

Lightsource Test Report

Product Information

Product Category: LED-PL-Röhre
 Product Spec: LED-PL-2G10-4-09W-DWM
 Manufacturer: METOLIGHT
 Buyer: 3258

Product Type: LED-PL-Röhren-2G10
 Product Number: 1
 Submitted Unit: 103322

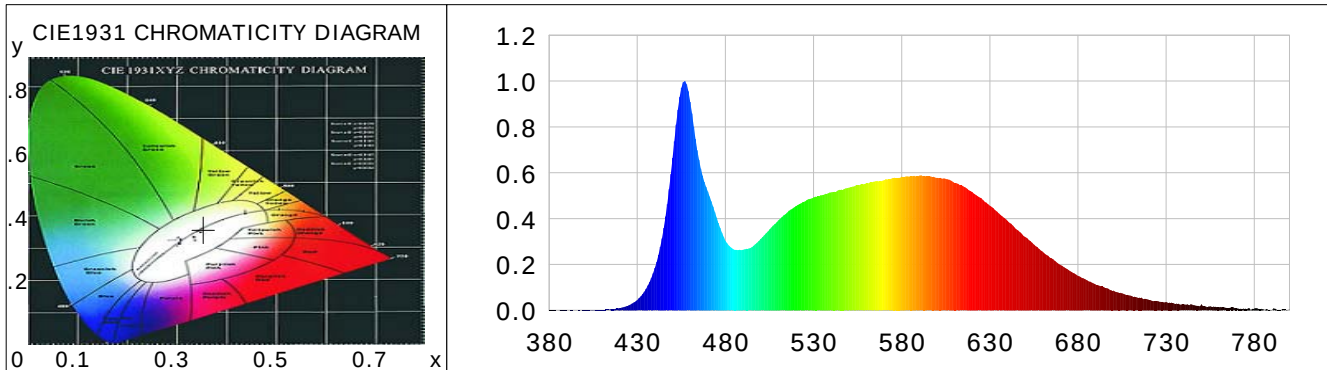
CIE Colorimetric Parameters

Chromaticity coordinates: $x=0.3532$ $y=0.3586$ $u(u')=0.2141$ $v=0.3262$ $v'=0.4892$
 CCT: $T_c=4733K$ ($duv=0.00034$) Color Ratio: $R=0.170$ $G=0.781$ $B=0.049$
 Peak Wavelength: 456.8nm Half Bandwidth: 23.3nm
 Dominant Wavelength: 575.1nm Color Purity: 0.136
 CRI: $R_a=86.0$, $avgR(1\sim14)=80.2$, $avgR(1\sim15)=80.3$ TM30: $R_f=83$, $R_g=92$
 GAI: $GAI_BB_8=90.7$, $GAI_BB_15=98.5$, $GAI_EES=80.3$

R1 =86	R2 =94	R3 =96	R4 =81	R5 =84	R6 =89	R7 =86	R8 =72
R9 =29	R10=83	R11=80	R12=56	R13=89	R14=98	R15=82	

Color Quality Scale: $Q_a=83.6$, $Q_f=83.8$, $Q_p=82.5$, $Q_g=91.7$

Q1 =82	Q2 =96	Q3 =82	Q4 =73	Q5 =77	Q6 =79	Q7 =86	Q8 =90
Q9 =98	Q10=92	Q11=88	Q12=87	Q13=87	Q14=79	Q15=81	



Photometric Parameters

Luminous Flux: 854.40 lm	Efficiency: 89.94 lm/W	Radiant Power: 2.705 W
Total mains efficacy: 105.77 lm/W	Energy Efficiency Class: F (EU 2019/2015)	
Pupil Flux: 1443.90 Plm	Pupil Lumens Per Watt: 151.99 Plm/W	Pupil Factor (Kp): 1.690
Cirtpic Flux: 3171.22 lm		

Electric Parameters

Voltage: 231.10V	Current: 0.0500A	Power: 9.50W
Power Factor: 0.8170	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: 44809 (2432)	CCD Integration Time: 217.92 ms

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

Test Device: Lisun LMS-9000B
 Test Time: 2021-03-05 10:26:01
 Inspector:

