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: P1363068

Luminaire Tested: **GSS-SB2B-735-U-SL2-HSS**

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: | P1363068 |
| Test Lab: | INNOVATION CENTER(G1) |
| Issue Date: | 02/18/2026 |
| Manufacturer: | COOPER LIGHTING SOLUTIONS (FORMERLY EATON) |
| Product Line: | McGRAW-EDISON |
| Catalog Number: | GSS-SB2B-735-U-SL2-HSS |
| Description: | GALLEON II SLIM SITE HIGH DENSITY LED ARRAYS 2SQUARE 74W 70CRI 3500K FIXTURE w/ TYPE II SPILL CONTROL DISTRIBUTION OPTIC AND HOUSE SIDE SHIELD |
| Light Source: | (52) 3500K CCT, 70 CRI LEDS |
| Ballast/Driver: | ELECTRONIC DRIVER |

**Summary**

| | |
|---|---|
| Lumens per Lamp: | N/A |
| Luminaire Lumens: | 8677.1 lumens |
| Efficiency: | N/A |
| Efficacy: | 117.3 lumens/watt |
| Luminous Opening: | Rectangular (W 1' x L: 0.5' x H: 0') |
| IES Classification: | Type II - Medium |
| BUG Rating: | B1 - U0 - G2 |

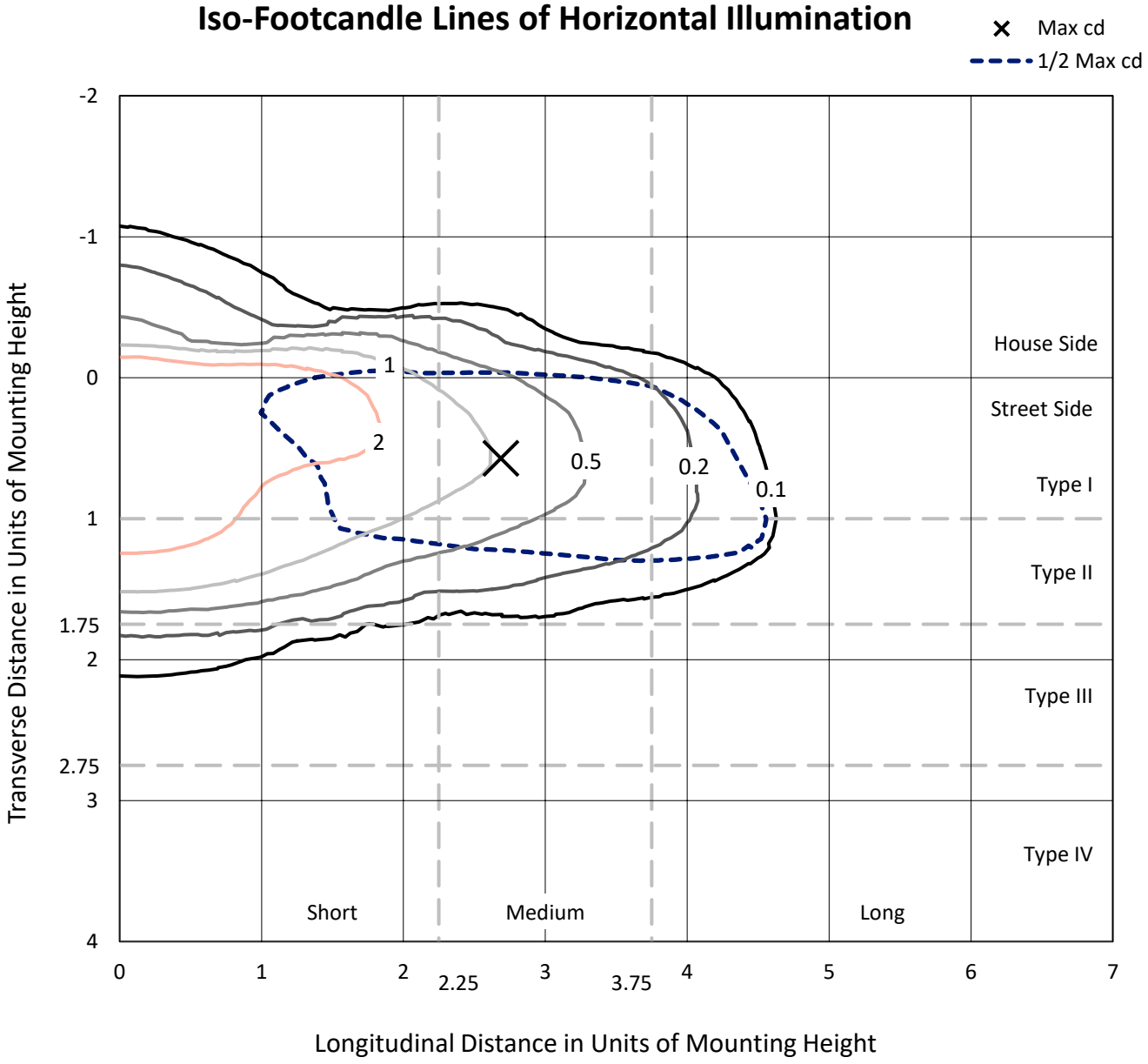
| | |
|---|---|
| Input Watts (W): | 74 |
| Input Voltage (V): | 120 |
| Input Current (Ain): | NR |
| Voltage Rise (V): | NR |
| Power Factor: | 0.98 |
| Total Harmonic Distortion (THDi): | 13.6% |
| Frequency (hertz): | 60 |
| Stabilization Time: | NR |
| Operation Time: | NR |
| Ambient Temperature (°C): | NR |
| Test Distance: | 28.75 FT |

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Scaled Data Report

REPORT NUMBER: P1363068
CATALOG NUMBER: GSS-SB2B-735-U-SL2-HSS

## Iso-Footcandle Lines of Horizontal Illumination



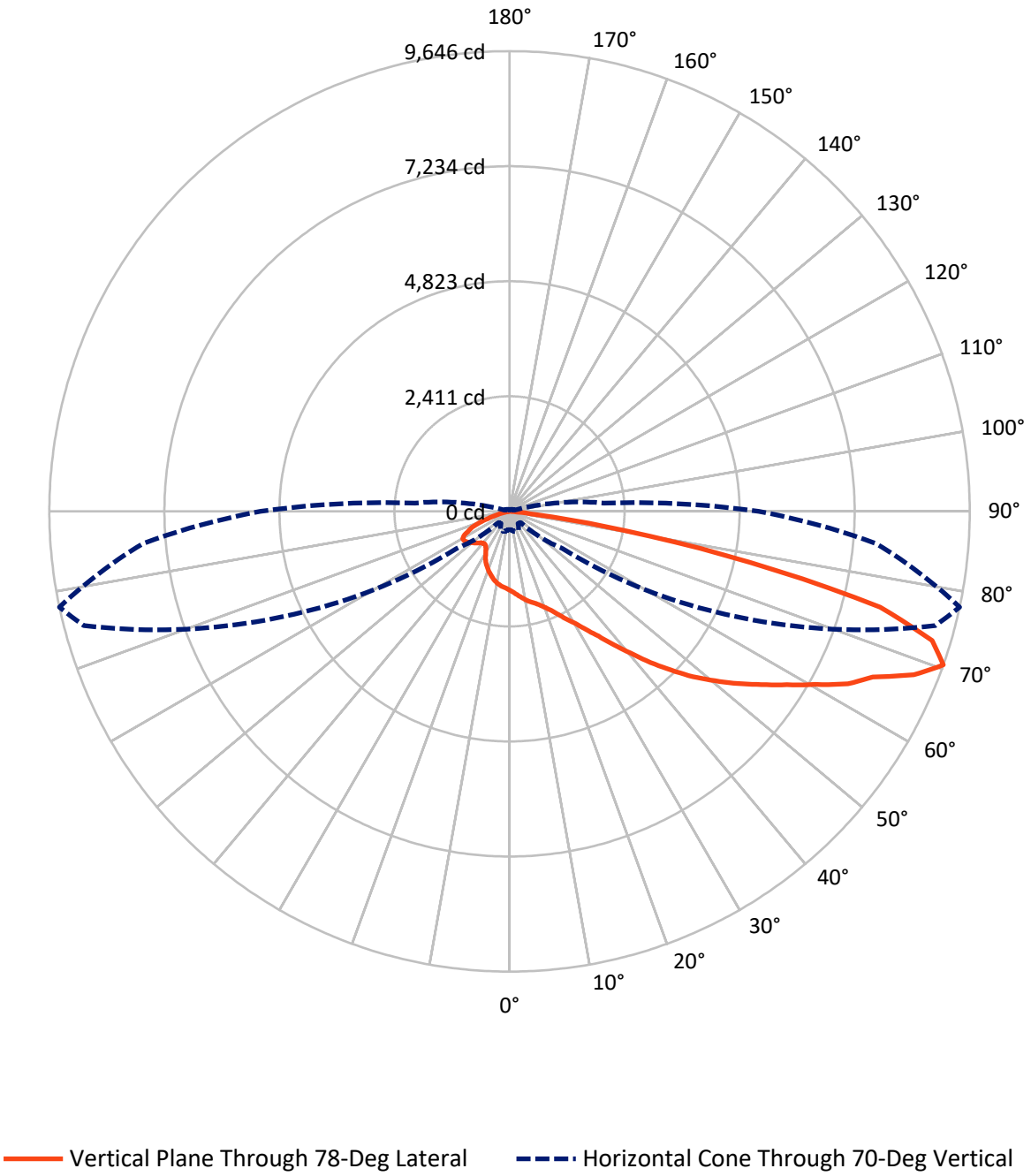

Based on 20 foot mounting height. Maximum calculated value = 5 fc
Type II - Medium - N/A

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Scaled Data Report

REPORT NUMBER: P1363068
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## Luminous Intensity Polar Plot



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Scaled Data Report

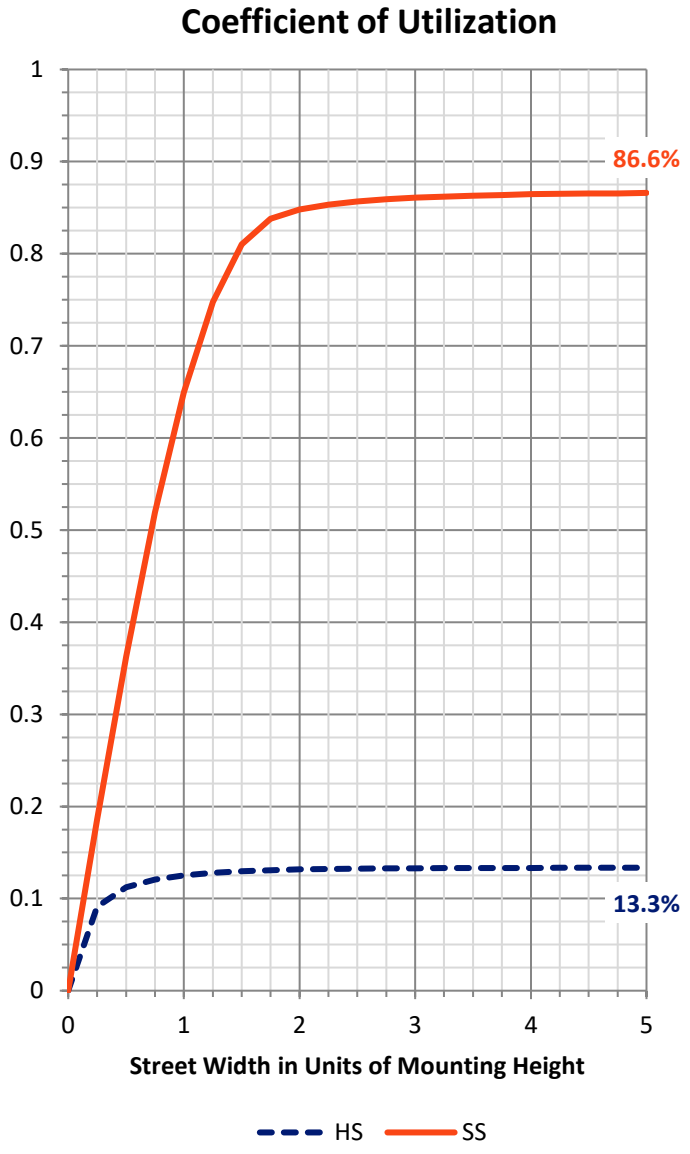
REPORT NUMBER: P1363068
CATALOG NUMBER: GSS-SB2B-735-U-SL2-HSS

**FLUX DISTRIBUTION:**

| | | Downward | Upward | Total |
|---|---|---|---|---|
| **House Side** | Lumens | 1167.1 | 0.0 | 1167.1 |
| | % Fixture | 13.5 | 0.0 | 13.5 |
| **Street Side** | Lumens | 7510.0 | 0.0 | 7510.0 |
| | % Fixture | 86.5 | 0.0 | 86.5 |
| **Total** | Lumens | 8677.1 | 0.0 | 8677.1 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

**ZONAL LUMENS:**

| Zone | Lumens | % Fixture |
|---|---|---|
| 0°-10° | 151.3 | 1.7 |
| 10°-20° | 374.7 | 4.3 |
| 20°-30° | 621.6 | 7.2 |
| 30°-40° | 990.8 | 11.4 |
| 40°-50° | 1512.1 | 17.4 |
| 50°-60° | 2013.3 | 23.2 |
| 60°-70° | 1879.4 | 21.7 |
| 70°-80° | 1062.8 | 12.2 |
| 80°-90° | 71.3 | 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° | 8677.1 | 100.0 |
| 0°-180° | 8677.1 | 100.0 |



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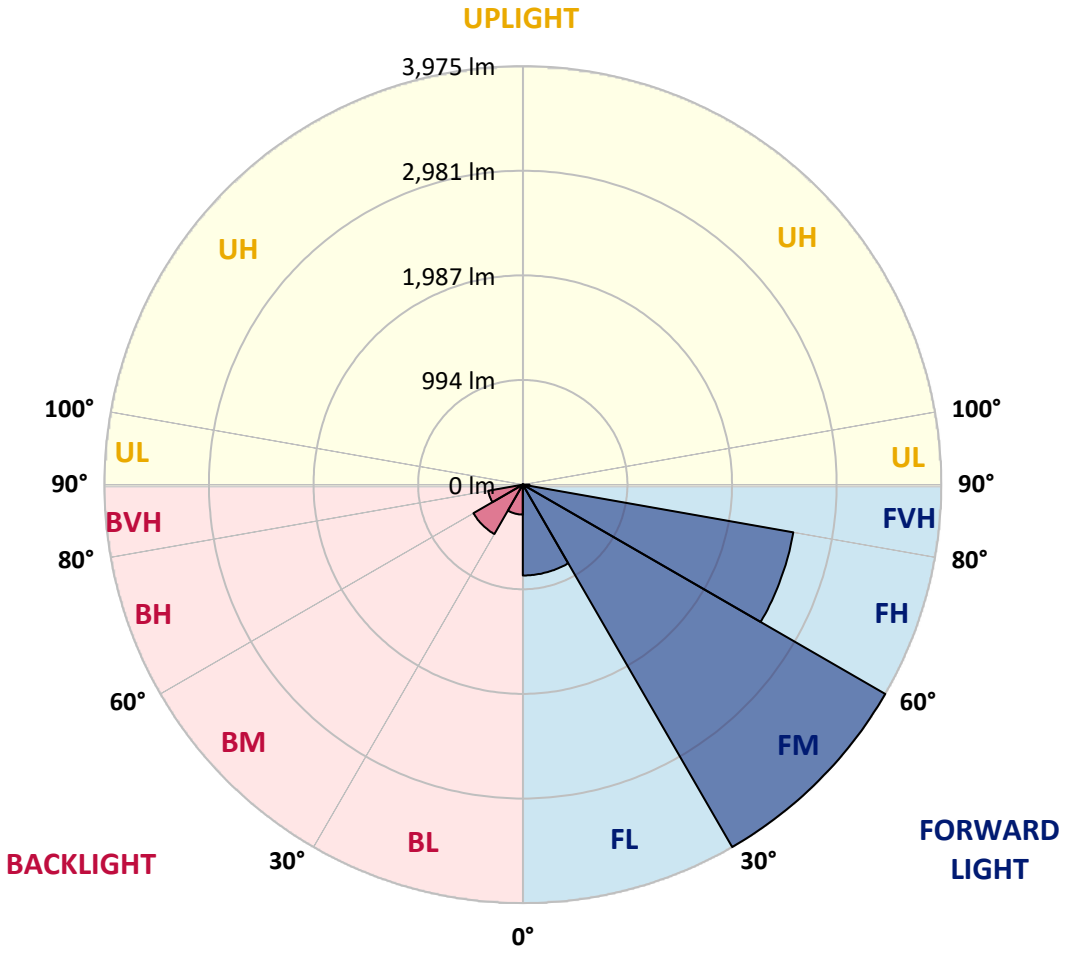
Scaled Data Report

REPORT NUMBER: P1363068
CATALOG NUMBER: GSS-SB2B-735-U-SL2-HSS

## LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit B | U | G |
|---|---|---|---|---|---|---|
| FL | (0°-30°) | 862.8 | 9.9 | | | |
| FM | (30°-60°) | 3974.8 | 45.8 | | | |
| FH | (60°-80°) | 2609.1 | 30.1 | | | G2/5000 |
| FVH | (80°-90°) | 63.3 | 0.7 | | | G1/100 |
| BL | (0°-30°) | 284.7 | 3.3 | B1/500 | | |
| BM | (30°-60°) | 541.3 | 6.2 | B1/1000 | | |
| BH | (60°-80°) | 333.1 | 3.8 | B1/500 | | G1/500 |
| BVH | (80°-90°) | 8.0 | 0.1 | | | G0/10 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

**BUG Rating: B1-U0-G2**
Type II Medium



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REPORT NUMBER: P1363068
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**CANDELA DISTRIBUTION (FULL):**

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 78° | 85° |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0° | 1657.9 | 1657.9 | 1657.9 | 1657.9 | 1657.9 | 1657.9 | 1657.9 | 1657.9 | 1657.9 | *1657.9* | 1657.9 |
| 2.5° | 1866.9 | 1840.2 | 1840.2 | 1828.0 | 1815.9 | 1794.0 | 1767.3 | 1738.1 | 1713.8 | *1701.6* | 1682.2 |
| 5° | 2000.6 | 1993.3 | 1990.9 | 1971.5 | 1952.0 | 1920.4 | 1886.4 | 1830.5 | 1779.4 | *1762.4* | 1718.6 |
| 7.5° | 1995.8 | 1990.9 | 2000.6 | 2024.9 | 2041.9 | 2029.8 | 2000.6 | 1932.6 | 1852.3 | *1823.2* | 1757.5 |
| 10° | 1845.0 | 1830.5 | 1864.5 | 1918.0 | 1995.8 | 2076.0 | 2088.1 | 2022.5 | 1920.4 | *1886.4* | 1794.0 |
| 12.5° | 1708.9 | 1708.9 | 1725.9 | 1774.5 | 1871.8 | 2015.2 | 2127.0 | 2105.1 | 1988.5 | *1947.1* | 1825.6 |
| 15° | 1691.9 | 1679.7 | 1684.6 | 1706.5 | 1774.5 | 1915.5 | 2102.7 | 2168.4 | 2051.7 | *1995.8* | 1854.8 |
| 17.5° | 1769.7 | 1755.1 | 1742.9 | 1733.2 | 1742.9 | 1835.3 | 2027.4 | 2221.8 | 2127.0 | *2066.3* | 1893.7 |
| 20° | 1891.2 | 1891.2 | 1859.6 | 1820.7 | 1789.1 | 1806.1 | 1966.6 | 2255.9 | 2217.0 | *2151.3* | 1952.0 |
| 22.5° | 2066.3 | 2044.4 | 2024.9 | 1964.2 | 1886.4 | 1849.9 | 1939.8 | 2292.3 | 2340.9 | *2260.7* | 2032.2 |
| 25° | 2212.1 | 2219.4 | 2197.5 | 2122.2 | 2012.8 | 1932.6 | 1961.7 | 2306.9 | 2481.9 | *2401.7* | 2131.9 |
| 27.5° | 2377.4 | 2370.1 | 2350.7 | 2275.3 | 2148.9 | 2034.7 | 2022.5 | 2336.1 | 2644.8 | *2559.7* | 2248.6 |
| 30° | 2530.6 | 2530.6 | 2506.2 | 2421.2 | 2292.3 | 2168.4 | 2112.4 | 2384.7 | 2807.7 | *2729.9* | 2379.8 |
| 32.5° | 2700.7 | 2703.1 | 2654.5 | 2564.6 | 2433.3 | 2292.3 | 2226.7 | 2457.6 | 3009.4 | *2951.1* | 2557.3 |
| 35° | 2839.3 | 2844.1 | 2832.0 | 2734.7 | 2562.2 | 2421.2 | 2345.8 | 2571.9 | 3245.2 | *3211.2* | 2793.1 |
| 37.5° | 2946.2 | 2953.5 | 2929.2 | 2885.5 | 2725.0 | 2545.1 | 2472.2 | 2712.9 | 3529.6 | *3551.5* | 3099.4 |
| 40° | 3070.2 | 3070.2 | 3070.2 | 3004.6 | 2885.5 | 2681.3 | 2601.1 | 2887.9 | 3835.9 | *3904.0* | 3439.7 |
| 42.5° | 3179.6 | 3186.9 | 3199.0 | 3148.0 | 3038.6 | 2875.7 | 2759.1 | 3084.8 | 4178.7 | *4331.8* | 3860.3 |
| 45° | 3235.5 | 3250.1 | 3293.9 | 3272.0 | 3189.3 | 3031.3 | 2926.8 | 3276.8 | 4555.5 | *4745.1* | 4312.4 |
| 47.5° | 3269.5 | 3286.6 | 3344.9 | 3371.6 | 3337.6 | 3150.4 | 3084.8 | 3505.3 | 4915.3 | *5177.8* | 4776.7 |
| 50° | 3296.3 | 3320.6 | 3386.2 | 3437.3 | 3468.9 | 3250.1 | 3240.4 | 3738.7 | 5275.0 | *5583.7* | 5199.7 |
| 52.5° | 3218.5 | 3242.8 | 3366.8 | 3529.6 | 3556.4 | 3400.8 | 3403.2 | 3991.5 | 5639.7 | *5997.0* | 5591.0 |
| 55° | 2941.4 | 2958.4 | 3131.0 | 3459.2 | 3660.9 | 3575.8 | 3624.5 | 4319.7 | 6038.3 | *6407.8* | 5965.4 |
| 57.5° | 2093.0 | 2197.5 | 2503.8 | 3024.0 | 3532.1 | 3826.2 | 3979.4 | 4681.9 | 6502.6 | *6857.5* | 6344.6 |
| 60° | 870.3 | 945.6 | 1242.2 | 2158.6 | 3055.6 | 3860.3 | 4468.0 | 5277.5 | 7030.1 | *7368.0* | 6774.9 |
| 62.5° | 566.4 | 573.7 | 602.9 | 926.2 | 1939.8 | 3386.2 | 4655.2 | 6121.0 | 7774.0 | *7961.2* | 7010.7 |
| 65° | 505.6 | 515.3 | 529.9 | 576.1 | 714.7 | 2285.0 | 4023.1 | 6405.4 | 8379.3 | *8367.1* | 6877.0 |
| 67.5° | 449.7 | 461.9 | 488.6 | 493.5 | 398.7 | 841.1 | 2703.1 | 5987.3 | 9008.9 | *9140.1* | 7241.6 |
| 70° | *384.1* | *388.9* | *437.6* | *442.4* | *313.6* | *330.6* | *1361.3* | *5197.2* | *9242.2* | *9645.8* | *7708.3* |
| 72.5° | 267.4 | 282.0 | 369.5 | 388.9 | 250.4 | 213.9 | 495.9 | 3782.5 | 8590.8 | *9261.7* | 7679.2 |
| 75° | 158.0 | 165.3 | 211.5 | 265.0 | 194.5 | 150.7 | 223.6 | 2326.4 | 7392.3 | *8021.9* | 6833.2 |
| 77.5° | 114.3 | 121.5 | 153.1 | 206.6 | 124.0 | 102.1 | 138.6 | 1215.4 | 5134.0 | *5160.8* | 3857.8 |
| 80° | 36.5 | 41.3 | 94.8 | 138.6 | 89.9 | 65.6 | 85.1 | 410.8 | 2593.8 | *2447.9* | 1179.0 |
| 82.5° | 19.4 | 19.4 | 58.3 | 72.9 | 55.9 | 41.3 | 48.6 | 170.2 | 831.4 | *532.4* | 187.2 |
| 85° | 9.7 | 9.7 | 24.3 | 29.2 | 21.9 | 19.4 | 24.3 | 60.8 | 87.5 | *80.2* | 53.5 |
| 87.5° | 0.0 | 0.0 | 2.4 | 2.4 | 2.4 | 4.9 | 9.7 | 17.0 | 21.9 | *21.9* | 24.3 |
| 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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Scaled Data Report

