

Lightsource Test Report

Product Information

Product Category: LED-Lampen
 Product Spec: LED-SLG12-E40-30-180-NW
 Manufacturer: METOLIGHT
 Buyer: 3811

Product Type: LED-streetbulb
 Product Number: 1
 Submitted Unit: 100234

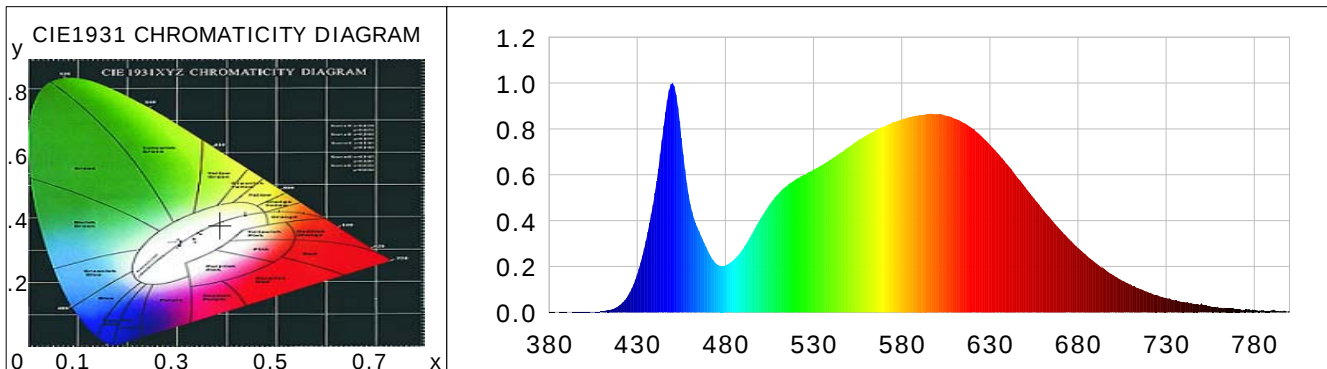
CIE Colorimetric Parameters

Chromaticity coordinates: $x=0.3869$ $y=0.3787$ $u(u')=0.2286$ $v=0.3356$ $v'=0.5034$
 CCT: $T_c=3843K$ ($duv=-0.00093$) Color Ratio: $R=0.191$ $G=0.777$ $B=0.032$
 Peak Wavelength: 449.8nm Half Bandwidth: 19.8nm
 Dominant Wavelength: 580.1nm Color Purity: 0.298
 CRI: $R_a=84.2$, $avgR(1\sim14)=78.4$, $avgR(1\sim15)=78.5$ TM30: $R_f=84$, $R_g=99$
 GAI: $GAI_BB_8=96.9$, $GAI_BB_15=102.4$, $GAI_EES=73.9$

R1 =83	R2 =89	R3 =92	R4 =84	R5 =83	R6 =84	R7 =88	R8 =71
R9 =25	R10=73	R11=83	R12=64	R13=84	R14=96	R15=79	

Color Quality Scale: $Q_a=83.9$, $Q_f=83.5$, $Q_p=85.3$, $Q_g=95.8$

Q1 =85	Q2 =98	Q3 =78	Q4 =77	Q5 =83	Q6 =84	Q7 =85	Q8 =90
Q9 =97	Q10=87	Q11=85	Q12=84	Q13=85	Q14=77	Q15=80	



Photometric Parameters

Luminous Flux: 3020.9 lm	Efficiency: 93.15 lm/W	Radiant Power: 9.457 W
Total mains efficacy: 93.15 lm/W	Energy Efficiency Class: F (EU 2019/2015)	
Pupil Flux: 4413.68 Plm	Pupil Lumens Per Watt: 136.10 Plm/W	Pupil Factor (Kp): 1.461
Cirtpic Flux: 8715.97 lm		

Electric Parameters

Voltage: 230.70V	Current: 0.1480A	Power: 32.43W
Power Factor: 0.9450	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: 45807 (2773)	CCD Integration Time: 111.83 ms

Condition: Tx:24.5'C, Ti:0.0'C, R.H.:60%
 Test Lab:
 Operator: CRE

Test Device: Lisun LMS-9000B
 Test Time: 2021-02-16 11:08:18
 Inspector:

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WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)
380	0.0011	0.0676	525	0.5978	35.2670	670	0.3604	21.2610
385	0.0001	0.0039	530	0.6226	36.7264	675	0.3190	18.8170
390	0.0010	0.0567	535	0.6428	37.9198	680	0.2811	16.5841
395	0.0008	0.0467	540	0.6675	39.3772	685	0.2464	14.5365
400	0.0019	0.1112	545	0.6945	40.9711	690	0.2152	12.6980
405	0.0017	0.1016	550	0.7205	42.5030	695	0.1887	11.1319
410	0.0047	0.2754	555	0.7489	44.1779	700	0.1624	9.5787
415	0.0116	0.6850	560	0.7720	45.5434	705	0.1387	8.1815
420	0.0313	1.8467	565	0.7943	46.8570	710	0.1209	7.1334
425	0.0762	4.4940	570	0.8100	47.7844	715	0.1022	6.0292
430	0.1661	9.8007	575	0.8289	48.8993	720	0.0869	5.1274
435	0.3123	18.4256	580	0.8414	49.6353	725	0.0750	4.4273
440	0.5204	30.7004	585	0.8524	50.2866	730	0.0631	3.7216
445	0.8141	48.0256	590	0.8602	50.7432	735	0.0522	3.0808
450	1.0000	58.9924	595	0.8639	50.9657	740	0.0456	2.6896
455	0.7603	44.8542	600	0.8654	51.0497	745	0.0372	2.1972
460	0.4733	27.9203	605	0.8584	50.6385	750	0.0391	2.3087
465	0.3543	20.8987	610	0.8447	49.8328	755	0.0263	1.5504
470	0.2685	15.8384	615	0.8271	48.7952	760	0.0198	1.1678
475	0.2105	12.4159	620	0.8022	47.3240	765	0.0192	1.1322
480	0.2047	12.0757	625	0.7698	45.4150	770	0.0146	0.8632
485	0.2307	13.6068	630	0.7307	43.1075	775	0.0124	0.7304
490	0.2760	16.2809	635	0.6890	40.6477	780	0.0118	0.6976
495	0.3409	20.1108	640	0.6438	37.9804	785	0.0101	0.5973
500	0.4099	24.1807	645	0.5939	35.0374	790	0.0086	0.5044
505	0.4696	27.7006	650	0.5464	32.2337	795	0.0058	0.3399
510	0.5170	30.5007	655	0.4973	29.3349	800	0.0073	0.4321
515	0.5516	32.5424	660	0.4487	26.4690			
520	0.5804	34.2374	665	0.4029	23.7678			

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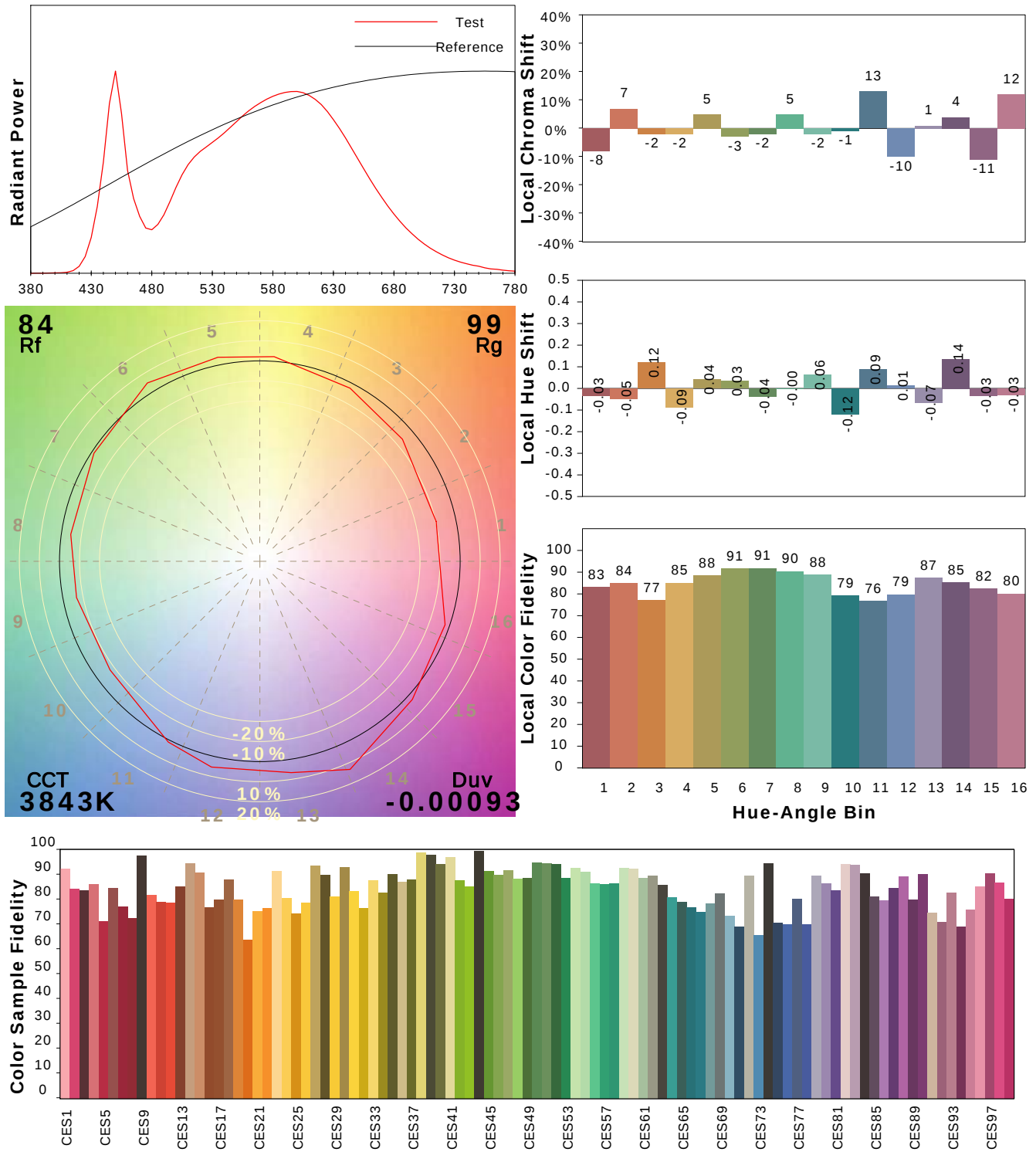
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IES TM-30-18 Color Rendition Report

