

Lightsource Test Report

Product Information

Product Category: LED-PL-Röhren
 Product Spec: LED-PL-2G11-07-NW
 Manufacturer: METOLIGHT
 Buyer: 2320

Product Type: LED-PL-Röhren-2G11
 Product Number: 1
 Submitted Unit: 101894

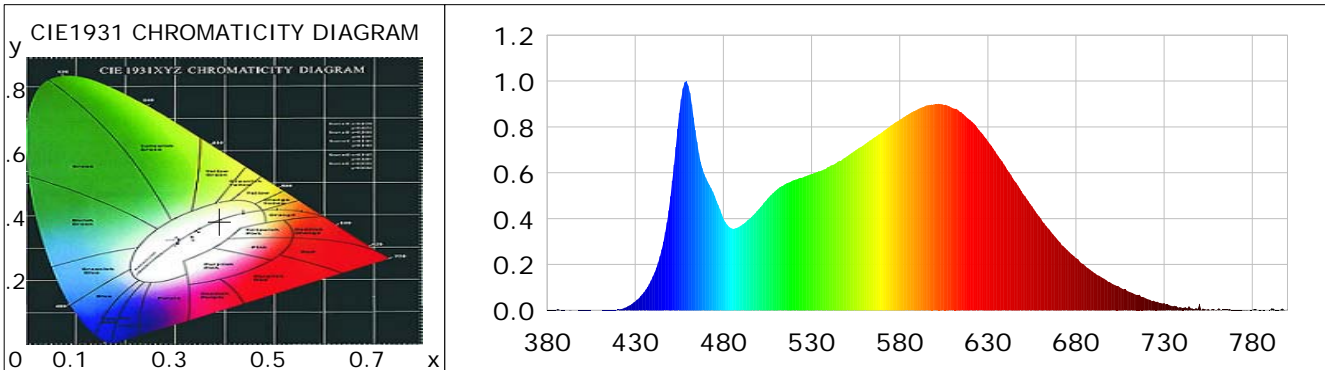
CIE Colorimetric Parameters

Chromaticity coordinates: $x=0.3898$ $y=0.3843$ $u(u')=0.2282$ $v=0.3375$ $v'=0.5063$
 CCT: $T_c=3812K$ ($duv=0.00089$) Color Ratio: $R=0.197$ $G=0.760$ $B=0.043$
 Peak Wavelength: 458.7nm Half Bandwidth: 24.9nm
 Dominant Wavelength: 579.3nm Color Purity: 0.324
 CRI: $R_a=86.4$, $avgR(1\sim14)=81.9$, $avgR(1\sim15)=81.8$ TM30: $R_f=84$, $R_g=92$
 GAI: $GAI_BB_8=89.4$, $GAI_BB_15=97.8$, $GAI_EES=67.6$

R1 =87	R2 =97	R3 =94	R4 =82	R5 =86	R6 =94	R7 =83	R8 =68
R9 =26	R10=91	R11=83	R12=67	R13=90	R14=97	R15=81	

Color Quality Scale: $Q_a=85.8$, $Q_f=86.1$, $Q_p=84.2$, $Q_g=90.8$

Q1 =80	Q2 =94	Q3 =89	Q4 =81	Q5 =81	Q6 =82	Q7 =87	Q8 =91
Q9 =96	Q10=97	Q11=93	Q12=90	Q13=88	Q14=79	Q15=80	



Photometric Parameters

Luminous Flux: 761.29 lm Efficiency: 111.30 lm/W Radiant Power: 2.332 W
 Total mains efficacy: 130.89 lm/W Energy Efficiency Class: E (EU 2019/2015)
 Pupil Flux: 1171.52 Plm Pupil Lumens Per Watt: 171.27 Plm/W Pupil Factor (Kp): 1.539
 Circopic Flux: 2446.98 lm

Electric Parameters

Voltage: 230.90V Current: 0.0610A Power: 6.84W
 Power Factor: 0.4860 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: 46721 (2615) CCD Integration Time: 372.09 ms

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

Test Device: Lisun LMS-9000B
 Test Time: 2021-03-01 15:15:36
 Inspector:

