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: P1198341

Luminaire Tested: GPC-SB1C-740-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: | P1198341 |
| | TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-1) |
| Test Lab: | INNOVATION CENTER |
| Issue Date: | 3/14/2026 |
| Manufacturer: | COOPER LIGHTING SOLUTIONS |
| Product Line: | McGRAW-EDISON |
| Catalog Number: | GPC-SB1C-740-U-T4W |
| Description: | GALLEON PEDESTRIAN LUMINAIRE |
| | (1) 70 CRI, 4000K, 615mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV WIDE OPTICS |
| Light Source: | - |
| Ballast/Driver: | ELECTRONIC DRIVER |

**Summary**

| | |
|---|---|
| Lumens per Lamp: | N/A |
| Luminaire Lumens: | 7950 lumens |
| Efficiency: | N/A |
| Efficacy: | 146.1 lumens/watt |
| Luminous Opening: | Rectangular (W 0.5' x L: 0.5' x H: 0') |
| IES Classification: | Type IV - Short |
| BUG Rating: | B2 - U0 - G2 |

| | |
|---|---|
| Input Watts (W): | 54.4 |
| Input Voltage (V): | 120.0 |
| Input Current (Ain): | 0.437 |
| Voltage Rise (V): | NR |
| Power Factor: | 0.993 |
| Total Harmonic Distortion (THDi): | 9.314 |
| Frequency (hertz): | 60 |
| Stabilization Time: | NR |
| Operation Time: | NR |
| Ambient Temperature (°C): | NR |
| Test Distance: | 28.75 FT |

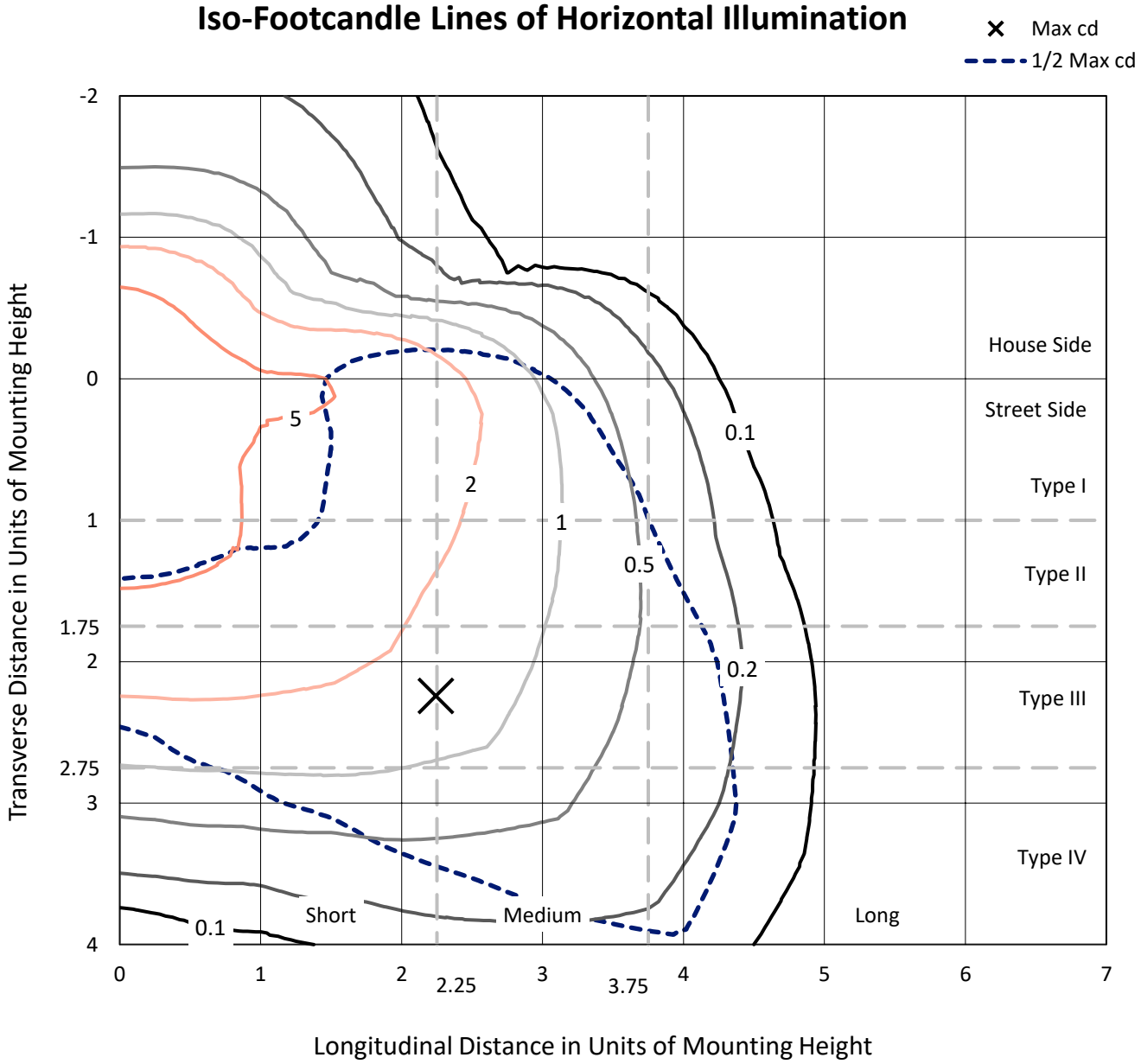


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Scaled Data Report

REPORT NUMBER: P1198341
CATALOG NUMBER: GPC-SB1C-740-U-T4W

## Iso-Footcandle Lines of Horizontal Illumination



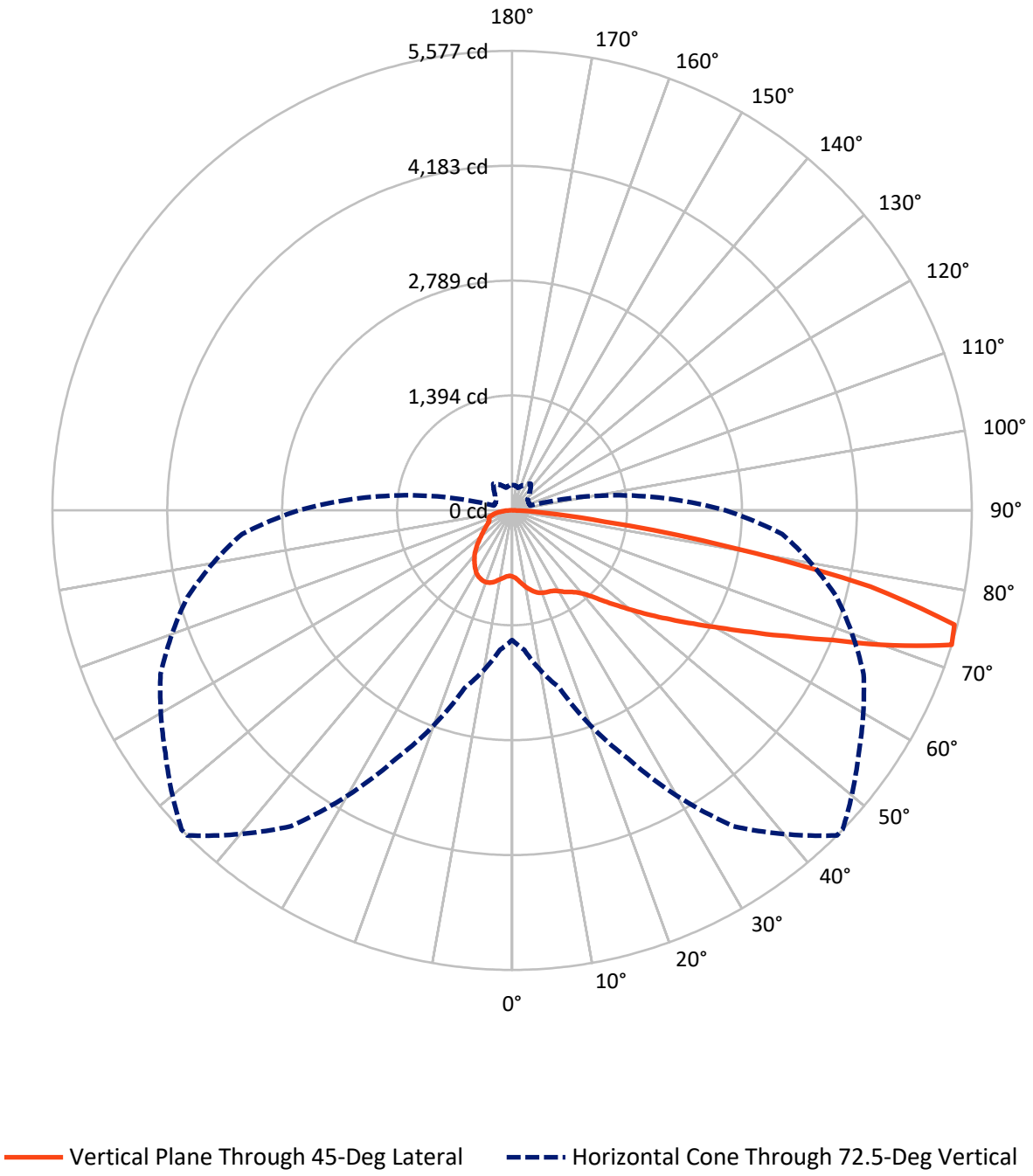

Based on 10 foot mounting height. Maximum calculated value = 10 fc
Type IV - Short - N/A

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## Luminous Intensity Polar Plot



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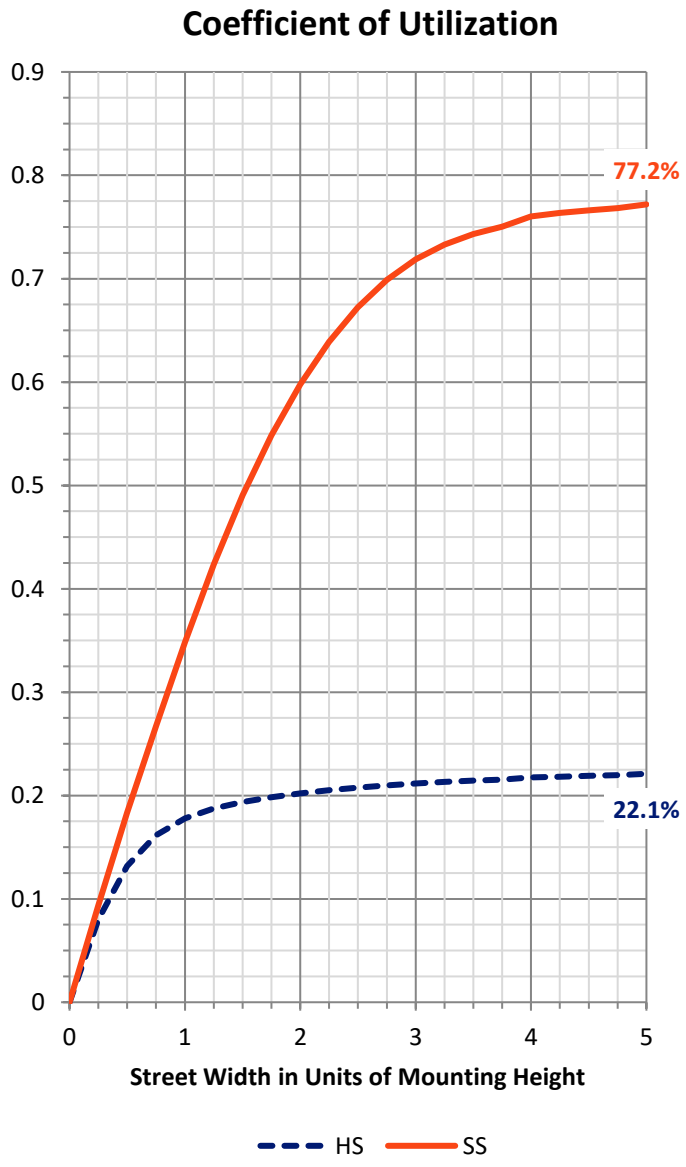
REPORT NUMBER: P1198341
CATALOG NUMBER: GPC-SB1C-740-U-T4W

**FLUX DISTRIBUTION:**

| | | Downward | Upward | Total |
|---|---|---|---|---|
| **House Side** | Lumens | 1797.2 | 0.0 | 1797.2 |
| | % Fixture | 22.6 | 0.0 | 22.6 |
| **Street Side** | Lumens | 6152.8 | 0.0 | 6152.8 |
| | % Fixture | 77.4 | 0.0 | 77.4 |
| **Total** | Lumens | 7950.0 | 0.0 | 7950.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

**ZONAL LUMENS:**

| Zone | Lumens | % Fixture |
|---|---|---|
| 0°-10° | 81.6 | 1.0 |
| 10°-20° | 272.2 | 3.4 |
| 20°-30° | 473.4 | 6.0 |
| 30°-40° | 678.7 | 8.5 |
| 40°-50° | 955.6 | 12.0 |
| 50°-60° | 1463.8 | 18.4 |
| 60°-70° | 2120.5 | 26.7 |
| 70°-80° | 1693.3 | 21.3 |
| 80°-90° | 210.9 | 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° | 7950.0 | 100.0 |
| 0°-180° | 7950.0 | 100.0 |



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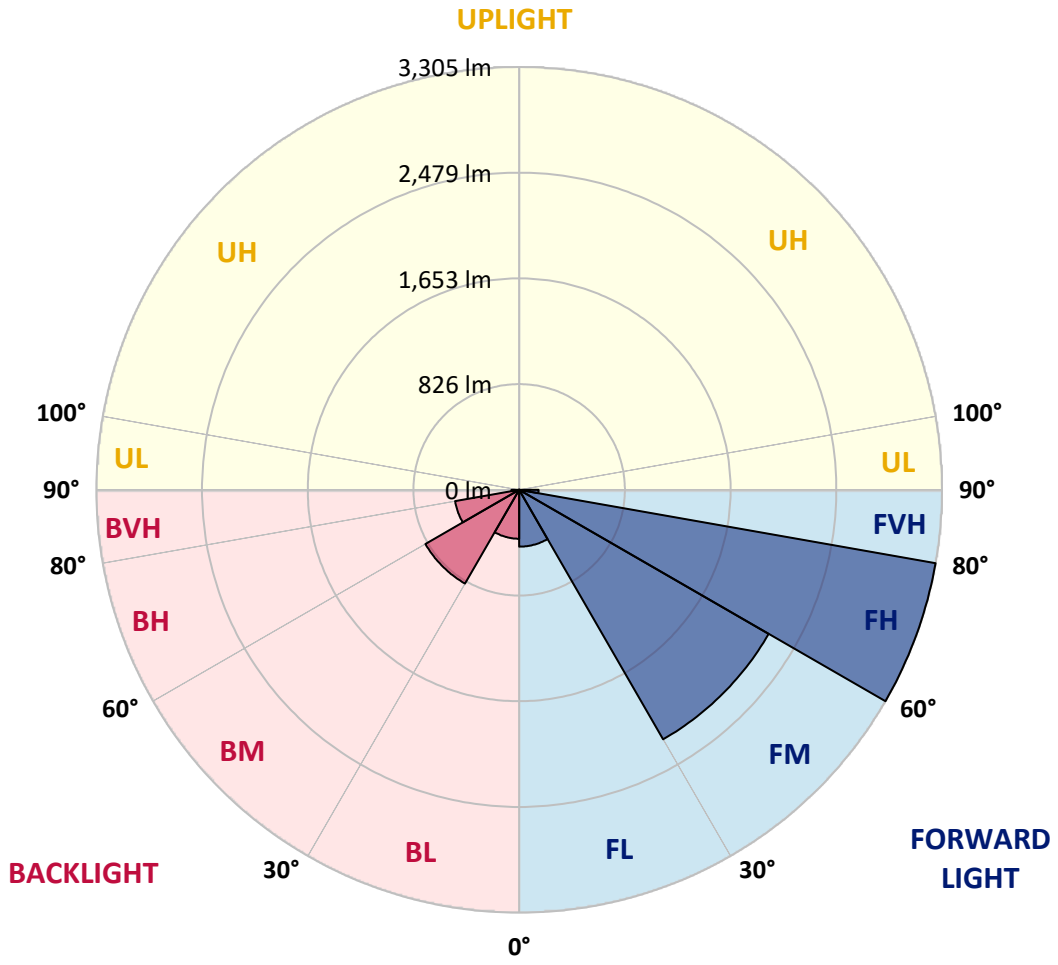
Scaled Data Report

REPORT NUMBER: P1198341
CATALOG NUMBER: GPC-SB1C-740-U-T4W

## LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit B | U | G |
|---|---|---|---|---|---|---|
| FL | (0°-30°) | 444.6 | 5.6 | | | |
| FM | (30°-60°) | 2251.9 | 28.3 | | | |
| FH | (60°-80°) | 3305.0 | 41.6 | | | G2/5000 |
| FVH | (80°-90°) | 151.3 | 1.9 | | | G2/225 |
| BL | (0°-30°) | 382.6 | 4.8 | B1/500 | | |
| BM | (30°-60°) | 846.2 | 10.6 | B1/1000 | | |
| BH | (60°-80°) | 508.8 | 6.4 | B2/1000 | | G2/1000 |
| BVH | (80°-90°) | 59.6 | 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: P1198341
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**CANDELA DISTRIBUTION (FULL):**

| | 0° | 5° | 15° | 25° | 35° | 45° | 46° | 55° | 65° | 75° | 85° |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0° | 802.0 | 802.0 | 802.0 | 802.0 | 802.0 | 802.0 | 802.0 | 802.0 | 802.0 | 802.0 | 802.0 |
| 2.5° | 833.4 | 838.9 | 833.8 | 829.2 | 827.1 | 821.7 | 821.3 | 817.9 | 815.8 | 810.0 | 808.3 |
| 5° | 891.6 | 898.7 | 890.4 | 881.2 | 872.8 | 859.4 | 857.7 | 848.1 | 837.2 | 824.6 | 817.5 |
| 7.5° | 957.4 | 963.7 | 954.0 | 940.2 | 925.5 | 903.3 | 902.9 | 885.3 | 868.2 | 846.8 | 834.7 |
| 10° | 1014.8 | 1023.1 | 1010.1 | 991.3 | 972.9 | 947.7 | 944.8 | 924.7 | 902.9 | 875.3 | 856.9 |
| 12.5° | 1065.4 | 1071.3 | 1058.7 | 1035.7 | 1014.3 | 989.2 | 985.4 | 963.2 | 938.9 | 907.5 | 884.1 |
| 15° | 1105.6 | 1113.2 | 1096.4 | 1071.7 | 1049.1 | 1024.4 | 1021.0 | 1000.9 | 976.6 | 943.6 | 913.4 |
| 17.5° | 1132.0 | 1138.3 | 1121.1 | 1093.5 | 1071.7 | 1051.2 | 1048.7 | 1031.9 | 1010.6 | 977.1 | 944.8 |
| 20° | 1142.1 | 1148.8 | 1130.8 | 1102.7 | 1082.6 | 1066.7 | 1065.4 | 1053.3 | 1038.6 | 1008.0 | 975.4 |
| 22.5° | 1152.1 | 1158.4 | 1134.9 | 1105.6 | 1088.0 | 1078.0 | 1077.6 | 1069.6 | 1063.7 | 1038.6 | 1006.8 |
| 25° | 1192.7 | 1194.4 | 1163.0 | 1120.7 | 1095.6 | 1086.8 | 1086.4 | 1085.9 | 1088.5 | 1068.8 | 1040.7 |
| 27.5° | 1227.9 | 1227.5 | 1200.7 | 1160.9 | 1122.0 | 1103.5 | 1103.1 | 1107.3 | 1115.3 | 1098.9 | 1075.9 |
| 30° | 1279.4 | 1274.8 | 1243.0 | 1201.5 | 1165.9 | 1137.5 | 1134.9 | 1131.2 | 1137.5 | 1124.5 | 1111.1 |
| 32.5° | 1388.7 | 1374.1 | 1322.6 | 1248.9 | 1202.4 | 1180.6 | 1177.2 | 1153.8 | 1156.3 | 1148.3 | 1141.6 |
| 35° | 1545.4 | 1526.1 | 1457.4 | 1338.5 | 1247.6 | 1216.6 | 1214.9 | 1185.2 | 1180.2 | 1173.1 | 1175.6 |
| 37.5° | 1731.7 | 1707.9 | 1627.9 | 1468.3 | 1325.5 | 1258.5 | 1256.0 | 1229.2 | 1208.7 | 1201.1 | 1215.4 |
| 40° | 1918.9 | 1888.8 | 1822.6 | 1626.6 | 1440.3 | 1328.4 | 1320.5 | 1279.9 | 1256.4 | 1243.8 | 1274.0 |
| 42.5° | 2100.7 | 2075.6 | 2019.0 | 1804.2 | 1581.8 | 1430.6 | 1413.0 | 1343.5 | 1325.9 | 1314.2 | 1368.6 |
| 45° | 2261.5 | 2238.9 | 2197.4 | 1993.9 | 1747.6 | 1569.7 | 1552.5 | 1439.0 | 1433.5 | 1433.5 | 1512.3 |
| 47.5° | 2392.2 | 2387.2 | 2343.2 | 2187.4 | 1943.2 | 1728.0 | 1698.2 | 1571.8 | 1586.4 | 1609.0 | 1716.2 |
| 50° | 2537.1 | 2523.3 | 2476.4 | 2377.9 | 2173.1 | 1909.3 | 1885.0 | 1734.7 | 1789.5 | 1851.5 | 2011.1 |
| 52.5° | 2670.3 | 2677.8 | 2625.5 | 2576.5 | 2432.8 | 2111.6 | 2068.9 | 1926.9 | 2045.4 | 2148.0 | 2356.6 |
| 55° | 2807.2 | 2807.6 | 2793.0 | 2786.3 | 2705.0 | 2335.2 | 2288.3 | 2158.1 | 2346.5 | 2473.8 | 2759.5 |
| 57.5° | 2935.8 | 2936.6 | 2958.4 | 3017.4 | 3020.8 | 2593.2 | 2540.0 | 2442.0 | 2681.2 | 2811.0 | 3174.9 |
| 60° | 3050.5 | 3056.4 | 3115.9 | 3254.1 | 3298.5 | 2888.9 | 2838.6 | 2777.5 | 3027.1 | 3157.7 | 3611.7 |
| 62.5° | 3089.1 | 3110.4 | 3242.8 | 3439.2 | 3572.8 | 3251.6 | 3202.1 | 3165.7 | 3390.6 | 3512.0 | 3976.9 |
| 65° | 3023.7 | 3072.7 | 3328.6 | 3592.0 | 3855.0 | 3682.5 | 3633.5 | 3593.7 | 3768.4 | 3882.7 | 4276.8 |
| 67.5° | 2863.3 | 2926.6 | 3323.6 | 3752.4 | 4197.6 | 4201.0 | 4155.3 | 4061.9 | 4173.3 | 4217.3 | 4374.4 |
| 70° | 2440.8 | 2535.4 | 3030.8 | 3812.3 | 4590.9 | 4910.0 | 4866.0 | 4625.6 | 4577.5 | 4364.7 | 4099.6 |
| 72.5° | 1572.6 | 1699.9 | 2231.8 | 3319.4 | 4678.4 | 5577.1 | 5574.6 | 5134.5 | 4705.2 | 4078.3 | 3288.0 |
| 75° | 573.8 | 651.7 | 1036.9 | 2083.5 | 3927.1 | 5543.2 | 5559.6 | 5047.4 | 4295.2 | 3150.2 | 2048.3 |
| 77.5° | 209.0 | 228.7 | 338.4 | 800.7 | 2415.2 | 4447.6 | 4481.6 | 4035.1 | 3057.2 | 1581.0 | 811.6 |
| 80° | 109.7 | 120.6 | 173.4 | 310.7 | 1034.9 | 2641.4 | 2694.6 | 2398.0 | 1436.9 | 476.2 | 243.3 |
| 82.5° | 60.7 | 65.8 | 97.2 | 168.8 | 466.1 | 1129.5 | 1161.3 | 947.3 | 505.5 | 201.9 | 100.5 |
| 85° | 32.7 | 34.8 | 45.6 | 92.1 | 227.8 | 391.6 | 400.4 | 283.1 | 201.4 | 118.5 | 48.6 |
| 87.5° | 9.6 | 11.7 | 15.1 | 29.3 | 89.2 | 87.9 | 90.0 | 56.1 | 79.6 | 59.9 | 15.9 |
| 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: P1198341
CATALOG NUMBER: GPC-SB1C-740-U-T4W

**CANDELA DISTRIBUTION (continued):**

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0° | 802.0 | 802.0 | 802.0 | 802.0 | 802.0 | 802.0 | 802.0 | 802.0 | 802.0 | 802.0 | 802.0 |
| 2.5° | 805.8 | 804.5 | 799.9 | 797.8 | 795.3 | 794.9 | 797.0 | 797.4 | 797.8 | 798.2 | 799.9 |
| 5° | 813.3 | 809.1 | 804.9 | 802.4 | 803.3 | 803.7 | 807.9 | 810.8 | 812.9 | 814.6 | 815.4 |
| 7.5° | 828.0 | 824.6 | 817.5 | 817.1 | 818.3 | 822.1 | 827.5 | 834.2 | 838.0 | 840.9 | 841.8 |
| 10° | 849.7 | 843.5 | 835.1 | 836.3 | 838.9 | 844.3 | 855.6 | 861.1 | 867.3 | 872.8 | 871.5 |
| 12.5° | 871.9 | 866.5 | 856.9 | 857.7 | 861.9 | 871.5 | 882.4 | 889.1 | 893.3 | 897.5 | 899.2 |
| 15° | 900.8 | 891.2 | 880.7 | 880.7 | 888.3 | 898.7 | 903.8 | 909.2 | 911.7 | 916.3 | 918.0 |
| 17.5° | 930.6 | 918.0 | 904.2 | 903.3 | 912.6 | 917.6 | 920.5 | 921.4 | 922.2 | 927.2 | 928.9 |
| 20° | 960.3 | 946.5 | 926.8 | 925.1 | 927.2 | 926.4 | 926.0 | 925.1 | 926.4 | 932.7 | 935.2 |
| 22.5° | 989.6 | 973.7 | 946.5 | 938.9 | 933.1 | 925.1 | 924.7 | 924.3 | 925.1 | 931.4 | 935.6 |
| 25° | 1024.0 | 1004.7 | 968.3 | 945.6 | 926.0 | 915.1 | 916.3 | 916.8 | 917.6 | 922.6 | 929.3 |
| 27.5° | 1061.2 | 1039.9 | 988.4 | 943.6 | 908.0 | 900.4 | 898.3 | 899.6 | 902.5 | 910.5 | 918.4 |
| 30° | 1098.5 | 1073.4 | 1006.8 | 935.2 | 885.3 | 874.9 | 868.2 | 871.1 | 880.3 | 888.3 | 897.1 |
| 32.5° | 1132.4 | 1107.3 | 1021.5 | 916.8 | 856.4 | 840.1 | 831.3 | 835.1 | 844.3 | 847.2 | 857.7 |
| 35° | 1172.2 | 1143.7 | 1027.7 | 887.4 | 825.0 | 799.9 | 788.2 | 782.7 | 787.3 | 784.4 | 793.6 |
| 37.5° | 1216.6 | 1186.9 | 1026.9 | 848.9 | 788.2 | 759.3 | 742.9 | 722.4 | 712.8 | 702.7 | 709.0 |
| 40° | 1282.4 | 1239.6 | 1016.8 | 802.4 | 742.5 | 716.1 | 686.8 | 652.1 | 630.3 | 610.6 | 611.9 |
| 42.5° | 1372.0 | 1312.9 | 998.4 | 751.3 | 691.0 | 666.3 | 626.5 | 585.9 | 551.6 | 518.9 | 516.0 |
| 45° | 1505.6 | 1408.8 | 975.4 | 696.9 | 635.3 | 611.0 | 567.9 | 522.2 | 483.3 | 441.4 | 436.4 |
| 47.5° | 1698.2 | 1537.8 | 953.6 | 634.9 | 576.7 | 554.5 | 515.5 | 473.2 | 427.2 | 386.6 | 381.9 |
| 50° | 1962.9 | 1722.9 | 933.5 | 574.6 | 518.9 | 502.1 | 471.1 | 428.0 | 381.5 | 348.9 | 346.8 |
| 52.5° | 2299.6 | 1974.6 | 925.1 | 516.4 | 464.9 | 458.6 | 433.9 | 393.7 | 349.7 | 322.1 | 320.0 |
| 55° | 2686.2 | 2275.8 | 925.1 | 460.7 | 417.5 | 419.6 | 402.5 | 365.2 | 327.1 | 302.4 | 299.9 |
| 57.5° | 3080.7 | 2580.6 | 908.4 | 409.2 | 377.3 | 386.1 | 375.2 | 342.6 | 308.2 | 282.7 | 278.5 |
| 60° | 3444.2 | 2836.1 | 840.5 | 362.3 | 341.7 | 355.6 | 348.4 | 320.4 | 278.5 | 257.1 | 253.8 |
| 62.5° | 3723.5 | 2980.2 | 709.9 | 325.0 | 312.4 | 328.3 | 324.6 | 291.1 | 273.1 | 264.3 | 261.3 |
| 65° | 3863.4 | 2956.7 | 542.8 | 291.9 | 287.7 | 312.4 | 304.5 | 303.2 | 289.0 | 278.9 | 275.6 |
| 67.5° | 3777.6 | 2754.9 | 393.7 | 267.6 | 273.5 | 297.8 | 328.3 | 333.4 | 307.0 | 287.3 | 283.9 |
| 70° | 3401.1 | 2389.7 | 293.2 | 244.6 | 255.5 | 298.2 | 374.4 | 348.9 | 301.1 | 278.1 | 274.3 |
| 72.5° | *2587.3* | *1782.0* | *227.4* | *220.3* | *232.0* | *300.3* | *394.9* | *341.7* | *284.4* | *307.4* | *304.9* |
| 75° | 1479.6 | 978.3 | 182.6 | 190.6 | 202.7 | 280.6 | 384.5 | 323.3 | 271.4 | 282.3 | 282.3 |
| 77.5° | 564.1 | 376.1 | 150.8 | 161.2 | 162.9 | 245.0 | 367.7 | 322.1 | 258.4 | 252.1 | 229.9 |
| 80° | 195.6 | 147.0 | 124.8 | 128.2 | 126.1 | 217.8 | 352.6 | 280.2 | 211.5 | 189.3 | 183.0 |
| 82.5° | 80.0 | 73.3 | 98.8 | 94.6 | 89.6 | 169.2 | 284.8 | 229.1 | 173.0 | 152.9 | 151.2 |
| 85° | 34.8 | 46.5 | 65.3 | 57.4 | 51.9 | 117.3 | 228.2 | 193.9 | 146.2 | 126.1 | 125.6 |
| 87.5° | 7.1 | 17.6 | 27.6 | 26.0 | 26.8 | 78.3 | 162.1 | 137.8 | 103.4 | 77.5 | 60.7 |
| 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

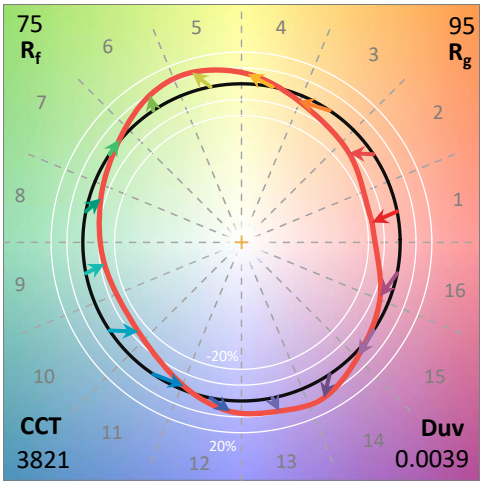
| | |
|---|---|
| Test Method: | LM-79-2008 |
| Report Number: | SP1-1908-441-3-R4 |
| Test Lab: | COOPER LIGHTING SOLUTIONS |
| Photometer: | SP1 - 76IN SPHERE |
| Measurement Geometry: | 4π |
| Issue Date: | 11/05/2024 |
| Manufacturer: | COOPER LIGHTING SOLUTIONS |
| Product Line: | McGRAW-EDISON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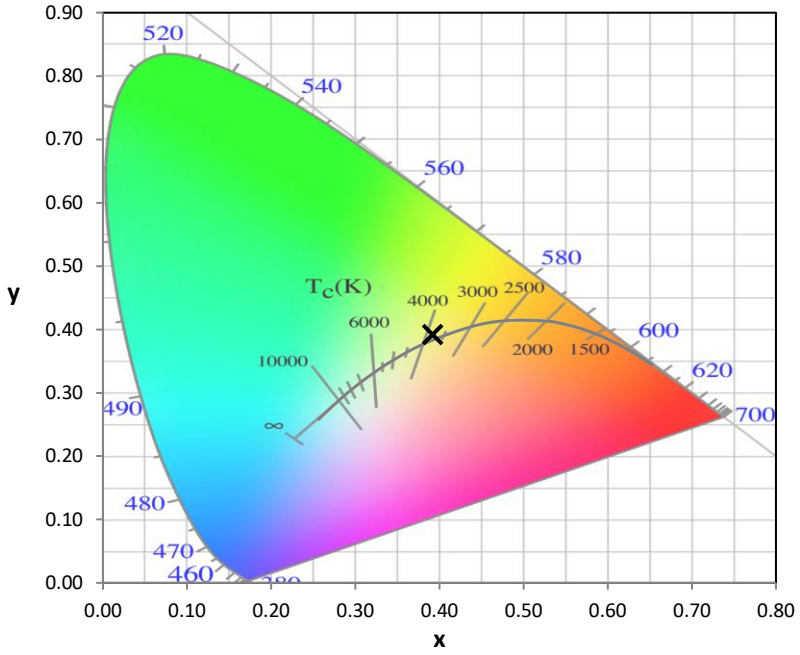
REPORT NUMBER: SP1-1908-441-3-R4

| 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 |

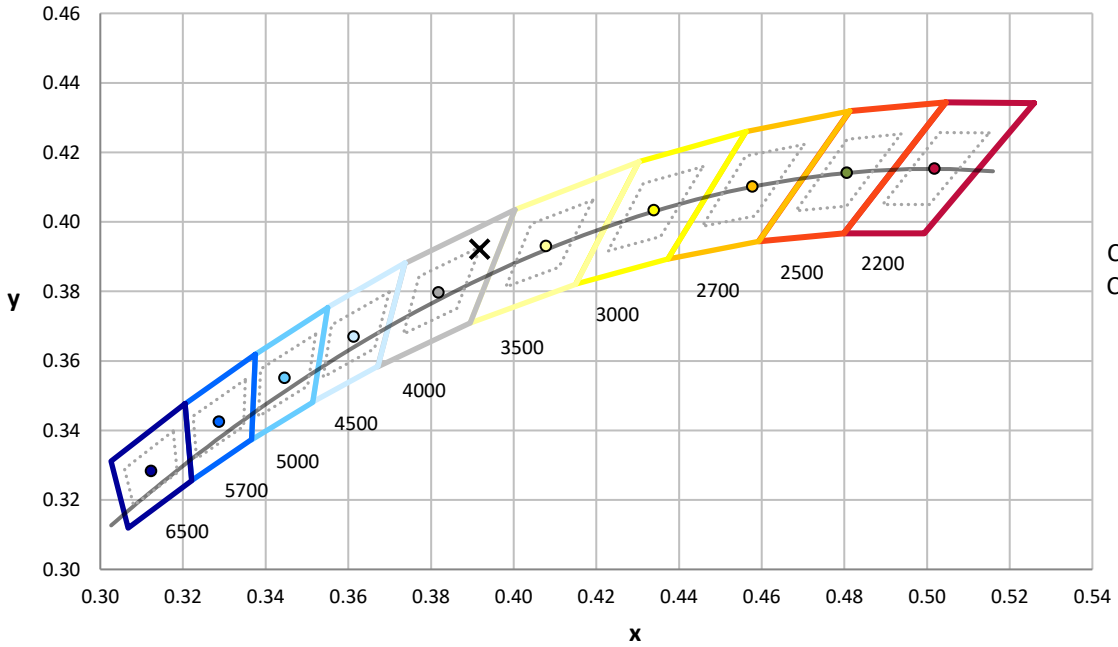
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Peachtree City, GA 30269

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

## CIE 1931 Chromaticity Diagram




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



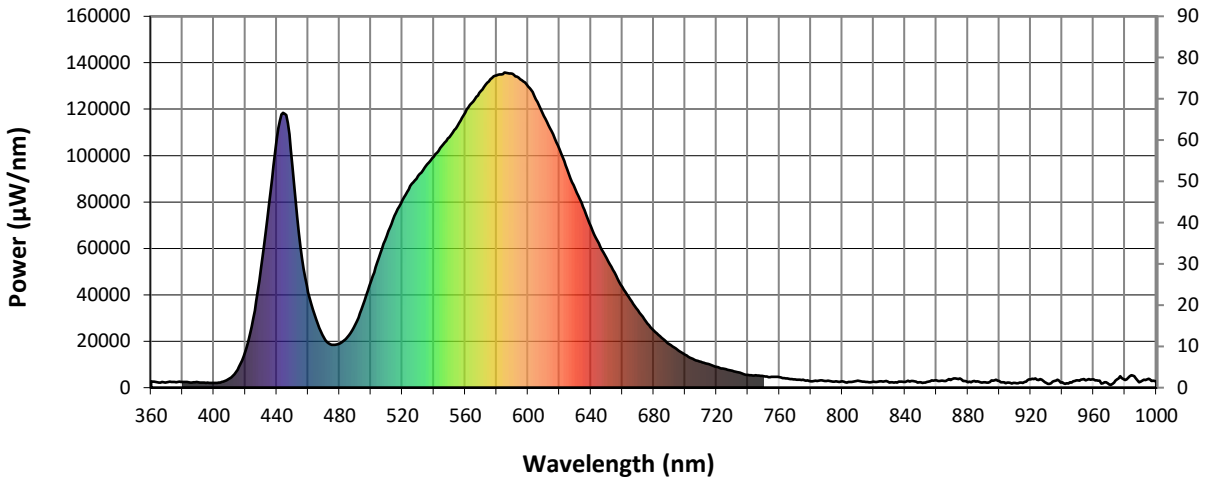

CCT = 3821K
CIE x = 0.3918
CIE y = 0.3921
Duv = 0.0039

Point lies inside the ANSI 4000K 7-step quadrangle

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## Photopic Flux vs. Wavelength



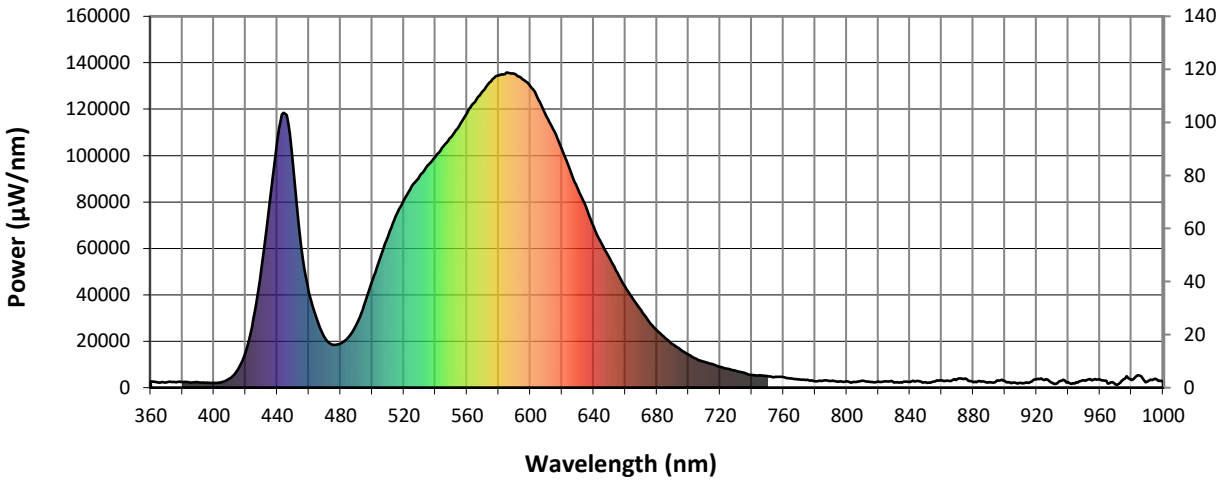

######

| 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



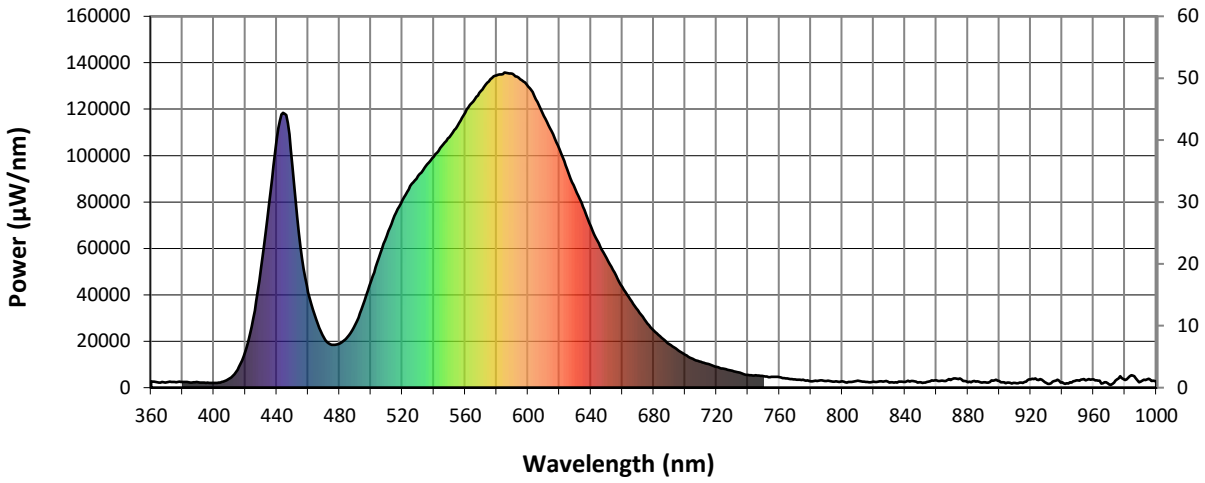

**Scotopic Lumens: 10930.8** **S/P: 1.47**

| 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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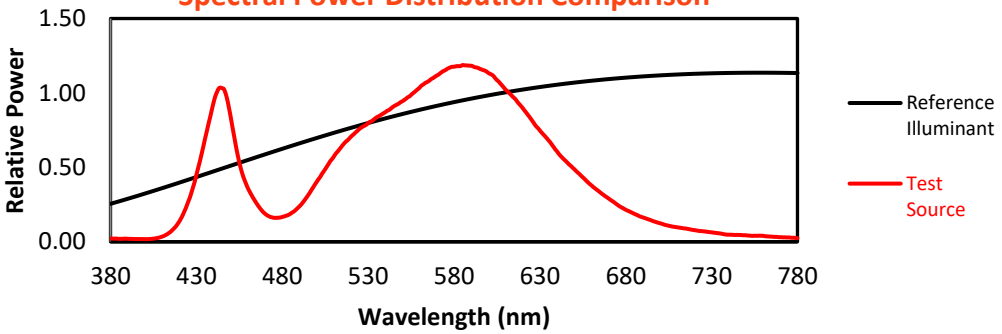
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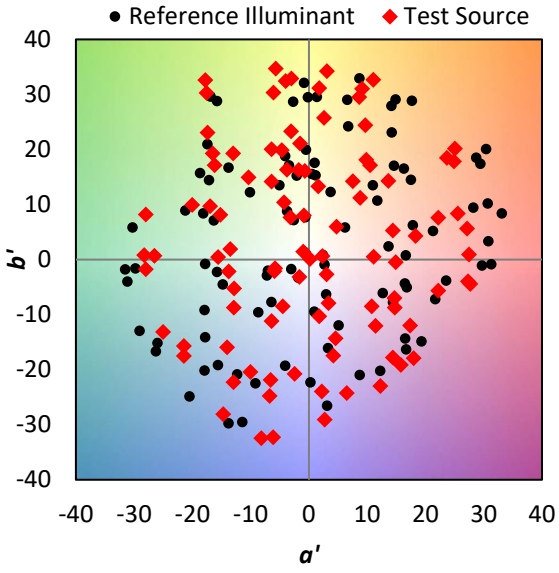
## Summary

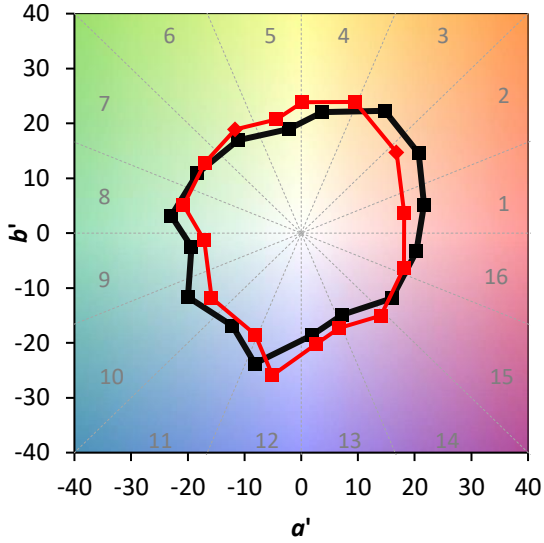
$R_f$ = 75.5
$R_g$ = 94.8
CIE $R_a$ = 72.3
$R_9$ = -33.5

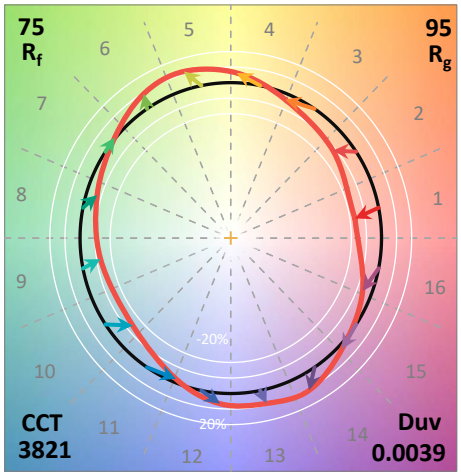
## Spectral Power Distribution Comparison

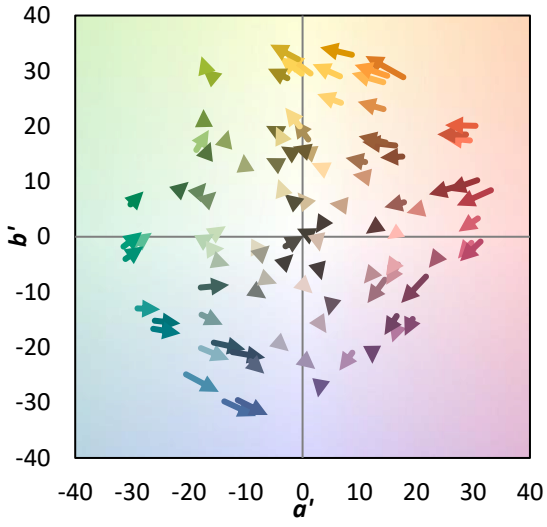



## Color Vector Graphics



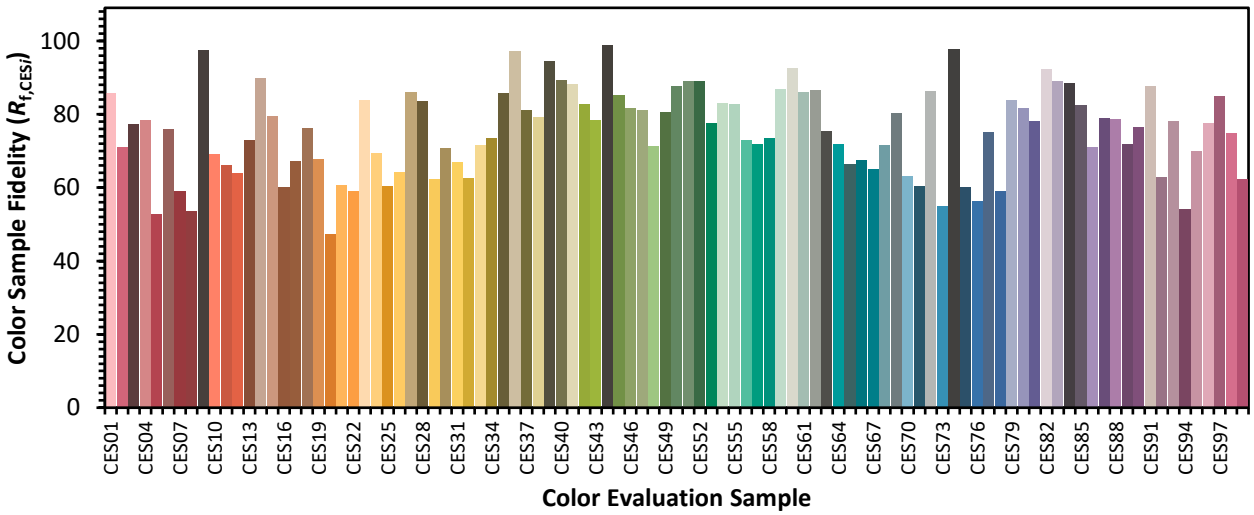
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Peachtree City, GA 30269

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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 | |

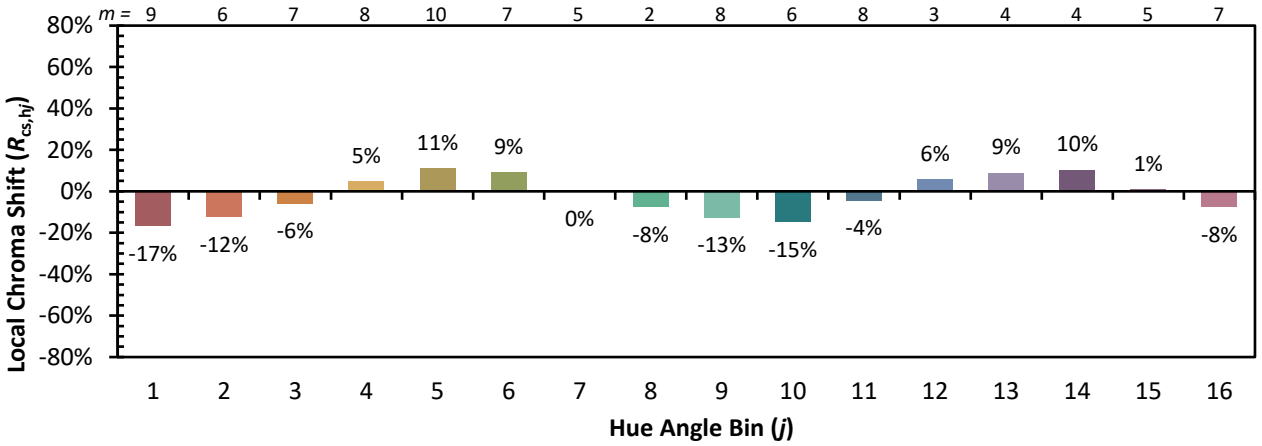


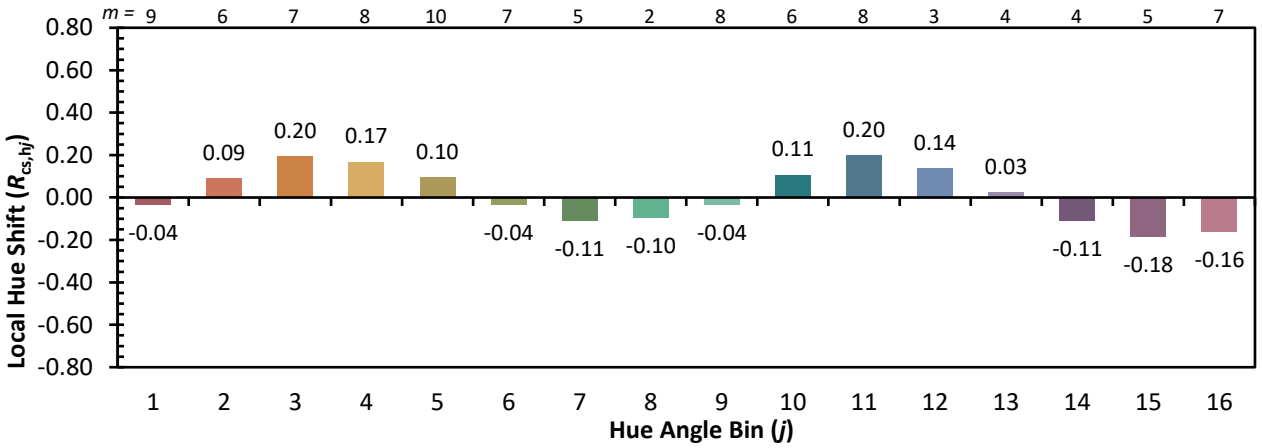
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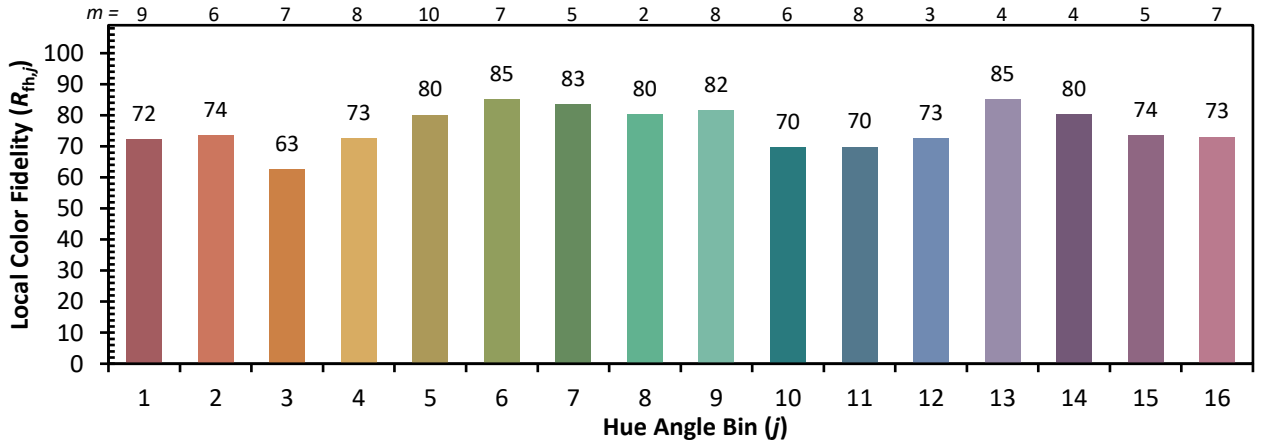
REPORT NUMBER: SP1-1908-441-3-R4

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## Color Rendition by Hue-Angle Bin



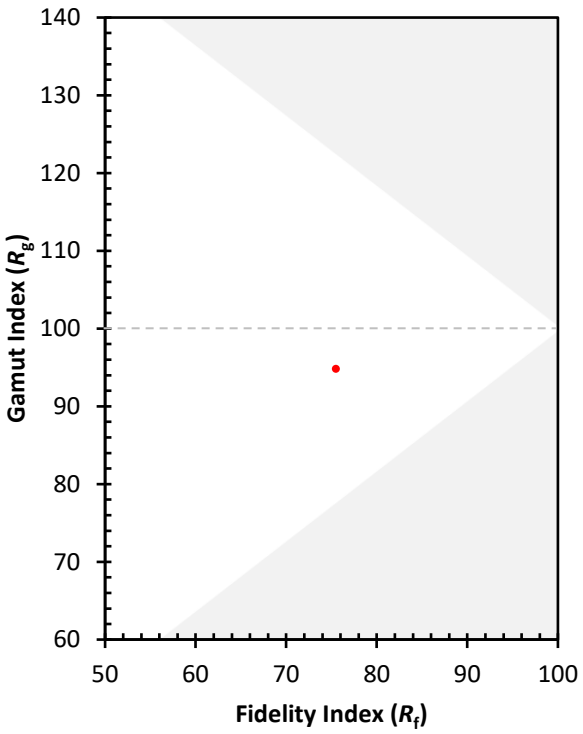



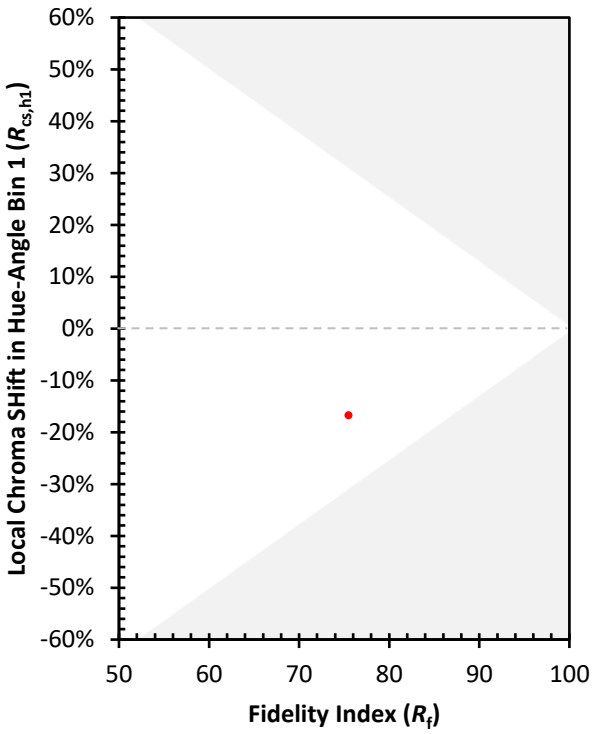
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### Measure Comparisons




(END OF REPORT)