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: P1366908

Luminaire Tested: **GSS-SB2B-735-U-T3R-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: | P1366908 |
| Test Lab: | INNOVATION CENTER(G1) |
| Issue Date: | 02/18/2026 |
| Manufacturer: | COOPER LIGHTING SOLUTIONS (FORMERLY EATON) |
| Product Line: | McGRAW-EDISON |
| Catalog Number: | GSS-SB2B-735-U-T3R-HSS |
| Description: | GALLEON II SLIM SITE HIGH DENSITY LED ARRAYS 2SQUARE 74W 70CRI 3500K FIXTURE w/ TYPE III ROADWAY DISTRIBUTION OPTIC AND HOUSE SIDE SHIELD |
| Light Source: | (52) 3500K CCT, 70 CRI LEDS |
| Ballast/Driver: | ELECTRONIC DRIVER |

**Summary**

| | |
|---|---|
| Lumens per Lamp: | N/A |
| Luminaire Lumens: | 8384.8 lumens |
| Efficiency: | N/A |
| Efficacy: | 113.3 lumens/watt |
| Luminous Opening: | Rectangular (W 1' x L: 0.5' x H: 0') |
| IES Classification: | Type III - Medium |
| BUG Rating: | B1 - U0 - G2 |

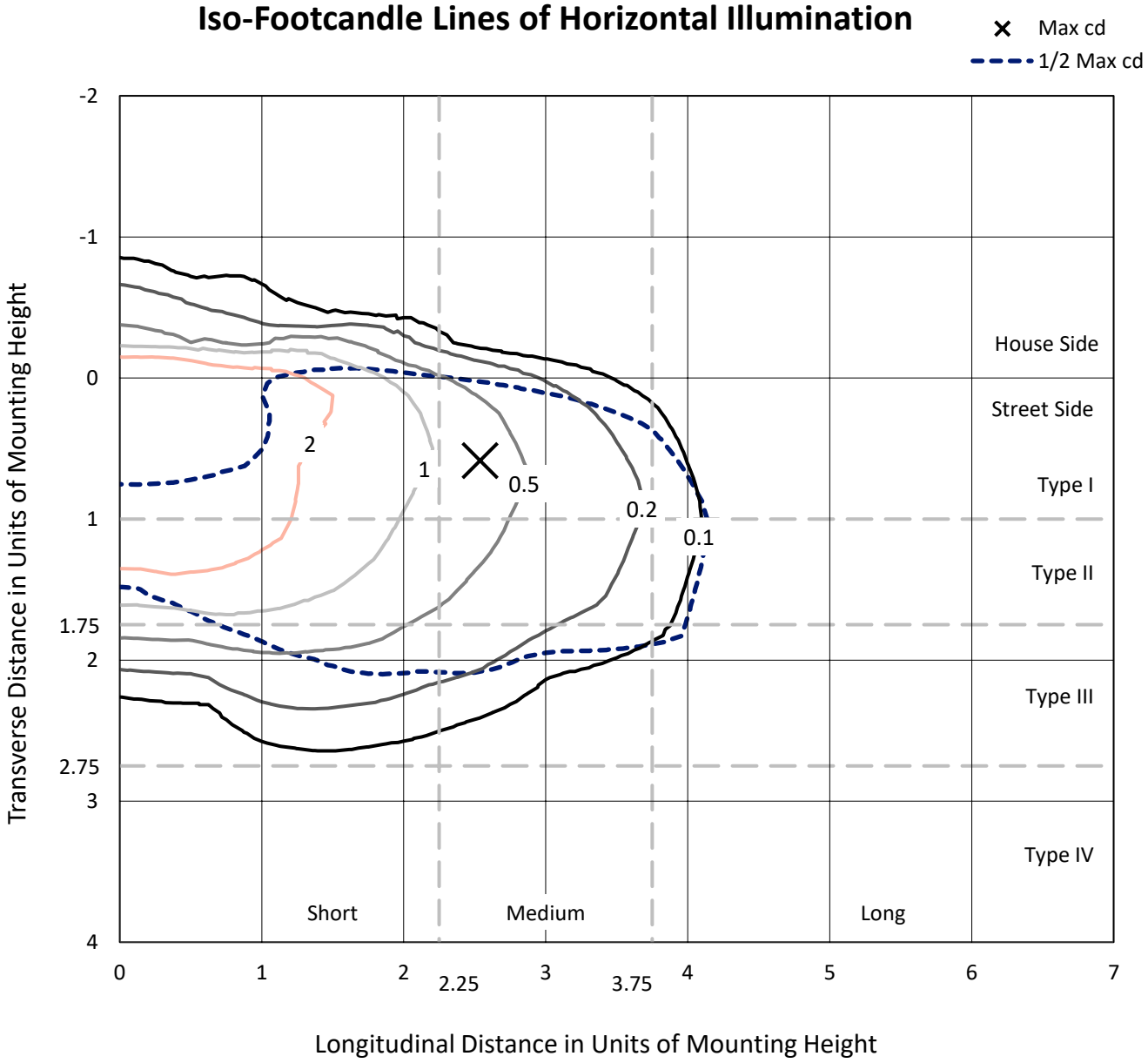
| | |
|---|---|
| Input Watts (W): | 74 |
| Input Voltage (V): | 120 |
| Input Current (Ain): | NR |
| Voltage Rise (V): | NR |
| Power Factor: | 0.98 |
| Total Harmonic Distortion (THDi): | 13.6% |
| Frequency (hertz): | 60 |
| Stabilization Time: | NR |
| Operation Time: | NR |
| Ambient Temperature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

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Scaled Data Report

REPORT NUMBER: P1366908
CATALOG NUMBER: GSS-SB2B-735-U-T3R-HSS

## Iso-Footcandle Lines of Horizontal Illumination



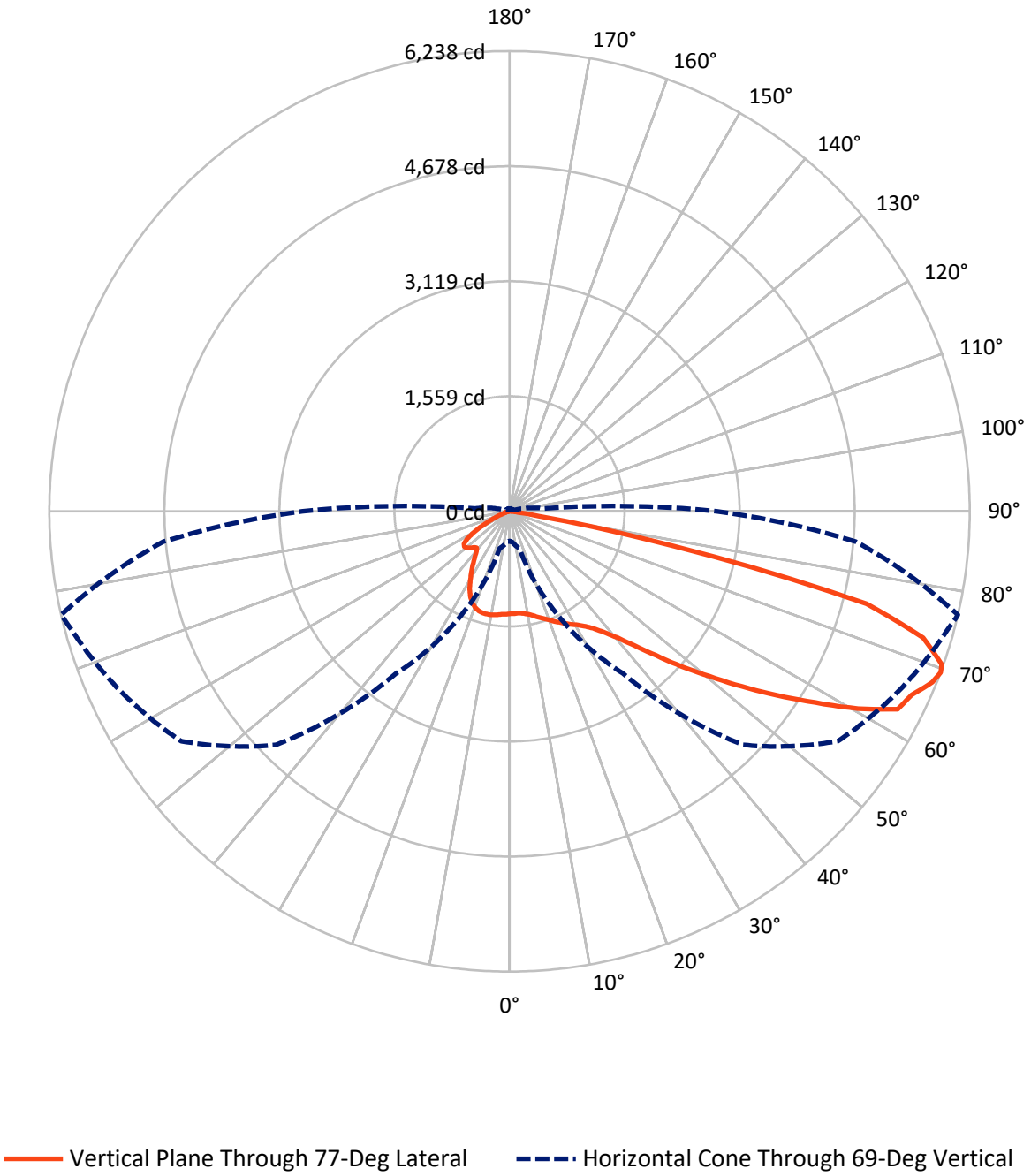

Based on 20 foot mounting height. Maximum calculated value = 4 fc
Type III - Medium - N/A

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## Luminous Intensity Polar Plot



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Scaled Data Report

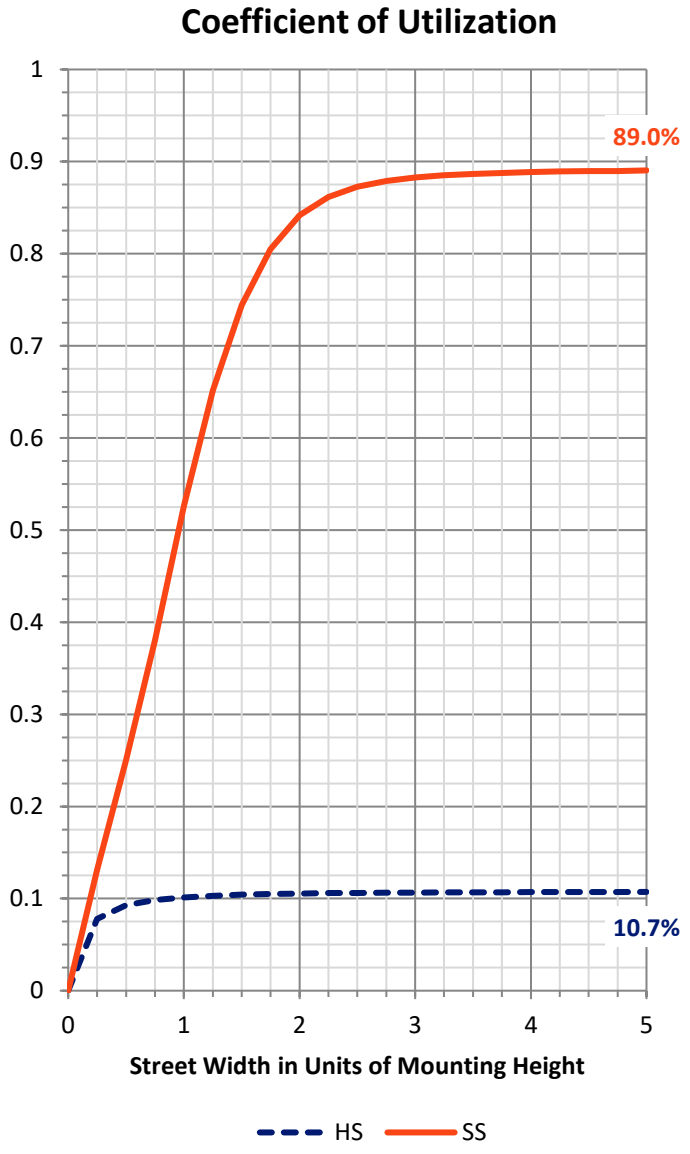
REPORT NUMBER: P1366908
CATALOG NUMBER: GSS-SB2B-735-U-T3R-HSS

**FLUX DISTRIBUTION:**

| | | Downward | Upward | Total |
|---|---|---|---|---|
| **House Side** | Lumens | 906.3 | 0.0 | 906.3 |
| | % Fixture | 10.8 | 0.0 | 10.8 |
| **Street Side** | Lumens | 7478.5 | 0.0 | 7478.5 |
| | % Fixture | 89.2 | 0.0 | 89.2 |
| **Total** | Lumens | 8384.8 | 0.0 | 8384.8 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

**ZONAL LUMENS:**

| Zone | Lumens | % Fixture |
|---|---|---|
| 0°-10° | 118.6 | 1.4 |
| 10°-20° | 281.6 | 3.4 |
| 20°-30° | 434.4 | 5.2 |
| 30°-40° | 771.6 | 9.2 |
| 40°-50° | 1490.6 | 17.8 |
| 50°-60° | 2165.7 | 25.8 |
| 60°-70° | 2078.3 | 24.8 |
| 70°-80° | 1007.2 | 12.0 |
| 80°-90° | 36.9 | 0.4 |
| 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° | 8384.8 | 100.0 |
| 0°-180° | 8384.8 | 100.0 |



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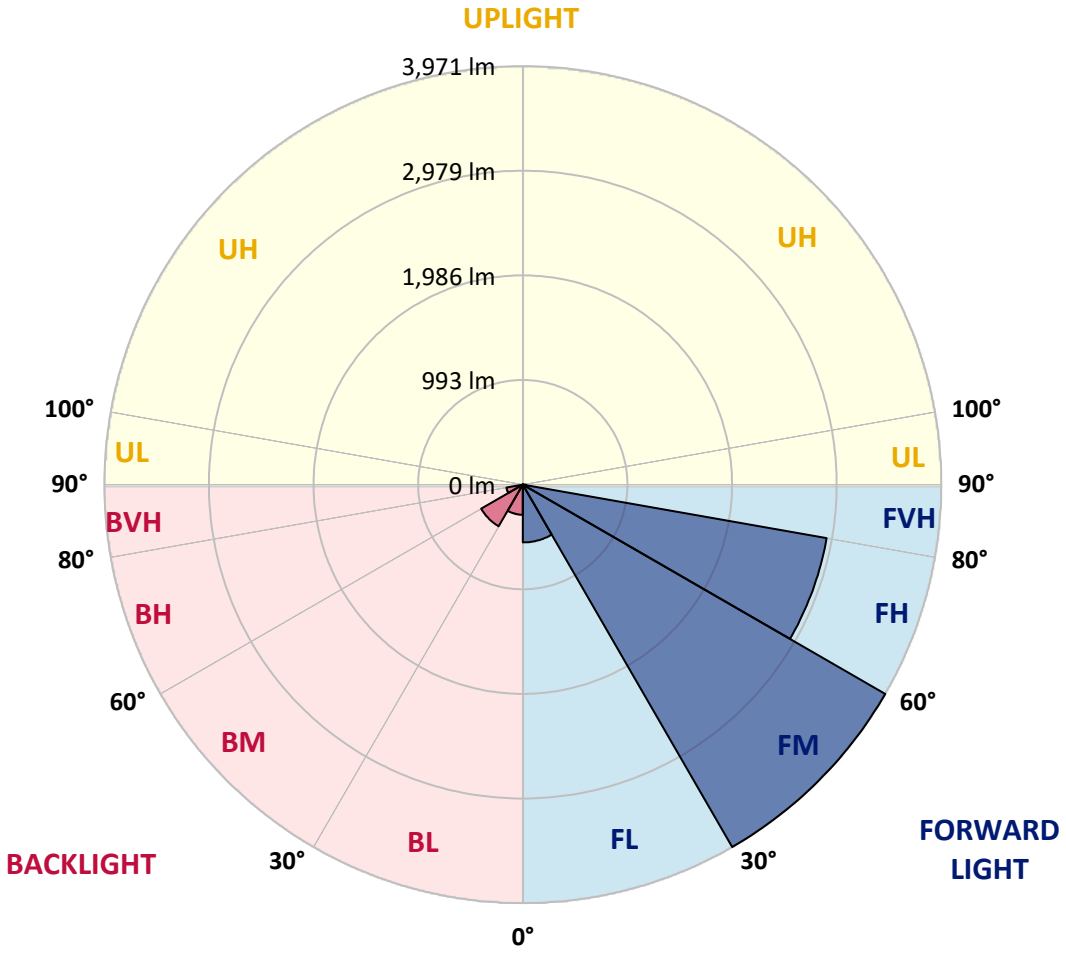
Scaled Data Report

REPORT NUMBER: P1366908
CATALOG NUMBER: GSS-SB2B-735-U-T3R-HSS

## LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit B | U | G |
|---|---|---|---|---|---|---|
| FL | (0°-30°) | 548.5 | 6.5 | | | |
| FM | (30°-60°) | 3971.4 | 47.4 | | | |
| FH | (60°-80°) | 2927.4 | 34.9 | | | G2/5000 |
| FVH | (80°-90°) | 31.1 | 0.4 | | | G1/100 |
| BL | (0°-30°) | 286.0 | 3.4 | B1/500 | | |
| BM | (30°-60°) | 456.5 | 5.4 | B1/1000 | | |
| BH | (60°-80°) | 158.0 | 1.9 | B1/500 | | G1/500 |
| BVH | (80°-90°) | 5.8 | 0.1 | | | G0/10 |
| 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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**CANDELA DISTRIBUTION (FULL):**

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 77° | 85° |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0° | 1388.0 | 1388.0 | 1388.0 | 1388.0 | 1388.0 | 1388.0 | 1388.0 | 1388.0 | 1388.0 | *1388.0* | 1388.0 |
| 2.5° | 1334.5 | 1339.4 | 1332.1 | 1337.0 | 1344.3 | 1349.1 | 1361.3 | 1366.1 | 1383.1 | *1388.0* | 1392.9 |
| 5° | 1268.9 | 1273.8 | 1273.8 | 1283.5 | 1295.6 | 1310.2 | 1329.7 | 1349.1 | 1380.7 | *1383.1* | 1405.0 |
| 7.5° | 1191.1 | 1188.7 | 1196.0 | 1215.4 | 1239.7 | 1276.2 | 1310.2 | 1344.3 | 1390.4 | *1397.7* | 1436.6 |
| 10° | 1091.4 | 1091.4 | 1106.0 | 1132.8 | 1171.7 | 1232.4 | 1290.8 | 1341.8 | 1402.6 | *1419.6* | 1470.7 |
| 12.5° | 1035.5 | 1038.0 | 1045.3 | 1067.1 | 1123.0 | 1193.5 | 1271.3 | 1354.0 | 1434.2 | *1451.2* | 1521.7 |
| 15° | 1013.7 | 1016.1 | 1025.8 | 1047.7 | 1091.4 | 1174.1 | 1266.5 | 1368.6 | 1468.2 | *1490.1* | 1575.2 |
| 17.5° | 1016.1 | 1013.7 | 1021.0 | 1038.0 | 1081.7 | 1161.9 | 1271.3 | 1392.9 | 1504.7 | *1531.4* | 1631.1 |
| 20° | 1030.7 | 1030.7 | 1030.7 | 1042.8 | 1084.2 | 1161.9 | 1285.9 | 1426.9 | 1550.9 | *1575.2* | 1699.2 |
| 22.5° | 1057.4 | 1052.6 | 1055.0 | 1059.8 | 1098.7 | 1176.5 | 1307.8 | 1463.4 | 1597.1 | *1626.2* | 1762.4 |
| 25° | 1076.9 | 1074.4 | 1074.4 | 1084.2 | 1120.6 | 1191.1 | 1329.7 | 1519.3 | 1648.1 | *1674.9* | 1828.0 |
| 27.5° | 1198.4 | 1186.3 | 1147.4 | 1115.8 | 1144.9 | 1222.7 | 1361.3 | 1567.9 | 1701.6 | *1730.8* | 1888.8 |
| 30° | 1580.0 | 1560.6 | 1441.5 | 1271.3 | 1198.4 | 1259.2 | 1402.6 | 1618.9 | 1759.9 | *1784.2* | 1966.6 |
| 32.5° | 2153.7 | 2129.4 | 1944.7 | 1618.9 | 1375.9 | 1332.1 | 1458.5 | 1679.7 | 1825.6 | *1852.3* | 2058.9 |
| 35° | 2754.1 | 2722.5 | 2540.2 | 2170.7 | 1752.6 | 1495.0 | 1543.6 | 1757.5 | 1915.5 | *1944.7* | 2190.2 |
| 37.5° | 3196.6 | 3174.7 | 3045.8 | 2739.6 | 2236.4 | 1803.7 | 1684.6 | 1869.3 | 2041.9 | *2073.5* | 2370.1 |
| 40° | 3563.6 | 3549.0 | 3510.1 | 3254.9 | 2780.9 | 2251.0 | 1922.8 | 2041.9 | 2214.5 | *2248.5* | 2588.8 |
| 42.5° | 3884.5 | 3879.6 | 3896.6 | 3782.4 | 3391.0 | 2768.7 | 2282.6 | 2294.7 | 2450.3 | *2486.8* | 2866.0 |
| 45° | 4149.4 | 4151.9 | 4219.9 | 4275.9 | 4018.2 | 3335.1 | 2698.2 | 2596.1 | 2734.7 | *2783.3* | 3167.4 |
| 47.5° | 4409.5 | 4390.1 | 4514.1 | 4635.6 | 4543.2 | 3908.8 | 3128.5 | 2936.5 | 3084.7 | *3140.6* | 3502.8 |
| 50° | 4446.0 | 4453.3 | 4667.2 | 4869.0 | 4949.2 | 4450.9 | 3595.2 | 3318.1 | 3456.7 | *3510.1* | 3860.2 |
| 52.5° | 4239.4 | 4283.1 | 4606.4 | 4975.9 | 5187.4 | 4929.8 | 4081.4 | 3726.5 | 3850.5 | *3942.8* | 4227.2 |
| 55° | 3230.6 | 3332.7 | 4392.5 | 4859.3 | 5226.3 | 5253.1 | 4531.1 | 4115.4 | 4290.4 | *4402.3* | 4572.4 |
| 57.5° | 2810.1 | 2839.2 | 3420.2 | 4616.2 | 5095.0 | 5425.6 | 4910.3 | 4504.4 | 4766.9 | *4890.9* | 4922.5 |
| 60° | 2413.8 | 2428.4 | 2875.7 | 4229.7 | 4869.0 | 5355.1 | 5228.7 | 4958.9 | 5284.7 | *5428.1* | 5221.5 |
| 62.5° | 1419.6 | 1533.9 | 2034.6 | 3408.0 | 4587.0 | 5262.8 | 5471.8 | 5428.1 | 5775.7 | *5904.5* | 5257.9 |
| 65° | 719.5 | 782.7 | 1086.6 | 2525.6 | 4098.4 | 5211.7 | 5693.0 | 5693.0 | 5868.1 | *5992.0* | 4990.5 |
| 67.5° | 466.7 | 491.0 | 612.6 | 1876.6 | 3184.4 | 5019.7 | 5600.7 | 5697.9 | 6045.5 | *6181.6* | 4881.1 |
| 69° | *401.1* | *418.1* | *520.2* | *1555.7* | *2681.2* | *4475.2* | *5430.5* | *5802.4* | *6154.9* | *6237.5* | *4708.5* |
| 70° | 359.8 | 374.3 | 474.0 | 1356.4 | 2328.7 | 3775.1 | 5333.3 | 5834.0 | 6137.9 | *6213.2* | 4533.5 |
| 72.5° | 250.4 | 252.8 | 352.5 | 802.2 | 1475.5 | 2399.2 | 4326.9 | 5578.8 | 5863.2 | *5863.2* | 3993.9 |
| 75° | 104.5 | 124.0 | 199.3 | 352.5 | 615.0 | 1329.7 | 2095.4 | 4757.2 | 5087.8 | *5000.2* | 3077.4 |
| 77.5° | 82.6 | 97.2 | 172.6 | 194.5 | 223.6 | 549.4 | 743.8 | 2783.3 | 2426.0 | *2289.9* | 1006.4 |
| 80° | 60.8 | 70.5 | 145.9 | 131.3 | 82.6 | 160.4 | 184.7 | 634.5 | 454.6 | *398.7* | 153.1 |
| 82.5° | 26.7 | 34.0 | 111.8 | 82.6 | 46.2 | 51.0 | 68.1 | 133.7 | 131.3 | *116.7* | 63.2 |
| 85° | 14.6 | 21.9 | 48.6 | 29.2 | 19.4 | 19.4 | 26.7 | 41.3 | 36.5 | *36.5* | 26.7 |
| 87.5° | 0.0 | 0.0 | 2.4 | 2.4 | 4.9 | 7.3 | 9.7 | 14.6 | 17.0 | *17.0* | 17.0 |
| 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
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

REPORT NUMBER: P1366908
CATALOG NUMBER: GSS-SB2B-735-U-T3R-HSS

**CANDELA DISTRIBUTION (continued):**

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0° | 1388.0 | 1388.0 | 1388.0 | 1388.0 | 1388.0 | 1388.0 | 1388.0 | 1388.0 | 1388.0 | 1388.0 | 1388.0 |
| 2.5° | 1392.9 | 1395.3 | 1395.3 | 1388.0 | 1380.7 | 1371.0 | 1354.0 | 1344.3 | 1339.4 | 1334.5 | 1332.1 |
| 5° | 1405.0 | 1409.9 | 1397.7 | 1366.1 | 1327.2 | 1273.8 | 1225.1 | 1186.3 | 1152.2 | 1144.9 | 1137.6 |
| 7.5° | 1436.6 | 1441.5 | 1405.0 | 1324.8 | 1225.1 | 1135.2 | 1038.0 | 969.9 | 914.0 | 901.8 | 904.3 |
| 10° | 1478.0 | 1482.8 | 1407.5 | 1268.9 | 1118.2 | 965.0 | 831.3 | 714.7 | 639.3 | 622.3 | 600.4 |
| 12.5° | 1536.3 | 1531.4 | 1400.2 | 1198.4 | 982.1 | 765.7 | 585.8 | 459.4 | 396.2 | 357.3 | 364.6 |
| 15° | 1592.2 | 1580.0 | 1385.6 | 1110.9 | 809.5 | 546.9 | 369.5 | 299.0 | 277.1 | 274.7 | 274.7 |
| 17.5° | 1660.3 | 1631.1 | 1358.8 | 996.6 | 612.6 | 367.1 | 279.5 | 265.0 | 260.1 | 262.5 | 260.1 |
| 20° | 1723.5 | 1670.0 | 1315.1 | 853.2 | 440.0 | 282.0 | 260.1 | 252.8 | 250.4 | 247.9 | 247.9 |
| 22.5° | 1791.5 | 1701.6 | 1249.5 | 687.9 | 316.0 | 257.7 | 247.9 | 240.7 | 233.4 | 230.9 | 230.9 |
| 25° | 1857.2 | 1723.5 | 1161.9 | 522.6 | 260.1 | 243.1 | 230.9 | 221.2 | 213.9 | 209.1 | 209.1 |
| 27.5° | 1913.1 | 1730.8 | 1052.6 | 381.6 | 238.2 | 228.5 | 211.5 | 199.3 | 189.6 | 187.2 | 187.2 |
| 30° | 1978.7 | 1728.3 | 918.9 | 286.8 | 223.6 | 209.1 | 189.6 | 172.6 | 165.3 | 167.7 | 167.7 |
| 32.5° | 2046.8 | 1738.1 | 785.2 | 240.7 | 209.1 | 187.2 | 160.4 | 145.9 | 141.0 | 141.0 | 143.4 |
| 35° | 2134.3 | 1752.6 | 658.8 | 226.1 | 194.5 | 160.4 | 136.1 | 119.1 | 116.7 | 121.5 | 121.5 |
| 37.5° | 2248.5 | 1769.7 | 537.2 | 223.6 | 182.3 | 138.6 | 111.8 | 102.1 | 99.7 | 102.1 | 102.1 |
| 40° | 2409.0 | 1823.1 | 423.0 | 223.6 | 172.6 | 124.0 | 94.8 | 89.9 | 89.9 | 89.9 | 89.9 |
| 42.5° | 2637.5 | 1944.7 | 345.2 | 221.2 | 167.7 | 114.2 | 85.1 | 80.2 | 80.2 | 82.6 | 82.6 |
| 45° | 2883.0 | 2129.4 | 320.9 | 213.9 | 162.9 | 114.2 | 80.2 | 75.4 | 77.8 | 77.8 | 77.8 |
| 47.5° | 3118.8 | 2316.6 | 328.2 | 201.8 | 158.0 | 116.7 | 77.8 | 72.9 | 72.9 | 72.9 | 72.9 |
| 50° | 3327.8 | 2447.9 | 340.3 | 184.7 | 148.3 | 114.2 | 77.8 | 68.1 | 70.5 | 70.5 | 70.5 |
| 52.5° | 3546.6 | 2503.8 | 345.2 | 160.4 | 133.7 | 109.4 | 77.8 | 65.6 | 65.6 | 68.1 | 68.1 |
| 55° | 3731.3 | 2486.8 | 325.7 | 136.1 | 116.7 | 102.1 | 72.9 | 63.2 | 63.2 | 63.2 | 63.2 |
| 57.5° | 3886.9 | 2362.8 | 265.0 | 114.2 | 99.7 | 85.1 | 68.1 | 60.8 | 60.8 | 60.8 | 60.8 |
| 60° | 3942.8 | 2051.6 | 194.5 | 97.2 | 80.2 | 70.5 | 63.2 | 58.3 | 55.9 | 55.9 | 53.5 |
| 62.5° | 3728.9 | 1582.5 | 133.7 | 82.6 | 68.1 | 60.8 | 55.9 | 53.5 | 51.0 | 46.2 | 43.8 |
| 65° | 3325.4 | 1089.0 | 97.2 | 68.1 | 58.3 | 51.0 | 51.0 | 48.6 | 41.3 | 36.5 | 34.0 |
| 67.5° | 3019.1 | 668.5 | 77.8 | 55.9 | 48.6 | 43.8 | 43.8 | 43.8 | 38.9 | 31.6 | 31.6 |
| 69° | *2807.6* | *464.3* | *70.5* | *51.0* | *43.8* | *38.9* | *38.9* | *41.3* | *36.5* | *29.2* | *29.2* |
| 70° | 2625.3 | 364.6 | 65.6 | 46.2 | 38.9 | 36.5 | 36.5 | 38.9 | 34.0 | 26.7 | 26.7 |
| 72.5° | 2190.2 | 179.9 | 55.9 | 38.9 | 31.6 | 29.2 | 31.6 | 31.6 | 29.2 | 21.9 | 21.9 |
| 75° | 1597.1 | 107.0 | 46.2 | 31.6 | 24.3 | 21.9 | 26.7 | 26.7 | 21.9 | 17.0 | 17.0 |
| 77.5° | 517.8 | 63.2 | 36.5 | 26.7 | 21.9 | 19.4 | 21.9 | 19.4 | 17.0 | 12.2 | 12.2 |
| 80° | 109.4 | 38.9 | 26.7 | 19.4 | 17.0 | 14.6 | 14.6 | 12.2 | 12.2 | 9.7 | 9.7 |
| 82.5° | 48.6 | 29.2 | 19.4 | 17.0 | 12.2 | 12.2 | 9.7 | 9.7 | 7.3 | 7.3 | 7.3 |
| 85° | 24.3 | 19.4 | 14.6 | 12.2 | 9.7 | 9.7 | 7.3 | 7.3 | 7.3 | 7.3 | 7.3 |
| 87.5° | 17.0 | 14.6 | 12.2 | 7.3 | 7.3 | 7.3 | 4.9 | 4.9 | 4.9 | 4.9 | 4.9 |
| 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-79-2019: Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Report Prepared for

Cooper Lighting Solutions

McGraw-Edison

Report Number: SP1-2407-184-5

Test Date: 10/10/2024

Luminaire Tested: GSS-SB1A-735-U-5WQ

Data in this report applies to families of products including GSS-SB1A-735-U-5WQ

Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

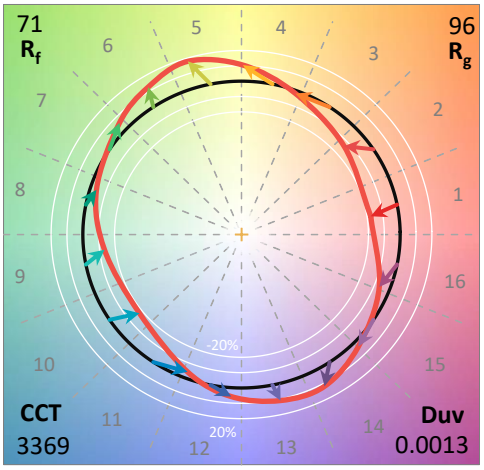
## Test Information

| | |
|---|---|
| Test Method: | LM-79-2019 |
| Report Number: | SP1-2407-184-5 |
| 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-735-U-5WQ** |
| Description: | GALLEON II SITE SLIM 1SQ 350MA 5WQ HIGH DENSITY LIGHTSQUARE WITH 70 CRI 3500K CCT 26 LEDS |

## Spectral Parameters

| | |
|---|---|
| CCT (K): | 3369 |
| CIE u': | 0.2386 |
| CIE v': | 0.5156 |
| Duv: | 0.0013 |
| CIE x: | 0.4143 |
| CIE y: | 0.3980 |
| CIE z: | 0.1877 |
| Peak Wavelength (nm): | 590 |
| Dominant Wavelength (nm): | 580 |
| Purity: | 43.80166 |
| Rf: | 71.4 |
| Rg: | 96 |

| | |
|---|---|
| CRI (Ra): | 70.1 |
| R1: | 66.6 |
| R2: | 77.6 |
| R3: | 88.5 |
| R4: | 69.5 |
| R5: | 66.4 |
| R6: | 69.6 |
| R7: | 77.5 |
| R8: | 44.9 |
| R9: | -40.2 |
| R10: | 49.1 |
| R11: | 66.3 |
| R12: | 45.7 |
| R13: | 68.0 |
| R14: | 93.4 |
| R15: | 57.6 |




## Test Conditions

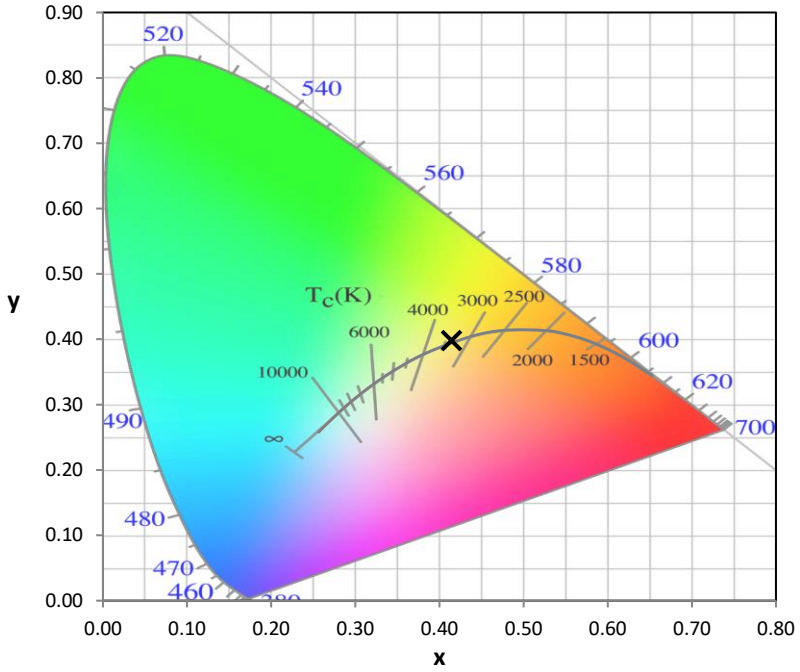
| | |
|---|---|
| Stabilization Time: | 21M |
| Operation Time: | 1H 21M |
| Sphere Temperature (°C): | 25.2 |

REPORT NUMBER: SP1-2407-184-5

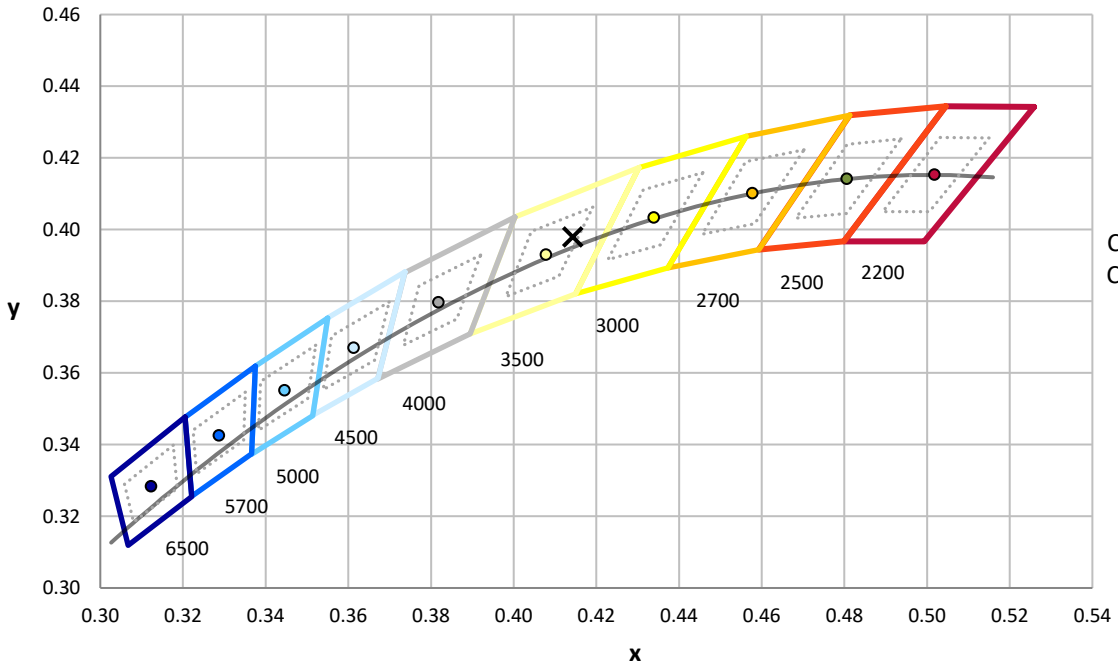
| Measurement and Test Equipment | | | |
|---|---|---|---|
| Instrument | Identification Number | Calibration Date | Calibration Due Date |
| Photometer | IN0058 | 6/18/2024 | 12/18/2024 |
| Power Meter | INXT2011004 | 2/8/2024 | 2/8/2025 |
| AC Power Source | IN0063 | 10/24/2023 | 10/24/2024 |
| DC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

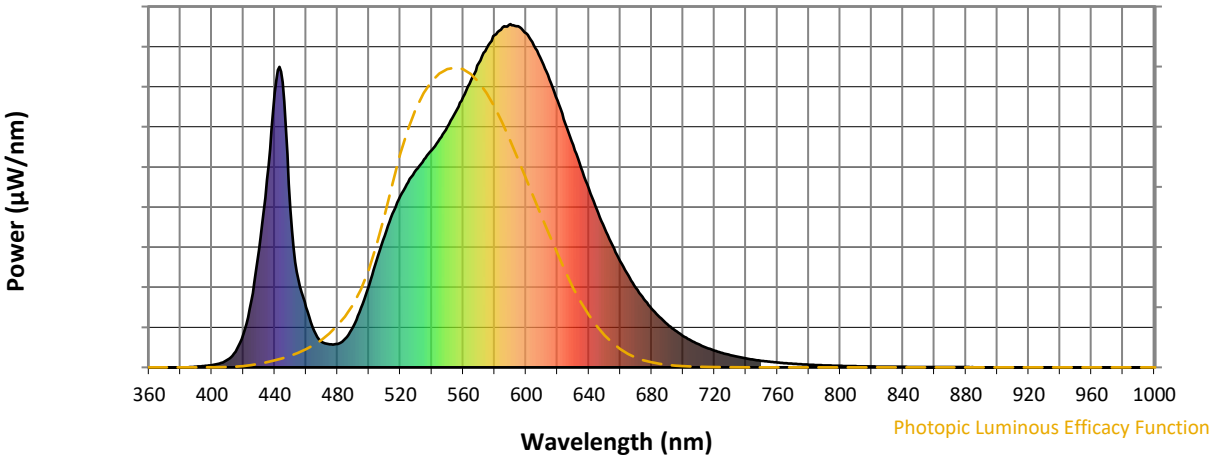



CCT = 3369K
CIE x = 0.4143
CIE y = 0.3980
Duv = 0.0013

Point lies inside the ANSI 3500K 4-step quadrangle

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## Photopic Flux vs. Wavelength

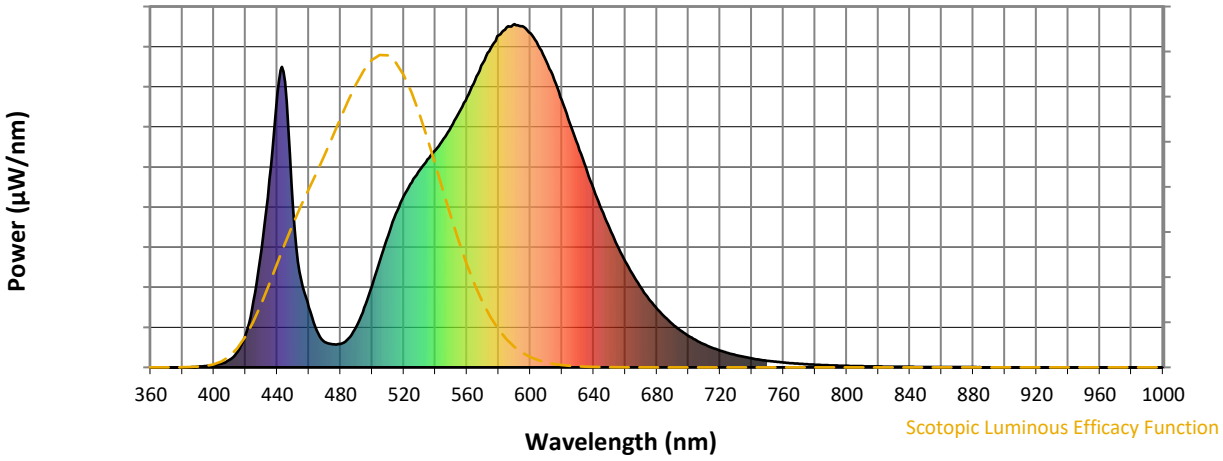



## Photopic Lumens: NR

| 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 | 119 | NR | 620 | 778 | NR | 750 | 19 | NR | 880 | 1 | NR |
| 365 | 0 | NR | 495 | 173 | NR | 625 | 711 | NR | 755 | 16 | NR | 885 | 0 | NR |
| 370 | 0 | NR | 500 | 239 | NR | 630 | 648 | NR | 760 | 14 | NR | 890 | 0 | NR |
| 375 | 0 | NR | 505 | 313 | NR | 635 | 582 | NR | 765 | 12 | NR | 895 | 0 | NR |
| 380 | 0 | NR | 510 | 383 | NR | 640 | 520 | NR | 770 | 11 | NR | 900 | 0 | NR |
| 385 | 0 | NR | 515 | 448 | NR | 645 | 460 | NR | 775 | 9 | NR | 905 | 0 | NR |
| 390 | 2 | NR | 520 | 500 | NR | 650 | 406 | NR | 780 | 8 | NR | 910 | 0 | NR |
| 395 | 4 | NR | 525 | 539 | NR | 655 | 355 | NR | 785 | 7 | NR | 915 | 0 | NR |
| 400 | 6 | NR | 530 | 575 | NR | 660 | 309 | NR | 790 | 6 | NR | 920 | 0 | NR |
| 405 | 11 | NR | 535 | 606 | NR | 665 | 269 | NR | 795 | 5 | NR | 925 | 0 | NR |
| 410 | 22 | NR | 540 | 633 | NR | 670 | 231 | NR | 800 | 4 | NR | 930 | 0 | NR |
| 415 | 45 | NR | 545 | 666 | NR | 675 | 199 | NR | 805 | 4 | NR | 935 | 0 | NR |
| 420 | 96 | NR | 550 | 701 | NR | 680 | 171 | NR | 810 | 3 | NR | 940 | 0 | NR |
| 425 | 193 | NR | 555 | 743 | NR | 685 | 147 | NR | 815 | 3 | NR | 945 | 0 | NR |
| 430 | 341 | NR | 560 | 788 | NR | 690 | 126 | NR | 820 | 3 | NR | 950 | 0 | NR |
| 435 | 547 | NR | 565 | 837 | NR | 695 | 107 | NR | 825 | 2 | NR | 955 | 0 | NR |
| 440 | 799 | NR | 570 | 887 | NR | 700 | 92 | NR | 830 | 2 | NR | 960 | 0 | NR |
| 445 | 831 | NR | 575 | 931 | NR | 705 | 78 | NR | 835 | 2 | NR | 965 | 0 | NR |
| 450 | 461 | NR | 580 | 967 | NR | 710 | 67 | NR | 840 | 2 | NR | 970 | 0 | NR |
| 455 | 256 | NR | 585 | 990 | NR | 715 | 57 | NR | 845 | 1 | NR | 975 | 0 | NR |
| 460 | 176 | NR | 590 | 1000 | NR | 720 | 49 | NR | 850 | 1 | NR | 980 | 0 | NR |
| 465 | 107 | NR | 595 | 994 | NR | 725 | 42 | NR | 855 | 1 | NR | 985 | 0 | NR |
| 470 | 74 | NR | 600 | 973 | NR | 730 | 36 | NR | 860 | 1 | NR | 990 | 0 | NR |
| 475 | 67 | NR | 605 | 938 | NR | 735 | 31 | NR | 865 | 1 | NR | 995 | 0 | NR |
| 480 | 68 | NR | 610 | 892 | NR | 740 | 26 | NR | 870 | 1 | NR | 1000 | 0 | NR |
| 485 | 84 | NR | 615 | 838 | NR | 745 | 22 | NR | 875 | 1 | NR | | | |

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## Scotopic Flux vs. Wavelength

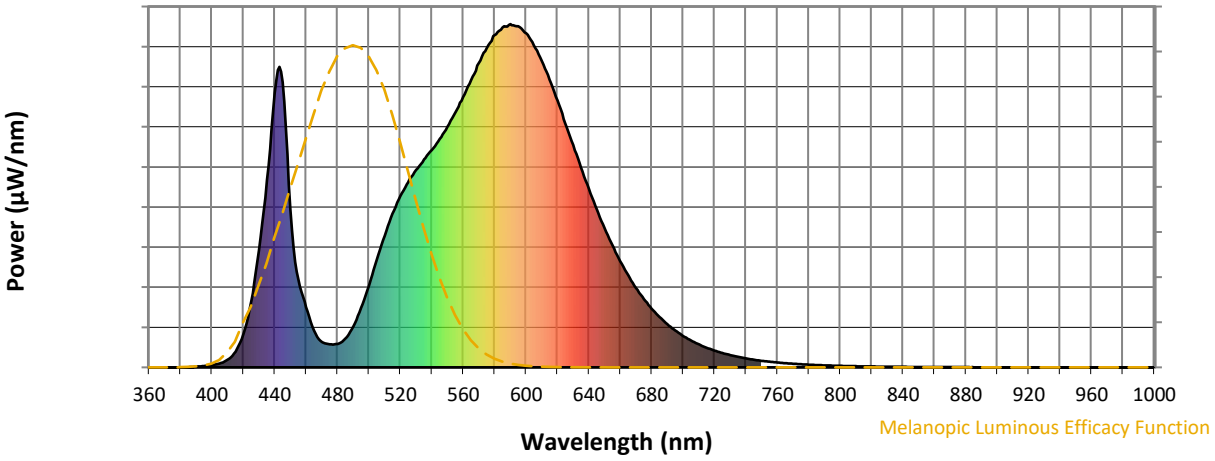



**Scotopic Lumens: NR** **S/P: 1.29**

| 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 | 119 | NR | 620 | 778 | NR | 750 | 19 | NR | 880 | 1 | NR |
| 365 | 0 | NR | 495 | 173 | NR | 625 | 711 | NR | 755 | 16 | NR | 885 | 0 | NR |
| 370 | 0 | NR | 500 | 239 | NR | 630 | 648 | NR | 760 | 14 | NR | 890 | 0 | NR |
| 375 | 0 | NR | 505 | 313 | NR | 635 | 582 | NR | 765 | 12 | NR | 895 | 0 | NR |
| 380 | 0 | NR | 510 | 383 | NR | 640 | 520 | NR | 770 | 11 | NR | 900 | 0 | NR |
| 385 | 0 | NR | 515 | 448 | NR | 645 | 460 | NR | 775 | 9 | NR | 905 | 0 | NR |
| 390 | 2 | NR | 520 | 500 | NR | 650 | 406 | NR | 780 | 8 | NR | 910 | 0 | NR |
| 395 | 4 | NR | 525 | 539 | NR | 655 | 355 | NR | 785 | 7 | NR | 915 | 0 | NR |
| 400 | 6 | NR | 530 | 575 | NR | 660 | 309 | NR | 790 | 6 | NR | 920 | 0 | NR |
| 405 | 11 | NR | 535 | 606 | NR | 665 | 269 | NR | 795 | 5 | NR | 925 | 0 | NR |
| 410 | 22 | NR | 540 | 633 | NR | 670 | 231 | NR | 800 | 4 | NR | 930 | 0 | NR |
| 415 | 45 | NR | 545 | 666 | NR | 675 | 199 | NR | 805 | 4 | NR | 935 | 0 | NR |
| 420 | 96 | NR | 550 | 701 | NR | 680 | 171 | NR | 810 | 3 | NR | 940 | 0 | NR |
| 425 | 193 | NR | 555 | 743 | NR | 685 | 147 | NR | 815 | 3 | NR | 945 | 0 | NR |
| 430 | 341 | NR | 560 | 788 | NR | 690 | 126 | NR | 820 | 3 | NR | 950 | 0 | NR |
| 435 | 547 | NR | 565 | 837 | NR | 695 | 107 | NR | 825 | 2 | NR | 955 | 0 | NR |
| 440 | 799 | NR | 570 | 887 | NR | 700 | 92 | NR | 830 | 2 | NR | 960 | 0 | NR |
| 445 | 831 | NR | 575 | 931 | NR | 705 | 78 | NR | 835 | 2 | NR | 965 | 0 | NR |
| 450 | 461 | NR | 580 | 967 | NR | 710 | 67 | NR | 840 | 2 | NR | 970 | 0 | NR |
| 455 | 256 | NR | 585 | 990 | NR | 715 | 57 | NR | 845 | 1 | NR | 975 | 0 | NR |
| 460 | 176 | NR | 590 | 1000 | NR | 720 | 49 | NR | 850 | 1 | NR | 980 | 0 | NR |
| 465 | 107 | NR | 595 | 994 | NR | 725 | 42 | NR | 855 | 1 | NR | 985 | 0 | NR |
| 470 | 74 | NR | 600 | 973 | NR | 730 | 36 | NR | 860 | 1 | NR | 990 | 0 | NR |
| 475 | 67 | NR | 605 | 938 | NR | 735 | 31 | NR | 865 | 1 | NR | 995 | 0 | NR |
| 480 | 68 | NR | 610 | 892 | NR | 740 | 26 | NR | 870 | 1 | NR | 1000 | 0 | NR |
| 485 | 84 | NR | 615 | 838 | NR | 745 | 22 | NR | 875 | 1 | NR | | | |

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## Melanopic Flux vs. Wavelength




**Melanopic Lumens: NR** **M/P: 2.36**

| 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 | 119 | NR | 620 | 778 | NR | 750 | 19 | NR | 880 | 1 | NR |
| 365 | 0 | NR | 495 | 173 | NR | 625 | 711 | NR | 755 | 16 | NR | 885 | 0 | NR |
| 370 | 0 | NR | 500 | 239 | NR | 630 | 648 | NR | 760 | 14 | NR | 890 | 0 | NR |
| 375 | 0 | NR | 505 | 313 | NR | 635 | 582 | NR | 765 | 12 | NR | 895 | 0 | NR |
| 380 | 0 | NR | 510 | 383 | NR | 640 | 520 | NR | 770 | 11 | NR | 900 | 0 | NR |
| 385 | 0 | NR | 515 | 448 | NR | 645 | 460 | NR | 775 | 9 | NR | 905 | 0 | NR |
| 390 | 2 | NR | 520 | 500 | NR | 650 | 406 | NR | 780 | 8 | NR | 910 | 0 | NR |
| 395 | 4 | NR | 525 | 539 | NR | 655 | 355 | NR | 785 | 7 | NR | 915 | 0 | NR |
| 400 | 6 | NR | 530 | 575 | NR | 660 | 309 | NR | 790 | 6 | NR | 920 | 0 | NR |
| 405 | 11 | NR | 535 | 606 | NR | 665 | 269 | NR | 795 | 5 | NR | 925 | 0 | NR |
| 410 | 22 | NR | 540 | 633 | NR | 670 | 231 | NR | 800 | 4 | NR | 930 | 0 | NR |
| 415 | 45 | NR | 545 | 666 | NR | 675 | 199 | NR | 805 | 4 | NR | 935 | 0 | NR |
| 420 | 96 | NR | 550 | 701 | NR | 680 | 171 | NR | 810 | 3 | NR | 940 | 0 | NR |
| 425 | 193 | NR | 555 | 743 | NR | 685 | 147 | NR | 815 | 3 | NR | 945 | 0 | NR |
| 430 | 341 | NR | 560 | 788 | NR | 690 | 126 | NR | 820 | 3 | NR | 950 | 0 | NR |
| 435 | 547 | NR | 565 | 837 | NR | 695 | 107 | NR | 825 | 2 | NR | 955 | 0 | NR |
| 440 | 799 | NR | 570 | 887 | NR | 700 | 92 | NR | 830 | 2 | NR | 960 | 0 | NR |
| 445 | 831 | NR | 575 | 931 | NR | 705 | 78 | NR | 835 | 2 | NR | 965 | 0 | NR |
| 450 | 461 | NR | 580 | 967 | NR | 710 | 67 | NR | 840 | 2 | NR | 970 | 0 | NR |
| 455 | 256 | NR | 585 | 990 | NR | 715 | 57 | NR | 845 | 1 | NR | 975 | 0 | NR |
| 460 | 176 | NR | 590 | 1000 | NR | 720 | 49 | NR | 850 | 1 | NR | 980 | 0 | NR |
| 465 | 107 | NR | 595 | 994 | NR | 725 | 42 | NR | 855 | 1 | NR | 985 | 0 | NR |
| 470 | 74 | NR | 600 | 973 | NR | 730 | 36 | NR | 860 | 1 | NR | 990 | 0 | NR |
| 475 | 67 | NR | 605 | 938 | NR | 735 | 31 | NR | 865 | 1 | NR | 995 | 0 | NR |
| 480 | 68 | NR | 610 | 892 | NR | 740 | 26 | NR | 870 | 1 | NR | 1000 | 0 | NR |
| 485 | 84 | NR | 615 | 838 | NR | 745 | 22 | NR | 875 | 1 | NR | | | |

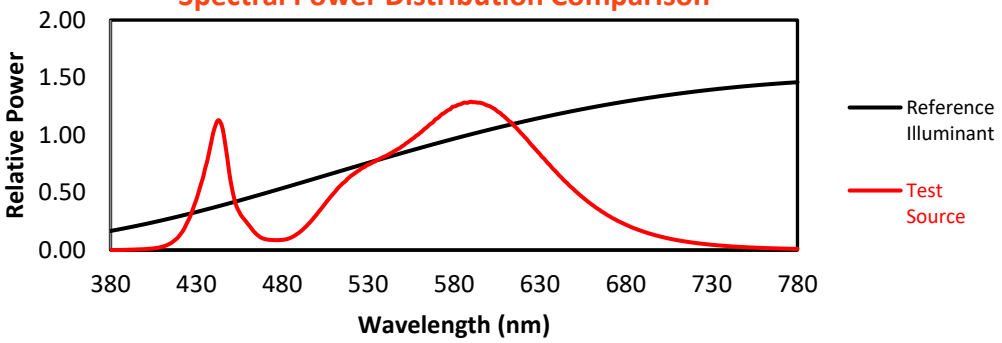
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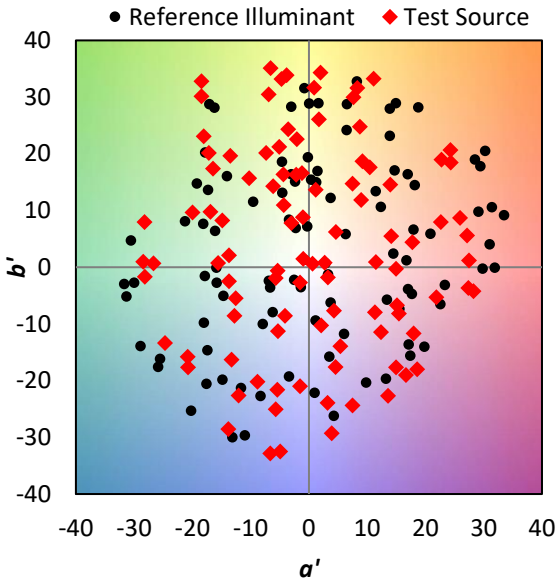
## Summary

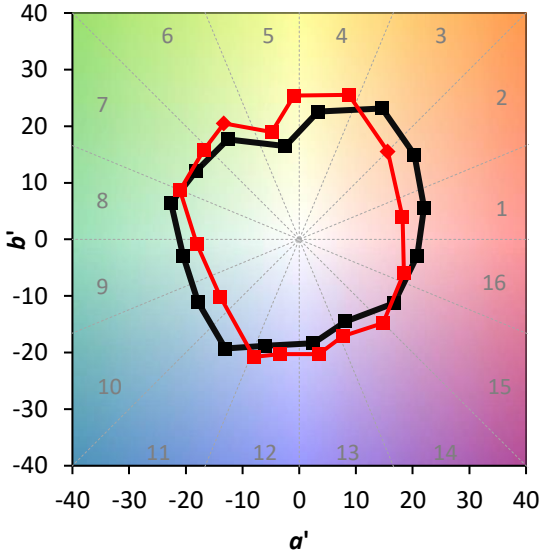
$R_f$ = 71.4
$R_g$ = 96
CIE $R_a$ = 70.1
$R_9$ = -40.2

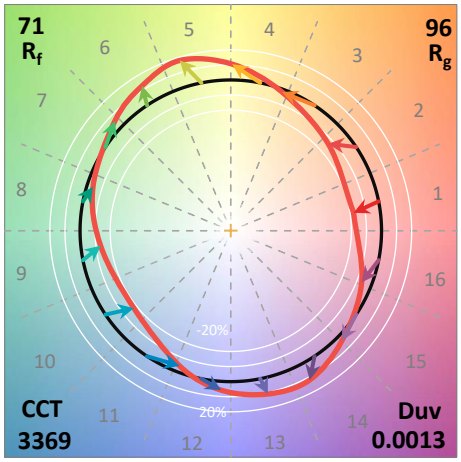
## Spectral Power Distribution Comparison

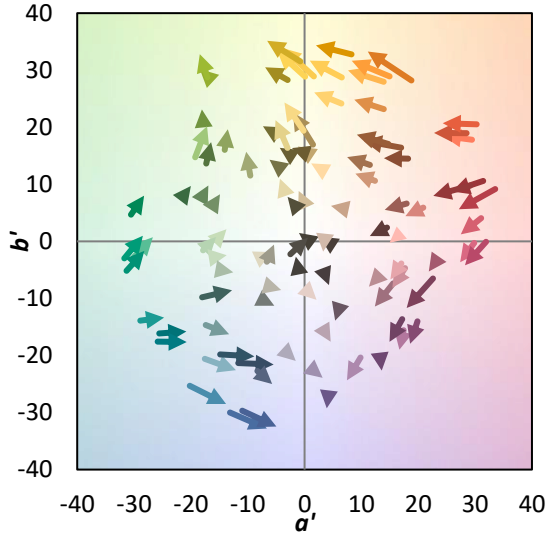



## Color Vector Graphics



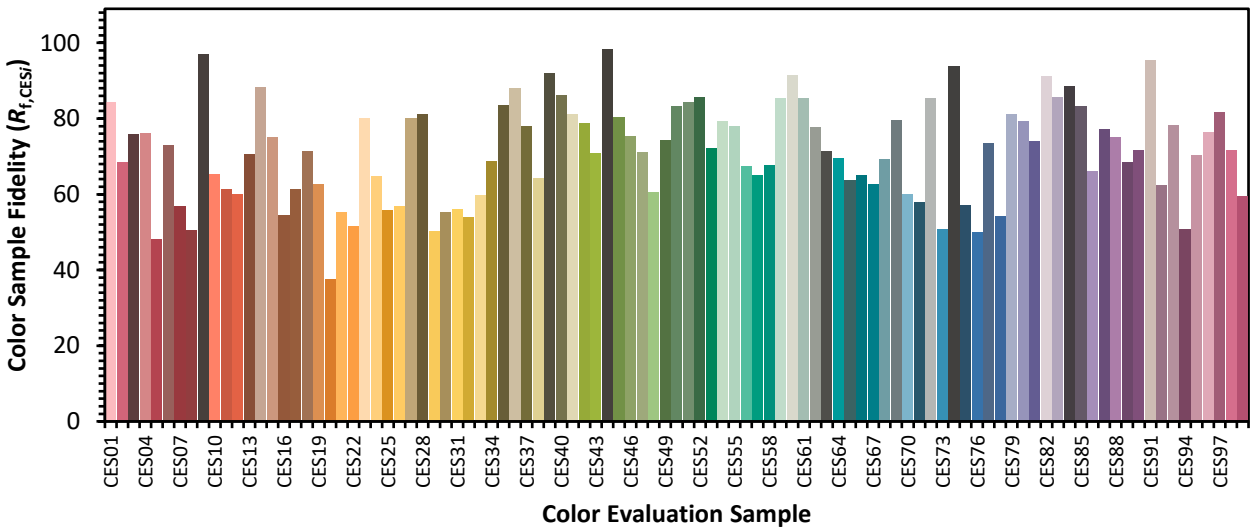



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## Individual Sample Fidelity Index ($R_{f,i}$)

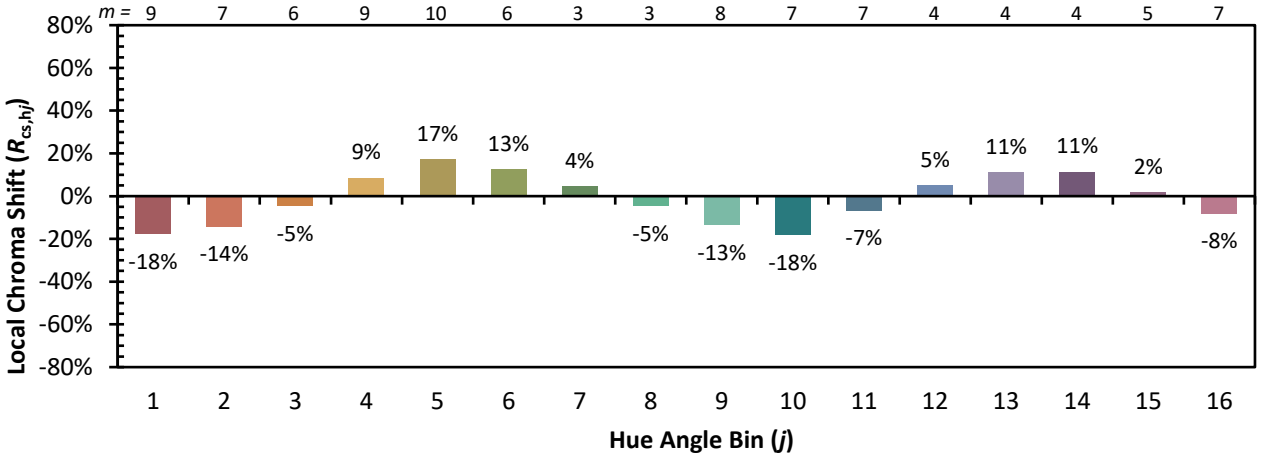
| | | | |
|---|---|---|---|
| CES01 = 86 | CES26 = 57 | CES51 = 84 | CES76 = 50 |
| CES02 = 62 | CES27 = 80 | CES52 = 86 | CES77 = 74 |
| CES03 = 31 | CES28 = 81 | CES53 = 72 | CES78 = 54 |
| CES04 = 70 | CES29 = 50 | CES54 = 79 | CES79 = 81 |
| CES05 = 48 | CES30 = 55 | CES55 = 78 | CES80 = 79 |
| CES06 = 51 | CES31 = 56 | CES56 = 67 | CES81 = 74 |
| CES07 = 40 | CES32 = 54 | CES57 = 65 | CES82 = 91 |
| CES08 = 39 | CES33 = 60 | CES58 = 68 | CES83 = 86 |
| CES09 = 29 | CES34 = 69 | CES59 = 85 | CES84 = 89 |
| CES10 = 75 | CES35 = 83 | CES60 = 91 | CES85 = 83 |
| CES11 = 58 | CES36 = 88 | CES61 = 85 | CES86 = 66 |
| CES12 = 64 | CES37 = 78 | CES62 = 78 | CES87 = 77 |
| CES13 = 43 | CES38 = 64 | CES63 = 71 | CES88 = 75 |
| CES14 = 74 | CES39 = 92 | CES64 = 70 | CES89 = 68 |
| CES15 = 71 | CES40 = 86 | CES65 = 64 | CES90 = 72 |
| CES16 = 47 | CES41 = 81 | CES66 = 65 | CES91 = 95 |
| CES17 = 50 | CES42 = 79 | CES67 = 63 | CES92 = 62 |
| CES18 = 56 | CES43 = 71 | CES68 = 69 | CES93 = 78 |
| CES19 = 72 | CES44 = 98 | CES69 = 80 | CES94 = 51 |
| CES20 = 65 | CES45 = 80 | CES70 = 60 | CES95 = 70 |
| CES21 = 87 | CES46 = 75 | CES71 = 58 | CES96 = 76 |
| CES22 = 79 | CES47 = 71 | CES72 = 85 | CES97 = 82 |
| CES23 = 92 | CES48 = 61 | CES73 = 51 | CES98 = 72 |
| CES24 = 91 | CES49 = 74 | CES74 = 94 | CES99 = 60 |
| CES25 = 72 | CES50 = 83 | CES75 = 57 | |

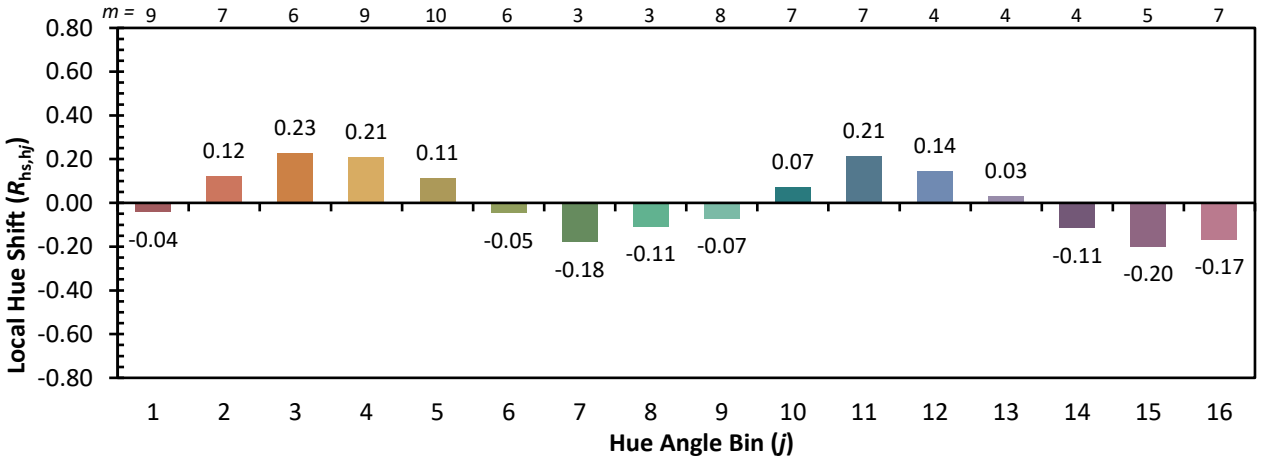


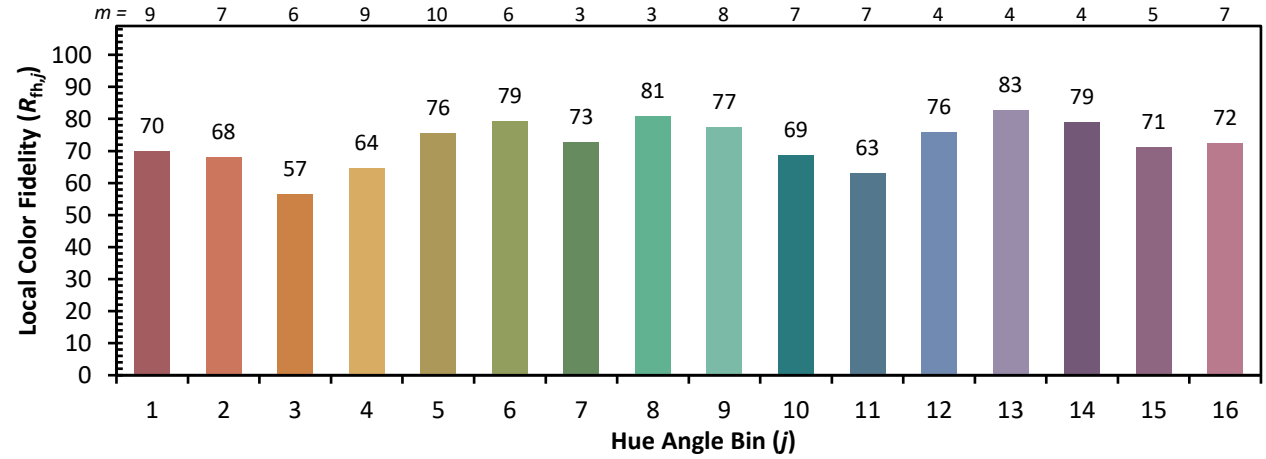
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## Color Rendition by Hue-Angle Bin



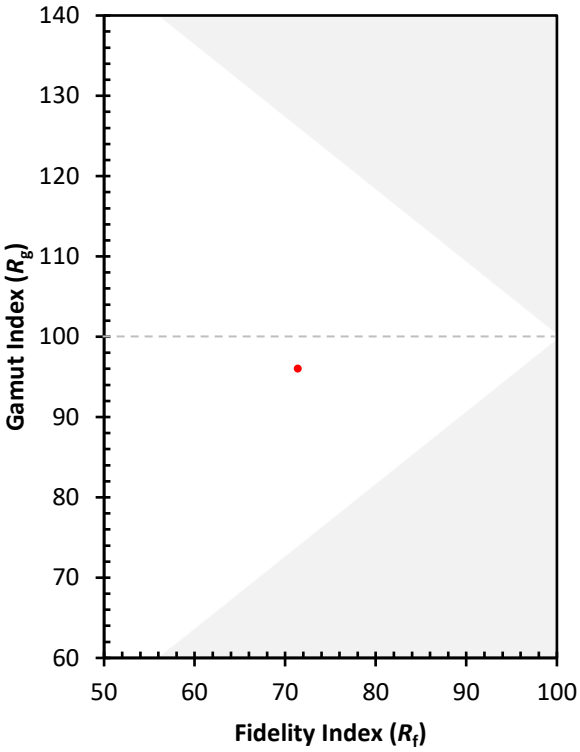



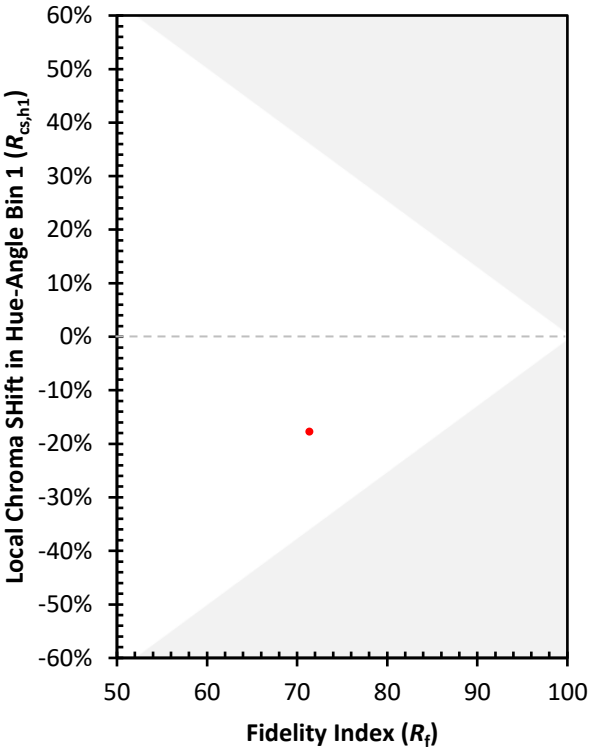



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## Measure Comparisons




(END OF REPORT)