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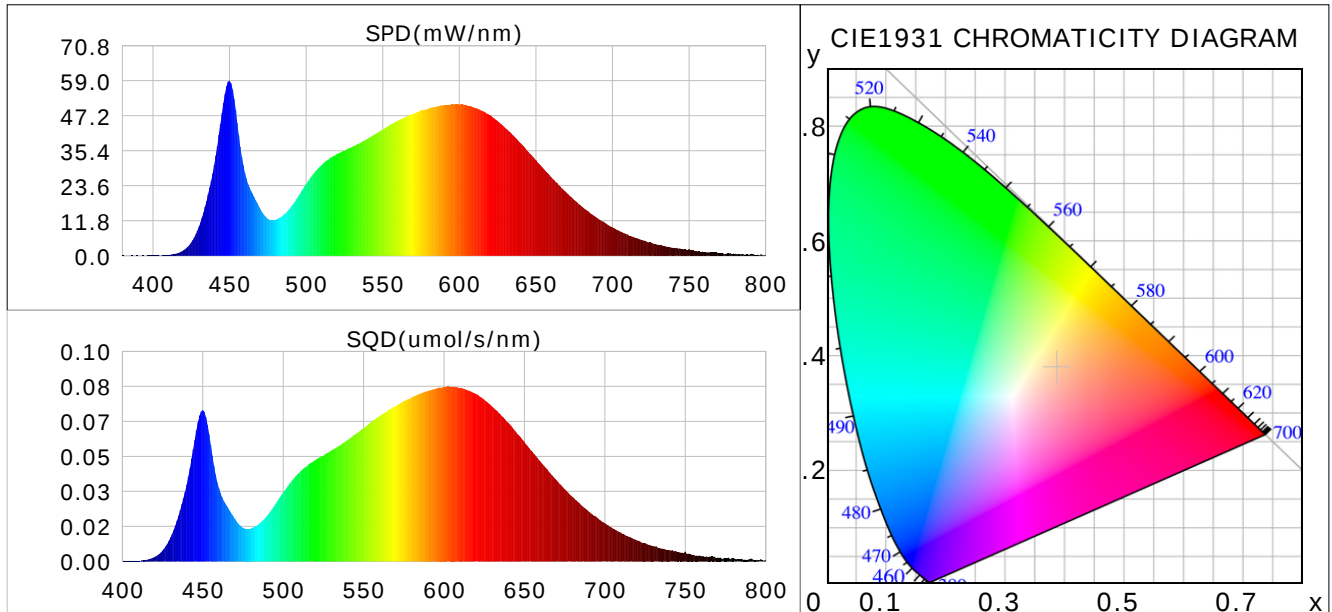
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Plant optical param data

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 CRI: Ra= 84.2



Plant Optical Param

$\mu_v(\text{lm})$: 3020.90	$Q_v(\text{lm.s})$: 3020.90
$\mu_e, \dot{E}(\text{W/nm})$: 9.46	$Q_e(\text{J})$: 9.46
$\mu_e(\text{W})$: 9.19	$\mu_{fr}(\text{W})$: 0.29
$\dot{C}_e$: 0.28	$\dot{C}_{fr}$: 0.01
$PPE(\mu\text{mol/s/w})$: 1.34	K_{fr} : 0.05
E_{rb_Ratio} : 1.70	$PPF(\mu\text{mol/s})$: 43.34
$PF_{uv}(360-400)(\mu\text{mol/s})$: 0.00	$PPF(400-500)(\mu\text{mol/s})$: 7.13
$PPF(500-600)(\mu\text{mol/s})$: 19.36	$PPF(600-700)(\mu\text{mol/s})$: 16.85
$PF_{fr}(700-800)(\mu\text{mol/s})$: 1.69	$PPF.t(\mu\text{mol})$: 43.34
$\mu_{ch-A.t}(\text{J})$: 0.78	$\mu_{ch-A}(\text{W})$: 0.78
$\mu_{ch-B.t}(\text{J})$: 0.41	$\mu_{ch-B}(\text{W})$: 0.41
$\mu_{b.t}(\text{J})$: 1.86	$\mu_b(\text{W})$: 1.86
$\mu_{y.t}(\text{J})$: 4.19	$\mu_y(\text{W})$: 4.19
$\mu_{r.t}(\text{J})$: 3.21	$\mu_r(\text{W})$: 3.21

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