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: P1363841

Luminaire Tested: **GSS-SB3C-735-U-SL3-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: | P1363841 |
| Test Lab: | INNOVATION CENTER(G1) |
| Issue Date: | 02/18/2026 |
| Manufacturer: | COOPER LIGHTING SOLUTIONS (FORMERLY EATON) |
| Product Line: | McGRAW-EDISON |
| Catalog Number: | GSS-SB3C-735-U-SL3-HSS |
| Description: | GALLEON II SLIM SITE HIGH DENSITY LED ARRAYS 3SQUARE 150W 70CRI 3500K FIXTURE w/ TYPE III SPILL CONTROL DISTRIBUTION OPTIC AND HOUSE SIDE SHIELD |
| Light Source: | (78) 3500K CCT, 70 CRI LEDS |
| Ballast/Driver: | ELECTRONIC DRIVER |

**Summary**

| | |
|---|---|
| Lumens per Lamp: | N/A |
| Luminaire Lumens: | 14828.3 lumens |
| Efficiency: | N/A |
| Efficacy: | 98.9 lumens/watt |
| Luminous Opening: | Rectangular (W 1.5' x L: 0.5' x H: 0') |
| IES Classification: | Type III - Medium |
| BUG Rating: | B1 - U0 - G3 |

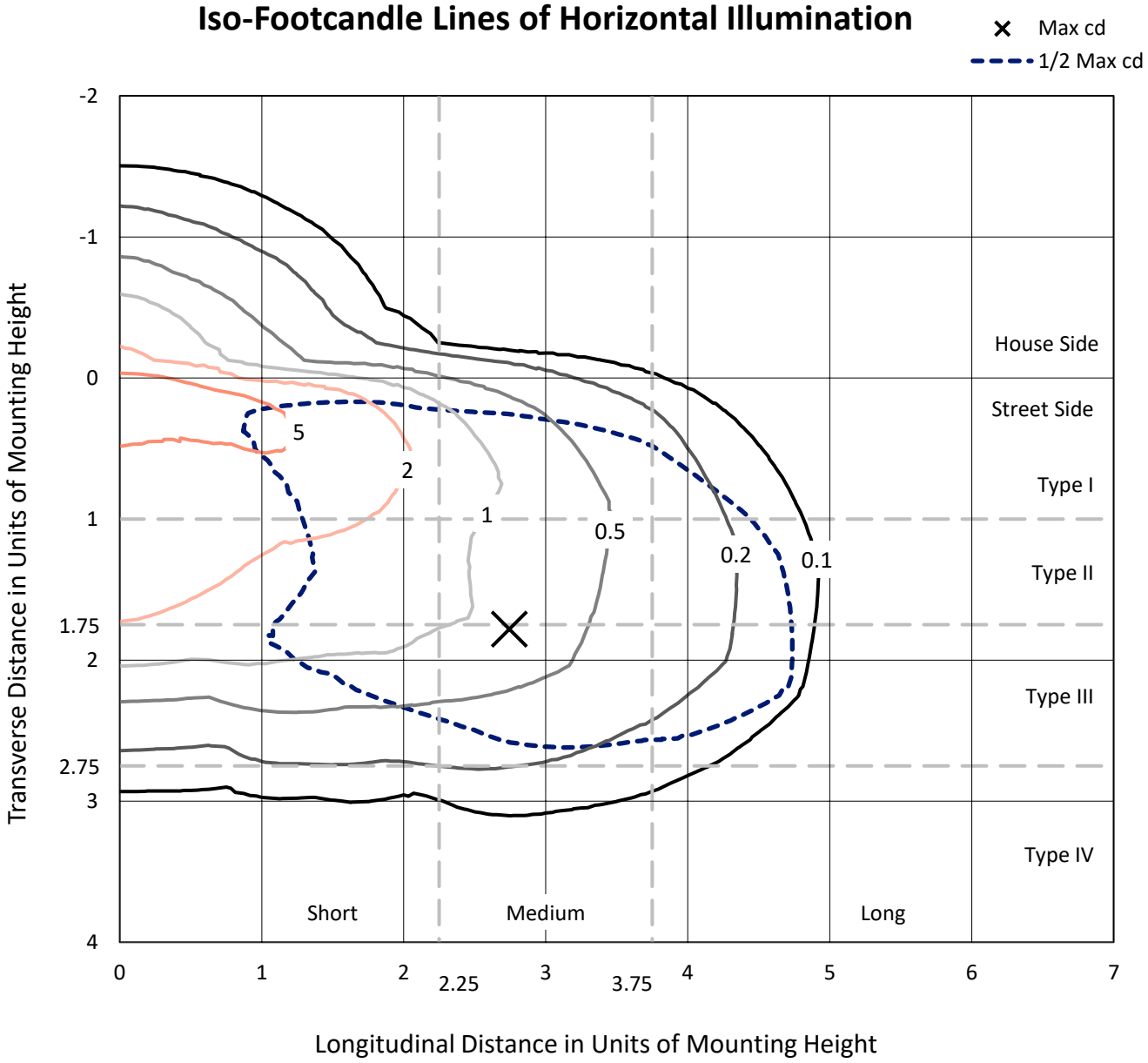
| | |
|---|---|
| Input Watts (W): | 150 |
| Input Voltage (V): | 120 |
| Input Current (Ain): | NR |
| Voltage Rise (V): | NR |
| Power Factor: | 0.98 |
| Total Harmonic Distortion (THDi): | 6.3% |
| Frequency (hertz): | 60 |
| Stabilization Time: | NR |
| Operation Time: | NR |
| Ambient Temperature (°C): | NR |
| Test Distance: | 28.75 FT |

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Scaled Data Report

REPORT NUMBER: P1363841
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## Iso-Footcandle Lines of Horizontal Illumination



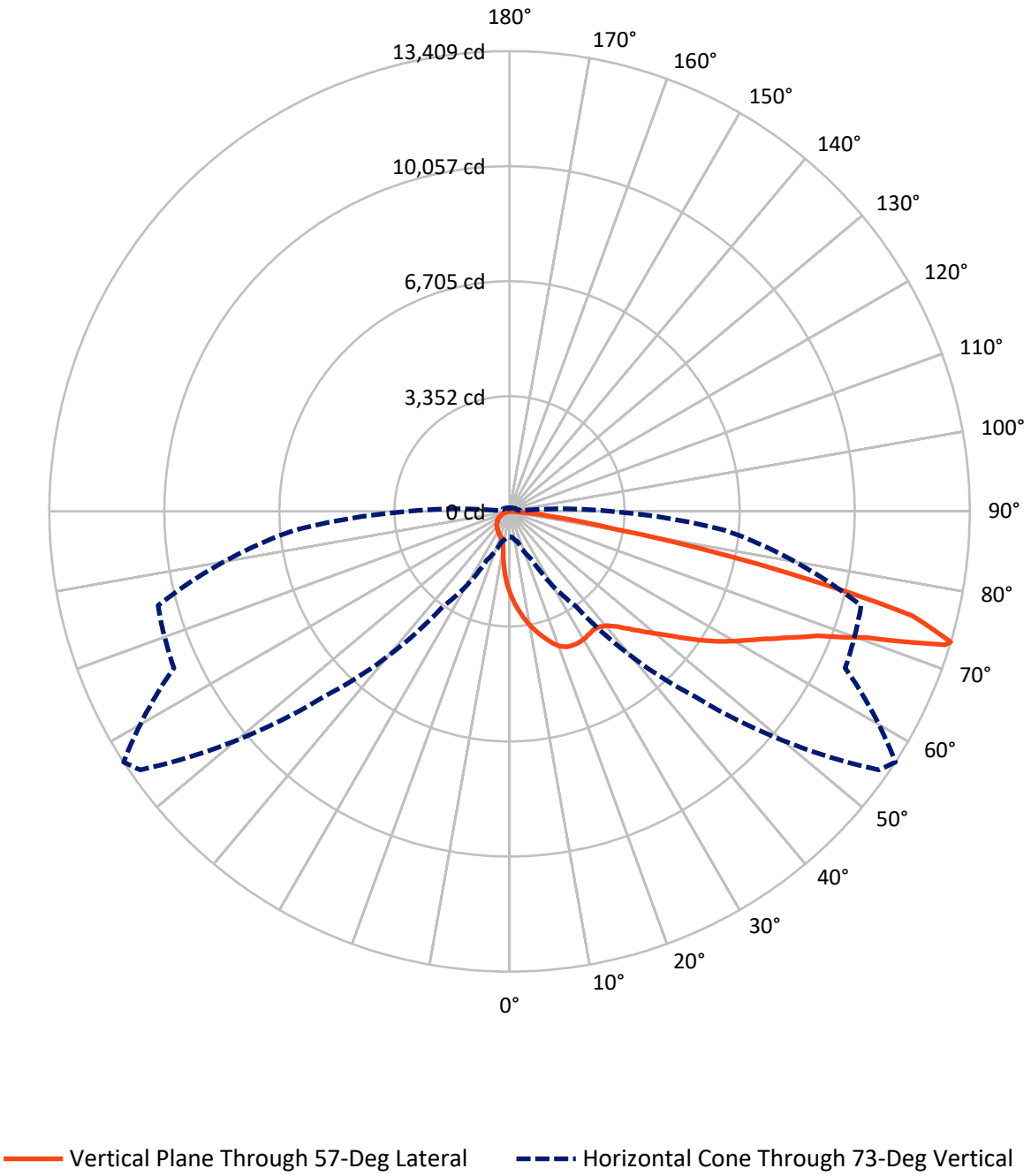

Based on 20 foot mounting height. Maximum calculated value = 8.7 fc
Type III - Medium - N/A

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REPORT NUMBER: P1363841
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## Luminous Intensity Polar Plot



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Scaled Data Report

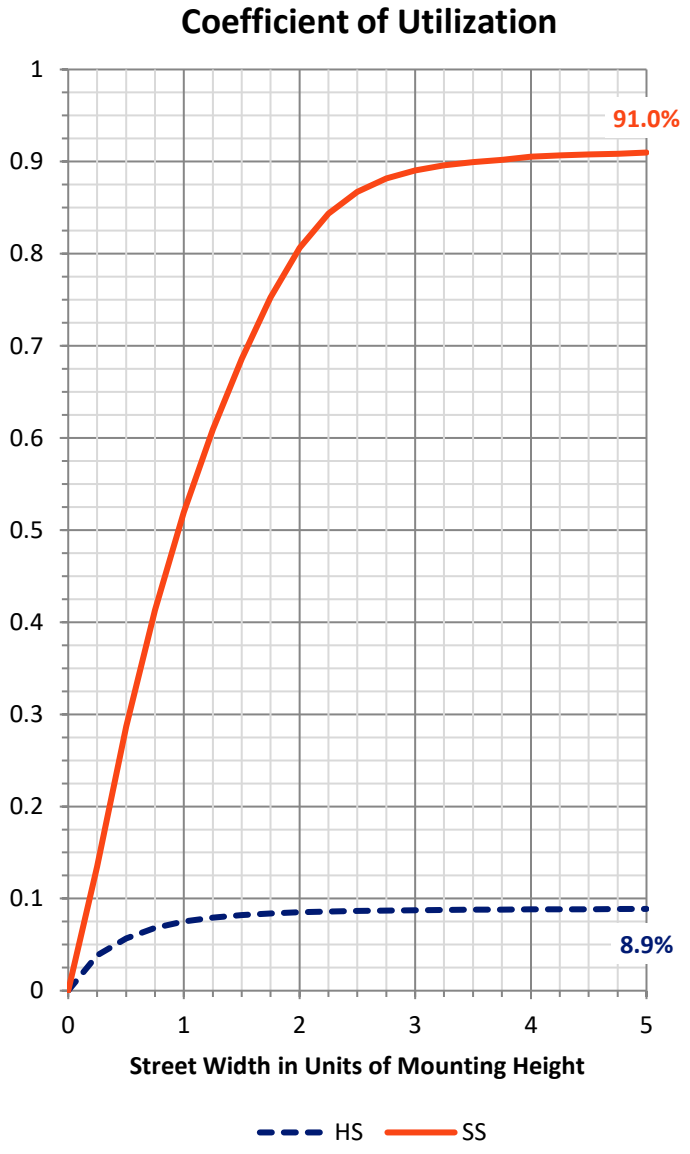
REPORT NUMBER: P1363841
CATALOG NUMBER: GSS-SB3C-735-U-SL3-HSS

**FLUX DISTRIBUTION:**

| | | Downward | Upward | Total |
|---|---|---|---|---|
| **House Side** | Lumens | 1328.2 | 0.0 | 1328.2 |
| | % Fixture | 9.0 | 0.0 | 9.0 |
| **Street Side** | Lumens | 13500.1 | 0.0 | 13500.1 |
| | % Fixture | 91.0 | 0.0 | 91.0 |
| **Total** | Lumens | 14828.3 | 0.0 | 14828.3 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

**ZONAL LUMENS:**

| Zone | Lumens | % Fixture |
|---|---|---|
| 0°-10° | 221.1 | 1.5 |
| 10°-20° | 634.2 | 4.3 |
| 20°-30° | 962.5 | 6.5 |
| 30°-40° | 1394.0 | 9.4 |
| 40°-50° | 2081.8 | 14.0 |
| 50°-60° | 3014.3 | 20.3 |
| 60°-70° | 3651.7 | 24.6 |
| 70°-80° | 2637.4 | 17.8 |
| 80°-90° | 231.3 | 1.6 |
| 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° | 14828.3 | 100.0 |
| 0°-180° | 14828.3 | 100.0 |



