

Lightsource Test Report

Product Information

Product Category: LED-PL-Röhre
 Product Spec: LED-PL-2G11-I-18-WWM
 Manufacturer: METOLIGHT
 Buyer: 4778

Product Type: LED-PL-Röhre-2G11
 Product Number: 1
 Submitted Unit: 101262

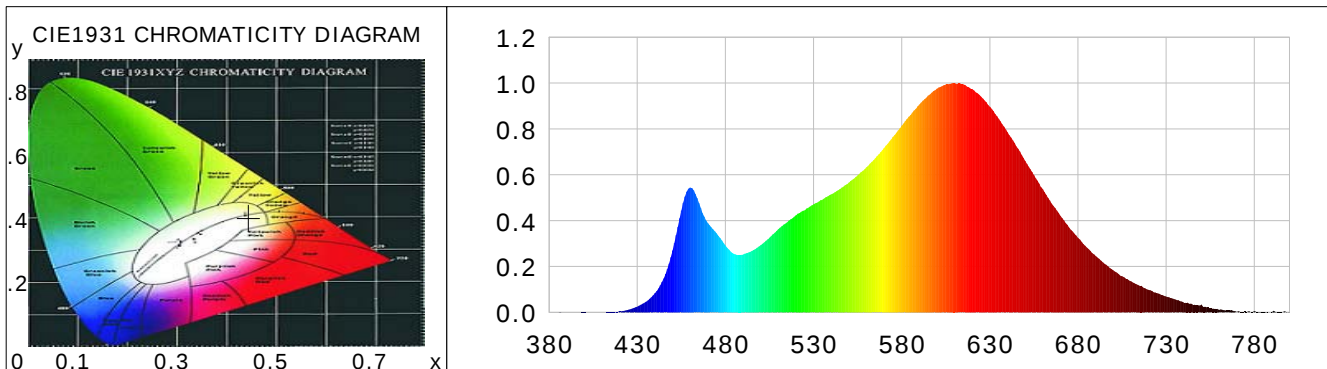
CIE Colorimetric Parameters

Chromaticity coordinates: $x=0.4444$ $y=0.4020$ $u(u')=0.2564$ $v=0.3478$ $v'=0.5217$
 CCT: $T_c=2860K$ ($duv=-0.00178$) Color Ratio: $R=0.247$ $G=0.722$ $B=0.031$
 Peak Wavelength: 609.4nm Half Bandwidth: 126.3nm
 Dominant Wavelength: 584.1nm Color Purity: 0.540
 CRI: $R_a=86.0$, $avgR(1\sim14)=82.4$, $avgR(1\sim15)=82.2$ TM30: $R_f=85$, $R_g=93$
 GAI: $GAI_BB_8=97.3$, $GAI_BB_15=106.3$, $GAI_EES=52.0$

R1 =87	R2 =97	R3 =93	R4 =83	R5 =87	R6 =96	R7 =81	R8 =64
R9 =26	R10=92	R11=83	R12=77	R13=90	R14=97	R15=80	

Color Quality Scale: $Q_a=85.1$, $Q_f=86.9$, $Q_p=86.5$, $Q_g=91.3$

Q1 =81	Q2 =93	Q3 =88	Q4 =82	Q5 =82	Q6 =84	Q7 =86	Q8 =88
Q9 =94	Q10=94	Q11=90	Q12=87	Q13=86	Q14=78	Q15=79	



Photometric Parameters

Luminous Flux: 1827.0 lm	Efficiency: 106.22 lm/W	Radiant Power: 5.795 W
Total mains efficacy: 124.92 lm/W	Energy Efficiency Class: E (EU 2019/2015)	
Pupil Flux: 2331.80 Plm	Pupil Lumens Per Watt: 135.57 Plm/W	Pupil Factor (Kp): 1.276
Cirtpic Flux: 4396.39 lm		

Electric Parameters

Voltage: 230.00V	Current: 0.0750A	Power: 17.20W
Power Factor: 0.9470	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: 46749 (2362)	CCD Integration Time: 227.00 ms

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

Test Device: Lisun LMS-9000B
 Test Time: 2021-02-26 11:55:18
 Inspector:

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WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)
380	0.0001	0.0048	525	0.4453	17.2512	670	0.4219	16.3455
385	0.0004	0.0150	530	0.4711	18.2492	675	0.3696	14.3194
390	0.0007	0.0265	535	0.4911	19.0252	680	0.3252	12.5984
395	0.0002	0.0058	540	0.5145	19.9305	685	0.2823	10.9376
400	0.0008	0.0299	545	0.5381	20.8461	690	0.2458	9.5218
405	0.0000	0.0015	550	0.5659	21.9201	695	0.2121	8.2153
410	0.0003	0.0097	555	0.5972	23.1349	700	0.1833	7.1003
415	0.0013	0.0485	560	0.6327	24.5115	705	0.1574	6.0983
420	0.0046	0.1763	565	0.6726	26.0544	710	0.1358	5.2594
425	0.0112	0.4356	570	0.7172	27.7838	715	0.1156	4.4791
430	0.0251	0.9724	575	0.7652	29.6429	720	0.0978	3.7897
435	0.0466	1.8033	580	0.8142	31.5401	725	0.0836	3.2366
440	0.0834	3.2312	585	0.8603	33.3273	730	0.0697	2.6986
445	0.1486	5.7576	590	0.9067	35.1231	735	0.0566	2.1928
450	0.2695	10.4417	595	0.9454	36.6211	740	0.0430	1.6664
455	0.4445	17.2173	600	0.9754	37.7839	745	0.0340	1.3162
460	0.5445	21.0935	605	0.9939	38.5007	750	0.0337	1.3045
465	0.4766	18.4611	610	0.9998	38.7292	755	0.0179	0.6936
470	0.3902	15.1149	615	0.9947	38.5330	760	0.0111	0.4309
475	0.3443	13.3357	620	0.9740	37.7312	765	0.0089	0.3455
480	0.2919	11.3095	625	0.9406	36.4380	770	0.0034	0.1313
485	0.2547	9.8650	630	0.8968	34.7399	775	0.0037	0.1441
490	0.2523	9.7744	635	0.8447	32.7212	780	0.0052	0.2017
495	0.2677	10.3717	640	0.7859	30.4435	785	0.0030	0.1169
500	0.2931	11.3535	645	0.7245	28.0647	790	0.0016	0.0608
505	0.3257	12.6155	650	0.6609	25.6019	795	0.0019	0.0724
510	0.3632	14.0687	655	0.5985	23.1847	800	0.0037	0.1426
515	0.3928	15.2176	660	0.5377	20.8305			
520	0.4236	16.4111	665	0.4753	18.4110			

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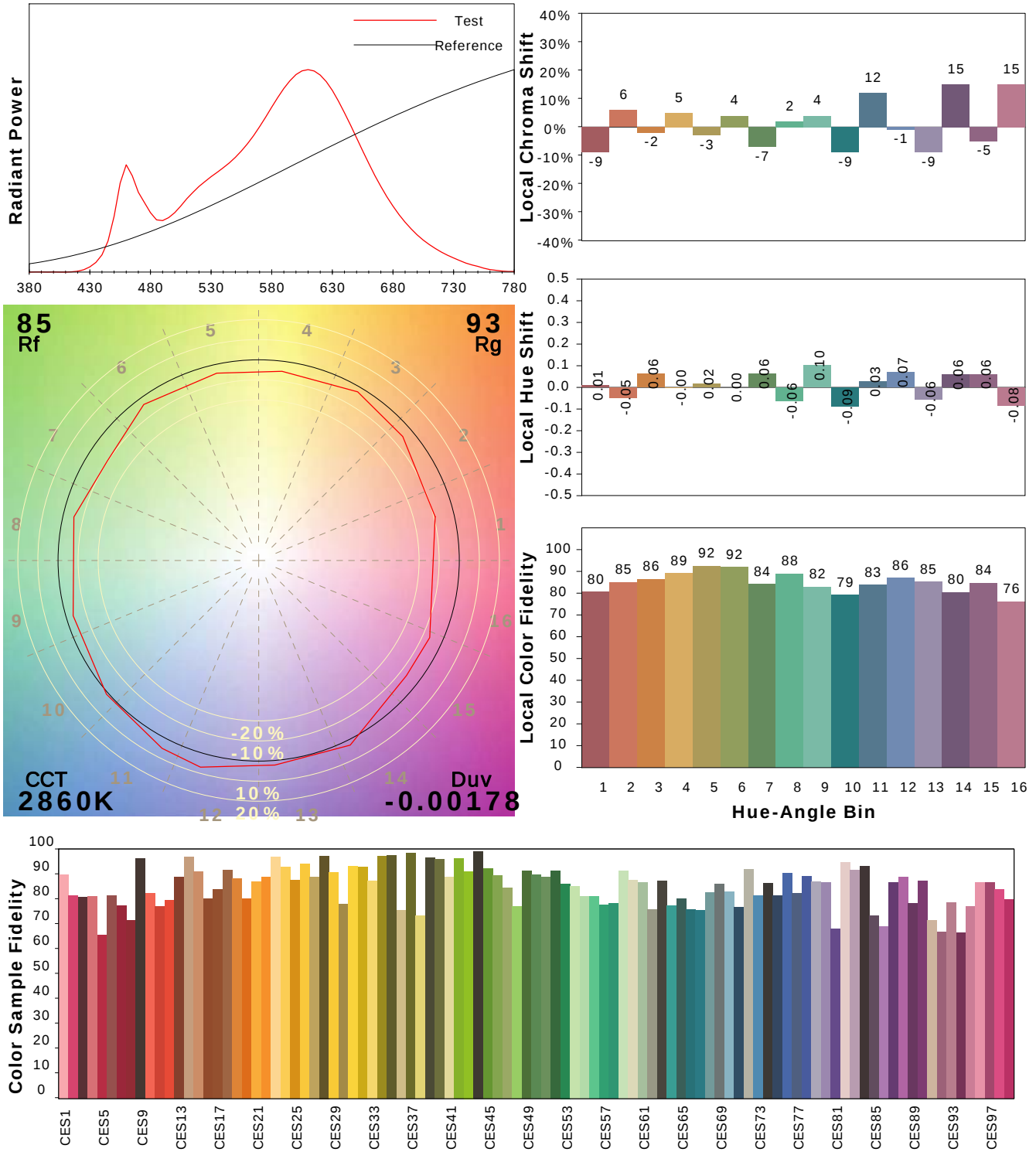
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IES TM-30-18 Color Rendition Report

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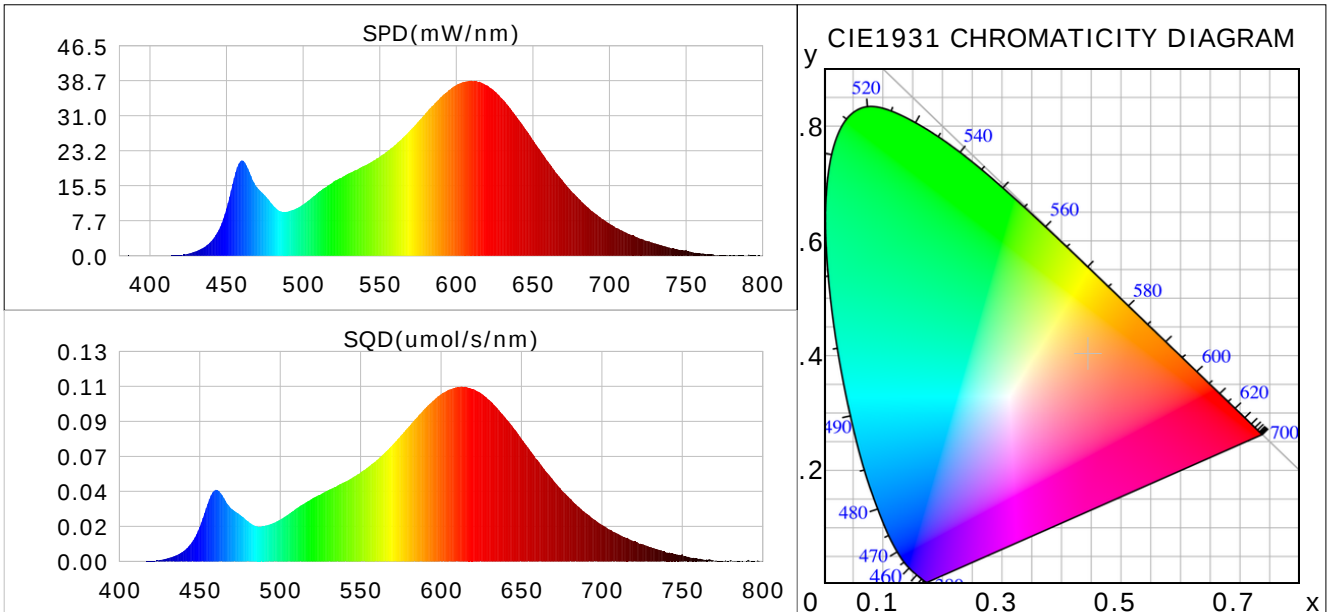
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Plant optical param data

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 CRI: Ra= 86.0



Plant Optical Param

$\mu_v(lm): 1827.00$	$Q_v(lm.s): 1827.00$
$\mu_e, \dot{E}(W/nm): 5.79$	$Q_e(J): 5.79$
$\mu_e(W): 5.61$	$\mu_{fr}(W): 0.19$
$\dot{C}_e: 0.33$	$\dot{C}_{fr}: 0.01$
$PPE(umol/s/w): 1.59$	$K_{fr}: 0.06$
$Erb_Ratio: 3.17$	$PPF(umol/s): 27.28$
$PF_{uv}(360-400)(umol/s): 0.00$	$PPF(400-500)(umol/s): 3.06$
$PPF(500-600)(umol/s): 11.01$	$PPF(600-700)(umol/s): 13.21$
$PF_{fr}(700-800)(umol/s): 1.12$	$PPF.t(umol): 27.28$
$\mu_{ch-A.t}(J): 0.44$	$\mu_{ch-A}(W): 0.44$
$\mu_{ch-B.t}(J): 0.23$	$\mu_{ch-B}(W): 0.23$
$\mu_b.t(J): 0.78$	$\mu_b(W): 0.78$
$\mu_y.t(J): 2.36$	$\mu_y(W): 2.36$
$\mu_r.t(J): 2.52$	$\mu_r(W): 2.52$

Electric Parameters

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