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

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Peachtree City, GA 30269

Scaled data based on original data using

LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

Brand: McGRAW-EDISON

Report Number: P1203416

Luminaire Tested: GWC-SB2C-750-U-SL2-HSS

Issue Date: 10/30/2025

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

Scaled Data Report

**Test Information**

| | |
|---|---|
| Test Method: | LM-79-2024 |
| Report Number: | P1203416 |
| | TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-11) |
| Test Lab: | INNOVATION CENTER |
| Issue Date: | 3/14/2026 |
| Manufacturer: | COOPER LIGHTING SOLUTIONS |
| Product Line: | McGRAW-EDISON |
| Catalog Number: | GWC-SB2C-750-U-SL2-HSS |
| Description: | GALLEON WALL LUMINAIRE |
| | (2) 70 CRI, 5000K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD |
| Light Source: | - |
| Ballast/Driver: | ELECTRONIC DRIVER |

**Summary**

| | |
|---|---|
| Lumens per Lamp: | N/A |
| Luminaire Lumens: | 12840 lumens |
| Efficiency: | N/A |
| Efficacy: | 127.3 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): | 100.9 |
| Input Voltage (V): | 120.0 |
| Input Current (Ain): | 0.857 |
| Voltage Rise (V): | NR |
| Power Factor: | 0.994 |
| Total Harmonic Distortion (THDi): | 9.472 |
| Frequency (hertz): | 60 |
| Stabilization Time: | NR |
| Operation Time: | NR |
| Ambient Temperature (°C): | NR |
| Test Distance: | 28.75 FT |

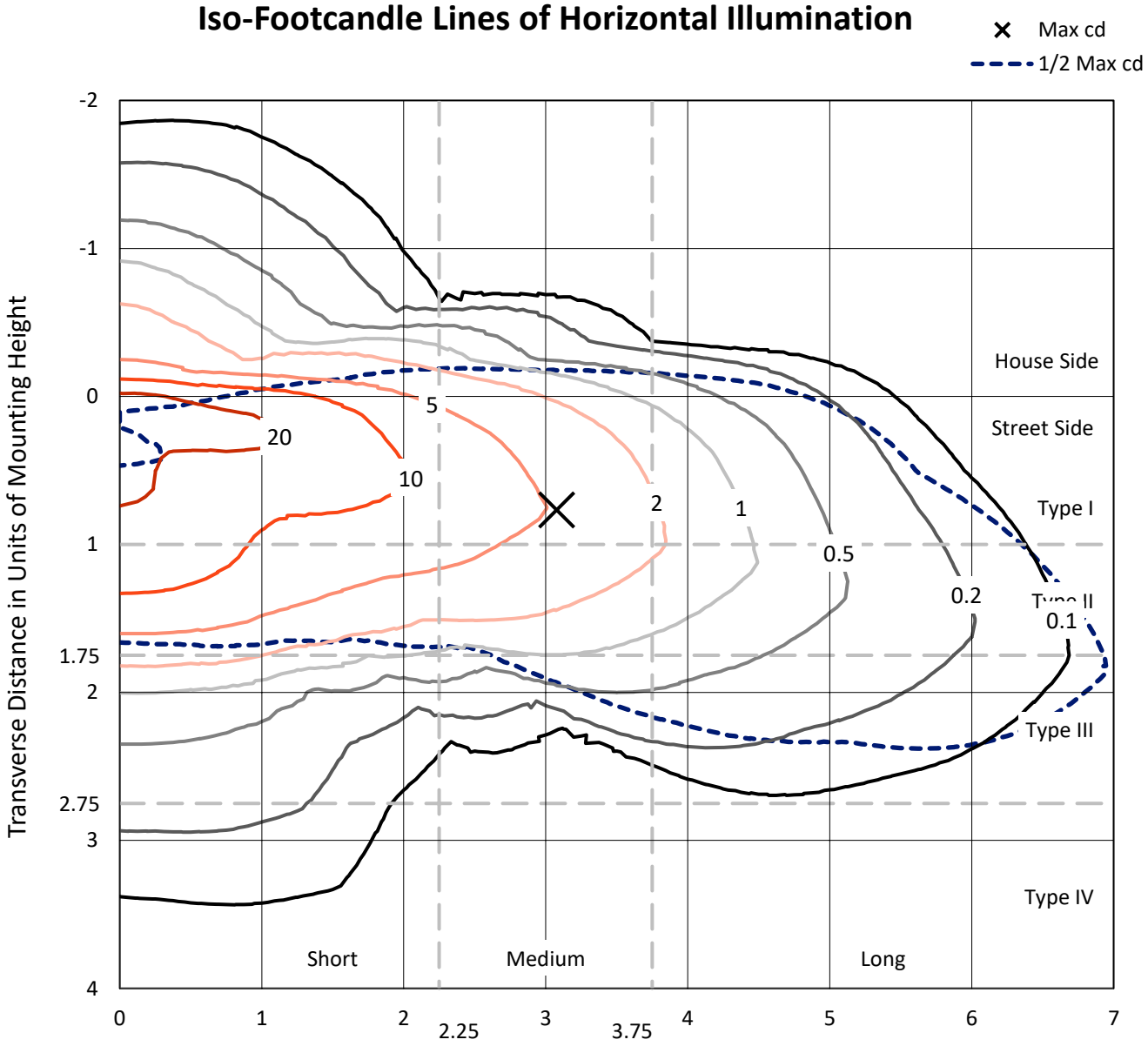


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REPORT NUMBER: P1203416
CATALOG NUMBER: GWC-SB2C-750-U-SL2-HSS

## Iso-Footcandle Lines of Horizontal Illumination



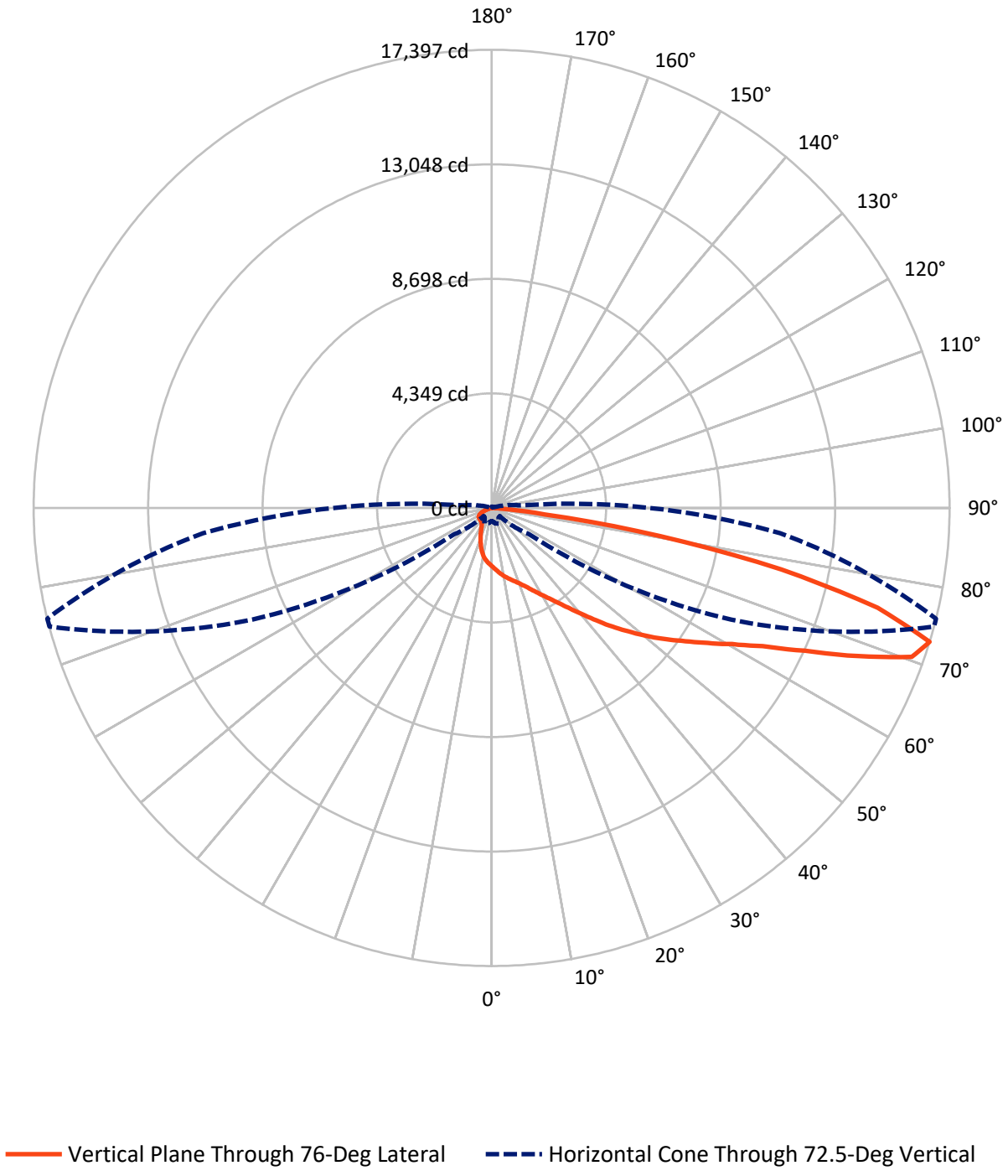

Based on 10 foot mounting height. Maximum calculated value = 19.1 fc
Type II - Medium - N/A

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## Luminous Intensity Polar Plot



