

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: P1049802

Luminaire Tested: **GALN-SA5B-835-U-LBC**

Issue Date: 07/10/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P1049802  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 07/10/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GALN-SA5B-835-U-LBC  
Description: GALLEON II AREA AND ROADWAY LUMINAIRE 800mA 5xLight Square PACKAGE  
80CRI 3500K FIXTURE w/ LEFT CORNER BACKLIGHT CONTROL  
Light Source: (70) 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

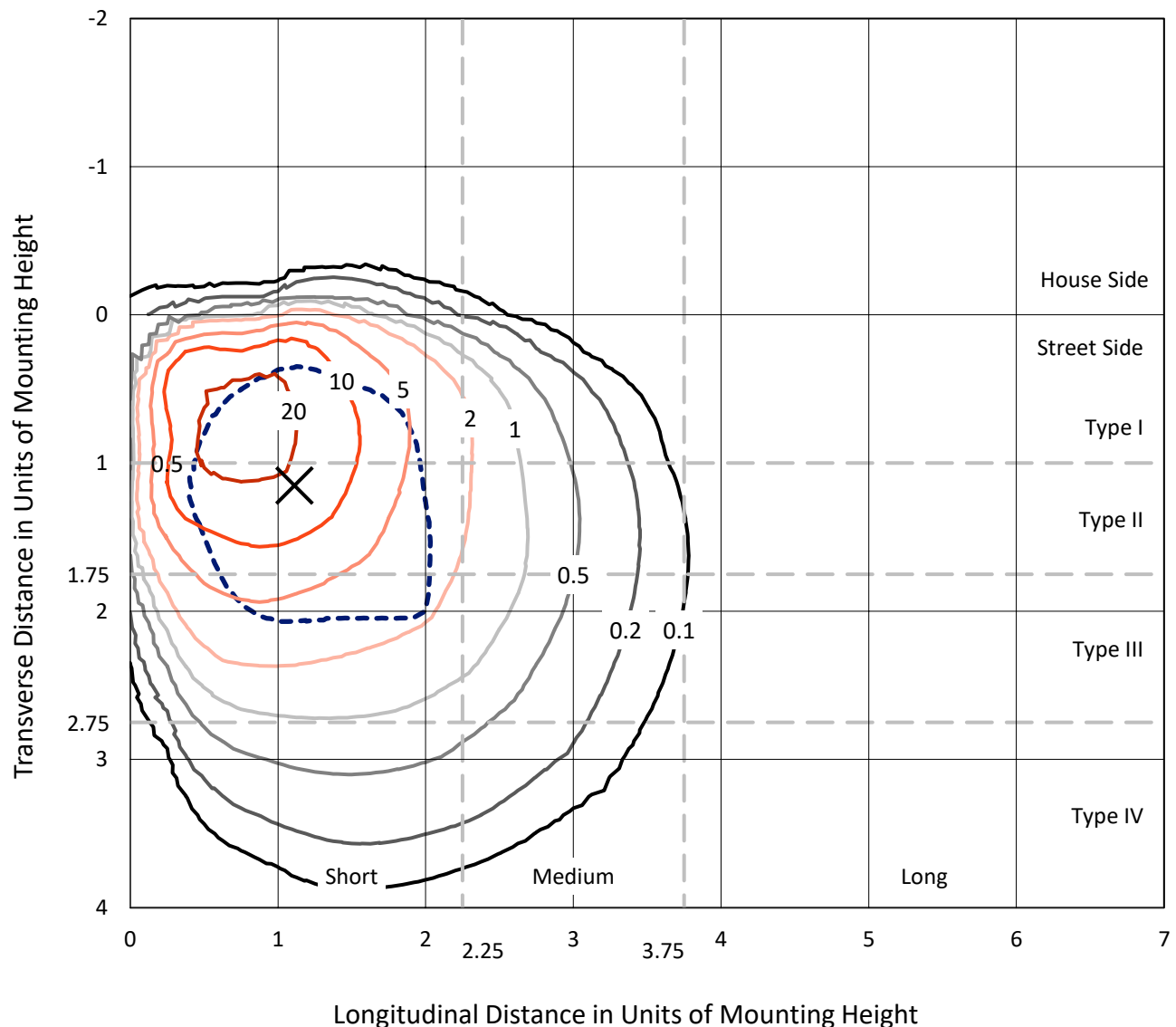
Lumens per Lamp: N/A  
Luminaire Lumens: 18253.6 lumens  
Efficiency: N/A  
Efficacy: 102.1 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B0 - U0 - G3

Input Watts (W): 178.8  
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

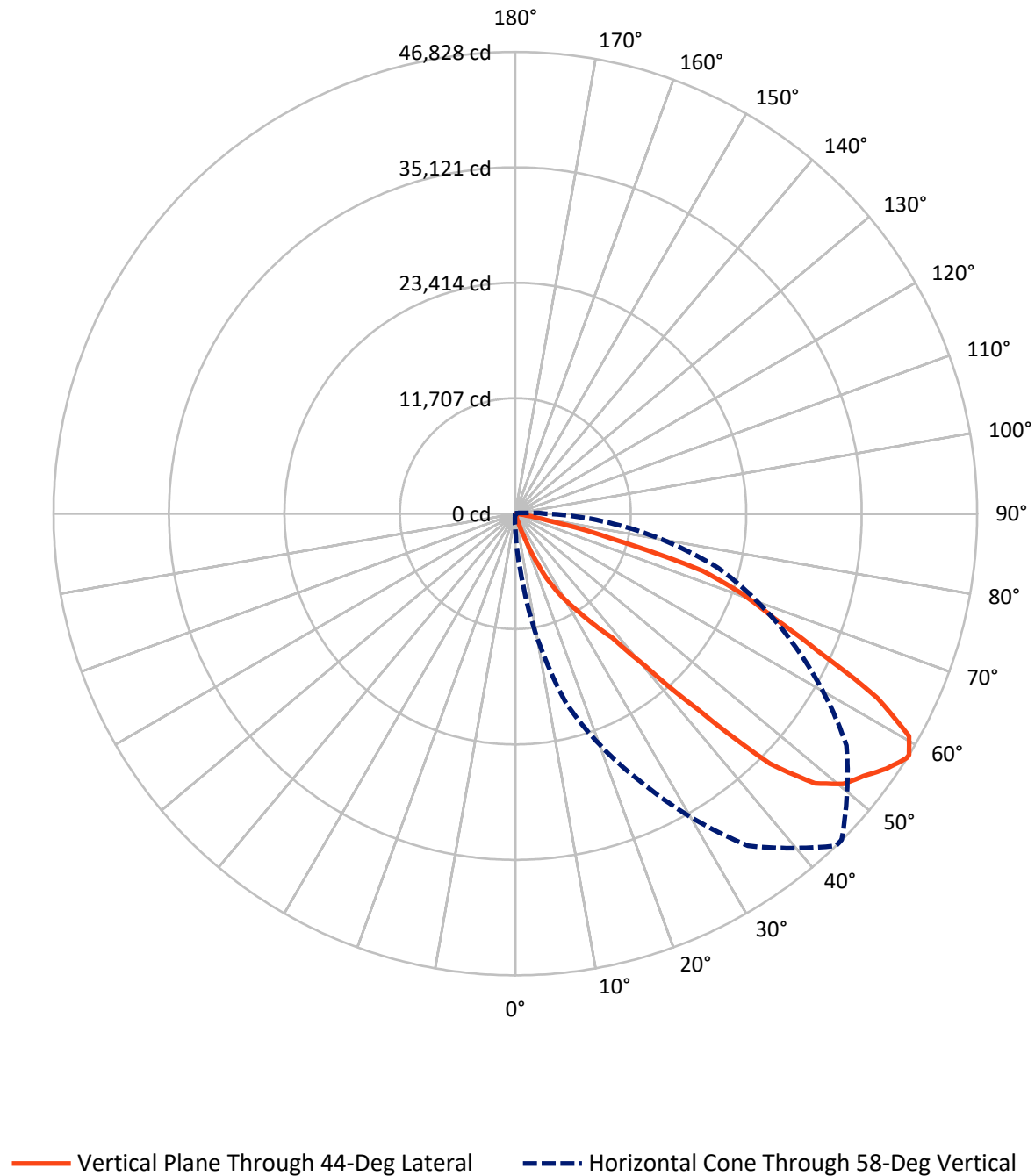
× Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 31.8 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    | 124.6    | 0.0    | 124.6   |
|                    | % Fixture | 0.7      | 0.0    | 0.7     |
| <b>Street Side</b> | Lumens    | 18129.0  | 0.0    | 18129.0 |
|                    | % Fixture | 99.3     | 0.0    | 99.3    |
| <b>Total</b>       | Lumens    | 18253.6  | 0.0    | 18253.6 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**Coefficient of Utilization**

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 7.1     | 0.0       |
| 10°-20°   | 40.0    | 0.2       |
| 20°-30°   | 432.4   | 2.4       |
| 30°-40°   | 1278.8  | 7.0       |
| 40°-50°   | 3811.7  | 20.9      |
| 50°-60°   | 6048.2  | 33.1      |
| 60°-70°   | 5044.9  | 27.6      |
| 70°-80°   | 1555.9  | 8.5       |
| 80°-90°   | 34.6    | 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°    | 18253.6 | 100.0     |
| 0°-180°   | 18253.6 | 100.0     |



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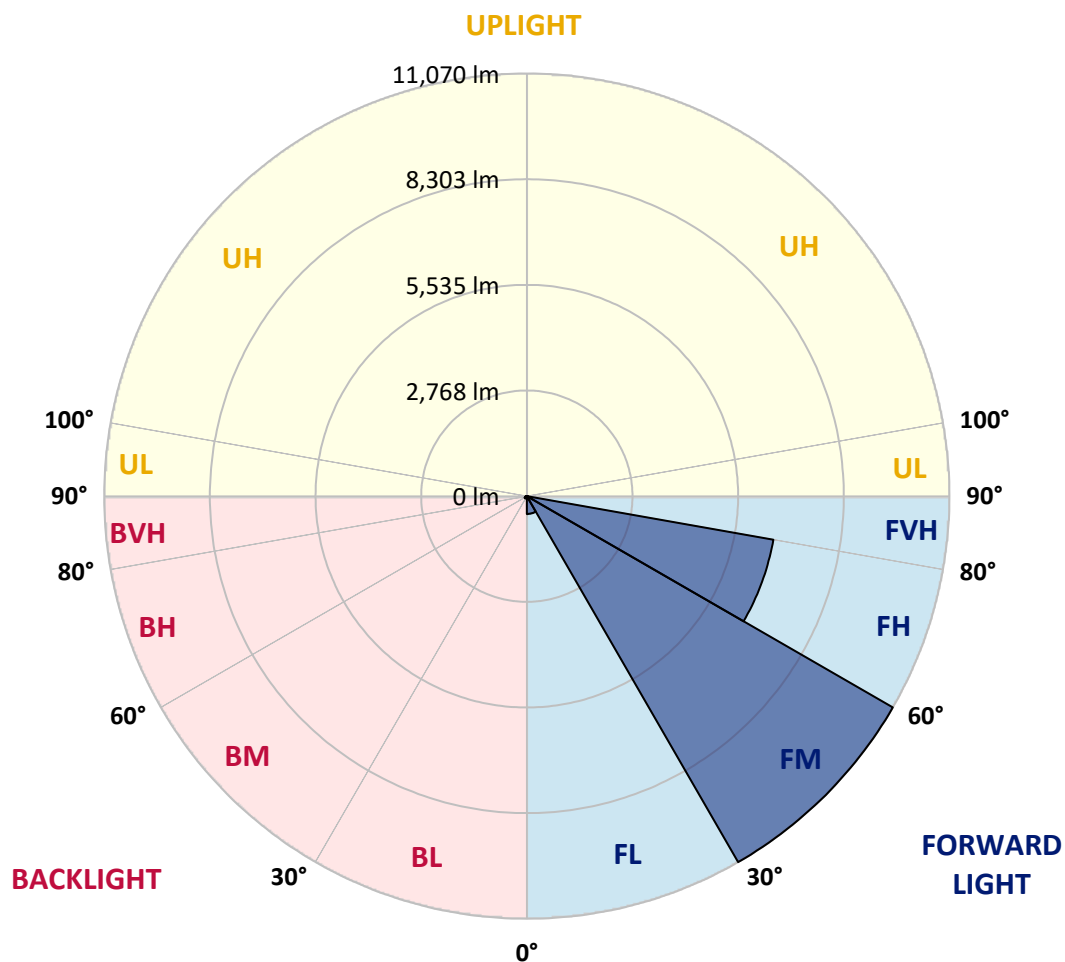
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|---------|-----------|-------------------------|------|---------|
|      |             |         |           | B                       | U    | G       |
| FL   | (0°-30°)    | 467.4   | 2.6       |                         |      |         |
| FM   | (30°-60°)   | 11070.5 | 60.6      |                         |      |         |
| FH   | (60°-80°)   | 6558.3  | 35.9      |                         |      | G3/7500 |
| FVH  | (80°-90°)   | 32.9    | 0.2       |                         |      | G1/100  |
| BL   | (0°-30°)    | 12.2    | 0.1       | B0/110                  |      |         |
| BM   | (30°-60°)   | 68.2    | 0.4       | B0/220                  |      |         |
| BH   | (60°-80°)   | 42.6    | 0.2       | B0/110                  |      | G0/110  |
| BVH  | (80°-90°)   | 1.7     | 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-G3**

Type III Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°     | 25°     | 35°     | 44°     | 45°     | 55°     | 65°     | 75°     |
|-------|--------|--------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 80.0   | 80.0   | 80.0    | 80.0    | 80.0    | 80.0    | 80.0    | 80.0    | 80.0    | 80.0    |
| 2.5°  | 103.4  | 103.4  | 99.3    | 93.8    | 88.3    | 82.7    | 81.4    | 78.6    | 77.2    | 75.8    |
| 5°    | 107.6  | 107.6  | 106.2   | 102.0   | 96.5    | 92.4    | 92.4    | 88.3    | 85.5    | 82.7    |
| 7.5°  | 110.3  | 111.7  | 114.4   | 113.1   | 110.3   | 106.2   | 106.2   | 103.4   | 99.3    | 92.4    |
| 10°   | 114.4  | 118.6  | 124.1   | 126.9   | 128.2   | 128.2   | 126.9   | 125.5   | 118.6   | 108.9   |
| 12.5° | 118.6  | 126.9  | 140.6   | 154.4   | 162.7   | 173.7   | 172.4   | 169.6   | 151.7   | 131.0   |
| 15°   | 126.9  | 139.3  | 168.2   | 208.2   | 270.3   | 308.9   | 324.0   | 310.3   | 251.0   | 176.5   |
| 17.5° | 136.5  | 157.2  | 244.1   | 435.7   | 714.3   | 846.6   | 926.6   | 861.8   | 570.9   | 335.1   |
| 20°   | 146.2  | 191.7  | 453.7   | 1129.3  | 1853.3  | 2286.2  | 2406.2  | 2218.7  | 1424.4  | 638.4   |
| 22.5° | 162.7  | 268.9  | 919.7   | 2334.5  | 3993.3  | 4642.8  | 4765.5  | 4165.7  | 2690.2  | 1260.3  |
| 25°   | 197.2  | 390.2  | 1585.7  | 3804.4  | 5959.6  | 7055.9  | 7004.9  | 6218.9  | 4364.2  | 2013.2  |
| 27.5° | 246.8  | 568.1  | 2397.9  | 5405.3  | 7843.2  | 8809.8  | 8925.7  | 7953.5  | 5817.6  | 2960.5  |
| 30°   | 318.5  | 787.4  | 3269.4  | 6687.7  | 9353.1  | 10398.3 | 10417.6 | 9412.4  | 7117.9  | 3792.0  |
| 32.5° | 387.5  | 994.2  | 4031.9  | 7927.3  | 10841.0 | 11986.8 | 12072.3 | 10835.5 | 8088.7  | 4658.0  |
| 35°   | 439.9  | 1129.3 | 4804.1  | 9016.7  | 12341.2 | 13920.1 | 13914.6 | 12446.0 | 9238.7  | 5431.5  |
| 37.5° | 444.0  | 1264.5 | 5503.2  | 10130.8 | 14241.4 | 16009.1 | 16184.2 | 14565.4 | 10628.6 | 6388.5  |
| 40°   | 434.4  | 1416.1 | 6388.5  | 11868.3 | 17665.2 | 20377.5 | 20531.9 | 18491.2 | 13416.8 | 8026.6  |
| 42.5° | 445.4  | 1679.5 | 7825.3  | 15077.0 | 23350.4 | 27245.8 | 27543.7 | 25398.1 | 18542.2 | 11369.1 |
| 45°   | 503.3  | 2174.5 | 10835.5 | 20445.1 | 31454.3 | 36203.2 | 36103.9 | 33013.8 | 24505.9 | 16457.3 |
| 47.5° | 695.0  | 3386.6 | 15297.6 | 25669.7 | 36633.4 | 40862.6 | 40948.0 | 37171.2 | 27986.3 | 20369.2 |
| 50°   | 1068.7 | 5181.9 | 19046.9 | 28431.7 | 38860.4 | 43103.3 | 43023.3 | 38659.1 | 29308.7 | 22295.6 |
| 52.5° | 1389.9 | 6480.9 | 20927.7 | 29401.1 | 39145.8 | 44210.5 | 44205.0 | 39050.7 | 29514.1 | 22461.0 |
| 55°   | 1469.9 | 6578.8 | 20942.9 | 29453.5 | 39785.6 | 45659.8 | 45841.8 | 40014.5 | 29780.3 | 21738.5 |
| 57.5° | 1438.2 | 5824.5 | 20068.6 | 29756.8 | 40924.6 | 46780.8 | 46790.5 | 40948.0 | 30455.9 | 21295.9 |
| 58°   | 1410.6 | 5705.9 | 19892.1 | 29929.2 | 41120.4 | 46827.7 | 46804.3 | 40990.8 | 31006.1 | 21279.3 |
| 60°   | 1256.2 | 4954.4 | 19204.0 | 30369.1 | 40829.5 | 45865.2 | 45646.0 | 40057.3 | 30924.8 | 21109.7 |
| 62.5° | 987.3  | 3865.1 | 18527.0 | 29860.2 | 37710.4 | 41205.9 | 41296.9 | 35464.1 | 28191.8 | 20121.0 |
| 65°   | 786.0  | 2880.5 | 17115.0 | 26192.4 | 31053.0 | 33838.4 | 34177.6 | 28838.5 | 23531.1 | 17037.8 |
| 67.5° | 626.0  | 2082.2 | 14357.2 | 20853.2 | 24572.1 | 28241.4 | 28488.2 | 24212.2 | 18230.5 | 13054.1 |
| 70°   | 508.8  | 1407.9 | 9910.2  | 15250.7 | 20267.2 | 24392.9 | 24408.0 | 20114.1 | 13607.1 | 8553.4  |
| 72.5° | 450.9  | 974.9  | 5752.8  | 11122.3 | 16433.8 | 19877.0 | 19475.7 | 16322.1 | 10457.6 | 5066.1  |
| 75°   | 390.2  | 646.7  | 2821.2  | 6799.4  | 9964.0  | 10031.6 | 10184.6 | 7571.6  | 5227.4  | 2409.0  |
| 77.5° | 321.3  | 459.2  | 1111.4  | 1857.4  | 2988.1  | 3825.1  | 3967.1  | 3006.0  | 1738.8  | 592.9   |
| 80°   | 220.6  | 217.9  | 299.2   | 569.5   | 854.9   | 1071.4  | 999.7   | 773.6   | 455.0   | 227.5   |
| 82.5° | 95.1   | 103.4  | 135.1   | 162.7   | 132.4   | 128.2   | 122.7   | 78.6    | 60.7    | 46.9    |
| 85°   | 30.3   | 27.6   | 29.0    | 29.0    | 23.4    | 17.9    | 17.9    | 8.3     | 0.0     | 0.0     |
| 87.5° | 15.2   | 12.4   | 12.4    | 11.0    | 6.9     | 2.8     | 1.4     | 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     |

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**CANDELA DISTRIBUTION (continued):**

| 85°     |       | 90°    | 95°   | 105°  | 115° | 125° | 135° | 145° | 155° | 165° | 175° |
|---------|-------|--------|-------|-------|------|------|------|------|------|------|------|
| 80.0    | 0°    | 80.0   | 80.0  | 80.0  | 80.0 | 80.0 | 80.0 | 80.0 | 80.0 | 80.0 | 80.0 |
| 74.5    | 2.5°  | 73.1   | 73.1  | 70.3  | 67.6 | 66.2 | 63.4 | 62.1 | 60.7 | 59.3 | 57.9 |
| 80.0    | 5°    | 77.2   | 75.8  | 71.7  | 67.6 | 63.4 | 59.3 | 56.5 | 53.8 | 51.0 | 49.6 |
| 88.3    | 7.5°  | 84.1   | 81.4  | 73.1  | 66.2 | 60.7 | 55.2 | 52.4 | 48.3 | 45.5 | 41.4 |
| 97.9    | 10°   | 92.4   | 86.9  | 75.8  | 67.6 | 59.3 | 52.4 | 48.3 | 44.1 | 40.0 | 34.5 |
| 111.7   | 12.5° | 103.4  | 93.8  | 80.0  | 66.2 | 56.5 | 48.3 | 44.1 | 38.6 | 34.5 | 30.3 |
| 129.6   | 15°   | 113.1  | 100.7 | 81.4  | 66.2 | 53.8 | 44.1 | 38.6 | 33.1 | 29.0 | 23.4 |
| 162.7   | 17.5° | 126.9  | 106.2 | 80.0  | 62.1 | 49.6 | 38.6 | 33.1 | 29.0 | 22.1 | 13.8 |
| 241.3   | 20°   | 150.3  | 110.3 | 77.2  | 57.9 | 42.7 | 31.7 | 24.8 | 19.3 | 9.7  | 2.8  |
| 362.7   | 22.5° | 187.5  | 121.3 | 74.5  | 52.4 | 37.2 | 24.8 | 16.5 | 6.9  | 0.0  | 0.0  |
| 551.6   | 25°   | 259.2  | 140.6 | 74.5  | 49.6 | 33.1 | 17.9 | 5.5  | 0.0  | 0.0  | 0.0  |
| 783.2   | 27.5° | 344.7  | 166.8 | 74.5  | 42.7 | 26.2 | 9.7  | 0.0  | 0.0  | 0.0  | 0.0  |
| 1067.3  | 30°   | 431.6  | 195.8 | 74.5  | 37.2 | 20.7 | 1.4  | 0.0  | 0.0  | 0.0  | 0.0  |
| 1314.1  | 32.5° | 514.3  | 220.6 | 75.8  | 31.7 | 13.8 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 1656.1  | 35°   | 598.4  | 224.8 | 74.5  | 27.6 | 8.3  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 2075.3  | 37.5° | 706.0  | 216.5 | 70.3  | 24.8 | 4.1  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 2730.2  | 40°   | 868.7  | 220.6 | 66.2  | 23.4 | 1.4  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 3898.2  | 42.5° | 1169.3 | 238.6 | 60.7  | 23.4 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 6209.2  | 45°   | 2021.5 | 319.9 | 55.2  | 24.8 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 9321.4  | 47.5° | 3343.9 | 575.0 | 53.8  | 24.8 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 11228.4 | 50°   | 4267.7 | 723.9 | 56.5  | 26.2 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 11467.0 | 52.5° | 4260.8 | 806.7 | 59.3  | 27.6 | 5.5  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 10569.3 | 55°   | 3787.9 | 821.8 | 63.4  | 30.3 | 17.9 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 9082.9  | 57.5° | 3166.0 | 750.1 | 73.1  | 37.2 | 33.1 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 8849.8  | 58°   | 3055.7 | 717.0 | 75.8  | 38.6 | 35.9 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 7676.4  | 60°   | 2504.1 | 584.7 | 96.5  | 48.3 | 48.3 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 6293.3  | 62.5° | 1729.2 | 510.2 | 110.3 | 62.1 | 49.6 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 4640.0  | 65°   | 1223.1 | 460.6 | 120.0 | 66.2 | 40.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 3297.0  | 67.5° | 914.2  | 424.7 | 132.4 | 67.6 | 20.7 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 2068.4  | 70°   | 700.5  | 398.5 | 162.7 | 71.7 | 5.5  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 1232.7  | 72.5° | 570.9  | 368.2 | 197.2 | 74.5 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 739.1   | 75°   | 473.0  | 332.3 | 190.3 | 81.4 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 394.4   | 77.5° | 314.4  | 257.9 | 173.7 | 81.4 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 140.6   | 80°   | 110.3  | 102.0 | 135.1 | 71.7 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 29.0    | 82.5° | 16.5   | 13.8  | 19.3  | 24.8 | 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  |



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**CANDELA DISTRIBUTION (continued):**

| 180° |       | 185° | 195° | 205° | 215° | 225° | 235° | 245° | 255° | 265° | 270° |
|------|-------|------|------|------|------|------|------|------|------|------|------|
| 80.0 | 0°    | 80.0 | 80.0 | 80.0 | 80.0 | 80.0 | 80.0 | 80.0 | 80.0 | 80.0 | 80.0 |
| 56.5 | 2.5°  | 56.5 | 56.5 | 55.2 | 56.5 | 56.5 | 59.3 | 66.2 | 75.8 | 86.9 | 91.0 |
| 48.3 | 5°    | 46.9 | 45.5 | 44.1 | 44.1 | 44.1 | 48.3 | 53.8 | 64.8 | 77.2 | 82.7 |
| 40.0 | 7.5°  | 38.6 | 37.2 | 35.9 | 34.5 | 34.5 | 37.2 | 44.1 | 56.5 | 68.9 | 74.5 |
| 33.1 | 10°   | 31.7 | 29.0 | 27.6 | 26.2 | 26.2 | 29.0 | 35.9 | 48.3 | 62.1 | 67.6 |
| 27.6 | 12.5° | 26.2 | 22.1 | 19.3 | 17.9 | 16.5 | 20.7 | 27.6 | 38.6 | 53.8 | 60.7 |
| 20.7 | 15°   | 17.9 | 13.8 | 9.7  | 8.3  | 6.9  | 11.0 | 17.9 | 30.3 | 45.5 | 53.8 |
| 11.0 | 17.5° | 9.7  | 4.1  | 1.4  | 0.0  | 0.0  | 2.8  | 8.3  | 22.1 | 37.2 | 44.1 |
| 0.0  | 20°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 11.0 | 27.6 | 34.5 |
| 0.0  | 22.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 1.4  | 16.5 | 23.4 |
| 0.0  | 25°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 6.9  | 12.4 |
| 0.0  | 27.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 2.8  |
| 0.0  | 30°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 0.0  | 32.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 0.0  | 35°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 0.0  | 37.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 0.0  | 40°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 0.0  | 42.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 0.0  | 45°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 0.0  | 47.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 0.0  | 50°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 0.0  | 52.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 0.0  | 55°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 0.0  | 57.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 0.0  | 58°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 0.0  | 60°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 0.0  | 62.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 0.0  | 65°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 0.0  | 67.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 0.0  | 70°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 0.0  | 72.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 0.0  | 75°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 0.0  | 77.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 0.0  | 80°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 0.0  | 82.5° | 0.0  | 0.0  | 0.0  | 0.0  | 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  | 4.1  |
| 0.0  | 87.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 5.5  | 11.0 |
| 0.0  | 90°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |

REPORT NUMBER: P1049802

CATALOG NUMBER: GALN-SA5B-835-U-LBC

**CANDELA DISTRIBUTION (continued):**

| 275° |       | 285° | 295° | 305° | 315° | 316° | 325° | 335° | 345°  | 355°  | 360°   |
|------|-------|------|------|------|------|------|------|------|-------|-------|--------|
| 80.0 | 0°    | 80.0 | 80.0 | 80.0 | 80.0 | 80.0 | 80.0 | 80.0 | 80.0  | 80.0  | 80.0   |
| 95.1 | 2.5°  | 97.9 | 96.5 | 93.8 | 91.0 | 91.0 | 91.0 | 95.1 | 99.3  | 103.4 | 103.4  |
| 85.5 | 5°    | 91.0 | 91.0 | 89.6 | 86.9 | 86.9 | 88.3 | 93.8 | 100.7 | 106.2 | 107.6  |
| 78.6 | 7.5°  | 84.1 | 86.9 | 84.1 | 82.7 | 84.1 | 85.5 | 91.0 | 99.3  | 107.6 | 110.3  |
| 73.1 | 10°   | 80.0 | 81.4 | 81.4 | 80.0 | 80.0 | 82.7 | 88.3 | 99.3  | 110.3 | 114.4  |
| 66.2 | 12.5° | 74.5 | 77.2 | 75.8 | 75.8 | 75.8 | 78.6 | 85.5 | 97.9  | 113.1 | 118.6  |
| 59.3 | 15°   | 68.9 | 73.1 | 73.1 | 71.7 | 71.7 | 73.1 | 82.7 | 96.5  | 117.2 | 126.9  |
| 51.0 | 17.5° | 63.4 | 67.6 | 68.9 | 66.2 | 66.2 | 68.9 | 78.6 | 96.5  | 120.0 | 136.5  |
| 41.4 | 20°   | 52.4 | 59.3 | 63.4 | 59.3 | 59.3 | 62.1 | 71.7 | 91.0  | 121.3 | 146.2  |
| 30.3 | 22.5° | 41.4 | 48.3 | 53.8 | 52.4 | 52.4 | 53.8 | 66.2 | 86.9  | 122.7 | 162.7  |
| 17.9 | 25°   | 30.3 | 37.2 | 41.4 | 44.1 | 44.1 | 48.3 | 60.7 | 84.1  | 128.2 | 197.2  |
| 8.3  | 27.5° | 17.9 | 26.2 | 31.7 | 34.5 | 35.9 | 41.4 | 56.5 | 81.4  | 137.9 | 246.8  |
| 0.0  | 30°   | 8.3  | 15.2 | 22.1 | 27.6 | 27.6 | 37.2 | 52.4 | 78.6  | 150.3 | 318.5  |
| 0.0  | 32.5° | 0.0  | 6.9  | 11.0 | 19.3 | 20.7 | 30.3 | 48.3 | 75.8  | 168.2 | 387.5  |
| 0.0  | 35°   | 0.0  | 0.0  | 5.5  | 15.2 | 15.2 | 24.8 | 44.1 | 73.1  | 195.8 | 439.9  |
| 0.0  | 37.5° | 0.0  | 0.0  | 0.0  | 11.0 | 12.4 | 22.1 | 42.7 | 71.7  | 201.3 | 444.0  |
| 0.0  | 40°   | 0.0  | 0.0  | 0.0  | 8.3  | 9.7  | 20.7 | 42.7 | 73.1  | 182.0 | 434.4  |
| 0.0  | 42.5° | 0.0  | 0.0  | 0.0  | 5.5  | 6.9  | 20.7 | 42.7 | 75.8  | 164.1 | 445.4  |
| 0.0  | 45°   | 0.0  | 0.0  | 0.0  | 4.1  | 5.5  | 22.1 | 41.4 | 74.5  | 154.4 | 503.3  |
| 0.0  | 47.5° | 0.0  | 0.0  | 0.0  | 5.5  | 8.3  | 22.1 | 40.0 | 73.1  | 155.8 | 695.0  |
| 0.0  | 50°   | 0.0  | 0.0  | 0.0  | 6.9  | 9.7  | 22.1 | 41.4 | 70.3  | 171.0 | 1068.7 |
| 0.0  | 52.5° | 0.0  | 0.0  | 0.0  | 5.5  | 8.3  | 24.8 | 45.5 | 68.9  | 186.2 | 1389.9 |
| 0.0  | 55°   | 0.0  | 0.0  | 0.0  | 1.4  | 4.1  | 31.7 | 49.6 | 68.9  | 209.6 | 1469.9 |
| 0.0  | 57.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 35.9 | 56.5 | 73.1  | 248.2 | 1438.2 |
| 0.0  | 58°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 35.9 | 57.9 | 73.1  | 251.0 | 1410.6 |
| 0.0  | 60°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 35.9 | 63.4 | 81.4  | 270.3 | 1256.2 |
| 0.0  | 62.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 30.3 | 75.8 | 102.0 | 281.3 | 987.3  |
| 0.0  | 65°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 24.8 | 89.6 | 111.7 | 289.6 | 786.0  |
| 0.0  | 67.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 23.4 | 92.4 | 113.1 | 293.7 | 626.0  |
| 0.0  | 70°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 24.8 | 91.0 | 121.3 | 307.5 | 508.8  |
| 0.0  | 72.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 27.6 | 82.7 | 133.8 | 307.5 | 450.9  |
| 0.0  | 75°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 29.0 | 77.2 | 150.3 | 279.9 | 390.2  |
| 0.0  | 77.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 27.6 | 75.8 | 175.1 | 249.6 | 321.3  |
| 0.0  | 80°   | 2.8  | 4.1  | 4.1  | 2.8  | 2.8  | 23.4 | 74.5 | 177.9 | 212.4 | 220.6  |
| 1.4  | 82.5° | 8.3  | 11.0 | 9.7  | 6.9  | 6.9  | 20.7 | 66.2 | 148.9 | 110.3 | 95.1   |
| 8.3  | 85°   | 15.2 | 17.9 | 17.9 | 15.2 | 15.2 | 19.3 | 41.4 | 53.8  | 37.2  | 30.3   |
| 15.2 | 87.5° | 20.7 | 23.4 | 23.4 | 20.7 | 20.7 | 19.3 | 17.9 | 16.5  | 15.2  | 15.2   |
| 0.0  | 90°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0    |

