

Lightsource Test Report

Product Information

Product Category: LED-PL-Röhre
 Product Spec: LED-PL-2G11-18W-NWM-TRF
 Manufacturer: METOLIGHT
 Buyer: 6852

Product Type: LED-PL-Röhre-2G11
 Product Number: 1
 Submitted Unit: 104978

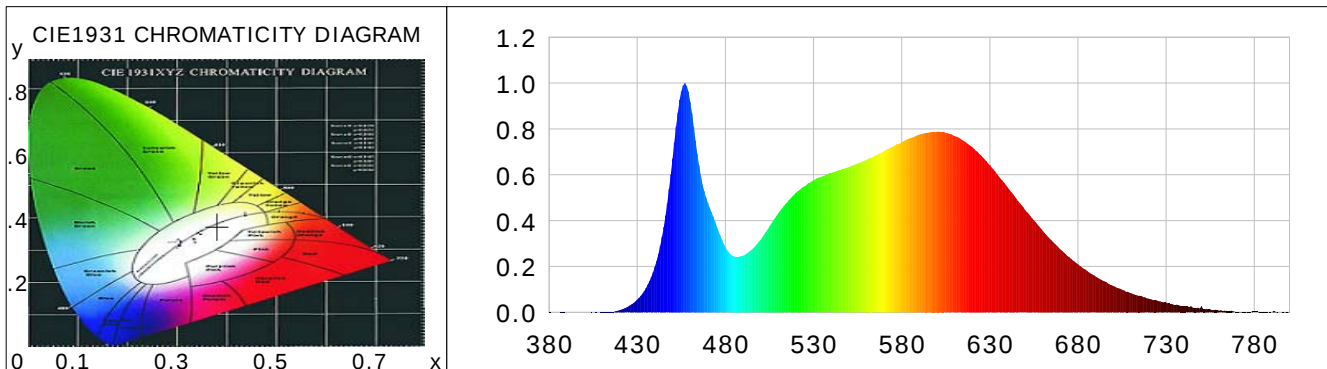
CIE Colorimetric Parameters

Chromaticity coordinates: $x=0.3811$ $y=0.3745$ $u(u')=0.2265$ $v=0.3338$ $v'=0.5007$
 CCT: $T_c=3965K$ ($duv=-0.00127$) Color Ratio: $R=0.191$ $G=0.770$ $B=0.039$
 Peak Wavelength: 456.9nm Half Bandwidth: 21.7nm
 Dominant Wavelength: 579.9nm Color Purity: 0.268
 CRI: $R_a=85.7$, $avgR(1\sim14)=79.9$, $avgR(1\sim15)=80.0$ TM30: $R_f=83$, $R_g=94$
 GAI: $GAI_BB_8=94.2$, $GAI_BB_15=102.4$, $GAI_EES=73.8$

R1 =86	R2 =93	R3 =96	R4 =83	R5 =84	R6 =89	R7 =86	R8 =69
R9 =25	R10=81	R11=81	R12=60	R13=88	R14=98	R15=81	

Color Quality Scale: $Q_a=83.8$, $Q_f=83.9$, $Q_p=83.7$, $Q_g=93.3$

Q1 =83	Q2 =97	Q3 =80	Q4 =74	Q5 =79	Q6 =82	Q7 =87	Q8 =90
Q9 =98	Q10=91	Q11=87	Q12=86	Q13=86	Q14=78	Q15=80	



Photometric Parameters

Luminous Flux: 1720.9 lm	Efficiency: 100.40 lm/W	Radiant Power: 5.316 W
Total mains efficacy: 118.07 lm/W	Energy Efficiency Class: E (EU 2019/2015)	
Pupil Flux: 2627.98 Plm	Pupil Lumens Per Watt: 153.32 Plm/W	Pupil Factor (Kp): 1.527
Cirtpic Flux: 5436.04 lm		

Electric Parameters

Voltage: 230.80V	Current: 0.0770A	Power: 17.14W
Power Factor: 0.9550	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: 46408 (2487)	CCD Integration Time: 158.86 ms

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

Test Device: Lisun LMS-9000B
 Test Time: 2021-02-25 15:29:41
 Inspector:

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WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)
380	0.0008	0.0298	525	0.5496	20.7051	670	0.2749	10.3570
385	0.0006	0.0242	530	0.5759	21.6957	675	0.2409	9.0745
390	0.0005	0.0184	535	0.5932	22.3496	680	0.2096	7.8963
395	0.0001	0.0047	540	0.6071	22.8711	685	0.1818	6.8482
400	0.0004	0.0142	545	0.6206	23.3818	690	0.1558	5.8700
405	0.0002	0.0075	550	0.6333	23.8579	695	0.1349	5.0834
410	0.0010	0.0394	555	0.6488	24.4438	700	0.1156	4.3543
415	0.0023	0.0866	560	0.6646	25.0383	705	0.0986	3.7146
420	0.0095	0.3574	565	0.6849	25.8016	710	0.0842	3.1731
425	0.0261	0.9842	570	0.7037	26.5103	715	0.0731	2.7522
430	0.0554	2.0885	575	0.7231	27.2435	720	0.0598	2.2512
435	0.1060	3.9928	580	0.7434	28.0050	725	0.0513	1.9326
440	0.1995	7.5152	585	0.7597	28.6192	730	0.0431	1.6250
445	0.3726	14.0392	590	0.7749	29.1953	735	0.0327	1.2326
450	0.6706	25.2637	595	0.7835	29.5166	740	0.0272	1.0265
455	0.9634	36.2935	600	0.7884	29.7012	745	0.0213	0.8020
460	0.9189	34.6202	605	0.7829	29.4932	750	0.0266	1.0021
465	0.6427	24.2125	610	0.7690	28.9706	755	0.0129	0.4866
470	0.4785	18.0276	615	0.7488	28.2111	760	0.0074	0.2777
475	0.3763	14.1760	620	0.7216	27.1872	765	0.0059	0.2226
480	0.2843	10.7107	625	0.6840	25.7692	770	0.0034	0.1285
485	0.2438	9.1847	630	0.6421	24.1913	775	0.0033	0.1232
490	0.2473	9.3163	635	0.5935	22.3614	780	0.0037	0.1389
495	0.2740	10.3229	640	0.5458	20.5642	785	0.0019	0.0707
500	0.3166	11.9275	645	0.4958	18.6789	790	0.0004	0.0155
505	0.3751	14.1322	650	0.4454	16.7816	795	0.0006	0.0217
510	0.4324	16.2894	655	0.4014	15.1210	800	0.0039	0.1488
515	0.4790	18.0449	660	0.3556	13.3959			
520	0.5218	19.6573	665	0.3135	11.8126			

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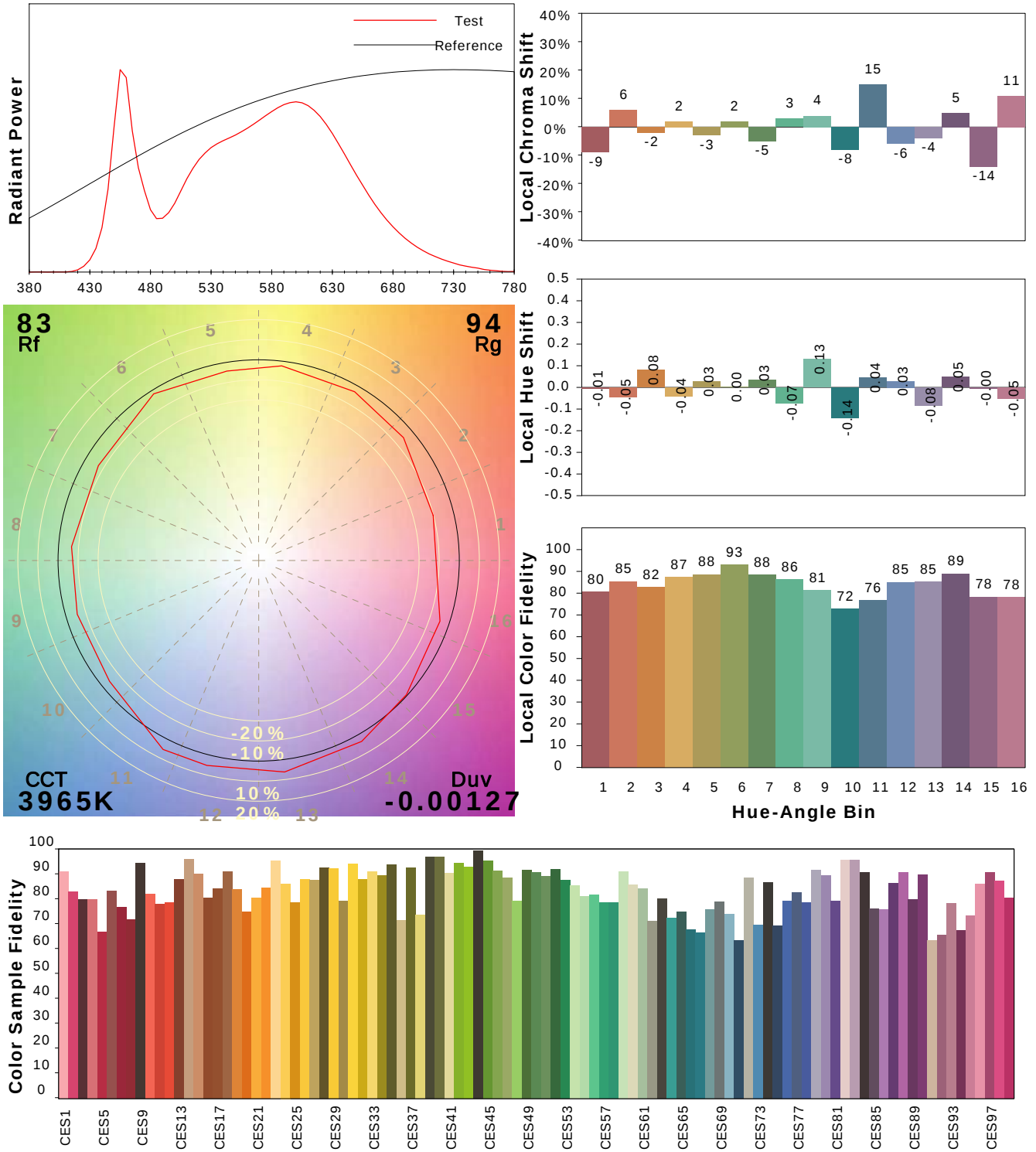
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IES TM-30-18 Color Rendition Report

