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: P1365732

Luminaire Tested: **GSS-SB2B-730-U-T2R**

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: | P1365732 |
| 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-T2R |
| Description: | GALLEON II SLIM SITE HIGH DENSITY LED ARRAYS 2SQUARE 74W 70CRI 3000K FIXTURE w/ TYPE II ROADWAY DISTRIBUTION OPTIC |
| Light Source: | (52) 3000K CCT, 70 CRI LEDS |
| Ballast/Driver: | ELECTRONIC DRIVER |

**Summary**

| | |
|---|---|
| Lumens per Lamp: | N/A |
| Luminaire Lumens: | 10516.4 lumens |
| Efficiency: | N/A |
| Efficacy: | 142.1 lumens/watt |
| Luminous Opening: | Rectangular (W 1' x L: 0.5' x H: 0') |
| IES Classification: | Type II - Medium |
| BUG Rating: | B2 - U0 - G2 |

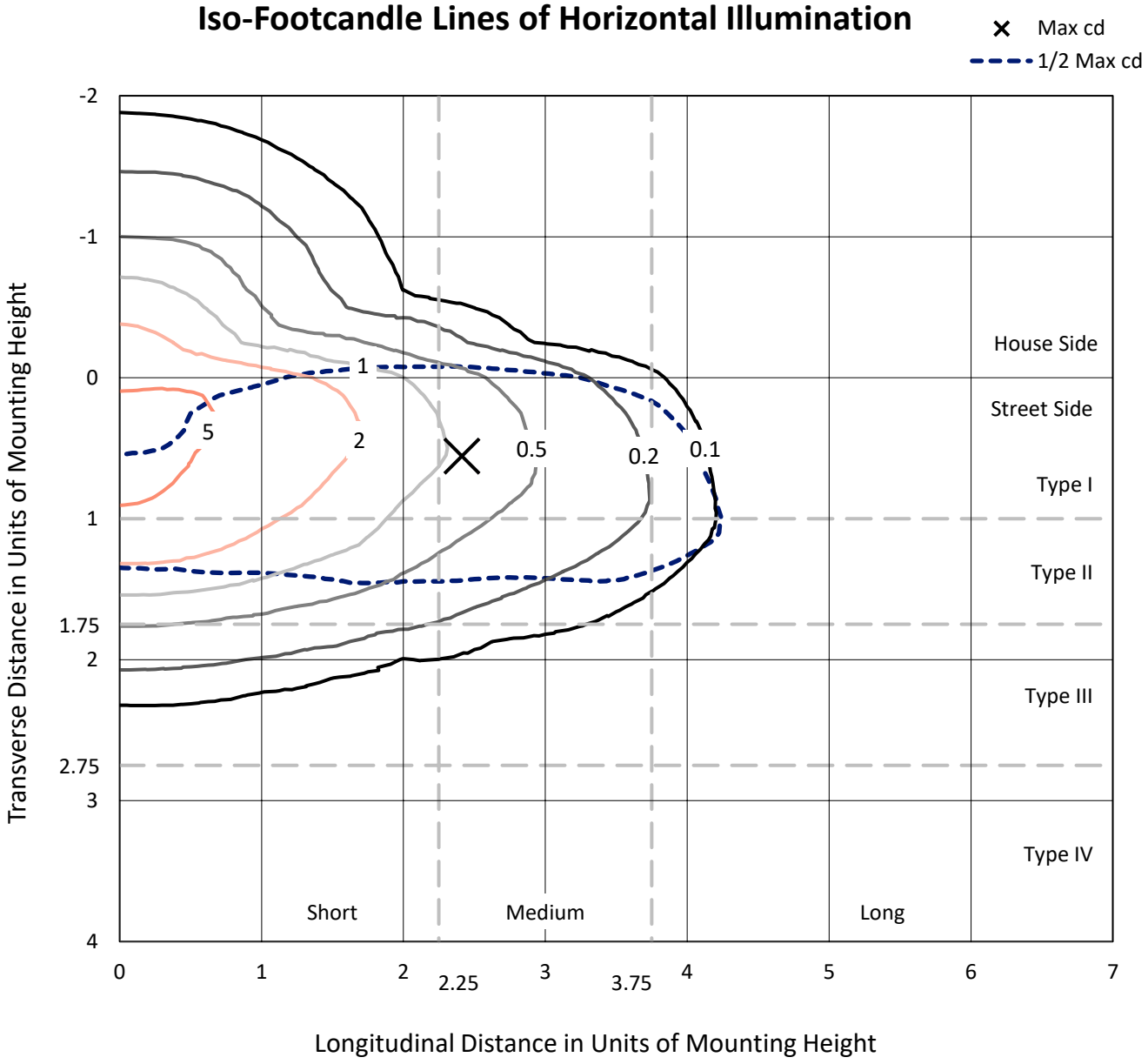
| | |
|---|---|
| Input Watts (W): | 74 |
| Input Voltage (V): | 120 |
| Input Current (Ain): | NR |
| Voltage Rise (V): | NR |
| Power Factor: | 0.98 |
| Total Harmonic Distortion (THDi): | 13.6% |
| Frequency (hertz): | 60 |
| Stabilization Time: | NR |
| Operation Time: | NR |
| Ambient Temperature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

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Scaled Data Report

REPORT NUMBER: P1365732
CATALOG NUMBER: GSS-SB2B-730-U-T2R

## Iso-Footcandle Lines of Horizontal Illumination



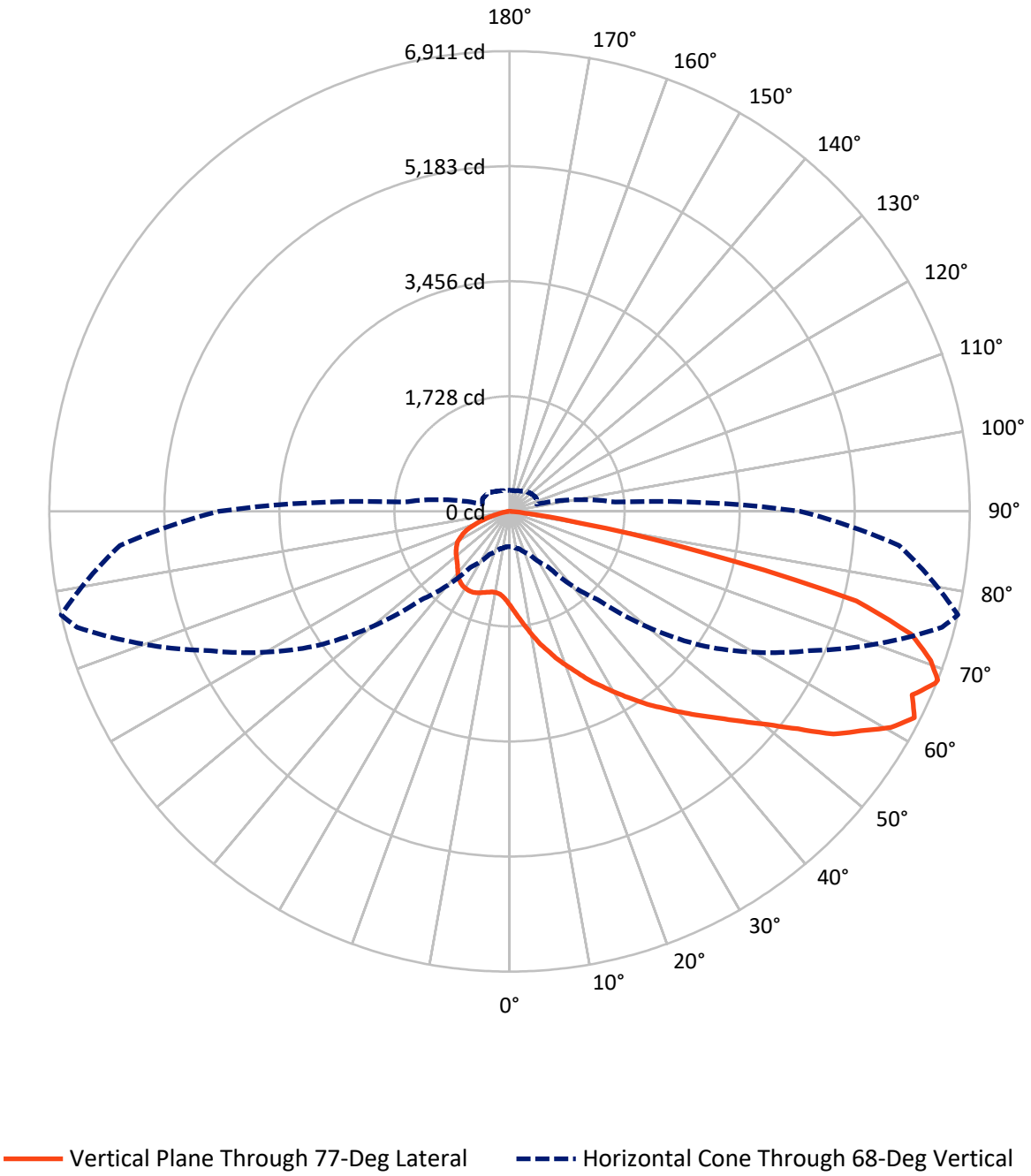

Based on 20 foot mounting height. Maximum calculated value = 6.1 fc
Type II - Medium - N/A

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## Luminous Intensity Polar Plot



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Scaled Data Report

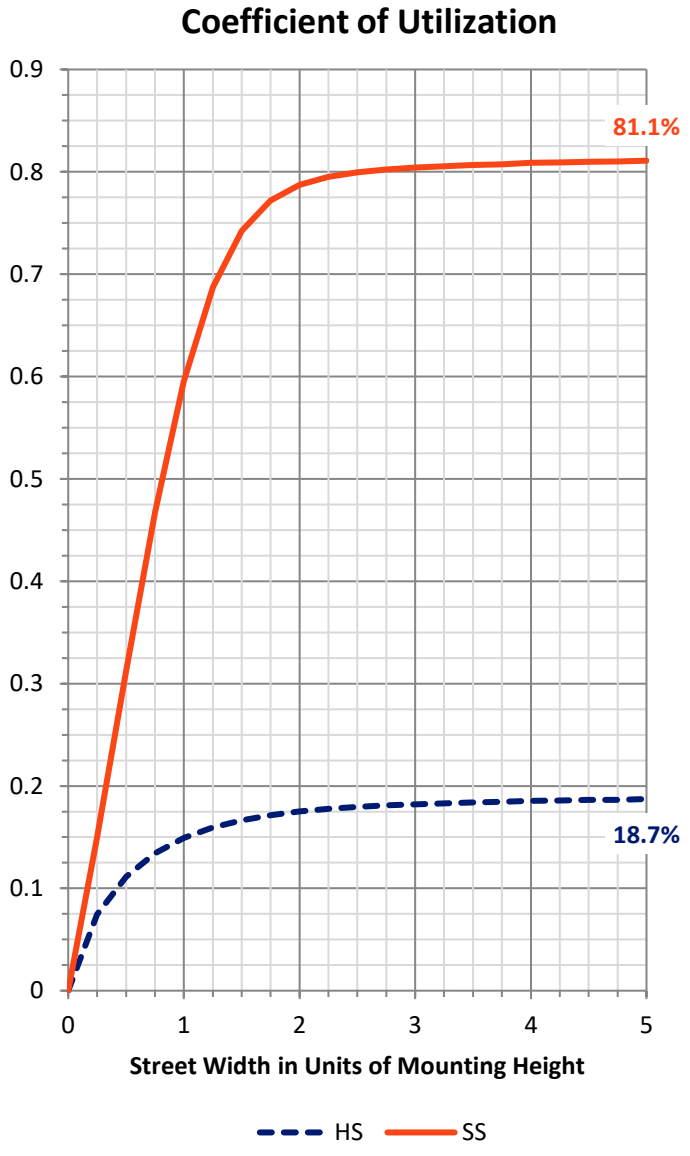
REPORT NUMBER: P1365732
CATALOG NUMBER: GSS-SB2B-730-U-T2R

**FLUX DISTRIBUTION:**

| | | Downward | Upward | Total |
|---|---|---|---|---|
| **House Side** | Lumens | 1985.2 | 0.0 | 1985.2 |
| | % Fixture | 18.9 | 0.0 | 18.9 |
| **Street Side** | Lumens | 8531.2 | 0.0 | 8531.2 |
| | % Fixture | 81.1 | 0.0 | 81.1 |
| **Total** | Lumens | 10516.4 | 0.0 | 10516.4 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

**ZONAL LUMENS:**

| Zone | Lumens | % Fixture |
|---|---|---|
| 0°-10° | 145.1 | 1.4 |
| 10°-20° | 509.7 | 4.8 |
| 20°-30° | 931.7 | 8.9 |
| 30°-40° | 1509.7 | 14.4 |
| 40°-50° | 2076.5 | 19.7 |
| 50°-60° | 2328.3 | 22.1 |
| 60°-70° | 1962.3 | 18.7 |
| 70°-80° | 972.6 | 9.2 |
| 80°-90° | 80.3 | 0.8 |
| 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° | 10516.4 | 100.0 |
| 0°-180° | 10516.4 | 100.0 |



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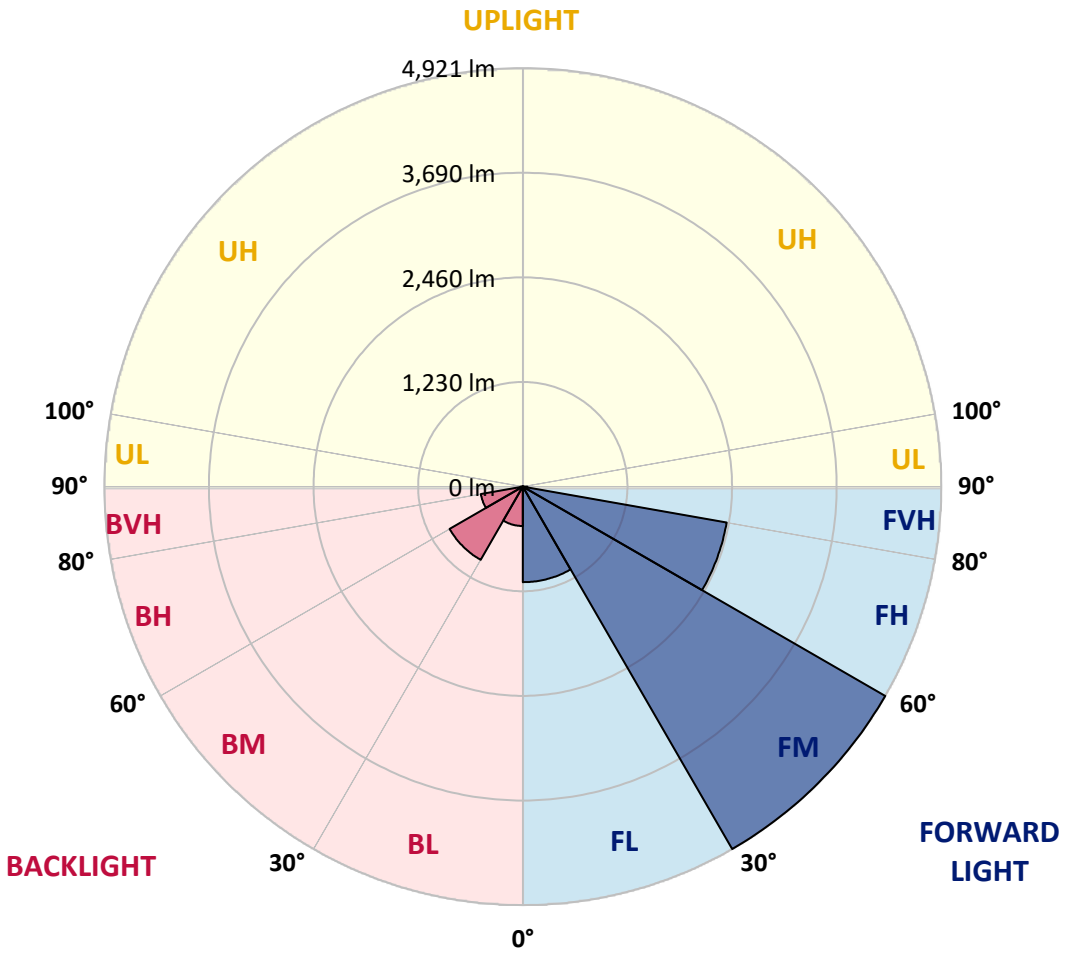
Scaled Data Report

REPORT NUMBER: P1365732
CATALOG NUMBER: GSS-SB2B-730-U-T2R

## LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit B | U | G |
|---|---|---|---|---|---|---|
| FL | (0°-30°) | 1123.7 | 10.7 | | | |
| FM | (30°-60°) | 4920.5 | 46.8 | | | |
| FH | (60°-80°) | 2434.1 | 23.1 | | | G2/5000 |
| FVH | (80°-90°) | 52.8 | 0.5 | | | G1/100 |
| BL | (0°-30°) | 462.9 | 4.4 | B1/500 | | |
| BM | (30°-60°) | 994.1 | 9.5 | B1/1000 | | |
| BH | (60°-80°) | 500.8 | 4.8 | B2/1000 | | G2/1000 |
| BVH | (80°-90°) | 27.5 | 0.3 | | | 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° | 77° | 85° |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0° | 1414.8 | 1414.8 | 1414.8 | 1414.8 | 1414.8 | 1414.8 | 1414.8 | 1414.8 | 1414.8 | *1414.8* | 1414.8 |
| 2.5° | 1764.9 | 1755.2 | 1747.9 | 1723.5 | 1709.0 | 1670.1 | 1638.5 | 1585.0 | 1516.9 | *1512.1* | 1458.6 |
| 5° | 2034.7 | 2022.6 | 2012.8 | 1978.8 | 1964.2 | 1896.1 | 1835.4 | 1740.6 | 1643.3 | *1626.3* | 1519.3 |
| 7.5° | 2253.5 | 2238.9 | 2229.2 | 2197.6 | 2168.4 | 2114.9 | 2037.1 | 1922.9 | 1781.9 | *1750.3* | 1609.3 |
| 10° | 2406.6 | 2406.6 | 2404.2 | 2384.8 | 2367.8 | 2316.7 | 2226.8 | 2093.1 | 1925.3 | *1888.9* | 1704.1 |
| 12.5° | 2525.8 | 2518.5 | 2528.2 | 2540.4 | 2542.8 | 2513.6 | 2431.0 | 2280.2 | 2078.5 | *2042.0* | 1803.8 |
| 15° | 2535.5 | 2537.9 | 2574.4 | 2623.0 | 2683.8 | 2693.5 | 2625.4 | 2467.4 | 2226.8 | *2178.1* | 1920.5 |
| 17.5° | 2486.9 | 2499.0 | 2550.1 | 2630.3 | 2747.0 | 2817.5 | 2802.9 | 2661.9 | 2387.2 | *2336.2* | 2027.4 |
| 20° | 2472.3 | 2486.9 | 2537.9 | 2637.6 | 2776.2 | 2892.8 | 2936.6 | 2834.5 | 2547.6 | *2477.1* | 2144.1 |
| 22.5° | 2559.8 | 2564.7 | 2601.1 | 2683.8 | 2817.5 | 2951.2 | 3048.4 | 2999.8 | 2717.8 | *2640.0* | 2277.8 |
| 25° | 2798.0 | 2793.2 | 2790.7 | 2810.2 | 2909.9 | 3026.5 | 3145.7 | 3155.4 | 2895.3 | *2817.5* | 2404.2 |
| 27.5° | 3194.3 | 3213.7 | 3157.8 | 3050.9 | 3060.6 | 3150.5 | 3242.9 | 3293.9 | 3067.9 | *2982.8* | 2530.6 |
| 30° | 3687.8 | 3685.3 | 3585.7 | 3413.1 | 3281.8 | 3313.4 | 3364.4 | 3425.2 | 3240.5 | *3162.7* | 2671.6 |
| 32.5° | 4108.3 | 4098.6 | 3991.6 | 3792.3 | 3585.7 | 3517.6 | 3537.0 | 3549.2 | 3439.8 | *3352.3* | 2815.0 |
| 35° | 4378.2 | 4380.6 | 4278.5 | 4105.9 | 3874.9 | 3763.1 | 3714.5 | 3685.3 | 3639.1 | *3554.1* | 2985.2 |
| 37.5° | 4648.0 | 4633.4 | 4504.6 | 4300.4 | 4108.3 | 4015.9 | 3960.0 | 3836.1 | 3823.9 | *3748.5* | 3135.9 |
| 40° | 4849.8 | 4835.2 | 4703.9 | 4470.5 | 4295.5 | 4220.1 | 4198.3 | 4011.1 | 4030.5 | *3964.9* | 3303.7 |
| 42.5° | 4942.1 | 4944.6 | 4825.5 | 4614.0 | 4434.1 | 4397.6 | 4441.4 | 4212.9 | 4249.3 | *4188.5* | 3486.0 |
| 45° | 4944.6 | 4932.4 | 4849.8 | 4682.0 | 4545.9 | 4516.7 | 4635.8 | 4441.4 | 4487.5 | *4431.6* | 3697.5 |
| 47.5° | 4810.9 | 4810.9 | 4776.8 | 4677.2 | 4604.2 | 4606.7 | 4798.7 | 4672.3 | 4755.0 | *4713.6* | 3943.0 |
| 50° | 4519.2 | 4543.5 | 4558.0 | 4577.5 | 4575.1 | 4669.9 | 4930.0 | 4913.0 | 5041.8 | *5029.7* | 4217.7 |
| 52.5° | 3629.4 | 3731.5 | 4098.6 | 4334.4 | 4485.1 | 4662.6 | 5073.4 | 5160.9 | 5404.0 | *5425.9* | 4614.0 |
| 55° | 2895.3 | 2919.6 | 3228.3 | 3836.1 | 4283.3 | 4601.8 | 5124.5 | 5440.5 | 5868.3 | *5902.4* | 4976.2 |
| 57.5° | 2350.7 | 2409.1 | 2596.3 | 3177.3 | 3843.3 | 4465.7 | 5158.5 | 5591.2 | 6162.5 | *6218.4* | 5275.2 |
| 60° | 1738.1 | 1772.2 | 1952.1 | 2433.4 | 3218.6 | 4147.2 | 5177.9 | 5729.8 | 6505.2 | *6585.5* | 5664.1 |
| 62.5° | 1278.7 | 1281.1 | 1395.4 | 1699.2 | 2540.4 | 3624.6 | 5027.2 | 5841.6 | 6731.3 | *6823.7* | 5788.1 |
| 65° | 826.5 | 836.2 | 950.5 | 1213.0 | 1716.3 | 2970.6 | 4679.6 | 5404.0 | 6510.1 | *6646.2* | 5712.8 |
| 67.5° | 556.7 | 573.7 | 641.8 | 773.0 | 1149.8 | 2119.8 | 3651.3 | 5002.9 | 6714.3 | *6894.2* | 5895.1 |
| 68° | *529.9* | *532.4* | *585.9* | *712.3* | *1023.4* | *1876.7* | *3510.3* | *4951.9* | *6724.0* | *6911.2* | *5873.2* |
| 70° | 420.6 | 425.4 | 459.5 | 527.5 | 695.3 | 1149.8 | 2834.5 | 4524.0 | 6544.1 | *6709.4* | 5554.7 |
| 72.5° | 320.9 | 328.2 | 350.1 | 376.8 | 452.2 | 705.0 | 1657.9 | 3685.3 | 6070.1 | *6305.9* | 5029.7 |
| 75° | 272.3 | 274.7 | 291.7 | 301.4 | 296.6 | 427.8 | 931.1 | 2883.1 | 5163.4 | *5379.7* | 4130.2 |
| 77.5° | 213.9 | 221.2 | 245.5 | 250.4 | 226.1 | 296.6 | 488.6 | 1645.8 | 3031.4 | *2960.9* | 1988.5 |
| 80° | 153.2 | 158.0 | 177.5 | 167.7 | 177.5 | 204.2 | 230.9 | 590.7 | 1261.7 | *1101.2* | 466.7 |
| 82.5° | 53.5 | 60.8 | 121.5 | 116.7 | 116.7 | 92.4 | 104.5 | 257.7 | 328.2 | *286.9* | 116.7 |
| 85° | 9.7 | 12.2 | 34.0 | 48.6 | 43.8 | 34.0 | 43.8 | 80.2 | 65.6 | *55.9* | 34.0 |
| 87.5° | 2.4 | 2.4 | 4.9 | 4.9 | 4.9 | 7.3 | 12.2 | 17.0 | 19.4 | *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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Scaled Data Report

REPORT NUMBER: P1365732
CATALOG NUMBER: GSS-SB2B-730-U-T2R

**CANDELA DISTRIBUTION (continued):**

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0° | 1414.8 | 1414.8 | 1414.8 | 1414.8 | 1414.8 | 1414.8 | 1414.8 | 1414.8 | 1414.8 | 1414.8 | 1414.8 |
| 2.5° | 1429.4 | 1392.9 | 1322.4 | 1259.2 | 1208.2 | 1159.6 | 1120.7 | 1093.9 | 1074.5 | 1064.8 | 1064.8 |
| 5° | 1461.0 | 1383.2 | 1254.4 | 1140.1 | 1052.6 | 994.3 | 957.8 | 935.9 | 933.5 | 931.1 | 931.1 |
| 7.5° | 1509.6 | 1400.2 | 1208.2 | 1064.8 | 989.4 | 957.8 | 948.1 | 945.6 | 945.6 | 950.5 | 950.5 |
| 10° | 1575.3 | 1429.4 | 1188.7 | 1038.0 | 996.7 | 987.0 | 982.1 | 989.4 | 991.8 | 994.3 | 996.7 |
| 12.5° | 1653.1 | 1465.9 | 1179.0 | 1050.2 | 1025.9 | 1021.0 | 1023.4 | 1021.0 | 1028.3 | 1033.2 | 1030.7 |
| 15° | 1728.4 | 1512.1 | 1188.7 | 1074.5 | 1055.0 | 1052.6 | 1045.3 | 1050.2 | 1047.7 | 1045.3 | 1045.3 |
| 17.5° | 1813.5 | 1565.5 | 1198.5 | 1093.9 | 1074.5 | 1064.8 | 1055.0 | 1050.2 | 1040.5 | 1038.0 | 1035.6 |
| 20° | 1905.9 | 1619.0 | 1215.5 | 1110.9 | 1079.3 | 1057.5 | 1040.5 | 1021.0 | 1006.4 | 999.1 | 999.1 |
| 22.5° | 2000.7 | 1674.9 | 1230.1 | 1113.4 | 1069.6 | 1030.7 | 1001.6 | 977.2 | 955.4 | 940.8 | 933.5 |
| 25° | 2097.9 | 1730.8 | 1234.9 | 1103.7 | 1040.5 | 994.3 | 955.4 | 926.2 | 897.0 | 882.4 | 877.6 |
| 27.5° | 2197.6 | 1779.5 | 1227.6 | 1079.3 | 1001.6 | 950.5 | 906.7 | 875.1 | 850.8 | 833.8 | 833.8 |
| 30° | 2294.8 | 1825.6 | 1208.2 | 1045.3 | 960.2 | 909.2 | 865.4 | 836.2 | 814.4 | 799.8 | 797.4 |
| 32.5° | 2406.6 | 1871.8 | 1183.9 | 1001.6 | 918.9 | 872.7 | 829.0 | 802.2 | 782.8 | 775.5 | 777.9 |
| 35° | 2518.5 | 1913.2 | 1145.0 | 960.2 | 875.1 | 836.2 | 794.9 | 773.0 | 765.8 | 760.9 | 758.5 |
| 37.5° | 2627.9 | 1942.3 | 1093.9 | 909.2 | 838.7 | 792.5 | 773.0 | 751.2 | 731.7 | 707.4 | 705.0 |
| 40° | 2739.7 | 1966.6 | 1028.3 | 858.1 | 797.4 | 760.9 | 751.2 | 722.0 | 675.8 | 634.5 | 634.5 |
| 42.5° | 2868.5 | 1991.0 | 957.8 | 809.5 | 746.3 | 729.3 | 726.9 | 680.7 | 612.6 | 583.4 | 581.0 |
| 45° | 3021.7 | 2008.0 | 894.6 | 763.3 | 692.8 | 685.5 | 705.0 | 644.2 | 588.3 | 564.0 | 566.4 |
| 47.5° | 3199.1 | 2046.9 | 838.7 | 712.3 | 641.8 | 653.9 | 656.4 | 610.2 | 566.4 | 537.2 | 537.2 |
| 50° | 3427.7 | 2114.9 | 780.3 | 646.6 | 605.3 | 632.0 | 610.2 | 576.1 | 529.9 | 512.9 | 510.5 |
| 52.5° | 3731.5 | 2170.8 | 731.7 | 593.2 | 581.0 | 607.7 | 578.6 | 542.1 | 503.2 | 478.9 | 476.5 |
| 55° | 3962.5 | 2173.3 | 685.5 | 551.8 | 564.0 | 559.1 | 547.0 | 508.1 | 478.9 | 449.7 | 449.7 |
| 57.5° | 4210.4 | 2158.7 | 644.2 | 527.5 | 547.0 | 525.1 | 515.4 | 474.0 | 444.9 | 423.0 | 418.1 |
| 60° | 4477.8 | 2132.0 | 600.4 | 510.5 | 532.4 | 500.8 | 478.9 | 444.9 | 420.6 | 403.5 | 403.5 |
| 62.5° | 4524.0 | 2003.1 | 547.0 | 505.6 | 515.4 | 476.5 | 442.4 | 415.7 | 391.4 | 381.7 | 381.7 |
| 65° | 4438.9 | 1867.0 | 486.2 | 481.3 | 488.6 | 447.3 | 408.4 | 384.1 | 364.6 | 354.9 | 352.5 |
| 67.5° | 4441.4 | 1645.8 | 437.6 | 452.2 | 440.0 | 413.3 | 374.4 | 352.5 | 328.2 | 320.9 | 320.9 |
| 68° | *4363.6* | *1592.3* | *420.6* | *447.3* | *430.3* | *403.5* | *364.6* | *340.3* | *318.5* | *316.0* | *316.0* |
| 70° | 3998.9 | 1290.8 | 359.8 | 413.3 | 401.1 | 369.5 | 320.9 | 308.7 | 294.1 | 291.7 | 294.1 |
| 72.5° | 3493.3 | 952.9 | 289.3 | 347.6 | 357.4 | 286.9 | 282.0 | 277.1 | 260.1 | 260.1 | 257.7 |
| 75° | 2732.4 | 695.3 | 218.8 | 274.7 | 265.0 | 262.5 | 240.7 | 238.2 | 223.6 | 221.2 | 216.4 |
| 77.5° | 1239.8 | 354.9 | 148.3 | 182.3 | 211.5 | 233.4 | 201.8 | 194.5 | 184.8 | 184.8 | 182.3 |
| 80° | 347.6 | 182.3 | 99.7 | 104.5 | 128.8 | 189.6 | 158.0 | 143.4 | 150.7 | 145.9 | 126.4 |
| 82.5° | 107.0 | 75.4 | 60.8 | 65.6 | 60.8 | 109.4 | 116.7 | 89.9 | 80.2 | 85.1 | 89.9 |
| 85° | 36.5 | 34.0 | 29.2 | 31.6 | 26.7 | 43.8 | 51.1 | 34.0 | 36.5 | 36.5 | 31.6 |
| 87.5° | 19.4 | 19.4 | 14.6 | 12.2 | 9.7 | 7.3 | 4.9 | 4.9 | 2.4 | 2.4 | 2.4 |
| 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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# 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

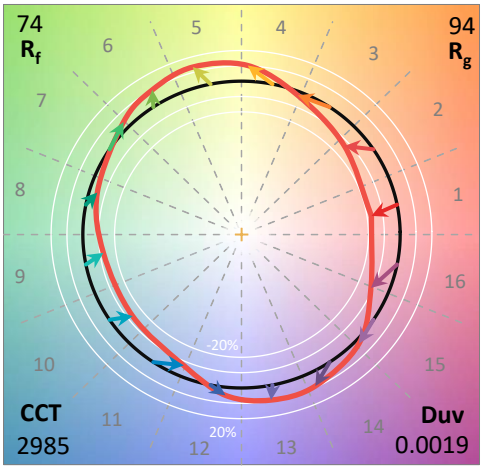
## Test Information

| | |
|---|---|
| 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

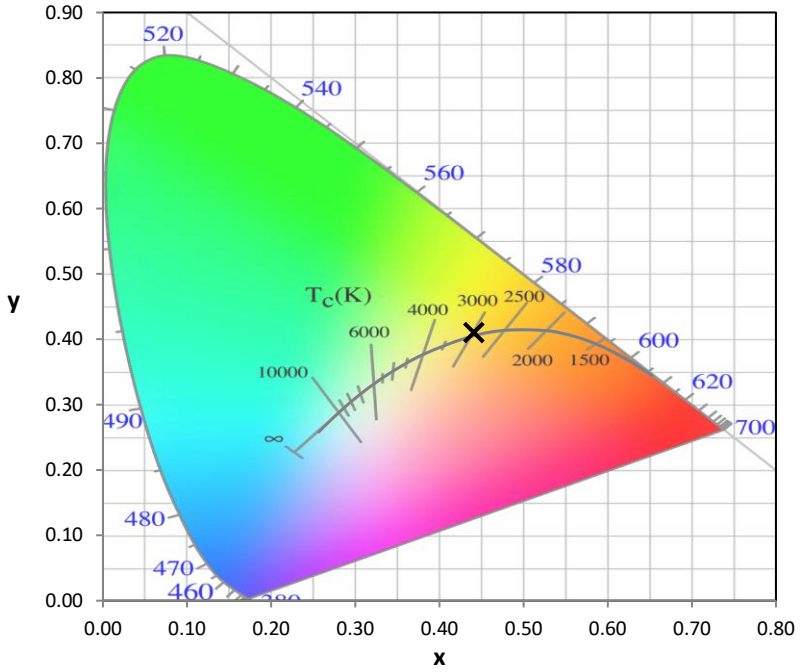
| | |
|---|---|
| Stabilization Time: | 36M |
| Operation Time: | 1H 36M |
| Sphere Temperature (°C): | 25.2 |

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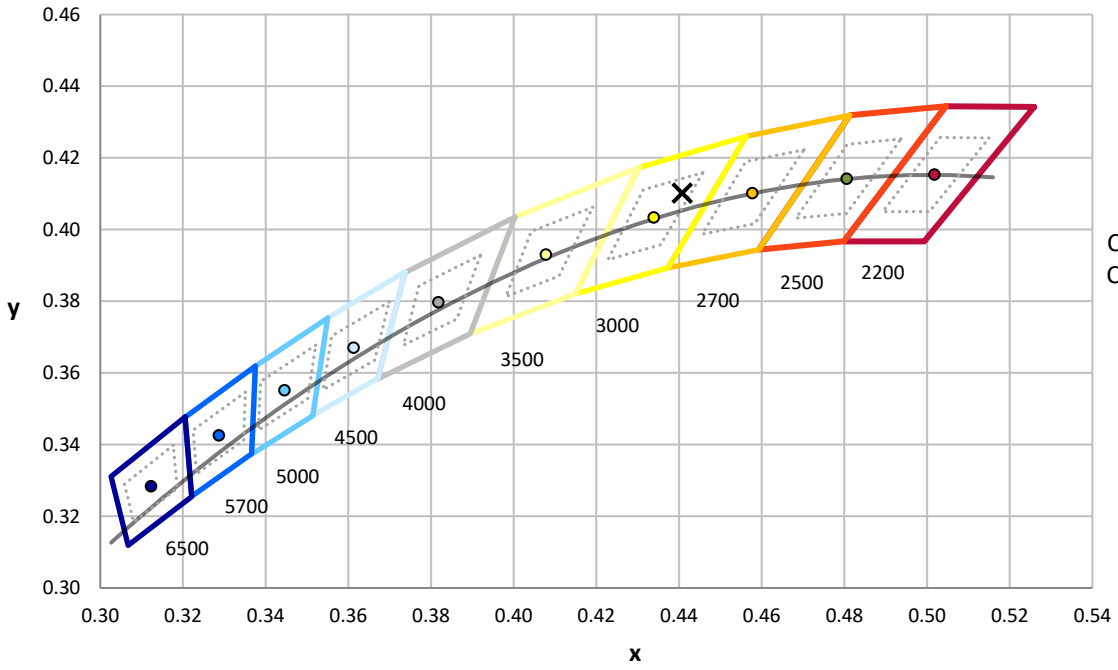
| Measurement and Test Equipment | | | |
|---|---|---|---|
| Instrument | Identification Number | Calibration Date | Calibration Due Date |
| Photometer | IN0058 | 6/18/2024 | 12/18/2024 |
| Power Meter | INXT2011004 | 2/8/2024 | 2/8/2025 |
| AC Power Source | IN0063 | 10/24/2023 | 10/24/2024 |
| DC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

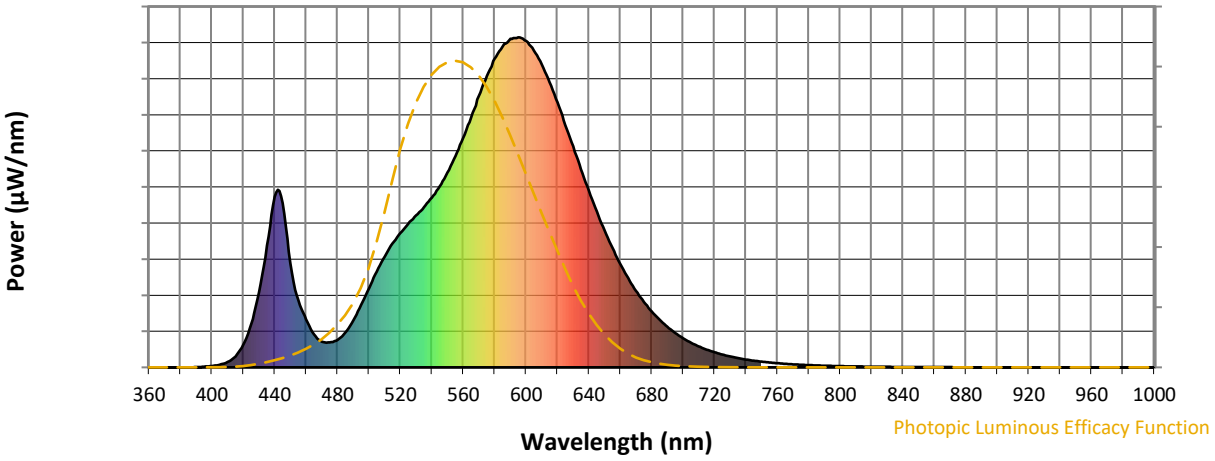



CCT = 2985K
CIE x = 0.4408
CIE y = 0.4101
Duv = 0.0019

Point lies inside the ANSI 3000K 4-step quadrangle

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## Photopic Flux vs. Wavelength

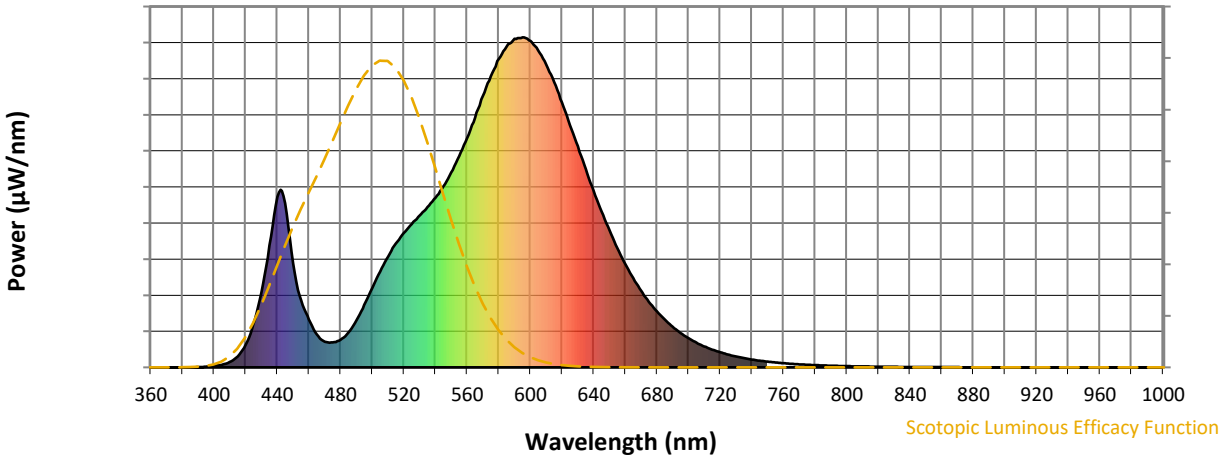



## Photopic Lumens: NR

| 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

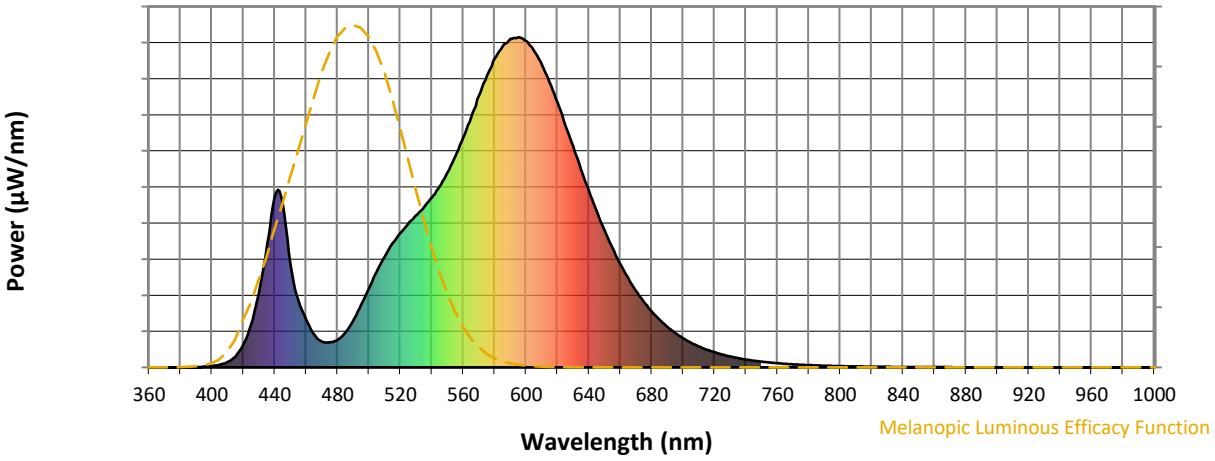



**Scotopic Lumens: NR** **S/P: 1.19**

| 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 | | | |

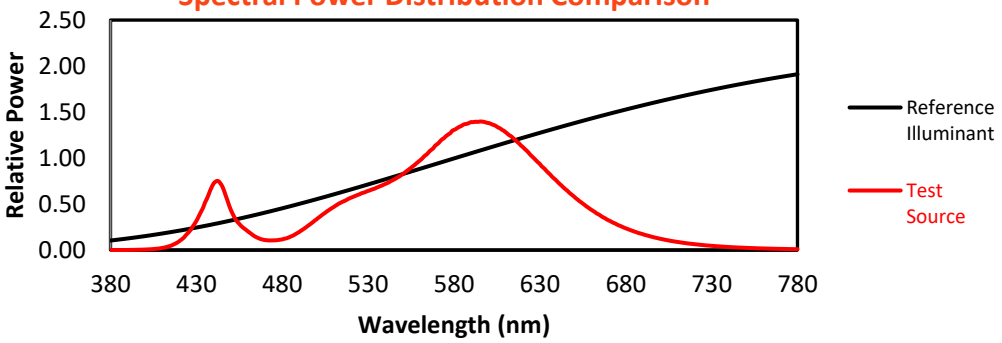
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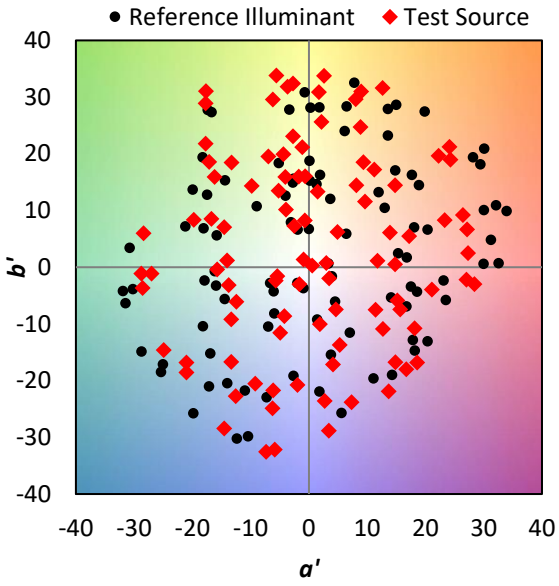
## Summary

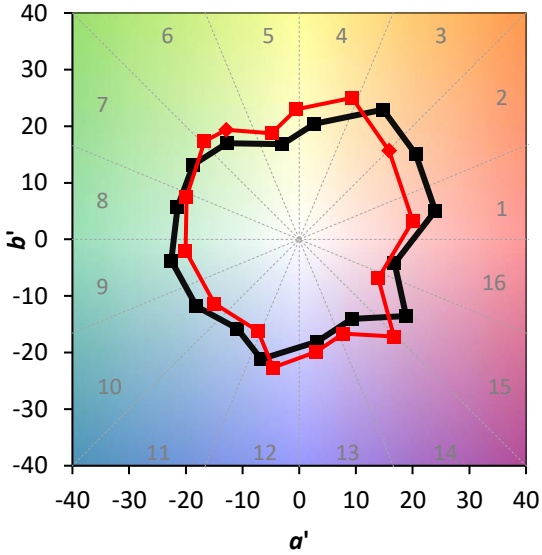
$R_f$ = 73.8
$R_g$ = 94.4
CIE $R_a$ = 70.8
$R_9$ = -43.2

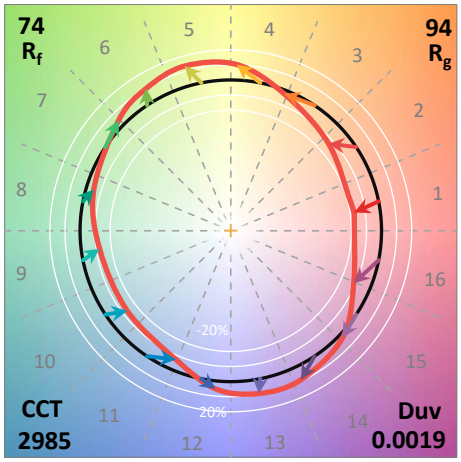
## Spectral Power Distribution Comparison

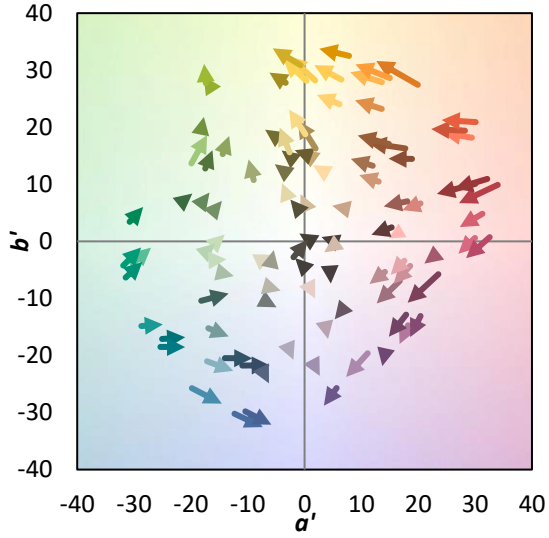



## Color Vector Graphics



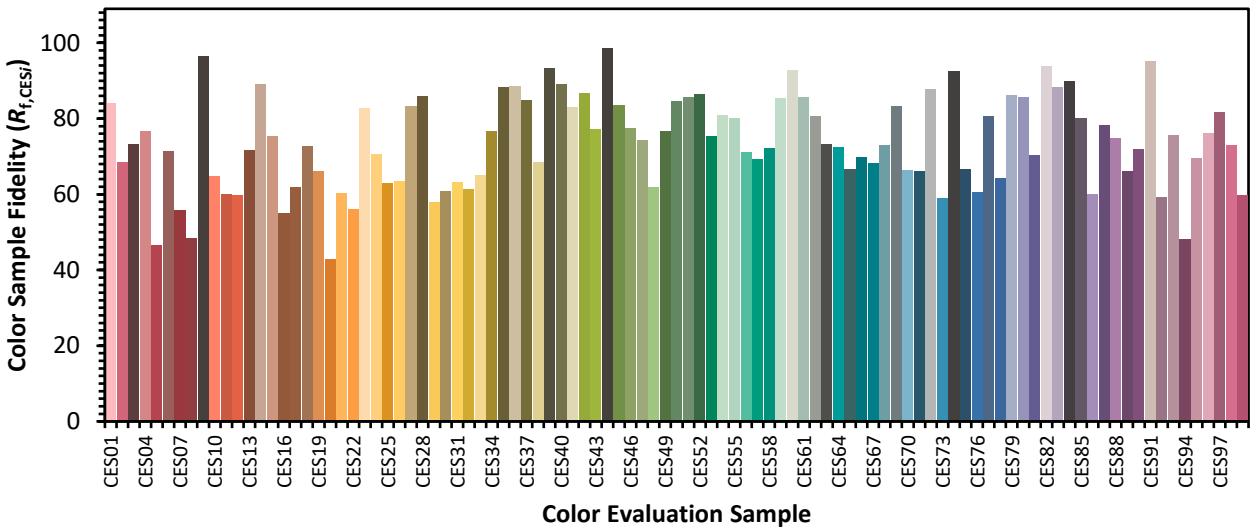



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**Individual Sample Fidelity Index ($R_{f,i}$)**

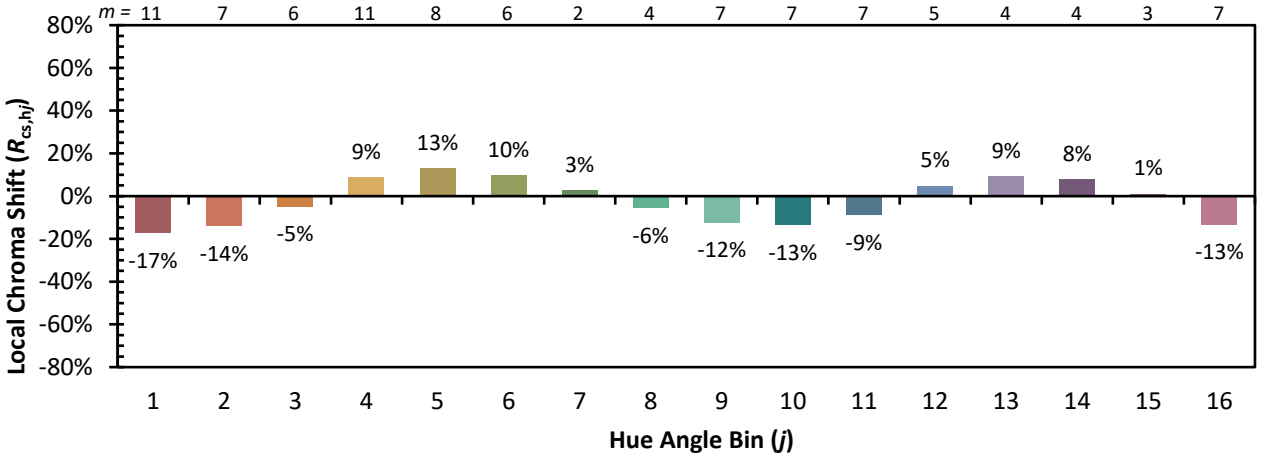
| | | | |
|---|---|---|---|
| CES01 = 86 | CES26 = 63 | CES51 = 86 | CES76 = 61 |
| CES02 = 62 | CES27 = 83 | CES52 = 86 | CES77 = 81 |
| CES03 = 31 | CES28 = 86 | CES53 = 75 | CES78 = 64 |
| CES04 = 71 | CES29 = 58 | CES54 = 81 | CES79 = 86 |
| CES05 = 49 | CES30 = 61 | CES55 = 80 | CES80 = 86 |
| CES06 = 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 | |

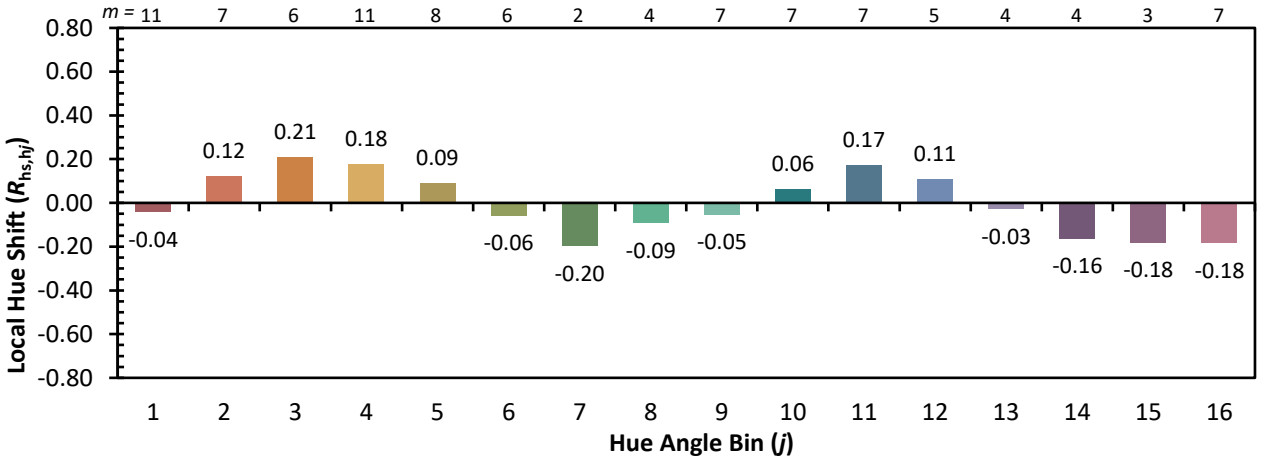


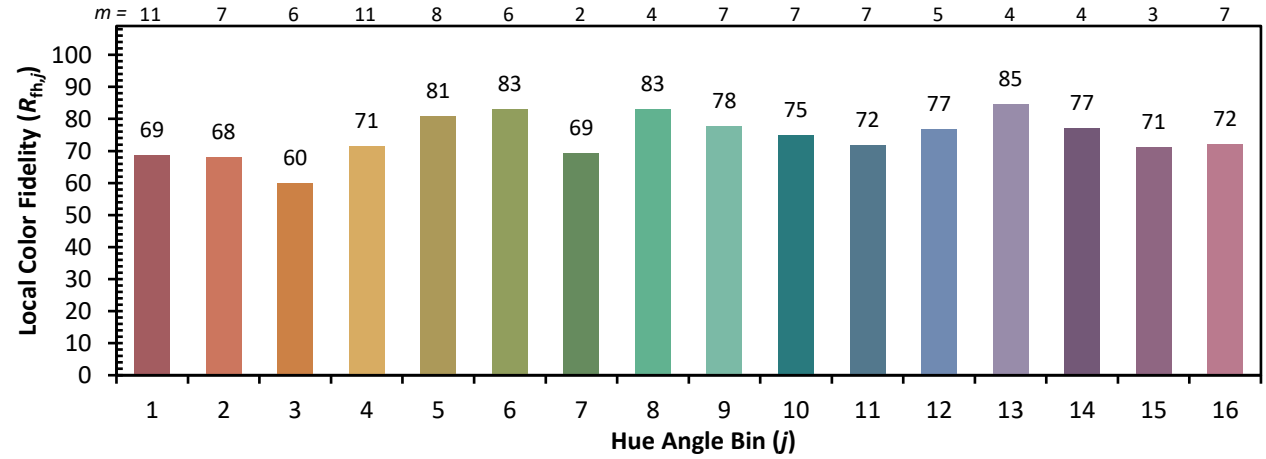
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## Color Rendition by Hue-Angle Bin



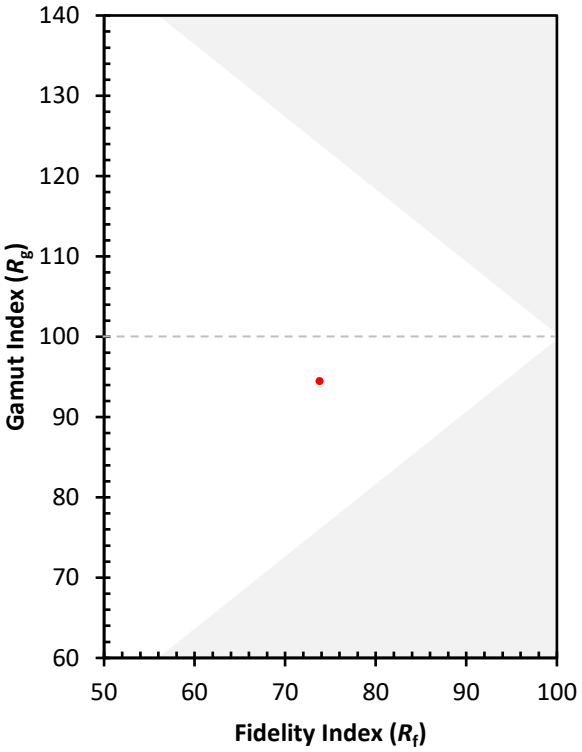



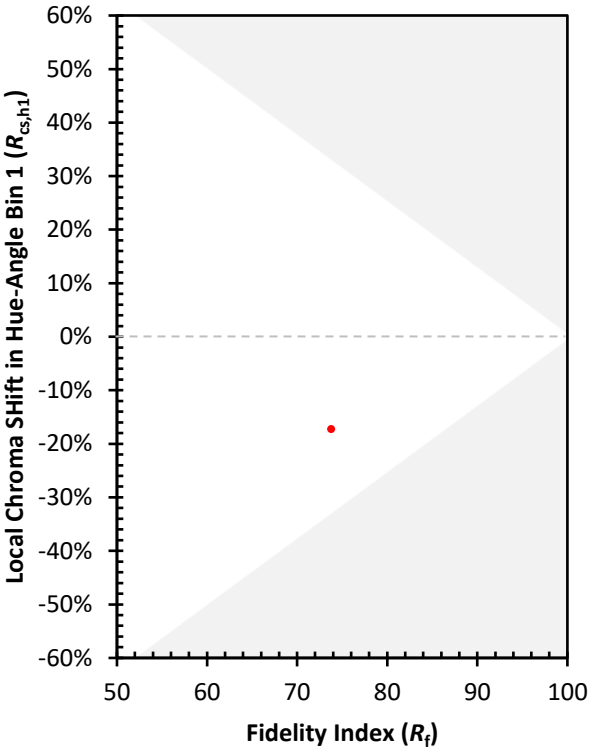



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## Measure Comparisons




(END OF REPORT)