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: P1360376

Luminaire Tested: **GSS-SB1B-735-U-T3-HSS**

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: | P1360376 |
| Test Lab: | INNOVATION CENTER(G3) |
| Issue Date: | 02/18/2026 |
| Manufacturer: | COOPER LIGHTING SOLUTIONS (FORMERLY EATON) |
| Product Line: | McGRAW-EDISON |
| Catalog Number: | GSS-SB1B-735-U-T3-HSS |
| Description: | GALLEON II SLIM SITE HIGH DENSITY LED ARRAYS 1SQUARE 40W 70CRI 3500K FIXTURE w/ TYPE III DISTRIBUTION OPTIC AND HOUSE SIDE SHIELD |
| Light Source: | (26) 3500K CCT, 70 CRI LEDS |
| Ballast/Driver: | ELECTRONIC DRIVER |

**Summary**

| | |
|---|---|
| Lumens per Lamp: | N/A |
| Luminaire Lumens: | 3723.7 lumens |
| Efficiency: | N/A |
| Efficacy: | 93.1 lumens/watt |
| Luminous Opening: | Rectangular (W 0.5' x L: 0.5' x H: 0') |
| IES Classification: | Type III - Short |
| BUG Rating: | B1 - U0 - G1 |

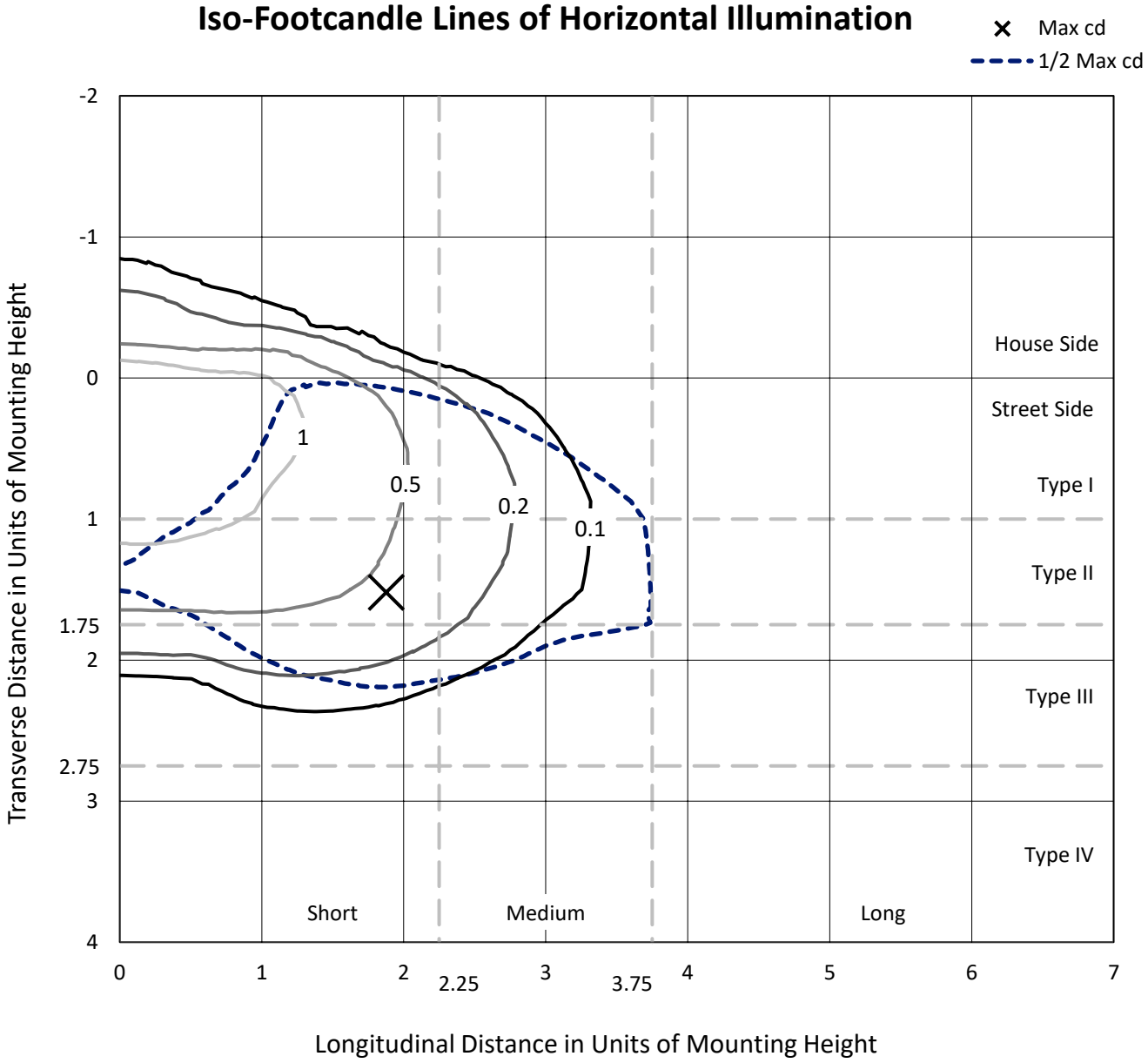
| | |
|---|---|
| Input Watts (W): | 40 |
| Input Voltage (V): | 120 |
| Input Current (Ain): | NR |
| Voltage Rise (V): | NR |
| Power Factor: | 0.98 |
| Total Harmonic Distortion (THDi): | 5.3% |
| Frequency (hertz): | 60 |
| Stabilization Time: | NR |
| Operation Time: | NR |
| Ambient Temperature (°C): | NR |
| Test Distance: | 28.75 FT |

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Scaled Data Report

REPORT NUMBER: P1360376
CATALOG NUMBER: GSS-SB1B-735-U-T3-HSS

## Iso-Footcandle Lines of Horizontal Illumination



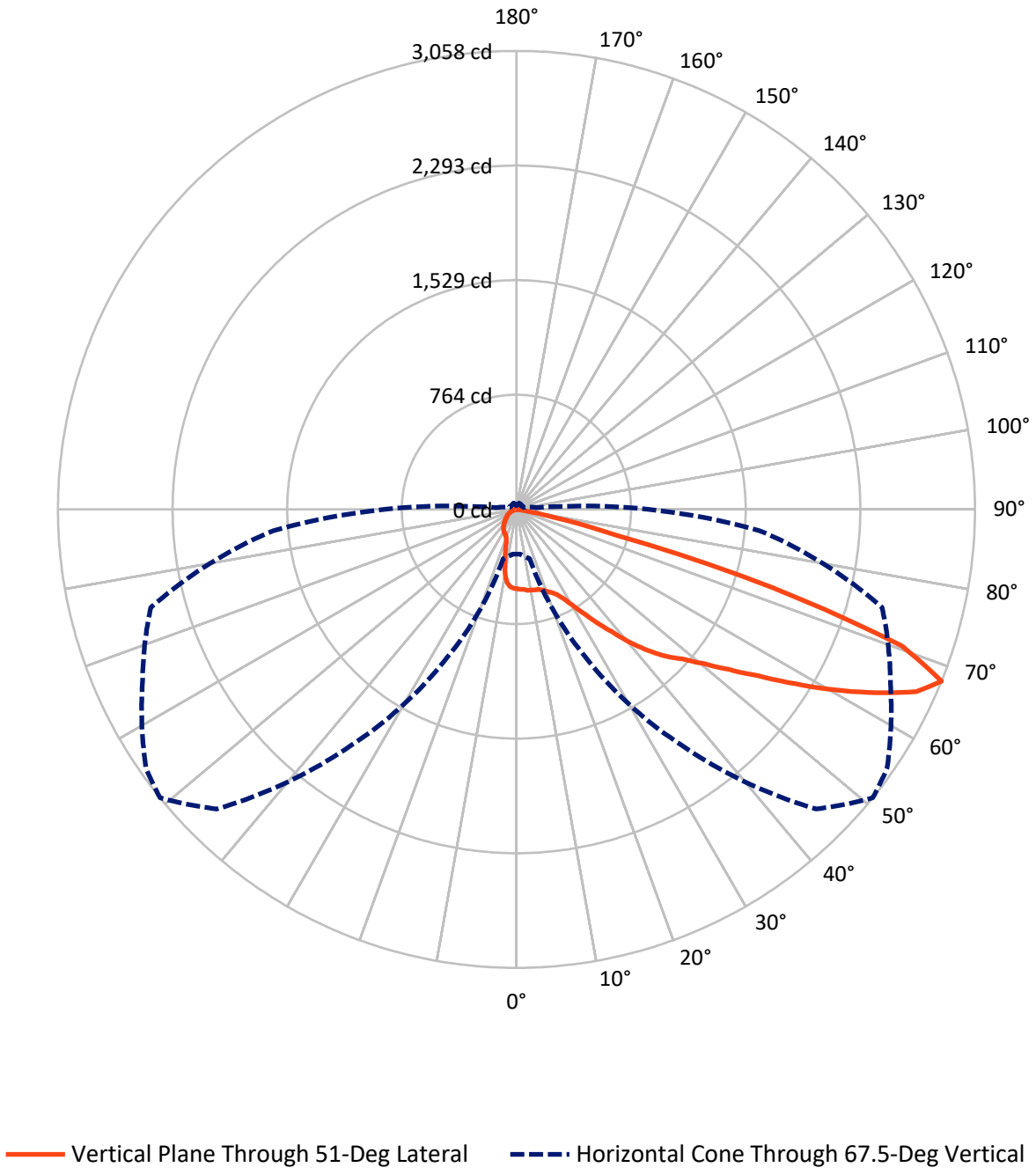

Based on 20 foot mounting height. Maximum calculated value = 1.7 fc
Type III - Short - N/A

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Scaled Data Report

REPORT NUMBER: P1360376
CATALOG NUMBER: GSS-SB1B-735-U-T3-HSS

## Luminous Intensity Polar Plot



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Scaled Data Report

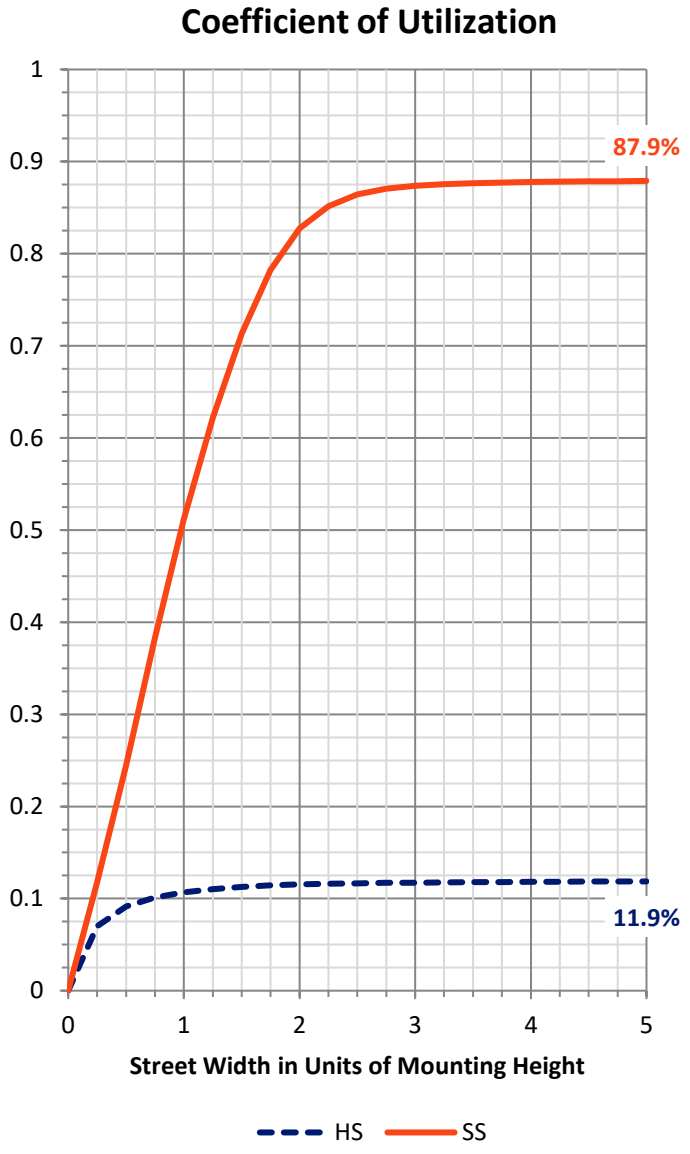
REPORT NUMBER: P1360376
CATALOG NUMBER: GSS-SB1B-735-U-T3-HSS

**FLUX DISTRIBUTION:**

| | | Downward | Upward | Total |
|---|---|---|---|---|
| **House Side** | Lumens | 445.2 | 0.0 | 445.2 |
| | % Fixture | 12.0 | 0.0 | 12.0 |
| **Street Side** | Lumens | 3278.5 | 0.0 | 3278.5 |
| | % Fixture | 88.0 | 0.0 | 88.0 |
| **Total** | Lumens | 3723.7 | 0.0 | 3723.7 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

**ZONAL LUMENS:**

| Zone | Lumens | % Fixture |
|---|---|---|
| 0°-10° | 48.3 | 1.3 |
| 10°-20° | 124.1 | 3.3 |
| 20°-30° | 221.3 | 5.9 |
| 30°-40° | 396.0 | 10.6 |
| 40°-50° | 623.8 | 16.8 |
| 50°-60° | 907.4 | 24.4 |
| 60°-70° | 987.2 | 26.5 |
| 70°-80° | 398.8 | 10.7 |
| 80°-90° | 16.8 | 0.4 |
| 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° | 3723.7 | 100.0 |
| 0°-180° | 3723.7 | 100.0 |



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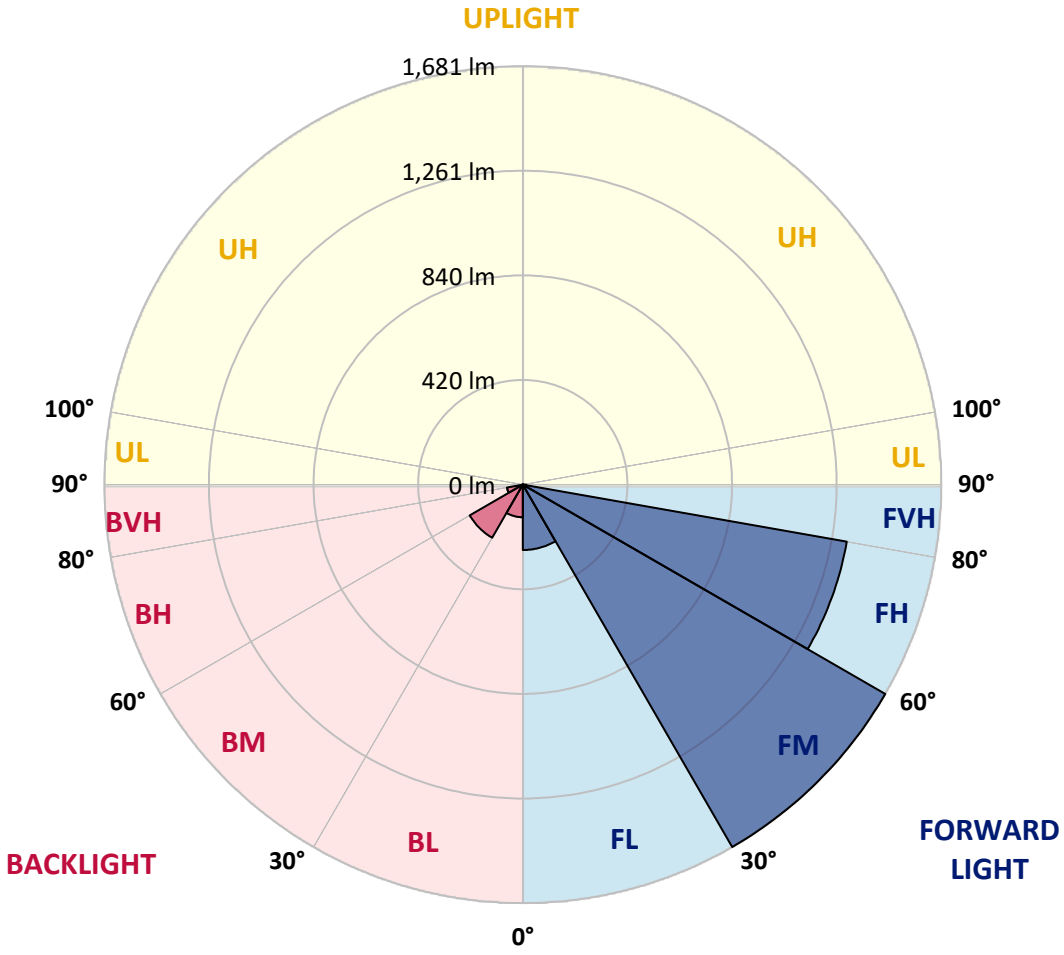
Scaled Data Report

REPORT NUMBER: P1360376
CATALOG NUMBER: GSS-SB1B-735-U-T3-HSS

## LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit B | U | G |
|---|---|---|---|---|---|---|
| FL | (0°-30°) | 262.6 | 7.1 | | | |
| FM | (30°-60°) | 1681.0 | 45.1 | | | |
| FH | (60°-80°) | 1321.3 | 35.5 | | | G1/1800 |
| FVH | (80°-90°) | 13.6 | 0.4 | | | G1/100 |
| BL | (0°-30°) | 131.1 | 3.5 | B1/500 | | |
| BM | (30°-60°) | 246.2 | 6.6 | B1/1000 | | |
| BH | (60°-80°) | 64.7 | 1.7 | B0/110 | | G0/110 |
| BVH | (80°-90°) | 3.2 | 0.1 | | | G0/10 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

**BUG Rating: B1-U0-G1**
Type III Short



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**CANDELA DISTRIBUTION (FULL):**

| | 0° | 5° | 15° | 25° | 35° | 45° | 51° | 55° | 65° | 75° | 85° |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0° | 528.8 | 528.8 | 528.8 | 528.8 | 528.8 | 528.8 | *528.8* | 528.8 | 528.8 | 528.8 | 528.8 |
| 2.5° | 533.2 | 532.1 | 533.2 | 528.8 | 531.0 | 532.1 | *534.3* | 531.0 | 529.9 | 531.0 | 529.9 |
| 5° | 531.0 | 529.9 | 531.0 | 532.1 | 534.3 | 537.7 | *536.6* | 536.6 | 538.8 | 534.3 | 534.3 |
| 7.5° | 512.0 | 510.9 | 517.6 | 519.8 | 528.8 | 536.6 | *545.5* | 542.1 | 546.6 | 545.5 | 542.1 |
| 10° | 488.6 | 485.3 | 491.9 | 504.2 | 517.6 | 537.7 | *546.6* | 548.8 | 558.9 | 563.3 | 561.1 |
| 12.5° | 475.2 | 471.9 | 480.8 | 489.7 | 510.9 | 535.5 | *551.1* | 556.6 | 567.8 | 576.7 | 579.0 |
| 15° | 465.2 | 468.5 | 477.4 | 494.2 | 514.3 | 539.9 | *553.3* | 564.5 | 587.9 | 596.8 | 596.8 |
| 17.5° | 471.9 | 470.8 | 478.6 | 495.3 | 519.8 | 545.5 | *565.6* | 576.7 | 604.6 | 616.9 | 615.8 |
| 20° | 537.7 | 531.0 | 529.9 | 521.0 | 528.8 | 558.9 | *583.4* | 594.6 | 621.3 | 638.1 | 637.0 |
| 22.5° | 622.5 | 629.2 | 611.3 | 591.2 | 566.7 | 576.7 | *602.4* | 618.0 | 644.8 | 662.6 | 655.9 |
| 25° | 737.4 | 734.0 | 721.7 | 681.6 | 637.0 | 615.8 | *629.2* | 644.8 | 678.2 | 692.7 | 681.6 |
| 27.5° | 859.0 | 844.5 | 828.8 | 773.1 | 713.9 | 674.9 | *677.1* | 687.2 | 726.2 | 735.1 | 709.5 |
| 30° | 989.5 | 991.7 | 966.0 | 890.2 | 808.8 | 749.6 | *745.2* | 749.6 | 780.9 | 779.8 | 744.1 |
| 32.5° | 1139.0 | 1133.4 | 1108.8 | 1027.4 | 937.0 | 840.0 | *828.8* | 821.0 | 834.4 | 822.1 | 780.9 |
| 35° | 1243.8 | 1249.4 | 1222.6 | 1169.1 | 1078.7 | 958.2 | *931.5* | 912.5 | 899.1 | 885.7 | 841.1 |
| 37.5° | 1337.5 | 1330.8 | 1315.2 | 1285.1 | 1197.0 | 1086.5 | *1035.2* | 1018.5 | 989.5 | 952.7 | 911.4 |
| 40° | 1358.7 | 1355.4 | 1347.6 | 1348.7 | 1291.8 | 1205.9 | *1169.1* | 1139.0 | 1088.8 | 1058.6 | 1005.1 |
| 42.5° | 1355.4 | 1366.5 | 1368.8 | 1377.7 | 1345.3 | 1324.1 | *1286.2* | 1257.2 | 1210.3 | 1173.5 | 1117.8 |
| 45° | 1373.2 | 1392.2 | 1407.8 | 1415.6 | 1394.4 | 1392.2 | *1396.6* | 1383.3 | 1350.9 | 1313.0 | 1249.4 |
| 47.5° | 1408.9 | 1441.3 | 1465.8 | 1482.5 | 1478.1 | 1514.9 | *1491.5* | 1488.1 | 1501.5 | 1464.7 | 1401.1 |
| 50° | 1475.8 | 1484.8 | 1542.8 | 1567.3 | 1608.6 | 1662.1 | *1616.4* | 1627.6 | 1654.3 | 1657.7 | 1540.5 |
| 52.5° | 1526.0 | 1533.9 | 1591.9 | 1664.4 | 1755.8 | 1815.0 | *1773.7* | 1772.6 | 1820.5 | 1833.9 | 1675.5 |
| 55° | 1539.4 | 1557.3 | 1632.0 | 1758.1 | 1929.9 | 1990.1 | *1961.1* | 1951.1 | 2014.6 | 2038.1 | 1794.9 |
| 57.5° | 1520.5 | 1527.2 | 1634.3 | 1816.1 | 2055.9 | 2186.4 | *2195.4* | 2164.1 | 2222.1 | 2227.7 | 1883.0 |
| 60° | 1315.2 | 1344.2 | 1531.6 | 1852.9 | 2163.0 | 2399.5 | *2446.4* | 2428.5 | 2433.0 | 2422.9 | 1948.8 |
| 62.5° | 909.2 | 914.7 | 1190.3 | 1813.9 | 2251.1 | 2614.8 | *2692.9* | 2679.5 | 2641.6 | 2546.8 | 1915.4 |
| 65° | 432.8 | 462.9 | 639.2 | 1535.0 | 2263.4 | 2778.8 | *2930.5* | 2939.4 | 2763.2 | 2547.9 | 1786.0 |
| 67.5° | *297.8* | *299.0* | *340.2* | *1083.2* | *1919.8* | *2825.6* | *3057.7* | *3016.4* | *2752.0* | *2524.4* | *1627.6* |
| 70° | 188.5 | 175.1 | 196.3 | 618.0 | 1297.4 | 2218.8 | *2727.5* | 2872.5 | 2705.2 | 2371.6 | 1375.4 |
| 72.5° | 74.7 | 80.3 | 92.6 | 203.0 | 635.9 | 1263.9 | *1781.5* | 2186.4 | 2439.7 | 2051.5 | 1074.3 |
| 75° | 33.5 | 35.7 | 46.9 | 84.8 | 164.0 | 515.4 | *689.4* | 966.0 | 1952.2 | 1619.7 | 760.8 |
| 77.5° | 22.3 | 23.4 | 30.1 | 49.1 | 74.7 | 143.9 | *252.1* | 295.6 | 1170.2 | 885.7 | 357.0 |
| 80° | 13.4 | 14.5 | 20.1 | 30.1 | 41.3 | 51.3 | *77.0* | 89.2 | 309.0 | 293.4 | 98.2 |
| 82.5° | 8.9 | 7.8 | 13.4 | 16.7 | 24.5 | 21.2 | *24.5* | 29.0 | 84.8 | 74.7 | 26.8 |
| 85° | 3.3 | 3.3 | 5.6 | 6.7 | 8.9 | 11.2 | *10.0* | 12.3 | 20.1 | 20.1 | 12.3 |
| 87.5° | 0.0 | 0.0 | 1.1 | 1.1 | 3.3 | 4.5 | *5.6* | 5.6 | 7.8 | 7.8 | 6.7 |
| 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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Peachtree City, GA 30269

Scaled Data Report

REPORT NUMBER: P1360376
CATALOG NUMBER: GSS-SB1B-735-U-T3-HSS

**CANDELA DISTRIBUTION (continued):**

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0° | 528.8 | 528.8 | 528.8 | 528.8 | 528.8 | 528.8 | 528.8 | 528.8 | 528.8 | 528.8 | 528.8 |
| 2.5° | 531.0 | 527.6 | 528.8 | 526.5 | 527.6 | 525.4 | 521.0 | 525.4 | 522.1 | 522.1 | 525.4 |
| 5° | 534.3 | 533.2 | 529.9 | 524.3 | 521.0 | 513.1 | 500.9 | 495.3 | 489.7 | 486.4 | 488.6 |
| 7.5° | 545.5 | 541.0 | 535.5 | 522.1 | 504.2 | 480.8 | 456.3 | 428.4 | 407.2 | 404.9 | 397.1 |
| 10° | 560.0 | 555.5 | 543.3 | 513.1 | 476.3 | 409.4 | 355.9 | 319.0 | 296.7 | 282.2 | 276.7 |
| 12.5° | 579.0 | 573.4 | 551.1 | 499.8 | 409.4 | 315.7 | 252.1 | 225.3 | 217.5 | 214.2 | 213.1 |
| 15° | 596.8 | 590.1 | 551.1 | 456.3 | 331.3 | 237.6 | 205.3 | 198.6 | 197.4 | 198.6 | 197.4 |
| 17.5° | 613.5 | 604.6 | 545.5 | 397.1 | 254.3 | 200.8 | 193.0 | 189.6 | 188.5 | 187.4 | 187.4 |
| 20° | 633.6 | 619.1 | 529.9 | 332.4 | 209.7 | 190.8 | 187.4 | 182.9 | 182.9 | 178.5 | 179.6 |
| 22.5° | 652.6 | 632.5 | 499.8 | 267.7 | 193.0 | 185.2 | 181.8 | 177.4 | 175.1 | 171.8 | 171.8 |
| 25° | 671.5 | 645.9 | 464.1 | 222.0 | 182.9 | 179.6 | 176.3 | 171.8 | 166.2 | 161.8 | 161.8 |
| 27.5° | 699.4 | 663.7 | 421.7 | 203.0 | 177.4 | 171.8 | 168.4 | 162.9 | 156.2 | 150.6 | 150.6 |
| 30° | 730.7 | 688.3 | 387.1 | 199.7 | 175.1 | 161.8 | 156.2 | 147.2 | 142.8 | 138.3 | 138.3 |
| 32.5° | 768.6 | 721.7 | 361.4 | 205.3 | 169.6 | 148.4 | 139.4 | 130.5 | 127.2 | 127.2 | 127.2 |
| 35° | 824.4 | 770.8 | 333.5 | 206.4 | 162.9 | 135.0 | 120.5 | 111.6 | 111.6 | 116.0 | 116.0 |
| 37.5° | 899.1 | 824.4 | 319.0 | 204.1 | 157.3 | 121.6 | 104.9 | 98.2 | 97.1 | 101.5 | 101.5 |
| 40° | 985.0 | 883.5 | 324.6 | 196.3 | 149.5 | 108.2 | 92.6 | 87.0 | 85.9 | 87.0 | 88.1 |
| 42.5° | 1078.7 | 947.1 | 338.0 | 185.2 | 136.1 | 97.1 | 83.7 | 80.3 | 79.2 | 79.2 | 79.2 |
| 45° | 1178.0 | 990.6 | 351.4 | 174.0 | 122.7 | 88.1 | 78.1 | 75.9 | 74.7 | 74.7 | 74.7 |
| 47.5° | 1272.8 | 1025.2 | 342.5 | 164.0 | 111.6 | 82.5 | 73.6 | 73.6 | 72.5 | 72.5 | 72.5 |
| 50° | 1354.3 | 1021.8 | 304.5 | 153.9 | 99.3 | 78.1 | 71.4 | 70.3 | 70.3 | 69.2 | 69.2 |
| 52.5° | 1400.0 | 953.8 | 245.4 | 142.8 | 88.1 | 73.6 | 69.2 | 68.0 | 66.9 | 65.8 | 65.8 |
| 55° | 1417.8 | 863.4 | 190.8 | 126.1 | 80.3 | 70.3 | 66.9 | 65.8 | 63.6 | 62.5 | 61.4 |
| 57.5° | 1386.6 | 730.7 | 147.2 | 100.4 | 73.6 | 65.8 | 63.6 | 62.5 | 60.2 | 56.9 | 55.8 |
| 60° | 1323.0 | 585.7 | 110.4 | 77.0 | 65.8 | 60.2 | 60.2 | 59.1 | 54.7 | 49.1 | 48.0 |
| 62.5° | 1211.5 | 420.6 | 83.7 | 62.5 | 56.9 | 54.7 | 56.9 | 54.7 | 48.0 | 40.2 | 39.0 |
| 65° | 1054.2 | 259.9 | 64.7 | 53.5 | 50.2 | 48.0 | 51.3 | 49.1 | 41.3 | 32.4 | 30.1 |
| 67.5° | *881.3* | *132.7* | *50.2* | *45.7* | *42.4* | *40.2* | *43.5* | *43.5* | *35.7* | *26.8* | *25.7* |
| 70° | 680.5 | 73.6 | 40.2 | 37.9 | 34.6 | 31.2 | 36.8 | 37.9 | 31.2 | 23.4 | 22.3 |
| 72.5° | 505.3 | 46.9 | 32.4 | 31.2 | 26.8 | 22.3 | 30.1 | 32.4 | 26.8 | 17.8 | 16.7 |
| 75° | 330.2 | 36.8 | 24.5 | 24.5 | 19.0 | 17.8 | 25.7 | 27.9 | 23.4 | 13.4 | 13.4 |
| 77.5° | 158.4 | 27.9 | 19.0 | 16.7 | 13.4 | 13.4 | 22.3 | 23.4 | 16.7 | 10.0 | 10.0 |
| 80° | 52.4 | 19.0 | 13.4 | 11.2 | 8.9 | 8.9 | 17.8 | 13.4 | 8.9 | 7.8 | 7.8 |
| 82.5° | 17.8 | 12.3 | 8.9 | 7.8 | 6.7 | 5.6 | 5.6 | 6.7 | 6.7 | 5.6 | 5.6 |
| 85° | 8.9 | 7.8 | 6.7 | 5.6 | 4.5 | 4.5 | 4.5 | 4.5 | 5.6 | 5.6 | 5.6 |
| 87.5° | 5.6 | 5.6 | 4.5 | 3.3 | 3.3 | 3.3 | 3.3 | 3.3 | 4.5 | 2.2 | 2.2 |
| 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: SP1-2407-184-5

Test Date: 10/10/2024

Luminaire Tested: GSS-SB1A-735-U-5WQ

Data in this report applies to families of products including GSS-SB1A-735-U-5WQ

Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

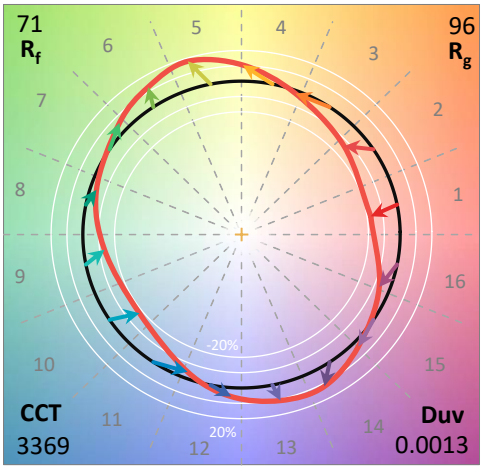
## Test Information

| | |
|---|---|
| Test Method: | LM-79-2019 |
| Report Number: | SP1-2407-184-5 |
| 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-735-U-5WQ** |
| Description: | GALLEON II SITE SLIM 1SQ 350MA 5WQ HIGH DENSITY LIGHTSQUARE WITH 70 CRI 3500K CCT 26 LEDS |

## Spectral Parameters

| | |
|---|---|
| CCT (K): | 3369 |
| CIE u': | 0.2386 |
| CIE v': | 0.5156 |
| Duv: | 0.0013 |
| CIE x: | 0.4143 |
| CIE y: | 0.3980 |
| CIE z: | 0.1877 |
| Peak Wavelength (nm): | 590 |
| Dominant Wavelength (nm): | 580 |
| Purity: | 43.80166 |
| Rf: | 71.4 |
| Rg: | 96 |

| | |
|---|---|
| CRI (Ra): | 70.1 |
| R1: | 66.6 |
| R2: | 77.6 |
| R3: | 88.5 |
| R4: | 69.5 |
| R5: | 66.4 |
| R6: | 69.6 |
| R7: | 77.5 |
| R8: | 44.9 |
| R9: | -40.2 |
| R10: | 49.1 |
| R11: | 66.3 |
| R12: | 45.7 |
| R13: | 68.0 |
| R14: | 93.4 |
| R15: | 57.6 |




## Test Conditions

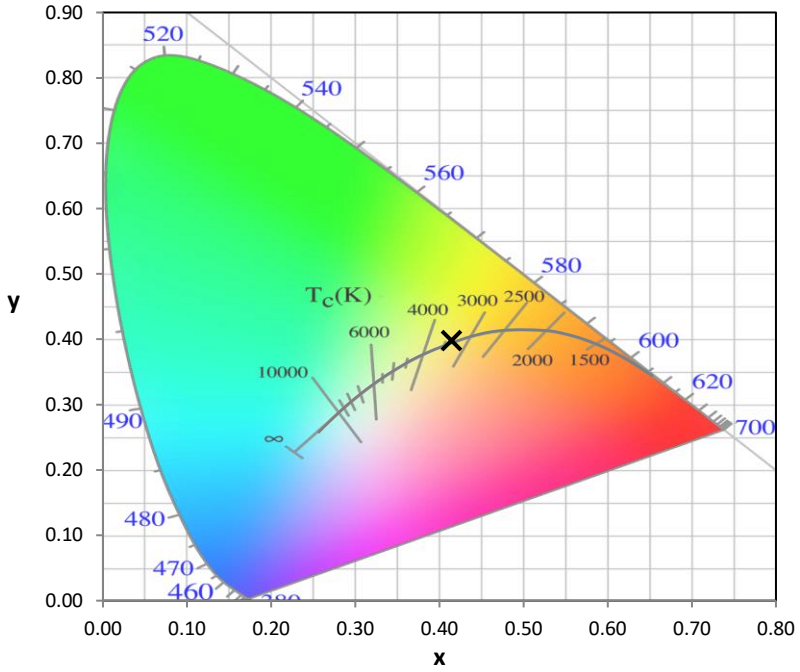
| | |
|---|---|
| Stabilization Time: | 21M |
| Operation Time: | 1H 21M |
| Sphere Temperature (°C): | 25.2 |

