

Lightsource Test Report (1/2)

Product Infomation

Product Category
Product Spec: 15W-4000K

Product Type: **m11004-a**
Product Number: 1

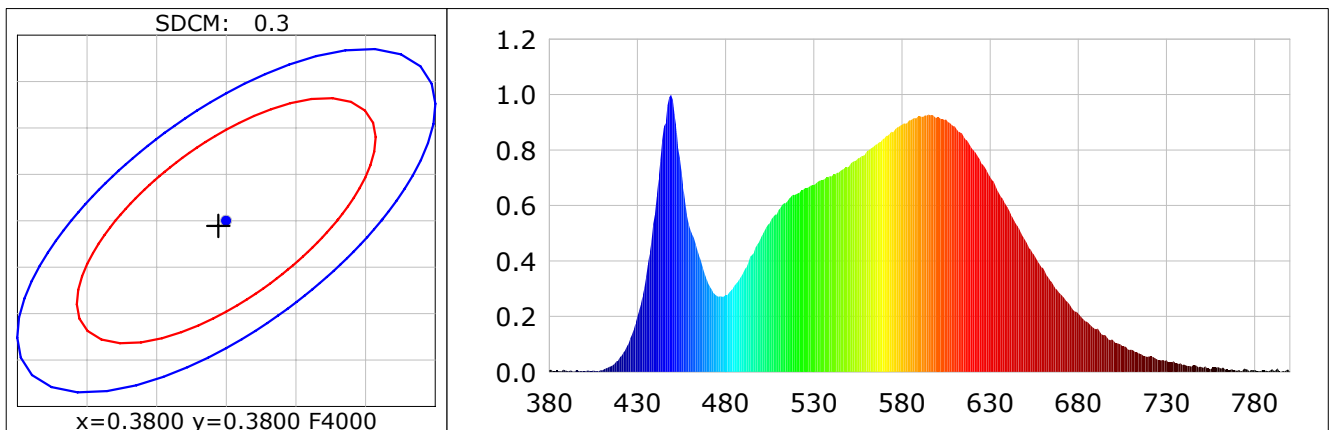
CIE Colorimetric Parameters

Chromaticity coordinates: $x=0.3794$ $y=0.3794$ $u(u')=0.2234$ $v=0.3351$ $v'(v')=0.5026$
 CCT: $T_c=4048K$ ($duv=0.00155$) Color Ratio: $R=0.182$ $G=0.782$ $B=0.036$
 Peak Wavelength: 448.8nm Half Bandwidth: 22.3nm
 Dominant Wavelength: 578.1nm Color Purity: 0.278
 CRI: $R_a=83.7$

R1 =82	R2 =89	R3 =95	R4 =84	R5 =82	R6 =86	R7 =86	R8 =66
R9 =9	R10=74	R11=84	R12=66	R13=83	R14=97	R15=75	

 Color Quality Scale: $Q_a=84.0$, $Q_f=84.3$, $Q_p=83.7$, $Q_g=93.0$

Q1 =82	Q2 =99	Q3 =82	Q4 =80	Q5 =84	Q6 =85	Q7 =87	Q8 =90
Q9 =98	Q10=89	Q11=87	Q12=85	Q13=85	Q14=73	Q15=76	



Photometric Parameters

Luminous Flux: 1840.55 lm
EEI: 0.14

Efficiency: 98.69 lm/W
Energy Efficiency Class: A+ (EU 874-2012)

Radiant Power: 12.117 W

Electric Parameters

Voltage: 220.10V
Power Factor: 0.9790

Current: 0.1890A
Frequency: 49.99Hz

Power: 15.67W

BIN: OUT :

Test Infomation

Scan Range: 380~800:1nm
Stabilization Time: 3 Min
Max of Signal: 43276 (4457)
Condition: $T_x:31.8^\circ C$, $T_l:28.9^\circ C$, R.H.:60%
Test Lab: IDEUS
Operator:

Photometric Method: sphere-spectroradiometer
Photometric Condition: Sphere diameter: 2.00m, 4 π
CCD Integration Time: 486.21 ms
Test Device: Inventfine CMS-3000S
Test Time: 2020-11-05 20:04:26
Inspector:

Lightsource Test Report (2/2)

WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)
380	0.0065	0.4797	525	0.6635	49.3379	670	0.2804	20.8498
385	0.0045	0.3381	530	0.6741	50.1217	675	0.2430	18.0709
390	0.0037	0.2755	535	0.6917	51.4309	680	0.2108	15.6714
395	0.0057	0.4262	540	0.7046	52.3885	685	0.1808	13.4444
400	0.0016	0.1192	545	0.7249	53.8994	690	0.1539	11.4457
405	0.0057	0.4221	550	0.7407	55.0785	695	0.1341	9.9675
410	0.0056	0.4133	555	0.7700	57.2559	700	0.1117	8.3071
415	0.0206	1.5286	560	0.7963	59.2099	705	0.0922	6.8578
420	0.0536	3.9863	565	0.8195	60.9315	710	0.0803	5.9729
425	0.1021	7.5905	570	0.8420	62.6085	715	0.0658	4.8919
430	0.1993	14.8157	575	0.8638	64.2295	720	0.0564	4.1939
435	0.3434	25.5366	580	0.8916	66.2960	725	0.0435	3.2336
440	0.5696	42.3532	585	0.9082	67.5310	730	0.0425	3.1591
445	0.8860	65.8757	590	0.9221	68.5601	735	0.0322	2.3972
450	0.9811	72.9476	595	0.9282	69.0136	740	0.0271	2.0167
455	0.7189	53.4554	600	0.9177	68.2360	745	0.0245	1.8193
460	0.5117	38.0478	605	0.9104	67.6934	750	0.0173	1.2868
465	0.4189	31.1502	610	0.8849	65.7977	755	0.0102	0.7586
470	0.3207	23.8490	615	0.8483	63.0787	760	0.0150	1.1168
475	0.2739	20.3677	620	0.8028	59.6891	765	0.0076	0.5681
480	0.2773	20.6223	625	0.7512	55.8535	770	0.0040	0.2955
485	0.3106	23.0943	630	0.7026	52.2394	775	0.0098	0.7305
490	0.3570	26.5435	635	0.6437	47.8643	780	0.0074	0.5535
495	0.4216	31.3482	640	0.5913	43.9671	785	0.0054	0.4020
500	0.4838	35.9751	645	0.5296	39.3804	790	0.0110	0.8150
505	0.5372	39.9446	650	0.4728	35.1565	795	0.0002	0.0158
510	0.5841	43.4301	655	0.4219	31.3677	800	0.0004	0.0333
515	0.6152	45.7416	660	0.3742	27.8252			
520	0.6410	47.6639	665	0.3227	23.9962			

Condition: Tx:31.8'C, Ti:28.9'C, R.H.:60%
Test Lab: IDEUS
Operator:

Test Device: Inventfine CMS-3000S
Test Time: 2020-11-05 20:04:26
Inspector:

Lightsource Test Report (1/2)

Product Information

Product Category:
Product Spec: 15W-4000K

Product Type: **ml004-a**
Product Number: 2

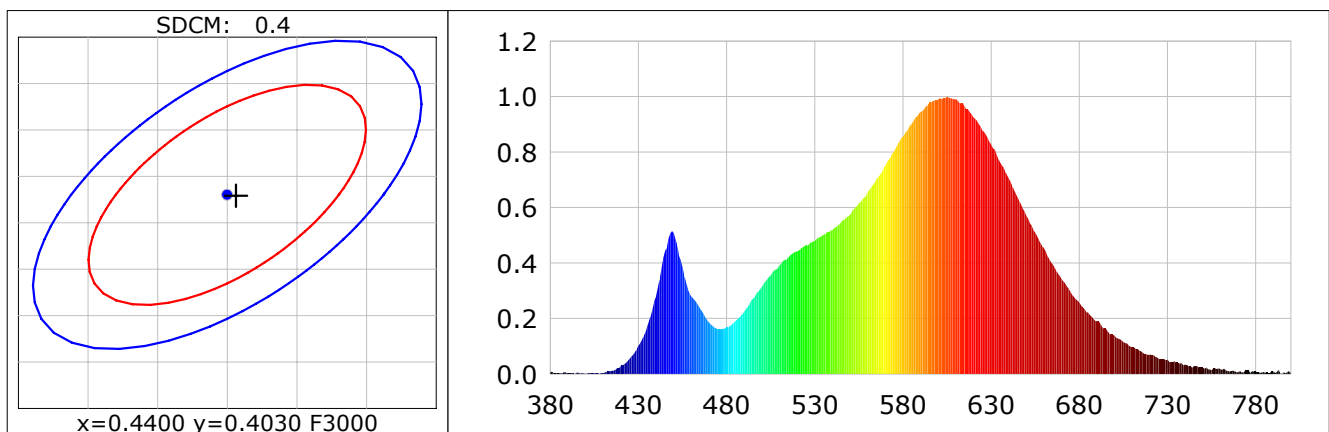
CIE Colorimetric Parameters

Chromaticity coordinates: $x=0.4406$ $y=0.4029$ $u(u')=0.2535$ $v=0.3477$ $v'=0.5215$
 CCT: $T_c=3929K$ ($duv=-0.00095$) Color Ratio: $R=0.234$ $G=0.742$ $B=0.024$
 Peak Wavelength: 605.0nm Half Bandwidth: 121.4nm
 Dominant Wavelength: 583.5nm Color Purity: 0.532
 CRI: $R_a=82.2$