(END OF RI



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

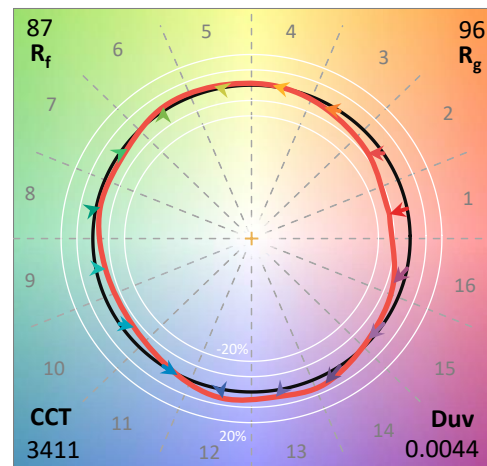
### Test Information

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

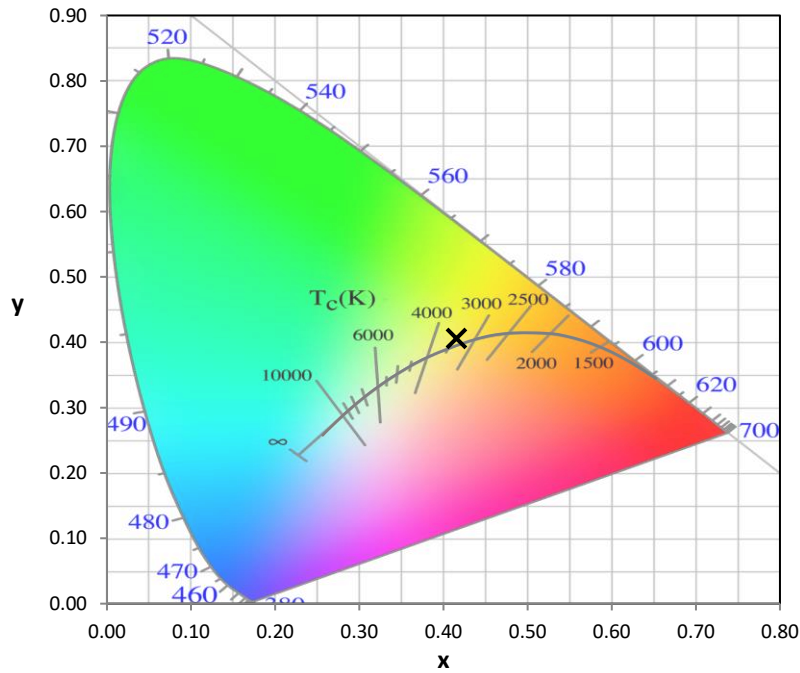
Stabilization Time: 35M  
 Operation Time: 1H 35M  
 Sphere Temperature (°C): 25.2

REPORT NUMBER: SP1-2407-184-10

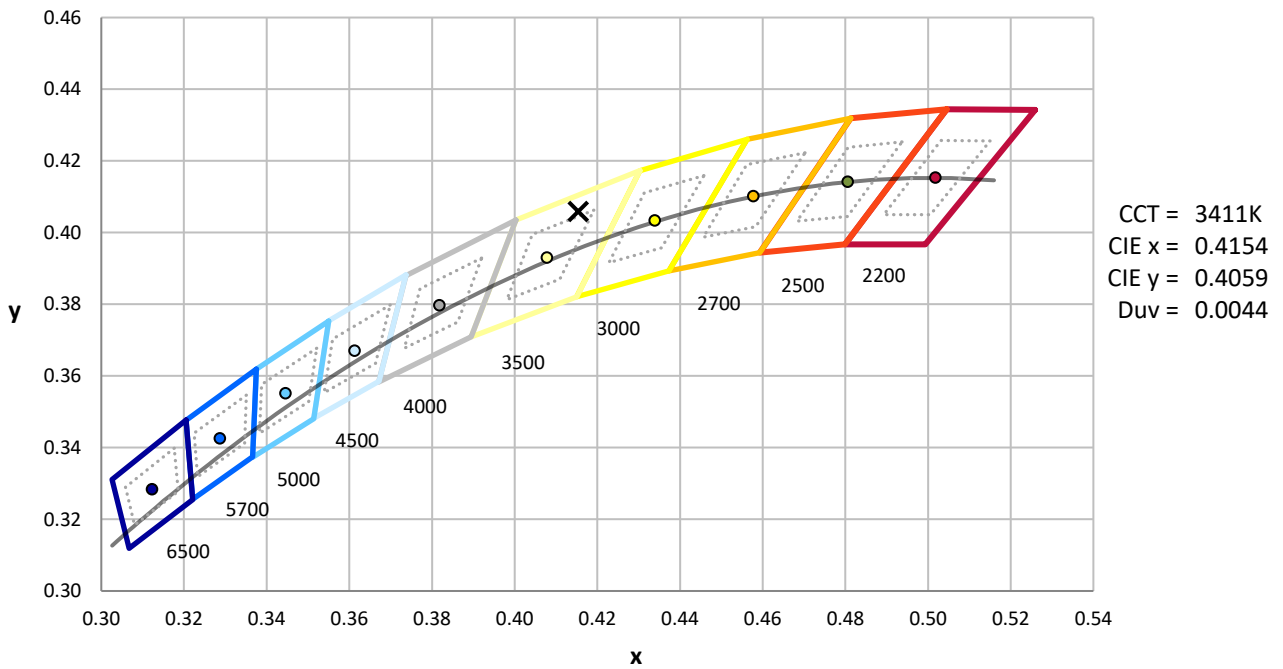
| Measurement and Test Equipment |                       |                  |                      |
|--------------------------------|-----------------------|------------------|----------------------|
| Instrument                     | Identification Number | Calibration Date | Calibration Due Date |
| 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

**CIE 1931 Chromaticity Diagram**



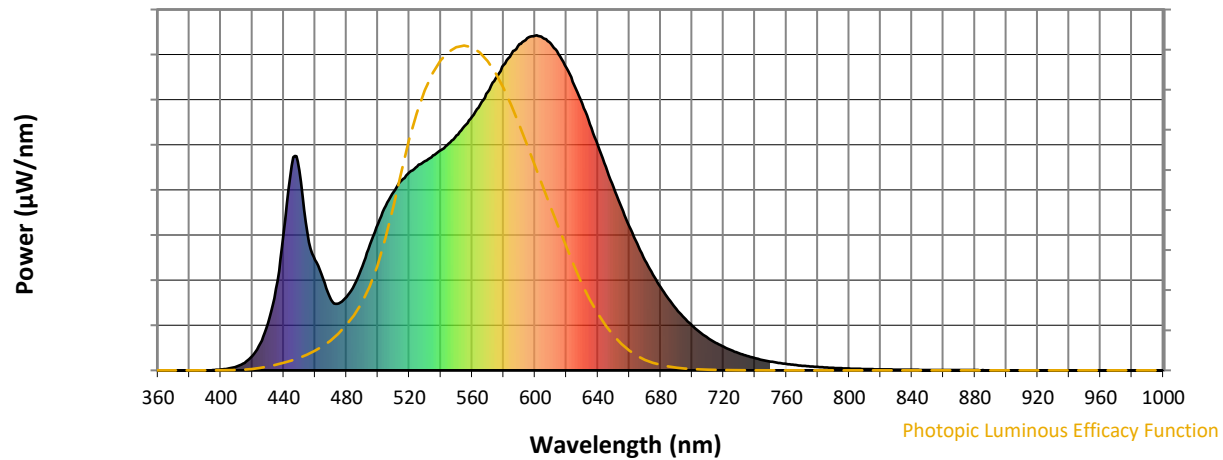
**CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles**



Point lies inside the ANSI 3500K 7-step quadrangle

REPORT NUMBER: SP1-2407-184-10

### Photopic Flux vs. Wavelength



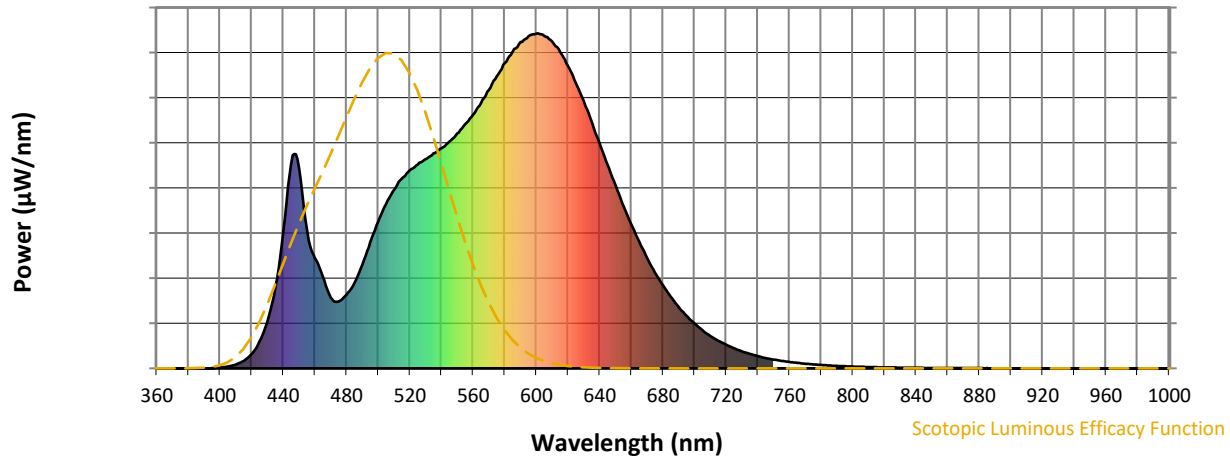
### Photopic Lumens: NR

| $\lambda$<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



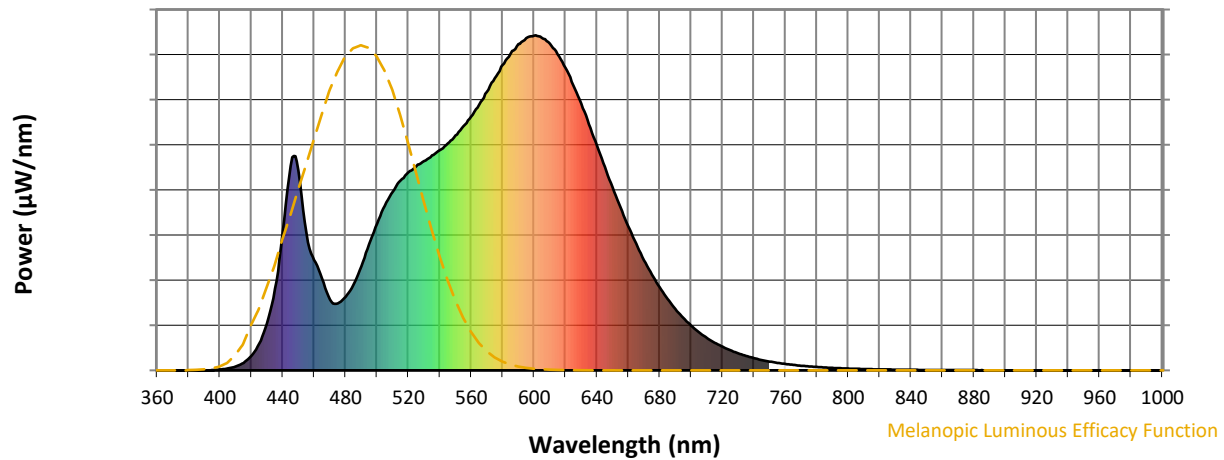
Scotopic Lumens: NR

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                             |                   |                                      |                                |

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### Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 2.88

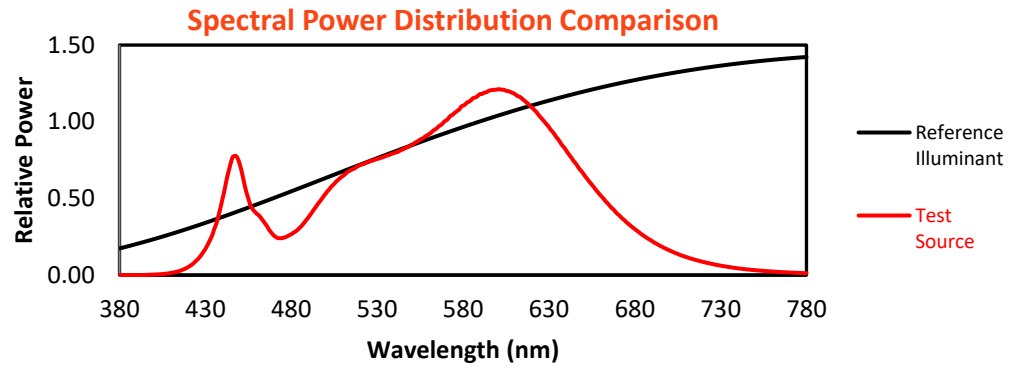
| $\lambda$<br>(nm) | Power<br>$\text{W}^{\wedge}/\text{nm}$ | Lumens<br>( $\phi/\text{nm}$ ) | $\lambda$<br>(nm) | Power<br>$\text{W}^{\wedge}/\text{nm}$ | Lumens<br>( $\phi/\text{nm}$ ) | $\lambda$<br>(nm) | Power<br>$\text{W}^{\wedge}/\text{nm}$ | Lumens<br>( $\phi/\text{nm}$ ) | $\lambda$<br>(nm) | 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                             |                   |                                        |                                |

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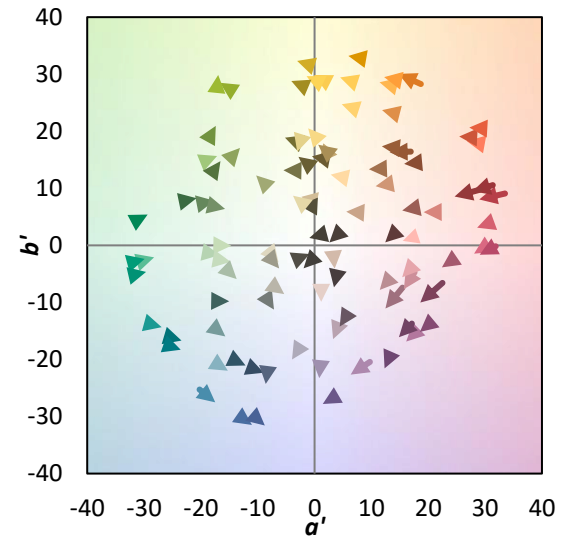
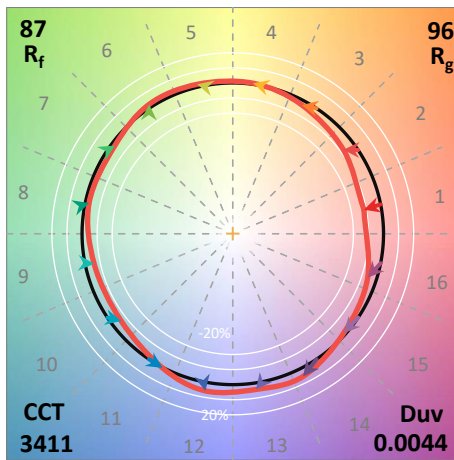
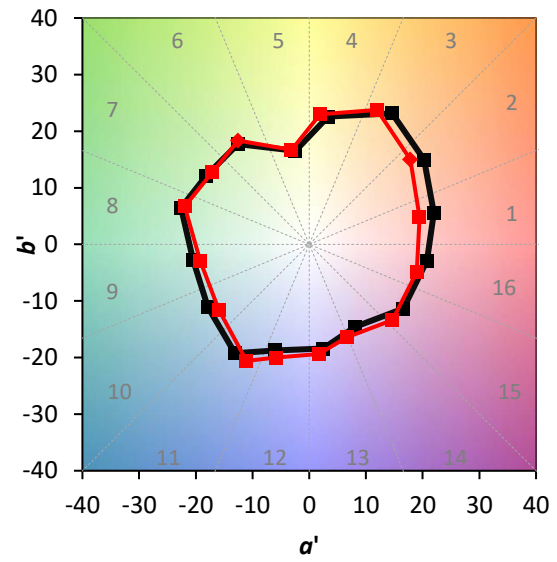
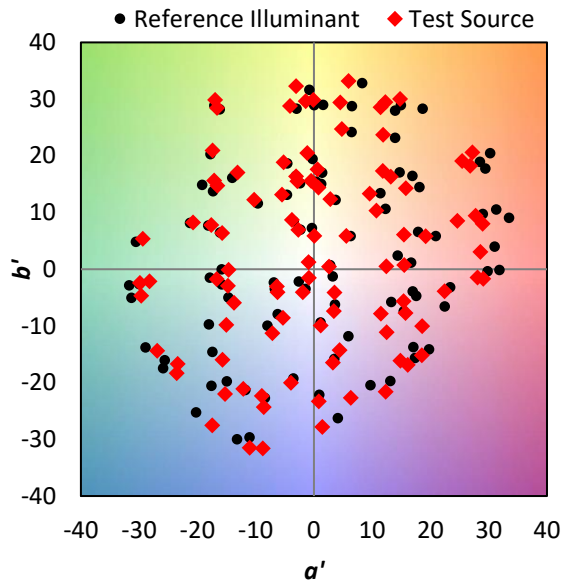
TM-30-18

### Summary

$R_f = 86.6$   
 $R_g = 95.9$   
 $CIE R_a = 83.5$   
 $R_9 = 6.3$

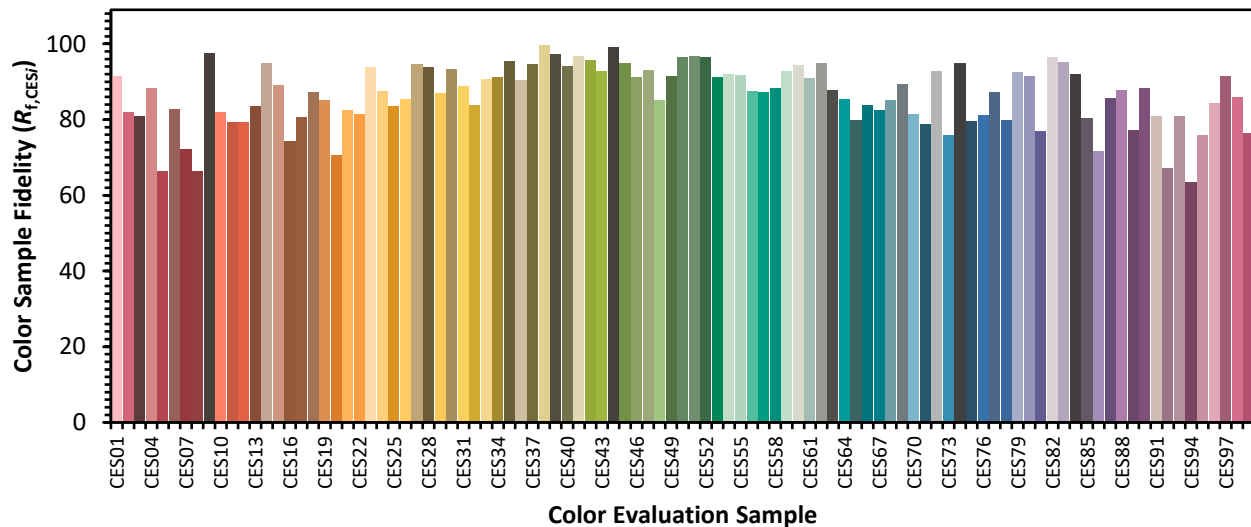


### Color Vector Graphics

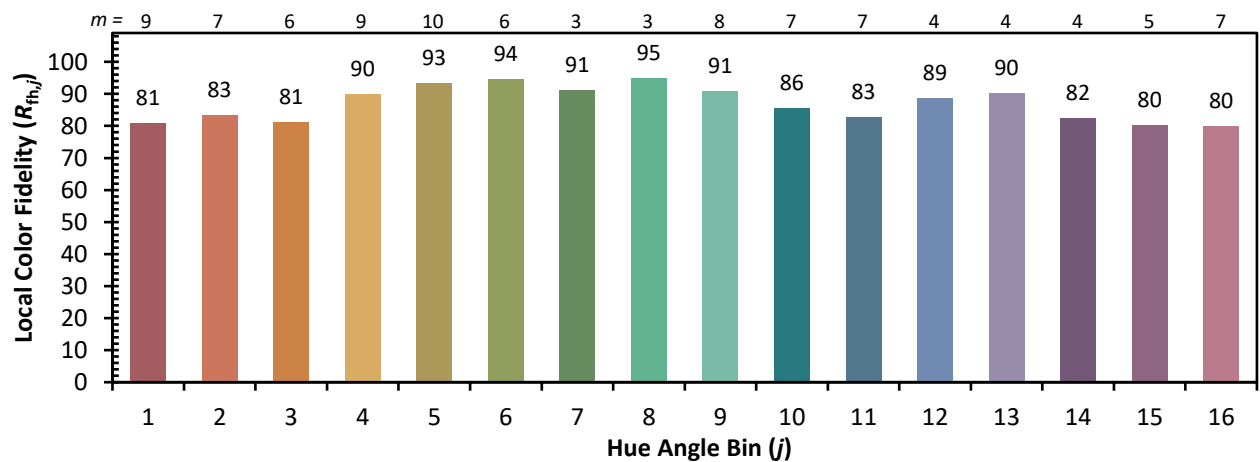
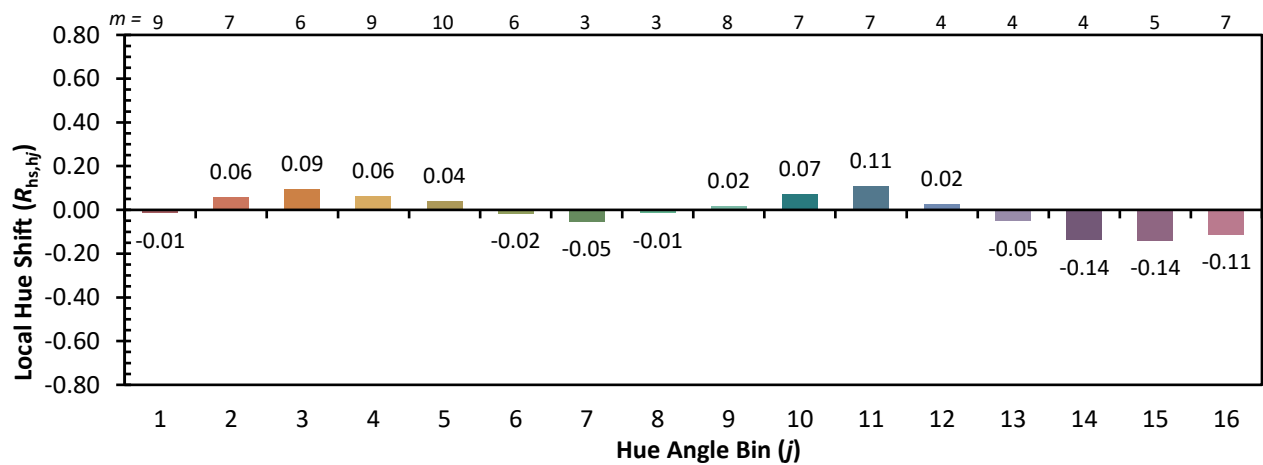
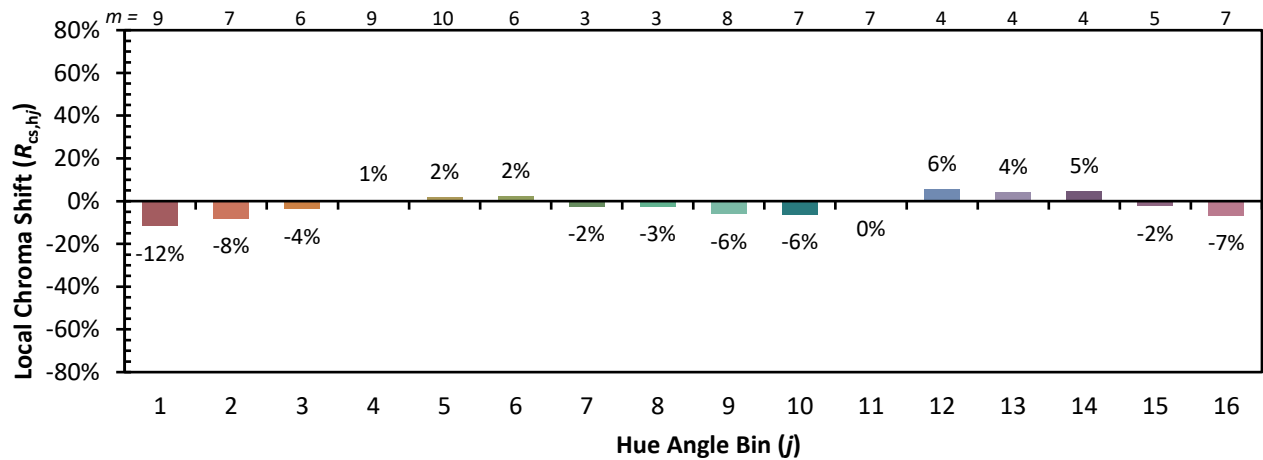


**Individual Sample Fidelity Index ( $R_{f,i}$ )**

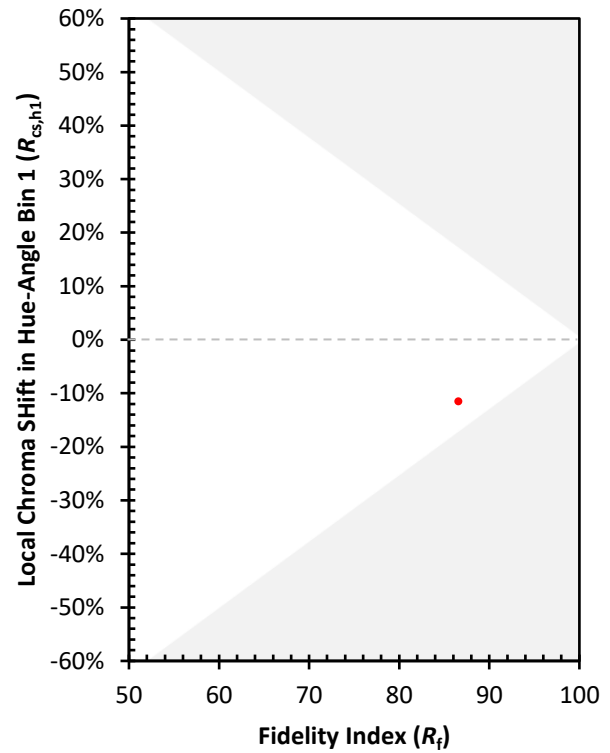
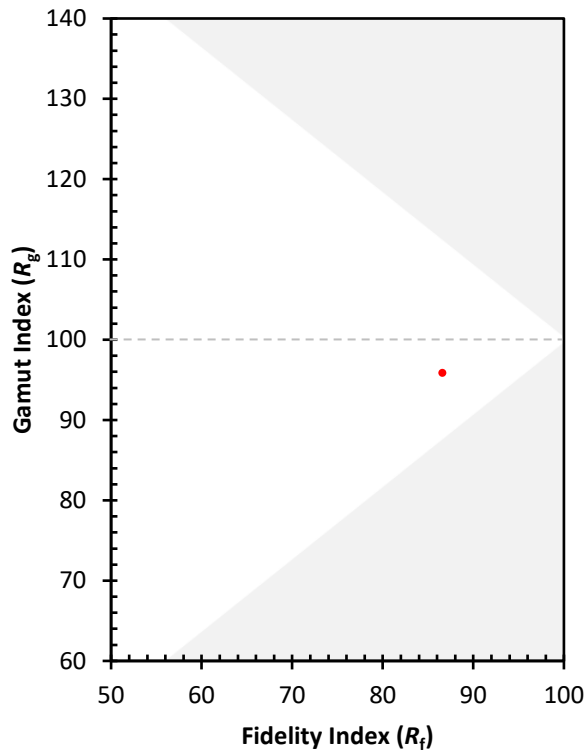
|            |             |            |            |
|------------|-------------|------------|------------|
| CES01 = 86 | CES26 = 85  | CES51 = 97 | CES76 = 81 |
| CES02 = 62 | CES27 = 95  | CES52 = 96 | CES77 = 87 |
| CES03 = 31 | CES28 = 94  | CES53 = 91 | CES78 = 80 |
| CES04 = 70 | CES29 = 87  | 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)