

Lightsource Test Report

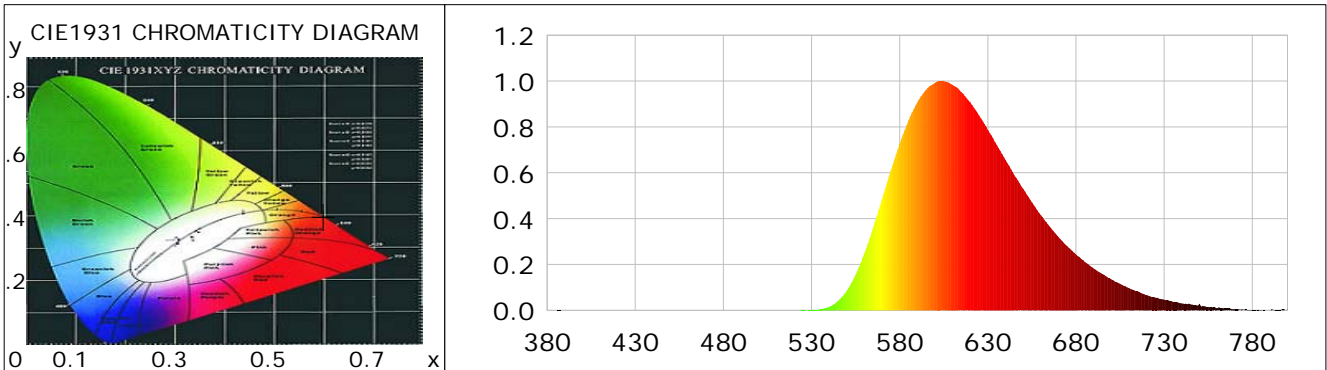
Product Information

Product Category: LED-Röhre
 Product Spec: LEDtube-UVL-530-055-T6-10W-
 Manufacturer: METOLIGHT
 Buyer: 8885

Product Type: LED-Röhre-UVL
 Product Number: 1
 Submitted Unit: 101695

CIE Colorimetric Parameters

Chromaticity coordinates: $x=0.5998$ $y=0.3993$ $u(u')=0.3639$ $v=0.3634$ $v'=0.5452$
 CCT: $T_c=1457K$ ($duv=0.00329$) Color Ratio: $R=0.398$ $G=0.602$ $B=0.000$
 Peak Wavelength: 602.3nm Half Bandwidth: 82.0nm
 Dominant Wavelength: 594.5nm Color Purity: 0.998
 CRI: $R_a=34.8$, $avgR(1\sim14)=31.5$, $avgR(1\sim15)=30.7$ TM30: $R_f=17$, $R_g=5$
 GAI: $GAI_BB_8=0.9$, $GAI_BB_15=0.9$, $GAI_EES=0.1$
 R1 =24 R2 =66 R3 =69 R4 =1 R5 =16 R6 =54 R7 =48 R8 =0
 R9 =0 R10=42 R11=0 R12=13 R13=27 R14=81 R15=20
 Color Quality Scale: $Q_a=0.1$, $Q_f=0.2$, $Q_p=0.0$, $Q_g=1.3$
 Q1 =39 Q2 =14 Q3 =0 Q4 =0 Q5 =0 Q6 =2 Q7 =22 Q8 =24
 Q9 =0 Q10=0 Q11=0 Q12=0 Q13=0 Q14=0 Q15=3



Photometric Parameters

Luminous Flux: 1192.9 lm Efficiency: 93.86 lm/W Radiant Power: 3.872 W
 Total mains efficacy: 110.37 lm/W Energy Efficiency Class: E (EU 2019/2015)
 Pupil Flux: 435.30 Plm Pupil Lumens Per Watt: 34.25 Plm/W Pupil Factor (Kp): 0.365
 Circopic Flux: 264.81 lm

Electric Parameters

Voltage: 230.80V Current: 0.0590A Power: 12.71W
 Power Factor: 0.9300 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: 44998 (2488) CCD Integration Time: 164.98 ms

