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: P1359243

Luminaire Tested: **GSS-SB6A-735-U-T2**

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: | P1359243 |
| Test Lab: | INNOVATION CENTER(G3) |
| Issue Date: | 02/18/2026 |
| Manufacturer: | COOPER LIGHTING SOLUTIONS (FORMERLY EATON) |
| Product Line: | McGRAW-EDISON |
| Catalog Number: | GSS-SB6A-735-U-T2 |
| Description: | GALLEON II SLIM SITE HIGH DENSITY LED ARRAYS 6SQUARE 170W 70CRI 3500K FIXTURE w/ TYPE II DISTRIBUTION OPTIC |
| Light Source: | (156) 3500K CCT, 70 CRI LEDS |
| Ballast/Driver: | ELECTRONIC DRIVER |

**Summary**

| | |
|---|---|
| Lumens per Lamp: | N/A |
| Luminaire Lumens: | 25433.8 lumens |
| Efficiency: | N/A |
| Efficacy: | 149.6 lumens/watt |
| Luminous Opening: | Rectangular (W 1.5' x L: 1' x H: 0') |
| IES Classification: | Type II - Medium |
| BUG Rating: | B3 - U0 - G3 |

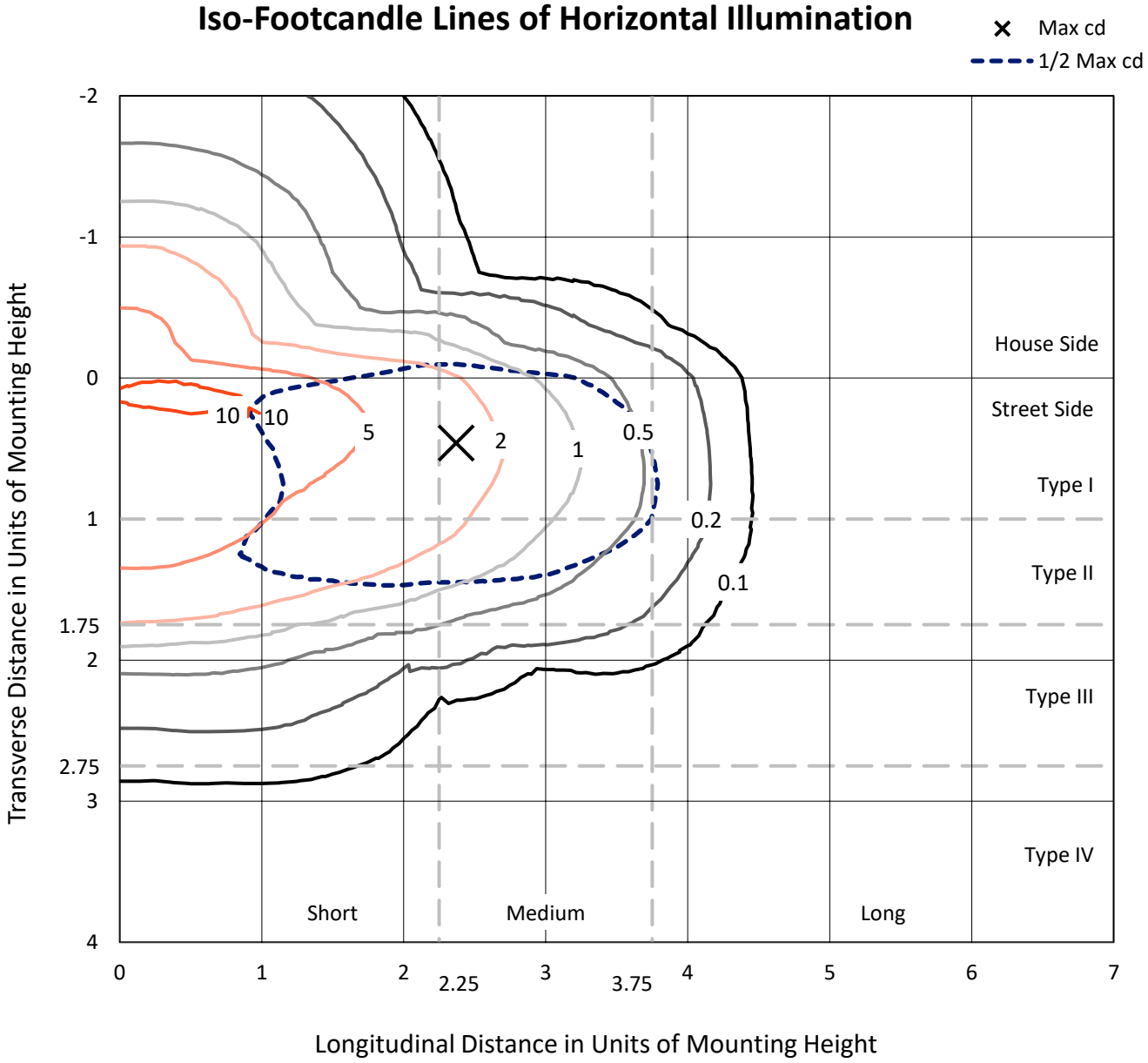
| | |
|---|---|
| Input Watts (W): | 170 |
| Input Voltage (V): | 120 |
| Input Current (Ain): | NR |
| Voltage Rise (V): | NR |
| Power Factor: | 0.98 |
| Total Harmonic Distortion (THDi): | 12.0% |
| Frequency (hertz): | 60 |
| Stabilization Time: | NR |
| Operation Time: | NR |
| Ambient Temperature (°C): | NR |
| Test Distance: | 28.75 FT |

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Scaled Data Report

REPORT NUMBER: P1359243
CATALOG NUMBER: GSS-SB6A-735-U-T2

## Iso-Footcandle Lines of Horizontal Illumination



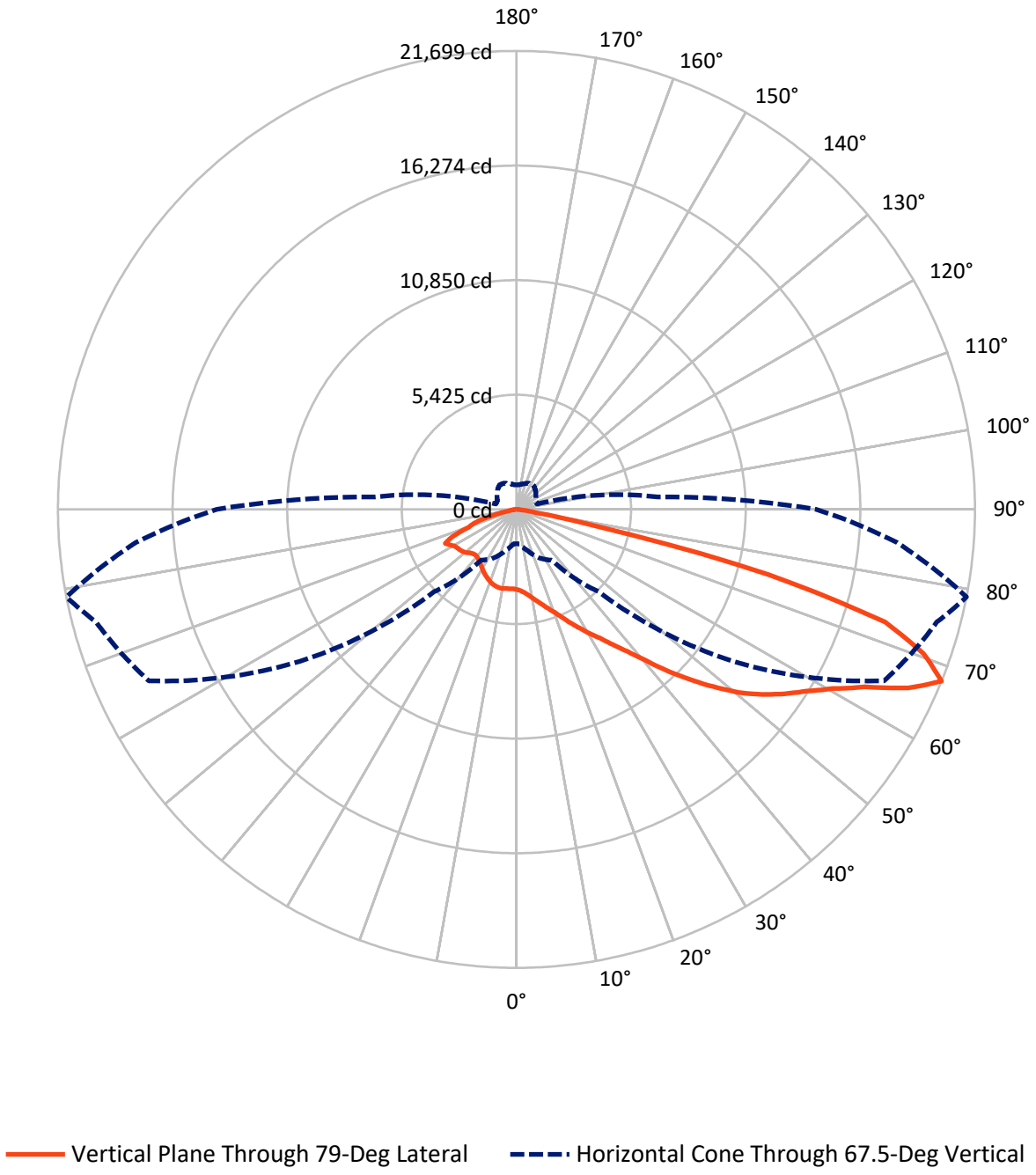

Based on 20 foot mounting height. Maximum calculated value = 11.3 fc
Type II - Medium - N/A

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## Luminous Intensity Polar Plot



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Scaled Data Report

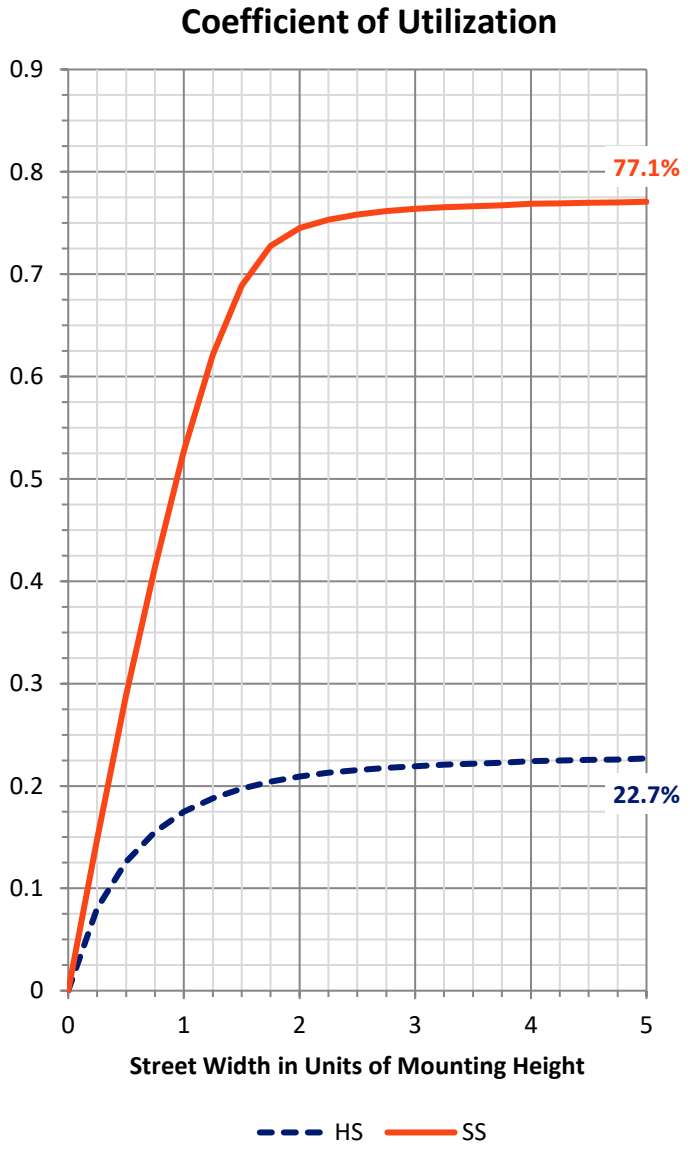
REPORT NUMBER: P1359243
CATALOG NUMBER: GSS-SB6A-735-U-T2

**FLUX DISTRIBUTION:**

| | | Downward | Upward | Total |
|---|---|---|---|---|
| **House Side** | Lumens | 5827.5 | 0.0 | 5827.5 |
| | % Fixture | 22.9 | 0.0 | 22.9 |
| **Street Side** | Lumens | 19606.3 | 0.0 | 19606.3 |
| | % Fixture | 77.1 | 0.0 | 77.1 |
| **Total** | Lumens | 25433.8 | 0.0 | 25433.8 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

**ZONAL LUMENS:**

| Zone | Lumens | % Fixture |
|---|---|---|
| 0°-10° | 362.5 | 1.4 |
| 10°-20° | 1091.3 | 4.3 |
| 20°-30° | 1843.8 | 7.2 |
| 30°-40° | 2844.5 | 11.2 |
| 40°-50° | 4344.0 | 17.1 |
| 50°-60° | 6006.2 | 23.6 |
| 60°-70° | 6069.8 | 23.9 |
| 70°-80° | 2670.5 | 10.5 |
| 80°-90° | 201.2 | 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° | 25433.8 | 100.0 |
| 0°-180° | 25433.8 | 100.0 |



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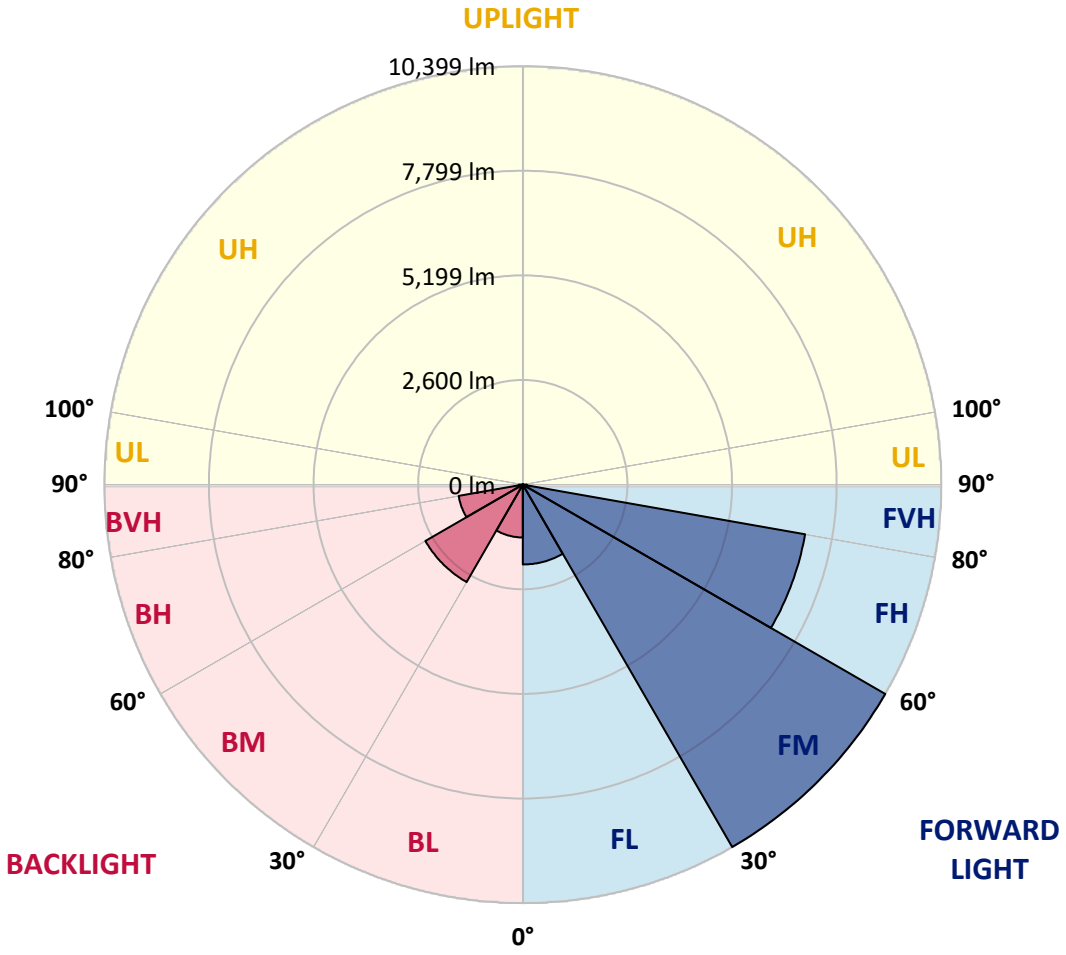
Scaled Data Report

REPORT NUMBER: P1359243
CATALOG NUMBER: GSS-SB6A-735-U-T2

## LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit B | U | G |
|---|---|---|---|---|---|---|
| FL | (0°-30°) | 1984.3 | 7.8 | | | |
| FM | (30°-60°) | 10398.5 | 40.9 | | | |
| FH | (60°-80°) | 7121.5 | 28.0 | | | G3/7500 |
| FVH | (80°-90°) | 101.9 | 0.4 | | | G2/225 |
| BL | (0°-30°) | 1313.3 | 5.2 | B3/2500 | | |
| BM | (30°-60°) | 2796.2 | 11.0 | B3/5000 | | |
| BH | (60°-80°) | 1618.7 | 6.4 | B3/2500 | | G3/2500 |
| BVH | (80°-90°) | 99.3 | 0.4 | | | G1/100 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

**BUG Rating: B3-U0-G3**
Type II Medium



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Scaled Data Report

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**CANDELA DISTRIBUTION (FULL):**

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 79° | 85° |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0° | 3793.5 | 3793.5 | 3793.5 | 3793.5 | 3793.5 | 3793.5 | 3793.5 | 3793.5 | 3793.5 | *3793.5* | 3793.5 |
| 2.5° | 3969.6 | 4032.0 | 4032.0 | 4003.6 | 3992.3 | 3986.6 | 3946.8 | 3901.4 | 3884.4 | *3856.0* | 3838.9 |
| 5° | 4213.7 | 4213.7 | 4225.1 | 4196.7 | 4213.7 | 4191.0 | 4134.2 | 4077.5 | 4009.3 | *3958.2* | 3935.5 |
| 7.5° | 4236.5 | 4281.9 | 4310.3 | 4310.3 | 4344.4 | 4350.0 | 4321.6 | 4259.2 | 4174.0 | *4094.5* | 4054.7 |
| 10° | 4259.2 | 4298.9 | 4298.9 | 4344.4 | 4418.2 | 4475.0 | 4492.0 | 4469.3 | 4333.0 | *4276.2* | 4196.7 |
| 12.5° | 4208.1 | 4253.5 | 4270.5 | 4361.4 | 4463.6 | 4571.5 | 4651.0 | 4662.4 | 4577.2 | *4475.0* | 4355.7 |
| 15° | 4032.0 | 4071.8 | 4139.9 | 4276.2 | 4457.9 | 4622.6 | 4776.0 | 4861.1 | 4764.6 | *4690.8* | 4526.1 |
| 17.5° | 3793.5 | 3816.2 | 3929.8 | 4105.8 | 4355.7 | 4634.0 | 4900.9 | 5065.6 | 5042.9 | *4946.3* | 4753.2 |
| 20° | 3770.8 | 3793.5 | 3827.6 | 3958.2 | 4247.8 | 4594.2 | 4980.4 | 5298.4 | 5360.9 | *5213.2* | 4974.7 |
| 22.5° | 3963.9 | 3986.6 | 3986.6 | 4003.6 | 4185.4 | 4560.2 | 5059.9 | 5548.3 | 5690.3 | *5565.3* | 5258.7 |
| 25° | 4230.8 | 4276.2 | 4225.1 | 4185.4 | 4247.8 | 4582.9 | 5105.3 | 5832.2 | 6110.5 | *5957.2* | 5576.7 |
| 27.5° | 4611.3 | 4605.6 | 4560.2 | 4440.9 | 4423.9 | 4651.0 | 5230.3 | 6053.7 | 6513.7 | *6354.7* | 5906.1 |
| 30° | 5139.4 | 5167.8 | 5065.6 | 4815.7 | 4702.1 | 4804.4 | 5400.6 | 6235.4 | 6939.6 | *6809.0* | 6218.4 |
| 32.5° | 5735.7 | 5724.3 | 5599.4 | 5360.9 | 5082.6 | 5054.2 | 5559.6 | 6428.5 | 7428.0 | *7263.3* | 6610.2 |
| 35° | 6377.4 | 6366.1 | 6326.3 | 5917.4 | 5554.0 | 5400.6 | 5815.2 | 6650.0 | 7995.9 | *7859.6* | 7070.2 |
| 37.5° | 6956.7 | 7007.8 | 7127.0 | 6468.3 | 6082.1 | 5855.0 | 6144.6 | 7019.1 | 8722.8 | *8524.0* | 7626.8 |
| 40° | 7450.7 | 7541.6 | 7655.2 | 7058.9 | 6576.2 | 6383.1 | 6581.9 | 7621.1 | 9500.8 | *9381.6* | 8296.9 |
| 42.5° | 7905.0 | 7967.5 | 7956.1 | 7592.7 | 7178.1 | 6962.3 | 7132.7 | 8245.8 | 10506.0 | *10420.8* | 9120.3 |
| 45° | 8461.6 | 8529.7 | 8501.3 | 8154.9 | 7740.3 | 7547.3 | 7853.9 | 8978.3 | 11460.0 | *11471.4* | 9898.3 |
| 47.5° | 9006.7 | 9074.9 | 9057.9 | 8739.8 | 8342.3 | 8183.3 | 8603.5 | 9841.5 | 12380.0 | *12533.3* | 10744.5 |
| 50° | 9517.8 | 9580.3 | 9614.4 | 9415.6 | 9069.2 | 8898.8 | 9336.1 | 10653.6 | 13271.6 | *13618.0* | 11550.9 |
| 52.5° | 9659.8 | 9739.3 | 9972.2 | 10046.0 | 9892.7 | 9688.2 | 10006.2 | 11431.6 | 14038.3 | *14555.0* | 12328.9 |
| 55° | 9194.1 | 9330.4 | 9830.2 | 10205.0 | 10659.3 | 10682.0 | 10704.7 | 12186.9 | 14708.4 | *15401.2* | 13038.8 |
| 57.5° | 8382.1 | 8404.8 | 8989.7 | 9750.7 | 10829.7 | 11795.1 | 11908.7 | 13067.2 | 15361.4 | *16224.6* | 13743.0 |
| 60° | 6581.9 | 6462.6 | 7411.0 | 8700.1 | 10216.4 | 12238.0 | 13828.1 | 14430.1 | 16173.5 | *17218.4* | 14589.1 |
| 62.5° | 3526.6 | 3538.0 | 4321.6 | 5923.1 | 8461.6 | 11806.4 | 15475.0 | 16463.1 | 17360.4 | *18507.6* | 15844.1 |
| 65° | 2214.8 | 2300.0 | 2742.9 | 3452.8 | 5122.4 | 9381.6 | 15577.2 | 19166.3 | 19240.1 | *20381.6* | 17417.2 |
| 67.5° | *1618.5* | *1641.2* | *2016.0* | *2532.8* | *2936.0* | *5502.9* | *12539.0* | *19200.4* | *20597.4* | *21699.1* | *18087.3* |
| 70° | 1203.9 | 1215.3 | 1482.2 | 1908.1 | 2140.9 | 2578.2 | 7990.2 | 16616.5 | 19893.2 | *20438.4* | 16412.0 |
| 72.5° | 880.2 | 885.9 | 1027.9 | 1402.7 | 1686.6 | 1533.3 | 3753.8 | 11971.1 | 17275.2 | *18246.3* | 14765.2 |
| 75° | 619.0 | 630.4 | 732.6 | 971.1 | 1135.8 | 1067.6 | 1431.1 | 7484.8 | 12402.7 | *12294.8* | 10312.9 |
| 77.5° | 465.7 | 471.3 | 539.5 | 687.1 | 772.3 | 698.5 | 806.4 | 3498.2 | 4429.5 | *3997.9* | 3254.0 |
| 80° | 340.7 | 357.8 | 391.8 | 431.6 | 516.8 | 448.6 | 454.3 | 982.5 | 1067.6 | *937.0* | 840.5 |
| 82.5° | 181.7 | 204.4 | 261.2 | 261.2 | 301.0 | 266.9 | 238.5 | 437.3 | 460.0 | *431.6* | 374.8 |
| 85° | 56.8 | 56.8 | 62.5 | 79.5 | 119.3 | 119.3 | 119.3 | 147.7 | 153.3 | *153.3* | 130.6 |
| 87.5° | 11.4 | 11.4 | 11.4 | 11.4 | 17.0 | 22.7 | 34.1 | 45.4 | 51.1 | *56.8* | 56.8 |
| 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: P1359243
CATALOG NUMBER: GSS-SB6A-735-U-T2

**CANDELA DISTRIBUTION (continued):**

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0° | 3793.5 | 3793.5 | 3793.5 | 3793.5 | 3793.5 | 3793.5 | 3793.5 | 3793.5 | 3793.5 | 3793.5 | 3793.5 |
| 2.5° | 3827.6 | 3787.8 | 3748.1 | 3679.9 | 3645.9 | 3594.7 | 3549.3 | 3526.6 | 3509.6 | 3503.9 | 3503.9 |
| 5° | 3901.4 | 3838.9 | 3714.0 | 3594.7 | 3486.8 | 3390.3 | 3316.5 | 3259.7 | 3225.6 | 3197.2 | 3197.2 |
| 7.5° | 3975.2 | 3890.1 | 3702.6 | 3492.5 | 3339.2 | 3219.9 | 3117.7 | 3083.6 | 3072.3 | 3043.9 | 3026.9 |
| 10° | 4100.2 | 3963.9 | 3685.6 | 3384.6 | 3168.8 | 3066.6 | 3021.2 | 3009.8 | 3015.5 | 3021.2 | 3021.2 |
| 12.5° | 4196.7 | 4049.1 | 3640.2 | 3248.3 | 3038.2 | 2981.4 | 2987.1 | 3015.5 | 3060.9 | 3055.3 | 3043.9 |
| 15° | 4333.0 | 4111.5 | 3549.3 | 3089.3 | 2936.0 | 2936.0 | 2992.8 | 3055.3 | 3100.7 | 3129.1 | 3112.0 |
| 17.5° | 4492.0 | 4185.4 | 3413.0 | 2941.7 | 2850.8 | 2901.9 | 3021.2 | 3083.6 | 3163.2 | 3180.2 | 3168.8 |
| 20° | 4690.8 | 4247.8 | 3259.7 | 2799.7 | 2794.0 | 2901.9 | 3004.1 | 3095.0 | 3157.5 | 3174.5 | 3185.9 |
| 22.5° | 4883.9 | 4304.6 | 3060.9 | 2697.5 | 2731.6 | 2867.8 | 2964.4 | 3060.9 | 3089.3 | 3106.4 | 3112.0 |
| 25° | 5082.6 | 4361.4 | 2879.2 | 2618.0 | 2686.1 | 2822.4 | 2901.9 | 2941.7 | 2947.4 | 2936.0 | 2936.0 |
| 27.5° | 5298.4 | 4367.1 | 2697.5 | 2555.5 | 2635.0 | 2754.3 | 2799.7 | 2811.1 | 2788.3 | 2708.8 | 2686.1 |
| 30° | 5525.6 | 4310.3 | 2549.8 | 2498.7 | 2578.2 | 2674.8 | 2708.8 | 2674.8 | 2595.3 | 2481.7 | 2470.3 |
| 32.5° | 5713.0 | 4225.1 | 2441.9 | 2430.6 | 2515.8 | 2600.9 | 2600.9 | 2538.5 | 2419.2 | 2305.6 | 2300.0 |
| 35° | 5996.9 | 4105.8 | 2334.0 | 2385.1 | 2459.0 | 2498.7 | 2510.1 | 2419.2 | 2288.6 | 2180.7 | 2169.3 |
| 37.5° | 6275.2 | 4003.6 | 2288.6 | 2328.4 | 2396.5 | 2430.6 | 2396.5 | 2305.6 | 2220.5 | 2129.6 | 2129.6 |
| 40° | 6706.8 | 3941.2 | 2231.8 | 2288.6 | 2345.4 | 2351.1 | 2288.6 | 2220.5 | 2231.8 | 2180.7 | 2175.0 |
| 42.5° | 7178.1 | 3935.5 | 2209.1 | 2248.8 | 2288.6 | 2277.2 | 2186.4 | 2186.4 | 2203.4 | 2106.9 | 2084.2 |
| 45° | 7717.6 | 4015.0 | 2209.1 | 2192.1 | 2214.8 | 2180.7 | 2129.6 | 2118.2 | 2078.5 | 1936.5 | 1930.8 |
| 47.5° | 8279.8 | 4208.1 | 2220.5 | 2112.6 | 2106.9 | 2095.5 | 2072.8 | 2033.0 | 1913.8 | 1794.5 | 1777.5 |
| 50° | 8722.8 | 4475.0 | 2254.5 | 2010.3 | 1987.6 | 2027.4 | 1987.6 | 1919.5 | 1783.2 | 1669.6 | 1652.6 |
| 52.5° | 9250.9 | 4741.9 | 2231.8 | 1885.4 | 1857.0 | 1959.2 | 1919.5 | 1822.9 | 1720.7 | 1652.6 | 1635.5 |
| 55° | 9807.5 | 5020.2 | 2140.9 | 1715.0 | 1737.7 | 1874.0 | 1862.7 | 1754.8 | 1629.8 | 1539.0 | 1527.6 |
| 57.5° | 10364.0 | 5372.2 | 1987.6 | 1567.4 | 1652.6 | 1822.9 | 1777.5 | 1646.9 | 1561.7 | 1499.2 | 1487.9 |
| 60° | 11215.8 | 5877.7 | 1766.1 | 1414.0 | 1567.4 | 1715.0 | 1641.2 | 1601.5 | 1510.6 | 1459.5 | 1431.1 |
| 62.5° | 12317.5 | 6718.1 | 1476.5 | 1272.1 | 1448.1 | 1584.4 | 1578.7 | 1533.3 | 1453.8 | 1397.0 | 1380.0 |
| 65° | 13884.9 | 7518.9 | 1209.6 | 1135.8 | 1294.8 | 1425.4 | 1493.6 | 1453.8 | 1374.3 | 1311.8 | 1306.1 |
| 67.5° | *14185.9* | *6718.1* | *1005.2* | *993.8* | *1124.4* | *1272.1* | *1402.7* | *1374.3* | *1249.4* | *1169.9* | *1158.5* |
| 70° | 12345.9 | 4798.7 | 846.2 | 857.5 | 982.5 | 1113.1 | 1255.0 | 1186.9 | 1084.7 | 1039.2 | 1033.6 |
| 72.5° | 10960.3 | 4122.9 | 709.9 | 732.6 | 823.4 | 942.7 | 1027.9 | 1050.6 | 976.8 | 937.0 | 920.0 |
| 75° | 7899.4 | 3089.3 | 573.6 | 602.0 | 664.4 | 732.6 | 891.6 | 931.3 | 863.2 | 823.4 | 795.0 |
| 77.5° | 2930.3 | 1289.1 | 425.9 | 454.3 | 499.7 | 596.3 | 721.2 | 806.4 | 755.3 | 783.7 | 704.2 |
| 80° | 704.2 | 454.3 | 312.3 | 306.7 | 352.1 | 448.6 | 573.6 | 636.0 | 584.9 | 556.5 | 482.7 |
| 82.5° | 306.7 | 221.5 | 204.4 | 204.4 | 215.8 | 295.3 | 380.5 | 448.6 | 437.3 | 363.4 | 346.4 |
| 85° | 113.6 | 96.5 | 96.5 | 102.2 | 102.2 | 136.3 | 204.4 | 238.5 | 215.8 | 187.4 | 181.7 |
| 87.5° | 51.1 | 51.1 | 39.8 | 34.1 | 28.4 | 28.4 | 34.1 | 22.7 | 17.0 | 11.4 | 11.4 |
| 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: SP1-2407-184-5

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

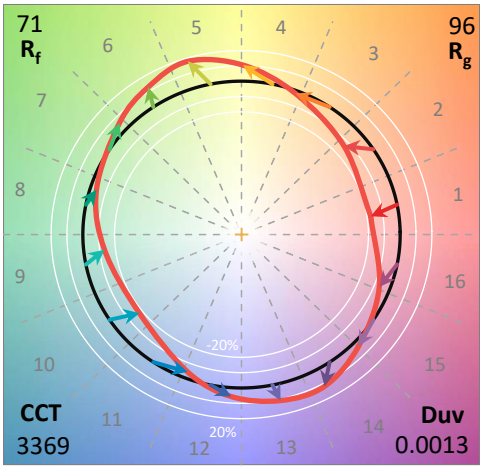
## Test Information

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

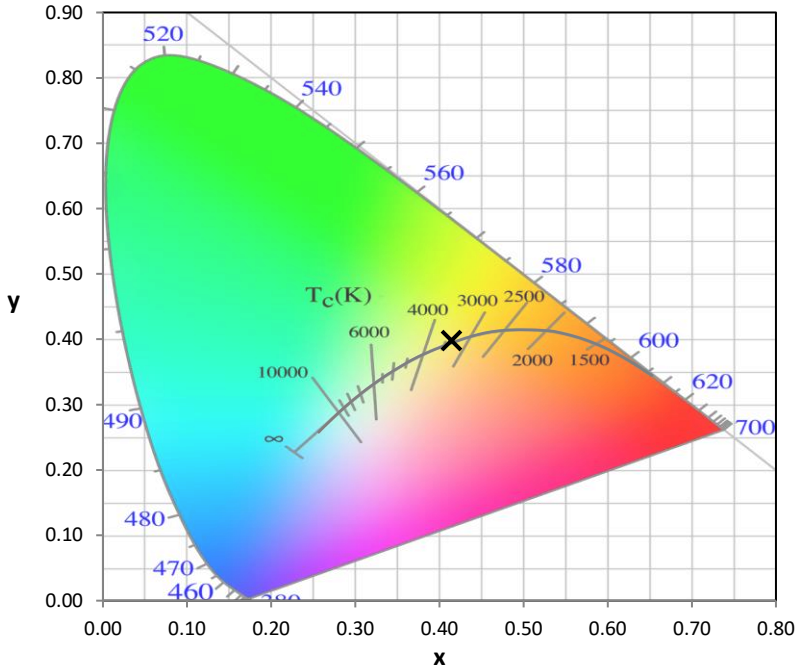
| | |
|---|---|
| Stabilization Time: | 21M |
| Operation Time: | 1H 21M |
| Sphere Temperature (°C): | 25.2 |

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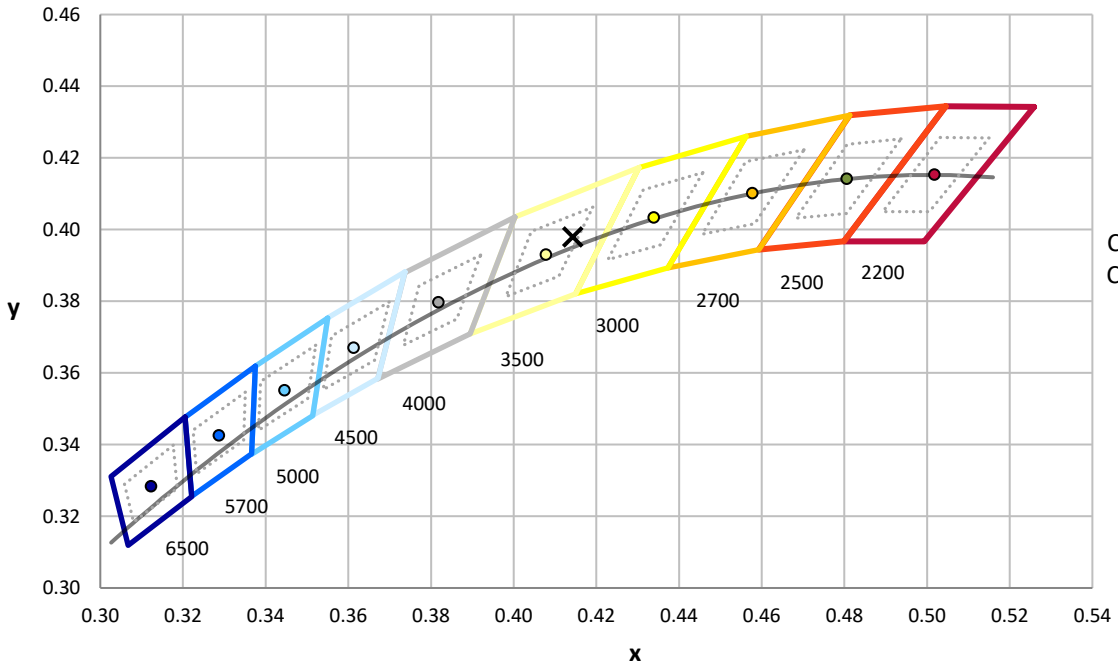
| Measurement and Test Equipment | | | |
|---|---|---|---|
| Instrument | Identification Number | Calibration Date | Calibration Due Date |
| Photometer | IN0058 | 6/18/2024 | 12/18/2024 |
| Power Meter | INXT2011004 | 2/8/2024 | 2/8/2025 |
| AC Power Source | IN0063 | 10/24/2023 | 10/24/2024 |
| DC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

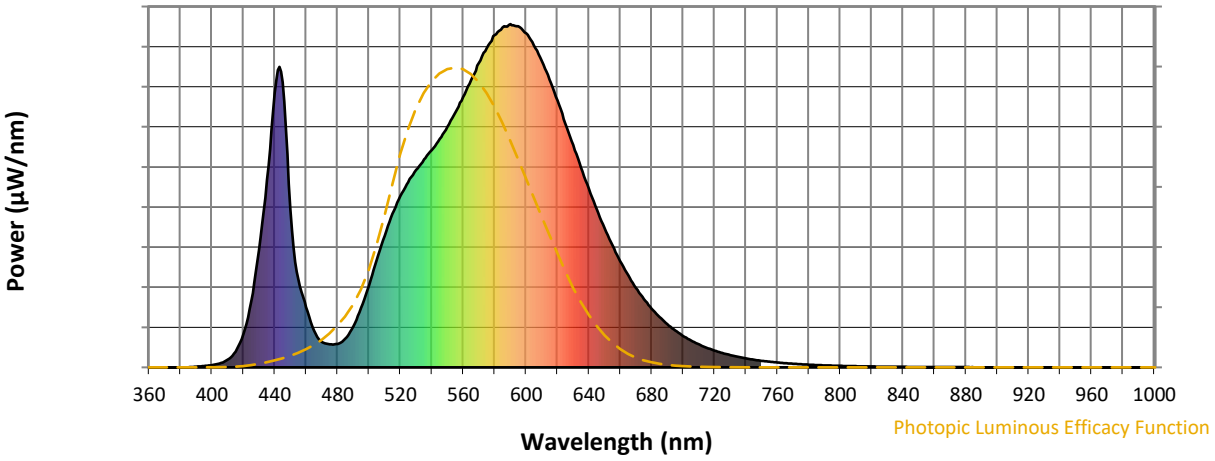



CCT = 3369K
CIE x = 0.4143
CIE y = 0.3980
Duv = 0.0013

Point lies inside the ANSI 3500K 4-step quadrangle

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## Photopic Flux vs. Wavelength

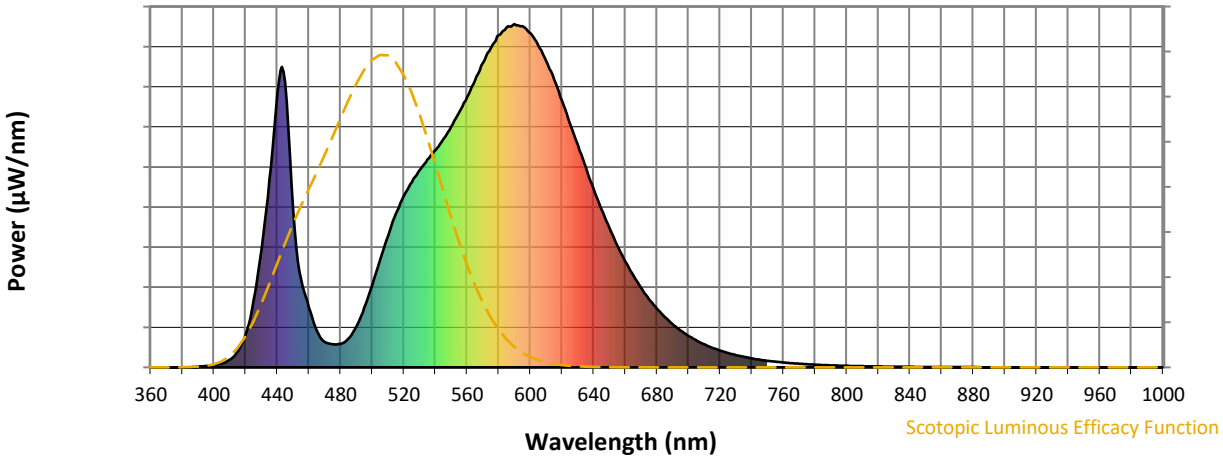



## Photopic Lumens: NR

| 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

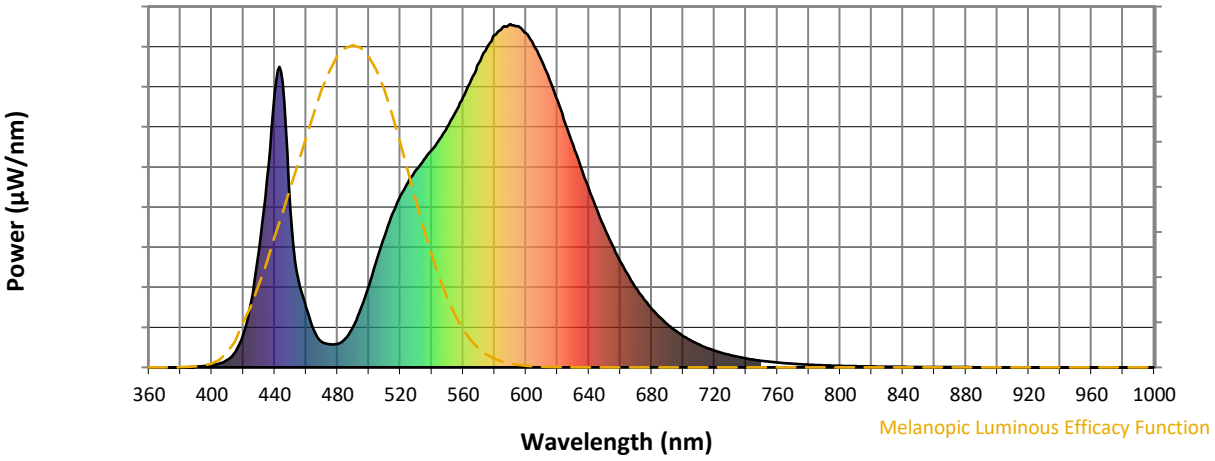



**Scotopic Lumens: NR** **S/P: 1.29**

| 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 | | | |

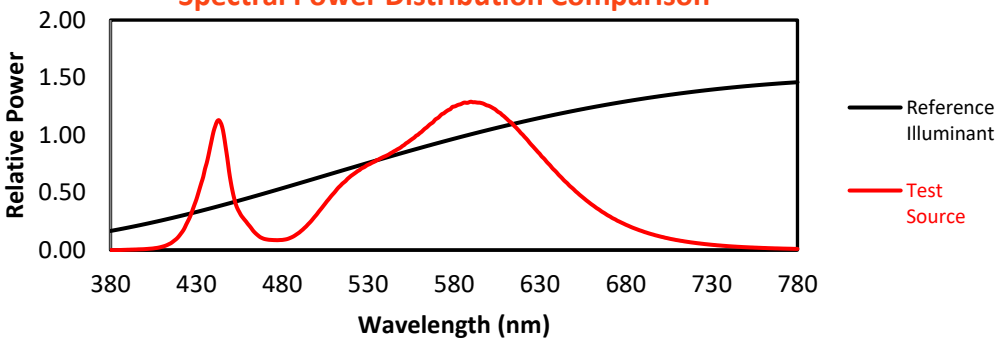
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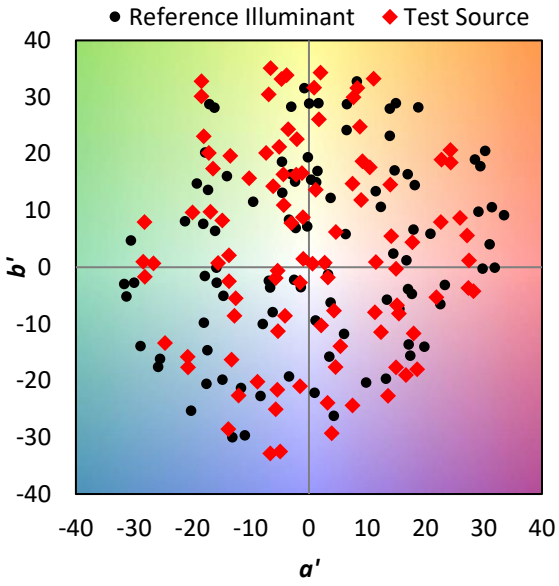
## Summary

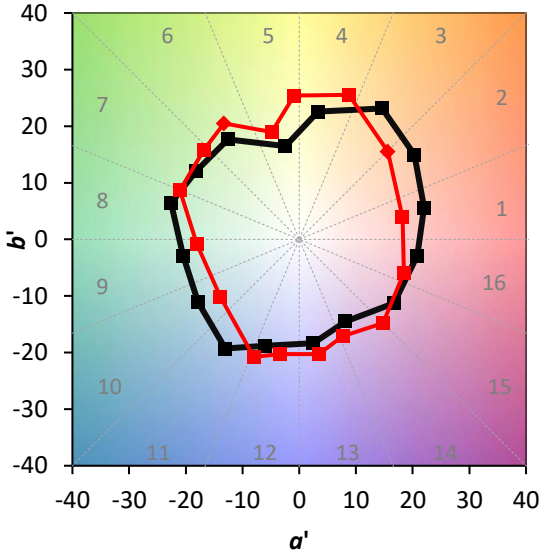
$R_f$ = 71.4
$R_g$ = 96
CIE $R_a$ = 70.1
$R_9$ = -40.2

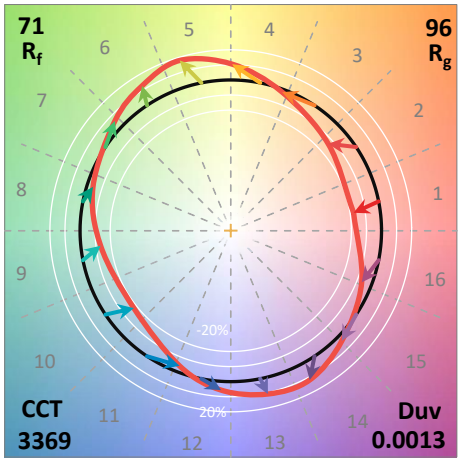
## Spectral Power Distribution Comparison

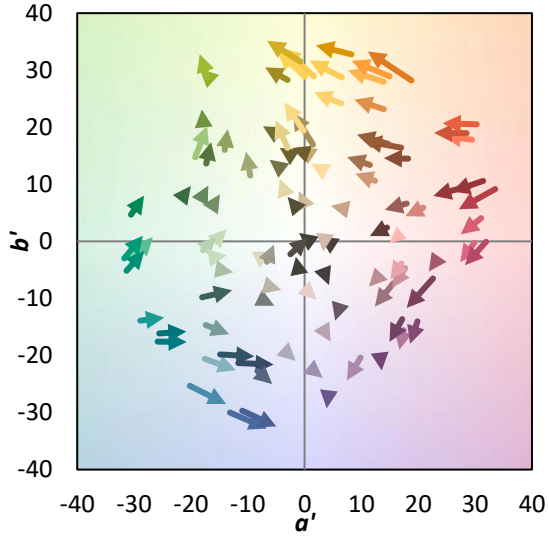



## Color Vector Graphics



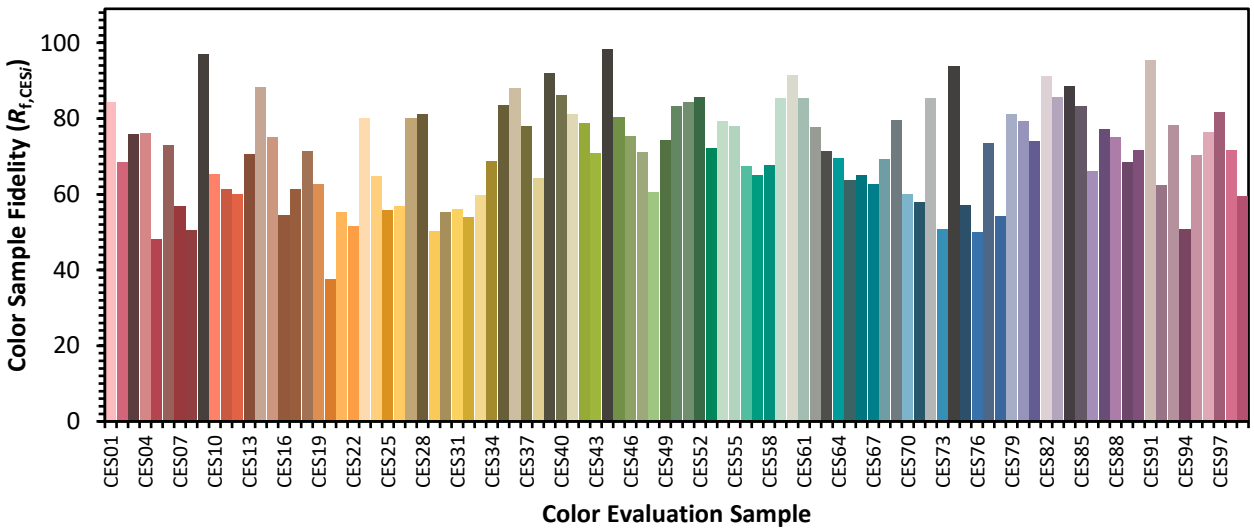



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## Individual Sample Fidelity Index ($R_{f,i}$)

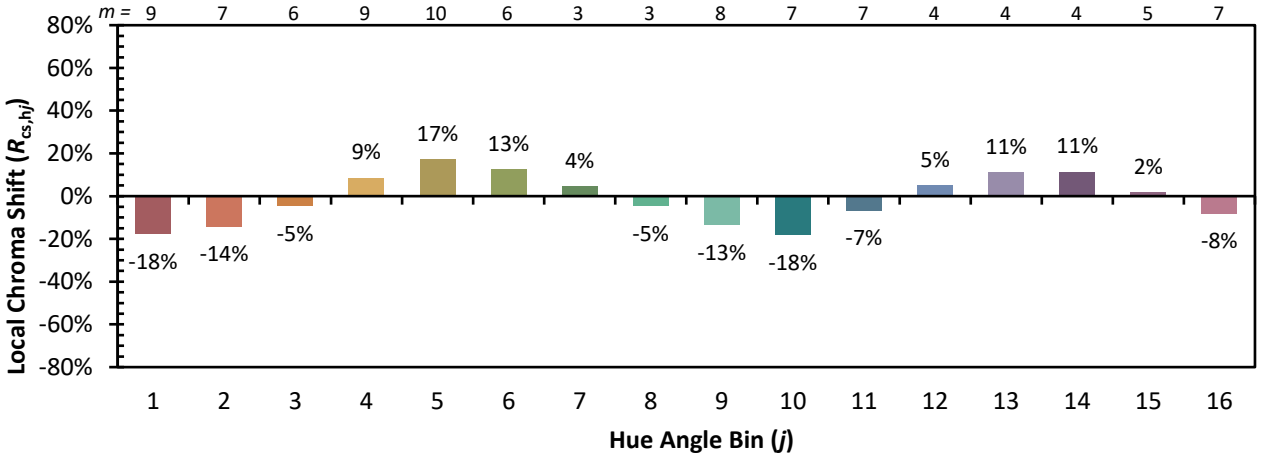
| | | | |
|---|---|---|---|
| CES01 = 86 | CES26 = 57 | CES51 = 84 | CES76 = 50 |
| CES02 = 62 | CES27 = 80 | CES52 = 86 | CES77 = 74 |
| CES03 = 31 | CES28 = 81 | CES53 = 72 | CES78 = 54 |
| CES04 = 70 | CES29 = 50 | CES54 = 79 | CES79 = 81 |
| CES05 = 48 | CES30 = 55 | CES55 = 78 | CES80 = 79 |
| CES06 = 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 | |

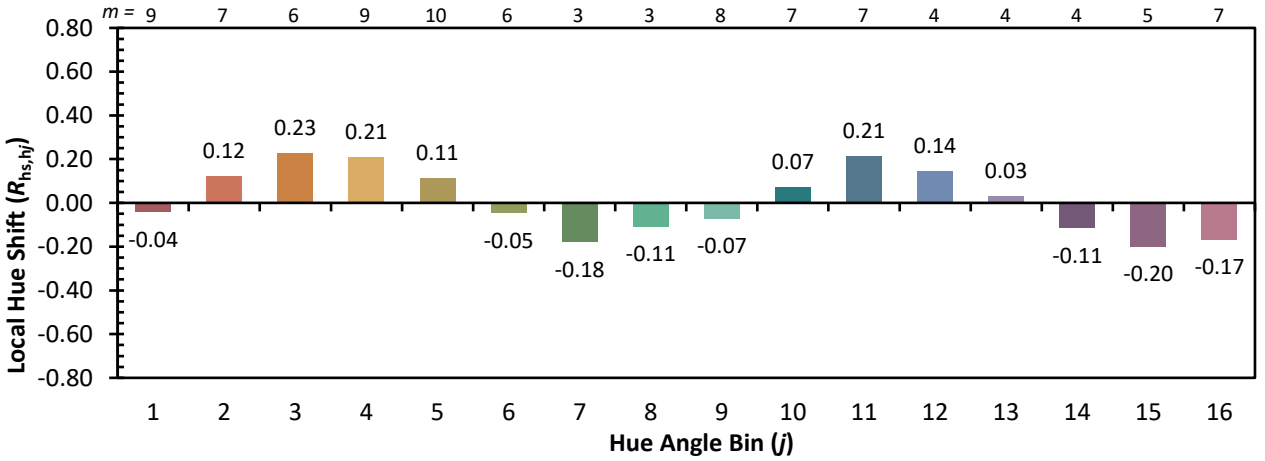


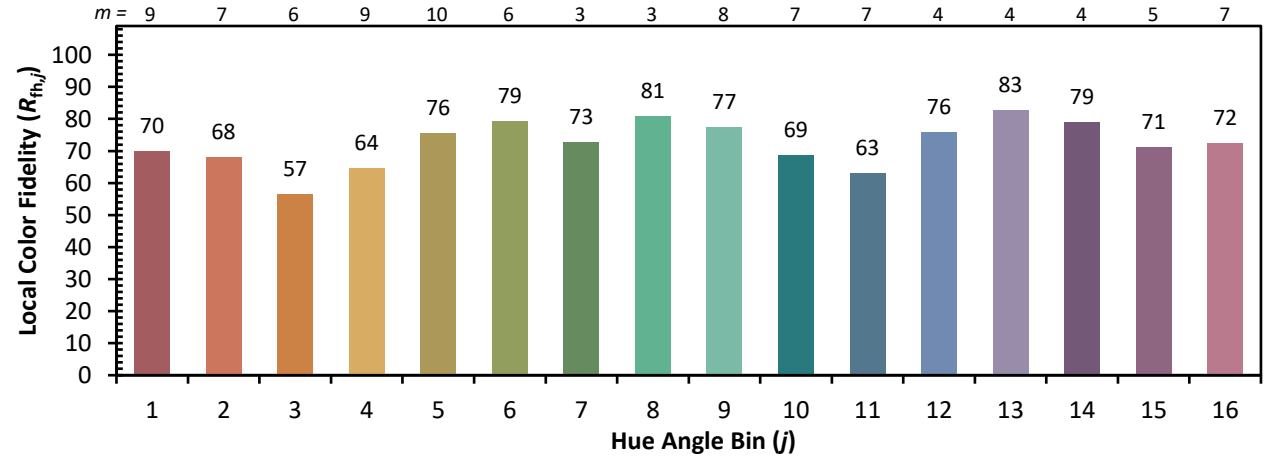
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## Color Rendition by Hue-Angle Bin



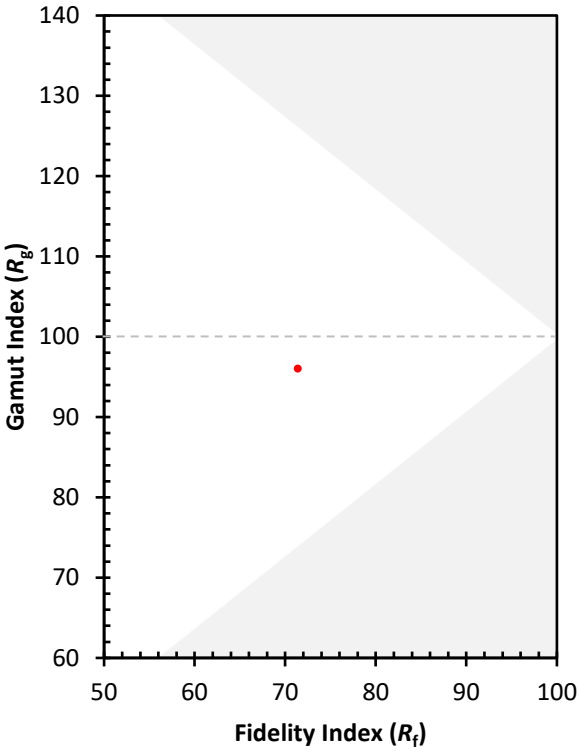



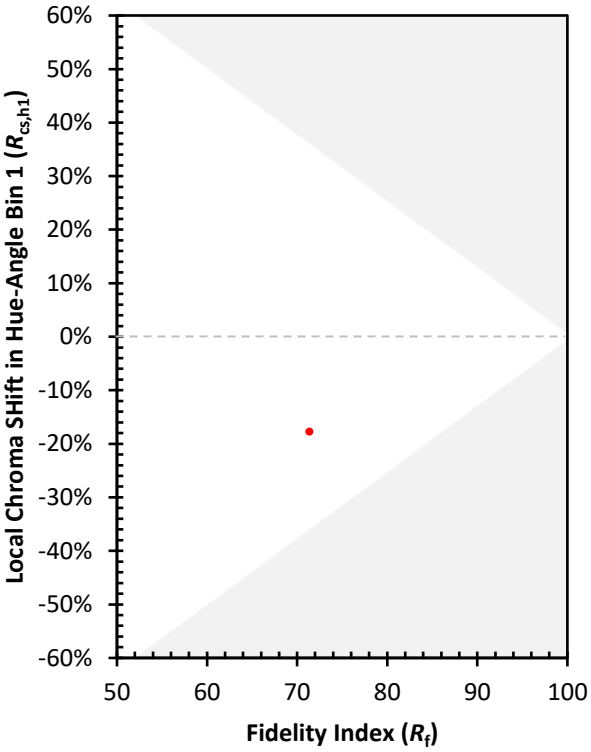



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## Measure Comparisons




(END OF REPORT)