

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: PrentaLux

Report Number: P879047

Luminaire Tested: PRLX-206-935-LL6-C-U-S-X-X-WHHR-SR-X

Issue Date: 9/24/2024

Test Information

Test Method: LM-79-2019
Report Number: P879047
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2405-094-1)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 9/24/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: PrentaLux
Catalog Number: PRLX-206-935-LL6-C-U-S-X-X-WHHR-SR-X
Description: PrentaLux 200 SERIES 3D PRINTED LUMINAIRE, 206 SHADE, CLEAR LENS.
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

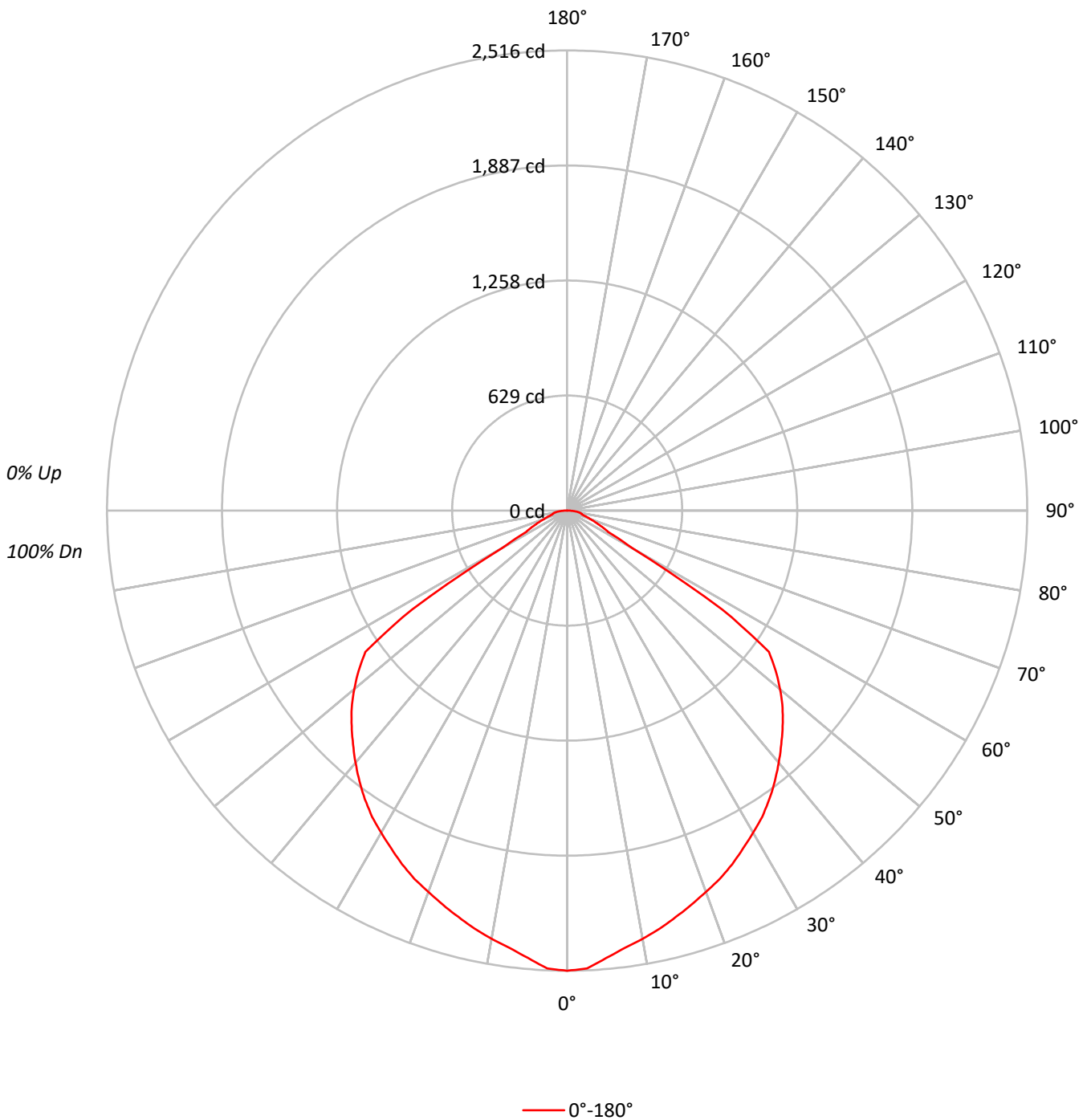
Lumens per Lamp: N/A
Luminaire Lumens: 5780.1 lumens
Efficiency: N/A
Efficacy: 147.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.37
Luminous Opening: Circular (Dia: 0.88' x H: 0')
CIE Type: Direct

Input Watts (W): 39.3
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: 0.5 HR
Operation Time: 3 HR
Ambient Temperature (°C): NR
Test Distance: 24 FT

