

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

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: STREETWORKS

Report Number: P800244

Luminaire Tested: **ARCH2-90-722-U-T2U-HSS**

Issue Date: 4/4/2024

### Test Information

Test Method: LM-79-08  
Report Number: P800244  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-25)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/4/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH2-90-722-U-T2U-HSS  
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 2200K, 695mA LIGHTSQUARES WITH 10 LEDS EACH AND TYPE II U  
OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 6954 lumens  
Efficiency: N/A  
Efficacy: 74.2 lumens/watt  
Luminous Opening: Rectangular (W 0.67' x L: 0.33' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B1 - U0 - G1  
  
Input Watts (W): 93.7  
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: 24 FT

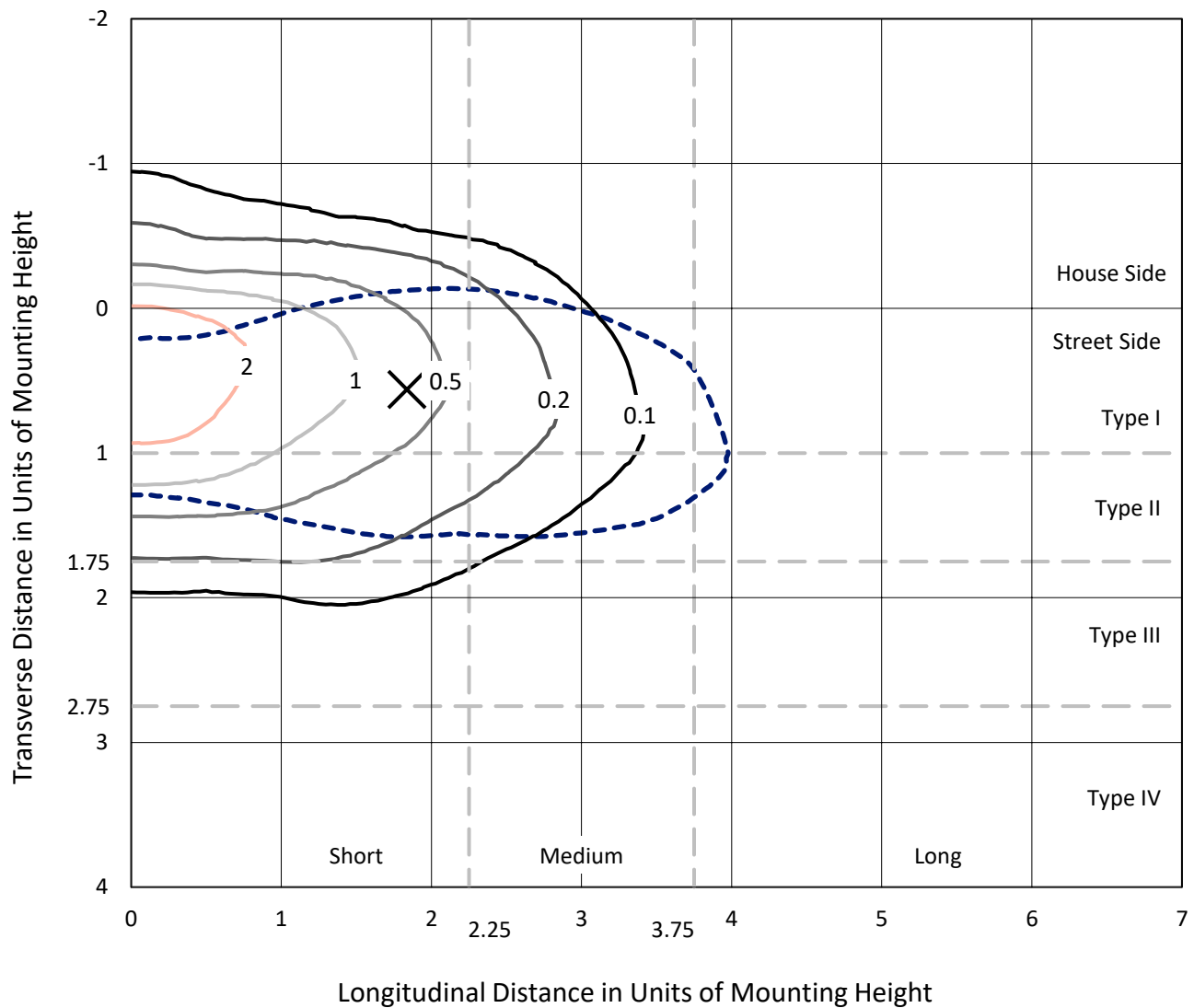


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## Iso-Footcandle Lines of Horizontal Illumination

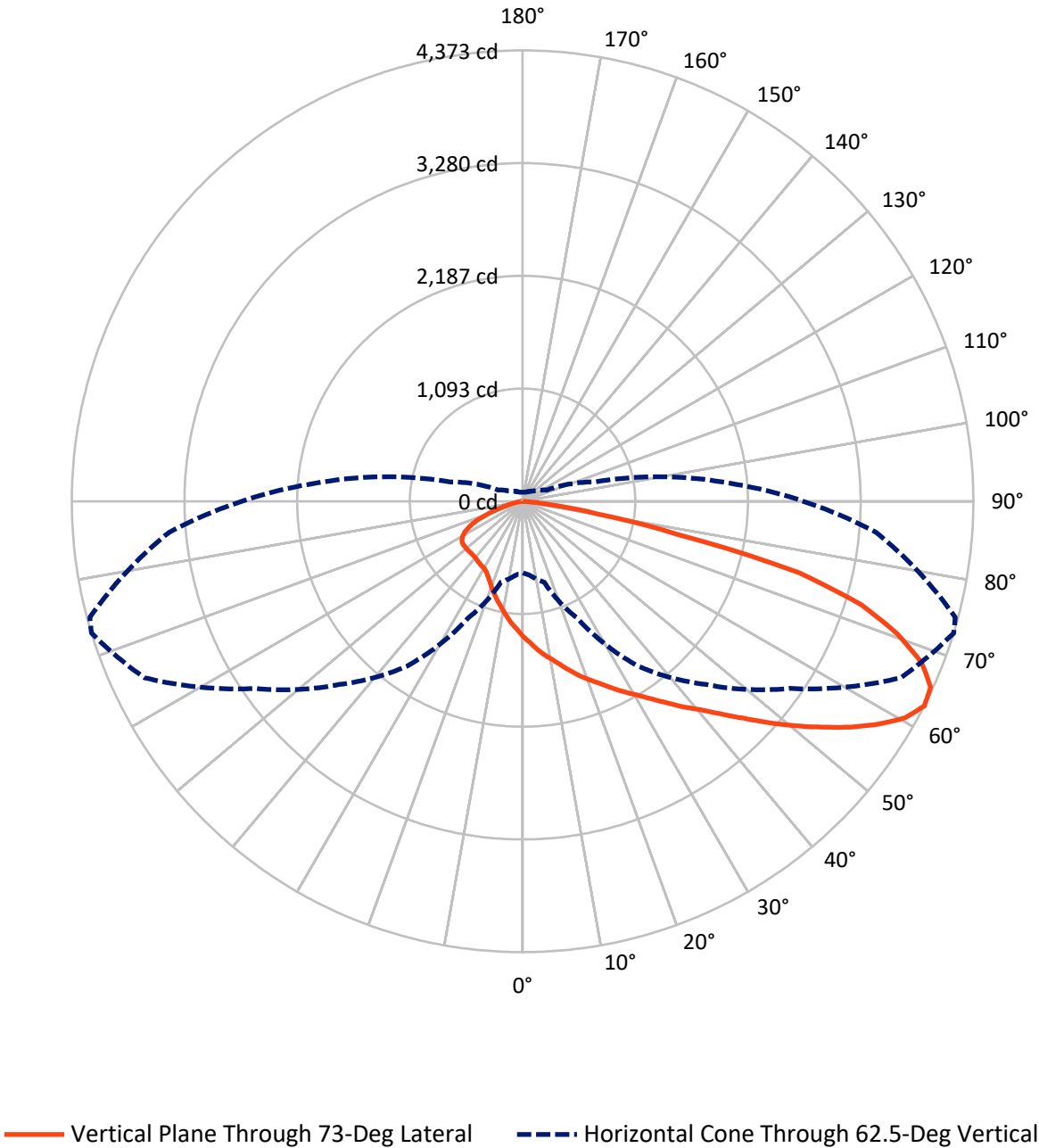
✕ Max cd  
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.3 fc  
Type II - Short - N/A

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Luminous Intensity Polar Plot



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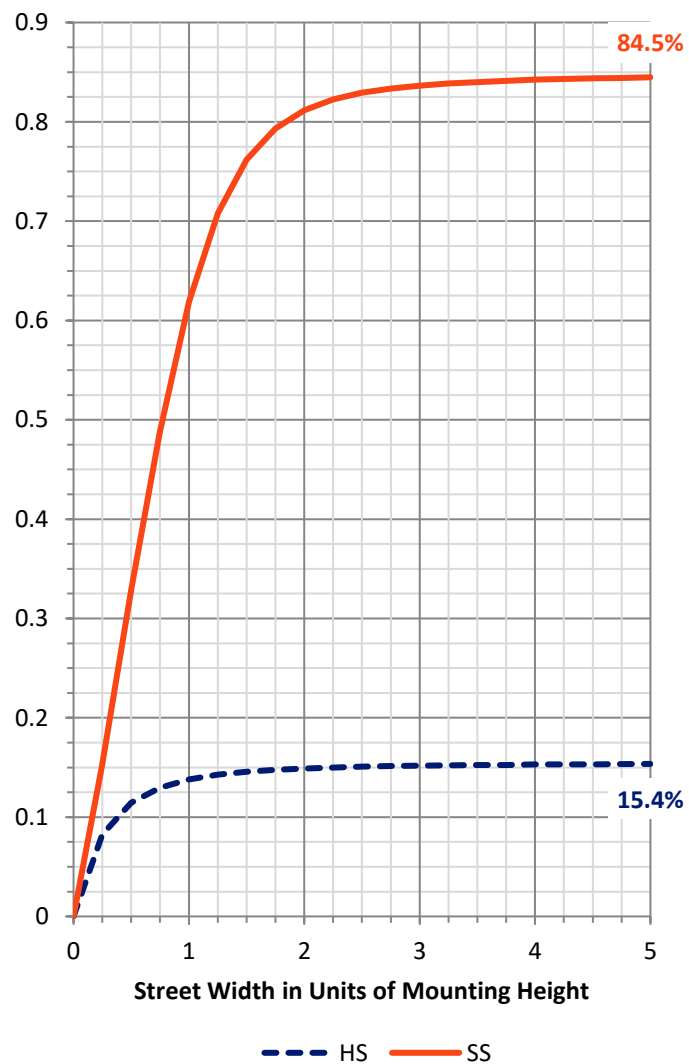
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 1078.0   | 0.0    | 1078.0 |
|                    | % Fixture | 15.5     | 0.0    | 15.5   |
| <b>Street Side</b> | Lumens    | 5876.0   | 0.0    | 5876.0 |
|                    | % Fixture | 84.5     | 0.0    | 84.5   |
| <b>Total</b>       | Lumens    | 6954.0   | 0.0    | 6954.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 127.2  | 1.8       |
| 10°-20°   | 383.9  | 5.5       |
| 20°-30°   | 638.9  | 9.2       |
| 30°-40°   | 964.0  | 13.9      |
| 40°-50°   | 1347.5 | 19.4      |
| 50°-60°   | 1488.4 | 21.4      |
| 60°-70°   | 1296.6 | 18.6      |
| 70°-80°   | 655.0  | 9.4       |
| 80°-90°   | 52.6   | 0.8       |
| 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°    | 6954.0 | 100.0     |
| 0°-180°   | 6954.0 | 100.0     |

**Coefficient of Utilization**



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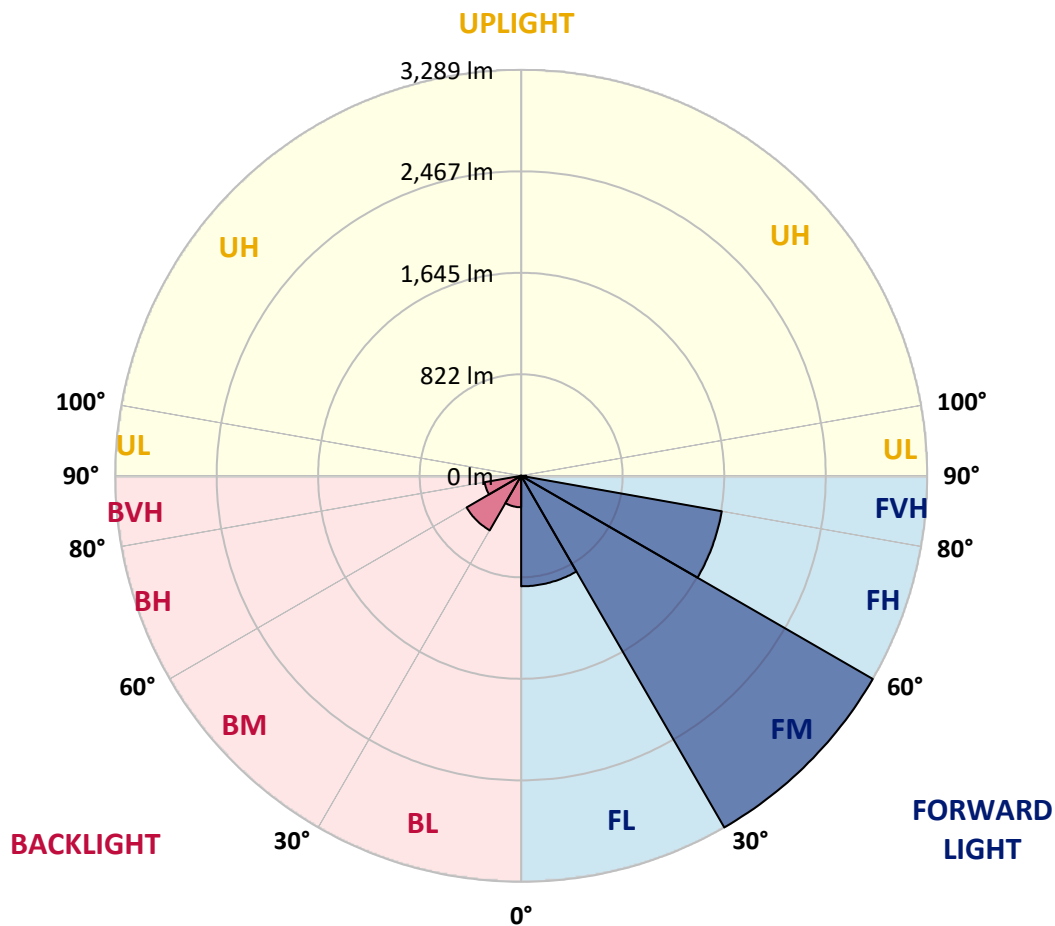
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 895.2  | 12.9      |                         |      |         |
| FM   | (30°-60°)   | 3289.5 | 47.3      |                         |      |         |
| FH   | (60°-80°)   | 1650.7 | 23.7      |                         |      | G1/1800 |
| FVH  | (80°-90°)   | 40.7   | 0.6       |                         |      | G1/100  |
| BL   | (0°-30°)    | 254.8  | 3.7       | B1/500                  |      |         |
| BM   | (30°-60°)   | 510.4  | 7.3       | B1/1000                 |      |         |
| BH   | (60°-80°)   | 300.9  | 4.3       | B1/500                  |      | G1/500  |
| BVH  | (80°-90°)   | 11.9   | 0.2       |                         |      | G1/100  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B1-U0-G1**

Type II Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 73°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1316.8 | 1316.8 | 1316.8 | 1316.8 | 1316.8 | 1316.8 | 1316.8 | 1316.8 | 1316.8 | 1316.8 | 1316.8 |
| 2.5°  | 1498.6 | 1515.3 | 1506.2 | 1512.2 | 1481.9 | 1462.2 | 1439.5 | 1395.5 | 1371.3 | 1368.3 | 1339.5 |
| 5°    | 1718.3 | 1736.5 | 1721.3 | 1716.8 | 1663.7 | 1618.3 | 1566.8 | 1489.5 | 1438.0 | 1428.9 | 1365.2 |
| 7.5°  | 1938.0 | 1954.7 | 1936.5 | 1922.9 | 1851.6 | 1771.3 | 1695.6 | 1581.9 | 1501.6 | 1486.5 | 1386.5 |
| 10°   | 2092.6 | 2107.7 | 2094.1 | 2080.4 | 2006.2 | 1924.4 | 1816.8 | 1668.3 | 1559.2 | 1535.0 | 1400.1 |
| 12.5° | 2209.2 | 2218.3 | 2212.3 | 2200.1 | 2130.4 | 2042.6 | 1939.5 | 1765.3 | 1624.4 | 1594.0 | 1421.3 |
| 15°   | 2304.7 | 2319.9 | 2312.3 | 2303.2 | 2236.5 | 2148.6 | 2050.1 | 1866.8 | 1700.1 | 1662.2 | 1453.1 |
| 17.5° | 2368.3 | 2378.9 | 2380.5 | 2380.5 | 2321.4 | 2235.0 | 2139.5 | 1959.2 | 1775.9 | 1727.4 | 1483.4 |
| 20°   | 2397.1 | 2409.3 | 2416.8 | 2429.0 | 2380.5 | 2306.2 | 2209.2 | 2038.0 | 1847.1 | 1792.5 | 1512.2 |
| 22.5° | 2410.8 | 2421.4 | 2441.1 | 2468.3 | 2429.0 | 2366.8 | 2277.4 | 2110.7 | 1918.3 | 1860.7 | 1545.6 |
| 25°   | 2421.4 | 2435.0 | 2463.8 | 2515.3 | 2488.0 | 2435.0 | 2357.7 | 2194.1 | 2003.2 | 1944.1 | 1594.0 |
| 27.5° | 2450.2 | 2466.8 | 2494.1 | 2556.2 | 2522.9 | 2497.1 | 2442.6 | 2283.5 | 2092.6 | 2032.0 | 1653.1 |
| 30°   | 2550.2 | 2563.8 | 2562.3 | 2601.7 | 2560.8 | 2553.2 | 2515.3 | 2369.9 | 2178.9 | 2118.3 | 1722.8 |
| 32.5° | 2732.0 | 2745.6 | 2712.3 | 2697.1 | 2607.7 | 2609.3 | 2594.1 | 2462.3 | 2282.0 | 2219.8 | 1803.2 |
| 35°   | 2927.5 | 2942.6 | 2898.7 | 2872.9 | 2722.9 | 2679.0 | 2686.5 | 2577.4 | 2397.1 | 2335.0 | 1903.2 |
| 37.5° | 3101.7 | 3119.9 | 3082.0 | 3044.1 | 2892.6 | 2791.1 | 2789.6 | 2706.2 | 2529.0 | 2465.3 | 2013.8 |
| 40°   | 3197.2 | 3218.4 | 3241.1 | 3219.9 | 3060.8 | 2948.7 | 2900.2 | 2838.1 | 2659.3 | 2594.1 | 2133.5 |
| 42.5° | 3242.6 | 3301.7 | 3342.6 | 3329.0 | 3198.7 | 3085.1 | 3027.5 | 2976.0 | 2818.4 | 2754.7 | 2275.9 |
| 45°   | 3115.4 | 3116.9 | 3203.2 | 3277.5 | 3253.2 | 3177.5 | 3166.9 | 3130.5 | 3000.2 | 2939.6 | 2436.5 |
| 47.5° | 2956.3 | 2944.1 | 3004.7 | 3136.6 | 3204.8 | 3224.5 | 3286.6 | 3301.7 | 3207.8 | 3147.2 | 2600.2 |
| 50°   | 2574.4 | 2582.0 | 2779.0 | 2968.4 | 3101.7 | 3229.0 | 3371.4 | 3477.5 | 3421.4 | 3363.9 | 2772.9 |
| 52.5° | 2094.1 | 2112.3 | 2338.0 | 2754.7 | 2965.3 | 3183.5 | 3421.4 | 3653.3 | 3639.6 | 3585.1 | 2945.7 |
| 55°   | 1678.9 | 1707.7 | 1947.1 | 2398.6 | 2791.1 | 3082.0 | 3442.7 | 3813.9 | 3865.4 | 3815.4 | 3115.4 |
| 57.5° | 1283.4 | 1313.7 | 1515.3 | 1978.9 | 2568.4 | 2916.9 | 3427.5 | 3954.8 | 4076.0 | 4044.2 | 3271.4 |
