

Lightsource Test Report

Product Information

Product Category: LED-HiPower
 Product Spec: LED-FLS-AX6-720-CW
 Manufacturer: METOLIGHT
 Buyer: 1953

Product Type: LED-HiPower-Station
 Product Number: 1
 Submitted Unit: 101796

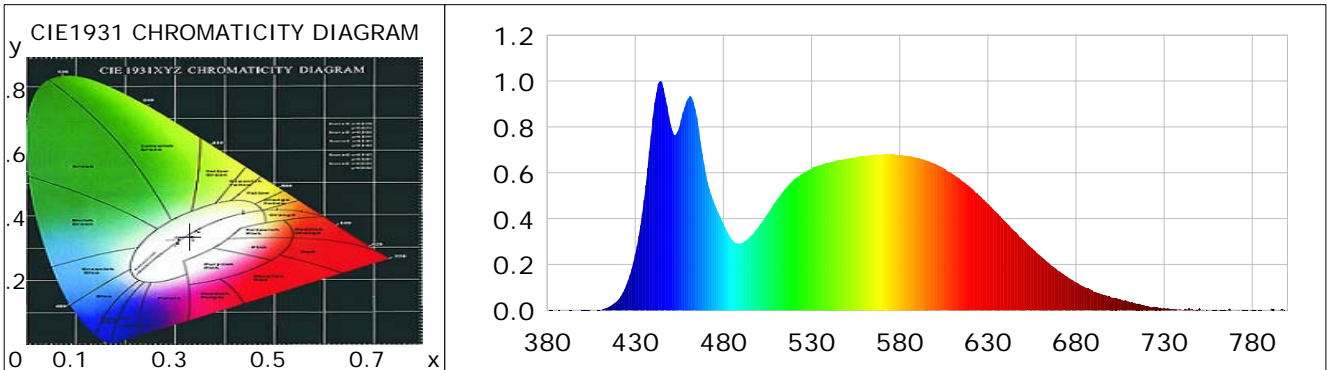
CIE Colorimetric Parameters

Chromaticity coordinates: $x=0.3300$ $y=0.3371$ $u(u')=0.2067$ $v=0.3168$ $v'=0.4752$
 CCT: $T_c=5612K$ ($duv=-0.00092$) Color Ratio: $R=0.150$ $G=0.799$ $B=0.050$
 Peak Wavelength: 444.3nm Half Bandwidth: 37.9nm
 Dominant Wavelength: 507.6nm Color Purity: 0.010
 CRI: $R_a=84.1$, $avgR(1\sim14)=77.6$, $avgR(1\sim15)=77.8$ TM30: $R_f=83$, $R_g=96$
 GAI: $GAI_BB_8=95.0$, $GAI_BB_15=99.3$, $GAI_EES=88.1$

R1 =83	R2 =89	R3 =90	R4 =84	R5 =84	R6 =83	R7 =88	R8 =72
R9 =17	R10=71	R11=82	R12=64	R13=85	R14=94	R15=80	

Color Quality Scale: $Q_a=80.7$, $Q_f=80.4$, $Q_p=81.8$, $Q_g=93.4$

Q1 =86	Q2 =98	Q3 =76	Q4 =70	Q5 =77	Q6 =81	Q7 =86	Q8 =90
Q9 =95	Q10=84	Q11=79	Q12=79	Q13=81	Q14=73	Q15=78	



Photometric Parameters

Luminous Flux: 87350 lm	Efficiency: 121.32 lm/W	Radiant Power: 276.681 W
Total mains efficacy: 142.67 lm/W	Energy Efficiency Class: D (EU 2019/2015)	
Pupil Flux: 154032.85 Plm	Pupil Lumens Per Watt: 213.93 Plm/W	Pupil Factor (Kp): 1.763
Cirtopic Flux: 343025.77 lm		

Electric Parameters

Voltage: 230.00V	Current: 3.1310A	Power: 720.00W
Power Factor: 0.9590	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: 45293 (2675)	CCD Integration Time: 275.30 ms

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

Test Device: Lisun LMS-9000B
 Test Time: 2021-08-18 09:36:16
 Inspector:

Lightsource Test Report

Product Information

Product Category: LED-HiPower
 Product Spec: LED-FLS-AX6-720-CW
 Manufacturer: METOLIGHT
 Buyer: 1953

Product Type: LED-HiPower-Station
 Product Number: 1
 Submitted Unit: 101796

WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)
380	0.0003	0.5534	525	0.5974	1192.0347	670	0.1724	344.0020
385	0.0006	1.1936	530	0.6179	1232.9851	675	0.1475	294.4094
390	0.0005	1.0662	535	0.6328	1262.6353	680	0.1227	244.9129
395	0.0001	0.2336	540	0.6434	1283.9067	685	0.1007	200.9780
400	0.0010	1.8968	545	0.6562	1309.4167	690	0.0815	162.6671
405	0.0002	0.4929	550	0.6620	1321.0411	695	0.0697	139.1016
410	0.0023	4.6850	555	0.6672	1331.3933	700	0.0561	111.9941
415	0.0155	30.9830	560	0.6717	1340.3819	705	0.0488	97.4336
420	0.0431	85.9879	565	0.6772	1351.2921	710	0.0382	76.2821
425	0.1117	222.9173	570	0.6789	1354.6881	715	0.0292	58.3584
430	0.2455	489.9125	575	0.6812	1359.2426	720	0.0189	37.7390
435	0.4820	961.8546	580	0.6782	1353.2419	725	0.0141	28.2150
440	0.8412	1678.5878	585	0.6717	1340.3004	730	0.0107	21.3015
445	0.9974	1990.3252	590	0.6639	1324.7295	735	0.0043	8.5308
450	0.8116	1619.5448	595	0.6532	1303.4156	740	0.0028	5.5013
455	0.7998	1595.9762	600	0.6388	1274.6680	745	0.0041	8.1123
460	0.9240	1843.7068	605	0.6198	1236.8636	750	0.0101	20.2231
465	0.8413	1678.7120	610	0.5941	1185.4654	755	0.0035	6.9230
470	0.5972	1191.6280	615	0.5665	1130.3754	760	0.0010	1.9996
475	0.4623	922.5618	620	0.5373	1072.1713	765	0.0013	2.4976
480	0.3785	755.3663	625	0.5019	1001.5253	770	0.0013	2.6702
485	0.3070	612.6436	630	0.4647	927.2412	775	0.0016	3.1861
490	0.2929	584.5003	635	0.4259	849.7566	780	0.0037	7.3430
495	0.3191	636.8184	640	0.3865	771.2048	785	0.0018	3.5534
500	0.3651	728.4517	645	0.3462	690.7996	790	0.0001	0.2224
505	0.4204	838.8472	650	0.3085	615.6002	795	0.0008	1.5631
510	0.4793	956.3219	655	0.2714	541.6224	800	0.0037	7.2842
515	0.5294	1056.4064	660	0.2367	472.2610			
520	0.5697	1136.7933	665	0.2038	406.7153			

