

Lightsource Test Report

Product Information

Product Category: LED-lamp
 Product Spec: LED-SLG12-E40-40-180-DW
 Manufacturer: METOLIGHT
 Buyer: 3811

Product Type: LED-streetbulb
 Product Number: 3
 Submitted Unit: 100199

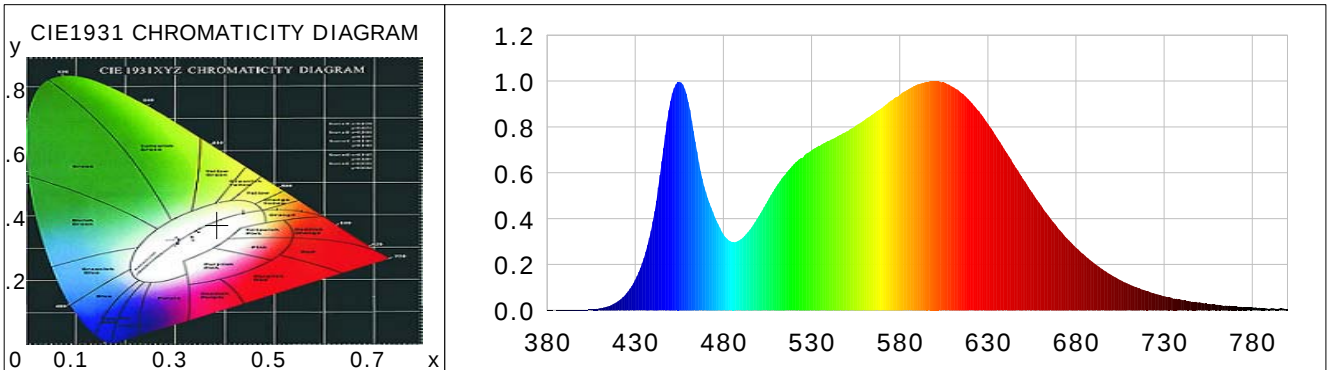
CIE Colorimetric Parameters

Chromaticity coordinates: $x=0.3846$ $y=0.3736$ $u(u')=0.2291$ $v=0.3339$ $v'=0.5008$
 CCT: $T_c=3863K$ ($duv=-0.00269$) Color Ratio: $R=0.194$ $G=0.769$ $B=0.037$
 Peak Wavelength: 599.8nm Half Bandwidth: 149.5nm
 Dominant Wavelength: 581.1nm Color Purity: 0.275
 CRI: $R_a=85.6$, $avgR(1\sim14)=80.1$, $avgR(1\sim15)=80.1$ TM30: $R_f=85$, $R_g=96$
 GAI: $GAI_BB_8=97.4$, $GAI_BB_15=104.2$, $GAI_EES=74.6$

R1 =85	R2 =92	R3 =95	R4 =84	R5 =85	R6 =88	R7 =86	R8 =69
R9 =24	R10=80	R11=82	R12=65	R13=87	R14=98	R15=81	

Color Quality Scale: $Q_a=83.9$, $Q_f=83.8$, $Q_p=84.6$, $Q_g=94.5$

Q1 =84	Q2 =98	Q3 =80	Q4 =76	Q5 =81	Q6 =84	Q7 =87	Q8 =89
Q9 =98	Q10=89	Q11=86	Q12=85	Q13=85	Q14=77	Q15=80	



Photometric Parameters

Luminous Flux: 4117.3 lm	Efficiency: 101.89 lm/W	Radiant Power: 12.860 W
Total mains efficacy: 119.82 lm/W	Energy Efficiency Class: E (EU 2019/2015)	
Pupil Flux: 6170.35 Plm	Pupil Lumens Per Watt: 152.69 Plm/W	Pupil Factor (Kp): 1.499
Cirtpic Flux: 12586.09 lm		

Electric Parameters

Voltage: 230.90V	Current: 0.2720A	Power: 40.41W
Power Factor: 0.9600	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: 46194 (2571)	CCD Integration Time: 42.07 ms

Condition: Tx:23.2'C, Ti:0.0'C, R.H.:60%
 Test Lab:
 Operator: CRE

Test Device: Lisun LMS-9000B
 Test Time: 2021-02-16 10:30:03
 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	0.0509	525	0.6659	48.1060	670	0.3567	25.7658
385	0.0007	0.0524	530	0.6977	50.4037	675	0.3132	22.6225
390	0.0012	0.0836	535	0.7197	51.9901	680	0.2732	19.7358
395	0.0017	0.1204	540	0.7397	53.4347	685	0.2388	17.2484
400	0.0025	0.1821	545	0.7607	54.9509	690	0.2072	14.9717
405	0.0045	0.3237	550	0.7807	56.3999	695	0.1791	12.9347
410	0.0096	0.6936	555	0.8054	58.1809	700	0.1545	11.1622
415	0.0188	1.3579	560	0.8298	59.9413	705	0.1325	9.5716
420	0.0387	2.7958	565	0.8572	61.9243	710	0.1140	8.2355
425	0.0744	5.3711	570	0.8837	63.8393	715	0.0984	7.1051
430	0.1335	9.6425	575	0.9149	66.0927	720	0.0842	6.0799
435	0.2286	16.5110	580	0.9399	67.9015	725	0.0720	5.2005
440	0.3878	28.0161	585	0.9645	69.6735	730	0.0615	4.4424
445	0.6505	46.9892	590	0.9853	71.1796	735	0.0518	3.7421
450	0.9131	65.9606	595	0.9965	71.9835	740	0.0455	3.2887
455	0.9967	71.9999	600	1.0000	72.2396	745	0.0386	2.7891
460	0.9095	65.7024	605	0.9942	71.8233	750	0.0355	2.5629
465	0.6919	49.9846	610	0.9748	70.4185	755	0.0279	2.0141
470	0.5164	37.3042	615	0.9486	68.5296	760	0.0245	1.7731
475	0.4091	29.5506	620	0.9122	65.8990	765	0.0213	1.5365
480	0.3321	23.9911	625	0.8679	62.6939	770	0.0176	1.2707
485	0.2978	21.5147	630	0.8135	58.7701	775	0.0135	0.9757
490	0.3103	22.4145	635	0.7548	54.5265	780	0.0136	0.9795
495	0.3515	25.3940	640	0.6941	50.1385	785	0.0094	0.6764
500	0.4099	29.6117	645	0.6333	45.7519	790	0.0073	0.5286
505	0.4766	34.4259	650	0.5718	41.3082	795	0.0074	0.5364
510	0.5405	39.0422	655	0.5147	37.1794	800	0.0062	0.4510
515	0.5916	42.7355	660	0.4594	33.1881			
520	0.6376	46.0587	665	0.4061	29.3346			

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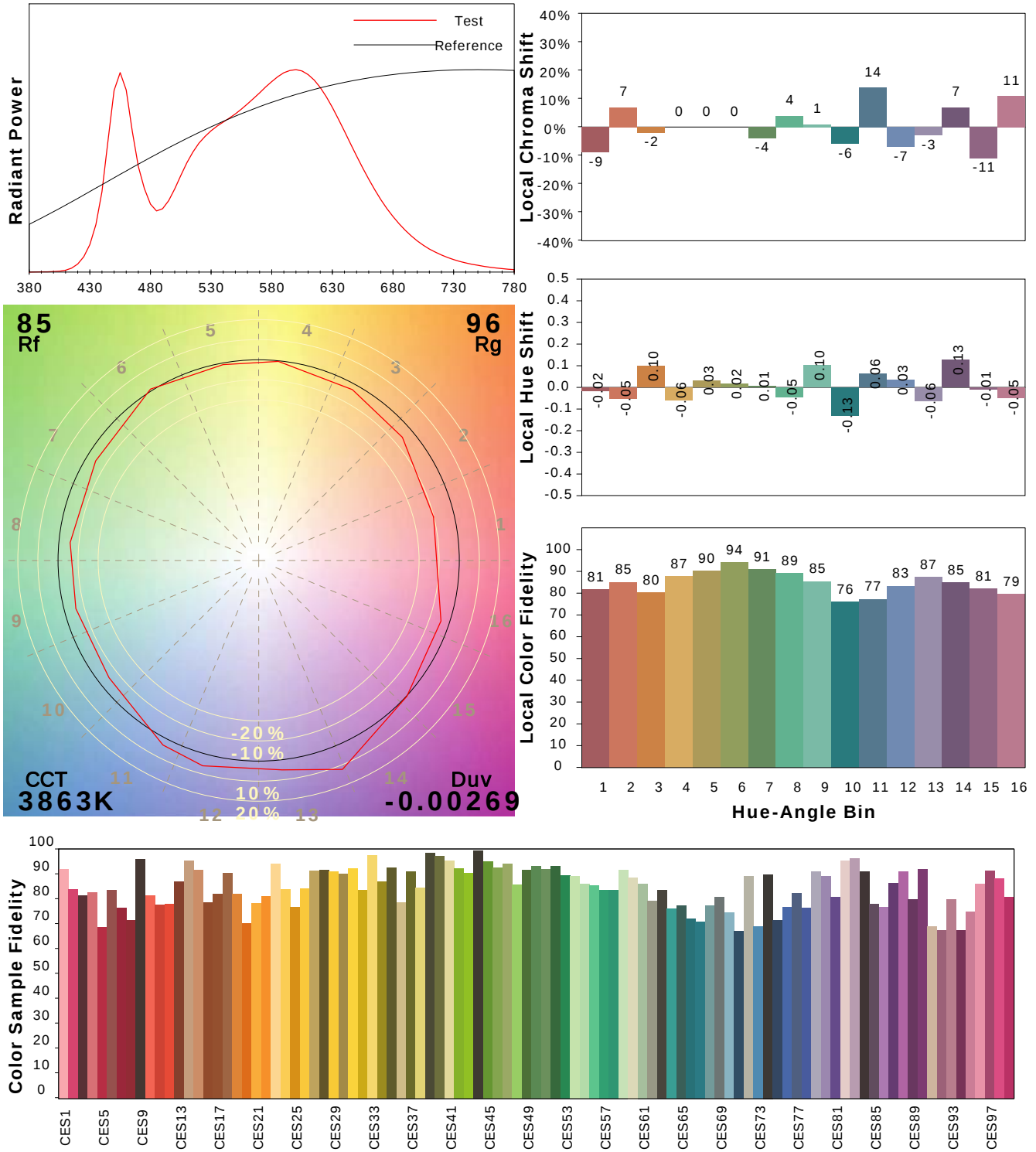
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IES TM-30-18 Color Rendition Report

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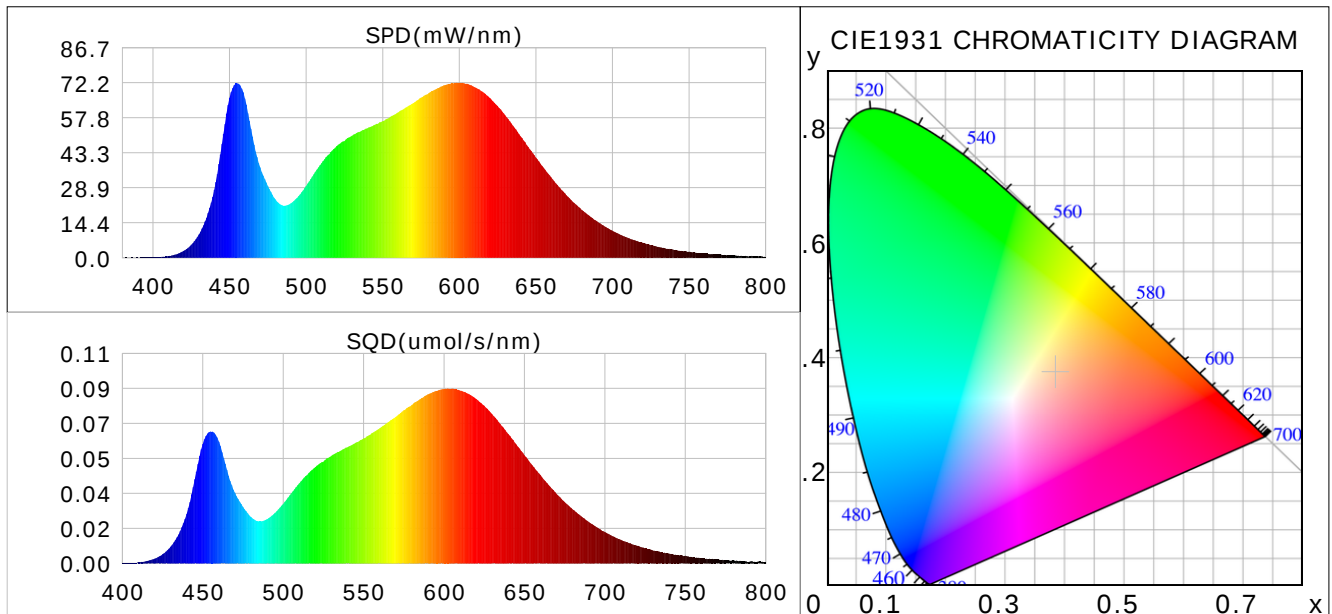
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Plant optical param data

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 CRI: Ra= 85.6



Plant Optical Param

$\mu_v(lm): 4117.30$	$Q_v(lm.s): 4117.30$
$\mu_e, \dot{E}(W/nm): 12.86$	$Q_e(J): 12.86$
$\mu_e(W): 12.53$	$\mu_{fr}(W): 0.35$
$\dot{C}_e: 0.31$	$\dot{C}_{fr}: 0.01$
$PPE(umol/s/w): 1.46$	$K_{fr}: 0.05$
$Erb_Ratio: 1.54$	$PPF(umol/s): 58.93$
$PF_{uv}(360-400)(umol/s): 0.01$	$PPF(400-500)(umol/s): 10.48$
$PPF(500-600)(umol/s): 26.14$	$PPF(600-700)(umol/s): 22.31$
$PF_{fr}(700-800)(umol/s): 2.07$	$PPF.t(umol): 58.93$
$\mu_{ch-A.t}(J): 1.01$	$\mu_{ch-A}(W): 1.01$
$\mu_{ch-B.t}(J): 0.60$	$\mu_{ch-B}(W): 0.60$
$\mu_b.t(J): 2.72$	$\mu_b(W): 2.72$
$\mu_y.t(J): 5.65$	$\mu_y(W): 5.65$
$\mu_r.t(J): 4.27$	$\mu_r(W): 4.27$

Electric Parameters

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Power Factor: 0.9600	Frequency: 49.99Hz	

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