

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: STREETWORKS

Report Number: P1066707

Luminaire Tested: **NVN-SA4C-722-U-LBC**

Issue Date: 08/07/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P1066707  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 08/07/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: NVN-SA4C-722-U-LBC  
Description: Navion AREA AND ROADWAY LUMINAIRE 1050mA 4xLight Square PACKAGE  
70CRI 2200K FIXTURE w/ LEFT CORNER BACKLIGHT CONTROL  
Light Source: (56) 2200K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 13949 lumens  
Efficiency: N/A  
Efficacy: 73.3 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B0 - U0 - G3

Input Watts (W): 190.4  
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



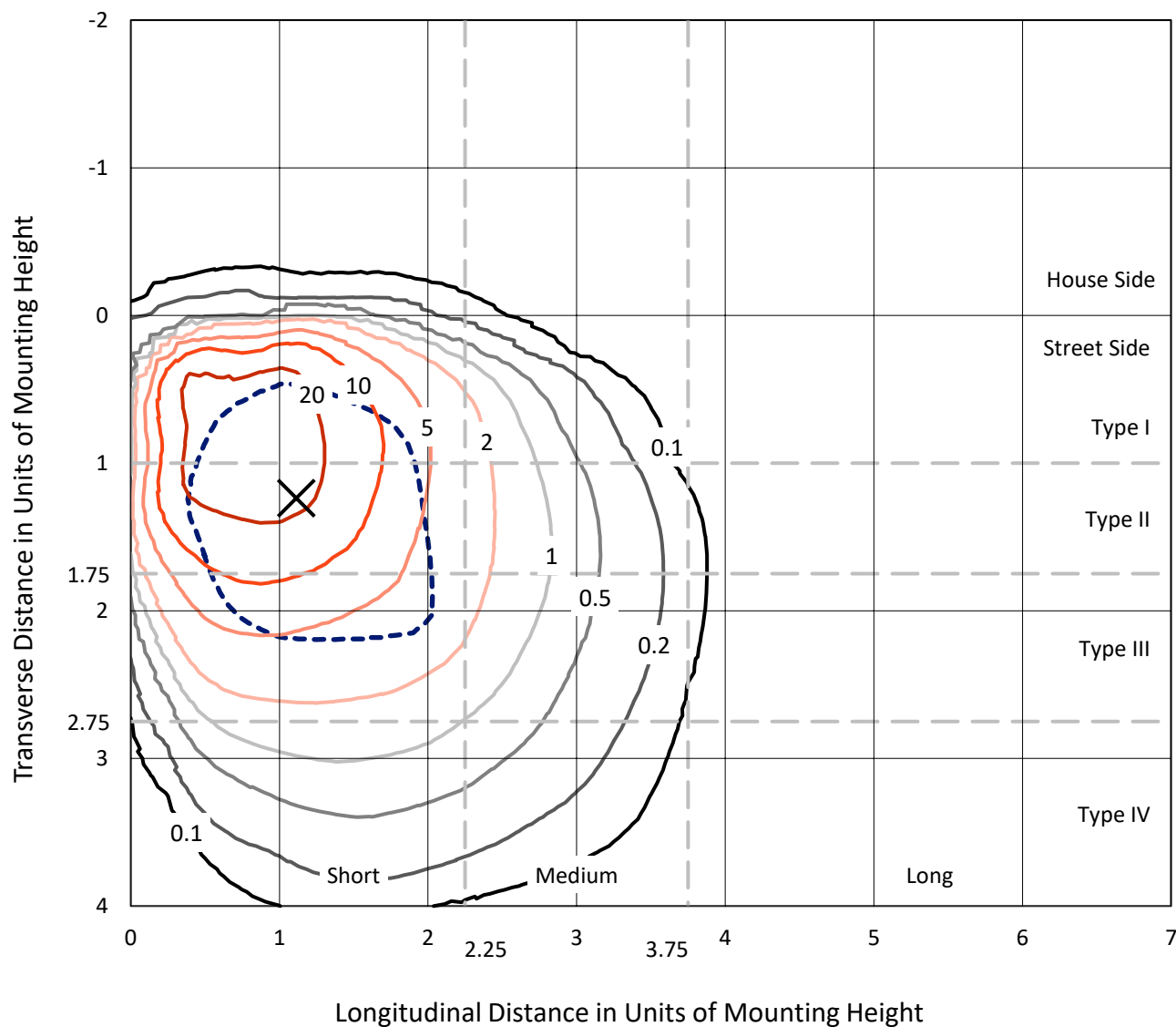
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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

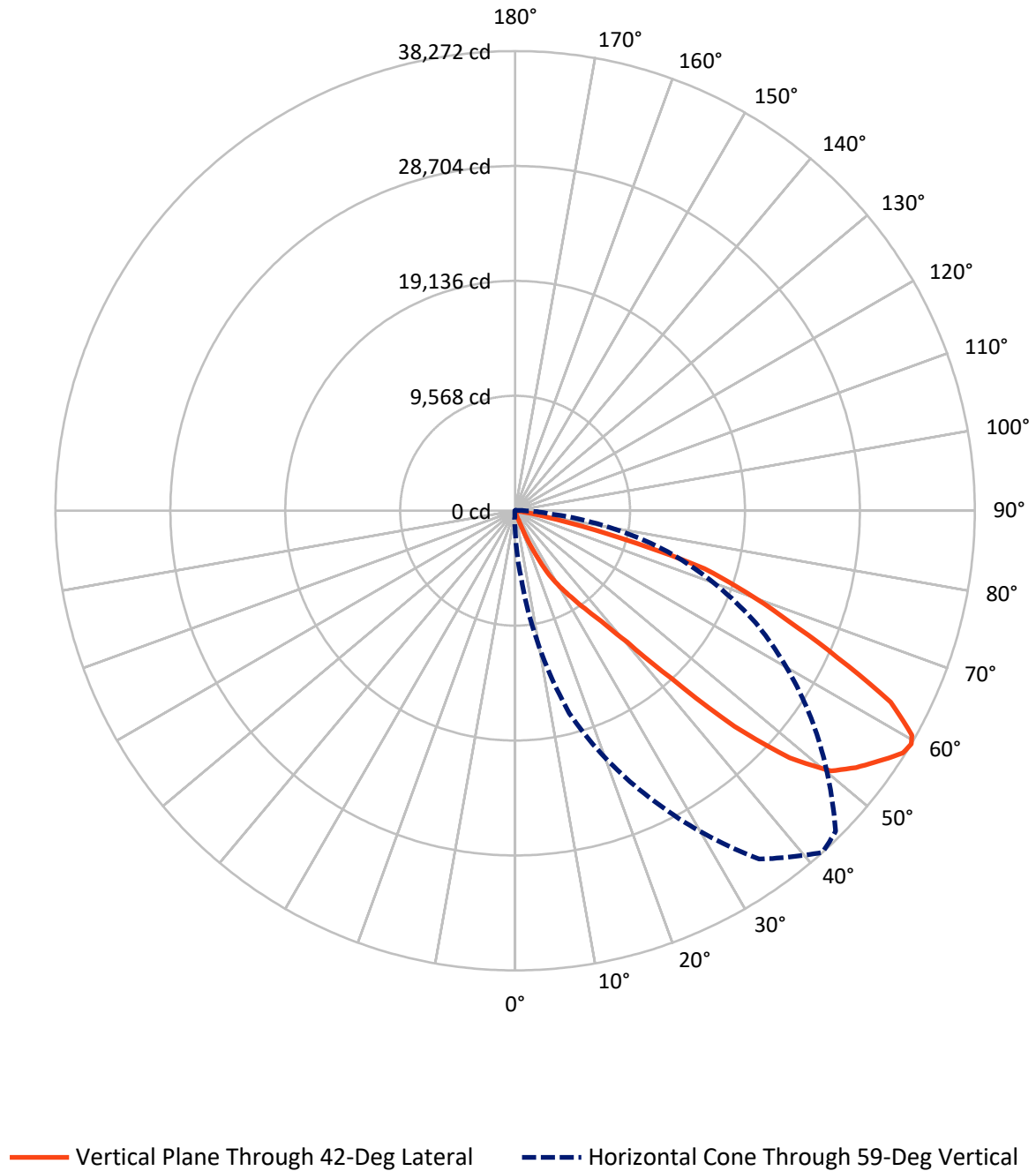


Based on 15 foot mounting height. Maximum calculated value = 41.4 fc  
 Type III - Short - N/A

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## Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 67.2     | 0.0    | 67.2    |
|                    | % Fixture | 0.5      | 0.0    | 0.5     |
| <b>Street Side</b> | Lumens    | 13881.8  | 0.0    | 13881.8 |
|                    | % Fixture | 99.5     | 0.0    | 99.5    |
| <b>Total</b>       | Lumens    | 13949.0  | 0.0    | 13949.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**Coefficient of Utilization**

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 4.1     | 0.0       |
| 10°-20°   | 20.3    | 0.1       |
| 20°-30°   | 260.2   | 1.9       |
| 30°-40°   | 877.2   | 6.3       |
| 40°-50°   | 2649.6  | 19.0      |
| 50°-60°   | 4677.1  | 33.5      |
| 60°-70°   | 4118.3  | 29.5      |
| 70°-80°   | 1310.8  | 9.4       |
| 80°-90°   | 31.4    | 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°    | 13949.0 | 100.0     |
| 0°-180°   | 13949.0 | 100.0     |



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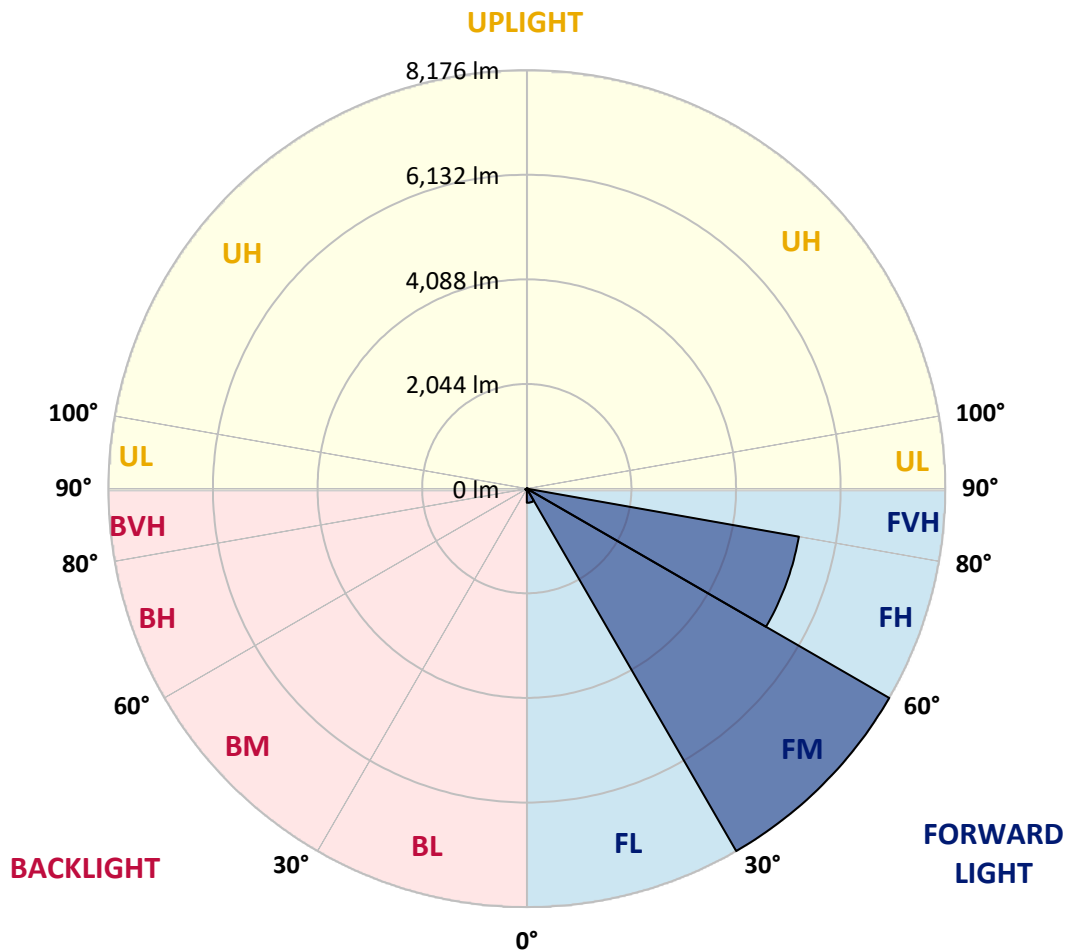
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 277.1  | 2.0       |                         |      |         |
| FM   | (30°-60°)   | 8176.4 | 58.6      |                         |      |         |
| FH   | (60°-80°)   | 5398.4 | 38.7      |                         |      | G3/7500 |
| FVH  | (80°-90°)   | 29.8   | 0.2       |                         |      | G1/100  |
| BL   | (0°-30°)    | 7.5    | 0.1       | B0/110                  |      |         |
| BM   | (30°-60°)   | 27.5   | 0.2       | B0/220                  |      |         |
| BH   | (60°-80°)   | 30.7   | 0.2       | B0/110                  |      | G0/110  |
| BVH  | (80°-90°)   | 1.5    | 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°     | 42°     | 45°     | 55°     | 65°     | 75°     | 85°    |
|-------|--------|--------|---------|---------|---------|---------|---------|---------|---------|---------|--------|
| 0°    | 39.4   | 39.4   | 39.4    | 39.4    | 39.4    | 39.4    | 39.4    | 39.4    | 39.4    | 39.4    | 39.4   |
| 2.5°  | 61.2   | 61.2   | 56.9    | 52.5    | 48.1    | 43.7    | 43.7    | 43.7    | 39.4    | 39.4    | 35.0   |
| 5°    | 70.0   | 70.0   | 65.6    | 61.2    | 61.2    | 56.9    | 56.9    | 52.5    | 48.1    | 48.1    | 43.7   |
| 7.5°  | 74.3   | 74.3   | 74.3    | 74.3    | 70.0    | 70.0    | 70.0    | 65.6    | 61.2    | 56.9    | 52.5   |
| 10°   | 78.7   | 83.1   | 87.5    | 87.5    | 87.5    | 87.5    | 87.5    | 83.1    | 74.3    | 70.0    | 61.2   |
| 12.5° | 87.5   | 91.8   | 100.6   | 109.3   | 109.3   | 113.7   | 109.3   | 105.0   | 96.2    | 83.1    | 70.0   |
| 15°   | 96.2   | 105.0  | 118.1   | 135.6   | 153.1   | 157.4   | 157.4   | 144.3   | 126.8   | 100.6   | 83.1   |
| 17.5° | 109.3  | 122.5  | 157.4   | 214.3   | 275.5   | 323.6   | 323.6   | 288.6   | 201.2   | 131.2   | 96.2   |
| 20°   | 118.1  | 144.3  | 253.7   | 516.1   | 787.2   | 988.4   | 949.0   | 839.7   | 450.5   | 205.6   | 105.0  |
| 22.5° | 131.2  | 183.7  | 537.9   | 1355.8  | 2099.3  | 2466.6  | 2379.2  | 1806.2  | 1010.3  | 367.4   | 126.8  |
| 25°   | 148.7  | 266.8  | 1067.1  | 2541.0  | 3901.1  | 4299.1  | 4242.3  | 3371.9  | 1841.2  | 616.7   | 161.8  |
| 27.5° | 183.7  | 393.6  | 1710.0  | 3853.0  | 5755.5  | 6096.6  | 6074.8  | 4937.7  | 2943.3  | 992.8   | 209.9  |
| 30°   | 231.8  | 572.9  | 2536.6  | 5235.0  | 6984.4  | 7329.9  | 7220.6  | 6083.5  | 3971.1  | 1517.6  | 271.2  |
| 32.5° | 288.6  | 800.3  | 3284.5  | 6254.1  | 8117.2  | 8572.0  | 8440.8  | 7080.7  | 4797.7  | 1963.7  | 402.4  |
| 35°   | 376.1  | 1023.4 | 4023.6  | 7155.0  | 9424.8  | 10002.1 | 9783.5  | 8108.4  | 5510.6  | 2466.6  | 485.5  |
| 37.5° | 419.9  | 1154.6 | 4701.5  | 8134.7  | 10894.3 | 11681.5 | 11515.4 | 9407.3  | 6236.6  | 3109.5  | 594.8  |
| 40°   | 424.2  | 1312.0 | 5405.6  | 9411.7  | 12971.7 | 14375.6 | 14078.2 | 11637.8 | 7588.0  | 3936.1  | 765.4  |
| 42.5° | 437.3  | 1548.2 | 6319.7  | 11589.7 | 17052.2 | 19068.3 | 18731.6 | 15740.1 | 10653.8 | 5593.7  | 1084.6 |
| 45°   | 498.6  | 1994.3 | 8182.8  | 15661.4 | 22654.6 | 25611.1 | 25221.8 | 21456.3 | 14935.4 | 8712.0  | 1850.0 |
| 47.5° | 712.9  | 3000.2 | 11449.8 | 20056.7 | 28383.8 | 30741.1 | 30644.9 | 25960.9 | 18814.7 | 11909.0 | 3135.8 |
| 50°   | 1145.8 | 4605.3 | 15167.2 | 23752.3 | 32031.3 | 34056.2 | 33815.7 | 27841.5 | 21027.7 | 14091.3 | 4019.2 |
| 52.5° | 1530.7 | 6140.4 | 17502.6 | 25112.5 | 33120.3 | 35534.5 | 35241.4 | 28528.2 | 21609.3 | 14734.2 | 4264.1 |
| 55°   | 1626.9 | 6695.8 | 18198.0 | 25532.3 | 33841.9 | 36785.3 | 36361.0 | 28987.4 | 21683.7 | 14275.0 | 3857.4 |
| 57.5° | 1578.8 | 6171.0 | 17747.6 | 25943.4 | 34847.8 | 38071.1 | 37506.9 | 29883.9 | 21933.0 | 13496.5 | 3210.1 |
| 59°   | 1495.7 | 5523.7 | 17467.6 | 26271.4 | 35403.3 | 38272.3 | 37743.1 | 30080.7 | 22099.2 | 13142.3 | 2816.5 |
| 60°   | 1399.5 | 5086.3 | 17249.0 | 26485.7 | 35368.3 | 37957.4 | 37410.7 | 29988.9 | 22164.8 | 12836.1 | 2628.5 |
| 62.5° | 1080.2 | 4058.6 | 16934.1 | 26332.7 | 33159.7 | 35084.0 | 34773.5 | 27740.9 | 21202.6 | 11856.5 | 2073.0 |
| 65°   | 839.7  | 3105.2 | 15779.5 | 23485.5 | 28217.6 | 29512.2 | 29416.0 | 23489.9 | 17843.8 | 10220.8 | 1495.7 |
| 67.5° | 664.8  | 2265.5 | 13343.5 | 19020.2 | 22702.7 | 24543.9 | 24474.0 | 19068.3 | 13544.6 | 7811.0  | 1075.9 |
| 70°   | 542.3  | 1613.8 | 9149.3  | 14340.6 | 18158.7 | 20476.6 | 20376.0 | 15346.5 | 10037.1 | 4955.1  | 782.9  |
| 72.5° | 459.2  | 1032.1 | 5549.9  | 10811.2 | 15154.1 | 16479.2 | 16186.2 | 12381.3 | 7299.3  | 2698.4  | 621.0  |
| 75°   | 389.2  | 634.2  | 2750.9  | 6739.5  | 9026.8  | 9018.1  | 8725.1  | 6555.8  | 3918.6  | 1320.8  | 494.2  |
| 77.5° | 314.9  | 446.1  | 1080.2  | 1850.0  | 2847.1  | 3525.0  | 3468.2  | 2322.3  | 1172.1  | 384.9   | 306.1  |
| 80°   | 205.6  | 209.9  | 288.6   | 507.3   | 782.9   | 865.9   | 984.0   | 708.5   | 341.1   | 183.7   | 126.8  |
| 82.5° | 91.8   | 100.6  | 131.2   | 166.2   | 166.2   | 153.1   | 135.6   | 100.6   | 74.3    | 61.2    | 30.6   |
| 85°   | 21.9   | 30.6   | 21.9    | 26.2    | 21.9    | 17.5    | 17.5    | 8.7     | 0.0     | 0.0     | 0.0    |
| 87.5° | 4.4    | 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°    | 39.4  | 39.4  | 39.4  | 39.4  | 39.4 | 39.4 | 39.4 | 39.4 | 39.4 | 39.4 | 39.4 |
| 2.5°  | 35.0  | 35.0  | 35.0  | 30.6  | 30.6 | 30.6 | 26.2 | 26.2 | 26.2 | 21.9 | 21.9 |
| 5°    | 43.7  | 39.4  | 35.0  | 35.0  | 30.6 | 30.6 | 26.2 | 21.9 | 21.9 | 21.9 | 17.5 |
| 7.5°  | 48.1  | 43.7  | 39.4  | 35.0  | 30.6 | 26.2 | 26.2 | 21.9 | 17.5 | 17.5 | 17.5 |
| 10°   | 56.9  | 52.5  | 43.7  | 35.0  | 30.6 | 26.2 | 21.9 | 21.9 | 17.5 | 13.1 | 13.1 |
| 12.5° | 65.6  | 56.9  | 48.1  | 39.4  | 30.6 | 26.2 | 21.9 | 21.9 | 17.5 | 13.1 | 8.7  |
| 15°   | 74.3  | 65.6  | 52.5  | 39.4  | 30.6 | 26.2 | 21.9 | 21.9 | 13.1 | 8.7  | 4.4  |
| 17.5° | 83.1  | 70.0  | 52.5  | 43.7  | 30.6 | 26.2 | 21.9 | 17.5 | 8.7  | 4.4  | 0.0  |
| 20°   | 87.5  | 74.3  | 56.9  | 43.7  | 30.6 | 26.2 | 21.9 | 13.1 | 4.4  | 0.0  | 0.0  |
| 22.5° | 96.2  | 83.1  | 61.2  | 43.7  | 30.6 | 21.9 | 13.1 | 4.4  | 0.0  | 0.0  | 0.0  |
| 25°   | 113.7 | 87.5  | 61.2  | 43.7  | 30.6 | 21.9 | 8.7  | 0.0  | 0.0  | 0.0  | 0.0  |
| 27.5° | 126.8 | 96.2  | 61.2  | 43.7  | 30.6 | 17.5 | 4.4  | 0.0  | 0.0  | 0.0  | 0.0  |
| 30°   | 148.7 | 105.0 | 65.6  | 43.7  | 30.6 | 13.1 | 4.4  | 0.0  | 0.0  | 0.0  | 0.0  |
| 32.5° | 183.7 | 113.7 | 65.6  | 43.7  | 26.2 | 13.1 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 35°   | 223.0 | 131.2 | 65.6  | 43.7  | 26.2 | 13.1 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 37.5° | 227.4 | 140.0 | 65.6  | 43.7  | 26.2 | 8.7  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 40°   | 236.2 | 131.2 | 70.0  | 43.7  | 26.2 | 8.7  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 42.5° | 271.2 | 122.5 | 74.3  | 43.7  | 26.2 | 8.7  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 45°   | 402.4 | 126.8 | 74.3  | 48.1  | 26.2 | 13.1 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 47.5° | 699.8 | 131.2 | 70.0  | 48.1  | 26.2 | 13.1 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 50°   | 896.6 | 153.1 | 70.0  | 52.5  | 30.6 | 8.7  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 52.5° | 953.4 | 179.3 | 70.0  | 56.9  | 39.4 | 4.4  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 55°   | 927.2 | 209.9 | 74.3  | 61.2  | 48.1 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 57.5° | 857.2 | 227.4 | 78.7  | 65.6  | 52.5 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 59°   | 782.9 | 240.5 | 91.8  | 70.0  | 52.5 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 60°   | 721.6 | 253.7 | 96.2  | 74.3  | 52.5 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 62.5° | 581.7 | 271.2 | 105.0 | 87.5  | 43.7 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 65°   | 507.3 | 284.3 | 109.3 | 96.2  | 39.4 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 67.5° | 463.6 | 293.0 | 118.1 | 100.6 | 35.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 70°   | 428.6 | 288.6 | 126.8 | 96.2  | 30.6 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 72.5° | 389.2 | 275.5 | 153.1 | 87.5  | 26.2 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 75°   | 349.9 | 249.3 | 166.2 | 78.7  | 17.5 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 77.5° | 253.7 | 209.9 | 153.1 | 70.0  | 8.7  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 80°   | 109.3 | 113.7 | 109.3 | 52.5  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 82.5° | 21.9  | 26.2  | 21.9  | 13.1  | 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°    | 39.4 | 39.4 | 39.4 | 39.4 | 39.4 | 39.4 | 39.4 | 39.4 | 39.4 | 39.4 | 39.4 |
| 2.5°  | 21.9 | 21.9 | 21.9 | 21.9 | 26.2 | 26.2 | 35.0 | 43.7 | 52.5 | 56.9 | 56.9 |
| 5°    | 17.5 | 17.5 | 17.5 | 17.5 | 17.5 | 21.9 | 26.2 | 35.0 | 48.1 | 52.5 | 52.5 |
| 7.5°  | 13.1 | 13.1 | 13.1 | 13.1 | 13.1 | 13.1 | 21.9 | 30.6 | 43.7 | 48.1 | 52.5 |
| 10°   | 13.1 | 8.7  | 8.7  | 4.4  | 4.4  | 8.7  | 13.1 | 26.2 | 39.4 | 43.7 | 48.1 |
| 12.5° | 8.7  | 4.4  | 4.4  | 0.0  | 0.0  | 4.4  | 8.7  | 21.9 | 35.0 | 39.4 | 43.7 |
| 15°   | 4.4  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 4.4  | 17.5 | 30.6 | 35.0 | 43.7 |
| 17.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 13.1 | 26.2 | 35.0 | 39.4 |
| 20°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 8.7  | 21.9 | 30.6 | 35.0 |
| 22.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 4.4  | 17.5 | 26.2 | 30.6 |
| 25°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 13.1 | 17.5 | 21.9 |
| 27.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 8.7  | 13.1 | 17.5 |
| 30°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 8.7  | 13.1 | 17.5 |
| 32.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 4.4  | 8.7  | 13.1 |
| 35°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 4.4  | 8.7  | 13.1 |
| 37.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 4.4  | 8.7  | 8.7  |
| 40°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 4.4  | 8.7  |
| 42.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 4.4  | 8.7  |
| 45°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 4.4  | 8.7  |
| 47.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 4.4  | 8.7  |
| 50°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 4.4  | 8.7  |
| 52.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 4.4  | 4.4  |
| 55°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 4.4  | 4.4  |
| 57.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 4.4  |
| 59°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 4.4  |
| 60°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 4.4  |
| 62.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 4.4  |
| 65°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 4.4  |
| 67.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 4.4  |
| 70°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 4.4  |
| 72.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 4.4  |
| 75°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 4.4  | 4.4  |
| 77.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 4.4  | 8.7  |
| 80°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 4.4  | 8.7  |
| 82.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 4.4  | 4.4  |
| 85°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 4.4  | 4.4  |
| 87.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 4.4  | 4.4  |
| 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: P1066707

CATALOG NUMBER: NVN-SA4C-722-U-LBC

**CANDELA DISTRIBUTION (continued):**

|       | 285° | 295° | 305° | 315° | 318° | 325° | 335°  | 345°  | 355°  | 360°   |
|-------|------|------|------|------|------|------|-------|-------|-------|--------|
| 0°    | 39.4 | 39.4 | 39.4 | 39.4 | 39.4 | 39.4 | 39.4  | 39.4  | 39.4  | 39.4   |
| 2.5°  | 61.2 | 61.2 | 56.9 | 52.5 | 52.5 | 52.5 | 56.9  | 61.2  | 61.2  | 61.2   |
| 5°    | 56.9 | 56.9 | 52.5 | 52.5 | 52.5 | 52.5 | 56.9  | 65.6  | 70.0  | 70.0   |
| 7.5°  | 56.9 | 56.9 | 52.5 | 52.5 | 52.5 | 52.5 | 56.9  | 65.6  | 70.0  | 74.3   |
| 10°   | 52.5 | 52.5 | 52.5 | 52.5 | 48.1 | 52.5 | 56.9  | 65.6  | 78.7  | 78.7   |
| 12.5° | 52.5 | 52.5 | 52.5 | 52.5 | 48.1 | 52.5 | 61.2  | 70.0  | 83.1  | 87.5   |
| 15°   | 52.5 | 52.5 | 52.5 | 48.1 | 48.1 | 52.5 | 61.2  | 74.3  | 87.5  | 96.2   |
| 17.5° | 48.1 | 52.5 | 52.5 | 48.1 | 48.1 | 52.5 | 61.2  | 74.3  | 96.2  | 109.3  |
| 20°   | 43.7 | 48.1 | 52.5 | 48.1 | 48.1 | 48.1 | 61.2  | 74.3  | 100.6 | 118.1  |
| 22.5° | 39.4 | 43.7 | 48.1 | 48.1 | 43.7 | 48.1 | 61.2  | 78.7  | 109.3 | 131.2  |
| 25°   | 35.0 | 39.4 | 39.4 | 43.7 | 43.7 | 48.1 | 61.2  | 78.7  | 113.7 | 148.7  |
| 27.5° | 26.2 | 30.6 | 35.0 | 39.4 | 39.4 | 48.1 | 61.2  | 83.1  | 122.5 | 183.7  |
| 30°   | 21.9 | 26.2 | 30.6 | 35.0 | 39.4 | 48.1 | 61.2  | 83.1  | 131.2 | 231.8  |
| 32.5° | 21.9 | 26.2 | 30.6 | 35.0 | 39.4 | 43.7 | 61.2  | 87.5  | 144.3 | 288.6  |
| 35°   | 17.5 | 21.9 | 26.2 | 35.0 | 35.0 | 43.7 | 61.2  | 87.5  | 157.4 | 376.1  |
| 37.5° | 17.5 | 21.9 | 26.2 | 35.0 | 35.0 | 43.7 | 61.2  | 87.5  | 192.4 | 419.9  |
| 40°   | 13.1 | 17.5 | 21.9 | 35.0 | 35.0 | 43.7 | 65.6  | 91.8  | 196.8 | 424.2  |
| 42.5° | 13.1 | 17.5 | 21.9 | 30.6 | 35.0 | 43.7 | 65.6  | 91.8  | 183.7 | 437.3  |
| 45°   | 13.1 | 17.5 | 21.9 | 35.0 | 39.4 | 48.1 | 65.6  | 96.2  | 179.3 | 498.6  |
| 47.5° | 13.1 | 17.5 | 21.9 | 35.0 | 43.7 | 48.1 | 65.6  | 96.2  | 183.7 | 712.9  |
| 50°   | 13.1 | 17.5 | 21.9 | 35.0 | 48.1 | 48.1 | 65.6  | 96.2  | 201.2 | 1145.8 |
| 52.5° | 8.7  | 13.1 | 17.5 | 30.6 | 39.4 | 52.5 | 70.0  | 91.8  | 214.3 | 1530.7 |
| 55°   | 8.7  | 8.7  | 13.1 | 26.2 | 35.0 | 56.9 | 74.3  | 91.8  | 249.3 | 1626.9 |
| 57.5° | 8.7  | 8.7  | 13.1 | 21.9 | 30.6 | 61.2 | 78.7  | 91.8  | 288.6 | 1578.8 |
| 59°   | 8.7  | 8.7  | 8.7  | 21.9 | 26.2 | 61.2 | 78.7  | 96.2  | 293.0 | 1495.7 |
| 60°   | 8.7  | 8.7  | 8.7  | 17.5 | 26.2 | 61.2 | 83.1  | 100.6 | 297.4 | 1399.5 |
| 62.5° | 4.4  | 4.4  | 4.4  | 17.5 | 21.9 | 61.2 | 91.8  | 122.5 | 306.1 | 1080.2 |
| 65°   | 8.7  | 8.7  | 4.4  | 13.1 | 21.9 | 52.5 | 105.0 | 131.2 | 310.5 | 839.7  |
| 67.5° | 8.7  | 8.7  | 8.7  | 17.5 | 21.9 | 52.5 | 109.3 | 135.6 | 310.5 | 664.8  |
| 70°   | 8.7  | 8.7  | 8.7  | 17.5 | 26.2 | 52.5 | 109.3 | 140.0 | 306.1 | 542.3  |
| 72.5° | 8.7  | 8.7  | 8.7  | 17.5 | 26.2 | 48.1 | 100.6 | 144.3 | 293.0 | 459.2  |
| 75°   | 8.7  | 8.7  | 8.7  | 13.1 | 21.9 | 43.7 | 96.2  | 157.4 | 266.8 | 389.2  |
| 77.5° | 8.7  | 8.7  | 8.7  | 8.7  | 17.5 | 35.0 | 87.5  | 174.9 | 236.2 | 314.9  |
| 80°   | 13.1 | 8.7  | 8.7  | 8.7  | 13.1 | 30.6 | 83.1  | 170.6 | 196.8 | 205.6  |
| 82.5° | 13.1 | 8.7  | 8.7  | 4.4  | 8.7  | 21.9 | 65.6  | 131.2 | 100.6 | 91.8   |
| 85°   | 8.7  | 8.7  | 8.7  | 4.4  | 4.4  | 13.1 | 30.6  | 39.4  | 30.6  | 21.9   |
| 87.5° | 8.7  | 8.7  | 8.7  | 4.4  | 4.4  | 4.4  | 4.4   | 4.4   | 4.4   | 4.4    |
| 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: SP1-2407-184-2

Test Date: 10/09/2024

Luminaire Tested: GSS-SB1A-722-U-5WQ

Data in this report applies to families of products including GSS-SB1A-722-U-5WQ

### Test Information

Test Method: LM-79-2019  
 Report Number: SP1-2407-184-2  
 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-722-U-5WQ**  
 Description: GALLEON II SITE SLIM 1SQ 350MA 5WQ HIGH DENSITY LIGHTSQUARE WITH 70 CRI  
 2200K CCT 26 LEDS

### Spectral Parameters

|                           |          |           |      |      |       |
|---------------------------|----------|-----------|------|------|-------|
| CCT (K):                  | 2160     | CRI (Ra): | 71.9 |      |       |
| CIE u':                   | 0.2927   | R1:       | 68.7 | R9:  | -17.8 |
| CIE v':                   | 0.5388   | R2:       | 82.6 | R10: | 60.5  |
| Duv:                      | 0.0015   | R3:       | 95.5 | R11: | 60.2  |
| CIE x:                    | 0.5130   | R4:       | 66.4 | R12: | 48.2  |
| CIE y:                    | 0.4197   | R5:       | 65.4 | R13: | 70.7  |
| CIE z:                    | 0.0674   | R6:       | 75.9 | R14: | 96.8  |
| Peak Wavelength (nm):     | 609      | R7:       | 77.2 | R15: | 61.8  |
| Dominant Wavelength (nm): | 587      | R8:       | 43.5 |      |       |
| Purity:                   | 79.96089 |           |      |      |       |
| Rf:                       | 70.6     |           |      |      |       |
| Rg:                       | 97.6     |           |      |      |       |



### Test Conditions

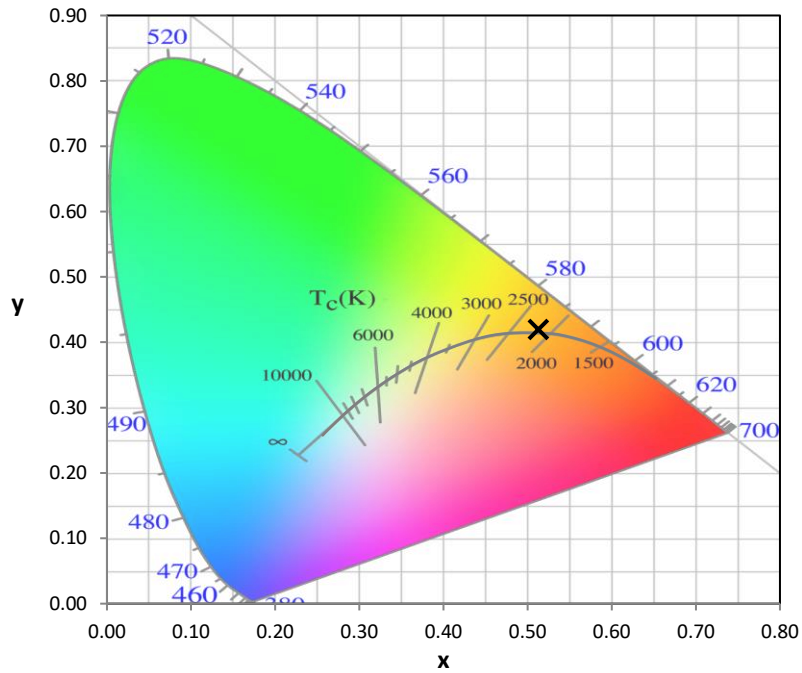
Stabilization Time: 21M  
 Operation Time: 1H 21M  
 Sphere Temperature (°C): 25.2

REPORT NUMBER: SP1-2407-184-2

| 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: SP1-2407-184-2

**CIE 1931 Chromaticity Diagram**



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



Point lies inside the ANSI 2200K 7-step quadrangle

REPORT NUMBER: SP1-2407-184-2

### 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               | 27                                   | NR                             | 620               | 966                                  | NR                             | 750               | 46                                   | NR                             | 880               | 1                                    | NR                             |
| 365               | 0                                    | NR                             | 495               | 42                                   | NR                             | 625               | 930                                  | NR                             | 755               | 39                                   | NR                             | 885               | 1                                    | NR                             |
| 370               | 0                                    | NR                             | 500               | 67                                   | NR                             | 630               | 888                                  | NR                             | 760               | 34                                   | NR                             | 890               | 1                                    | NR                             |
| 375               | 0                                    | NR                             | 505               | 101                                  | NR                             | 635               | 835                                  | NR                             | 765               | 30                                   | NR                             | 895               | 1                                    | NR                             |
| 380               | 0                                    | NR                             | 510               | 139                                  | NR                             | 640               | 778                                  | NR                             | 770               | 26                                   | NR                             | 900               | 1                                    | NR                             |
| 385               | 0                                    | NR                             | 515               | 183                                  | NR                             | 645               | 717                                  | NR                             | 775               | 22                                   | NR                             | 905               | 1                                    | NR                             |
| 390               | 0                                    | NR                             | 520               | 224                                  | NR                             | 650               | 656                                  | NR                             | 780               | 19                                   | NR                             | 910               | 1                                    | NR                             |
| 395               | 0                                    | NR                             | 525               | 262                                  | NR                             | 655               | 595                                  | NR                             | 785               | 17                                   | NR                             | 915               | 1                                    | NR                             |
| 400               | 1                                    | NR                             | 530               | 299                                  | NR                             | 660               | 536                                  | NR                             | 790               | 15                                   | NR                             | 920               | 1                                    | NR                             |
| 405               | 3                                    | NR                             | 535               | 332                                  | NR                             | 665               | 480                                  | NR                             | 795               | 13                                   | NR                             | 925               | 1                                    | NR                             |
| 410               | 7                                    | NR                             | 540               | 365                                  | NR                             | 670               | 425                                  | NR                             | 800               | 11                                   | NR                             | 930               | 1                                    | NR                             |
| 415               | 17                                   | NR                             | 545               | 400                                  | NR                             | 675               | 376                                  | NR                             | 805               | 10                                   | NR                             | 935               | 0                                    | NR                             |
| 420               | 36                                   | NR                             | 550               | 437                                  | NR                             | 680               | 332                                  | NR                             | 810               | 8                                    | NR                             | 940               | 0                                    | NR                             |
| 425               | 67                                   | NR                             | 555               | 479                                  | NR                             | 685               | 291                                  | NR                             | 815               | 8                                    | NR                             | 945               | 0                                    | NR                             |
| 430               | 105                                  | NR                             | 560               | 525                                  | NR                             | 690               | 255                                  | NR                             | 820               | 7                                    | NR                             | 950               | 0                                    | NR                             |
| 435               | 141                                  | NR                             | 565               | 579                                  | NR                             | 695               | 221                                  | NR                             | 825               | 6                                    | NR                             | 955               | 0                                    | NR                             |
| 440               | 169                                  | NR                             | 570               | 639                                  | NR                             | 700               | 192                                  | NR                             | 830               | 5                                    | NR                             | 960               | 0                                    | NR                             |
| 445               | 173                                  | NR                             | 575               | 703                                  | NR                             | 705               | 167                                  | NR                             | 835               | 4                                    | NR                             | 965               | 0                                    | NR                             |
| 450               | 136                                  | NR                             | 580               | 769                                  | NR                             | 710               | 144                                  | NR                             | 840               | 4                                    | NR                             | 970               | 0                                    | NR                             |
| 455               | 80                                   | NR                             | 585               | 832                                  | NR                             | 715               | 125                                  | NR                             | 845               | 3                                    | NR                             | 975               | 0                                    | NR                             |
| 460               | 45                                   | NR                             | 590               | 890                                  | NR                             | 720               | 109                                  | NR                             | 850               | 3                                    | NR                             | 980               | 0                                    | NR                             |
| 465               | 32                                   | NR                             | 595               | 937                                  | NR                             | 725               | 94                                   | NR                             | 855               | 3                                    | NR                             | 985               | 0                                    | NR                             |
| 470               | 23                                   | NR                             | 600               | 972                                  | NR                             | 730               | 81                                   | NR                             | 860               | 2                                    | NR                             | 990               | 0                                    | NR                             |
| 475               | 18                                   | NR                             | 605               | 992                                  | NR                             | 735               | 70                                   | NR                             | 865               | 2                                    | NR                             | 995               | 0                                    | NR                             |
| 480               | 18                                   | NR                             | 610               | 998                                  | NR                             | 740               | 61                                   | NR                             | 870               | 2                                    | NR                             | 1000              | 0                                    | NR                             |
| 485               | 20                                   | NR                             | 615               | 990                                  | NR                             | 745               | 53                                   | NR                             | 875               | 2                                    | NR                             |                   |                                      |                                |

REPORT NUMBER: SP1-2407-184-2

### Scotopic Flux vs. Wavelength



Scotopic Lumens: NR

S/P: 0.8

| $\lambda$<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               | 27                                   | NR                             | 620               | 966                                  | NR                             | 750               | 46                                   | NR                             | 880               | 1                                    | NR                             |
| 365               | 0                                    | NR                             | 495               | 42                                   | NR                             | 625               | 930                                  | NR                             | 755               | 39                                   | NR                             | 885               | 1                                    | NR                             |
| 370               | 0                                    | NR                             | 500               | 67                                   | NR                             | 630               | 888                                  | NR                             | 760               | 34                                   | NR                             | 890               | 1                                    | NR                             |
| 375               | 0                                    | NR                             | 505               | 101                                  | NR                             | 635               | 835                                  | NR                             | 765               | 30                                   | NR                             | 895               | 1                                    | NR                             |
| 380               | 0                                    | NR                             | 510               | 139                                  | NR                             | 640               | 778                                  | NR                             | 770               | 26                                   | NR                             | 900               | 1                                    | NR                             |
| 385               | 0                                    | NR                             | 515               | 183                                  | NR                             | 645               | 717                                  | NR                             | 775               | 22                                   | NR                             | 905               | 1                                    | NR                             |
| 390               | 0                                    | NR                             | 520               | 224                                  | NR                             | 650               | 656                                  | NR                             | 780               | 19                                   | NR                             | 910               | 1                                    | NR                             |
| 395               | 0                                    | NR                             | 525               | 262                                  | NR                             | 655               | 595                                  | NR                             | 785               | 17                                   | NR                             | 915               | 1                                    | NR                             |
| 400               | 1                                    | NR                             | 530               | 299                                  | NR                             | 660               | 536                                  | NR                             | 790               | 15                                   | NR                             | 920               | 1                                    | NR                             |
| 405               | 3                                    | NR                             | 535               | 332                                  | NR                             | 665               | 480                                  | NR                             | 795               | 13                                   | NR                             | 925               | 1                                    | NR                             |
| 410               | 7                                    | NR                             | 540               | 365                                  | NR                             | 670               | 425                                  | NR                             | 800               | 11                                   | NR                             | 930               | 1                                    | NR                             |
| 415               | 17                                   | NR                             | 545               | 400                                  | NR                             | 675               | 376                                  | NR                             | 805               | 10                                   | NR                             | 935               | 0                                    | NR                             |
| 420               | 36                                   | NR                             | 550               | 437                                  | NR                             | 680               | 332                                  | NR                             | 810               | 8                                    | NR                             | 940               | 0                                    | NR                             |
| 425               | 67                                   | NR                             | 555               | 479                                  | NR                             | 685               | 291                                  | NR                             | 815               | 8                                    | NR                             | 945               | 0                                    | NR                             |
| 430               | 105                                  | NR                             | 560               | 525                                  | NR                             | 690               | 255                                  | NR                             | 820               | 7                                    | NR                             | 950               | 0                                    | NR                             |
| 435               | 141                                  | NR                             | 565               | 579                                  | NR                             | 695               | 221                                  | NR                             | 825               | 6                                    | NR                             | 955               | 0                                    | NR                             |
| 440               | 169                                  | NR                             | 570               | 639                                  | NR                             | 700               | 192                                  | NR                             | 830               | 5                                    | NR                             | 960               | 0                                    | NR                             |
| 445               | 173                                  | NR                             | 575               | 703                                  | NR                             | 705               | 167                                  | NR                             | 835               | 4                                    | NR                             | 965               | 0                                    | NR                             |
| 450               | 136                                  | NR                             | 580               | 769                                  | NR                             | 710               | 144                                  | NR                             | 840               | 4                                    | NR                             | 970               | 0                                    | NR                             |
| 455               | 80                                   | NR                             | 585               | 832                                  | NR                             | 715               | 125                                  | NR                             | 845               | 3                                    | NR                             | 975               | 0                                    | NR                             |
| 460               | 45                                   | NR                             | 590               | 890                                  | NR                             | 720               | 109                                  | NR                             | 850               | 3                                    | NR                             | 980               | 0                                    | NR                             |
| 465               | 32                                   | NR                             | 595               | 937                                  | NR                             | 725               | 94                                   | NR                             | 855               | 3                                    | NR                             | 985               | 0                                    | NR                             |
| 470               | 23                                   | NR                             | 600               | 972                                  | NR                             | 730               | 81                                   | NR                             | 860               | 2                                    | NR                             | 990               | 0                                    | NR                             |
| 475               | 18                                   | NR                             | 605               | 992                                  | NR                             | 735               | 70                                   | NR                             | 865               | 2                                    | NR                             | 995               | 0                                    | NR                             |
| 480               | 18                                   | NR                             | 610               | 998                                  | NR                             | 740               | 61                                   | NR                             | 870               | 2                                    | NR                             | 1000              | 0                                    | NR                             |
| 485               | 20                                   | NR                             | 615               | 990                                  | NR                             | 745               | 53                                   | NR                             | 875               | 2                                    | NR                             |                   |                                      |                                |

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### Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 1.21

| $\lambda$<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               | 27                                     | NR                             | 620               | 966                                    | NR                             | 750               | 46                                     | NR                             | 880               | 1                                      | NR                             |
| 365               | 0                                      | NR                             | 495               | 42                                     | NR                             | 625               | 930                                    | NR                             | 755               | 39                                     | NR                             | 885               | 1                                      | NR                             |
| 370               | 0                                      | NR                             | 500               | 67                                     | NR                             | 630               | 888                                    | NR                             | 760               | 34                                     | NR                             | 890               | 1                                      | NR                             |
| 375               | 0                                      | NR                             | 505               | 101                                    | NR                             | 635               | 835                                    | NR                             | 765               | 30                                     | NR                             | 895               | 1                                      | NR                             |
| 380               | 0                                      | NR                             | 510               | 139                                    | NR                             | 640               | 778                                    | NR                             | 770               | 26                                     | NR                             | 900               | 1                                      | NR                             |
| 385               | 0                                      | NR                             | 515               | 183                                    | NR                             | 645               | 717                                    | NR                             | 775               | 22                                     | NR                             | 905               | 1                                      | NR                             |
| 390               | 0                                      | NR                             | 520               | 224                                    | NR                             | 650               | 656                                    | NR                             | 780               | 19                                     | NR                             | 910               | 1                                      | NR                             |
| 395               | 0                                      | NR                             | 525               | 262                                    | NR                             | 655               | 595                                    | NR                             | 785               | 17                                     | NR                             | 915               | 1                                      | NR                             |
| 400               | 1                                      | NR                             | 530               | 299                                    | NR                             | 660               | 536                                    | NR                             | 790               | 15                                     | NR                             | 920               | 1                                      | NR                             |
| 405               | 3                                      | NR                             | 535               | 332                                    | NR                             | 665               | 480                                    | NR                             | 795               | 13                                     | NR                             | 925               | 1                                      | NR                             |
| 410               | 7                                      | NR                             | 540               | 365                                    | NR                             | 670               | 425                                    | NR                             | 800               | 11                                     | NR                             | 930               | 1                                      | NR                             |
| 415               | 17                                     | NR                             | 545               | 400                                    | NR                             | 675               | 376                                    | NR                             | 805               | 10                                     | NR                             | 935               | 0                                      | NR                             |
| 420               | 36                                     | NR                             | 550               | 437                                    | NR                             | 680               | 332                                    | NR                             | 810               | 8                                      | NR                             | 940               | 0                                      | NR                             |
| 425               | 67                                     | NR                             | 555               | 479                                    | NR                             | 685               | 291                                    | NR                             | 815               | 8                                      | NR                             | 945               | 0                                      | NR                             |
| 430               | 105                                    | NR                             | 560               | 525                                    | NR                             | 690               | 255                                    | NR                             | 820               | 7                                      | NR                             | 950               | 0                                      | NR                             |
| 435               | 141                                    | NR                             | 565               | 579                                    | NR                             | 695               | 221                                    | NR                             | 825               | 6                                      | NR                             | 955               | 0                                      | NR                             |
| 440               | 169                                    | NR                             | 570               | 639                                    | NR                             | 700               | 192                                    | NR                             | 830               | 5                                      | NR                             | 960               | 0                                      | NR                             |
| 445               | 173                                    | NR                             | 575               | 703                                    | NR                             | 705               | 167                                    | NR                             | 835               | 4                                      | NR                             | 965               | 0                                      | NR                             |
| 450               | 136                                    | NR                             | 580               | 769                                    | NR                             | 710               | 144                                    | NR                             | 840               | 4                                      | NR                             | 970               | 0                                      | NR                             |
| 455               | 80                                     | NR                             | 585               | 832                                    | NR                             | 715               | 125                                    | NR                             | 845               | 3                                      | NR                             | 975               | 0                                      | NR                             |
| 460               | 45                                     | NR                             | 590               | 890                                    | NR                             | 720               | 109                                    | NR                             | 850               | 3                                      | NR                             | 980               | 0                                      | NR                             |
| 465               | 32                                     | NR                             | 595               | 937                                    | NR                             | 725               | 94                                     | NR                             | 855               | 3                                      | NR                             | 985               | 0                                      | NR                             |
| 470               | 23                                     | NR                             | 600               | 972                                    | NR                             | 730               | 81                                     | NR                             | 860               | 2                                      | NR                             | 990               | 0                                      | NR                             |
| 475               | 18                                     | NR                             | 605               | 992                                    | NR                             | 735               | 70                                     | NR                             | 865               | 2                                      | NR                             | 995               | 0                                      | NR                             |
| 480               | 18                                     | NR                             | 610               | 998                                    | NR                             | 740               | 61                                     | NR                             | 870               | 2                                      | NR                             | 1000              | 0                                      | NR                             |
| 485               | 20                                     | NR                             | 615               | 990                                    | NR                             | 745               | 53                                     | NR                             | 875               | 2                                      | NR                             |                   |                                        |                                |

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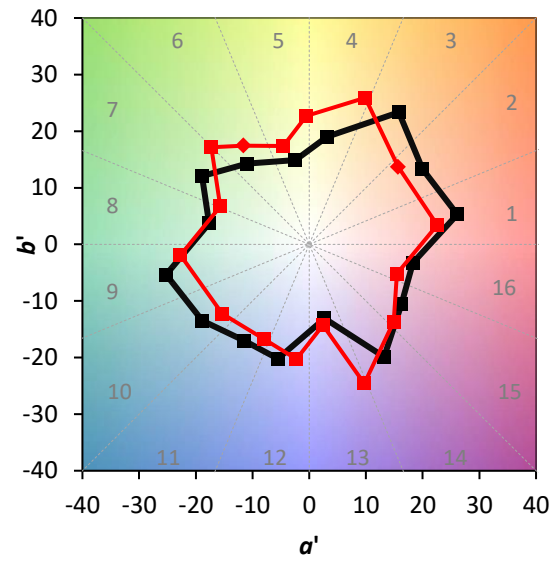
TM-30-18

### Summary

$R_f = 70.6$   
 $R_g = 97.6$   
 $CIE\ R_a = 71.9$   
 $R_g = -17.8$



### Color Vector Graphics



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

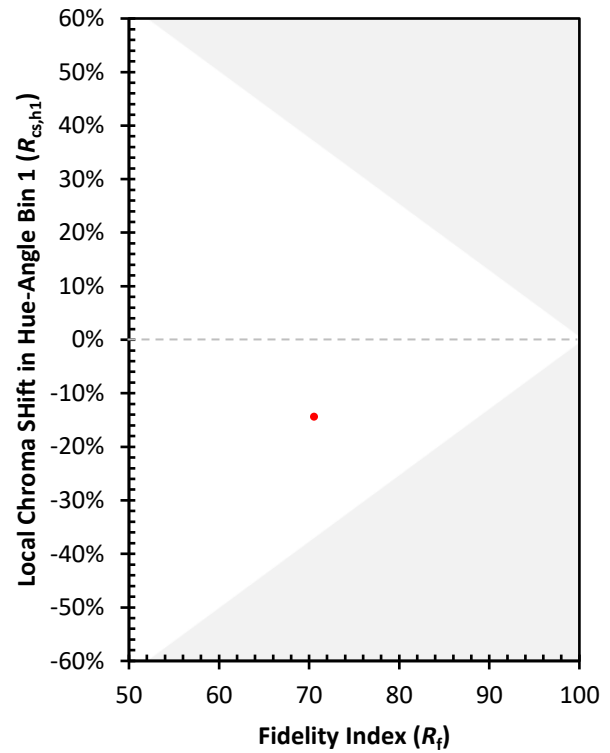
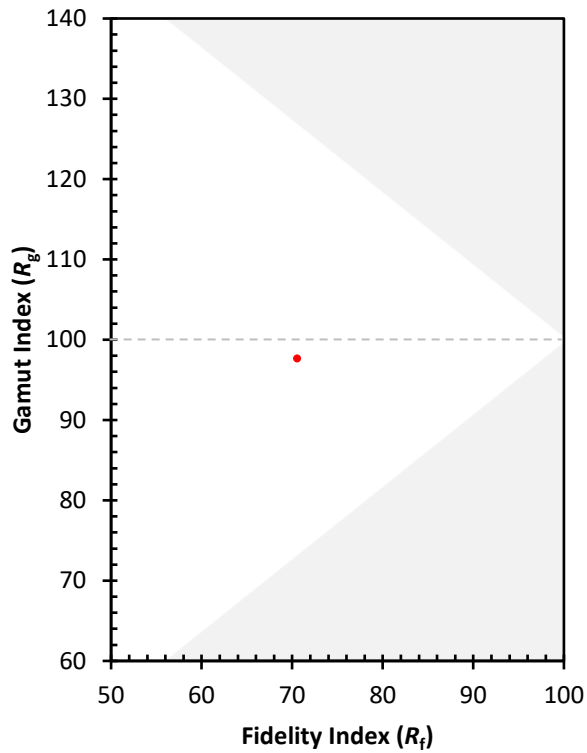
|            |            |            |            |
|------------|------------|------------|------------|
| CES01 = 87 | CES26 = 60 | CES51 = 74 | CES76 = 58 |
| CES02 = 65 | CES27 = 77 | CES52 = 77 | CES77 = 82 |
| CES03 = 32 | CES28 = 85 | CES53 = 65 | CES78 = 65 |
| CES04 = 72 | CES29 = 50 | CES54 = 77 | CES79 = 86 |
| CES05 = 52 | CES30 = 49 | CES55 = 74 | CES80 = 85 |
| CES06 = 53 | CES31 = 55 | CES56 = 64 | CES81 = 61 |
| CES07 = 44 | CES32 = 55 | CES57 = 60 | CES82 = 93 |
| CES08 = 43 | CES33 = 55 | CES58 = 64 | CES83 = 83 |
| CES09 = 29 | CES34 = 75 | CES59 = 84 | CES84 = 93 |
| CES10 = 79 | CES35 = 88 | CES60 = 89 | CES85 = 81 |
| CES11 = 62 | CES36 = 78 | CES61 = 84 | CES86 = 55 |
| CES12 = 68 | CES37 = 82 | CES62 = 68 | CES87 = 79 |
| CES13 = 45 | CES38 = 54 | CES63 = 68 | CES88 = 72 |
| CES14 = 75 | CES39 = 90 | CES64 = 69 | CES89 = 62 |
| CES15 = 72 | CES40 = 86 | CES65 = 66 | CES90 = 67 |
| CES16 = 49 | CES41 = 75 | CES66 = 64 | CES91 = 89 |
| CES17 = 51 | CES42 = 83 | CES67 = 63 | CES92 = 67 |
| CES18 = 57 | CES43 = 68 | CES68 = 71 | CES93 = 78 |
| CES19 = 74 | CES44 = 98 | CES69 = 81 | CES94 = 52 |
| CES20 = 68 | CES45 = 76 | CES70 = 65 | CES95 = 76 |
| CES21 = 89 | CES46 = 68 | CES71 = 64 | CES96 = 78 |
| CES22 = 81 | CES47 = 60 | CES72 = 88 | CES97 = 76 |
| CES23 = 92 | CES48 = 47 | CES73 = 59 | CES98 = 71 |
| CES24 = 92 | CES49 = 65 | CES74 = 85 | CES99 = 65 |
| CES25 = 74 | CES50 = 74 | CES75 = 66 |            |



Color Rendition by Hue-Angle Bin



**Measure Comparisons**



(END OF REPORT)