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WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)
380	0.0020	0.0470	525	0.4747	10.9358	670	0.1986	4.5754
385	0.0004	0.0082	530	0.4924	11.3435	675	0.1745	4.0201
390	0.0010	0.0225	535	0.5028	11.5821	680	0.1503	3.4621
395	0.0003	0.0068	540	0.5146	11.8552	685	0.1319	3.0383
400	0.0015	0.0357	545	0.5258	12.1117	690	0.1126	2.5941
405	0.0014	0.0330	550	0.5348	12.3191	695	0.0994	2.2899
410	0.0025	0.0573	555	0.5452	12.5599	700	0.0860	1.9815
415	0.0055	0.1273	560	0.5546	12.7751	705	0.0744	1.7136
420	0.0099	0.2274	565	0.5627	12.9625	710	0.0641	1.4774
425	0.0214	0.4934	570	0.5677	13.0767	715	0.0553	1.2735
430	0.0452	1.0405	575	0.5778	13.3107	720	0.0463	1.0659
435	0.0938	2.1603	580	0.5834	13.4387	725	0.0407	0.9383
440	0.1849	4.2601	585	0.5850	13.4765	730	0.0363	0.8367
445	0.3601	8.2953	590	0.5871	13.5251	735	0.0283	0.6528
450	0.6652	15.3236	595	0.5845	13.4650	740	0.0269	0.6199
455	0.9707	22.3605	600	0.5783	13.3214	745	0.0238	0.5480
460	0.9095	20.9508	605	0.5736	13.2130	750	0.0261	0.6020
465	0.6564	15.1210	610	0.5553	12.7911	755	0.0177	0.4080
470	0.5181	11.9350	615	0.5405	12.4508	760	0.0134	0.3094
475	0.4046	9.3212	620	0.5160	11.8874	765	0.0099	0.2276
480	0.3043	7.0099	625	0.4896	11.2783	770	0.0093	0.2143
485	0.2652	6.1093	630	0.4559	10.5014	775	0.0077	0.1766
490	0.2640	6.0814	635	0.4232	9.7485	780	0.0081	0.1876
495	0.2752	6.3402	640	0.3907	8.9999	785	0.0047	0.1082
500	0.3119	7.1842	645	0.3535	8.1434	790	0.0008	0.0182
505	0.3529	8.1296	650	0.3202	7.3752	795	0.0012	0.0275
510	0.3927	9.0462	655	0.2874	6.6215	800	0.0044	0.1015
515	0.4262	9.8184	660	0.2562	5.9006			
520	0.4546	10.4725	665	0.2271	5.2315			

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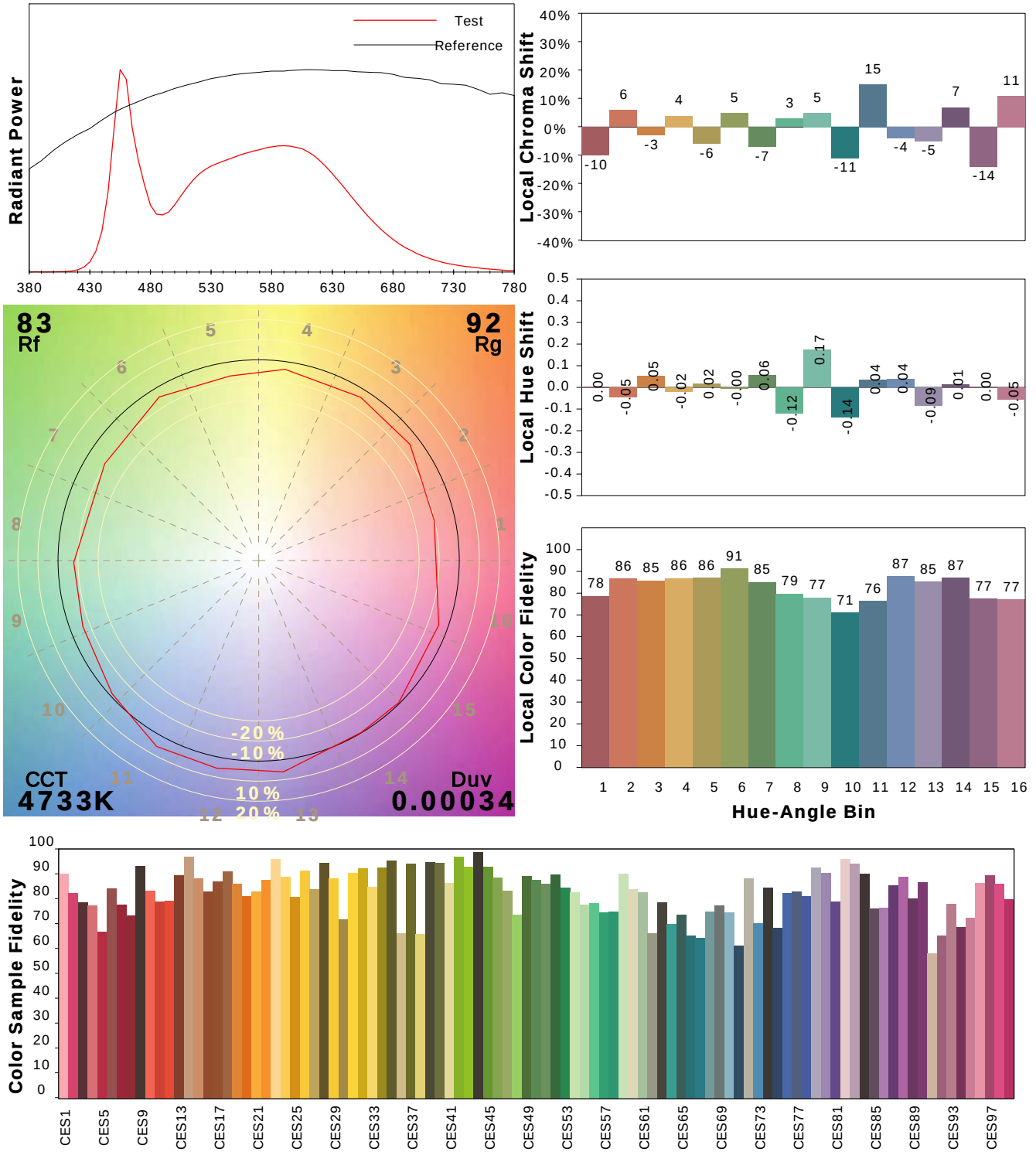
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IES TM-30-18 Color Rendition Report

