

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: P1063930

Luminaire Tested: **GLAN-SA6B-722-U-T4BC**

Issue Date: 08/07/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P1063930  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 08/07/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: GLAN-SA6B-722-U-T4BC  
Description: GALLEON II AREA AND ROADWAY LUMINAIRE 800mA 6xLight Square PACKAGE  
70CRI 2200K FIXTURE w/ TYPE IV ANGLED BACKLIGHT CONTROL  
Light Source: (84) 2200K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 19791.4 lumens  
Efficiency: N/A  
Efficacy: 92.6 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B0 - U0 - G4

Input Watts (W): 213.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: 0.97  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT

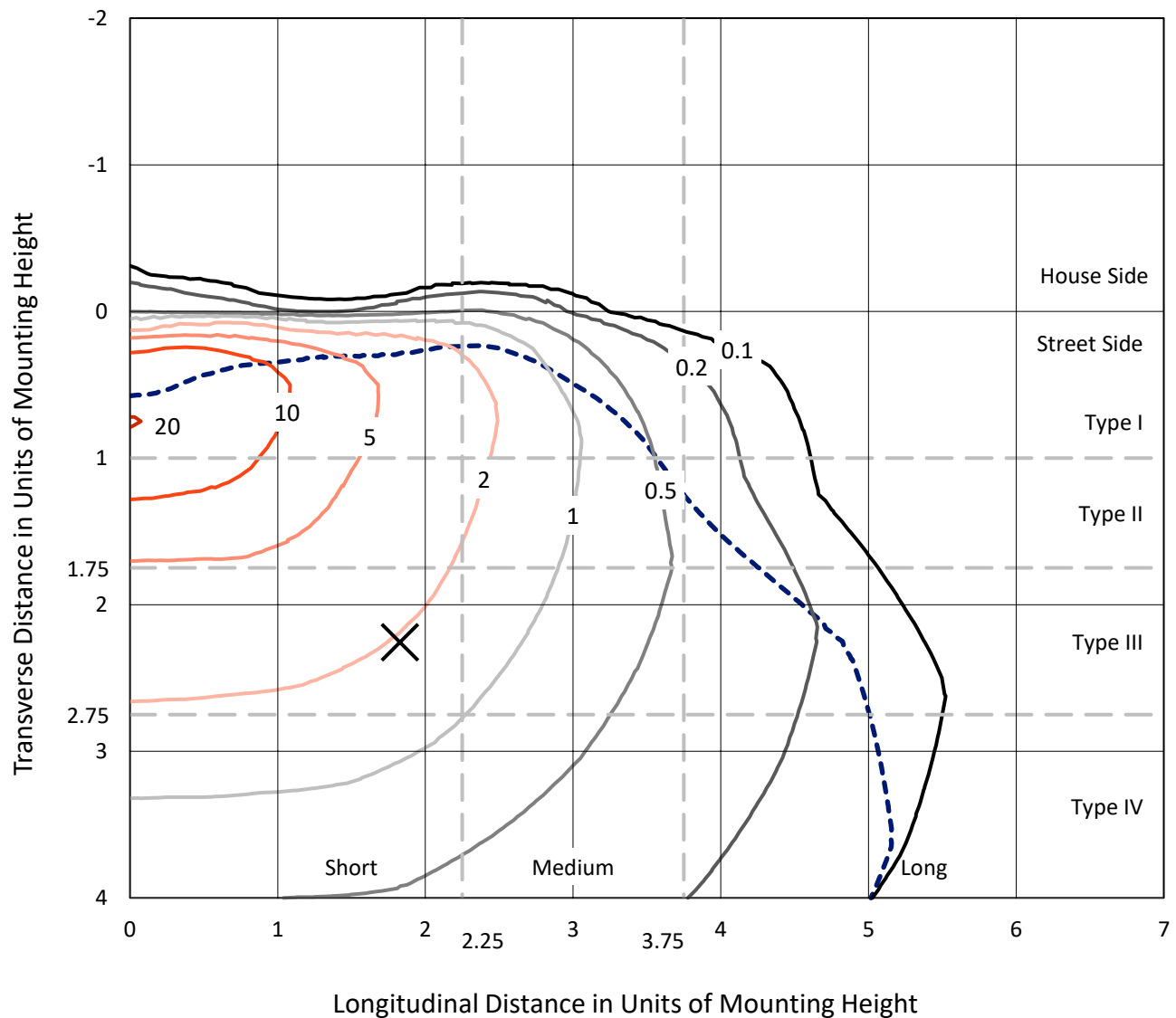


REPORT NUMBER: P1063930

CATALOG NUMBER: GLAN-SA6B-722-U-T4BC

## Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

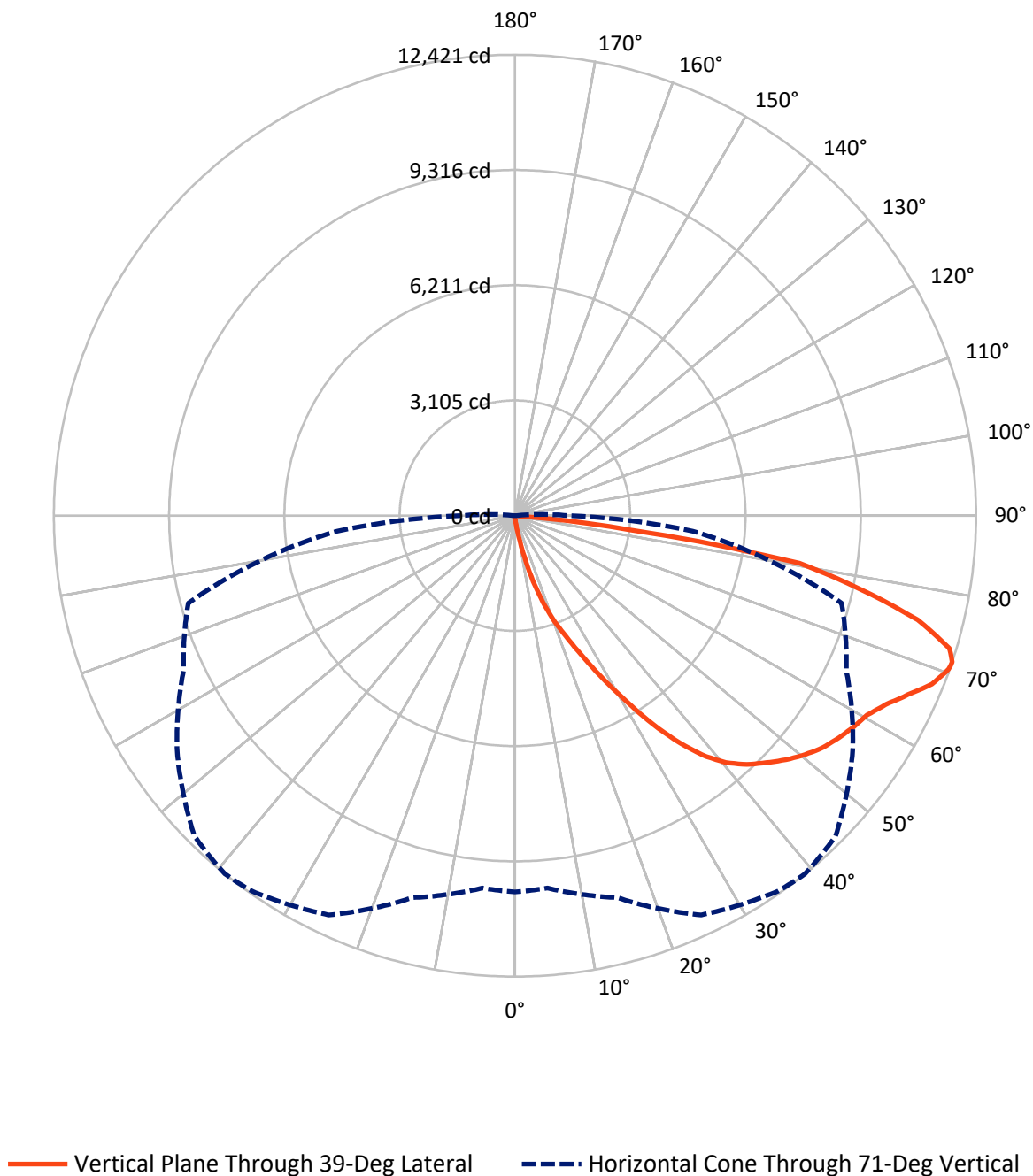


Based on 15 foot mounting height. Maximum calculated value = 20.4 fc  
 Type IV - Short - N/A

REPORT NUMBER: P1063930

CATALOG NUMBER: GLAN-SA6B-722-U-T4BC

## Luminous Intensity Polar Plot



REPORT NUMBER: P1063930

CATALOG NUMBER: GLAN-SA6B-722-U-T4BC

**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 70.3     | 0.0    | 70.3    |
|                    | % Fixture | 0.4      | 0.0    | 0.4     |
| <b>Street Side</b> | Lumens    | 19721.1  | 0.0    | 19721.1 |
|                    | % Fixture | 99.6     | 0.0    | 99.6    |
| <b>Total</b>       | Lumens    | 19791.4  | 0.0    | 19791.4 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**Coefficient of Utilization**

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 16.5    | 0.1       |
| 10°-20°   | 211.5   | 1.1       |
| 20°-30°   | 753.3   | 3.8       |
| 30°-40°   | 1815.5  | 9.2       |
| 40°-50°   | 3038.5  | 15.4      |
| 50°-60°   | 3902.5  | 19.7      |
| 60°-70°   | 4938.7  | 25.0      |
| 70°-80°   | 4403.0  | 22.2      |
| 80°-90°   | 711.7   | 3.6       |
| 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°    | 19791.4 | 100.0     |
| 0°-180°   | 19791.4 | 100.0     |



REPORT NUMBER: P1063930

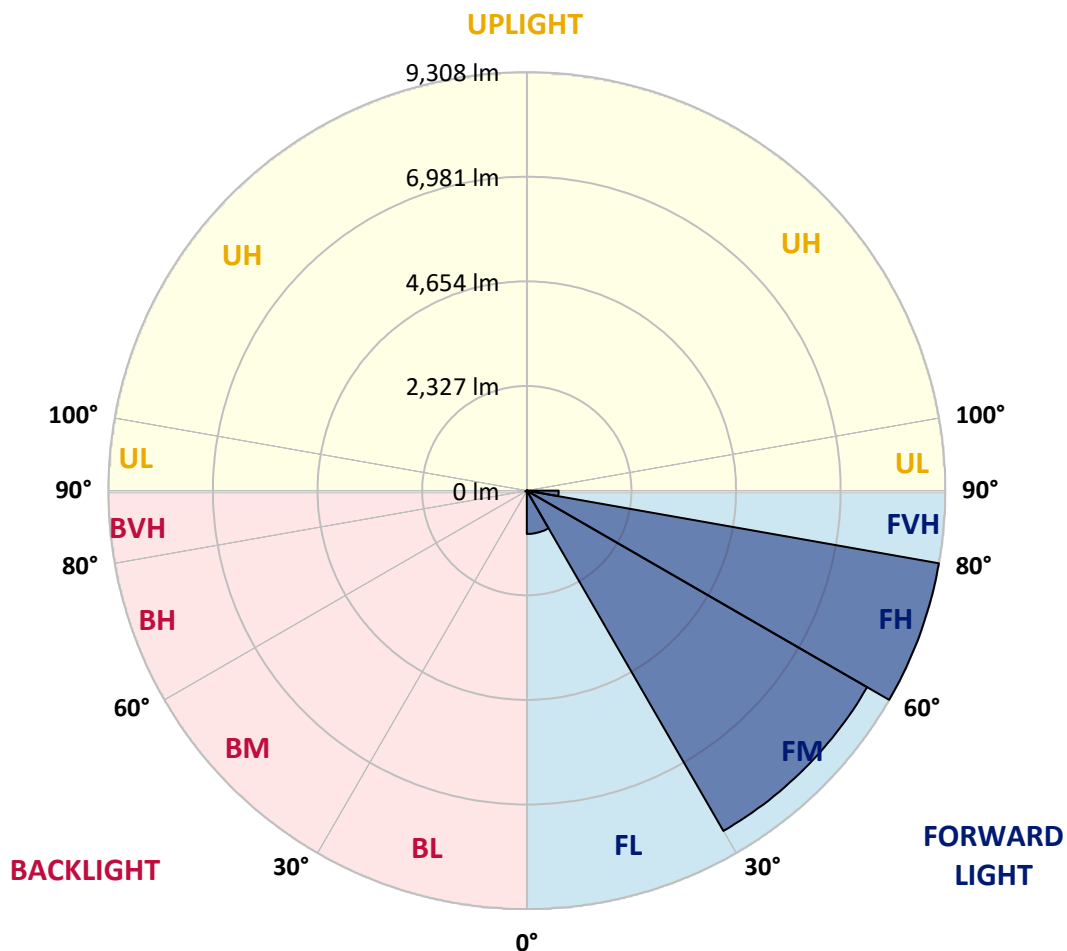
CATALOG NUMBER: GLAN-SA6B-722-U-T4BC

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

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |          |
|------|-------------|--------|-----------|-------------------------|------|----------|
|      |             |        |           | B                       | U    | G        |
| FL   | (0°-30°)    | 964.4  | 4.9       |                         |      |          |
| FM   | (30°-60°)   | 8740.3 | 44.2      |                         |      |          |
| FH   | (60°-80°)   | 9307.9 | 47.0      |                         |      | G4/12000 |
| FVH  | (80°-90°)   | 708.5  | 3.6       |                         |      | G4/750   |
| BL   | (0°-30°)    | 17.0   | 0.1       | B0/110                  |      |          |
| BM   | (30°-60°)   | 16.3   | 0.1       | B0/220                  |      |          |
| BH   | (60°-80°)   | 33.8   | 0.2       | B0/110                  |      | G0/110   |
| BVH  | (80°-90°)   | 3.2    | 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-G4**

Type IV Short



REPORT NUMBER: P1063930

CATALOG NUMBER: GLAN-SA6B-722-U-T4BC

**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 39°     | 45°     | 55°     | 65°     | 75°    | 85°    |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------|--------|
| 0°    | 108.5   | 108.5   | 108.5   | 108.5   | 108.5   | 108.5   | 108.5   | 108.5   | 108.5   | 108.5  | 108.5  |
| 2.5°  | 124.6   | 124.6   | 124.6   | 120.6   | 120.6   | 119.2   | 117.9   | 117.9   | 115.2   | 113.9  | 111.2  |
| 5°    | 188.9   | 184.9   | 175.5   | 170.2   | 159.4   | 152.7   | 146.0   | 136.7   | 127.3   | 120.6  | 112.5  |
| 7.5°  | 427.4   | 436.8   | 406.0   | 348.3   | 289.4   | 263.9   | 221.1   | 178.2   | 147.4   | 127.3  | 113.9  |
| 10°   | 1089.2  | 1083.9  | 979.4   | 864.2   | 667.2   | 588.2   | 460.9   | 290.7   | 190.2   | 139.3  | 115.2  |
| 12.5° | 1852.9  | 1847.5  | 1724.3  | 1567.5  | 1307.6  | 1142.8  | 901.7   | 542.6   | 273.3   | 158.1  | 115.2  |
| 15°   | 2494.7  | 2473.2  | 2434.4  | 2279.0  | 1974.8  | 1836.8  | 1518.0  | 959.3   | 442.1   | 190.2  | 117.9  |
| 17.5° | 2919.4  | 2900.6  | 2864.4  | 2808.2  | 2615.2  | 2451.8  | 2195.9  | 1507.2  | 715.4   | 246.5  | 123.3  |
| 20°   | 3309.2  | 3295.8  | 3266.4  | 3255.6  | 3131.0  | 3044.0  | 2832.3  | 2136.9  | 1114.7  | 334.9  | 131.3  |
| 22.5° | 3845.1  | 3817.0  | 3829.1  | 3764.8  | 3642.8  | 3538.3  | 3408.4  | 2796.1  | 1602.4  | 482.3  | 146.0  |
| 25°   | 4501.6  | 4488.2  | 4454.7  | 4409.2  | 4240.4  | 4149.3  | 3949.6  | 3417.8  | 2147.7  | 675.2  | 162.1  |
| 27.5° | 5294.8  | 5280.0  | 5272.0  | 5167.5  | 4973.2  | 4874.1  | 4595.4  | 4004.6  | 2761.3  | 945.9  | 183.5  |
| 30°   | 6208.5  | 6215.2  | 6163.0  | 6029.0  | 5802.6  | 5663.2  | 5376.5  | 4619.5  | 3389.6  | 1263.4 | 206.3  |
| 32.5° | 7154.4  | 7141.0  | 7060.6  | 6902.5  | 6700.2  | 6570.2  | 6205.8  | 5293.4  | 4048.8  | 1682.8 | 233.1  |
| 35°   | 8174.0  | 8148.5  | 7936.8  | 7755.9  | 7583.1  | 7419.7  | 7087.4  | 6075.9  | 4708.0  | 2153.0 | 269.3  |
| 37.5° | 9202.9  | 9083.7  | 8658.9  | 8429.8  | 8310.6  | 8176.6  | 7867.1  | 6910.5  | 5363.1  | 2678.2 | 313.5  |
| 40°   | 9980.0  | 9887.5  | 9383.8  | 8961.7  | 8866.6  | 8752.7  | 8522.3  | 7631.3  | 6059.8  | 3242.2 | 367.1  |
| 42.5° | 10410.0 | 10359.1 | 9906.3  | 9489.6  | 9265.9  | 9165.4  | 8968.4  | 8261.0  | 6748.4  | 3865.2 | 444.8  |
| 45°   | 10593.6 | 10514.5 | 10211.7 | 10017.5 | 9661.1  | 9495.0  | 9260.5  | 8736.7  | 7467.9  | 4572.6 | 553.3  |
| 47.5° | 10537.3 | 10491.8 | 10274.7 | 10345.7 | 10087.1 | 9828.6  | 9484.2  | 9101.1  | 8082.8  | 5384.5 | 702.0  |
| 50°   | 10183.6 | 10144.8 | 10077.8 | 10462.3 | 10430.1 | 10124.7 | 9773.6  | 9389.1  | 8585.3  | 6221.9 | 932.5  |
| 52.5° | 9511.0  | 9495.0  | 9666.5  | 10371.2 | 10624.4 | 10385.9 | 10052.3 | 9643.7  | 9054.2  | 7096.8 | 1262.1 |
| 55°   | 8644.2  | 8709.9  | 9200.2  | 10229.2 | 10723.5 | 10578.8 | 10298.8 | 9882.2  | 9430.7  | 7879.2 | 1748.4 |
| 57.5° | 8287.8  | 8305.2  | 8917.5  | 10128.7 | 10767.7 | 10749.0 | 10538.6 | 10109.9 | 9776.3  | 8504.9 | 2490.6 |
| 60°   | 8704.5  | 8677.7  | 9000.6  | 10205.0 | 10856.2 | 10901.7 | 10751.7 | 10321.6 | 10076.4 | 9042.1 | 3479.4 |
| 62.5° | 9457.5  | 9442.7  | 9545.9  | 10530.6 | 11114.8 | 11207.2 | 11047.8 | 10474.3 | 10341.7 | 9395.8 | 4607.5 |
| 65°   | 10130.0 | 10099.2 | 10290.8 | 11108.1 | 11568.9 | 11634.6 | 11495.2 | 10735.6 | 10458.3 | 9653.1 | 5667.2 |
| 67.5° | 10420.7 | 10414.0 | 10722.2 | 11657.4 | 12045.9 | 12116.9 | 11995.0 | 11096.0 | 10431.5 | 9734.8 | 6134.8 |
| 70°   | 10288.1 | 10262.7 | 10755.7 | 11890.5 | 12315.2 | 12395.6 | 12277.7 | 11230.0 | 10140.7 | 9476.2 | 5442.2 |
| 71°   | 10142.1 | 10073.7 | 10655.2 | 11874.4 | 12352.7 | 12421.0 | 12214.7 | 11108.1 | 9848.7  | 9109.1 | 4813.8 |
| 72.5° | 9689.2  | 9701.3  | 10379.2 | 11706.9 | 12262.9 | 12242.8 | 11858.3 | 10671.3 | 9496.3  | 8275.8 | 3866.6 |
| 75°   | 8574.5  | 8645.6  | 9485.6  | 11003.5 | 11461.8 | 11205.9 | 10617.7 | 9836.6  | 8788.9  | 5933.9 | 2684.9 |
| 77.5° | 7007.0  | 7112.9  | 8036.0  | 9650.4  | 9520.4  | 9495.0  | 9470.8  | 8667.0  | 7505.4  | 3187.3 | 1867.6 |
| 80°   | 3345.4  | 3574.5  | 4847.3  | 6889.1  | 7484.0  | 7772.0  | 7591.1  | 6984.2  | 5803.9  | 1518.0 | 1116.0 |
| 82.5° | 218.4   | 215.7   | 305.5   | 578.8   | 2439.7  | 3153.8  | 5010.7  | 4992.0  | 4046.1  | 739.6  | 455.5  |
| 85°   | 103.2   | 105.8   | 116.6   | 132.6   | 154.1   | 168.8   | 233.1   | 1366.6  | 1936.0  | 352.4  | 99.1   |
| 87.5° | 60.3    | 61.6    | 72.3    | 92.4    | 120.6   | 134.0   | 159.4   | 205.0   | 251.9   | 194.3  | 21.4   |
| 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: P1063930

CATALOG NUMBER: GLAN-SA6B-722-U-T4BC

**CANDELA DISTRIBUTION (continued):**

|       | 90°    | 95°   | 105°  | 115°  | 125°  | 135°  | 145°  | 155°  | 165°  | 175°  | 180°  |
|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°    | 108.5  | 108.5 | 108.5 | 108.5 | 108.5 | 108.5 | 108.5 | 108.5 | 108.5 | 108.5 | 108.5 |
| 2.5°  | 109.9  | 108.5 | 104.5 | 100.5 | 96.5  | 93.8  | 92.4  | 93.8  | 93.8  | 95.1  | 95.1  |
| 5°    | 109.9  | 105.8 | 99.1  | 91.1  | 85.7  | 80.4  | 77.7  | 76.4  | 77.7  | 77.7  | 77.7  |
| 7.5°  | 108.5  | 101.8 | 92.4  | 83.1  | 76.4  | 69.7  | 67.0  | 65.6  | 65.6  | 67.0  | 67.0  |
| 10°   | 105.8  | 99.1  | 87.1  | 76.4  | 68.3  | 60.3  | 56.3  | 52.3  | 52.3  | 52.3  | 53.6  |
| 12.5° | 104.5  | 95.1  | 80.4  | 69.7  | 58.9  | 49.6  | 41.5  | 37.5  | 38.9  | 38.9  | 38.9  |
| 15°   | 101.8  | 91.1  | 76.4  | 63.0  | 49.6  | 37.5  | 30.8  | 26.8  | 28.1  | 29.5  | 28.1  |
| 17.5° | 101.8  | 89.8  | 71.0  | 54.9  | 38.9  | 28.1  | 22.8  | 20.1  | 20.1  | 21.4  | 21.4  |
| 20°   | 101.8  | 87.1  | 67.0  | 46.9  | 29.5  | 21.4  | 16.1  | 14.7  | 14.7  | 17.4  | 18.8  |
| 22.5° | 104.5  | 87.1  | 61.6  | 38.9  | 24.1  | 16.1  | 12.1  | 10.7  | 12.1  | 14.7  | 16.1  |
| 25°   | 108.5  | 85.7  | 56.3  | 34.8  | 20.1  | 12.1  | 9.4   | 6.7   | 8.0   | 10.7  | 12.1  |
| 27.5° | 112.5  | 84.4  | 50.9  | 30.8  | 16.1  | 9.4   | 6.7   | 5.4   | 4.0   | 5.4   | 5.4   |
| 30°   | 116.6  | 84.4  | 45.6  | 25.5  | 13.4  | 6.7   | 4.0   | 2.7   | 1.3   | 0.0   | 0.0   |
| 32.5° | 119.2  | 81.7  | 41.5  | 20.1  | 10.7  | 5.4   | 2.7   | 1.3   | 0.0   | 0.0   | 0.0   |
| 35°   | 121.9  | 79.0  | 36.2  | 16.1  | 8.0   | 4.0   | 1.3   | 0.0   | 0.0   | 0.0   | 0.0   |
| 37.5° | 124.6  | 75.0  | 30.8  | 13.4  | 6.7   | 2.7   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 40°   | 127.3  | 69.7  | 25.5  | 12.1  | 4.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 42.5° | 130.0  | 65.6  | 21.4  | 9.4   | 2.7   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 45°   | 136.7  | 63.0  | 17.4  | 8.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 47.5° | 148.7  | 60.3  | 16.1  | 5.4   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 50°   | 166.1  | 57.6  | 14.7  | 4.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 52.5° | 190.2  | 56.3  | 13.4  | 2.7   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 55°   | 233.1  | 54.9  | 12.1  | 2.7   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 57.5° | 306.8  | 53.6  | 12.1  | 2.7   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 60°   | 470.3  | 50.9  | 12.1  | 2.7   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 62.5° | 840.0  | 49.6  | 10.7  | 2.7   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 65°   | 1464.4 | 50.9  | 10.7  | 2.7   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 67.5° | 2099.4 | 53.6  | 9.4   | 4.0   | 1.3   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 70°   | 1796.6 | 46.9  | 9.4   | 5.4   | 2.7   | 1.3   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 71°   | 1464.4 | 41.5  | 9.4   | 5.4   | 2.7   | 1.3   | 1.3   | 0.0   | 0.0   | 0.0   | 0.0   |
| 72.5° | 941.9  | 32.2  | 8.0   | 5.4   | 2.7   | 2.7   | 1.3   | 0.0   | 0.0   | 0.0   | 0.0   |
| 75°   | 397.9  | 26.8  | 8.0   | 5.4   | 4.0   | 2.7   | 2.7   | 1.3   | 0.0   | 0.0   | 0.0   |
| 77.5° | 170.2  | 20.1  | 8.0   | 6.7   | 5.4   | 4.0   | 4.0   | 2.7   | 1.3   | 0.0   | 0.0   |
| 80°   | 64.3   | 16.1  | 9.4   | 8.0   | 6.7   | 6.7   | 5.4   | 2.7   | 1.3   | 0.0   | 0.0   |
| 82.5° | 29.5   | 13.4  | 9.4   | 8.0   | 8.0   | 6.7   | 5.4   | 4.0   | 2.7   | 0.0   | 0.0   |
| 85°   | 18.8   | 12.1  | 9.4   | 8.0   | 8.0   | 6.7   | 6.7   | 4.0   | 2.7   | 0.0   | 0.0   |
| 87.5° | 14.7   | 12.1  | 9.4   | 9.4   | 8.0   | 8.0   | 5.4   | 4.0   | 1.3   | 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   |

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

### Photopic Flux vs. Wavelength

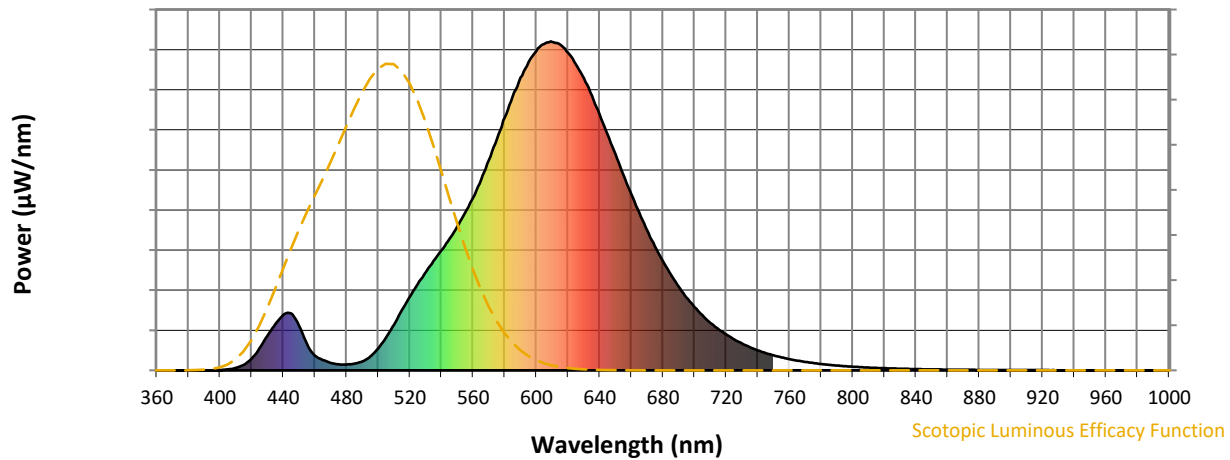


### Photopic Lumens: NR

| λ<br>(nm) | Power<br>W <sup>λ</sup> /nm | Lumens<br>(φ/nm) | λ<br>(nm) | Power<br>W <sup>λ</sup> /nm | Lumens<br>(φ/nm) | λ<br>(nm) | Power<br>W <sup>λ</sup> /nm | Lumens<br>(φ/nm) | λ<br>(nm) | Power<br>W <sup>λ</sup> /nm | Lumens<br>(φ/nm) | λ<br>(nm) | Power<br>W <sup>λ</sup> /nm | Lumens<br>(φ/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



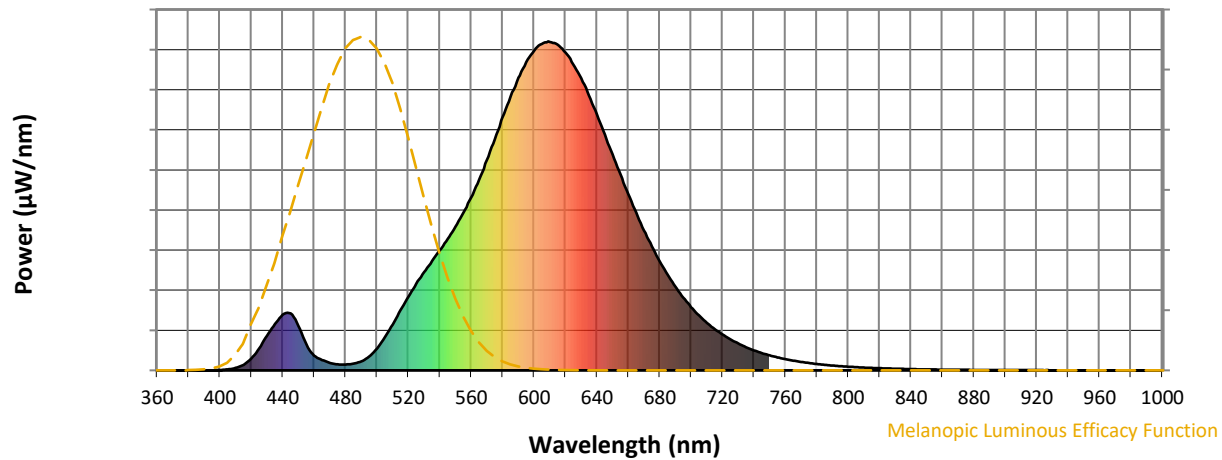
Scotopic Lumens: NR

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                             |                   |                                      |                                |

REPORT NUMBER: SP1-2407-184-2

### Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 1.21

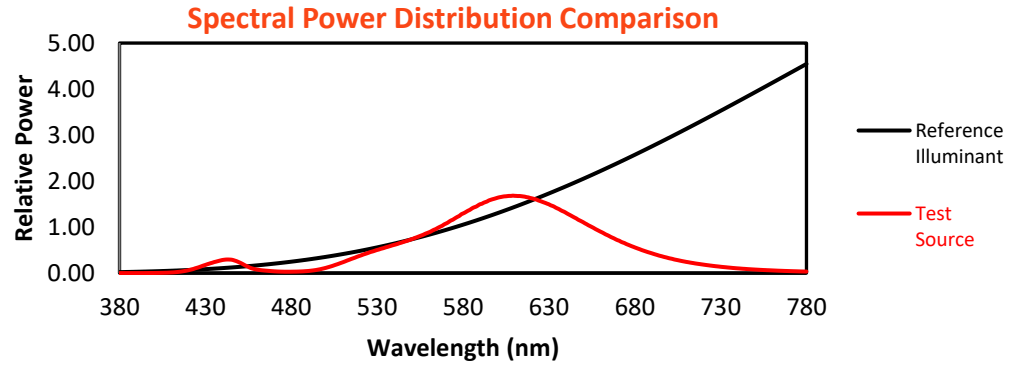
| $\lambda$<br>(nm) | Power<br>$\text{W}^{\wedge}/\text{nm}$ | Lumens<br>( $\phi/\text{nm}$ ) | $\lambda$<br>(nm) | Power<br>$\text{W}^{\wedge}/\text{nm}$ | Lumens<br>( $\phi/\text{nm}$ ) | $\lambda$<br>(nm) | Power<br>$\text{W}^{\wedge}/\text{nm}$ | Lumens<br>( $\phi/\text{nm}$ ) | $\lambda$<br>(nm)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

REPORT NUMBER: SP1-2407-184-2

TM-30-18

### Summary

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

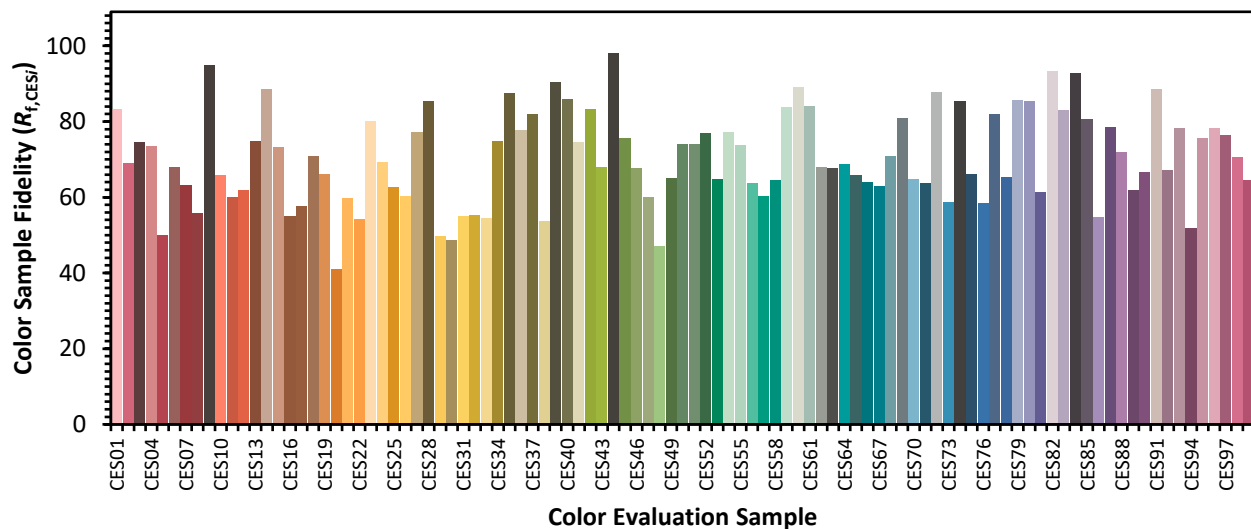


### Color Vector Graphics



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

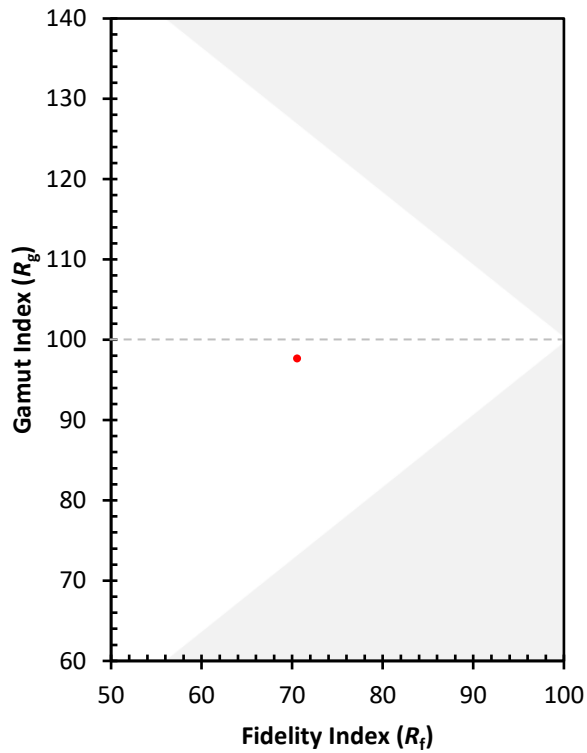
|            |            |            |            |
|------------|------------|------------|------------|
| CES01 = 87 | CES26 = 60 | CES51 = 74 | CES76 = 58 |
| CES02 = 65 | CES27 = 77 | CES52 = 77 | CES77 = 82 |
| CES03 = 32 | CES28 = 85 | CES53 = 65 | CES78 = 65 |
| CES04 = 72 | CES29 = 50 | CES54 = 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)