

Lightsource Test Report

Product Information

Product Category: LED-Röhre
 Product Spec: LEDtube-150-8Meat-P-25WM
 Manufacturer: METOLIGHT
 Buyer: 7116

Product Type: LED-Röhre-Spezial
 Product Number: 1
 Submitted Unit: 101786

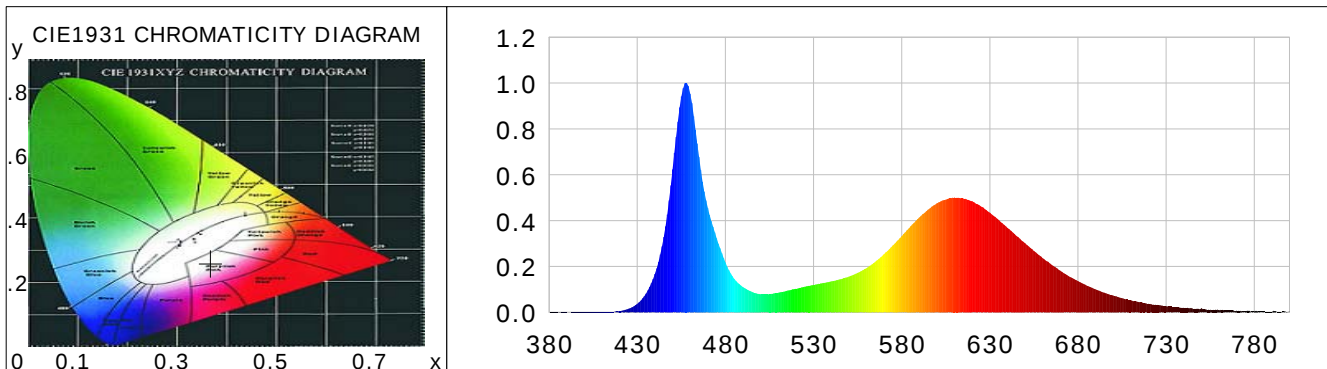
CIE Colorimetric Parameters

Chromaticity coordinates: $x=0.3677$ $y=0.2590$ $u(u')=0.2737$ $v=0.2892$ $v'=0.4339$
 CCT: $T_c=2960K$ ($duv=-0.06277$) Color Ratio: $R=0.307$ $G=0.623$ $B=0.070$
 Peak Wavelength: 457.6nm Half Bandwidth: 20.5nm
 Dominant Wavelength: 0.0nm Color Purity: 0.000
 CRI: $R_a=60.8$, $avgR(1\sim14)=57.2$, $avgR(1\sim15)=58.8$ TM30: $R_f=78$, $R_g=103$
 GAI: $GAI_BB_8=206.8$, $GAI_BB_15=187.7$, $GAI_EES=116.5$

R1 =84	R2 =61	R3 =44	R4 =72	R5 =77	R6 =36	R7 =48	R8 =64
R9 =76	R10=22	R11=69	R12=0	R13=73	R14=73	R15=81	

Color Quality Scale: $Q_a=71.7$, $Q_f=63.0$, $Q_p=90.5$, $Q_g=109.2$

Q1 =90	Q2 =96	Q3 =67	Q4 =60	Q5 =71	Q6 =82	Q7 =81	Q8 =80
Q9 =97	Q10=80	Q11=66	Q12=55	Q13=53	Q14=72	Q15=81	



Photometric Parameters

Luminous Flux: 2096.2 lm	Efficiency: 82.59 lm/W	Radiant Power: 8.934 W
Total mains efficacy: 97.13 lm/W	Energy Efficiency Class: F (EU 2019/2015)	
Pupil Flux: 3619.84 Plm	Pupil Lumens Per Watt: 142.63 Plm/W	Pupil Factor (Kp): 1.727
Cirtpic Flux: 9101.94 lm		

Electric Parameters

Voltage: 230.50V	Current: 0.1140A	Power: 25.38W
Power Factor: 0.9590	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: 44010 (2615)	CCD Integration Time: 68.73 ms

Condition: Tx:23.3'C, Ti:0.0'C, R.H.:60%
 Test Lab:
 Operator: CRE

Test Device: Lisun LMS-9000B
 Test Time: 2021-02-17 11:21:50
 Inspector:

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WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)
380	0.0010	0.1144	525	0.1120	12.6450	670	0.1819	20.5409
385	0.0011	0.1295	530	0.1195	13.4951	675	0.1570	17.7322
390	0.0014	0.1536	535	0.1272	14.3706	680	0.1364	15.4070
395	0.0010	0.1097	540	0.1349	15.2369	685	0.1161	13.1114
400	0.0012	0.1345	545	0.1441	16.2783	690	0.1000	11.2891
405	0.0016	0.1777	550	0.1560	17.6220	695	0.0854	9.6417
410	0.0019	0.2171	555	0.1721	19.4425	700	0.0734	8.2945
415	0.0032	0.3633	560	0.1926	21.7549	705	0.0618	6.9769
420	0.0056	0.6340	565	0.2209	24.9517	710	0.0527	5.9572
425	0.0156	1.7660	570	0.2544	28.7282	715	0.0446	5.0366
430	0.0372	4.2042	575	0.2921	32.9912	720	0.0373	4.2081
435	0.0817	9.2302	580	0.3329	37.6011	725	0.0326	3.6838
440	0.1673	18.9002	585	0.3751	42.3629	730	0.0272	3.0690
445	0.3294	37.2102	590	0.4146	46.8224	735	0.0223	2.5160
450	0.6235	70.4241	595	0.4485	50.6608	740	0.0199	2.2424
455	0.9418	106.3742	600	0.4754	53.6952	745	0.0167	1.8852
460	0.9537	107.7161	605	0.4918	55.5501	750	0.0179	2.0255
465	0.6778	76.5614	610	0.5006	56.5462	755	0.0116	1.3109
470	0.4554	51.4406	615	0.4965	56.0835	760	0.0094	1.0669
475	0.3237	36.5636	620	0.4846	54.7304	765	0.0091	1.0243
480	0.2179	24.6093	625	0.4620	52.1792	770	0.0072	0.8186
485	0.1464	16.5318	630	0.4344	49.0600	775	0.0048	0.5400
490	0.1103	12.4577	635	0.4029	45.5097	780	0.0046	0.5173
495	0.0897	10.1369	640	0.3683	41.6035	785	0.0048	0.5432
500	0.0794	8.9680	645	0.3342	37.7459	790	0.0024	0.2714
505	0.0796	8.9952	650	0.3014	34.0465	795	0.0027	0.3046
510	0.0856	9.6701	655	0.2676	30.2290	800	0.0047	0.5314
515	0.0944	10.6640	660	0.2364	26.7052			
520	0.1030	11.6376	665	0.2075	23.4398			

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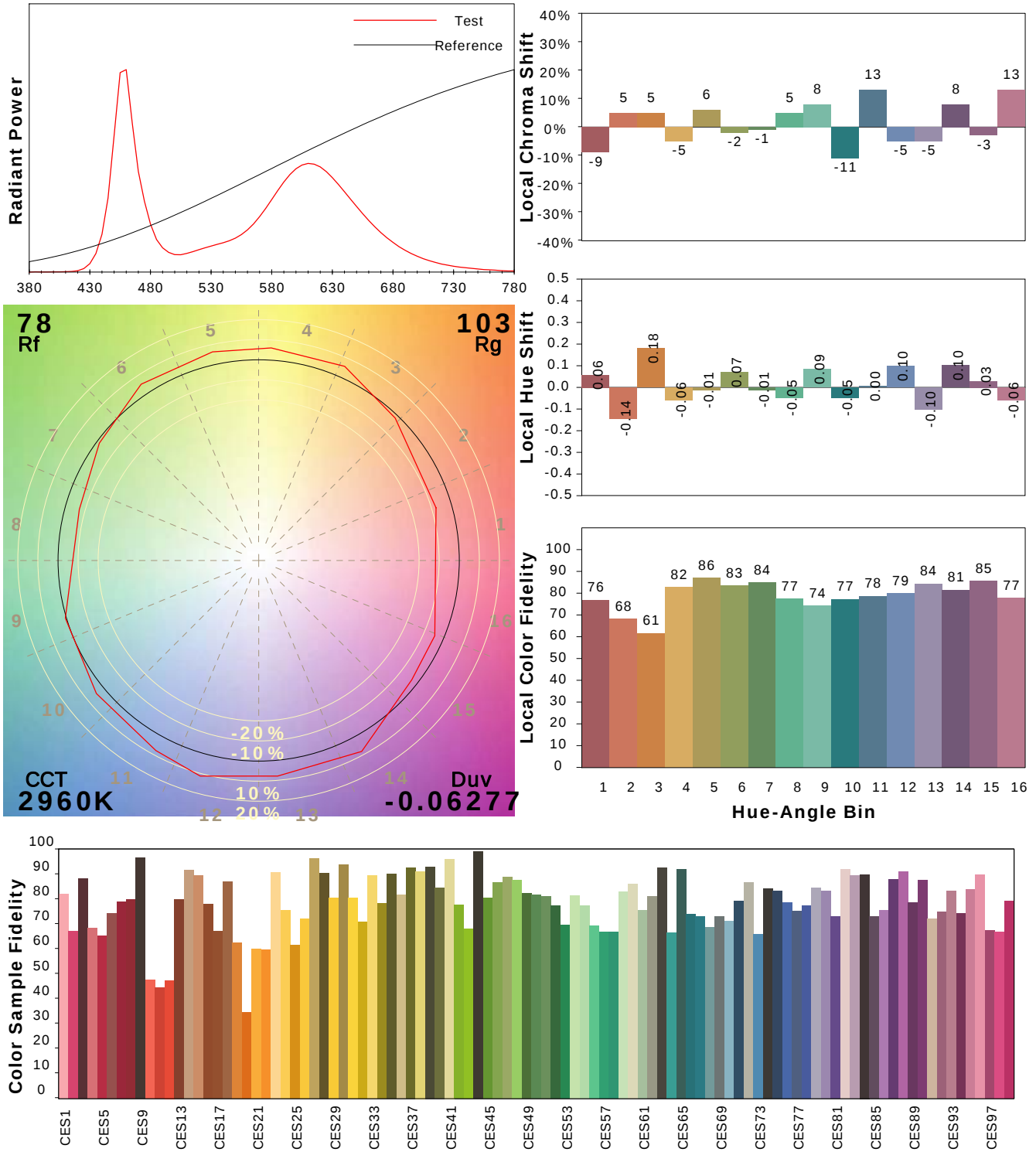
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IES TM-30-18 Color Rendition Report

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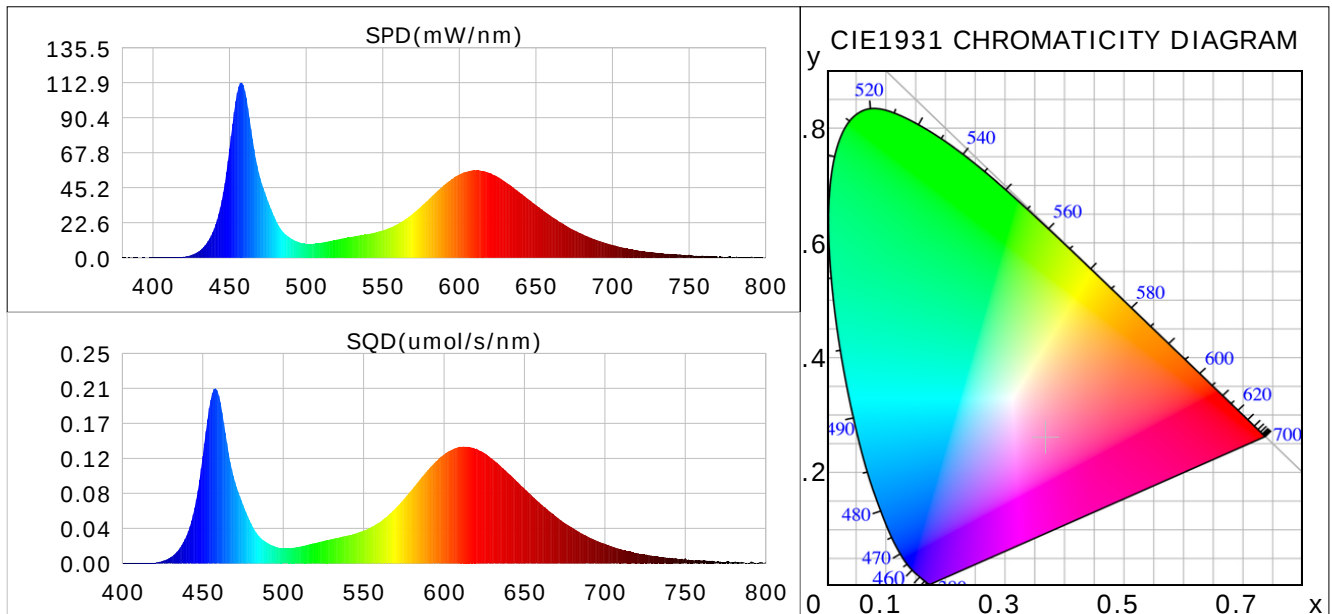
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Plant optical param data

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 CRI: Ra= 60.8



Plant Optical Param

$\mu_v(lm)$: 2096.20	$Q_v(lm.s)$: 2096.20
$\mu_e, \dot{E}(W/nm)$: 8.93	$Q_e(J)$: 8.93
$\mu_e(W)$: 8.70	$\mu_{fr}(W)$: 0.24
$\dot{C}_e$: 0.34	$\dot{C}_{fr}$: 0.01
$PPE(umol/s/w)$: 1.60	K_{fr} : 0.06
Erb_Ratio : 1.15	$PPF(umol/s)$: 40.58
$PF_{uv}(360-400)(umol/s)$: 0.01	$PPF(400-500)(umol/s)$: 11.39
$PPF(500-600)(umol/s)$: 11.16	$PPF(600-700)(umol/s)$: 18.03
$PF_{fr}(700-800)(umol/s)$: 1.44	$PPF.t(umol)$: 40.58
$\mu_{ch-A.t}(J)$: 0.82	$\mu_{ch-A}(W)$: 0.82
$\mu_{ch-B.t}(J)$: 0.60	$\mu_{ch-B}(W)$: 0.60
$\mu_b.t(J)$: 2.96	$\mu_b(W)$: 2.96
$\mu_y.t(J)$: 2.37	$\mu_y(W)$: 2.37
$\mu_r.t(J)$: 3.44	$\mu_r(W)$: 3.44

Electric Parameters

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