

Report No.:

Test Time: 26.02.2020 17:40

## Luminaire Property

Luminaire Manufacturer: FAROS LED

Luminaire Category: FG 100 500W 5000K PI60

Luminous Length (mm): 210

Luminous Width (mm): 545

Luminous Height (mm): 338

Voltage: 228.7 V

Current: 2.257 A

Power: 507.06 W

Power Factor: 0.981

## Photometric Results

CIE Class: Direct

Measurement Flux: 68747 lm

Downward Ratio: 97%

Total Rated Lamp Lumens: 68747.0 lm

Efficiency: 100%

Upward Ratio: 3%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 121.1, 113.6, 118.6, 118.4

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 52.3, 51.3, 50.4, 50.3

Luminaire Efficacy Rating (LER): 135.63

Central Intensity: 60902.3 cd

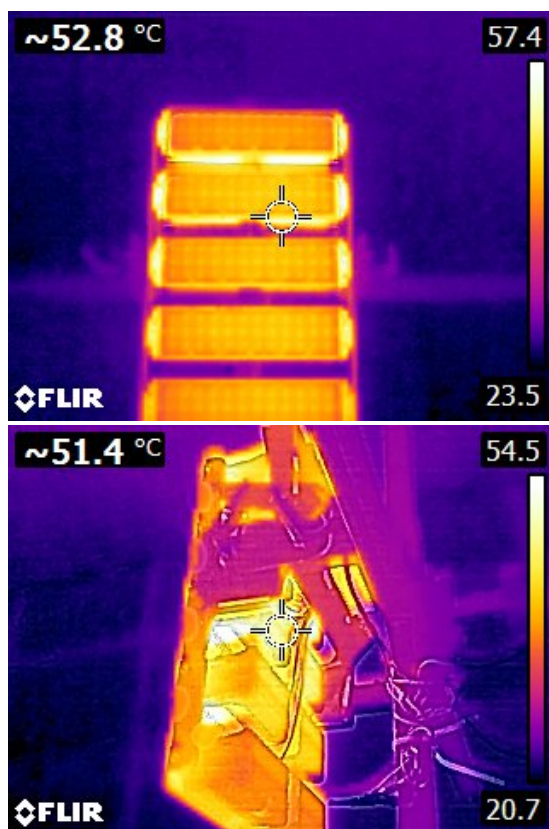
Max. Intensity: 61354.72 cd

Pos of Max. Intensity: H135 V0

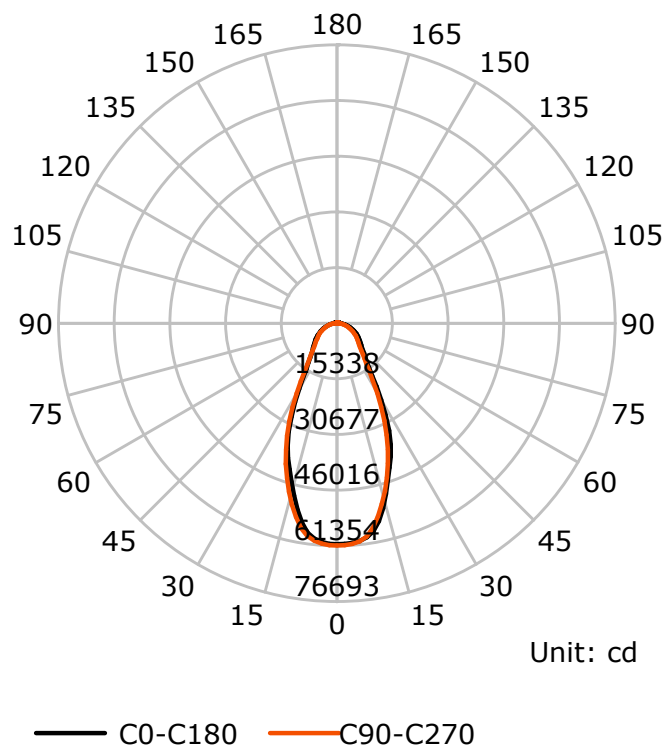
S/MH(C0/C180): 0.80

S/MH(C90/C270): 0.79

Termogramma



Luminous Intensity Distribution Curve



C Plane (°):0.0-360.0: 22.5

Test Lab: FAROS LED Lab

Test Type: TYPE C

Temperature:

