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

Scaled data based on original data using

LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: McGRAW-EDISON

Report Number: P1361458

Luminaire Tested: **GSS-SB1D-722-U-5MQ**

Issue Date: 02/18/2026

Report Generated By 670245763

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

Scaled Data Report

**Test Information**

| | |
|---|---|
| Test Method: | LM-79-08 |
| Report Number: | P1361458 |
| Test Lab: | INNOVATION CENTER(G1) |
| Issue Date: | 02/18/2026 |
| Manufacturer: | COOPER LIGHTING SOLUTIONS (FORMERLY EATON) |
| Product Line: | McGRAW-EDISON |
| Catalog Number: | GSS-SB1D-722-U-5MQ |
| Description: | GALLEON II SLIM SITE HIGH DENSITY LED ARRAYS 1SQUARE 76W 70CRI 2200K FIXTURE w/ TYPE V SQUARE MEDIUM DISTRIBUTION OPTIC |
| Light Source: | (26) 2200K CCT, 70 CRI LEDS |
| Ballast/Driver: | ELECTRONIC DRIVER |

**Summary**

| | |
|---|---|
| Lumens per Lamp: | N/A |
| Luminaire Lumens: | 7768.2 lumens |
| Efficiency: | N/A |
| Efficacy: | 102.2 lumens/watt |
| Luminous Opening: | Rectangular (W 0.5' x L: 0.5' x H: 0') |
| IES Classification: | Type V - Short |
| BUG Rating: | B3 - U0 - G1 |

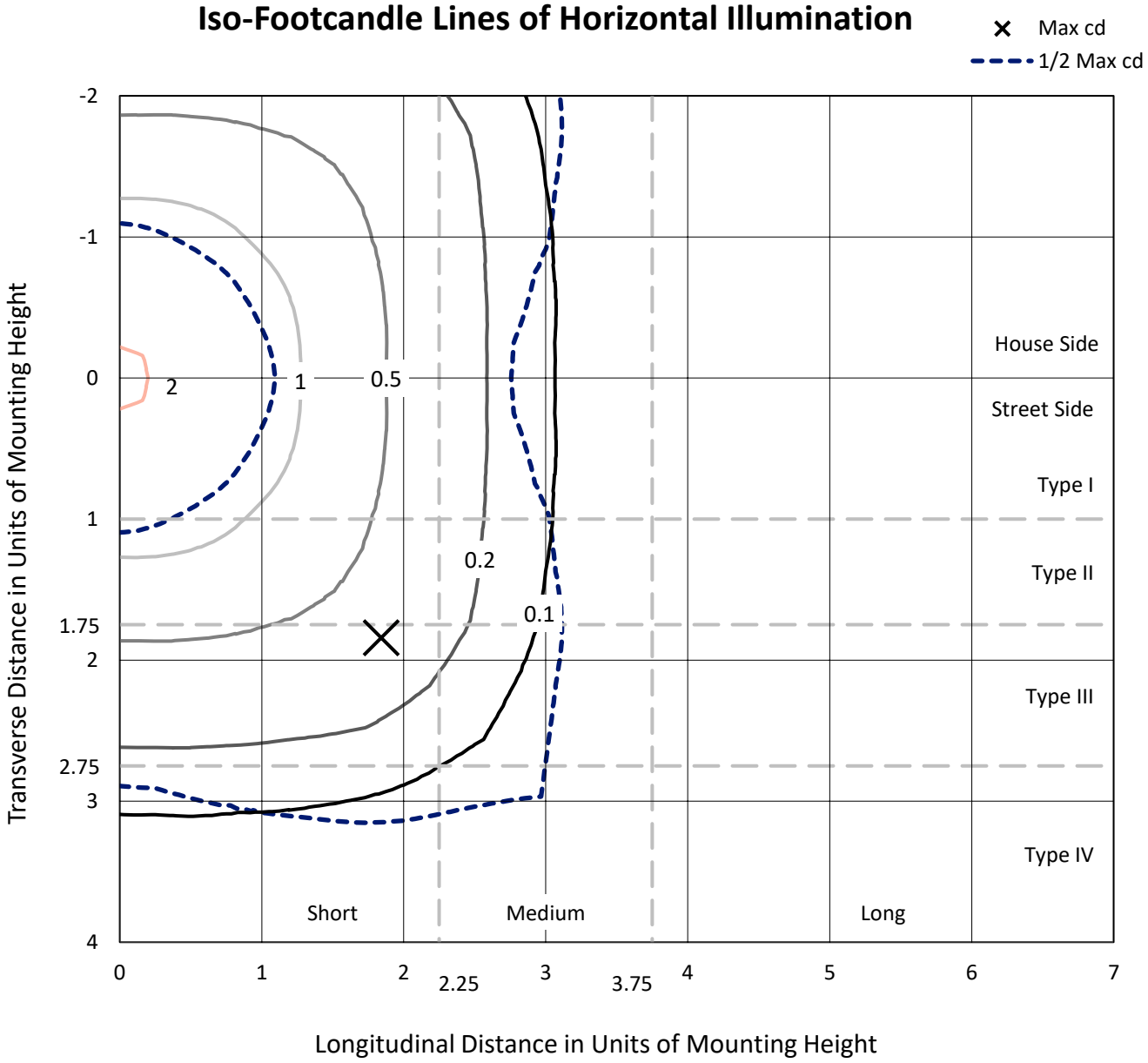
| | |
|---|---|
| Input Watts (W): | 76 |
| Input Voltage (V): | 120 |
| Input Current (Ain): | NR |
| Voltage Rise (V): | NR |
| Power Factor: | 0.98 |
| Total Harmonic Distortion (THDi): | 6.7% |
| Frequency (hertz): | 60 |
| Stabilization Time: | NR |
| Operation Time: | NR |
| Ambient Temperature (°C): | NR |
| Test Distance: | 28.75 FT |

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Scaled Data Report

REPORT NUMBER: P1361458
CATALOG NUMBER: GSS-SB1D-722-U-5MQ

## Iso-Footcandle Lines of Horizontal Illumination



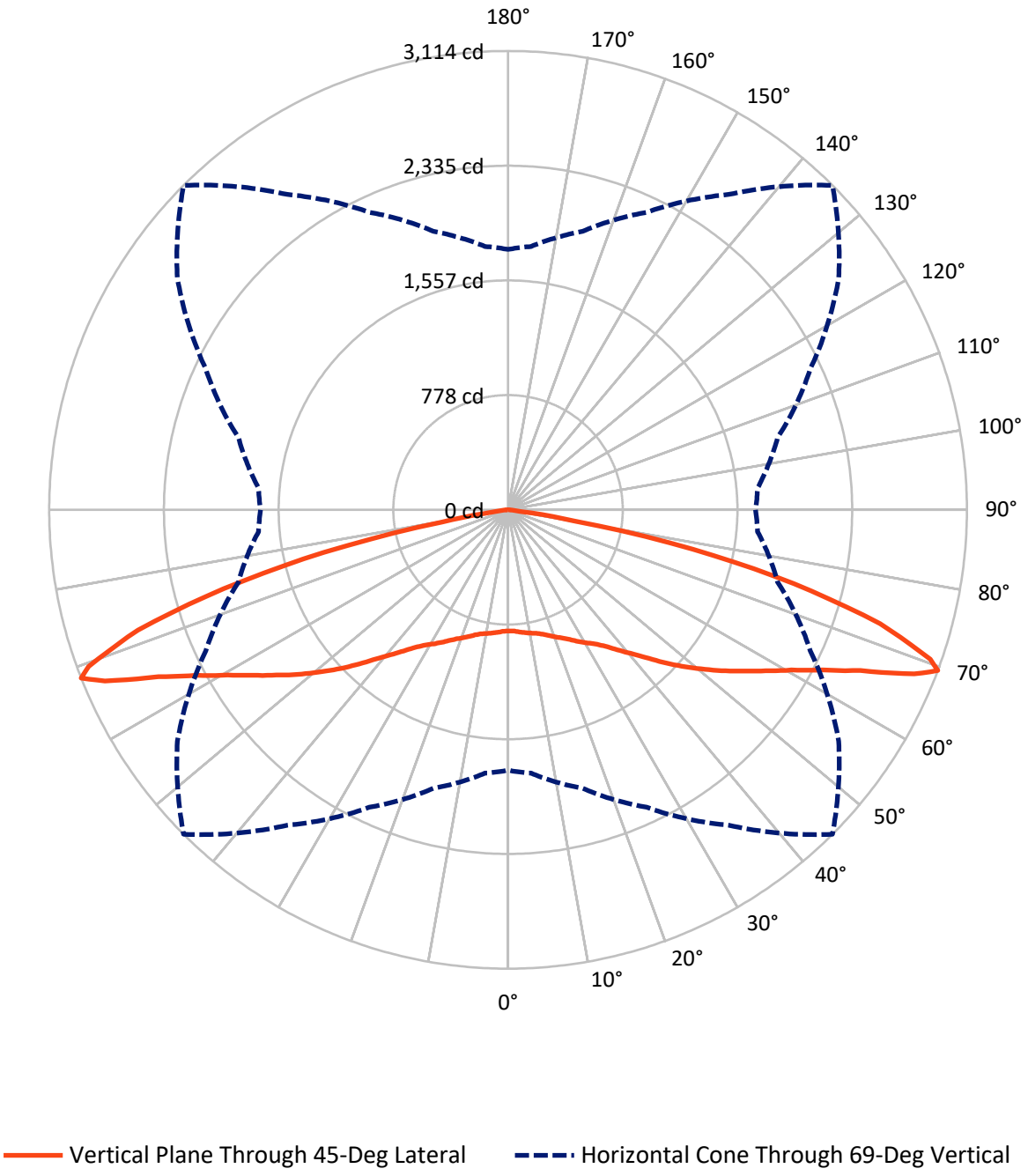

Based on 20 foot mounting height. Maximum calculated value = 2.1 fc
Type V - Short - N/A

