

## Lightsource Test Report

### Product Information

Product Category: LED-Lampen  
 Product Spec: LED-SLG371-E40-27-360-NW  
 Manufacturer: METOLIGHT  
 Buyer: 3811

Product Type: LED-Strassenlampen  
 Product Number: 1  
 Submitted Unit: 102925

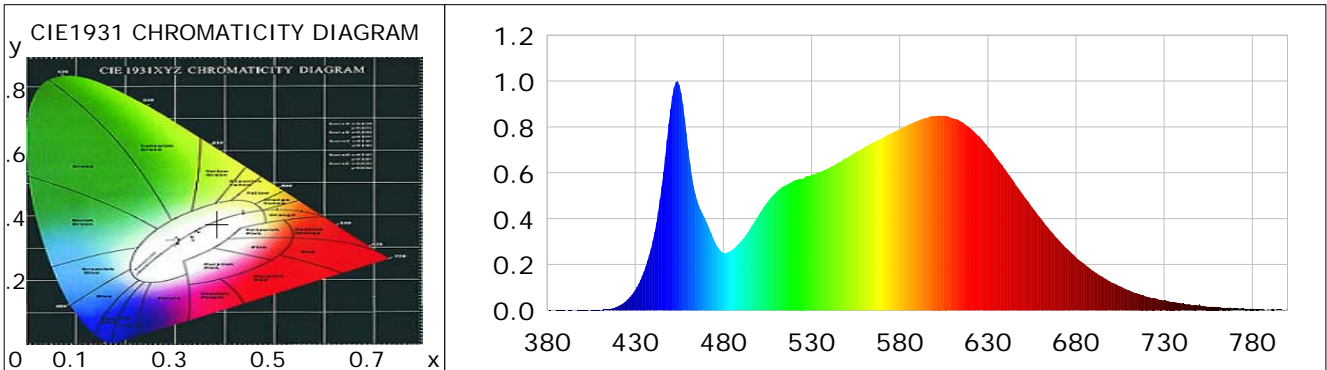
### CIE Colorimetric Parameters

Chromaticity coordinates:  $x=0.3849$   $y=0.3761$   $u(u')=0.2283$   $v=0.3346$   $v'=0.5020$   
 CCT:  $T_c=3874K$  ( $duv=-0.00159$ ) Color Ratio:  $R=0.196$   $G=0.767$   $B=0.038$   
 Peak Wavelength: 453.7nm Half Bandwidth: 20.1nm  
 Dominant Wavelength: 580.4nm Color Purity: 0.284  
 CRI:  $R_a=87.2$ ,  $avgR(1\sim14)=82.1$ ,  $avgR(1\sim15)=82.1$  TM30:  $R_f=86$ ,  $R_g=97$   
 GAI:  $GAI\_BB\_8=96.7$ ,  $GAI\_BB\_15=103.4$ ,  $GAI\_EES=74.2$   

R1 =87	R2 =93	R3 =96	R4 =86	R5 =87	R6 =90	R7 =87	R8 =71
R9 =30	R10=83	R11=86	R12=66	R13=89	R14=98	R15=82	

Color Quality Scale:  $Q_a=86.0$ ,  $Q_f=86.0$ ,  $Q_p=86.4$ ,  $Q_g=95.0$   

Q1 =85	Q2 =98	Q3 =82	Q4 =79	Q5 =84	Q6 =87	Q7 =89	Q8 =91
Q9 =98	Q10=91	Q11=88	Q12=87	Q13=87	Q14=79	Q15=81	



### Photometric Parameters

Luminous Flux: 3965.8 lm	Efficiency: 145.86 lm/W	Radiant Power: 12.334 W
Total mains efficacy: 171.53 lm/W	Energy Efficiency Class: C (EU 2019/2015)	
Pupil Flux: 6007.34 Plm	Pupil Lumens Per Watt: 220.94 Plm/W	Pupil Factor (Kp): 1.515
Cirtopic Flux: 12282.27 lm		

### Electric Parameters

Voltage: 230.90V	Current: 0.1240A	Power: 27.19W
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: 46230 (2592)	CCD Integration Time: 105.37 ms

Condition:  $T_x=22.6^{\circ}C$ ,  $T_i=0.0^{\circ}C$ , R.H.: 60%  
 Test Lab:  
 Operator: CRE

Test Device: Lisun LMS-9000B  
 Test Time: 2021-02-12 11:38:57  
 Inspector:

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WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)
380	0.0005	0.0441	525	0.5737	46.5066	670	0.3086	25.0129
385	0.0007	0.0598	530	0.5902	47.8386	675	0.2682	21.7387
390	0.0011	0.0855	535	0.6029	48.8750	680	0.2311	18.7318
395	0.0006	0.0462	540	0.6212	50.3579	685	0.2003	16.2325
400	0.0012	0.0991	545	0.6431	52.1313	690	0.1706	13.8292
405	0.0010	0.0801	550	0.6653	53.9272	695	0.1461	11.8400
410	0.0020	0.1637	555	0.6894	55.8806	700	0.1216	9.8583
415	0.0056	0.4504	560	0.7116	57.6829	705	0.1052	8.5299
420	0.0171	1.3855	565	0.7328	59.3988	710	0.0881	7.1406
425	0.0423	3.4327	570	0.7514	60.9092	715	0.0736	5.9690
430	0.0883	7.1582	575	0.7725	62.6190	720	0.0599	4.8555
435	0.1690	13.7000	580	0.7908	64.0995	725	0.0525	4.2559
440	0.3041	24.6485	585	0.8096	65.6284	730	0.0432	3.5046
445	0.5417	43.9107	590	0.8257	66.9280	735	0.0370	2.9984
450	0.8774	71.1259	595	0.8397	68.0709	740	0.0298	2.4147
455	0.9833	79.7060	600	0.8474	68.6923	745	0.0240	1.9468
460	0.7029	56.9767	605	0.8491	68.8248	750	0.0261	2.1175
465	0.4815	39.0327	610	0.8381	67.9377	755	0.0160	1.2995
470	0.3922	31.7884	615	0.8230	66.7107	760	0.0149	1.2060
475	0.3005	24.3609	620	0.7948	64.4241	765	0.0104	0.8403
480	0.2511	20.3541	625	0.7590	61.5259	770	0.0081	0.6558
485	0.2633	21.3432	630	0.7122	57.7340	775	0.0088	0.7138
490	0.3004	24.3496	635	0.6636	53.7900	780	0.0066	0.5339
495	0.3532	28.6314	640	0.6126	49.6571	785	0.0044	0.3596
500	0.4153	33.6658	645	0.5579	45.2233	790	0.0020	0.1607
505	0.4731	38.3539	650	0.5036	40.8234	795	0.0038	0.3086
510	0.5171	41.9177	655	0.4507	36.5336	800	0.0054	0.4407
515	0.5439	44.0864	660	0.4010	32.5085			
520	0.5655	45.8412	665	0.3515	28.4913			

Condition: Tx:22.6'C, Ti:0.0'C, R.H.:60%  
 Test Lab:  
 Operator: CRE

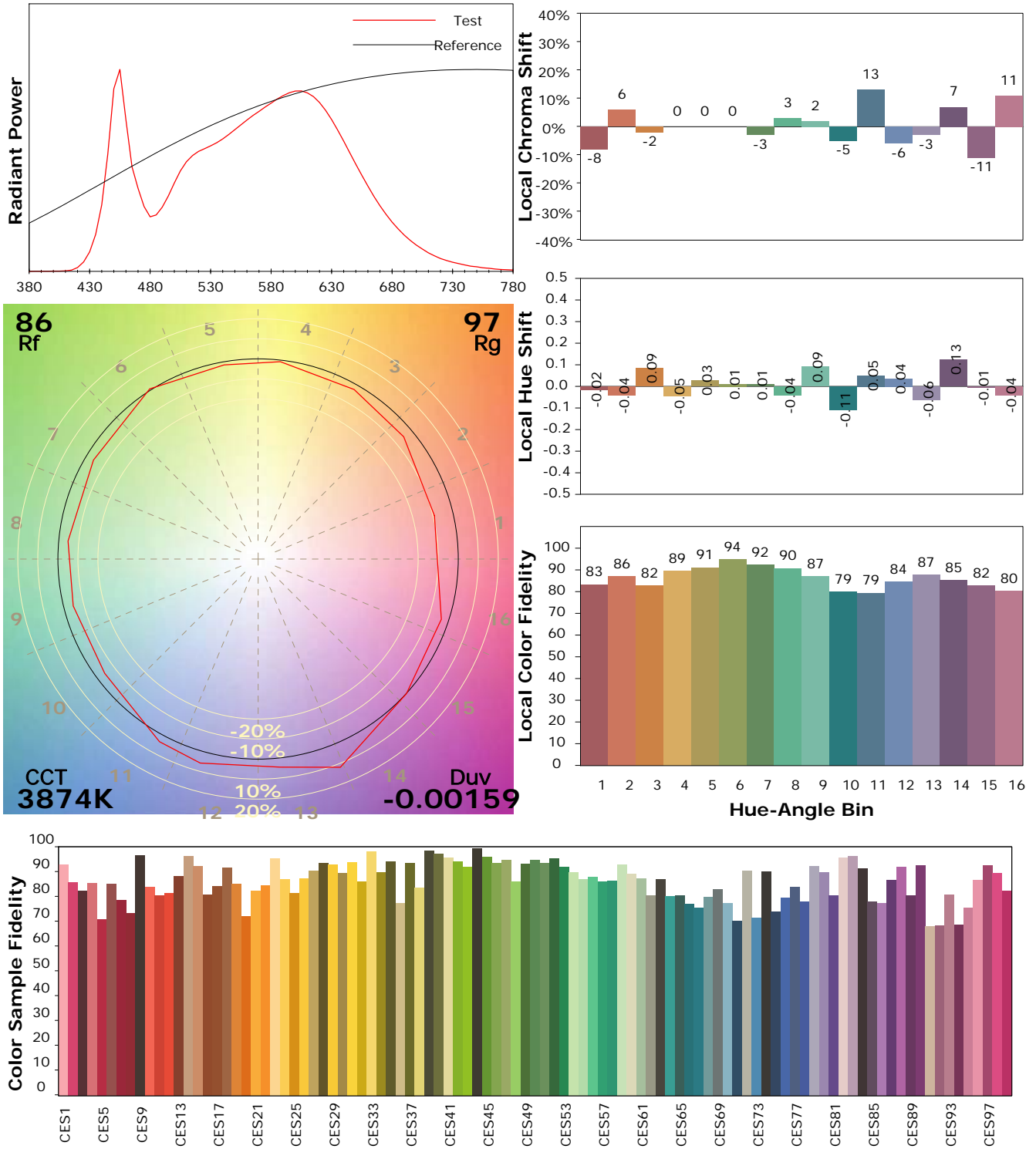
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## IES TM-30-18 Color Rendition Report

