

Lightsource Test Report

Product Infomation

Product Type: C 70W 6000K

Product Number: 2

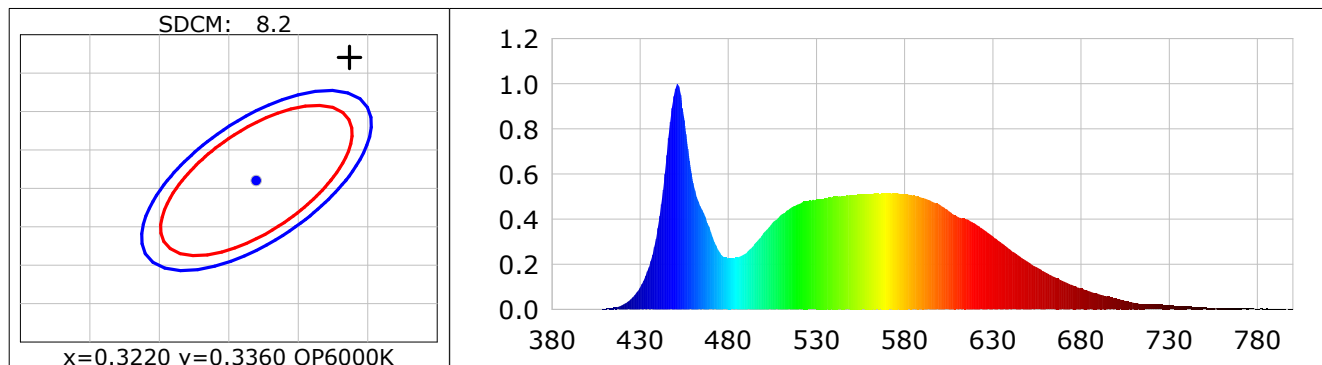
CIE Colorimetric Parameters

Chromaticity coordinates: $x=0.3287$ $y=0.3520$ $u(u')=0.2002$ $v=0.3216$ $v'=0.4824$
 CCT: $T_c=5660K$ ($duv=0.00717$) Color Ratio: $R=0.139$ $G=0.813$ $B=0.049$
 Peak Wavelength: 451.2nm Half Bandwidth: 19.5nm
 Dominant Wavelength: 555.0nm Color Purity: 0.044
 Central Wave: 452.3nm Gravity Wave: 451.8nm
 CRI: $R_a=81.2$ TM30: $R_f=82$, $R_g=94$
 GAI: $GAI_BB_8=87.5$, $GAI_BB_15=93.6$, $GAI_EES=81.5$

R1 =78	R2 =86	R3 =92	R4 =80	R5 =79	R6 =81	R7 =87	R8 =66
R9 =-2	R10=67	R11=79	R12=56	R13=80	R14=96	R15=72	

Color Quality Scale: $Q_a=80.9$, $Q_f=81.1$, $Q_p=80.4$, $Q_g=90.4$

Q1 =82	Q2 =98	Q3 =78	Q4 =73	Q5 =79	Q6 =81	Q7 =84	Q8 =89
Q9 =97	Q10=87	Q11=83	Q12=82	Q13=82	Q14=69	Q15=74	



Photometric Parameters

Luminous Flux: 8553.2 lm Efficiency: 125.23 lm/W Radiant Power: 26.282 W
 Total mains efficacy: 125.23 lm/W Energy Efficiency Class: E (EU 2019/2015)

Electric Parameters

Voltage: 230.40V Current: 0.2990A Power: 68.30W
 Power Factor: 0.9880 Frequency: 50.00Hz

Test Infomation

Scan Range: 380~800:1nm Photometric Method: sphere-spectroradiometer
 Stabilization Time: 0 Sec ALC.: 1.0000 Photometric Condition: Sphere diameter: 1.50m, 4T
 Max of Signal: 44567 (3216) CCD Integration Time: 31.35 ms

Condition: $T_x:36.1^\circ C$, $T_i:35.1^\circ C$, R.H.:60%
 Test Lab:
 Operator:

Test Device: CMS-2S (Plus)
 Test Time: 2022-08-24 09:04:29
 Inspector:

Lightsource Test Report

Product Infomation

Product Type: C 70W 4000K

Product Number: 3

CIE Colorimetric Parameters

Chromaticity coordinates: $x=0.3780$ $y=0.3775$ $u(u')=0.2232$ $v=0.3344$ $v'=0.5016$

CCT: $T_c=4072K$ ($duv=0.00105$)

Color Ratio: $R=0.182$ $G=0.780$ $B=0.039$

Peak Wavelength: 452.2nm

Half Bandwidth: 20.8nm

Dominant Wavelength: 578.2nm

Color Purity: 0.268

Central Wave: 454.6nm

Gravity Wave: 453.7nm

CRI: $R_a=84.2$

TM30: $R_f=84$, $R_g=94$

GAI: $GAI_BB_8=90.7$, $GAI_BB_15=98.2$, $GAI_EES=72.6$

$R1=83$

$R2=91$

$R3=96$

$R4=82$

$R5=83$

$R6=87$

$R7=86$

$R8=66$

$R9=13$

$R10=78$

$R11=82$

$R12=61$

$R13=85$

$R14=98$

$R15=77$

Color Quality Scale: $Q_a=83.7$, $Q_f=84.0$, $Q_p=83.0$, $Q_g=92.1$

$Q1=82$

$Q2=98$

$Q3=81$

$Q4=77$

$Q5=81$

$Q6=84$

$Q7=86$

$Q8=90$

$Q9=98$

$Q10=91$

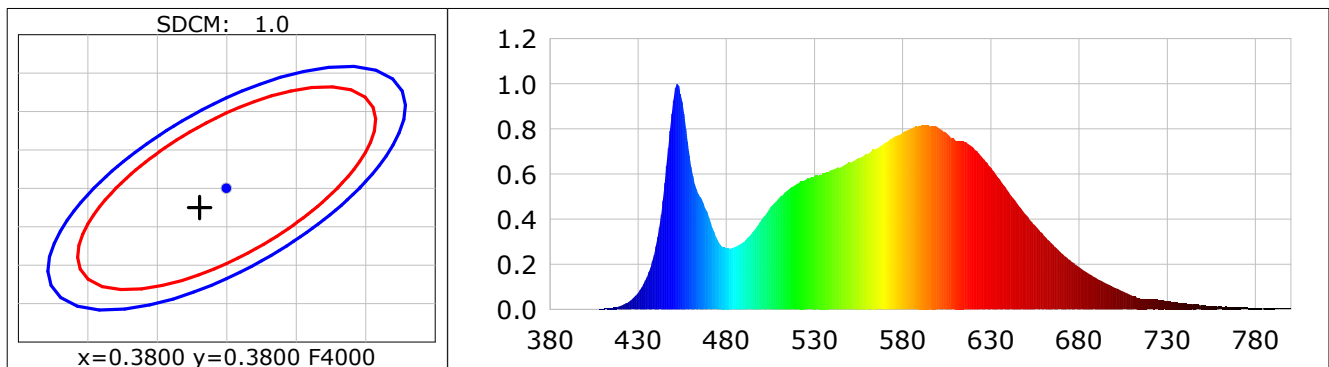
$Q11=87$

$Q12=86$

$Q13=85$

$Q14=74$

$Q15=77$



Photometric Parameters

Luminous Flux: 8836.2 lm

Efficiency: 134.70 lm/W

Radiant Power: 26.760 W

Total mains efficacy: 134.70 lm/W

Energy Efficiency Class: E (EU 2019/2015)

Electric Parameters

Voltage: 230.30V

Current: 0.2880A

Power: 65.60W

Power Factor: 0.9880

Frequency: 50.00Hz

Test Infomation

Scan Range: 380~800:1nm

Photometric Method: sphere-spectroradiometer

Stabilization Time: 0 Sec ALC.: 1.0000

Photometric Condition: Sphere diameter: 1.50m, 4T

Max of Signal: 45219 (3243)

CCD Integration Time: 43.12 ms

Condition: $T_x:36.2^{\circ}C$, $T_i:35.0^{\circ}C$, R.H.:60%

Test Lab:

Operator:

Test Device: CMS-2S (Plus)

Test Time: 2022-08-24 09:05:12

Inspector:

Lightsource Test Report

Product Infomation

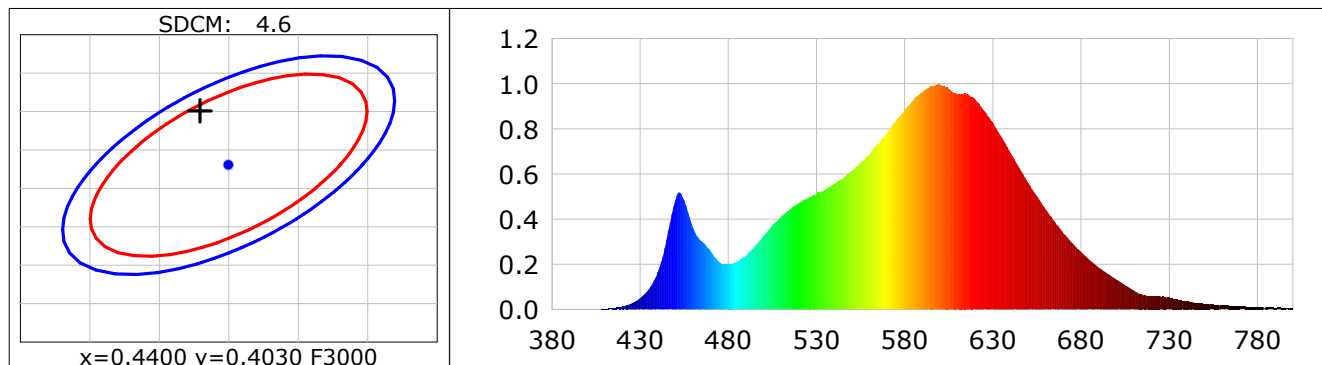
Product Type: C 70W 3000K

Product Number: 4

CIE Colorimetric Parameters

Chromaticity coordinates: $x=0.4379$ $y=0.4101$ $u(u')=0.2487$ $v=0.3492$ $v'=0.5239$
 CCT: $T_c=3032K$ ($duv=0.00223$) Color Ratio: $R=0.224$ $G=0.750$ $B=0.026$
 Peak Wavelength: 599.0nm Half Bandwidth: 128.1nm
 Dominant Wavelength: 581.9nm Color Purity: 0.546
 Central Wave: 591.1nm Gravity Wave: 593.7nm
 CRI: $R_a=81.8$ TM30: $R_f=84$, $R_g=94$
 GAI: $GAI_BB_8=85.8$, $GAI_BB_15=94.3$, $GAI_EES=50.0$

R1 =80	R2 =90	R3 =97	R4 =80	R5 =80	R6 =89	R7 =82	R8 =58
R9 =3	R10=78	R11=79	R12=68	R13=82	R14=99	R15=72	
Color Quality Scale: $Q_a=82.5$, $Q_f=84.4$, $Q_p=81.8$, $Q_g=88.8$							
Q1 =78	Q2 =94	Q3 =84	Q4 =80	Q5 =82	Q6 =83	Q7 =83	Q8 =88
Q9 =95	Q10=91	Q11=88	Q12=85	Q13=83	Q14=71	Q15=73	



Photometric Parameters

Luminous Flux: 7750.1 lm Efficiency: 114.82 lm/W Radiant Power: 22.955 W
 Total mains efficacy: 114.82 lm/W Energy Efficiency Class: E (EU 2019/2015)

Electric Parameters

Voltage: 230.30V Current: 0.2960A Power: 67.50W
 Power Factor: 0.9890 Frequency: 50.00Hz

Test Infomation

Scan Range: 380~800:1nm Photometric Method: sphere-spectroradiometer
 Stabilization Time: 0 Sec ALC.: 1.0000 Photometric Condition: Sphere diameter: 1.50m, 4T
 Max of Signal: 45460 (3278) CCD Integration Time: 60.36 ms

Condition: $T_x:36.1^\circ C$, $T_i:35.1^\circ C$, R.H.:60%
 Test Lab:
 Operator:

Test Device: CMS-2S (Plus)
 Test Time: 2022-08-24 09:05:40
 Inspector:

Lightsource Test Report

Product Infomation

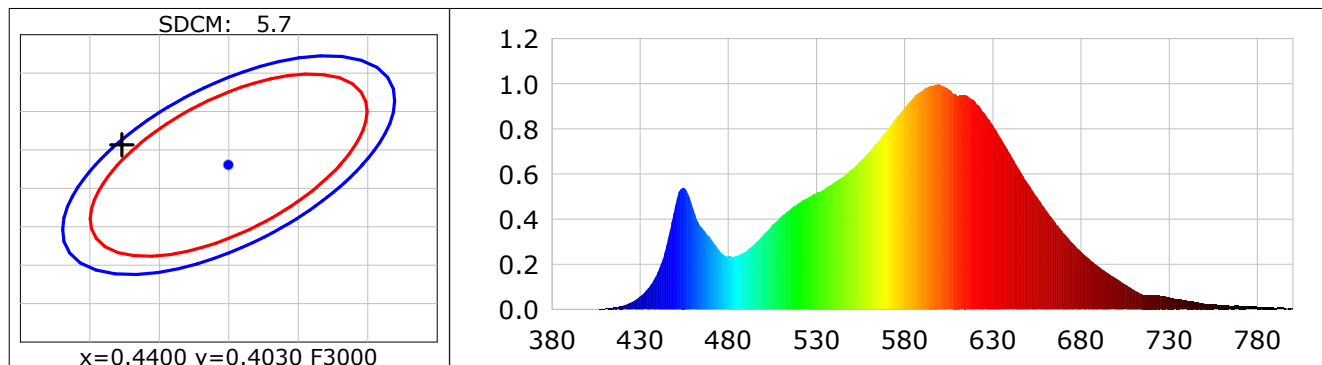
Product Type: H 70W 3000K

Product Number: 5

CIE Colorimetric Parameters

Chromaticity coordinates: $x=0.4323$ $y=0.4057$ $u(u')=0.2469$ $v=0.3475$ $v'=0.5213$
 CCT: $T_c=3092K$ ($duv=0.00130$) Color Ratio: $R=0.220$ $G=0.751$ $B=0.028$
 Peak Wavelength: 599.0nm Half Bandwidth: 129.0nm
 Dominant Wavelength: 582.0nm Color Purity: 0.515
 Central Wave: 590.4nm Gravity Wave: 593.3nm
 CRI: $R_a=81.7$ TM30: $R_f=84$, $R_g=93$
 GAI: $GAI_BB_8=87.9$, $GAI_BB_15=96.4$, $GAI_EES=52.6$

R1 =80	R2 =91	R3 =96	R4 =79	R5 =80	R6 =89	R7 =81	R8 =57
R9 =3	R10=80	R11=78	R12=69	R13=82	R14=98	R15=72	
Color Quality Scale: $Q_a=82.1$, $Q_f=84.0$, $Q_p=81.5$, $Q_g=88.9$							
Q1 =78	Q2 =94	Q3 =84	Q4 =79	Q5 =81	Q6 =82	Q7 =83	Q8 =87
Q9 =95	Q10=91	Q11=87	Q12=84	Q13=82	Q14=71	Q15=74	



Photometric Parameters

Luminous Flux: 6737.1 lm Efficiency: 102.23 lm/W Radiant Power: 20.108 W
 Total mains efficacy: 102.23 lm/W Energy Efficiency Class: F (EU 2019/2015)

Electric Parameters

Voltage: 230.40V Current: 0.2890A Power: 65.90W
 Power Factor: 0.9880 Frequency: 50.00Hz

Test Infomation

Scan Range: 380~800:1nm Photometric Method: sphere-spectroradiometer
 Stabilization Time: 0 Sec ALC.: 1.0000 Photometric Condition: Sphere diameter: 1.50m, 4T
 Max of Signal: 45560 (3315) CCD Integration Time: 69.46 ms

Condition: $T_x:36.4^{\circ}C$, $T_i:35.1^{\circ}C$, R.H.:60%
 Test Lab:
 Operator:

Test Device: CMS-2S (Plus)
 Test Time: 2022-08-24 09:31:16
 Inspector:

Lightsource Test Report

Product Infomation

Product Type: H 70W 4000K

Product Number: 6

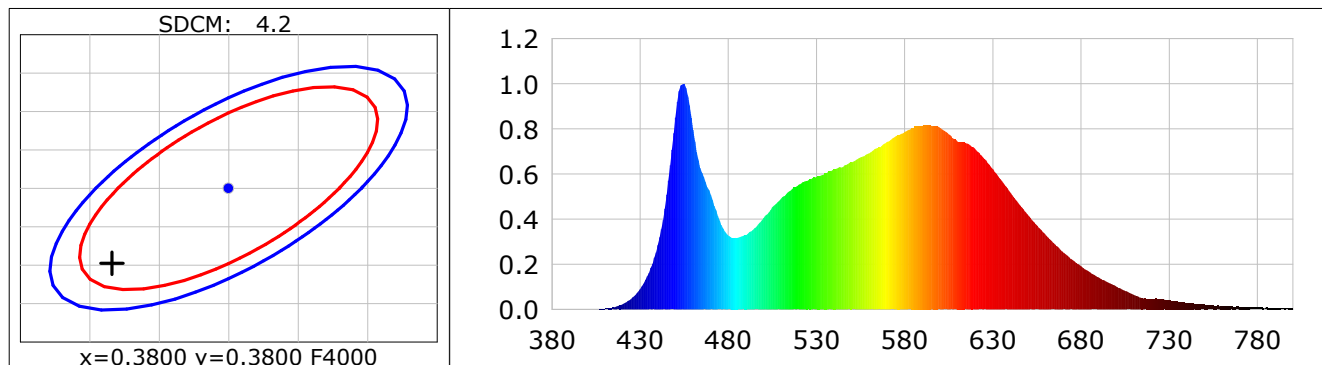
CIE Colorimetric Parameters

Chromaticity coordinates: $x=0.3716$ $y=0.3702$ $u(u')=0.2219$ $v=0.3316$ $v'=0.4974$
 CCT: $T_c=4205K$ ($duv=-0.00040$) Color Ratio: $R=0.180$ $G=0.777$ $B=0.043$
 Peak Wavelength: 454.6nm Half Bandwidth: 25.5nm
 Dominant Wavelength: 578.5nm Color Purity: 0.226
 Central Wave: 457.6nm Gravity Wave: 456.7nm
 CRI: $R_a=84.9$ TM30: $R_f=84$, $R_g=94$
 GAI: $GAI_BB_8=91.9$, $GAI_BB_15=99.2$, $GAI_EES=75.3$

R1 =84	R2 =93	R3 =96	R4 =82	R5 =84	R6 =89	R7 =85	R8 =67
R9 =17	R10=82	R11=81	R12=63	R13=87	R14=98	R15=79	

Color Quality Scale: $Q_a=83.7$, $Q_f=84.0$, $Q_p=82.9$, $Q_g=91.9$

Q1 =82	Q2 =97	Q3 =82	Q4 =76	Q5 =80	Q6 =83	Q7 =86	Q8 =90
Q9 =98	Q10=92	Q11=87	Q12=85	Q13=85	Q14=75	Q15=78	



Photometric Parameters

Luminous Flux: 7618.3 lm Efficiency: 119.22 lm/W Radiant Power: 23.482 W
 Total mains efficacy: 119.22 lm/W Energy Efficiency Class: E (EU 2019/2015)

Electric Parameters

Voltage: 230.40V Current: 0.2810A Power: 63.90W
 Power Factor: 0.9880 Frequency: 50.00Hz

Test Infomation

Scan Range: 380~800:1nm Photometric Method: sphere-spectroradiometer
 Stabilization Time: 0 Sec ALC.: 1.0000 Photometric Condition: Sphere diameter: 1.50m, 4T
 Max of Signal: 54336 (3295) CCD Integration Time: 59.04 ms

Condition: $T_x:36.4^{\circ}C$, $T_i:35.0^{\circ}C$, R.H.:60%
 Test Lab:
 Operator:

Test Device: CMS-2S (Plus)
 Test Time: 2022-08-24 09:31:42
 Inspector:

