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

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Scaled data based on original data using

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

Test Report Prepared for

Cooper Lighting Solutions

Brand: McGRAW-EDISON

Report Number: P1199807

Luminaire Tested: GPC-SB2B-760-U-SL3

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: | P1199807 |
| | TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-12) |
| Test Lab: | INNOVATION CENTER |
| Issue Date: | 3/15/2026 |
| Manufacturer: | COOPER LIGHTING SOLUTIONS |
| Product Line: | McGRAW-EDISON |
| Catalog Number: | GPC-SB2B-760-U-SL3 |
| Description: | GALLEON PEDESTRIAN LUMINAIRE |
| | (2) 70 CRI, 5700K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III SPILL LIGHT ELIMINATOR OPTICS |
| Light Source: | - |
| Ballast/Driver: | ELECTRONIC DRIVER |

**Summary**

| | |
|---|---|
| Lumens per Lamp: | N/A |
| Luminaire Lumens: | 11642 lumens |
| Efficiency: | N/A |
| Efficacy: | 157.5 lumens/watt |
| Luminous Opening: | Rectangular (W 1' x L: 0.5' x H: 0') |
| IES Classification: | Type IV - Medium |
| BUG Rating: | B2 - U0 - G3 |

| | |
|---|---|
| Input Watts (W): | 73.9 |
| Input Voltage (V): | 120.0 |
| Input Current (Ain): | 0.627 |
| Voltage Rise (V): | NR |
| Power Factor: | 0.988 |
| Total Harmonic Distortion (THDi): | 13.593 |
| Frequency (hertz): | 60 |
| Stabilization Time: | NR |
| Operation Time: | NR |
| Ambient Temperature (°C): | NR |
| Test Distance: | 28.75 FT |

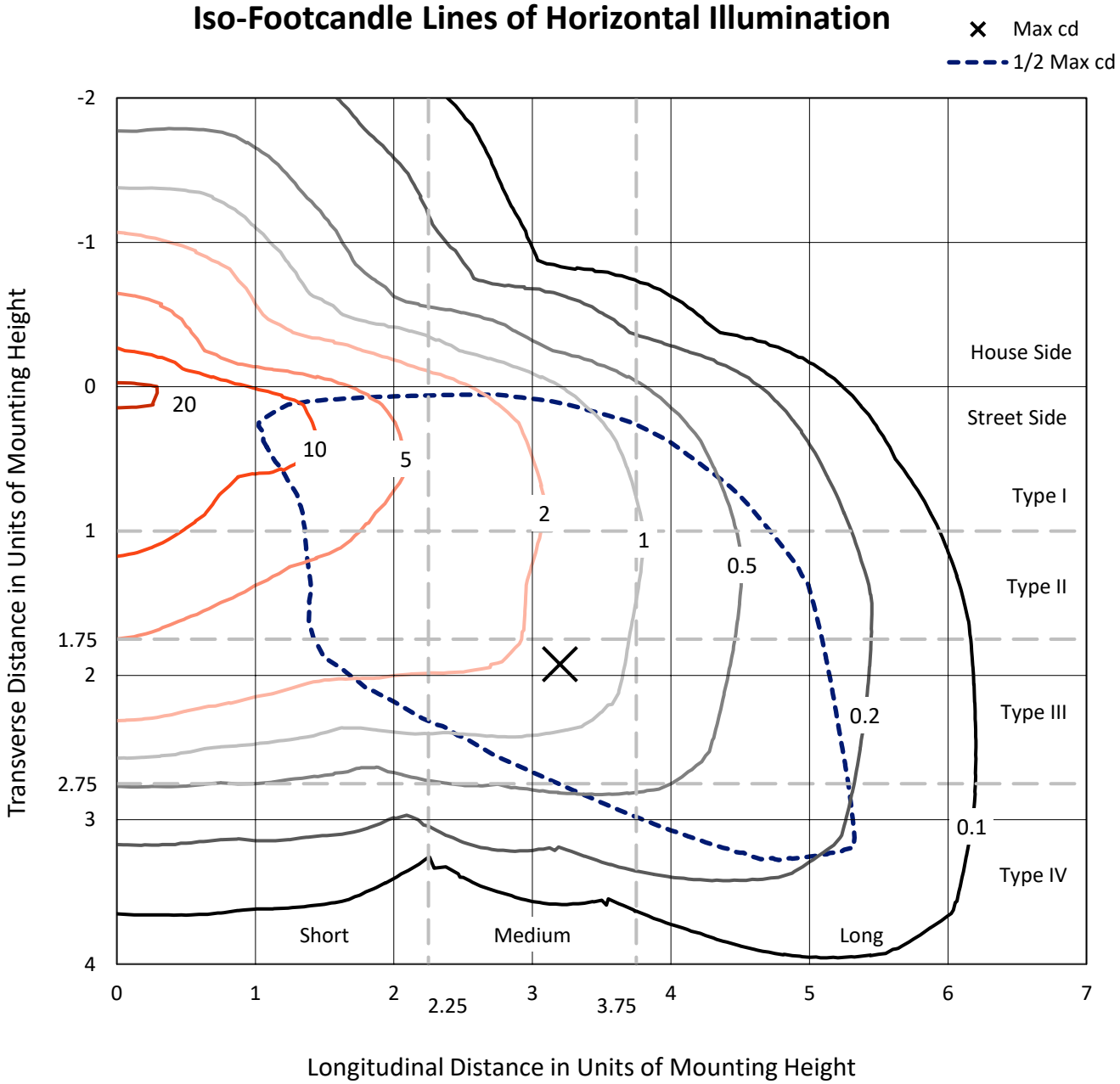


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REPORT NUMBER: P1199807
CATALOG NUMBER: GPC-SB2B-760-U-SL3

## Iso-Footcandle Lines of Horizontal Illumination



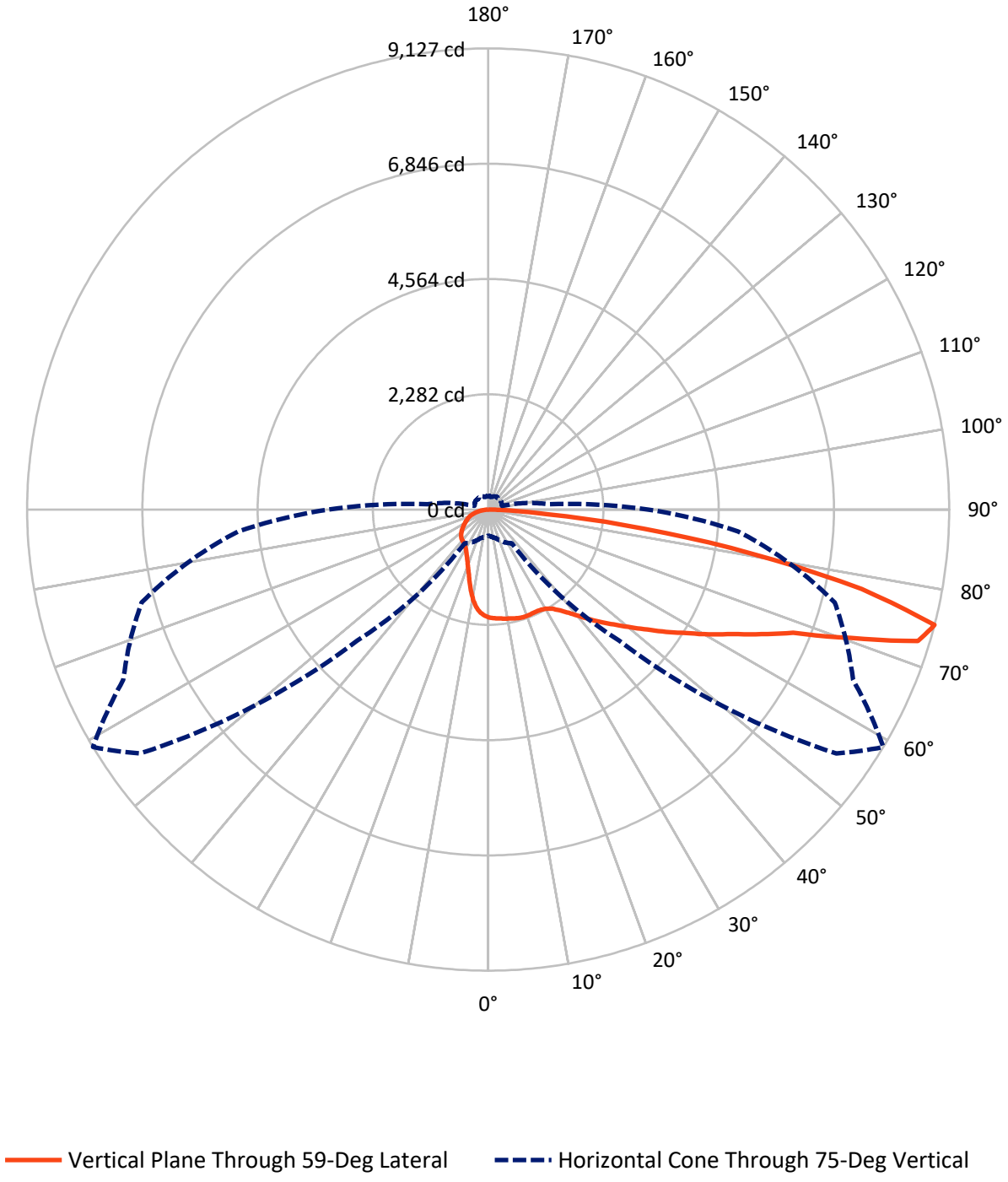

Based on 10 foot mounting height. Maximum calculated value = 21.4 fc
Type IV - Medium - N/A

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## Luminous Intensity Polar Plot



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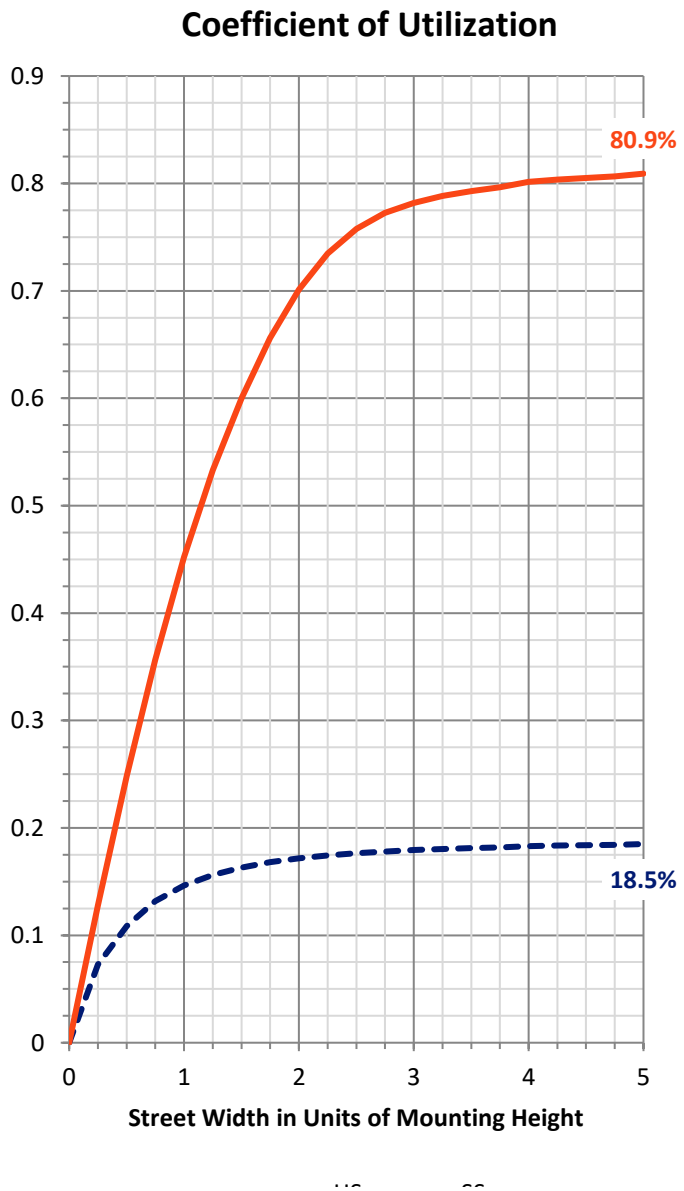
REPORT NUMBER: P1199807
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**FLUX DISTRIBUTION:**

| | | Downward | Upward | Total |
|---|---|---|---|---|
| **House Side** | Lumens | 2183.5 | 0.0 | 2183.5 |
| | % Fixture | 18.8 | 0.0 | 18.8 |
| **Street Side** | Lumens | 9458.5 | 0.0 | 9458.5 |
| | % Fixture | 81.2 | 0.0 | 81.2 |
| **Total** | Lumens | 11642.0 | 0.0 | 11642.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

**ZONAL LUMENS:**

| Zone | Lumens | % Fixture |
|---|---|---|
| 0°-10° | 191.6 | 1.6 |
| 10°-20° | 489.8 | 4.2 |
| 20°-30° | 743.9 | 6.4 |
| 30°-40° | 1105.8 | 9.5 |
| 40°-50° | 1644.5 | 14.1 |
| 50°-60° | 2232.2 | 19.2 |
| 60°-70° | 2725.1 | 23.4 |
| 70°-80° | 2138.7 | 18.4 |
| 80°-90° | 370.5 | 3.2 |
| 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° | 11642.0 | 100.0 |
| 0°-180° | 11642.0 | 100.0 |



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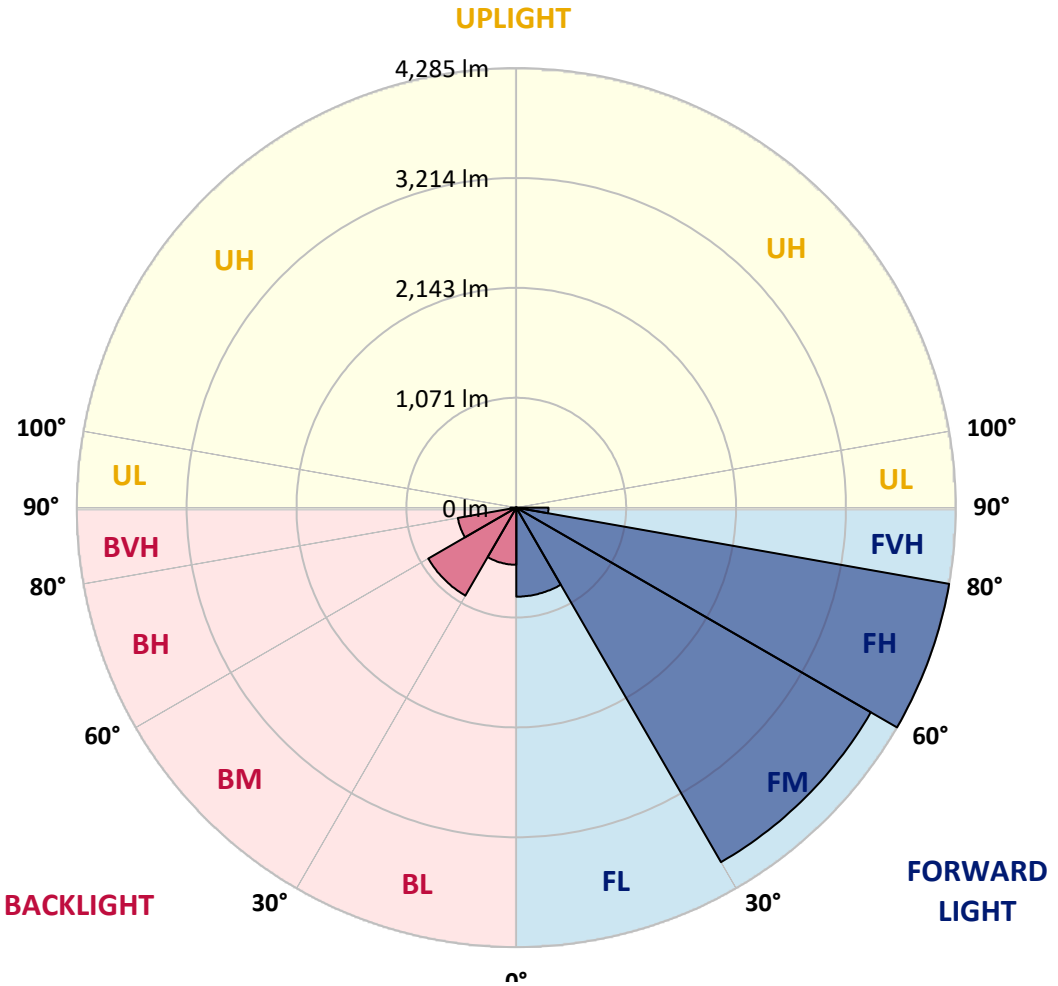
Scaled Data Report

REPORT NUMBER: P1199807
CATALOG NUMBER: GPC-SB2B-760-U-SL3

## LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit B | U | G |
|---|---|---|---|---|---|---|
| FL | (0°-30°) | 868.0 | 7.5 | | | |
| FM | (30°-60°) | 3991.4 | 34.3 | | | |
| FH | (60°-80°) | 4285.3 | 36.8 | | | G2/5000 |
| FVH | (80°-90°) | 313.8 | 2.7 | | | G3/500 |
| BL | (0°-30°) | 557.2 | 4.8 | B2/1000 | | |
| BM | (30°-60°) | 991.1 | 8.5 | B1/1000 | | |
| BH | (60°-80°) | 578.5 | 5.0 | B2/1000 | | G2/1000 |
| BVH | (80°-90°) | 56.7 | 0.5 | | | G1/100 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

**BUG Rating: B2-U0-G3**
Type IV Medium



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**CANDELA DISTRIBUTION (FULL):**

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 59° | 65° | 75° | 85° |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0° | 2136.9 | 2136.9 | 2136.9 | 2136.9 | 2136.9 | 2136.9 | 2136.9 | 2136.9 | 2136.9 | 2136.9 | 2136.9 |
| 2.5° | 2155.0 | 2147.5 | 2155.0 | 2151.9 | 2150.6 | 2148.1 | 2148.8 | 2153.1 | 2150.6 | 2153.8 | 2143.1 |
| 5° | 2140.6 | 2136.2 | 2143.8 | 2141.9 | 2150.0 | 2151.3 | 2159.4 | 2164.4 | 2167.6 | 2168.2 | 2160.0 |
| 7.5° | 2116.8 | 2112.4 | 2123.1 | 2131.9 | 2149.4 | 2154.4 | 2171.3 | 2179.5 | 2183.8 | 2191.3 | 2179.5 |
| 10° | 2029.8 | 2027.9 | 2054.2 | 2087.4 | 2128.7 | 2154.4 | 2180.1 | 2193.9 | 2200.7 | 2220.8 | 2207.0 |
| 12.5° | 1875.7 | 1878.2 | 1912.7 | 1976.5 | 2059.2 | 2141.9 | 2190.1 | 2210.1 | 2220.8 | 2245.8 | 2239.6 |
| 15° | 1728.5 | 1727.9 | 1765.5 | 1833.7 | 1949.6 | 2086.8 | 2195.1 | 2229.6 | 2247.7 | 2284.7 | 2279.7 |
| 17.5° | 1643.4 | 1640.9 | 1667.2 | 1719.1 | 1826.9 | 2002.2 | 2182.6 | 2240.2 | 2279.0 | 2325.4 | 2321.0 |
| 20° | 1627.7 | 1622.7 | 1636.5 | 1662.1 | 1738.5 | 1909.5 | 2150.0 | 2240.2 | 2304.1 | 2364.2 | 2361.7 |
| 22.5° | 1684.7 | 1676.5 | 1670.9 | 1667.8 | 1701.6 | 1833.1 | 2113.1 | 2232.7 | 2341.0 | 2419.9 | 2415.6 |
| 25° | 1799.3 | 1786.8 | 1758.0 | 1729.8 | 1719.8 | 1798.7 | 2080.5 | 2230.8 | 2396.1 | 2495.1 | 2478.8 |
| 27.5° | 1984.7 | 1969.0 | 1910.8 | 1843.1 | 1782.4 | 1816.2 | 2066.1 | 2242.1 | 2456.9 | 2574.6 | 2542.1 |
| 30° | 2214.5 | 2197.6 | 2124.3 | 2020.4 | 1911.4 | 1881.3 | 2084.3 | 2275.3 | 2534.6 | 2680.5 | 2616.6 |
| 32.5° | 2420.6 | 2401.8 | 2339.2 | 2233.3 | 2086.1 | 1994.1 | 2141.9 | 2338.5 | 2656.7 | 2827.6 | 2728.7 |
| 35° | 2603.4 | 2581.5 | 2525.2 | 2427.5 | 2300.3 | 2152.5 | 2245.8 | 2450.6 | 2830.2 | 3066.9 | 2880.9 |
| 37.5° | 2782.6 | 2756.9 | 2695.5 | 2592.2 | 2503.2 | 2363.6 | 2389.3 | 2594.7 | 3060.6 | 3357.5 | 3082.5 |
| 40° | 2983.0 | 2946.0 | 2871.5 | 2769.4 | 2683.0 | 2611.0 | 2577.8 | 2771.3 | 3294.9 | 3681.9 | 3334.3 |
| 42.5° | 3177.1 | 3142.0 | 3053.1 | 2966.1 | 2857.7 | 2837.0 | 2796.3 | 2978.0 | 3551.0 | 4038.2 | 3589.8 |
| 45° | 3386.3 | 3344.3 | 3236.6 | 3126.4 | 3058.1 | 2987.3 | 3008.0 | 3184.6 | 3802.1 | 4401.5 | 3857.9 |
| 47.5° | 3582.3 | 3535.3 | 3408.2 | 3285.5 | 3247.9 | 3113.9 | 3202.2 | 3412.0 | 4063.3 | 4769.7 | 4123.4 |
| 50° | 3688.2 | 3641.8 | 3536.0 | 3425.1 | 3395.7 | 3269.8 | 3412.6 | 3661.9 | 4337.0 | 5136.7 | 4378.3 |
| 52.5° | 3776.5 | 3726.4 | 3588.0 | 3526.6 | 3517.8 | 3439.5 | 3671.9 | 3947.4 | 4610.7 | 5461.2 | 4624.4 |
| 55° | 3870.4 | 3814.7 | 3638.1 | 3582.9 | 3623.0 | 3629.9 | 3979.4 | 4271.2 | 4900.0 | 5777.4 | 4856.8 |
| 57.5° | 3978.7 | 3908.0 | 3686.3 | 3630.5 | 3725.7 | 3852.9 | 4332.6 | 4606.9 | 5184.3 | 6070.5 | 5063.5 |
| 60° | 4080.8 | 4009.4 | 3779.0 | 3706.3 | 3836.6 | 4111.5 | 4737.8 | 5013.4 | 5506.2 | 6331.7 | 5258.9 |
| 62.5° | 4100.9 | 4042.0 | 3852.9 | 3852.2 | 3986.9 | 4413.4 | 5217.5 | 5423.6 | 5787.4 | 6589.7 | 5434.2 |
| 65° | 3753.9 | 3717.0 | 3604.9 | 3846.6 | 4202.3 | 4848.0 | 5751.7 | 5948.4 | 6145.0 | 6815.2 | 5588.3 |
| 67.5° | 2857.1 | 2862.1 | 2854.0 | 3320.5 | 4028.2 | 5472.4 | 6525.2 | 6510.2 | 6586.6 | 7068.2 | 5765.5 |
| 70° | 1306.4 | 1335.9 | 1527.5 | 2292.2 | 3227.2 | 5544.4 | 7804.1 | 7609.3 | 7140.8 | 7395.7 | 5919.0 |
| 72.5° | 705.8 | 728.4 | 806.6 | 1110.4 | 1940.2 | 4929.4 | 8759.8 | 8898.2 | 7878.0 | 7616.2 | 5750.5 |
| 75° | 517.9 | 530.5 | 584.9 | 705.8 | 814.8 | 3663.7 | 8417.2 | 9127.4 | 7970.0 | 7102.0 | 4965.8 |
| 77.5° | 387.7 | 393.3 | 437.8 | 559.3 | 417.1 | 1931.4 | 6725.6 | 7559.2 | 6822.7 | 5835.0 | 3668.1 |
| 80° | 281.2 | 287.5 | 320.7 | 419.6 | 292.5 | 706.4 | 4618.2 | 5305.8 | 4672.7 | 3719.5 | 1828.1 |
| 82.5° | 194.1 | 196.7 | 211.1 | 285.6 | 204.2 | 274.3 | 2620.4 | 3111.4 | 2608.5 | 1305.2 | 493.5 |
| 85° | 117.1 | 120.2 | 126.5 | 166.6 | 115.9 | 130.3 | 1131.1 | 1169.9 | 779.7 | 311.9 | 153.4 |
| 87.5° | 48.2 | 51.4 | 56.4 | 70.1 | 45.7 | 36.3 | 186.6 | 234.2 | 145.9 | 91.4 | 47.6 |
| 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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REPORT NUMBER: P1199807
CATALOG NUMBER: GPC-SB2B-760-U-SL3

**CANDELA DISTRIBUTION (continued):**

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0° | 2136.9 | 2136.9 | 2136.9 | 2136.9 | 2136.9 | 2136.9 | 2136.9 | 2136.9 | 2136.9 | 2136.9 | 2136.9 |
| 2.5° | 2140.0 | 2135.6 | 2123.7 | 2107.4 | 2092.4 | 2073.6 | 2065.5 | 2058.6 | 2052.3 | 2040.4 | 2034.8 |
| 5° | 2153.1 | 2141.2 | 2109.3 | 2068.0 | 2021.0 | 1969.6 | 1919.5 | 1885.1 | 1855.7 | 1833.7 | 1815.6 |
| 7.5° | 2173.2 | 2150.6 | 2092.4 | 2007.8 | 1900.1 | 1789.9 | 1690.3 | 1619.6 | 1566.3 | 1546.9 | 1513.1 |
| 10° | 2193.9 | 2166.9 | 2065.5 | 1916.4 | 1730.4 | 1560.7 | 1428.5 | 1355.9 | 1313.3 | 1299.5 | 1278.2 |
| 12.5° | 2218.3 | 2178.8 | 2023.5 | 1789.3 | 1540.6 | 1354.6 | 1239.4 | 1196.8 | 1174.9 | 1167.4 | 1169.3 |
| 15° | 2254.0 | 2188.8 | 1960.3 | 1630.2 | 1359.7 | 1204.3 | 1129.8 | 1100.4 | 1089.1 | 1088.5 | 1091.0 |
| 17.5° | 2280.9 | 2190.7 | 1861.9 | 1459.9 | 1220.6 | 1113.5 | 1052.1 | 1040.9 | 1048.4 | 1059.7 | 1064.0 |
| 20° | 2311.0 | 2173.8 | 1732.9 | 1304.5 | 1122.9 | 1034.0 | 1008.3 | 1015.8 | 1034.0 | 1050.3 | 1055.9 |
| 22.5° | 2332.3 | 2143.1 | 1577.0 | 1183.7 | 1038.4 | 988.3 | 987.0 | 1002.7 | 1012.7 | 1020.8 | 1025.2 |
| 25° | 2351.1 | 2091.1 | 1411.6 | 1082.2 | 968.9 | 960.7 | 974.5 | 969.5 | 962.6 | 969.5 | 973.9 |
| 27.5° | 2364.8 | 2009.1 | 1263.8 | 993.3 | 920.0 | 941.9 | 933.8 | 922.5 | 921.9 | 925.6 | 931.9 |
| 30° | 2360.4 | 1899.5 | 1142.3 | 908.7 | 885.6 | 906.9 | 887.4 | 885.6 | 883.7 | 885.6 | 892.4 |
| 32.5° | 2360.4 | 1774.9 | 1049.0 | 850.5 | 863.6 | 855.5 | 853.6 | 849.2 | 841.7 | 841.1 | 849.2 |
| 35° | 2373.6 | 1650.2 | 968.9 | 819.2 | 845.5 | 826.1 | 827.3 | 816.7 | 801.0 | 793.5 | 801.0 |
| 37.5° | 2400.5 | 1550.0 | 889.3 | 804.1 | 813.5 | 812.9 | 807.9 | 789.7 | 762.2 | 738.4 | 746.5 |
| 40° | 2465.7 | 1520.6 | 834.8 | 797.3 | 798.5 | 806.0 | 792.9 | 757.8 | 695.2 | 656.3 | 661.4 |
| 42.5° | 2567.7 | 1570.1 | 822.9 | 780.3 | 788.5 | 796.0 | 770.3 | 688.9 | 644.4 | 621.3 | 621.3 |
| 45° | 2697.4 | 1656.5 | 848.6 | 755.9 | 764.7 | 777.8 | 701.4 | 662.6 | 642.6 | 643.2 | 646.3 |
| 47.5° | 2861.5 | 1747.3 | 896.2 | 734.6 | 730.2 | 737.8 | 655.7 | 631.9 | 604.4 | 611.2 | 628.8 |
| 50° | 3051.2 | 1839.4 | 941.3 | 705.8 | 692.0 | 667.6 | 626.3 | 603.7 | 568.7 | 552.4 | 556.8 |
| 52.5° | 3256.6 | 1928.3 | 959.5 | 670.7 | 650.7 | 622.5 | 606.2 | 578.7 | 536.1 | 509.2 | 508.5 |
| 55° | 3451.4 | 2009.1 | 939.4 | 628.8 | 609.4 | 587.4 | 584.9 | 568.0 | 522.3 | 484.7 | 484.7 |
| 57.5° | 3635.5 | 2076.7 | 889.3 | 586.2 | 567.4 | 554.3 | 571.2 | 563.0 | 505.4 | 457.2 | 454.7 |
| 60° | 3791.5 | 2123.1 | 816.7 | 543.0 | 529.8 | 522.9 | 548.6 | 546.1 | 481.6 | 427.7 | 425.9 |
| 62.5° | 3915.5 | 2141.2 | 736.5 | 501.6 | 498.5 | 486.0 | 517.3 | 517.3 | 451.5 | 398.9 | 397.1 |
| 65° | 4012.6 | 2123.7 | 655.1 | 460.9 | 467.2 | 448.4 | 479.1 | 475.3 | 419.6 | 373.3 | 370.8 |
| 67.5° | 4098.4 | 2066.1 | 564.9 | 420.9 | 435.3 | 411.5 | 439.0 | 430.3 | 384.5 | 347.6 | 345.1 |
| 70° | 4136.6 | 1932.1 | 462.2 | 380.8 | 398.3 | 375.1 | 398.9 | 382.7 | 345.1 | 320.0 | 315.0 |
| 72.5° | 3829.7 | 1605.8 | 363.9 | 338.8 | 353.8 | 335.1 | 355.7 | 336.9 | 302.5 | 291.2 | 281.8 |
| 75° | *3168.3* | *1205.0* | *279.9* | *293.1* | *304.4* | *290.0* | *303.7* | *290.0* | *258.7* | *266.8* | *243.6* |
| 77.5° | 2300.9 | 813.5 | 214.2 | 244.9 | 249.9 | 242.4 | 254.3 | 238.6 | 210.4 | 208.6 | 199.2 |
| 80° | 1144.2 | 476.6 | 167.8 | 193.5 | 191.6 | 186.6 | 200.4 | 192.9 | 169.1 | 179.1 | 177.2 |
| 82.5° | 331.3 | 204.2 | 122.1 | 135.9 | 132.1 | 133.4 | 143.4 | 147.2 | 220.5 | 218.6 | 223.6 |
| 85° | 104.0 | 80.2 | 73.3 | 75.8 | 72.0 | 73.9 | 84.5 | 167.8 | 155.3 | 90.8 | 98.3 |
| 87.5° | 26.9 | 27.6 | 18.2 | 19.4 | 20.0 | 23.8 | 26.9 | 102.1 | 48.8 | 31.9 | 33.8 |
| 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

