Signify Classified - Internal

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: P1366153

Luminaire Tested: **GSS-SB5C-735-U-T2R-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: | P1366153 |
| Test Lab: | INNOVATION CENTER(G1) |
| Issue Date: | 02/18/2026 |
| Manufacturer: | COOPER LIGHTING SOLUTIONS (FORMERLY EATON) |
| Product Line: | McGRAW-EDISON |
| Catalog Number: | GSS-SB5C-735-U-T2R-HSS |
| Description: | GALLEON II SLIM SITE HIGH DENSITY LED ARRAYS 5SQUARE 252W 70CRI 3500K FIXTURE w/ TYPE II ROADWAY DISTRIBUTION OPTIC AND HOUSE SIDE SHIELD |
| Light Source: | (130) 3500K CCT, 70 CRI LEDS |
| Ballast/Driver: | ELECTRONIC DRIVER |

**Summary**

| | |
|---|---|
| Lumens per Lamp: | N/A |
| Luminaire Lumens: | 30458.4 lumens |
| Efficiency: | N/A |
| Efficacy: | 120.9 lumens/watt |
| Luminous Opening: | Rectangular (W 1.5' x L: 1' x H: 0') |
| IES Classification: | Type II - Short |
| BUG Rating: | B2 - U0 - G4 |

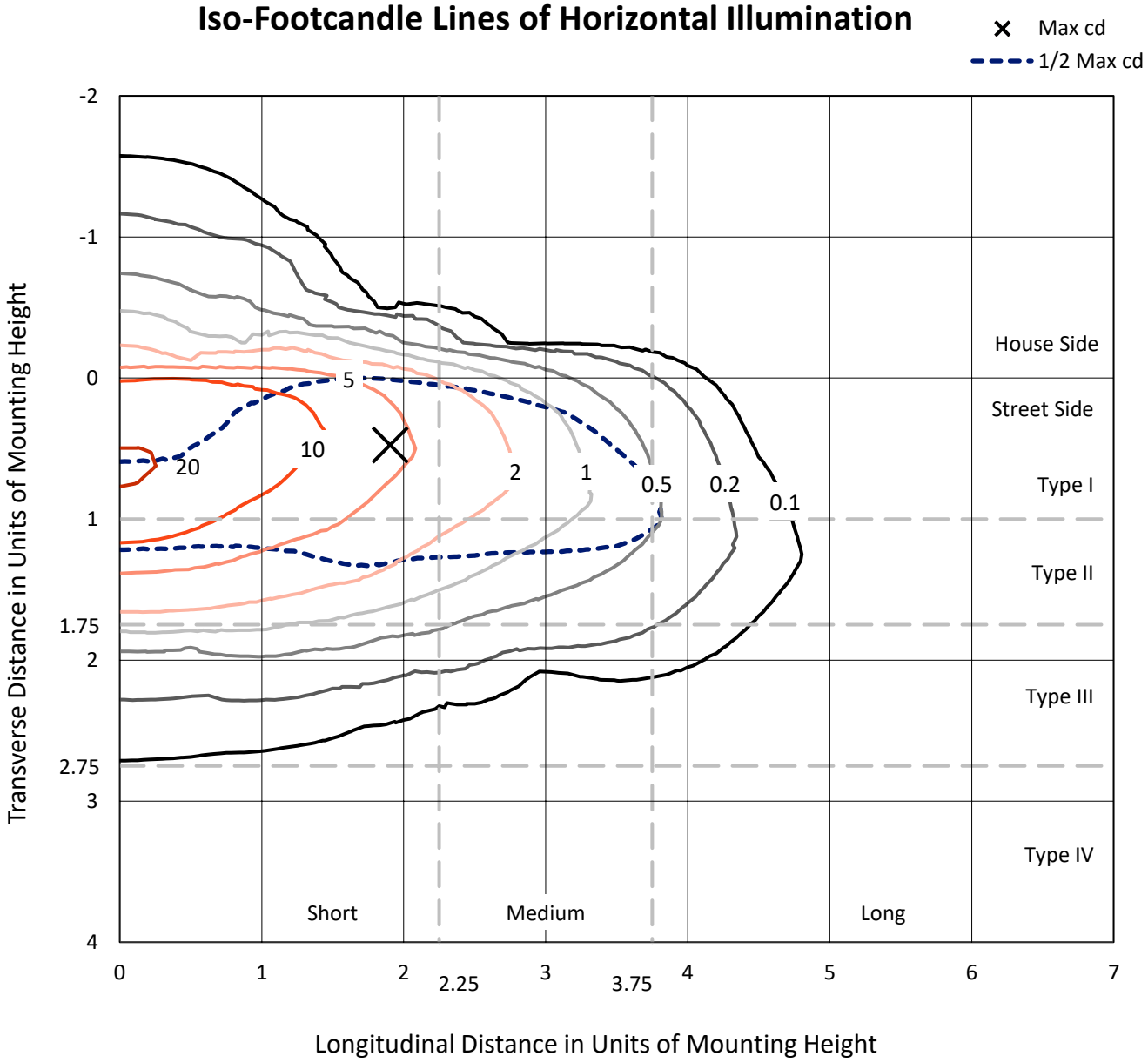
| | |
|---|---|
| Input Watts (W): | 252 |
| Input Voltage (V): | 120 |
| Input Current (Ain): | NR |
| Voltage Rise (V): | NR |
| Power Factor: | 0.98 |
| Total Harmonic Distortion (THDi): | 7.9% |
| Frequency (hertz): | 60 |
| Stabilization Time: | NR |
| Operation Time: | NR |
| Ambient Temperature (°C): | NR |
| Test Distance: | 28.75 FT |

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REPORT NUMBER: P1366153
CATALOG NUMBER: GSS-SB5C-735-U-T2R-HSS

## Iso-Footcandle Lines of Horizontal Illumination



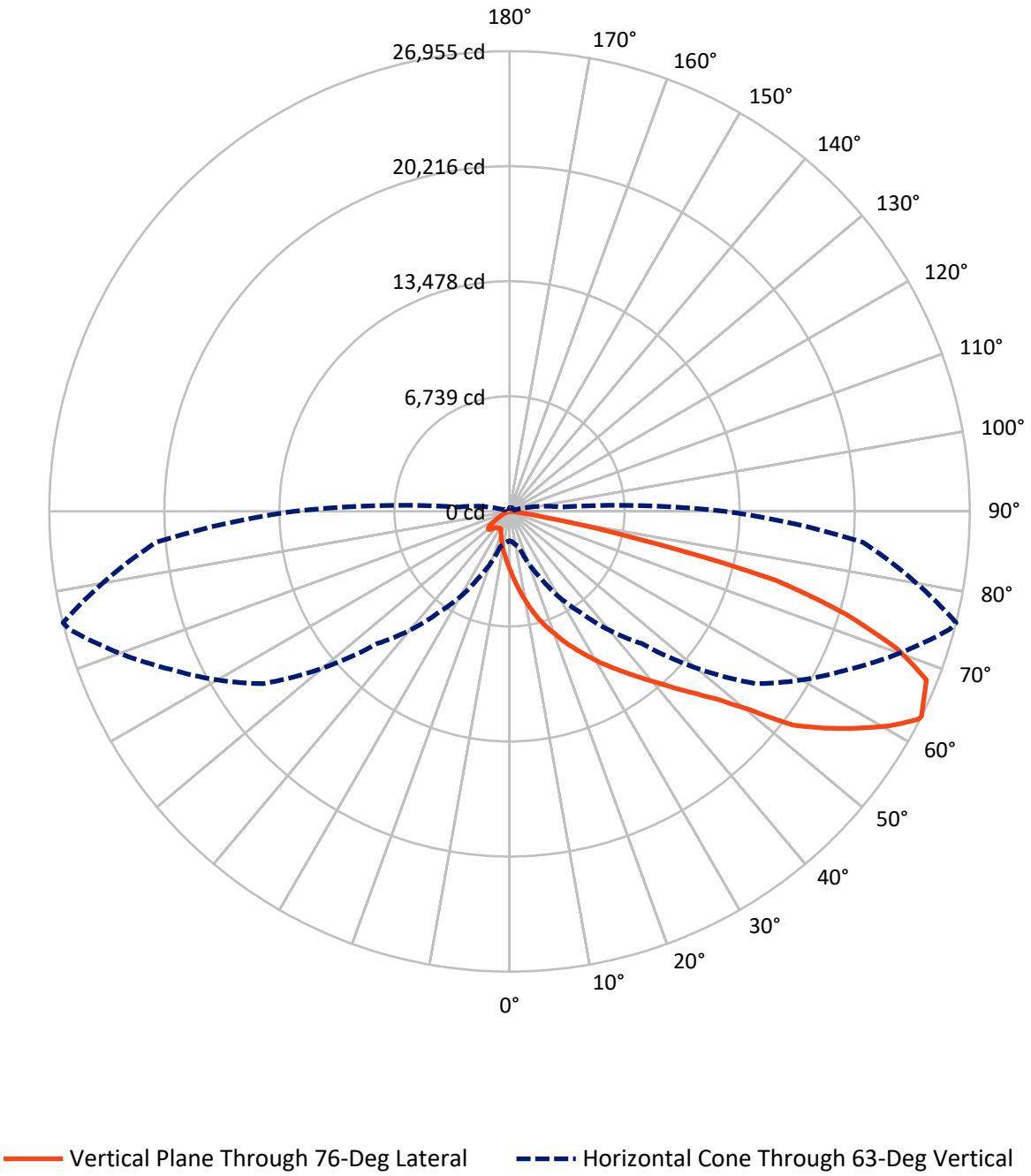

Based on 20 foot mounting height. Maximum calculated value = 21.5 fc
Type II - Short - N/A

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## Luminous Intensity Polar Plot



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Scaled Data Report

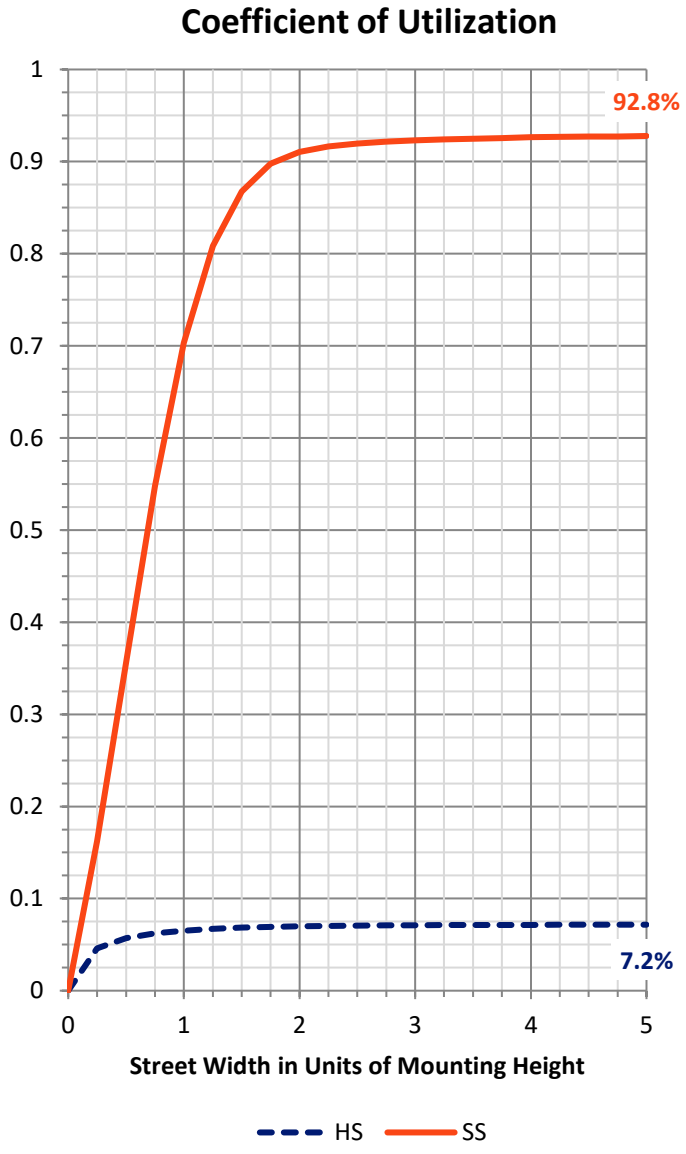
REPORT NUMBER: P1366153
CATALOG NUMBER: GSS-SB5C-735-U-T2R-HSS

**FLUX DISTRIBUTION:**

| | | Downward | Upward | Total |
|---|---|---|---|---|
| **House Side** | Lumens | 2194.8 | 0.0 | 2194.8 |
| | % Fixture | 7.2 | 0.0 | 7.2 |
| **Street Side** | Lumens | 28263.6 | 0.0 | 28263.6 |
| | % Fixture | 92.8 | 0.0 | 92.8 |
| **Total** | Lumens | 30458.4 | 0.0 | 30458.4 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

**ZONAL LUMENS:**

| Zone | Lumens | % Fixture |
|---|---|---|
| 0°-10° | 355.3 | 1.2 |
| 10°-20° | 1271.0 | 4.2 |
| 20°-30° | 2478.1 | 8.1 |
| 30°-40° | 4352.6 | 14.3 |
| 40°-50° | 6368.4 | 20.9 |
| 50°-60° | 7389.8 | 24.3 |
| 60°-70° | 5824.1 | 19.1 |
| 70°-80° | 2314.8 | 7.6 |
| 80°-90° | 104.4 | 0.3 |
| 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° | 30458.4 | 100.0 |
| 0°-180° | 30458.4 | 100.0 |



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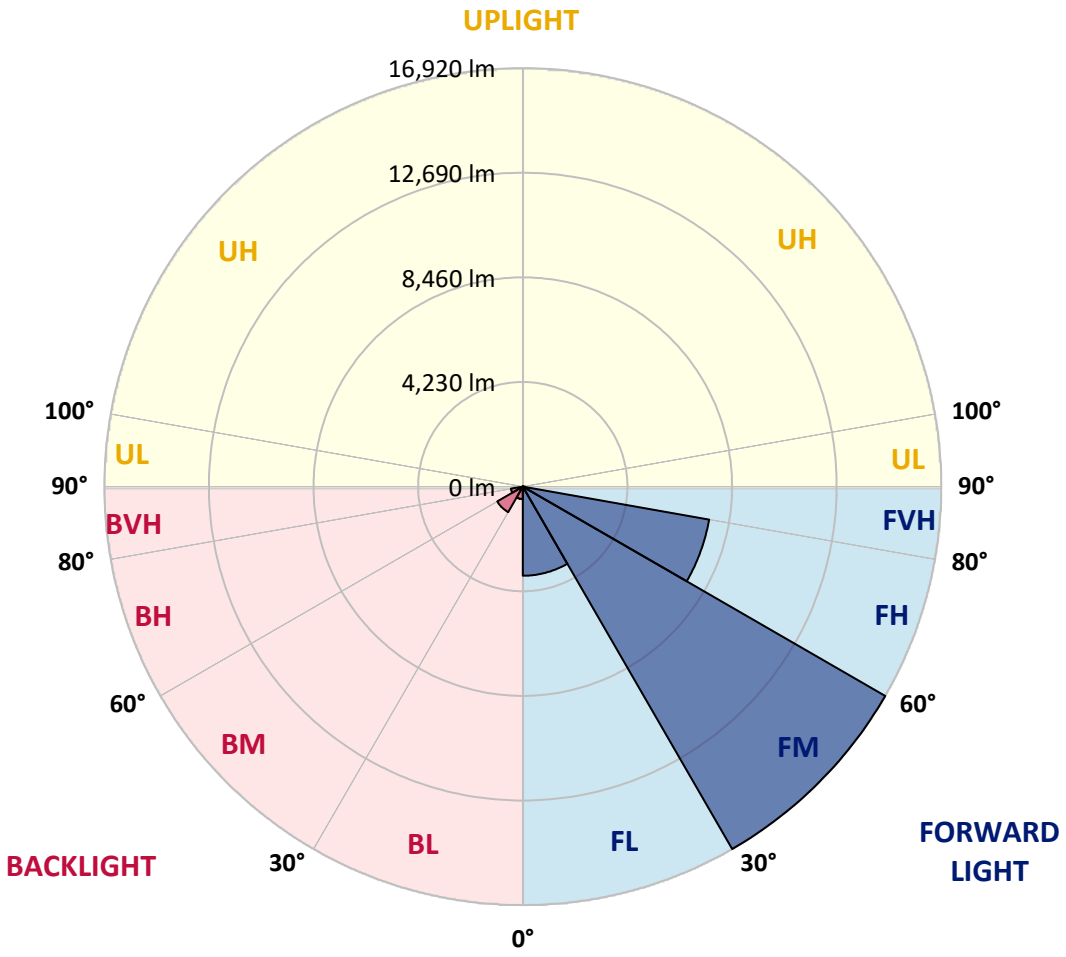
Scaled Data Report

REPORT NUMBER: P1366153
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## LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit B | U | G |
|---|---|---|---|---|---|---|
| FL | (0°-30°) | 3601.8 | 11.8 | | | |
| FM | (30°-60°) | 16920.1 | 55.6 | | | |
| FH | (60°-80°) | 7650.4 | 25.1 | | | G4/12000 |
| FVH | (80°-90°) | 91.3 | 0.3 | | | G1/100 |
| BL | (0°-30°) | 502.6 | 1.7 | B2/1000 | | |
| BM | (30°-60°) | 1190.6 | 3.9 | B2/2500 | | |
| BH | (60°-80°) | 488.4 | 1.6 | B1/500 | | G1/500 |
| BVH | (80°-90°) | 13.1 | 0.0 | | | 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 II Short



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**CANDELA DISTRIBUTION (FULL):**

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 76° | 85° |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0° | 3405.0 | 3405.0 | 3405.0 | 3405.0 | 3405.0 | 3405.0 | 3405.0 | 3405.0 | 3405.0 | *3405.0* | 3405.0 |
| 2.5° | 4881.1 | 4856.0 | 4856.0 | 4763.7 | 4629.5 | 4486.9 | 4285.7 | 4059.2 | 3832.8 | *3824.4* | 3572.8 |
| 5° | 6055.3 | 6021.7 | 5979.8 | 5870.8 | 5694.6 | 5459.8 | 5191.4 | 4797.2 | 4327.6 | *4310.8* | 3816.0 |
| 7.5° | 6818.5 | 6826.9 | 6768.1 | 6717.8 | 6600.4 | 6348.8 | 6004.9 | 5518.5 | 4906.3 | *4830.8* | 4134.7 |
| 10° | 7506.2 | 7464.2 | 7455.9 | 7447.5 | 7363.6 | 7120.4 | 6793.3 | 6223.0 | 5476.6 | *5401.1* | 4486.9 |
| 12.5° | 7933.9 | 7917.1 | 7975.8 | 8026.2 | 8009.4 | 7908.7 | 7531.3 | 6961.0 | 6080.4 | *5988.2* | 4839.2 |
| 15° | 8068.1 | 8084.9 | 8227.4 | 8386.8 | 8521.0 | 8554.5 | 8235.8 | 7648.8 | 6650.7 | *6592.0* | 5241.7 |
| 17.5° | 7967.5 | 7992.6 | 8193.9 | 8479.1 | 8806.1 | 9057.7 | 8915.2 | 8294.5 | 7263.0 | *7153.9* | 5602.4 |
| 20° | 8009.4 | 8034.6 | 8219.1 | 8487.4 | 8915.2 | 9342.9 | 9468.7 | 8982.3 | 7808.1 | *7690.7* | 6021.7 |
| 22.5° | 8713.9 | 8747.4 | 8789.4 | 8789.4 | 9082.9 | 9544.2 | 9829.3 | 9628.0 | 8428.7 | *8311.3* | 6483.0 |
| 25° | 10257.1 | 10231.9 | 10005.4 | 9636.4 | 9644.8 | 9846.1 | 10156.4 | 10164.8 | 9057.7 | *8915.2* | 6902.3 |
| 27.5° | 11791.8 | 11858.9 | 11565.4 | 11020.3 | 10592.5 | 10399.6 | 10533.8 | 10642.8 | 9661.6 | *9519.0* | 7372.0 |
| 30° | 13209.2 | 13167.3 | 12857.0 | 12295.0 | 11758.3 | 11313.8 | 11028.6 | 11087.3 | 10307.4 | *10198.3* | 7841.7 |
| 32.5° | 14324.6 | 14341.4 | 13989.2 | 13368.6 | 12781.5 | 12395.7 | 11808.6 | 11565.4 | 10936.4 | *10852.5* | 8344.9 |
| 35° | 15264.0 | 15213.6 | 14785.9 | 14182.1 | 13636.9 | 13385.3 | 12764.7 | 12085.4 | 11657.6 | *11548.6* | 8873.2 |
| 37.5° | 16161.4 | 16127.8 | 15599.4 | 14794.3 | 14299.5 | 14182.1 | 13829.8 | 12773.1 | 12404.1 | *12320.2* | 9544.2 |
| 40° | 16765.2 | 16731.7 | 16278.8 | 15490.4 | 14895.0 | 14794.3 | 14777.5 | 13628.5 | 13209.2 | *13150.5* | 10231.9 |
| 42.5° | 16907.8 | 16865.8 | 16547.2 | 15960.1 | 15431.7 | 15322.7 | 15683.3 | 14559.5 | 14215.6 | *14115.0* | 11037.0 |
| 45° | 16622.6 | 16664.6 | 16446.5 | 16094.3 | 15842.7 | 15716.9 | 16429.7 | 15574.3 | 15247.2 | *15188.5* | 11900.9 |
| 47.5° | 15800.7 | 15817.5 | 15800.7 | 15909.8 | 15960.1 | 16186.5 | 17117.5 | 16673.0 | 16446.5 | *16454.9* | 13007.9 |
| 50° | 14307.9 | 14282.7 | 14542.7 | 15146.6 | 15742.0 | 16522.0 | 18006.5 | 18107.1 | 18325.2 | *18274.8* | 14660.1 |
| 52.5° | 11389.3 | 11431.2 | 12555.0 | 13662.1 | 15113.0 | 16488.4 | 18677.4 | 19901.9 | 20790.9 | *20790.9* | 16446.5 |
| 55° | 9183.5 | 9217.1 | 9955.1 | 11825.4 | 13838.2 | 16127.8 | 19046.4 | 20824.4 | 22417.9 | *22409.5* | 17721.3 |
| 57.5° | 7506.2 | 7564.9 | 8152.0 | 9628.0 | 11934.4 | 15087.8 | 19197.4 | 21545.7 | 23818.5 | *23969.5* | 19029.6 |
| 60° | 4201.8 | 4528.9 | 5694.6 | 7632.0 | 9829.3 | 13469.2 | 18962.5 | 22157.9 | 25344.9 | *25521.0* | 20363.1 |
| 62.5° | 1903.8 | 1945.7 | 2474.1 | 4713.4 | 7657.1 | 11406.0 | 17872.3 | 22007.0 | 26720.3 | *26854.5* | 20799.3 |
| 63° | *1727.7* | *1794.8* | *2147.0* | *4310.8* | *7221.0* | *10944.8* | *17595.5* | *21897.9* | *26695.2* | *26955.2* | *20765.7* |
| 65° | 1358.7 | 1400.6 | 1492.8 | 2784.4 | 4839.2 | 8982.3 | 15733.6 | 20103.2 | 26342.9 | *26653.2* | 20027.7 |
| 67.5° | 1115.4 | 1115.4 | 1190.9 | 1736.1 | 2675.4 | 6181.1 | 11666.0 | 17553.6 | 25973.9 | *26334.5* | 19088.3 |
| 70° | 947.7 | 947.7 | 998.0 | 1224.5 | 1593.5 | 2985.7 | 8395.2 | 15020.8 | 23776.6 | *24070.1* | 16614.2 |
| 72.5° | 687.7 | 721.3 | 796.7 | 956.1 | 1098.7 | 1685.7 | 4310.8 | 11531.8 | 20346.4 | *20606.4* | 13938.9 |
| 75° | 561.9 | 578.7 | 645.8 | 729.7 | 754.8 | 1014.8 | 1518.0 | 8588.1 | 16010.4 | *16111.0* | 9670.0 |
| 77.5° | 293.5 | 318.7 | 528.4 | 595.5 | 578.7 | 620.6 | 738.0 | 4679.8 | 7782.9 | *7254.6* | 3136.7 |
| 80° | 125.8 | 125.8 | 377.4 | 385.8 | 411.0 | 293.5 | 352.2 | 1073.5 | 2230.9 | *2079.9* | 637.4 |
| 82.5° | 33.5 | 41.9 | 301.9 | 268.4 | 276.8 | 134.2 | 151.0 | 343.9 | 570.3 | *536.8* | 184.5 |
| 85° | 16.8 | 25.2 | 75.5 | 67.1 | 83.9 | 50.3 | 67.1 | 134.2 | 100.6 | *100.6* | 75.5 |
| 87.5° | 0.0 | 0.0 | 8.4 | 8.4 | 8.4 | 16.8 | 25.2 | 41.9 | 50.3 | *50.3* | 50.3 |
| 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: P1366153
CATALOG NUMBER: GSS-SB5C-735-U-T2R-HSS

**CANDELA DISTRIBUTION (continued):**

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0° | 3405.0 | 3405.0 | 3405.0 | 3405.0 | 3405.0 | 3405.0 | 3405.0 | 3405.0 | 3405.0 | 3405.0 | 3405.0 |
| 2.5° | 3438.6 | 3296.0 | 3036.0 | 2801.2 | 2566.4 | 2348.3 | 2172.2 | 2088.3 | 1970.9 | 1987.7 | 1970.9 |
| 5° | 3530.8 | 3245.7 | 2700.5 | 2214.1 | 1853.5 | 1568.3 | 1383.8 | 1283.2 | 1199.3 | 1182.5 | 1199.3 |
| 7.5° | 3673.4 | 3228.9 | 2415.4 | 1769.6 | 1358.7 | 1174.2 | 1098.7 | 1065.1 | 1040.0 | 1031.6 | 1040.0 |
| 10° | 3857.9 | 3237.3 | 2155.4 | 1434.1 | 1149.0 | 1065.1 | 1014.8 | 981.3 | 956.1 | 956.1 | 947.7 |
| 12.5° | 4059.2 | 3245.7 | 1895.4 | 1216.1 | 1048.3 | 989.6 | 939.3 | 905.8 | 880.6 | 872.2 | 872.2 |
| 15° | 4252.1 | 3245.7 | 1677.4 | 1090.3 | 981.3 | 922.5 | 880.6 | 838.7 | 813.5 | 796.7 | 805.1 |
| 17.5° | 4445.0 | 3228.9 | 1467.7 | 1014.8 | 922.5 | 863.8 | 813.5 | 771.6 | 746.4 | 729.7 | 729.7 |
| 20° | 4663.1 | 3212.1 | 1283.2 | 947.7 | 863.8 | 805.1 | 746.4 | 712.9 | 687.7 | 670.9 | 670.9 |
| 22.5° | 4889.5 | 3178.6 | 1140.6 | 880.6 | 796.7 | 738.0 | 687.7 | 645.8 | 620.6 | 603.8 | 603.8 |
| 25° | 5107.6 | 3145.0 | 1014.8 | 821.9 | 746.4 | 679.3 | 629.0 | 587.1 | 553.5 | 545.1 | 545.1 |
| 27.5° | 5342.4 | 3103.1 | 922.5 | 763.2 | 687.7 | 629.0 | 570.3 | 528.4 | 503.2 | 494.8 | 494.8 |
| 30° | 5627.5 | 3128.3 | 889.0 | 704.5 | 637.4 | 578.7 | 528.4 | 486.4 | 461.3 | 461.3 | 461.3 |
| 32.5° | 5895.9 | 3145.0 | 930.9 | 679.3 | 587.1 | 528.4 | 478.0 | 444.5 | 427.7 | 427.7 | 427.7 |
| 35° | 6197.8 | 3178.6 | 972.9 | 704.5 | 553.5 | 486.4 | 444.5 | 419.3 | 394.2 | 394.2 | 394.2 |
| 37.5° | 6550.1 | 3187.0 | 1006.4 | 738.0 | 545.1 | 452.9 | 427.7 | 394.2 | 377.4 | 377.4 | 377.4 |
| 40° | 7153.9 | 3321.2 | 1006.4 | 763.2 | 545.1 | 419.3 | 385.8 | 360.6 | 343.9 | 343.9 | 343.9 |
| 42.5° | 7900.4 | 3740.5 | 989.6 | 771.6 | 553.5 | 411.0 | 360.6 | 343.9 | 327.1 | 327.1 | 327.1 |
| 45° | 8688.7 | 4226.9 | 1098.7 | 729.7 | 553.5 | 411.0 | 335.5 | 335.5 | 310.3 | 310.3 | 310.3 |
| 47.5° | 9611.3 | 4713.4 | 1207.7 | 662.6 | 561.9 | 411.0 | 327.1 | 301.9 | 293.5 | 293.5 | 293.5 |
| 50° | 10810.6 | 5032.1 | 1241.2 | 587.1 | 545.1 | 411.0 | 310.3 | 293.5 | 276.8 | 285.2 | 285.2 |
| 52.5° | 11741.5 | 5023.7 | 1199.3 | 511.6 | 511.6 | 402.6 | 293.5 | 285.2 | 276.8 | 276.8 | 276.8 |
| 55° | 12513.1 | 4889.5 | 981.3 | 436.1 | 452.9 | 343.9 | 285.2 | 285.2 | 268.4 | 268.4 | 268.4 |
| 57.5° | 13117.0 | 4470.2 | 704.5 | 369.0 | 377.4 | 285.2 | 276.8 | 276.8 | 268.4 | 260.0 | 260.0 |
| 60° | 13393.7 | 3790.8 | 486.4 | 318.7 | 310.3 | 260.0 | 260.0 | 260.0 | 251.6 | 243.2 | 243.2 |
| 62.5° | 12898.9 | 3103.1 | 352.2 | 276.8 | 251.6 | 234.8 | 243.2 | 243.2 | 226.4 | 209.7 | 201.3 |
| 63° | *12622.1* | *2960.5* | *335.5* | *268.4* | *243.2* | *234.8* | *243.2* | *243.2* | *226.4* | *201.3* | *192.9* |
| 65° | 11708.0 | 2390.2 | 293.5 | 243.2 | 218.1 | 209.7 | 226.4 | 218.1 | 192.9 | 151.0 | 151.0 |
| 67.5° | 10475.1 | 1585.1 | 251.6 | 218.1 | 192.9 | 184.5 | 192.9 | 192.9 | 167.7 | 134.2 | 125.8 |
| 70° | 8931.9 | 998.0 | 209.7 | 176.1 | 159.3 | 142.6 | 151.0 | 167.7 | 142.6 | 109.0 | 100.6 |
| 72.5° | 7330.1 | 696.1 | 167.7 | 142.6 | 125.8 | 100.6 | 125.8 | 142.6 | 117.4 | 83.9 | 83.9 |
| 75° | 4939.8 | 444.5 | 134.2 | 109.0 | 92.3 | 83.9 | 100.6 | 109.0 | 92.3 | 58.7 | 58.7 |
| 77.5° | 1559.9 | 226.4 | 109.0 | 83.9 | 67.1 | 58.7 | 67.1 | 75.5 | 50.3 | 33.5 | 33.5 |
| 80° | 343.9 | 134.2 | 75.5 | 58.7 | 50.3 | 41.9 | 41.9 | 25.2 | 16.8 | 16.8 | 8.4 |
| 82.5° | 125.8 | 83.9 | 58.7 | 41.9 | 33.5 | 25.2 | 16.8 | 16.8 | 8.4 | 0.0 | 0.0 |
| 85° | 67.1 | 50.3 | 33.5 | 25.2 | 25.2 | 16.8 | 16.8 | 8.4 | 0.0 | 0.0 | 0.0 |
| 87.5° | 41.9 | 33.5 | 25.2 | 25.2 | 16.8 | 16.8 | 8.4 | 8.4 | 0.0 | 0.0 | 0.0 |
| 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

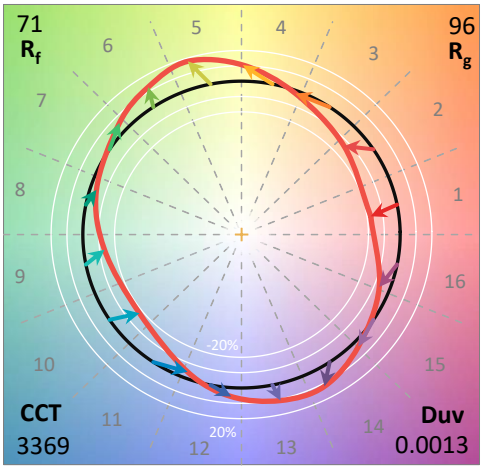
## Test Information

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

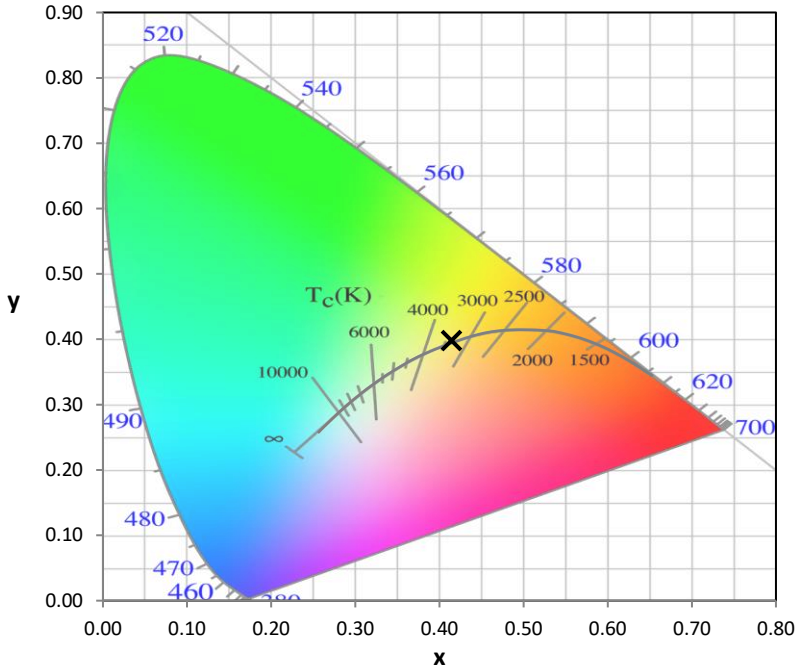
| | |
|---|---|
| Stabilization Time: | 21M |
| Operation Time: | 1H 21M |
| Sphere Temperature (°C): | 25.2 |

REPORT NUMBER: SP1-2407-184-5

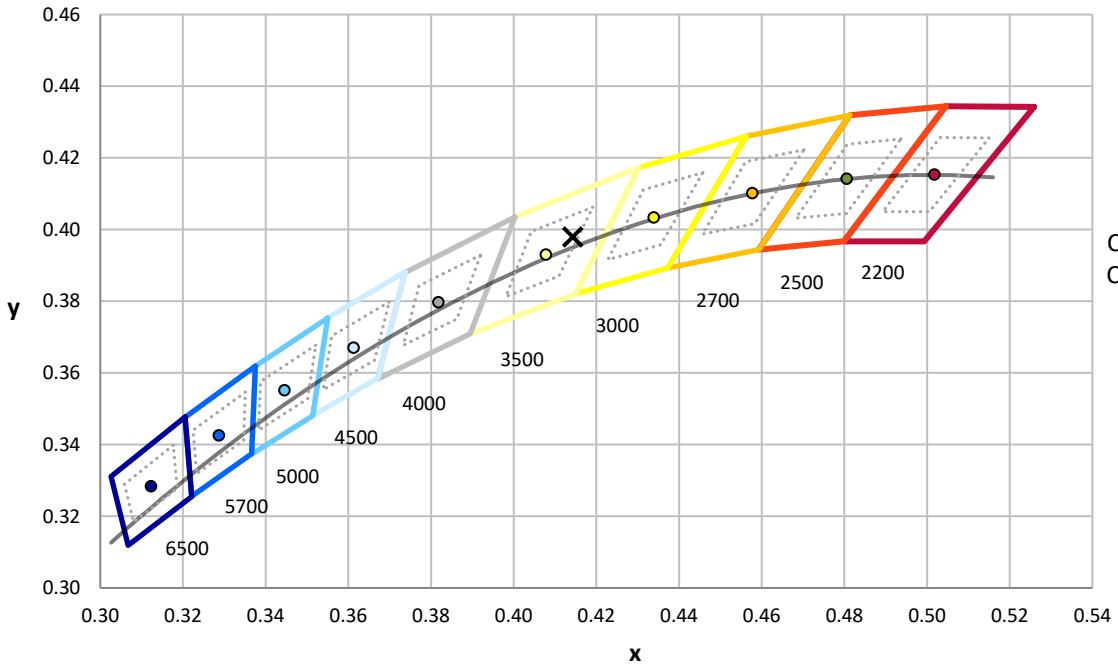
| Measurement and Test Equipment | | | |
|---|---|---|---|
| Instrument | Identification Number | Calibration Date | Calibration Due Date |
| Photometer | IN0058 | 6/18/2024 | 12/18/2024 |
| Power Meter | INXT2011004 | 2/8/2024 | 2/8/2025 |
| AC Power Source | IN0063 | 10/24/2023 | 10/24/2024 |
| DC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

REPORT NUMBER: SP1-2407-184-5

**CIE 1931 Chromaticity Diagram**




**CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles**

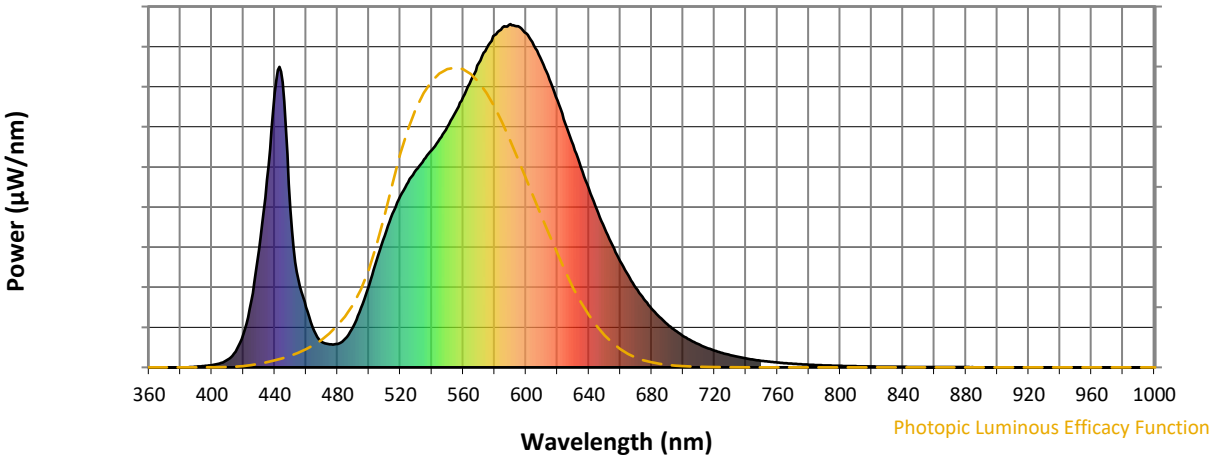



CCT = 3369K
CIE x = 0.4143
CIE y = 0.3980
Duv = 0.0013

Point lies inside the ANSI 3500K 4-step quadrangle

REPORT NUMBER: SP1-2407-184-5

## Photopic Flux vs. Wavelength

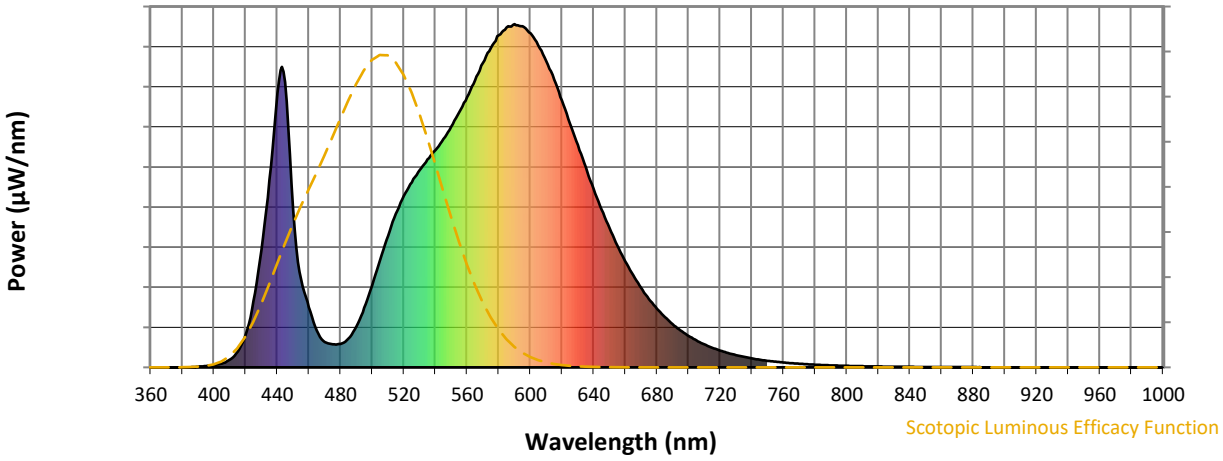



## Photopic Lumens: NR

| 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 | | | |

REPORT NUMBER: SP1-2407-184-5

## Scotopic Flux vs. Wavelength

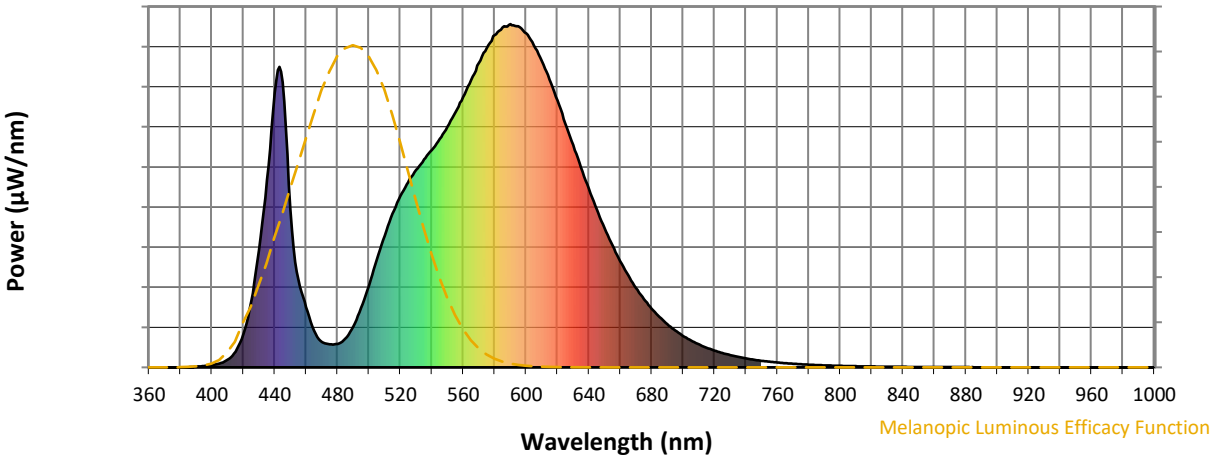



**Scotopic Lumens: NR** **S/P: 1.29**

| 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 | | | |

REPORT NUMBER: SP1-2407-184-5

## 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 | | | |

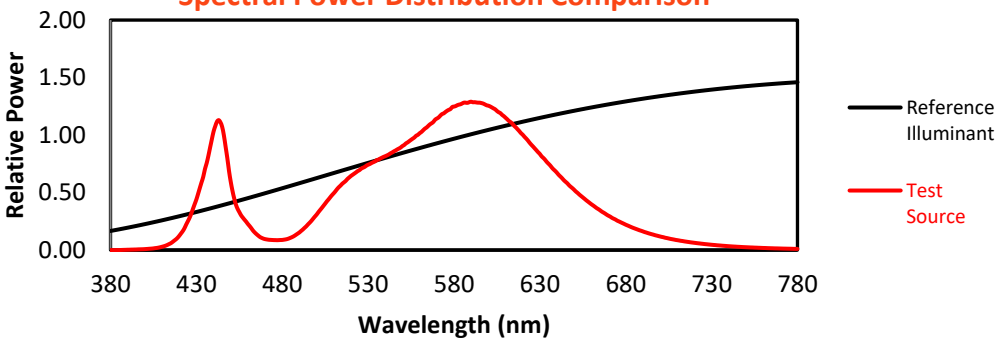
REPORT NUMBER: SP1-2407-184-5

# TM-30-18

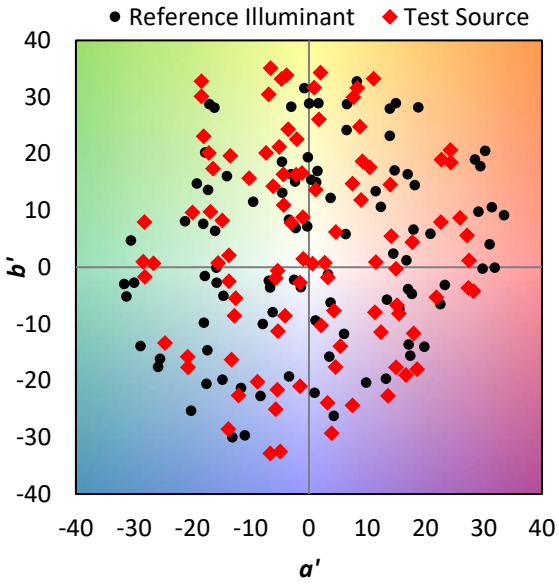
## Summary

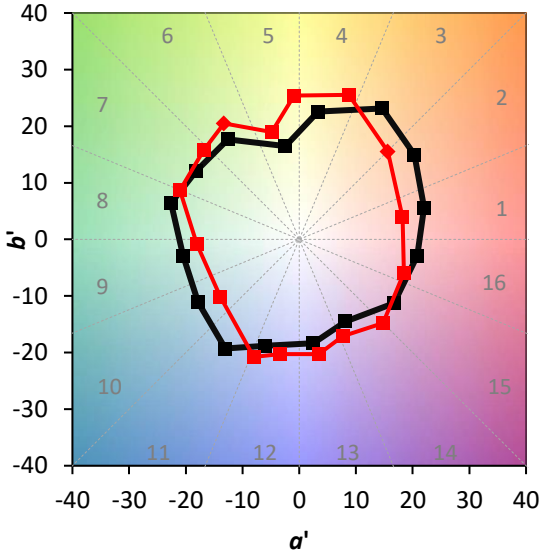
$R_f$ = 71.4
$R_g$ = 96
CIE $R_a$ = 70.1
$R_9$ = -40.2

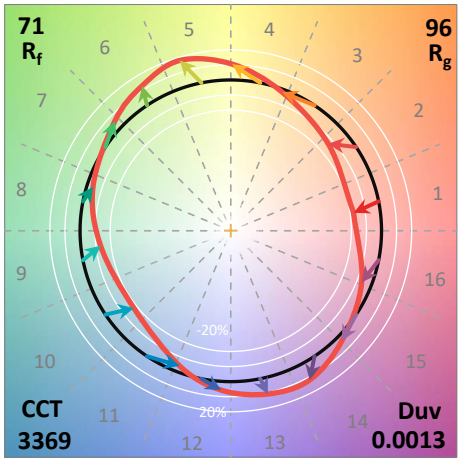
## Spectral Power Distribution Comparison

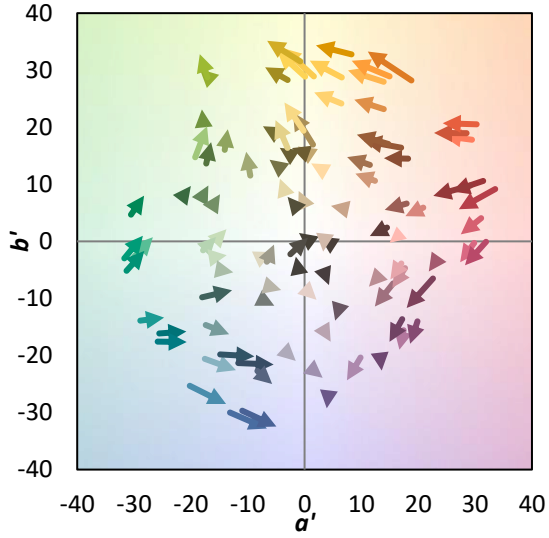



## Color Vector Graphics



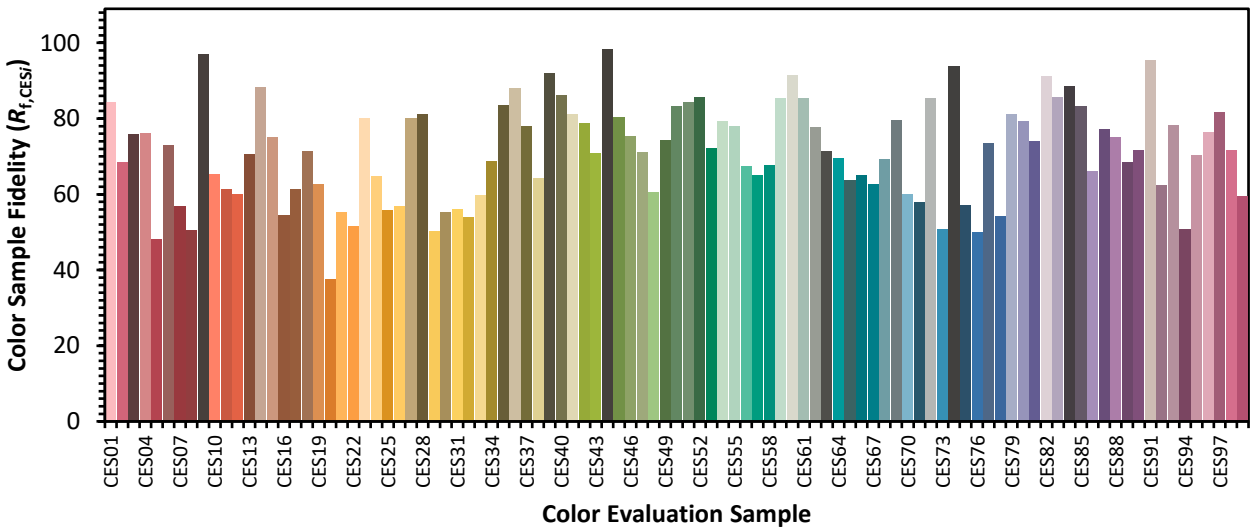



REPORT NUMBER: SP1-2407-184-5

# TM-30-18

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

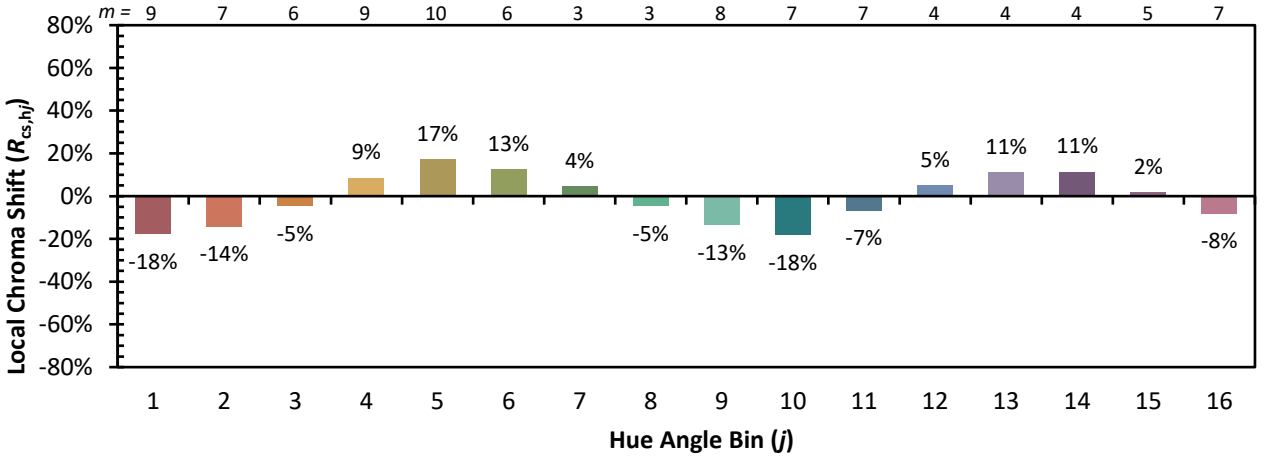
| | | | |
|---|---|---|---|
| CES01 = 86 | CES26 = 57 | CES51 = 84 | CES76 = 50 |
| CES02 = 62 | CES27 = 80 | CES52 = 86 | CES77 = 74 |
| CES03 = 31 | CES28 = 81 | CES53 = 72 | CES78 = 54 |
| CES04 = 70 | CES29 = 50 | CES54 = 79 | CES79 = 81 |
| CES05 = 48 | CES30 = 55 | CES55 = 78 | CES80 = 79 |
| CES06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

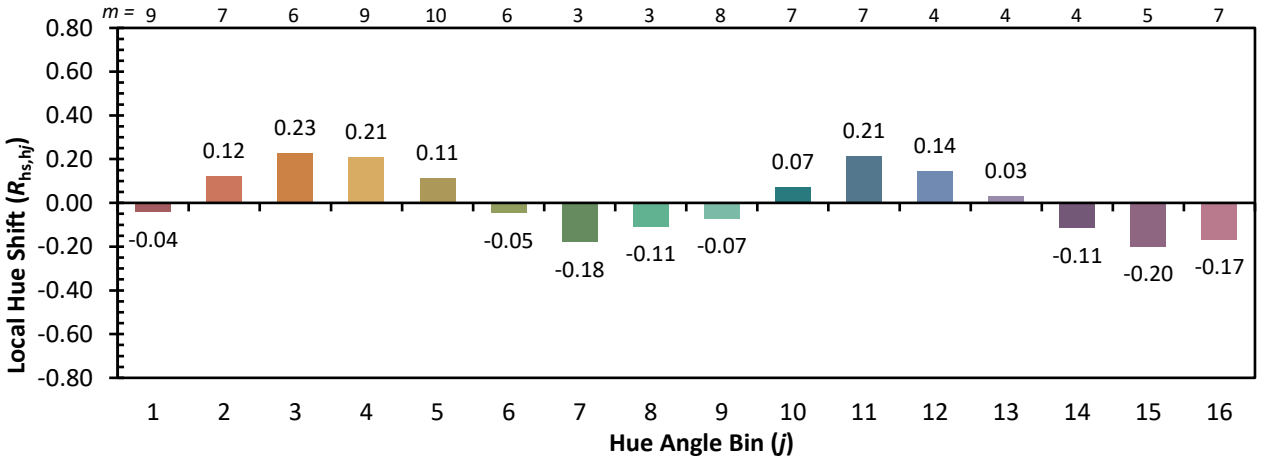


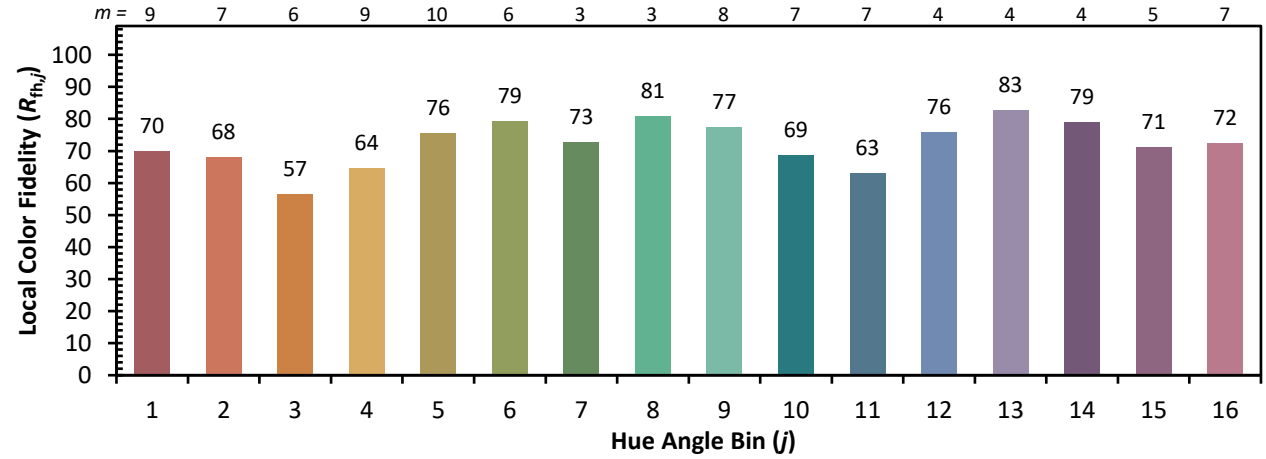
REPORT NUMBER: SP1-2407-184-5

**TM-30-18**

## Color Rendition by Hue-Angle Bin



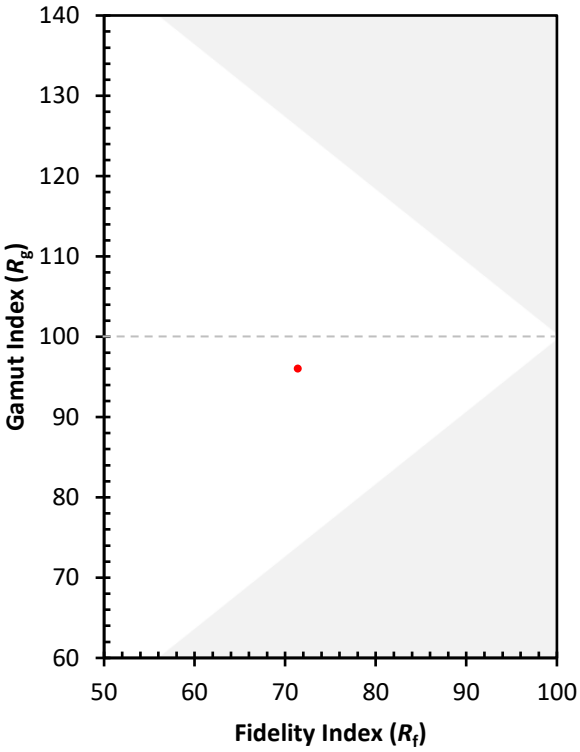



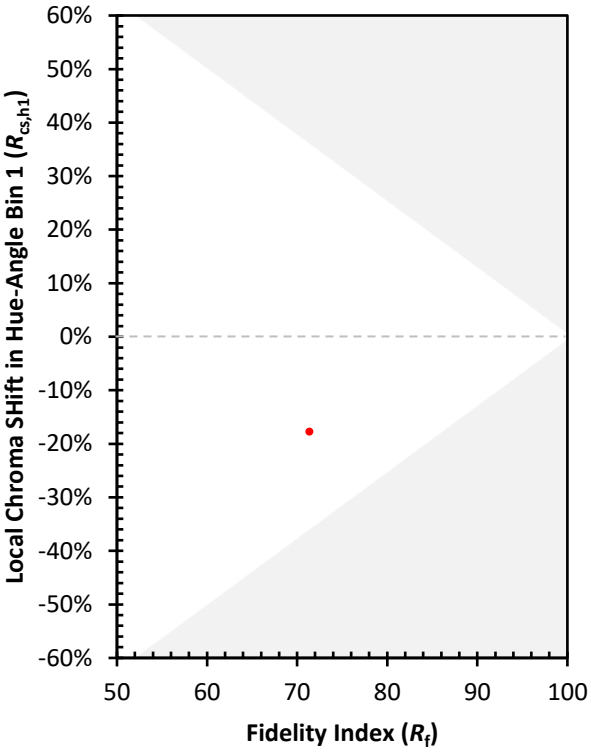



REPORT NUMBER: SP1-2407-184-5

# TM-30-18

## Measure Comparisons




(END OF REPORT)