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

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1121 Highway 74 South
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: P1200156

Luminaire Tested: GPC-SB2C-727-U-T3R

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: | P1200156 |
| | TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-5) |
| Test Lab: | INNOVATION CENTER |
| Issue Date: | 3/13/2026 |
| Manufacturer: | COOPER LIGHTING SOLUTIONS |
| Product Line: | McGRAW-EDISON |
| Catalog Number: | GPC-SB2C-727-U-T3R |
| Description: | GALLEON PEDESTRIAN LUMINAIRE |
| | (2) 70 CRI, 2700K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III ROADWAY OPTI |
| Light Source: | - |
| Ballast/Driver: | ELECTRONIC DRIVER |

**Summary**

| | |
|---|---|
| Lumens per Lamp: | N/A |
| Luminaire Lumens: | 14258 lumens |
| Efficiency: | N/A |
| Efficacy: | 141.3 lumens/watt |
| Luminous Opening: | Rectangular (W 1' x L: 0.5' x H: 0') |
| IES Classification: | Type III - Medium |
| BUG Rating: | B2 - U0 - G2 |

| | |
|---|---|
| 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 |

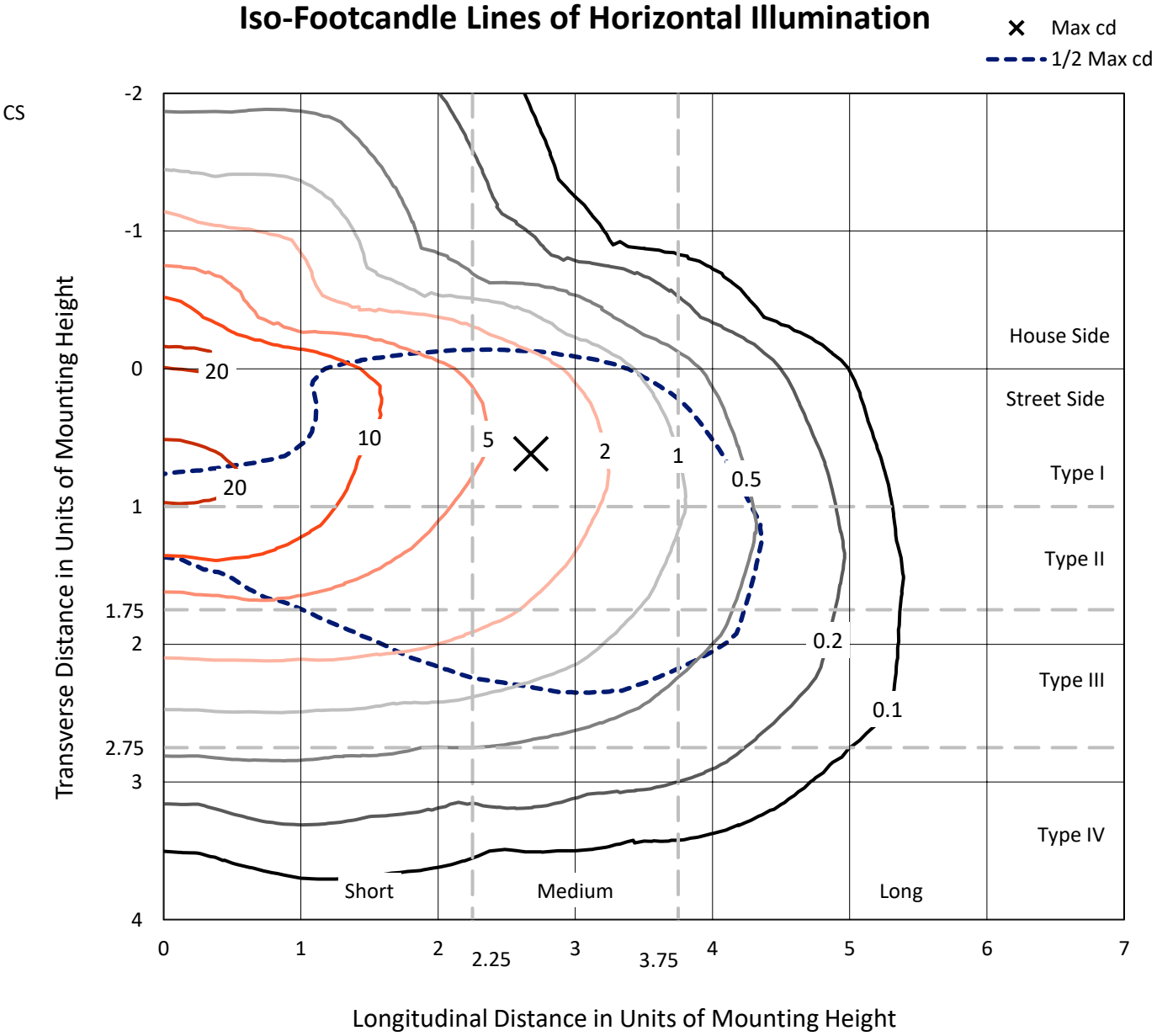


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Scaled Data Report

REPORT NUMBER: P1200156
CATALOG NUMBER: GPC-SB2C-727-U-T3R

## Iso-Footcandle Lines of Horizontal Illumination



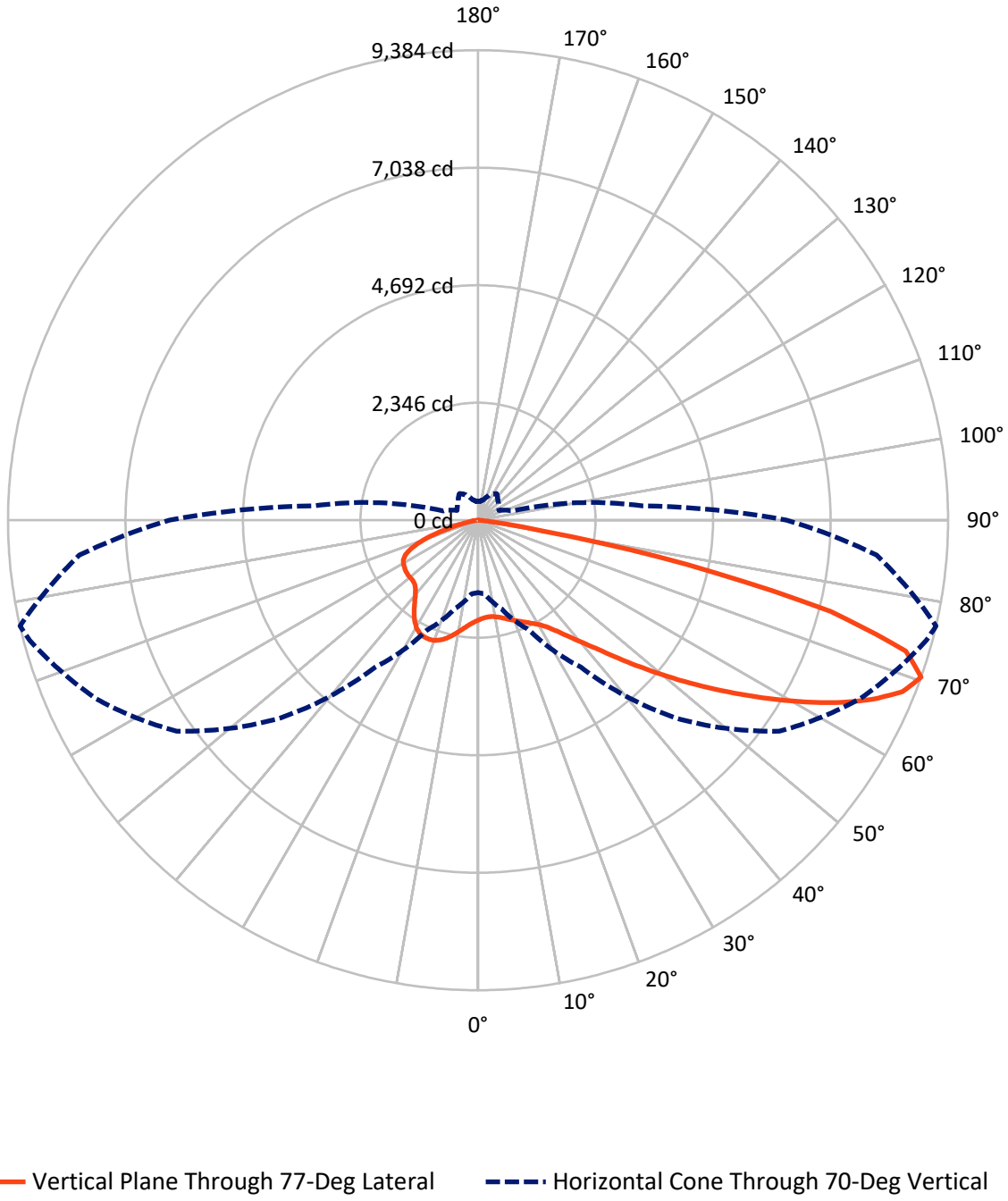

Based on 10 foot mounting height. Maximum calculated value = 23.6 fc
Type III - Medium - N/A

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## Luminous Intensity Polar Plot



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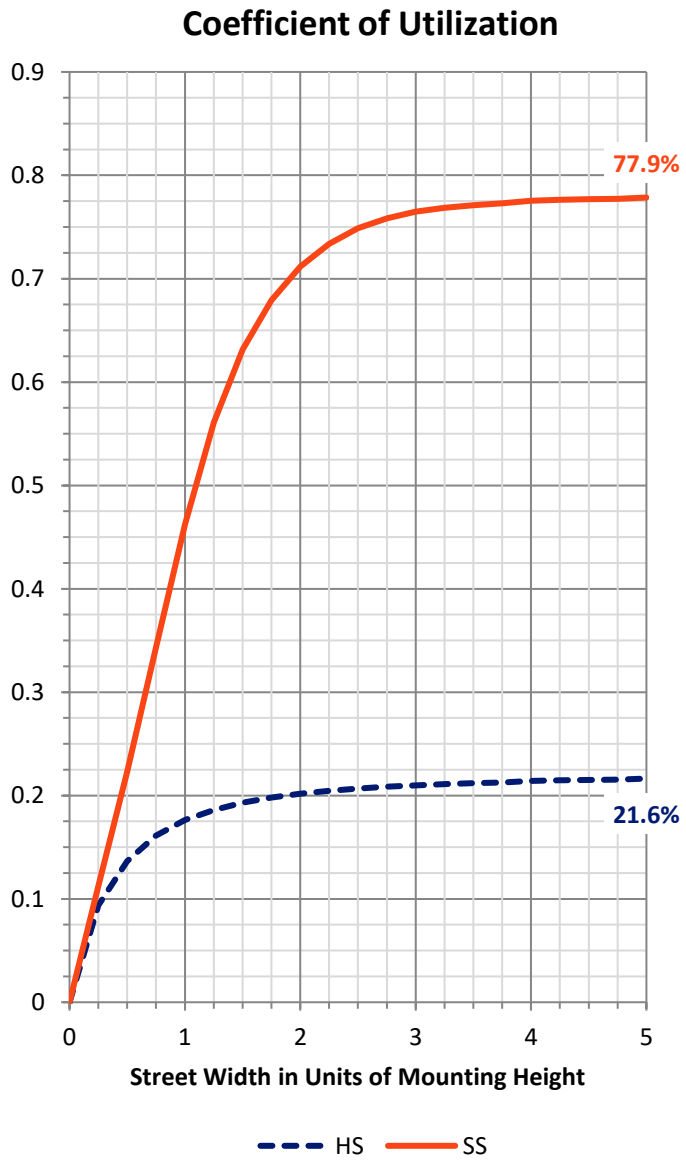
REPORT NUMBER: P1200156
CATALOG NUMBER: GPC-SB2C-727-U-T3R

**FLUX DISTRIBUTION:**

| | | Downward | Upward | Total |
|---|---|---|---|---|
| **House Side** | Lumens | 3122.3 | 0.0 | 3122.3 |
| | % Fixture | 21.9 | 0.0 | 21.9 |
| **Street Side** | Lumens | 11135.7 | 0.0 | 11135.7 |
| | % Fixture | 78.1 | 0.0 | 78.1 |
| **Total** | Lumens | 14258.0 | 0.0 | 14258.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

**ZONAL LUMENS:**

| Zone | Lumens | % Fixture |
|---|---|---|
| 0°-10° | 189.7 | 1.3 |
| 10°-20° | 547.5 | 3.8 |
| 20°-30° | 936.3 | 6.6 |
| 30°-40° | 1505.7 | 10.6 |
| 40°-50° | 2350.8 | 16.5 |
| 50°-60° | 3140.1 | 22.0 |
| 60°-70° | 3346.9 | 23.5 |
| 70°-80° | 2060.3 | 14.5 |
| 80°-90° | 180.5 | 1.3 |
| 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° | 14258.0 | 100.0 |
| 0°-180° | 14258.0 | 100.0 |



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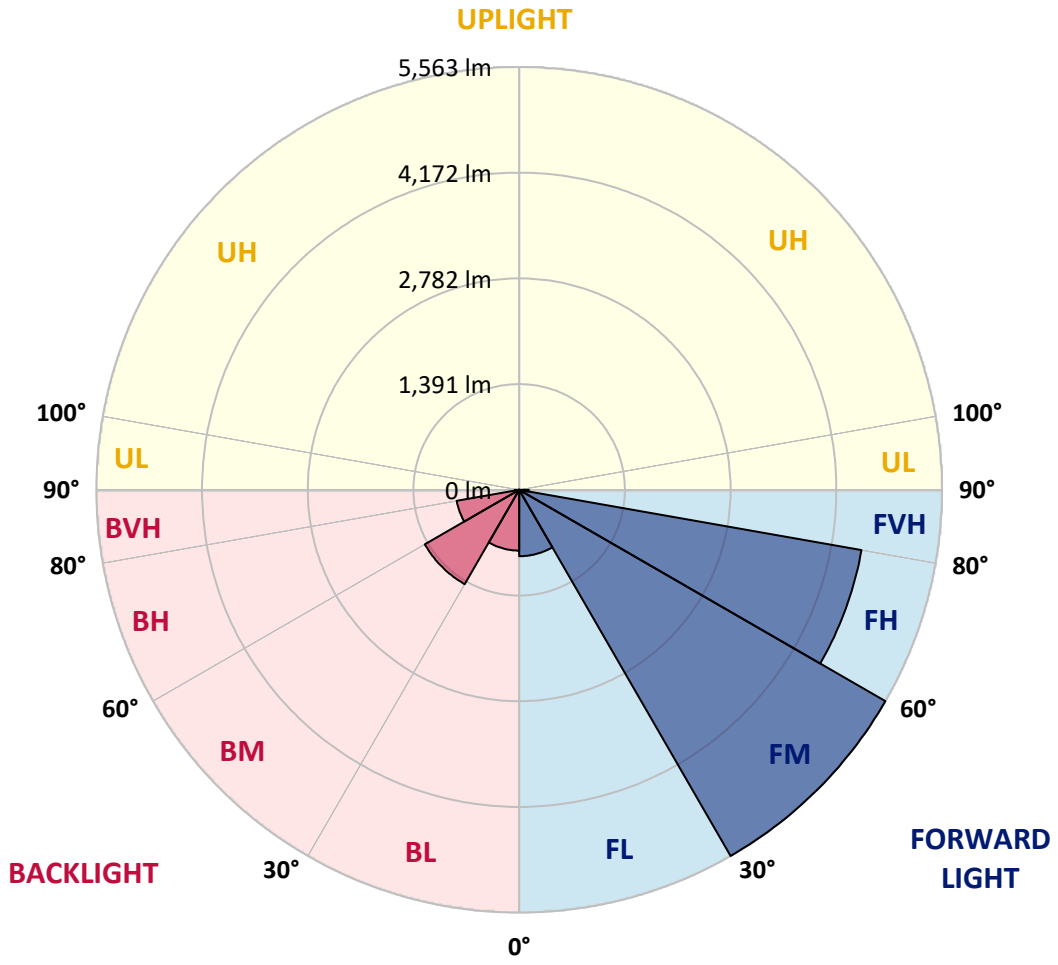
Scaled Data Report

REPORT NUMBER: P1200156
CATALOG NUMBER: GPC-SB2C-727-U-T3R

## LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit B | U | G |
|---|---|---|---|---|---|---|
| FL | (0°-30°) | 873.5 | 6.1 | | | |
| FM | (30°-60°) | 5563.2 | 39.0 | | | |
| FH | (60°-80°) | 4572.8 | 32.1 | | | G2/5000 |
| FVH | (80°-90°) | 126.2 | 0.9 | | | G2/225 |
| BL | (0°-30°) | 800.0 | 5.6 | B2/1000 | | |
| BM | (30°-60°) | 1433.5 | 10.1 | B2/2500 | | |
| BH | (60°-80°) | 834.5 | 5.9 | B2/1000 | | G2/1000 |
| BVH | (80°-90°) | 54.3 | 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-G2**
Type III Medium



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**CANDELA DISTRIBUTION (FULL):**

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 77° | 85° |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0° | 1989.1 | 1989.1 | 1989.1 | 1989.1 | 1989.1 | 1989.1 | 1989.1 | 1989.1 | 1989.1 | *1989.1* | 1989.1 |
| 2.5° | 1833.6 | 1832.9 | 1842.3 | 1845.3 | 1862.8 | 1875.2 | 1898.6 | 1923.4 | 1955.5 | *1959.2* | 1978.9 |
| 5° | 1727.7 | 1727.7 | 1738.7 | 1750.3 | 1773.0 | 1797.8 | 1833.6 | 1876.7 | 1932.2 | *1940.9* | 1989.9 |
| 7.5° | 1637.9 | 1643.7 | 1653.2 | 1675.9 | 1702.1 | 1737.9 | 1792.7 | 1854.0 | 1927.1 | *1940.9* | 2019.8 |
| 10° | 1565.6 | 1572.2 | 1583.8 | 1602.1 | 1641.5 | 1691.2 | 1762.8 | 1841.6 | 1939.5 | *1961.4* | 2063.6 |
| 12.5° | 1543.0 | 1549.5 | 1556.1 | 1570.0 | 1606.5 | 1664.9 | 1750.3 | 1847.5 | 1969.4 | *1991.3* | 2123.5 |
| 15° | 1595.5 | 1603.6 | 1598.5 | 1594.8 | 1613.8 | 1667.1 | 1756.2 | 1868.6 | 2006.6 | *2038.0* | 2197.2 |
| 17.5° | 1716.7 | 1719.7 | 1708.0 | 1673.7 | 1670.7 | 1699.2 | 1783.9 | 1897.8 | 2053.4 | *2087.7* | 2271.7 |
| 20° | 1912.4 | 1907.3 | 1883.2 | 1815.3 | 1776.6 | 1770.8 | 1831.4 | 1941.7 | 2101.6 | *2138.1* | 2352.0 |
| 22.5° | 2178.2 | 2172.4 | 2124.2 | 2016.9 | 1930.7 | 1873.7 | 1900.0 | 1998.6 | 2155.6 | *2196.5* | 2430.2 |
| 25° | 2509.8 | 2501.7 | 2430.9 | 2284.9 | 2151.2 | 2010.3 | 1993.5 | 2073.8 | 2222.1 | *2260.0* | 2512.0 |
| 27.5° | 2896.8 | 2890.2 | 2813.5 | 2620.8 | 2428.0 | 2197.2 | 2109.6 | 2162.2 | 2291.4 | *2334.5* | 2604.0 |
| 30° | 3313.0 | 3332.0 | 3196.2 | 2988.8 | 2744.9 | 2441.1 | 2265.9 | 2271.0 | 2381.2 | *2420.0* | 2715.7 |
| 32.5° | 3802.3 | 3835.1 | 3671.5 | 3408.7 | 3075.7 | 2706.2 | 2463.0 | 2422.9 | 2512.0 | *2544.1* | 2856.6 |
| 35° | 4287.1 | 4324.4 | 4188.5 | 3897.9 | 3514.6 | 3018.7 | 2669.0 | 2597.4 | 2685.8 | *2720.8* | 3043.6 |
| 37.5° | 4706.3 | 4755.9 | 4685.8 | 4433.2 | 3984.1 | 3395.5 | 2937.7 | 2802.6 | 2899.7 | *2943.5* | 3294.8 |
| 40° | 5037.1 | 5113.0 | 5107.9 | 4950.2 | 4537.6 | 3852.6 | 3278.7 | 3056.0 | 3165.5 | *3213.0* | 3599.3 |
| 42.5° | 5305.8 | 5371.5 | 5428.5 | 5420.4 | 5115.2 | 4371.8 | 3679.6 | 3385.3 | 3468.5 | *3523.3* | 3941.7 |
| 45° | 5491.3 | 5561.4 | 5684.0 | 5816.2 | 5670.9 | 4927.5 | 4138.9 | 3776.0 | 3851.9 | *3934.4* | 4349.9 |
| 47.5° | 5657.0 | 5736.6 | 5895.8 | 6105.4 | 6142.6 | 5485.4 | 4642.0 | 4230.9 | 4300.3 | *4385.7* | 4759.6 |
| 50° | 5671.6 | 5740.3 | 5987.1 | 6284.3 | 6477.8 | 6021.4 | 5182.4 | 4741.3 | 4806.3 | *4897.6* | 5198.4 |
| 52.5° | 5318.9 | 5427.0 | 5857.8 | 6279.2 | 6631.9 | 6469.8 | 5719.1 | 5272.2 | 5345.2 | *5454.7* | 5652.6 |
| 55° | 4128.7 | 4287.1 | 5478.8 | 6083.5 | 6577.1 | 6759.7 | 6229.5 | 5836.7 | 5930.1 | *6044.8* | 6109.8 |
| 57.5° | 3556.2 | 3625.5 | 4349.2 | 5727.1 | 6327.4 | 6834.9 | 6660.3 | 6407.0 | 6557.4 | *6683.0* | 6593.2 |
| 60° | 3196.2 | 3253.9 | 3681.8 | 5172.9 | 5998.8 | 6715.8 | 6993.3 | 6938.6 | 7198.5 | *7348.2* | 7087.5 |
| 62.5° | 2810.6 | 2865.4 | 3254.6 | 4319.3 | 5578.2 | 6517.9 | 7203.6 | 7429.3 | 7855.7 | *8019.3* | 7553.4 |
| 65° | 2428.0 | 2474.7 | 2847.9 | 3629.2 | 5043.6 | 6320.1 | 7312.4 | 7853.5 | 8464.0 | *8633.4* | 7940.4 |
| 67.5° | 2001.5 | 2040.2 | 2392.9 | 3061.8 | 4393.7 | 6049.1 | 7366.5 | 8187.2 | 8993.4 | *9138.7* | 8131.7 |
| 70° | *1444.4* | *1474.3* | *1838.7* | *2421.4* | *3578.1* | *5583.3* | *7344.6* | *8423.8* | *9268.0* | *9384.1* | *7987.2* |
| 72.5° | 682.8 | 709.8 | 1137.7 | 1572.2 | 2527.3 | 4676.3 | 6901.3 | 8236.2 | 8989.0 | *8931.3* | 7102.1 |
| 75° | 364.4 | 387.7 | 653.5 | 862.4 | 1334.8 | 3205.7 | 5647.5 | 7094.8 | 7548.3 | *7267.9* | 5248.8 |
| 77.5° | 246.8 | 265.1 | 404.5 | 517.7 | 609.7 | 1521.8 | 3629.9 | 4912.2 | 4726.0 | *4263.0* | 2628.8 |
| 80° | 195.7 | 214.7 | 331.5 | 350.5 | 295.0 | 549.9 | 1499.9 | 2273.9 | 1633.5 | *1306.4* | 747.7 |
| 82.5° | 150.4 | 171.6 | 278.9 | 254.1 | 160.6 | 225.6 | 436.7 | 719.3 | 418.4 | *318.4* | 181.1 |
| 85° | 92.0 | 114.6 | 219.1 | 162.1 | 90.5 | 103.0 | 148.2 | 200.1 | 127.8 | *106.6* | 65.0 |
| 87.5° | 46.7 | 65.7 | 111.0 | 59.1 | 40.9 | 24.1 | 39.4 | 39.4 | 33.6 | *29.2* | 16.8 |
| 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: P1200156
CATALOG NUMBER: GPC-SB2C-727-U-T3R

**CANDELA DISTRIBUTION (continued):**

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0° | 1989.1 | 1989.1 | 1989.1 | 1989.1 | 1989.1 | 1989.1 | 1989.1 | 1989.1 | 1989.1 | 1989.1 | 1989.1 |
| 2.5° | 1996.4 | 2011.0 | 2035.9 | 2059.2 | 2077.5 | 2095.0 | 2112.5 | 2122.0 | 2124.9 | 2136.6 | 2143.2 |
| 5° | 2019.8 | 2046.8 | 2095.0 | 2140.3 | 2168.8 | 2186.3 | 2198.7 | 2206.0 | 2207.5 | 2211.1 | 2216.9 |
| 7.5° | 2062.9 | 2106.0 | 2173.1 | 2218.4 | 2239.6 | 2238.1 | 2233.0 | 2214.8 | 2207.5 | 2200.9 | 2202.3 |
| 10° | 2123.5 | 2180.4 | 2263.0 | 2294.4 | 2281.2 | 2246.2 | 2200.9 | 2147.6 | 2122.8 | 2098.7 | 2091.4 |
| 12.5° | 2198.7 | 2271.0 | 2352.0 | 2350.6 | 2285.6 | 2195.8 | 2090.6 | 2008.8 | 1957.0 | 1919.8 | 1911.0 |
| 15° | 2290.0 | 2373.2 | 2435.3 | 2385.6 | 2243.2 | 2081.9 | 1927.8 | 1821.2 | 1774.4 | 1733.5 | 1729.2 |
| 17.5° | 2384.2 | 2473.3 | 2501.7 | 2374.7 | 2136.6 | 1913.2 | 1738.7 | 1654.7 | 1608.7 | 1586.8 | 1593.3 |
| 20° | 2476.2 | 2564.5 | 2541.2 | 2311.9 | 1974.5 | 1721.9 | 1566.3 | 1520.3 | 1510.8 | 1515.9 | 1513.7 |
| 22.5° | 2573.3 | 2652.2 | 2549.2 | 2190.7 | 1767.9 | 1526.2 | 1440.7 | 1442.2 | 1463.4 | 1478.7 | 1482.3 |
| 25° | 2672.6 | 2725.9 | 2528.0 | 2015.4 | 1545.9 | 1382.3 | 1361.1 | 1384.5 | 1426.1 | 1456.1 | 1464.1 |
| 27.5° | 2768.3 | 2791.6 | 2482.0 | 1798.5 | 1355.3 | 1279.3 | 1283.0 | 1331.2 | 1394.0 | 1435.6 | 1445.8 |
| 30° | 2876.3 | 2850.1 | 2393.7 | 1554.6 | 1223.1 | 1191.0 | 1221.7 | 1277.9 | 1340.7 | 1377.9 | 1386.7 |
| 32.5° | 2998.3 | 2900.4 | 2253.5 | 1329.0 | 1129.7 | 1120.2 | 1170.5 | 1207.1 | 1234.8 | 1245.8 | 1251.6 |
| 35° | 3150.2 | 2971.3 | 2073.8 | 1170.5 | 1045.7 | 1068.3 | 1116.5 | 1098.3 | 1087.3 | 1081.5 | 1087.3 |
| 37.5° | 3347.3 | 3066.9 | 1863.5 | 1067.6 | 977.8 | 1031.1 | 1050.8 | 993.8 | 950.7 | 929.6 | 934.7 |
| 40° | 3584.7 | 3207.1 | 1661.3 | 988.0 | 934.7 | 998.9 | 964.6 | 896.0 | 841.2 | 811.3 | 813.5 |
| 42.5° | 3848.3 | 3353.9 | 1491.1 | 928.1 | 910.6 | 972.7 | 901.1 | 819.3 | 731.0 | 721.5 | 731.0 |
| 45° | 4125.0 | 3505.1 | 1375.0 | 882.1 | 898.9 | 950.0 | 864.6 | 732.4 | 669.6 | 708.3 | 728.8 |
| 47.5° | 4401.8 | 3643.8 | 1304.9 | 847.8 | 893.1 | 924.5 | 832.5 | 684.2 | 639.7 | 695.9 | 722.2 |
| 50° | 4709.9 | 3767.9 | 1273.5 | 823.0 | 886.5 | 914.2 | 784.3 | 671.8 | 608.3 | 645.5 | 673.3 |
| 52.5° | 5015.9 | 3864.3 | 1250.1 | 798.1 | 877.0 | 906.2 | 760.9 | 657.2 | 570.3 | 572.5 | 587.8 |
| 55° | 5321.1 | 3927.1 | 1224.6 | 765.3 | 855.8 | 888.7 | 758.7 | 641.1 | 541.8 | 531.6 | 538.9 |
| 57.5° | 5646.8 | 3962.9 | 1193.2 | 728.8 | 819.3 | 844.1 | 756.5 | 628.7 | 533.1 | 516.3 | 518.5 |
| 60° | 5978.3 | 4015.5 | 1152.3 | 684.2 | 770.4 | 790.8 | 751.4 | 624.3 | 527.9 | 499.5 | 501.7 |
| 62.5° | 6275.5 | 4033.7 | 1103.4 | 641.9 | 707.6 | 738.3 | 740.4 | 620.7 | 514.1 | 465.2 | 465.2 |
| 65° | 6470.5 | 3954.9 | 1017.9 | 593.7 | 639.7 | 684.2 | 719.3 | 608.3 | 489.2 | 440.3 | 440.3 |
| 67.5° | 6462.5 | 3730.0 | 884.3 | 531.6 | 574.0 | 624.3 | 688.6 | 587.1 | 459.3 | 409.7 | 411.8 |
| 70° | *6161.6* | *3286.0* | *714.9* | *459.3* | *501.7* | *560.1* | *649.2* | *555.7* | *423.5* | *376.1* | *380.4* |
| 72.5° | 5284.6 | 2571.8 | 519.2 | 374.6 | 417.7 | 493.6 | 598.1 | 517.7 | 387.0 | 346.1 | 343.9 |
| 75° | 3775.2 | 1627.7 | 352.0 | 287.7 | 324.9 | 418.4 | 534.5 | 473.2 | 353.4 | 347.6 | 327.9 |
| 77.5° | 1928.5 | 777.7 | 232.9 | 210.3 | 226.4 | 330.1 | 449.1 | 422.8 | 358.5 | 287.0 | 255.6 |
| 80° | 627.3 | 287.0 | 146.8 | 143.1 | 150.4 | 219.8 | 347.6 | 346.9 | 271.6 | 195.0 | 172.3 |
| 82.5° | 200.1 | 123.4 | 95.7 | 92.0 | 88.4 | 138.0 | 242.4 | 274.6 | 183.3 | 123.4 | 122.7 |
| 85° | 79.6 | 73.8 | 56.2 | 51.8 | 37.2 | 65.0 | 127.1 | 182.6 | 136.6 | 89.1 | 91.3 |
| 87.5° | 29.2 | 29.2 | 15.3 | 11.0 | 8.0 | 21.9 | 34.3 | 54.8 | 78.1 | 46.0 | 45.3 |
| 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: SP1-1908-441-1-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

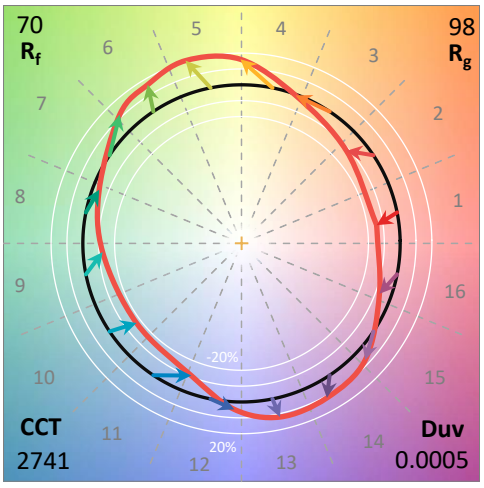
| | |
|---|---|
| Test Method: | LM-79-2008 |
| Report Number: | SP1-1908-441-1-R4 |
| Test Lab: | COOPER LIGHTING SOLUTIONS |
| Photometer: | SP1 - 76IN SPHERE |
| Measurement Geometry: | 4π |
| Issue Date: | 10/28/2024 |
| Manufacturer: | COOPER LIGHTING SOLUTIONS |
| Product Line: | McGRAW-EDISON |
| 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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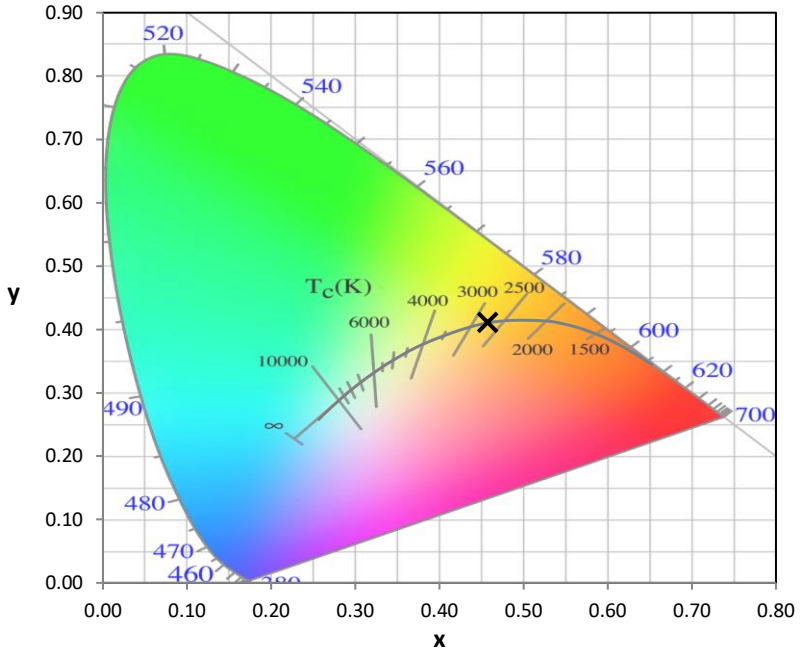
REPORT NUMBER: SP1-1908-441-1-R4

| 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 |

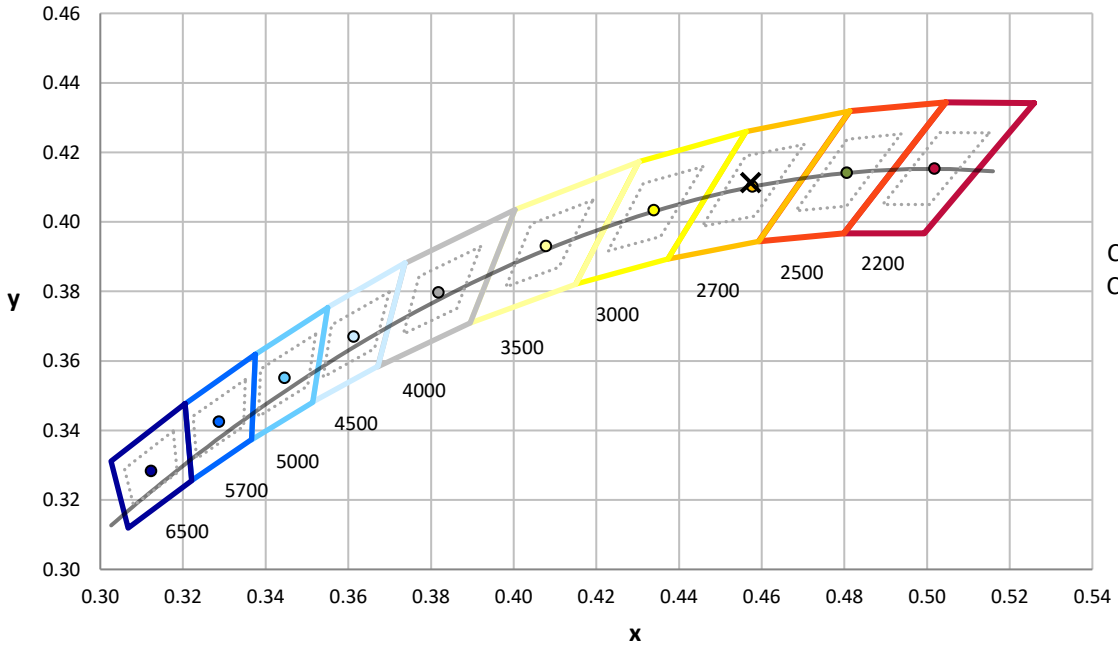
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REPORT NUMBER: SP1-1908-441-1-R4

## CIE 1931 Chromaticity Diagram




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



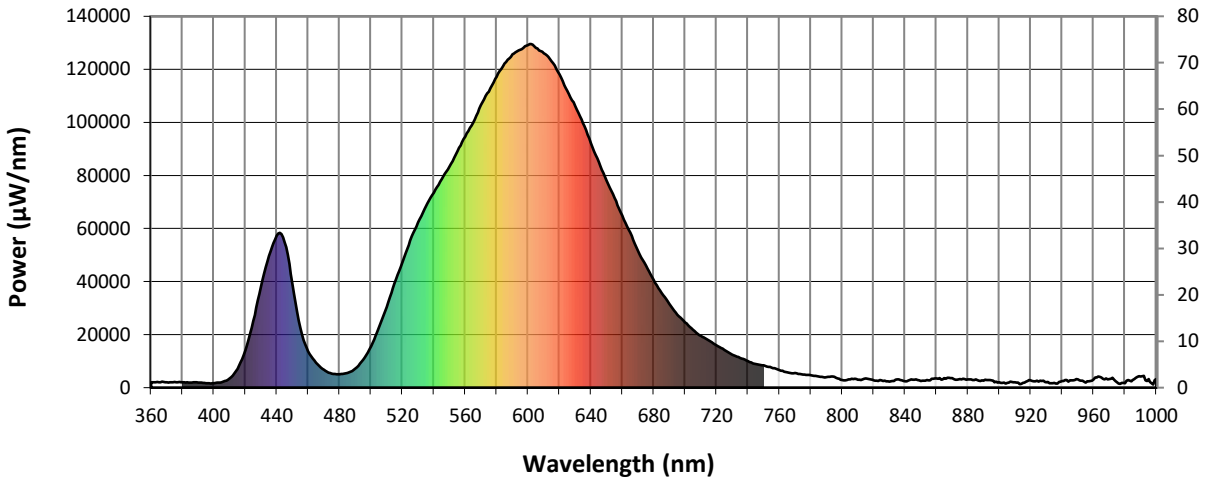

CCT = 2741K
CIE x = 0.4573
CIE y = 0.4113
Duv = 0.0005

Point lies inside the ANSI 2700K 4-step quadrangle

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## Photopic Flux vs. Wavelength



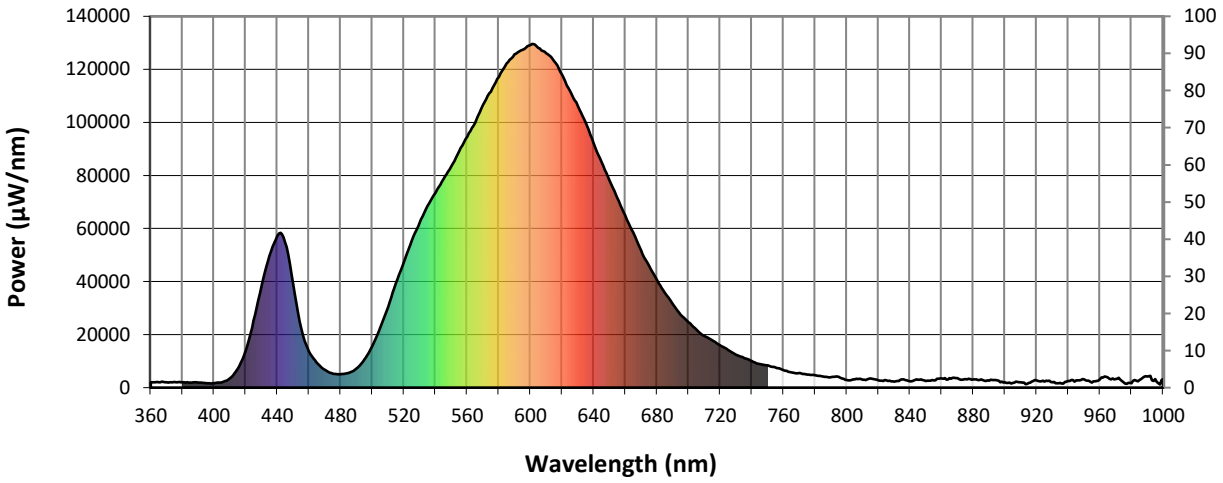

######

| 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



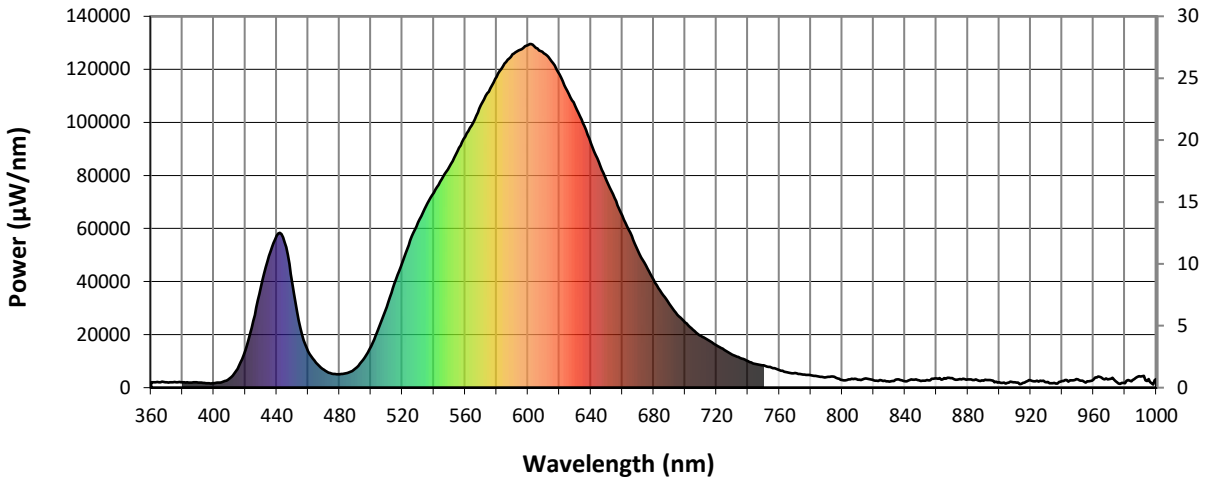

**Scotopic Lumens: 6474.3** **S/P: 1.04**

| 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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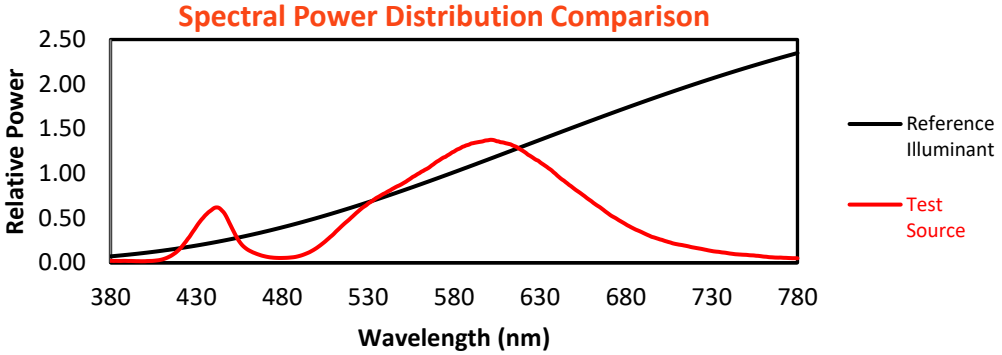
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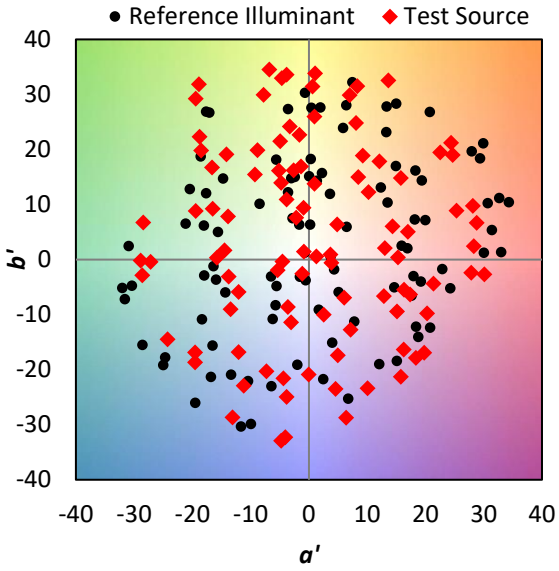
## Summary

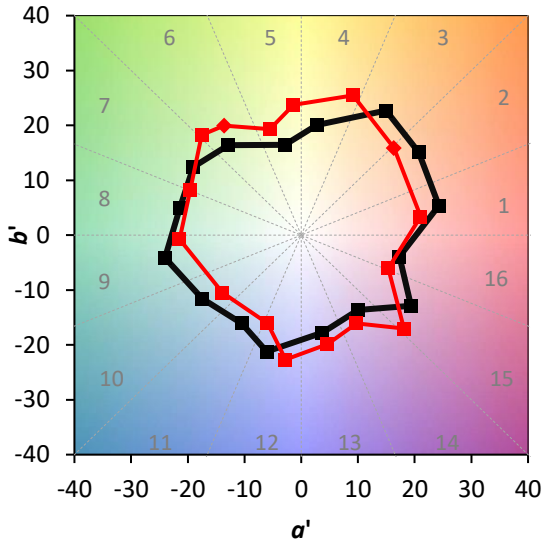
$R_f$ = 69.9
$R_g$ = 98.3
CIE $R_a$ = 71.5
$R_9$ = -16.1

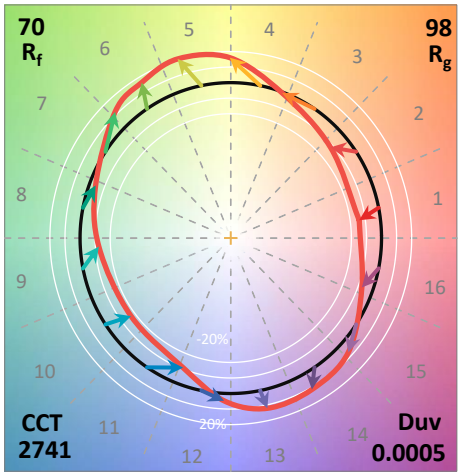
## Spectral Power Distribution Comparison

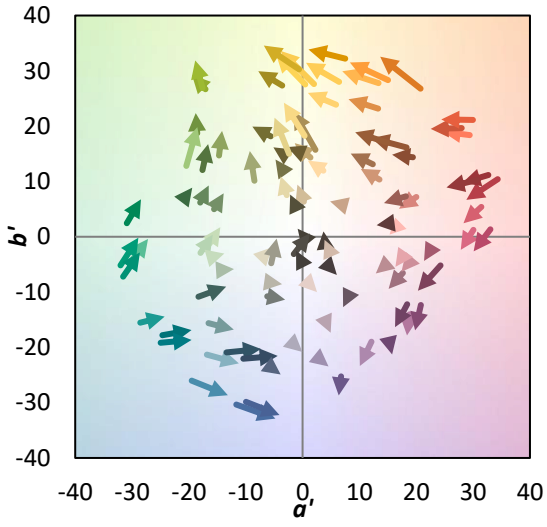



## Color Vector Graphics



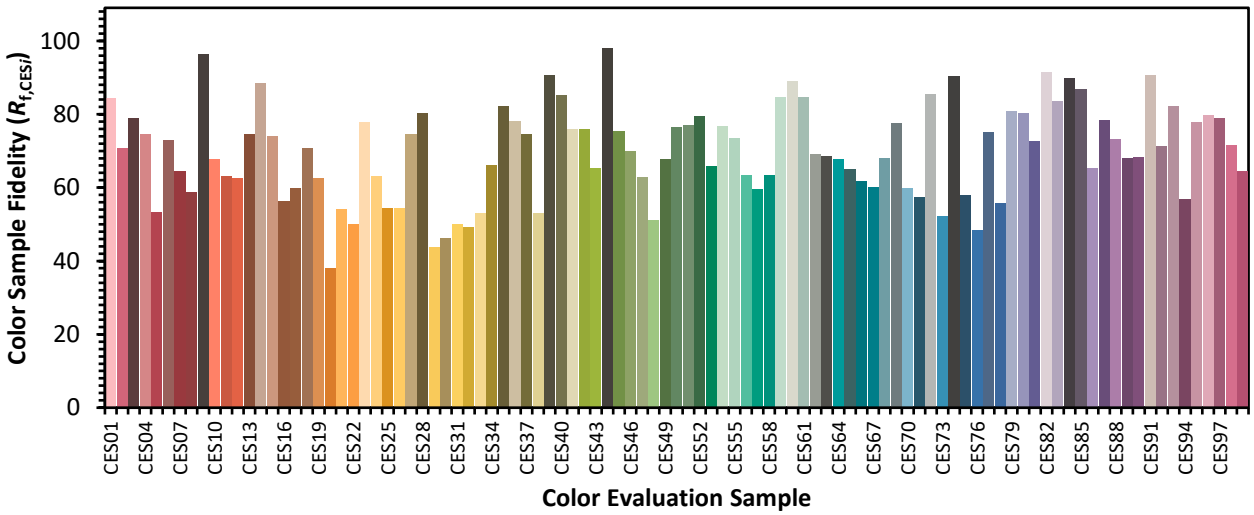
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Peachtree City, GA 30269

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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 | |

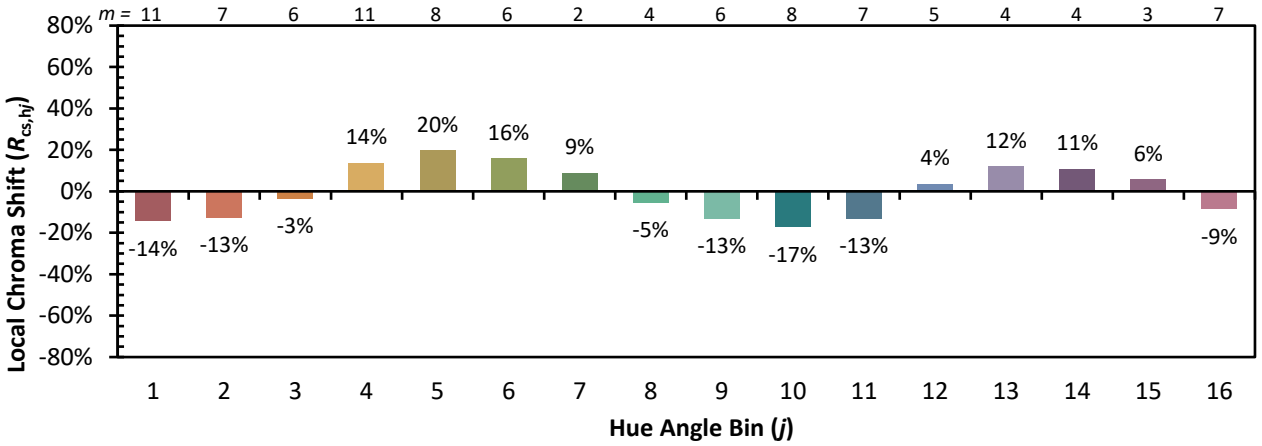


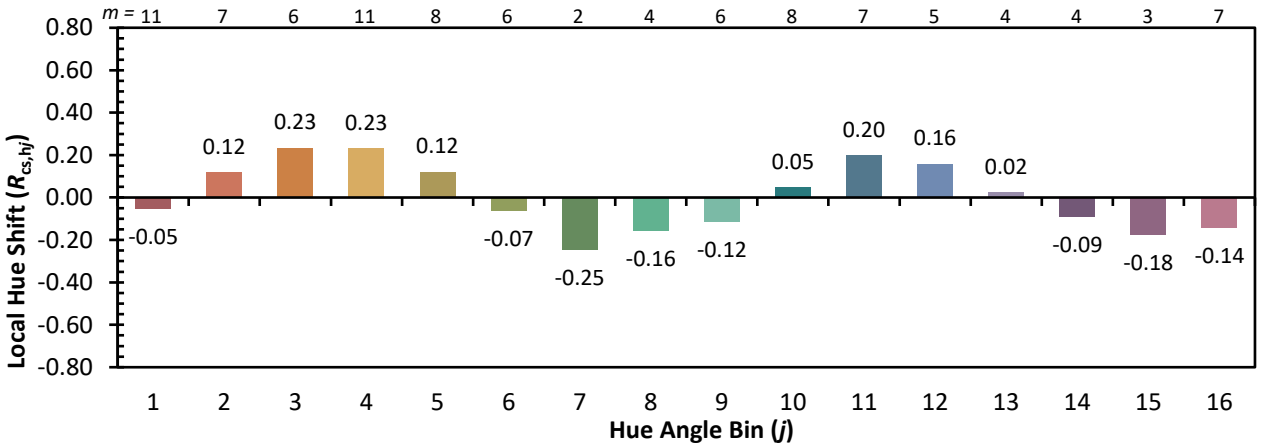
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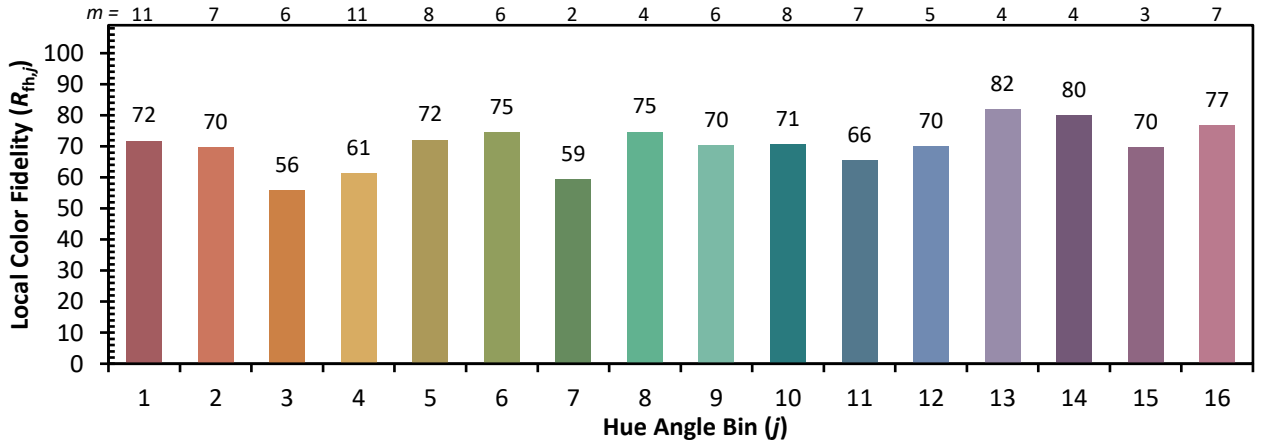
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### Color Rendition by Hue-Angle Bin



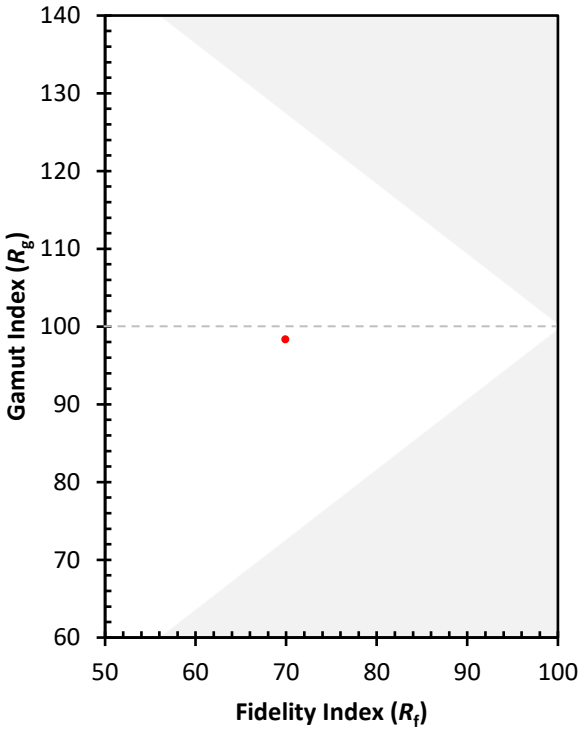



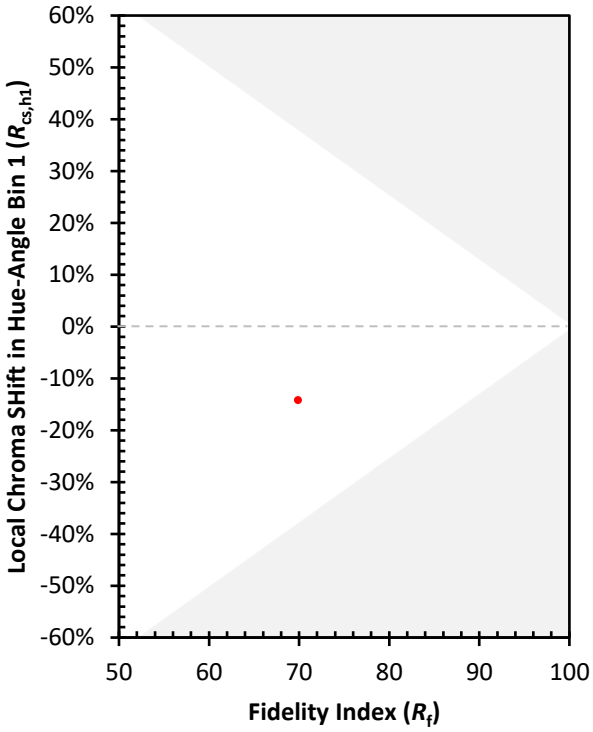
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### Measure Comparisons




(END OF REPORT)