Operator: Lab

Gamma Plane (°):0.0-180.0:2.0

Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

## Lightsource Test Report

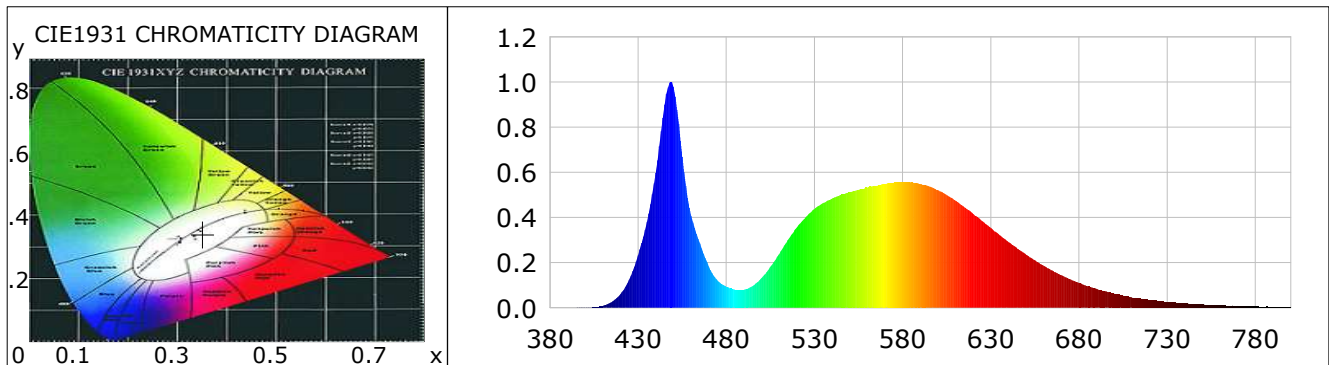
### Product Information

Product Type: FG 100 500W 5000K PI60

Manufacturer: FAROS LED

### CIE Colorimetric Parameters

Chromaticity coordinates:  $x=0.3512$   $y=0.3404$   $u(u')=0.2201$   $v=0.3200$   $v'=0.4800$   
 CCT:  $T_c=4712K$  ( $duv=-0.00825$ ) Color Ratio:  $R=0.160$   $G=0.811$   $B=0.029$   
 Peak Wavelength: 448.5nm Half Bandwidth: 19.9nm  
 Dominant Wavelength: 589.5nm Color Purity: 0.075  
 CRI:  $R_a=74.1$ ,  $avgR(1\sim14)=64.6$ ,  $avgR(1\sim15)=65.2$  TM30:  $R_f=71$ ,  $R_g=96$   
 GAI:  $GAI\_BB\_8=98.2$ ,  $GAI\_BB\_15=104.5$ ,  $GAI\_EES=86.7$   
 R1 =74 R2 =79 R3 =79 R4 =74 R5 =73 R6 =69 R7 =82 R8 =62  
 R9 =-8 R10=47 R11=69 R12=42 R13=74 R14=88 R15=72  
 Color Quality Scale:  $Q_a=70.0$ ,  $Q_f=68.2$ ,  $Q_p=74.8$ ,  $Q_g=93.5$   
 Q1 =81 Q2 =92 Q3 =57 Q4 =52 Q5 =66 Q6 =71 Q7 =76 Q8 =85  
 Q9 =88 Q10=71 Q11=65 Q12=67 Q13=71 Q14=65 Q15=71