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Report Generated By FNC07603 / LDUCLS01DT446
Version: v6.13

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## Test Information

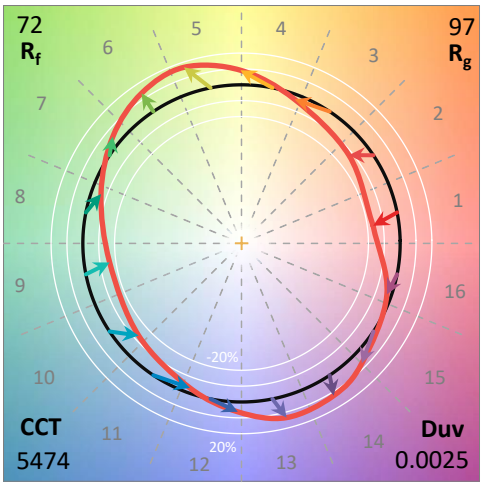
| | |
|---|---|
| Test Method: | LM-79-2008 |
| Report Number: | SP1-1908-441-9-R4 |
| Test Lab: | COOPER LIGHTING SOLUTIONS |
| Photometer: | SP1 - 76IN SPHERE |
| Measurement Geometry: | 4π |
| Issue Date: | 10/28/2024 |
| Manufacturer: | COOPER LIGHTING SOLUTIONS |
| Product Line: | McGRAW-EDISON |
| Catalog Number: | **SA1C-760-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): | 5474 | CRI (Ra): | 71.7 | | |
| CIE u': | 0.2052 | R1: | 70.6 | R9: | -27.1 |
| CIE v': | 0.4804 | R2: | 74.6 | R10: | 40.8 |
| Duv: | 0.0025 | R3: | 78.3 | R11: | 74.6 |
| CIE x: | 0.3330 | R4: | 73.8 | R12: | 50.4 |
| CIE y: | 0.3466 | R5: | 72.4 | R13: | 70.0 |
| CIE z: | 0.3204 | R6: | 67.5 | R14: | 87.8 |
| Peak Wavelength (nm): | 442 | R7: | 77.5 | | |
| Dominant Wavelength (nm): | 554 | R8: | 58.9 | | |
| Purity: | 4.1 | | | | |

| | |
|---|---|
| Rf: | 72.1 |
| Rg: | 97.2 |




## Test Conditions

| | |
|---|---|
| Stabilization Time: | 240M |
| Operation Time: | 12H |
| Room Temperature (°C) / RH%: | 24.6/31% |
| Sphere Temperature (°C): | 25.9 |

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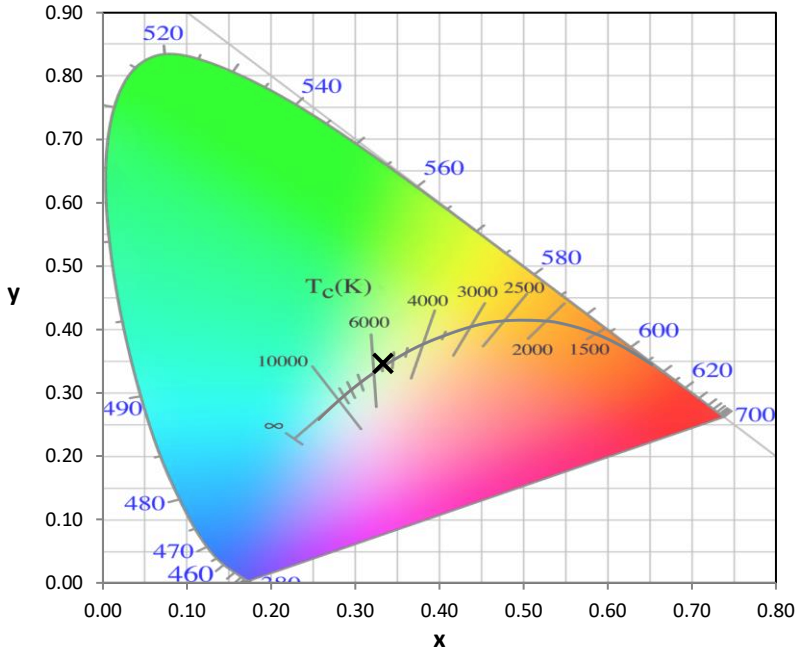
REPORT NUMBER: SP1-1908-441-9-R4

| 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 |

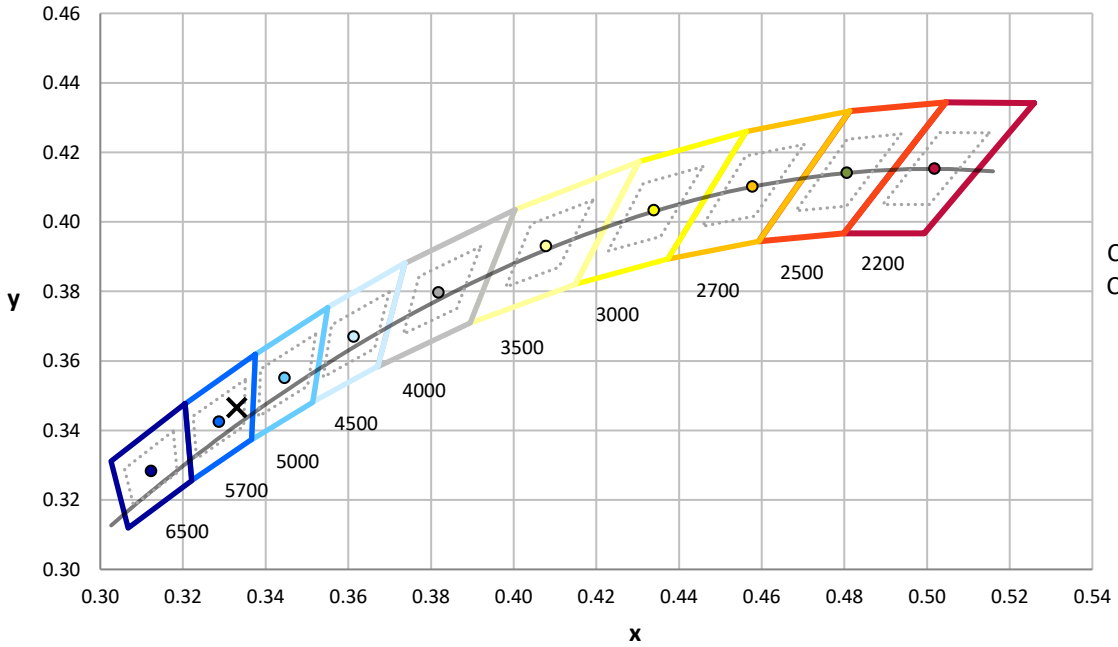
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

REPORT NUMBER: SP1-1908-441-9-R4

## CIE 1931 Chromaticity Diagram




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



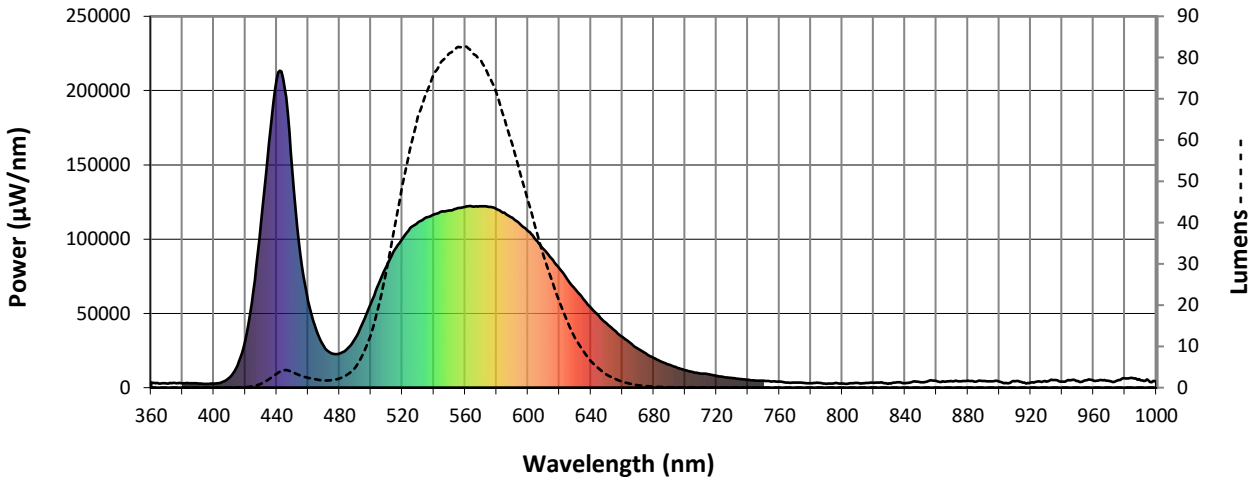

CCT = 5474K
CIE x = 0.3330
CIE y = 0.3466
Duv = 0.0025

Point lies inside the ANSI 5700K 4-step quadrangle

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## Photopic Flux vs. Wavelength



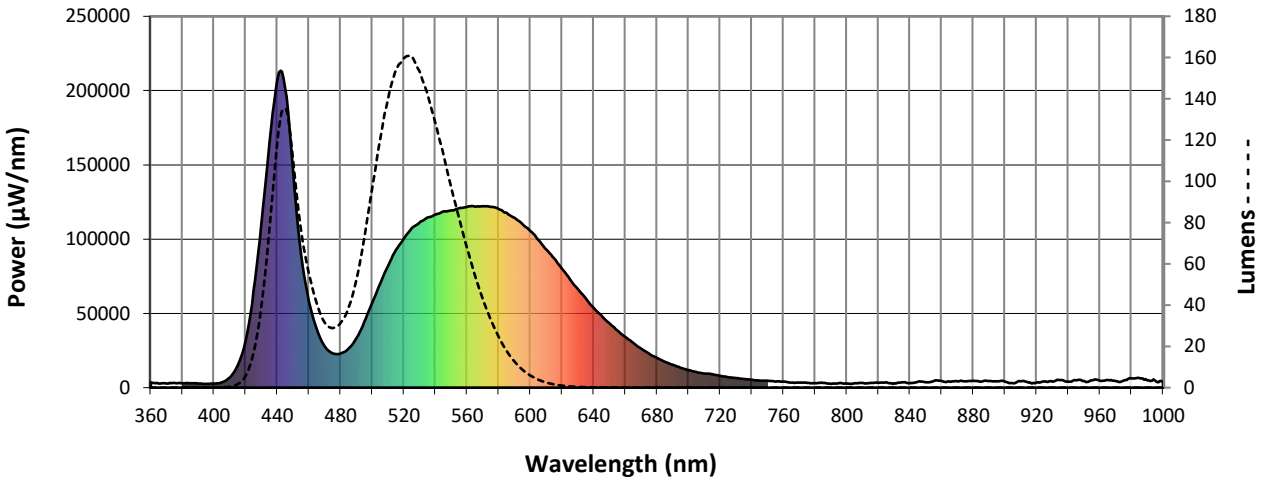

**Photopic Lumens: 7459.9**

| 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 | 3540 | 0.0 | 490 | 33363 | 4.7 | 620 | 80193 | 20.9 | 750 | 4663 | 0.0 | 880 | 4678 | 0.0 |
| 365 | 2862 | 0.0 | 495 | 44177 | 8.0 | 625 | 73091 | 16.1 | 755 | 4147 | 0.0 | 885 | 4128 | 0.0 |
| 370 | 2865 | 0.0 | 500 | 57019 | 12.6 | 630 | 66269 | 12.0 | 760 | 4040 | 0.0 | 890 | 4504 | 0.0 |
| 375 | 3254 | 0.0 | 505 | 70030 | 19.6 | 635 | 60012 | 9.0 | 765 | 3474 | 0.0 | 895 | 4371 | 0.0 |
| 380 | 3076 | 0.0 | 510 | 81972 | 28.2 | 640 | 53914 | 6.4 | 770 | 3469 | 0.0 | 900 | 4082 | 0.0 |
| 385 | 2904 | 0.0 | 515 | 92590 | 38.4 | 645 | 48385 | 4.7 | 775 | 3181 | 0.0 | 905 | 2982 | 0.0 |
| 390 | 2689 | 0.0 | 520 | 100305 | 48.6 | 650 | 43219 | 3.2 | 780 | 2969 | 0.0 | 910 | 4351 | 0.0 |
| 395 | 2619 | 0.0 | 525 | 107452 | 57.7 | 655 | 38562 | 2.2 | 785 | 3132 | 0.0 | 915 | 3365 | 0.0 |
| 400 | 2679 | 0.0 | 530 | 111373 | 65.6 | 660 | 34110 | 1.4 | 790 | 2507 | 0.0 | 920 | 3430 | 0.0 |
| 405 | 3515 | 0.0 | 535 | 114505 | 71.0 | 665 | 30085 | 1.0 | 795 | 2968 | 0.0 | 925 | 4264 | 0.0 |
| 410 | 6934 | 0.0 | 540 | 116408 | 75.8 | 670 | 26205 | 0.6 | 800 | 2758 | 0.0 | 930 | 4095 | 0.0 |
| 415 | 14943 | 0.0 | 545 | 118700 | 79.0 | 675 | 22906 | 0.4 | 805 | 2872 | 0.0 | 935 | 5048 | 0.0 |
| 420 | 31939 | 0.1 | 550 | 119209 | 81.0 | 680 | 20058 | 0.2 | 810 | 3094 | 0.0 | 940 | 4074 | 0.0 |
| 425 | 64701 | 0.3 | 555 | 120742 | 82.5 | 685 | 17413 | 0.1 | 815 | 3222 | 0.0 | 945 | 4949 | 0.0 |
| 430 | 110939 | 0.9 | 560 | 121594 | 82.6 | 690 | 15447 | 0.1 | 820 | 3238 | 0.0 | 950 | 4387 | 0.0 |
| 435 | 164597 | 1.9 | 565 | 121913 | 81.1 | 695 | 13398 | 0.1 | 825 | 3524 | 0.0 | 955 | 4978 | 0.0 |
| 440 | 207696 | 3.3 | 570 | 122147 | 79.4 | 700 | 11777 | 0.0 | 830 | 2921 | 0.0 | 960 | 4706 | 0.0 |
| 445 | 201830 | 4.2 | 575 | 121605 | 75.7 | 705 | 10412 | 0.0 | 835 | 3595 | 0.0 | 965 | 5083 | 0.0 |
| 450 | 145410 | 3.8 | 580 | 120248 | 71.5 | 710 | 9544 | 0.0 | 840 | 3016 | 0.0 | 970 | 4522 | 0.0 |
| 455 | 89594 | 3.0 | 585 | 117717 | 65.4 | 715 | 8940 | 0.0 | 845 | 4032 | 0.0 | 975 | 4740 | 0.0 |
| 460 | 58321 | 2.4 | 590 | 114359 | 59.1 | 720 | 7897 | 0.0 | 850 | 3579 | 0.0 | 980 | 6122 | 0.0 |
| 465 | 39318 | 2.0 | 595 | 109974 | 52.1 | 725 | 7045 | 0.0 | 855 | 4571 | 0.0 | 985 | 6450 | 0.0 |
| 470 | 27693 | 1.7 | 600 | 105269 | 45.4 | 730 | 6483 | 0.0 | 860 | 4485 | 0.0 | 990 | 4875 | 0.0 |
| 475 | 23081 | 1.8 | 605 | 99453 | 38.5 | 735 | 5838 | 0.0 | 865 | 3978 | 0.0 | 995 | 4764 | 0.0 |
| 480 | 23002 | 2.2 | 610 | 92921 | 31.9 | 740 | 5261 | 0.0 | 870 | 4298 | 0.0 | 1000 | 3640 | 0.0 |
| 485 | 26201 | 3.1 | 615 | 86989 | 26.3 | 745 | 4760 | 0.0 | 875 | 4356 | 0.0 | | | |

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## Scotopic Flux vs. Wavelength



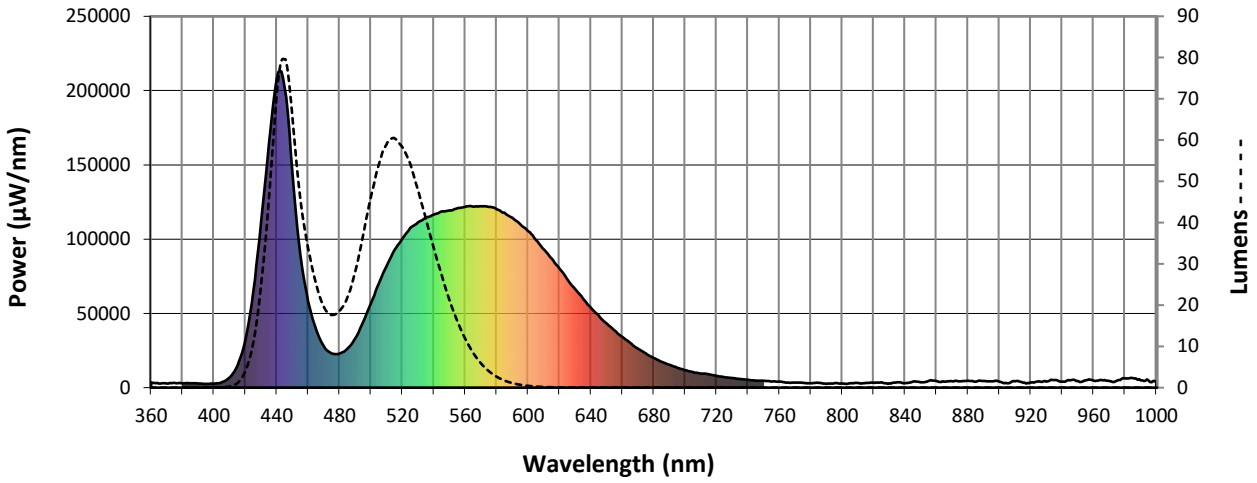

**Scotopic Lumens: 13759.3** **S/P: 1.85**

| 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 | 3540 | 0.0 | 490 | 33363 | 27.8 | 620 | 80193 | 0.1 | 750 | 4663 | 0.0 | 880 | 4678 | 0.0 |
| 365 | 2862 | 0.0 | 495 | 44177 | 36.5 | 625 | 73091 | 0.0 | 755 | 4147 | 0.0 | 885 | 4128 | 0.0 |
| 370 | 2865 | 0.0 | 500 | 57019 | 45.8 | 630 | 66269 | 0.0 | 760 | 4040 | 0.0 | 890 | 4504 | 0.0 |
| 375 | 3254 | 0.0 | 505 | 70030 | 53.7 | 635 | 60012 | 0.0 | 765 | 3474 | 0.0 | 895 | 4371 | 0.0 |
| 380 | 3076 | 0.0 | 510 | 81972 | 58.9 | 640 | 53914 | 0.0 | 770 | 3469 | 0.0 | 900 | 4082 | 0.0 |
| 385 | 2904 | 0.0 | 515 | 92590 | 60.5 | 645 | 48385 | 0.0 | 775 | 3181 | 0.0 | 905 | 2982 | 0.0 |
| 390 | 2689 | 0.0 | 520 | 100305 | 58.4 | 650 | 43219 | 0.0 | 780 | 2969 | 0.0 | 910 | 4351 | 0.0 |
| 395 | 2619 | 0.0 | 525 | 107452 | 54.5 | 655 | 38562 | 0.0 | 785 | 3132 | 0.0 | 915 | 3365 | 0.0 |
| 400 | 2679 | 0.0 | 530 | 111373 | 48.1 | 660 | 34110 | 0.0 | 790 | 2507 | 0.0 | 920 | 3430 | 0.0 |
| 405 | 3515 | 0.1 | 535 | 114505 | 41.2 | 665 | 30085 | 0.0 | 795 | 2968 | 0.0 | 925 | 4264 | 0.0 |
| 410 | 6934 | 0.3 | 540 | 116408 | 34.1 | 670 | 26205 | 0.0 | 800 | 2758 | 0.0 | 930 | 4095 | 0.0 |
| 415 | 14943 | 1.0 | 545 | 118700 | 27.6 | 675 | 22906 | 0.0 | 805 | 2872 | 0.0 | 935 | 5048 | 0.0 |
| 420 | 31939 | 3.6 | 550 | 119209 | 21.4 | 680 | 20058 | 0.0 | 810 | 3094 | 0.0 | 940 | 4074 | 0.0 |
| 425 | 64701 | 10.1 | 555 | 120742 | 16.3 | 685 | 17413 | 0.0 | 815 | 3222 | 0.0 | 945 | 4949 | 0.0 |
| 430 | 110939 | 23.4 | 560 | 121594 | 12.0 | 690 | 15447 | 0.0 | 820 | 3238 | 0.0 | 950 | 4387 | 0.0 |
| 435 | 164597 | 43.9 | 565 | 121913 | 8.6 | 695 | 13398 | 0.0 | 825 | 3524 | 0.0 | 955 | 4978 | 0.0 |
| 440 | 207696 | 69.4 | 570 | 122147 | 6.0 | 700 | 11777 | 0.0 | 830 | 2921 | 0.0 | 960 | 4706 | 0.0 |
| 445 | 201830 | 79.6 | 575 | 121605 | 4.0 | 705 | 10412 | 0.0 | 835 | 3595 | 0.0 | 965 | 5083 | 0.0 |
| 450 | 145410 | 67.0 | 580 | 120248 | 2.7 | 710 | 9544 | 0.0 | 840 | 3016 | 0.0 | 970 | 4522 | 0.0 |
| 455 | 89594 | 46.9 | 585 | 117717 | 1.7 | 715 | 8940 | 0.0 | 845 | 4032 | 0.0 | 975 | 4740 | 0.0 |
| 460 | 58321 | 34.4 | 590 | 114359 | 1.1 | 720 | 7897 | 0.0 | 850 | 3579 | 0.0 | 980 | 6122 | 0.0 |
| 465 | 39318 | 25.7 | 595 | 109974 | 0.7 | 725 | 7045 | 0.0 | 855 | 4571 | 0.0 | 985 | 6450 | 0.0 |
| 470 | 27693 | 19.8 | 600 | 105269 | 0.4 | 730 | 6483 | 0.0 | 860 | 4485 | 0.0 | 990 | 4875 | 0.0 |
| 475 | 23081 | 17.6 | 605 | 99453 | 0.3 | 735 | 5838 | 0.0 | 865 | 3978 | 0.0 | 995 | 4764 | 0.0 |
| 480 | 23002 | 18.5 | 610 | 92921 | 0.2 | 740 | 5261 | 0.0 | 870 | 4298 | 0.0 | 1000 | 3640 | 0.0 |
| 485 | 26201 | 21.6 | 615 | 86989 | 0.1 | 745 | 4760 | 0.0 | 875 | 4356 | 0.0 | | | |

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## Melanopic Flux vs. Wavelength




**Melanopic Lumens: 5527.6** **M/P: 0.74**

| 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 | 3540 | 0.0 | 490 | 33363 | 51.4 | 620 | 80193 | 1.0 | 750 | 4663 | 0.0 | 880 | 4678 | 0.0 |
| 365 | 2862 | 0.0 | 495 | 44177 | 71.4 | 625 | 73091 | 0.6 | 755 | 4147 | 0.0 | 885 | 4128 | 0.0 |
| 370 | 2865 | 0.0 | 500 | 57019 | 95.4 | 630 | 66269 | 0.4 | 760 | 4040 | 0.0 | 890 | 4504 | 0.0 |
| 375 | 3254 | 0.0 | 505 | 70030 | 119.1 | 635 | 60012 | 0.2 | 765 | 3474 | 0.0 | 895 | 4371 | 0.0 |
| 380 | 3076 | 0.0 | 510 | 81972 | 138.9 | 640 | 53914 | 0.1 | 770 | 3469 | 0.0 | 900 | 4082 | 0.0 |
| 385 | 2904 | 0.0 | 515 | 92590 | 153.5 | 645 | 48385 | 0.1 | 775 | 3181 | 0.0 | 905 | 2982 | 0.0 |
| 390 | 2689 | 0.0 | 520 | 100305 | 159.4 | 650 | 43219 | 0.0 | 780 | 2969 | 0.0 | 910 | 4351 | 0.0 |
| 395 | 2619 | 0.0 | 525 | 107452 | 160.7 | 655 | 38562 | 0.0 | 785 | 3132 | 0.0 | 915 | 3365 | 0.0 |
| 400 | 2679 | 0.0 | 530 | 111373 | 153.5 | 660 | 34110 | 0.0 | 790 | 2507 | 0.0 | 920 | 3430 | 0.0 |
| 405 | 3515 | 0.1 | 535 | 114505 | 142.7 | 665 | 30085 | 0.0 | 795 | 2968 | 0.0 | 925 | 4264 | 0.0 |
| 410 | 6934 | 0.4 | 540 | 116408 | 128.6 | 670 | 26205 | 0.0 | 800 | 2758 | 0.0 | 930 | 4095 | 0.0 |
| 415 | 14943 | 1.5 | 545 | 118700 | 113.8 | 675 | 22906 | 0.0 | 805 | 2872 | 0.0 | 935 | 5048 | 0.0 |
| 420 | 31939 | 5.3 | 550 | 119209 | 97.5 | 680 | 20058 | 0.0 | 810 | 3094 | 0.0 | 940 | 4074 | 0.0 |
| 425 | 64701 | 15.8 | 555 | 120742 | 82.5 | 685 | 17413 | 0.0 | 815 | 3222 | 0.0 | 945 | 4949 | 0.0 |
| 430 | 110939 | 37.8 | 560 | 121594 | 68.0 | 690 | 15447 | 0.0 | 820 | 3238 | 0.0 | 950 | 4387 | 0.0 |
| 435 | 164597 | 73.6 | 565 | 121913 | 54.7 | 695 | 13398 | 0.0 | 825 | 3524 | 0.0 | 955 | 4978 | 0.0 |
| 440 | 207696 | 116.1 | 570 | 122147 | 43.1 | 700 | 11777 | 0.0 | 830 | 2921 | 0.0 | 960 | 4706 | 0.0 |
| 445 | 201830 | 135.1 | 575 | 121605 | 33.1 | 705 | 10412 | 0.0 | 835 | 3595 | 0.0 | 965 | 5083 | 0.0 |
| 450 | 145410 | 112.7 | 580 | 120248 | 24.8 | 710 | 9544 | 0.0 | 840 | 3016 | 0.0 | 970 | 4522 | 0.0 |
| 455 | 89594 | 78.3 | 585 | 117717 | 18.0 | 715 | 8940 | 0.0 | 845 | 4032 | 0.0 | 975 | 4740 | 0.0 |
| 460 | 58321 | 56.3 | 590 | 114359 | 12.7 | 720 | 7897 | 0.0 | 850 | 3579 | 0.0 | 980 | 6122 | 0.0 |
| 465 | 39318 | 41.5 | 595 | 109974 | 8.8 | 725 | 7045 | 0.0 | 855 | 4571 | 0.0 | 985 | 6450 | 0.0 |
| 470 | 27693 | 31.9 | 600 | 105269 | 5.9 | 730 | 6483 | 0.0 | 860 | 4485 | 0.0 | 990 | 4875 | 0.0 |
| 475 | 23081 | 28.9 | 605 | 99453 | 3.9 | 735 | 5838 | 0.0 | 865 | 3978 | 0.0 | 995 | 4764 | 0.0 |
| 480 | 23002 | 31.1 | 610 | 92921 | 2.5 | 740 | 5261 | 0.0 | 870 | 4298 | 0.0 | 1000 | 3640 | 0.0 |
| 485 | 26201 | 38.0 | 615 | 86989 | 1.6 | 745 | 4760 | 0.0 | 875 | 4356 | 0.0 | | | |

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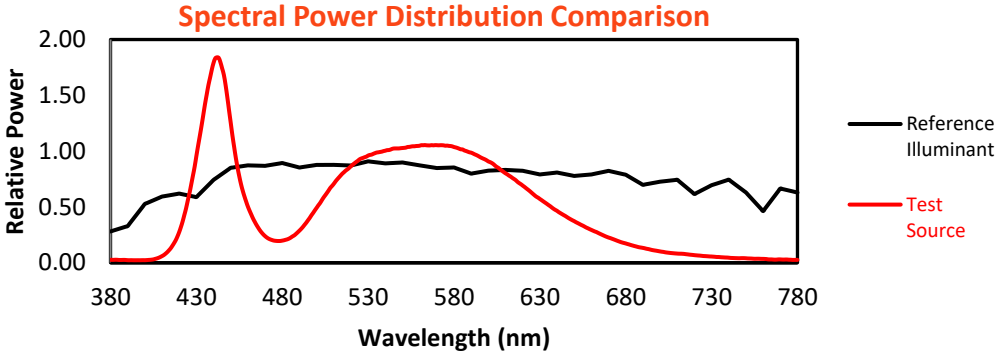
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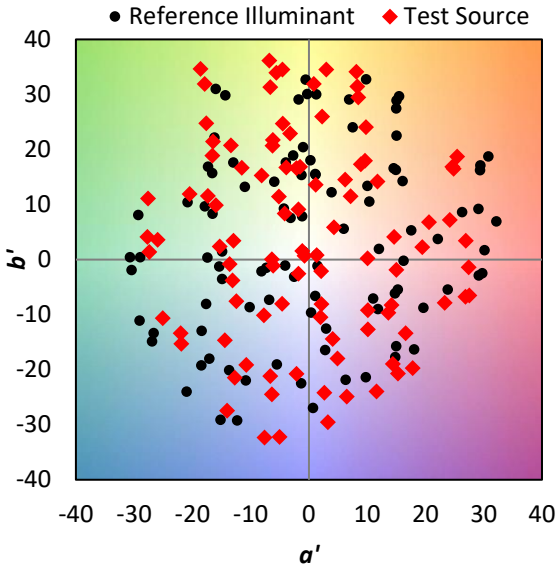
## Summary

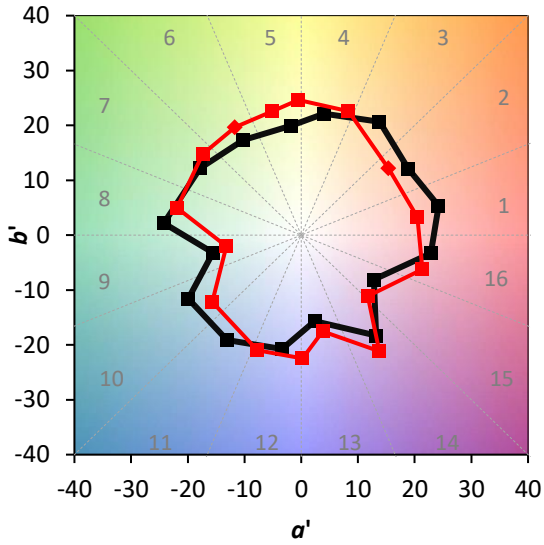
$R_f$ = 72.1
$R_g$ = 97.2
CIE $R_a$ = 71.7
$R_9$ = -27.1

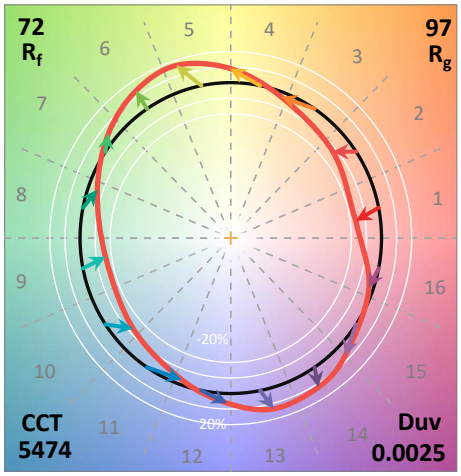
## Spectral Power Distribution Comparison

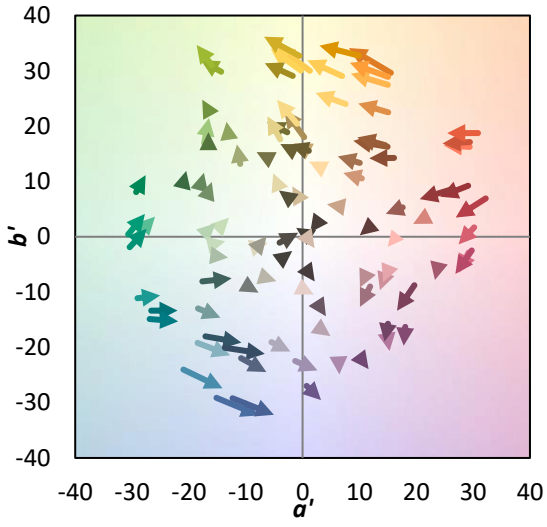



## Color Vector Graphics



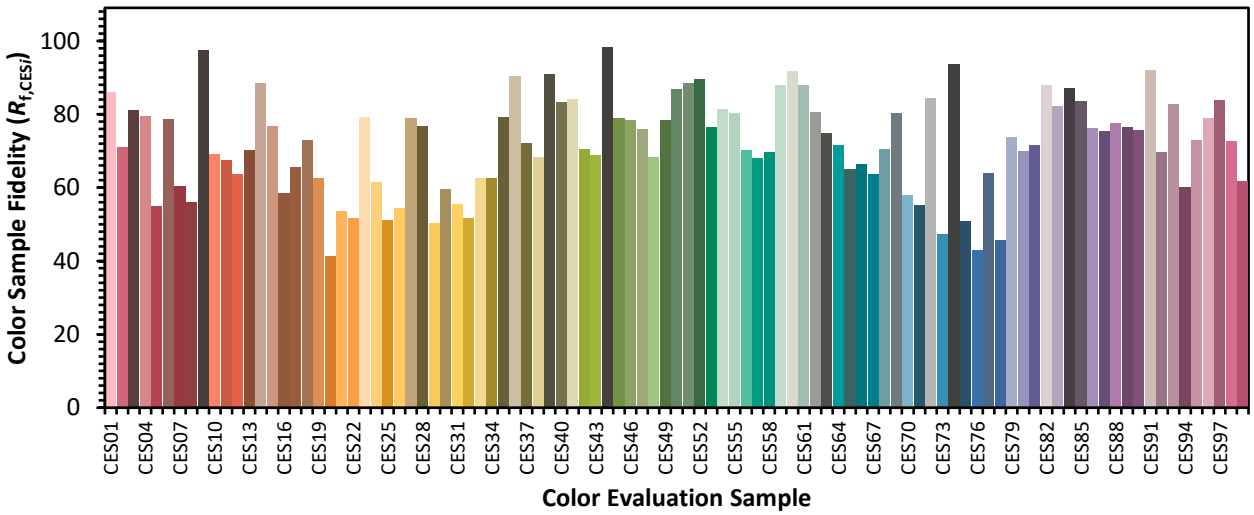
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Peachtree City, GA 30269