Condition: Tx:20.8'C, Ti:0.0'C, R.H.:60%
 Test Lab:
 Operator: CRE

Test Device: Lisun LMS-9000B
 Test Time: 2021-02-22 11:12:59
 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	0.0289	525	0.0019	0.0826	670	0.3210	13.9450
385	0.0000	0.0002	530	0.0014	0.0612	675	0.2805	12.1881
390	0.0002	0.0080	535	0.0052	0.2275	680	0.2442	10.6089
395	0.0001	0.0031	540	0.0150	0.6518	685	0.2108	9.1586
400	0.0003	0.0142	545	0.0399	1.7339	690	0.1827	7.9395
405	0.0001	0.0037	550	0.0856	3.7172	695	0.1584	6.8803
410	0.0001	0.0053	555	0.1550	6.7361	700	0.1348	5.8562
415	0.0002	0.0078	560	0.2499	10.8563	705	0.1154	5.0148
420	0.0004	0.0169	565	0.3629	15.7662	710	0.0971	4.2167
425	0.0001	0.0063	570	0.4861	21.1167	715	0.0826	3.5905
430	0.0001	0.0030	575	0.6109	26.5392	720	0.0663	2.8815
435	0.0002	0.0108	580	0.7261	31.5475	725	0.0563	2.4441
440	0.0004	0.0192	585	0.8282	35.9811	730	0.0473	2.0534
445	0.0002	0.0107	590	0.9070	39.4062	735	0.0371	1.6098
450	0.0002	0.0098	595	0.9623	41.8052	740	0.0307	1.3326
455	0.0002	0.0097	600	0.9921	43.1017	745	0.0259	1.1231
460	0.0003	0.0121	605	0.9996	43.4295	750	0.0285	1.2395
465	0.0000	0.0008	610	0.9830	42.7064	755	0.0153	0.6643
470	0.0001	0.0061	615	0.9520	41.3599	760	0.0098	0.4239
475	0.0002	0.0077	620	0.9077	39.4366	765	0.0090	0.3895
480	0.0001	0.0032	625	0.8497	36.9155	770	0.0057	0.2476
485	0.0000	0.0005	630	0.7865	34.1695	775	0.0034	0.1495
490	0.0001	0.0027	635	0.7213	31.3383	780	0.0027	0.1179
495	0.0001	0.0052	640	0.6557	28.4877	785	0.0031	0.1352
500	0.0002	0.0102	645	0.5898	25.6239	790	0.0010	0.0429
505	0.0004	0.0155	650	0.5299	23.0204	795	0.0008	0.0359
510	0.0001	0.0048	655	0.4711	20.4660	800	0.0047	0.2041
515	0.0005	0.0225	660	0.4158	18.0651			
520	0.0002	0.0108	665	0.3662	15.9101			

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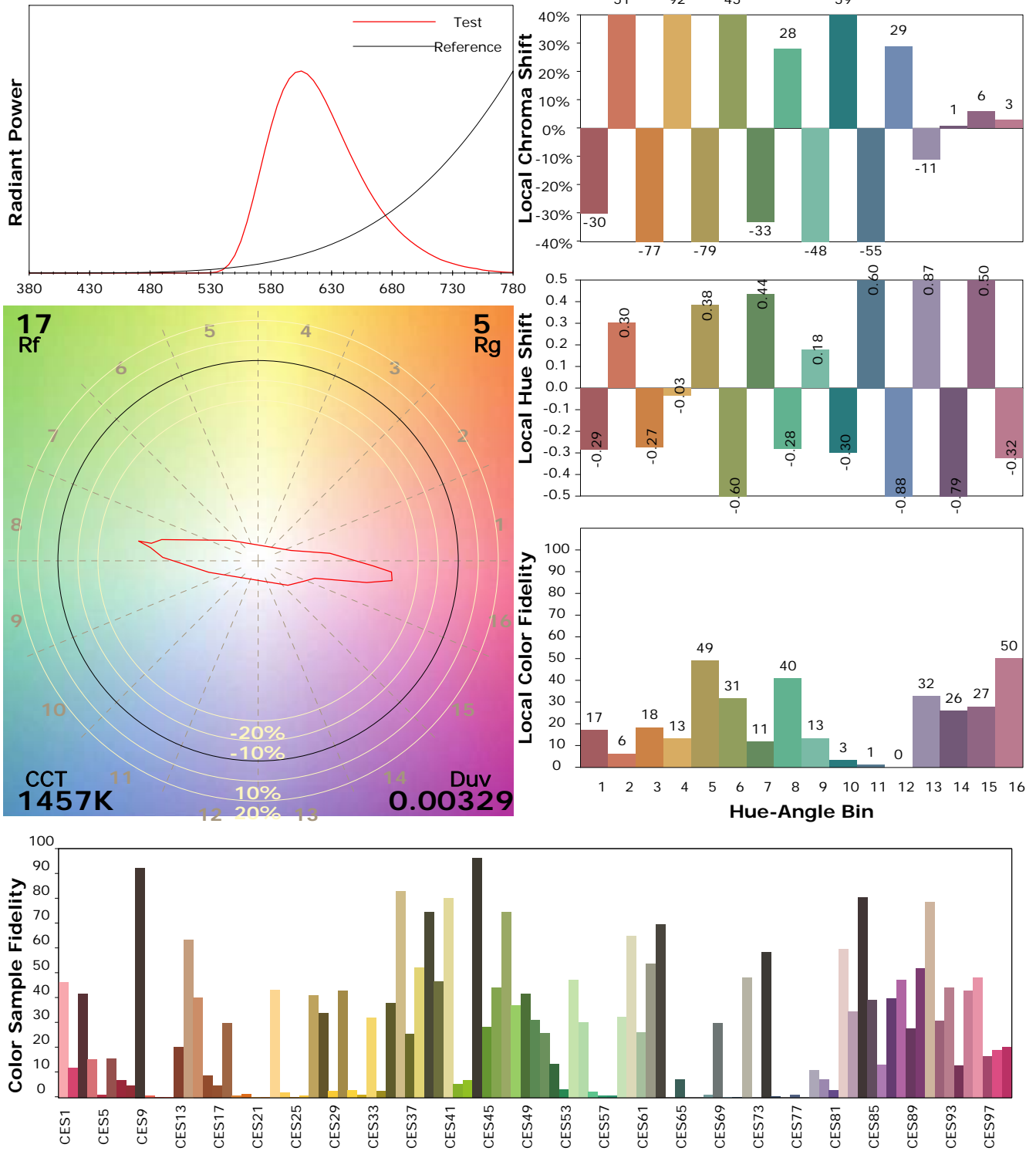
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IES TM-30-18 Color Rendition Report

