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

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Peachtree City, GA 30269

Scaled data based on original data using

LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

Brand: McGRAW-EDISON

Report Number: P1201908

Luminaire Tested: GWC-SB1C-740-U-T2-HSS

Issue Date: 10/30/2025

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

Scaled Data Report

**Test Information**

| | |
|---|---|
| Test Method: | LM-79-2024 |
| Report Number: | P1201908 |
| | TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-4) |
| Test Lab: | INNOVATION CENTER |
| Issue Date: | 3/14/2026 |
| Manufacturer: | COOPER LIGHTING SOLUTIONS |
| Product Line: | McGRAW-EDISON |
| Catalog Number: | GWC-SB1C-740-U-T2-HSS |
| Description: | GALLEON WALL LUMINAIRE |
| | (1) 70 CRI, 4000K, 615mA LIGHTSQUARE WITH 26 LEDS AND TYPE II OPTICS WITH HOUSE SIDE SHIELD |
| Light Source: | - |
| Ballast/Driver: | ELECTRONIC DRIVER |

**Summary**

| | |
|---|---|
| Lumens per Lamp: | N/A |
| Luminaire Lumens: | 5817 lumens |
| Efficiency: | N/A |
| Efficacy: | 106.9 lumens/watt |
| Luminous Opening: | Rectangular (W 0.5' x L: 0.5' x H: 0') |
| IES Classification: | Type II - Medium |
| BUG Rating: | B1 - U0 - G1 |

| | |
|---|---|
| Input Watts (W): | 54.4 |
| Input Voltage (V): | 120.0 |
| Input Current (Ain): | 0.437 |
| Voltage Rise (V): | NR |
| Power Factor: | 0.993 |
| Total Harmonic Distortion (THDi): | 9.314 |
| Frequency (hertz): | 60 |
| Stabilization Time: | NR |
| Operation Time: | NR |
| Ambient Temperature (°C): | NR |
| Test Distance: | 28.75 FT |

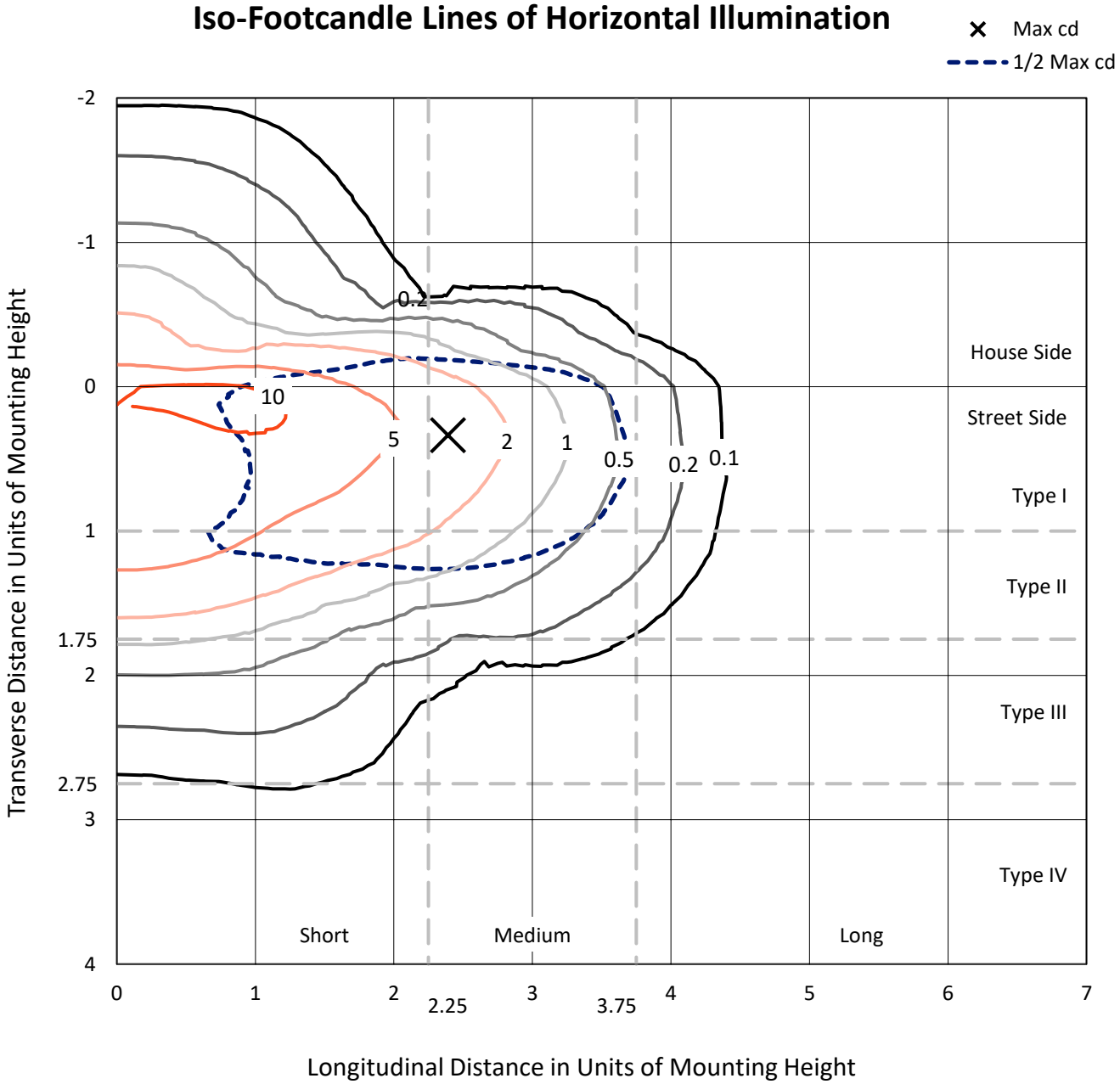


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REPORT NUMBER: P1201908
CATALOG NUMBER: GWC-SB1C-740-U-T2-HSS

## Iso-Footcandle Lines of Horizontal Illumination



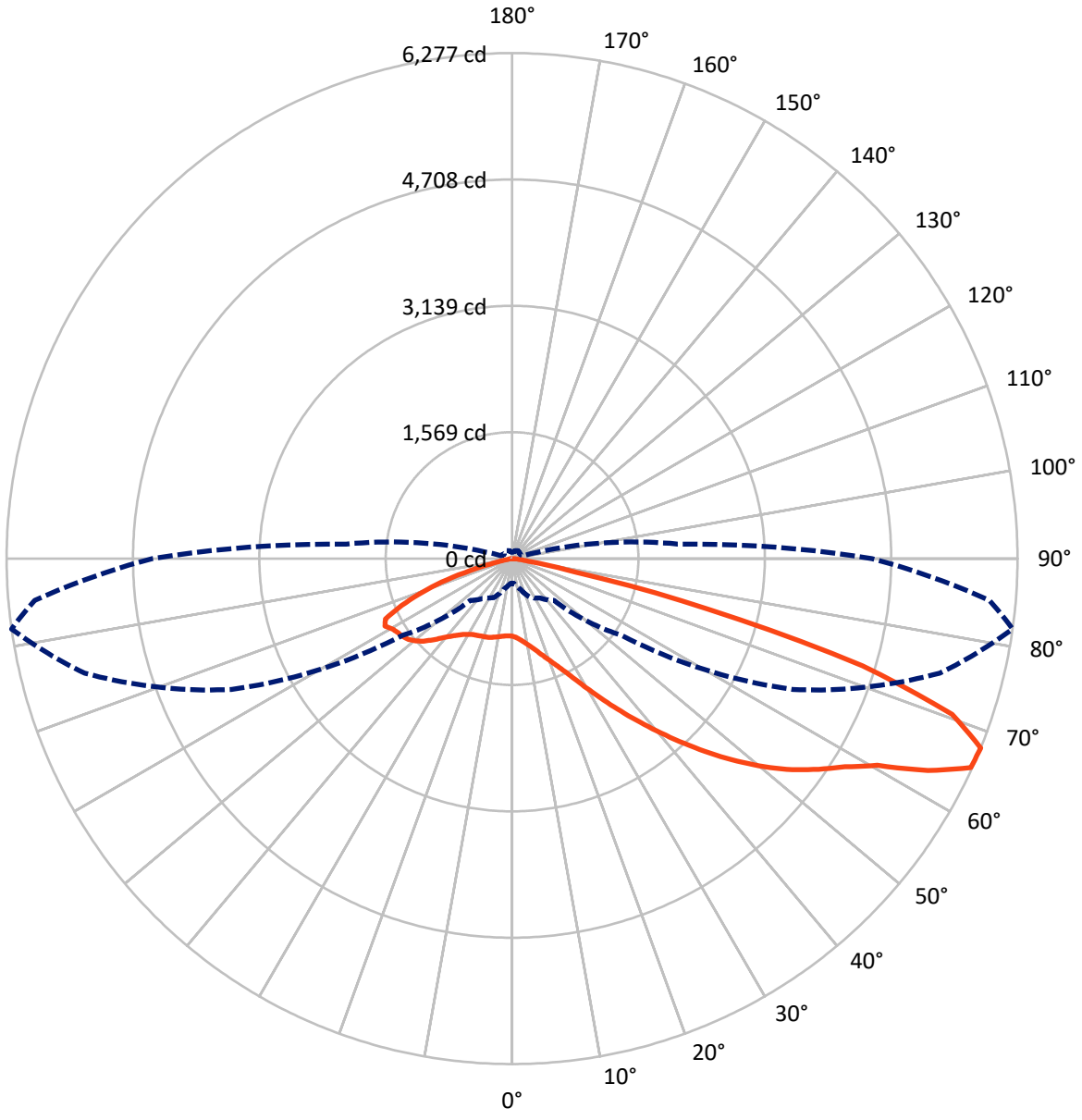

Based on 10 foot mounting height. Maximum calculated value = 13.5 fc
Type II - Medium - N/A

