

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: P836531

Luminaire Tested: **ARCH3-40-727-U-T2R-HSS**

Issue Date: 5/16/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P836531  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-329-2)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/16/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH3-40-727-U-T2R-HSS  
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 2700K, 345mA LIGHTSQUARE WITH 40 LEDS AND TYPE II ROADWAY  
OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

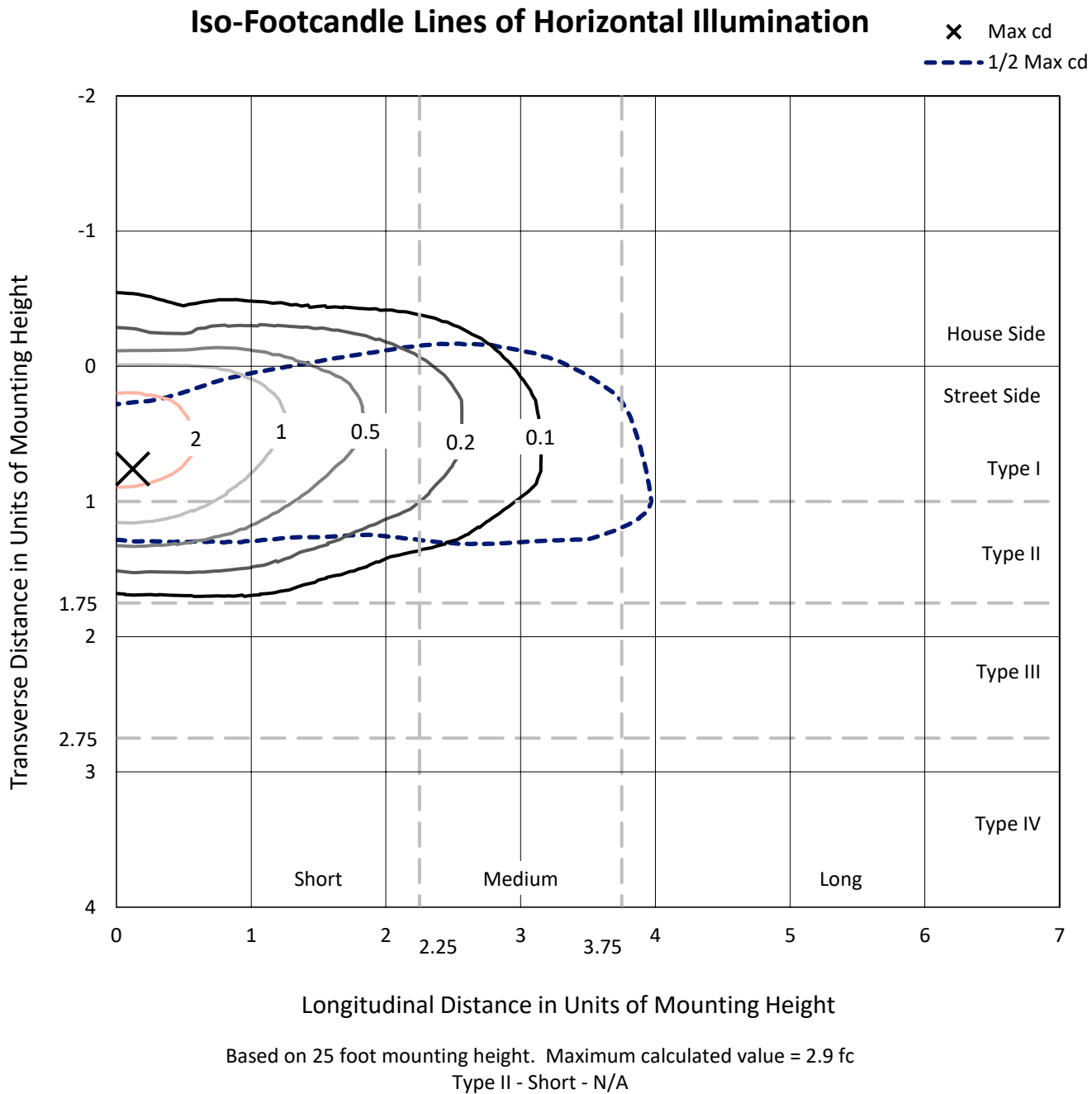
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4933 lumens  
Efficiency: N/A  
Efficacy: 113.1 lumens/watt  
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B1 - U0 - G1

Input Watts (W): 43.6  
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

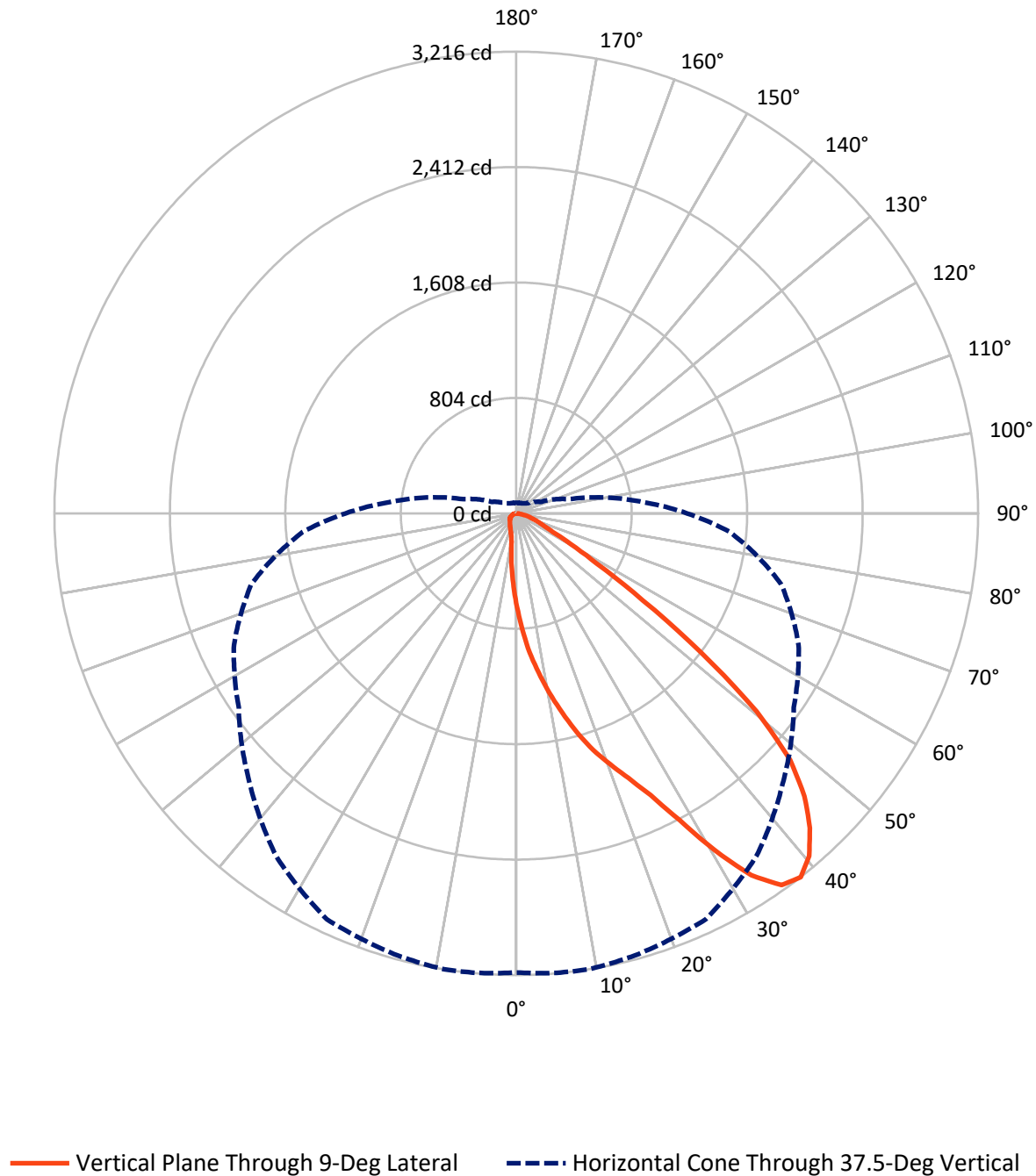


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## Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 599.9    | 0.0    | 599.9  |
|                    | % Fixture | 12.2     | 0.0    | 12.2   |
| <b>Street Side</b> | Lumens    | 4333.1   | 0.0    | 4333.1 |
|                    | % Fixture | 87.8     | 0.0    | 87.8   |
| <b>Total</b>       | Lumens    | 4933.0   | 0.0    | 4933.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 65.5   | 1.3       |
| 10°-20°   | 227.8  | 4.6       |
| 20°-30°   | 468.1  | 9.5       |
| 30°-40°   | 827.4  | 16.8      |
| 40°-50°   | 1099.1 | 22.3      |
| 50°-60°   | 1042.5 | 21.1      |
| 60°-70°   | 795.3  | 16.1      |
| 70°-80°   | 385.6  | 7.8       |
| 80°-90°   | 21.7   | 0.4       |
| 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°    | 4933.0 | 100.0     |
| 0°-180°   | 4933.0 | 100.0     |

**Coefficient of Utilization**



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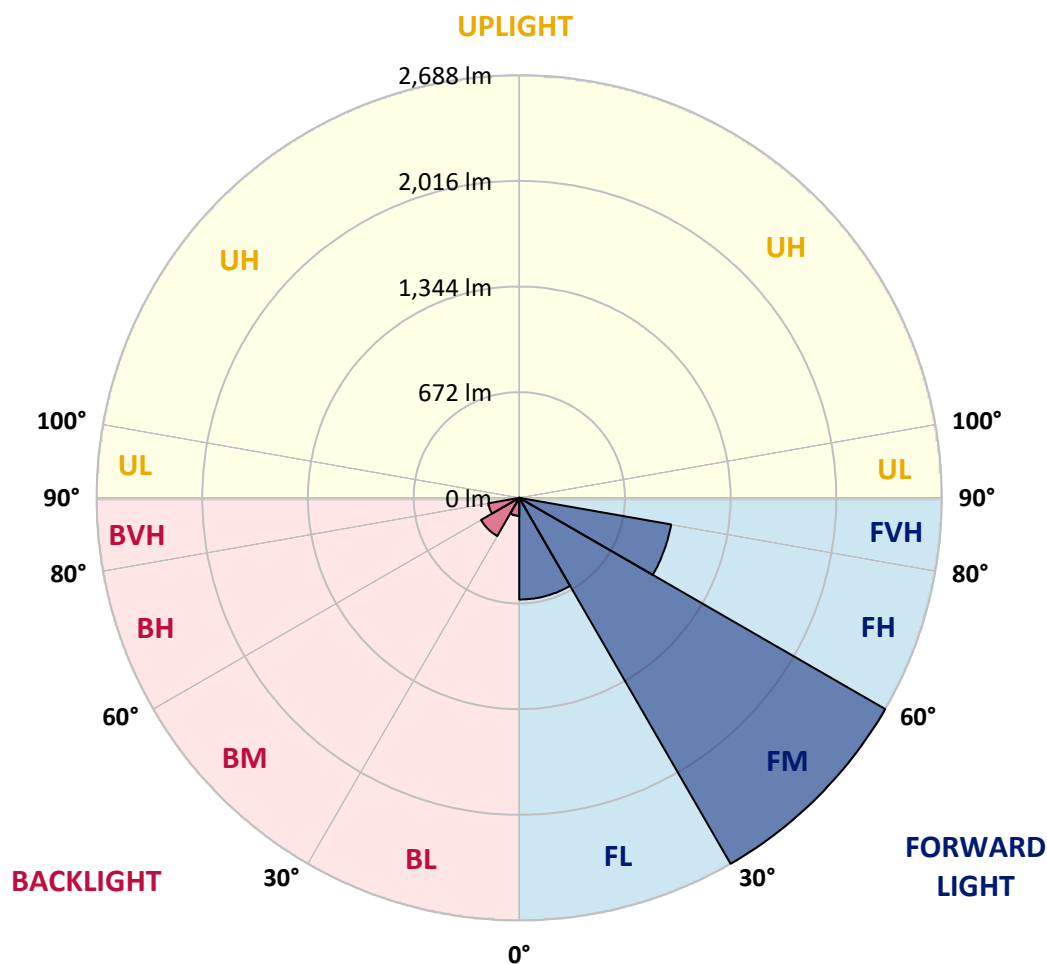
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 647.0  | 13.1      |                         |      |         |
| FM   | (30°-60°)   | 2688.2 | 54.5      |                         |      |         |
| FH   | (60°-80°)   | 980.7  | 19.9      |                         |      | G1/1800 |
| FVH  | (80°-90°)   | 17.2   | 0.3       |                         |      | G1/100  |
| BL   | (0°-30°)    | 114.5  | 2.3       | B1/500                  |      |         |
| BM   | (30°-60°)   | 280.7  | 5.7       | B1/1000                 |      |         |
| BH   | (60°-80°)   | 200.2  | 4.1       | B1/500                  |      | G1/500  |
| BVH  | (80°-90°)   | 4.5    | 0.1       |                         |      | G0/10   |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

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

Type II Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 9°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 652.1  | 652.1  | 652.1  | 652.1  | 652.1  | 652.1  | 652.1  | 652.1  | 652.1  | 652.1  | 652.1  |
| 2.5°  | 808.0  | 793.8  | 810.0  | 808.0  | 793.8  | 784.7  | 756.4  | 747.3  | 713.8  | 689.5  | 668.3  |
| 5°    | 974.1  | 959.9  | 974.1  | 970.0  | 949.8  | 927.5  | 880.9  | 850.5  | 790.8  | 738.1  | 690.6  |
| 7.5°  | 1111.8 | 1111.8 | 1117.9 | 1118.9 | 1094.6 | 1060.1 | 1002.4 | 956.9  | 872.8  | 791.8  | 715.9  |
| 10°   | 1260.6 | 1261.6 | 1274.8 | 1265.7 | 1233.3 | 1186.7 | 1113.8 | 1056.1 | 954.8  | 848.5  | 740.2  |
| 12.5° | 1419.6 | 1420.6 | 1424.7 | 1420.6 | 1382.1 | 1322.4 | 1234.3 | 1158.4 | 1041.9 | 913.3  | 773.6  |
| 15°   | 1578.6 | 1579.6 | 1584.6 | 1577.6 | 1535.0 | 1465.2 | 1364.9 | 1271.8 | 1134.1 | 986.2  | 814.1  |
| 17.5° | 1727.4 | 1729.4 | 1733.5 | 1724.4 | 1679.8 | 1596.8 | 1494.5 | 1382.1 | 1232.3 | 1064.2 | 859.7  |
| 20°   | 1861.1 | 1863.1 | 1866.1 | 1854.0 | 1809.4 | 1726.4 | 1616.0 | 1498.6 | 1332.5 | 1144.2 | 909.3  |
| 22.5° | 1995.7 | 1997.8 | 2002.8 | 1986.6 | 1937.0 | 1841.8 | 1733.5 | 1612.0 | 1438.8 | 1232.3 | 967.0  |
| 25°   | 2167.9 | 2169.9 | 2173.9 | 2150.7 | 2082.8 | 1971.4 | 1857.0 | 1732.5 | 1554.3 | 1331.5 | 1037.9 |
| 27.5° | 2420.0 | 2418.0 | 2418.0 | 2375.4 | 2259.0 | 2114.2 | 1981.6 | 1855.0 | 1678.8 | 1437.8 | 1115.8 |
| 30°   | 2731.9 | 2726.8 | 2723.8 | 2666.0 | 2500.0 | 2275.2 | 2109.1 | 1969.4 | 1798.3 | 1550.2 | 1199.9 |
| 32.5° | 3011.3 | 3011.3 | 3005.3 | 2944.5 | 2768.3 | 2491.9 | 2244.8 | 2080.8 | 1913.7 | 1663.6 | 1287.0 |
| 35°   | 3176.4 | 3183.5 | 3180.4 | 3134.9 | 3006.3 | 2724.8 | 2428.1 | 2214.4 | 2035.2 | 1782.1 | 1391.2 |
| 37.5° | 3198.6 | 3212.8 | 3215.9 | 3188.5 | 3120.7 | 2915.1 | 2631.6 | 2359.2 | 2168.9 | 1909.7 | 1492.5 |
| 40°   | 3108.5 | 3138.9 | 3138.9 | 3134.9 | 3110.6 | 3005.3 | 2802.7 | 2527.3 | 2306.6 | 2042.3 | 1594.8 |
| 42.5° | 2969.8 | 3001.2 | 2997.2 | 3012.3 | 3006.3 | 2984.0 | 2898.9 | 2684.3 | 2444.3 | 2179.0 | 1687.9 |
| 45°   | 2788.6 | 2821.0 | 2812.9 | 2840.2 | 2852.4 | 2876.7 | 2888.8 | 2793.6 | 2580.0 | 2327.9 | 1792.2 |
| 47.5° | 2498.0 | 2552.6 | 2564.8 | 2613.4 | 2664.0 | 2740.0 | 2797.7 | 2833.1 | 2706.5 | 2487.8 | 1905.6 |
| 50°   | 2068.6 | 2145.6 | 2169.9 | 2272.2 | 2410.9 | 2567.8 | 2661.0 | 2784.5 | 2795.7 | 2651.9 | 2028.1 |
| 52.5° | 1481.4 | 1570.5 | 1607.9 | 1776.0 | 2061.6 | 2334.9 | 2503.0 | 2677.2 | 2830.1 | 2808.8 | 2160.8 |
| 55°   | 957.9  | 1033.8 | 1070.3 | 1228.2 | 1607.9 | 2037.3 | 2316.7 | 2538.5 | 2810.8 | 2952.6 | 2312.7 |
| 57.5° | 590.3  | 633.9  | 658.2  | 793.8  | 1143.2 | 1655.5 | 2072.7 | 2410.9 | 2752.1 | 3077.1 | 2470.6 |
| 60°   | 397.9  | 423.2  | 435.4  | 499.2  | 776.6  | 1237.3 | 1737.5 | 2277.2 | 2675.2 | 3161.2 | 2614.4 |
| 62.5° | 264.3  | 272.4  | 284.5  | 324.0  | 512.4  | 868.8  | 1334.5 | 2038.3 | 2617.4 | 3166.2 | 2720.7 |
| 65°   | 204.5  | 208.6  | 213.6  | 230.9  | 315.9  | 607.5  | 938.6  | 1651.5 | 2531.4 | 3058.9 | 2754.1 |
| 67.5° | 161.0  | 165.0  | 171.1  | 180.2  | 228.8  | 412.1  | 638.9  | 1210.0 | 2355.2 | 2890.8 | 2699.5 |
| 70°   | 126.6  | 129.6  | 133.7  | 141.8  | 178.2  | 298.7  | 422.2  | 804.0  | 1999.8 | 2730.9 | 2527.3 |
| 72.5° | 100.2  | 103.3  | 107.3  | 115.4  | 144.8  | 218.7  | 289.6  | 501.2  | 1542.1 | 2535.4 | 2196.2 |
| 75°   | 79.0   | 81.0   | 84.0   | 92.1   | 116.4  | 170.1  | 196.4  | 299.7  | 1048.0 | 2178.0 | 1711.2 |
| 77.5° | 39.5   | 48.6   | 55.7   | 63.8   | 85.1   | 117.5  | 130.6  | 166.1  | 442.5  | 1117.9 | 816.1  |
| 80°   | 23.3   | 28.4   | 30.4   | 35.4   | 55.7   | 70.9   | 70.9   | 66.8   | 139.7  | 429.3  | 333.1  |
| 82.5° | 13.2   | 18.2   | 19.2   | 20.3   | 33.4   | 40.5   | 32.4   | 24.3   | 28.4   | 143.8  | 97.2   |
| 85°   | 4.1    | 6.1    | 7.1    | 8.1    | 11.1   | 12.2   | 11.1   | 10.1   | 8.1    | 14.2   | 9.1    |
| 87.5° | 0.0    | 0.0    | 0.0    | 0.0    | 1.0    | 2.0    | 2.0    | 2.0    | 3.0    | 3.0    | 3.0    |
| 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°    | 652.1  | 652.1  | 652.1 | 652.1 | 652.1 | 652.1 | 652.1 | 652.1 | 652.1 | 652.1 | 652.1 |
| 2.5°  | 656.1  | 643.0  | 617.7 | 594.4 | 572.1 | 555.9 | 540.7 | 526.5 | 516.4 | 508.3 | 507.3 |
| 5°    | 665.2  | 638.9  | 590.3 | 544.8 | 503.2 | 468.8 | 439.4 | 416.2 | 398.9 | 386.8 | 385.8 |
| 7.5°  | 677.4  | 636.9  | 563.0 | 495.1 | 433.4 | 383.8 | 341.2 | 309.8 | 287.6 | 278.5 | 271.4 |
| 10°   | 687.5  | 634.9  | 535.6 | 445.5 | 364.5 | 301.7 | 251.1 | 219.7 | 203.5 | 197.4 | 194.4 |
