

Lightsource Test Report

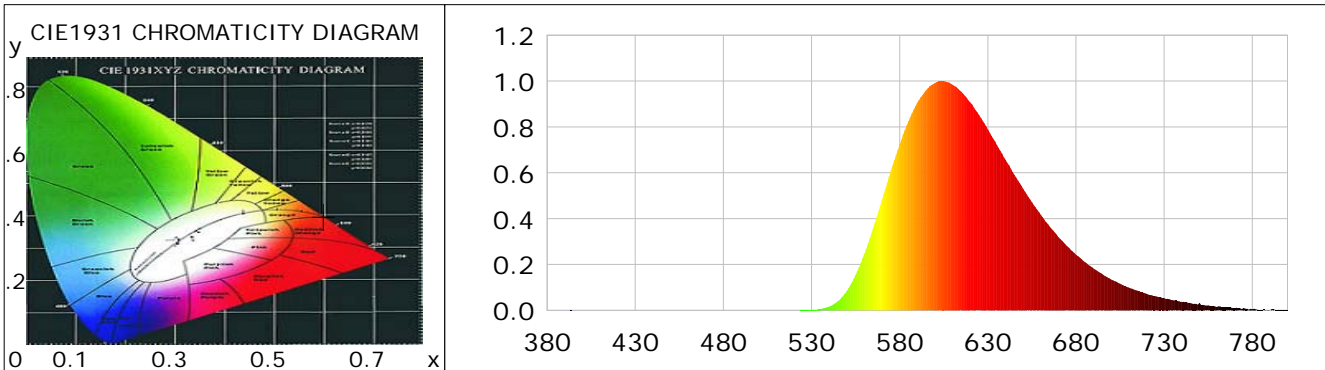
Product Information

Product Category: LED-Röhre
 Product Spec: LEDtube-UVL-530-115-T6-18W
 Manufacturer: METOLIGHT
 Buyer: 8885

Product Type: LED-Röhre-UVL
 Product Number: 1
 Submitted Unit: 101696

CIE Colorimetric Parameters

Chromaticity coordinates: $x=0.6000$ $y=0.3991$ $u(u')=0.3642$ $v=0.3634$ $v'=0.5451$
 CCT: $T_c=1455K$ ($duv=0.00327$) Color Ratio: $R=0.399$ $G=0.601$ $B=0.000$
 Peak Wavelength: 604.7nm Half Bandwidth: 81.8nm
 Dominant Wavelength: 594.5nm Color Purity: 0.999
 CRI: $R_a=34.9$, $avgR(1\sim14)=31.6$, $avgR(1\sim15)=30.8$ TM30: $R_f=17$, $R_g=4$
 GAI: $GAI_BB_8=0.8$, $GAI_BB_15=0.8$, $GAI_EES=0.1$
 R1 =24 R2 =66 R3 =69 R4 =2 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: $Q_a=0.1$, $Q_f=0.2$, $Q_p=0.0$, $Q_g=1.1$
 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: 1788.9 lm Efficiency: 103.82 lm/W Radiant Power: 5.837 W
 Total mains efficacy: 122.10 lm/W Energy Efficiency Class: E (EU 2019/2015)
 Pupil Flux: 652.45 Plm Pupil Lumens Per Watt: 37.87 Plm/W Pupil Factor (Kp): 0.365
 Circopic Flux: 397.16 lm

Electric Parameters

Voltage: 230.50V Current: 0.0800A Power: 17.23W
 Power Factor: 0.9270 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: 46281 (2468) CCD Integration Time: 126.21 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 11:18:00
 Inspector:

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WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)
380	0.0002	0.0123	525	0.0019	0.1264	670	0.3199	20.8785
385	0.0000	0.0022	530	0.0020	0.1280	675	0.2794	18.2403
390	0.0002	0.0103	535	0.0059	0.3831	680	0.2423	15.8146
395	0.0004	0.0238	540	0.0168	1.0934	685	0.2102	13.7187
400	0.0003	0.0174	545	0.0401	2.6149	690	0.1819	11.8722
405	0.0001	0.0043	550	0.0842	5.4941	695	0.1571	10.2558
410	0.0000	0.0026	555	0.1537	10.0314	700	0.1343	8.7661
415	0.0002	0.0099	560	0.2463	16.0785	705	0.1160	7.5728
420	0.0003	0.0190	565	0.3603	23.5212	710	0.0997	6.5075
425	0.0001	0.0093	570	0.4825	31.4950	715	0.0857	5.5957
430	0.0005	0.0300	575	0.6083	39.7061	720	0.0723	4.7224
435	0.0004	0.0253	580	0.7243	47.2802	725	0.0620	4.0500
440	0.0001	0.0082	585	0.8247	53.8298	730	0.0533	3.4778
445	0.0001	0.0045	590	0.9063	59.1561	735	0.0442	2.8865
450	0.0003	0.0174	595	0.9602	62.6758	740	0.0375	2.4472
455	0.0003	0.0195	600	0.9918	64.7403	745	0.0321	2.0955
460	0.0003	0.0218	605	1.0000	65.2750	750	0.0327	2.1371
465	0.0000	0.0020	610	0.9836	64.2070	755	0.0222	1.4513
470	0.0000	0.0031	615	0.9541	62.2773	760	0.0154	1.0064
475	0.0001	0.0068	620	0.9071	59.2108	765	0.0133	0.8704
480	0.0001	0.0061	625	0.8515	55.5809	770	0.0098	0.6405
485	0.0001	0.0049	630	0.7886	51.4763	775	0.0103	0.6728
490	0.0001	0.0055	635	0.7225	47.1612	780	0.0051	0.3324
495	0.0001	0.0057	640	0.6564	42.8464	785	0.0030	0.1946
500	0.0001	0.0085	645	0.5913	38.5972	790	0.0013	0.0856
505	0.0003	0.0166	650	0.5299	34.5906	795	0.0024	0.1591
510	0.0003	0.0166	655	0.4717	30.7912	800	0.0028	0.1834
515	0.0006	0.0363	660	0.4169	27.2163			
520	0.0001	0.0081	665	0.3659	23.8863			

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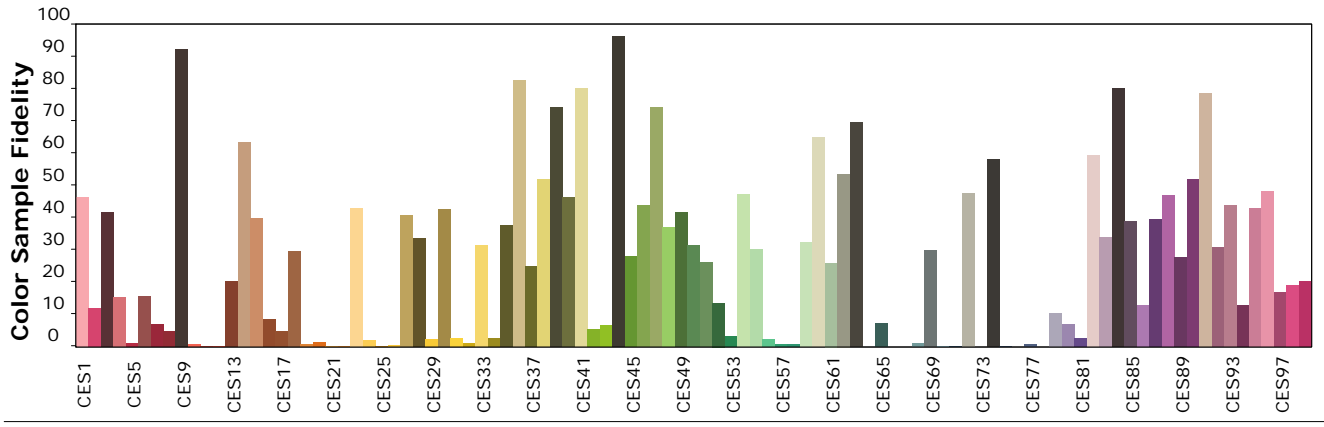
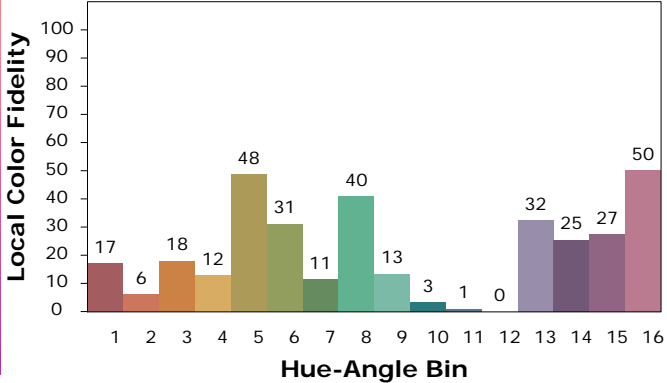
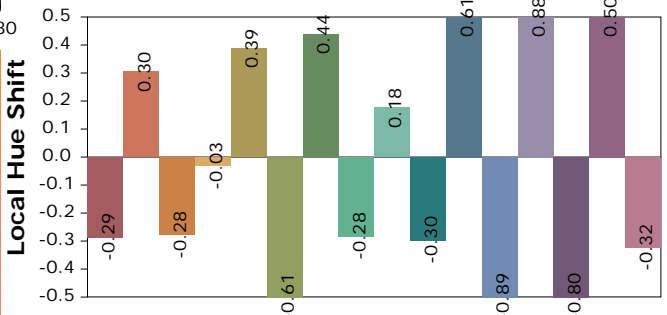
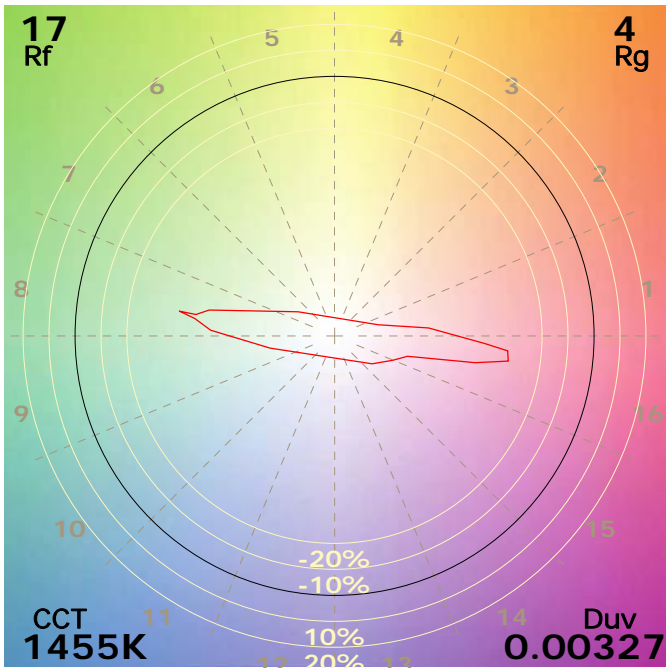
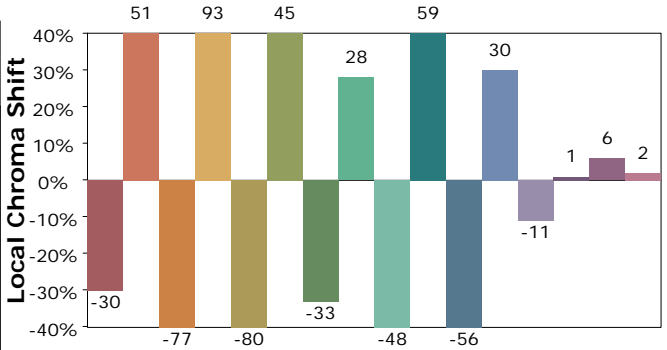
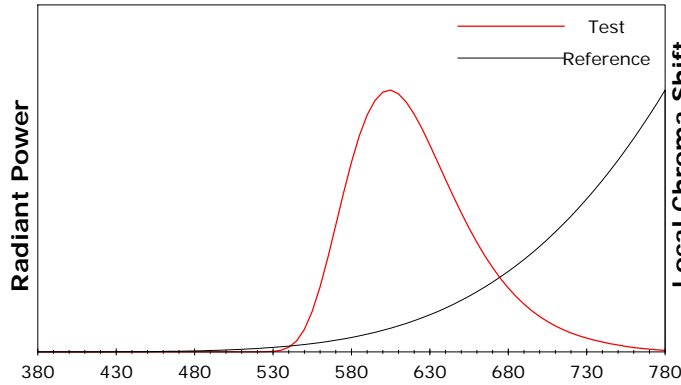
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IES TM-30-18 Color Rendition Report

