

Lightsource Test Report

Product Information

Product Category: Ledtube
 Product Spec: Ledtube-UVL-520-120-T8-18W
 Manufacturer: METOLIGHT
 Buyer: 9034

Product Type: Ledtube-UVL
 Product Number: 1
 Submitted Unit: 102159

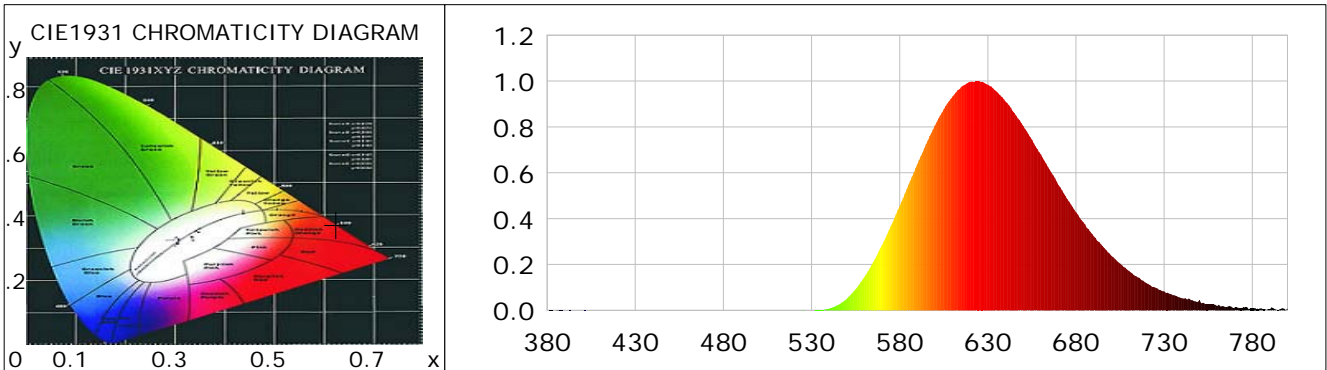
CIE Colorimetric Parameters

Chromaticity coordinates: $x=0.6254$ $y=0.3737$ $u(u')=0.4013$ $v=0.3597$ $v'=0.5395$
 CCT: $T_c=1226K$ ($duv=0.00143$) Color Ratio: $R=0.518$ $G=0.482$ $B=0.000$
 Peak Wavelength: 624.6nm Half Bandwidth: 91.5nm
 Dominant Wavelength: 599.7nm Color Purity: 0.999
 CRI: $R_a=47.0$, $avgR(1\sim14)=44.0$, $avgR(1\sim15)=43.4$ TM30: $R_f=35$, $R_g=13$
 GAI: $GAI_BB_8=4.5$, $GAI_BB_15=4.1$, $GAI_EES=0.1$

R1 =40	R2 =75	R3 =73	R4 =19	R5 =34	R6 =72	R7 =54	R8 =10
R9 =0	R10=59	R11=0	R12=52	R13=42	R14=86	R15=35	

Color Quality Scale: $Q_a=0.1$, $Q_f=0.6$, $Q_p=0.0$, $Q_g=2.8$

Q1 =26	Q2 =19	Q3 =0	Q4 =0	Q5 =0	Q6 =1	Q7 =13	Q8 =29
Q9 =3	Q10=0	Q11=0	Q12=0	Q13=0	Q14=0	Q15=1	



Photometric Parameters

Luminous Flux: 386.31 lm	Efficiency: 20.52 lm/W	Radiant Power: 1.676 W
Total mains efficacy: 24.13 lm/W	Energy Efficiency Class: G (EU 2019/2015)	
Pupil Flux: 118.64 Plm	Pupil Lumens Per Watt: 6.30 Plm/W	Pupil Factor (Kp): 0.307
Cirtpopic Flux: 66.18 lm		

Electric Parameters

Voltage: 230.20V	Current: 0.0860A	Power: 18.83W
Power Factor: 0.9470	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: 46024 (2299)	CCD Integration Time: 549.23 ms

Condition: $T_x=16.3^{\circ}C$, $T_i=0.0^{\circ}C$, R.H.:60%
 Test Lab:
 Operator: CRE

Test Device: Lisun LMS-9000B
 Test Time: 2021-01-22 09:34:46
 Inspector:

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WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)
380	0.0006	0.0096	525	0.0028	0.0480	670	0.5479	9.4198
385	0.0010	0.0171	530	0.0004	0.0070	675	0.4856	8.3494
390	0.0006	0.0106	535	0.0021	0.0366	680	0.4280	7.3591
395	0.0003	0.0043	540	0.0080	0.1370	685	0.3751	6.4490
400	0.0005	0.0086	545	0.0233	0.4005	690	0.3232	5.5575
405	0.0002	0.0029	550	0.0508	0.8741	695	0.2805	4.8233
410	0.0002	0.0041	555	0.0918	1.5791	700	0.2383	4.0964
415	0.0006	0.0108	560	0.1454	2.4995	705	0.2040	3.5081
420	0.0004	0.0077	565	0.2114	3.6351	710	0.1722	2.9607
425	0.0004	0.0068	570	0.2855	4.9089	715	0.1441	2.4776
430	0.0005	0.0079	575	0.3686	6.3376	720	0.1184	2.0364
435	0.0007	0.0123	580	0.4553	7.8288	725	0.0996	1.7126
440	0.0006	0.0102	585	0.5479	9.4196	730	0.0828	1.4242
445	0.0001	0.0011	590	0.6378	10.9663	735	0.0664	1.1414
450	0.0004	0.0070	595	0.7250	12.4663	740	0.0535	0.9194
455	0.0004	0.0076	600	0.8069	13.8732	745	0.0455	0.7822
460	0.0001	0.0022	605	0.8764	15.0685	750	0.0449	0.7712
465	0.0000	0.0004	610	0.9320	16.0238	755	0.0272	0.4672
470	0.0001	0.0024	615	0.9750	16.7638	760	0.0194	0.3342
475	0.0004	0.0065	620	0.9975	17.1508	765	0.0144	0.2476
480	0.0001	0.0014	625	1.0000	17.1937	770	0.0126	0.2160
485	0.0000	0.0004	630	0.9840	16.9194	775	0.0141	0.2417
490	0.0002	0.0037	635	0.9542	16.4068	780	0.0095	0.1628
495	0.0003	0.0047	640	0.9106	15.6567	785	0.0084	0.1441
500	0.0003	0.0053	645	0.8613	14.8083	790	0.0050	0.0853
505	0.0003	0.0056	650	0.8044	13.8310	795	0.0032	0.0554
510	0.0001	0.0014	655	0.7445	12.8005	800	0.0088	0.1519
515	0.0006	0.0110	660	0.6809	11.7067			
520	0.0001	0.0009	665	0.6137	10.5512			

