

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: P1067945

Luminaire Tested: **NAV-SA2A-730-U-LBC**

Issue Date: 08/07/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P1067945  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 08/07/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SA2A-730-U-LBC  
Description: Navion AREA AND ROADWAY LUMINAIRE 615mA 2xLight Square PACKAGE  
70CRI 3000K FIXTURE w/ LEFT CORNER BACKLIGHT CONTROL  
Light Source: (28) 3000K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5667.9 lumens  
Efficiency: N/A  
Efficacy: 102.5 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): 55.3  
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

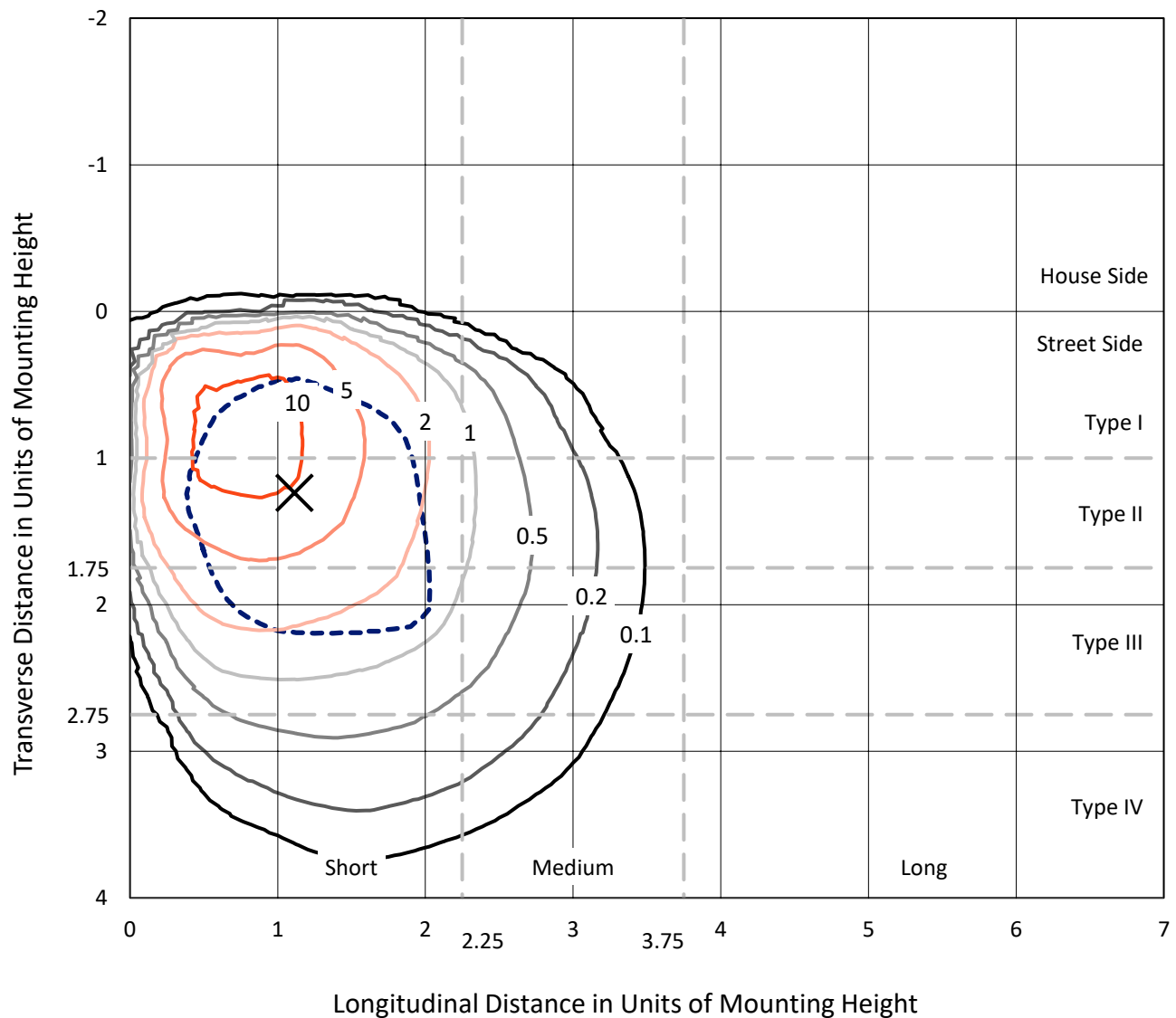


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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

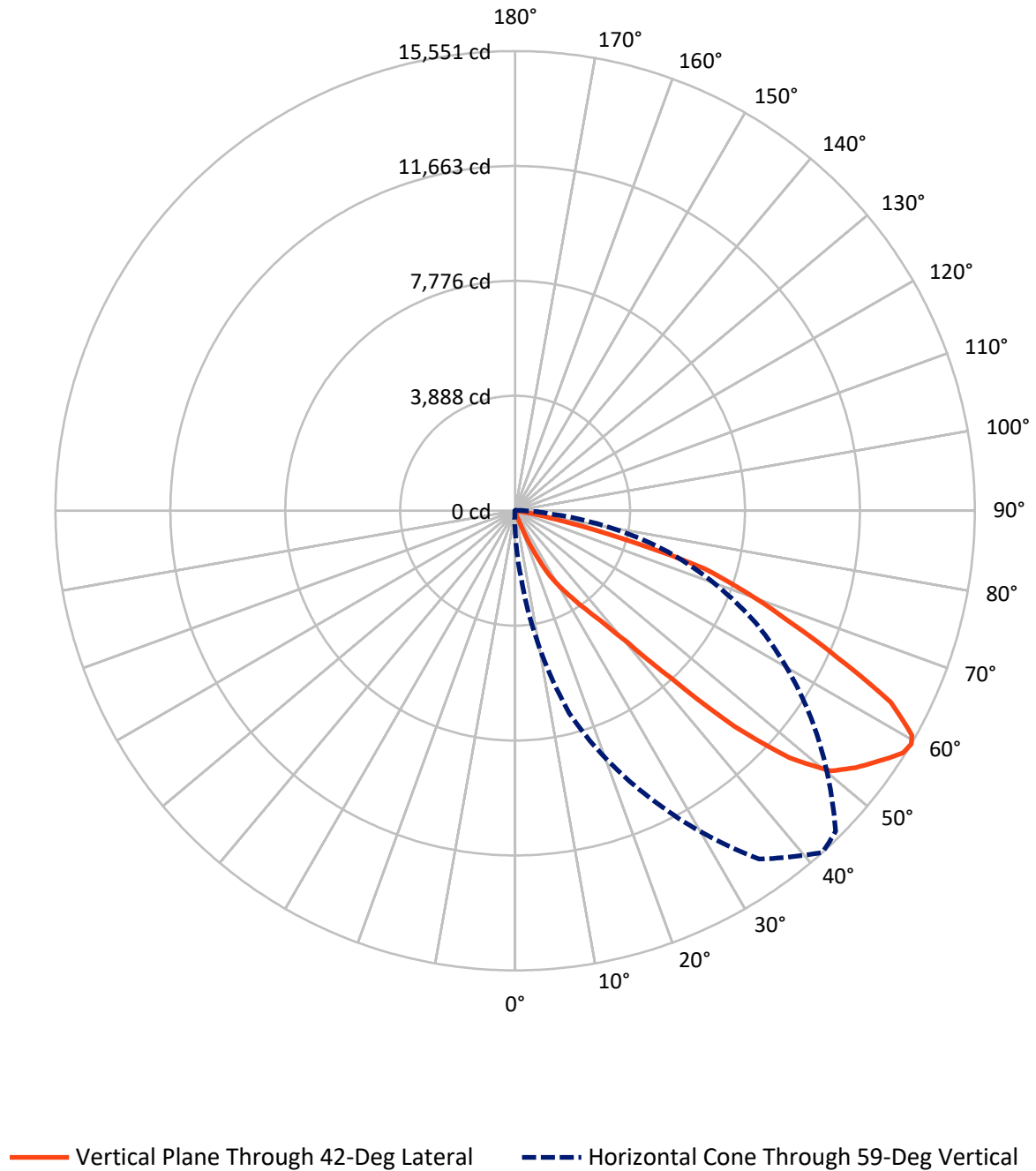


Based on 15 foot mounting height. Maximum calculated value = 16.8 fc  
 Type III - Short - N/A

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## Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 27.3     | 0.0    | 27.3   |
|                    | % Fixture | 0.5      | 0.0    | 0.5    |
| <b>Street Side</b> | Lumens    | 5640.6   | 0.0    | 5640.6 |
|                    | % Fixture | 99.5     | 0.0    | 99.5   |
| <b>Total</b>       | Lumens    | 5667.9   | 0.0    | 5667.9 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**Coefficient of Utilization**

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 1.7    | 0.0       |
| 10°-20°   | 8.3    | 0.1       |
| 20°-30°   | 105.7  | 1.9       |
| 30°-40°   | 356.4  | 6.3       |
| 40°-50°   | 1076.6 | 19.0      |
| 50°-60°   | 1900.4 | 33.5      |
| 60°-70°   | 1673.4 | 29.5      |
| 70°-80°   | 532.6  | 9.4       |
| 80°-90°   | 12.7   | 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°    | 5667.9 | 100.0     |
| 0°-180°   | 5667.9 | 100.0     |



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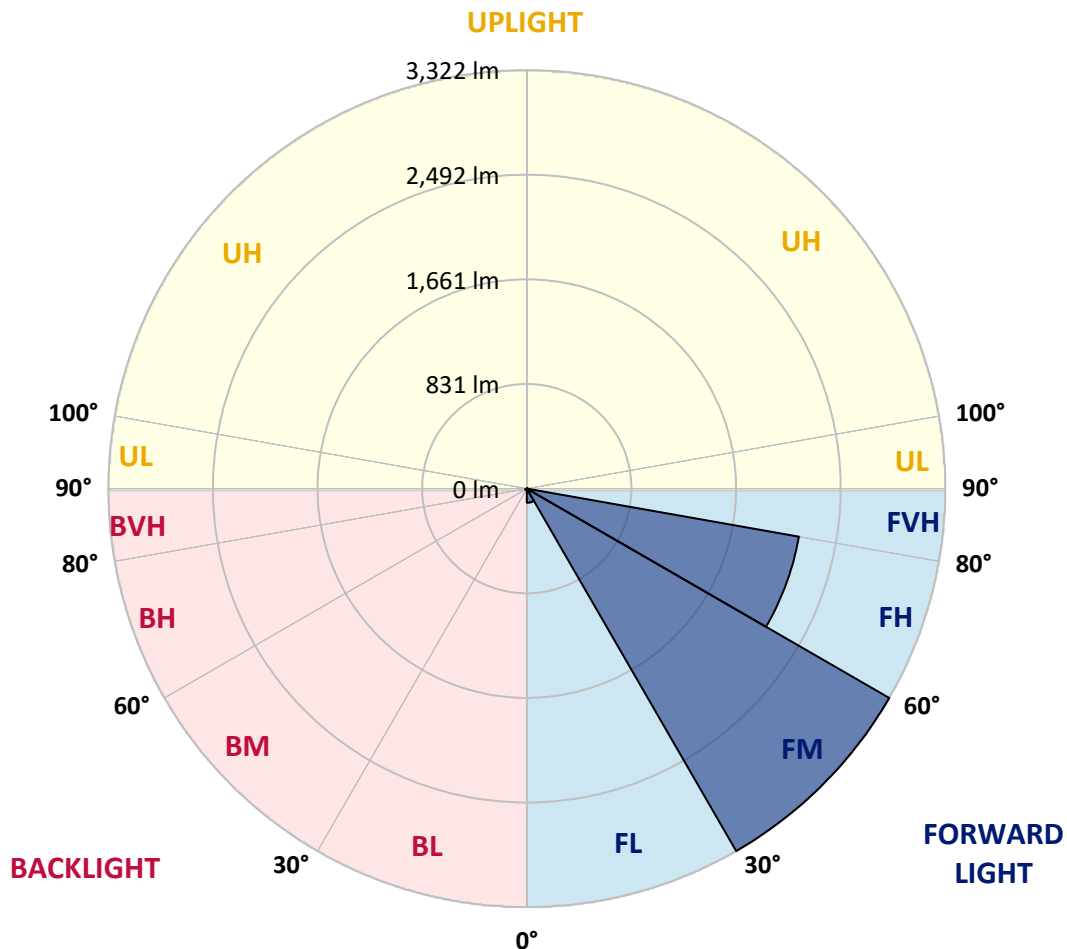
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 112.6  | 2.0       |                         |      |         |
| FM   | (30°-60°)   | 3322.3 | 58.6      |                         |      |         |
| FH   | (60°-80°)   | 2193.5 | 38.7      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 12.1   | 0.2       |                         |      | G1/100  |
| BL   | (0°-30°)    | 3.0    | 0.1       | B0/110                  |      |         |
| BM   | (30°-60°)   | 11.2   | 0.2       | B0/220                  |      |         |
| BH   | (60°-80°)   | 12.5   | 0.2       | B0/110                  |      | G0/110  |
| BVH  | (80°-90°)   | 0.6    | 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°    | 16.0  | 16.0   | 16.0   | 16.0    | 16.0    | 16.0    | 16.0    | 16.0    | 16.0   | 16.0   | 16.0   |
| 2.5°  | 24.9  | 24.9   | 23.1   | 21.3    | 19.5    | 17.8    | 17.8    | 17.8    | 16.0   | 16.0   | 14.2   |
| 5°    | 28.4  | 28.4   | 26.7   | 24.9    | 24.9    | 23.1    | 23.1    | 21.3    | 19.5   | 19.5   | 17.8   |
| 7.5°  | 30.2  | 30.2   | 30.2   | 30.2    | 28.4    | 28.4    | 28.4    | 26.7    | 24.9   | 23.1   | 21.3   |
| 10°   | 32.0  | 33.8   | 35.5   | 35.5    | 35.5    | 35.5    | 35.5    | 33.8    | 30.2   | 28.4   | 24.9   |
| 12.5° | 35.5  | 37.3   | 40.9   | 44.4    | 44.4    | 46.2    | 44.4    | 42.6    | 39.1   | 33.8   | 28.4   |
| 15°   | 39.1  | 42.6   | 48.0   | 55.1    | 62.2    | 64.0    | 64.0    | 58.6    | 51.5   | 40.9   | 33.8   |
| 17.5° | 44.4  | 49.8   | 64.0   | 87.1    | 112.0   | 131.5   | 131.5   | 117.3   | 81.7   | 53.3   | 39.1   |
| 20°   | 48.0  | 58.6   | 103.1  | 209.7   | 319.9   | 401.6   | 385.6   | 341.2   | 183.0  | 83.5   | 42.6   |
| 22.5° | 53.3  | 74.6   | 218.6  | 550.9   | 853.0   | 1002.3  | 966.7   | 733.9   | 410.5  | 149.3  | 51.5   |
| 25°   | 60.4  | 108.4  | 433.6  | 1032.5  | 1585.1  | 1746.9  | 1723.8  | 1370.1  | 748.1  | 250.6  | 65.8   |
| 27.5° | 74.6  | 159.9  | 694.8  | 1565.6  | 2338.6  | 2477.2  | 2468.3  | 2006.3  | 1196.0 | 403.4  | 85.3   |
| 30°   | 94.2  | 232.8  | 1030.7 | 2127.1  | 2838.0  | 2978.4  | 2933.9  | 2471.9  | 1613.6 | 616.6  | 110.2  |
| 32.5° | 117.3 | 325.2  | 1334.6 | 2541.2  | 3298.2  | 3483.0  | 3429.7  | 2877.1  | 1949.4 | 797.9  | 163.5  |
| 35°   | 152.8 | 415.8  | 1634.9 | 2907.3  | 3829.6  | 4064.1  | 3975.3  | 3294.7  | 2239.1 | 1002.3 | 197.3  |
| 37.5° | 170.6 | 469.1  | 1910.3 | 3305.3  | 4426.7  | 4746.5  | 4679.0  | 3822.5  | 2534.1 | 1263.5 | 241.7  |
| 40°   | 172.4 | 533.1  | 2196.4 | 3824.2  | 5270.8  | 5841.2  | 5720.4  | 4728.8  | 3083.2 | 1599.4 | 311.0  |
| 42.5° | 177.7 | 629.1  | 2567.9 | 4709.2  | 6928.8  | 7748.0  | 7611.2  | 6395.6  | 4328.9 | 2272.9 | 440.7  |
| 45°   | 202.6 | 810.3  | 3324.9 | 6363.7  | 9205.2  | 10406.5 | 10248.3 | 8718.3  | 6068.7 | 3539.9 | 751.7  |
| 47.5° | 289.7 | 1219.1 | 4652.3 | 8149.6  | 11533.1 | 12491.0 | 12451.9 | 10548.6 | 7644.9 | 4838.9 | 1274.2 |
| 50°   | 465.6 | 1871.2 | 6162.9 | 9651.2  | 13015.2 | 13838.0 | 13740.2 | 11312.8 | 8544.1 | 5725.7 | 1633.1 |
| 52.5° | 622.0 | 2495.0 | 7111.8 | 10203.9 | 13457.7 | 14438.6 | 14319.6 | 11591.8 | 8780.5 | 5986.9 | 1732.6 |
| 55°   | 661.1 | 2720.7 | 7394.4 | 10374.5 | 13750.9 | 14946.9 | 14774.5 | 11778.4 | 8810.7 | 5800.3 | 1567.4 |
| 57.5° | 641.5 | 2507.4 | 7211.3 | 10541.5 | 14159.6 | 15469.3 | 15240.1 | 12142.7 | 8912.0 | 5484.0 | 1304.4 |
| 59°   | 607.8 | 2244.4 | 7097.6 | 10674.8 | 14385.3 | 15551.1 | 15336.0 | 12222.6 | 8979.5 | 5340.1 | 1144.4 |
| 60°   | 568.7 | 2066.7 | 7008.7 | 10761.9 | 14371.1 | 15423.1 | 15201.0 | 12185.3 | 9006.2 | 5215.7 | 1068.0 |
| 62.5° | 438.9 | 1649.1 | 6880.8 | 10699.7 | 13473.7 | 14255.6 | 14129.4 | 11271.9 | 8615.2 | 4817.6 | 842.3  |
| 65°   | 341.2 | 1261.7 | 6411.6 | 9542.8  | 11465.6 | 11991.6 | 11952.5 | 9544.6  | 7250.4 | 4153.0 | 607.8  |
| 67.5° | 270.1 | 920.5  | 5421.8 | 7728.4  | 9224.7  | 9972.9  | 9944.4  | 7748.0  | 5503.6 | 3173.8 | 437.2  |
| 70°   | 220.4 | 655.7  | 3717.6 | 5827.0  | 7378.4  | 8320.2  | 8279.3  | 6235.7  | 4078.4 | 2013.4 | 318.1  |
| 72.5° | 186.6 | 419.4  | 2255.1 | 4392.9  | 6157.5  | 6696.0  | 6576.9  | 5030.9  | 2965.9 | 1096.4 | 252.3  |
| 75°   | 158.2 | 257.7  | 1117.8 | 2738.5  | 3667.9  | 3664.3  | 3545.2  | 2663.8  | 1592.2 | 536.7  | 200.8  |
| 77.5° | 127.9 | 181.3  | 438.9  | 751.7   | 1156.9  | 1432.3  | 1409.2  | 943.6   | 476.3  | 156.4  | 124.4  |
| 80°   | 83.5  | 85.3   | 117.3  | 206.1   | 318.1   | 351.9   | 399.8   | 287.9   | 138.6  | 74.6   | 51.5   |
| 82.5° | 37.3  | 40.9   | 53.3   | 67.5    | 67.5    | 62.2    | 55.1    | 40.9    | 30.2   | 24.9   | 12.4   |
| 85°   | 8.9   | 12.4   | 8.9    | 10.7    | 8.9     | 7.1     | 7.1     | 3.6     | 0.0    | 0.0    | 0.0    |
| 87.5° | 1.8   | 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°    | 16.0  | 16.0  | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 |
| 2.5°  | 14.2  | 14.2  | 14.2 | 12.4 | 12.4 | 12.4 | 10.7 | 10.7 | 10.7 | 8.9  | 8.9  |
| 5°    | 17.8  | 16.0  | 14.2 | 14.2 | 12.4 | 12.4 | 10.7 | 8.9  | 8.9  | 8.9  | 7.1  |
| 7.5°  | 19.5  | 17.8  | 16.0 | 14.2 | 12.4 | 10.7 | 10.7 | 8.9  | 7.1  | 7.1  | 7.1  |
| 10°   | 23.1  | 21.3  | 17.8 | 14.2 | 12.4 | 10.7 | 8.9  | 8.9  | 7.1  | 5.3  | 5.3  |
| 12.5° | 26.7  | 23.1  | 19.5 | 16.0 | 12.4 | 10.7 | 8.9  | 8.9  | 7.1  | 5.3  | 3.6  |
| 15°   | 30.2  | 26.7  | 21.3 | 16.0 | 12.4 | 10.7 | 8.9  | 8.9  | 5.3  | 3.6  | 1.8  |
| 17.5° | 33.8  | 28.4  | 21.3 | 17.8 | 12.4 | 10.7 | 8.9  | 7.1  | 3.6  | 1.8  | 0.0  |
| 20°   | 35.5  | 30.2  | 23.1 | 17.8 | 12.4 | 10.7 | 8.9  | 5.3  | 1.8  | 0.0  | 0.0  |
| 22.5° | 39.1  | 33.8  | 24.9 | 17.8 | 12.4 | 8.9  | 5.3  | 1.8  | 0.0  | 0.0  | 0.0  |
| 25°   | 46.2  | 35.5  | 24.9 | 17.8 | 12.4 | 8.9  | 3.6  | 0.0  | 0.0  | 0.0  | 0.0  |
| 27.5° | 51.5  | 39.1  | 24.9 | 17.8 | 12.4 | 7.1  | 1.8  | 0.0  | 0.0  | 0.0  | 0.0  |
| 30°   | 60.4  | 42.6  | 26.7 | 17.8 | 12.4 | 5.3  | 1.8  | 0.0  | 0.0  | 0.0  | 0.0  |
| 32.5° | 74.6  | 46.2  | 26.7 | 17.8 | 10.7 | 5.3  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 35°   | 90.6  | 53.3  | 26.7 | 17.8 | 10.7 | 5.3  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 37.5° | 92.4  | 56.9  | 26.7 | 17.8 | 10.7 | 3.6  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 40°   | 96.0  | 53.3  | 28.4 | 17.8 | 10.7 | 3.6  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 42.5° | 110.2 | 49.8  | 30.2 | 17.8 | 10.7 | 3.6  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 45°   | 163.5 | 51.5  | 30.2 | 19.5 | 10.7 | 5.3  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 47.5° | 284.3 | 53.3  | 28.4 | 19.5 | 10.7 | 5.3  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 50°   | 364.3 | 62.2  | 28.4 | 21.3 | 12.4 | 3.6  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 52.5° | 387.4 | 72.9  | 28.4 | 23.1 | 16.0 | 1.8  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 55°   | 376.7 | 85.3  | 30.2 | 24.9 | 19.5 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 57.5° | 348.3 | 92.4  | 32.0 | 26.7 | 21.3 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 59°   | 318.1 | 97.7  | 37.3 | 28.4 | 21.3 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 60°   | 293.2 | 103.1 | 39.1 | 30.2 | 21.3 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 62.5° | 236.3 | 110.2 | 42.6 | 35.5 | 17.8 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 65°   | 206.1 | 115.5 | 44.4 | 39.1 | 16.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 67.5° | 188.4 | 119.1 | 48.0 | 40.9 | 14.2 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 70°   | 174.2 | 117.3 | 51.5 | 39.1 | 12.4 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 72.5° | 158.2 | 112.0 | 62.2 | 35.5 | 10.7 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 75°   | 142.2 | 101.3 | 67.5 | 32.0 | 7.1  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 77.5° | 103.1 | 85.3  | 62.2 | 28.4 | 3.6  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 80°   | 44.4  | 46.2  | 44.4 | 21.3 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 82.5° | 8.9   | 10.7  | 8.9  | 5.3  | 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°    | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 |
| 2.5°  | 8.9  | 8.9  | 8.9  | 8.9  | 10.7 | 10.7 | 14.2 | 17.8 | 21.3 | 23.1 | 23.1 |
| 5°    | 7.1  | 7.1  | 7.1  | 7.1  | 7.1  | 8.9  | 10.7 | 14.2 | 19.5 | 21.3 | 21.3 |
| 7.5°  | 5.3  | 5.3  | 5.3  | 5.3  | 5.3  | 5.3  | 8.9  | 12.4 | 17.8 | 19.5 | 21.3 |
| 10°   | 5.3  | 3.6  | 3.6  | 1.8  | 1.8  | 3.6  | 5.3  | 10.7 | 16.0 | 17.8 | 19.5 |
| 12.5° | 3.6  | 1.8  | 1.8  | 0.0  | 0.0  | 1.8  | 3.6  | 8.9  | 14.2 | 16.0 | 17.8 |
| 15°   | 1.8  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 1.8  | 7.1  | 12.4 | 14.2 | 17.8 |
| 17.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 5.3  | 10.7 | 14.2 | 16.0 |
| 20°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 3.6  | 8.9  | 12.4 | 14.2 |
| 22.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 1.8  | 7.1  | 10.7 | 12.4 |
| 25°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 5.3  | 7.1  | 8.9  |
| 27.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 3.6  | 5.3  | 7.1  |
| 30°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 3.6  | 5.3  | 7.1  |
| 32.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 1.8  | 3.6  | 5.3  |
| 35°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 1.8  | 3.6  | 5.3  |
| 37.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 1.8  | 3.6  | 3.6  |
| 40°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 1.8  | 3.6  |
| 42.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 1.8  | 3.6  |
| 45°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 1.8  | 3.6  |
| 47.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 1.8  | 3.6  |
| 50°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 1.8  | 3.6  |
| 52.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 1.8  | 1.8  |
| 55°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 1.8  | 1.8  |
| 57.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 1.8  |
| 59°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 1.8  |
| 60°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 1.8  |
| 62.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 1.8  |
| 65°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 1.8  |
| 67.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 1.8  |
| 70°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 1.8  |
| 72.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 1.8  |
| 75°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 1.8  | 1.8  |
| 77.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 1.8  | 3.6  |
| 80°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 1.8  | 3.6  |
| 82.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 1.8  | 1.8  |
| 85°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 1.8  | 1.8  |
| 87.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 1.8  | 1.8  |
| 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: P1067945

CATALOG NUMBER: NAV-SA2A-730-U-LBC

**CANDELA DISTRIBUTION (continued):**

|       | 285° | 295° | 305° | 315° | 318° | 325° | 335° | 345° | 355°  | 360°  |
|-------|------|------|------|------|------|------|------|------|-------|-------|
| 0°    | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 16.0 | 16.0  | 16.0  |
| 2.5°  | 24.9 | 24.9 | 23.1 | 21.3 | 21.3 | 21.3 | 23.1 | 24.9 | 24.9  | 24.9  |
| 5°    | 23.1 | 23.1 | 21.3 | 21.3 | 21.3 | 21.3 | 23.1 | 26.7 | 28.4  | 28.4  |
| 7.5°  | 23.1 | 23.1 | 21.3 | 21.3 | 21.3 | 21.3 | 23.1 | 26.7 | 28.4  | 30.2  |
| 10°   | 21.3 | 21.3 | 21.3 | 21.3 | 19.5 | 21.3 | 23.1 | 26.7 | 32.0  | 32.0  |
| 12.5° | 21.3 | 21.3 | 21.3 | 21.3 | 19.5 | 21.3 | 24.9 | 28.4 | 33.8  | 35.5  |
| 15°   | 21.3 | 21.3 | 21.3 | 19.5 | 19.5 | 21.3 | 24.9 | 30.2 | 35.5  | 39.1  |
| 17.5° | 19.5 | 21.3 | 21.3 | 19.5 | 19.5 | 21.3 | 24.9 | 30.2 | 39.1  | 44.4  |
| 20°   | 17.8 | 19.5 | 21.3 | 19.5 | 19.5 | 19.5 | 24.9 | 30.2 | 40.9  | 48.0  |
| 22.5° | 16.0 | 17.8 | 19.5 | 19.5 | 17.8 | 19.5 | 24.9 | 32.0 | 44.4  | 53.3  |
| 25°   | 14.2 | 16.0 | 16.0 | 17.8 | 17.8 | 19.5 | 24.9 | 32.0 | 46.2  | 60.4  |
| 27.5° | 10.7 | 12.4 | 14.2 | 16.0 | 16.0 | 19.5 | 24.9 | 33.8 | 49.8  | 74.6  |
| 30°   | 8.9  | 10.7 | 12.4 | 14.2 | 16.0 | 19.5 | 24.9 | 33.8 | 53.3  | 94.2  |
| 32.5° | 8.9  | 10.7 | 12.4 | 14.2 | 16.0 | 17.8 | 24.9 | 35.5 | 58.6  | 117.3 |
| 35°   | 7.1  | 8.9  | 10.7 | 14.2 | 14.2 | 17.8 | 24.9 | 35.5 | 64.0  | 152.8 |
| 37.5° | 7.1  | 8.9  | 10.7 | 14.2 | 14.2 | 17.8 | 24.9 | 35.5 | 78.2  | 170.6 |
| 40°   | 5.3  | 7.1  | 8.9  | 14.2 | 14.2 | 17.8 | 26.7 | 37.3 | 80.0  | 172.4 |
| 42.5° | 5.3  | 7.1  | 8.9  | 12.4 | 14.2 | 17.8 | 26.7 | 37.3 | 74.6  | 177.7 |
| 45°   | 5.3  | 7.1  | 8.9  | 14.2 | 16.0 | 19.5 | 26.7 | 39.1 | 72.9  | 202.6 |
| 47.5° | 5.3  | 7.1  | 8.9  | 14.2 | 17.8 | 19.5 | 26.7 | 39.1 | 74.6  | 289.7 |
| 50°   | 5.3  | 7.1  | 8.9  | 14.2 | 19.5 | 19.5 | 26.7 | 39.1 | 81.7  | 465.6 |
| 52.5° | 3.6  | 5.3  | 7.1  | 12.4 | 16.0 | 21.3 | 28.4 | 37.3 | 87.1  | 622.0 |
| 55°   | 3.6  | 3.6  | 5.3  | 10.7 | 14.2 | 23.1 | 30.2 | 37.3 | 101.3 | 661.1 |
| 57.5° | 3.6  | 3.6  | 5.3  | 8.9  | 12.4 | 24.9 | 32.0 | 37.3 | 117.3 | 641.5 |
| 59°   | 3.6  | 3.6  | 3.6  | 8.9  | 10.7 | 24.9 | 32.0 | 39.1 | 119.1 | 607.8 |
| 60°   | 3.6  | 3.6  | 3.6  | 7.1  | 10.7 | 24.9 | 33.8 | 40.9 | 120.8 | 568.7 |
| 62.5° | 1.8  | 1.8  | 1.8  | 7.1  | 8.9  | 24.9 | 37.3 | 49.8 | 124.4 | 438.9 |
| 65°   | 3.6  | 3.6  | 1.8  | 5.3  | 8.9  | 21.3 | 42.6 | 53.3 | 126.2 | 341.2 |
| 67.5° | 3.6  | 3.6  | 3.6  | 7.1  | 8.9  | 21.3 | 44.4 | 55.1 | 126.2 | 270.1 |
| 70°   | 3.6  | 3.6  | 3.6  | 7.1  | 10.7 | 21.3 | 44.4 | 56.9 | 124.4 | 220.4 |
| 72.5° | 3.6  | 3.6  | 3.6  | 7.1  | 10.7 | 19.5 | 40.9 | 58.6 | 119.1 | 186.6 |
| 75°   | 3.6  | 3.6  | 3.6  | 5.3  | 8.9  | 17.8 | 39.1 | 64.0 | 108.4 | 158.2 |
| 77.5° | 3.6  | 3.6  | 3.6  | 3.6  | 7.1  | 14.2 | 35.5 | 71.1 | 96.0  | 127.9 |
| 80°   | 5.3  | 3.6  | 3.6  | 3.6  | 5.3  | 12.4 | 33.8 | 69.3 | 80.0  | 83.5  |
| 82.5° | 5.3  | 3.6  | 3.6  | 1.8  | 3.6  | 8.9  | 26.7 | 53.3 | 40.9  | 37.3  |
| 85°   | 3.6  | 3.6  | 3.6  | 1.8  | 1.8  | 5.3  | 12.4 | 16.0 | 12.4  | 8.9   |
| 87.5° | 3.6  | 3.6  | 3.6  | 1.8  | 1.8  | 1.8  | 1.8  | 1.8  | 1.8   | 1.8   |
| 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: SP1-2407-184-4

Test Date: 10/10/2024

Luminaire Tested: GSS-SB1A-730-U-5WQ

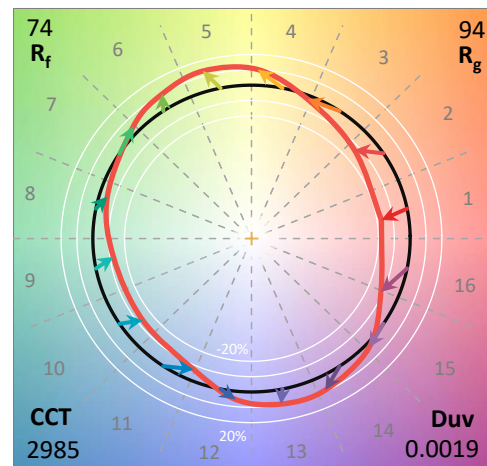
Data in this report applies to families of products including GSS-SB1A-730-U-5WQ

### Test Information

Test Method: LM-79-2019  
 Report Number: SP1-2407-184-4  
 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-730-U-5WQ**  
 Description: GALLEON II SITE SLIM 1SQ 350MA 5WQ HIGH DENSITY LIGHTSQUARE WITH 70 CRI  
 3000K CCT 26 LEDS

### Spectral Parameters

|                           |          |           |      |      |       |
|---------------------------|----------|-----------|------|------|-------|
| CCT (K):                  | 2985     | CRI (Ra): | 70.8 |      |       |
| CIE u':                   | 0.2504   | R1:       | 66.3 | R9:  | -43.2 |
| CIE v':                   | 0.5243   | R2:       | 80.6 | R10: | 57.6  |
| Duv:                      | 0.0019   | R3:       | 94.5 | R11: | 64.8  |
| CIE x:                    | 0.4408   | R4:       | 68.2 | R12: | 53.5  |
| CIE y:                    | 0.4101   | R5:       | 66.5 | R13: | 68.7  |
| CIE z:                    | 0.1491   | R6:       | 74.7 | R14: | 97.0  |
| Peak Wavelength (nm):     | 595      | R7:       | 76.2 | R15: | 56.4  |
| Dominant Wavelength (nm): | 582      | R8:       | 39.6 |      |       |
| Purity:                   | 55.41818 |           |      |      |       |
| Rf:                       | 73.8     |           |      |      |       |
| Rg:                       | 94.4     |           |      |      |       |



### Test Conditions

Stabilization Time: 36M  
 Operation Time: 1H 36M  
 Sphere Temperature (°C): 25.2

REPORT NUMBER: SP1-2407-184-4

| Measurement and Test Equipment |                       |                  |                      |
|--------------------------------|-----------------------|------------------|----------------------|
| Instrument                     | Identification Number | Calibration Date | Calibration Due Date |
| Photometer                     | IN0058                | 6/18/2024        | 12/18/2024           |
| Power Meter                    | INXT2011004           | 2/8/2024         | 2/8/2025             |
| AC Power Source                | IN0063                | 10/24/2023       | 10/24/2024           |
| DC Power Source                | IN0208                | 10/24/2023       | 10/24/2024           |
| Sphere Thermometer             | IN0085                | 10/24/2023       | 10/24/2024           |
| Room Thermometer               | IN0046                | 10/24/2023       | 10/24/2024           |

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**CIE 1931 Chromaticity Diagram**



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



Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2407-184-4

### Photopic Flux vs. Wavelength

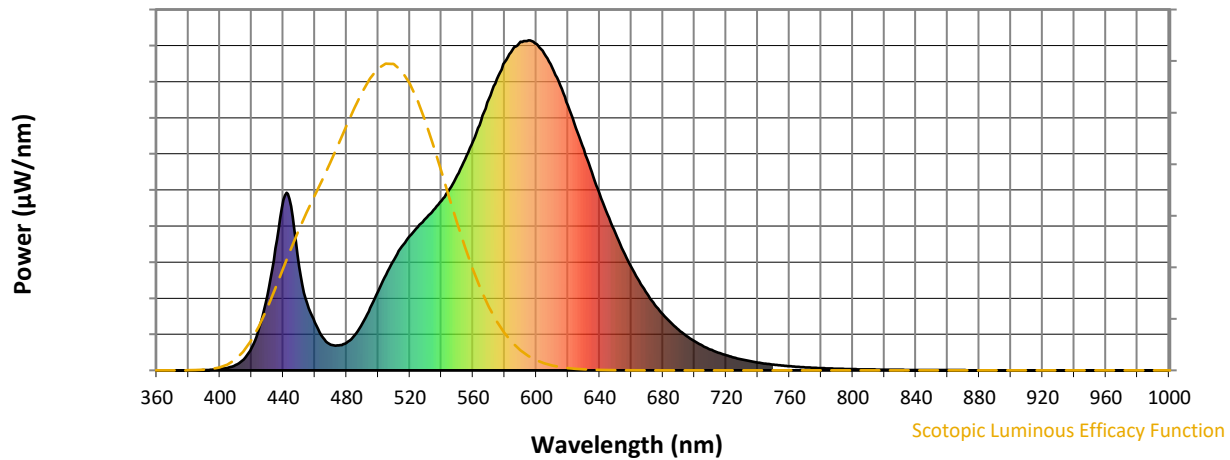


### Photopic Lumens: NR

| $\lambda$<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               | 142                                  | NR                             | 620               | 803                                  | NR                             | 750               | 17                                   | NR                             | 880               | 0                                    | NR                             |
| 365               | 0                                    | NR                             | 495               | 189                                  | NR                             | 625               | 734                                  | NR                             | 755               | 15                                   | NR                             | 885               | 0                                    | NR                             |
| 370               | 0                                    | NR                             | 500               | 240                                  | NR                             | 630               | 670                                  | NR                             | 760               | 13                                   | NR                             | 890               | 0                                    | NR                             |
| 375               | 0                                    | NR                             | 505               | 290                                  | NR                             | 635               | 600                                  | NR                             | 765               | 11                                   | NR                             | 895               | 0                                    | NR                             |
| 380               | 0                                    | NR                             | 510               | 335                                  | NR                             | 640               | 535                                  | NR                             | 770               | 9                                    | NR                             | 900               | 0                                    | NR                             |
| 385               | 0                                    | NR                             | 515               | 375                                  | NR                             | 645               | 473                                  | NR                             | 775               | 8                                    | NR                             | 905               | 0                                    | NR                             |
| 390               | 1                                    | NR                             | 520               | 408                                  | NR                             | 650               | 415                                  | NR                             | 780               | 7                                    | NR                             | 910               | 0                                    | NR                             |
| 395               | 2                                    | NR                             | 525               | 434                                  | NR                             | 655               | 362                                  | NR                             | 785               | 6                                    | NR                             | 915               | 0                                    | NR                             |
| 400               | 4                                    | NR                             | 530               | 461                                  | NR                             | 660               | 313                                  | NR                             | 790               | 5                                    | NR                             | 920               | 0                                    | NR                             |
| 405               | 8                                    | NR                             | 535               | 486                                  | NR                             | 665               | 271                                  | NR                             | 795               | 4                                    | NR                             | 925               | 0                                    | NR                             |
| 410               | 16                                   | NR                             | 540               | 514                                  | NR                             | 670               | 231                                  | NR                             | 800               | 4                                    | NR                             | 930               | 0                                    | NR                             |
| 415               | 33                                   | NR                             | 545               | 549                                  | NR                             | 675               | 198                                  | NR                             | 805               | 3                                    | NR                             | 935               | 0                                    | NR                             |
| 420               | 69                                   | NR                             | 550               | 591                                  | NR                             | 680               | 169                                  | NR                             | 810               | 3                                    | NR                             | 940               | 0                                    | NR                             |
| 425               | 131                                  | NR                             | 555               | 640                                  | NR                             | 685               | 144                                  | NR                             | 815               | 2                                    | NR                             | 945               | 0                                    | NR                             |
| 430               | 227                                  | NR                             | 560               | 695                                  | NR                             | 690               | 123                                  | NR                             | 820               | 2                                    | NR                             | 950               | 0                                    | NR                             |
| 435               | 369                                  | NR                             | 565               | 757                                  | NR                             | 695               | 104                                  | NR                             | 825               | 2                                    | NR                             | 955               | 0                                    | NR                             |
| 440               | 517                                  | NR                             | 570               | 822                                  | NR                             | 700               | 88                                   | NR                             | 830               | 2                                    | NR                             | 960               | 0                                    | NR                             |
| 445               | 498                                  | NR                             | 575               | 882                                  | NR                             | 705               | 75                                   | NR                             | 835               | 1                                    | NR                             | 965               | 0                                    | NR                             |
| 450               | 315                                  | NR                             | 580               | 935                                  | NR                             | 710               | 63                                   | NR                             | 840               | 1                                    | NR                             | 970               | 0                                    | NR                             |
| 455               | 204                                  | NR                             | 585               | 972                                  | NR                             | 715               | 54                                   | NR                             | 845               | 1                                    | NR                             | 975               | 0                                    | NR                             |
| 460               | 145                                  | NR                             | 590               | 996                                  | NR                             | 720               | 46                                   | NR                             | 850               | 1                                    | NR                             | 980               | 0                                    | NR                             |
| 465               | 100                                  | NR                             | 595               | 1000                                 | NR                             | 725               | 39                                   | NR                             | 855               | 1                                    | NR                             | 985               | 0                                    | NR                             |
| 470               | 78                                   | NR                             | 600               | 989                                  | NR                             | 730               | 33                                   | NR                             | 860               | 1                                    | NR                             | 990               | 0                                    | NR                             |
| 475               | 76                                   | NR                             | 605               | 960                                  | NR                             | 735               | 28                                   | NR                             | 865               | 1                                    | NR                             | 995               | 0                                    | NR                             |
| 480               | 83                                   | NR                             | 610               | 918                                  | NR                             | 740               | 24                                   | NR                             | 870               | 1                                    | NR                             | 1000              | 0                                    | NR                             |
| 485               | 105                                  | NR                             | 615               | 864                                  | NR                             | 745               | 20                                   | NR                             | 875               | 1                                    | NR                             |                   |                                      |                                |

REPORT NUMBER: SP1-2407-184-4

### Scotopic Flux vs. Wavelength



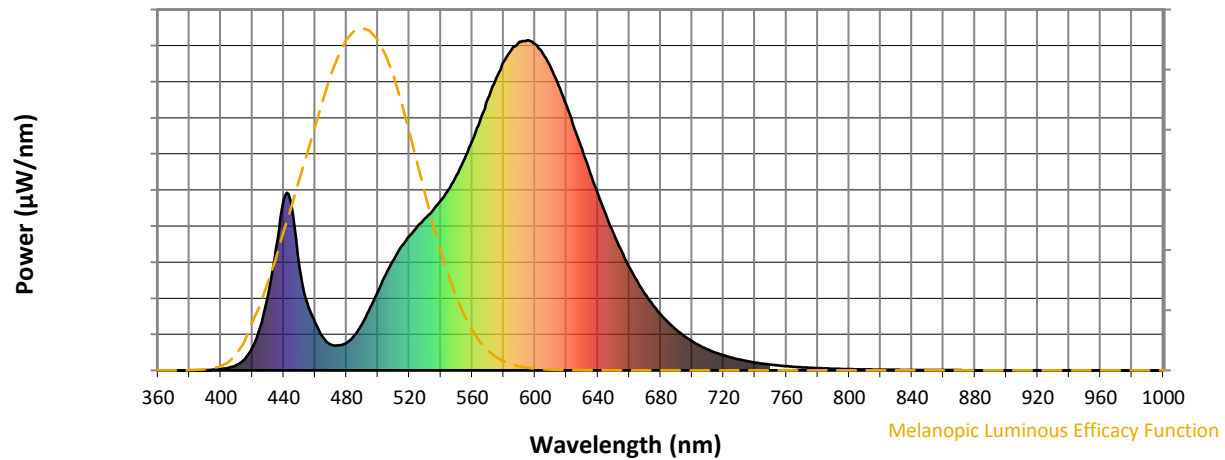
Scotopic Lumens: NR

S/P: 1.19

| $\lambda$<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               | 142                                  | NR                             | 620               | 803                                  | NR                             | 750               | 17                                   | NR                             | 880               | 0                                    | NR                             |
| 365               | 0                                    | NR                             | 495               | 189                                  | NR                             | 625               | 734                                  | NR                             | 755               | 15                                   | NR                             | 885               | 0                                    | NR                             |
| 370               | 0                                    | NR                             | 500               | 240                                  | NR                             | 630               | 670                                  | NR                             | 760               | 13                                   | NR                             | 890               | 0                                    | NR                             |
| 375               | 0                                    | NR                             | 505               | 290                                  | NR                             | 635               | 600                                  | NR                             | 765               | 11                                   | NR                             | 895               | 0                                    | NR                             |
| 380               | 0                                    | NR                             | 510               | 335                                  | NR                             | 640               | 535                                  | NR                             | 770               | 9                                    | NR                             | 900               | 0                                    | NR                             |
| 385               | 0                                    | NR                             | 515               | 375                                  | NR                             | 645               | 473                                  | NR                             | 775               | 8                                    | NR                             | 905               | 0                                    | NR                             |
| 390               | 1                                    | NR                             | 520               | 408                                  | NR                             | 650               | 415                                  | NR                             | 780               | 7                                    | NR                             | 910               | 0                                    | NR                             |
| 395               | 2                                    | NR                             | 525               | 434                                  | NR                             | 655               | 362                                  | NR                             | 785               | 6                                    | NR                             | 915               | 0                                    | NR                             |
| 400               | 4                                    | NR                             | 530               | 461                                  | NR                             | 660               | 313                                  | NR                             | 790               | 5                                    | NR                             | 920               | 0                                    | NR                             |
| 405               | 8                                    | NR                             | 535               | 486                                  | NR                             | 665               | 271                                  | NR                             | 795               | 4                                    | NR                             | 925               | 0                                    | NR                             |
| 410               | 16                                   | NR                             | 540               | 514                                  | NR                             | 670               | 231                                  | NR                             | 800               | 4                                    | NR                             | 930               | 0                                    | NR                             |
| 415               | 33                                   | NR                             | 545               | 549                                  | NR                             | 675               | 198                                  | NR                             | 805               | 3                                    | NR                             | 935               | 0                                    | NR                             |
| 420               | 69                                   | NR                             | 550               | 591                                  | NR                             | 680               | 169                                  | NR                             | 810               | 3                                    | NR                             | 940               | 0                                    | NR                             |
| 425               | 131                                  | NR                             | 555               | 640                                  | NR                             | 685               | 144                                  | NR                             | 815               | 2                                    | NR                             | 945               | 0                                    | NR                             |
| 430               | 227                                  | NR                             | 560               | 695                                  | NR                             | 690               | 123                                  | NR                             | 820               | 2                                    | NR                             | 950               | 0                                    | NR                             |
| 435               | 369                                  | NR                             | 565               | 757                                  | NR                             | 695               | 104                                  | NR                             | 825               | 2                                    | NR                             | 955               | 0                                    | NR                             |
| 440               | 517                                  | NR                             | 570               | 822                                  | NR                             | 700               | 88                                   | NR                             | 830               | 2                                    | NR                             | 960               | 0                                    | NR                             |
| 445               | 498                                  | NR                             | 575               | 882                                  | NR                             | 705               | 75                                   | NR                             | 835               | 1                                    | NR                             | 965               | 0                                    | NR                             |
| 450               | 315                                  | NR                             | 580               | 935                                  | NR                             | 710               | 63                                   | NR                             | 840               | 1                                    | NR                             | 970               | 0                                    | NR                             |
| 455               | 204                                  | NR                             | 585               | 972                                  | NR                             | 715               | 54                                   | NR                             | 845               | 1                                    | NR                             | 975               | 0                                    | NR                             |
| 460               | 145                                  | NR                             | 590               | 996                                  | NR                             | 720               | 46                                   | NR                             | 850               | 1                                    | NR                             | 980               | 0                                    | NR                             |
| 465               | 100                                  | NR                             | 595               | 1000                                 | NR                             | 725               | 39                                   | NR                             | 855               | 1                                    | NR                             | 985               | 0                                    | NR                             |
| 470               | 78                                   | NR                             | 600               | 989                                  | NR                             | 730               | 33                                   | NR                             | 860               | 1                                    | NR                             | 990               | 0                                    | NR                             |
| 475               | 76                                   | NR                             | 605               | 960                                  | NR                             | 735               | 28                                   | NR                             | 865               | 1                                    | NR                             | 995               | 0                                    | NR                             |
| 480               | 83                                   | NR                             | 610               | 918                                  | NR                             | 740               | 24                                   | NR                             | 870               | 1                                    | NR                             | 1000              | 0                                    | NR                             |
| 485               | 105                                  | NR                             | 615               | 864                                  | NR                             | 745               | 20                                   | NR                             | 875               | 1                                    | NR                             |                   |                                      |                                |

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### Melanopic Flux vs. Wavelength


**Melanopic Lumens: NR**
**M/P: 2.13**

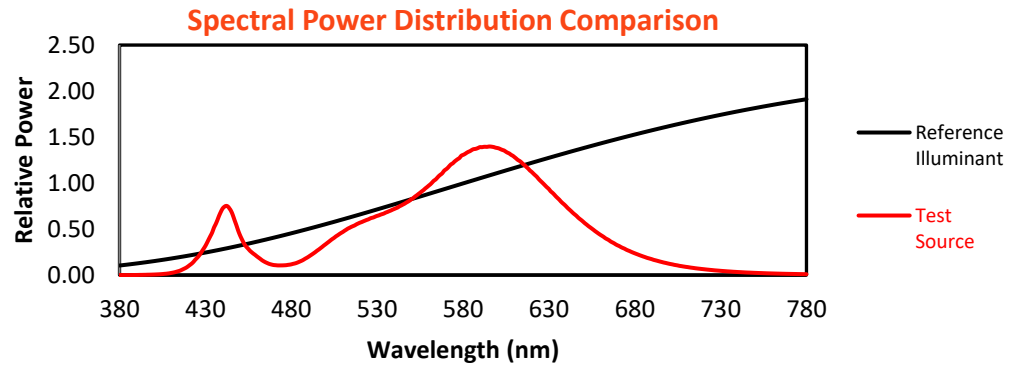
| $\lambda$<br>(nm) | Power<br>$\text{W}^\wedge/\text{nm}$ | Lumens<br>( $\phi/\text{nm}$ ) | $\lambda$<br>(nm) | Power<br>$\text{W}^\wedge/\text{nm}$ | Lumens<br>( $\phi/\text{nm}$ ) | $\lambda$<br>(nm) | Power<br>$\text{W}^\wedge/\text{nm}$ | Lumens<br>( $\phi/\text{nm}$ ) | $\lambda$<br>(nm) | Power<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               | 142                                  | NR                             | 620               | 803                                  | NR                             | 750               | 17                                   | NR                             | 880               | 0                                    | NR                             |
| 365               | 0                                    | NR                             | 495               | 189                                  | NR                             | 625               | 734                                  | NR                             | 755               | 15                                   | NR                             | 885               | 0                                    | NR                             |
| 370               | 0                                    | NR                             | 500               | 240                                  | NR                             | 630               | 670                                  | NR                             | 760               | 13                                   | NR                             | 890               | 0                                    | NR                             |
| 375               | 0                                    | NR                             | 505               | 290                                  | NR                             | 635               | 600                                  | NR                             | 765               | 11                                   | NR                             | 895               | 0                                    | NR                             |
| 380               | 0                                    | NR                             | 510               | 335                                  | NR                             | 640               | 535                                  | NR                             | 770               | 9                                    | NR                             | 900               | 0                                    | NR                             |
| 385               | 0                                    | NR                             | 515               | 375                                  | NR                             | 645               | 473                                  | NR                             | 775               | 8                                    | NR                             | 905               | 0                                    | NR                             |
| 390               | 1                                    | NR                             | 520               | 408                                  | NR                             | 650               | 415                                  | NR                             | 780               | 7                                    | NR                             | 910               | 0                                    | NR                             |
| 395               | 2                                    | NR                             | 525               | 434                                  | NR                             | 655               | 362                                  | NR                             | 785               | 6                                    | NR                             | 915               | 0                                    | NR                             |
| 400               | 4                                    | NR                             | 530               | 461                                  | NR                             | 660               | 313                                  | NR                             | 790               | 5                                    | NR                             | 920               | 0                                    | NR                             |
| 405               | 8                                    | NR                             | 535               | 486                                  | NR                             | 665               | 271                                  | NR                             | 795               | 4                                    | NR                             | 925               | 0                                    | NR                             |
| 410               | 16                                   | NR                             | 540               | 514                                  | NR                             | 670               | 231                                  | NR                             | 800               | 4                                    | NR                             | 930               | 0                                    | NR                             |
| 415               | 33                                   | NR                             | 545               | 549                                  | NR                             | 675               | 198                                  | NR                             | 805               | 3                                    | NR                             | 935               | 0                                    | NR                             |
| 420               | 69                                   | NR                             | 550               | 591                                  | NR                             | 680               | 169                                  | NR                             | 810               | 3                                    | NR                             | 940               | 0                                    | NR                             |
| 425               | 131                                  | NR                             | 555               | 640                                  | NR                             | 685               | 144                                  | NR                             | 815               | 2                                    | NR                             | 945               | 0                                    | NR                             |
| 430               | 227                                  | NR                             | 560               | 695                                  | NR                             | 690               | 123                                  | NR                             | 820               | 2                                    | NR                             | 950               | 0                                    | NR                             |
| 435               | 369                                  | NR                             | 565               | 757                                  | NR                             | 695               | 104                                  | NR                             | 825               | 2                                    | NR                             | 955               | 0                                    | NR                             |
| 440               | 517                                  | NR                             | 570               | 822                                  | NR                             | 700               | 88                                   | NR                             | 830               | 2                                    | NR                             | 960               | 0                                    | NR                             |
| 445               | 498                                  | NR                             | 575               | 882                                  | NR                             | 705               | 75                                   | NR                             | 835               | 1                                    | NR                             | 965               | 0                                    | NR                             |
| 450               | 315                                  | NR                             | 580               | 935                                  | NR                             | 710               | 63                                   | NR                             | 840               | 1                                    | NR                             | 970               | 0                                    | NR                             |
| 455               | 204                                  | NR                             | 585               | 972                                  | NR                             | 715               | 54                                   | NR                             | 845               | 1                                    | NR                             | 975               | 0                                    | NR                             |
| 460               | 145                                  | NR                             | 590               | 996                                  | NR                             | 720               | 46                                   | NR                             | 850               | 1                                    | NR                             | 980               | 0                                    | NR                             |
| 465               | 100                                  | NR                             | 595               | 1000                                 | NR                             | 725               | 39                                   | NR                             | 855               | 1                                    | NR                             | 985               | 0                                    | NR                             |
| 470               | 78                                   | NR                             | 600               | 989                                  | NR                             | 730               | 33                                   | NR                             | 860               | 1                                    | NR                             | 990               | 0                                    | NR                             |
| 475               | 76                                   | NR                             | 605               | 960                                  | NR                             | 735               | 28                                   | NR                             | 865               | 1                                    | NR                             | 995               | 0                                    | NR                             |
| 480               | 83                                   | NR                             | 610               | 918                                  | NR                             | 740               | 24                                   | NR                             | 870               | 1                                    | NR                             | 1000              | 0                                    | NR                             |
| 485               | 105                                  | NR                             | 615               | 864                                  | NR                             | 745               | 20                                   | NR                             | 875               | 1                                    | NR                             |                   |                                      |                                |

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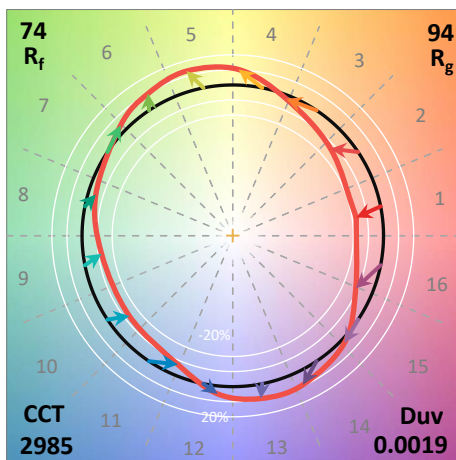
TM-30-18

### Summary

$R_f = 73.8$   
 $R_g = 94.4$   
 $CIE R_a = 70.8$   
 $R_g = -43.2$

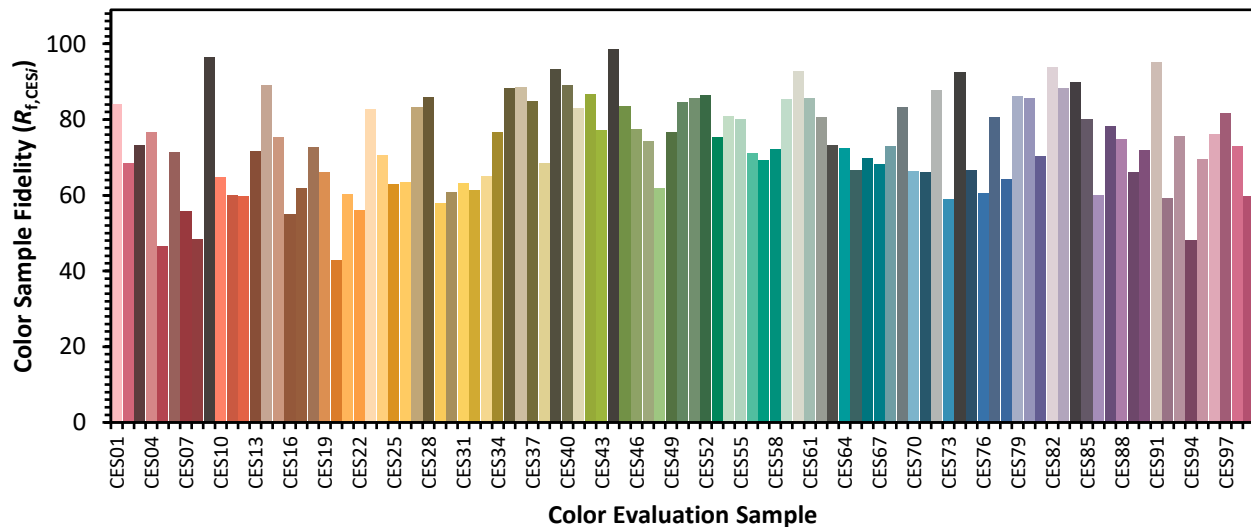


### Color Vector Graphics



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

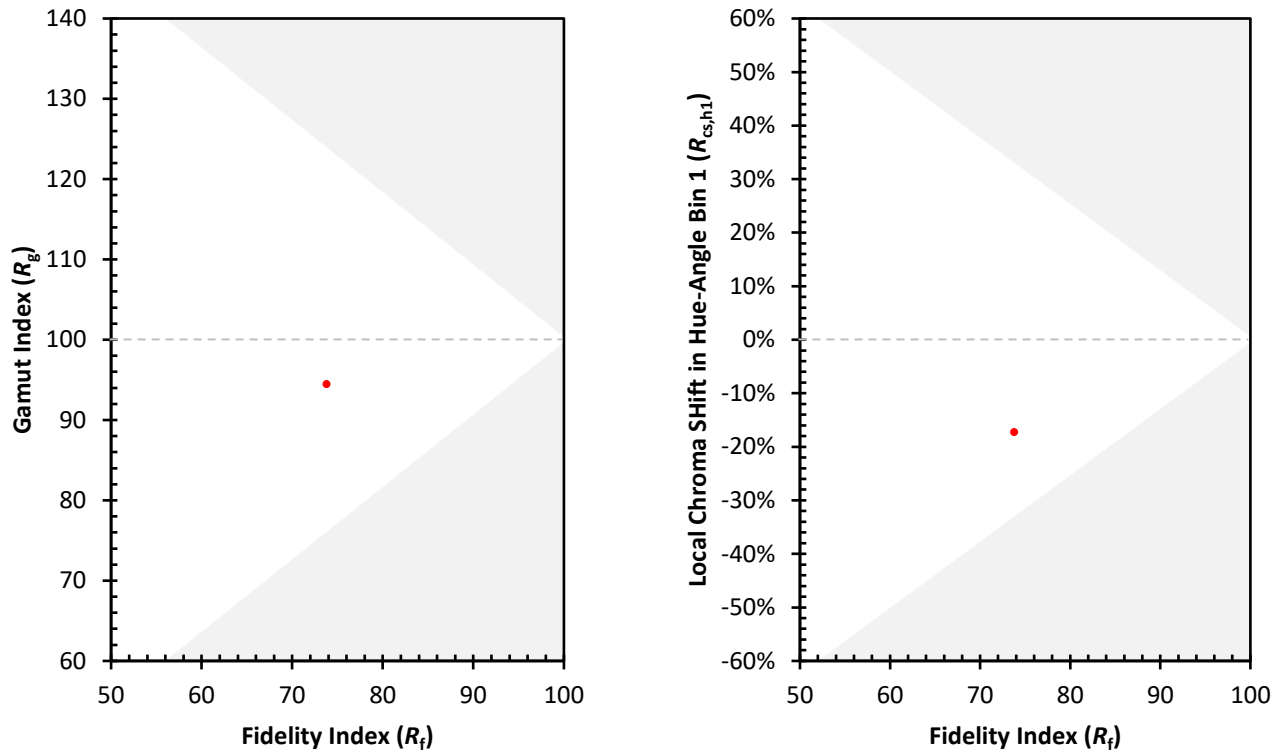
|            |            |            |            |
|------------|------------|------------|------------|
| CES01 = 86 | CES26 = 63 | CES51 = 86 | CES76 = 61 |
| CES02 = 62 | CES27 = 83 | CES52 = 86 | CES77 = 81 |
| CES03 = 31 | CES28 = 86 | CES53 = 75 | CES78 = 64 |
| CES04 = 71 | CES29 = 58 | CES54 = 81 | CES79 = 86 |
| CES05 = 49 | CES30 = 61 | CES55 = 80 | CES80 = 86 |
| CES06 = 51 | CES31 = 63 | CES56 = 71 | CES81 = 70 |
| CES07 = 41 | CES32 = 61 | CES57 = 69 | CES82 = 94 |
| CES08 = 40 | CES33 = 65 | CES58 = 72 | CES83 = 88 |
| CES09 = 29 | CES34 = 77 | CES59 = 85 | CES84 = 90 |
| CES10 = 76 | CES35 = 88 | CES60 = 93 | CES85 = 80 |
| CES11 = 59 | CES36 = 89 | CES61 = 86 | CES86 = 60 |
| CES12 = 65 | CES37 = 85 | CES62 = 81 | CES87 = 78 |
| CES13 = 43 | CES38 = 69 | CES63 = 73 | CES88 = 75 |
| CES14 = 74 | CES39 = 93 | CES64 = 72 | CES89 = 66 |
| CES15 = 71 | CES40 = 89 | CES65 = 67 | CES90 = 72 |
| CES16 = 47 | CES41 = 83 | CES66 = 70 | CES91 = 95 |
| CES17 = 50 | CES42 = 87 | CES67 = 68 | CES92 = 59 |
| CES18 = 56 | CES43 = 77 | CES68 = 73 | CES93 = 76 |
| CES19 = 73 | CES44 = 99 | CES69 = 83 | CES94 = 48 |
| CES20 = 66 | CES45 = 83 | CES70 = 66 | CES95 = 70 |
| CES21 = 87 | CES46 = 77 | CES71 = 66 | CES96 = 76 |
| CES22 = 79 | CES47 = 74 | CES72 = 88 | CES97 = 82 |
| CES23 = 92 | CES48 = 62 | CES73 = 59 | CES98 = 73 |
| CES24 = 91 | CES49 = 77 | CES74 = 93 | CES99 = 60 |
| CES25 = 73 | CES50 = 85 | CES75 = 67 |            |



Color Rendition by Hue-Angle Bin



**Measure Comparisons**



(END OF REPORT)