| 60°   | 966.7  | 997.0  | 1125.8 | 1604.7 | 2289.5 | 2732.0 | 3351.7 | 4047.2 | 4265.4 | 4232.1 | 3385.1 |
| 62.5° | 692.5  | 716.7  | 812.2  | 1248.6 | 1950.1 | 2512.3 | 3165.4 | 4048.8 | 4373.0 | 4345.7 | 3439.6 |
| 65°   | 498.5  | 498.5  | 575.8  | 891.0  | 1631.9 | 2248.6 | 2883.5 | 3862.4 | 4350.3 | 4342.7 | 3401.7 |
| 67.5° | 359.1  | 362.1  | 424.3  | 622.8  | 1301.6 | 1928.9 | 2518.4 | 3530.5 | 4174.5 | 4212.4 | 3265.4 |
| 70°   | 254.6  | 262.1  | 290.9  | 434.9  | 983.4  | 1522.8 | 2127.4 | 3095.7 | 3857.8 | 3924.5 | 3001.7 |
| 72.5° | 197.0  | 201.5  | 221.2  | 303.1  | 718.2  | 1131.9 | 1695.6 | 2610.8 | 3435.1 | 3510.8 | 2642.6 |
| 75°   | 151.5  | 156.1  | 171.2  | 222.7  | 515.2  | 794.0  | 1204.6 | 2025.9 | 2769.9 | 2904.7 | 2122.9 |
| 77.5° | 110.6  | 116.7  | 127.3  | 162.1  | 300.0  | 504.6  | 730.4  | 1139.5 | 1528.9 | 1592.5 | 1112.2 |
| 80°   | 51.5   | 59.1   | 74.2   | 104.6  | 162.1  | 237.9  | 259.1  | 439.4  | 734.9  | 768.2  | 603.1  |
| 82.5° | 28.8   | 36.4   | 42.4   | 63.6   | 81.8   | 84.9   | 87.9   | 110.6  | 277.3  | 306.1  | 253.0  |
| 85°   | 13.6   | 18.2   | 19.7   | 27.3   | 27.3   | 24.2   | 28.8   | 21.2   | 45.5   | 54.5   | 53.0   |
| 87.5° | 0.0    | 1.5    | 3.0    | 7.6    | 6.1    | 4.5    | 4.5    | 4.5    | 4.5    | 6.1    | 4.5    |
| 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°    | 1316.8 | 1316.8 | 1316.8 | 1316.8 | 1316.8 | 1316.8 | 1316.8 | 1316.8 | 1316.8 | 1316.8 | 1316.8 |
| 2.5°  | 1325.8 | 1306.1 | 1260.7 | 1221.3 | 1195.5 | 1172.8 | 1142.5 | 1128.9 | 1104.6 | 1109.2 | 1095.5 |
| 5°    | 1333.4 | 1297.1 | 1216.7 | 1142.5 | 1088.0 | 1039.5 | 986.4  | 956.1  | 922.8  | 919.8  | 909.2  |
| 7.5°  | 1338.0 | 1281.9 | 1166.7 | 1062.2 | 978.9  | 904.6  | 833.4  | 794.0  | 753.1  | 744.0  | 734.9  |
| 10°   | 1333.4 | 1259.2 | 1115.2 | 978.9  | 868.2  | 775.8  | 695.5  | 645.5  | 603.1  | 592.5  | 583.4  |
| 12.5° | 1338.0 | 1247.1 | 1066.7 | 901.6  | 769.7  | 665.2  | 574.3  | 522.8  | 483.4  | 472.8  | 466.7  |
| 15°   | 1348.6 | 1239.5 | 1025.8 | 831.9  | 681.9  | 565.2  | 475.8  | 431.8  | 400.0  | 389.4  | 386.4  |
| 17.5° | 1357.7 | 1231.9 | 981.9  | 763.7  | 594.0  | 477.3  | 400.0  | 363.7  | 336.4  | 325.8  | 322.7  |
| 20°   | 1369.8 | 1221.3 | 937.9  | 698.5  | 516.7  | 407.6  | 339.4  | 307.6  | 286.4  | 278.8  | 277.3  |
| 22.5° | 1380.4 | 1213.7 | 897.0  | 633.4  | 445.5  | 351.5  | 294.0  | 268.2  | 253.0  | 245.5  | 245.5  |
| 25°   | 1407.7 | 1216.7 | 862.2  | 572.8  | 392.5  | 307.6  | 259.1  | 239.4  | 227.3  | 222.7  | 222.7  |
| 27.5° | 1439.5 | 1228.9 | 834.9  | 521.2  | 347.0  | 274.3  | 234.9  | 218.2  | 212.1  | 206.1  | 207.6  |
| 30°   | 1484.9 | 1253.1 | 816.7  | 478.8  | 313.7  | 248.5  | 215.2  | 203.0  | 197.0  | 195.5  | 195.5  |
| 32.5° | 1542.5 | 1292.5 | 815.2  | 451.5  | 289.4  | 228.8  | 201.5  | 190.9  | 187.9  | 186.4  | 186.4  |
| 35°   | 1610.7 | 1327.4 | 806.1  | 439.4  | 274.3  | 215.2  | 190.9  | 183.3  | 181.8  | 181.8  | 181.8  |
| 37.5° | 1692.5 | 1384.9 | 800.1  | 422.8  | 266.7  | 207.6  | 183.3  | 177.3  | 177.3  | 177.3  | 177.3  |
| 40°   | 1777.4 | 1431.9 | 791.0  | 407.6  | 263.7  | 203.0  | 178.8  | 171.2  | 171.2  | 171.2  | 171.2  |
| 42.5° | 1878.9 | 1500.1 | 787.9  | 400.0  | 259.1  | 200.0  | 172.7  | 163.6  | 165.2  | 165.2  | 166.7  |
| 45°   | 2001.6 | 1577.4 | 786.4  | 392.5  | 257.6  | 197.0  | 166.7  | 156.1  | 157.6  | 156.1  | 156.1  |
| 47.5° | 2125.9 | 1666.8 | 791.0  | 387.9  | 256.1  | 194.0  | 162.1  | 148.5  | 148.5  | 147.0  | 147.0  |
| 50°   | 2256.2 | 1748.6 | 794.0  | 383.4  | 253.0  | 187.9  | 154.6  | 142.4  | 139.4  | 136.4  | 137.9  |
| 52.5° | 2378.9 | 1824.4 | 795.5  | 375.8  | 244.0  | 178.8  | 148.5  | 134.9  | 130.3  | 125.8  | 127.3  |
| 55°   | 2501.7 | 1897.1 | 798.5  | 366.7  | 231.8  | 169.7  | 140.9  | 127.3  | 121.2  | 115.2  | 115.2  |
| 57.5° | 2612.3 | 1960.7 | 791.0  | 344.0  | 218.2  | 160.6  | 133.3  | 118.2  | 109.1  | 103.0  | 103.0  |
| 60°   | 2688.1 | 2006.2 | 768.2  | 310.6  | 200.0  | 150.0  | 125.8  | 109.1  | 98.5   | 93.9   | 93.9   |
| 62.5° | 2724.4 | 2013.8 | 727.3  | 256.1  | 177.3  | 139.4  | 116.7  | 100.0  | 90.9   | 87.9   | 87.9   |
| 65°   | 2689.6 | 1980.4 | 663.7  | 192.4  | 153.0  | 127.3  | 107.6  | 92.4   | 83.3   | 75.8   | 75.8   |
| 67.5° | 2568.4 | 1886.5 | 575.8  | 145.5  | 130.3  | 115.2  | 98.5   | 84.9   | 74.2   | 68.2   | 68.2   |
| 70°   | 2324.4 | 1691.0 | 445.5  | 116.7  | 110.6  | 100.0  | 89.4   | 75.8   | 66.7   | 59.1   | 59.1   |
| 72.5° | 2004.7 | 1433.4 | 313.7  | 93.9   | 93.9   | 84.9   | 75.8   | 66.7   | 57.6   | 51.5   | 51.5   |
| 75°   | 1538.0 | 1060.7 | 210.6  | 75.8   | 77.3   | 71.2   | 62.1   | 54.5   | 48.5   | 43.9   | 43.9   |
| 77.5° | 839.5  | 524.3  | 128.8  | 56.1   | 57.6   | 54.5   | 48.5   | 43.9   | 40.9   | 36.4   | 36.4   |
| 80°   | 407.6  | 230.3  | 74.2   | 39.4   | 40.9   | 39.4   | 36.4   | 31.8   | 31.8   | 28.8   | 28.8   |
| 82.5° | 171.2  | 86.4   | 39.4   | 27.3   | 27.3   | 24.2   | 22.7   | 22.7   | 22.7   | 21.2   | 21.2   |
| 85°   | 42.4   | 16.7   | 16.7   | 15.2   | 15.2   | 15.2   | 13.6   | 13.6   | 13.6   | 10.6   | 12.1   |
| 87.5° | 6.1    | 6.1    | 6.1    | 6.1    | 6.1    | 6.1    | 4.5    | 1.5    | 0.0    | 0.0    | 0.0    |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)