R1 =80	R2 =91	R3 =96	R4 =81	R5 =82	R6 =90	R7 =81	R8 =57
R9 =4	R10=79	R11=81	R12=75	R13=83	R14=99	R15=73	

 Color Quality Scale: $Q_a=82.0$, $Q_f=83.5$, $Q_p=83.9$, $Q_g=92.1$

Q1 =77	Q2 =95	Q3 =83	Q4 =81	Q5 =84	Q6 =83	Q7 =83	Q8 =85
Q9 =95	Q10=89	Q11=86	Q12=83	Q13=82	Q14=71	Q15=73	



Photometric Parameters

Luminous Flux: 1620.33 lm Efficiency: 99.07 lm/W Radiant Power: 12.060 W
 EEI: 0.14 Energy Efficiency Class: A+ (EU 874-2012)

Electric Parameters

Voltage: 220.10V Current: 0.1870A Power: 15.34W
 Power Factor: 0.9780 Frequency: 50.00Hz

BIN: OUT :

Test Information

Scan Range: 380~800:1nm Stabilization Time: 3 Min Max of Signal: 43346 (4367) Condition: $T_x:31.8^\circ C$, $T_l:28.9^\circ C$, R.H.:60% Test Lab: IDEUS Operator:	Photometric Method: sphere-spectroradiometer Photometric Condition: Sphere diameter: 2.00m, 4 π CCD Integration Time: 442.19 ms Test Device: Inventfine CMS-3000S Test Time: 2020-11-05 20:10:18 Inspector:
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Lightsource Test Report (2/2)

WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)	WL(nm)	PL	PE(mW/nm)
380	0.0054	0.4543	525	0.4658	39.0132	670	0.3412	28.5778
385	0.0037	0.3089	530	0.4808	40.2714	675	0.2959	24.7875
390	0.0023	0.1953	535	0.5022	42.0630	680	0.2575	21.5660
395	0.0054	0.4552	540	0.5188	43.4560	685	0.2214	18.5434
400	0.0008	0.0679	545	0.5479	45.8940	690	0.1894	15.8687
405	0.0041	0.3428	550	0.5732	48.0147	695	0.1629	13.6427
410	0.0034	0.2827	555	0.6160	51.6005	700	0.1376	11.5259
415	0.0113	0.9493	560	0.6575	55.0720	705	0.1141	9.5571
420	0.0298	2.4956	565	0.7032	58.8985	710	0.0969	8.1133
425	0.0543	4.5500	570	0.7504	62.8573	715	0.0815	6.8228
430	0.1021	8.5487	575	0.8019	67.1686	720	0.0700	5.8632
435	0.1705	14.2847	580	0.8552	71.6308	725	0.0544	4.5541
440	0.2795	23.4152	585	0.9032	75.6574	730	0.0519	4.3491
445	0.4435	37.1478	590	0.9450	79.1544	735	0.0402	3.3645
450	0.5071	42.4745	595	0.9787	81.9815	740	0.0336	2.8169
455	0.3832	32.0998	600	0.9902	82.9387	745	0.0284	2.3806
460	0.2792	23.3842	605	1.0000	83.7629	750	0.0226	1.8895
465	0.2354	19.7212	610	0.9911	83.0153	755	0.0143	1.1979
470	0.1854	15.5261	615	0.9635	80.7084	760	0.0172	1.4392
475	0.1609	13.4735	620	0.9251	77.4874	765	0.0088	0.7370
480	0.1683	14.0950	625	0.8769	73.4503	770	0.0054	0.4530
485	0.1909	15.9892	630	0.8272	69.2848	775	0.0112	0.9350
490	0.2248	18.8298	635	0.7632	63.9248	780	0.0085	0.7135
495	0.2712	22.7135	640	0.7037	58.9445	785	0.0053	0.4430
500	0.3145	26.3420	645	0.6359	53.2665	790	0.0100	0.8373
505	0.3554	29.7718	650	0.5694	47.6947	795	0.0004	0.0351
510	0.3933	32.9409	655	0.5108	42.7841	800	0.0006	0.0467
515	0.4208	35.2442	660	0.4535	37.9843			
520	0.4422	37.0385	665	0.3943	33.0266			

Condition: Tx:31.8'C, Ti:28.9'C, R.H.:60%
Test Lab: IDEUS
Operator:

Test Device: Inventfine CMS-3000S
Test Time: 2020-11-05 20:10:18
Inspector: