

## Lightsource Test Report

### Product Information

Product Number: 63

### CIE Colorimetric Parameters

Chromaticity coordinates:  $x=0.4520$   $y=0.4121$   $u(u')=0.2568$   $v=0.3512$   $v'=0.5267$ CCT:  $T_c=2825K$  ( $duv=0.00129$ )Color Ratio:  $R=0.238$   $G=0.740$   $B=0.022$ 

Peak Wavelength: 601.2nm

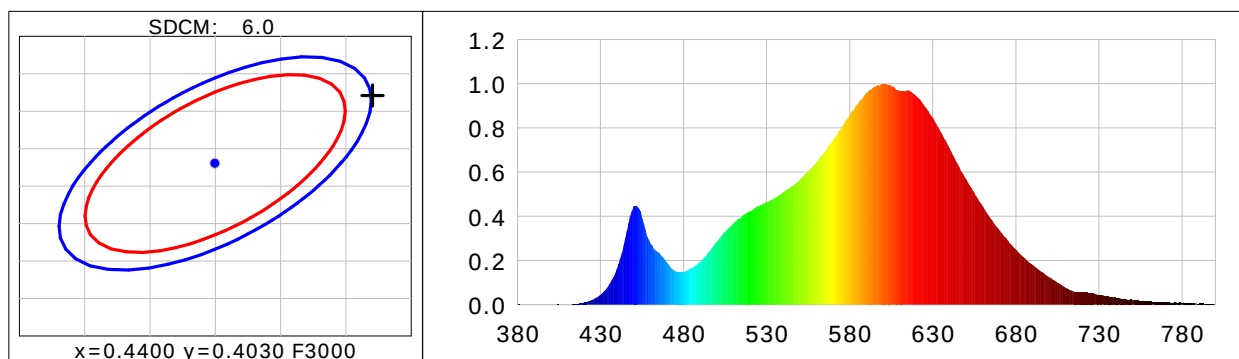
Half Bandwidth: 117.1nm

Dominant Wavelength: 583.2nm

Color Purity: 0.594

Central Wave: 596.9nm

Gravity Wave: 598.3nm

CRI:  $R_a=80.9$ TM30:  $R_f=84$ ,  $R_g=95$ GAI:  $GAI\_BB\_8=88.4$ ,  $GAI\_BB\_15=96.5$ ,  $GAI\_EES=46.3$  $R1=79$   $R2=90$   $R3=96$   $R4=79$   $R5=79$   $R6=89$   $R7=80$   $R8=55$  $R9=-0$   $R10=78$   $R11=78$   $R12=70$   $R13=81$   $R14=99$   $R15=70$ Color Quality Scale:  $Q_a=81.6$ ,  $Q_f=83.8$ ,  $Q_p=81.9$ ,  $Q_g=89.2$  $Q1=76$   $Q2=94$   $Q3=84$   $Q4=80$   $Q5=82$   $Q6=82$   $Q7=82$   $Q8=86$  $Q9=95$   $Q10=90$   $Q11=87$   $Q12=84$   $Q13=82$   $Q14=70$   $Q15=72$ 

### Photometric Parameters

Luminous Flux: 5668.2 lm

Efficiency: 114.60 lm/W

Radiant Power: 16.776 W

Total mains efficacy: 134.77 lm/W Energy Efficiency Class: E (EU 2019/2015)

Auxiliary lamp correction factor: 1.00

### Electric Parameters

Voltage: 230.50V

Current: 0.2310A

Power: 49.46W

Power Factor: 0.9280

Frequency: 49.99Hz

### Test Information

Scan Range: 380~800:1nm

Stabilization Time: 0 Min ALC.: 1.0000

Max of Signal: 50636 (3034)

Photometric Method: sphere-spectroradiometer

Photometric Condition: Sphere diameter: 1.50m, 2 $\pi$ 

CCD Integration Time: 188.95 ms

Condition: Tx:27.7°C, Ti:26.7°C, R.H.:60%  
Test Lab:  
Operator:Test Device: CMS-2S (Plus)  
Test Time: 2024-06-04 11:34:38  
Inspector:

## Lightsource Test Report

### Product Information

Product Number: 64

### CIE Colorimetric Parameters

Chromaticity coordinates:  $x=0.3751$   $y=0.3787$   $u(u')=0.2208$   $v=0.3344$   $v'=0.5017$ CCT:  $T_c=4162K$  ( $duv=0.00253$ )Color Ratio:  $R=0.176$   $G=0.787$   $B=0.038$ 