Lightsource Test Report

Product Infomation

Product Type: H 70W 6000K

Product Number: 7

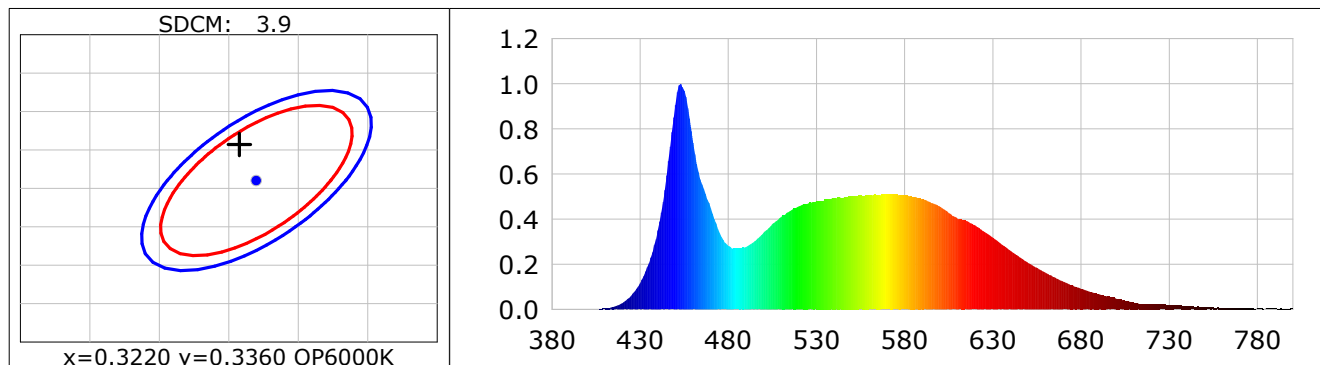
CIE Colorimetric Parameters

Chromaticity coordinates: $x=0.3208$ $y=0.3407$ $u(u')=0.1990$ $v=0.3171$ $v'=0.4756$
 CCT: $T_c=6034K$ ($duv=0.00517$) Color Ratio: $R=0.137$ $G=0.807$ $B=0.056$
 Peak Wavelength: 452.8nm Half Bandwidth: 24.1nm
 Dominant Wavelength: 499.4nm Color Purity: 0.039
 Central Wave: 455.5nm Gravity Wave: 454.7nm
 CRI: $R_a=83.1$ TM30: $R_f=83$, $R_g=93$
 GAI: $GAI_BB_8=88.6$, $GAI_BB_15=94.4$, $GAI_EES=84.4$

R1 =81	R2 =89	R3 =93	R4 =81	R5 =81	R6 =84	R7 =87	R8 =68
R9 =6	R10=73	R11=80	R12=58	R13=83	R14=97	R15=76	

Color Quality Scale: $Q_a=81.4$, $Q_f=81.6$, $Q_p=80.7$, $Q_g=90.4$

Q1 =82	Q2 =98	Q3 =79	Q4 =73	Q5 =78	Q6 =80	Q7 =84	Q8 =89
Q9 =97	Q10=88	Q11=84	Q12=83	Q13=82	Q14=71	Q15=76	



Photometric Parameters

Luminous Flux: 7133.1 lm Efficiency: 107.91 lm/W Radiant Power: 22.566 W
 Total mains efficacy: 107.91 lm/W Energy Efficiency Class: F (EU 2019/2015)

Electric Parameters

Voltage: 230.40V Current: 0.2900A Power: 66.10W
 Power Factor: 0.9880 Frequency: 50.00Hz

Test Infomation

Scan Range: 380~800:1nm Photometric Method: sphere-spectroradiometer
 Stabilization Time: 0 Sec ALC.: 1.0000 Photometric Condition: Sphere diameter: 1.50m, 4T
 Max of Signal: 45211 (3235) CCD Integration Time: 36.93 ms

Condition: $T_x:36.4^{\circ}C$, $T_i:34.9^{\circ}C$, R.H.:60%
 Test Lab:
 Operator:

Test Device: CMS-2S (Plus)
 Test Time: 2022-08-24 09:32:02
 Inspector: