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: P1198367

Luminaire Tested: GPC-SB1C-750-U-T4FT

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: | P1198367 |
| | TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-24) |
| Test Lab: | INNOVATION CENTER |
| Issue Date: | 3/15/2026 |
| Manufacturer: | COOPER LIGHTING SOLUTIONS |
| Product Line: | McGRAW-EDISON |
| Catalog Number: | GPC-SB1C-750-U-T4FT |
| Description: | GALLEON PEDESTRIAN LUMINAIRE |
| | (1) 70 CRI, 5000K, 615mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV FORWARD THROW OPT |
| Light Source: | - |
| Ballast/Driver: | ELECTRONIC DRIVER |

**Summary**

| | |
|---|---|
| Lumens per Lamp: | N/A |
| Luminaire Lumens: | 7873 lumens |
| Efficiency: | N/A |
| Efficacy: | 144.7 lumens/watt |
| Luminous Opening: | Rectangular (W 0.5' x L: 0.5' x H: 0') |
| IES Classification: | Type IV - Short |
| BUG Rating: | B1 - 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 |

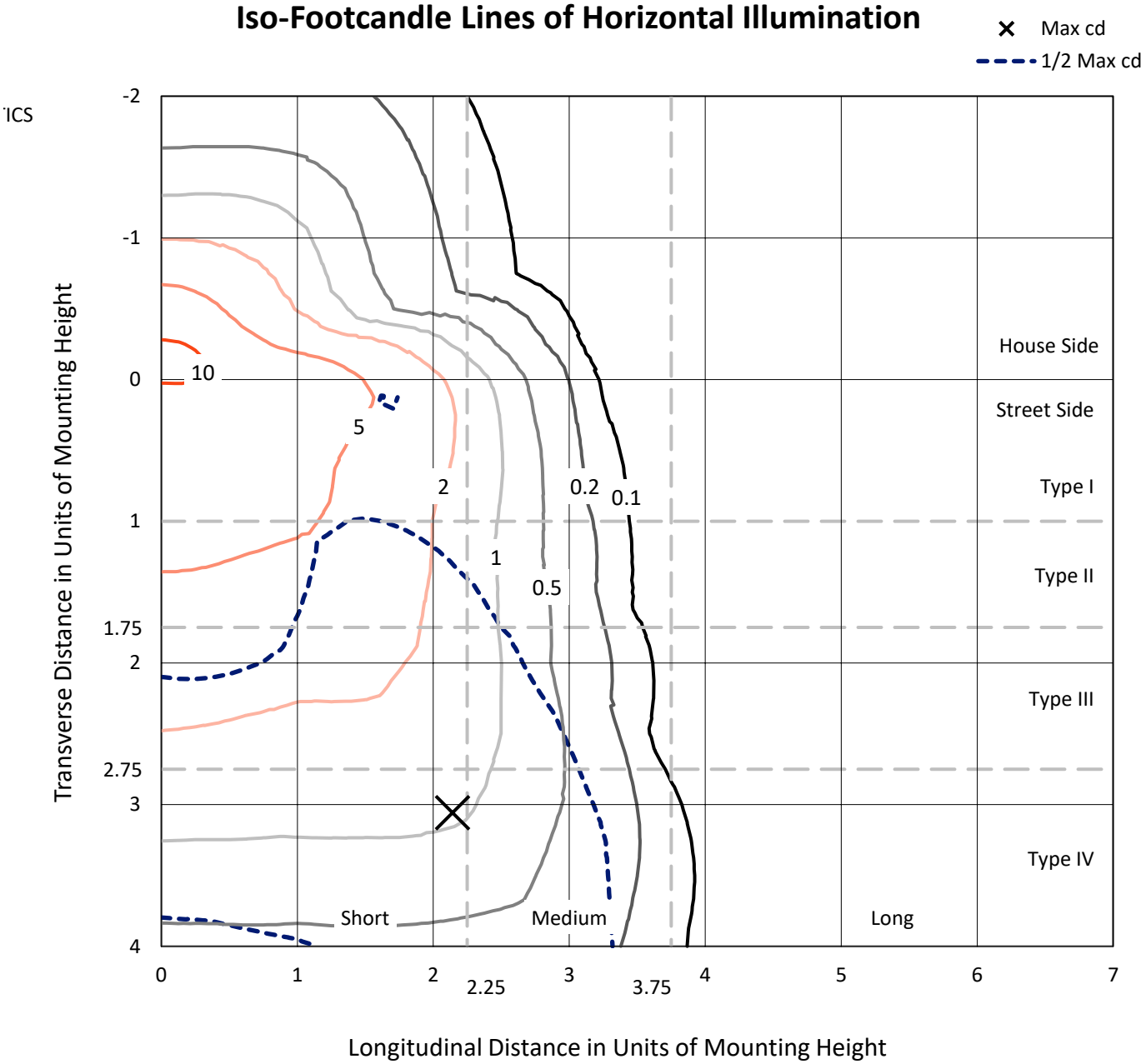


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Scaled Data Report

REPORT NUMBER: P1198367
CATALOG NUMBER: GPC-SB1C-750-U-T4FT

## Iso-Footcandle Lines of Horizontal Illumination



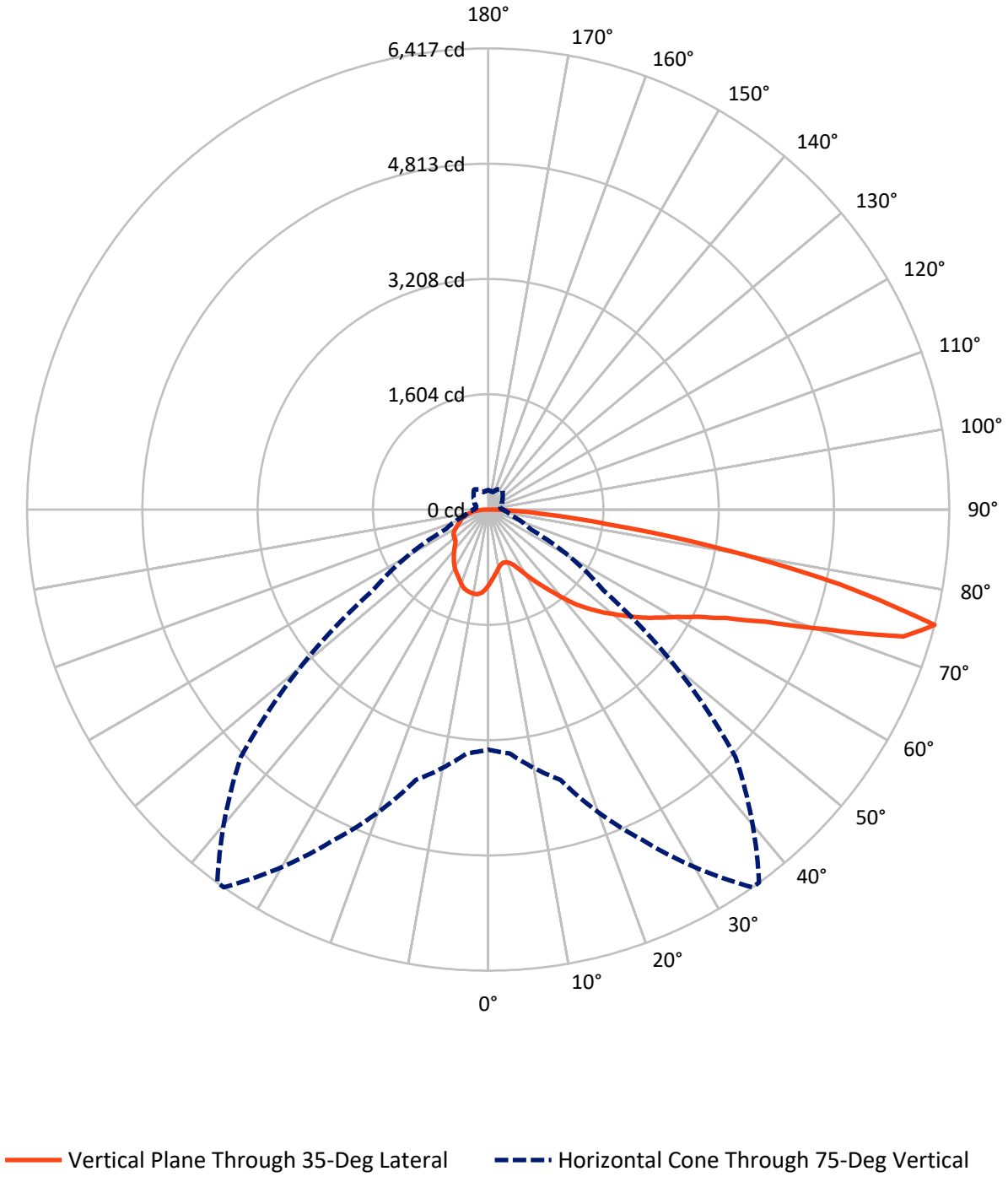

Based on 10 foot mounting height. Maximum calculated value = 11.6 fc
Type IV - Short - N/A

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## Luminous Intensity Polar Plot



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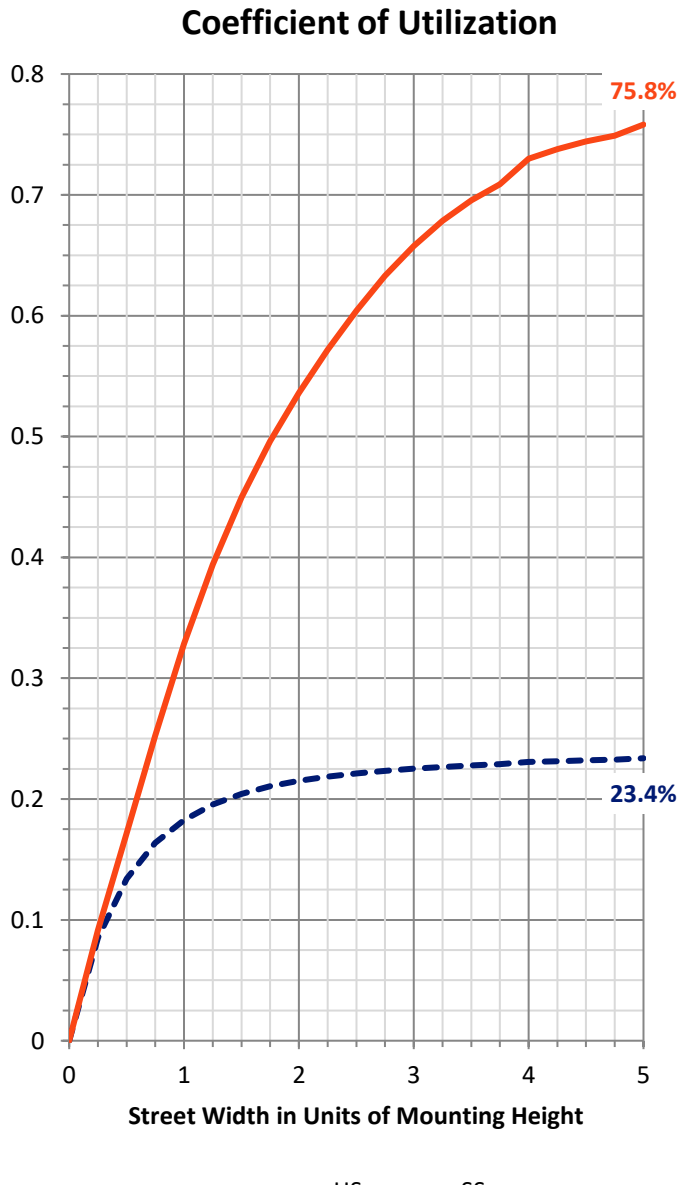
REPORT NUMBER: P1198367
CATALOG NUMBER: GPC-SB1C-750-U-T4FT

**FLUX DISTRIBUTION:**

| | | Downward | Upward | Total |
|---|---|---|---|---|
| **House Side** | Lumens | 1873.6 | 0.0 | 1873.6 |
| | % Fixture | 23.8 | 0.0 | 23.8 |
| **Street Side** | Lumens | 5999.4 | 0.0 | 5999.4 |
| | % Fixture | 76.2 | 0.0 | 76.2 |
| **Total** | Lumens | 7873.0 | 0.0 | 7873.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

**ZONAL LUMENS:**

| Zone | Lumens | % Fixture |
|---|---|---|
| 0°-10° | 99.3 | 1.3 |
| 10°-20° | 286.5 | 3.6 |
| 20°-30° | 481.1 | 6.1 |
| 30°-40° | 747.8 | 9.5 |
| 40°-50° | 1109.9 | 14.1 |
| 50°-60° | 1532.2 | 19.5 |
| 60°-70° | 1858.9 | 23.6 |
| 70°-80° | 1536.3 | 19.5 |
| 80°-90° | 221.0 | 2.8 |
| 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° | 7873.0 | 100.0 |
| 0°-180° | 7873.0 | 100.0 |



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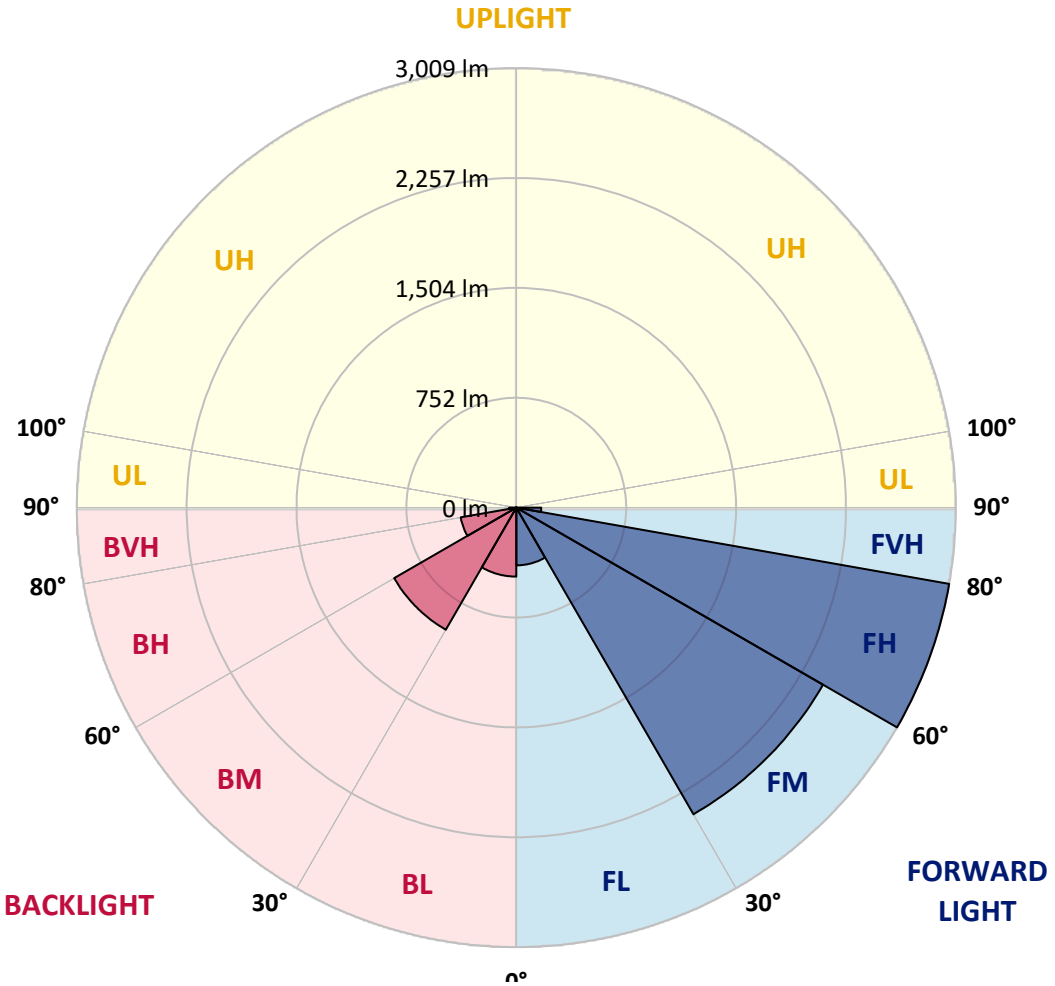
Scaled Data Report

REPORT NUMBER: P1198367
CATALOG NUMBER: GPC-SB1C-750-U-T4FT

## LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit B | U | G |
|---|---|---|---|---|---|---|
| FL | (0°-30°) | 394.8 | 5.0 | | | |
| FM | (30°-60°) | 2424.5 | 30.8 | | | |
| FH | (60°-80°) | 3008.9 | 38.2 | | | G2/5000 |
| FVH | (80°-90°) | 171.2 | 2.2 | | | G2/225 |
| BL | (0°-30°) | 472.2 | 6.0 | B1/500 | | |
| BM | (30°-60°) | 965.4 | 12.3 | B1/1000 | | |
| BH | (60°-80°) | 386.3 | 4.9 | B1/500 | | G1/500 |
| BVH | (80°-90°) | 49.8 | 0.6 | | | G1/100 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

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



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REPORT NUMBER: P1198367
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**CANDELA DISTRIBUTION (FULL):**

| | 0° | 5° | 15° | 25° | 35° | 36° | 45° | 55° | 65° | 75° | 85° |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0° | 1049.1 | 1049.1 | 1049.1 | 1049.1 | 1049.1 | 1049.1 | 1049.1 | 1049.1 | 1049.1 | 1049.1 | 1049.1 |
| 2.5° | 967.4 | 973.4 | 975.9 | 974.6 | 981.0 | 980.2 | 989.1 | 1000.2 | 1015.5 | 1030.4 | 1052.1 |
| 5° | 892.9 | 899.3 | 904.8 | 910.0 | 922.3 | 926.1 | 940.2 | 961.5 | 989.5 | 1018.1 | 1053.8 |
| 7.5° | 823.6 | 829.1 | 837.6 | 847.0 | 867.8 | 871.7 | 895.1 | 928.3 | 967.4 | 1009.1 | 1058.5 |
| 10° | 767.0 | 772.5 | 781.4 | 792.1 | 818.0 | 822.7 | 852.5 | 896.8 | 947.8 | 1000.6 | 1063.6 |
| 12.5° | 742.7 | 744.4 | 749.5 | 760.1 | 782.7 | 785.7 | 818.4 | 869.1 | 928.7 | 994.2 | 1071.3 |
| 15° | 741.4 | 744.8 | 745.2 | 750.8 | 769.5 | 770.8 | 801.0 | 851.2 | 916.8 | 992.9 | 1082.8 |
| 17.5° | 754.2 | 756.7 | 752.9 | 756.3 | 772.1 | 774.2 | 798.0 | 842.7 | 912.9 | 998.5 | 1102.3 |
| 20° | 788.2 | 790.4 | 778.9 | 774.2 | 785.7 | 787.4 | 810.8 | 848.2 | 916.8 | 1010.0 | 1129.1 |
| 22.5° | 860.6 | 861.9 | 833.8 | 814.6 | 815.5 | 816.3 | 836.8 | 870.8 | 931.7 | 1030.8 | 1163.2 |
| 25° | 973.4 | 972.5 | 927.8 | 890.8 | 869.5 | 864.8 | 878.5 | 907.4 | 956.8 | 1058.5 | 1207.0 |
| 27.5° | 1105.3 | 1098.9 | 1054.2 | 998.9 | 952.5 | 945.7 | 942.7 | 955.1 | 992.5 | 1095.1 | 1260.7 |
| 30° | 1254.3 | 1248.3 | 1200.2 | 1127.9 | 1063.6 | 1052.5 | 1024.4 | 1018.1 | 1045.7 | 1144.9 | 1335.1 |
| 32.5° | 1417.7 | 1413.9 | 1356.4 | 1268.7 | 1182.8 | 1170.0 | 1122.8 | 1105.7 | 1127.4 | 1220.2 | 1439.0 |
| 35° | 1554.8 | 1551.4 | 1503.7 | 1413.5 | 1308.3 | 1292.6 | 1244.5 | 1225.3 | 1236.4 | 1316.8 | 1574.8 |
| 37.5° | 1678.6 | 1676.9 | 1636.0 | 1565.0 | 1456.4 | 1437.3 | 1383.2 | 1376.9 | 1374.7 | 1444.1 | 1739.5 |
| 40° | 1793.5 | 1789.3 | 1746.7 | 1709.3 | 1628.8 | 1611.4 | 1563.7 | 1558.2 | 1542.0 | 1600.7 | 1925.9 |
| 42.5° | 1920.8 | 1909.7 | 1848.0 | 1830.6 | 1808.8 | 1794.4 | 1765.9 | 1766.7 | 1731.0 | 1777.4 | 2123.4 |
| 45° | 2024.6 | 2018.2 | 1954.8 | 1944.6 | 1968.0 | 1962.1 | 1986.8 | 1993.1 | 1923.8 | 1962.5 | 2328.5 |
| 47.5° | 2136.1 | 2130.2 | 2076.6 | 2069.3 | 2132.7 | 2134.4 | 2221.7 | 2223.8 | 2111.9 | 2154.9 | 2534.1 |
| 50° | 2273.6 | 2265.1 | 2211.9 | 2220.8 | 2291.9 | 2298.3 | 2457.9 | 2443.4 | 2285.1 | 2350.2 | 2738.0 |
| 52.5° | 2364.3 | 2369.4 | 2357.9 | 2372.4 | 2469.4 | 2475.4 | 2690.3 | 2653.3 | 2456.6 | 2543.0 | 2938.0 |
| 55° | 2431.1 | 2441.3 | 2477.1 | 2510.3 | 2656.7 | 2662.6 | 2909.5 | 2852.9 | 2598.8 | 2721.8 | 3126.1 |
| 57.5° | 2517.1 | 2502.6 | 2569.4 | 2634.1 | 2834.6 | 2850.3 | 3122.7 | 3045.2 | 2724.8 | 2875.9 | 3255.1 |
| 60° | 2640.5 | 2630.3 | 2682.2 | 2778.0 | 3033.8 | 3058.9 | 3348.3 | 3218.5 | 2817.1 | 2998.0 | 3280.2 |
| 62.5° | 2890.7 | 2865.2 | 2873.3 | 2958.0 | 3284.9 | 3318.1 | 3602.8 | 3369.6 | 2863.1 | 3045.7 | 3145.7 |
| 65° | 3264.9 | 3221.0 | 3180.2 | 3238.9 | 3638.5 | 3671.3 | 3890.1 | 3488.3 | 2846.1 | 2953.3 | 2788.6 |
| 67.5° | 3736.0 | 3692.6 | 3642.4 | 3697.7 | 4159.5 | 4185.5 | 4244.6 | 3555.1 | 2712.0 | 2597.5 | 2157.4 |
| 70° | 4124.6 | 4108.4 | 4168.4 | 4396.1 | 4991.6 | 4992.4 | 4699.2 | 3499.8 | 2344.7 | 1841.6 | 1248.3 |
| 72.5° | 4073.1 | 4063.3 | 4379.5 | 5083.5 | 6040.3 | 6017.7 | 5129.5 | 3081.0 | 1579.4 | 830.8 | 467.7 |
| 75° | 3341.5 | 3404.9 | 3894.8 | 5071.2 | 6416.9 | 6414.0 | 4866.0 | 1958.7 | 653.3 | 344.3 | 241.7 |
| 77.5° | 1791.8 | 1892.3 | 2528.6 | 3744.1 | 5009.4 | 5084.8 | 3421.1 | 685.2 | 280.5 | 220.5 | 167.3 |
| 80° | 584.4 | 672.0 | 1007.8 | 1906.3 | 3255.1 | 3241.0 | 1466.2 | 269.0 | 192.0 | 156.2 | 115.8 |
| 82.5° | 248.1 | 258.3 | 450.3 | 900.2 | 1670.5 | 1644.6 | 466.9 | 154.5 | 134.9 | 106.8 | 71.5 |
| 85° | 97.0 | 108.5 | 198.8 | 416.2 | 723.5 | 707.8 | 168.5 | 76.6 | 86.4 | 69.8 | 42.6 |
| 87.5° | 31.9 | 38.7 | 71.1 | 142.6 | 225.1 | 217.1 | 41.3 | 26.4 | 37.5 | 31.9 | 15.3 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

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REPORT NUMBER: P1198367
CATALOG NUMBER: GPC-SB1C-750-U-T4FT

**CANDELA DISTRIBUTION (continued):**

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0° | 1049.1 | 1049.1 | 1049.1 | 1049.1 | 1049.1 | 1049.1 | 1049.1 | 1049.1 | 1049.1 | 1049.1 | 1049.1 |
| 2.5° | 1058.1 | 1064.9 | 1073.0 | 1084.9 | 1095.1 | 1103.6 | 1112.5 | 1118.1 | 1120.2 | 1126.6 | 1126.2 |
| 5° | 1065.7 | 1080.6 | 1100.6 | 1120.2 | 1139.4 | 1150.9 | 1161.1 | 1166.2 | 1170.9 | 1174.3 | 1175.1 |
| 7.5° | 1078.5 | 1097.7 | 1129.1 | 1154.7 | 1170.9 | 1180.2 | 1187.0 | 1185.3 | 1187.0 | 1187.9 | 1189.2 |
| 10° | 1089.6 | 1116.4 | 1153.8 | 1178.1 | 1190.4 | 1190.9 | 1189.2 | 1183.2 | 1180.2 | 1180.6 | 1181.5 |
| 12.5° | 1102.8 | 1132.6 | 1173.0 | 1193.4 | 1196.8 | 1187.5 | 1180.2 | 1170.0 | 1166.2 | 1164.5 | 1163.6 |
| 15° | 1120.6 | 1154.7 | 1193.8 | 1201.5 | 1193.0 | 1181.1 | 1168.7 | 1152.1 | 1143.6 | 1136.8 | 1138.9 |
| 17.5° | 1142.3 | 1179.8 | 1210.0 | 1204.5 | 1186.2 | 1166.6 | 1146.6 | 1121.5 | 1104.0 | 1096.8 | 1097.2 |
| 20° | 1172.6 | 1206.2 | 1222.4 | 1198.1 | 1170.4 | 1140.6 | 1106.6 | 1075.9 | 1059.8 | 1052.5 | 1051.7 |
| 22.5° | 1209.2 | 1241.5 | 1234.3 | 1187.0 | 1147.9 | 1100.2 | 1057.6 | 1035.1 | 1027.0 | 1021.9 | 1022.7 |
| 25° | 1253.0 | 1280.7 | 1242.8 | 1170.9 | 1110.8 | 1046.6 | 1013.8 | 1006.6 | 1002.7 | 998.9 | 998.9 |
| 27.5° | 1310.0 | 1324.9 | 1249.2 | 1147.0 | 1053.0 | 989.5 | 977.6 | 978.9 | 977.6 | 971.2 | 972.5 |
| 30° | 1385.4 | 1382.4 | 1255.1 | 1108.3 | 986.6 | 938.0 | 938.9 | 944.4 | 945.3 | 941.0 | 943.2 |
| 32.5° | 1484.5 | 1454.3 | 1258.1 | 1058.1 | 923.1 | 892.9 | 893.8 | 899.7 | 904.0 | 896.8 | 900.2 |
| 35° | 1604.6 | 1538.2 | 1253.4 | 995.1 | 874.2 | 849.9 | 843.6 | 845.3 | 846.5 | 839.7 | 844.4 |
| 37.5° | 1744.6 | 1632.2 | 1232.6 | 925.3 | 833.8 | 807.8 | 794.2 | 782.7 | 775.9 | 769.5 | 773.8 |
| 40° | 1898.2 | 1734.8 | 1194.3 | 857.2 | 788.7 | 763.1 | 742.7 | 721.0 | 698.0 | 689.5 | 693.3 |
| 42.5° | 2059.1 | 1840.3 | 1147.9 | 792.1 | 736.7 | 715.9 | 694.2 | 662.7 | 628.2 | 610.8 | 612.9 |
| 45° | 2225.9 | 1948.4 | 1102.3 | 727.8 | 683.5 | 674.6 | 649.5 | 611.6 | 574.1 | 552.0 | 550.3 |
| 47.5° | 2389.4 | 2050.6 | 1035.5 | 663.1 | 633.7 | 643.5 | 623.9 | 589.0 | 547.3 | 512.4 | 508.6 |
| 50° | 2545.6 | 2146.4 | 926.1 | 597.6 | 593.3 | 634.2 | 615.4 | 565.2 | 517.5 | 472.9 | 469.0 |
| 52.5° | 2700.5 | 2223.8 | 786.1 | 538.0 | 571.6 | 631.6 | 604.4 | 549.0 | 490.7 | 443.9 | 438.8 |
| 55° | 2832.0 | 2263.8 | 651.2 | 486.9 | 540.1 | 609.9 | 591.2 | 529.9 | 452.8 | 403.1 | 398.8 |
| 57.5° | 2906.9 | 2231.5 | 538.8 | 436.7 | 496.7 | 574.1 | 568.6 | 489.0 | 407.7 | 369.4 | 364.3 |
| 60° | 2874.6 | 2100.4 | 446.9 | 392.8 | 455.4 | 535.4 | 529.5 | 448.6 | 373.3 | 337.1 | 332.0 |
| 62.5° | 2696.2 | 1850.6 | 374.1 | 354.5 | 417.9 | 495.8 | 490.3 | 417.5 | 346.9 | 312.0 | 306.4 |
| 65° | 2337.0 | 1505.4 | 317.5 | 322.6 | 380.1 | 448.2 | 456.3 | 391.6 | 326.0 | 292.0 | 286.4 |
| 67.5° | 1782.5 | 1090.4 | 273.2 | 294.9 | 343.0 | 401.4 | 424.8 | 372.8 | 308.6 | 276.2 | 271.1 |
| 70° | 1015.9 | 619.3 | 235.8 | 268.1 | 310.3 | 357.9 | 400.5 | 357.9 | 289.8 | 263.0 | 259.6 |
| 72.5° | 385.2 | 284.3 | 203.9 | 241.3 | 278.8 | 321.3 | 373.7 | 334.5 | 268.1 | 248.1 | 244.7 |
| 75° | *205.6* | *173.2* | *171.5* | *209.8* | *242.6* | *285.6* | *340.1* | *311.5* | *252.0* | *262.2* | *270.7* |
| 77.5° | 140.0 | 122.6 | 143.4 | 179.6 | 203.0 | 246.0 | 304.3 | 276.6 | 218.3 | 217.5 | 200.5 |
| 80° | 97.0 | 86.8 | 116.6 | 144.7 | 157.1 | 206.8 | 265.6 | 237.5 | 177.9 | 166.0 | 158.8 |
| 82.5° | 58.3 | 56.6 | 87.3 | 108.1 | 111.1 | 159.6 | 220.0 | 199.2 | 145.6 | 126.8 | 127.7 |
| 85° | 31.9 | 33.6 | 55.8 | 63.4 | 64.7 | 111.5 | 172.4 | 154.1 | 111.9 | 94.1 | 94.9 |
| 87.5° | 8.9 | 11.5 | 20.4 | 25.1 | 31.1 | 57.9 | 102.6 | 91.5 | 56.2 | 39.2 | 39.2 |
| 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

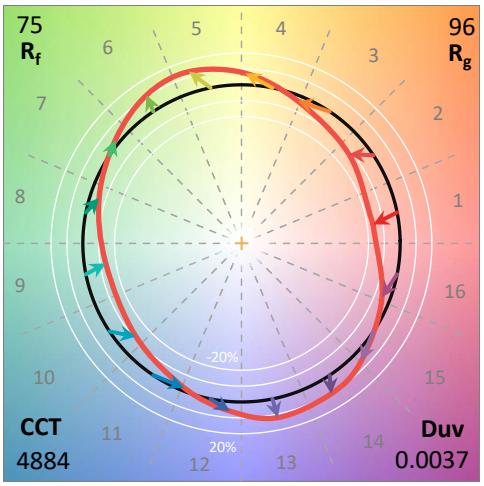
| | |
|---|---|
| Test Method: | LM-79-2008 |
| Report Number: | SP1-1908-441-4-R4 |
| Test Lab: | COOPER LIGHTING SOLUTIONS |
| Photometer: | SP1 - 76IN SPHERE |
| Measurement Geometry: | 4π |
| Issue Date: | 10/28/2024 |
| Manufacturer: | COOPER LIGHTING SOLUTIONS |
| Product Line: | McGRAW-EDISON |
| 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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Peachtree City, GA 30269

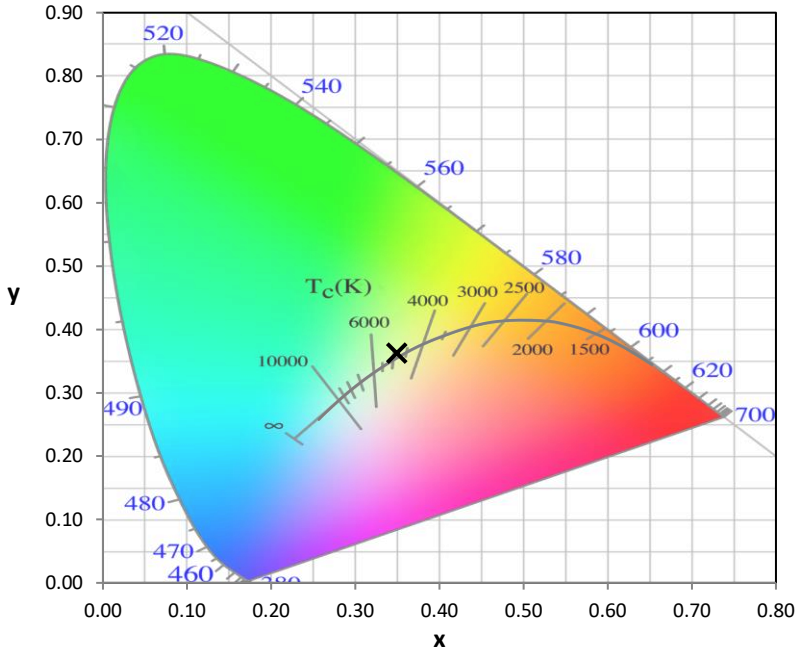
REPORT NUMBER: SP1-1908-441-4-R4

| 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 |

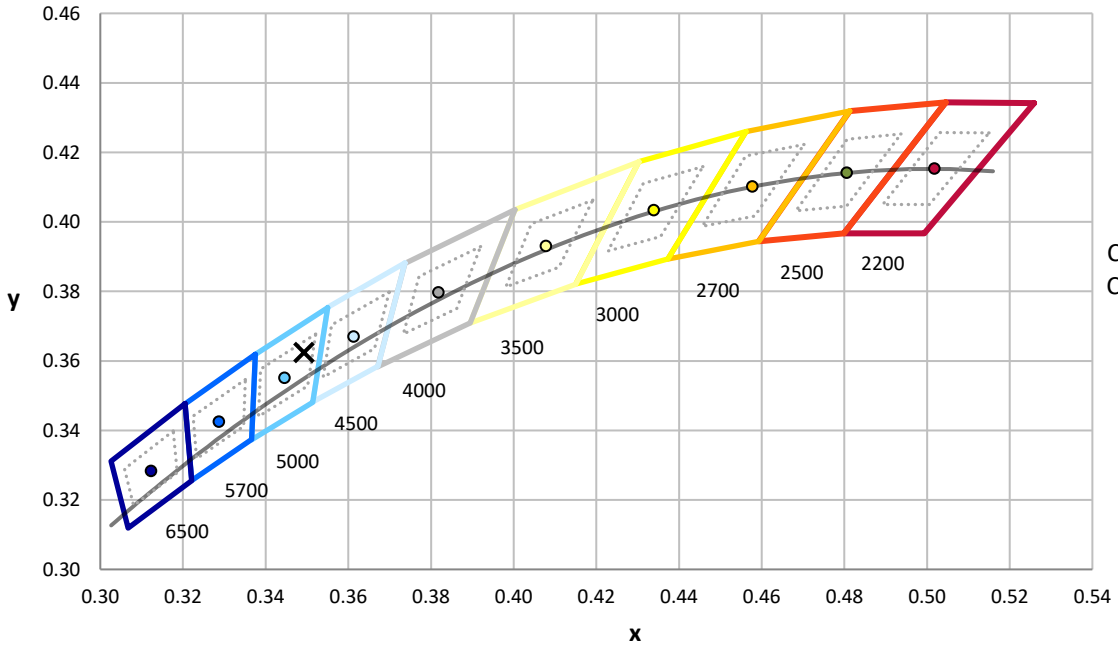
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REPORT NUMBER: SP1-1908-441-4-R4

## CIE 1931 Chromaticity Diagram




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



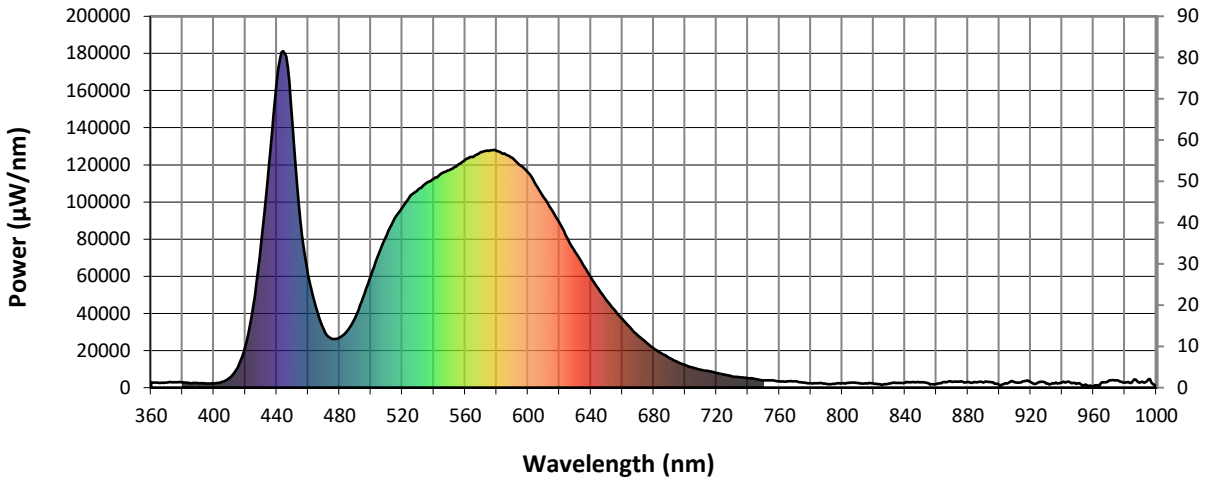

CCT = 4884K
CIE x = 0.3493
CIE y = 0.3624
Duv = 0.0037

Point lies inside the ANSI 5000K 4-step quadrangle

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## Photopic Flux vs. Wavelength



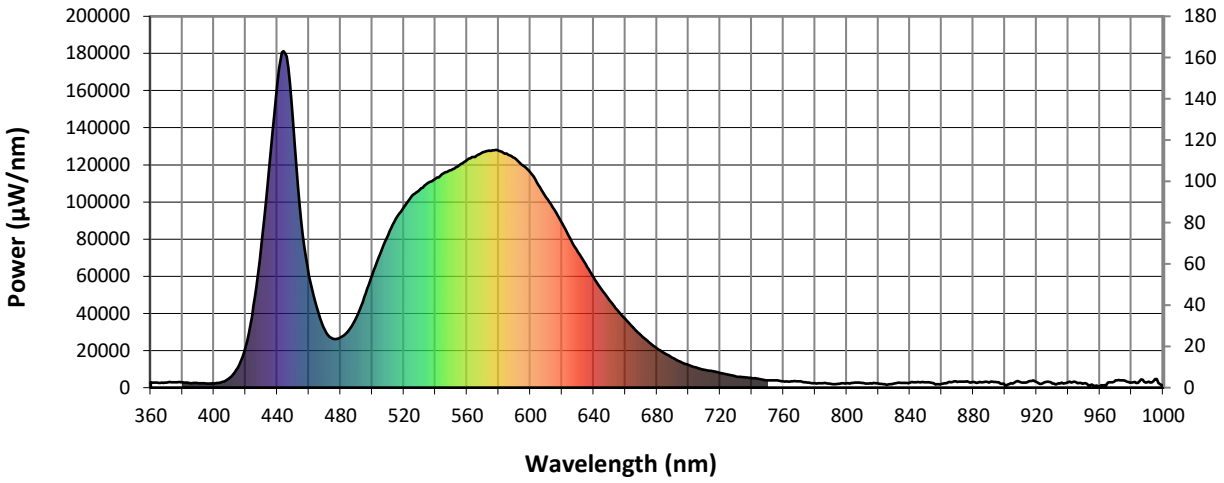

######

| 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



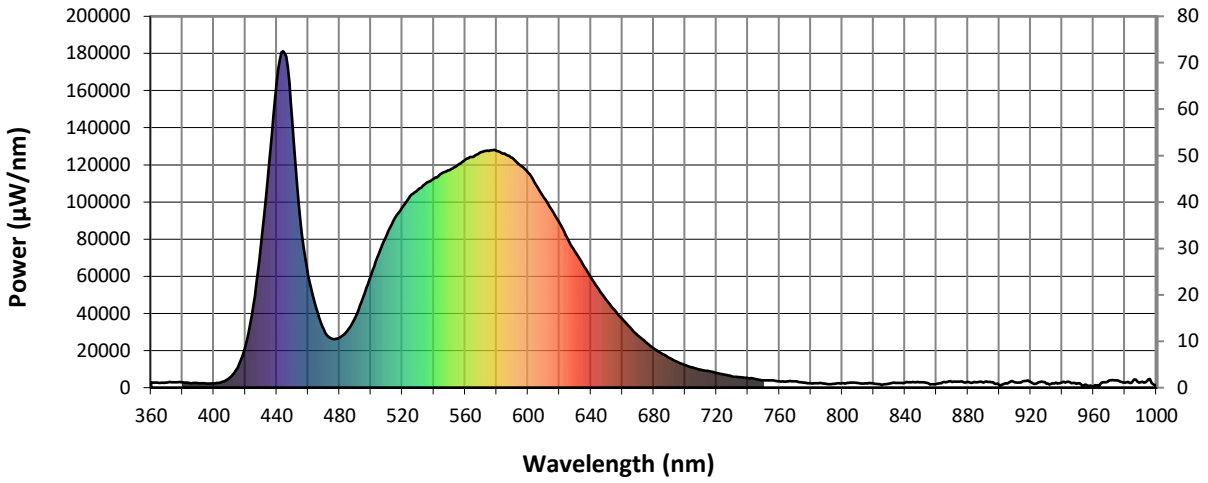

**Scotopic Lumens: 13493.5** **S/P: 1.77**

| 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

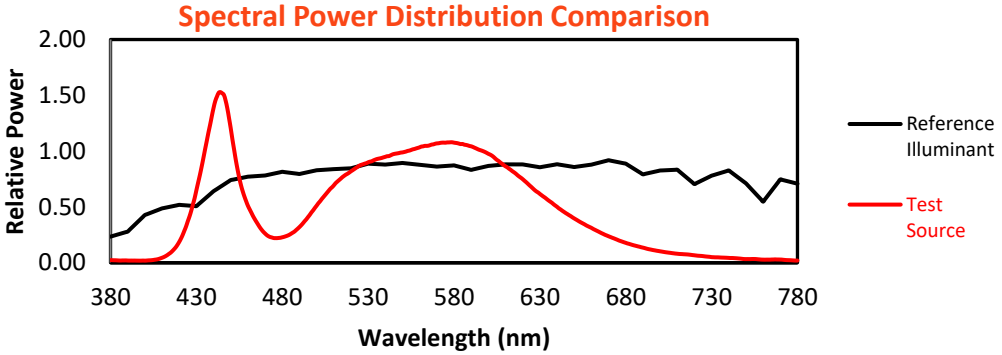
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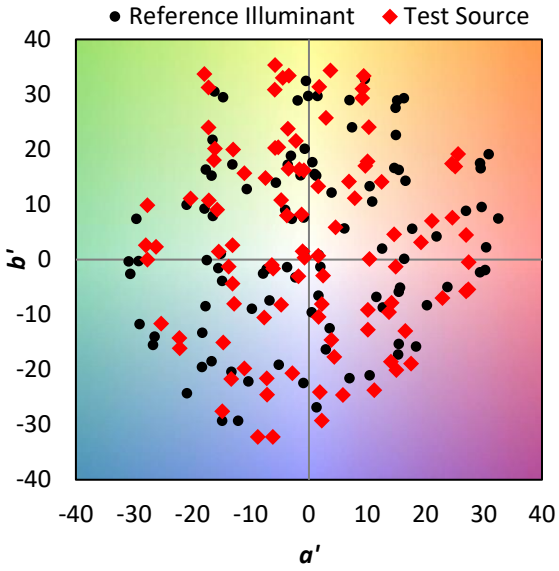
## Summary

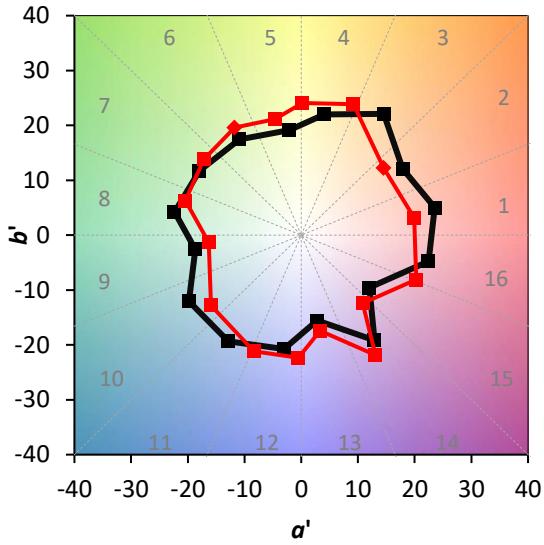
$R_f$ = 74.9
$R_g$ = 96.3
CIE $R_a$ = 73.5
$R_9$ = -28.4

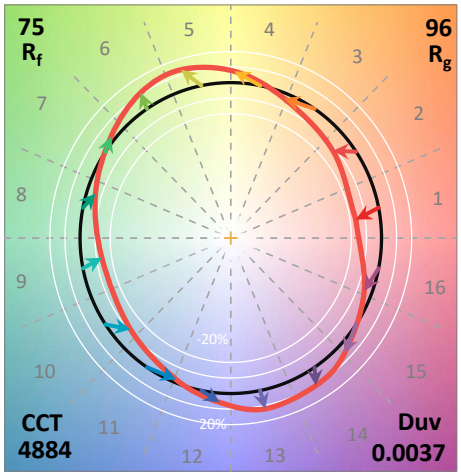
## Spectral Power Distribution Comparison

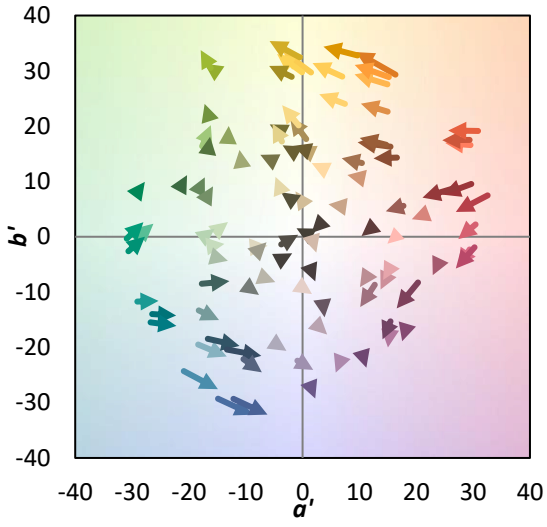



## Color Vector Graphics



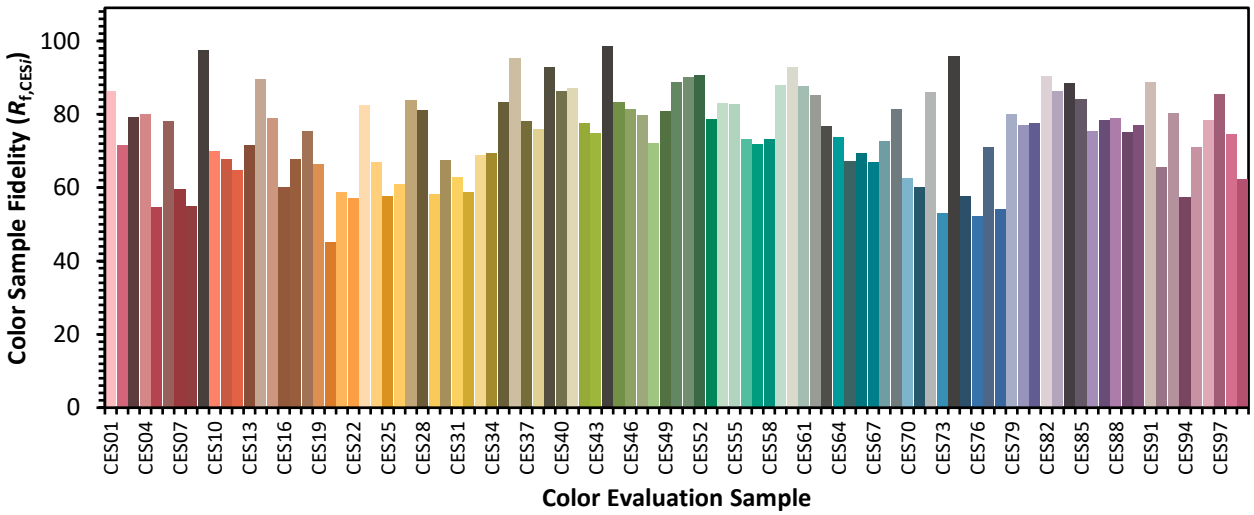
Cooper Lighting Solutions Photometric Lab
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Peachtree City, GA 30269

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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 | |

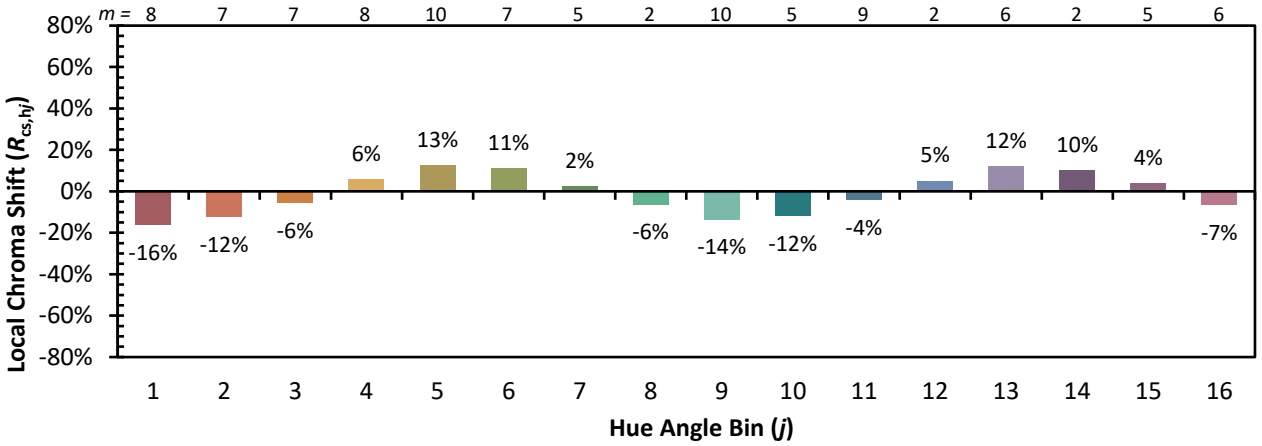


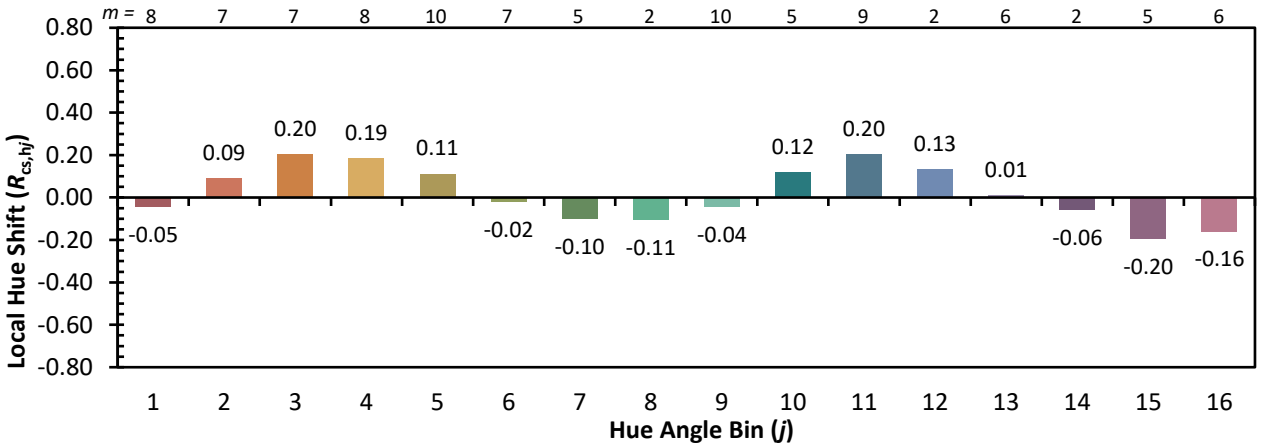
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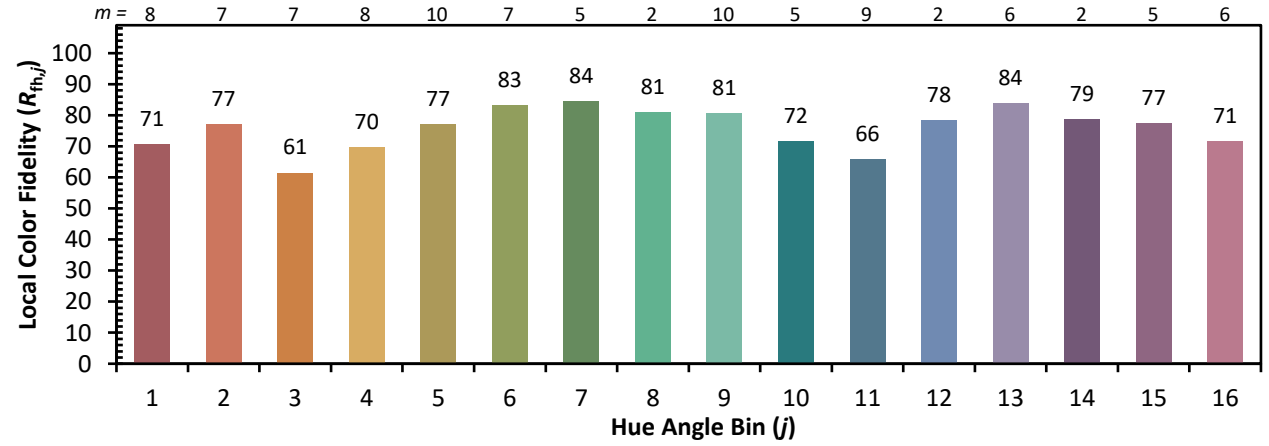
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### Color Rendition by Hue-Angle Bin



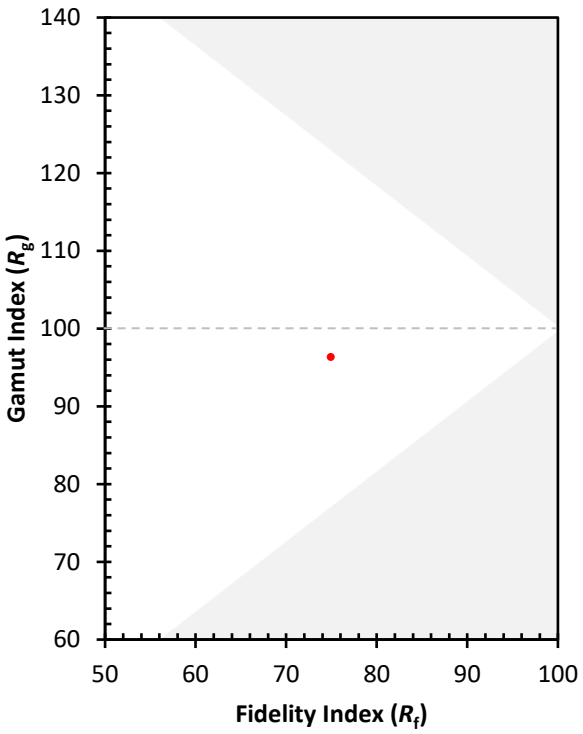



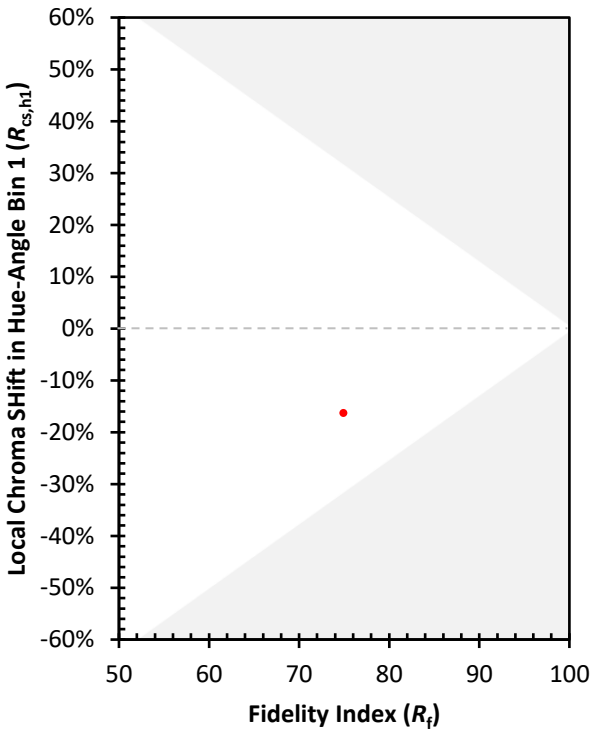
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### Measure Comparisons




(END OF REPORT)