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Scaled Data Report

REPORT NUMBER: P1361458
CATALOG NUMBER: GSS-SB1D-722-U-5MQ

## Luminous Intensity Polar Plot



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Scaled Data Report

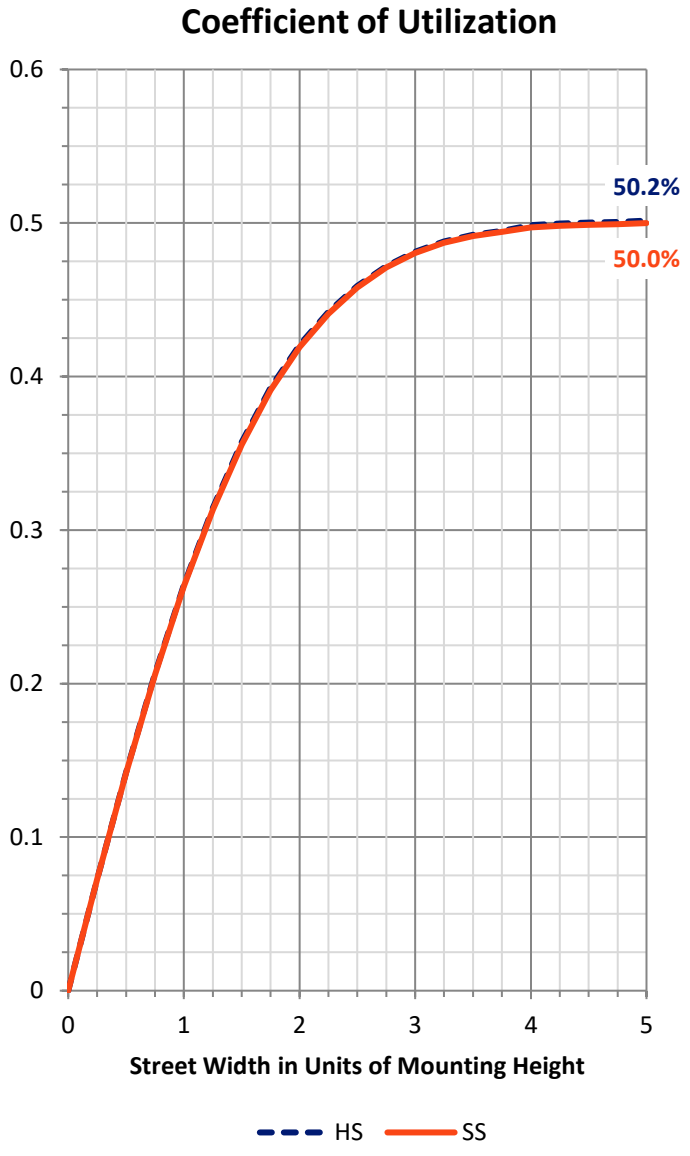
REPORT NUMBER: P1361458
CATALOG NUMBER: GSS-SB1D-722-U-5MQ

**FLUX DISTRIBUTION:**

| | | Downward | Upward | Total |
|---|---|---|---|---|
| **House Side** | Lumens | 3884.1 | 0.0 | 3884.1 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| **Street Side** | Lumens | 3884.1 | 0.0 | 3884.1 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| **Total** | Lumens | 7768.2 | 0.0 | 7768.2 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

**ZONAL LUMENS:**

| Zone | Lumens | % Fixture |
|---|---|---|
| 0°-10° | 80.1 | 1.0 |
| 10°-20° | 248.7 | 3.2 |
| 20°-30° | 446.1 | 5.7 |
| 30°-40° | 718.2 | 9.2 |
| 40°-50° | 1146.3 | 14.8 |
| 50°-60° | 1698.6 | 21.9 |
| 60°-70° | 2181.3 | 28.1 |
| 70°-80° | 1208.2 | 15.6 |
| 80°-90° | 40.8 | 0.5 |
| 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°-90° | 7768.2 | 100.0 |
| 0°-180° | 7768.2 | 100.0 |



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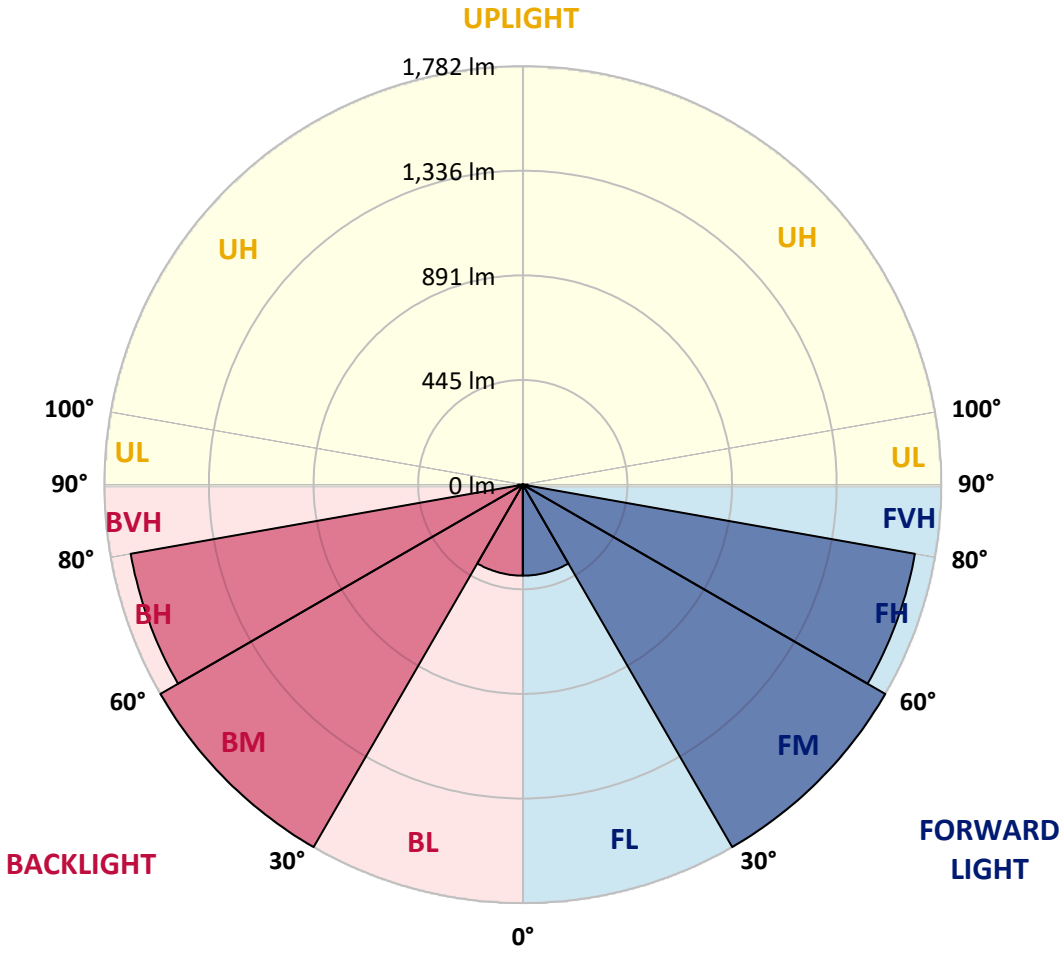
Scaled Data Report

