

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: LUMARK

Report Number: P1068090

Luminaire Tested: **NAV-SA2B-835-U-LBC**

Issue Date: 08/07/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P1068090  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 08/07/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SA2B-835-U-LBC  
Description: Navion AREA AND ROADWAY LUMINAIRE 800mA 2xLight Square PACKAGE  
80CRI 3500K FIXTURE w/ LEFT CORNER BACKLIGHT CONTROL  
Light Source: (28) 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6828.7 lumens  
Efficiency: N/A  
Efficacy: 93.8 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B0 - U0 - G2

Input Watts (W): 72.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: 0.97  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT

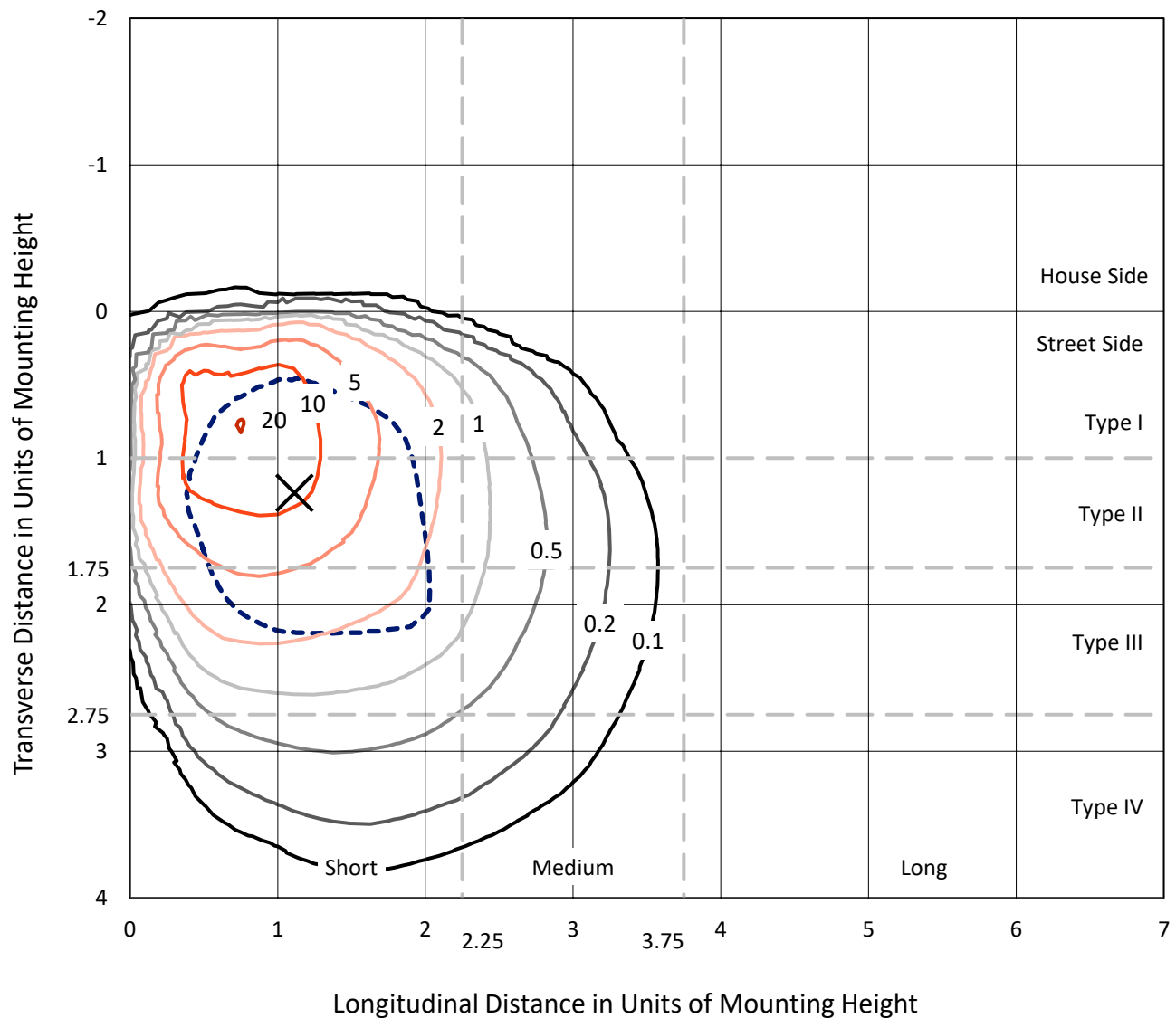


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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

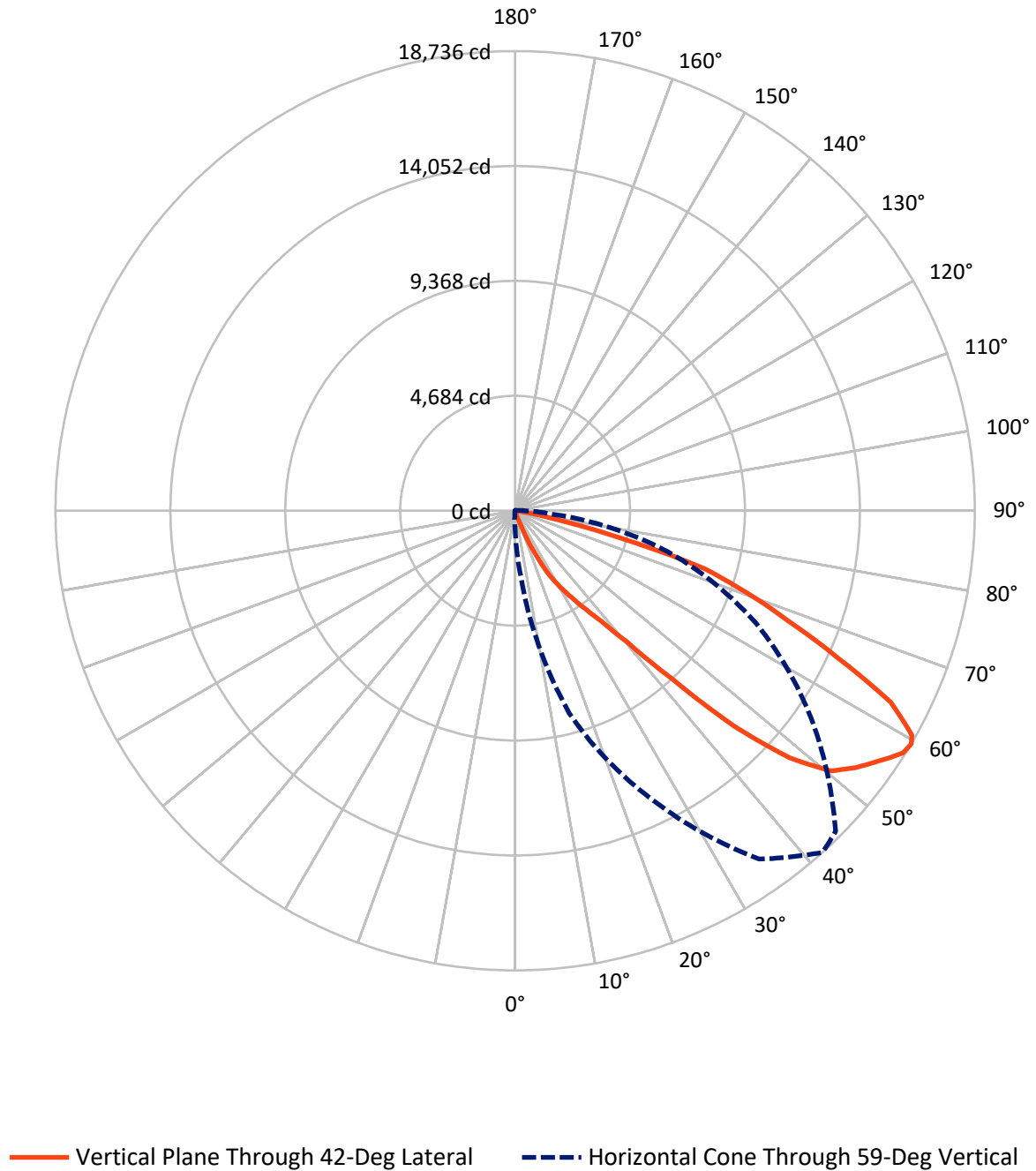


Based on 15 foot mounting height. Maximum calculated value = 20.3 fc  
 Type III - Short - N/A

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## Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 32.9     | 0.0    | 32.9   |
|                    | % Fixture | 0.5      | 0.0    | 0.5    |
| <b>Street Side</b> | Lumens    | 6795.8   | 0.0    | 6795.8 |
|                    | % Fixture | 99.5     | 0.0    | 99.5   |
| <b>Total</b>       | Lumens    | 6828.7   | 0.0    | 6828.7 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**Coefficient of Utilization**

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 2.0    | 0.0       |
| 10°-20°   | 10.0   | 0.1       |
| 20°-30°   | 127.4  | 1.9       |
| 30°-40°   | 429.4  | 6.3       |
| 40°-50°   | 1297.1 | 19.0      |
| 50°-60°   | 2289.7 | 33.5      |
| 60°-70°   | 2016.1 | 29.5      |
| 70°-80°   | 641.7  | 9.4       |
| 80°-90°   | 15.3   | 0.2       |
| 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°    | 6828.7 | 100.0     |
| 0°-180°   | 6828.7 | 100.0     |



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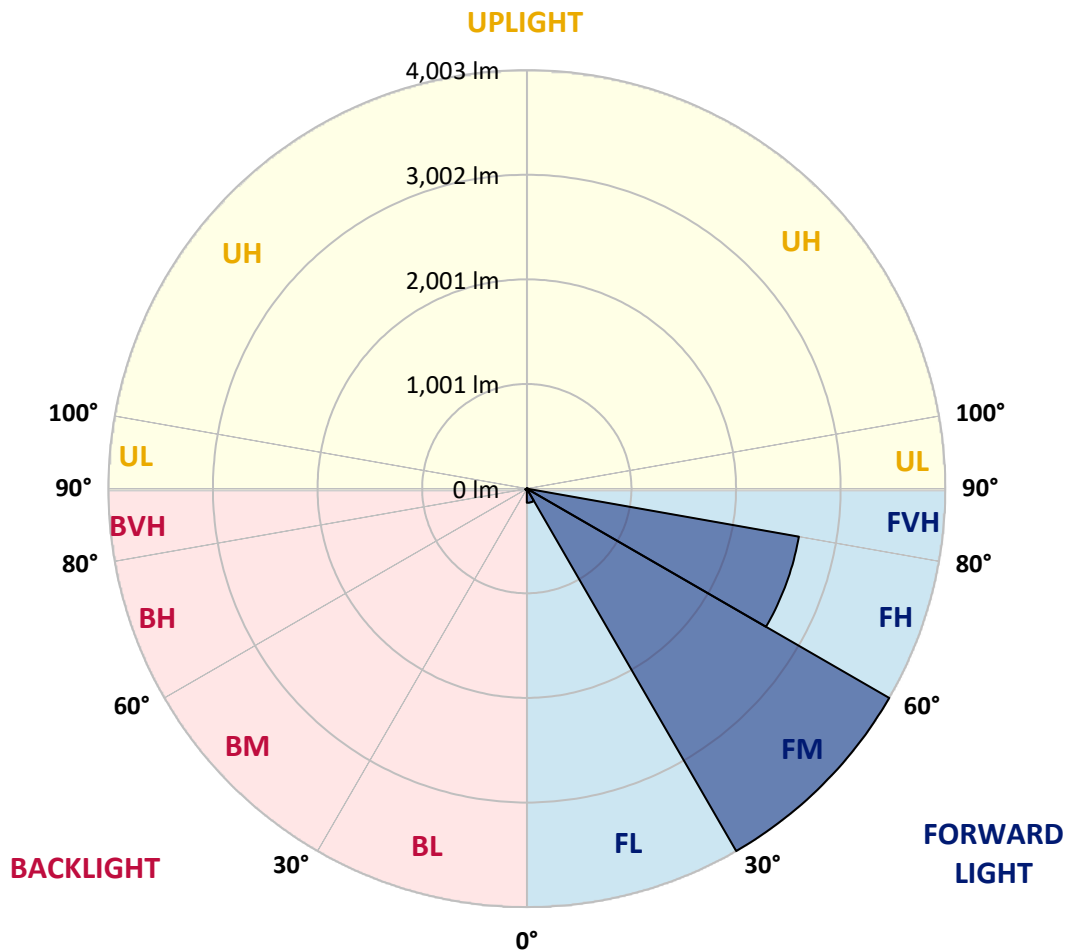
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 135.7  | 2.0       |                         |      |         |
| FM   | (30°-60°)   | 4002.8 | 58.6      |                         |      |         |
| FH   | (60°-80°)   | 2642.8 | 38.7      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 14.6   | 0.2       |                         |      | G1/100  |
| BL   | (0°-30°)    | 3.7    | 0.1       | B0/110                  |      |         |
| BM   | (30°-60°)   | 13.4   | 0.2       | B0/220                  |      |         |
| BH   | (60°-80°)   | 15.0   | 0.2       | B0/110                  |      | G0/110  |
| BVH  | (80°-90°)   | 0.7    | 0.0       |                         |      | G0/10   |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B0-U0-G2**

Type III Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°    | 5°     | 15°    | 25°     | 35°     | 42°     | 45°     | 55°     | 65°     | 75°    | 85°    |
|-------|-------|--------|--------|---------|---------|---------|---------|---------|---------|--------|--------|
| 0°    | 19.3  | 19.3   | 19.3   | 19.3    | 19.3    | 19.3    | 19.3    | 19.3    | 19.3    | 19.3   | 19.3   |
| 2.5°  | 30.0  | 30.0   | 27.8   | 25.7    | 23.6    | 21.4    | 21.4    | 21.4    | 19.3    | 19.3   | 17.1   |
| 5°    | 34.3  | 34.3   | 32.1   | 30.0    | 30.0    | 27.8    | 27.8    | 25.7    | 23.6    | 23.6   | 21.4   |
| 7.5°  | 36.4  | 36.4   | 36.4   | 36.4    | 34.3    | 34.3    | 34.3    | 32.1    | 30.0    | 27.8   | 25.7   |
| 10°   | 38.5  | 40.7   | 42.8   | 42.8    | 42.8    | 42.8    | 42.8    | 40.7    | 36.4    | 34.3   | 30.0   |
| 12.5° | 42.8  | 45.0   | 49.2   | 53.5    | 53.5    | 55.7    | 53.5    | 51.4    | 47.1    | 40.7   | 34.3   |
| 15°   | 47.1  | 51.4   | 57.8   | 66.4    | 74.9    | 77.1    | 77.1    | 70.7    | 62.1    | 49.2   | 40.7   |
| 17.5° | 53.5  | 59.9   | 77.1   | 104.9   | 134.9   | 158.4   | 158.4   | 141.3   | 98.5    | 64.2   | 47.1   |
| 20°   | 57.8  | 70.7   | 124.2  | 252.6   | 385.4   | 483.9   | 464.6   | 411.1   | 220.5   | 100.6  | 51.4   |
| 22.5° | 64.2  | 89.9   | 263.3  | 663.7   | 1027.7  | 1207.5  | 1164.7  | 884.2   | 494.6   | 179.8  | 62.1   |
| 25°   | 72.8  | 130.6  | 522.4  | 1243.9  | 1909.8  | 2104.6  | 2076.8  | 1650.7  | 901.4   | 301.9  | 79.2   |
| 27.5° | 89.9  | 192.7  | 837.1  | 1886.3  | 2817.6  | 2984.6  | 2973.9  | 2417.2  | 1440.9  | 486.0  | 102.8  |
| 30°   | 113.5 | 280.5  | 1241.8 | 2562.8  | 3419.2  | 3588.4  | 3534.9  | 2978.2  | 1944.1  | 742.9  | 132.7  |
| 32.5° | 141.3 | 391.8  | 1607.9 | 3061.7  | 3973.8  | 4196.4  | 4132.2  | 3466.3  | 2348.7  | 961.3  | 197.0  |
| 35°   | 184.1 | 501.0  | 1969.8 | 3502.7  | 4613.9  | 4896.6  | 4789.5  | 3969.5  | 2697.7  | 1207.5 | 237.7  |
| 37.5° | 205.5 | 565.2  | 2301.6 | 3982.3  | 5333.3  | 5718.7  | 5637.4  | 4605.4  | 3053.1  | 1522.3 | 291.2  |
| 40°   | 207.7 | 642.3  | 2646.3 | 4607.5  | 6350.3  | 7037.6  | 6892.0  | 5697.3  | 3714.7  | 1926.9 | 374.7  |
| 42.5° | 214.1 | 757.9  | 3093.8 | 5673.8  | 8347.9  | 9334.9  | 9170.1  | 7705.6  | 5215.6  | 2738.4 | 531.0  |
| 45°   | 244.1 | 976.3  | 4005.9 | 7667.1  | 11090.6 | 12537.9 | 12347.4 | 10503.9 | 7311.7  | 4265.0 | 905.7  |
| 47.5° | 349.0 | 1468.8 | 5605.2 | 9818.8  | 13895.3 | 15049.4 | 15002.3 | 12709.2 | 9210.8  | 5830.1 | 1535.1 |
| 50°   | 561.0 | 2254.5 | 7425.1 | 11628.0 | 15681.0 | 16672.3 | 16554.5 | 13629.9 | 10294.1 | 6898.4 | 1967.6 |
| 52.5° | 749.4 | 3006.0 | 8568.4 | 12293.9 | 16214.1 | 17395.9 | 17252.5 | 13966.0 | 10578.9 | 7213.2 | 2087.5 |
| 55°   | 796.5 | 3277.9 | 8908.9 | 12499.4 | 16567.4 | 18008.3 | 17800.6 | 14190.8 | 10615.3 | 6988.4 | 1888.4 |
| 57.5° | 772.9 | 3021.0 | 8688.3 | 12700.6 | 17059.8 | 18637.8 | 18361.6 | 14629.7 | 10737.3 | 6607.2 | 1571.5 |
| 59°   | 732.2 | 2704.1 | 8551.3 | 12861.2 | 17331.7 | 18736.2 | 18477.2 | 14726.1 | 10818.7 | 6433.8 | 1378.8 |
| 60°   | 685.1 | 2490.0 | 8444.3 | 12966.1 | 17314.6 | 18582.1 | 18314.5 | 14681.1 | 10850.8 | 6284.0 | 1286.8 |
| 62.5° | 528.8 | 1986.9 | 8290.1 | 12891.2 | 16233.4 | 17175.4 | 17023.4 | 13580.6 | 10379.8 | 5804.4 | 1014.9 |
| 65°   | 411.1 | 1520.1 | 7724.9 | 11497.4 | 13814.0 | 14447.7 | 14400.6 | 11499.5 | 8735.4  | 5003.6 | 732.2  |
| 67.5° | 325.4 | 1109.1 | 6532.3 | 9311.4  | 11114.1 | 12015.5 | 11981.3 | 9334.9  | 6630.8  | 3823.9 | 526.7  |
| 70°   | 265.5 | 790.0  | 4479.1 | 7020.5  | 8889.6  | 10024.3 | 9975.1  | 7512.9  | 4913.7  | 2425.8 | 383.2  |
| 72.5° | 224.8 | 505.3  | 2717.0 | 5292.7  | 7418.7  | 8067.4  | 7924.0  | 6061.3  | 3573.4  | 1321.0 | 304.0  |
| 75°   | 190.6 | 310.5  | 1346.7 | 3299.3  | 4419.1  | 4414.8  | 4271.4  | 3209.4  | 1918.4  | 646.6  | 241.9  |
| 77.5° | 154.2 | 218.4  | 528.8  | 905.7   | 1393.8  | 1725.7  | 1697.8  | 1136.9  | 573.8   | 188.4  | 149.9  |
| 80°   | 100.6 | 102.8  | 141.3  | 248.4   | 383.2   | 423.9   | 481.7   | 346.8   | 167.0   | 89.9   | 62.1   |
| 82.5° | 45.0  | 49.2   | 64.2   | 81.4    | 81.4    | 74.9    | 66.4    | 49.2    | 36.4    | 30.0   | 15.0   |
| 85°   | 10.7  | 15.0   | 10.7   | 12.8    | 10.7    | 8.6     | 8.6     | 4.3     | 0.0     | 0.0    | 0.0    |
| 87.5° | 2.1   | 0.0    | 0.0    | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 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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**CANDELA DISTRIBUTION (continued):**

|       | 90°   | 95°   | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|-------|-------|------|------|------|------|------|------|------|------|------|
| 0°    | 19.3  | 19.3  | 19.3 | 19.3 | 19.3 | 19.3 | 19.3 | 19.3 | 19.3 | 19.3 | 19.3 |
| 2.5°  | 17.1  | 17.1  | 17.1 | 15.0 | 15.0 | 15.0 | 12.8 | 12.8 | 12.8 | 10.7 | 10.7 |
| 5°    | 21.4  | 19.3  | 17.1 | 17.1 | 15.0 | 15.0 | 12.8 | 10.7 | 10.7 | 10.7 | 8.6  |
| 7.5°  | 23.6  | 21.4  | 19.3 | 17.1 | 15.0 | 12.8 | 12.8 | 10.7 | 8.6  | 8.6  | 8.6  |
| 10°   | 27.8  | 25.7  | 21.4 | 17.1 | 15.0 | 12.8 | 10.7 | 10.7 | 8.6  | 6.4  | 6.4  |
| 12.5° | 32.1  | 27.8  | 23.6 | 19.3 | 15.0 | 12.8 | 10.7 | 10.7 | 8.6  | 6.4  | 4.3  |
| 15°   | 36.4  | 32.1  | 25.7 | 19.3 | 15.0 | 12.8 | 10.7 | 10.7 | 6.4  | 4.3  | 2.1  |
| 17.5° | 40.7  | 34.3  | 25.7 | 21.4 | 15.0 | 12.8 | 10.7 | 8.6  | 4.3  | 2.1  | 0.0  |
| 20°   | 42.8  | 36.4  | 27.8 | 21.4 | 15.0 | 12.8 | 10.7 | 6.4  | 2.1  | 0.0  | 0.0  |
| 22.5° | 47.1  | 40.7  | 30.0 | 21.4 | 15.0 | 10.7 | 6.4  | 2.1  | 0.0  | 0.0  | 0.0  |
| 25°   | 55.7  | 42.8  | 30.0 | 21.4 | 15.0 | 10.7 | 4.3  | 0.0  | 0.0  | 0.0  | 0.0  |
| 27.5° | 62.1  | 47.1  | 30.0 | 21.4 | 15.0 | 8.6  | 2.1  | 0.0  | 0.0  | 0.0  | 0.0  |
| 30°   | 72.8  | 51.4  | 32.1 | 21.4 | 15.0 | 6.4  | 2.1  | 0.0  | 0.0  | 0.0  | 0.0  |
| 32.5° | 89.9  | 55.7  | 32.1 | 21.4 | 12.8 | 6.4  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 35°   | 109.2 | 64.2  | 32.1 | 21.4 | 12.8 | 6.4  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 37.5° | 111.3 | 68.5  | 32.1 | 21.4 | 12.8 | 4.3  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 40°   | 115.6 | 64.2  | 34.3 | 21.4 | 12.8 | 4.3  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 42.5° | 132.7 | 59.9  | 36.4 | 21.4 | 12.8 | 4.3  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 45°   | 197.0 | 62.1  | 36.4 | 23.6 | 12.8 | 6.4  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 47.5° | 342.6 | 64.2  | 34.3 | 23.6 | 12.8 | 6.4  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 50°   | 438.9 | 74.9  | 34.3 | 25.7 | 15.0 | 4.3  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 52.5° | 466.7 | 87.8  | 34.3 | 27.8 | 19.3 | 2.1  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 55°   | 453.9 | 102.8 | 36.4 | 30.0 | 23.6 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 57.5° | 419.6 | 111.3 | 38.5 | 32.1 | 25.7 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 59°   | 383.2 | 117.8 | 45.0 | 34.3 | 25.7 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 60°   | 353.3 | 124.2 | 47.1 | 36.4 | 25.7 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 62.5° | 284.8 | 132.7 | 51.4 | 42.8 | 21.4 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 65°   | 248.4 | 139.2 | 53.5 | 47.1 | 19.3 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 67.5° | 227.0 | 143.4 | 57.8 | 49.2 | 17.1 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 70°   | 209.8 | 141.3 | 62.1 | 47.1 | 15.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 72.5° | 190.6 | 134.9 | 74.9 | 42.8 | 12.8 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 75°   | 171.3 | 122.0 | 81.4 | 38.5 | 8.6  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 77.5° | 124.2 | 102.8 | 74.9 | 34.3 | 4.3  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 80°   | 53.5  | 55.7  | 53.5 | 25.7 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 82.5° | 10.7  | 12.8  | 10.7 | 6.4  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 85°   | 0.0   | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 87.5° | 0.0   | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 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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**CANDELA DISTRIBUTION (continued):**

|       | 185° | 195° | 205° | 215° | 225° | 235° | 245° | 255° | 265° | 270° | 275° |
|-------|------|------|------|------|------|------|------|------|------|------|------|
| 0°    | 19.3 | 19.3 | 19.3 | 19.3 | 19.3 | 19.3 | 19.3 | 19.3 | 19.3 | 19.3 | 19.3 |
| 2.5°  | 10.7 | 10.7 | 10.7 | 10.7 | 12.8 | 12.8 | 17.1 | 21.4 | 25.7 | 27.8 | 27.8 |
| 5°    | 8.6  | 8.6  | 8.6  | 8.6  | 8.6  | 10.7 | 12.8 | 17.1 | 23.6 | 25.7 | 25.7 |
| 7.5°  | 6.4  | 6.4  | 6.4  | 6.4  | 6.4  | 6.4  | 10.7 | 15.0 | 21.4 | 23.6 | 25.7 |
| 10°   | 6.4  | 4.3  | 4.3  | 2.1  | 2.1  | 4.3  | 6.4  | 12.8 | 19.3 | 21.4 | 23.6 |
| 12.5° | 4.3  | 2.1  | 2.1  | 0.0  | 0.0  | 2.1  | 4.3  | 10.7 | 17.1 | 19.3 | 21.4 |
| 15°   | 2.1  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 2.1  | 8.6  | 15.0 | 17.1 | 21.4 |
| 17.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 6.4  | 12.8 | 17.1 | 19.3 |
| 20°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 4.3  | 10.7 | 15.0 | 17.1 |
| 22.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 2.1  | 8.6  | 12.8 | 15.0 |
| 25°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 6.4  | 8.6  | 10.7 |
| 27.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 4.3  | 6.4  | 8.6  |
| 30°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 4.3  | 6.4  | 8.6  |
| 32.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 2.1  | 4.3  | 6.4  |
| 35°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 2.1  | 4.3  | 6.4  |
| 37.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 2.1  | 4.3  | 4.3  |
| 40°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 2.1  | 4.3  |
| 42.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 2.1  | 4.3  |
| 45°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 2.1  | 4.3  |
| 47.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 2.1  | 4.3  |
| 50°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 2.1  | 4.3  |
| 52.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 2.1  | 2.1  |
| 55°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 2.1  | 2.1  |
| 57.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 2.1  |
| 59°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 2.1  |
| 60°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 2.1  |
| 62.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 2.1  |
| 65°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 2.1  |
| 67.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 2.1  |
| 70°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 2.1  |
| 72.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 2.1  |
| 75°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 2.1  | 2.1  |
| 77.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 2.1  | 4.3  |
| 80°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 2.1  | 4.3  |
| 82.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 2.1  | 2.1  |
| 85°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 2.1  | 2.1  |
| 87.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 2.1  | 2.1  |
| 90°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |

REPORT NUMBER: P1068090

CATALOG NUMBER: NAV-SA2B-835-U-LBC

**CANDELA DISTRIBUTION (continued):**

|       | 285° | 295° | 305° | 315° | 318° | 325° | 335° | 345° | 355°  | 360°  |
|-------|------|------|------|------|------|------|------|------|-------|-------|
| 0°    | 19.3 | 19.3 | 19.3 | 19.3 | 19.3 | 19.3 | 19.3 | 19.3 | 19.3  | 19.3  |
| 2.5°  | 30.0 | 30.0 | 27.8 | 25.7 | 25.7 | 25.7 | 27.8 | 30.0 | 30.0  | 30.0  |
| 5°    | 27.8 | 27.8 | 25.7 | 25.7 | 25.7 | 25.7 | 27.8 | 32.1 | 34.3  | 34.3  |
| 7.5°  | 27.8 | 27.8 | 25.7 | 25.7 | 25.7 | 25.7 | 27.8 | 32.1 | 34.3  | 36.4  |
| 10°   | 25.7 | 25.7 | 25.7 | 25.7 | 23.6 | 25.7 | 27.8 | 32.1 | 38.5  | 38.5  |
| 12.5° | 25.7 | 25.7 | 25.7 | 25.7 | 23.6 | 25.7 | 30.0 | 34.3 | 40.7  | 42.8  |
| 15°   | 25.7 | 25.7 | 25.7 | 23.6 | 23.6 | 25.7 | 30.0 | 36.4 | 42.8  | 47.1  |
| 17.5° | 23.6 | 25.7 | 25.7 | 23.6 | 23.6 | 25.7 | 30.0 | 36.4 | 47.1  | 53.5  |
| 20°   | 21.4 | 23.6 | 25.7 | 23.6 | 23.6 | 23.6 | 30.0 | 36.4 | 49.2  | 57.8  |
| 22.5° | 19.3 | 21.4 | 23.6 | 23.6 | 21.4 | 23.6 | 30.0 | 38.5 | 53.5  | 64.2  |
| 25°   | 17.1 | 19.3 | 19.3 | 21.4 | 21.4 | 23.6 | 30.0 | 38.5 | 55.7  | 72.8  |
| 27.5° | 12.8 | 15.0 | 17.1 | 19.3 | 19.3 | 23.6 | 30.0 | 40.7 | 59.9  | 89.9  |
| 30°   | 10.7 | 12.8 | 15.0 | 17.1 | 19.3 | 23.6 | 30.0 | 40.7 | 64.2  | 113.5 |
| 32.5° | 10.7 | 12.8 | 15.0 | 17.1 | 19.3 | 21.4 | 30.0 | 42.8 | 70.7  | 141.3 |
| 35°   | 8.6  | 10.7 | 12.8 | 17.1 | 17.1 | 21.4 | 30.0 | 42.8 | 77.1  | 184.1 |
| 37.5° | 8.6  | 10.7 | 12.8 | 17.1 | 17.1 | 21.4 | 30.0 | 42.8 | 94.2  | 205.5 |
| 40°   | 6.4  | 8.6  | 10.7 | 17.1 | 17.1 | 21.4 | 32.1 | 45.0 | 96.3  | 207.7 |
| 42.5° | 6.4  | 8.6  | 10.7 | 15.0 | 17.1 | 21.4 | 32.1 | 45.0 | 89.9  | 214.1 |
| 45°   | 6.4  | 8.6  | 10.7 | 17.1 | 19.3 | 23.6 | 32.1 | 47.1 | 87.8  | 244.1 |
| 47.5° | 6.4  | 8.6  | 10.7 | 17.1 | 21.4 | 23.6 | 32.1 | 47.1 | 89.9  | 349.0 |
| 50°   | 6.4  | 8.6  | 10.7 | 17.1 | 23.6 | 23.6 | 32.1 | 47.1 | 98.5  | 561.0 |
| 52.5° | 4.3  | 6.4  | 8.6  | 15.0 | 19.3 | 25.7 | 34.3 | 45.0 | 104.9 | 749.4 |
| 55°   | 4.3  | 4.3  | 6.4  | 12.8 | 17.1 | 27.8 | 36.4 | 45.0 | 122.0 | 796.5 |
| 57.5° | 4.3  | 4.3  | 6.4  | 10.7 | 15.0 | 30.0 | 38.5 | 45.0 | 141.3 | 772.9 |
| 59°   | 4.3  | 4.3  | 4.3  | 10.7 | 12.8 | 30.0 | 38.5 | 47.1 | 143.4 | 732.2 |
| 60°   | 4.3  | 4.3  | 4.3  | 8.6  | 12.8 | 30.0 | 40.7 | 49.2 | 145.6 | 685.1 |
| 62.5° | 2.1  | 2.1  | 2.1  | 8.6  | 10.7 | 30.0 | 45.0 | 59.9 | 149.9 | 528.8 |
| 65°   | 4.3  | 4.3  | 2.1  | 6.4  | 10.7 | 25.7 | 51.4 | 64.2 | 152.0 | 411.1 |
| 67.5° | 4.3  | 4.3  | 4.3  | 8.6  | 10.7 | 25.7 | 53.5 | 66.4 | 152.0 | 325.4 |
| 70°   | 4.3  | 4.3  | 4.3  | 8.6  | 12.8 | 25.7 | 53.5 | 68.5 | 149.9 | 265.5 |
| 72.5° | 4.3  | 4.3  | 4.3  | 8.6  | 12.8 | 23.6 | 49.2 | 70.7 | 143.4 | 224.8 |
| 75°   | 4.3  | 4.3  | 4.3  | 6.4  | 10.7 | 21.4 | 47.1 | 77.1 | 130.6 | 190.6 |
| 77.5° | 4.3  | 4.3  | 4.3  | 4.3  | 8.6  | 17.1 | 42.8 | 85.6 | 115.6 | 154.2 |
| 80°   | 6.4  | 4.3  | 4.3  | 4.3  | 6.4  | 15.0 | 40.7 | 83.5 | 96.3  | 100.6 |
| 82.5° | 6.4  | 4.3  | 4.3  | 2.1  | 4.3  | 10.7 | 32.1 | 64.2 | 49.2  | 45.0  |
| 85°   | 4.3  | 4.3  | 4.3  | 2.1  | 2.1  | 6.4  | 15.0 | 19.3 | 15.0  | 10.7  |
| 87.5° | 4.3  | 4.3  | 4.3  | 2.1  | 2.1  | 2.1  | 2.1  | 2.1  | 2.1   | 2.1   |
| 90°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   |

LM-79-2019: Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Report Prepared for

Cooper Lighting Solutions

McGraw-Edison

Report Number: SP1-2407-184-10

Test Date: 10/11/2024

Luminaire Tested: GSS-SB1A-835-U-5WQ

Data in this report applies to families of products including GSS-SB1A-835-U-5WQ

### Test Information

Test Method: LM-79-2019  
 Report Number: SP1-2407-184-10  
 Test Lab: COOPER LIGHTING SOLUTIONS  
 Photometer: SP1 - 76IN SPHERE  
 Measurement Geometry:  $4\pi$   
 Issue Date: 10/15/2024  
 Manufacturer: COOPER LIGHTING SOLUTIONS  
 Product Line: McGraw-Edison  
 Catalog Number: **GSS-SB1A-835-U-5WQ**  
 Description: GALLEON II SITE SLIM 1SQ 350MA 5WQ HIGH DENSITY LIGHTSQUARE WITH 80 CRI 3500K CCT 26 LEDS

### Spectral Parameters

CCT (K): 3411  
 CIE  $u'$ : 0.2360  
 CIE  $v'$ : 0.5189  
 Duv: 0.0044  
 CIE x: 0.4154  
 CIE y: 0.4059  
 CIE z: 0.1787  
 Peak Wavelength (nm): 601  
 Dominant Wavelength (nm): 579  
 Purity: 46.51914  
 R<sub>f</sub>: 86.6  
 R<sub>g</sub>: 95.9

CRI (Ra): 83.5  
 R1: 81.1  
 R2: 88.9  
 R3: 97.2  
 R4: 83.8  
 R5: 81.7  
 R6: 86.9  
 R7: 86.1  
 R8: 62.2  
 R9: 6.3  
 R10: 75.4  
 R11: 84.1  
 R12: 69.7  
 R13: 82.8  
 R14: 98.5  
 R15: 72.6



### Test Conditions

Stabilization Time: 35M  
 Operation Time: 1H 35M  
 Sphere Temperature (°C): 25.2

REPORT NUMBER: SP1-2407-184-10

| 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: SP1-2407-184-10

### Photopic Flux vs. Wavelength



### Photopic Lumens: NR

| $\lambda$<br>(nm) | Power<br>$\text{W}^\wedge/\text{nm}$ | Lumens<br>( $\phi/\text{nm}$ ) | $\lambda$<br>(nm) | Power<br>$\text{W}^\wedge/\text{nm}$ | Lumens<br>( $\phi/\text{nm}$ ) | $\lambda$<br>(nm) | Power<br>$\text{W}^\wedge/\text{nm}$ | Lumens<br>( $\phi/\text{nm}$ ) | $\lambda$<br>(nm) | Power<br>$\text{W}^\wedge/\text{nm}$ | Lumens<br>( $\phi/\text{nm}$ ) | $\lambda$<br>(nm) | Power<br>$\text{W}^\wedge/\text{nm}$ | Lumens<br>( $\phi/\text{nm}$ ) |
|-------------------|--------------------------------------|--------------------------------|-------------------|--------------------------------------|--------------------------------|-------------------|--------------------------------------|--------------------------------|-------------------|--------------------------------------|--------------------------------|-------------------|--------------------------------------|--------------------------------|
| 360               | 0                                    | NR                             | 490               | 311                                  | NR                             | 620               | 903                                  | NR                             | 750               | 26                                   | NR                             | 880               | 1                                    | NR                             |
| 365               | 0                                    | NR                             | 495               | 376                                  | NR                             | 625               | 851                                  | NR                             | 755               | 22                                   | NR                             | 885               | 1                                    | NR                             |
| 370               | 0                                    | NR                             | 500               | 438                                  | NR                             | 630               | 797                                  | NR                             | 760               | 19                                   | NR                             | 890               | 0                                    | NR                             |
| 375               | 0                                    | NR                             | 505               | 491                                  | NR                             | 635               | 735                                  | NR                             | 765               | 16                                   | NR                             | 895               | 0                                    | NR                             |
| 380               | 0                                    | NR                             | 510               | 533                                  | NR                             | 640               | 672                                  | NR                             | 770               | 14                                   | NR                             | 900               | 0                                    | NR                             |
| 385               | 0                                    | NR                             | 515               | 566                                  | NR                             | 645               | 607                                  | NR                             | 775               | 12                                   | NR                             | 905               | 0                                    | NR                             |
| 390               | 0                                    | NR                             | 520               | 592                                  | NR                             | 650               | 546                                  | NR                             | 780               | 10                                   | NR                             | 910               | 0                                    | NR                             |
| 395               | 1                                    | NR                             | 525               | 608                                  | NR                             | 655               | 487                                  | NR                             | 785               | 9                                    | NR                             | 915               | 0                                    | NR                             |
| 400               | 3                                    | NR                             | 530               | 625                                  | NR                             | 660               | 429                                  | NR                             | 790               | 7                                    | NR                             | 920               | 0                                    | NR                             |
| 405               | 6                                    | NR                             | 535               | 642                                  | NR                             | 665               | 378                                  | NR                             | 795               | 6                                    | NR                             | 925               | 0                                    | NR                             |
| 410               | 12                                   | NR                             | 540               | 657                                  | NR                             | 670               | 329                                  | NR                             | 800               | 5                                    | NR                             | 930               | 0                                    | NR                             |
| 415               | 22                                   | NR                             | 545               | 677                                  | NR                             | 675               | 286                                  | NR                             | 805               | 5                                    | NR                             | 935               | 0                                    | NR                             |
| 420               | 43                                   | NR                             | 550               | 701                                  | NR                             | 680               | 248                                  | NR                             | 810               | 4                                    | NR                             | 940               | 0                                    | NR                             |
| 425               | 80                                   | NR                             | 555               | 728                                  | NR                             | 685               | 213                                  | NR                             | 815               | 3                                    | NR                             | 945               | 0                                    | NR                             |
| 430               | 140                                  | NR                             | 560               | 757                                  | NR                             | 690               | 184                                  | NR                             | 820               | 3                                    | NR                             | 950               | 0                                    | NR                             |
| 435               | 243                                  | NR                             | 565               | 793                                  | NR                             | 695               | 156                                  | NR                             | 825               | 3                                    | NR                             | 955               | 0                                    | NR                             |
| 440               | 412                                  | NR                             | 570               | 831                                  | NR                             | 700               | 134                                  | NR                             | 830               | 2                                    | NR                             | 960               | 0                                    | NR                             |
| 445               | 610                                  | NR                             | 575               | 872                                  | NR                             | 705               | 114                                  | NR                             | 835               | 2                                    | NR                             | 965               | 0                                    | NR                             |
| 450               | 597                                  | NR                             | 580               | 911                                  | NR                             | 710               | 97                                   | NR                             | 840               | 2                                    | NR                             | 970               | 0                                    | NR                             |
| 455               | 412                                  | NR                             | 585               | 944                                  | NR                             | 715               | 83                                   | NR                             | 845               | 1                                    | NR                             | 975               | 0                                    | NR                             |
| 460               | 330                                  | NR                             | 590               | 974                                  | NR                             | 720               | 70                                   | NR                             | 850               | 1                                    | NR                             | 980               | 0                                    | NR                             |
| 465               | 274                                  | NR                             | 595               | 992                                  | NR                             | 725               | 60                                   | NR                             | 855               | 1                                    | NR                             | 985               | 0                                    | NR                             |
| 470               | 211                                  | NR                             | 600               | 999                                  | NR                             | 730               | 51                                   | NR                             | 860               | 1                                    | NR                             | 990               | 0                                    | NR                             |
| 475               | 200                                  | NR                             | 605               | 992                                  | NR                             | 735               | 43                                   | NR                             | 865               | 1                                    | NR                             | 995               | 0                                    | NR                             |
| 480               | 220                                  | NR                             | 610               | 975                                  | NR                             | 740               | 36                                   | NR                             | 870               | 1                                    | NR                             | 1000              | 0                                    | NR                             |
| 485               | 255                                  | NR                             | 615               | 944                                  | NR                             | 745               | 31                                   | NR                             | 875               | 1                                    | NR                             |                   |                                      |                                |

REPORT NUMBER: SP1-2407-184-10

### Scotopic Flux vs. Wavelength


**Scotopic Lumens: NR**
**S/P: 1.48**

| $\lambda$<br>(nm) | Power<br>$\text{W}^\wedge/\text{nm}$ | Lumens<br>( $\phi/\text{nm}$ ) | $\lambda$<br>(nm) | Power<br>$\text{W}^\wedge/\text{nm}$ | Lumens<br>( $\phi/\text{nm}$ ) | $\lambda$<br>(nm) | Power<br>$\text{W}^\wedge/\text{nm}$ | Lumens<br>( $\phi/\text{nm}$ ) | $\lambda$<br>(nm) | Power<br>$\text{W}^\wedge/\text{nm}$ | Lumens<br>( $\phi/\text{nm}$ ) | $\lambda$<br>(nm) | Power<br>$\text{W}^\wedge/\text{nm}$ | Lumens<br>( $\phi/\text{nm}$ ) |
|-------------------|--------------------------------------|--------------------------------|-------------------|--------------------------------------|--------------------------------|-------------------|--------------------------------------|--------------------------------|-------------------|--------------------------------------|--------------------------------|-------------------|--------------------------------------|--------------------------------|
| 360               | 0                                    | NR                             | 490               | 311                                  | NR                             | 620               | 903                                  | NR                             | 750               | 26                                   | NR                             | 880               | 1                                    | NR                             |
| 365               | 0                                    | NR                             | 495               | 376                                  | NR                             | 625               | 851                                  | NR                             | 755               | 22                                   | NR                             | 885               | 1                                    | NR                             |
| 370               | 0                                    | NR                             | 500               | 438                                  | NR                             | 630               | 797                                  | NR                             | 760               | 19                                   | NR                             | 890               | 0                                    | NR                             |
| 375               | 0                                    | NR                             | 505               | 491                                  | NR                             | 635               | 735                                  | NR                             | 765               | 16                                   | NR                             | 895               | 0                                    | NR                             |
| 380               | 0                                    | NR                             | 510               | 533                                  | NR                             | 640               | 672                                  | NR                             | 770               | 14                                   | NR                             | 900               | 0                                    | NR                             |
| 385               | 0                                    | NR                             | 515               | 566                                  | NR                             | 645               | 607                                  | NR                             | 775               | 12                                   | NR                             | 905               | 0                                    | NR                             |
| 390               | 0                                    | NR                             | 520               | 592                                  | NR                             | 650               | 546                                  | NR                             | 780               | 10                                   | NR                             | 910               | 0                                    | NR                             |
| 395               | 1                                    | NR                             | 525               | 608                                  | NR                             | 655               | 487                                  | NR                             | 785               | 9                                    | NR                             | 915               | 0                                    | NR                             |
| 400               | 3                                    | NR                             | 530               | 625                                  | NR                             | 660               | 429                                  | NR                             | 790               | 7                                    | NR                             | 920               | 0                                    | NR                             |
| 405               | 6                                    | NR                             | 535               | 642                                  | NR                             | 665               | 378                                  | NR                             | 795               | 6                                    | NR                             | 925               | 0                                    | NR                             |
| 410               | 12                                   | NR                             | 540               | 657                                  | NR                             | 670               | 329                                  | NR                             | 800               | 5                                    | NR                             | 930               | 0                                    | NR                             |
| 415               | 22                                   | NR                             | 545               | 677                                  | NR                             | 675               | 286                                  | NR                             | 805               | 5                                    | NR                             | 935               | 0                                    | NR                             |
| 420               | 43                                   | NR                             | 550               | 701                                  | NR                             | 680               | 248                                  | NR                             | 810               | 4                                    | NR                             | 940               | 0                                    | NR                             |
| 425               | 80                                   | NR                             | 555               | 728                                  | NR                             | 685               | 213                                  | NR                             | 815               | 3                                    | NR                             | 945               | 0                                    | NR                             |
| 430               | 140                                  | NR                             | 560               | 757                                  | NR                             | 690               | 184                                  | NR                             | 820               | 3                                    | NR                             | 950               | 0                                    | NR                             |
| 435               | 243                                  | NR                             | 565               | 793                                  | NR                             | 695               | 156                                  | NR                             | 825               | 3                                    | NR                             | 955               | 0                                    | NR                             |
| 440               | 412                                  | NR                             | 570               | 831                                  | NR                             | 700               | 134                                  | NR                             | 830               | 2                                    | NR                             | 960               | 0                                    | NR                             |
| 445               | 610                                  | NR                             | 575               | 872                                  | NR                             | 705               | 114                                  | NR                             | 835               | 2                                    | NR                             | 965               | 0                                    | NR                             |
| 450               | 597                                  | NR                             | 580               | 911                                  | NR                             | 710               | 97                                   | NR                             | 840               | 2                                    | NR                             | 970               | 0                                    | NR                             |
| 455               | 412                                  | NR                             | 585               | 944                                  | NR                             | 715               | 83                                   | NR                             | 845               | 1                                    | NR                             | 975               | 0                                    | NR                             |
| 460               | 330                                  | NR                             | 590               | 974                                  | NR                             | 720               | 70                                   | NR                             | 850               | 1                                    | NR                             | 980               | 0                                    | NR                             |
| 465               | 274                                  | NR                             | 595               | 992                                  | NR                             | 725               | 60                                   | NR                             | 855               | 1                                    | NR                             | 985               | 0                                    | NR                             |
| 470               | 211                                  | NR                             | 600               | 999                                  | NR                             | 730               | 51                                   | NR                             | 860               | 1                                    | NR                             | 990               | 0                                    | NR                             |
| 475               | 200                                  | NR                             | 605               | 992                                  | NR                             | 735               | 43                                   | NR                             | 865               | 1                                    | NR                             | 995               | 0                                    | NR                             |
| 480               | 220                                  | NR                             | 610               | 975                                  | NR                             | 740               | 36                                   | NR                             | 870               | 1                                    | NR                             | 1000              | 0                                    | NR                             |
| 485               | 255                                  | NR                             | 615               | 944                                  | NR                             | 745               | 31                                   | NR                             | 875               | 1                                    | NR                             |                   |                                      |                                |

REPORT NUMBER: SP1-2407-184-10

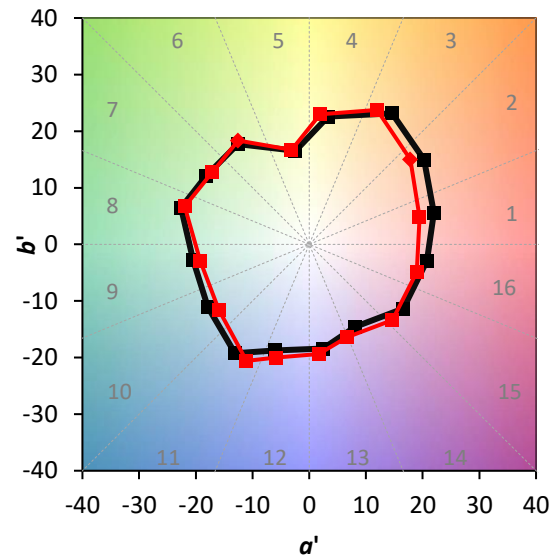
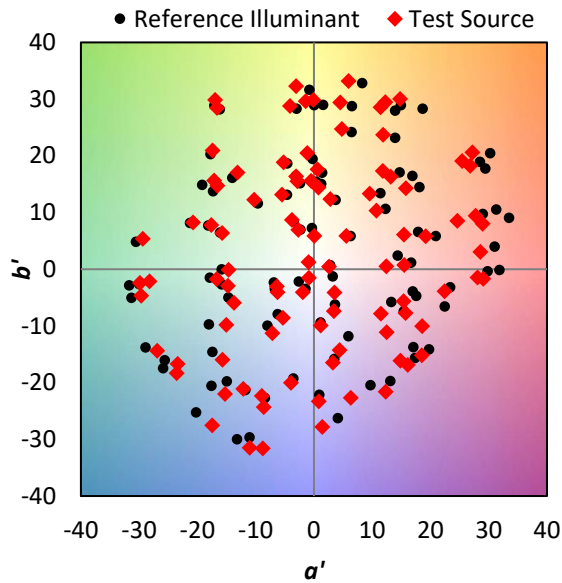
### Melanopic Flux vs. Wavelength


**Melanopic Lumens: NR**
**M/P: 2.88**

| $\lambda$<br>(nm) | Power<br>$\text{W}^\wedge/\text{nm}$ | Lumens<br>( $\phi/\text{nm}$ ) | $\lambda$<br>(nm) | Power<br>$\text{W}^\wedge/\text{nm}$ | Lumens<br>( $\phi/\text{nm}$ ) | $\lambda$<br>(nm) | Power<br>$\text{W}^\wedge/\text{nm}$ | Lumens<br>( $\phi/\text{nm}$ ) | $\lambda$<br>(nm) | Power<br>$\text{W}^\wedge/\text{nm}$ | Lumens<br>( $\phi/\text{nm}$ ) | $\lambda$<br>(nm) | Power<br>$\text{W}^\wedge/\text{nm}$ | Lumens<br>( $\phi/\text{nm}$ ) |
|-------------------|--------------------------------------|--------------------------------|-------------------|--------------------------------------|--------------------------------|-------------------|--------------------------------------|--------------------------------|-------------------|--------------------------------------|--------------------------------|-------------------|--------------------------------------|--------------------------------|
| 360               | 0                                    | NR                             | 490               | 311                                  | NR                             | 620               | 903                                  | NR                             | 750               | 26                                   | NR                             | 880               | 1                                    | NR                             |
| 365               | 0                                    | NR                             | 495               | 376                                  | NR                             | 625               | 851                                  | NR                             | 755               | 22                                   | NR                             | 885               | 1                                    | NR                             |
| 370               | 0                                    | NR                             | 500               | 438                                  | NR                             | 630               | 797                                  | NR                             | 760               | 19                                   | NR                             | 890               | 0                                    | NR                             |
| 375               | 0                                    | NR                             | 505               | 491                                  | NR                             | 635               | 735                                  | NR                             | 765               | 16                                   | NR                             | 895               | 0                                    | NR                             |
| 380               | 0                                    | NR                             | 510               | 533                                  | NR                             | 640               | 672                                  | NR                             | 770               | 14                                   | NR                             | 900               | 0                                    | NR                             |
| 385               | 0                                    | NR                             | 515               | 566                                  | NR                             | 645               | 607                                  | NR                             | 775               | 12                                   | NR                             | 905               | 0                                    | NR                             |
| 390               | 0                                    | NR                             | 520               | 592                                  | NR                             | 650               | 546                                  | NR                             | 780               | 10                                   | NR                             | 910               | 0                                    | NR                             |
| 395               | 1                                    | NR                             | 525               | 608                                  | NR                             | 655               | 487                                  | NR                             | 785               | 9                                    | NR                             | 915               | 0                                    | NR                             |
| 400               | 3                                    | NR                             | 530               | 625                                  | NR                             | 660               | 429                                  | NR                             | 790               | 7                                    | NR                             | 920               | 0                                    | NR                             |
| 405               | 6                                    | NR                             | 535               | 642                                  | NR                             | 665               | 378                                  | NR                             | 795               | 6                                    | NR                             | 925               | 0                                    | NR                             |
| 410               | 12                                   | NR                             | 540               | 657                                  | NR                             | 670               | 329                                  | NR                             | 800               | 5                                    | NR                             | 930               | 0                                    | NR                             |
| 415               | 22                                   | NR                             | 545               | 677                                  | NR                             | 675               | 286                                  | NR                             | 805               | 5                                    | NR                             | 935               | 0                                    | NR                             |
| 420               | 43                                   | NR                             | 550               | 701                                  | NR                             | 680               | 248                                  | NR                             | 810               | 4                                    | NR                             | 940               | 0                                    | NR                             |
| 425               | 80                                   | NR                             | 555               | 728                                  | NR                             | 685               | 213                                  | NR                             | 815               | 3                                    | NR                             | 945               | 0                                    | NR                             |
| 430               | 140                                  | NR                             | 560               | 757                                  | NR                             | 690               | 184                                  | NR                             | 820               | 3                                    | NR                             | 950               | 0                                    | NR                             |
| 435               | 243                                  | NR                             | 565               | 793                                  | NR                             | 695               | 156                                  | NR                             | 825               | 3                                    | NR                             | 955               | 0                                    | NR                             |
| 440               | 412                                  | NR                             | 570               | 831                                  | NR                             | 700               | 134                                  | NR                             | 830               | 2                                    | NR                             | 960               | 0                                    | NR                             |
| 445               | 610                                  | NR                             | 575               | 872                                  | NR                             | 705               | 114                                  | NR                             | 835               | 2                                    | NR                             | 965               | 0                                    | NR                             |
| 450               | 597                                  | NR                             | 580               | 911                                  | NR                             | 710               | 97                                   | NR                             | 840               | 2                                    | NR                             | 970               | 0                                    | NR                             |
| 455               | 412                                  | NR                             | 585               | 944                                  | NR                             | 715               | 83                                   | NR                             | 845               | 1                                    | NR                             | 975               | 0                                    | NR                             |
| 460               | 330                                  | NR                             | 590               | 974                                  | NR                             | 720               | 70                                   | NR                             | 850               | 1                                    | NR                             | 980               | 0                                    | NR                             |
| 465               | 274                                  | NR                             | 595               | 992                                  | NR                             | 725               | 60                                   | NR                             | 855               | 1                                    | NR                             | 985               | 0                                    | NR                             |
| 470               | 211                                  | NR                             | 600               | 999                                  | NR                             | 730               | 51                                   | NR                             | 860               | 1                                    | NR                             | 990               | 0                                    | NR                             |
| 475               | 200                                  | NR                             | 605               | 992                                  | NR                             | 735               | 43                                   | NR                             | 865               | 1                                    | NR                             | 995               | 0                                    | NR                             |
| 480               | 220                                  | NR                             | 610               | 975                                  | NR                             | 740               | 36                                   | NR                             | 870               | 1                                    | NR                             | 1000              | 0                                    | NR                             |
| 485               | 255                                  | NR                             | 615               | 944                                  | NR                             | 745               | 31                                   | NR                             | 875               | 1                                    | NR                             |                   |                                      |                                |

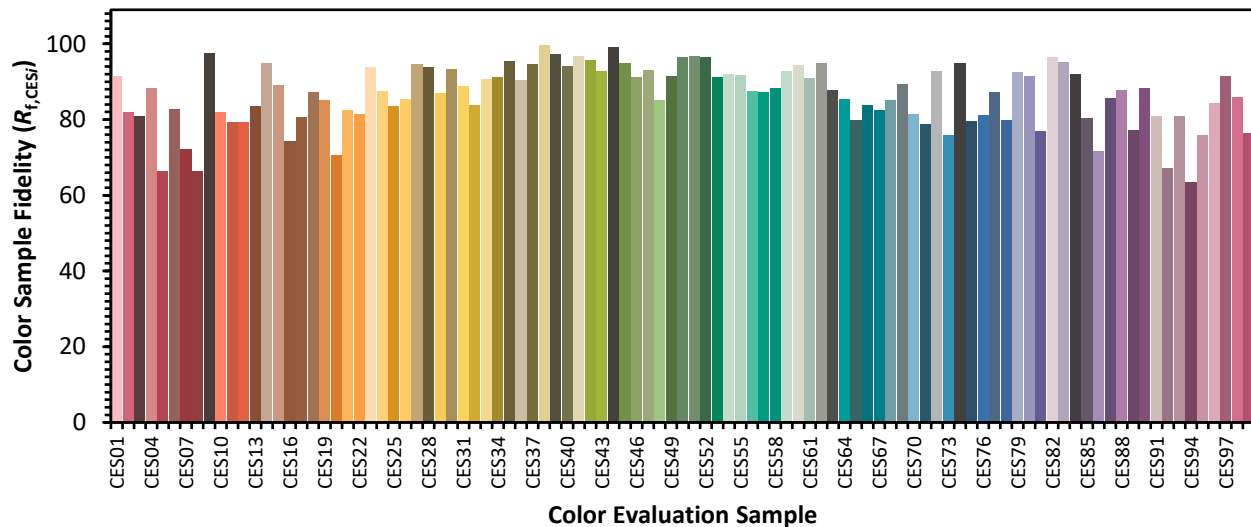
REPORT NUMBER: SP1-2407-184-10

**TM-30-18**
**Summary**
 $R_f = 86.6$   
 $R_g = 95.9$   
 $CIE\ R_a = 83.5$   
 $R_9 = 6.3$ 

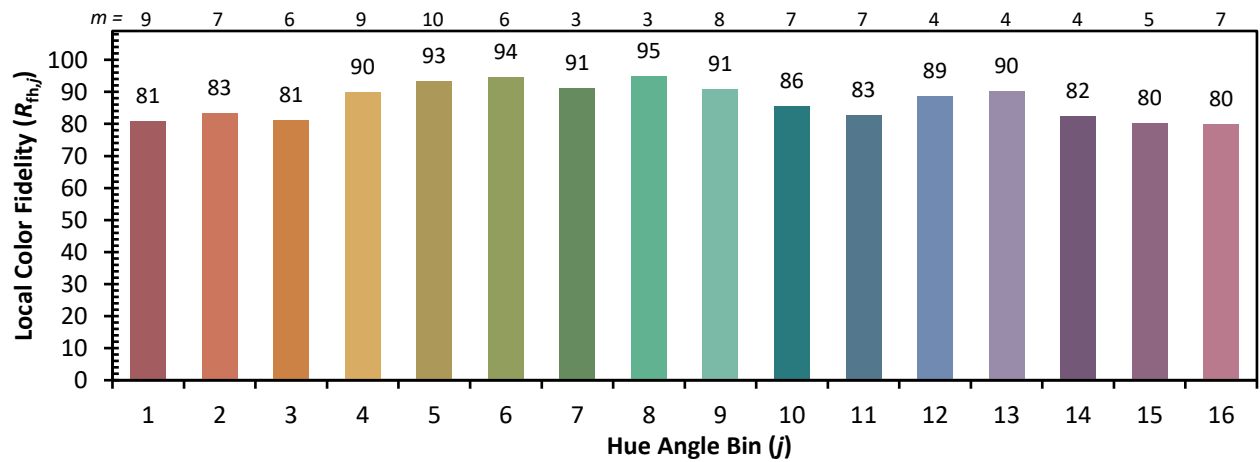
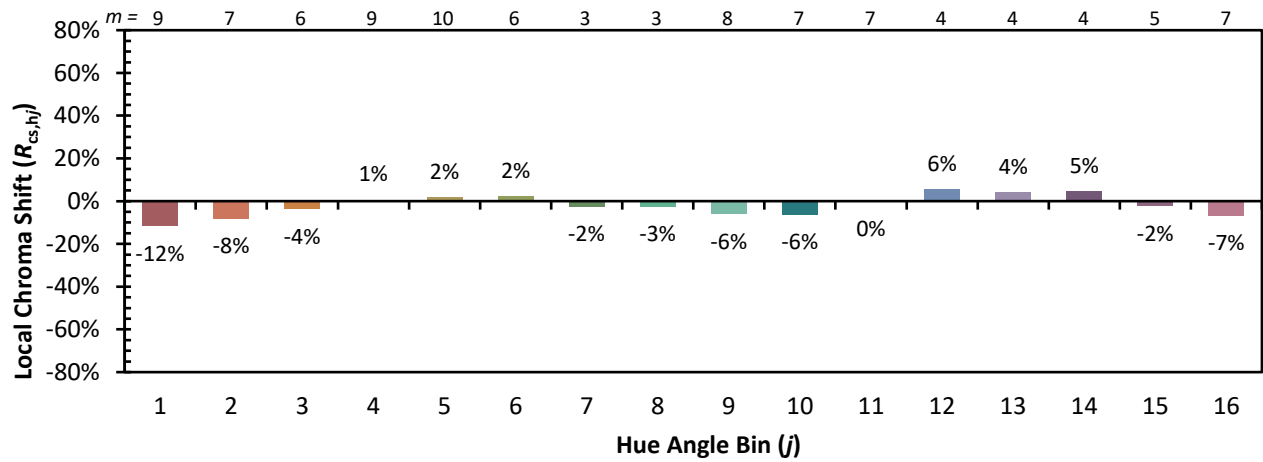
**Color Vector Graphics**


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

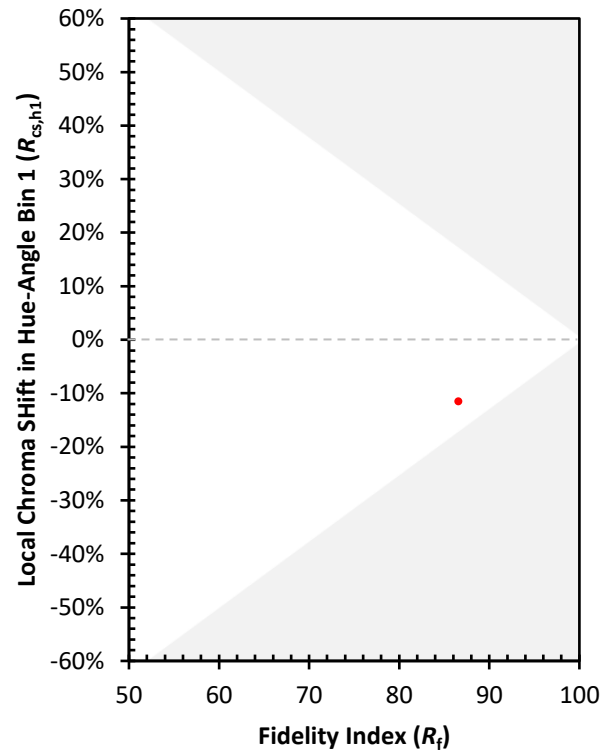
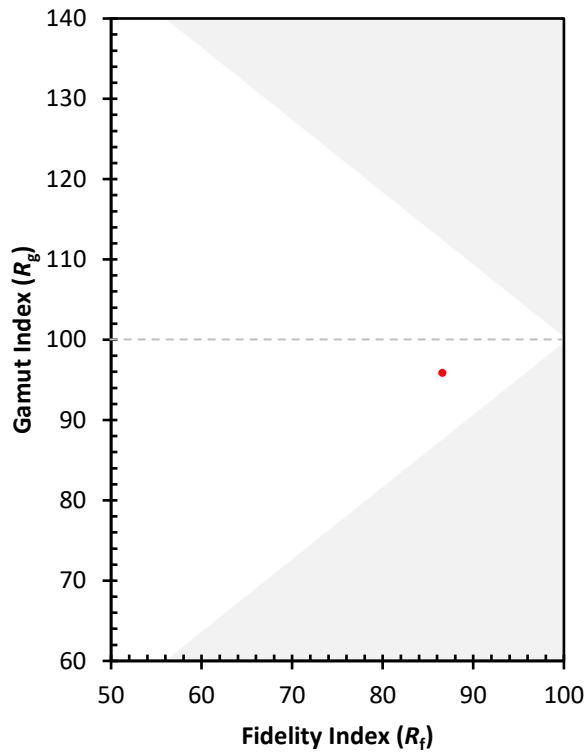
|            |             |            |            |
|------------|-------------|------------|------------|
| CES01 = 86 | CES26 = 85  | CES51 = 97 | CES76 = 81 |
| CES02 = 62 | CES27 = 95  | CES52 = 96 | CES77 = 87 |
| CES03 = 31 | CES28 = 94  | CES53 = 91 | CES78 = 80 |
| CES04 = 70 | CES29 = 87  | CES54 = 92 | CES79 = 93 |
| CES05 = 49 | CES30 = 93  | CES55 = 92 | CES80 = 91 |
| CES06 = 51 | CES31 = 89  | CES56 = 88 | CES81 = 77 |
| CES07 = 41 | CES32 = 84  | CES57 = 87 | CES82 = 96 |
| CES08 = 40 | CES33 = 91  | CES58 = 88 | CES83 = 95 |
| CES09 = 29 | CES34 = 91  | CES59 = 93 | CES84 = 92 |
| CES10 = 75 | CES35 = 95  | CES60 = 94 | CES85 = 80 |
| CES11 = 58 | CES36 = 90  | CES61 = 91 | CES86 = 72 |
| CES12 = 64 | CES37 = 95  | CES62 = 95 | CES87 = 86 |
| CES13 = 43 | CES38 = 100 | CES63 = 88 | CES88 = 88 |
| CES14 = 74 | CES39 = 97  | CES64 = 85 | CES89 = 77 |
| CES15 = 71 | CES40 = 94  | CES65 = 80 | CES90 = 88 |
| CES16 = 47 | CES41 = 97  | CES66 = 84 | CES91 = 81 |
| CES17 = 49 | CES42 = 96  | CES67 = 82 | CES92 = 67 |
| CES18 = 56 | CES43 = 93  | CES68 = 85 | CES93 = 81 |
| CES19 = 72 | CES44 = 99  | CES69 = 89 | CES94 = 63 |
| CES20 = 66 | CES45 = 95  | CES70 = 81 | CES95 = 76 |
| CES21 = 86 | CES46 = 91  | CES71 = 79 | CES96 = 84 |
| CES22 = 78 | CES47 = 93  | CES72 = 93 | CES97 = 92 |
| CES23 = 91 | CES48 = 85  | CES73 = 76 | CES98 = 86 |
| CES24 = 90 | CES49 = 92  | CES74 = 95 | CES99 = 77 |
| CES25 = 72 | CES50 = 96  | CES75 = 80 |            |



Color Rendition by Hue-Angle Bin



**Measure Comparisons**



(END OF REPORT)