TEST NUMBER: P879047

CATALOG NUMBER: PRLX-206-935-LL6-C-U-S-X-X-WHHR-SR-X

Luminous Intensity Polar Plot





TEST NUMBER: P879047

CATALOG NUMBER: PRLX-206-935-LL6-C-U-S-X-X-WHHR-SR-X

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|-----|-----|-----|--|-----|-----|-----|-----|
| RF | 20 | | | | 20 | | | | 20 | | | | 20 | | | | 20 | | | |
| RC | 80 | | | | 70 | | | | 50 | | | | 30 | | | | 10 | 0 | | |
| RW | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 | | 50 | 30 | 10 | | 50 | 30 | 10 | 0 |
| RCR | | | | | | | | | | | | | | | | | | | | |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | | 106 | 106 | 106 | | 102 | 102 | 102 | 100 |
| 1 | 111 | 107 | 103 | 100 | 108 | 105 | 101 | 99 | 100 | 98 | 95 | | 97 | 95 | 93 | | 93 | 91 | 90 | 88 |
| 2 | 102 | 95 | 89 | 85 | 100 | 93 | 88 | 84 | 90 | 86 | 82 | | 87 | 83 | 80 | | 84 | 81 | 78 | 76 |
| 3 | 94 | 85 | 78 | 72 | 92 | 83 | 77 | 72 | 81 | 75 | 70 | | 78 | 73 | 69 | | 75 | 71 | 68 | 66 |
| 4 | 87 | 76 | 68 | 62 | 85 | 75 | 67 | 62 | 72 | 66 | 61 | | 70 | 65 | 60 | | 68 | 63 | 59 | 57 |
| 5 | 80 | 68 | 60 | 54 | 78 | 67 | 60 | 54 | 65 | 59 | 53 | | 63 | 57 | 53 | | 62 | 56 | 52 | 50 |
| 6 | 74 | 62 | 54 | 48 | 72 | 61 | 53 | 47 | 59 | 52 | 47 | | 58 | 51 | 47 | | 56 | 51 | 46 | 44 |
| 7 | 69 | 56 | 48 | 42 | 67 | 55 | 48 | 42 | 54 | 47 | 42 | | 53 | 46 | 42 | | 51 | 46 | 41 | 39 |
| 8 | 64 | 51 | 43 | 38 | 63 | 51 | 43 | 38 | 49 | 42 | 37 | | 48 | 42 | 37 | | 47 | 41 | 37 | 35 |
| 9 | 60 | 47 | 39 | 34 | 59 | 47 | 39 | 34 | 45 | 39 | 34 | | 44 | 38 | 34 | | 43 | 38 | 33 | 32 |
| 10 | 56 | 43 | 36 | 31 | 55 | 43 | 36 | 31 | 42 | 35 | 31 | | 41 | 35 | 31 | | 40 | 34 | 30 | 29 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|-------|
| | 0° |
| 0° | 45041 |
| 5° | 44126 |
| 10° | 43220 |
| 15° | 42620 |
| 20° | 42263 |
| 25° | 42155 |
| 30° | 42042 |
| 35° | 42118 |
| 40° | 42061 |
| 45° | 42183 |
| 50° | 42326 |
| 55° | 42019 |
| 60° | 14700 |
| 65° | 8899 |
| 70° | 6998 |
| 75° | 5941 |
| 80° | 7381 |
| 85° | 8832 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 47.5°
 Luminance: 42338 cd/sqm

TEST NUMBER: P879047

CATALOG NUMBER: PRLX-206-935-LL6-C-U-S-X-X-WHHR-SR-X

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 232.0 | 4.0 |
| 10°-20° | 649.6 | 11.2 |
| 20°-30° | 983.8 | 17.0 |
| 30°-40° | 1205.5 | 20.9 |
| 40°-50° | 1286.0 | 22.2 |
| 50°-60° | 1057.9 | 18.3 |
| 60°-70° | 222.9 | 3.9 |
| 70°-80° | 98.5 | 1.7 |
| 80°-90° | 44.0 | 0.8 |
| 90°-100° | 0.0 | 0.0 |
| 100°-110° | 0.0 | 0.0 |
| 110°-120° | 0.0 | 0.0 |
| 120°-130° | 0.0 | 0.0 |
| 130°-140° | 0.0 | 0.0 |
| 140°-150° | 0.0 | 0.0 |
| 150°-160° | 0.0 | 0.0 |
| 160°-170° | 0.0 | 0.0 |
| 170°-180° | 0.0 | 0.0 |
| 0°-30° | 1865.4 | 32.3 |
| 0°-40° | 3070.9 | 53.1 |
| 0°-60° | 5414.8 | 93.7 |
| 0°-90° | 5780.1 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 5780.1 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 2516 | |
| 5° | 2456 | 232 |
| 15° | 2300 | 650 |
| 25° | 2134 | 984 |
| 35° | 1927 | 1206 |
| 45° | 1666 | 1286 |
| 55° | 1346 | 1058 |
| 65° | 210 | 223 |
| 75° | 86 | 98 |
| 85° | 43 | 44 |
| 90° | 0 | |

TEST NUMBER: P879047

CATALOG NUMBER: PRLX-206-935-LL6-C-U-S-X-X-WHHR-SR-X

CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|--------|
| 0° | 2516.2 |
| 2.5° | 2505.1 |
| 5° | 2455.7 |
| 7.5° | 2411.2 |
| 10° | 2377.8 |
| 12.5° | 2341.2 |
| 15° | 2299.8 |
| 17.5° | 2260.0 |
| 20° | 2218.6 |
| 22.5° | 2180.4 |
| 25° | 2134.3 |
| 27.5° | 2083.3 |
| 30° | 2034.0 |
| 32.5° | 1984.7 |
| 35° | 1927.4 |
| 37.5° | 1865.3 |
| 40° | 1800.0 |
| 42.5° | 1733.2 |
| 45° | 1666.3 |
| 47.5° | 1597.9 |
| 50° | 1519.9 |
| 52.5° | 1437.2 |
| 55° | 1346.4 |
| 57.5° | 1005.9 |
| 60° | 410.6 |
| 62.5° | 253.1 |
| 65° | 210.1 |
| 67.5° | 168.7 |
| 70° | 133.7 |
| 72.5° | 105.0 |
| 75° | 85.9 |
| 77.5° | 79.6 |
| 80° | 71.6 |
| 82.5° | 60.5 |
| 85° | 43.0 |
| 87.5° | 22.3 |
| 90° | 0.0 |