REPORT NUMBER: P1361458
CATALOG NUMBER: GSS-SB1D-722-U-5MQ

## LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit B | U | G |
|---|---|---|---|---|---|---|
| FL | (0°-30°) | 387.4 | 5.0 | | | |
| FM | (30°-60°) | 1781.5 | 22.9 | | | |
| FH | (60°-80°) | 1694.7 | 21.8 | | | G1/1800 |
| FVH | (80°-90°) | 20.4 | 0.3 | | | G1/100 |
| BL | (0°-30°) | 387.4 | 5.0 | B1/500 | | |
| BM | (30°-60°) | 1781.5 | 22.9 | B2/2500 | | |
| BH | (60°-80°) | 1694.7 | 21.8 | B3/2500 | | G1/1800 |
| BVH | (80°-90°) | 20.4 | 0.3 | | | G1/100 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

**BUG Rating: B3-U0-G1**
Type V Short



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Scaled Data Report

REPORT NUMBER: P1361458
CATALOG NUMBER: GSS-SB1D-722-U-5MQ

**CANDELA DISTRIBUTION (FULL):**

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° | 90° |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0° | 822.2 | 822.2 | 822.2 | 822.2 | 822.2 | 822.2 | 822.2 | 822.2 | 822.2 | 822.2 | 822.2 |
| 2.5° | 831.1 | 827.5 | 827.5 | 825.7 | 824.0 | 824.0 | 825.7 | 824.0 | 827.5 | 825.7 | 825.7 |
| 5° | 836.4 | 832.9 | 832.9 | 834.7 | 831.1 | 832.9 | 834.7 | 831.1 | 836.4 | 832.9 | 832.9 |
| 7.5° | 843.6 | 841.8 | 840.0 | 843.6 | 841.8 | 841.8 | 845.4 | 841.8 | 845.4 | 840.0 | 838.2 |
| 10° | 854.3 | 848.9 | 848.9 | 850.7 | 848.9 | 850.7 | 854.3 | 850.7 | 850.7 | 847.1 | 847.1 |
| 12.5° | 861.4 | 859.6 | 857.9 | 859.6 | 859.6 | 859.6 | 861.4 | 857.9 | 859.6 | 857.9 | 856.1 |
| 15° | 872.1 | 870.3 | 870.3 | 870.3 | 872.1 | 875.7 | 873.9 | 868.6 | 870.3 | 866.8 | 866.8 |
| 17.5° | 888.2 | 884.6 | 886.4 | 888.2 | 891.7 | 897.1 | 891.7 | 884.6 | 884.6 | 881.0 | 879.3 |
| 20° | 906.0 | 904.2 | 906.0 | 909.6 | 913.1 | 920.3 | 913.1 | 906.0 | 902.4 | 898.9 | 895.3 |
| 22.5° | 925.6 | 923.8 | 929.2 | 932.8 | 936.3 | 945.2 | 938.1 | 931.0 | 922.1 | 918.5 | 916.7 |
| 25° | 947.0 | 945.2 | 950.6 | 961.3 | 970.2 | 975.6 | 968.4 | 955.9 | 948.8 | 941.7 | 938.1 |
| 27.5° | 970.2 | 970.2 | 979.1 | 989.8 | 1002.3 | 1011.2 | 1004.1 | 988.0 | 973.8 | 966.6 | 964.9 |
| 30° | 1005.9 | 1005.9 | 1014.8 | 1029.1 | 1039.8 | 1046.9 | 1039.8 | 1027.3 | 1013.0 | 1005.9 | 1004.1 |
| 32.5° | 1054.0 | 1054.0 | 1064.7 | 1075.4 | 1080.8 | 1084.4 | 1082.6 | 1077.2 | 1064.7 | 1054.0 | 1050.5 |
| 35° | 1111.1 | 1112.9 | 1125.4 | 1134.3 | 1139.6 | 1136.1 | 1139.6 | 1136.1 | 1125.4 | 1116.5 | 1114.7 |
| 37.5° | 1184.2 | 1184.2 | 1196.7 | 1205.6 | 1202.1 | 1205.6 | 1205.6 | 1207.4 | 1202.1 | 1189.6 | 1184.2 |
| 40° | 1264.5 | 1266.3 | 1280.5 | 1285.9 | 1284.1 | 1280.5 | 1285.9 | 1291.2 | 1284.1 | 1271.6 | 1268.0 |
| 42.5° | 1353.7 | 1357.2 | 1367.9 | 1378.6 | 1375.1 | 1369.7 | 1380.4 | 1384.0 | 1371.5 | 1360.8 | 1360.8 |
| 45° | 1446.4 | 1446.4 | 1462.4 | 1482.1 | 1483.9 | 1474.9 | 1482.1 | 1483.9 | 1467.8 | 1453.5 | 1448.2 |
| 47.5° | 1540.9 | 1544.5 | 1565.9 | 1587.3 | 1594.4 | 1585.5 | 1590.9 | 1592.6 | 1565.9 | 1551.6 | 1542.7 |
| 50° | 1635.4 | 1640.8 | 1669.3 | 1703.2 | 1710.4 | 1696.1 | 1706.8 | 1699.7 | 1671.1 | 1640.8 | 1633.7 |
| 52.5° | 1712.1 | 1724.6 | 1767.4 | 1813.8 | 1833.4 | 1813.8 | 1828.1 | 1815.6 | 1767.4 | 1728.2 | 1715.7 |
| 55° | 1797.7 | 1806.7 | 1861.9 | 1922.6 | 1949.3 | 1931.5 | 1945.8 | 1924.4 | 1856.6 | 1808.4 | 1796.0 |
| 57.5° | 1881.6 | 1885.1 | 1947.6 | 2033.2 | 2076.0 | 2061.7 | 2063.5 | 2022.5 | 1949.3 | 1886.9 | 1869.1 |
| 60° | 1947.6 | 1958.3 | 2038.5 | 2138.4 | 2206.2 | 2207.9 | 2191.9 | 2129.5 | 2043.9 | 1972.5 | 1958.3 |
| 62.5° | 1861.9 | 1885.1 | 2029.6 | 2241.8 | 2352.4 | 2393.4 | 2345.3 | 2249.0 | 2063.5 | 1935.1 | 1913.7 |
| 65° | 1804.9 | 1819.1 | 1927.9 | 2186.5 | 2527.2 | 2628.8 | 2532.5 | 2234.7 | 1995.7 | 1894.0 | 1874.4 |
| 67.5° | 1842.3 | 1860.2 | 1981.4 | 2181.2 | 2568.2 | 2973.1 | 2644.9 | 2281.1 | 2036.7 | 1878.0 | 1858.4 |
| 69° | 1767.4 | 1794.2 | 1956.5 | 2227.6 | 2612.8 | 3113.9 | 2739.4 | 2263.2 | 1894.0 | 1699.7 | 1680.0 |
| 70° | 1681.8 | 1705.0 | 1879.8 | 2202.6 | 2677.0 | 3039.0 | 2776.9 | 2154.4 | 1754.9 | 1569.5 | 1551.6 |
| 72.5° | 1310.9 | 1335.8 | 1540.9 | 1945.8 | 2539.7 | 2641.3 | 2423.7 | 1799.5 | 1455.3 | 1289.5 | 1269.8 |
| 75° | 433.4 | 478.0 | 672.4 | 1214.5 | 1633.7 | 2002.8 | 1565.9 | 1209.2 | 781.2 | 590.3 | 531.5 |
| 77.5° | 92.7 | 99.9 | 174.8 | 312.1 | 677.7 | 1282.3 | 761.5 | 297.8 | 160.5 | 112.4 | 101.7 |
| 80° | 49.9 | 53.5 | 73.1 | 91.0 | 167.6 | 458.4 | 146.2 | 80.3 | 76.7 | 55.3 | 51.7 |
| 82.5° | 32.1 | 32.1 | 41.0 | 49.9 | 64.2 | 85.6 | 57.1 | 48.2 | 42.8 | 30.3 | 30.3 |
| 85° | 17.8 | 17.8 | 19.6 | 25.0 | 25.0 | 26.8 | 25.0 | 23.2 | 19.6 | 17.8 | 16.1 |
| 87.5° | 10.7 | 12.5 | 12.5 | 10.7 | 10.7 | 10.7 | 10.7 | 10.7 | 10.7 | 12.5 | 10.7 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

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

# LM-79-2019: Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Report Prepared for

Cooper Lighting Solutions

McGraw-Edison

Report Number: SP1-2407-184-2

Test Date: 10/09/2024

Luminaire Tested: GSS-SB1A-722-U-5WQ

Data in this report applies to families of products including GSS-SB1A-722-U-5WQ

Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

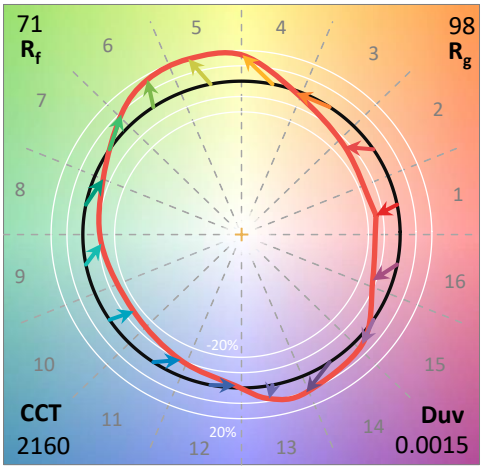
## Test Information

| | |
|---|---|
| Test Method: | LM-79-2019 |
| Report Number: | SP1-2407-184-2 |
| Test Lab: | COOPER LIGHTING SOLUTIONS |
| Photometer: | SP1 - 76IN SPHERE |
| Measurement Geometry: | 4π |
| Issue Date: | 10/15/2024 |
| Manufacturer: | COOPER LIGHTING SOLUTIONS |
| Product Line: | McGraw-Edison |
| Catalog Number: | **GSS-SB1A-722-U-5WQ** |
| Description: | GALLEON II SITE SLIM 1SQ 350MA 5WQ HIGH DENSITY LIGHTSQUARE WITH 70 CRI 2200K CCT 26 LEDS |

## Spectral Parameters

| | |
|---|---|
| CCT (K): | 2160 |
| CIE u': | 0.2927 |
| CIE v': | 0.5388 |
| Duv: | 0.0015 |
| CIE x: | 0.5130 |
| CIE y: | 0.4197 |
| CIE z: | 0.0674 |
| Peak Wavelength (nm): | 609 |
| Dominant Wavelength (nm): | 587 |
| Purity: | 79.96089 |
| Rf: | 70.6 |
| Rg: | 97.6 |

| | |
|---|---|
| CRI (Ra): | 71.9 |
| R1: | 68.7 |
| R2: | 82.6 |
| R3: | 95.5 |
| R4: | 66.4 |
| R5: | 65.4 |
| R6: | 75.9 |
| R7: | 77.2 |
| R8: | 43.5 |
| R9: | -17.8 |
| R10: | 60.5 |
| R11: | 60.2 |
| R12: | 48.2 |
| R13: | 70.7 |
| R14: | 96.8 |
| R15: | 61.8 |




## Test Conditions

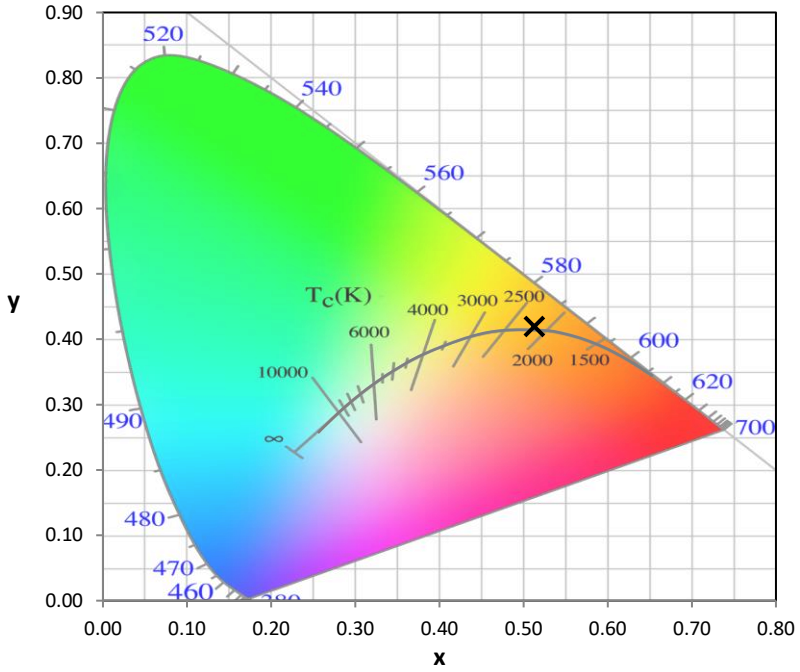
| | |
|---|---|
| Stabilization Time: | 21M |
| Operation Time: | 1H 21M |
| Sphere Temperature (°C): | 25.2 |

REPORT NUMBER: SP1-2407-184-2

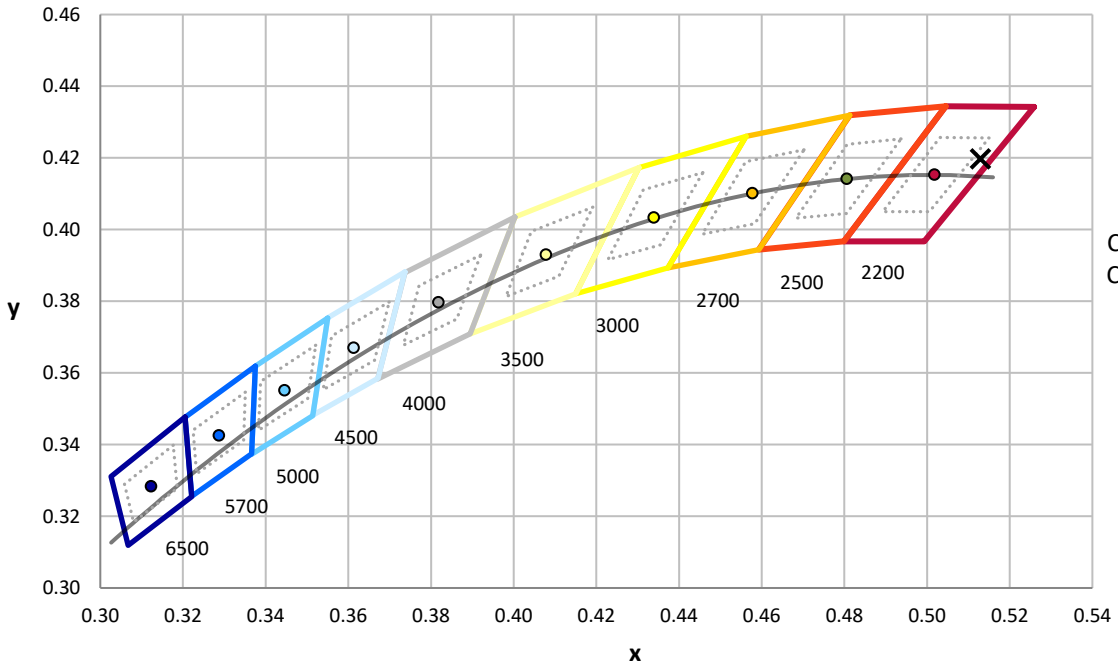
| Measurement and Test Equipment | | | |
|---|---|---|---|
| Instrument | Identification Number | Calibration Date | Calibration Due Date |
| Photometer | IN0058 | 6/18/2024 | 12/18/2024 |
| Power Meter | INXT2011004 | 2/8/2024 | 2/8/2025 |
| AC Power Source | IN0063 | 10/24/2023 | 10/24/2024 |
| DC Power Source | IN0208 | 10/24/2023 | 10/24/2024 |
| Sphere Thermometer | IN0085 | 10/24/2023 | 10/24/2024 |
| Room Thermometer | IN0046 | 10/24/2023 | 10/24/2024 |

REPORT NUMBER: SP1-2407-184-2

## CIE 1931 Chromaticity Diagram




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

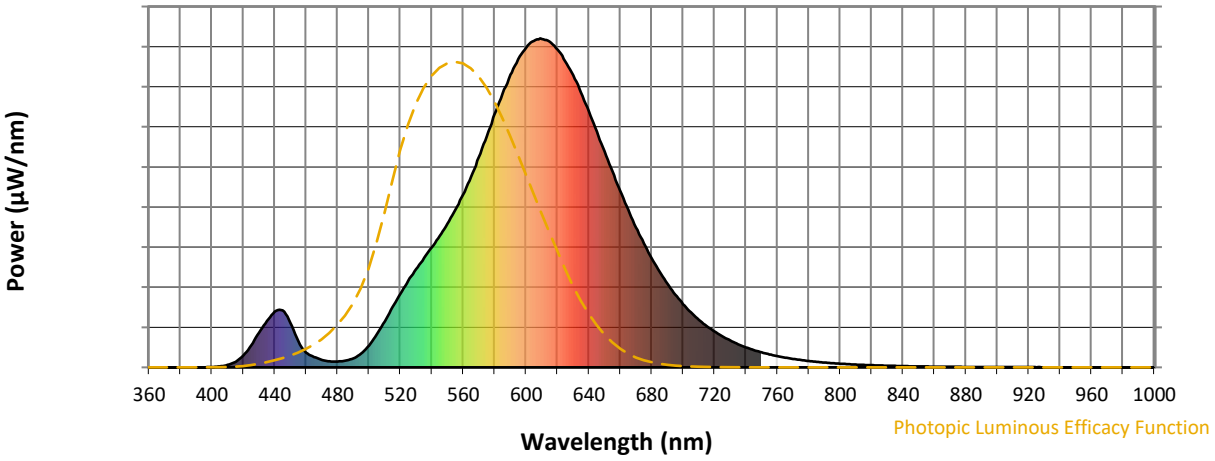



CCT = 2160K
CIE x = 0.5130
CIE y = 0.4197
Duv = 0.0015

Point lies inside the ANSI 2200K 7-step quadrangle

REPORT NUMBER: SP1-2407-184-2

## Photopic Flux vs. Wavelength

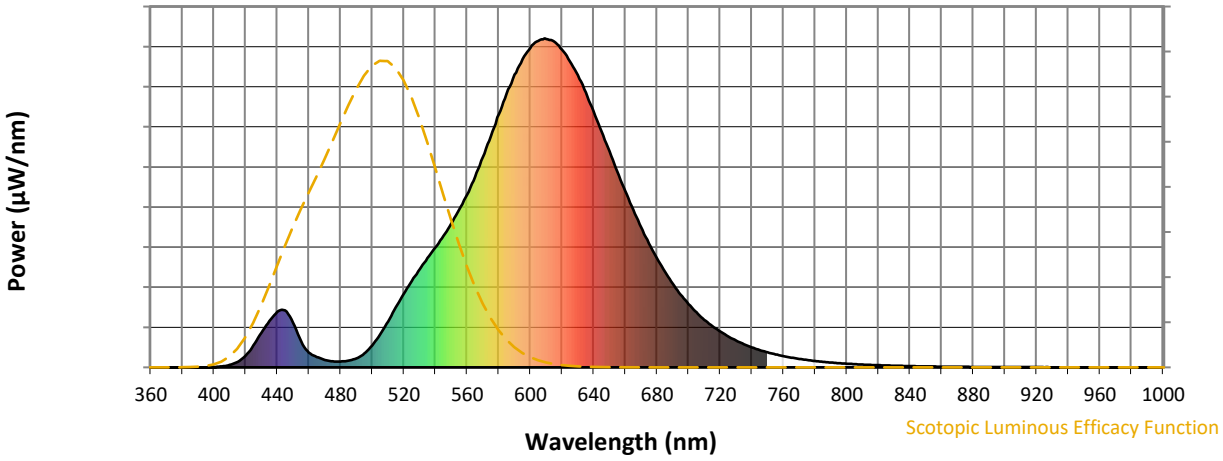



## Photopic Lumens: NR

| λ (nm) | Power W^/nm | Lumens (ϕ/nm) | λ (nm) | Power W^/nm | Lumens (ϕ/nm) | λ (nm) | Power W^/nm | Lumens (ϕ/nm) | λ (nm) | Power W^/nm | Lumens (ϕ/nm) | λ (nm) | Power W^/nm | Lumens (ϕ/nm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 360 | 0 | NR | 490 | 27 | NR | 620 | 966 | NR | 750 | 46 | NR | 880 | 1 | NR |
| 365 | 0 | NR | 495 | 42 | NR | 625 | 930 | NR | 755 | 39 | NR | 885 | 1 | NR |
| 370 | 0 | NR | 500 | 67 | NR | 630 | 888 | NR | 760 | 34 | NR | 890 | 1 | NR |
| 375 | 0 | NR | 505 | 101 | NR | 635 | 835 | NR | 765 | 30 | NR | 895 | 1 | NR |
| 380 | 0 | NR | 510 | 139 | NR | 640 | 778 | NR | 770 | 26 | NR | 900 | 1 | NR |
| 385 | 0 | NR | 515 | 183 | NR | 645 | 717 | NR | 775 | 22 | NR | 905 | 1 | NR |
| 390 | 0 | NR | 520 | 224 | NR | 650 | 656 | NR | 780 | 19 | NR | 910 | 1 | NR |
| 395 | 0 | NR | 525 | 262 | NR | 655 | 595 | NR | 785 | 17 | NR | 915 | 1 | NR |
| 400 | 1 | NR | 530 | 299 | NR | 660 | 536 | NR | 790 | 15 | NR | 920 | 1 | NR |
| 405 | 3 | NR | 535 | 332 | NR | 665 | 480 | NR | 795 | 13 | NR | 925 | 1 | NR |
| 410 | 7 | NR | 540 | 365 | NR | 670 | 425 | NR | 800 | 11 | NR | 930 | 1 | NR |
| 415 | 17 | NR | 545 | 400 | NR | 675 | 376 | NR | 805 | 10 | NR | 935 | 0 | NR |
| 420 | 36 | NR | 550 | 437 | NR | 680 | 332 | NR | 810 | 8 | NR | 940 | 0 | NR |
| 425 | 67 | NR | 555 | 479 | NR | 685 | 291 | NR | 815 | 8 | NR | 945 | 0 | NR |
| 430 | 105 | NR | 560 | 525 | NR | 690 | 255 | NR | 820 | 7 | NR | 950 | 0 | NR |
| 435 | 141 | NR | 565 | 579 | NR | 695 | 221 | NR | 825 | 6 | NR | 955 | 0 | NR |
| 440 | 169 | NR | 570 | 639 | NR | 700 | 192 | NR | 830 | 5 | NR | 960 | 0 | NR |
| 445 | 173 | NR | 575 | 703 | NR | 705 | 167 | NR | 835 | 4 | NR | 965 | 0 | NR |
| 450 | 136 | NR | 580 | 769 | NR | 710 | 144 | NR | 840 | 4 | NR | 970 | 0 | NR |
| 455 | 80 | NR | 585 | 832 | NR | 715 | 125 | NR | 845 | 3 | NR | 975 | 0 | NR |
| 460 | 45 | NR | 590 | 890 | NR | 720 | 109 | NR | 850 | 3 | NR | 980 | 0 | NR |
| 465 | 32 | NR | 595 | 937 | NR | 725 | 94 | NR | 855 | 3 | NR | 985 | 0 | NR |
| 470 | 23 | NR | 600 | 972 | NR | 730 | 81 | NR | 860 | 2 | NR | 990 | 0 | NR |
| 475 | 18 | NR | 605 | 992 | NR | 735 | 70 | NR | 865 | 2 | NR | 995 | 0 | NR |
| 480 | 18 | NR | 610 | 998 | NR | 740 | 61 | NR | 870 | 2 | NR | 1000 | 0 | NR |
| 485 | 20 | NR | 615 | 990 | NR | 745 | 53 | NR | 875 | 2 | NR | | | |