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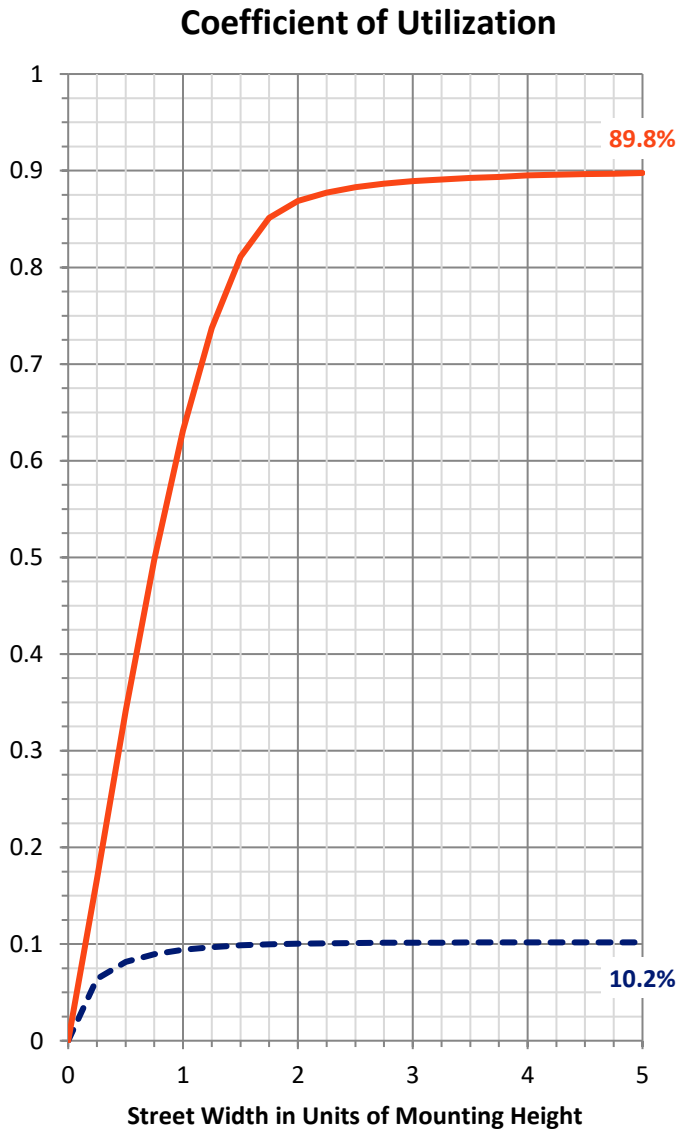
REPORT NUMBER: P1203416
CATALOG NUMBER: GWC-SB2C-750-U-SL2-HSS

**FLUX DISTRIBUTION:**

| | | Downward | Upward | Total |
|---|---|---|---|---|
| **House Side** | Lumens | 1314.2 | 0.0 | 1314.2 |
| | % Fixture | 10.2 | 0.0 | 10.2 |
| **Street Side** | Lumens | 11525.8 | 0.0 | 11525.8 |
| | % Fixture | 89.8 | 0.0 | 89.8 |
| **Total** | Lumens | 12840.0 | 0.0 | 12840.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

**ZONAL LUMENS:**

| Zone | Lumens | % Fixture |
|---|---|---|
| 0°-10° | 201.8 | 1.6 |
| 10°-20° | 541.1 | 4.2 |
| 20°-30° | 856.4 | 6.7 |
| 30°-40° | 1325.0 | 10.3 |
| 40°-50° | 2012.5 | 15.7 |
| 50°-60° | 2774.4 | 21.6 |
| 60°-70° | 2931.0 | 22.8 |
| 70°-80° | 2010.7 | 15.7 |
| 80°-90° | 187.1 | 1.5 |
| 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° | 12840.0 | 100.0 |
| 0°-180° | 12840.0 | 100.0 |



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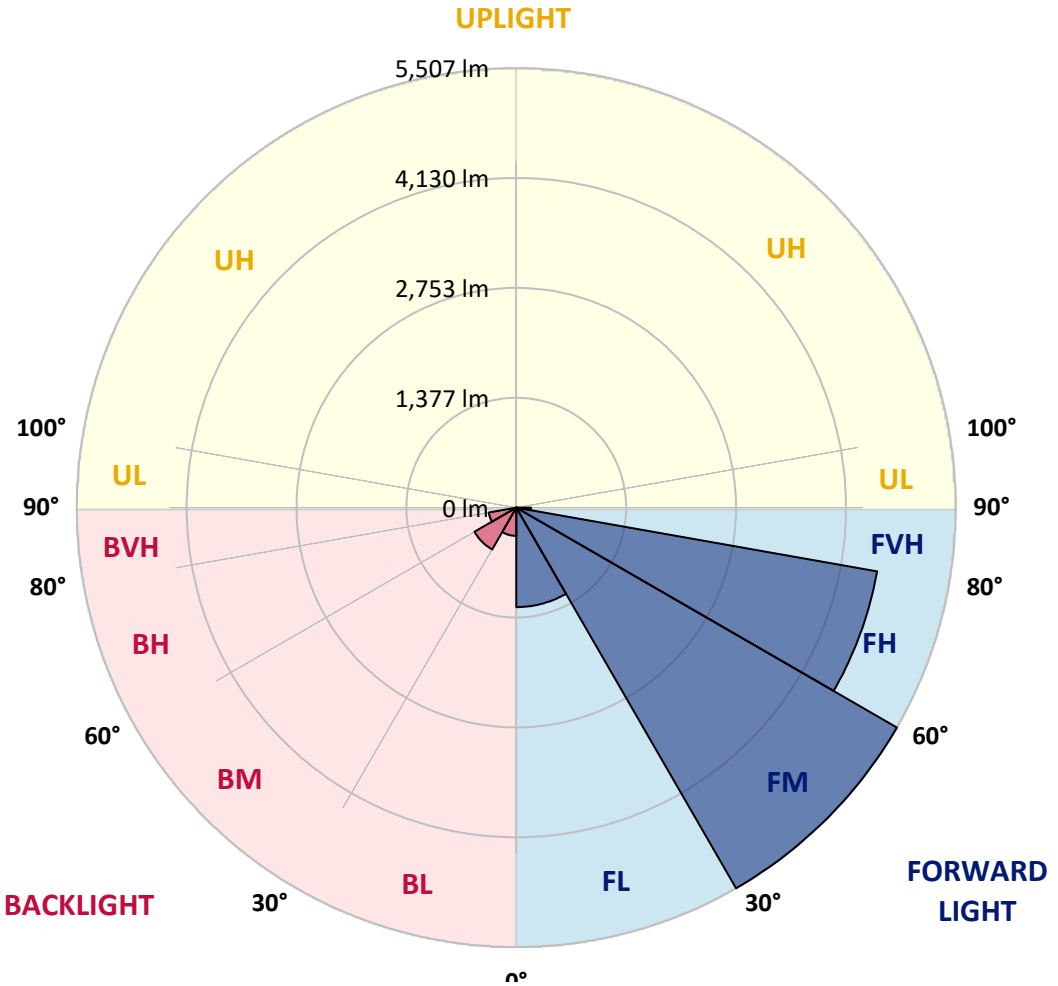
Scaled Data Report

REPORT NUMBER: P1203416
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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°) | 1246.1 | 9.7 | | | |
| FM | (30°-60°) | 5506.8 | 42.9 | | | |
| FH | (60°-80°) | 4590.9 | 35.8 | | | G2/5000 |
| FVH | (80°-90°) | 182.1 | 1.4 | | | G2/225 |
| BL | (0°-30°) | 353.2 | 2.8 | B1/500 | | |
| BM | (30°-60°) | 605.1 | 4.7 | B1/1000 | | |
| BH | (60°-80°) | 350.8 | 2.7 | B1/500 | | G1/500 |
| BVH | (80°-90°) | 5.1 | 0.0 | | | 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: P1203416
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**CANDELA DISTRIBUTION (FULL):**

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 76° | 85° |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0° | 2218.9 | 2218.9 | 2218.9 | 2218.9 | 2218.9 | 2218.9 | 2218.9 | 2218.9 | 2218.9 | 2218.9 | 2218.9 |
| 2.5° | 2579.5 | 2545.4 | 2552.0 | 2517.9 | 2502.1 | 2463.7 | 2423.8 | 2371.3 | 2313.0 | 2313.0 | 2256.3 |
| 5° | 2851.0 | 2829.4 | 2829.4 | 2789.4 | 2758.6 | 2698.6 | 2627.0 | 2534.5 | 2424.6 | 2413.8 | 2306.3 |
| 7.5° | 3017.6 | 3004.3 | 3012.6 | 2989.3 | 2964.3 | 2901.8 | 2816.9 | 2696.1 | 2540.4 | 2527.0 | 2365.5 |
| 10° | 3050.1 | 3049.3 | 3072.6 | 3079.3 | 3095.9 | 3064.3 | 2988.5 | 2849.4 | 2654.5 | 2635.3 | 2416.3 |
| 12.5° | 2924.3 | 2908.5 | 2966.0 | 3033.4 | 3128.4 | 3170.9 | 3131.7 | 2989.3 | 2758.6 | 2731.9 | 2463.7 |
| 15° | 2717.8 | 2721.1 | 2776.1 | 2880.2 | 3038.4 | 3190.0 | 3240.8 | 3125.9 | 2864.4 | 2832.7 | 2508.7 |
| 17.5° | 2599.5 | 2587.0 | 2634.5 | 2727.8 | 2902.7 | 3116.7 | 3291.6 | 3253.3 | 2976.8 | 2941.0 | 2554.5 |
| 20° | 2585.3 | 2584.5 | 2595.3 | 2637.8 | 2771.1 | 3011.8 | 3285.8 | 3377.4 | 3109.2 | 3067.6 | 2620.3 |
| 22.5° | 2683.6 | 2682.0 | 2672.8 | 2664.5 | 2701.1 | 2909.3 | 3260.8 | 3495.7 | 3267.5 | 3222.5 | 2713.6 |
| 25° | 2834.4 | 2831.9 | 2817.7 | 2766.9 | 2731.1 | 2854.4 | 3237.5 | 3605.7 | 3454.9 | 3404.9 | 2826.9 |
| 27.5° | 3018.5 | 3016.8 | 2991.0 | 2914.3 | 2821.9 | 2859.4 | 3225.8 | 3718.9 | 3671.5 | 3622.3 | 2957.7 |
| 30° | 3244.2 | 3240.8 | 3187.5 | 3079.3 | 2958.5 | 2938.5 | 3241.7 | 3846.4 | 3897.2 | 3859.7 | 3108.4 |
| 32.5° | 3527.4 | 3518.2 | 3448.2 | 3285.0 | 3115.9 | 3044.3 | 3271.7 | 3977.1 | 4164.5 | 4129.6 | 3310.0 |
| 35° | 3746.4 | 3732.3 | 3691.4 | 3547.4 | 3298.3 | 3174.2 | 3341.6 | 4132.1 | 4486.0 | 4455.2 | 3567.3 |
| 37.5° | 3934.7 | 3920.5 | 3887.2 | 3768.9 | 3559.8 | 3340.0 | 3454.1 | 4338.6 | 4865.8 | 4850.8 | 3881.3 |
| 40° | 4137.9 | 4114.6 | 4098.7 | 3972.1 | 3783.1 | 3579.0 | 3614.8 | 4580.2 | 5303.1 | 5304.8 | 4258.7 |
| 42.5° | 4294.5 | 4285.3 | 4287.0 | 4189.5 | 3998.8 | 3862.2 | 3828.0 | 4852.5 | 5827.0 | 5842.8 | 4712.6 |
| 45° | 4428.6 | 4421.1 | 4451.9 | 4383.6 | 4216.2 | 4047.9 | 4077.9 | 5160.7 | 6400.1 | 6432.5 | 5220.7 |
| 47.5° | 4531.8 | 4540.2 | 4584.3 | 4540.2 | 4441.9 | 4178.7 | 4299.5 | 5493.0 | 7002.2 | 7006.4 | 5745.4 |
| 50° | 4635.1 | 4638.5 | 4711.8 | 4690.1 | 4650.1 | 4344.4 | 4503.5 | 5864.5 | 7636.9 | 7644.4 | 6236.0 |
| 52.5° | 4667.6 | 4662.6 | 4779.2 | 4832.5 | 4834.2 | 4549.3 | 4767.6 | 6269.3 | 8259.1 | 8283.3 | 6740.7 |
| 55° | 4501.0 | 4515.2 | 4703.4 | 4920.0 | 5005.8 | 4832.5 | 5124.0 | 6781.5 | 8922.1 | 8932.1 | 7240.5 |
| 57.5° | 3686.4 | 3764.7 | 4181.2 | 4683.4 | 5116.5 | 5238.2 | 5636.3 | 7380.4 | 9687.5 | 9678.4 | 7746.9 |
| 60° | 2237.2 | 2330.5 | 2828.6 | 3928.0 | 4755.1 | 5645.4 | 6390.9 | 8308.2 | 10523.8 | 10498.0 | 8259.1 |
| 62.5° | 1251.0 | 1279.3 | 1438.4 | 2351.3 | 3616.5 | 5386.4 | 7128.0 | 9500.1 | 11646.5 | 11559.1 | 8763.0 |
| 65° | 922.0 | 931.2 | 968.7 | 1151.9 | 1777.4 | 4142.9 | 6966.4 | 10925.2 | 13224.1 | 13068.3 | 9366.9 |
| 67.5° | 801.3 | 810.4 | 847.1 | 872.1 | 793.8 | 2176.4 | 5739.6 | 11715.7 | 15227.2 | 15023.1 | 10184.0 |
| 70° | 674.7 | 679.7 | 738.8 | 755.4 | 568.0 | 827.9 | 3687.3 | 11471.6 | 17081.3 | 16935.5 | 11061.0 |
| 72.5° | 503.1 | 523.1 | 608.9 | 648.8 | 455.6 | 439.8 | 1735.8 | 10029.9 | 17395.3 | 17396.9 | 11001.9 |
| 75° | 341.5 | 359.8 | 458.1 | 533.9 | 351.5 | 308.2 | 700.5 | 7489.5 | 15147.2 | 15147.2 | 9644.2 |
| 77.5° | 233.2 | 248.2 | 319.0 | 419.0 | 266.5 | 211.6 | 363.1 | 4753.4 | 10866.9 | 11249.2 | 6874.0 |
| 80° | 103.3 | 112.4 | 205.7 | 304.0 | 202.4 | 136.6 | 205.7 | 2602.8 | 6571.6 | 6490.8 | 2694.5 |
| 82.5° | 50.8 | 58.3 | 131.6 | 189.9 | 130.8 | 84.1 | 108.3 | 1237.7 | 2129.7 | 2024.0 | 420.6 |
| 85° | 10.0 | 13.3 | 70.8 | 80.8 | 60.8 | 37.5 | 40.8 | 380.6 | 256.5 | 293.2 | 89.1 |
| 87.5° | 0.0 | 0.0 | 21.7 | 15.0 | 6.7 | 8.3 | 8.3 | 34.1 | 20.0 | 23.3 | 23.3 |
| 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: P1203416
CATALOG NUMBER: GWC-SB2C-750-U-SL2-HSS

**CANDELA DISTRIBUTION (continued):**

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0° | 2218.9 | 2218.9 | 2218.9 | 2218.9 | 2218.9 | 2218.9 | 2218.9 | 2218.9 | 2218.9 | 2218.9 | 2218.9 |
| 2.5° | 2226.4 | 2195.5 | 2128.1 | 2061.4 | 1993.1 | 1930.7 | 1887.4 | 1844.1 | 1817.4 | 1805.7 | 1807.4 |
| 5° | 2243.9 | 2181.4 | 2039.8 | 1891.5 | 1744.9 | 1601.7 | 1494.2 | 1393.5 | 1361.8 | 1309.3 | 1312.7 |
| 7.5° | 2271.3 | 2169.7 | 1946.5 | 1696.6 | 1458.4 | 1248.5 | 1096.9 | 976.2 | 927.9 | 881.2 | 880.4 |
| 10° | 2289.7 | 2148.1 | 1823.2 | 1489.2 | 1166.9 | 931.2 | 786.3 | 698.8 | 667.2 | 638.8 | 638.0 |
| 12.5° | 2297.2 | 2108.1 | 1681.6 | 1256.9 | 907.9 | 709.6 | 623.0 | 582.2 | 571.4 | 561.4 | 561.4 |
| 15° | 2303.8 | 2068.9 | 1523.4 | 1032.8 | 717.1 | 593.9 | 559.7 | 546.4 | 538.9 | 532.2 | 532.2 |
| 17.5° | 2309.7 | 2019.0 | 1342.6 | 839.6 | 605.5 | 547.2 | 530.6 | 516.4 | 510.6 | 503.1 | 503.1 |
| 20° | 2329.6 | 1970.7 | 1181.1 | 693.0 | 544.7 | 513.9 | 495.6 | 480.6 | 475.6 | 470.6 | 471.4 |
| 22.5° | 2367.1 | 1931.5 | 1024.5 | 593.9 | 508.1 | 479.8 | 456.4 | 439.8 | 436.4 | 433.1 | 430.6 |
| 25° | 2412.1 | 1883.2 | 877.1 | 529.7 | 472.3 | 440.6 | 414.8 | 400.6 | 397.3 | 398.1 | 396.5 |
| 27.5° | 2469.6 | 1829.9 | 750.4 | 488.9 | 440.6 | 404.0 | 374.8 | 364.0 | 365.6 | 369.0 | 367.3 |
| 30° | 2532.9 | 1780.8 | 651.3 | 460.6 | 412.3 | 371.5 | 342.3 | 334.8 | 340.7 | 345.7 | 344.0 |
| 32.5° | 2627.0 | 1737.4 | 582.2 | 438.1 | 387.3 | 344.8 | 321.5 | 312.3 | 319.0 | 325.7 | 324.0 |
| 35° | 2755.3 | 1715.8 | 543.1 | 419.0 | 365.6 | 324.0 | 300.7 | 294.0 | 300.7 | 302.3 | 301.5 |
| 37.5° | 2912.7 | 1714.1 | 526.4 | 403.1 | 345.7 | 306.5 | 280.7 | 278.2 | 283.2 | 284.0 | 282.4 |
| 40° | 3115.9 | 1724.9 | 513.9 | 391.5 | 324.8 | 286.5 | 262.4 | 259.9 | 261.5 | 267.4 | 266.5 |
| 42.5° | 3373.3 | 1769.9 | 496.4 | 376.5 | 302.3 | 266.5 | 247.4 | 241.5 | 240.7 | 247.4 | 246.5 |
| 45° | 3696.4 | 1869.0 | 473.1 | 352.3 | 282.4 | 249.9 | 230.7 | 224.1 | 221.6 | 223.2 | 225.7 |
| 47.5° | 4048.8 | 1990.6 | 449.8 | 329.8 | 268.2 | 236.5 | 217.4 | 209.1 | 204.9 | 204.9 | 204.9 |
| 50° | 4390.3 | 2128.1 | 433.9 | 306.5 | 258.2 | 224.1 | 203.2 | 194.9 | 188.2 | 186.6 | 185.7 |
| 52.5° | 4728.4 | 2263.0 | 421.5 | 283.2 | 246.5 | 208.2 | 189.9 | 180.7 | 173.2 | 169.9 | 168.2 |
| 55° | 5036.6 | 2391.3 | 399.8 | 260.7 | 231.5 | 191.6 | 176.6 | 167.4 | 158.3 | 152.4 | 149.9 |
| 57.5° | 5332.3 | 2497.9 | 359.8 | 237.4 | 208.2 | 175.7 | 162.4 | 152.4 | 141.6 | 134.1 | 130.8 |
| 60° | 5601.3 | 2552.9 | 309.8 | 212.4 | 184.9 | 159.1 | 146.6 | 137.4 | 123.3 | 110.8 | 107.4 |
| 62.5° | 5806.2 | 2531.2 | 255.7 | 184.1 | 160.8 | 144.1 | 128.3 | 119.1 | 102.4 | 87.5 | 81.6 |
| 65° | 6016.1 | 2412.9 | 204.1 | 154.1 | 140.8 | 124.1 | 107.4 | 98.3 | 79.1 | 63.3 | 59.1 |
| 67.5° | 6288.4 | 2160.6 | 160.8 | 128.3 | 121.6 | 98.3 | 84.1 | 78.3 | 65.0 | 50.0 | 46.6 |
| 70° | 6463.4 | 1678.3 | 124.9 | 104.1 | 99.9 | 71.6 | 65.0 | 64.1 | 51.6 | 38.3 | 34.1 |
| 72.5° | *5983.6* | *1100.3* | *95.8* | *79.1* | *71.6* | *46.6* | *50.0* | *50.0* | *37.5* | *25.8* | *22.5* |
| 75° | 4994.9 | 643.8 | 69.1 | 56.6 | 40.8 | 30.0 | 34.1 | 34.1 | 23.3 | 12.5 | 10.0 |
| 77.5° | 3567.3 | 343.2 | 45.8 | 35.0 | 20.8 | 13.3 | 18.3 | 17.5 | 7.5 | 0.8 | 0.0 |
| 80° | 1364.3 | 118.3 | 21.7 | 14.2 | 5.8 | 2.5 | 1.7 | 0.8 | 0.8 | 0.0 | 0.0 |
| 82.5° | 208.2 | 30.8 | 4.2 | 3.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 37.5 | 4.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 8.3 | 0.0 | 0.0 | 0.0 | 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 |


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# LM-79-2008: Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Report Prepared for

Cooper Lighting Solutions

McGRAW-EDISON

Report Number: SP1-1908-441-4-R4

Test Date: 10/02/2019

Luminaire Tested: SA1C-750-U-5WQ

Data in this report applies to products using SA and SB light squares

Report Generated By FNC07603 / LDUCLS01DT446
Version: v6.13

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## Test Information

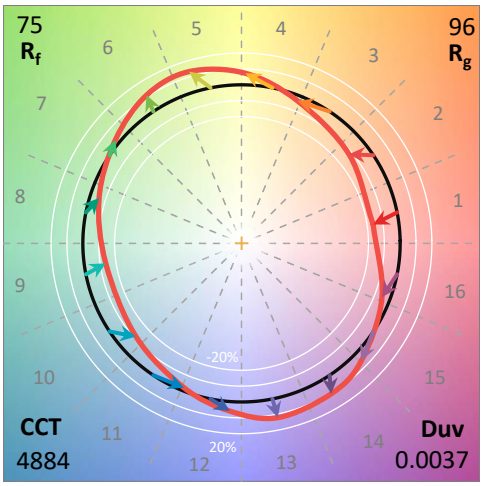
| | |
|---|---|
| Test Method: | LM-79-2008 |
| Report Number: | SP1-1908-441-4-R4 |
| Test Lab: | COOPER LIGHTING SOLUTIONS |
| Photometer: | SP1 - 76IN SPHERE |
| Measurement Geometry: | 4π |
| Issue Date: | 10/28/2024 |
| Manufacturer: | COOPER LIGHTING SOLUTIONS |
| Product Line: | McGRAW-EDISON |
| Catalog Number: | **SA1C-750-U-5WQ** |
| Description: | McGRAW EDISON ROADWAY AND AREA LUMINAIRE |

***THIS IS A REVISION OF SP1-1908-441-4-R3. TO UPDATE THE CATALOG INFORMATION.***TESTED IN SITU. ROADWAY AND AREA LUMINAIRE. (1) 70 CRI, 5000K, 1050MA LIGHTSQUARE WITH 16 LEDS AND TYPE V WIDE OPTICS.

## Spectral Parameters

| | | | | | |
|---|---|---|---|---|---|
| CCT (K): | 4884 | CRI (Ra): | 73.5 | | |
| CIE u': | 0.2101 | R1: | 70.5 | R9: | -28.4 |
| CIE v': | 0.4904 | R2: | 77.7 | R10: | 48.6 |
| Duv: | 0.0037 | R3: | 84.6 | R11: | 73.2 |
| CIE x: | 0.3493 | R4: | 74.7 | R12: | 50.7 |
| CIE y: | 0.3624 | R5: | 71.9 | R13: | 71.2 |
| CIE z: | 0.2884 | R6: | 70.7 | R14: | 91.4 |
| Peak Wavelength (nm): | 444 | R7: | 81.2 | | |
| Dominant Wavelength (nm): | 571 | R8: | 56.9 | | |
| Purity: | 13.7 | | | | |

| | |
|---|---|
| Rf: | 74.9 |
| Rg: | 96.3 |




## Test Conditions

| | |
|---|---|
| Stabilization Time: | 240M |
| Operation Time: | 12H |
| Room Temperature (°C) / RH%: | 25.0./44% |
| Sphere Temperature (°C): | 25.7 |

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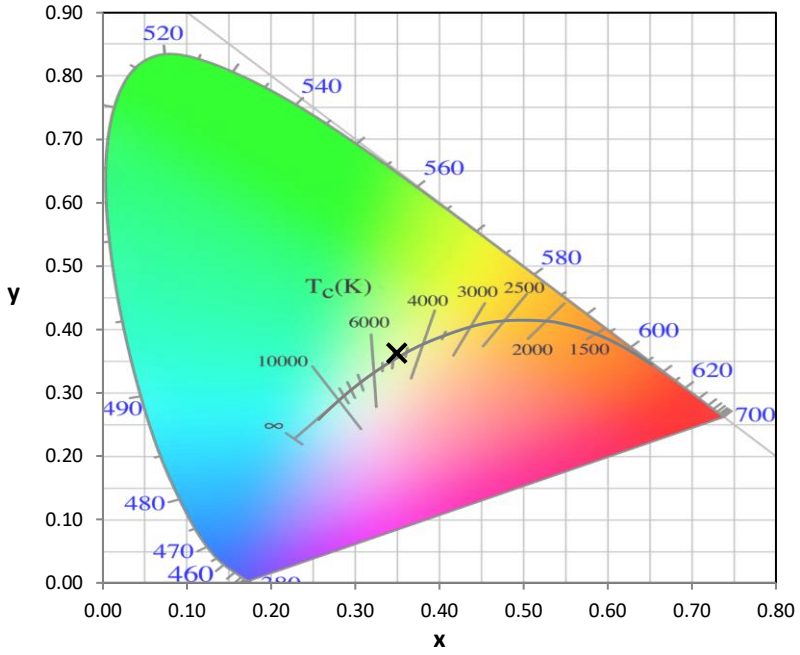
REPORT NUMBER: SP1-1908-441-4-R4

| Measurement and Test Equipment | | | |
|---|---|---|---|
| Instrument | Identification Number | Calibration Date | Calibration Due Date |
| Photometer | IN0058 | 6/28/2019 | 12/28/2019 |
| Power Meter | IN0071 | 12/5/2018 | 12/5/2019 |
| AC Power Source | IN0063 | 12/5/2018 | 12/5/2019 |
| DC Power Source | IN0208 | 12/5/2018 | 12/5/2019 |
| Sphere Thermometer | IN0085 | 12/5/2018 | 12/5/2019 |
| Room Thermometer | IN0046 | 12/5/2018 | 12/5/2019 |

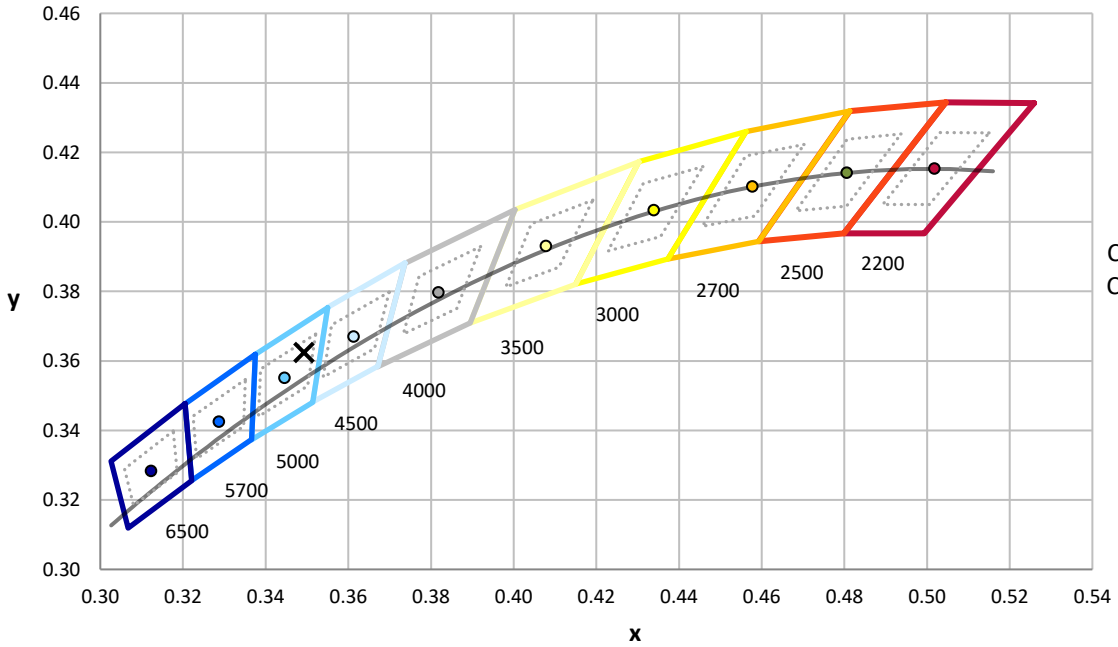
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1121 Highway 74 South
Peachtree City, GA 30269

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

## CIE 1931 Chromaticity Diagram




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



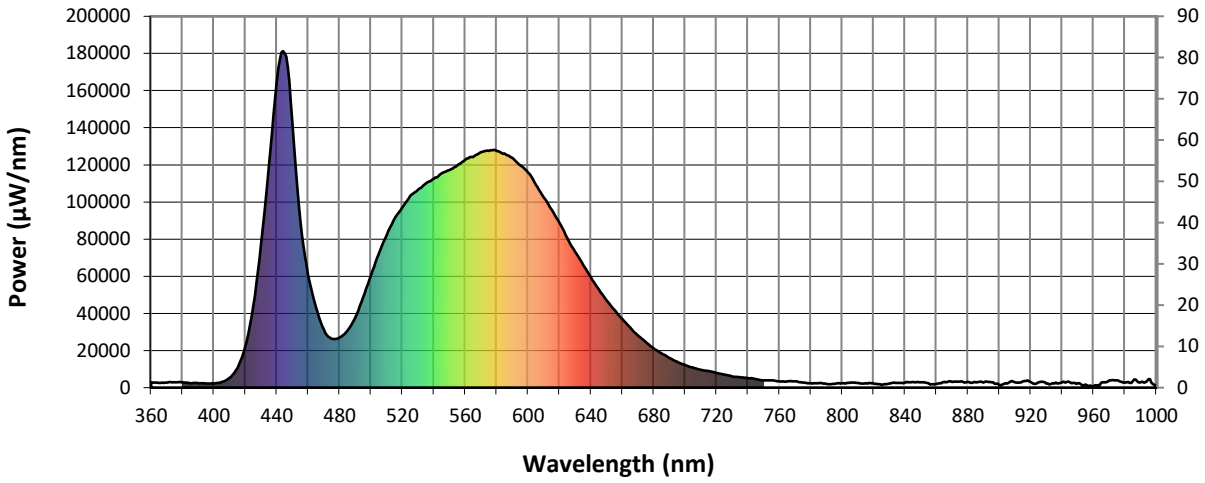

CCT = 4884K
CIE x = 0.3493
CIE y = 0.3624
Duv = 0.0037

Point lies inside the ANSI 5000K 4-step quadrangle

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## Photopic Flux vs. Wavelength



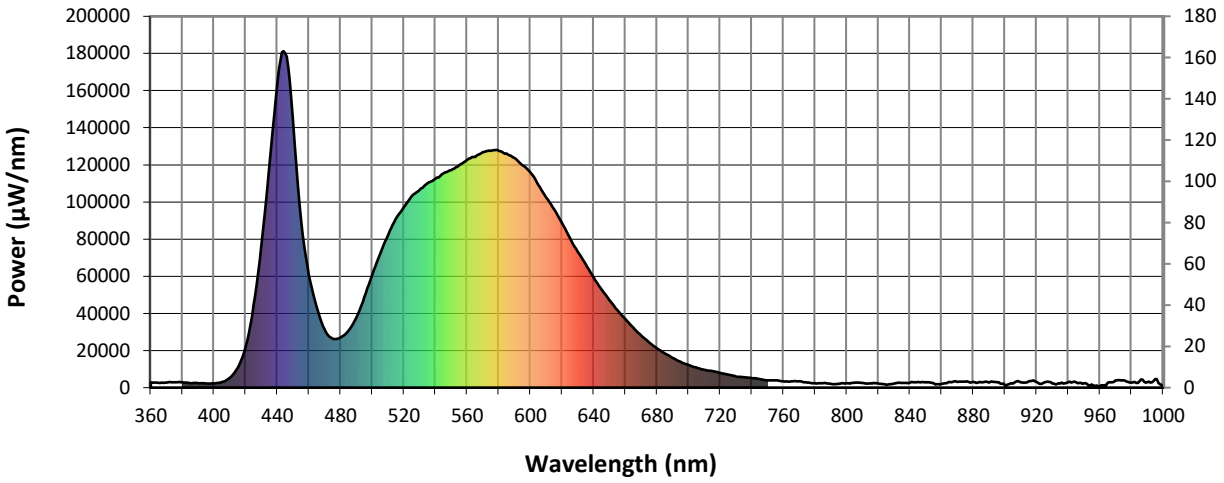

######

| λ (nm) | Power (µW/nm) | Lumens (ϕ/nm) | λ (nm) | Power (µW/nm) | Lumens (ϕ/nm) | λ (nm) | Power (µW/nm) | Lumens (ϕ/nm) | λ (nm) | Power (µW/nm) | Lumens (ϕ/nm) | λ (nm) | Power (µW/nm) | Lumens (ϕ/nm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 360 | 2945 | NR | 490 | 37941 | NR | 620 | 88803 | NR | 750 | 3908 | NR | 880 | 2997 | NR |
| 365 | 2596 | NR | 495 | 48525 | NR | 625 | 80578 | NR | 755 | 3988 | NR | 885 | 2927 | NR |
| 370 | 2732 | NR | 500 | 60609 | NR | 630 | 73127 | NR | 760 | 3335 | NR | 890 | 2649 | NR |
| 375 | 2894 | NR | 505 | 72036 | NR | 635 | 66244 | NR | 765 | 3438 | NR | 895 | 2828 | NR |
| 380 | 2822 | NR | 510 | 82168 | NR | 640 | 59440 | NR | 770 | 3427 | NR | 900 | 1407 | NR |
| 385 | 2394 | NR | 515 | 90898 | NR | 645 | 52864 | NR | 775 | 2759 | NR | 905 | 2224 | NR |
| 390 | 2370 | NR | 520 | 97142 | NR | 650 | 47085 | NR | 780 | 2340 | NR | 910 | 2905 | NR |
| 395 | 2267 | NR | 525 | 103255 | NR | 655 | 41789 | NR | 785 | 2412 | NR | 915 | 3350 | NR |
| 400 | 2262 | NR | 530 | 106697 | NR | 660 | 37064 | NR | 790 | 1999 | NR | 920 | 3114 | NR |
| 405 | 3000 | NR | 535 | 110081 | NR | 665 | 32299 | NR | 795 | 2054 | NR | 925 | 2834 | NR |
| 410 | 5324 | NR | 540 | 112494 | NR | 670 | 28142 | NR | 800 | 2331 | NR | 930 | 2271 | NR |
| 415 | 10725 | NR | 545 | 115513 | NR | 675 | 24505 | NR | 805 | 2648 | NR | 935 | 2228 | NR |
| 420 | 22128 | NR | 550 | 117203 | NR | 680 | 21162 | NR | 810 | 2485 | NR | 940 | 2833 | NR |
| 425 | 44095 | NR | 555 | 119753 | NR | 685 | 18400 | NR | 815 | 2409 | NR | 945 | 2941 | NR |
| 430 | 77002 | NR | 560 | 122602 | NR | 690 | 16065 | NR | 820 | 2221 | NR | 950 | 2323 | NR |
| 435 | 119881 | NR | 565 | 124314 | NR | 695 | 13860 | NR | 825 | 1562 | NR | 955 | 1667 | NR |
| 440 | 164454 | NR | 570 | 126775 | NR | 700 | 12177 | NR | 830 | 2249 | NR | 960 | 749 | NR |
| 445 | 179997 | NR | 575 | 127511 | NR | 705 | 10757 | NR | 835 | 2573 | NR | 965 | 2669 | NR |
| 450 | 142822 | NR | 580 | 127577 | NR | 710 | 9601 | NR | 840 | 2764 | NR | 970 | 3968 | NR |
| 455 | 90008 | NR | 585 | 126153 | NR | 715 | 8944 | NR | 845 | 3109 | NR | 975 | 3886 | NR |
| 460 | 60557 | NR | 590 | 123678 | NR | 720 | 7947 | NR | 850 | 2963 | NR | 980 | 2788 | NR |
| 465 | 43305 | NR | 595 | 119774 | NR | 725 | 7062 | NR | 855 | 2336 | NR | 985 | 3496 | NR |
| 470 | 31089 | NR | 600 | 115733 | NR | 730 | 6004 | NR | 860 | 2118 | NR | 990 | 2913 | NR |
| 475 | 26278 | NR | 605 | 109231 | NR | 735 | 5594 | NR | 865 | 3144 | NR | 995 | 4659 | NR |
| 480 | 27060 | NR | 610 | 102408 | NR | 740 | 5165 | NR | 870 | 3069 | NR | 1000 | 1308 | NR |
| 485 | 30698 | NR | 615 | 96015 | NR | 745 | 4687 | NR | 875 | 3311 | NR | | | |

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## Scotopic Flux vs. Wavelength



