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: P1199748

Luminaire Tested: GPC-SB2B-740-U-SL2-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: | P1199748 |
| | TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-11) |
| Test Lab: | INNOVATION CENTER |
| Issue Date: | 3/14/2026 |
| Manufacturer: | COOPER LIGHTING SOLUTIONS |
| Product Line: | McGRAW-EDISON |
| Catalog Number: | GPC-SB2B-740-U-SL2-HSS |
| Description: | GALLEON PEDESTRIAN LUMINAIRE |
| | (2) 70 CRI, 4000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD |
| Light Source: | - |
| Ballast/Driver: | ELECTRONIC DRIVER |

**Summary**

| | |
|---|---|
| Lumens per Lamp: | N/A |
| Luminaire Lumens: | 9654 lumens |
| Efficiency: | N/A |
| Efficacy: | 130.6 lumens/watt |
| Luminous Opening: | Rectangular (W 1' x L: 0.5' x H: 0') |
| IES Classification: | Type II - Medium |
| BUG Rating: | B1 - U0 - G2 |

| | |
|---|---|
| Input Watts (W): | 73.9 |
| Input Voltage (V): | 120.0 |
| Input Current (Ain): | 0.627 |
| Voltage Rise (V): | NR |
| Power Factor: | 0.988 |
| Total Harmonic Distortion (THDi): | 13.593 |
| Frequency (hertz): | 60 |
| Stabilization Time: | NR |
| Operation Time: | NR |
| Ambient Temperature (°C): | NR |
| Test Distance: | 28.75 FT |

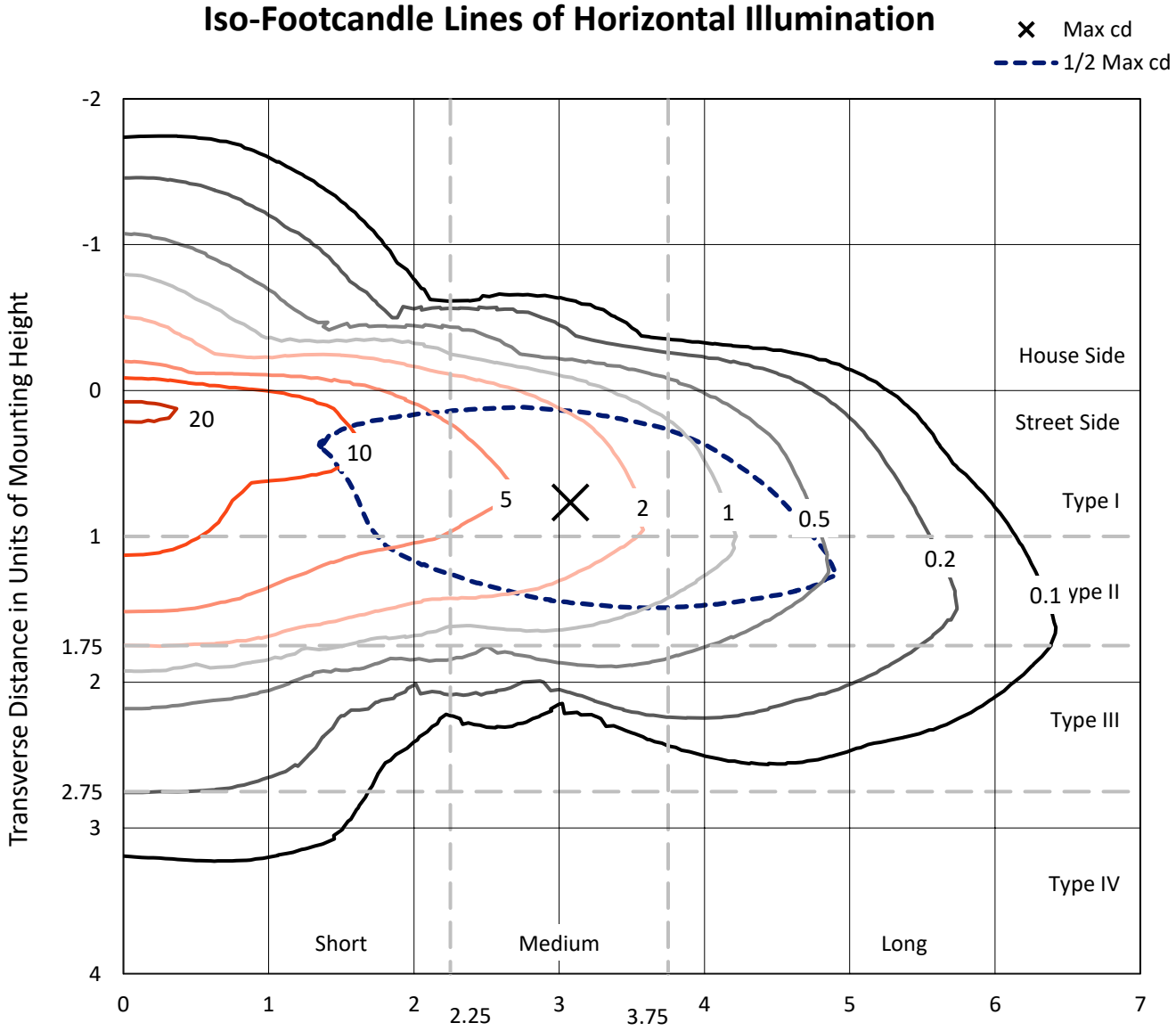


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Scaled Data Report

REPORT NUMBER: P1199748
CATALOG NUMBER: GPC-SB2B-740-U-SL2-HSS

## Iso-Footcandle Lines of Horizontal Illumination



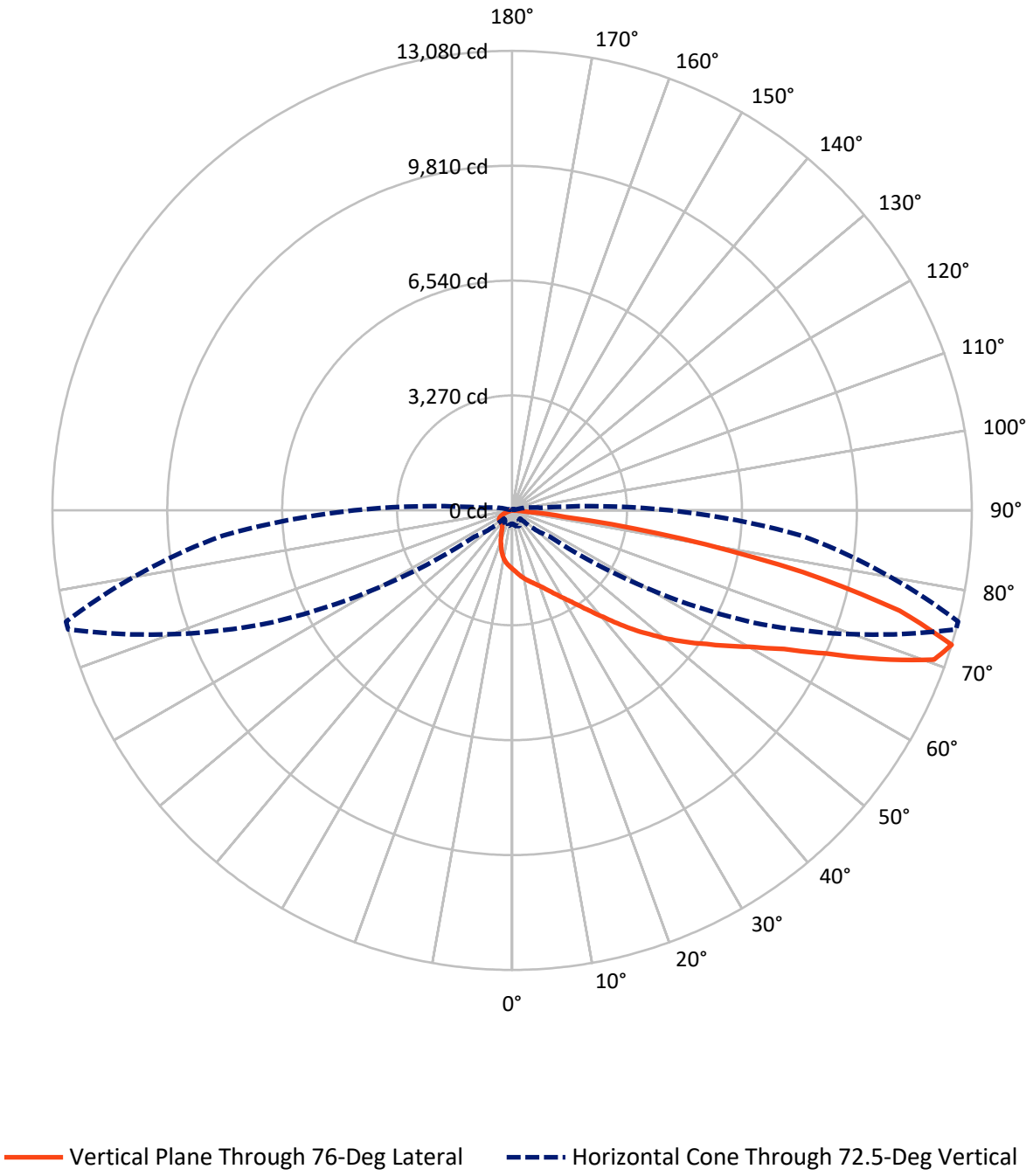

Based on 10 foot mounting height. Maximum calculated value = 22 fc
Type II - Medium - N/A

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## Luminous Intensity Polar Plot



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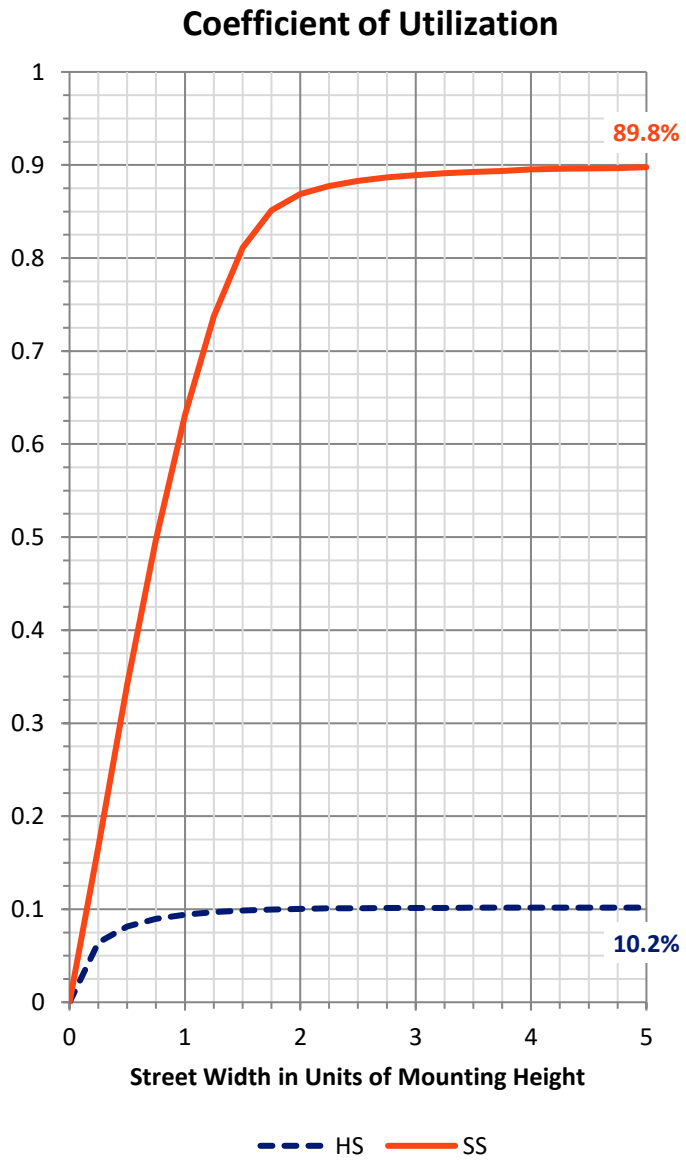
REPORT NUMBER: P1199748
CATALOG NUMBER: GPC-SB2B-740-U-SL2-HSS

**FLUX DISTRIBUTION:**

| | | Downward | Upward | Total |
|---|---|---|---|---|
| **House Side** | Lumens | 988.1 | 0.0 | 988.1 |
| | % Fixture | 10.2 | 0.0 | 10.2 |
| **Street Side** | Lumens | 8665.9 | 0.0 | 8665.9 |
| | % Fixture | 89.8 | 0.0 | 89.8 |
| **Total** | Lumens | 9654.0 | 0.0 | 9654.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

**ZONAL LUMENS:**

| Zone | Lumens | % Fixture |
|---|---|---|
| 0°-10° | 151.7 | 1.6 |
| 10°-20° | 406.8 | 4.2 |
| 20°-30° | 643.9 | 6.7 |
| 30°-40° | 996.2 | 10.3 |
| 40°-50° | 1513.1 | 15.7 |
| 50°-60° | 2086.0 | 21.6 |
| 60°-70° | 2203.7 | 22.8 |
| 70°-80° | 1511.8 | 15.7 |
| 80°-90° | 140.7 | 1.5 |
| 90°-100° | 0.0 | 0.0 |
| 100°-110° | 0.0 | 0.0 |
| 110°-120° | 0.0 | 0.0 |
| 120°-130° | 0.0 | 0.0 |
| 130°-140° | 0.0 | 0.0 |
| 140°-150° | 0.0 | 0.0 |
| 150°-160° | 0.0 | 0.0 |
| 160°-170° | 0.0 | 0.0 |
| 170°-180° | 0.0 | 0.0 |
| 0°-90° | 9654.0 | 100.0 |
| 0°-180° | 9654.0 | 100.0 |



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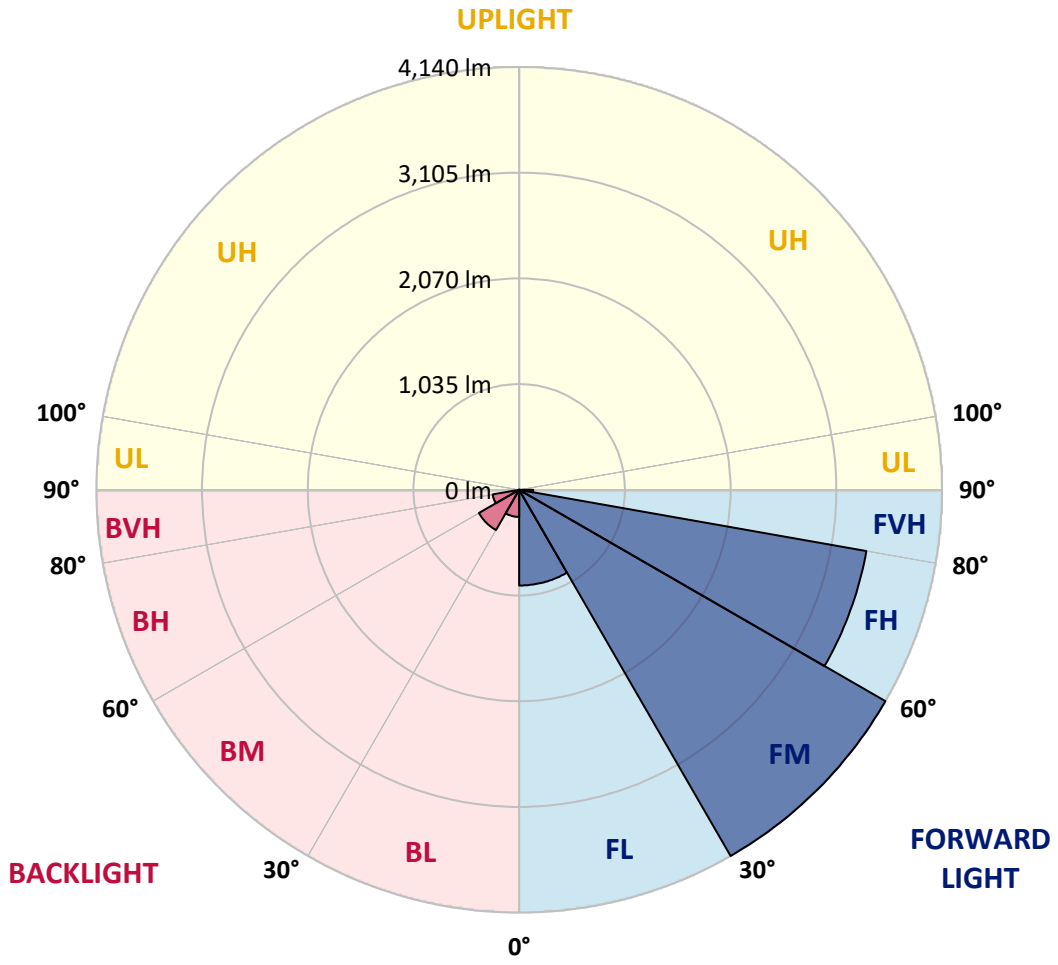
Scaled Data Report

REPORT NUMBER: P1199748
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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°) | 936.9 | 9.7 | | | |
| FM | (30°-60°) | 4140.4 | 42.9 | | | |
| FH | (60°-80°) | 3451.7 | 35.8 | | | G2/5000 |
| FVH | (80°-90°) | 136.9 | 1.4 | | | G2/225 |
| BL | (0°-30°) | 265.6 | 2.8 | B1/500 | | |
| BM | (30°-60°) | 454.9 | 4.7 | B1/1000 | | |
| BH | (60°-80°) | 263.8 | 2.7 | B1/500 | | G1/500 |
| BVH | (80°-90°) | 3.8 | 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 II Medium



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REPORT NUMBER: P1199748
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**CANDELA DISTRIBUTION (FULL):**

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 76° | 85° |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0° | 1668.3 | 1668.3 | 1668.3 | 1668.3 | 1668.3 | 1668.3 | 1668.3 | 1668.3 | 1668.3 | *1668.3* | 1668.3 |
| 2.5° | 1939.5 | 1913.8 | 1918.8 | 1893.1 | 1881.2 | 1852.4 | 1822.3 | 1782.9 | 1739.1 | *1739.1* | 1696.5 |
| 5° | 2143.6 | 2127.3 | 2127.3 | 2097.3 | 2074.1 | 2029.0 | 1975.2 | 1905.6 | 1823.0 | *1814.8* | 1734.1 |
| 7.5° | 2268.9 | 2258.8 | 2265.1 | 2247.6 | 2228.8 | 2181.8 | 2117.9 | 2027.1 | 1910.0 | *1900.0* | 1778.5 |
| 10° | 2293.3 | 2292.7 | 2310.2 | 2315.2 | 2327.7 | 2303.9 | 2246.9 | 2142.4 | 1995.8 | *1981.4* | 1816.7 |
| 12.5° | 2198.7 | 2186.8 | 2230.0 | 2280.8 | 2352.1 | 2384.1 | 2354.7 | 2247.6 | 2074.1 | *2054.1* | 1852.4 |
| 15° | 2043.4 | 2045.9 | 2087.2 | 2165.5 | 2284.5 | 2398.5 | 2436.7 | 2350.3 | 2153.6 | *2129.8* | 1886.2 |
| 17.5° | 1954.5 | 1945.1 | 1980.8 | 2050.9 | 2182.4 | 2343.4 | 2474.9 | 2446.1 | 2238.2 | *2211.2* | 1920.7 |
| 20° | 1943.8 | 1943.2 | 1951.4 | 1983.3 | 2083.5 | 2264.5 | 2470.5 | 2539.4 | 2337.7 | *2306.4* | 1970.1 |
| 22.5° | 2017.7 | 2016.5 | 2009.6 | 2003.3 | 2030.9 | 2187.4 | 2451.7 | 2628.3 | 2456.7 | *2422.9* | 2040.3 |
| 25° | 2131.1 | 2129.2 | 2118.6 | 2080.4 | 2053.4 | 2146.1 | 2434.2 | 2711.0 | 2597.6 | *2560.1* | 2125.4 |
| 27.5° | 2269.5 | 2268.2 | 2248.8 | 2191.2 | 2121.7 | 2149.9 | 2425.4 | 2796.1 | 2760.5 | *2723.5* | 2223.8 |
| 30° | 2439.2 | 2436.7 | 2396.6 | 2315.2 | 2224.4 | 2209.4 | 2437.3 | 2892.0 | 2930.2 | *2902.0* | 2337.1 |
| 32.5° | 2652.1 | 2645.2 | 2592.6 | 2469.9 | 2342.8 | 2288.9 | 2459.9 | 2990.3 | 3131.2 | *3104.9* | 2488.7 |
| 35° | 2816.8 | 2806.2 | 2775.5 | 2667.1 | 2479.9 | 2386.6 | 2512.5 | 3106.8 | 3372.9 | *3349.7* | 2682.2 |
| 37.5° | 2958.3 | 2947.7 | 2922.6 | 2833.7 | 2676.5 | 2511.2 | 2597.0 | 3262.1 | 3658.5 | *3647.2* | 2918.3 |
| 40° | 3111.1 | 3093.6 | 3081.7 | 2986.5 | 2844.4 | 2690.9 | 2717.9 | 3443.7 | 3987.3 | *3988.5* | 3201.9 |
| 42.5° | 3228.9 | 3222.0 | 3223.2 | 3150.0 | 3006.6 | 2903.9 | 2878.2 | 3648.5 | 4381.2 | *4393.1* | 3543.2 |
| 45° | 3329.7 | 3324.1 | 3347.2 | 3295.9 | 3170.0 | 3043.5 | 3066.1 | 3880.2 | 4812.0 | *4836.4* | 3925.3 |
| 47.5° | 3407.4 | 3413.6 | 3446.8 | 3413.6 | 3339.7 | 3141.8 | 3232.6 | 4130.0 | 5264.8 | *5267.9* | 4319.8 |
| 50° | 3485.0 | 3487.5 | 3542.6 | 3526.3 | 3496.3 | 3266.5 | 3386.1 | 4409.3 | 5742.0 | *5747.6* | 4688.6 |
| 52.5° | 3509.4 | 3505.7 | 3593.3 | 3633.4 | 3634.7 | 3420.5 | 3584.6 | 4713.7 | 6209.8 | *6227.9* | 5068.1 |
| 55° | 3384.2 | 3394.8 | 3536.4 | 3699.2 | 3763.7 | 3633.4 | 3852.6 | 5098.8 | 6708.3 | *6715.8* | 5443.9 |
| 57.5° | 2771.7 | 2830.6 | 3143.7 | 3521.3 | 3847.0 | 3938.4 | 4237.7 | 5549.1 | 7283.8 | *7276.9* | 5824.6 |
| 60° | 1682.1 | 1752.2 | 2126.7 | 2953.3 | 3575.2 | 4244.6 | 4805.1 | 6246.7 | 7912.5 | *7893.1* | 6209.8 |
| 62.5° | 940.6 | 961.9 | 1081.5 | 1767.9 | 2719.1 | 4049.9 | 5359.3 | 7142.9 | 8756.7 | *8690.9* | 6588.6 |
| 65° | 693.2 | 700.1 | 728.3 | 866.1 | 1336.4 | 3114.9 | 5237.8 | 8214.3 | 9942.8 | *9825.7* | 7042.7 |
| 67.5° | 602.4 | 609.3 | 636.9 | 655.7 | 596.8 | 1636.4 | 4315.4 | 8808.6 | 11448.9 | *11295.4* | 7657.0 |
| 70° | 507.3 | 511.0 | 555.5 | 568.0 | 427.1 | 622.5 | 2772.4 | 8625.2 | 12842.9 | *12733.3* | 8316.4 |
| 72.5° | *378.2* | *393.3* | *457.8* | *487.8* | *342.6* | *330.7* | *1305.1* | *7541.1* | *13079.0* | *13080.2* | *8272.0* |
| 75° | 256.8 | 270.5 | 344.4 | 401.4 | 264.3 | 231.7 | 526.7 | 5631.1 | 11388.7 | *11388.7* | 7251.2 |
| 77.5° | 175.3 | 186.6 | 239.8 | 315.0 | 200.4 | 159.1 | 273.0 | 3573.9 | 8170.5 | *8458.0* | 5168.3 |
| 80° | 77.7 | 84.5 | 154.7 | 228.6 | 152.2 | 102.7 | 154.7 | 1957.0 | 4941.0 | *4880.3* | 2025.9 |
| 82.5° | 38.2 | 43.8 | 98.9 | 142.8 | 98.3 | 63.2 | 81.4 | 930.6 | 1601.3 | *1521.8* | 316.2 |
| 85° | 7.5 | 10.0 | 53.2 | 60.7 | 45.7 | 28.2 | 30.7 | 286.2 | 192.9 | *220.4* | 67.0 |
| 87.5° | 0.0 | 0.0 | 16.3 | 11.3 | 5.0 | 6.3 | 6.3 | 25.7 | 15.0 | *17.5* | 17.5 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | *0.0* | 0.0 |

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Scaled Data Report

REPORT NUMBER: P1199748
CATALOG NUMBER: GPC-SB2B-740-U-SL2-HSS

**CANDELA DISTRIBUTION (continued):**

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0° | 1668.3 | 1668.3 | 1668.3 | 1668.3 | 1668.3 | 1668.3 | 1668.3 | 1668.3 | 1668.3 | 1668.3 | 1668.3 |
| 2.5° | 1673.9 | 1650.8 | 1600.0 | 1549.9 | 1498.6 | 1451.6 | 1419.1 | 1386.5 | 1366.4 | 1357.7 | 1358.9 |
| 5° | 1687.1 | 1640.1 | 1533.7 | 1422.2 | 1312.0 | 1204.3 | 1123.5 | 1047.7 | 1023.9 | 984.4 | 986.9 |
| 7.5° | 1707.7 | 1631.3 | 1463.5 | 1275.6 | 1096.5 | 938.7 | 824.8 | 733.9 | 697.6 | 662.6 | 661.9 |
| 10° | 1721.5 | 1615.1 | 1370.8 | 1119.7 | 877.4 | 700.1 | 591.2 | 525.4 | 501.6 | 480.3 | 479.7 |
| 12.5° | 1727.2 | 1585.0 | 1264.4 | 945.0 | 682.6 | 533.6 | 468.4 | 437.7 | 429.6 | 422.1 | 422.1 |
| 15° | 1732.2 | 1555.6 | 1145.4 | 776.5 | 539.2 | 446.5 | 420.8 | 410.8 | 405.2 | 400.2 | 400.2 |
| 17.5° | 1736.6 | 1518.0 | 1009.5 | 631.2 | 455.3 | 411.4 | 398.9 | 388.3 | 383.9 | 378.2 | 378.2 |
| 20° | 1751.6 | 1481.7 | 888.0 | 521.0 | 409.6 | 386.4 | 372.6 | 361.3 | 357.6 | 353.8 | 354.5 |
| 22.5° | 1779.8 | 1452.2 | 770.3 | 446.5 | 382.0 | 360.7 | 343.2 | 330.7 | 328.1 | 325.6 | 323.8 |
| 25° | 1813.6 | 1415.9 | 659.4 | 398.3 | 355.1 | 331.3 | 311.9 | 301.2 | 298.7 | 299.3 | 298.1 |
| 27.5° | 1856.8 | 1375.8 | 564.2 | 367.6 | 331.3 | 303.7 | 281.8 | 273.7 | 274.9 | 277.4 | 276.2 |
| 30° | 1904.4 | 1338.9 | 489.7 | 346.3 | 310.0 | 279.3 | 257.4 | 251.7 | 256.1 | 259.9 | 258.6 |
| 32.5° | 1975.2 | 1306.3 | 437.7 | 329.4 | 291.2 | 259.3 | 241.7 | 234.8 | 239.8 | 244.9 | 243.6 |
| 35° | 2071.6 | 1290.0 | 408.3 | 315.0 | 274.9 | 243.6 | 226.1 | 221.1 | 226.1 | 227.3 | 226.7 |
| 37.5° | 2190.0 | 1288.8 | 395.8 | 303.1 | 259.9 | 230.5 | 211.0 | 209.2 | 212.9 | 213.5 | 212.3 |
| 40° | 2342.8 | 1296.9 | 386.4 | 294.3 | 244.2 | 215.4 | 197.3 | 195.4 | 196.6 | 201.0 | 200.4 |
| 42.5° | 2536.3 | 1330.8 | 373.2 | 283.1 | 227.3 | 200.4 | 186.0 | 181.6 | 181.0 | 186.0 | 185.4 |
| 45° | 2779.2 | 1405.3 | 355.7 | 264.9 | 212.3 | 187.9 | 173.5 | 168.5 | 166.6 | 167.8 | 169.7 |
| 47.5° | 3044.1 | 1496.7 | 338.2 | 248.0 | 201.6 | 177.9 | 163.4 | 157.2 | 154.1 | 154.1 | 154.1 |
| 50° | 3300.9 | 1600.0 | 326.3 | 230.5 | 194.1 | 168.5 | 152.8 | 146.5 | 141.5 | 140.3 | 139.7 |
| 52.5° | 3555.1 | 1701.5 | 316.9 | 212.9 | 185.4 | 156.6 | 142.8 | 135.9 | 130.3 | 127.8 | 126.5 |
| 55° | 3786.9 | 1797.9 | 300.6 | 196.0 | 174.1 | 144.0 | 132.8 | 125.9 | 119.0 | 114.6 | 112.7 |
| 57.5° | 4009.2 | 1878.1 | 270.5 | 178.5 | 156.6 | 132.1 | 122.1 | 114.6 | 106.5 | 100.8 | 98.3 |
| 60° | 4211.4 | 1919.4 | 233.0 | 159.7 | 139.0 | 119.6 | 110.2 | 103.3 | 92.7 | 83.3 | 80.8 |
| 62.5° | 4365.5 | 1903.1 | 192.3 | 138.4 | 120.9 | 108.3 | 96.4 | 89.6 | 77.0 | 65.8 | 61.4 |
| 65° | 4523.3 | 1814.2 | 153.4 | 115.9 | 105.8 | 93.3 | 80.8 | 73.9 | 59.5 | 47.6 | 44.5 |
| 67.5° | 4728.1 | 1624.5 | 120.9 | 96.4 | 91.4 | 73.9 | 63.2 | 58.9 | 48.8 | 37.6 | 35.1 |
| 70° | 4859.6 | 1261.9 | 93.9 | 78.3 | 75.1 | 53.9 | 48.8 | 48.2 | 38.8 | 28.8 | 25.7 |
| 72.5° | *4498.9* | *827.3* | *72.0* | *59.5* | *53.9* | *35.1* | *37.6* | *37.6* | *28.2* | *19.4* | *16.9* |
| 75° | 3755.5 | 484.1 | 52.0 | 42.6 | 30.7 | 22.5 | 25.7 | 25.7 | 17.5 | 9.4 | 7.5 |
| 77.5° | 2682.2 | 258.0 | 34.4 | 26.3 | 15.7 | 10.0 | 13.8 | 13.2 | 5.6 | 0.6 | 0.0 |
| 80° | 1025.8 | 88.9 | 16.3 | 10.6 | 4.4 | 1.9 | 1.3 | 0.6 | 0.6 | 0.0 | 0.0 |
| 82.5° | 156.6 | 23.2 | 3.1 | 2.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 28.2 | 3.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 6.3 | 0.0 | 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

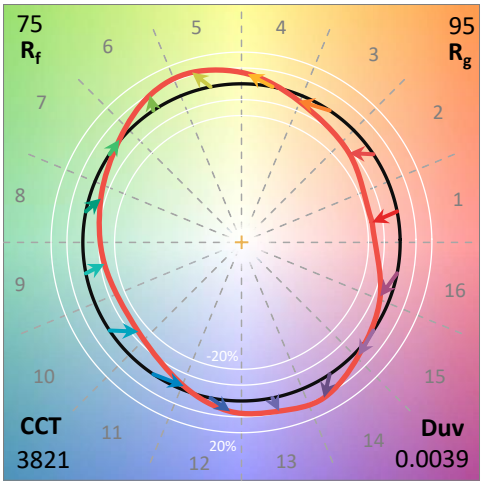
| | |
|---|---|
| Test Method: | LM-79-2008 |
| Report Number: | SP1-1908-441-3-R4 |
| Test Lab: | COOPER LIGHTING SOLUTIONS |
| Photometer: | SP1 - 76IN SPHERE |
| Measurement Geometry: | 4π |
| Issue Date: | 11/05/2024 |
| Manufacturer: | COOPER LIGHTING SOLUTIONS |
| Product Line: | McGRAW-EDISON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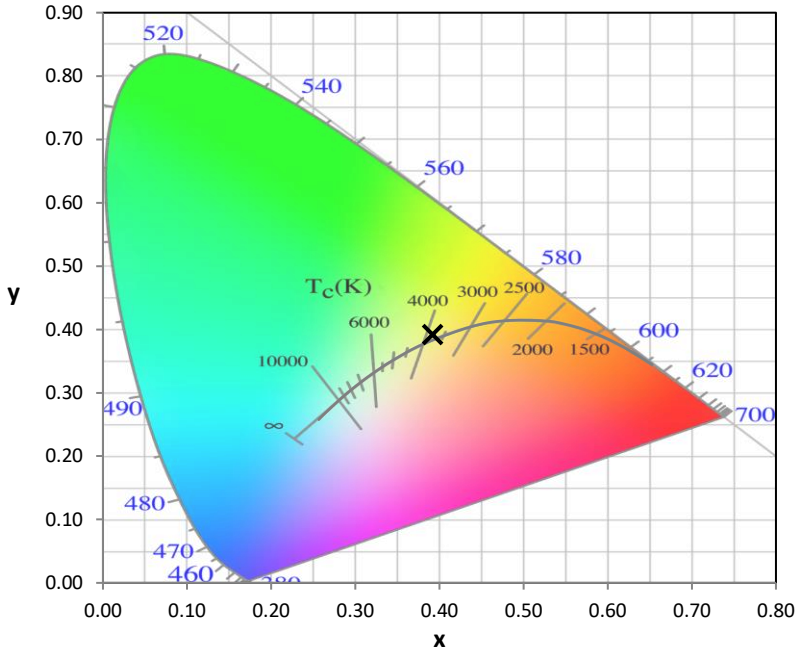
REPORT NUMBER: SP1-1908-441-3-R4

| 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 |

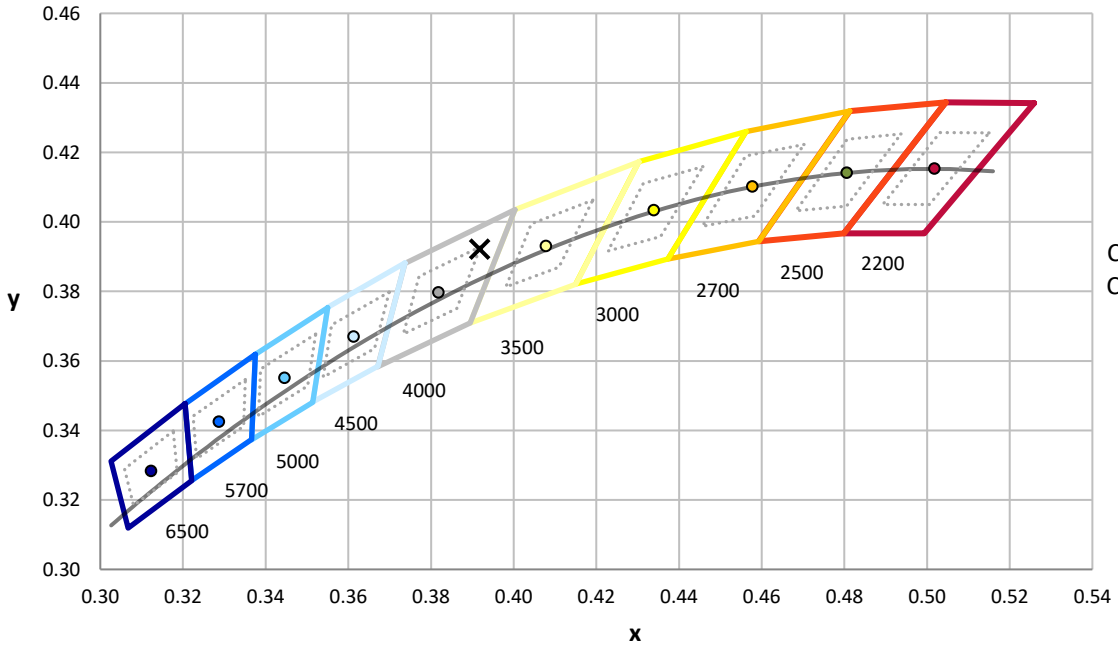
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1121 Highway 74 South
Peachtree City, GA 30269

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

## CIE 1931 Chromaticity Diagram




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



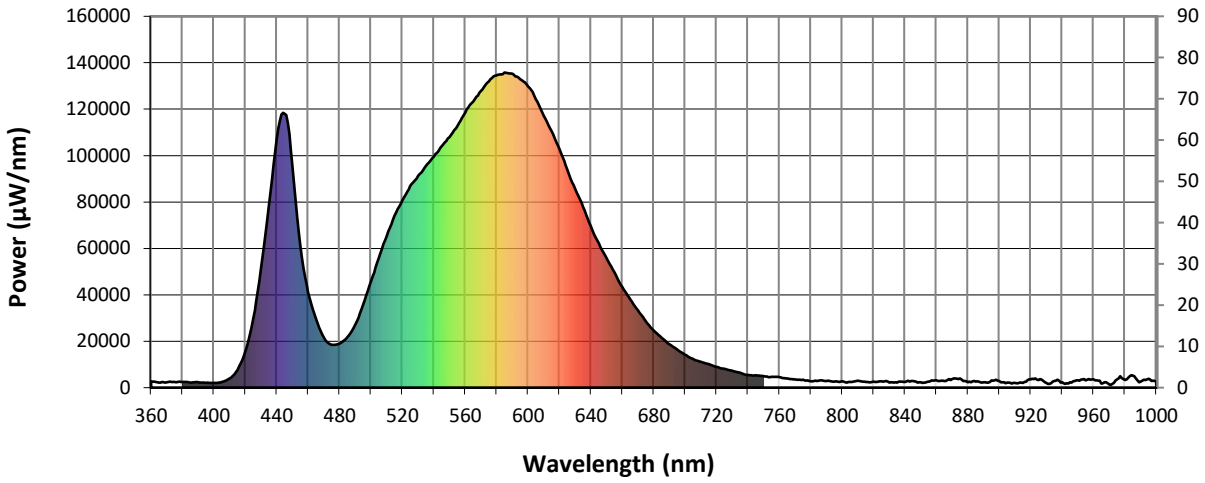

CCT = 3821K
CIE x = 0.3918
CIE y = 0.3921
Duv = 0.0039

Point lies inside the ANSI 4000K 7-step quadrangle

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## Photopic Flux vs. Wavelength



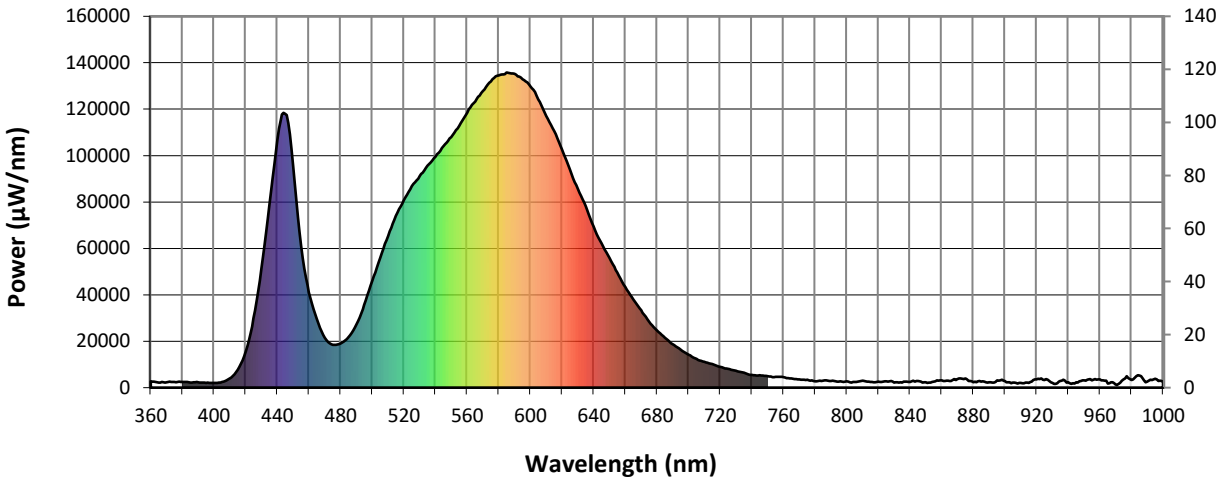

######

| 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



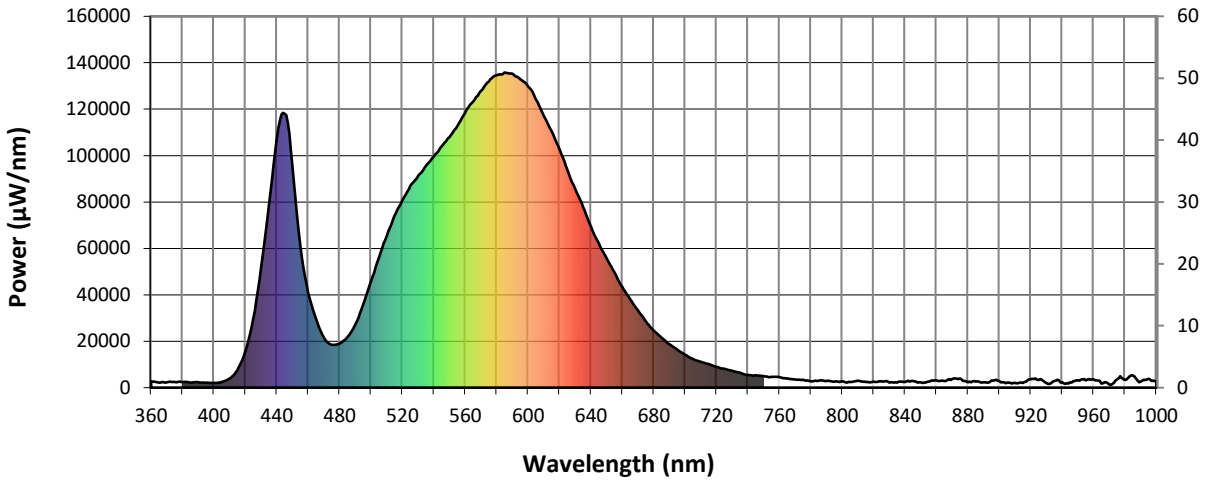

**Scotopic Lumens: 10930.8** **S/P: 1.47**

| 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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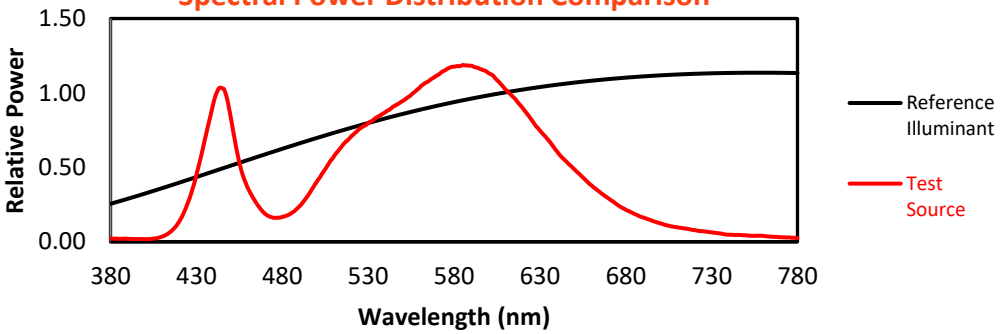
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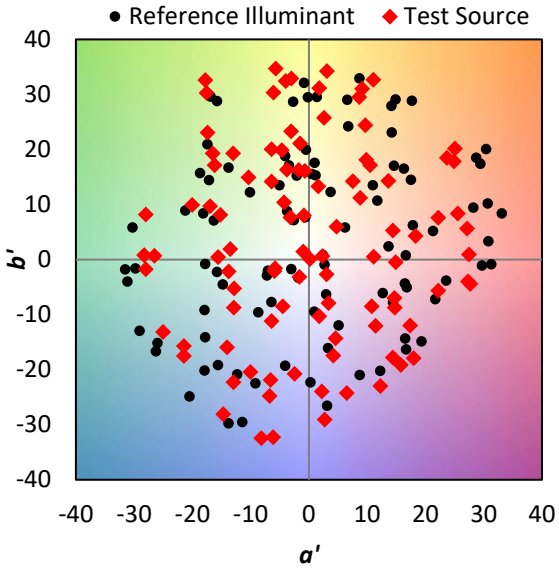
## Summary

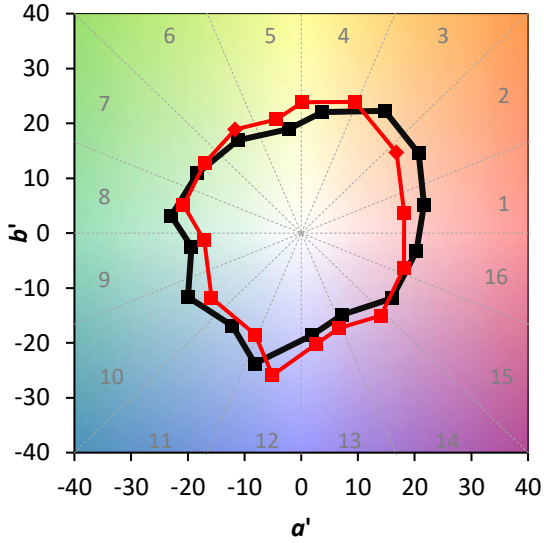
$R_f$ = 75.5
$R_g$ = 94.8
CIE $R_a$ = 72.3
$R_9$ = -33.5

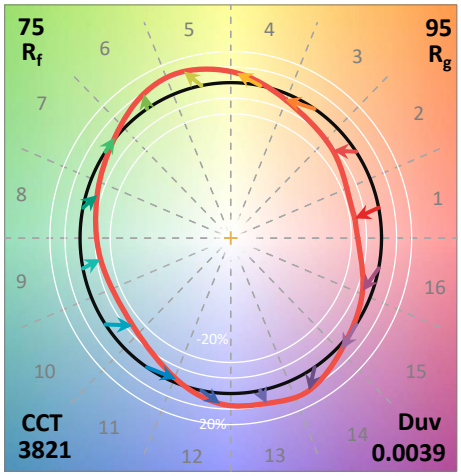
## Spectral Power Distribution Comparison

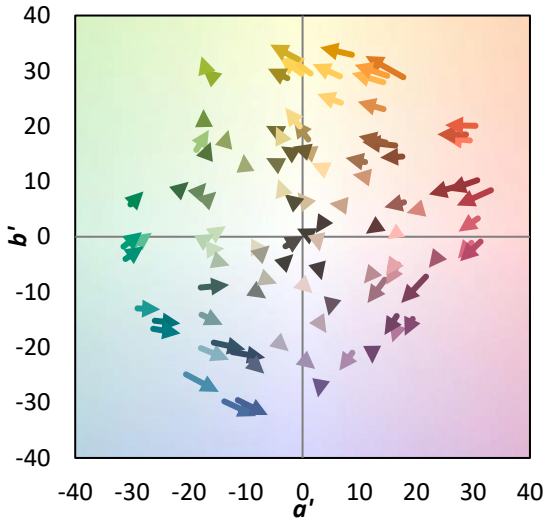



## Color Vector Graphics



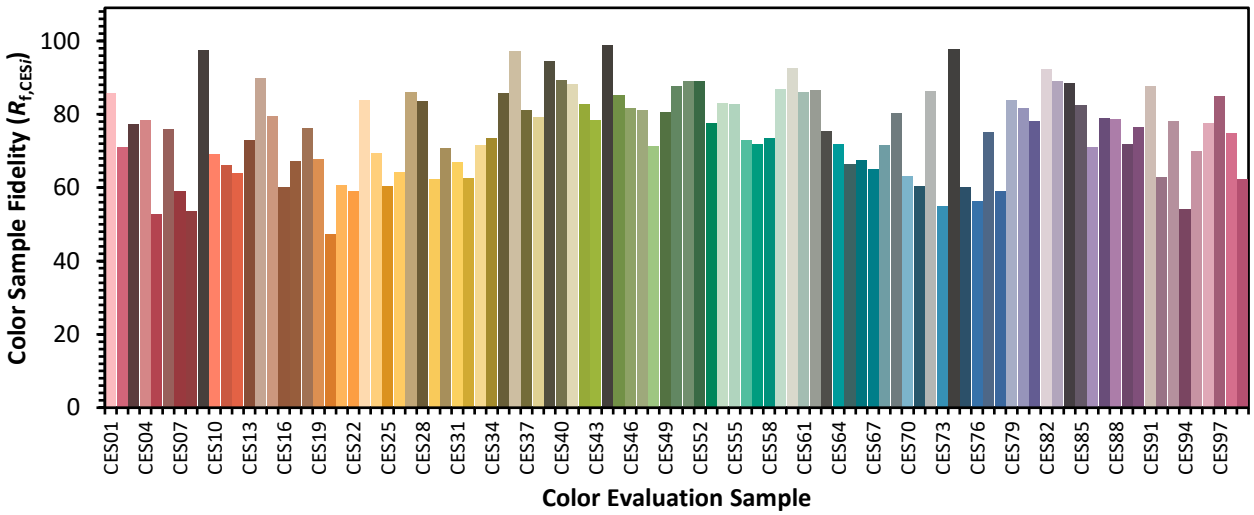
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Peachtree City, GA 30269

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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 | |

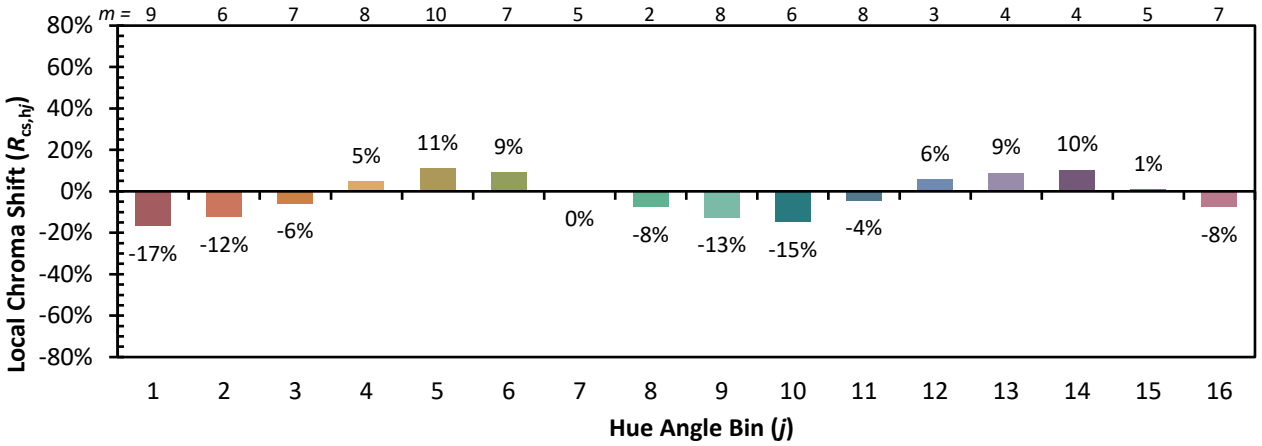


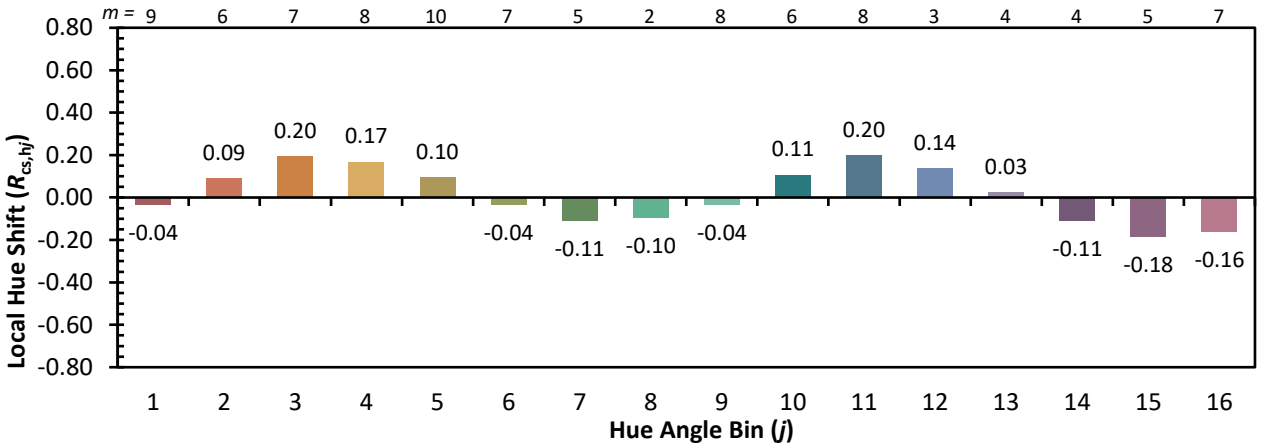
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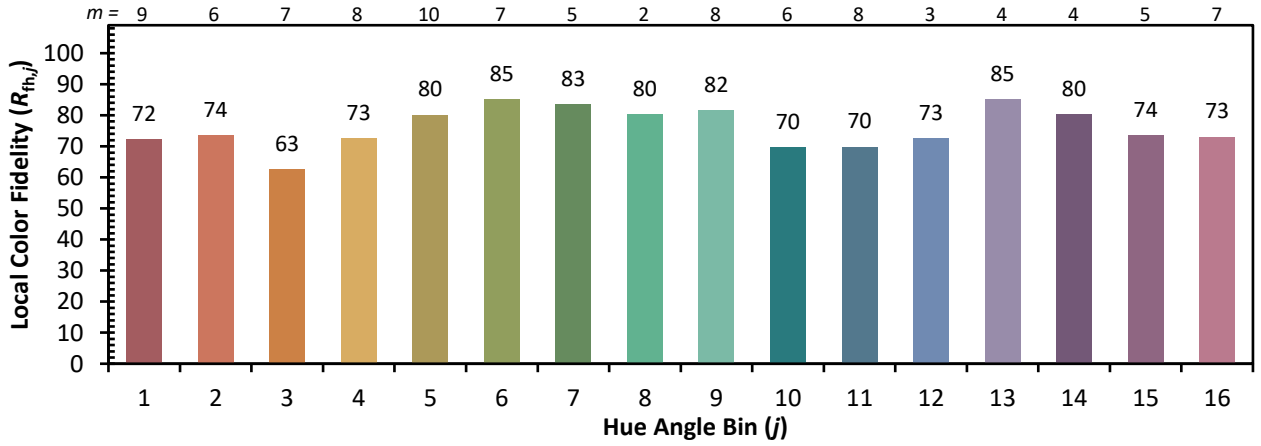
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## Color Rendition by Hue-Angle Bin



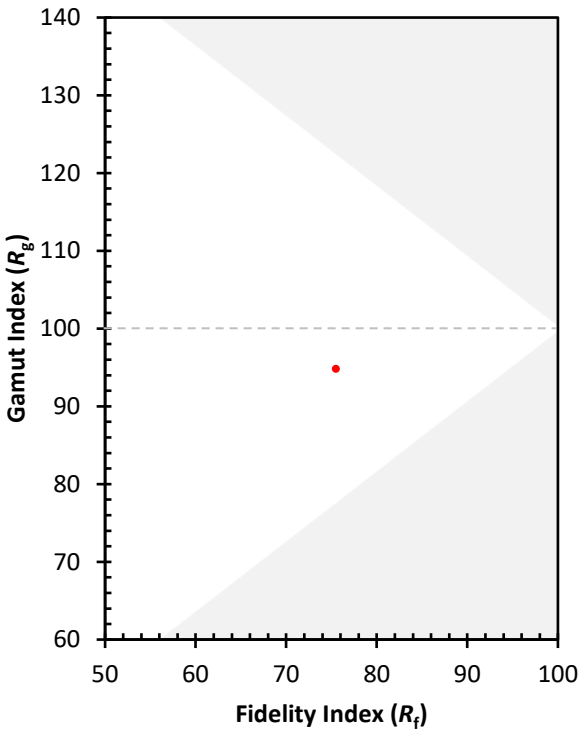



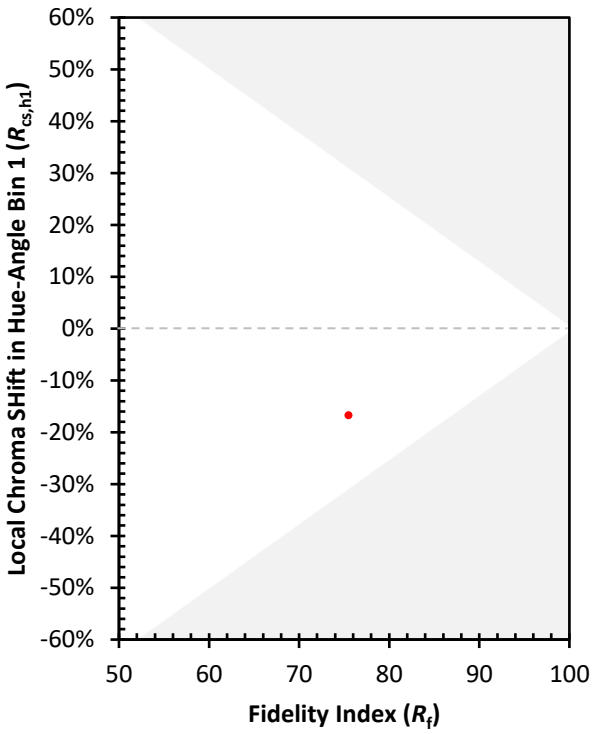
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### Measure Comparisons




(END OF REPORT)