

Lightsource Test Report

Product Information

Product Category: LED-Röhre Product Type: LED-Röhre-SCE
 Product Spec: LEDtube-150-8NWM-30W-SCE-RM-160 Product Number: 1
 Manufacturer: METOLIGHT Submitted Unit: 102598
 Buyer: 6961

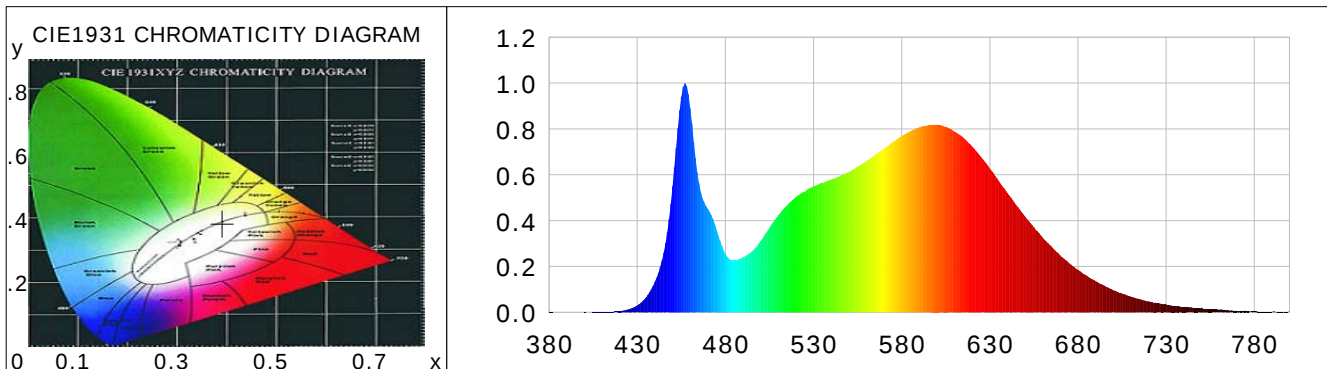
CIE Colorimetric Parameters

Chromaticity coordinates: $x=0.3914$ $y=0.3841$ $u(u')=0.2294$ $v=0.3376$ $v'=0.5064$
 CCT: $T_c=3771K$ ($duv=0.00037$) Color Ratio: $R=0.193$ $G=0.771$ $B=0.036$
 Peak Wavelength: 457.1nm Half Bandwidth: 17.5nm
 Dominant Wavelength: 579.7nm Color Purity: 0.328
 CRI: $R_a=83.2$, $avgR(1\sim14)=76.8$, $avgR(1\sim15)=76.7$ TM30: $R_f=82$, $R_g=92$
 GAI: $GAI_BB_8=90.0$, $GAI_BB_15=99.3$, $GAI_EES=67.4$

R1 =82	R2 =92	R3 =96	R4 =80	R5 =82	R6 =88	R7 =83	R8 =63
R9 =10	R10=80	R11=78	R12=58	R13=85	R14=99	R15=76	

Color Quality Scale: $Q_a=82.2$, $Q_f=82.6$, $Q_p=81.1$, $Q_g=90.9$

Q1 =80	Q2 =96	Q3 =81	Q4 =74	Q5 =78	Q6 =80	Q7 =84	Q8 =88
Q9 =98	Q10=91	Q11=87	Q12=85	Q13=84	Q14=73	Q15=76	



Photometric Parameters

Luminous Flux: 4902.7 lm Efficiency: 156.49 lm/W Radiant Power: 14.671 W
 Total mains efficacy: 184.03 lm/W Energy Efficiency Class: C (EU 2019/2015)
 Pupil Flux: 7236.60 Plm Pupil Lumens Per Watt: 230.98 Plm/W Pupil Factor (Kp): 1.476
 Cirtopic Flux: 14675.99 lm

Electric Parameters

Voltage: 230.90V Current: 0.1390A Power: 31.33W
 Power Factor: 0.9710 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: 45355 (2543) CCD Integration Time: 58.81 ms

Condition: Tx:21.9'C, Ti:0.0'C, R.H.:60%
 Test Lab:
 Operator: CRE

Test Device: Lisun LMS-9000B
 Test Time: 2021-02-17 15:08:42
 Inspector:

