

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-735-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-735-U-SLL-HSS  
Description: GALLEON WALL LUMINAIRE  
(2) 70 CRI, 3500K, 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: 10278.9 lumens  
Efficiency: N/A  
Efficacy: 91.0 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



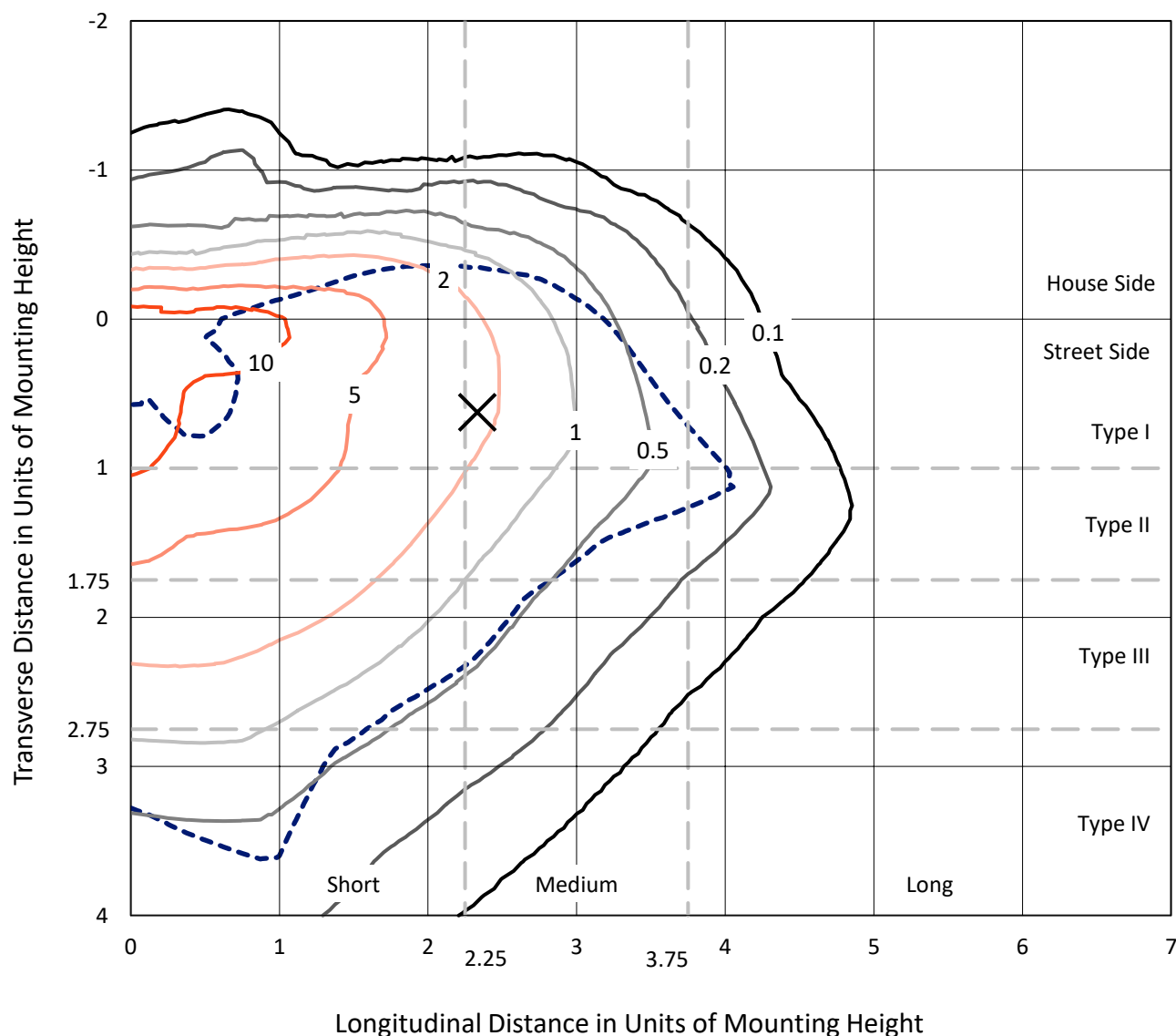
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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd

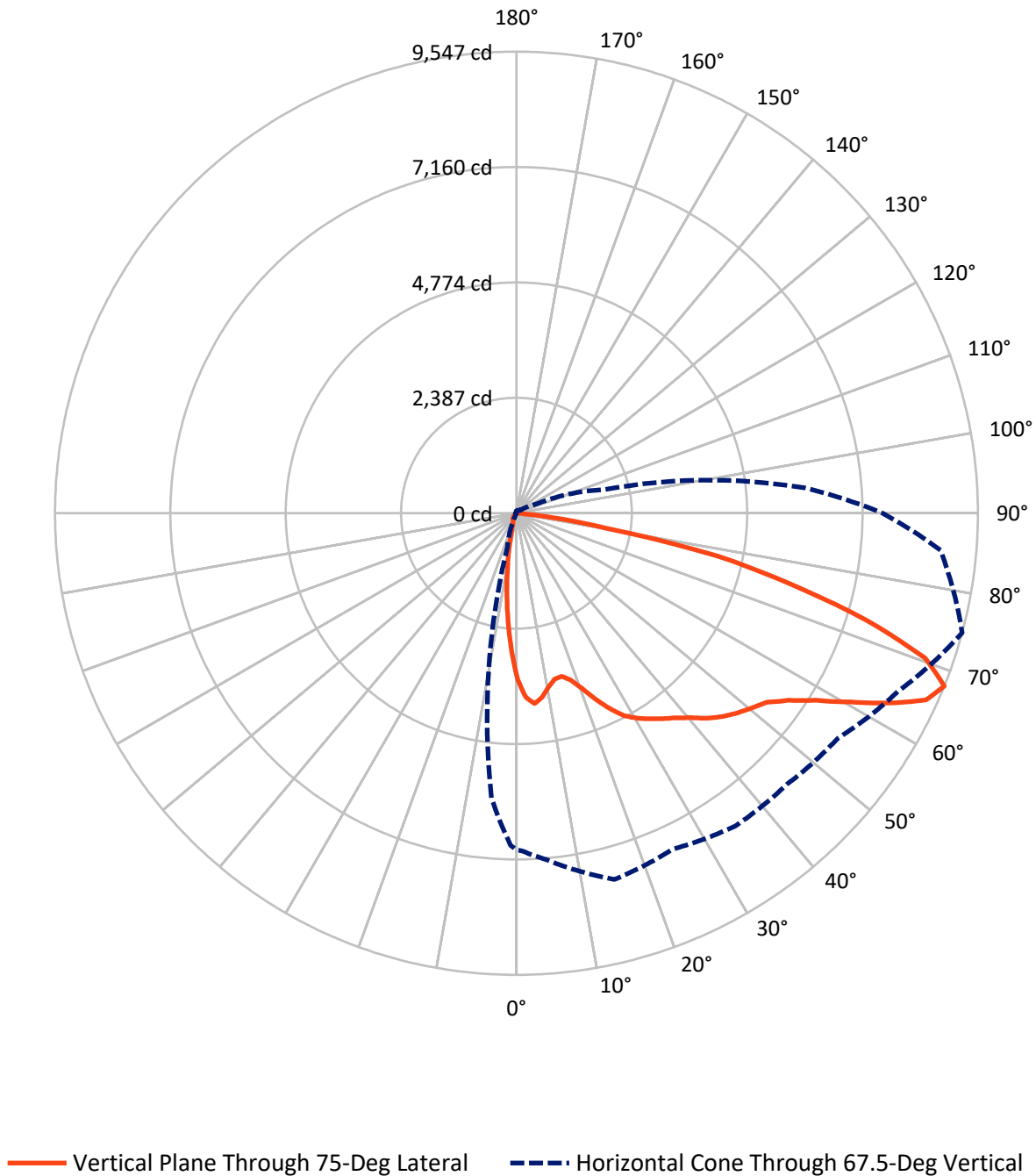
--- 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 19.9 fc  
 Type III - Medium - N/A

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## Luminous Intensity Polar Plot



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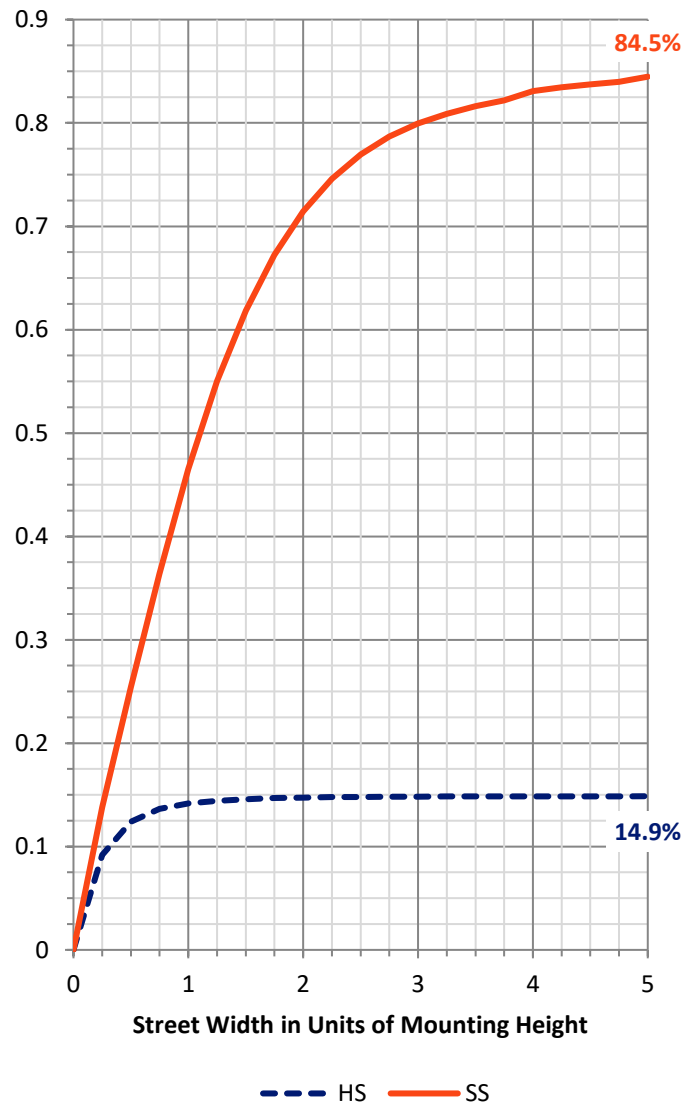
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 1542.5   | 0.0    | 1542.5  |
|                    | % Fixture | 15.0     | 0.0    | 15.0    |
| <b>Street Side</b> | Lumens    | 8736.4   | 0.0    | 8736.4  |
|                    | % Fixture | 85.0     | 0.0    | 85.0    |
| <b>Total</b>       | Lumens    | 10278.9  | 0.0    | 10278.9 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 261.6   | 2.5       |
| 10°-20°   | 515.0   | 5.0       |
| 20°-30°   | 728.6   | 7.1       |
| 30°-40°   | 1071.3  | 10.4      |
| 40°-50°   | 1539.8  | 15.0      |
| 50°-60°   | 2167.7  | 21.1      |
| 60°-70°   | 2531.6  | 24.6      |
| 70°-80°   | 1291.6  | 12.6      |
| 80°-90°   | 171.6   | 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°    | 10278.9 | 100.0     |
| 0°-180°   | 10278.9 | 100.0     |

