

Lightsource Test Report

Product Information

Product Category: LED-Lampen
 Product Spec: LED-SLG381-E40-20-NW
 Manufacturer: METOLIGHT
 Buyer: 3811

Product Type: LED-Strassenlampe
 Product Number: 1
 Submitted Unit: 102938

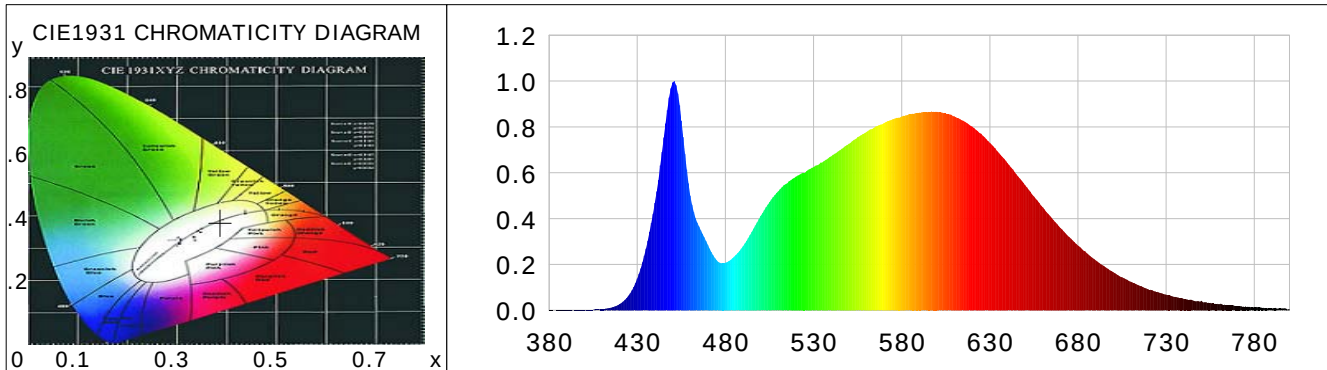
CIE Colorimetric Parameters

Chromaticity coordinates: $x=0.3874$ $y=0.3808$ $u(u')=0.2280$ $v=0.3363$ $v'=0.5044$
 CCT: $T_c=3847K$ ($duv=-0.00007$) Color Ratio: $R=0.190$ $G=0.777$ $B=0.032$
 Peak Wavelength: 450.7nm Half Bandwidth: 19.4nm
 Dominant Wavelength: 579.7nm Color Purity: 0.305
 CRI: $R_a=84.1$, $avgR(1\sim14)=78.1$, $avgR(1\sim15)=78.2$ TM30: $R_f=84$, $R_g=98$
 GAI: $GAI_BB_8=95.1$, $GAI_BB_15=101.2$, $GAI_EES=72.6$

R1 =83	R2 =89	R3 =93	R4 =84	R5 =83	R6 =84	R7 =88	R8 =70
R9 =23	R10=73	R11=83	R12=62	R13=84	R14=96	R15=79	

Color Quality Scale: $Q_a=84.0$, $Q_f=83.8$, $Q_p=84.9$, $Q_g=95.1$

Q1 =85	Q2 =98	Q3 =78	Q4 =77	Q5 =83	Q6 =84	Q7 =85	Q8 =90
Q9 =97	Q10=88	Q11=85	Q12=85	Q13=85	Q14=77	Q15=80	



Photometric Parameters

Luminous Flux: 2964.8 lm	Efficiency: 147.50 lm/W	Radiant Power: 9.269 W
Total mains efficacy: 173.46 lm/W	Energy Efficiency Class: C (EU 2019/2015)	
Pupil Flux: 4336.44 Plm	Pupil Lumens Per Watt: 215.74 Plm/W	Pupil Factor (Kp): 1.463
Cirtpic Flux: 8573.27 lm		

Electric Parameters

Voltage: 231.00V	Current: 0.0910A	Power: 20.10W
Power Factor: 0.9460	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: 45987 (2698)	CCD Integration Time: 80.25 ms

Condition: Tx:24.3'C, Ti:0.0'C, R.H.:60%
 Test Lab:
 Operator: CRE

Test Device: Lisun LMS-9000B
 Test Time: 2021-02-16 10:58:15
 Inspector:

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WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)
380	0.0013	0.0725	525	0.5995	34.5462	670	0.3597	20.7268
385	0.0014	0.0807	530	0.6247	35.9971	675	0.3202	18.4514
390	0.0012	0.0671	535	0.6456	37.1997	680	0.2832	16.3162
395	0.0012	0.0683	540	0.6722	38.7321	685	0.2486	14.3269
400	0.0018	0.1053	545	0.6987	40.2612	690	0.2180	12.5602
405	0.0029	0.1689	550	0.7261	41.8380	695	0.1919	11.0570
410	0.0055	0.3162	555	0.7548	43.4956	700	0.1665	9.5939
415	0.0118	0.6786	560	0.7781	44.8382	705	0.1441	8.3026
420	0.0273	1.5749	565	0.8011	46.1597	710	0.1248	7.1887
425	0.0637	3.6698	570	0.8169	47.0728	715	0.1072	6.1785
430	0.1386	7.9879	575	0.8339	48.0495	720	0.0914	5.2652
435	0.2689	15.4935	580	0.8456	48.7261	725	0.0806	4.6447
440	0.4687	27.0108	585	0.8555	49.2971	730	0.0690	3.9783
445	0.7545	43.4741	590	0.8624	49.6923	735	0.0587	3.3853
450	0.9940	57.2801	595	0.8651	49.8473	740	0.0500	2.8833
455	0.8273	47.6724	600	0.8658	49.8905	745	0.0438	2.5230
460	0.5012	28.8781	605	0.8591	49.5068	750	0.0417	2.4038
465	0.3661	21.0959	610	0.8457	48.7336	755	0.0322	1.8575
470	0.2862	16.4915	615	0.8267	47.6383	760	0.0266	1.5345
475	0.2186	12.5943	620	0.8020	46.2123	765	0.0225	1.2956
480	0.2075	11.9571	625	0.7702	44.3815	770	0.0184	1.0581
485	0.2344	13.5071	630	0.7308	42.1117	775	0.0174	1.0009
490	0.2793	16.0921	635	0.6871	39.5916	780	0.0146	0.8437
495	0.3424	19.7290	640	0.6417	36.9752	785	0.0113	0.6489
500	0.4123	23.7602	645	0.5934	34.1953	790	0.0080	0.4585
505	0.4723	27.2176	650	0.5455	31.4346	795	0.0095	0.5452
510	0.5196	29.9438	655	0.4970	28.6395	800	0.0076	0.4395
515	0.5542	31.9335	660	0.4497	25.9151			
520	0.5833	33.6110	665	0.4040	23.2800			

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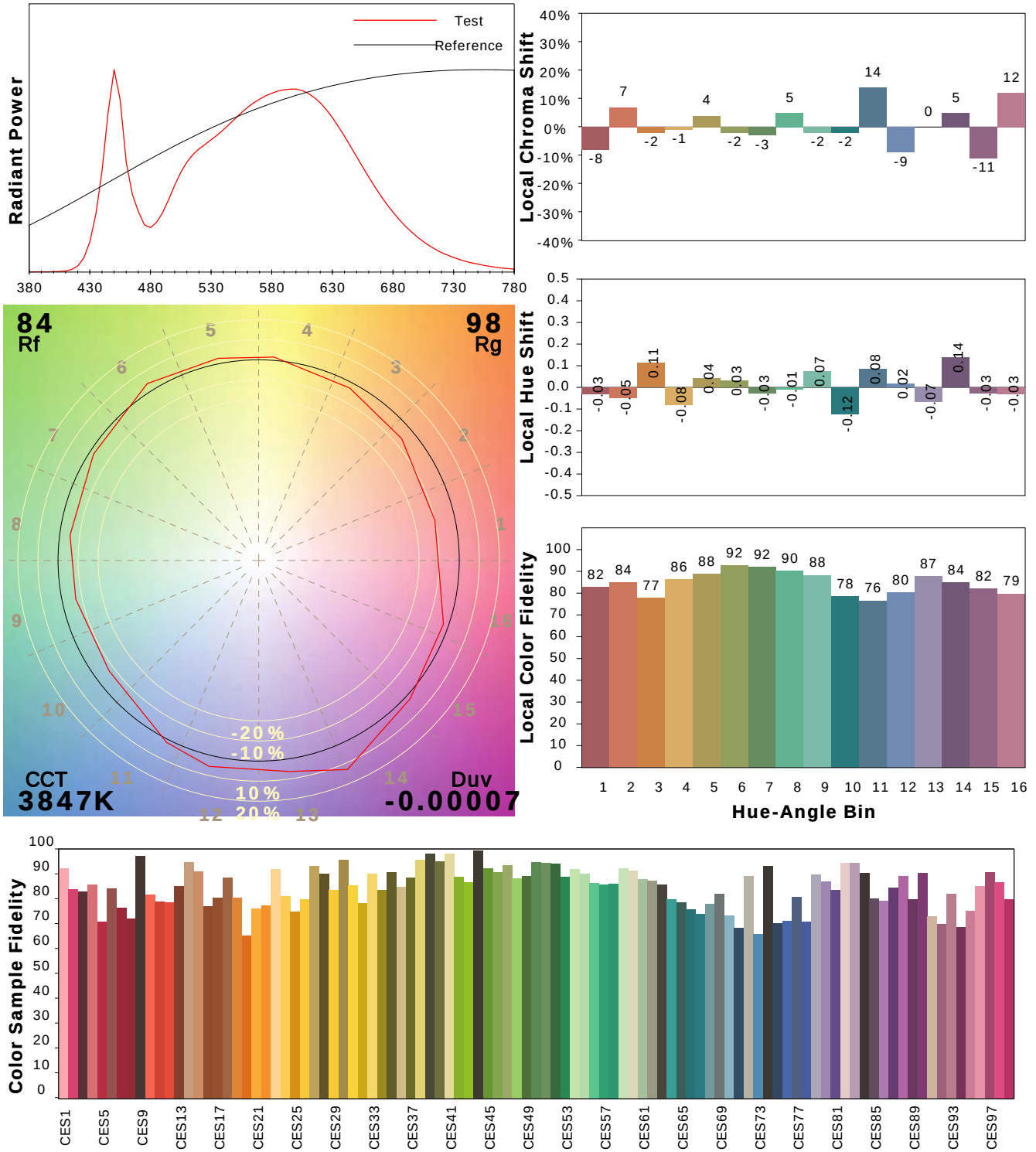
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IES TM-30-18 Color Rendition Report

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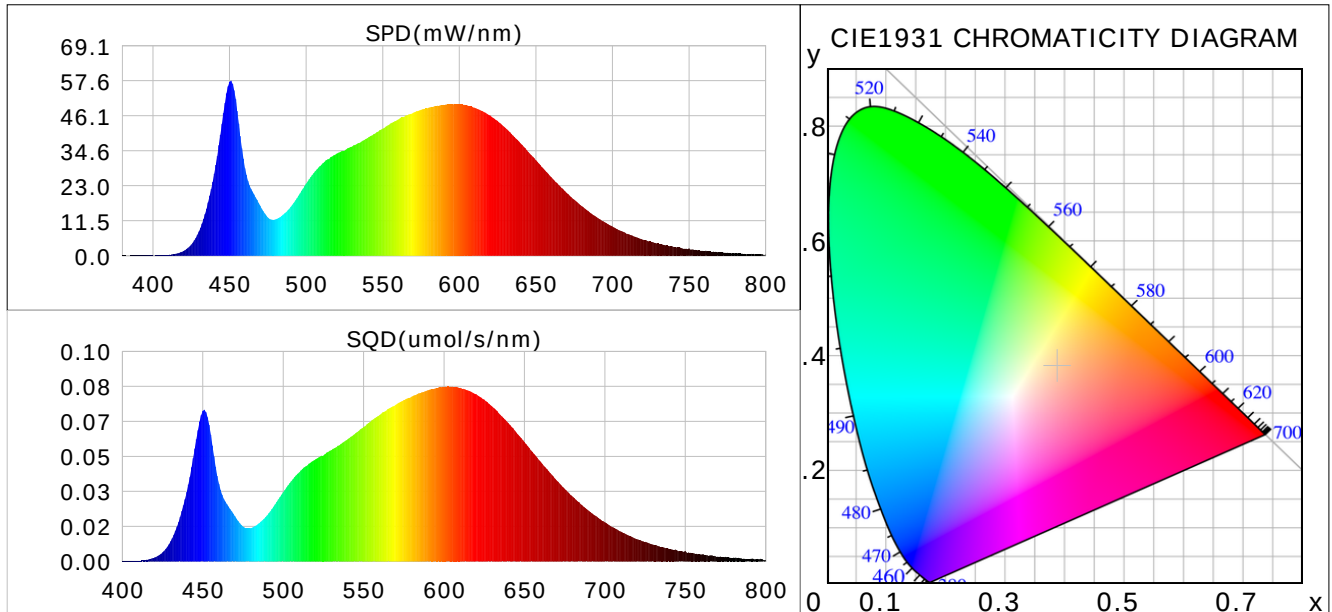
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Plant optical param data

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 CRI: Ra= 84.1



Plant Optical Param

$\mu_v(lm)$: 2964.80	$Q_v(lm.s)$: 2964.80
$\mu_e, \dot{E}(W/nm)$: 9.27	$Q_e(J)$: 9.27
$\mu_e(W)$: 8.98	$\mu_{fr}(W)$: 0.31
$\dot{C}_e$: 0.45	$\dot{C}_{fr}$: 0.02
$PPE(umol/s/w)$: 2.11	K_{fr} : 0.09
E_{rb_Ratio} : 1.72	$PPF(umol/s)$: 42.39
$PF_{uv}(360-400)(umol/s)$: 0.01	$PPF(400-500)(umol/s)$: 6.91
$PPF(500-600)(umol/s)$: 19.01	$PPF(600-700)(umol/s)$: 16.47
$PF_{fr}(700-800)(umol/s)$: 1.82	$PPF.t(umol)$: 42.39
$\mu_{ch-A.t}(J)$: 0.75	$\mu_{ch-A}(W)$: 0.75
$\mu_{ch-B.t}(J)$: 0.40	$\mu_{ch-B}(W)$: 0.40
$\mu_b.t(J)$: 1.80	$\mu_b(W)$: 1.80
$\mu_y.t(J)$: 4.12	$\mu_y(W)$: 4.12
$\mu_r.t(J)$: 3.14	$\mu_r(W)$: 3.14

Electric Parameters

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