Lightsource Test Report

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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	0.0762	525	0.5254	56.7215	670	0.2483	26.8071
385	0.0001	0.0127	530	0.5489	59.2650	675	0.2140	23.1079
390	0.0003	0.0293	535	0.5631	60.7977	680	0.1860	20.0791
395	0.0002	0.0168	540	0.5791	62.5205	685	0.1595	17.2184
400	0.0009	0.0943	545	0.5944	64.1710	690	0.1360	14.6816
405	0.0007	0.0774	550	0.6129	66.1676	695	0.1161	12.5378
410	0.0011	0.1173	555	0.6372	68.7974	700	0.0968	10.4498
415	0.0028	0.3040	560	0.6591	71.1564	705	0.0818	8.8344
420	0.0058	0.6303	565	0.6876	74.2415	710	0.0684	7.3892
425	0.0132	1.4198	570	0.7144	77.1354	715	0.0574	6.1977
430	0.0300	3.2437	575	0.7425	80.1687	720	0.0477	5.1528
435	0.0654	7.0607	580	0.7694	83.0680	725	0.0402	4.3451
440	0.1330	14.3596	585	0.7898	85.2676	730	0.0345	3.7241
445	0.2609	28.1646	590	0.8071	87.1431	735	0.0282	3.0473
450	0.5498	59.3577	595	0.8159	88.0877	740	0.0231	2.4988
455	0.9406	101.5490	600	0.8182	88.3347	745	0.0202	2.1794
460	0.8907	96.1616	605	0.8099	87.4458	750	0.0204	2.2058
465	0.5629	60.7792	610	0.7887	85.1530	755	0.0138	1.4870
470	0.4514	48.7361	615	0.7625	82.3231	760	0.0119	1.2809
475	0.3594	38.8079	620	0.7237	78.1327	765	0.0109	1.1803
480	0.2547	27.4943	625	0.6767	73.0613	770	0.0063	0.6794
485	0.2264	24.4460	630	0.6264	67.6326	775	0.0070	0.7550
490	0.2403	25.9458	635	0.5736	61.9244	780	0.0042	0.4552
495	0.2654	28.6549	640	0.5197	56.1067	785	0.0031	0.3358
500	0.3115	33.6292	645	0.4673	50.4506	790	0.0015	0.1652
505	0.3691	39.8546	650	0.4176	45.0886	795	0.0014	0.1468
510	0.4241	45.7837	655	0.3712	40.0737	800	0.0047	0.5106
515	0.4659	50.3036	660	0.3254	35.1356			
520	0.5033	54.3369	665	0.2870	30.9840			

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IES TM-30-18 Color Rendition Report

