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: P1197862

Luminaire Tested: GPC-SB1B-740-U-T4FT-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: | P1197862 |
| | TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-25) |
| Test Lab: | INNOVATION CENTER |
| Issue Date: | 3/14/2026 |
| Manufacturer: | COOPER LIGHTING SOLUTIONS |
| Product Line: | McGRAW-EDISON |
| Catalog Number: | GPC-SB1B-740-U-T4FT-HSS |
| Description: | GALLEON PEDESTRIAN LUMINAIRE |
| | (1) 70 CRI, 4000K, 450mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV FORWARD THROW OPT WITH HOUSE SIDE SHIELD |
| Light Source: | - |
| Ballast/Driver: | ELECTRONIC DRIVER |

**Summary**

| | |
|---|---|
| Lumens per Lamp: | N/A |
| Luminaire Lumens: | 4535 lumens |
| Efficiency: | N/A |
| Efficacy: | 113.9 lumens/watt |
| Luminous Opening: | Rectangular (W 0.5' x L: 0.5' x H: 0') |
| IES Classification: | Type IV - Short |
| BUG Rating: | B1 - U0 - G2 |

| | |
|---|---|
| Input Watts (W): | 39.8 |
| Input Voltage (V): | 120.0 |
| Input Current (Ain): | 0.33 |
| Voltage Rise (V): | NR |
| Power Factor: | 0.996 |
| Total Harmonic Distortion (THDi): | 5.305 |
| Frequency (hertz): | 60 |
| Stabilization Time: | NR |
| Operation Time: | NR |
| Ambient Temperature (°C): | NR |
| Test Distance: | 28.75 FT |