Condition: Tx:16.3'C, Ti:0.0'C, R.H.:60%
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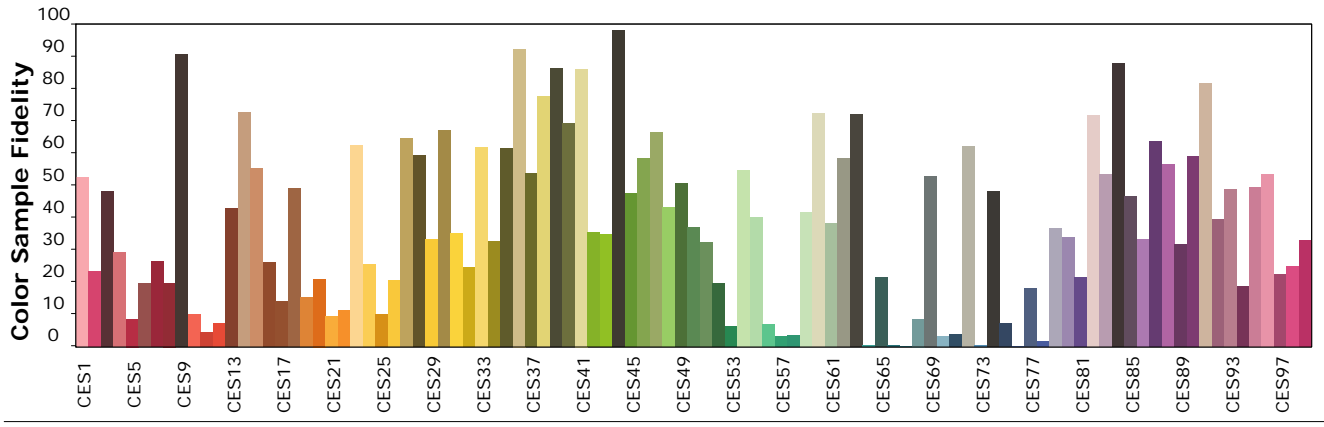
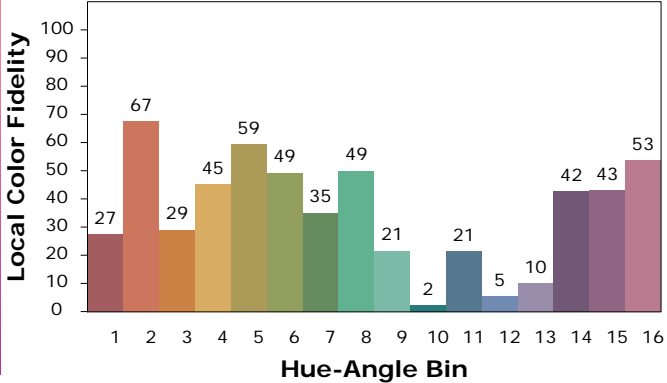
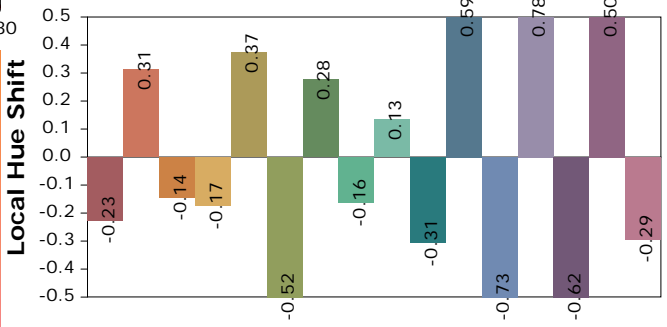
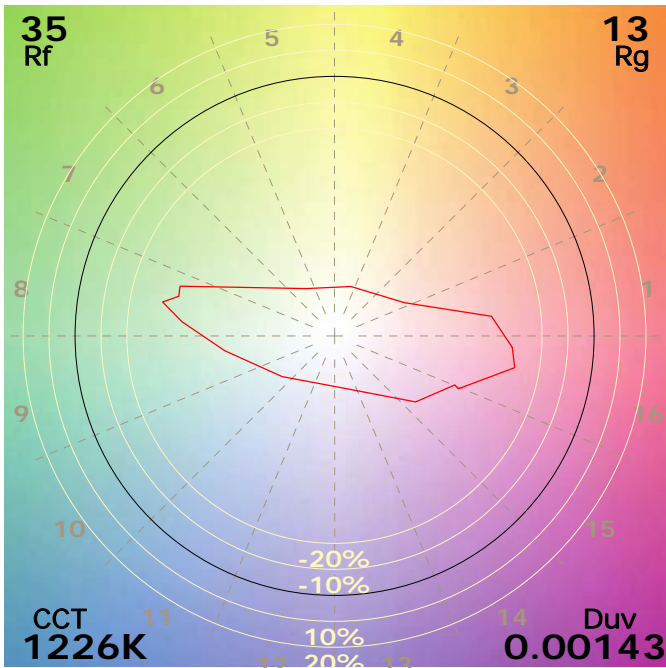
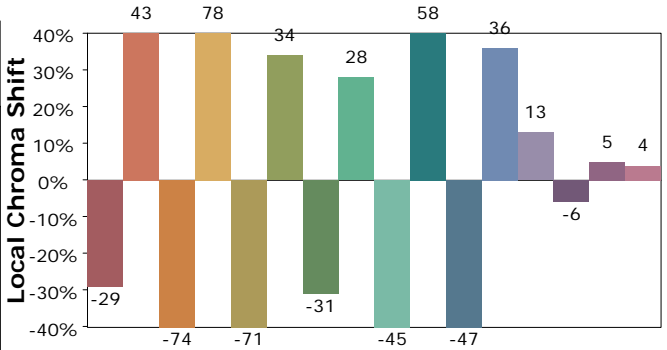
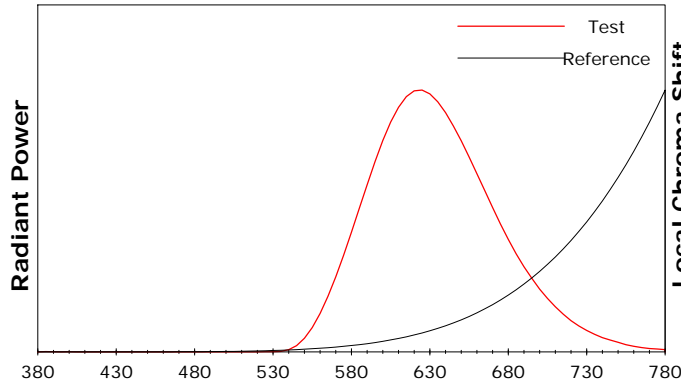
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IES TM-30-18 Color Rendition Report

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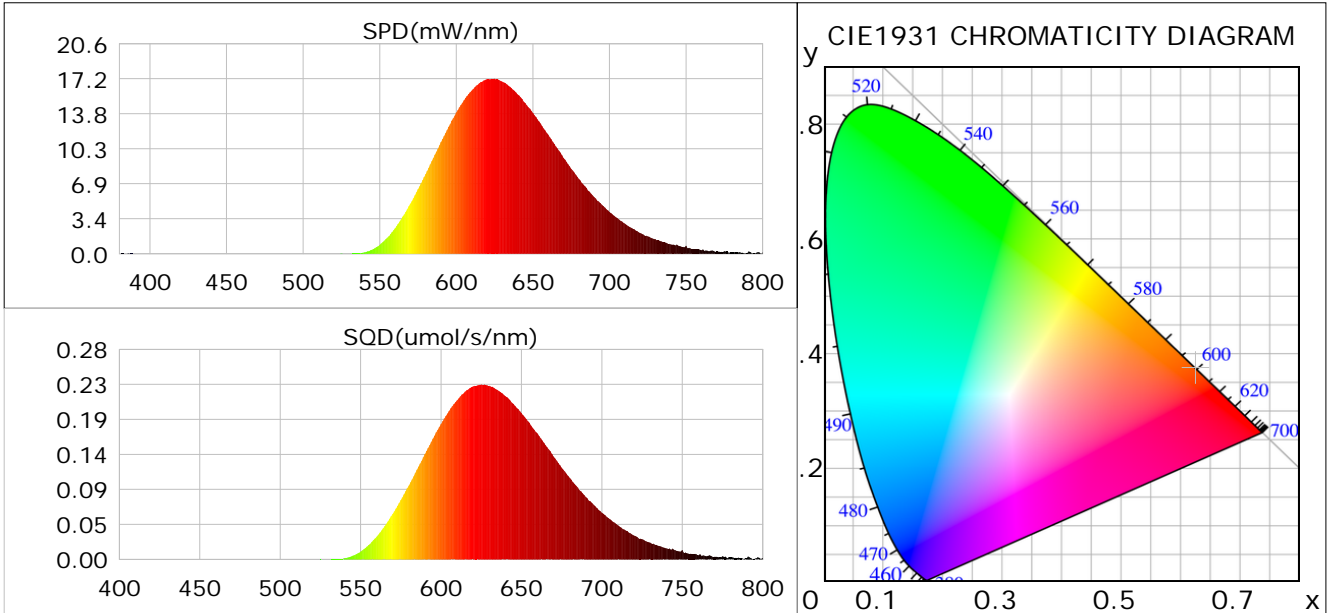
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Plant optical param data

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 Dominant Wavelength: 599.7nm Color Purity: 0.999
 CRI: $R_a=47.0$



Plant Optical Param

$ \mu_v(lm)$: 386.31	$Q_v(lm.s)$: 386.31
$ \mu_e, \dot{E}(W/nm)$: 1.68	$Q_e(J)$: 1.68
$ \mu_e(W)$: 1.57	$ \mu_{fr}(W)$: 0.11
$ \zeta_e$: 0.08	$ \zeta_{fr}$: 0.01
PPE(umol/s/w): 0.44	Kfr: 0.03
Erb_Ratio: 2093.59	PPF(umol/s): 8.25
PFuv(360-400)(umol/s): 0.00	PPF(400-500)(umol/s): 0.00
PPF(500-600)(umol/s): 1.69	PPF(600-700)(umol/s): 6.56
PPfr(700-800)(umol/s): 0.64	PPF.t(umol): 8.25
$ \mu_{ch-A.t}(J)$: 0.16	$ \mu_{ch-A}(W)$: 0.16
$ \mu_{ch-B.t}(J)$: 0.05	$ \mu_{ch-B}(W)$: 0.05
$ \mu_b.t(J)$: 0.00	$ \mu_b(W)$: 0.00
$ \mu_y.t(J)$: 0.35	$ \mu_y(W)$: 0.35
$ \mu_r.t(J)$: 1.24	$ \mu_r(W)$: 1.24

Electric Parameters

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