Product Information

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Product Type: LED-Röhre-SCE

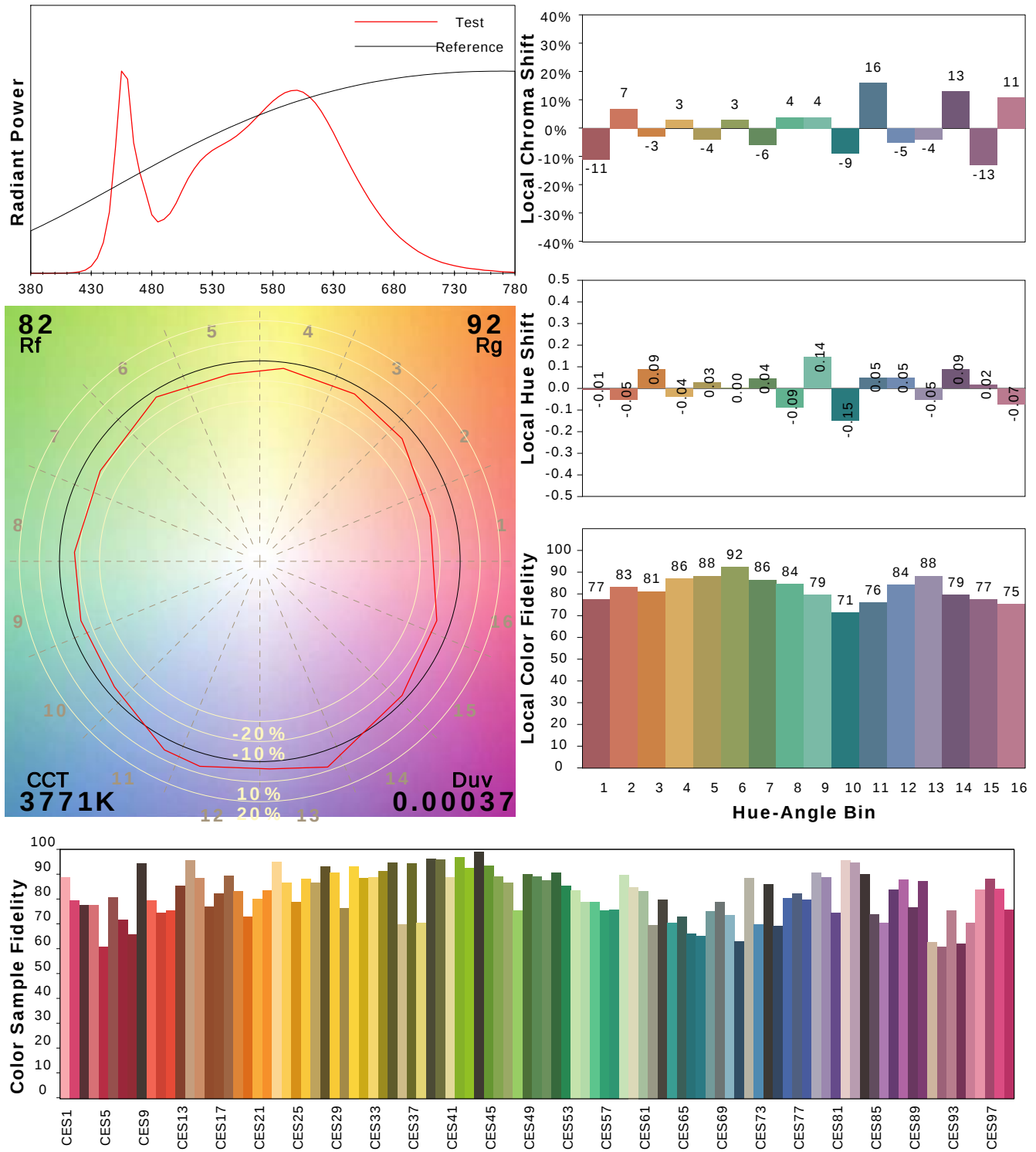
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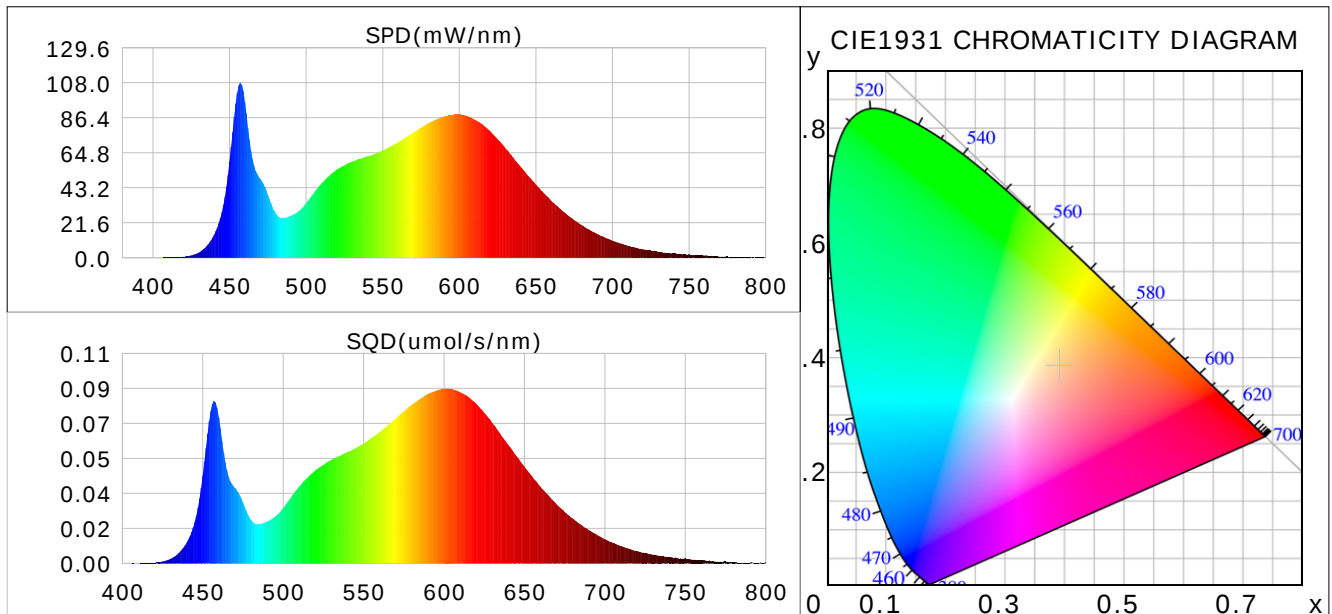
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Plant optical param data

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 Dominant Wavelength: 579.7nm Color Purity: 0.328
 CRI: Ra= 83.2



Plant Optical Param

$\mu_v(lm)$: 4902.70	$Q_v(lm.s)$: 4902.70
$\mu_e, \dot{E}(W/nm)$: 14.67	$Q_e(J)$: 14.67
$\mu_e(W)$: 14.40	$\mu_{fr}(W)$: 0.29
$\dot{C}_e$: 0.46	$\dot{C}_{fr}$: 0.01
$PPE(umol/s/w)$: 2.17	K_{fr} : 0.05
E_{rb_Ratio} : 1.62	$PPF(umol/s)$: 67.85
$PF_{uv}(360-400)(umol/s)$: 0.00	$PPF(400-500)(umol/s)$: 11.41
$PPF(500-600)(umol/s)$: 31.23	$PPF(600-700)(umol/s)$: 25.21
$PF_{fr}(700-800)(umol/s)$: 1.69	$PPF.t(umol)$: 67.85
$\mu_{ch-A.t}(J)$: 1.06	$\mu_{ch-A}(W)$: 1.06
$\mu_{ch-B.t}(J)$: 0.68	$\mu_{ch-B}(W)$: 0.68
$\mu_{b.t}(J)$: 2.94	$\mu_b(W)$: 2.94
$\mu_{y.t}(J)$: 6.74	$\mu_y(W)$: 6.74
$\mu_{r.t}(J)$: 4.84	$\mu_r(W)$: 4.84

Electric Parameters

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Power Factor: 0.9710	Frequency: 49.99Hz	

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