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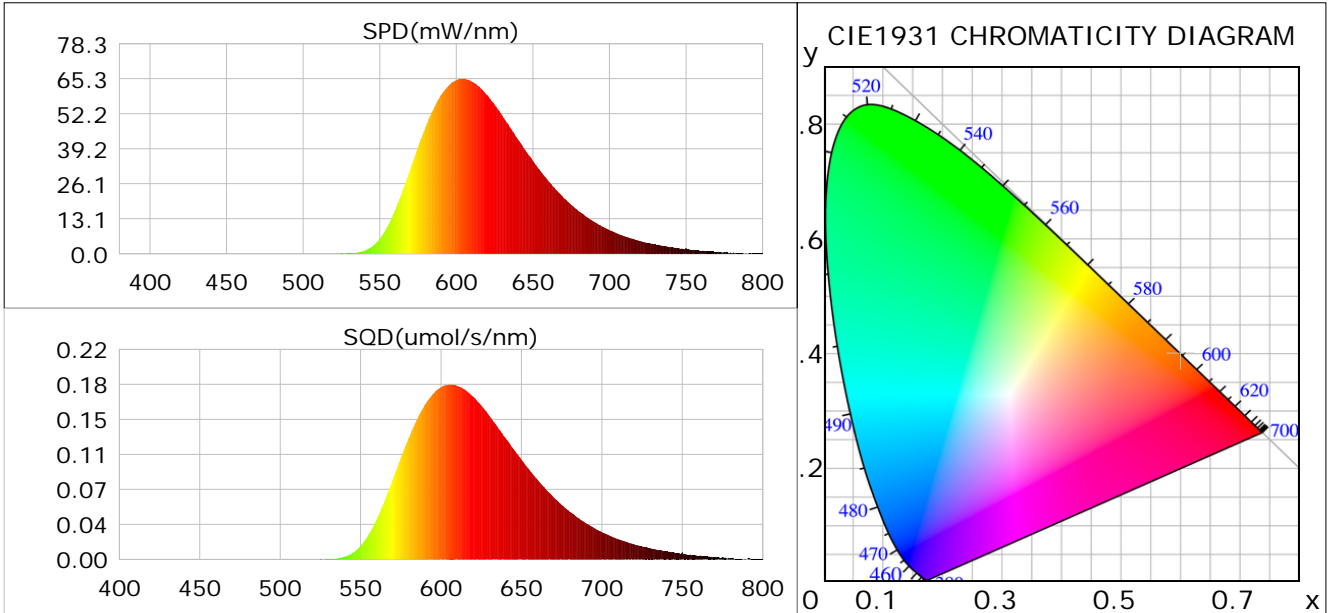
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Plant optical param data

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 CRI: $R_a=34.9$



Plant Optical Param

$\mu_v(\text{lm})$: 1788.90	$Q_v(\text{lm}\cdot\text{s})$: 1788.90
$\mu_e, \dot{E}(\text{W}/\text{nm})$: 5.84	$Q_e(\text{J})$: 5.84
$\mu_e(\text{W})$: 5.59	$\mu_{fr}(\text{W})$: 0.26
ζ_e : 0.32	ζ_{fr} : 0.02
PPE(umol/s/w): 1.67	Kfr: 0.09
Erb_Ratio: 3227.31	PPF(umol/s): 28.82
PFuv(360-400)(umol/s): 0.00	PPF(400-500)(umol/s): 0.00
PPF(500-600)(umol/s): 9.54	PPF(600-700)(umol/s): 19.27
PPfr(700-800)(umol/s): 1.52	PPF.t(umol): 28.82
$\mu_{ch-A.t}(\text{J})$: 0.49	$\mu_{ch-A}(\text{W})$: 0.49
$\mu_{ch-B.t}(\text{J})$: 0.17	$\mu_{ch-B}(\text{W})$: 0.17
$\mu_b.t(\text{J})$: 0.00	$\mu_b(\text{W})$: 0.00
$\mu_y.t(\text{J})$: 1.96	$\mu_y(\text{W})$: 1.96
$\mu_r.t(\text{J})$: 3.69	$\mu_r(\text{W})$: 3.69

Electric Parameters

Voltage: 230.50V	Current: 0.0800A	Power: 17.23W
Power Factor: 0.9270	Frequency: 49.99Hz	

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