**Coefficient of Utilization**



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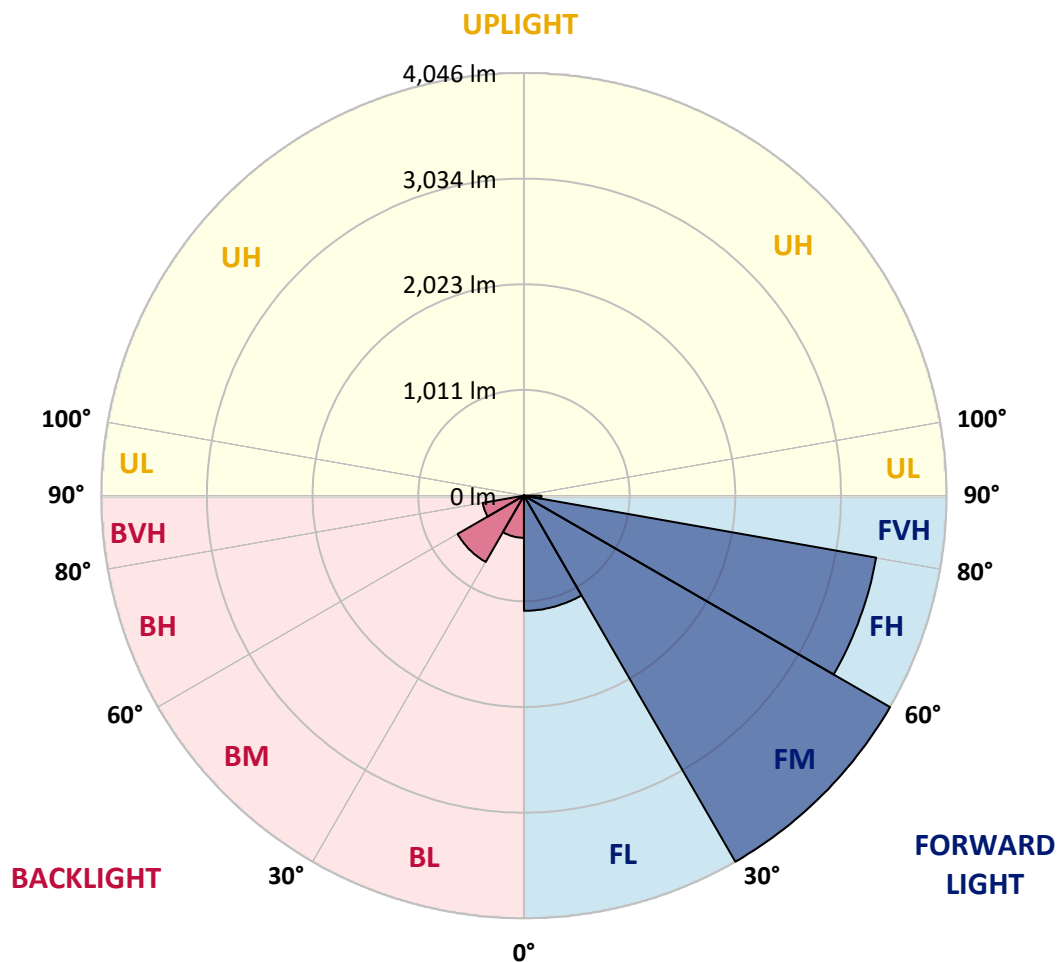
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 1101.9 | 10.7      |                         |      |         |
| FM   | (30°-60°)   | 4045.6 | 39.4      |                         |      |         |
| FH   | (60°-80°)   | 3422.6 | 33.3      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 166.4  | 1.6       |                         |      | G2/225  |
| BL   | (0°-30°)    | 403.4  | 3.9       | B1/500                  |      |         |
| BM   | (30°-60°)   | 733.2  | 7.1       | B1/1000                 |      |         |
| BH   | (60°-80°)   | 400.6  | 3.9       | B1/500                  |      | G1/500  |
| BVH  | (80°-90°)   | 5.2    | 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



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 1°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 3448.4 | 3448.4 | 3448.4 | 3448.4 | 3448.4 | 3448.4 | 3448.4 | 3448.4 | 3448.4 | 3448.4 | 3448.4 |
| 2.5°  | 3738.1 | 3744.0 | 3774.1 | 3844.3 | 3920.7 | 3926.6 | 3978.1 | 3925.1 | 3907.0 | 3821.4 | 3732.8 |
| 5°    | 3766.3 | 3788.8 | 3892.5 | 4098.4 | 4277.2 | 4334.6 | 4375.5 | 4271.2 | 4161.7 | 3952.3 | 3728.8 |
| 7.5°  | 3539.0 | 3576.5 | 3739.5 | 4126.2 | 4445.6 | 4586.8 | 4613.6 | 4450.5 | 4182.2 | 3837.4 | 3501.5 |
| 10°   | 3247.8 | 3290.6 | 3487.3 | 3962.6 | 4401.2 | 4643.2 | 4680.2 | 4466.5 | 4080.9 | 3651.4 | 3255.6 |
| 12.5° | 3012.1 | 3062.2 | 3263.4 | 3778.5 | 4248.9 | 4516.7 | 4589.7 | 4412.5 | 3993.3 | 3519.4 | 3087.6 |
| 15°   | 2903.5 | 2961.0 | 3172.3 | 3659.7 | 4079.9 | 4290.8 | 4351.1 | 4274.7 | 3944.5 | 3498.5 | 3048.6 |
| 17.5° | 2965.9 | 3028.1 | 3246.3 | 3669.9 | 3921.2 | 4011.3 | 4060.0 | 4091.2 | 3944.5 | 3624.7 | 3162.6 |
| 20°   | 3221.5 | 3288.6 | 3519.4 | 3773.6 | 3789.7 | 3756.1 | 3808.2 | 3917.7 | 3990.4 | 3864.2 | 3436.2 |
| 22.5° | 3575.0 | 3653.9 | 3914.4 | 3951.4 | 3725.4 | 3598.3 | 3605.2 | 3777.0 | 4073.6 | 4168.1 | 3816.0 |
| 25°   | 4005.9 | 4102.3 | 4367.2 | 4216.3 | 3752.2 | 3504.4 | 3502.0 | 3661.2 | 4154.9 | 4472.4 | 4239.1 |
| 27.5° | 4433.9 | 4540.1 | 4772.8 | 4539.5 | 3862.8 | 3487.3 | 3482.4 | 3626.1 | 4234.2 | 4743.1 | 4701.2 |
| 30°   | 4792.8 | 4896.0 | 5096.6 | 4773.8 | 3982.0 | 3527.2 | 3503.8 | 3663.6 | 4281.5 | 4918.9 | 5038.2 |
| 32.5° | 5084.9 | 5167.7 | 5329.8 | 4934.9 | 4109.7 | 3604.6 | 3554.0 | 3763.9 | 4361.9 | 5067.4 | 5347.9 |
| 35°   | 5406.3 | 5493.5 | 5558.2 | 5088.3 | 4252.7 | 3716.1 | 3643.6 | 3923.1 | 4485.5 | 5218.3 | 5687.3 |
| 37.5° | 5773.0 | 5859.7 | 5851.9 | 5228.6 | 4434.4 | 3900.7 | 3854.4 | 4175.3 | 4677.9 | 5367.8 | 6066.0 |
| 40°   | 6131.8 | 6220.4 | 6157.2 | 5382.0 | 4647.7 | 4205.0 | 4171.0 | 4554.2 | 4935.5 | 5559.1 | 6510.1 |
| 42.5° | 6467.8 | 6563.7 | 6428.4 | 5527.0 | 4901.9 | 4588.8 | 4647.2 | 5042.1 | 5257.8 | 5794.8 | 6892.9 |
| 45°   | 6738.5 | 6836.3 | 6655.7 | 5668.2 | 5169.7 | 5054.2 | 5230.0 | 5582.5 | 5645.4 | 5994.0 | 7151.4 |
| 47.5° | 6935.3 | 7027.7 | 6813.5 | 5809.5 | 5512.5 | 5623.5 | 5929.7 | 6149.4 | 5995.5 | 6166.8 | 7335.0 |
| 50°   | 7060.9 | 7132.9 | 6859.7 | 5986.2 | 5962.3 | 6287.6 | 6658.6 | 6765.8 | 6325.1 | 6322.7 | 7558.0 |
| 52.5° | 7140.7 | 7173.3 | 6893.8 | 6170.8 | 6431.7 | 7010.7 | 7372.5 | 7406.1 | 6664.5 | 6494.0 | 7858.4 |
| 55°   | 7415.9 | 7442.1 | 7135.4 | 6394.3 | 6819.8 | 7644.2 | 8018.1 | 7987.0 | 7048.6 | 6829.6 | 8212.9 |
| 57.5° | 7885.2 | 7913.0 | 7634.5 | 6715.6 | 7133.9 | 8035.7 | 8486.1 | 8542.1 | 7499.1 | 7300.9 | 8592.7 |
| 60°   | 8120.9 | 8172.4 | 8073.2 | 7122.7 | 7438.2 | 8285.9 | 8805.0 | 8983.7 | 8062.0 | 7922.2 | 8960.8 |
| 62.5° | 7907.2 | 7982.1 | 8126.2 | 7574.1 | 7740.6 | 8423.7 | 8904.3 | 9142.0 | 8638.5 | 8646.3 | 9187.7 |
| 65°   | 7480.6 | 7540.4 | 7784.9 | 7821.4 | 7915.9 | 8406.7 | 8659.0 | 8920.9 | 8991.5 | 9311.4 | 9175.5 |
| 67.5° | 6965.4 | 6987.8 | 7195.2 | 7840.9 | 7661.7 | 7894.5 | 7921.7 | 8115.5 | 8712.5 | 9547.1 | 8806.9 |
| 70°   | 6223.9 | 6236.0 | 6417.1 | 7188.9 | 6584.1 | 6635.3 | 6594.8 | 6634.3 | 7490.4 | 8973.0 | 7876.4 |
| 72.5° | 5008.9 | 5039.7 | 5297.2 | 5970.1 | 4796.6 | 4649.2 | 4966.6 | 4949.1 | 5768.5 | 7580.9 | 5849.9 |
| 75°   | 3688.0 | 3741.0 | 4130.0 | 4808.9 | 3366.6 | 3045.2 | 3277.0 | 3338.8 | 4100.8 | 5864.0 | 3658.3 |
| 77.5° | 2582.1 | 2621.6 | 2998.5 | 3535.0 | 2436.6 | 2177.5 | 2093.7 | 2167.3 | 2706.8 | 4242.0 | 1843.0 |
| 80°   | 1487.5 | 1502.2 | 1742.7 | 2041.2 | 1641.9 | 1878.5 | 1701.8 | 1752.4 | 1622.0 | 1887.3 | 792.8  |
| 82.5° | 973.4  | 975.7  | 1069.8 | 1214.8 | 1022.5 | 1188.1 | 879.4  | 1124.3 | 997.7  | 758.1  | 258.1  |
| 85°   | 525.9  | 528.8  | 620.4  | 862.4  | 578.9  | 327.2  | 192.3  | 394.9  | 616.9  | 173.8  | 70.6   |
| 87.5° | 58.0   | 53.1   | 186.9  | 313.6  | 160.7  | 29.7   | 10.2   | 44.3   | 98.8   | 11.2   | 0.0    |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

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**CANDELA DISTRIBUTION (continued):**

|       | 90°    | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 3448.4 | 3448.4 | 3448.4 | 3448.4 | 3448.4 | 3448.4 | 3448.4 | 3448.4 | 3448.4 | 3448.4 | 3448.4 |
| 2.5°  | 3687.5 | 3647.0 | 3546.2 | 3439.6 | 3353.9 | 3273.6 | 3192.7 | 3093.9 | 3017.4 | 3001.8 | 2976.6 |
| 5°    | 3608.6 | 3480.5 | 3269.2 | 3056.9 | 2886.0 | 2670.3 | 2533.5 | 2426.8 | 2322.7 | 2316.3 | 2295.3 |
| 7.5°  | 3333.0 | 3164.5 | 2867.0 | 2573.4 | 2332.8 | 2127.4 | 1919.9 | 1781.2 | 1672.1 | 1633.6 | 1610.8 |
| 10°   | 3068.1 | 2878.7 | 2507.1 | 2172.2 | 1957.4 | 1775.8 | 1629.8 | 1484.6 | 1353.2 | 1262.5 | 1221.7 |
| 12.5° | 2883.1 | 2673.7 | 2264.2 | 1975.5 | 1821.6 | 1649.2 | 1471.0 | 1289.9 | 1138.5 | 1029.4 | 962.6  |
| 15°   | 2811.5 | 2588.0 | 2182.9 | 1897.6 | 1707.6 | 1489.5 | 1261.6 | 1054.7 | 886.7  | 787.9  | 727.9  |
| 17.5° | 2896.7 | 2636.7 | 2176.6 | 1802.6 | 1537.2 | 1266.0 | 1014.3 | 769.8  | 611.5  | 536.6  | 498.2  |
| 20°   | 3112.9 | 2791.5 | 2174.1 | 1686.2 | 1334.7 | 1001.1 | 687.1  | 506.4  | 410.5  | 368.6  | 350.6  |
| 22.5° | 3418.6 | 2989.2 | 2193.6 | 1571.3 | 1123.8 | 715.3  | 474.3  | 372.0  | 322.9  | 300.4  | 290.2  |
| 25°   | 3812.2 | 3266.7 | 2248.6 | 1467.1 | 925.7  | 533.7  | 369.6  | 311.6  | 277.0  | 259.6  | 252.2  |
| 27.5° | 4231.3 | 3586.1 | 2334.3 | 1376.5 | 764.5  | 425.5  | 316.5  | 266.8  | 242.0  | 229.9  | 223.0  |
| 30°   | 4577.1 | 3956.3 | 2421.0 | 1275.7 | 647.6  | 371.1  | 289.7  | 243.5  | 214.7  | 206.9  | 200.7  |
| 32.5° | 4879.4 | 4236.2 | 2482.3 | 1184.7 | 571.2  | 329.6  | 262.0  | 217.7  | 198.2  | 183.1  | 176.2  |
| 35°   | 5192.5 | 4469.4 | 2480.4 | 1120.9 | 518.5  | 298.4  | 238.6  | 194.7  | 171.4  | 153.9  | 148.5  |
| 37.5° | 5531.4 | 4732.9 | 2438.0 | 1066.4 | 495.7  | 273.6  | 225.5  | 182.6  | 159.2  | 141.7  | 134.9  |
| 40°   | 5928.2 | 5009.4 | 2394.7 | 1015.2 | 489.3  | 253.7  | 216.2  | 172.8  | 148.0  | 131.0  | 124.2  |
| 42.5° | 6314.9 | 5258.7 | 2356.7 | 977.3  | 462.1  | 253.2  | 207.9  | 165.5  | 139.2  | 122.7  | 114.9  |
| 45°   | 6624.0 | 5491.0 | 2349.4 | 954.3  | 433.3  | 262.0  | 203.6  | 160.7  | 132.5  | 115.9  | 108.6  |
| 47.5° | 6881.2 | 5743.3 | 2396.1 | 938.3  | 406.1  | 239.1  | 214.3  | 157.3  | 126.1  | 110.0  | 101.7  |
| 50°   | 7186.9 | 6052.9 | 2506.2 | 912.0  | 377.4  | 215.2  | 245.4  | 158.3  | 120.7  | 104.2  | 95.4   |
| 52.5° | 7613.5 | 6481.4 | 2667.9 | 867.7  | 337.9  | 193.3  | 241.5  | 159.2  | 114.9  | 97.9   | 89.1   |
| 55°   | 8091.7 | 7016.5 | 2841.7 | 794.2  | 282.9  | 164.6  | 206.9  | 152.4  | 103.7  | 91.0   | 82.8   |
| 57.5° | 8594.1 | 7502.0 | 2944.9 | 706.5  | 225.0  | 142.2  | 165.5  | 138.7  | 91.5   | 81.8   | 76.5   |
| 60°   | 8673.0 | 7686.5 | 2897.7 | 599.0  | 178.7  | 123.7  | 122.7  | 141.2  | 81.8   | 72.1   | 68.2   |
| 62.5° | 8476.8 | 7454.7 | 2669.3 | 503.0  | 149.5  | 108.6  | 100.8  | 123.2  | 74.0   | 64.3   | 60.4   |
| 65°   | 8099.5 | 6828.1 | 2299.3 | 453.4  | 138.7  | 93.0   | 83.8   | 86.7   | 64.7   | 56.0   | 52.6   |
| 67.5° | 7574.5 | 5991.5 | 1887.8 | 425.1  | 137.3  | 79.8   | 71.6   | 65.8   | 56.0   | 48.7   | 45.7   |
| 70°   | 6501.4 | 4991.5 | 1506.0 | 409.5  | 133.4  | 67.2   | 60.4   | 53.5   | 46.8   | 41.4   | 39.0   |
| 72.5° | 4785.0 | 3537.0 | 1171.5 | 392.5  | 134.4  | 53.5   | 52.6   | 44.3   | 37.5   | 32.1   | 31.2   |
| 75°   | 2764.7 | 2020.7 | 768.3  | 318.0  | 128.0  | 41.4   | 43.9   | 31.2   | 26.3   | 22.4   | 22.4   |
| 77.5° | 1473.4 | 1232.4 | 292.6  | 132.5  | 46.8   | 26.3   | 24.8   | 18.5   | 16.5   | 13.6   | 13.2   |
| 80°   | 642.3  | 542.4  | 88.1   | 37.0   | 25.8   | 14.1   | 9.2    | 8.3    | 7.3    | 5.8    | 5.4    |
| 82.5° | 227.4  | 196.2  | 28.7   | 18.0   | 11.2   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 85°   | 51.6   | 37.0   | 0.0    | 4.4    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 87.5° | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |



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**CANDELA DISTRIBUTION (continued):**

|       | 185°   | 195°   | 205°   | 215°   | 225°   | 235°   | 245°   | 255°   | 265°   | 270°   | 275°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 3448.4 | 3448.4 | 3448.4 | 3448.4 | 3448.4 | 3448.4 | 3448.4 | 3448.4 | 3448.4 | 3448.4 | 3448.4 |
| 2.5°  | 2924.9 | 2914.2 | 2851.0 | 2853.3 | 2864.6 | 2880.7 | 2842.6 | 2860.2 | 2907.4 | 2952.7 | 2969.7 |
| 5°    | 2261.8 | 2264.2 | 2225.7 | 2249.6 | 2271.0 | 2285.6 | 2224.3 | 2225.2 | 2262.7 | 2313.8 | 2340.6 |
| 7.5°  | 1593.7 | 1589.8 | 1591.7 | 1648.7 | 1689.1 | 1659.9 | 1682.8 | 1603.5 | 1608.3 | 1644.8 | 1617.5 |
| 10°   | 1184.7 | 1131.1 | 1101.0 | 1143.8 | 1188.1 | 1172.0 | 1132.5 | 1106.8 | 1124.8 | 1165.2 | 1162.3 |
| 12.5° | 931.0  | 854.1  | 808.8  | 778.1  | 814.6  | 784.4  | 783.5  | 761.1  | 736.7  | 741.1  | 805.8  |
| 15°   | 700.2  | 644.2  | 590.6  | 541.5  | 540.5  | 530.3  | 478.2  | 419.7  | 414.8  | 417.7  | 451.4  |
| 17.5° | 481.5  | 462.6  | 440.7  | 398.3  | 387.1  | 344.3  | 293.7  | 270.3  | 258.5  | 263.9  | 275.1  |
| 20°   | 338.4  | 331.1  | 333.6  | 310.7  | 294.6  | 253.7  | 224.0  | 214.7  | 212.8  | 218.1  | 223.5  |
| 22.5° | 280.5  | 267.4  | 265.8  | 255.6  | 239.5  | 209.9  | 193.8  | 188.4  | 186.0  | 190.9  | 194.7  |
| 25°   | 245.4  | 232.2  | 226.9  | 220.6  | 203.6  | 183.1  | 173.3  | 168.4  | 166.1  | 169.0  | 171.4  |
| 27.5° | 216.2  | 204.0  | 199.2  | 194.7  | 178.2  | 163.6  | 155.8  | 151.4  | 149.5  | 150.5  | 152.9  |
| 30°   | 194.3  | 183.6  | 177.3  | 171.9  | 157.7  | 147.6  | 140.7  | 136.3  | 134.4  | 134.4  | 136.9  |
| 32.5° | 171.4  | 165.5  | 159.7  | 152.9  | 139.8  | 132.9  | 126.1  | 121.3  | 119.3  | 119.8  | 121.7  |
| 35°   | 142.7  | 140.7  | 142.2  | 135.8  | 124.7  | 118.8  | 112.0  | 106.6  | 105.2  | 105.7  | 107.7  |
| 37.5° | 126.6  | 117.8  | 123.2  | 119.8  | 113.5  | 105.7  | 96.9   | 92.1   | 89.6   | 91.0   | 92.1   |
| 40°   | 116.4  | 105.7  | 101.7  | 105.2  | 104.2  | 91.5   | 83.8   | 78.9   | 76.9   | 77.4   | 78.4   |
| 42.5° | 107.7  | 95.0   | 86.1   | 85.7   | 91.5   | 79.8   | 71.6   | 67.2   | 64.7   | 64.7   | 65.8   |
| 45°   | 99.3   | 85.7   | 75.0   | 66.7   | 76.9   | 67.6   | 59.9   | 56.0   | 53.1   | 53.1   | 53.5   |
| 47.5° | 93.0   | 77.9   | 65.3   | 54.6   | 58.0   | 55.5   | 49.2   | 45.3   | 42.4   | 42.4   | 42.8   |
| 50°   | 87.2   | 70.1   | 56.5   | 45.7   | 43.3   | 45.7   | 39.9   | 35.5   | 33.6   | 33.1   | 34.1   |
| 52.5° | 80.8   | 62.3   | 48.2   | 39.0   | 34.1   | 34.6   | 31.2   | 28.3   | 25.8   | 25.8   | 26.8   |
| 55°   | 74.5   | 56.0   | 41.9   | 33.1   | 28.3   | 25.8   | 24.8   | 22.9   | 20.9   | 20.9   | 21.9   |
| 57.5° | 68.2   | 49.2   | 35.5   | 27.2   | 22.4   | 20.5   | 20.5   | 19.0   | 17.6   | 17.6   | 18.5   |
| 60°   | 62.3   | 42.4   | 29.2   | 22.4   | 17.6   | 17.0   | 17.6   | 16.1   | 15.1   | 15.1   | 16.1   |
| 62.5° | 55.5   | 36.1   | 23.9   | 18.5   | 14.1   | 13.6   | 15.1   | 14.1   | 13.2   | 13.2   | 14.1   |
| 65°   | 47.3   | 30.7   | 19.0   | 14.1   | 10.7   | 10.7   | 12.7   | 11.6   | 10.7   | 10.7   | 11.6   |
| 67.5° | 39.9   | 25.8   | 14.7   | 10.2   | 7.8    | 8.3    | 10.7   | 9.8    | 9.2    | 9.2    | 10.2   |
| 70°   | 33.1   | 20.0   | 10.2   | 6.3    | 4.4    | 6.3    | 8.3    | 8.3    | 8.3    | 8.3    | 9.2    |
| 72.5° | 24.8   | 13.6   | 5.8    | 2.4    | 2.0    | 4.4    | 6.9    | 7.8    | 7.3    | 7.3    | 8.7    |
| 75°   | 16.1   | 7.8    | 2.0    | 0.0    | 0.0    | 2.4    | 5.4    | 6.3    | 6.3    | 5.8    | 7.3    |
| 77.5° | 9.2    | 2.4    | 0.0    | 0.0    | 0.0    | 0.0    | 3.4    | 2.9    | 2.4    | 2.0    | 3.4    |
| 80°   | 2.4    | 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-735-U-SLL-HSS

**CANDELA DISTRIBUTION (continued):**

|       | 285°   | 295°   | 305°   | 315°   | 325°   | 335°   | 345°   | 355°   | 359°   | 360°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 3448.4 | 3448.4 | 3448.4 | 3448.4 | 3448.4 | 3448.4 | 3448.4 | 3448.4 | 3448.4 | 3448.4 |
| 2.5°  | 3038.4 | 3095.9 | 3176.7 | 3262.3 | 3394.3 | 3499.1 | 3601.7 | 3689.8 | 3723.9 | 3738.1 |
| 5°    | 2404.9 | 2489.1 | 2607.5 | 2759.4 | 2997.5 | 3211.7 | 3428.9 | 3647.6 | 3742.5 | 3766.3 |
| 7.5°  | 1725.7 | 1833.2 | 1983.7 | 2174.1 | 2453.1 | 2730.6 | 3034.1 | 3354.9 | 3502.0 | 3539.0 |
| 10°   | 1277.2 | 1408.6 | 1581.0 | 1781.7 | 2048.0 | 2333.4 | 2663.9 | 3030.6 | 3198.5 | 3247.8 |
| 12.5° | 906.1  | 1083.9 | 1314.7 | 1558.6 | 1789.5 | 2044.1 | 2378.6 | 2782.8 | 2959.0 | 3012.1 |
| 15°   | 532.2  | 704.1  | 977.3  | 1304.0 | 1599.5 | 1857.7 | 2197.4 | 2655.7 | 2849.9 | 2903.5 |
| 17.5° | 305.3  | 391.0  | 597.5  | 961.7  | 1362.9 | 1720.3 | 2140.5 | 2687.3 | 2916.2 | 2965.9 |
| 20°   | 233.3  | 260.5  | 344.3  | 619.3  | 1086.3 | 1585.4 | 2140.5 | 2866.5 | 3148.5 | 3221.5 |
| 22.5° | 204.0  | 224.0  | 258.1  | 369.6  | 799.5  | 1440.8 | 2165.3 | 3125.6 | 3494.2 | 3575.0 |
| 25°   | 181.1  | 199.2  | 228.4  | 278.1  | 545.3  | 1268.9 | 2224.3 | 3443.5 | 3901.2 | 4005.9 |
| 27.5° | 162.1  | 179.1  | 205.4  | 243.5  | 372.9  | 1061.5 | 2303.6 | 3816.5 | 4350.1 | 4433.9 |
| 30°   | 145.1  | 161.2  | 185.1  | 211.8  | 287.7  | 826.3  | 2371.3 | 4168.1 | 4702.7 | 4792.8 |
| 32.5° | 129.1  | 143.6  | 165.1  | 185.1  | 235.7  | 611.1  | 2378.6 | 4446.5 | 4995.3 | 5084.9 |
| 35°   | 113.9  | 127.1  | 146.5  | 162.1  | 195.3  | 482.6  | 2265.2 | 4688.0 | 5287.9 | 5406.3 |
| 37.5° | 99.3   | 112.0  | 129.1  | 140.7  | 171.9  | 393.4  | 2091.8 | 4957.4 | 5663.4 | 5773.0 |
| 40°   | 85.7   | 96.9   | 114.4  | 122.2  | 162.6  | 302.4  | 1903.4 | 5239.8 | 6031.5 | 6131.8 |
| 42.5° | 73.1   | 83.8   | 100.8  | 115.9  | 142.7  | 225.9  | 1699.8 | 5504.7 | 6362.6 | 6467.8 |
| 45°   | 60.9   | 72.1   | 89.1   | 122.7  | 118.4  | 169.0  | 1482.2 | 5680.4 | 6624.0 | 6738.5 |
| 47.5° | 49.2   | 61.8   | 85.2   | 116.9  | 94.5   | 124.2  | 1309.8 | 5847.0 | 6822.3 | 6935.3 |
| 50°   | 39.5   | 52.1   | 95.9   | 104.2  | 77.4   | 95.0   | 1237.7 | 5996.0 | 6952.3 | 7060.9 |
| 52.5° | 32.1   | 43.9   | 90.6   | 79.8   | 64.7   | 78.4   | 1276.7 | 6237.5 | 7072.5 | 7140.7 |
| 55°   | 26.8   | 34.6   | 54.6   | 55.5   | 55.0   | 66.7   | 1324.9 | 6584.1 | 7383.6 | 7415.9 |
| 57.5° | 23.4   | 27.7   | 38.0   | 42.8   | 46.2   | 59.4   | 1325.9 | 7081.8 | 7865.3 | 7885.2 |
| 60°   | 20.0   | 24.3   | 31.7   | 34.6   | 39.9   | 53.1   | 1277.7 | 7255.6 | 8054.6 | 8120.9 |
| 62.5° | 17.6   | 21.4   | 26.3   | 28.7   | 33.6   | 47.7   | 1164.8 | 7003.8 | 7794.6 | 7907.2 |
| 65°   | 15.6   | 19.4   | 21.9   | 24.3   | 29.7   | 42.8   | 978.8  | 6500.4 | 7363.3 | 7480.6 |
| 67.5° | 13.6   | 17.0   | 19.4   | 21.9   | 26.8   | 38.0   | 720.6  | 5915.6 | 6868.0 | 6965.4 |
| 70°   | 12.2   | 15.1   | 17.6   | 19.4   | 23.4   | 32.1   | 437.3  | 5019.7 | 6183.4 | 6223.9 |
| 72.5° | 11.6   | 13.6   | 16.1   | 17.6   | 20.5   | 28.3   | 221.5  | 3688.9 | 4943.2 | 5008.9 |
| 75°   | 10.2   | 12.2   | 14.7   | 15.6   | 18.0   | 24.3   | 90.1   | 2422.9 | 3582.3 | 3688.0 |
| 77.5° | 8.3    | 11.2   | 13.2   | 14.1   | 15.6   | 20.0   | 45.7   | 1548.4 | 2514.0 | 2582.1 |
| 80°   | 2.9    | 8.3    | 11.2   | 11.6   | 13.2   | 14.7   | 30.2   | 847.7  | 1458.3 | 1487.5 |
| 82.5° | 0.0    | 5.4    | 8.7    | 8.3    | 9.2    | 11.2   | 19.4   | 403.2  | 962.6  | 973.4  |
| 85°   | 0.0    | 2.4    | 6.9    | 5.4    | 3.9    | 7.8    | 6.9    | 88.1   | 504.9  | 525.9  |
| 87.5° | 0.0    | 0.0    | 0.5    | 2.4    | 2.0    | 2.9    | 0.9    | 0.5    | 45.7   | 58.0   |
| 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: SP1-2104-224-2

Luminaire Tested: CCW-SA-2A-735-U-SL4

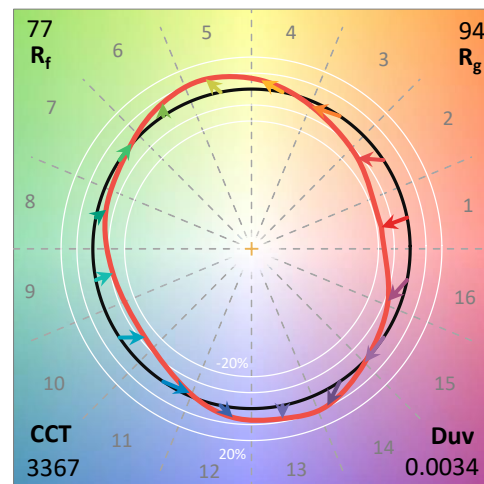
Test Date: 04/26/2021

### Test Information

Test Method: LM-79-08  
 Report Number: SP1-2104-224-2  
 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-735-U-SL4**  
 Description: INVUE WALL PACK ClearCurve Light Square

### Spectral Parameters

|                           |        |           |      |      |       |
|---------------------------|--------|-----------|------|------|-------|
| CCT (K):                  | 3367   | CRI (Ra): | 73.3 |      |       |
| CIE u':                   | 0.2376 | R1:       | 69.1 | R9:  | -34.3 |
| CIE v':                   | 0.5184 | R2:       | 81.3 | R10: | 58.3  |
| Duv:                      | 0.0034 | R3:       | 93.4 | R11: | 69.1  |
| CIE x:                    | 0.4168 | R4:       | 71.8 | R12: | 54.2  |
| CIE y:                    | 0.4041 | R5:       | 69.6 | R13: | 71.1  |
| CIE z:                    | 0.1791 | R6:       | 75.4 | R14: | 96.4  |
| Peak Wavelength (nm):     | 590    | R7:       | 79.5 |      |       |
| Dominant Wavelength (nm): | 580    | R8:       | 46.4 |      |       |
| Purity:                   | 46.5   |           |      |      |       |
| Rf:                       | 77.2   |           |      |      |       |
| Rg:                       | 94.4   |           |      |      |       |



### Test Conditions

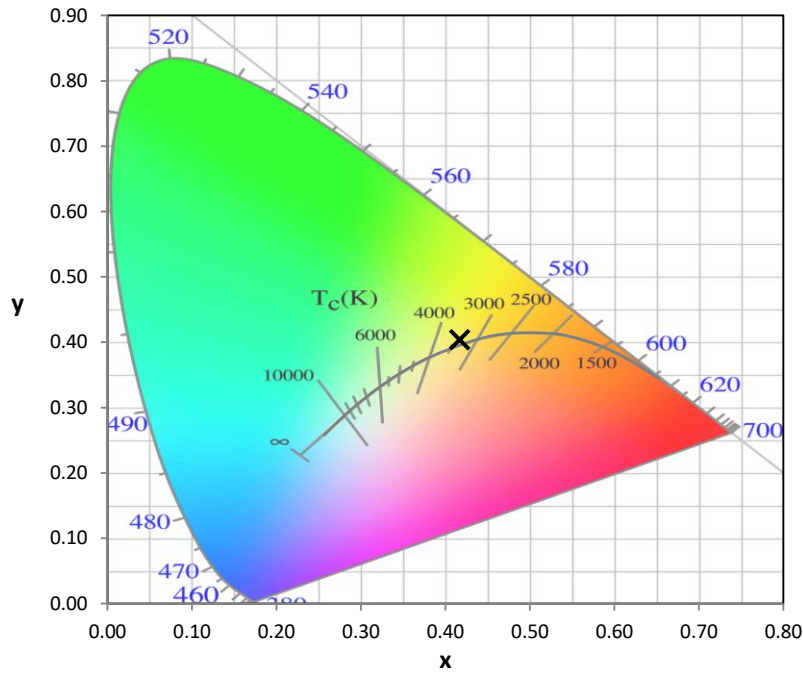
Stabilization Time: 71M  
 Operation Time: 12H  
 Room Temperature (°C) / RH%: 24.9/38%  
 Sphere Temperature (°C): 24.2

REPORT NUMBER: SP1-2104-224-2

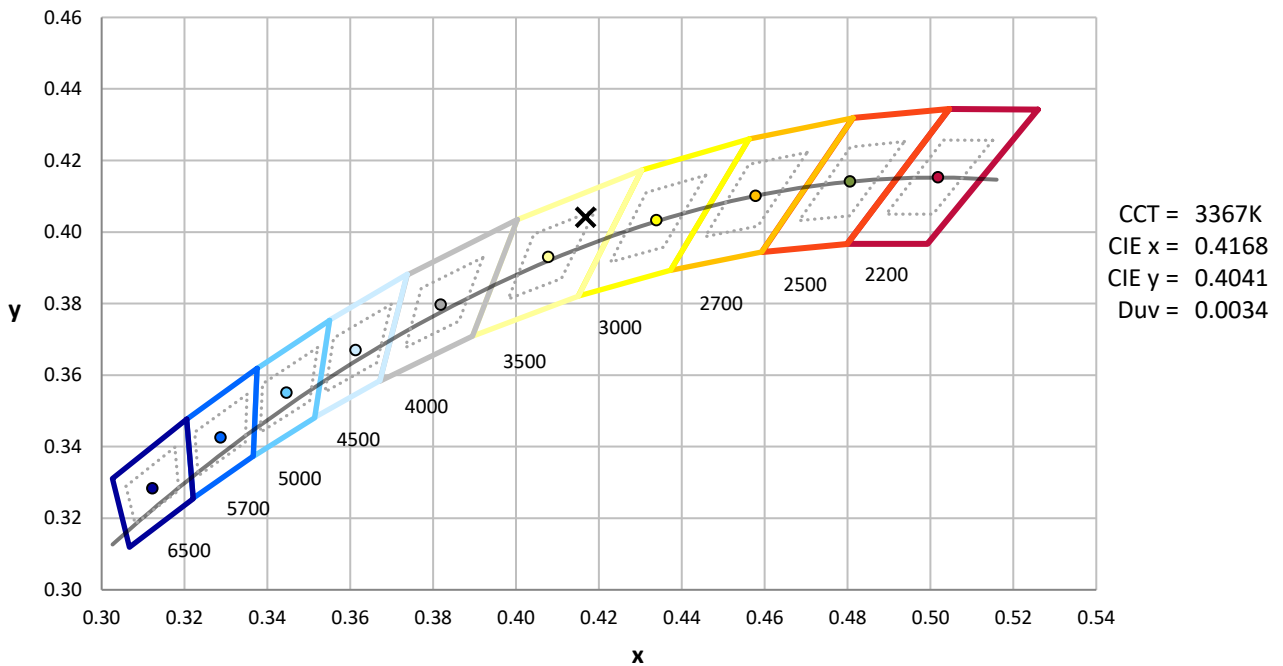
| Measurement and Test Equipment |                       |                  |                      |
|--------------------------------|-----------------------|------------------|----------------------|
| Instrument                     | Identification Number | Calibration Date | Calibration Due Date |
| 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: SP1-2104-224-2

**CIE 1931 Chromaticity Diagram**



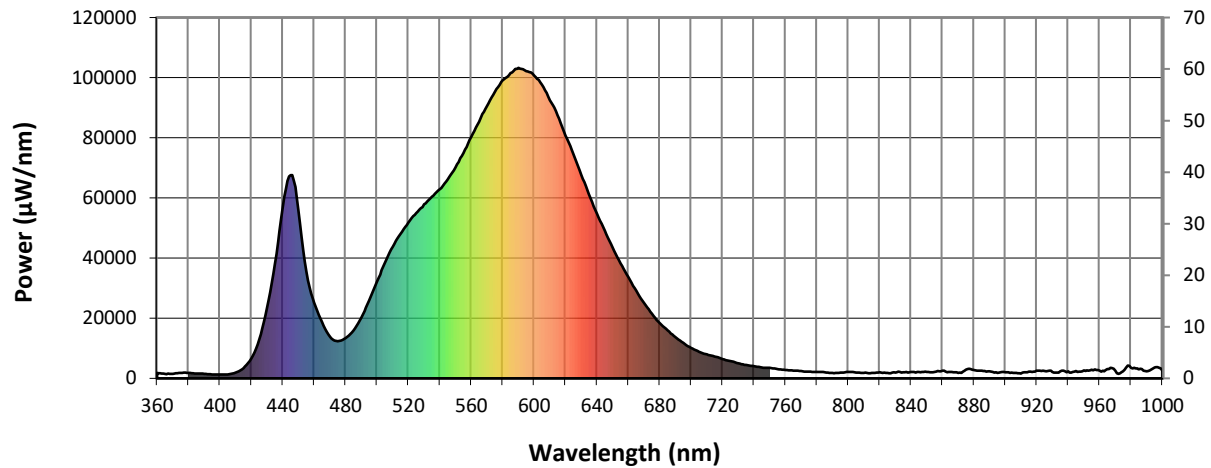
**CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles**



Point lies inside the ANSI 3500K 4-step quadrangle

REPORT NUMBER: SP1-2104-224-2

### Photopic Flux vs. Wavelength

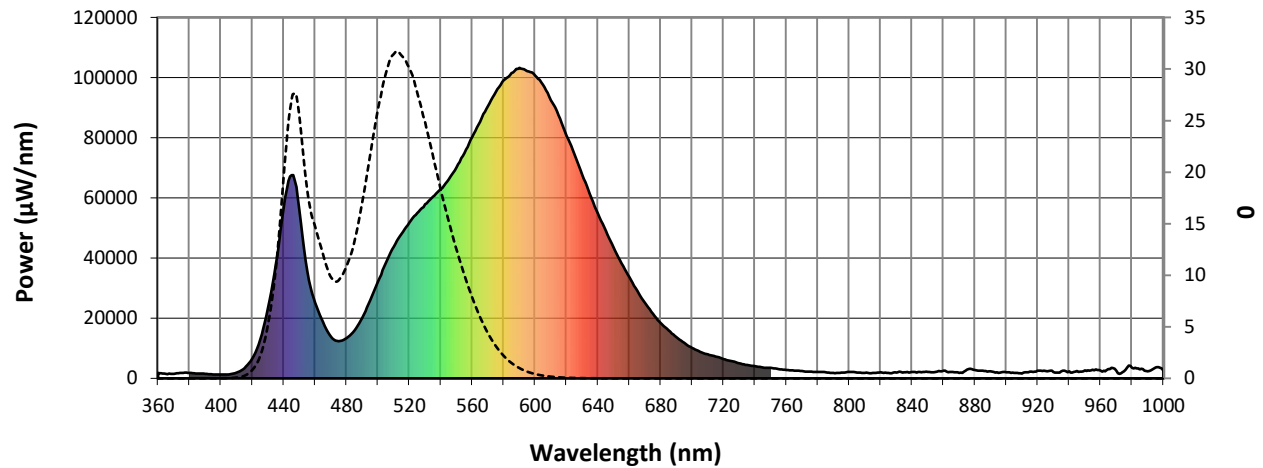


#####

| 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       | 1840             | 0.0              | 490       | 20271            | 2.9              | 620       | 80709            | 21.0             | 750       | 3465             | 0.0              | 880       | 2800             | 0.0              |
| 365       | 1514             | 0.0              | 495       | 25910            | 4.7              | 625       | 74695            | 16.5             | 755       | 3075             | 0.0              | 885       | 2582             | 0.0              |
| 370       | 1514             | 0.0              | 500       | 32216            | 7.1              | 630       | 67709            | 12.3             | 760       | 2794             | 0.0              | 890       | 2353             | 0.0              |
| 375       | 1843             | 0.0              | 505       | 38336            | 10.7             | 635       | 61156            | 9.2              | 765       | 2593             | 0.0              | 895       | 1819             | 0.0              |
| 380       | 1796             | 0.0              | 510       | 43738            | 15.0             | 640       | 54795            | 6.5              | 770       | 2401             | 0.0              | 900       | 2024             | 0.0              |
| 385       | 1575             | 0.0              | 515       | 47977            | 19.9             | 645       | 49111            | 4.7              | 775       | 2233             | 0.0              | 905       | 1851             | 0.0              |
| 390       | 1527             | 0.0              | 520       | 51818            | 25.1             | 650       | 43533            | 3.2              | 780       | 2166             | 0.0              | 910       | 1602             | 0.0              |
| 395       | 1326             | 0.0              | 525       | 54890            | 29.5             | 655       | 38234            | 2.2              | 785       | 2051             | 0.0              | 915       | 2200             | 0.0              |
| 400       | 1233             | 0.0              | 530       | 57872            | 34.1             | 660       | 33754            | 1.4              | 790       | 1765             | 0.0              | 920       | 2530             | 0.0              |
| 405       | 1329             | 0.0              | 535       | 60410            | 37.5             | 665       | 29162            | 0.9              | 795       | 1903             | 0.0              | 925       | 2487             | 0.0              |
| 410       | 1902             | 0.0              | 540       | 62857            | 41.0             | 670       | 25117            | 0.5              | 800       | 2127             | 0.0              | 930       | 2089             | 0.0              |
| 415       | 3436             | 0.0              | 545       | 66165            | 44.0             | 675       | 21511            | 0.4              | 805       | 1867             | 0.0              | 935       | 2293             | 0.0              |
| 420       | 6571             | 0.0              | 550       | 70124            | 47.7             | 680       | 18435            | 0.2              | 810       | 1775             | 0.0              | 940       | 2315             | 0.0              |
| 425       | 12957            | 0.1              | 555       | 74973            | 51.2             | 685       | 16004            | 0.1              | 815       | 1812             | 0.0              | 945       | 2481             | 0.0              |
| 430       | 23376            | 0.2              | 560       | 80227            | 54.5             | 690       | 13701            | 0.1              | 820       | 1973             | 0.0              | 950       | 2701             | 0.0              |
| 435       | 38205            | 0.5              | 565       | 85358            | 56.8             | 695       | 11765            | 0.0              | 825       | 1773             | 0.0              | 955       | 2892             | 0.0              |
| 440       | 56691            | 0.9              | 570       | 90422            | 58.8             | 700       | 10145            | 0.0              | 830       | 1925             | 0.0              | 960       | 2609             | 0.0              |
| 445       | 67585            | 1.4              | 575       | 95259            | 59.3             | 705       | 8865             | 0.0              | 835       | 2001             | 0.0              | 965       | 3066             | 0.0              |
| 450       | 55963            | 1.5              | 580       | 99033            | 58.8             | 710       | 7954             | 0.0              | 840       | 2142             | 0.0              | 970       | 2566             | 0.0              |
| 455       | 35549            | 1.2              | 585       | 101572           | 56.4             | 715       | 7285             | 0.0              | 845       | 2101             | 0.0              | 975       | 2375             | 0.0              |
| 460       | 25268            | 1.0              | 590       | 103264           | 53.4             | 720       | 6412             | 0.0              | 850       | 2097             | 0.0              | 980       | 3526             | 0.0              |
| 465       | 18712            | 1.0              | 595       | 102194           | 48.4             | 725       | 5721             | 0.0              | 855       | 2090             | 0.0              | 985       | 2982             | 0.0              |
| 470       | 13835            | 0.9              | 600       | 100645           | 43.4             | 730       | 5017             | 0.0              | 860       | 2535             | 0.0              | 990       | 2305             | 0.0              |
| 475       | 12398            | 1.0              | 605       | 97644            | 37.8             | 735       | 4459             | 0.0              | 865       | 2101             | 0.0              | 995       | 3671             | 0.0              |
| 480       | 13406            | 1.3              | 610       | 92487            | 31.8             | 740       | 4062             | 0.0              | 870       | 1798             | 0.0              | 1000      | 2560             | 0.0              |
| 485       | 15865            | 1.9              | 615       | 87436            | 26.4             | 745       | 3636             | 0.0              | 875       | 2857             | 0.0              |           |                  |                  |

REPORT NUMBER: SP1-2104-224-2

### Scotopic Flux vs. Wavelength



Scotopic Lumens: 7088.7

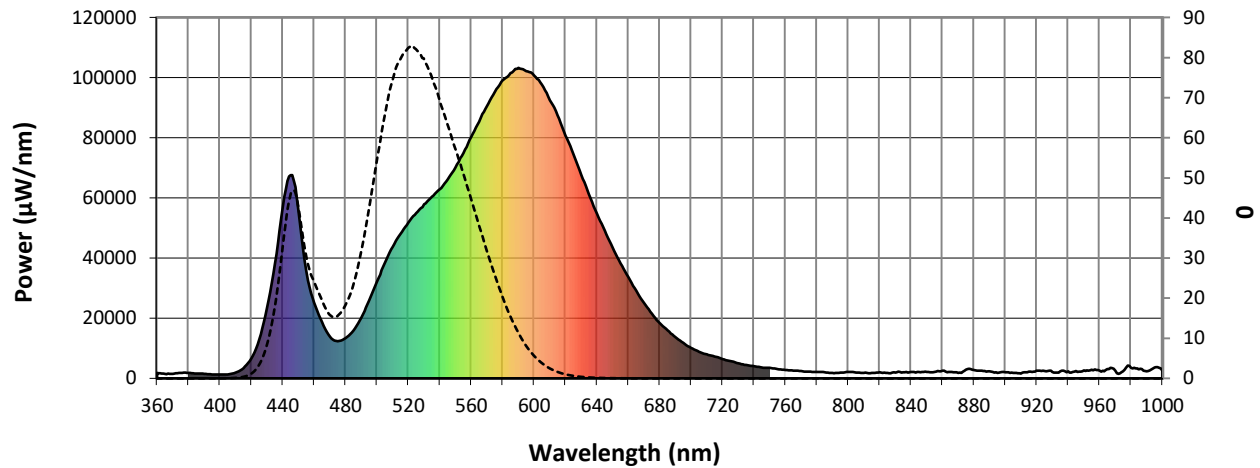
S/P: 1.35

| λ (nm) | Power (μW/nm) | Lumens (Φ/nm) | λ (nm) | Power (μW/nm) | Lumens (Φ/nm) | λ (nm) | Power (μW/nm) | Lumens (Φ/nm) | λ (nm) | Power (μW/nm) | Lumens (Φ/nm) | λ (nm) | Power (μW/nm) | Lumens (Φ/nm) |
|--------|---------------|---------------|--------|---------------|---------------|--------|---------------|---------------|--------|---------------|---------------|--------|---------------|---------------|
| 360    | 1840          | 0.0           | 490    | 20271         | 31.2          | 620    | 80709         | 1.0           | 750    | 3465          | 0.0           | 880    | 2800          | 0.0           |
| 365    | 1514          | 0.0           | 495    | 25910         | 41.9          | 625    | 74695         | 0.6           | 755    | 3075          | 0.0           | 885    | 2582          | 0.0           |
| 370    | 1514          | 0.0           | 500    | 32216         | 53.9          | 630    | 67709         | 0.4           | 760    | 2794          | 0.0           | 890    | 2353          | 0.0           |
| 375    | 1843          | 0.0           | 505    | 38336         | 65.2          | 635    | 61156         | 0.2           | 765    | 2593          | 0.0           | 895    | 1819          | 0.0           |
| 380    | 1796          | 0.0           | 510    | 43738         | 74.1          | 640    | 54795         | 0.1           | 770    | 2401          | 0.0           | 900    | 2024          | 0.0           |
| 385    | 1575          | 0.0           | 515    | 47977         | 79.5          | 645    | 49111         | 0.1           | 775    | 2233          | 0.0           | 905    | 1851          | 0.0           |
| 390    | 1527          | 0.0           | 520    | 51818         | 82.4          | 650    | 43533         | 0.1           | 780    | 2166          | 0.0           | 910    | 1602          | 0.0           |
| 395    | 1326          | 0.0           | 525    | 54890         | 82.1          | 655    | 38234         | 0.0           | 785    | 2051          | 0.0           | 915    | 2200          | 0.0           |
| 400    | 1233          | 0.0           | 530    | 57872         | 79.8          | 660    | 33754         | 0.0           | 790    | 1765          | 0.0           | 920    | 2530          | 0.0           |
| 405    | 1329          | 0.0           | 535    | 60410         | 75.3          | 665    | 29162         | 0.0           | 795    | 1903          | 0.0           | 925    | 2487          | 0.0           |
| 410    | 1902          | 0.1           | 540    | 62857         | 69.5          | 670    | 25117         | 0.0           | 800    | 2127          | 0.0           | 930    | 2089          | 0.0           |
| 415    | 3436          | 0.4           | 545    | 66165         | 63.4          | 675    | 21511         | 0.0           | 805    | 1867          | 0.0           | 935    | 2293          | 0.0           |
| 420    | 6571          | 1.1           | 550    | 70124         | 57.3          | 680    | 18435         | 0.0           | 810    | 1775          | 0.0           | 940    | 2315          | 0.0           |
| 425    | 12957         | 3.2           | 555    | 74973         | 51.2          | 685    | 16004         | 0.0           | 815    | 1812          | 0.0           | 945    | 2481          | 0.0           |
| 430    | 23376         | 8.0           | 560    | 80227         | 44.8          | 690    | 13701         | 0.0           | 820    | 1973          | 0.0           | 950    | 2701          | 0.0           |
| 435    | 38205         | 17.1          | 565    | 85358         | 38.3          | 695    | 11765         | 0.0           | 825    | 1773          | 0.0           | 955    | 2892          | 0.0           |
| 440    | 56691         | 31.7          | 570    | 90422         | 31.9          | 700    | 10145         | 0.0           | 830    | 1925          | 0.0           | 960    | 2609          | 0.0           |
| 445    | 67585         | 45.3          | 575    | 95259         | 25.9          | 705    | 8865          | 0.0           | 835    | 2001          | 0.0           | 965    | 3066          | 0.0           |
| 450    | 55963         | 43.4          | 580    | 99033         | 20.4          | 710    | 7954          | 0.0           | 840    | 2142          | 0.0           | 970    | 2566          | 0.0           |
| 455    | 35549         | 31.1          | 585    | 101572        | 15.5          | 715    | 7285          | 0.0           | 845    | 2101          | 0.0           | 975    | 2375          | 0.0           |
| 460    | 25268         | 24.4          | 590    | 103264        | 11.5          | 720    | 6412          | 0.0           | 850    | 2097          | 0.0           | 980    | 3526          | 0.0           |
| 465    | 18712         | 19.8          | 595    | 102194        | 8.1           | 725    | 5721          | 0.0           | 855    | 2090          | 0.0           | 985    | 2982          | 0.0           |
| 470    | 13835         | 15.9          | 600    | 100645        | 5.7           | 730    | 5017          | 0.0           | 860    | 2535          | 0.0           | 990    | 2305          | 0.0           |
| 475    | 12398         | 15.5          | 605    | 97644         | 3.8           | 735    | 4459          | 0.0           | 865    | 2101          | 0.0           | 995    | 3671          | 0.0           |
| 480    | 13406         | 18.1          | 610    | 92487         | 2.5           | 740    | 4062          | 0.0           | 870    | 1798          | 0.0           | 1000   | 2560          | 0.0           |
| 485    | 15865         | 23.0          | 615    | 87436         | 1.6           | 745    | 3636          | 0.0           | 875    | 2857          | 0.0           |        |               |               |



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### Melanopic Flux vs. Wavelength



Melanopic Lumens: 2621

M/P: 0.5

| 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       | 1840             | 0.0              | 490       | 20271            | 16.9             | 620       | 80709            | 0.1              | 750       | 3465             | 0.0              | 880       | 2800             | 0.0              |
| 365       | 1514             | 0.0              | 495       | 25910            | 21.4             | 625       | 74695            | 0.0              | 755       | 3075             | 0.0              | 885       | 2582             | 0.0              |
| 370       | 1514             | 0.0              | 500       | 32216            | 25.9             | 630       | 67709            | 0.0              | 760       | 2794             | 0.0              | 890       | 2353             | 0.0              |
| 375       | 1843             | 0.0              | 505       | 38336            | 29.4             | 635       | 61156            | 0.0              | 765       | 2593             | 0.0              | 895       | 1819             | 0.0              |
| 380       | 1796             | 0.0              | 510       | 43738            | 31.4             | 640       | 54795            | 0.0              | 770       | 2401             | 0.0              | 900       | 2024             | 0.0              |
| 385       | 1575             | 0.0              | 515       | 47977            | 31.3             | 645       | 49111            | 0.0              | 775       | 2233             | 0.0              | 905       | 1851             | 0.0              |
| 390       | 1527             | 0.0              | 520       | 51818            | 30.2             | 650       | 43533            | 0.0              | 780       | 2166             | 0.0              | 910       | 1602             | 0.0              |
| 395       | 1326             | 0.0              | 525       | 54890            | 27.8             | 655       | 38234            | 0.0              | 785       | 2051             | 0.0              | 915       | 2200             | 0.0              |
| 400       | 1233             | 0.0              | 530       | 57872            | 25.0             | 660       | 33754            | 0.0              | 790       | 1765             | 0.0              | 920       | 2530             | 0.0              |
| 405       | 1329             | 0.0              | 535       | 60410            | 21.7             | 665       | 29162            | 0.0              | 795       | 1903             | 0.0              | 925       | 2487             | 0.0              |
| 410       | 1902             | 0.1              | 540       | 62857            | 18.4             | 670       | 25117            | 0.0              | 800       | 2127             | 0.0              | 930       | 2089             | 0.0              |
| 415       | 3436             | 0.2              | 545       | 66165            | 15.4             | 675       | 21511            | 0.0              | 805       | 1867             | 0.0              | 935       | 2293             | 0.0              |
| 420       | 6571             | 0.8              | 550       | 70124            | 12.6             | 680       | 18435            | 0.0              | 810       | 1775             | 0.0              | 940       | 2315             | 0.0              |
| 425       | 12957            | 2.0              | 555       | 74973            | 10.1             | 685       | 16004            | 0.0              | 815       | 1812             | 0.0              | 945       | 2481             | 0.0              |
| 430       | 23376            | 4.9              | 560       | 80227            | 7.9              | 690       | 13701            | 0.0              | 820       | 1973             | 0.0              | 950       | 2701             | 0.0              |
| 435       | 38205            | 10.2             | 565       | 85358            | 6.0              | 695       | 11765            | 0.0              | 825       | 1773             | 0.0              | 955       | 2892             | 0.0              |
| 440       | 56691            | 18.9             | 570       | 90422            | 4.4              | 700       | 10145            | 0.0              | 830       | 1925             | 0.0              | 960       | 2609             | 0.0              |
| 445       | 67585            | 26.7             | 575       | 95259            | 3.2              | 705       | 8865             | 0.0              | 835       | 2001             | 0.0              | 965       | 3066             | 0.0              |
| 450       | 55963            | 25.8             | 580       | 99033            | 2.2              | 710       | 7954             | 0.0              | 840       | 2142             | 0.0              | 970       | 2566             | 0.0              |
| 455       | 35549            | 18.6             | 585       | 101572           | 1.5              | 715       | 7285             | 0.0              | 845       | 2101             | 0.0              | 975       | 2375             | 0.0              |
| 460       | 25268            | 14.9             | 590       | 103264           | 1.0              | 720       | 6412             | 0.0              | 850       | 2097             | 0.0              | 980       | 3526             | 0.0              |
| 465       | 18712            | 12.2             | 595       | 102194           | 0.7              | 725       | 5721             | 0.0              | 855       | 2090             | 0.0              | 985       | 2982             | 0.0              |
| 470       | 13835            | 9.9              | 600       | 100645           | 0.4              | 730       | 5017             | 0.0              | 860       | 2535             | 0.0              | 990       | 2305             | 0.0              |
| 475       | 12398            | 9.5              | 605       | 97644            | 0.3              | 735       | 4459             | 0.0              | 865       | 2101             | 0.0              | 995       | 3671             | 0.0              |
| 480       | 13406            | 10.8             | 610       | 92487            | 0.2              | 740       | 4062             | 0.0              | 870       | 1798             | 0.0              | 1000      | 2560             | 0.0              |
| 485       | 15865            | 13.1             | 615       | 87436            | 0.1              | 745       | 3636             | 0.0              | 875       | 2857             | 0.0              |           |                  |                  |

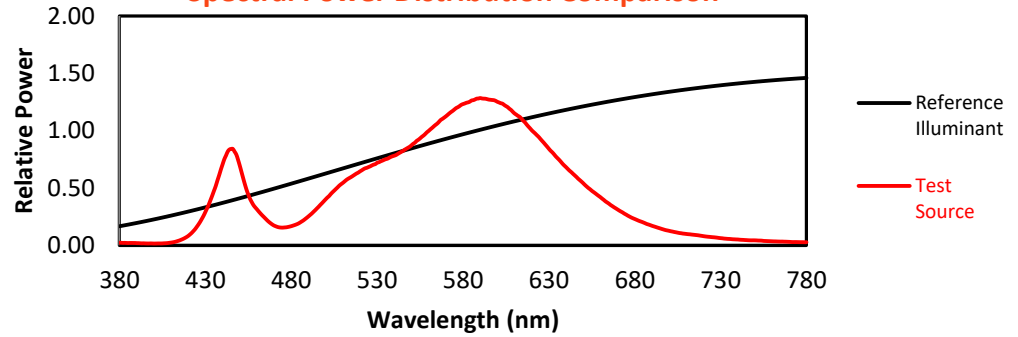
REPORT NUMBER: SP1-2104-224-2

TM-30-18

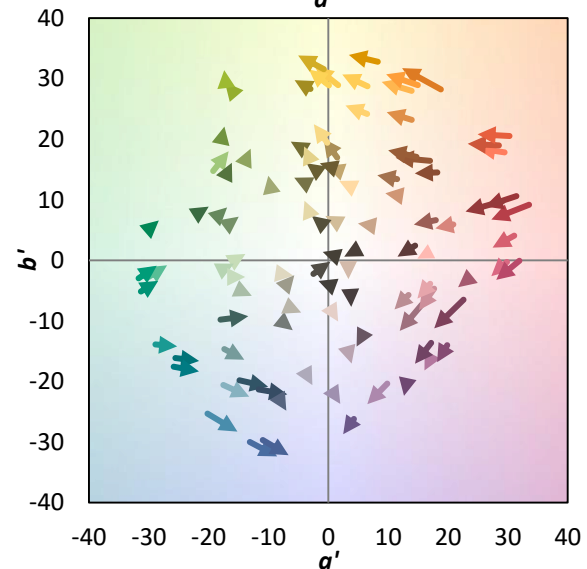
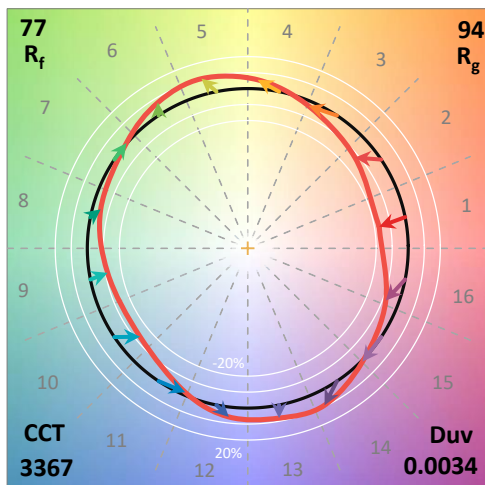
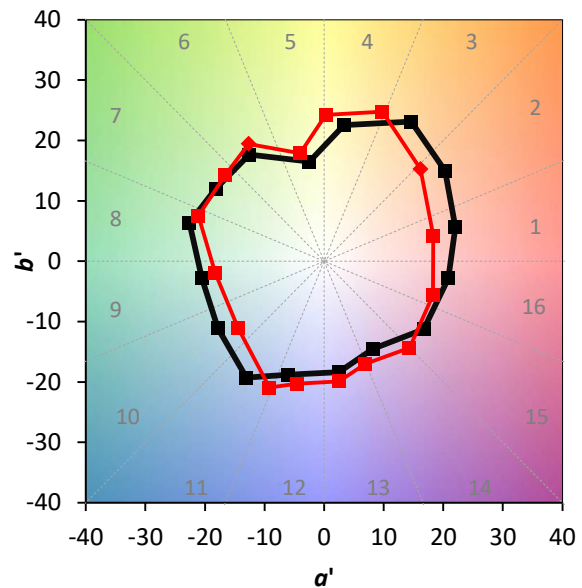
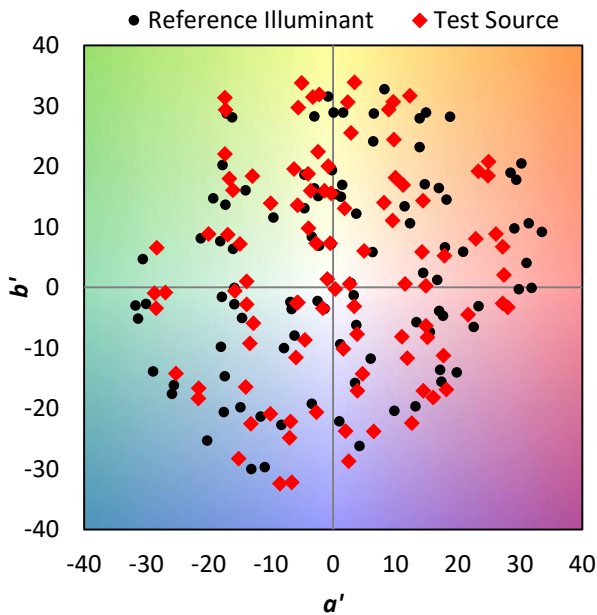
### Summary

$R_f = 77.2$   
 $R_g = 94.4$   
 CIE  $R_a = 73.3$   
 $R_g = -34.3$

### Spectral Power Distribution Comparison

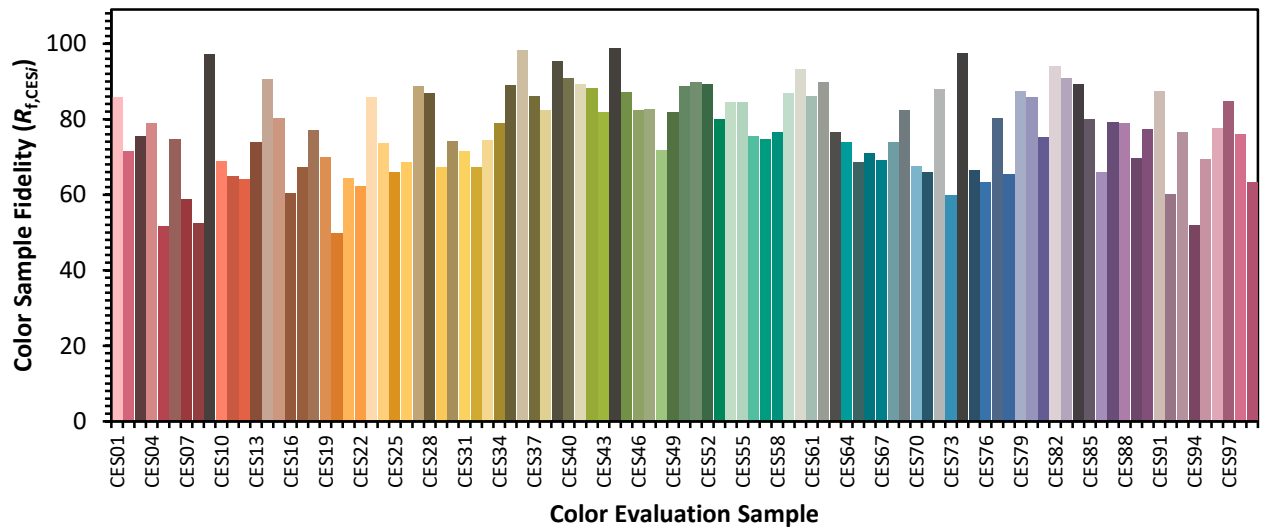


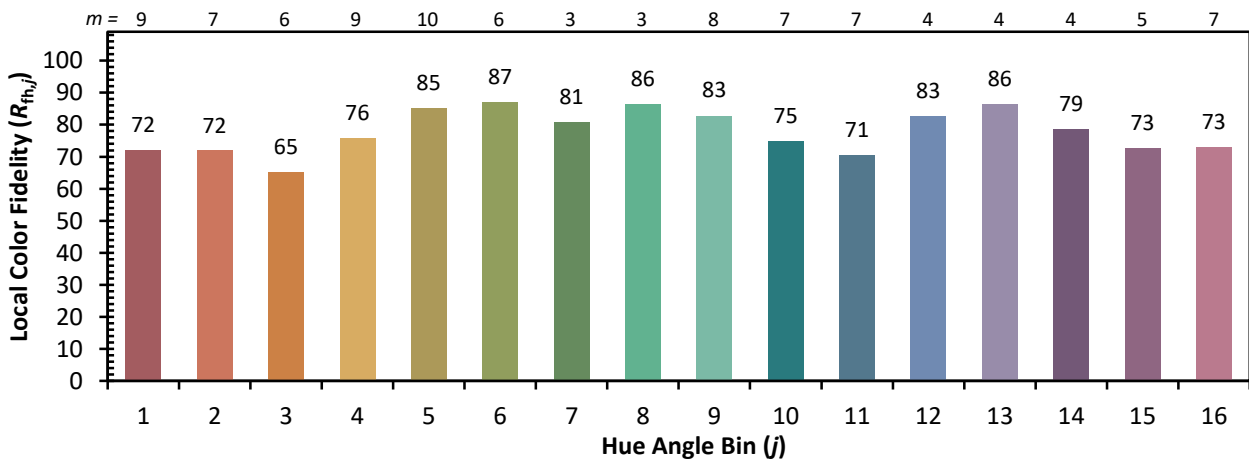
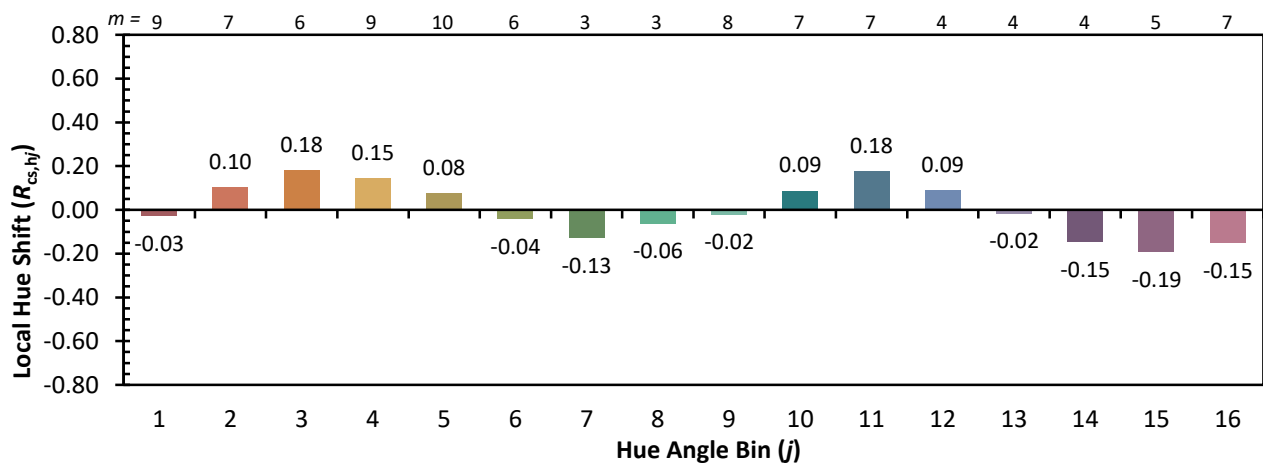
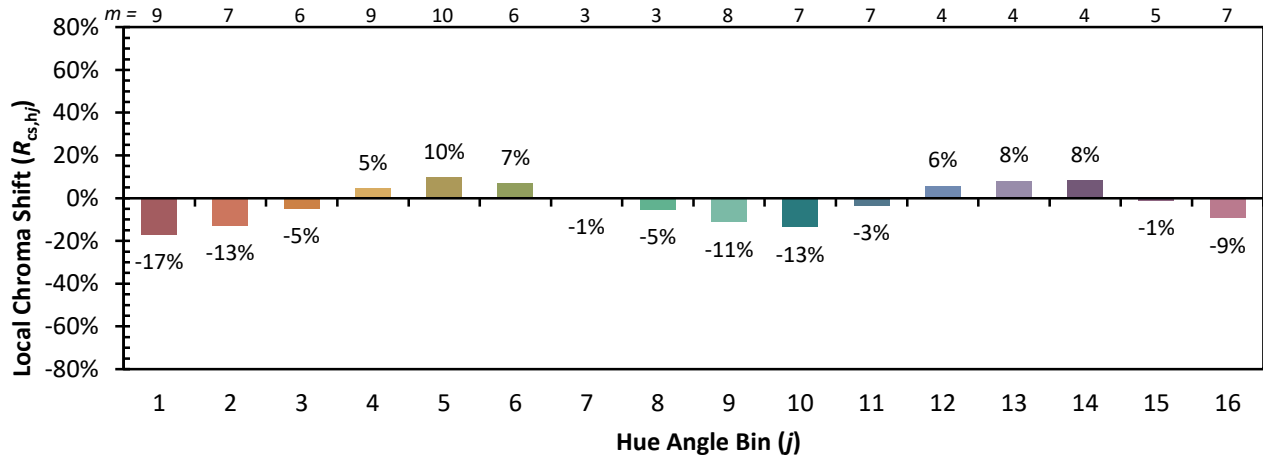
### Color Vector Graphics



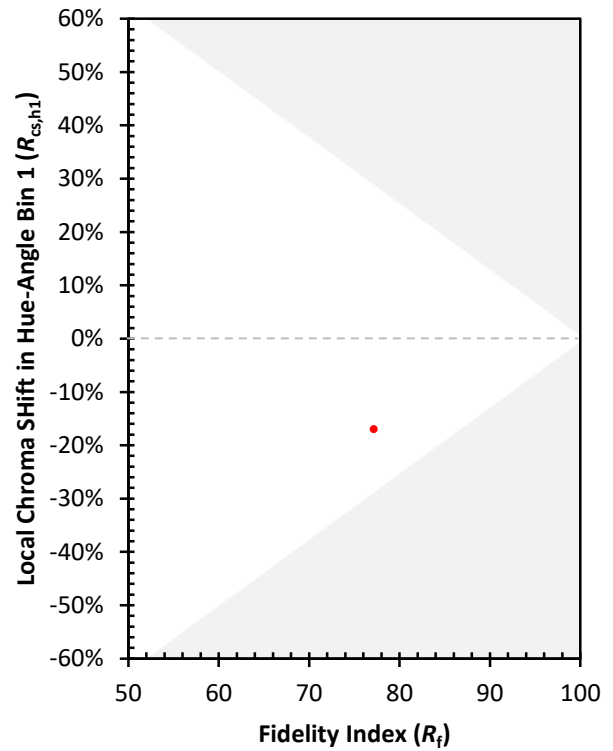
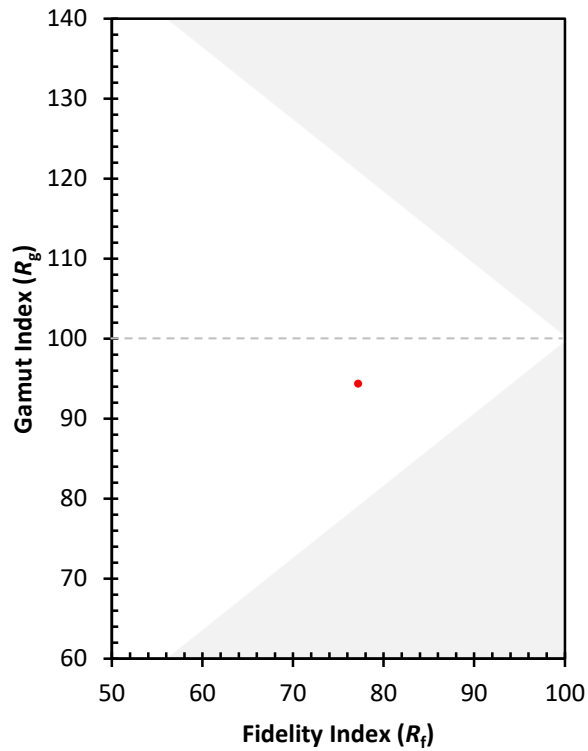
**Individual Sample Fidelity Index ( $R_{f,i}$ )**

|            |            |            |            |
|------------|------------|------------|------------|
| CES01 = 86 | CES26 = 69 | CES51 = 90 | CES76 = 63 |
| CES02 = 62 | CES27 = 89 | CES52 = 89 | CES77 = 80 |
| CES03 = 31 | CES28 = 87 | CES53 = 80 | CES78 = 65 |
| CES04 = 70 | CES29 = 67 | CES54 = 85 | CES79 = 87 |
| CES05 = 48 | CES30 = 74 | CES55 = 84 | CES80 = 86 |
| CES06 = 51 | CES31 = 71 | CES56 = 76 | CES81 = 75 |
| CES07 = 41 | CES32 = 67 | CES57 = 75 | CES82 = 94 |
| CES08 = 39 | CES33 = 75 | CES58 = 77 | CES83 = 91 |
| CES09 = 29 | CES34 = 79 | CES59 = 87 | CES84 = 89 |
| CES10 = 75 | CES35 = 89 | CES60 = 93 | CES85 = 80 |
| CES11 = 58 | CES36 = 98 | CES61 = 86 | CES86 = 66 |
| CES12 = 64 | CES37 = 86 | CES62 = 90 | CES87 = 79 |
| CES13 = 43 | CES38 = 82 | CES63 = 77 | CES88 = 79 |
| CES14 = 74 | CES39 = 95 | CES64 = 74 | CES89 = 70 |
| CES15 = 71 | CES40 = 91 | CES65 = 69 | CES90 = 77 |
| CES16 = 47 | CES41 = 89 | CES66 = 71 | CES91 = 87 |
| CES17 = 50 | CES42 = 88 | CES67 = 69 | CES92 = 60 |
| CES18 = 56 | CES43 = 82 | CES68 = 74 | CES93 = 76 |
| CES19 = 72 | CES44 = 99 | CES69 = 82 | CES94 = 52 |
| CES20 = 65 | CES45 = 87 | CES70 = 67 | CES95 = 69 |
| CES21 = 86 | CES46 = 82 | CES71 = 66 | CES96 = 78 |
| CES22 = 79 | CES47 = 83 | CES72 = 88 | CES97 = 85 |
| CES23 = 92 | CES48 = 72 | CES73 = 60 | CES98 = 76 |
| CES24 = 91 | CES49 = 82 | CES74 = 97 | CES99 = 63 |
| CES25 = 72 | CES50 = 89 | CES75 = 67 |            |



**Color Rendition by Hue-Angle Bin**


**Measure Comparisons**



(END OF REPORT)