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

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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: P1501577

Luminaire Tested: GSS-SB4A-840-U-T2LG

Issue Date: 07/20/2026

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: | P1501577 |
| Test Lab: | INNOVATION CENTER(G1) |
| Issue Date: | 7/20/2026 |
| Manufacturer: | COOPER LIGHTING SOLUTIONS |
| Product Line: | McGRAW-EDISON |
| Catalog Number: | GSS-SB4A-840-U-T2LG |
| Description: | GALLEON II SLIM SITE HIGH DENSITY LED ARRAYS 4SQUARE 114W 80CRI 4000K FIXTURE w/ TYPE II LOW GLARE DISTRIBUTION FIXTURE |
| Light Source: | (104) 4000K CCT, 80 CRI LEDS |
| Ballast/Driver: | ELECTRONIC DRIVER |

**Summary**

| | |
|---|---|
| Lumens per Lamp: | N/A |
| Luminaire Lumens: | 16598.5 lumens |
| Efficiency: | N/A |
| Efficacy: | 145.6 lumens/watt |
| Luminous Opening: | Rectangular (W 1.5' x L: 1' x H: 0') |
| IES Classification: | Type II - Short |
| BUG Rating: | B2 - U0 - G2 |

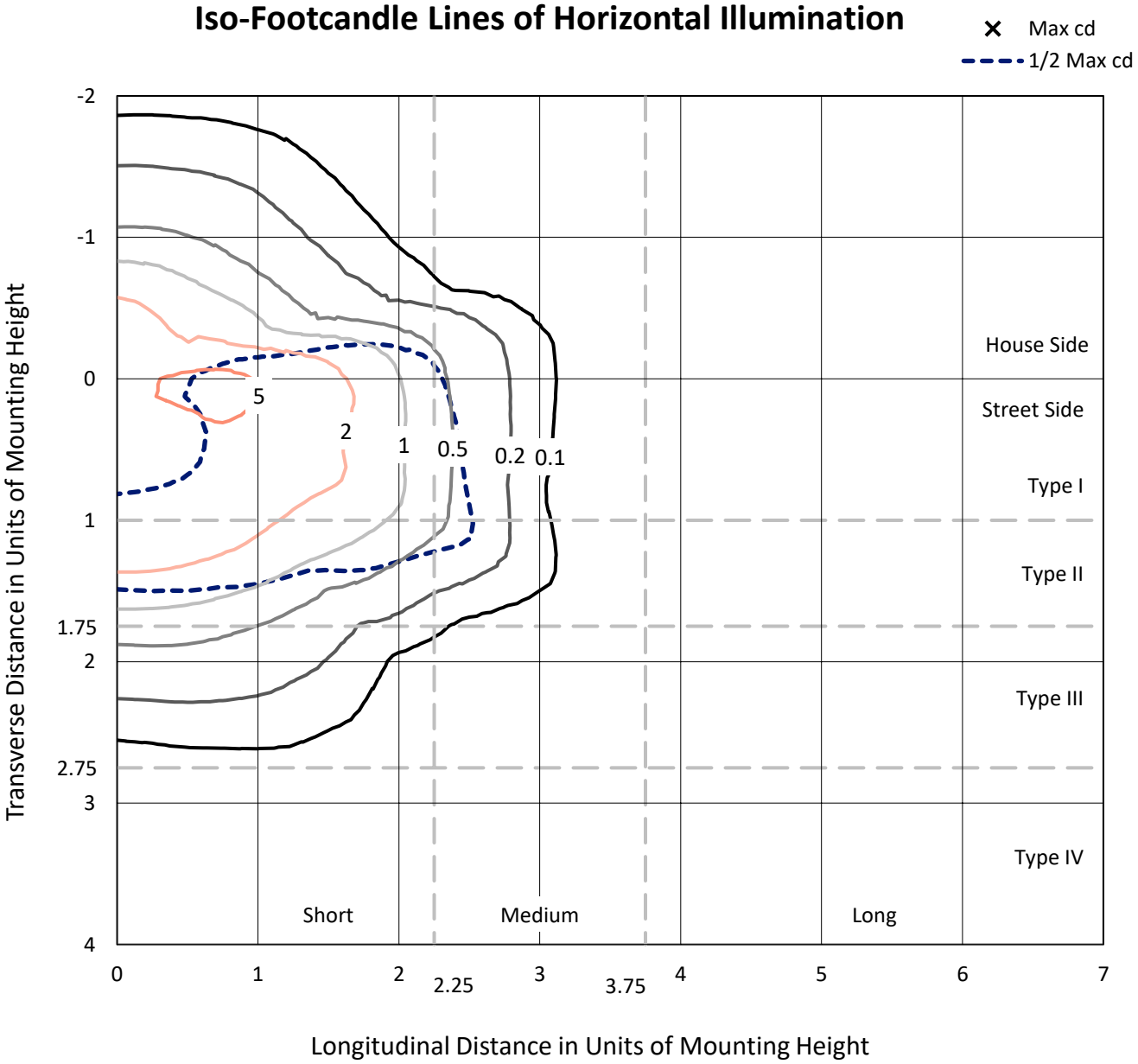
| | |
|---|---|
| Input Watts (W): | 114 |
| Input Voltage (V): | 120 |
| Input Current (Ain): | NR |
| Voltage Rise (V): | NR |
| Power Factor: | 0.98 |
| Total Harmonic Distortion (THDi): | 8.2% |
| Frequency (hertz): | 60 |
| Stabilization Time: | NR |
| Operation Time: | NR |
| Ambient Temperature (°C): | NR |
| Test Distance: | 28.75 FT |

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## Iso-Footcandle Lines of Horizontal Illumination



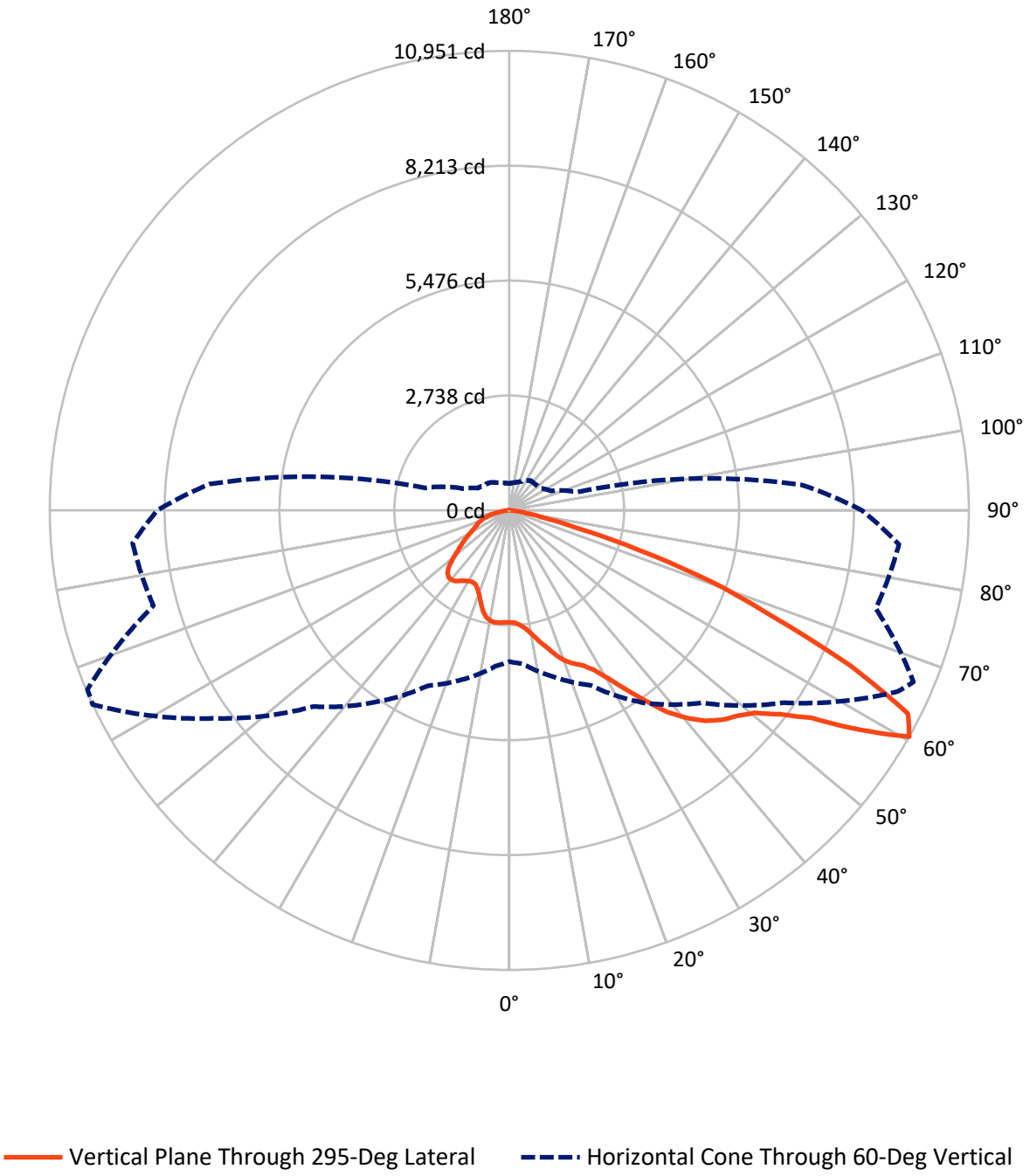

Based on 25 foot mounting height. Maximum calculated value = 6.4 fc
Type II - Short - N/A

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## Luminous Intensity Polar Plot



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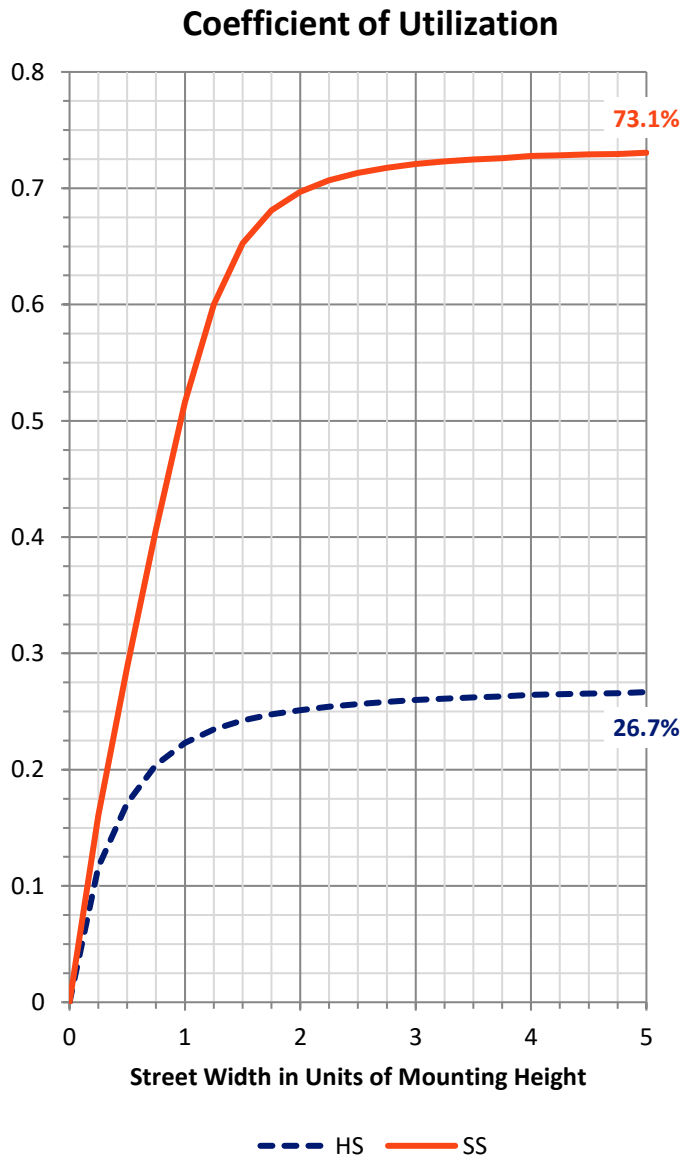
REPORT NUMBER: P1501577
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**FLUX DISTRIBUTION:**

| | | Downward | Upward | Total |
|---|---|---|---|---|
| **House Side** | Lumens | 4463.5 | 0.0 | 4463.5 |
| | % Fixture | 26.9 | 0.0 | 26.9 |
| **Street Side** | Lumens | 12134.9 | 0.0 | 12134.9 |
| | % Fixture | 73.1 | 0.0 | 73.1 |
| **Total** | Lumens | 16598.5 | 0.0 | 16598.5 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

**ZONAL LUMENS:**

| Zone | Lumens | % Fixture |
|---|---|---|
| 0°-10° | 251.1 | 1.5 |
| 10°-20° | 721.8 | 4.3 |
| 20°-30° | 1367.3 | 8.2 |
| 30°-40° | 2410.4 | 14.5 |
| 40°-50° | 3564.8 | 21.5 |
| 50°-60° | 4186.0 | 25.2 |
| 60°-70° | 3032.9 | 18.3 |
| 70°-80° | 935.3 | 5.6 |
| 80°-90° | 128.8 | 0.8 |
| 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° | 16598.5 | 100.0 |
| 0°-180° | 16598.5 | 100.0 |



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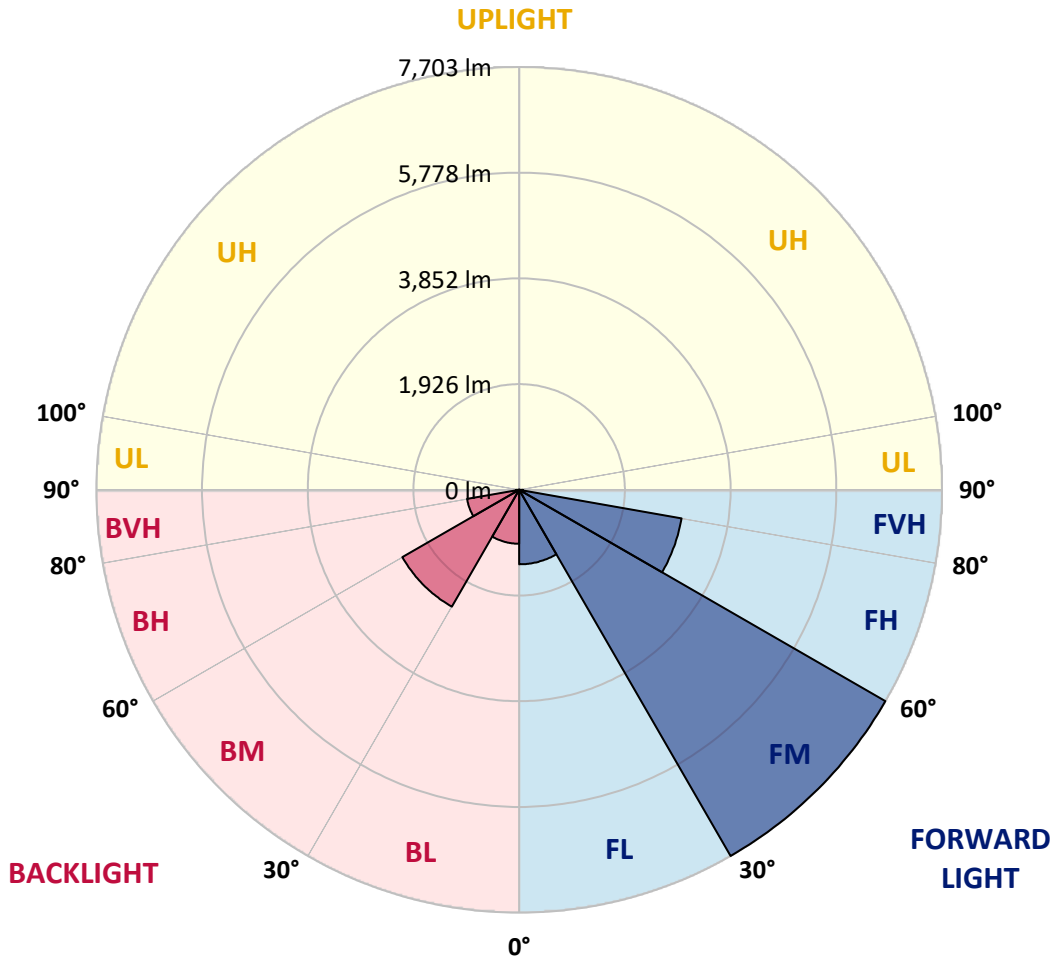
Scaled Data Report

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## LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit B | U | G |
|---|---|---|---|---|---|---|
| FL | (0°-30°) | 1357.2 | 8.2 | | | |
| FM | (30°-60°) | 7703.5 | 46.4 | | | |
| FH | (60°-80°) | 3004.8 | 18.1 | | | G2/5000 |
| FVH | (80°-90°) | 69.5 | 0.4 | | | G1/100 |
| BL | (0°-30°) | 983.0 | 5.9 | B2/1000 | | |
| BM | (30°-60°) | 2457.8 | 14.8 | B2/2500 | | |
| BH | (60°-80°) | 963.5 | 5.8 | B2/1000 | | G2/1000 |
| BVH | (80°-90°) | 59.3 | 0.4 | | | 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 II Short



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**CANDELA DISTRIBUTION (FULL):**

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 67° | 75° | 85° |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0° | 2670.6 | 2670.6 | 2670.6 | 2670.6 | 2670.6 | 2670.6 | 2670.6 | 2670.6 | 2670.6 | 2670.6 | 2670.6 |
| 2.5° | 2723.6 | 2731.1 | 2719.8 | 2727.4 | 2727.4 | 2716.0 | 2712.2 | 2697.1 | 2704.7 | 2700.9 | 2697.1 |
| 5° | 2787.9 | 2791.7 | 2784.1 | 2795.4 | 2795.4 | 2799.2 | 2795.4 | 2776.5 | 2776.5 | 2776.5 | 2769.0 |
| 7.5° | 2769.0 | 2769.0 | 2772.7 | 2810.6 | 2848.4 | 2897.6 | 2897.6 | 2890.0 | 2897.6 | 2893.8 | 2859.8 |
| 10° | 2610.1 | 2625.2 | 2659.3 | 2753.8 | 2844.6 | 2950.5 | 3022.4 | 3045.1 | 3045.1 | 3048.9 | 2992.1 |
| 12.5° | 2326.4 | 2337.7 | 2417.2 | 2560.9 | 2750.1 | 2943.0 | 3117.0 | 3230.5 | 3241.8 | 3260.7 | 3185.1 |
| 15° | 2072.9 | 2080.5 | 2137.2 | 2284.8 | 2500.4 | 2840.8 | 3169.9 | 3404.5 | 3442.3 | 3521.7 | 3408.2 |
| 17.5° | 2095.6 | 2091.9 | 2107.0 | 2163.7 | 2318.8 | 2674.4 | 3158.6 | 3608.7 | 3676.8 | 3816.8 | 3718.4 |
| 20° | 2231.8 | 2231.8 | 2243.2 | 2254.5 | 2311.3 | 2553.3 | 3075.4 | 3775.2 | 3907.6 | 4179.9 | 4066.4 |
| 22.5° | 2447.4 | 2447.4 | 2443.6 | 2462.6 | 2462.6 | 2606.3 | 3079.1 | 3900.0 | 4096.7 | 4584.7 | 4475.0 |
| 25° | 2746.3 | 2731.1 | 2731.1 | 2738.7 | 2704.7 | 2806.8 | 3173.7 | 4028.6 | 4285.8 | 5065.1 | 4970.5 |
| 27.5° | 3082.9 | 3094.3 | 3086.7 | 3060.2 | 3014.8 | 3094.3 | 3400.7 | 4229.1 | 4497.7 | 5572.0 | 5534.1 |
| 30° | 3449.9 | 3453.6 | 3461.2 | 3446.1 | 3408.2 | 3465.0 | 3756.3 | 4531.7 | 4777.6 | 6101.6 | 6184.8 |
| 32.5° | 3809.2 | 3862.2 | 3843.3 | 3805.4 | 3820.6 | 3922.7 | 4195.1 | 4940.3 | 5193.7 | 6593.3 | 6888.4 |
| 35° | 4266.9 | 4285.8 | 4361.5 | 4221.5 | 4225.3 | 4399.3 | 4754.9 | 5477.4 | 5723.3 | 7104.0 | 7592.0 |
| 37.5° | 4932.7 | 4966.7 | 4932.7 | 4713.3 | 4679.2 | 4921.3 | 5299.6 | 6007.0 | 6184.8 | 7489.8 | 8246.4 |
| 40° | 5587.1 | 5628.7 | 5685.5 | 5428.2 | 5212.6 | 5413.1 | 5814.1 | 6411.7 | 6597.1 | 7701.7 | 8681.4 |
| 42.5° | 6128.0 | 6196.1 | 6135.6 | 6059.9 | 5863.2 | 5901.1 | 6173.4 | 6725.7 | 6911.1 | 7970.2 | 9120.2 |
| 45° | 6585.7 | 6597.1 | 6623.6 | 6570.6 | 6472.3 | 6438.2 | 6479.8 | 7001.9 | 7206.1 | 8091.3 | 9335.8 |
| 47.5° | 6774.9 | 6824.1 | 6846.8 | 6937.5 | 7039.7 | 6971.6 | 6740.8 | 7130.5 | 7315.8 | 8083.7 | 9403.9 |
| 50° | 6672.8 | 6721.9 | 6843.0 | 7058.6 | 7304.5 | 7425.5 | 7047.2 | 7308.3 | 7516.3 | 8219.9 | 9543.9 |
| 52.5° | 6404.2 | 6457.1 | 6653.8 | 6899.7 | 7312.0 | 7588.2 | 7478.5 | 7679.0 | 7879.4 | 8462.0 | 9778.4 |
| 55° | 5753.5 | 5833.0 | 6109.1 | 6517.7 | 7085.1 | 7501.2 | 7932.4 | 8223.7 | 8443.1 | 8753.3 | 10020.5 |
| 57.5° | 4807.9 | 4891.1 | 5201.3 | 5814.1 | 6665.2 | 7141.8 | 8064.8 | 9245.0 | 9343.4 | 9101.3 | 10043.2 |
| 60° | *3601.2* | *3669.3* | *4108.1* | *4599.8* | *5598.5* | *6483.6* | *7989.1* | *10213.4* | *10463.1* | *9040.7* | *9320.7* |
| 62.5° | 2852.2 | 2935.4 | 3325.0 | 3552.0 | 4266.9 | 5356.4 | 7724.4 | 10482.0 | 10697.6 | 8541.4 | 8314.5 |
| 65° | 2228.0 | 2284.8 | 2647.9 | 2973.2 | 3147.2 | 3657.9 | 6619.8 | 9169.4 | 9362.3 | 7728.1 | 6861.9 |
| 67.5° | 1471.5 | 1558.5 | 1989.7 | 2436.1 | 2526.9 | 2326.4 | 4554.4 | 7054.8 | 7145.6 | 6143.2 | 5159.7 |
| 70° | 1055.4 | 1097.0 | 1418.5 | 1895.2 | 2031.3 | 1558.5 | 2481.5 | 5341.2 | 5367.7 | 4123.2 | 3476.3 |
| 72.5° | 718.7 | 726.3 | 964.6 | 1452.6 | 1619.0 | 1131.0 | 1365.6 | 3517.9 | 3427.2 | 2035.1 | 1989.7 |
| 75° | 488.0 | 495.5 | 616.6 | 968.4 | 1146.2 | 786.8 | 888.9 | 1917.8 | 1842.2 | 1123.5 | 1206.7 |
| 77.5° | 329.1 | 336.7 | 423.7 | 650.6 | 764.1 | 544.7 | 650.6 | 1013.8 | 994.9 | 745.2 | 646.8 |
| 80° | 249.7 | 261.0 | 314.0 | 416.1 | 533.4 | 317.8 | 370.7 | 480.4 | 488.0 | 397.2 | 329.1 |
| 82.5° | 140.0 | 155.1 | 189.1 | 211.8 | 344.2 | 177.8 | 177.8 | 287.5 | 276.1 | 245.9 | 177.8 |
| 85° | 60.5 | 64.3 | 75.7 | 79.4 | 140.0 | 75.7 | 64.3 | 124.8 | 128.6 | 121.0 | 56.7 |
| 87.5° | 11.3 | 11.3 | 11.3 | 11.3 | 11.3 | 11.3 | 11.3 | 15.1 | 15.1 | 15.1 | 15.1 |
| 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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**CANDELA DISTRIBUTION (continued):**

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0° | 2670.6 | 2670.6 | 2670.6 | 2670.6 | 2670.6 | 2670.6 | 2670.6 | 2670.6 | 2670.6 | 2670.6 | 2670.6 |
| 2.5° | 2678.2 | 2700.9 | 2678.2 | 2666.8 | 2666.8 | 2647.9 | 2640.4 | 2640.4 | 2613.9 | 2625.2 | 2617.7 |
| 5° | 2738.7 | 2746.3 | 2719.8 | 2685.7 | 2640.4 | 2602.5 | 2549.6 | 2481.5 | 2439.9 | 2436.1 | 2439.9 |
| 7.5° | 2833.3 | 2837.1 | 2765.2 | 2689.5 | 2576.0 | 2439.9 | 2277.2 | 2144.8 | 2027.5 | 2008.6 | 2031.3 |
| 10° | 2965.7 | 2958.1 | 2852.2 | 2674.4 | 2436.1 | 2148.6 | 1898.9 | 1777.9 | 1709.8 | 1706.0 | 1702.2 |
| 12.5° | 3143.5 | 3094.3 | 2931.6 | 2610.1 | 2194.0 | 1861.1 | 1732.5 | 1724.9 | 1743.8 | 1759.0 | 1762.8 |
| 15° | 3347.7 | 3283.4 | 2995.9 | 2485.3 | 1948.1 | 1755.2 | 1762.8 | 1827.1 | 1849.8 | 1864.9 | 1864.9 |
| 17.5° | 3601.2 | 3517.9 | 3067.8 | 2307.5 | 1823.3 | 1777.9 | 1830.8 | 1891.4 | 1929.2 | 1944.3 | 1940.5 |
| 20° | 3937.8 | 3763.8 | 3124.5 | 2137.2 | 1789.2 | 1815.7 | 1861.1 | 1921.6 | 1959.5 | 1978.4 | 1978.4 |
| 22.5° | 4274.5 | 4058.9 | 3135.9 | 2020.0 | 1789.2 | 1819.5 | 1861.1 | 1921.6 | 1963.2 | 1982.2 | 1978.4 |
| 25° | 4732.2 | 4437.2 | 3139.7 | 1936.8 | 1793.0 | 1800.6 | 1838.4 | 1891.4 | 1951.9 | 1970.8 | 1978.4 |
| 27.5° | 5220.2 | 4853.3 | 3158.6 | 1917.8 | 1777.9 | 1774.1 | 1800.6 | 1849.8 | 1910.3 | 1959.5 | 1963.2 |
| 30° | 5825.4 | 5322.3 | 3166.2 | 1936.8 | 1781.7 | 1732.5 | 1751.4 | 1800.6 | 1864.9 | 1914.1 | 1929.2 |
| 32.5° | 6419.3 | 5757.3 | 3151.0 | 1978.4 | 1789.2 | 1706.0 | 1709.8 | 1740.1 | 1808.1 | 1842.2 | 1868.7 |
| 35° | 7047.2 | 6218.8 | 3124.5 | 2035.1 | 1793.0 | 1694.7 | 1660.6 | 1675.8 | 1721.1 | 1724.9 | 1736.3 |
| 37.5° | 7539.0 | 6563.1 | 3045.1 | 2110.8 | 1800.6 | 1653.1 | 1585.0 | 1573.6 | 1554.7 | 1516.9 | 1524.4 |
| 40° | 7943.8 | 6793.8 | 2912.7 | 2148.6 | 1781.7 | 1603.9 | 1490.4 | 1437.4 | 1365.6 | 1308.8 | 1320.2 |
| 42.5° | 8235.0 | 6948.9 | 2753.8 | 2156.2 | 1751.4 | 1520.7 | 1380.7 | 1289.9 | 1210.5 | 1150.0 | 1153.7 |
| 45° | 8363.6 | 6933.8 | 2583.6 | 2099.4 | 1679.5 | 1418.5 | 1278.6 | 1191.6 | 1104.6 | 1040.3 | 1032.7 |
| 47.5° | 8367.4 | 6786.2 | 2349.1 | 1963.2 | 1558.5 | 1301.3 | 1184.0 | 1089.4 | 1017.6 | 972.2 | 968.4 |
| 50° | 8397.7 | 6703.0 | 2129.7 | 1766.5 | 1399.6 | 1176.4 | 1100.8 | 1006.2 | 964.6 | 900.3 | 881.4 |
| 52.5° | 8586.8 | 6839.2 | 1978.4 | 1550.9 | 1252.1 | 1085.6 | 1028.9 | 945.7 | 877.6 | 836.0 | 832.2 |
| 55° | 8893.2 | 7073.7 | 1895.2 | 1388.3 | 1112.1 | 998.6 | 960.8 | 888.9 | 828.4 | 786.8 | 775.5 |
| 57.5° | 8931.0 | 7194.8 | 1796.8 | 1237.0 | 998.6 | 930.6 | 915.4 | 836.0 | 749.0 | 718.7 | 707.4 |
| 60° | *8401.5* | *6990.5* | *1675.8* | *1097.0* | *915.4* | *877.6* | *870.0* | *764.1* | *692.2* | *654.4* | *639.3* |
| 62.5° | 7679.0 | 6479.8 | 1490.4 | 968.4 | 851.1 | 824.6 | 794.4 | 711.2 | 620.4 | 578.8 | 567.4 |
| 65° | 6275.6 | 5447.1 | 1267.2 | 881.4 | 786.8 | 756.5 | 749.0 | 635.5 | 575.0 | 552.3 | 548.5 |
| 67.5° | 4754.9 | 4376.6 | 1115.9 | 817.1 | 718.7 | 707.4 | 680.9 | 643.1 | 616.6 | 590.1 | 582.5 |
| 70° | 3362.9 | 3158.6 | 949.5 | 733.9 | 650.6 | 631.7 | 741.4 | 699.8 | 605.2 | 571.2 | 567.4 |
| 72.5° | 2038.9 | 1982.2 | 820.9 | 658.2 | 559.8 | 590.1 | 684.7 | 631.7 | 544.7 | 503.1 | 488.0 |
| 75° | 1286.1 | 1176.4 | 688.5 | 559.8 | 446.4 | 480.4 | 597.7 | 563.6 | 469.1 | 427.4 | 416.1 |
| 77.5° | 699.8 | 650.6 | 518.2 | 457.7 | 351.8 | 389.6 | 522.0 | 465.3 | 374.5 | 408.5 | 363.1 |
| 80° | 306.4 | 340.4 | 344.2 | 264.8 | 234.5 | 287.5 | 374.5 | 363.1 | 287.5 | 291.3 | 242.1 |
| 82.5° | 147.5 | 192.9 | 223.2 | 181.6 | 132.4 | 170.2 | 249.7 | 208.1 | 192.9 | 181.6 | 174.0 |
| 85° | 45.4 | 71.9 | 98.4 | 87.0 | 60.5 | 71.9 | 117.3 | 113.5 | 136.2 | 117.3 | 109.7 |
| 87.5° | 15.1 | 15.1 | 11.3 | 11.3 | 11.3 | 15.1 | 18.9 | 11.3 | 3.8 | 3.8 | 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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**CANDELA DISTRIBUTION (continued):**

| | 185° | 195° | 205° | 215° | 225° | 235° | 245° | 255° | 265° | 270° | 275° |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0° | 2670.6 | 2670.6 | 2670.6 | 2670.6 | 2670.6 | 2670.6 | 2670.6 | 2670.6 | 2670.6 | 2670.6 | 2670.6 |
| 2.5° | 2613.9 | 2617.7 | 2617.7 | 2621.4 | 2621.4 | 2632.8 | 2647.9 | 2663.0 | 2651.7 | 2666.8 | 2670.6 |
| 5° | 2432.3 | 2451.2 | 2466.3 | 2523.1 | 2568.5 | 2606.3 | 2647.9 | 2685.7 | 2697.1 | 2704.7 | 2723.6 |
| 7.5° | 2004.9 | 2057.8 | 2156.2 | 2284.8 | 2428.5 | 2568.5 | 2663.0 | 2761.4 | 2776.5 | 2795.4 | 2821.9 |
| 10° | 1706.0 | 1728.7 | 1796.8 | 1929.2 | 2186.4 | 2462.6 | 2693.3 | 2848.4 | 2912.7 | 2950.5 | 2977.0 |
| 12.5° | 1755.2 | 1740.1 | 1728.7 | 1747.6 | 1914.1 | 2269.6 | 2674.4 | 2973.2 | 3094.3 | 3135.9 | 3169.9 |
| 15° | 1872.5 | 1857.3 | 1815.7 | 1762.8 | 1781.7 | 2065.4 | 2610.1 | 3090.5 | 3283.4 | 3351.5 | 3423.4 |
| 17.5° | 1940.5 | 1925.4 | 1891.4 | 1834.6 | 1785.5 | 1895.2 | 2489.0 | 3196.4 | 3582.3 | 3665.5 | 3767.6 |
| 20° | 1978.4 | 1963.2 | 1929.2 | 1872.5 | 1815.7 | 1830.8 | 2334.0 | 3328.8 | 3922.7 | 4055.1 | 4206.4 |
| 22.5° | 1985.9 | 1967.0 | 1929.2 | 1872.5 | 1838.4 | 1827.1 | 2186.4 | 3408.2 | 4289.6 | 4493.9 | 4667.9 |
| 25° | 1982.2 | 1948.1 | 1898.9 | 1857.3 | 1838.4 | 1834.6 | 2084.3 | 3453.6 | 4686.8 | 5012.1 | 5208.8 |
| 27.5° | 1955.7 | 1914.1 | 1864.9 | 1834.6 | 1827.1 | 1849.8 | 2038.9 | 3506.6 | 5152.1 | 5568.2 | 5882.2 |
| 30° | 1925.4 | 1864.9 | 1804.4 | 1793.0 | 1811.9 | 1883.8 | 2076.7 | 3525.5 | 5640.1 | 6173.4 | 6495.0 |
| 32.5° | 1846.0 | 1800.6 | 1740.1 | 1736.3 | 1781.7 | 1910.3 | 2163.7 | 3499.0 | 6071.3 | 6778.7 | 7183.4 |
| 35° | 1732.5 | 1706.0 | 1672.0 | 1683.3 | 1755.2 | 1933.0 | 2224.3 | 3415.8 | 6464.7 | 7342.3 | 7815.1 |
| 37.5° | 1532.0 | 1550.9 | 1569.8 | 1596.3 | 1687.1 | 1929.2 | 2250.7 | 3283.4 | 6790.0 | 7792.4 | 8397.7 |
| 40° | 1308.8 | 1373.1 | 1433.7 | 1501.7 | 1622.8 | 1898.9 | 2258.3 | 3120.8 | 6979.2 | 8132.9 | 8915.9 |
| 42.5° | 1168.9 | 1229.4 | 1305.0 | 1403.4 | 1535.8 | 1830.8 | 2250.7 | 2939.2 | 7039.7 | 8367.4 | 9245.0 |
| 45° | 1040.3 | 1112.1 | 1206.7 | 1308.8 | 1460.1 | 1732.5 | 2182.6 | 2742.5 | 7069.9 | 8477.1 | 9385.0 |
| 47.5° | 972.2 | 1013.8 | 1100.8 | 1202.9 | 1361.8 | 1611.4 | 2050.2 | 2598.7 | 7024.5 | 8499.8 | 9555.2 |
| 50° | 892.7 | 949.5 | 1006.2 | 1104.6 | 1259.7 | 1460.1 | 1891.4 | 2515.5 | 7100.2 | 8723.0 | 9823.8 |
| 52.5° | 832.2 | 862.5 | 923.0 | 1013.8 | 1127.3 | 1320.2 | 1740.1 | 2447.4 | 7308.3 | 8950.0 | 10103.7 |
| 55° | 786.8 | 820.9 | 858.7 | 934.3 | 1021.3 | 1180.2 | 1585.0 | 2345.3 | 7550.3 | 9192.1 | 10383.6 |
| 57.5° | 714.9 | 737.6 | 790.6 | 870.0 | 926.8 | 1044.0 | 1403.4 | 2224.3 | 7531.4 | 9002.9 | 9899.4 |
| 60° | *650.6* | *673.3* | *730.1* | *809.5* | *843.6* | *923.0* | *1225.6* | *2069.2* | *7168.3* | *8386.3* | *9006.7* |
| 62.5° | 578.8 | 605.2 | 673.3 | 730.1 | 760.3 | 820.9 | 1040.3 | 1785.5 | 6411.7 | 7459.6 | 7962.7 |
| 65° | 548.5 | 563.6 | 609.0 | 677.1 | 673.3 | 730.1 | 877.6 | 1403.4 | 5159.7 | 5700.6 | 6158.3 |
| 67.5° | 582.5 | 605.2 | 597.7 | 616.6 | 605.2 | 635.5 | 786.8 | 1127.3 | 4055.1 | 4293.4 | 4558.2 |
| 70° | 575.0 | 627.9 | 654.4 | 616.6 | 529.6 | 563.6 | 680.9 | 900.3 | 2901.4 | 2878.7 | 2867.3 |
| 72.5° | 503.1 | 556.1 | 631.7 | 669.5 | 518.2 | 469.1 | 590.1 | 779.2 | 1861.1 | 1853.5 | 1675.8 |
| 75° | 427.4 | 465.3 | 556.1 | 605.2 | 446.4 | 378.3 | 506.9 | 662.0 | 1112.1 | 1127.3 | 1006.2 |
| 77.5° | 393.4 | 374.5 | 465.3 | 533.4 | 363.1 | 291.3 | 408.5 | 499.3 | 612.8 | 620.4 | 575.0 |
| 80° | 283.7 | 272.4 | 348.0 | 389.6 | 276.1 | 208.1 | 230.7 | 310.2 | 329.1 | 295.1 | 306.4 |
| 82.5° | 181.6 | 185.4 | 208.1 | 249.7 | 170.2 | 113.5 | 158.9 | 208.1 | 177.8 | 143.7 | 170.2 |
| 85° | 117.3 | 132.4 | 109.7 | 128.6 | 53.0 | 53.0 | 68.1 | 90.8 | 60.5 | 41.6 | 45.4 |
| 87.5° | 0.0 | 0.0 | 7.6 | 15.1 | 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 |

REPORT NUMBER: P1501577
CATALOG NUMBER: GSS-SB4A-840-U-T2LG

**CANDELA DISTRIBUTION (continued):**

| | 285° | 293° | 295° | 305° | 315° | 325° | 335° | 345° | 355° | 360° |
|---|---|---|---|---|---|---|---|---|---|---|
| 0° | 2670.6 | 2670.6 | *2670.6* | 2670.6 | 2670.6 | 2670.6 | 2670.6 | 2670.6 | 2670.6 | 2670.6 |
| 2.5° | 2682.0 | 2678.2 | *2678.2* | 2685.7 | 2704.7 | 2712.2 | 2723.6 | 2719.8 | 2731.1 | 2723.6 |
| 5° | 2734.9 | 2738.7 | *2750.1* | 2753.8 | 2765.2 | 2780.3 | 2784.1 | 2780.3 | 2787.9 | 2787.9 |
| 7.5° | 2840.8 | 2856.0 | *2848.4* | 2867.3 | 2852.2 | 2833.3 | 2803.0 | 2780.3 | 2761.4 | 2769.0 |
| 10° | 3018.6 | 3011.1 | *3007.3* | 2973.2 | 2905.1 | 2806.8 | 2727.4 | 2640.4 | 2625.2 | 2610.1 |
| 12.5° | 3215.3 | 3207.8 | *3207.8* | 3090.5 | 2897.6 | 2693.3 | 2511.7 | 2375.6 | 2330.2 | 2326.4 |
| 15° | 3491.5 | 3442.3 | *3396.9* | 3151.0 | 2765.2 | 2417.2 | 2205.3 | 2099.4 | 2072.9 | 2072.9 |
| 17.5° | 3835.7 | 3707.1 | *3631.4* | 3105.6 | 2549.6 | 2235.6 | 2110.8 | 2084.3 | 2076.7 | 2095.6 |
| 20° | 4263.1 | 3937.8 | *3828.1* | 3003.5 | 2470.1 | 2258.3 | 2197.8 | 2201.6 | 2205.3 | 2231.8 |
| 22.5° | 4732.2 | 4149.7 | *3968.1* | 3003.5 | 2549.6 | 2402.0 | 2371.8 | 2413.4 | 2424.7 | 2447.4 |
| 25° | 5254.2 | 4338.8 | *4092.9* | 3162.4 | 2784.1 | 2674.4 | 2636.6 | 2678.2 | 2708.4 | 2746.3 |
| 27.5° | 5840.5 | 4535.5 | *4308.5* | 3449.9 | 3086.7 | 3018.6 | 2977.0 | 2995.9 | 3037.5 | 3082.9 |
| 30° | 6366.4 | 4864.6 | *4637.6* | 3888.7 | 3499.0 | 3415.8 | 3343.9 | 3374.2 | 3419.6 | 3449.9 |
| 32.5° | 6831.6 | 5265.6 | *5072.7* | 4350.2 | 3971.9 | 3828.1 | 3748.7 | 3741.1 | 3831.9 | 3809.2 |
| 35° | 7259.1 | 5738.4 | *5553.1* | 4876.0 | 4452.3 | 4274.5 | 4168.6 | 4304.8 | 4244.2 | 4266.9 |
| 37.5° | 7595.7 | 6230.2 | *6082.6* | 5379.1 | 4951.6 | 4709.5 | 4645.2 | 4811.6 | 4906.2 | 4932.7 |
| 40° | 7871.9 | 6657.6 | *6502.5* | 5878.4 | 5409.3 | 5231.5 | 5333.7 | 5609.8 | 5598.5 | 5587.1 |
| 42.5° | 8083.7 | 7024.5 | *6854.3* | 6256.7 | 5848.1 | 5882.2 | 5961.6 | 6147.0 | 6192.3 | 6128.0 |
| 45° | 8178.3 | 7255.3 | *7119.1* | 6555.5 | 6347.4 | 6544.1 | 6578.2 | 6657.6 | 6627.4 | 6585.7 |
| 47.5° | 8288.0 | 7459.6 | *7315.8* | 6827.8 | 6888.4 | 7081.3 | 7013.2 | 6948.9 | 6839.2 | 6774.9 |
| 50° | 8473.3 | 7701.7 | *7580.6* | 7225.0 | 7444.4 | 7380.1 | 7115.3 | 6971.6 | 6748.4 | 6672.8 |
| 52.5° | 8825.1 | 8159.4 | *8068.6* | 7853.0 | 7705.4 | 7334.7 | 7013.2 | 6756.0 | 6506.3 | 6404.2 |
| 55° | 9139.1 | 8779.7 | *8726.8* | 8439.3 | 7626.0 | 7096.4 | 6665.2 | 6268.0 | 5840.5 | 5753.5 |
| 57.5° | 9320.7 | 9808.6 | *9869.2* | 8689.0 | 7262.9 | 6555.5 | 5920.0 | 5284.5 | 4879.7 | 4807.9 |
| 60° | *8779.7* | *10920.8* | *10951.0* | *8639.8* | *6608.4* | *5579.5* | *4611.2* | *4161.0* | *3726.0* | *3601.2* |
| 62.5° | 8034.5 | 10690.0 | *10663.5* | 8344.7 | 5261.8 | 4070.2 | 3502.8 | 3291.0 | 2954.3 | 2852.2 |
| 65° | 6907.3 | 8904.6 | *8934.8* | 7209.9 | 3499.0 | 2943.0 | 2943.0 | 2674.4 | 2299.9 | 2228.0 |
| 67.5° | 5628.7 | 6865.7 | *6797.6* | 4675.5 | 2148.6 | 2356.6 | 2470.1 | 2084.3 | 1558.5 | 1471.5 |
| 70° | 3657.9 | 5242.9 | *5148.3* | 2697.1 | 1350.4 | 1963.2 | 1944.3 | 1566.1 | 1115.9 | 1055.4 |
| 72.5° | 1573.6 | 3030.0 | *3222.9* | 1376.9 | 1017.6 | 1581.2 | 1550.9 | 1097.0 | 745.2 | 718.7 |
| 75° | 949.5 | 1524.4 | *1660.6* | 877.6 | 741.4 | 1191.6 | 1074.3 | 696.0 | 506.9 | 488.0 |
| 77.5° | 601.5 | 836.0 | *828.4* | 658.2 | 556.1 | 805.7 | 722.5 | 480.4 | 344.2 | 329.1 |
| 80° | 348.0 | 412.3 | *427.4* | 412.3 | 374.5 | 575.0 | 461.5 | 348.0 | 268.6 | 249.7 |
| 82.5° | 223.2 | 257.2 | *261.0* | 200.5 | 208.1 | 370.7 | 249.7 | 204.3 | 155.1 | 140.0 |
| 85° | 98.4 | 109.7 | *105.9* | 68.1 | 68.1 | 151.3 | 87.0 | 83.2 | 60.5 | 60.5 |
| 87.5° | 3.8 | 7.6 | *3.8* | 3.8 | 3.8 | 15.1 | 7.6 | 11.3 | 11.3 | 11.3 |
| 90° | 0.0 | 0.0 | *0.0* | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

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

# LM-79-2019: Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Report Prepared for

Cooper Lighting Solutions

McGraw-Edison

Report Number: SP1-2407-184-11

Test Date: 10/11/2024

Luminaire Tested: GSS-SB1A-840-U-5WQ

Data in this report applies to families of products including GSS-SB1A-840-U-5WQ

Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

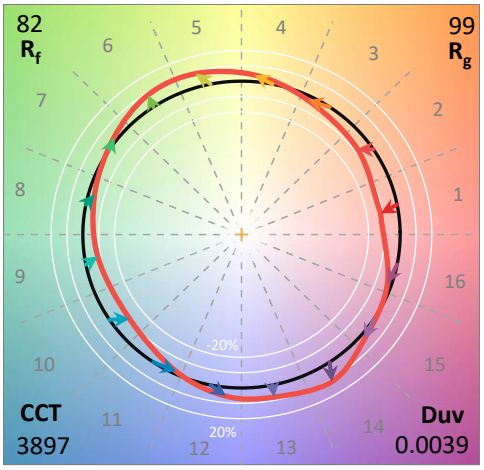
## Test Information

| | |
|---|---|
| Test Method: | LM-79-2019 |
| Report Number: | SP1-2407-184-11 |
| 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-840-U-5WQ** |
| Description: | GALLEON II SITE SLIM 1SQ 350MA 5WQ HIGH DENSITY LIGHTSQUARE WITH 80 CRI 4000K CCT 26 LEDS |

## Spectral Parameters

| | |
|---|---|
| CCT (K): | 3897 |
| CIE u': | 0.2249 |
| CIE v': | 0.5084 |
| Duv: | 0.0039 |
| CIE x: | 0.3882 |
| CIE y: | 0.3900 |
| CIE z: | 0.2218 |
| Peak Wavelength (nm): | 445 |
| Dominant Wavelength (nm): | 577 |
| Purity: | 33.54925 |
| Rf: | 81.8 |
| Rg: | 98.6 |

| | |
|---|---|
| CRI (Ra): | 80.2 |
| R1: | 78.9 |
| R2: | 83.5 |
| R3: | 88.3 |
| R4: | 82.1 |
| R5: | 78.8 |
| R6: | 78.4 |
| R7: | 85.8 |
| R8: | 65.8 |
| R9: | 6.7 |
| R10: | 61.9 |
| R11: | 81.9 |
| R12: | 58.9 |
| R13: | 79.2 |
| R14: | 93.2 |
| R15: | 71.9 |




## Test Conditions

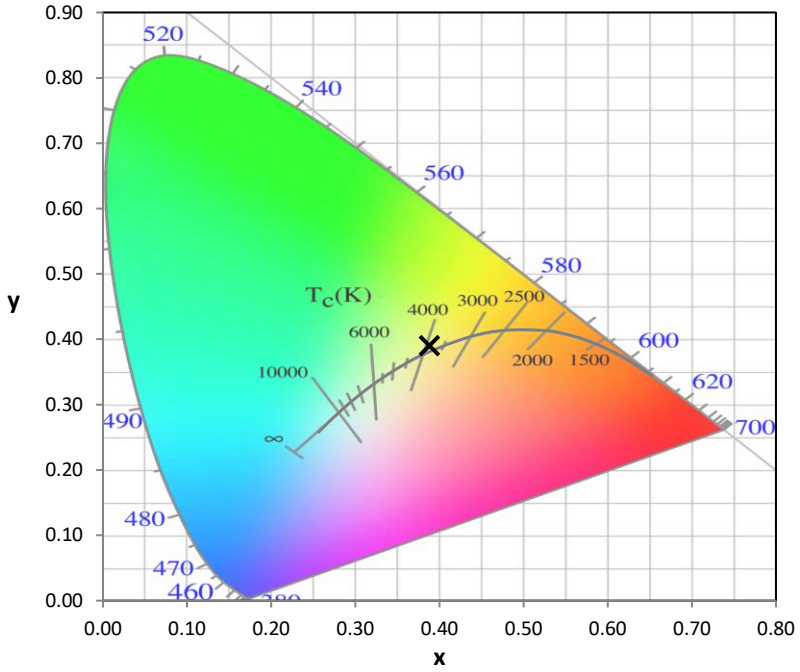
| | |
|---|---|
| Stabilization Time: | 24M |
| Operation Time: | 1H 24M |
| Sphere Temperature (°C): | 25.2 |

REPORT NUMBER: SP1-2407-184-11

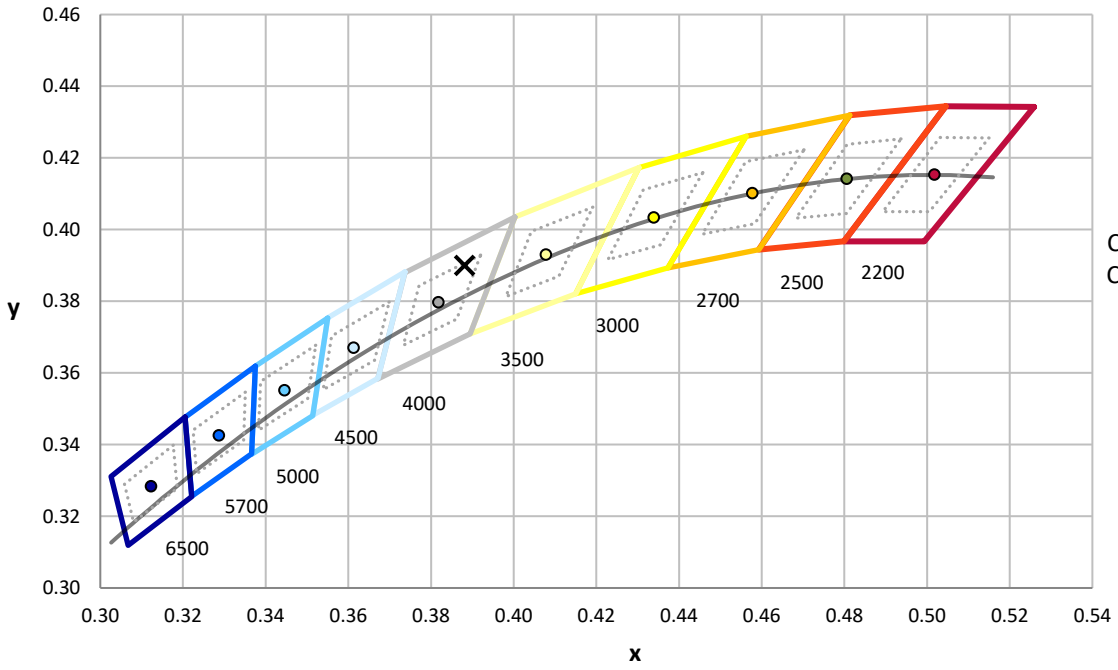
| Measurement and Test Equipment | | | |
|---|---|---|---|
| Instrument | Identification Number | Calibration Date | Calibration Due Date |
| Photometer | IN0058 | 6/18/2024 | 12/18/2024 |
| Power Meter | INXT2011004 | 2/8/2024 | 2/8/2025 |
| AC Power Source | IN0063 | 10/24/2023 | 10/24/2024 |
| DC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

REPORT NUMBER: SP1-2407-184-11

## CIE 1931 Chromaticity Diagram




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

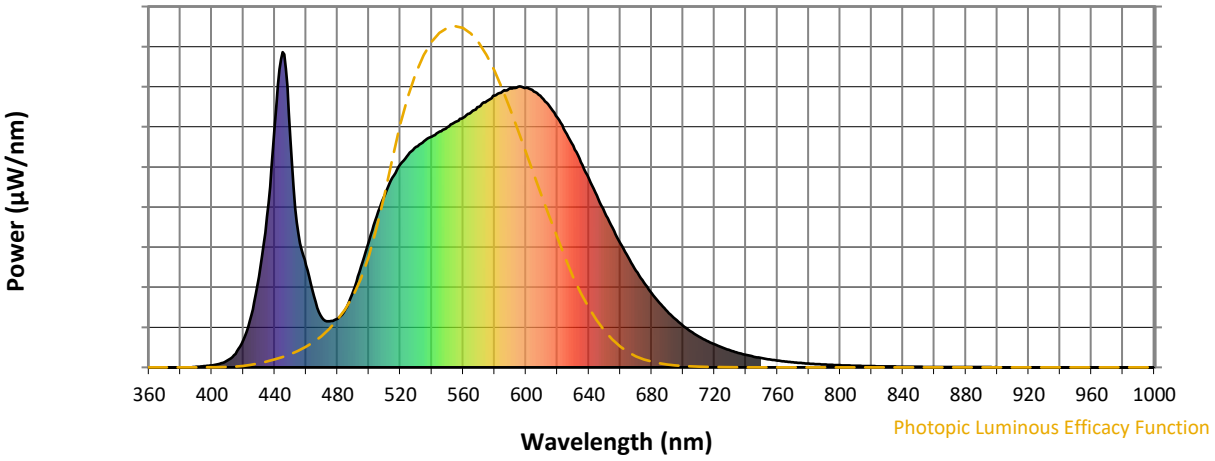



CCT = 3897K
CIE x = 0.3882
CIE y = 0.3900
Duv = 0.0039

Point lies inside the ANSI 4000K 4-step quadrangle

REPORT NUMBER: SP1-2407-184-11

## Photopic Flux vs. Wavelength

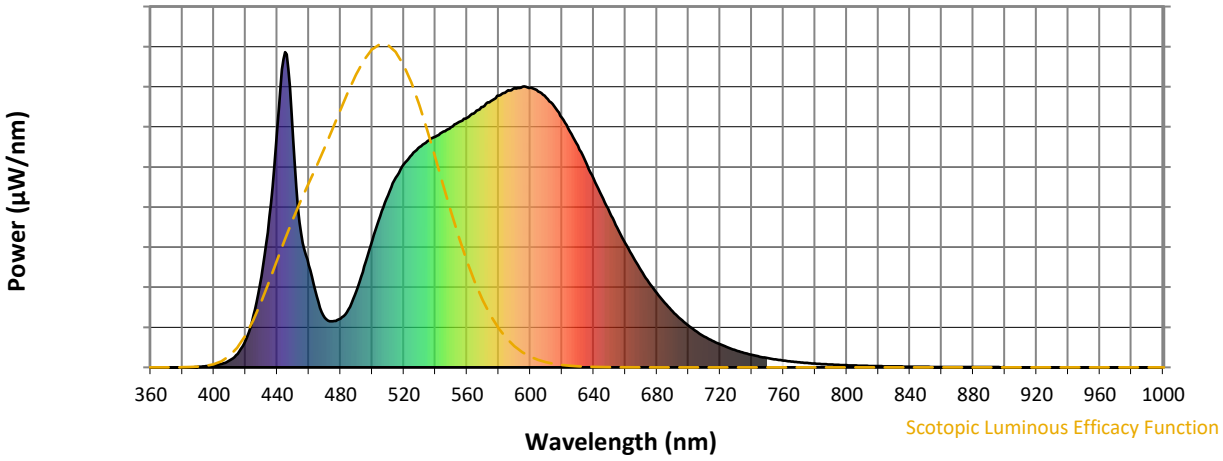



## Photopic Lumens: NR

| 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 | 242 | NR | 620 | 792 | NR | 750 | 29 | NR | 880 | 1 | NR |
| 365 | 0 | NR | 495 | 320 | NR | 625 | 748 | NR | 755 | 25 | NR | 885 | 1 | NR |
| 370 | 0 | NR | 500 | 401 | NR | 630 | 703 | NR | 760 | 22 | NR | 890 | 1 | NR |
| 375 | 0 | NR | 505 | 479 | NR | 635 | 651 | NR | 765 | 19 | NR | 895 | 1 | NR |
| 380 | 0 | NR | 510 | 546 | NR | 640 | 599 | NR | 770 | 16 | NR | 900 | 1 | NR |
| 385 | 0 | NR | 515 | 602 | NR | 645 | 545 | NR | 775 | 14 | NR | 905 | 0 | NR |
| 390 | 2 | NR | 520 | 645 | NR | 650 | 493 | NR | 780 | 12 | NR | 910 | 0 | NR |
| 395 | 4 | NR | 525 | 674 | NR | 655 | 443 | NR | 785 | 10 | NR | 915 | 0 | NR |
| 400 | 6 | NR | 530 | 699 | NR | 660 | 394 | NR | 790 | 9 | NR | 920 | 0 | NR |
| 405 | 11 | NR | 535 | 718 | NR | 665 | 349 | NR | 795 | 8 | NR | 925 | 0 | NR |
| 410 | 22 | NR | 540 | 732 | NR | 670 | 307 | NR | 800 | 7 | NR | 930 | 0 | NR |
| 415 | 43 | NR | 545 | 749 | NR | 675 | 269 | NR | 805 | 6 | NR | 935 | 0 | NR |
| 420 | 86 | NR | 550 | 762 | NR | 680 | 235 | NR | 810 | 5 | NR | 940 | 0 | NR |
| 425 | 164 | NR | 555 | 778 | NR | 685 | 204 | NR | 815 | 5 | NR | 945 | 0 | NR |
| 430 | 288 | NR | 560 | 792 | NR | 690 | 178 | NR | 820 | 4 | NR | 950 | 0 | NR |
| 435 | 478 | NR | 565 | 809 | NR | 695 | 153 | NR | 825 | 3 | NR | 955 | 0 | NR |
| 440 | 766 | NR | 570 | 827 | NR | 700 | 132 | NR | 830 | 3 | NR | 960 | 0 | NR |
| 445 | 1000 | NR | 575 | 845 | NR | 705 | 114 | NR | 835 | 3 | NR | 965 | 0 | NR |
| 450 | 726 | NR | 580 | 862 | NR | 710 | 98 | NR | 840 | 2 | NR | 970 | 0 | NR |
| 455 | 425 | NR | 585 | 875 | NR | 715 | 84 | NR | 845 | 2 | NR | 975 | 0 | NR |
| 460 | 324 | NR | 590 | 887 | NR | 720 | 73 | NR | 850 | 2 | NR | 980 | 0 | NR |
| 465 | 225 | NR | 595 | 890 | NR | 725 | 63 | NR | 855 | 1 | NR | 985 | 0 | NR |
| 470 | 157 | NR | 600 | 887 | NR | 730 | 54 | NR | 860 | 1 | NR | 990 | 0 | NR |
| 475 | 147 | NR | 605 | 875 | NR | 735 | 46 | NR | 865 | 1 | NR | 995 | 0 | NR |
| 480 | 154 | NR | 610 | 856 | NR | 740 | 40 | NR | 870 | 1 | NR | 1000 | 0 | NR |
| 485 | 184 | NR | 615 | 828 | NR | 745 | 34 | NR | 875 | 1 | NR | | | |

REPORT NUMBER: SP1-2407-184-11

## Scotopic Flux vs. Wavelength

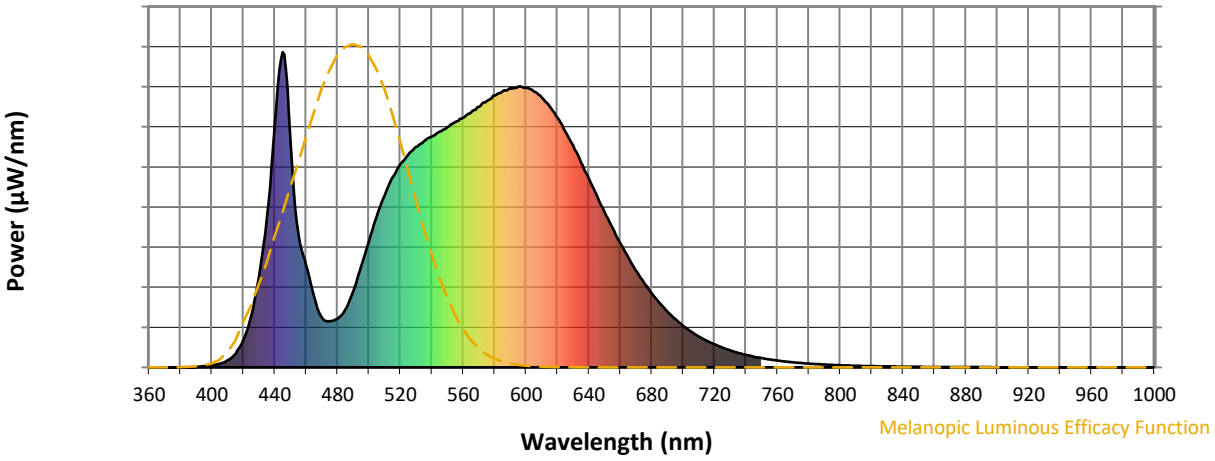



**Scotopic Lumens: NR** **S/P: 1.57**

| 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 | 242 | NR | 620 | 792 | NR | 750 | 29 | NR | 880 | 1 | NR |
| 365 | 0 | NR | 495 | 320 | NR | 625 | 748 | NR | 755 | 25 | NR | 885 | 1 | NR |
| 370 | 0 | NR | 500 | 401 | NR | 630 | 703 | NR | 760 | 22 | NR | 890 | 1 | NR |
| 375 | 0 | NR | 505 | 479 | NR | 635 | 651 | NR | 765 | 19 | NR | 895 | 1 | NR |
| 380 | 0 | NR | 510 | 546 | NR | 640 | 599 | NR | 770 | 16 | NR | 900 | 1 | NR |
| 385 | 0 | NR | 515 | 602 | NR | 645 | 545 | NR | 775 | 14 | NR | 905 | 0 | NR |
| 390 | 2 | NR | 520 | 645 | NR | 650 | 493 | NR | 780 | 12 | NR | 910 | 0 | NR |
| 395 | 4 | NR | 525 | 674 | NR | 655 | 443 | NR | 785 | 10 | NR | 915 | 0 | NR |
| 400 | 6 | NR | 530 | 699 | NR | 660 | 394 | NR | 790 | 9 | NR | 920 | 0 | NR |
| 405 | 11 | NR | 535 | 718 | NR | 665 | 349 | NR | 795 | 8 | NR | 925 | 0 | NR |
| 410 | 22 | NR | 540 | 732 | NR | 670 | 307 | NR | 800 | 7 | NR | 930 | 0 | NR |
| 415 | 43 | NR | 545 | 749 | NR | 675 | 269 | NR | 805 | 6 | NR | 935 | 0 | NR |
| 420 | 86 | NR | 550 | 762 | NR | 680 | 235 | NR | 810 | 5 | NR | 940 | 0 | NR |
| 425 | 164 | NR | 555 | 778 | NR | 685 | 204 | NR | 815 | 5 | NR | 945 | 0 | NR |
| 430 | 288 | NR | 560 | 792 | NR | 690 | 178 | NR | 820 | 4 | NR | 950 | 0 | NR |
| 435 | 478 | NR | 565 | 809 | NR | 695 | 153 | NR | 825 | 3 | NR | 955 | 0 | NR |
| 440 | 766 | NR | 570 | 827 | NR | 700 | 132 | NR | 830 | 3 | NR | 960 | 0 | NR |
| 445 | 1000 | NR | 575 | 845 | NR | 705 | 114 | NR | 835 | 3 | NR | 965 | 0 | NR |
| 450 | 726 | NR | 580 | 862 | NR | 710 | 98 | NR | 840 | 2 | NR | 970 | 0 | NR |
| 455 | 425 | NR | 585 | 875 | NR | 715 | 84 | NR | 845 | 2 | NR | 975 | 0 | NR |
| 460 | 324 | NR | 590 | 887 | NR | 720 | 73 | NR | 850 | 2 | NR | 980 | 0 | NR |
| 465 | 225 | NR | 595 | 890 | NR | 725 | 63 | NR | 855 | 1 | NR | 985 | 0 | NR |
| 470 | 157 | NR | 600 | 887 | NR | 730 | 54 | NR | 860 | 1 | NR | 990 | 0 | NR |
| 475 | 147 | NR | 605 | 875 | NR | 735 | 46 | NR | 865 | 1 | NR | 995 | 0 | NR |
| 480 | 154 | NR | 610 | 856 | NR | 740 | 40 | NR | 870 | 1 | NR | 1000 | 0 | NR |
| 485 | 184 | NR | 615 | 828 | NR | 745 | 34 | NR | 875 | 1 | NR | | | |

REPORT NUMBER: SP1-2407-184-11

## Melanopic Flux vs. Wavelength




**Melanopic Lumens: NR** **M/P: 3.06**

| 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 | 242 | NR | 620 | 792 | NR | 750 | 29 | NR | 880 | 1 | NR |
| 365 | 0 | NR | 495 | 320 | NR | 625 | 748 | NR | 755 | 25 | NR | 885 | 1 | NR |
| 370 | 0 | NR | 500 | 401 | NR | 630 | 703 | NR | 760 | 22 | NR | 890 | 1 | NR |
| 375 | 0 | NR | 505 | 479 | NR | 635 | 651 | NR | 765 | 19 | NR | 895 | 1 | NR |
| 380 | 0 | NR | 510 | 546 | NR | 640 | 599 | NR | 770 | 16 | NR | 900 | 1 | NR |
| 385 | 0 | NR | 515 | 602 | NR | 645 | 545 | NR | 775 | 14 | NR | 905 | 0 | NR |
| 390 | 2 | NR | 520 | 645 | NR | 650 | 493 | NR | 780 | 12 | NR | 910 | 0 | NR |
| 395 | 4 | NR | 525 | 674 | NR | 655 | 443 | NR | 785 | 10 | NR | 915 | 0 | NR |
| 400 | 6 | NR | 530 | 699 | NR | 660 | 394 | NR | 790 | 9 | NR | 920 | 0 | NR |
| 405 | 11 | NR | 535 | 718 | NR | 665 | 349 | NR | 795 | 8 | NR | 925 | 0 | NR |
| 410 | 22 | NR | 540 | 732 | NR | 670 | 307 | NR | 800 | 7 | NR | 930 | 0 | NR |
| 415 | 43 | NR | 545 | 749 | NR | 675 | 269 | NR | 805 | 6 | NR | 935 | 0 | NR |
| 420 | 86 | NR | 550 | 762 | NR | 680 | 235 | NR | 810 | 5 | NR | 940 | 0 | NR |
| 425 | 164 | NR | 555 | 778 | NR | 685 | 204 | NR | 815 | 5 | NR | 945 | 0 | NR |
| 430 | 288 | NR | 560 | 792 | NR | 690 | 178 | NR | 820 | 4 | NR | 950 | 0 | NR |
| 435 | 478 | NR | 565 | 809 | NR | 695 | 153 | NR | 825 | 3 | NR | 955 | 0 | NR |
| 440 | 766 | NR | 570 | 827 | NR | 700 | 132 | NR | 830 | 3 | NR | 960 | 0 | NR |
| 445 | 1000 | NR | 575 | 845 | NR | 705 | 114 | NR | 835 | 3 | NR | 965 | 0 | NR |
| 450 | 726 | NR | 580 | 862 | NR | 710 | 98 | NR | 840 | 2 | NR | 970 | 0 | NR |
| 455 | 425 | NR | 585 | 875 | NR | 715 | 84 | NR | 845 | 2 | NR | 975 | 0 | NR |
| 460 | 324 | NR | 590 | 887 | NR | 720 | 73 | NR | 850 | 2 | NR | 980 | 0 | NR |
| 465 | 225 | NR | 595 | 890 | NR | 725 | 63 | NR | 855 | 1 | NR | 985 | 0 | NR |
| 470 | 157 | NR | 600 | 887 | NR | 730 | 54 | NR | 860 | 1 | NR | 990 | 0 | NR |
| 475 | 147 | NR | 605 | 875 | NR | 735 | 46 | NR | 865 | 1 | NR | 995 | 0 | NR |
| 480 | 154 | NR | 610 | 856 | NR | 740 | 40 | NR | 870 | 1 | NR | 1000 | 0 | NR |
| 485 | 184 | NR | 615 | 828 | NR | 745 | 34 | NR | 875 | 1 | NR | | | |

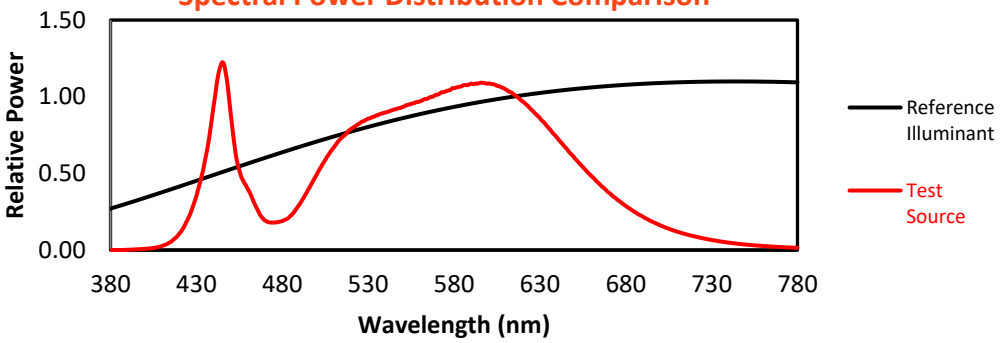
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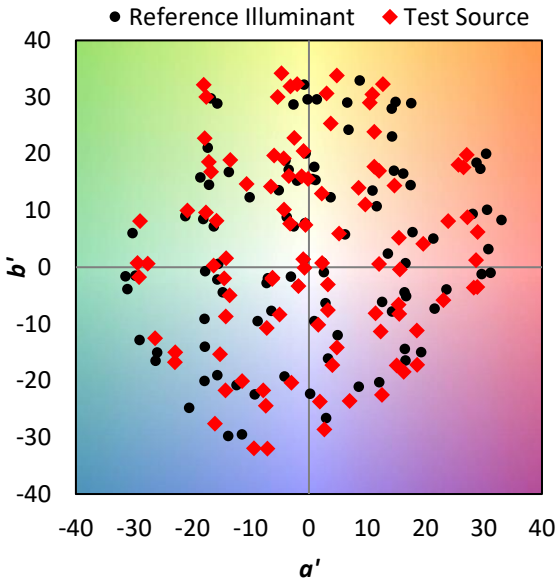
## Summary

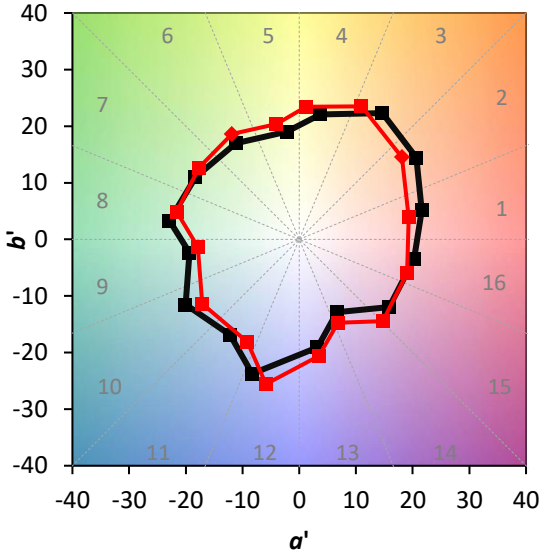
$R_f$ = 81.8
$R_g$ = 98.6
CIE $R_a$ = 80.2
$R_9$ = 6.7

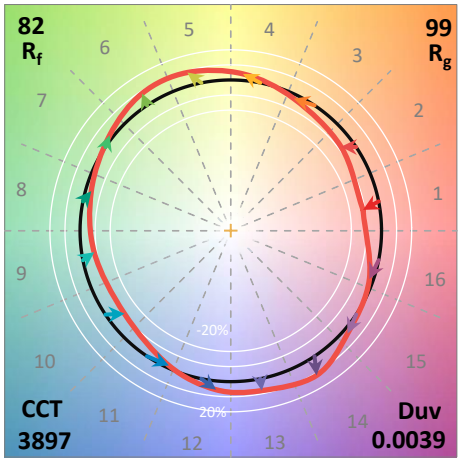
## Spectral Power Distribution Comparison

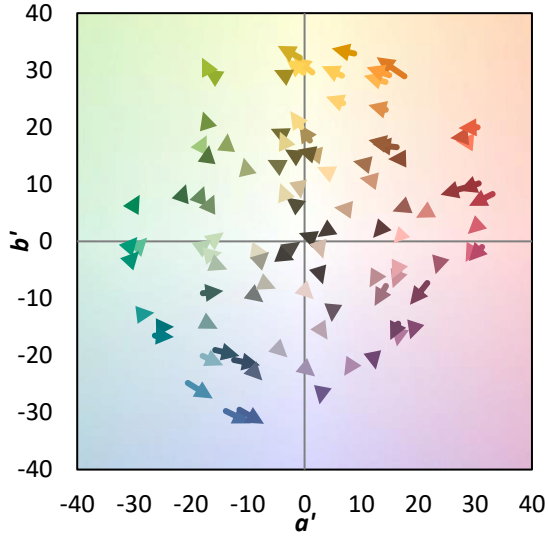



## Color Vector Graphics



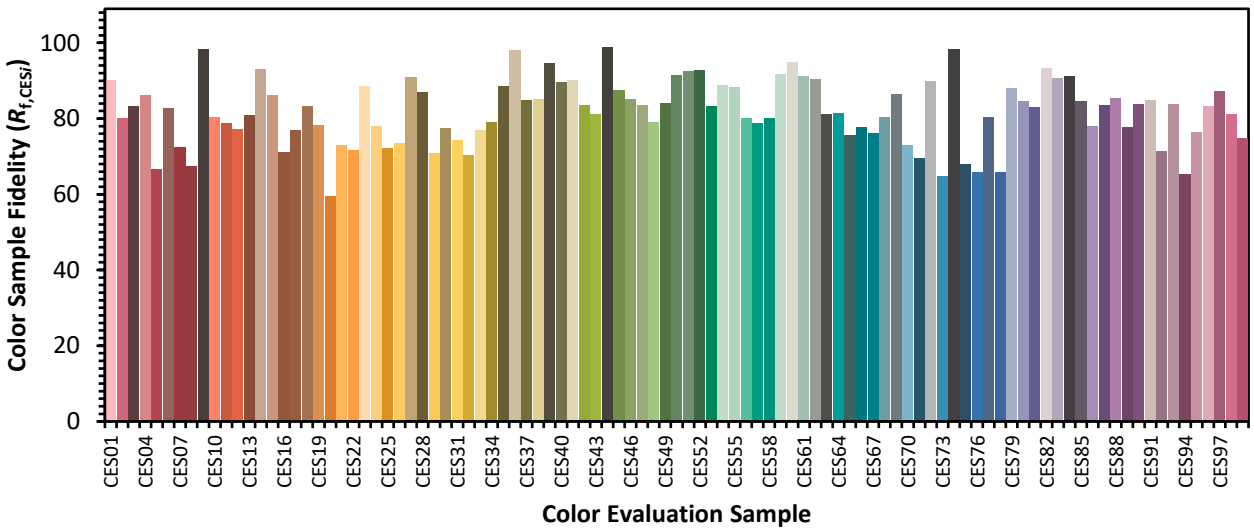



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**Individual Sample Fidelity Index ($R_{f,i}$)**

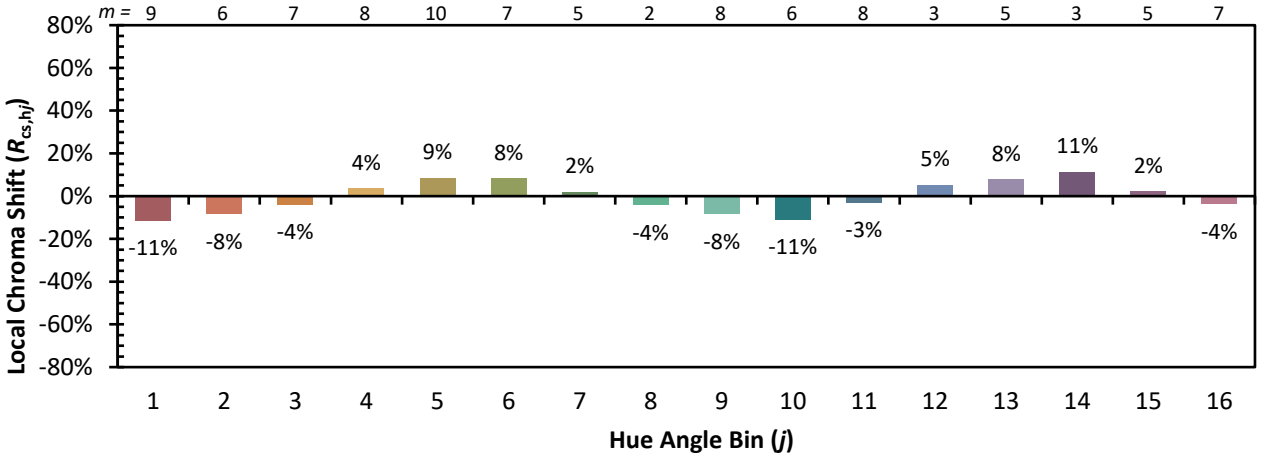
| | | | |
|---|---|---|---|
| CES01 = 85 | CES26 = 73 | CES51 = 93 | CES76 = 66 |
| CES02 = 61 | CES27 = 91 | CES52 = 93 | CES77 = 80 |
| CES03 = 31 | CES28 = 87 | CES53 = 83 | CES78 = 66 |
| CES04 = 69 | CES29 = 71 | CES54 = 89 | CES79 = 88 |
| CES05 = 48 | CES30 = 77 | CES55 = 88 | CES80 = 85 |
| CES06 = 50 | CES31 = 74 | CES56 = 80 | CES81 = 83 |
| CES07 = 41 | CES32 = 70 | CES57 = 79 | CES82 = 93 |
| CES08 = 40 | CES33 = 77 | CES58 = 80 | CES83 = 91 |
| CES09 = 29 | CES34 = 79 | CES59 = 92 | CES84 = 91 |
| CES10 = 74 | CES35 = 88 | CES60 = 95 | CES85 = 84 |
| CES11 = 57 | CES36 = 98 | CES61 = 91 | CES86 = 78 |
| CES12 = 63 | CES37 = 85 | CES62 = 90 | CES87 = 84 |
| CES13 = 42 | CES38 = 85 | CES63 = 81 | CES88 = 85 |
| CES14 = 74 | CES39 = 95 | CES64 = 81 | CES89 = 78 |
| CES15 = 71 | CES40 = 90 | CES65 = 76 | CES90 = 84 |
| CES16 = 47 | CES41 = 90 | CES66 = 78 | CES91 = 85 |
| CES17 = 49 | CES42 = 84 | CES67 = 76 | CES92 = 71 |
| CES18 = 56 | CES43 = 81 | CES68 = 80 | CES93 = 84 |
| CES19 = 71 | CES44 = 99 | CES69 = 86 | CES94 = 65 |
| CES20 = 65 | CES45 = 87 | CES70 = 73 | CES95 = 77 |
| CES21 = 86 | CES46 = 85 | CES71 = 70 | CES96 = 83 |
| CES22 = 78 | CES47 = 84 | CES72 = 90 | CES97 = 87 |
| CES23 = 91 | CES48 = 79 | CES73 = 65 | CES98 = 81 |
| CES24 = 90 | CES49 = 84 | CES74 = 98 | CES99 = 75 |
| CES25 = 71 | CES50 = 91 | CES75 = 68 | |

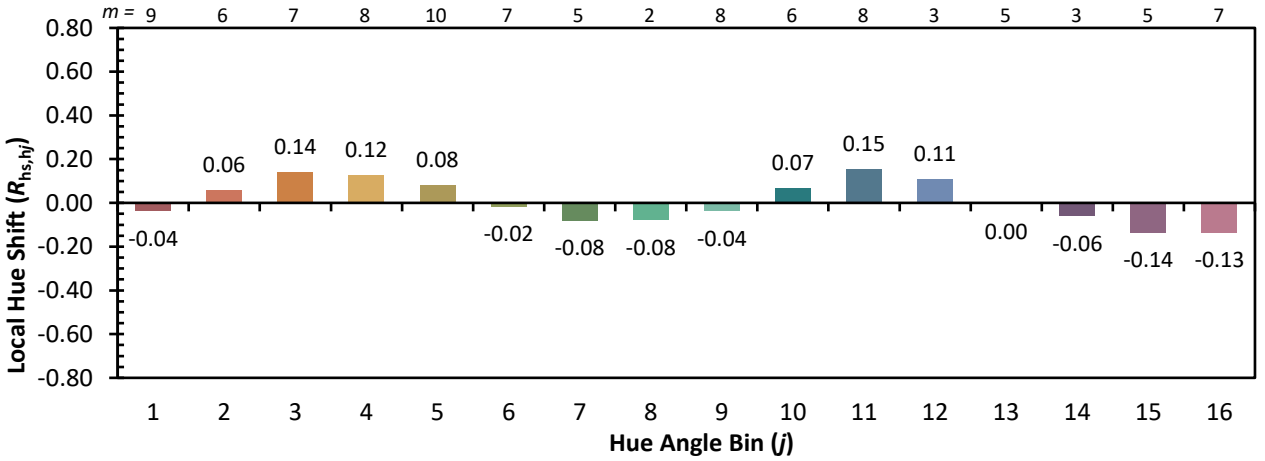


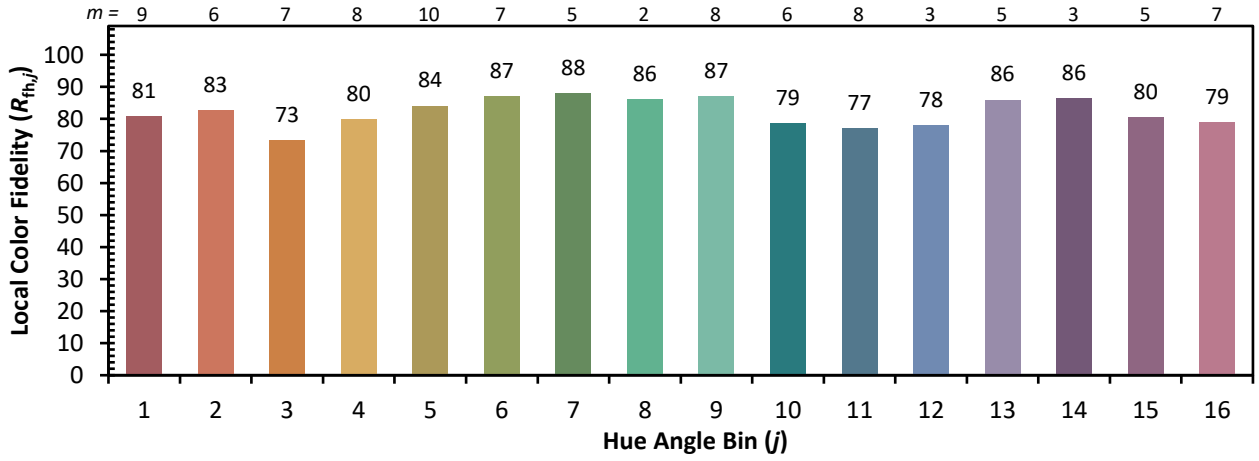
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## Color Rendition by Hue-Angle Bin



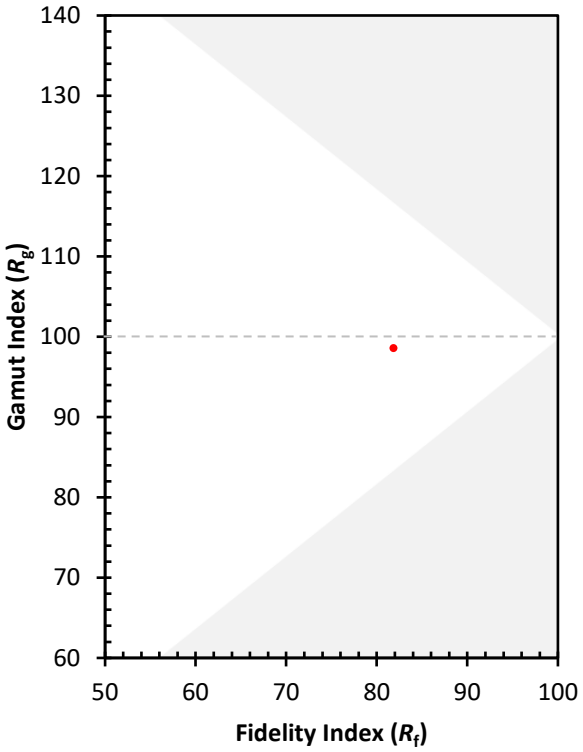



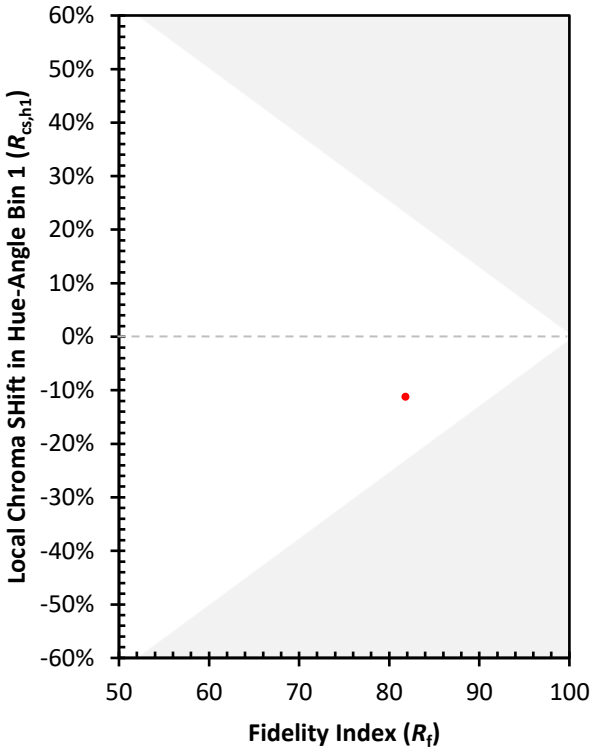



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## Measure Comparisons




(END OF REPORT)