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: P1203333

Luminaire Tested: GWC-SB2C-727-U-SL4

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: | P1203333 |
| | TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-9) |
| Test Lab: | INNOVATION CENTER |
| Issue Date: | 3/14/2026 |
| Manufacturer: | COOPER LIGHTING SOLUTIONS |
| Product Line: | McGRAW-EDISON |
| Catalog Number: | GWC-SB2C-727-U-SL4 |
| Description: | GALLEON WALL LUMINAIRE |
| | (2) 70 CRI, 2700K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV SPILL LIGHT ELIMINATOR OPTICS |
| Light Source: | - |
| Ballast/Driver: | ELECTRONIC DRIVER |

**Summary**

| | |
|---|---|
| Lumens per Lamp: | N/A |
| Luminaire Lumens: | 13767 lumens |
| Efficiency: | N/A |
| Efficacy: | 136.4 lumens/watt |
| Luminous Opening: | Rectangular (W 1' x L: 0.5' x H: 0') |
| IES Classification: | Type IV - Medium |
| BUG Rating: | B2 - U0 - G3 |

| | |
|---|---|
| Input Watts (W): | 100.9 |
| Input Voltage (V): | 120.0 |
| Input Current (Ain): | 0.857 |
| Voltage Rise (V): | NR |
| Power Factor: | 0.994 |
| Total Harmonic Distortion (THDi): | 9.472 |
| Frequency (hertz): | 60 |
| Stabilization Time: | NR |
| Operation Time: | NR |
| Ambient Temperature (°C): | NR |
| Test Distance: | 28.75 FT |

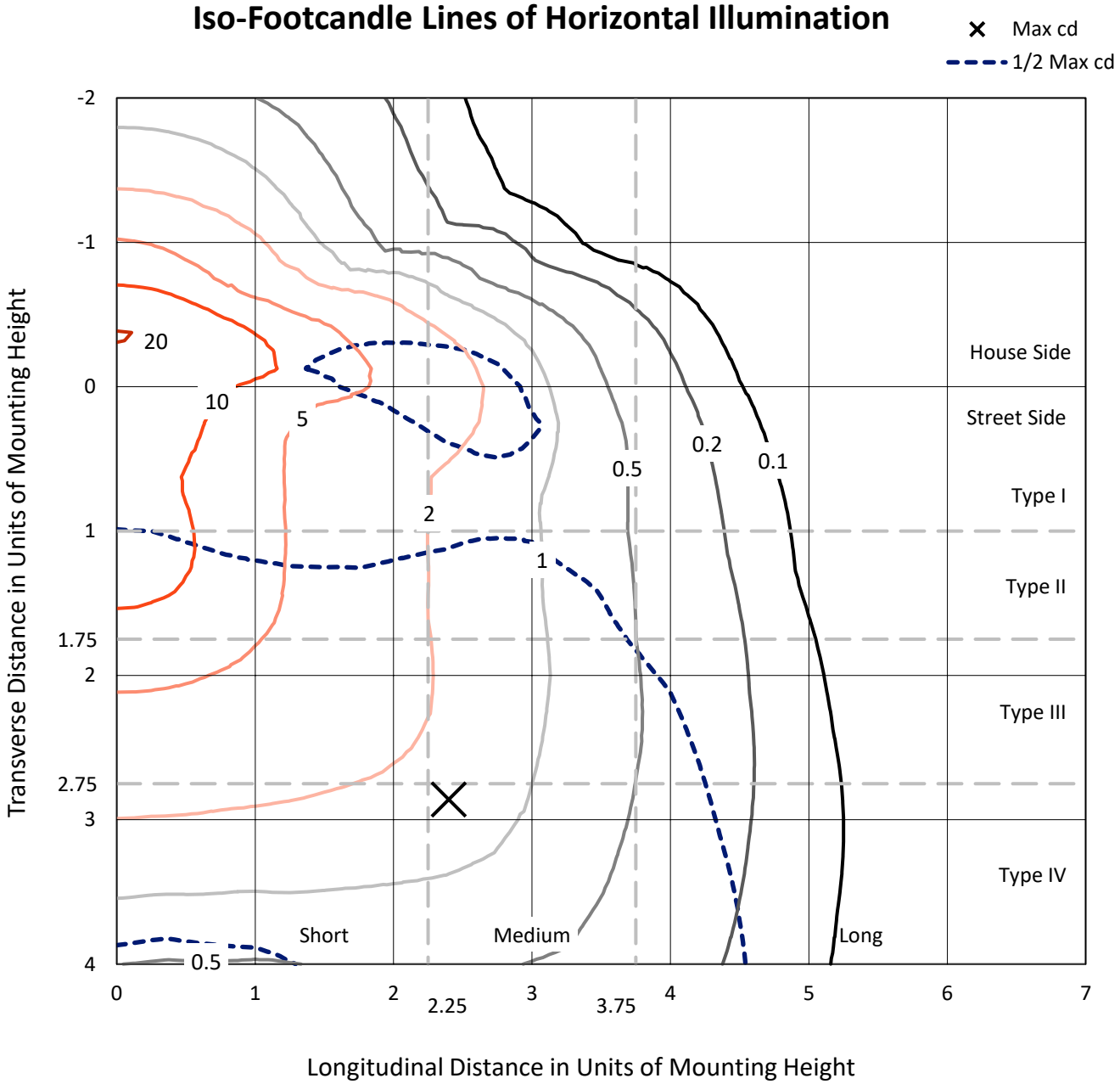


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REPORT NUMBER: P1203333
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## Iso-Footcandle Lines of Horizontal Illumination



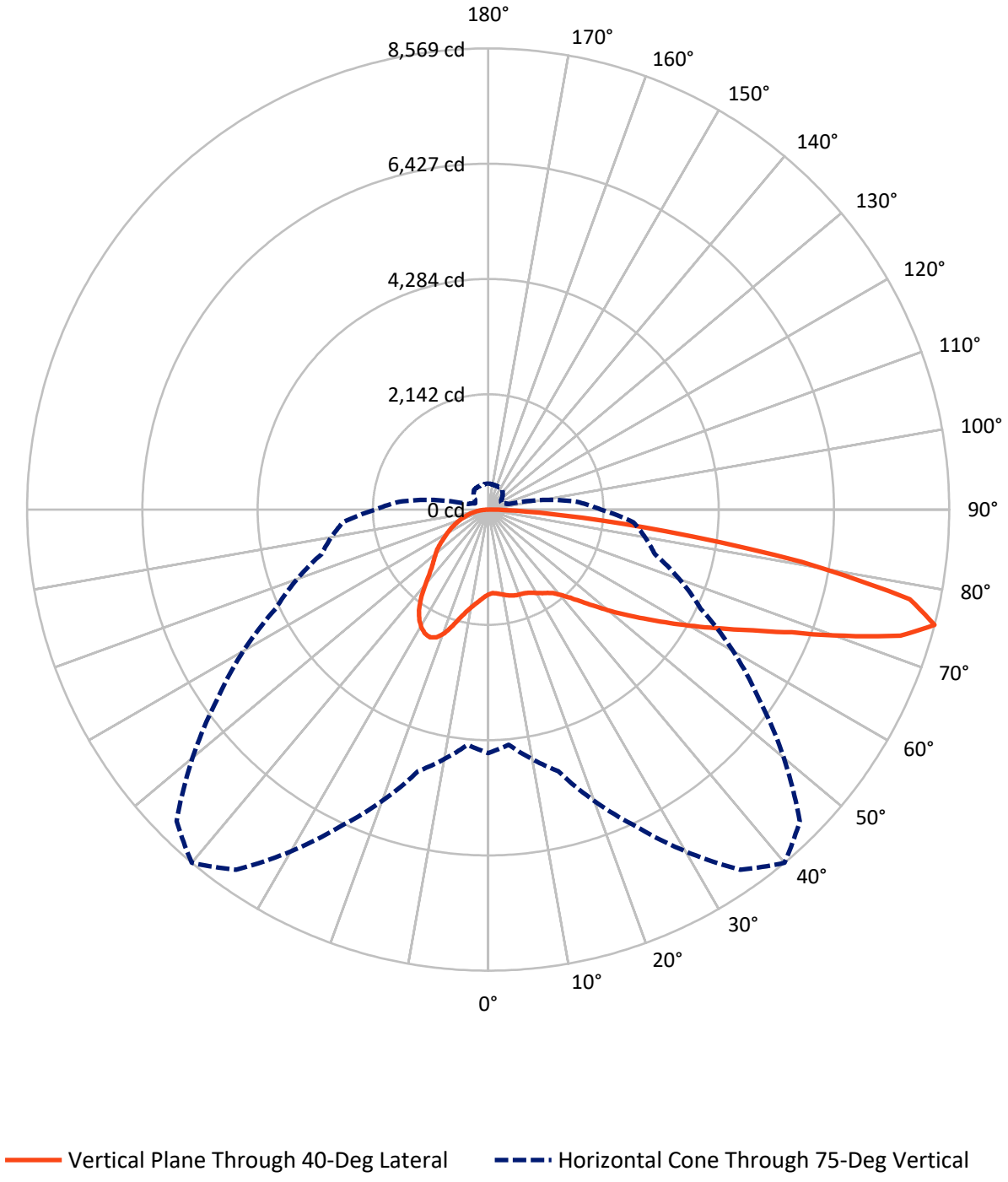

Based on 10 foot mounting height. Maximum calculated value = 14.8 fc
Type IV - Medium - N/A

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## Luminous Intensity Polar Plot



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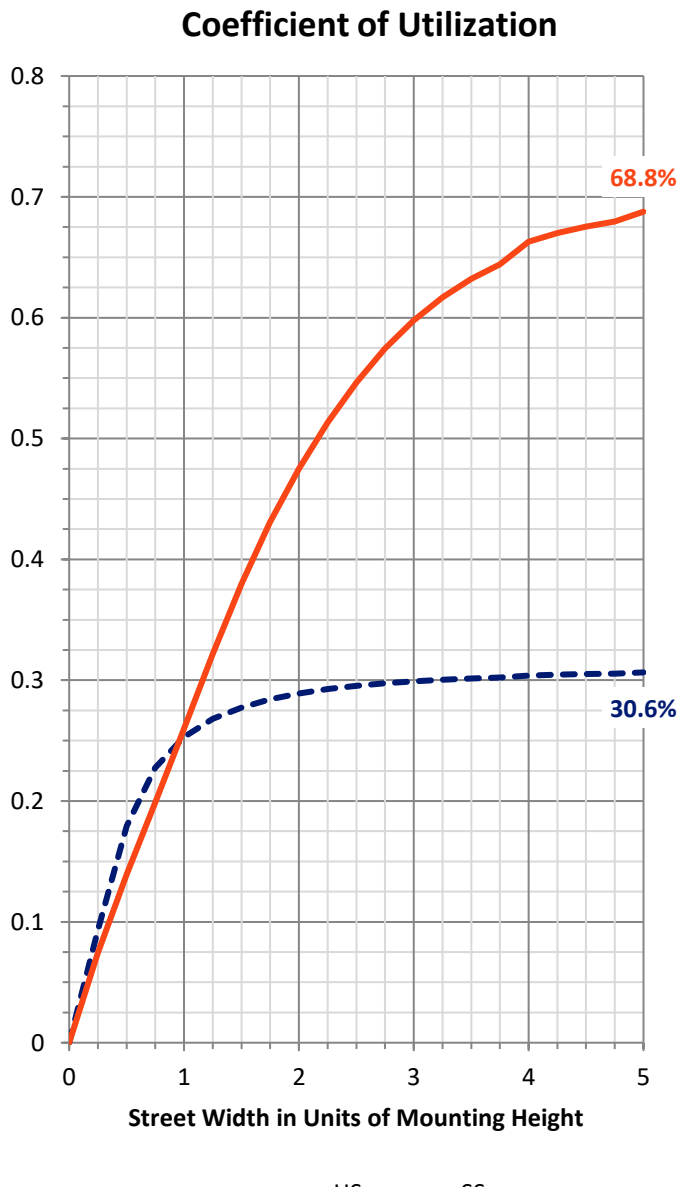
REPORT NUMBER: P1203333
CATALOG NUMBER: GWC-SB2C-727-U-SL4

**FLUX DISTRIBUTION:**

| | | Downward | Upward | Total |
|---|---|---|---|---|
| **House Side** | Lumens | 4265.5 | 0.0 | 4265.5 |
| | % Fixture | 31.0 | 0.0 | 31.0 |
| **Street Side** | Lumens | 9501.5 | 0.0 | 9501.5 |
| | % Fixture | 69.0 | 0.0 | 69.0 |
| **Total** | Lumens | 13767.0 | 0.0 | 13767.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

**ZONAL LUMENS:**

| Zone | Lumens | % Fixture |
|---|---|---|
| 0°-10° | 157.1 | 1.1 |
| 10°-20° | 527.6 | 3.8 |
| 20°-30° | 963.4 | 7.0 |
| 30°-40° | 1366.3 | 9.9 |
| 40°-50° | 1844.9 | 13.4 |
| 50°-60° | 2481.9 | 18.0 |
| 60°-70° | 3150.1 | 22.9 |
| 70°-80° | 2858.9 | 20.8 |
| 80°-90° | 416.7 | 3.0 |
| 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° | 13767.0 | 100.0 |
| 0°-180° | 13767.0 | 100.0 |



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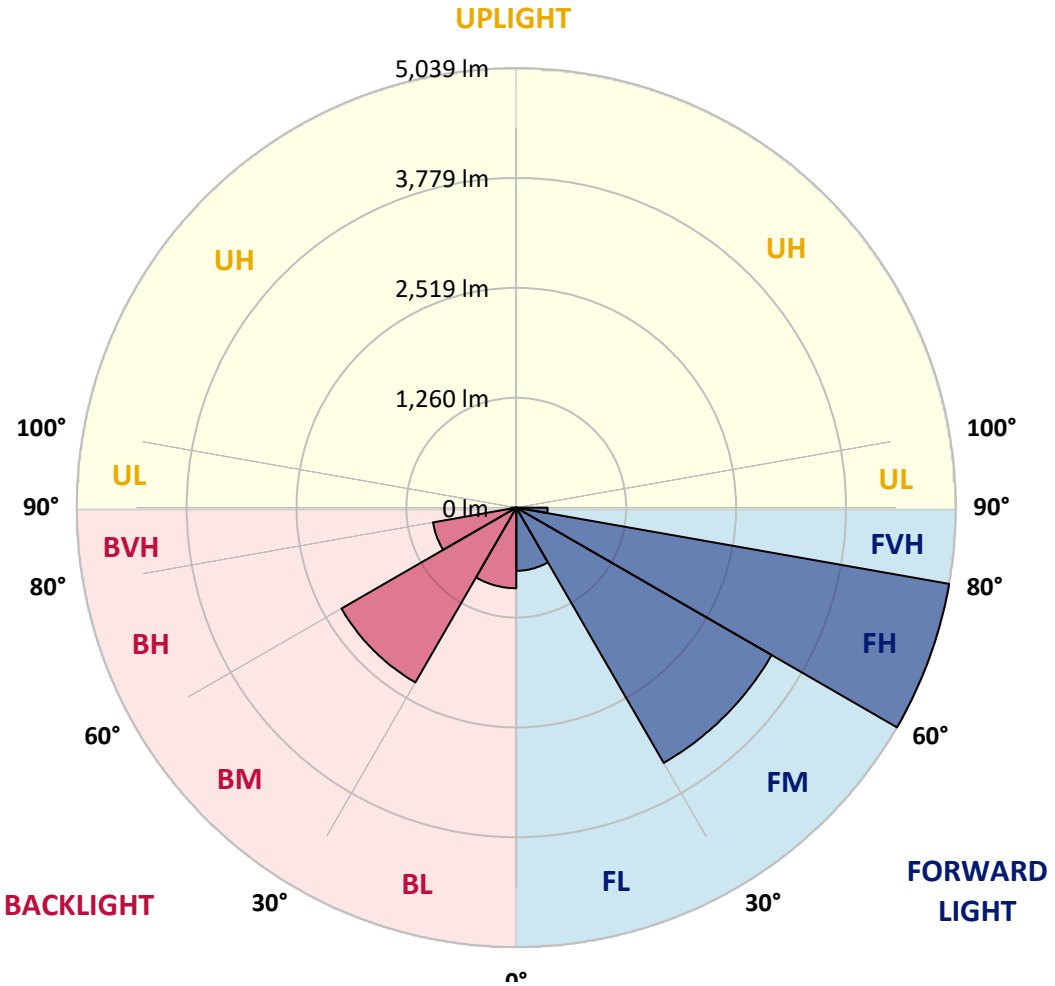
Scaled Data Report

REPORT NUMBER: P1203333
CATALOG NUMBER: GWC-SB2C-727-U-SL4

## LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit B | U | G |
|---|---|---|---|---|---|---|
| FL | (0°-30°) | 724.2 | 5.3 | | | |
| FM | (30°-60°) | 3379.5 | 24.5 | | | |
| FH | (60°-80°) | 5038.5 | 36.6 | | | G3/7500 |
| FVH | (80°-90°) | 359.4 | 2.6 | | | G3/500 |
| BL | (0°-30°) | 923.9 | 6.7 | B2/1000 | | |
| BM | (30°-60°) | 2313.6 | 16.8 | B2/2500 | | |
| BH | (60°-80°) | 970.5 | 7.0 | B2/1000 | | G2/1000 |
| BVH | (80°-90°) | 57.4 | 0.4 | | | G1/100 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

**BUG Rating: B2-U0-G3**
Type IV Medium



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**CANDELA DISTRIBUTION (FULL):**

| | 0° | 5° | 15° | 25° | 35° | 40° | 45° | 55° | 65° | 75° | 85° |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0° | 1574.3 | 1574.3 | 1574.3 | 1574.3 | 1574.3 | 1574.3 | 1574.3 | 1574.3 | 1574.3 | 1574.3 | 1574.3 |
| 2.5° | 1550.2 | 1558.9 | 1556.8 | 1553.8 | 1553.8 | 1554.6 | 1553.8 | 1558.9 | 1564.1 | 1569.2 | 1577.2 |
| 5° | 1566.2 | 1575.0 | 1570.6 | 1567.0 | 1564.1 | 1563.3 | 1561.1 | 1560.4 | 1563.3 | 1569.9 | 1580.8 |
| 7.5° | 1597.6 | 1606.4 | 1599.8 | 1593.3 | 1587.4 | 1584.5 | 1581.6 | 1577.2 | 1575.0 | 1578.7 | 1594.0 |
| 10° | 1632.7 | 1641.5 | 1633.4 | 1621.7 | 1612.2 | 1608.6 | 1605.7 | 1601.3 | 1598.4 | 1600.6 | 1617.4 |
| 12.5° | 1667.7 | 1676.5 | 1665.5 | 1649.5 | 1637.1 | 1634.9 | 1631.2 | 1629.8 | 1629.0 | 1628.3 | 1645.1 |
| 15° | 1700.6 | 1707.9 | 1694.0 | 1675.0 | 1661.9 | 1658.2 | 1654.6 | 1656.8 | 1660.4 | 1664.8 | 1683.8 |
| 17.5° | 1726.2 | 1733.5 | 1713.0 | 1688.2 | 1675.8 | 1674.3 | 1672.1 | 1679.4 | 1689.6 | 1700.6 | 1724.0 |
| 20° | 1749.5 | 1756.8 | 1730.5 | 1696.9 | 1682.3 | 1682.3 | 1683.1 | 1698.4 | 1713.0 | 1729.1 | 1761.2 |
| 22.5° | 1782.4 | 1788.2 | 1756.1 | 1710.1 | 1688.9 | 1690.4 | 1696.2 | 1711.5 | 1729.8 | 1751.7 | 1796.3 |
| 25° | 1831.3 | 1835.7 | 1796.3 | 1734.9 | 1710.8 | 1715.2 | 1720.3 | 1727.6 | 1745.1 | 1770.7 | 1830.6 |
| 27.5° | 1910.2 | 1913.8 | 1862.0 | 1778.7 | 1742.2 | 1749.5 | 1756.8 | 1751.7 | 1759.7 | 1781.6 | 1858.3 |
| 30° | 2021.1 | 2023.3 | 1957.6 | 1847.4 | 1795.5 | 1799.2 | 1800.6 | 1779.5 | 1764.1 | 1781.6 | 1878.0 |
| 32.5° | 2152.6 | 2151.8 | 2073.7 | 1930.6 | 1856.1 | 1852.5 | 1840.1 | 1798.4 | 1762.7 | 1778.0 | 1895.6 |
| 35° | 2356.3 | 2348.3 | 2247.5 | 2047.4 | 1924.8 | 1902.1 | 1872.9 | 1819.6 | 1770.0 | 1774.3 | 1910.9 |
| 37.5° | 2693.6 | 2668.8 | 2529.4 | 2238.7 | 2027.0 | 1969.3 | 1926.2 | 1853.9 | 1786.0 | 1772.9 | 1929.1 |
| 40° | 3074.1 | 3042.7 | 2889.3 | 2500.9 | 2180.3 | 2087.6 | 2018.2 | 1902.9 | 1812.3 | 1779.5 | 1956.2 |
| 42.5° | 3525.3 | 3480.8 | 3315.8 | 2809.7 | 2374.6 | 2240.2 | 2135.8 | 1964.9 | 1851.0 | 1800.6 | 1992.7 |
| 45° | 4079.5 | 4020.4 | 3786.7 | 3158.0 | 2619.2 | 2440.3 | 2300.8 | 2059.1 | 1910.2 | 1841.5 | 2047.4 |
| 47.5° | 4639.6 | 4654.2 | 4322.0 | 3556.7 | 2912.7 | 2687.1 | 2507.4 | 2200.8 | 1996.3 | 1907.2 | 2135.8 |
| 50° | 5234.7 | 5244.9 | 4854.3 | 3998.5 | 3245.7 | 2966.0 | 2739.6 | 2359.2 | 2116.1 | 2000.7 | 2267.9 |
| 52.5° | 5699.1 | 5700.5 | 5337.6 | 4460.7 | 3592.5 | 3272.7 | 2990.1 | 2540.3 | 2254.8 | 2124.8 | 2443.9 |
| 55° | 5989.7 | 5986.0 | 5676.4 | 4898.1 | 3991.2 | 3594.7 | 3267.6 | 2746.2 | 2424.2 | 2270.9 | 2665.2 |
| 57.5° | 6200.7 | 6189.8 | 5910.1 | 5274.1 | 4416.1 | 3975.1 | 3581.5 | 2979.9 | 2624.3 | 2444.7 | 2956.5 |
| 60° | 6281.0 | 6274.5 | 6068.6 | 5599.0 | 4863.0 | 4395.7 | 3943.7 | 3241.3 | 2851.4 | 2649.8 | 3331.1 |
| 62.5° | 6311.7 | 6324.1 | 6224.1 | 5913.8 | 5341.3 | 4861.6 | 4341.7 | 3553.8 | 3106.9 | 2882.0 | 3726.1 |
| 65° | 6419.8 | 6442.4 | 6422.0 | 6325.6 | 5881.6 | 5407.0 | 4869.6 | 3925.5 | 3385.9 | 3131.0 | 4138.7 |
| 67.5° | 6633.7 | 6656.3 | 6665.1 | 6818.4 | 6541.7 | 6086.8 | 5528.2 | 4388.4 | 3712.3 | 3389.5 | 4449.0 |
| 70° | 6628.6 | 6622.0 | 6776.8 | 7210.6 | 7368.3 | 7028.0 | 6416.1 | 4957.9 | 4101.4 | 3604.2 | 4488.4 |
| 72.5° | 6033.5 | 5980.9 | 6346.8 | 7206.2 | 8056.1 | 8010.8 | 7500.4 | 5692.5 | 4437.3 | 3630.5 | 3894.8 |
| 75° | 4526.4 | 4386.2 | 5032.4 | 6494.2 | 8170.7 | 8568.7 | 8189.7 | 6148.1 | 4357.7 | 3207.7 | 2710.4 |
| 77.5° | 1935.7 | 1794.8 | 2556.4 | 4807.5 | 7312.8 | 8010.1 | 7557.4 | 5363.9 | 3478.6 | 2121.2 | 1331.1 |
| 80° | 506.7 | 506.0 | 772.5 | 2179.6 | 4973.3 | 5915.2 | 5189.4 | 3464.0 | 1987.6 | 757.9 | 367.3 |
| 82.5° | 209.6 | 204.5 | 284.0 | 847.7 | 2430.0 | 3319.4 | 2709.0 | 1545.1 | 717.8 | 205.2 | 121.9 |
| 85° | 78.1 | 77.4 | 138.0 | 292.8 | 857.2 | 1369.1 | 990.9 | 395.0 | 178.9 | 100.0 | 54.8 |
| 87.5° | 21.9 | 21.2 | 29.9 | 101.5 | 208.8 | 316.9 | 169.4 | 65.0 | 50.4 | 39.4 | 16.1 |
| 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: P1203333
CATALOG NUMBER: GWC-SB2C-727-U-SL4

**CANDELA DISTRIBUTION (continued):**

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0° | 1574.3 | 1574.3 | 1574.3 | 1574.3 | 1574.3 | 1574.3 | 1574.3 | 1574.3 | 1574.3 | 1574.3 | 1574.3 |
| 2.5° | 1579.4 | 1583.0 | 1589.6 | 1594.7 | 1601.3 | 1608.6 | 1618.8 | 1625.4 | 1632.0 | 1636.3 | 1633.4 |
| 5° | 1586.0 | 1594.0 | 1610.8 | 1627.6 | 1647.3 | 1665.5 | 1686.7 | 1702.1 | 1714.5 | 1718.1 | 1719.6 |
| 7.5° | 1600.6 | 1613.7 | 1642.2 | 1670.7 | 1702.1 | 1732.0 | 1762.7 | 1788.9 | 1810.1 | 1818.2 | 1818.9 |
| 10° | 1626.1 | 1643.6 | 1683.8 | 1724.0 | 1765.6 | 1811.6 | 1851.0 | 1889.0 | 1918.9 | 1931.3 | 1932.1 |
| 12.5° | 1658.2 | 1680.2 | 1732.7 | 1788.2 | 1845.9 | 1909.4 | 1960.5 | 2007.3 | 2044.5 | 2061.3 | 2061.3 |
| 15° | 1699.9 | 1728.3 | 1795.5 | 1870.0 | 1954.7 | 2043.1 | 2108.0 | 2159.9 | 2201.5 | 2221.9 | 2220.5 |
| 17.5° | 1745.1 | 1783.1 | 1867.8 | 1980.3 | 2101.5 | 2217.6 | 2293.5 | 2331.5 | 2374.6 | 2394.3 | 2393.5 |
| 20° | 1788.9 | 1835.7 | 1956.9 | 2120.5 | 2281.8 | 2405.2 | 2466.6 | 2476.8 | 2479.7 | 2481.9 | 2487.7 |
| 22.5° | 1834.2 | 1897.0 | 2068.6 | 2297.2 | 2470.2 | 2555.6 | 2564.4 | 2520.6 | 2459.3 | 2430.8 | 2438.8 |
| 25° | 1883.9 | 1967.1 | 2214.6 | 2492.1 | 2632.3 | 2642.5 | 2575.4 | 2468.7 | 2352.6 | 2299.3 | 2307.4 |
| 27.5° | 1932.1 | 2048.2 | 2389.9 | 2678.3 | 2749.1 | 2659.3 | 2514.8 | 2363.6 | 2223.4 | 2167.2 | 2173.8 |
| 30° | 1980.3 | 2140.9 | 2583.4 | 2841.1 | 2802.4 | 2617.7 | 2419.1 | 2250.4 | 2109.5 | 2050.4 | 2056.9 |
| 32.5° | 2029.2 | 2249.0 | 2806.1 | 2958.7 | 2793.0 | 2529.4 | 2300.1 | 2123.4 | 1999.2 | 1937.2 | 1945.2 |
| 35° | 2084.7 | 2381.9 | 3017.1 | 3023.0 | 2729.4 | 2399.4 | 2143.1 | 1971.5 | 1863.4 | 1813.8 | 1824.7 |
| 37.5° | 2157.0 | 2550.5 | 3203.3 | 3039.0 | 2618.4 | 2208.8 | 1948.1 | 1791.9 | 1702.8 | 1680.2 | 1696.2 |
| 40° | 2246.8 | 2753.5 | 3345.7 | 3013.5 | 2454.1 | 1977.3 | 1734.9 | 1610.1 | 1559.7 | 1564.8 | 1582.3 |
| 42.5° | 2363.6 | 2980.6 | 3445.7 | 2947.7 | 2225.6 | 1738.6 | 1548.0 | 1492.5 | 1516.6 | 1537.0 | 1556.0 |
| 45° | 2515.5 | 3216.5 | 3507.8 | 2836.0 | 1967.1 | 1536.3 | 1437.7 | 1450.9 | 1469.1 | 1471.3 | 1485.9 |
| 47.5° | 2709.7 | 3455.2 | 3548.7 | 2667.4 | 1703.5 | 1393.9 | 1367.6 | 1370.6 | 1366.9 | 1351.6 | 1363.3 |
| 50° | 2952.1 | 3687.4 | 3585.2 | 2443.9 | 1479.4 | 1304.8 | 1269.8 | 1259.6 | 1209.2 | 1159.5 | 1166.1 |
| 52.5° | 3228.1 | 3900.6 | 3600.5 | 2166.5 | 1304.8 | 1230.4 | 1173.4 | 1109.1 | 1015.0 | 999.6 | 1004.7 |
| 55° | 3534.8 | 4097.8 | 3561.1 | 1825.5 | 1158.1 | 1134.7 | 1048.5 | 971.1 | 960.9 | 947.8 | 950.0 |
| 57.5° | 3901.4 | 4310.3 | 3480.8 | 1445.0 | 1007.7 | 1023.0 | 939.0 | 947.8 | 929.5 | 909.1 | 905.4 |
| 60° | 4302.2 | 4530.1 | 3339.9 | 1098.2 | 852.1 | 883.5 | 910.5 | 909.8 | 904.7 | 887.9 | 882.1 |
| 62.5° | 4662.9 | 4674.6 | 3062.4 | 841.2 | 715.6 | 775.5 | 849.2 | 848.5 | 844.1 | 834.6 | 830.9 |
| 65° | 4877.6 | 4652.7 | 2599.5 | 662.3 | 603.1 | 686.4 | 766.0 | 771.8 | 772.5 | 771.8 | 771.8 |
| 67.5° | 4839.7 | 4396.4 | 1964.2 | 527.2 | 510.4 | 595.8 | 683.5 | 691.5 | 697.3 | 698.8 | 700.2 |
| 70° | 4410.3 | 3833.5 | 1280.7 | 420.6 | 427.9 | 516.2 | 605.3 | 613.4 | 618.5 | 624.3 | 627.2 |
| 72.5° | 3437.7 | 2818.5 | 733.1 | 340.3 | 355.6 | 447.6 | 527.9 | 537.4 | 540.3 | 551.3 | 555.7 |
| 75° | *2094.9* | *1657.5* | *395.8* | *268.0* | *292.1* | *382.6* | *451.3* | *462.2* | *467.3* | *480.5* | *481.9* |
| 77.5° | 996.0 | 717.8 | 225.6 | 208.8 | 235.1 | 312.5 | 381.2 | 393.6 | 379.7 | 387.0 | 381.2 |
| 80° | 336.6 | 266.5 | 142.4 | 159.2 | 179.6 | 243.9 | 305.2 | 317.6 | 288.4 | 287.0 | 284.0 |
| 82.5° | 117.6 | 108.1 | 90.5 | 105.9 | 116.1 | 174.5 | 230.7 | 246.8 | 214.7 | 213.9 | 203.7 |
| 85° | 46.0 | 43.8 | 50.4 | 57.7 | 69.4 | 107.3 | 151.9 | 159.9 | 132.2 | 106.6 | 105.1 |
| 87.5° | 9.5 | 10.2 | 12.4 | 13.1 | 21.2 | 37.2 | 54.8 | 67.2 | 53.3 | 45.3 | 41.6 |
| 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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# LM-79-2008: Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Report Prepared for

Cooper Lighting Solutions

McGRAW-EDISON

Report Number: SP1-1908-441-1-R4

Test Date: 08/20/2019

Luminaire Tested: SA1C-727-U-5WQ

Data in this report applies to products using SA and SB light squares

Report Generated By FNC07603 / LDUCLS01DT446
Version: v6.13

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## Test Information

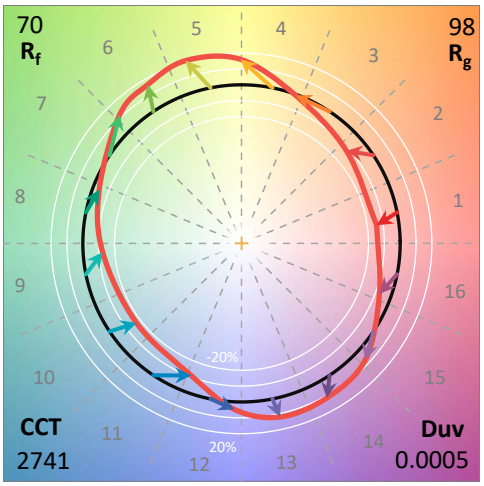
| | |
|---|---|
| Test Method: | LM-79-2008 |
| Report Number: | SP1-1908-441-1-R4 |
| Test Lab: | COOPER LIGHTING SOLUTIONS |
| Photometer: | SP1 - 76IN SPHERE |
| Measurement Geometry: | 4π |
| Issue Date: | 10/28/2024 |
| Manufacturer: | COOPER LIGHTING SOLUTIONS |
| Product Line: | McGRAW-EDISON |
| Catalog Number: | **SA1C-727-U-5WQ** |
| Description: | McGRAW EDISON ROADWAY AND AREA LUMINAIRE |

***THIS IS A REVISION OF SP1-1908-441-1-R3. TO UPDATE THE CATALOG NUMBER.***TESTED IN SITU. (1) 70 CRI, 2700K, 1050MA LIGHTSQUARE WITH 16 LEDS AND TYPE V WIDE OPTICS.

## Spectral Parameters

| | | | | | |
|---|---|---|---|---|---|
| CCT (K): | 2741 | CRI (Ra): | 71.5 | | |
| CIE u': | 0.2605 | R1: | 69.2 | R9: | -16.1 |
| CIE v': | 0.5272 | R2: | 79.4 | R10: | 51.4 |
| Duv: | 0.0005 | R3: | 87.8 | R11: | 63.1 |
| CIE x: | 0.4573 | R4: | 69.4 | R12: | 42.0 |
| CIE y: | 0.4113 | R5: | 66.4 | R13: | 70.2 |
| CIE z: | 0.1313 | R6: | 69.8 | R14: | 92.4 |
| Peak Wavelength (nm): | 602 | R7: | 79.8 | | |
| Dominant Wavelength (nm): | 583 | R8: | 50.1 | | |
| Purity: | 61.2 | | | | |

| | |
|---|---|
| Rf: | 69.9 |
| Rg: | 98.3 |




## Test Conditions

| | |
|---|---|
| Stabilization Time: | 56M |
| Operation Time: | 12H |
| Room Temperature (°C) / RH%: | 25.3./42% |
| Sphere Temperature (°C): | 25.7 |

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1121 Highway 74 South
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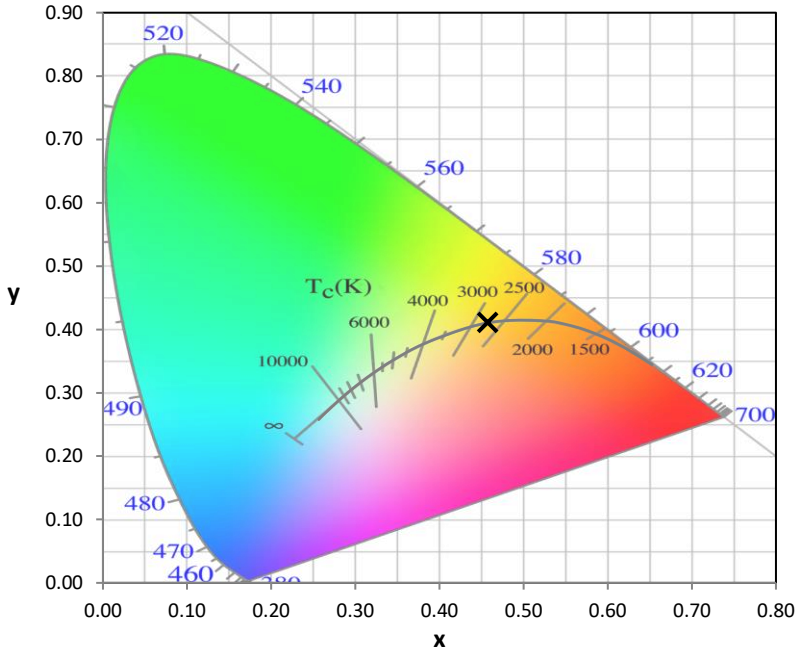
REPORT NUMBER: SP1-1908-441-1-R4

| 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 |

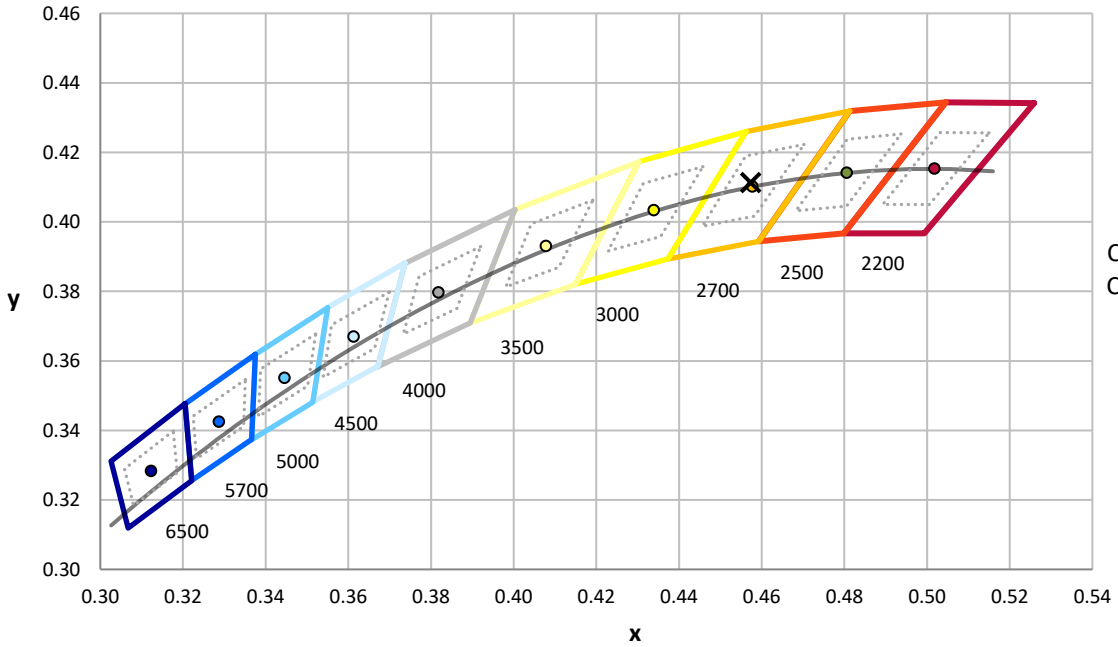
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REPORT NUMBER: SP1-1908-441-1-R4

## CIE 1931 Chromaticity Diagram




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



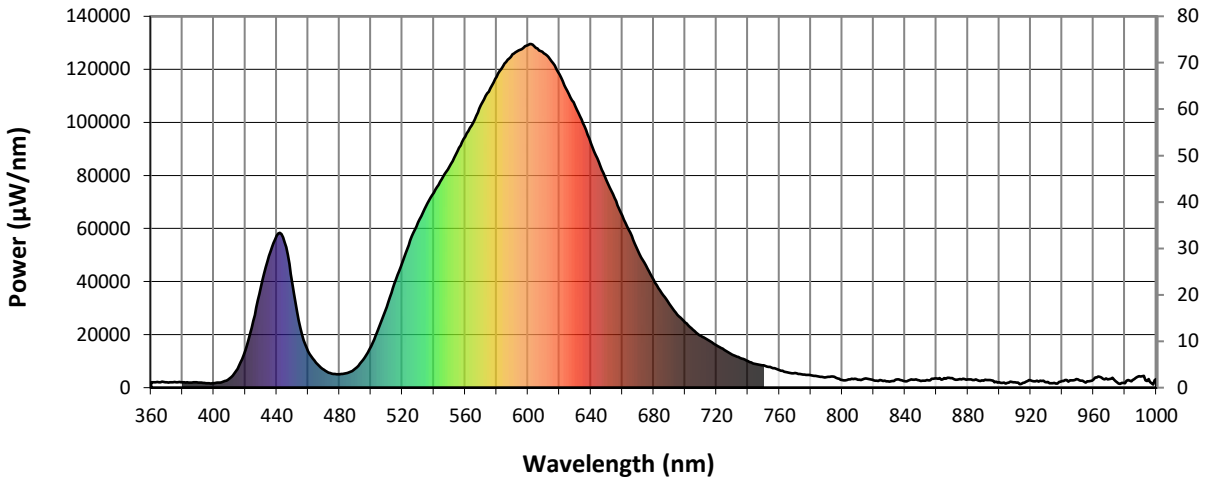

CCT = 2741K
CIE x = 0.4573
CIE y = 0.4113
Duv = 0.0005

Point lies inside the ANSI 2700K 4-step quadrangle

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## Photopic Flux vs. Wavelength



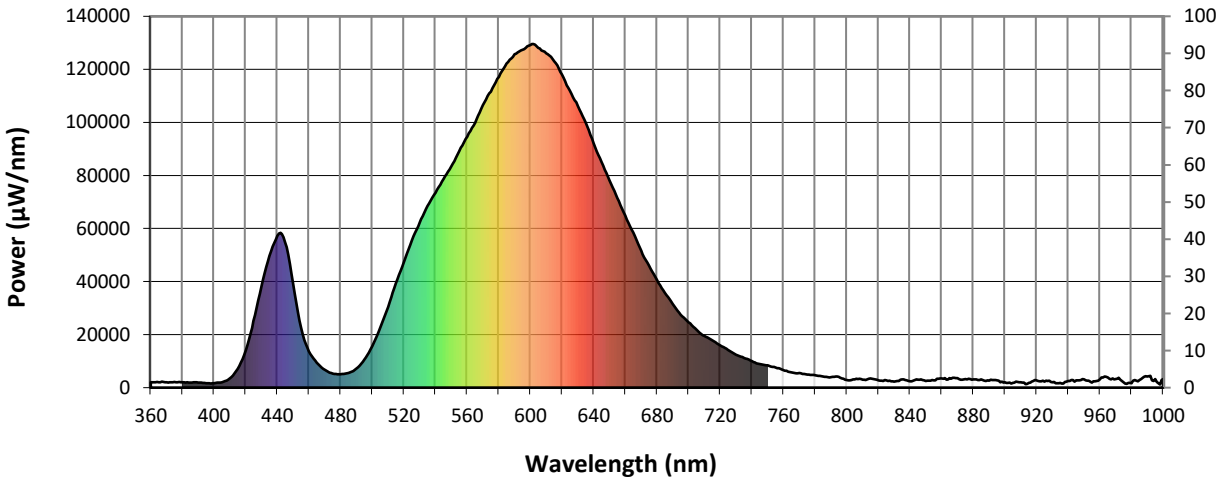

######

| 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 | 2044 | NR | 490 | 7179 | NR | 620 | 118034 | NR | 750 | 8362 | NR | 880 | 3128 | NR |
| 365 | 2016 | NR | 495 | 10476 | NR | 625 | 111884 | NR | 755 | 7635 | NR | 885 | 3110 | NR |
| 370 | 2020 | NR | 500 | 15549 | NR | 630 | 106119 | NR | 760 | 6582 | NR | 890 | 2632 | NR |
| 375 | 2137 | NR | 505 | 22477 | NR | 635 | 99706 | NR | 765 | 5777 | NR | 895 | 2709 | NR |
| 380 | 2046 | NR | 510 | 30417 | NR | 640 | 92142 | NR | 770 | 5474 | NR | 900 | 2016 | NR |
| 385 | 1925 | NR | 515 | 39274 | NR | 645 | 84987 | NR | 775 | 4977 | NR | 905 | 1748 | NR |
| 390 | 1893 | NR | 520 | 47282 | NR | 650 | 78016 | NR | 780 | 4723 | NR | 910 | 2046 | NR |
| 395 | 1695 | NR | 525 | 55413 | NR | 655 | 71541 | NR | 785 | 4219 | NR | 915 | 1844 | NR |
| 400 | 1633 | NR | 530 | 62377 | NR | 660 | 64863 | NR | 790 | 3969 | NR | 920 | 2734 | NR |
| 405 | 2065 | NR | 535 | 68520 | NR | 665 | 58485 | NR | 795 | 4122 | NR | 925 | 2307 | NR |
| 410 | 3449 | NR | 540 | 73435 | NR | 670 | 51641 | NR | 800 | 2864 | NR | 930 | 2039 | NR |
| 415 | 7117 | NR | 545 | 78677 | NR | 675 | 46030 | NR | 805 | 3151 | NR | 935 | 1784 | NR |
| 420 | 13992 | NR | 550 | 83331 | NR | 680 | 40590 | NR | 810 | 3022 | NR | 940 | 2464 | NR |
| 425 | 25176 | NR | 555 | 89120 | NR | 685 | 35691 | NR | 815 | 3471 | NR | 945 | 2794 | NR |
| 430 | 38151 | NR | 560 | 94613 | NR | 690 | 31631 | NR | 820 | 2749 | NR | 950 | 3090 | NR |
| 435 | 49673 | NR | 565 | 99818 | NR | 695 | 27437 | NR | 825 | 2729 | NR | 955 | 1866 | NR |
| 440 | 57273 | NR | 570 | 106526 | NR | 700 | 24589 | NR | 830 | 2282 | NR | 960 | 3110 | NR |
| 445 | 54802 | NR | 575 | 111610 | NR | 705 | 21832 | NR | 835 | 3140 | NR | 965 | 3880 | NR |
| 450 | 39184 | NR | 580 | 117163 | NR | 710 | 19500 | NR | 840 | 2365 | NR | 970 | 3243 | NR |
| 455 | 22506 | NR | 585 | 122201 | NR | 715 | 17870 | NR | 845 | 3024 | NR | 975 | 2014 | NR |
| 460 | 13692 | NR | 590 | 125662 | NR | 720 | 15924 | NR | 850 | 2510 | NR | 980 | 1688 | NR |
| 465 | 9446 | NR | 595 | 127415 | NR | 725 | 14268 | NR | 855 | 2739 | NR | 985 | 2827 | NR |
| 470 | 6698 | NR | 600 | 129155 | NR | 730 | 12438 | NR | 860 | 3515 | NR | 990 | 4172 | NR |
| 475 | 5328 | NR | 605 | 128057 | NR | 735 | 11255 | NR | 865 | 3600 | NR | 995 | 3177 | NR |
| 480 | 5081 | NR | 610 | 126031 | NR | 740 | 9951 | NR | 870 | 3609 | NR | 1000 | 3241 | NR |
| 485 | 5579 | NR | 615 | 123059 | NR | 745 | 8870 | NR | 875 | 3208 | NR | | | |

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## Scotopic Flux vs. Wavelength



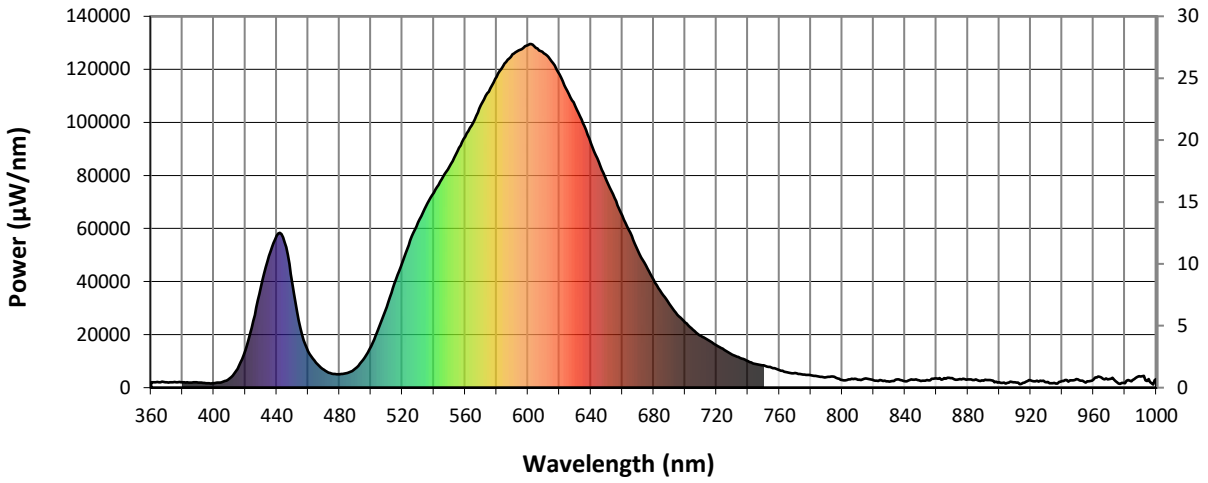

**Scotopic Lumens: 6474.3** **S/P: 1.04**

| 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 | 2044 | NR | 490 | 7179 | NR | 620 | 118034 | NR | 750 | 8362 | NR | 880 | 3128 | NR |
| 365 | 2016 | NR | 495 | 10476 | NR | 625 | 111884 | NR | 755 | 7635 | NR | 885 | 3110 | NR |
| 370 | 2020 | NR | 500 | 15549 | NR | 630 | 106119 | NR | 760 | 6582 | NR | 890 | 2632 | NR |
| 375 | 2137 | NR | 505 | 22477 | NR | 635 | 99706 | NR | 765 | 5777 | NR | 895 | 2709 | NR |
| 380 | 2046 | NR | 510 | 30417 | NR | 640 | 92142 | NR | 770 | 5474 | NR | 900 | 2016 | NR |
| 385 | 1925 | NR | 515 | 39274 | NR | 645 | 84987 | NR | 775 | 4977 | NR | 905 | 1748 | NR |
| 390 | 1893 | NR | 520 | 47282 | NR | 650 | 78016 | NR | 780 | 4723 | NR | 910 | 2046 | NR |
| 395 | 1695 | NR | 525 | 55413 | NR | 655 | 71541 | NR | 785 | 4219 | NR | 915 | 1844 | NR |
| 400 | 1633 | NR | 530 | 62377 | NR | 660 | 64863 | NR | 790 | 3969 | NR | 920 | 2734 | NR |
| 405 | 2065 | NR | 535 | 68520 | NR | 665 | 58485 | NR | 795 | 4122 | NR | 925 | 2307 | NR |
| 410 | 3449 | NR | 540 | 73435 | NR | 670 | 51641 | NR | 800 | 2864 | NR | 930 | 2039 | NR |
| 415 | 7117 | NR | 545 | 78677 | NR | 675 | 46030 | NR | 805 | 3151 | NR | 935 | 1784 | NR |
| 420 | 13992 | NR | 550 | 83331 | NR | 680 | 40590 | NR | 810 | 3022 | NR | 940 | 2464 | NR |
| 425 | 25176 | NR | 555 | 89120 | NR | 685 | 35691 | NR | 815 | 3471 | NR | 945 | 2794 | NR |
| 430 | 38151 | NR | 560 | 94613 | NR | 690 | 31631 | NR | 820 | 2749 | NR | 950 | 3090 | NR |
| 435 | 49673 | NR | 565 | 99818 | NR | 695 | 27437 | NR | 825 | 2729 | NR | 955 | 1866 | NR |
| 440 | 57273 | NR | 570 | 106526 | NR | 700 | 24589 | NR | 830 | 2282 | NR | 960 | 3110 | NR |
| 445 | 54802 | NR | 575 | 111610 | NR | 705 | 21832 | NR | 835 | 3140 | NR | 965 | 3880 | NR |
| 450 | 39184 | NR | 580 | 117163 | NR | 710 | 19500 | NR | 840 | 2365 | NR | 970 | 3243 | NR |
| 455 | 22506 | NR | 585 | 122201 | NR | 715 | 17870 | NR | 845 | 3024 | NR | 975 | 2014 | NR |
| 460 | 13692 | NR | 590 | 125662 | NR | 720 | 15924 | NR | 850 | 2510 | NR | 980 | 1688 | NR |
| 465 | 9446 | NR | 595 | 127415 | NR | 725 | 14268 | NR | 855 | 2739 | NR | 985 | 2827 | NR |
| 470 | 6698 | NR | 600 | 129155 | NR | 730 | 12438 | NR | 860 | 3515 | NR | 990 | 4172 | NR |
| 475 | 5328 | NR | 605 | 128057 | NR | 735 | 11255 | NR | 865 | 3600 | NR | 995 | 3177 | NR |
| 480 | 5081 | NR | 610 | 126031 | NR | 740 | 9951 | NR | 870 | 3609 | NR | 1000 | 3241 | NR |
| 485 | 5579 | NR | 615 | 123059 | NR | 745 | 8870 | NR | 875 | 3208 | NR | | | |

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## Melanopic Flux vs. Wavelength




**Melanopic Lumens: 2145.7** **M/P: 0.35**

| 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 | 2044 | NR | 490 | 7179 | NR | 620 | 118034 | NR | 750 | 8362 | NR | 880 | 3128 | NR |
| 365 | 2016 | NR | 495 | 10476 | NR | 625 | 111884 | NR | 755 | 7635 | NR | 885 | 3110 | NR |
| 370 | 2020 | NR | 500 | 15549 | NR | 630 | 106119 | NR | 760 | 6582 | NR | 890 | 2632 | NR |
| 375 | 2137 | NR | 505 | 22477 | NR | 635 | 99706 | NR | 765 | 5777 | NR | 895 | 2709 | NR |
| 380 | 2046 | NR | 510 | 30417 | NR | 640 | 92142 | NR | 770 | 5474 | NR | 900 | 2016 | NR |
| 385 | 1925 | NR | 515 | 39274 | NR | 645 | 84987 | NR | 775 | 4977 | NR | 905 | 1748 | NR |
| 390 | 1893 | NR | 520 | 47282 | NR | 650 | 78016 | NR | 780 | 4723 | NR | 910 | 2046 | NR |
| 395 | 1695 | NR | 525 | 55413 | NR | 655 | 71541 | NR | 785 | 4219 | NR | 915 | 1844 | NR |
| 400 | 1633 | NR | 530 | 62377 | NR | 660 | 64863 | NR | 790 | 3969 | NR | 920 | 2734 | NR |
| 405 | 2065 | NR | 535 | 68520 | NR | 665 | 58485 | NR | 795 | 4122 | NR | 925 | 2307 | NR |
| 410 | 3449 | NR | 540 | 73435 | NR | 670 | 51641 | NR | 800 | 2864 | NR | 930 | 2039 | NR |
| 415 | 7117 | NR | 545 | 78677 | NR | 675 | 46030 | NR | 805 | 3151 | NR | 935 | 1784 | NR |
| 420 | 13992 | NR | 550 | 83331 | NR | 680 | 40590 | NR | 810 | 3022 | NR | 940 | 2464 | NR |
| 425 | 25176 | NR | 555 | 89120 | NR | 685 | 35691 | NR | 815 | 3471 | NR | 945 | 2794 | NR |
| 430 | 38151 | NR | 560 | 94613 | NR | 690 | 31631 | NR | 820 | 2749 | NR | 950 | 3090 | NR |
| 435 | 49673 | NR | 565 | 99818 | NR | 695 | 27437 | NR | 825 | 2729 | NR | 955 | 1866 | NR |
| 440 | 57273 | NR | 570 | 106526 | NR | 700 | 24589 | NR | 830 | 2282 | NR | 960 | 3110 | NR |
| 445 | 54802 | NR | 575 | 111610 | NR | 705 | 21832 | NR | 835 | 3140 | NR | 965 | 3880 | NR |
| 450 | 39184 | NR | 580 | 117163 | NR | 710 | 19500 | NR | 840 | 2365 | NR | 970 | 3243 | NR |
| 455 | 22506 | NR | 585 | 122201 | NR | 715 | 17870 | NR | 845 | 3024 | NR | 975 | 2014 | NR |
| 460 | 13692 | NR | 590 | 125662 | NR | 720 | 15924 | NR | 850 | 2510 | NR | 980 | 1688 | NR |
| 465 | 9446 | NR | 595 | 127415 | NR | 725 | 14268 | NR | 855 | 2739 | NR | 985 | 2827 | NR |
| 470 | 6698 | NR | 600 | 129155 | NR | 730 | 12438 | NR | 860 | 3515 | NR | 990 | 4172 | NR |
| 475 | 5328 | NR | 605 | 128057 | NR | 735 | 11255 | NR | 865 | 3600 | NR | 995 | 3177 | NR |
| 480 | 5081 | NR | 610 | 126031 | NR | 740 | 9951 | NR | 870 | 3609 | NR | 1000 | 3241 | NR |
| 485 | 5579 | NR | 615 | 123059 | NR | 745 | 8870 | NR | 875 | 3208 | NR | | | |

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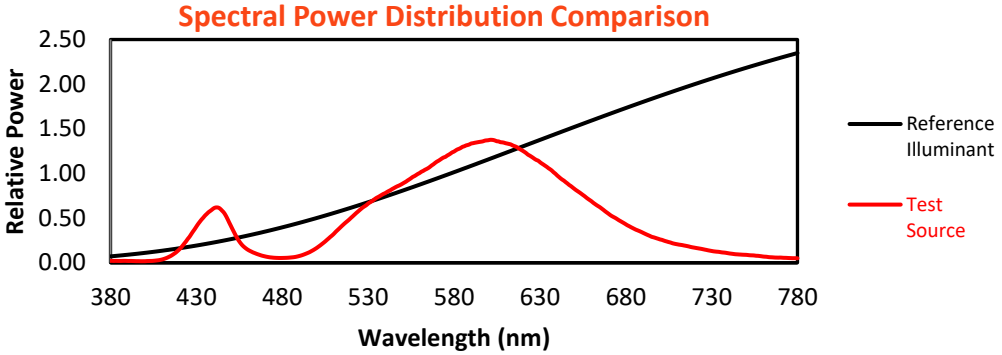
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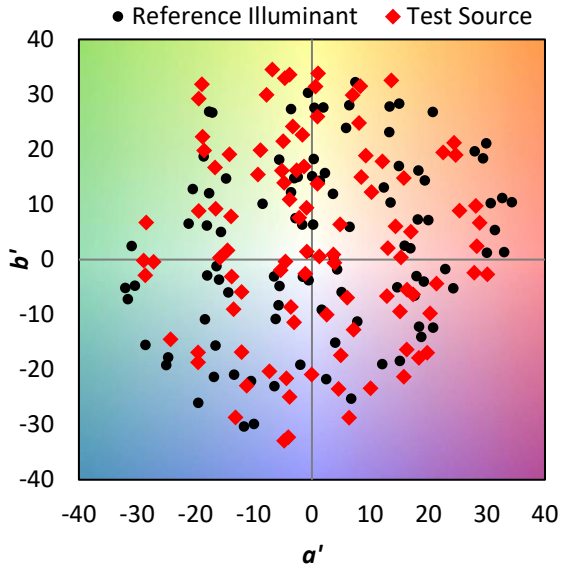
## Summary

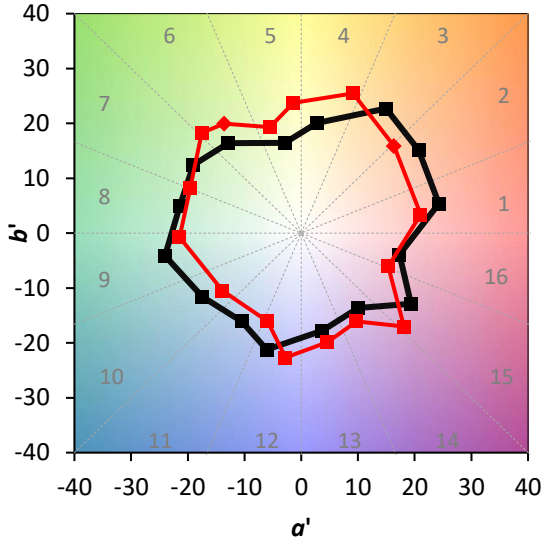
$R_f$ = 69.9
$R_g$ = 98.3
CIE $R_a$ = 71.5
$R_9$ = -16.1

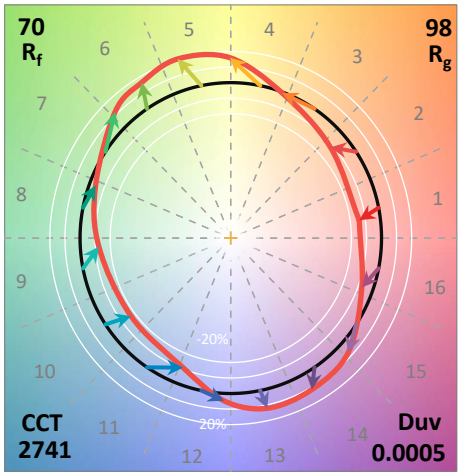
## Spectral Power Distribution Comparison

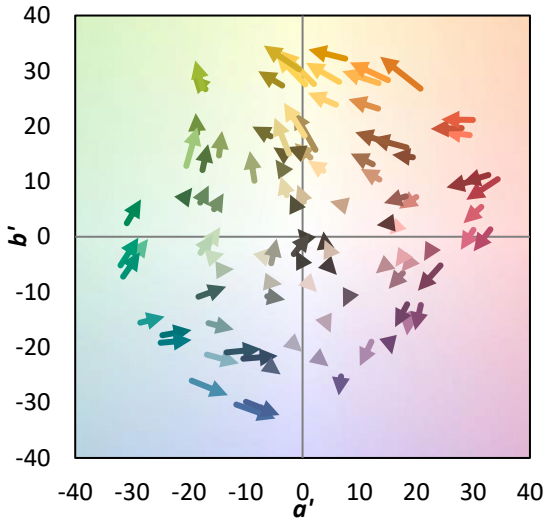



## Color Vector Graphics



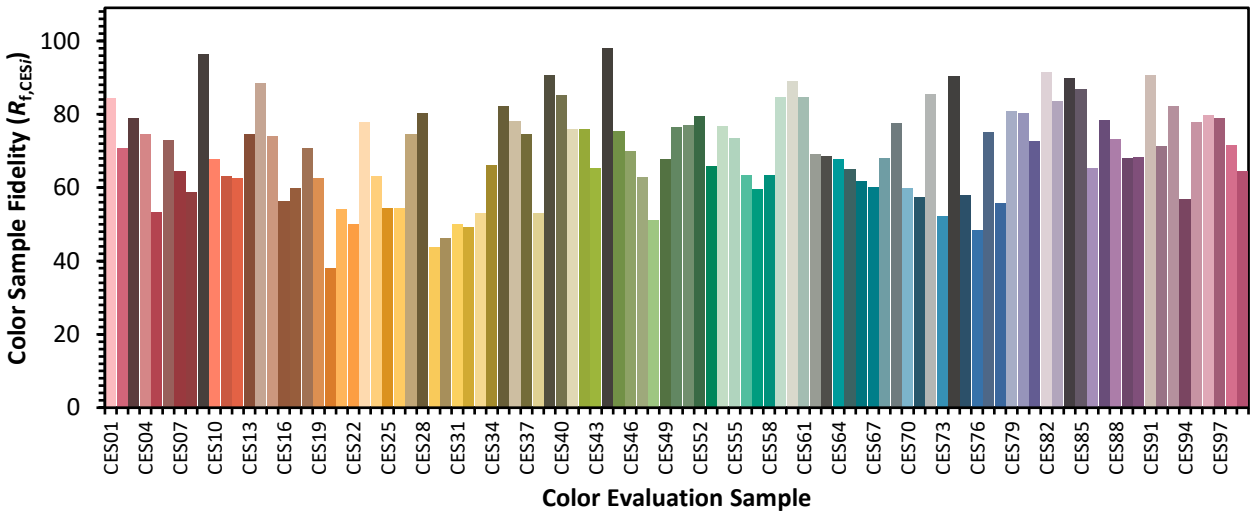
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Peachtree City, GA 30269

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

| | | | |
|---|---|---|---|
| CES01 = 86 | CES26 = 54 | CES51 = 77 | CES76 = 48 |
| CES02 = 63 | CES27 = 74 | CES52 = 80 | CES77 = 75 |
| CES03 = 31 | CES28 = 80 | CES53 = 66 | CES78 = 56 |
| CES04 = 71 | CES29 = 44 | CES54 = 77 | CES79 = 81 |
| CES05 = 50 | CES30 = 46 | CES55 = 74 | CES80 = 80 |
| CES06 = 52 | CES31 = 50 | CES56 = 63 | CES81 = 73 |
| CES07 = 42 | CES32 = 49 | CES57 = 60 | CES82 = 91 |
| CES08 = 41 | CES33 = 53 | CES58 = 63 | CES83 = 84 |
| CES09 = 29 | CES34 = 66 | CES59 = 85 | CES84 = 90 |
| CES10 = 77 | CES35 = 82 | CES60 = 89 | CES85 = 87 |
| CES11 = 60 | CES36 = 78 | CES61 = 85 | CES86 = 65 |
| CES12 = 66 | CES37 = 75 | CES62 = 69 | CES87 = 78 |
| CES13 = 43 | CES38 = 53 | CES63 = 68 | CES88 = 73 |
| CES14 = 74 | CES39 = 91 | CES64 = 68 | CES89 = 68 |
| CES15 = 71 | CES40 = 85 | CES65 = 65 | CES90 = 68 |
| CES16 = 48 | CES41 = 76 | CES66 = 62 | CES91 = 91 |
| CES17 = 50 | CES42 = 76 | CES67 = 60 | CES92 = 71 |
| CES18 = 57 | CES43 = 65 | CES68 = 68 | CES93 = 82 |
| CES19 = 73 | CES44 = 98 | CES69 = 77 | CES94 = 57 |
| CES20 = 67 | CES45 = 75 | CES70 = 60 | CES95 = 78 |
| CES21 = 88 | CES46 = 70 | CES71 = 57 | CES96 = 80 |
| CES22 = 80 | CES47 = 63 | CES72 = 86 | CES97 = 79 |
| CES23 = 92 | CES48 = 51 | CES73 = 52 | CES98 = 71 |
| CES24 = 91 | CES49 = 68 | CES74 = 90 | CES99 = 64 |
| CES25 = 73 | CES50 = 77 | CES75 = 58 | |

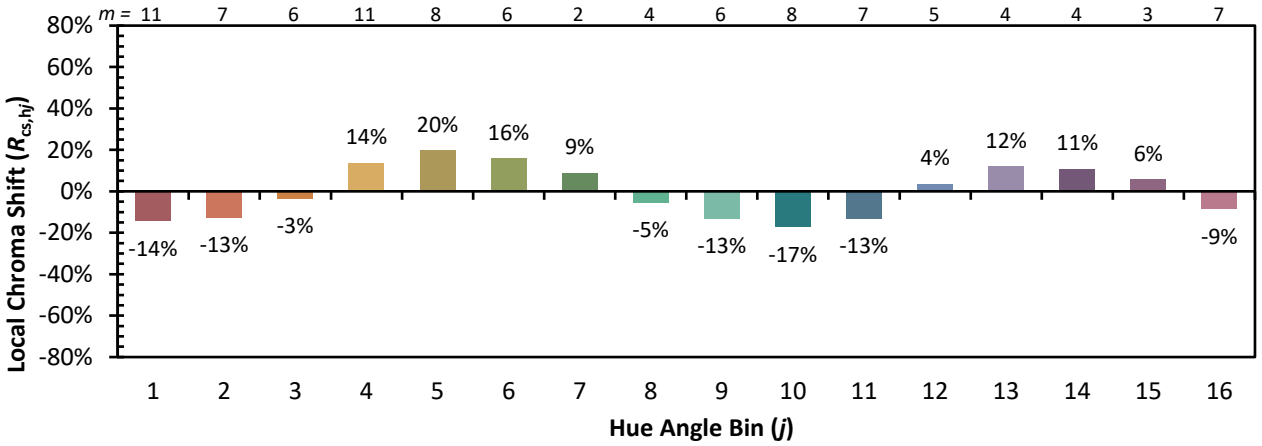


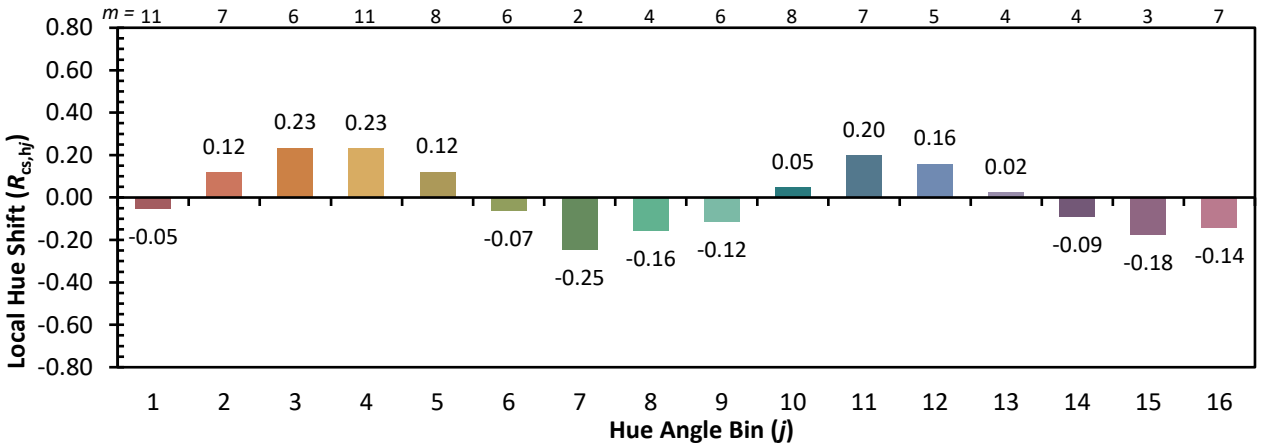
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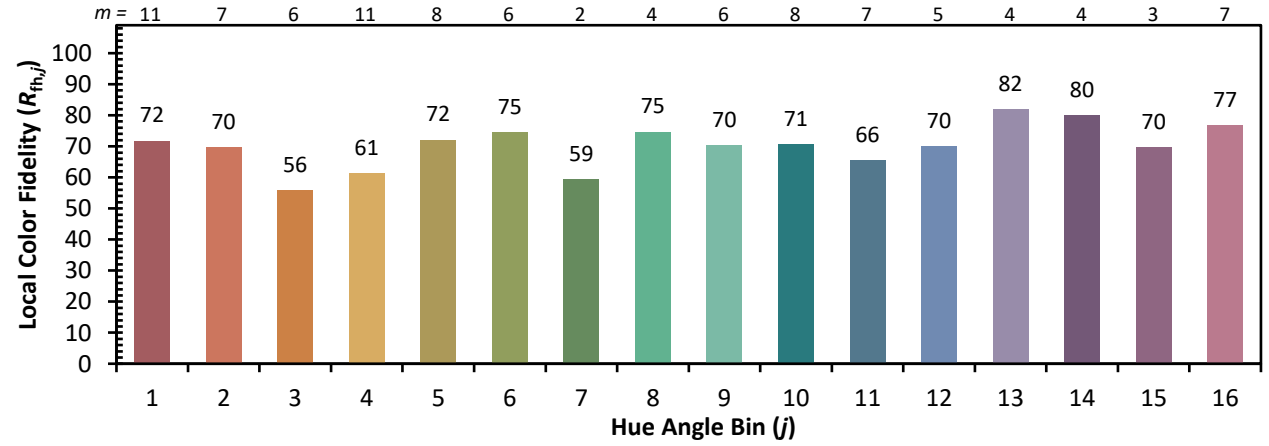
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### Color Rendition by Hue-Angle Bin



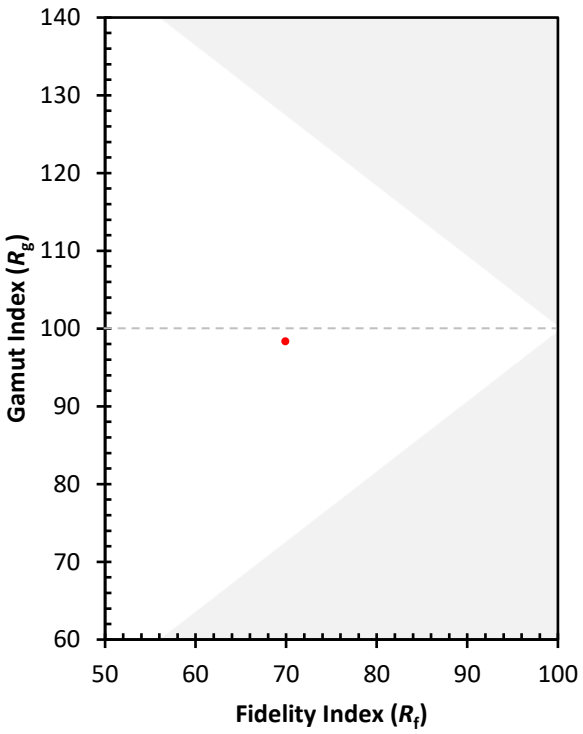



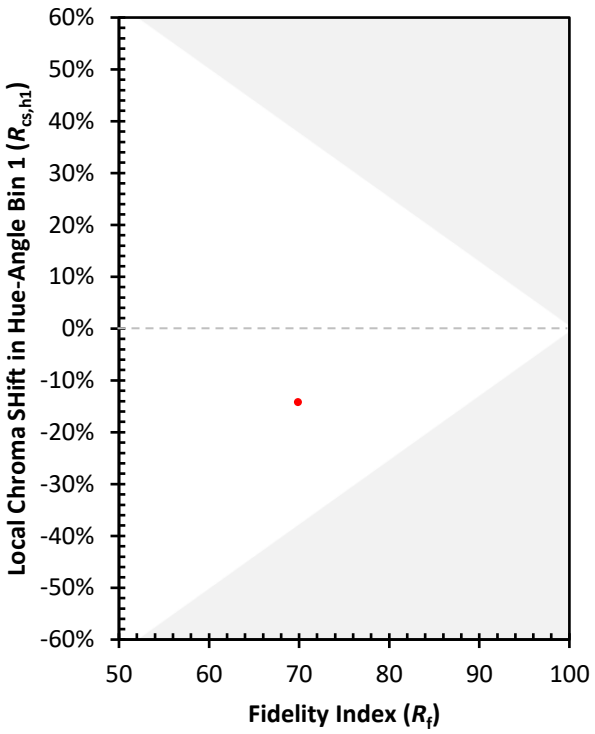
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### Measure Comparisons




(END OF REPORT)