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## Luminous Intensity Polar Plot



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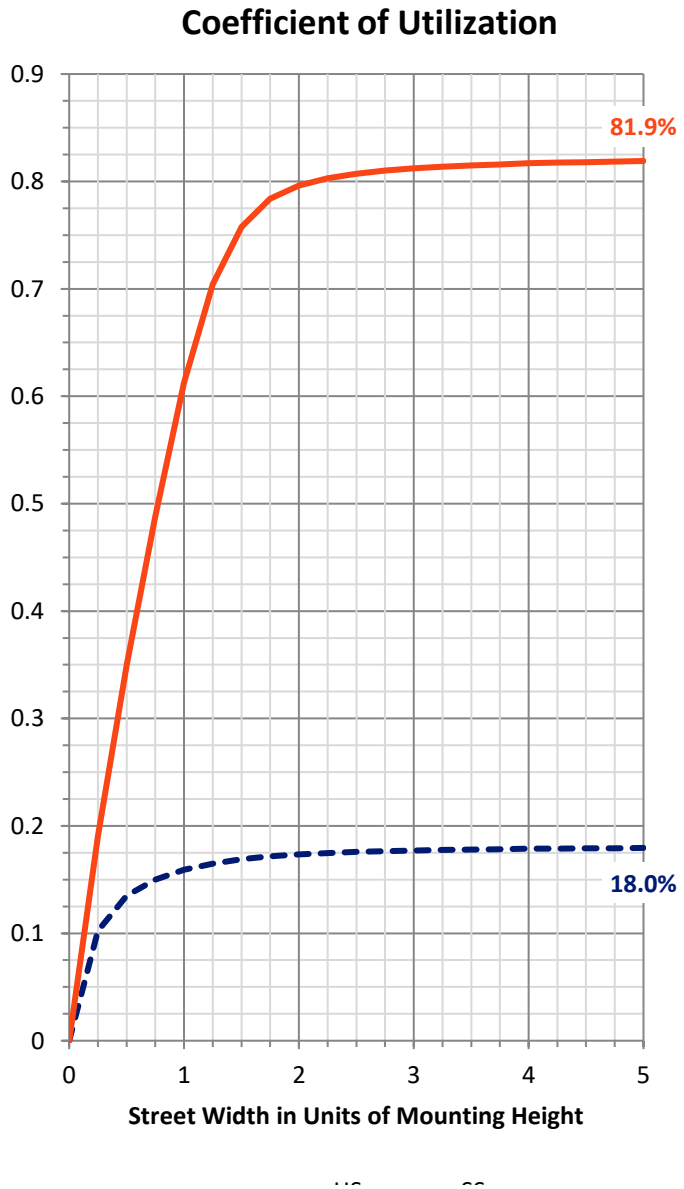
REPORT NUMBER: P1201908
CATALOG NUMBER: GWC-SB1C-740-U-T2-HSS

**FLUX DISTRIBUTION:**

| | | Downward | Upward | Total |
|---|---|---|---|---|
| **House Side** | Lumens | 1053.7 | 0.0 | 1053.7 |
| | % Fixture | 18.1 | 0.0 | 18.1 |
| **Street Side** | Lumens | 4763.3 | 0.0 | 4763.3 |
| | % Fixture | 81.9 | 0.0 | 81.9 |
| **Total** | Lumens | 5817.0 | 0.0 | 5817.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

**ZONAL LUMENS:**

| Zone | Lumens | % Fixture |
|---|---|---|
| 0°-10° | 85.9 | 1.5 |
| 10°-20° | 223.1 | 3.8 |
| 20°-30° | 357.3 | 6.1 |
| 30°-40° | 631.9 | 10.9 |
| 40°-50° | 1107.1 | 19.0 |
| 50°-60° | 1476.6 | 25.4 |
| 60°-70° | 1374.7 | 23.6 |
| 70°-80° | 527.6 | 9.1 |
| 80°-90° | 32.8 | 0.6 |
| 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° | 5817.0 | 100.0 |
| 0°-180° | 5817.0 | 100.0 |



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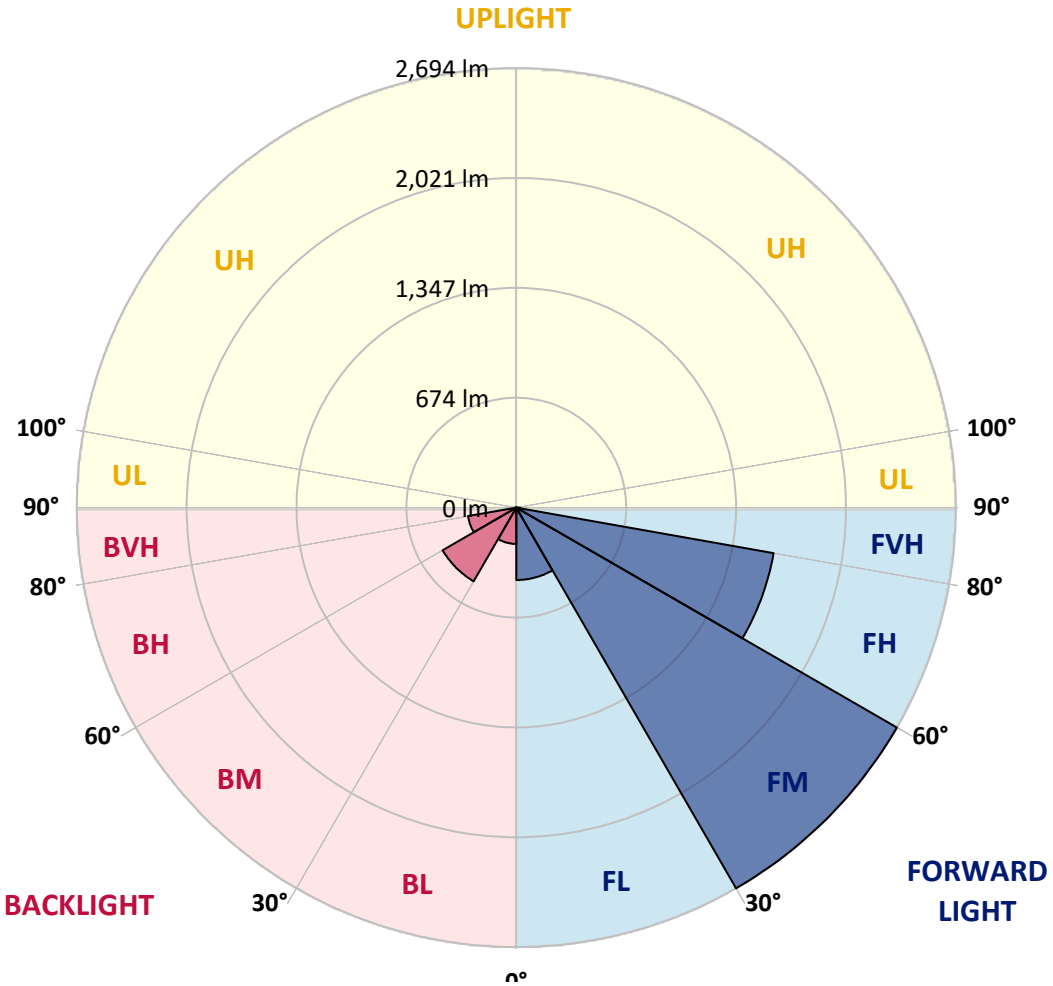
Scaled Data Report

REPORT NUMBER: P1201908
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## LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit B | U | G |
|---|---|---|---|---|---|---|
| FL | (0°-30°) | 443.8 | 7.6 | | | |
| FM | (30°-60°) | 2694.2 | 46.3 | | | |
| FH | (60°-80°) | 1601.5 | 27.5 | | | G1/1800 |
| FVH | (80°-90°) | 23.8 | 0.4 | | | G1/100 |
| BL | (0°-30°) | 222.5 | 3.8 | B1/500 | | |
| BM | (30°-60°) | 521.5 | 9.0 | B1/1000 | | |
| BH | (60°-80°) | 300.7 | 5.2 | B1/500 | | G1/500 |
| BVH | (80°-90°) | 8.9 | 0.2 | | | 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 II Medium



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**CANDELA DISTRIBUTION (FULL):**

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 82° | 85° |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0° | 963.7 | 963.7 | 963.7 | 963.7 | 963.7 | 963.7 | 963.7 | 963.7 | 963.7 | *963.7* | 963.7 |
| 2.5° | 1018.5 | 1024.4 | 1021.1 | 1019.4 | 1016.5 | 1012.3 | 1008.9 | 998.4 | 987.6 | *980.4* | 977.9 |
| 5° | 1039.1 | 1044.9 | 1044.5 | 1046.2 | 1048.3 | 1049.5 | 1048.7 | 1037.0 | 1021.5 | *1009.3* | 1002.2 |
| 7.5° | 1021.5 | 1028.2 | 1033.6 | 1042.0 | 1056.7 | 1072.2 | 1079.7 | 1077.2 | 1061.3 | *1044.5* | 1035.7 |
| 10° | 971.6 | 978.8 | 991.7 | 1011.4 | 1042.4 | 1075.9 | 1104.0 | 1117.0 | 1106.9 | *1088.5* | 1076.3 |
| 12.5° | 880.3 | 887.5 | 913.0 | 955.7 | 1007.7 | 1065.9 | 1119.5 | 1154.2 | 1156.8 | *1138.3* | 1124.1 |
| 15° | 777.7 | 784.8 | 812.1 | 865.7 | 944.8 | 1038.2 | 1127.9 | 1193.6 | 1215.8 | *1199.9* | 1182.7 |
| 17.5° | 714.1 | 720.4 | 740.9 | 784.0 | 866.5 | 982.9 | 1124.9 | 1235.5 | 1286.2 | *1273.6* | 1253.1 |
| 20° | 694.8 | 700.2 | 709.9 | 740.0 | 808.7 | 925.6 | 1105.7 | 1274.9 | 1362.0 | *1354.8* | 1331.8 |
| 22.5° | 715.3 | 720.4 | 723.3 | 736.7 | 779.8 | 887.9 | 1081.4 | 1315.1 | 1449.9 | *1450.8* | 1422.7 |
| 25° | 762.7 | 767.7 | 764.3 | 772.7 | 791.5 | 876.1 | 1072.2 | 1362.4 | 1560.5 | *1569.7* | 1537.9 |
| 27.5° | 840.6 | 841.0 | 833.0 | 832.6 | 835.5 | 893.7 | 1081.8 | 1413.1 | 1699.9 | *1717.1* | 1677.7 |
| 30° | 996.8 | 990.5 | 959.9 | 926.8 | 911.7 | 946.5 | 1108.6 | 1473.0 | 1864.5 | *1895.1* | 1845.7 |
| 32.5° | 1237.6 | 1228.4 | 1172.2 | 1093.1 | 1013.5 | 1031.5 | 1156.8 | 1541.2 | 2043.8 | *2099.1* | 2038.8 |
| 35° | 1498.9 | 1496.4 | 1437.8 | 1320.1 | 1181.0 | 1152.6 | 1235.1 | 1630.8 | 2239.4 | *2327.3* | 2255.7 |
| 37.5° | 1741.8 | 1740.6 | 1707.1 | 1568.4 | 1399.2 | 1321.3 | 1360.7 | 1748.1 | 2448.8 | *2576.1* | 2491.5 |
| 40° | 1963.8 | 1967.6 | 1934.1 | 1810.1 | 1639.6 | 1537.9 | 1531.6 | 1893.0 | 2681.6 | *2847.1* | 2746.6 |
| 42.5° | 2155.6 | 2159.8 | 2125.9 | 2034.2 | 1877.1 | 1777.4 | 1741.4 | 2070.6 | 2909.0 | *3138.1* | 3019.2 |
| 45° | 2285.9 | 2311.8 | 2306.8 | 2233.5 | 2120.8 | 2017.4 | 1993.5 | 2293.4 | 3168.3 | *3446.8* | 3307.3 |
| 47.5° | 2322.7 | 2346.6 | 2384.3 | 2394.3 | 2325.6 | 2223.9 | 2252.4 | 2561.9 | 3430.5 | *3755.9* | 3597.2 |
| 50° | 2231.8 | 2254.0 | 2332.3 | 2436.6 | 2484.4 | 2453.0 | 2504.1 | 2849.6 | 3698.9 | *4064.1* | 3881.5 |
| 52.5° | 2052.6 | 2075.2 | 2174.0 | 2339.0 | 2533.8 | 2632.6 | 2756.6 | 3133.1 | 3959.0 | *4356.0* | 4150.8 |
| 55° | 1793.3 | 1817.2 | 1944.1 | 2130.9 | 2439.6 | 2706.8 | 2967.3 | 3416.2 | 4197.3 | *4618.6* | 4393.7 |
| 57.5° | 1440.7 | 1458.3 | 1590.2 | 1851.6 | 2202.5 | 2633.1 | 3122.6 | 3725.3 | 4421.8 | *4876.6* | 4634.5 |
| 60° | 939.0 | 954.5 | 1107.8 | 1399.2 | 1809.7 | 2386.8 | 3153.6 | 4070.0 | 4720.0 | *5212.1* | 4959.1 |
| 62.5° | 624.4 | 634.9 | 725.8 | 939.8 | 1274.4 | 1914.0 | 2972.3 | 4345.1 | 5157.2 | *5795.9* | 5515.7 |
| 65° | 428.4 | 438.9 | 529.8 | 678.9 | 823.4 | 1266.1 | 2450.9 | 4308.7 | 5553.4 | *6259.5* | 5928.2 |
| 67.5° | *305.7* | *314.5* | *391.6* | *532.3* | *596.0* | *735.4* | *1661.4* | *3843.0* | *5496.5* | *6277.1* | *5950.4* |
| 70° | 219.0 | 224.1 | 287.7 | 414.6 | 473.7 | 441.8 | 923.9 | 2939.2 | 4812.5 | *5796.3* | 5497.3 |
| 72.5° | 153.3 | 155.0 | 199.8 | 315.8 | 381.5 | 322.5 | 439.7 | 1959.6 | 3639.9 | *4549.5* | 4261.8 |
| 75° | 103.9 | 106.0 | 134.4 | 231.6 | 306.1 | 246.3 | 232.9 | 1050.8 | 2136.8 | *2518.3* | 2257.4 |
| 77.5° | 63.7 | 64.5 | 86.7 | 158.3 | 229.1 | 187.6 | 149.9 | 445.2 | 826.7 | *811.7* | 691.9 |
| 80° | 36.0 | 36.0 | 55.3 | 98.4 | 156.2 | 121.0 | 105.1 | 189.3 | 261.8 | *229.9* | 202.7 |
| 82.5° | 20.1 | 20.5 | 40.2 | 61.1 | 103.4 | 71.6 | 57.8 | 87.5 | 113.1 | *100.1* | 87.1 |
| 85° | 8.4 | 9.2 | 24.7 | 28.9 | 49.4 | 35.6 | 23.5 | 36.9 | 41.9 | *37.3* | 27.2 |
| 87.5° | 0.8 | 1.3 | 7.5 | 5.4 | 5.9 | 7.1 | 3.4 | 7.1 | 5.9 | *5.9* | 4.2 |
| 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: P1201908
CATALOG NUMBER: GWC-SB1C-740-U-T2-HSS

**CANDELA DISTRIBUTION (continued):**

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0° | 963.7 | 963.7 | 963.7 | 963.7 | 963.7 | 963.7 | 963.7 | 963.7 | 963.7 | 963.7 | 963.7 |
| 2.5° | 970.0 | 963.7 | 947.8 | 929.3 | 905.0 | 893.3 | 877.4 | 866.5 | 857.3 | 858.1 | 849.8 |
| 5° | 988.8 | 972.9 | 937.3 | 892.9 | 837.6 | 798.3 | 756.4 | 727.5 | 704.0 | 699.0 | 687.7 |
| 7.5° | 1014.8 | 989.6 | 927.2 | 847.3 | 753.9 | 683.1 | 619.8 | 579.2 | 550.3 | 541.1 | 531.9 |
| 10° | 1048.3 | 1011.8 | 914.3 | 789.9 | 655.4 | 565.4 | 497.5 | 465.7 | 446.0 | 439.3 | 434.3 |
| 12.5° | 1087.2 | 1037.4 | 897.1 | 719.9 | 554.1 | 467.4 | 424.3 | 408.3 | 402.1 | 400.0 | 398.7 |
| 15° | 1136.2 | 1069.2 | 871.1 | 637.0 | 468.2 | 407.5 | 389.1 | 387.0 | 387.8 | 387.0 | 386.6 |
| 17.5° | 1194.4 | 1104.0 | 828.8 | 551.6 | 410.4 | 376.9 | 370.2 | 371.9 | 374.0 | 373.6 | 372.7 |
| 20° | 1258.1 | 1138.3 | 774.8 | 475.8 | 371.1 | 355.2 | 351.4 | 353.1 | 354.7 | 353.9 | 353.5 |
| 22.5° | 1330.6 | 1175.2 | 714.9 | 416.7 | 344.7 | 335.0 | 330.9 | 331.3 | 331.3 | 329.6 | 328.8 |
| 25° | 1417.3 | 1215.8 | 652.1 | 374.8 | 324.6 | 317.0 | 312.0 | 310.3 | 307.8 | 302.8 | 302.0 |
| 27.5° | 1520.7 | 1258.9 | 591.8 | 345.5 | 308.7 | 301.5 | 295.7 | 291.5 | 285.2 | 276.8 | 276.0 |
| 30° | 1637.1 | 1311.3 | 540.7 | 327.1 | 296.1 | 289.0 | 282.3 | 276.0 | 266.8 | 256.3 | 255.5 |
| 32.5° | 1774.1 | 1367.4 | 503.4 | 314.9 | 284.8 | 277.3 | 269.3 | 261.8 | 251.7 | 241.2 | 241.7 |
| 35° | 1937.4 | 1435.3 | 481.6 | 306.6 | 276.0 | 265.9 | 257.1 | 248.8 | 241.2 | 232.0 | 231.2 |
| 37.5° | 2114.6 | 1507.3 | 474.9 | 302.4 | 270.1 | 254.6 | 244.6 | 238.7 | 237.9 | 232.4 | 232.0 |
| 40° | 2308.5 | 1592.7 | 480.0 | 299.9 | 263.8 | 243.7 | 232.9 | 231.6 | 233.7 | 224.1 | 224.5 |
| 42.5° | 2513.7 | 1694.1 | 488.3 | 296.9 | 255.1 | 232.9 | 222.4 | 222.4 | 220.7 | 207.3 | 207.3 |
| 45° | 2735.7 | 1810.9 | 496.7 | 289.8 | 244.6 | 222.0 | 214.0 | 211.1 | 204.0 | 191.0 | 190.6 |
| 47.5° | 2959.3 | 1929.9 | 503.0 | 276.8 | 232.0 | 212.8 | 205.6 | 198.9 | 188.5 | 176.7 | 176.3 |
| 50° | 3171.6 | 2036.7 | 496.3 | 257.6 | 217.8 | 204.0 | 196.4 | 187.2 | 175.9 | 167.9 | 166.7 |
| 52.5° | 3361.4 | 2129.2 | 467.8 | 235.0 | 202.7 | 194.7 | 188.0 | 178.4 | 169.2 | 160.8 | 160.0 |
| 55° | 3526.4 | 2204.2 | 417.6 | 213.6 | 189.3 | 186.8 | 180.1 | 167.9 | 155.4 | 148.3 | 147.4 |
| 57.5° | 3684.7 | 2261.2 | 354.7 | 196.0 | 177.2 | 178.0 | 167.9 | 157.1 | 145.3 | 137.8 | 137.0 |
| 60° | 3895.3 | 2337.4 | 291.1 | 179.7 | 164.2 | 166.7 | 155.8 | 147.8 | 133.2 | 123.5 | 122.3 |
| 62.5° | 4232.1 | 2455.9 | 231.2 | 159.6 | 149.1 | 149.9 | 145.3 | 135.7 | 118.1 | 106.8 | 106.0 |
| 65° | 4499.3 | 2412.3 | 182.2 | 137.8 | 131.9 | 133.2 | 133.2 | 122.7 | 103.9 | 90.9 | 89.6 |
| 67.5° | *4469.1* | *2065.6* | *145.3* | *116.4* | *115.6* | *116.4* | *119.4* | *110.6* | *92.1* | *81.7* | *80.0* |
| 70° | 4116.9 | 1643.0 | 116.4 | 96.7 | 100.5 | 98.4 | 106.8 | 100.9 | 82.9 | 72.5 | 71.2 |
| 72.5° | 3359.3 | 1183.6 | 88.8 | 80.0 | 77.1 | 80.4 | 96.3 | 90.9 | 69.1 | 57.4 | 56.1 |
| 75° | 1963.0 | 631.6 | 66.2 | 63.2 | 55.7 | 67.0 | 85.4 | 77.5 | 52.8 | 42.3 | 41.0 |
| 77.5° | 639.1 | 220.3 | 48.6 | 46.5 | 41.5 | 54.0 | 72.9 | 65.3 | 43.1 | 33.5 | 32.2 |
| 80° | 171.3 | 66.6 | 33.1 | 30.6 | 26.8 | 40.2 | 57.8 | 51.9 | 31.0 | 21.8 | 21.4 |
| 82.5° | 68.7 | 28.1 | 19.3 | 17.2 | 14.7 | 27.6 | 45.7 | 41.9 | 23.0 | 13.8 | 13.8 |
| 85° | 22.2 | 9.2 | 7.1 | 5.4 | 6.7 | 17.2 | 27.2 | 28.5 | 16.3 | 7.1 | 5.4 |
| 87.5° | 2.9 | 1.3 | 1.3 | 1.7 | 1.3 | 2.9 | 8.4 | 8.0 | 4.6 | 0.8 | 0.0 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |


HS
SS

0

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Peachtree City, GA 30269

# LM-79-2008: Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Report Prepared for

Cooper Lighting Solutions

McGRAW-EDISON

Report Number: SP1-1908-441-3-R4

Test Date: 10/02/2019

Luminaire Tested: SA1C-740-U-5WQ

Data in this report applies to families of products SA1C-740-U-5WQ

Data valid for all products using SA and SB light squares

Report Generated By FNC07603 / LDUCLS01DT446
Version: v6.13

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## Test Information

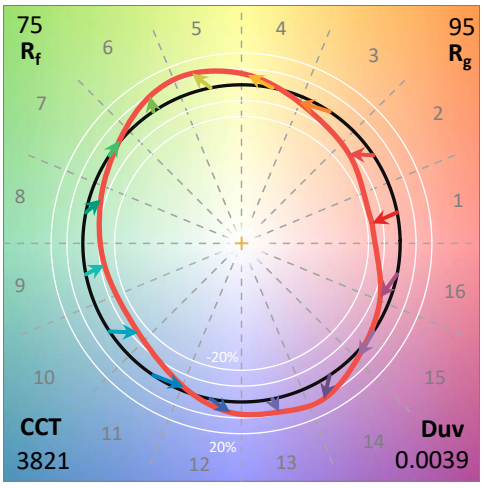
| | |
|---|---|
| Test Method: | LM-79-2008 |
| Report Number: | SP1-1908-441-3-R4 |
| Test Lab: | COOPER LIGHTING SOLUTIONS |
| Photometer: | SP1 - 76IN SPHERE |
| Measurement Geometry: | 4π |
| Issue Date: | 11/05/2024 |
| Manufacturer: | COOPER LIGHTING SOLUTIONS |
| Product Line: | McGRAW-EDISON |
| Catalog Number: | **SA1C-740-U-5WQ** |
| Description: | McGRAW EDISON ROADWAY AND AREA LUMINAIRE |

***THIS IS A REVISION OF SP1-1908-441-3-R3. TO UPDATE THE CATALOG INFORMATION.***TESTED IN SITU. ROADWAY AND AREA LUMINAIRE. (1) 70 CRI, 4000K, 1050MA LIGHTSQUARE WITH 16 LEDS AND TYPE V WIDE OPTICS.

## Spectral Parameters

| | | | | | |
|---|---|---|---|---|---|
| CCT (K): | 3821 | CRI (Ra): | 72.3 | | |
| CIE u': | 0.2264 | R1: | 68.5 | R9: | -33.5 |
| CIE v': | 0.5098 | R2: | 78.5 | R10: | 50.8 |
| Duv: | 0.0039 | R3: | 88.2 | R11: | 69.2 |
| CIE x: | 0.3918 | R4: | 72.2 | R12: | 48.9 |
| CIE y: | 0.3921 | R5: | 69.0 | R13: | 69.8 |
| CIE z: | 0.2161 | R6: | 71.0 | R14: | 93.4 |
| Peak Wavelength (nm): | 585 | R7: | 80.4 | | |
| Dominant Wavelength (nm): | 577 | R8: | 50.4 | | |
| Purity: | 35.4 | | | | |

| | |
|---|---|
| Rf: | 75.5 |
| Rg: | 94.8 |




## Test Conditions

| | |
|---|---|
| Stabilization Time: | 67M |
| Operation Time: | 12H |
| Room Temperature (°C) / RH%: | 25.0./44% |
| Sphere Temperature (°C): | 25.7 |

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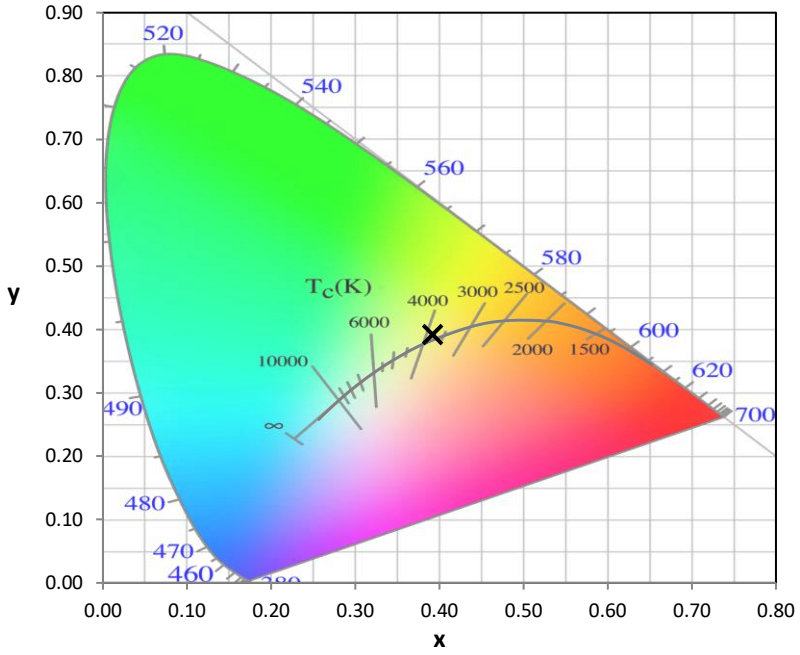
REPORT NUMBER: SP1-1908-441-3-R4

| Measurement and Test Equipment | | | |
|---|---|---|---|
| Instrument | Identification Number | Calibration Date | Calibration Due Date |
| Photometer | IN0058 | 6/28/2019 | 12/28/2019 |
| Power Meter | IN0071 | 12/5/2018 | 12/5/2019 |
| AC Power Source | IN0063 | 12/5/2018 | 12/5/2019 |
| DC Power Source | IN0208 | 12/5/2018 | 12/5/2019 |
| Sphere Thermometer | IN0085 | 12/5/2018 | 12/5/2019 |
| Room Thermometer | IN0046 | 12/5/2018 | 12/5/2019 |

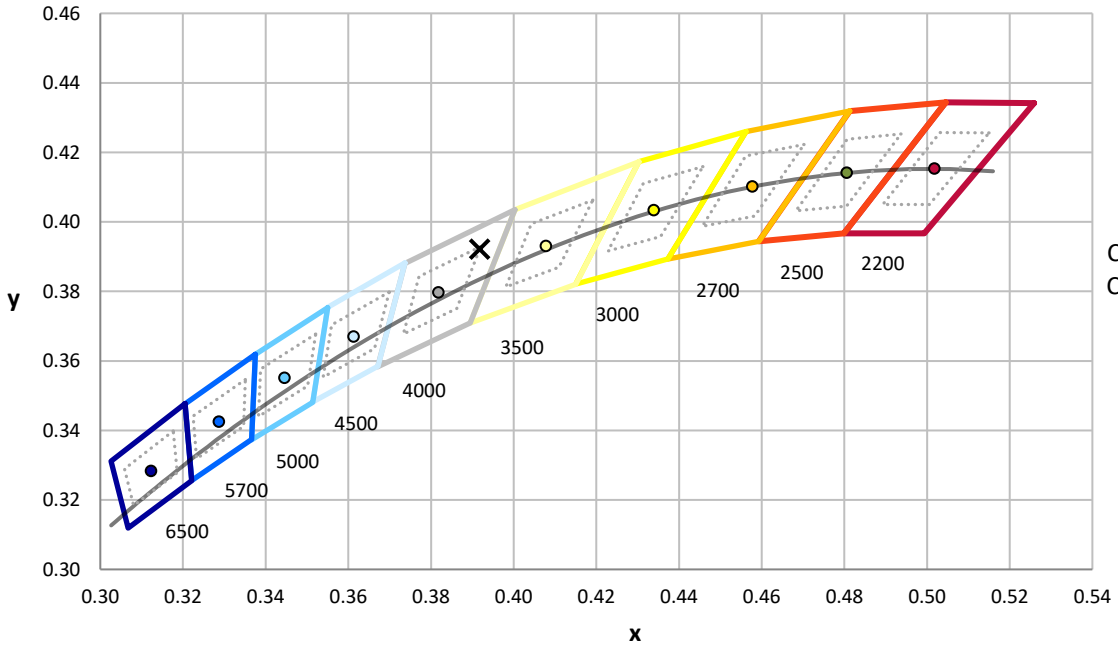
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

REPORT NUMBER: SP1-1908-441-3-R4

## CIE 1931 Chromaticity Diagram




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



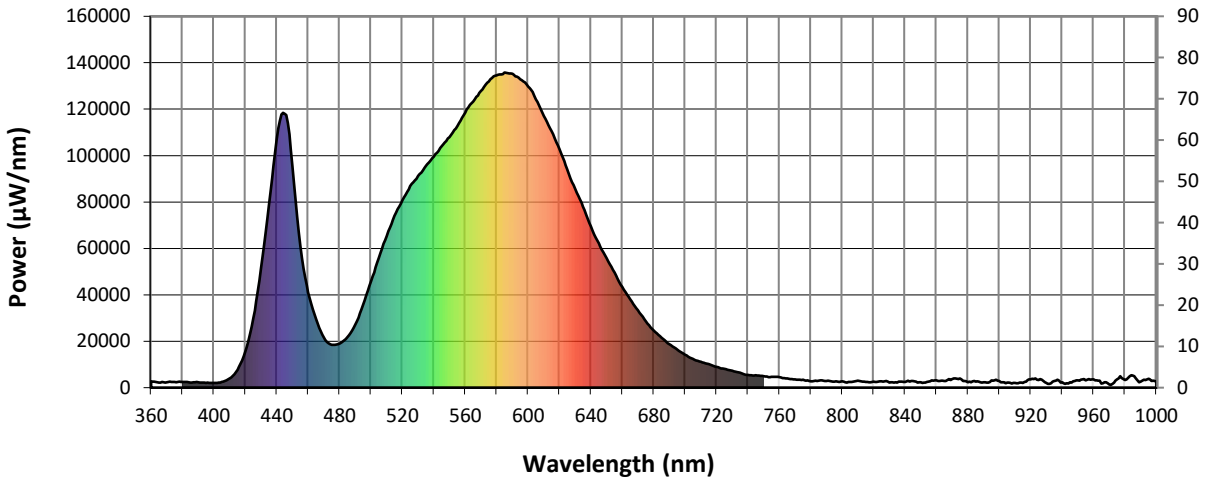

CCT = 3821K
CIE x = 0.3918
CIE y = 0.3921
Duv = 0.0039

Point lies inside the ANSI 4000K 7-step quadrangle

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## Photopic Flux vs. Wavelength



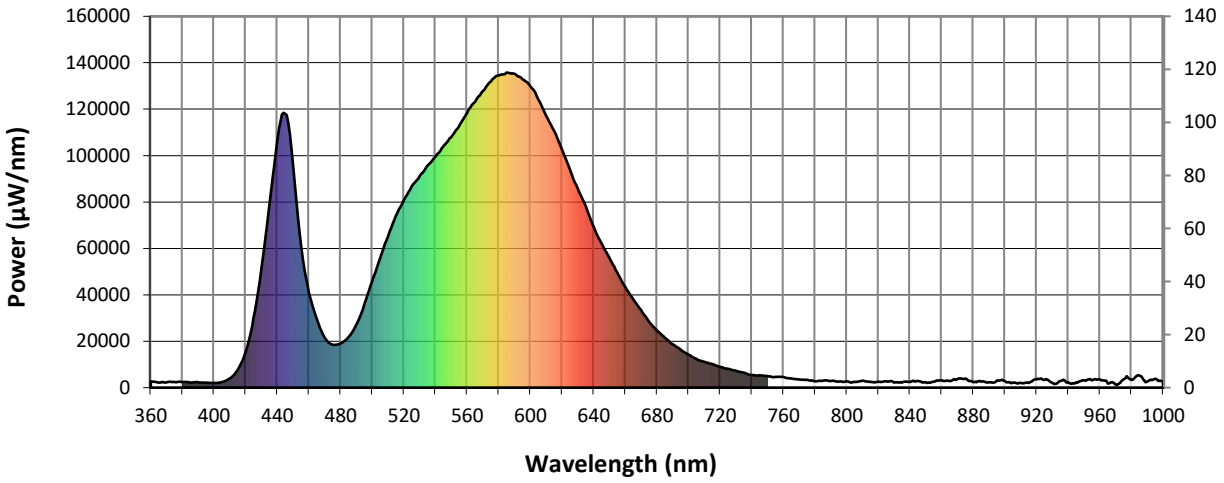

######

| 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 | 2662 | NR | 490 | 27227 | NR | 620 | 102725 | NR | 750 | 4998 | NR | 880 | 2294 | NR |
| 365 | 2227 | NR | 495 | 35672 | NR | 625 | 94018 | NR | 755 | 4638 | NR | 885 | 2526 | NR |
| 370 | 2351 | NR | 500 | 45857 | NR | 630 | 85530 | NR | 760 | 4579 | NR | 890 | 2275 | NR |
| 375 | 2487 | NR | 505 | 55772 | NR | 635 | 77990 | NR | 765 | 3952 | NR | 895 | 3151 | NR |
| 380 | 2507 | NR | 510 | 65358 | NR | 640 | 69405 | NR | 770 | 3495 | NR | 900 | 2915 | NR |
| 385 | 2244 | NR | 515 | 73945 | NR | 645 | 62112 | NR | 775 | 3353 | NR | 905 | 2197 | NR |
| 390 | 2299 | NR | 520 | 80747 | NR | 650 | 55830 | NR | 780 | 2778 | NR | 910 | 2048 | NR |
| 395 | 2056 | NR | 525 | 86794 | NR | 655 | 49542 | NR | 785 | 2954 | NR | 915 | 2045 | NR |
| 400 | 2025 | NR | 530 | 91185 | NR | 660 | 43371 | NR | 790 | 2859 | NR | 920 | 3527 | NR |
| 405 | 2414 | NR | 535 | 95640 | NR | 665 | 38089 | NR | 795 | 2638 | NR | 925 | 3296 | NR |
| 410 | 3944 | NR | 540 | 99533 | NR | 670 | 33284 | NR | 800 | 2710 | NR | 930 | 2096 | NR |
| 415 | 7705 | NR | 545 | 104097 | NR | 675 | 28574 | NR | 805 | 2390 | NR | 935 | 2810 | NR |
| 420 | 15513 | NR | 550 | 107982 | NR | 680 | 24590 | NR | 810 | 2947 | NR | 940 | 2304 | NR |
| 425 | 29927 | NR | 555 | 112790 | NR | 685 | 21480 | NR | 815 | 2387 | NR | 945 | 2250 | NR |
| 430 | 51389 | NR | 560 | 118428 | NR | 690 | 18698 | NR | 820 | 2557 | NR | 950 | 3082 | NR |
| 435 | 78905 | NR | 565 | 123208 | NR | 695 | 16372 | NR | 825 | 2693 | NR | 955 | 3173 | NR |
| 440 | 106921 | NR | 570 | 127740 | NR | 700 | 14200 | NR | 830 | 2208 | NR | 960 | 3569 | NR |
| 445 | 118008 | NR | 575 | 131879 | NR | 705 | 12325 | NR | 835 | 2160 | NR | 965 | 1744 | NR |
| 450 | 95722 | NR | 580 | 134489 | NR | 710 | 11122 | NR | 840 | 2493 | NR | 970 | 1283 | NR |
| 455 | 61053 | NR | 585 | 135793 | NR | 715 | 10157 | NR | 845 | 2809 | NR | 975 | 3622 | NR |
| 460 | 41109 | NR | 590 | 135243 | NR | 720 | 8957 | NR | 850 | 2287 | NR | 980 | 3346 | NR |
| 465 | 29591 | NR | 595 | 132928 | NR | 725 | 8084 | NR | 855 | 2564 | NR | 985 | 5229 | NR |
| 470 | 21545 | NR | 600 | 129738 | NR | 730 | 7241 | NR | 860 | 3166 | NR | 990 | 2613 | NR |
| 475 | 18425 | NR | 605 | 124239 | NR | 735 | 6387 | NR | 865 | 2867 | NR | 995 | 3838 | NR |
| 480 | 19056 | NR | 610 | 116984 | NR | 740 | 5430 | NR | 870 | 3742 | NR | 1000 | 2626 | NR |
| 485 | 21740 | NR | 615 | 110543 | NR | 745 | 5284 | NR | 875 | 3912 | NR | | | |

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## Scotopic Flux vs. Wavelength



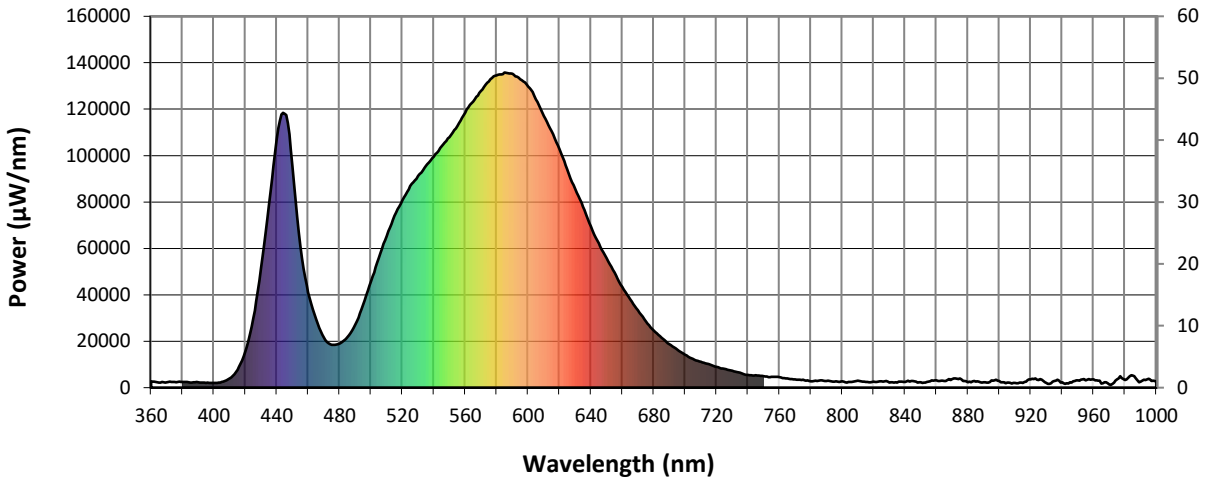

**Scotopic Lumens: 10930.8** **S/P: 1.47**

| 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 | 2662 | NR | 490 | 27227 | NR | 620 | 102725 | NR | 750 | 4998 | NR | 880 | 2294 | NR |
| 365 | 2227 | NR | 495 | 35672 | NR | 625 | 94018 | NR | 755 | 4638 | NR | 885 | 2526 | NR |
| 370 | 2351 | NR | 500 | 45857 | NR | 630 | 85530 | NR | 760 | 4579 | NR | 890 | 2275 | NR |
| 375 | 2487 | NR | 505 | 55772 | NR | 635 | 77990 | NR | 765 | 3952 | NR | 895 | 3151 | NR |
| 380 | 2507 | NR | 510 | 65358 | NR | 640 | 69405 | NR | 770 | 3495 | NR | 900 | 2915 | NR |
| 385 | 2244 | NR | 515 | 73945 | NR | 645 | 62112 | NR | 775 | 3353 | NR | 905 | 2197 | NR |
| 390 | 2299 | NR | 520 | 80747 | NR | 650 | 55830 | NR | 780 | 2778 | NR | 910 | 2048 | NR |
| 395 | 2056 | NR | 525 | 86794 | NR | 655 | 49542 | NR | 785 | 2954 | NR | 915 | 2045 | NR |
| 400 | 2025 | NR | 530 | 91185 | NR | 660 | 43371 | NR | 790 | 2859 | NR | 920 | 3527 | NR |
| 405 | 2414 | NR | 535 | 95640 | NR | 665 | 38089 | NR | 795 | 2638 | NR | 925 | 3296 | NR |
| 410 | 3944 | NR | 540 | 99533 | NR | 670 | 33284 | NR | 800 | 2710 | NR | 930 | 2096 | NR |
| 415 | 7705 | NR | 545 | 104097 | NR | 675 | 28574 | NR | 805 | 2390 | NR | 935 | 2810 | NR |
| 420 | 15513 | NR | 550 | 107982 | NR | 680 | 24590 | NR | 810 | 2947 | NR | 940 | 2304 | NR |
| 425 | 29927 | NR | 555 | 112790 | NR | 685 | 21480 | NR | 815 | 2387 | NR | 945 | 2250 | NR |
| 430 | 51389 | NR | 560 | 118428 | NR | 690 | 18698 | NR | 820 | 2557 | NR | 950 | 3082 | NR |
| 435 | 78905 | NR | 565 | 123208 | NR | 695 | 16372 | NR | 825 | 2693 | NR | 955 | 3173 | NR |
| 440 | 106921 | NR | 570 | 127740 | NR | 700 | 14200 | NR | 830 | 2208 | NR | 960 | 3569 | NR |
| 445 | 118008 | NR | 575 | 131879 | NR | 705 | 12325 | NR | 835 | 2160 | NR | 965 | 1744 | NR |
| 450 | 95722 | NR | 580 | 134489 | NR | 710 | 11122 | NR | 840 | 2493 | NR | 970 | 1283 | NR |
| 455 | 61053 | NR | 585 | 135793 | NR | 715 | 10157 | NR | 845 | 2809 | NR | 975 | 3622 | NR |
| 460 | 41109 | NR | 590 | 135243 | NR | 720 | 8957 | NR | 850 | 2287 | NR | 980 | 3346 | NR |
| 465 | 29591 | NR | 595 | 132928 | NR | 725 | 8084 | NR | 855 | 2564 | NR | 985 | 5229 | NR |
| 470 | 21545 | NR | 600 | 129738 | NR | 730 | 7241 | NR | 860 | 3166 | NR | 990 | 2613 | NR |
| 475 | 18425 | NR | 605 | 124239 | NR | 735 | 6387 | NR | 865 | 2867 | NR | 995 | 3838 | NR |
| 480 | 19056 | NR | 610 | 116984 | NR | 740 | 5430 | NR | 870 | 3742 | NR | 1000 | 2626 | NR |
| 485 | 21740 | NR | 615 | 110543 | NR | 745 | 5284 | NR | 875 | 3912 | NR | | | |

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## Melanopic Flux vs. Wavelength




**Melanopic Lumens: 4115.9** **M/P: 0.55**

| 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 | 2662 | NR | 490 | 27227 | NR | 620 | 102725 | NR | 750 | 4998 | NR | 880 | 2294 | NR |
| 365 | 2227 | NR | 495 | 35672 | NR | 625 | 94018 | NR | 755 | 4638 | NR | 885 | 2526 | NR |
| 370 | 2351 | NR | 500 | 45857 | NR | 630 | 85530 | NR | 760 | 4579 | NR | 890 | 2275 | NR |
| 375 | 2487 | NR | 505 | 55772 | NR | 635 | 77990 | NR | 765 | 3952 | NR | 895 | 3151 | NR |
| 380 | 2507 | NR | 510 | 65358 | NR | 640 | 69405 | NR | 770 | 3495 | NR | 900 | 2915 | NR |
| 385 | 2244 | NR | 515 | 73945 | NR | 645 | 62112 | NR | 775 | 3353 | NR | 905 | 2197 | NR |
| 390 | 2299 | NR | 520 | 80747 | NR | 650 | 55830 | NR | 780 | 2778 | NR | 910 | 2048 | NR |
| 395 | 2056 | NR | 525 | 86794 | NR | 655 | 49542 | NR | 785 | 2954 | NR | 915 | 2045 | NR |
| 400 | 2025 | NR | 530 | 91185 | NR | 660 | 43371 | NR | 790 | 2859 | NR | 920 | 3527 | NR |
| 405 | 2414 | NR | 535 | 95640 | NR | 665 | 38089 | NR | 795 | 2638 | NR | 925 | 3296 | NR |
| 410 | 3944 | NR | 540 | 99533 | NR | 670 | 33284 | NR | 800 | 2710 | NR | 930 | 2096 | NR |
| 415 | 7705 | NR | 545 | 104097 | NR | 675 | 28574 | NR | 805 | 2390 | NR | 935 | 2810 | NR |
| 420 | 15513 | NR | 550 | 107982 | NR | 680 | 24590 | NR | 810 | 2947 | NR | 940 | 2304 | NR |
| 425 | 29927 | NR | 555 | 112790 | NR | 685 | 21480 | NR | 815 | 2387 | NR | 945 | 2250 | NR |
| 430 | 51389 | NR | 560 | 118428 | NR | 690 | 18698 | NR | 820 | 2557 | NR | 950 | 3082 | NR |
| 435 | 78905 | NR | 565 | 123208 | NR | 695 | 16372 | NR | 825 | 2693 | NR | 955 | 3173 | NR |
| 440 | 106921 | NR | 570 | 127740 | NR | 700 | 14200 | NR | 830 | 2208 | NR | 960 | 3569 | NR |
| 445 | 118008 | NR | 575 | 131879 | NR | 705 | 12325 | NR | 835 | 2160 | NR | 965 | 1744 | NR |
| 450 | 95722 | NR | 580 | 134489 | NR | 710 | 11122 | NR | 840 | 2493 | NR | 970 | 1283 | NR |
| 455 | 61053 | NR | 585 | 135793 | NR | 715 | 10157 | NR | 845 | 2809 | NR | 975 | 3622 | NR |
| 460 | 41109 | NR | 590 | 135243 | NR | 720 | 8957 | NR | 850 | 2287 | NR | 980 | 3346 | NR |
| 465 | 29591 | NR | 595 | 132928 | NR | 725 | 8084 | NR | 855 | 2564 | NR | 985 | 5229 | NR |
| 470 | 21545 | NR | 600 | 129738 | NR | 730 | 7241 | NR | 860 | 3166 | NR | 990 | 2613 | NR |
| 475 | 18425 | NR | 605 | 124239 | NR | 735 | 6387 | NR | 865 | 2867 | NR | 995 | 3838 | NR |
| 480 | 19056 | NR | 610 | 116984 | NR | 740 | 5430 | NR | 870 | 3742 | NR | 1000 | 2626 | NR |
| 485 | 21740 | NR | 615 | 110543 | NR | 745 | 5284 | NR | 875 | 3912 | NR | | | |

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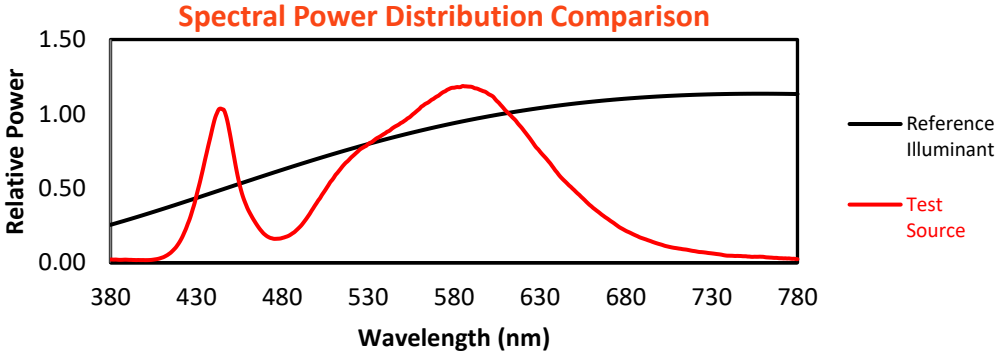
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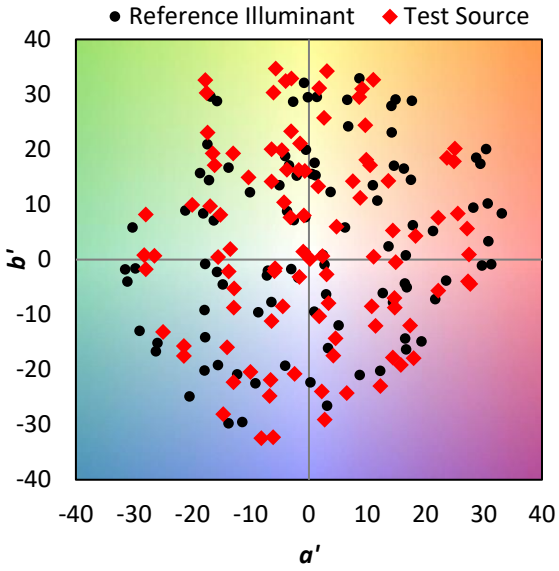
## Summary

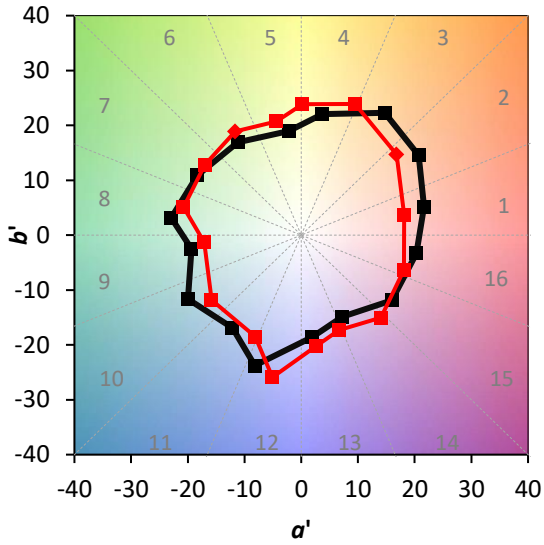
$R_f$ = 75.5
$R_g$ = 94.8
CIE $R_a$ = 72.3
$R_9$ = -33.5

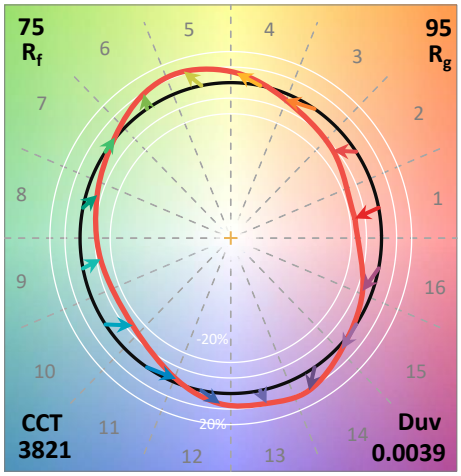
## Spectral Power Distribution Comparison

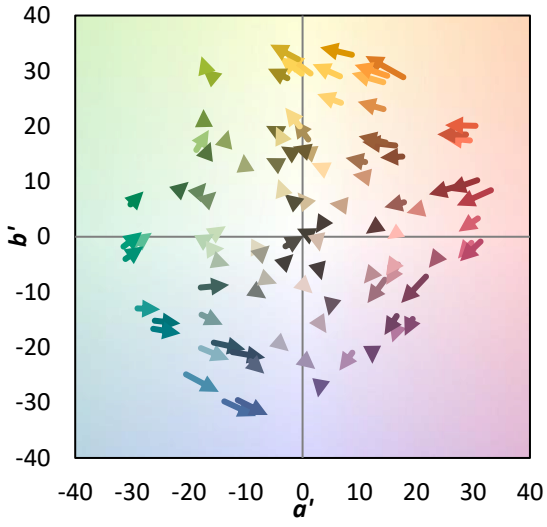



## Color Vector Graphics



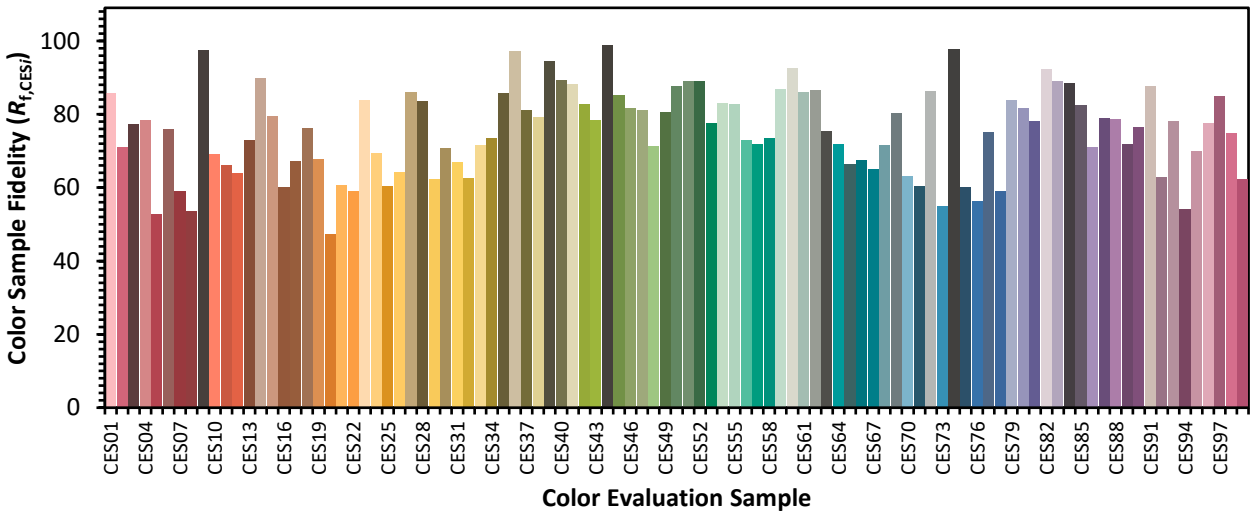
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Peachtree City, GA 30269

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

| | | | |
|---|---|---|---|
| CES01 = 85 | CES26 = 64 | CES51 = 89 | CES76 = 56 |
| CES02 = 61 | CES27 = 86 | CES52 = 89 | CES77 = 75 |
| CES03 = 30 | CES28 = 83 | CES53 = 78 | CES78 = 59 |
| CES04 = 70 | CES29 = 62 | CES54 = 83 | CES79 = 84 |
| CES05 = 47 | CES30 = 71 | CES55 = 83 | CES80 = 82 |
| CES06 = 50 | CES31 = 67 | CES56 = 73 | CES81 = 78 |
| CES07 = 40 | CES32 = 63 | CES57 = 72 | CES82 = 92 |
| CES08 = 39 | CES33 = 72 | CES58 = 73 | CES83 = 89 |
| CES09 = 29 | CES34 = 73 | CES59 = 87 | CES84 = 89 |
| CES10 = 74 | CES35 = 86 | CES60 = 92 | CES85 = 83 |
| CES11 = 57 | CES36 = 97 | CES61 = 86 | CES86 = 71 |
| CES12 = 63 | CES37 = 81 | CES62 = 87 | CES87 = 79 |
| CES13 = 42 | CES38 = 79 | CES63 = 75 | CES88 = 79 |
| CES14 = 74 | CES39 = 94 | CES64 = 72 | CES89 = 72 |
| CES15 = 71 | CES40 = 89 | CES65 = 66 | CES90 = 77 |
| CES16 = 46 | CES41 = 88 | CES66 = 67 | CES91 = 88 |
| CES17 = 49 | CES42 = 83 | CES67 = 65 | CES92 = 63 |
| CES18 = 56 | CES43 = 78 | CES68 = 71 | CES93 = 78 |
| CES19 = 72 | CES44 = 99 | CES69 = 80 | CES94 = 54 |
| CES20 = 65 | CES45 = 85 | CES70 = 63 | CES95 = 70 |
| CES21 = 86 | CES46 = 82 | CES71 = 60 | CES96 = 78 |
| CES22 = 78 | CES47 = 81 | CES72 = 86 | CES97 = 85 |
| CES23 = 92 | CES48 = 71 | CES73 = 55 | CES98 = 75 |
| CES24 = 91 | CES49 = 81 | CES74 = 98 | CES99 = 62 |
| CES25 = 72 | CES50 = 88 | CES75 = 60 | |

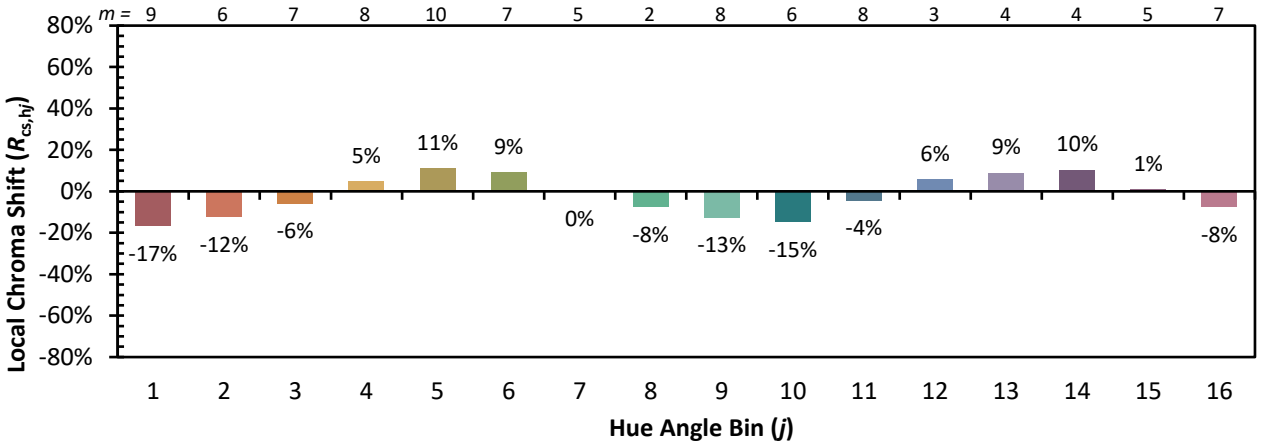


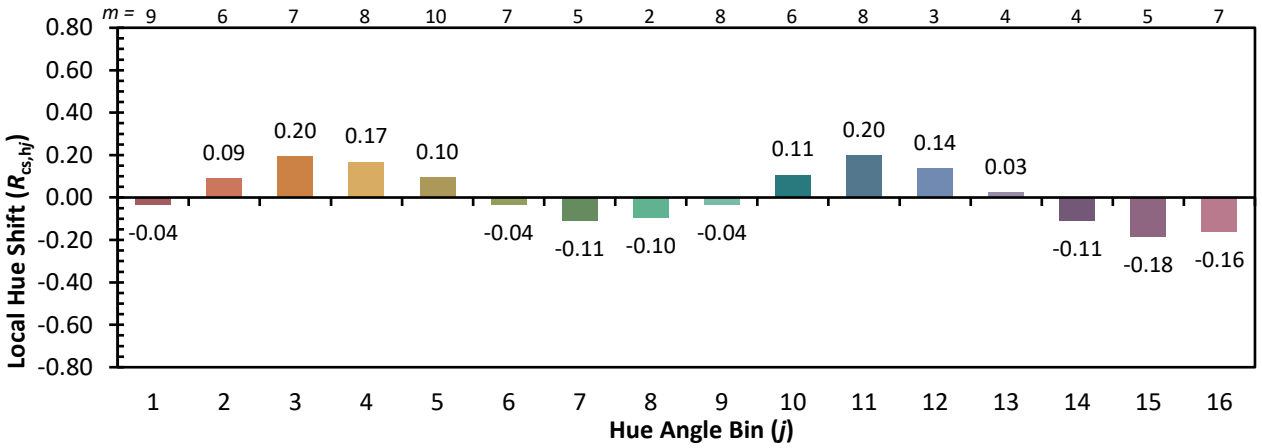
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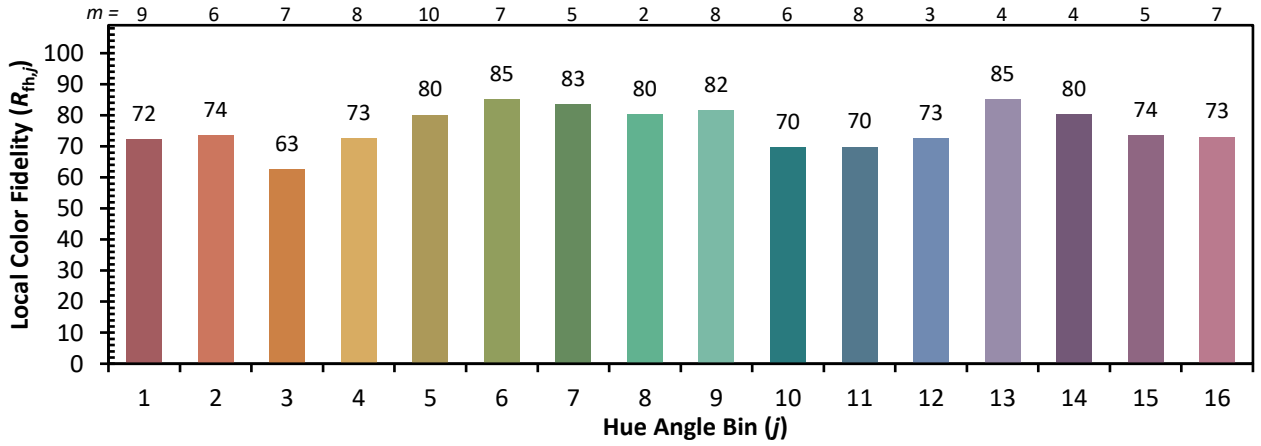
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### Color Rendition by Hue-Angle Bin



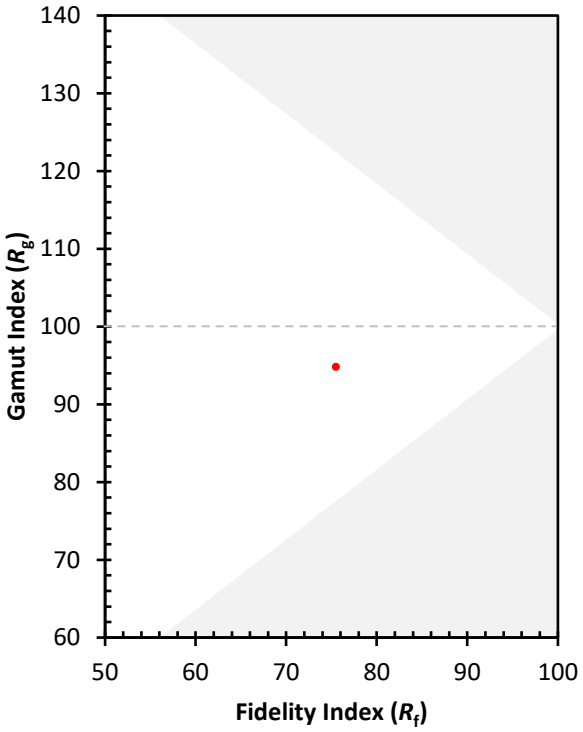



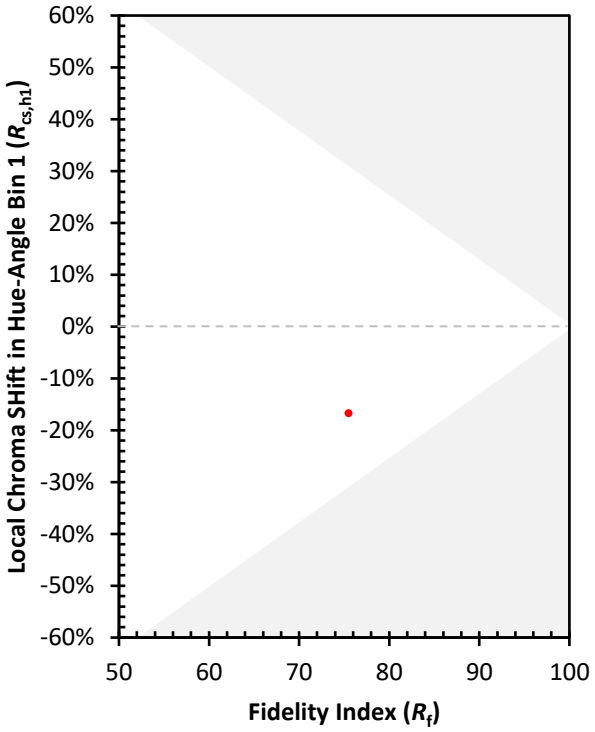
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### Measure Comparisons




(END OF REPORT)