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

Cooper Lighting Solutions Photometric Lab
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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: P1198754

Luminaire Tested: GPC-SB1D-730-U-T3-HSS

Issue Date: 10/30/2025

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

Scaled Data Report

**Test Information**

| | |
|---|---|
| Test Method: | LM-79-2024 |
| Report Number: | P1198754 |
| | TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-6) |
| Test Lab: | INNOVATION CENTER |
| Issue Date: | 3/13/2026 |
| Manufacturer: | COOPER LIGHTING SOLUTIONS |
| Product Line: | McGRAW-EDISON |
| Catalog Number: | GPC-SB1D-730-U-T3-HSS |
| Description: | GALLEON PEDESTRIAN LUMINAIRE |
| | (1) 70 CRI, 3000K, 900mA LIGHTSQUARE WITH 26 LEDS AND TYPE III OPTICS WITH HOUSE SIDE SHIELD |
| Light Source: | - |
| Ballast/Driver: | ELECTRONIC DRIVER |

**Summary**

| | |
|---|---|
| Lumens per Lamp: | N/A |
| Luminaire Lumens: | 8023 lumens |
| Efficiency: | N/A |
| Efficacy: | 100.8 lumens/watt |
| Luminous Opening: | Rectangular (W 0.5' x L: 0.5' x H: 0') |
| IES Classification: | Type III - Short |
| BUG Rating: | B1 - U0 - G2 |

| | |
|---|---|
| Input Watts (W): | 79.6 |
| Input Voltage (V): | 120.0 |
| Input Current (Ain): | 0.638 |
| Voltage Rise (V): | NR |
| Power Factor: | 0.997 |
| Total Harmonic Distortion (THDi): | 6.673 |
| Frequency (hertz): | 60 |
| Stabilization Time: | NR |
| Operation Time: | NR |
| Ambient Temperature (°C): | NR |
| Test Distance: | 28.75 FT |

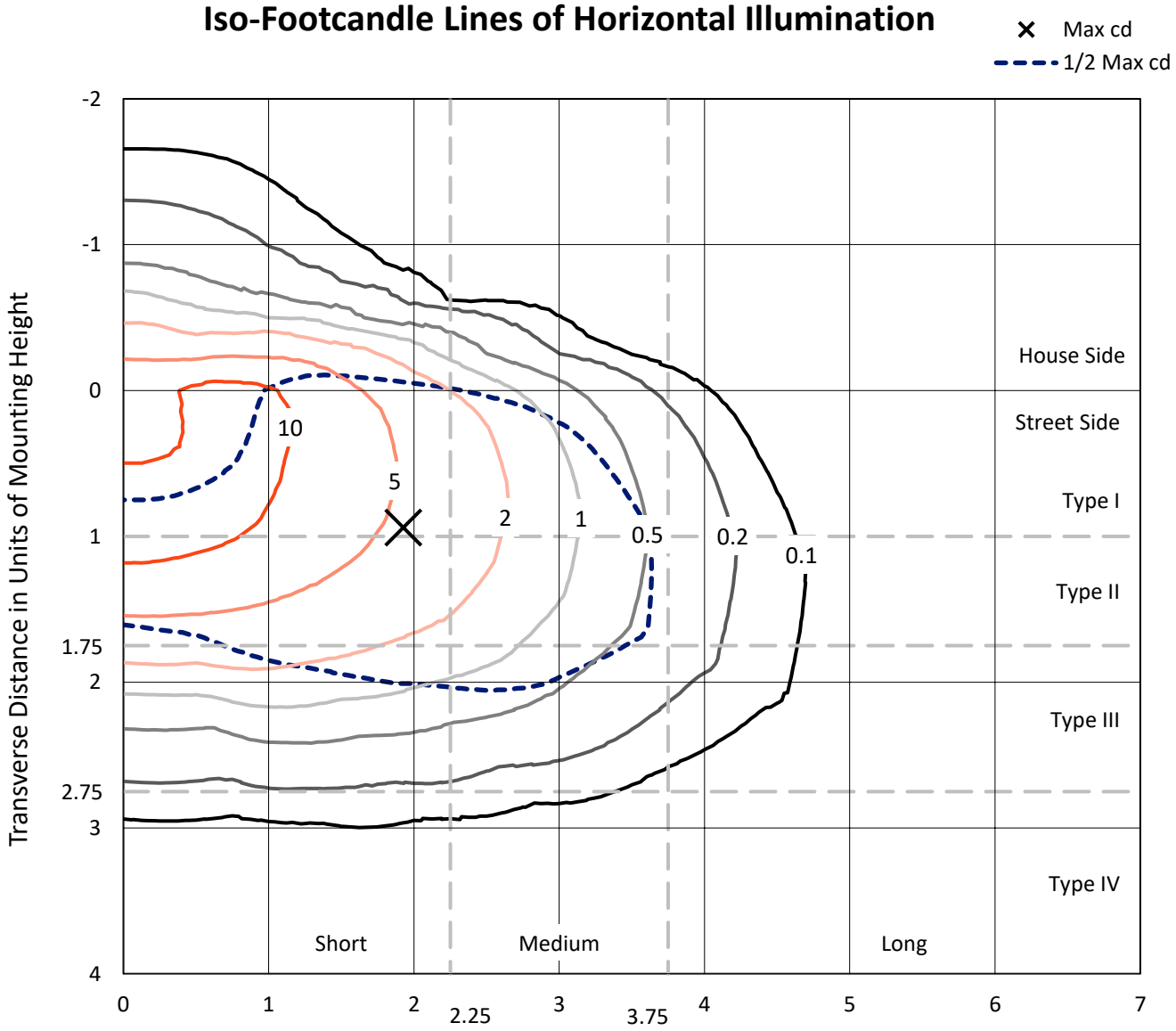


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REPORT NUMBER: P1198754
CATALOG NUMBER: GPC-SB1D-730-U-T3-HSS

## Iso-Footcandle Lines of Horizontal Illumination



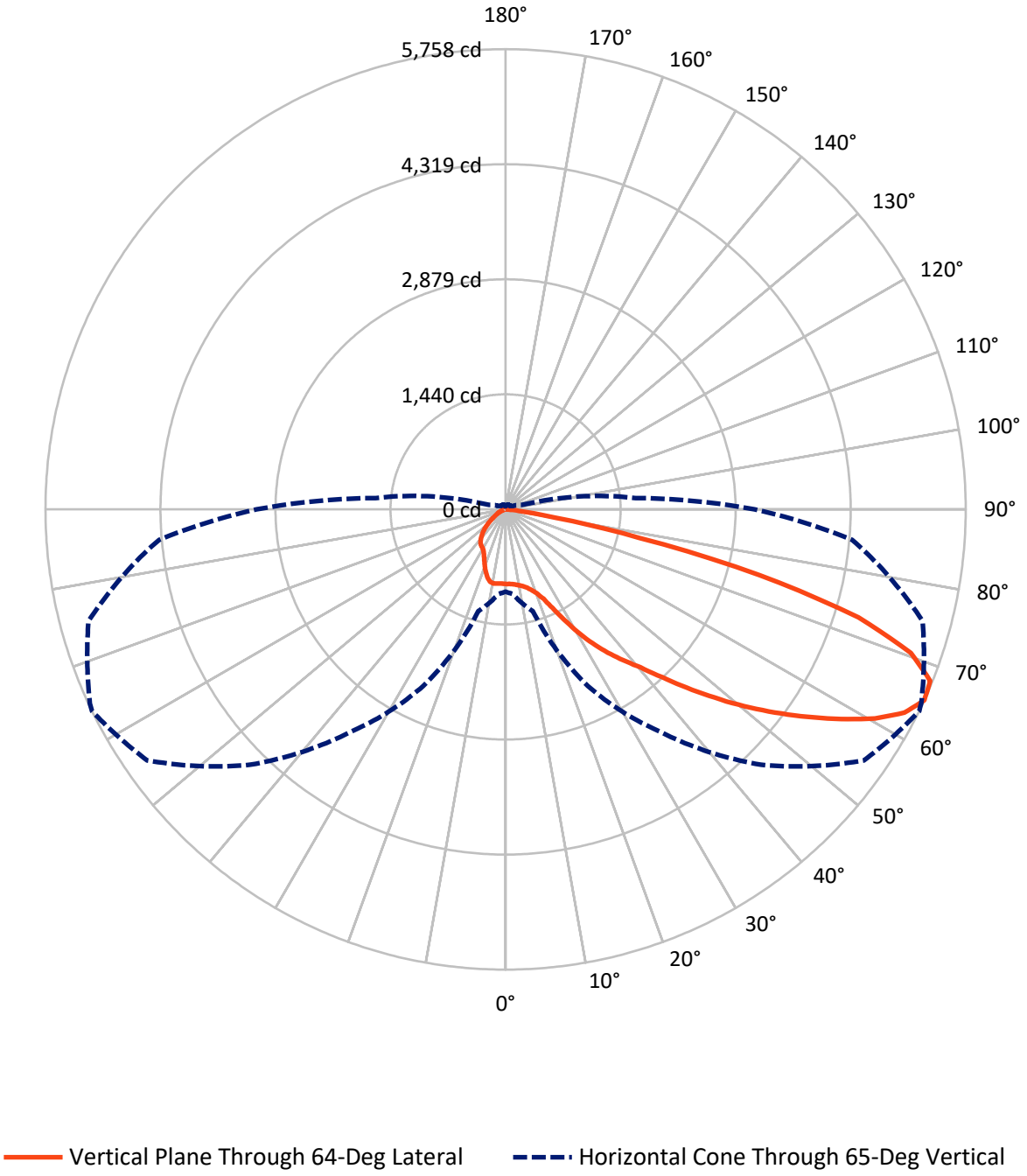

Based on 10 foot mounting height. Maximum calculated value = 14.7 fc
Type III - Short - N/A

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## Luminous Intensity Polar Plot



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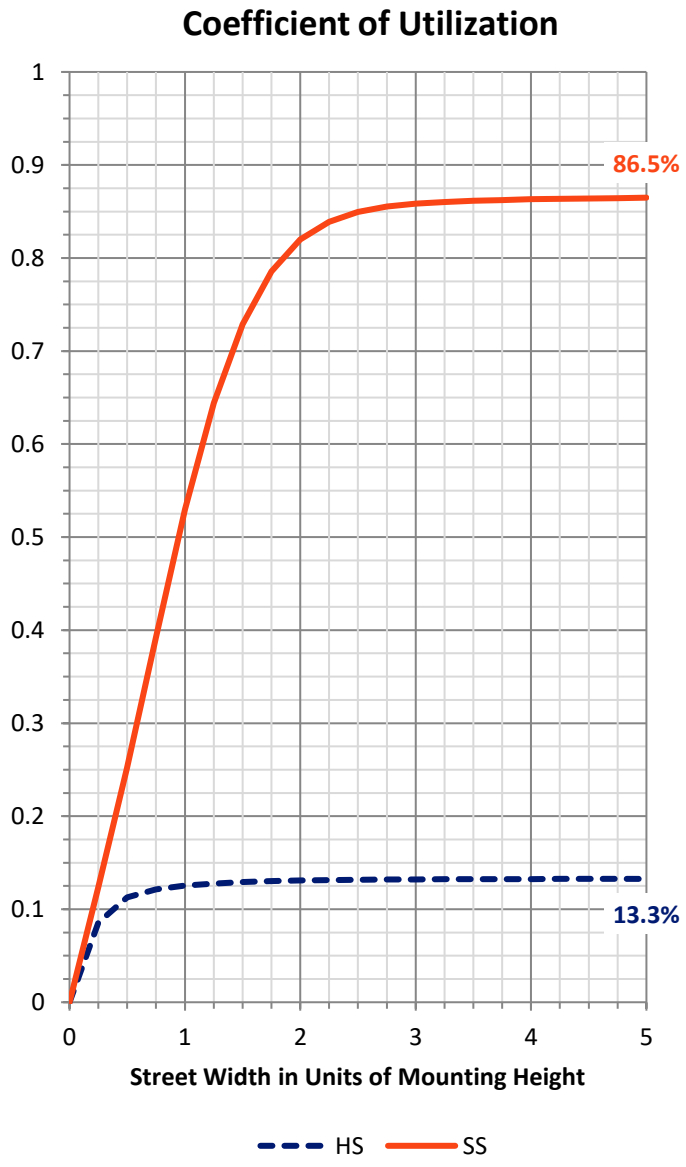
REPORT NUMBER: P1198754
CATALOG NUMBER: GPC-SB1D-730-U-T3-HSS

**FLUX DISTRIBUTION:**

| | | Downward | Upward | Total |
|---|---|---|---|---|
| **House Side** | Lumens | 1072.9 | 0.0 | 1072.9 |
| | % Fixture | 13.4 | 0.0 | 13.4 |
| **Street Side** | Lumens | 6950.1 | 0.0 | 6950.1 |
| | % Fixture | 86.6 | 0.0 | 86.6 |
| **Total** | Lumens | 8023.0 | 0.0 | 8023.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

**ZONAL LUMENS:**

| Zone | Lumens | % Fixture |
|---|---|---|
| 0°-10° | 86.1 | 1.1 |
| 10°-20° | 233.5 | 2.9 |
| 20°-30° | 442.5 | 5.5 |
| 30°-40° | 895.4 | 11.2 |
| 40°-50° | 1525.3 | 19.0 |
| 50°-60° | 2074.3 | 25.9 |
| 60°-70° | 1947.8 | 24.3 |
| 70°-80° | 780.4 | 9.7 |
| 80°-90° | 37.8 | 0.5 |
| 90°-100° | 0.0 | 0.0 |
| 100°-110° | 0.0 | 0.0 |
| 110°-120° | 0.0 | 0.0 |
| 120°-130° | 0.0 | 0.0 |
| 130°-140° | 0.0 | 0.0 |
| 140°-150° | 0.0 | 0.0 |
| 150°-160° | 0.0 | 0.0 |
| 160°-170° | 0.0 | 0.0 |
| 170°-180° | 0.0 | 0.0 |
| 0°-90° | 8023.0 | 100.0 |
| 0°-180° | 8023.0 | 100.0 |



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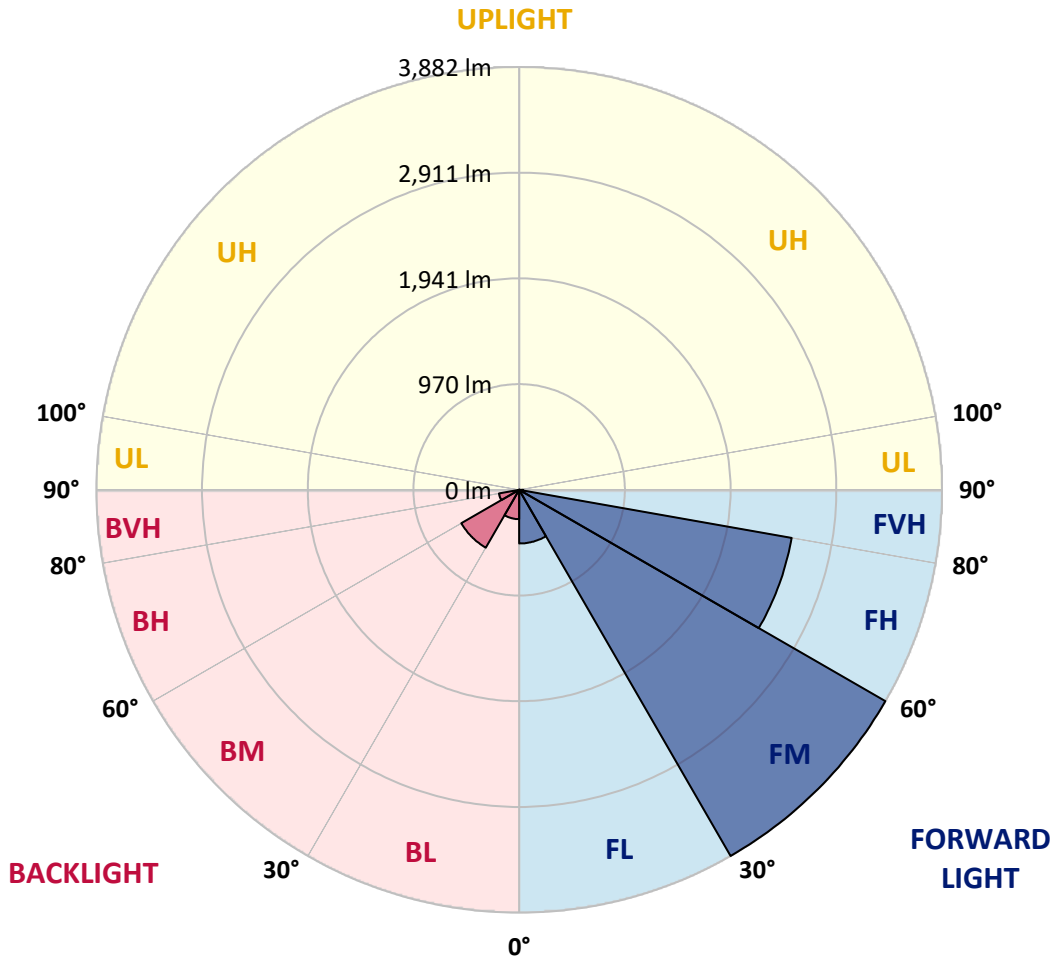
Scaled Data Report

REPORT NUMBER: P1198754
CATALOG NUMBER: GPC-SB1D-730-U-T3-HSS

## LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit B | U | G |
|---|---|---|---|---|---|---|
| FL | (0°-30°) | 492.7 | 6.1 | | | |
| FM | (30°-60°) | 3881.5 | 48.4 | | | |
| FH | (60°-80°) | 2539.9 | 31.7 | | | G2/5000 |
| FVH | (80°-90°) | 36.0 | 0.4 | | | G1/100 |
| BL | (0°-30°) | 269.4 | 3.4 | B1/500 | | |
| BM | (30°-60°) | 613.4 | 7.6 | B1/1000 | | |
| BH | (60°-80°) | 188.3 | 2.3 | B1/500 | | G1/500 |
| BVH | (80°-90°) | 1.8 | 0.0 | | | G0/10 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

**BUG Rating: B1-U0-G2**
Type III Short



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**CANDELA DISTRIBUTION (FULL):**

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 64° | 65° | 75° | 85° |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0° | 933.2 | 933.2 | 933.2 | 933.2 | 933.2 | 933.2 | 933.2 | 933.2 | 933.2 | 933.2 | 933.2 |
| 2.5° | 929.9 | 936.4 | 934.8 | 933.2 | 932.6 | 933.7 | 934.2 | 933.7 | 933.7 | 933.7 | 934.2 |
| 5° | 912.2 | 917.6 | 917.6 | 921.3 | 926.7 | 933.2 | 938.0 | 939.1 | 940.2 | 941.8 | 941.2 |
| 7.5° | 878.3 | 882.6 | 885.8 | 898.2 | 911.6 | 928.9 | 943.4 | 950.9 | 952.0 | 957.9 | 960.1 |
| 10° | 855.2 | 860.5 | 865.9 | 878.8 | 898.2 | 924.0 | 948.8 | 967.0 | 969.7 | 983.7 | 990.2 |
| 12.5° | 854.1 | 859.5 | 866.5 | 880.4 | 903.0 | 930.5 | 960.6 | 986.9 | 991.8 | 1012.2 | 1025.7 |
| 15° | 865.4 | 871.8 | 878.3 | 895.5 | 919.7 | 953.1 | 985.3 | 1018.1 | 1023.0 | 1052.0 | 1066.5 |
| 17.5° | 888.5 | 897.1 | 902.0 | 919.2 | 945.0 | 982.1 | 1024.6 | 1062.2 | 1066.5 | 1100.4 | 1118.7 |
| 20° | 934.2 | 944.5 | 946.1 | 960.1 | 985.3 | 1025.1 | 1075.7 | 1122.5 | 1127.9 | 1166.6 | 1187.0 |
| 22.5° | 1028.9 | 1043.4 | 1030.5 | 1037.5 | 1060.1 | 1099.9 | 1154.7 | 1213.9 | 1221.4 | 1265.5 | 1283.8 |
| 25° | 1195.6 | 1216.1 | 1182.7 | 1170.9 | 1180.6 | 1222.0 | 1290.8 | 1365.6 | 1374.2 | 1409.7 | 1418.8 |
| 27.5° | 1523.2 | 1496.8 | 1446.3 | 1396.8 | 1367.7 | 1391.4 | 1468.9 | 1561.4 | 1572.1 | 1606.5 | 1595.8 |
| 30° | 1883.0 | 1859.9 | 1791.6 | 1681.8 | 1613.0 | 1609.2 | 1680.8 | 1784.0 | 1796.4 | 1829.2 | 1796.4 |
| 32.5° | 2243.3 | 2221.3 | 2147.1 | 2012.1 | 1892.7 | 1833.5 | 1883.0 | 1997.6 | 2004.0 | 2025.0 | 1976.6 |
| 35° | 2597.8 | 2575.2 | 2501.0 | 2362.7 | 2215.9 | 2081.5 | 2071.8 | 2200.9 | 2203.0 | 2225.1 | 2153.0 |
| 37.5° | 2954.4 | 2935.5 | 2856.5 | 2720.9 | 2576.3 | 2390.7 | 2300.9 | 2393.4 | 2396.1 | 2417.6 | 2342.8 |
| 40° | 3208.8 | 3216.8 | 3162.5 | 3057.6 | 2933.4 | 2730.6 | 2558.0 | 2598.3 | 2582.2 | 2618.2 | 2573.6 |
| 42.5° | 3427.1 | 3443.3 | 3395.9 | 3343.2 | 3271.2 | 3092.6 | 2876.4 | 2869.4 | 2843.6 | 2862.9 | 2816.7 |
| 45° | 3615.9 | 3629.4 | 3586.9 | 3574.5 | 3572.9 | 3447.6 | 3224.4 | 3182.4 | 3146.4 | 3142.6 | 3087.2 |
| 47.5° | 3685.3 | 3711.1 | 3729.4 | 3770.8 | 3851.5 | 3798.8 | 3584.2 | 3519.1 | 3478.8 | 3449.2 | 3361.5 |
| 50° | 3711.7 | 3739.1 | 3801.5 | 3922.0 | 4112.9 | 4135.5 | 3942.4 | 3869.2 | 3819.8 | 3766.0 | 3636.9 |
| 52.5° | 3676.2 | 3725.1 | 3809.0 | 4011.8 | 4288.8 | 4405.5 | 4286.1 | 4222.1 | 4165.6 | 4077.9 | 3886.5 |
| 55° | 3466.9 | 3515.9 | 3687.5 | 4010.7 | 4376.4 | 4594.8 | 4610.9 | 4582.4 | 4519.0 | 4380.7 | 4088.1 |
| 57.5° | 3025.9 | 3098.5 | 3370.1 | 3874.1 | 4374.8 | 4757.8 | 4929.3 | 4949.8 | 4878.8 | 4680.9 | 4246.8 |
| 60° | 2414.9 | 2513.3 | 2844.7 | 3571.3 | 4239.8 | 4846.0 | 5208.5 | 5310.7 | 5235.4 | 4976.7 | 4375.4 |
| 62.5° | 1685.1 | 1799.1 | 2112.6 | 3096.9 | 3931.1 | 4782.5 | 5412.3 | 5601.1 | 5544.1 | 5241.3 | 4424.8 |
| 65° | 1027.8 | 1064.4 | 1317.2 | 2437.0 | 3406.2 | 4516.8 | 5475.2 | 5758.2 | 5739.3 | 5403.2 | 4351.7 |
| 67.5° | 684.7 | 715.3 | 787.9 | 1671.1 | 2644.0 | 3986.0 | 5324.6 | 5730.7 | 5736.1 | 5376.8 | 4083.8 |
| 70° | 412.5 | 438.9 | 486.2 | 971.9 | 1713.6 | 3155.0 | 4858.3 | 5381.1 | 5412.3 | 5024.5 | 3576.1 |
| 72.5° | 170.0 | 187.7 | 230.7 | 440.5 | 887.4 | 2002.4 | 3868.7 | 4620.1 | 4692.7 | 4224.8 | 2744.6 |
| 75° | 96.3 | 105.4 | 135.5 | 221.1 | 385.1 | 933.2 | 2343.4 | 3279.8 | 3386.8 | 2911.9 | 1651.2 |
| 77.5° | 64.0 | 68.3 | 87.7 | 143.1 | 216.8 | 318.4 | 1001.5 | 1708.7 | 1913.1 | 1590.4 | 714.8 |
| 80° | 43.0 | 46.8 | 60.2 | 95.7 | 140.9 | 136.6 | 318.9 | 633.0 | 778.8 | 546.4 | 174.3 |
| 82.5° | 29.0 | 29.6 | 43.0 | 62.9 | 89.3 | 66.2 | 94.1 | 196.9 | 247.4 | 158.1 | 66.2 |
| 85° | 16.7 | 16.1 | 31.7 | 36.6 | 39.8 | 27.4 | 28.5 | 59.2 | 77.4 | 66.7 | 37.6 |
| 87.5° | 2.2 | 3.2 | 12.4 | 9.7 | 5.4 | 5.9 | 5.9 | 10.2 | 15.1 | 16.1 | 8.1 |
| 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: P1198754
CATALOG NUMBER: GPC-SB1D-730-U-T3-HSS

**CANDELA DISTRIBUTION (continued):**

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0° | 933.2 | 933.2 | 933.2 | 933.2 | 933.2 | 933.2 | 933.2 | 933.2 | 933.2 | 933.2 | 933.2 |
| 2.5° | 934.2 | 933.7 | 932.1 | 930.5 | 926.7 | 924.6 | 925.6 | 924.6 | 924.0 | 924.6 | 926.7 |
| 5° | 941.2 | 939.6 | 935.3 | 929.9 | 922.4 | 913.3 | 907.3 | 898.7 | 890.7 | 885.8 | 886.9 |
| 7.5° | 960.1 | 958.4 | 952.5 | 937.5 | 913.3 | 875.1 | 840.1 | 809.5 | 786.3 | 772.9 | 773.4 |
| 10° | 990.2 | 987.5 | 978.3 | 945.0 | 881.5 | 798.2 | 728.8 | 671.2 | 633.6 | 615.8 | 614.2 |
| 12.5° | 1025.7 | 1022.4 | 1006.3 | 938.0 | 821.3 | 691.1 | 595.4 | 531.4 | 496.4 | 480.8 | 479.2 |
| 15° | 1067.6 | 1063.3 | 1031.6 | 904.7 | 733.6 | 572.8 | 485.1 | 437.3 | 414.7 | 400.7 | 401.2 |
| 17.5° | 1119.8 | 1112.3 | 1050.4 | 854.6 | 638.4 | 482.4 | 417.4 | 381.3 | 361.4 | 348.0 | 346.9 |
| 20° | 1187.6 | 1175.2 | 1065.5 | 794.9 | 550.8 | 425.4 | 371.6 | 341.5 | 326.5 | 314.6 | 312.5 |
| 22.5° | 1282.2 | 1264.5 | 1083.8 | 730.4 | 488.9 | 386.2 | 337.8 | 315.7 | 303.3 | 289.9 | 287.7 |
| 25° | 1399.5 | 1378.5 | 1106.3 | 670.7 | 446.4 | 352.3 | 313.0 | 294.7 | 280.2 | 264.6 | 263.0 |
| 27.5° | 1563.5 | 1525.9 | 1133.2 | 621.7 | 409.8 | 323.2 | 290.4 | 270.0 | 253.3 | 240.4 | 237.7 |
| 30° | 1746.4 | 1684.5 | 1156.9 | 592.2 | 376.5 | 296.4 | 260.9 | 240.4 | 224.8 | 215.7 | 214.1 |
| 32.5° | 1919.6 | 1835.7 | 1172.5 | 579.3 | 346.4 | 265.7 | 228.6 | 206.5 | 194.7 | 192.0 | 193.6 |
| 35° | 2083.1 | 1972.3 | 1170.9 | 566.9 | 319.5 | 235.0 | 196.9 | 174.3 | 165.1 | 166.7 | 166.7 |
| 37.5° | 2271.3 | 2118.0 | 1159.6 | 547.5 | 297.4 | 207.1 | 169.4 | 149.5 | 141.5 | 142.0 | 144.1 |
| 40° | 2490.2 | 2286.4 | 1152.6 | 511.0 | 273.2 | 181.3 | 146.8 | 130.7 | 124.8 | 122.6 | 122.1 |
| 42.5° | 2723.6 | 2449.3 | 1153.7 | 469.5 | 243.1 | 158.1 | 131.2 | 117.8 | 112.4 | 110.8 | 110.3 |
| 45° | 2958.1 | 2604.8 | 1155.3 | 426.5 | 211.4 | 140.4 | 119.9 | 108.6 | 105.4 | 103.3 | 103.3 |
| 47.5° | 3178.7 | 2737.1 | 1125.2 | 380.3 | 180.2 | 126.9 | 110.8 | 103.3 | 100.6 | 97.9 | 97.9 |
| 50° | 3384.1 | 2825.3 | 1052.6 | 326.5 | 155.4 | 116.2 | 103.8 | 98.4 | 95.7 | 93.0 | 93.0 |
| 52.5° | 3543.8 | 2839.3 | 932.6 | 271.1 | 138.2 | 108.1 | 99.5 | 94.7 | 91.4 | 88.7 | 88.2 |
| 55° | 3614.8 | 2751.6 | 762.1 | 219.4 | 124.8 | 101.1 | 95.2 | 90.4 | 86.6 | 83.9 | 83.4 |
| 57.5° | 3596.6 | 2567.1 | 594.3 | 176.4 | 111.9 | 94.1 | 89.8 | 86.6 | 82.3 | 78.0 | 77.4 |
| 60° | 3506.7 | 2320.3 | 448.0 | 146.8 | 100.0 | 86.6 | 83.9 | 81.2 | 75.3 | 68.8 | 67.8 |
| 62.5° | 3351.3 | 2009.9 | 319.5 | 121.6 | 87.1 | 78.0 | 76.9 | 74.8 | 66.2 | 54.3 | 53.2 |
| 65° | *3113.6* | *1632.9* | *215.1* | *101.1* | *74.8* | *68.3* | *68.8* | *65.1* | *53.8* | *40.3* | *39.3* |
| 67.5° | 2766.1 | 1194.0 | 137.7 | 82.8 | 62.4 | 57.0 | 57.5 | 55.4 | 45.7 | 34.4 | 32.8 |
| 70° | 2323.5 | 790.6 | 89.8 | 62.9 | 50.0 | 44.1 | 47.3 | 47.9 | 38.7 | 28.0 | 26.9 |
| 72.5° | 1703.3 | 466.8 | 62.9 | 46.8 | 36.6 | 30.7 | 38.7 | 39.8 | 31.2 | 21.0 | 19.9 |
| 75° | 970.8 | 221.6 | 47.3 | 33.9 | 22.6 | 21.5 | 30.1 | 30.1 | 21.5 | 14.0 | 12.9 |
| 77.5° | 407.7 | 92.5 | 33.3 | 22.1 | 12.9 | 12.4 | 20.4 | 18.8 | 10.8 | 6.5 | 6.5 |
| 80° | 117.8 | 41.4 | 17.7 | 10.8 | 5.4 | 4.8 | 8.1 | 5.9 | 2.7 | 1.1 | 1.1 |
| 82.5° | 46.3 | 18.3 | 7.0 | 4.3 | 2.2 | 2.2 | 1.1 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 27.4 | 7.5 | 3.2 | 1.6 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 7.0 | 1.6 | 1.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

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Report Generated By FNC07603 / LDUCLS01DT446
Version: v6.13

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## Test Information

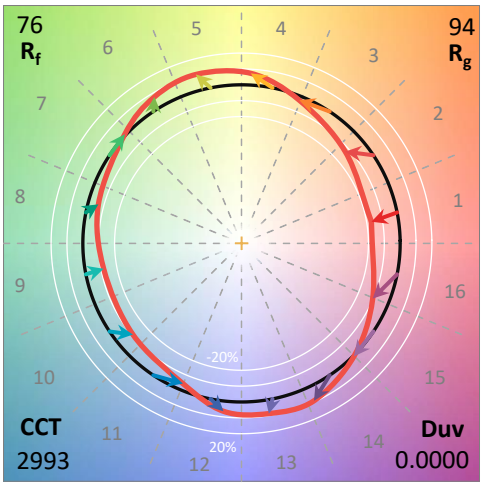
| | |
|---|---|
| Test Method: | LM-79-2008 |
| Report Number: | SP1-1908-441-2-R4 |
| Test Lab: | COOPER LIGHTING SOLUTIONS |
| Photometer: | SP1 - 76IN SPHERE |
| Measurement Geometry: | 4π |
| Issue Date: | 10/28/2024 |
| Manufacturer: | COOPER LIGHTING SOLUTIONS |
| Product Line: | McGRAW-EDISON |
| 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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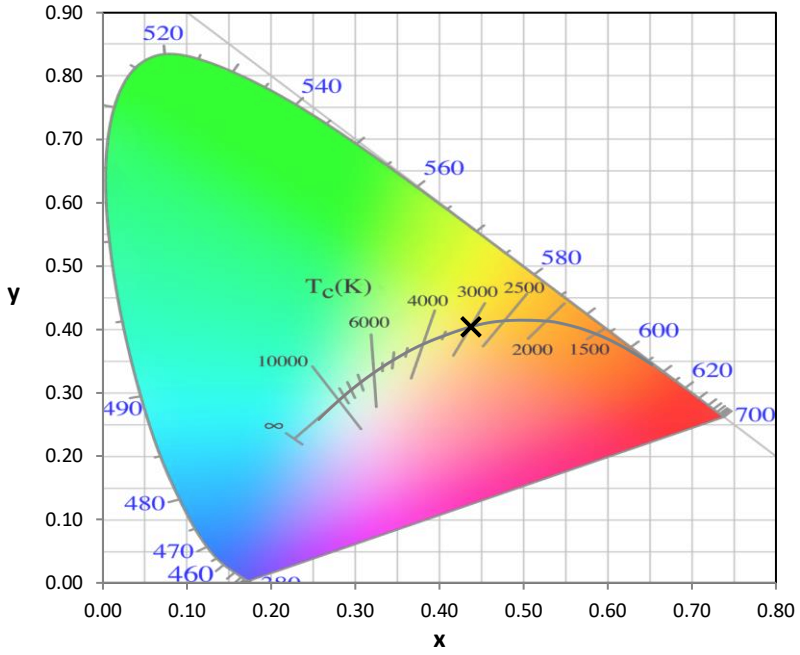
REPORT NUMBER: SP1-1908-441-2-R4

| 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 |

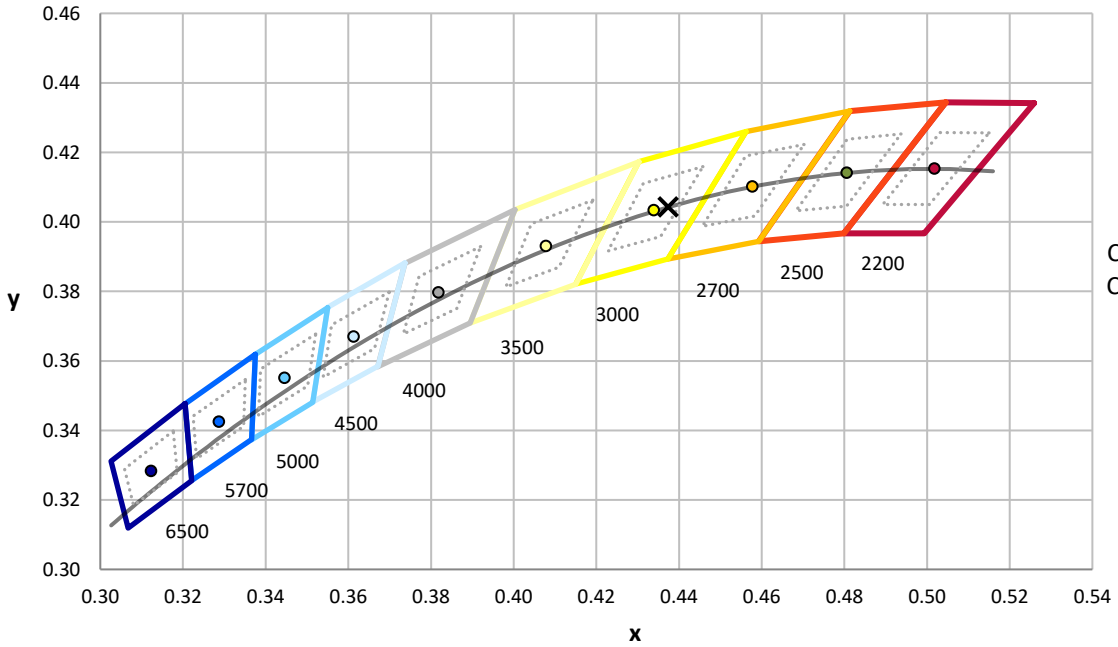
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1121 Highway 74 South
Peachtree City, GA 30269

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

## CIE 1931 Chromaticity Diagram




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



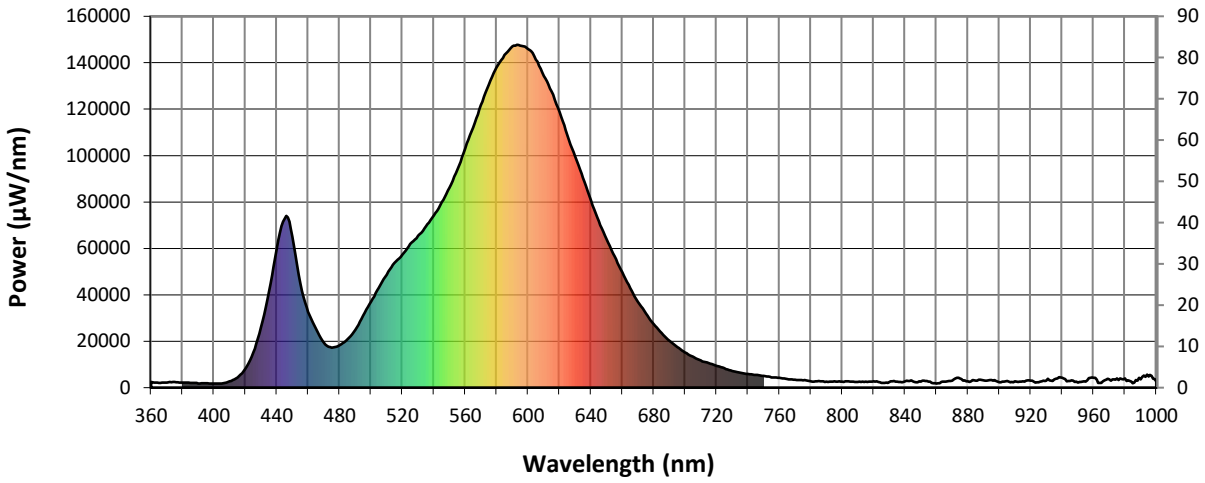

CCT = 2993K
CIE x = 0.4374
CIE y = 0.4043
Duv = 0.0000

Point lies inside the ANSI 3000K 4-step quadrangle

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## Photopic Flux vs. Wavelength



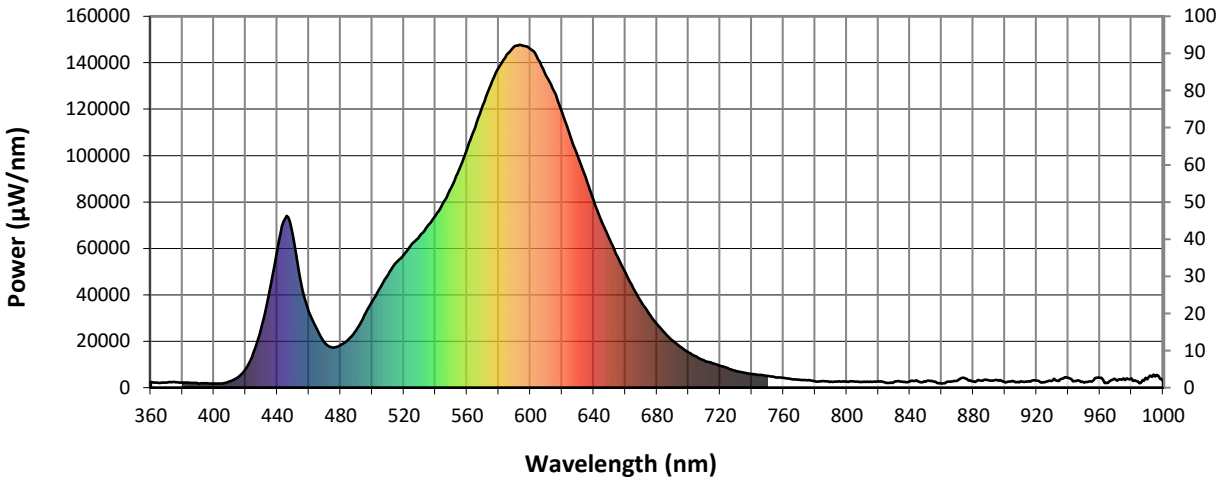

######

| 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



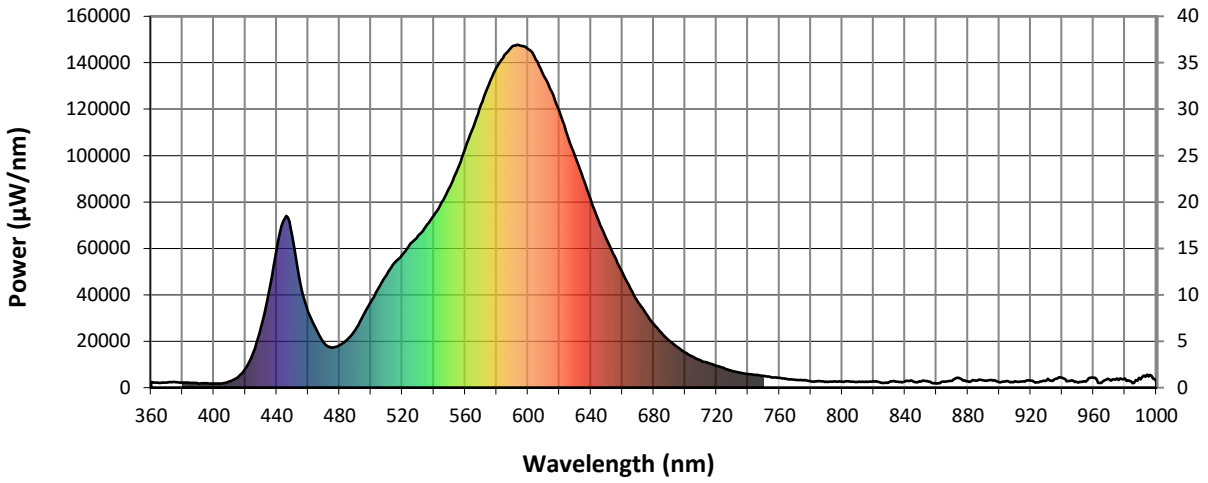

**Scotopic Lumens: 8494.8** **S/P: 1.23**

| 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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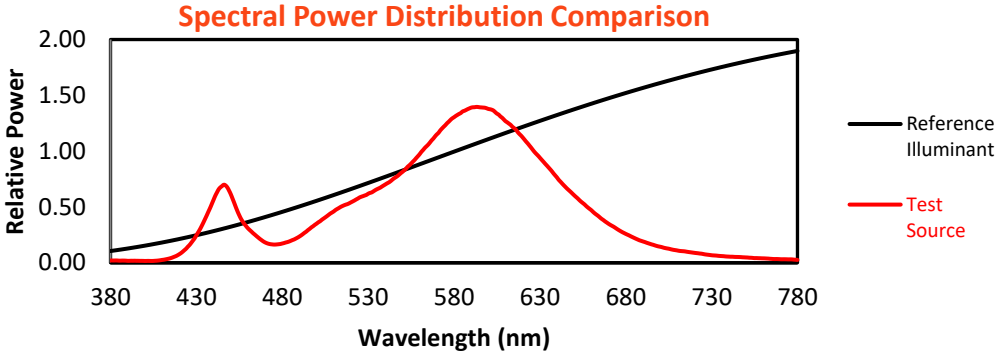
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# TM-30-18

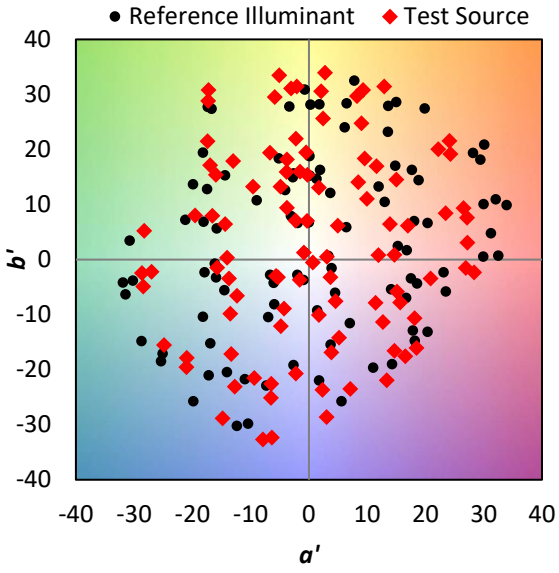
## Summary

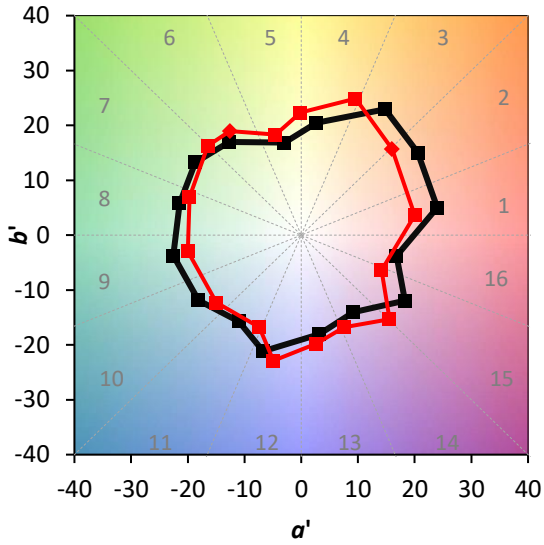
$R_f$ = 75.7
$R_g$ = 93.9
CIE $R_a$ = 71.8
$R_9$ = -38.3

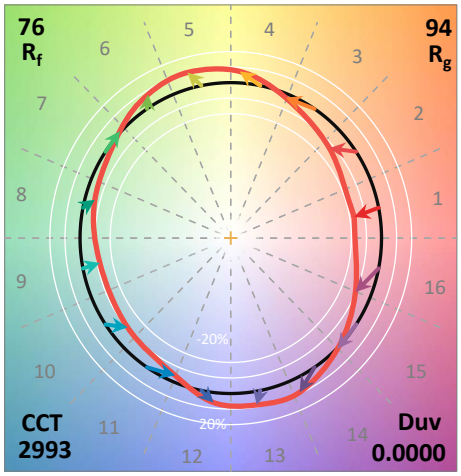
## Spectral Power Distribution Comparison

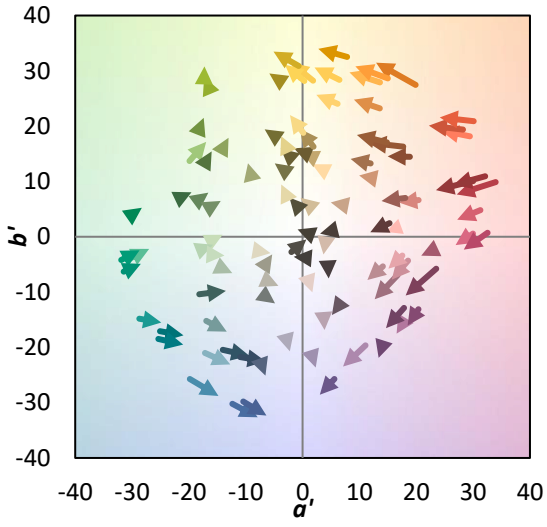



## Color Vector Graphics



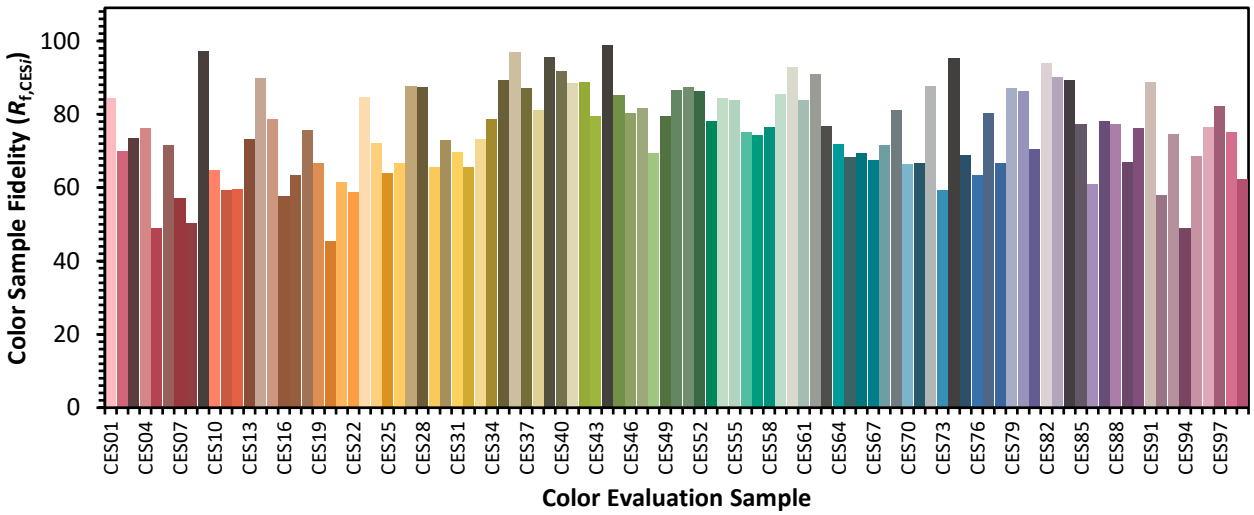
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Peachtree City, GA 30269

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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 | |

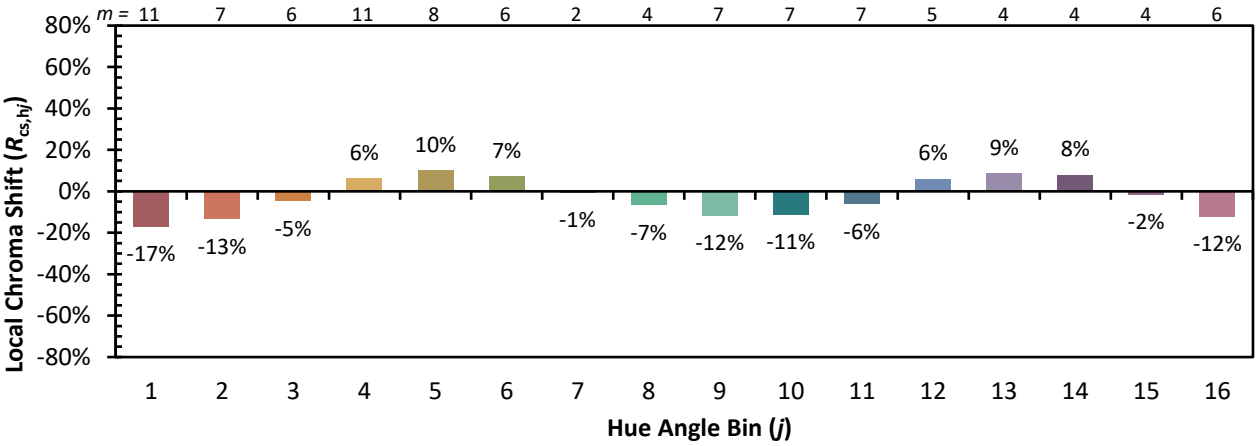


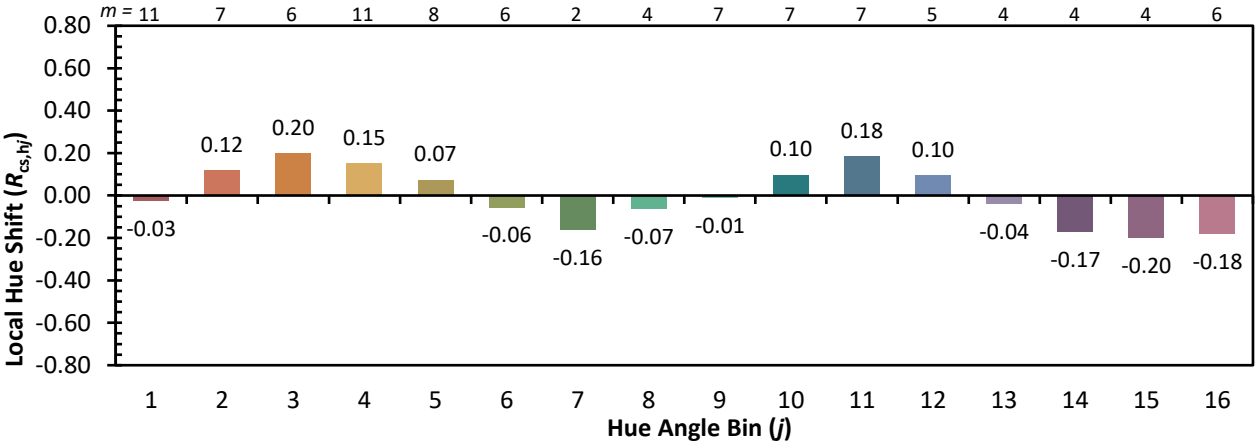
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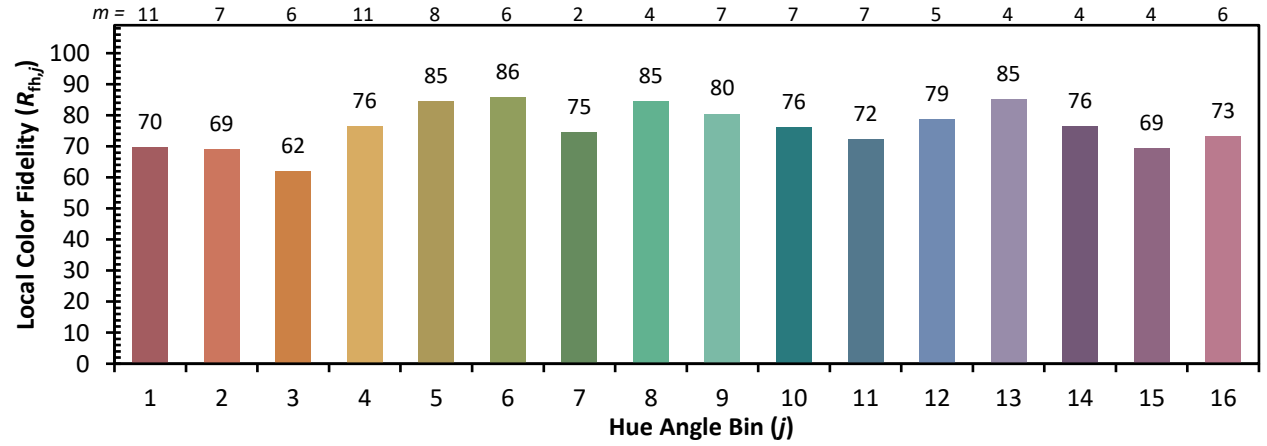
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## Color Rendition by Hue-Angle Bin



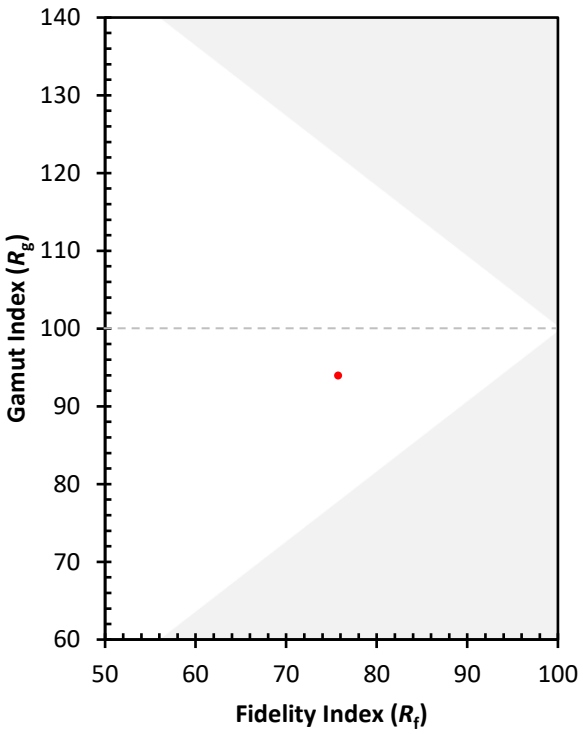



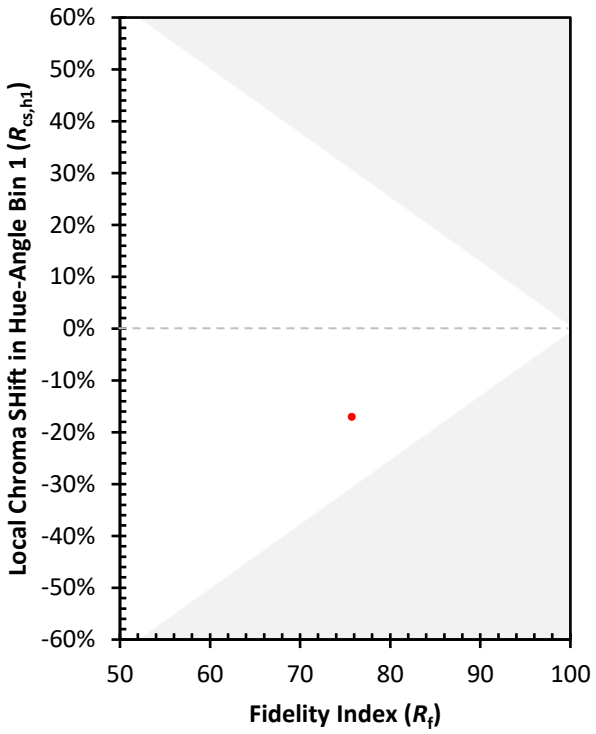
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### Measure Comparisons




(END OF REPORT)