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

Scaled data based on original data using

LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: McGRAW-EDISON

Report Number: P1363477

Luminaire Tested: **GSS-SB2C-750-U-SL3**

Issue Date: 02/18/2026

Report Generated By 670245763

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

Scaled Data Report

**Test Information**

| | |
|---|---|
| Test Method: | LM-79-08 |
| Report Number: | P1363477 |
| Test Lab: | INNOVATION CENTER(G1) |
| Issue Date: | 02/18/2026 |
| Manufacturer: | COOPER LIGHTING SOLUTIONS (FORMERLY EATON) |
| Product Line: | McGRAW-EDISON |
| Catalog Number: | GSS-SB2C-750-U-SL3 |
| Description: | GALLEON II SLIM SITE HIGH DENSITY LED ARRAYS 2SQUARE 102W 70CRI 5000K FIXTURE w/ TYPE III SPILL CONTROL DISTRIBUTION OPTIC |
| Light Source: | (52) 5000K CCT, 70 CRI LEDS |
| Ballast/Driver: | ELECTRONIC DRIVER |

**Summary**

| | |
|---|---|
| Lumens per Lamp: | N/A |
| Luminaire Lumens: | 13626.7 lumens |
| Efficiency: | N/A |
| Efficacy: | 133.6 lumens/watt |
| Luminous Opening: | Rectangular (W 1' x L: 0.5' x H: 0') |
| IES Classification: | Type III - Medium |
| BUG Rating: | B2 - U0 - G3 |

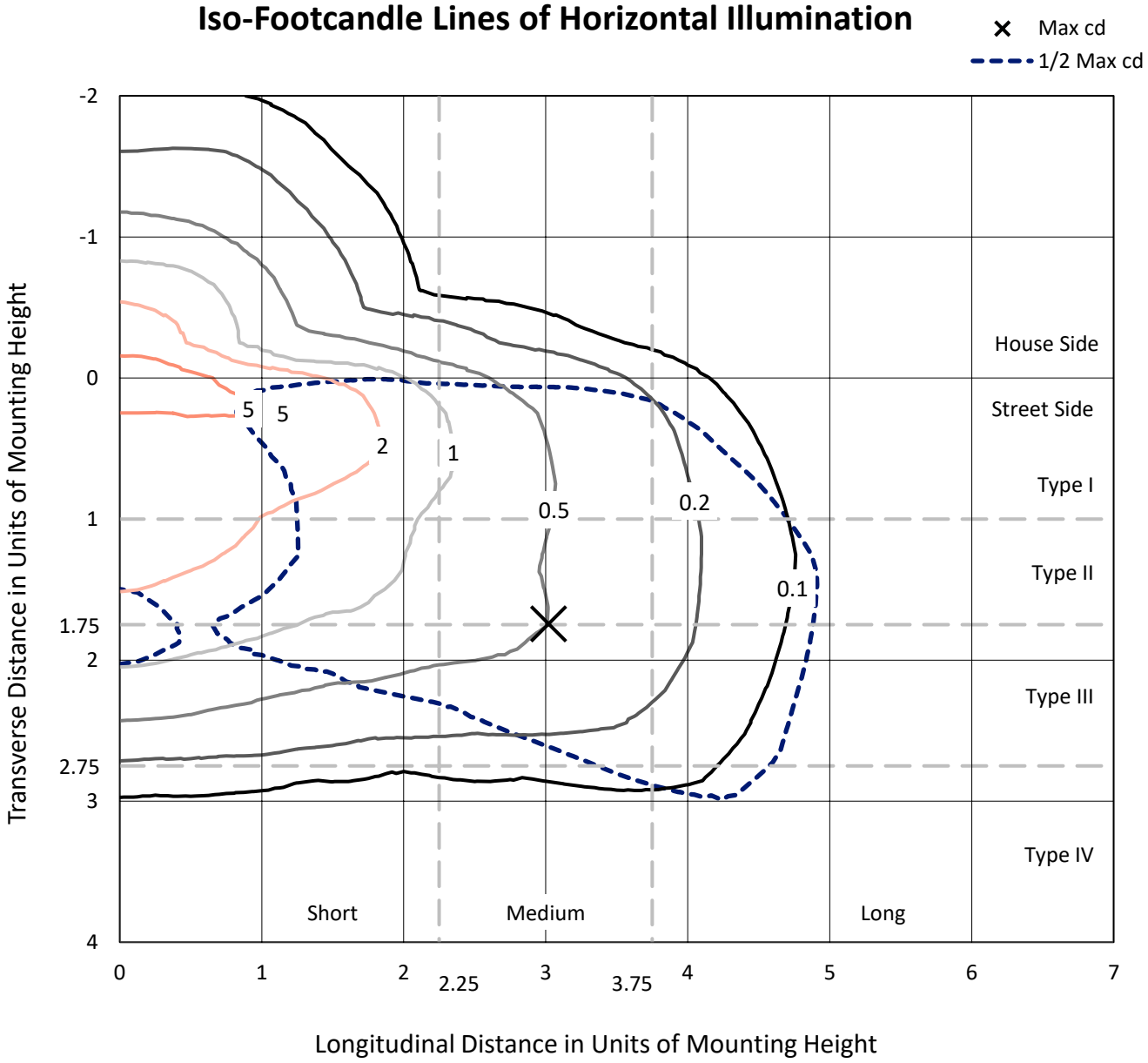
| | |
|---|---|
| Input Watts (W): | 102 |
| Input Voltage (V): | 120 |
| Input Current (Ain): | NR |
| Voltage Rise (V): | NR |
| Power Factor: | 0.98 |
| Total Harmonic Distortion (THDi): | 9.5% |
| Frequency (hertz): | 60 |
| Stabilization Time: | NR |
| Operation Time: | NR |
| Ambient Temperature (°C): | NR |
| Test Distance: | 28.75 FT |

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Scaled Data Report

REPORT NUMBER: P1363477
CATALOG NUMBER: GSS-SB2C-750-U-SL3

## Iso-Footcandle Lines of Horizontal Illumination



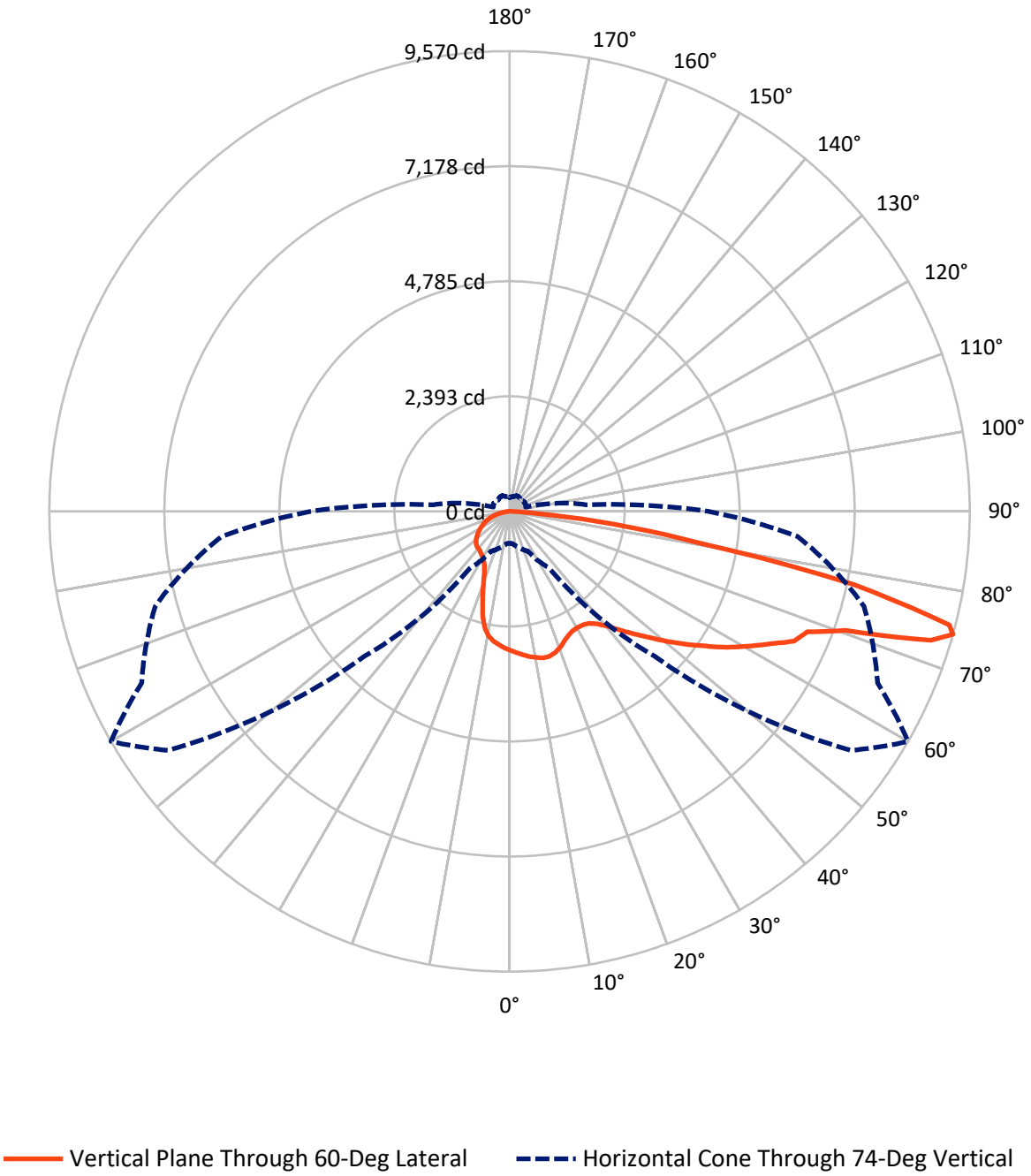

Based on 20 foot mounting height. Maximum calculated value = 7.2 fc
Type III - Medium - N/A

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## Luminous Intensity Polar Plot



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Scaled Data Report

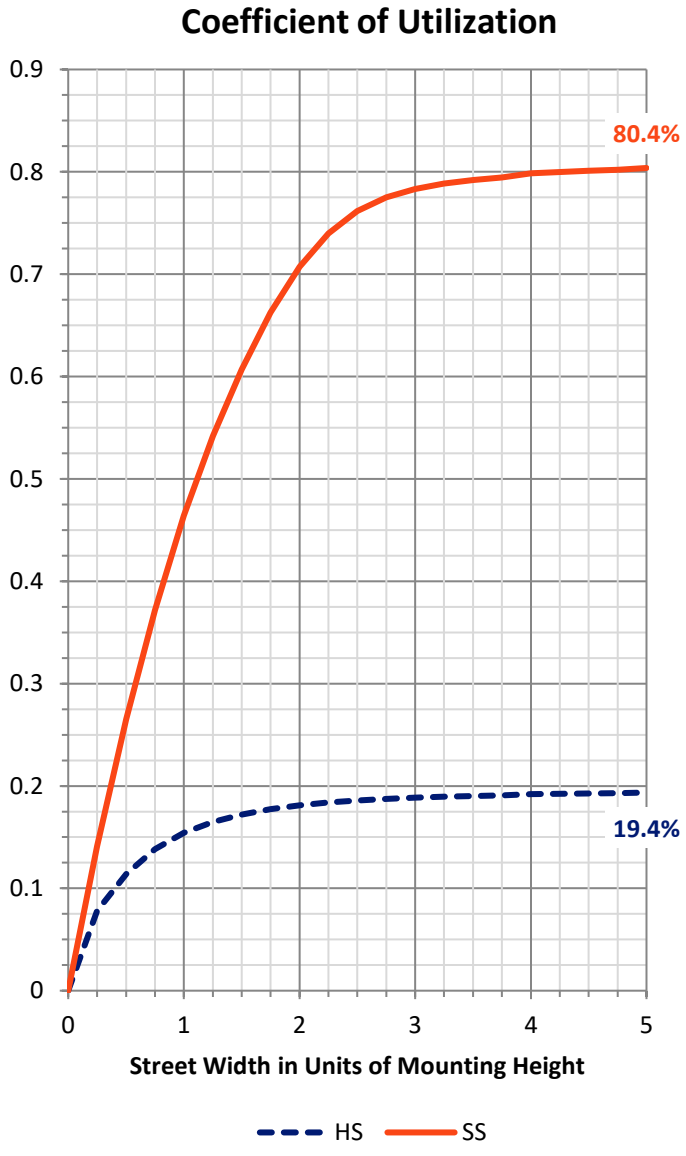
REPORT NUMBER: P1363477
CATALOG NUMBER: GSS-SB2C-750-U-SL3

**FLUX DISTRIBUTION:**

| | | Downward | Upward | Total |
|---|---|---|---|---|
| **House Side** | Lumens | 2659.9 | 0.0 | 2659.9 |
| | % Fixture | 19.5 | 0.0 | 19.5 |
| **Street Side** | Lumens | 10966.8 | 0.0 | 10966.8 |
| | % Fixture | 80.5 | 0.0 | 80.5 |
| **Total** | Lumens | 13626.7 | 0.0 | 13626.7 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

**ZONAL LUMENS:**

| Zone | Lumens | % Fixture |
|---|---|---|
| 0°-10° | 266.0 | 2.0 |
| 10°-20° | 652.6 | 4.8 |
| 20°-30° | 975.7 | 7.2 |
| 30°-40° | 1390.8 | 10.2 |
| 40°-50° | 1999.9 | 14.7 |
| 50°-60° | 2677.8 | 19.7 |
| 60°-70° | 3144.4 | 23.1 |
| 70°-80° | 2242.8 | 16.5 |
| 80°-90° | 276.8 | 2.0 |
| 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° | 13626.7 | 100.0 |
| 0°-180° | 13626.7 | 100.0 |



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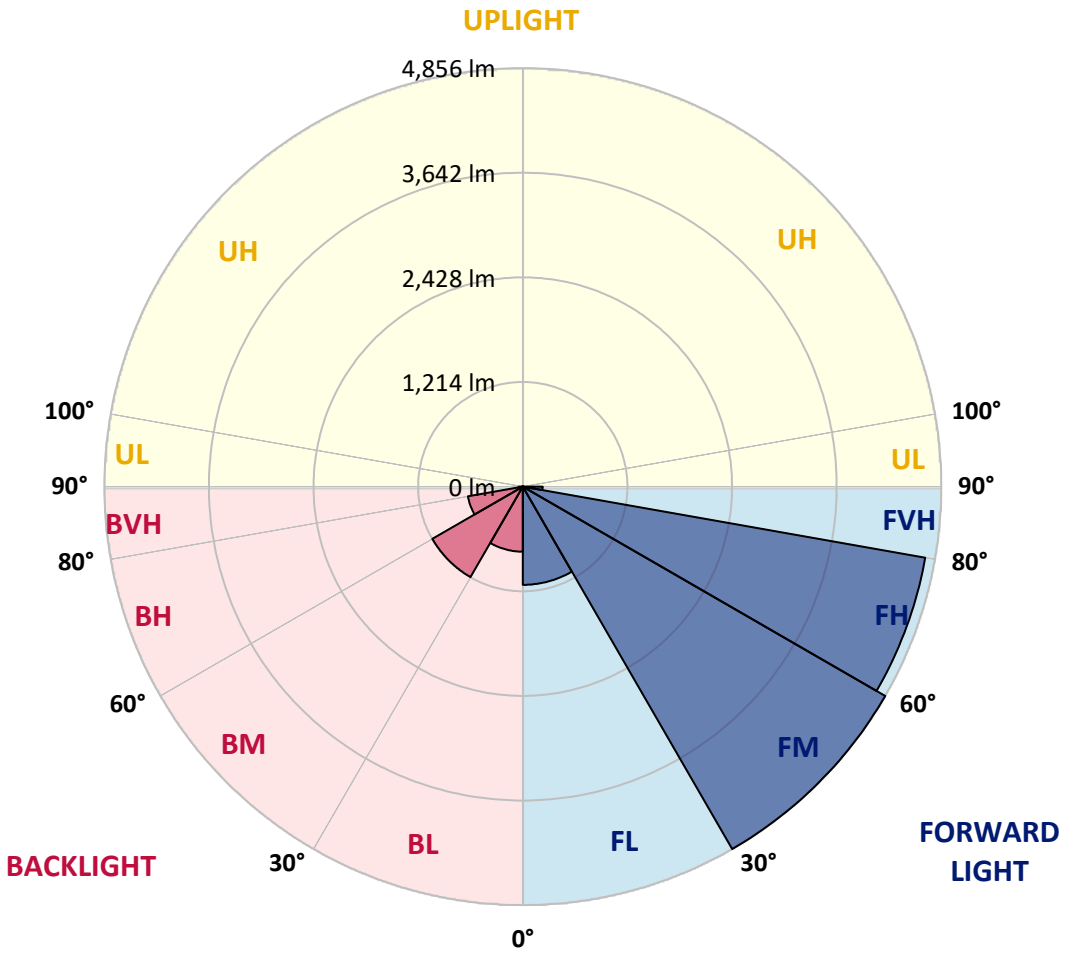
Scaled Data Report

REPORT NUMBER: P1363477
CATALOG NUMBER: GSS-SB2C-750-U-SL3

## LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit B | U | G |
|---|---|---|---|---|---|---|
| FL | (0°-30°) | 1139.4 | 8.4 | | | |
| FM | (30°-60°) | 4856.2 | 35.6 | | | |
| FH | (60°-80°) | 4741.2 | 34.8 | | | G2/5000 |
| FVH | (80°-90°) | 230.0 | 1.7 | | | G3/500 |
| BL | (0°-30°) | 754.9 | 5.5 | B2/1000 | | |
| BM | (30°-60°) | 1212.3 | 8.9 | B2/2500 | | |
| BH | (60°-80°) | 646.0 | 4.7 | B2/1000 | | G2/1000 |
| BVH | (80°-90°) | 46.8 | 0.3 | | | G1/100 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

**BUG Rating: B2-U0-G3**
Type III Medium



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Scaled Data Report

REPORT NUMBER: P1363477
CATALOG NUMBER: GSS-SB2C-750-U-SL3

**CANDELA DISTRIBUTION (FULL):**

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 60° | 65° | 75° | 85° |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0° | 2890.3 | 2890.3 | 2890.3 | 2890.3 | 2890.3 | 2890.3 | 2890.3 | *2890.3* | 2890.3 | 2890.3 | 2890.3 |
| 2.5° | 2981.9 | 2985.3 | 2971.7 | 2961.6 | 2961.6 | 2944.6 | 2944.6 | *2944.6* | 2927.6 | 2924.2 | 2900.5 |
| 5° | 3015.8 | 3012.4 | 3005.7 | 3009.1 | 3012.4 | 3005.7 | 3009.1 | *2998.9* | 2975.1 | 2968.3 | 2931.0 |
| 7.5° | 2920.9 | 2920.9 | 2937.8 | 2971.7 | 3019.2 | 3043.0 | 3056.5 | *3049.8* | 3039.6 | 3019.2 | 2965.0 |
| 10° | 2578.2 | 2602.0 | 2652.9 | 2764.8 | 2903.9 | 3019.2 | 3093.9 | *3090.5* | 3093.9 | 3066.7 | 3005.7 |
| 12.5° | 2276.3 | 2286.5 | 2334.0 | 2432.3 | 2632.5 | 2880.1 | 3087.1 | *3127.8* | 3138.0 | 3121.0 | 3046.4 |
| 15° | 2113.5 | 2110.1 | 2147.4 | 2225.4 | 2378.1 | 2649.5 | 3012.4 | *3124.4* | 3185.5 | 3182.1 | 3104.0 |
| 17.5° | 2042.2 | 2045.6 | 2066.0 | 2116.9 | 2228.8 | 2452.7 | 2880.1 | *3083.7* | 3209.2 | 3249.9 | 3158.3 |
| 20° | 2076.1 | 2066.0 | 2076.1 | 2086.3 | 2147.4 | 2323.8 | 2737.7 | *3012.4* | 3229.6 | 3314.4 | 3219.4 |
| 22.5° | 2147.4 | 2137.2 | 2133.8 | 2127.0 | 2140.6 | 2249.2 | 2608.8 | *2924.2* | 3246.5 | 3399.2 | 3290.6 |
| 25° | 2272.9 | 2262.7 | 2232.2 | 2194.9 | 2177.9 | 2225.4 | 2523.9 | *2849.6* | 3263.5 | 3517.9 | 3382.2 |
| 27.5° | 2452.7 | 2439.1 | 2395.0 | 2306.8 | 2252.6 | 2259.3 | 2496.8 | *2808.9* | 3294.0 | 3633.3 | 3470.4 |
| 30° | 2720.7 | 2713.9 | 2615.5 | 2473.1 | 2361.1 | 2320.4 | 2510.4 | *2798.7* | 3327.9 | 3765.6 | 3558.6 |
| 32.5° | 2961.6 | 2954.8 | 2880.1 | 2720.7 | 2534.1 | 2418.8 | 2544.3 | *2812.3* | 3372.0 | 3935.2 | 3687.5 |
| 35° | 3158.3 | 3144.8 | 3083.7 | 2961.6 | 2771.6 | 2568.0 | 2618.9 | *2859.8* | 3467.0 | 4159.1 | 3843.6 |
| 37.5° | 3358.5 | 3348.3 | 3263.5 | 3134.6 | 3015.8 | 2775.0 | 2744.4 | *2968.3* | 3595.9 | 4464.4 | 4070.9 |
| 40° | 3599.3 | 3585.8 | 3484.0 | 3331.3 | 3226.2 | 3056.5 | 2924.2 | *3141.4* | 3792.7 | 4813.8 | 4328.7 |
| 42.5° | 3830.0 | 3816.4 | 3697.7 | 3565.4 | 3433.1 | 3327.9 | 3178.7 | *3372.0* | 4037.0 | 5258.2 | 4634.0 |
| 45° | 4098.0 | 4098.0 | 3931.8 | 3785.9 | 3646.8 | 3517.9 | 3419.5 | *3636.6* | 4321.9 | 5760.3 | 4973.3 |
| 47.5° | 4349.1 | 4325.3 | 4162.5 | 4003.0 | 3867.3 | 3623.1 | 3650.2 | *3914.8* | 4640.8 | 6269.1 | 5339.6 |
| 50° | 4430.5 | 4423.7 | 4315.1 | 4172.6 | 4057.3 | 3752.0 | 3887.7 | *4247.3* | 5000.4 | 6754.3 | 5685.7 |
| 52.5° | 4525.5 | 4494.9 | 4338.9 | 4318.5 | 4186.2 | 3914.8 | 4179.4 | *4589.9* | 5329.5 | 7195.3 | 5963.8 |
| 55° | 4644.2 | 4610.3 | 4396.5 | 4355.8 | 4284.6 | 4098.0 | 4511.9 | *4942.7* | 5641.6 | 7537.9 | 6225.0 |
| 57.5° | 4861.3 | 4820.6 | 4518.7 | 4430.5 | 4372.8 | 4328.7 | 4888.4 | *5332.8* | 5957.0 | 7805.9 | 6448.9 |
| 60° | 4986.8 | 4952.9 | 4695.1 | 4630.6 | 4545.8 | 4647.6 | 5292.1 | *5692.4* | 6255.6 | 8012.8 | 6622.0 |
| 62.5° | 4922.4 | 4898.6 | 4718.8 | 4841.0 | 4908.8 | 5068.2 | 5753.5 | *6065.6* | 6493.0 | 8168.9 | 6628.7 |
| 65° | 4589.9 | 4542.4 | 4420.3 | 4790.1 | 5326.1 | 5777.3 | 6340.4 | *6503.2* | 6649.1 | 7748.2 | 6228.4 |
| 67.5° | 3792.7 | 3745.2 | 3816.4 | 4196.4 | 5088.6 | 6869.6 | 7147.8 | *6679.6* | 6367.5 | 7364.9 | 6170.8 |
| 70° | 1723.3 | 1645.3 | 2076.1 | 2968.3 | 4210.0 | 6632.1 | 8270.7 | *7412.4* | 6652.5 | 7331.0 | 6055.4 |
| 72.5° | 844.7 | 878.6 | 1014.3 | 1333.2 | 2574.8 | 5092.0 | 9118.8 | *9166.3* | 7619.3 | 7419.2 | 6136.8 |
| 74° | *661.5* | *671.7* | *783.6* | *915.9* | *1438.4* | *4250.7* | *8664.2* | *9570.0* | *8443.7* | *7629.5* | *6011.3* |
| 75° | 569.9 | 583.5 | 695.4 | 763.3 | 926.1 | 3579.0 | 8087.5 | *9447.8* | 8820.2 | 7588.8 | 5733.2 |
| 77.5° | 417.3 | 413.9 | 495.3 | 607.2 | 434.2 | 1594.4 | 6550.7 | *7320.8* | 7520.9 | 6180.9 | 3823.2 |
| 80° | 257.8 | 268.0 | 342.6 | 424.0 | 288.4 | 607.2 | 3850.4 | *3999.6* | 3558.6 | 3579.0 | 1855.6 |
| 82.5° | 156.1 | 162.8 | 183.2 | 220.5 | 159.4 | 213.7 | 1743.7 | *2174.5* | 1801.4 | 1170.4 | 312.1 |
| 85° | 47.5 | 50.9 | 61.1 | 78.0 | 57.7 | 78.0 | 586.9 | *529.2* | 376.6 | 156.1 | 91.6 |
| 87.5° | 3.4 | 3.4 | 6.8 | 6.8 | 10.2 | 17.0 | 23.7 | *27.1* | 30.5 | 33.9 | 33.9 |
| 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: P1363477
CATALOG NUMBER: GSS-SB2C-750-U-SL3

**CANDELA DISTRIBUTION (continued):**

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0° | 2890.3 | 2890.3 | 2890.3 | 2890.3 | 2890.3 | 2890.3 | 2890.3 | 2890.3 | 2890.3 | 2890.3 | 2890.3 |
| 2.5° | 2900.5 | 2890.3 | 2876.8 | 2853.0 | 2836.0 | 2819.1 | 2798.7 | 2768.2 | 2758.0 | 2761.4 | 2768.2 |
| 5° | 2924.2 | 2897.1 | 2856.4 | 2802.1 | 2761.4 | 2727.5 | 2673.2 | 2629.1 | 2602.0 | 2602.0 | 2588.4 |
| 7.5° | 2948.0 | 2910.7 | 2846.2 | 2754.6 | 2683.4 | 2588.4 | 2486.6 | 2384.9 | 2313.6 | 2283.1 | 2255.9 |
| 10° | 2988.7 | 2931.0 | 2825.9 | 2703.7 | 2551.1 | 2361.1 | 2154.2 | 1943.8 | 1811.5 | 1743.7 | 1740.3 |
| 12.5° | 3015.8 | 2958.2 | 2815.7 | 2618.9 | 2330.6 | 1971.0 | 1655.5 | 1482.5 | 1428.2 | 1404.5 | 1397.7 |
| 15° | 3059.9 | 2981.9 | 2791.9 | 2462.9 | 1991.3 | 1560.5 | 1387.5 | 1336.6 | 1333.2 | 1336.6 | 1340.0 |
| 17.5° | 3097.3 | 3002.3 | 2730.9 | 2215.2 | 1597.8 | 1357.0 | 1312.9 | 1309.5 | 1333.2 | 1343.4 | 1353.6 |
| 20° | 3138.0 | 3019.2 | 2622.3 | 1869.2 | 1377.3 | 1295.9 | 1289.1 | 1309.5 | 1343.4 | 1370.5 | 1373.9 |
| 22.5° | 3195.6 | 3032.8 | 2432.3 | 1526.6 | 1272.1 | 1262.0 | 1278.9 | 1299.3 | 1319.6 | 1343.4 | 1350.2 |
| 25° | 3256.7 | 3032.8 | 2171.1 | 1292.5 | 1217.9 | 1245.0 | 1262.0 | 1245.0 | 1238.2 | 1258.6 | 1258.6 |
| 27.5° | 3304.2 | 3009.1 | 1801.4 | 1167.0 | 1180.6 | 1224.7 | 1214.5 | 1177.2 | 1170.4 | 1183.9 | 1180.6 |
| 30° | 3338.1 | 2920.9 | 1428.2 | 1099.1 | 1143.2 | 1180.6 | 1153.4 | 1133.1 | 1119.5 | 1122.9 | 1126.3 |
| 32.5° | 3389.0 | 2785.2 | 1170.4 | 1051.6 | 1112.7 | 1109.3 | 1105.9 | 1085.6 | 1068.6 | 1072.0 | 1075.4 |
| 35° | 3450.1 | 2561.3 | 1024.5 | 1017.7 | 1085.6 | 1058.4 | 1061.8 | 1038.1 | 1017.7 | 1017.7 | 1021.1 |
| 37.5° | 3528.1 | 2293.3 | 963.4 | 1004.1 | 1041.5 | 1038.1 | 1027.9 | 997.4 | 966.8 | 960.0 | 960.0 |
| 40° | 3612.9 | 1964.2 | 932.9 | 997.4 | 1021.1 | 1031.3 | 1010.9 | 973.6 | 892.2 | 841.3 | 837.9 |
| 42.5° | 3667.2 | 1692.8 | 922.7 | 987.2 | 1017.7 | 1027.9 | 1000.8 | 885.4 | 807.4 | 773.5 | 770.1 |
| 45° | 3745.2 | 1543.5 | 922.7 | 960.0 | 1004.1 | 1014.3 | 919.3 | 841.3 | 797.2 | 780.3 | 783.6 |
| 47.5° | 3823.2 | 1543.5 | 922.7 | 939.7 | 966.8 | 980.4 | 854.9 | 821.0 | 780.3 | 780.3 | 793.8 |
| 50° | 3931.8 | 1628.4 | 915.9 | 909.2 | 919.3 | 868.5 | 814.2 | 787.0 | 732.8 | 712.4 | 715.8 |
| 52.5° | 4094.6 | 1757.3 | 888.8 | 865.1 | 868.5 | 804.0 | 787.0 | 746.3 | 692.0 | 651.3 | 641.2 |
| 55° | 4271.0 | 1896.3 | 834.5 | 814.2 | 810.8 | 763.3 | 756.5 | 712.4 | 661.5 | 607.2 | 597.1 |
| 57.5° | 4464.4 | 2008.3 | 766.7 | 763.3 | 753.1 | 722.6 | 732.8 | 702.2 | 631.0 | 559.7 | 549.6 |
| 60° | 4647.6 | 2133.8 | 702.2 | 709.0 | 692.0 | 685.3 | 698.8 | 678.5 | 590.3 | 512.3 | 505.5 |
| 62.5° | 4647.6 | 2130.4 | 644.6 | 651.3 | 647.9 | 631.0 | 654.7 | 641.2 | 536.0 | 471.5 | 464.8 |
| 65° | 4393.2 | 2035.4 | 576.7 | 593.7 | 607.2 | 573.3 | 603.8 | 580.1 | 488.5 | 437.6 | 427.4 |
| 67.5° | 4359.2 | 1998.1 | 508.9 | 525.8 | 549.6 | 512.3 | 532.6 | 508.9 | 444.4 | 400.3 | 393.5 |
| 70° | 4291.4 | 1913.3 | 447.8 | 468.2 | 478.3 | 437.6 | 464.8 | 447.8 | 400.3 | 366.4 | 359.6 |
| 72.5° | 4325.3 | 1838.7 | 383.3 | 407.1 | 410.5 | 373.2 | 400.3 | 393.5 | 352.8 | 329.1 | 315.5 |
| 74° | *4135.3* | *1591.0* | *346.0* | *366.4* | *359.6* | *332.5* | *356.2* | *356.2* | *318.9* | *301.9* | *285.0* |
| 75° | 3884.3 | 1411.2 | 318.9 | 339.2 | 322.3 | 305.3 | 329.1 | 332.5 | 295.1 | 295.1 | 268.0 |
| 77.5° | 2551.1 | 946.5 | 251.0 | 264.6 | 257.8 | 247.6 | 261.2 | 257.8 | 230.7 | 223.9 | 206.9 |
| 80° | 1248.4 | 519.0 | 190.0 | 183.2 | 186.6 | 183.2 | 193.4 | 190.0 | 176.4 | 169.6 | 166.2 |
| 82.5° | 234.1 | 173.0 | 125.5 | 122.1 | 115.3 | 108.6 | 122.1 | 122.1 | 162.8 | 183.2 | 183.2 |
| 85° | 71.2 | 67.8 | 61.1 | 61.1 | 57.7 | 50.9 | 54.3 | 78.0 | 95.0 | 64.5 | 61.1 |
| 87.5° | 30.5 | 30.5 | 27.1 | 23.7 | 17.0 | 17.0 | 13.6 | 13.6 | 13.6 | 13.6 | 13.6 |
| 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-79-2019: Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Report Prepared for

Cooper Lighting Solutions

McGraw-Edison

Report Number: SP1-2407-184-6

Test Date: 10/10/2024

Luminaire Tested: GSS-SB1A-750-U-5WQ

Data in this report applies to families of products including GSS-SB1A-750-U-5WQ

Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

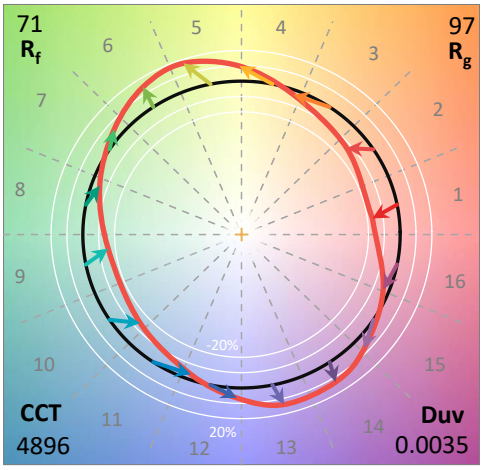
## Test Information

| | |
|---|---|
| Test Method: | LM-79-2019 |
| Report Number: | SP1-2407-184-6 |
| Test Lab: | COOPER LIGHTING SOLUTIONS |
| Photometer: | SP1 - 76IN SPHERE |
| Measurement Geometry: | 4π |
| Issue Date: | 10/15/2024 |
| Manufacturer: | COOPER LIGHTING SOLUTIONS |
| Product Line: | McGraw-Edison |
| Catalog Number: | **GSS-SB1A-750-U-5WQ** |
| Description: | GALLEON II SITE SLIM 1SQ 350MA 5WQ HIGH DENSITY LIGHTSQUARE WITH 70 CRI 5000K CCT 26 LEDS |

## Spectral Parameters

| | |
|---|---|
| CCT (K): | 4896 |
| CIE u': | 0.2101 |
| CIE v': | 0.4901 |
| Duv: | 0.0035 |
| CIE x: | 0.3489 |
| CIE y: | 0.3618 |
| CIE z: | 0.2893 |
| Peak Wavelength (nm): | 443 |
| Dominant Wavelength (nm): | 570 |
| Purity: | 13.25435 |
| Rf: | 70.7 |
| Rg: | 96.8 |

| | |
|---|---|
| CRI (Ra): | 70.2 |
| R1: | 68.1 |
| R2: | 73.9 |
| R3: | 79.4 |
| R4: | 72.1 |
| R5: | 69.2 |
| R6: | 65.7 |
| R7: | 78.1 |
| R8: | 55.3 |
| R9: | -35.1 |
| R10: | 39.3 |
| R11: | 71.1 |
| R12: | 43.8 |
| R13: | 68.1 |
| R14: | 88.4 |
| R15: | 59.7 |




## Test Conditions

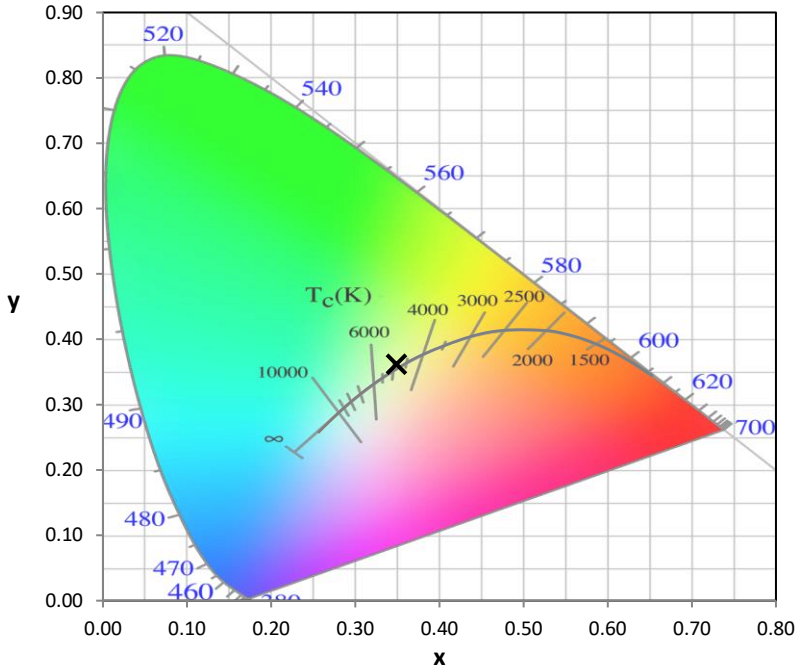
| | |
|---|---|
| Stabilization Time: | 21M |
| Operation Time: | 1H 21M |
| Sphere Temperature (°C): | 25.2 |

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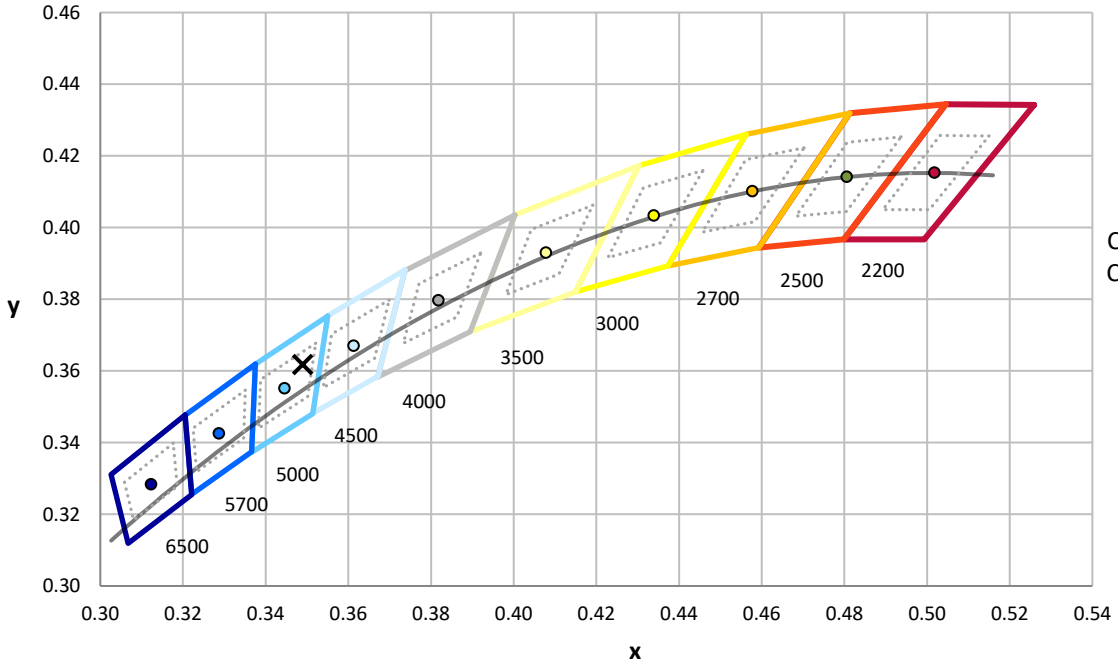
| Measurement and Test Equipment | | | |
|---|---|---|---|
| Instrument | Identification Number | Calibration Date | Calibration Due Date |
| Photometer | IN0058 | 6/18/2024 | 12/18/2024 |
| Power Meter | INXT2011004 | 2/8/2024 | 2/8/2025 |
| AC Power Source | IN0063 | 10/24/2023 | 10/24/2024 |
| DC Power Source | IN0208 | 10/24/2023 | 10/24/2024 |
| Sphere Thermometer | IN0085 | 10/24/2023 | 10/24/2024 |
| Room Thermometer | IN0046 | 10/24/2023 | 10/24/2024 |

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## CIE 1931 Chromaticity Diagram




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

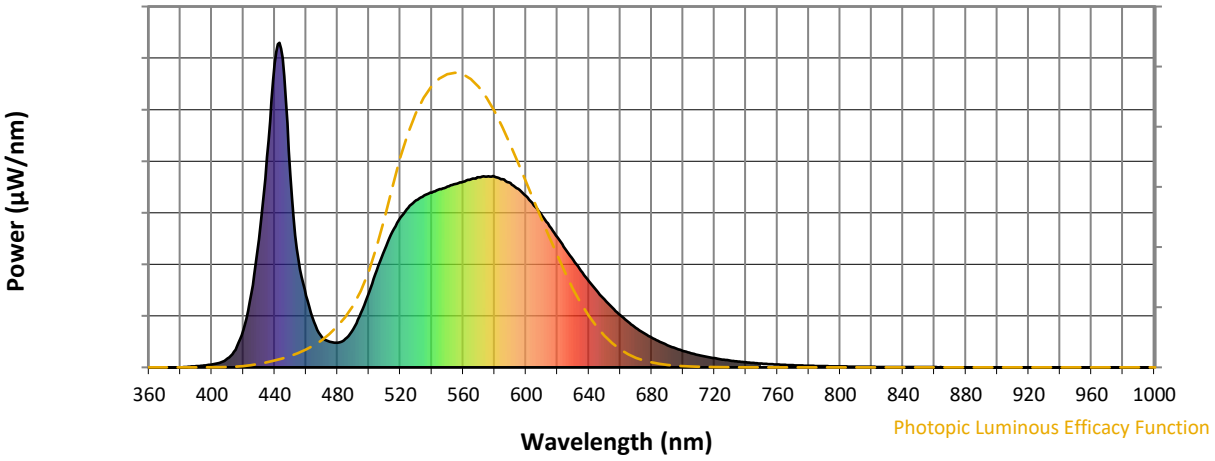



CCT = 4896K
CIE x = 0.3489
CIE y = 0.3618
Duv = 0.0035

Point lies inside the ANSI 5000K 4-step quadrangle

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## Photopic Flux vs. Wavelength

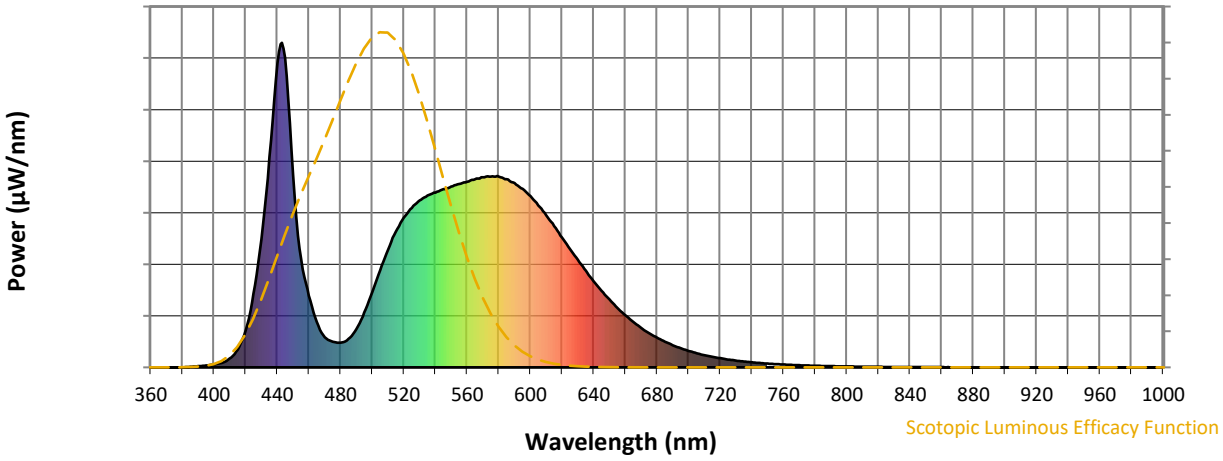



## Photopic Lumens: NR

| λ (nm) | Power W^/nm | Lumens (ϕ/nm) | λ (nm) | Power W^/nm | Lumens (ϕ/nm) | λ (nm) | Power W^/nm | Lumens (ϕ/nm) | λ (nm) | Power W^/nm | Lumens (ϕ/nm) | λ (nm) | Power W^/nm | Lumens (ϕ/nm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 360 | 0 | NR | 490 | 118 | NR | 620 | 401 | NR | 750 | 12 | NR | 880 | 0 | NR |
| 365 | 0 | NR | 495 | 168 | NR | 625 | 365 | NR | 755 | 10 | NR | 885 | 0 | NR |
| 370 | 0 | NR | 500 | 230 | NR | 630 | 331 | NR | 760 | 9 | NR | 890 | 0 | NR |
| 375 | 0 | NR | 505 | 299 | NR | 635 | 298 | NR | 765 | 8 | NR | 895 | 0 | NR |
| 380 | 0 | NR | 510 | 362 | NR | 640 | 266 | NR | 770 | 6 | NR | 900 | 0 | NR |
| 385 | 2 | NR | 515 | 418 | NR | 645 | 236 | NR | 775 | 6 | NR | 905 | 0 | NR |
| 390 | 4 | NR | 520 | 461 | NR | 650 | 209 | NR | 780 | 5 | NR | 910 | 0 | NR |
| 395 | 6 | NR | 525 | 491 | NR | 655 | 184 | NR | 785 | 4 | NR | 915 | 0 | NR |
| 400 | 9 | NR | 530 | 514 | NR | 660 | 160 | NR | 790 | 4 | NR | 920 | 0 | NR |
| 405 | 14 | NR | 535 | 530 | NR | 665 | 140 | NR | 795 | 3 | NR | 925 | 0 | NR |
| 410 | 27 | NR | 540 | 539 | NR | 670 | 122 | NR | 800 | 3 | NR | 930 | 0 | NR |
| 415 | 55 | NR | 545 | 549 | NR | 675 | 106 | NR | 805 | 2 | NR | 935 | 0 | NR |
| 420 | 115 | NR | 550 | 557 | NR | 680 | 92 | NR | 810 | 2 | NR | 940 | 0 | NR |
| 425 | 226 | NR | 555 | 565 | NR | 685 | 79 | NR | 815 | 2 | NR | 945 | 0 | NR |
| 430 | 395 | NR | 560 | 572 | NR | 690 | 68 | NR | 820 | 2 | NR | 950 | 0 | NR |
| 435 | 648 | NR | 565 | 580 | NR | 695 | 59 | NR | 825 | 1 | NR | 955 | 0 | NR |
| 440 | 937 | NR | 570 | 586 | NR | 700 | 51 | NR | 830 | 1 | NR | 960 | 0 | NR |
| 445 | 953 | NR | 575 | 588 | NR | 705 | 44 | NR | 835 | 1 | NR | 965 | 0 | NR |
| 450 | 591 | NR | 580 | 588 | NR | 710 | 38 | NR | 840 | 1 | NR | 970 | 0 | NR |
| 455 | 334 | NR | 585 | 580 | NR | 715 | 32 | NR | 845 | 1 | NR | 975 | 0 | NR |
| 460 | 221 | NR | 590 | 568 | NR | 720 | 28 | NR | 850 | 1 | NR | 980 | 0 | NR |
| 465 | 140 | NR | 595 | 550 | NR | 725 | 24 | NR | 855 | 1 | NR | 985 | 0 | NR |
| 470 | 93 | NR | 600 | 527 | NR | 730 | 21 | NR | 860 | 1 | NR | 990 | 0 | NR |
| 475 | 79 | NR | 605 | 499 | NR | 735 | 18 | NR | 865 | 0 | NR | 995 | 0 | NR |
| 480 | 76 | NR | 610 | 469 | NR | 740 | 15 | NR | 870 | 0 | NR | 1000 | 0 | NR |
| 485 | 87 | NR | 615 | 435 | NR | 745 | 13 | NR | 875 | 0 | NR | | | |

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## Scotopic Flux vs. Wavelength

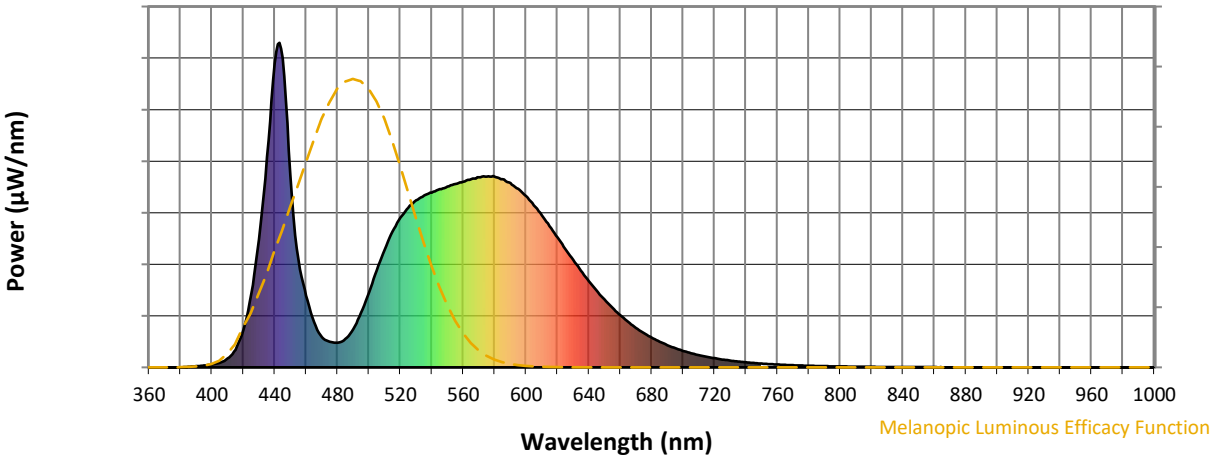



**Scotopic Lumens: NR** **S/P: 1.7**

| λ (nm) | Power W^/nm | Lumens (ϕ/nm) | λ (nm) | Power W^/nm | Lumens (ϕ/nm) | λ (nm) | Power W^/nm | Lumens (ϕ/nm) | λ (nm) | Power W^/nm | Lumens (ϕ/nm) | λ (nm) | Power W^/nm | Lumens (ϕ/nm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 360 | 0 | NR | 490 | 118 | NR | 620 | 401 | NR | 750 | 12 | NR | 880 | 0 | NR |
| 365 | 0 | NR | 495 | 168 | NR | 625 | 365 | NR | 755 | 10 | NR | 885 | 0 | NR |
| 370 | 0 | NR | 500 | 230 | NR | 630 | 331 | NR | 760 | 9 | NR | 890 | 0 | NR |
| 375 | 0 | NR | 505 | 299 | NR | 635 | 298 | NR | 765 | 8 | NR | 895 | 0 | NR |
| 380 | 0 | NR | 510 | 362 | NR | 640 | 266 | NR | 770 | 6 | NR | 900 | 0 | NR |
| 385 | 2 | NR | 515 | 418 | NR | 645 | 236 | NR | 775 | 6 | NR | 905 | 0 | NR |
| 390 | 4 | NR | 520 | 461 | NR | 650 | 209 | NR | 780 | 5 | NR | 910 | 0 | NR |
| 395 | 6 | NR | 525 | 491 | NR | 655 | 184 | NR | 785 | 4 | NR | 915 | 0 | NR |
| 400 | 9 | NR | 530 | 514 | NR | 660 | 160 | NR | 790 | 4 | NR | 920 | 0 | NR |
| 405 | 14 | NR | 535 | 530 | NR | 665 | 140 | NR | 795 | 3 | NR | 925 | 0 | NR |
| 410 | 27 | NR | 540 | 539 | NR | 670 | 122 | NR | 800 | 3 | NR | 930 | 0 | NR |
| 415 | 55 | NR | 545 | 549 | NR | 675 | 106 | NR | 805 | 2 | NR | 935 | 0 | NR |
| 420 | 115 | NR | 550 | 557 | NR | 680 | 92 | NR | 810 | 2 | NR | 940 | 0 | NR |
| 425 | 226 | NR | 555 | 565 | NR | 685 | 79 | NR | 815 | 2 | NR | 945 | 0 | NR |
| 430 | 395 | NR | 560 | 572 | NR | 690 | 68 | NR | 820 | 2 | NR | 950 | 0 | NR |
| 435 | 648 | NR | 565 | 580 | NR | 695 | 59 | NR | 825 | 1 | NR | 955 | 0 | NR |
| 440 | 937 | NR | 570 | 586 | NR | 700 | 51 | NR | 830 | 1 | NR | 960 | 0 | NR |
| 445 | 953 | NR | 575 | 588 | NR | 705 | 44 | NR | 835 | 1 | NR | 965 | 0 | NR |
| 450 | 591 | NR | 580 | 588 | NR | 710 | 38 | NR | 840 | 1 | NR | 970 | 0 | NR |
| 455 | 334 | NR | 585 | 580 | NR | 715 | 32 | NR | 845 | 1 | NR | 975 | 0 | NR |
| 460 | 221 | NR | 590 | 568 | NR | 720 | 28 | NR | 850 | 1 | NR | 980 | 0 | NR |
| 465 | 140 | NR | 595 | 550 | NR | 725 | 24 | NR | 855 | 1 | NR | 985 | 0 | NR |
| 470 | 93 | NR | 600 | 527 | NR | 730 | 21 | NR | 860 | 1 | NR | 990 | 0 | NR |
| 475 | 79 | NR | 605 | 499 | NR | 735 | 18 | NR | 865 | 0 | NR | 995 | 0 | NR |
| 480 | 76 | NR | 610 | 469 | NR | 740 | 15 | NR | 870 | 0 | NR | 1000 | 0 | NR |
| 485 | 87 | NR | 615 | 435 | NR | 745 | 13 | NR | 875 | 0 | NR | | | |

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## Melanopic Flux vs. Wavelength




**Melanopic Lumens: NR** **M/P: 3.37**

| λ (nm) | Power W^/nm | Lumens (ϕ/nm) | λ (nm) | Power W^/nm | Lumens (ϕ/nm) | λ (nm) | Power W^/nm | Lumens (ϕ/nm) | λ (nm) | Power W^/nm | Lumens (ϕ/nm) | λ (nm) | Power W^/nm | Lumens (ϕ/nm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 360 | 0 | NR | 490 | 118 | NR | 620 | 401 | NR | 750 | 12 | NR | 880 | 0 | NR |
| 365 | 0 | NR | 495 | 168 | NR | 625 | 365 | NR | 755 | 10 | NR | 885 | 0 | NR |
| 370 | 0 | NR | 500 | 230 | NR | 630 | 331 | NR | 760 | 9 | NR | 890 | 0 | NR |
| 375 | 0 | NR | 505 | 299 | NR | 635 | 298 | NR | 765 | 8 | NR | 895 | 0 | NR |
| 380 | 0 | NR | 510 | 362 | NR | 640 | 266 | NR | 770 | 6 | NR | 900 | 0 | NR |
| 385 | 2 | NR | 515 | 418 | NR | 645 | 236 | NR | 775 | 6 | NR | 905 | 0 | NR |
| 390 | 4 | NR | 520 | 461 | NR | 650 | 209 | NR | 780 | 5 | NR | 910 | 0 | NR |
| 395 | 6 | NR | 525 | 491 | NR | 655 | 184 | NR | 785 | 4 | NR | 915 | 0 | NR |
| 400 | 9 | NR | 530 | 514 | NR | 660 | 160 | NR | 790 | 4 | NR | 920 | 0 | NR |
| 405 | 14 | NR | 535 | 530 | NR | 665 | 140 | NR | 795 | 3 | NR | 925 | 0 | NR |
| 410 | 27 | NR | 540 | 539 | NR | 670 | 122 | NR | 800 | 3 | NR | 930 | 0 | NR |
| 415 | 55 | NR | 545 | 549 | NR | 675 | 106 | NR | 805 | 2 | NR | 935 | 0 | NR |
| 420 | 115 | NR | 550 | 557 | NR | 680 | 92 | NR | 810 | 2 | NR | 940 | 0 | NR |
| 425 | 226 | NR | 555 | 565 | NR | 685 | 79 | NR | 815 | 2 | NR | 945 | 0 | NR |
| 430 | 395 | NR | 560 | 572 | NR | 690 | 68 | NR | 820 | 2 | NR | 950 | 0 | NR |
| 435 | 648 | NR | 565 | 580 | NR | 695 | 59 | NR | 825 | 1 | NR | 955 | 0 | NR |
| 440 | 937 | NR | 570 | 586 | NR | 700 | 51 | NR | 830 | 1 | NR | 960 | 0 | NR |
| 445 | 953 | NR | 575 | 588 | NR | 705 | 44 | NR | 835 | 1 | NR | 965 | 0 | NR |
| 450 | 591 | NR | 580 | 588 | NR | 710 | 38 | NR | 840 | 1 | NR | 970 | 0 | NR |
| 455 | 334 | NR | 585 | 580 | NR | 715 | 32 | NR | 845 | 1 | NR | 975 | 0 | NR |
| 460 | 221 | NR | 590 | 568 | NR | 720 | 28 | NR | 850 | 1 | NR | 980 | 0 | NR |
| 465 | 140 | NR | 595 | 550 | NR | 725 | 24 | NR | 855 | 1 | NR | 985 | 0 | NR |
| 470 | 93 | NR | 600 | 527 | NR | 730 | 21 | NR | 860 | 1 | NR | 990 | 0 | NR |
| 475 | 79 | NR | 605 | 499 | NR | 735 | 18 | NR | 865 | 0 | NR | 995 | 0 | NR |
| 480 | 76 | NR | 610 | 469 | NR | 740 | 15 | NR | 870 | 0 | NR | 1000 | 0 | NR |
| 485 | 87 | NR | 615 | 435 | NR | 745 | 13 | NR | 875 | 0 | NR | | | |

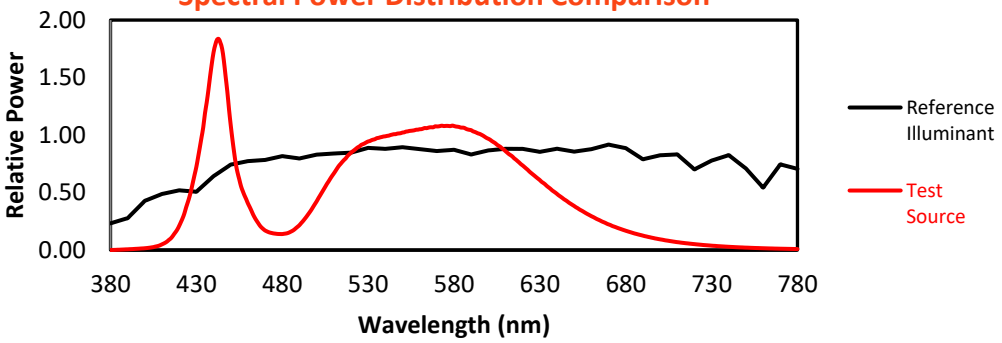
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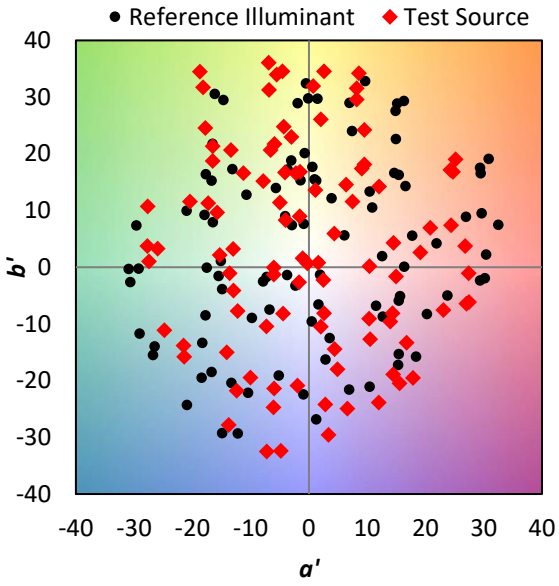
## Summary

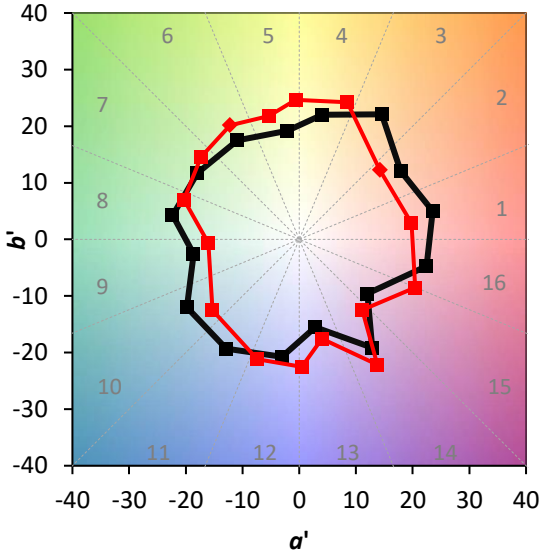
$R_f$ = 70.7
$R_g$ = 96.8
CIE $R_a$ = 70.2
$R_9$ = -35.1

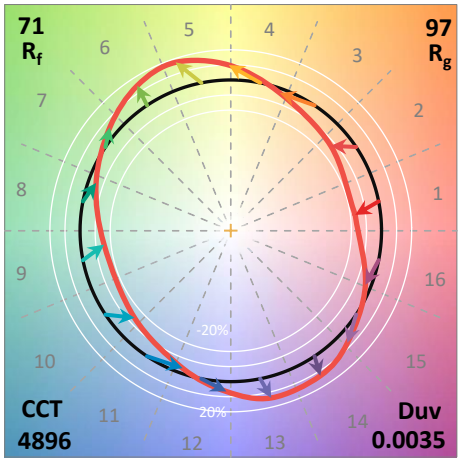
## Spectral Power Distribution Comparison

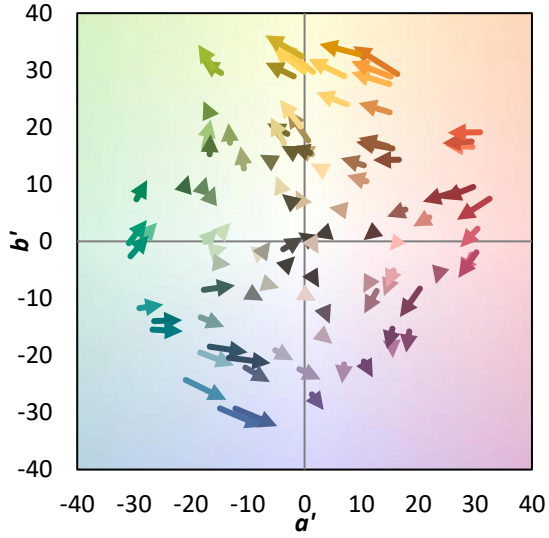



## Color Vector Graphics



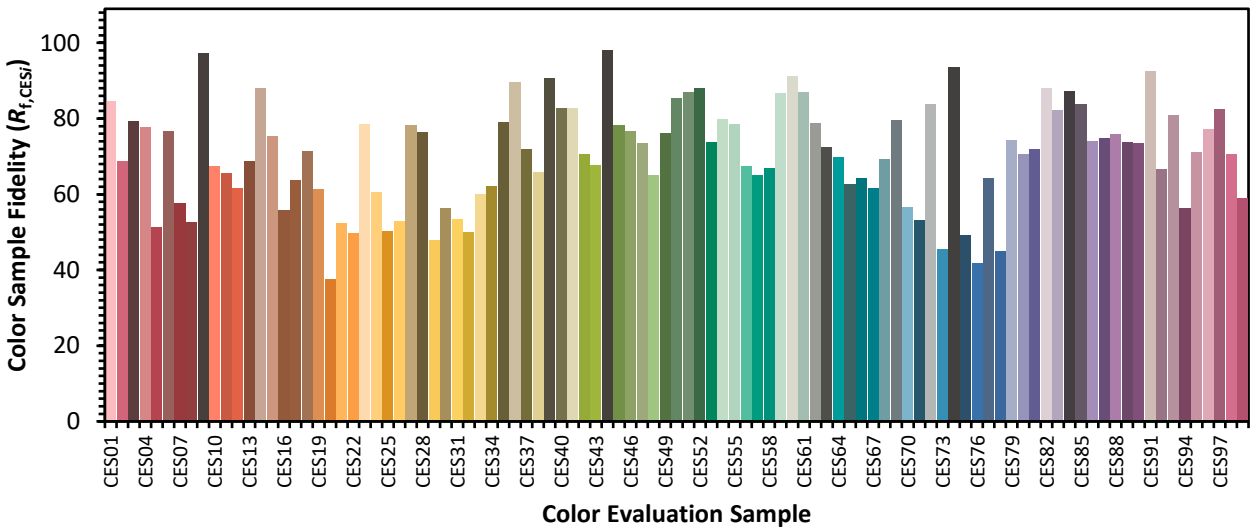



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## Individual Sample Fidelity Index ($R_{f,i}$)

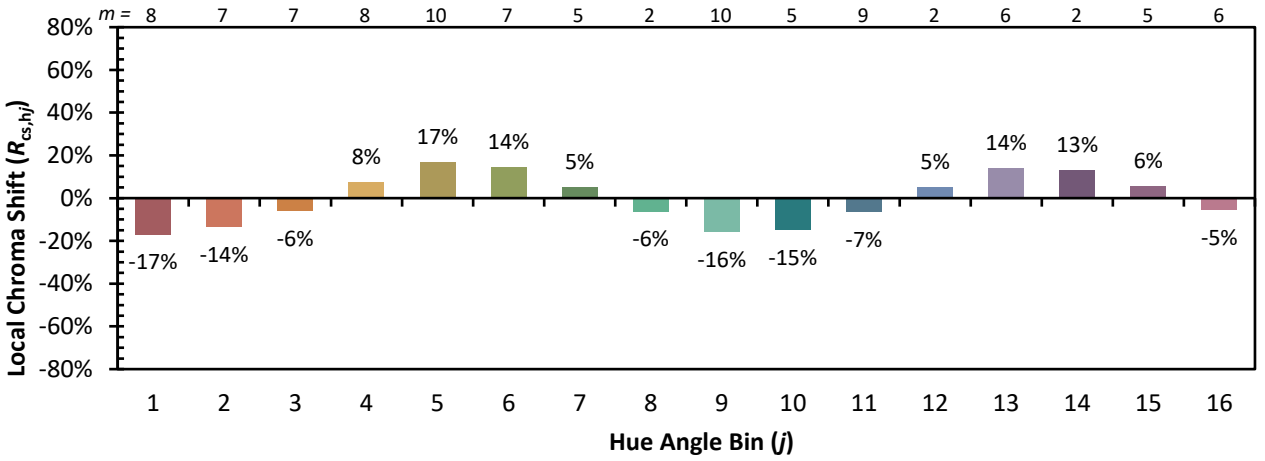
| | | | |
|---|---|---|---|
| CES01 = 85 | CES26 = 53 | CES51 = 87 | CES76 = 42 |
| CES02 = 59 | CES27 = 78 | CES52 = 88 | CES77 = 64 |
| CES03 = 30 | CES28 = 76 | CES53 = 74 | CES78 = 45 |
| CES04 = 69 | CES29 = 48 | CES54 = 80 | CES79 = 74 |
| CES05 = 46 | CES30 = 56 | CES55 = 79 | CES80 = 71 |
| CES06 = 50 | CES31 = 54 | CES56 = 68 | CES81 = 72 |
| CES07 = 39 | CES32 = 50 | CES57 = 65 | CES82 = 88 |
| CES08 = 38 | CES33 = 60 | CES58 = 67 | CES83 = 82 |
| CES09 = 29 | CES34 = 62 | CES59 = 87 | CES84 = 87 |
| CES10 = 72 | CES35 = 79 | CES60 = 91 | CES85 = 84 |
| CES11 = 56 | CES36 = 90 | CES61 = 87 | CES86 = 74 |
| CES12 = 61 | CES37 = 72 | CES62 = 79 | CES87 = 75 |
| CES13 = 41 | CES38 = 66 | CES63 = 72 | CES88 = 76 |
| CES14 = 74 | CES39 = 91 | CES64 = 70 | CES89 = 74 |
| CES15 = 70 | CES40 = 83 | CES65 = 63 | CES90 = 73 |
| CES16 = 46 | CES41 = 83 | CES66 = 64 | CES91 = 92 |
| CES17 = 49 | CES42 = 70 | CES67 = 62 | CES92 = 67 |
| CES18 = 55 | CES43 = 68 | CES68 = 69 | CES93 = 81 |
| CES19 = 71 | CES44 = 98 | CES69 = 80 | CES94 = 56 |
| CES20 = 64 | CES45 = 78 | CES70 = 56 | CES95 = 71 |
| CES21 = 85 | CES46 = 77 | CES71 = 53 | CES96 = 77 |
| CES22 = 77 | CES47 = 73 | CES72 = 84 | CES97 = 82 |
| CES23 = 91 | CES48 = 65 | CES73 = 46 | CES98 = 71 |
| CES24 = 90 | CES49 = 76 | CES74 = 94 | CES99 = 59 |
| CES25 = 71 | CES50 = 85 | CES75 = 49 | |

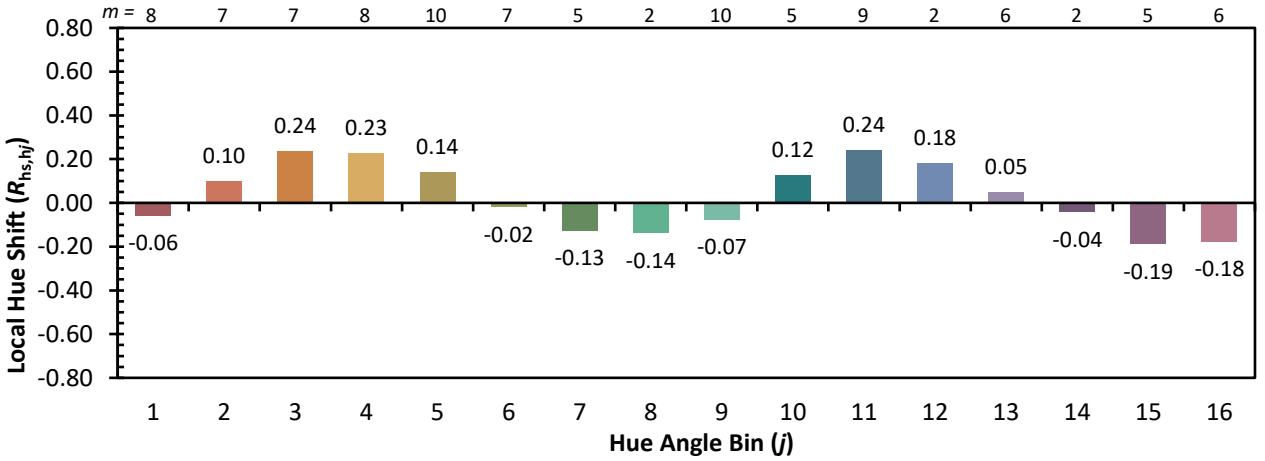


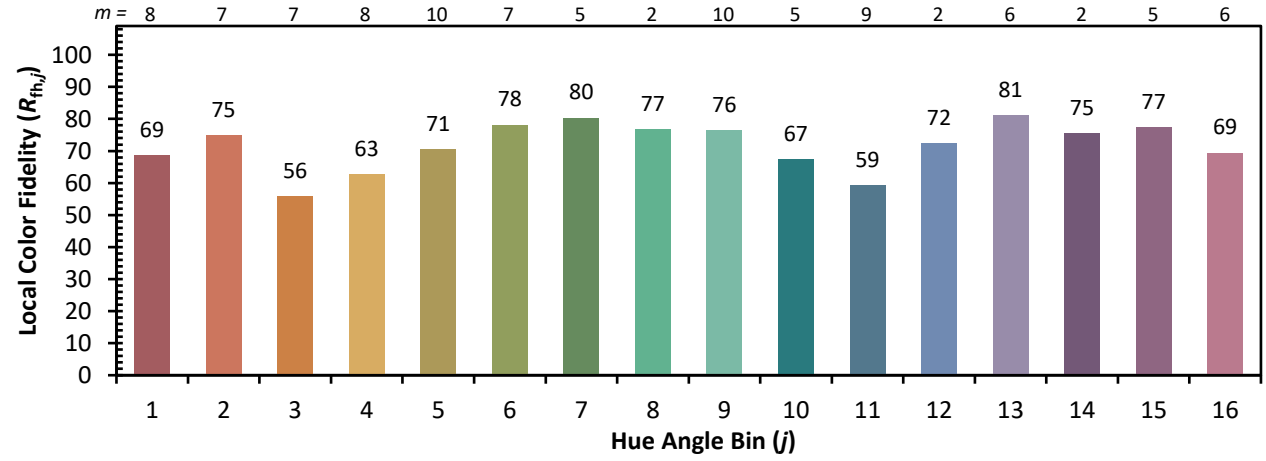
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## Color Rendition by Hue-Angle Bin



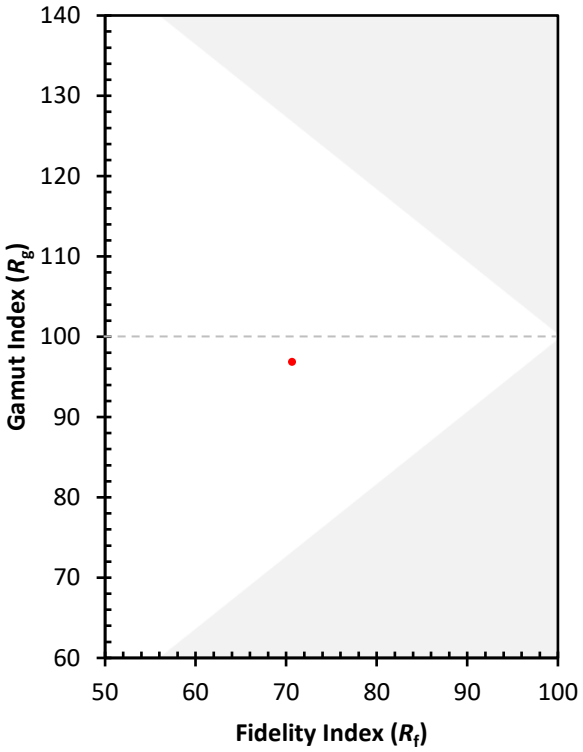



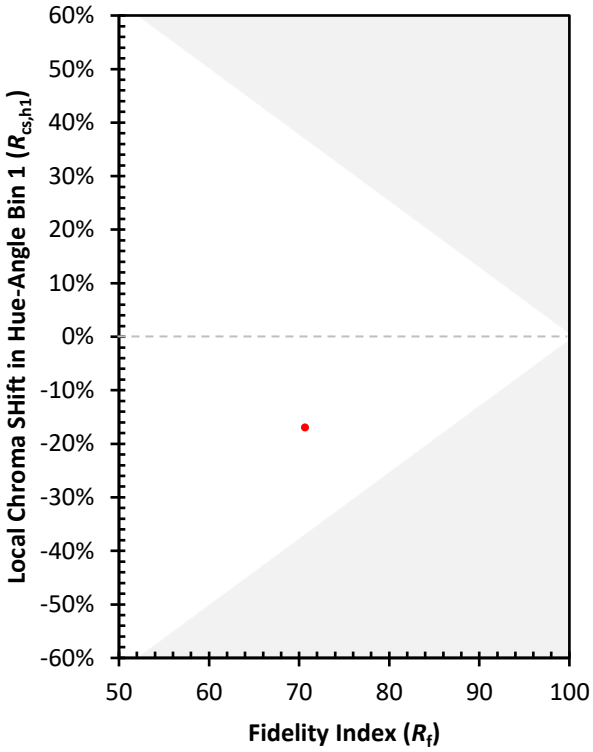



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## Measure Comparisons




(END OF REPORT)