REPORT NUMBER: SP1-2407-184-2

## Scotopic Flux vs. Wavelength

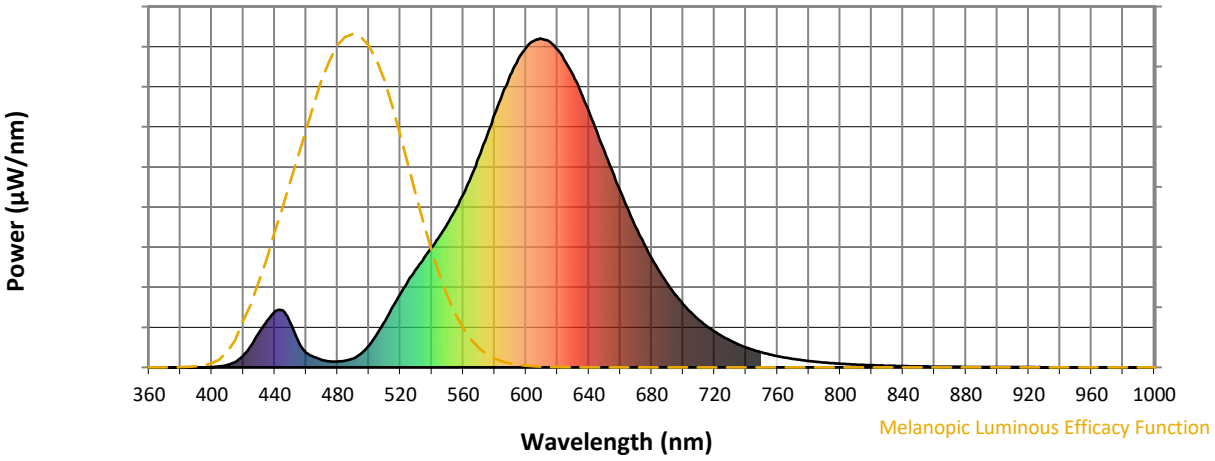



**Scotopic Lumens: NR** **S/P: 0.8**

| λ (nm) | Power W^/nm | Lumens (ϕ/nm) | λ (nm) | Power W^/nm | Lumens (ϕ/nm) | λ (nm) | Power W^/nm | Lumens (ϕ/nm) | λ (nm) | Power W^/nm | Lumens (ϕ/nm) | λ (nm) | Power W^/nm | Lumens (ϕ/nm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 360 | 0 | NR | 490 | 27 | NR | 620 | 966 | NR | 750 | 46 | NR | 880 | 1 | NR |
| 365 | 0 | NR | 495 | 42 | NR | 625 | 930 | NR | 755 | 39 | NR | 885 | 1 | NR |
| 370 | 0 | NR | 500 | 67 | NR | 630 | 888 | NR | 760 | 34 | NR | 890 | 1 | NR |
| 375 | 0 | NR | 505 | 101 | NR | 635 | 835 | NR | 765 | 30 | NR | 895 | 1 | NR |
| 380 | 0 | NR | 510 | 139 | NR | 640 | 778 | NR | 770 | 26 | NR | 900 | 1 | NR |
| 385 | 0 | NR | 515 | 183 | NR | 645 | 717 | NR | 775 | 22 | NR | 905 | 1 | NR |
| 390 | 0 | NR | 520 | 224 | NR | 650 | 656 | NR | 780 | 19 | NR | 910 | 1 | NR |
| 395 | 0 | NR | 525 | 262 | NR | 655 | 595 | NR | 785 | 17 | NR | 915 | 1 | NR |
| 400 | 1 | NR | 530 | 299 | NR | 660 | 536 | NR | 790 | 15 | NR | 920 | 1 | NR |
| 405 | 3 | NR | 535 | 332 | NR | 665 | 480 | NR | 795 | 13 | NR | 925 | 1 | NR |
| 410 | 7 | NR | 540 | 365 | NR | 670 | 425 | NR | 800 | 11 | NR | 930 | 1 | NR |
| 415 | 17 | NR | 545 | 400 | NR | 675 | 376 | NR | 805 | 10 | NR | 935 | 0 | NR |
| 420 | 36 | NR | 550 | 437 | NR | 680 | 332 | NR | 810 | 8 | NR | 940 | 0 | NR |
| 425 | 67 | NR | 555 | 479 | NR | 685 | 291 | NR | 815 | 8 | NR | 945 | 0 | NR |
| 430 | 105 | NR | 560 | 525 | NR | 690 | 255 | NR | 820 | 7 | NR | 950 | 0 | NR |
| 435 | 141 | NR | 565 | 579 | NR | 695 | 221 | NR | 825 | 6 | NR | 955 | 0 | NR |
| 440 | 169 | NR | 570 | 639 | NR | 700 | 192 | NR | 830 | 5 | NR | 960 | 0 | NR |
| 445 | 173 | NR | 575 | 703 | NR | 705 | 167 | NR | 835 | 4 | NR | 965 | 0 | NR |
| 450 | 136 | NR | 580 | 769 | NR | 710 | 144 | NR | 840 | 4 | NR | 970 | 0 | NR |
| 455 | 80 | NR | 585 | 832 | NR | 715 | 125 | NR | 845 | 3 | NR | 975 | 0 | NR |
| 460 | 45 | NR | 590 | 890 | NR | 720 | 109 | NR | 850 | 3 | NR | 980 | 0 | NR |
| 465 | 32 | NR | 595 | 937 | NR | 725 | 94 | NR | 855 | 3 | NR | 985 | 0 | NR |
| 470 | 23 | NR | 600 | 972 | NR | 730 | 81 | NR | 860 | 2 | NR | 990 | 0 | NR |
| 475 | 18 | NR | 605 | 992 | NR | 735 | 70 | NR | 865 | 2 | NR | 995 | 0 | NR |
| 480 | 18 | NR | 610 | 998 | NR | 740 | 61 | NR | 870 | 2 | NR | 1000 | 0 | NR |
| 485 | 20 | NR | 615 | 990 | NR | 745 | 53 | NR | 875 | 2 | NR | | | |

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## Melanopic Flux vs. Wavelength




**Melanopic Lumens: NR** **M/P: 1.21**

| λ (nm) | Power W^/nm | Lumens (ϕ/nm) | λ (nm) | Power W^/nm | Lumens (ϕ/nm) | λ (nm) | Power W^/nm | Lumens (ϕ/nm) | λ (nm) | Power W^/nm | Lumens (ϕ/nm) | λ (nm) | Power W^/nm | Lumens (ϕ/nm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 360 | 0 | NR | 490 | 27 | NR | 620 | 966 | NR | 750 | 46 | NR | 880 | 1 | NR |
| 365 | 0 | NR | 495 | 42 | NR | 625 | 930 | NR | 755 | 39 | NR | 885 | 1 | NR |
| 370 | 0 | NR | 500 | 67 | NR | 630 | 888 | NR | 760 | 34 | NR | 890 | 1 | NR |
| 375 | 0 | NR | 505 | 101 | NR | 635 | 835 | NR | 765 | 30 | NR | 895 | 1 | NR |
| 380 | 0 | NR | 510 | 139 | NR | 640 | 778 | NR | 770 | 26 | NR | 900 | 1 | NR |
| 385 | 0 | NR | 515 | 183 | NR | 645 | 717 | NR | 775 | 22 | NR | 905 | 1 | NR |
| 390 | 0 | NR | 520 | 224 | NR | 650 | 656 | NR | 780 | 19 | NR | 910 | 1 | NR |
| 395 | 0 | NR | 525 | 262 | NR | 655 | 595 | NR | 785 | 17 | NR | 915 | 1 | NR |
| 400 | 1 | NR | 530 | 299 | NR | 660 | 536 | NR | 790 | 15 | NR | 920 | 1 | NR |
| 405 | 3 | NR | 535 | 332 | NR | 665 | 480 | NR | 795 | 13 | NR | 925 | 1 | NR |
| 410 | 7 | NR | 540 | 365 | NR | 670 | 425 | NR | 800 | 11 | NR | 930 | 1 | NR |
| 415 | 17 | NR | 545 | 400 | NR | 675 | 376 | NR | 805 | 10 | NR | 935 | 0 | NR |
| 420 | 36 | NR | 550 | 437 | NR | 680 | 332 | NR | 810 | 8 | NR | 940 | 0 | NR |
| 425 | 67 | NR | 555 | 479 | NR | 685 | 291 | NR | 815 | 8 | NR | 945 | 0 | NR |
| 430 | 105 | NR | 560 | 525 | NR | 690 | 255 | NR | 820 | 7 | NR | 950 | 0 | NR |
| 435 | 141 | NR | 565 | 579 | NR | 695 | 221 | NR | 825 | 6 | NR | 955 | 0 | NR |
| 440 | 169 | NR | 570 | 639 | NR | 700 | 192 | NR | 830 | 5 | NR | 960 | 0 | NR |
| 445 | 173 | NR | 575 | 703 | NR | 705 | 167 | NR | 835 | 4 | NR | 965 | 0 | NR |
| 450 | 136 | NR | 580 | 769 | NR | 710 | 144 | NR | 840 | 4 | NR | 970 | 0 | NR |
| 455 | 80 | NR | 585 | 832 | NR | 715 | 125 | NR | 845 | 3 | NR | 975 | 0 | NR |
| 460 | 45 | NR | 590 | 890 | NR | 720 | 109 | NR | 850 | 3 | NR | 980 | 0 | NR |
| 465 | 32 | NR | 595 | 937 | NR | 725 | 94 | NR | 855 | 3 | NR | 985 | 0 | NR |
| 470 | 23 | NR | 600 | 972 | NR | 730 | 81 | NR | 860 | 2 | NR | 990 | 0 | NR |
| 475 | 18 | NR | 605 | 992 | NR | 735 | 70 | NR | 865 | 2 | NR | 995 | 0 | NR |
| 480 | 18 | NR | 610 | 998 | NR | 740 | 61 | NR | 870 | 2 | NR | 1000 | 0 | NR |
| 485 | 20 | NR | 615 | 990 | NR | 745 | 53 | NR | 875 | 2 | NR | | | |

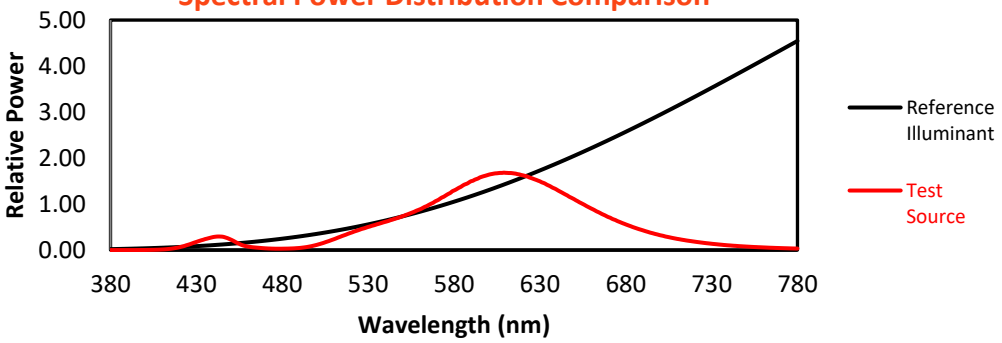
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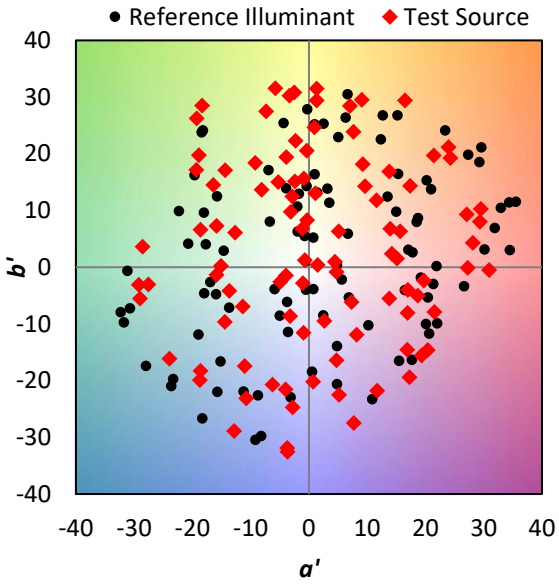
## Summary

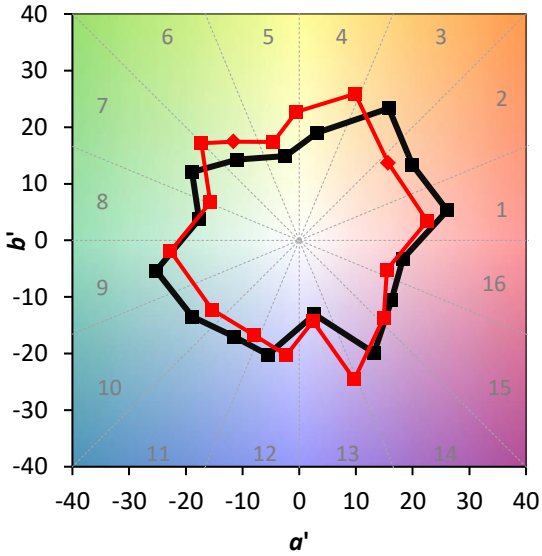
$R_f$ = 70.6
$R_g$ = 97.6
CIE $R_a$ = 71.9
$R_9$ = -17.8

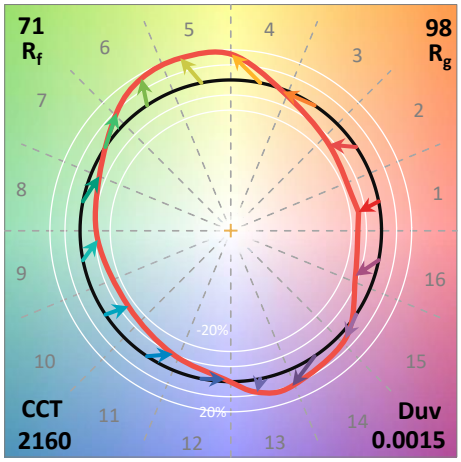
## Spectral Power Distribution Comparison

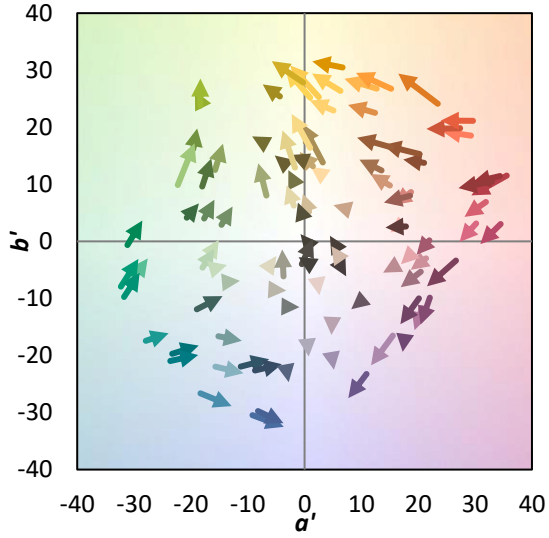



## Color Vector Graphics



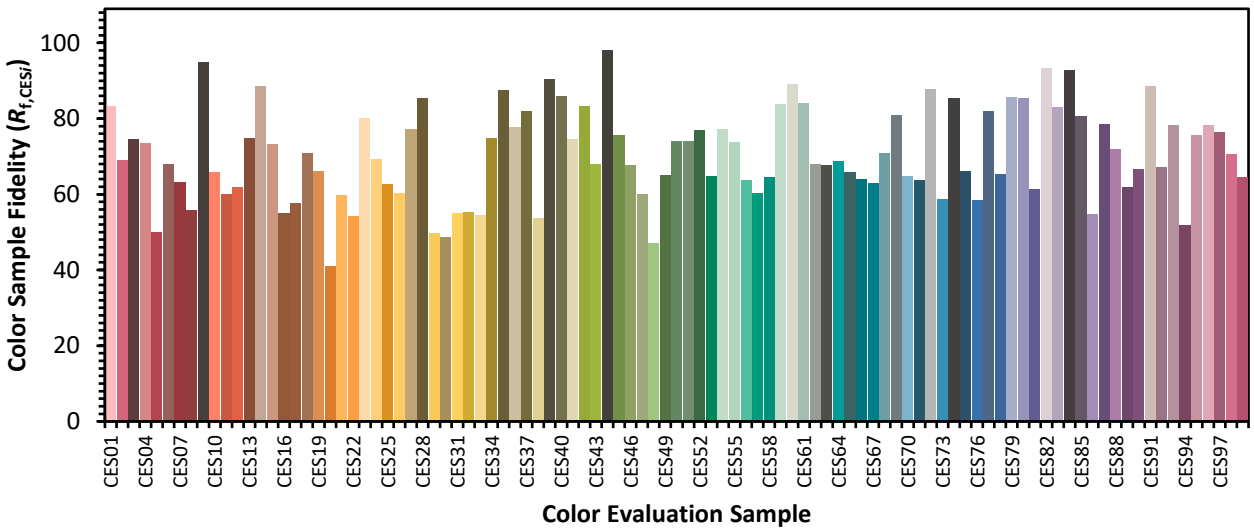



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**Individual Sample Fidelity Index ($R_{f,i}$)**

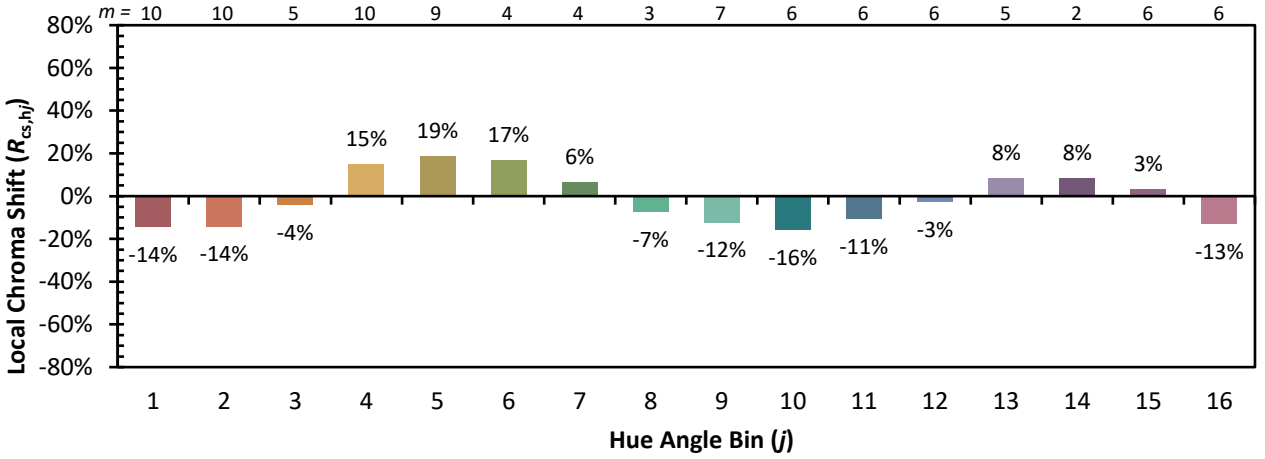
| | | | |
|---|---|---|---|
| CES01 = 87 | CES26 = 60 | CES51 = 74 | CES76 = 58 |
| CES02 = 65 | CES27 = 77 | CES52 = 77 | CES77 = 82 |
| CES03 = 32 | CES28 = 85 | CES53 = 65 | CES78 = 65 |
| CES04 = 72 | CES29 = 50 | CES54 = 77 | CES79 = 86 |
| CES05 = 52 | CES30 = 49 | CES55 = 74 | CES80 = 85 |
| CES06 = 53 | CES31 = 55 | CES56 = 64 | CES81 = 61 |
| CES07 = 44 | CES32 = 55 | CES57 = 60 | CES82 = 93 |
| CES08 = 43 | CES33 = 55 | CES58 = 64 | CES83 = 83 |
| CES09 = 29 | CES34 = 75 | CES59 = 84 | CES84 = 93 |
| CES10 = 79 | CES35 = 88 | CES60 = 89 | CES85 = 81 |
| CES11 = 62 | CES36 = 78 | CES61 = 84 | CES86 = 55 |
| CES12 = 68 | CES37 = 82 | CES62 = 68 | CES87 = 79 |
| CES13 = 45 | CES38 = 54 | CES63 = 68 | CES88 = 72 |
| CES14 = 75 | CES39 = 90 | CES64 = 69 | CES89 = 62 |
| CES15 = 72 | CES40 = 86 | CES65 = 66 | CES90 = 67 |
| CES16 = 49 | CES41 = 75 | CES66 = 64 | CES91 = 89 |
| CES17 = 51 | CES42 = 83 | CES67 = 63 | CES92 = 67 |
| CES18 = 57 | CES43 = 68 | CES68 = 71 | CES93 = 78 |
| CES19 = 74 | CES44 = 98 | CES69 = 81 | CES94 = 52 |
| CES20 = 68 | CES45 = 76 | CES70 = 65 | CES95 = 76 |
| CES21 = 89 | CES46 = 68 | CES71 = 64 | CES96 = 78 |
| CES22 = 81 | CES47 = 60 | CES72 = 88 | CES97 = 76 |
| CES23 = 92 | CES48 = 47 | CES73 = 59 | CES98 = 71 |
| CES24 = 92 | CES49 = 65 | CES74 = 85 | CES99 = 65 |
| CES25 = 74 | CES50 = 74 | CES75 = 66 | |

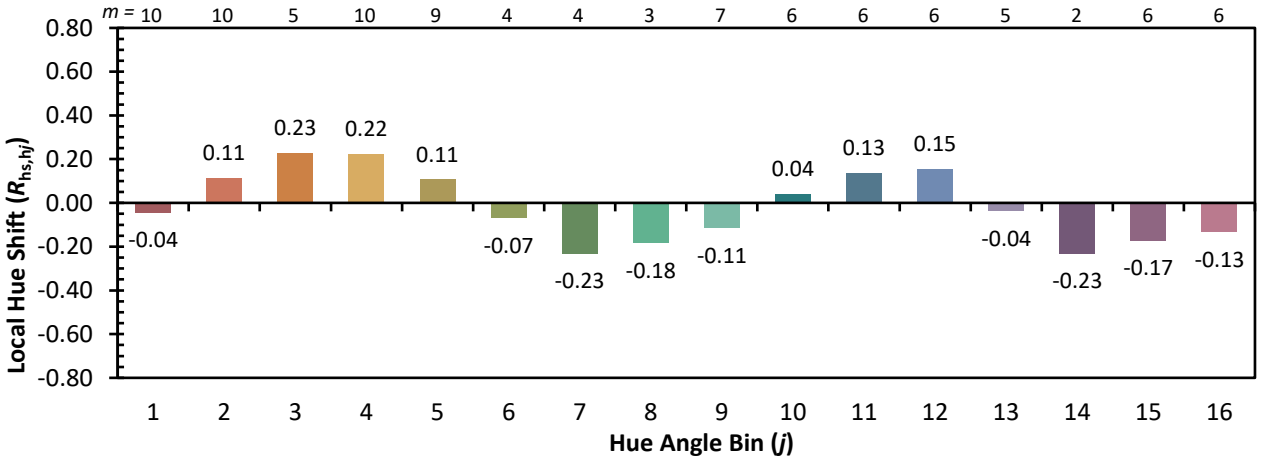


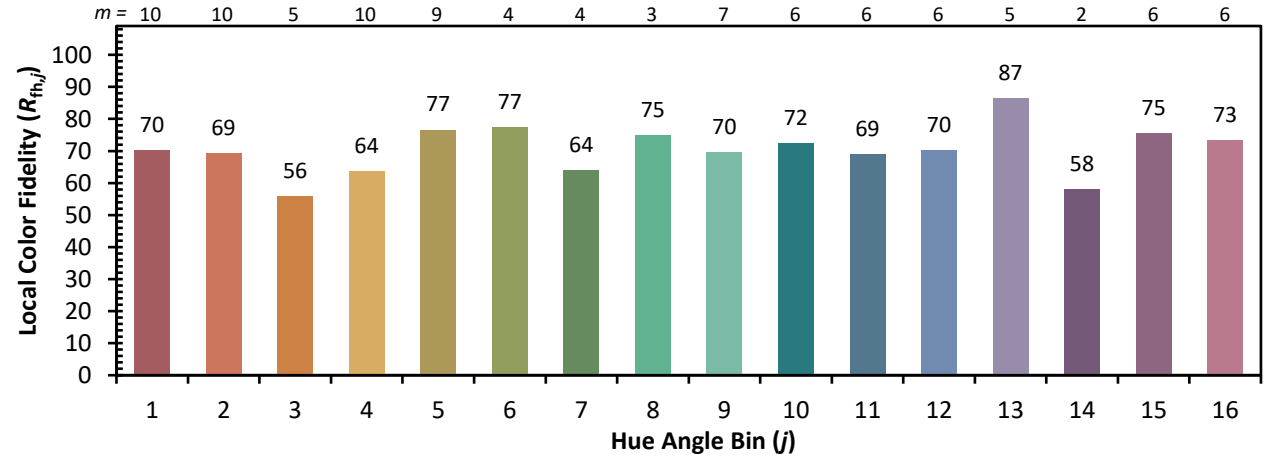
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## Color Rendition by Hue-Angle Bin



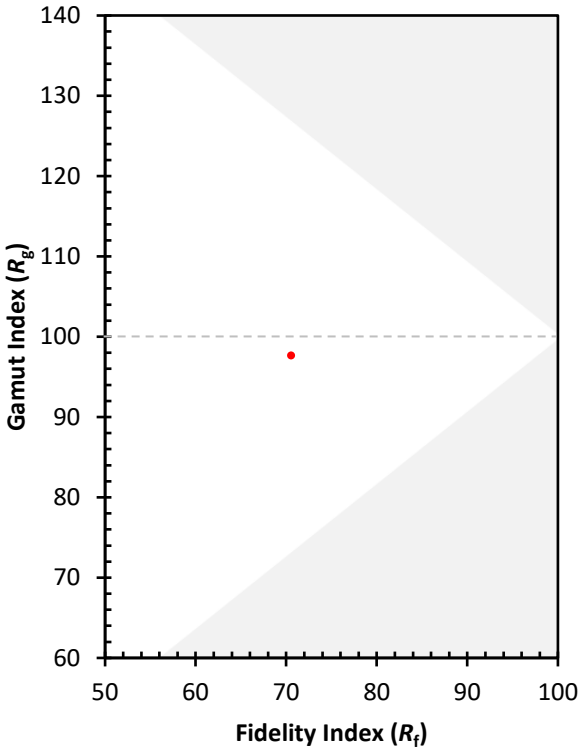



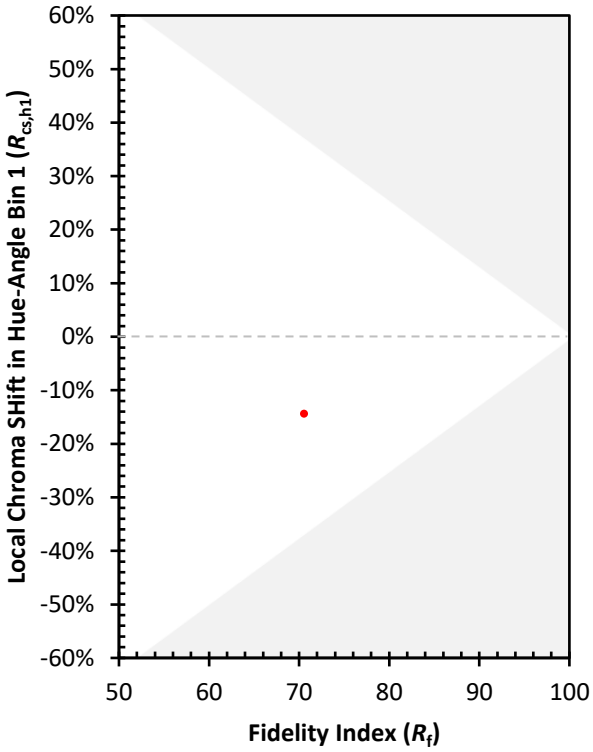



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## Measure Comparisons




(END OF REPORT)