REPORT NUMBER: P1363068
CATALOG NUMBER: GSS-SB2B-735-U-SL2-HSS

**CANDELA DISTRIBUTION (continued):**

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0° | 1657.9 | 1657.9 | 1657.9 | 1657.9 | 1657.9 | 1657.9 | 1657.9 | 1657.9 | 1657.9 | 1657.9 | 1657.9 |
| 2.5° | 1660.3 | 1640.8 | 1611.7 | 1577.6 | 1553.3 | 1519.3 | 1490.1 | 1478.0 | 1456.1 | 1451.2 | 1446.4 |
| 5° | 1677.3 | 1638.4 | 1572.8 | 1497.4 | 1431.8 | 1354.0 | 1290.8 | 1242.2 | 1208.2 | 1193.6 | 1186.3 |
| 7.5° | 1704.1 | 1640.8 | 1533.9 | 1409.9 | 1290.8 | 1174.1 | 1057.4 | 967.5 | 916.4 | 867.8 | 870.3 |
| 10° | 1718.6 | 1643.3 | 1482.8 | 1310.2 | 1132.8 | 952.9 | 777.9 | 644.2 | 573.7 | 532.4 | 522.6 |
| 12.5° | 1730.8 | 1631.1 | 1424.5 | 1186.3 | 933.5 | 675.8 | 500.8 | 413.3 | 376.8 | 371.9 | 369.5 |
| 15° | 1738.1 | 1616.5 | 1351.6 | 1042.9 | 707.4 | 457.0 | 371.9 | 347.6 | 337.9 | 335.5 | 335.5 |
| 17.5° | 1755.1 | 1599.5 | 1276.2 | 865.4 | 491.0 | 364.6 | 333.0 | 320.9 | 313.6 | 311.2 | 311.2 |
| 20° | 1784.3 | 1602.0 | 1198.4 | 670.9 | 381.6 | 333.0 | 308.7 | 296.6 | 286.8 | 286.8 | 286.8 |
| 22.5° | 1832.9 | 1611.7 | 1098.8 | 503.2 | 335.5 | 303.9 | 282.0 | 267.4 | 262.5 | 265.0 | 265.0 |
| 25° | 1898.5 | 1636.0 | 996.7 | 388.9 | 308.7 | 274.7 | 252.8 | 240.7 | 238.2 | 240.7 | 240.7 |
| 27.5° | 1981.2 | 1662.7 | 870.3 | 335.5 | 284.4 | 250.4 | 228.5 | 221.2 | 218.8 | 223.6 | 223.6 |
| 30° | 2071.1 | 1694.3 | 719.5 | 308.7 | 262.5 | 230.9 | 211.5 | 204.2 | 204.2 | 211.5 | 211.5 |
| 32.5° | 2197.5 | 1745.4 | 583.4 | 286.8 | 245.5 | 216.3 | 196.9 | 189.6 | 192.0 | 199.3 | 199.3 |
| 35° | 2367.7 | 1811.0 | 478.9 | 272.3 | 233.4 | 204.2 | 187.2 | 177.5 | 179.9 | 182.3 | 184.7 |
| 37.5° | 2588.9 | 1901.0 | 413.3 | 262.5 | 221.2 | 196.9 | 175.0 | 167.7 | 167.7 | 170.2 | 170.2 |
| 40° | 2836.8 | 2007.9 | 381.6 | 255.2 | 211.5 | 184.7 | 165.3 | 155.6 | 155.6 | 160.4 | 160.4 |
| 42.5° | 3152.9 | 2122.2 | 357.3 | 245.5 | 199.3 | 175.0 | 153.1 | 145.9 | 143.4 | 148.3 | 148.3 |
| 45° | 3517.5 | 2287.5 | 342.8 | 235.8 | 187.2 | 162.9 | 143.4 | 133.7 | 131.3 | 133.7 | 136.1 |
| 47.5° | 3887.0 | 2462.5 | 328.2 | 223.6 | 179.9 | 153.1 | 136.1 | 124.0 | 121.5 | 121.5 | 121.5 |
| 50° | 4234.6 | 2637.5 | 318.4 | 209.1 | 172.6 | 143.4 | 126.4 | 116.7 | 111.8 | 111.8 | 111.8 |
| 52.5° | 4545.8 | 2800.4 | 313.6 | 196.9 | 165.3 | 136.1 | 121.5 | 109.4 | 102.1 | 102.1 | 102.1 |
| 55° | 4842.3 | 2958.4 | 306.3 | 182.3 | 158.0 | 126.4 | 114.3 | 102.1 | 94.8 | 92.4 | 92.4 |
| 57.5° | 5141.3 | 3104.2 | 286.8 | 167.7 | 143.4 | 119.1 | 107.0 | 94.8 | 87.5 | 82.7 | 82.7 |
| 60° | 5386.8 | 3194.2 | 257.7 | 150.7 | 126.4 | 109.4 | 99.7 | 87.5 | 77.8 | 70.5 | 70.5 |
| 62.5° | 5403.9 | 3101.8 | 213.9 | 133.7 | 111.8 | 99.7 | 89.9 | 77.8 | 65.6 | 55.9 | 55.9 |
| 65° | 5114.6 | 2780.9 | 170.2 | 111.8 | 99.7 | 87.5 | 75.4 | 65.6 | 53.5 | 43.8 | 41.3 |
| 67.5° | 5180.2 | 2523.3 | 131.3 | 94.8 | 87.5 | 70.5 | 60.8 | 53.5 | 43.8 | 36.5 | 36.5 |
| 70° | *5219.1* | *1986.0* | *104.5* | *77.8* | *72.9* | *55.9* | *48.6* | *46.2* | *36.5* | *29.2* | *29.2* |
| 72.5° | 4878.8 | 1230.0 | 85.1 | 65.6 | 55.9 | 38.9 | 38.9 | 36.5 | 29.2 | 21.9 | 19.4 |
| 75° | 4302.7 | 734.1 | 65.6 | 51.0 | 38.9 | 29.2 | 29.2 | 26.7 | 19.4 | 14.6 | 14.6 |
| 77.5° | 2601.1 | 386.5 | 51.0 | 38.9 | 26.7 | 21.9 | 19.4 | 17.0 | 12.2 | 9.7 | 7.3 |
| 80° | 804.6 | 136.1 | 38.9 | 26.7 | 19.4 | 17.0 | 12.2 | 7.3 | 4.9 | 4.9 | 2.4 |
| 82.5° | 111.8 | 48.6 | 29.2 | 21.9 | 14.6 | 9.7 | 7.3 | 4.9 | 2.4 | 2.4 | 2.4 |
| 85° | 38.9 | 26.7 | 19.4 | 14.6 | 9.7 | 7.3 | 4.9 | 2.4 | 2.4 | 0.0 | 0.0 |
| 87.5° | 21.9 | 19.4 | 14.6 | 9.7 | 7.3 | 4.9 | 4.9 | 2.4 | 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 |

Cooper Lighting Solutions Photometric Lab
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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: SP1-2407-184-5

Test Date: 10/10/2024

Luminaire Tested: GSS-SB1A-735-U-5WQ

Data in this report applies to families of products including GSS-SB1A-735-U-5WQ

Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

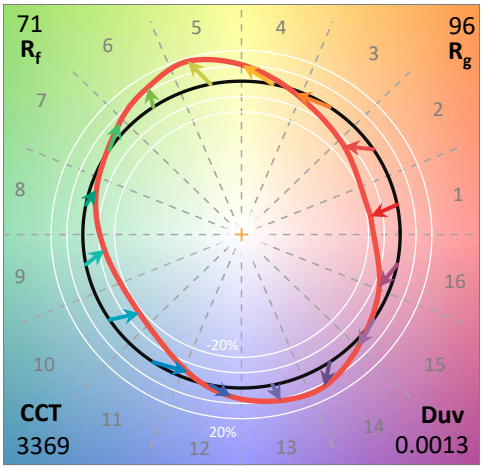
## Test Information

| | |
|---|---|
| Test Method: | LM-79-2019 |
| Report Number: | SP1-2407-184-5 |
| 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-735-U-5WQ** |
| Description: | GALLEON II SITE SLIM 1SQ 350MA 5WQ HIGH DENSITY LIGHTSQUARE WITH 70 CRI 3500K CCT 26 LEDS |

## Spectral Parameters

| | |
|---|---|
| CCT (K): | 3369 |
| CIE u': | 0.2386 |
| CIE v': | 0.5156 |
| Duv: | 0.0013 |
| CIE x: | 0.4143 |
| CIE y: | 0.3980 |
| CIE z: | 0.1877 |
| Peak Wavelength (nm): | 590 |
| Dominant Wavelength (nm): | 580 |
| Purity: | 43.80166 |
| Rf: | 71.4 |
| Rg: | 96 |

| | |
|---|---|
| CRI (Ra): | 70.1 |
| R1: | 66.6 |
| R2: | 77.6 |
| R3: | 88.5 |
| R4: | 69.5 |
| R5: | 66.4 |
| R6: | 69.6 |
| R7: | 77.5 |
| R8: | 44.9 |
| R9: | -40.2 |
| R10: | 49.1 |
| R11: | 66.3 |
| R12: | 45.7 |
| R13: | 68.0 |
| R14: | 93.4 |
| R15: | 57.6 |




## Test Conditions

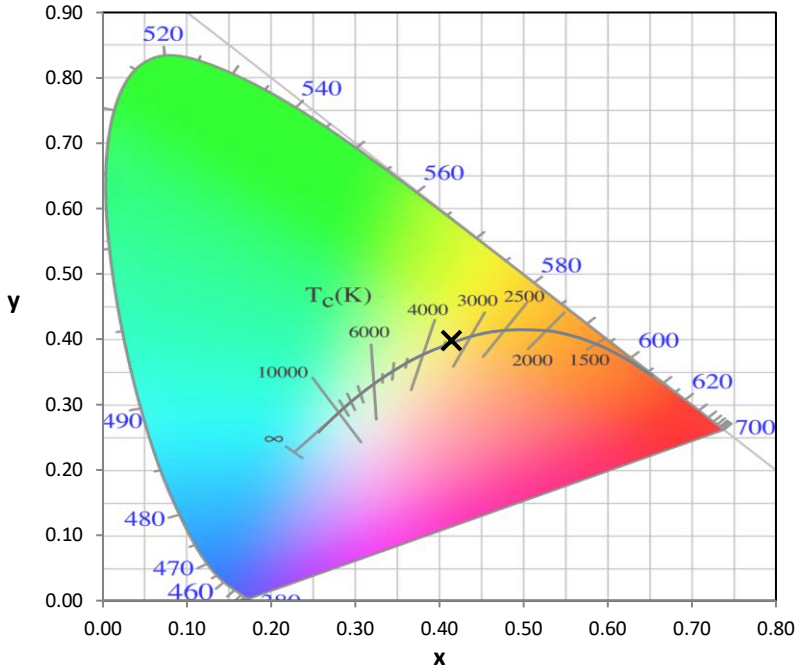
| | |
|---|---|
| Stabilization Time: | 21M |
| Operation Time: | 1H 21M |
| Sphere Temperature (°C): | 25.2 |

REPORT NUMBER: SP1-2407-184-5

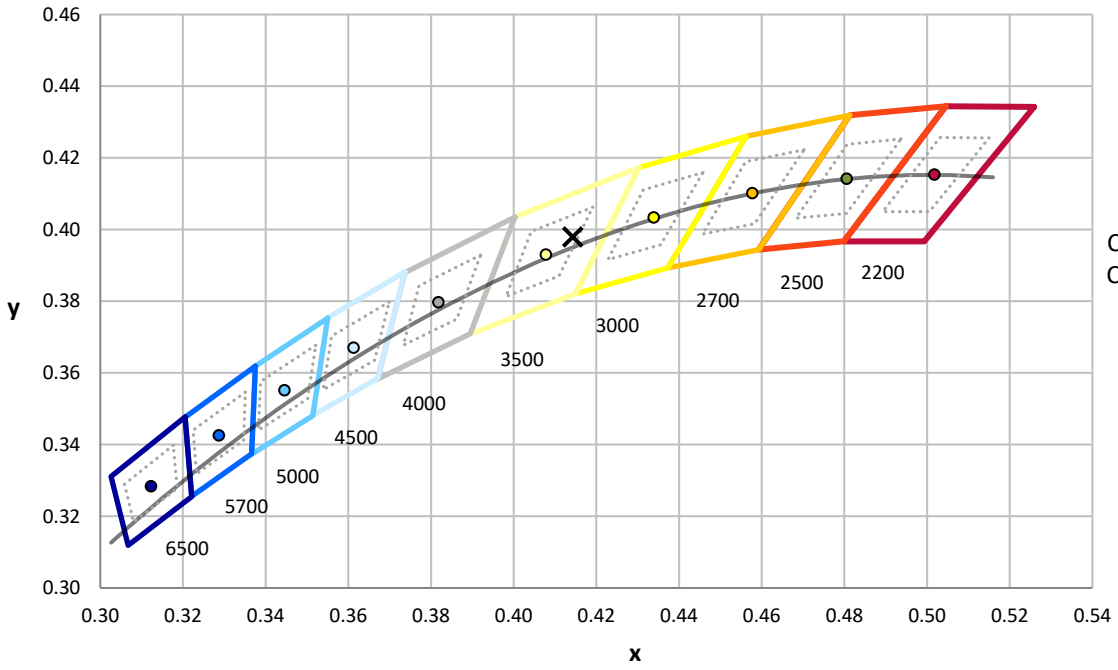
| Measurement and Test Equipment | | | |
|---|---|---|---|
| Instrument | Identification Number | Calibration Date | Calibration Due Date |
| Photometer | IN0058 | 6/18/2024 | 12/18/2024 |
| Power Meter | INXT2011004 | 2/8/2024 | 2/8/2025 |
| AC Power Source | IN0063 | 10/24/2023 | 10/24/2024 |
| DC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

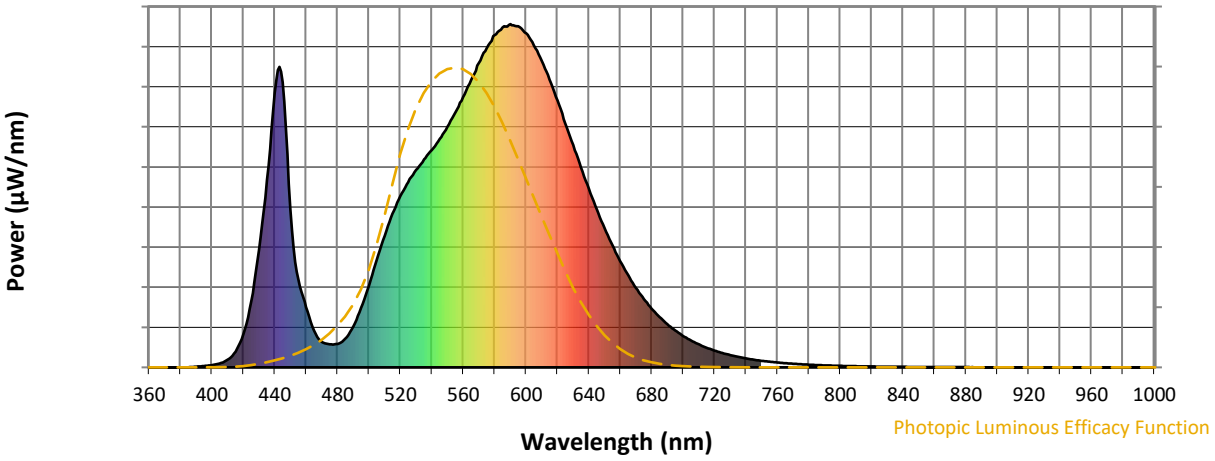



CCT = 3369K
CIE x = 0.4143
CIE y = 0.3980
Duv = 0.0013

Point lies inside the ANSI 3500K 4-step quadrangle

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## Photopic Flux vs. Wavelength

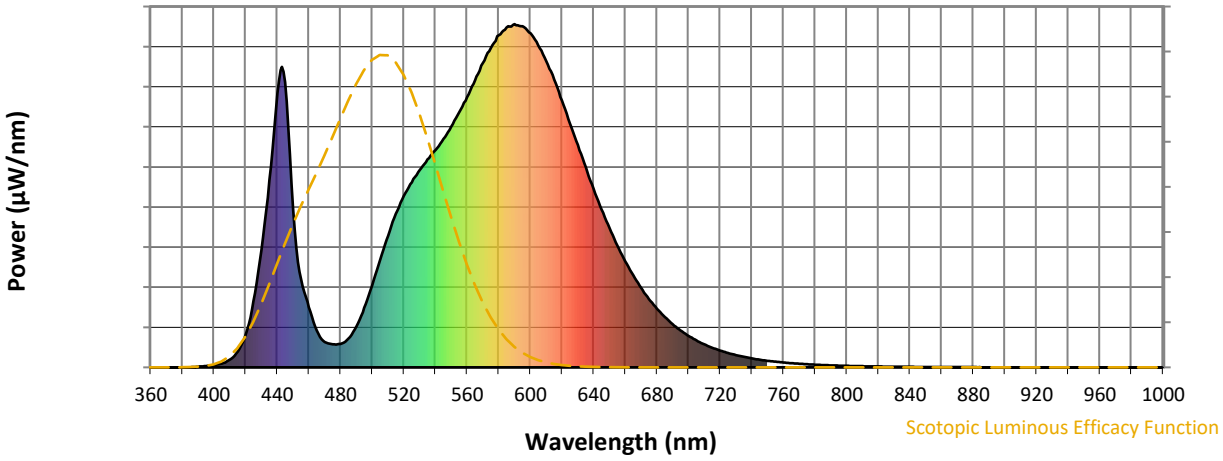



## Photopic Lumens: NR

| 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 | 119 | NR | 620 | 778 | NR | 750 | 19 | NR | 880 | 1 | NR |
| 365 | 0 | NR | 495 | 173 | NR | 625 | 711 | NR | 755 | 16 | NR | 885 | 0 | NR |
| 370 | 0 | NR | 500 | 239 | NR | 630 | 648 | NR | 760 | 14 | NR | 890 | 0 | NR |
| 375 | 0 | NR | 505 | 313 | NR | 635 | 582 | NR | 765 | 12 | NR | 895 | 0 | NR |
| 380 | 0 | NR | 510 | 383 | NR | 640 | 520 | NR | 770 | 11 | NR | 900 | 0 | NR |
| 385 | 0 | NR | 515 | 448 | NR | 645 | 460 | NR | 775 | 9 | NR | 905 | 0 | NR |
| 390 | 2 | NR | 520 | 500 | NR | 650 | 406 | NR | 780 | 8 | NR | 910 | 0 | NR |
| 395 | 4 | NR | 525 | 539 | NR | 655 | 355 | NR | 785 | 7 | NR | 915 | 0 | NR |
| 400 | 6 | NR | 530 | 575 | NR | 660 | 309 | NR | 790 | 6 | NR | 920 | 0 | NR |
| 405 | 11 | NR | 535 | 606 | NR | 665 | 269 | NR | 795 | 5 | NR | 925 | 0 | NR |
| 410 | 22 | NR | 540 | 633 | NR | 670 | 231 | NR | 800 | 4 | NR | 930 | 0 | NR |
| 415 | 45 | NR | 545 | 666 | NR | 675 | 199 | NR | 805 | 4 | NR | 935 | 0 | NR |
| 420 | 96 | NR | 550 | 701 | NR | 680 | 171 | NR | 810 | 3 | NR | 940 | 0 | NR |
| 425 | 193 | NR | 555 | 743 | NR | 685 | 147 | NR | 815 | 3 | NR | 945 | 0 | NR |
| 430 | 341 | NR | 560 | 788 | NR | 690 | 126 | NR | 820 | 3 | NR | 950 | 0 | NR |
| 435 | 547 | NR | 565 | 837 | NR | 695 | 107 | NR | 825 | 2 | NR | 955 | 0 | NR |
| 440 | 799 | NR | 570 | 887 | NR | 700 | 92 | NR | 830 | 2 | NR | 960 | 0 | NR |
| 445 | 831 | NR | 575 | 931 | NR | 705 | 78 | NR | 835 | 2 | NR | 965 | 0 | NR |
| 450 | 461 | NR | 580 | 967 | NR | 710 | 67 | NR | 840 | 2 | NR | 970 | 0 | NR |
| 455 | 256 | NR | 585 | 990 | NR | 715 | 57 | NR | 845 | 1 | NR | 975 | 0 | NR |
| 460 | 176 | NR | 590 | 1000 | NR | 720 | 49 | NR | 850 | 1 | NR | 980 | 0 | NR |
| 465 | 107 | NR | 595 | 994 | NR | 725 | 42 | NR | 855 | 1 | NR | 985 | 0 | NR |
| 470 | 74 | NR | 600 | 973 | NR | 730 | 36 | NR | 860 | 1 | NR | 990 | 0 | NR |
| 475 | 67 | NR | 605 | 938 | NR | 735 | 31 | NR | 865 | 1 | NR | 995 | 0 | NR |
| 480 | 68 | NR | 610 | 892 | NR | 740 | 26 | NR | 870 | 1 | NR | 1000 | 0 | NR |
| 485 | 84 | NR | 615 | 838 | NR | 745 | 22 | NR | 875 | 1 | NR | | | |

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## Scotopic Flux vs. Wavelength

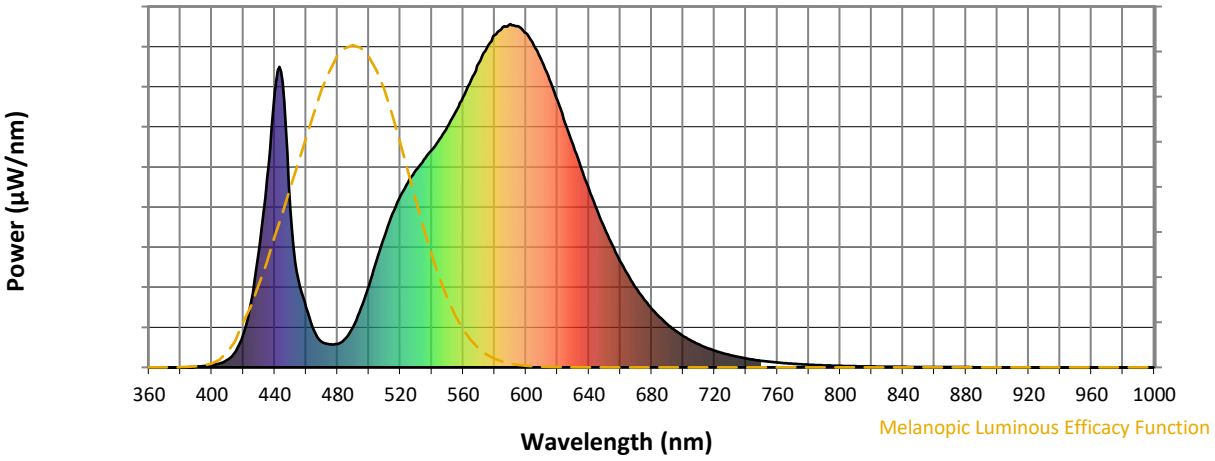



**Scotopic Lumens: NR** **S/P: 1.29**

| 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 | 119 | NR | 620 | 778 | NR | 750 | 19 | NR | 880 | 1 | NR |
| 365 | 0 | NR | 495 | 173 | NR | 625 | 711 | NR | 755 | 16 | NR | 885 | 0 | NR |
| 370 | 0 | NR | 500 | 239 | NR | 630 | 648 | NR | 760 | 14 | NR | 890 | 0 | NR |
| 375 | 0 | NR | 505 | 313 | NR | 635 | 582 | NR | 765 | 12 | NR | 895 | 0 | NR |
| 380 | 0 | NR | 510 | 383 | NR | 640 | 520 | NR | 770 | 11 | NR | 900 | 0 | NR |
| 385 | 0 | NR | 515 | 448 | NR | 645 | 460 | NR | 775 | 9 | NR | 905 | 0 | NR |
| 390 | 2 | NR | 520 | 500 | NR | 650 | 406 | NR | 780 | 8 | NR | 910 | 0 | NR |
| 395 | 4 | NR | 525 | 539 | NR | 655 | 355 | NR | 785 | 7 | NR | 915 | 0 | NR |
| 400 | 6 | NR | 530 | 575 | NR | 660 | 309 | NR | 790 | 6 | NR | 920 | 0 | NR |
| 405 | 11 | NR | 535 | 606 | NR | 665 | 269 | NR | 795 | 5 | NR | 925 | 0 | NR |
| 410 | 22 | NR | 540 | 633 | NR | 670 | 231 | NR | 800 | 4 | NR | 930 | 0 | NR |
| 415 | 45 | NR | 545 | 666 | NR | 675 | 199 | NR | 805 | 4 | NR | 935 | 0 | NR |
| 420 | 96 | NR | 550 | 701 | NR | 680 | 171 | NR | 810 | 3 | NR | 940 | 0 | NR |
| 425 | 193 | NR | 555 | 743 | NR | 685 | 147 | NR | 815 | 3 | NR | 945 | 0 | NR |
| 430 | 341 | NR | 560 | 788 | NR | 690 | 126 | NR | 820 | 3 | NR | 950 | 0 | NR |
| 435 | 547 | NR | 565 | 837 | NR | 695 | 107 | NR | 825 | 2 | NR | 955 | 0 | NR |
| 440 | 799 | NR | 570 | 887 | NR | 700 | 92 | NR | 830 | 2 | NR | 960 | 0 | NR |
| 445 | 831 | NR | 575 | 931 | NR | 705 | 78 | NR | 835 | 2 | NR | 965 | 0 | NR |
| 450 | 461 | NR | 580 | 967 | NR | 710 | 67 | NR | 840 | 2 | NR | 970 | 0 | NR |
| 455 | 256 | NR | 585 | 990 | NR | 715 | 57 | NR | 845 | 1 | NR | 975 | 0 | NR |
| 460 | 176 | NR | 590 | 1000 | NR | 720 | 49 | NR | 850 | 1 | NR | 980 | 0 | NR |
| 465 | 107 | NR | 595 | 994 | NR | 725 | 42 | NR | 855 | 1 | NR | 985 | 0 | NR |
| 470 | 74 | NR | 600 | 973 | NR | 730 | 36 | NR | 860 | 1 | NR | 990 | 0 | NR |
| 475 | 67 | NR | 605 | 938 | NR | 735 | 31 | NR | 865 | 1 | NR | 995 | 0 | NR |
| 480 | 68 | NR | 610 | 892 | NR | 740 | 26 | NR | 870 | 1 | NR | 1000 | 0 | NR |
| 485 | 84 | NR | 615 | 838 | NR | 745 | 22 | NR | 875 | 1 | NR | | | |

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## Melanopic Flux vs. Wavelength




**Melanopic Lumens: NR** **M/P: 2.36**

| 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 | 119 | NR | 620 | 778 | NR | 750 | 19 | NR | 880 | 1 | NR |
| 365 | 0 | NR | 495 | 173 | NR | 625 | 711 | NR | 755 | 16 | NR | 885 | 0 | NR |
| 370 | 0 | NR | 500 | 239 | NR | 630 | 648 | NR | 760 | 14 | NR | 890 | 0 | NR |
| 375 | 0 | NR | 505 | 313 | NR | 635 | 582 | NR | 765 | 12 | NR | 895 | 0 | NR |
| 380 | 0 | NR | 510 | 383 | NR | 640 | 520 | NR | 770 | 11 | NR | 900 | 0 | NR |
| 385 | 0 | NR | 515 | 448 | NR | 645 | 460 | NR | 775 | 9 | NR | 905 | 0 | NR |
| 390 | 2 | NR | 520 | 500 | NR | 650 | 406 | NR | 780 | 8 | NR | 910 | 0 | NR |
| 395 | 4 | NR | 525 | 539 | NR | 655 | 355 | NR | 785 | 7 | NR | 915 | 0 | NR |
| 400 | 6 | NR | 530 | 575 | NR | 660 | 309 | NR | 790 | 6 | NR | 920 | 0 | NR |
| 405 | 11 | NR | 535 | 606 | NR | 665 | 269 | NR | 795 | 5 | NR | 925 | 0 | NR |
| 410 | 22 | NR | 540 | 633 | NR | 670 | 231 | NR | 800 | 4 | NR | 930 | 0 | NR |
| 415 | 45 | NR | 545 | 666 | NR | 675 | 199 | NR | 805 | 4 | NR | 935 | 0 | NR |
| 420 | 96 | NR | 550 | 701 | NR | 680 | 171 | NR | 810 | 3 | NR | 940 | 0 | NR |
| 425 | 193 | NR | 555 | 743 | NR | 685 | 147 | NR | 815 | 3 | NR | 945 | 0 | NR |
| 430 | 341 | NR | 560 | 788 | NR | 690 | 126 | NR | 820 | 3 | NR | 950 | 0 | NR |
| 435 | 547 | NR | 565 | 837 | NR | 695 | 107 | NR | 825 | 2 | NR | 955 | 0 | NR |
| 440 | 799 | NR | 570 | 887 | NR | 700 | 92 | NR | 830 | 2 | NR | 960 | 0 | NR |
| 445 | 831 | NR | 575 | 931 | NR | 705 | 78 | NR | 835 | 2 | NR | 965 | 0 | NR |
| 450 | 461 | NR | 580 | 967 | NR | 710 | 67 | NR | 840 | 2 | NR | 970 | 0 | NR |
| 455 | 256 | NR | 585 | 990 | NR | 715 | 57 | NR | 845 | 1 | NR | 975 | 0 | NR |
| 460 | 176 | NR | 590 | 1000 | NR | 720 | 49 | NR | 850 | 1 | NR | 980 | 0 | NR |
| 465 | 107 | NR | 595 | 994 | NR | 725 | 42 | NR | 855 | 1 | NR | 985 | 0 | NR |
| 470 | 74 | NR | 600 | 973 | NR | 730 | 36 | NR | 860 | 1 | NR | 990 | 0 | NR |
| 475 | 67 | NR | 605 | 938 | NR | 735 | 31 | NR | 865 | 1 | NR | 995 | 0 | NR |
| 480 | 68 | NR | 610 | 892 | NR | 740 | 26 | NR | 870 | 1 | NR | 1000 | 0 | NR |
| 485 | 84 | NR | 615 | 838 | NR | 745 | 22 | NR | 875 | 1 | NR | | | |

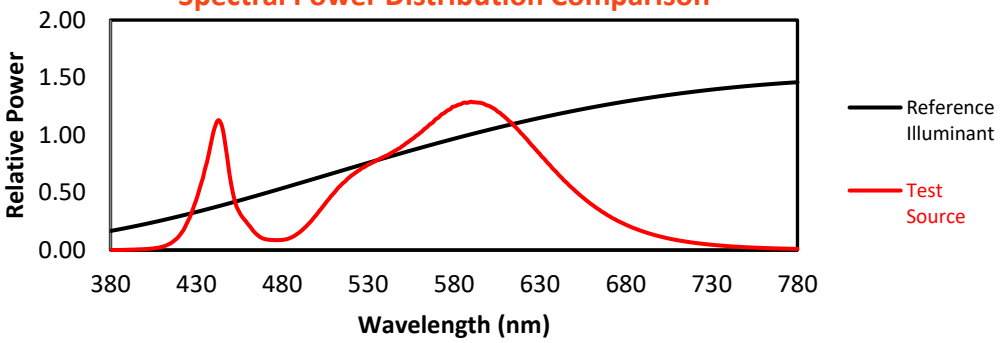
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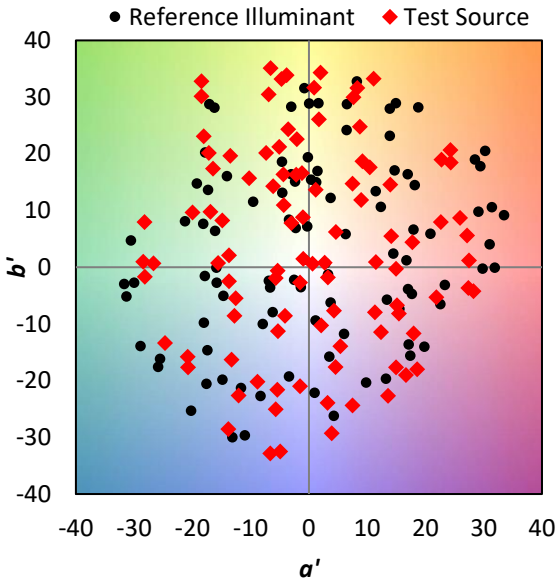
## Summary

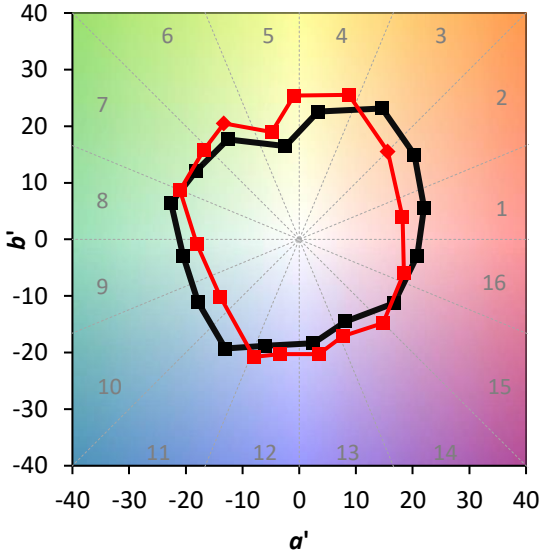
$R_f$ = 71.4
$R_g$ = 96
CIE $R_a$ = 70.1
$R_9$ = -40.2

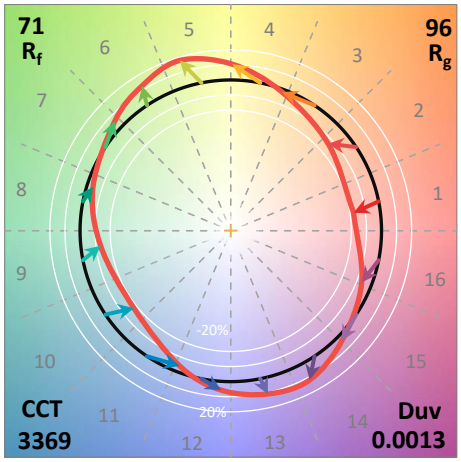
## Spectral Power Distribution Comparison

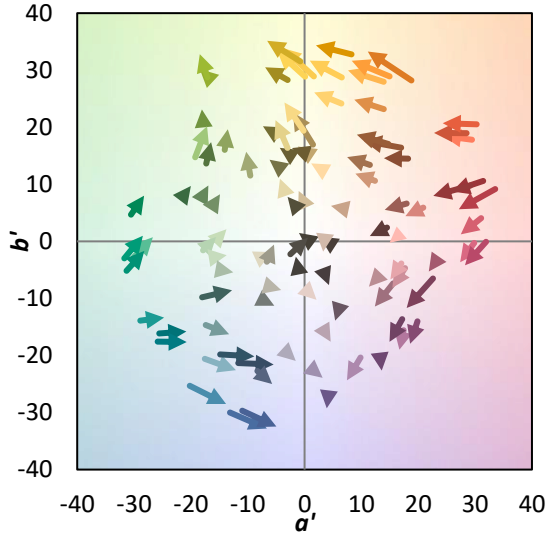



## Color Vector Graphics



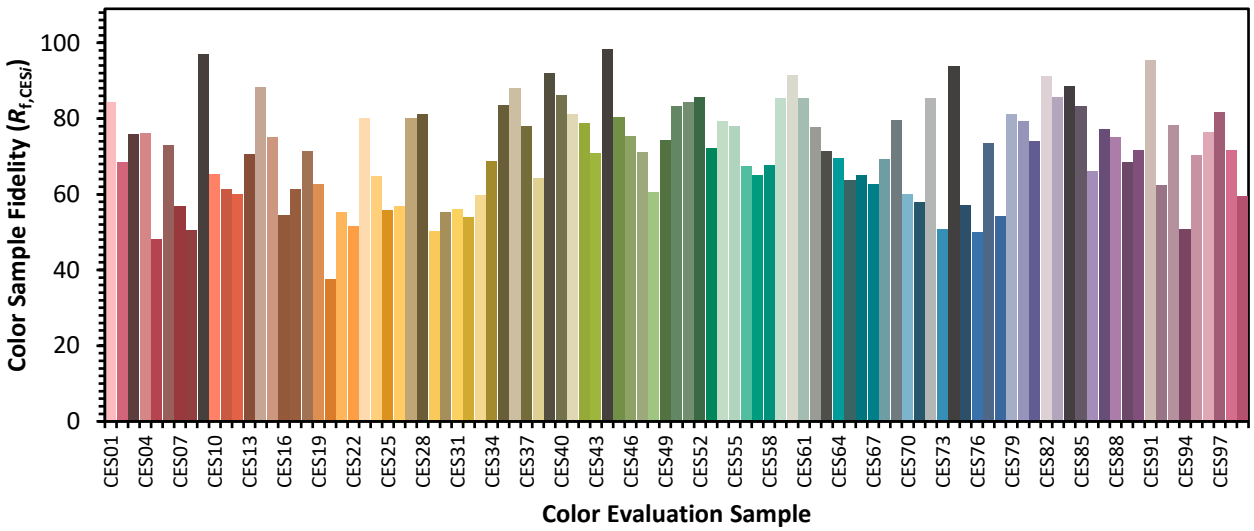



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## Individual Sample Fidelity Index ($R_{f,i}$)

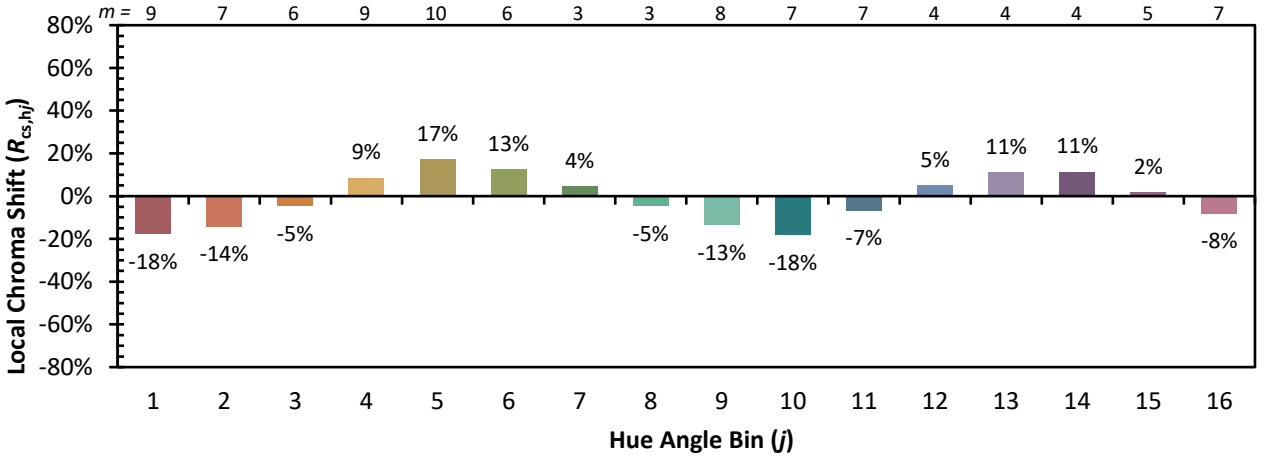
| | | | |
|---|---|---|---|
| CES01 = 86 | CES26 = 57 | CES51 = 84 | CES76 = 50 |
| CES02 = 62 | CES27 = 80 | CES52 = 86 | CES77 = 74 |
| CES03 = 31 | CES28 = 81 | CES53 = 72 | CES78 = 54 |
| CES04 = 70 | CES29 = 50 | CES54 = 79 | CES79 = 81 |
| CES05 = 48 | CES30 = 55 | CES55 = 78 | CES80 = 79 |
| CES06 = 51 | CES31 = 56 | CES56 = 67 | CES81 = 74 |
| CES07 = 40 | CES32 = 54 | CES57 = 65 | CES82 = 91 |
| CES08 = 39 | CES33 = 60 | CES58 = 68 | CES83 = 86 |
| CES09 = 29 | CES34 = 69 | CES59 = 85 | CES84 = 89 |
| CES10 = 75 | CES35 = 83 | CES60 = 91 | CES85 = 83 |
| CES11 = 58 | CES36 = 88 | CES61 = 85 | CES86 = 66 |
| CES12 = 64 | CES37 = 78 | CES62 = 78 | CES87 = 77 |
| CES13 = 43 | CES38 = 64 | CES63 = 71 | CES88 = 75 |
| CES14 = 74 | CES39 = 92 | CES64 = 70 | CES89 = 68 |
| CES15 = 71 | CES40 = 86 | CES65 = 64 | CES90 = 72 |
| CES16 = 47 | CES41 = 81 | CES66 = 65 | CES91 = 95 |
| CES17 = 50 | CES42 = 79 | CES67 = 63 | CES92 = 62 |
| CES18 = 56 | CES43 = 71 | CES68 = 69 | CES93 = 78 |
| CES19 = 72 | CES44 = 98 | CES69 = 80 | CES94 = 51 |
| CES20 = 65 | CES45 = 80 | CES70 = 60 | CES95 = 70 |
| CES21 = 87 | CES46 = 75 | CES71 = 58 | CES96 = 76 |
| CES22 = 79 | CES47 = 71 | CES72 = 85 | CES97 = 82 |
| CES23 = 92 | CES48 = 61 | CES73 = 51 | CES98 = 72 |
| CES24 = 91 | CES49 = 74 | CES74 = 94 | CES99 = 60 |
| CES25 = 72 | CES50 = 83 | CES75 = 57 | |

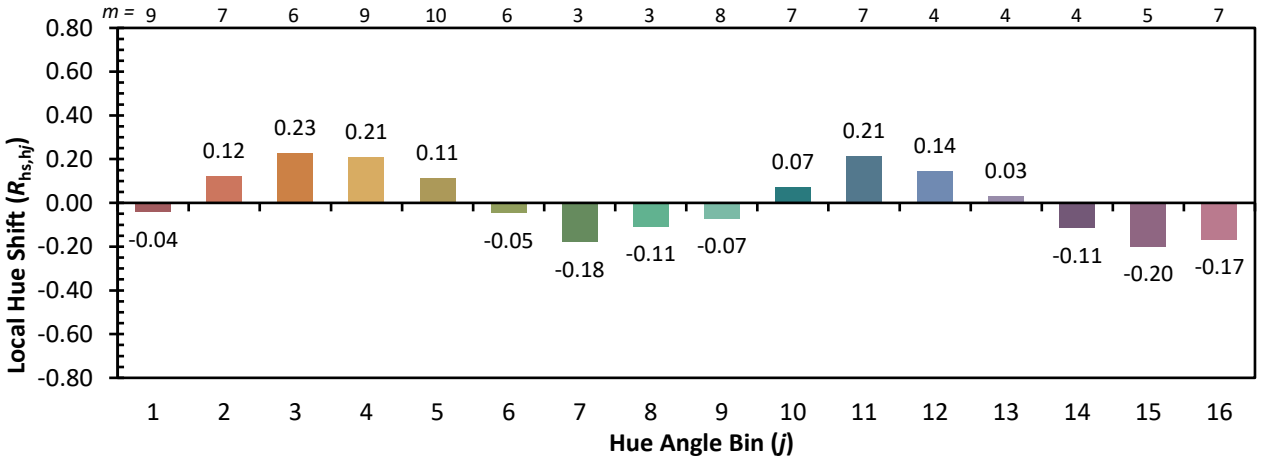


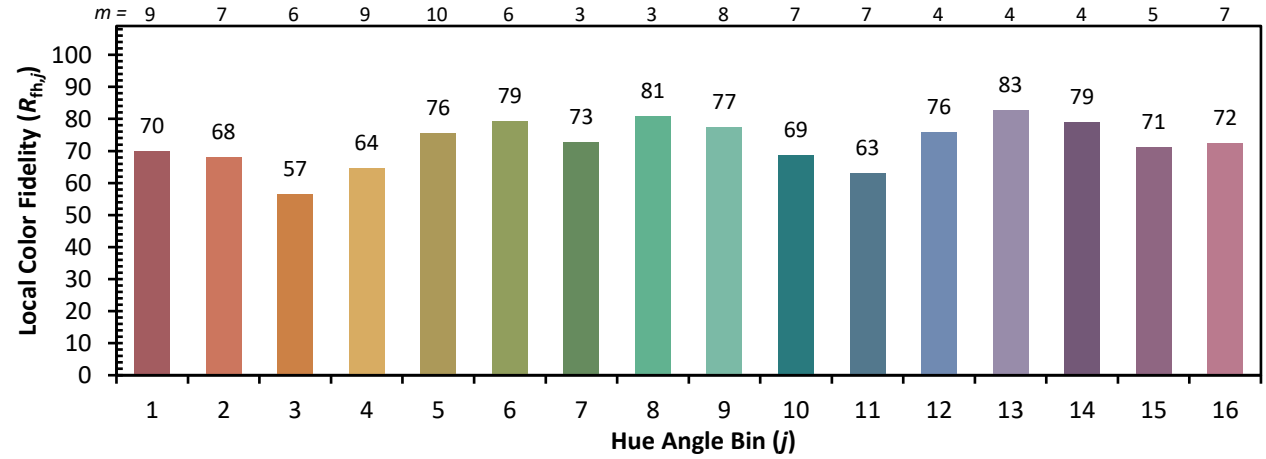
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## Color Rendition by Hue-Angle Bin



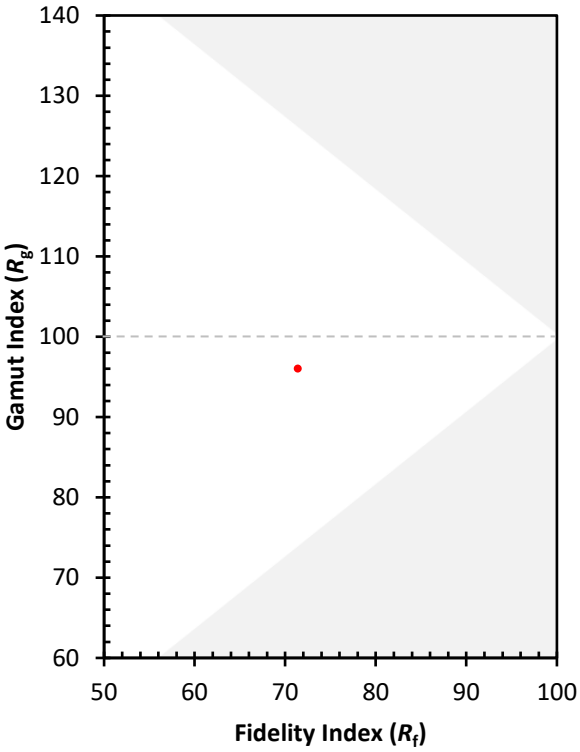



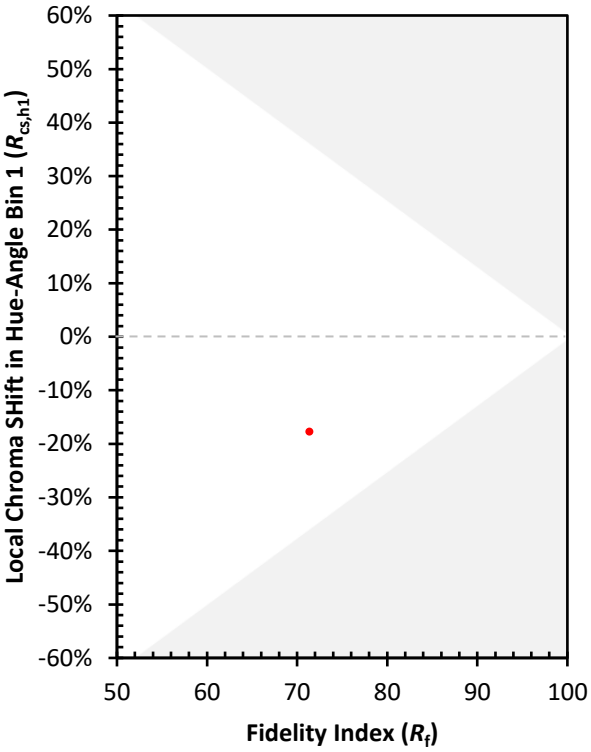



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## Measure Comparisons




(END OF REPORT)