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

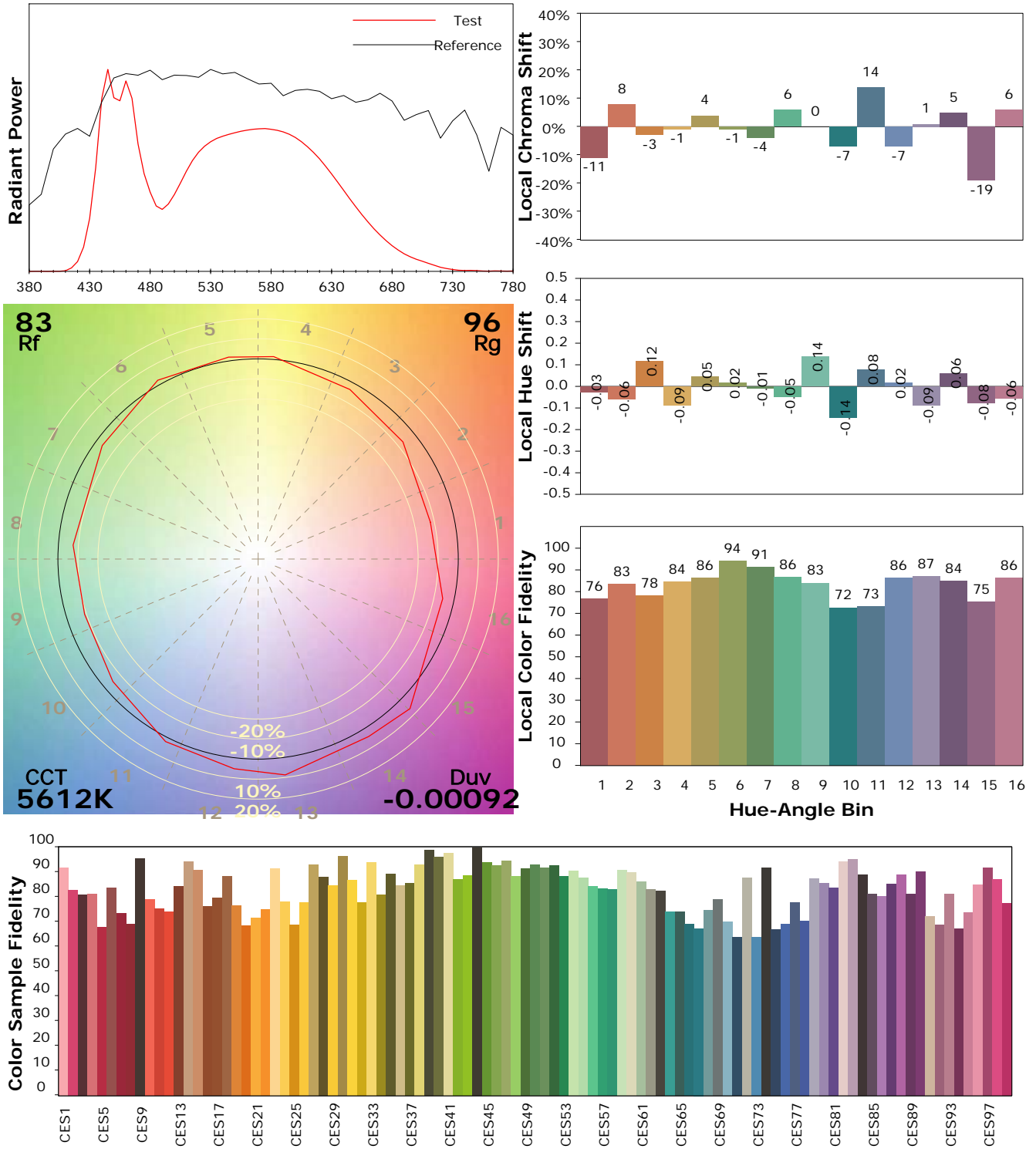
Test Device: Lisun LMS-9000B
 Test Time: 2021-08-18 09:36:16
 Inspector:

IES TM-30-18 Color Rendition Report

Product Information

Product Category: LED-HiPower
 Product Spec: LED-FLS-AX6-720-CW
 Manufacturer: METOLIGHT
 Buyer: 1953

Product Type: LED-HiPower-Station
 Product Number: 1
 Submitted Unit: 101796



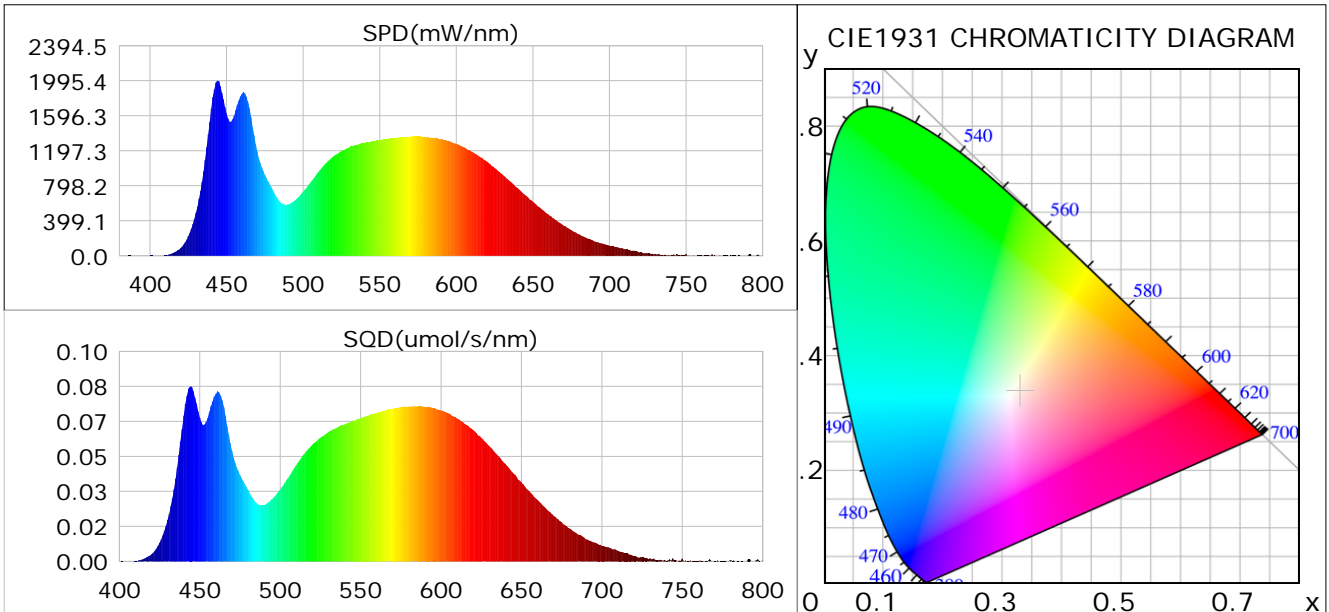
Condition: Tx:0.0°C, Ti:0.0°C, R.H.: 60%
 Test Lab:
 Operator: CRE

Test Device: Lisun LMS-9000B
 Test Time: 2021-08-18 09:36:16
 Inspector:

Plant optical param data

CIE Colorimetric Parameters

Chromaticity coordinates: $x=0.3300$ $y=0.3371$ $u(u')=0.2067$ $v=0.3168$ $v'=0.4752$
 CCT: $T_c=5612K$ ($duv=-0.00092$) Color Ratio: $R=0.150$ $G=0.799$ $B=0.050$
 Peak Wavelength: 444.3nm Half Bandwidth: 37.9nm
 Dominant Wavelength: 507.6nm Color Purity: 0.010
 CRI: $R_a=84.1$



Plant Optical Param

$ \mu_v(lm): 87350.00$	$Q_v(lm.s): 87350.00$
$ \mu_e, \dot{E}(W/nm): 276.68$	$Q_e(J): 276.68$
$ \mu_e(W): 274.57$	$ \mu_{fr}(W): 2.28$
$ \zeta_e: 0.38$	$ \zeta_{fr}: 0.00$
$PPE(umol/s/w): 1.73$	$K_{fr}: 0.02$
$Erb_Ratio: 0.74$	$PPF(umol/s): 1245.02$
$PF_{uv}(360-400)(umol/s): 0.10$	$PPF(400-500)(umol/s): 332.33$
$PPF(500-600)(umol/s): 571.87$	$PPF(600-700)(umol/s): 340.82$
$PPF_{fr}(700-800)(umol/s): 13.07$	$PPF.t(umol): 1245.02$
$ \mu_{ch-A.t}(J): 24.33$	$ \mu_{ch-A}(W): 24.33$
$ \mu_{ch-B.t}(J): 15.53$	$ \mu_{ch-B}(W): 15.53$
$ \mu_b.t(J): 86.62$	$ \mu_b(W): 86.62$
$ \mu_y.t(J): 124.35$	$ \mu_y(W): 124.35$
$ \mu_r.t(J): 65.60$	$ \mu_r(W): 65.60$

Electric Parameters

Voltage: 230.00V	Current: 3.1310A	Power: 720.00W
Power Factor: 0.9590	Frequency: 49.99Hz	

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

Test Device: Lisun LMS-9000B
 Test Time: 2021-08-18 09:36:16
 Inspector: