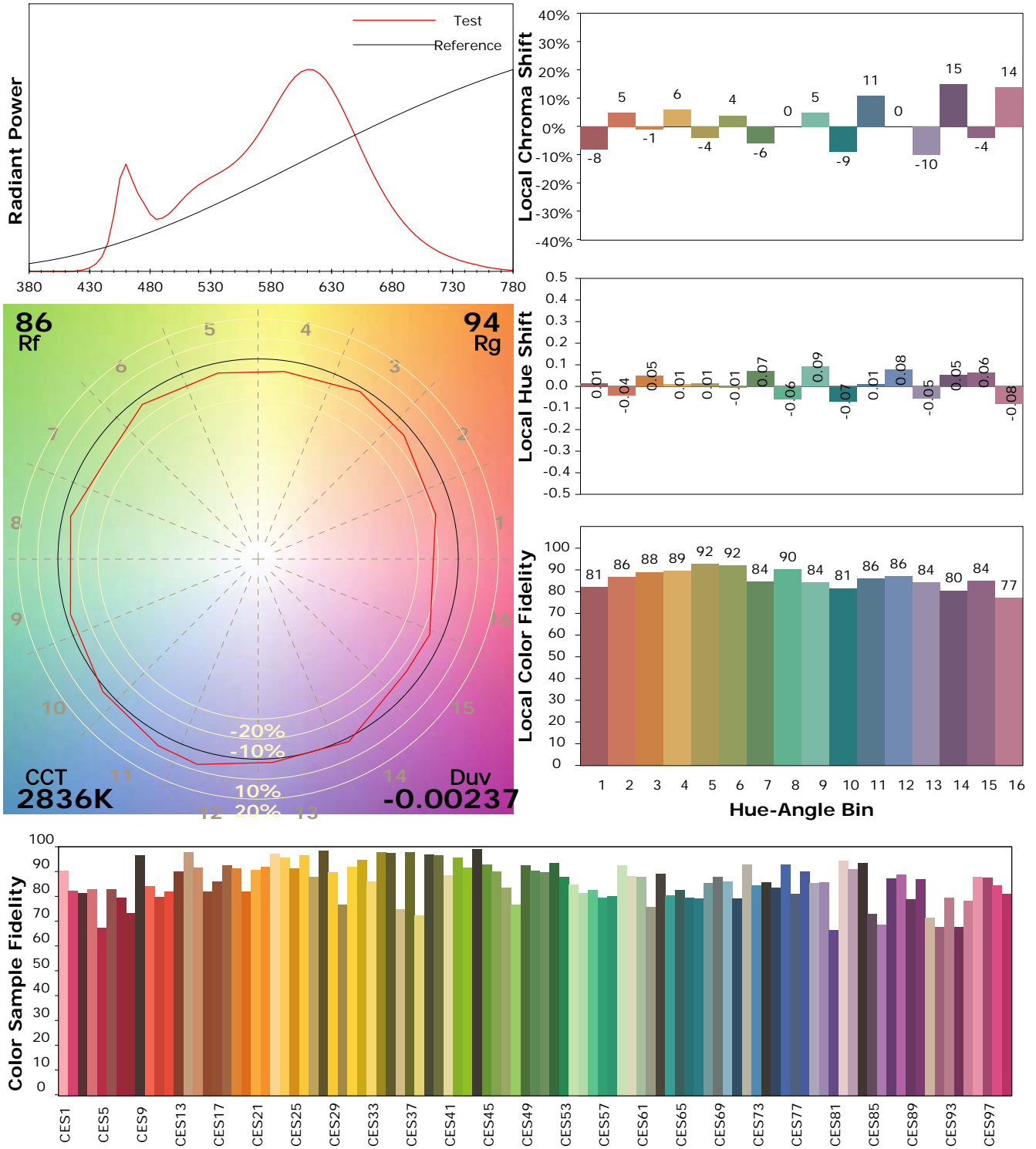
Test Device: Lisun LMS-9000B
 Test Time: 2021-02-25 15:34:46
 Inspector:

IES TM-30-18 Color Rendition Report

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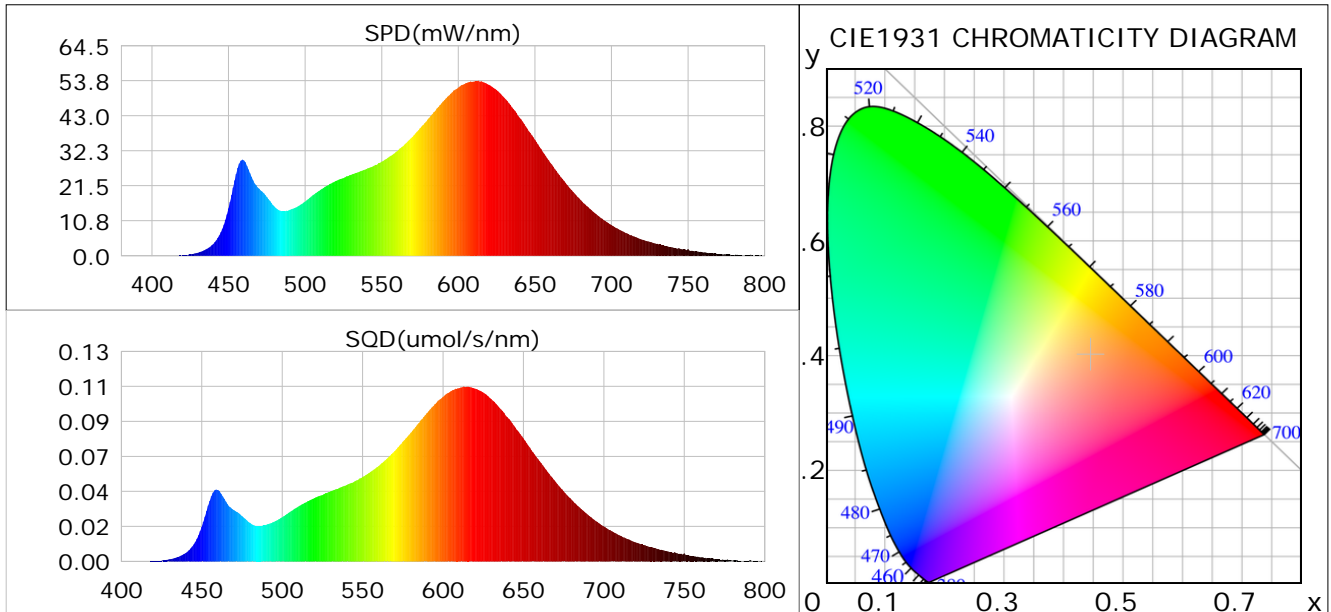
Condition: Tx:0.0°C, Ti:0.0°C, R.H.: 60%
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 Operator: CRE

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

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 Dominant Wavelength: 584.4nm Color Purity: 0.539
 CRI: $R_a=87.4$



Plant Optical Param

$ \mu_v(lm): 2474.20$	$Q_v(lm.s): 2474.20$
$ \mu_e, \dot{E}(W/nm): 7.92$	$Q_e(J): 7.92$
$ \mu_e(W): 7.67$	$ \mu_{fr}(W): 0.27$
$ \zeta_e: 0.31$	$ \zeta_{fr}: 0.01$
$PPE(umol/s/w): 1.49$	$K_{fr}: 0.06$
$Erb_Ratio: 3.21$	$PPF(umol/s): 37.29$
$PF_{uv}(360-400)(umol/s): 0.00$	$PPF(400-500)(umol/s): 4.19$
$PPF(500-600)(umol/s): 14.83$	$PPF(600-700)(umol/s): 18.26$
$PPF_{fr}(700-800)(umol/s): 1.56$	$PPF.t(umol): 37.29$
$ \mu_{ch-A.t}(J): 0.60$	$ \mu_{ch-A}(W): 0.60$
$ \mu_{ch-B.t}(J): 0.32$	$ \mu_{ch-B}(W): 0.32$
$ \mu_b.t(J): 1.07$	$ \mu_b(W): 1.07$
$ \mu_y.t(J): 3.19$	$ \mu_y(W): 3.19$
$ \mu_r.t(J): 3.48$	$ \mu_r(W): 3.48$

Electric Parameters

Voltage: 230.70V	Current: 0.1100A	Power: 25.00W
Power Factor: 0.9780	Frequency: 49.99Hz	

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

Test Device: Lisun LMS-9000B
 Test Time: 2021-02-25 15:34:46
 Inspector: