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

Cooper Lighting Solutions Photometric Lab
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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: P1200719

Luminaire Tested: GPC-SB2D-740-U-T4FT

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: | P1200719 |
| | TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-24) |
| Test Lab: | INNOVATION CENTER |
| Issue Date: | 3/15/2026 |
| Manufacturer: | COOPER LIGHTING SOLUTIONS |
| Product Line: | McGRAW-EDISON |
| Catalog Number: | GPC-SB2D-740-U-T4FT |
| Description: | GALLEON PEDESTRIAN LUMINAIRE |
| | (2) 70 CRI, 4000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV FORWARD THRC OPTICS |
| Light Source: | - |
| Ballast/Driver: | ELECTRONIC DRIVER |

**Summary**

| | |
|---|---|
| Lumens per Lamp: | N/A |
| Luminaire Lumens: | 21276 lumens |
| Efficiency: | N/A |
| Efficacy: | 144.1 lumens/watt |
| Luminous Opening: | Rectangular (W 1' x L: 0.5' x H: 0') |
| IES Classification: | Type IV - Short |
| BUG Rating: | B3 - U0 - G4 |

| | |
|---|---|
| Input Watts (W): | 147.6 |
| Input Voltage (V): | 120.0 |
| Input Current (Ain): | 1.234 |
| Voltage Rise (V): | NR |
| Power Factor: | 0.999 |
| Total Harmonic Distortion (THDi): | 3.108 |
| Frequency (hertz): | 60 |
| Stabilization Time: | NR |
| Operation Time: | NR |
| Ambient Temperature (°C): | NR |
| Test Distance: | 28.75 FT |

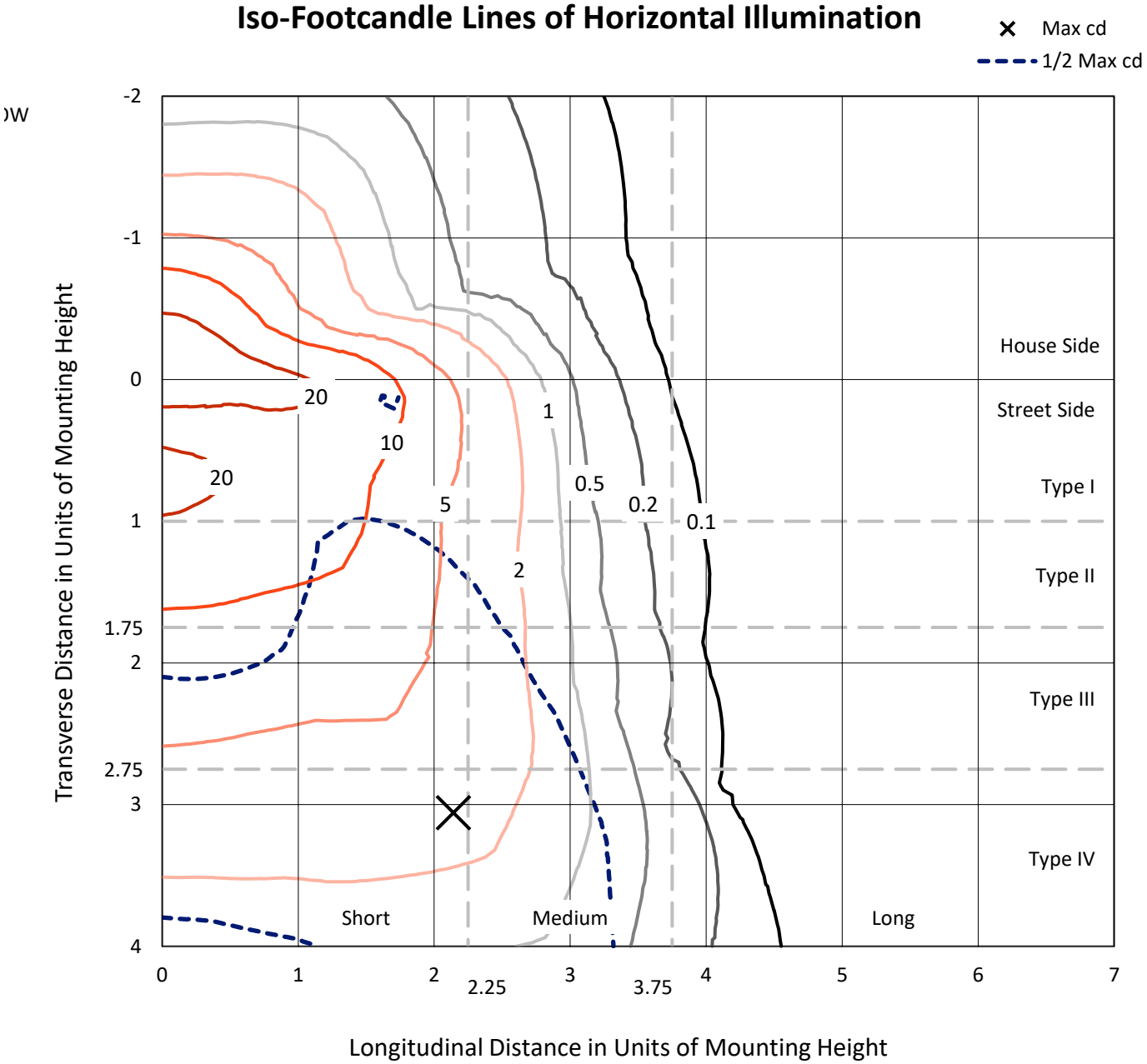


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Scaled Data Report

REPORT NUMBER: P1200719
CATALOG NUMBER: GPC-SB2D-740-U-T4FT

## Iso-Footcandle Lines of Horizontal Illumination



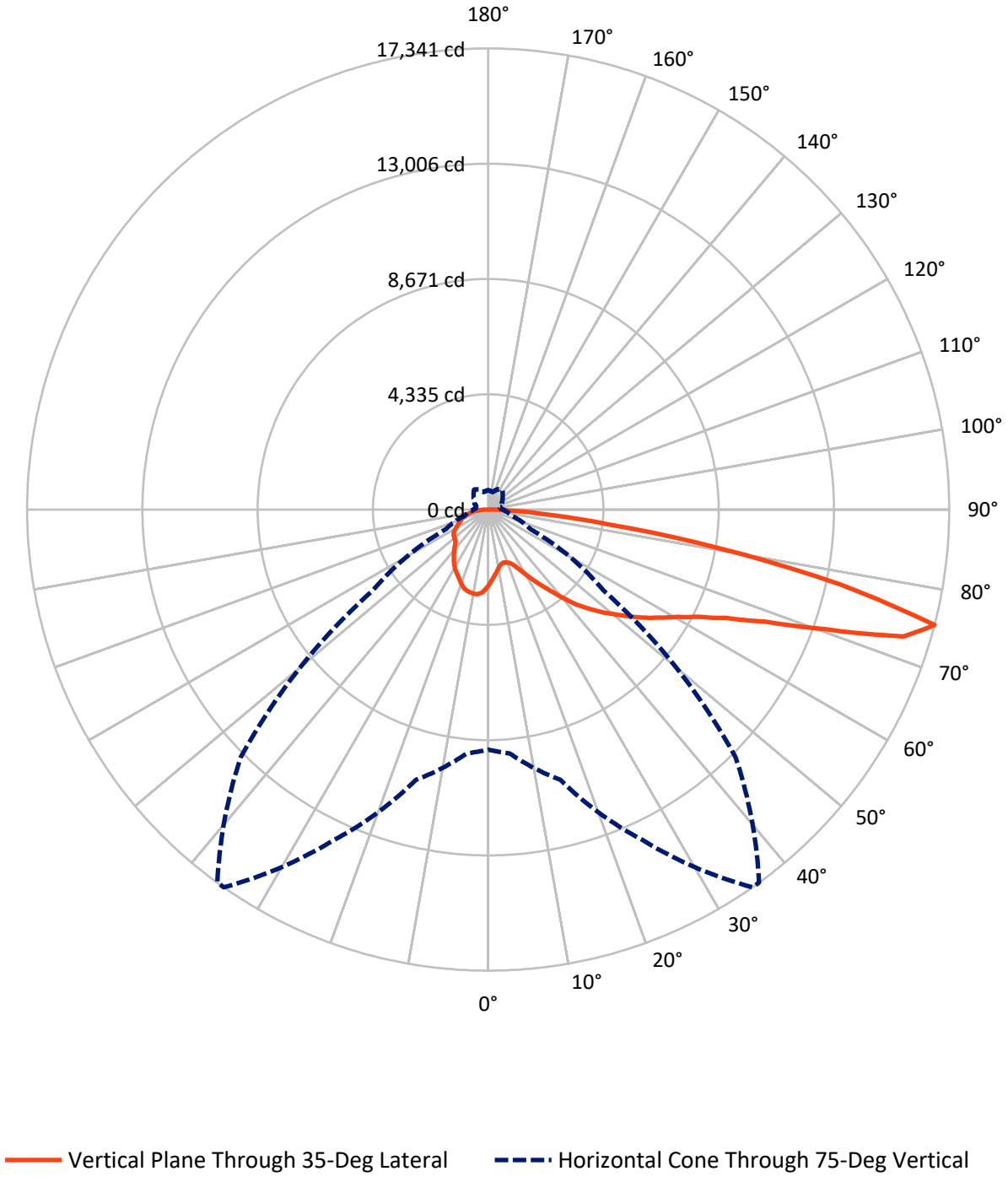

Based on 10 foot mounting height. Maximum calculated value = 31.3 fc
Type IV - Short - N/A

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## Luminous Intensity Polar Plot



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Scaled Data Report

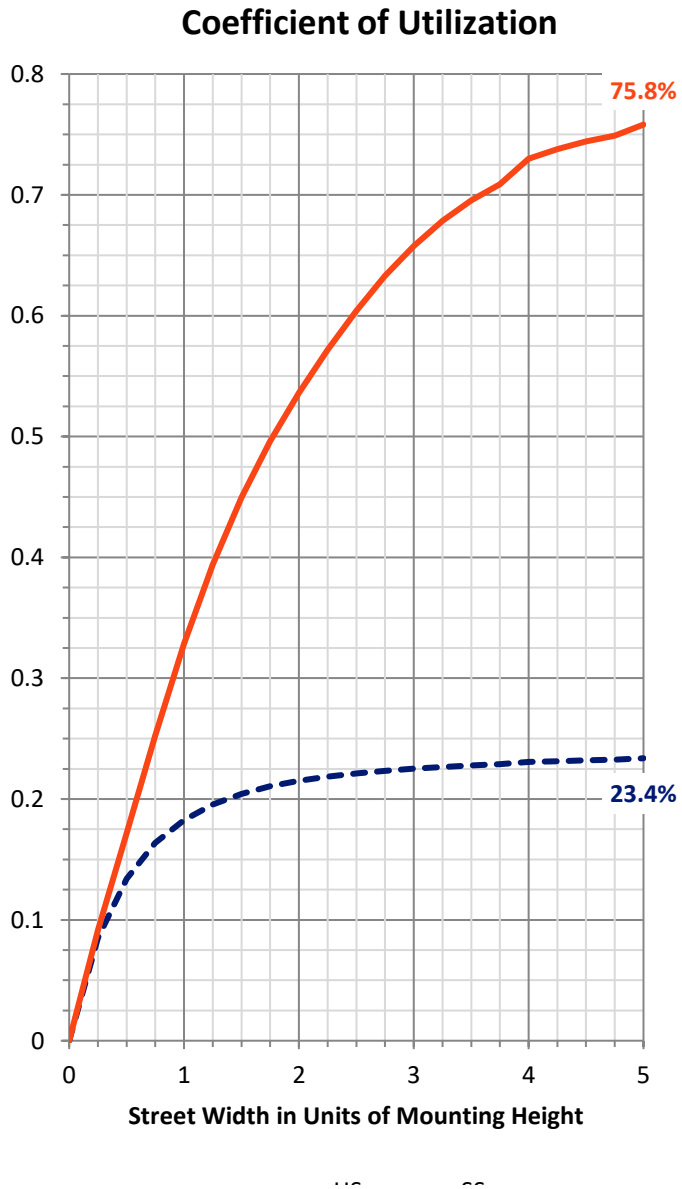
REPORT NUMBER: P1200719
CATALOG NUMBER: GPC-SB2D-740-U-T4FT

**FLUX DISTRIBUTION:**

| | | Downward | Upward | Total |
|---|---|---|---|---|
| **House Side** | Lumens | 5063.2 | 0.0 | 5063.2 |
| | % Fixture | 23.8 | 0.0 | 23.8 |
| **Street Side** | Lumens | 16212.9 | 0.0 | 16212.9 |
| | % Fixture | 76.2 | 0.0 | 76.2 |
| **Total** | Lumens | 21276.0 | 0.0 | 21276.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

**ZONAL LUMENS:**

| Zone | Lumens | % Fixture |
|---|---|---|
| 0°-10° | 268.4 | 1.3 |
| 10°-20° | 774.3 | 3.6 |
| 20°-30° | 1300.2 | 6.1 |
| 30°-40° | 2020.7 | 9.5 |
| 40°-50° | 2999.3 | 14.1 |
| 50°-60° | 4140.7 | 19.5 |
| 60°-70° | 5023.6 | 23.6 |
| 70°-80° | 4151.6 | 19.5 |
| 80°-90° | 597.1 | 2.8 |
| 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° | 21276.0 | 100.0 |
| 0°-180° | 21276.0 | 100.0 |



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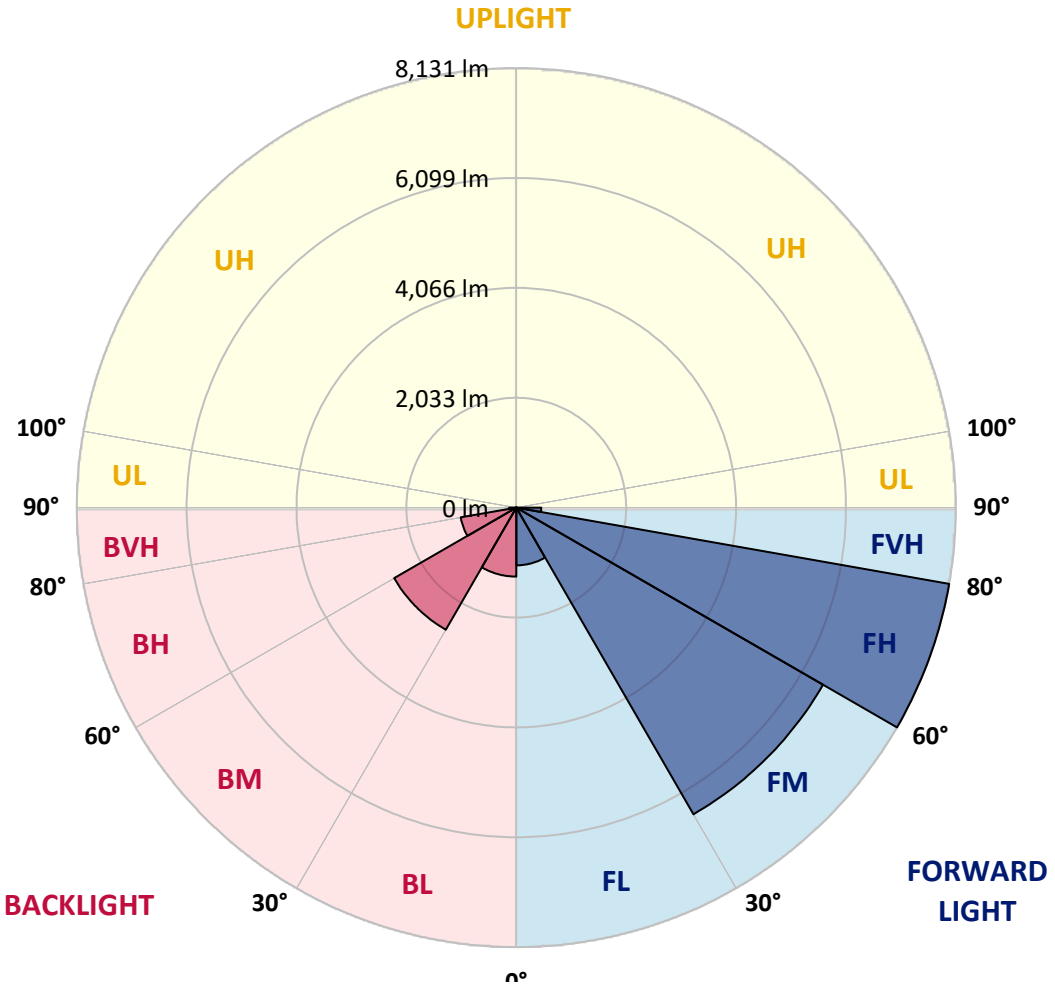
Scaled Data Report

REPORT NUMBER: P1200719
CATALOG NUMBER: GPC-SB2D-740-U-T4FT

## LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit B | U | G |
|---|---|---|---|---|---|---|
| FL | (0°-30°) | 1067.0 | 5.0 | | | |
| FM | (30°-60°) | 6551.9 | 30.8 | | | |
| FH | (60°-80°) | 8131.4 | 38.2 | | | G4/12000 |
| FVH | (80°-90°) | 462.7 | 2.2 | | | G3/500 |
| BL | (0°-30°) | 1276.0 | 6.0 | B3/2500 | | |
| BM | (30°-60°) | 2608.8 | 12.3 | B3/5000 | | |
| BH | (60°-80°) | 1043.9 | 4.9 | B3/2500 | | G3/2500 |
| BVH | (80°-90°) | 134.5 | 0.6 | | | G2/225 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

**BUG Rating: B3-U0-G4**
Type IV Short



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REPORT NUMBER: P1200719
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**CANDELA DISTRIBUTION (FULL):**

| | 0° | 5° | 15° | 25° | 35° | 36° | 45° | 55° | 65° | 75° | 85° |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0° | 2835.2 | 2835.2 | 2835.2 | 2835.2 | 2835.2 | 2835.2 | 2835.2 | 2835.2 | 2835.2 | 2835.2 | 2835.2 |
| 2.5° | 2614.3 | 2630.4 | 2637.3 | 2633.9 | 2651.1 | 2648.8 | 2673.0 | 2702.9 | 2744.3 | 2784.6 | 2843.2 |
| 5° | 2413.1 | 2430.3 | 2445.3 | 2459.1 | 2492.4 | 2502.8 | 2540.7 | 2598.2 | 2674.1 | 2751.2 | 2847.8 |
| 7.5° | 2225.6 | 2240.5 | 2263.5 | 2288.8 | 2345.2 | 2355.5 | 2418.8 | 2508.5 | 2614.3 | 2727.1 | 2860.5 |
| 10° | 2072.6 | 2087.6 | 2111.7 | 2140.5 | 2210.6 | 2223.3 | 2303.8 | 2423.4 | 2561.4 | 2704.1 | 2874.3 |
| 12.5° | 2007.0 | 2011.6 | 2025.5 | 2054.2 | 2115.2 | 2123.2 | 2211.8 | 2348.6 | 2509.7 | 2686.8 | 2895.0 |
| 15° | 2003.6 | 2012.8 | 2013.9 | 2028.9 | 2079.5 | 2083.0 | 2164.6 | 2300.3 | 2477.5 | 2683.3 | 2926.0 |
| 17.5° | 2038.1 | 2045.0 | 2034.7 | 2043.9 | 2086.4 | 2092.2 | 2156.6 | 2277.3 | 2467.1 | 2698.3 | 2978.9 |
| 20° | 2130.1 | 2135.9 | 2104.8 | 2092.2 | 2123.2 | 2127.8 | 2191.1 | 2292.3 | 2477.5 | 2729.4 | 3051.4 |
| 22.5° | 2325.6 | 2329.1 | 2253.2 | 2201.4 | 2203.7 | 2206.0 | 2261.2 | 2353.2 | 2517.7 | 2785.7 | 3143.4 |
| 25° | 2630.4 | 2628.1 | 2507.4 | 2407.3 | 2349.8 | 2337.1 | 2374.0 | 2452.2 | 2585.6 | 2860.5 | 3261.9 |
| 27.5° | 2987.0 | 2969.7 | 2849.0 | 2699.5 | 2574.1 | 2555.7 | 2547.6 | 2581.0 | 2682.2 | 2959.4 | 3406.8 |
| 30° | 3389.6 | 3373.5 | 3243.5 | 3048.0 | 2874.3 | 2844.4 | 2768.5 | 2751.2 | 2826.0 | 3094.0 | 3608.1 |
| 32.5° | 3831.2 | 3820.9 | 3665.6 | 3428.7 | 3196.3 | 3161.8 | 3034.2 | 2988.1 | 3046.8 | 3297.5 | 3888.7 |
| 35° | 4201.6 | 4192.4 | 4063.6 | 3819.7 | 3535.6 | 3493.1 | 3363.1 | 3311.3 | 3341.2 | 3558.6 | 4255.6 |
| 37.5° | 4536.3 | 4531.7 | 4421.3 | 4229.2 | 3935.9 | 3884.1 | 3738.1 | 3720.8 | 3715.1 | 3902.5 | 4700.7 |
| 40° | 4846.8 | 4835.3 | 4720.3 | 4619.1 | 4401.7 | 4354.5 | 4225.7 | 4210.8 | 4167.1 | 4325.8 | 5204.5 |
| 42.5° | 5190.7 | 5160.8 | 4994.0 | 4946.9 | 4888.2 | 4849.1 | 4772.1 | 4774.4 | 4677.7 | 4803.1 | 5738.2 |
| 45° | 5471.4 | 5454.1 | 5282.7 | 5255.1 | 5318.4 | 5302.3 | 5369.0 | 5386.2 | 5198.8 | 5303.4 | 6292.6 |
| 47.5° | 5772.7 | 5756.6 | 5611.7 | 5592.1 | 5763.5 | 5768.1 | 6003.9 | 6009.6 | 5707.1 | 5823.3 | 6848.1 |
| 50° | 6144.2 | 6121.2 | 5977.4 | 6001.6 | 6193.7 | 6210.9 | 6642.2 | 6603.1 | 6175.3 | 6351.2 | 7399.0 |
| 52.5° | 6389.2 | 6403.0 | 6371.9 | 6411.1 | 6673.3 | 6689.4 | 7270.2 | 7170.2 | 6638.8 | 6872.3 | 7939.6 |
| 55° | 6569.8 | 6597.4 | 6694.0 | 6783.7 | 7179.4 | 7195.5 | 7862.6 | 7709.6 | 7022.9 | 7355.3 | 8448.0 |
| 57.5° | 6802.1 | 6763.0 | 6943.6 | 7118.4 | 7660.1 | 7702.7 | 8438.8 | 8229.5 | 7363.4 | 7771.7 | 8796.5 |
| 60° | 7135.7 | 7108.1 | 7248.4 | 7507.2 | 8198.4 | 8266.3 | 9048.4 | 8697.6 | 7613.0 | 8101.8 | 8864.4 |
| 62.5° | 7812.0 | 7742.9 | 7764.8 | 7993.7 | 8877.0 | 8966.7 | 9736.2 | 9105.9 | 7737.2 | 8230.6 | 8500.9 |
| 65° | 8823.0 | 8704.5 | 8594.1 | 8752.8 | 9832.8 | 9921.4 | 10512.6 | 9426.8 | 7691.2 | 7981.0 | 7535.9 |
| 67.5° | 10096.2 | 9978.9 | 9843.2 | 9992.7 | 11240.6 | 11310.8 | 11470.7 | 9607.4 | 7328.9 | 7019.5 | 5830.2 |
| 70° | 11146.3 | 11102.6 | 11264.8 | 11880.1 | 13489.2 | 13491.5 | 12699.0 | 9457.9 | 6336.3 | 4976.8 | 3373.5 |
| 72.5° | 11007.1 | 10980.7 | 11835.3 | 13737.6 | 16323.2 | 16262.3 | 13861.9 | 8326.1 | 4268.3 | 2245.1 | 1264.0 |
| 75° | 9030.0 | 9201.4 | 10525.2 | 13704.3 | 17341.1 | 17333.1 | 13149.9 | 5293.1 | 1765.5 | 930.5 | 653.3 |
| 77.5° | 4842.2 | 5113.7 | 6833.2 | 10118.1 | 13537.5 | 13741.1 | 9245.1 | 1851.8 | 758.0 | 595.8 | 452.0 |
| 80° | 1579.2 | 1816.1 | 2723.6 | 5151.6 | 8796.5 | 8758.6 | 3962.3 | 726.9 | 518.7 | 422.1 | 312.8 |
| 82.5° | 670.5 | 698.2 | 1216.9 | 2432.6 | 4514.4 | 4444.3 | 1261.7 | 417.5 | 364.6 | 288.7 | 193.2 |
| 85° | 262.2 | 293.3 | 537.1 | 1124.9 | 1955.3 | 1912.7 | 455.5 | 207.0 | 233.5 | 188.6 | 115.0 |
| 87.5° | 86.3 | 104.7 | 192.1 | 385.3 | 608.4 | 586.6 | 111.6 | 71.3 | 101.2 | 86.3 | 41.4 |
| 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: P1200719
CATALOG NUMBER: GPC-SB2D-740-U-T4FT

**CANDELA DISTRIBUTION (continued):**

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0° | 2835.2 | 2835.2 | 2835.2 | 2835.2 | 2835.2 | 2835.2 | 2835.2 | 2835.2 | 2835.2 | 2835.2 | 2835.2 |
| 2.5° | 2859.3 | 2877.7 | 2899.6 | 2931.8 | 2959.4 | 2982.4 | 3006.5 | 3021.5 | 3027.2 | 3044.5 | 3043.4 |
| 5° | 2880.0 | 2920.3 | 2974.3 | 3027.2 | 3079.0 | 3110.1 | 3137.7 | 3151.5 | 3164.1 | 3173.3 | 3175.6 |
| 7.5° | 2914.5 | 2966.3 | 3051.4 | 3120.4 | 3164.1 | 3189.4 | 3207.8 | 3203.2 | 3207.8 | 3210.1 | 3213.6 |
| 10° | 2944.4 | 3016.9 | 3118.1 | 3183.7 | 3217.0 | 3218.2 | 3213.6 | 3197.5 | 3189.4 | 3190.6 | 3192.9 |
| 12.5° | 2980.1 | 3060.6 | 3169.9 | 3225.1 | 3234.3 | 3209.0 | 3189.4 | 3161.8 | 3151.5 | 3146.9 | 3144.6 |
| 15° | 3028.4 | 3120.4 | 3226.2 | 3246.9 | 3223.9 | 3191.7 | 3158.4 | 3113.5 | 3090.5 | 3072.1 | 3077.9 |
| 17.5° | 3087.1 | 3188.3 | 3269.9 | 3255.0 | 3205.5 | 3152.6 | 3098.6 | 3030.7 | 2983.5 | 2964.0 | 2965.1 |
| 20° | 3168.7 | 3259.6 | 3303.3 | 3237.7 | 3163.0 | 3082.5 | 2990.4 | 2907.6 | 2863.9 | 2844.4 | 2842.1 |
| 22.5° | 3267.6 | 3355.0 | 3335.5 | 3207.8 | 3102.0 | 2973.2 | 2858.2 | 2797.2 | 2775.4 | 2761.6 | 2763.9 |
| 25° | 3386.1 | 3460.9 | 3358.5 | 3164.1 | 3001.9 | 2828.3 | 2739.7 | 2720.2 | 2709.8 | 2699.5 | 2699.5 |
| 27.5° | 3540.2 | 3580.5 | 3375.8 | 3099.7 | 2845.5 | 2674.1 | 2641.9 | 2645.4 | 2641.9 | 2624.7 | 2628.1 |
| 30° | 3743.8 | 3735.8 | 3391.9 | 2995.0 | 2666.1 | 2535.0 | 2537.3 | 2552.2 | 2554.5 | 2543.0 | 2548.8 |
| 32.5° | 4011.8 | 3930.1 | 3399.9 | 2859.3 | 2494.7 | 2413.1 | 2415.4 | 2431.5 | 2443.0 | 2423.4 | 2432.6 |
| 35° | 4336.1 | 4156.7 | 3387.3 | 2689.1 | 2362.5 | 2296.9 | 2279.6 | 2284.2 | 2287.7 | 2269.3 | 2281.9 |
| 37.5° | 4714.5 | 4410.9 | 3330.9 | 2500.5 | 2253.2 | 2183.0 | 2146.2 | 2115.2 | 2096.8 | 2079.5 | 2091.0 |
| 40° | 5129.8 | 4688.1 | 3227.4 | 2316.4 | 2131.3 | 2062.3 | 2007.0 | 1948.4 | 1886.3 | 1863.3 | 1873.6 |
| 42.5° | 5564.5 | 4973.3 | 3102.0 | 2140.5 | 1990.9 | 1934.6 | 1875.9 | 1790.8 | 1697.7 | 1650.5 | 1656.2 |
| 45° | 6015.4 | 5265.5 | 2978.9 | 1966.8 | 1847.2 | 1823.0 | 1755.2 | 1652.8 | 1551.6 | 1491.8 | 1487.2 |
| 47.5° | 6457.1 | 5541.5 | 2798.4 | 1792.0 | 1712.6 | 1739.1 | 1686.2 | 1591.8 | 1479.1 | 1384.8 | 1374.5 |
| 50° | 6879.2 | 5800.3 | 2502.8 | 1614.8 | 1603.3 | 1713.8 | 1663.1 | 1527.4 | 1398.6 | 1277.8 | 1267.5 |
| 52.5° | 7297.8 | 6009.6 | 2124.4 | 1453.8 | 1544.7 | 1706.9 | 1633.2 | 1483.7 | 1326.1 | 1199.6 | 1185.8 |
| 55° | 7653.2 | 6117.8 | 1759.8 | 1315.8 | 1459.6 | 1648.2 | 1597.6 | 1432.0 | 1223.8 | 1089.2 | 1077.7 |
| 57.5° | 7855.7 | 6030.3 | 1456.1 | 1180.1 | 1342.2 | 1551.6 | 1536.6 | 1321.5 | 1101.9 | 998.3 | 984.5 |
| 60° | 7768.3 | 5676.1 | 1207.7 | 1061.6 | 1230.7 | 1446.9 | 1430.8 | 1212.3 | 1008.7 | 910.9 | 897.1 |
| 62.5° | 7286.3 | 5000.9 | 1011.0 | 958.1 | 1129.5 | 1339.9 | 1325.0 | 1128.3 | 937.4 | 843.1 | 828.1 |
| 65° | 6315.6 | 4068.2 | 858.0 | 871.8 | 1027.1 | 1211.1 | 1233.0 | 1058.2 | 881.0 | 789.0 | 774.1 |
| 67.5° | 4816.9 | 2946.7 | 738.4 | 797.1 | 927.0 | 1084.6 | 1147.9 | 1007.5 | 833.9 | 746.5 | 732.7 |
| 70° | 2745.5 | 1673.5 | 637.2 | 724.6 | 838.5 | 967.3 | 1082.3 | 967.3 | 783.3 | 710.8 | 701.6 |
| 72.5° | 1040.9 | 768.3 | 550.9 | 652.1 | 753.4 | 868.4 | 1009.8 | 904.0 | 724.6 | 670.5 | 661.3 |
| 75° | *555.5* | *468.1* | *463.5* | *567.0* | *655.6* | *771.8* | *919.0* | *841.9* | *680.9* | *708.5* | *731.5* |
| 77.5° | 378.4 | 331.2 | 387.6 | 485.4 | 548.6 | 664.8 | 822.4 | 747.6 | 590.0 | 587.7 | 541.7 |
| 80° | 262.2 | 234.6 | 315.1 | 391.1 | 424.4 | 559.0 | 717.7 | 641.8 | 480.8 | 448.6 | 429.0 |
| 82.5° | 157.6 | 153.0 | 235.8 | 292.1 | 300.2 | 431.3 | 594.6 | 538.3 | 393.4 | 342.8 | 345.1 |
| 85° | 86.3 | 90.9 | 150.7 | 171.4 | 174.8 | 301.3 | 465.8 | 416.4 | 302.5 | 254.2 | 256.5 |
| 87.5° | 24.2 | 31.1 | 55.2 | 67.9 | 84.0 | 156.4 | 277.2 | 247.3 | 151.8 | 105.8 | 105.8 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |


HS
SS

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: SP1-1908-441-3-R4

Test Date: 10/02/2019

Luminaire Tested: SA1C-740-U-5WQ

Data in this report applies to families of products SA1C-740-U-5WQ

Data valid for all products using SA and SB light squares

Report Generated By FNC07603 / LDUCLS01DT446
Version: v6.13

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## Test Information

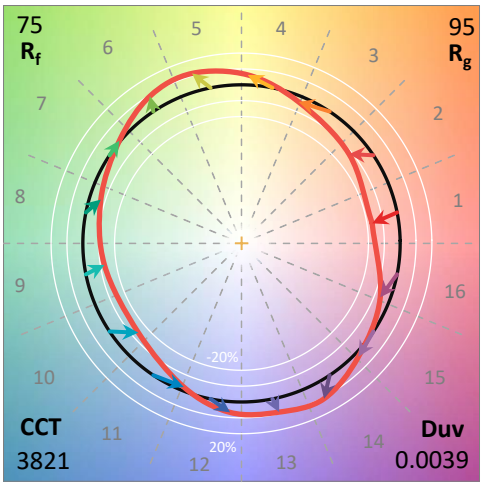
| | |
|---|---|
| Test Method: | LM-79-2008 |
| Report Number: | SP1-1908-441-3-R4 |
| Test Lab: | COOPER LIGHTING SOLUTIONS |
| Photometer: | SP1 - 76IN SPHERE |
| Measurement Geometry: | 4π |
| Issue Date: | 11/05/2024 |
| Manufacturer: | COOPER LIGHTING SOLUTIONS |
| Product Line: | McGRAW-EDISON |
| Catalog Number: | **SA1C-740-U-5WQ** |
| Description: | McGRAW EDISON ROADWAY AND AREA LUMINAIRE |

***THIS IS A REVISION OF SP1-1908-441-3-R3. TO UPDATE THE CATALOG INFORMATION.***TESTED IN SITU. ROADWAY AND AREA LUMINAIRE. (1) 70 CRI, 4000K, 1050MA LIGHTSQUARE WITH 16 LEDS AND TYPE V WIDE OPTICS.

## Spectral Parameters

| | | | | | |
|---|---|---|---|---|---|
| CCT (K): | 3821 | CRI (Ra): | 72.3 | | |
| CIE u': | 0.2264 | R1: | 68.5 | R9: | -33.5 |
| CIE v': | 0.5098 | R2: | 78.5 | R10: | 50.8 |
| Duv: | 0.0039 | R3: | 88.2 | R11: | 69.2 |
| CIE x: | 0.3918 | R4: | 72.2 | R12: | 48.9 |
| CIE y: | 0.3921 | R5: | 69.0 | R13: | 69.8 |
| CIE z: | 0.2161 | R6: | 71.0 | R14: | 93.4 |
| Peak Wavelength (nm): | 585 | R7: | 80.4 | | |
| Dominant Wavelength (nm): | 577 | R8: | 50.4 | | |
| Purity: | 35.4 | | | | |

| | |
|---|---|
| Rf: | 75.5 |
| Rg: | 94.8 |




## Test Conditions

| | |
|---|---|
| Stabilization Time: | 67M |
| Operation Time: | 12H |
| Room Temperature (°C) / RH%: | 25.0./44% |
| Sphere Temperature (°C): | 25.7 |

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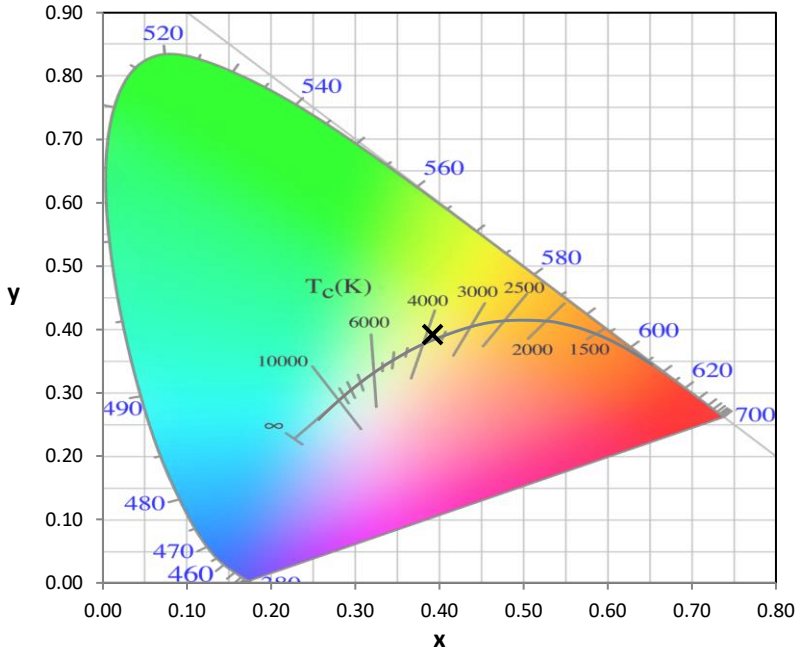
REPORT NUMBER: SP1-1908-441-3-R4

