

Lightsource Test Report

Product Information

Product Category: LED-Röhre
 Product Spec: LEDtube-060-8Meat-RBW-10WM
 Manufacturer: METOLIGHT
 Buyer: 7116

Product Type: LEDtube-060-8Meat-RBW
 Product Number: 1
 Submitted Unit: 104306

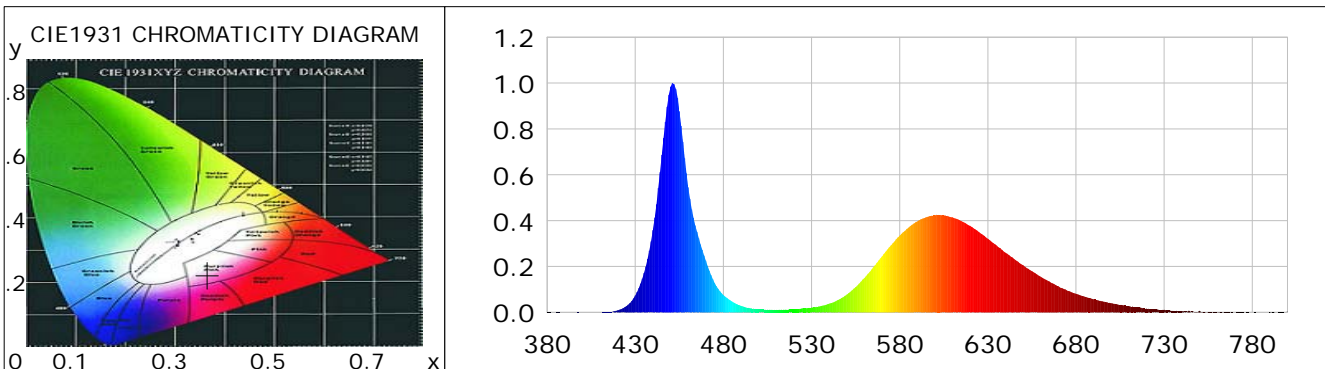
CIE Colorimetric Parameters

Chromaticity coordinates: $x=0.3653$ $y=0.2220$ $u(u')=0.2962$ $v=0.2700$ $v'=0.4050$
 CCT: $T_c=2357K$ ($duv=-0.08723$) Color Ratio: $R=0.327$ $G=0.615$ $B=0.058$
 Peak Wavelength: 451.3nm Half Bandwidth: 18.5nm
 Dominant Wavelength: 0.0nm Color Purity: 0.000
 CRI: $R_a=38.6$, $avgR(1\sim14)=35.2$, $avgR(1\sim15)=38.6$ TM30: $R_f=39$, $R_g=97$
 GAI: $GAI_BB_8=268.8$, $GAI_BB_15=218.6$, $GAI_EES=100.1$

R1 =73	R2 =71	R3 =17	R4 =8	R5 =79	R6 =44	R7 =11	R8 =6
R9 =0	R10=39	R11=0	R12=0	R13=88	R14=57	R15=86	

Color Quality Scale: $Q_a=31.7$, $Q_f=9.1$, $Q_p=81.1$, $Q_g=102.6$

Q1 =63	Q2 =79	Q3 =16	Q4 =3	Q5 =19	Q6 =35	Q7 =46	Q8 =56
Q9 =92	Q10=49	Q11=22	Q12=8	Q13=8	Q14=46	Q15=58	



Photometric Parameters

Luminous Flux: 806.94 lm	Efficiency: 72.50 lm/W	Radiant Power: 3.563 W
Total mains efficacy: 85.26 lm/W	Energy Efficiency Class: F (EU 2019/2015)	
Pupil Flux: 1256.52 Plm	Pupil Lumens Per Watt: 112.89 Plm/W	Pupil Factor (Kp): 1.557
Cirtopic Flux: 3158.95 lm		

Electric Parameters

Voltage: 230.90V	Current: 0.0510A	Power: 11.13W
Power Factor: 0.9380	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: 49552 (2365)	CCD Integration Time: 130.01 ms

Condition: Tx:19.6'C, Ti:0.0'C, R.H.:60%
 Test Lab:
 Operator: CRE

Test Device: Lisun LMS-9000B
 Test Time: 2021-01-06 10:22:21
 Inspector:

Lightsource Test Report

Product Information

Product Category: LED-Röhre

Product Spec: LEDtube-060-8Meat-RBW-10WM

Manufacturer: METOLIGHT

Buyer: 7116

Product Type: LEDtube-060-8Meat-RBW

Product Number: 1

Submitted Unit: 104306

WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)
380	0.0009	0.0516	525	0.0177	1.0327	670	0.1140	6.6394
385	0.0007	0.0413	530	0.0205	1.1947	675	0.0953	5.5475
390	0.0003	0.0153	535	0.0269	1.5650	680	0.0814	4.7413
395	0.0002	0.0145	540	0.0382	2.2220	685	0.0679	3.9551
400	0.0004	0.0250	545	0.0540	3.1456	690	0.0571	3.3270
405	0.0001	0.0052	550	0.0778	4.5276	695	0.0475	2.7646
410	0.0005	0.0265	555	0.1101	6.4112	700	0.0398	2.3175
415	0.0021	0.1212	560	0.1497	8.7161	705	0.0325	1.8935
420	0.0089	0.5189	565	0.1969	11.4651	710	0.0277	1.6131
425	0.0274	1.5942	570	0.2446	14.2448	715	0.0217	1.2615
430	0.0736	4.2882	575	0.2922	17.0164	720	0.0165	0.9584
435	0.1718	10.0033	580	0.3345	19.4800	725	0.0129	0.7492
440	0.3585	20.8758	585	0.3699	21.5396	730	0.0117	0.6825
445	0.6872	40.0155	590	0.3972	23.1295	735	0.0064	0.3703
450	0.9839	57.2951	595	0.4151	24.1703	740	0.0057	0.3313
455	0.8773	51.0882	600	0.4231	24.6392	745	0.0040	0.2319
460	0.5458	31.7826	605	0.4233	24.6517	750	0.0066	0.3858
465	0.3512	20.4511	610	0.4146	24.1443	755	0.0025	0.1453
470	0.2260	13.1615	615	0.3985	23.2074	760	0.0009	0.0548
475	0.1283	7.4727	620	0.3772	21.9653	765	0.0011	0.0629
480	0.0758	4.4123	625	0.3497	20.3639	770	0.0005	0.0313
485	0.0469	2.7308	630	0.3206	18.6711	775	0.0012	0.0720
490	0.0286	1.6652	635	0.2911	16.9520	780	0.0003	0.0154
495	0.0184	1.0722	640	0.2603	15.1567	785	0.0006	0.0348
500	0.0139	0.8072	645	0.2320	13.5109	790	0.0017	0.0963
505	0.0118	0.6873	650	0.2055	11.9644	795	0.0008	0.0462
510	0.0108	0.6281	655	0.1798	10.4700	800	0.0043	0.2479
515	0.0120	0.7014	660	0.1551	9.0331			
520	0.0134	0.7794	665	0.1342	7.8173			

Condition: Tx: 19.6°C, Ti: 0.0°C, R.H.: 60%
 Test Lab:
 Operator: CRE

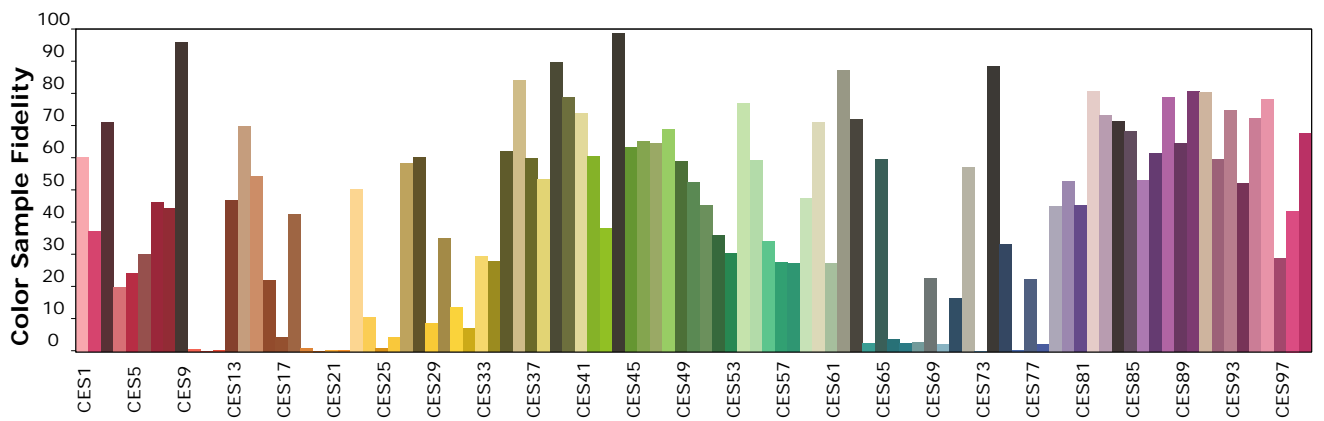
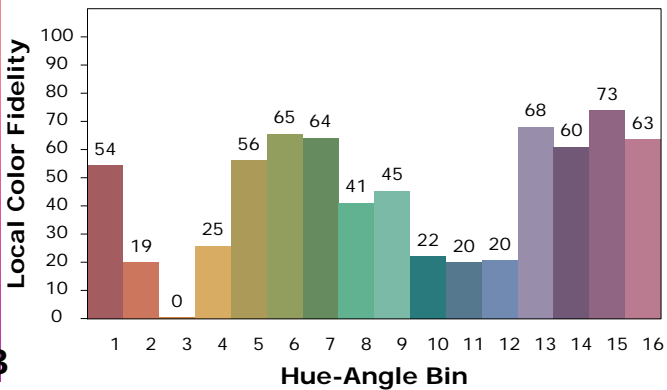
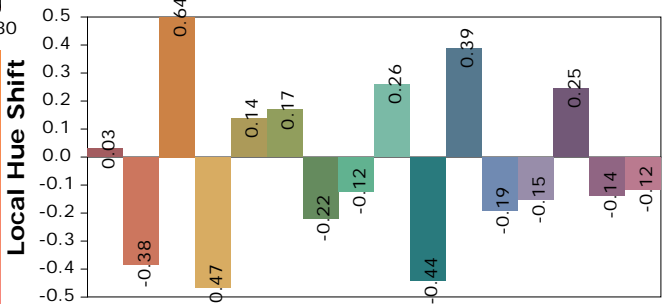
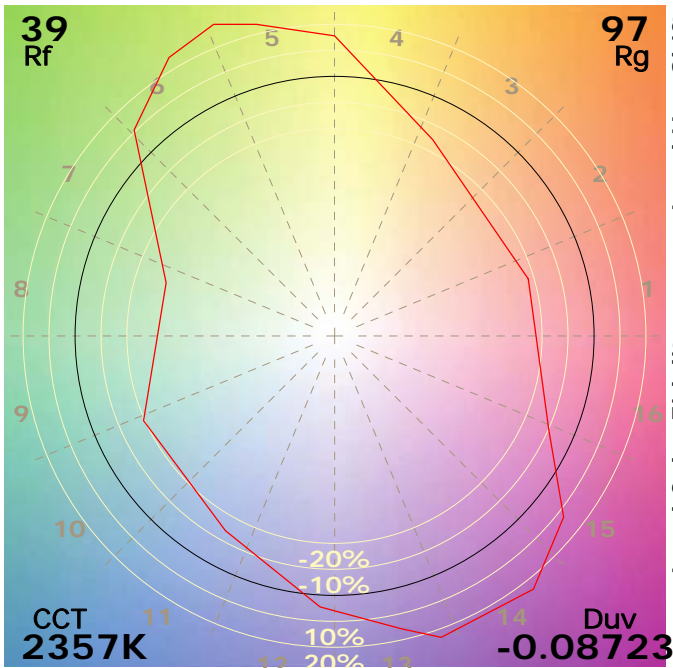
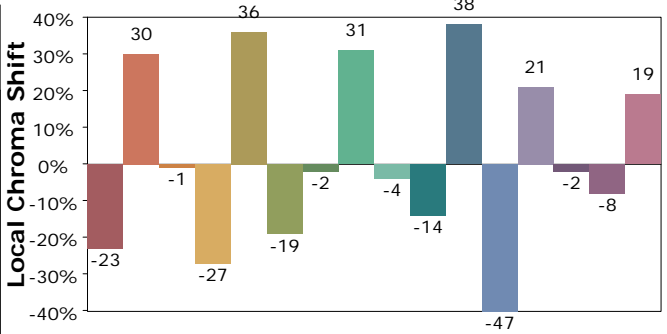
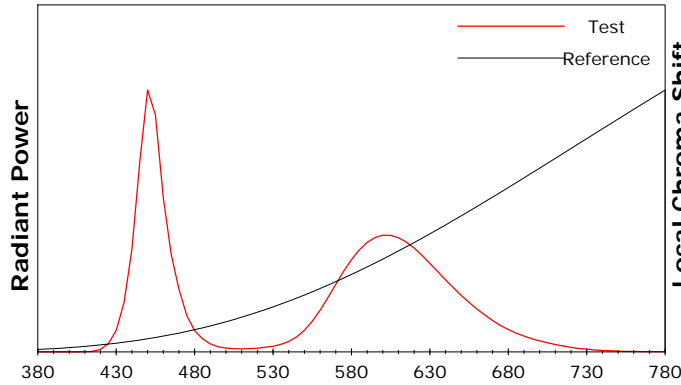
Test Device: Lisun LMS-9000B
 Test Time: 2021-01-06 10:22:21
 Inspector:

IES TM-30-18 Color Rendition Report

Product Information

Product Category: LED-Röhre
 Product Spec: LEDtube-060-8Meat-RBW-10WM
 Manufacturer: METOLIGHT
 Buyer: 7116

Product Type: LEDtube-060-8Meat-RBW
 Product Number: 1
 Submitted Unit: 104306



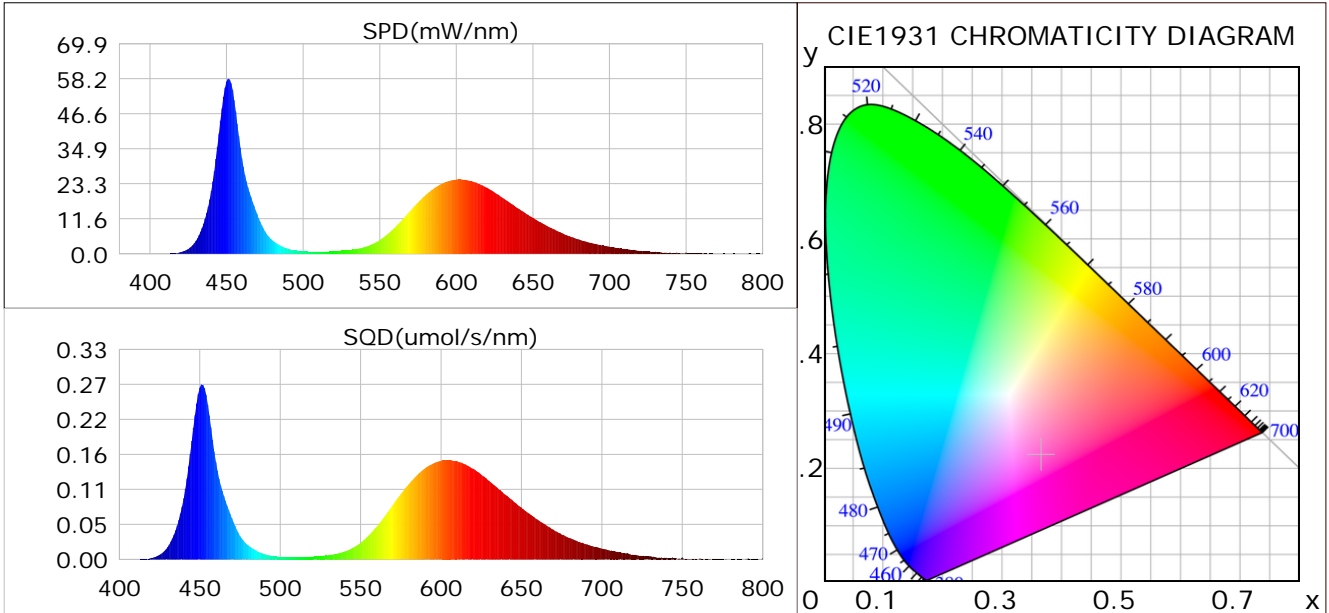
Condition: Tx: 19.6°C, Ti: 0.0°C, R.H.: 60%
 Test Lab:
 Operator: CRE

Test Device: Lisun LMS-9000B
 Test Time: 2021-01-06 10:22:21
 Inspector:

Plant optical param data

CIE Colorimetric Parameters

Chromaticity coordinates: $x=0.3653$ $y=0.2220$ $u(u')=0.2962$ $v=0.2700$ $v'=0.4050$
 CCT: $T_c=2357K$ ($duv=-0.08723$) Color Ratio: $R=0.327$ $G=0.615$ $B=0.058$
 Peak Wavelength: 451.3nm Half Bandwidth: 18.5nm
 Dominant Wavelength: 0.0nm Color Purity: 0.000
 CRI: $R_a=38.6$



Plant Optical Param

$ \mu_v(lm)$: 806.94	$Q_v(lm.s)$: 806.94
$ \mu_e, \dot{E}(W/nm)$: 3.56	$Q_e(J)$: 3.56
$ \mu_e(W)$: 3.51	$ \mu_{fr}(W)$: 0.05
$ \zeta_e$: 0.32	$ \zeta_{fr}$: 0.00
PPE(umol/s/w): 1.45	Kfr: 0.03
Erb_Ratio: 0.95	PPF(umol/s): 16.17
PFuv(360-400)(umol/s): 0.00	PPF(400-500)(umol/s): 5.10
PPF(500-600)(umol/s): 4.29	PPF(600-700)(umol/s): 6.78
PPfr(700-800)(umol/s): 0.30	PPF.t(umol): 16.17
$ \mu_{ch-A.t}(J)$: 0.39	$ \mu_{ch-A}(W)$: 0.39
$ \mu_{ch-B.t}(J)$: 0.26	$ \mu_{ch-B}(W)$: 0.26
$ \mu_b.t(J)$: 1.35	$ \mu_b(W)$: 1.35
$ \mu_y.t(J)$: 0.89	$ \mu_y(W)$: 0.89
$ \mu_r.t(J)$: 1.31	$ \mu_r(W)$: 1.31

Electric Parameters

Voltage: 230.90V	Current: 0.0510A	Power: 11.13W
Power Factor: 0.9380	Frequency: 49.99Hz	

Condition: Tx: 19.6°C, Ti: 0.0°C, R.H.: 60%
 Test Lab:
 Operator: CRE

Test Device: Lisun LMS-9000B
 Test Time: 2021-01-06 10:22:21
 Inspector: