

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: P386838

Luminaire Tested: **GWC-SA2C-740-U-SLL-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P386838  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-27)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GWC-SA2C-740-U-SLL-HSS  
Description: GALLEON WALL LUMINAIRE  
(2) 70 CRI, 4000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT  
ELIMINATOR LEFT OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10942 lumens  
Efficiency: N/A  
Efficacy: 96.8 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B1 - U0 - G2

Input Watts (W): 113  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT

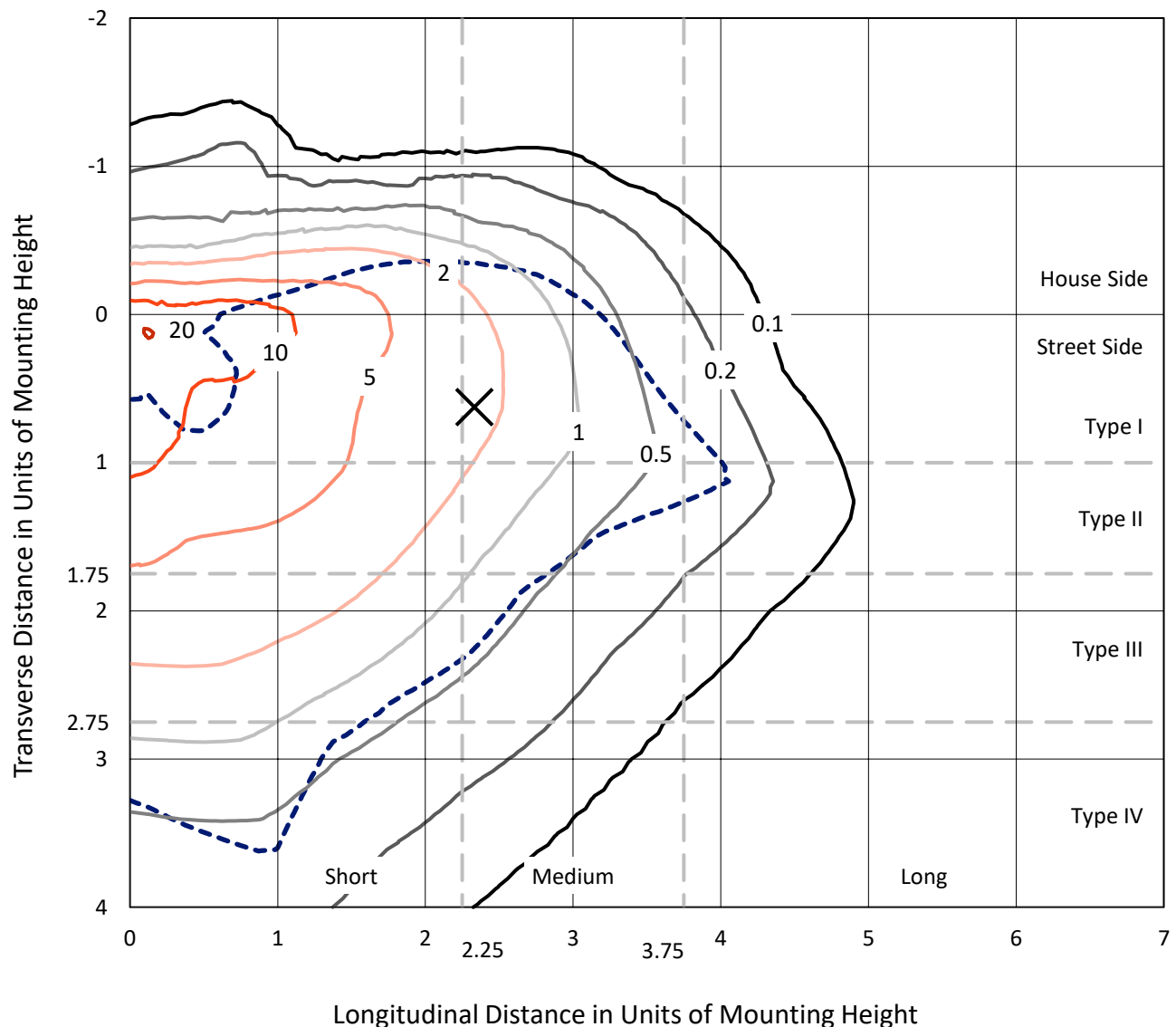


REPORT NUMBER: P386838

CATALOG NUMBER: GWC-SA2C-740-U-SLL-HSS

## Iso-Footcandle Lines of Horizontal Illumination

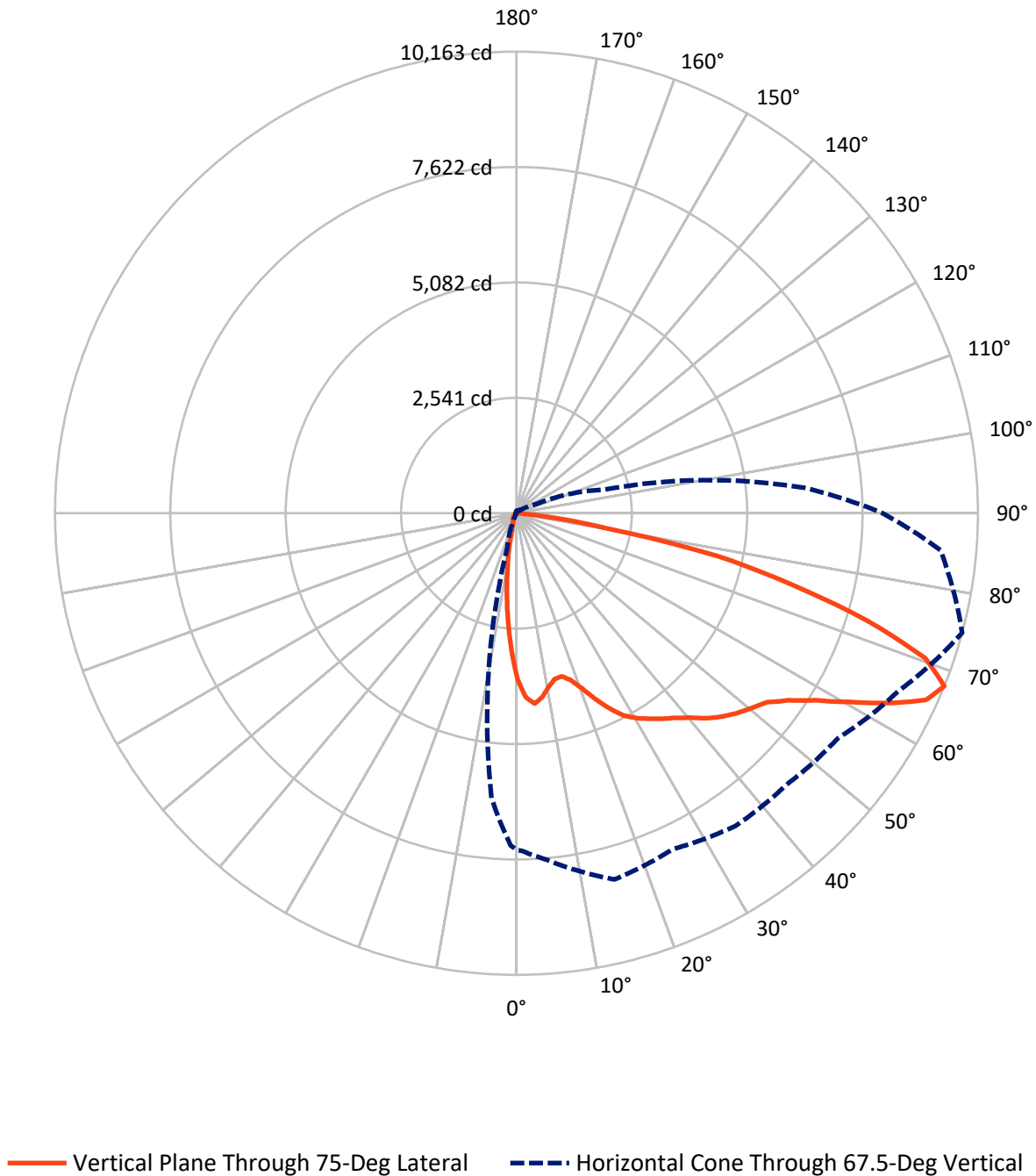
× Max cd  
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 21.1 fc  
 Type III - Medium - N/A

REPORT NUMBER: P386838  
CATALOG NUMBER: GWC-SA2C-740-U-SLL-HSS

## Luminous Intensity Polar Plot



REPORT NUMBER: P386838

CATALOG NUMBER: GWC-SA2C-740-U-SLL-HSS

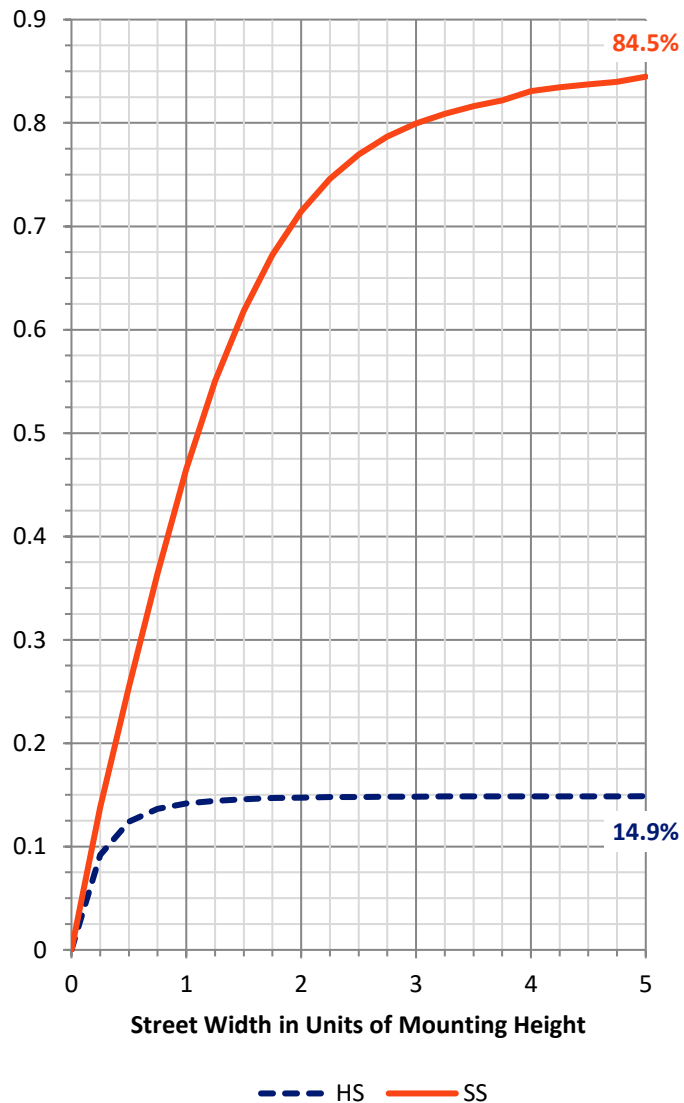
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 1642.0   | 0.0    | 1642.0  |
|                    | % Fixture | 15.0     | 0.0    | 15.0    |
| <b>Street Side</b> | Lumens    | 9300.0   | 0.0    | 9300.0  |
|                    | % Fixture | 85.0     | 0.0    | 85.0    |
| <b>Total</b>       | Lumens    | 10942.0  | 0.0    | 10942.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 278.5   | 2.5       |
| 10°-20°   | 548.3   | 5.0       |
| 20°-30°   | 775.7   | 7.1       |
| 30°-40°   | 1140.4  | 10.4      |
| 40°-50°   | 1639.2  | 15.0      |
| 50°-60°   | 2307.5  | 21.1      |
| 60°-70°   | 2695.0  | 24.6      |
| 70°-80°   | 1374.9  | 12.6      |
| 80°-90°   | 182.6   | 1.7       |
| 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°    | 10942.0 | 100.0     |
| 0°-180°   | 10942.0 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P386838