### Photometric Parameters

Luminous Flux:  
EEI: 0.00

Efficiency: 0.00 lm/W

Radiant Power: 171.020 W

Energy Efficiency Class: A++ (EU 874-2012)

### Electric Parameters

Voltage: 0.0000V  
Power Factor: 0.0000

Current: 0.0000A  
Frequency: 0.00Hz

Power: 0.00W

### Test Information

Scan Range: 380~800:1nm  
 Stabilization Time: 0 ms ALC.: 1.0000  
 Max of Signal: 45561 (2935)

Photometric Method: sphere-spectroradiometer  
 Photometric Condition: Sphere diameter: 1.00m, 4PI  
 CCD Integration Time: 9.11 ms

## Lightsource Test Report

### Product Information

Product Type: FG 100 500W 5000K PI60

Manufacturer: FAROS LED

| WL(nm) | PL     | PE(mW/nm) | WL(nm) | PL     | PE(mW/nm) | WL(nm) | PL     | PE(mW/nm) |
|--------|--------|-----------|--------|--------|-----------|--------|--------|-----------|
| 380    | 0.0003 | 0.4376    | 525    | 0.4004 | 681.3279  | 670    | 0.1447 | 246.2646  |
| 385    | 0.0006 | 1.1022    | 530    | 0.4373 | 744.1763  | 675    | 0.1265 | 215.3072  |
| 390    | 0.0015 | 2.5040    | 535    | 0.4639 | 789.4100  | 680    | 0.1106 | 188.1942  |
| 395    | 0.0015 | 2.5851    | 540    | 0.4845 | 824.4971  | 685    | 0.0961 | 163.4896  |
| 400    | 0.0016 | 2.7535    | 545    | 0.5010 | 852.4448  | 690    | 0.0838 | 142.6544  |
| 405    | 0.0037 | 6.2737    | 550    | 0.5128 | 872.5524  | 695    | 0.0740 | 125.8371  |
| 410    | 0.0096 | 16.3138   | 555    | 0.5233 | 890.5460  | 700    | 0.0630 | 107.1777  |
| 415    | 0.0263 | 44.6721   | 560    | 0.5321 | 905.4193  | 705    | 0.0549 | 93.4383   |
| 420    | 0.0610 | 103.8029  | 565    | 0.5412 | 920.9684  | 710    | 0.0466 | 79.3604   |
| 425    | 0.1252 | 213.0654  | 570    | 0.5484 | 933.1924  | 715    | 0.0412 | 70.0717   |
| 430    | 0.2334 | 397.0973  | 575    | 0.5550 | 944.4903  | 720    | 0.0348 | 59.1448   |
| 435    | 0.3820 | 650.1057  | 580    | 0.5573 | 948.2386  | 725    | 0.0309 | 52.5111   |
| 440    | 0.5993 | 1019.7962 | 585    | 0.5553 | 944.9083  | 730    | 0.0268 | 45.6113   |
| 445    | 0.9015 | 1534.0855 | 590    | 0.5493 | 934.7042  | 735    | 0.0234 | 39.9032   |
| 450    | 0.9788 | 1665.5077 | 595    | 0.5380 | 915.4977  | 740    | 0.0200 | 34.0614   |
| 455    | 0.6703 | 1140.5500 | 600    | 0.5209 | 886.3158  | 745    | 0.0174 | 29.6330   |
| 460    | 0.4089 | 695.8094  | 605    | 0.4994 | 849.7382  | 750    | 0.0150 | 25.5209   |
| 465    | 0.2865 | 487.5451  | 610    | 0.4751 | 808.4813  | 755    | 0.0132 | 22.5320   |
| 470    | 0.1847 | 314.2316  | 615    | 0.4465 | 759.8376  | 760    | 0.0116 | 19.6609   |
| 475    | 0.1217 | 207.1717  | 620    | 0.4162 | 708.2764  | 765    | 0.0092 | 15.7062   |
| 480    | 0.0940 | 159.9323  | 625    | 0.3856 | 656.1158  | 770    | 0.0089 | 15.2139   |
| 485    | 0.0807 | 137.3471  | 630    | 0.3545 | 603.2355  | 775    | 0.0073 | 12.4753   |
| 490    | 0.0808 | 137.4278  | 635    | 0.3226 | 548.9046  | 780    | 0.0065 | 10.9989   |
| 495    | 0.0975 | 165.8970  | 640    | 0.2918 | 496.5506  | 785    | 0.0055 | 9.3691    |
| 500    | 0.1319 | 224.4733  | 645    | 0.2624 | 446.5504  | 790    | 0.0045 | 7.7013    |
| 505    | 0.1817 | 309.2667  | 650    | 0.2363 | 402.0266  | 795    | 0.0038 | 6.4276    |
| 510    | 0.2395 | 407.6123  | 655    | 0.2112 | 359.4389  | 800    | 0.0038 | 6.4278    |
| 515    | 0.3011 | 512.4355  | 660    | 0.1866 | 317.4678  |        |        |           |
| 520    | 0.3574 | 608.2307  | 665    | 0.1650 | 280.8099  |        |        |           |

Condition: Tx:23.9°C, Ti:0.0°C, R.H.:60%  
Test Lab: FAROS LED Lab  
Operator: Lab

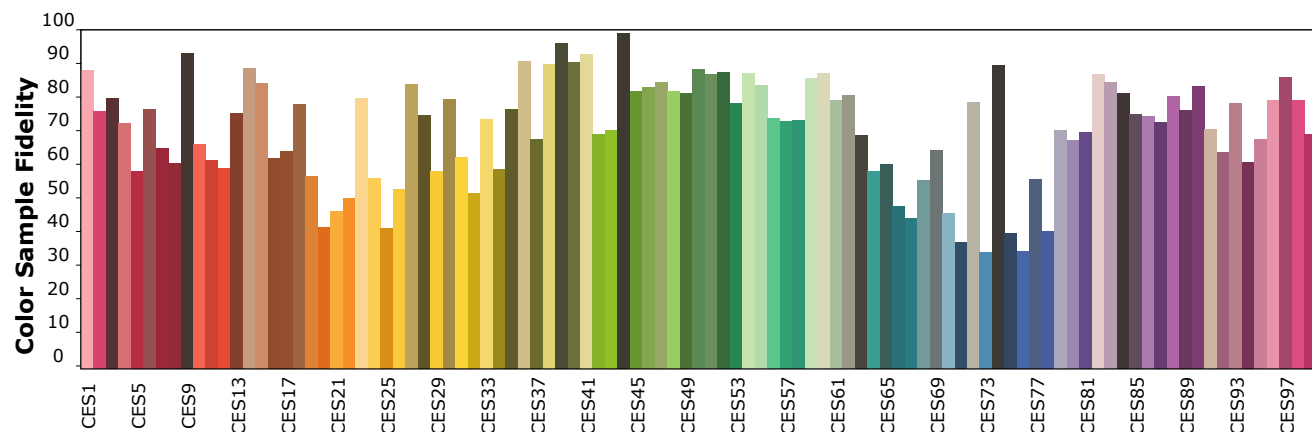
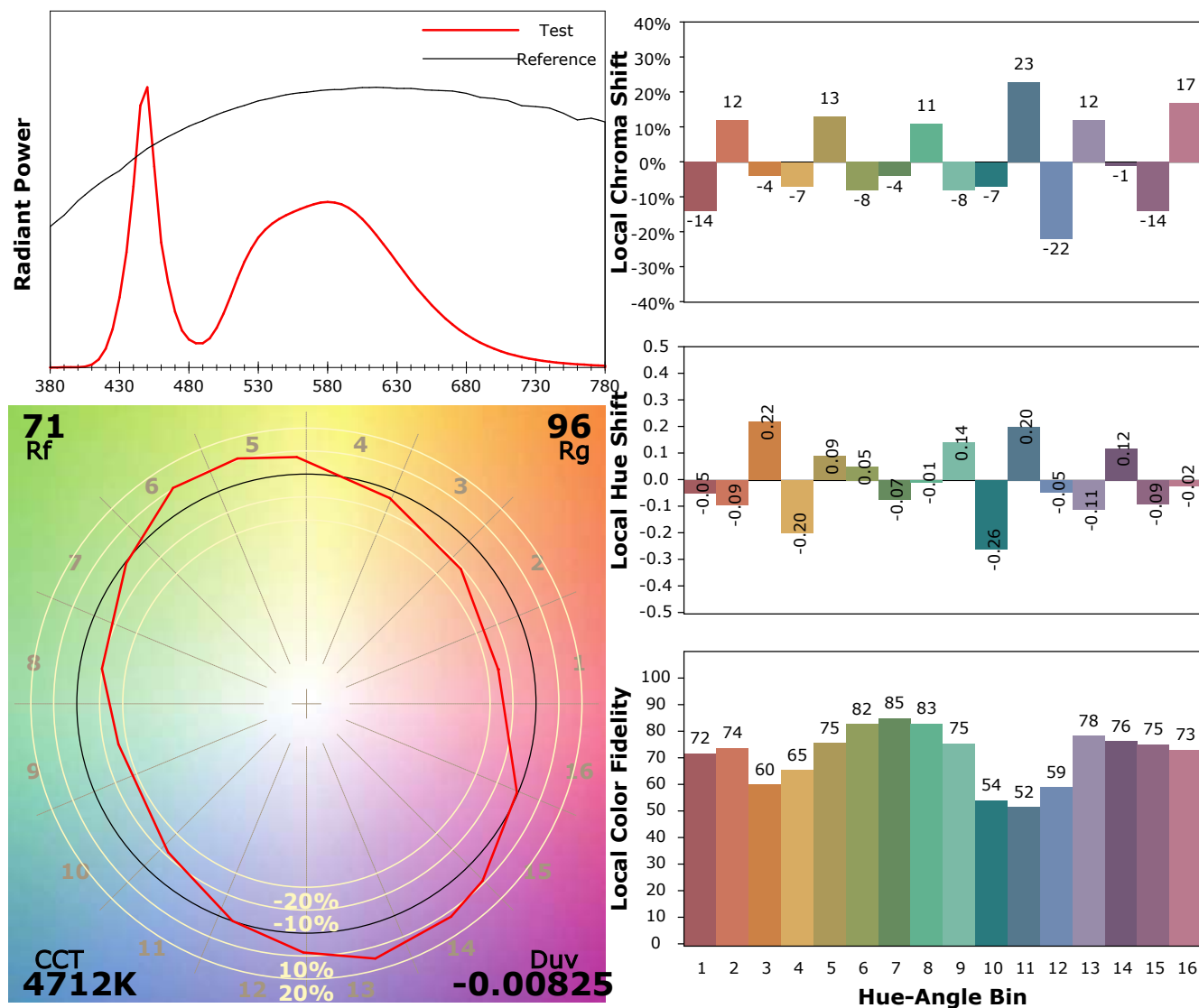
Test Device: Lisun LMS-9000A(Plus)  
Test Time: 2021-10-01 15:16:24  
Inspector:

## IES TM-30-18 Color Rendition Report

### Product Information

Product Type: FG 100 500W 5000K PI60

Manufacturer: FAROS LED



Condition: Tx:23.9°C, Ti:0.0°C, R.H.:60%

Test Lab: FAROS LED Lab

Operator: Lab

Test Device: Lisun LMS-9000A(Plus)

Test Time: 2021-10-01 15:16:24

Inspector: