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

Scaled data based on original data using

LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: McGRAW-EDISON

Report Number: P1363812

Luminaire Tested: **GSS-SB2B-730-U-SL3-HSS**

Issue Date: 02/18/2026

Report Generated By 670245763

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

Scaled Data Report

**Test Information**

| | |
|---|---|
| Test Method: | LM-79-08 |
| Report Number: | P1363812 |
| Test Lab: | INNOVATION CENTER(G1) |
| Issue Date: | 02/18/2026 |
| Manufacturer: | COOPER LIGHTING SOLUTIONS (FORMERLY EATON) |
| Product Line: | McGRAW-EDISON |
| Catalog Number: | GSS-SB2B-730-U-SL3-HSS |
| Description: | GALLEON II SLIM SITE HIGH DENSITY LED ARRAYS 2SQUARE 74W 70CRI 3000K FIXTURE w/ TYPE III SPILL CONTROL DISTRIBUTION OPTIC AND HOUSE SIDE SHIELD |
| Light Source: | (52) 3000K CCT, 70 CRI LEDS |
| Ballast/Driver: | ELECTRONIC DRIVER |

**Summary**

| | |
|---|---|
| Lumens per Lamp: | N/A |
| Luminaire Lumens: | 7464.4 lumens |
| Efficiency: | N/A |
| Efficacy: | 100.9 lumens/watt |
| Luminous Opening: | Rectangular (W 1' x L: 0.5' x H: 0') |
| IES Classification: | Type III - Medium |
| BUG Rating: | B1 - U0 - G2 |

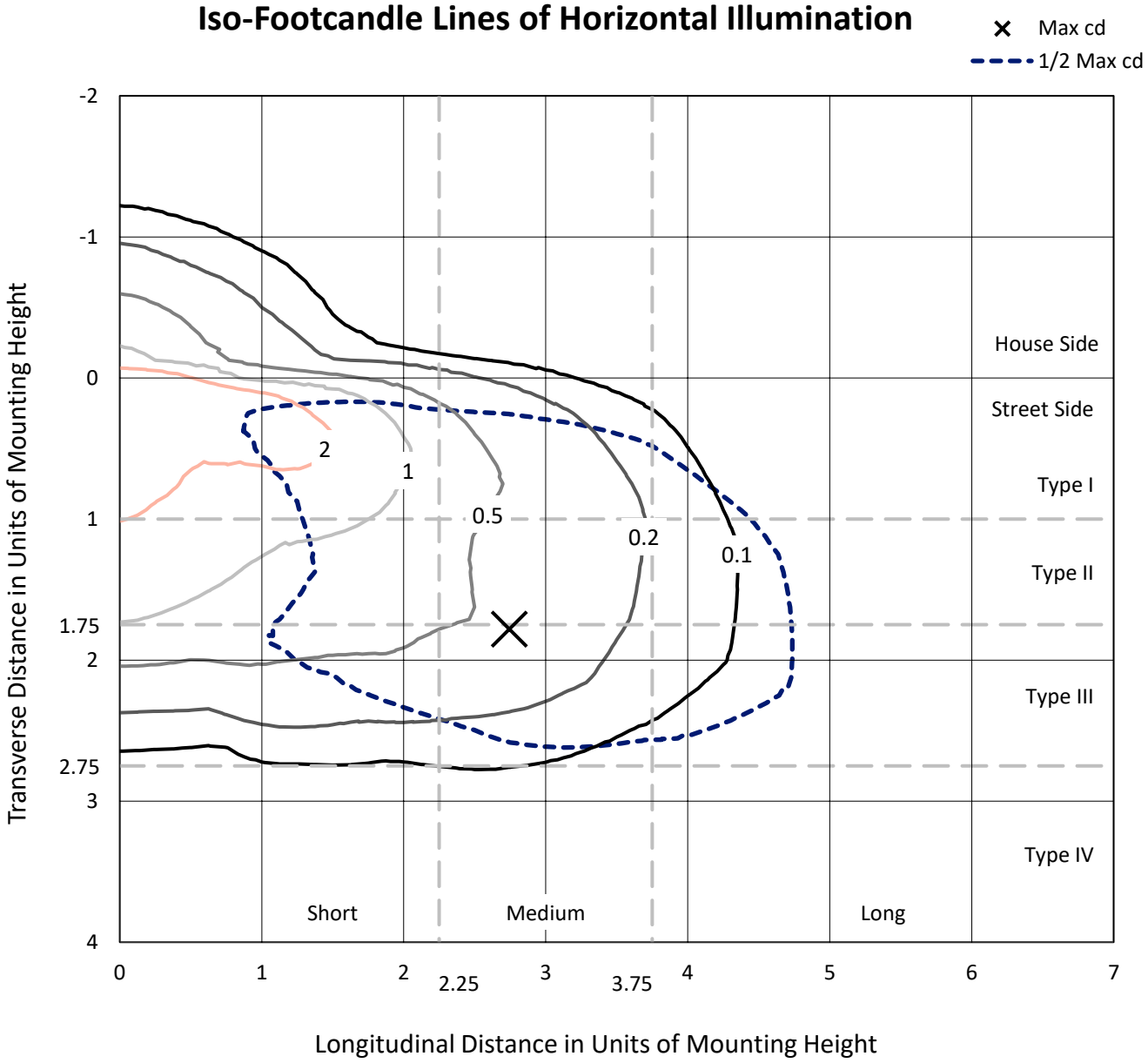
| | |
|---|---|
| Input Watts (W): | 74 |
| Input Voltage (V): | 120 |
| Input Current (Ain): | NR |
| Voltage Rise (V): | NR |
| Power Factor: | 0.98 |
| Total Harmonic Distortion (THDi): | 13.6% |
| Frequency (hertz): | 60 |
| Stabilization Time: | NR |
| Operation Time: | NR |
| Ambient Temperature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

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Scaled Data Report

REPORT NUMBER: P1363812
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## Iso-Footcandle Lines of Horizontal Illumination



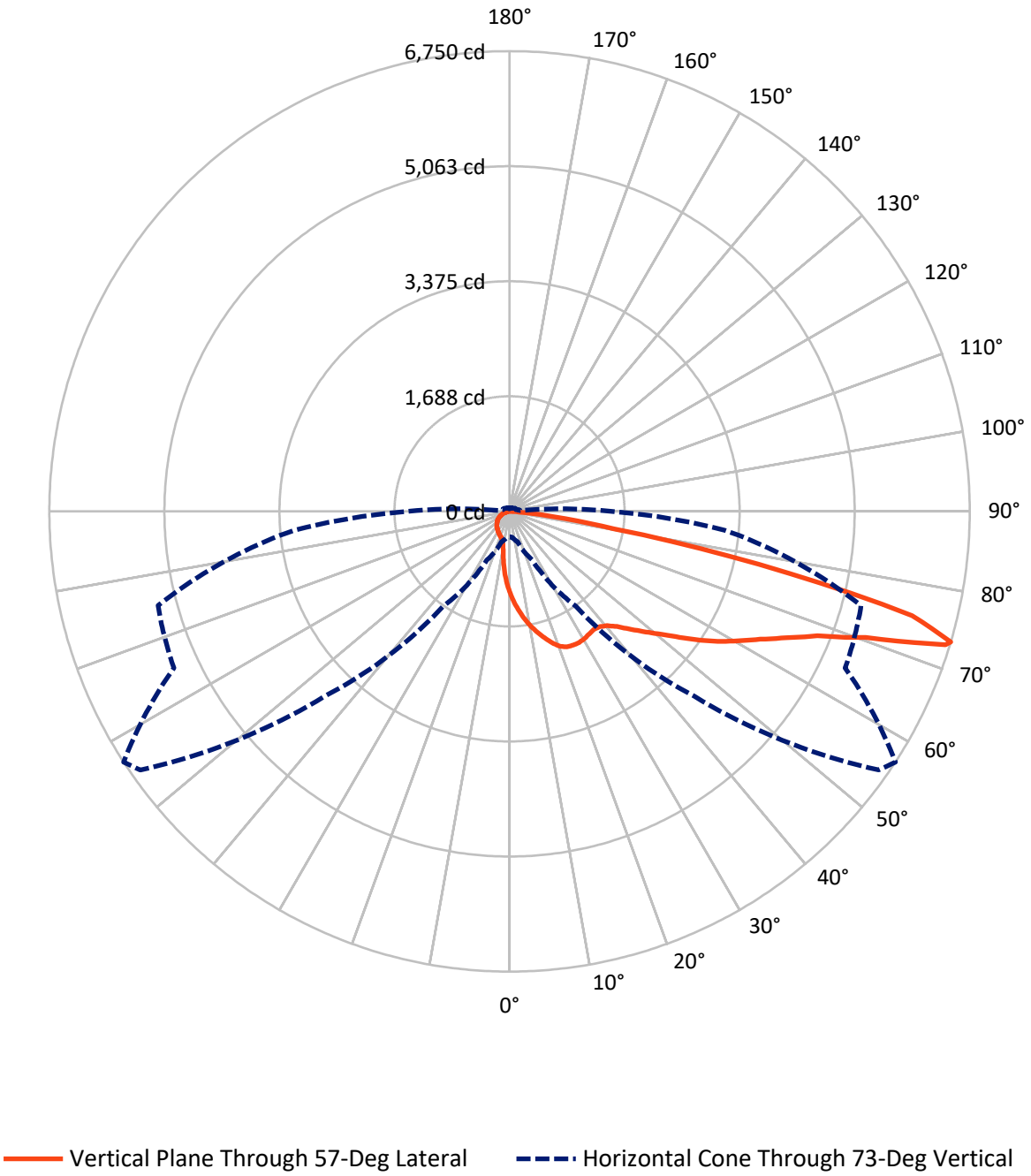

Based on 20 foot mounting height. Maximum calculated value = 4.4 fc
Type III - Medium - N/A

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Scaled Data Report

REPORT NUMBER: P1363812
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## Luminous Intensity Polar Plot



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Scaled Data Report

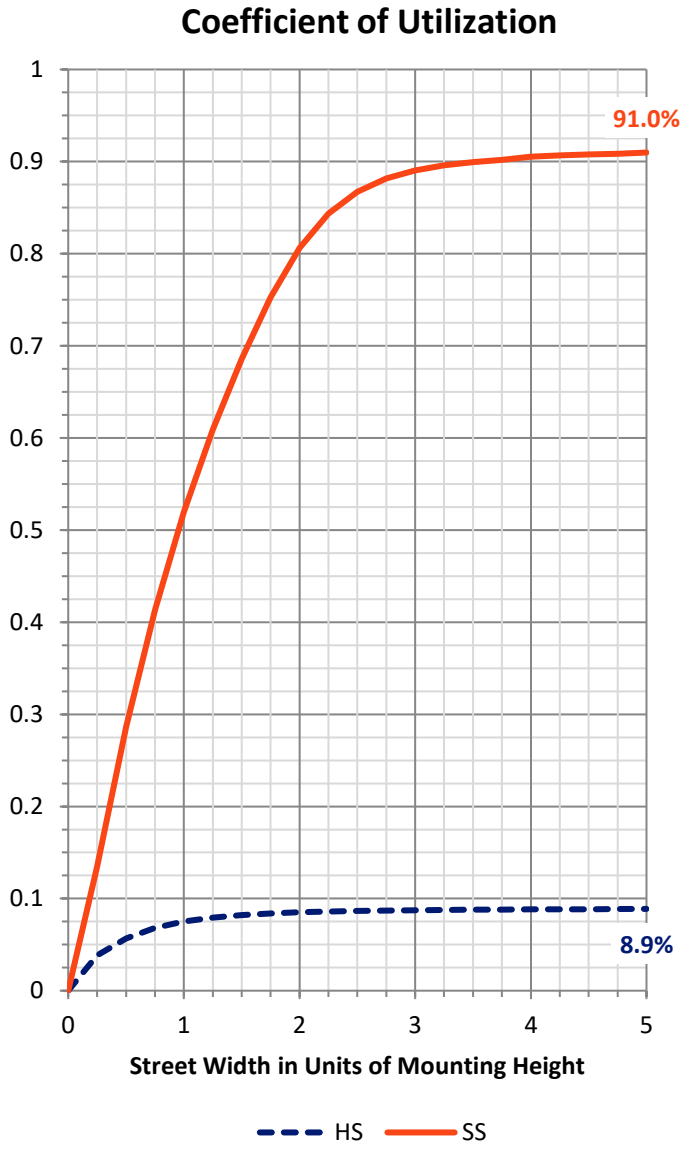
REPORT NUMBER: P1363812
CATALOG NUMBER: GSS-SB2B-730-U-SL3-HSS

**FLUX DISTRIBUTION:**

| | | Downward | Upward | Total |
|---|---|---|---|---|
| **House Side** | Lumens | 668.6 | 0.0 | 668.6 |
| | % Fixture | 9.0 | 0.0 | 9.0 |
| **Street Side** | Lumens | 6795.8 | 0.0 | 6795.8 |
| | % Fixture | 91.0 | 0.0 | 91.0 |
| **Total** | Lumens | 7464.4 | 0.0 | 7464.4 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

**ZONAL LUMENS:**

| Zone | Lumens | % Fixture |
|---|---|---|
| 0°-10° | 111.3 | 1.5 |
| 10°-20° | 319.3 | 4.3 |
| 20°-30° | 484.5 | 6.5 |
| 30°-40° | 701.7 | 9.4 |
| 40°-50° | 1047.9 | 14.0 |
| 50°-60° | 1517.4 | 20.3 |
| 60°-70° | 1838.2 | 24.6 |
| 70°-80° | 1327.6 | 17.8 |
| 80°-90° | 116.4 | 1.6 |
| 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° | 7464.4 | 100.0 |
| 0°-180° | 7464.4 | 100.0 |



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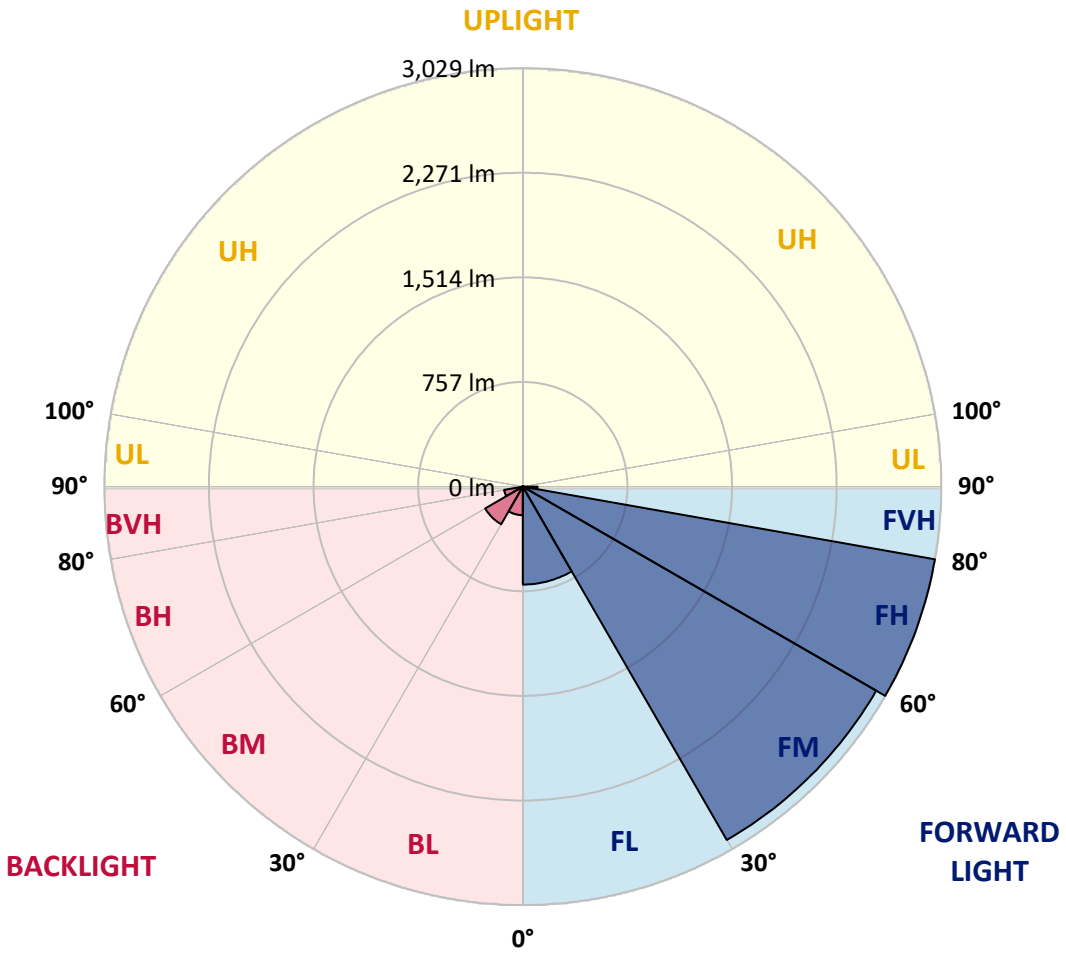
Scaled Data Report

REPORT NUMBER: P1363812
CATALOG NUMBER: GSS-SB2B-730-U-SL3-HSS

## LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit B | U | G |
|---|---|---|---|---|---|---|
| FL | (0°-30°) | 708.4 | 9.5 | | | |
| FM | (30°-60°) | 2952.6 | 39.6 | | | |
| FH | (60°-80°) | 3028.5 | 40.6 | | | G2/5000 |
| FVH | (80°-90°) | 106.3 | 1.4 | | | G2/225 |
| BL | (0°-30°) | 206.7 | 2.8 | B1/500 | | |
| BM | (30°-60°) | 314.5 | 4.2 | B1/1000 | | |
| BH | (60°-80°) | 137.4 | 1.8 | B1/500 | | G1/500 |
| BVH | (80°-90°) | 10.1 | 0.1 | | | G1/100 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

**BUG Rating: B1-U0-G2**
Type III Medium



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REPORT NUMBER: P1363812
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**CANDELA DISTRIBUTION (FULL):**

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 57° | 65° | 75° | 85° |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0° | 1200.8 | 1200.8 | 1200.8 | 1200.8 | 1200.8 | 1200.8 | 1200.8 | *1200.8* | 1200.8 | 1200.8 | 1200.8 |
| 2.5° | 1443.9 | 1448.7 | 1431.7 | 1422.0 | 1402.5 | 1370.9 | 1339.3 | *1339.3* | 1302.9 | 1268.8 | 1225.1 |
| 5° | 1657.8 | 1643.2 | 1635.9 | 1611.6 | 1575.1 | 1536.2 | 1480.3 | *1465.7* | 1407.4 | 1334.5 | 1247.0 |
| 7.5° | 1820.6 | 1803.6 | 1796.3 | 1774.4 | 1733.1 | 1682.1 | 1606.7 | *1594.6* | 1509.5 | 1402.5 | 1276.1 |
| 10° | 1920.3 | 1908.1 | 1908.1 | 1891.1 | 1859.5 | 1806.0 | 1730.7 | *1713.7* | 1611.6 | 1465.7 | 1295.6 |
| 12.5° | 1876.5 | 1871.7 | 1900.8 | 1939.7 | 1954.3 | 1922.7 | 1842.5 | *1820.6* | 1703.9 | 1536.2 | 1319.9 |
| 15° | 1677.2 | 1672.3 | 1725.8 | 1827.9 | 1951.9 | 2005.4 | 1944.6 | *1925.1* | 1803.6 | 1609.1 | 1344.2 |
| 17.5° | 1485.2 | 1477.9 | 1528.9 | 1631.0 | 1815.8 | 2015.1 | 2051.5 | *2027.2* | 1903.3 | 1682.1 | 1370.9 |
| 20° | 1375.8 | 1368.5 | 1402.5 | 1485.2 | 1652.9 | 1937.3 | 2107.4 | *2112.3* | 2012.6 | 1762.3 | 1397.7 |
| 22.5° | 1336.9 | 1334.5 | 1351.5 | 1407.4 | 1526.5 | 1803.6 | 2129.3 | *2158.5* | 2131.8 | 1854.6 | 1436.6 |
| 25° | 1353.9 | 1344.2 | 1349.1 | 1370.9 | 1456.0 | 1696.7 | 2117.2 | *2173.1* | 2231.4 | 1966.5 | 1487.6 |
| 27.5° | 1397.7 | 1390.4 | 1383.1 | 1383.1 | 1426.8 | 1618.9 | 2085.6 | *2177.9* | 2333.5 | 2088.0 | 1531.4 |
| 30° | 1470.6 | 1460.9 | 1439.0 | 1412.3 | 1426.8 | 1570.3 | 2049.1 | *2165.8* | 2421.0 | 2219.3 | 1592.1 |
| 32.5° | 1635.9 | 1628.6 | 1565.4 | 1480.3 | 1460.9 | 1558.1 | 2007.8 | *2143.9* | 2515.8 | 2374.8 | 1662.6 |
| 35° | 1798.7 | 1791.4 | 1747.7 | 1626.2 | 1519.2 | 1567.8 | 1981.0 | *2129.3* | 2632.5 | 2564.4 | 1745.3 |
| 37.5° | 1871.7 | 1859.5 | 1825.5 | 1759.8 | 1655.3 | 1623.7 | 1988.3 | *2146.3* | 2800.2 | 2773.5 | 1847.4 |
| 40° | 1964.0 | 1944.6 | 1893.5 | 1832.8 | 1786.6 | 1752.6 | 2046.7 | *2204.7* | 2987.4 | 3014.1 | 1959.2 |
| 42.5° | 2100.2 | 2078.3 | 2002.9 | 1917.8 | 1864.4 | 1932.4 | 2158.5 | *2309.2* | 3218.3 | 3281.5 | 2095.3 |
| 45° | 2287.3 | 2258.1 | 2160.9 | 2049.1 | 1983.5 | 2022.4 | 2309.2 | *2457.5* | 3475.9 | 3585.3 | 2253.3 |
| 47.5° | 2457.5 | 2450.2 | 2340.8 | 2212.0 | 2134.2 | 2083.1 | 2472.1 | *2630.1* | 3748.2 | 3925.6 | 2416.1 |
| 50° | 2617.9 | 2591.2 | 2484.2 | 2357.8 | 2292.2 | 2207.1 | 2651.9 | *2822.1* | 4020.4 | 4236.8 | 2591.2 |
| 52.5° | 2792.9 | 2763.7 | 2617.9 | 2474.5 | 2408.9 | 2389.4 | 2885.3 | *3050.6* | 4258.6 | 4564.9 | 2768.6 |
| 55° | 2929.0 | 2887.7 | 2727.3 | 2608.2 | 2503.7 | 2569.3 | 3135.6 | *3325.2* | 4470.1 | 4861.5 | 2948.5 |
| 57.5° | 3099.2 | 3045.7 | 2817.2 | 2729.7 | 2649.5 | 2751.6 | 3417.6 | *3599.9* | 4691.3 | 5111.8 | 3128.4 |
| 60° | 3247.5 | 3206.1 | 2984.9 | 2875.6 | 2800.2 | 2958.2 | 3692.3 | *3852.7* | 4863.9 | 5325.7 | 3293.6 |
| 62.5° | 2795.3 | 2790.5 | 2848.8 | 3177.0 | 3065.2 | 3271.8 | 3986.4 | *4127.4* | 4968.4 | 5469.1 | 3361.7 |
| 65° | 1983.5 | 1998.1 | 2160.9 | 3181.8 | 3580.5 | 3796.8 | 4372.9 | *4465.3* | 4973.3 | 5306.3 | 3228.0 |
| 67.5° | 1261.5 | 1247.0 | 1448.7 | 2664.1 | 3599.9 | 4832.3 | 4961.1 | *4868.8* | 4749.6 | 5131.3 | 3245.0 |
| 70° | 756.0 | 760.8 | 828.9 | 1932.4 | 2967.9 | 5068.1 | 5782.7 | *5544.5* | 4883.3 | 5260.1 | 3259.6 |
| 72.5° | 410.8 | 420.5 | 517.7 | 948.0 | 1966.5 | 4032.6 | 6652.9 | *6686.9* | 5340.3 | 5320.9 | 3203.7 |
| 73° | *374.3* | *376.8* | *464.3* | *792.4* | *1701.5* | *3833.3* | *6611.6* | *6750.1* | *5432.7* | *5337.9* | *3167.2* |
| 75° | 247.9 | 247.9 | 316.0 | 449.7 | 746.2 | 2980.1 | 5488.6 | *6101.1* | 5746.2 | 5162.9 | 2882.8 |
| 77.5° | 153.1 | 162.9 | 218.8 | 311.1 | 272.2 | 1499.8 | 3228.0 | *3733.6* | 5124.0 | 3884.3 | 1810.9 |
| 80° | 55.9 | 60.8 | 136.1 | 204.2 | 158.0 | 568.8 | 1353.9 | *1553.2* | 2374.8 | 1971.3 | 653.9 |
| 82.5° | 29.2 | 31.6 | 85.1 | 104.5 | 85.1 | 148.3 | 605.3 | *646.6* | 957.7 | 512.9 | 121.5 |
| 85° | 14.6 | 17.0 | 36.5 | 43.8 | 34.0 | 48.6 | 150.7 | *141.0* | 216.3 | 68.1 | 34.0 |
| 87.5° | 0.0 | 0.0 | 2.4 | 4.9 | 7.3 | 9.7 | 14.6 | *14.6* | 17.0 | 19.4 | 19.4 |
| 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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Peachtree City, GA 30269

Scaled Data Report

REPORT NUMBER: P1363812
CATALOG NUMBER: GSS-SB2B-730-U-SL3-HSS

**CANDELA DISTRIBUTION (continued):**

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0° | 1200.8 | 1200.8 | 1200.8 | 1200.8 | 1200.8 | 1200.8 | 1200.8 | 1200.8 | 1200.8 | 1200.8 | 1200.8 |
| 2.5° | 1198.4 | 1178.9 | 1132.7 | 1086.5 | 1052.5 | 1016.0 | 982.0 | 952.8 | 935.8 | 928.5 | 935.8 |
| 5° | 1200.8 | 1159.5 | 1064.7 | 969.9 | 877.5 | 802.1 | 731.6 | 680.6 | 644.1 | 632.0 | 627.1 |
| 7.5° | 1200.8 | 1132.7 | 984.4 | 828.9 | 692.8 | 593.1 | 522.6 | 491.0 | 474.0 | 471.6 | 471.6 |
| 10° | 1198.4 | 1101.1 | 894.5 | 690.3 | 534.8 | 466.7 | 444.8 | 440.0 | 440.0 | 440.0 | 442.4 |
| 12.5° | 1195.9 | 1072.0 | 792.4 | 556.6 | 449.7 | 427.8 | 420.5 | 420.5 | 422.9 | 425.4 | 427.8 |
| 15° | 1191.1 | 1028.2 | 685.5 | 464.3 | 418.1 | 410.8 | 405.9 | 405.9 | 408.4 | 413.2 | 413.2 |
| 17.5° | 1186.2 | 984.4 | 580.9 | 422.9 | 403.5 | 396.2 | 393.8 | 391.3 | 396.2 | 401.1 | 401.1 |
| 20° | 1176.5 | 928.5 | 493.4 | 401.1 | 388.9 | 384.1 | 381.6 | 379.2 | 381.6 | 386.5 | 388.9 |
| 22.5° | 1164.3 | 858.0 | 435.1 | 386.5 | 376.8 | 369.5 | 367.0 | 364.6 | 364.6 | 374.3 | 374.3 |
| 25° | 1152.2 | 780.3 | 401.1 | 371.9 | 362.2 | 354.9 | 350.0 | 347.6 | 350.0 | 357.3 | 357.3 |
| 27.5° | 1127.9 | 695.2 | 379.2 | 359.7 | 350.0 | 340.3 | 335.4 | 330.6 | 333.0 | 340.3 | 340.3 |
| 30° | 1091.4 | 605.3 | 367.0 | 347.6 | 335.4 | 323.3 | 316.0 | 311.1 | 313.6 | 320.9 | 323.3 |
| 32.5° | 1037.9 | 527.5 | 362.2 | 337.9 | 323.3 | 306.3 | 296.5 | 289.3 | 291.7 | 301.4 | 301.4 |
| 35° | 982.0 | 471.6 | 359.7 | 328.1 | 308.7 | 291.7 | 274.7 | 264.9 | 269.8 | 279.5 | 282.0 |
| 37.5° | 923.7 | 440.0 | 359.7 | 323.3 | 299.0 | 277.1 | 252.8 | 243.1 | 245.5 | 255.2 | 257.7 |
| 40° | 872.6 | 425.4 | 362.2 | 318.4 | 286.8 | 260.1 | 233.4 | 221.2 | 226.1 | 238.2 | 235.8 |
| 42.5° | 853.2 | 422.9 | 362.2 | 306.3 | 274.7 | 243.1 | 213.9 | 201.8 | 206.6 | 213.9 | 216.3 |
| 45° | 875.1 | 432.7 | 357.3 | 294.1 | 257.7 | 223.6 | 199.3 | 187.2 | 189.6 | 194.5 | 199.3 |
| 47.5° | 950.4 | 444.8 | 350.0 | 279.5 | 243.1 | 209.0 | 184.7 | 175.0 | 170.2 | 177.4 | 179.9 |
| 50° | 1054.9 | 452.1 | 337.9 | 264.9 | 230.9 | 194.5 | 172.6 | 160.4 | 155.6 | 158.0 | 160.4 |
| 52.5° | 1174.0 | 452.1 | 325.7 | 250.4 | 218.8 | 179.9 | 162.9 | 150.7 | 141.0 | 143.4 | 143.4 |
| 55° | 1293.1 | 447.3 | 294.1 | 238.2 | 206.6 | 170.2 | 153.1 | 136.1 | 128.8 | 128.8 | 126.4 |
| 57.5° | 1417.1 | 440.0 | 255.2 | 221.2 | 192.0 | 158.0 | 141.0 | 126.4 | 116.7 | 111.8 | 111.8 |
| 60° | 1538.7 | 430.2 | 233.4 | 204.2 | 175.0 | 148.3 | 128.8 | 116.7 | 104.5 | 97.2 | 94.8 |
| 62.5° | 1601.9 | 403.5 | 209.0 | 182.3 | 158.0 | 133.7 | 116.7 | 104.5 | 89.9 | 80.2 | 77.8 |
| 65° | 1567.8 | 347.6 | 179.9 | 162.9 | 143.4 | 119.1 | 104.5 | 92.4 | 75.4 | 63.2 | 63.2 |
| 67.5° | 1604.3 | 291.7 | 153.1 | 138.6 | 124.0 | 102.1 | 87.5 | 80.2 | 65.6 | 55.9 | 55.9 |
| 70° | 1616.4 | 228.5 | 128.8 | 119.1 | 107.0 | 85.1 | 75.4 | 70.5 | 58.3 | 48.6 | 46.2 |
| 72.5° | 1526.5 | 170.2 | 104.5 | 99.7 | 87.5 | 65.6 | 63.2 | 58.3 | 48.6 | 38.9 | 38.9 |
| 73° | *1490.0* | *158.0* | *99.7* | *94.8* | *82.6* | *63.2* | *60.8* | *55.9* | *46.2* | *38.9* | *36.5* |
| 75° | 1312.6 | 121.5 | 82.6 | 77.8 | 65.6 | 53.5 | 51.0 | 46.2 | 38.9 | 31.6 | 31.6 |
| 77.5° | 870.2 | 87.5 | 63.2 | 58.3 | 48.6 | 41.3 | 38.9 | 34.0 | 29.2 | 24.3 | 24.3 |
| 80° | 320.9 | 58.3 | 46.2 | 41.3 | 36.5 | 34.0 | 29.2 | 24.3 | 19.4 | 19.4 | 17.0 |
| 82.5° | 65.6 | 38.9 | 34.0 | 29.2 | 26.7 | 24.3 | 19.4 | 17.0 | 14.6 | 14.6 | 14.6 |
| 85° | 26.7 | 24.3 | 19.4 | 19.4 | 19.4 | 17.0 | 14.6 | 14.6 | 12.2 | 12.2 | 9.7 |
| 87.5° | 17.0 | 14.6 | 14.6 | 12.2 | 12.2 | 9.7 | 9.7 | 9.7 | 9.7 | 9.7 | 9.7 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

Cooper Lighting Solutions Photometric Lab
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Peachtree City, GA 30269

# LM-79-2019: Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Report Prepared for

Cooper Lighting Solutions

McGraw-Edison

Report Number: SP1-2407-184-4

Test Date: 10/10/2024

Luminaire Tested: GSS-SB1A-730-U-5WQ

Data in this report applies to families of products including GSS-SB1A-730-U-5WQ

Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

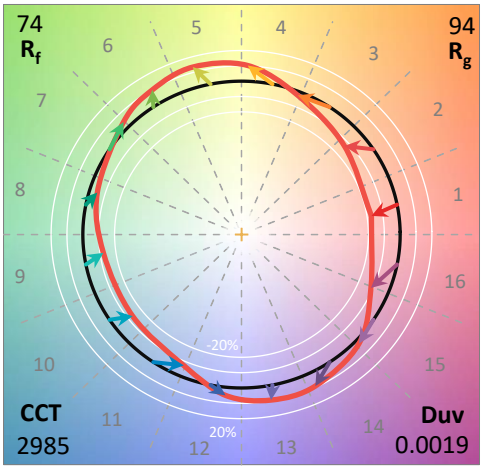
## Test Information

| | |
|---|---|
| Test Method: | LM-79-2019 |
| Report Number: | SP1-2407-184-4 |
| Test Lab: | COOPER LIGHTING SOLUTIONS |
| Photometer: | SP1 - 76IN SPHERE |
| Measurement Geometry: | 4π |
| Issue Date: | 10/15/2024 |
| Manufacturer: | COOPER LIGHTING SOLUTIONS |
| Product Line: | McGraw-Edison |
| Catalog Number: | **GSS-SB1A-730-U-5WQ** |
| Description: | GALLEON II SITE SLIM 1SQ 350MA 5WQ HIGH DENSITY LIGHTSQUARE WITH 70 CRI 3000K CCT 26 LEDS |

## Spectral Parameters

| | |
|---|---|
| CCT (K): | 2985 |
| CIE u': | 0.2504 |
| CIE v': | 0.5243 |
| Duv: | 0.0019 |
| CIE x: | 0.4408 |
| CIE y: | 0.4101 |
| CIE z: | 0.1491 |
| Peak Wavelength (nm): | 595 |
| Dominant Wavelength (nm): | 582 |
| Purity: | 55.41818 |
| Rf: | 73.8 |
| Rg: | 94.4 |

| | |
|---|---|
| CRI (Ra): | 70.8 |
| R1: | 66.3 |
| R2: | 80.6 |
| R3: | 94.5 |
| R4: | 68.2 |
| R5: | 66.5 |
| R6: | 74.7 |
| R7: | 76.2 |
| R8: | 39.6 |
| R9: | -43.2 |
| R10: | 57.6 |
| R11: | 64.8 |
| R12: | 53.5 |
| R13: | 68.7 |
| R14: | 97.0 |
| R15: | 56.4 |




## Test Conditions

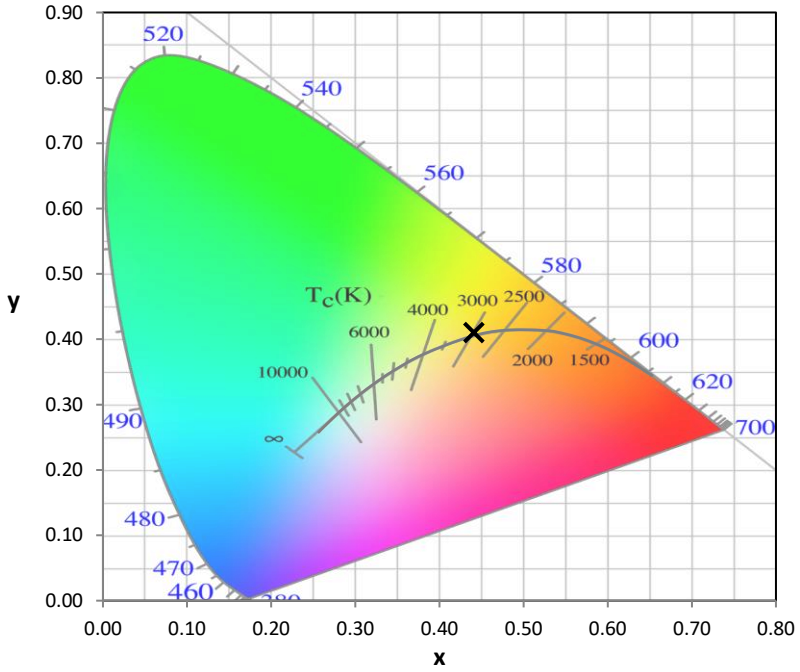
| | |
|---|---|
| Stabilization Time: | 36M |
| Operation Time: | 1H 36M |
| Sphere Temperature (°C): | 25.2 |

REPORT NUMBER: SP1-2407-184-4

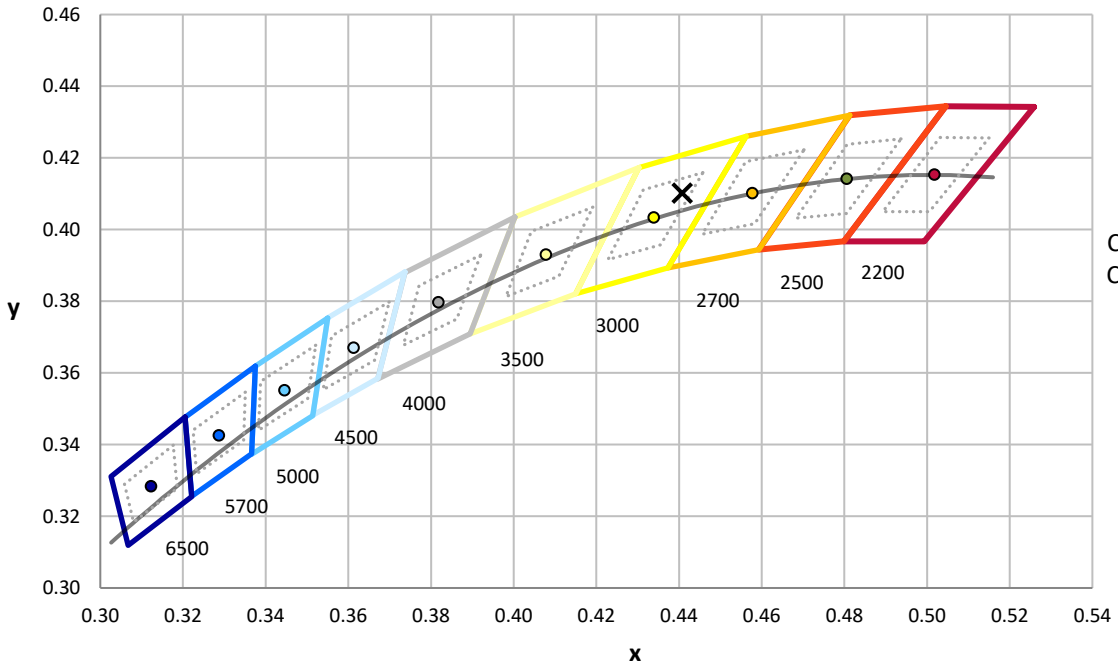
| Measurement and Test Equipment | | | |
|---|---|---|---|
| Instrument | Identification Number | Calibration Date | Calibration Due Date |
| Photometer | IN0058 | 6/18/2024 | 12/18/2024 |
| Power Meter | INXT2011004 | 2/8/2024 | 2/8/2025 |
| AC Power Source | IN0063 | 10/24/2023 | 10/24/2024 |
| DC Power Source | IN0208 | 10/24/2023 | 10/24/2024 |
| Sphere Thermometer | IN0085 | 10/24/2023 | 10/24/2024 |
| Room Thermometer | IN0046 | 10/24/2023 | 10/24/2024 |

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## CIE 1931 Chromaticity Diagram




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

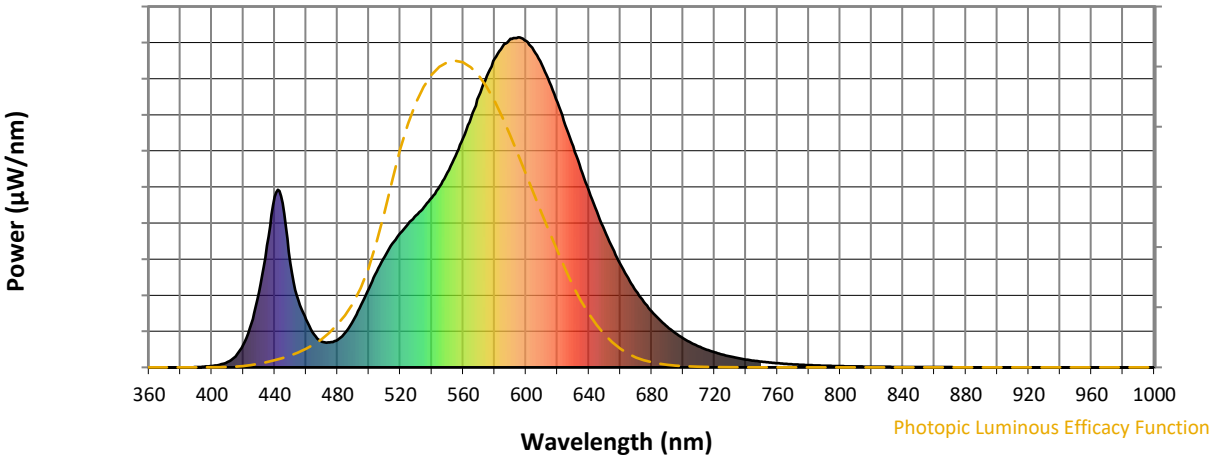



CCT = 2985K
CIE x = 0.4408
CIE y = 0.4101
Duv = 0.0019

Point lies inside the ANSI 3000K 4-step quadrangle

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## Photopic Flux vs. Wavelength

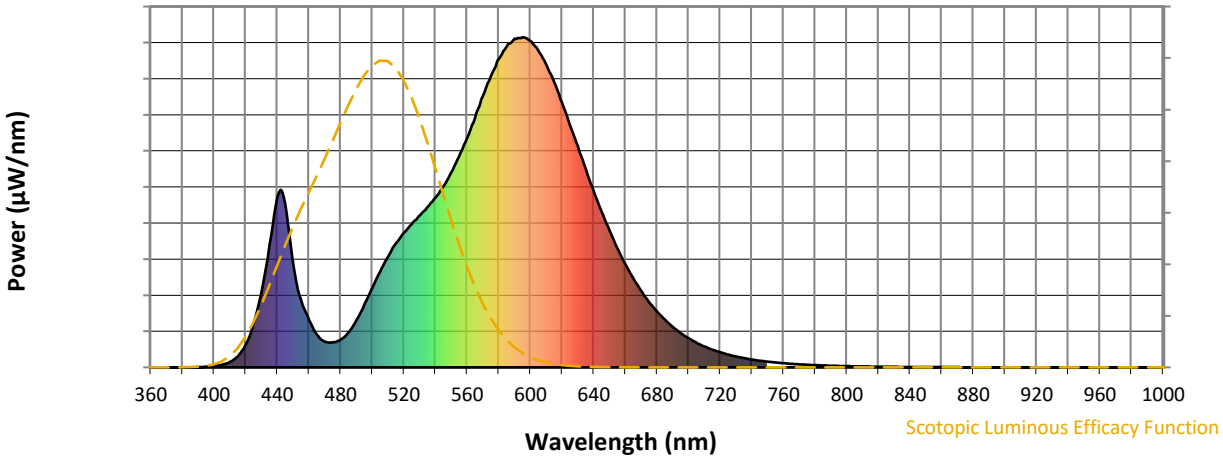



## Photopic Lumens: NR

| λ (nm) | Power W^/nm | Lumens (ϕ/nm) | λ (nm) | Power W^/nm | Lumens (ϕ/nm) | λ (nm) | Power W^/nm | Lumens (ϕ/nm) | λ (nm) | Power W^/nm | Lumens (ϕ/nm) | λ (nm) | Power W^/nm | Lumens (ϕ/nm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 360 | 0 | NR | 490 | 142 | NR | 620 | 803 | NR | 750 | 17 | NR | 880 | 0 | NR |
| 365 | 0 | NR | 495 | 189 | NR | 625 | 734 | NR | 755 | 15 | NR | 885 | 0 | NR |
| 370 | 0 | NR | 500 | 240 | NR | 630 | 670 | NR | 760 | 13 | NR | 890 | 0 | NR |
| 375 | 0 | NR | 505 | 290 | NR | 635 | 600 | NR | 765 | 11 | NR | 895 | 0 | NR |
| 380 | 0 | NR | 510 | 335 | NR | 640 | 535 | NR | 770 | 9 | NR | 900 | 0 | NR |
| 385 | 0 | NR | 515 | 375 | NR | 645 | 473 | NR | 775 | 8 | NR | 905 | 0 | NR |
| 390 | 1 | NR | 520 | 408 | NR | 650 | 415 | NR | 780 | 7 | NR | 910 | 0 | NR |
| 395 | 2 | NR | 525 | 434 | NR | 655 | 362 | NR | 785 | 6 | NR | 915 | 0 | NR |
| 400 | 4 | NR | 530 | 461 | NR | 660 | 313 | NR | 790 | 5 | NR | 920 | 0 | NR |
| 405 | 8 | NR | 535 | 486 | NR | 665 | 271 | NR | 795 | 4 | NR | 925 | 0 | NR |
| 410 | 16 | NR | 540 | 514 | NR | 670 | 231 | NR | 800 | 4 | NR | 930 | 0 | NR |
| 415 | 33 | NR | 545 | 549 | NR | 675 | 198 | NR | 805 | 3 | NR | 935 | 0 | NR |
| 420 | 69 | NR | 550 | 591 | NR | 680 | 169 | NR | 810 | 3 | NR | 940 | 0 | NR |
| 425 | 131 | NR | 555 | 640 | NR | 685 | 144 | NR | 815 | 2 | NR | 945 | 0 | NR |
| 430 | 227 | NR | 560 | 695 | NR | 690 | 123 | NR | 820 | 2 | NR | 950 | 0 | NR |
| 435 | 369 | NR | 565 | 757 | NR | 695 | 104 | NR | 825 | 2 | NR | 955 | 0 | NR |
| 440 | 517 | NR | 570 | 822 | NR | 700 | 88 | NR | 830 | 2 | NR | 960 | 0 | NR |
| 445 | 498 | NR | 575 | 882 | NR | 705 | 75 | NR | 835 | 1 | NR | 965 | 0 | NR |
| 450 | 315 | NR | 580 | 935 | NR | 710 | 63 | NR | 840 | 1 | NR | 970 | 0 | NR |
| 455 | 204 | NR | 585 | 972 | NR | 715 | 54 | NR | 845 | 1 | NR | 975 | 0 | NR |
| 460 | 145 | NR | 590 | 996 | NR | 720 | 46 | NR | 850 | 1 | NR | 980 | 0 | NR |
| 465 | 100 | NR | 595 | 1000 | NR | 725 | 39 | NR | 855 | 1 | NR | 985 | 0 | NR |
| 470 | 78 | NR | 600 | 989 | NR | 730 | 33 | NR | 860 | 1 | NR | 990 | 0 | NR |
| 475 | 76 | NR | 605 | 960 | NR | 735 | 28 | NR | 865 | 1 | NR | 995 | 0 | NR |
| 480 | 83 | NR | 610 | 918 | NR | 740 | 24 | NR | 870 | 1 | NR | 1000 | 0 | NR |
| 485 | 105 | NR | 615 | 864 | NR | 745 | 20 | NR | 875 | 1 | NR | | | |

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## Scotopic Flux vs. Wavelength

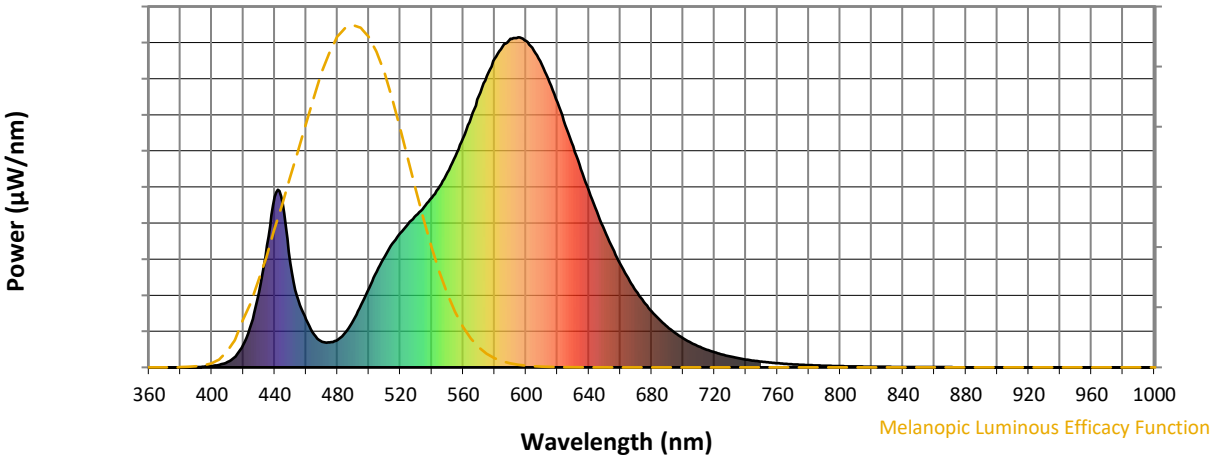



**Scotopic Lumens: NR** **S/P: 1.19**

| λ (nm) | Power W^/nm | Lumens (ϕ/nm) | λ (nm) | Power W^/nm | Lumens (ϕ/nm) | λ (nm) | Power W^/nm | Lumens (ϕ/nm) | λ (nm) | Power W^/nm | Lumens (ϕ/nm) | λ (nm) | Power W^/nm | Lumens (ϕ/nm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 360 | 0 | NR | 490 | 142 | NR | 620 | 803 | NR | 750 | 17 | NR | 880 | 0 | NR |
| 365 | 0 | NR | 495 | 189 | NR | 625 | 734 | NR | 755 | 15 | NR | 885 | 0 | NR |
| 370 | 0 | NR | 500 | 240 | NR | 630 | 670 | NR | 760 | 13 | NR | 890 | 0 | NR |
| 375 | 0 | NR | 505 | 290 | NR | 635 | 600 | NR | 765 | 11 | NR | 895 | 0 | NR |
| 380 | 0 | NR | 510 | 335 | NR | 640 | 535 | NR | 770 | 9 | NR | 900 | 0 | NR |
| 385 | 0 | NR | 515 | 375 | NR | 645 | 473 | NR | 775 | 8 | NR | 905 | 0 | NR |
| 390 | 1 | NR | 520 | 408 | NR | 650 | 415 | NR | 780 | 7 | NR | 910 | 0 | NR |
| 395 | 2 | NR | 525 | 434 | NR | 655 | 362 | NR | 785 | 6 | NR | 915 | 0 | NR |
| 400 | 4 | NR | 530 | 461 | NR | 660 | 313 | NR | 790 | 5 | NR | 920 | 0 | NR |
| 405 | 8 | NR | 535 | 486 | NR | 665 | 271 | NR | 795 | 4 | NR | 925 | 0 | NR |
| 410 | 16 | NR | 540 | 514 | NR | 670 | 231 | NR | 800 | 4 | NR | 930 | 0 | NR |
| 415 | 33 | NR | 545 | 549 | NR | 675 | 198 | NR | 805 | 3 | NR | 935 | 0 | NR |
| 420 | 69 | NR | 550 | 591 | NR | 680 | 169 | NR | 810 | 3 | NR | 940 | 0 | NR |
| 425 | 131 | NR | 555 | 640 | NR | 685 | 144 | NR | 815 | 2 | NR | 945 | 0 | NR |
| 430 | 227 | NR | 560 | 695 | NR | 690 | 123 | NR | 820 | 2 | NR | 950 | 0 | NR |
| 435 | 369 | NR | 565 | 757 | NR | 695 | 104 | NR | 825 | 2 | NR | 955 | 0 | NR |
| 440 | 517 | NR | 570 | 822 | NR | 700 | 88 | NR | 830 | 2 | NR | 960 | 0 | NR |
| 445 | 498 | NR | 575 | 882 | NR | 705 | 75 | NR | 835 | 1 | NR | 965 | 0 | NR |
| 450 | 315 | NR | 580 | 935 | NR | 710 | 63 | NR | 840 | 1 | NR | 970 | 0 | NR |
| 455 | 204 | NR | 585 | 972 | NR | 715 | 54 | NR | 845 | 1 | NR | 975 | 0 | NR |
| 460 | 145 | NR | 590 | 996 | NR | 720 | 46 | NR | 850 | 1 | NR | 980 | 0 | NR |
| 465 | 100 | NR | 595 | 1000 | NR | 725 | 39 | NR | 855 | 1 | NR | 985 | 0 | NR |
| 470 | 78 | NR | 600 | 989 | NR | 730 | 33 | NR | 860 | 1 | NR | 990 | 0 | NR |
| 475 | 76 | NR | 605 | 960 | NR | 735 | 28 | NR | 865 | 1 | NR | 995 | 0 | NR |
| 480 | 83 | NR | 610 | 918 | NR | 740 | 24 | NR | 870 | 1 | NR | 1000 | 0 | NR |
| 485 | 105 | NR | 615 | 864 | NR | 745 | 20 | NR | 875 | 1 | NR | | | |

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## Melanopic Flux vs. Wavelength




**Melanopic Lumens: NR** **M/P: 2.13**

| λ (nm) | Power W^/nm | Lumens (ϕ/nm) | λ (nm) | Power W^/nm | Lumens (ϕ/nm) | λ (nm) | Power W^/nm | Lumens (ϕ/nm) | λ (nm) | Power W^/nm | Lumens (ϕ/nm) | λ (nm) | Power W^/nm | Lumens (ϕ/nm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 360 | 0 | NR | 490 | 142 | NR | 620 | 803 | NR | 750 | 17 | NR | 880 | 0 | NR |
| 365 | 0 | NR | 495 | 189 | NR | 625 | 734 | NR | 755 | 15 | NR | 885 | 0 | NR |
| 370 | 0 | NR | 500 | 240 | NR | 630 | 670 | NR | 760 | 13 | NR | 890 | 0 | NR |
| 375 | 0 | NR | 505 | 290 | NR | 635 | 600 | NR | 765 | 11 | NR | 895 | 0 | NR |
| 380 | 0 | NR | 510 | 335 | NR | 640 | 535 | NR | 770 | 9 | NR | 900 | 0 | NR |
| 385 | 0 | NR | 515 | 375 | NR | 645 | 473 | NR | 775 | 8 | NR | 905 | 0 | NR |
| 390 | 1 | NR | 520 | 408 | NR | 650 | 415 | NR | 780 | 7 | NR | 910 | 0 | NR |
| 395 | 2 | NR | 525 | 434 | NR | 655 | 362 | NR | 785 | 6 | NR | 915 | 0 | NR |
| 400 | 4 | NR | 530 | 461 | NR | 660 | 313 | NR | 790 | 5 | NR | 920 | 0 | NR |
| 405 | 8 | NR | 535 | 486 | NR | 665 | 271 | NR | 795 | 4 | NR | 925 | 0 | NR |
| 410 | 16 | NR | 540 | 514 | NR | 670 | 231 | NR | 800 | 4 | NR | 930 | 0 | NR |
| 415 | 33 | NR | 545 | 549 | NR | 675 | 198 | NR | 805 | 3 | NR | 935 | 0 | NR |
| 420 | 69 | NR | 550 | 591 | NR | 680 | 169 | NR | 810 | 3 | NR | 940 | 0 | NR |
| 425 | 131 | NR | 555 | 640 | NR | 685 | 144 | NR | 815 | 2 | NR | 945 | 0 | NR |
| 430 | 227 | NR | 560 | 695 | NR | 690 | 123 | NR | 820 | 2 | NR | 950 | 0 | NR |
| 435 | 369 | NR | 565 | 757 | NR | 695 | 104 | NR | 825 | 2 | NR | 955 | 0 | NR |
| 440 | 517 | NR | 570 | 822 | NR | 700 | 88 | NR | 830 | 2 | NR | 960 | 0 | NR |
| 445 | 498 | NR | 575 | 882 | NR | 705 | 75 | NR | 835 | 1 | NR | 965 | 0 | NR |
| 450 | 315 | NR | 580 | 935 | NR | 710 | 63 | NR | 840 | 1 | NR | 970 | 0 | NR |
| 455 | 204 | NR | 585 | 972 | NR | 715 | 54 | NR | 845 | 1 | NR | 975 | 0 | NR |
| 460 | 145 | NR | 590 | 996 | NR | 720 | 46 | NR | 850 | 1 | NR | 980 | 0 | NR |
| 465 | 100 | NR | 595 | 1000 | NR | 725 | 39 | NR | 855 | 1 | NR | 985 | 0 | NR |
| 470 | 78 | NR | 600 | 989 | NR | 730 | 33 | NR | 860 | 1 | NR | 990 | 0 | NR |
| 475 | 76 | NR | 605 | 960 | NR | 735 | 28 | NR | 865 | 1 | NR | 995 | 0 | NR |
| 480 | 83 | NR | 610 | 918 | NR | 740 | 24 | NR | 870 | 1 | NR | 1000 | 0 | NR |
| 485 | 105 | NR | 615 | 864 | NR | 745 | 20 | NR | 875 | 1 | NR | | | |

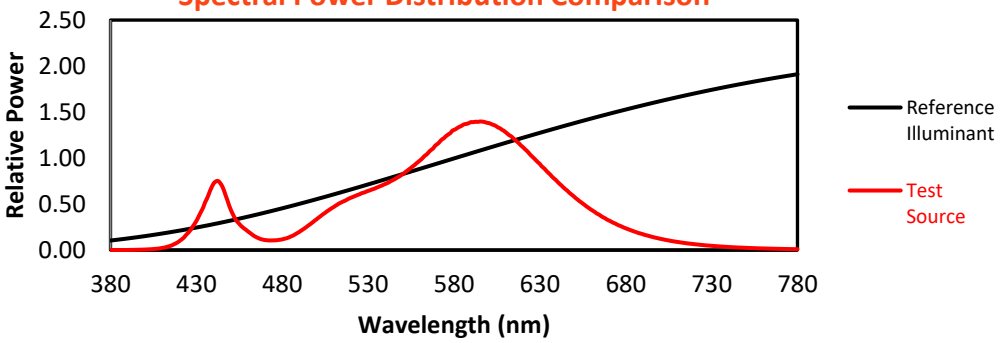
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# TM-30-18

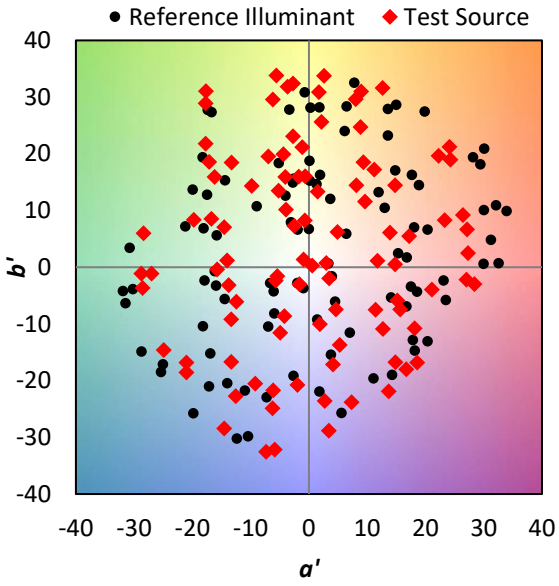
## Summary

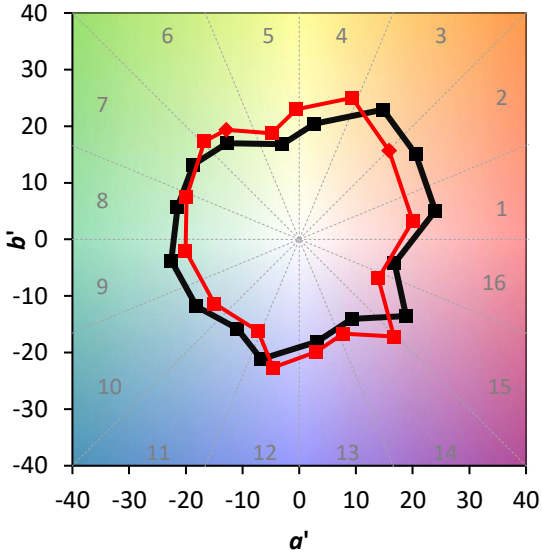
$R_f$ = 73.8
$R_g$ = 94.4
CIE $R_a$ = 70.8
$R_9$ = -43.2

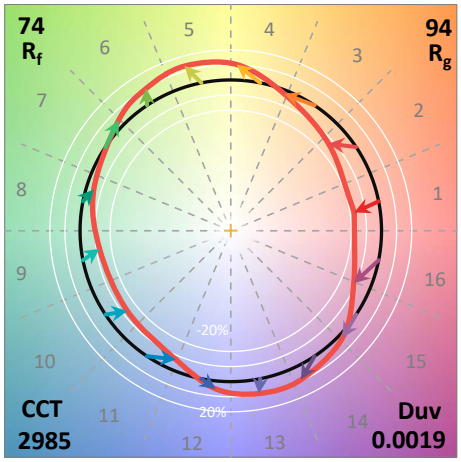
## Spectral Power Distribution Comparison

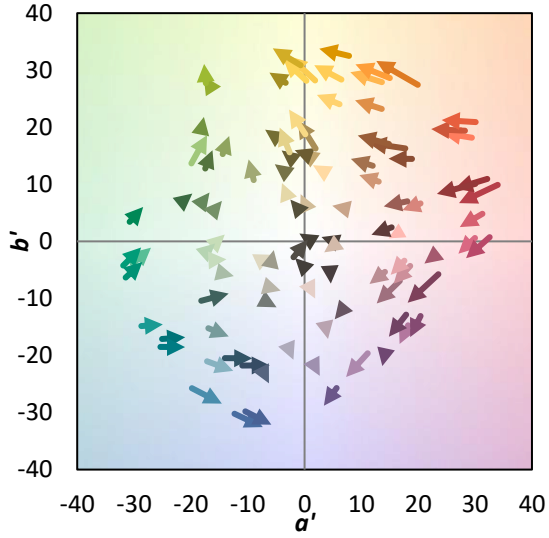



## Color Vector Graphics



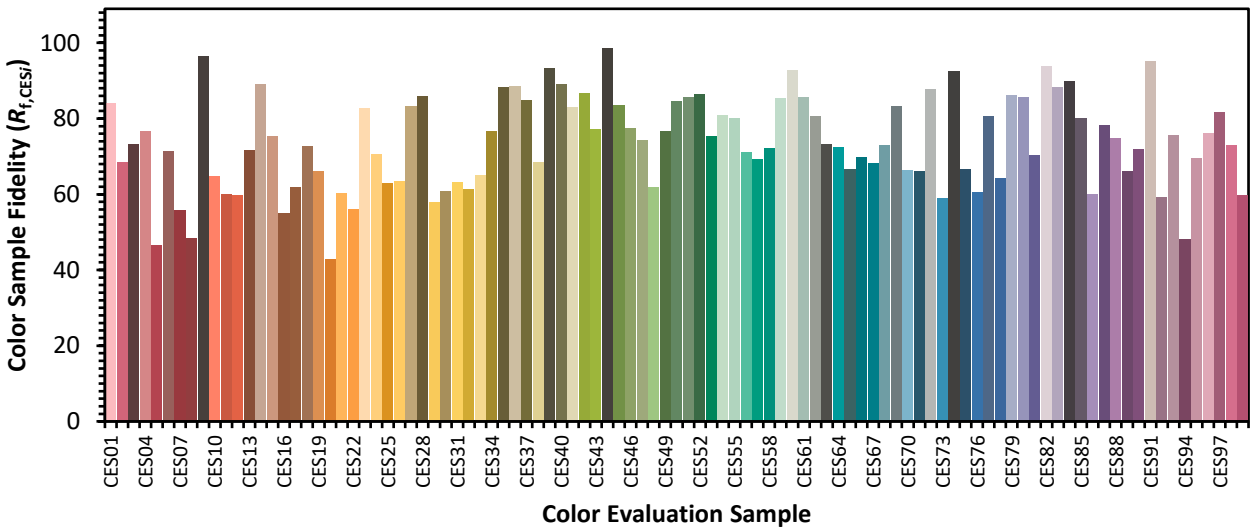



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**Individual Sample Fidelity Index ($R_{f,i}$)**

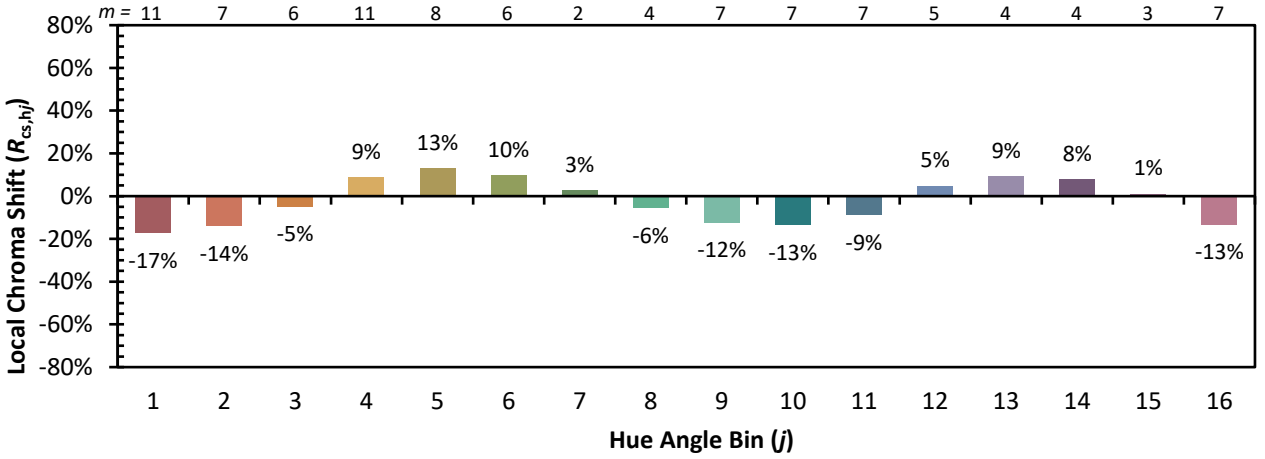
| | | | |
|---|---|---|---|
| CES01 = 86 | CES26 = 63 | CES51 = 86 | CES76 = 61 |
| CES02 = 62 | CES27 = 83 | CES52 = 86 | CES77 = 81 |
| CES03 = 31 | CES28 = 86 | CES53 = 75 | CES78 = 64 |
| CES04 = 71 | CES29 = 58 | CES54 = 81 | CES79 = 86 |
| CES05 = 49 | CES30 = 61 | CES55 = 80 | CES80 = 86 |
| CES06 = 51 | CES31 = 63 | CES56 = 71 | CES81 = 70 |
| CES07 = 41 | CES32 = 61 | CES57 = 69 | CES82 = 94 |
| CES08 = 40 | CES33 = 65 | CES58 = 72 | CES83 = 88 |
| CES09 = 29 | CES34 = 77 | CES59 = 85 | CES84 = 90 |
| CES10 = 76 | CES35 = 88 | CES60 = 93 | CES85 = 80 |
| CES11 = 59 | CES36 = 89 | CES61 = 86 | CES86 = 60 |
| CES12 = 65 | CES37 = 85 | CES62 = 81 | CES87 = 78 |
| CES13 = 43 | CES38 = 69 | CES63 = 73 | CES88 = 75 |
| CES14 = 74 | CES39 = 93 | CES64 = 72 | CES89 = 66 |
| CES15 = 71 | CES40 = 89 | CES65 = 67 | CES90 = 72 |
| CES16 = 47 | CES41 = 83 | CES66 = 70 | CES91 = 95 |
| CES17 = 50 | CES42 = 87 | CES67 = 68 | CES92 = 59 |
| CES18 = 56 | CES43 = 77 | CES68 = 73 | CES93 = 76 |
| CES19 = 73 | CES44 = 99 | CES69 = 83 | CES94 = 48 |
| CES20 = 66 | CES45 = 83 | CES70 = 66 | CES95 = 70 |
| CES21 = 87 | CES46 = 77 | CES71 = 66 | CES96 = 76 |
| CES22 = 79 | CES47 = 74 | CES72 = 88 | CES97 = 82 |
| CES23 = 92 | CES48 = 62 | CES73 = 59 | CES98 = 73 |
| CES24 = 91 | CES49 = 77 | CES74 = 93 | CES99 = 60 |
| CES25 = 73 | CES50 = 85 | CES75 = 67 | |

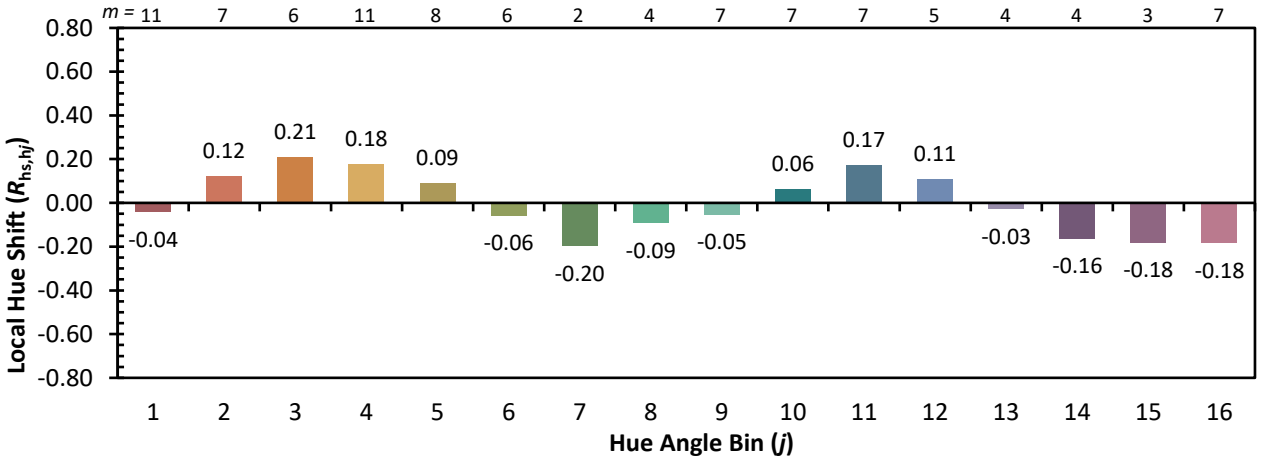


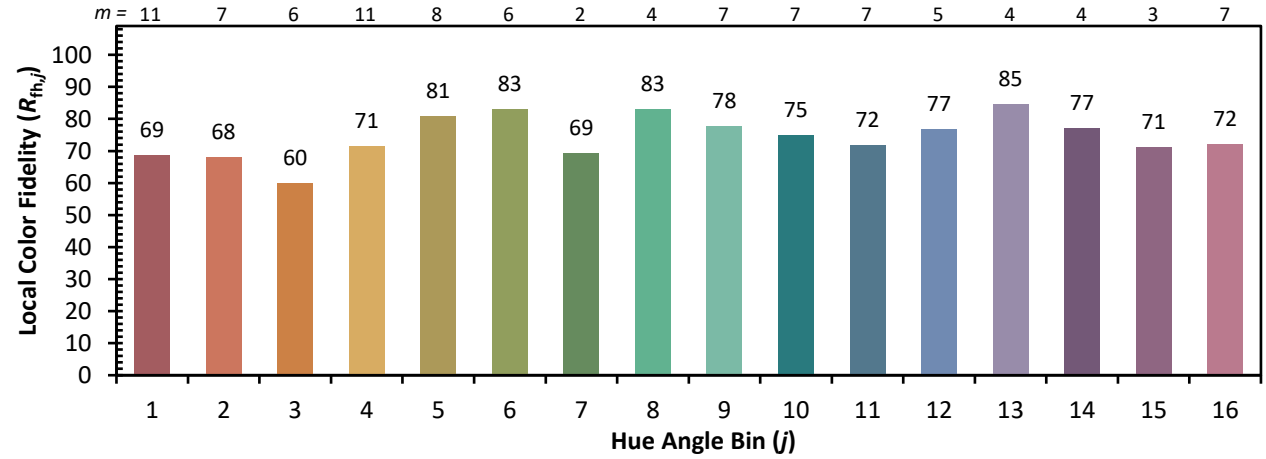
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## Color Rendition by Hue-Angle Bin



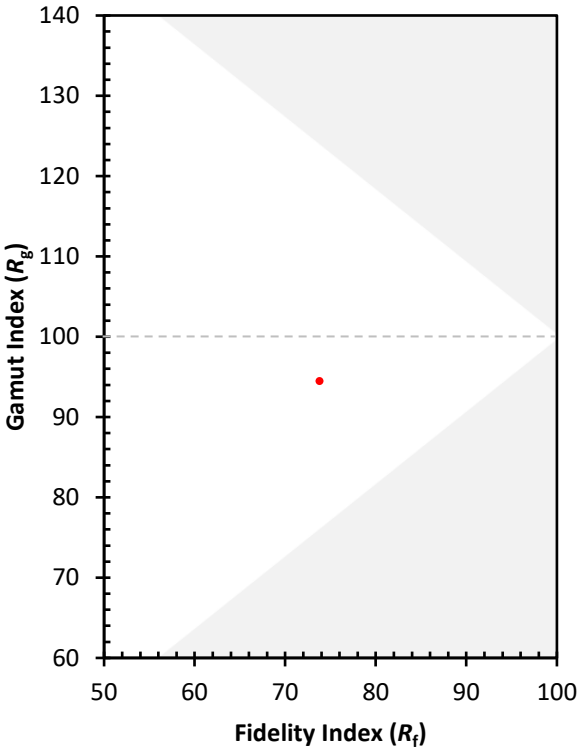



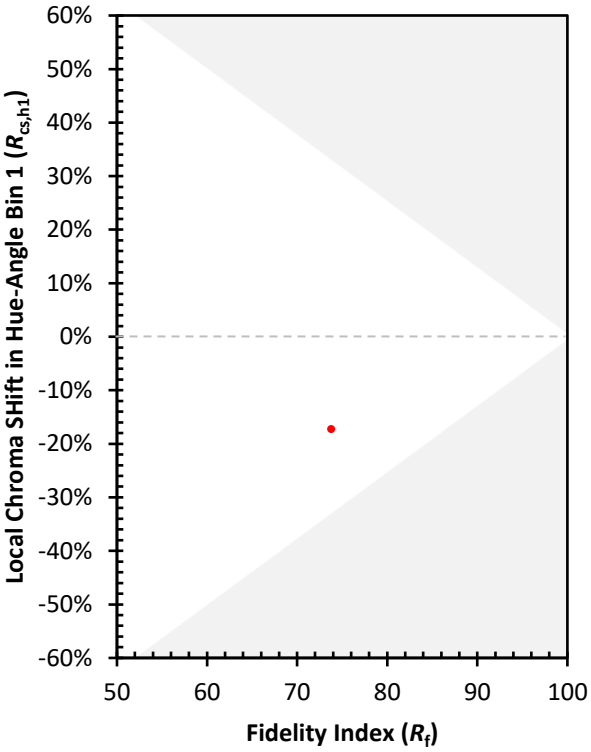



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## Measure Comparisons




(END OF REPORT)