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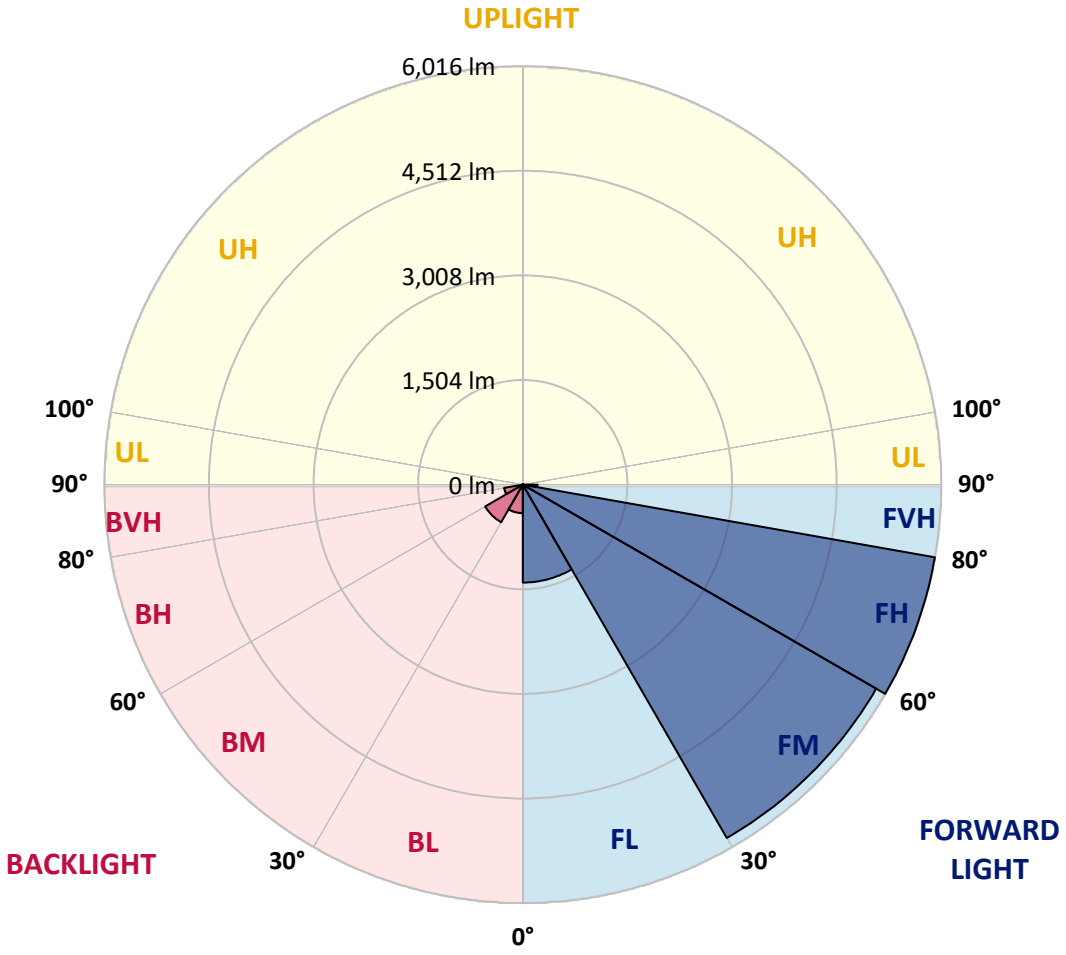
Scaled Data Report

REPORT NUMBER: P1363841
CATALOG NUMBER: GSS-SB3C-735-U-SL3-HSS

## LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit B | U | G |
|---|---|---|---|---|---|---|
| FL | (0°-30°) | 1407.3 | 9.5 | | | |
| FM | (30°-60°) | 5865.4 | 39.6 | | | |
| FH | (60°-80°) | 6016.3 | 40.6 | | | G3/7500 |
| FVH | (80°-90°) | 211.2 | 1.4 | | | G2/225 |
| BL | (0°-30°) | 410.6 | 2.8 | B1/500 | | |
| BM | (30°-60°) | 624.7 | 4.2 | B1/1000 | | |
| BH | (60°-80°) | 272.9 | 1.8 | B1/500 | | G1/500 |
| BVH | (80°-90°) | 20.1 | 0.1 | | | G1/100 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

**BUG Rating: B1-U0-G3**
Type III Medium



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**CANDELA DISTRIBUTION (FULL):**

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 57° | 65° | 75° | 85° |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0° | 2385.4 | 2385.4 | 2385.4 | 2385.4 | 2385.4 | 2385.4 | 2385.4 | 2385.4 | 2385.4 | 2385.4 | 2385.4 |
| 2.5° | 2868.3 | 2877.9 | 2844.1 | 2824.8 | 2786.2 | 2723.4 | 2660.6 | 2660.6 | 2588.2 | 2520.6 | 2433.7 |
| 5° | 3293.2 | 3264.2 | 3249.7 | 3201.4 | 3129.0 | 3051.8 | 2940.7 | 2911.7 | 2795.8 | 2651.0 | 2477.1 |
| 7.5° | 3616.7 | 3582.9 | 3568.4 | 3525.0 | 3442.9 | 3341.5 | 3191.8 | 3167.6 | 2998.6 | 2786.2 | 2535.1 |
| 10° | 3814.7 | 3790.6 | 3790.6 | 3756.8 | 3694.0 | 3587.7 | 3438.1 | 3404.3 | 3201.4 | 2911.7 | 2573.7 |
| 12.5° | 3727.8 | 3718.1 | 3776.1 | 3853.3 | 3882.3 | 3819.5 | 3660.2 | 3616.7 | 3384.9 | 3051.8 | 2622.0 |
| 15° | 3331.8 | 3322.2 | 3428.4 | 3631.2 | 3877.5 | 3983.7 | 3863.0 | 3824.4 | 3582.9 | 3196.6 | 2670.3 |
| 17.5° | 2950.4 | 2935.9 | 3037.3 | 3240.1 | 3607.1 | 4003.0 | 4075.4 | 4027.2 | 3780.9 | 3341.5 | 2723.4 |
| 20° | 2733.1 | 2718.6 | 2786.2 | 2950.4 | 3283.5 | 3848.5 | 4186.5 | 4196.2 | 3998.2 | 3500.8 | 2776.5 |
| 22.5° | 2655.8 | 2651.0 | 2684.8 | 2795.8 | 3032.4 | 3582.9 | 4230.0 | 4287.9 | 4234.8 | 3684.3 | 2853.8 |
| 25° | 2689.6 | 2670.3 | 2679.9 | 2723.4 | 2892.4 | 3370.5 | 4205.8 | 4316.9 | 4432.8 | 3906.4 | 2955.2 |
| 27.5° | 2776.5 | 2762.0 | 2747.5 | 2747.5 | 2834.5 | 3215.9 | 4143.1 | 4326.5 | 4635.6 | 4147.9 | 3042.1 |
| 30° | 2921.4 | 2902.1 | 2858.6 | 2805.5 | 2834.5 | 3119.4 | 4070.6 | 4302.4 | 4809.4 | 4408.6 | 3162.8 |
| 32.5° | 3249.7 | 3235.2 | 3109.7 | 2940.7 | 2902.1 | 3095.2 | 3988.5 | 4258.9 | 4997.7 | 4717.7 | 3302.9 |
| 35° | 3573.3 | 3558.8 | 3471.9 | 3230.4 | 3018.0 | 3114.5 | 3935.4 | 4230.0 | 5229.5 | 5094.3 | 3467.0 |
| 37.5° | 3718.1 | 3694.0 | 3626.4 | 3496.0 | 3288.4 | 3225.6 | 3949.9 | 4263.8 | 5562.7 | 5509.6 | 3669.8 |
| 40° | 3901.6 | 3863.0 | 3761.6 | 3640.9 | 3549.1 | 3481.5 | 4065.8 | 4379.7 | 5934.5 | 5987.6 | 3892.0 |
| 42.5° | 4172.0 | 4128.6 | 3978.9 | 3809.9 | 3703.6 | 3838.8 | 4287.9 | 4587.3 | 6393.2 | 6518.8 | 4162.4 |
| 45° | 4543.8 | 4485.9 | 4292.7 | 4070.6 | 3940.2 | 4017.5 | 4587.3 | 4881.8 | 6905.1 | 7122.4 | 4476.2 |
| 47.5° | 4881.8 | 4867.4 | 4650.1 | 4394.1 | 4239.6 | 4138.2 | 4910.8 | 5224.7 | 7445.9 | 7798.4 | 4799.8 |
| 50° | 5200.5 | 5147.4 | 4935.0 | 4683.9 | 4553.5 | 4384.5 | 5268.1 | 5606.2 | 7986.7 | 8416.5 | 5147.4 |
| 52.5° | 5548.2 | 5490.3 | 5200.5 | 4915.6 | 4785.3 | 4746.6 | 5731.7 | 6060.1 | 8459.9 | 9068.4 | 5499.9 |
| 55° | 5818.6 | 5736.5 | 5417.8 | 5181.2 | 4973.6 | 5104.0 | 6229.1 | 6605.7 | 8880.0 | 9657.5 | 5857.2 |
| 57.5° | 6156.6 | 6050.4 | 5596.5 | 5422.7 | 5263.3 | 5466.1 | 6789.2 | 7151.3 | 9319.4 | 10154.8 | 6214.6 |
| 60° | 6451.2 | 6369.1 | 5929.7 | 5712.4 | 5562.7 | 5876.6 | 7334.8 | 7653.5 | 9662.3 | 10579.7 | 6542.9 |
| 62.5° | 5553.0 | 5543.4 | 5659.3 | 6311.2 | 6089.0 | 6499.5 | 7919.1 | 8199.2 | 9869.9 | 10864.6 | 6678.1 |
| 65° | 3940.2 | 3969.2 | 4292.7 | 6320.8 | 7112.7 | 7542.5 | 8686.9 | 8870.4 | 9879.6 | 10541.1 | 6412.6 |
| 67.5° | 2506.1 | 2477.1 | 2877.9 | 5292.3 | 7151.3 | 9599.5 | 9855.4 | 9671.9 | 9435.3 | 10193.4 | 6446.4 |
| 70° | 1501.7 | 1511.4 | 1646.6 | 3838.8 | 5895.9 | 10067.9 | 11487.5 | 11014.3 | 9700.9 | 10449.4 | 6475.3 |
| 72.5° | 816.1 | 835.4 | 1028.5 | 1883.2 | 3906.4 | 8010.9 | 13216.2 | 13283.8 | 10608.7 | 10570.1 | 6364.3 |
| 73° | 743.6 | 748.5 | 922.3 | 1574.2 | 3380.1 | 7614.9 | 13134.1 | 13409.4 | 10792.2 | 10603.9 | 6291.8 |
| 75° | 492.5 | 492.5 | 627.7 | 893.3 | 1482.4 | 5920.0 | 10903.3 | 12120.1 | 11415.1 | 10256.2 | 5726.9 |
| 77.5° | 304.2 | 323.5 | 434.6 | 618.1 | 540.8 | 2979.3 | 6412.6 | 7416.9 | 10179.0 | 7716.3 | 3597.4 |
| 80° | 111.1 | 120.7 | 270.4 | 405.6 | 313.9 | 1129.9 | 2689.6 | 3085.6 | 4717.7 | 3916.1 | 1298.9 |
| 82.5° | 57.9 | 62.8 | 169.0 | 207.6 | 169.0 | 294.6 | 1202.4 | 1284.4 | 1902.5 | 1018.9 | 241.4 |
| 85° | 29.0 | 33.8 | 72.4 | 86.9 | 67.6 | 96.6 | 299.4 | 280.1 | 429.8 | 135.2 | 67.6 |
| 87.5° | 0.0 | 0.0 | 4.8 | 9.7 | 14.5 | 19.3 | 29.0 | 29.0 | 33.8 | 38.6 | 38.6 |
| 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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Scaled Data Report

REPORT NUMBER: P1363841
CATALOG NUMBER: GSS-SB3C-735-U-SL3-HSS

**CANDELA DISTRIBUTION (continued):**

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0° | 2385.4 | 2385.4 | 2385.4 | 2385.4 | 2385.4 | 2385.4 | 2385.4 | 2385.4 | 2385.4 | 2385.4 | 2385.4 |
| 2.5° | 2380.6 | 2341.9 | 2250.2 | 2158.4 | 2090.8 | 2018.4 | 1950.8 | 1892.9 | 1859.1 | 1844.6 | 1859.1 |
| 5° | 2385.4 | 2303.3 | 2115.0 | 1926.7 | 1743.2 | 1593.5 | 1453.4 | 1352.0 | 1279.6 | 1255.5 | 1245.8 |
| 7.5° | 2385.4 | 2250.2 | 1955.6 | 1646.6 | 1376.2 | 1178.2 | 1038.2 | 975.4 | 941.6 | 936.8 | 936.8 |
| 10° | 2380.6 | 2187.4 | 1777.0 | 1371.4 | 1062.3 | 927.1 | 883.7 | 874.0 | 874.0 | 874.0 | 878.8 |
| 12.5° | 2375.7 | 2129.5 | 1574.2 | 1105.8 | 893.3 | 849.9 | 835.4 | 835.4 | 840.2 | 845.0 | 849.9 |
| 15° | 2366.1 | 2042.6 | 1361.7 | 922.3 | 830.5 | 816.1 | 806.4 | 806.4 | 811.2 | 820.9 | 820.9 |
| 17.5° | 2356.4 | 1955.6 | 1154.1 | 840.2 | 801.6 | 787.1 | 782.3 | 777.4 | 787.1 | 796.7 | 796.7 |
| 20° | 2337.1 | 1844.6 | 980.2 | 796.7 | 772.6 | 762.9 | 758.1 | 753.3 | 758.1 | 767.8 | 772.6 |
| 22.5° | 2313.0 | 1704.5 | 864.3 | 767.8 | 748.5 | 734.0 | 729.1 | 724.3 | 724.3 | 743.6 | 743.6 |
| 25° | 2288.8 | 1550.0 | 796.7 | 738.8 | 719.5 | 705.0 | 695.3 | 690.5 | 695.3 | 709.8 | 709.8 |
| 27.5° | 2240.5 | 1381.0 | 753.3 | 714.7 | 695.3 | 676.0 | 666.4 | 656.7 | 661.5 | 676.0 | 676.0 |
| 30° | 2168.1 | 1202.4 | 729.1 | 690.5 | 666.4 | 642.2 | 627.7 | 618.1 | 622.9 | 637.4 | 642.2 |
| 32.5° | 2061.9 | 1047.8 | 719.5 | 671.2 | 642.2 | 608.4 | 589.1 | 574.6 | 579.4 | 598.8 | 598.8 |
| 35° | 1950.8 | 936.8 | 714.7 | 651.9 | 613.2 | 579.4 | 545.6 | 526.3 | 536.0 | 555.3 | 560.1 |
| 37.5° | 1834.9 | 874.0 | 714.7 | 642.2 | 593.9 | 550.5 | 502.2 | 482.9 | 487.7 | 507.0 | 511.8 |
| 40° | 1733.5 | 845.0 | 719.5 | 632.6 | 569.8 | 516.7 | 463.6 | 439.4 | 449.1 | 473.2 | 468.4 |
| 42.5° | 1694.9 | 840.2 | 719.5 | 608.4 | 545.6 | 482.9 | 424.9 | 400.8 | 410.4 | 424.9 | 429.8 |
| 45° | 1738.3 | 859.5 | 709.8 | 584.3 | 511.8 | 444.2 | 396.0 | 371.8 | 376.6 | 386.3 | 396.0 |
| 47.5° | 1888.0 | 883.7 | 695.3 | 555.3 | 482.9 | 415.3 | 367.0 | 347.7 | 338.0 | 352.5 | 357.3 |
| 50° | 2095.7 | 898.1 | 671.2 | 526.3 | 458.7 | 386.3 | 342.8 | 318.7 | 309.0 | 313.9 | 318.7 |
| 52.5° | 2332.3 | 898.1 | 647.0 | 497.4 | 434.6 | 357.3 | 323.5 | 299.4 | 280.1 | 284.9 | 284.9 |
| 55° | 2568.9 | 888.5 | 584.3 | 473.2 | 410.4 | 338.0 | 304.2 | 270.4 | 255.9 | 255.9 | 251.1 |
| 57.5° | 2815.1 | 874.0 | 507.0 | 439.4 | 381.5 | 313.9 | 280.1 | 251.1 | 231.8 | 222.1 | 222.1 |
| 60° | 3056.6 | 854.7 | 463.6 | 405.6 | 347.7 | 294.6 | 255.9 | 231.8 | 207.6 | 193.1 | 188.3 |
| 62.5° | 3182.1 | 801.6 | 415.3 | 362.2 | 313.9 | 265.6 | 231.8 | 207.6 | 178.7 | 159.3 | 154.5 |
| 65° | 3114.5 | 690.5 | 357.3 | 323.5 | 284.9 | 236.6 | 207.6 | 183.5 | 149.7 | 125.5 | 125.5 |
| 67.5° | 3187.0 | 579.4 | 304.2 | 275.2 | 246.3 | 202.8 | 173.8 | 159.3 | 130.4 | 111.1 | 111.1 |
| 70° | 3211.1 | 453.9 | 255.9 | 236.6 | 212.5 | 169.0 | 149.7 | 140.0 | 115.9 | 96.6 | 91.7 |
| 72.5° | 3032.4 | 338.0 | 207.6 | 198.0 | 173.8 | 130.4 | 125.5 | 115.9 | 96.6 | 77.3 | 77.3 |
| 73° | *2960.0* | *313.9* | *198.0* | *188.3* | *164.2* | *125.5* | *120.7* | *111.1* | *91.7* | *77.3* | *72.4* |
| 75° | 2607.5 | 241.4 | 164.2 | 154.5 | 130.4 | 106.2 | 101.4 | 91.7 | 77.3 | 62.8 | 62.8 |
| 77.5° | 1728.7 | 173.8 | 125.5 | 115.9 | 96.6 | 82.1 | 77.3 | 67.6 | 57.9 | 48.3 | 48.3 |
| 80° | 637.4 | 115.9 | 91.7 | 82.1 | 72.4 | 67.6 | 57.9 | 48.3 | 38.6 | 38.6 | 33.8 |
| 82.5° | 130.4 | 77.3 | 67.6 | 57.9 | 53.1 | 48.3 | 38.6 | 33.8 | 29.0 | 29.0 | 29.0 |
| 85° | 53.1 | 48.3 | 38.6 | 38.6 | 38.6 | 33.8 | 29.0 | 29.0 | 24.1 | 24.1 | 19.3 |
| 87.5° | 33.8 | 29.0 | 29.0 | 24.1 | 24.1 | 19.3 | 19.3 | 19.3 | 19.3 | 19.3 | 19.3 |
| 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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# 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

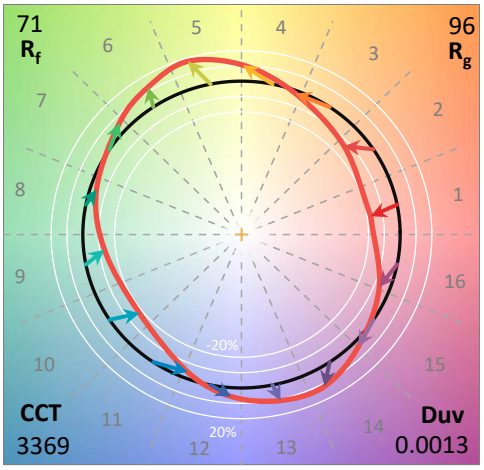
## Test Information

| | |
|---|---|
| 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

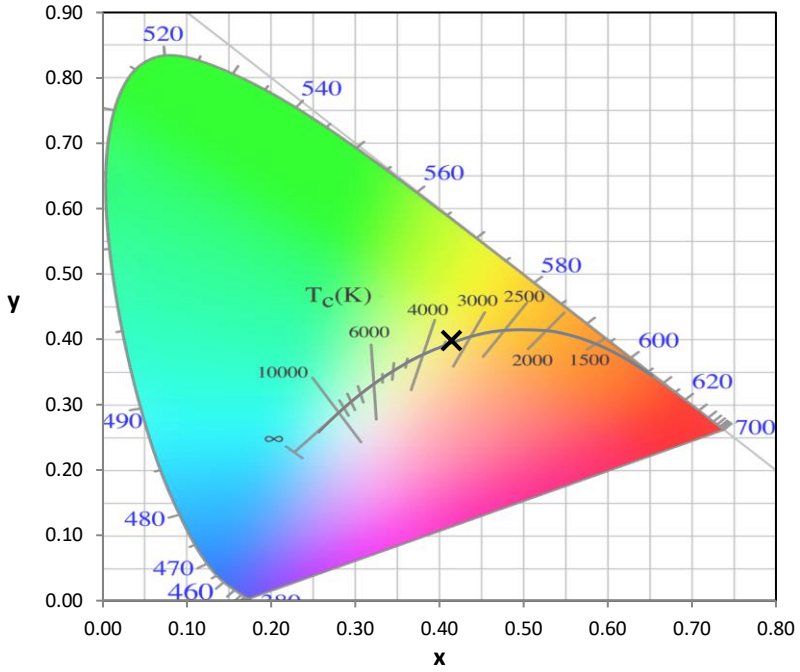
| | |
|---|---|
| Stabilization Time: | 21M |
| Operation Time: | 1H 21M |
| Sphere Temperature (°C): | 25.2 |

REPORT NUMBER: SP1-2407-184-5

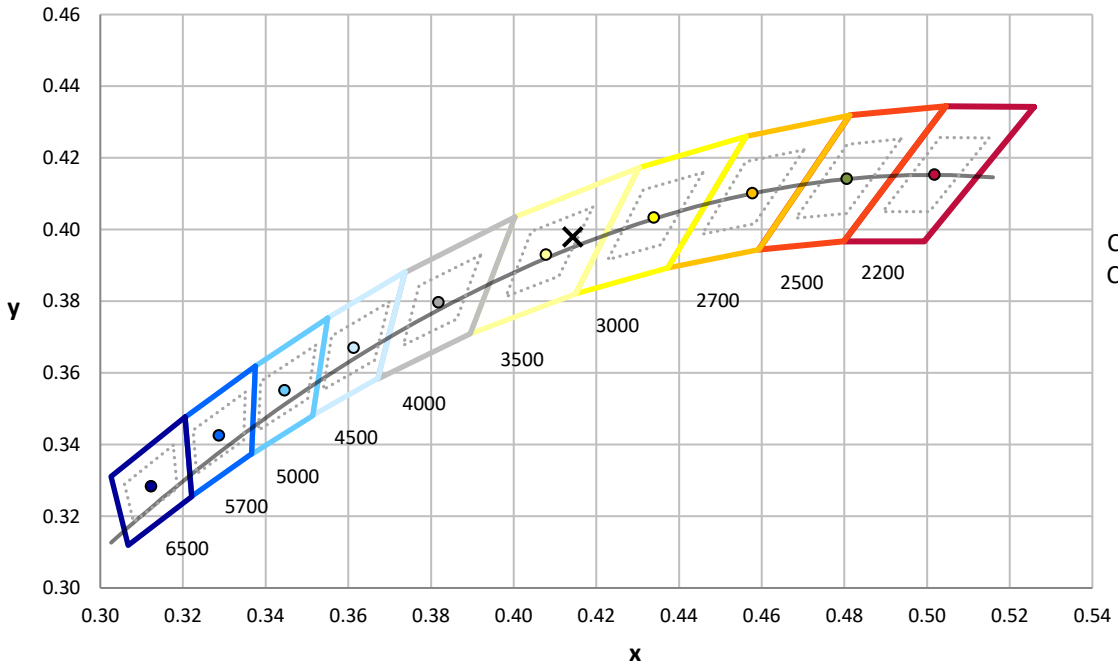
| Measurement and Test Equipment | | | |
|---|---|---|---|
| Instrument | Identification Number | Calibration Date | Calibration Due Date |
| Photometer | IN0058 | 6/18/2024 | 12/18/2024 |
| Power Meter | INXT2011004 | 2/8/2024 | 2/8/2025 |
| AC Power Source | IN0063 | 10/24/2023 | 10/24/2024 |
| DC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

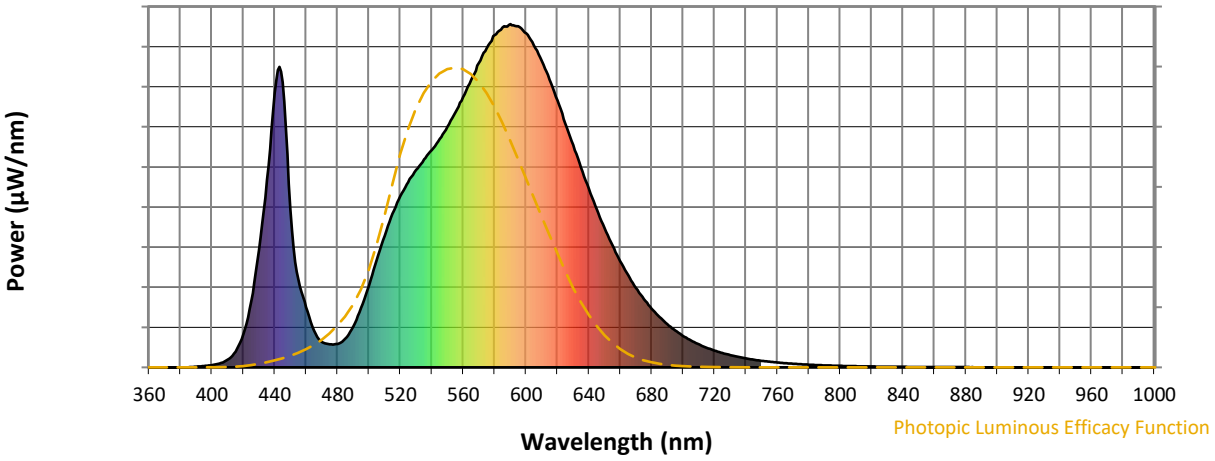



CCT = 3369K
CIE x = 0.4143
CIE y = 0.3980
Duv = 0.0013

Point lies inside the ANSI 3500K 4-step quadrangle

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## Photopic Flux vs. Wavelength

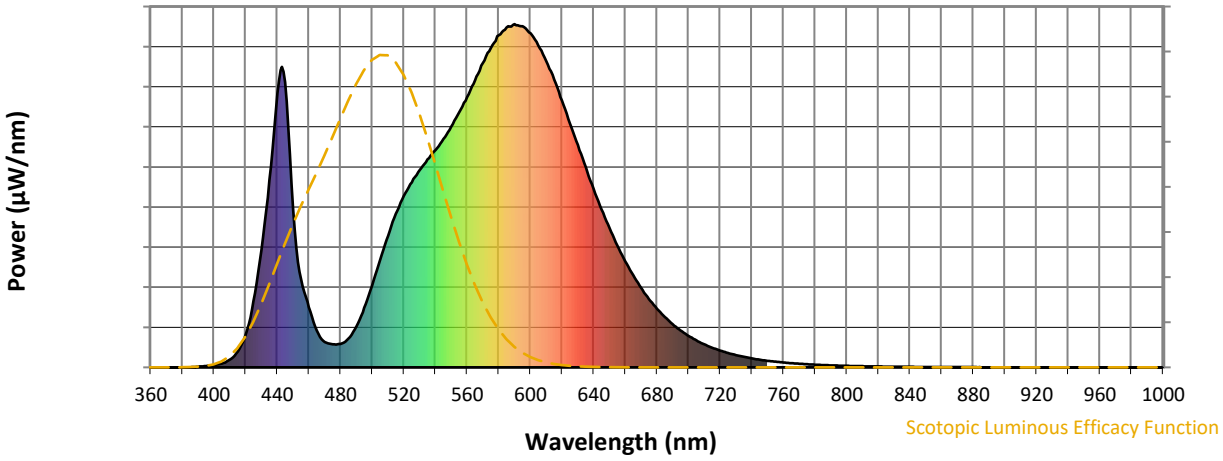



## Photopic Lumens: NR

| 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

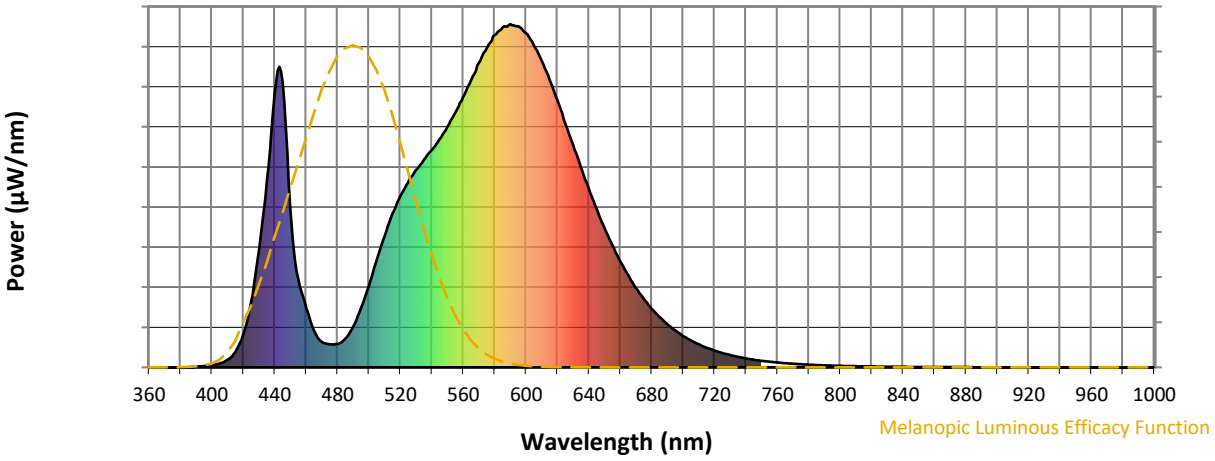



**Scotopic Lumens: NR** **S/P: 1.29**

| 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 | | | |

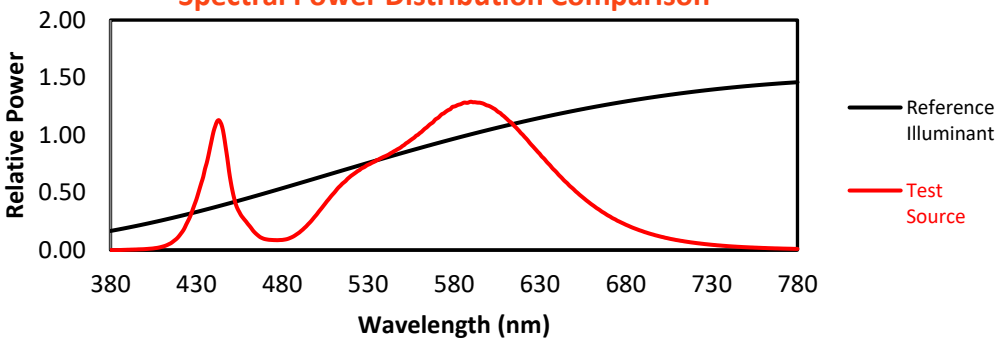
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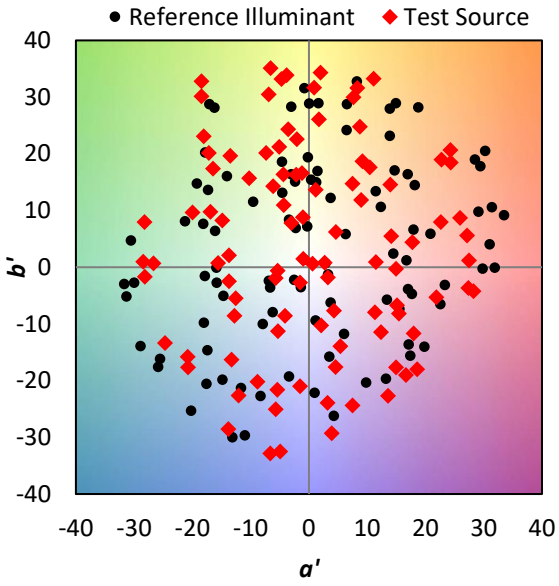
## Summary

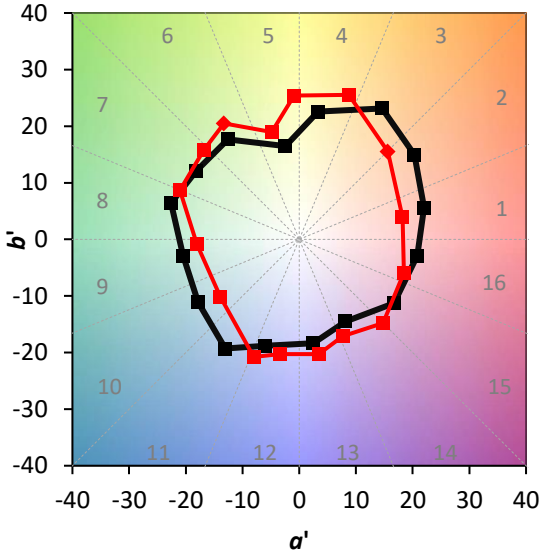
$R_f$ = 71.4
$R_g$ = 96
CIE $R_a$ = 70.1
$R_9$ = -40.2

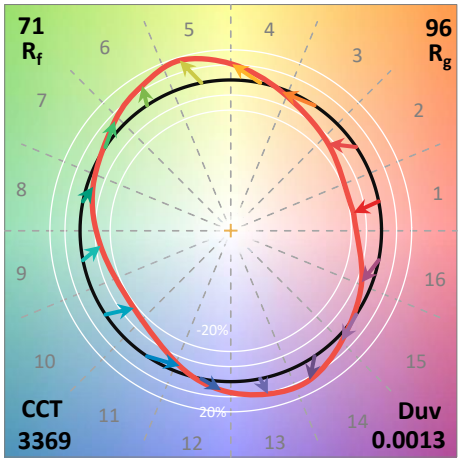
## Spectral Power Distribution Comparison

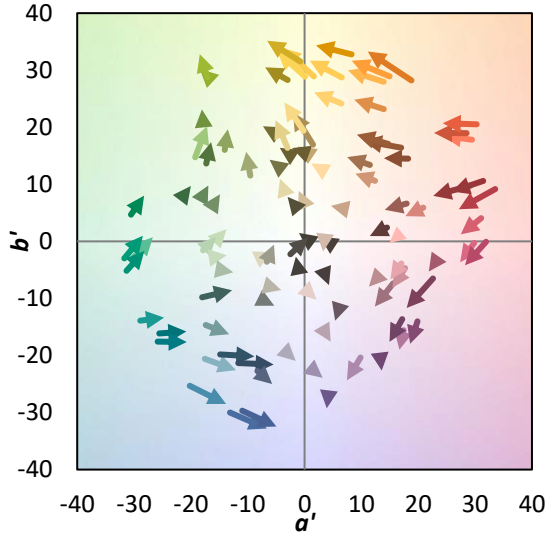



## Color Vector Graphics



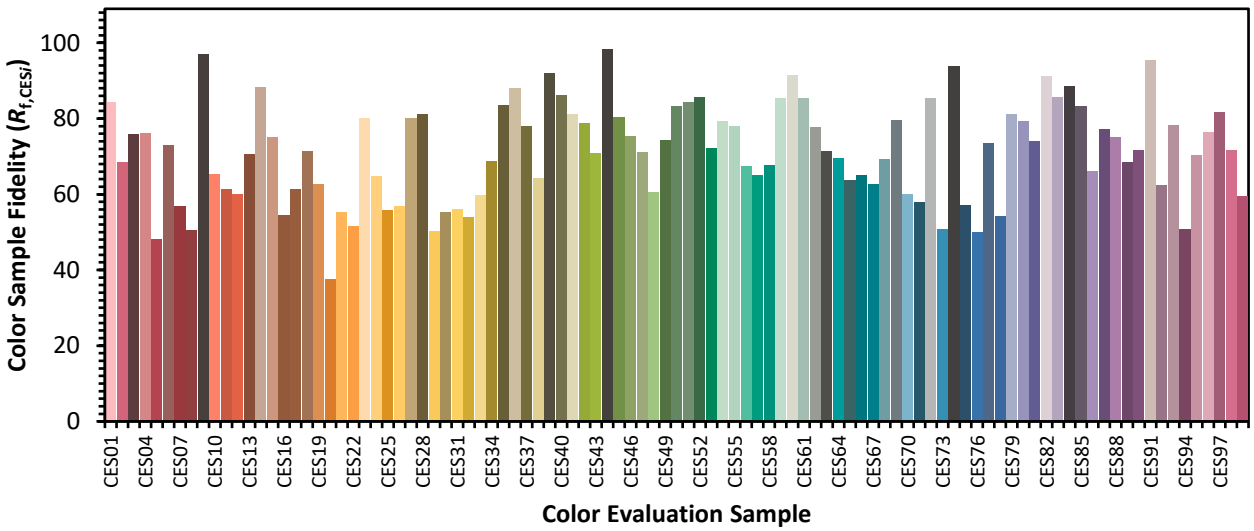



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## Individual Sample Fidelity Index ($R_{f,i}$)

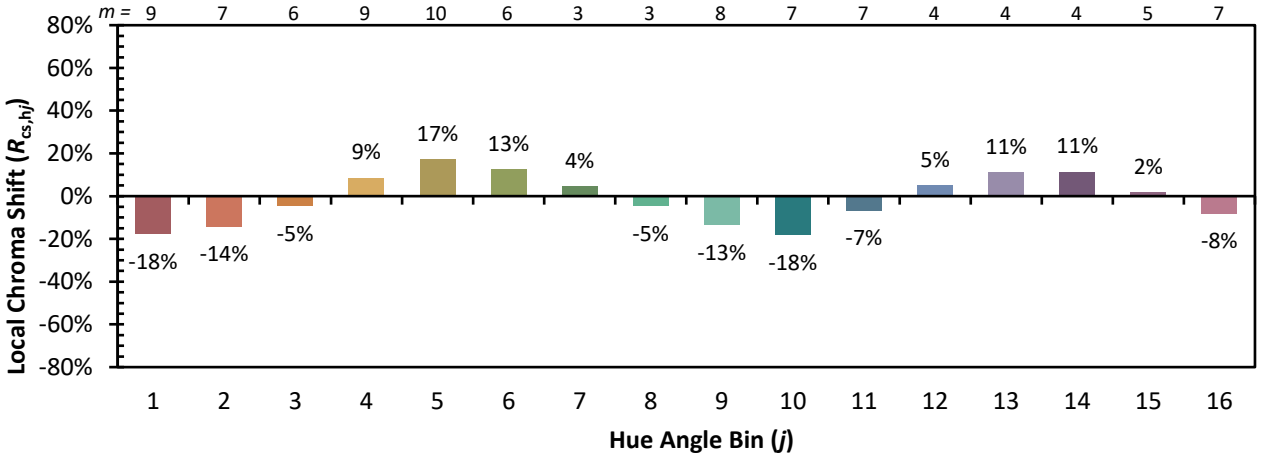
| | | | |
|---|---|---|---|
| CES01 = 86 | CES26 = 57 | CES51 = 84 | CES76 = 50 |
| CES02 = 62 | CES27 = 80 | CES52 = 86 | CES77 = 74 |
| CES03 = 31 | CES28 = 81 | CES53 = 72 | CES78 = 54 |
| CES04 = 70 | CES29 = 50 | CES54 = 79 | CES79 = 81 |
| CES05 = 48 | CES30 = 55 | CES55 = 78 | CES80 = 79 |
| CES06 = 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 | |

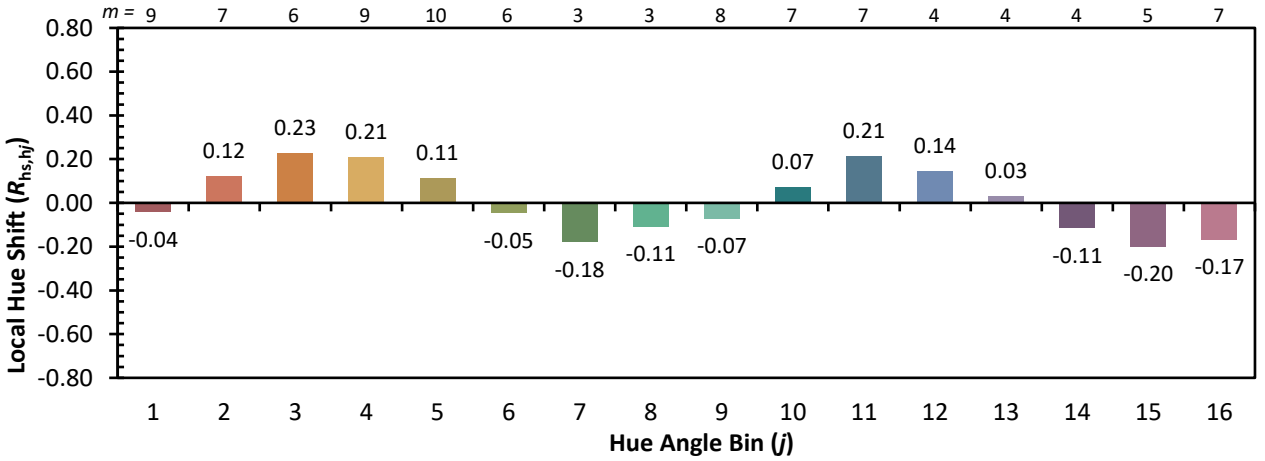


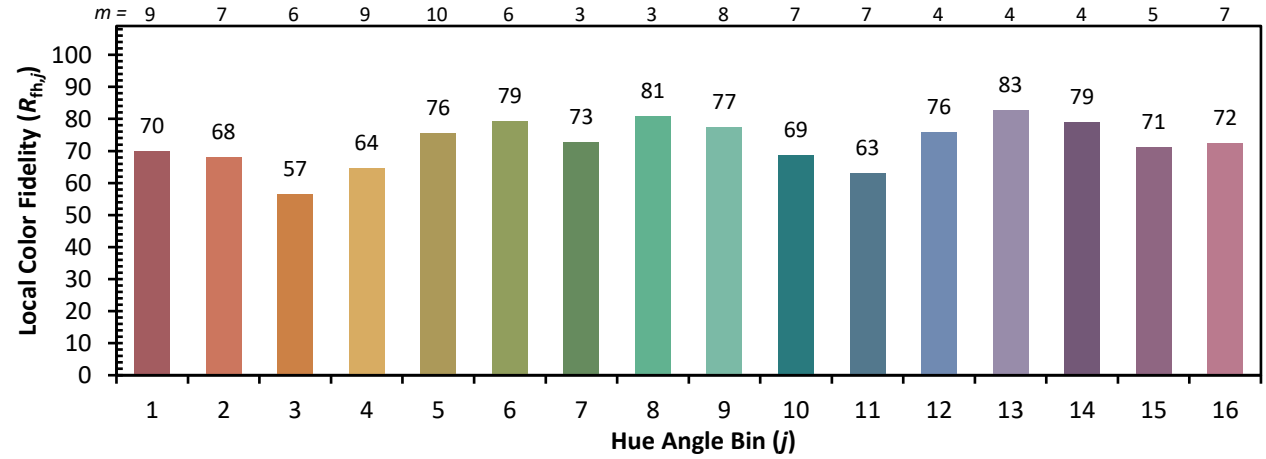
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## Color Rendition by Hue-Angle Bin



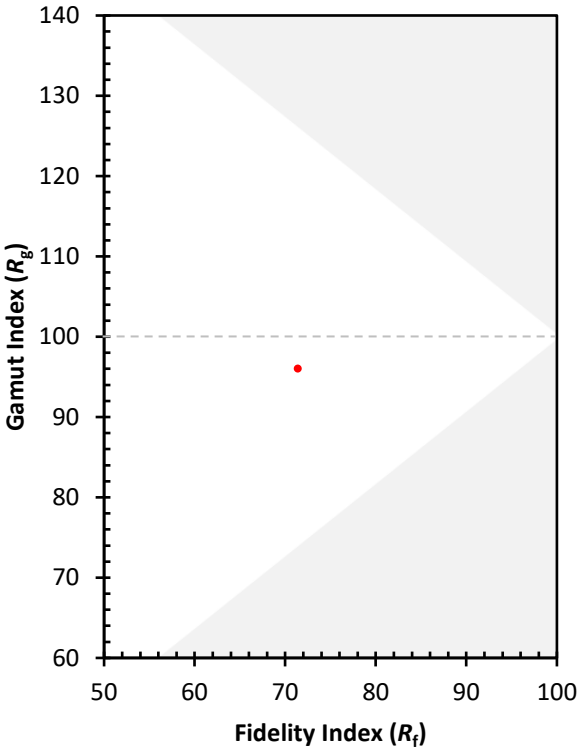



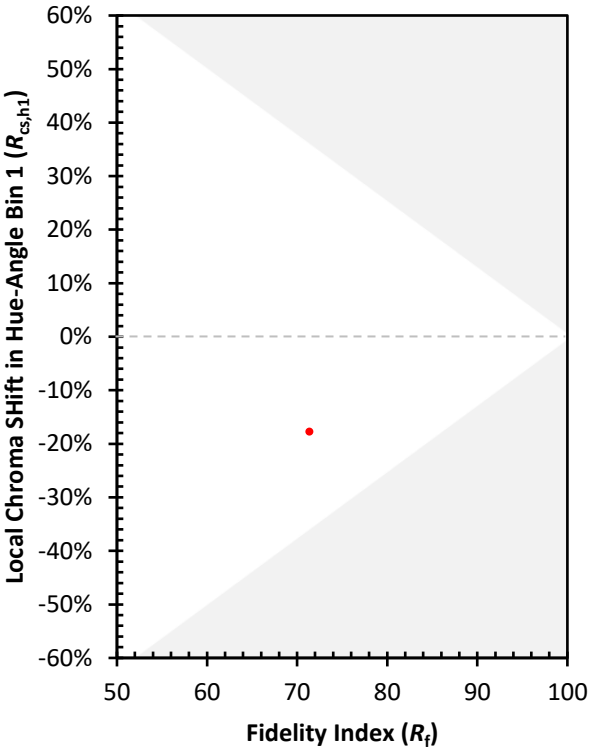



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## Measure Comparisons




(END OF REPORT)