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: P1360692

Luminaire Tested: **GSS-SB2B-722-U-T1**

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: | P1360692 |
| Test Lab: | INNOVATION CENTER(G3) |
| Issue Date: | 02/18/2026 |
| Manufacturer: | COOPER LIGHTING SOLUTIONS (FORMERLY EATON) |
| Product Line: | McGRAW-EDISON |
| Catalog Number: | GSS-SB2B-722-U-T1 |
| Description: | GALLEON II SLIM SITE HIGH DENSITY LED ARRAYS 2SQUARE 74W 70CRI 2200K FIXTURE w/ TYPE I DISTRIBUTION OPTIC |
| Light Source: | (52) 2200K CCT, 70 CRI LEDS |
| Ballast/Driver: | ELECTRONIC DRIVER |

**Summary**

| | |
|---|---|
| Lumens per Lamp: | N/A |
| Luminaire Lumens: | 8552.1 lumens |
| Efficiency: | N/A |
| Efficacy: | 115.6 lumens/watt |
| Luminous Opening: | Rectangular (W 1' x L: 0.5' x H: 0') |
| IES Classification: | Type I - Short |
| BUG Rating: | B3 - U0 - G3 |

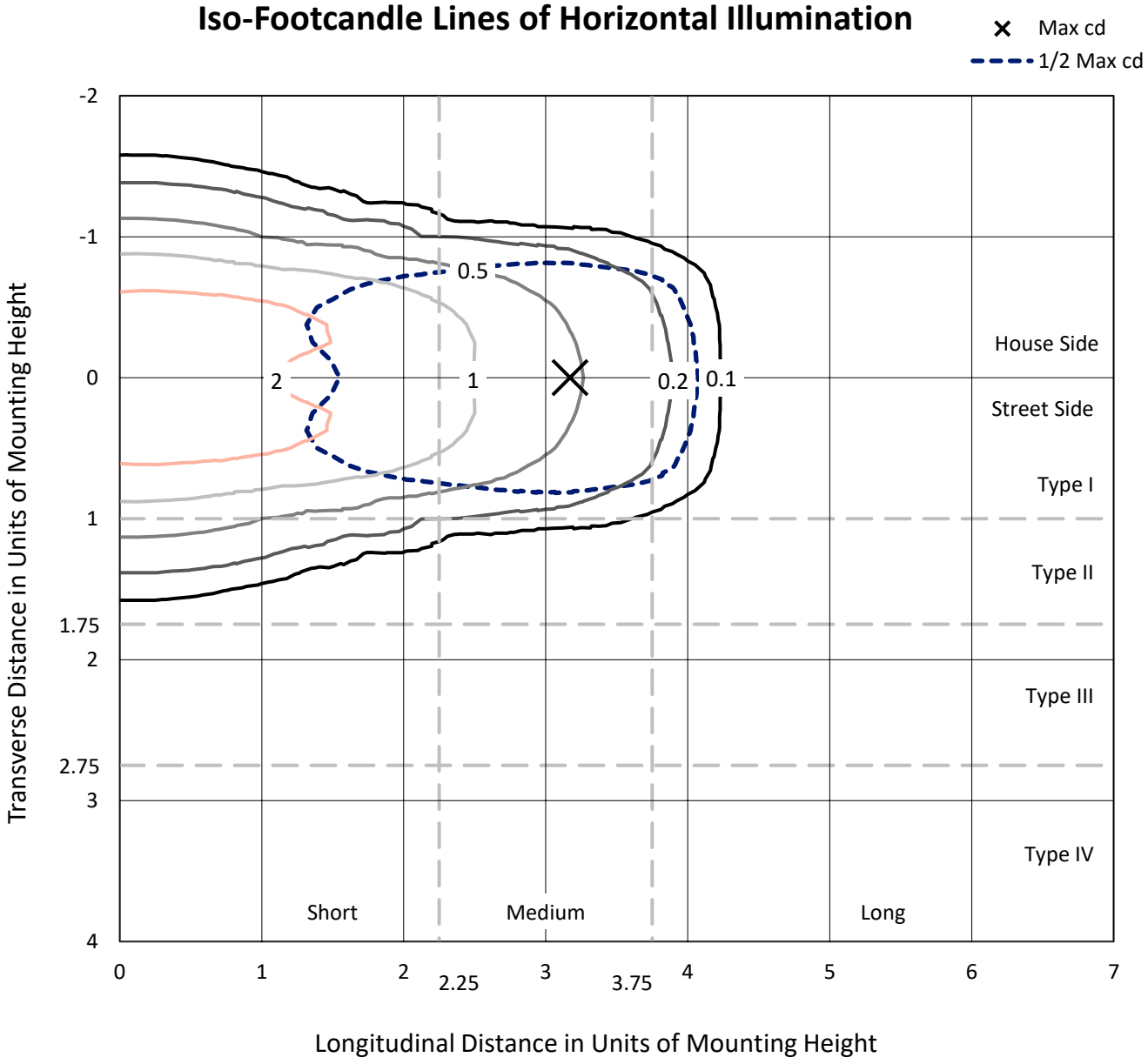
| | |
|---|---|
| Input Watts (W): | 74 |
| Input Voltage (V): | 120 |
| Input Current (Ain): | NR |
| Voltage Rise (V): | NR |
| Power Factor: | 0.98 |
| Total Harmonic Distortion (THDi): | 13.6% |
| Frequency (hertz): | 60 |
| Stabilization Time: | NR |
| Operation Time: | NR |
| Ambient Temperature (°C): | NR |
| Test Distance: | 28.75 FT |

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Scaled Data Report

REPORT NUMBER: P1360692
CATALOG NUMBER: GSS-SB2B-722-U-T1

## Iso-Footcandle Lines of Horizontal Illumination



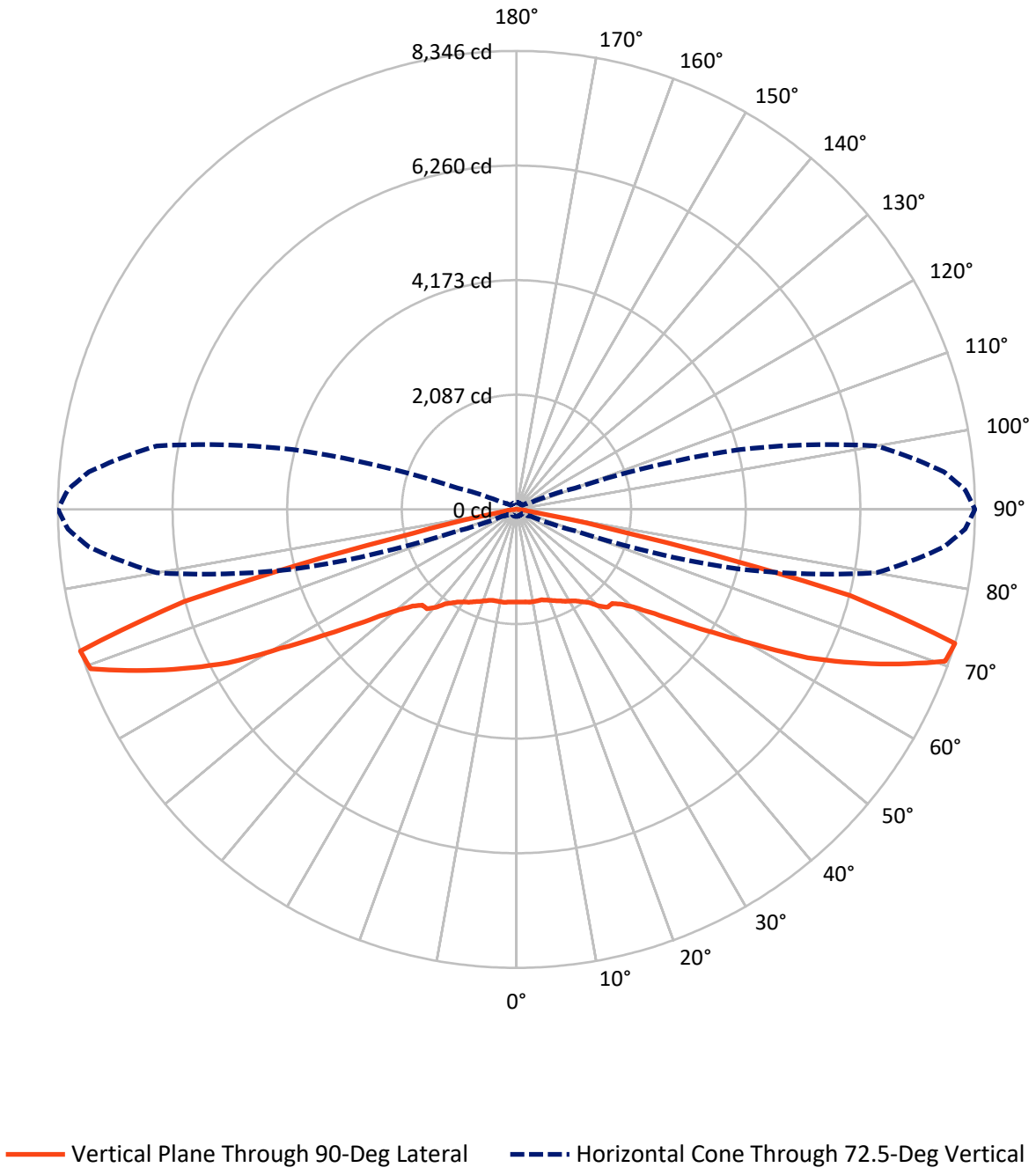

Based on 20 foot mounting height. Maximum calculated value = 4.2 fc
Type I - Short - N/A

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## Luminous Intensity Polar Plot



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Scaled Data Report

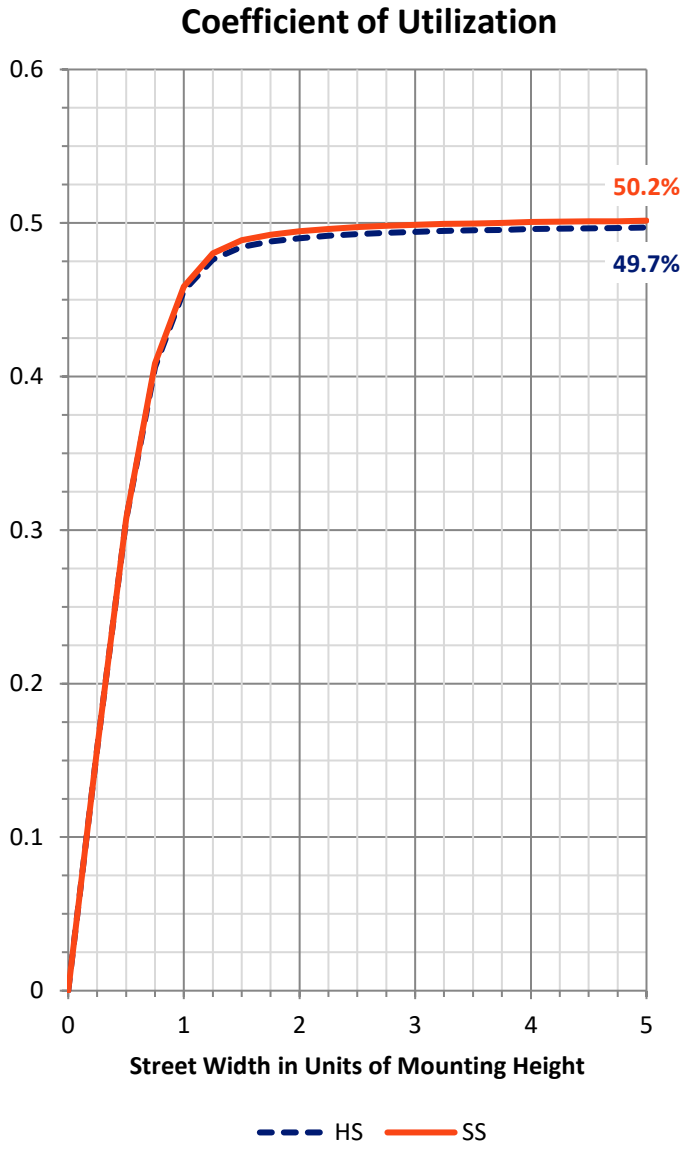
REPORT NUMBER: P1360692
CATALOG NUMBER: GSS-SB2B-722-U-T1

**FLUX DISTRIBUTION:**

| | | Downward | Upward | Total |
|---|---|---|---|---|
| **House Side** | Lumens | 4276.1 | 0.0 | 4276.1 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| **Street Side** | Lumens | 4276.1 | 0.0 | 4276.1 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| **Total** | Lumens | 8552.1 | 0.0 | 8552.1 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

**ZONAL LUMENS:**

| Zone | Lumens | % Fixture |
|---|---|---|
| 0°-10° | 163.1 | 1.9 |
| 10°-20° | 497.1 | 5.8 |
| 20°-30° | 830.8 | 9.7 |
| 30°-40° | 1145.8 | 13.4 |
| 40°-50° | 1404.6 | 16.4 |
| 50°-60° | 1646.0 | 19.2 |
| 60°-70° | 1827.8 | 21.4 |
| 70°-80° | 994.0 | 11.6 |
| 80°-90° | 43.1 | 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° | 8552.1 | 100.0 |
| 0°-180° | 8552.1 | 100.0 |



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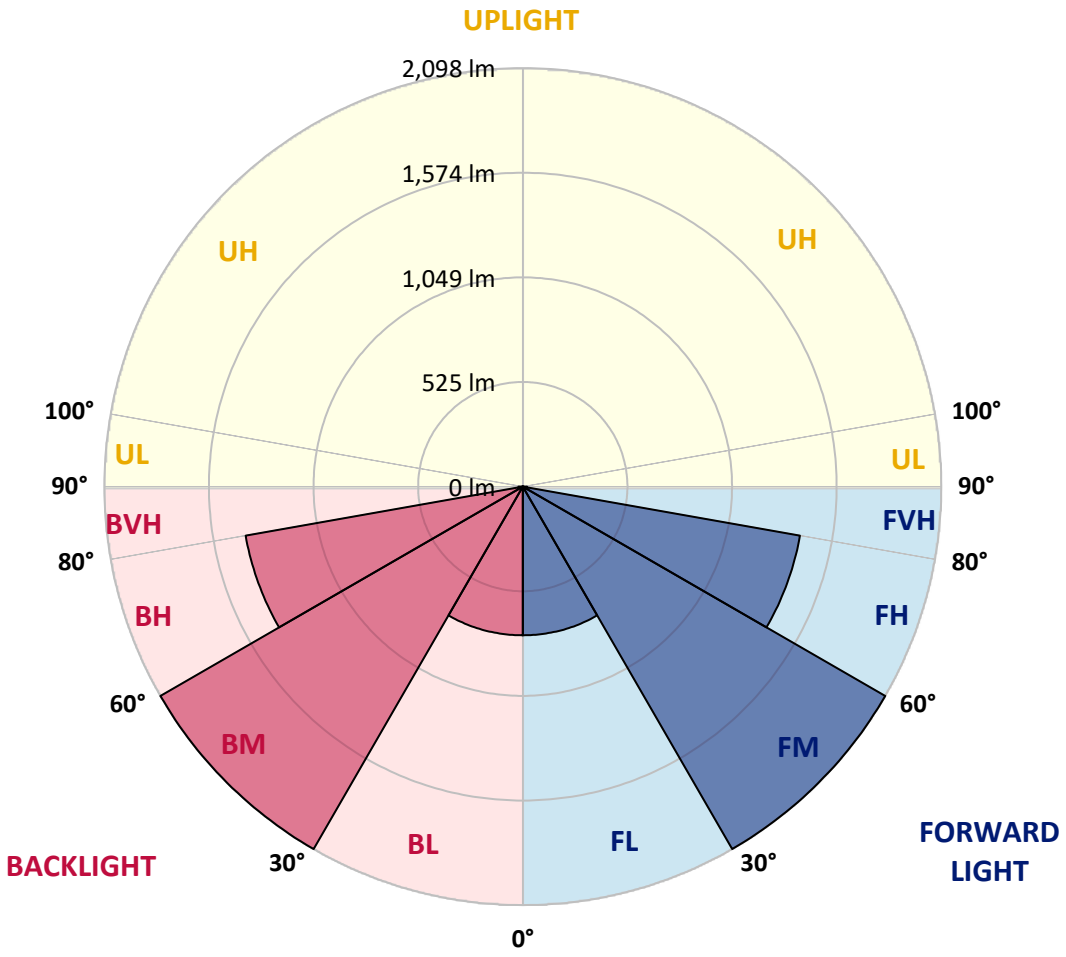
Scaled Data Report

REPORT NUMBER: P1360692
CATALOG NUMBER: GSS-SB2B-722-U-T1

## LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit B | U | G |
|---|---|---|---|---|---|---|
| FL | (0°-30°) | 745.5 | 8.7 | | | |
| FM | (30°-60°) | 2098.1 | 24.5 | | | |
| FH | (60°-80°) | 1410.9 | 16.5 | | | G1/1800 |
| FVH | (80°-90°) | 21.5 | 0.3 | | | G1/100 |
| BL | (0°-30°) | 745.5 | 8.7 | B2/1000 | | |
| BM | (30°-60°) | 2098.1 | 24.5 | B2/2500 | | |
| BH | (60°-80°) | 1410.9 | 16.5 | B3/2500 | | G3/2500 |
| BVH | (80°-90°) | 21.5 | 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-G3**
Type I Short



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REPORT NUMBER: P1360692
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**CANDELA DISTRIBUTION (FULL):**

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 70° | 75° | 80° |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0° | 1685.0 | 1685.0 | 1685.0 | 1685.0 | 1685.0 | 1685.0 | 1685.0 | 1685.0 | 1685.0 | 1685.0 | 1685.0 |
| 2.5° | 1686.9 | 1686.9 | 1681.2 | 1688.7 | 1685.0 | 1686.9 | 1688.7 | 1686.9 | 1685.0 | 1686.9 | 1688.7 |
| 5° | 1696.2 | 1692.5 | 1696.2 | 1700.0 | 1694.3 | 1698.1 | 1696.2 | 1686.9 | 1692.5 | 1692.5 | 1692.5 |
| 7.5° | 1713.1 | 1716.8 | 1713.1 | 1722.4 | 1716.8 | 1728.0 | 1716.8 | 1709.3 | 1707.4 | 1705.6 | 1705.6 |
| 10° | 1720.6 | 1720.6 | 1718.7 | 1735.5 | 1739.3 | 1750.5 | 1743.0 | 1731.8 | 1726.2 | 1718.7 | 1711.2 |
| 12.5° | 1700.0 | 1703.7 | 1713.1 | 1744.9 | 1759.9 | 1782.3 | 1776.7 | 1754.3 | 1737.4 | 1731.8 | 1720.6 |
| 15° | 1677.5 | 1681.2 | 1700.0 | 1739.3 | 1774.8 | 1808.5 | 1806.7 | 1778.6 | 1758.0 | 1743.0 | 1726.2 |
| 17.5° | 1641.9 | 1647.5 | 1673.7 | 1733.7 | 1797.3 | 1834.8 | 1846.0 | 1817.9 | 1795.4 | 1771.1 | 1748.6 |
| 20° | 1582.0 | 1582.0 | 1628.8 | 1705.6 | 1793.6 | 1877.8 | 1907.8 | 1885.3 | 1859.1 | 1819.8 | 1789.8 |
| 22.5° | 1514.6 | 1518.4 | 1565.2 | 1666.3 | 1791.7 | 1915.3 | 1973.3 | 1949.0 | 1922.7 | 1879.7 | 1834.8 |
| 25° | 1447.2 | 1447.2 | 1499.6 | 1613.8 | 1767.4 | 1941.5 | 2050.1 | 2037.0 | 1984.5 | 1945.2 | 1887.2 |
| 27.5° | 1385.4 | 1385.4 | 1441.6 | 1561.4 | 1726.2 | 1949.0 | 2126.8 | 2126.8 | 2068.8 | 2010.7 | 1947.1 |
| 30° | 1312.4 | 1331.1 | 1394.8 | 1520.2 | 1688.7 | 1935.9 | 2183.0 | 2218.6 | 2166.1 | 2091.2 | 1997.6 |
| 32.5° | 1250.6 | 1263.7 | 1329.3 | 1462.2 | 1634.4 | 1920.9 | 2246.6 | 2334.6 | 2280.3 | 2177.4 | 2072.5 |
| 35° | 1177.6 | 1175.7 | 1250.6 | 1381.7 | 1557.7 | 1887.2 | 2297.2 | 2473.2 | 2420.8 | 2310.3 | 2168.0 |
| 37.5° | 1082.1 | 1082.1 | 1158.9 | 1286.2 | 1484.7 | 1829.1 | 2338.4 | 2626.7 | 2587.4 | 2461.9 | 2310.3 |
| 40° | 979.2 | 990.4 | 1057.8 | 1187.0 | 1396.7 | 1759.9 | 2338.4 | 2752.1 | 2772.7 | 2643.5 | 2486.3 |
| 42.5° | 904.3 | 908.0 | 969.8 | 1091.5 | 1299.3 | 1670.0 | 2308.4 | 2860.7 | 2922.5 | 2813.9 | 2609.8 |
| 45° | 825.6 | 835.0 | 887.4 | 999.8 | 1198.2 | 1563.3 | 2256.0 | 2982.4 | 3081.6 | 3006.8 | 2739.0 |
| 47.5° | 730.2 | 739.5 | 799.4 | 913.6 | 1102.7 | 1447.2 | 2168.0 | 3109.7 | 3317.5 | 3263.2 | 2969.3 |
| 50° | 619.7 | 627.2 | 683.4 | 805.0 | 996.0 | 1314.3 | 2057.5 | 3205.2 | 3553.4 | 3607.7 | 3317.5 |
| 52.5° | 484.9 | 490.5 | 550.4 | 668.4 | 868.7 | 1187.0 | 1902.2 | 3263.2 | 3791.2 | 3982.2 | 3783.7 |
| 55° | 348.2 | 357.6 | 410.0 | 507.4 | 700.2 | 1016.6 | 1716.8 | 3293.2 | 4051.4 | 4425.9 | 4362.2 |
| 57.5° | 250.9 | 254.6 | 290.2 | 365.1 | 520.5 | 816.3 | 1479.0 | 3242.7 | 4285.5 | 4955.7 | 5088.6 |
| 60° | 207.8 | 207.8 | 213.4 | 249.0 | 355.7 | 576.6 | 1194.5 | 3055.4 | 4485.8 | 5491.2 | 5901.2 |
| 62.5° | 191.0 | 191.0 | 194.7 | 200.3 | 234.0 | 374.4 | 853.7 | 2675.4 | 4508.3 | 6006.0 | 6792.3 |
| 65° | 174.1 | 174.1 | 177.9 | 181.6 | 189.1 | 243.4 | 514.9 | 1958.3 | 4068.3 | 6011.6 | 7271.6 |
| 67.5° | 159.1 | 159.1 | 161.0 | 162.9 | 166.6 | 177.9 | 282.7 | 1187.0 | 3255.8 | 5852.5 | 7455.1 |
| 70° | 144.2 | 144.2 | 144.2 | 142.3 | 147.9 | 149.8 | 187.2 | 602.8 | 2177.4 | 5285.2 | 7367.1 |
| 72.5° | *127.3* | *127.3* | *125.4* | *121.7* | *123.6* | *123.6* | *138.5* | *295.8* | *1130.8* | *4201.2* | *6651.9* |
| 75° | 108.6 | 110.5 | 103.0 | 99.2 | 97.4 | 99.2 | 110.5 | 168.5 | 505.5 | 2548.1 | 4970.7 |
| 77.5° | 91.7 | 95.5 | 84.2 | 76.8 | 74.9 | 74.9 | 86.1 | 104.8 | 217.2 | 924.9 | 2227.9 |
| 80° | 69.3 | 71.1 | 61.8 | 54.3 | 54.3 | 52.4 | 63.7 | 76.8 | 103.0 | 275.2 | 499.9 |
| 82.5° | 39.3 | 39.3 | 35.6 | 31.8 | 30.0 | 31.8 | 43.1 | 52.4 | 63.7 | 97.4 | 136.7 |
| 85° | 9.4 | 9.4 | 11.2 | 13.1 | 13.1 | 16.8 | 24.3 | 28.1 | 33.7 | 39.3 | 52.4 |
| 87.5° | 1.9 | 1.9 | 1.9 | 3.7 | 5.6 | 5.6 | 9.4 | 13.1 | 16.8 | 20.6 | 22.5 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

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Scaled Data Report

REPORT NUMBER: P1360692
CATALOG NUMBER: GSS-SB2B-722-U-T1

**CANDELA DISTRIBUTION (continued):**

| | 85° | 87.5° | 90° |
|---|---|---|---|
| 0° | 1685.0 | 1685.0 | *1685.0* |
| 2.5° | 1688.7 | 1690.6 | *1688.7* |
| 5° | 1700.0 | 1696.2 | *1690.6* |
| 7.5° | 1701.8 | 1703.7 | *1705.6* |
| 10° | 1709.3 | 1716.8 | *1705.6* |
| 12.5° | 1716.8 | 1711.2 | *1707.4* |
| 15° | 1722.4 | 1720.6 | *1709.3* |
| 17.5° | 1743.0 | 1735.5 | *1733.7* |
| 20° | 1774.8 | 1773.0 | *1767.4* |
| 22.5° | 1812.3 | 1808.5 | *1806.7* |
| 25° | 1866.6 | 1853.5 | *1846.0* |
| 27.5° | 1911.5 | 1900.3 | *1896.5* |
| 30° | 1956.4 | 1934.0 | *1934.0* |
| 32.5° | 1995.8 | 1990.1 | *1986.4* |
| 35° | 2089.4 | 2061.3 | *2065.0* |
| 37.5° | 2203.6 | 2175.5 | *2151.2* |
| 40° | 2364.6 | 2327.1 | *2312.2* |
| 42.5° | 2467.6 | 2430.1 | *2433.9* |
| 45° | 2525.6 | 2460.1 | *2443.2* |
| 47.5° | 2682.9 | 2600.5 | *2578.0* |
| 50° | 2937.5 | 2836.4 | *2808.3* |
| 52.5° | 3349.4 | 3186.5 | *3149.0* |
| 55° | 3866.1 | 3665.8 | *3628.3* |
| 57.5° | 4573.8 | 4307.9 | *4227.4* |
| 60° | 5435.0 | 5105.5 | *4983.8* |
| 62.5° | 6470.3 | 6064.1 | *5948.0* |
| 65° | 7249.2 | 6910.3 | *6730.6* |
| 67.5° | 7872.6 | 7593.6 | *7507.5* |
| 70° | 8243.3 | 8256.4 | *8278.9* |
| 72.5° | *7814.6* | *8174.0* | *8346.3* |
| 75° | 5727.1 | 6006.0 | *6273.7* |
| 77.5° | 2212.9 | 1995.8 | *1932.1* |
| 80° | 357.6 | 335.1 | *346.4* |
| 82.5° | 161.0 | 170.4 | *179.7* |
| 85° | 104.8 | 121.7 | *129.2* |
| 87.5° | 24.3 | 24.3 | *24.3* |
| 90° | 0.0 | 0.0 | *0.0* |

Cooper Lighting Solutions Photometric Lab
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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

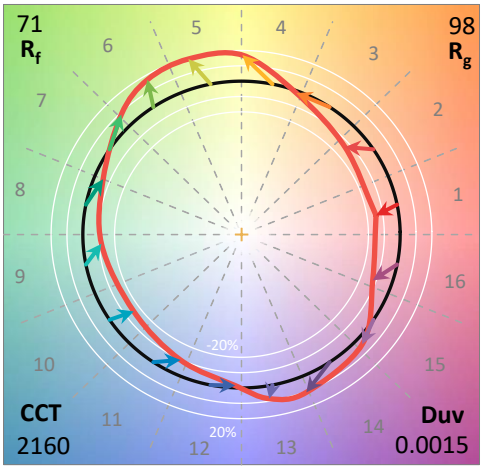
## Test Information

| | |
|---|---|
| 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

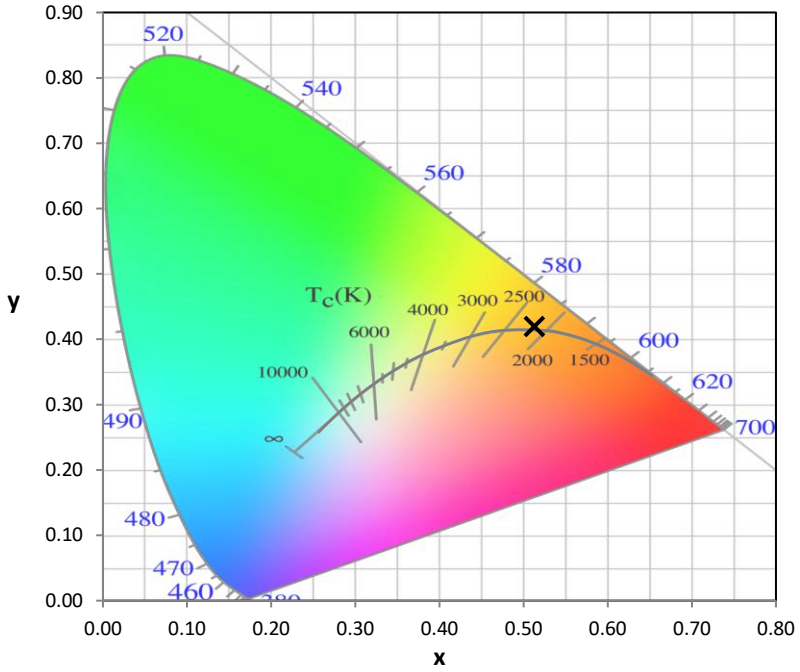
| | |
|---|---|
| Stabilization Time: | 21M |
| Operation Time: | 1H 21M |
| Sphere Temperature (°C): | 25.2 |

REPORT NUMBER: SP1-2407-184-2

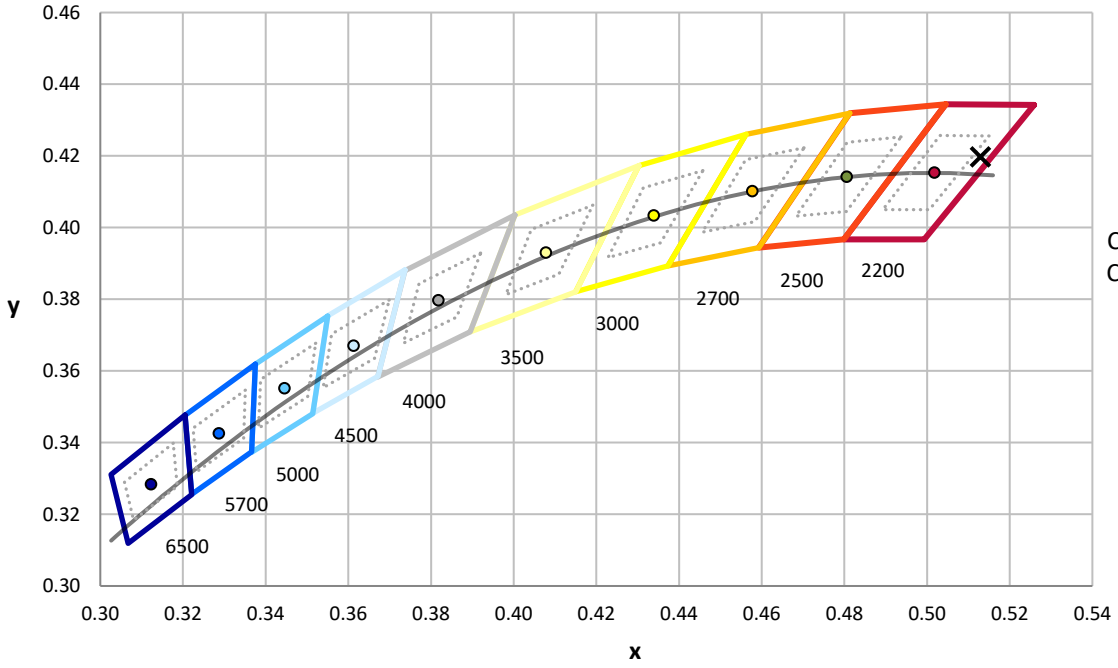
| Measurement and Test Equipment | | | |
|---|---|---|---|
| Instrument | Identification Number | Calibration Date | Calibration Due Date |
| Photometer | IN0058 | 6/18/2024 | 12/18/2024 |
| Power Meter | INXT2011004 | 2/8/2024 | 2/8/2025 |
| AC Power Source | IN0063 | 10/24/2023 | 10/24/2024 |
| DC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

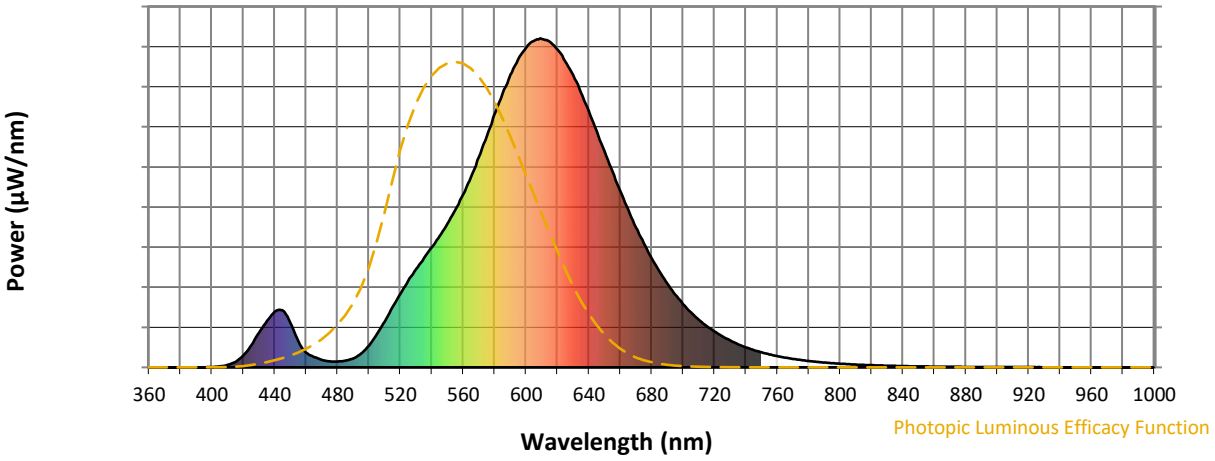



CCT = 2160K
CIE x = 0.5130
CIE y = 0.4197
Duv = 0.0015

Point lies inside the ANSI 2200K 7-step quadrangle

REPORT NUMBER: SP1-2407-184-2

## Photopic Flux vs. Wavelength

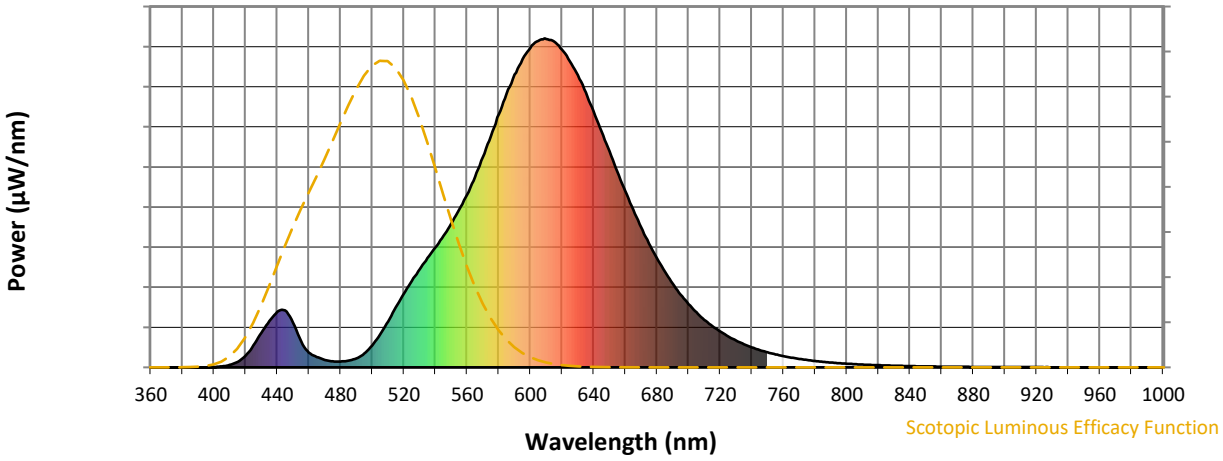



## Photopic Lumens: NR

| 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 | | | |

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## Scotopic Flux vs. Wavelength

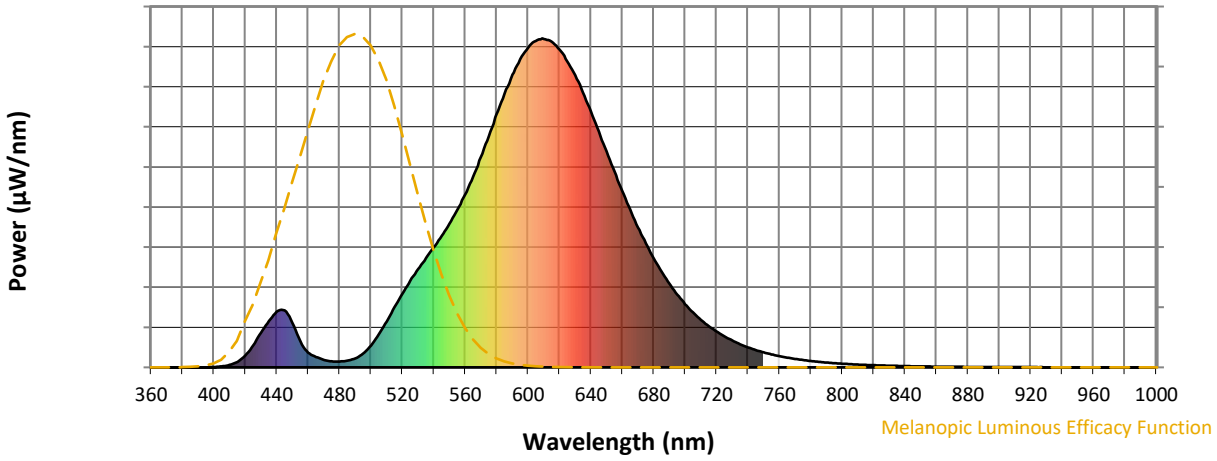



**Scotopic Lumens: NR** **S/P: 0.8**

| 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 | | | |

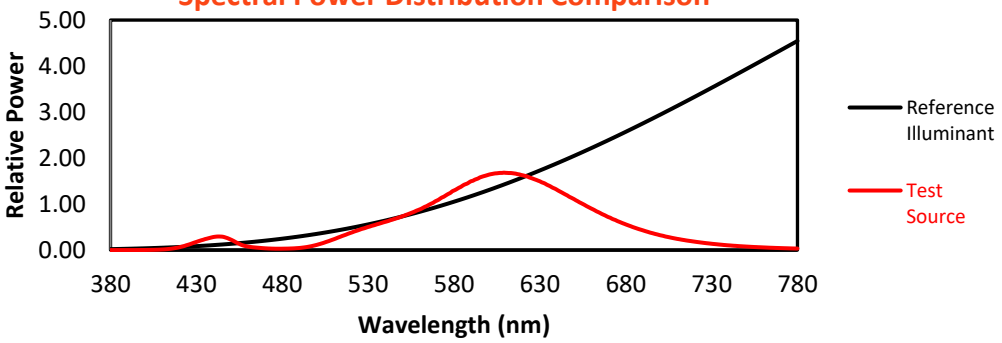
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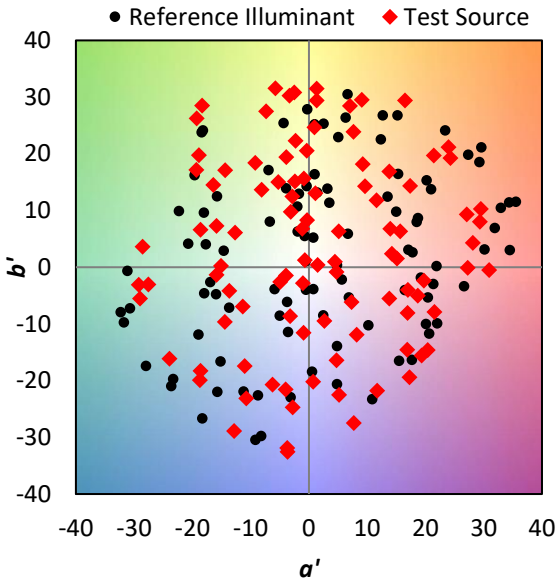
## Summary

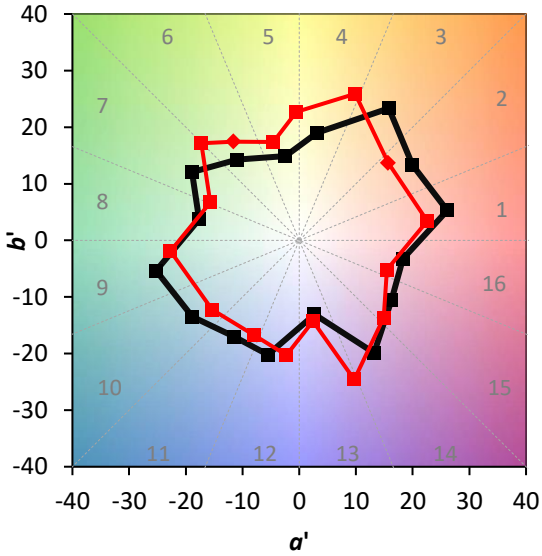
$R_f$ = 70.6
$R_g$ = 97.6
CIE $R_a$ = 71.9
$R_9$ = -17.8

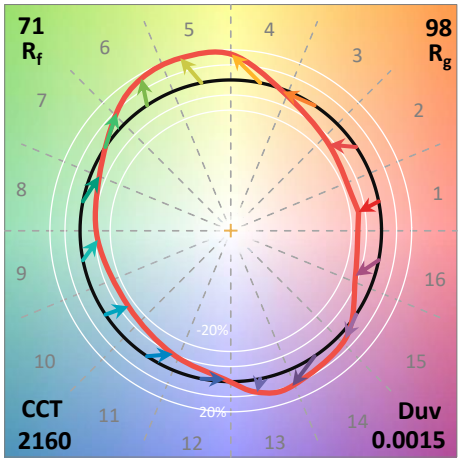
## Spectral Power Distribution Comparison

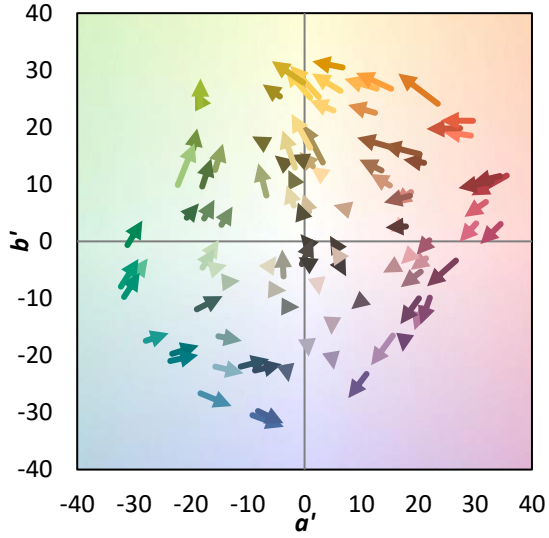



## Color Vector Graphics



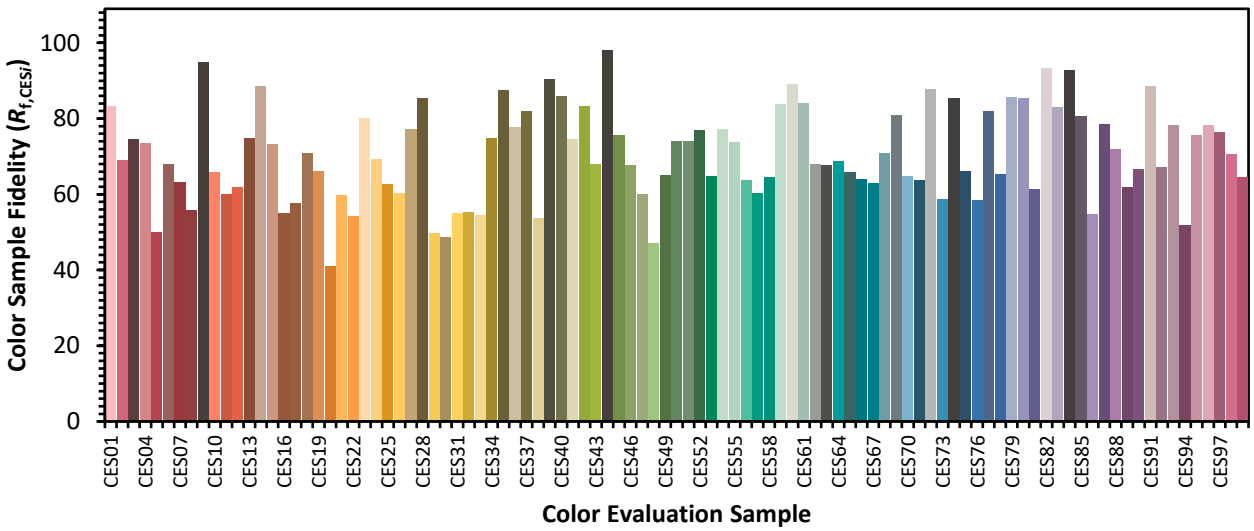



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**Individual Sample Fidelity Index ($R_{f,i}$)**

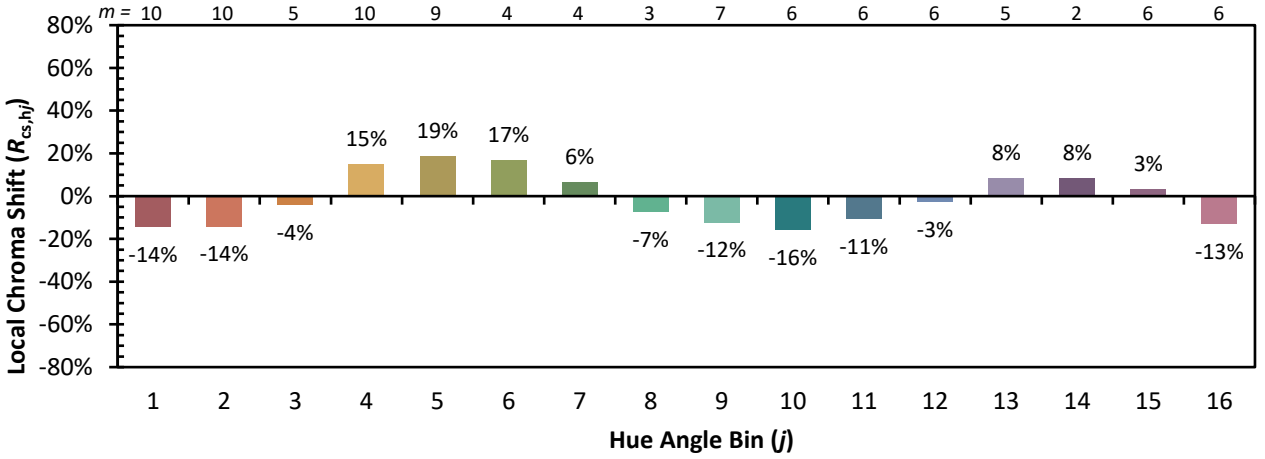
| | | | |
|---|---|---|---|
| CES01 = 87 | CES26 = 60 | CES51 = 74 | CES76 = 58 |
| CES02 = 65 | CES27 = 77 | CES52 = 77 | CES77 = 82 |
| CES03 = 32 | CES28 = 85 | CES53 = 65 | CES78 = 65 |
| CES04 = 72 | CES29 = 50 | CES54 = 77 | CES79 = 86 |
| CES05 = 52 | CES30 = 49 | CES55 = 74 | CES80 = 85 |
| CES06 = 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 | |

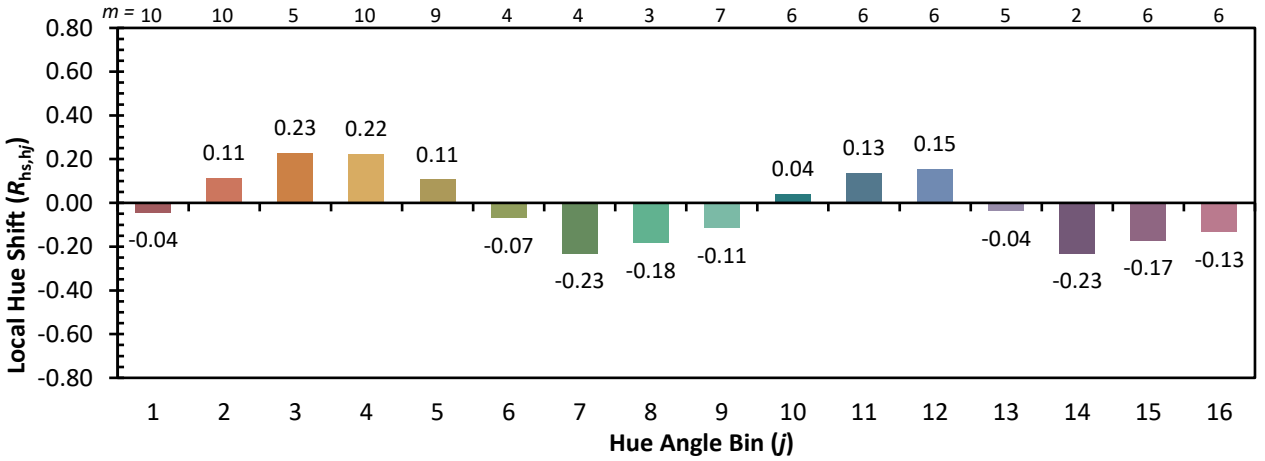


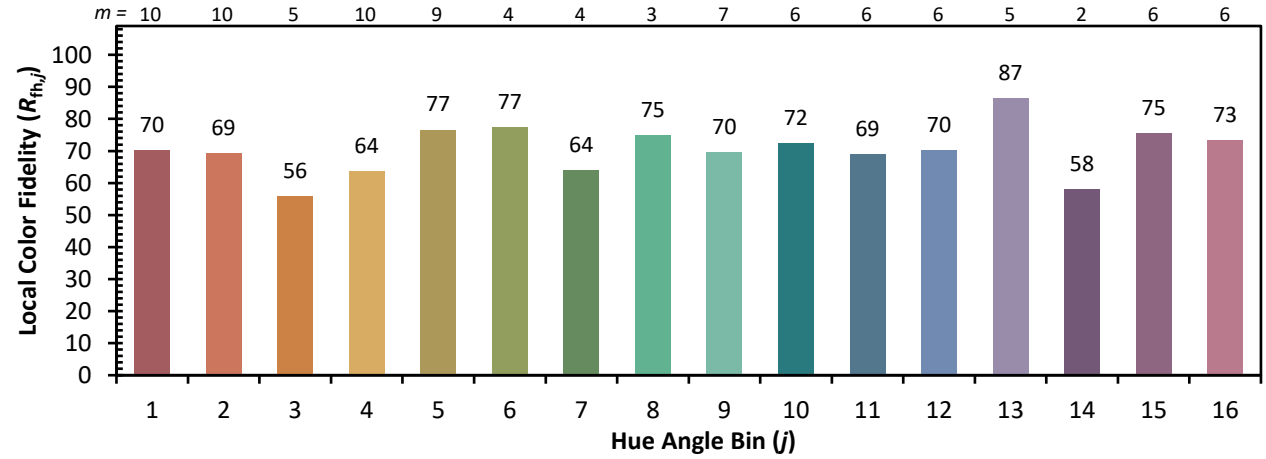
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## Color Rendition by Hue-Angle Bin



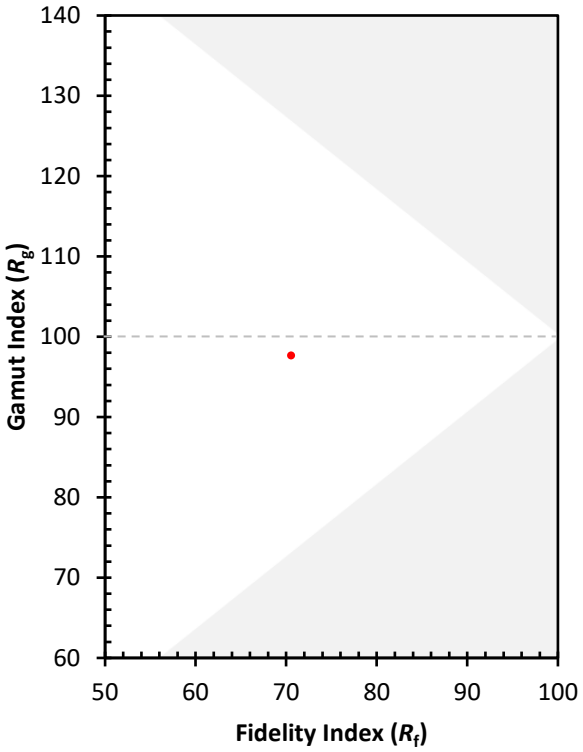



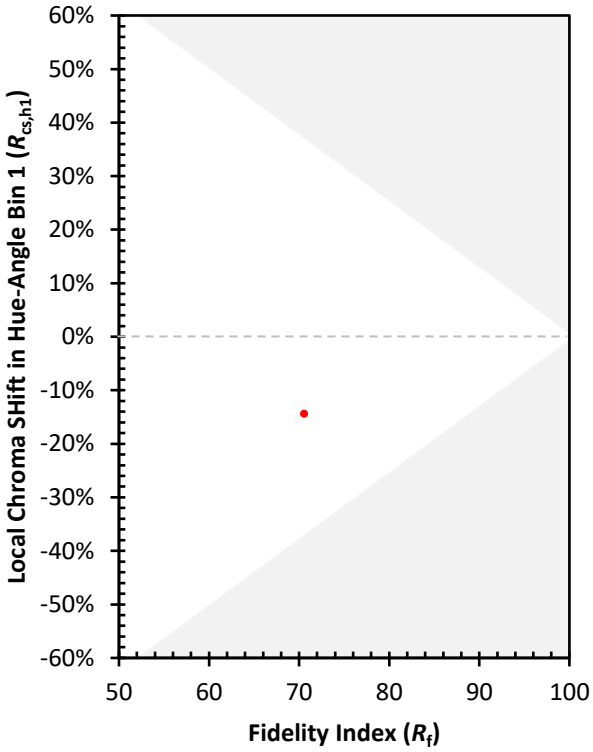



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## Measure Comparisons




(END OF REPORT)