TEST NUMBER: P879047

CATALOG NUMBER: PRLX-206-935-LL6-C-U-S-X-X-WHHR-SR-X

CIE UGR TABLE:

| Reflectances: | | | | | | | | | | | |
|-----------------|------|------------------|-------|-------|-------|-------|----------------|-------|-------|-------|-------|
| Ceiling | | 0.7 | 0.7 | 0.5 | 0.5 | 0.3 | 0.7 | 0.7 | 0.5 | 0.5 | 0.3 |
| Wall | | 0.5 | 0.3 | 0.5 | 0.3 | 0.3 | 0.5 | 0.3 | 0.5 | 0.3 | 0.3 |
| Reference plane | | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| Room dimensions | | Viewed crosswise | | | | | Viewed endwise | | | | |
| X=2H | Y=2H | 24.45 | 25.95 | 24.82 | 26.27 | 26.58 | 24.45 | 25.95 | 24.82 | 26.27 | 26.58 |
| | 3H | 24.50 | 25.83 | 24.88 | 26.16 | 26.52 | 24.50 | 25.83 | 24.88 | 26.16 | 26.52 |
| | 4H | 24.51 | 25.75 | 24.91 | 26.10 | 26.48 | 24.51 | 25.75 | 24.91 | 26.10 | 26.48 |
| | 6H | 24.53 | 25.67 | 24.95 | 26.04 | 26.43 | 24.53 | 25.67 | 24.95 | 26.04 | 26.43 |
| | 8H | 24.55 | 25.63 | 24.98 | 26.02 | 26.43 | 24.55 | 25.63 | 24.98 | 26.02 | 26.43 |
| | 12H | 24.57 | 25.61 | 25.00 | 25.99 | 26.42 | 24.57 | 25.61 | 25.00 | 25.99 | 26.42 |
| 4H | 2H | 24.35 | 25.59 | 24.75 | 25.94 | 26.32 | 24.35 | 25.59 | 24.75 | 25.94 | 26.32 |
| | 3H | 24.47 | 25.48 | 24.88 | 25.88 | 26.28 | 24.47 | 25.48 | 24.88 | 25.88 | 26.28 |
| | 4H | 24.50 | 25.40 | 24.93 | 25.81 | 26.25 | 24.50 | 25.40 | 24.93 | 25.81 | 26.25 |
| | 6H | 24.58 | 25.36 | 25.04 | 25.81 | 26.27 | 24.58 | 25.36 | 25.04 | 25.81 | 26.27 |
| | 8H | 24.63 | 25.36 | 25.09 | 25.80 | 26.27 | 24.63 | 25.36 | 25.09 | 25.80 | 26.27 |
| | 12H | 24.68 | 25.33 | 25.17 | 25.81 | 26.29 | 24.68 | 25.33 | 25.17 | 25.81 | 26.29 |
| 8H | 4H | 24.45 | 25.18 | 24.91 | 25.62 | 26.09 | 24.45 | 25.18 | 24.91 | 25.62 | 26.09 |
| | 6H | 24.57 | 25.18 | 25.07 | 25.67 | 26.15 | 24.57 | 25.18 | 25.07 | 25.67 | 26.15 |
| | 8H | 24.65 | 25.21 | 25.17 | 25.72 | 26.21 | 24.65 | 25.21 | 25.17 | 25.72 | 26.21 |
| | 12H | 24.76 | 25.26 | 25.27 | 25.75 | 26.32 | 24.76 | 25.26 | 25.27 | 25.75 | 26.32 |
| 12H | 4H | 24.42 | 25.07 | 24.91 | 25.55 | 26.03 | 24.42 | 25.07 | 24.91 | 25.55 | 26.03 |
| | 6H | 24.54 | 25.10 | 25.06 | 25.61 | 26.10 | 24.54 | 25.10 | 25.06 | 25.61 | 26.10 |
| | 8H | 24.67 | 25.17 | 25.18 | 25.66 | 26.23 | 24.67 | 25.17 | 25.18 | 25.66 | 26.23 |

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Test Information

Test Method: LM-79-2019
 Report Number: SP1-2203-582-3
 Test Lab: COOPER LIGHTING SOLUTIONS
 Photometer: SP1 - 76IN SPHERE
 Measurement Geometry: 4π
 Issue Date: 05/26/2022
 Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
 Product Line: SHAPER
 Catalog Number: **225-90-35K-27L-UNV-STD-X-X-WHHR-SR-X**
 Description: Shaper 3D PRINTED 200 Series Pendants

Spectral Parameters

CCT (K): 3441
 CIE u': 0.2377
 CIE v': 0.5110
 Duv: -0.0011
 CIE x: 0.4074
 CIE y: 0.3893
 CIE z: 0.2033
 Peak Wavelength (nm): 614
 Dominant Wavelength (nm): 581
 Purity: 39.3
 Rf: 90.6
 Rg: 101.2

CRI (Ra): 91.6
 R1: 92.1
 R2: 94.0
 R3: 94.6
 R4: 92.3
 R5: 91.7
 R6: 91.8
 R7: 92.7
 R8: 83.9
 R9: 60.2
 R10: 85.4
 R11: 92.9
 R12: 79.3
 R13: 92.4
 R14: 96.6

Test Conditions
 Stabilization Time: 76M
 Operation Time: 12H
 Room Temperature (°C) / RH%: 24.7/43%
 Sphere Temperature (°C): 24.9



REPORT NUMBER: SP1-2203-582-3

| Measurement and Test Equipment | | | |
|--------------------------------|-----------------------|------------------|----------------------|
| Instrument | Identification Number | Calibration Date | Calibration Due Date |
| Photometer | 76INCH SPHERE IN0058 | 2/7/2022 | 8/7/2022 |
| Power Meter | XITRON 2801 IN0071 | 11/29/2021 | 11/29/2022 |
| AC Power Source | CHROMA 61603 IN0063 | 11/29/2021 | 11/29/2022 |
| DC Power Source | AGILENT E3634A IN0208 | 11/29/2021 | 11/29/2022 |
| Sphere Thermometer | ONSET IN0085 | 11/29/2021 | 11/29/2022 |
| Room Thermometer | ONSET IN0046 | 11/29/2021 | 11/29/2022 |

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CIE 1931 Chromaticity Diagram



CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 3500K 4-step quadrangle

REPORT NUMBER: SP1-2203-582-3

Photopic Flux vs. Wavelength

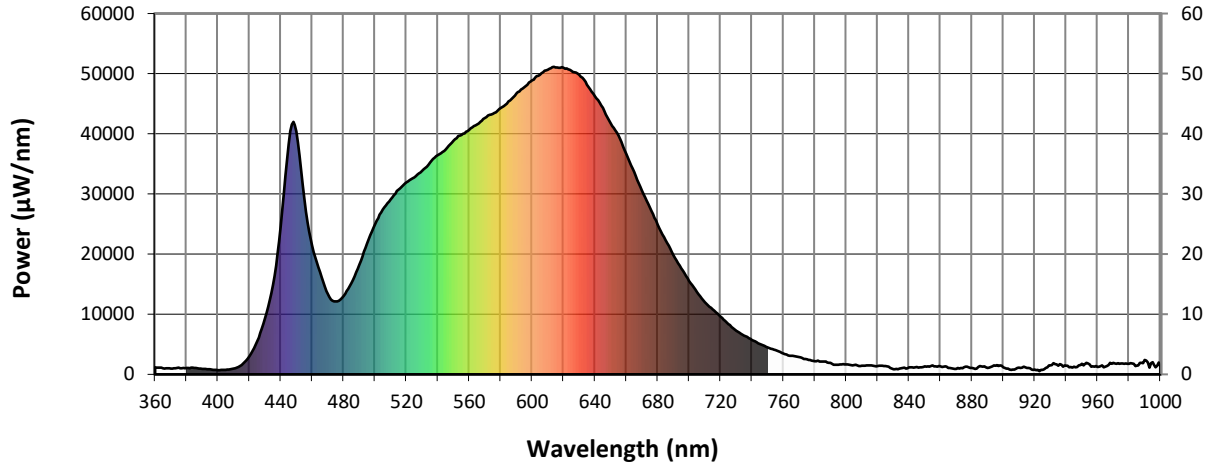


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| λ (nm) | Power (µW/nm) | Lumens (φ/nm) | λ (nm) | Power (µW/nm) | Lumens (φ/nm) | λ (nm) | Power (µW/nm) | Lumens (φ/nm) | λ (nm) | Power (µW/nm) | Lumens (φ/nm) | λ (nm) | Power (µW/nm) | Lumens (φ/nm) |
|--------|---------------|---------------|--------|---------------|---------------|--------|---------------|---------------|--------|---------------|---------------|--------|---------------|---------------|
| 360 | 1176 | NR | 490 | 18251 | NR | 620 | 50949 | NR | 750 | 4448 | NR | 880 | 1078 | NR |
| 365 | 1035 | NR | 495 | 21761 | NR | 625 | 50494 | NR | 755 | 4035 | NR | 885 | 1366 | NR |
| 370 | 979 | NR | 500 | 24951 | NR | 630 | 49793 | NR | 760 | 3463 | NR | 890 | 1088 | NR |
| 375 | 1099 | NR | 505 | 27426 | NR | 635 | 48171 | NR | 765 | 3084 | NR | 895 | 1436 | NR |
| 380 | 1040 | NR | 510 | 29083 | NR | 640 | 46242 | NR | 770 | 2868 | NR | 900 | 1170 | NR |
| 385 | 1047 | NR | 515 | 30682 | NR | 645 | 44312 | NR | 775 | 2487 | NR | 905 | 763 | NR |
| 390 | 930 | NR | 520 | 31915 | NR | 650 | 41773 | NR | 780 | 2185 | NR | 910 | 1136 | NR |
| 395 | 841 | NR | 525 | 32739 | NR | 655 | 39696 | NR | 785 | 2145 | NR | 915 | 1061 | NR |
| 400 | 711 | NR | 530 | 33844 | NR | 660 | 36682 | NR | 790 | 1894 | NR | 920 | 778 | NR |
| 405 | 753 | NR | 535 | 35227 | NR | 665 | 33648 | NR | 795 | 1582 | NR | 925 | 763 | NR |
| 410 | 958 | NR | 540 | 36463 | NR | 670 | 30552 | NR | 800 | 1644 | NR | 930 | 1492 | NR |
| 415 | 1535 | NR | 545 | 37427 | NR | 675 | 27713 | NR | 805 | 1561 | NR | 935 | 1449 | NR |
| 420 | 2990 | NR | 550 | 38864 | NR | 680 | 24916 | NR | 810 | 1432 | NR | 940 | 1460 | NR |
| 425 | 5552 | NR | 555 | 39820 | NR | 685 | 22289 | NR | 815 | 1467 | NR | 945 | 1266 | NR |
| 430 | 9299 | NR | 560 | 40626 | NR | 690 | 19853 | NR | 820 | 1380 | NR | 950 | 1747 | NR |
| 435 | 14864 | NR | 565 | 41572 | NR | 695 | 17633 | NR | 825 | 1382 | NR | 955 | 1663 | NR |
| 440 | 24581 | NR | 570 | 42645 | NR | 700 | 15562 | NR | 830 | 868 | NR | 960 | 1251 | NR |
| 445 | 38254 | NR | 575 | 43293 | NR | 705 | 13701 | NR | 835 | 998 | NR | 965 | 1292 | NR |
| 450 | 40396 | NR | 580 | 44263 | NR | 710 | 11971 | NR | 840 | 1172 | NR | 970 | 1912 | NR |
| 455 | 29196 | NR | 585 | 45373 | NR | 715 | 10811 | NR | 845 | 1237 | NR | 975 | 1791 | NR |
| 460 | 21421 | NR | 590 | 46704 | NR | 720 | 9569 | NR | 850 | 1336 | NR | 980 | 1745 | NR |
| 465 | 17013 | NR | 595 | 47749 | NR | 725 | 8370 | NR | 855 | 1467 | NR | 985 | 1464 | NR |
| 470 | 13285 | NR | 600 | 48894 | NR | 730 | 7260 | NR | 860 | 1322 | NR | 990 | 2377 | NR |
| 475 | 12108 | NR | 605 | 49792 | NR | 735 | 6455 | NR | 865 | 1078 | NR | 995 | 2042 | NR |
| 480 | 13038 | NR | 610 | 50661 | NR | 740 | 5711 | NR | 870 | 924 | NR | 1000 | 1316 | NR |
| 485 | 15186 | NR | 615 | 51053 | NR | 745 | 5054 | NR | 875 | 1193 | NR | | | |

REPORT NUMBER: SP1-2203-582-3

Scotopic Flux vs. Wavelength



Scotopic Lumens: 4480.2

S/P: 1.57

| λ (nm) | Power (µW/nm) | Lumens (φ/nm) | λ (nm) | Power (µW/nm) | Lumens (φ/nm) | λ (nm) | Power (µW/nm) | Lumens (φ/nm) | λ (nm) | Power (µW/nm) | Lumens (φ/nm) | λ (nm) | Power (µW/nm) | Lumens (φ/nm) |
|--------|---------------|---------------|--------|---------------|---------------|--------|---------------|---------------|--------|---------------|---------------|--------|---------------|---------------|
| 360 | 1176 | NR | 490 | 18251 | NR | 620 | 50949 | NR | 750 | 4448 | NR | 880 | 1078 | NR |
| 365 | 1035 | NR | 495 | 21761 | NR | 625 | 50494 | NR | 755 | 4035 | NR | 885 | 1366 | NR |
| 370 | 979 | NR | 500 | 24951 | NR | 630 | 49793 | NR | 760 | 3463 | NR | 890 | 1088 | NR |
| 375 | 1099 | NR | 505 | 27426 | NR | 635 | 48171 | NR | 765 | 3084 | NR | 895 | 1436 | NR |
| 380 | 1040 | NR | 510 | 29083 | NR | 640 | 46242 | NR | 770 | 2868 | NR | 900 | 1170 | NR |
| 385 | 1047 | NR | 515 | 30682 | NR | 645 | 44312 | NR | 775 | 2487 | NR | 905 | 763 | NR |
| 390 | 930 | NR | 520 | 31915 | NR | 650 | 41773 | NR | 780 | 2185 | NR | 910 | 1136 | NR |
| 395 | 841 | NR | 525 | 32739 | NR | 655 | 39696 | NR | 785 | 2145 | NR | 915 | 1061 | NR |
| 400 | 711 | NR | 530 | 33844 | NR | 660 | 36682 | NR | 790 | 1894 | NR | 920 | 778 | NR |
| 405 | 753 | NR | 535 | 35227 | NR | 665 | 33648 | NR | 795 | 1582 | NR | 925 | 763 | NR |
| 410 | 958 | NR | 540 | 36463 | NR | 670 | 30552 | NR | 800 | 1644 | NR | 930 | 1492 | NR |
| 415 | 1535 | NR | 545 | 37427 | NR | 675 | 27713 | NR | 805 | 1561 | NR | 935 | 1449 | NR |
| 420 | 2990 | NR | 550 | 38864 | NR | 680 | 24916 | NR | 810 | 1432 | NR | 940 | 1460 | NR |
| 425 | 5552 | NR | 555 | 39820 | NR | 685 | 22289 | NR | 815 | 1467 | NR | 945 | 1266 | NR |
| 430 | 9299 | NR | 560 | 40626 | NR | 690 | 19853 | NR | 820 | 1380 | NR | 950 | 1747 | NR |
| 435 | 14864 | NR | 565 | 41572 | NR | 695 | 17633 | NR | 825 | 1382 | NR | 955 | 1663 | NR |
| 440 | 24581 | NR | 570 | 42645 | NR | 700 | 15562 | NR | 830 | 868 | NR | 960 | 1251 | NR |
| 445 | 38254 | NR | 575 | 43293 | NR | 705 | 13701 | NR | 835 | 998 | NR | 965 | 1292 | NR |
| 450 | 40396 | NR | 580 | 44263 | NR | 710 | 11971 | NR | 840 | 1172 | NR | 970 | 1912 | NR |
| 455 | 29196 | NR | 585 | 45373 | NR | 715 | 10811 | NR | 845 | 1237 | NR | 975 | 1791 | NR |
| 460 | 21421 | NR | 590 | 46704 | NR | 720 | 9569 | NR | 850 | 1336 | NR | 980 | 1745 | NR |
| 465 | 17013 | NR | 595 | 47749 | NR | 725 | 8370 | NR | 855 | 1467 | NR | 985 | 1464 | NR |
| 470 | 13285 | NR | 600 | 48894 | NR | 730 | 7260 | NR | 860 | 1322 | NR | 990 | 2377 | NR |
| 475 | 12108 | NR | 605 | 49792 | NR | 735 | 6455 | NR | 865 | 1078 | NR | 995 | 2042 | NR |
| 480 | 13038 | NR | 610 | 50661 | NR | 740 | 5711 | NR | 870 | 924 | NR | 1000 | 1316 | NR |
| 485 | 15186 | NR | 615 | 51053 | NR | 745 | 5054 | NR | 875 | 1193 | NR | | | |

REPORT NUMBER: SP1-2203-582-3

Melanopic Flux vs. Wavelength



Melanopic Lumens: 1763.9 S/P: 0.62

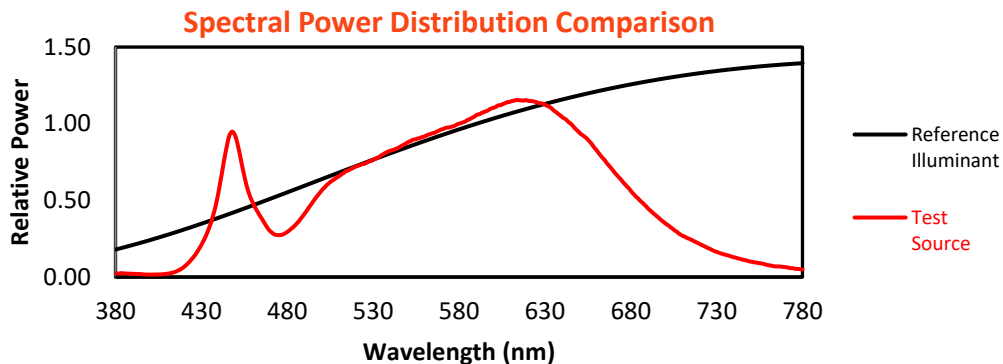
| λ (nm) | Power ($\mu\text{W}/\text{nm}$) | Lumens (ϕ/nm) | λ (nm) | Power ($\mu\text{W}/\text{nm}$) | Lumens (ϕ/nm) | λ (nm) | Power ($\mu\text{W}/\text{nm}$) | Lumens (ϕ/nm) | λ (nm) | Power ($\mu\text{W}/\text{nm}$) | Lumens (ϕ/nm) | λ (nm) | Power ($\mu\text{W}/\text{nm}$) | Lumens (ϕ/nm) |
|-------------------|--------------------------------------|--------------------------------|-------------------|--------------------------------------|--------------------------------|-------------------|--------------------------------------|--------------------------------|-------------------|--------------------------------------|--------------------------------|-------------------|--------------------------------------|--------------------------------|
| 360 | 1176 | NR | 490 | 18251 | NR | 620 | 50949 | NR | 750 | 4448 | NR | 880 | 1078 | NR |
| 365 | 1035 | NR | 495 | 21761 | NR | 625 | 50494 | NR | 755 | 4035 | NR | 885 | 1366 | NR |
| 370 | 979 | NR | 500 | 24951 | NR | 630 | 49793 | NR | 760 | 3463 | NR | 890 | 1088 | NR |
| 375 | 1099 | NR | 505 | 27426 | NR | 635 | 48171 | NR | 765 | 3084 | NR | 895 | 1436 | NR |
| 380 | 1040 | NR | 510 | 29083 | NR | 640 | 46242 | NR | 770 | 2868 | NR | 900 | 1170 | NR |
| 385 | 1047 | NR | 515 | 30682 | NR | 645 | 44312 | NR | 775 | 2487 | NR | 905 | 763 | NR |
| 390 | 930 | NR | 520 | 31915 | NR | 650 | 41773 | NR | 780 | 2185 | NR | 910 | 1136 | NR |
| 395 | 841 | NR | 525 | 32739 | NR | 655 | 39696 | NR | 785 | 2145 | NR | 915 | 1061 | NR |
| 400 | 711 | NR | 530 | 33844 | NR | 660 | 36682 | NR | 790 | 1894 | NR | 920 | 778 | NR |
| 405 | 753 | NR | 535 | 35227 | NR | 665 | 33648 | NR | 795 | 1582 | NR | 925 | 763 | NR |
| 410 | 958 | NR | 540 | 36463 | NR | 670 | 30552 | NR | 800 | 1644 | NR | 930 | 1492 | NR |
| 415 | 1535 | NR | 545 | 37427 | NR | 675 | 27713 | NR | 805 | 1561 | NR | 935 | 1449 | NR |
| 420 | 2990 | NR | 550 | 38864 | NR | 680 | 24916 | NR | 810 | 1432 | NR | 940 | 1460 | NR |
| 425 | 5552 | NR | 555 | 39820 | NR | 685 | 22289 | NR | 815 | 1467 | NR | 945 | 1266 | NR |
| 430 | 9299 | NR | 560 | 40626 | NR | 690 | 19853 | NR | 820 | 1380 | NR | 950 | 1747 | NR |
| 435 | 14864 | NR | 565 | 41572 | NR | 695 | 17633 | NR | 825 | 1382 | NR | 955 | 1663 | NR |
| 440 | 24581 | NR | 570 | 42645 | NR | 700 | 15562 | NR | 830 | 868 | NR | 960 | 1251 | NR |
| 445 | 38254 | NR | 575 | 43293 | NR | 705 | 13701 | NR | 835 | 998 | NR | 965 | 1292 | NR |
| 450 | 40396 | NR | 580 | 44263 | NR | 710 | 11971 | NR | 840 | 1172 | NR | 970 | 1912 | NR |
| 455 | 29196 | NR | 585 | 45373 | NR | 715 | 10811 | NR | 845 | 1237 | NR | 975 | 1791 | NR |
| 460 | 21421 | NR | 590 | 46704 | NR | 720 | 9569 | NR | 850 | 1336 | NR | 980 | 1745 | NR |
| 465 | 17013 | NR | 595 | 47749 | NR | 725 | 8370 | NR | 855 | 1467 | NR | 985 | 1464 | NR |
| 470 | 13285 | NR | 600 | 48894 | NR | 730 | 7260 | NR | 860 | 1322 | NR | 990 | 2377 | NR |
| 475 | 12108 | NR | 605 | 49792 | NR | 735 | 6455 | NR | 865 | 1078 | NR | 995 | 2042 | NR |
| 480 | 13038 | NR | 610 | 50661 | NR | 740 | 5711 | NR | 870 | 924 | NR | 1000 | 1316 | NR |
| 485 | 15186 | NR | 615 | 51053 | NR | 745 | 5054 | NR | 875 | 1193 | NR | | | |

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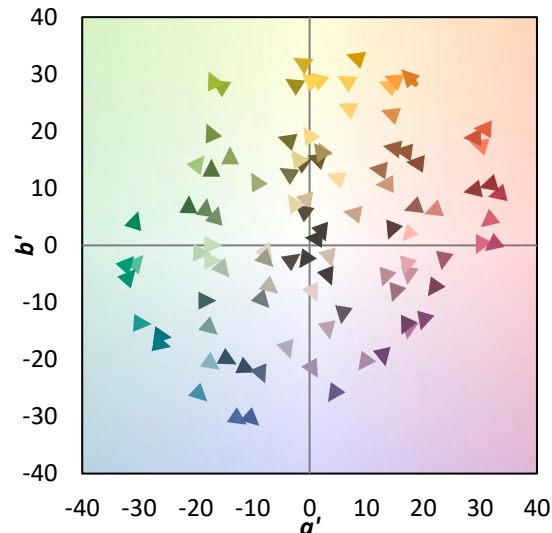
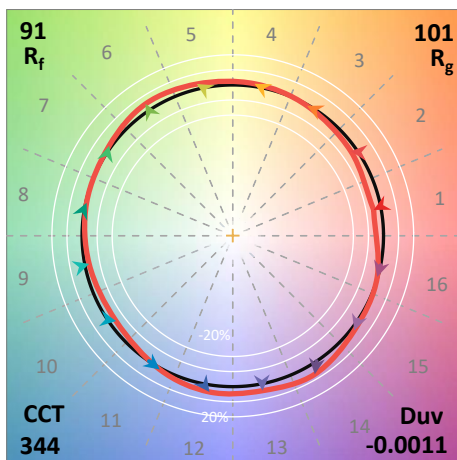
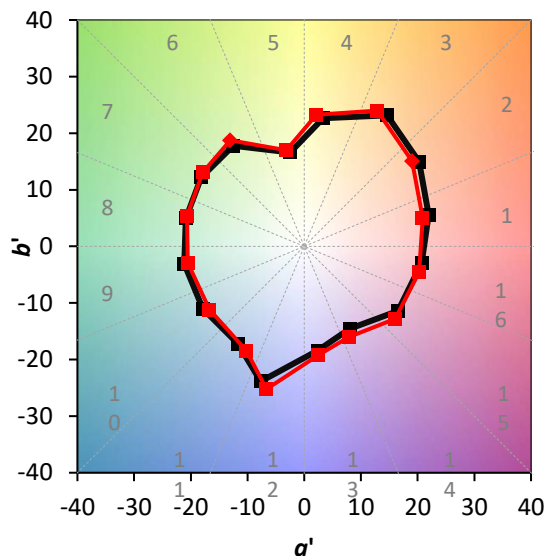
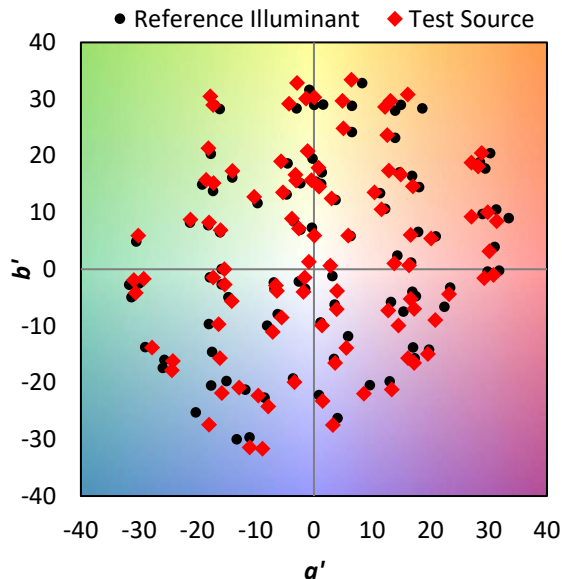
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Summary