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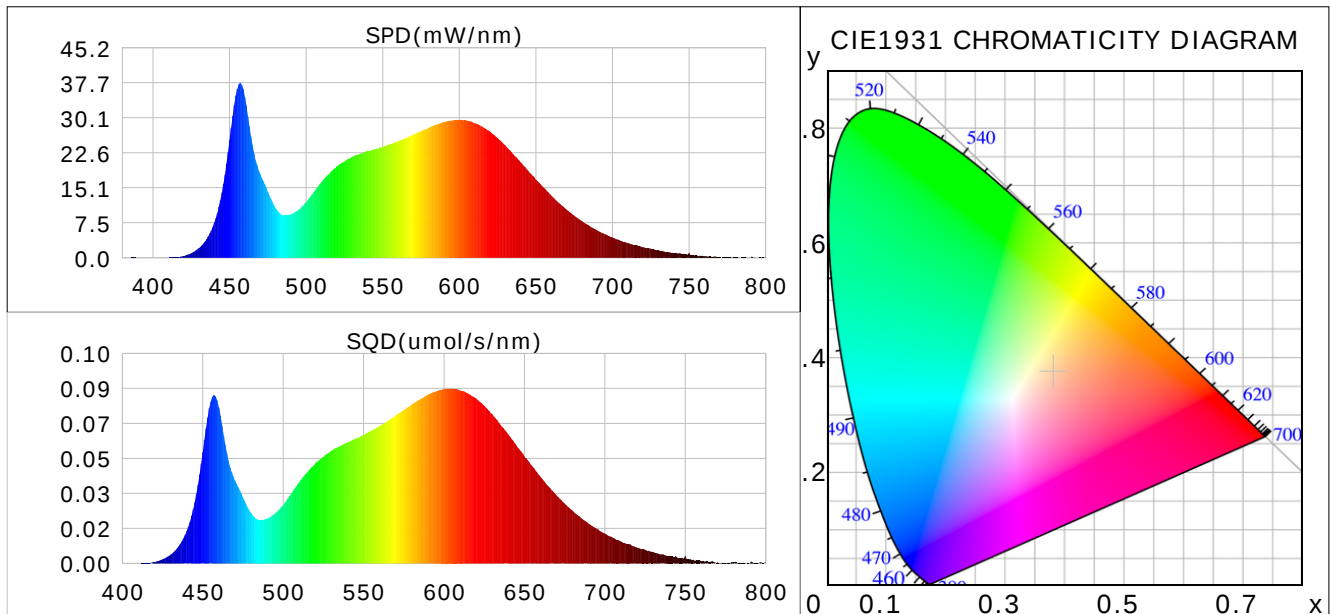
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Plant optical param data

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 Dominant Wavelength: 579.9nm Color Purity: 0.268
 CRI: Ra= 85.7



Plant Optical Param

$\mu_v(lm): 1720.90$	$Q_v(lm.s): 1720.90$
$\mu_e, \ddot{E}(W/nm): 5.32$	$Q_e(J): 5.32$
$\mu_e(W): 5.20$	$\mu_{fr}(W): 0.12$
$\zeta_e: 0.30$	$\zeta_{fr}: 0.01$
$PPE(umol/s/w): 1.43$	$K_{fr}: 0.04$
$Erb_Ratio: 1.50$	$PPF(umol/s): 24.45$
$PF_{uv}(360-400)(umol/s): 0.00$	$PPF(400-500)(umol/s): 4.43$
$PPF(500-600)(umol/s): 10.93$	$PPF(600-700)(umol/s): 9.10$
$PF_{fr}(700-800)(umol/s): 0.68$	$PPF.t(umol): 24.45$
$\mu_{ch-A.t}(J): 0.40$	$\mu_{ch-A}(W): 0.40$
$\mu_{ch-B.t}(J): 0.25$	$\mu_{ch-B}(W): 0.25$
$\mu_b.t(J): 1.14$	$\mu_b(W): 1.14$
$\mu_y.t(J): 2.36$	$\mu_y(W): 2.36$
$\mu_r.t(J): 1.74$	$\mu_r(W): 1.74$

Electric Parameters

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