

Lightsource Test Report

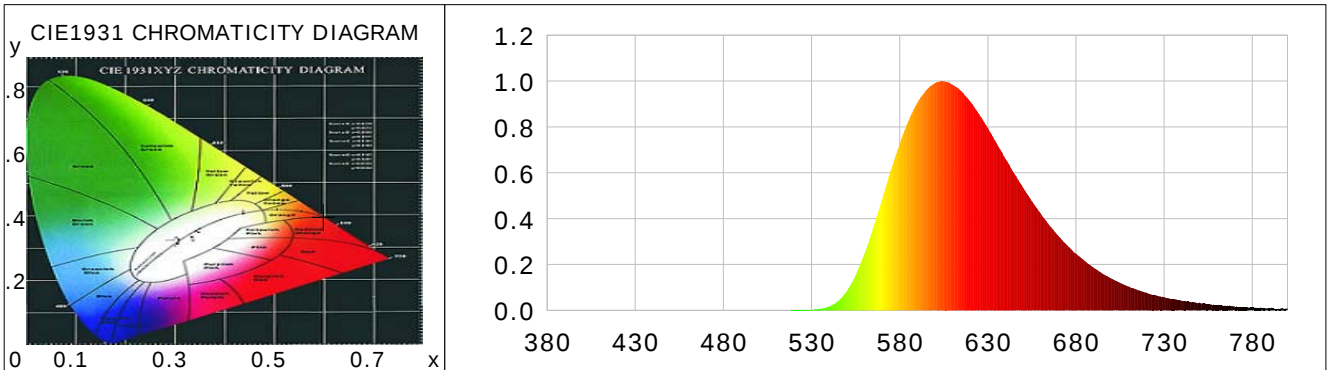
Product Information

Product Category: LED-Röhre
Product Spec: LEDtube-UVL-530-145-T6-25W
Manufacturer: METOLIGHT
Buyer: 8885

Product Type: LED-Röhre-UVL
Product Number: 1
Submitted Unit: 101697

CIE Colorimetric Parameters

Chromaticity coordinates: $x=0.6001$ $y=0.3991$ $u(u')=0.3643$ $v=0.3634$ $v'=0.5451$
CCT: $T_c=1455K$ ($duv=0.00327$) Color Ratio: $R=0.399$ $G=0.601$ $B=0.000$
Peak Wavelength: 604.8nm Half Bandwidth: 82.3nm
Dominant Wavelength: 594.5nm Color Purity: 0.999
CRI: $R_a = 35.0$, $avgR(1\sim14) = 31.7$, $avgR(1\sim15) = 30.9$ TM30: $R_f = 16$, $R_g = 4$
GAI: $GAI_BB_8=0.7$, $GAI_BB_15=0.7$, $GAI_EES=0.1$
 $R1 = 24$ $R2 = 66$ $R3 = 69$ $R4 = 2$ $R5 = 17$ $R6 = 54$ $R7 = 48$ $R8 = 0$
 $R9 = 0$ $R10 = 42$ $R11 = 0$ $R12 = 13$ $R13 = 27$ $R14 = 81$ $R15 = 20$
Color Quality Scale: $Q_a = 0.1$, $Q_f = 0.2$, $Q_p = 0.0$, $Q_g = 1.0$
 $Q1 = 39$ $Q2 = 13$ $Q3 = 0$ $Q4 = 0$ $Q5 = 0$ $Q6 = 2$ $Q7 = 22$ $Q8 = 23$
 $Q9 = 0$ $Q10 = 0$ $Q11 = 0$ $Q12 = 0$ $Q13 = 0$ $Q14 = 0$ $Q15 = 3$



Photometric Parameters

Luminous Flux: 2448.8 lm Efficiency: 102.46 lm/W Radiant Power: 8.046 W
Total mains efficacy: 120.49 lm/W Energy Efficiency Class: E (EU 2019/2015)
Pupil Flux: 894.44 Plm Pupil Lumens Per Watt: 37.42 Plm/W Pupil Factor (Kp): 0.365
Cirtopic Flux: 546.12 lm

Electric Parameters

Voltage: 230.70V Current: 0.1080A Power: 23.90W
Power Factor: 0.9580 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: 52204 (2471) CCD Integration Time: 107.27 ms

Condition: Tx:20.9'C, Ti:0.0'C, R.H.:60%
Test Lab:
Operator: CRE

Test Device: Lisun LMS-9000B
Test Time: 2021-02-22 11:28:24
Inspector:

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WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)
380	0.0003	0.0270	525	0.0025	0.2230	670	0.3252	29.0075
385	0.0001	0.0067	530	0.0030	0.2720	675	0.2838	25.3108
390	0.0003	0.0262	535	0.0068	0.6084	680	0.2477	22.0947
395	0.0001	0.0115	540	0.0174	1.5484	685	0.2144	19.1260
400	0.0001	0.0052	545	0.0400	3.5666	690	0.1858	16.5738
405	0.0002	0.0154	550	0.0832	7.4230	695	0.1598	14.2504
410	0.0002	0.0159	555	0.1525	13.6035	700	0.1395	12.4432
415	0.0003	0.0306	560	0.2463	21.9680	705	0.1199	10.6906
420	0.0001	0.0082	565	0.3607	32.1686	710	0.1037	9.2495
425	0.0002	0.0169	570	0.4837	43.1465	715	0.0886	7.9034
430	0.0001	0.0056	575	0.6114	54.5341	720	0.0772	6.8840
435	0.0003	0.0246	580	0.7274	64.8773	725	0.0669	5.9688
440	0.0001	0.0133	585	0.8261	73.6840	730	0.0579	5.1625
445	0.0001	0.0085	590	0.9050	80.7193	735	0.0493	4.4005
450	0.0001	0.0122	595	0.9602	85.6418	740	0.0422	3.7664
455	0.0001	0.0094	600	0.9910	88.3929	745	0.0365	3.2582
460	0.0002	0.0214	605	1.0000	89.1922	750	0.0338	3.0172
465	0.0000	0.0017	610	0.9842	87.7861	755	0.0267	2.3828
470	0.0001	0.0052	615	0.9563	85.2913	760	0.0230	2.0553
475	0.0001	0.0132	620	0.9109	81.2411	765	0.0200	1.7878
480	0.0000	0.0024	625	0.8556	76.3155	770	0.0164	1.4667
485	0.0000	0.0004	630	0.7939	70.8111	775	0.0150	1.3372
490	0.0002	0.0153	635	0.7275	64.8910	780	0.0129	1.1481
495	0.0002	0.0219	640	0.6603	58.8893	785	0.0123	1.0933
500	0.0003	0.0273	645	0.5964	53.1911	790	0.0091	0.8118
505	0.0002	0.0202	650	0.5346	47.6845	795	0.0077	0.6843
510	0.0001	0.0106	655	0.4756	42.4171	800	0.0095	0.8433
515	0.0008	0.0717	660	0.4219	37.6315			
520	0.0008	0.0673	665	0.3698	32.9843			

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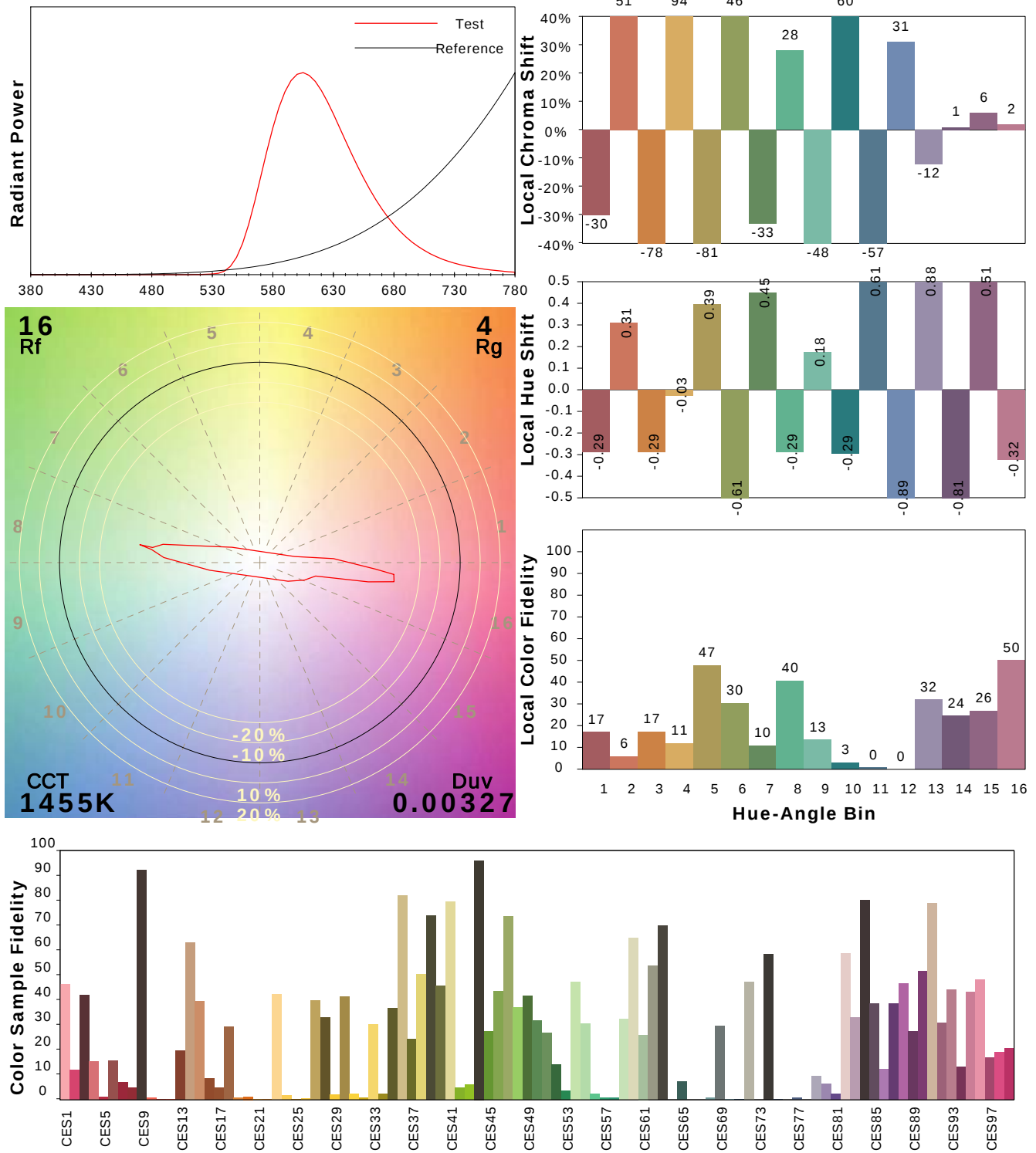
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IES TM-30-18 Color Rendition Report

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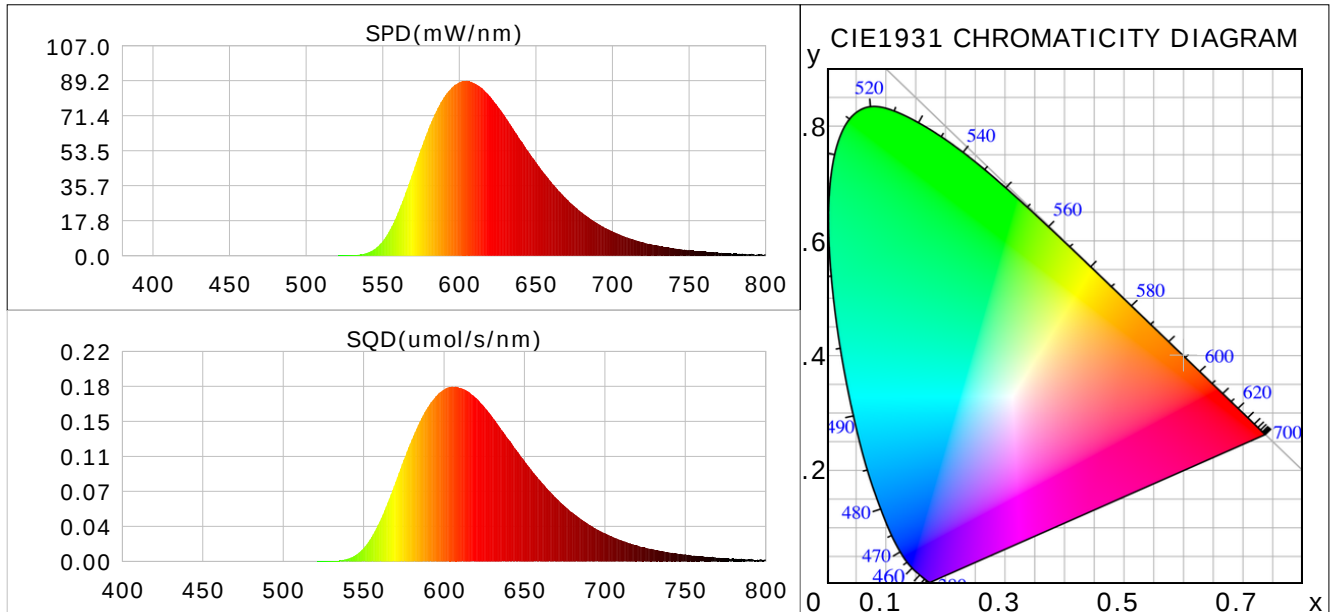
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Plant optical param data

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 Dominant Wavelength: 594.5nm Color Purity: 0.999
 CRI: Ra= 35.0



Plant Optical Param

$\mu_v(\text{lm})$: 2448.80	$Q_v(\text{lm.s})$: 2448.80
$\mu_e, \dot{E}(\text{W/nm})$: 8.05	$Q_e(\text{J})$: 8.05
$\mu_e(\text{W})$: 7.67	$\mu_{fr}(\text{W})$: 0.40
$\dot{C}_e$: 0.32	$\dot{C}_{fr}$: 0.02
$PPE(\mu\text{mol/s/w})$: 1.66	K_{fr} : 0.10
E_{rb_Ratio} : 3906.08	$PPF(\mu\text{mol/s})$: 39.56
$PF_{uv}(360-400)(\mu\text{mol/s})$: 0.00	$PPF(400-500)(\mu\text{mol/s})$: 0.00
$PPF(500-600)(\mu\text{mol/s})$: 13.05	$PPF(600-700)(\mu\text{mol/s})$: 26.50
$PF_{fr}(700-800)(\mu\text{mol/s})$: 2.37	$PPF.t(\mu\text{mol})$: 39.56
$\mu_{ch-A.t}(\text{J})$: 0.67	$\mu_{ch-A}(\text{W})$: 0.67
$\mu_{ch-B.t}(\text{J})$: 0.23	$\mu_{ch-B}(\text{W})$: 0.23
$\mu_{b.t}(\text{J})$: 0.00	$\mu_b(\text{W})$: 0.00
$\mu_{y.t}(\text{J})$: 2.68	$\mu_y(\text{W})$: 2.68
$\mu_{r.t}(\text{J})$: 5.08	$\mu_r(\text{W})$: 5.08

Electric Parameters

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Power Factor: 0.9580	Frequency: 49.99Hz	

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