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

| | | | |
|---|---|---|---|
| CES01 = 85 | CES26 = 54 | CES51 = 88 | CES76 = 43 |
| CES02 = 59 | CES27 = 79 | CES52 = 90 | CES77 = 64 |
| CES03 = 30 | CES28 = 77 | CES53 = 77 | CES78 = 46 |
| CES04 = 69 | CES29 = 50 | CES54 = 81 | CES79 = 74 |
| CES05 = 46 | CES30 = 59 | CES55 = 80 | CES80 = 70 |
| CES06 = 50 | CES31 = 55 | CES56 = 70 | CES81 = 71 |
| CES07 = 38 | CES32 = 52 | CES57 = 68 | CES82 = 88 |
| CES08 = 38 | CES33 = 63 | CES58 = 70 | CES83 = 82 |
| CES09 = 29 | CES34 = 63 | CES59 = 88 | CES84 = 87 |
| CES10 = 72 | CES35 = 79 | CES60 = 92 | CES85 = 84 |
| CES11 = 55 | CES36 = 90 | CES61 = 88 | CES86 = 76 |
| CES12 = 61 | CES37 = 72 | CES62 = 81 | CES87 = 75 |
| CES13 = 41 | CES38 = 68 | CES63 = 75 | CES88 = 77 |
| CES14 = 74 | CES39 = 91 | CES64 = 72 | CES89 = 76 |
| CES15 = 70 | CES40 = 83 | CES65 = 65 | CES90 = 76 |
| CES16 = 46 | CES41 = 84 | CES66 = 66 | CES91 = 92 |
| CES17 = 48 | CES42 = 70 | CES67 = 64 | CES92 = 70 |
| CES18 = 55 | CES43 = 69 | CES68 = 71 | CES93 = 83 |
| CES19 = 70 | CES44 = 98 | CES69 = 80 | CES94 = 60 |
| CES20 = 64 | CES45 = 79 | CES70 = 58 | CES95 = 73 |
| CES21 = 85 | CES46 = 78 | CES71 = 55 | CES96 = 79 |
| CES22 = 77 | CES47 = 76 | CES72 = 84 | CES97 = 84 |
| CES23 = 91 | CES48 = 68 | CES73 = 47 | CES98 = 73 |
| CES24 = 90 | CES49 = 78 | CES74 = 94 | CES99 = 62 |
| CES25 = 71 | CES50 = 87 | CES75 = 51 | |

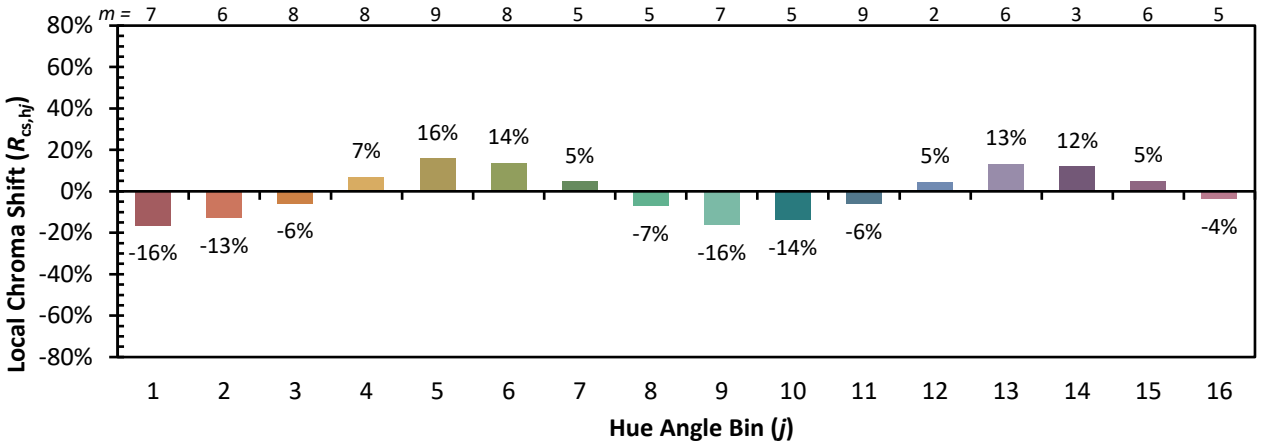


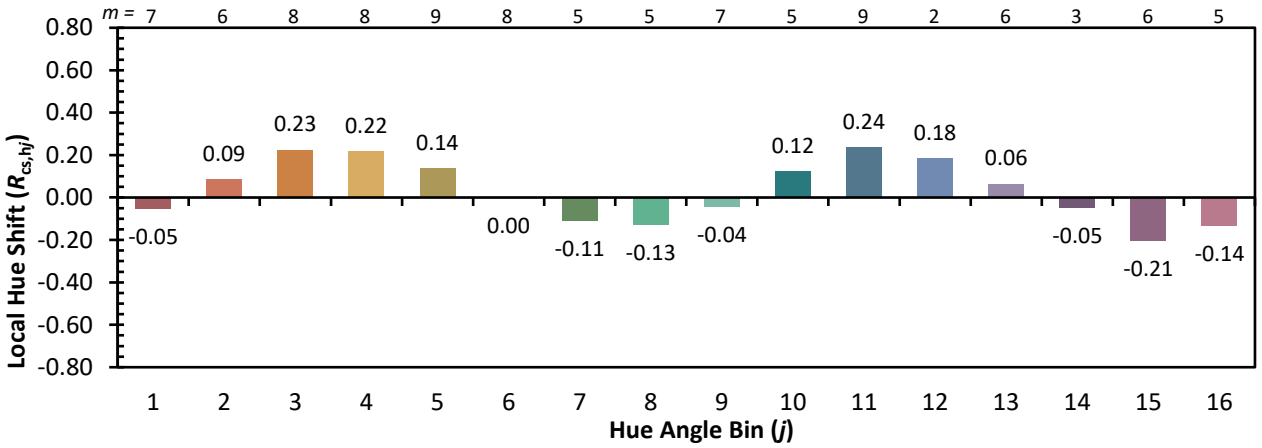
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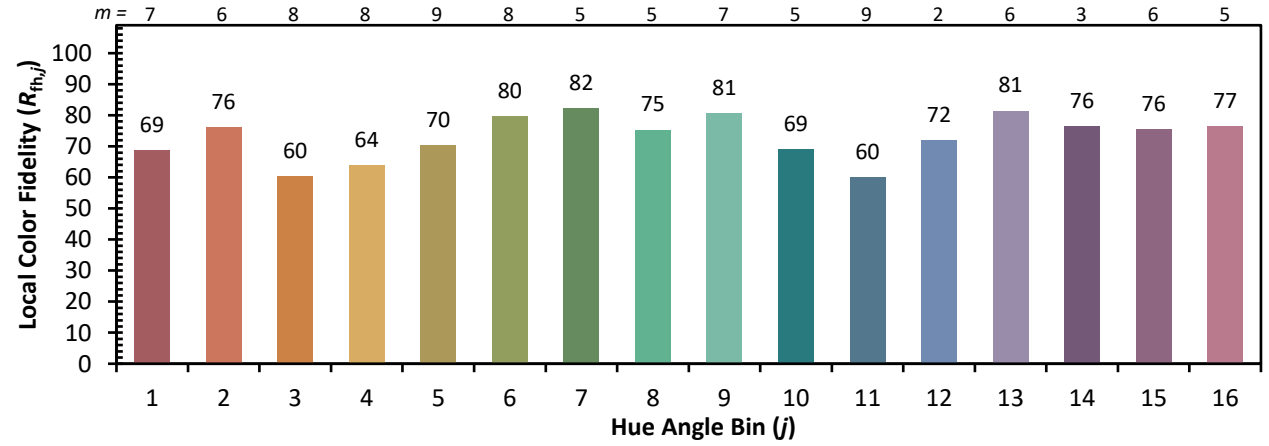
REPORT NUMBER: SP1-1908-441-9-R4

**TM-30-18**

## Color Rendition by Hue-Angle Bin



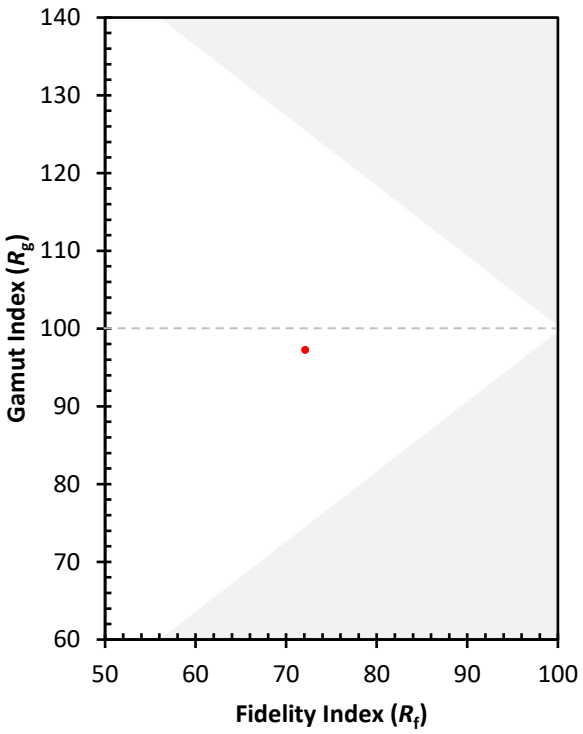



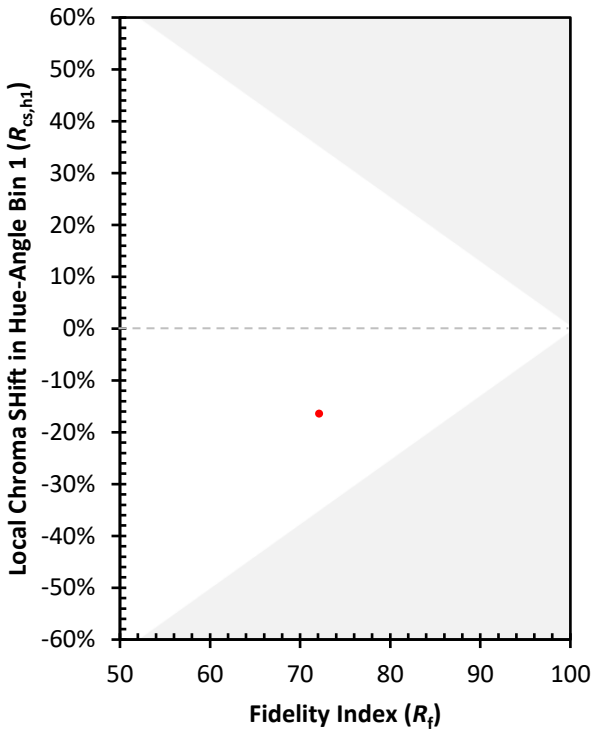
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### Measure Comparisons




(END OF REPORT)