

Signify Classified - Internal  
Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: McGRAW-EDISON

Report Number: P1049583

Luminaire Tested: **GALN-SA4C-730-U-LBC**

Issue Date: 07/10/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P1049583  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 07/10/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GALN-SA4C-730-U-LBC  
Description: GALLEON II AREA AND ROADWAY LUMINAIRE 1050mA 4xLight Square PACKAGE  
70CRI 3000K FIXTURE w/ LEFT CORNER BACKLIGHT CONTROL  
Light Source: (56) 3000K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 19917.4 lumens  
Efficiency: N/A  
Efficacy: 104.6 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 (A<sub>in</sub>): 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

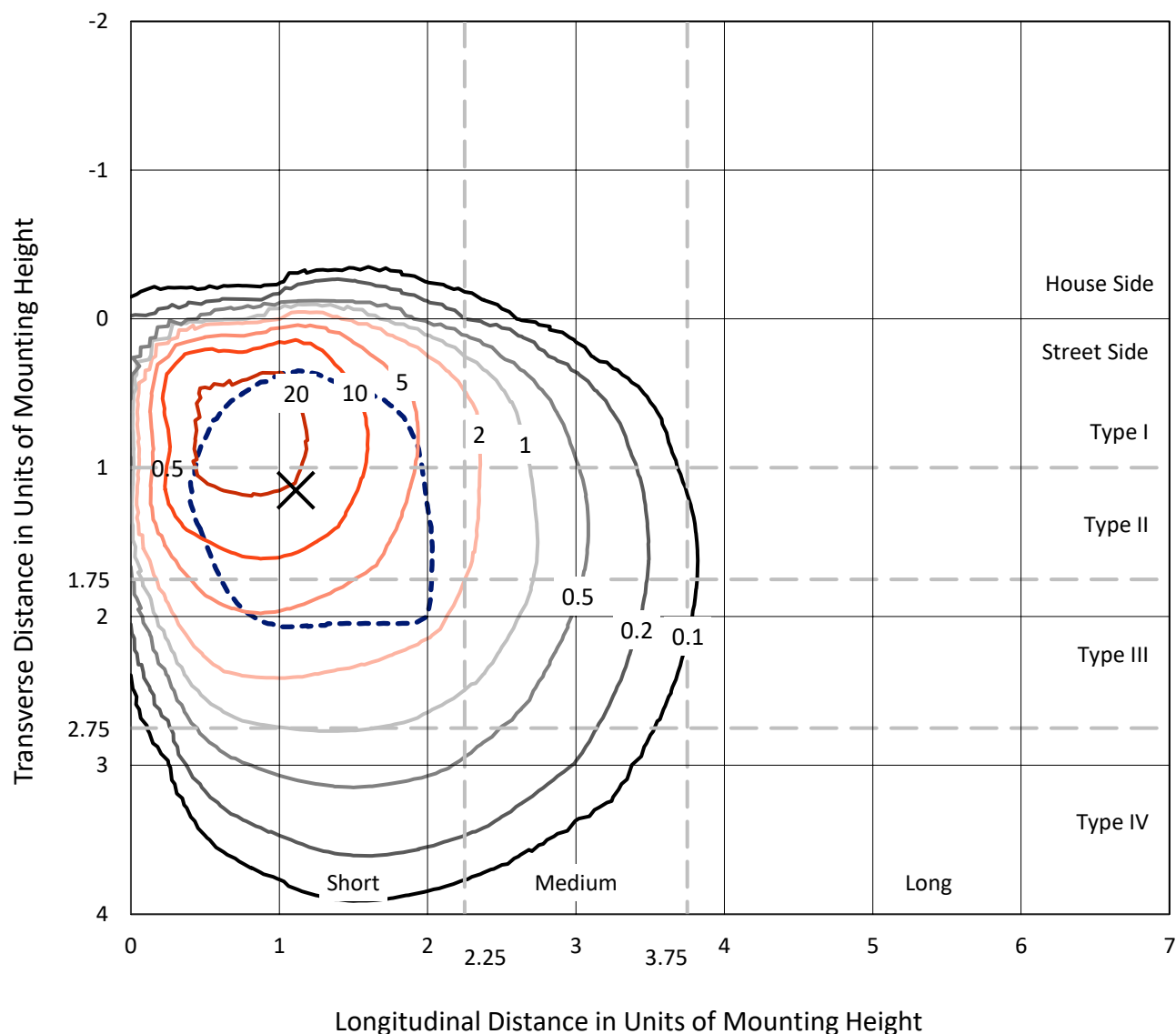
REPORT NUMBER: P1049583

CATALOG NUMBER: GALN-SA4C-730-U-LBC

## Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

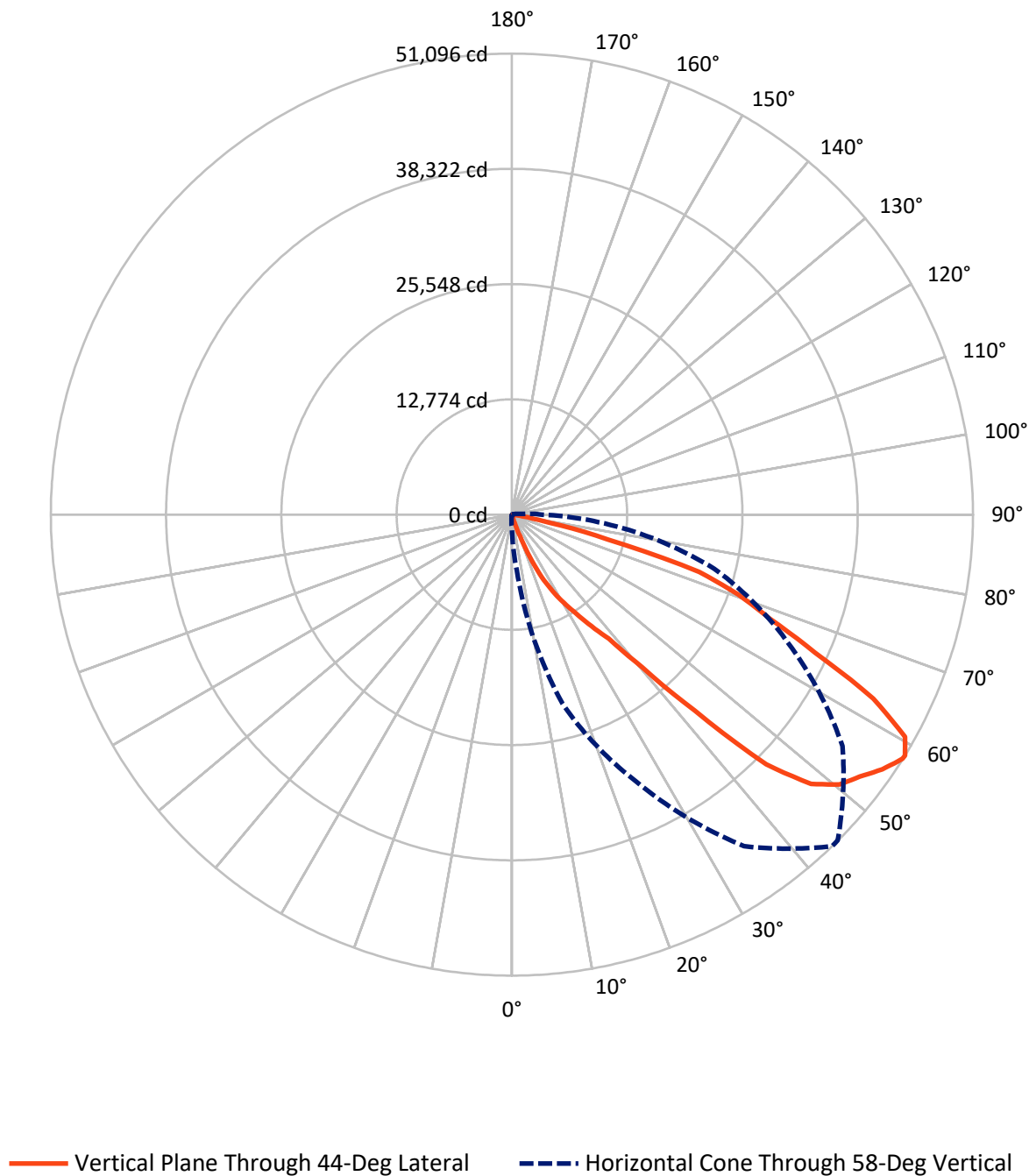


Based on 20 foot mounting height. Maximum calculated value = 34.7 fc

Type III - Short - N/A

REPORT NUMBER: P1049583  
CATALOG NUMBER: GALN-SA4C-730-U-LBC

## Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 136.0    | 0.0    | 136.0   |
|                    | % Fixture | 0.7      | 0.0    | 0.7     |
| <b>Street Side</b> | Lumens    | 19781.4  | 0.0    | 19781.4 |
|                    | % Fixture | 99.3     | 0.0    | 99.3    |
| <b>Total</b>       | Lumens    | 19917.4  | 0.0    | 19917.4 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**Coefficient of Utilization**

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 7.8     | 0.0       |
| 10°-20°   | 43.7    | 0.2       |
| 20°-30°   | 471.8   | 2.4       |
| 30°-40°   | 1395.4  | 7.0       |
| 40°-50°   | 4159.1  | 20.9      |
| 50°-60°   | 6599.4  | 33.1      |
| 60°-70°   | 5504.7  | 27.6      |
| 70°-80°   | 1697.7  | 8.5       |
| 80°-90°   | 37.7    | 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°    | 19917.4 | 100.0     |
| 0°-180°   | 19917.4 | 100.0     |



REPORT NUMBER: P1049583

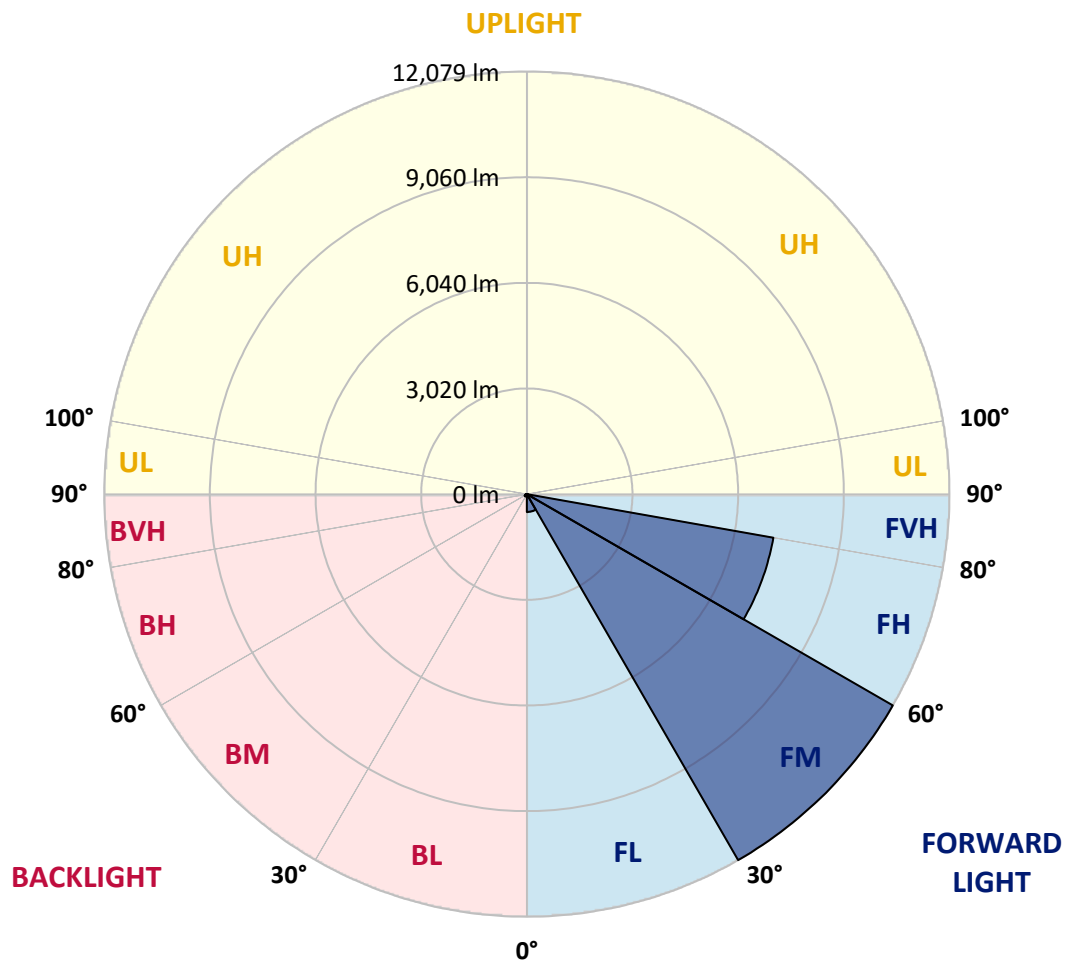
CATALOG NUMBER: GALN-SA4C-730-U-LBC

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

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|---------|-----------|-------------------------|------|---------|
|      |             |         |           | B                       | U    | G       |
| FL   | (0°-30°)    | 510.0   | 2.6       |                         |      |         |
| FM   | (30°-60°)   | 12079.5 | 60.6      |                         |      |         |
| FH   | (60°-80°)   | 7156.0  | 35.9      |                         |      | G3/7500 |
| FVH  | (80°-90°)   | 35.9    | 0.2       |                         |      | G1/100  |
| BL   | (0°-30°)    | 13.3    | 0.1       | B0/110                  |      |         |
| BM   | (30°-60°)   | 74.4    | 0.4       | B0/220                  |      |         |
| BH   | (60°-80°)   | 46.4    | 0.2       | B0/110                  |      | G0/110  |
| BVH  | (80°-90°)   | 1.8     | 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



REPORT NUMBER: P1049583

CATALOG NUMBER: GALN-SA4C-730-U-LBC

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°     | 25°     | 35°     | 44°     | 45°     | 55°     | 65°     | 75°     |
|-------|--------|--------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 87.3   | 87.3   | 87.3    | 87.3    | 87.3    | 87.3    | 87.3    | 87.3    | 87.3    | 87.3    |
| 2.5°  | 112.8  | 112.8  | 108.3   | 102.3   | 96.3    | 90.3    | 88.8    | 85.8    | 84.3    | 82.8    |
| 5°    | 117.4  | 117.4  | 115.9   | 111.3   | 105.3   | 100.8   | 100.8   | 96.3    | 93.3    | 90.3    |
| 7.5°  | 120.4  | 121.9  | 124.9   | 123.4   | 120.4   | 115.9   | 115.9   | 112.8   | 108.3   | 100.8   |
| 10°   | 124.9  | 129.4  | 135.4   | 138.4   | 139.9   | 139.9   | 138.4   | 136.9   | 129.4   | 118.9   |
| 12.5° | 129.4  | 138.4  | 153.5   | 168.5   | 177.5   | 189.6   | 188.1   | 185.1   | 165.5   | 142.9   |
| 15°   | 138.4  | 152.0  | 183.6   | 227.2   | 294.9   | 337.0   | 353.6   | 338.5   | 273.8   | 192.6   |
| 17.5° | 149.0  | 171.5  | 266.3   | 475.4   | 779.4   | 923.8   | 1011.1  | 940.4   | 622.9   | 365.6   |
| 20°   | 159.5  | 209.1  | 495.0   | 1232.3  | 2022.2  | 2494.6  | 2625.5  | 2420.9  | 1554.2  | 696.6   |
| 22.5° | 177.5  | 293.4  | 1003.6  | 2547.3  | 4357.3  | 5065.9  | 5199.9  | 4545.4  | 2935.5  | 1375.2  |
| 25°   | 215.2  | 425.8  | 1730.3  | 4151.2  | 6502.8  | 7699.0  | 7643.3  | 6785.7  | 4762.0  | 2196.7  |
| 27.5° | 269.3  | 619.9  | 2616.5  | 5898.0  | 8558.1  | 9612.8  | 9739.2  | 8678.5  | 6347.9  | 3230.4  |
| 30°   | 347.6  | 859.1  | 3567.4  | 7297.3  | 10205.6 | 11346.1 | 11367.2 | 10270.3 | 7766.7  | 4137.6  |
| 32.5° | 422.8  | 1084.8 | 4399.4  | 8649.9  | 11829.1 | 13079.4 | 13172.7 | 11823.1 | 8825.9  | 5082.5  |
| 35°   | 480.0  | 1232.3 | 5242.0  | 9838.5  | 13466.1 | 15188.8 | 15182.8 | 13580.4 | 10080.7 | 5926.6  |
| 37.5° | 484.5  | 1379.7 | 6004.8  | 11054.2 | 15539.4 | 17468.3 | 17659.4 | 15893.0 | 11597.4 | 6970.8  |
| 40°   | 473.9  | 1545.2 | 6970.8  | 12950.0 | 19275.3 | 22234.8 | 22403.3 | 20176.5 | 14639.6 | 8758.2  |
| 42.5° | 486.0  | 1832.6 | 8538.5  | 16451.2 | 25478.7 | 29729.2 | 30054.2 | 27713.0 | 20232.2 | 12405.3 |
| 45°   | 549.2  | 2372.7 | 11823.1 | 22308.5 | 34321.2 | 39503.0 | 39394.6 | 36022.9 | 26739.5 | 17957.3 |
| 47.5° | 758.3  | 3695.3 | 16691.9 | 28009.4 | 39972.4 | 44587.0 | 44680.3 | 40559.2 | 30537.1 | 22225.8 |
| 50°   | 1166.1 | 5654.2 | 20782.9 | 31023.1 | 42402.3 | 47031.9 | 46944.7 | 42182.6 | 31980.0 | 24327.7 |
| 52.5° | 1516.6 | 7071.6 | 22835.1 | 32080.8 | 42713.8 | 48240.1 | 48234.1 | 42609.9 | 32204.2 | 24508.2 |
| 55°   | 1603.9 | 7178.4 | 22851.7 | 32138.0 | 43411.9 | 49821.4 | 50020.0 | 43661.7 | 32494.6 | 23719.8 |
| 57.5° | 1569.3 | 6355.4 | 21897.8 | 32469.0 | 44654.7 | 51044.7 | 51055.2 | 44680.3 | 33231.8 | 23236.9 |
| 58°   | 1539.2 | 6226.0 | 21705.2 | 32657.1 | 44868.3 | 51095.8 | 51070.2 | 44726.9 | 33832.2 | 23218.8 |
| 60°   | 1370.7 | 5406.0 | 20954.4 | 33137.1 | 44550.9 | 50045.6 | 49806.4 | 43708.3 | 33743.4 | 23033.7 |
| 62.5° | 1077.3 | 4217.4 | 20215.6 | 32581.9 | 41147.5 | 44961.6 | 45060.9 | 38696.5 | 30761.3 | 21955.0 |
| 65°   | 857.6  | 3143.1 | 18675.0 | 28579.7 | 33883.3 | 36922.6 | 37292.7 | 31467.0 | 25675.8 | 18590.7 |
| 67.5° | 683.1  | 2271.9 | 15665.8 | 22753.9 | 26811.8 | 30815.5 | 31084.8 | 26419.1 | 19892.2 | 14243.9 |
| 70°   | 555.2  | 1536.2 | 10813.5 | 16640.7 | 22114.4 | 26616.2 | 26632.7 | 21947.4 | 14847.3 | 9333.0  |
| 72.5° | 492.0  | 1063.7 | 6277.1  | 12136.0 | 17931.7 | 21688.6 | 21250.8 | 17809.8 | 11410.8 | 5527.9  |
| 75°   | 425.8  | 705.7  | 3078.4  | 7419.1  | 10872.2 | 10945.9 | 11112.9 | 8261.7  | 5703.9  | 2628.5  |
| 77.5° | 350.6  | 501.0  | 1212.7  | 2026.7  | 3260.4  | 4173.7  | 4328.7  | 3280.0  | 1897.3  | 647.0   |
| 80°   | 240.7  | 237.7  | 326.5   | 621.4   | 932.8   | 1169.1  | 1090.8  | 844.1   | 496.5   | 248.3   |
| 82.5° | 103.8  | 112.8  | 147.4   | 177.5   | 144.4   | 139.9   | 133.9   | 85.8    | 66.2    | 51.2    |
| 85°   | 33.1   | 30.1   | 31.6    | 31.6    | 25.6    | 19.6    | 19.6    | 9.0     | 0.0     | 0.0     |
| 87.5° | 16.6   | 13.5   | 13.5    | 12.0    | 7.5     | 3.0     | 1.5     | 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     |



REPORT NUMBER: P1049583

CATALOG NUMBER: GALN-SA4C-730-U-LBC

**CANDELA DISTRIBUTION (continued):**

| 85°     |       | 90°    | 95°   | 105°  | 115° | 125° | 135° | 145° | 155° | 165° | 175° |
|---------|-------|--------|-------|-------|------|------|------|------|------|------|------|
| 87.3    | 0°    | 87.3   | 87.3  | 87.3  | 87.3 | 87.3 | 87.3 | 87.3 | 87.3 | 87.3 | 87.3 |
| 81.2    | 2.5°  | 79.7   | 79.7  | 76.7  | 73.7 | 72.2 | 69.2 | 67.7 | 66.2 | 64.7 | 63.2 |
| 87.3    | 5°    | 84.3   | 82.8  | 78.2  | 73.7 | 69.2 | 64.7 | 61.7 | 58.7 | 55.7 | 54.2 |
| 96.3    | 7.5°  | 91.8   | 88.8  | 79.7  | 72.2 | 66.2 | 60.2 | 57.2 | 52.7 | 49.7 | 45.1 |
| 106.8   | 10°   | 100.8  | 94.8  | 82.8  | 73.7 | 64.7 | 57.2 | 52.7 | 48.1 | 43.6 | 37.6 |
| 121.9   | 12.5° | 112.8  | 102.3 | 87.3  | 72.2 | 61.7 | 52.7 | 48.1 | 42.1 | 37.6 | 33.1 |
| 141.4   | 15°   | 123.4  | 109.8 | 88.8  | 72.2 | 58.7 | 48.1 | 42.1 | 36.1 | 31.6 | 25.6 |
| 177.5   | 17.5° | 138.4  | 115.9 | 87.3  | 67.7 | 54.2 | 42.1 | 36.1 | 31.6 | 24.1 | 15.0 |
| 263.3   | 20°   | 164.0  | 120.4 | 84.3  | 63.2 | 46.6 | 34.6 | 27.1 | 21.1 | 10.5 | 3.0  |
| 395.7   | 22.5° | 204.6  | 132.4 | 81.2  | 57.2 | 40.6 | 27.1 | 18.1 | 7.5  | 0.0  | 0.0  |
| 601.8   | 25°   | 282.9  | 153.5 | 81.2  | 54.2 | 36.1 | 19.6 | 6.0  | 0.0  | 0.0  | 0.0  |
| 854.6   | 27.5° | 376.1  | 182.1 | 81.2  | 46.6 | 28.6 | 10.5 | 0.0  | 0.0  | 0.0  | 0.0  |
| 1164.6  | 30°   | 470.9  | 213.7 | 81.2  | 40.6 | 22.6 | 1.5  | 0.0  | 0.0  | 0.0  | 0.0  |
| 1433.9  | 32.5° | 561.2  | 240.7 | 82.8  | 34.6 | 15.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 1807.0  | 35°   | 653.0  | 245.2 | 81.2  | 30.1 | 9.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 2264.4  | 37.5° | 770.3  | 236.2 | 76.7  | 27.1 | 4.5  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 2979.1  | 40°   | 947.9  | 240.7 | 72.2  | 25.6 | 1.5  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 4253.5  | 42.5° | 1275.9 | 260.3 | 66.2  | 25.6 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 6775.2  | 45°   | 2205.7 | 349.1 | 60.2  | 27.1 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 10171.0 | 47.5° | 3648.6 | 627.4 | 58.7  | 27.1 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 12251.9 | 50°   | 4656.7 | 789.9 | 61.7  | 28.6 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 12512.2 | 52.5° | 4649.2 | 880.2 | 64.7  | 30.1 | 6.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 11532.7 | 55°   | 4133.1 | 896.7 | 69.2  | 33.1 | 19.6 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 9910.7  | 57.5° | 3454.5 | 818.5 | 79.7  | 40.6 | 36.1 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 9656.4  | 58°   | 3334.2 | 782.4 | 82.8  | 42.1 | 39.1 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 8376.0  | 60°   | 2732.3 | 637.9 | 105.3 | 52.7 | 52.7 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 6866.9  | 62.5° | 1886.8 | 556.7 | 120.4 | 67.7 | 54.2 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 5062.9  | 65°   | 1334.6 | 502.5 | 130.9 | 72.2 | 43.6 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 3597.5  | 67.5° | 997.5  | 463.4 | 144.4 | 73.7 | 22.6 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 2256.9  | 70°   | 764.3  | 434.8 | 177.5 | 78.2 | 6.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 1345.1  | 72.5° | 622.9  | 401.7 | 215.2 | 81.2 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 806.5   | 75°   | 516.1  | 362.6 | 207.6 | 88.8 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 430.3   | 77.5° | 343.0  | 281.4 | 189.6 | 88.8 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 153.5   | 80°   | 120.4  | 111.3 | 147.4 | 78.2 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 31.6    | 82.5° | 18.1   | 15.0  | 21.1  | 27.1 | 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  |

REPORT NUMBER: P1049583

CATALOG NUMBER: GALN-SA4C-730-U-LBC

**CANDELA DISTRIBUTION (continued):**

| 180° |       | 185° | 195° | 205° | 215° | 225° | 235° | 245° | 255° | 265° | 270° |
|------|-------|------|------|------|------|------|------|------|------|------|------|
| 87.3 | 0°    | 87.3 | 87.3 | 87.3 | 87.3 | 87.3 | 87.3 | 87.3 | 87.3 | 87.3 | 87.3 |
| 61.7 | 2.5°  | 61.7 | 61.7 | 60.2 | 61.7 | 61.7 | 64.7 | 72.2 | 82.8 | 94.8 | 99.3 |
| 52.7 | 5°    | 51.2 | 49.7 | 48.1 | 48.1 | 48.1 | 52.7 | 58.7 | 70.7 | 84.3 | 90.3 |
| 43.6 | 7.5°  | 42.1 | 40.6 | 39.1 | 37.6 | 37.6 | 40.6 | 48.1 | 61.7 | 75.2 | 81.2 |
| 36.1 | 10°   | 34.6 | 31.6 | 30.1 | 28.6 | 28.6 | 31.6 | 39.1 | 52.7 | 67.7 | 73.7 |
| 30.1 | 12.5° | 28.6 | 24.1 | 21.1 | 19.6 | 18.1 | 22.6 | 30.1 | 42.1 | 58.7 | 66.2 |
| 22.6 | 15°   | 19.6 | 15.0 | 10.5 | 9.0  | 7.5  | 12.0 | 19.6 | 33.1 | 49.7 | 58.7 |
| 12.0 | 17.5° | 10.5 | 4.5  | 1.5  | 0.0  | 0.0  | 3.0  | 9.0  | 24.1 | 40.6 | 48.1 |
| 0.0  | 20°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 12.0 | 30.1 | 37.6 |
| 0.0  | 22.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 1.5  | 18.1 | 25.6 |
| 0.0  | 25°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 7.5  | 13.5 |
| 0.0  | 27.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 3.0  |
| 0.0  | 30°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 0.0  | 32.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 0.0  | 35°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 0.0  | 37.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 0.0  | 40°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 0.0  | 42.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 0.0  | 45°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 0.0  | 47.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 0.0  | 50°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 0.0  | 52.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 0.0  | 55°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 0.0  | 57.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 0.0  | 58°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 0.0  | 60°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 0.0  | 62.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 0.0  | 65°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 0.0  | 67.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 0.0  | 70°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 0.0  | 72.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 0.0  | 75°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 0.0  | 77.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 0.0  | 80°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 0.0  | 82.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 0.0  | 85°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 4.5  |
| 0.0  | 87.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 6.0  | 12.0 |
| 0.0  | 90°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |



REPORT NUMBER: P1049583

CATALOG NUMBER: GALN-SA4C-730-U-LBC

**CANDELA DISTRIBUTION (continued):**

| 275°  |       | 285°  | 295°  | 305°  | 315° | 316° | 325° | 335°  | 345°  | 355°  | 360°   |
|-------|-------|-------|-------|-------|------|------|------|-------|-------|-------|--------|
| 87.3  | 0°    | 87.3  | 87.3  | 87.3  | 87.3 | 87.3 | 87.3 | 87.3  | 87.3  | 87.3  | 87.3   |
| 103.8 | 2.5°  | 106.8 | 105.3 | 102.3 | 99.3 | 99.3 | 99.3 | 103.8 | 108.3 | 112.8 | 112.8  |
| 93.3  | 5°    | 99.3  | 99.3  | 97.8  | 94.8 | 94.8 | 96.3 | 102.3 | 109.8 | 115.9 | 117.4  |
| 85.8  | 7.5°  | 91.8  | 94.8  | 91.8  | 90.3 | 91.8 | 93.3 | 99.3  | 108.3 | 117.4 | 120.4  |
| 79.7  | 10°   | 87.3  | 88.8  | 88.8  | 87.3 | 87.3 | 90.3 | 96.3  | 108.3 | 120.4 | 124.9  |
| 72.2  | 12.5° | 81.2  | 84.3  | 82.8  | 82.8 | 82.8 | 85.8 | 93.3  | 106.8 | 123.4 | 129.4  |
| 64.7  | 15°   | 75.2  | 79.7  | 79.7  | 78.2 | 78.2 | 79.7 | 90.3  | 105.3 | 127.9 | 138.4  |
| 55.7  | 17.5° | 69.2  | 73.7  | 75.2  | 72.2 | 72.2 | 75.2 | 85.8  | 105.3 | 130.9 | 149.0  |
| 45.1  | 20°   | 57.2  | 64.7  | 69.2  | 64.7 | 64.7 | 67.7 | 78.2  | 99.3  | 132.4 | 159.5  |
| 33.1  | 22.5° | 45.1  | 52.7  | 58.7  | 57.2 | 57.2 | 58.7 | 72.2  | 94.8  | 133.9 | 177.5  |
| 19.6  | 25°   | 33.1  | 40.6  | 45.1  | 48.1 | 48.1 | 52.7 | 66.2  | 91.8  | 139.9 | 215.2  |
| 9.0   | 27.5° | 19.6  | 28.6  | 34.6  | 37.6 | 39.1 | 45.1 | 61.7  | 88.8  | 150.5 | 269.3  |
| 0.0   | 30°   | 9.0   | 16.6  | 24.1  | 30.1 | 30.1 | 40.6 | 57.2  | 85.8  | 164.0 | 347.6  |
| 0.0   | 32.5° | 0.0   | 7.5   | 12.0  | 21.1 | 22.6 | 33.1 | 52.7  | 82.8  | 183.6 | 422.8  |
| 0.0   | 35°   | 0.0   | 0.0   | 6.0   | 16.6 | 16.6 | 27.1 | 48.1  | 79.7  | 213.7 | 480.0  |
| 0.0   | 37.5° | 0.0   | 0.0   | 0.0   | 12.0 | 13.5 | 24.1 | 46.6  | 78.2  | 219.7 | 484.5  |
| 0.0   | 40°   | 0.0   | 0.0   | 0.0   | 9.0  | 10.5 | 22.6 | 46.6  | 79.7  | 198.6 | 473.9  |
| 0.0   | 42.5° | 0.0   | 0.0   | 0.0   | 6.0  | 7.5  | 22.6 | 46.6  | 82.8  | 179.0 | 486.0  |
| 0.0   | 45°   | 0.0   | 0.0   | 0.0   | 4.5  | 6.0  | 24.1 | 45.1  | 81.2  | 168.5 | 549.2  |
| 0.0   | 47.5° | 0.0   | 0.0   | 0.0   | 6.0  | 9.0  | 24.1 | 43.6  | 79.7  | 170.0 | 758.3  |
| 0.0   | 50°   | 0.0   | 0.0   | 0.0   | 7.5  | 10.5 | 24.1 | 45.1  | 76.7  | 186.6 | 1166.1 |
| 0.0   | 52.5° | 0.0   | 0.0   | 0.0   | 6.0  | 9.0  | 27.1 | 49.7  | 75.2  | 203.1 | 1516.6 |
| 0.0   | 55°   | 0.0   | 0.0   | 0.0   | 1.5  | 4.5  | 34.6 | 54.2  | 75.2  | 228.7 | 1603.9 |
| 0.0   | 57.5° | 0.0   | 0.0   | 0.0   | 0.0  | 0.0  | 39.1 | 61.7  | 79.7  | 270.8 | 1569.3 |
| 0.0   | 58°   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0  | 39.1 | 63.2  | 79.7  | 273.8 | 1539.2 |
| 0.0   | 60°   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0  | 39.1 | 69.2  | 88.8  | 294.9 | 1370.7 |
| 0.0   | 62.5° | 0.0   | 0.0   | 0.0   | 0.0  | 0.0  | 33.1 | 82.8  | 111.3 | 306.9 | 1077.3 |
| 0.0   | 65°   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0  | 27.1 | 97.8  | 121.9 | 316.0 | 857.6  |
| 0.0   | 67.5° | 0.0   | 0.0   | 0.0   | 0.0  | 0.0  | 25.6 | 100.8 | 123.4 | 320.5 | 683.1  |
| 0.0   | 70°   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0  | 27.1 | 99.3  | 132.4 | 335.5 | 555.2  |
| 0.0   | 72.5° | 0.0   | 0.0   | 0.0   | 0.0  | 0.0  | 30.1 | 90.3  | 145.9 | 335.5 | 492.0  |
| 0.0   | 75°   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0  | 31.6 | 84.3  | 164.0 | 305.4 | 425.8  |
| 0.0   | 77.5° | 0.0   | 0.0   | 0.0   | 0.0  | 0.0  | 30.1 | 82.8  | 191.1 | 272.3 | 350.6  |
| 0.0   | 80°   | 3.0   | 4.5   | 4.5   | 3.0  | 3.0  | 25.6 | 81.2  | 194.1 | 231.7 | 240.7  |
| 1.5   | 82.5° | 9.0   | 12.0  | 10.5  | 7.5  | 7.5  | 22.6 | 72.2  | 162.5 | 120.4 | 103.8  |
| 9.0   | 85°   | 16.6  | 19.6  | 19.6  | 16.6 | 16.6 | 21.1 | 45.1  | 58.7  | 40.6  | 33.1   |
| 16.6  | 87.5° | 22.6  | 25.6  | 25.6  | 22.6 | 22.6 | 21.1 | 19.6  | 18.1  | 16.6  | 16.6   |
| 0.0   | 90°   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0  | 0.0  | 0.0   | 0.0   | 0.0   | 0.0    |

(END OF RI



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

Report Prepared for

Cooper Lighting Solutions

McGraw-Edison

Report Number: SP1-2407-184-4

Test Date: 10/10/2024

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

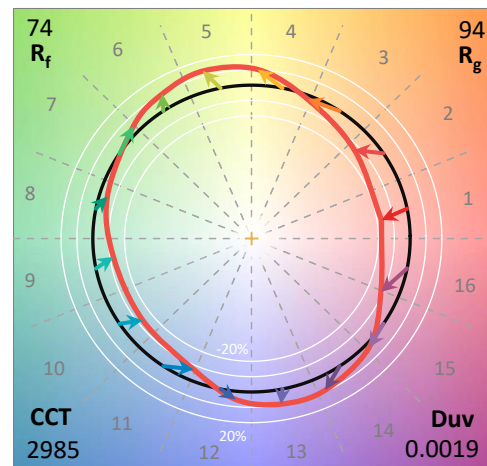
Data in this report applies to families of products including GSS-SB1A-730-U-5WQ

### 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

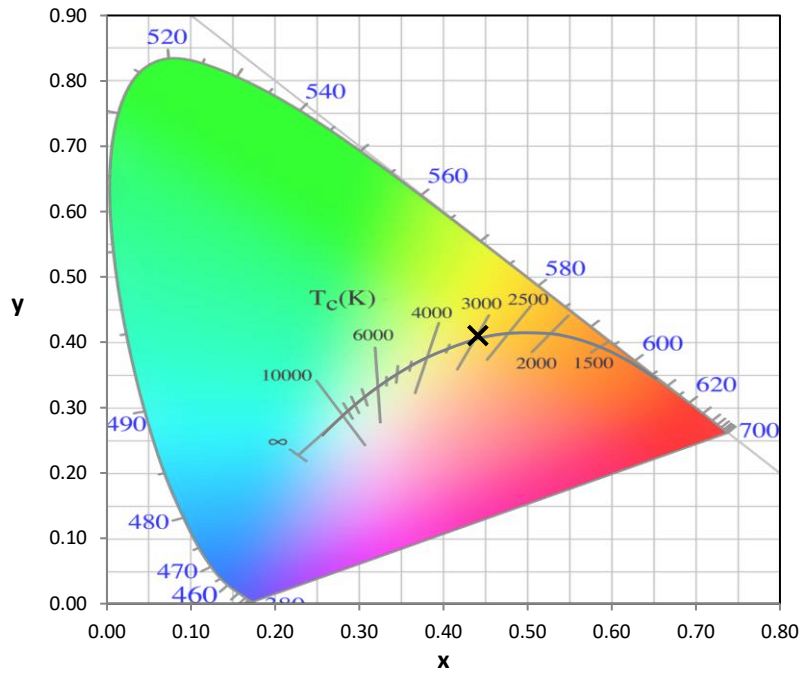
Stabilization Time: 36M  
 Operation Time: 1H 36M  
 Sphere Temperature (°C): 25.2

REPORT NUMBER: SP1-2407-184-4

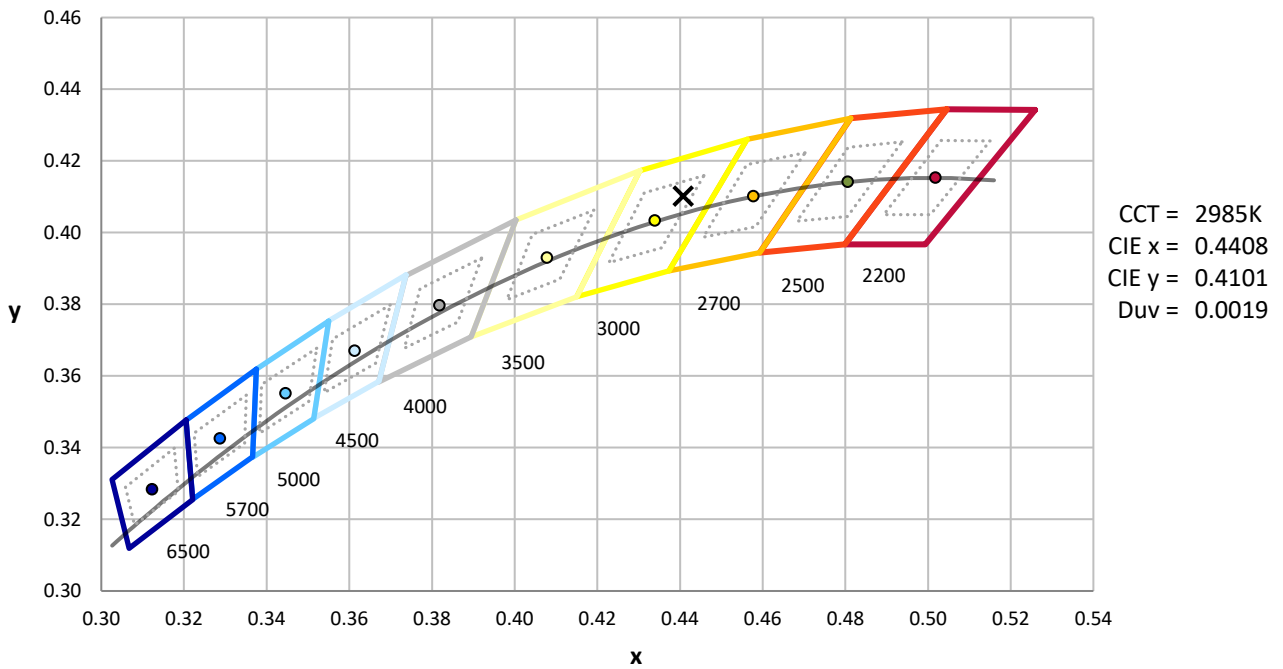
| Measurement and Test Equipment |                       |                  |                      |
|--------------------------------|-----------------------|------------------|----------------------|
| Instrument                     | Identification Number | Calibration Date | Calibration Due Date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

REPORT NUMBER: SP1-2407-184-4

**CIE 1931 Chromaticity Diagram**



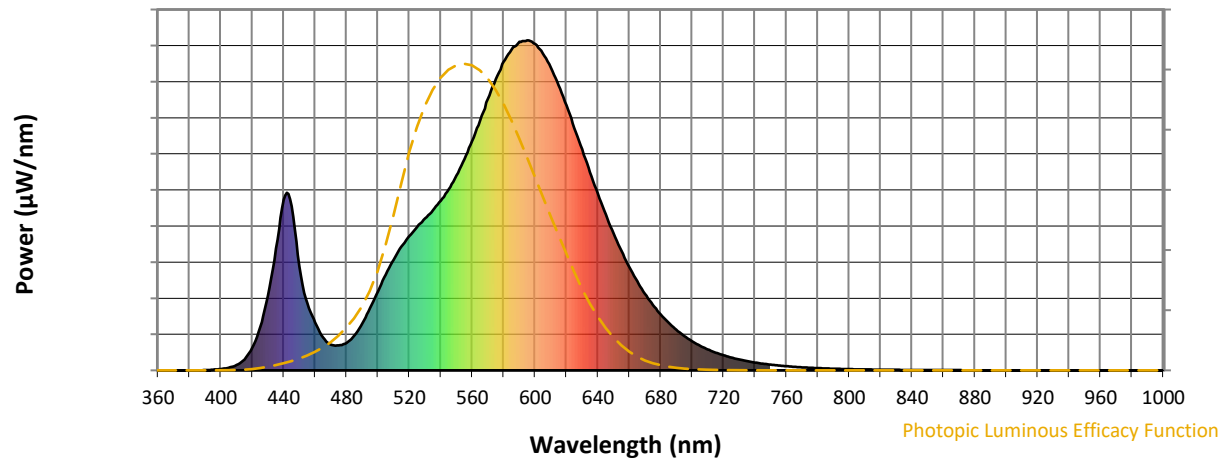
**CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles**



Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2407-184-4

### Photopic Flux vs. Wavelength

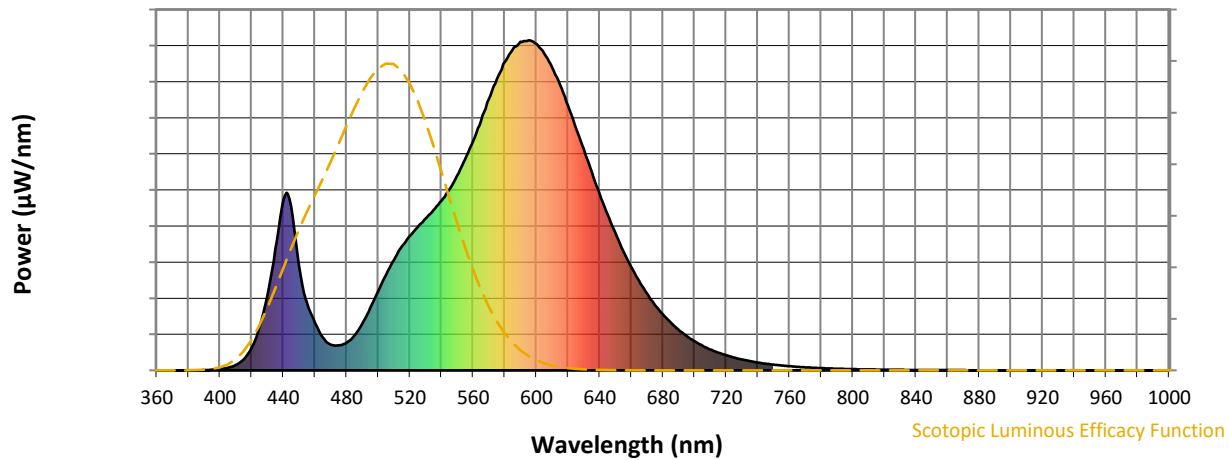


### Photopic Lumens: NR

| $\lambda$<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

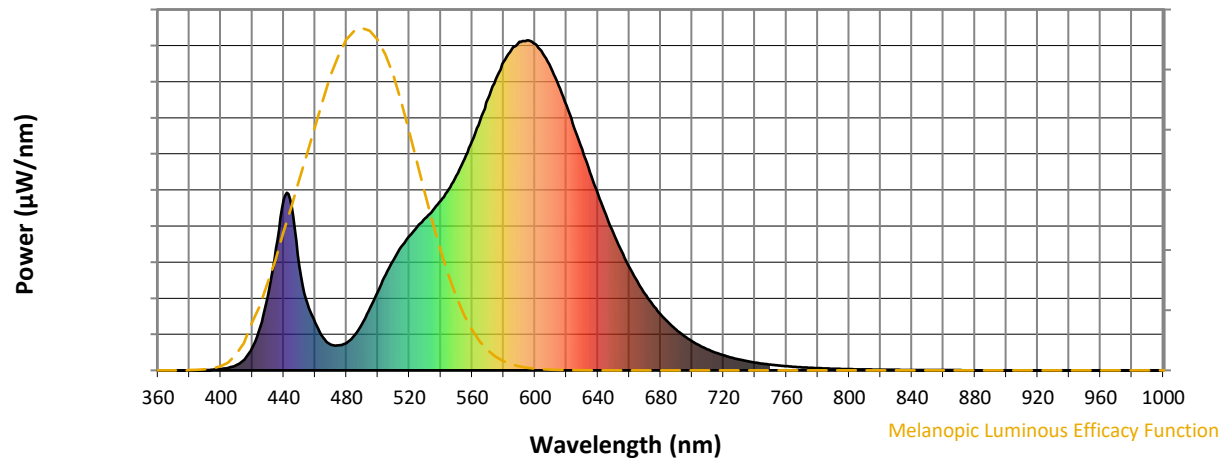


Scotopic Lumens: NR

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                             |                   |                                      |                                |

REPORT NUMBER: SP1-2407-184-4

**Melanopic Flux vs. Wavelength**

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

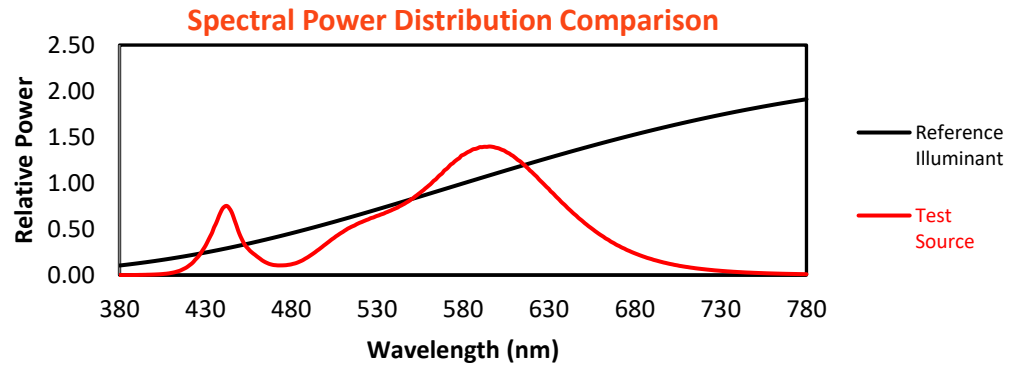
| $\lambda$<br>(nm) | Power<br>$\text{W}^\wedge/\text{nm}$ | Lumens<br>( $\phi/\text{nm}$ ) | $\lambda$<br>(nm) | Power<br>$\text{W}^\wedge/\text{nm}$ | Lumens<br>( $\phi/\text{nm}$ ) | $\lambda$<br>(nm) | Power<br>$\text{W}^\wedge/\text{nm}$ | Lumens<br>( $\phi/\text{nm}$ ) | $\lambda$<br>(nm) | Power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

REPORT NUMBER: SP1-2407-184-4

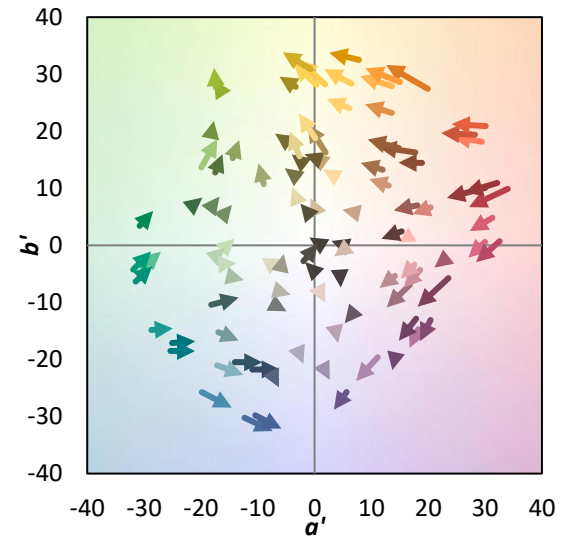
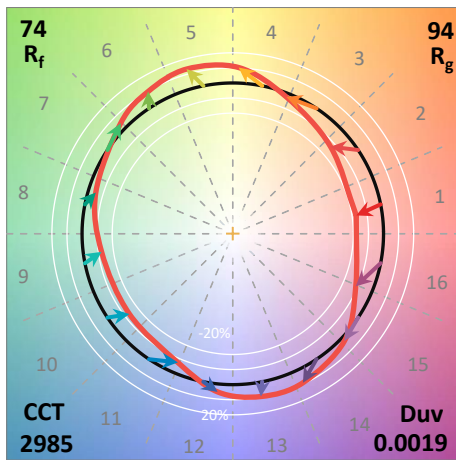
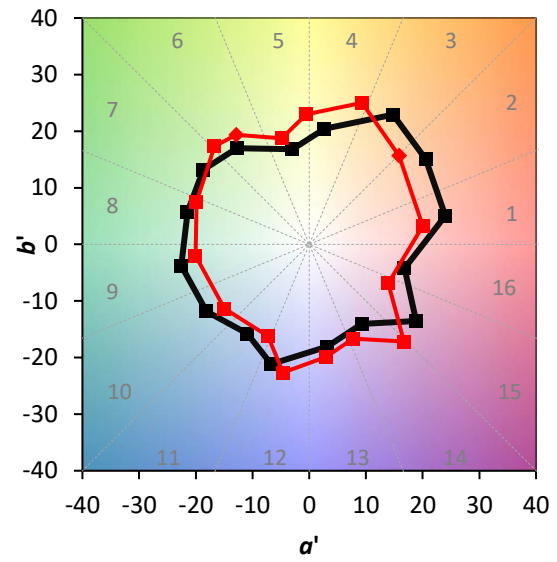
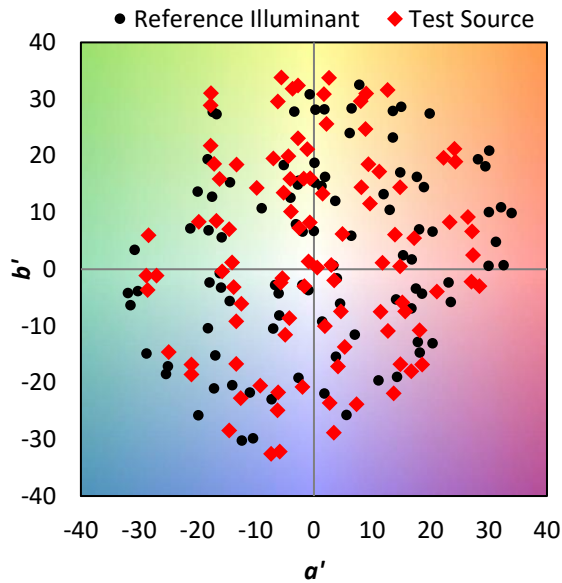
TM-30-18

### Summary

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

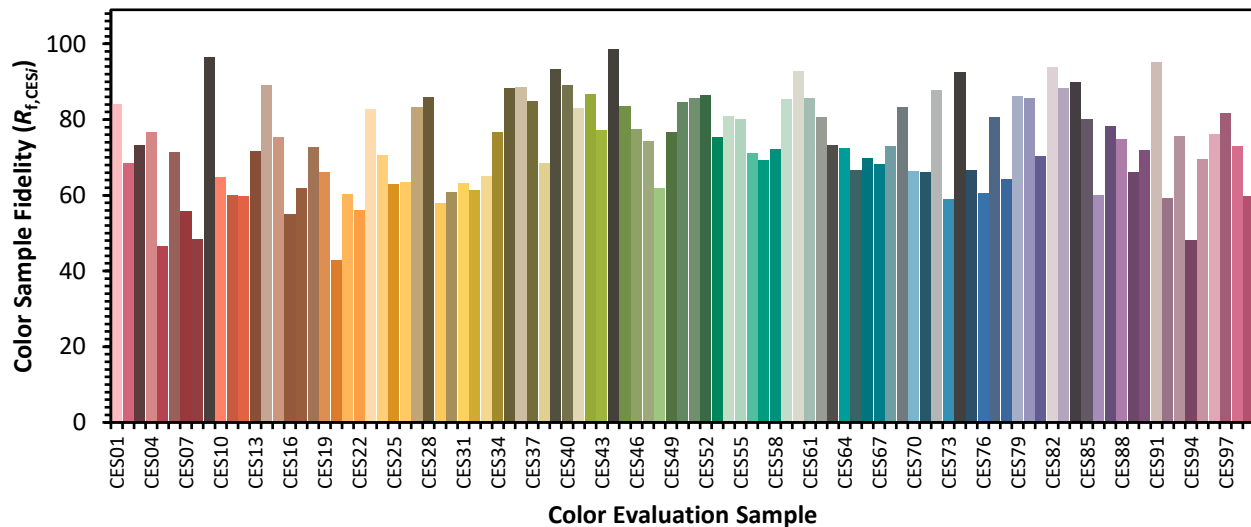


### Color Vector Graphics

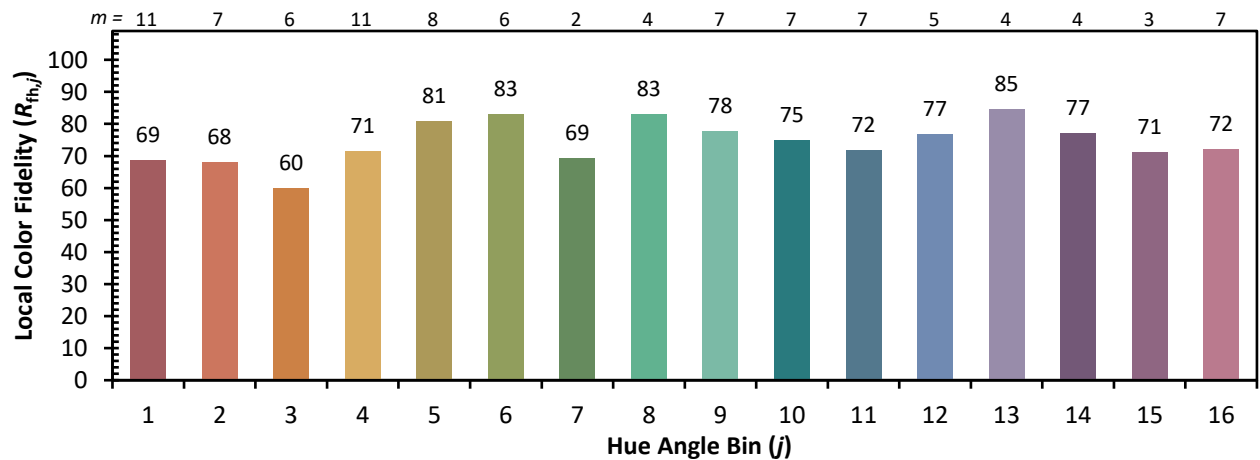
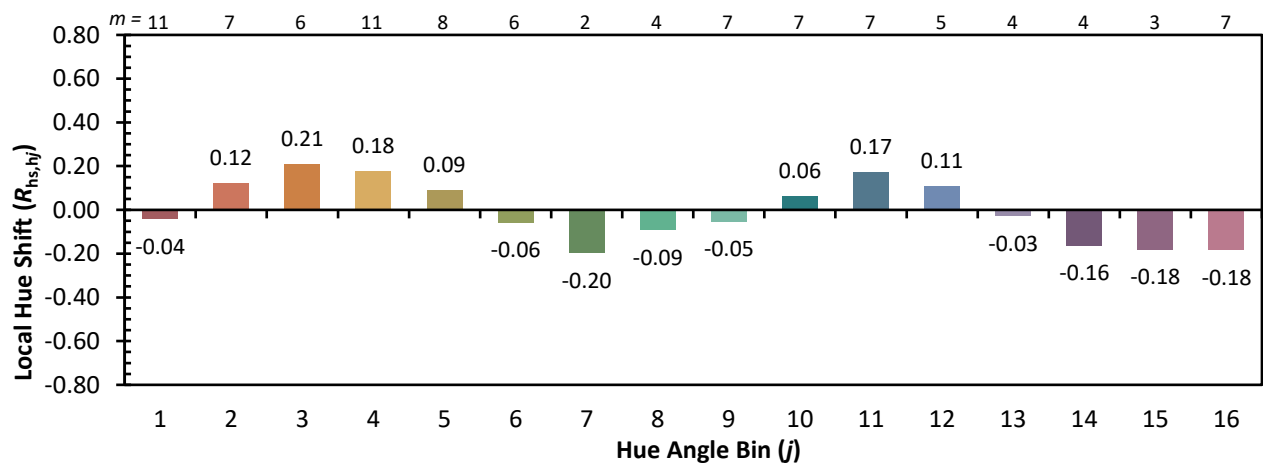
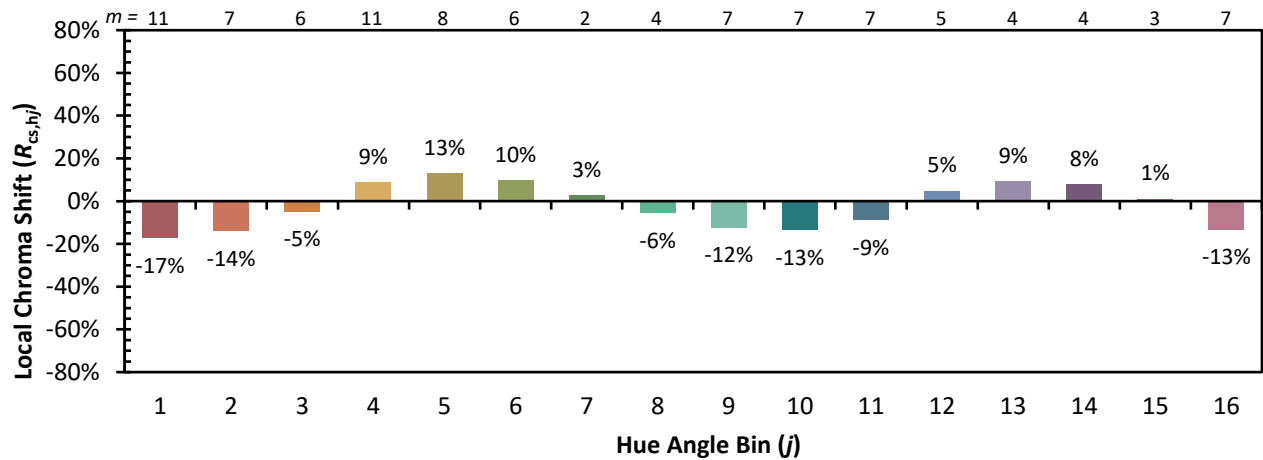


**Individual Sample Fidelity Index ( $R_{f,i}$ )**

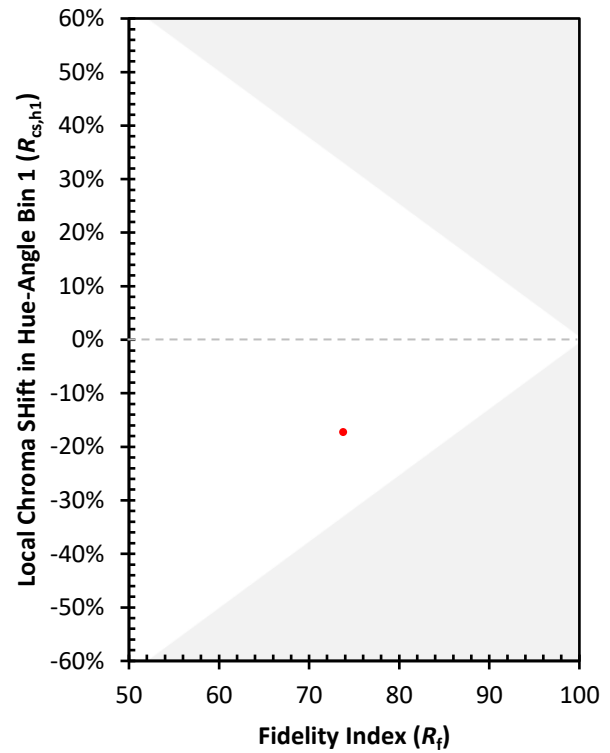
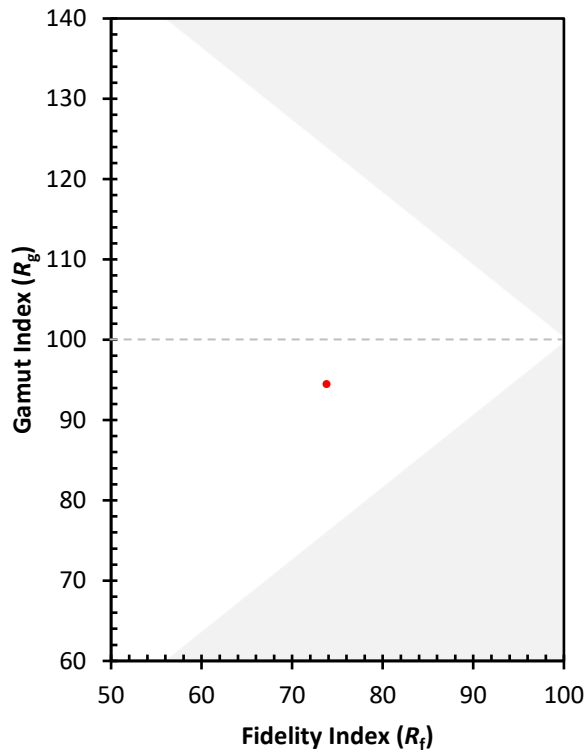
|            |            |            |            |
|------------|------------|------------|------------|
| CES01 = 86 | CES26 = 63 | CES51 = 86 | CES76 = 61 |
| CES02 = 62 | CES27 = 83 | CES52 = 86 | CES77 = 81 |
| CES03 = 31 | CES28 = 86 | CES53 = 75 | CES78 = 64 |
| CES04 = 71 | CES29 = 58 | CES54 = 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)