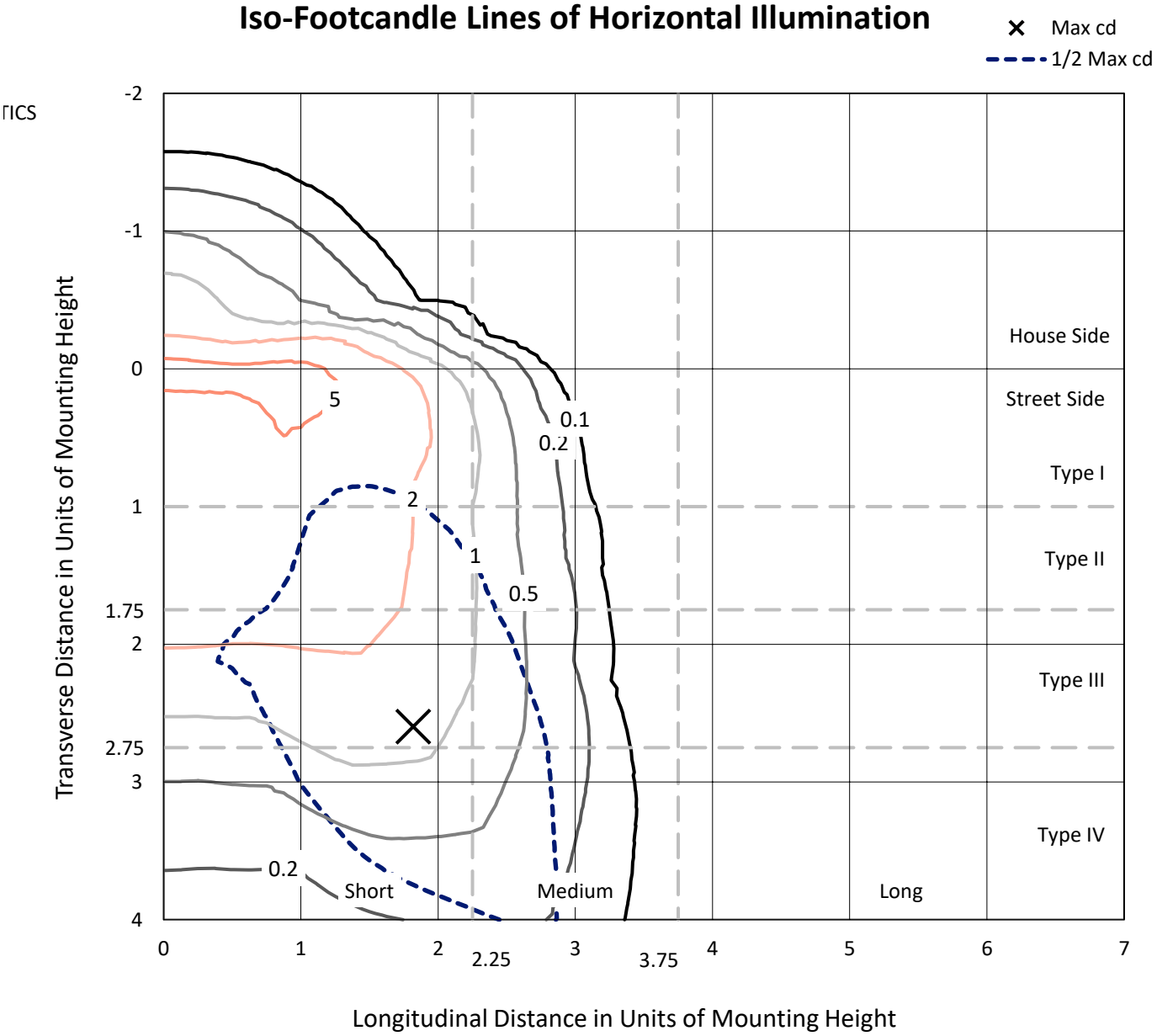


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REPORT NUMBER: P1197862
CATALOG NUMBER: GPC-SB1B-740-U-T4FT-HSS

## Iso-Footcandle Lines of Horizontal Illumination



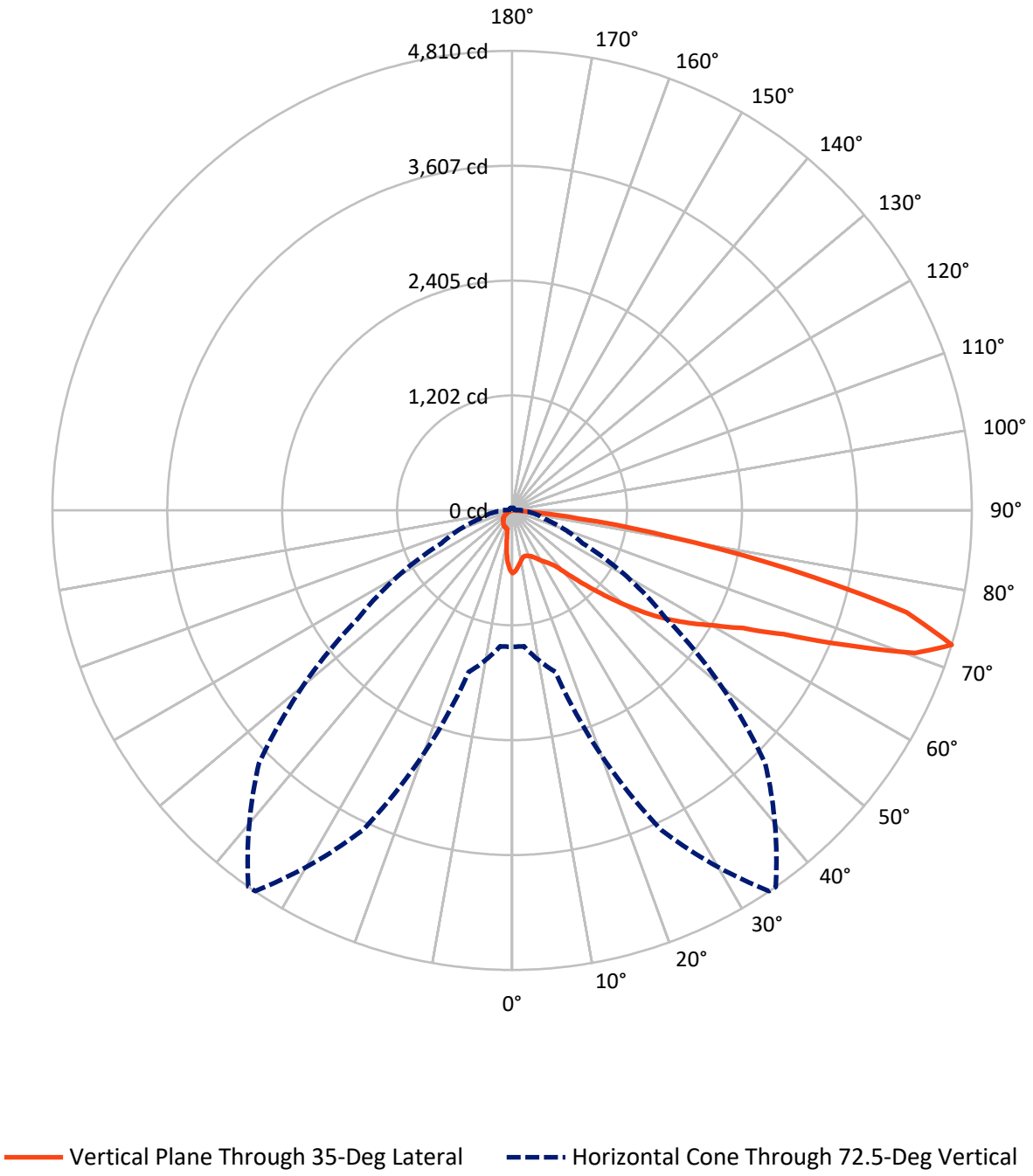

Based on 10 foot mounting height. Maximum calculated value = 6.6 fc
Type IV - Short - N/A

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## Luminous Intensity Polar Plot



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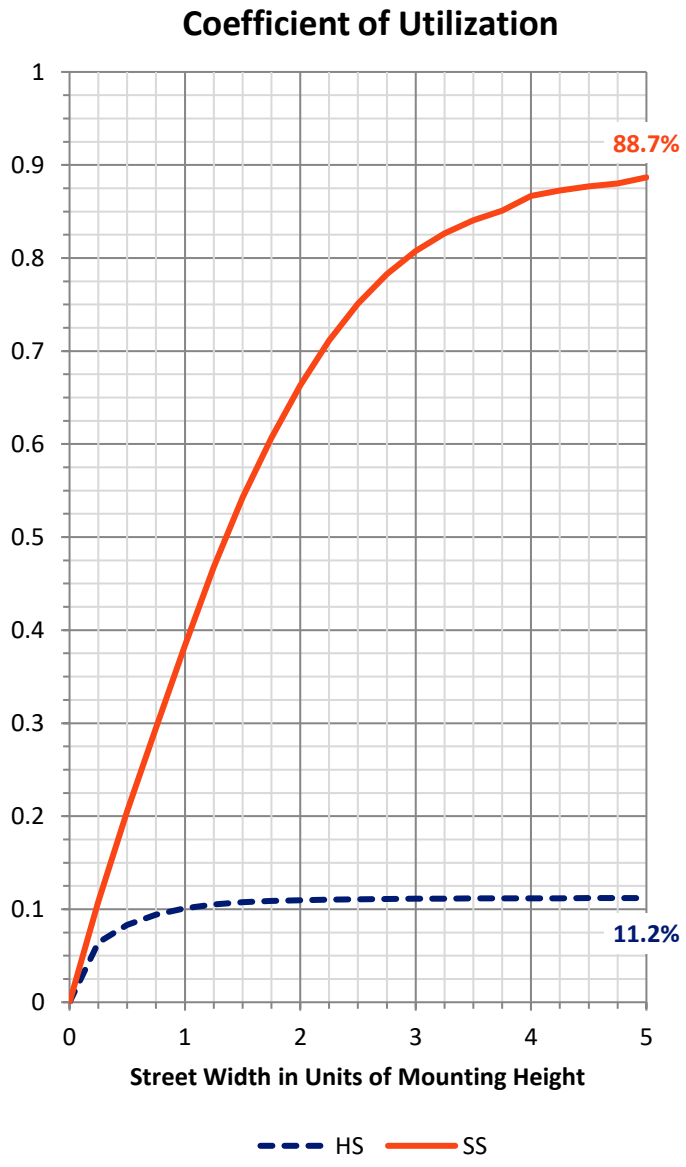
REPORT NUMBER: P1197862
CATALOG NUMBER: GPC-SB1B-740-U-T4FT-HSS

**FLUX DISTRIBUTION:**

| | | Downward | Upward | Total |
|---|---|---|---|---|
| **House Side** | Lumens | 510.4 | 0.0 | 510.4 |
| | % Fixture | 11.3 | 0.0 | 11.3 |
| **Street Side** | Lumens | 4024.6 | 0.0 | 4024.6 |
| | % Fixture | 88.7 | 0.0 | 88.7 |
| **Total** | Lumens | 4535.0 | 0.0 | 4535.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

**ZONAL LUMENS:**

| Zone | Lumens | % Fixture |
|---|---|---|
| 0°-10° | 54.0 | 1.2 |
| 10°-20° | 126.4 | 2.8 |
| 20°-30° | 205.2 | 4.5 |
| 30°-40° | 342.5 | 7.6 |
| 40°-50° | 647.9 | 14.3 |
| 50°-60° | 1029.6 | 22.7 |
| 60°-70° | 1273.7 | 28.1 |
| 70°-80° | 791.7 | 17.5 |
| 80°-90° | 64.0 | 1.4 |
| 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° | 4535.0 | 100.0 |
| 0°-180° | 4535.0 | 100.0 |