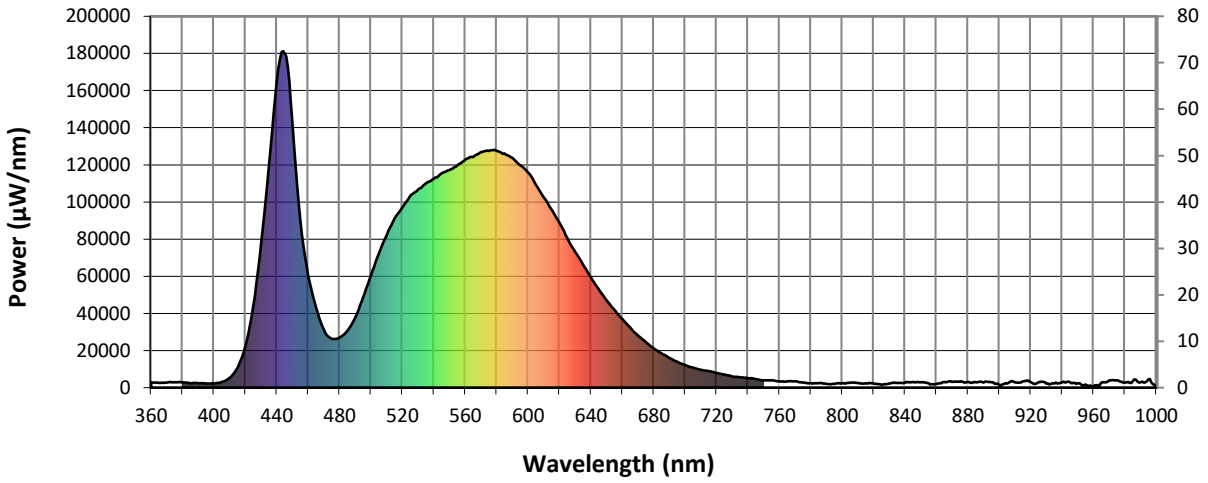

**Scotopic Lumens: 13493.5** **S/P: 1.77**

| λ (nm) | Power (µW/nm) | Lumens (ϕ/nm) | λ (nm) | Power (µW/nm) | Lumens (ϕ/nm) | λ (nm) | Power (µW/nm) | Lumens (ϕ/nm) | λ (nm) | Power (µW/nm) | Lumens (ϕ/nm) | λ (nm) | Power (µW/nm) | Lumens (ϕ/nm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 360 | 2945 | NR | 490 | 37941 | NR | 620 | 88803 | NR | 750 | 3908 | NR | 880 | 2997 | NR |
| 365 | 2596 | NR | 495 | 48525 | NR | 625 | 80578 | NR | 755 | 3988 | NR | 885 | 2927 | NR |
| 370 | 2732 | NR | 500 | 60609 | NR | 630 | 73127 | NR | 760 | 3335 | NR | 890 | 2649 | NR |
| 375 | 2894 | NR | 505 | 72036 | NR | 635 | 66244 | NR | 765 | 3438 | NR | 895 | 2828 | NR |
| 380 | 2822 | NR | 510 | 82168 | NR | 640 | 59440 | NR | 770 | 3427 | NR | 900 | 1407 | NR |
| 385 | 2394 | NR | 515 | 90898 | NR | 645 | 52864 | NR | 775 | 2759 | NR | 905 | 2224 | NR |
| 390 | 2370 | NR | 520 | 97142 | NR | 650 | 47085 | NR | 780 | 2340 | NR | 910 | 2905 | NR |
| 395 | 2267 | NR | 525 | 103255 | NR | 655 | 41789 | NR | 785 | 2412 | NR | 915 | 3350 | NR |
| 400 | 2262 | NR | 530 | 106697 | NR | 660 | 37064 | NR | 790 | 1999 | NR | 920 | 3114 | NR |
| 405 | 3000 | NR | 535 | 110081 | NR | 665 | 32299 | NR | 795 | 2054 | NR | 925 | 2834 | NR |
| 410 | 5324 | NR | 540 | 112494 | NR | 670 | 28142 | NR | 800 | 2331 | NR | 930 | 2271 | NR |
| 415 | 10725 | NR | 545 | 115513 | NR | 675 | 24505 | NR | 805 | 2648 | NR | 935 | 2228 | NR |
| 420 | 22128 | NR | 550 | 117203 | NR | 680 | 21162 | NR | 810 | 2485 | NR | 940 | 2833 | NR |
| 425 | 44095 | NR | 555 | 119753 | NR | 685 | 18400 | NR | 815 | 2409 | NR | 945 | 2941 | NR |
| 430 | 77002 | NR | 560 | 122602 | NR | 690 | 16065 | NR | 820 | 2221 | NR | 950 | 2323 | NR |
| 435 | 119881 | NR | 565 | 124314 | NR | 695 | 13860 | NR | 825 | 1562 | NR | 955 | 1667 | NR |
| 440 | 164454 | NR | 570 | 126775 | NR | 700 | 12177 | NR | 830 | 2249 | NR | 960 | 749 | NR |
| 445 | 179997 | NR | 575 | 127511 | NR | 705 | 10757 | NR | 835 | 2573 | NR | 965 | 2669 | NR |
| 450 | 142822 | NR | 580 | 127577 | NR | 710 | 9601 | NR | 840 | 2764 | NR | 970 | 3968 | NR |
| 455 | 90008 | NR | 585 | 126153 | NR | 715 | 8944 | NR | 845 | 3109 | NR | 975 | 3886 | NR |
| 460 | 60557 | NR | 590 | 123678 | NR | 720 | 7947 | NR | 850 | 2963 | NR | 980 | 2788 | NR |
| 465 | 43305 | NR | 595 | 119774 | NR | 725 | 7062 | NR | 855 | 2336 | NR | 985 | 3496 | NR |
| 470 | 31089 | NR | 600 | 115733 | NR | 730 | 6004 | NR | 860 | 2118 | NR | 990 | 2913 | NR |
| 475 | 26278 | NR | 605 | 109231 | NR | 735 | 5594 | NR | 865 | 3144 | NR | 995 | 4659 | NR |
| 480 | 27060 | NR | 610 | 102408 | NR | 740 | 5165 | NR | 870 | 3069 | NR | 1000 | 1308 | NR |
| 485 | 30698 | NR | 615 | 96015 | NR | 745 | 4687 | NR | 875 | 3311 | NR | | | |

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## Melanopic Flux vs. Wavelength




**Melanopic Lumens: 5378.9** **M/P: 0.71**

| λ (nm) | Power (µW/nm) | Lumens (ϕ/nm) | λ (nm) | Power (µW/nm) | Lumens (ϕ/nm) | λ (nm) | Power (µW/nm) | Lumens (ϕ/nm) | λ (nm) | Power (µW/nm) | Lumens (ϕ/nm) | λ (nm) | Power (µW/nm) | Lumens (ϕ/nm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 360 | 2945 | NR | 490 | 37941 | NR | 620 | 88803 | NR | 750 | 3908 | NR | 880 | 2997 | NR |
| 365 | 2596 | NR | 495 | 48525 | NR | 625 | 80578 | NR | 755 | 3988 | NR | 885 | 2927 | NR |
| 370 | 2732 | NR | 500 | 60609 | NR | 630 | 73127 | NR | 760 | 3335 | NR | 890 | 2649 | NR |
| 375 | 2894 | NR | 505 | 72036 | NR | 635 | 66244 | NR | 765 | 3438 | NR | 895 | 2828 | NR |
| 380 | 2822 | NR | 510 | 82168 | NR | 640 | 59440 | NR | 770 | 3427 | NR | 900 | 1407 | NR |
| 385 | 2394 | NR | 515 | 90898 | NR | 645 | 52864 | NR | 775 | 2759 | NR | 905 | 2224 | NR |
| 390 | 2370 | NR | 520 | 97142 | NR | 650 | 47085 | NR | 780 | 2340 | NR | 910 | 2905 | NR |
| 395 | 2267 | NR | 525 | 103255 | NR | 655 | 41789 | NR | 785 | 2412 | NR | 915 | 3350 | NR |
| 400 | 2262 | NR | 530 | 106697 | NR | 660 | 37064 | NR | 790 | 1999 | NR | 920 | 3114 | NR |
| 405 | 3000 | NR | 535 | 110081 | NR | 665 | 32299 | NR | 795 | 2054 | NR | 925 | 2834 | NR |
| 410 | 5324 | NR | 540 | 112494 | NR | 670 | 28142 | NR | 800 | 2331 | NR | 930 | 2271 | NR |
| 415 | 10725 | NR | 545 | 115513 | NR | 675 | 24505 | NR | 805 | 2648 | NR | 935 | 2228 | NR |
| 420 | 22128 | NR | 550 | 117203 | NR | 680 | 21162 | NR | 810 | 2485 | NR | 940 | 2833 | NR |
| 425 | 44095 | NR | 555 | 119753 | NR | 685 | 18400 | NR | 815 | 2409 | NR | 945 | 2941 | NR |
| 430 | 77002 | NR | 560 | 122602 | NR | 690 | 16065 | NR | 820 | 2221 | NR | 950 | 2323 | NR |
| 435 | 119881 | NR | 565 | 124314 | NR | 695 | 13860 | NR | 825 | 1562 | NR | 955 | 1667 | NR |
| 440 | 164454 | NR | 570 | 126775 | NR | 700 | 12177 | NR | 830 | 2249 | NR | 960 | 749 | NR |
| 445 | 179997 | NR | 575 | 127511 | NR | 705 | 10757 | NR | 835 | 2573 | NR | 965 | 2669 | NR |
| 450 | 142822 | NR | 580 | 127577 | NR | 710 | 9601 | NR | 840 | 2764 | NR | 970 | 3968 | NR |
| 455 | 90008 | NR | 585 | 126153 | NR | 715 | 8944 | NR | 845 | 3109 | NR | 975 | 3886 | NR |
| 460 | 60557 | NR | 590 | 123678 | NR | 720 | 7947 | NR | 850 | 2963 | NR | 980 | 2788 | NR |
| 465 | 43305 | NR | 595 | 119774 | NR | 725 | 7062 | NR | 855 | 2336 | NR | 985 | 3496 | NR |
| 470 | 31089 | NR | 600 | 115733 | NR | 730 | 6004 | NR | 860 | 2118 | NR | 990 | 2913 | NR |
| 475 | 26278 | NR | 605 | 109231 | NR | 735 | 5594 | NR | 865 | 3144 | NR | 995 | 4659 | NR |
| 480 | 27060 | NR | 610 | 102408 | NR | 740 | 5165 | NR | 870 | 3069 | NR | 1000 | 1308 | NR |
| 485 | 30698 | NR | 615 | 96015 | NR | 745 | 4687 | NR | 875 | 3311 | NR | | | |

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Peachtree City, GA 30269

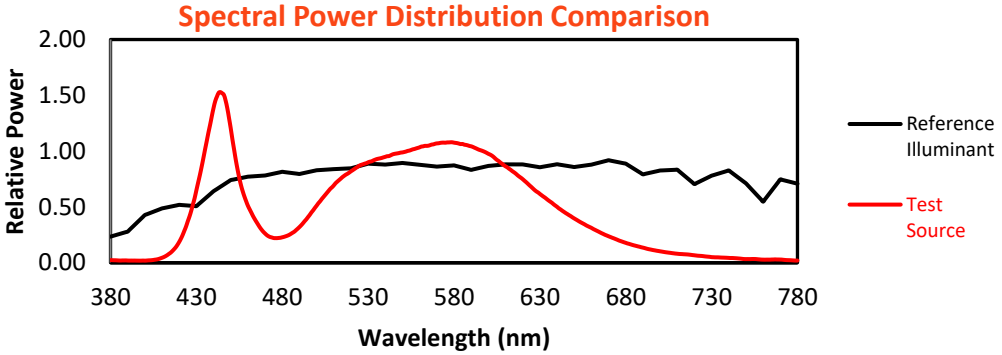
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# TM-30-18

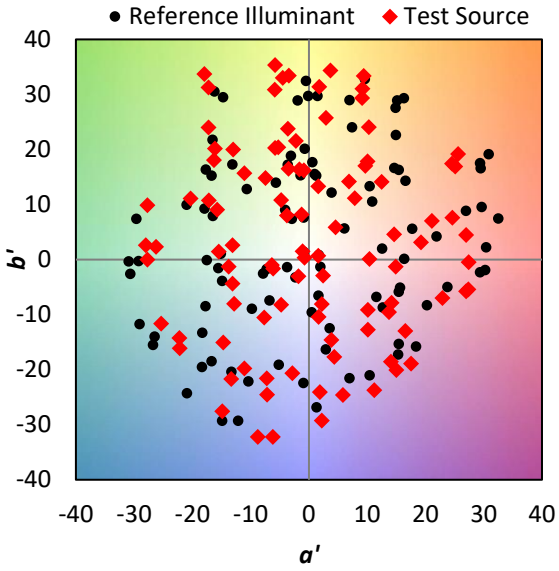
## Summary

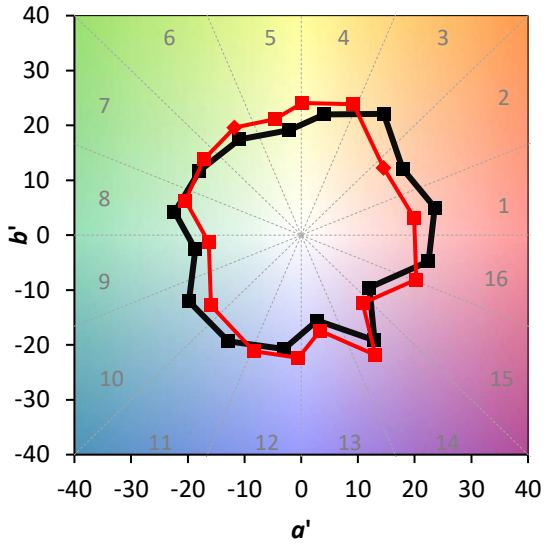
$R_f$ = 74.9
$R_g$ = 96.3
CIE $R_a$ = 73.5
$R_9$ = -28.4

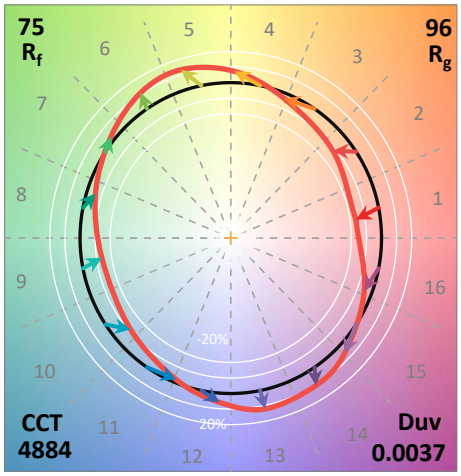
## Spectral Power Distribution Comparison

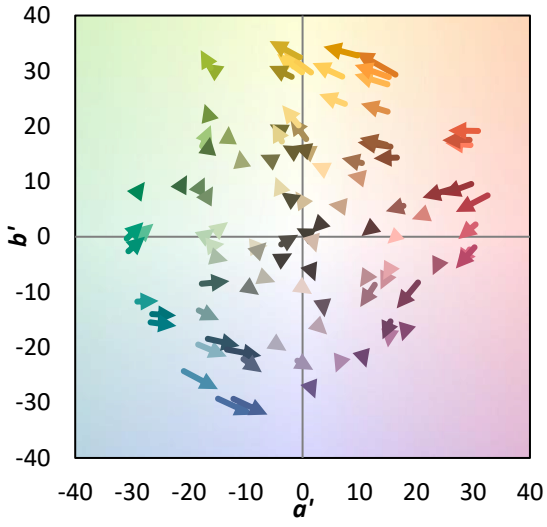



## Color Vector Graphics



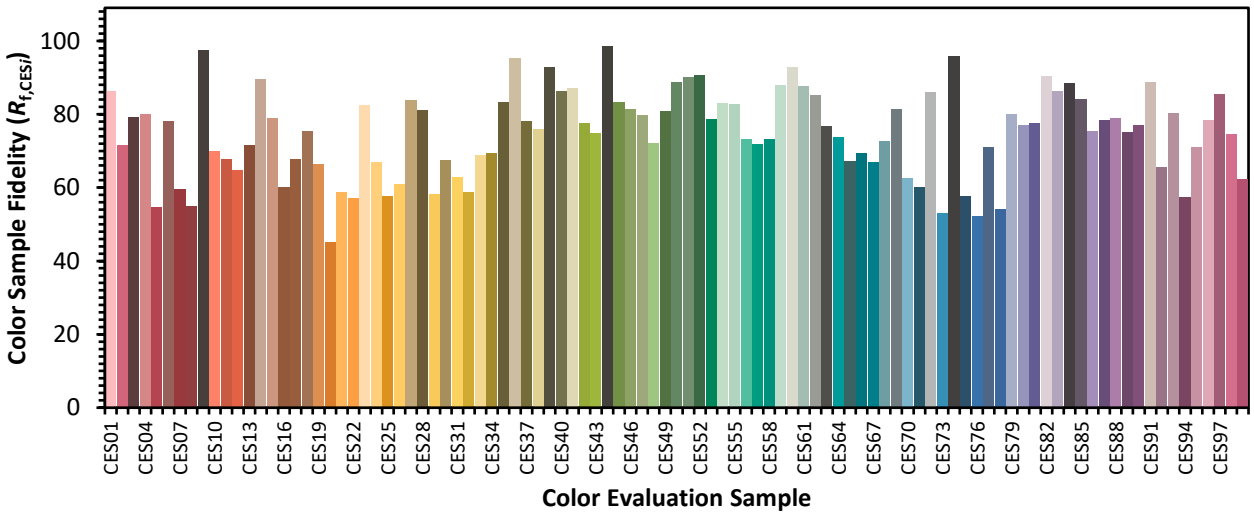
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Peachtree City, GA 30269

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

| | | | |
|---|---|---|---|
| CES01 = 85 | CES26 = 61 | CES51 = 90 | CES76 = 52 |
| CES02 = 60 | CES27 = 84 | CES52 = 91 | CES77 = 71 |
| CES03 = 30 | CES28 = 81 | CES53 = 79 | CES78 = 54 |
| CES04 = 69 | CES29 = 58 | CES54 = 83 | CES79 = 80 |
| CES05 = 46 | CES30 = 67 | CES55 = 83 | CES80 = 77 |
| CES06 = 50 | CES31 = 63 | CES56 = 73 | CES81 = 77 |
| CES07 = 39 | CES32 = 59 | CES57 = 72 | CES82 = 90 |
| CES08 = 38 | CES33 = 69 | CES58 = 73 | CES83 = 86 |
| CES09 = 29 | CES34 = 69 | CES59 = 88 | CES84 = 88 |
| CES10 = 73 | CES35 = 83 | CES60 = 93 | CES85 = 84 |
| CES11 = 56 | CES36 = 95 | CES61 = 88 | CES86 = 75 |
| CES12 = 61 | CES37 = 78 | CES62 = 85 | CES87 = 78 |
| CES13 = 41 | CES38 = 76 | CES63 = 77 | CES88 = 79 |
| CES14 = 74 | CES39 = 93 | CES64 = 74 | CES89 = 75 |
| CES15 = 70 | CES40 = 86 | CES65 = 67 | CES90 = 77 |
| CES16 = 46 | CES41 = 87 | CES66 = 69 | CES91 = 89 |
| CES17 = 49 | CES42 = 78 | CES67 = 67 | CES92 = 66 |
| CES18 = 55 | CES43 = 75 | CES68 = 73 | CES93 = 80 |
| CES19 = 71 | CES44 = 99 | CES69 = 81 | CES94 = 57 |
| CES20 = 64 | CES45 = 83 | CES70 = 63 | CES95 = 71 |
| CES21 = 85 | CES46 = 81 | CES71 = 60 | CES96 = 78 |
| CES22 = 77 | CES47 = 80 | CES72 = 86 | CES97 = 85 |
| CES23 = 91 | CES48 = 72 | CES73 = 53 | CES98 = 75 |
| CES24 = 90 | CES49 = 81 | CES74 = 96 | CES99 = 62 |
| CES25 = 71 | CES50 = 89 | CES75 = 58 | |

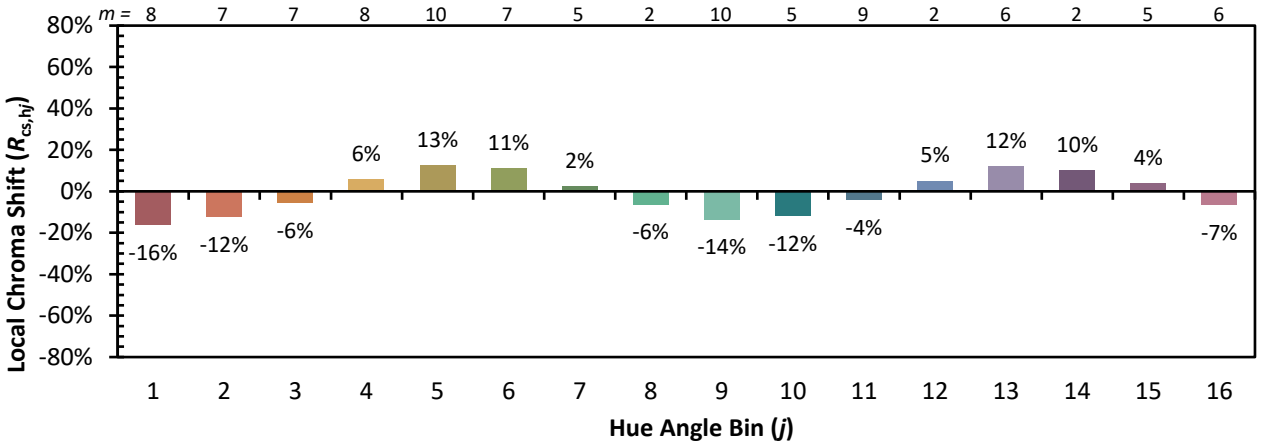


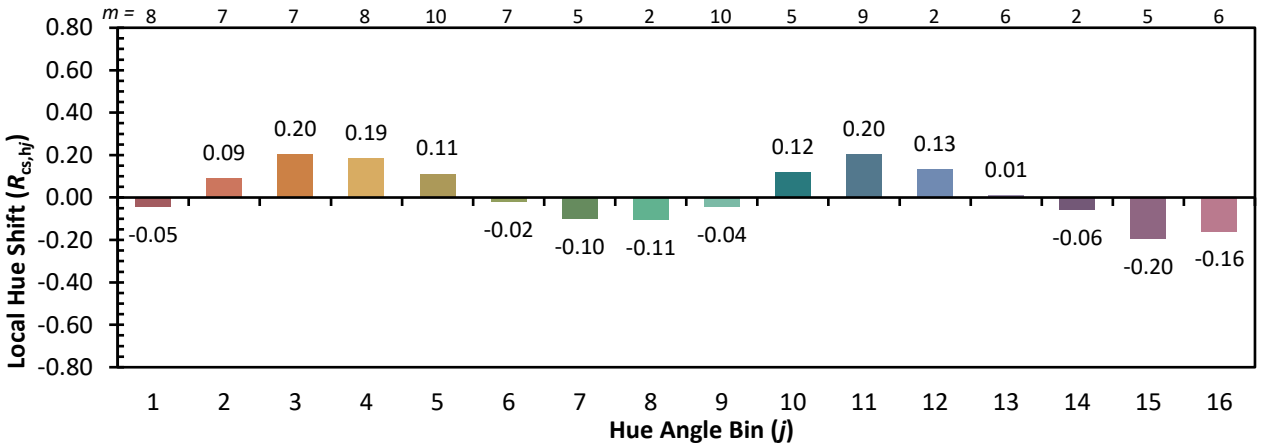
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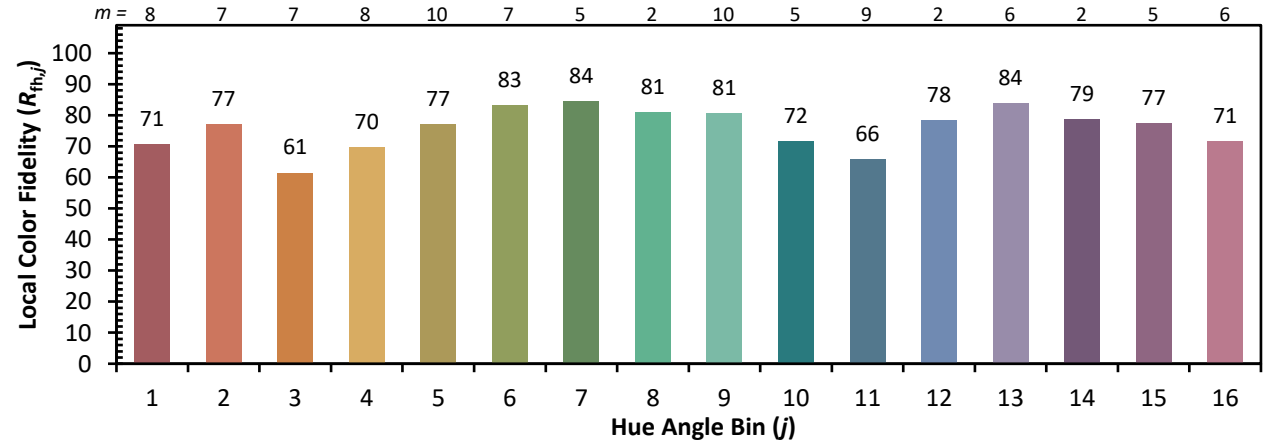
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### Color Rendition by Hue-Angle Bin



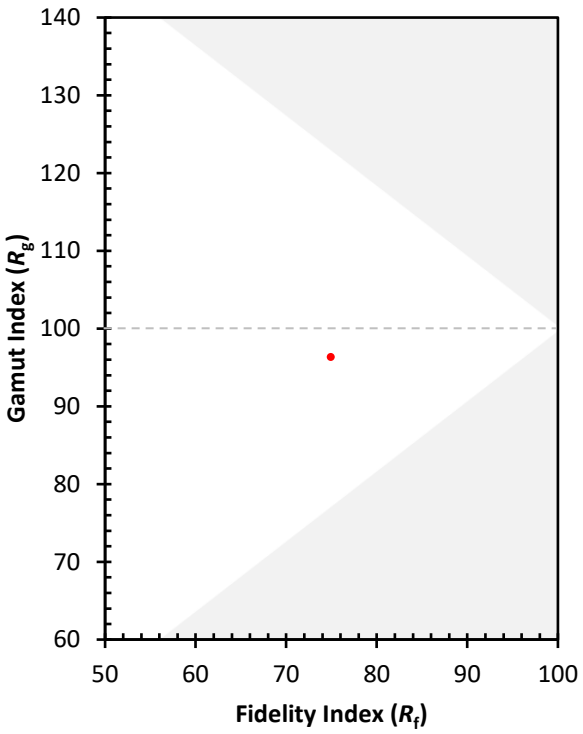



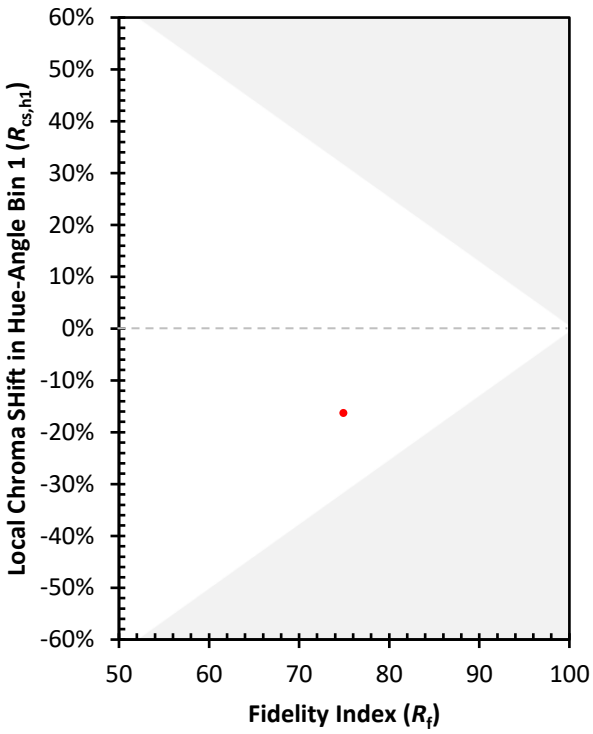
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### Measure Comparisons




(END OF REPORT)