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WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)
380	0.0007	0.0107	525	0.5799	8.7009	670	0.3038	4.5584
385	0.0020	0.0300	530	0.5941	8.9143	675	0.2638	3.9590
390	0.0010	0.0156	535	0.6078	9.1198	680	0.2277	3.4168
395	0.0001	0.0020	540	0.6267	9.4045	685	0.1952	2.9290
400	0.0010	0.0150	545	0.6490	9.7379	690	0.1651	2.4770
405	0.0001	0.0016	550	0.6713	10.0727	695	0.1415	2.1232
410	0.0004	0.0055	555	0.6978	10.4700	700	0.1187	1.7804
415	0.0014	0.0209	560	0.7232	10.8516	705	0.0995	1.4928
420	0.0040	0.0605	565	0.7516	11.2777	710	0.0816	1.2239
425	0.0136	0.2038	570	0.7764	11.6507	715	0.0677	1.0157
430	0.0387	0.5802	575	0.8064	12.1006	720	0.0509	0.7637
435	0.0791	1.1870	580	0.8323	12.4883	725	0.0383	0.5743
440	0.1474	2.2121	585	0.8548	12.8271	730	0.0316	0.4741
445	0.2653	3.9817	590	0.8757	13.1402	735	0.0177	0.2650
450	0.4972	7.4604	595	0.8929	13.3984	740	0.0115	0.1719
455	0.8605	12.9116	600	0.8986	13.4838	745	0.0091	0.1362
460	0.9802	14.7087	605	0.8962	13.4479	750	0.0284	0.4255
465	0.7345	11.0208	610	0.8820	13.2348	755	0.0057	0.0854
470	0.5781	8.6744	615	0.8638	12.9621	760	0.0040	0.0597
475	0.4992	7.4901	620	0.8300	12.4538	765	0.0036	0.0539
480	0.4004	6.0077	625	0.7858	11.7919	770	0.0022	0.0328
485	0.3568	5.3538	630	0.7367	11.0547	775	0.0029	0.0433
490	0.3696	5.5464	635	0.6817	10.2293	780	0.0028	0.0425
495	0.4002	6.0053	640	0.6264	9.3987	785	0.0029	0.0440
500	0.4411	6.6188	645	0.5661	8.4939	790	0.0017	0.0254
505	0.4870	7.3081	650	0.5063	7.5980	795	0.0008	0.0118
510	0.5247	7.8728	655	0.4541	6.8138	800	0.0046	0.0683
515	0.5505	8.2605	660	0.4008	6.0141			
520	0.5677	8.5187	665	0.3514	5.2733			

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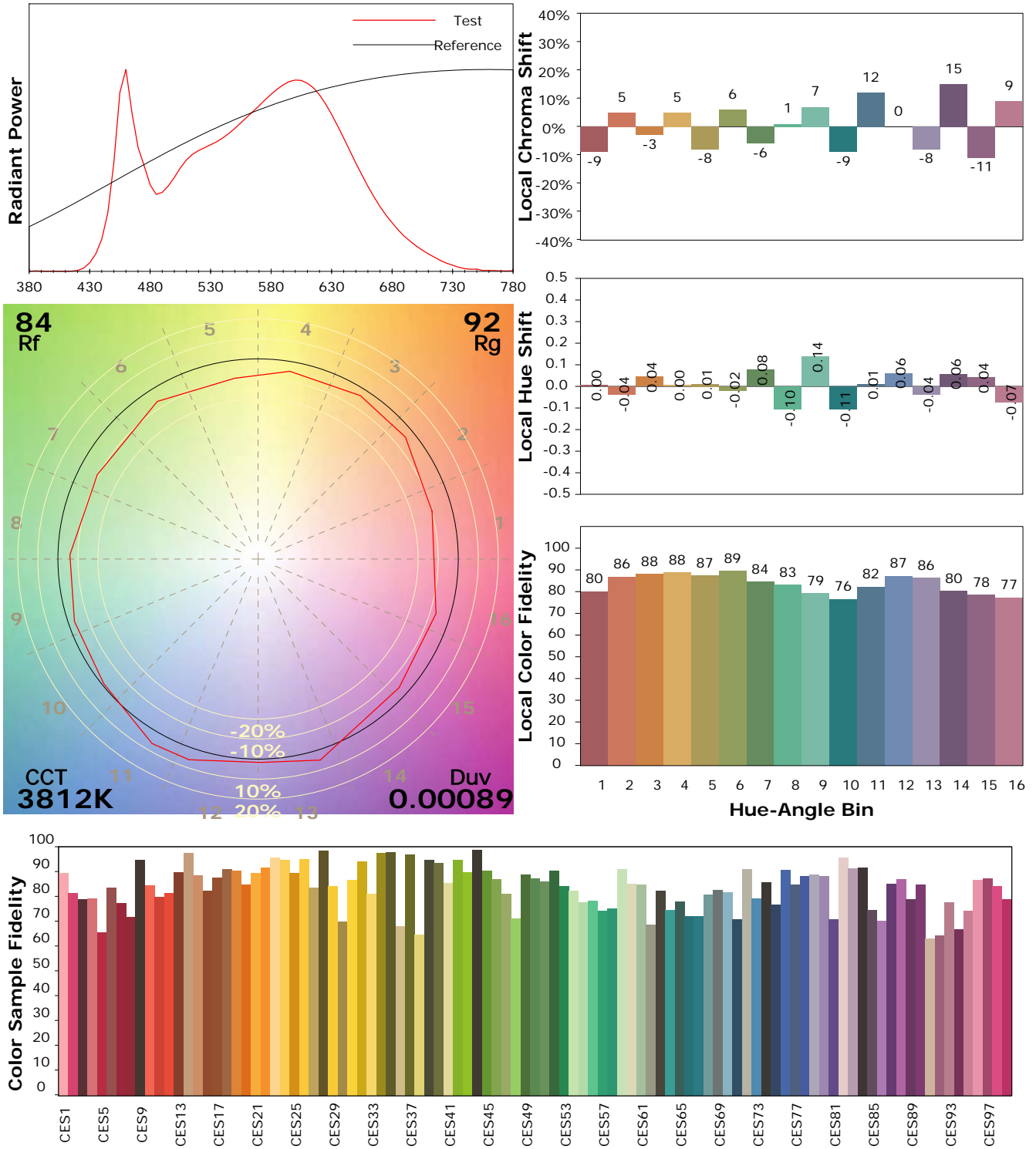
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IES TM-30-18 Color Rendition Report

