

## Lightsource Test Report

### Product Information

Product Category: LED-Lampen  
 Product Spec: LED-SLG28-E27-27-360-WWM  
 Manufacturer: METOLIGHT  
 Buyer: 3811

Product Type: LED-Strassenlampen  
 Product Number: 1  
 Submitted Unit: 100251

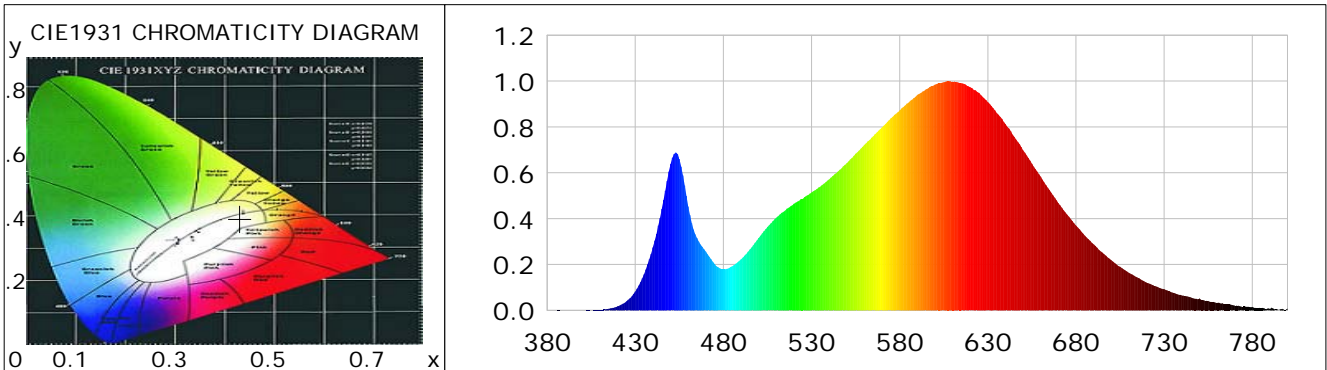
### CIE Colorimetric Parameters

Chromaticity coordinates:  $x=0.4309$   $y=0.3925$   $u(u')=0.2517$   $v=0.3439$   $v'=0.5158$   
 CCT:  $T_c=3007K$  ( $duv=-0.00387$ ) Color Ratio:  $R=0.234$   $G=0.740$   $B=0.026$   
 Peak Wavelength: 607.5nm Half Bandwidth: 140.0nm  
 Dominant Wavelength: 584.3nm Color Purity: 0.471  
 CRI:  $R_a=85.1$ ,  $avgR(1\sim14)=80.6$ ,  $avgR(1\sim15)=80.5$  TM30:  $R_f=85$ ,  $R_g=99$   
 GAI:  $GAI\_BB\_8=106.3$ ,  $GAI\_BB\_15=112.3$ ,  $GAI\_EES=61.2$   

R1 =84	R2 =92	R3 =96	R4 =83	R5 =84	R6 =90	R7 =84	R8 =67
R9 =27	R10=81	R11=82	R12=73	R13=86	R14=98	R15=80	

Color Quality Scale:  $Q_a=83.0$ ,  $Q_f=83.3$ ,  $Q_p=87.3$ ,  $Q_g=96.0$   

Q1 =82	Q2 =97	Q3 =80	Q4 =78	Q5 =83	Q6 =84	Q7 =82	Q8 =85
Q9 =96	Q10=88	Q11=84	Q12=82	Q13=83	Q14=78	Q15=79	



### Photometric Parameters

Luminous Flux: 3629.8 lm	Efficiency: 133.50 lm/W	Radiant Power: 11.697 W
Total mains efficacy: 133.50 lm/W	Energy Efficiency Class: E (EU 2019/2015)	
Pupil Flux: 4631.48 Plm	Pupil Lumens Per Watt: 170.34 Plm/W	Pupil Factor (Kp): 1.276
Cirtpopic Flux: 8578.43 lm		

### Electric Parameters

Voltage: 230.90V	Current: 0.1240A	Power: 27.19W
Power Factor: 0.9400	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: 45695 (2597)	CCD Integration Time: 106.61 ms

Condition:  $T_x=22.7^{\circ}C$ ,  $T_i=0.0^{\circ}C$ , R.H.: 60%  
 Test Lab:  
 Operator: CRE

Test Device: Lisun LMS-9000B  
 Test Time: 2021-02-12 11:57:48  
 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	0.0342	525	0.4864	35.0453	670	0.4682	33.7333
385	0.0007	0.0494	530	0.5139	37.0207	675	0.4180	30.1127
390	0.0006	0.0439	535	0.5403	38.9266	680	0.3704	26.6882
395	0.0003	0.0199	540	0.5713	41.1579	685	0.3259	23.4822
400	0.0007	0.0473	545	0.6059	43.6489	690	0.2877	20.7303
405	0.0006	0.0424	550	0.6419	46.2431	695	0.2516	18.1245
410	0.0023	0.1683	555	0.6833	49.2267	700	0.2187	15.7585
415	0.0072	0.5164	560	0.7220	52.0185	705	0.1901	13.6953
420	0.0175	1.2626	565	0.7599	54.7492	710	0.1637	11.7945
425	0.0395	2.8445	570	0.7983	57.5134	715	0.1427	10.2788
430	0.0823	5.9319	575	0.8378	60.3599	720	0.1208	8.7025
435	0.1576	11.3516	580	0.8724	62.8497	725	0.1060	7.6394
440	0.2750	19.8147	585	0.9055	65.2388	730	0.0924	6.6548
445	0.4427	31.8974	590	0.9400	67.7252	735	0.0773	5.5679
450	0.6385	45.9995	595	0.9642	69.4687	740	0.0650	4.6837
455	0.6598	47.5362	600	0.9843	70.9150	745	0.0565	4.0740
460	0.4536	32.6821	605	0.9952	71.6974	750	0.0519	3.7395
465	0.3152	22.7054	610	0.9971	71.8369	755	0.0409	2.9460
470	0.2565	18.4822	615	0.9908	71.3811	760	0.0331	2.3882
475	0.2018	14.5378	620	0.9738	70.1574	765	0.0279	2.0086
480	0.1789	12.8866	625	0.9481	68.3054	770	0.0206	1.4868
485	0.1921	13.8399	630	0.9082	65.4296	775	0.0170	1.2274
490	0.2222	16.0088	635	0.8614	62.0573	780	0.0153	1.1026
495	0.2656	19.1357	640	0.8122	58.5152	785	0.0099	0.7158
500	0.3160	22.7664	645	0.7573	54.5610	790	0.0068	0.4894
505	0.3639	26.2183	650	0.6976	50.2607	795	0.0026	0.1904
510	0.4043	29.1290	655	0.6398	46.0926	800	0.0086	0.6232
515	0.4354	31.3674	660	0.5829	41.9959			
520	0.4651	33.5105	665	0.5245	37.7892			

Condition: Tx:22.7'C, Ti:0.0'C, R.H.:60%  
 Test Lab:  
 Operator: CRE

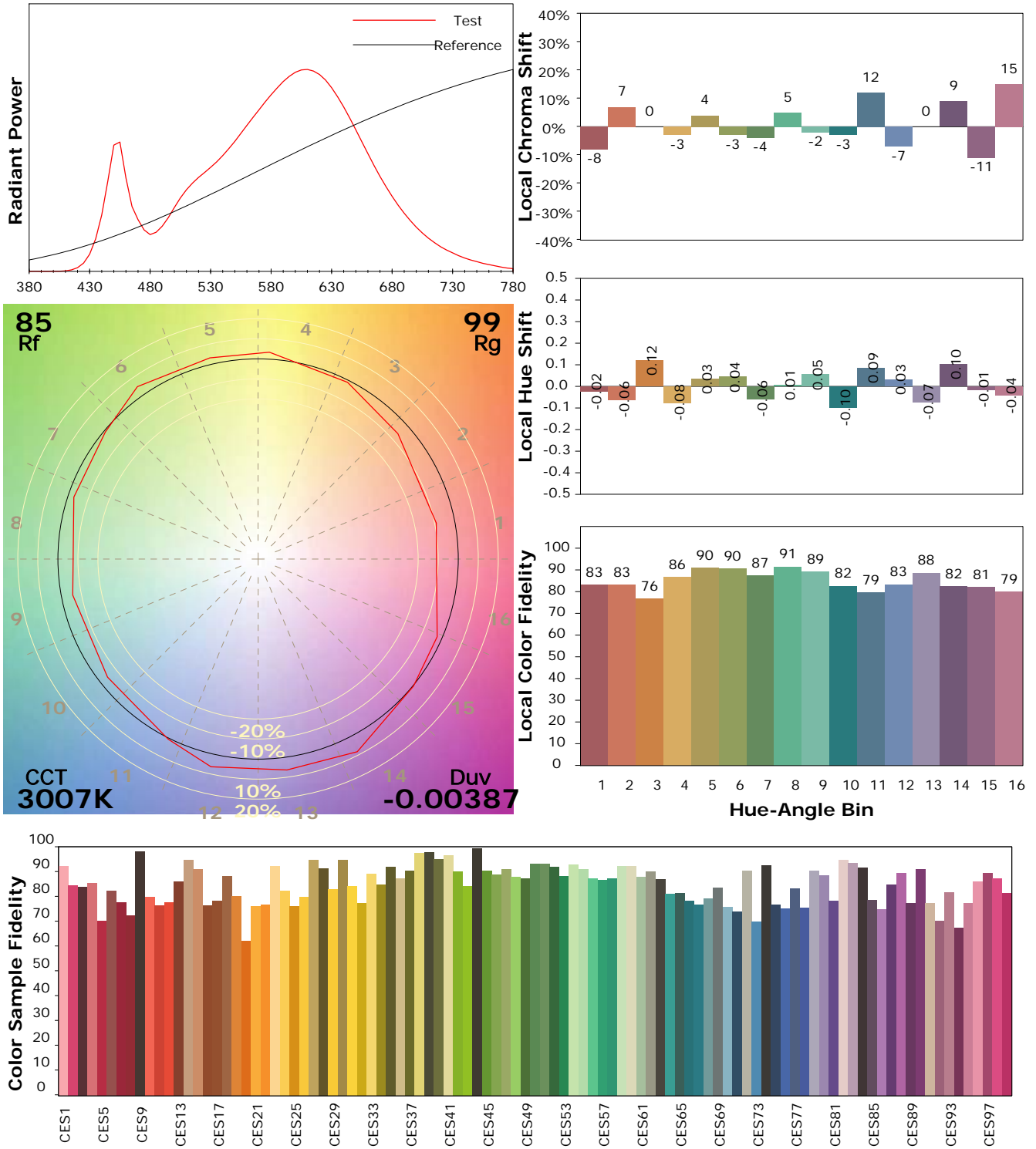
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## IES TM-30-18 Color Rendition Report

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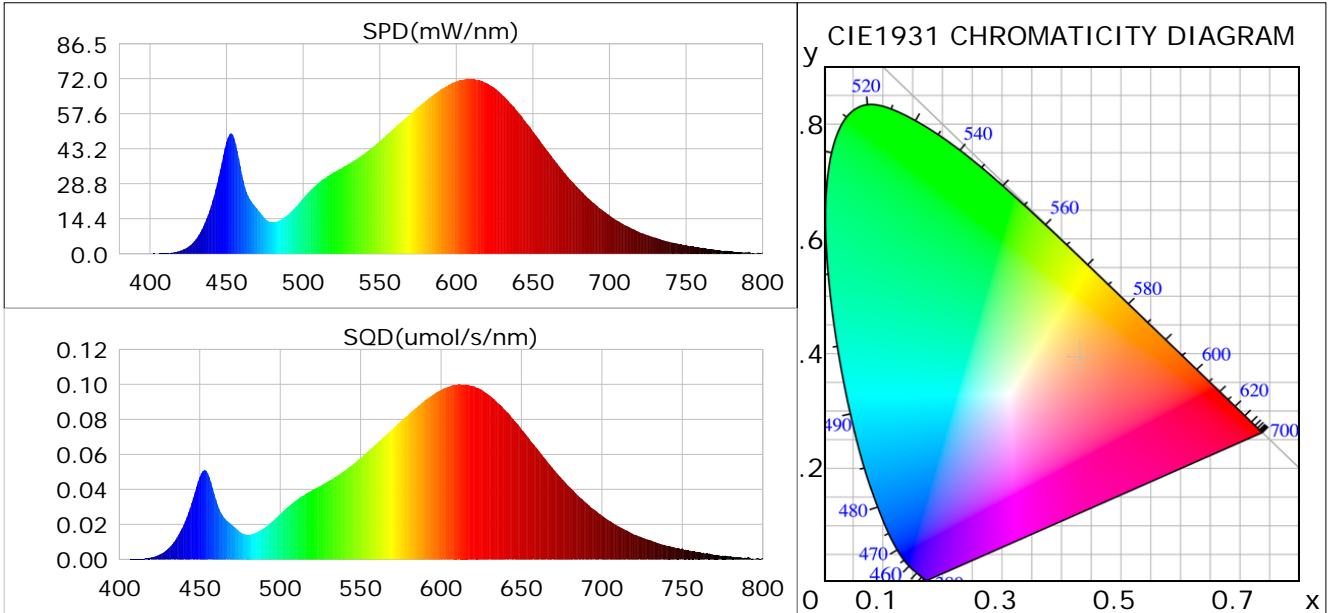
Condition: Tx:22.7°C, Ti:0.0°C, R.H.:60%  
 Test Lab:  
 Operator: CRE

Test Device: Lisun LMS-9000B  
 Test Time: 2021-02-12 11:57:48  
 Inspector:

## Plant optical param data

### CIE Colorimetric Parameters

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 Peak Wavelength: 607.5nm Half Bandwidth: 140.0nm  
 Dominant Wavelength: 584.3nm Color Purity: 0.471  
 CRI:  $R_a=85.1$



### Plant Optical Param

$ \mu_v(lm): 3629.80$	$Q_v(lm.s): 3629.80$
$ \mu_e, \dot{E}(W/nm): 11.70$	$Q_e(J): 11.70$
$ \mu_e(W): 11.23$	$ \mu_{fr}(W): 0.49$
$ \zeta_e: 0.41$	$ \zeta_{fr}: 0.02$
$PPE(umol/s/w): 2.00$	$K_{fr}: 0.11$
$Erb\_Ratio: 2.90$	$PPF(umol/s): 54.34$
$PF_{uv}(360-400)(umol/s): 0.00$	$PPF(400-500)(umol/s): 6.39$
$PPF(500-600)(umol/s): 22.28$	$PPF(600-700)(umol/s): 25.68$
$PPF_{fr}(700-800)(umol/s): 2.90$	$PPF.t(umol): 54.34$
$ \mu_{ch-A.t}(J): 0.94$	$ \mu_{ch-A}(W): 0.94$
$ \mu_{ch-B.t}(J): 0.46$	$ \mu_{ch-B}(W): 0.46$
$ \mu_b.t(J): 1.66$	$ \mu_b(W): 1.66$
$ \mu_y.t(J): 4.79$	$ \mu_y(W): 4.79$
$ \mu_r.t(J): 4.88$	$ \mu_r(W): 4.88$

### Electric Parameters

Voltage: 230.90V	Current: 0.1240A	Power: 27.19W
Power Factor: 0.9400	Frequency: 49.99Hz	

Condition:  $T_x=22.7^\circ C$ ,  $T_i=0.0^\circ C$ , R.H.: 60%  
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