Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

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Peachtree City, GA 30269

Scaled data based on original data using

LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

Brand: McGRAW-EDISON

Report Number: P1501107

Luminaire Tested: GSS-SB6C-760-U-T3LG

Issue Date: 07/20/2026

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

**Test Information**

| | |
|---|---|
| Test Method: | LM-79-2024 |
| Report Number: | P1501107 |
| Test Lab: | INNOVATION CENTER(G1) |
| Issue Date: | 7/20/2026 |
| Manufacturer: | COOPER LIGHTING SOLUTIONS |
| Product Line: | McGRAW-EDISON |
| Catalog Number: | GSS-SB6C-760-U-T3LG |
| Description: | GALLEON II SLIM SITE HIGH DENSITY LED ARRAYS 6SQUARE 300W 70CRI 5700K FIXTURE w/ TYPE III LOW GLARE DISTRIBUTION FIXTURE |
| Light Source: | (156) 5700K CCT, 70 CRI LEDS |
| Ballast/Driver: | ELECTRONIC DRIVER |

**Summary**

| | |
|---|---|
| Lumens per Lamp: | N/A |
| Luminaire Lumens: | 46890.4 lumens |
| Efficiency: | N/A |
| Efficacy: | 156.3 lumens/watt |
| Luminous Opening: | Rectangular (W 1.5' x L: 1' x H: 0') |
| IES Classification: | Type III - Short |
| BUG Rating: | B4 - U0 - G4 |

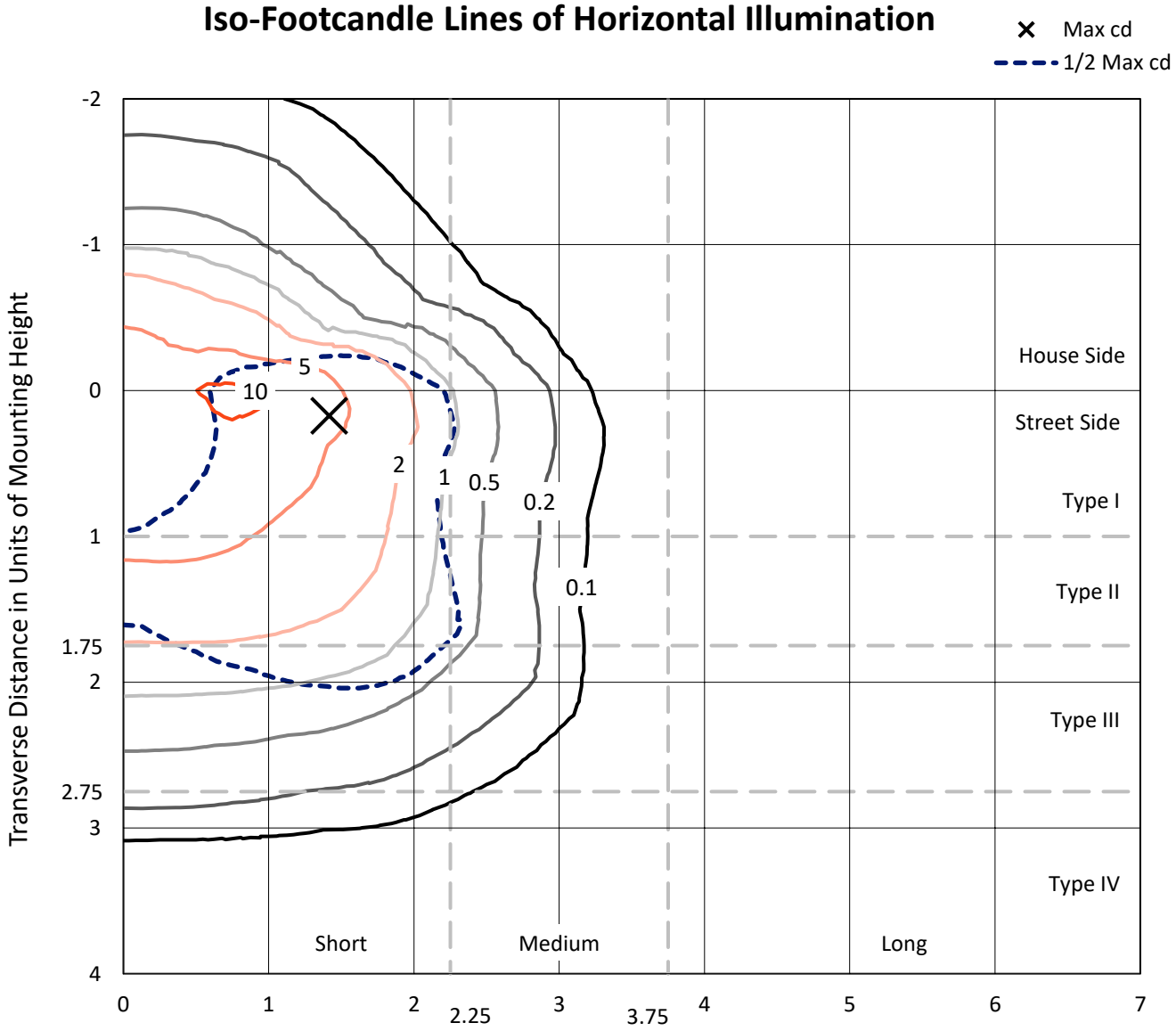
| | |
|---|---|
| Input Watts (W): | 300 |
| Input Voltage (V): | 120 |
| Input Current (Ain): | NR |
| Voltage Rise (V): | NR |
| Power Factor: | 0.98 |
| Total Harmonic Distortion (THDi): | 6.3% |
| Frequency (hertz): | 60 |
| Stabilization Time: | NR |
| Operation Time: | NR |
| Ambient Temperature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

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Scaled Data Report

REPORT NUMBER: P1501107
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## Iso-Footcandle Lines of Horizontal Illumination



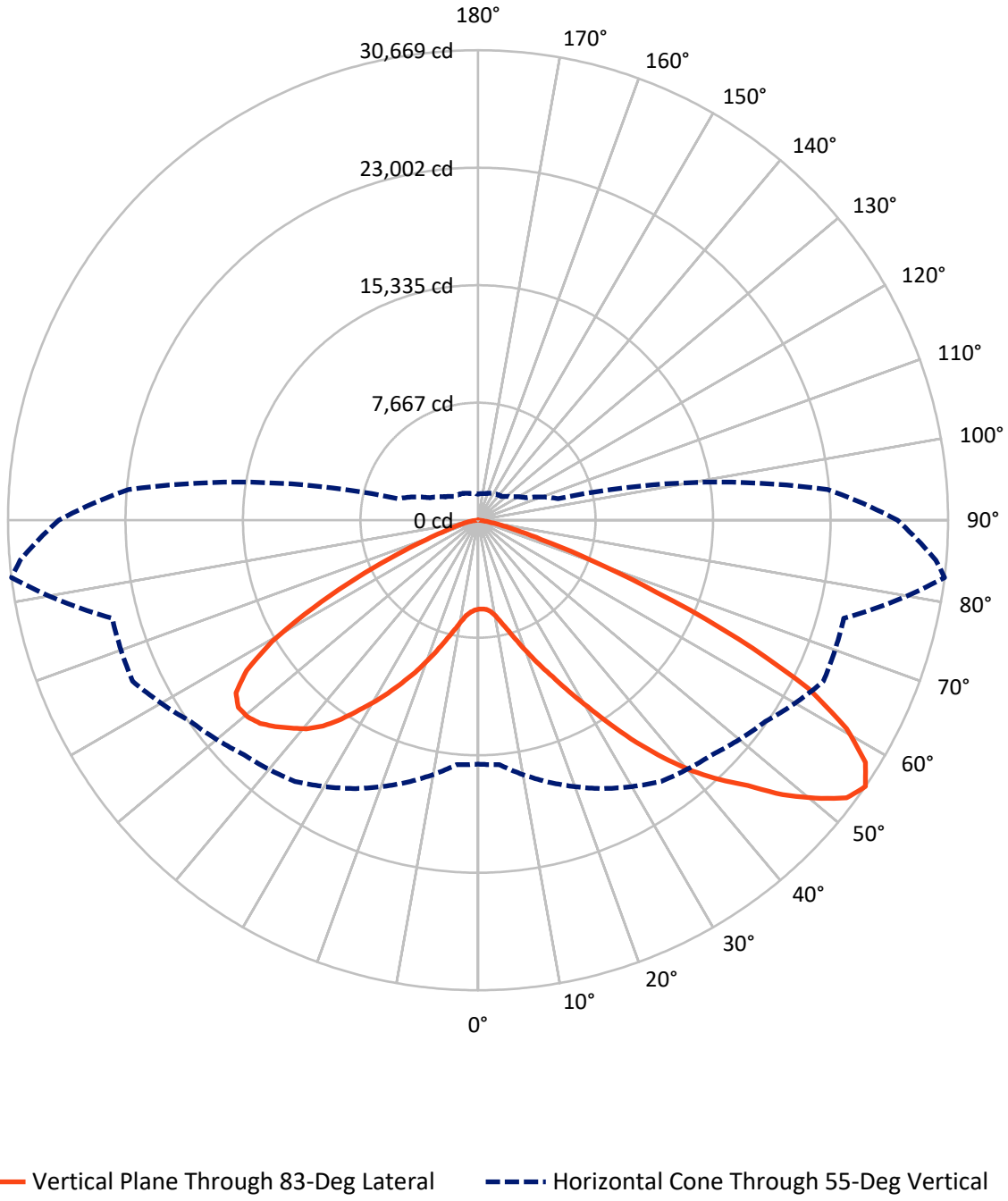

Based on 30 foot mounting height. Maximum calculated value = 10.9 fc
Type III - Short - N/A

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## Luminous Intensity Polar Plot



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Scaled Data Report

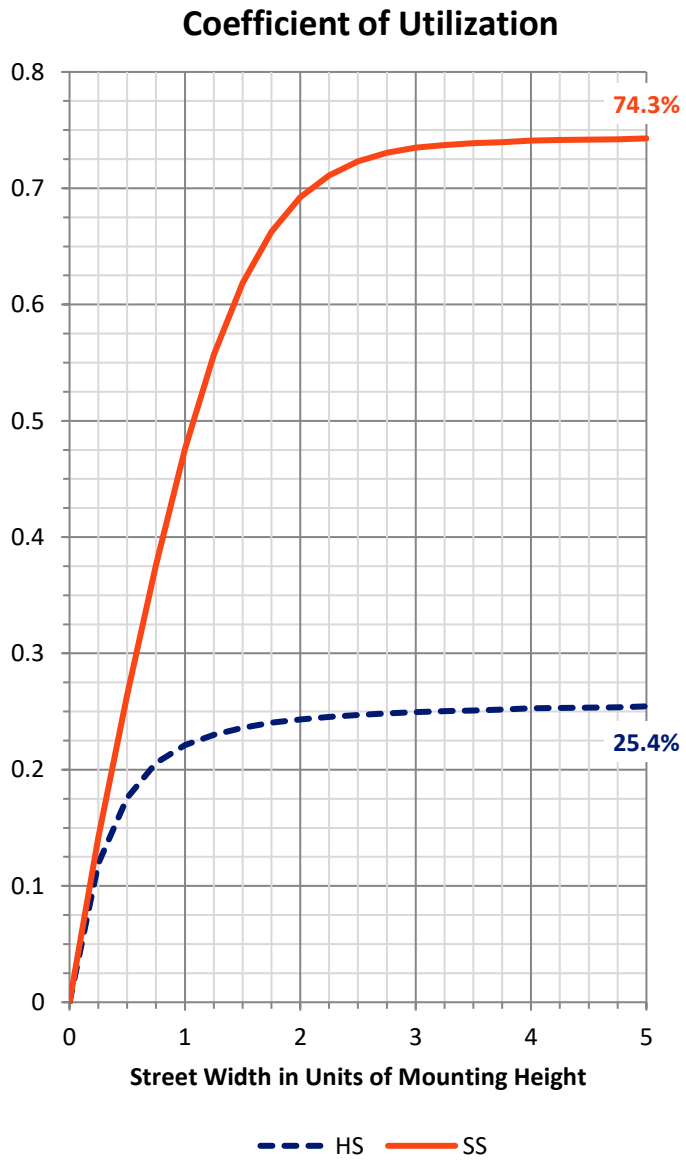
REPORT NUMBER: P1501107
CATALOG NUMBER: GSS-SB6C-760-U-T3LG

**FLUX DISTRIBUTION:**

| | | Downward | Upward | Total |
|---|---|---|---|---|
| **House Side** | Lumens | 12033.1 | 0.0 | 12033.1 |
| | % Fixture | 25.7 | 0.0 | 25.7 |
| **Street Side** | Lumens | 34857.4 | 0.0 | 34857.4 |
| | % Fixture | 74.3 | 0.0 | 74.3 |
| **Total** | Lumens | 46890.4 | 0.0 | 46890.4 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

**ZONAL LUMENS:**

| Zone | Lumens | % Fixture |
|---|---|---|
| 0°-10° | 560.8 | 1.2 |
| 10°-20° | 1827.1 | 3.9 |
| 20°-30° | 3657.8 | 7.8 |
| 30°-40° | 6507.7 | 13.9 |
| 40°-50° | 9806.9 | 20.9 |
| 50°-60° | 11950.3 | 25.5 |
| 60°-70° | 9663.5 | 20.6 |
| 70°-80° | 2646.8 | 5.6 |
| 80°-90° | 269.6 | 0.6 |
| 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° | 46890.4 | 100.0 |
| 0°-180° | 46890.4 | 100.0 |



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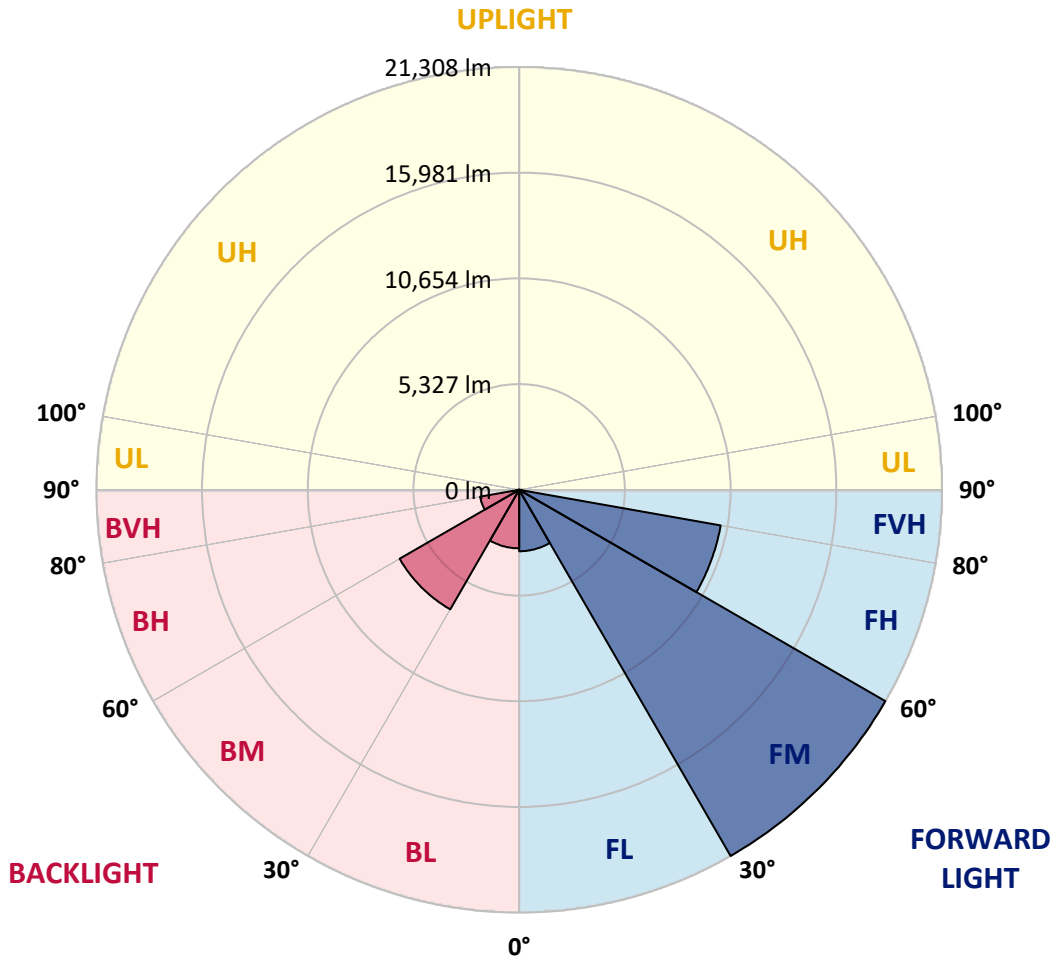
Scaled Data Report

REPORT NUMBER: P1501107
CATALOG NUMBER: GSS-SB6C-760-U-T3LG

## LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit B | U | G |
|---|---|---|---|---|---|---|
| FL | (0°-30°) | 3096.1 | 6.6 | | | |
| FM | (30°-60°) | 21308.5 | 45.4 | | | |
| FH | (60°-80°) | 10312.4 | 22.0 | | | G4/12000 |
| FVH | (80°-90°) | 140.4 | 0.3 | | | G2/225 |
| BL | (0°-30°) | 2949.6 | 6.3 | B4/5000 | | |
| BM | (30°-60°) | 6956.5 | 14.8 | B4/8500 | | |
| BH | (60°-80°) | 1997.8 | 4.3 | B3/2500 | | G3/2500 |
| BVH | (80°-90°) | 129.2 | 0.3 | | | G2/225 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

**BUG Rating: B4-U0-G4**
Type III Short



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REPORT NUMBER: P1501107
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**CANDELA DISTRIBUTION (FULL):**

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 83° | 85° |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0° | 5804.5 | 5804.5 | 5804.5 | 5804.5 | 5804.5 | 5804.5 | 5804.5 | 5804.5 | 5804.5 | *5804.5* | 5804.5 |
| 2.5° | 5637.8 | 5627.4 | 5617.0 | 5606.5 | 5627.4 | 5658.6 | 5689.9 | 5710.8 | 5762.9 | *5804.5* | 5783.7 |
| 5° | 5189.7 | 5168.9 | 5189.7 | 5273.1 | 5346.0 | 5471.1 | 5596.1 | 5679.5 | 5794.1 | *5846.2* | 5867.1 |
| 7.5° | 4793.7 | 4772.9 | 4793.7 | 4897.9 | 5023.0 | 5221.0 | 5481.5 | 5689.9 | 5898.3 | *6023.4* | 6044.2 |
| 10° | 4793.7 | 4804.1 | 4804.1 | 4845.8 | 4908.3 | 5106.3 | 5419.0 | 5815.0 | 6179.7 | *6356.9* | 6398.5 |
| 12.5° | 4950.0 | 4950.0 | 4950.0 | 5002.1 | 5043.8 | 5200.1 | 5554.4 | 6044.2 | 6627.8 | *6888.3* | 6919.6 |
| 15° | 5158.4 | 5148.0 | 5179.3 | 5210.5 | 5283.5 | 5439.8 | 5794.1 | 6377.7 | 7117.6 | *7513.6* | 7555.3 |
| 17.5° | 5450.2 | 5429.4 | 5460.6 | 5533.6 | 5637.8 | 5815.0 | 6169.3 | 6836.2 | 7795.0 | *8295.2* | 8357.7 |
| 20° | 5773.3 | 5762.9 | 5825.4 | 5940.0 | 6085.9 | 6304.8 | 6711.2 | 7388.5 | 8566.1 | *9201.8* | 9316.4 |
| 22.5° | 6158.9 | 6138.0 | 6252.6 | 6461.1 | 6659.1 | 6909.2 | 7399.0 | 8107.6 | 9451.9 | *10212.7* | 10327.3 |
| 25° | 6596.5 | 6596.5 | 6752.9 | 7003.0 | 7305.2 | 7753.3 | 8243.1 | 9024.7 | 10494.0 | *11306.9* | 11484.0 |
| 27.5° | 7315.6 | 7367.7 | 7430.2 | 7690.8 | 8118.0 | 8722.4 | 9243.5 | 10129.3 | 11629.9 | *12651.2* | 12713.7 |
| 30° | 8482.8 | 8461.9 | 8566.1 | 8743.3 | 9097.6 | 9733.3 | 10514.9 | 11463.2 | 13068.0 | *14141.4* | 14297.7 |
| 32.5° | 9535.3 | 9566.6 | 9712.4 | 10045.9 | 10473.2 | 11015.1 | 11953.0 | 13120.1 | 14631.2 | *15871.3* | 15944.3 |
| 35° | 10598.2 | 10619.1 | 10900.5 | 11400.7 | 12036.3 | 12640.8 | 13662.0 | 14808.4 | 16329.8 | *17799.2* | 17997.2 |
| 37.5° | 12088.5 | 12067.6 | 12349.0 | 12776.2 | 13630.8 | 14568.7 | 15391.9 | 16486.2 | 17955.5 | *19675.0* | 19904.3 |
| 40° | 13203.5 | 13318.1 | 13849.6 | 14391.5 | 15193.9 | 16163.1 | 16861.3 | 17893.0 | 19289.4 | *21509.1* | 21717.5 |
| 42.5° | 14349.8 | 14443.6 | 15152.3 | 15965.1 | 16809.2 | 17465.7 | 18007.6 | 18966.4 | 20352.4 | *23134.8* | 23249.4 |
| 45° | 15298.1 | 15423.2 | 16236.0 | 17267.7 | 18143.1 | 18810.1 | 18997.6 | 19893.8 | 21436.2 | *24698.0* | 24875.1 |
| 47.5° | 15902.6 | 16038.0 | 16996.8 | 18205.6 | 19101.8 | 19810.5 | 19748.0 | 21008.9 | 22592.9 | *26771.8* | 26709.2 |
| 50° | 16319.4 | 16402.8 | 17444.9 | 18737.1 | 19904.3 | 20373.2 | 20644.2 | 22269.9 | 23780.9 | *28512.1* | 28282.8 |
| 52.5° | 16621.6 | 16757.1 | 17705.4 | 19122.7 | 20352.4 | 20967.2 | 21696.7 | 23728.8 | 24604.2 | *30106.5* | 29595.9 |
| 55° | *15913.0* | *16017.2* | *17684.6* | *19320.7* | *20810.9* | *21623.7* | *22895.1* | *24864.7* | *24708.4* | *30669.2* | *29981.5* |
| 57.5° | 15183.5 | 15266.9 | 16809.2 | 19268.6 | 21311.1 | 22436.6 | 24260.3 | 25010.6 | 23780.9 | *29804.3* | 28939.3 |
| 60° | 14266.5 | 14329.0 | 15871.3 | 18716.3 | 21321.5 | 23072.3 | 24958.5 | 23947.6 | 22061.4 | *27626.3* | 26803.0 |
| 62.5° | 12578.2 | 12578.2 | 14276.9 | 17226.0 | 20800.5 | 23395.3 | 24770.9 | 21936.4 | 19758.4 | *24197.8* | 23061.9 |
| 65° | 10910.9 | 10837.9 | 11984.2 | 14568.7 | 19414.5 | 23312.0 | 23364.1 | 19393.6 | 16183.9 | *18664.2* | 17778.4 |
| 67.5° | 9097.6 | 9108.0 | 9785.4 | 11827.9 | 15725.4 | 21571.6 | 20394.1 | 14985.5 | 11275.6 | *12567.8* | 12109.3 |
| 70° | 6158.9 | 6315.2 | 7003.0 | 8587.0 | 11859.2 | 15287.7 | 16236.0 | 10150.1 | 7034.2 | *7805.4* | 7430.2 |
| 72.5° | 2344.7 | 2376.0 | 3178.4 | 4501.9 | 7492.8 | 9191.4 | 11327.7 | 5679.5 | 4116.3 | *4303.9* | 4324.7 |
| 75° | 990.0 | 1031.7 | 1354.7 | 1896.6 | 3324.3 | 5012.5 | 5960.9 | 2876.2 | 2501.1 | *2574.0* | 2553.2 |
| 77.5° | 666.9 | 687.8 | 823.3 | 1021.3 | 1500.6 | 2011.3 | 2490.6 | 1625.7 | 1531.9 | *1438.1* | 1396.4 |
| 80° | 500.2 | 500.2 | 594.0 | 687.8 | 844.1 | 1031.7 | 1083.8 | 823.3 | 917.1 | *760.7* | 739.9 |
| 82.5° | 323.1 | 343.9 | 375.2 | 406.4 | 479.4 | 510.6 | 437.7 | 448.1 | 531.5 | *396.0* | 375.2 |
| 85° | 156.3 | 166.7 | 177.2 | 187.6 | 187.6 | 177.2 | 156.3 | 198.0 | 270.9 | *166.7* | 156.3 |
| 87.5° | 20.8 | 20.8 | 20.8 | 20.8 | 20.8 | 20.8 | 10.4 | 10.4 | 10.4 | *10.4* | 10.4 |
| 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: P1501107
CATALOG NUMBER: GSS-SB6C-760-U-T3LG

**CANDELA DISTRIBUTION (continued):**

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0° | 5804.5 | 5804.5 | 5804.5 | 5804.5 | 5804.5 | 5804.5 | 5804.5 | 5804.5 | 5804.5 | 5804.5 | 5804.5 |
| 2.5° | 5815.0 | 5856.6 | 5887.9 | 5908.8 | 5960.9 | 5950.4 | 5981.7 | 6002.5 | 6023.4 | 6054.6 | 6013.0 |
| 5° | 5919.2 | 5992.1 | 6075.5 | 6138.0 | 6200.5 | 6231.8 | 6242.2 | 6263.1 | 6273.5 | 6294.3 | 6283.9 |
| 7.5° | 6148.4 | 6231.8 | 6356.9 | 6419.4 | 6471.5 | 6471.5 | 6440.2 | 6429.8 | 6398.5 | 6419.4 | 6419.4 |
| 10° | 6534.0 | 6659.1 | 6794.5 | 6805.0 | 6742.4 | 6669.5 | 6554.9 | 6492.3 | 6409.0 | 6388.1 | 6367.3 |
| 12.5° | 7096.8 | 7263.5 | 7367.7 | 7294.8 | 7075.9 | 6805.0 | 6502.8 | 6221.4 | 6002.5 | 5908.8 | 5887.9 |
| 15° | 7732.4 | 7940.9 | 7961.7 | 7753.3 | 7357.3 | 6700.8 | 6065.1 | 5752.4 | 5637.8 | 5637.8 | 5627.4 |
| 17.5° | 8607.8 | 8753.7 | 8670.3 | 8170.1 | 7284.3 | 6211.0 | 5752.4 | 5700.3 | 5731.6 | 5773.3 | 5773.3 |
| 20° | 9524.9 | 9691.6 | 9347.7 | 8461.9 | 6836.2 | 5919.2 | 5783.7 | 5825.4 | 5898.3 | 5940.0 | 5929.6 |
| 22.5° | 10619.1 | 10702.5 | 10035.5 | 8472.3 | 6356.9 | 5846.2 | 5846.2 | 5898.3 | 5950.4 | 6013.0 | 6013.0 |
| 25° | 11744.6 | 11713.3 | 10671.2 | 8086.8 | 6085.9 | 5825.4 | 5804.5 | 5846.2 | 5867.1 | 5898.3 | 5887.9 |
| 27.5° | 13005.5 | 12838.8 | 11161.0 | 7471.9 | 6002.5 | 5762.9 | 5658.6 | 5617.0 | 5637.8 | 5669.1 | 5679.5 |
| 30° | 14454.0 | 14058.0 | 11557.0 | 7086.3 | 5971.3 | 5617.0 | 5366.9 | 5252.2 | 5231.4 | 5273.1 | 5273.1 |
| 32.5° | 16131.8 | 15277.3 | 11796.7 | 7034.2 | 5940.0 | 5356.4 | 5023.0 | 4804.1 | 4762.4 | 4783.3 | 4835.4 |
| 35° | 17851.3 | 16746.7 | 11734.1 | 7169.7 | 5950.4 | 5148.0 | 4658.2 | 4366.4 | 4324.7 | 4345.6 | 4397.7 |
| 37.5° | 19654.2 | 18143.1 | 11494.5 | 7378.1 | 5867.1 | 4866.6 | 4324.7 | 3970.4 | 3907.9 | 3949.6 | 3970.4 |
| 40° | 21050.6 | 19320.7 | 10900.5 | 7461.5 | 5721.2 | 4512.3 | 3939.2 | 3637.0 | 3470.2 | 3459.8 | 3511.9 |
| 42.5° | 22342.8 | 20248.2 | 10254.3 | 7326.0 | 5419.0 | 4137.2 | 3543.2 | 3241.0 | 2980.4 | 2782.4 | 2782.4 |
| 45° | 23635.0 | 21186.1 | 9597.8 | 6940.4 | 4918.8 | 3741.2 | 3126.3 | 2719.9 | 2417.7 | 2271.8 | 2282.2 |
| 47.5° | 24927.2 | 22092.7 | 8816.2 | 6356.9 | 4418.5 | 3324.3 | 2678.2 | 2355.2 | 2146.7 | 2032.1 | 2032.1 |
| 50° | 26125.7 | 22749.2 | 7815.8 | 5429.4 | 3845.4 | 2907.5 | 2365.6 | 2178.0 | 2021.7 | 1917.5 | 1896.6 |
| 52.5° | 27178.2 | 23186.9 | 6461.1 | 4303.9 | 3220.1 | 2438.5 | 2198.8 | 2053.0 | 1938.3 | 1823.7 | 1792.4 |
| 55° | *27365.8* | *22895.1* | *5408.5* | *3459.8* | *2657.4* | *2188.4* | *2073.8* | *1948.7* | *1792.4* | *1740.3* | *1709.1* |
| 57.5° | 26209.0 | 21352.8 | 4564.4 | 2917.9 | 2271.8 | 2011.3 | 1969.6 | 1823.7 | 1698.6 | 1646.5 | 1615.3 |
| 60° | 24239.4 | 18549.5 | 3772.4 | 2501.1 | 2021.7 | 1844.5 | 1896.6 | 1750.7 | 1552.7 | 1521.5 | 1490.2 |
| 62.5° | 20696.3 | 14474.9 | 3011.7 | 2105.1 | 1834.1 | 1719.5 | 1771.6 | 1563.2 | 1396.4 | 1354.7 | 1344.3 |
| 65° | 16090.2 | 10358.6 | 2532.3 | 1855.0 | 1688.2 | 1594.4 | 1573.6 | 1386.0 | 1261.0 | 1229.7 | 1229.7 |
| 67.5° | 11233.9 | 6586.1 | 2115.5 | 1698.6 | 1500.6 | 1438.1 | 1427.7 | 1302.6 | 1219.3 | 1188.0 | 1188.0 |
| 70° | 6877.9 | 3991.3 | 1782.0 | 1552.7 | 1323.5 | 1208.8 | 1281.8 | 1261.0 | 1135.9 | 1104.6 | 1094.2 |
| 72.5° | 3574.4 | 2386.4 | 1563.2 | 1427.7 | 1115.1 | 1031.7 | 1146.3 | 1156.7 | 1052.5 | 1094.2 | 1083.8 |
| 75° | 2073.8 | 1657.0 | 1365.2 | 1261.0 | 885.8 | 864.9 | 1000.4 | 1104.6 | 1021.3 | 1052.5 | 1031.7 |
| 77.5° | 1188.0 | 1063.0 | 1052.5 | 1031.7 | 698.2 | 708.6 | 896.2 | 990.0 | 875.4 | 906.6 | 833.7 |
| 80° | 656.5 | 687.8 | 729.5 | 646.1 | 489.8 | 552.3 | 719.1 | 792.0 | 666.9 | 656.5 | 604.4 |
| 82.5° | 343.9 | 427.3 | 489.8 | 416.8 | 281.4 | 333.5 | 489.8 | 489.8 | 427.3 | 406.4 | 396.0 |
| 85° | 156.3 | 177.2 | 229.3 | 208.4 | 104.2 | 125.1 | 229.3 | 250.1 | 218.8 | 198.0 | 187.6 |
| 87.5° | 10.4 | 10.4 | 10.4 | 10.4 | 10.4 | 10.4 | 20.8 | 31.3 | 10.4 | 10.4 | 10.4 |
| 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: SP1-2407-184-7

Test Date: 10/10/2024

Luminaire Tested: GSS-SB1A-757-U-5WQ

Data in this report applies to families of products including GSS-SB1A-757-U-5WQ

Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

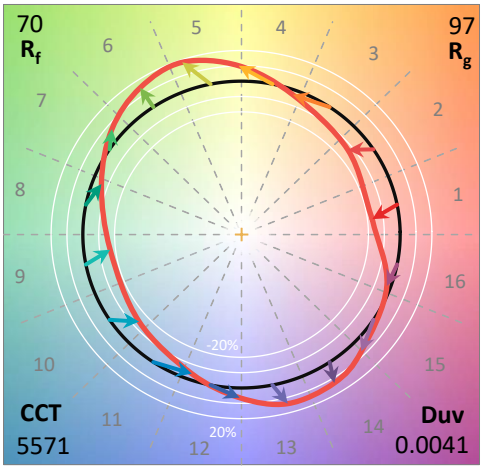
## Test Information

| | |
|---|---|
| Test Method: | LM-79-2019 |
| Report Number: | SP1-2407-184-7 |
| 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-757-U-5WQ** |
| Description: | GALLEON II SITE SLIM 1SQ 350MA 5WQ HIGH DENSITY LIGHTSQUARE WITH 70 CRI 5700K CCT 26 LEDS |

## Spectral Parameters

| | |
|---|---|
| CCT (K): | 5571 |
| CIE u': | 0.2033 |
| CIE v': | 0.4806 |
| Duv: | 0.0041 |
| CIE x: | 0.3308 |
| CIE y: | 0.3476 |
| CIE z: | 0.3216 |
| Peak Wavelength (nm): | 442 |
| Dominant Wavelength (nm): | 544 |
| Purity: | 3.635698 |
| Rf: | 70.4 |
| Rg: | 97.1 |

| | |
|---|---|
| CRI (Ra): | 69.9 |
| R1: | 68.8 |
| R2: | 72.5 |
| R3: | 76.8 |
| R4: | 72.0 |
| R5: | 70.9 |
| R6: | 65.6 |
| R7: | 75.5 |
| R8: | 56.8 |
| R9: | -35.4 |
| R10: | 36.7 |
| R11: | 73.9 |
| R12: | 47.8 |
| R13: | 68.0 |
| R14: | 87.0 |
| R15: | 59.8 |




## Test Conditions

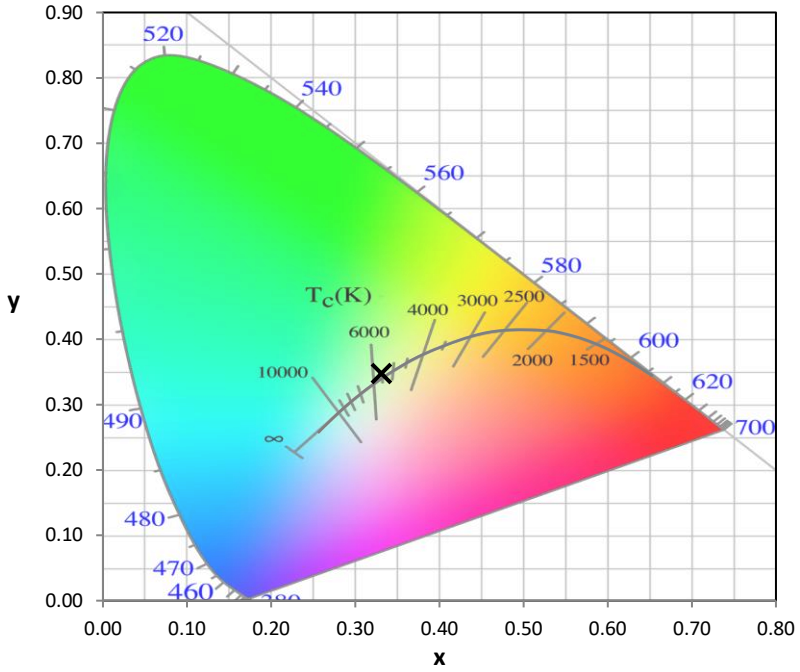
| | |
|---|---|
| Stabilization Time: | 20M |
| Operation Time: | 1H 20M |
| Sphere Temperature (°C): | 25.2 |

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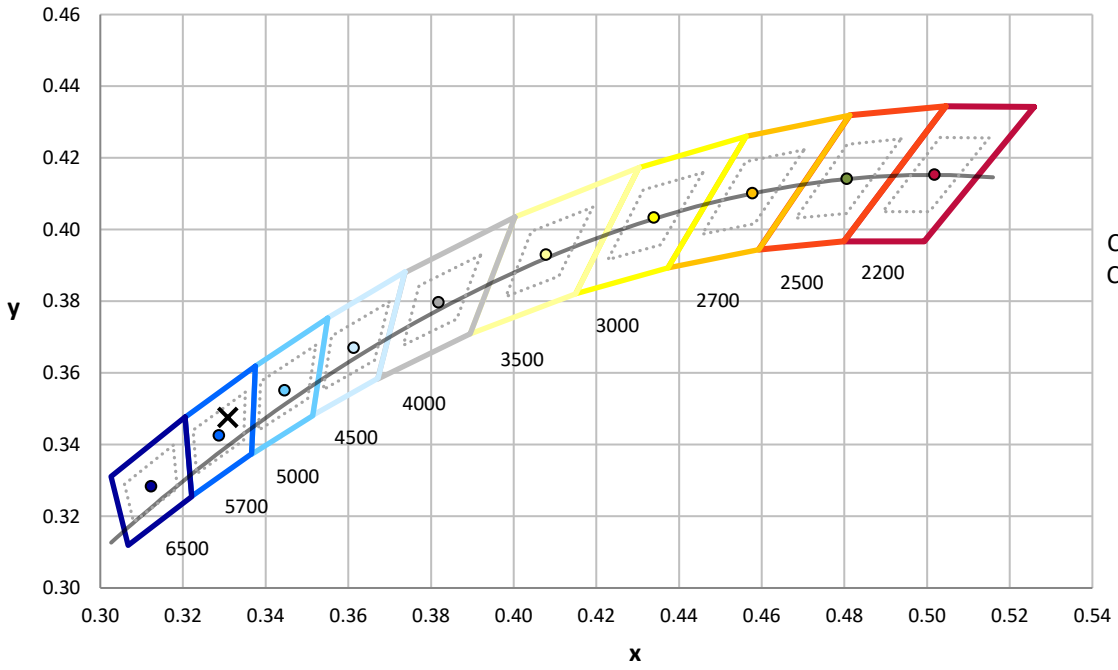
| Measurement and Test Equipment | | | |
|---|---|---|---|
| Instrument | Identification Number | Calibration Date | Calibration Due Date |
| Photometer | IN0058 | 6/18/2024 | 12/18/2024 |
| Power Meter | INXT2011004 | 2/8/2024 | 2/8/2025 |
| AC Power Source | IN0063 | 10/24/2023 | 10/24/2024 |
| DC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

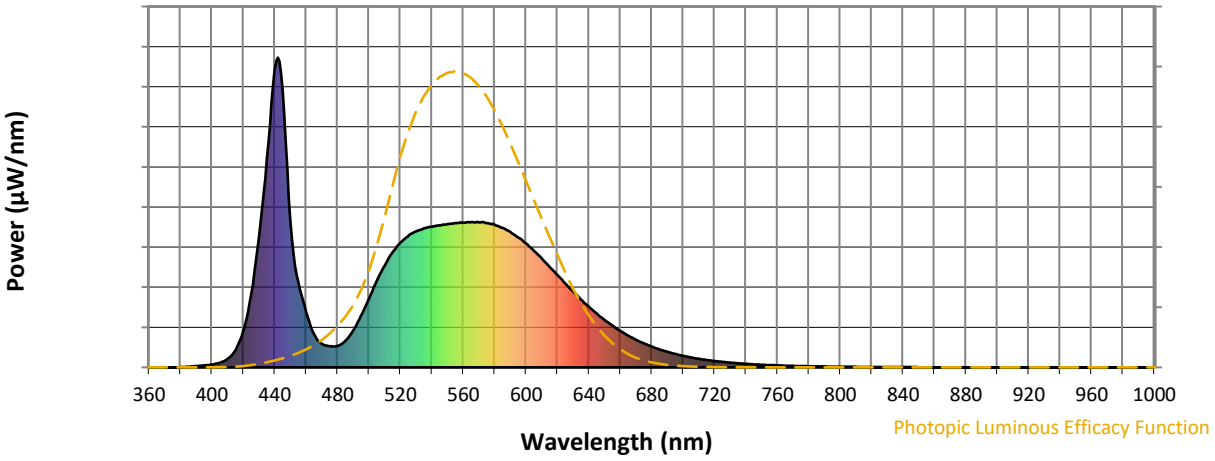



CCT = 5571K
CIE x = 0.3308
CIE y = 0.3476
Duv = 0.0041

Point lies inside the ANSI 5700K 4-step quadrangle

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## Photopic Flux vs. Wavelength

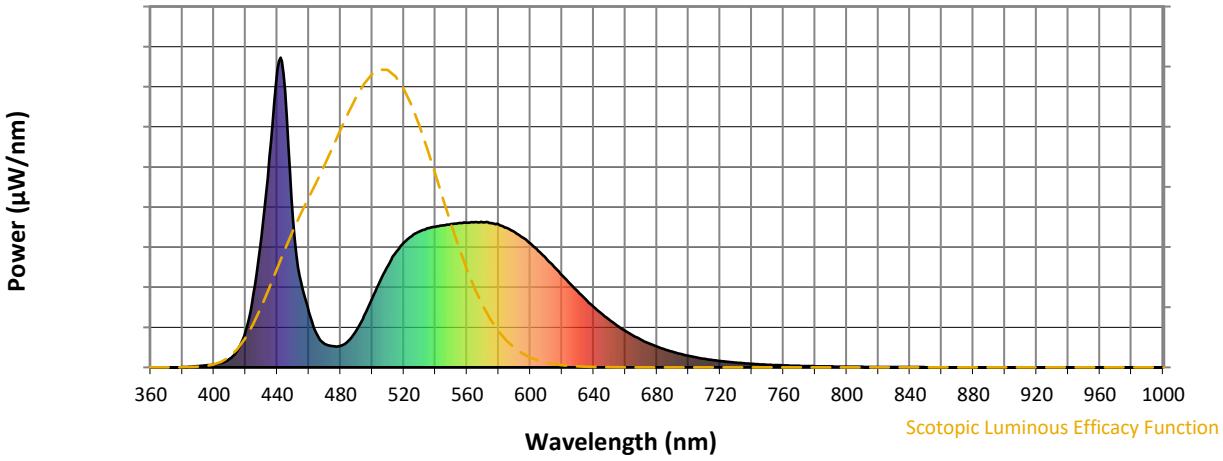



## Photopic Lumens: NR

| 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 | 120 | NR | 620 | 298 | NR | 750 | 9 | NR | 880 | 0 | NR |
| 365 | 0 | NR | 495 | 167 | NR | 625 | 270 | NR | 755 | 7 | NR | 885 | 0 | NR |
| 370 | 0 | NR | 500 | 222 | NR | 630 | 245 | NR | 760 | 6 | NR | 890 | 0 | NR |
| 375 | 0 | NR | 505 | 279 | NR | 635 | 219 | NR | 765 | 6 | NR | 895 | 0 | NR |
| 380 | 1 | NR | 510 | 329 | NR | 640 | 196 | NR | 770 | 5 | NR | 900 | 0 | NR |
| 385 | 2 | NR | 515 | 371 | NR | 645 | 173 | NR | 775 | 4 | NR | 905 | 0 | NR |
| 390 | 4 | NR | 520 | 403 | NR | 650 | 153 | NR | 780 | 4 | NR | 910 | 0 | NR |
| 395 | 6 | NR | 525 | 424 | NR | 655 | 135 | NR | 785 | 3 | NR | 915 | 0 | NR |
| 400 | 9 | NR | 530 | 439 | NR | 660 | 117 | NR | 790 | 3 | NR | 920 | 0 | NR |
| 405 | 14 | NR | 535 | 449 | NR | 665 | 103 | NR | 795 | 2 | NR | 925 | 0 | NR |
| 410 | 28 | NR | 540 | 454 | NR | 670 | 89 | NR | 800 | 2 | NR | 930 | 0 | NR |
| 415 | 55 | NR | 545 | 459 | NR | 675 | 77 | NR | 805 | 2 | NR | 935 | 0 | NR |
| 420 | 118 | NR | 550 | 463 | NR | 680 | 67 | NR | 810 | 2 | NR | 940 | 0 | NR |
| 425 | 237 | NR | 555 | 466 | NR | 685 | 58 | NR | 815 | 1 | NR | 945 | 0 | NR |
| 430 | 420 | NR | 560 | 467 | NR | 690 | 50 | NR | 820 | 1 | NR | 950 | 0 | NR |
| 435 | 677 | NR | 565 | 469 | NR | 695 | 43 | NR | 825 | 1 | NR | 955 | 0 | NR |
| 440 | 962 | NR | 570 | 469 | NR | 700 | 37 | NR | 830 | 1 | NR | 960 | 0 | NR |
| 445 | 894 | NR | 575 | 466 | NR | 705 | 32 | NR | 835 | 1 | NR | 965 | 0 | NR |
| 450 | 472 | NR | 580 | 461 | NR | 710 | 28 | NR | 840 | 1 | NR | 970 | 0 | NR |
| 455 | 275 | NR | 585 | 450 | NR | 715 | 24 | NR | 845 | 1 | NR | 975 | 0 | NR |
| 460 | 180 | NR | 590 | 437 | NR | 720 | 21 | NR | 850 | 1 | NR | 980 | 0 | NR |
| 465 | 107 | NR | 595 | 420 | NR | 725 | 18 | NR | 855 | 0 | NR | 985 | 0 | NR |
| 470 | 76 | NR | 600 | 400 | NR | 730 | 15 | NR | 860 | 0 | NR | 990 | 0 | NR |
| 475 | 68 | NR | 605 | 376 | NR | 735 | 13 | NR | 865 | 0 | NR | 995 | 0 | NR |
| 480 | 69 | NR | 610 | 352 | NR | 740 | 11 | NR | 870 | 0 | NR | 1000 | 0 | NR |
| 485 | 86 | NR | 615 | 325 | NR | 745 | 10 | NR | 875 | 0 | NR | | | |

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## Scotopic Flux vs. Wavelength

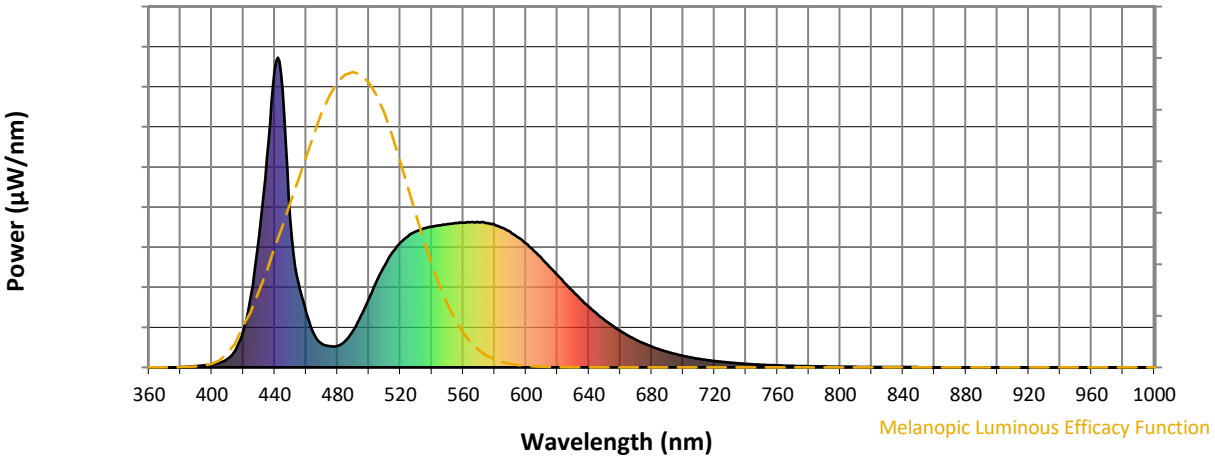



**Scotopic Lumens: NR** **S/P: 1.84**

| 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 | 120 | NR | 620 | 298 | NR | 750 | 9 | NR | 880 | 0 | NR |
| 365 | 0 | NR | 495 | 167 | NR | 625 | 270 | NR | 755 | 7 | NR | 885 | 0 | NR |
| 370 | 0 | NR | 500 | 222 | NR | 630 | 245 | NR | 760 | 6 | NR | 890 | 0 | NR |
| 375 | 0 | NR | 505 | 279 | NR | 635 | 219 | NR | 765 | 6 | NR | 895 | 0 | NR |
| 380 | 1 | NR | 510 | 329 | NR | 640 | 196 | NR | 770 | 5 | NR | 900 | 0 | NR |
| 385 | 2 | NR | 515 | 371 | NR | 645 | 173 | NR | 775 | 4 | NR | 905 | 0 | NR |
| 390 | 4 | NR | 520 | 403 | NR | 650 | 153 | NR | 780 | 4 | NR | 910 | 0 | NR |
| 395 | 6 | NR | 525 | 424 | NR | 655 | 135 | NR | 785 | 3 | NR | 915 | 0 | NR |
| 400 | 9 | NR | 530 | 439 | NR | 660 | 117 | NR | 790 | 3 | NR | 920 | 0 | NR |
| 405 | 14 | NR | 535 | 449 | NR | 665 | 103 | NR | 795 | 2 | NR | 925 | 0 | NR |
| 410 | 28 | NR | 540 | 454 | NR | 670 | 89 | NR | 800 | 2 | NR | 930 | 0 | NR |
| 415 | 55 | NR | 545 | 459 | NR | 675 | 77 | NR | 805 | 2 | NR | 935 | 0 | NR |
| 420 | 118 | NR | 550 | 463 | NR | 680 | 67 | NR | 810 | 2 | NR | 940 | 0 | NR |
| 425 | 237 | NR | 555 | 466 | NR | 685 | 58 | NR | 815 | 1 | NR | 945 | 0 | NR |
| 430 | 420 | NR | 560 | 467 | NR | 690 | 50 | NR | 820 | 1 | NR | 950 | 0 | NR |
| 435 | 677 | NR | 565 | 469 | NR | 695 | 43 | NR | 825 | 1 | NR | 955 | 0 | NR |
| 440 | 962 | NR | 570 | 469 | NR | 700 | 37 | NR | 830 | 1 | NR | 960 | 0 | NR |
| 445 | 894 | NR | 575 | 466 | NR | 705 | 32 | NR | 835 | 1 | NR | 965 | 0 | NR |
| 450 | 472 | NR | 580 | 461 | NR | 710 | 28 | NR | 840 | 1 | NR | 970 | 0 | NR |
| 455 | 275 | NR | 585 | 450 | NR | 715 | 24 | NR | 845 | 1 | NR | 975 | 0 | NR |
| 460 | 180 | NR | 590 | 437 | NR | 720 | 21 | NR | 850 | 1 | NR | 980 | 0 | NR |
| 465 | 107 | NR | 595 | 420 | NR | 725 | 18 | NR | 855 | 0 | NR | 985 | 0 | NR |
| 470 | 76 | NR | 600 | 400 | NR | 730 | 15 | NR | 860 | 0 | NR | 990 | 0 | NR |
| 475 | 68 | NR | 605 | 376 | NR | 735 | 13 | NR | 865 | 0 | NR | 995 | 0 | NR |
| 480 | 69 | NR | 610 | 352 | NR | 740 | 11 | NR | 870 | 0 | NR | 1000 | 0 | NR |
| 485 | 86 | NR | 615 | 325 | NR | 745 | 10 | NR | 875 | 0 | NR | | | |

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## Melanopic Flux vs. Wavelength




**Melanopic Lumens: NR** **M/P: 3.71**

| 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 | 120 | NR | 620 | 298 | NR | 750 | 9 | NR | 880 | 0 | NR |
| 365 | 0 | NR | 495 | 167 | NR | 625 | 270 | NR | 755 | 7 | NR | 885 | 0 | NR |
| 370 | 0 | NR | 500 | 222 | NR | 630 | 245 | NR | 760 | 6 | NR | 890 | 0 | NR |
| 375 | 0 | NR | 505 | 279 | NR | 635 | 219 | NR | 765 | 6 | NR | 895 | 0 | NR |
| 380 | 1 | NR | 510 | 329 | NR | 640 | 196 | NR | 770 | 5 | NR | 900 | 0 | NR |
| 385 | 2 | NR | 515 | 371 | NR | 645 | 173 | NR | 775 | 4 | NR | 905 | 0 | NR |
| 390 | 4 | NR | 520 | 403 | NR | 650 | 153 | NR | 780 | 4 | NR | 910 | 0 | NR |
| 395 | 6 | NR | 525 | 424 | NR | 655 | 135 | NR | 785 | 3 | NR | 915 | 0 | NR |
| 400 | 9 | NR | 530 | 439 | NR | 660 | 117 | NR | 790 | 3 | NR | 920 | 0 | NR |
| 405 | 14 | NR | 535 | 449 | NR | 665 | 103 | NR | 795 | 2 | NR | 925 | 0 | NR |
| 410 | 28 | NR | 540 | 454 | NR | 670 | 89 | NR | 800 | 2 | NR | 930 | 0 | NR |
| 415 | 55 | NR | 545 | 459 | NR | 675 | 77 | NR | 805 | 2 | NR | 935 | 0 | NR |
| 420 | 118 | NR | 550 | 463 | NR | 680 | 67 | NR | 810 | 2 | NR | 940 | 0 | NR |
| 425 | 237 | NR | 555 | 466 | NR | 685 | 58 | NR | 815 | 1 | NR | 945 | 0 | NR |
| 430 | 420 | NR | 560 | 467 | NR | 690 | 50 | NR | 820 | 1 | NR | 950 | 0 | NR |
| 435 | 677 | NR | 565 | 469 | NR | 695 | 43 | NR | 825 | 1 | NR | 955 | 0 | NR |
| 440 | 962 | NR | 570 | 469 | NR | 700 | 37 | NR | 830 | 1 | NR | 960 | 0 | NR |
| 445 | 894 | NR | 575 | 466 | NR | 705 | 32 | NR | 835 | 1 | NR | 965 | 0 | NR |
| 450 | 472 | NR | 580 | 461 | NR | 710 | 28 | NR | 840 | 1 | NR | 970 | 0 | NR |
| 455 | 275 | NR | 585 | 450 | NR | 715 | 24 | NR | 845 | 1 | NR | 975 | 0 | NR |
| 460 | 180 | NR | 590 | 437 | NR | 720 | 21 | NR | 850 | 1 | NR | 980 | 0 | NR |
| 465 | 107 | NR | 595 | 420 | NR | 725 | 18 | NR | 855 | 0 | NR | 985 | 0 | NR |
| 470 | 76 | NR | 600 | 400 | NR | 730 | 15 | NR | 860 | 0 | NR | 990 | 0 | NR |
| 475 | 68 | NR | 605 | 376 | NR | 735 | 13 | NR | 865 | 0 | NR | 995 | 0 | NR |
| 480 | 69 | NR | 610 | 352 | NR | 740 | 11 | NR | 870 | 0 | NR | 1000 | 0 | NR |
| 485 | 86 | NR | 615 | 325 | NR | 745 | 10 | NR | 875 | 0 | NR | | | |

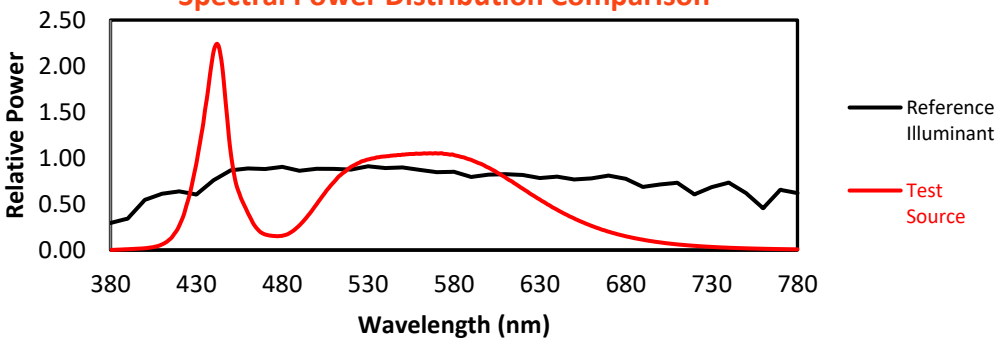
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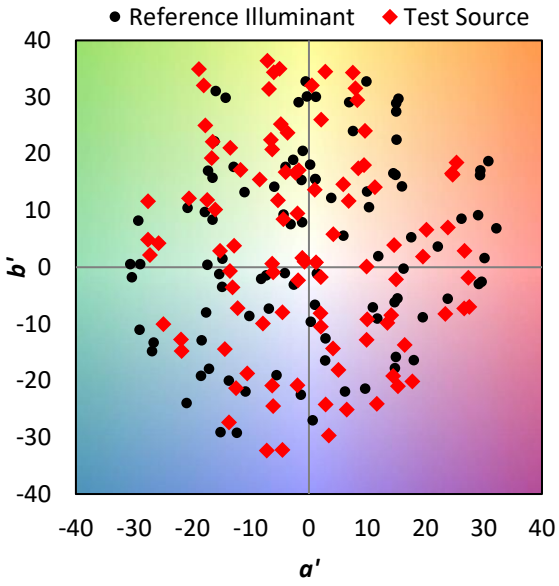
## Summary

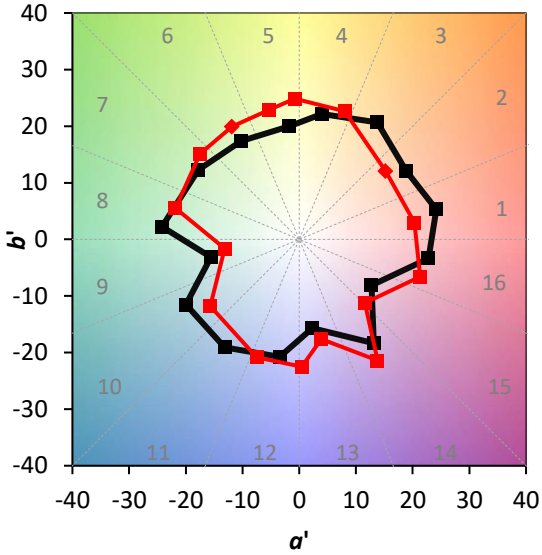
$R_f$ = 70.4
$R_g$ = 97.1
CIE $R_a$ = 69.9
$R_9$ = -35.4

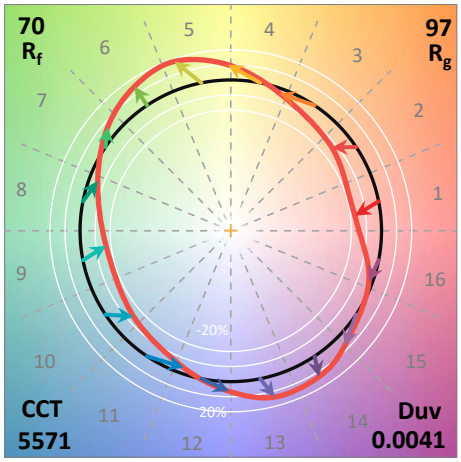
## Spectral Power Distribution Comparison

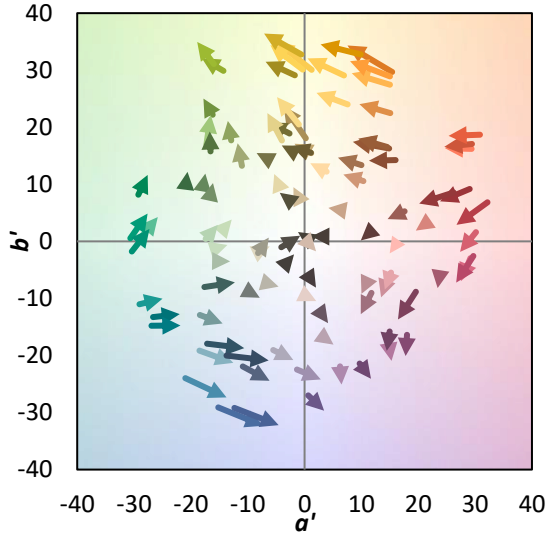



## Color Vector Graphics



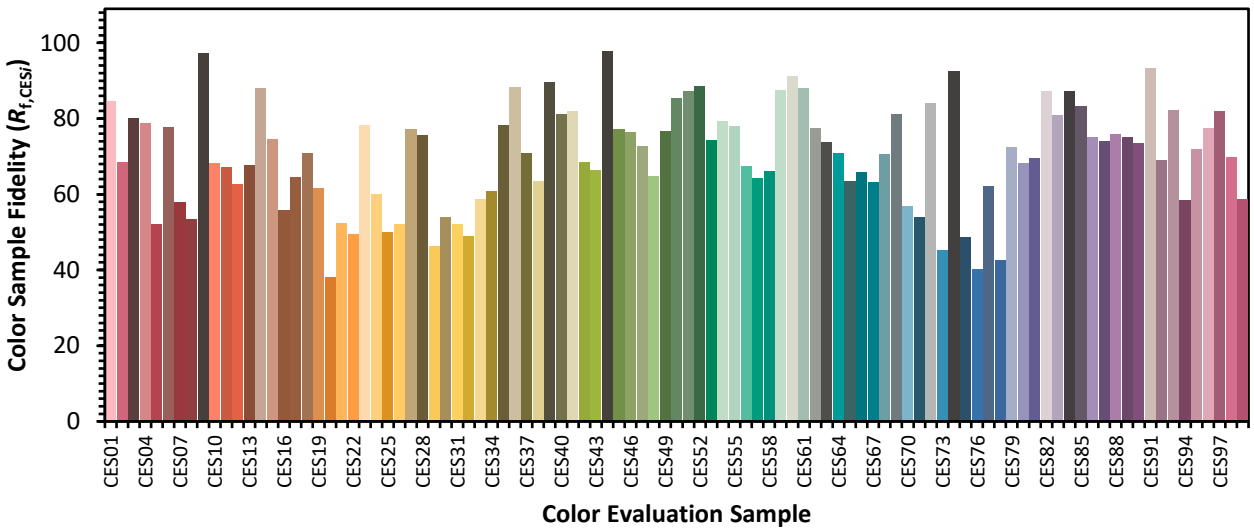



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# TM-30-18

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

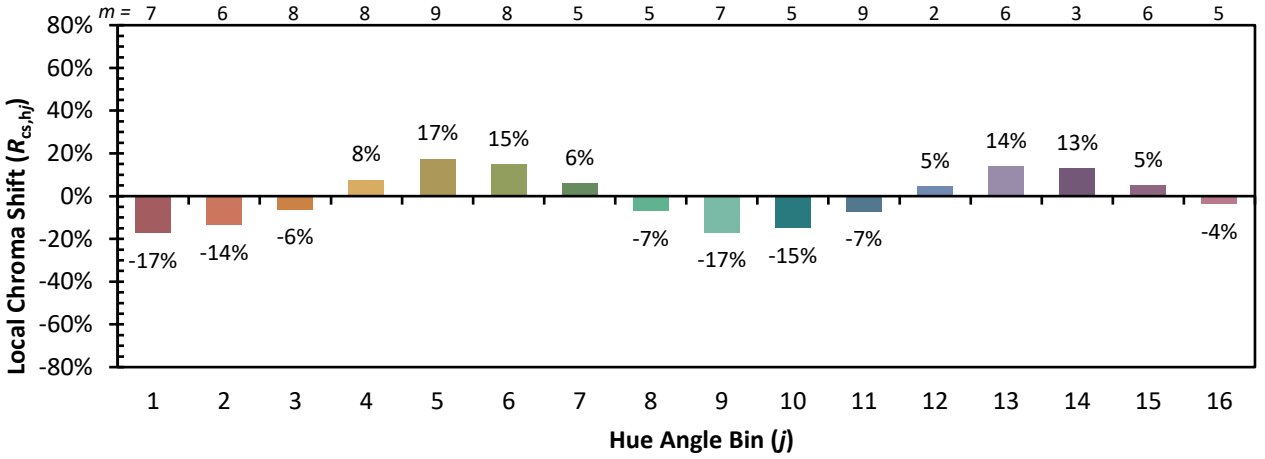
| | | | |
|---|---|---|---|
| CES01 = 85 | CES26 = 52 | CES51 = 87 | CES76 = 40 |
| CES02 = 59 | CES27 = 77 | CES52 = 88 | CES77 = 62 |
| CES03 = 30 | CES28 = 76 | CES53 = 74 | CES78 = 43 |
| CES04 = 68 | CES29 = 46 | CES54 = 79 | CES79 = 72 |
| CES05 = 45 | CES30 = 54 | CES55 = 78 | CES80 = 68 |
| CES06 = 49 | CES31 = 52 | CES56 = 67 | CES81 = 70 |
| CES07 = 38 | CES32 = 49 | CES57 = 64 | CES82 = 87 |
| CES08 = 37 | CES33 = 59 | CES58 = 66 | CES83 = 81 |
| CES09 = 29 | CES34 = 61 | CES59 = 87 | CES84 = 87 |
| CES10 = 72 | CES35 = 78 | CES60 = 91 | CES85 = 83 |
| CES11 = 55 | CES36 = 88 | CES61 = 88 | CES86 = 75 |
| CES12 = 61 | CES37 = 71 | CES62 = 77 | CES87 = 74 |
| CES13 = 41 | CES38 = 64 | CES63 = 74 | CES88 = 76 |
| CES14 = 74 | CES39 = 90 | CES64 = 71 | CES89 = 75 |
| CES15 = 70 | CES40 = 81 | CES65 = 63 | CES90 = 73 |
| CES16 = 46 | CES41 = 82 | CES66 = 66 | CES91 = 93 |
| CES17 = 48 | CES42 = 69 | CES67 = 63 | CES92 = 69 |
| CES18 = 55 | CES43 = 67 | CES68 = 71 | CES93 = 82 |
| CES19 = 70 | CES44 = 98 | CES69 = 81 | CES94 = 58 |
| CES20 = 63 | CES45 = 77 | CES70 = 57 | CES95 = 72 |
| CES21 = 85 | CES46 = 76 | CES71 = 54 | CES96 = 78 |
| CES22 = 77 | CES47 = 73 | CES72 = 84 | CES97 = 82 |
| CES23 = 91 | CES48 = 65 | CES73 = 45 | CES98 = 70 |
| CES24 = 90 | CES49 = 77 | CES74 = 92 | CES99 = 59 |
| CES25 = 71 | CES50 = 85 | CES75 = 49 | |

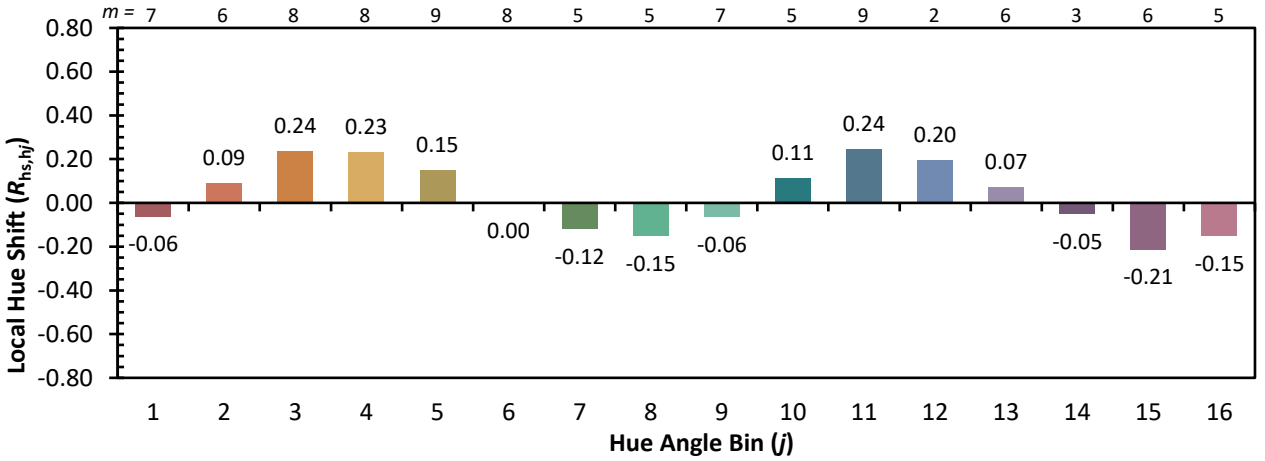


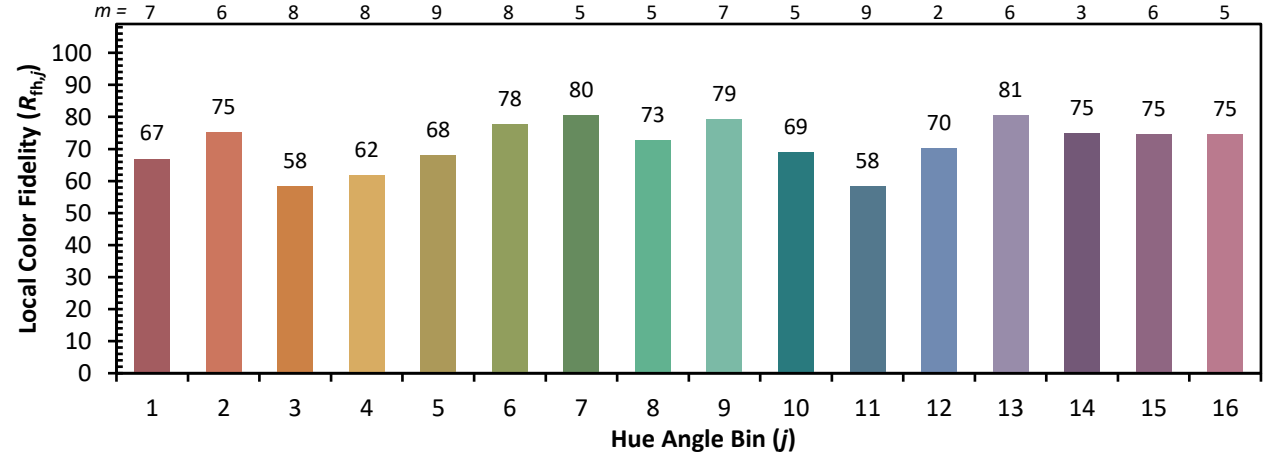
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## Color Rendition by Hue-Angle Bin



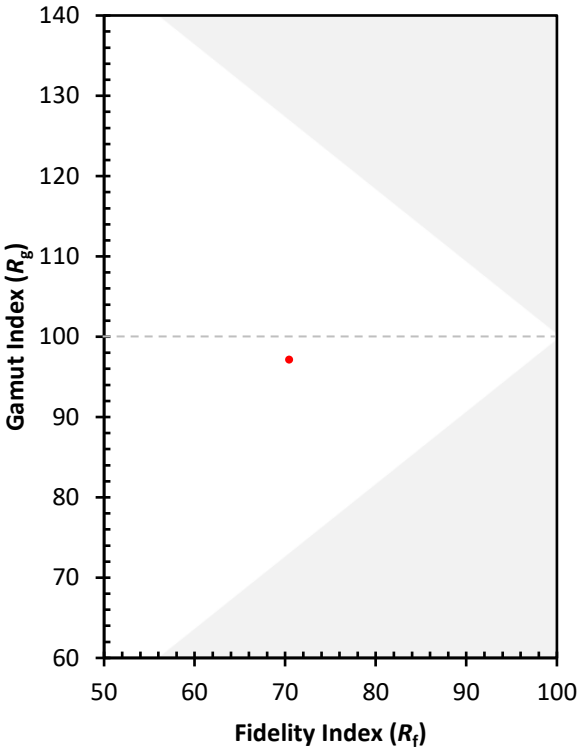



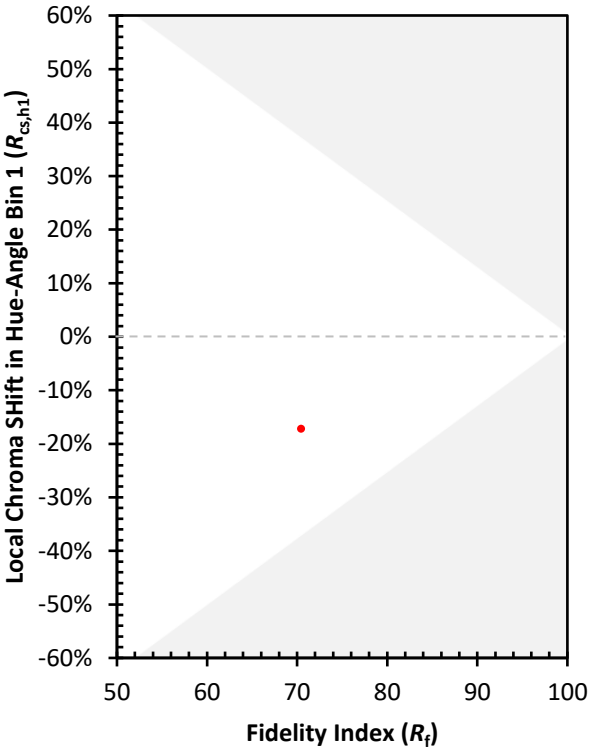



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## Measure Comparisons




(END OF REPORT)