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

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1121 Highway 74 South
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: P1502818

Luminaire Tested: GSS-SB2B-935-U-T4LG-HSS

Issue Date: 07/20/2026

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: | P1502818 |
| Test Lab: | INNOVATION CENTER(G1) |
| Issue Date: | 7/20/2026 |
| Manufacturer: | COOPER LIGHTING SOLUTIONS |
| Product Line: | McGRAW-EDISON |
| Catalog Number: | GSS-SB2B-935-U-T4LG-HSS |
| Description: | GALLEON II SLIM SITE HIGH DENSITY LED ARRAYS 2SQUARE 74W 90CRI 3500K FIXTURE w/ TYPE IV LOW GLARE DISTRIBUTION FIXTURE W/ HOUSE SIDE SHIELD |
| Light Source: | (52) 3500K CCT, 90 CRI LEDS |
| Ballast/Driver: | ELECTRONIC DRIVER |

**Summary**

| | |
|---|---|
| Lumens per Lamp: | N/A |
| Luminaire Lumens: | 5879.7 lumens |
| Efficiency: | N/A |
| Efficacy: | 79.5 lumens/watt |
| Luminous Opening: | Rectangular (W 1' x L: 0.5' x H: 0') |
| IES Classification: | Type III - Short |
| BUG Rating: | B1 - U0 - G1 |

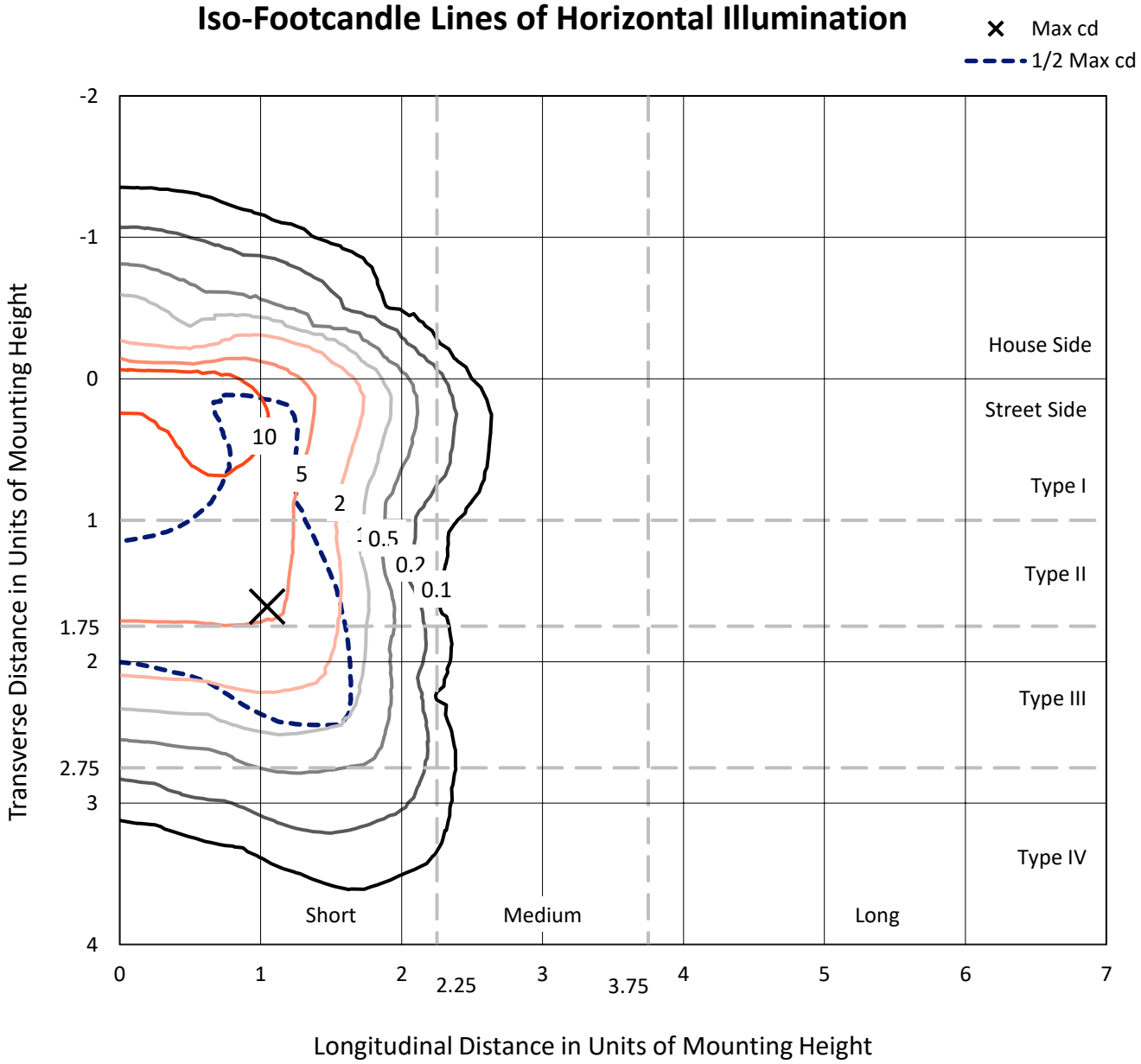
| | |
|---|---|
| Input Watts (W): | 74 |
| Input Voltage (V): | 120 |
| Input Current (Ain): | NR |
| Voltage Rise (V): | NR |
| Power Factor: | 0.98 |
| Total Harmonic Distortion (THDi): | 13.6% |
| Frequency (hertz): | 60 |
| Stabilization Time: | NR |
| Operation Time: | NR |
| Ambient Temperature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

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REPORT NUMBER: P1502818
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## Iso-Footcandle Lines of Horizontal Illumination



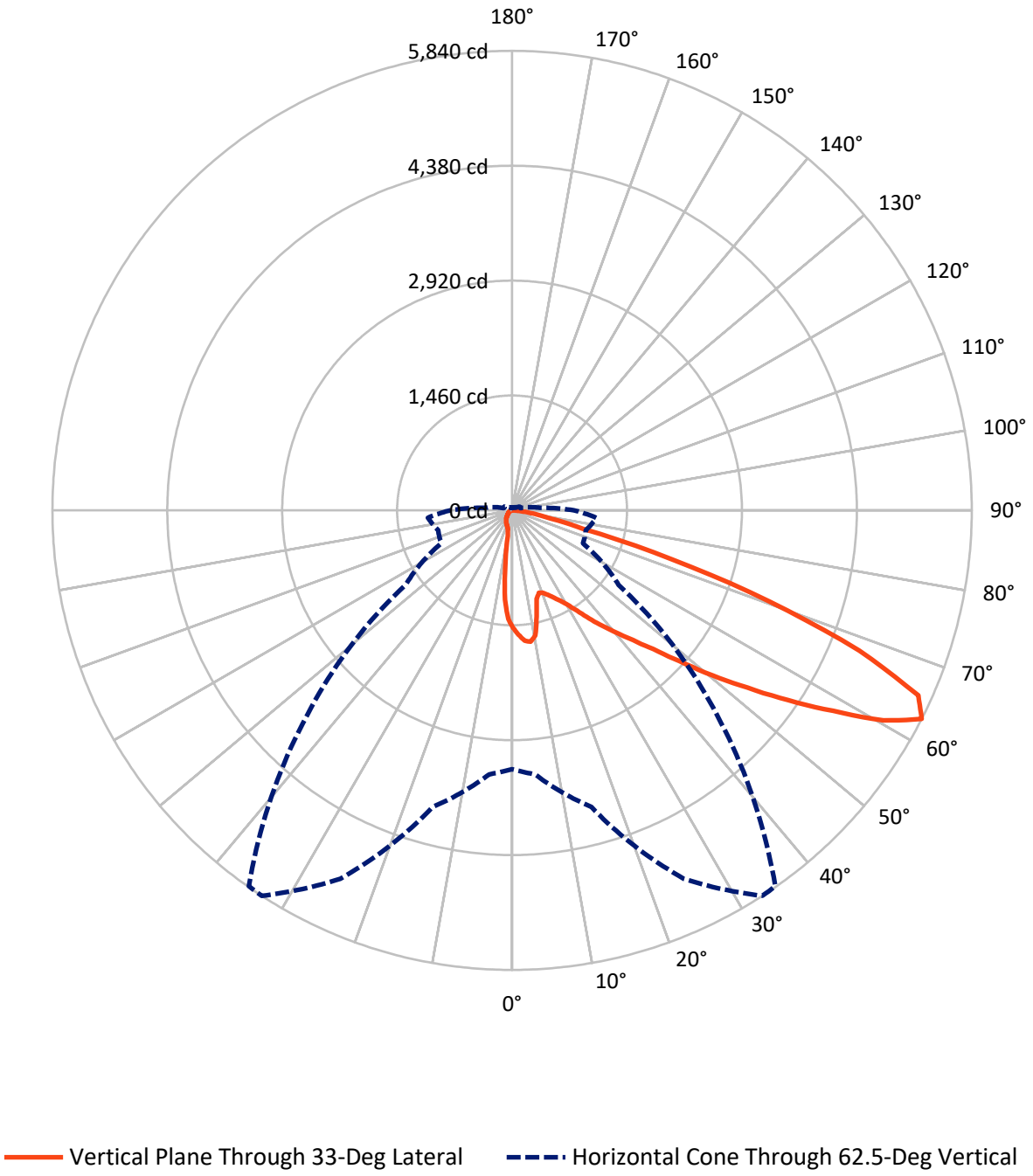

Based on 10 foot mounting height. Maximum calculated value = 17.8 fc
Type III - Short - N/A

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## Luminous Intensity Polar Plot



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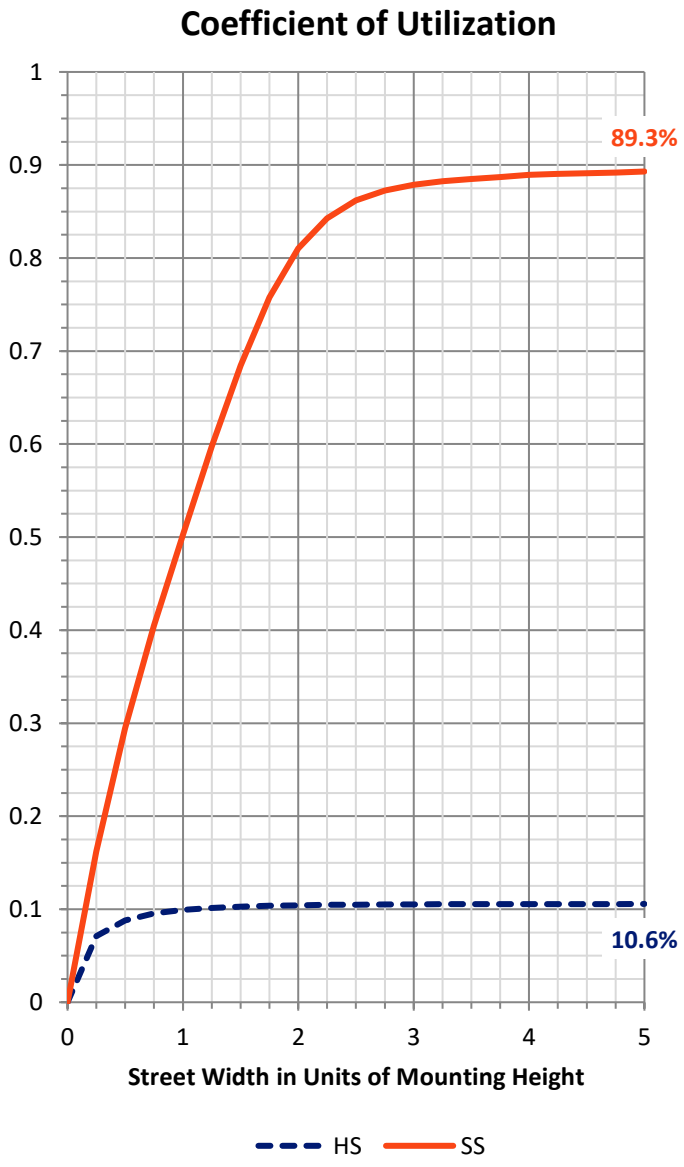
REPORT NUMBER: P1502818
CATALOG NUMBER: GSS-SB2B-935-U-T4LG-HSS

**FLUX DISTRIBUTION:**

| | | Downward | Upward | Total |
|---|---|---|---|---|
| **House Side** | Lumens | 625.7 | 0.0 | 625.7 |
| | % Fixture | 10.6 | 0.0 | 10.6 |
| **Street Side** | Lumens | 5254.1 | 0.0 | 5254.1 |
| | % Fixture | 89.4 | 0.0 | 89.4 |
| **Total** | Lumens | 5879.7 | 0.0 | 5879.7 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

**ZONAL LUMENS:**

| Zone | Lumens | % Fixture |
|---|---|---|
| 0°-10° | 127.0 | 2.2 |
| 10°-20° | 283.3 | 4.8 |
| 20°-30° | 456.7 | 7.8 |
| 30°-40° | 759.7 | 12.9 |
| 40°-50° | 1200.8 | 20.4 |
| 50°-60° | 1613.2 | 27.4 |
| 60°-70° | 1184.3 | 20.1 |
| 70°-80° | 234.4 | 4.0 |
| 80°-90° | 20.4 | 0.3 |
| 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° | 5879.7 | 100.0 |
| 0°-180° | 5879.7 | 100.0 |



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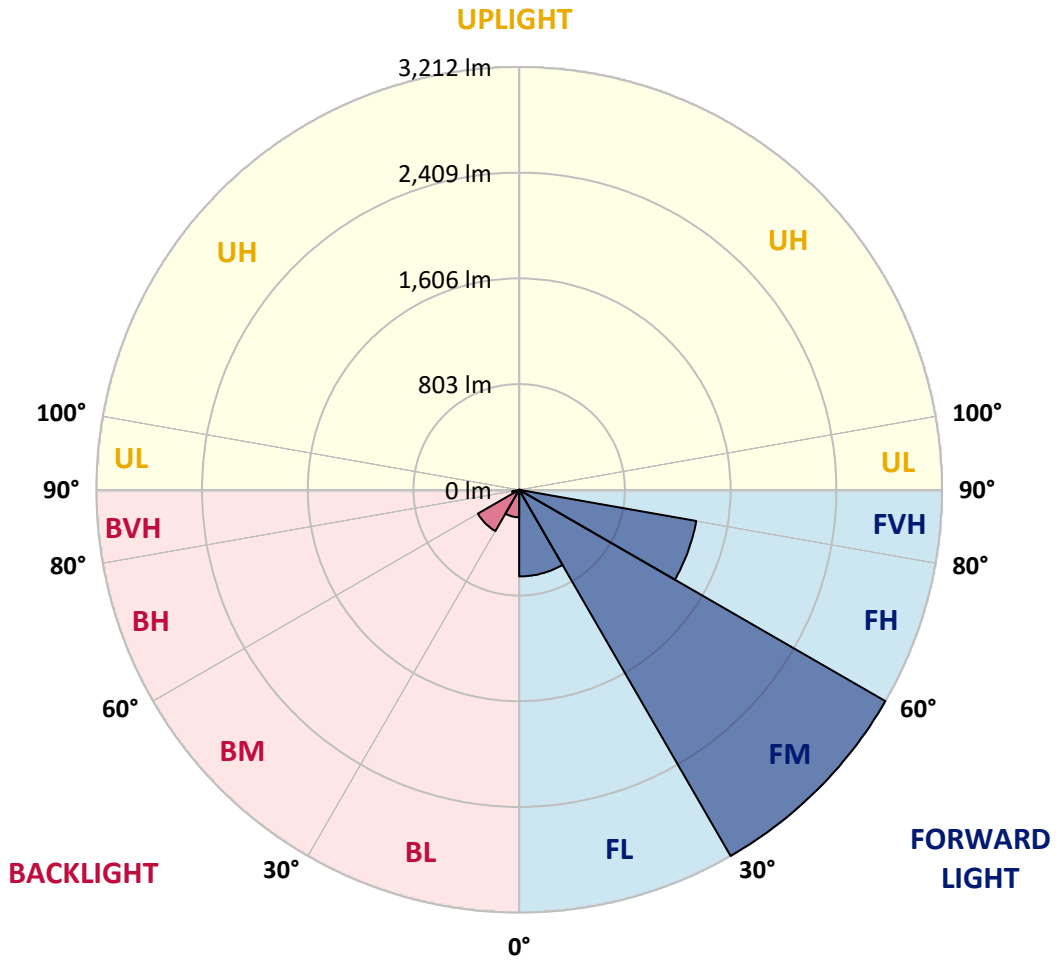
Scaled Data Report

REPORT NUMBER: P1502818
CATALOG NUMBER: GSS-SB2B-935-U-T4LG-HSS

## LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit B | U | G |
|---|---|---|---|---|---|---|
| FL | (0°-30°) | 658.3 | 11.2 | | | |
| FM | (30°-60°) | 3211.8 | 54.6 | | | |
| FH | (60°-80°) | 1365.2 | 23.2 | | | G1/1800 |
| FVH | (80°-90°) | 18.8 | 0.3 | | | G1/100 |
| BL | (0°-30°) | 208.7 | 3.6 | B1/500 | | |
| BM | (30°-60°) | 361.9 | 6.2 | B1/1000 | | |
| BH | (60°-80°) | 53.5 | 0.9 | B0/110 | | G0/110 |
| BVH | (80°-90°) | 1.5 | 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-G1**
Type III Short



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**CANDELA DISTRIBUTION (FULL):**

| | 0° | 5° | 15° | 25° | 33° | 35° | 45° | 55° | 65° | 75° | 85° |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0° | 1493.5 | 1493.5 | 1493.5 | 1493.5 | *1493.5* | 1493.5 | 1493.5 | 1493.5 | 1493.5 | 1493.5 | 1493.5 |
| 2.5° | 1591.2 | 1597.8 | 1597.8 | 1584.6 | *1581.3* | 1574.6 | 1568.0 | 1566.4 | 1544.8 | 1528.3 | 1511.7 |
| 5° | 1672.3 | 1670.7 | 1669.0 | 1662.4 | *1664.1* | 1655.8 | 1650.8 | 1642.5 | 1606.1 | 1581.3 | 1536.6 |
| 7.5° | 1637.6 | 1652.5 | 1659.1 | 1677.3 | *1685.6* | 1683.9 | 1697.2 | 1700.5 | 1669.0 | 1634.3 | 1566.4 |
| 10° | 1410.7 | 1402.4 | 1462.1 | 1539.9 | *1617.7* | 1635.9 | 1707.1 | 1745.2 | 1733.6 | 1702.1 | 1614.4 |
| 12.5° | 1117.7 | 1125.9 | 1167.3 | 1258.4 | *1385.9* | 1425.6 | 1630.9 | 1781.6 | 1814.7 | 1794.9 | 1680.6 |
| 15° | 1023.3 | 1023.3 | 1044.8 | 1087.8 | *1164.0* | 1202.1 | 1455.4 | 1776.7 | 1900.8 | 1902.5 | 1763.4 |
| 17.5° | 1003.4 | 1006.7 | 1024.9 | 1053.1 | *1102.8* | 1119.3 | 1296.5 | 1703.8 | 1985.3 | 2015.1 | 1856.1 |
| 20° | 1006.7 | 1011.7 | 1031.6 | 1071.3 | *1119.3* | 1139.2 | 1255.1 | 1611.1 | 2056.5 | 2137.6 | 1953.8 |
| 22.5° | 1018.3 | 1016.6 | 1051.4 | 1104.4 | *1165.7* | 1183.9 | 1289.9 | 1573.0 | 2116.1 | 2278.4 | 2068.1 |
| 25° | 1031.6 | 1033.2 | 1077.9 | 1152.4 | *1226.9* | 1248.5 | 1367.7 | 1607.8 | 2159.1 | 2429.0 | 2184.0 |
| 27.5° | 1071.3 | 1076.3 | 1130.9 | 1212.0 | *1299.8* | 1327.9 | 1468.7 | 1698.8 | 2233.6 | 2574.7 | 2309.8 |
| 30° | 1132.6 | 1137.5 | 1200.4 | 1298.1 | *1392.5* | 1435.6 | 1594.5 | 1813.1 | 2344.6 | 2743.6 | 2439.0 |
| 32.5° | 1203.8 | 1210.4 | 1291.5 | 1404.1 | *1518.4* | 1559.7 | 1738.6 | 1986.9 | 2492.0 | 2915.8 | 2573.1 |
| 35° | 1293.2 | 1311.4 | 1399.1 | 1533.3 | *1687.2* | 1727.0 | 1915.7 | 2184.0 | 2684.0 | 3069.8 | 2687.3 |
| 37.5° | 1415.7 | 1430.6 | 1538.2 | 1705.5 | *1861.1* | 1914.1 | 2114.4 | 2390.9 | 2857.9 | 3207.2 | 2780.1 |
| 40° | 1564.7 | 1578.0 | 1698.8 | 1881.0 | *2043.2* | 2087.9 | 2323.1 | 2599.6 | 3045.0 | 3283.4 | 2799.9 |
| 42.5° | 1813.1 | 1849.5 | 1925.7 | 2079.7 | *2253.5* | 2309.8 | 2554.9 | 2801.6 | 3180.8 | 3298.3 | 2768.5 |
| 45° | 2246.9 | 2258.5 | 2275.0 | 2347.9 | *2515.1* | 2564.8 | 2799.9 | 2977.1 | 3261.9 | 3301.6 | 2740.3 |
| 47.5° | 2662.5 | 2702.2 | 2725.4 | 2758.5 | *2859.5* | 2877.7 | 3056.6 | 3134.4 | 3326.5 | 3290.0 | 2740.3 |
| 50° | 3078.1 | 3107.9 | 3147.6 | 3187.4 | *3295.0* | 3301.6 | 3328.1 | 3240.4 | 3329.8 | 3195.7 | 2723.8 |
| 52.5° | 3455.6 | 3465.6 | 3533.4 | 3609.6 | *3743.7* | 3780.1 | 3579.8 | 3318.2 | 3129.4 | 2897.6 | 2645.9 |
| 55° | 3793.4 | 3806.6 | 3909.3 | 4064.9 | *4257.0* | 4305.0 | 3887.8 | 3167.5 | 2700.6 | 2511.8 | 2465.5 |
| 57.5° | 4012.0 | 4043.4 | 4248.7 | 4591.5 | *4808.4* | 4786.9 | 4126.2 | 2814.8 | 2169.1 | 2054.8 | 2145.9 |
| 60° | 3902.7 | 3945.7 | 4377.9 | 5033.6 | *5419.4* | 5356.5 | 4060.0 | 2316.4 | 1602.8 | 1520.0 | 1698.8 |
| 62.5° | *3288.4* | *3367.9* | *3902.7* | *5164.4* | *5839.9* | *5830.0* | *3685.8* | *1652.5* | *993.5* | *971.9* | *1072.9* |
| 65° | 2286.6 | 2424.1 | 3058.2 | 4727.3 | *5671.1* | 5686.0 | 3102.9 | 962.0 | 460.3 | 571.2 | 627.5 |
| 67.5° | 1347.8 | 1445.5 | 1970.4 | 3859.6 | *4758.7* | 4621.3 | 2109.5 | 445.4 | 230.2 | 347.7 | 332.8 |
| 70° | 592.8 | 659.0 | 1129.2 | 2674.1 | *3467.2* | 3245.3 | 1029.9 | 216.9 | 175.5 | 210.3 | 183.8 |
| 72.5° | 326.2 | 356.0 | 594.4 | 1412.4 | *2109.5* | 2005.2 | 347.7 | 144.1 | 150.7 | 157.3 | 132.5 |
| 75° | 182.1 | 195.4 | 312.9 | 816.3 | *927.2* | 862.7 | 168.9 | 94.4 | 127.5 | 127.5 | 97.7 |
| 77.5° | 106.0 | 117.6 | 195.4 | 508.3 | *508.3* | 410.6 | 102.7 | 59.6 | 96.0 | 86.1 | 53.0 |
| 80° | 49.7 | 56.3 | 107.6 | 281.5 | *321.2* | 264.9 | 58.0 | 41.4 | 62.9 | 54.6 | 34.8 |
| 82.5° | 14.9 | 18.2 | 53.0 | 109.3 | *182.1* | 155.6 | 29.8 | 26.5 | 46.4 | 34.8 | 19.9 |
| 85° | 9.9 | 11.6 | 26.5 | 44.7 | *89.4* | 77.8 | 9.9 | 8.3 | 19.9 | 16.6 | 8.3 |
| 87.5° | 1.7 | 1.7 | 3.3 | 3.3 | *3.3* | 3.3 | 1.7 | 1.7 | 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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Scaled Data Report

REPORT NUMBER: P1502818
CATALOG NUMBER: GSS-SB2B-935-U-T4LG-HSS

**CANDELA DISTRIBUTION (continued):**

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0° | 1493.5 | 1493.5 | 1493.5 | 1493.5 | 1493.5 | 1493.5 | 1493.5 | 1493.5 | 1493.5 | 1493.5 | 1493.5 |
| 2.5° | 1501.8 | 1490.2 | 1463.7 | 1438.9 | 1425.6 | 1395.8 | 1384.2 | 1371.0 | 1364.4 | 1362.7 | 1352.8 |
| 5° | 1508.4 | 1486.9 | 1420.7 | 1354.4 | 1284.9 | 1218.7 | 1150.8 | 1091.2 | 1043.1 | 1044.8 | 1046.5 |
| 7.5° | 1528.3 | 1485.2 | 1369.3 | 1236.9 | 1087.8 | 915.6 | 731.9 | 594.4 | 506.7 | 488.5 | 471.9 |
| 10° | 1554.8 | 1491.9 | 1306.4 | 1061.4 | 768.3 | 483.5 | 341.1 | 291.4 | 269.9 | 264.9 | 266.6 |
| 12.5° | 1604.5 | 1508.4 | 1226.9 | 819.6 | 425.5 | 278.2 | 246.7 | 238.4 | 235.1 | 235.1 | 235.1 |
| 15° | 1665.7 | 1531.6 | 1102.8 | 536.5 | 278.2 | 231.8 | 225.2 | 223.5 | 220.2 | 220.2 | 221.9 |
| 17.5° | 1717.0 | 1531.6 | 938.8 | 349.4 | 228.5 | 215.3 | 210.3 | 208.6 | 208.6 | 210.3 | 208.6 |
| 20° | 1773.3 | 1520.0 | 755.0 | 263.3 | 211.9 | 200.3 | 197.0 | 197.0 | 197.0 | 198.7 | 198.7 |
| 22.5° | 1831.3 | 1500.1 | 584.5 | 225.2 | 197.0 | 187.1 | 185.4 | 187.1 | 188.8 | 190.4 | 190.4 |
| 25° | 1895.9 | 1475.3 | 462.0 | 208.6 | 183.8 | 175.5 | 175.5 | 175.5 | 177.2 | 180.5 | 182.1 |
| 27.5° | 1967.1 | 1453.8 | 395.7 | 198.7 | 172.2 | 163.9 | 163.9 | 165.6 | 168.9 | 170.5 | 172.2 |
| 30° | 2033.3 | 1453.8 | 374.2 | 203.7 | 167.2 | 157.3 | 154.0 | 155.6 | 159.0 | 162.3 | 162.3 |
| 32.5° | 2116.1 | 1470.3 | 385.8 | 225.2 | 165.6 | 147.4 | 144.1 | 144.1 | 147.4 | 149.0 | 149.0 |
| 35° | 2185.6 | 1501.8 | 425.5 | 255.0 | 172.2 | 139.1 | 132.5 | 130.8 | 134.1 | 132.5 | 134.1 |
| 37.5° | 2241.9 | 1544.8 | 498.4 | 294.7 | 185.4 | 129.2 | 120.9 | 115.9 | 115.9 | 115.9 | 115.9 |
| 40° | 2258.5 | 1587.9 | 591.1 | 321.2 | 183.8 | 117.6 | 106.0 | 101.0 | 99.3 | 97.7 | 97.7 |
| 42.5° | 2235.3 | 1607.8 | 665.6 | 319.6 | 163.9 | 109.3 | 94.4 | 87.8 | 82.8 | 81.1 | 81.1 |
| 45° | 2217.1 | 1617.7 | 692.1 | 278.2 | 149.0 | 99.3 | 84.4 | 76.2 | 71.2 | 69.5 | 67.9 |
| 47.5° | 2218.7 | 1627.6 | 652.4 | 226.8 | 135.8 | 91.1 | 76.2 | 67.9 | 62.9 | 61.3 | 59.6 |
| 50° | 2225.4 | 1611.1 | 553.0 | 188.8 | 124.2 | 82.8 | 67.9 | 61.3 | 56.3 | 54.6 | 53.0 |
| 52.5° | 2155.8 | 1523.3 | 389.1 | 165.6 | 114.2 | 77.8 | 61.3 | 56.3 | 51.3 | 49.7 | 49.7 |
| 55° | 1973.7 | 1313.0 | 263.3 | 147.4 | 106.0 | 71.2 | 56.3 | 53.0 | 48.0 | 44.7 | 44.7 |
| 57.5° | 1682.3 | 990.2 | 182.1 | 134.1 | 92.7 | 64.6 | 53.0 | 48.0 | 43.1 | 39.7 | 39.7 |
| 60° | 1286.5 | 645.8 | 132.5 | 122.5 | 76.2 | 59.6 | 49.7 | 46.4 | 39.7 | 36.4 | 34.8 |
| 62.5° | *783.2* | *362.6* | *107.6* | *107.6* | *64.6* | *56.3* | *44.7* | *41.4* | *34.8* | *29.8* | *28.1* |
| 65° | 453.7 | 213.6 | 87.8 | 91.1 | 56.3 | 51.3 | 39.7 | 34.8 | 28.1 | 23.2 | 21.5 |
| 67.5° | 218.6 | 124.2 | 69.5 | 64.6 | 49.7 | 43.1 | 34.8 | 29.8 | 24.8 | 19.9 | 18.2 |
| 70° | 134.1 | 96.0 | 53.0 | 46.4 | 39.7 | 33.1 | 28.1 | 26.5 | 21.5 | 16.6 | 16.6 |
| 72.5° | 109.3 | 77.8 | 41.4 | 33.1 | 29.8 | 23.2 | 23.2 | 21.5 | 16.6 | 13.2 | 11.6 |
| 75° | 86.1 | 58.0 | 31.5 | 23.2 | 18.2 | 18.2 | 16.6 | 14.9 | 13.2 | 9.9 | 9.9 |
| 77.5° | 46.4 | 39.7 | 23.2 | 13.2 | 9.9 | 11.6 | 11.6 | 9.9 | 8.3 | 6.6 | 6.6 |
| 80° | 29.8 | 23.2 | 13.2 | 6.6 | 6.6 | 6.6 | 6.6 | 5.0 | 5.0 | 3.3 | 3.3 |
| 82.5° | 14.9 | 11.6 | 6.6 | 1.7 | 3.3 | 3.3 | 3.3 | 3.3 | 3.3 | 1.7 | 1.7 |
| 85° | 3.3 | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 |
| 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-79-08: Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

McGRAW-EDISON

Report Number: SP1-2106-271-3

Luminaire Tested: GFLD-SA1-A-935-U-WR-X-BK

Test Date: 06/15/2021

Report Generated By FNC07603 / LDUCLS01DT446
Version: v6.09

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## Test Information

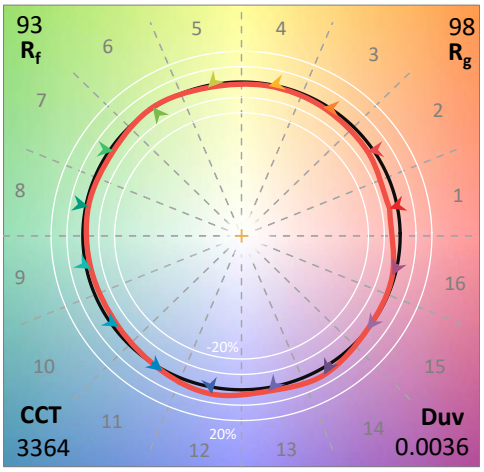
| | |
|---|---|
| Test Method: | LM-79-08 |
| Report Number: | SP1-2106-271-3 |
| Test Lab: | COOPER LIGHTING SOLUTIONS |
| Photometer: | SP1 |
| Measurement Geometry: | 4π |
| Issue Date: | 06/15/2021 |
| Manufacturer: | COOPER LIGHTING SOLUTIONS (FORMERLY EATON) |
| Product Line: | McGRAW-EDISON |
| Catalog Number: | **GFLD-SA1-A-935-U-WR-X-BK** |
| Description: | MCGRAW EDISON |

N6, BLACK

## Spectral Parameters

| | | | | | |
|---|---|---|---|---|---|
| CCT (K): | 3364 | CRI (Ra): | 92.0 | | |
| CIE u': | 0.2376 | R1: | 91.7 | R9: | 59.7 |
| CIE v': | 0.5188 | R2: | 94.0 | R10: | 85.2 |
| Duv: | 0.0036 | R3: | 95.5 | R11: | 92.8 |
| CIE x: | 0.4173 | R4: | 93.0 | R12: | 78.2 |
| CIE y: | 0.4050 | R5: | 90.9 | R13: | 92.0 |
| CIE z: | 0.1777 | R6: | 92.2 | R14: | 96.9 |
| Peak Wavelength (nm): | 622 | R7: | 94.8 | | |
| Dominant Wavelength (nm): | 580 | R8: | 84.1 | | |
| Purity: | 46.9 | | | | |

| | |
|---|---|
| Rf: | 92.6 |
| Rg: | 98.3 |




## Test Conditions

| | |
|---|---|
| Stabilization Time: | 76M |
| Operation Time: | 12H |
| Room Temperature (°C) / RH%: | 24.8/44% |
| Sphere Temperature (°C): | 24.9 |

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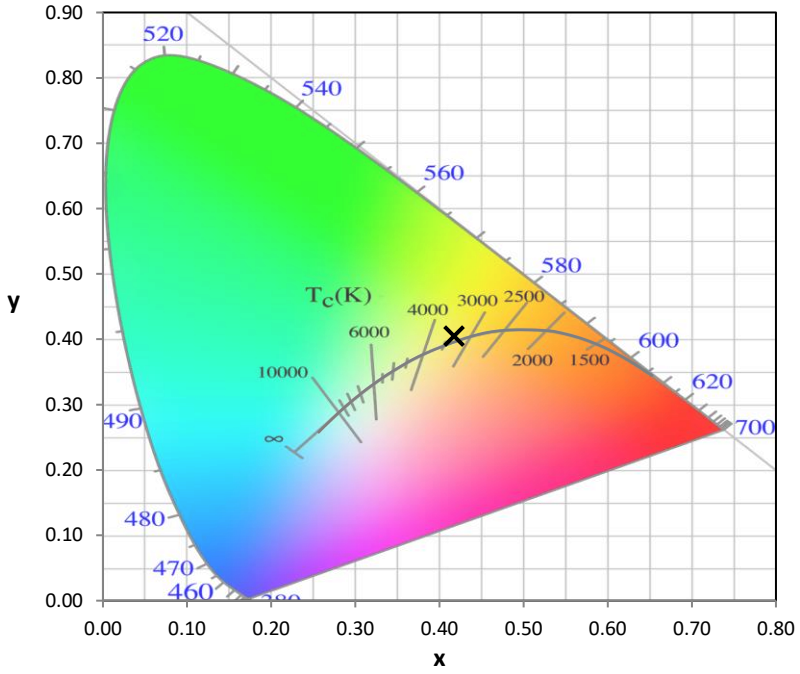
REPORT NUMBER: SP1-2106-271-3

| Measurement and Test Equipment | | | |
|---|---|---|---|
| Instrument | Identification Number | Calibration Date | Calibration Due Date |
| Photometer | 76INCH SPHERE IN0058 | 1/31/2021 | 7/31/2021 |
| Power Meter | XITRON 2801 IN0071 | 12/1/2020 | 12/1/2021 |
| AC Power Source | CHROMA 61603 IN0063 | 12/1/2020 | 12/1/2021 |
| DC Power Source | AGILENT E3634A IN0208 | 12/1/2020 | 12/1/2021 |
| Sphere Thermometer | ONSET IN0085 | 12/1/2020 | 12/1/2021 |
| Room Thermometer | ONSET IN0046 | 12/1/2020 | 12/1/2021 |

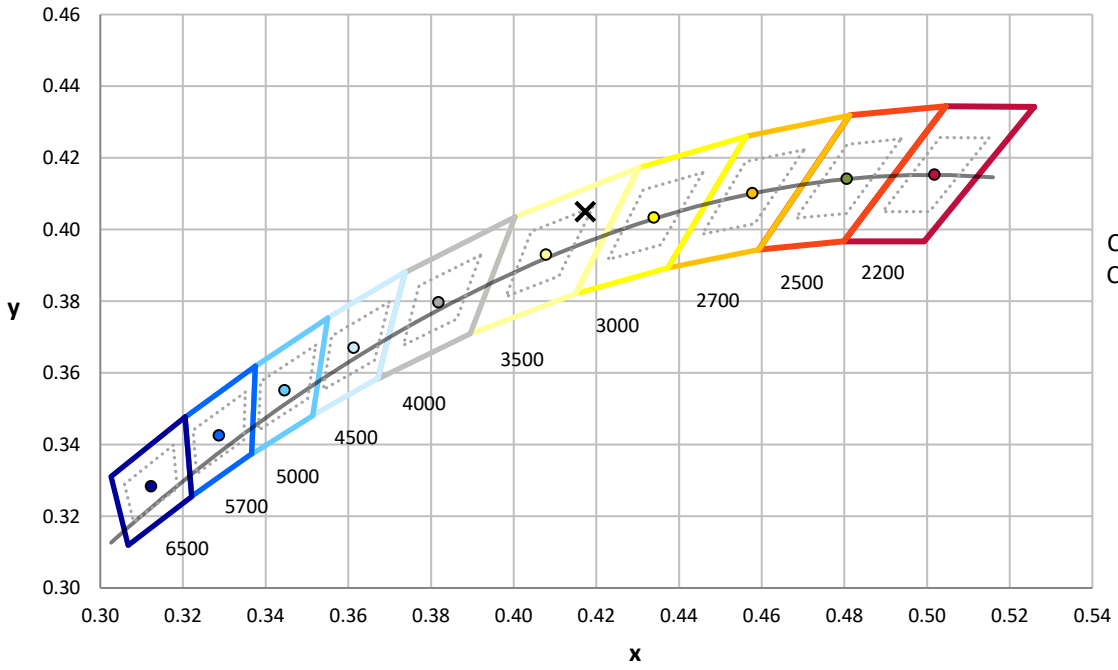
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1121 Highway 74 South
Peachtree City, GA 30269

REPORT NUMBER: SP1-2106-271-3

## CIE 1931 Chromaticity Diagram




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



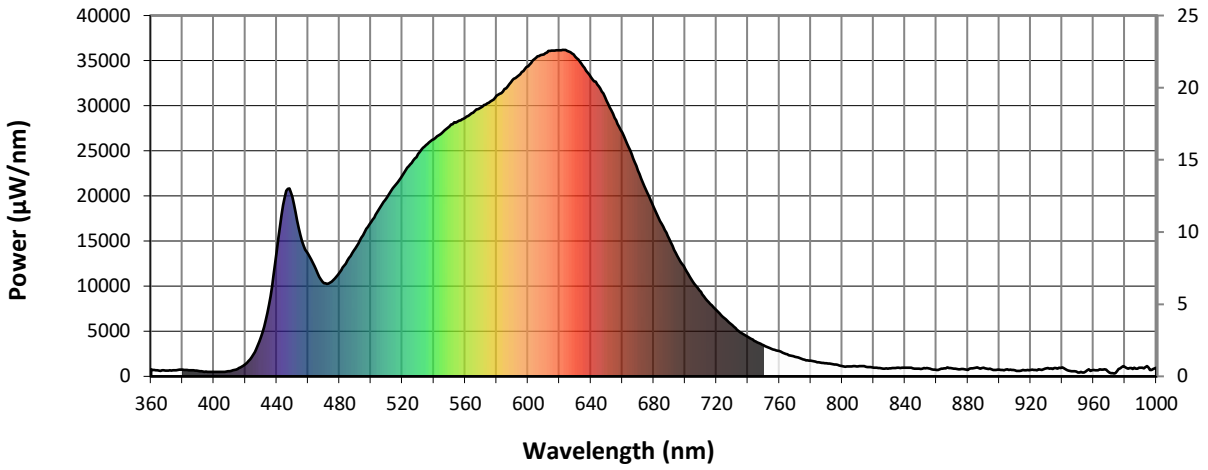

CCT = 3364K
CIE x = 0.4173
CIE y = 0.4050
Duv = 0.0036

Point lies inside the ANSI 3500K 4-step quadrangle

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## Photopic Flux vs. Wavelength



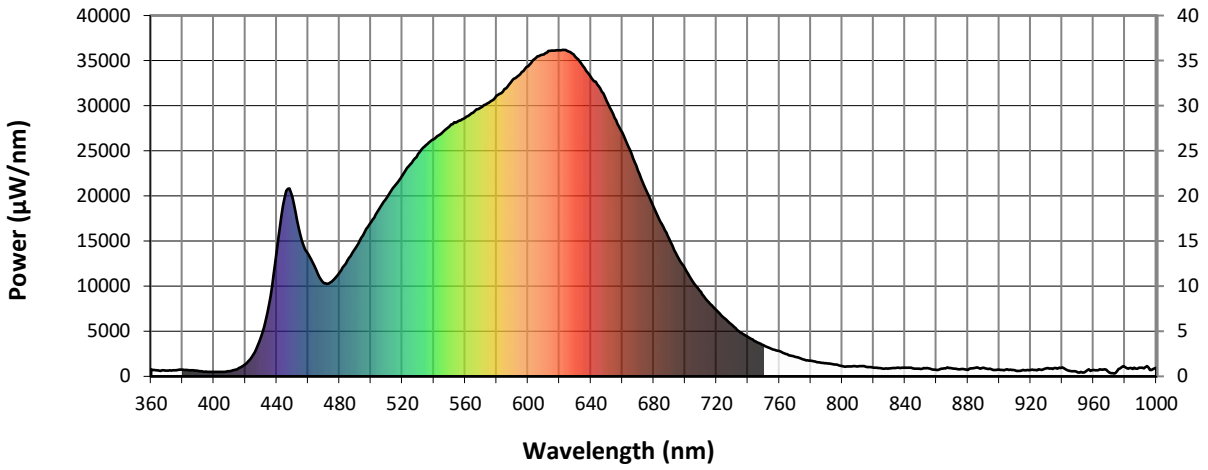

######

| 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 | 792 | NR | 490 | 14205 | NR | 620 | 36151 | NR | 750 | 3427 | NR | 880 | 712 | NR |
| 365 | 640 | NR | 495 | 15647 | NR | 625 | 36077 | NR | 755 | 3047 | NR | 885 | 942 | NR |
| 370 | 630 | NR | 500 | 17088 | NR | 630 | 35451 | NR | 760 | 2790 | NR | 890 | 952 | NR |
| 375 | 684 | NR | 505 | 18475 | NR | 635 | 34417 | NR | 765 | 2433 | NR | 895 | 764 | NR |
| 380 | 731 | NR | 510 | 19780 | NR | 640 | 33166 | NR | 770 | 2178 | NR | 900 | 743 | NR |
| 385 | 664 | NR | 515 | 21055 | NR | 645 | 32124 | NR | 775 | 1893 | NR | 905 | 776 | NR |
| 390 | 595 | NR | 520 | 22268 | NR | 650 | 30559 | NR | 780 | 1724 | NR | 910 | 659 | NR |
| 395 | 520 | NR | 525 | 23497 | NR | 655 | 28656 | NR | 785 | 1549 | NR | 915 | 701 | NR |
| 400 | 491 | NR | 530 | 24653 | NR | 660 | 27033 | NR | 790 | 1451 | NR | 920 | 728 | NR |
| 405 | 489 | NR | 535 | 25661 | NR | 665 | 25030 | NR | 795 | 1317 | NR | 925 | 793 | NR |
| 410 | 585 | NR | 540 | 26289 | NR | 670 | 22820 | NR | 800 | 1124 | NR | 930 | 877 | NR |
| 415 | 826 | NR | 545 | 26945 | NR | 675 | 20678 | NR | 805 | 1116 | NR | 935 | 923 | NR |
| 420 | 1336 | NR | 550 | 27713 | NR | 680 | 18748 | NR | 810 | 1105 | NR | 940 | 1001 | NR |
| 425 | 2406 | NR | 555 | 28230 | NR | 685 | 16904 | NR | 815 | 1073 | NR | 945 | 604 | NR |
| 430 | 4355 | NR | 560 | 28678 | NR | 690 | 15203 | NR | 820 | 977 | NR | 950 | 424 | NR |
| 435 | 7911 | NR | 565 | 29242 | NR | 695 | 13356 | NR | 825 | 882 | NR | 955 | 550 | NR |
| 440 | 13821 | NR | 570 | 29806 | NR | 700 | 11948 | NR | 830 | 875 | NR | 960 | 709 | NR |
| 445 | 19836 | NR | 575 | 30322 | NR | 705 | 10482 | NR | 835 | 944 | NR | 965 | 755 | NR |
| 450 | 19902 | NR | 580 | 31125 | NR | 710 | 9351 | NR | 840 | 956 | NR | 970 | 426 | NR |
| 455 | 15697 | NR | 585 | 31838 | NR | 715 | 8217 | NR | 845 | 875 | NR | 975 | 556 | NR |
| 460 | 13589 | NR | 590 | 32845 | NR | 720 | 7313 | NR | 850 | 801 | NR | 980 | 1040 | NR |
| 465 | 11857 | NR | 595 | 33487 | NR | 725 | 6460 | NR | 855 | 890 | NR | 985 | 833 | NR |
| 470 | 10336 | NR | 600 | 34359 | NR | 730 | 5680 | NR | 860 | 706 | NR | 990 | 964 | NR |
| 475 | 10504 | NR | 605 | 35281 | NR | 735 | 4904 | NR | 865 | 902 | NR | 995 | 953 | NR |
| 480 | 11526 | NR | 610 | 35679 | NR | 740 | 4372 | NR | 870 | 879 | NR | 1000 | 950 | NR |
| 485 | 12831 | NR | 615 | 36113 | NR | 745 | 3858 | NR | 875 | 769 | NR | | | |

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## Scotopic Flux vs. Wavelength



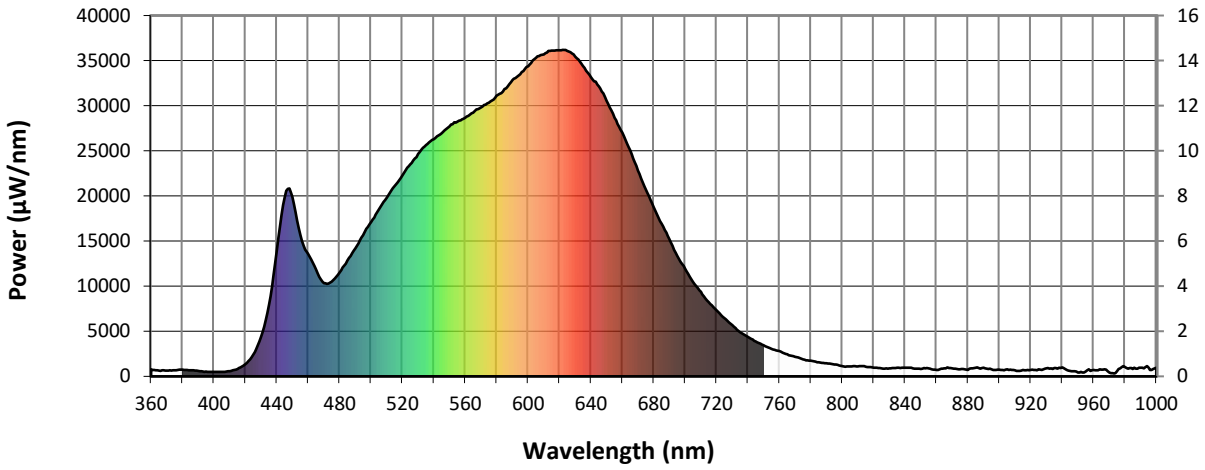

**Scotopic Lumens: 3109.5** **S/P: 1.54**

| 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 | 792 | NR | 490 | 14205 | NR | 620 | 36151 | NR | 750 | 3427 | NR | 880 | 712 | NR |
| 365 | 640 | NR | 495 | 15647 | NR | 625 | 36077 | NR | 755 | 3047 | NR | 885 | 942 | NR |
| 370 | 630 | NR | 500 | 17088 | NR | 630 | 35451 | NR | 760 | 2790 | NR | 890 | 952 | NR |
| 375 | 684 | NR | 505 | 18475 | NR | 635 | 34417 | NR | 765 | 2433 | NR | 895 | 764 | NR |
| 380 | 731 | NR | 510 | 19780 | NR | 640 | 33166 | NR | 770 | 2178 | NR | 900 | 743 | NR |
| 385 | 664 | NR | 515 | 21055 | NR | 645 | 32124 | NR | 775 | 1893 | NR | 905 | 776 | NR |
| 390 | 595 | NR | 520 | 22268 | NR | 650 | 30559 | NR | 780 | 1724 | NR | 910 | 659 | NR |
| 395 | 520 | NR | 525 | 23497 | NR | 655 | 28656 | NR | 785 | 1549 | NR | 915 | 701 | NR |
| 400 | 491 | NR | 530 | 24653 | NR | 660 | 27033 | NR | 790 | 1451 | NR | 920 | 728 | NR |
| 405 | 489 | NR | 535 | 25661 | NR | 665 | 25030 | NR | 795 | 1317 | NR | 925 | 793 | NR |
| 410 | 585 | NR | 540 | 26289 | NR | 670 | 22820 | NR | 800 | 1124 | NR | 930 | 877 | NR |
| 415 | 826 | NR | 545 | 26945 | NR | 675 | 20678 | NR | 805 | 1116 | NR | 935 | 923 | NR |
| 420 | 1336 | NR | 550 | 27713 | NR | 680 | 18748 | NR | 810 | 1105 | NR | 940 | 1001 | NR |
| 425 | 2406 | NR | 555 | 28230 | NR | 685 | 16904 | NR | 815 | 1073 | NR | 945 | 604 | NR |
| 430 | 4355 | NR | 560 | 28678 | NR | 690 | 15203 | NR | 820 | 977 | NR | 950 | 424 | NR |
| 435 | 7911 | NR | 565 | 29242 | NR | 695 | 13356 | NR | 825 | 882 | NR | 955 | 550 | NR |
| 440 | 13821 | NR | 570 | 29806 | NR | 700 | 11948 | NR | 830 | 875 | NR | 960 | 709 | NR |
| 445 | 19836 | NR | 575 | 30322 | NR | 705 | 10482 | NR | 835 | 944 | NR | 965 | 755 | NR |
| 450 | 19902 | NR | 580 | 31125 | NR | 710 | 9351 | NR | 840 | 956 | NR | 970 | 426 | NR |
| 455 | 15697 | NR | 585 | 31838 | NR | 715 | 8217 | NR | 845 | 875 | NR | 975 | 556 | NR |
| 460 | 13589 | NR | 590 | 32845 | NR | 720 | 7313 | NR | 850 | 801 | NR | 980 | 1040 | NR |
| 465 | 11857 | NR | 595 | 33487 | NR | 725 | 6460 | NR | 855 | 890 | NR | 985 | 833 | NR |
| 470 | 10336 | NR | 600 | 34359 | NR | 730 | 5680 | NR | 860 | 706 | NR | 990 | 964 | NR |
| 475 | 10504 | NR | 605 | 35281 | NR | 735 | 4904 | NR | 865 | 902 | NR | 995 | 953 | NR |
| 480 | 11526 | NR | 610 | 35679 | NR | 740 | 4372 | NR | 870 | 879 | NR | 1000 | 950 | NR |
| 485 | 12831 | NR | 615 | 36113 | NR | 745 | 3858 | NR | 875 | 769 | NR | | | |

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## Melanopic Flux vs. Wavelength




**Melanopic Lumens: 1210.8** **S/P: 0.6**

| 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 | 792 | NR | 490 | 14205 | NR | 620 | 36151 | NR | 750 | 3427 | NR | 880 | 712 | NR |
| 365 | 640 | NR | 495 | 15647 | NR | 625 | 36077 | NR | 755 | 3047 | NR | 885 | 942 | NR |
| 370 | 630 | NR | 500 | 17088 | NR | 630 | 35451 | NR | 760 | 2790 | NR | 890 | 952 | NR |
| 375 | 684 | NR | 505 | 18475 | NR | 635 | 34417 | NR | 765 | 2433 | NR | 895 | 764 | NR |
| 380 | 731 | NR | 510 | 19780 | NR | 640 | 33166 | NR | 770 | 2178 | NR | 900 | 743 | NR |
| 385 | 664 | NR | 515 | 21055 | NR | 645 | 32124 | NR | 775 | 1893 | NR | 905 | 776 | NR |
| 390 | 595 | NR | 520 | 22268 | NR | 650 | 30559 | NR | 780 | 1724 | NR | 910 | 659 | NR |
| 395 | 520 | NR | 525 | 23497 | NR | 655 | 28656 | NR | 785 | 1549 | NR | 915 | 701 | NR |
| 400 | 491 | NR | 530 | 24653 | NR | 660 | 27033 | NR | 790 | 1451 | NR | 920 | 728 | NR |
| 405 | 489 | NR | 535 | 25661 | NR | 665 | 25030 | NR | 795 | 1317 | NR | 925 | 793 | NR |
| 410 | 585 | NR | 540 | 26289 | NR | 670 | 22820 | NR | 800 | 1124 | NR | 930 | 877 | NR |
| 415 | 826 | NR | 545 | 26945 | NR | 675 | 20678 | NR | 805 | 1116 | NR | 935 | 923 | NR |
| 420 | 1336 | NR | 550 | 27713 | NR | 680 | 18748 | NR | 810 | 1105 | NR | 940 | 1001 | NR |
| 425 | 2406 | NR | 555 | 28230 | NR | 685 | 16904 | NR | 815 | 1073 | NR | 945 | 604 | NR |
| 430 | 4355 | NR | 560 | 28678 | NR | 690 | 15203 | NR | 820 | 977 | NR | 950 | 424 | NR |
| 435 | 7911 | NR | 565 | 29242 | NR | 695 | 13356 | NR | 825 | 882 | NR | 955 | 550 | NR |
| 440 | 13821 | NR | 570 | 29806 | NR | 700 | 11948 | NR | 830 | 875 | NR | 960 | 709 | NR |
| 445 | 19836 | NR | 575 | 30322 | NR | 705 | 10482 | NR | 835 | 944 | NR | 965 | 755 | NR |
| 450 | 19902 | NR | 580 | 31125 | NR | 710 | 9351 | NR | 840 | 956 | NR | 970 | 426 | NR |
| 455 | 15697 | NR | 585 | 31838 | NR | 715 | 8217 | NR | 845 | 875 | NR | 975 | 556 | NR |
| 460 | 13589 | NR | 590 | 32845 | NR | 720 | 7313 | NR | 850 | 801 | NR | 980 | 1040 | NR |
| 465 | 11857 | NR | 595 | 33487 | NR | 725 | 6460 | NR | 855 | 890 | NR | 985 | 833 | NR |
| 470 | 10336 | NR | 600 | 34359 | NR | 730 | 5680 | NR | 860 | 706 | NR | 990 | 964 | NR |
| 475 | 10504 | NR | 605 | 35281 | NR | 735 | 4904 | NR | 865 | 902 | NR | 995 | 953 | NR |
| 480 | 11526 | NR | 610 | 35679 | NR | 740 | 4372 | NR | 870 | 879 | NR | 1000 | 950 | NR |
| 485 | 12831 | NR | 615 | 36113 | NR | 745 | 3858 | NR | 875 | 769 | NR | | | |