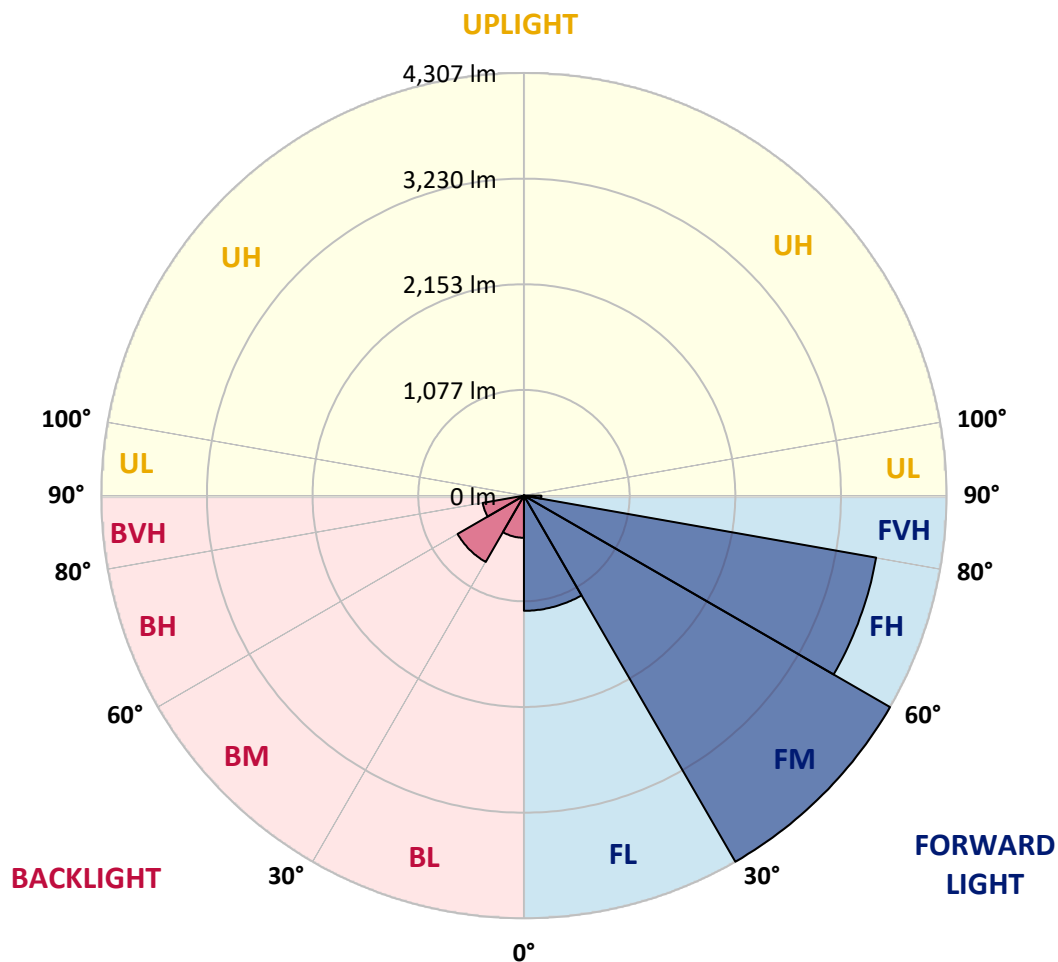
CATALOG NUMBER: GWC-SA2C-740-U-SLL-HSS

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

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 1173.0 | 10.7      |                         |      |         |
| FM   | (30°-60°)   | 4306.6 | 39.4      |                         |      |         |
| FH   | (60°-80°)   | 3643.4 | 33.3      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 177.1  | 1.6       |                         |      | G2/225  |
| BL   | (0°-30°)    | 429.4  | 3.9       | B1/500                  |      |         |
| BM   | (30°-60°)   | 780.5  | 7.1       | B1/1000                 |      |         |
| BH   | (60°-80°)   | 426.5  | 3.9       | B1/500                  |      | G1/500  |
| BVH  | (80°-90°)   | 5.5    | 0.1       |                         |      | G0/10   |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B1-U0-G2**

Type III Medium





REPORT NUMBER: P386838

CATALOG NUMBER: GWC-SA2C-740-U-SLL-HSS

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 1°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 75°     | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|--------|
| 0°    | 3670.9 | 3670.9 | 3670.9 | 3670.9 | 3670.9 | 3670.9 | 3670.9 | 3670.9 | 3670.9 | 3670.9  | 3670.9 |
| 2.5°  | 3979.3 | 3985.5 | 4017.6 | 4092.3 | 4173.6 | 4179.9 | 4234.8 | 4178.3 | 4159.1 | 4067.9  | 3973.6 |
| 5°    | 4009.3 | 4033.2 | 4143.6 | 4362.8 | 4553.1 | 4614.2 | 4657.8 | 4546.8 | 4430.2 | 4207.3  | 3969.4 |
| 7.5°  | 3767.3 | 3807.2 | 3980.8 | 4392.4 | 4732.4 | 4882.7 | 4911.2 | 4737.6 | 4452.0 | 4085.0  | 3727.4 |
| 10°   | 3457.3 | 3502.9 | 3712.3 | 4218.2 | 4685.2 | 4942.8 | 4982.2 | 4754.7 | 4344.2 | 3887.0  | 3465.6 |
| 12.5° | 3206.4 | 3259.8 | 3473.9 | 4022.3 | 4523.0 | 4808.1 | 4885.8 | 4697.2 | 4250.9 | 3746.5  | 3286.8 |
| 15°   | 3090.8 | 3152.0 | 3377.0 | 3895.8 | 4343.1 | 4567.6 | 4631.8 | 4550.5 | 4199.0 | 3724.2  | 3245.3 |
| 17.5° | 3157.2 | 3223.5 | 3455.7 | 3906.7 | 4174.2 | 4270.1 | 4321.9 | 4355.1 | 4199.0 | 3858.5  | 3366.6 |
| 20°   | 3429.3 | 3500.8 | 3746.5 | 4017.1 | 4034.2 | 3998.4 | 4053.9 | 4170.5 | 4247.8 | 4113.5  | 3657.9 |
| 22.5° | 3805.6 | 3889.6 | 4166.9 | 4206.3 | 3965.8 | 3830.5 | 3837.8 | 4020.7 | 4336.4 | 4437.0  | 4062.2 |
| 25°   | 4264.3 | 4367.0 | 4649.0 | 4488.3 | 3994.3 | 3730.5 | 3727.9 | 3897.4 | 4423.0 | 4760.9  | 4512.6 |
| 27.5° | 4720.0 | 4833.0 | 5080.7 | 4832.4 | 4112.0 | 3712.3 | 3707.1 | 3860.0 | 4507.4 | 5049.1  | 5004.5 |
| 30°   | 5102.0 | 5211.9 | 5425.4 | 5081.8 | 4238.9 | 3754.8 | 3729.9 | 3900.0 | 4557.7 | 5236.2  | 5363.2 |
| 32.5° | 5413.0 | 5501.1 | 5673.7 | 5253.3 | 4374.8 | 3837.2 | 3783.3 | 4006.7 | 4643.3 | 5394.3  | 5692.9 |
| 35°   | 5755.1 | 5847.9 | 5916.8 | 5416.6 | 4527.1 | 3955.9 | 3878.7 | 4176.2 | 4774.9 | 5555.0  | 6054.2 |
| 37.5° | 6145.4 | 6237.7 | 6229.4 | 5565.9 | 4720.5 | 4152.4 | 4103.1 | 4444.7 | 4979.7 | 5714.1  | 6457.4 |
| 40°   | 6527.4 | 6621.7 | 6554.4 | 5729.2 | 4947.5 | 4476.3 | 4440.1 | 4848.0 | 5253.9 | 5917.8  | 6930.1 |
| 42.5° | 6885.1 | 6987.2 | 6843.1 | 5883.6 | 5218.1 | 4884.8 | 4947.0 | 5367.4 | 5597.0 | 6168.7  | 7337.6 |
| 45°   | 7173.2 | 7277.4 | 7085.1 | 6033.9 | 5503.2 | 5380.3 | 5567.4 | 5942.7 | 6009.6 | 6380.7  | 7612.8 |
| 47.5° | 7382.7 | 7481.1 | 7253.1 | 6184.3 | 5868.1 | 5986.3 | 6312.3 | 6546.1 | 6382.3 | 6564.7  | 7808.2 |
| 50°   | 7516.4 | 7593.1 | 7302.3 | 6372.4 | 6347.0 | 6693.3 | 7088.2 | 7202.3 | 6733.2 | 6730.6  | 8045.6 |
| 52.5° | 7601.4 | 7636.1 | 7338.6 | 6568.9 | 6846.7 | 7463.0 | 7848.1 | 7883.9 | 7094.5 | 6913.0  | 8365.4 |
| 55°   | 7894.3 | 7922.2 | 7595.7 | 6806.8 | 7259.8 | 8137.4 | 8535.4 | 8502.3 | 7503.4 | 7270.2  | 8742.8 |
| 57.5° | 8393.9 | 8423.5 | 8127.0 | 7148.9 | 7594.1 | 8554.1 | 9033.6 | 9093.2 | 7982.9 | 7771.9  | 9147.1 |
| 60°   | 8644.8 | 8699.7 | 8594.0 | 7582.2 | 7918.1 | 8820.5 | 9373.1 | 9563.3 | 8582.1 | 8433.3  | 9538.9 |
| 62.5° | 8417.3 | 8497.1 | 8650.5 | 8062.7 | 8240.0 | 8967.2 | 9478.8 | 9731.8 | 9195.8 | 9204.1  | 9780.5 |
| 65°   | 7963.2 | 8026.9 | 8287.2 | 8326.0 | 8426.6 | 8949.1 | 9217.6 | 9496.4 | 9571.6 | 9912.1  | 9767.5 |
| 67.5° | 7414.8 | 7438.6 | 7659.4 | 8346.8 | 8156.0 | 8403.8 | 8432.8 | 8639.1 | 9274.6 | 10163.0 | 9375.1 |
| 70°   | 6625.4 | 6638.3 | 6831.1 | 7652.7 | 7008.9 | 7063.4 | 7020.3 | 7062.3 | 7973.6 | 9551.9  | 8384.6 |
| 72.5° | 5332.1 | 5364.8 | 5639.0 | 6355.3 | 5106.1 | 4949.1 | 5287.0 | 5268.4 | 6140.7 | 8070.0  | 6227.3 |
| 75°   | 3925.9 | 3982.4 | 4396.5 | 5119.1 | 3583.8 | 3241.7 | 3488.4 | 3554.2 | 4365.4 | 6242.3  | 3894.3 |
| 77.5° | 2748.7 | 2790.7 | 3191.9 | 3763.1 | 2593.8 | 2318.0 | 2228.8 | 2307.1 | 2881.4 | 4515.7  | 1961.9 |
| 80°   | 1583.5 | 1599.1 | 1855.1 | 2172.9 | 1747.8 | 1999.7 | 1811.6 | 1865.5 | 1726.6 | 2009.1  | 843.9  |
| 82.5° | 1036.2 | 1038.7 | 1138.8 | 1293.2 | 1088.5 | 1264.7 | 936.1  | 1196.8 | 1062.1 | 807.0   | 274.7  |
| 85°   | 559.8  | 562.9  | 660.4  | 918.0  | 616.3  | 348.3  | 204.7  | 420.4  | 656.7  | 185.0   | 75.2   |
| 87.5° | 61.7   | 56.5   | 199.0  | 333.8  | 171.1  | 31.6   | 10.9   | 47.2   | 105.2  | 11.9    | 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    |



REPORT NUMBER: P386838

CATALOG NUMBER: GWC-SA2C-740-U-SLL-HSS

**CANDELA DISTRIBUTION (continued):**

|       | 90°    | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 3670.9 | 3670.9 | 3670.9 | 3670.9 | 3670.9 | 3670.9 | 3670.9 | 3670.9 | 3670.9 | 3670.9 | 3670.9 |
| 2.5°  | 3925.4 | 3882.3 | 3775.0 | 3661.5 | 3570.3 | 3484.8 | 3398.7 | 3293.5 | 3212.1 | 3195.5 | 3168.6 |
| 5°    | 3841.4 | 3705.1 | 3480.1 | 3254.1 | 3072.2 | 2842.6 | 2696.9 | 2583.4 | 2472.5 | 2465.7 | 2443.4 |
| 7.5°  | 3548.0 | 3368.7 | 3052.0 | 2739.4 | 2483.3 | 2264.6 | 2043.8 | 1896.1 | 1780.0 | 1739.0 | 1714.7 |
| 10°   | 3266.0 | 3064.4 | 2668.9 | 2312.3 | 2083.7 | 1890.4 | 1734.9 | 1580.4 | 1440.5 | 1344.0 | 1300.5 |
| 12.5° | 3069.1 | 2846.2 | 2410.3 | 2102.9 | 1939.1 | 1755.6 | 1565.9 | 1373.1 | 1211.9 | 1095.8 | 1024.7 |
| 15°   | 2992.9 | 2755.0 | 2323.7 | 2020.0 | 1817.8 | 1585.6 | 1343.0 | 1122.7 | 943.9  | 838.7  | 774.9  |
| 17.5° | 3083.6 | 2806.8 | 2317.0 | 1918.9 | 1636.4 | 1347.7 | 1079.7 | 819.5  | 651.0  | 571.2  | 530.3  |
| 20°   | 3313.7 | 2971.6 | 2314.4 | 1795.0 | 1420.8 | 1065.7 | 731.4  | 539.1  | 437.0  | 392.4  | 373.2  |
| 22.5° | 3639.2 | 3182.1 | 2335.1 | 1672.7 | 1196.3 | 761.4  | 504.9  | 396.0  | 343.7  | 319.8  | 308.9  |
| 25°   | 4058.1 | 3477.5 | 2393.7 | 1561.7 | 985.4  | 568.1  | 393.4  | 331.7  | 294.9  | 276.3  | 268.5  |
| 27.5° | 4504.3 | 3817.5 | 2484.9 | 1465.3 | 813.8  | 453.0  | 336.9  | 284.0  | 257.6  | 244.7  | 237.4  |
| 30°   | 4872.4 | 4211.5 | 2577.2 | 1358.0 | 689.4  | 395.0  | 308.4  | 259.2  | 228.6  | 220.3  | 213.6  |
| 32.5° | 5194.2 | 4509.5 | 2642.5 | 1261.1 | 608.0  | 350.9  | 278.9  | 231.7  | 211.0  | 194.9  | 187.6  |
| 35°   | 5527.5 | 4757.8 | 2640.4 | 1193.2 | 552.0  | 317.7  | 254.0  | 207.3  | 182.5  | 163.8  | 158.1  |
| 37.5° | 5888.3 | 5038.2 | 2595.3 | 1135.2 | 527.7  | 291.3  | 240.0  | 194.4  | 169.5  | 150.8  | 143.6  |
| 40°   | 6310.7 | 5332.6 | 2549.2 | 1080.7 | 520.9  | 270.1  | 230.1  | 184.0  | 157.6  | 139.4  | 132.2  |
| 42.5° | 6722.3 | 5598.0 | 2508.7 | 1040.3 | 491.9  | 269.5  | 221.3  | 176.2  | 148.2  | 130.6  | 122.3  |
| 45°   | 7051.4 | 5845.3 | 2501.0 | 1015.9 | 461.3  | 278.9  | 216.7  | 171.1  | 141.0  | 123.4  | 115.6  |
| 47.5° | 7325.1 | 6113.8 | 2550.7 | 998.8  | 432.3  | 254.5  | 228.1  | 167.4  | 134.2  | 117.1  | 108.3  |
| 50°   | 7650.6 | 6443.4 | 2667.9 | 970.8  | 401.7  | 229.1  | 261.2  | 168.5  | 128.5  | 110.9  | 101.6  |
| 52.5° | 8104.7 | 6899.6 | 2840.0 | 923.7  | 359.7  | 205.8  | 257.1  | 169.5  | 122.3  | 104.2  | 94.9   |
| 55°   | 8613.7 | 7469.2 | 3025.0 | 845.4  | 301.2  | 175.2  | 220.3  | 162.2  | 110.4  | 96.9   | 88.1   |
| 57.5° | 9148.6 | 7986.0 | 3134.9 | 752.1  | 239.5  | 151.4  | 176.2  | 147.7  | 97.4   | 87.1   | 81.4   |
| 60°   | 9232.6 | 8182.4 | 3084.6 | 637.6  | 190.2  | 131.7  | 130.6  | 150.3  | 87.1   | 76.7   | 72.6   |
| 62.5° | 9023.7 | 7935.7 | 2841.5 | 535.4  | 159.1  | 115.6  | 107.3  | 131.1  | 78.8   | 68.4   | 64.3   |
| 65°   | 8622.0 | 7268.6 | 2447.6 | 482.6  | 147.7  | 99.0   | 89.2   | 92.3   | 68.9   | 59.6   | 56.0   |
| 67.5° | 8063.2 | 6378.1 | 2009.6 | 452.5  | 146.2  | 85.0   | 76.2   | 70.0   | 59.6   | 51.8   | 48.7   |
| 70°   | 6920.8 | 5313.5 | 1603.2 | 435.9  | 142.0  | 71.5   | 64.3   | 57.0   | 49.8   | 44.1   | 41.5   |
| 72.5° | 5093.7 | 3765.2 | 1247.1 | 417.8  | 143.1  | 57.0   | 56.0   | 47.2   | 39.9   | 34.2   | 33.2   |
| 75°   | 2943.1 | 2151.1 | 817.9  | 338.5  | 136.3  | 44.1   | 46.7   | 33.2   | 28.0   | 23.8   | 23.8   |
| 77.5° | 1568.5 | 1311.9 | 311.5  | 141.0  | 49.8   | 28.0   | 26.4   | 19.7   | 17.6   | 14.5   | 14.0   |
| 80°   | 683.7  | 577.4  | 93.8   | 39.4   | 27.5   | 15.0   | 9.8    | 8.8    | 7.8    | 6.2    | 5.7    |
| 82.5° | 242.1  | 208.9  | 30.6   | 19.2   | 11.9   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 85°   | 54.9   | 39.4   | 0.0    | 4.7    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 87.5° | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

REPORT NUMBER: P386838

CATALOG NUMBER: GWC-SA2C-740-U-SLL-HSS

**CANDELA DISTRIBUTION (continued):**

|       | 185°   | 195°   | 205°   | 215°   | 225°   | 235°   | 245°   | 255°   | 265°   | 270°   | 275°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 3670.9 | 3670.9 | 3670.9 | 3670.9 | 3670.9 | 3670.9 | 3670.9 | 3670.9 | 3670.9 | 3670.9 | 3670.9 |
| 2.5°  | 3113.6 | 3102.2 | 3034.9 | 3037.4 | 3049.4 | 3066.5 | 3026.0 | 3044.7 | 3095.0 | 3143.2 | 3161.3 |
| 5°    | 2407.7 | 2410.3 | 2369.3 | 2394.7 | 2417.5 | 2433.1 | 2367.8 | 2368.8 | 2408.7 | 2463.1 | 2491.6 |
| 7.5°  | 1696.5 | 1692.4 | 1694.4 | 1755.1 | 1798.1 | 1767.0 | 1791.4 | 1706.9 | 1712.1 | 1750.9 | 1721.9 |
| 10°   | 1261.1 | 1204.1 | 1172.0 | 1217.6 | 1264.7 | 1247.6 | 1205.6 | 1178.2 | 1197.4 | 1240.4 | 1237.3 |
| 12.5° | 991.1  | 909.2  | 861.0  | 828.3  | 867.2  | 835.0  | 834.0  | 810.2  | 784.2  | 788.9  | 857.8  |
| 15°   | 745.4  | 685.8  | 628.7  | 576.4  | 575.4  | 564.5  | 509.0  | 446.8  | 441.6  | 444.7  | 480.5  |
| 17.5° | 512.6  | 492.4  | 469.1  | 424.0  | 412.1  | 366.5  | 312.6  | 287.7  | 275.2  | 280.9  | 292.9  |
| 20°   | 360.2  | 352.5  | 355.1  | 330.7  | 313.6  | 270.1  | 238.4  | 228.6  | 226.5  | 232.2  | 237.9  |
| 22.5° | 298.6  | 284.6  | 283.0  | 272.1  | 255.0  | 223.4  | 206.3  | 200.6  | 198.0  | 203.2  | 207.3  |
| 25°   | 261.2  | 247.2  | 241.5  | 234.8  | 216.7  | 194.9  | 184.5  | 179.3  | 176.8  | 179.9  | 182.5  |
| 27.5° | 230.1  | 217.2  | 212.0  | 207.3  | 189.7  | 174.2  | 165.9  | 161.2  | 159.1  | 160.2  | 162.8  |
| 30°   | 206.8  | 195.4  | 188.7  | 183.0  | 167.9  | 157.1  | 149.8  | 145.1  | 143.1  | 143.1  | 145.7  |
| 32.5° | 182.5  | 176.2  | 170.0  | 162.8  | 148.8  | 141.5  | 134.2  | 129.1  | 127.0  | 127.5  | 129.6  |
| 35°   | 151.9  | 149.8  | 151.4  | 144.6  | 132.7  | 126.5  | 119.2  | 113.5  | 112.0  | 112.5  | 114.6  |
| 37.5° | 134.8  | 125.4  | 131.1  | 127.5  | 120.8  | 112.5  | 103.1  | 98.0   | 95.4   | 96.9   | 98.0   |
| 40°   | 123.9  | 112.5  | 108.3  | 112.0  | 110.9  | 97.4   | 89.2   | 84.0   | 81.9   | 82.4   | 83.5   |
| 42.5° | 114.6  | 101.1  | 91.7   | 91.2   | 97.4   | 85.0   | 76.2   | 71.5   | 68.9   | 68.9   | 70.0   |
| 45°   | 105.7  | 91.2   | 79.8   | 71.0   | 81.9   | 72.0   | 63.8   | 59.6   | 56.5   | 56.5   | 57.0   |
| 47.5° | 99.0   | 82.9   | 69.5   | 58.1   | 61.7   | 59.1   | 52.4   | 48.2   | 45.1   | 45.1   | 45.6   |
| 50°   | 92.8   | 74.6   | 60.1   | 48.7   | 46.1   | 48.7   | 42.5   | 37.8   | 35.8   | 35.2   | 36.3   |
| 52.5° | 86.0   | 66.3   | 51.3   | 41.5   | 36.3   | 36.8   | 33.2   | 30.1   | 27.5   | 27.5   | 28.5   |
| 55°   | 79.3   | 59.6   | 44.6   | 35.2   | 30.1   | 27.5   | 26.4   | 24.4   | 22.3   | 22.3   | 23.3   |
| 57.5° | 72.6   | 52.4   | 37.8   | 29.0   | 23.8   | 21.8   | 21.8   | 20.2   | 18.7   | 18.7   | 19.7   |
| 60°   | 66.3   | 45.1   | 31.1   | 23.8   | 18.7   | 18.1   | 18.7   | 17.1   | 16.1   | 16.1   | 17.1   |
| 62.5° | 59.1   | 38.4   | 25.4   | 19.7   | 15.0   | 14.5   | 16.1   | 15.0   | 14.0   | 14.0   | 15.0   |
| 65°   | 50.3   | 32.7   | 20.2   | 15.0   | 11.4   | 11.4   | 13.5   | 12.4   | 11.4   | 11.4   | 12.4   |
| 67.5° | 42.5   | 27.5   | 15.6   | 10.9   | 8.3    | 8.8    | 11.4   | 10.4   | 9.8    | 9.8    | 10.9   |
| 70°   | 35.2   | 21.3   | 10.9   | 6.7    | 4.7    | 6.7    | 8.8    | 8.8    | 8.8    | 8.8    | 9.8    |
| 72.5° | 26.4   | 14.5   | 6.2    | 2.6    | 2.1    | 4.7    | 7.3    | 8.3    | 7.8    | 7.8    | 9.3    |
| 75°   | 17.1   | 8.3    | 2.1    | 0.0    | 0.0    | 2.6    | 5.7    | 6.7    | 6.7    | 6.2    | 7.8    |
| 77.5° | 9.8    | 2.6    | 0.0    | 0.0    | 0.0    | 0.0    | 3.6    | 3.1    | 2.6    | 2.1    | 3.6    |
| 80°   | 2.6    | 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    | 0.0    | 0.0    |
| 87.5° | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

REPORT NUMBER: P386838

CATALOG NUMBER: GWC-SA2C-740-U-SLL-HSS

**CANDELA DISTRIBUTION (continued):**

|       | 285°   | 295°   | 305°   | 315°   | 325°   | 335°   | 345°   | 355°   | 359°   | 360°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 3670.9 | 3670.9 | 3670.9 | 3670.9 | 3670.9 | 3670.9 | 3670.9 | 3670.9 | 3670.9 | 3670.9 |
| 2.5°  | 3234.4 | 3295.6 | 3381.6 | 3472.8 | 3613.3 | 3724.8 | 3834.1 | 3927.9 | 3964.2 | 3979.3 |
| 5°    | 2560.1 | 2649.7 | 2775.7 | 2937.4 | 3190.9 | 3418.9 | 3650.1 | 3882.9 | 3983.9 | 4009.3 |
| 7.5°  | 1837.0 | 1951.5 | 2111.7 | 2314.4 | 2611.4 | 2906.8 | 3229.8 | 3571.3 | 3727.9 | 3767.3 |
| 10°   | 1359.6 | 1499.5 | 1683.0 | 1896.6 | 2180.1 | 2483.9 | 2835.8 | 3226.1 | 3404.9 | 3457.3 |
| 12.5° | 964.6  | 1153.8 | 1399.5 | 1659.2 | 1904.9 | 2176.0 | 2532.1 | 2962.3 | 3149.9 | 3206.4 |
| 15°   | 566.5  | 749.5  | 1040.3 | 1388.1 | 1702.7 | 1977.5 | 2339.2 | 2827.0 | 3033.8 | 3090.8 |
| 17.5° | 325.0  | 416.2  | 636.0  | 1023.7 | 1450.8 | 1831.3 | 2278.6 | 2860.7 | 3104.3 | 3157.2 |
| 20°   | 248.3  | 277.3  | 366.5  | 659.3  | 1156.4 | 1687.7 | 2278.6 | 3051.4 | 3351.6 | 3429.3 |
| 22.5° | 217.2  | 238.4  | 274.7  | 393.4  | 851.1  | 1533.8 | 2305.0 | 3327.2 | 3719.6 | 3805.6 |
| 25°   | 192.8  | 212.0  | 243.1  | 296.0  | 580.5  | 1350.8 | 2367.8 | 3665.7 | 4152.9 | 4264.3 |
| 27.5° | 172.6  | 190.7  | 218.7  | 259.2  | 397.0  | 1130.0 | 2452.2 | 4062.7 | 4630.8 | 4720.0 |
| 30°   | 154.5  | 171.6  | 197.0  | 225.5  | 306.3  | 879.6  | 2524.3 | 4437.0 | 5006.1 | 5102.0 |
| 32.5° | 137.4  | 152.9  | 175.7  | 197.0  | 250.9  | 650.5  | 2532.1 | 4733.4 | 5317.6 | 5413.0 |
| 35°   | 121.3  | 135.3  | 156.0  | 172.6  | 207.9  | 513.7  | 2411.3 | 4990.5 | 5629.1 | 5755.1 |
| 37.5° | 105.7  | 119.2  | 137.4  | 149.8  | 183.0  | 418.8  | 2226.8 | 5277.2 | 6028.8 | 6145.4 |
| 40°   | 91.2   | 103.1  | 121.8  | 130.1  | 173.1  | 321.9  | 2026.2 | 5577.8 | 6420.6 | 6527.4 |
| 42.5° | 77.8   | 89.2   | 107.3  | 123.4  | 151.9  | 240.5  | 1809.5 | 5859.8 | 6773.1 | 6885.1 |
| 45°   | 64.8   | 76.7   | 94.9   | 130.6  | 126.0  | 179.9  | 1577.8 | 6046.9 | 7051.4 | 7173.2 |
| 47.5° | 52.4   | 65.8   | 90.7   | 124.4  | 100.6  | 132.2  | 1394.3 | 6224.2 | 7262.4 | 7382.7 |
| 50°   | 42.0   | 55.5   | 102.1  | 110.9  | 82.4   | 101.1  | 1317.6 | 6382.8 | 7400.8 | 7516.4 |
| 52.5° | 34.2   | 46.7   | 96.4   | 85.0   | 68.9   | 83.5   | 1359.1 | 6639.9 | 7528.8 | 7601.4 |
| 55°   | 28.5   | 36.8   | 58.1   | 59.1   | 58.6   | 71.0   | 1410.4 | 7008.9 | 7860.0 | 7894.3 |
| 57.5° | 24.9   | 29.5   | 40.4   | 45.6   | 49.2   | 63.2   | 1411.4 | 7538.7 | 8372.7 | 8393.9 |
| 60°   | 21.3   | 25.9   | 33.7   | 36.8   | 42.5   | 56.5   | 1360.1 | 7723.7 | 8574.3 | 8644.8 |
| 62.5° | 18.7   | 22.8   | 28.0   | 30.6   | 35.8   | 50.8   | 1239.9 | 7455.7 | 8297.5 | 8417.3 |
| 65°   | 16.6   | 20.7   | 23.3   | 25.9   | 31.6   | 45.6   | 1041.9 | 6919.8 | 7838.3 | 7963.2 |
| 67.5° | 14.5   | 18.1   | 20.7   | 23.3   | 28.5   | 40.4   | 767.1  | 6297.3 | 7311.1 | 7414.8 |
| 70°   | 13.0   | 16.1   | 18.7   | 20.7   | 24.9   | 34.2   | 465.5  | 5343.5 | 6582.3 | 6625.4 |
| 72.5° | 12.4   | 14.5   | 17.1   | 18.7   | 21.8   | 30.1   | 235.8  | 3926.9 | 5262.1 | 5332.1 |
| 75°   | 10.9   | 13.0   | 15.6   | 16.6   | 19.2   | 25.9   | 95.9   | 2579.2 | 3813.4 | 3925.9 |
| 77.5° | 8.8    | 11.9   | 14.0   | 15.0   | 16.6   | 21.3   | 48.7   | 1648.3 | 2676.2 | 2748.7 |
| 80°   | 3.1    | 8.8    | 11.9   | 12.4   | 14.0   | 15.6   | 32.1   | 902.4  | 1552.4 | 1583.5 |
| 82.5° | 0.0    | 5.7    | 9.3    | 8.8    | 9.8    | 11.9   | 20.7   | 429.2  | 1024.7 | 1036.2 |
| 85°   | 0.0    | 2.6    | 7.3    | 5.7    | 4.1    | 8.3    | 7.3    | 93.8   | 537.5  | 559.8  |
| 87.5° | 0.0    | 0.0    | 0.5    | 2.6    | 2.1    | 3.1    | 1.0    | 0.5    | 48.7   | 61.7   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

INVUE

Report Number: SP1-2104-224-3

Luminaire Tested: CCW-SA-2A-740-U-SL4

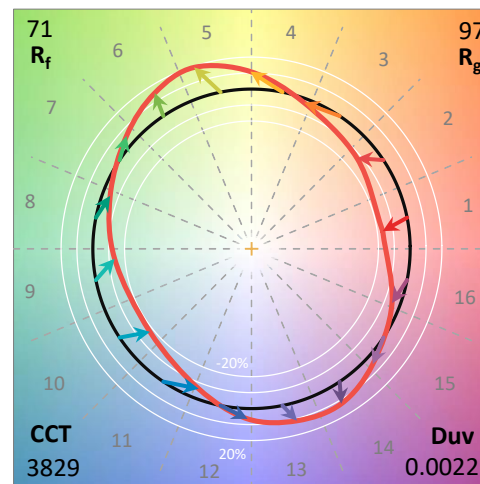
Test Date: 04/26/2021

### Test Information

Test Method: LM-79-08  
 Report Number: SP1-2104-224-3  
 Test Lab: COOPER LIGHTING SOLUTIONS  
 Photometer: SP1  
 Measurement Geometry:  $4\pi$   
 Issue Date: 04/26/2021  
 Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
 Product Line: INVUE  
 Catalog Number: **CCW-SA-2A-740-U-SL4**  
 Description: INVUE WALL PACK ClearCurve Light Square

### Spectral Parameters

|                           |        |           |      |      |       |
|---------------------------|--------|-----------|------|------|-------|
| CCT (K):                  | 3829   | CRI (Ra): | 69.8 |      |       |
| CIE u':                   | 0.2271 | R1:       | 67.2 | R9:  | -35.1 |
| CIE v':                   | 0.5076 | R2:       | 75.2 | R10: | 43.1  |
| Duv:                      | 0.0022 | R3:       | 83.2 | R11: | 69.0  |
| CIE x:                    | 0.3900 | R4:       | 71.0 | R12: | 44.3  |
| CIE y:                    | 0.3873 | R5:       | 67.4 | R13: | 67.6  |
| CIE z:                    | 0.2227 | R6:       | 66.8 | R14: | 90.3  |
| Peak Wavelength (nm):     | 440    | R7:       | 77.6 |      |       |
| Dominant Wavelength (nm): | 578    | R8:       | 50.3 |      |       |
| Purity:                   | 33.4   |           |      |      |       |
| Rf:                       | 70.6   |           |      |      |       |
| Rg:                       | 96.7   |           |      |      |       |



### Test Conditions

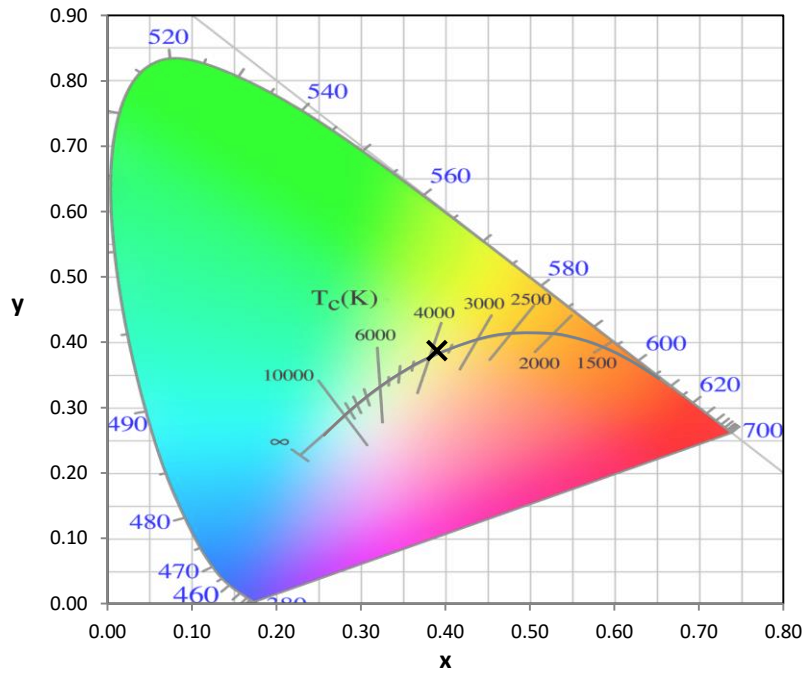
Stabilization Time: 62M  
 Operation Time: 12H  
 Room Temperature (°C) / RH%: 24.8/39%  
 Sphere Temperature (°C): 24.2

REPORT NUMBER: SP1-2104-224-3

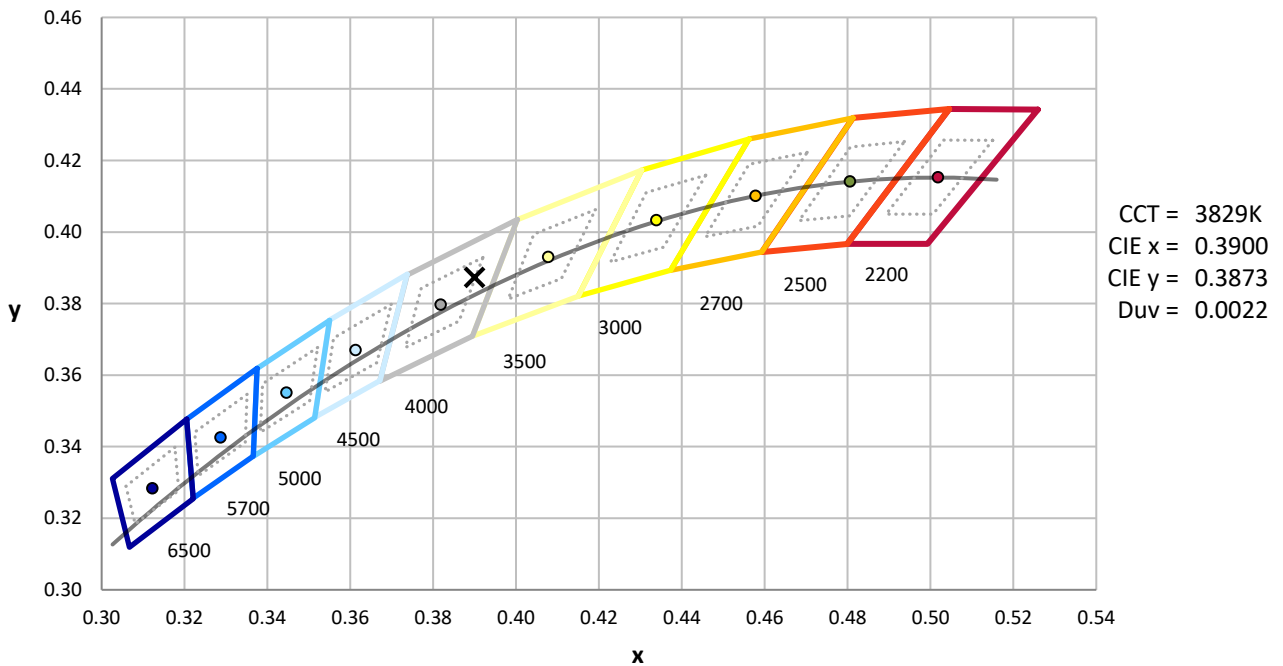
| Measurement and Test Equipment |                       |                  |                      |
|--------------------------------|-----------------------|------------------|----------------------|
| Instrument                     | Identification Number | Calibration Date | Calibration Due Date |
| Photometer                     | IN0058                | 1/31/2021        | 7/31/2021            |
| Power Meter                    | IN0071                | 12/1/2020        | 12/1/2021            |
| AC Power Source                | IN0063                | 12/1/2020        | 12/1/2021            |
| DC Power Source                | IN0208                | 12/1/2020        | 12/1/2021            |
| Sphere Thermometer             | IN0085                | 12/1/2020        | 12/1/2021            |
| Room Thermometer               | IN0046                | 12/1/2020        | 12/1/2021            |

REPORT NUMBER: SP1-2104-224-3

**CIE 1931 Chromaticity Diagram**



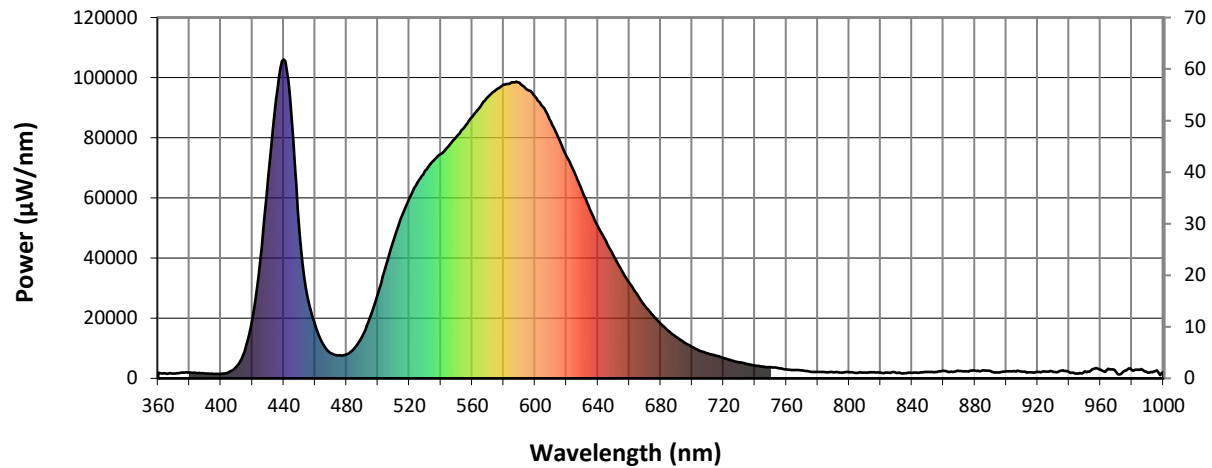
**CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles**



Point lies inside the ANSI 4000K 7-step quadrangle

REPORT NUMBER: SP1-2104-224-3

### Photopic Flux vs. Wavelength

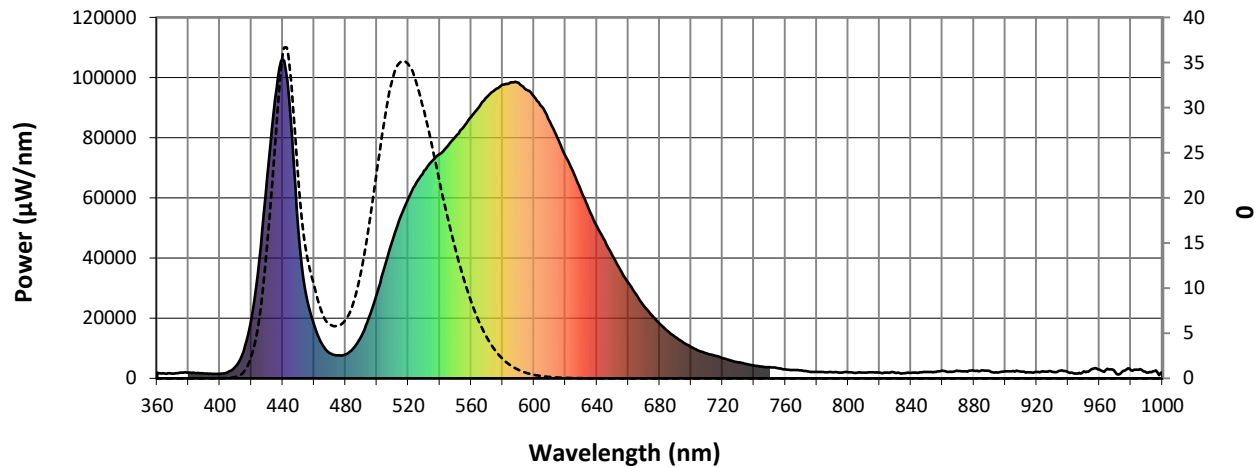


#####

| λ<br>(nm) | Power<br>(μW/nm) | Lumens<br>(Φ/nm) | λ<br>(nm) | Power<br>(μW/nm) | Lumens<br>(Φ/nm) | λ<br>(nm) | Power<br>(μW/nm) | Lumens<br>(Φ/nm) | λ<br>(nm) | Power<br>(μW/nm) | Lumens<br>(Φ/nm) | λ<br>(nm) | Power<br>(μW/nm) | Lumens<br>(Φ/nm) |
|-----------|------------------|------------------|-----------|------------------|------------------|-----------|------------------|------------------|-----------|------------------|------------------|-----------|------------------|------------------|
| 360       | 1901             | 0.0              | 490       | 14057            | 2.0              | 620       | 73853            | 19.2             | 750       | 3678             | 0.0              | 880       | 2528             | 0.0              |
| 365       | 1585             | 0.0              | 495       | 20304            | 3.7              | 625       | 68653            | 15.1             | 755       | 3385             | 0.0              | 885       | 2638             | 0.0              |
| 370       | 1604             | 0.0              | 500       | 28346            | 6.3              | 630       | 62254            | 11.3             | 760       | 2963             | 0.0              | 890       | 2417             | 0.0              |
| 375       | 1905             | 0.0              | 505       | 37228            | 10.4             | 635       | 56177            | 8.4              | 765       | 2782             | 0.0              | 895       | 1902             | 0.0              |
| 380       | 1882             | 0.0              | 510       | 46037            | 15.8             | 640       | 50521            | 6.0              | 770       | 2657             | 0.0              | 900       | 2330             | 0.0              |
| 385       | 1693             | 0.0              | 515       | 53619            | 22.2             | 645       | 45727            | 4.4              | 775       | 2259             | 0.0              | 905       | 2456             | 0.0              |
| 390       | 1640             | 0.0              | 520       | 59890            | 29.0             | 650       | 40814            | 3.0              | 780       | 2169             | 0.0              | 910       | 2205             | 0.0              |
| 395       | 1513             | 0.0              | 525       | 64946            | 34.9             | 655       | 35925            | 2.1              | 785       | 2065             | 0.0              | 915       | 2002             | 0.0              |
| 400       | 1481             | 0.0              | 530       | 69048            | 40.7             | 660       | 31824            | 1.3              | 790       | 2054             | 0.0              | 920       | 2125             | 0.0              |
| 405       | 2044             | 0.0              | 535       | 72246            | 44.8             | 665       | 27860            | 0.9              | 795       | 1908             | 0.0              | 925       | 2266             | 0.0              |
| 410       | 3966             | 0.0              | 540       | 74621            | 48.6             | 670       | 24069            | 0.5              | 800       | 2026             | 0.0              | 930       | 2159             | 0.0              |
| 415       | 8943             | 0.0              | 545       | 77288            | 51.4             | 675       | 20926            | 0.4              | 805       | 1766             | 0.0              | 935       | 2581             | 0.0              |
| 420       | 19566            | 0.1              | 550       | 80334            | 54.6             | 680       | 18170            | 0.2              | 810       | 1913             | 0.0              | 940       | 2052             | 0.0              |
| 425       | 39243            | 0.2              | 555       | 83561            | 57.1             | 685       | 15785            | 0.1              | 815       | 2019             | 0.0              | 945       | 1631             | 0.0              |
| 430       | 66113            | 0.5              | 560       | 86964            | 59.1             | 690       | 13770            | 0.1              | 820       | 1876             | 0.0              | 950       | 2301             | 0.0              |
| 435       | 92550            | 1.1              | 565       | 90264            | 60.0             | 695       | 11953            | 0.1              | 825       | 1869             | 0.0              | 955       | 3077             | 0.0              |
| 440       | 106034           | 1.7              | 570       | 93519            | 60.8             | 700       | 10452            | 0.0              | 830       | 1862             | 0.0              | 960       | 2911             | 0.0              |
| 445       | 86383            | 1.8              | 575       | 95920            | 59.7             | 705       | 9162             | 0.0              | 835       | 1663             | 0.0              | 965       | 3163             | 0.0              |
| 450       | 49216            | 1.3              | 580       | 97650            | 58.0             | 710       | 8266             | 0.0              | 840       | 1843             | 0.0              | 970       | 1995             | 0.0              |
| 455       | 27376            | 0.9              | 585       | 98486            | 54.7             | 715       | 7583             | 0.0              | 845       | 1921             | 0.0              | 975       | 2418             | 0.0              |
| 460       | 17830            | 0.7              | 590       | 98332            | 50.8             | 720       | 6750             | 0.0              | 850       | 2105             | 0.0              | 980       | 2674             | 0.0              |
| 465       | 11374            | 0.6              | 595       | 96023            | 45.5             | 725       | 5965             | 0.0              | 855       | 2096             | 0.0              | 985       | 2850             | 0.0              |
| 470       | 8344             | 0.5              | 600       | 93650            | 40.4             | 730       | 5310             | 0.0              | 860       | 2601             | 0.0              | 990       | 1972             | 0.0              |
| 475       | 7639             | 0.6              | 605       | 90313            | 35.0             | 735       | 4838             | 0.0              | 865       | 2199             | 0.0              | 995       | 2443             | 0.0              |
| 480       | 7991             | 0.8              | 610       | 85305            | 29.3             | 740       | 4280             | 0.0              | 870       | 2491             | 0.0              | 1000      | 1979             | 0.0              |
| 485       | 9994             | 1.2              | 615       | 79870            | 24.1             | 745       | 3928             | 0.0              | 875       | 2370             | 0.0              |           |                  |                  |

REPORT NUMBER: SP1-2104-224-3

### Scotopic Flux vs. Wavelength



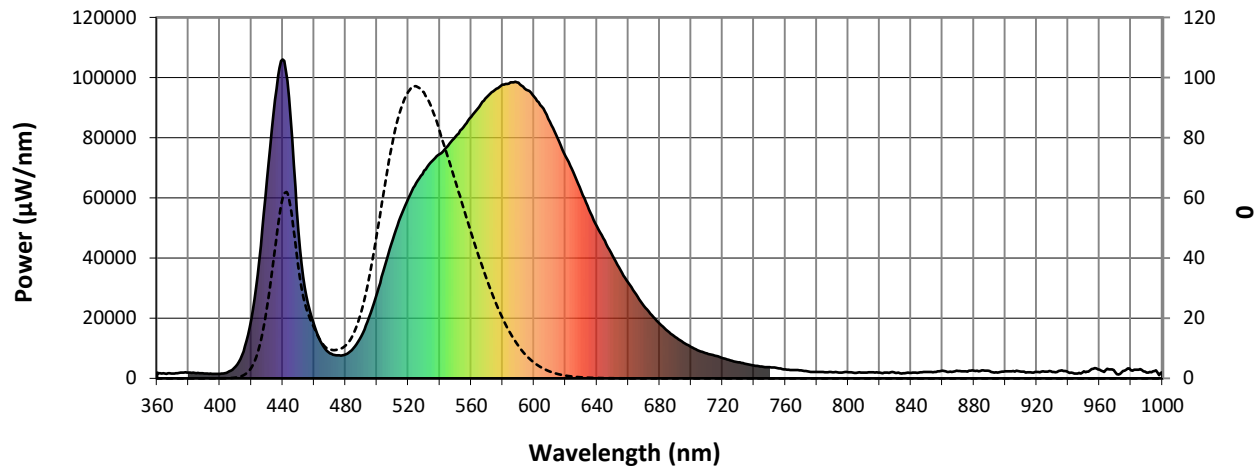
Scotopic Lumens: 7682.8

S/P: 1.42

| λ<br>(nm) | Power<br>(μW/nm) | Lumens<br>(Φ/nm) | λ<br>(nm) | Power<br>(μW/nm) | Lumens<br>(Φ/nm) | λ<br>(nm) | Power<br>(μW/nm) | Lumens<br>(Φ/nm) | λ<br>(nm) | Power<br>(μW/nm) | Lumens<br>(Φ/nm) | λ<br>(nm) | Power<br>(μW/nm) | Lumens<br>(Φ/nm) |
|-----------|------------------|------------------|-----------|------------------|------------------|-----------|------------------|------------------|-----------|------------------|------------------|-----------|------------------|------------------|
| 360       | 1901             | 0.0              | 490       | 14057            | 21.6             | 620       | 73853            | 0.9              | 750       | 3678             | 0.0              | 880       | 2528             | 0.0              |
| 365       | 1585             | 0.0              | 495       | 20304            | 32.8             | 625       | 68653            | 0.6              | 755       | 3385             | 0.0              | 885       | 2638             | 0.0              |
| 370       | 1604             | 0.0              | 500       | 28346            | 47.4             | 630       | 62254            | 0.4              | 760       | 2963             | 0.0              | 890       | 2417             | 0.0              |
| 375       | 1905             | 0.0              | 505       | 37228            | 63.3             | 635       | 56177            | 0.2              | 765       | 2782             | 0.0              | 895       | 1902             | 0.0              |
| 380       | 1882             | 0.0              | 510       | 46037            | 78.0             | 640       | 50521            | 0.1              | 770       | 2657             | 0.0              | 900       | 2330             | 0.0              |
| 385       | 1693             | 0.0              | 515       | 53619            | 88.9             | 645       | 45727            | 0.1              | 775       | 2259             | 0.0              | 905       | 2456             | 0.0              |
| 390       | 1640             | 0.0              | 520       | 59890            | 95.2             | 650       | 40814            | 0.0              | 780       | 2169             | 0.0              | 910       | 2205             | 0.0              |
| 395       | 1513             | 0.0              | 525       | 64946            | 97.2             | 655       | 35925            | 0.0              | 785       | 2065             | 0.0              | 915       | 2002             | 0.0              |
| 400       | 1481             | 0.0              | 530       | 69048            | 95.2             | 660       | 31824            | 0.0              | 790       | 2054             | 0.0              | 920       | 2125             | 0.0              |
| 405       | 2044             | 0.1              | 535       | 72246            | 90.0             | 665       | 27860            | 0.0              | 795       | 1908             | 0.0              | 925       | 2266             | 0.0              |
| 410       | 3966             | 0.2              | 540       | 74621            | 82.5             | 670       | 24069            | 0.0              | 800       | 2026             | 0.0              | 930       | 2159             | 0.0              |
| 415       | 8943             | 0.9              | 545       | 77288            | 74.1             | 675       | 20926            | 0.0              | 805       | 1766             | 0.0              | 935       | 2581             | 0.0              |
| 420       | 19566            | 3.2              | 550       | 80334            | 65.7             | 680       | 18170            | 0.0              | 810       | 1913             | 0.0              | 940       | 2052             | 0.0              |
| 425       | 39243            | 9.6              | 555       | 83561            | 57.1             | 685       | 15785            | 0.0              | 815       | 2019             | 0.0              | 945       | 1631             | 0.0              |
| 430       | 66113            | 22.5             | 560       | 86964            | 48.6             | 690       | 13770            | 0.0              | 820       | 1876             | 0.0              | 950       | 2301             | 0.0              |
| 435       | 92550            | 41.4             | 565       | 90264            | 40.5             | 695       | 11953            | 0.0              | 825       | 1869             | 0.0              | 955       | 3077             | 0.0              |
| 440       | 106034           | 59.3             | 570       | 93519            | 33.0             | 700       | 10452            | 0.0              | 830       | 1862             | 0.0              | 960       | 2911             | 0.0              |
| 445       | 86383            | 57.8             | 575       | 95920            | 26.1             | 705       | 9162             | 0.0              | 835       | 1663             | 0.0              | 965       | 3163             | 0.0              |
| 450       | 49216            | 38.1             | 580       | 97650            | 20.1             | 710       | 8266             | 0.0              | 840       | 1843             | 0.0              | 970       | 1995             | 0.0              |
| 455       | 27376            | 23.9             | 585       | 98486            | 15.1             | 715       | 7583             | 0.0              | 845       | 1921             | 0.0              | 975       | 2418             | 0.0              |
| 460       | 17830            | 17.2             | 590       | 98332            | 10.9             | 720       | 6750             | 0.0              | 850       | 2105             | 0.0              | 980       | 2674             | 0.0              |
| 465       | 11374            | 12.0             | 595       | 96023            | 7.7              | 725       | 5965             | 0.0              | 855       | 2096             | 0.0              | 985       | 2850             | 0.0              |
| 470       | 8344             | 9.6              | 600       | 93650            | 5.3              | 730       | 5310             | 0.0              | 860       | 2601             | 0.0              | 990       | 1972             | 0.0              |
| 475       | 7639             | 9.6              | 605       | 90313            | 3.5              | 735       | 4838             | 0.0              | 865       | 2199             | 0.0              | 995       | 2443             | 0.0              |
| 480       | 7991             | 10.8             | 610       | 85305            | 2.3              | 740       | 4280             | 0.0              | 870       | 2491             | 0.0              | 1000      | 1979             | 0.0              |
| 485       | 9994             | 14.5             | 615       | 79870            | 1.5              | 745       | 3928             | 0.0              | 875       | 2370             | 0.0              |           |                  |                  |

REPORT NUMBER: SP1-2104-224-3

### Melanopic Flux vs. Wavelength



**Melanopic Lumens: 2823**

**M/P: 0.52**

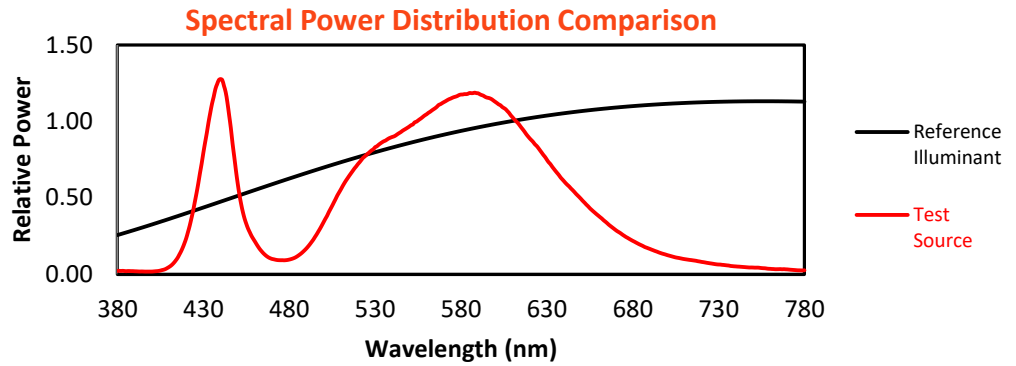
| λ<br>(nm) | Power<br>(μW/nm) | Lumens<br>(Φ/nm) | λ<br>(nm) | Power<br>(μW/nm) | Lumens<br>(Φ/nm) | λ<br>(nm) | Power<br>(μW/nm) | Lumens<br>(Φ/nm) | λ<br>(nm) | Power<br>(μW/nm) | Lumens<br>(Φ/nm) | λ<br>(nm) | Power<br>(μW/nm) | Lumens<br>(Φ/nm) |
|-----------|------------------|------------------|-----------|------------------|------------------|-----------|------------------|------------------|-----------|------------------|------------------|-----------|------------------|------------------|
| 360       | 1901             | 0.0              | 490       | 14057            | 11.7             | 620       | 73853            | 0.1              | 750       | 3678             | 0.0              | 880       | 2528             | 0.0              |
| 365       | 1585             | 0.0              | 495       | 20304            | 16.8             | 625       | 68653            | 0.0              | 755       | 3385             | 0.0              | 885       | 2638             | 0.0              |
| 370       | 1604             | 0.0              | 500       | 28346            | 22.8             | 630       | 62254            | 0.0              | 760       | 2963             | 0.0              | 890       | 2417             | 0.0              |
| 375       | 1905             | 0.0              | 505       | 37228            | 28.6             | 635       | 56177            | 0.0              | 765       | 2782             | 0.0              | 895       | 1902             | 0.0              |
| 380       | 1882             | 0.0              | 510       | 46037            | 33.1             | 640       | 50521            | 0.0              | 770       | 2657             | 0.0              | 900       | 2330             | 0.0              |
| 385       | 1693             | 0.0              | 515       | 53619            | 35.0             | 645       | 45727            | 0.0              | 775       | 2259             | 0.0              | 905       | 2456             | 0.0              |
| 390       | 1640             | 0.0              | 520       | 59890            | 34.9             | 650       | 40814            | 0.0              | 780       | 2169             | 0.0              | 910       | 2205             | 0.0              |
| 395       | 1513             | 0.0              | 525       | 64946            | 32.9             | 655       | 35925            | 0.0              | 785       | 2065             | 0.0              | 915       | 2002             | 0.0              |
| 400       | 1481             | 0.0              | 530       | 69048            | 29.8             | 660       | 31824            | 0.0              | 790       | 2054             | 0.0              | 920       | 2125             | 0.0              |
| 405       | 2044             | 0.0              | 535       | 72246            | 26.0             | 665       | 27860            | 0.0              | 795       | 1908             | 0.0              | 925       | 2266             | 0.0              |
| 410       | 3966             | 0.2              | 540       | 74621            | 21.8             | 670       | 24069            | 0.0              | 800       | 2026             | 0.0              | 930       | 2159             | 0.0              |
| 415       | 8943             | 0.6              | 545       | 77288            | 18.0             | 675       | 20926            | 0.0              | 805       | 1766             | 0.0              | 935       | 2581             | 0.0              |
| 420       | 19566            | 2.2              | 550       | 80334            | 14.4             | 680       | 18170            | 0.0              | 810       | 1913             | 0.0              | 940       | 2052             | 0.0              |
| 425       | 39243            | 6.1              | 555       | 83561            | 11.3             | 685       | 15785            | 0.0              | 815       | 2019             | 0.0              | 945       | 1631             | 0.0              |
| 430       | 66113            | 14.0             | 560       | 86964            | 8.6              | 690       | 13770            | 0.0              | 820       | 1876             | 0.0              | 950       | 2301             | 0.0              |
| 435       | 92550            | 24.7             | 565       | 90264            | 6.3              | 695       | 11953            | 0.0              | 825       | 1869             | 0.0              | 955       | 3077             | 0.0              |
| 440       | 106034           | 35.4             | 570       | 93519            | 4.6              | 700       | 10452            | 0.0              | 830       | 1862             | 0.0              | 960       | 2911             | 0.0              |
| 445       | 86383            | 34.1             | 575       | 95920            | 3.2              | 705       | 9162             | 0.0              | 835       | 1663             | 0.0              | 965       | 3163             | 0.0              |
| 450       | 49216            | 22.7             | 580       | 97650            | 2.2              | 710       | 8266             | 0.0              | 840       | 1843             | 0.0              | 970       | 1995             | 0.0              |
| 455       | 27376            | 14.3             | 585       | 98486            | 1.5              | 715       | 7583             | 0.0              | 845       | 1921             | 0.0              | 975       | 2418             | 0.0              |
| 460       | 17830            | 10.5             | 590       | 98332            | 1.0              | 720       | 6750             | 0.0              | 850       | 2105             | 0.0              | 980       | 2674             | 0.0              |
| 465       | 11374            | 7.4              | 595       | 96023            | 0.6              | 725       | 5965             | 0.0              | 855       | 2096             | 0.0              | 985       | 2850             | 0.0              |
| 470       | 8344             | 6.0              | 600       | 93650            | 0.4              | 730       | 5310             | 0.0              | 860       | 2601             | 0.0              | 990       | 1972             | 0.0              |
| 475       | 7639             | 5.8              | 605       | 90313            | 0.2              | 735       | 4838             | 0.0              | 865       | 2199             | 0.0              | 995       | 2443             | 0.0              |
| 480       | 7991             | 6.4              | 610       | 85305            | 0.2              | 740       | 4280             | 0.0              | 870       | 2491             | 0.0              | 1000      | 1979             | 0.0              |
| 485       | 9994             | 8.2              | 615       | 79870            | 0.1              | 745       | 3928             | 0.0              | 875       | 2370             | 0.0              |           |                  |                  |

REPORT NUMBER: SP1-2104-224-3

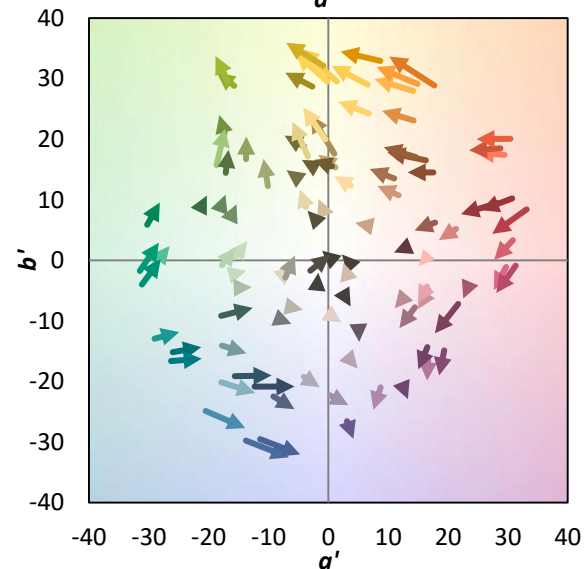
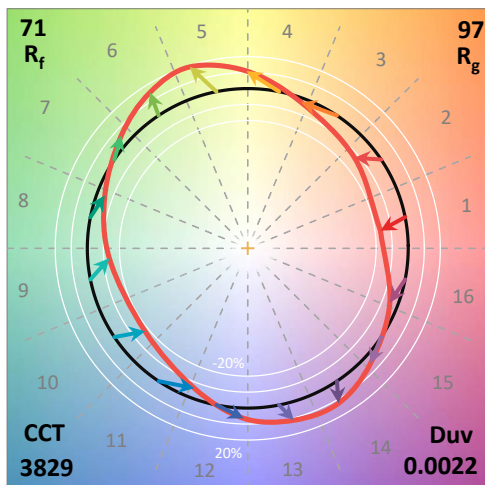
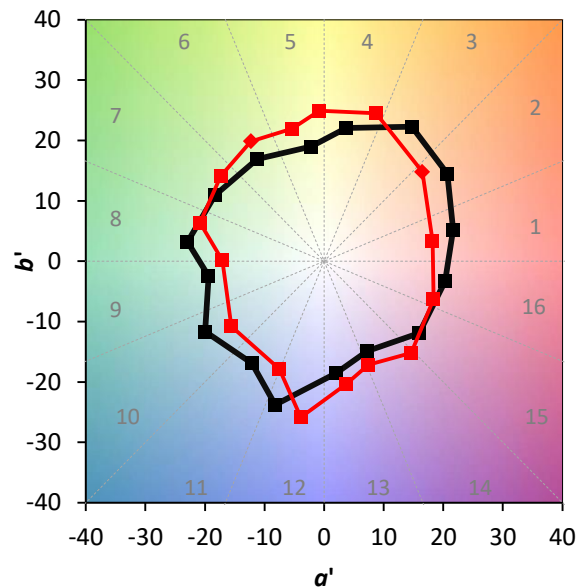
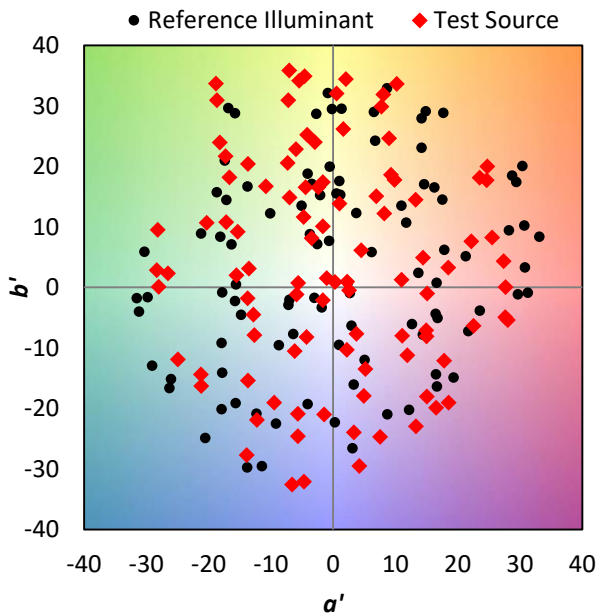
TM-30-18

### Summary

$R_f = 70.6$   
 $R_g = 96.7$   
 CIE  $R_a = 69.8$   
 $R_g = -35.1$

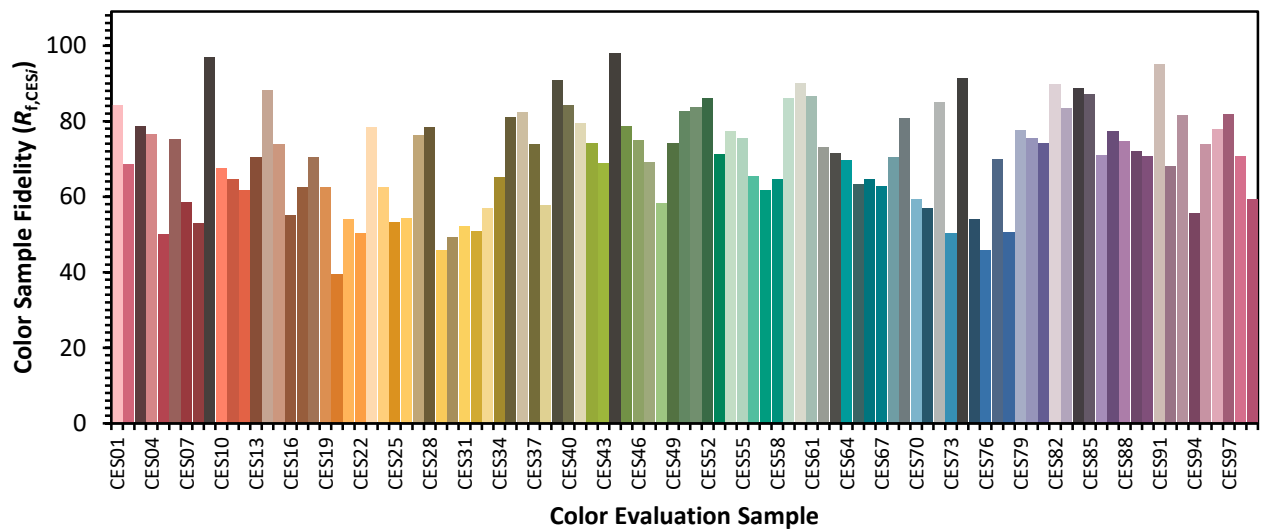


### Color Vector Graphics

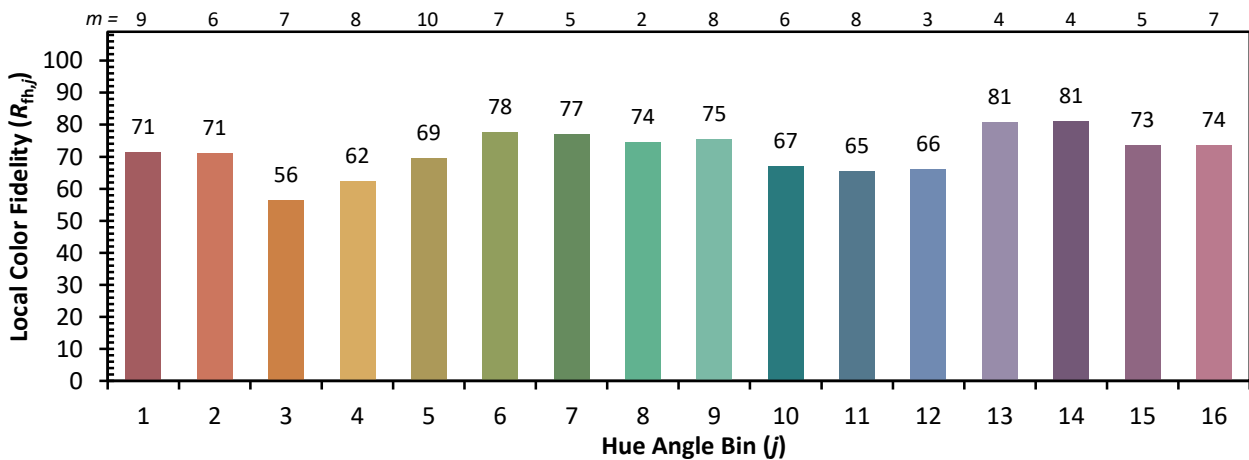
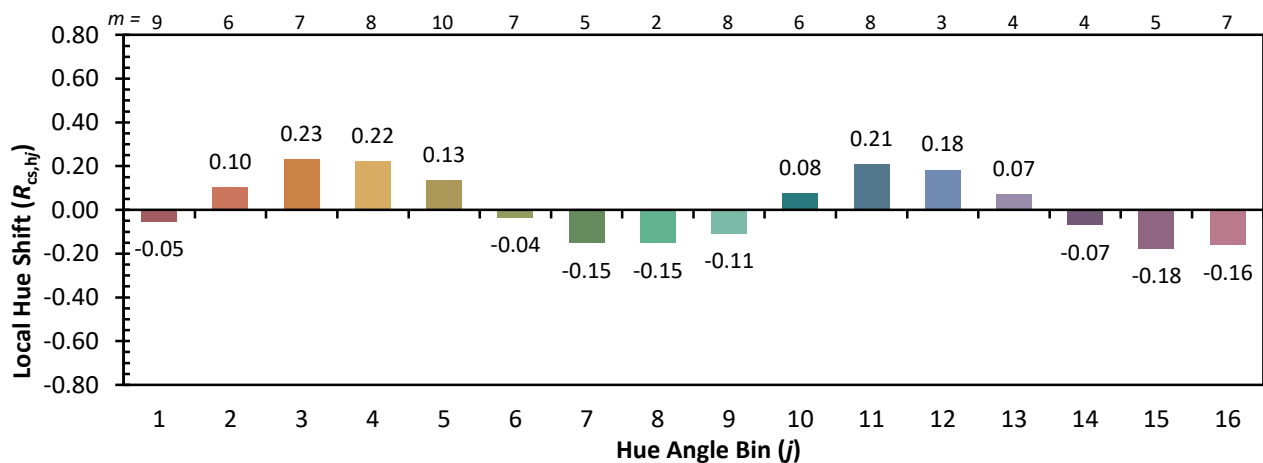
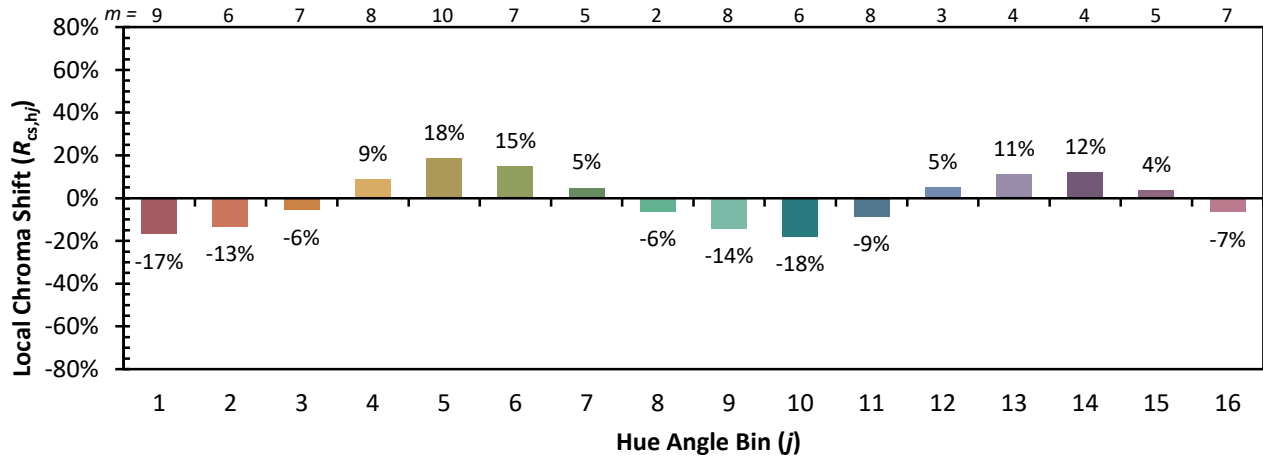


Individual Sample Fidelity Index ( $R_{f,i}$ )

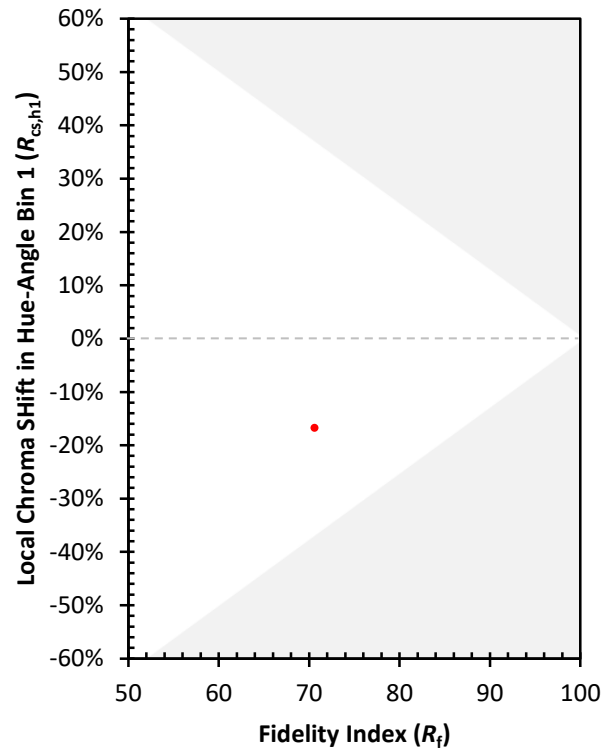
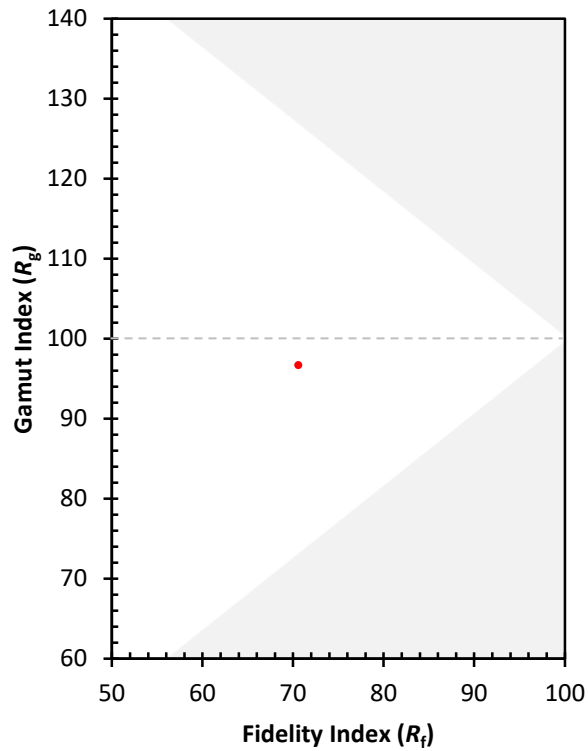
|            |            |            |            |
|------------|------------|------------|------------|
| CES01 = 85 | CES26 = 54 | CES51 = 84 | CES76 = 46 |
| CES02 = 61 | CES27 = 76 | CES52 = 86 | CES77 = 70 |
| CES03 = 30 | CES28 = 78 | CES53 = 71 | CES78 = 50 |
| CES04 = 70 | CES29 = 46 | CES54 = 77 | CES79 = 77 |
| CES05 = 47 | CES30 = 49 | CES55 = 76 | CES80 = 75 |
| CES06 = 50 | CES31 = 52 | CES56 = 65 | CES81 = 74 |
| CES07 = 40 | CES32 = 51 | CES57 = 62 | CES82 = 90 |
| CES08 = 39 | CES33 = 57 | CES58 = 65 | CES83 = 84 |
| CES09 = 29 | CES34 = 65 | CES59 = 86 | CES84 = 89 |
| CES10 = 74 | CES35 = 81 | CES60 = 90 | CES85 = 87 |
| CES11 = 57 | CES36 = 82 | CES61 = 87 | CES86 = 71 |
| CES12 = 63 | CES37 = 74 | CES62 = 73 | CES87 = 77 |
| CES13 = 42 | CES38 = 58 | CES63 = 72 | CES88 = 75 |
| CES14 = 74 | CES39 = 91 | CES64 = 70 | CES89 = 72 |
| CES15 = 71 | CES40 = 84 | CES65 = 63 | CES90 = 71 |
| CES16 = 46 | CES41 = 79 | CES66 = 65 | CES91 = 95 |
| CES17 = 49 | CES42 = 74 | CES67 = 63 | CES92 = 68 |
| CES18 = 56 | CES43 = 69 | CES68 = 70 | CES93 = 82 |
| CES19 = 72 | CES44 = 98 | CES69 = 81 | CES94 = 56 |
| CES20 = 65 | CES45 = 79 | CES70 = 59 | CES95 = 74 |
| CES21 = 86 | CES46 = 75 | CES71 = 57 | CES96 = 78 |
| CES22 = 78 | CES47 = 69 | CES72 = 85 | CES97 = 82 |
| CES23 = 92 | CES48 = 58 | CES73 = 50 | CES98 = 71 |
| CES24 = 91 | CES49 = 74 | CES74 = 91 | CES99 = 59 |
| CES25 = 72 | CES50 = 83 | CES75 = 54 |            |



Color Rendition by Hue-Angle Bin



**Measure Comparisons**



(END OF REPORT)