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: P1199237

Luminaire Tested: GPC-SB2A-730-U-T4W

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: | P1199237 |
| | TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-1) |
| Test Lab: | INNOVATION CENTER |
| Issue Date: | 3/13/2026 |
| Manufacturer: | COOPER LIGHTING SOLUTIONS |
| Product Line: | McGRAW-EDISON |
| Catalog Number: | GPC-SB2A-730-U-T4W |
| Description: | GALLEON PEDESTRIAN LUMINAIRE |
| | (2) 70 CRI, 3000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV WIDE OPTICS |
| Light Source: | - |
| Ballast/Driver: | ELECTRONIC DRIVER |

**Summary**

| | |
|---|---|
| Lumens per Lamp: | N/A |
| Luminaire Lumens: | 8951 lumens |
| Efficiency: | N/A |
| Efficacy: | 156.2 lumens/watt |
| Luminous Opening: | Rectangular (W 1' x L: 0.5' x H: 0') |
| IES Classification: | Type IV - Short |
| 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 |

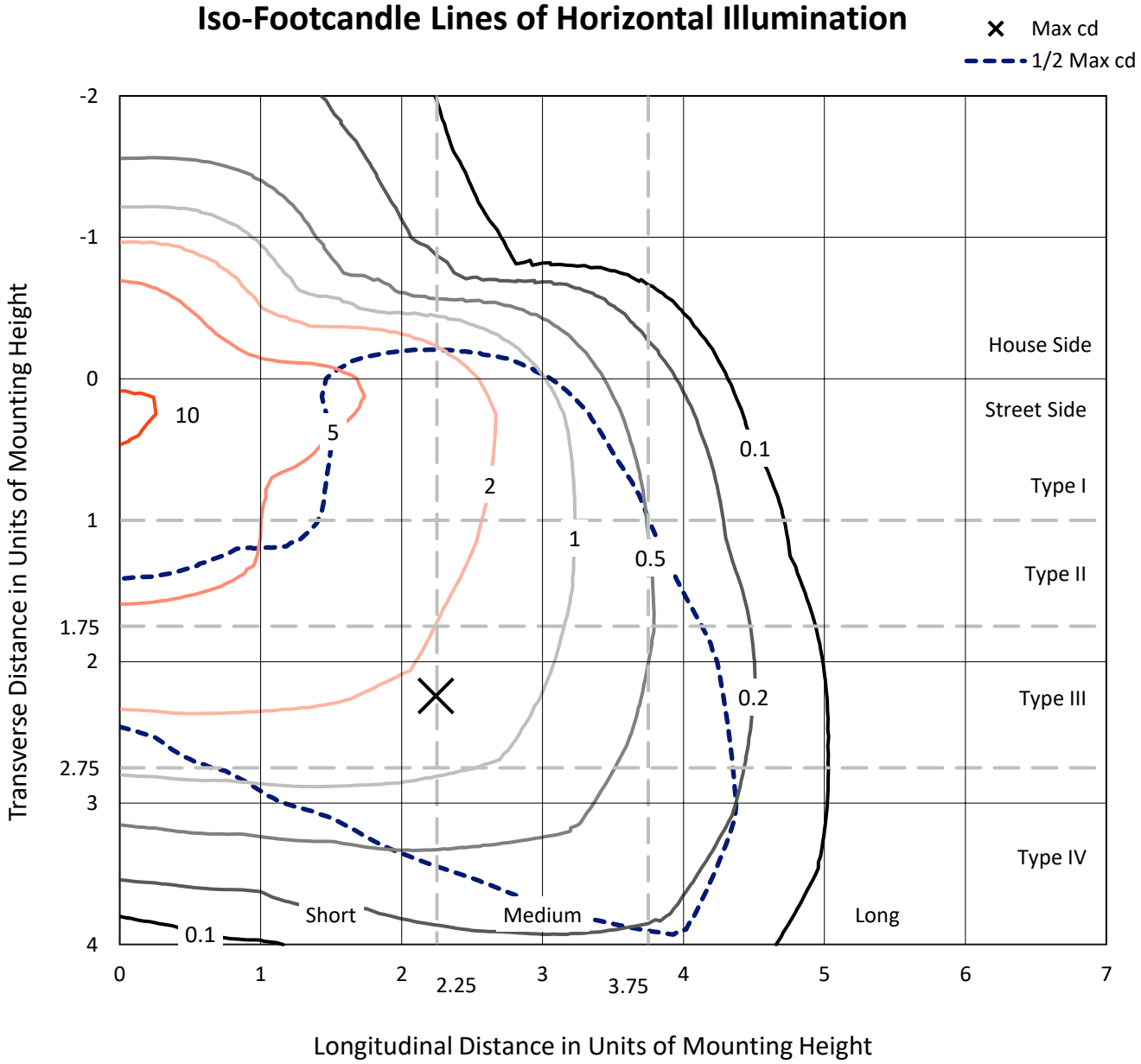


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Scaled Data Report

REPORT NUMBER: P1199237
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## Iso-Footcandle Lines of Horizontal Illumination



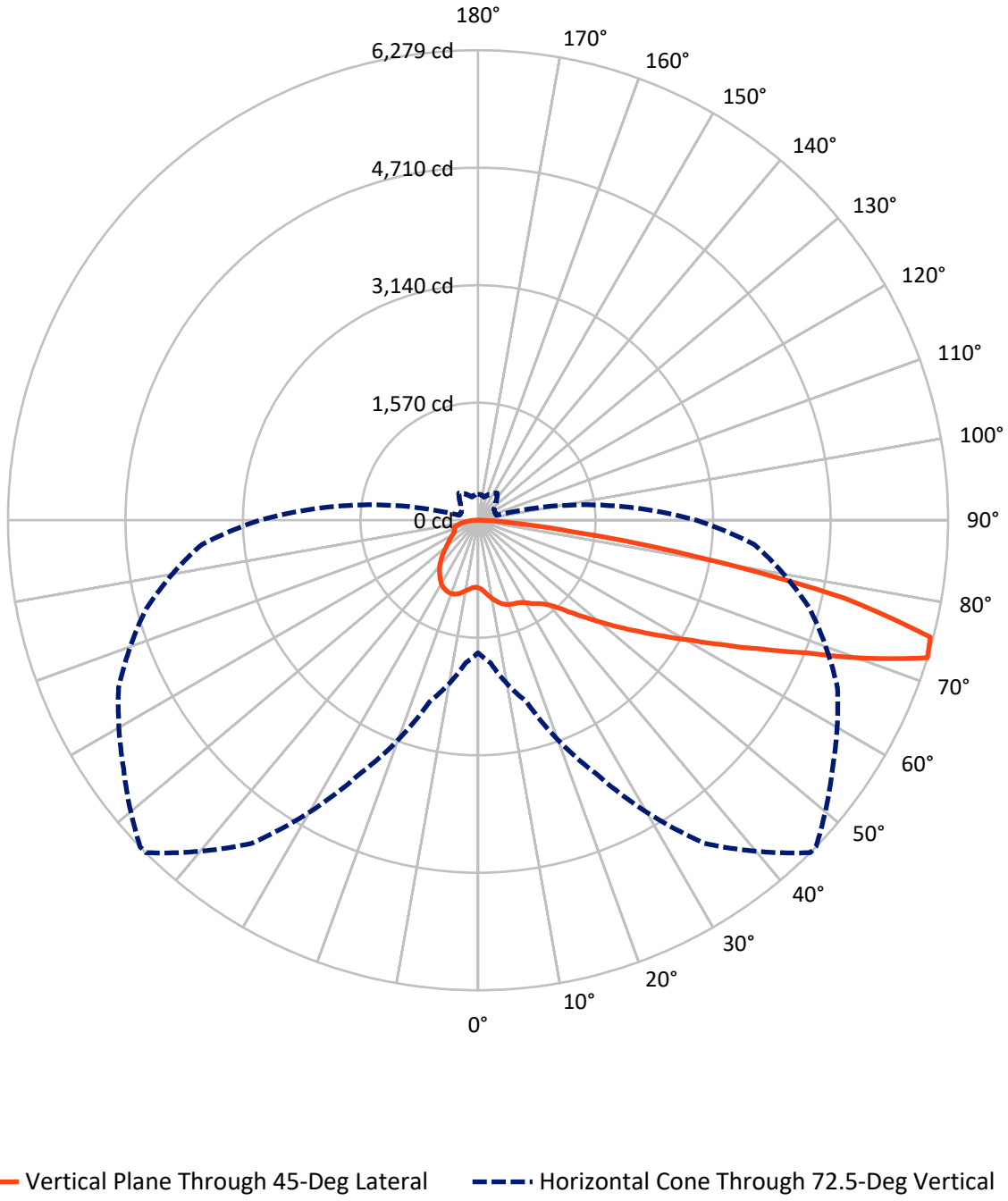

Based on 10 foot mounting height. Maximum calculated value = 11.2 fc
Type IV - Short - N/A

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## Luminous Intensity Polar Plot



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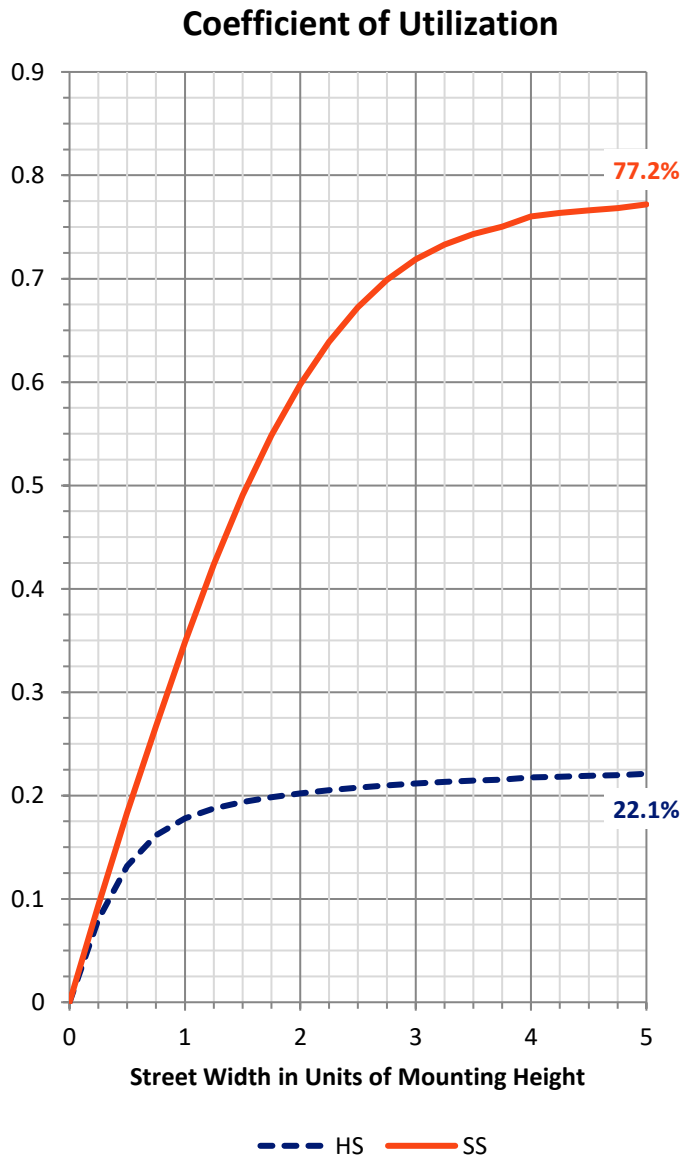
REPORT NUMBER: P1199237
CATALOG NUMBER: GPC-SB2A-730-U-T4W

**FLUX DISTRIBUTION:**

| | | Downward | Upward | Total |
|---|---|---|---|---|
| **House Side** | Lumens | 2023.5 | 0.0 | 2023.5 |
| | % Fixture | 22.6 | 0.0 | 22.6 |
| **Street Side** | Lumens | 6927.5 | 0.0 | 6927.5 |
| | % Fixture | 77.4 | 0.0 | 77.4 |
| **Total** | Lumens | 8951.0 | 0.0 | 8951.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

**ZONAL LUMENS:**

| Zone | Lumens | % Fixture |
|---|---|---|
| 0°-10° | 91.9 | 1.0 |
| 10°-20° | 306.4 | 3.4 |
| 20°-30° | 533.0 | 6.0 |
| 30°-40° | 764.1 | 8.5 |
| 40°-50° | 1076.0 | 12.0 |
| 50°-60° | 1648.1 | 18.4 |
| 60°-70° | 2387.5 | 26.7 |
| 70°-80° | 1906.5 | 21.3 |
| 80°-90° | 237.4 | 2.7 |
| 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° | 8951.0 | 100.0 |
| 0°-180° | 8951.0 | 100.0 |



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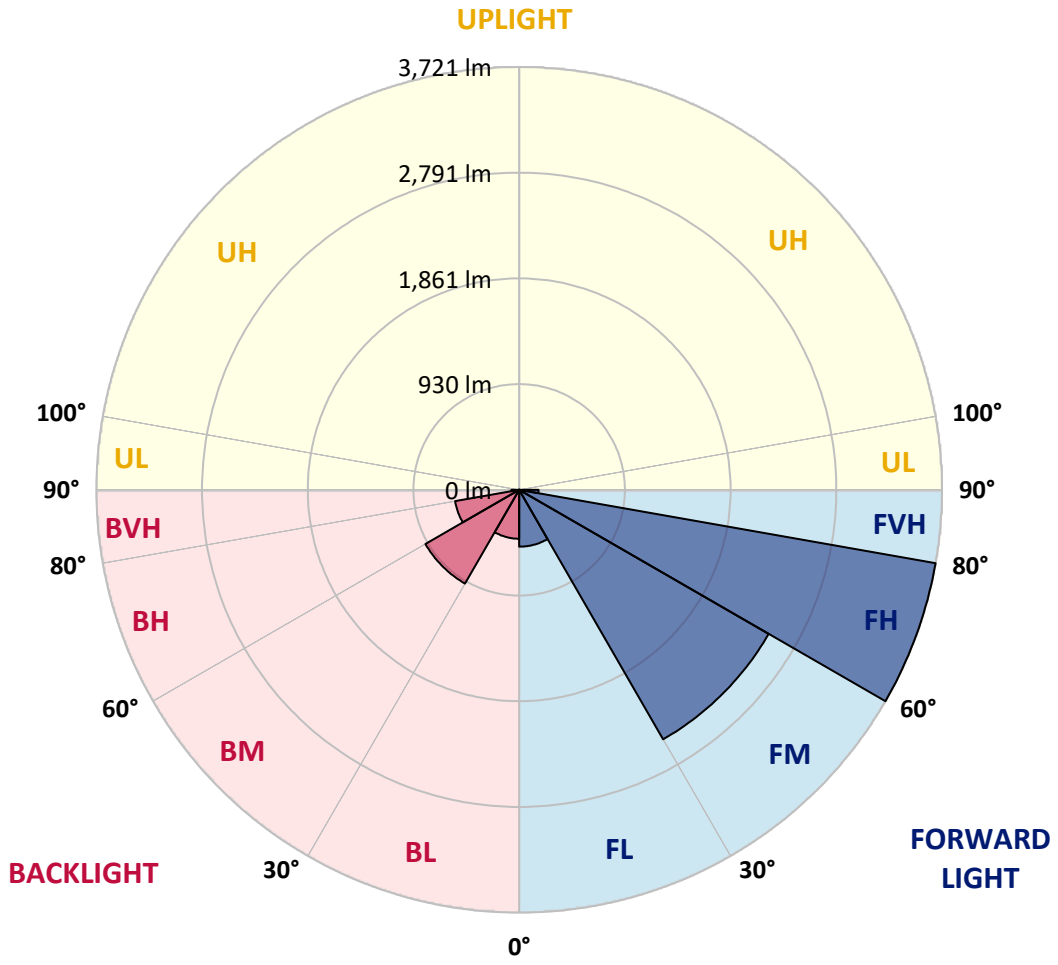
Scaled Data Report

REPORT NUMBER: P1199237
CATALOG NUMBER: GPC-SB2A-730-U-T4W

## LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit B | U | G |
|---|---|---|---|---|---|---|
| FL | (0°-30°) | 500.6 | 5.6 | | | |
| FM | (30°-60°) | 2535.4 | 28.3 | | | |
| FH | (60°-80°) | 3721.2 | 41.6 | | | G2/5000 |
| FVH | (80°-90°) | 170.3 | 1.9 | | | G2/225 |
| BL | (0°-30°) | 430.8 | 4.8 | B1/500 | | |
| BM | (30°-60°) | 952.8 | 10.6 | B1/1000 | | |
| BH | (60°-80°) | 572.8 | 6.4 | B2/1000 | | G2/1000 |
| BVH | (80°-90°) | 67.1 | 0.7 | | | 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 IV Short



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REPORT NUMBER: P1199237
CATALOG NUMBER: GPC-SB2A-730-U-T4W

**CANDELA DISTRIBUTION (FULL):**

| | 0° | 5° | 15° | 25° | 35° | 45° | 46° | 55° | 65° | 75° | 85° |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0° | 903.0 | 903.0 | 903.0 | 903.0 | 903.0 | 903.0 | 903.0 | 903.0 | 903.0 | 903.0 | 903.0 |
| 2.5° | 938.3 | 944.5 | 938.8 | 933.6 | 931.3 | 925.1 | 924.7 | 920.9 | 918.5 | 911.9 | 910.1 |
| 5° | 1003.9 | 1011.9 | 1002.5 | 992.1 | 982.7 | 967.6 | 965.7 | 954.9 | 942.6 | 928.4 | 920.4 |
| 7.5° | 1077.9 | 1085.0 | 1074.1 | 1058.6 | 1042.1 | 1017.1 | 1016.6 | 996.8 | 977.5 | 953.4 | 939.8 |
| 10° | 1142.5 | 1151.9 | 1137.3 | 1116.1 | 1095.4 | 1067.1 | 1063.8 | 1041.1 | 1016.6 | 985.5 | 964.8 |
| 12.5° | 1199.6 | 1206.2 | 1192.0 | 1166.1 | 1142.0 | 1113.8 | 1109.5 | 1084.5 | 1057.2 | 1021.8 | 995.4 |
| 15° | 1244.8 | 1253.3 | 1234.5 | 1206.6 | 1181.2 | 1153.4 | 1149.6 | 1127.0 | 1099.6 | 1062.4 | 1028.4 |
| 17.5° | 1274.5 | 1281.6 | 1262.3 | 1231.2 | 1206.6 | 1183.5 | 1180.7 | 1161.9 | 1137.8 | 1100.1 | 1063.8 |
| 20° | 1285.9 | 1293.4 | 1273.1 | 1241.5 | 1218.9 | 1201.0 | 1199.6 | 1185.9 | 1169.4 | 1135.0 | 1098.2 |
| 22.5° | 1297.2 | 1304.3 | 1277.8 | 1244.8 | 1225.0 | 1213.7 | 1213.2 | 1204.3 | 1197.7 | 1169.4 | 1133.6 |
| 25° | 1342.9 | 1344.8 | 1309.4 | 1261.8 | 1233.5 | 1223.6 | 1223.2 | 1222.7 | 1225.5 | 1203.3 | 1171.8 |
| 27.5° | 1382.5 | 1382.1 | 1351.9 | 1307.1 | 1263.2 | 1242.5 | 1242.0 | 1246.7 | 1255.7 | 1237.3 | 1211.4 |
| 30° | 1440.5 | 1435.3 | 1399.5 | 1352.8 | 1312.7 | 1280.7 | 1277.8 | 1273.6 | 1280.7 | 1266.1 | 1251.0 |
| 32.5° | 1563.6 | 1547.1 | 1489.1 | 1406.1 | 1353.8 | 1329.2 | 1325.5 | 1299.1 | 1301.9 | 1292.9 | 1285.4 |
| 35° | 1739.9 | 1718.3 | 1640.9 | 1507.0 | 1404.7 | 1369.8 | 1367.9 | 1334.4 | 1328.8 | 1320.8 | 1323.6 |
| 37.5° | 1949.8 | 1922.9 | 1832.8 | 1653.2 | 1492.4 | 1417.0 | 1414.1 | 1383.9 | 1360.8 | 1352.4 | 1368.4 |
| 40° | 2160.6 | 2126.6 | 2052.1 | 1831.4 | 1621.6 | 1495.7 | 1486.7 | 1441.0 | 1414.6 | 1400.4 | 1434.4 |
| 42.5° | 2365.2 | 2336.9 | 2273.3 | 2031.4 | 1781.0 | 1610.7 | 1590.9 | 1512.7 | 1492.9 | 1479.7 | 1541.0 |
| 45° | 2546.3 | 2520.8 | 2474.1 | 2245.0 | 1967.7 | 1767.3 | 1748.0 | 1620.2 | 1614.1 | 1614.1 | 1702.7 |
| 47.5° | 2693.4 | 2687.7 | 2638.2 | 2462.8 | 2187.9 | 1945.5 | 1912.1 | 1769.7 | 1786.2 | 1811.6 | 1932.3 |
| 50° | 2856.5 | 2841.0 | 2788.2 | 2677.4 | 2446.8 | 2149.7 | 2122.4 | 1953.1 | 2014.9 | 2084.6 | 2264.3 |
| 52.5° | 3006.5 | 3015.0 | 2956.0 | 2900.9 | 2739.1 | 2377.5 | 2329.4 | 2169.5 | 2303.0 | 2418.5 | 2653.3 |
| 55° | 3160.7 | 3161.1 | 3144.6 | 3137.1 | 3045.6 | 2629.3 | 2576.4 | 2429.8 | 2642.0 | 2785.3 | 3106.9 |
| 57.5° | 3305.4 | 3306.4 | 3330.9 | 3397.4 | 3401.2 | 2919.7 | 2859.8 | 2749.5 | 3018.7 | 3164.9 | 3574.7 |
| 60° | 3434.6 | 3441.2 | 3508.2 | 3663.8 | 3713.8 | 3252.6 | 3196.0 | 3127.2 | 3408.2 | 3555.3 | 4066.5 |
| 62.5° | 3478.0 | 3502.1 | 3651.1 | 3872.2 | 4022.6 | 3661.0 | 3605.3 | 3564.3 | 3817.5 | 3954.3 | 4477.7 |
| 65° | 3404.5 | 3459.6 | 3747.7 | 4044.3 | 4340.4 | 4146.2 | 4091.0 | 4046.2 | 4242.8 | 4371.6 | 4815.3 |
| 67.5° | 3223.9 | 3295.1 | 3742.1 | 4224.9 | 4726.2 | 4729.9 | 4678.5 | 4573.4 | 4698.8 | 4748.3 | 4925.1 |
| 70° | 2748.1 | 2854.6 | 3412.5 | 4292.3 | 5168.9 | 5528.2 | 5478.7 | 5208.1 | 5153.8 | 4914.3 | 4615.8 |
| 72.5° | 1770.6 | 1913.9 | 2512.8 | 3737.4 | 5267.5 | 6279.4 | 6276.5 | 5781.0 | 5297.6 | 4591.8 | 3702.0 |
| 75° | 646.0 | 733.7 | 1167.5 | 2345.9 | 4421.5 | 6241.2 | 6259.6 | 5682.9 | 4836.0 | 3546.9 | 2306.3 |
| 77.5° | 235.3 | 257.5 | 381.0 | 901.6 | 2719.3 | 5007.7 | 5045.9 | 4543.2 | 3442.2 | 1780.0 | 913.8 |
| 80° | 123.5 | 135.8 | 195.2 | 349.9 | 1165.2 | 2973.9 | 3033.8 | 2700.0 | 1617.8 | 536.1 | 274.0 |
| 82.5° | 68.4 | 74.0 | 109.4 | 190.0 | 524.8 | 1271.7 | 1307.6 | 1066.6 | 569.1 | 227.3 | 113.2 |
| 85° | 36.8 | 39.1 | 51.4 | 103.7 | 256.5 | 440.9 | 450.8 | 318.8 | 226.8 | 133.4 | 54.7 |
| 87.5° | 10.8 | 13.2 | 17.0 | 33.0 | 100.4 | 99.0 | 101.4 | 63.2 | 89.6 | 67.4 | 17.9 |
| 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: P1199237
CATALOG NUMBER: GPC-SB2A-730-U-T4W

**CANDELA DISTRIBUTION (continued):**

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0° | 903.0 | 903.0 | 903.0 | 903.0 | 903.0 | 903.0 | 903.0 | 903.0 | 903.0 | 903.0 | 903.0 |
| 2.5° | 907.2 | 905.8 | 900.6 | 898.3 | 895.4 | 895.0 | 897.3 | 897.8 | 898.3 | 898.7 | 900.6 |
| 5° | 915.7 | 911.0 | 906.3 | 903.5 | 904.4 | 904.9 | 909.6 | 912.9 | 915.2 | 917.1 | 918.1 |
| 7.5° | 932.2 | 928.4 | 920.4 | 920.0 | 921.4 | 925.6 | 931.7 | 939.3 | 943.5 | 946.8 | 947.8 |
| 10° | 956.7 | 949.7 | 940.2 | 941.6 | 944.5 | 950.6 | 963.3 | 969.5 | 976.5 | 982.7 | 981.3 |
| 12.5° | 981.7 | 975.6 | 964.8 | 965.7 | 970.4 | 981.3 | 993.5 | 1001.1 | 1005.8 | 1010.5 | 1012.4 |
| 15° | 1014.3 | 1003.4 | 991.6 | 991.6 | 1000.1 | 1011.9 | 1017.6 | 1023.7 | 1026.5 | 1031.7 | 1033.6 |
| 17.5° | 1047.7 | 1033.6 | 1018.0 | 1017.1 | 1027.5 | 1033.1 | 1036.4 | 1037.4 | 1038.3 | 1044.0 | 1045.9 |
| 20° | 1081.2 | 1065.7 | 1043.5 | 1041.6 | 1044.0 | 1043.0 | 1042.6 | 1041.6 | 1043.0 | 1050.1 | 1052.9 |
| 22.5° | 1114.2 | 1096.3 | 1065.7 | 1057.2 | 1050.6 | 1041.6 | 1041.1 | 1040.7 | 1041.6 | 1048.7 | 1053.4 |
| 25° | 1152.9 | 1131.2 | 1090.2 | 1064.7 | 1042.6 | 1030.3 | 1031.7 | 1032.2 | 1033.1 | 1038.8 | 1046.3 |
| 27.5° | 1194.9 | 1170.8 | 1112.8 | 1062.4 | 1022.3 | 1013.8 | 1011.4 | 1012.8 | 1016.1 | 1025.1 | 1034.1 |
| 30° | 1236.8 | 1208.5 | 1133.6 | 1052.9 | 996.8 | 985.0 | 977.5 | 980.8 | 991.2 | 1000.1 | 1010.0 |
| 32.5° | 1275.0 | 1246.7 | 1150.1 | 1032.2 | 964.3 | 945.9 | 936.0 | 940.2 | 950.6 | 953.9 | 965.7 |
| 35° | 1319.8 | 1287.8 | 1157.1 | 999.2 | 928.9 | 900.6 | 887.4 | 881.3 | 886.5 | 883.2 | 893.6 |
| 37.5° | 1369.8 | 1336.3 | 1156.2 | 955.8 | 887.4 | 854.9 | 836.5 | 813.4 | 802.5 | 791.2 | 798.3 |
| 40° | 1443.8 | 1395.7 | 1144.9 | 903.5 | 836.0 | 806.3 | 773.3 | 734.2 | 709.7 | 687.5 | 688.9 |
| 42.5° | 1544.7 | 1478.2 | 1124.1 | 845.9 | 778.0 | 750.2 | 705.4 | 659.7 | 621.0 | 584.2 | 580.9 |
| 45° | 1695.2 | 1586.2 | 1098.2 | 784.6 | 715.3 | 688.0 | 639.4 | 588.0 | 544.1 | 497.0 | 491.3 |
| 47.5° | 1912.1 | 1731.5 | 1073.7 | 714.8 | 649.3 | 624.3 | 580.5 | 532.8 | 481.0 | 435.2 | 430.0 |
| 50° | 2210.1 | 1939.9 | 1051.0 | 646.9 | 584.2 | 565.4 | 530.5 | 481.9 | 429.6 | 392.8 | 390.4 |
| 52.5° | 2589.2 | 2223.3 | 1041.6 | 581.4 | 523.4 | 516.3 | 488.5 | 443.2 | 393.7 | 362.6 | 360.2 |
| 55° | 3024.4 | 2562.3 | 1041.6 | 518.7 | 470.1 | 472.5 | 453.1 | 411.2 | 368.3 | 340.4 | 337.6 |
| 57.5° | 3468.6 | 2905.6 | 1022.8 | 460.7 | 424.8 | 434.8 | 422.5 | 385.7 | 347.0 | 318.3 | 313.6 |
| 60° | 3877.9 | 3193.2 | 946.4 | 407.9 | 384.8 | 400.3 | 392.3 | 360.7 | 313.6 | 289.5 | 285.7 |
| 62.5° | 4192.4 | 3355.4 | 799.2 | 365.9 | 351.8 | 369.7 | 365.4 | 327.7 | 307.4 | 297.5 | 294.2 |
| 65° | 4349.9 | 3329.0 | 611.1 | 328.7 | 323.9 | 351.8 | 342.8 | 341.4 | 325.4 | 314.0 | 310.3 |
| 67.5° | 4253.2 | 3101.7 | 443.2 | 301.3 | 307.9 | 335.3 | 369.7 | 375.3 | 345.6 | 323.5 | 319.7 |
| 70° | 3829.3 | 2690.6 | 330.1 | 275.4 | 287.6 | 335.7 | 421.5 | 392.8 | 339.0 | 313.1 | 308.9 |
| 72.5° | *2913.1* | *2006.4* | *256.0* | *248.0* | *261.2* | *338.1* | *444.7* | *384.8* | *320.2* | *346.1* | *343.3* |
| 75° | 1665.9 | 1101.5 | 205.6 | 214.5 | 228.2 | 315.9 | 432.9 | 364.0 | 305.6 | 317.8 | 317.8 |
| 77.5° | 635.2 | 423.4 | 169.8 | 181.5 | 183.4 | 275.8 | 414.0 | 362.6 | 290.9 | 283.9 | 258.9 |
| 80° | 220.2 | 165.5 | 140.5 | 144.3 | 141.9 | 245.2 | 397.0 | 315.5 | 238.1 | 213.1 | 206.1 |
| 82.5° | 90.1 | 82.5 | 111.3 | 106.6 | 100.9 | 190.5 | 320.6 | 257.9 | 194.7 | 172.1 | 170.2 |
| 85° | 39.1 | 52.3 | 73.6 | 64.6 | 58.5 | 132.0 | 257.0 | 218.3 | 164.6 | 141.9 | 141.5 |
| 87.5° | 8.0 | 19.8 | 31.1 | 29.2 | 30.2 | 88.2 | 182.5 | 155.1 | 116.5 | 87.2 | 68.4 |
| 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 Generated By FNC07603 / LDUCLS01DT446
Version: v6.13

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## Test Information

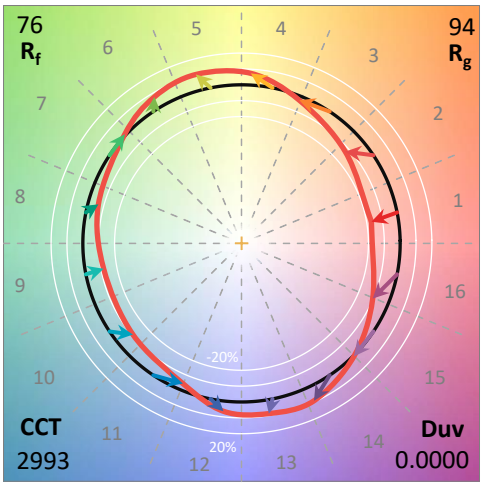
| | |
|---|---|
| Test Method: | LM-79-2008 |
| Report Number: | SP1-1908-441-2-R4 |
| Test Lab: | COOPER LIGHTING SOLUTIONS |
| Photometer: | SP1 - 76IN SPHERE |
| Measurement Geometry: | 4π |
| Issue Date: | 10/28/2024 |
| Manufacturer: | COOPER LIGHTING SOLUTIONS |
| Product Line: | McGRAW-EDISON |
| Catalog Number: | **SA1C-730-U-5WQ** |
| Description: | McGRAW EDISON ROADWAY AND AREA LUMINAIRE |

***THIS IS A REVISION OF SP1-1908-441-2-R3. TO UPDATE THE CATALOG INFORMATION.***TESTED IN SITU. (1) 70 CRI, 3000K, 1050MA LIGHTSQUARE WITH 16 LEDS AND TYPE V WIDE OPTICS.

## Spectral Parameters

| | | | | | |
|---|---|---|---|---|---|
| CCT (K): | 2993 | CRI (Ra): | 71.8 | | |
| CIE u': | 0.2508 | R1: | 67.5 | R9: | -38.3 |
| CIE v': | 0.5215 | R2: | 82.9 | R10: | 62.5 |
| Duv: | 0.0000 | R3: | 94.7 | R11: | 63.7 |
| CIE x: | 0.4374 | R4: | 67.7 | R12: | 57.8 |
| CIE y: | 0.4043 | R5: | 67.9 | R13: | 70.4 |
| CIE z: | 0.1583 | R6: | 77.6 | R14: | 97.3 |
| Peak Wavelength (nm): | 593 | R7: | 76.0 | | |
| Dominant Wavelength (nm): | 582 | R8: | 40.5 | | |
| Purity: | 53 | | | | |

| | |
|---|---|
| Rf: | 75.7 |
| Rg: | 93.9 |




## Test Conditions

| | |
|---|---|
| Stabilization Time: | 53M |
| Operation Time: | 12H |
| Room Temperature (°C) / RH%: | 25.0./44% |
| Sphere Temperature (°C): | 25.7 |

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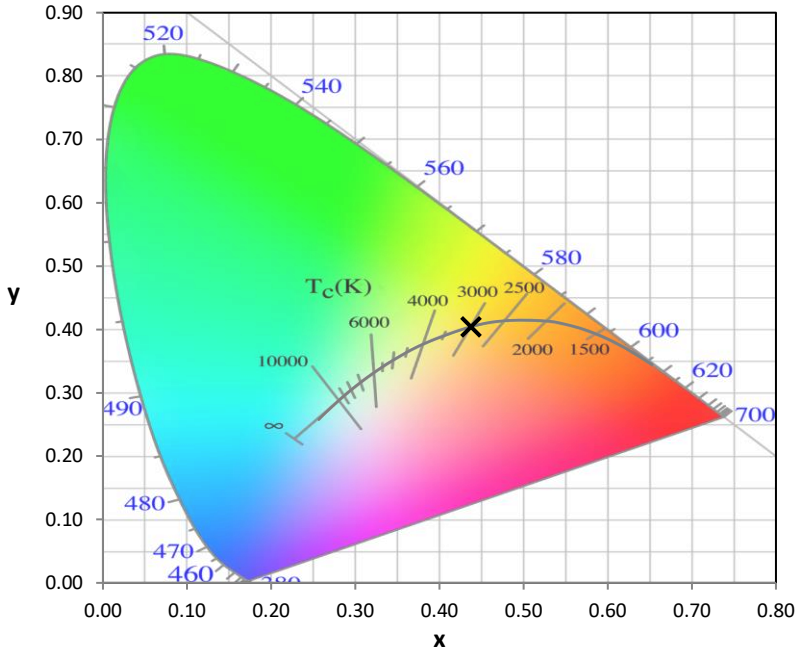
REPORT NUMBER: SP1-1908-441-2-R4

| 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 |

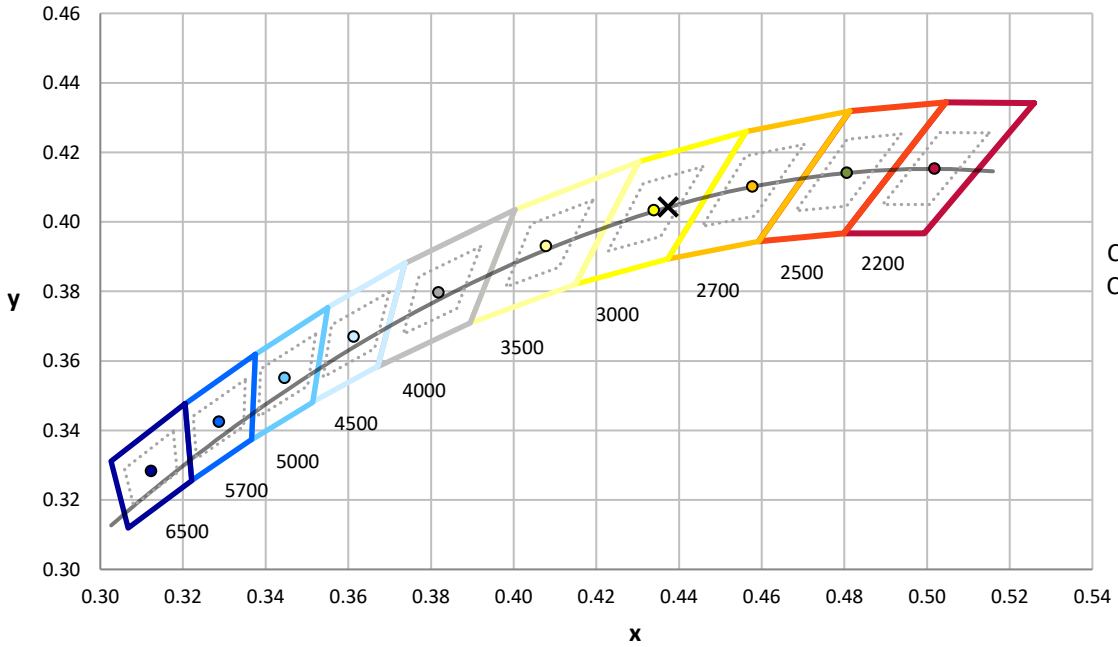
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1121 Highway 74 South
Peachtree City, GA 30269

REPORT NUMBER: SP1-1908-441-2-R4

## CIE 1931 Chromaticity Diagram




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



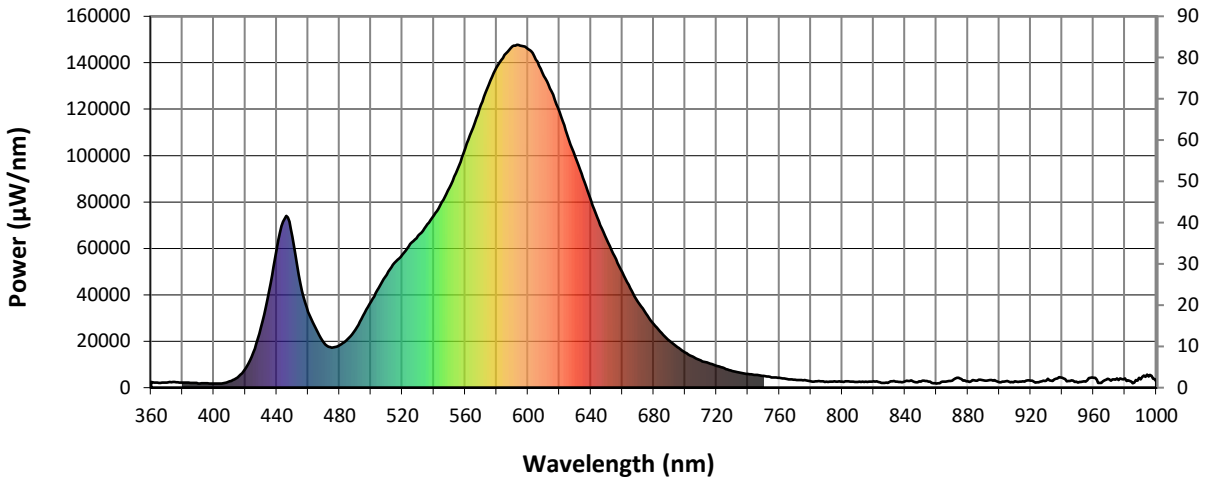

CCT = 2993K
CIE x = 0.4374
CIE y = 0.4043
Duv = 0.0000

Point lies inside the ANSI 3000K 4-step quadrangle

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## Photopic Flux vs. Wavelength



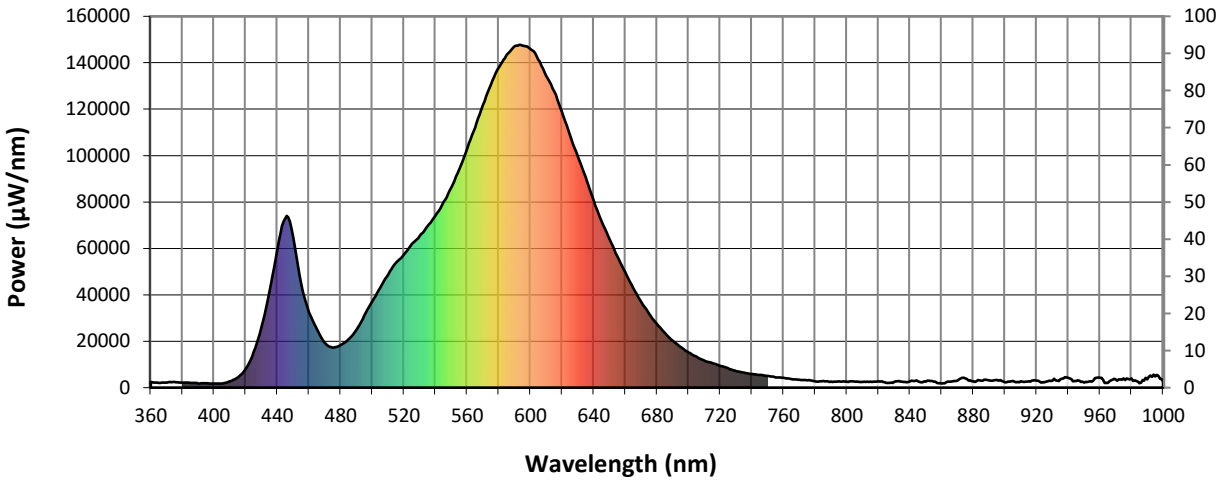

######

| 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 | 2397 | NR | 490 | 24908 | NR | 620 | 118784 | NR | 750 | 5037 | NR | 880 | 2677 | NR |
| 365 | 2084 | NR | 495 | 30998 | NR | 625 | 108951 | NR | 755 | 4413 | NR | 885 | 2940 | NR |
| 370 | 2143 | NR | 500 | 37103 | NR | 630 | 99573 | NR | 760 | 4189 | NR | 890 | 3116 | NR |
| 375 | 2413 | NR | 505 | 42987 | NR | 635 | 90444 | NR | 765 | 3677 | NR | 895 | 3345 | NR |
| 380 | 2172 | NR | 510 | 48702 | NR | 640 | 80749 | NR | 770 | 3366 | NR | 900 | 2312 | NR |
| 385 | 1997 | NR | 515 | 53741 | NR | 645 | 71664 | NR | 775 | 3211 | NR | 905 | 2829 | NR |
| 390 | 1830 | NR | 520 | 57283 | NR | 650 | 63936 | NR | 780 | 2682 | NR | 910 | 2783 | NR |
| 395 | 1861 | NR | 525 | 61876 | NR | 655 | 56611 | NR | 785 | 2804 | NR | 915 | 2662 | NR |
| 400 | 1717 | NR | 530 | 65398 | NR | 660 | 49763 | NR | 790 | 2581 | NR | 920 | 3047 | NR |
| 405 | 1761 | NR | 535 | 69597 | NR | 665 | 42891 | NR | 795 | 2711 | NR | 925 | 2256 | NR |
| 410 | 2680 | NR | 540 | 74214 | NR | 670 | 36939 | NR | 800 | 2609 | NR | 930 | 2976 | NR |
| 415 | 4374 | NR | 545 | 79911 | NR | 675 | 31946 | NR | 805 | 2581 | NR | 935 | 3503 | NR |
| 420 | 8071 | NR | 550 | 86153 | NR | 680 | 27385 | NR | 810 | 2404 | NR | 940 | 4226 | NR |
| 425 | 15169 | NR | 555 | 93952 | NR | 685 | 23504 | NR | 815 | 2556 | NR | 945 | 2930 | NR |
| 430 | 26038 | NR | 560 | 102904 | NR | 690 | 20210 | NR | 820 | 2742 | NR | 950 | 2115 | NR |
| 435 | 41316 | NR | 565 | 112009 | NR | 695 | 17459 | NR | 825 | 2014 | NR | 955 | 2634 | NR |
| 440 | 59674 | NR | 570 | 121662 | NR | 700 | 15207 | NR | 830 | 2488 | NR | 960 | 4200 | NR |
| 445 | 72751 | NR | 575 | 130476 | NR | 705 | 13322 | NR | 835 | 2625 | NR | 965 | 1982 | NR |
| 450 | 65091 | NR | 580 | 137926 | NR | 710 | 11676 | NR | 840 | 2754 | NR | 970 | 3613 | NR |
| 455 | 44894 | NR | 585 | 143406 | NR | 715 | 10626 | NR | 845 | 2708 | NR | 975 | 4034 | NR |
| 460 | 32712 | NR | 590 | 147039 | NR | 720 | 9416 | NR | 850 | 2608 | NR | 980 | 3922 | NR |
| 465 | 25296 | NR | 595 | 147365 | NR | 725 | 8333 | NR | 855 | 2605 | NR | 985 | 1909 | NR |
| 470 | 19318 | NR | 600 | 145800 | NR | 730 | 7134 | NR | 860 | 1765 | NR | 990 | 3617 | NR |
| 475 | 17265 | NR | 605 | 141363 | NR | 735 | 6437 | NR | 865 | 2581 | NR | 995 | 4767 | NR |
| 480 | 18260 | NR | 610 | 134199 | NR | 740 | 5834 | NR | 870 | 3016 | NR | 1000 | 2528 | NR |
| 485 | 20845 | NR | 615 | 127683 | NR | 745 | 5500 | NR | 875 | 3952 | NR | | | |

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## Scotopic Flux vs. Wavelength



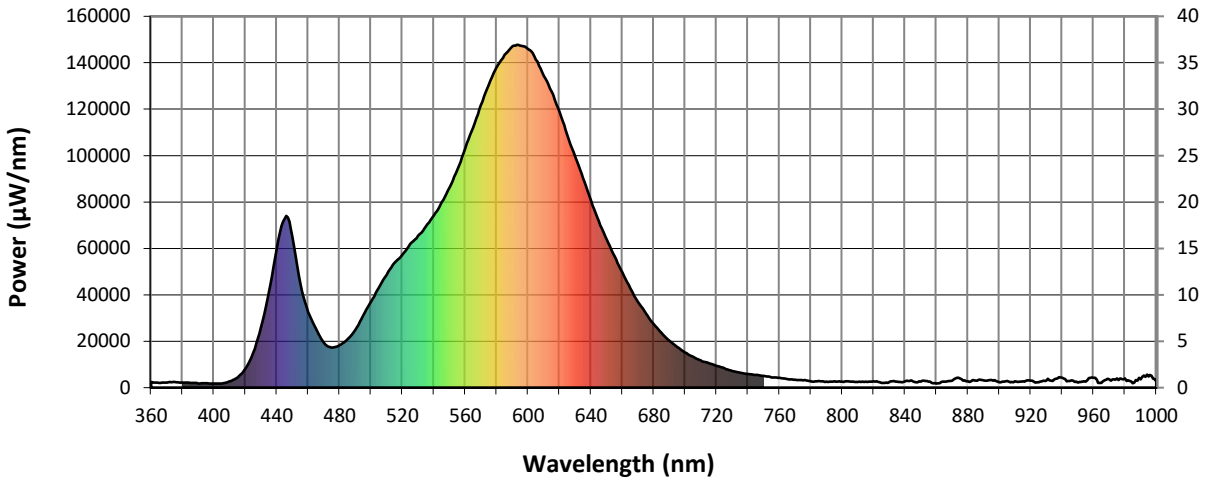

**Scotopic Lumens: 8494.8** **S/P: 1.23**

| 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 | 2397 | NR | 490 | 24908 | NR | 620 | 118784 | NR | 750 | 5037 | NR | 880 | 2677 | NR |
| 365 | 2084 | NR | 495 | 30998 | NR | 625 | 108951 | NR | 755 | 4413 | NR | 885 | 2940 | NR |
| 370 | 2143 | NR | 500 | 37103 | NR | 630 | 99573 | NR | 760 | 4189 | NR | 890 | 3116 | NR |
| 375 | 2413 | NR | 505 | 42987 | NR | 635 | 90444 | NR | 765 | 3677 | NR | 895 | 3345 | NR |
| 380 | 2172 | NR | 510 | 48702 | NR | 640 | 80749 | NR | 770 | 3366 | NR | 900 | 2312 | NR |
| 385 | 1997 | NR | 515 | 53741 | NR | 645 | 71664 | NR | 775 | 3211 | NR | 905 | 2829 | NR |
| 390 | 1830 | NR | 520 | 57283 | NR | 650 | 63936 | NR | 780 | 2682 | NR | 910 | 2783 | NR |
| 395 | 1861 | NR | 525 | 61876 | NR | 655 | 56611 | NR | 785 | 2804 | NR | 915 | 2662 | NR |
| 400 | 1717 | NR | 530 | 65398 | NR | 660 | 49763 | NR | 790 | 2581 | NR | 920 | 3047 | NR |
| 405 | 1761 | NR | 535 | 69597 | NR | 665 | 42891 | NR | 795 | 2711 | NR | 925 | 2256 | NR |
| 410 | 2680 | NR | 540 | 74214 | NR | 670 | 36939 | NR | 800 | 2609 | NR | 930 | 2976 | NR |
| 415 | 4374 | NR | 545 | 79911 | NR | 675 | 31946 | NR | 805 | 2581 | NR | 935 | 3503 | NR |
| 420 | 8071 | NR | 550 | 86153 | NR | 680 | 27385 | NR | 810 | 2404 | NR | 940 | 4226 | NR |
| 425 | 15169 | NR | 555 | 93952 | NR | 685 | 23504 | NR | 815 | 2556 | NR | 945 | 2930 | NR |
| 430 | 26038 | NR | 560 | 102904 | NR | 690 | 20210 | NR | 820 | 2742 | NR | 950 | 2115 | NR |
| 435 | 41316 | NR | 565 | 112009 | NR | 695 | 17459 | NR | 825 | 2014 | NR | 955 | 2634 | NR |
| 440 | 59674 | NR | 570 | 121662 | NR | 700 | 15207 | NR | 830 | 2488 | NR | 960 | 4200 | NR |
| 445 | 72751 | NR | 575 | 130476 | NR | 705 | 13322 | NR | 835 | 2625 | NR | 965 | 1982 | NR |
| 450 | 65091 | NR | 580 | 137926 | NR | 710 | 11676 | NR | 840 | 2754 | NR | 970 | 3613 | NR |
| 455 | 44894 | NR | 585 | 143406 | NR | 715 | 10626 | NR | 845 | 2708 | NR | 975 | 4034 | NR |
| 460 | 32712 | NR | 590 | 147039 | NR | 720 | 9416 | NR | 850 | 2608 | NR | 980 | 3922 | NR |
| 465 | 25296 | NR | 595 | 147365 | NR | 725 | 8333 | NR | 855 | 2605 | NR | 985 | 1909 | NR |
| 470 | 19318 | NR | 600 | 145800 | NR | 730 | 7134 | NR | 860 | 1765 | NR | 990 | 3617 | NR |
| 475 | 17265 | NR | 605 | 141363 | NR | 735 | 6437 | NR | 865 | 2581 | NR | 995 | 4767 | NR |
| 480 | 18260 | NR | 610 | 134199 | NR | 740 | 5834 | NR | 870 | 3016 | NR | 1000 | 2528 | NR |
| 485 | 20845 | NR | 615 | 127683 | NR | 745 | 5500 | NR | 875 | 3952 | NR | | | |

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## Melanopic Flux vs. Wavelength




**Melanopic Lumens: 3101.5** **M/P: 0.45**

| 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 | 2397 | NR | 490 | 24908 | NR | 620 | 118784 | NR | 750 | 5037 | NR | 880 | 2677 | NR |
| 365 | 2084 | NR | 495 | 30998 | NR | 625 | 108951 | NR | 755 | 4413 | NR | 885 | 2940 | NR |
| 370 | 2143 | NR | 500 | 37103 | NR | 630 | 99573 | NR | 760 | 4189 | NR | 890 | 3116 | NR |
| 375 | 2413 | NR | 505 | 42987 | NR | 635 | 90444 | NR | 765 | 3677 | NR | 895 | 3345 | NR |
| 380 | 2172 | NR | 510 | 48702 | NR | 640 | 80749 | NR | 770 | 3366 | NR | 900 | 2312 | NR |
| 385 | 1997 | NR | 515 | 53741 | NR | 645 | 71664 | NR | 775 | 3211 | NR | 905 | 2829 | NR |
| 390 | 1830 | NR | 520 | 57283 | NR | 650 | 63936 | NR | 780 | 2682 | NR | 910 | 2783 | NR |
| 395 | 1861 | NR | 525 | 61876 | NR | 655 | 56611 | NR | 785 | 2804 | NR | 915 | 2662 | NR |
| 400 | 1717 | NR | 530 | 65398 | NR | 660 | 49763 | NR | 790 | 2581 | NR | 920 | 3047 | NR |
| 405 | 1761 | NR | 535 | 69597 | NR | 665 | 42891 | NR | 795 | 2711 | NR | 925 | 2256 | NR |
| 410 | 2680 | NR | 540 | 74214 | NR | 670 | 36939 | NR | 800 | 2609 | NR | 930 | 2976 | NR |
| 415 | 4374 | NR | 545 | 79911 | NR | 675 | 31946 | NR | 805 | 2581 | NR | 935 | 3503 | NR |
| 420 | 8071 | NR | 550 | 86153 | NR | 680 | 27385 | NR | 810 | 2404 | NR | 940 | 4226 | NR |
| 425 | 15169 | NR | 555 | 93952 | NR | 685 | 23504 | NR | 815 | 2556 | NR | 945 | 2930 | NR |
| 430 | 26038 | NR | 560 | 102904 | NR | 690 | 20210 | NR | 820 | 2742 | NR | 950 | 2115 | NR |
| 435 | 41316 | NR | 565 | 112009 | NR | 695 | 17459 | NR | 825 | 2014 | NR | 955 | 2634 | NR |
| 440 | 59674 | NR | 570 | 121662 | NR | 700 | 15207 | NR | 830 | 2488 | NR | 960 | 4200 | NR |
| 445 | 72751 | NR | 575 | 130476 | NR | 705 | 13322 | NR | 835 | 2625 | NR | 965 | 1982 | NR |
| 450 | 65091 | NR | 580 | 137926 | NR | 710 | 11676 | NR | 840 | 2754 | NR | 970 | 3613 | NR |
| 455 | 44894 | NR | 585 | 143406 | NR | 715 | 10626 | NR | 845 | 2708 | NR | 975 | 4034 | NR |
| 460 | 32712 | NR | 590 | 147039 | NR | 720 | 9416 | NR | 850 | 2608 | NR | 980 | 3922 | NR |
| 465 | 25296 | NR | 595 | 147365 | NR | 725 | 8333 | NR | 855 | 2605 | NR | 985 | 1909 | NR |
| 470 | 19318 | NR | 600 | 145800 | NR | 730 | 7134 | NR | 860 | 1765 | NR | 990 | 3617 | NR |
| 475 | 17265 | NR | 605 | 141363 | NR | 735 | 6437 | NR | 865 | 2581 | NR | 995 | 4767 | NR |
| 480 | 18260 | NR | 610 | 134199 | NR | 740 | 5834 | NR | 870 | 3016 | NR | 1000 | 2528 | NR |
| 485 | 20845 | NR | 615 | 127683 | NR | 745 | 5500 | NR | 875 | 3952 | NR | | | |

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Peachtree City, GA 30269

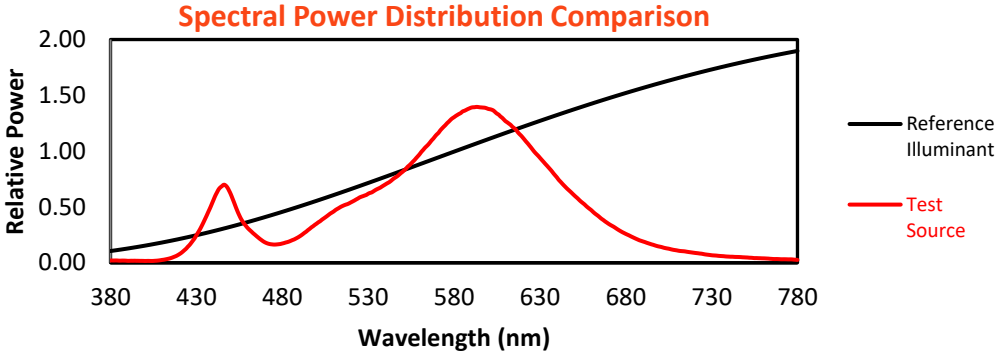
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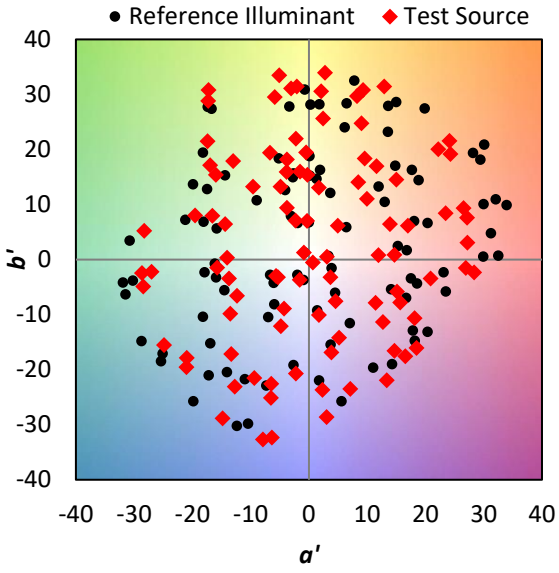
## Summary

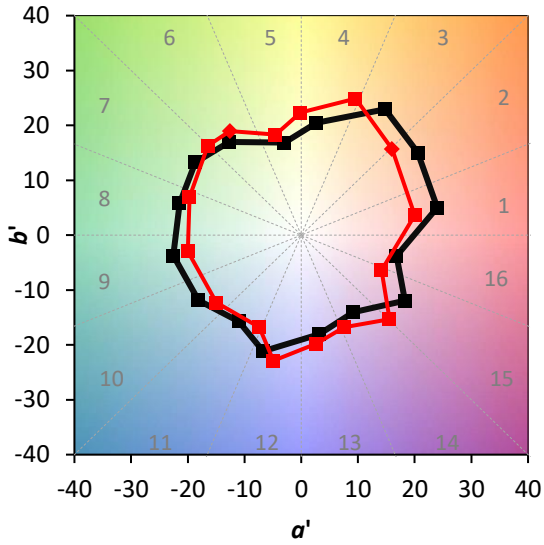
$R_f$ = 75.7
$R_g$ = 93.9
CIE $R_a$ = 71.8
$R_9$ = -38.3

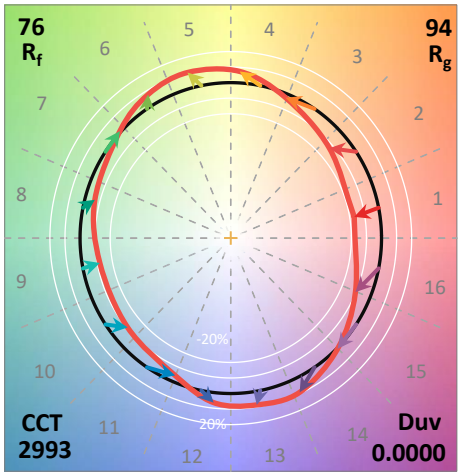
## Spectral Power Distribution Comparison

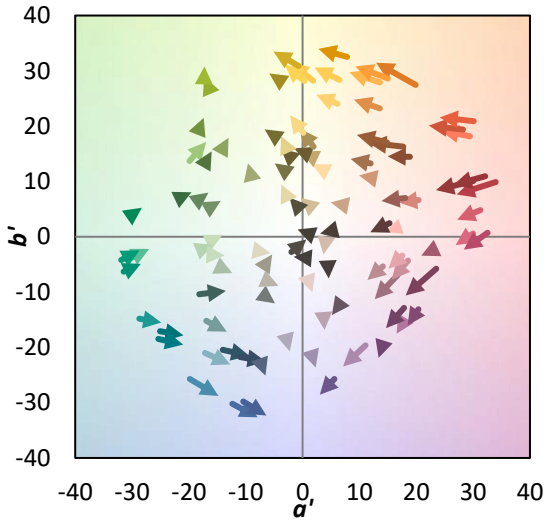



## Color Vector Graphics



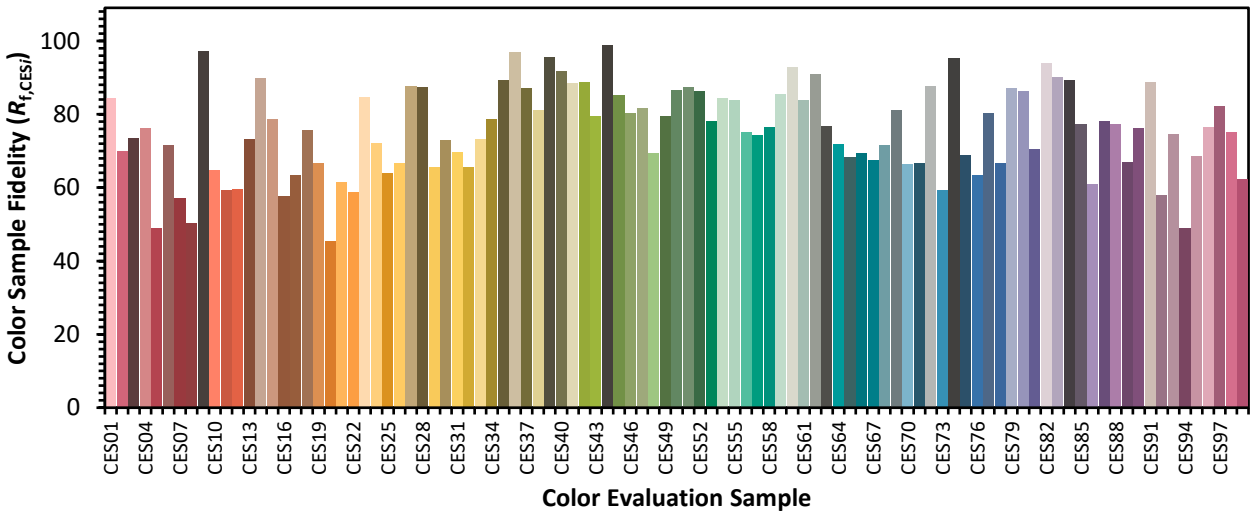
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Peachtree City, GA 30269

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

| | | | |
|---|---|---|---|
| CES01 = 86 | CES26 = 67 | CES51 = 87 | CES76 = 63 |
| CES02 = 63 | CES27 = 88 | CES52 = 86 | CES77 = 80 |
| CES03 = 31 | CES28 = 87 | CES53 = 78 | CES78 = 67 |
| CES04 = 71 | CES29 = 66 | CES54 = 84 | CES79 = 87 |
| CES05 = 49 | CES30 = 73 | CES55 = 84 | CES80 = 86 |
| CES06 = 51 | CES31 = 70 | CES56 = 75 | CES81 = 71 |
| CES07 = 41 | CES32 = 65 | CES57 = 74 | CES82 = 94 |
| CES08 = 40 | CES33 = 73 | CES58 = 76 | CES83 = 90 |
| CES09 = 29 | CES34 = 79 | CES59 = 85 | CES84 = 89 |
| CES10 = 76 | CES35 = 89 | CES60 = 93 | CES85 = 77 |
| CES11 = 59 | CES36 = 97 | CES61 = 84 | CES86 = 61 |
| CES12 = 65 | CES37 = 87 | CES62 = 91 | CES87 = 78 |
| CES13 = 43 | CES38 = 81 | CES63 = 77 | CES88 = 77 |
| CES14 = 74 | CES39 = 95 | CES64 = 72 | CES89 = 67 |
| CES15 = 71 | CES40 = 92 | CES65 = 68 | CES90 = 76 |
| CES16 = 47 | CES41 = 88 | CES66 = 69 | CES91 = 89 |
| CES17 = 50 | CES42 = 89 | CES67 = 67 | CES92 = 58 |
| CES18 = 56 | CES43 = 79 | CES68 = 72 | CES93 = 74 |
| CES19 = 73 | CES44 = 99 | CES69 = 81 | CES94 = 49 |
| CES20 = 66 | CES45 = 85 | CES70 = 66 | CES95 = 68 |
| CES21 = 87 | CES46 = 80 | CES71 = 67 | CES96 = 76 |
| CES22 = 79 | CES47 = 82 | CES72 = 88 | CES97 = 82 |
| CES23 = 92 | CES48 = 69 | CES73 = 59 | CES98 = 75 |
| CES24 = 91 | CES49 = 80 | CES74 = 95 | CES99 = 62 |
| CES25 = 73 | CES50 = 87 | CES75 = 69 | |

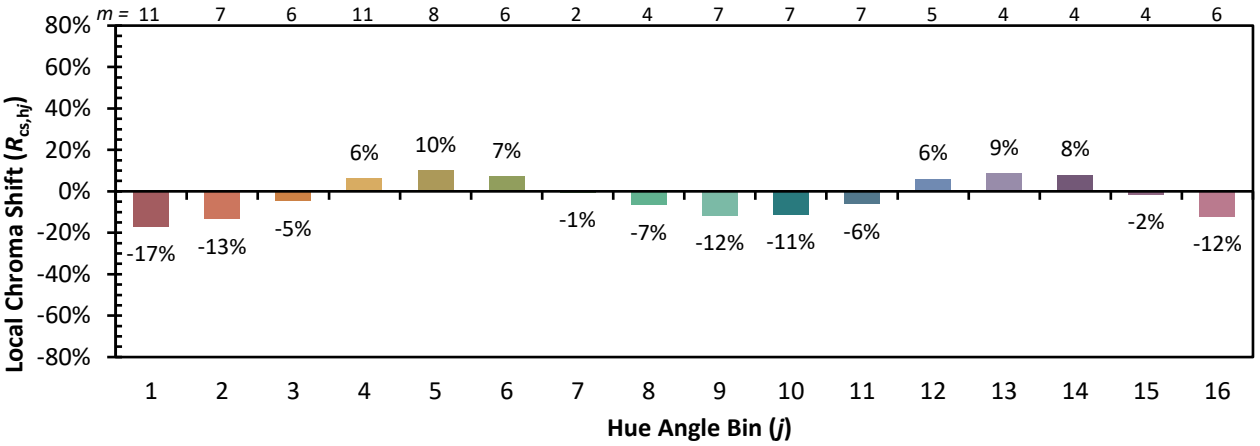


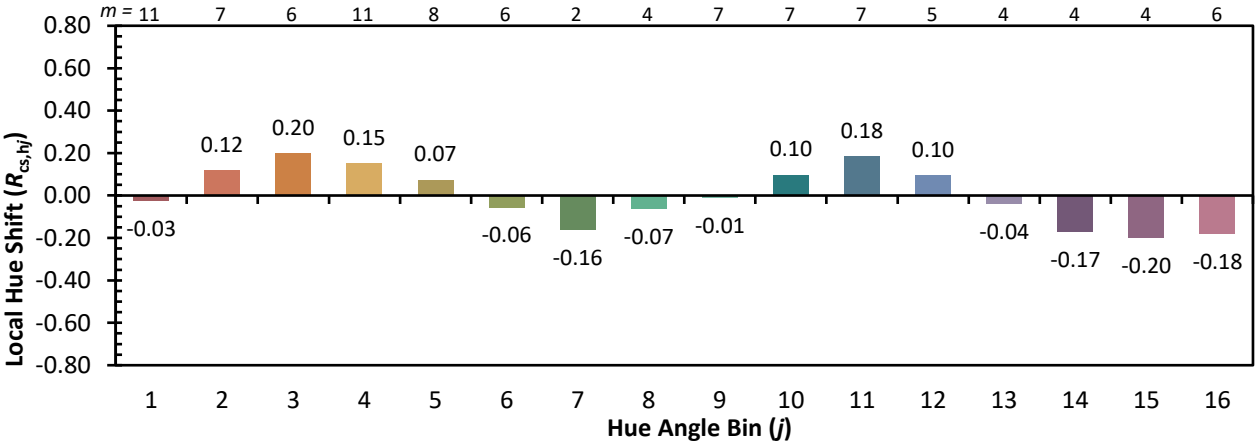
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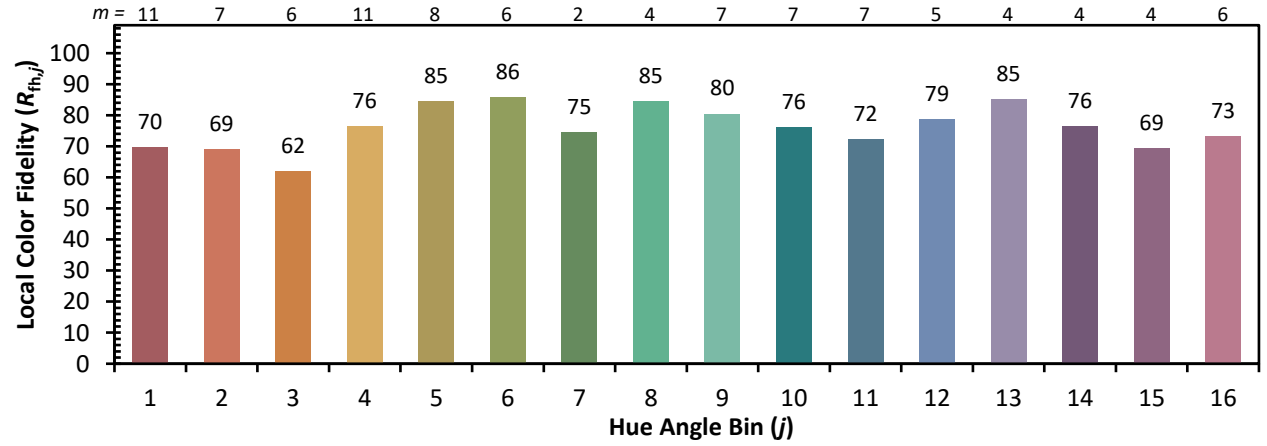
REPORT NUMBER: SP1-1908-441-2-R4

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## Color Rendition by Hue-Angle Bin



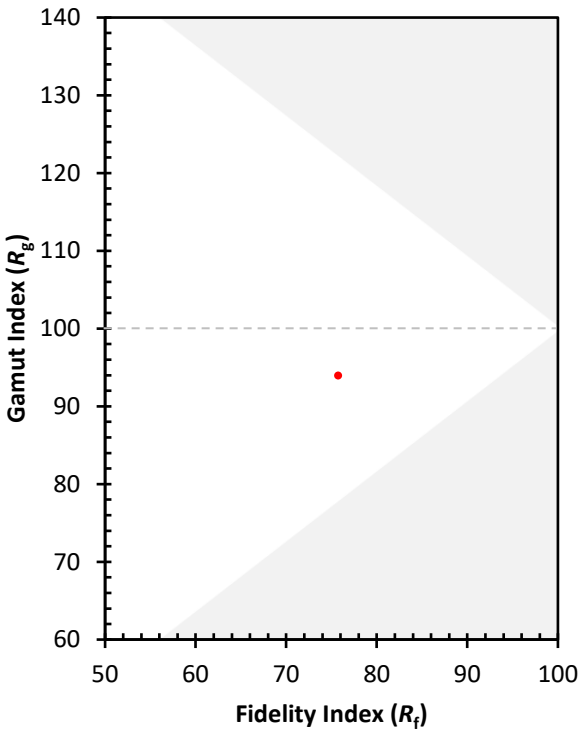



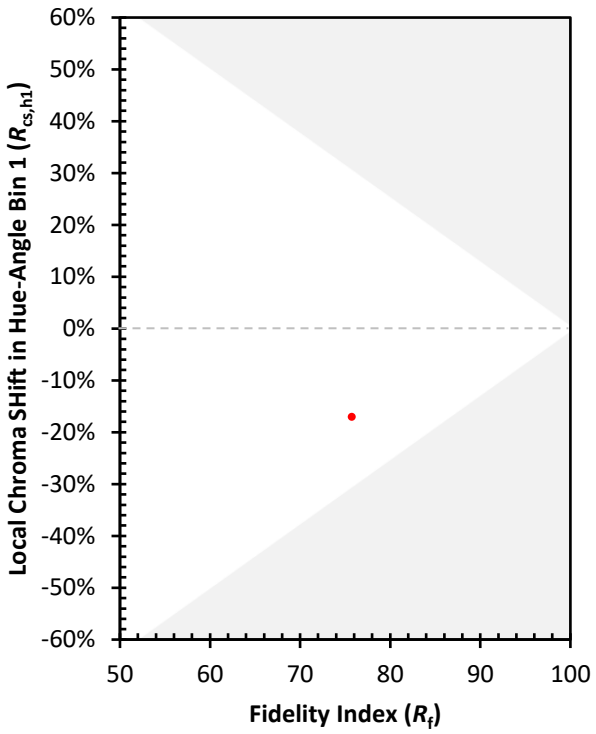
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### Measure Comparisons




(END OF REPORT)