REPORT NUMBER: SP1-2407-184-5

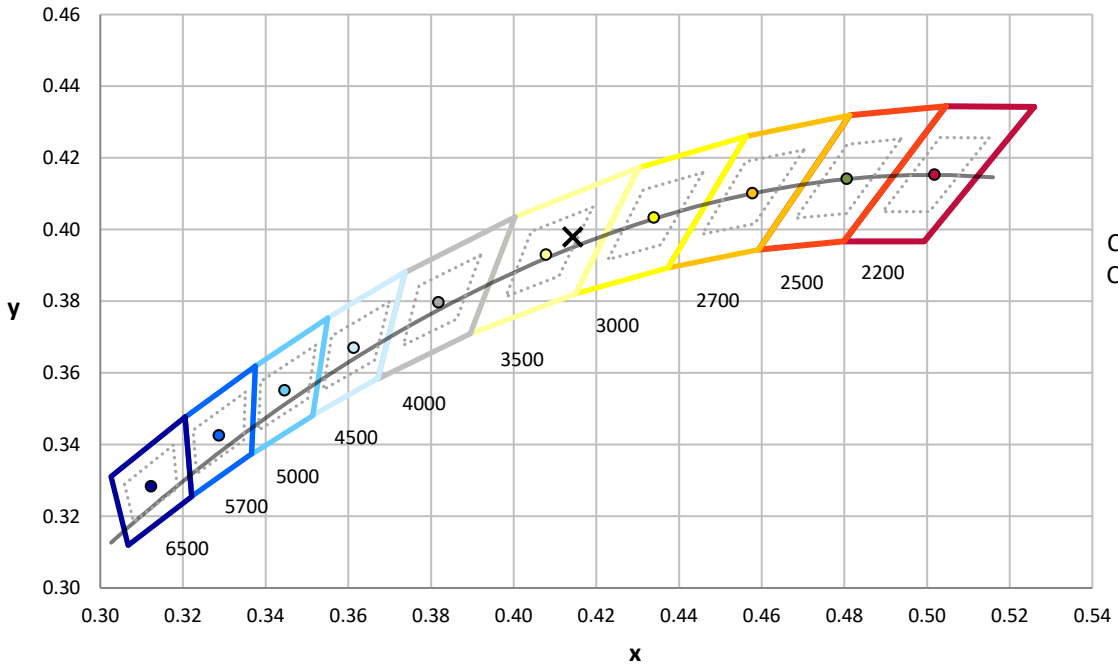
| Measurement and Test Equipment | | | |
|---|---|---|---|
| Instrument | Identification Number | Calibration Date | Calibration Due Date |
| Photometer | IN0058 | 6/18/2024 | 12/18/2024 |
| Power Meter | INXT2011004 | 2/8/2024 | 2/8/2025 |
| AC Power Source | IN0063 | 10/24/2023 | 10/24/2024 |
| DC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

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**CIE 1931 Chromaticity Diagram**




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

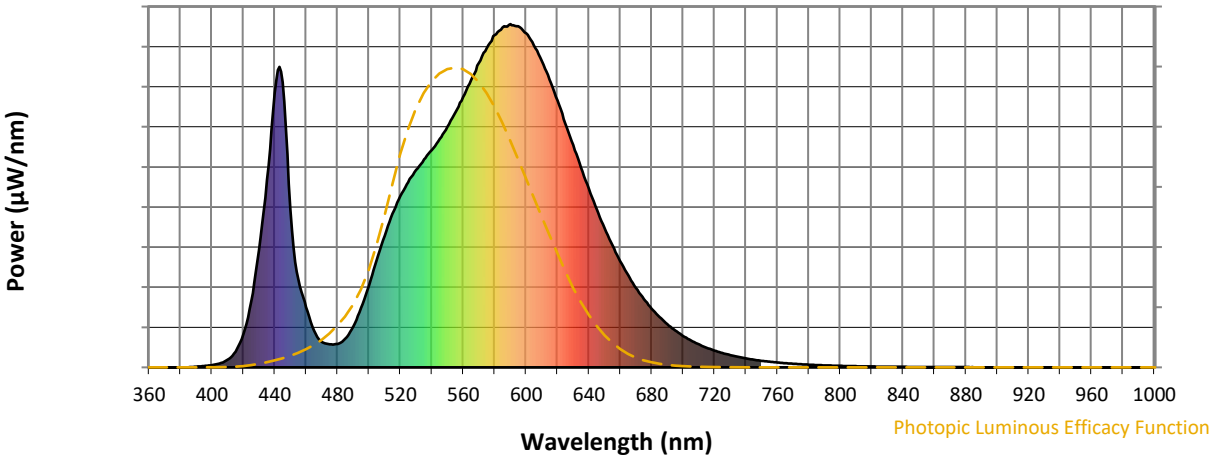



CCT = 3369K
CIE x = 0.4143
CIE y = 0.3980
Duv = 0.0013

Point lies inside the ANSI 3500K 4-step quadrangle

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## Photopic Flux vs. Wavelength

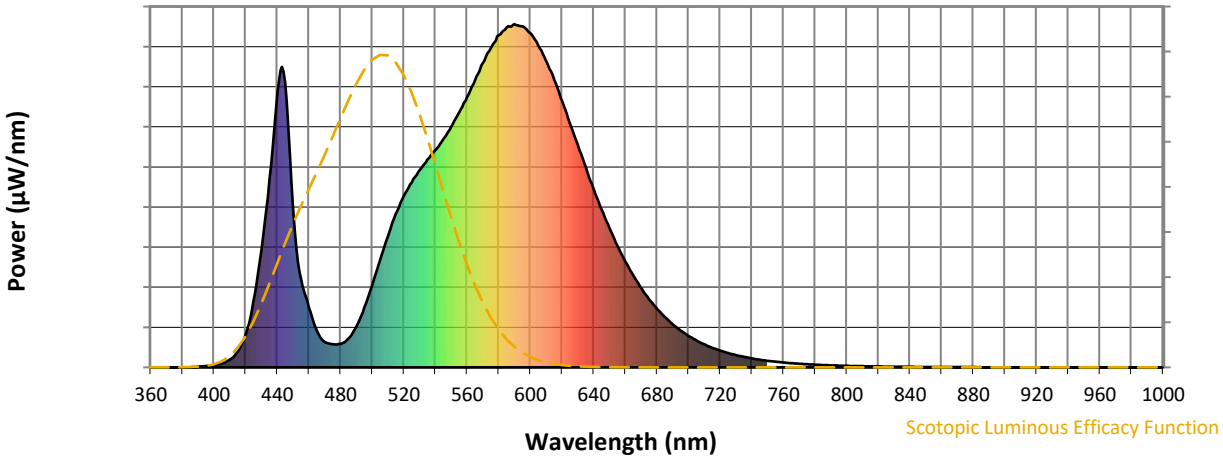



## Photopic Lumens: NR

| 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 | 119 | NR | 620 | 778 | NR | 750 | 19 | NR | 880 | 1 | NR |
| 365 | 0 | NR | 495 | 173 | NR | 625 | 711 | NR | 755 | 16 | NR | 885 | 0 | NR |
| 370 | 0 | NR | 500 | 239 | NR | 630 | 648 | NR | 760 | 14 | NR | 890 | 0 | NR |
| 375 | 0 | NR | 505 | 313 | NR | 635 | 582 | NR | 765 | 12 | NR | 895 | 0 | NR |
| 380 | 0 | NR | 510 | 383 | NR | 640 | 520 | NR | 770 | 11 | NR | 900 | 0 | NR |
| 385 | 0 | NR | 515 | 448 | NR | 645 | 460 | NR | 775 | 9 | NR | 905 | 0 | NR |
| 390 | 2 | NR | 520 | 500 | NR | 650 | 406 | NR | 780 | 8 | NR | 910 | 0 | NR |
| 395 | 4 | NR | 525 | 539 | NR | 655 | 355 | NR | 785 | 7 | NR | 915 | 0 | NR |
| 400 | 6 | NR | 530 | 575 | NR | 660 | 309 | NR | 790 | 6 | NR | 920 | 0 | NR |
| 405 | 11 | NR | 535 | 606 | NR | 665 | 269 | NR | 795 | 5 | NR | 925 | 0 | NR |
| 410 | 22 | NR | 540 | 633 | NR | 670 | 231 | NR | 800 | 4 | NR | 930 | 0 | NR |
| 415 | 45 | NR | 545 | 666 | NR | 675 | 199 | NR | 805 | 4 | NR | 935 | 0 | NR |
| 420 | 96 | NR | 550 | 701 | NR | 680 | 171 | NR | 810 | 3 | NR | 940 | 0 | NR |
| 425 | 193 | NR | 555 | 743 | NR | 685 | 147 | NR | 815 | 3 | NR | 945 | 0 | NR |
| 430 | 341 | NR | 560 | 788 | NR | 690 | 126 | NR | 820 | 3 | NR | 950 | 0 | NR |
| 435 | 547 | NR | 565 | 837 | NR | 695 | 107 | NR | 825 | 2 | NR | 955 | 0 | NR |
| 440 | 799 | NR | 570 | 887 | NR | 700 | 92 | NR | 830 | 2 | NR | 960 | 0 | NR |
| 445 | 831 | NR | 575 | 931 | NR | 705 | 78 | NR | 835 | 2 | NR | 965 | 0 | NR |
| 450 | 461 | NR | 580 | 967 | NR | 710 | 67 | NR | 840 | 2 | NR | 970 | 0 | NR |
| 455 | 256 | NR | 585 | 990 | NR | 715 | 57 | NR | 845 | 1 | NR | 975 | 0 | NR |
| 460 | 176 | NR | 590 | 1000 | NR | 720 | 49 | NR | 850 | 1 | NR | 980 | 0 | NR |
| 465 | 107 | NR | 595 | 994 | NR | 725 | 42 | NR | 855 | 1 | NR | 985 | 0 | NR |
| 470 | 74 | NR | 600 | 973 | NR | 730 | 36 | NR | 860 | 1 | NR | 990 | 0 | NR |
| 475 | 67 | NR | 605 | 938 | NR | 735 | 31 | NR | 865 | 1 | NR | 995 | 0 | NR |
| 480 | 68 | NR | 610 | 892 | NR | 740 | 26 | NR | 870 | 1 | NR | 1000 | 0 | NR |
| 485 | 84 | NR | 615 | 838 | NR | 745 | 22 | NR | 875 | 1 | NR | | | |

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## Scotopic Flux vs. Wavelength

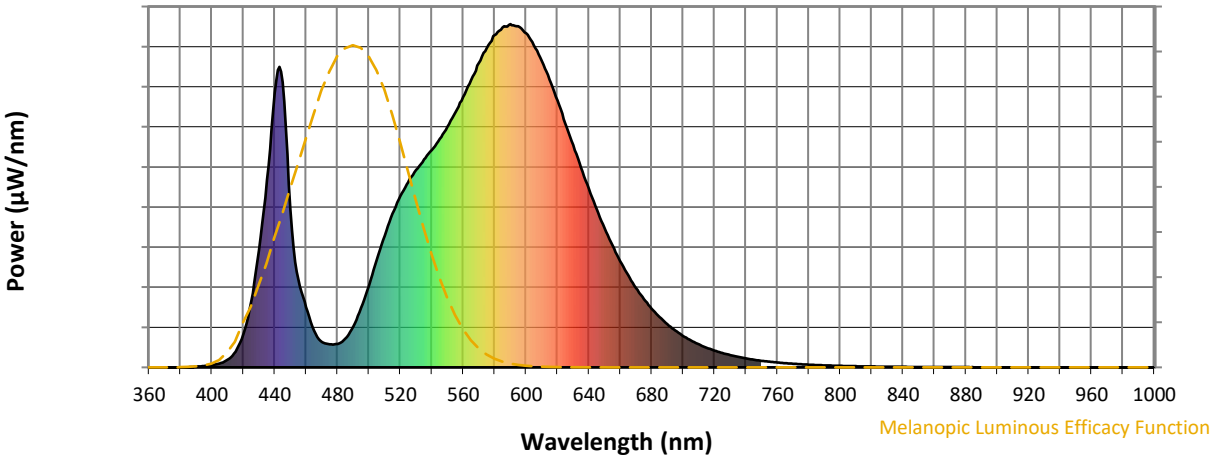



**Scotopic Lumens: NR** **S/P: 1.29**

| 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 | 119 | NR | 620 | 778 | NR | 750 | 19 | NR | 880 | 1 | NR |
| 365 | 0 | NR | 495 | 173 | NR | 625 | 711 | NR | 755 | 16 | NR | 885 | 0 | NR |
| 370 | 0 | NR | 500 | 239 | NR | 630 | 648 | NR | 760 | 14 | NR | 890 | 0 | NR |
| 375 | 0 | NR | 505 | 313 | NR | 635 | 582 | NR | 765 | 12 | NR | 895 | 0 | NR |
| 380 | 0 | NR | 510 | 383 | NR | 640 | 520 | NR | 770 | 11 | NR | 900 | 0 | NR |
| 385 | 0 | NR | 515 | 448 | NR | 645 | 460 | NR | 775 | 9 | NR | 905 | 0 | NR |
| 390 | 2 | NR | 520 | 500 | NR | 650 | 406 | NR | 780 | 8 | NR | 910 | 0 | NR |
| 395 | 4 | NR | 525 | 539 | NR | 655 | 355 | NR | 785 | 7 | NR | 915 | 0 | NR |
| 400 | 6 | NR | 530 | 575 | NR | 660 | 309 | NR | 790 | 6 | NR | 920 | 0 | NR |
| 405 | 11 | NR | 535 | 606 | NR | 665 | 269 | NR | 795 | 5 | NR | 925 | 0 | NR |
| 410 | 22 | NR | 540 | 633 | NR | 670 | 231 | NR | 800 | 4 | NR | 930 | 0 | NR |
| 415 | 45 | NR | 545 | 666 | NR | 675 | 199 | NR | 805 | 4 | NR | 935 | 0 | NR |
| 420 | 96 | NR | 550 | 701 | NR | 680 | 171 | NR | 810 | 3 | NR | 940 | 0 | NR |
| 425 | 193 | NR | 555 | 743 | NR | 685 | 147 | NR | 815 | 3 | NR | 945 | 0 | NR |
| 430 | 341 | NR | 560 | 788 | NR | 690 | 126 | NR | 820 | 3 | NR | 950 | 0 | NR |
| 435 | 547 | NR | 565 | 837 | NR | 695 | 107 | NR | 825 | 2 | NR | 955 | 0 | NR |
| 440 | 799 | NR | 570 | 887 | NR | 700 | 92 | NR | 830 | 2 | NR | 960 | 0 | NR |
| 445 | 831 | NR | 575 | 931 | NR | 705 | 78 | NR | 835 | 2 | NR | 965 | 0 | NR |
| 450 | 461 | NR | 580 | 967 | NR | 710 | 67 | NR | 840 | 2 | NR | 970 | 0 | NR |
| 455 | 256 | NR | 585 | 990 | NR | 715 | 57 | NR | 845 | 1 | NR | 975 | 0 | NR |
| 460 | 176 | NR | 590 | 1000 | NR | 720 | 49 | NR | 850 | 1 | NR | 980 | 0 | NR |
| 465 | 107 | NR | 595 | 994 | NR | 725 | 42 | NR | 855 | 1 | NR | 985 | 0 | NR |
| 470 | 74 | NR | 600 | 973 | NR | 730 | 36 | NR | 860 | 1 | NR | 990 | 0 | NR |
| 475 | 67 | NR | 605 | 938 | NR | 735 | 31 | NR | 865 | 1 | NR | 995 | 0 | NR |
| 480 | 68 | NR | 610 | 892 | NR | 740 | 26 | NR | 870 | 1 | NR | 1000 | 0 | NR |
| 485 | 84 | NR | 615 | 838 | NR | 745 | 22 | NR | 875 | 1 | NR | | | |

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## Melanopic Flux vs. Wavelength




**Melanopic Lumens: NR** **M/P: 2.36**

| 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 | 119 | NR | 620 | 778 | NR | 750 | 19 | NR | 880 | 1 | NR |
| 365 | 0 | NR | 495 | 173 | NR | 625 | 711 | NR | 755 | 16 | NR | 885 | 0 | NR |
| 370 | 0 | NR | 500 | 239 | NR | 630 | 648 | NR | 760 | 14 | NR | 890 | 0 | NR |
| 375 | 0 | NR | 505 | 313 | NR | 635 | 582 | NR | 765 | 12 | NR | 895 | 0 | NR |
| 380 | 0 | NR | 510 | 383 | NR | 640 | 520 | NR | 770 | 11 | NR | 900 | 0 | NR |
| 385 | 0 | NR | 515 | 448 | NR | 645 | 460 | NR | 775 | 9 | NR | 905 | 0 | NR |
| 390 | 2 | NR | 520 | 500 | NR | 650 | 406 | NR | 780 | 8 | NR | 910 | 0 | NR |
| 395 | 4 | NR | 525 | 539 | NR | 655 | 355 | NR | 785 | 7 | NR | 915 | 0 | NR |
| 400 | 6 | NR | 530 | 575 | NR | 660 | 309 | NR | 790 | 6 | NR | 920 | 0 | NR |
| 405 | 11 | NR | 535 | 606 | NR | 665 | 269 | NR | 795 | 5 | NR | 925 | 0 | NR |
| 410 | 22 | NR | 540 | 633 | NR | 670 | 231 | NR | 800 | 4 | NR | 930 | 0 | NR |
| 415 | 45 | NR | 545 | 666 | NR | 675 | 199 | NR | 805 | 4 | NR | 935 | 0 | NR |
| 420 | 96 | NR | 550 | 701 | NR | 680 | 171 | NR | 810 | 3 | NR | 940 | 0 | NR |
| 425 | 193 | NR | 555 | 743 | NR | 685 | 147 | NR | 815 | 3 | NR | 945 | 0 | NR |
| 430 | 341 | NR | 560 | 788 | NR | 690 | 126 | NR | 820 | 3 | NR | 950 | 0 | NR |
| 435 | 547 | NR | 565 | 837 | NR | 695 | 107 | NR | 825 | 2 | NR | 955 | 0 | NR |
| 440 | 799 | NR | 570 | 887 | NR | 700 | 92 | NR | 830 | 2 | NR | 960 | 0 | NR |
| 445 | 831 | NR | 575 | 931 | NR | 705 | 78 | NR | 835 | 2 | NR | 965 | 0 | NR |
| 450 | 461 | NR | 580 | 967 | NR | 710 | 67 | NR | 840 | 2 | NR | 970 | 0 | NR |
| 455 | 256 | NR | 585 | 990 | NR | 715 | 57 | NR | 845 | 1 | NR | 975 | 0 | NR |
| 460 | 176 | NR | 590 | 1000 | NR | 720 | 49 | NR | 850 | 1 | NR | 980 | 0 | NR |
| 465 | 107 | NR | 595 | 994 | NR | 725 | 42 | NR | 855 | 1 | NR | 985 | 0 | NR |
| 470 | 74 | NR | 600 | 973 | NR | 730 | 36 | NR | 860 | 1 | NR | 990 | 0 | NR |
| 475 | 67 | NR | 605 | 938 | NR | 735 | 31 | NR | 865 | 1 | NR | 995 | 0 | NR |
| 480 | 68 | NR | 610 | 892 | NR | 740 | 26 | NR | 870 | 1 | NR | 1000 | 0 | NR |
| 485 | 84 | NR | 615 | 838 | NR | 745 | 22 | NR | 875 | 1 | NR | | | |

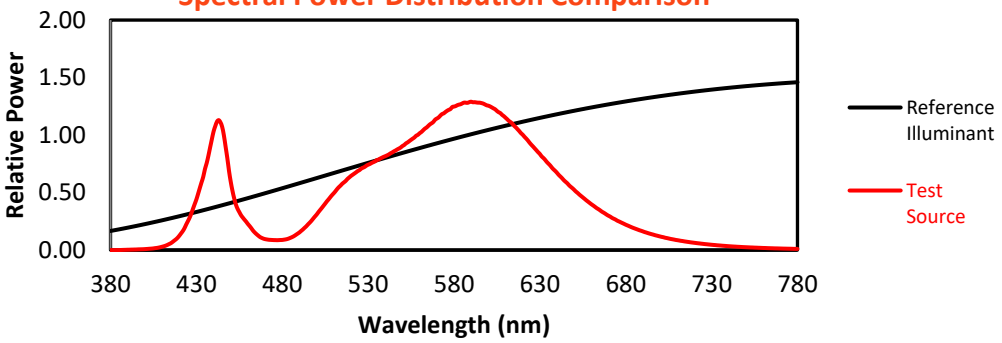
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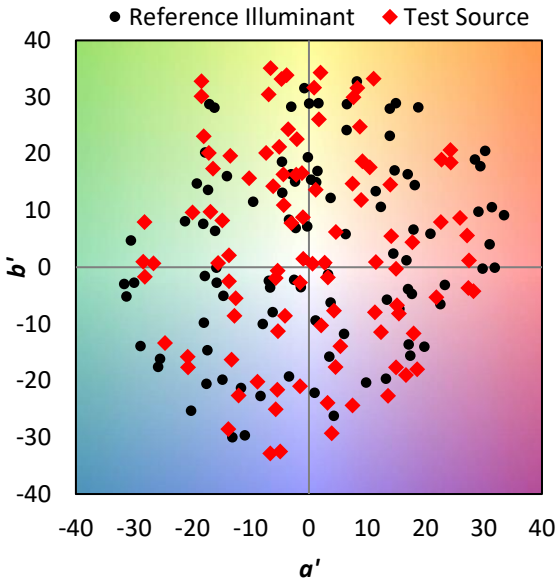
## Summary

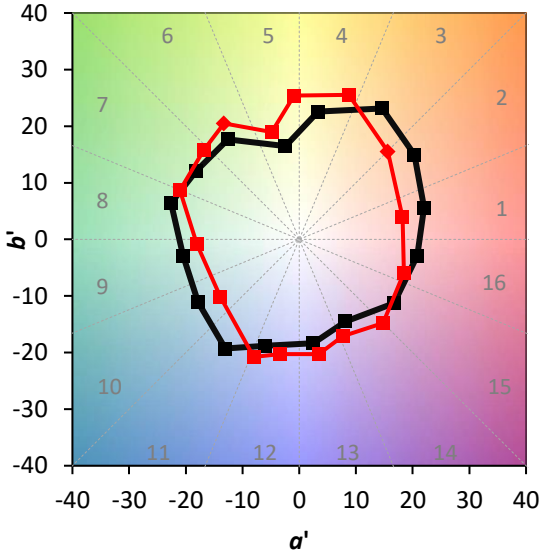
$R_f$ = 71.4
$R_g$ = 96
CIE $R_a$ = 70.1
$R_9$ = -40.2

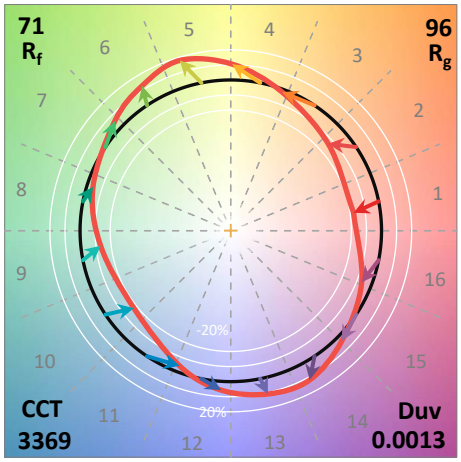
## Spectral Power Distribution Comparison

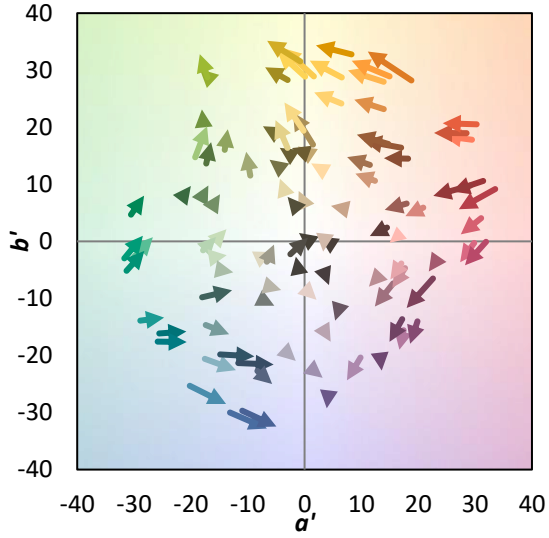



## Color Vector Graphics



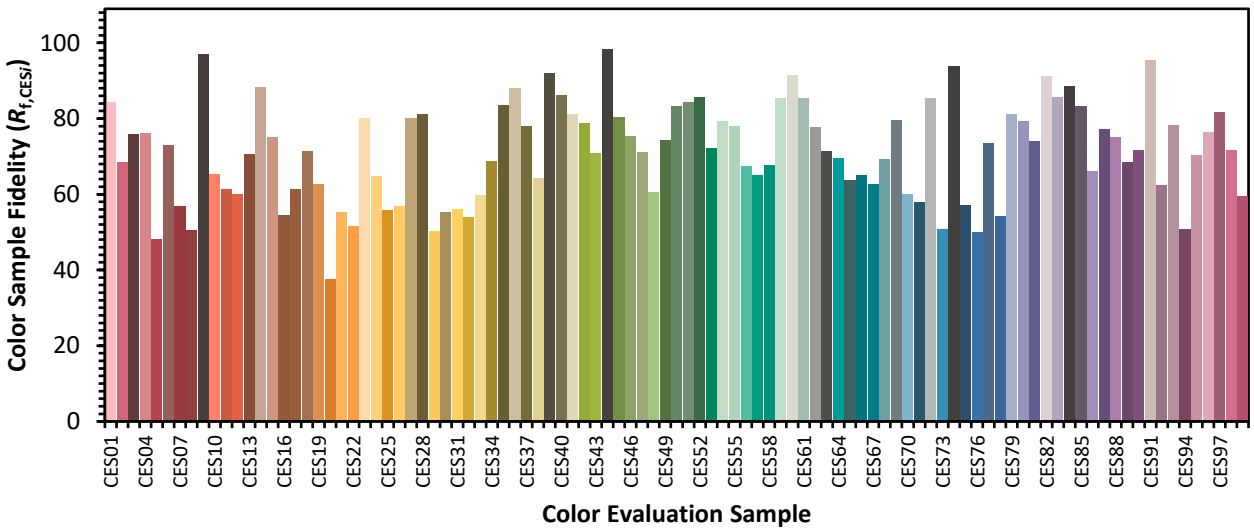



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## Individual Sample Fidelity Index ($R_{f,i}$)

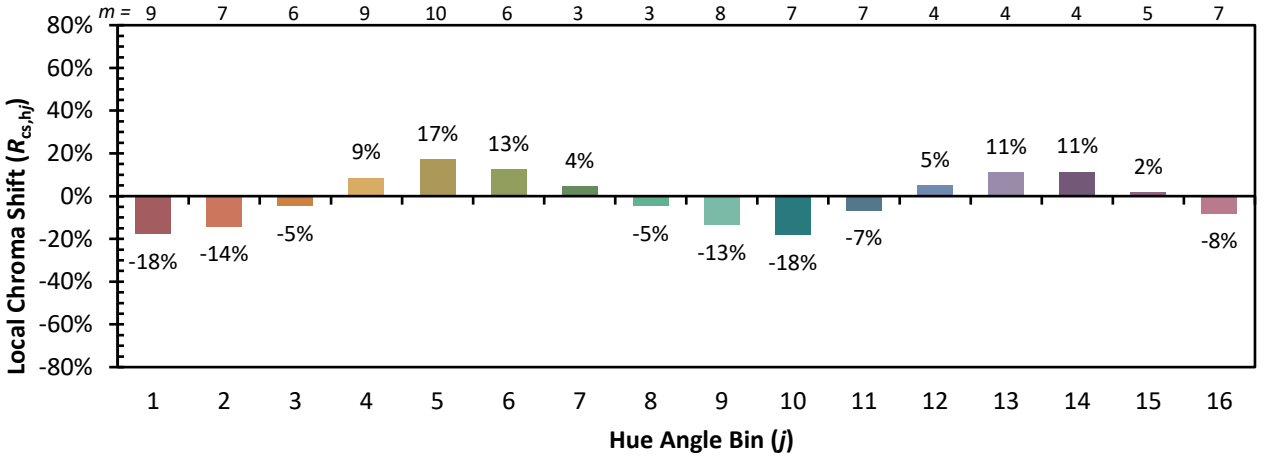
| | | | |
|---|---|---|---|
| CES01 = 86 | CES26 = 57 | CES51 = 84 | CES76 = 50 |
| CES02 = 62 | CES27 = 80 | CES52 = 86 | CES77 = 74 |
| CES03 = 31 | CES28 = 81 | CES53 = 72 | CES78 = 54 |
| CES04 = 70 | CES29 = 50 | CES54 = 79 | CES79 = 81 |
| CES05 = 48 | CES30 = 55 | CES55 = 78 | CES80 = 79 |
| CES06 = 51 | CES31 = 56 | CES56 = 67 | CES81 = 74 |
| CES07 = 40 | CES32 = 54 | CES57 = 65 | CES82 = 91 |
| CES08 = 39 | CES33 = 60 | CES58 = 68 | CES83 = 86 |
| CES09 = 29 | CES34 = 69 | CES59 = 85 | CES84 = 89 |
| CES10 = 75 | CES35 = 83 | CES60 = 91 | CES85 = 83 |
| CES11 = 58 | CES36 = 88 | CES61 = 85 | CES86 = 66 |
| CES12 = 64 | CES37 = 78 | CES62 = 78 | CES87 = 77 |
| CES13 = 43 | CES38 = 64 | CES63 = 71 | CES88 = 75 |
| CES14 = 74 | CES39 = 92 | CES64 = 70 | CES89 = 68 |
| CES15 = 71 | CES40 = 86 | CES65 = 64 | CES90 = 72 |
| CES16 = 47 | CES41 = 81 | CES66 = 65 | CES91 = 95 |
| CES17 = 50 | CES42 = 79 | CES67 = 63 | CES92 = 62 |
| CES18 = 56 | CES43 = 71 | CES68 = 69 | CES93 = 78 |
| CES19 = 72 | CES44 = 98 | CES69 = 80 | CES94 = 51 |
| CES20 = 65 | CES45 = 80 | CES70 = 60 | CES95 = 70 |
| CES21 = 87 | CES46 = 75 | CES71 = 58 | CES96 = 76 |
| CES22 = 79 | CES47 = 71 | CES72 = 85 | CES97 = 82 |
| CES23 = 92 | CES48 = 61 | CES73 = 51 | CES98 = 72 |
| CES24 = 91 | CES49 = 74 | CES74 = 94 | CES99 = 60 |
| CES25 = 72 | CES50 = 83 | CES75 = 57 | |

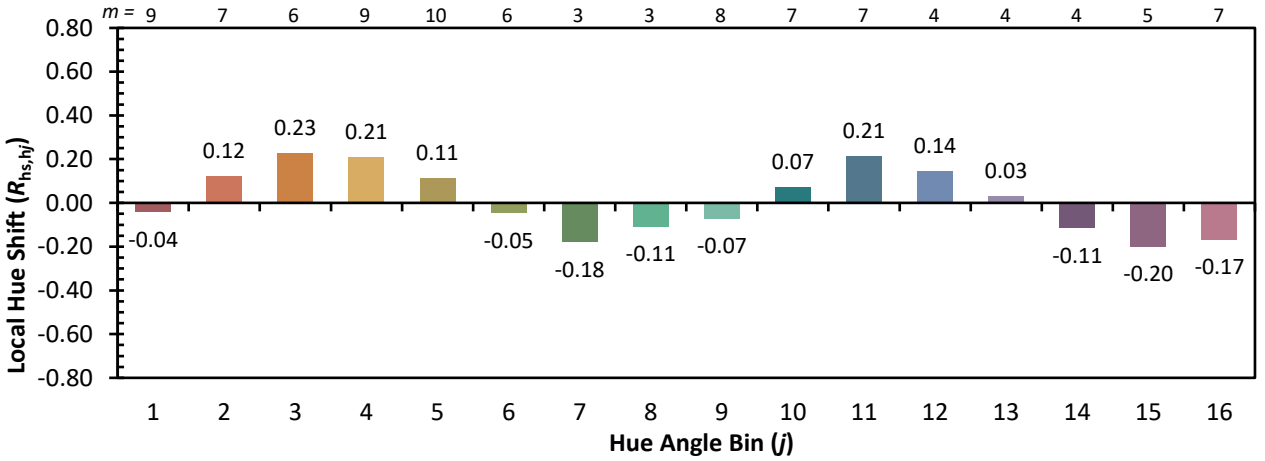


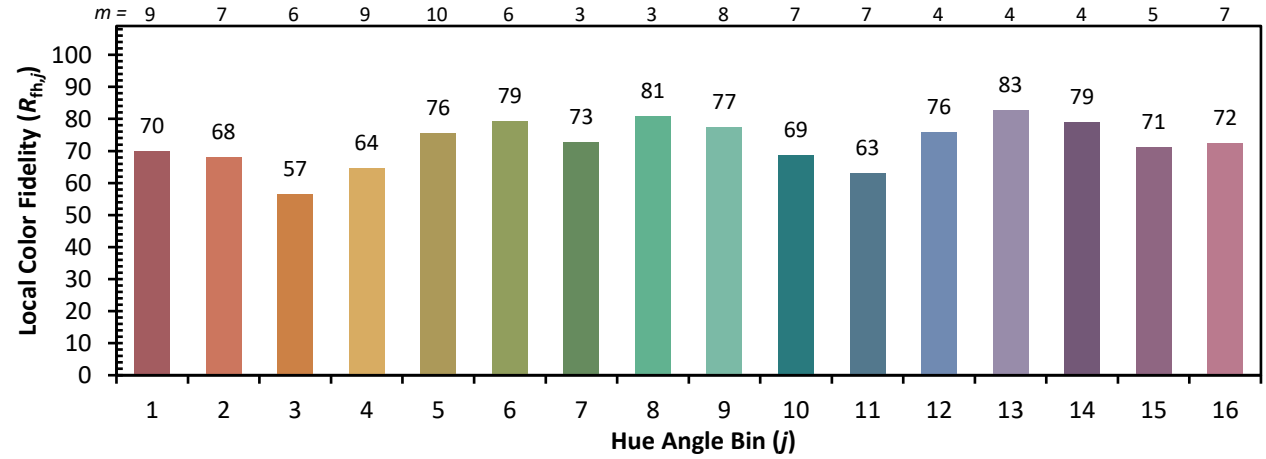
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## Color Rendition by Hue-Angle Bin



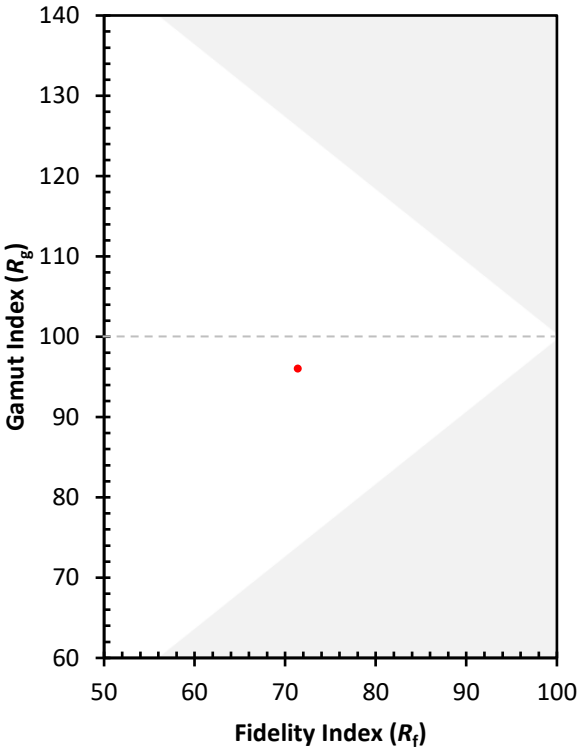



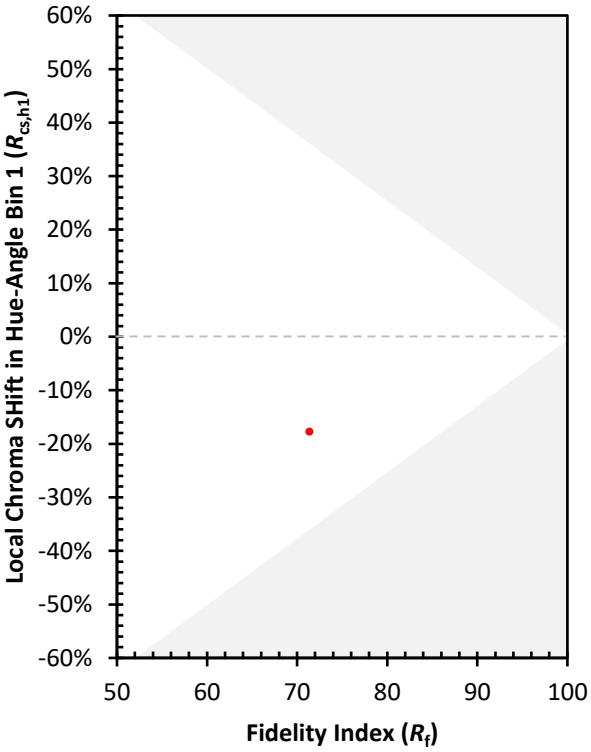



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## Measure Comparisons




(END OF REPORT)