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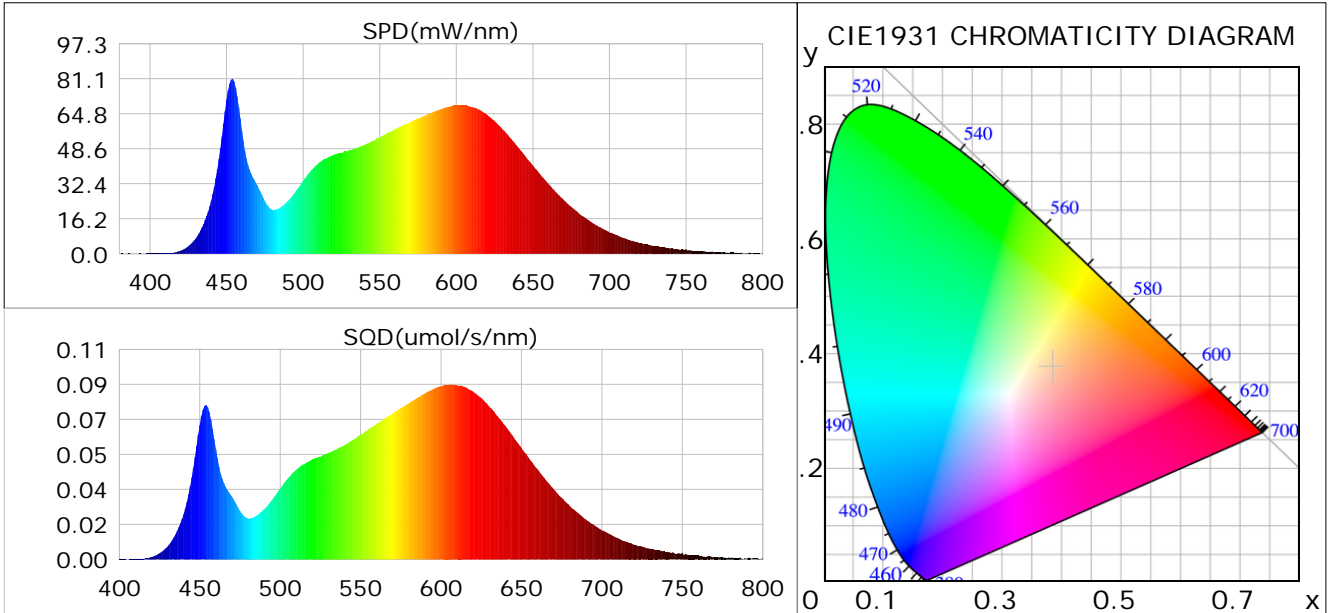
Condition: Tx:22.6°C, Ti:0.0°C, R.H.:60%  
 Test Lab:  
 Operator: CRE

Test Device: Lisun LMS-9000B  
 Test Time: 2021-02-12 11:38:57  
 Inspector:

## Plant optical param data

### CIE Colorimetric Parameters

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 Peak Wavelength: 453.7nm Half Bandwidth: 20.1nm  
 Dominant Wavelength: 580.4nm Color Purity: 0.284  
 CRI:  $R_a=87.2$



### Plant Optical Param

$ \mu_v(lm): 3965.80$	$Q_v(lm.s): 3965.80$
$ \mu_e, \dot{E}(W/nm): 12.33$	$Q_e(J): 12.33$
$ \mu_e(W): 12.07$	$ \mu_{fr}(W): 0.28$
$ \zeta_e: 0.44$	$ \zeta_{fr}: 0.01$
$PPE(umol/s/w): 2.09$	$K_{fr}: 0.06$
$Erb\_Ratio: 1.59$	$PPF(umol/s): 56.81$
$PF_{uv}(360-400)(umol/s): 0.01$	$PPF(400-500)(umol/s): 9.91$
$PPF(500-600)(umol/s): 25.22$	$PPF(600-700)(umol/s): 21.67$
$PPF_r(700-800)(umol/s): 1.63$	$PPF.t(umol): 56.81$
$ \mu_{ch-A.t}(J): 0.96$	$ \mu_{ch-A}(W): 0.96$
$ \mu_{ch-B.t}(J): 0.56$	$ \mu_{ch-B}(W): 0.56$
$ \mu_b.t(J): 2.56$	$ \mu_b(W): 2.56$
$ \mu_y.t(J): 5.47$	$ \mu_y(W): 5.47$
$ \mu_r.t(J): 4.14$	$ \mu_r(W): 4.14$

### Electric Parameters

Voltage: 230.90V	Current: 0.1240A	Power: 27.19W
Power Factor: 0.9470	Frequency: 49.99Hz	

Condition:  $T_x: 22.6^\circ C$ ,  $T_i: 0.0^\circ C$ , R.H.: 60%  
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