Peak Wavelength: 450.4nm

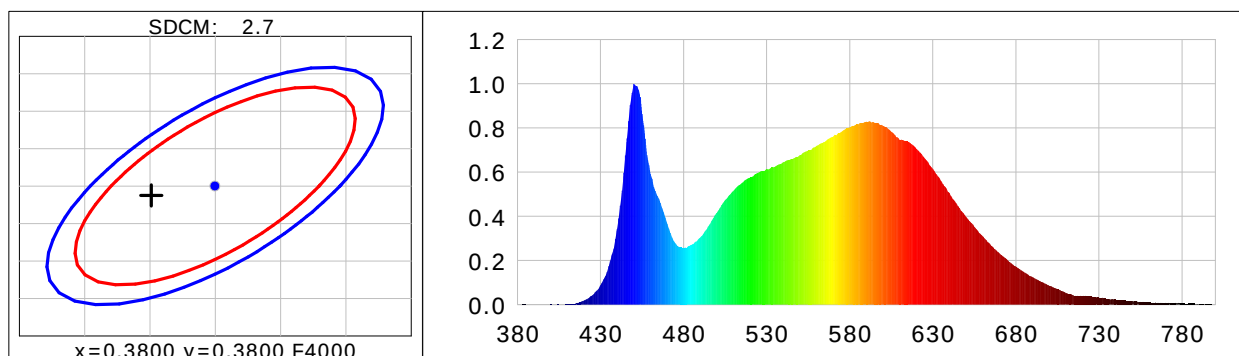
Half Bandwidth: 21.0nm

Dominant Wavelength: 577.0nm

Color Purity: 0.263

Central Wave: 453.3nm

Gravity Wave: 452.2nm

CRI:  $R_a=82.7$ TM30:  $R_f=84$ ,  $R_g=94$ GAI:  $GAI\_BB\_8=88.6$ ,  $GAI\_BB\_15=95.9$ ,  $GAI\_EES=72.1$  $R1=81$  $R2=89$  $R3=95$  $R4=81$  $R5=81$  $R6=85$  $R7=86$  $R8=64$  $R9=6$  $R10=74$  $R11=80$  $R12=59$  $R13=83$  $R14=98$  $R15=74$ Color Quality Scale:  $Q_a=82.7$ ,  $Q_f=83.1$ ,  $Q_p=81.8$ ,  $Q_g=91.3$  $Q1=81$  $Q2=98$  $Q3=80$  $Q4=76$  $Q5=81$  $Q6=83$  $Q7=85$  $Q8=89$  $Q9=98$  $Q10=90$  $Q11=86$  $Q12=85$  $Q13=84$  $Q14=72$  $Q15=75$ 

### Photometric Parameters

Luminous Flux: 6041.9 lm

Efficiency: 122.01 lm/W

Radiant Power: 18.024 W

Total mains efficacy: 143.48 lm/W Energy Efficiency Class: D (EU 2019/2015)

Auxiliary lamp correction factor: 1.00

### Electric Parameters

Voltage: 230.60V

Current: 0.2310A

Power: 49.52W

Power Factor: 0.9280

Frequency: 49.99Hz

### Test Information

Scan Range: 380~800:1nm

Stabilization Time: 0 Min ALC.: 1.0000

Max of Signal: 51687 (3003)

Photometric Method: sphere-spectroradiometer

Photometric Condition: Sphere diameter: 1.50m, 2 $\pi$ 

CCD Integration Time: 160.60 ms

Condition: Tx:27.7°C, Ti:26.7°C, R.H.:60%  
Test Lab:  
Operator:Test Device: CMS-2S (Plus)  
Test Time: 2024-06-04 11:34:57  
Inspector:

## Lightsource Test Report

### Product Information

Product Number: 65

### CIE Colorimetric Parameters

Chromaticity coordinates:  $x=0.3583$   $y=0.3709$   $u(u')=0.2128$   $v=0.3305$   $v'=0.4957$ CCT:  $T_c=4621K$  ( $duv=0.00445$ )Color Ratio:  $R=0.161$   $G=0.797$   $B=0.042$ 

Peak Wavelength: 451.2nm

Half Bandwidth: 21.5nm

Dominant Wavelength: 573.1nm

Color Purity: 0.188

Central Wave: 453.6nm

Gravity Wave: 452.8nm

CRI:  $R_a=81.7$ TM30:  $R_f=83$ ,  $R_g=93$ GAI:  $GAI\_BB\_8=86.1$ ,  $GAI\_BB\_15=93.5$ ,  $GAI\_EES=75.2$ 

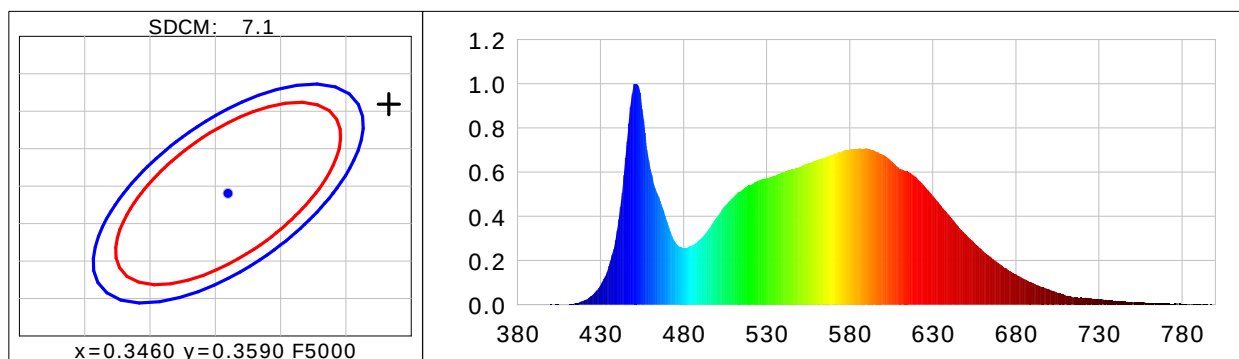
|          |          |          |          |          |          |          |          |
|----------|----------|----------|----------|----------|----------|----------|----------|
| $R_1=79$ | $R_2=88$ | $R_3=94$ | $R_4=80$ | $R_5=79$ | $R_6=83$ | $R_7=86$ | $R_8=64$ |
|----------|----------|----------|----------|----------|----------|----------|----------|

|         |             |             |             |             |             |             |  |
|---------|-------------|-------------|-------------|-------------|-------------|-------------|--|
| $R_9=1$ | $R_{10}=71$ | $R_{11}=78$ | $R_{12}=55$ | $R_{13}=81$ | $R_{14}=97$ | $R_{15}=73$ |  |
|---------|-------------|-------------|-------------|-------------|-------------|-------------|--|

Color Quality Scale:  $Q_a=81.8$ ,  $Q_f=82.3$ ,  $Q_p=80.4$ ,  $Q_g=90.0$ 

|          |          |          |          |          |          |          |          |
|----------|----------|----------|----------|----------|----------|----------|----------|
| $Q_1=81$ | $Q_2=98$ | $Q_3=80$ | $Q_4=75$ | $Q_5=79$ | $Q_6=81$ | $Q_7=84$ | $Q_8=89$ |
|----------|----------|----------|----------|----------|----------|----------|----------|

|          |             |             |             |             |             |             |  |
|----------|-------------|-------------|-------------|-------------|-------------|-------------|--|
| $Q_9=97$ | $Q_{10}=90$ | $Q_{11}=86$ | $Q_{12}=85$ | $Q_{13}=84$ | $Q_{14}=70$ | $Q_{15}=75$ |  |
|----------|-------------|-------------|-------------|-------------|-------------|-------------|--|



### Photometric Parameters

Luminous Flux: 6065.7 lm

Efficiency: 123.01 lm/W

Radiant Power: 18.153 W

Total mains efficacy: 144.66 lm/W Energy Efficiency Class: D (EU 2019/2015)

Auxiliary lamp correction factor: 1.00

### Electric Parameters

Voltage: 230.60V

Current: 0.2310A

Power: 49.31W

Power Factor: 0.9270

Frequency: 49.99Hz

### Test Information

Scan Range: 380~800:1nm

Stabilization Time: 0 Min ALC.: 1.0000

Max of Signal: 49690 (2982)

Photometric Method: sphere-spectroradiometer

Photometric Condition: Sphere diameter: 1.50m, 2 $\pi$ 

CCD Integration Time: 136.51 ms

Condition: Tx:27.7°C, Ti:26.7°C, R.H.:60%  
Test Lab:  
Operator:Test Device: CMS-2S (Plus)  
Test Time: 2024-06-04 11:35:12  
Inspector: