

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



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

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: INVUE

Report Number: P674241

Luminaire Tested: **CCP-SA1E-727-U-SLR-HSS**

Issue Date: 04/16/2023

**Test Information**

Test Method: LM-79-08  
Report Number: P674241  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 04/16/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: CCP-SA1E-727-U-SLR-HSS  
Description: INVUE CLEAR CURVE POLE MOUNT Light Square Luminaire @1050mA w/ SLR  
distribution lens and House Side Shield  
Light Source: (16) 2700K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4109 lumens  
Efficiency: N/A  
Efficacy: 73.2 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U0 - G1

Input Watts (W): 56.1  
Input Voltage (V): 120  
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: 25 FT

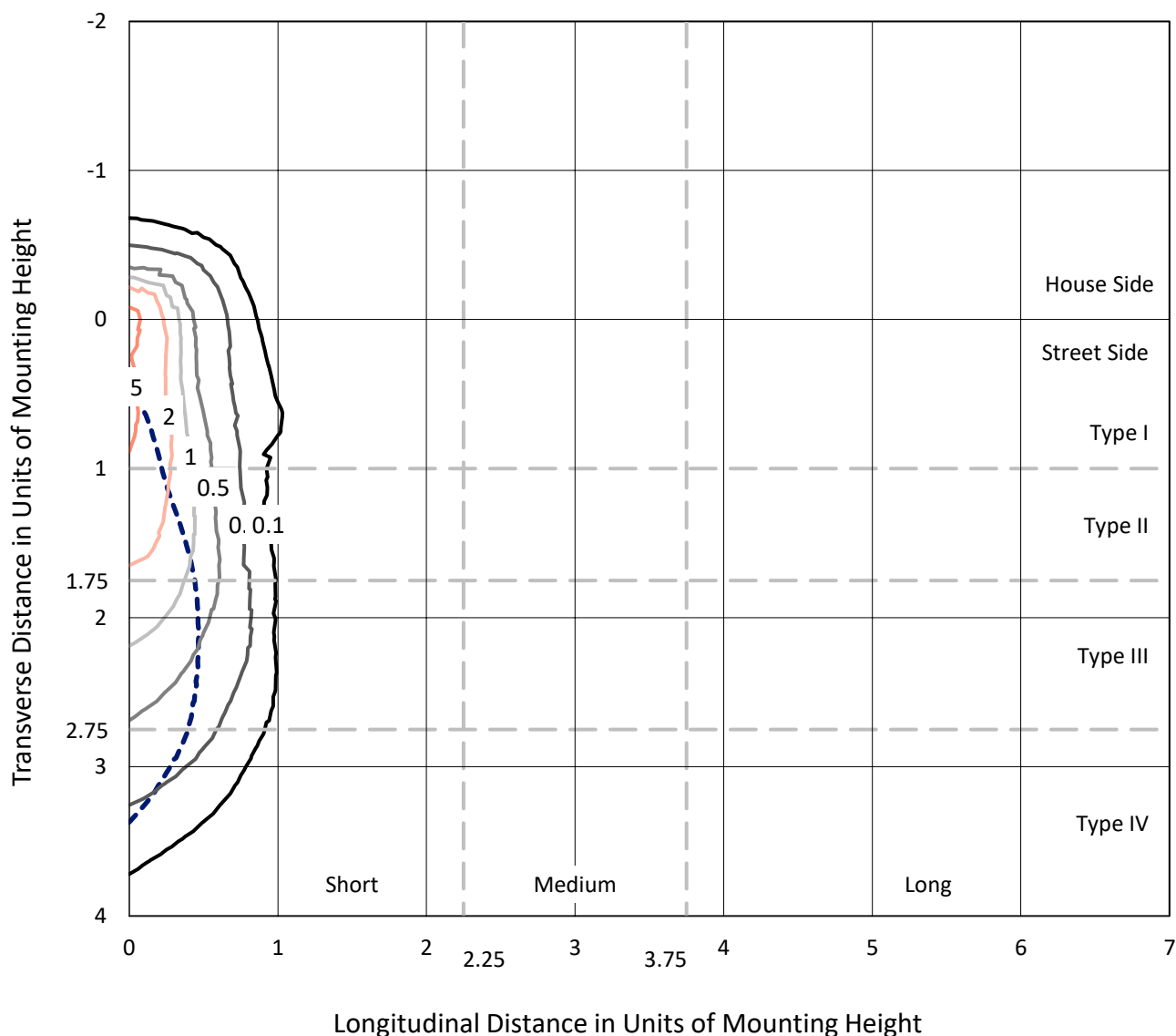
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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

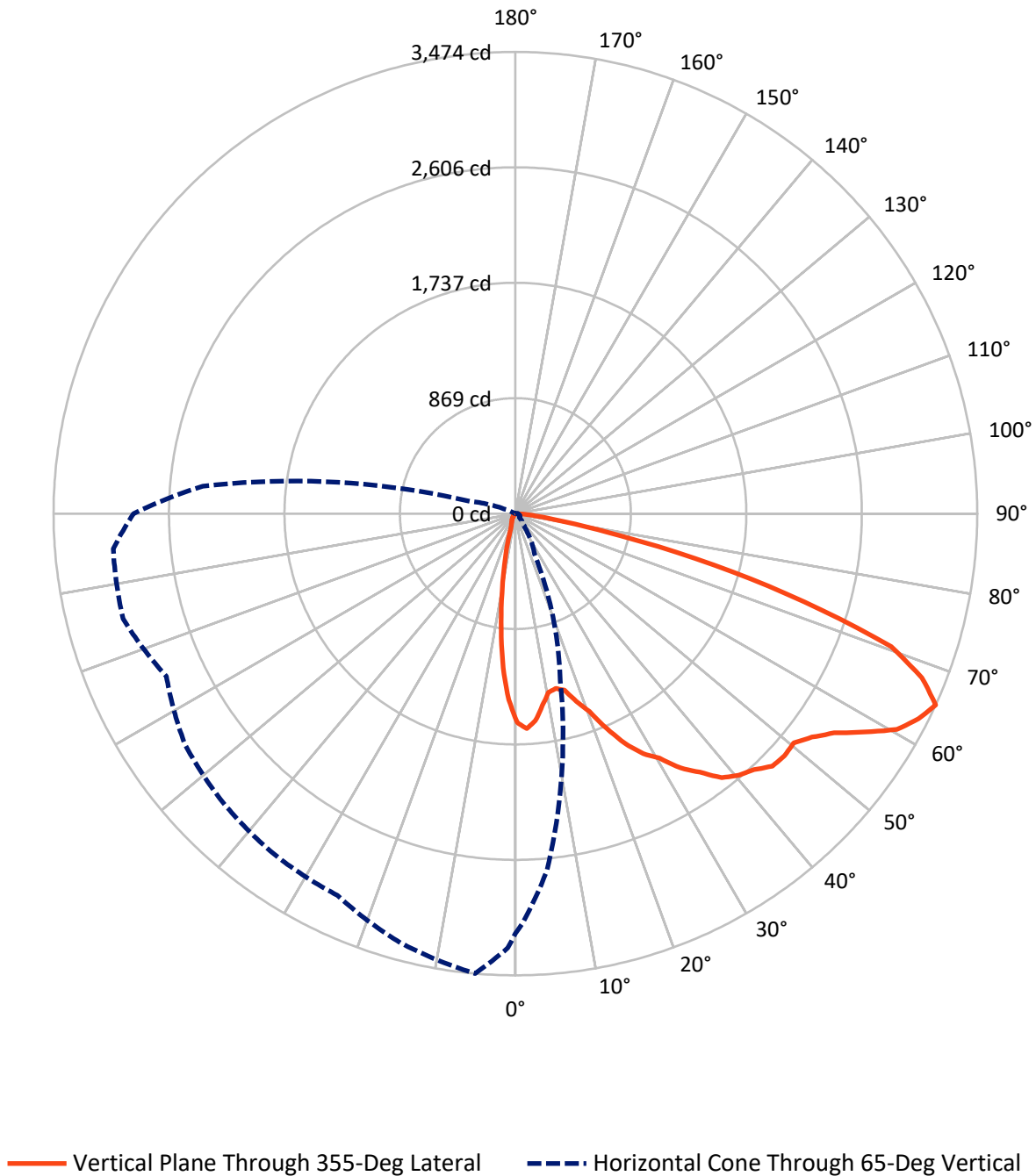


Based on 15 foot mounting height. Maximum calculated value = 7 fc

Type IV - Short - N/A

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## Luminous Intensity Polar Plot



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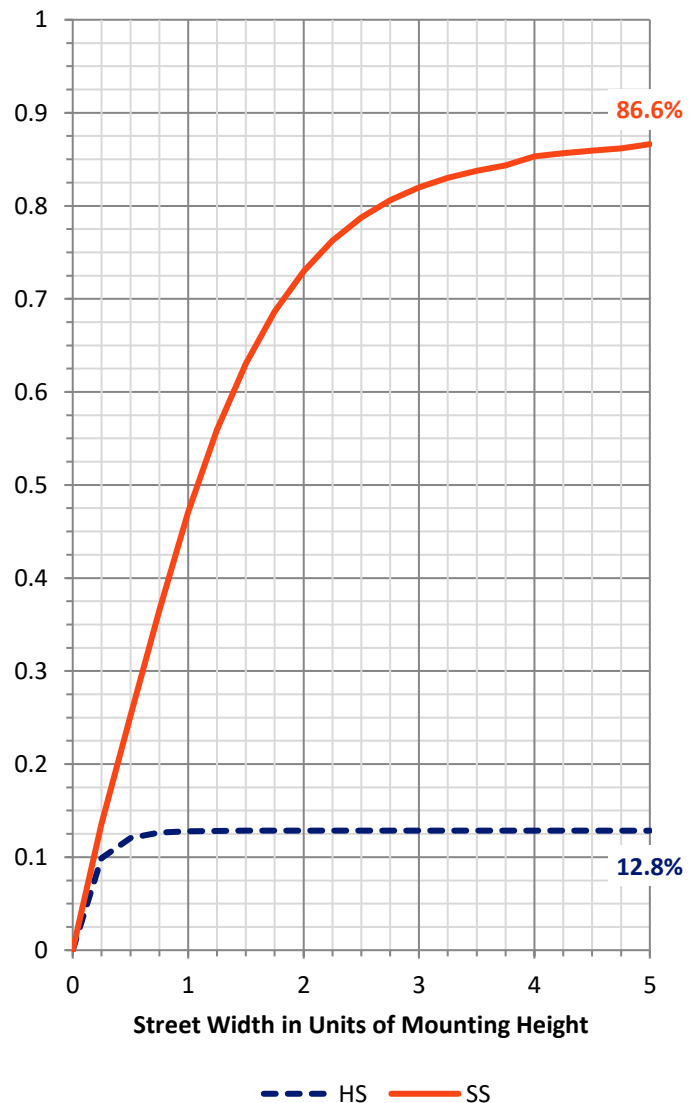
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 533.5    | 0.0    | 533.5  |
|                    | % Fixture | 13.0     | 0.0    | 13.0   |
| <b>Street Side</b> | Lumens    | 3575.5   | 0.0    | 3575.5 |
|                    | % Fixture | 87.0     | 0.0    | 87.0   |
| <b>Total</b>       | Lumens    | 4109.0   | 0.0    | 4109.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 119.0  | 2.9       |
| 10°-20°   | 230.4  | 5.6       |
| 20°-30°   | 320.9  | 7.8       |
| 30°-40°   | 456.0  | 11.1      |
| 40°-50°   | 632.3  | 15.4      |
| 50°-60°   | 861.6  | 21.0      |
| 60°-70°   | 947.2  | 23.1      |
| 70°-80°   | 465.6  | 11.3      |
| 80°-90°   | 76.0   | 1.9       |
| 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°    | 4109.0 | 100.0     |
| 0°-180°   | 4109.0 | 100.0     |