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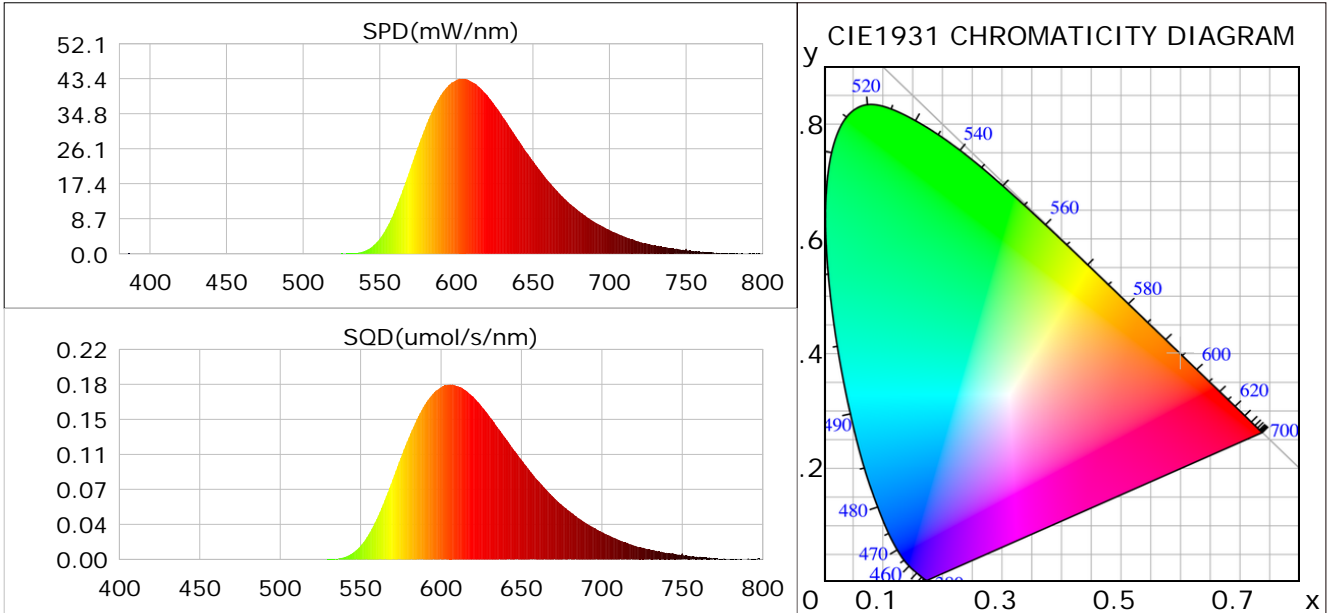
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Plant optical param data

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 Dominant Wavelength: 594.5nm Color Purity: 0.998
 CRI: $R_a=34.8$



Plant Optical Param

$ \mu_v(lm): 1192.90$	$Q_v(lm.s): 1192.90$
$ \mu_e, \dot{E}(W/nm): 3.87$	$Q_e(J): 3.87$
$ \mu_e(W): 3.72$	$ \mu_{fr}(W): 0.16$
$ \dot{C}_e: 0.29$	$ \dot{C}_{fr}: 0.01$
$PPE(umol/s/w): 1.51$	$K_{fr}: 0.07$
$Erb_Ratio: 2800.94$	$PPF(umol/s): 19.19$
$PF_{uv}(360-400)(umol/s): 0.00$	$PPF(400-500)(umol/s): 0.00$
$PPF(500-600)(umol/s): 6.37$	$PPF(600-700)(umol/s): 12.82$
$PPF_{fr}(700-800)(umol/s): 0.90$	$PPF.t(umol): 19.19$
$ \mu_{ch-A.t}(J): 0.33$	$ \mu_{ch-A}(W): 0.33$
$ \mu_{ch-B.t}(J): 0.11$	$ \mu_{ch-B}(W): 0.11$
$ \mu_b.t(J): 0.00$	$ \mu_b(W): 0.00$
$ \mu_y.t(J): 1.31$	$ \mu_y(W): 1.31$
$ \mu_r.t(J): 2.46$	$ \mu_r(W): 2.46$

Electric Parameters

Voltage: 230.80V	Current: 0.0590A	Power: 12.71W
Power Factor: 0.9300	Frequency: 49.99Hz	

Condition: $T_x: 20.8^\circ C$, $T_i: 0.0^\circ C$, R.H.: 60%
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