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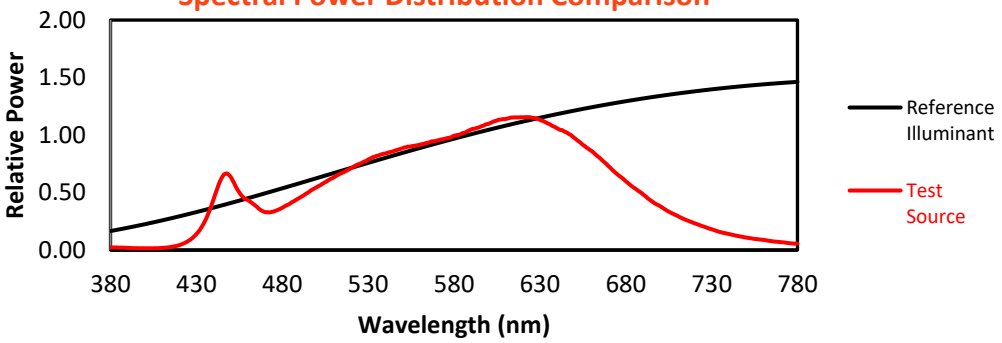
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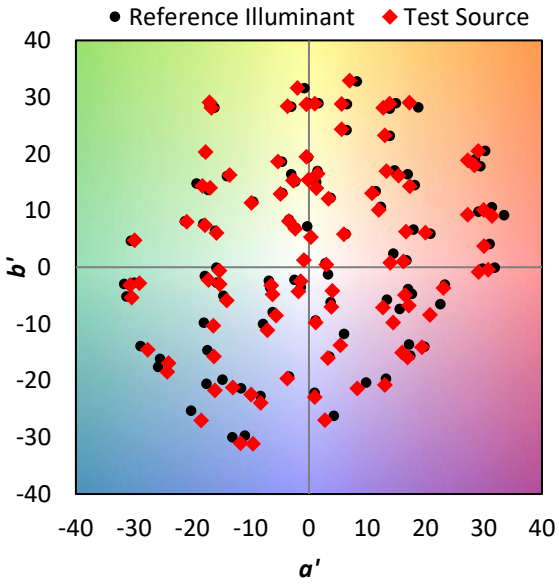
## Summary

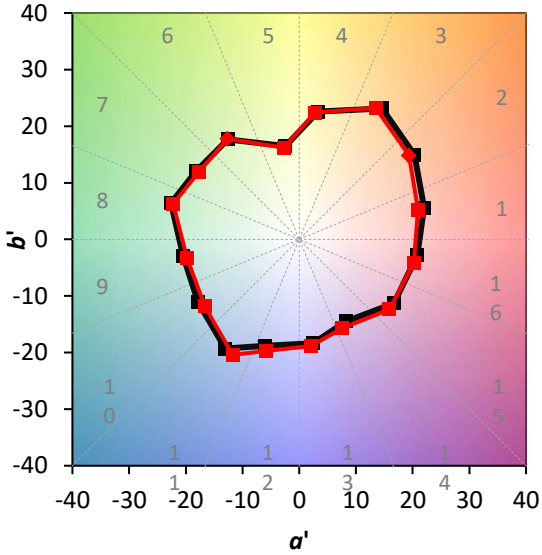
$R_f$ = 92.6
$R_g$ = 98.3
CIE $R_a$ = 92.0
$R_9$ = 59.7

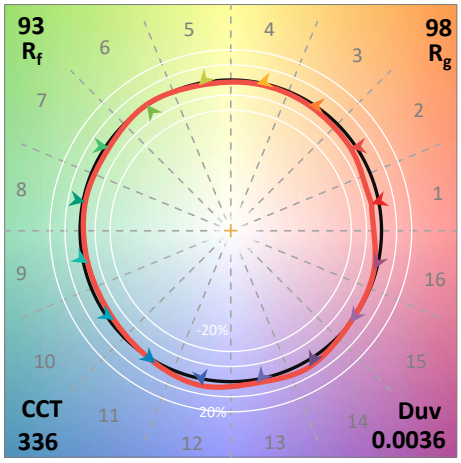
## Spectral Power Distribution Comparison

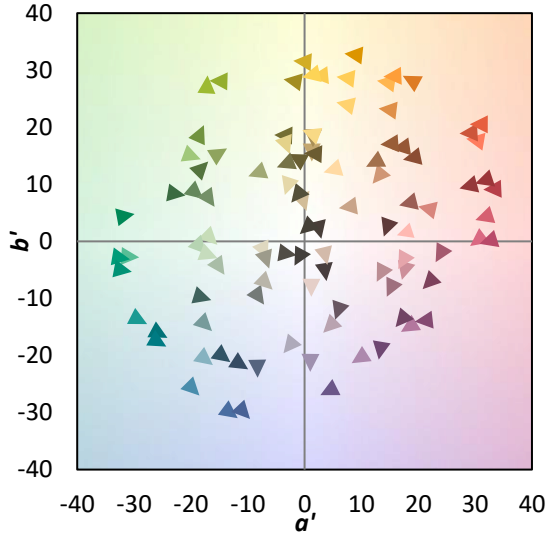



## Color Vector Graphics



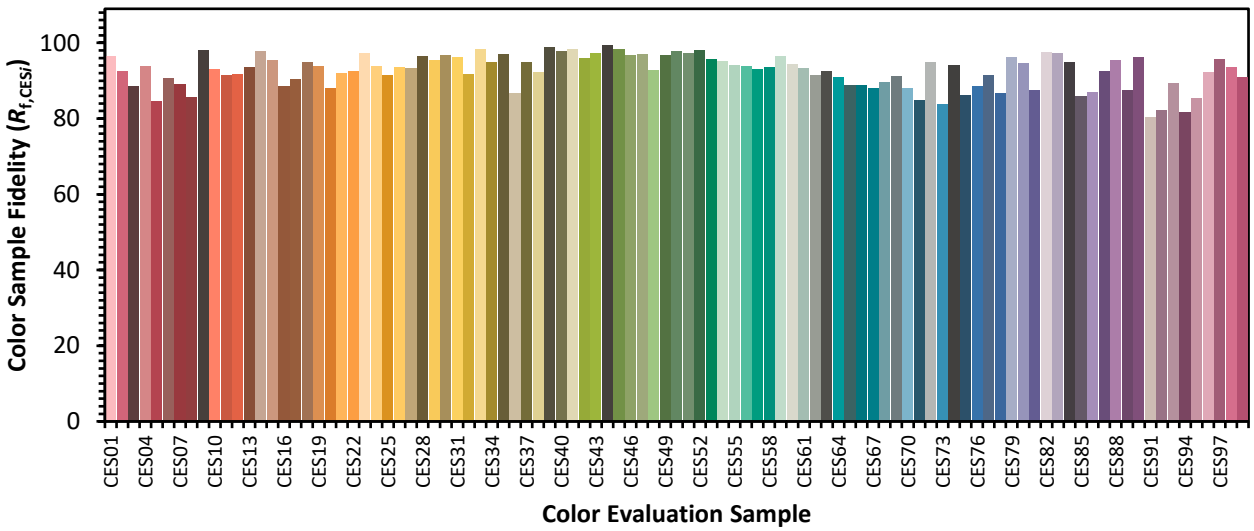
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Peachtree City, GA 30269

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

| | | | |
|---|---|---|---|
| CES01 = 86 | CES26 = 94 | CES51 = 97 | CES76 = 88 |
| CES02 = 62 | CES27 = 93 | CES52 = 98 | CES77 = 91 |
| CES03 = 31 | CES28 = 96 | CES53 = 96 | CES78 = 87 |
| CES04 = 70 | CES29 = 96 | CES54 = 95 | CES79 = 96 |
| CES05 = 50 | CES30 = 97 | CES55 = 94 | CES80 = 95 |
| CES06 = 51 | CES31 = 96 | CES56 = 94 | CES81 = 88 |
| CES07 = 42 | CES32 = 92 | CES57 = 93 | CES82 = 98 |
| CES08 = 41 | CES33 = 98 | CES58 = 94 | CES83 = 97 |
| CES09 = 29 | CES34 = 95 | CES59 = 96 | CES84 = 95 |
| CES10 = 75 | CES35 = 97 | CES60 = 94 | CES85 = 86 |
| CES11 = 58 | CES36 = 87 | CES61 = 93 | CES86 = 87 |
| CES12 = 64 | CES37 = 95 | CES62 = 91 | CES87 = 92 |
| CES13 = 43 | CES38 = 92 | CES63 = 93 | CES88 = 96 |
| CES14 = 74 | CES39 = 99 | CES64 = 91 | CES89 = 87 |
| CES15 = 71 | CES40 = 98 | CES65 = 89 | CES90 = 96 |
| CES16 = 48 | CES41 = 98 | CES66 = 89 | CES91 = 80 |
| CES17 = 49 | CES42 = 96 | CES67 = 88 | CES92 = 82 |
| CES18 = 56 | CES43 = 97 | CES68 = 90 | CES93 = 89 |
| CES19 = 71 | CES44 = 99 | CES69 = 91 | CES94 = 82 |
| CES20 = 66 | CES45 = 98 | CES70 = 88 | CES95 = 85 |
| CES21 = 86 | CES46 = 97 | CES71 = 85 | CES96 = 92 |
| CES22 = 78 | CES47 = 97 | CES72 = 95 | CES97 = 96 |
| CES23 = 91 | CES48 = 93 | CES73 = 84 | CES98 = 94 |
| CES24 = 90 | CES49 = 97 | CES74 = 94 | CES99 = 91 |
| CES25 = 71 | CES50 = 98 | CES75 = 86 | |

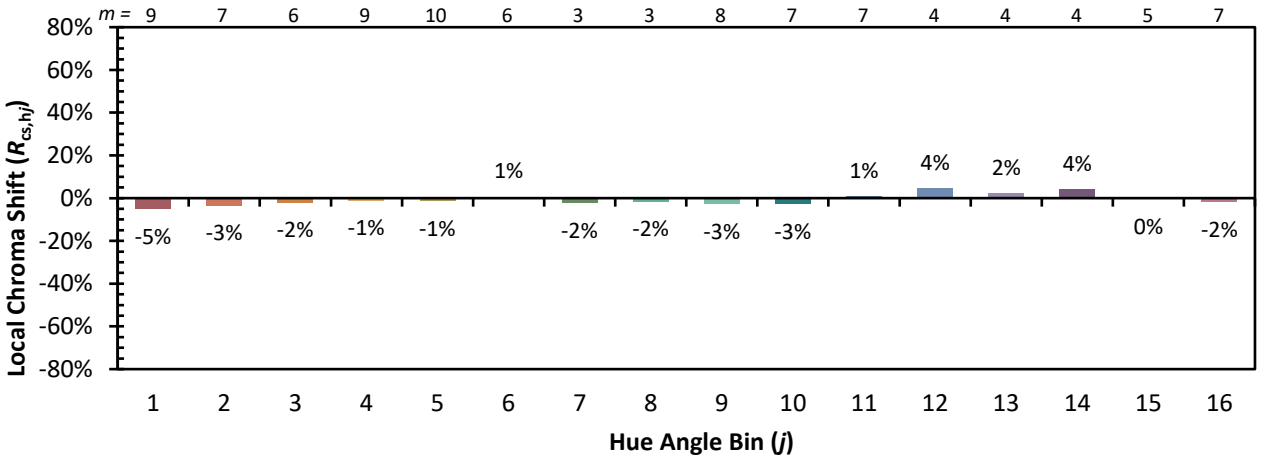


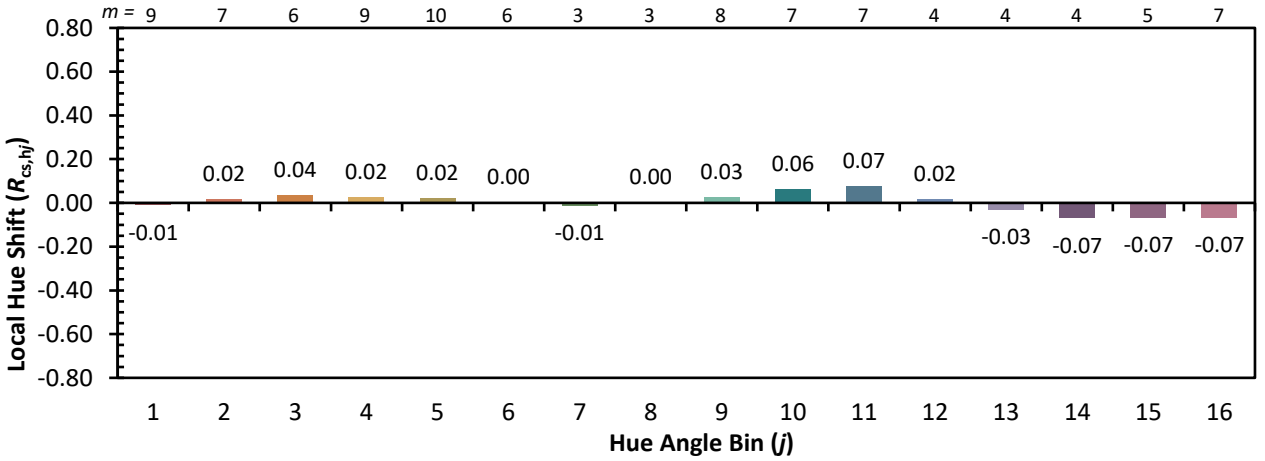
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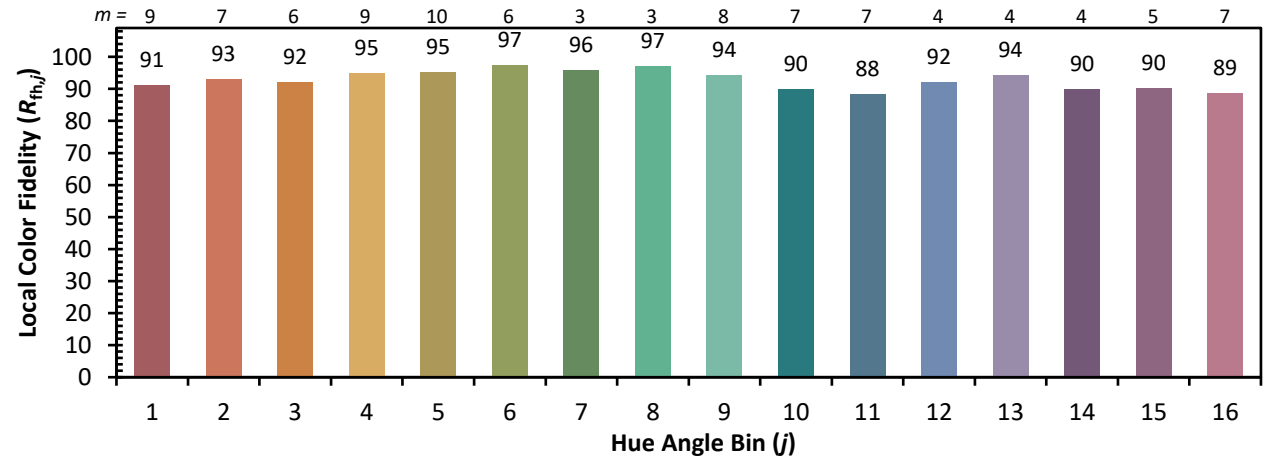
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### Color Rendition by Hue-Angle Bin



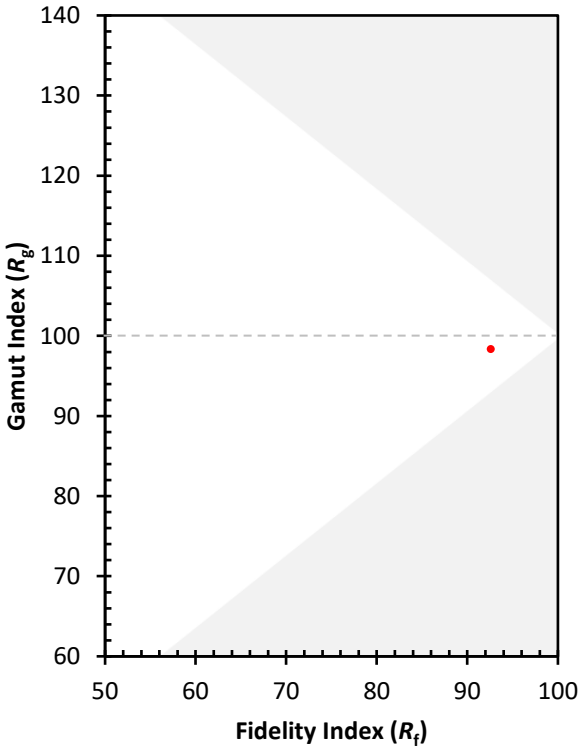



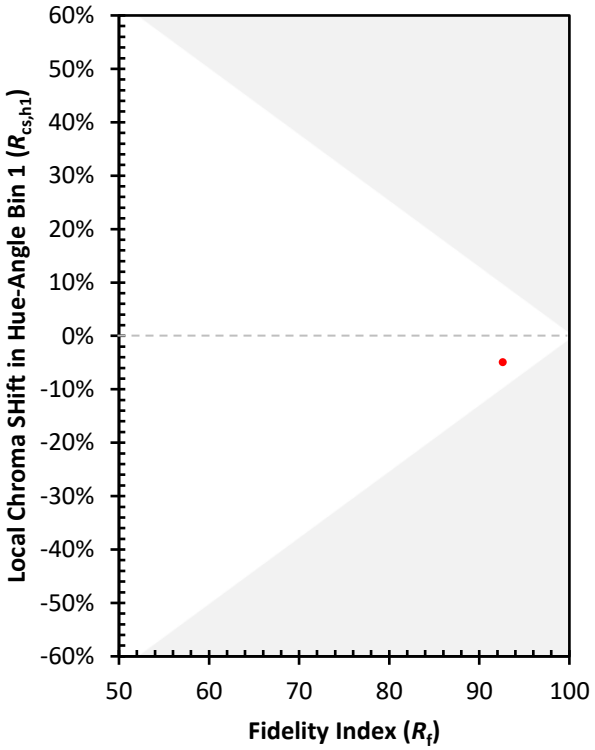
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### Measure Comparisons




(END OF REPORT)