

Lightsource Test Report

Product Infomation

Product Number: 43

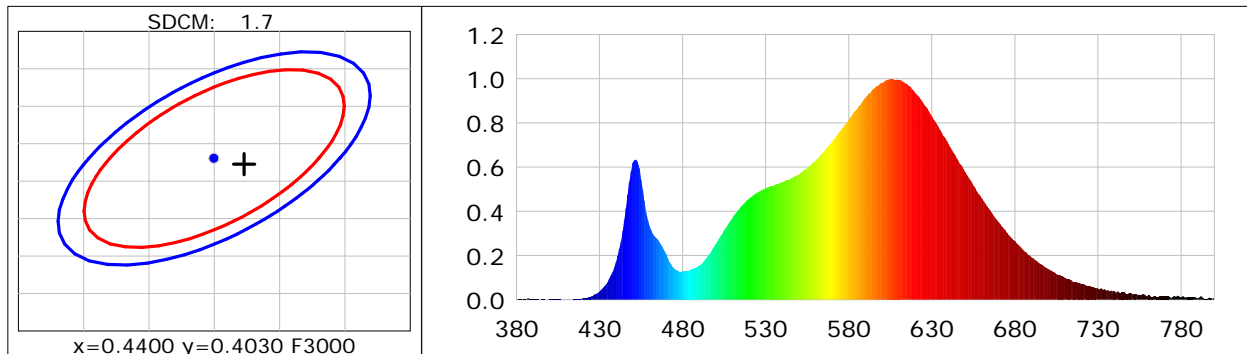
CIE Colorimetric Parameters

Chromaticity coordinates: $x=0.4423$ $y=0.4022$ $u(u')=0.2548$ $v=0.3476$ $v'=0.5215$
 CCT: $T_c=2897K$ ($duv=-0.00142$) Color Ratio: $R=0.240$ $G=0.739$ $B=0.021$
 Peak Wavelength: 605.7nm Half Bandwidth: 127.8nm
 Dominant Wavelength: 583.8nm Color Purity: 0.535
 Central Wave: 592.6nm Gravity Wave: 597.1nm
 CRI: $R_a=83.3$ TM30: $R_f=84$, $R_g=98$
 GAI: $GAI_BB_8=99.4$, $GAI_BB_15=107.4$, $GAI_EES=54.2$

R1 =82	R2 =91	R3 =97	R4 =83	R5 =83	R6 =89	R7 =82	R8 =60
R9 =9	R10=79	R11=83	R12=68	R13=85	R14=98	R15=75	

Color Quality Scale: $Q_a=82.1$, $Q_f=83.1$, $Q_p=85.2$, $Q_g=93.8$

Q1 =78	Q2 =95	Q3 =80	Q4 =79	Q5 =83	Q6 =83	Q7 =82	Q8 =85
Q9 =96	Q10=88	Q11=86	Q12=84	Q13=83	Q14=73	Q15=74	



Photometric Parameters

Luminous Flux: 1751.8 lm Efficiency: 117.65 lm/W Radiant Power: 5.309 W
 Total mains efficacy: 138.36 lm/W Energy Efficiency Class: D (EU 2019/2015)
 Auxiliary lamp correction factor: 0.82

Electric Parameters

Voltage: 230.80V Current: 0.0680A Power: 14.89W
 Power Factor: 0.9460 Frequency: 49.99Hz

Test Infomation

Scan Range: 380~800:1nm Photometric Method: sphere-spectroradiometer
 Stabilization Time: 0 Min ALC.: 0.8200 Photometric Condition: Sphere diameter: 1.50m, 2T
 Max of Signal: 45200 (3269) CCD Integration Time: 701.97 ms

Condition: Tx: 26.1°C, Ti: 25.5°C, R.H.: 60%
 Test Lab:
 Operator:

Test Device: CMS-2S (Plus)
 Test Time:
 Inspector:

Lightsource Test Report

Product Infomation

Product Number: 44

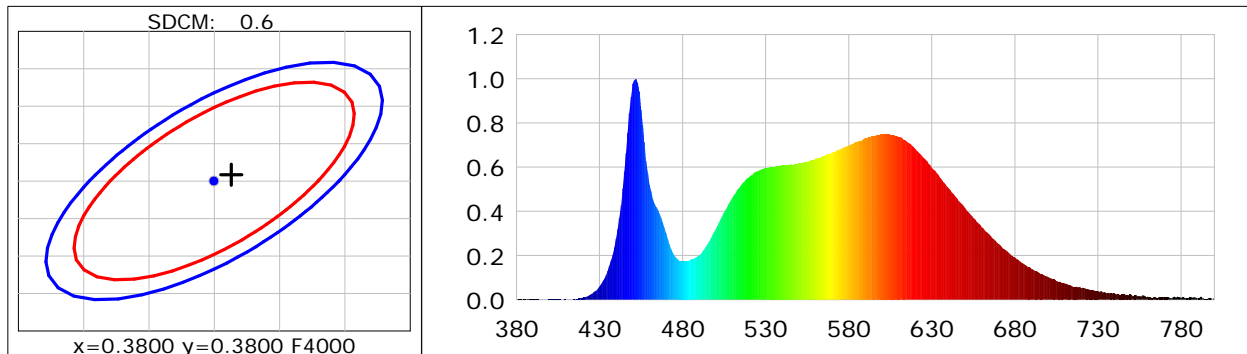
CIE Colorimetric Parameters

Chromaticity coordinates: $x=0.3813$ $y=0.3808$ $u(u')=0.2240$ $v=0.3357$ $v'=0.5035$
 CCT: $T_c=4007K$ ($duv=0.00165$) Color Ratio: $R=0.187$ $G=0.781$ $B=0.032$
 Peak Wavelength: 451.7nm Half Bandwidth: 16.8nm
 Dominant Wavelength: 578.2nm Color Purity: 0.287
 Central Wave: 452.3nm Gravity Wave: 452.2nm
 CRI: $R_a=84.7$ TM30: $R_f=84$, $R_g=97$
 GAI: $GAI_BB_8=92.6$, $GAI_BB_15=100.1$, $GAI_EES=73.2$

R1 =84	R2 =89	R3 =92	R4 =85	R5 =83	R6 =85	R7 =88	R8 =70
R9 =20	R10=73	R11=85	R12=56	R13=85	R14=95	R15=79	

Color Quality Scale: $Q_a=84.4$, $Q_f=84.3$, $Q_p=84.8$, $Q_g=94.5$

Q1 =84	Q2 =99	Q3 =78	Q4 =77	Q5 =83	Q6 =85	Q7 =87	Q8 =90
Q9 =97	Q10=89	Q11=87	Q12=87	Q13=87	Q14=76	Q15=79	



Photometric Parameters

Luminous Flux: 1829.1 lm Efficiency: 122.93 lm/W Radiant Power: 5.538 W
 Total mains efficacy: 144.56 lm/W Energy Efficiency Class: D (EU 2019/2015)
 Auxiliary lamp correction factor: 0.82

Electric Parameters

Voltage: 230.80V Current: 0.0680A Power: 14.88W
 Power Factor: 0.9460 Frequency: 49.98Hz

Test Infomation

Scan Range: 380~800:1nm Photometric Method: sphere-spectroradiometer
 Stabilization Time: 0 Min ALC.: 0.8200 Photometric Condition: Sphere diameter: 1.50m, 2T
 Max of Signal: 53451 (3267) CCD Integration Time: 701.97 ms

Condition: Tx:26.1°C, Ti:25.4°C, R.H.:60%
 Test Lab:
 Operator:

Test Device: CMS-2S (Plus)
 Test Time:
 Inspector:

Lightsource Test Report

Product Infomation

Product Number: 45

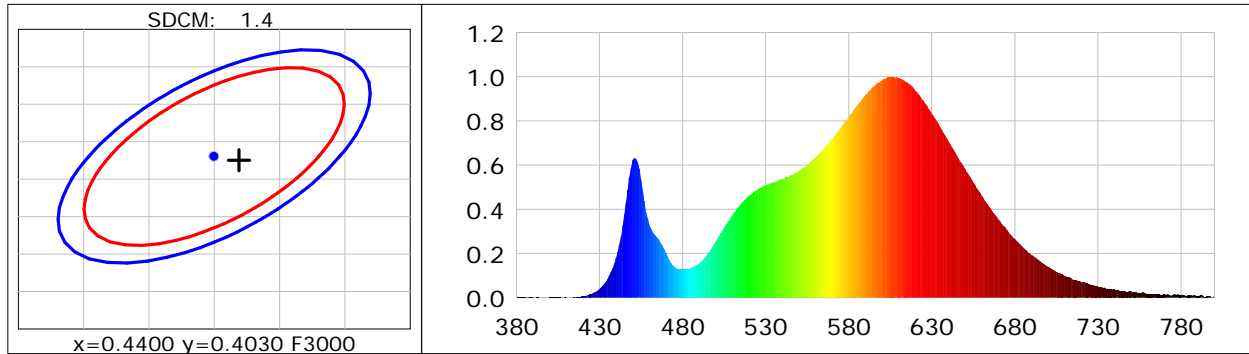
CIE Colorimetric Parameters

Chromaticity coordinates: $x=0.4419$ $y=0.4025$ $u(u')=0.2545$ $v=0.3477$ $v'=0.5215$
 CCT: $T_c=2905K$ ($duv=-0.00127$) Color Ratio: $R=0.239$ $G=0.740$ $B=0.021$
 Peak Wavelength: 606.6nm Half Bandwidth: 129.2nm
 Dominant Wavelength: 583.7nm Color Purity: 0.535
 Central Wave: 592.2nm Gravity Wave: 597.2nm
 CRI: $R_a=83.3$ TM30: $R_f=84$, $R_g=98$
 GAI: $GAI_BB_8=99.1$, $GAI_BB_15=107.0$, $GAI_EES=54.3$

R1 =82	R2 =91	R3 =97	R4 =83	R5 =83	R6 =89	R7 =82	R8 =60
R9 =10	R10=78	R11=83	R12=68	R13=84	R14=98	R15=75	

Color Quality Scale: $Q_a=82.1$, $Q_f=83.2$, $Q_p=85.1$, $Q_g=93.8$

Q1 =78	Q2 =96	Q3 =80	Q4 =79	Q5 =83	Q6 =83	Q7 =82	Q8 =85
Q9 =96	Q10=88	Q11=86	Q12=84	Q13=83	Q14=73	Q15=74	



Photometric Parameters

Luminous Flux: 2344.4 lm Efficiency: 116.06 lm/W Radiant Power: 7.103 W
 Total mains efficacy: 136.49 lm/W Energy Efficiency Class: D (EU 2019/2015)
 Auxiliary lamp correction factor: 0.82

Electric Parameters

Voltage: 230.80V Current: 0.0910A Power: 20.20W
 Power Factor: 0.9640 Frequency: 49.99Hz

Test Infomation

Scan Range: 380~800:1nm Photometric Method: sphere-spectroradiometer
 Stabilization Time: 0 Min ALC.: 0.8200 Photometric Condition: Sphere diameter: 1.50m, 2T
 Max of Signal: 51122 (3214) CCD Integration Time: 596.67 ms

Condition: Tx:26.2°C, Ti:25.6°C, R.H.:60%
 Test Lab:
 Operator:

Test Device: CMS-2S (Plus)
 Test Time:
 Inspector:

Lightsource Test Report

Product Infomation

Product Number: 46

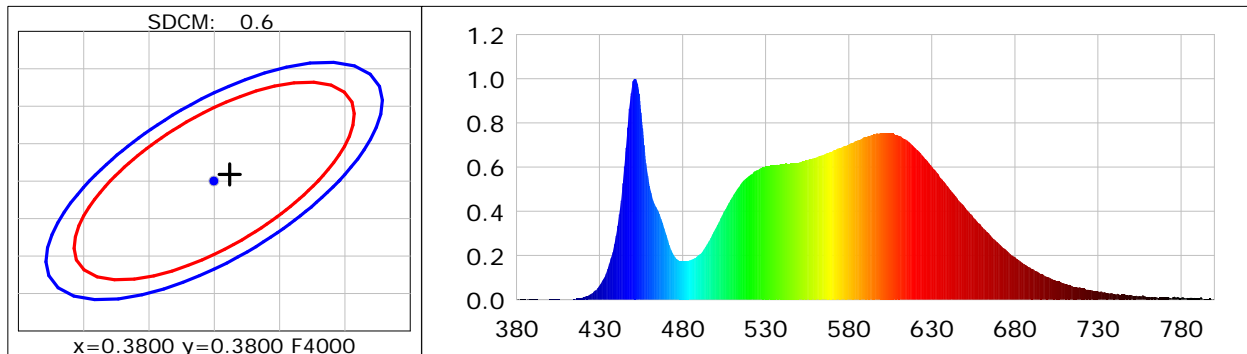
CIE Colorimetric Parameters

Chromaticity coordinates: $x=0.3812$ $y=0.3809$ $u(u')=0.2240$ $v=0.3357$ $v'=0.5035$
 CCT: $T_c=4010K$ ($duv=0.00170$) Color Ratio: $R=0.187$ $G=0.781$ $B=0.032$
 Peak Wavelength: 451.5nm Half Bandwidth: 16.9nm
 Dominant Wavelength: 578.1nm Color Purity: 0.287
 Central Wave: 452.1nm Gravity Wave: 451.7nm
 CRI: $R_a=84.5$ TM30: $R_f=84$, $R_g=97$
 GAI: $GAI_BB_8=92.6$, $GAI_BB_15=100.0$, $GAI_EES=73.2$

R1 =84	R2 =89	R3 =92	R4 =85	R5 =83	R6 =85	R7 =88	R8 =70
R9 =20	R10=72	R11=85	R12=56	R13=85	R14=95	R15=79	

Color Quality Scale: $Q_a=84.3$, $Q_f=84.2$, $Q_p=84.8$, $Q_g=94.6$

Q1 =84	Q2 =99	Q3 =78	Q4 =77	Q5 =83	Q6 =85	Q7 =87	Q8 =90
Q9 =97	Q10=88	Q11=87	Q12=87	Q13=87	Q14=76	Q15=79	



Photometric Parameters

Luminous Flux: 2462.0 lm Efficiency: 122.06 lm/W Radiant Power: 7.446 W
 Total mains efficacy: 143.54 lm/W Energy Efficiency Class: D (EU 2019/2015)
 Auxiliary lamp correction factor: 0.82

Electric Parameters

Voltage: 230.90V Current: 0.0910A Power: 20.17W
 Power Factor: 0.9630 Frequency: 49.99Hz

Test Infomation

Scan Range: 380~800:1nm Photometric Method: sphere-spectroradiometer
 Stabilization Time: 0 Min ALC.: 0.8200 Photometric Condition: Sphere diameter: 1.50m, 2T
 Max of Signal: 51747 (3146) CCD Integration Time: 507.16 ms

Condition: Tx:26.2°C, Ti:25.2°C, R.H.:60%
 Test Lab:
 Operator:

Test Device: CMS-2S (Plus)
 Test Time:
 Inspector: