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: P1358789

Luminaire Tested: **GSS-SB6C-722-U-SL4-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: | P1358789 |
| Test Lab: | INNOVATION CENTER(G3) |
| Issue Date: | 02/18/2026 |
| Manufacturer: | COOPER LIGHTING SOLUTIONS (FORMERLY EATON) |
| Product Line: | McGRAW-EDISON |
| Catalog Number: | GSS-SB6C-722-U-SL4-HSS |
| Description: | GALLEON II SLIM SITE HIGH DENSITY LED ARRAYS 6SQUARE 300W 70CRI 2200K FIXTURE w/ TYPE IV SPILL CONTROL DISTRIBUTION OPTIC AND HOUSE SIDE SHIELD |
| Light Source: | (156) 2200K CCT, 70 CRI LEDS |
| Ballast/Driver: | ELECTRONIC DRIVER |

**Summary**

| | |
|---|---|
| Lumens per Lamp: | N/A |
| Luminaire Lumens: | 22846.2 lumens |
| Efficiency: | N/A |
| Efficacy: | 76.2 lumens/watt |
| Luminous Opening: | Rectangular (W 1.5' x L: 1' x H: 0') |
| IES Classification: | Type IV - Short |
| BUG Rating: | B2 - U0 - G4 |

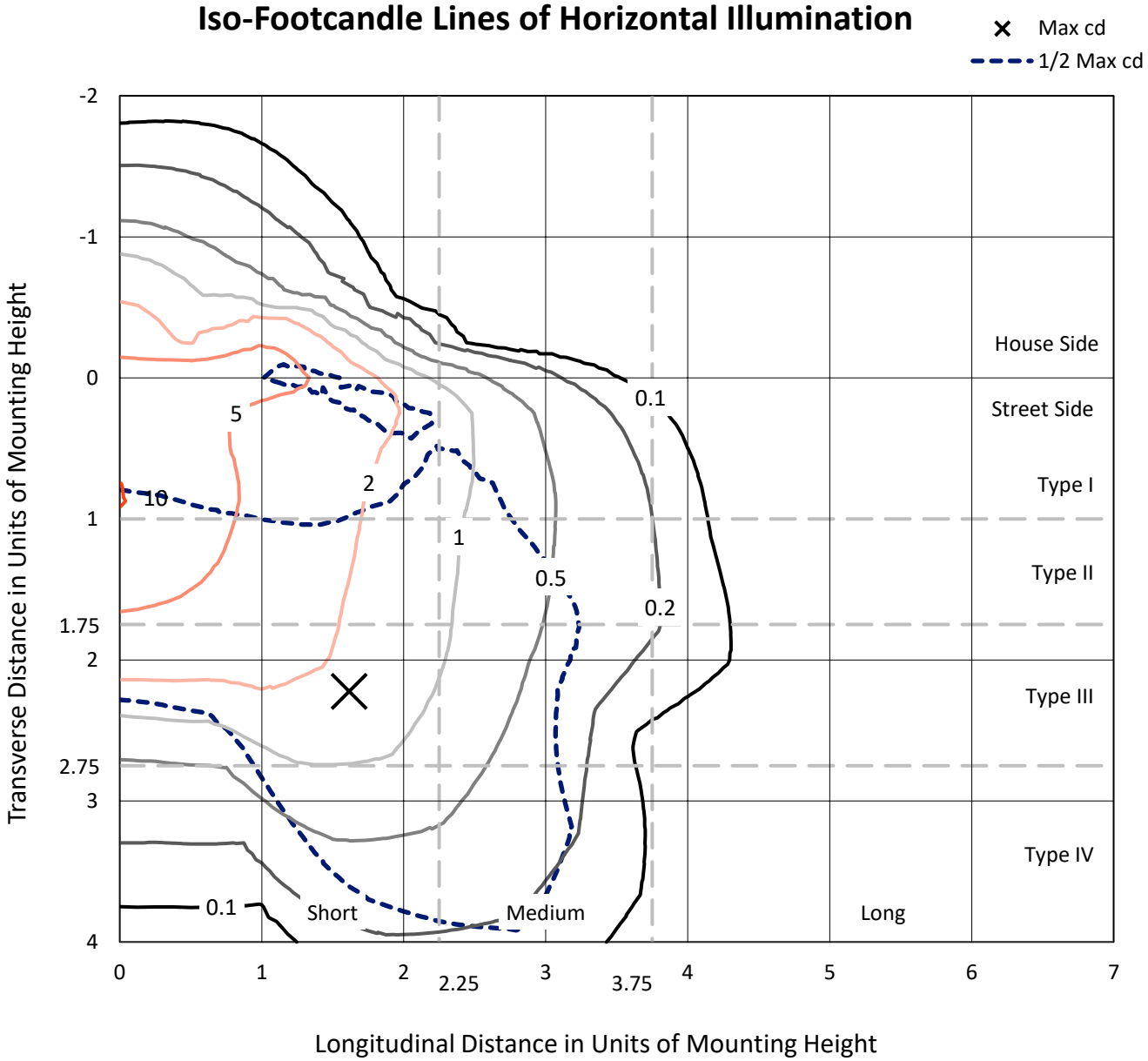
| | |
|---|---|
| Input Watts (W): | 300 |
| Input Voltage (V): | 120 |
| Input Current (Ain): | NR |
| Voltage Rise (V): | NR |
| Power Factor: | 0.98 |
| Total Harmonic Distortion (THDi): | 6.3% |
| Frequency (hertz): | 60 |
| Stabilization Time: | NR |
| Operation Time: | NR |
| Ambient Temperature (°C): | NR |
| Test Distance: | 28.75 FT |

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Scaled Data Report

REPORT NUMBER: P1358789
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## Iso-Footcandle Lines of Horizontal Illumination



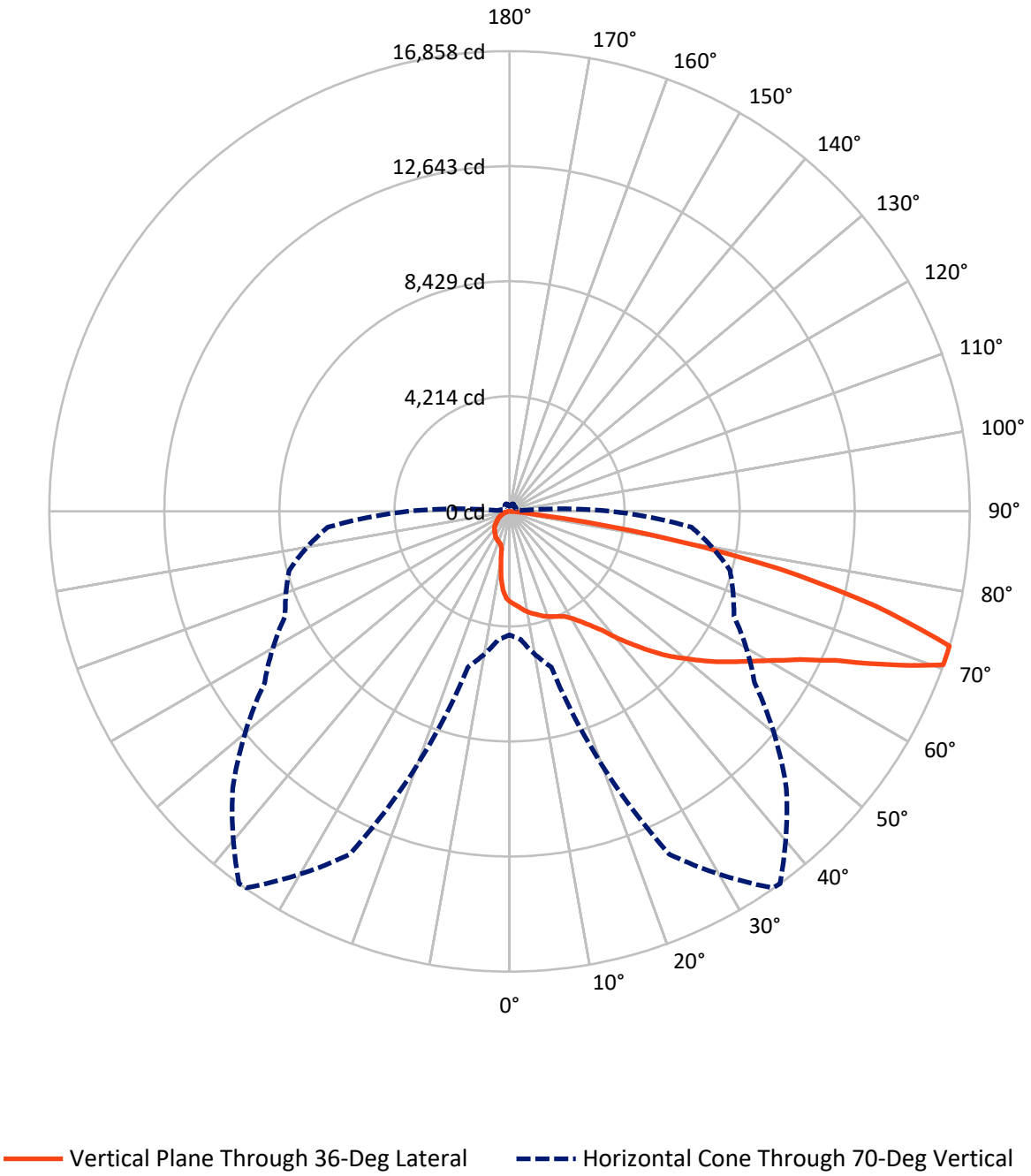

Based on 20 foot mounting height. Maximum calculated value = 10.1 fc
Type IV - Short - N/A

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## Luminous Intensity Polar Plot



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Scaled Data Report

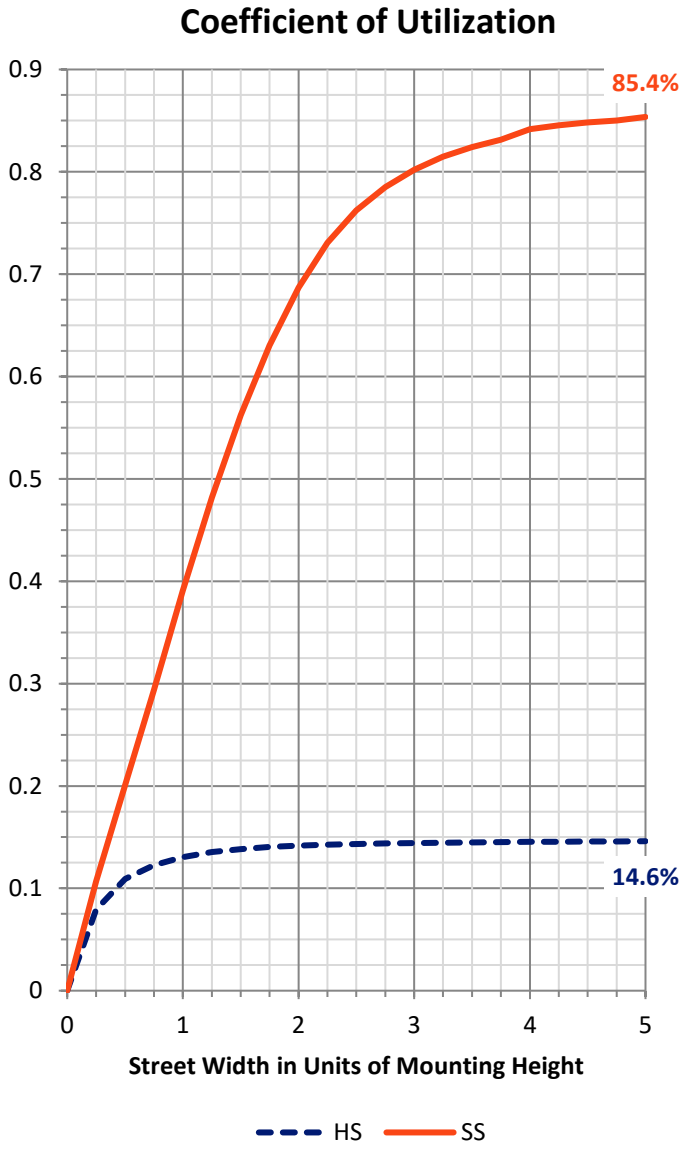
REPORT NUMBER: P1358789
CATALOG NUMBER: GSS-SB6C-722-U-SL4-HSS

**FLUX DISTRIBUTION:**

| | | Downward | Upward | Total |
|---|---|---|---|---|
| **House Side** | Lumens | 3372.5 | 0.0 | 3372.5 |
| | % Fixture | 14.8 | 0.0 | 14.8 |
| **Street Side** | Lumens | 19473.7 | 0.0 | 19473.7 |
| | % Fixture | 85.2 | 0.0 | 85.2 |
| **Total** | Lumens | 22846.2 | 0.0 | 22846.2 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

**ZONAL LUMENS:**

| Zone | Lumens | % Fixture |
|---|---|---|
| 0°-10° | 302.0 | 1.3 |
| 10°-20° | 837.2 | 3.7 |
| 20°-30° | 1411.1 | 6.2 |
| 30°-40° | 2253.8 | 9.9 |
| 40°-50° | 3683.3 | 16.1 |
| 50°-60° | 4969.7 | 21.8 |
| 60°-70° | 5519.3 | 24.2 |
| 70°-80° | 3654.0 | 16.0 |
| 80°-90° | 215.9 | 0.9 |
| 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° | 22846.2 | 100.0 |
| 0°-180° | 22846.2 | 100.0 |



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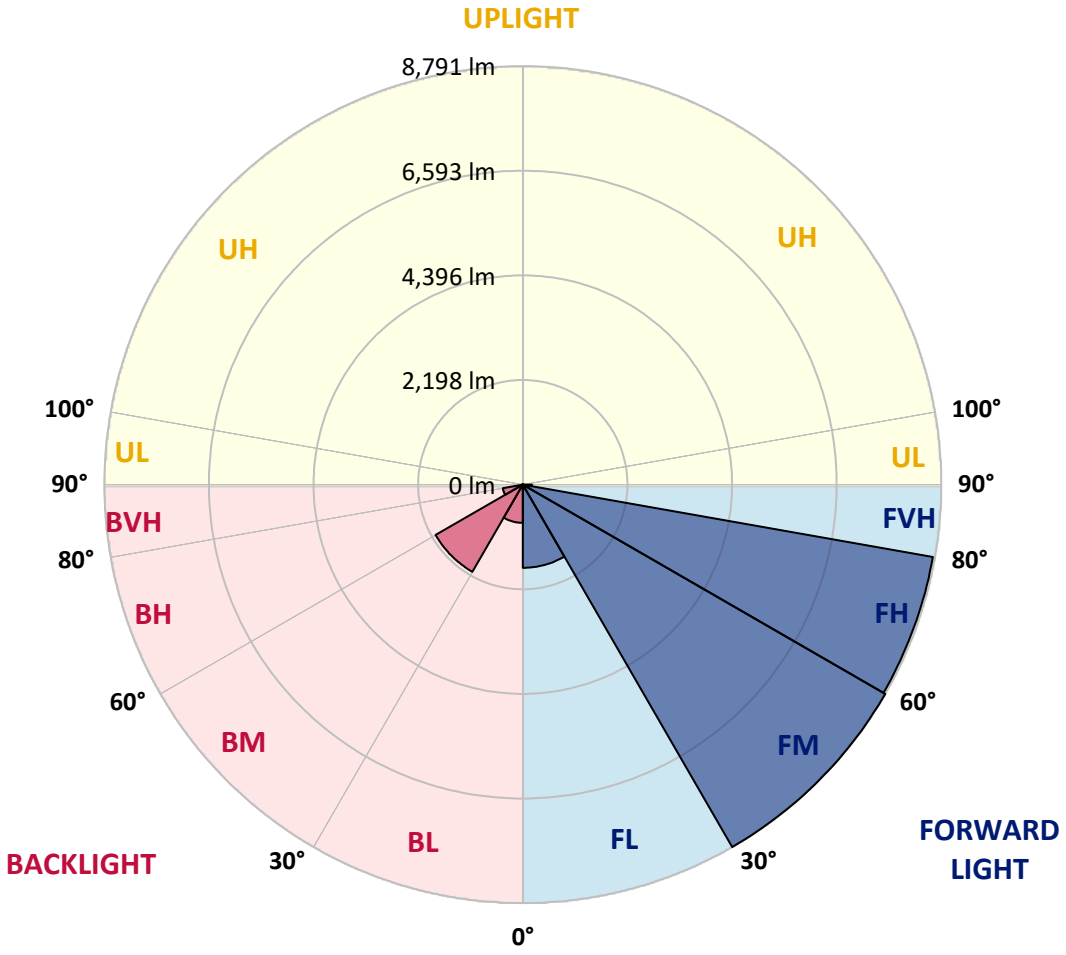
Scaled Data Report

REPORT NUMBER: P1358789
CATALOG NUMBER: GSS-SB6C-722-U-SL4-HSS

## LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit B | U | G |
|---|---|---|---|---|---|---|
| FL | (0°-30°) | 1747.2 | 7.6 | | | |
| FM | (30°-60°) | 8791.2 | 38.5 | | | |
| FH | (60°-80°) | 8747.0 | 38.3 | | | G4/12000 |
| FVH | (80°-90°) | 188.3 | 0.8 | | | G2/225 |
| BL | (0°-30°) | 803.0 | 3.5 | B2/1000 | | |
| BM | (30°-60°) | 2115.5 | 9.3 | B2/2500 | | |
| BH | (60°-80°) | 426.4 | 1.9 | B1/500 | | G1/500 |
| BVH | (80°-90°) | 27.6 | 0.1 | | | G1/100 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

**BUG Rating: B2-U0-G4**
Type IV Short



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**CANDELA DISTRIBUTION (FULL):**

| | 0° | 5° | 15° | 25° | 35° | 36° | 45° | 55° | 65° | 75° | 85° |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0° | 3313.9 | 3313.9 | 3313.9 | 3313.9 | 3313.9 | 3313.9 | 3313.9 | 3313.9 | 3313.9 | 3313.9 | 3313.9 |
| 2.5° | 3430.8 | 3399.6 | 3415.2 | 3423.0 | 3399.6 | 3407.4 | 3391.8 | 3384.0 | 3352.8 | 3376.2 | 3345.0 |
| 5° | 3555.6 | 3547.8 | 3540.0 | 3540.0 | 3516.6 | 3508.8 | 3485.4 | 3469.8 | 3438.6 | 3415.2 | 3376.2 |
| 7.5° | 3703.7 | 3656.9 | 3649.1 | 3664.7 | 3618.0 | 3641.3 | 3618.0 | 3594.6 | 3540.0 | 3477.6 | 3415.2 |
| 10° | 3820.7 | 3797.3 | 3766.1 | 3758.3 | 3766.1 | 3750.5 | 3727.1 | 3703.7 | 3672.5 | 3594.6 | 3524.4 |
| 12.5° | 3953.2 | 3937.6 | 3906.5 | 3890.9 | 3836.3 | 3844.1 | 3844.1 | 3812.9 | 3766.1 | 3719.3 | 3641.3 |
| 15° | 4101.4 | 4039.0 | 4023.4 | 3984.4 | 3953.2 | 3929.8 | 3937.6 | 3945.4 | 3890.9 | 3844.1 | 3766.1 |
| 17.5° | 4171.6 | 4156.0 | 4117.0 | 4070.2 | 4070.2 | 4039.0 | 4031.2 | 4031.2 | 4007.8 | 3992.2 | 3898.7 |
| 20° | 4280.7 | 4265.1 | 4195.0 | 4156.0 | 4117.0 | 4109.2 | 4132.6 | 4132.6 | 4093.6 | 4085.8 | 4070.2 |
| 22.5° | 4444.5 | 4397.7 | 4304.1 | 4241.7 | 4195.0 | 4187.2 | 4218.3 | 4210.5 | 4210.5 | 4218.3 | 4249.5 |
| 25° | 4600.4 | 4545.8 | 4444.5 | 4343.1 | 4241.7 | 4257.3 | 4296.3 | 4304.1 | 4272.9 | 4319.7 | 4436.7 |
| 27.5° | 4834.3 | 4826.5 | 4670.6 | 4467.9 | 4374.3 | 4366.5 | 4382.1 | 4366.5 | 4335.3 | 4389.9 | 4608.2 |
| 30° | 5450.3 | 5380.1 | 5122.8 | 4748.6 | 4538.0 | 4553.6 | 4530.2 | 4436.7 | 4358.7 | 4421.1 | 4772.0 |
| 32.5° | 6050.7 | 5887.0 | 5621.9 | 5193.0 | 4803.1 | 4810.9 | 4647.2 | 4467.9 | 4382.1 | 4452.3 | 4935.7 |
| 35° | 6924.0 | 6752.5 | 6354.8 | 5606.3 | 5208.6 | 5138.4 | 4803.1 | 4584.8 | 4428.9 | 4506.8 | 5122.8 |
| 37.5° | 8156.0 | 7906.5 | 7368.5 | 6425.0 | 5567.3 | 5536.1 | 5076.0 | 4686.2 | 4467.9 | 4499.0 | 5372.3 |
| 40° | 9107.3 | 8865.5 | 8428.9 | 7290.5 | 6183.3 | 6120.9 | 5504.9 | 4881.1 | 4475.7 | 4538.0 | 5606.3 |
| 42.5° | 9933.8 | 9809.0 | 9224.2 | 8054.6 | 6822.6 | 6690.1 | 5918.2 | 5122.8 | 4639.4 | 4639.4 | 5996.1 |
| 45° | 11041.0 | 10807.1 | 10144.3 | 8772.0 | 7462.0 | 7313.9 | 6464.0 | 5504.9 | 4842.1 | 4756.4 | 6401.6 |
| 47.5° | 12015.7 | 11820.7 | 11048.8 | 9450.3 | 8070.2 | 7945.5 | 6986.4 | 5918.2 | 5099.4 | 4966.9 | 6877.2 |
| 50° | 13083.9 | 12881.2 | 11992.3 | 10261.3 | 8670.6 | 8491.3 | 7563.4 | 6300.2 | 5411.3 | 5294.4 | 7446.4 |
| 52.5° | 13824.6 | 13653.1 | 12764.2 | 10994.2 | 9247.6 | 9122.8 | 8031.2 | 6690.1 | 5777.8 | 5660.8 | 7992.2 |
| 55° | 14315.9 | 14043.0 | 13177.4 | 11633.6 | 9887.0 | 9731.0 | 8452.3 | 7126.7 | 6191.1 | 6152.1 | 8460.1 |
| 57.5° | 14549.8 | 14276.9 | 13543.9 | 12195.0 | 10518.6 | 10347.0 | 8974.7 | 7602.4 | 6729.1 | 6760.3 | 8959.1 |
| 60° | 14425.0 | 14222.3 | 13684.3 | 12725.2 | 11220.3 | 11080.0 | 9473.7 | 8148.2 | 7282.7 | 7415.2 | 9193.0 |
| 62.5° | 13504.9 | 13551.7 | 13699.9 | 13512.7 | 12117.0 | 11945.5 | 10198.9 | 8842.1 | 8039.0 | 8062.4 | 9169.6 |
| 65° | 10448.4 | 10643.3 | 12343.1 | 14425.0 | 13372.4 | 13146.3 | 11196.9 | 9715.4 | 8553.6 | 8288.5 | 8561.4 |
| 67.5° | 6643.3 | 7056.6 | 8927.9 | 14931.8 | 15126.8 | 14986.4 | 12514.7 | 10432.8 | 8678.4 | 8623.8 | 8007.8 |
| 70° | 4522.4 | 4709.6 | 5902.6 | 13855.8 | 16834.4 | 16857.8 | 14339.2 | 10955.2 | 9068.3 | 8358.7 | 6690.1 |
| 72.5° | 3555.6 | 3571.2 | 4171.6 | 12483.5 | 16764.2 | 16850.0 | 14206.7 | 11501.0 | 8795.4 | 7446.4 | 5099.4 |
| 75° | 2386.0 | 2448.4 | 2846.0 | 10183.3 | 13926.0 | 13855.8 | 11602.4 | 8834.3 | 8023.4 | 5887.0 | 3306.1 |
| 77.5° | 670.6 | 694.0 | 1185.2 | 6487.4 | 9762.2 | 10058.5 | 8421.1 | 3033.2 | 5582.9 | 2697.9 | 1247.6 |
| 80° | 202.7 | 218.3 | 483.4 | 1863.6 | 4670.6 | 5349.0 | 4382.1 | 912.3 | 1348.9 | 639.4 | 249.5 |
| 82.5° | 85.8 | 93.6 | 288.5 | 428.9 | 1068.2 | 1154.0 | 1029.2 | 241.7 | 421.1 | 202.7 | 85.8 |
| 85° | 31.2 | 39.0 | 93.6 | 101.4 | 163.7 | 148.1 | 117.0 | 78.0 | 109.2 | 93.6 | 46.8 |
| 87.5° | 0.0 | 7.8 | 7.8 | 15.6 | 23.4 | 23.4 | 31.2 | 31.2 | 31.2 | 31.2 | 31.2 |
| 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: P1358789
CATALOG NUMBER: GSS-SB6C-722-U-SL4-HSS

**CANDELA DISTRIBUTION (continued):**

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0° | 3313.9 | 3313.9 | 3313.9 | 3313.9 | 3313.9 | 3313.9 | 3313.9 | 3313.9 | 3313.9 | 3313.9 | 3313.9 |
| 2.5° | 3321.7 | 3313.9 | 3282.7 | 3243.7 | 3220.3 | 3212.5 | 3189.1 | 3142.3 | 3157.9 | 3165.7 | 3126.7 |
| 5° | 3352.8 | 3298.3 | 3235.9 | 3157.9 | 3072.1 | 3002.0 | 2908.4 | 2838.2 | 2791.4 | 2783.6 | 2775.8 |
| 7.5° | 3384.0 | 3337.2 | 3228.1 | 3056.5 | 2885.0 | 2705.7 | 2463.9 | 2292.4 | 2167.7 | 2105.3 | 2128.7 |
| 10° | 3485.4 | 3407.4 | 3220.3 | 2955.2 | 2588.7 | 2198.8 | 1848.0 | 1645.2 | 1528.3 | 1473.7 | 1450.3 |
| 12.5° | 3586.8 | 3477.6 | 3220.3 | 2775.8 | 2152.1 | 1660.8 | 1380.1 | 1317.7 | 1317.7 | 1333.3 | 1325.5 |
| 15° | 3719.3 | 3594.6 | 3243.7 | 2502.9 | 1707.6 | 1302.2 | 1255.4 | 1263.2 | 1286.6 | 1302.2 | 1302.2 |
| 17.5° | 3867.5 | 3773.9 | 3243.7 | 2159.9 | 1333.3 | 1208.6 | 1216.4 | 1239.8 | 1263.2 | 1271.0 | 1278.8 |
| 20° | 4078.0 | 3945.4 | 3142.3 | 1762.2 | 1169.6 | 1169.6 | 1185.2 | 1200.8 | 1232.0 | 1247.6 | 1255.4 |
| 22.5° | 4272.9 | 4124.8 | 2955.2 | 1403.5 | 1122.8 | 1130.6 | 1161.8 | 1177.4 | 1208.6 | 1224.2 | 1216.4 |
| 25° | 4514.6 | 4374.3 | 2752.4 | 1138.4 | 1076.0 | 1091.6 | 1115.0 | 1138.4 | 1185.2 | 1200.8 | 1200.8 |
| 27.5° | 4779.7 | 4655.0 | 2596.5 | 1115.0 | 1029.2 | 1052.6 | 1091.6 | 1122.8 | 1161.8 | 1177.4 | 1177.4 |
| 30° | 5068.2 | 4943.5 | 2502.9 | 1200.8 | 1005.9 | 998.1 | 1044.8 | 1068.2 | 1115.0 | 1154.0 | 1161.8 |
| 32.5° | 5372.3 | 5177.4 | 2471.7 | 1372.3 | 1021.4 | 959.1 | 998.1 | 1029.2 | 1091.6 | 1138.4 | 1138.4 |
| 35° | 5809.0 | 5528.3 | 2471.7 | 1559.5 | 1083.8 | 920.1 | 951.3 | 990.3 | 1060.4 | 1107.2 | 1107.2 |
| 37.5° | 6347.0 | 6081.9 | 2713.5 | 1692.0 | 1138.4 | 888.9 | 904.5 | 943.5 | 998.1 | 1060.4 | 1068.2 |
| 40° | 6986.4 | 6861.6 | 3352.8 | 1777.8 | 1169.6 | 857.7 | 873.3 | 888.9 | 920.1 | 982.5 | 998.1 |
| 42.5° | 7672.6 | 7540.0 | 4265.1 | 1863.6 | 1154.0 | 834.3 | 826.5 | 826.5 | 842.1 | 881.1 | 888.9 |
| 45° | 8335.3 | 8148.2 | 5083.8 | 1832.4 | 1083.8 | 787.5 | 771.9 | 748.5 | 748.5 | 779.7 | 779.7 |
| 47.5° | 8920.1 | 8584.8 | 5481.5 | 1621.8 | 998.1 | 740.7 | 709.6 | 670.6 | 670.6 | 686.2 | 686.2 |
| 50° | 9294.4 | 8569.2 | 5232.0 | 1286.6 | 873.3 | 694.0 | 647.2 | 616.0 | 608.2 | 616.0 | 608.2 |
| 52.5° | 9349.0 | 8023.4 | 4304.1 | 998.1 | 756.3 | 639.4 | 584.8 | 569.2 | 561.4 | 561.4 | 561.4 |
| 55° | 8982.5 | 7017.6 | 3025.4 | 764.1 | 662.8 | 577.0 | 538.0 | 530.2 | 522.4 | 514.6 | 506.8 |
| 57.5° | 8350.9 | 5559.5 | 1848.0 | 616.0 | 600.4 | 522.4 | 499.0 | 491.2 | 475.6 | 452.2 | 444.4 |
| 60° | 7508.8 | 4093.6 | 974.7 | 522.4 | 522.4 | 460.0 | 460.0 | 460.0 | 421.1 | 389.9 | 374.3 |
| 62.5° | 6573.1 | 2760.2 | 545.8 | 444.4 | 436.6 | 413.3 | 421.1 | 413.3 | 374.3 | 319.7 | 311.9 |
| 65° | 5528.3 | 1567.3 | 366.5 | 366.5 | 374.3 | 358.7 | 374.3 | 366.5 | 311.9 | 257.3 | 241.7 |
| 67.5° | 4772.0 | 818.7 | 288.5 | 311.9 | 311.9 | 296.3 | 319.7 | 327.5 | 280.7 | 226.1 | 210.5 |
| 70° | *3734.9* | *413.3* | *233.9* | *257.3* | *257.3* | *233.9* | *280.7* | *304.1* | *257.3* | *194.9* | *187.1* |
| 72.5° | 2635.5 | 257.3 | 194.9 | 202.7 | 194.9 | 179.3 | 241.7 | 272.9 | 226.1 | 163.7 | 155.9 |
| 75° | 1606.2 | 171.5 | 148.1 | 163.7 | 140.4 | 140.4 | 210.5 | 241.7 | 194.9 | 132.6 | 124.8 |
| 77.5° | 748.5 | 124.8 | 109.2 | 117.0 | 101.4 | 109.2 | 171.5 | 187.1 | 140.4 | 109.2 | 101.4 |
| 80° | 187.1 | 85.8 | 85.8 | 78.0 | 78.0 | 85.8 | 124.8 | 117.0 | 101.4 | 93.6 | 85.8 |
| 82.5° | 78.0 | 62.4 | 54.6 | 54.6 | 54.6 | 62.4 | 78.0 | 78.0 | 85.8 | 78.0 | 78.0 |
| 85° | 39.0 | 39.0 | 39.0 | 39.0 | 46.8 | 46.8 | 62.4 | 70.2 | 70.2 | 70.2 | 62.4 |
| 87.5° | 23.4 | 23.4 | 23.4 | 23.4 | 23.4 | 31.2 | 39.0 | 46.8 | 54.6 | 31.2 | 23.4 |
| 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: SP1-2407-184-2

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

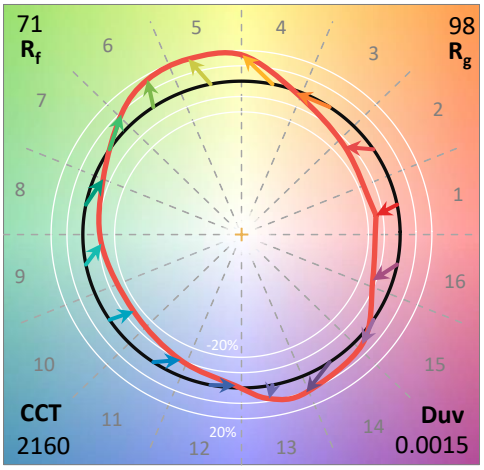
## Test Information

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

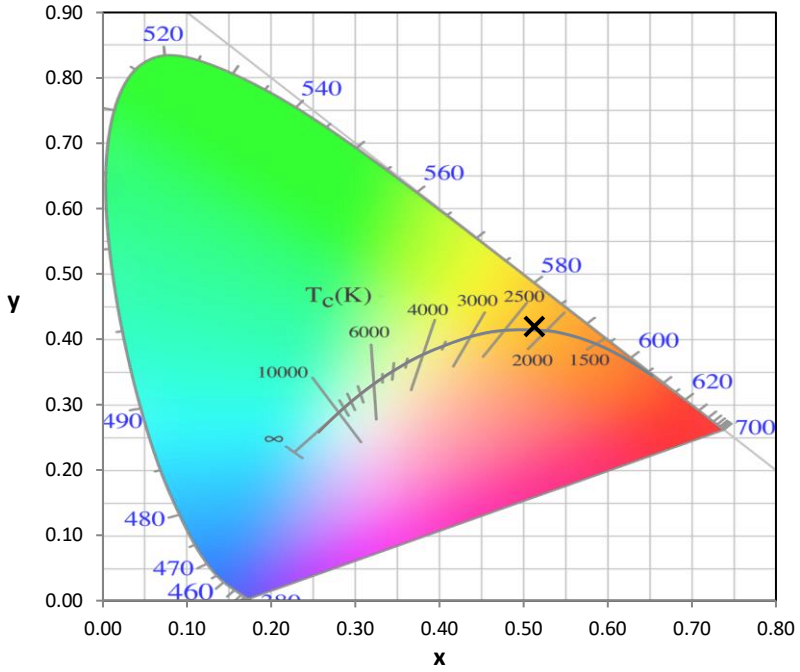
| | |
|---|---|
| Stabilization Time: | 21M |
| Operation Time: | 1H 21M |
| Sphere Temperature (°C): | 25.2 |

REPORT NUMBER: SP1-2407-184-2

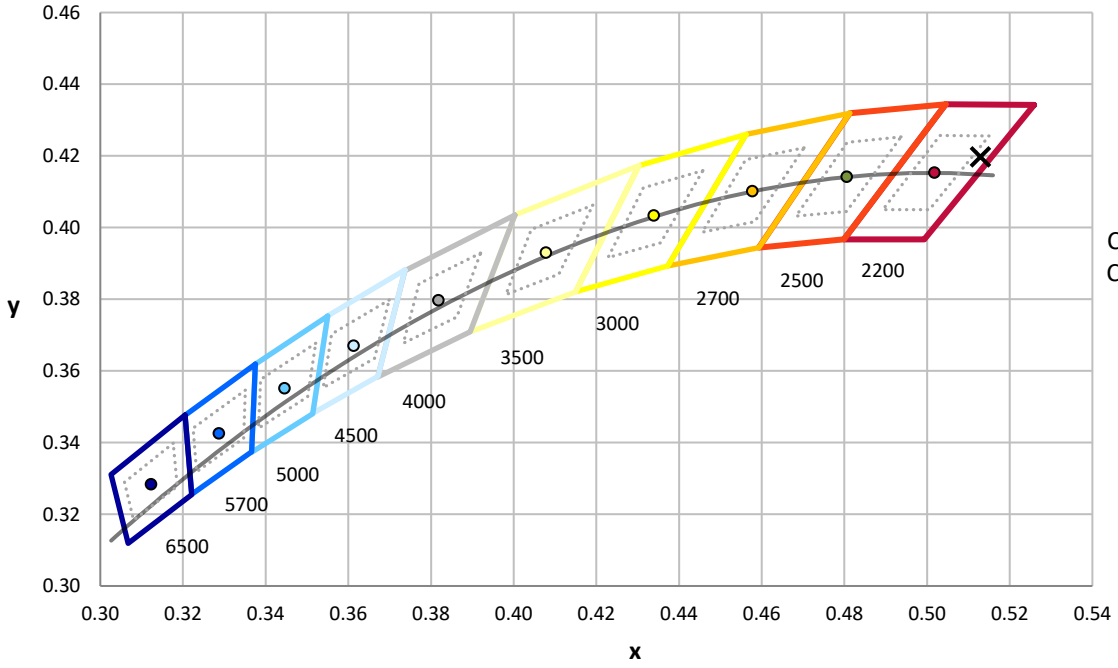
| Measurement and Test Equipment | | | |
|---|---|---|---|
| Instrument | Identification Number | Calibration Date | Calibration Due Date |
| Photometer | IN0058 | 6/18/2024 | 12/18/2024 |
| Power Meter | INXT2011004 | 2/8/2024 | 2/8/2025 |
| AC Power Source | IN0063 | 10/24/2023 | 10/24/2024 |
| DC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

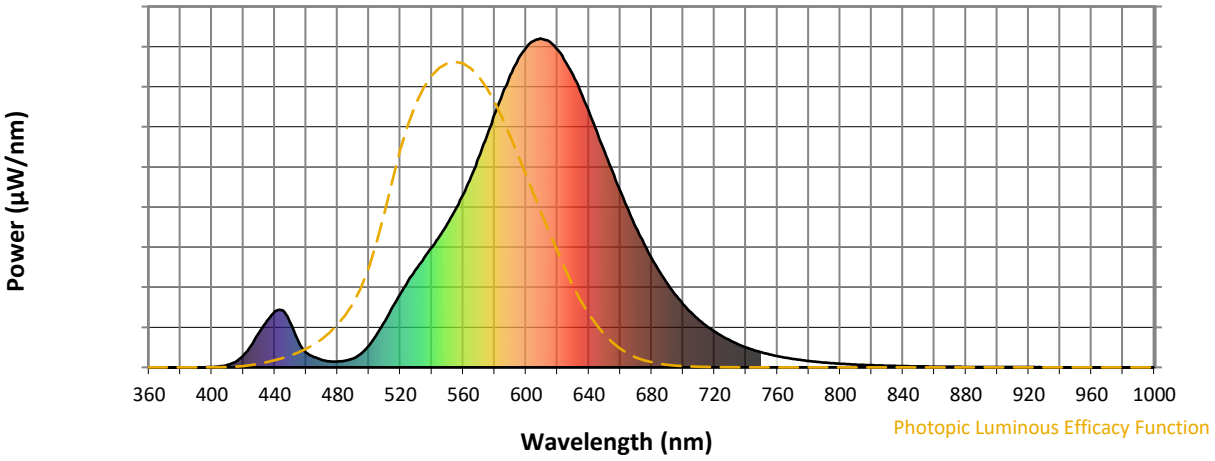



CCT = 2160K
CIE x = 0.5130
CIE y = 0.4197
Duv = 0.0015

Point lies inside the ANSI 2200K 7-step quadrangle

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## Photopic Flux vs. Wavelength

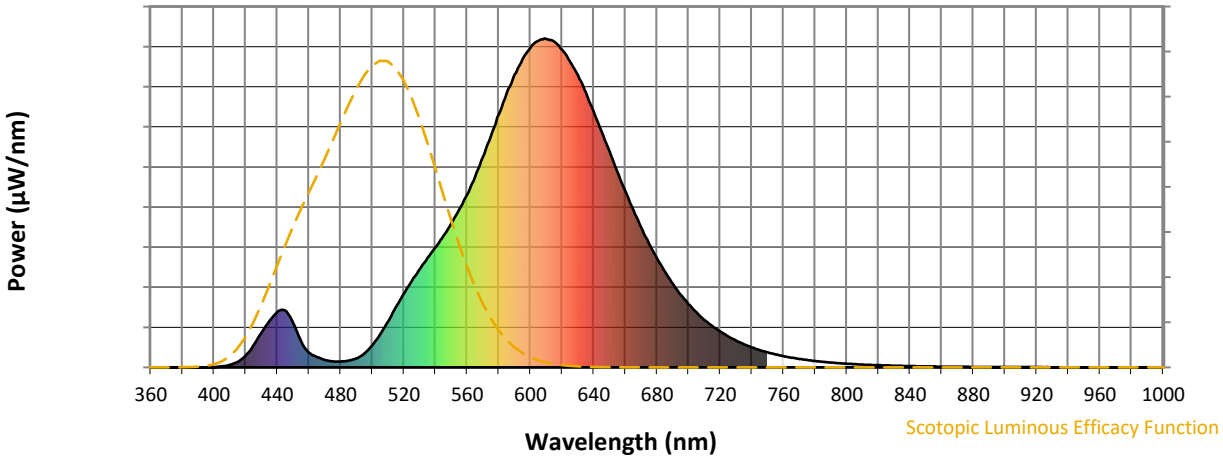



## Photopic Lumens: NR

| 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

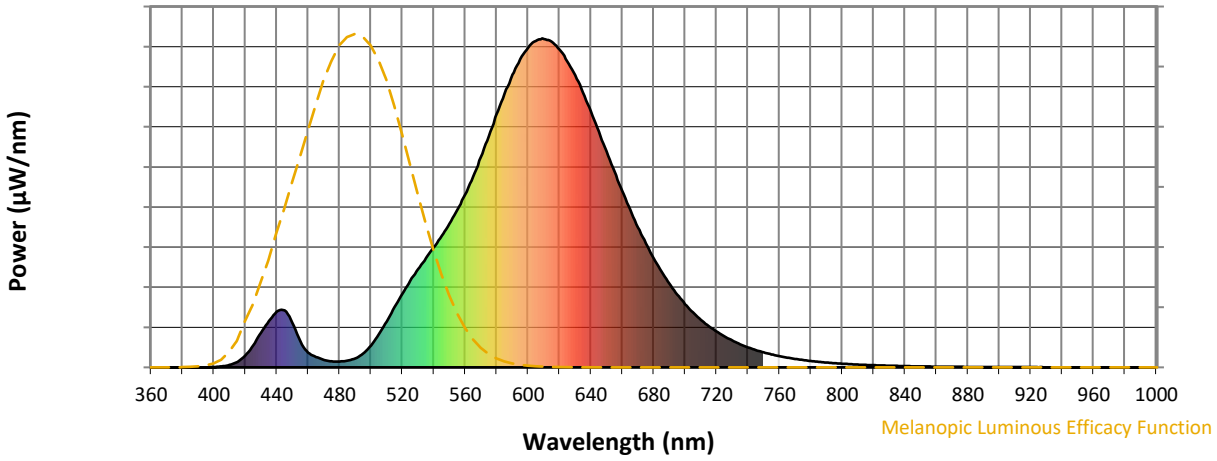



**Scotopic Lumens: NR** **S/P: 0.8**

| 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 | | | |

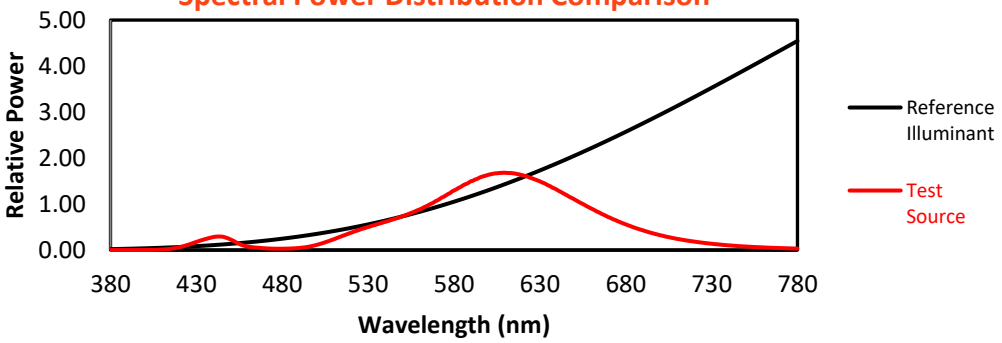
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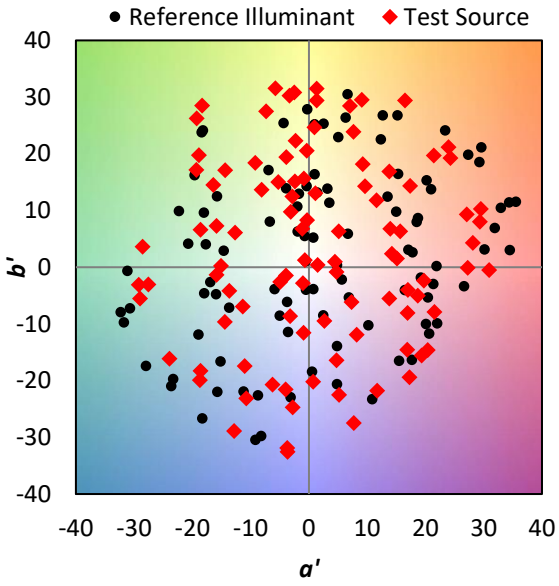
## Summary

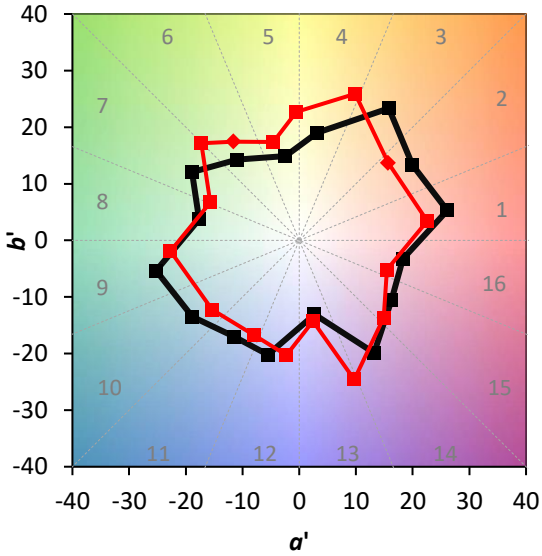
$R_f$ = 70.6
$R_g$ = 97.6
CIE $R_a$ = 71.9
$R_9$ = -17.8

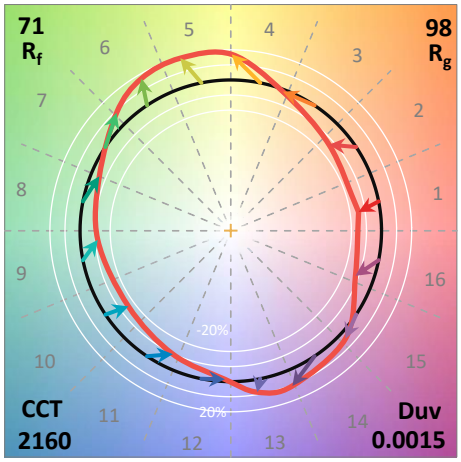
## Spectral Power Distribution Comparison

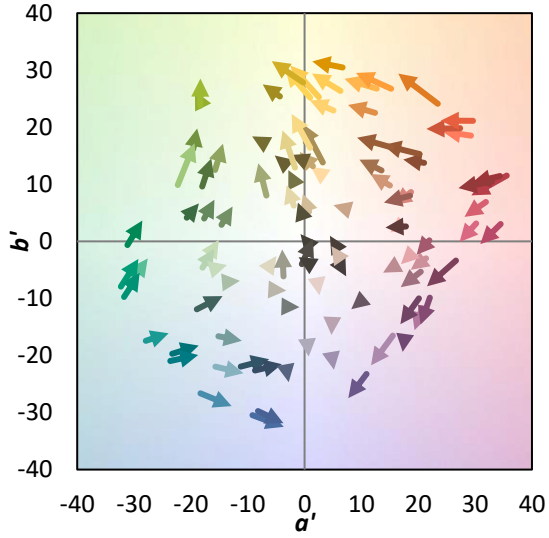



## Color Vector Graphics



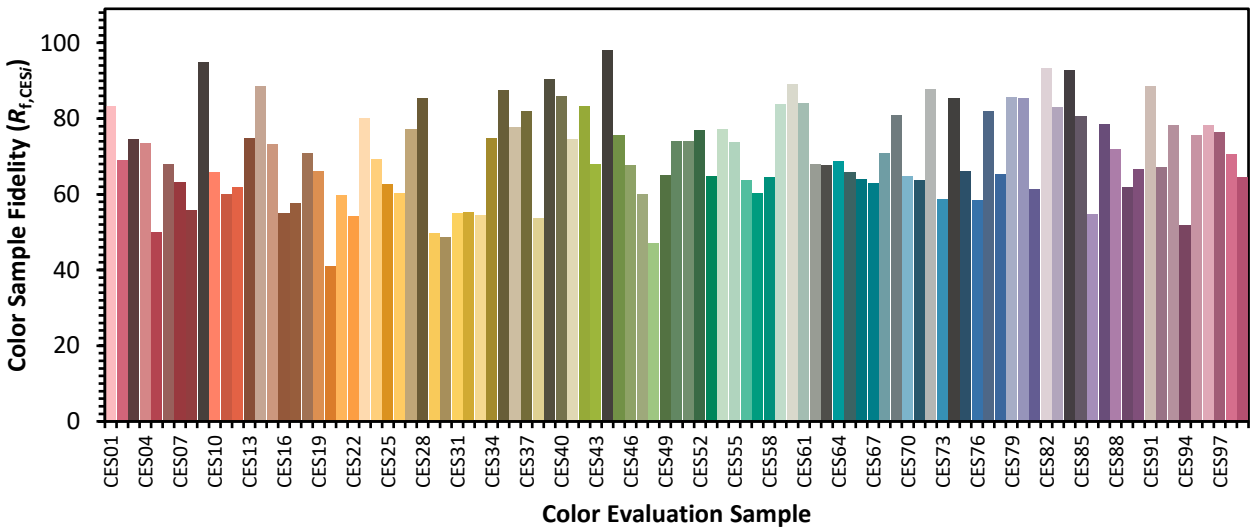



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**Individual Sample Fidelity Index ($R_{f,i}$)**

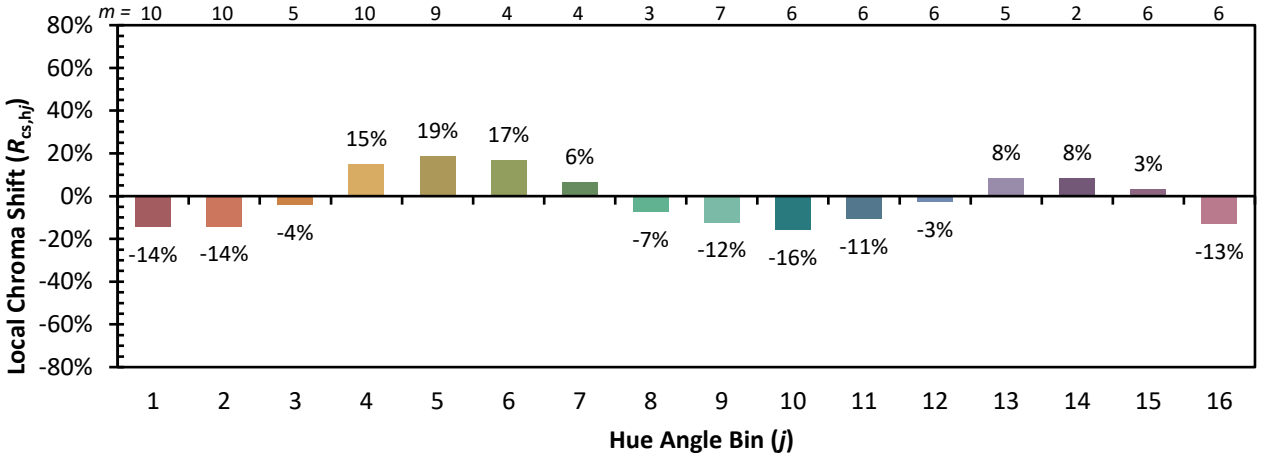
| | | | |
|---|---|---|---|
| CES01 = 87 | CES26 = 60 | CES51 = 74 | CES76 = 58 |
| CES02 = 65 | CES27 = 77 | CES52 = 77 | CES77 = 82 |
| CES03 = 32 | CES28 = 85 | CES53 = 65 | CES78 = 65 |
| CES04 = 72 | CES29 = 50 | CES54 = 77 | CES79 = 86 |
| CES05 = 52 | CES30 = 49 | CES55 = 74 | CES80 = 85 |
| CES06 = 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 | |

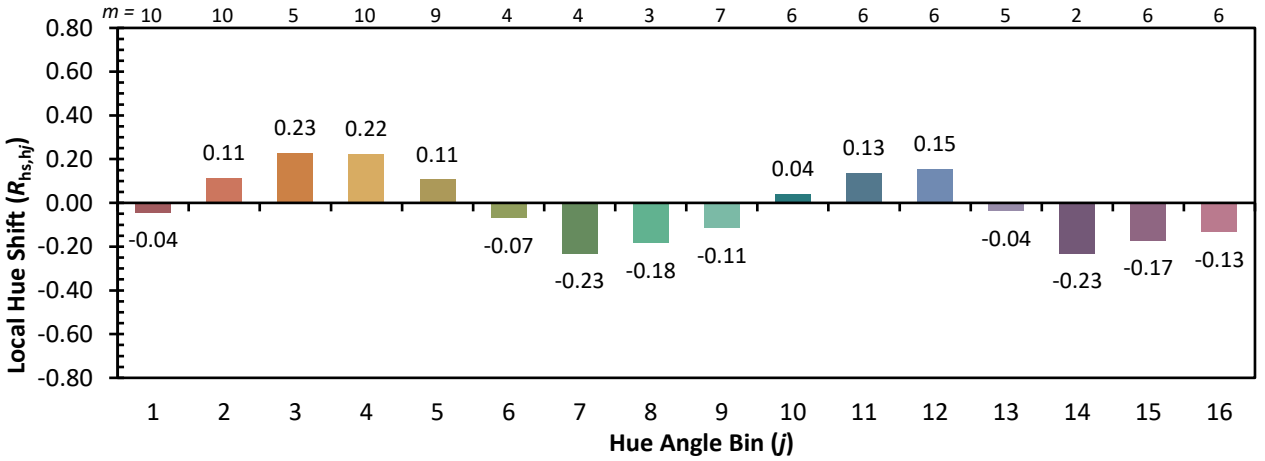


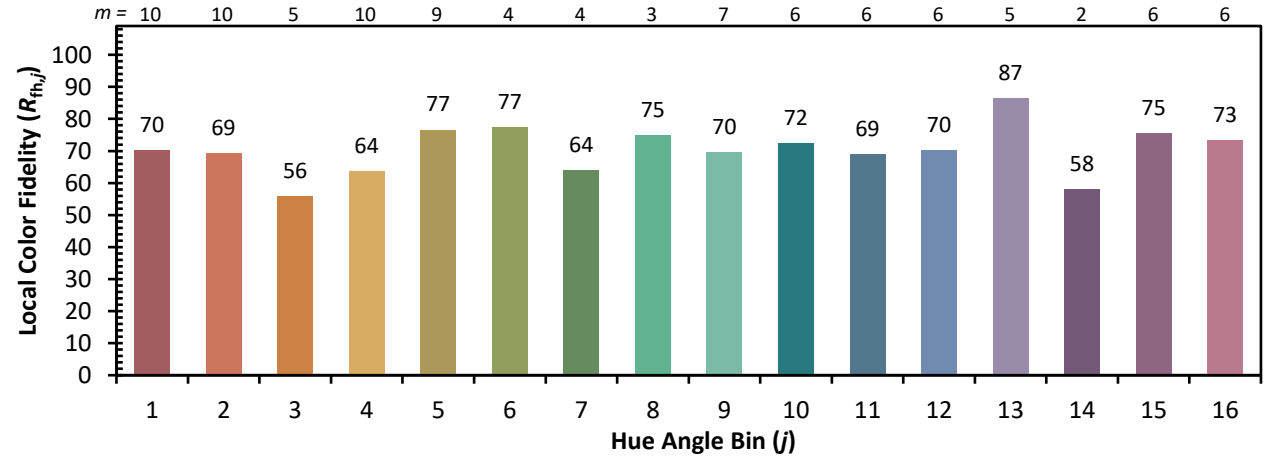
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## Color Rendition by Hue-Angle Bin



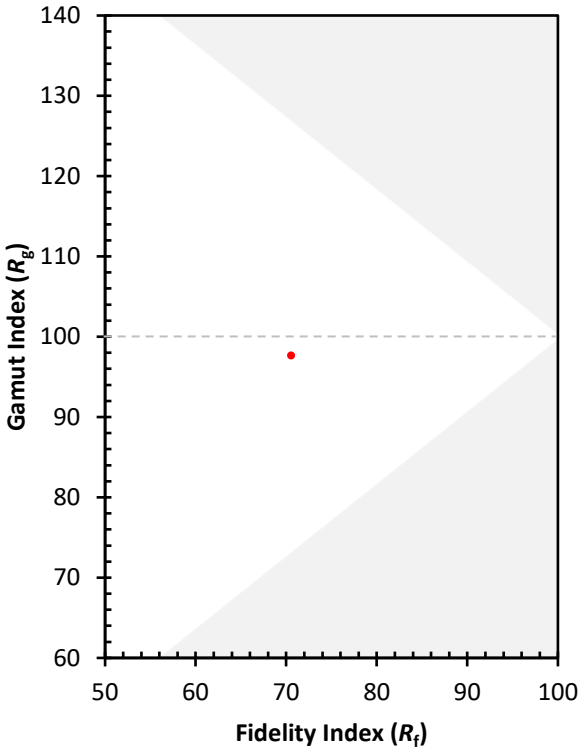



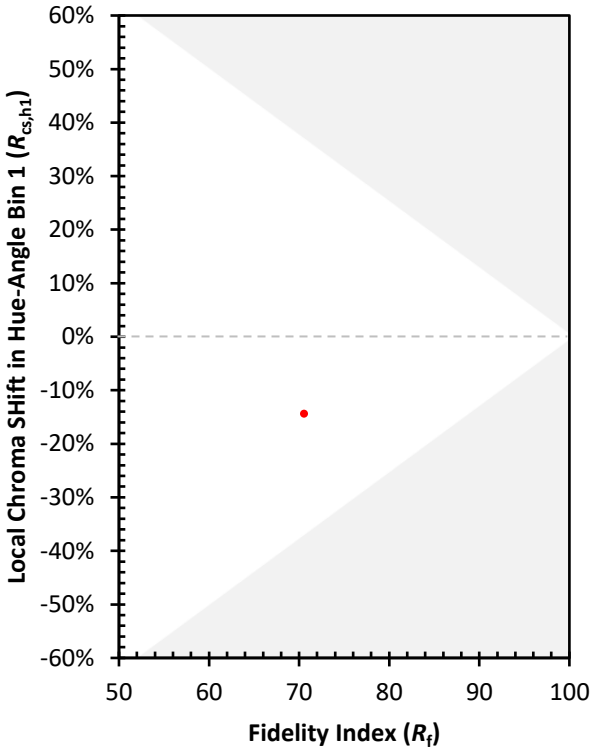



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## Measure Comparisons




(END OF REPORT)