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: P1199312

Luminaire Tested: GPC-SB2A-750-U-T2R

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: | P1199312 |
| | TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-3) |
| Test Lab: | INNOVATION CENTER |
| Issue Date: | 3/15/2026 |
| Manufacturer: | COOPER LIGHTING SOLUTIONS |
| Product Line: | McGRAW-EDISON |
| Catalog Number: | GPC-SB2A-750-U-T2R |
| Description: | GALLEON PEDESTRIAN LUMINAIRE |
| | (2) 70 CRI, 5000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II ROADWAY OPTIC |
| Light Source: | - |
| Ballast/Driver: | ELECTRONIC DRIVER |

**Summary**

| | |
|---|---|
| Lumens per Lamp: | N/A |
| Luminaire Lumens: | 9665 lumens |
| Efficiency: | N/A |
| Efficacy: | 168.7 lumens/watt |
| Luminous Opening: | Rectangular (W 1' x L: 0.5' x H: 0') |
| IES Classification: | Type II - Medium |
| BUG Rating: | B2 - U0 - G2 |

| | |
|---|---|
| Input Watts (W): | 57.3 |
| Input Voltage (V): | 120.0 |
| Input Current (Ain): | 0.484 |
| Voltage Rise (V): | NR |
| Power Factor: | 0.994 |
| Total Harmonic Distortion (THDi): | 9.038 |
| Frequency (hertz): | 60 |
| Stabilization Time: | NR |
| Operation Time: | NR |
| Ambient Temperature (°C): | NR |
| Test Distance: | 28.75 FT |

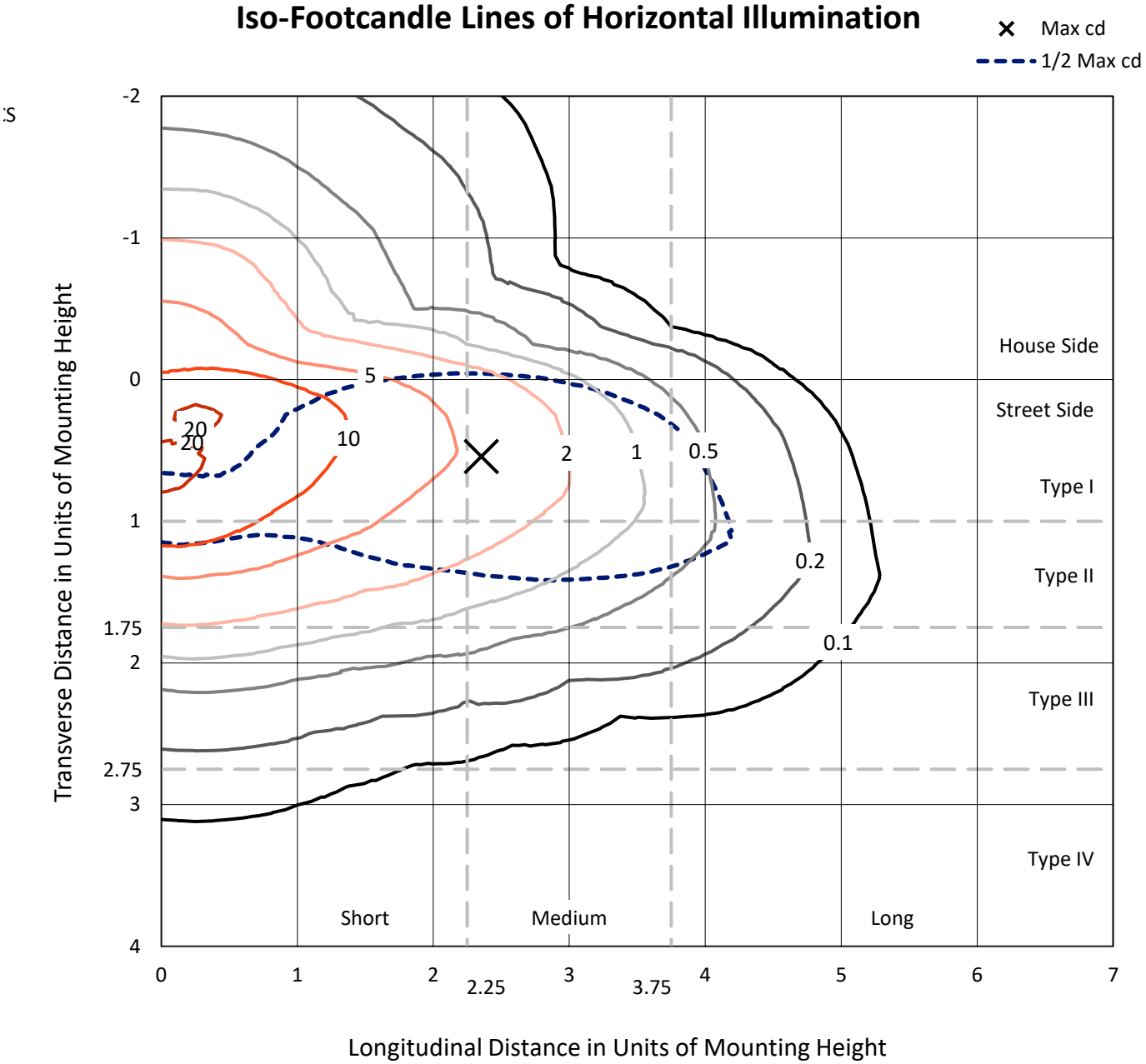


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Scaled Data Report

REPORT NUMBER: P1199312
CATALOG NUMBER: GPC-SB2A-750-U-T2R

## Iso-Footcandle Lines of Horizontal Illumination



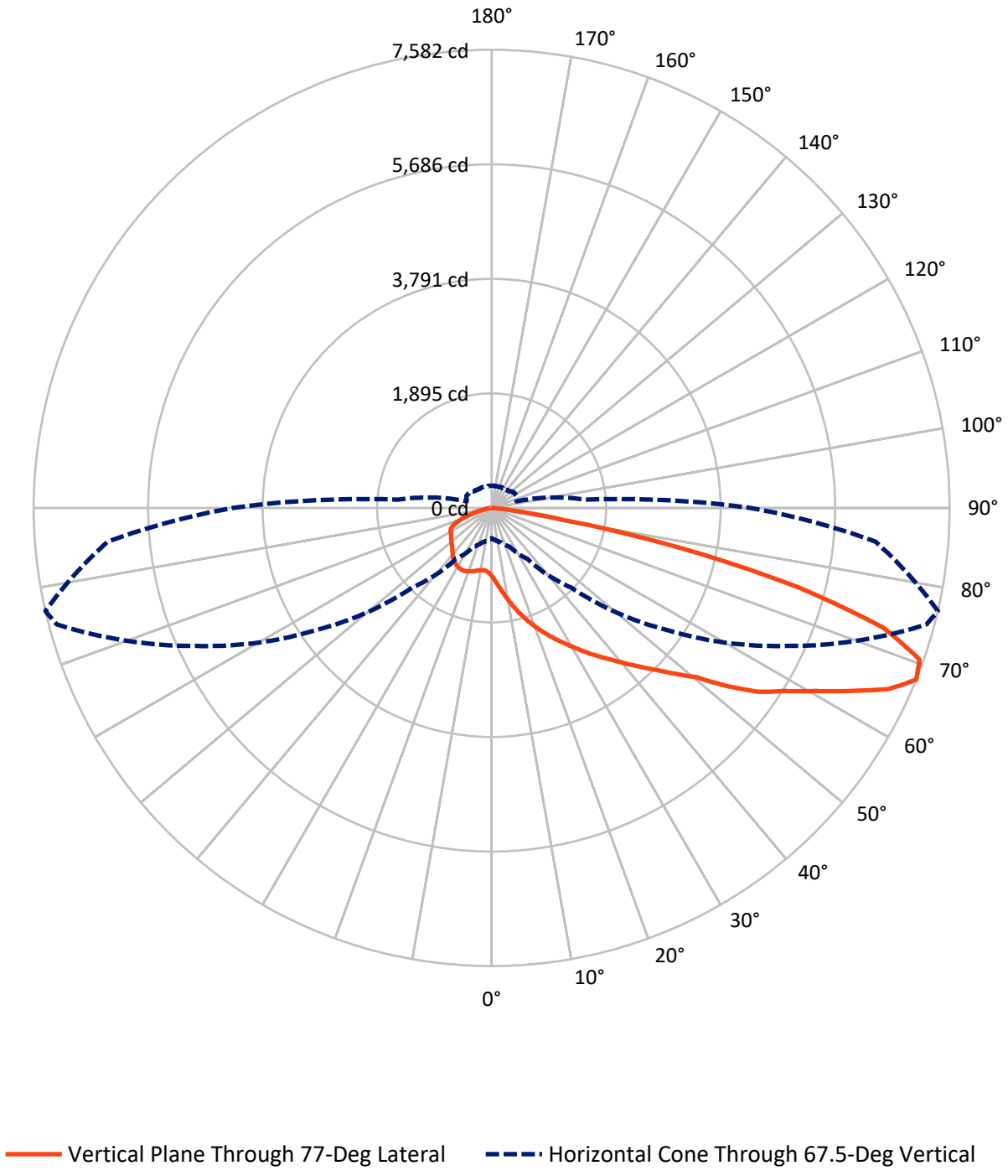

Based on 10 foot mounting height. Maximum calculated value = 22.1 fc
Type II - Medium - N/A

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## Luminous Intensity Polar Plot



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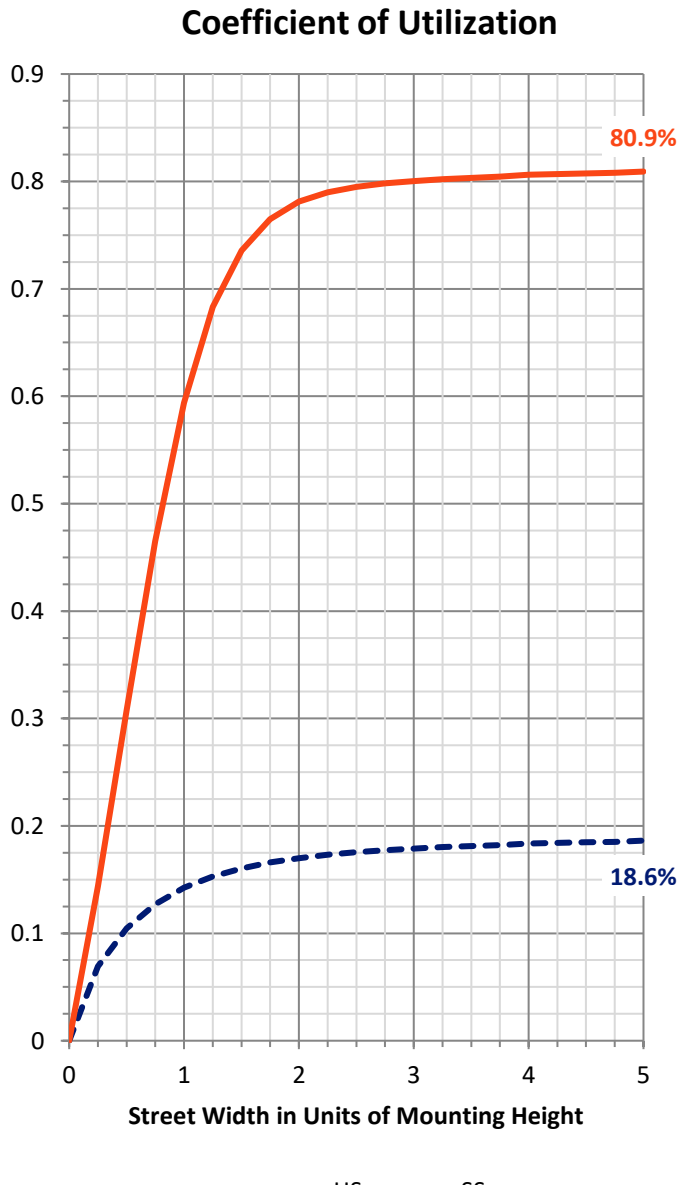
REPORT NUMBER: P1199312
CATALOG NUMBER: GPC-SB2A-750-U-T2R

**FLUX DISTRIBUTION:**

| | | Downward | Upward | Total |
|---|---|---|---|---|
| **House Side** | Lumens | 1828.2 | 0.0 | 1828.2 |
| | % Fixture | 18.9 | 0.0 | 18.9 |
| **Street Side** | Lumens | 7836.8 | 0.0 | 7836.8 |
| | % Fixture | 81.1 | 0.0 | 81.1 |
| **Total** | Lumens | 9665.0 | 0.0 | 9665.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

**ZONAL LUMENS:**

| Zone | Lumens | % Fixture |
|---|---|---|
| 0°-10° | 121.6 | 1.3 |
| 10°-20° | 436.7 | 4.5 |
| 20°-30° | 824.5 | 8.5 |
| 30°-40° | 1328.2 | 13.7 |
| 40°-50° | 1816.8 | 18.8 |
| 50°-60° | 2049.4 | 21.2 |
| 60°-70° | 1912.8 | 19.8 |
| 70°-80° | 1048.5 | 10.8 |
| 80°-90° | 126.5 | 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° | 9665.0 | 100.0 |
| 0°-180° | 9665.0 | 100.0 |



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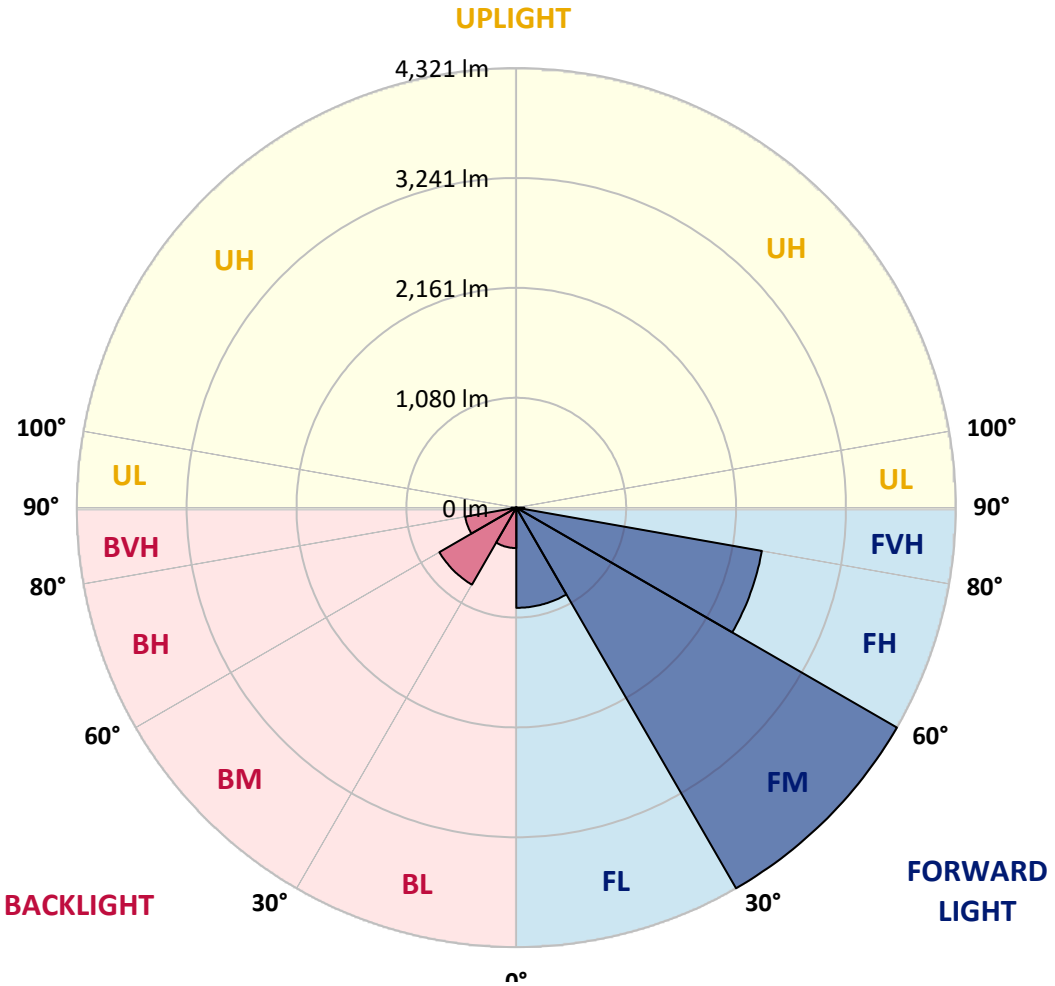
Scaled Data Report

REPORT NUMBER: P1199312
CATALOG NUMBER: GPC-SB2A-750-U-T2R

## LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit B | U | G |
|---|---|---|---|---|---|---|
| FL | (0°-30°) | 985.2 | 10.2 | | | |
| FM | (30°-60°) | 4321.1 | 44.7 | | | |
| FH | (60°-80°) | 2451.3 | 25.4 | | | G2/5000 |
| FVH | (80°-90°) | 79.1 | 0.8 | | | G1/100 |
| BL | (0°-30°) | 397.5 | 4.1 | B1/500 | | |
| BM | (30°-60°) | 873.3 | 9.0 | B1/1000 | | |
| BH | (60°-80°) | 510.0 | 5.3 | B2/1000 | | G2/1000 |
| BVH | (80°-90°) | 47.4 | 0.5 | | | 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 II Medium



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**CANDELA DISTRIBUTION (FULL):**

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 77° | 85° |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0° | 1134.0 | 1134.0 | 1134.0 | 1134.0 | 1134.0 | 1134.0 | 1134.0 | 1134.0 | 1134.0 | *1134.0* | 1134.0 |
| 2.5° | 1419.9 | 1429.9 | 1417.4 | 1417.4 | 1375.5 | 1353.5 | 1311.6 | 1279.7 | 1222.3 | *1212.3* | 1174.4 |
| 5° | 1678.3 | 1690.8 | 1673.3 | 1665.8 | 1616.4 | 1571.0 | 1500.7 | 1431.4 | 1329.1 | *1318.6* | 1229.3 |
| 7.5° | 1878.4 | 1894.3 | 1878.9 | 1870.9 | 1827.0 | 1776.1 | 1693.8 | 1597.0 | 1452.8 | *1432.3* | 1303.1 |
| 10° | 2041.5 | 2044.0 | 2039.0 | 2042.0 | 2007.6 | 1965.7 | 1881.4 | 1768.6 | 1588.5 | *1560.6* | 1392.4 |
| 12.5° | 2133.8 | 2145.3 | 2155.3 | 2173.2 | 2167.2 | 2141.3 | 2065.5 | 1930.8 | 1732.2 | *1696.3* | 1489.7 |
| 15° | 2177.2 | 2197.2 | 2219.6 | 2261.0 | 2294.5 | 2300.9 | 2243.1 | 2104.9 | 1878.4 | *1835.0* | 1588.0 |
| 17.5° | 2192.7 | 2211.6 | 2247.1 | 2306.9 | 2378.8 | 2427.2 | 2401.2 | 2274.0 | 2023.0 | *1973.2* | 1691.3 |
| 20° | 2271.0 | 2276.5 | 2297.9 | 2354.8 | 2432.6 | 2513.0 | 2532.4 | 2436.6 | 2166.2 | *2109.9* | 1798.0 |
| 22.5° | 2438.6 | 2427.7 | 2433.6 | 2459.6 | 2515.5 | 2593.3 | 2637.7 | 2580.3 | 2313.4 | *2248.6* | 1905.8 |
| 25° | 2715.5 | 2683.6 | 2651.7 | 2621.7 | 2650.2 | 2694.1 | 2744.5 | 2724.0 | 2467.6 | *2385.3* | 2014.6 |
| 27.5° | 3065.3 | 3026.3 | 2956.0 | 2857.7 | 2823.3 | 2838.8 | 2861.2 | 2857.2 | 2610.3 | *2526.9* | 2126.8 |
| 30° | 3409.5 | 3364.1 | 3280.3 | 3138.1 | 3047.3 | 3006.4 | 2989.4 | 2977.9 | 2765.4 | *2676.6* | 2240.1 |
| 32.5° | 3684.4 | 3648.5 | 3566.2 | 3407.0 | 3275.3 | 3205.4 | 3149.1 | 3108.2 | 2927.6 | *2838.8* | 2359.8 |
| 35° | 3924.9 | 3891.4 | 3797.1 | 3623.5 | 3480.3 | 3406.0 | 3332.2 | 3244.9 | 3096.2 | *3006.4* | 2488.5 |
| 37.5° | 4144.4 | 4111.0 | 3981.7 | 3801.1 | 3657.0 | 3605.6 | 3539.7 | 3391.5 | 3265.3 | *3180.5* | 2624.7 |
| 40° | 4283.1 | 4275.6 | 4154.9 | 3950.3 | 3800.6 | 3775.2 | 3753.2 | 3561.7 | 3452.9 | *3374.1* | 2774.4 |
| 42.5° | 4318.5 | 4335.0 | 4239.2 | 4071.0 | 3928.4 | 3907.9 | 3959.3 | 3754.2 | 3663.4 | *3588.1* | 2944.0 |
| 45° | 4233.2 | 4280.6 | 4217.7 | 4103.5 | 4019.2 | 4008.2 | 4141.9 | 3964.8 | 3896.4 | *3827.6* | 3148.6 |
| 47.5° | 4017.2 | 4097.5 | 4071.5 | 4055.6 | 4043.6 | 4091.0 | 4302.5 | 4188.3 | 4160.3 | *4100.5* | 3382.1 |
| 50° | 3581.1 | 3733.3 | 3778.7 | 3879.5 | 3995.2 | 4155.4 | 4448.7 | 4432.2 | 4468.7 | *4408.3* | 3666.4 |
| 52.5° | 2827.3 | 3036.8 | 3300.2 | 3552.7 | 3846.5 | 4133.9 | 4609.4 | 4782.5 | 4936.1 | *4903.2* | 4118.4 |
| 55° | 2333.9 | 2428.2 | 2630.7 | 3093.7 | 3558.2 | 4043.6 | 4681.7 | 5065.4 | 5400.1 | *5370.7* | 4461.2 |
| 57.5° | 1954.7 | 2039.0 | 2163.7 | 2550.4 | 3122.1 | 3838.6 | 4726.6 | 5238.0 | 5717.9 | *5714.9* | 4799.4 |
| 60° | 1548.1 | 1637.4 | 1765.1 | 2039.0 | 2612.8 | 3484.3 | 4716.6 | 5434.5 | 6123.5 | *6148.5* | 5212.0 |
| 62.5° | 1089.1 | 1187.4 | 1329.1 | 1584.5 | 2092.4 | 3025.3 | 4513.1 | 5576.7 | 6601.0 | *6668.8* | 5708.4 |
| 65° | 715.9 | 780.8 | 887.5 | 1108.1 | 1559.1 | 2435.1 | 4124.4 | 5595.2 | 7111.9 | *7226.6* | 6174.4 |
| 67.5° | *501.9* | *526.8* | *589.7* | *709.4* | *1027.7* | *1867.4* | *3505.3* | *5404.1* | *7452.6* | *7581.8* | *6376.5* |
| 70° | 391.6 | 404.1 | 436.0 | 483.9 | 645.6 | 1255.7 | 2686.1 | 4907.2 | 7379.8 | *7514.5* | 6165.4 |
| 72.5° | 338.3 | 350.2 | 362.2 | 368.2 | 433.0 | 775.3 | 1819.5 | 4103.0 | 6693.8 | *6785.1* | 5360.7 |
| 75° | 306.8 | 309.8 | 319.8 | 317.8 | 330.3 | 502.9 | 1050.2 | 2989.4 | 5281.4 | *5249.9* | 3957.3 |
| 77.5° | 257.9 | 261.9 | 278.4 | 275.9 | 293.4 | 343.7 | 545.3 | 1929.3 | 3424.0 | *3210.4* | 2202.7 |
| 80° | 218.5 | 220.5 | 238.5 | 235.5 | 254.9 | 249.0 | 278.4 | 983.3 | 1452.3 | *1230.3* | 635.1 |
| 82.5° | 75.8 | 93.8 | 182.1 | 187.6 | 194.6 | 150.7 | 160.6 | 401.1 | 443.5 | *339.8* | 133.2 |
| 85° | 36.9 | 39.4 | 92.8 | 131.7 | 131.2 | 75.8 | 78.3 | 143.2 | 139.7 | *109.8* | 44.4 |
| 87.5° | 6.0 | 7.5 | 11.0 | 51.4 | 40.9 | 20.0 | 26.9 | 27.9 | 28.9 | *24.9* | 10.0 |
| 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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REPORT NUMBER: P1199312
CATALOG NUMBER: GPC-SB2A-750-U-T2R

**CANDELA DISTRIBUTION (continued):**

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0° | 1134.0 | 1134.0 | 1134.0 | 1134.0 | 1134.0 | 1134.0 | 1134.0 | 1134.0 | 1134.0 | 1134.0 | 1134.0 |
| 2.5° | 1146.5 | 1121.5 | 1069.1 | 1020.8 | 982.8 | 946.4 | 926.0 | 908.5 | 898.5 | 896.5 | 896.5 |
| 5° | 1177.4 | 1126.0 | 1030.7 | 950.4 | 898.0 | 859.1 | 838.7 | 825.7 | 819.2 | 815.2 | 814.7 |
| 7.5° | 1221.8 | 1146.5 | 1010.8 | 919.5 | 864.6 | 836.7 | 826.2 | 824.2 | 823.7 | 824.2 | 825.7 |
| 10° | 1283.2 | 1179.9 | 1008.8 | 912.0 | 866.1 | 850.6 | 850.1 | 850.6 | 852.6 | 853.1 | 853.6 |
| 12.5° | 1349.5 | 1214.3 | 1016.8 | 918.5 | 885.1 | 876.6 | 875.1 | 874.6 | 876.1 | 877.1 | 877.6 |
| 15° | 1421.9 | 1259.7 | 1030.2 | 932.4 | 906.0 | 897.0 | 895.5 | 892.5 | 892.0 | 891.5 | 891.0 |
| 17.5° | 1496.2 | 1304.6 | 1045.2 | 947.4 | 919.5 | 907.0 | 901.5 | 894.5 | 889.0 | 887.5 | 889.0 |
| 20° | 1571.5 | 1349.0 | 1055.7 | 954.9 | 920.5 | 903.0 | 892.0 | 880.1 | 870.6 | 865.1 | 867.1 |
| 22.5° | 1651.9 | 1395.4 | 1062.2 | 952.9 | 911.5 | 887.5 | 867.6 | 853.6 | 839.2 | 829.7 | 830.2 |
| 25° | 1730.2 | 1435.8 | 1061.7 | 942.4 | 894.0 | 863.6 | 838.2 | 820.2 | 800.2 | 790.3 | 790.3 |
| 27.5° | 1805.5 | 1472.3 | 1049.2 | 924.0 | 869.1 | 835.2 | 804.7 | 783.3 | 763.8 | 754.3 | 753.8 |
| 30° | 1883.4 | 1502.7 | 1029.7 | 897.0 | 839.7 | 802.2 | 768.8 | 750.3 | 732.9 | 723.9 | 723.4 |
| 32.5° | 1960.7 | 1530.6 | 1002.3 | 863.6 | 805.7 | 769.8 | 736.9 | 719.9 | 709.4 | 709.4 | 709.9 |
| 35° | 2042.5 | 1550.1 | 965.9 | 824.7 | 769.8 | 735.4 | 709.4 | 699.5 | 698.5 | 692.5 | 691.0 |
| 37.5° | 2128.8 | 1562.6 | 921.5 | 784.8 | 734.4 | 702.0 | 694.0 | 682.0 | 672.0 | 659.0 | 657.1 |
| 40° | 2219.6 | 1575.0 | 868.1 | 743.4 | 697.0 | 679.0 | 675.5 | 659.5 | 631.1 | 599.2 | 594.7 |
| 42.5° | 2329.9 | 1583.5 | 812.7 | 702.0 | 657.6 | 651.6 | 656.6 | 629.1 | 583.7 | 559.8 | 560.3 |
| 45° | 2457.6 | 1597.5 | 761.8 | 661.0 | 617.1 | 617.1 | 638.1 | 602.2 | 564.8 | 549.8 | 552.3 |
| 47.5° | 2623.2 | 1629.9 | 714.4 | 616.1 | 579.7 | 589.7 | 597.2 | 569.7 | 548.8 | 530.3 | 529.8 |
| 50° | 2862.7 | 1707.7 | 665.5 | 570.7 | 551.3 | 571.2 | 560.8 | 544.8 | 520.4 | 505.4 | 503.9 |
| 52.5° | 3160.0 | 1753.6 | 622.1 | 529.8 | 526.8 | 546.8 | 531.8 | 516.9 | 498.4 | 478.4 | 474.5 |
| 55° | 3362.6 | 1762.1 | 585.7 | 499.9 | 510.4 | 508.4 | 502.9 | 489.4 | 479.4 | 453.0 | 453.5 |
| 57.5° | 3589.1 | 1779.1 | 555.8 | 481.9 | 499.9 | 477.9 | 476.0 | 464.5 | 451.5 | 433.5 | 427.6 |
| 60° | 3860.0 | 1805.5 | 529.8 | 475.0 | 490.9 | 458.0 | 448.0 | 443.5 | 430.6 | 421.6 | 424.1 |
| 62.5° | 4155.4 | 1829.5 | 503.4 | 476.0 | 480.4 | 438.5 | 423.6 | 422.1 | 414.1 | 411.1 | 411.1 |
| 65° | 4356.9 | 1764.1 | 470.5 | 475.0 | 464.0 | 418.6 | 399.6 | 399.1 | 392.6 | 391.6 | 391.1 |
| 67.5° | *4286.6* | *1557.1* | *426.1* | *461.0* | *447.0* | *398.6* | *377.7* | *375.7* | *367.2* | *367.7* | *367.7* |
| 70° | 3934.3 | 1261.7 | 364.7 | 426.6 | 426.1 | 380.7 | 354.7 | 348.2 | 336.8 | 338.8 | 340.8 |
| 72.5° | 3273.8 | 934.9 | 282.4 | 369.2 | 392.6 | 364.2 | 328.3 | 317.8 | 303.3 | 305.3 | 304.8 |
| 75° | 2364.3 | 635.6 | 205.5 | 280.9 | 341.7 | 344.7 | 302.3 | 284.4 | 266.9 | 269.9 | 270.9 |
| 77.5° | 1209.8 | 360.2 | 151.2 | 193.6 | 268.4 | 313.3 | 278.9 | 254.9 | 250.9 | 278.9 | 274.9 |
| 80° | 394.6 | 180.6 | 104.8 | 135.7 | 176.1 | 256.4 | 244.5 | 217.0 | 216.0 | 222.5 | 191.1 |
| 82.5° | 117.7 | 76.3 | 67.4 | 89.3 | 97.3 | 196.6 | 211.0 | 164.1 | 141.2 | 148.7 | 153.7 |
| 85° | 40.4 | 36.9 | 38.4 | 44.4 | 46.4 | 115.2 | 147.7 | 108.8 | 102.8 | 113.3 | 111.8 |
| 87.5° | 9.5 | 13.0 | 11.0 | 10.0 | 10.0 | 27.9 | 57.4 | 45.4 | 62.9 | 41.9 | 40.4 |
| 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: SP1-1908-441-4-R4

Test Date: 10/02/2019

Luminaire Tested: SA1C-750-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

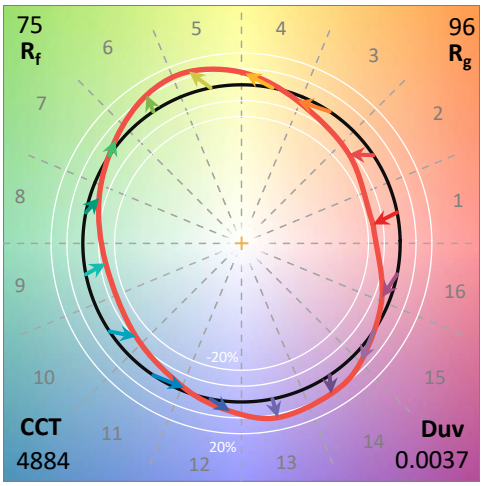
| | |
|---|---|
| Test Method: | LM-79-2008 |
| Report Number: | SP1-1908-441-4-R4 |
| Test Lab: | COOPER LIGHTING SOLUTIONS |
| Photometer: | SP1 - 76IN SPHERE |
| Measurement Geometry: | 4π |
| Issue Date: | 10/28/2024 |
| Manufacturer: | COOPER LIGHTING SOLUTIONS |
| Product Line: | McGRAW-EDISON |
| Catalog Number: | **SA1C-750-U-5WQ** |
| Description: | McGRAW EDISON ROADWAY AND AREA LUMINAIRE |

***THIS IS A REVISION OF SP1-1908-441-4-R3. TO UPDATE THE CATALOG INFORMATION.***TESTED IN SITU. ROADWAY AND AREA LUMINAIRE. (1) 70 CRI, 5000K, 1050MA LIGHTSQUARE WITH 16 LEDS AND TYPE V WIDE OPTICS.

## Spectral Parameters

| | | | | | |
|---|---|---|---|---|---|
| CCT (K): | 4884 | CRI (Ra): | 73.5 | | |
| CIE u': | 0.2101 | R1: | 70.5 | R9: | -28.4 |
| CIE v': | 0.4904 | R2: | 77.7 | R10: | 48.6 |
| Duv: | 0.0037 | R3: | 84.6 | R11: | 73.2 |
| CIE x: | 0.3493 | R4: | 74.7 | R12: | 50.7 |
| CIE y: | 0.3624 | R5: | 71.9 | R13: | 71.2 |
| CIE z: | 0.2884 | R6: | 70.7 | R14: | 91.4 |
| Peak Wavelength (nm): | 444 | R7: | 81.2 | | |
| Dominant Wavelength (nm): | 571 | R8: | 56.9 | | |
| Purity: | 13.7 | | | | |

| | |
|---|---|
| Rf: | 74.9 |
| Rg: | 96.3 |




## Test Conditions

| | |
|---|---|
| Stabilization Time: | 240M |
| Operation Time: | 12H |
| Room Temperature (°C) / RH%: | 25.0./44% |
| Sphere Temperature (°C): | 25.7 |

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1121 Highway 74 South
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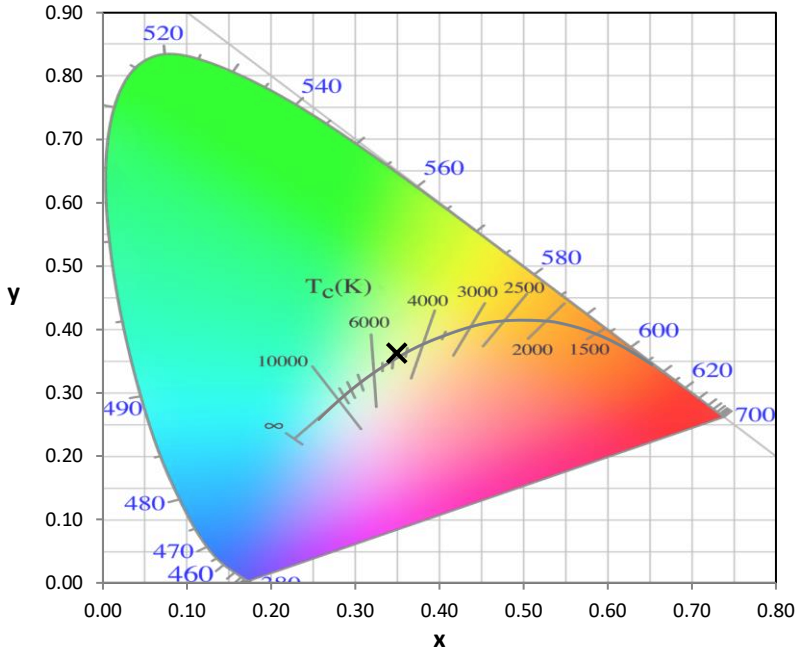
REPORT NUMBER: SP1-1908-441-4-R4

| 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 |

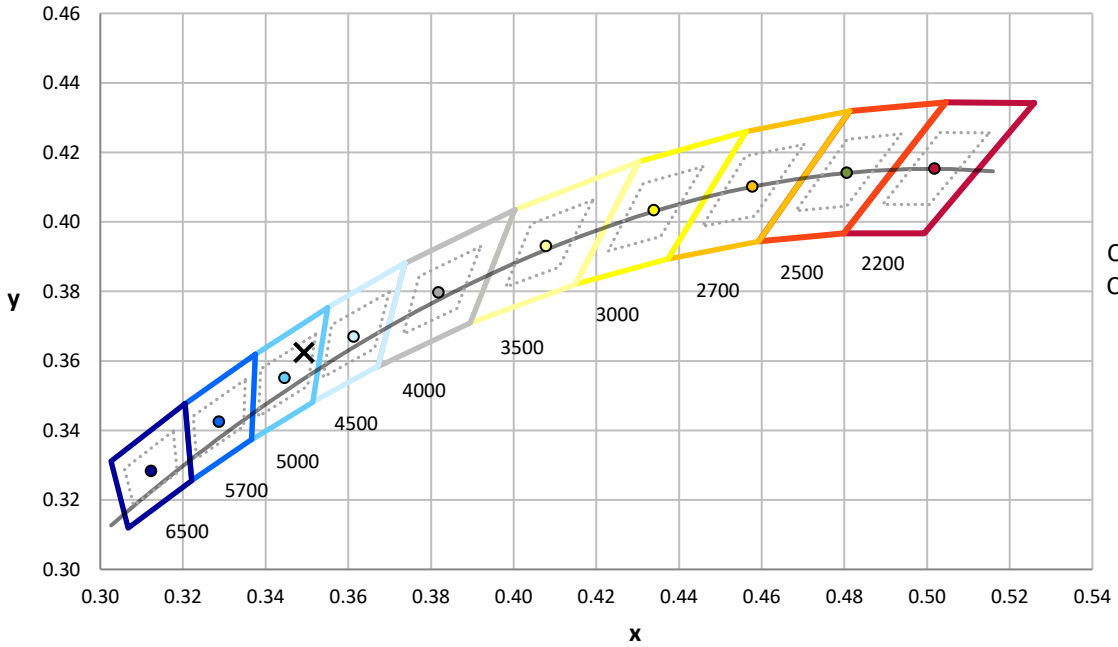
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## CIE 1931 Chromaticity Diagram




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



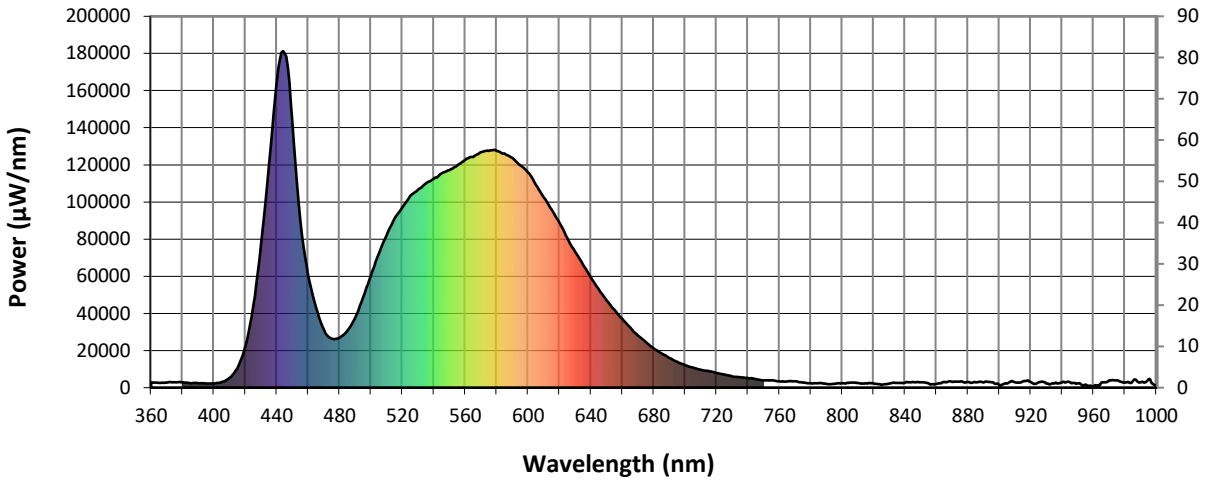

CCT = 4884K
CIE x = 0.3493
CIE y = 0.3624
Duv = 0.0037

Point lies inside the ANSI 5000K 4-step quadrangle

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## Photopic Flux vs. Wavelength



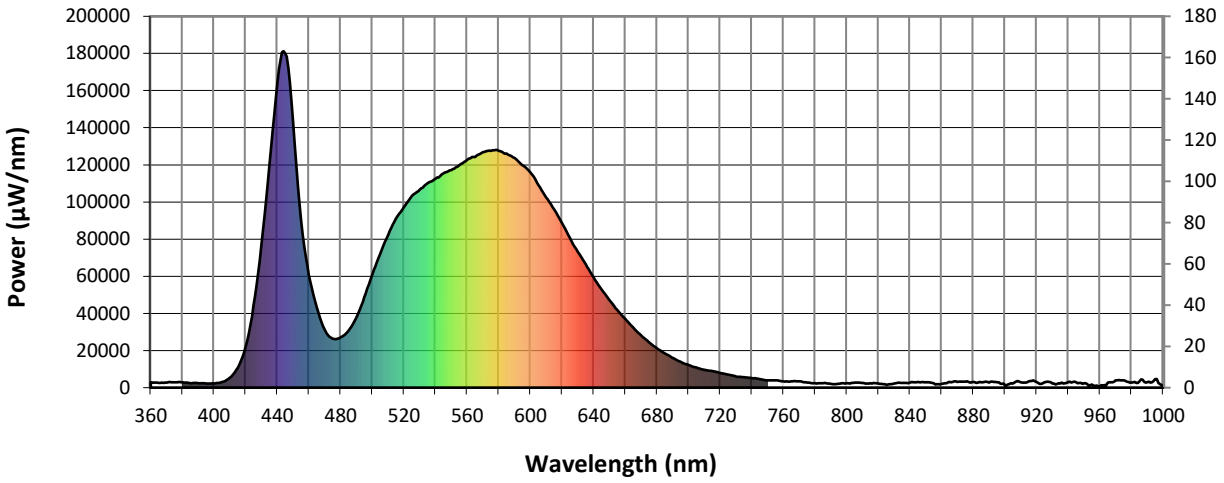

######

| 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 | 2945 | NR | 490 | 37941 | NR | 620 | 88803 | NR | 750 | 3908 | NR | 880 | 2997 | NR |
| 365 | 2596 | NR | 495 | 48525 | NR | 625 | 80578 | NR | 755 | 3988 | NR | 885 | 2927 | NR |
| 370 | 2732 | NR | 500 | 60609 | NR | 630 | 73127 | NR | 760 | 3335 | NR | 890 | 2649 | NR |
| 375 | 2894 | NR | 505 | 72036 | NR | 635 | 66244 | NR | 765 | 3438 | NR | 895 | 2828 | NR |
| 380 | 2822 | NR | 510 | 82168 | NR | 640 | 59440 | NR | 770 | 3427 | NR | 900 | 1407 | NR |
| 385 | 2394 | NR | 515 | 90898 | NR | 645 | 52864 | NR | 775 | 2759 | NR | 905 | 2224 | NR |
| 390 | 2370 | NR | 520 | 97142 | NR | 650 | 47085 | NR | 780 | 2340 | NR | 910 | 2905 | NR |
| 395 | 2267 | NR | 525 | 103255 | NR | 655 | 41789 | NR | 785 | 2412 | NR | 915 | 3350 | NR |
| 400 | 2262 | NR | 530 | 106697 | NR | 660 | 37064 | NR | 790 | 1999 | NR | 920 | 3114 | NR |
| 405 | 3000 | NR | 535 | 110081 | NR | 665 | 32299 | NR | 795 | 2054 | NR | 925 | 2834 | NR |
| 410 | 5324 | NR | 540 | 112494 | NR | 670 | 28142 | NR | 800 | 2331 | NR | 930 | 2271 | NR |
| 415 | 10725 | NR | 545 | 115513 | NR | 675 | 24505 | NR | 805 | 2648 | NR | 935 | 2228 | NR |
| 420 | 22128 | NR | 550 | 117203 | NR | 680 | 21162 | NR | 810 | 2485 | NR | 940 | 2833 | NR |
| 425 | 44095 | NR | 555 | 119753 | NR | 685 | 18400 | NR | 815 | 2409 | NR | 945 | 2941 | NR |
| 430 | 77002 | NR | 560 | 122602 | NR | 690 | 16065 | NR | 820 | 2221 | NR | 950 | 2323 | NR |
| 435 | 119881 | NR | 565 | 124314 | NR | 695 | 13860 | NR | 825 | 1562 | NR | 955 | 1667 | NR |
| 440 | 164454 | NR | 570 | 126775 | NR | 700 | 12177 | NR | 830 | 2249 | NR | 960 | 749 | NR |
| 445 | 179997 | NR | 575 | 127511 | NR | 705 | 10757 | NR | 835 | 2573 | NR | 965 | 2669 | NR |
| 450 | 142822 | NR | 580 | 127577 | NR | 710 | 9601 | NR | 840 | 2764 | NR | 970 | 3968 | NR |
| 455 | 90008 | NR | 585 | 126153 | NR | 715 | 8944 | NR | 845 | 3109 | NR | 975 | 3886 | NR |
| 460 | 60557 | NR | 590 | 123678 | NR | 720 | 7947 | NR | 850 | 2963 | NR | 980 | 2788 | NR |
| 465 | 43305 | NR | 595 | 119774 | NR | 725 | 7062 | NR | 855 | 2336 | NR | 985 | 3496 | NR |
| 470 | 31089 | NR | 600 | 115733 | NR | 730 | 6004 | NR | 860 | 2118 | NR | 990 | 2913 | NR |
| 475 | 26278 | NR | 605 | 109231 | NR | 735 | 5594 | NR | 865 | 3144 | NR | 995 | 4659 | NR |
| 480 | 27060 | NR | 610 | 102408 | NR | 740 | 5165 | NR | 870 | 3069 | NR | 1000 | 1308 | NR |
| 485 | 30698 | NR | 615 | 96015 | NR | 745 | 4687 | NR | 875 | 3311 | NR | | | |

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## Scotopic Flux vs. Wavelength



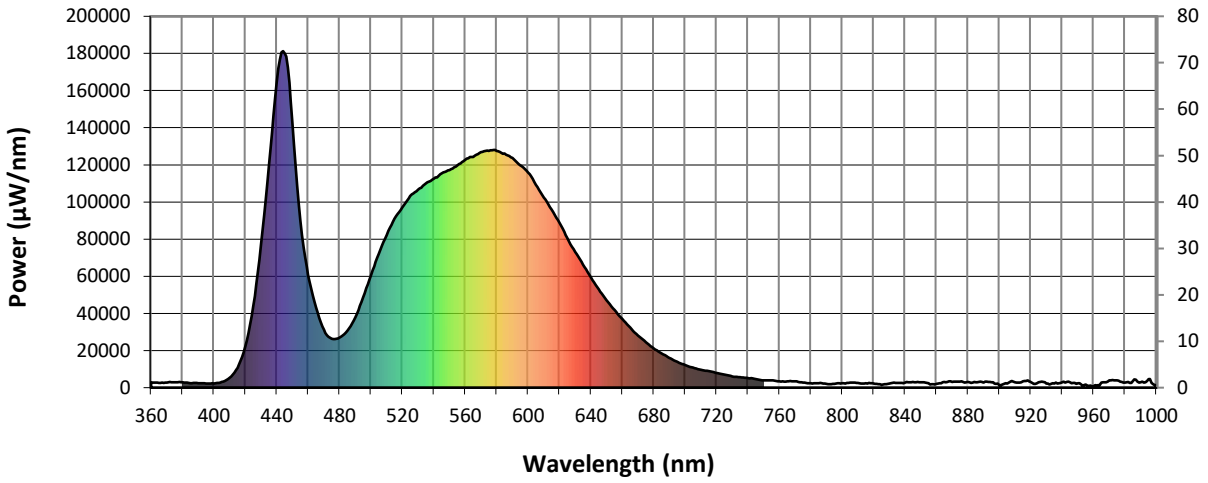

**Scotopic Lumens: 13493.5** **S/P: 1.77**

| 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 | 2945 | NR | 490 | 37941 | NR | 620 | 88803 | NR | 750 | 3908 | NR | 880 | 2997 | NR |
| 365 | 2596 | NR | 495 | 48525 | NR | 625 | 80578 | NR | 755 | 3988 | NR | 885 | 2927 | NR |
| 370 | 2732 | NR | 500 | 60609 | NR | 630 | 73127 | NR | 760 | 3335 | NR | 890 | 2649 | NR |
| 375 | 2894 | NR | 505 | 72036 | NR | 635 | 66244 | NR | 765 | 3438 | NR | 895 | 2828 | NR |
| 380 | 2822 | NR | 510 | 82168 | NR | 640 | 59440 | NR | 770 | 3427 | NR | 900 | 1407 | NR |
| 385 | 2394 | NR | 515 | 90898 | NR | 645 | 52864 | NR | 775 | 2759 | NR | 905 | 2224 | NR |
| 390 | 2370 | NR | 520 | 97142 | NR | 650 | 47085 | NR | 780 | 2340 | NR | 910 | 2905 | NR |
| 395 | 2267 | NR | 525 | 103255 | NR | 655 | 41789 | NR | 785 | 2412 | NR | 915 | 3350 | NR |
| 400 | 2262 | NR | 530 | 106697 | NR | 660 | 37064 | NR | 790 | 1999 | NR | 920 | 3114 | NR |
| 405 | 3000 | NR | 535 | 110081 | NR | 665 | 32299 | NR | 795 | 2054 | NR | 925 | 2834 | NR |
| 410 | 5324 | NR | 540 | 112494 | NR | 670 | 28142 | NR | 800 | 2331 | NR | 930 | 2271 | NR |
| 415 | 10725 | NR | 545 | 115513 | NR | 675 | 24505 | NR | 805 | 2648 | NR | 935 | 2228 | NR |
| 420 | 22128 | NR | 550 | 117203 | NR | 680 | 21162 | NR | 810 | 2485 | NR | 940 | 2833 | NR |
| 425 | 44095 | NR | 555 | 119753 | NR | 685 | 18400 | NR | 815 | 2409 | NR | 945 | 2941 | NR |
| 430 | 77002 | NR | 560 | 122602 | NR | 690 | 16065 | NR | 820 | 2221 | NR | 950 | 2323 | NR |
| 435 | 119881 | NR | 565 | 124314 | NR | 695 | 13860 | NR | 825 | 1562 | NR | 955 | 1667 | NR |
| 440 | 164454 | NR | 570 | 126775 | NR | 700 | 12177 | NR | 830 | 2249 | NR | 960 | 749 | NR |
| 445 | 179997 | NR | 575 | 127511 | NR | 705 | 10757 | NR | 835 | 2573 | NR | 965 | 2669 | NR |
| 450 | 142822 | NR | 580 | 127577 | NR | 710 | 9601 | NR | 840 | 2764 | NR | 970 | 3968 | NR |
| 455 | 90008 | NR | 585 | 126153 | NR | 715 | 8944 | NR | 845 | 3109 | NR | 975 | 3886 | NR |
| 460 | 60557 | NR | 590 | 123678 | NR | 720 | 7947 | NR | 850 | 2963 | NR | 980 | 2788 | NR |
| 465 | 43305 | NR | 595 | 119774 | NR | 725 | 7062 | NR | 855 | 2336 | NR | 985 | 3496 | NR |
| 470 | 31089 | NR | 600 | 115733 | NR | 730 | 6004 | NR | 860 | 2118 | NR | 990 | 2913 | NR |
| 475 | 26278 | NR | 605 | 109231 | NR | 735 | 5594 | NR | 865 | 3144 | NR | 995 | 4659 | NR |
| 480 | 27060 | NR | 610 | 102408 | NR | 740 | 5165 | NR | 870 | 3069 | NR | 1000 | 1308 | NR |
| 485 | 30698 | NR | 615 | 96015 | NR | 745 | 4687 | NR | 875 | 3311 | NR | | | |

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## Melanopic Flux vs. Wavelength




**Melanopic Lumens: 5378.9** **M/P: 0.71**

| 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 | 2945 | NR | 490 | 37941 | NR | 620 | 88803 | NR | 750 | 3908 | NR | 880 | 2997 | NR |
| 365 | 2596 | NR | 495 | 48525 | NR | 625 | 80578 | NR | 755 | 3988 | NR | 885 | 2927 | NR |
| 370 | 2732 | NR | 500 | 60609 | NR | 630 | 73127 | NR | 760 | 3335 | NR | 890 | 2649 | NR |
| 375 | 2894 | NR | 505 | 72036 | NR | 635 | 66244 | NR | 765 | 3438 | NR | 895 | 2828 | NR |
| 380 | 2822 | NR | 510 | 82168 | NR | 640 | 59440 | NR | 770 | 3427 | NR | 900 | 1407 | NR |
| 385 | 2394 | NR | 515 | 90898 | NR | 645 | 52864 | NR | 775 | 2759 | NR | 905 | 2224 | NR |
| 390 | 2370 | NR | 520 | 97142 | NR | 650 | 47085 | NR | 780 | 2340 | NR | 910 | 2905 | NR |
| 395 | 2267 | NR | 525 | 103255 | NR | 655 | 41789 | NR | 785 | 2412 | NR | 915 | 3350 | NR |
| 400 | 2262 | NR | 530 | 106697 | NR | 660 | 37064 | NR | 790 | 1999 | NR | 920 | 3114 | NR |
| 405 | 3000 | NR | 535 | 110081 | NR | 665 | 32299 | NR | 795 | 2054 | NR | 925 | 2834 | NR |
| 410 | 5324 | NR | 540 | 112494 | NR | 670 | 28142 | NR | 800 | 2331 | NR | 930 | 2271 | NR |
| 415 | 10725 | NR | 545 | 115513 | NR | 675 | 24505 | NR | 805 | 2648 | NR | 935 | 2228 | NR |
| 420 | 22128 | NR | 550 | 117203 | NR | 680 | 21162 | NR | 810 | 2485 | NR | 940 | 2833 | NR |
| 425 | 44095 | NR | 555 | 119753 | NR | 685 | 18400 | NR | 815 | 2409 | NR | 945 | 2941 | NR |
| 430 | 77002 | NR | 560 | 122602 | NR | 690 | 16065 | NR | 820 | 2221 | NR | 950 | 2323 | NR |
| 435 | 119881 | NR | 565 | 124314 | NR | 695 | 13860 | NR | 825 | 1562 | NR | 955 | 1667 | NR |
| 440 | 164454 | NR | 570 | 126775 | NR | 700 | 12177 | NR | 830 | 2249 | NR | 960 | 749 | NR |
| 445 | 179997 | NR | 575 | 127511 | NR | 705 | 10757 | NR | 835 | 2573 | NR | 965 | 2669 | NR |
| 450 | 142822 | NR | 580 | 127577 | NR | 710 | 9601 | NR | 840 | 2764 | NR | 970 | 3968 | NR |
| 455 | 90008 | NR | 585 | 126153 | NR | 715 | 8944 | NR | 845 | 3109 | NR | 975 | 3886 | NR |
| 460 | 60557 | NR | 590 | 123678 | NR | 720 | 7947 | NR | 850 | 2963 | NR | 980 | 2788 | NR |
| 465 | 43305 | NR | 595 | 119774 | NR | 725 | 7062 | NR | 855 | 2336 | NR | 985 | 3496 | NR |
| 470 | 31089 | NR | 600 | 115733 | NR | 730 | 6004 | NR | 860 | 2118 | NR | 990 | 2913 | NR |
| 475 | 26278 | NR | 605 | 109231 | NR | 735 | 5594 | NR | 865 | 3144 | NR | 995 | 4659 | NR |
| 480 | 27060 | NR | 610 | 102408 | NR | 740 | 5165 | NR | 870 | 3069 | NR | 1000 | 1308 | NR |
| 485 | 30698 | NR | 615 | 96015 | NR | 745 | 4687 | NR | 875 | 3311 | NR | | | |

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Peachtree City, GA 30269

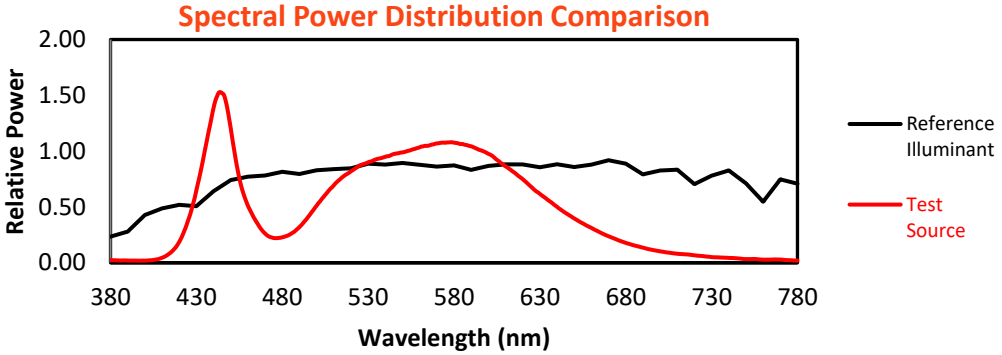
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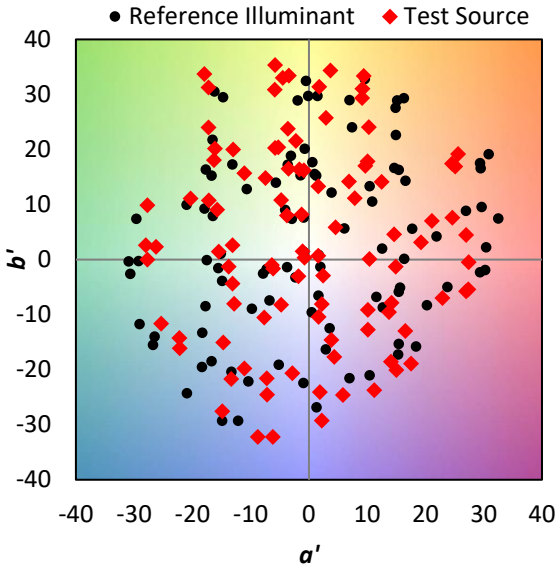
## Summary

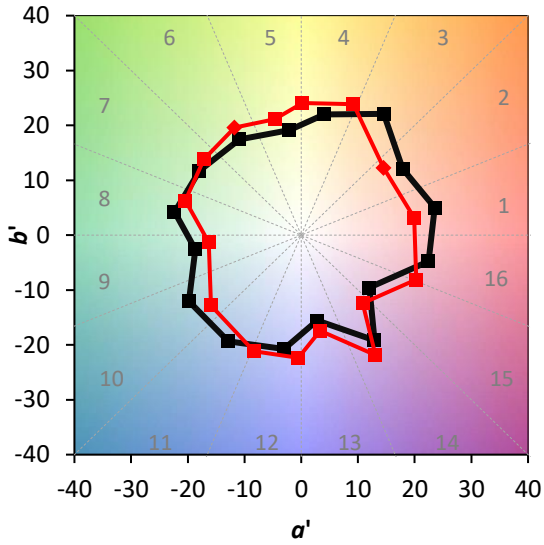
$R_f$ = 74.9
$R_g$ = 96.3
CIE $R_a$ = 73.5
$R_9$ = -28.4

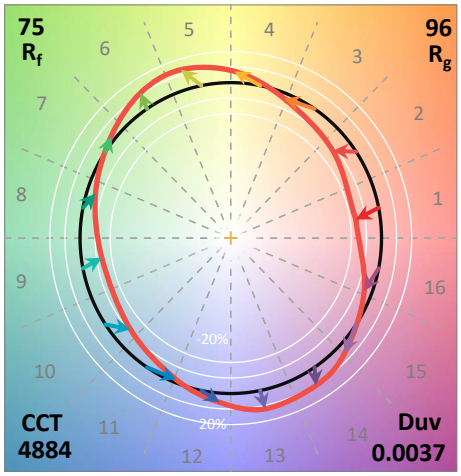
## Spectral Power Distribution Comparison

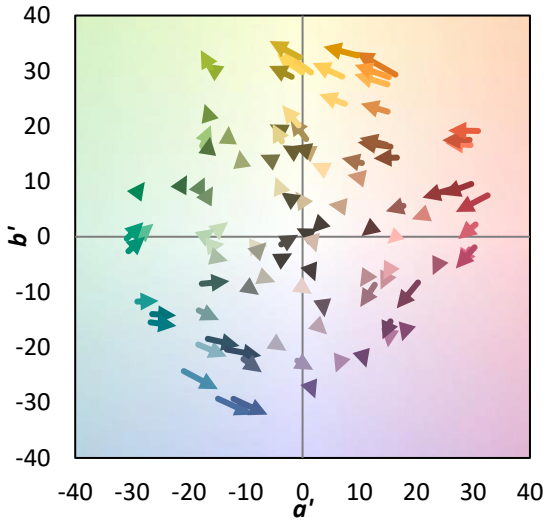



## Color Vector Graphics



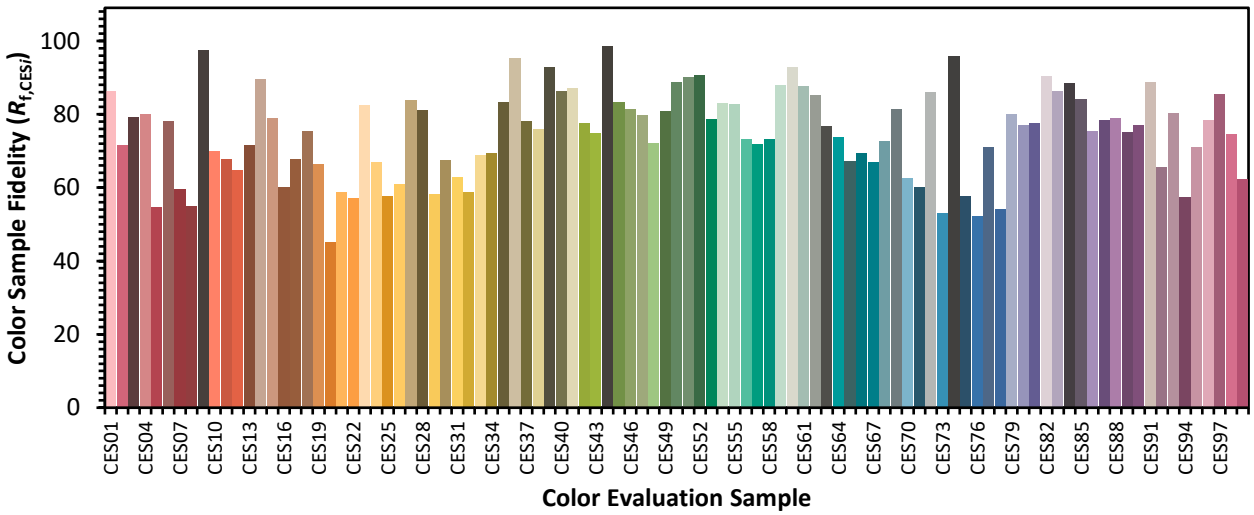
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Peachtree City, GA 30269

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

| | | | |
|---|---|---|---|
| CES01 = 85 | CES26 = 61 | CES51 = 90 | CES76 = 52 |
| CES02 = 60 | CES27 = 84 | CES52 = 91 | CES77 = 71 |
| CES03 = 30 | CES28 = 81 | CES53 = 79 | CES78 = 54 |
| CES04 = 69 | CES29 = 58 | CES54 = 83 | CES79 = 80 |
| CES05 = 46 | CES30 = 67 | CES55 = 83 | CES80 = 77 |
| CES06 = 50 | CES31 = 63 | CES56 = 73 | CES81 = 77 |
| CES07 = 39 | CES32 = 59 | CES57 = 72 | CES82 = 90 |
| CES08 = 38 | CES33 = 69 | CES58 = 73 | CES83 = 86 |
| CES09 = 29 | CES34 = 69 | CES59 = 88 | CES84 = 88 |
| CES10 = 73 | CES35 = 83 | CES60 = 93 | CES85 = 84 |
| CES11 = 56 | CES36 = 95 | CES61 = 88 | CES86 = 75 |
| CES12 = 61 | CES37 = 78 | CES62 = 85 | CES87 = 78 |
| CES13 = 41 | CES38 = 76 | CES63 = 77 | CES88 = 79 |
| CES14 = 74 | CES39 = 93 | CES64 = 74 | CES89 = 75 |
| CES15 = 70 | CES40 = 86 | CES65 = 67 | CES90 = 77 |
| CES16 = 46 | CES41 = 87 | CES66 = 69 | CES91 = 89 |
| CES17 = 49 | CES42 = 78 | CES67 = 67 | CES92 = 66 |
| CES18 = 55 | CES43 = 75 | CES68 = 73 | CES93 = 80 |
| CES19 = 71 | CES44 = 99 | CES69 = 81 | CES94 = 57 |
| CES20 = 64 | CES45 = 83 | CES70 = 63 | CES95 = 71 |
| CES21 = 85 | CES46 = 81 | CES71 = 60 | CES96 = 78 |
| CES22 = 77 | CES47 = 80 | CES72 = 86 | CES97 = 85 |
| CES23 = 91 | CES48 = 72 | CES73 = 53 | CES98 = 75 |
| CES24 = 90 | CES49 = 81 | CES74 = 96 | CES99 = 62 |
| CES25 = 71 | CES50 = 89 | CES75 = 58 | |

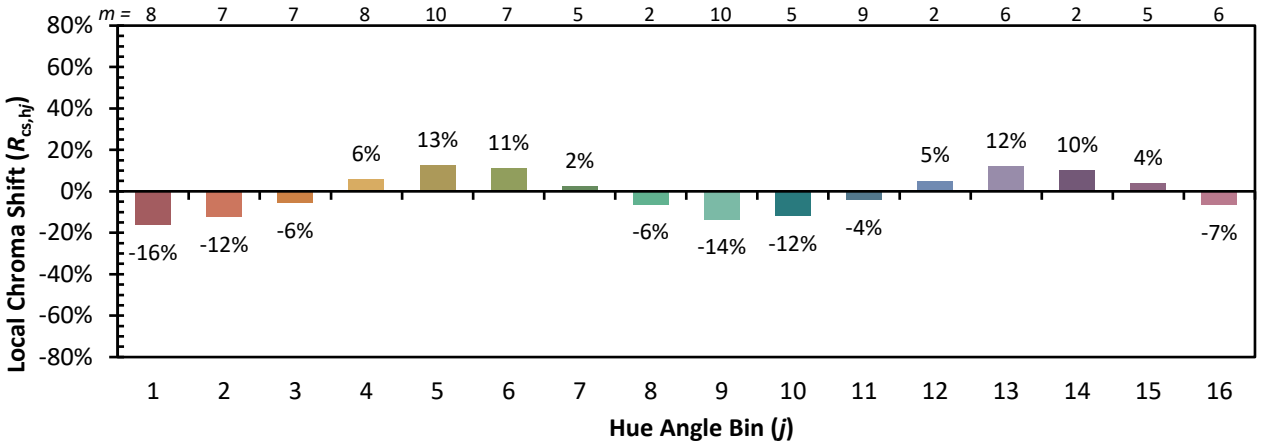


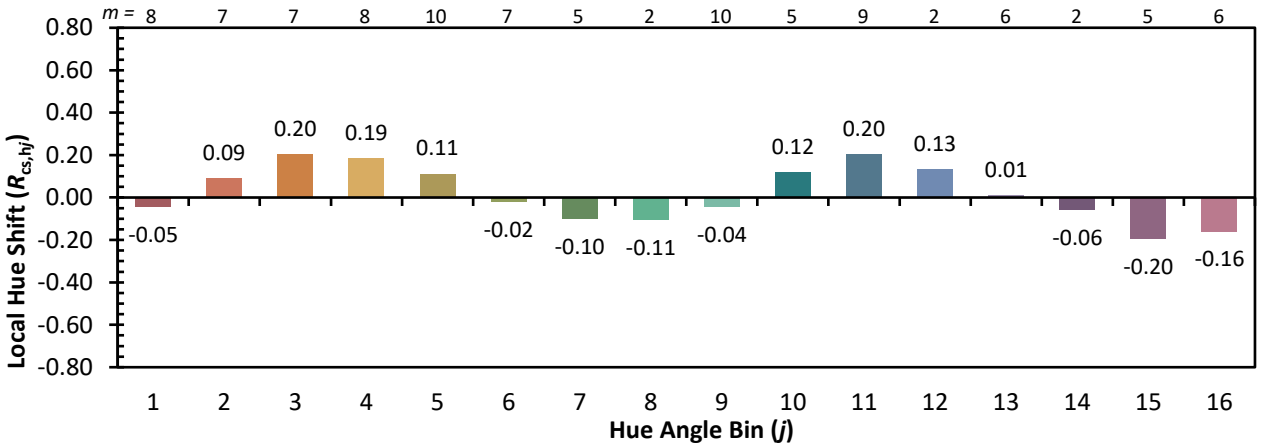
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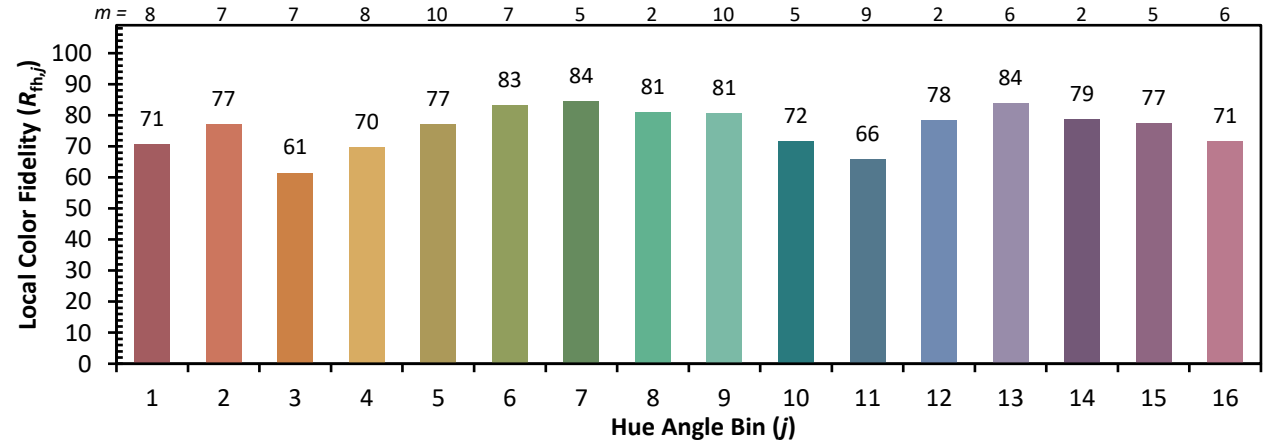
REPORT NUMBER: SP1-1908-441-4-R4

## TM-30-18

### Color Rendition by Hue-Angle Bin



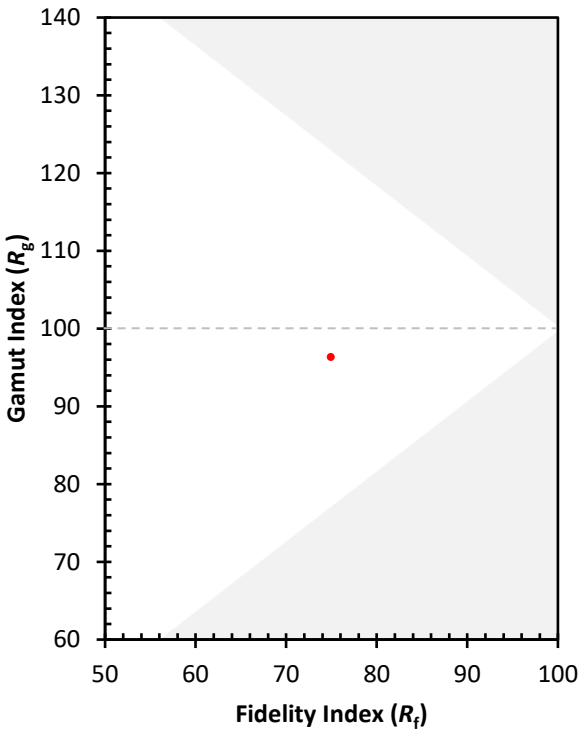



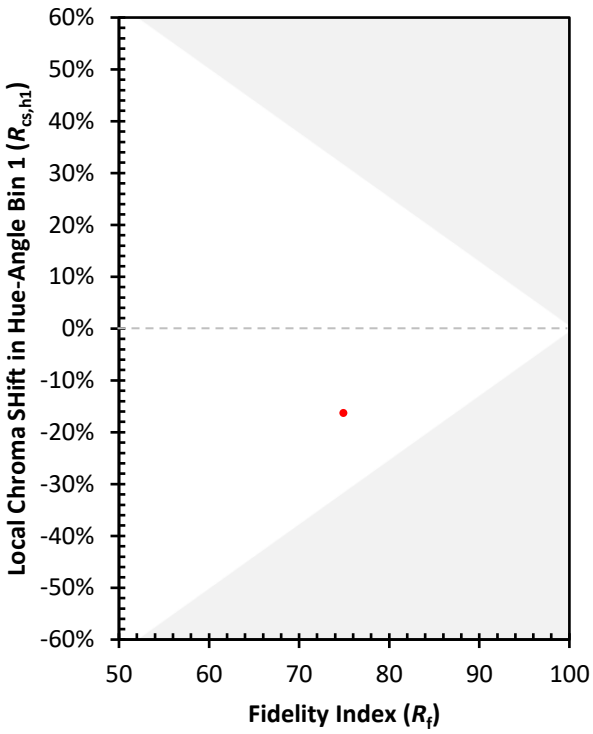
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### Measure Comparisons




(END OF REPORT)