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: P1357636

Luminaire Tested: **GSS-SB6B-722-U-T4FT**

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: | P1357636 |
| Test Lab: | INNOVATION CENTER(G3) |
| Issue Date: | 02/18/2026 |
| Manufacturer: | COOPER LIGHTING SOLUTIONS (FORMERLY EATON) |
| Product Line: | McGRAW-EDISON |
| Catalog Number: | GSS-SB6B-722-U-T4FT |
| Description: | GALLEON II SLIM SITE HIGH DENSITY LED ARRAYS 6SQUARE 219W 70CRI 2200K FIXTURE w/ TYPE IV FORWARD THROW DISTRIBUTION OPTIC |
| Light Source: | (156) 2200K CCT, 70 CRI LEDS |
| Ballast/Driver: | ELECTRONIC DRIVER |

**Summary**

| | |
|---|---|
| Lumens per Lamp: | N/A |
| Luminaire Lumens: | 25722.9 lumens |
| Efficiency: | N/A |
| Efficacy: | 117.5 lumens/watt |
| Luminous Opening: | Rectangular (W 1.5' x L: 1' x H: 0') |
| IES Classification: | Type IV - Short |
| BUG Rating: | B3 - U0 - G4 |

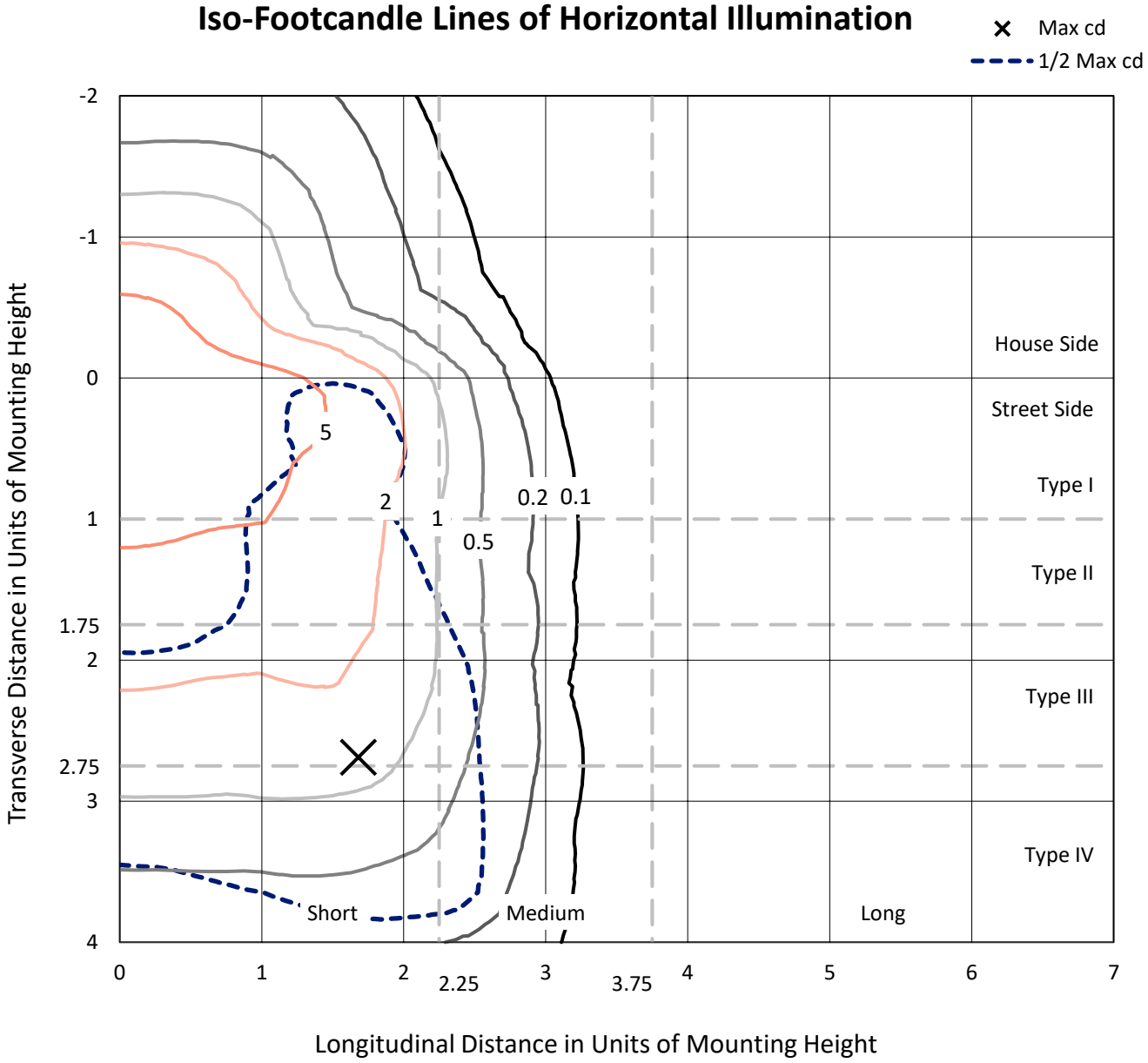
| | |
|---|---|
| Input Watts (W): | 219 |
| Input Voltage (V): | 120 |
| Input Current (Ain): | NR |
| Voltage Rise (V): | NR |
| Power Factor: | 0.98 |
| Total Harmonic Distortion (THDi): | 8.7% |
| Frequency (hertz): | 60 |
| Stabilization Time: | NR |
| Operation Time: | NR |
| Ambient Temperature (°C): | NR |
| Test Distance: | 28.75 FT |

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Scaled Data Report

REPORT NUMBER: P1357636
CATALOG NUMBER: GSS-SB6B-722-U-T4FT

## Iso-Footcandle Lines of Horizontal Illumination



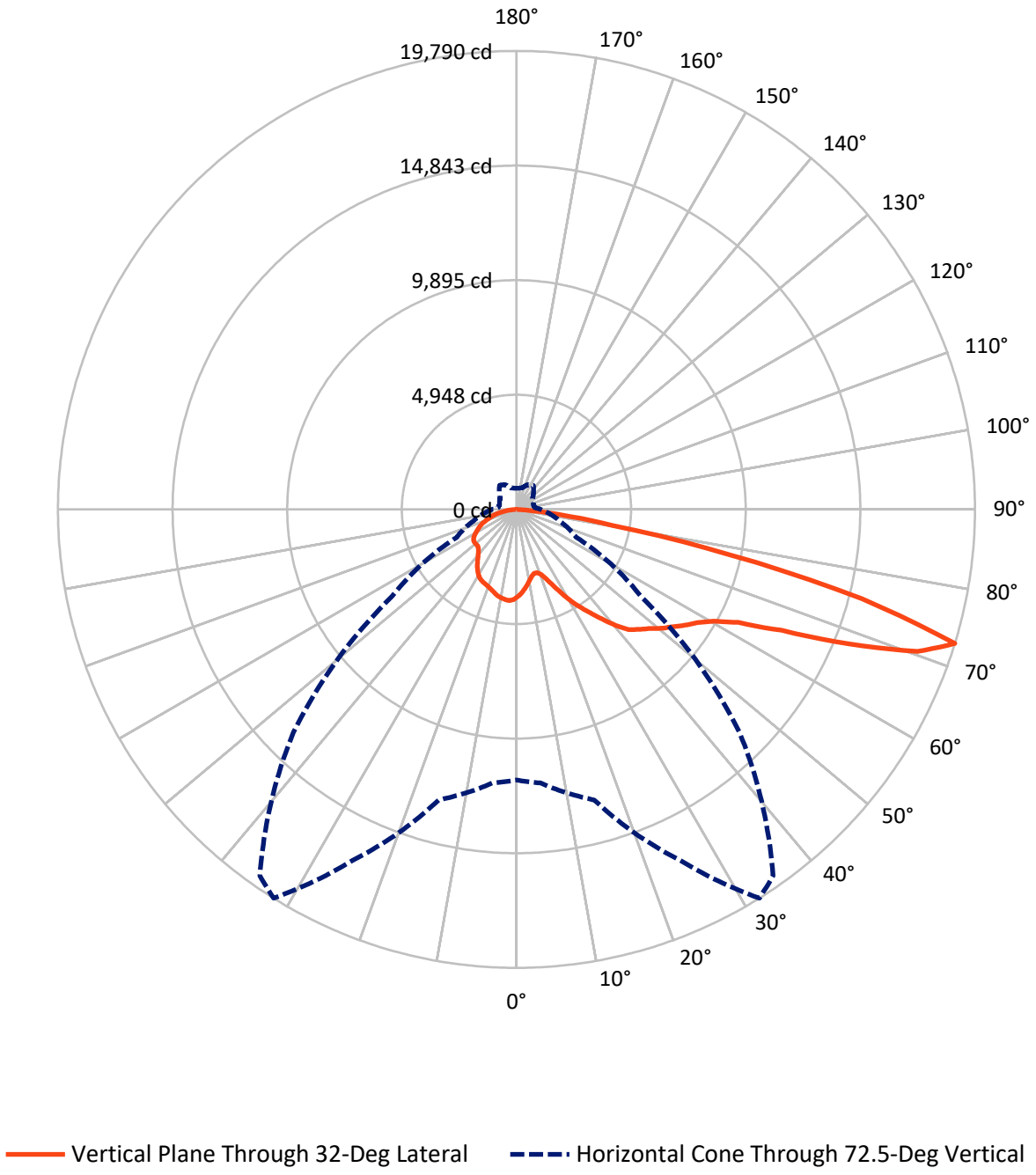

Based on 20 foot mounting height. Maximum calculated value = 9.5 fc
Type IV - Short - N/A

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Scaled Data Report

REPORT NUMBER: P1357636
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## Luminous Intensity Polar Plot



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Scaled Data Report

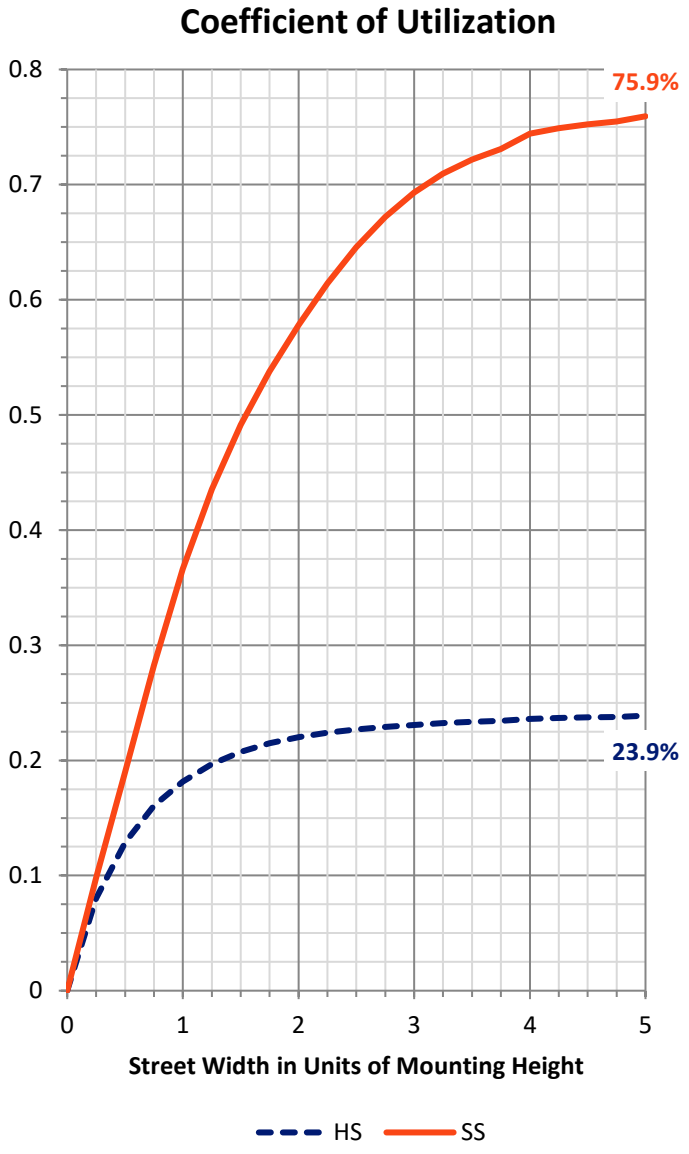
REPORT NUMBER: P1357636
CATALOG NUMBER: GSS-SB6B-722-U-T4FT

**FLUX DISTRIBUTION:**

| | | Downward | Upward | Total |
|---|---|---|---|---|
| **House Side** | Lumens | 6203.5 | 0.0 | 6203.5 |
| | % Fixture | 24.1 | 0.0 | 24.1 |
| **Street Side** | Lumens | 19519.4 | 0.0 | 19519.4 |
| | % Fixture | 75.9 | 0.0 | 75.9 |
| **Total** | Lumens | 25722.9 | 0.0 | 25722.9 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

**ZONAL LUMENS:**

| Zone | Lumens | % Fixture |
|---|---|---|
| 0°-10° | 353.4 | 1.4 |
| 10°-20° | 1002.7 | 3.9 |
| 20°-30° | 1737.3 | 6.8 |
| 30°-40° | 2744.3 | 10.7 |
| 40°-50° | 3999.7 | 15.5 |
| 50°-60° | 5422.0 | 21.1 |
| 60°-70° | 6240.1 | 24.3 |
| 70°-80° | 3904.8 | 15.2 |
| 80°-90° | 318.6 | 1.2 |
| 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° | 25722.9 | 100.0 |
| 0°-180° | 25722.9 | 100.0 |



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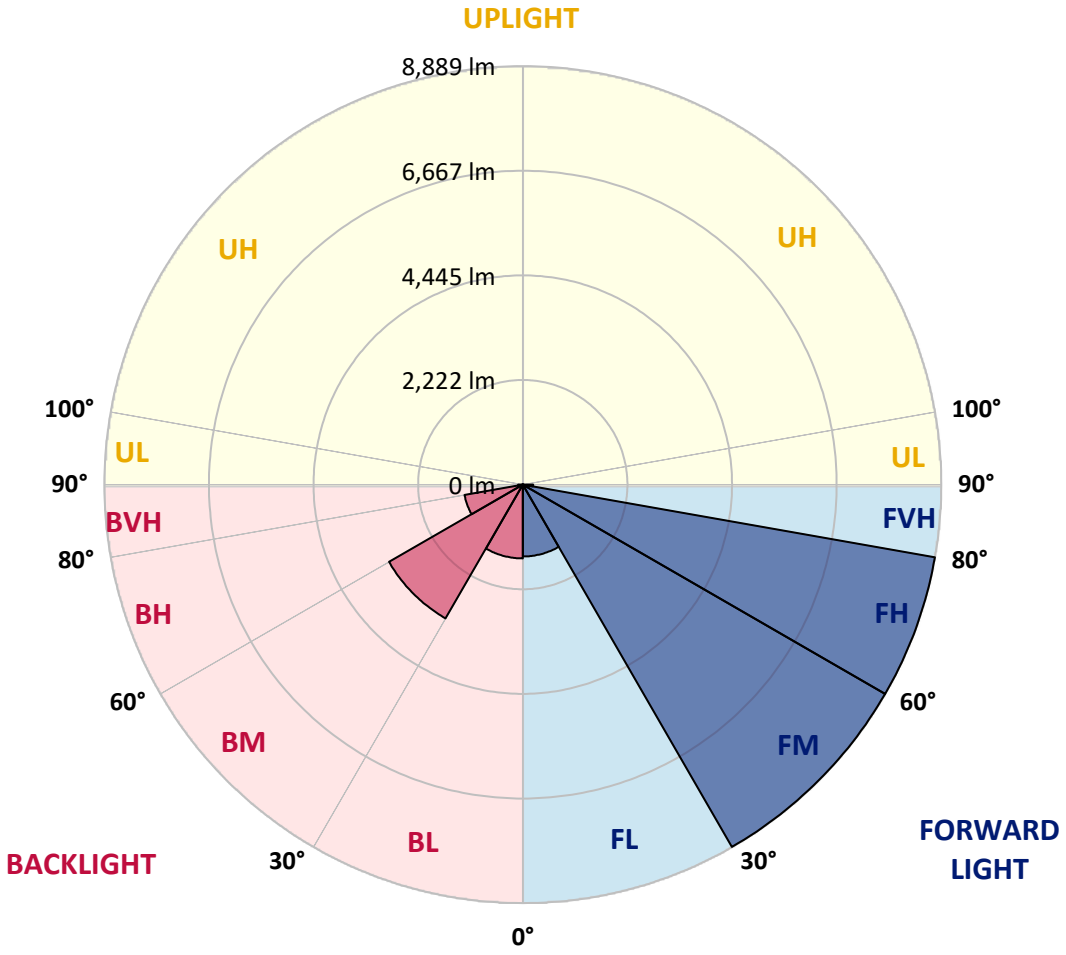
Scaled Data Report

REPORT NUMBER: P1357636
CATALOG NUMBER: GSS-SB6B-722-U-T4FT

## LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit B | U | G |
|---|---|---|---|---|---|---|
| FL | (0°-30°) | 1525.9 | 5.9 | | | |
| FM | (30°-60°) | 8885.6 | 34.5 | | | |
| FH | (60°-80°) | 8889.0 | 34.6 | | | G4/12000 |
| FVH | (80°-90°) | 218.8 | 0.9 | | | G2/225 |
| BL | (0°-30°) | 1567.5 | 6.1 | B3/2500 | | |
| BM | (30°-60°) | 3280.4 | 12.8 | B3/5000 | | |
| BH | (60°-80°) | 1255.9 | 4.9 | B3/2500 | | G3/2500 |
| BVH | (80°-90°) | 99.7 | 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-G4**
Type IV Short