| 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 |

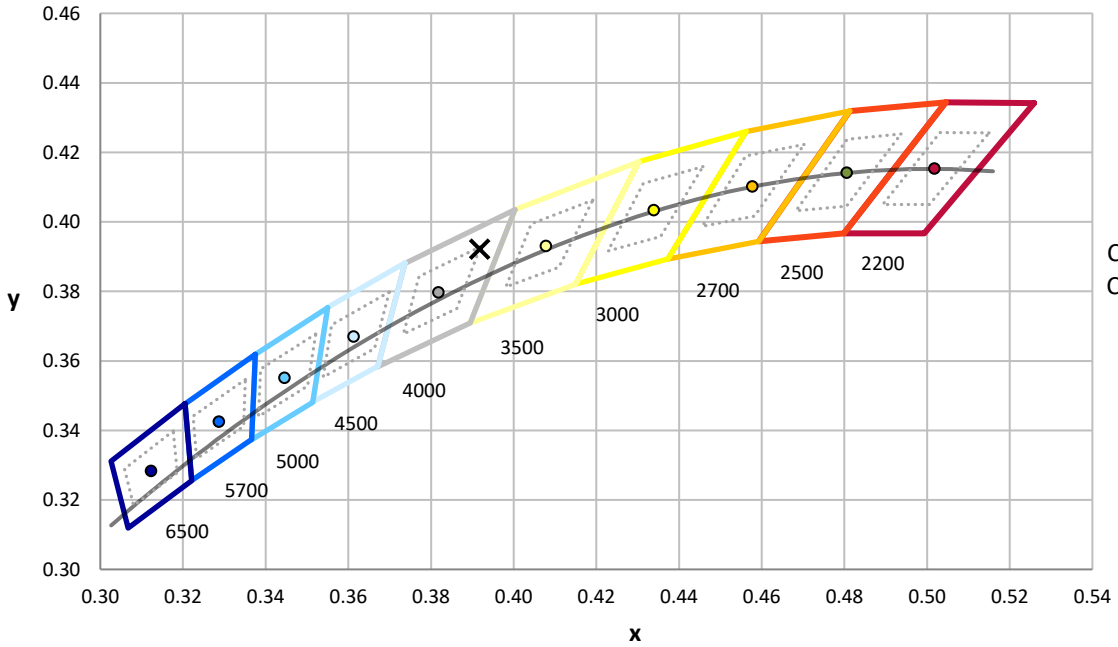
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Peachtree City, GA 30269

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## CIE 1931 Chromaticity Diagram




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



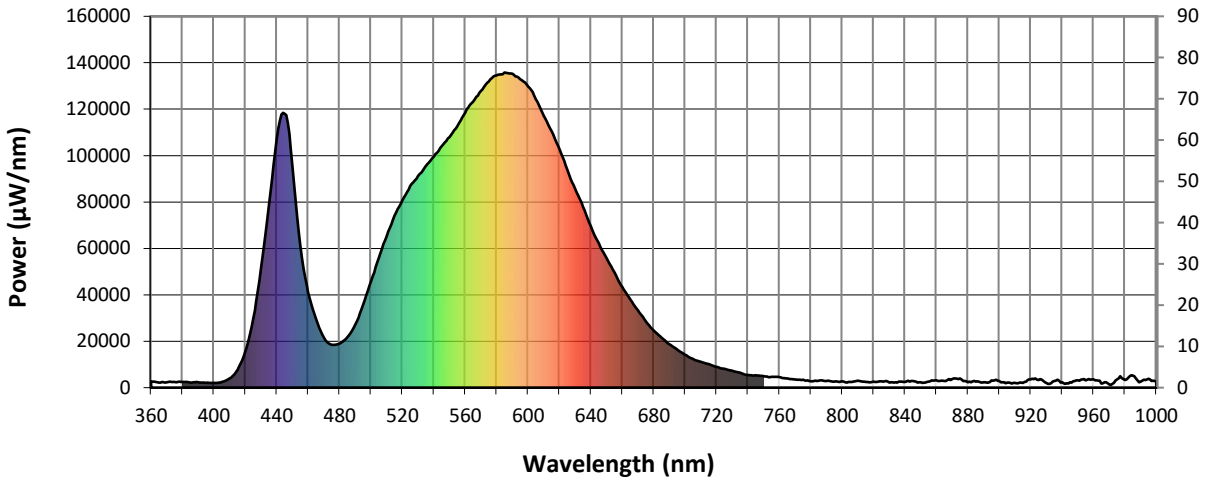

CCT = 3821K
CIE x = 0.3918
CIE y = 0.3921
Duv = 0.0039

Point lies inside the ANSI 4000K 7-step quadrangle

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## Photopic Flux vs. Wavelength



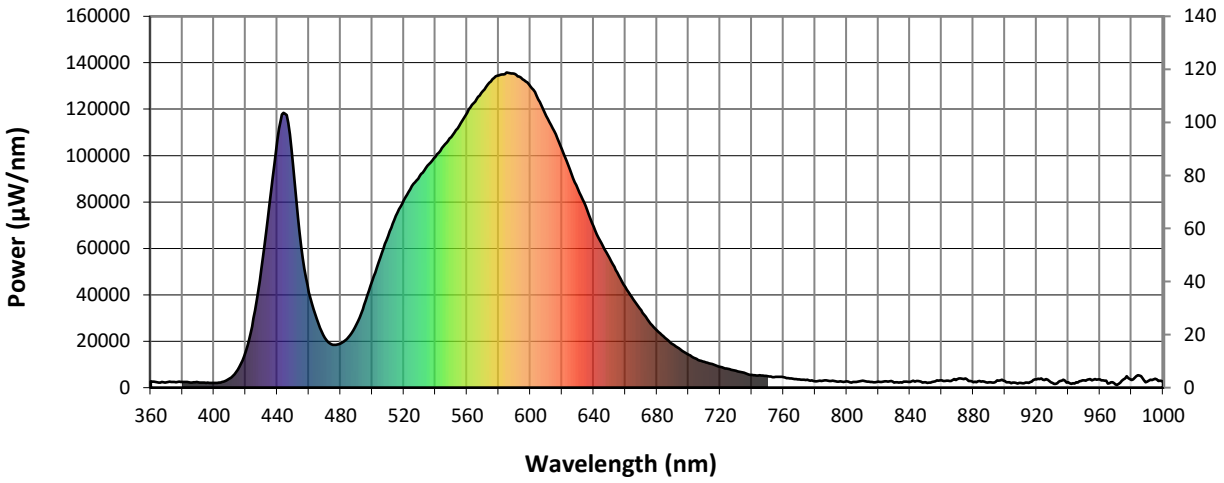

######

| 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 | 2662 | NR | 490 | 27227 | NR | 620 | 102725 | NR | 750 | 4998 | NR | 880 | 2294 | NR |
| 365 | 2227 | NR | 495 | 35672 | NR | 625 | 94018 | NR | 755 | 4638 | NR | 885 | 2526 | NR |
| 370 | 2351 | NR | 500 | 45857 | NR | 630 | 85530 | NR | 760 | 4579 | NR | 890 | 2275 | NR |
| 375 | 2487 | NR | 505 | 55772 | NR | 635 | 77990 | NR | 765 | 3952 | NR | 895 | 3151 | NR |
| 380 | 2507 | NR | 510 | 65358 | NR | 640 | 69405 | NR | 770 | 3495 | NR | 900 | 2915 | NR |
| 385 | 2244 | NR | 515 | 73945 | NR | 645 | 62112 | NR | 775 | 3353 | NR | 905 | 2197 | NR |
| 390 | 2299 | NR | 520 | 80747 | NR | 650 | 55830 | NR | 780 | 2778 | NR | 910 | 2048 | NR |
| 395 | 2056 | NR | 525 | 86794 | NR | 655 | 49542 | NR | 785 | 2954 | NR | 915 | 2045 | NR |
| 400 | 2025 | NR | 530 | 91185 | NR | 660 | 43371 | NR | 790 | 2859 | NR | 920 | 3527 | NR |
| 405 | 2414 | NR | 535 | 95640 | NR | 665 | 38089 | NR | 795 | 2638 | NR | 925 | 3296 | NR |
| 410 | 3944 | NR | 540 | 99533 | NR | 670 | 33284 | NR | 800 | 2710 | NR | 930 | 2096 | NR |
| 415 | 7705 | NR | 545 | 104097 | NR | 675 | 28574 | NR | 805 | 2390 | NR | 935 | 2810 | NR |
| 420 | 15513 | NR | 550 | 107982 | NR | 680 | 24590 | NR | 810 | 2947 | NR | 940 | 2304 | NR |
| 425 | 29927 | NR | 555 | 112790 | NR | 685 | 21480 | NR | 815 | 2387 | NR | 945 | 2250 | NR |
| 430 | 51389 | NR | 560 | 118428 | NR | 690 | 18698 | NR | 820 | 2557 | NR | 950 | 3082 | NR |
| 435 | 78905 | NR | 565 | 123208 | NR | 695 | 16372 | NR | 825 | 2693 | NR | 955 | 3173 | NR |
| 440 | 106921 | NR | 570 | 127740 | NR | 700 | 14200 | NR | 830 | 2208 | NR | 960 | 3569 | NR |
| 445 | 118008 | NR | 575 | 131879 | NR | 705 | 12325 | NR | 835 | 2160 | NR | 965 | 1744 | NR |
| 450 | 95722 | NR | 580 | 134489 | NR | 710 | 11122 | NR | 840 | 2493 | NR | 970 | 1283 | NR |
| 455 | 61053 | NR | 585 | 135793 | NR | 715 | 10157 | NR | 845 | 2809 | NR | 975 | 3622 | NR |
| 460 | 41109 | NR | 590 | 135243 | NR | 720 | 8957 | NR | 850 | 2287 | NR | 980 | 3346 | NR |
| 465 | 29591 | NR | 595 | 132928 | NR | 725 | 8084 | NR | 855 | 2564 | NR | 985 | 5229 | NR |
| 470 | 21545 | NR | 600 | 129738 | NR | 730 | 7241 | NR | 860 | 3166 | NR | 990 | 2613 | NR |
| 475 | 18425 | NR | 605 | 124239 | NR | 735 | 6387 | NR | 865 | 2867 | NR | 995 | 3838 | NR |
| 480 | 19056 | NR | 610 | 116984 | NR | 740 | 5430 | NR | 870 | 3742 | NR | 1000 | 2626 | NR |
| 485 | 21740 | NR | 615 | 110543 | NR | 745 | 5284 | NR | 875 | 3912 | NR | | | |

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## Scotopic Flux vs. Wavelength



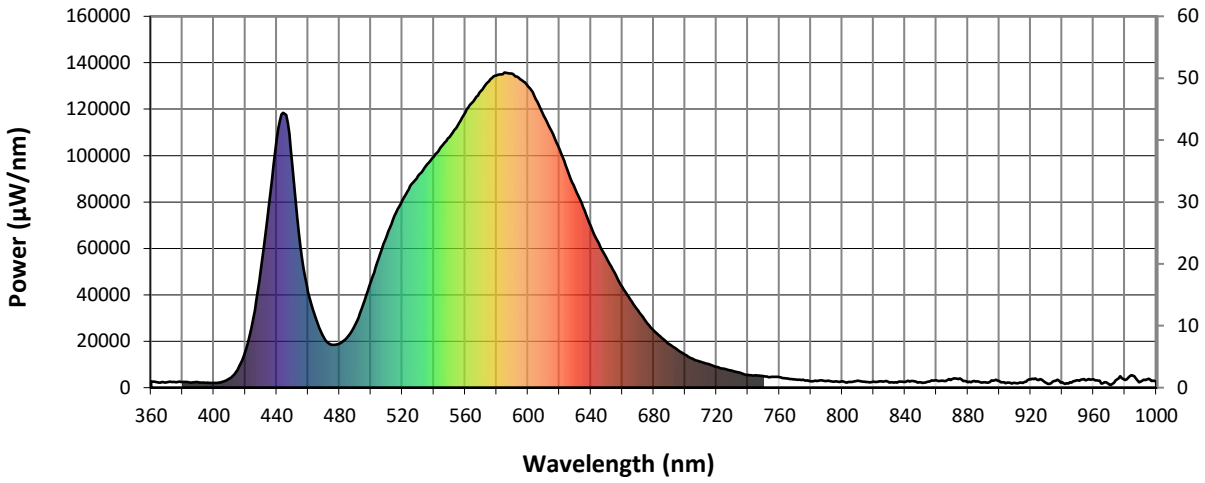

**Scotopic Lumens: 10930.8** **S/P: 1.47**

| 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 | 2662 | NR | 490 | 27227 | NR | 620 | 102725 | NR | 750 | 4998 | NR | 880 | 2294 | NR |
| 365 | 2227 | NR | 495 | 35672 | NR | 625 | 94018 | NR | 755 | 4638 | NR | 885 | 2526 | NR |
| 370 | 2351 | NR | 500 | 45857 | NR | 630 | 85530 | NR | 760 | 4579 | NR | 890 | 2275 | NR |
| 375 | 2487 | NR | 505 | 55772 | NR | 635 | 77990 | NR | 765 | 3952 | NR | 895 | 3151 | NR |
| 380 | 2507 | NR | 510 | 65358 | NR | 640 | 69405 | NR | 770 | 3495 | NR | 900 | 2915 | NR |
| 385 | 2244 | NR | 515 | 73945 | NR | 645 | 62112 | NR | 775 | 3353 | NR | 905 | 2197 | NR |
| 390 | 2299 | NR | 520 | 80747 | NR | 650 | 55830 | NR | 780 | 2778 | NR | 910 | 2048 | NR |
| 395 | 2056 | NR | 525 | 86794 | NR | 655 | 49542 | NR | 785 | 2954 | NR | 915 | 2045 | NR |
| 400 | 2025 | NR | 530 | 91185 | NR | 660 | 43371 | NR | 790 | 2859 | NR | 920 | 3527 | NR |
| 405 | 2414 | NR | 535 | 95640 | NR | 665 | 38089 | NR | 795 | 2638 | NR | 925 | 3296 | NR |
| 410 | 3944 | NR | 540 | 99533 | NR | 670 | 33284 | NR | 800 | 2710 | NR | 930 | 2096 | NR |
| 415 | 7705 | NR | 545 | 104097 | NR | 675 | 28574 | NR | 805 | 2390 | NR | 935 | 2810 | NR |
| 420 | 15513 | NR | 550 | 107982 | NR | 680 | 24590 | NR | 810 | 2947 | NR | 940 | 2304 | NR |
| 425 | 29927 | NR | 555 | 112790 | NR | 685 | 21480 | NR | 815 | 2387 | NR | 945 | 2250 | NR |
| 430 | 51389 | NR | 560 | 118428 | NR | 690 | 18698 | NR | 820 | 2557 | NR | 950 | 3082 | NR |
| 435 | 78905 | NR | 565 | 123208 | NR | 695 | 16372 | NR | 825 | 2693 | NR | 955 | 3173 | NR |
| 440 | 106921 | NR | 570 | 127740 | NR | 700 | 14200 | NR | 830 | 2208 | NR | 960 | 3569 | NR |
| 445 | 118008 | NR | 575 | 131879 | NR | 705 | 12325 | NR | 835 | 2160 | NR | 965 | 1744 | NR |
| 450 | 95722 | NR | 580 | 134489 | NR | 710 | 11122 | NR | 840 | 2493 | NR | 970 | 1283 | NR |
| 455 | 61053 | NR | 585 | 135793 | NR | 715 | 10157 | NR | 845 | 2809 | NR | 975 | 3622 | NR |
| 460 | 41109 | NR | 590 | 135243 | NR | 720 | 8957 | NR | 850 | 2287 | NR | 980 | 3346 | NR |
| 465 | 29591 | NR | 595 | 132928 | NR | 725 | 8084 | NR | 855 | 2564 | NR | 985 | 5229 | NR |
| 470 | 21545 | NR | 600 | 129738 | NR | 730 | 7241 | NR | 860 | 3166 | NR | 990 | 2613 | NR |
| 475 | 18425 | NR | 605 | 124239 | NR | 735 | 6387 | NR | 865 | 2867 | NR | 995 | 3838 | NR |
| 480 | 19056 | NR | 610 | 116984 | NR | 740 | 5430 | NR | 870 | 3742 | NR | 1000 | 2626 | NR |
| 485 | 21740 | NR | 615 | 110543 | NR | 745 | 5284 | NR | 875 | 3912 | NR | | | |

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## Melanopic Flux vs. Wavelength




**Melanopic Lumens: 4115.9** **M/P: 0.55**

| 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 | 2662 | NR | 490 | 27227 | NR | 620 | 102725 | NR | 750 | 4998 | NR | 880 | 2294 | NR |
| 365 | 2227 | NR | 495 | 35672 | NR | 625 | 94018 | NR | 755 | 4638 | NR | 885 | 2526 | NR |
| 370 | 2351 | NR | 500 | 45857 | NR | 630 | 85530 | NR | 760 | 4579 | NR | 890 | 2275 | NR |
| 375 | 2487 | NR | 505 | 55772 | NR | 635 | 77990 | NR | 765 | 3952 | NR | 895 | 3151 | NR |
| 380 | 2507 | NR | 510 | 65358 | NR | 640 | 69405 | NR | 770 | 3495 | NR | 900 | 2915 | NR |
| 385 | 2244 | NR | 515 | 73945 | NR | 645 | 62112 | NR | 775 | 3353 | NR | 905 | 2197 | NR |
| 390 | 2299 | NR | 520 | 80747 | NR | 650 | 55830 | NR | 780 | 2778 | NR | 910 | 2048 | NR |
| 395 | 2056 | NR | 525 | 86794 | NR | 655 | 49542 | NR | 785 | 2954 | NR | 915 | 2045 | NR |
| 400 | 2025 | NR | 530 | 91185 | NR | 660 | 43371 | NR | 790 | 2859 | NR | 920 | 3527 | NR |
| 405 | 2414 | NR | 535 | 95640 | NR | 665 | 38089 | NR | 795 | 2638 | NR | 925 | 3296 | NR |
| 410 | 3944 | NR | 540 | 99533 | NR | 670 | 33284 | NR | 800 | 2710 | NR | 930 | 2096 | NR |
| 415 | 7705 | NR | 545 | 104097 | NR | 675 | 28574 | NR | 805 | 2390 | NR | 935 | 2810 | NR |
| 420 | 15513 | NR | 550 | 107982 | NR | 680 | 24590 | NR | 810 | 2947 | NR | 940 | 2304 | NR |
| 425 | 29927 | NR | 555 | 112790 | NR | 685 | 21480 | NR | 815 | 2387 | NR | 945 | 2250 | NR |
| 430 | 51389 | NR | 560 | 118428 | NR | 690 | 18698 | NR | 820 | 2557 | NR | 950 | 3082 | NR |
| 435 | 78905 | NR | 565 | 123208 | NR | 695 | 16372 | NR | 825 | 2693 | NR | 955 | 3173 | NR |
| 440 | 106921 | NR | 570 | 127740 | NR | 700 | 14200 | NR | 830 | 2208 | NR | 960 | 3569 | NR |
| 445 | 118008 | NR | 575 | 131879 | NR | 705 | 12325 | NR | 835 | 2160 | NR | 965 | 1744 | NR |
| 450 | 95722 | NR | 580 | 134489 | NR | 710 | 11122 | NR | 840 | 2493 | NR | 970 | 1283 | NR |
| 455 | 61053 | NR | 585 | 135793 | NR | 715 | 10157 | NR | 845 | 2809 | NR | 975 | 3622 | NR |
| 460 | 41109 | NR | 590 | 135243 | NR | 720 | 8957 | NR | 850 | 2287 | NR | 980 | 3346 | NR |
| 465 | 29591 | NR | 595 | 132928 | NR | 725 | 8084 | NR | 855 | 2564 | NR | 985 | 5229 | NR |
| 470 | 21545 | NR | 600 | 129738 | NR | 730 | 7241 | NR | 860 | 3166 | NR | 990 | 2613 | NR |
| 475 | 18425 | NR | 605 | 124239 | NR | 735 | 6387 | NR | 865 | 2867 | NR | 995 | 3838 | NR |
| 480 | 19056 | NR | 610 | 116984 | NR | 740 | 5430 | NR | 870 | 3742 | NR | 1000 | 2626 | NR |
| 485 | 21740 | NR | 615 | 110543 | NR | 745 | 5284 | NR | 875 | 3912 | NR | | | |

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Peachtree City, GA 30269

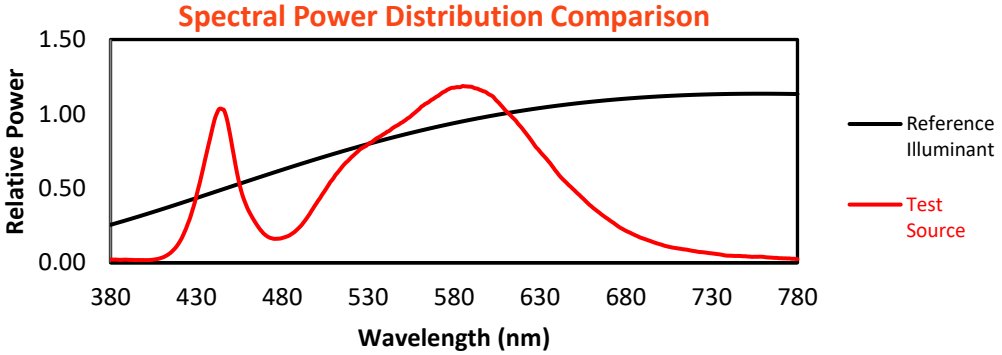
REPORT NUMBER: SP1-1908-441-3-R4

# TM-30-18

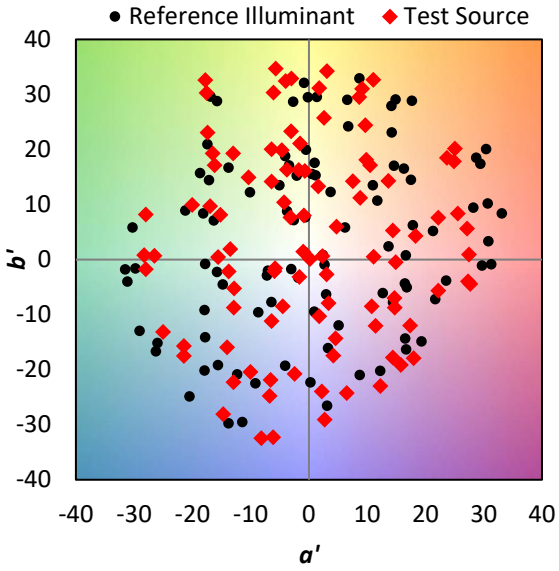
## Summary

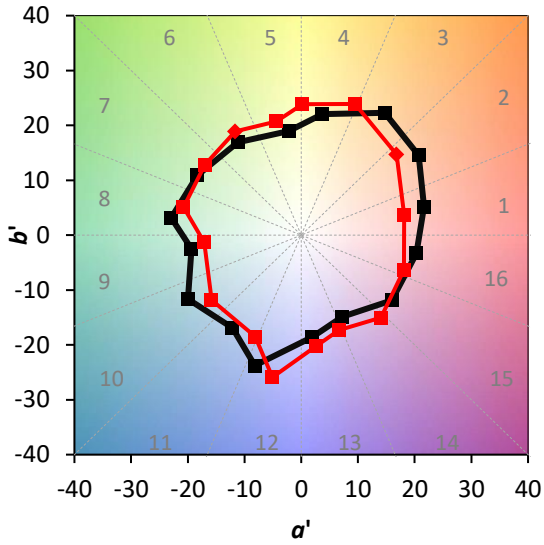
$R_f$ = 75.5
$R_g$ = 94.8
CIE $R_a$ = 72.3
$R_9$ = -33.5

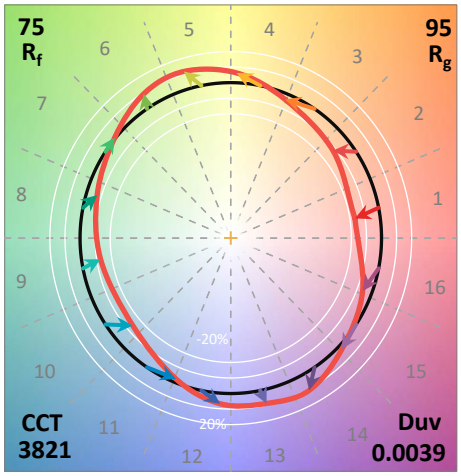
## Spectral Power Distribution Comparison

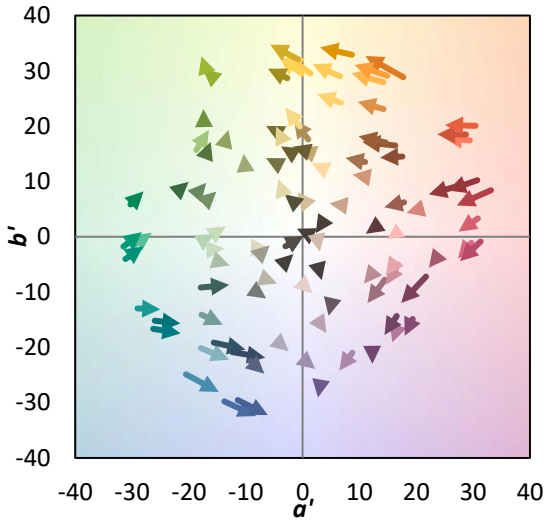



## Color Vector Graphics



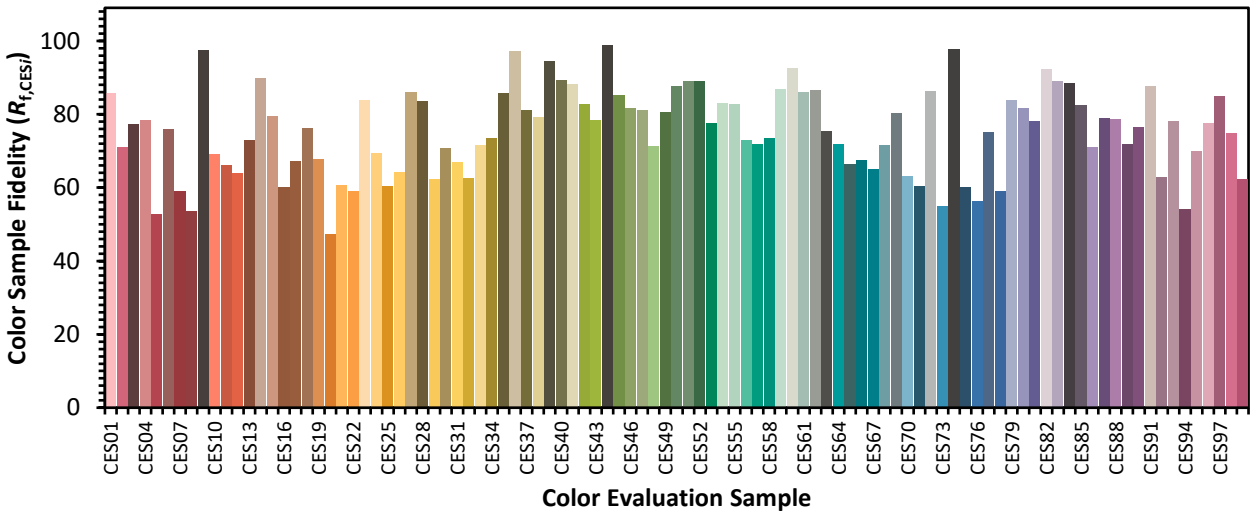
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Peachtree City, GA 30269

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

| | | | |
|---|---|---|---|
| CES01 = 85 | CES26 = 64 | CES51 = 89 | CES76 = 56 |
| CES02 = 61 | CES27 = 86 | CES52 = 89 | CES77 = 75 |
| CES03 = 30 | CES28 = 83 | CES53 = 78 | CES78 = 59 |
| CES04 = 70 | CES29 = 62 | CES54 = 83 | CES79 = 84 |
| CES05 = 47 | CES30 = 71 | CES55 = 83 | CES80 = 82 |
| CES06 = 50 | CES31 = 67 | CES56 = 73 | CES81 = 78 |
| CES07 = 40 | CES32 = 63 | CES57 = 72 | CES82 = 92 |
| CES08 = 39 | CES33 = 72 | CES58 = 73 | CES83 = 89 |
| CES09 = 29 | CES34 = 73 | CES59 = 87 | CES84 = 89 |
| CES10 = 74 | CES35 = 86 | CES60 = 92 | CES85 = 83 |
| CES11 = 57 | CES36 = 97 | CES61 = 86 | CES86 = 71 |
| CES12 = 63 | CES37 = 81 | CES62 = 87 | CES87 = 79 |
| CES13 = 42 | CES38 = 79 | CES63 = 75 | CES88 = 79 |
| CES14 = 74 | CES39 = 94 | CES64 = 72 | CES89 = 72 |
| CES15 = 71 | CES40 = 89 | CES65 = 66 | CES90 = 77 |
| CES16 = 46 | CES41 = 88 | CES66 = 67 | CES91 = 88 |
| CES17 = 49 | CES42 = 83 | CES67 = 65 | CES92 = 63 |
| CES18 = 56 | CES43 = 78 | CES68 = 71 | CES93 = 78 |
| CES19 = 72 | CES44 = 99 | CES69 = 80 | CES94 = 54 |
| CES20 = 65 | CES45 = 85 | CES70 = 63 | CES95 = 70 |
| CES21 = 86 | CES46 = 82 | CES71 = 60 | CES96 = 78 |
| CES22 = 78 | CES47 = 81 | CES72 = 86 | CES97 = 85 |
| CES23 = 92 | CES48 = 71 | CES73 = 55 | CES98 = 75 |
| CES24 = 91 | CES49 = 81 | CES74 = 98 | CES99 = 62 |
| CES25 = 72 | CES50 = 88 | CES75 = 60 | |

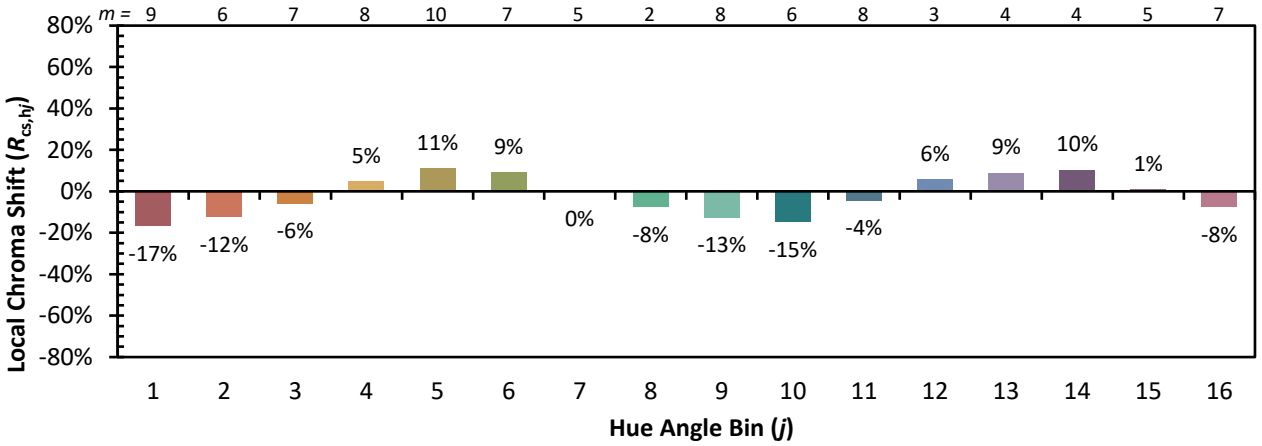


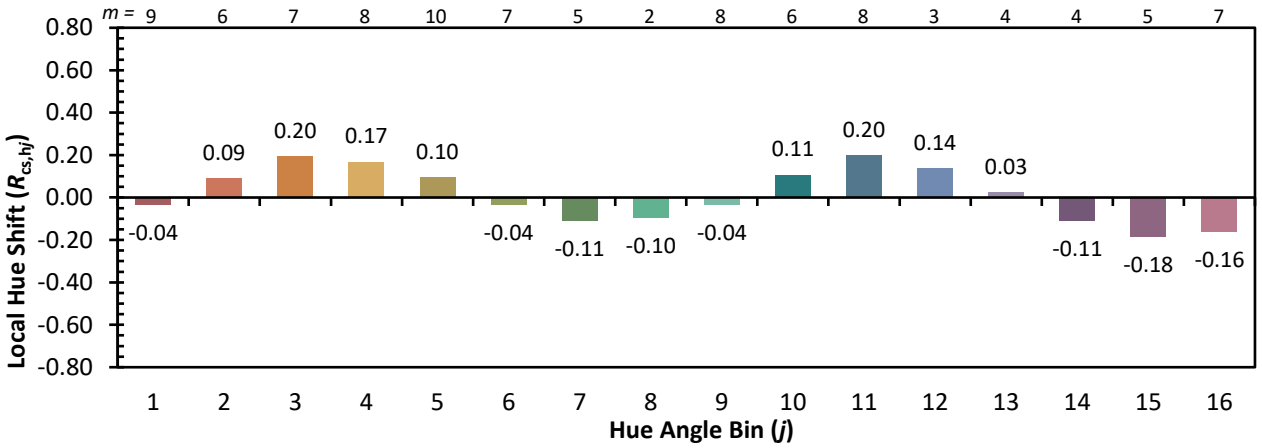
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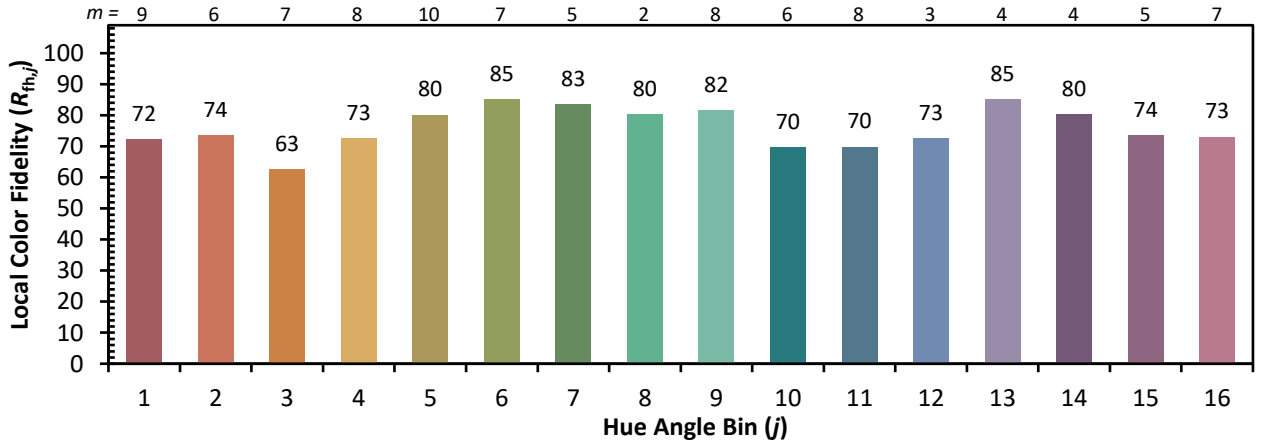
REPORT NUMBER: SP1-1908-441-3-R4

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### Color Rendition by Hue-Angle Bin



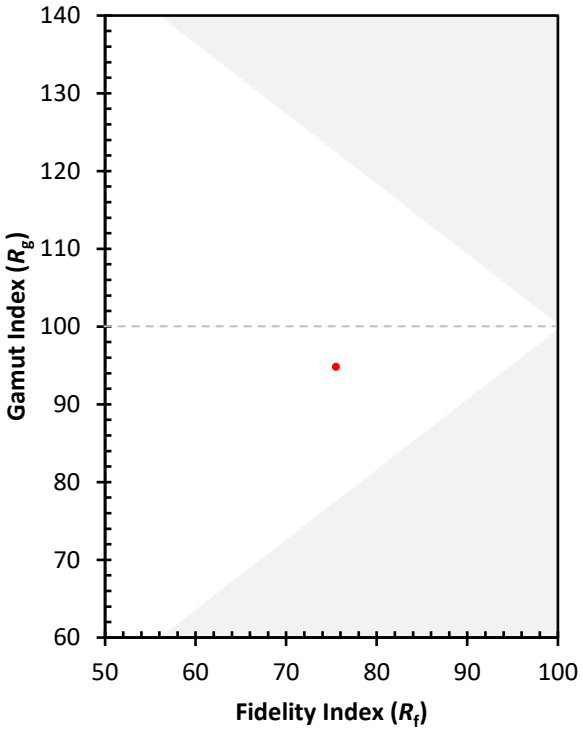



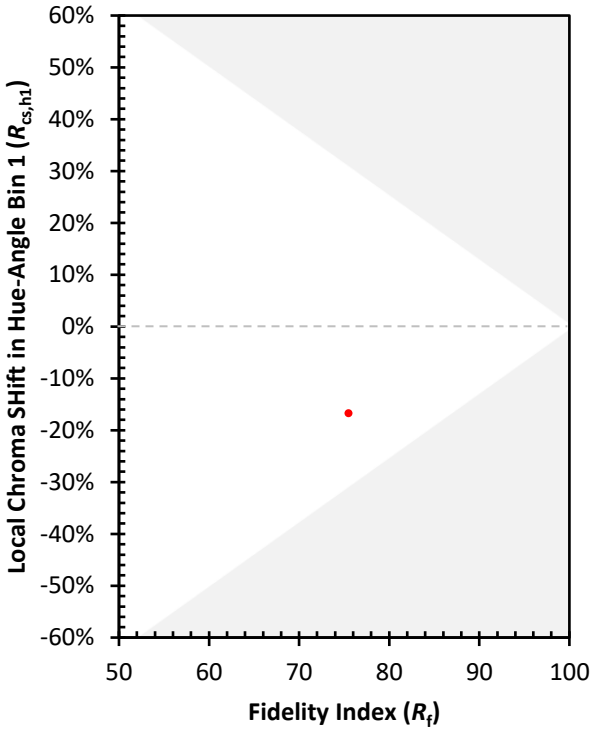
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### Measure Comparisons




(END OF REPORT)