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: P1198377

Luminaire Tested: GPC-SB1C-760-U-SL2

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: | P1198377 |
| | TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-10) |
| Test Lab: | INNOVATION CENTER |
| Issue Date: | 3/15/2026 |
| Manufacturer: | COOPER LIGHTING SOLUTIONS |
| Product Line: | McGRAW-EDISON |
| Catalog Number: | GPC-SB1C-760-U-SL2 |
| Description: | GALLEON PEDESTRIAN LUMINAIRE |
| | (1) 70 CRI, 5700K, 615mA LIGHTSQUARE WITH 26 LEDS AND TYPE II SPILL LIGHT ELIMINATOR OPTICS |
| Light Source: | - |
| Ballast/Driver: | ELECTRONIC DRIVER |

**Summary**

| | |
|---|---|
| Lumens per Lamp: | N/A |
| Luminaire Lumens: | 7917 lumens |
| Efficiency: | N/A |
| Efficacy: | 145.5 lumens/watt |
| Luminous Opening: | Rectangular (W 0.5' x L: 0.5' x H: 0') |
| IES Classification: | Type II - Medium |
| BUG Rating: | B2 - U0 - G2 |

| | |
|---|---|
| Input Watts (W): | 54.4 |
| Input Voltage (V): | 120.0 |
| Input Current (Ain): | 0.437 |
| Voltage Rise (V): | NR |
| Power Factor: | 0.993 |
| Total Harmonic Distortion (THDi): | 9.314 |
| Frequency (hertz): | 60 |
| Stabilization Time: | NR |
| Operation Time: | NR |
| Ambient Temperature (°C): | NR |
| Test Distance: | 28.75 FT |

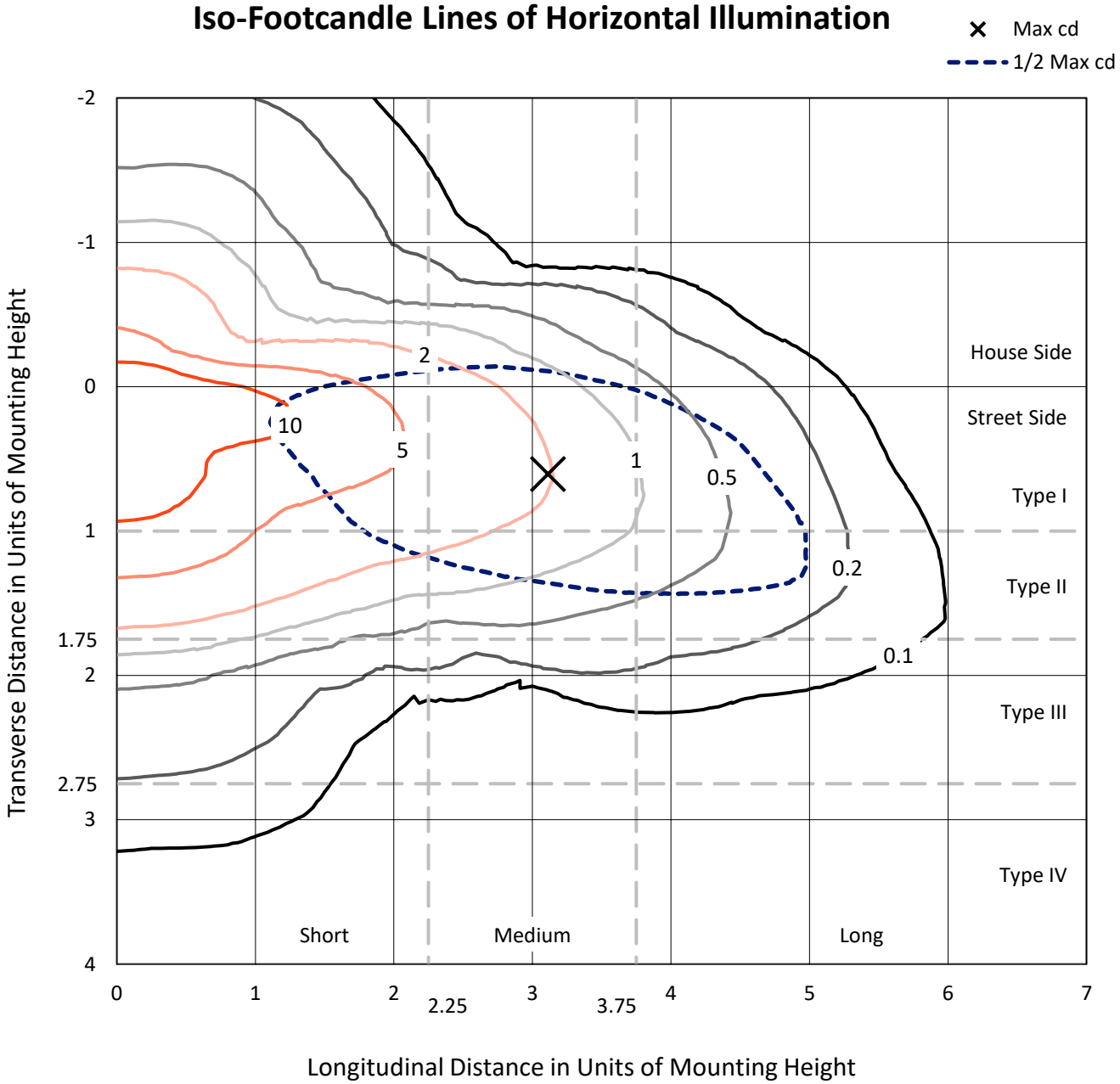


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REPORT NUMBER: P1198377
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## Iso-Footcandle Lines of Horizontal Illumination



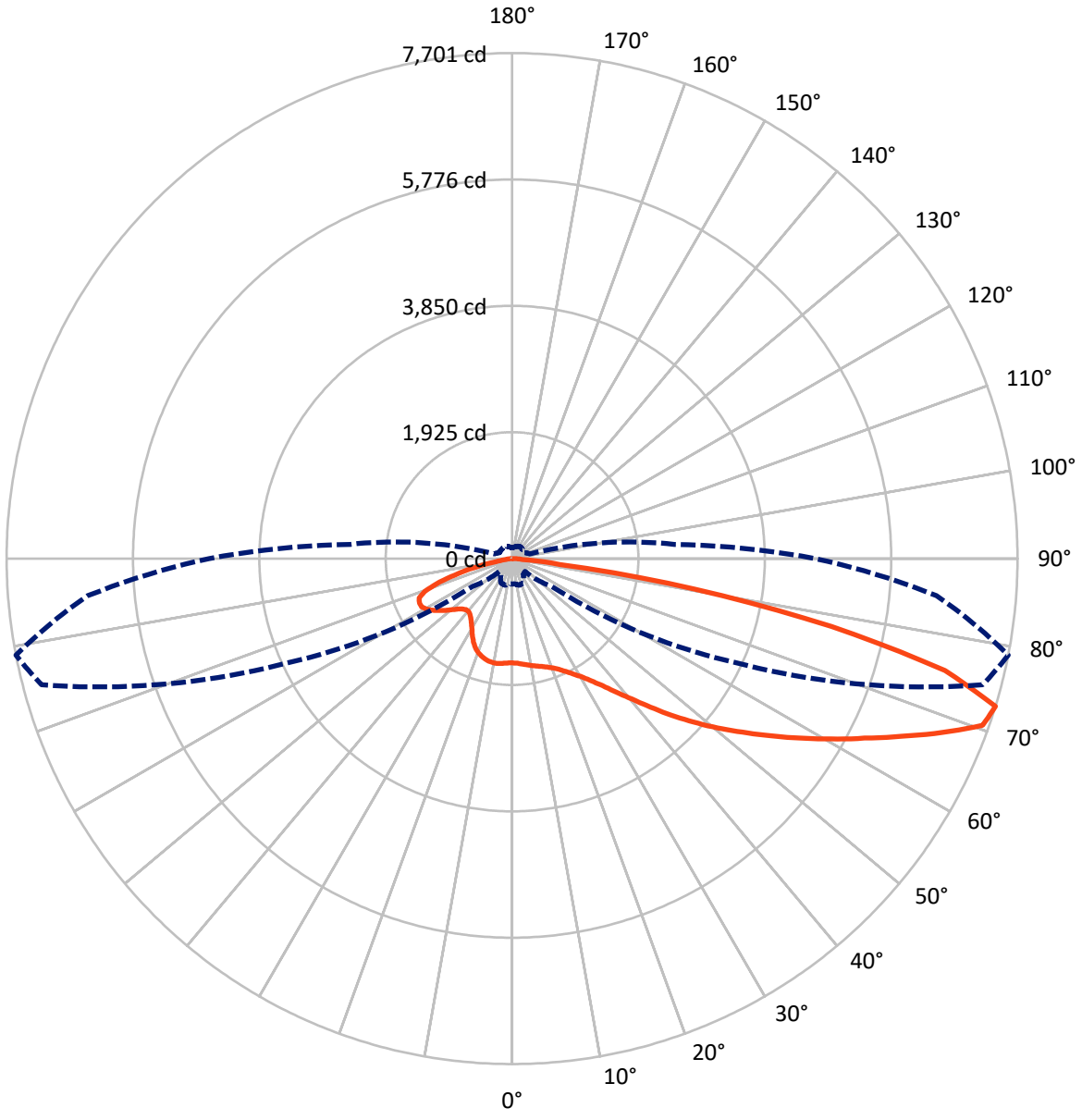

Based on 10 foot mounting height. Maximum calculated value = 16 fc
Type II - Medium - N/A

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## Luminous Intensity Polar Plot



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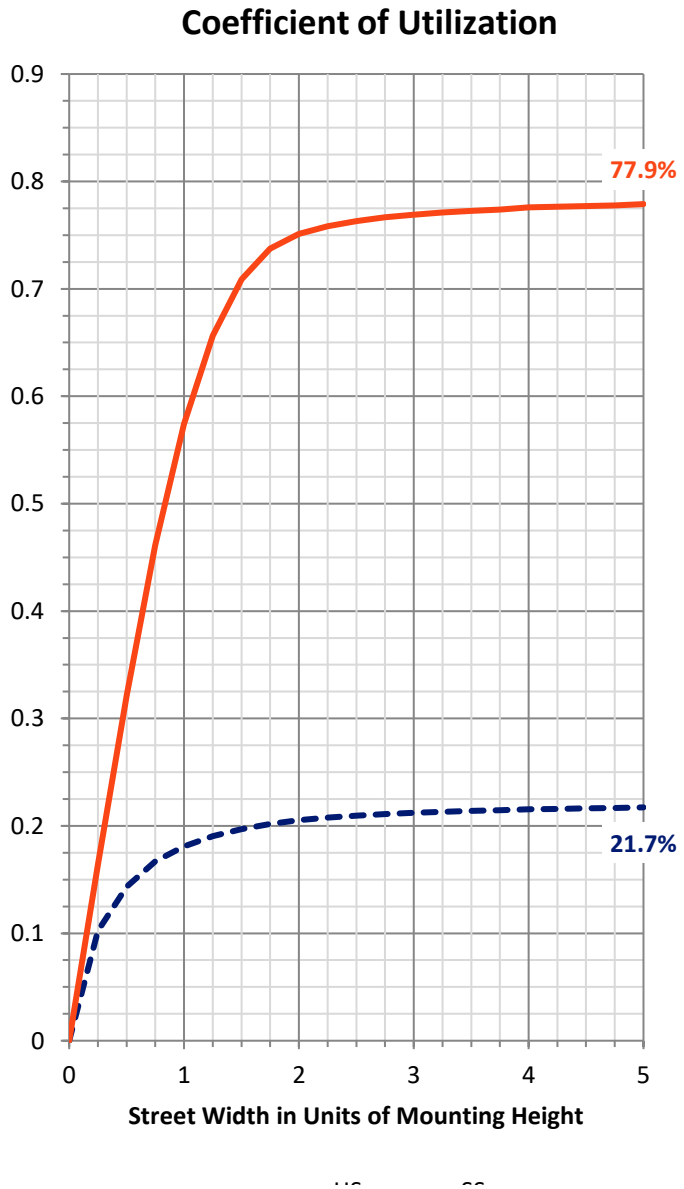
REPORT NUMBER: P1198377
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**FLUX DISTRIBUTION:**

| | | Downward | Upward | Total |
|---|---|---|---|---|
| **House Side** | Lumens | 1742.2 | 0.0 | 1742.2 |
| | % Fixture | 22.0 | 0.0 | 22.0 |
| **Street Side** | Lumens | 6174.8 | 0.0 | 6174.8 |
| | % Fixture | 78.0 | 0.0 | 78.0 |
| **Total** | Lumens | 7917.0 | 0.0 | 7917.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

**ZONAL LUMENS:**

| Zone | Lumens | % Fixture |
|---|---|---|
| 0°-10° | 144.3 | 1.8 |
| 10°-20° | 377.2 | 4.8 |
| 20°-30° | 608.6 | 7.7 |
| 30°-40° | 913.4 | 11.5 |
| 40°-50° | 1295.7 | 16.4 |
| 50°-60° | 1636.3 | 20.7 |
| 60°-70° | 1661.9 | 21.0 |
| 70°-80° | 1132.7 | 14.3 |
| 80°-90° | 147.0 | 1.9 |
| 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° | 7917.0 | 100.0 |
| 0°-180° | 7917.0 | 100.0 |



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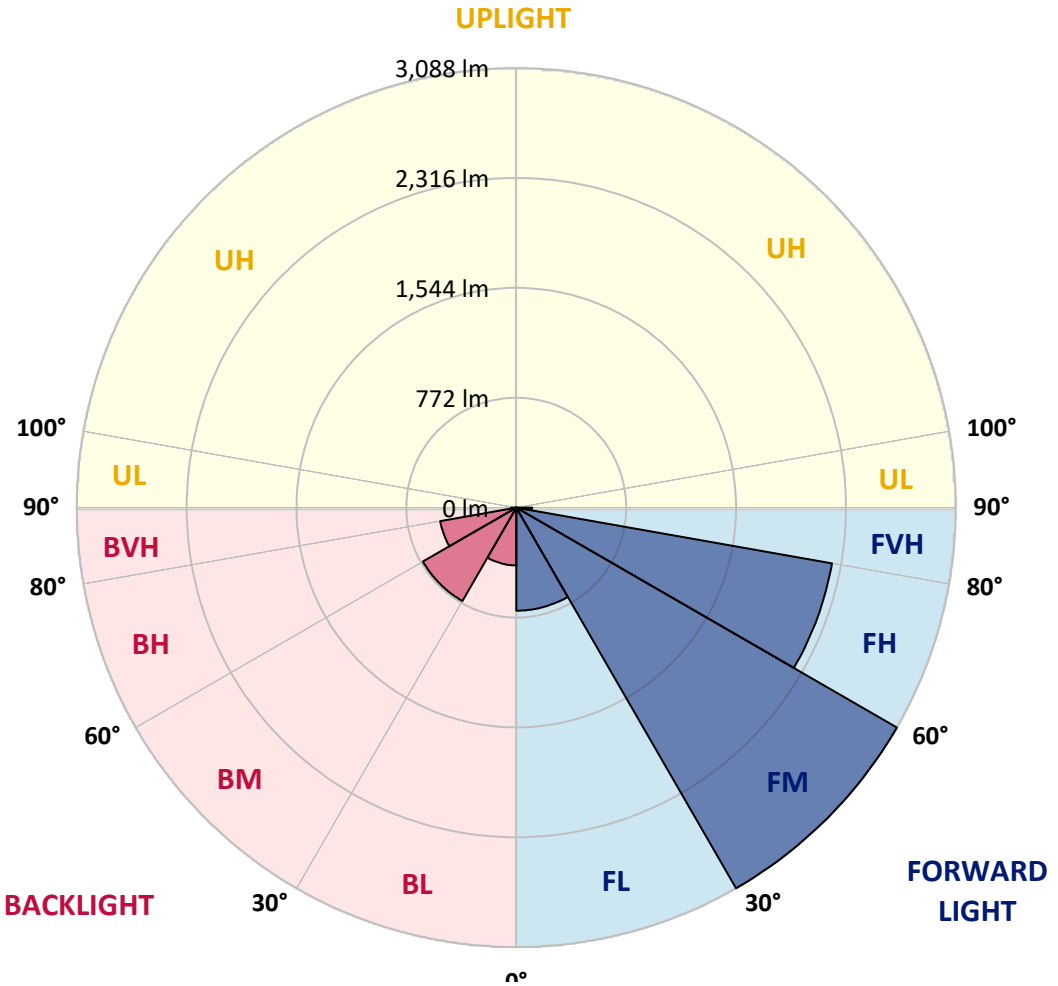
Scaled Data Report

REPORT NUMBER: P1198377
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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°) | 724.2 | 9.1 | | | |
| FM | (30°-60°) | 3087.8 | 39.0 | | | |
| FH | (60°-80°) | 2252.1 | 28.4 | | | G2/5000 |
| FVH | (80°-90°) | 110.7 | 1.4 | | | G2/225 |
| BL | (0°-30°) | 405.8 | 5.1 | B1/500 | | |
| BM | (30°-60°) | 757.7 | 9.6 | B1/1000 | | |
| BH | (60°-80°) | 542.5 | 6.9 | B2/1000 | | G2/1000 |
| BVH | (80°-90°) | 36.3 | 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-G2**
Type II Medium



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**CANDELA DISTRIBUTION (FULL):**

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 79° | 85° |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0° | 1589.3 | 1589.3 | 1589.3 | 1589.3 | 1589.3 | 1589.3 | 1589.3 | 1589.3 | 1589.3 | *1589.3* | 1589.3 |
| 2.5° | 1590.1 | 1582.6 | 1587.2 | 1585.5 | 1587.6 | 1590.1 | 1590.9 | 1592.2 | 1596.4 | *1596.0* | 1595.5 |
| 5° | 1586.7 | 1579.2 | 1585.5 | 1583.4 | 1588.8 | 1594.7 | 1599.7 | 1604.3 | 1611.0 | *1614.0* | 1609.8 |
| 7.5° | 1579.6 | 1574.6 | 1580.9 | 1587.2 | 1597.2 | 1606.0 | 1613.1 | 1623.6 | 1633.2 | *1634.9* | 1637.8 |
| 10° | 1538.2 | 1534.4 | 1549.1 | 1565.4 | 1593.0 | 1616.9 | 1632.4 | 1644.5 | 1655.0 | *1656.7* | 1660.9 |
| 12.5° | 1495.0 | 1490.4 | 1506.8 | 1529.0 | 1573.8 | 1616.9 | 1649.6 | 1665.5 | 1674.7 | *1680.1* | 1686.4 |
| 15° | 1487.9 | 1484.1 | 1493.4 | 1512.6 | 1549.9 | 1605.6 | 1661.3 | 1690.6 | 1698.6 | *1704.8* | 1707.4 |
| 17.5° | 1522.3 | 1515.1 | 1518.9 | 1525.6 | 1547.4 | 1595.1 | 1670.5 | 1719.1 | 1731.2 | *1737.9* | 1737.9 |
| 20° | 1601.8 | 1591.8 | 1585.9 | 1572.5 | 1568.7 | 1596.8 | 1669.7 | 1753.4 | 1769.3 | *1777.7* | 1779.8 |
| 22.5° | 1707.8 | 1701.1 | 1688.5 | 1654.6 | 1617.7 | 1617.3 | 1685.6 | 1797.4 | 1827.1 | *1835.1* | 1830.1 |
| 25° | 1835.9 | 1825.9 | 1810.0 | 1763.9 | 1693.1 | 1657.9 | 1712.4 | 1853.5 | 1903.3 | *1905.4* | 1890.8 |
| 27.5° | 1983.3 | 1968.3 | 1946.5 | 1885.8 | 1790.3 | 1721.6 | 1753.4 | 1918.0 | 1990.9 | *1990.0* | 1959.9 |
| 30° | 2138.7 | 2123.6 | 2100.6 | 2026.9 | 1906.7 | 1807.4 | 1810.4 | 1987.5 | 2094.7 | *2090.1* | 2038.6 |
| 32.5° | 2252.2 | 2240.9 | 2236.3 | 2179.3 | 2040.7 | 1908.8 | 1875.7 | 2064.6 | 2222.9 | *2218.7* | 2146.7 |
| 35° | 2339.3 | 2324.6 | 2330.1 | 2301.2 | 2186.9 | 2022.3 | 1955.7 | 2156.3 | 2378.7 | *2378.2* | 2288.6 |
| 37.5° | 2425.6 | 2412.6 | 2417.2 | 2397.9 | 2322.1 | 2166.3 | 2053.3 | 2268.5 | 2571.7 | *2580.9* | 2460.3 |
| 40° | 2504.3 | 2490.5 | 2508.9 | 2490.9 | 2427.2 | 2319.6 | 2164.2 | 2395.4 | 2795.3 | *2812.9* | 2668.0 |
| 42.5° | 2551.6 | 2540.7 | 2571.3 | 2571.7 | 2518.5 | 2449.0 | 2286.1 | 2535.3 | 3054.1 | *3093.5* | 2923.5 |
| 45° | 2567.9 | 2564.2 | 2610.2 | 2619.9 | 2599.4 | 2524.0 | 2395.8 | 2687.7 | 3333.1 | *3403.4* | 3214.5 |
| 47.5° | 2550.4 | 2543.2 | 2606.9 | 2642.5 | 2658.8 | 2559.2 | 2486.7 | 2852.7 | 3617.8 | *3720.8* | 3532.0 |
| 50° | 2461.6 | 2447.8 | 2542.4 | 2617.4 | 2675.6 | 2582.2 | 2578.4 | 3043.3 | 3941.5 | *4054.2* | 3851.1 |
| 52.5° | 2302.0 | 2291.6 | 2399.2 | 2529.4 | 2638.7 | 2593.5 | 2681.4 | 3251.4 | 4248.9 | *4394.7* | 4178.1 |
| 55° | 2098.1 | 2084.3 | 2202.8 | 2372.8 | 2547.0 | 2589.7 | 2784.5 | 3484.2 | 4611.6 | *4759.4* | 4516.1 |
| 57.5° | 1774.8 | 1747.1 | 1897.1 | 2098.1 | 2397.5 | 2585.1 | 2891.7 | 3715.8 | 4980.1 | *5157.3* | 4876.7 |
| 60° | 1303.2 | 1262.2 | 1446.0 | 1684.3 | 2105.2 | 2540.3 | 3024.4 | 3975.5 | 5422.3 | *5581.9* | 5270.3 |
| 62.5° | 758.8 | 735.0 | 855.1 | 1077.5 | 1586.7 | 2276.5 | 3099.0 | 4277.4 | 5857.0 | *6024.5* | 5657.3 |
| 65° | 589.2 | 582.5 | 593.0 | 610.2 | 883.2 | 1704.4 | 2869.0 | 4571.8 | 6409.8 | *6527.1* | 6060.6 |
| 67.5° | 539.0 | 533.9 | 538.5 | 506.3 | 448.1 | 949.4 | 2269.8 | 4646.3 | 7002.0 | *7073.2* | 6413.6 |
| 70° | 479.1 | 473.2 | 488.3 | 460.7 | 352.6 | 431.8 | 1466.6 | 4375.8 | 7473.1 | *7606.7* | 6682.0 |
| 72.5° | *390.3* | *383.6* | *418.8* | *406.2* | *296.9* | *277.2* | *736.6* | *3733.0* | *7423.7* | *7700.9* | *6489.8* |
| 75° | 299.8 | 296.1 | 338.0 | 348.4 | 242.1 | 218.2 | 353.4 | 2774.8 | 6532.9 | *6812.3* | 5593.2 |
| 77.5° | 232.8 | 229.9 | 251.3 | 289.4 | 195.2 | 169.2 | 217.3 | 1760.1 | 4923.2 | *4972.2* | 3854.4 |
| 80° | 174.6 | 166.3 | 185.9 | 224.0 | 152.0 | 123.5 | 147.4 | 1026.4 | 3111.9 | *2820.9* | 1677.6 |
| 82.5° | 109.3 | 105.1 | 121.4 | 149.5 | 107.2 | 85.0 | 95.9 | 567.0 | 1247.1 | *734.5* | 323.7 |
| 85° | 62.4 | 60.7 | 66.2 | 85.4 | 58.2 | 49.0 | 54.9 | 250.4 | 227.8 | *156.6* | 97.6 |
| 87.5° | 25.1 | 24.3 | 30.2 | 38.1 | 21.4 | 18.0 | 19.3 | 60.3 | 50.3 | *46.5* | 32.2 |
| 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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CATALOG NUMBER: GPC-SB1C-760-U-SL2

**CANDELA DISTRIBUTION (continued):**

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0° | 1589.3 | 1589.3 | 1589.3 | 1589.3 | 1589.3 | 1589.3 | 1589.3 | 1589.3 | 1589.3 | 1589.3 | 1589.3 |
| 2.5° | 1593.9 | 1593.9 | 1588.0 | 1578.8 | 1568.3 | 1561.6 | 1550.7 | 1547.8 | 1536.5 | 1533.1 | 1538.6 |
| 5° | 1613.1 | 1609.8 | 1591.8 | 1565.8 | 1530.2 | 1497.6 | 1461.5 | 1438.9 | 1407.1 | 1395.8 | 1404.2 |
| 7.5° | 1637.4 | 1628.2 | 1597.2 | 1540.3 | 1465.7 | 1392.4 | 1316.2 | 1258.4 | 1203.1 | 1183.5 | 1186.0 |
| 10° | 1659.6 | 1646.6 | 1593.9 | 1494.2 | 1365.2 | 1238.3 | 1116.9 | 1031.9 | 967.4 | 941.0 | 946.9 |
| 12.5° | 1681.8 | 1657.9 | 1571.7 | 1417.6 | 1222.4 | 1050.3 | 920.9 | 854.7 | 814.9 | 783.1 | 793.6 |
| 15° | 1702.8 | 1669.2 | 1537.3 | 1315.0 | 1065.8 | 891.2 | 795.7 | 742.9 | 711.1 | 690.1 | 693.9 |
| 17.5° | 1727.0 | 1678.9 | 1485.8 | 1184.7 | 916.7 | 781.0 | 703.1 | 671.3 | 665.0 | 662.5 | 664.2 |
| 20° | 1761.0 | 1687.7 | 1418.0 | 1039.0 | 807.0 | 693.1 | 652.9 | 649.9 | 649.5 | 648.3 | 652.5 |
| 22.5° | 1797.4 | 1698.1 | 1328.4 | 906.7 | 713.6 | 638.2 | 631.1 | 625.2 | 621.5 | 621.0 | 625.7 |
| 25° | 1840.5 | 1701.5 | 1216.1 | 798.2 | 634.0 | 612.3 | 603.9 | 595.1 | 592.6 | 592.6 | 595.1 |
| 27.5° | 1882.4 | 1690.2 | 1085.5 | 704.0 | 589.2 | 588.4 | 577.5 | 574.6 | 574.1 | 575.4 | 578.8 |
| 30° | 1924.3 | 1668.8 | 955.7 | 616.9 | 563.3 | 563.3 | 559.5 | 561.6 | 563.3 | 567.4 | 570.4 |
| 32.5° | 1980.8 | 1646.2 | 847.2 | 552.4 | 540.6 | 536.5 | 540.2 | 544.4 | 546.1 | 551.5 | 556.1 |
| 35° | 2063.7 | 1630.3 | 760.9 | 517.2 | 517.2 | 511.7 | 513.8 | 513.0 | 509.2 | 506.7 | 512.6 |
| 37.5° | 2173.5 | 1629.5 | 689.7 | 500.9 | 497.5 | 496.7 | 497.1 | 491.6 | 477.0 | 459.4 | 459.8 |
| 40° | 2305.4 | 1652.1 | 634.9 | 489.6 | 487.0 | 492.1 | 489.6 | 474.9 | 434.7 | 404.1 | 403.3 |
| 42.5° | 2482.5 | 1716.6 | 599.7 | 475.7 | 483.3 | 489.6 | 479.5 | 428.8 | 401.6 | 381.1 | 380.3 |
| 45° | 2691.1 | 1821.3 | 581.7 | 461.1 | 476.2 | 483.7 | 435.1 | 412.9 | 391.1 | 366.4 | 364.8 |
| 47.5° | 2927.3 | 1953.2 | 577.5 | 447.3 | 460.2 | 464.8 | 416.3 | 406.2 | 381.5 | 354.7 | 352.6 |
| 50° | 3184.4 | 2109.4 | 588.8 | 430.9 | 437.2 | 421.3 | 410.0 | 400.8 | 375.2 | 348.8 | 345.9 |
| 52.5° | 3450.3 | 2281.5 | 611.4 | 408.7 | 414.2 | 396.6 | 407.5 | 399.5 | 371.5 | 335.9 | 333.3 |
| 55° | 3711.6 | 2454.9 | 633.2 | 382.8 | 390.7 | 374.4 | 400.4 | 394.5 | 354.3 | 314.1 | 312.0 |
| 57.5° | 3977.1 | 2627.4 | 654.5 | 359.7 | 368.1 | 353.0 | 389.0 | 381.1 | 335.0 | 294.0 | 293.1 |
| 60° | 4253.1 | 2794.9 | 664.6 | 337.5 | 343.4 | 333.3 | 371.9 | 358.1 | 313.2 | 273.5 | 272.2 |
| 62.5° | 4511.5 | 2934.4 | 648.3 | 315.3 | 319.1 | 314.9 | 349.3 | 330.8 | 291.5 | 250.4 | 250.0 |
| 65° | 4770.7 | 3017.3 | 598.0 | 293.6 | 294.4 | 292.3 | 317.4 | 301.5 | 265.9 | 230.3 | 227.8 |
| 67.5° | 5005.7 | 3063.8 | 518.0 | 270.1 | 268.0 | 267.2 | 287.7 | 269.7 | 241.2 | 210.2 | 207.7 |
| 70° | 5055.5 | 2945.7 | 395.7 | 242.5 | 242.5 | 240.4 | 255.0 | 236.6 | 214.0 | 188.9 | 188.0 |
| 72.5° | *4617.4* | *2477.9* | *281.0* | *211.1* | *214.4* | *210.2* | *222.4* | *206.9* | *186.4* | *169.6* | *164.6* |
| 75° | 3723.4 | 1817.1 | 204.4 | 178.8 | 184.7 | 177.6 | 188.9 | 178.0 | 160.4 | 160.0 | 144.1 |
| 77.5° | 2558.3 | 1123.6 | 148.2 | 147.4 | 151.6 | 142.4 | 155.4 | 149.5 | 133.6 | 126.5 | 118.5 |
| 80° | 1091.8 | 448.1 | 108.0 | 113.9 | 113.9 | 105.5 | 120.6 | 122.3 | 108.5 | 105.1 | 105.1 |
| 82.5° | 217.3 | 127.3 | 75.8 | 78.3 | 73.7 | 71.2 | 85.4 | 94.6 | 130.7 | 145.3 | 145.7 |
| 85° | 65.3 | 46.9 | 45.6 | 42.7 | 37.7 | 38.1 | 50.3 | 95.1 | 117.3 | 67.0 | 57.8 |
| 87.5° | 18.0 | 11.7 | 12.1 | 9.6 | 8.0 | 10.5 | 17.2 | 72.0 | 39.4 | 16.8 | 14.2 |
| 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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Report Generated By FNC07603 / LDUCLS01DT446
Version: v6.13

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## Test Information

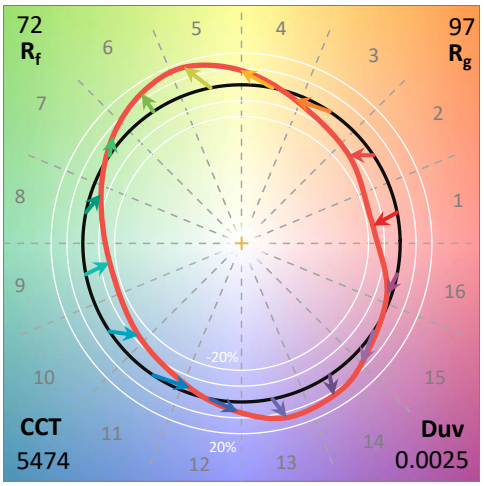
| | |
|---|---|
| Test Method: | LM-79-2008 |
| Report Number: | SP1-1908-441-9-R4 |
| Test Lab: | COOPER LIGHTING SOLUTIONS |
| Photometer: | SP1 - 76IN SPHERE |
| Measurement Geometry: | 4π |
| Issue Date: | 10/28/2024 |
| Manufacturer: | COOPER LIGHTING SOLUTIONS |
| Product Line: | McGRAW-EDISON |
| 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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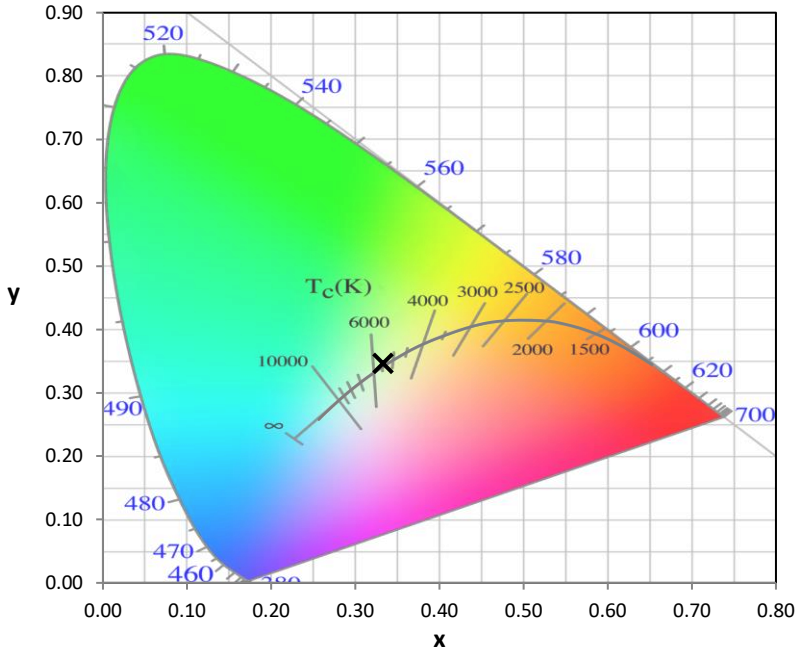
REPORT NUMBER: SP1-1908-441-9-R4

| 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 |

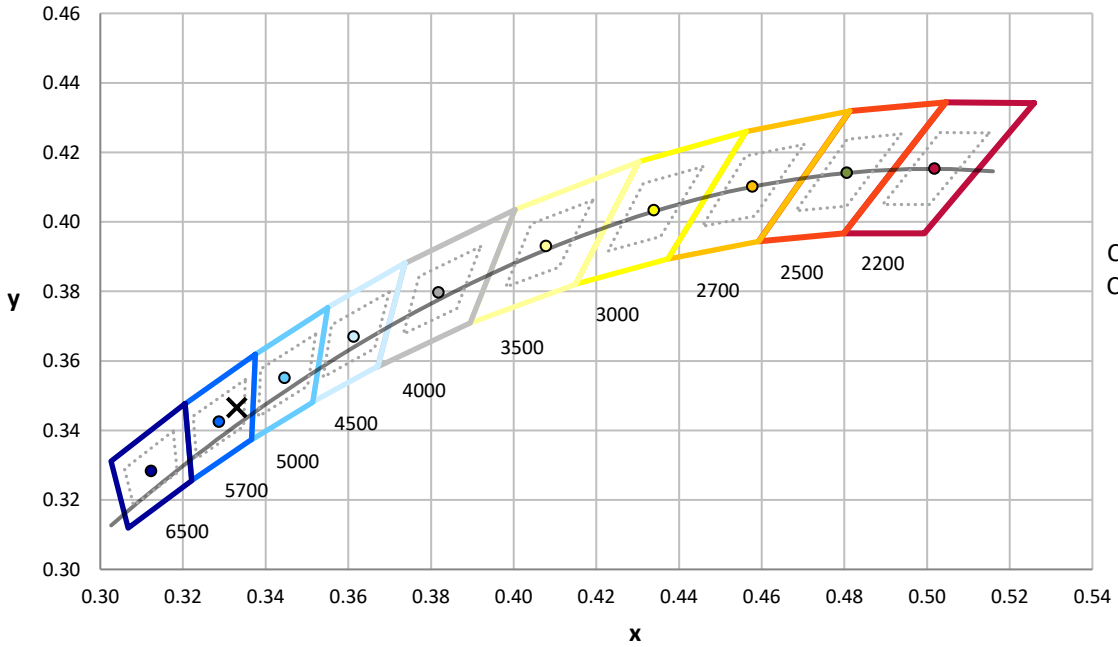
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

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

## CIE 1931 Chromaticity Diagram




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



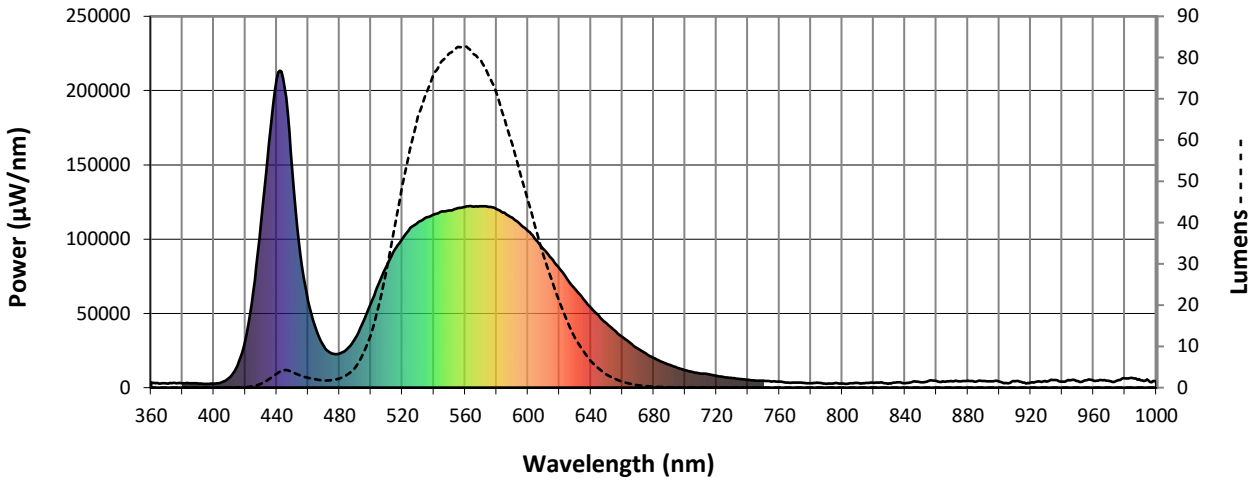

CCT = 5474K
CIE x = 0.3330
CIE y = 0.3466
Duv = 0.0025

Point lies inside the ANSI 5700K 4-step quadrangle

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1121 Highway 74 South
Peachtree City, GA 30269

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

## Photopic Flux vs. Wavelength



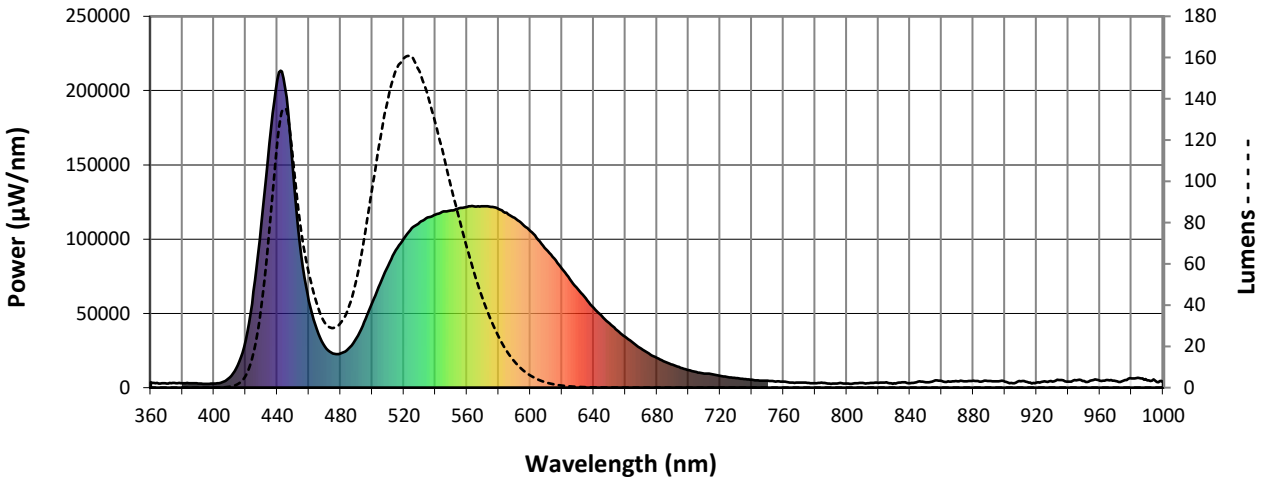

**Photopic Lumens: 7459.9**

| 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 | | | |

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

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

## Scotopic Flux vs. Wavelength



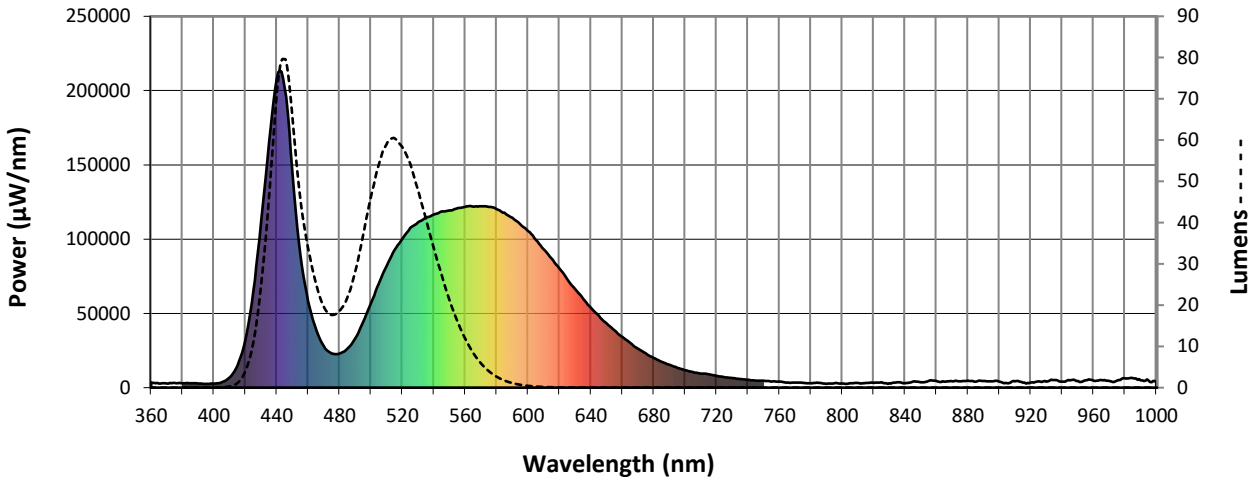

**Scotopic Lumens: 13759.3** **S/P: 1.85**

| 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 | | | |

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

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

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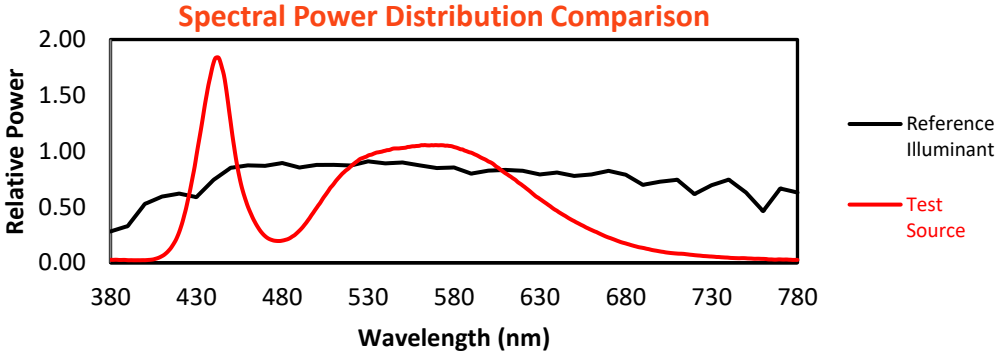
REPORT NUMBER: SP1-1908-441-9-R4

# TM-30-18

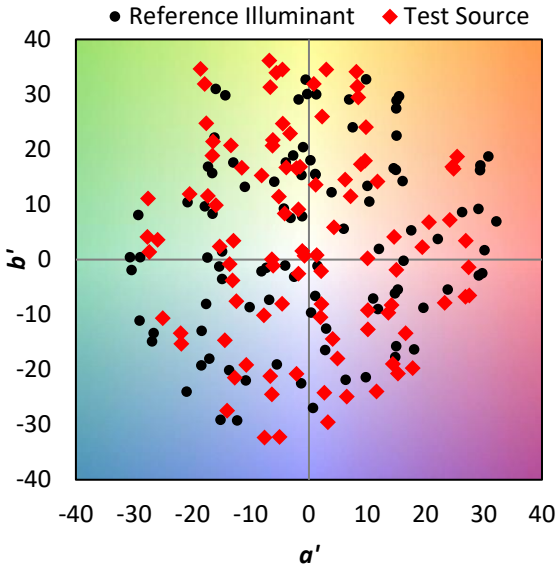
## Summary

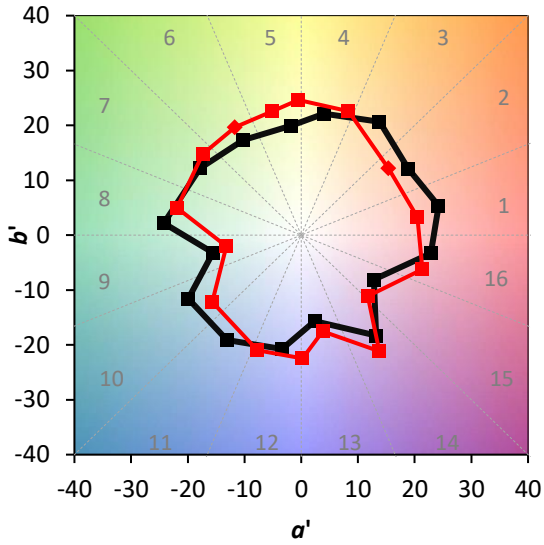
$R_f$ = 72.1
$R_g$ = 97.2
CIE $R_a$ = 71.7
$R_9$ = -27.1

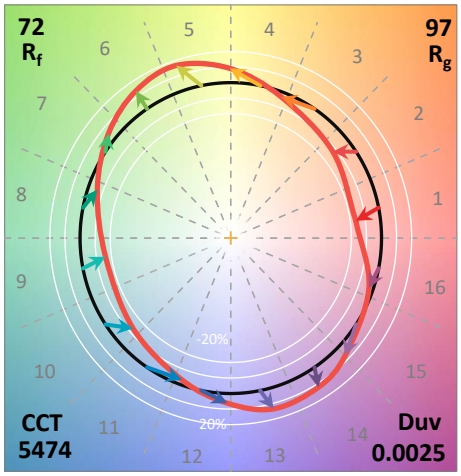
## Spectral Power Distribution Comparison

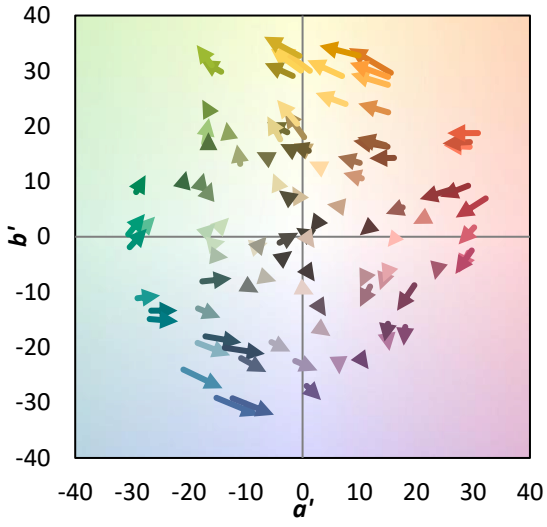



## Color Vector Graphics



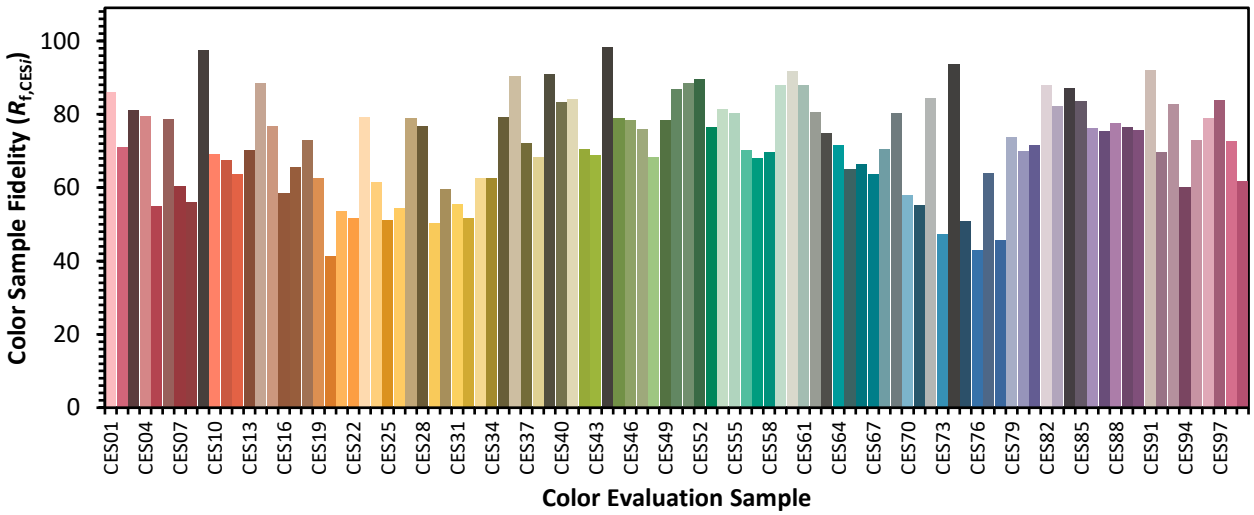
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

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

# TM-30-18

## 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 | |

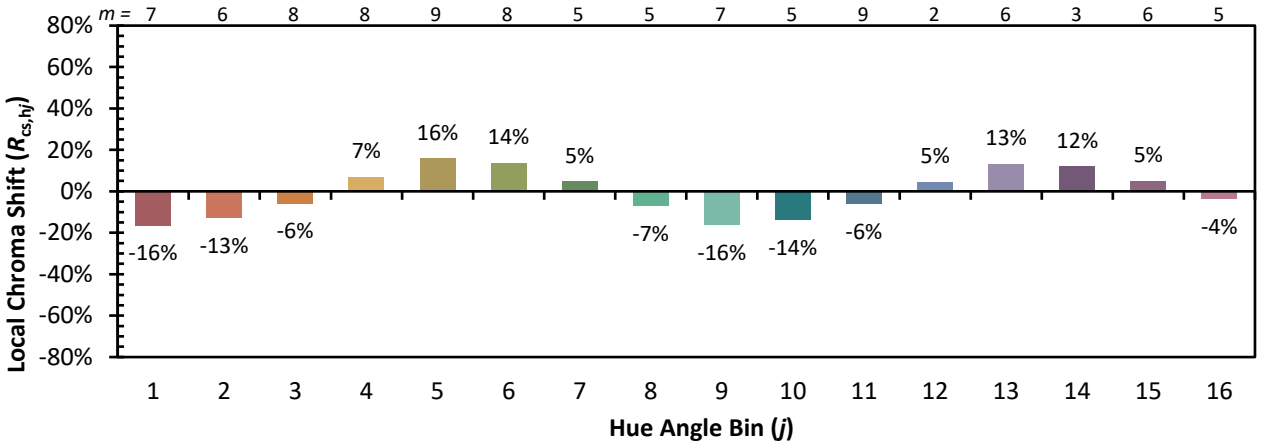


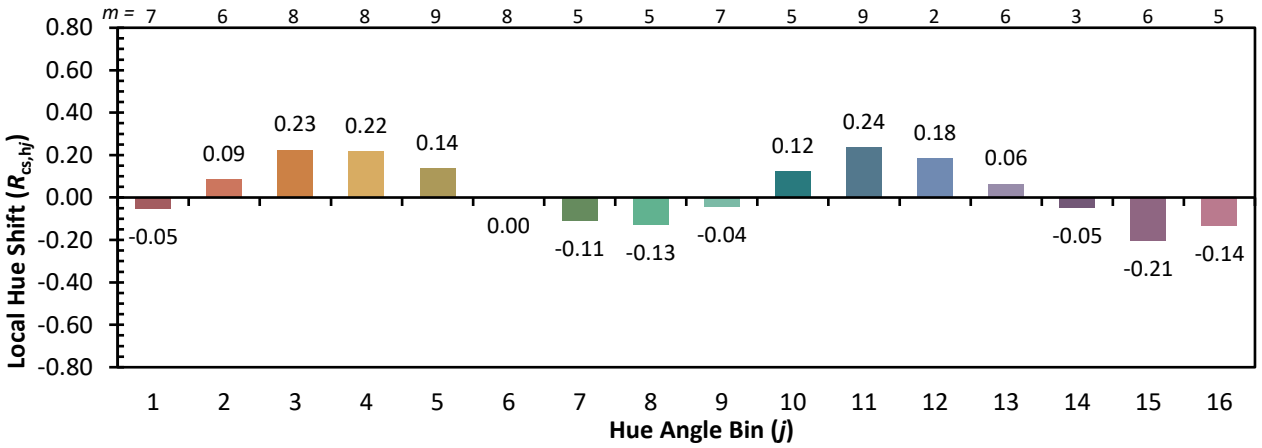
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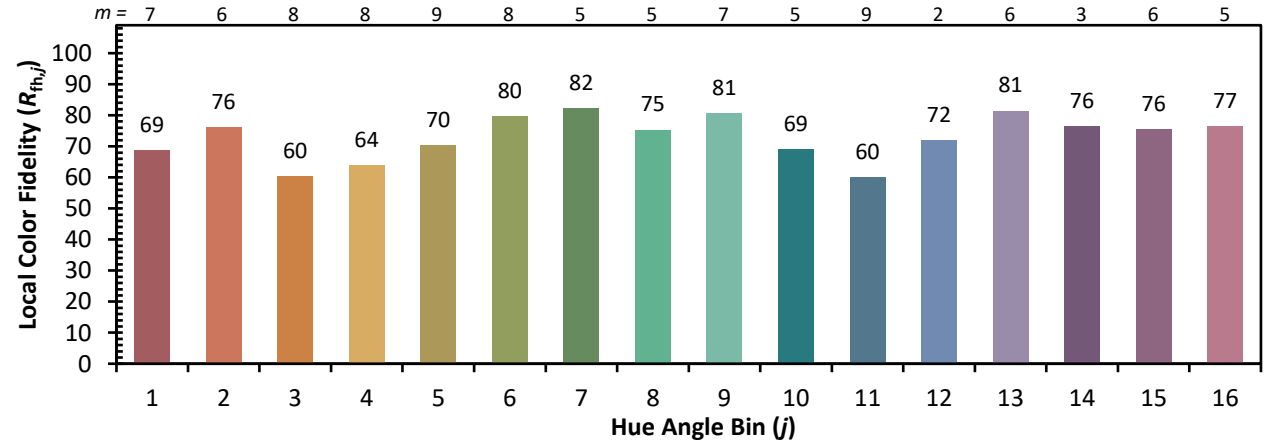
REPORT NUMBER: SP1-1908-441-9-R4

**TM-30-18**

## Color Rendition by Hue-Angle Bin



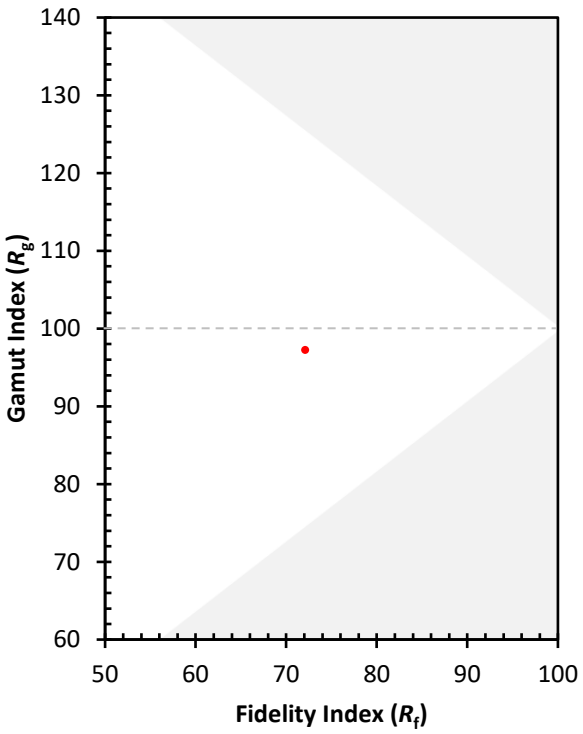



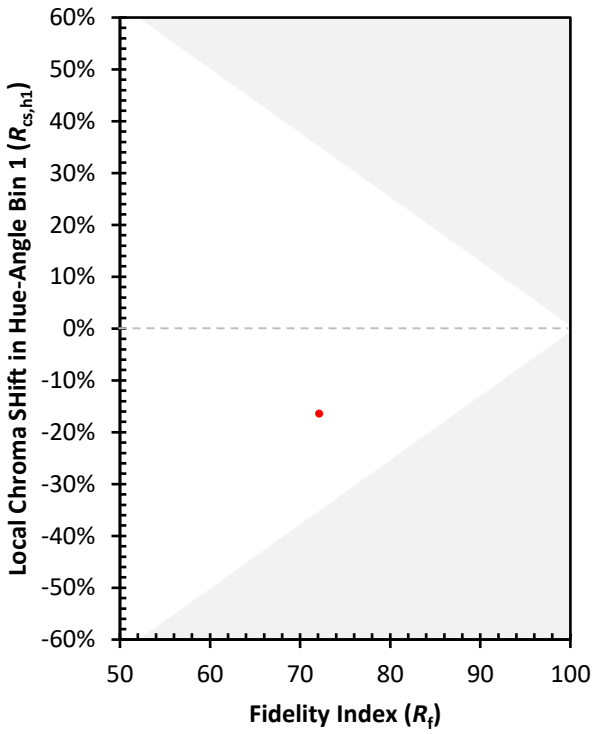
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REPORT NUMBER: SP1-1908-441-9-R4

## TM-30-18

### Measure Comparisons




(END OF REPORT)