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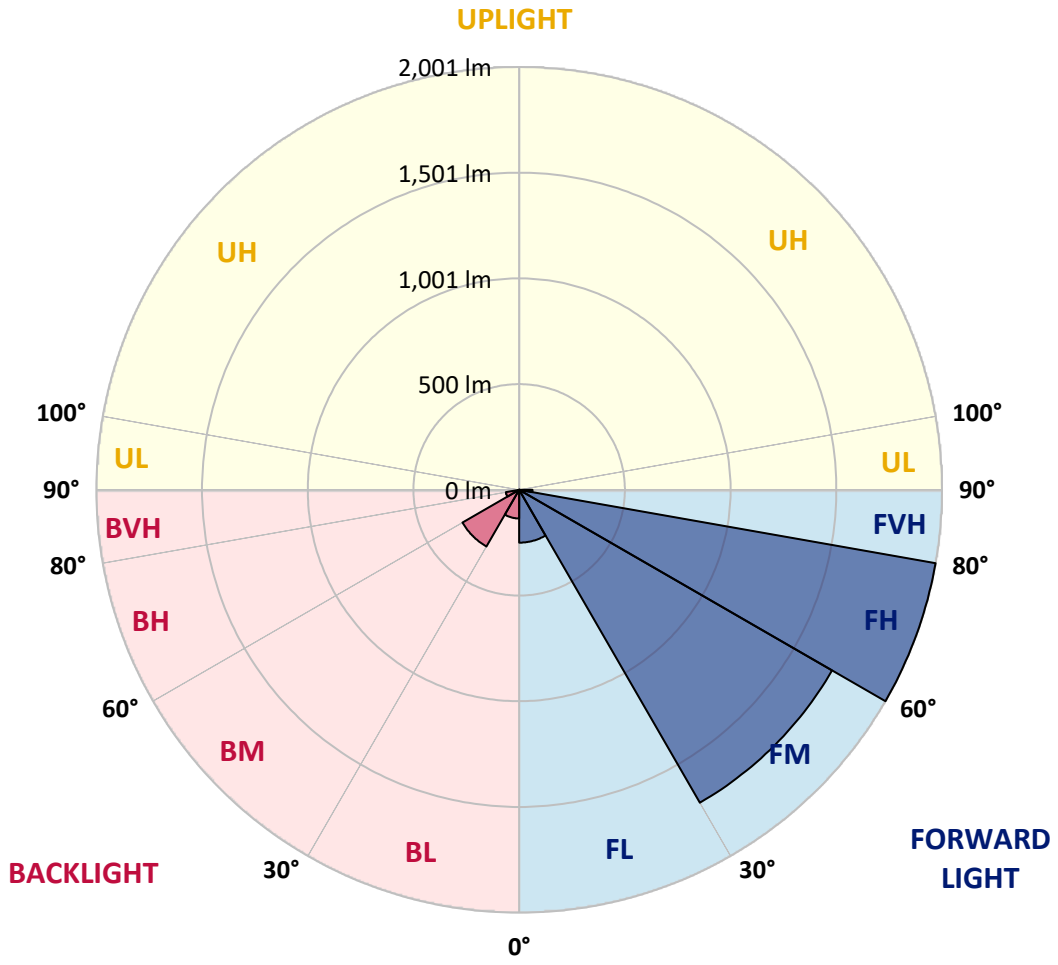
Scaled Data Report

REPORT NUMBER: P1197862
CATALOG NUMBER: GPC-SB1B-740-U-T4FT-HSS

## LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit B | U | G |
|---|---|---|---|---|---|---|
| FL | (0°-30°) | 250.0 | 5.5 | | | |
| FM | (30°-60°) | 1710.1 | 37.7 | | | |
| FH | (60°-80°) | 2001.4 | 44.1 | | | G2/5000 |
| FVH | (80°-90°) | 63.1 | 1.4 | | | G1/100 |
| BL | (0°-30°) | 135.6 | 3.0 | B1/500 | | |
| BM | (30°-60°) | 309.9 | 6.8 | B1/1000 | | |
| BH | (60°-80°) | 64.0 | 1.4 | B0/110 | | G0/110 |
| BVH | (80°-90°) | 0.9 | 0.0 | | | G0/10 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

**BUG Rating: B1-U0-G2**
Type IV Short



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REPORT NUMBER: P1197862
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**CANDELA DISTRIBUTION (FULL):**

| | 0° | 5° | 15° | 25° | 34° | 35° | 45° | 55° | 65° | 75° | 85° |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0° | 657.3 | 657.3 | 657.3 | 657.3 | 657.3 | *657.3* | 657.3 | 657.3 | 657.3 | 657.3 | 657.3 |
| 2.5° | 628.0 | 633.3 | 634.3 | 636.0 | 636.0 | *638.0* | 641.3 | 646.0 | 653.6 | 657.6 | 660.3 |
| 5° | 578.9 | 582.8 | 587.8 | 591.8 | 599.5 | *600.5* | 613.4 | 626.0 | 643.6 | 656.9 | 666.2 |
| 7.5° | 529.3 | 534.0 | 540.6 | 550.3 | 560.2 | *563.2* | 582.8 | 604.1 | 632.0 | 656.9 | 672.6 |
| 10° | 494.5 | 494.8 | 500.8 | 510.4 | 526.4 | *530.0* | 553.9 | 584.2 | 619.1 | 653.0 | 678.5 |
| 12.5° | 474.8 | 477.2 | 479.8 | 487.1 | 502.4 | *504.8* | 530.3 | 565.9 | 606.1 | 650.6 | 685.5 |
| 15° | 474.8 | 476.5 | 478.2 | 481.8 | 494.1 | *496.1* | 518.7 | 554.3 | 599.5 | 651.6 | 696.8 |
| 17.5° | 479.8 | 482.5 | 481.2 | 485.5 | 498.4 | *499.8* | 519.7 | 550.9 | 599.1 | 657.9 | 714.1 |
| 20° | 491.8 | 493.8 | 491.1 | 493.8 | 506.7 | *509.4* | 530.0 | 557.3 | 604.8 | 668.9 | 735.7 |
| 22.5° | 510.7 | 511.7 | 505.4 | 507.4 | 520.7 | *524.0* | 547.9 | 575.2 | 618.4 | 686.5 | 764.6 |
| 25° | 534.7 | 536.7 | 527.0 | 529.3 | 542.0 | *546.0* | 573.5 | 602.1 | 640.0 | 710.8 | 801.5 |
| 27.5° | 562.2 | 563.2 | 554.9 | 554.6 | 570.9 | *576.5* | 604.4 | 635.3 | 668.9 | 741.3 | 848.0 |
| 30° | 593.8 | 596.8 | 588.8 | 587.5 | 608.1 | *612.7* | 640.3 | 676.2 | 711.4 | 787.2 | 914.1 |
| 32.5° | 618.7 | 621.1 | 616.4 | 619.7 | 640.7 | *644.3* | 683.9 | 734.0 | 778.2 | 852.3 | 1004.2 |
| 35° | 654.6 | 655.9 | 645.3 | 651.3 | 675.2 | *684.5* | 743.3 | 815.1 | 862.3 | 934.1 | 1121.8 |
| 37.5° | 784.5 | 784.5 | 739.3 | 709.8 | 732.7 | *741.0* | 824.7 | 917.1 | 966.0 | 1043.7 | 1270.0 |
| 40° | 964.3 | 961.3 | 895.2 | 834.7 | 831.7 | *848.0* | 940.7 | 1045.7 | 1099.9 | 1175.3 | 1436.8 |
| 42.5° | 1156.0 | 1151.4 | 1061.3 | 1001.5 | 991.6 | *997.2* | 1074.6 | 1204.2 | 1259.4 | 1335.8 | 1616.3 |
| 45° | 1326.2 | 1324.8 | 1242.4 | 1162.0 | 1144.1 | *1162.0* | 1241.8 | 1389.6 | 1429.2 | 1509.6 | 1795.4 |
| 47.5° | 1468.7 | 1468.7 | 1408.6 | 1356.1 | 1346.8 | *1357.4* | 1468.1 | 1595.3 | 1591.7 | 1694.7 | 1969.8 |
| 50° | 1632.9 | 1631.6 | 1574.4 | 1551.8 | 1561.4 | *1576.4* | 1728.6 | 1812.0 | 1759.8 | 1876.5 | 2125.7 |
| 52.5° | 1747.9 | 1755.8 | 1736.2 | 1732.6 | 1781.7 | *1807.7* | 1993.1 | 2024.0 | 1910.3 | 2048.9 | 2242.3 |
| 55° | 1838.9 | 1848.2 | 1870.8 | 1896.4 | 1991.1 | *2025.0* | 2249.3 | 2225.0 | 2036.3 | 2198.4 | 2309.4 |
| 57.5° | 1967.8 | 1954.5 | 1989.4 | 2039.9 | 2193.1 | *2234.0* | 2497.5 | 2414.8 | 2137.6 | 2319.7 | 2316.7 |
| 60° | 2124.3 | 2126.3 | 2132.3 | 2196.1 | 2394.8 | *2447.3* | 2742.1 | 2594.2 | 2202.8 | 2394.2 | 2235.7 |
| 62.5° | 2312.4 | 2315.4 | 2327.7 | 2425.7 | 2665.6 | *2715.2* | 3002.6 | 2741.1 | 2232.7 | 2373.2 | 2026.3 |
| 65° | 2299.5 | 2312.1 | 2449.3 | 2784.6 | 3077.4 | *3126.2* | 3306.6 | 2844.1 | 2187.5 | 2181.8 | 1649.8 |
| 67.5° | 2094.8 | 2115.4 | 2345.0 | 3213.3 | 3698.1 | *3752.6* | 3674.2 | 2864.4 | 1992.4 | 1696.7 | 1076.3 |
| 70° | 1826.3 | 1833.6 | 2109.7 | 3598.7 | 4416.8 | *4472.0* | 4003.1 | 2641.4 | 1511.9 | 946.4 | 482.2 |
| 72.5° | *1426.2* | *1427.9* | *1751.8* | *3688.1* | *4806.9* | *4809.9* | *3744.9* | *1960.9* | *813.1* | *363.5* | *167.5* |
| 75° | 1018.8 | 1008.8 | 1173.3 | 2991.0 | 4229.1 | *4263.0* | 2807.5 | 919.8 | 310.7 | 171.8 | 83.4 |
| 77.5° | 546.3 | 557.3 | 663.9 | 1773.8 | 2921.5 | *2979.3* | 1531.9 | 265.2 | 158.2 | 117.0 | 55.2 |
| 80° | 168.8 | 178.1 | 272.1 | 812.1 | 1654.8 | *1689.7* | 567.9 | 118.0 | 110.3 | 83.4 | 36.2 |
| 82.5° | 53.2 | 55.2 | 126.9 | 341.3 | 686.8 | *702.8* | 164.5 | 66.8 | 75.4 | 55.2 | 21.3 |
| 85° | 15.3 | 15.6 | 56.5 | 127.3 | 169.8 | *173.1* | 46.2 | 25.9 | 43.2 | 34.2 | 11.0 |
| 87.5° | 1.7 | 5.3 | 21.3 | 21.3 | 15.0 | *14.6* | 5.0 | 5.6 | 12.3 | 4.3 | 2.0 |
| 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: P1197862
CATALOG NUMBER: GPC-SB1B-740-U-T4FT-HSS

**CANDELA DISTRIBUTION (continued):**

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0° | 657.3 | 657.3 | 657.3 | 657.3 | 657.3 | 657.3 | 657.3 | 657.3 | 657.3 | 657.3 | 657.3 |
| 2.5° | 658.6 | 658.9 | 654.6 | 647.3 | 639.3 | 632.7 | 624.4 | 617.7 | 613.1 | 611.7 | 614.1 |
| 5° | 663.3 | 660.9 | 648.6 | 626.4 | 599.8 | 576.9 | 551.3 | 531.0 | 517.7 | 512.1 | 514.1 |
| 7.5° | 670.2 | 663.6 | 636.7 | 592.8 | 542.0 | 496.8 | 450.9 | 415.4 | 392.8 | 381.5 | 383.1 |
| 10° | 676.2 | 662.9 | 616.7 | 544.3 | 466.5 | 398.1 | 336.3 | 293.4 | 269.5 | 258.2 | 258.5 |
| 12.5° | 681.9 | 662.6 | 590.8 | 486.8 | 381.5 | 297.7 | 240.2 | 219.0 | 212.3 | 210.0 | 209.3 |
| 15° | 692.5 | 663.6 | 558.3 | 421.0 | 296.7 | 225.0 | 204.0 | 203.7 | 205.0 | 204.4 | 204.0 |
| 17.5° | 707.1 | 664.6 | 521.4 | 351.2 | 228.9 | 198.4 | 197.4 | 200.4 | 202.4 | 201.4 | 201.0 |
| 20° | 726.1 | 668.6 | 482.2 | 282.1 | 196.7 | 191.7 | 194.1 | 196.7 | 198.4 | 196.7 | 196.4 |
| 22.5° | 752.6 | 675.5 | 439.3 | 226.6 | 186.4 | 187.7 | 189.7 | 192.7 | 194.4 | 192.1 | 191.7 |
| 25° | 785.2 | 686.5 | 397.1 | 197.0 | 181.4 | 183.1 | 186.1 | 189.4 | 191.4 | 189.1 | 188.7 |
| 27.5° | 827.4 | 704.1 | 358.2 | 190.4 | 176.4 | 177.4 | 181.8 | 186.7 | 189.4 | 186.4 | 186.4 |
| 30° | 888.5 | 733.0 | 324.6 | 193.4 | 173.5 | 171.1 | 177.1 | 184.1 | 187.1 | 184.4 | 184.1 |
| 32.5° | 969.6 | 773.9 | 304.0 | 198.0 | 172.1 | 163.8 | 169.5 | 178.4 | 183.4 | 181.8 | 181.8 |
| 35° | 1076.0 | 836.0 | 296.1 | 203.4 | 171.1 | 156.2 | 160.2 | 169.8 | 178.4 | 180.1 | 180.1 |
| 37.5° | 1204.9 | 922.4 | 298.4 | 205.7 | 168.1 | 149.9 | 151.9 | 160.2 | 171.5 | 176.8 | 178.1 |
| 40° | 1351.4 | 1023.1 | 311.7 | 203.4 | 164.8 | 144.5 | 144.9 | 151.2 | 161.2 | 169.1 | 171.8 |
| 42.5° | 1502.6 | 1140.8 | 336.3 | 194.7 | 161.8 | 139.9 | 138.9 | 143.2 | 149.9 | 155.5 | 157.8 |
| 45° | 1646.5 | 1261.7 | 360.5 | 182.8 | 158.2 | 135.2 | 132.9 | 134.6 | 135.9 | 138.2 | 139.6 |
| 47.5° | 1772.1 | 1346.8 | 353.6 | 171.8 | 153.2 | 129.9 | 125.9 | 125.3 | 121.3 | 121.0 | 120.6 |
| 50° | 1858.8 | 1365.4 | 314.0 | 160.8 | 145.9 | 123.9 | 117.6 | 113.6 | 106.7 | 103.3 | 103.7 |
| 52.5° | 1886.4 | 1292.0 | 256.5 | 149.9 | 133.9 | 116.0 | 107.0 | 100.7 | 92.0 | 89.1 | 88.7 |
| 55° | 1849.9 | 1148.1 | 205.0 | 136.6 | 117.3 | 105.3 | 95.4 | 87.1 | 80.1 | 76.4 | 76.4 |
| 57.5° | 1760.5 | 965.0 | 162.2 | 121.0 | 99.7 | 93.4 | 83.4 | 75.1 | 69.1 | 65.5 | 64.8 |
| 60° | 1612.3 | 766.3 | 128.3 | 102.3 | 85.1 | 80.4 | 70.1 | 64.8 | 59.5 | 55.2 | 54.2 |
| 62.5° | 1387.3 | 547.0 | 100.7 | 81.1 | 71.1 | 65.8 | 59.8 | 55.8 | 49.5 | 43.5 | 42.5 |
| 65° | 1082.6 | 334.6 | 77.8 | 59.5 | 57.2 | 54.5 | 50.8 | 47.2 | 39.5 | 33.6 | 32.6 |
| 67.5° | 682.9 | 158.5 | 55.5 | 44.9 | 45.2 | 43.9 | 42.2 | 39.2 | 33.6 | 28.2 | 27.6 |
| 70° | 300.7 | 76.8 | 36.6 | 34.2 | 33.6 | 33.6 | 34.9 | 33.9 | 28.6 | 23.6 | 22.6 |
| 72.5° | *102.3* | *41.2* | *27.2* | *25.9* | *24.3* | *23.9* | *29.2* | *28.2* | *22.9* | *18.3* | *17.3* |
| 75° | 53.5 | 27.6 | 19.9 | 18.6 | 14.6 | 17.6 | 23.3 | 21.9 | 16.3 | 12.0 | 11.0 |
| 77.5° | 34.9 | 19.6 | 13.6 | 12.0 | 8.3 | 11.6 | 17.3 | 15.3 | 9.6 | 6.0 | 5.3 |
| 80° | 21.9 | 13.0 | 8.0 | 5.6 | 4.0 | 6.3 | 9.3 | 6.6 | 3.7 | 1.3 | 1.0 |
| 82.5° | 11.6 | 6.6 | 3.0 | 2.0 | 1.7 | 2.0 | 2.3 | 1.7 | 0.7 | 0.0 | 0.0 |
| 85° | 4.7 | 2.3 | 1.0 | 0.7 | 0.3 | 0.0 | 0.7 | 0.3 | 0.0 | 0.0 | 0.0 |
| 87.5° | 1.7 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 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 |

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# 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

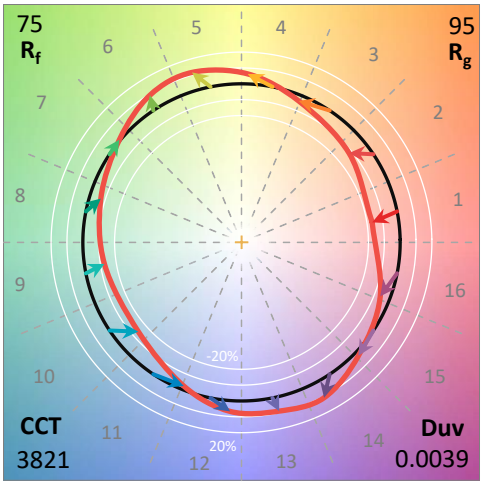
| | |
|---|---|
| Test Method: | LM-79-2008 |
| Report Number: | SP1-1908-441-3-R4 |
| Test Lab: | COOPER LIGHTING SOLUTIONS |
| Photometer: | SP1 - 76IN SPHERE |
| Measurement Geometry: | 4π |
| Issue Date: | 11/05/2024 |
| Manufacturer: | COOPER LIGHTING SOLUTIONS |
| Product Line: | McGRAW-EDISON |
| 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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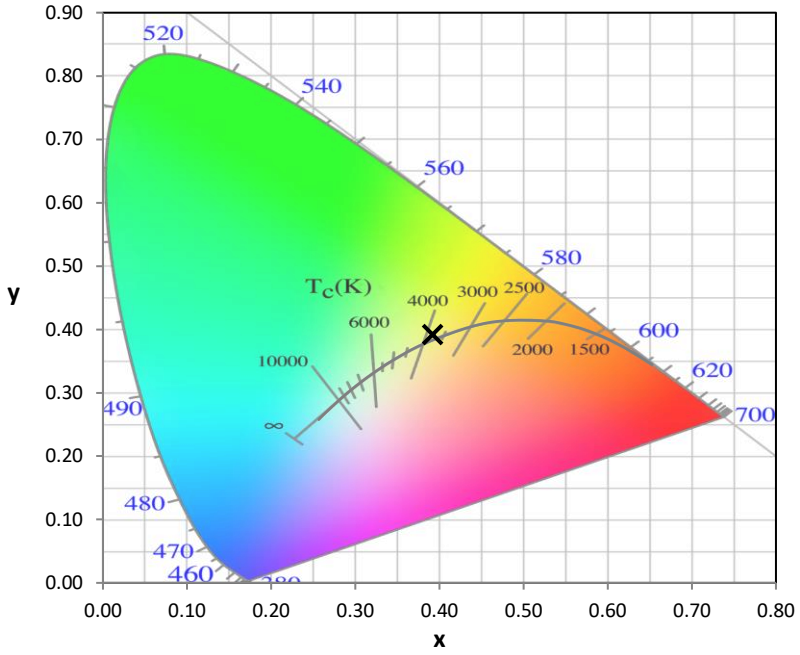
REPORT NUMBER: SP1-1908-441-3-R4

| 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 |

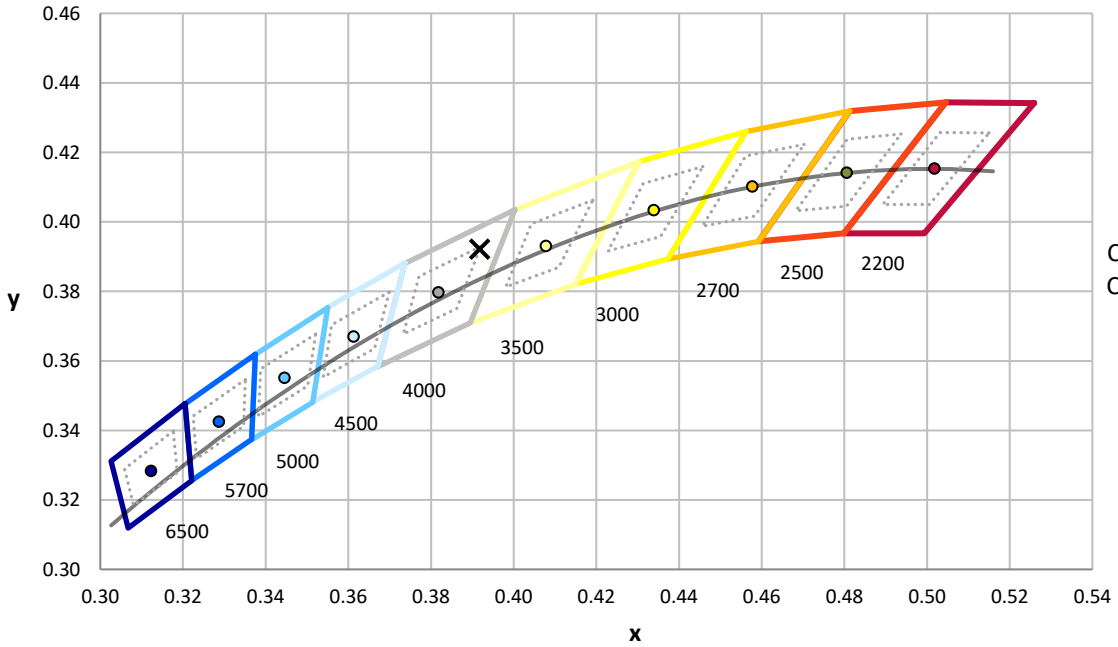
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1121 Highway 74 South
Peachtree City, GA 30269

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

## CIE 1931 Chromaticity Diagram




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



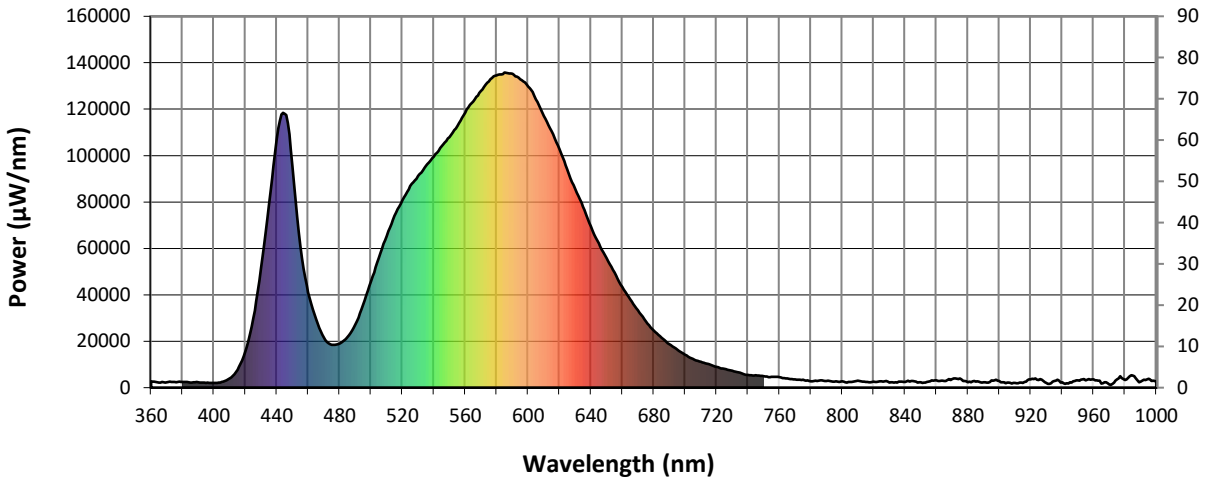

CCT = 3821K
CIE x = 0.3918
CIE y = 0.3921
Duv = 0.0039

Point lies inside the ANSI 4000K 7-step quadrangle

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## Photopic Flux vs. Wavelength



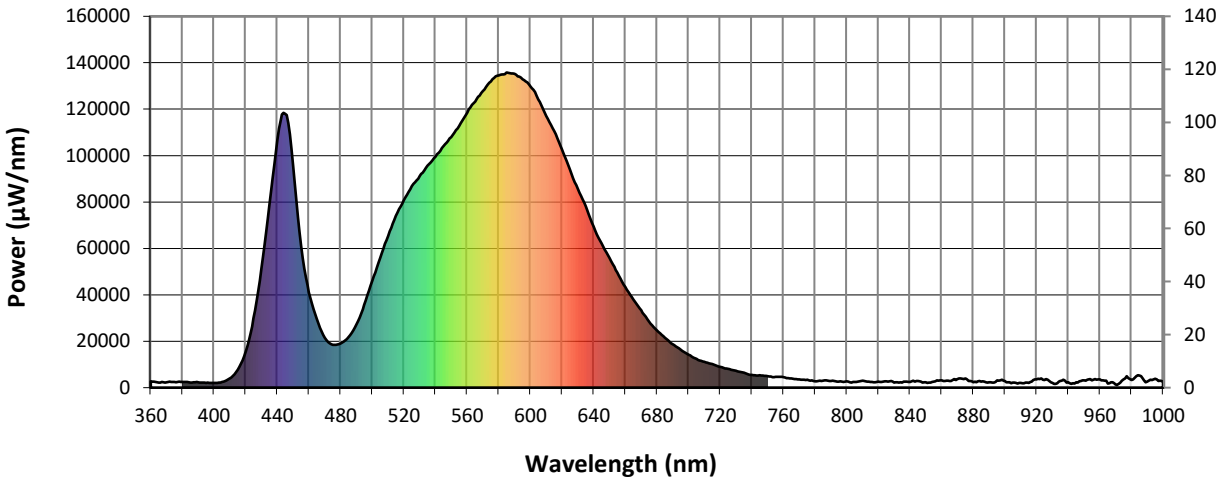

######

| 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



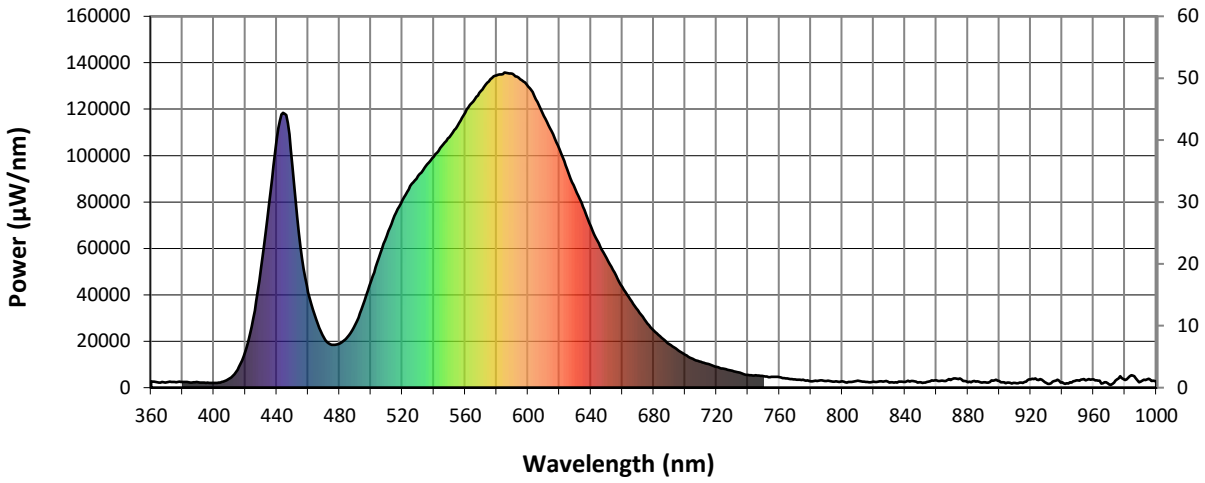

**Scotopic Lumens: 10930.8** **S/P: 1.47**

| 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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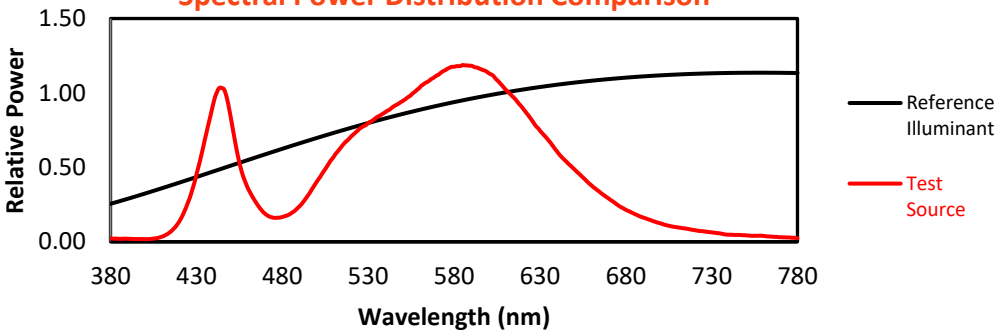
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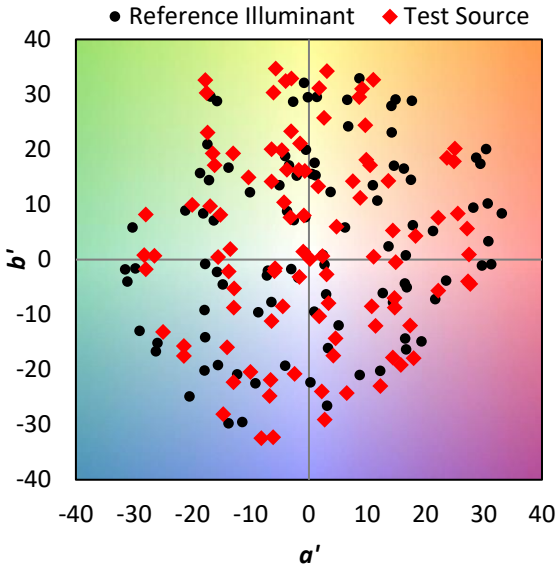
## Summary

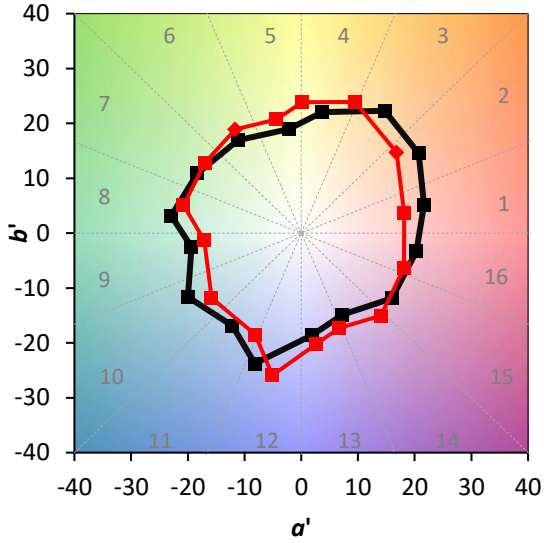
$R_f$ = 75.5
$R_g$ = 94.8
CIE $R_a$ = 72.3
$R_9$ = -33.5

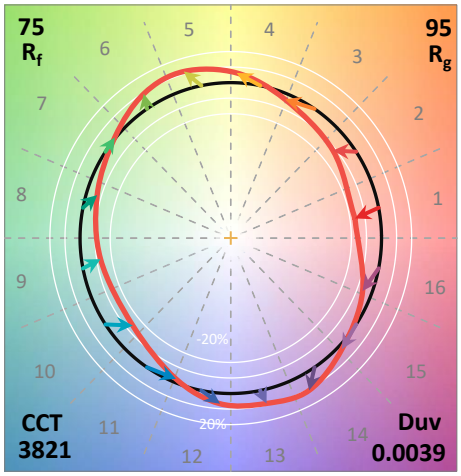
## Spectral Power Distribution Comparison

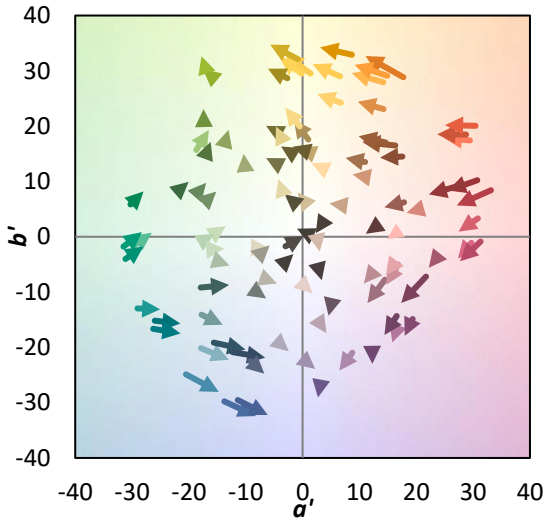



## Color Vector Graphics



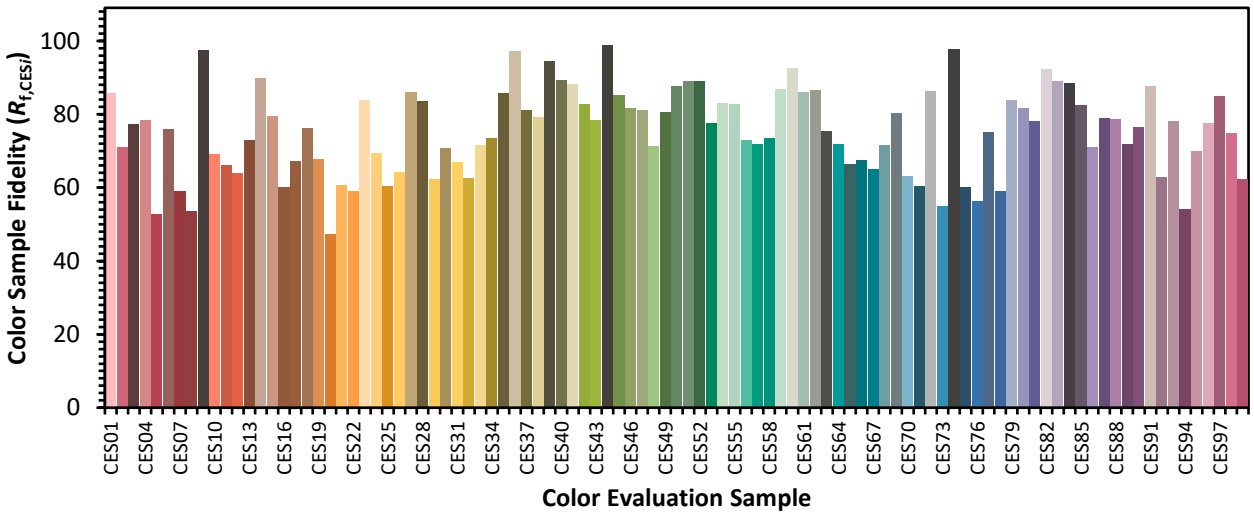
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Peachtree City, GA 30269

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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 | |

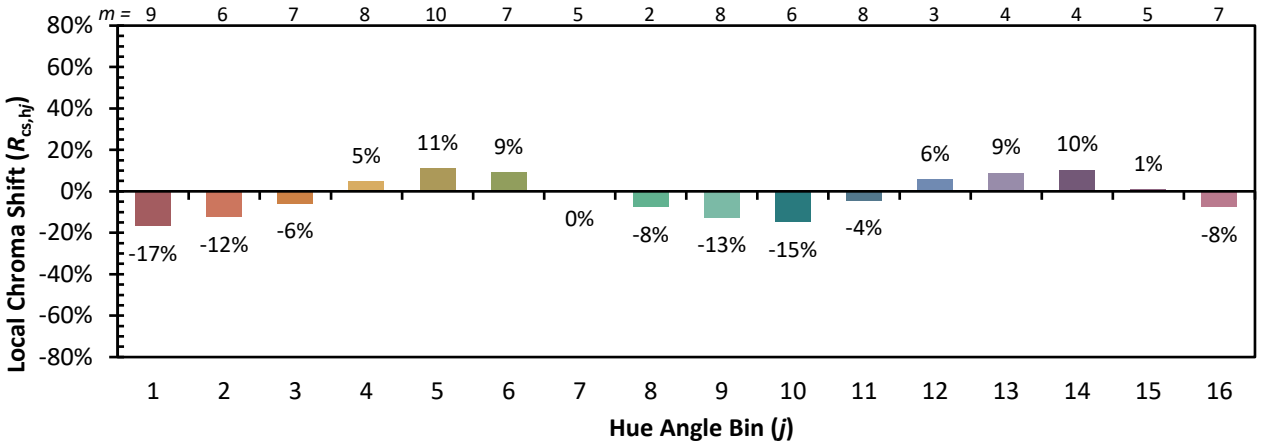


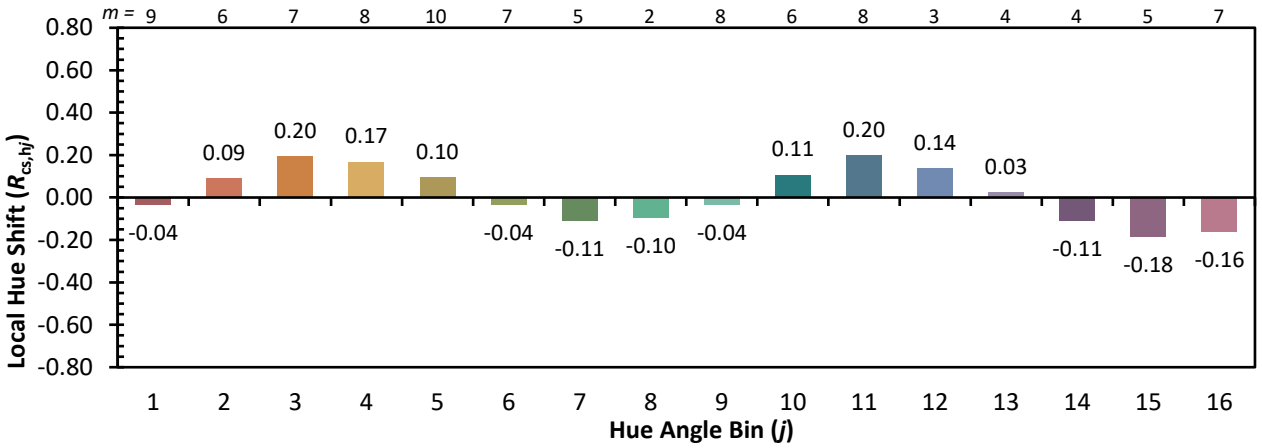
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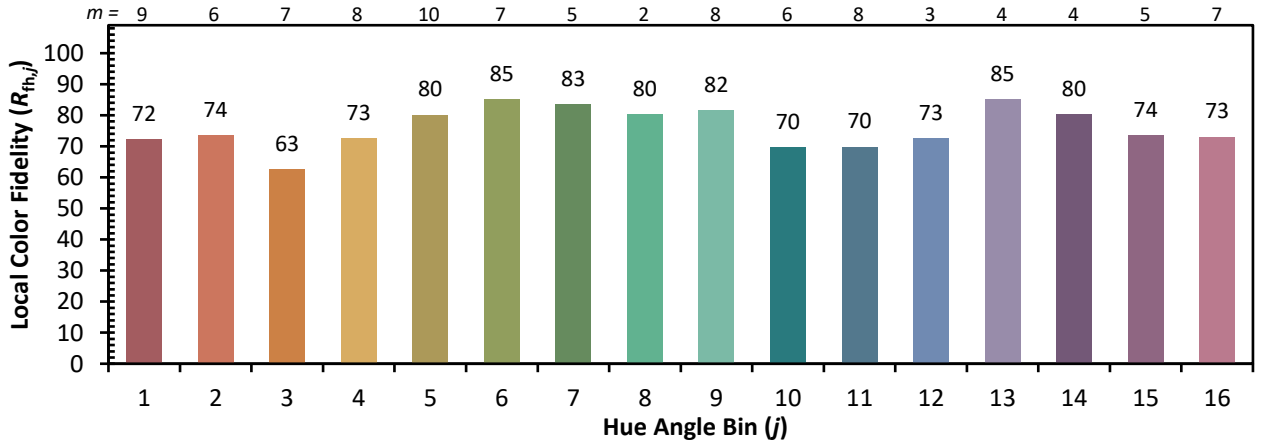
REPORT NUMBER: SP1-1908-441-3-R4

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## Color Rendition by Hue-Angle Bin



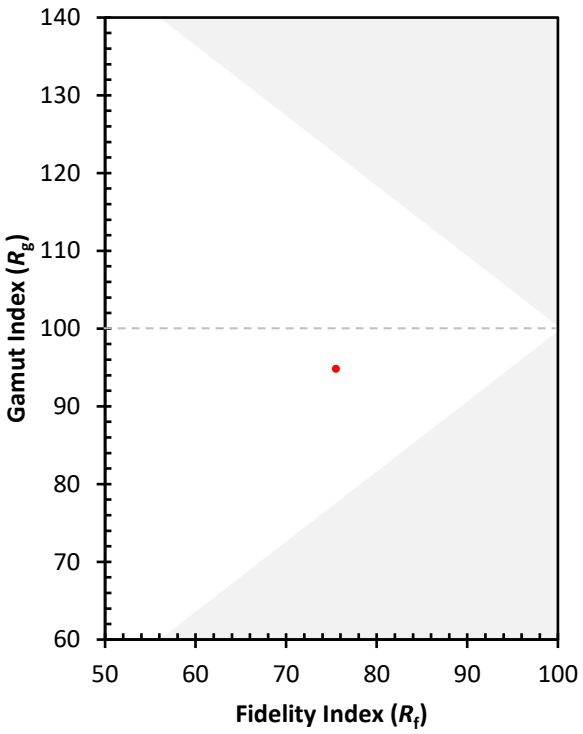



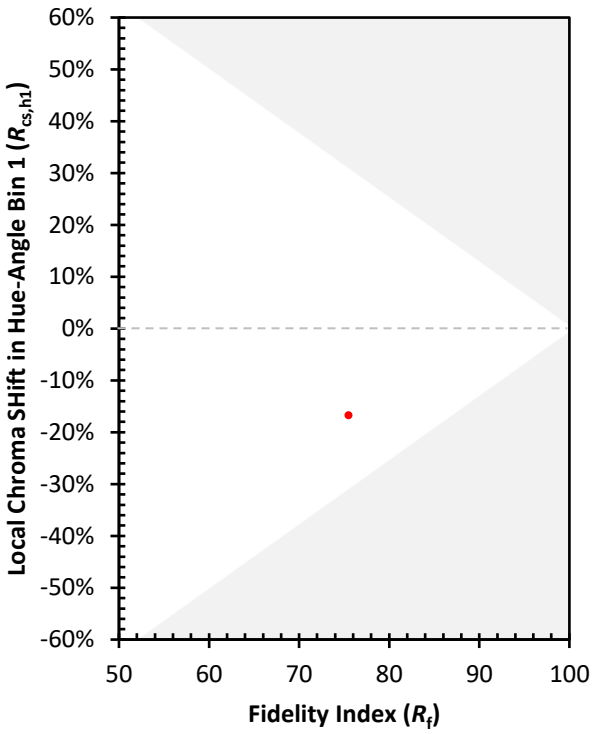
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### Measure Comparisons




(END OF REPORT)