**Coefficient of Utilization**



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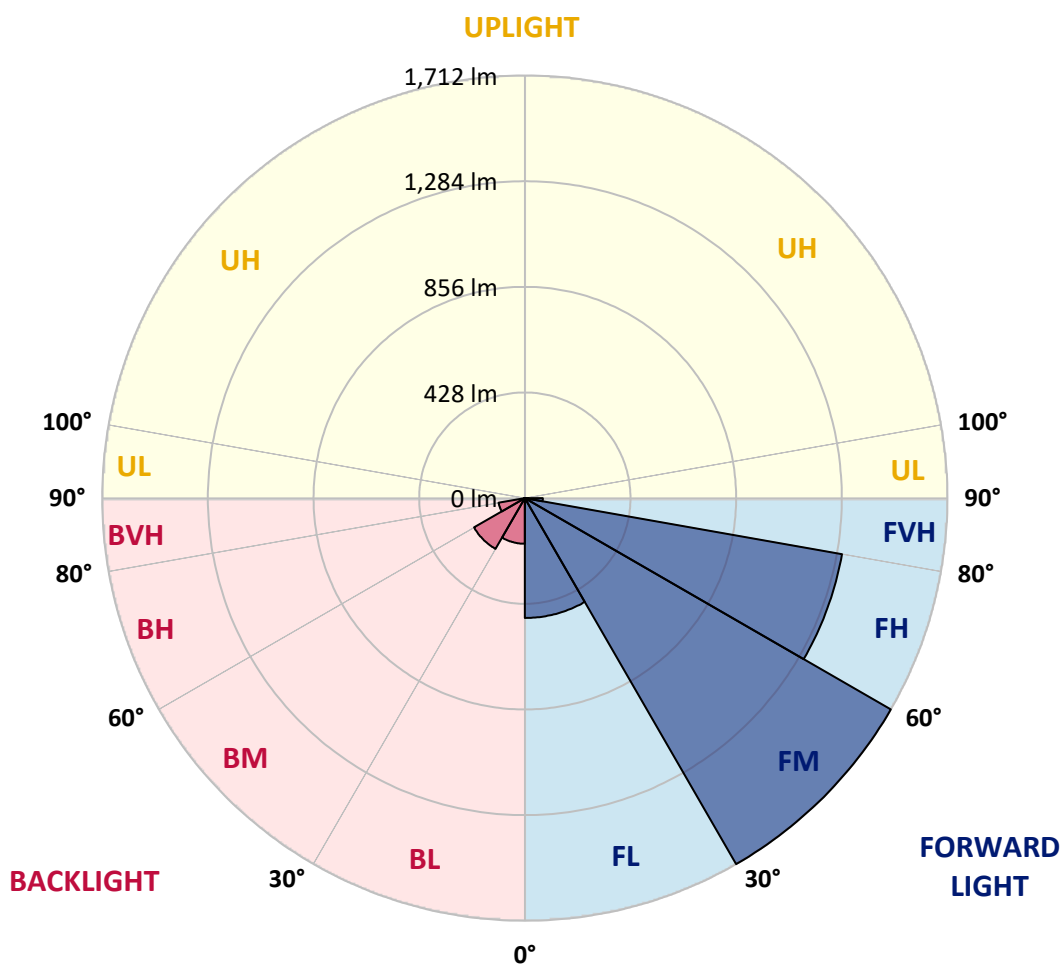
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 485.6  | 11.8      |                         |      |         |
| FM   | (30°-60°)   | 1712.3 | 41.7      |                         |      |         |
| FH   | (60°-80°)   | 1305.0 | 31.8      |                         |      | G1/1800 |
| FVH  | (80°-90°)   | 72.6   | 1.8       |                         |      | G1/100  |
| BL   | (0°-30°)    | 184.7  | 4.5       | B1/500                  |      |         |
| BM   | (30°-60°)   | 237.5  | 5.8       | B1/1000                 |      |         |
| BH   | (60°-80°)   | 107.8  | 2.6       | B0/110                  |      | G0/110  |
| BVH  | (80°-90°)   | 3.4    | 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-G1**

Type IV Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 1°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1570.9 | 1570.9 | 1570.9 | 1570.9 | 1570.9 | 1570.9 | 1570.9 | 1570.9 | 1570.9 | 1570.9 | 1570.9 |
| 2.5°  | 1603.0 | 1621.8 | 1604.1 | 1542.1 | 1531.0 | 1501.1 | 1455.7 | 1452.3 | 1404.7 | 1410.2 | 1384.8 |
| 5°    | 1506.6 | 1525.4 | 1487.8 | 1405.8 | 1329.4 | 1268.4 | 1231.9 | 1166.5 | 1152.1 | 1120.0 | 1120.0 |
| 7.5°  | 1408.0 | 1406.9 | 1342.7 | 1274.0 | 1159.9 | 1048.0 | 997.0  | 902.9  | 847.5  | 817.6  | 788.8  |
| 10°   | 1326.0 | 1308.3 | 1268.4 | 1126.6 | 1002.6 | 886.2  | 823.1  | 761.1  | 703.5  | 653.6  | 603.8  |
| 12.5° | 1268.4 | 1279.5 | 1216.4 | 1062.4 | 901.8  | 820.9  | 753.3  | 687.9  | 619.3  | 562.8  | 507.4  |
| 15°   | 1298.3 | 1280.6 | 1206.4 | 1048.0 | 885.1  | 774.4  | 684.6  | 604.9  | 528.4  | 454.2  | 412.1  |
| 17.5° | 1391.4 | 1346.0 | 1258.5 | 1048.0 | 850.8  | 703.5  | 594.9  | 500.7  | 418.8  | 352.3  | 300.2  |
| 20°   | 1516.6 | 1464.5 | 1370.4 | 1086.8 | 825.3  | 651.4  | 502.9  | 384.4  | 299.1  | 237.1  | 197.2  |
| 22.5° | 1645.1 | 1604.1 | 1462.3 | 1102.3 | 795.4  | 581.6  | 396.6  | 278.1  | 199.4  | 159.5  | 139.6  |
| 25°   | 1799.1 | 1741.5 | 1586.4 | 1164.3 | 751.1  | 514.0  | 312.4  | 193.9  | 148.4  | 127.4  | 115.2  |
| 27.5° | 1922.0 | 1912.1 | 1702.7 | 1202.0 | 717.9  | 458.6  | 247.0  | 154.0  | 123.0  | 107.5  | 99.7   |
| 30°   | 2077.1 | 2022.9 | 1844.5 | 1277.3 | 680.2  | 395.5  | 206.1  | 138.5  | 113.0  | 96.4   | 90.8   |
| 32.5° | 2170.2 | 2144.7 | 1918.7 | 1319.4 | 638.1  | 343.4  | 177.2  | 121.9  | 103.0  | 90.8   | 85.3   |
| 35°   | 2305.3 | 2254.4 | 2025.1 | 1346.0 | 615.9  | 313.5  | 159.5  | 110.8  | 86.4   | 74.2   | 67.6   |
| 37.5° | 2456.0 | 2437.2 | 2152.5 | 1344.9 | 583.8  | 295.8  | 147.3  | 103.0  | 82.0   | 68.7   | 60.9   |
| 40°   | 2610.0 | 2533.6 | 2230.0 | 1375.9 | 567.2  | 282.5  | 138.5  | 98.6   | 77.5   | 65.4   | 55.4   |
| 42.5° | 2725.2 | 2637.7 | 2319.7 | 1364.8 | 547.3  | 259.2  | 135.2  | 91.9   | 74.2   | 59.8   | 51.0   |
| 45°   | 2756.2 | 2725.2 | 2400.6 | 1361.5 | 532.9  | 240.4  | 129.6  | 90.8   | 72.0   | 56.5   | 47.6   |
| 47.5° | 2816.0 | 2795.0 | 2500.3 | 1367.0 | 521.8  | 226.0  | 116.3  | 93.1   | 68.7   | 53.2   | 45.4   |
| 50°   | 2842.6 | 2805.0 | 2581.2 | 1380.3 | 496.3  | 208.3  | 104.1  | 97.5   | 67.6   | 52.1   | 43.2   |
| 52.5° | 2952.3 | 2919.1 | 2692.0 | 1418.0 | 475.2  | 185.0  | 91.9   | 93.1   | 69.8   | 48.7   | 41.0   |
| 55°   | 3059.8 | 3022.1 | 2862.6 | 1504.4 | 445.3  | 166.2  | 78.7   | 82.0   | 66.5   | 44.3   | 36.6   |
| 57.5° | 3207.1 | 3145.1 | 2976.7 | 1539.8 | 418.8  | 140.7  | 69.8   | 67.6   | 62.0   | 39.9   | 32.1   |
| 60°   | 3229.3 | 3254.7 | 2960.1 | 1517.7 | 391.1  | 124.1  | 60.9   | 52.1   | 66.5   | 35.4   | 27.7   |
| 62.5° | 3303.5 | 3197.1 | 2882.5 | 1466.7 | 371.1  | 114.1  | 54.3   | 43.2   | 57.6   | 31.0   | 23.3   |
| 65°   | 3160.6 | 3081.9 | 2700.8 | 1302.8 | 345.6  | 115.2  | 47.6   | 35.4   | 36.6   | 25.5   | 18.8   |
| 67.5° | 2951.2 | 2889.2 | 2399.5 | 1124.4 | 320.2  | 113.0  | 42.1   | 31.0   | 27.7   | 22.2   | 16.6   |
| 70°   | 2590.0 | 2456.0 | 2038.4 | 912.8  | 282.5  | 105.2  | 35.4   | 27.7   | 23.3   | 17.7   | 12.2   |
| 72.5° | 1884.4 | 1830.1 | 1462.3 | 705.7  | 253.7  | 95.3   | 33.2   | 23.3   | 19.9   | 13.3   | 10.0   |
| 75°   | 1268.4 | 1178.7 | 922.8  | 463.1  | 203.8  | 83.1   | 27.7   | 21.0   | 15.5   | 10.0   | 7.8    |
| 77.5° | 670.2  | 633.7  | 522.9  | 220.5  | 113.0  | 38.8   | 15.5   | 12.2   | 8.9    | 7.8    | 4.4    |
| 80°   | 290.2  | 258.1  | 226.0  | 89.7   | 39.9   | 17.7   | 10.0   | 6.6    | 5.5    | 4.4    | 2.2    |
| 82.5° | 148.4  | 141.8  | 117.4  | 38.8   | 23.3   | 13.3   | 5.5    | 4.4    | 3.3    | 2.2    | 1.1    |
| 85°   | 73.1   | 75.3   | 62.0   | 12.2   | 13.3   | 7.8    | 1.1    | 1.1    | 0.0    | 0.0    | 0.0    |
| 87.5° | 5.5    | 5.5    | 4.4    | 2.2    | 3.3    | 1.1    | 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):**

|       | 90°    | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1570.9 | 1570.9 | 1570.9 | 1570.9 | 1570.9 | 1570.9 | 1570.9 | 1570.9 | 1570.9 | 1570.9 | 1570.9 |
| 2.5°  | 1374.8 | 1390.3 | 1363.7 | 1380.3 | 1372.6 | 1375.9 | 1379.2 | 1370.4 | 1372.6 | 1403.6 | 1404.7 |
| 5°    | 1101.2 | 1131.1 | 1120.0 | 1135.5 | 1162.1 | 1148.8 | 1161.0 | 1158.8 | 1161.0 | 1165.4 | 1185.4 |
| 7.5°  | 785.4  | 776.6  | 797.6  | 838.6  | 886.2  | 915.0  | 900.6  | 892.9  | 888.5  | 877.4  | 890.7  |
| 10°   | 592.7  | 588.2  | 582.7  | 594.9  | 625.9  | 658.0  | 675.8  | 645.9  | 629.2  | 608.2  | 600.4  |
| 12.5° | 491.9  | 464.2  | 448.7  | 429.8  | 438.7  | 467.5  | 468.6  | 439.8  | 413.2  | 402.1  | 414.3  |
| 15°   | 387.7  | 368.9  | 341.2  | 314.6  | 301.3  | 323.5  | 304.6  | 277.0  | 242.6  | 238.2  | 237.1  |
| 17.5° | 277.0  | 265.9  | 245.9  | 234.9  | 219.3  | 213.8  | 193.9  | 151.8  | 127.4  | 120.8  | 123.0  |
| 20°   | 188.3  | 179.5  | 178.4  | 168.4  | 161.7  | 157.3  | 125.2  | 97.5   | 89.7   | 90.8   | 91.9   |
| 22.5° | 139.6  | 135.2  | 129.6  | 128.5  | 123.0  | 117.4  | 91.9   | 82.0   | 76.4   | 76.4   | 79.8   |
| 25°   | 114.1  | 111.9  | 106.3  | 104.1  | 101.9  | 94.2   | 77.5   | 69.8   | 67.6   | 65.4   | 68.7   |
| 27.5° | 97.5   | 96.4   | 93.1   | 89.7   | 87.5   | 79.8   | 67.6   | 60.9   | 58.7   | 58.7   | 58.7   |
| 30°   | 87.5   | 87.5   | 83.1   | 76.4   | 76.4   | 67.6   | 57.6   | 53.2   | 51.0   | 51.0   | 49.9   |
| 32.5° | 82.0   | 79.8   | 74.2   | 69.8   | 66.5   | 57.6   | 51.0   | 46.5   | 43.2   | 43.2   | 44.3   |
| 35°   | 66.5   | 66.5   | 65.4   | 62.0   | 57.6   | 48.7   | 43.2   | 38.8   | 36.6   | 35.4   | 36.6   |
| 37.5° | 58.7   | 55.4   | 51.0   | 52.1   | 49.9   | 42.1   | 36.6   | 33.2   | 29.9   | 29.9   | 29.9   |
| 40°   | 53.2   | 49.9   | 45.4   | 42.1   | 41.0   | 37.7   | 32.1   | 26.6   | 23.3   | 22.2   | 22.2   |
| 42.5° | 47.6   | 45.4   | 38.8   | 33.2   | 32.1   | 32.1   | 24.4   | 19.9   | 16.6   | 16.6   | 16.6   |
| 45°   | 44.3   | 41.0   | 35.4   | 28.8   | 23.3   | 24.4   | 19.9   | 14.4   | 12.2   | 11.1   | 11.1   |
| 47.5° | 42.1   | 38.8   | 31.0   | 24.4   | 17.7   | 17.7   | 14.4   | 10.0   | 7.8    | 6.6    | 6.6    |
| 50°   | 38.8   | 35.4   | 27.7   | 19.9   | 13.3   | 11.1   | 8.9    | 5.5    | 3.3    | 2.2    | 2.2    |
| 52.5° | 36.6   | 33.2   | 24.4   | 16.6   | 11.1   | 7.8    | 5.5    | 1.1    | 0.0    | 0.0    | 0.0    |
| 55°   | 33.2   | 28.8   | 21.0   | 13.3   | 8.9    | 4.4    | 1.1    | 0.0    | 0.0    | 0.0    | 0.0    |
| 57.5° | 28.8   | 25.5   | 16.6   | 10.0   | 5.5    | 1.1    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 60°   | 24.4   | 21.0   | 13.3   | 7.8    | 2.2    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 62.5° | 19.9   | 17.7   | 10.0   | 4.4    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 65°   | 16.6   | 13.3   | 7.8    | 1.1    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 67.5° | 14.4   | 11.1   | 5.5    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 70°   | 11.1   | 7.8    | 3.3    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 72.5° | 7.8    | 5.5    | 1.1    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 75°   | 5.5    | 3.3    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 77.5° | 3.3    | 1.1    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 80°   | 1.1    | 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    |

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**CANDELA DISTRIBUTION (continued):**

|       | 185°   | 195°   | 205°   | 215°   | 225°   | 235°   | 245°   | 255°   | 265°   | 270°   | 275°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1570.9 | 1570.9 | 1570.9 | 1570.9 | 1570.9 | 1570.9 | 1570.9 | 1570.9 | 1570.9 | 1570.9 | 1570.9 |
| 2.5°  | 1409.1 | 1442.4 | 1473.4 | 1482.2 | 1506.6 | 1574.2 | 1574.2 | 1606.3 | 1663.9 | 1685.0 | 1689.4 |
| 5°    | 1188.7 | 1224.1 | 1230.8 | 1299.5 | 1331.6 | 1400.3 | 1445.7 | 1554.3 | 1619.6 | 1660.6 | 1686.1 |
| 7.5°  | 904.0  | 916.2  | 941.6  | 1005.9 | 1069.0 | 1152.1 | 1238.5 | 1377.0 | 1492.2 | 1538.7 | 1625.2 |
| 10°   | 621.5  | 658.0  | 713.4  | 771.0  | 869.6  | 961.6  | 1073.5 | 1204.2 | 1346.0 | 1403.6 | 1477.8 |
| 12.5° | 418.8  | 469.7  | 558.3  | 640.3  | 731.2  | 824.2  | 930.6  | 1105.6 | 1266.2 | 1346.0 | 1420.2 |
| 15°   | 244.8  | 306.9  | 383.3  | 516.2  | 637.0  | 741.1  | 847.5  | 1024.7 | 1219.7 | 1322.7 | 1413.6 |
| 17.5° | 124.1  | 142.9  | 206.1  | 321.3  | 480.8  | 651.4  | 809.8  | 1035.8 | 1255.1 | 1381.4 | 1456.8 |
| 20°   | 93.1   | 98.6   | 116.3  | 170.6  | 329.0  | 538.4  | 774.4  | 1052.4 | 1353.7 | 1507.7 | 1548.7 |
| 22.5° | 80.9   | 85.3   | 93.1   | 110.8  | 185.0  | 412.1  | 724.5  | 1093.4 | 1487.8 | 1632.9 | 1719.3 |
| 25°   | 68.7   | 73.1   | 79.8   | 90.8   | 118.5  | 280.3  | 663.6  | 1136.6 | 1607.4 | 1790.2 | 1871.1 |
| 27.5° | 59.8   | 63.1   | 69.8   | 78.7   | 96.4   | 178.4  | 558.3  | 1194.2 | 1790.2 | 1980.8 | 2001.8 |
| 30°   | 51.0   | 54.3   | 59.8   | 69.8   | 82.0   | 126.3  | 409.9  | 1202.0 | 1891.0 | 2063.8 | 2122.6 |
| 32.5° | 44.3   | 45.4   | 52.1   | 60.9   | 68.7   | 99.7   | 288.0  | 1209.7 | 1965.2 | 2171.3 | 2183.5 |
| 35°   | 36.6   | 38.8   | 45.4   | 51.0   | 59.8   | 78.7   | 218.2  | 1170.9 | 2061.6 | 2282.1 | 2278.8 |
| 37.5° | 29.9   | 33.2   | 37.7   | 42.1   | 48.7   | 66.5   | 173.9  | 1098.9 | 2182.4 | 2453.8 | 2349.7 |
| 40°   | 23.3   | 26.6   | 31.0   | 36.6   | 41.0   | 59.8   | 130.7  | 990.4  | 2308.7 | 2538.0 | 2427.2 |
| 42.5° | 16.6   | 18.8   | 23.3   | 28.8   | 36.6   | 49.9   | 94.2   | 861.9  | 2358.5 | 2636.6 | 2520.3 |
| 45°   | 12.2   | 14.4   | 17.7   | 24.4   | 37.7   | 39.9   | 65.4   | 744.4  | 2411.7 | 2679.8 | 2499.2 |
| 47.5° | 6.6    | 8.9    | 13.3   | 21.0   | 33.2   | 29.9   | 46.5   | 639.2  | 2472.6 | 2718.6 | 2515.8 |
| 50°   | 2.2    | 3.3    | 7.8    | 22.2   | 26.6   | 23.3   | 36.6   | 582.7  | 2532.4 | 2726.3 | 2549.1 |
| 52.5° | 0.0    | 0.0    | 4.4    | 23.3   | 19.9   | 17.7   | 32.1   | 560.5  | 2516.9 | 2750.7 | 2528.0 |
| 55°   | 0.0    | 0.0    | 1.1    | 10.0   | 11.1   | 13.3   | 26.6   | 559.4  | 2626.6 | 2758.4 | 2643.2 |
| 57.5° | 0.0    | 0.0    | 0.0    | 3.3    | 6.6    | 11.1   | 23.3   | 524.0  | 2696.4 | 2951.2 | 2798.3 |
| 60°   | 0.0    | 0.0    | 0.0    | 1.1    | 4.4    | 7.8    | 17.7   | 493.0  | 2767.3 | 3037.6 | 2964.5 |
| 62.5° | 0.0    | 0.0    | 0.0    | 0.0    | 1.1    | 3.3    | 12.2   | 445.3  | 2624.4 | 3031.0 | 3125.1 |
| 65°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 7.8    | 352.3  | 2360.7 | 2872.5 | 3036.5 |
| 67.5° | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 4.4    | 243.7  | 2067.2 | 2673.1 | 2873.6 |
| 70°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 147.3  | 1668.4 | 2344.1 | 2437.2 |
| 72.5° | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 63.1   | 1190.9 | 1861.1 | 1999.6 |
| 75°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 25.5   | 736.7  | 1360.4 | 1531.0 |
| 77.5° | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 10.0   | 477.5  | 1030.3 | 1162.1 |
| 80°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 2.2    | 254.8  | 645.9  | 751.1  |
| 82.5° | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 110.8  | 392.2  | 452.0  |
| 85°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 35.4   | 238.2  | 271.4  |
| 87.5° | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 36.6   | 48.7   |
| 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: P674241

CATALOG NUMBER: CCP-SA1E-727-U-SLR-HSS

**CANDELA DISTRIBUTION (continued):**

|       | 285°   | 295°   | 305°   | 315°   | 325°   | 335°   | 345°   | 355°   | 359°   | 360°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1570.9 | 1570.9 | 1570.9 | 1570.9 | 1570.9 | 1570.9 | 1570.9 | 1570.9 | 1570.9 | 1570.9 |
| 2.5°  | 1691.6 | 1723.7 | 1735.9 | 1717.1 | 1719.3 | 1680.5 | 1675.0 | 1620.7 | 1598.6 | 1603.0 |
| 5°    | 1769.2 | 1815.7 | 1841.2 | 1820.1 | 1772.5 | 1698.3 | 1630.7 | 1566.4 | 1526.6 | 1506.6 |
| 7.5°  | 1751.4 | 1803.5 | 1835.6 | 1855.6 | 1801.3 | 1681.6 | 1578.6 | 1457.9 | 1406.9 | 1408.0 |
| 10°   | 1654.0 | 1762.5 | 1827.9 | 1802.4 | 1776.9 | 1657.3 | 1497.8 | 1367.0 | 1321.6 | 1326.0 |
| 12.5° | 1575.3 | 1696.0 | 1734.8 | 1754.8 | 1702.7 | 1607.4 | 1500.0 | 1350.4 | 1299.5 | 1268.4 |
| 15°   | 1526.6 | 1616.3 | 1618.5 | 1649.5 | 1628.5 | 1628.5 | 1523.2 | 1377.0 | 1332.7 | 1298.3 |
| 17.5° | 1526.6 | 1546.5 | 1544.3 | 1555.4 | 1590.8 | 1632.9 | 1581.9 | 1484.5 | 1396.9 | 1391.4 |
| 20°   | 1560.9 | 1498.9 | 1484.5 | 1488.9 | 1518.8 | 1644.0 | 1711.6 | 1589.7 | 1534.3 | 1516.6 |
| 22.5° | 1640.7 | 1504.4 | 1416.9 | 1401.4 | 1493.3 | 1642.9 | 1794.6 | 1755.9 | 1659.5 | 1645.1 |
| 25°   | 1750.3 | 1494.4 | 1399.2 | 1379.2 | 1449.0 | 1682.8 | 1908.7 | 1916.5 | 1829.0 | 1799.1 |
| 27.5° | 1854.5 | 1538.7 | 1396.9 | 1392.5 | 1484.5 | 1673.9 | 1987.4 | 2045.0 | 1946.4 | 1922.0 |
| 30°   | 1889.9 | 1583.1 | 1437.9 | 1379.2 | 1497.8 | 1706.0 | 1985.2 | 2135.8 | 2071.6 | 2077.1 |
| 32.5° | 1932.0 | 1627.4 | 1442.4 | 1419.1 | 1554.3 | 1758.1 | 2048.3 | 2282.1 | 2235.6 | 2170.2 |
| 35°   | 1994.0 | 1687.2 | 1484.5 | 1463.4 | 1594.1 | 1804.6 | 2061.6 | 2389.5 | 2381.8 | 2305.3 |
| 37.5° | 2047.2 | 1745.9 | 1572.0 | 1575.3 | 1716.0 | 1879.9 | 2120.3 | 2521.4 | 2508.1 | 2456.0 |
| 40°   | 2084.9 | 1827.9 | 1708.2 | 1717.1 | 1822.3 | 1964.1 | 2224.5 | 2587.8 | 2686.4 | 2610.0 |
| 42.5° | 2090.4 | 1901.0 | 1864.4 | 1935.3 | 2033.9 | 2094.9 | 2266.6 | 2633.3 | 2775.1 | 2725.2 |
| 45°   | 2111.5 | 2017.3 | 2119.2 | 2171.3 | 2252.2 | 2210.1 | 2264.4 | 2710.8 | 2781.7 | 2756.2 |
| 47.5° | 2193.5 | 2228.9 | 2357.4 | 2515.8 | 2544.6 | 2406.2 | 2317.5 | 2723.0 | 2819.4 | 2816.0 |
| 50°   | 2278.8 | 2456.0 | 2636.6 | 2741.8 | 2778.4 | 2541.3 | 2367.4 | 2713.0 | 2869.2 | 2842.6 |
| 52.5° | 2374.0 | 2653.2 | 2913.5 | 3043.1 | 3023.2 | 2690.9 | 2423.9 | 2793.9 | 2961.2 | 2952.3 |
| 55°   | 2433.8 | 2741.8 | 3091.9 | 3272.5 | 3256.9 | 2858.1 | 2603.3 | 2910.2 | 3081.9 | 3059.8 |
| 57.5° | 2592.3 | 2885.8 | 3269.1 | 3353.3 | 3394.3 | 3077.5 | 2728.5 | 3100.7 | 3182.7 | 3207.1 |
| 60°   | 2723.0 | 2980.0 | 3315.7 | 3437.5 | 3451.9 | 3208.2 | 2947.9 | 3296.8 | 3311.2 | 3229.3 |
| 62.5° | 2914.6 | 3016.6 | 3217.1 | 3326.7 | 3401.0 | 3282.4 | 3145.1 | 3402.1 | 3309.0 | 3303.5 |
| 65°   | 3055.3 | 2896.9 | 3033.2 | 3094.1 | 3141.7 | 3169.4 | 3343.4 | 3474.1 | 3268.0 | 3160.6 |
| 67.5° | 2976.7 | 2670.9 | 2645.4 | 2648.8 | 2663.2 | 2830.4 | 3276.9 | 3297.9 | 3039.8 | 2951.2 |
| 70°   | 2620.0 | 2191.2 | 2156.9 | 2183.5 | 2111.5 | 2313.1 | 3007.7 | 2997.7 | 2682.0 | 2590.0 |
| 72.5° | 2119.2 | 1597.5 | 1538.7 | 1575.3 | 1591.9 | 1805.7 | 2530.2 | 2273.2 | 1956.4 | 1884.4 |
| 75°   | 1683.9 | 1170.9 | 988.2  | 1076.8 | 1133.3 | 1315.0 | 1976.3 | 1544.3 | 1365.9 | 1268.4 |
| 77.5° | 1322.7 | 886.2  | 768.8  | 733.4  | 785.4  | 956.0  | 1437.9 | 810.9  | 715.6  | 670.2  |
| 80°   | 838.6  | 651.4  | 706.8  | 655.8  | 678.0  | 682.4  | 748.9  | 368.9  | 293.6  | 290.2  |
| 82.5° | 505.2  | 445.3  | 529.5  | 291.4  | 530.6  | 474.1  | 311.3  | 167.3  | 148.4  | 148.4  |
| 85°   | 357.8  | 275.8  | 182.8  | 118.5  | 236.0  | 260.3  | 120.8  | 86.4   | 75.3   | 73.1   |
| 87.5° | 179.5  | 85.3   | 41.0   | 26.6   | 29.9   | 48.7   | 14.4   | 6.6    | 6.6    | 5.5    |
| 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)

STREETWORKS

Report Number: SP1-2101-121-5

Luminaire Tested: IFLD-S-SA2E-727-U-T2

Test Date: 03/04/2021

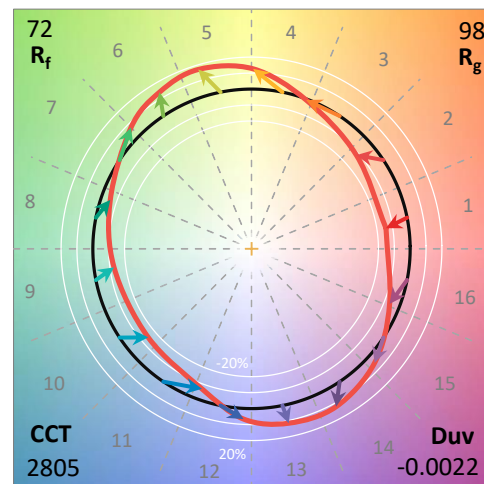
### Test Information

Test Method: LM-79-08  
 Report Number: SP1-2101-121-5  
 Test Lab: COOPER LIGHTING SOLUTIONS  
 Photometer: SP1  
 Measurement Geometry:  $4\pi$   
 Issue Date: 03/04/2021  
 Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
 Product Line: STREETWORKS  
 Catalog Number: **IFLD-S-SA2E-727-U-T2**  
 Description: STREETWORKS INF FLOOD

PROGRAMMED @ 1500mA.

### Spectral Parameters

|                           |         |           |      |      |       |
|---------------------------|---------|-----------|------|------|-------|
| CCT (K):                  | 2805    | CRI (Ra): | 72.4 |      |       |
| CIE u':                   | 0.2586  | R1:       | 69.8 | R9:  | -15.0 |
| CIE v':                   | 0.5221  | R2:       | 81.3 | R10: | 55.6  |
| Duv:                      | -0.0022 | R3:       | 90.2 | R11: | 61.7  |
| CIE x:                    | 0.4477  | R4:       | 68.5 | R12: | 47.2  |
| CIE y:                    | 0.4017  | R5:       | 67.5 | R13: | 71.4  |
| CIE z:                    | 0.1506  | R6:       | 72.4 | R14: | 93.9  |
| Peak Wavelength (nm):     | 599     | R7:       | 79.4 |      |       |
| Dominant Wavelength (nm): | 584     | R8:       | 49.9 |      |       |
| Purity:                   | 55.3    |           |      |      |       |
| Rf:                       | 71.9    |           |      |      |       |
| Rg:                       | 97.9    |           |      |      |       |



### Test Conditions

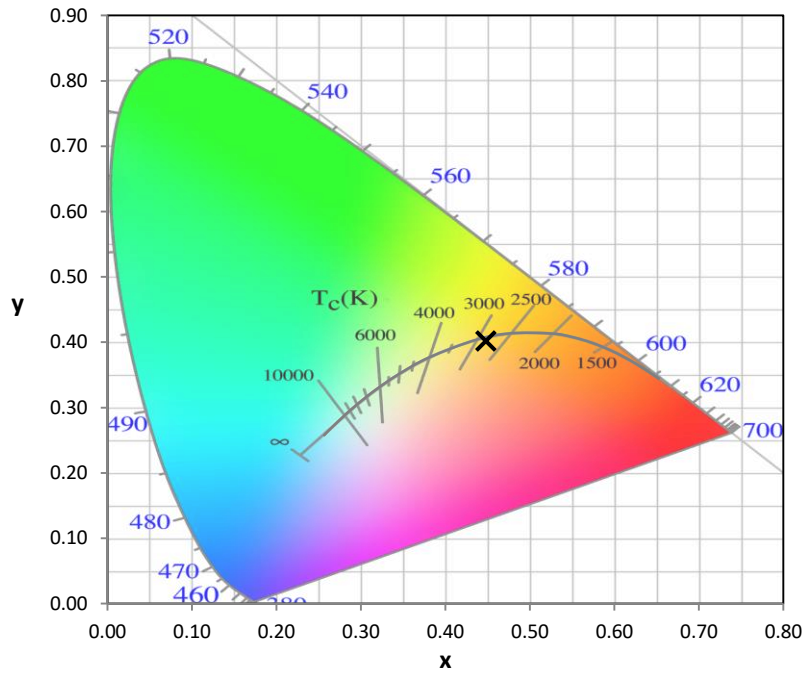
Stabilization Time: 60M  
 Operation Time: 12H  
 Room Temperature (°C) / RH%: 25.3/31%  
 Sphere Temperature (°C): 24.8

REPORT NUMBER: SP1-2101-121-5

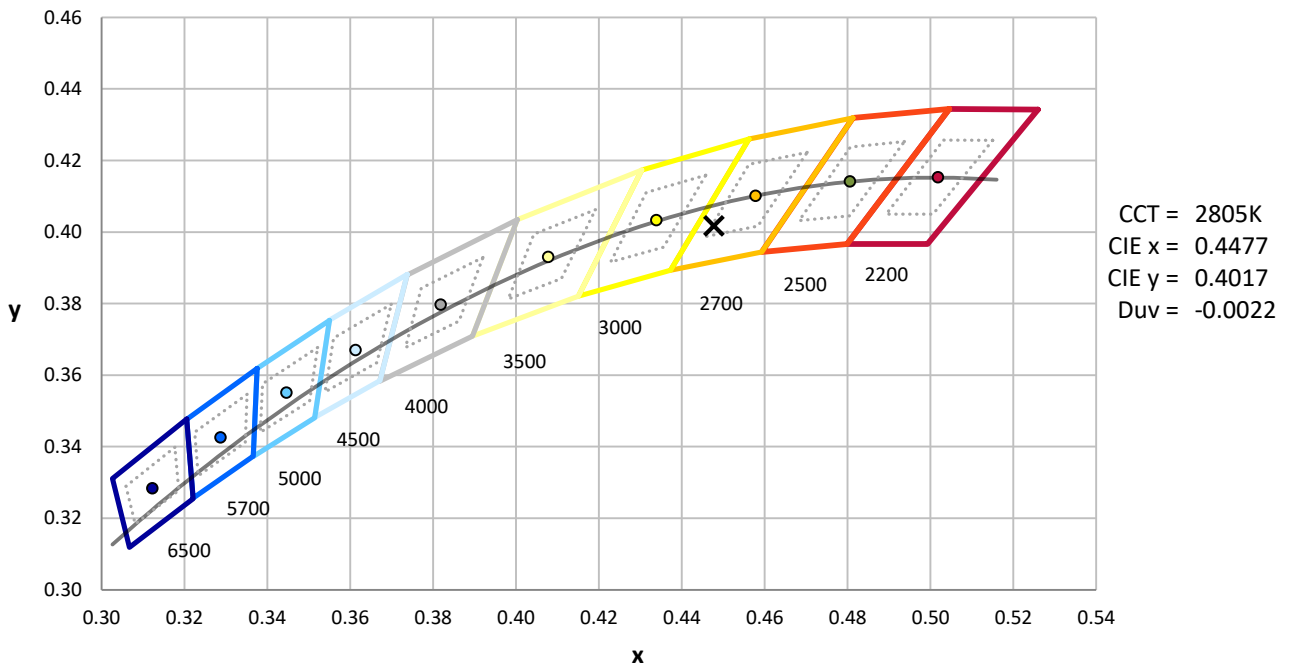
| Measurement and Test Equipment |                       |                  |                      |
|--------------------------------|-----------------------|------------------|----------------------|
| Instrument                     | Identification Number | Calibration Date | Calibration Due Date |
| 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: SP1-2101-121-5

**CIE 1931 Chromaticity Diagram**



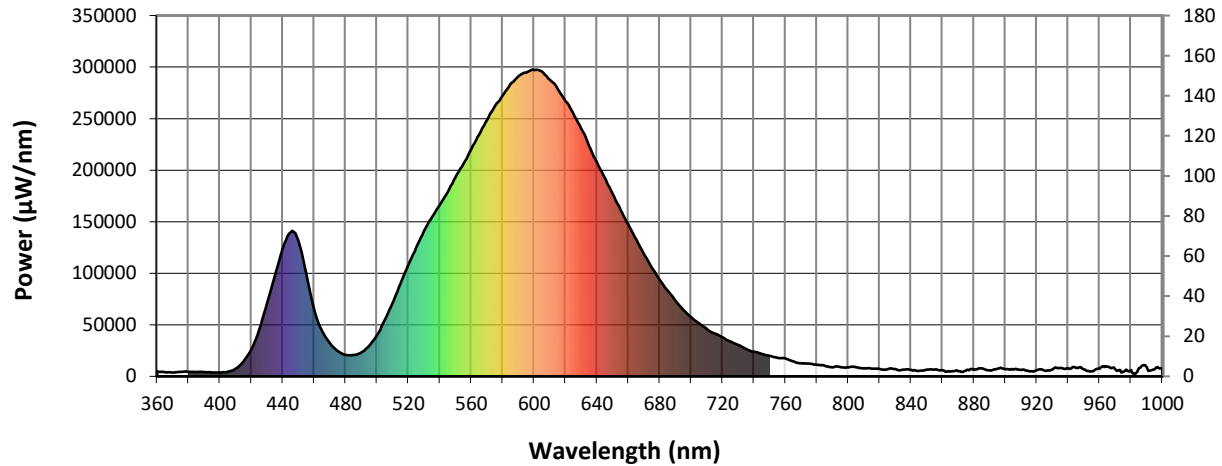
**CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles**



Point lies inside the ANSI 2700K 4-step quadrangle

REPORT NUMBER: SP1-2101-121-5

### Photopic Flux vs. Wavelength

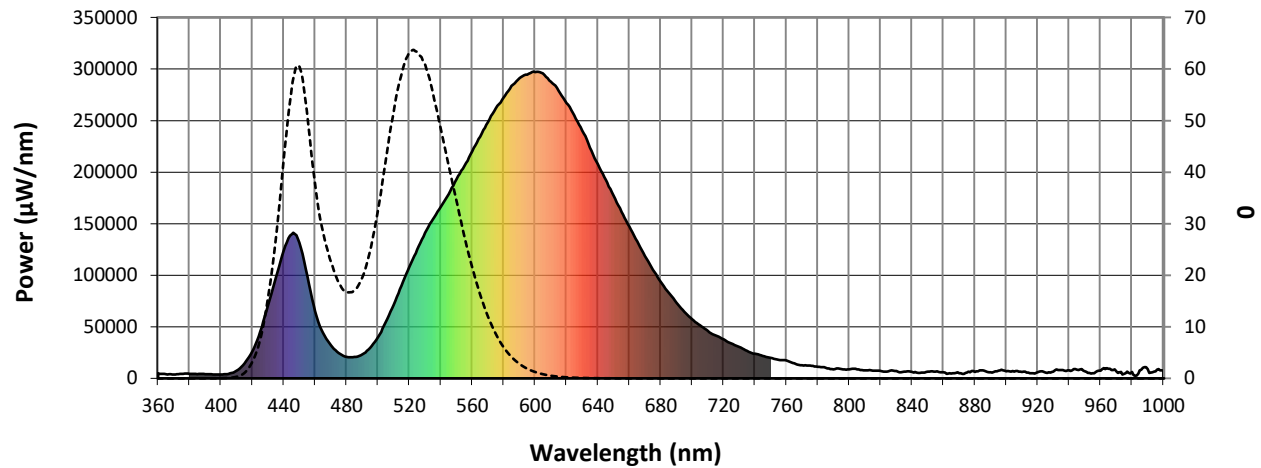


#####

| 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       | 4854             | 0.0              | 490       | 23280            | 3.3              | 620       | 266893           | 69.5             | 750       | 19996            | 0.0              | 880       | 6314             | 0.0              |
| 365       | 4049             | 0.0              | 495       | 29582            | 5.4              | 625       | 255096           | 56.3             | 755       | 17900            | 0.0              | 885       | 7853             | 0.0              |
| 370       | 3795             | 0.0              | 500       | 39981            | 8.8              | 630       | 240244           | 43.5             | 760       | 17272            | 0.0              | 890       | 5823             | 0.0              |
| 375       | 4296             | 0.0              | 505       | 54556            | 15.3             | 635       | 223787           | 33.6             | 765       | 14514            | 0.0              | 895       | 7346             | 0.0              |
| 380       | 4496             | 0.0              | 510       | 71364            | 24.5             | 640       | 207566           | 24.8             | 770       | 12643            | 0.0              | 900       | 6920             | 0.0              |
| 385       | 4186             | 0.0              | 515       | 89828            | 37.2             | 645       | 192517           | 18.5             | 775       | 12475            | 0.0              | 905       | 6608             | 0.0              |
| 390       | 3945             | 0.0              | 520       | 108414           | 52.6             | 650       | 177187           | 12.9             | 780       | 11188            | 0.0              | 910       | 6279             | 0.0              |
| 395       | 3780             | 0.0              | 525       | 124929           | 67.1             | 655       | 161553           | 9.3              | 785       | 10229            | 0.0              | 915       | 5131             | 0.0              |
| 400       | 3679             | 0.0              | 530       | 141352           | 83.2             | 660       | 147361           | 6.1              | 790       | 8578             | 0.0              | 920       | 5855             | 0.0              |
| 405       | 4475             | 0.0              | 535       | 154552           | 95.8             | 665       | 132756           | 4.2              | 795       | 9114             | 0.0              | 925       | 5678             | 0.0              |
| 410       | 7499             | 0.0              | 540       | 166297           | 108.4            | 670       | 118534           | 2.6              | 800       | 8597             | 0.0              | 930       | 6661             | 0.0              |
| 415       | 14449            | 0.0              | 545       | 178874           | 119.1            | 675       | 105260           | 1.8              | 805       | 8790             | 0.0              | 935       | 8074             | 0.0              |
| 420       | 26000            | 0.1              | 550       | 193176           | 131.3            | 680       | 93637            | 1.1              | 810       | 7814             | 0.0              | 940       | 7823             | 0.0              |
| 425       | 45491            | 0.2              | 555       | 206008           | 140.7            | 685       | 83217            | 0.7              | 815       | 7533             | 0.0              | 945       | 8364             | 0.0              |
| 430       | 70707            | 0.6              | 560       | 220126           | 149.6            | 690       | 73671            | 0.4              | 820       | 7303             | 0.0              | 950       | 6763             | 0.0              |
| 435       | 98169            | 1.2              | 565       | 234383           | 155.8            | 695       | 64520            | 0.3              | 825       | 6745             | 0.0              | 955       | 4883             | 0.0              |
| 440       | 123846           | 1.9              | 570       | 248161           | 161.4            | 700       | 57442            | 0.2              | 830       | 7209             | 0.0              | 960       | 7488             | 0.0              |
| 445       | 139822           | 2.9              | 575       | 261970           | 163.0            | 705       | 51479            | 0.1              | 835       | 6674             | 0.0              | 965       | 9316             | 0.0              |
| 450       | 131679           | 3.4              | 580       | 272271           | 161.8            | 710       | 45940            | 0.1              | 840       | 6151             | 0.0              | 970       | 6857             | 0.0              |
| 455       | 99242            | 3.3              | 585       | 283822           | 157.7            | 715       | 41575            | 0.0              | 845       | 5371             | 0.0              | 975       | 4388             | 0.0              |
| 460       | 65216            | 2.7              | 590       | 291192           | 150.6            | 720       | 37753            | 0.0              | 850       | 6484             | 0.0              | 980       | 6095             | 0.0              |
| 465       | 44137            | 2.3              | 595       | 294651           | 139.7            | 725       | 33818            | 0.0              | 855       | 6614             | 0.0              | 985       | 7701             | 0.0              |
| 470       | 32002            | 2.0              | 600       | 297168           | 128.1            | 730       | 30414            | 0.0              | 860       | 5959             | 0.0              | 990       | 9045             | 0.0              |
| 475       | 24549            | 1.9              | 605       | 295658           | 114.5            | 735       | 26662            | 0.0              | 865       | 4768             | 0.0              | 995       | 6989             | 0.0              |
| 480       | 20801            | 2.0              | 610       | 287633           | 98.8             | 740       | 23848            | 0.0              | 870       | 5098             | 0.0              | 1000      | 7341             | 0.0              |
| 485       | 20656            | 2.4              | 615       | 279152           | 84.3             | 745       | 21851            | 0.0              | 875       | 5516             | 0.0              |           |                  |                  |

REPORT NUMBER: SP1-2101-121-5

### Scotopic Flux vs. Wavelength



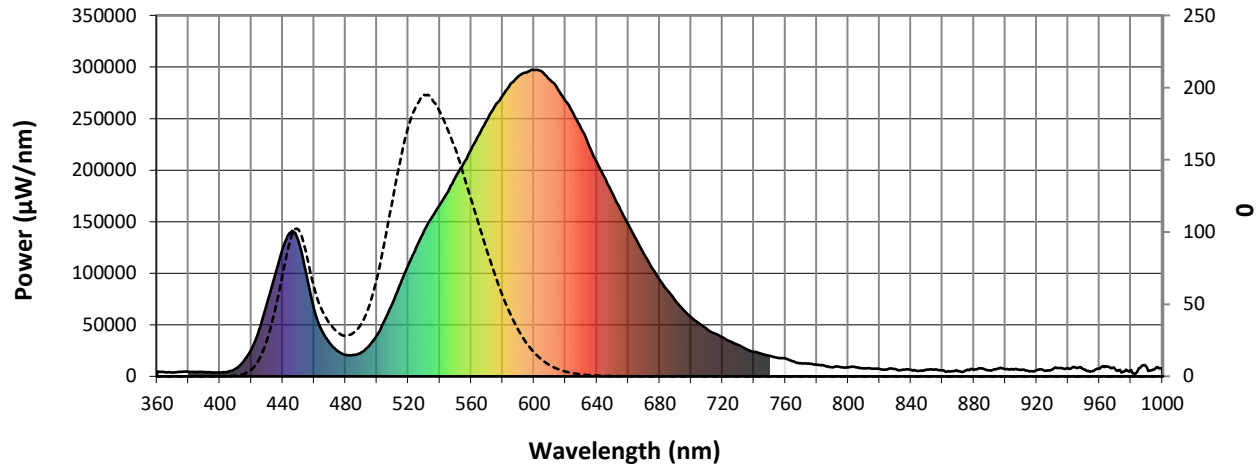
Scotopic Lumens: 15895.6

S/P: 1.11

| 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       | 4854             | 0.0              | 490       | 23280            | 35.8             | 620       | 266893           | 3.3              | 750       | 19996            | 0.0              | 880       | 6314             | 0.0              |
| 365       | 4049             | 0.0              | 495       | 29582            | 47.8             | 625       | 255096           | 2.2              | 755       | 17900            | 0.0              | 885       | 7853             | 0.0              |
| 370       | 3795             | 0.0              | 500       | 39981            | 66.9             | 630       | 240244           | 1.4              | 760       | 17272            | 0.0              | 890       | 5823             | 0.0              |
| 375       | 4296             | 0.0              | 505       | 54556            | 92.7             | 635       | 223787           | 0.9              | 765       | 14514            | 0.0              | 895       | 7346             | 0.0              |
| 380       | 4496             | 0.0              | 510       | 71364            | 121.0            | 640       | 207566           | 0.5              | 770       | 12643            | 0.0              | 900       | 6920             | 0.0              |
| 385       | 4186             | 0.0              | 515       | 89828            | 148.9            | 645       | 192517           | 0.3              | 775       | 12475            | 0.0              | 905       | 6608             | 0.0              |
| 390       | 3945             | 0.0              | 520       | 108414           | 172.3            | 650       | 177187           | 0.2              | 780       | 11188            | 0.0              | 910       | 6279             | 0.0              |
| 395       | 3780             | 0.0              | 525       | 124929           | 186.9            | 655       | 161553           | 0.1              | 785       | 10229            | 0.0              | 915       | 5131             | 0.0              |
| 400       | 3679             | 0.1              | 530       | 141352           | 194.9            | 660       | 147361           | 0.1              | 790       | 8578             | 0.0              | 920       | 5855             | 0.0              |
| 405       | 4475             | 0.1              | 535       | 154552           | 192.6            | 665       | 132756           | 0.0              | 795       | 9114             | 0.0              | 925       | 5678             | 0.0              |
| 410       | 7499             | 0.4              | 540       | 166297           | 183.8            | 670       | 118534           | 0.0              | 800       | 8597             | 0.0              | 930       | 6661             | 0.0              |
| 415       | 14449            | 1.5              | 545       | 178874           | 171.5            | 675       | 105260           | 0.0              | 805       | 8790             | 0.0              | 935       | 8074             | 0.0              |
| 420       | 26000            | 4.3              | 550       | 193176           | 158.0            | 680       | 93637            | 0.0              | 810       | 7814             | 0.0              | 940       | 7823             | 0.0              |
| 425       | 45491            | 11.1             | 555       | 206008           | 140.8            | 685       | 83217            | 0.0              | 815       | 7533             | 0.0              | 945       | 8364             | 0.0              |
| 430       | 70707            | 24.1             | 560       | 220126           | 123.0            | 690       | 73671            | 0.0              | 820       | 7303             | 0.0              | 950       | 6763             | 0.0              |
| 435       | 98169            | 43.9             | 565       | 234383           | 105.2            | 695       | 64520            | 0.0              | 825       | 6745             | 0.0              | 955       | 4883             | 0.0              |
| 440       | 123846           | 69.2             | 570       | 248161           | 87.6             | 700       | 57442            | 0.0              | 830       | 7209             | 0.0              | 960       | 7488             | 0.0              |
| 445       | 139822           | 93.6             | 575       | 261970           | 71.3             | 705       | 51479            | 0.0              | 835       | 6674             | 0.0              | 965       | 9316             | 0.0              |
| 450       | 131679           | 102.1            | 580       | 272271           | 56.1             | 710       | 45940            | 0.0              | 840       | 6151             | 0.0              | 970       | 6857             | 0.0              |
| 455       | 99242            | 86.7             | 585       | 283822           | 43.4             | 715       | 41575            | 0.0              | 845       | 5371             | 0.0              | 975       | 4388             | 0.0              |
| 460       | 65216            | 63.0             | 590       | 291192           | 32.4             | 720       | 37753            | 0.0              | 850       | 6484             | 0.0              | 980       | 6095             | 0.0              |
| 465       | 44137            | 46.6             | 595       | 294651           | 23.5             | 725       | 33818            | 0.0              | 855       | 6614             | 0.0              | 985       | 7701             | 0.0              |
| 470       | 32002            | 36.9             | 600       | 297168           | 16.7             | 730       | 30414            | 0.0              | 860       | 5959             | 0.0              | 990       | 9045             | 0.0              |
| 475       | 24549            | 30.7             | 605       | 295658           | 11.6             | 735       | 26662            | 0.0              | 865       | 4768             | 0.0              | 995       | 6989             | 0.0              |
| 480       | 20801            | 28.1             | 610       | 287633           | 7.8              | 740       | 23848            | 0.0              | 870       | 5098             | 0.0              | 1000      | 7341             | 0.0              |
| 485       | 20656            | 29.9             | 615       | 279152           | 5.2              | 745       | 21851            | 0.0              | 875       | 5516             | 0.0              |           |                  |                  |

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### Melanopic Flux vs. Wavelength



**Melanopic Lumens: 5527.7**

**M/P: 0.39**

| 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       | 4854             | 0.0              | 490       | 23280            | 19.4             | 620       | 266893           | 0.2              | 750       | 19996            | 0.0              | 880       | 6314             | 0.0              |
| 365       | 4049             | 0.0              | 495       | 29582            | 24.4             | 625       | 255096           | 0.1              | 755       | 17900            | 0.0              | 885       | 7853             | 0.0              |
| 370       | 3795             | 0.0              | 500       | 39981            | 32.1             | 630       | 240244           | 0.1              | 760       | 17272            | 0.0              | 890       | 5823             | 0.0              |
| 375       | 4296             | 0.0              | 505       | 54556            | 41.9             | 635       | 223787           | 0.1              | 765       | 14514            | 0.0              | 895       | 7346             | 0.0              |
| 380       | 4496             | 0.0              | 510       | 71364            | 51.2             | 640       | 207566           | 0.0              | 770       | 12643            | 0.0              | 900       | 6920             | 0.0              |
| 385       | 4186             | 0.0              | 515       | 89828            | 58.7             | 645       | 192517           | 0.0              | 775       | 12475            | 0.0              | 905       | 6608             | 0.0              |
| 390       | 3945             | 0.0              | 520       | 108414           | 63.1             | 650       | 177187           | 0.0              | 780       | 11188            | 0.0              | 910       | 6279             | 0.0              |
| 395       | 3780             | 0.0              | 525       | 124929           | 63.4             | 655       | 161553           | 0.0              | 785       | 10229            | 0.0              | 915       | 5131             | 0.0              |
| 400       | 3679             | 0.0              | 530       | 141352           | 61.1             | 660       | 147361           | 0.0              | 790       | 8578             | 0.0              | 920       | 5855             | 0.0              |
| 405       | 4475             | 0.1              | 535       | 154552           | 55.6             | 665       | 132756           | 0.0              | 795       | 9114             | 0.0              | 925       | 5678             | 0.0              |
| 410       | 7499             | 0.3              | 540       | 166297           | 48.7             | 670       | 118534           | 0.0              | 800       | 8597             | 0.0              | 930       | 6661             | 0.0              |
| 415       | 14449            | 1.0              | 545       | 178874           | 41.5             | 675       | 105260           | 0.0              | 805       | 8790             | 0.0              | 935       | 8074             | 0.0              |
| 420       | 26000            | 3.0              | 550       | 193176           | 34.7             | 680       | 93637            | 0.0              | 810       | 7814             | 0.0              | 940       | 7823             | 0.0              |
| 425       | 45491            | 7.1              | 555       | 206008           | 27.8             | 685       | 83217            | 0.0              | 815       | 7533             | 0.0              | 945       | 8364             | 0.0              |
| 430       | 70707            | 14.9             | 560       | 220126           | 21.7             | 690       | 73671            | 0.0              | 820       | 7303             | 0.0              | 950       | 6763             | 0.0              |
| 435       | 98169            | 26.2             | 565       | 234383           | 16.5             | 695       | 64520            | 0.0              | 825       | 6745             | 0.0              | 955       | 4883             | 0.0              |
| 440       | 123846           | 41.4             | 570       | 248161           | 12.1             | 700       | 57442            | 0.0              | 830       | 7209             | 0.0              | 960       | 7488             | 0.0              |
| 445       | 139822           | 55.1             | 575       | 261970           | 8.7              | 705       | 51479            | 0.0              | 835       | 6674             | 0.0              | 965       | 9316             | 0.0              |
| 450       | 131679           | 60.7             | 580       | 272271           | 6.1              | 710       | 45940            | 0.0              | 840       | 6151             | 0.0              | 970       | 6857             | 0.0              |
| 455       | 99242            | 52.0             | 585       | 283822           | 4.2              | 715       | 41575            | 0.0              | 845       | 5371             | 0.0              | 975       | 4388             | 0.0              |
| 460       | 65216            | 38.4             | 590       | 291192           | 2.9              | 720       | 37753            | 0.0              | 850       | 6484             | 0.0              | 980       | 6095             | 0.0              |
| 465       | 44137            | 28.8             | 595       | 294651           | 1.9              | 725       | 33818            | 0.0              | 855       | 6614             | 0.0              | 985       | 7701             | 0.0              |
| 470       | 32002            | 22.9             | 600       | 297168           | 1.3              | 730       | 30414            | 0.0              | 860       | 5959             | 0.0              | 990       | 9045             | 0.0              |
| 475       | 24549            | 18.7             | 605       | 295658           | 0.8              | 735       | 26662            | 0.0              | 865       | 4768             | 0.0              | 995       | 6989             | 0.0              |
| 480       | 20801            | 16.7             | 610       | 287633           | 0.5              | 740       | 23848            | 0.0              | 870       | 5098             | 0.0              | 1000      | 7341             | 0.0              |
| 485       | 20656            | 17.0             | 615       | 279152           | 0.3              | 745       | 21851            | 0.0              | 875       | 5516             | 0.0              |           |                  |                  |

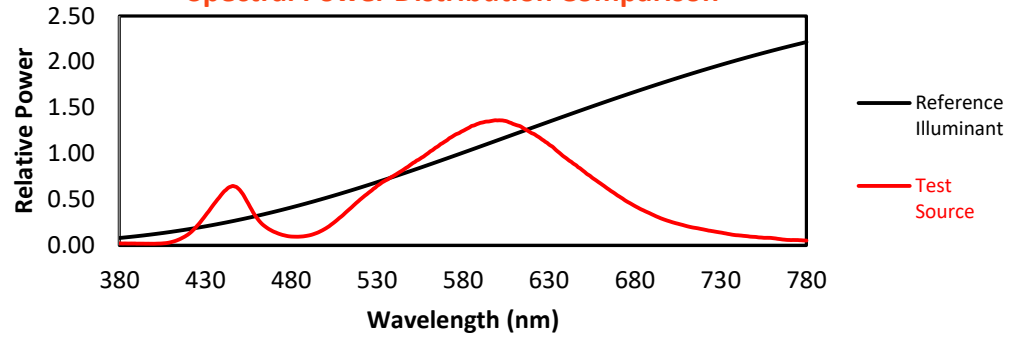
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TM-30-18

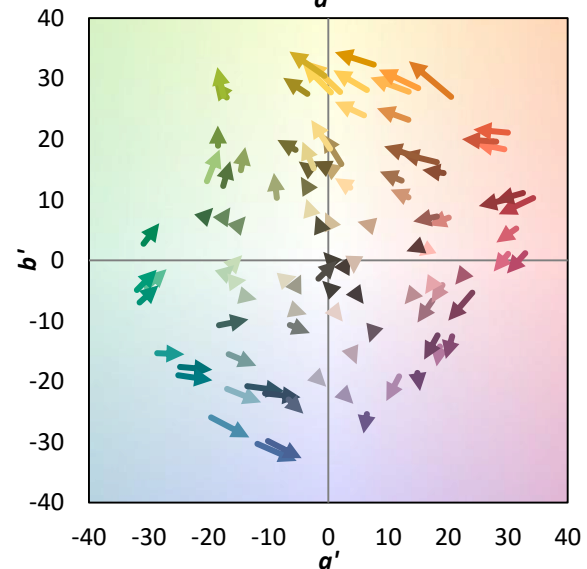
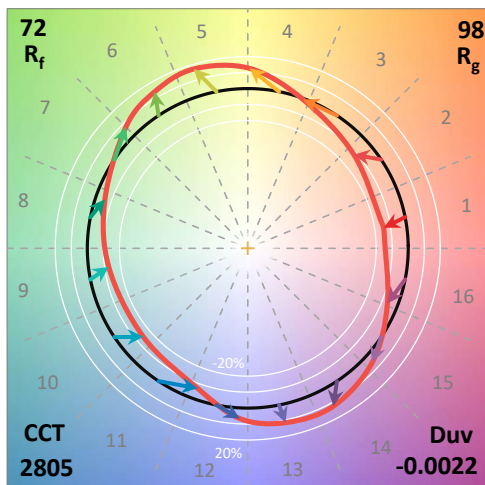
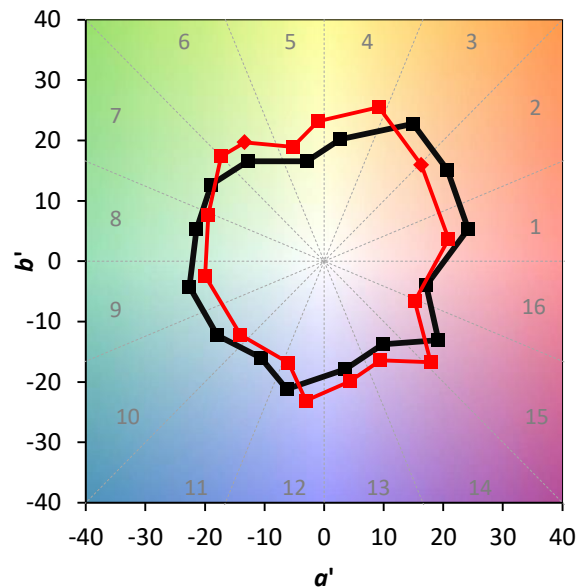
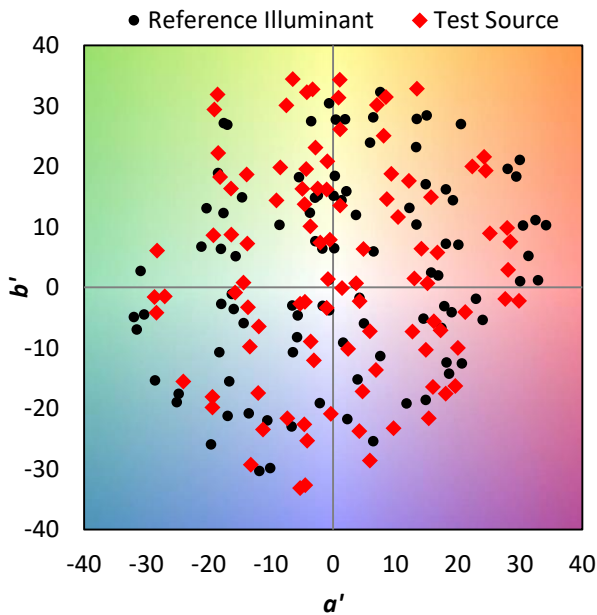
### Summary

$R_f = 71.9$   
 $R_g = 97.9$   
 CIE  $R_a = 72.4$   
 $R_g = -15.0$

### Spectral Power Distribution Comparison

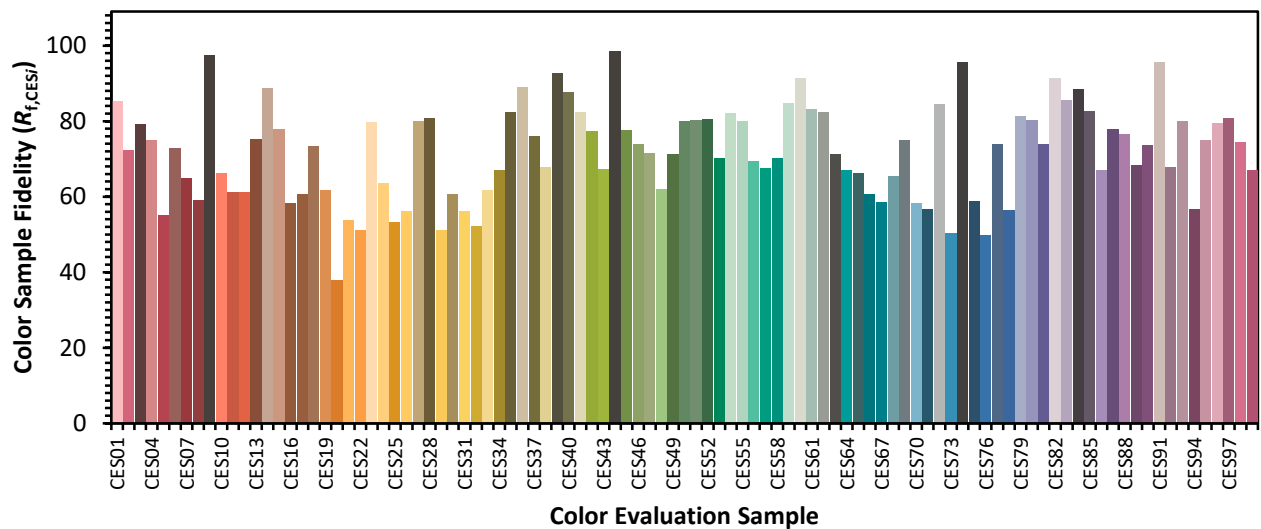


### Color Vector Graphics

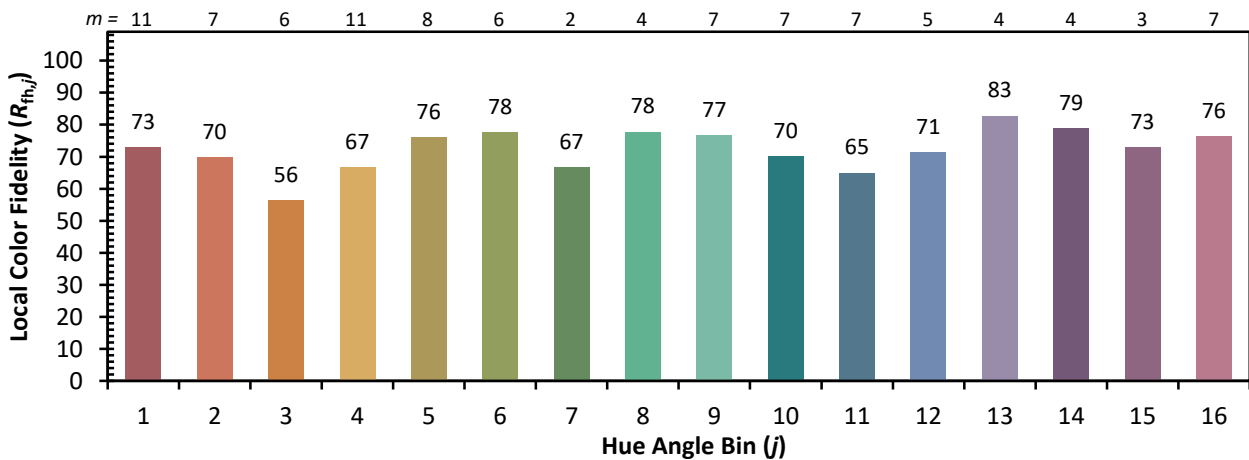
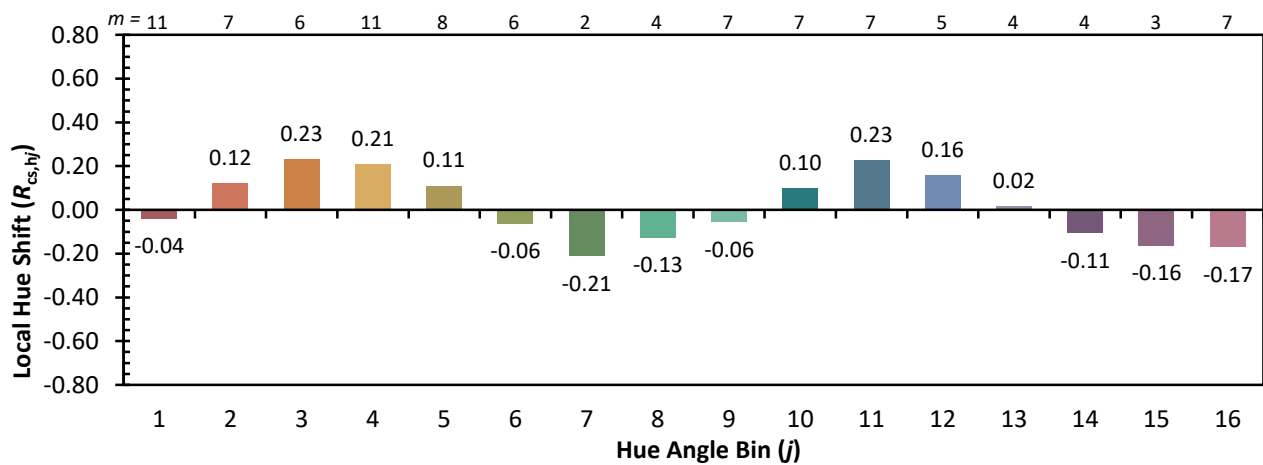
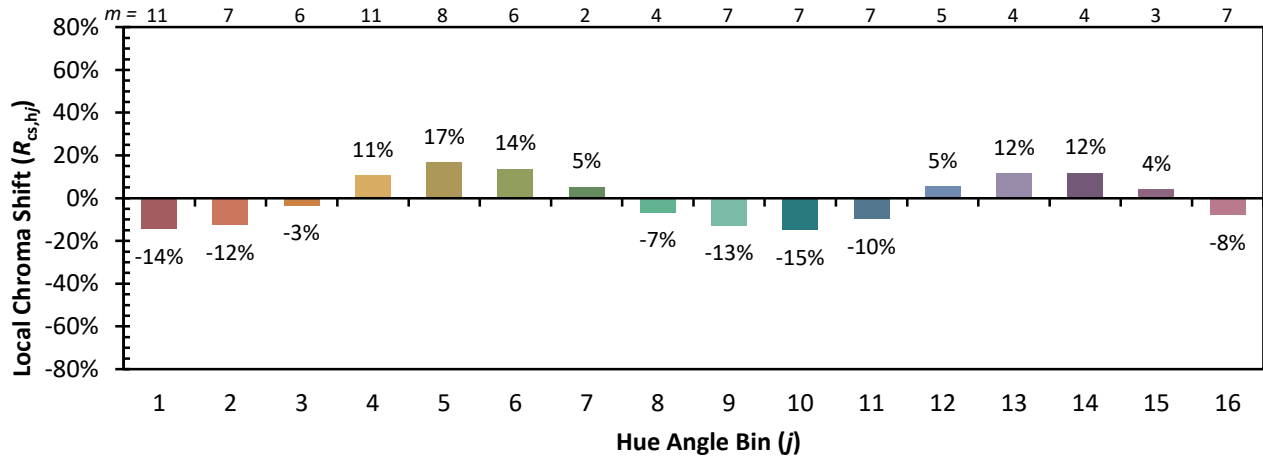


**Individual Sample Fidelity Index ( $R_{f,i}$ )**

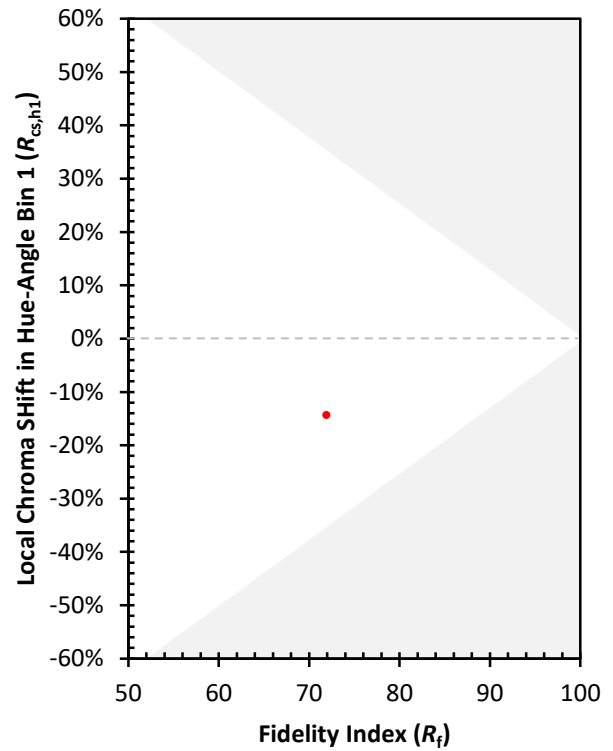
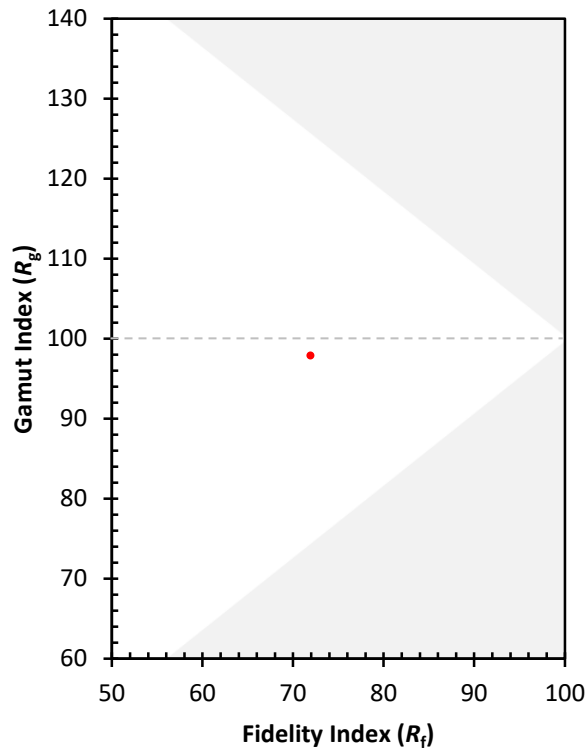
|            |            |            |            |
|------------|------------|------------|------------|
| CES01 = 86 | CES26 = 56 | CES51 = 80 | CES76 = 50 |
| CES02 = 63 | CES27 = 80 | CES52 = 81 | CES77 = 74 |
| CES03 = 31 | CES28 = 81 | CES53 = 70 | CES78 = 56 |
| CES04 = 71 | CES29 = 51 | CES54 = 82 | CES79 = 81 |
| CES05 = 50 | CES30 = 61 | CES55 = 80 | CES80 = 80 |
| CES06 = 52 | CES31 = 56 | CES56 = 69 | CES81 = 74 |
| CES07 = 42 | CES32 = 52 | CES57 = 67 | CES82 = 91 |
| CES08 = 41 | CES33 = 62 | CES58 = 70 | CES83 = 86 |
| CES09 = 29 | CES34 = 67 | CES59 = 85 | CES84 = 89 |
| CES10 = 76 | CES35 = 83 | CES60 = 91 | CES85 = 83 |
| CES11 = 60 | CES36 = 89 | CES61 = 83 | CES86 = 67 |
| CES12 = 66 | CES37 = 76 | CES62 = 82 | CES87 = 78 |
| CES13 = 43 | CES38 = 68 | CES63 = 71 | CES88 = 76 |
| CES14 = 74 | CES39 = 93 | CES64 = 67 | CES89 = 68 |
| CES15 = 71 | CES40 = 88 | CES65 = 66 | CES90 = 74 |
| CES16 = 48 | CES41 = 82 | CES66 = 61 | CES91 = 96 |
| CES17 = 50 | CES42 = 77 | CES67 = 58 | CES92 = 68 |
| CES18 = 57 | CES43 = 67 | CES68 = 65 | CES93 = 80 |
| CES19 = 73 | CES44 = 99 | CES69 = 75 | CES94 = 57 |
| CES20 = 67 | CES45 = 78 | CES70 = 58 | CES95 = 75 |
| CES21 = 88 | CES46 = 74 | CES71 = 57 | CES96 = 79 |
| CES22 = 80 | CES47 = 71 | CES72 = 85 | CES97 = 81 |
| CES23 = 92 | CES48 = 62 | CES73 = 50 | CES98 = 75 |
| CES24 = 91 | CES49 = 71 | CES74 = 96 | CES99 = 67 |
| CES25 = 73 | CES50 = 80 | CES75 = 59 |            |



Color Rendition by Hue-Angle Bin



**Measure Comparisons**



(END OF REPORT)