$R_f = 90.6$
 $R_g = 101.2$
 CIE $R_a = 91.6$
 $R_9 = 60.2$



Color Vector Graphics



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Individual Sample Fidelity Index ($R_{f,i}$)

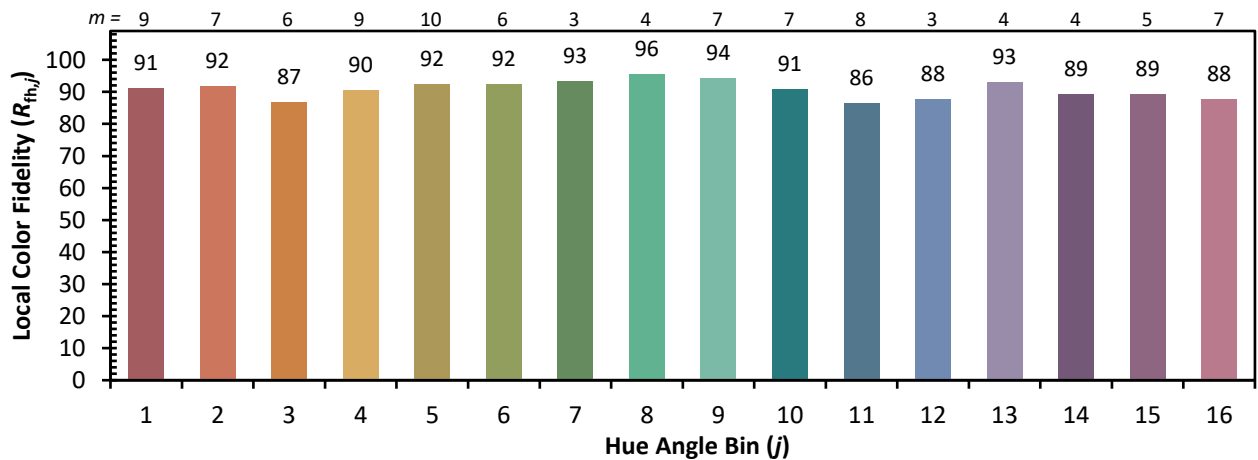
| | | | |
|------------|------------|------------|------------|
| CES01 = 86 | CES26 = 87 | CES51 = 97 | CES76 = 82 |
| CES02 = 62 | CES27 = 96 | CES52 = 96 | CES77 = 88 |
| CES03 = 31 | CES28 = 94 | CES53 = 92 | CES78 = 80 |
| CES04 = 70 | CES29 = 86 | CES54 = 97 | CES79 = 95 |
| CES05 = 50 | CES30 = 93 | CES55 = 96 | CES80 = 92 |
| CES06 = 51 | CES31 = 88 | CES56 = 92 | CES81 = 89 |
| CES07 = 42 | CES32 = 84 | CES57 = 92 | CES82 = 96 |
| CES08 = 41 | CES33 = 89 | CES58 = 92 | CES83 = 95 |
| CES09 = 29 | CES34 = 89 | CES59 = 97 | CES84 = 94 |
| CES10 = 75 | CES35 = 94 | CES60 = 96 | CES85 = 86 |
| CES11 = 58 | CES36 = 91 | CES61 = 94 | CES86 = 87 |
| CES12 = 64 | CES37 = 92 | CES62 = 96 | CES87 = 90 |
| CES13 = 43 | CES38 = 98 | CES63 = 92 | CES88 = 94 |
| CES14 = 74 | CES39 = 97 | CES64 = 92 | CES89 = 86 |
| CES15 = 71 | CES40 = 95 | CES65 = 89 | CES90 = 95 |
| CES16 = 48 | CES41 = 96 | CES66 = 90 | CES91 = 82 |
| CES17 = 49 | CES42 = 91 | CES67 = 88 | CES92 = 82 |
| CES18 = 56 | CES43 = 88 | CES68 = 88 | CES93 = 90 |
| CES19 = 71 | CES44 = 99 | CES69 = 90 | CES94 = 80 |
| CES20 = 66 | CES45 = 93 | CES70 = 85 | CES95 = 85 |
| CES21 = 86 | CES46 = 92 | CES71 = 83 | CES96 = 91 |
| CES22 = 78 | CES47 = 91 | CES72 = 94 | CES97 = 92 |
| CES23 = 91 | CES48 = 93 | CES73 = 79 | CES98 = 92 |
| CES24 = 90 | CES49 = 91 | CES74 = 96 | CES99 = 91 |
| CES25 = 71 | CES50 = 97 | CES75 = 83 | |



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Color Rendition by Hue-Angle Bin



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Measure Comparisons



(END OF REPORT)