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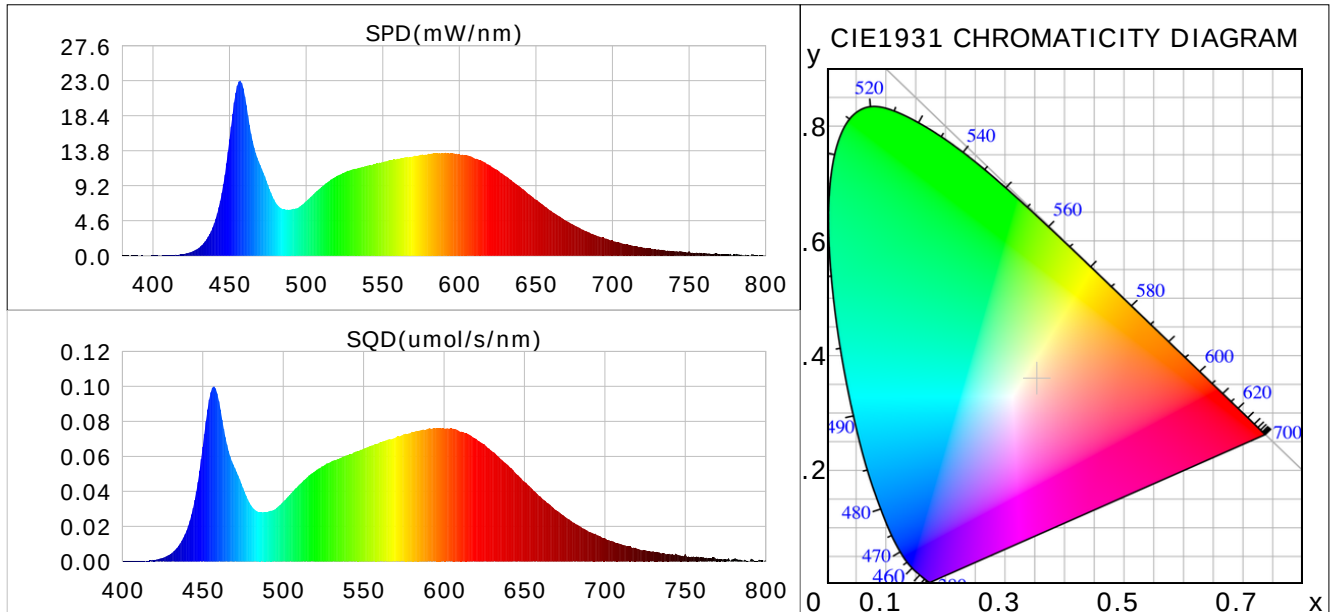
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Plant optical param data

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 CRI: Ra= 86.0



Plant Optical Param

$\Phi_{\nu}(lm): 854.40$	$Q_v(lm.s): 854.40$
$\Phi_{\mu e}, \dot{E}(W/nm): 2.71$	$Q_e(J): 2.71$
$\Phi_{\mu e}(W): 2.65$	$\Phi_{\mu fr}(W): 0.06$
$\Phi_{\zeta e}: 0.28$	$\Phi_{\zeta fr}: 0.01$
$PPE(umol/s/w): 1.29$	$Kfr: 0.04$
$Erb_Ratio: 1.06$	$PPF(umol/s): 12.25$
$PF_{uv}(360-400)(umol/s): 0.00$	$PPF(400-500)(umol/s): 2.75$
$PPF(500-600)(umol/s): 5.49$	$PPF(600-700)(umol/s): 4.01$
$PF_{fr}(700-800)(umol/s): 0.37$	$PPF.t(umol): 12.25$
$\Phi_{\mu ch-A.t}(J): 0.20$	$\Phi_{\mu ch-A}(W): 0.20$
$\Phi_{\mu ch-B.t}(J): 0.14$	$\Phi_{\mu ch-B}(W): 0.14$
$\Phi_{\mu b.t}(J): 0.71$	$\Phi_{\mu b}(W): 0.71$
$\Phi_{\mu y.t}(J): 1.19$	$\Phi_{\mu y}(W): 1.19$
$\Phi_{\mu r.t}(J): 0.77$	$\Phi_{\mu r}(W): 0.77$

Electric Parameters

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