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REPORT NUMBER: P1357636
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**CANDELA DISTRIBUTION (FULL):**

| | 0° | 5° | 15° | 25° | 32° | 35° | 45° | 55° | 65° | 75° | 85° |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0° | 3778.3 | 3778.3 | 3778.3 | 3778.3 | 3778.3 | 3778.3 | 3778.3 | 3778.3 | 3778.3 | 3778.3 | 3778.3 |
| 2.5° | 3618.7 | 3612.8 | 3642.3 | 3630.5 | 3654.2 | 3642.3 | 3642.3 | 3677.8 | 3707.4 | 3748.8 | 3778.3 |
| 5° | 3417.6 | 3423.6 | 3417.6 | 3476.8 | 3476.8 | 3482.7 | 3530.0 | 3624.6 | 3695.5 | 3742.8 | 3772.4 |
| 7.5° | 3157.5 | 3169.3 | 3192.9 | 3258.0 | 3299.4 | 3328.9 | 3417.6 | 3518.2 | 3636.4 | 3725.1 | 3831.5 |
| 10° | 2944.6 | 2926.9 | 2980.1 | 3051.0 | 3110.2 | 3139.7 | 3287.6 | 3447.2 | 3606.9 | 3754.7 | 3843.4 |
| 12.5° | 2790.9 | 2790.9 | 2820.4 | 2885.5 | 2950.5 | 2997.8 | 3163.4 | 3358.5 | 3571.4 | 3754.7 | 3920.2 |
| 15° | 2761.3 | 2773.1 | 2785.0 | 2808.6 | 2867.7 | 2891.4 | 3051.0 | 3293.5 | 3530.0 | 3807.9 | 3973.4 |
| 17.5° | 2861.8 | 2850.0 | 2838.2 | 2850.0 | 2873.7 | 2885.5 | 3003.7 | 3240.3 | 3506.3 | 3813.8 | 4003.0 |
| 20° | 3133.8 | 3110.2 | 3092.4 | 3003.7 | 2986.0 | 2997.8 | 3045.1 | 3222.5 | 3512.2 | 3896.6 | 4127.2 |
| 22.5° | 3512.2 | 3524.1 | 3453.1 | 3305.3 | 3234.3 | 3228.4 | 3169.3 | 3287.6 | 3547.7 | 3961.6 | 4233.6 |
| 25° | 4056.2 | 4003.0 | 3932.1 | 3754.7 | 3606.9 | 3553.6 | 3429.5 | 3423.6 | 3624.6 | 4079.9 | 4387.3 |
| 27.5° | 4606.1 | 4576.6 | 4464.2 | 4215.9 | 4050.3 | 3973.4 | 3748.8 | 3636.4 | 3736.9 | 4221.8 | 4564.7 |
| 30° | 5221.1 | 5221.1 | 5037.8 | 4759.9 | 4541.1 | 4399.2 | 4133.1 | 3920.2 | 3926.1 | 4411.0 | 4819.0 |
| 32.5° | 5853.7 | 5818.3 | 5640.9 | 5232.9 | 5014.1 | 4872.2 | 4517.4 | 4298.7 | 4227.7 | 4677.1 | 5167.8 |
| 35° | 6309.0 | 6320.9 | 6155.3 | 5794.6 | 5481.2 | 5345.2 | 5025.9 | 4777.6 | 4618.0 | 5049.6 | 5611.3 |
| 37.5° | 6722.9 | 6734.8 | 6634.2 | 6279.5 | 6001.6 | 5865.6 | 5504.9 | 5333.4 | 5091.0 | 5581.7 | 6143.5 |
| 40° | 6929.9 | 6900.3 | 6870.8 | 6740.7 | 6581.0 | 6474.6 | 6102.1 | 5877.4 | 5664.5 | 6155.3 | 6722.9 |
| 42.5° | 7083.6 | 7083.6 | 7036.3 | 7095.4 | 7095.4 | 7024.5 | 6734.8 | 6533.7 | 6320.9 | 6953.5 | 7337.9 |
| 45° | 7261.0 | 7184.1 | 7184.1 | 7237.4 | 7385.2 | 7432.5 | 7456.1 | 7266.9 | 7071.8 | 7745.9 | 8006.0 |
| 47.5° | 7444.3 | 7462.0 | 7414.7 | 7479.8 | 7686.7 | 7893.7 | 8201.2 | 8029.7 | 7816.8 | 8686.0 | 8762.9 |
| 50° | 7674.9 | 7698.6 | 7698.6 | 7840.5 | 8071.1 | 8313.5 | 9070.3 | 8893.0 | 8538.2 | 9750.3 | 9596.6 |
| 52.5° | 7734.0 | 7745.9 | 7923.2 | 8082.9 | 8419.9 | 8751.0 | 9939.5 | 9685.3 | 9306.9 | 10720.0 | 10323.9 |
| 55° | 7627.6 | 7716.3 | 8035.6 | 8343.1 | 8827.9 | 9224.1 | 10767.3 | 10448.0 | 9868.6 | 11459.1 | 10897.4 |
| 57.5° | 7870.0 | 7905.5 | 8201.2 | 8550.0 | 9224.1 | 9732.6 | 11583.3 | 11128.0 | 10258.8 | 12068.2 | 11128.0 |
| 60° | 8384.4 | 8360.8 | 8621.0 | 9011.2 | 9791.7 | 10448.0 | 12464.3 | 11707.5 | 10584.0 | 12168.7 | 10672.7 |
| 62.5° | 9537.5 | 9419.2 | 9513.8 | 9868.6 | 10743.7 | 11636.5 | 13369.0 | 12180.5 | 10383.0 | 11175.3 | 9135.4 |
| 65° | 11098.5 | 11063.0 | 11003.9 | 11376.4 | 12576.7 | 13339.4 | 14498.4 | 12080.0 | 9377.8 | 9431.0 | 7343.8 |
| 67.5° | 12493.9 | 12541.2 | 12505.7 | 13499.1 | 15515.4 | 16213.1 | 15698.7 | 11352.7 | 7769.5 | 6728.8 | 4724.4 |
| 70° | 13032.0 | 13126.6 | 13753.3 | 15645.5 | 18365.4 | 19175.4 | 16242.7 | 9502.0 | 5380.7 | 3636.4 | 2323.8 |
| 72.5° | 11683.8 | 11855.3 | 12984.7 | 16715.7 | 19790.4 | 19311.4 | 13617.3 | 6557.4 | 2838.2 | 1915.8 | 1294.9 |
| 75° | 8077.0 | 8254.4 | 9969.1 | 14019.4 | 15397.1 | 14610.7 | 8360.8 | 2826.4 | 1466.4 | 1117.5 | 798.2 |
| 77.5° | 3169.3 | 3630.5 | 4753.9 | 7822.7 | 9436.9 | 9259.6 | 3961.6 | 975.6 | 816.0 | 680.0 | 520.3 |
| 80° | 1064.3 | 1206.2 | 1767.9 | 3086.5 | 4186.3 | 4422.8 | 1442.7 | 496.7 | 473.0 | 413.9 | 325.2 |
| 82.5° | 384.3 | 431.6 | 756.8 | 1164.8 | 1909.9 | 1921.7 | 467.1 | 266.1 | 289.7 | 248.3 | 171.5 |
| 85° | 130.1 | 141.9 | 177.4 | 360.7 | 467.1 | 502.6 | 130.1 | 100.5 | 118.3 | 106.4 | 76.9 |
| 87.5° | 11.8 | 11.8 | 11.8 | 17.7 | 17.7 | 17.7 | 17.7 | 23.7 | 23.7 | 17.7 | 17.7 |
| 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: P1357636
CATALOG NUMBER: GSS-SB6B-722-U-T4FT

**CANDELA DISTRIBUTION (continued):**

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0° | 3778.3 | 3778.3 | 3778.3 | 3778.3 | 3778.3 | 3778.3 | 3778.3 | 3778.3 | 3778.3 | 3778.3 | 3778.3 |
| 2.5° | 3784.2 | 3802.0 | 3813.8 | 3837.5 | 3867.0 | 3872.9 | 3896.6 | 3902.5 | 3890.7 | 3902.5 | 3890.7 |
| 5° | 3819.7 | 3849.3 | 3872.9 | 3908.4 | 3932.1 | 3961.6 | 3955.7 | 3938.0 | 3938.0 | 3908.4 | 3955.7 |
| 7.5° | 3867.0 | 3908.4 | 3926.1 | 3961.6 | 3967.5 | 3949.8 | 3926.1 | 3920.2 | 3861.1 | 3861.1 | 3872.9 |
| 10° | 3932.1 | 3967.5 | 3985.3 | 3997.1 | 3961.6 | 3932.1 | 3884.8 | 3855.2 | 3831.5 | 3807.9 | 3813.8 |
| 12.5° | 3979.4 | 4014.8 | 4014.8 | 3973.4 | 3932.1 | 3884.8 | 3843.4 | 3784.2 | 3766.5 | 3736.9 | 3736.9 |
| 15° | 4008.9 | 4068.1 | 4026.7 | 3961.6 | 3878.8 | 3813.8 | 3748.8 | 3695.5 | 3671.9 | 3666.0 | 3689.6 |
| 17.5° | 4085.8 | 4115.4 | 4014.8 | 3902.5 | 3813.8 | 3725.1 | 3654.2 | 3612.8 | 3583.2 | 3577.3 | 3624.6 |
| 20° | 4174.5 | 4150.8 | 3979.4 | 3837.5 | 3736.9 | 3618.7 | 3559.5 | 3547.7 | 3535.9 | 3571.4 | 3571.4 |
| 22.5° | 4263.2 | 4221.8 | 3943.9 | 3784.2 | 3624.6 | 3541.8 | 3488.6 | 3524.1 | 3530.0 | 3553.6 | 3577.3 |
| 25° | 4393.3 | 4292.7 | 3932.1 | 3701.5 | 3494.5 | 3435.4 | 3441.3 | 3488.6 | 3500.4 | 3500.4 | 3512.2 |
| 27.5° | 4535.2 | 4411.0 | 3938.0 | 3577.3 | 3364.4 | 3346.7 | 3388.1 | 3405.8 | 3423.6 | 3405.8 | 3411.7 |
| 30° | 4736.2 | 4535.2 | 3908.4 | 3435.4 | 3252.1 | 3281.6 | 3305.3 | 3299.4 | 3222.5 | 3204.8 | 3216.6 |
| 32.5° | 5031.9 | 4706.6 | 3884.8 | 3323.0 | 3192.9 | 3192.9 | 3169.3 | 3098.3 | 3021.5 | 2950.5 | 2974.2 |
| 35° | 5368.9 | 4919.5 | 3796.1 | 3234.3 | 3133.8 | 3110.2 | 3015.6 | 2897.3 | 2755.4 | 2672.6 | 2678.5 |
| 37.5° | 5723.7 | 5114.6 | 3701.5 | 3133.8 | 3039.2 | 2980.1 | 2844.1 | 2660.8 | 2518.9 | 2436.1 | 2424.3 |
| 40° | 6184.9 | 5333.4 | 3559.5 | 2997.8 | 2909.1 | 2814.5 | 2660.8 | 2459.8 | 2317.8 | 2252.8 | 2288.3 |
| 42.5° | 6652.0 | 5587.7 | 3394.0 | 2808.6 | 2737.7 | 2678.5 | 2507.1 | 2311.9 | 2175.9 | 2134.5 | 2158.2 |
| 45° | 7172.3 | 5847.8 | 3222.5 | 2583.9 | 2548.4 | 2536.6 | 2388.8 | 2235.1 | 2116.8 | 2057.7 | 2051.8 |
| 47.5° | 7704.5 | 6119.8 | 2986.0 | 2382.9 | 2365.1 | 2442.0 | 2329.7 | 2199.6 | 2099.1 | 2004.5 | 1998.5 |
| 50° | 8301.7 | 6385.9 | 2666.7 | 2128.6 | 2211.4 | 2388.8 | 2347.4 | 2205.5 | 2034.0 | 1886.2 | 1862.6 |
| 52.5° | 8833.8 | 6480.5 | 2329.7 | 1927.6 | 2093.2 | 2394.7 | 2365.1 | 2170.0 | 1945.3 | 1767.9 | 1744.3 |
| 55° | 9194.5 | 6320.9 | 2039.9 | 1750.2 | 2004.5 | 2353.3 | 2341.5 | 2116.8 | 1856.6 | 1667.4 | 1643.8 |
| 57.5° | 9218.2 | 5853.7 | 1762.0 | 1602.4 | 1862.6 | 2235.1 | 2270.5 | 2010.4 | 1720.6 | 1561.0 | 1543.3 |
| 60° | 8650.5 | 5085.1 | 1537.3 | 1472.3 | 1708.8 | 2081.3 | 2140.5 | 1862.6 | 1596.5 | 1425.0 | 1413.2 |
| 62.5° | 7379.3 | 4068.1 | 1324.5 | 1330.4 | 1561.0 | 1874.4 | 1986.7 | 1738.4 | 1472.3 | 1306.7 | 1289.0 |
| 65° | 5871.5 | 3110.2 | 1176.7 | 1206.2 | 1371.8 | 1673.3 | 1844.8 | 1614.2 | 1348.1 | 1188.5 | 1164.8 |
| 67.5° | 3943.9 | 2146.4 | 1017.0 | 1076.1 | 1188.5 | 1466.4 | 1702.9 | 1484.1 | 1194.4 | 1064.3 | 1046.6 |
| 70° | 1880.3 | 1247.6 | 875.1 | 946.1 | 1017.0 | 1241.7 | 1496.0 | 1300.8 | 1070.2 | 963.8 | 957.9 |
| 72.5° | *1046.6* | *798.2* | *756.8* | *810.1* | *851.5* | *1040.7* | *1265.4* | *1176.7* | *957.9* | *916.5* | *910.6* |
| 75° | 668.2 | 567.6 | 603.1 | 668.2 | 691.8 | 821.9 | 1093.9 | 1052.5 | 863.3 | 886.9 | 886.9 |
| 77.5° | 413.9 | 390.2 | 461.2 | 520.3 | 538.1 | 674.1 | 898.8 | 892.8 | 721.4 | 709.5 | 626.8 |
| 80° | 266.1 | 260.2 | 331.1 | 337.0 | 366.6 | 514.4 | 715.5 | 685.9 | 544.0 | 496.7 | 467.1 |
| 82.5° | 141.9 | 147.8 | 201.0 | 212.9 | 207.0 | 313.4 | 490.8 | 484.9 | 402.1 | 348.9 | 331.1 |
| 85° | 53.2 | 53.2 | 76.9 | 94.6 | 100.5 | 159.6 | 260.2 | 266.1 | 218.8 | 165.6 | 171.5 |
| 87.5° | 11.8 | 11.8 | 11.8 | 17.7 | 17.7 | 35.5 | 47.3 | 53.2 | 59.1 | 29.6 | 17.7 |
| 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: SP1-2407-184-2

Test Date: 10/09/2024

Luminaire Tested: GSS-SB1A-722-U-5WQ

Data in this report applies to families of products including GSS-SB1A-722-U-5WQ

Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

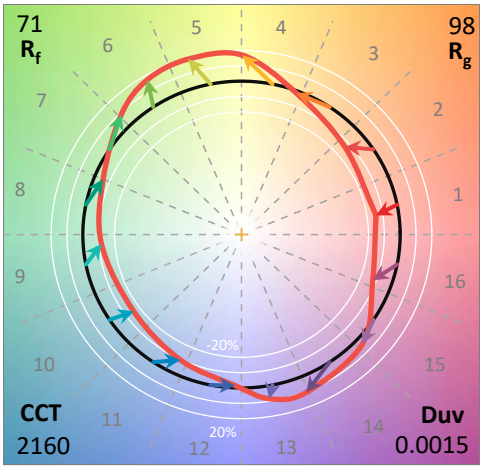
## Test Information

| | |
|---|---|
| Test Method: | LM-79-2019 |
| Report Number: | SP1-2407-184-2 |
| 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-722-U-5WQ** |
| Description: | GALLEON II SITE SLIM 1SQ 350MA 5WQ HIGH DENSITY LIGHTSQUARE WITH 70 CRI 2200K CCT 26 LEDS |

## Spectral Parameters

| | |
|---|---|
| CCT (K): | 2160 |
| CIE u': | 0.2927 |
| CIE v': | 0.5388 |
| Duv: | 0.0015 |
| CIE x: | 0.5130 |
| CIE y: | 0.4197 |
| CIE z: | 0.0674 |
| Peak Wavelength (nm): | 609 |
| Dominant Wavelength (nm): | 587 |
| Purity: | 79.96089 |
| Rf: | 70.6 |
| Rg: | 97.6 |

| | |
|---|---|
| CRI (Ra): | 71.9 |
| R1: | 68.7 |
| R2: | 82.6 |
| R3: | 95.5 |
| R4: | 66.4 |
| R5: | 65.4 |
| R6: | 75.9 |
| R7: | 77.2 |
| R8: | 43.5 |
| R9: | -17.8 |
| R10: | 60.5 |
| R11: | 60.2 |
| R12: | 48.2 |
| R13: | 70.7 |
| R14: | 96.8 |
| R15: | 61.8 |




## Test Conditions

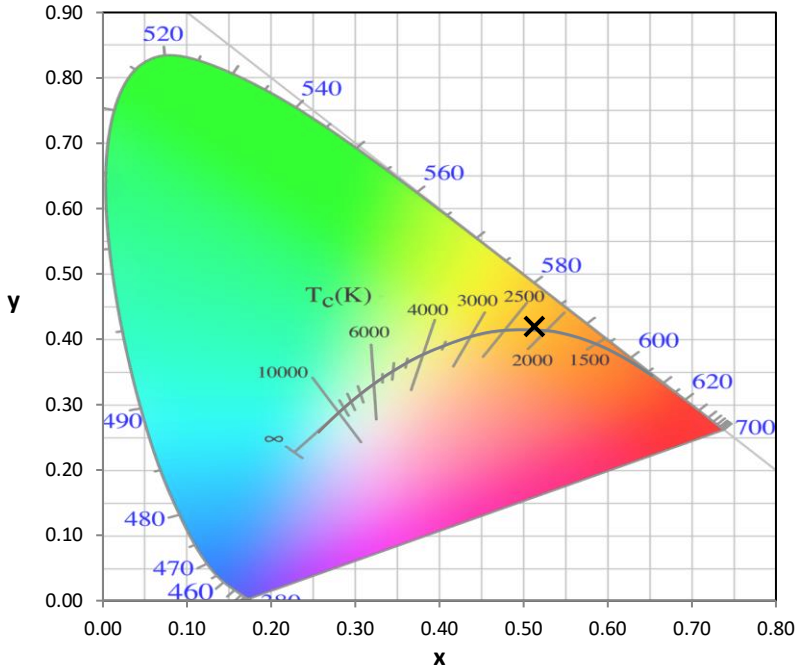
| | |
|---|---|
| Stabilization Time: | 21M |
| Operation Time: | 1H 21M |
| Sphere Temperature (°C): | 25.2 |

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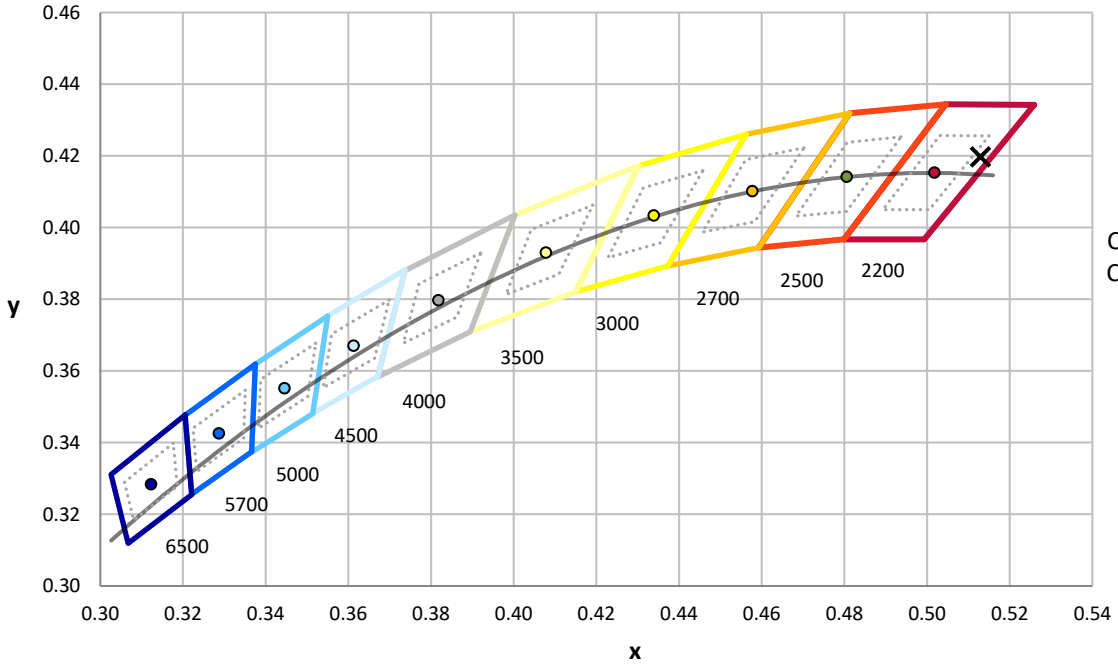
| Measurement and Test Equipment | | | |
|---|---|---|---|
| Instrument | Identification Number | Calibration Date | Calibration Due Date |
| Photometer | IN0058 | 6/18/2024 | 12/18/2024 |
| Power Meter | INXT2011004 | 2/8/2024 | 2/8/2025 |
| AC Power Source | IN0063 | 10/24/2023 | 10/24/2024 |
| DC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

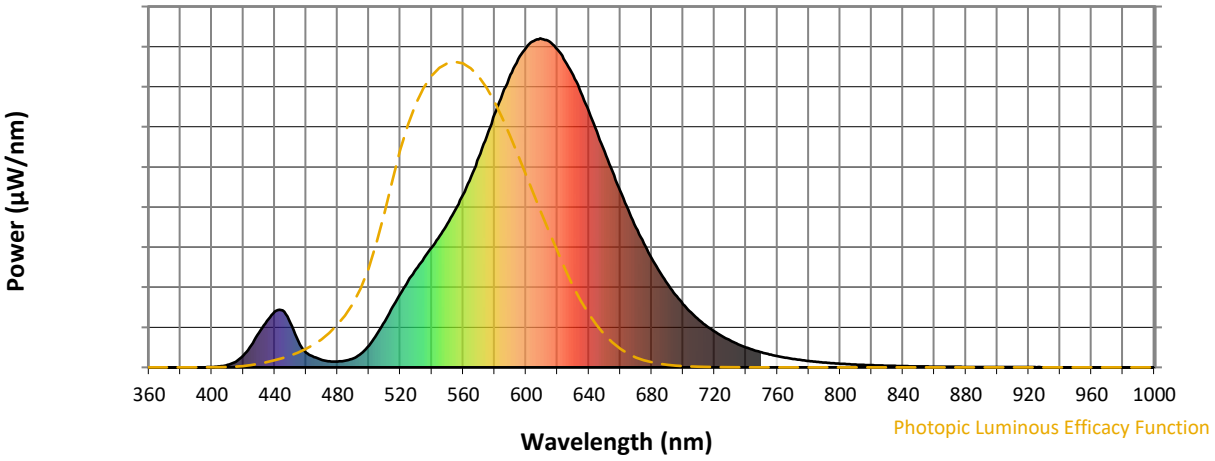



CCT = 2160K
CIE x = 0.5130
CIE y = 0.4197
Duv = 0.0015

Point lies inside the ANSI 2200K 7-step quadrangle

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## Photopic Flux vs. Wavelength

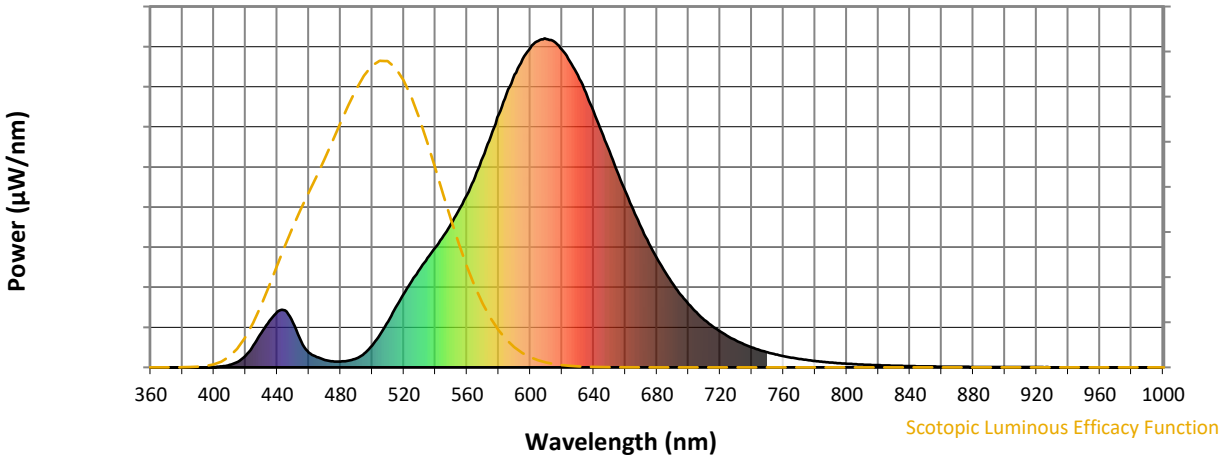



## Photopic Lumens: NR

| 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 | 27 | NR | 620 | 966 | NR | 750 | 46 | NR | 880 | 1 | NR |
| 365 | 0 | NR | 495 | 42 | NR | 625 | 930 | NR | 755 | 39 | NR | 885 | 1 | NR |
| 370 | 0 | NR | 500 | 67 | NR | 630 | 888 | NR | 760 | 34 | NR | 890 | 1 | NR |
| 375 | 0 | NR | 505 | 101 | NR | 635 | 835 | NR | 765 | 30 | NR | 895 | 1 | NR |
| 380 | 0 | NR | 510 | 139 | NR | 640 | 778 | NR | 770 | 26 | NR | 900 | 1 | NR |
| 385 | 0 | NR | 515 | 183 | NR | 645 | 717 | NR | 775 | 22 | NR | 905 | 1 | NR |
| 390 | 0 | NR | 520 | 224 | NR | 650 | 656 | NR | 780 | 19 | NR | 910 | 1 | NR |
| 395 | 0 | NR | 525 | 262 | NR | 655 | 595 | NR | 785 | 17 | NR | 915 | 1 | NR |
| 400 | 1 | NR | 530 | 299 | NR | 660 | 536 | NR | 790 | 15 | NR | 920 | 1 | NR |
| 405 | 3 | NR | 535 | 332 | NR | 665 | 480 | NR | 795 | 13 | NR | 925 | 1 | NR |
| 410 | 7 | NR | 540 | 365 | NR | 670 | 425 | NR | 800 | 11 | NR | 930 | 1 | NR |
| 415 | 17 | NR | 545 | 400 | NR | 675 | 376 | NR | 805 | 10 | NR | 935 | 0 | NR |
| 420 | 36 | NR | 550 | 437 | NR | 680 | 332 | NR | 810 | 8 | NR | 940 | 0 | NR |
| 425 | 67 | NR | 555 | 479 | NR | 685 | 291 | NR | 815 | 8 | NR | 945 | 0 | NR |
| 430 | 105 | NR | 560 | 525 | NR | 690 | 255 | NR | 820 | 7 | NR | 950 | 0 | NR |
| 435 | 141 | NR | 565 | 579 | NR | 695 | 221 | NR | 825 | 6 | NR | 955 | 0 | NR |
| 440 | 169 | NR | 570 | 639 | NR | 700 | 192 | NR | 830 | 5 | NR | 960 | 0 | NR |
| 445 | 173 | NR | 575 | 703 | NR | 705 | 167 | NR | 835 | 4 | NR | 965 | 0 | NR |
| 450 | 136 | NR | 580 | 769 | NR | 710 | 144 | NR | 840 | 4 | NR | 970 | 0 | NR |
| 455 | 80 | NR | 585 | 832 | NR | 715 | 125 | NR | 845 | 3 | NR | 975 | 0 | NR |
| 460 | 45 | NR | 590 | 890 | NR | 720 | 109 | NR | 850 | 3 | NR | 980 | 0 | NR |
| 465 | 32 | NR | 595 | 937 | NR | 725 | 94 | NR | 855 | 3 | NR | 985 | 0 | NR |
| 470 | 23 | NR | 600 | 972 | NR | 730 | 81 | NR | 860 | 2 | NR | 990 | 0 | NR |
| 475 | 18 | NR | 605 | 992 | NR | 735 | 70 | NR | 865 | 2 | NR | 995 | 0 | NR |
| 480 | 18 | NR | 610 | 998 | NR | 740 | 61 | NR | 870 | 2 | NR | 1000 | 0 | NR |
| 485 | 20 | NR | 615 | 990 | NR | 745 | 53 | NR | 875 | 2 | NR | | | |

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## Scotopic Flux vs. Wavelength

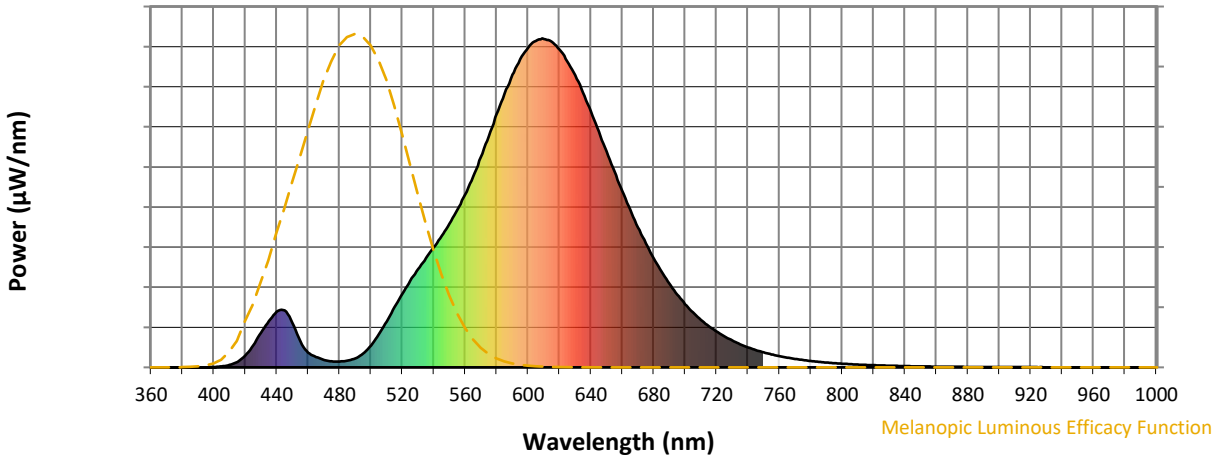



**Scotopic Lumens: NR** **S/P: 0.8**

| 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 | 27 | NR | 620 | 966 | NR | 750 | 46 | NR | 880 | 1 | NR |
| 365 | 0 | NR | 495 | 42 | NR | 625 | 930 | NR | 755 | 39 | NR | 885 | 1 | NR |
| 370 | 0 | NR | 500 | 67 | NR | 630 | 888 | NR | 760 | 34 | NR | 890 | 1 | NR |
| 375 | 0 | NR | 505 | 101 | NR | 635 | 835 | NR | 765 | 30 | NR | 895 | 1 | NR |
| 380 | 0 | NR | 510 | 139 | NR | 640 | 778 | NR | 770 | 26 | NR | 900 | 1 | NR |
| 385 | 0 | NR | 515 | 183 | NR | 645 | 717 | NR | 775 | 22 | NR | 905 | 1 | NR |
| 390 | 0 | NR | 520 | 224 | NR | 650 | 656 | NR | 780 | 19 | NR | 910 | 1 | NR |
| 395 | 0 | NR | 525 | 262 | NR | 655 | 595 | NR | 785 | 17 | NR | 915 | 1 | NR |
| 400 | 1 | NR | 530 | 299 | NR | 660 | 536 | NR | 790 | 15 | NR | 920 | 1 | NR |
| 405 | 3 | NR | 535 | 332 | NR | 665 | 480 | NR | 795 | 13 | NR | 925 | 1 | NR |
| 410 | 7 | NR | 540 | 365 | NR | 670 | 425 | NR | 800 | 11 | NR | 930 | 1 | NR |
| 415 | 17 | NR | 545 | 400 | NR | 675 | 376 | NR | 805 | 10 | NR | 935 | 0 | NR |
| 420 | 36 | NR | 550 | 437 | NR | 680 | 332 | NR | 810 | 8 | NR | 940 | 0 | NR |
| 425 | 67 | NR | 555 | 479 | NR | 685 | 291 | NR | 815 | 8 | NR | 945 | 0 | NR |
| 430 | 105 | NR | 560 | 525 | NR | 690 | 255 | NR | 820 | 7 | NR | 950 | 0 | NR |
| 435 | 141 | NR | 565 | 579 | NR | 695 | 221 | NR | 825 | 6 | NR | 955 | 0 | NR |
| 440 | 169 | NR | 570 | 639 | NR | 700 | 192 | NR | 830 | 5 | NR | 960 | 0 | NR |
| 445 | 173 | NR | 575 | 703 | NR | 705 | 167 | NR | 835 | 4 | NR | 965 | 0 | NR |
| 450 | 136 | NR | 580 | 769 | NR | 710 | 144 | NR | 840 | 4 | NR | 970 | 0 | NR |
| 455 | 80 | NR | 585 | 832 | NR | 715 | 125 | NR | 845 | 3 | NR | 975 | 0 | NR |
| 460 | 45 | NR | 590 | 890 | NR | 720 | 109 | NR | 850 | 3 | NR | 980 | 0 | NR |
| 465 | 32 | NR | 595 | 937 | NR | 725 | 94 | NR | 855 | 3 | NR | 985 | 0 | NR |
| 470 | 23 | NR | 600 | 972 | NR | 730 | 81 | NR | 860 | 2 | NR | 990 | 0 | NR |
| 475 | 18 | NR | 605 | 992 | NR | 735 | 70 | NR | 865 | 2 | NR | 995 | 0 | NR |
| 480 | 18 | NR | 610 | 998 | NR | 740 | 61 | NR | 870 | 2 | NR | 1000 | 0 | NR |
| 485 | 20 | NR | 615 | 990 | NR | 745 | 53 | NR | 875 | 2 | NR | | | |

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## Melanopic Flux vs. Wavelength




**Melanopic Lumens: NR** **M/P: 1.21**

| 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 | 27 | NR | 620 | 966 | NR | 750 | 46 | NR | 880 | 1 | NR |
| 365 | 0 | NR | 495 | 42 | NR | 625 | 930 | NR | 755 | 39 | NR | 885 | 1 | NR |
| 370 | 0 | NR | 500 | 67 | NR | 630 | 888 | NR | 760 | 34 | NR | 890 | 1 | NR |
| 375 | 0 | NR | 505 | 101 | NR | 635 | 835 | NR | 765 | 30 | NR | 895 | 1 | NR |
| 380 | 0 | NR | 510 | 139 | NR | 640 | 778 | NR | 770 | 26 | NR | 900 | 1 | NR |
| 385 | 0 | NR | 515 | 183 | NR | 645 | 717 | NR | 775 | 22 | NR | 905 | 1 | NR |
| 390 | 0 | NR | 520 | 224 | NR | 650 | 656 | NR | 780 | 19 | NR | 910 | 1 | NR |
| 395 | 0 | NR | 525 | 262 | NR | 655 | 595 | NR | 785 | 17 | NR | 915 | 1 | NR |
| 400 | 1 | NR | 530 | 299 | NR | 660 | 536 | NR | 790 | 15 | NR | 920 | 1 | NR |
| 405 | 3 | NR | 535 | 332 | NR | 665 | 480 | NR | 795 | 13 | NR | 925 | 1 | NR |
| 410 | 7 | NR | 540 | 365 | NR | 670 | 425 | NR | 800 | 11 | NR | 930 | 1 | NR |
| 415 | 17 | NR | 545 | 400 | NR | 675 | 376 | NR | 805 | 10 | NR | 935 | 0 | NR |
| 420 | 36 | NR | 550 | 437 | NR | 680 | 332 | NR | 810 | 8 | NR | 940 | 0 | NR |
| 425 | 67 | NR | 555 | 479 | NR | 685 | 291 | NR | 815 | 8 | NR | 945 | 0 | NR |
| 430 | 105 | NR | 560 | 525 | NR | 690 | 255 | NR | 820 | 7 | NR | 950 | 0 | NR |
| 435 | 141 | NR | 565 | 579 | NR | 695 | 221 | NR | 825 | 6 | NR | 955 | 0 | NR |
| 440 | 169 | NR | 570 | 639 | NR | 700 | 192 | NR | 830 | 5 | NR | 960 | 0 | NR |
| 445 | 173 | NR | 575 | 703 | NR | 705 | 167 | NR | 835 | 4 | NR | 965 | 0 | NR |
| 450 | 136 | NR | 580 | 769 | NR | 710 | 144 | NR | 840 | 4 | NR | 970 | 0 | NR |
| 455 | 80 | NR | 585 | 832 | NR | 715 | 125 | NR | 845 | 3 | NR | 975 | 0 | NR |
| 460 | 45 | NR | 590 | 890 | NR | 720 | 109 | NR | 850 | 3 | NR | 980 | 0 | NR |
| 465 | 32 | NR | 595 | 937 | NR | 725 | 94 | NR | 855 | 3 | NR | 985 | 0 | NR |
| 470 | 23 | NR | 600 | 972 | NR | 730 | 81 | NR | 860 | 2 | NR | 990 | 0 | NR |
| 475 | 18 | NR | 605 | 992 | NR | 735 | 70 | NR | 865 | 2 | NR | 995 | 0 | NR |
| 480 | 18 | NR | 610 | 998 | NR | 740 | 61 | NR | 870 | 2 | NR | 1000 | 0 | NR |
| 485 | 20 | NR | 615 | 990 | NR | 745 | 53 | NR | 875 | 2 | NR | | | |

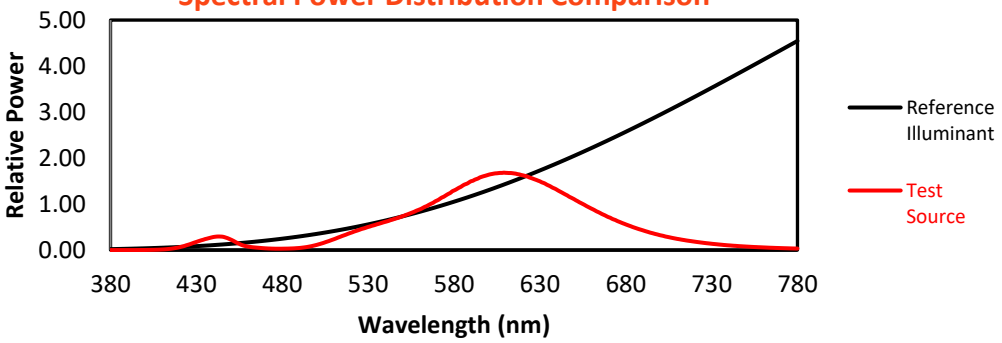
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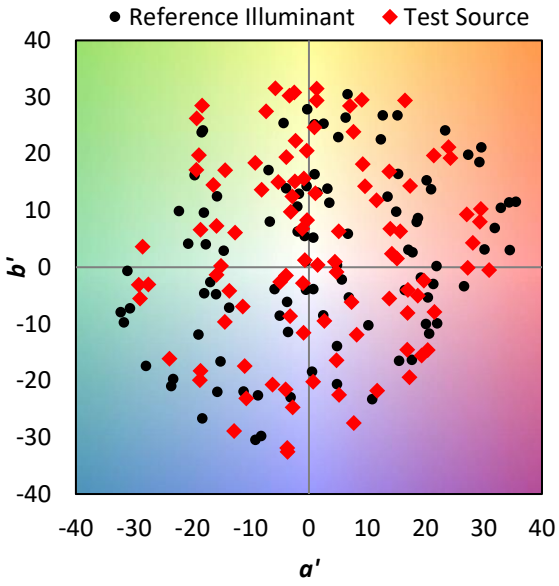
## Summary

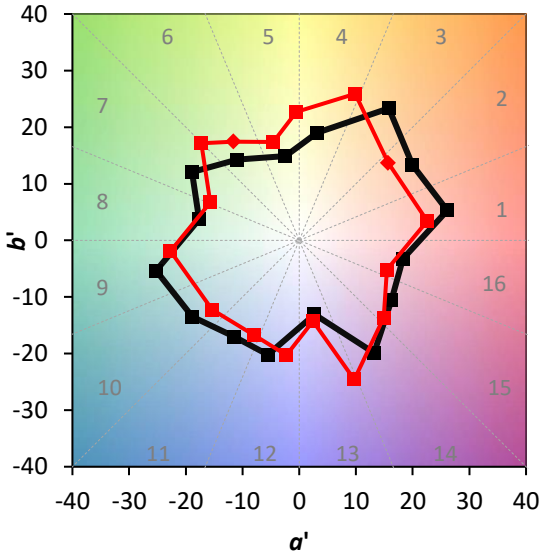
$R_f$ = 70.6
$R_g$ = 97.6
CIE $R_a$ = 71.9
$R_9$ = -17.8

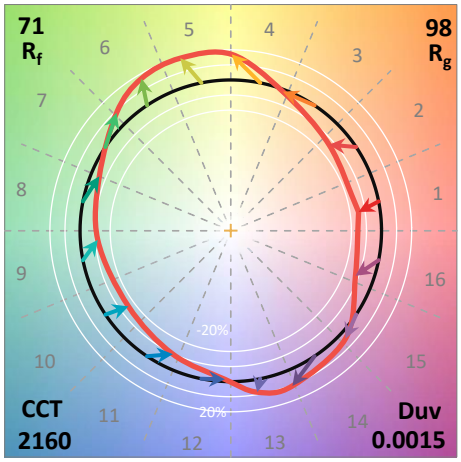
## Spectral Power Distribution Comparison

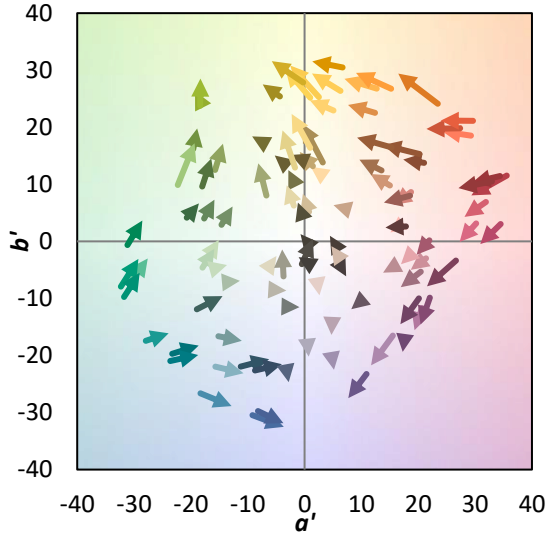



## Color Vector Graphics



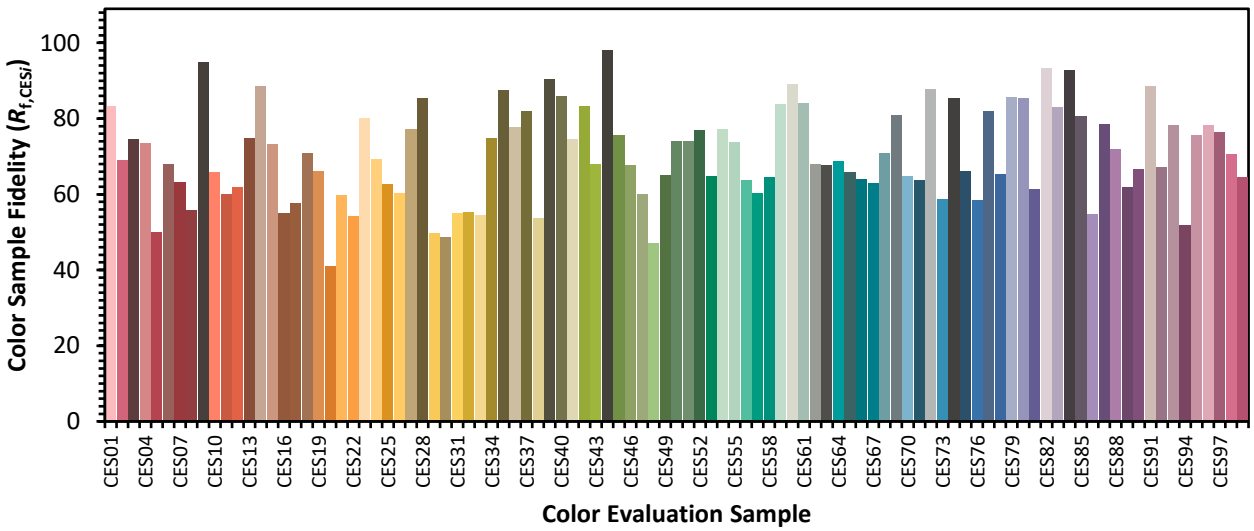



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**Individual Sample Fidelity Index ($R_{f,i}$)**

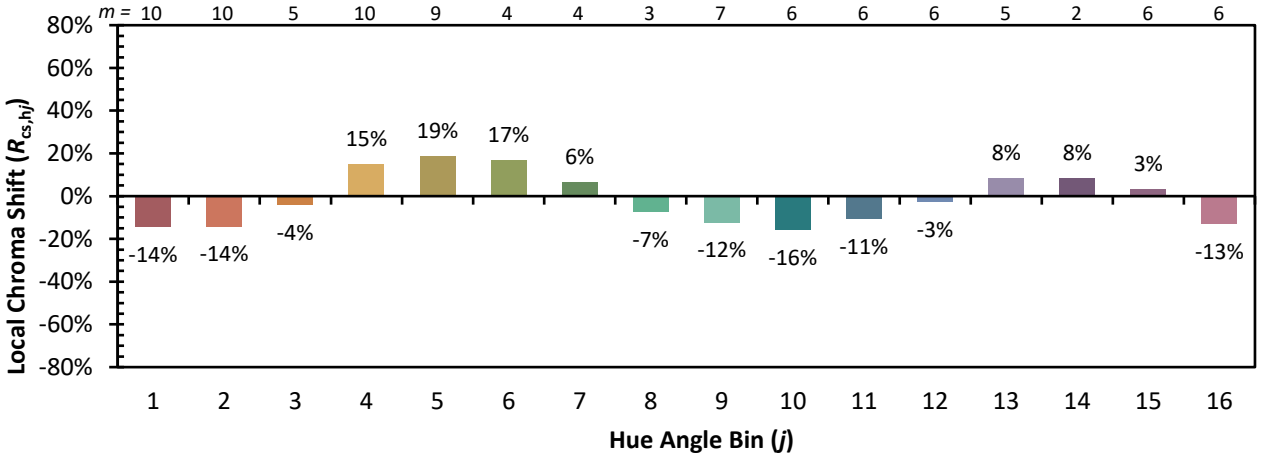
| | | | |
|---|---|---|---|
| CES01 = 87 | CES26 = 60 | CES51 = 74 | CES76 = 58 |
| CES02 = 65 | CES27 = 77 | CES52 = 77 | CES77 = 82 |
| CES03 = 32 | CES28 = 85 | CES53 = 65 | CES78 = 65 |
| CES04 = 72 | CES29 = 50 | CES54 = 77 | CES79 = 86 |
| CES05 = 52 | CES30 = 49 | CES55 = 74 | CES80 = 85 |
| CES06 = 53 | CES31 = 55 | CES56 = 64 | CES81 = 61 |
| CES07 = 44 | CES32 = 55 | CES57 = 60 | CES82 = 93 |
| CES08 = 43 | CES33 = 55 | CES58 = 64 | CES83 = 83 |
| CES09 = 29 | CES34 = 75 | CES59 = 84 | CES84 = 93 |
| CES10 = 79 | CES35 = 88 | CES60 = 89 | CES85 = 81 |
| CES11 = 62 | CES36 = 78 | CES61 = 84 | CES86 = 55 |
| CES12 = 68 | CES37 = 82 | CES62 = 68 | CES87 = 79 |
| CES13 = 45 | CES38 = 54 | CES63 = 68 | CES88 = 72 |
| CES14 = 75 | CES39 = 90 | CES64 = 69 | CES89 = 62 |
| CES15 = 72 | CES40 = 86 | CES65 = 66 | CES90 = 67 |
| CES16 = 49 | CES41 = 75 | CES66 = 64 | CES91 = 89 |
| CES17 = 51 | CES42 = 83 | CES67 = 63 | CES92 = 67 |
| CES18 = 57 | CES43 = 68 | CES68 = 71 | CES93 = 78 |
| CES19 = 74 | CES44 = 98 | CES69 = 81 | CES94 = 52 |
| CES20 = 68 | CES45 = 76 | CES70 = 65 | CES95 = 76 |
| CES21 = 89 | CES46 = 68 | CES71 = 64 | CES96 = 78 |
| CES22 = 81 | CES47 = 60 | CES72 = 88 | CES97 = 76 |
| CES23 = 92 | CES48 = 47 | CES73 = 59 | CES98 = 71 |
| CES24 = 92 | CES49 = 65 | CES74 = 85 | CES99 = 65 |
| CES25 = 74 | CES50 = 74 | CES75 = 66 | |

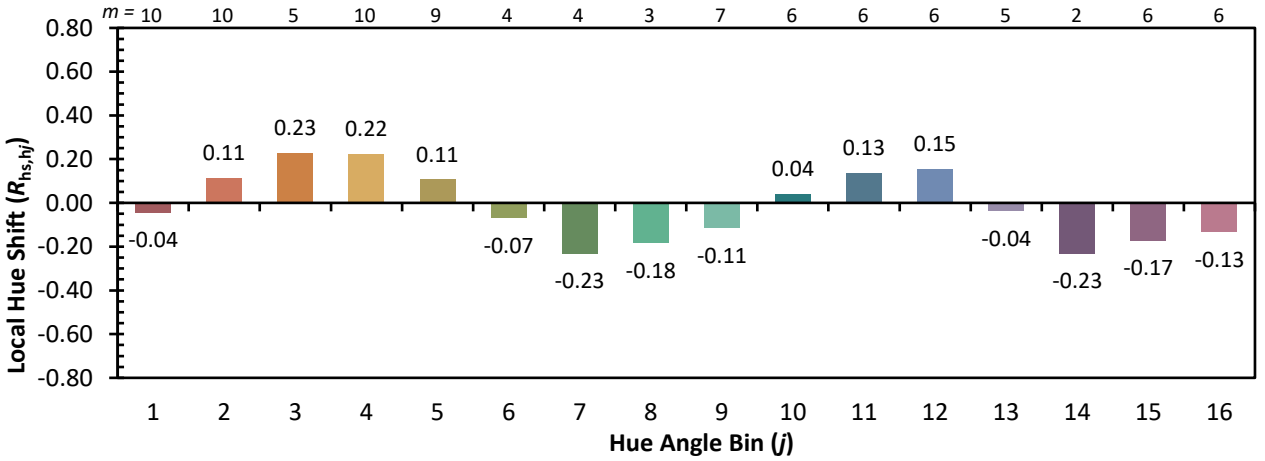


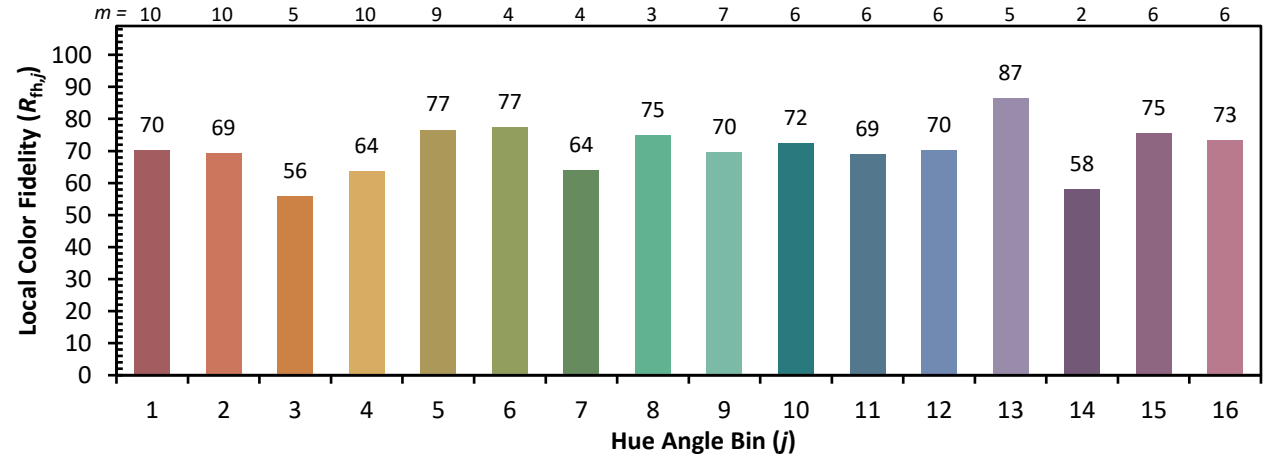
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## Color Rendition by Hue-Angle Bin



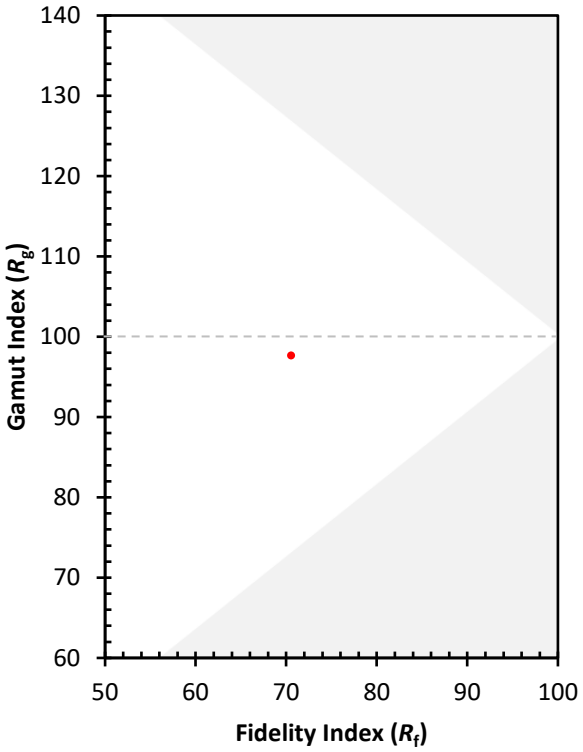



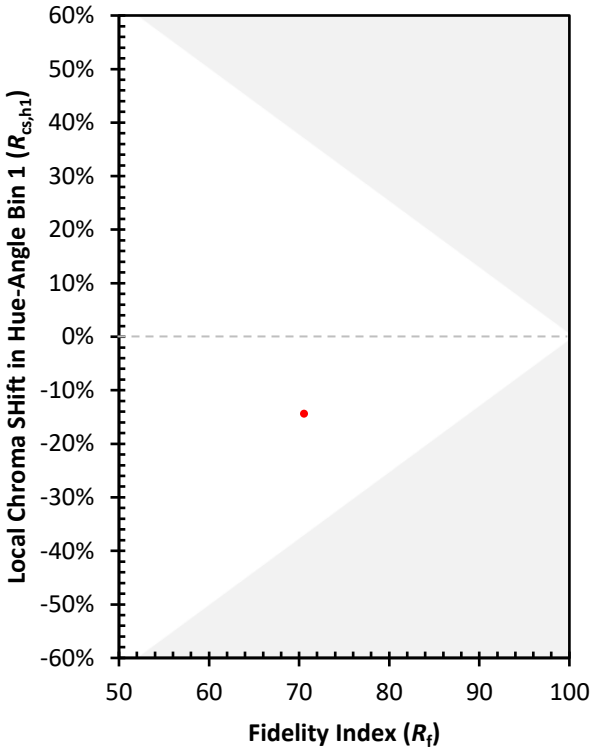



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## Measure Comparisons




(END OF REPORT)