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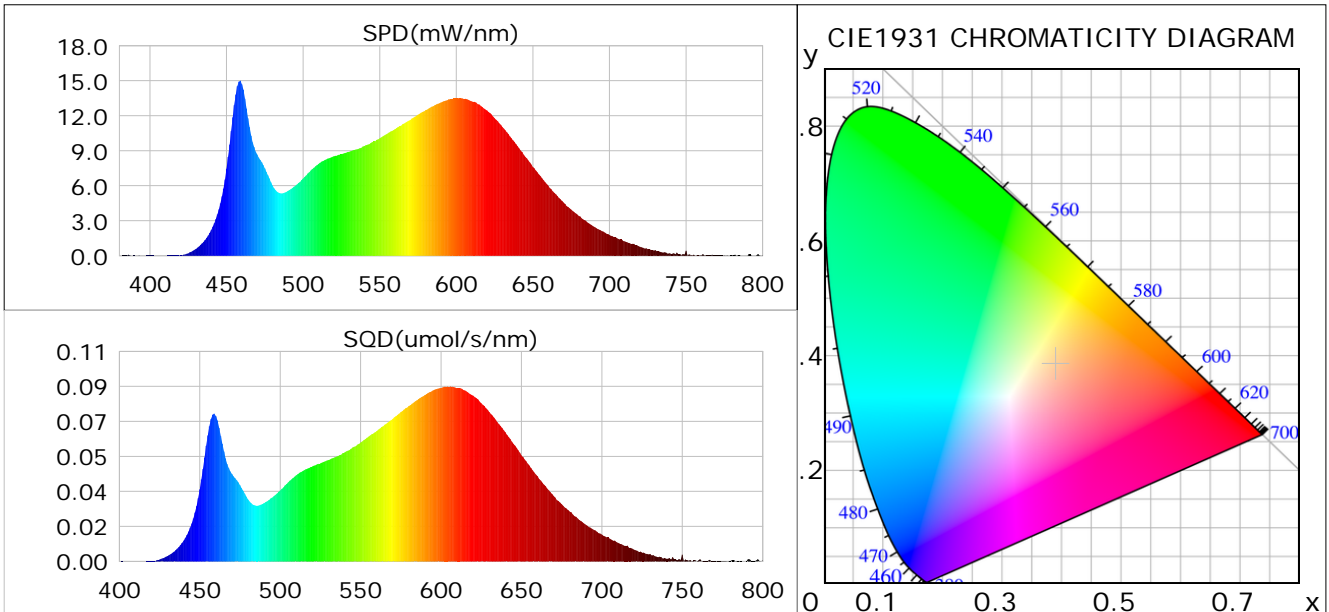
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Plant optical param data

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 Dominant Wavelength: 579.3nm Color Purity: 0.324
 CRI: $R_a=86.4$



Plant Optical Param

$ \mu_v(lm): 761.29$	$Q_v(lm.s): 761.29$
$ \mu_e, \dot{E}(W/nm): 2.33$	$Q_e(J): 2.33$
$ \mu_e(W): 2.30$	$ \mu_{fr}(W): 0.04$
$ \zeta_e: 0.34$	$ \zeta_{fr}: 0.01$
$PPE(umol/s/w): 1.58$	$K_{fr}: 0.03$
$Erb_Ratio: 1.59$	$PPF(umol/s): 10.82$
$PF_{uv}(360-400)(umol/s): 0.00$	$PPF(400-500)(umol/s): 1.90$
$PPF(500-600)(umol/s): 4.81$	$PPF(600-700)(umol/s): 4.11$
$PPF_{fr}(700-800)(umol/s): 0.22$	$PPF.t(umol): 10.82$
$ \mu_{ch-A.t}(J): 0.17$	$ \mu_{ch-A}(W): 0.17$
$ \mu_{ch-B.t}(J): 0.11$	$ \mu_{ch-B}(W): 0.11$
$ \mu_b.t(J): 0.49$	$ \mu_b(W): 0.49$
$ \mu_y.t(J): 1.04$	$ \mu_y(W): 1.04$
$ \mu_r.t(J): 0.79$	$ \mu_r(W): 0.79$

Electric Parameters

Voltage: 230.90V	Current: 0.0610A	Power: 6.84W
Power Factor: 0.4860	Frequency: 49.99Hz	

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