

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: P1049935

Luminaire Tested: **GALN-SA2C-930-U-LBC**

Issue Date: 07/10/2025



**Test Information**

Test Method: LM-79-08  
Report Number: P1049935  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 07/10/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GALN-SA2C-930-U-LBC  
Description: GALLEON II AREA AND ROADWAY LUMINAIRE 1050mA 2xLight Square PACKAGE  
90CRI 3000K FIXTURE w/ LEFT CORNER BACKLIGHT CONTROL  
Light Source: (28) 3000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7156 lumens  
Efficiency: N/A  
Efficacy: 74.4 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B0 - U0 - G2

Input Watts (W): 96.2  
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

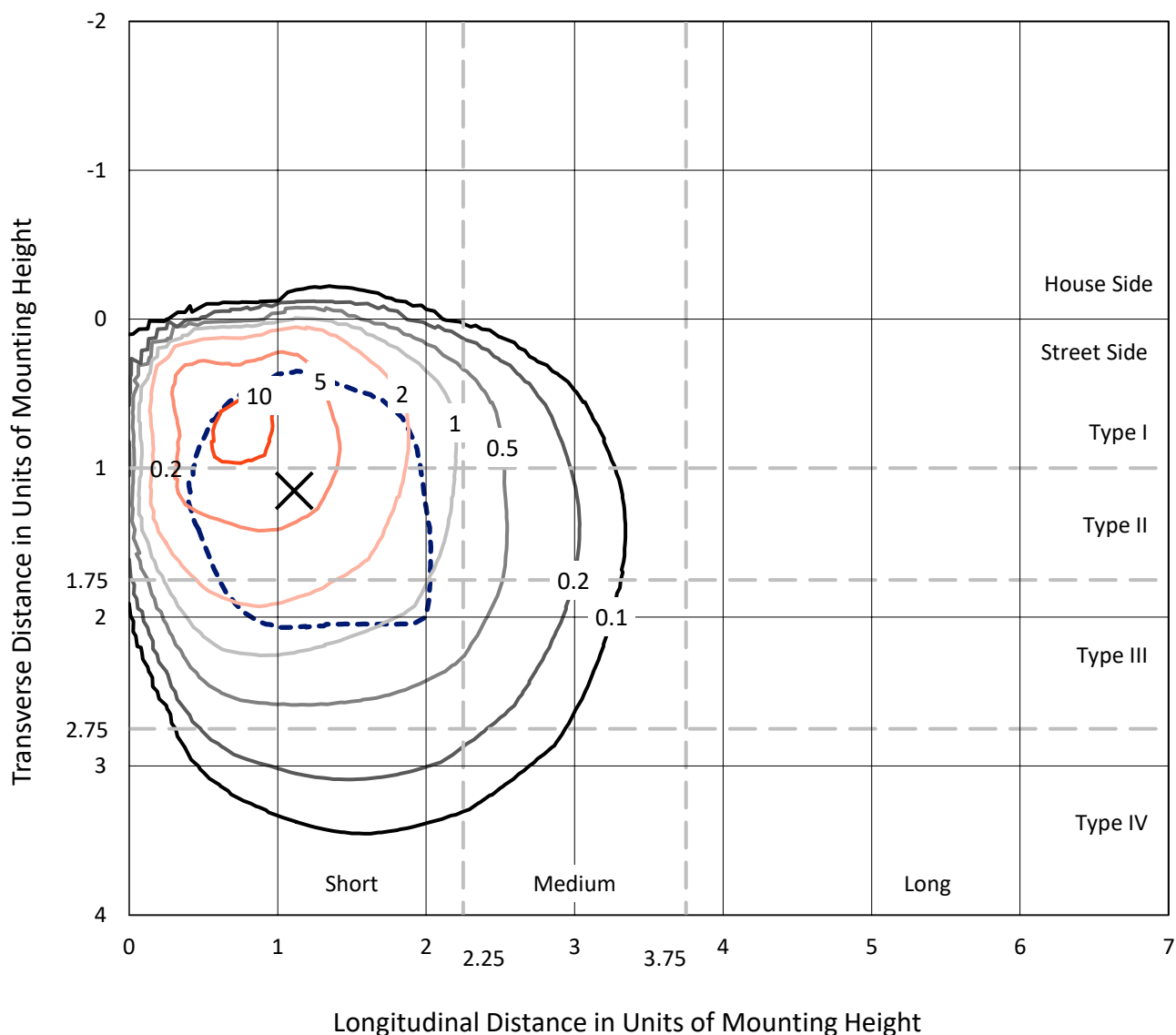
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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

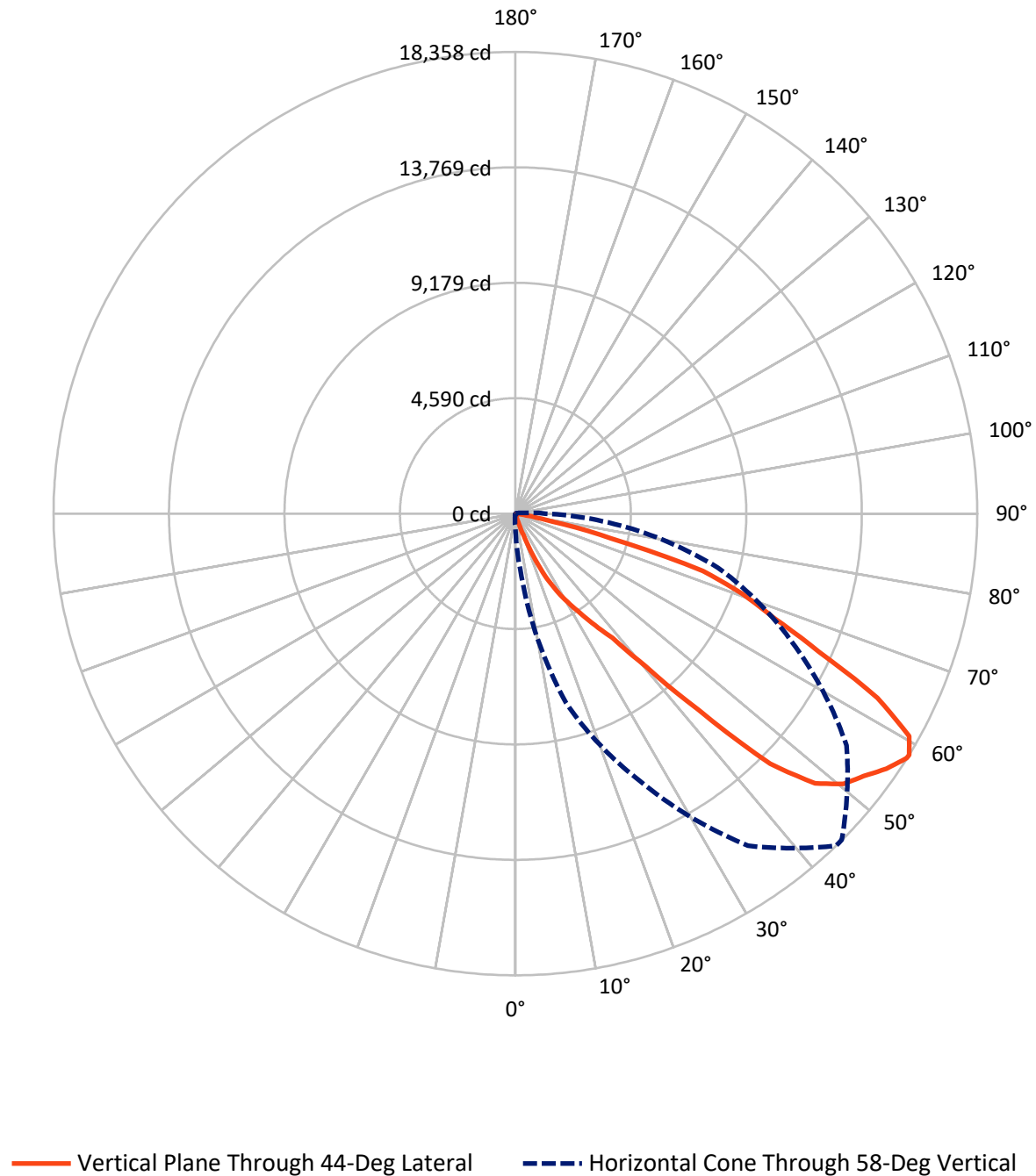


Based on 20 foot mounting height. Maximum calculated value = 12.5 fc

Type III - Short - N/A

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## Luminous Intensity Polar Plot



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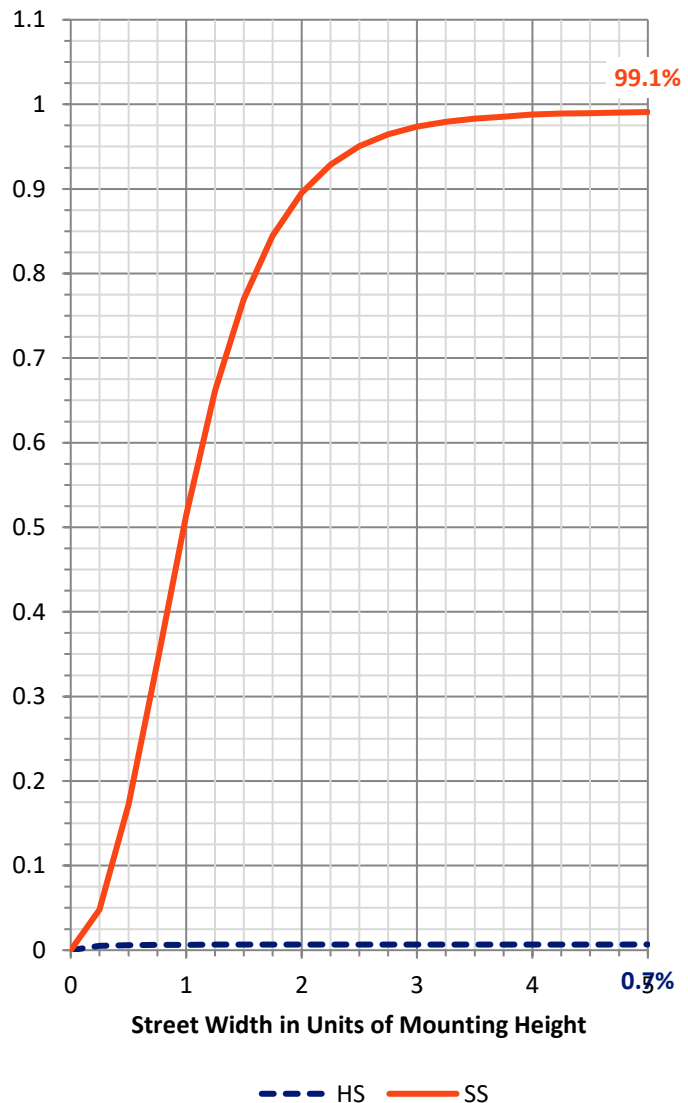
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 48.9     | 0.0    | 48.9   |
|                    | % Fixture | 0.7      | 0.0    | 0.7    |
| <b>Street Side</b> | Lumens    | 7107.2   | 0.0    | 7107.2 |
|                    | % Fixture | 99.3     | 0.0    | 99.3   |
| <b>Total</b>       | Lumens    | 7156.0   | 0.0    | 7156.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**Coefficient of Utilization**

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 2.8    | 0.0       |
| 10°-20°   | 15.7   | 0.2       |
| 20°-30°   | 169.5  | 2.4       |
| 30°-40°   | 501.3  | 7.0       |
| 40°-50°   | 1494.3 | 20.9      |
| 50°-60°   | 2371.1 | 33.1      |
| 60°-70°   | 1977.8 | 27.6      |
| 70°-80°   | 610.0  | 8.5       |
| 80°-90°   | 13.5   | 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°    | 7156.0 | 100.0     |
| 0°-180°   | 7156.0 | 100.0     |



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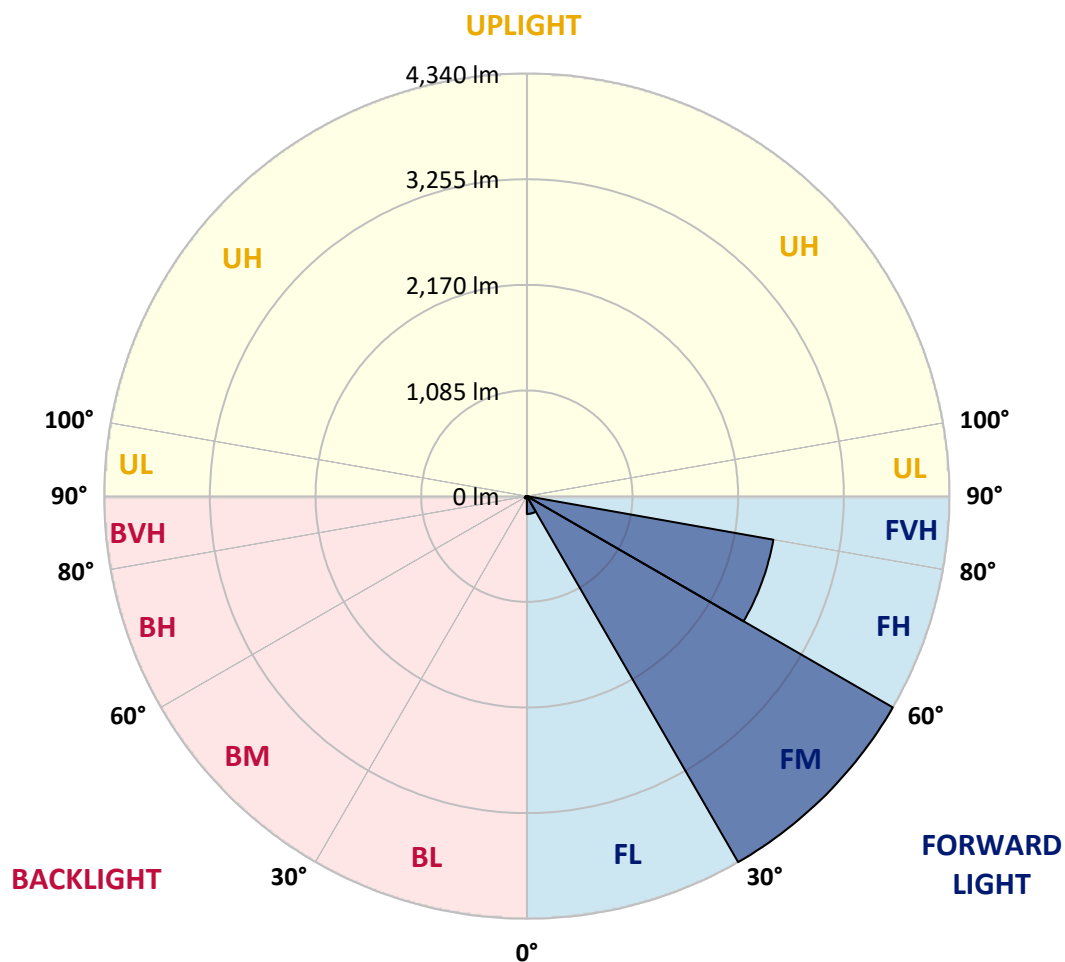
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 183.2  | 2.6       |                         |      |         |
| FM   | (30°-60°)   | 4340.0 | 60.6      |                         |      |         |
| FH   | (60°-80°)   | 2571.1 | 35.9      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 12.9   | 0.2       |                         |      | G1/100  |
| BL   | (0°-30°)    | 4.8    | 0.1       | B0/110                  |      |         |
| BM   | (30°-60°)   | 26.7   | 0.4       | B0/220                  |      |         |
| BH   | (60°-80°)   | 16.7   | 0.2       | B0/110                  |      | G0/110  |
| BVH  | (80°-90°)   | 0.7    | 0.0       |                         |      | G0/10   |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B0-U0-G2**

Type III Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°    | 5°     | 15°    | 25°     | 35°     | 44°     | 45°     | 55°     | 65°     | 75°    |
|-------|-------|--------|--------|---------|---------|---------|---------|---------|---------|--------|
| 0°    | 31.4  | 31.4   | 31.4   | 31.4    | 31.4    | 31.4    | 31.4    | 31.4    | 31.4    | 31.4   |
| 2.5°  | 40.5  | 40.5   | 38.9   | 36.8    | 34.6    | 32.4    | 31.9    | 30.8    | 30.3    | 29.7   |
| 5°    | 42.2  | 42.2   | 41.6   | 40.0    | 37.8    | 36.2    | 36.2    | 34.6    | 33.5    | 32.4   |
| 7.5°  | 43.2  | 43.8   | 44.9   | 44.3    | 43.2    | 41.6    | 41.6    | 40.5    | 38.9    | 36.2   |
| 10°   | 44.9  | 46.5   | 48.7   | 49.7    | 50.3    | 50.3    | 49.7    | 49.2    | 46.5    | 42.7   |
| 12.5° | 46.5  | 49.7   | 55.1   | 60.5    | 63.8    | 68.1    | 67.6    | 66.5    | 59.5    | 51.4   |
| 15°   | 49.7  | 54.6   | 66.0   | 81.6    | 106.0   | 121.1   | 127.0   | 121.6   | 98.4    | 69.2   |
| 17.5° | 53.5  | 61.6   | 95.7   | 170.8   | 280.0   | 331.9   | 363.3   | 337.9   | 223.8   | 131.4  |
| 20°   | 57.3  | 75.1   | 177.8  | 442.7   | 726.5   | 896.3   | 943.3   | 869.8   | 558.4   | 250.3  |
| 22.5° | 63.8  | 105.4  | 360.6  | 915.2   | 1565.5  | 1820.1  | 1868.2  | 1633.1  | 1054.7  | 494.1  |
| 25°   | 77.3  | 153.0  | 621.7  | 1491.5  | 2336.4  | 2766.1  | 2746.1  | 2438.0  | 1710.9  | 789.2  |
| 27.5° | 96.8  | 222.7  | 940.1  | 2119.1  | 3074.8  | 3453.7  | 3499.2  | 3118.0  | 2280.7  | 1160.6 |
| 30°   | 124.9 | 308.7  | 1281.7 | 2621.8  | 3666.7  | 4076.5  | 4084.1  | 3690.0  | 2790.5  | 1486.6 |
| 32.5° | 151.9 | 389.8  | 1580.6 | 3107.8  | 4250.0  | 4699.2  | 4732.8  | 4247.9  | 3171.0  | 1826.1 |
| 35°   | 172.4 | 442.7  | 1883.4 | 3534.8  | 4838.2  | 5457.1  | 5455.0  | 4879.2  | 3621.9  | 2129.3 |
| 37.5° | 174.1 | 495.7  | 2157.4 | 3971.6  | 5583.1  | 6276.1  | 6344.8  | 5710.1  | 4166.8  | 2504.5 |
| 40°   | 170.3 | 555.2  | 2504.5 | 4652.7  | 6925.3  | 7988.6  | 8049.2  | 7249.1  | 5259.8  | 3146.7 |
| 42.5° | 174.6 | 658.4  | 3067.8 | 5910.7  | 9154.1  | 10681.3 | 10798.0 | 9956.9  | 7269.1  | 4457.1 |
| 45°   | 197.3 | 852.5  | 4247.9 | 8015.1  | 12331.1 | 14192.9 | 14153.9 | 12942.5 | 9607.1  | 6451.8 |
| 47.5° | 272.5 | 1327.7 | 5997.2 | 10063.4 | 14361.5 | 16019.5 | 16053.0 | 14572.3 | 10971.6 | 7985.4 |
| 50°   | 418.9 | 2031.5 | 7467.0 | 11146.2 | 15234.5 | 16897.9 | 16866.5 | 15155.6 | 11490.0 | 8740.6 |
| 52.5° | 544.9 | 2540.7 | 8204.3 | 11526.2 | 15346.4 | 17332.0 | 17329.8 | 15309.1 | 11570.5 | 8805.5 |
| 55°   | 576.3 | 2579.1 | 8210.3 | 11546.7 | 15597.3 | 17900.1 | 17971.5 | 15687.0 | 11674.8 | 8522.2 |
| 57.5° | 563.8 | 2283.4 | 7867.6 | 11665.7 | 16043.8 | 18339.6 | 18343.4 | 16053.0 | 11939.7 | 8348.7 |
| 58°   | 553.0 | 2236.9 | 7798.4 | 11733.2 | 16120.6 | 18358.0 | 18348.8 | 16069.7 | 12155.4 | 8342.2 |
| 60°   | 492.5 | 1942.3 | 7528.6 | 11905.7 | 16006.5 | 17980.7 | 17894.7 | 15703.8 | 12123.5 | 8275.7 |
| 62.5° | 387.1 | 1515.2 | 7263.2 | 11706.2 | 14783.7 | 16154.1 | 16189.7 | 13903.1 | 11052.1 | 7888.1 |
| 65°   | 308.1 | 1129.3 | 6709.6 | 10268.3 | 12173.8 | 13265.8 | 13398.7 | 11305.6 | 9224.9  | 6679.4 |
| 67.5° | 245.4 | 816.3  | 5628.5 | 8175.1  | 9633.1  | 11071.6 | 11168.3 | 9492.0  | 7147.0  | 5117.6 |
| 70°   | 199.5 | 551.9  | 3885.1 | 5978.8  | 7945.4  | 9562.8  | 9568.8  | 7885.4  | 5334.4  | 3353.2 |
| 72.5° | 176.8 | 382.2  | 2255.3 | 4360.3  | 6442.6  | 7792.4  | 7635.1  | 6398.8  | 4099.7  | 1986.1 |
| 75°   | 153.0 | 253.5  | 1106.0 | 2665.6  | 3906.2  | 3932.7  | 3992.7  | 2968.3  | 2049.3  | 944.4  |
| 77.5° | 126.0 | 180.0  | 435.7  | 728.2   | 1171.4  | 1499.6  | 1555.2  | 1178.5  | 681.7   | 232.4  |
| 80°   | 86.5  | 85.4   | 117.3  | 223.3   | 335.2   | 420.0   | 391.9   | 303.3   | 178.4   | 89.2   |
| 82.5° | 37.3  | 40.5   | 53.0   | 63.8    | 51.9    | 50.3    | 48.1    | 30.8    | 23.8    | 18.4   |
| 85°   | 11.9  | 10.8   | 11.4   | 11.4    | 9.2     | 7.0     | 7.0     | 3.2     | 0.0     | 0.0    |
| 87.5° | 5.9   | 4.9    | 4.9    | 4.3     | 2.7     | 1.1     | 0.5     | 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    |

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**CANDELA DISTRIBUTION (continued):**

| 85°    |       | 90°    | 95°   | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° |
|--------|-------|--------|-------|------|------|------|------|------|------|------|------|
| 31.4   | 0°    | 31.4   | 31.4  | 31.4 | 31.4 | 31.4 | 31.4 | 31.4 | 31.4 | 31.4 | 31.4 |
| 29.2   | 2.5°  | 28.7   | 28.7  | 27.6 | 26.5 | 25.9 | 24.9 | 24.3 | 23.8 | 23.2 | 22.7 |
| 31.4   | 5°    | 30.3   | 29.7  | 28.1 | 26.5 | 24.9 | 23.2 | 22.2 | 21.1 | 20.0 | 19.5 |
| 34.6   | 7.5°  | 33.0   | 31.9  | 28.7 | 25.9 | 23.8 | 21.6 | 20.5 | 18.9 | 17.8 | 16.2 |
| 38.4   | 10°   | 36.2   | 34.1  | 29.7 | 26.5 | 23.2 | 20.5 | 18.9 | 17.3 | 15.7 | 13.5 |
| 43.8   | 12.5° | 40.5   | 36.8  | 31.4 | 25.9 | 22.2 | 18.9 | 17.3 | 15.1 | 13.5 | 11.9 |
| 50.8   | 15°   | 44.3   | 39.5  | 31.9 | 25.9 | 21.1 | 17.3 | 15.1 | 13.0 | 11.4 | 9.2  |
| 63.8   | 17.5° | 49.7   | 41.6  | 31.4 | 24.3 | 19.5 | 15.1 | 13.0 | 11.4 | 8.6  | 5.4  |
| 94.6   | 20°   | 58.9   | 43.2  | 30.3 | 22.7 | 16.8 | 12.4 | 9.7  | 7.6  | 3.8  | 1.1  |
| 142.2  | 22.5° | 73.5   | 47.6  | 29.2 | 20.5 | 14.6 | 9.7  | 6.5  | 2.7  | 0.0  | 0.0  |
| 216.2  | 25°   | 101.6  | 55.1  | 29.2 | 19.5 | 13.0 | 7.0  | 2.2  | 0.0  | 0.0  | 0.0  |
| 307.0  | 27.5° | 135.1  | 65.4  | 29.2 | 16.8 | 10.3 | 3.8  | 0.0  | 0.0  | 0.0  | 0.0  |
| 418.4  | 30°   | 169.2  | 76.8  | 29.2 | 14.6 | 8.1  | 0.5  | 0.0  | 0.0  | 0.0  | 0.0  |
| 515.2  | 32.5° | 201.6  | 86.5  | 29.7 | 12.4 | 5.4  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 649.2  | 35°   | 234.6  | 88.1  | 29.2 | 10.8 | 3.2  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 813.6  | 37.5° | 276.8  | 84.9  | 27.6 | 9.7  | 1.6  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 1070.3 | 40°   | 340.6  | 86.5  | 25.9 | 9.2  | 0.5  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 1528.2 | 42.5° | 458.4  | 93.5  | 23.8 | 9.2  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 2434.2 | 45°   | 792.5  | 125.4 | 21.6 | 9.7  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 3654.3 | 47.5° | 1310.9 | 225.4 | 21.1 | 9.7  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 4401.9 | 50°   | 1673.1 | 283.8 | 22.2 | 10.3 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 4495.4 | 52.5° | 1670.4 | 316.2 | 23.2 | 10.8 | 2.2  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 4143.5 | 55°   | 1485.0 | 322.2 | 24.9 | 11.9 | 7.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 3560.8 | 57.5° | 1241.2 | 294.1 | 28.7 | 14.6 | 13.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 3469.4 | 58°   | 1197.9 | 281.1 | 29.7 | 15.1 | 14.1 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 3009.4 | 60°   | 981.7  | 229.2 | 37.8 | 18.9 | 18.9 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 2467.2 | 62.5° | 677.9  | 200.0 | 43.2 | 24.3 | 19.5 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 1819.0 | 65°   | 479.5  | 180.6 | 47.0 | 25.9 | 15.7 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 1292.5 | 67.5° | 358.4  | 166.5 | 51.9 | 26.5 | 8.1  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 810.9  | 70°   | 274.6  | 156.2 | 63.8 | 28.1 | 2.2  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 483.3  | 72.5° | 223.8  | 144.3 | 77.3 | 29.2 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 289.7  | 75°   | 185.4  | 130.3 | 74.6 | 31.9 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 154.6  | 77.5° | 123.3  | 101.1 | 68.1 | 31.9 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 55.1   | 80°   | 43.2   | 40.0  | 53.0 | 28.1 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 11.4   | 82.5° | 6.5    | 5.4   | 7.6  | 9.7  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 0.0    | 85°   | 0.0    | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 0.0    | 87.5° | 0.0    | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| 0.0    | 90°   | 0.0    | 0.0   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |



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**CANDELA DISTRIBUTION (continued):**

| 180° |       | 185° | 195° | 205° | 215° | 225° | 235° | 245° | 255° | 265° | 270° |
|------|-------|------|------|------|------|------|------|------|------|------|------|
| 31.4 | 0°    | 31.4 | 31.4 | 31.4 | 31.4 | 31.4 | 31.4 | 31.4 | 31.4 | 31.4 | 31.4 |
| 22.2 | 2.5°  | 22.2 | 22.2 | 21.6 | 22.2 | 22.2 | 23.2 | 25.9 | 29.7 | 34.1 | 35.7 |
| 18.9 | 5°    | 18.4 | 17.8 | 17.3 | 17.3 | 17.3 | 18.9 | 21.1 | 25.4 | 30.3 | 32.4 |
| 15.7 | 7.5°  | 15.1 | 14.6 | 14.1 | 13.5 | 13.5 | 14.6 | 17.3 | 22.2 | 27.0 | 29.2 |
| 13.0 | 10°   | 12.4 | 11.4 | 10.8 | 10.3 | 10.3 | 11.4 | 14.1 | 18.9 | 24.3 | 26.5 |
| 10.8 | 12.5° | 10.3 | 8.6  | 7.6  | 7.0  | 6.5  | 8.1  | 10.8 | 15.1 | 21.1 | 23.8 |
| 8.1  | 15°   | 7.0  | 5.4  | 3.8  | 3.2  | 2.7  | 4.3  | 7.0  | 11.9 | 17.8 | 21.1 |
| 4.3  | 17.5° | 3.8  | 1.6  | 0.5  | 0.0  | 0.0  | 1.1  | 3.2  | 8.6  | 14.6 | 17.3 |
| 0.0  | 20°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 4.3  | 10.8 | 13.5 |
| 0.0  | 22.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.5  | 6.5  | 9.2  |
| 0.0  | 25°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 2.7  | 4.9  |
| 0.0  | 27.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 1.1  |
| 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  | 1.6  |
| 0.0  | 87.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 2.2  | 4.3  |
| 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: P1049935

CATALOG NUMBER: GALN-SA2C-930-U-LBC

**CANDELA DISTRIBUTION (continued):**

| 275° |       | 285° | 295° | 305° | 315° | 316° | 325° | 335° | 345° | 355°  | 360°  |
|------|-------|------|------|------|------|------|------|------|------|-------|-------|
| 31.4 | 0°    | 31.4 | 31.4 | 31.4 | 31.4 | 31.4 | 31.4 | 31.4 | 31.4 | 31.4  | 31.4  |
| 37.3 | 2.5°  | 38.4 | 37.8 | 36.8 | 35.7 | 35.7 | 35.7 | 37.3 | 38.9 | 40.5  | 40.5  |
| 33.5 | 5°    | 35.7 | 35.7 | 35.1 | 34.1 | 34.1 | 34.6 | 36.8 | 39.5 | 41.6  | 42.2  |
| 30.8 | 7.5°  | 33.0 | 34.1 | 33.0 | 32.4 | 33.0 | 33.5 | 35.7 | 38.9 | 42.2  | 43.2  |
| 28.7 | 10°   | 31.4 | 31.9 | 31.9 | 31.4 | 31.4 | 32.4 | 34.6 | 38.9 | 43.2  | 44.9  |
| 25.9 | 12.5° | 29.2 | 30.3 | 29.7 | 29.7 | 29.7 | 30.8 | 33.5 | 38.4 | 44.3  | 46.5  |
| 23.2 | 15°   | 27.0 | 28.7 | 28.7 | 28.1 | 28.1 | 28.7 | 32.4 | 37.8 | 45.9  | 49.7  |
| 20.0 | 17.5° | 24.9 | 26.5 | 27.0 | 25.9 | 25.9 | 27.0 | 30.8 | 37.8 | 47.0  | 53.5  |
| 16.2 | 20°   | 20.5 | 23.2 | 24.9 | 23.2 | 23.2 | 24.3 | 28.1 | 35.7 | 47.6  | 57.3  |
| 11.9 | 22.5° | 16.2 | 18.9 | 21.1 | 20.5 | 20.5 | 21.1 | 25.9 | 34.1 | 48.1  | 63.8  |
| 7.0  | 25°   | 11.9 | 14.6 | 16.2 | 17.3 | 17.3 | 18.9 | 23.8 | 33.0 | 50.3  | 77.3  |
| 3.2  | 27.5° | 7.0  | 10.3 | 12.4 | 13.5 | 14.1 | 16.2 | 22.2 | 31.9 | 54.1  | 96.8  |
| 0.0  | 30°   | 3.2  | 5.9  | 8.6  | 10.8 | 10.8 | 14.6 | 20.5 | 30.8 | 58.9  | 124.9 |
| 0.0  | 32.5° | 0.0  | 2.7  | 4.3  | 7.6  | 8.1  | 11.9 | 18.9 | 29.7 | 66.0  | 151.9 |
| 0.0  | 35°   | 0.0  | 0.0  | 2.2  | 5.9  | 5.9  | 9.7  | 17.3 | 28.7 | 76.8  | 172.4 |
| 0.0  | 37.5° | 0.0  | 0.0  | 0.0  | 4.3  | 4.9  | 8.6  | 16.8 | 28.1 | 78.9  | 174.1 |
| 0.0  | 40°   | 0.0  | 0.0  | 0.0  | 3.2  | 3.8  | 8.1  | 16.8 | 28.7 | 71.4  | 170.3 |
| 0.0  | 42.5° | 0.0  | 0.0  | 0.0  | 2.2  | 2.7  | 8.1  | 16.8 | 29.7 | 64.3  | 174.6 |
| 0.0  | 45°   | 0.0  | 0.0  | 0.0  | 1.6  | 2.2  | 8.6  | 16.2 | 29.2 | 60.5  | 197.3 |
| 0.0  | 47.5° | 0.0  | 0.0  | 0.0  | 2.2  | 3.2  | 8.6  | 15.7 | 28.7 | 61.1  | 272.5 |
| 0.0  | 50°   | 0.0  | 0.0  | 0.0  | 2.7  | 3.8  | 8.6  | 16.2 | 27.6 | 67.0  | 418.9 |
| 0.0  | 52.5° | 0.0  | 0.0  | 0.0  | 2.2  | 3.2  | 9.7  | 17.8 | 27.0 | 73.0  | 544.9 |
| 0.0  | 55°   | 0.0  | 0.0  | 0.0  | 0.5  | 1.6  | 12.4 | 19.5 | 27.0 | 82.2  | 576.3 |
| 0.0  | 57.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 14.1 | 22.2 | 28.7 | 97.3  | 563.8 |
| 0.0  | 58°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 14.1 | 22.7 | 28.7 | 98.4  | 553.0 |
| 0.0  | 60°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 14.1 | 24.9 | 31.9 | 106.0 | 492.5 |
| 0.0  | 62.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 11.9 | 29.7 | 40.0 | 110.3 | 387.1 |
| 0.0  | 65°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 9.7  | 35.1 | 43.8 | 113.5 | 308.1 |
| 0.0  | 67.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 9.2  | 36.2 | 44.3 | 115.1 | 245.4 |
| 0.0  | 70°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 9.7  | 35.7 | 47.6 | 120.5 | 199.5 |
| 0.0  | 72.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 10.8 | 32.4 | 52.4 | 120.5 | 176.8 |
| 0.0  | 75°   | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 11.4 | 30.3 | 58.9 | 109.7 | 153.0 |
| 0.0  | 77.5° | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 10.8 | 29.7 | 68.7 | 97.8  | 126.0 |
| 0.0  | 80°   | 1.1  | 1.6  | 1.6  | 1.1  | 1.1  | 9.2  | 29.2 | 69.7 | 83.2  | 86.5  |
| 0.5  | 82.5° | 3.2  | 4.3  | 3.8  | 2.7  | 2.7  | 8.1  | 25.9 | 58.4 | 43.2  | 37.3  |
| 3.2  | 85°   | 5.9  | 7.0  | 7.0  | 5.9  | 5.9  | 7.6  | 16.2 | 21.1 | 14.6  | 11.9  |
| 5.9  | 87.5° | 8.1  | 9.2  | 9.2  | 8.1  | 8.1  | 7.6  | 7.0  | 6.5  | 5.9   | 5.9   |
| 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: SP1-2407-184-14

Test Date: 10/11/2024

Luminaire Tested: GSS-SB1A-930-U-5WQ

Data in this report applies to families of products including GSS-SB1A-930-U-5WQ

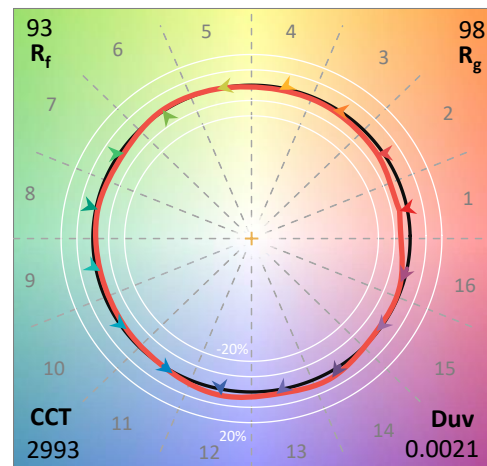
### Test Information

Test Method: LM-79-2019  
 Report Number: SP1-2407-184-14  
 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-930-U-5WQ**  
 Description: GALLEON II SITE SLIM 1SQ 350MA 5WQ HIGH DENSITY LIGHTSQUARE WITH 90 CRI  
 3000K CCT 26 LEDS

### Spectral Parameters

CCT (K): 2993  
 CIE  $u'$ : 0.2501  
 CIE  $v'$ : 0.5245  
 Duv: 0.0021  
 CIE x: 0.4406  
 CIE y: 0.4107  
 CIE z: 0.1487  
 Peak Wavelength (nm): 621  
 Dominant Wavelength (nm): 582  
 Purity: 55.53327  
 R<sub>f</sub>: 92.6  
 R<sub>g</sub>: 98.5

CRI (Ra): 92.4  
 R1: 92.2  
 R2: 95.2  
 R3: 97.0  
 R4: 93.1  
 R5: 91.7  
 R6: 94.2  
 R7: 93.3  
 R8: 82.3  
 R9: 58.2  
 R10: 87.7  
 R11: 93.5  
 R12: 81.7  
 R13: 92.9  
 R14: 97.6  
 R15: 88.1



### Test Conditions

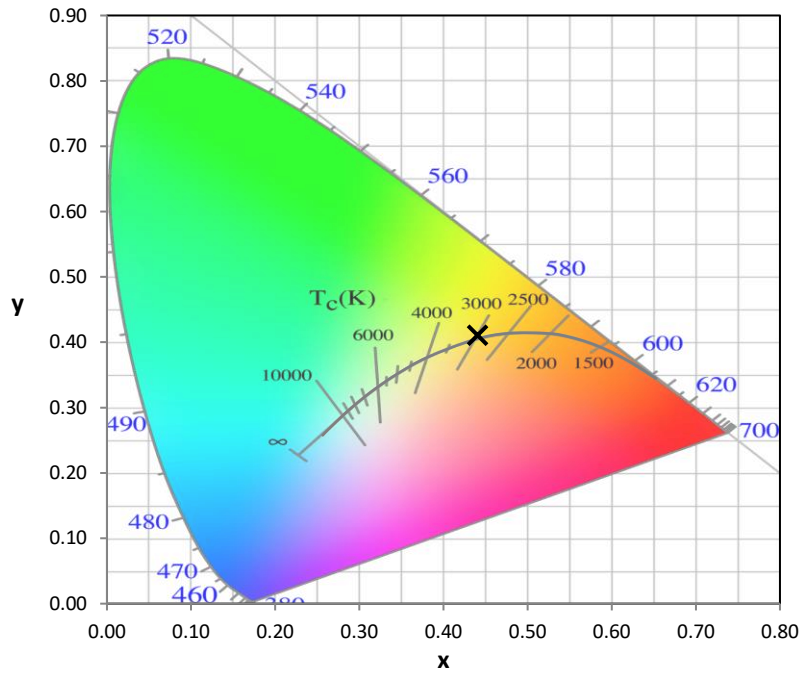
Stabilization Time: 20M  
 Operation Time: 1H 20M  
 Sphere Temperature (°C): 25.2

REPORT NUMBER: SP1-2407-184-14

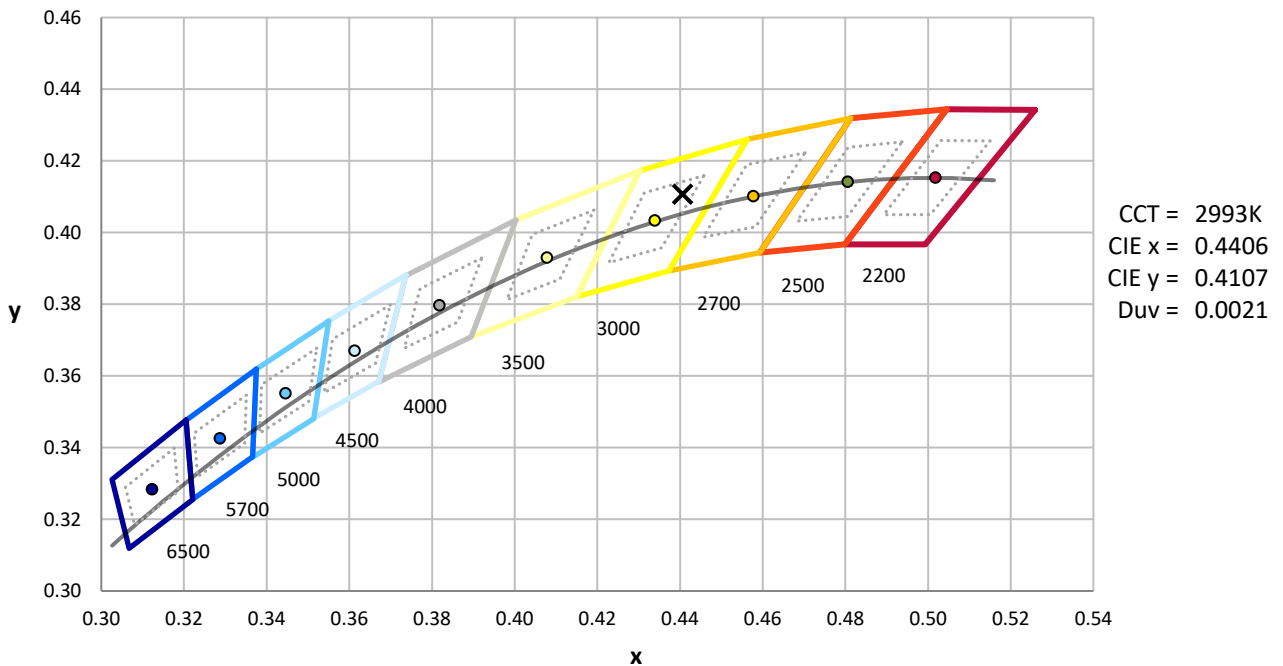
| Measurement and Test Equipment |                       |                  |                      |
|--------------------------------|-----------------------|------------------|----------------------|
| Instrument                     | Identification Number | Calibration Date | Calibration Due Date |
| 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: SP1-2407-184-14

**CIE 1931 Chromaticity Diagram**



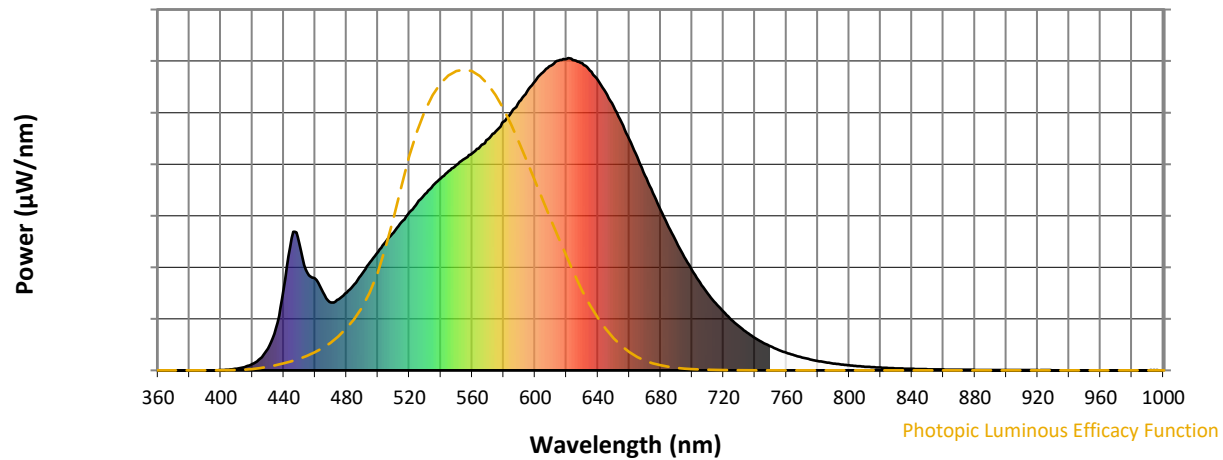
**CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles**



Point lies inside the ANSI 3000K 4-step quadrangle

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### Photopic Flux vs. Wavelength



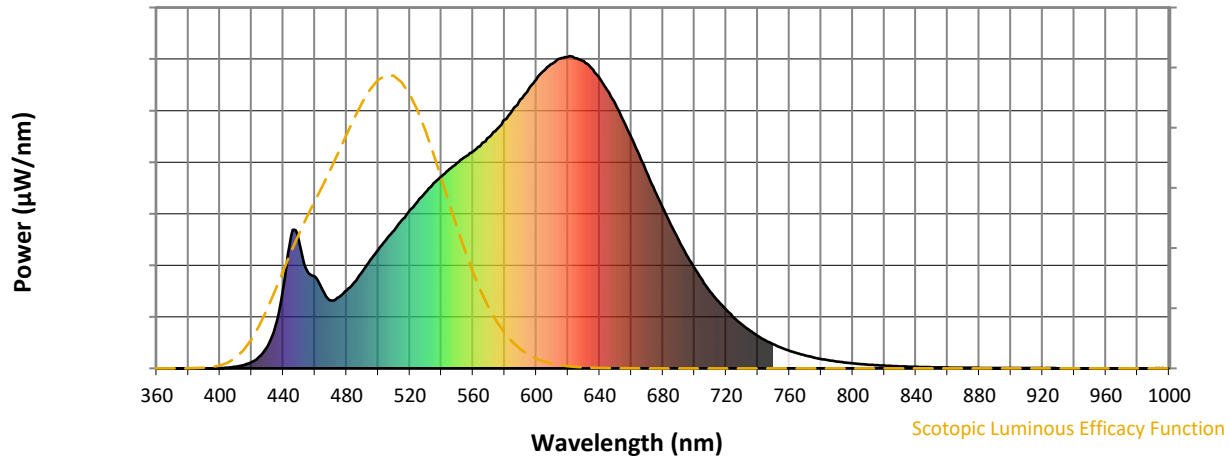
### Photopic Lumens: NR

| $\lambda$<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               | 310                                  | NR                             | 620               | 998                                  | NR                             | 750               | 77                                   | NR                             | 880               | 2                                    | NR                             |
| 365               | 0                                    | NR                             | 495               | 347                                  | NR                             | 625               | 993                                  | NR                             | 755               | 66                                   | NR                             | 885               | 1                                    | NR                             |
| 370               | 0                                    | NR                             | 500               | 379                                  | NR                             | 630               | 983                                  | NR                             | 760               | 56                                   | NR                             | 890               | 1                                    | NR                             |
| 375               | 0                                    | NR                             | 505               | 412                                  | NR                             | 635               | 960                                  | NR                             | 765               | 48                                   | NR                             | 895               | 1                                    | NR                             |
| 380               | 0                                    | NR                             | 510               | 442                                  | NR                             | 640               | 930                                  | NR                             | 770               | 41                                   | NR                             | 900               | 1                                    | NR                             |
| 385               | 0                                    | NR                             | 515               | 475                                  | NR                             | 645               | 889                                  | NR                             | 775               | 35                                   | NR                             | 905               | 1                                    | NR                             |
| 390               | 0                                    | NR                             | 520               | 506                                  | NR                             | 650               | 846                                  | NR                             | 780               | 30                                   | NR                             | 910               | 1                                    | NR                             |
| 395               | 0                                    | NR                             | 525               | 535                                  | NR                             | 655               | 794                                  | NR                             | 785               | 26                                   | NR                             | 915               | 1                                    | NR                             |
| 400               | 1                                    | NR                             | 530               | 565                                  | NR                             | 660               | 740                                  | NR                             | 790               | 22                                   | NR                             | 920               | 1                                    | NR                             |
| 405               | 2                                    | NR                             | 535               | 592                                  | NR                             | 665               | 684                                  | NR                             | 795               | 19                                   | NR                             | 925               | 1                                    | NR                             |
| 410               | 6                                    | NR                             | 540               | 615                                  | NR                             | 670               | 624                                  | NR                             | 800               | 16                                   | NR                             | 930               | 0                                    | NR                             |
| 415               | 10                                   | NR                             | 545               | 638                                  | NR                             | 675               | 567                                  | NR                             | 805               | 14                                   | NR                             | 935               | 0                                    | NR                             |
| 420               | 20                                   | NR                             | 550               | 658                                  | NR                             | 680               | 513                                  | NR                             | 810               | 12                                   | NR                             | 940               | 0                                    | NR                             |
| 425               | 38                                   | NR                             | 555               | 678                                  | NR                             | 685               | 459                                  | NR                             | 815               | 10                                   | NR                             | 945               | 0                                    | NR                             |
| 430               | 70                                   | NR                             | 560               | 695                                  | NR                             | 690               | 412                                  | NR                             | 820               | 9                                    | NR                             | 950               | 0                                    | NR                             |
| 435               | 136                                  | NR                             | 565               | 716                                  | NR                             | 695               | 363                                  | NR                             | 825               | 8                                    | NR                             | 955               | 0                                    | NR                             |
| 440               | 262                                  | NR                             | 570               | 740                                  | NR                             | 700               | 320                                  | NR                             | 830               | 7                                    | NR                             | 960               | 0                                    | NR                             |
| 445               | 424                                  | NR                             | 575               | 765                                  | NR                             | 705               | 281                                  | NR                             | 835               | 6                                    | NR                             | 965               | 0                                    | NR                             |
| 450               | 406                                  | NR                             | 580               | 796                                  | NR                             | 710               | 245                                  | NR                             | 840               | 5                                    | NR                             | 970               | 0                                    | NR                             |
| 455               | 313                                  | NR                             | 585               | 827                                  | NR                             | 715               | 215                                  | NR                             | 845               | 4                                    | NR                             | 975               | 0                                    | NR                             |
| 460               | 294                                  | NR                             | 590               | 861                                  | NR                             | 720               | 188                                  | NR                             | 850               | 4                                    | NR                             | 980               | 0                                    | NR                             |
| 465               | 250                                  | NR                             | 595               | 894                                  | NR                             | 725               | 162                                  | NR                             | 855               | 3                                    | NR                             | 985               | 0                                    | NR                             |
| 470               | 217                                  | NR                             | 600               | 927                                  | NR                             | 730               | 140                                  | NR                             | 860               | 3                                    | NR                             | 990               | 0                                    | NR                             |
| 475               | 228                                  | NR                             | 605               | 954                                  | NR                             | 735               | 121                                  | NR                             | 865               | 2                                    | NR                             | 995               | 0                                    | NR                             |
| 480               | 249                                  | NR                             | 610               | 976                                  | NR                             | 740               | 104                                  | NR                             | 870               | 2                                    | NR                             | 1000              | 0                                    | NR                             |
| 485               | 276                                  | NR                             | 615               | 992                                  | NR                             | 745               | 89                                   | NR                             | 875               | 2                                    | NR                             |                   |                                      |                                |



REPORT NUMBER: SP1-2407-184-14

### Scotopic Flux vs. Wavelength



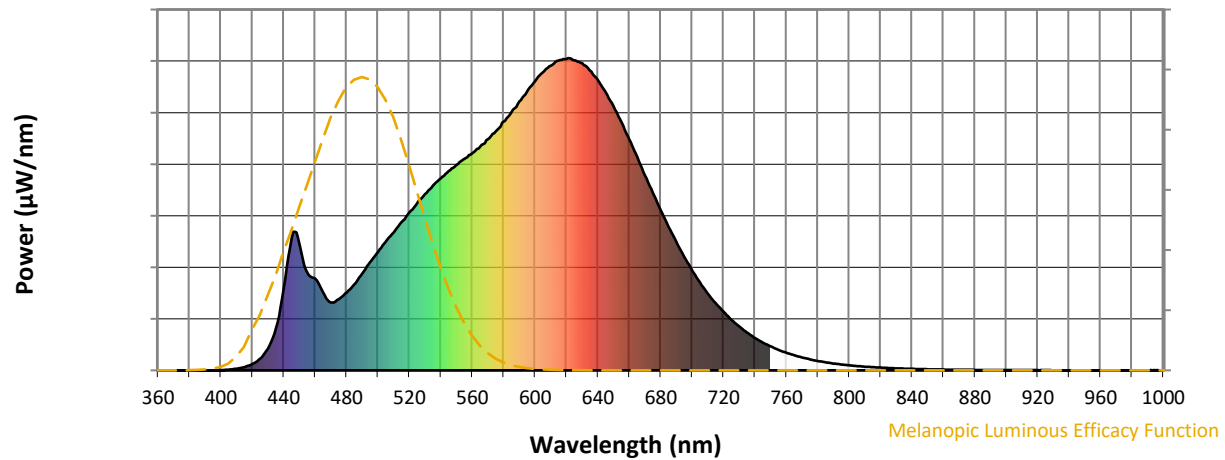
Scotopic Lumens: NR

S/P: 1.39

| $\lambda$<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               | 310                                  | NR                             | 620               | 998                                  | NR                             | 750               | 77                                   | NR                             | 880               | 2                                    | NR                             |
| 365               | 0                                    | NR                             | 495               | 347                                  | NR                             | 625               | 993                                  | NR                             | 755               | 66                                   | NR                             | 885               | 1                                    | NR                             |
| 370               | 0                                    | NR                             | 500               | 379                                  | NR                             | 630               | 983                                  | NR                             | 760               | 56                                   | NR                             | 890               | 1                                    | NR                             |
| 375               | 0                                    | NR                             | 505               | 412                                  | NR                             | 635               | 960                                  | NR                             | 765               | 48                                   | NR                             | 895               | 1                                    | NR                             |
| 380               | 0                                    | NR                             | 510               | 442                                  | NR                             | 640               | 930                                  | NR                             | 770               | 41                                   | NR                             | 900               | 1                                    | NR                             |
| 385               | 0                                    | NR                             | 515               | 475                                  | NR                             | 645               | 889                                  | NR                             | 775               | 35                                   | NR                             | 905               | 1                                    | NR                             |
| 390               | 0                                    | NR                             | 520               | 506                                  | NR                             | 650               | 846                                  | NR                             | 780               | 30                                   | NR                             | 910               | 1                                    | NR                             |
| 395               | 0                                    | NR                             | 525               | 535                                  | NR                             | 655               | 794                                  | NR                             | 785               | 26                                   | NR                             | 915               | 1                                    | NR                             |
| 400               | 1                                    | NR                             | 530               | 565                                  | NR                             | 660               | 740                                  | NR                             | 790               | 22                                   | NR                             | 920               | 1                                    | NR                             |
| 405               | 2                                    | NR                             | 535               | 592                                  | NR                             | 665               | 684                                  | NR                             | 795               | 19                                   | NR                             | 925               | 1                                    | NR                             |
| 410               | 6                                    | NR                             | 540               | 615                                  | NR                             | 670               | 624                                  | NR                             | 800               | 16                                   | NR                             | 930               | 0                                    | NR                             |
| 415               | 10                                   | NR                             | 545               | 638                                  | NR                             | 675               | 567                                  | NR                             | 805               | 14                                   | NR                             | 935               | 0                                    | NR                             |
| 420               | 20                                   | NR                             | 550               | 658                                  | NR                             | 680               | 513                                  | NR                             | 810               | 12                                   | NR                             | 940               | 0                                    | NR                             |
| 425               | 38                                   | NR                             | 555               | 678                                  | NR                             | 685               | 459                                  | NR                             | 815               | 10                                   | NR                             | 945               | 0                                    | NR                             |
| 430               | 70                                   | NR                             | 560               | 695                                  | NR                             | 690               | 412                                  | NR                             | 820               | 9                                    | NR                             | 950               | 0                                    | NR                             |
| 435               | 136                                  | NR                             | 565               | 716                                  | NR                             | 695               | 363                                  | NR                             | 825               | 8                                    | NR                             | 955               | 0                                    | NR                             |
| 440               | 262                                  | NR                             | 570               | 740                                  | NR                             | 700               | 320                                  | NR                             | 830               | 7                                    | NR                             | 960               | 0                                    | NR                             |
| 445               | 424                                  | NR                             | 575               | 765                                  | NR                             | 705               | 281                                  | NR                             | 835               | 6                                    | NR                             | 965               | 0                                    | NR                             |
| 450               | 406                                  | NR                             | 580               | 796                                  | NR                             | 710               | 245                                  | NR                             | 840               | 5                                    | NR                             | 970               | 0                                    | NR                             |
| 455               | 313                                  | NR                             | 585               | 827                                  | NR                             | 715               | 215                                  | NR                             | 845               | 4                                    | NR                             | 975               | 0                                    | NR                             |
| 460               | 294                                  | NR                             | 590               | 861                                  | NR                             | 720               | 188                                  | NR                             | 850               | 4                                    | NR                             | 980               | 0                                    | NR                             |
| 465               | 250                                  | NR                             | 595               | 894                                  | NR                             | 725               | 162                                  | NR                             | 855               | 3                                    | NR                             | 985               | 0                                    | NR                             |
| 470               | 217                                  | NR                             | 600               | 927                                  | NR                             | 730               | 140                                  | NR                             | 860               | 3                                    | NR                             | 990               | 0                                    | NR                             |
| 475               | 228                                  | NR                             | 605               | 954                                  | NR                             | 735               | 121                                  | NR                             | 865               | 2                                    | NR                             | 995               | 0                                    | NR                             |
| 480               | 249                                  | NR                             | 610               | 976                                  | NR                             | 740               | 104                                  | NR                             | 870               | 2                                    | NR                             | 1000              | 0                                    | NR                             |
| 485               | 276                                  | NR                             | 615               | 992                                  | NR                             | 745               | 89                                   | NR                             | 875               | 2                                    | NR                             |                   |                                      |                                |

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### Melanopic Flux vs. Wavelength



Melanopic Lumens: NR

M/P: 2.69

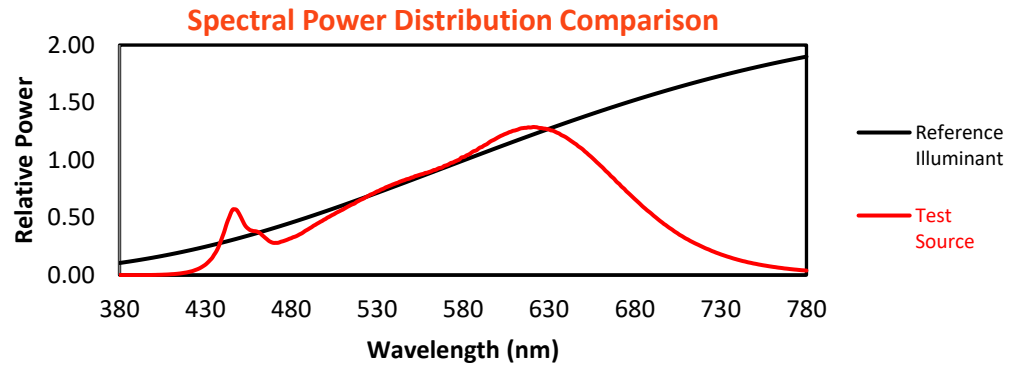
| $\lambda$<br>(nm) | Power<br>$\text{W}^{\wedge}/\text{nm}$ | Lumens<br>( $\phi/\text{nm}$ ) | $\lambda$<br>(nm) | Power<br>$\text{W}^{\wedge}/\text{nm}$ | Lumens<br>( $\phi/\text{nm}$ ) | $\lambda$<br>(nm) | Power<br>$\text{W}^{\wedge}/\text{nm}$ | Lumens<br>( $\phi/\text{nm}$ ) | $\lambda$<br>(nm) | 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               | 310                                    | NR                             | 620               | 998                                    | NR                             | 750               | 77                                     | NR                             | 880               | 2                                      | NR                             |
| 365               | 0                                      | NR                             | 495               | 347                                    | NR                             | 625               | 993                                    | NR                             | 755               | 66                                     | NR                             | 885               | 1                                      | NR                             |
| 370               | 0                                      | NR                             | 500               | 379                                    | NR                             | 630               | 983                                    | NR                             | 760               | 56                                     | NR                             | 890               | 1                                      | NR                             |
| 375               | 0                                      | NR                             | 505               | 412                                    | NR                             | 635               | 960                                    | NR                             | 765               | 48                                     | NR                             | 895               | 1                                      | NR                             |
| 380               | 0                                      | NR                             | 510               | 442                                    | NR                             | 640               | 930                                    | NR                             | 770               | 41                                     | NR                             | 900               | 1                                      | NR                             |
| 385               | 0                                      | NR                             | 515               | 475                                    | NR                             | 645               | 889                                    | NR                             | 775               | 35                                     | NR                             | 905               | 1                                      | NR                             |
| 390               | 0                                      | NR                             | 520               | 506                                    | NR                             | 650               | 846                                    | NR                             | 780               | 30                                     | NR                             | 910               | 1                                      | NR                             |
| 395               | 0                                      | NR                             | 525               | 535                                    | NR                             | 655               | 794                                    | NR                             | 785               | 26                                     | NR                             | 915               | 1                                      | NR                             |
| 400               | 1                                      | NR                             | 530               | 565                                    | NR                             | 660               | 740                                    | NR                             | 790               | 22                                     | NR                             | 920               | 1                                      | NR                             |
| 405               | 2                                      | NR                             | 535               | 592                                    | NR                             | 665               | 684                                    | NR                             | 795               | 19                                     | NR                             | 925               | 1                                      | NR                             |
| 410               | 6                                      | NR                             | 540               | 615                                    | NR                             | 670               | 624                                    | NR                             | 800               | 16                                     | NR                             | 930               | 0                                      | NR                             |
| 415               | 10                                     | NR                             | 545               | 638                                    | NR                             | 675               | 567                                    | NR                             | 805               | 14                                     | NR                             | 935               | 0                                      | NR                             |
| 420               | 20                                     | NR                             | 550               | 658                                    | NR                             | 680               | 513                                    | NR                             | 810               | 12                                     | NR                             | 940               | 0                                      | NR                             |
| 425               | 38                                     | NR                             | 555               | 678                                    | NR                             | 685               | 459                                    | NR                             | 815               | 10                                     | NR                             | 945               | 0                                      | NR                             |
| 430               | 70                                     | NR                             | 560               | 695                                    | NR                             | 690               | 412                                    | NR                             | 820               | 9                                      | NR                             | 950               | 0                                      | NR                             |
| 435               | 136                                    | NR                             | 565               | 716                                    | NR                             | 695               | 363                                    | NR                             | 825               | 8                                      | NR                             | 955               | 0                                      | NR                             |
| 440               | 262                                    | NR                             | 570               | 740                                    | NR                             | 700               | 320                                    | NR                             | 830               | 7                                      | NR                             | 960               | 0                                      | NR                             |
| 445               | 424                                    | NR                             | 575               | 765                                    | NR                             | 705               | 281                                    | NR                             | 835               | 6                                      | NR                             | 965               | 0                                      | NR                             |
| 450               | 406                                    | NR                             | 580               | 796                                    | NR                             | 710               | 245                                    | NR                             | 840               | 5                                      | NR                             | 970               | 0                                      | NR                             |
| 455               | 313                                    | NR                             | 585               | 827                                    | NR                             | 715               | 215                                    | NR                             | 845               | 4                                      | NR                             | 975               | 0                                      | NR                             |
| 460               | 294                                    | NR                             | 590               | 861                                    | NR                             | 720               | 188                                    | NR                             | 850               | 4                                      | NR                             | 980               | 0                                      | NR                             |
| 465               | 250                                    | NR                             | 595               | 894                                    | NR                             | 725               | 162                                    | NR                             | 855               | 3                                      | NR                             | 985               | 0                                      | NR                             |
| 470               | 217                                    | NR                             | 600               | 927                                    | NR                             | 730               | 140                                    | NR                             | 860               | 3                                      | NR                             | 990               | 0                                      | NR                             |
| 475               | 228                                    | NR                             | 605               | 954                                    | NR                             | 735               | 121                                    | NR                             | 865               | 2                                      | NR                             | 995               | 0                                      | NR                             |
| 480               | 249                                    | NR                             | 610               | 976                                    | NR                             | 740               | 104                                    | NR                             | 870               | 2                                      | NR                             | 1000              | 0                                      | NR                             |
| 485               | 276                                    | NR                             | 615               | 992                                    | NR                             | 745               | 89                                     | NR                             | 875               | 2                                      | NR                             |                   |                                        |                                |

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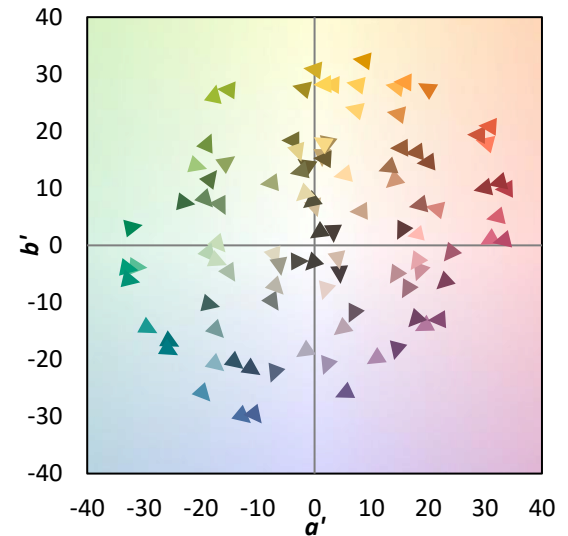
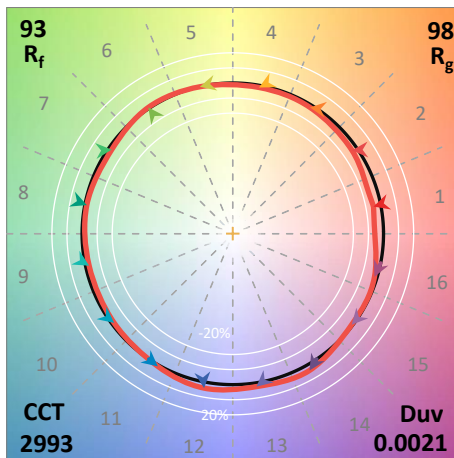
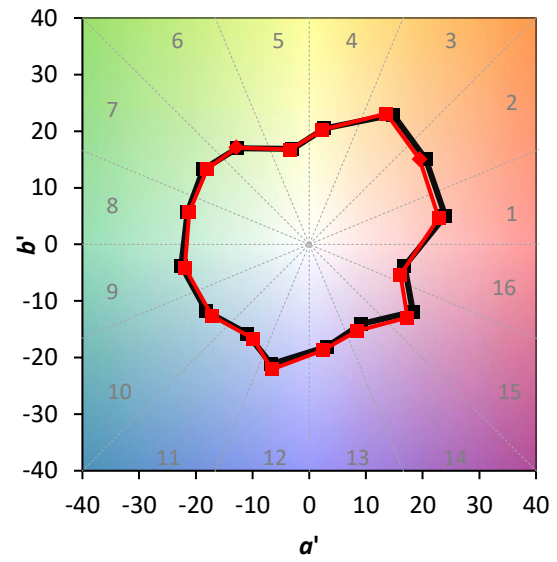
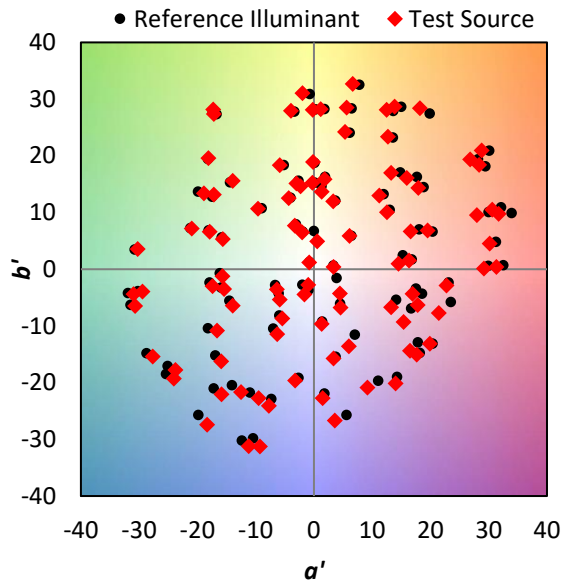
TM-30-18

### Summary

$R_f = 92.6$   
 $R_g = 98.5$   
 $CIE R_a = 92.4$   
 $R_9 = 58.2$

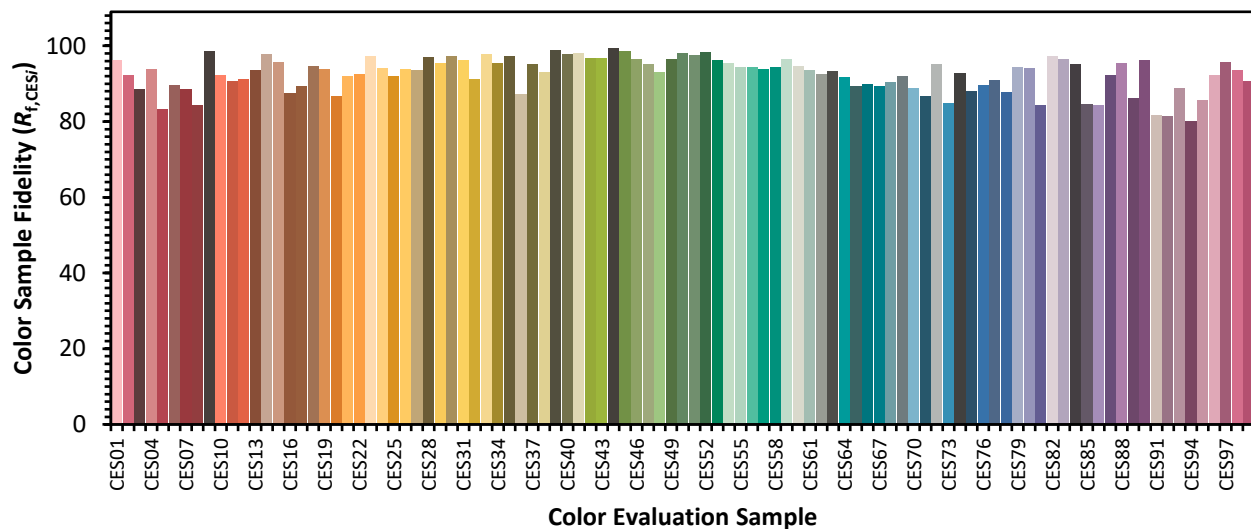


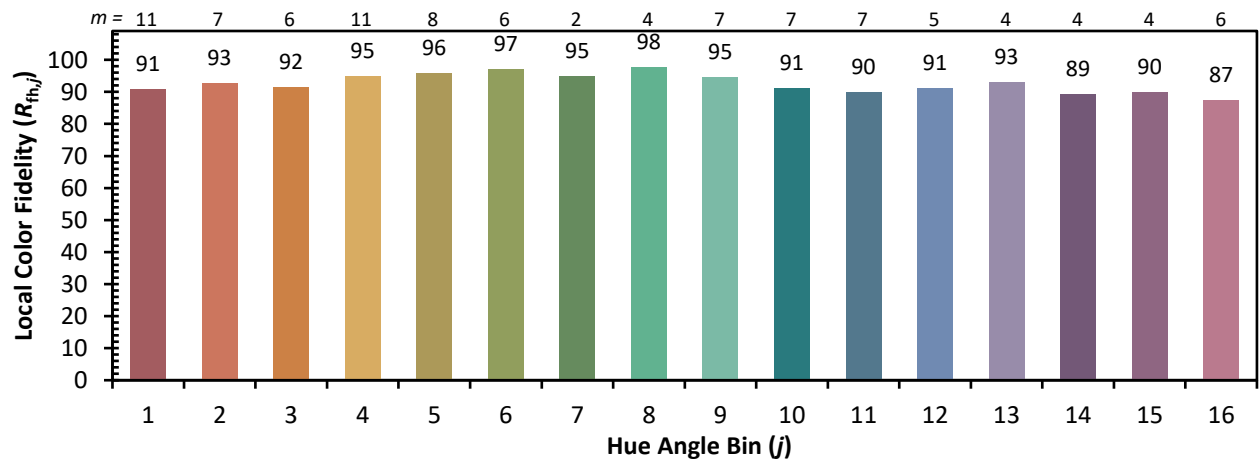
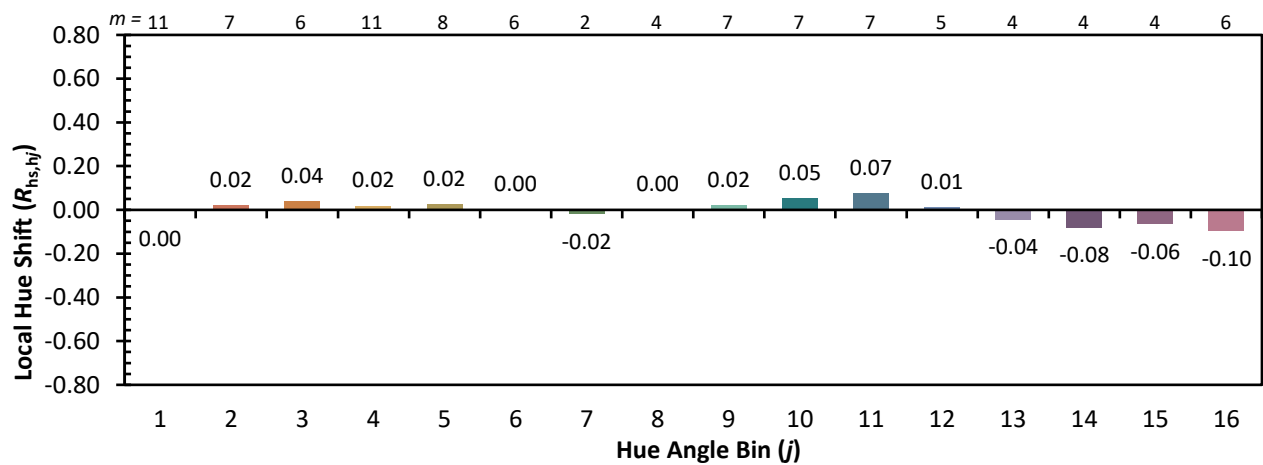
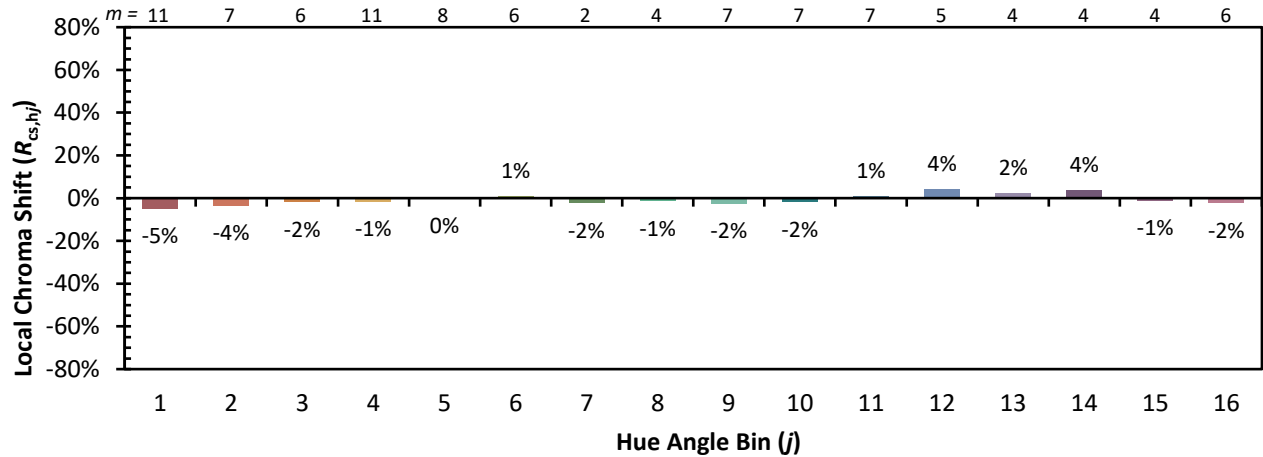
### Color Vector Graphics



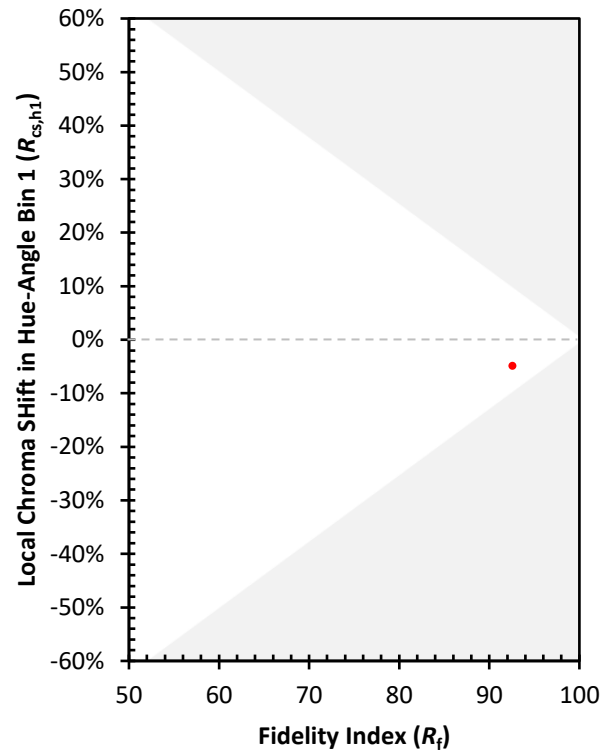
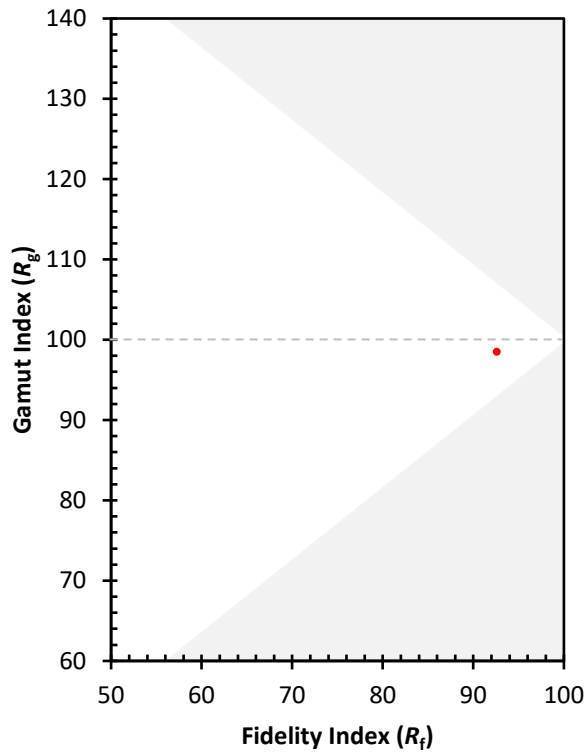
**Individual Sample Fidelity Index ( $R_{f,i}$ )**

|            |            |            |            |
|------------|------------|------------|------------|
| CES01 = 86 | CES26 = 94 | CES51 = 98 | CES76 = 90 |
| CES02 = 63 | CES27 = 94 | CES52 = 98 | CES77 = 91 |
| CES03 = 32 | CES28 = 97 | CES53 = 96 | CES78 = 88 |
| CES04 = 70 | CES29 = 95 | CES54 = 95 | CES79 = 94 |
| CES05 = 51 | CES30 = 97 | CES55 = 94 | CES80 = 94 |
| CES06 = 51 | CES31 = 96 | CES56 = 94 | CES81 = 84 |
| CES07 = 43 | CES32 = 91 | CES57 = 94 | CES82 = 97 |
| CES08 = 42 | CES33 = 98 | CES58 = 94 | CES83 = 97 |
| CES09 = 29 | CES34 = 96 | CES59 = 97 | CES84 = 95 |
| CES10 = 76 | CES35 = 97 | CES60 = 95 | CES85 = 85 |
| CES11 = 59 | CES36 = 87 | CES61 = 94 | CES86 = 84 |
| CES12 = 65 | CES37 = 95 | CES62 = 92 | CES87 = 92 |
| CES13 = 44 | CES38 = 93 | CES63 = 93 | CES88 = 95 |
| CES14 = 74 | CES39 = 99 | CES64 = 92 | CES89 = 86 |
| CES15 = 72 | CES40 = 98 | CES65 = 89 | CES90 = 96 |
| CES16 = 48 | CES41 = 98 | CES66 = 90 | CES91 = 82 |
| CES17 = 50 | CES42 = 97 | CES67 = 89 | CES92 = 81 |
| CES18 = 57 | CES43 = 97 | CES68 = 90 | CES93 = 89 |
| CES19 = 72 | CES44 = 99 | CES69 = 92 | CES94 = 80 |
| CES20 = 67 | CES45 = 99 | CES70 = 89 | CES95 = 86 |
| CES21 = 86 | CES46 = 96 | CES71 = 87 | CES96 = 92 |
| CES22 = 79 | CES47 = 95 | CES72 = 95 | CES97 = 96 |
| CES23 = 92 | CES48 = 93 | CES73 = 85 | CES98 = 94 |
| CES24 = 91 | CES49 = 97 | CES74 = 93 | CES99 = 91 |
| CES25 = 72 | CES50 = 98 | CES75 = 88 |            |



**Color Rendition by Hue-Angle Bin**


**Measure Comparisons**



(END OF REPORT)