| 12.5° | 704.7  | 636.9  | 512.4 | 400.0 | 304.8 | 230.9 | 192.4 | 175.2 | 168.1 | 163.0 | 162.0 |
| 15°   | 730.0  | 646.0  | 490.1 | 355.4 | 244.0 | 186.3 | 164.0 | 152.9 | 145.8 | 144.8 | 143.8 |
| 17.5° | 755.4  | 654.1  | 469.8 | 309.8 | 202.5 | 162.0 | 146.8 | 137.7 | 132.6 | 131.6 | 131.6 |
| 20°   | 784.7  | 664.2  | 447.5 | 266.3 | 173.1 | 145.8 | 133.7 | 126.6 | 120.5 | 119.5 | 119.5 |
| 22.5° | 819.2  | 678.4  | 426.3 | 227.8 | 153.9 | 133.7 | 123.5 | 115.4 | 110.4 | 109.4 | 109.4 |
| 25°   | 865.7  | 699.7  | 409.1 | 199.5 | 140.7 | 123.5 | 114.4 | 107.3 | 103.3 | 101.3 | 101.3 |
| 27.5° | 917.4  | 729.0  | 396.9 | 182.3 | 131.6 | 115.4 | 106.3 | 100.2 | 96.2  | 94.2  | 94.2  |
| 30°   | 975.1  | 761.4  | 388.8 | 175.2 | 126.6 | 108.3 | 100.2 | 94.2  | 89.1  | 88.1  | 88.1  |
| 32.5° | 1038.9 | 798.9  | 383.8 | 176.2 | 125.6 | 103.3 | 94.2  | 88.1  | 84.0  | 82.0  | 82.0  |
| 35°   | 1109.8 | 840.4  | 380.7 | 182.3 | 127.6 | 99.2  | 89.1  | 83.0  | 79.0  | 77.0  | 77.0  |
| 37.5° | 1188.7 | 889.0  | 380.7 | 188.3 | 132.6 | 98.2  | 84.0  | 78.0  | 74.9  | 72.9  | 72.9  |
| 40°   | 1262.7 | 940.7  | 384.8 | 195.4 | 137.7 | 98.2  | 80.0  | 74.9  | 70.9  | 68.9  | 68.9  |
| 42.5° | 1320.4 | 970.0  | 387.8 | 202.5 | 140.7 | 97.2  | 75.9  | 70.9  | 67.8  | 65.8  | 65.8  |
| 45°   | 1386.2 | 1001.4 | 381.7 | 205.5 | 140.7 | 95.2  | 72.9  | 67.8  | 64.8  | 62.8  | 62.8  |
| 47.5° | 1459.1 | 1039.9 | 380.7 | 207.6 | 137.7 | 91.1  | 69.9  | 64.8  | 62.8  | 60.8  | 60.8  |
| 50°   | 1533.0 | 1082.4 | 382.7 | 206.6 | 133.7 | 85.1  | 65.8  | 62.8  | 59.7  | 57.7  | 57.7  |
| 52.5° | 1617.0 | 1127.0 | 386.8 | 204.5 | 124.5 | 78.0  | 62.8  | 59.7  | 56.7  | 54.7  | 53.7  |
| 55°   | 1710.2 | 1175.6 | 394.9 | 200.5 | 112.4 | 70.9  | 59.7  | 56.7  | 52.7  | 50.6  | 49.6  |
| 57.5° | 1817.5 | 1235.3 | 404.0 | 192.4 | 99.2  | 64.8  | 56.7  | 52.7  | 46.6  | 43.5  | 42.5  |
| 60°   | 1919.8 | 1303.2 | 414.1 | 173.1 | 86.1  | 58.7  | 53.7  | 47.6  | 41.5  | 39.5  | 38.5  |
| 62.5° | 2016.0 | 1370.0 | 419.2 | 138.7 | 72.9  | 53.7  | 50.6  | 43.5  | 37.5  | 35.4  | 34.4  |
| 65°   | 2077.8 | 1442.9 | 408.1 | 94.2  | 59.7  | 49.6  | 46.6  | 40.5  | 34.4  | 31.4  | 31.4  |
| 67.5° | 2081.8 | 1477.3 | 369.6 | 61.8  | 48.6  | 44.6  | 42.5  | 36.5  | 30.4  | 28.4  | 27.3  |
| 70°   | 1979.5 | 1425.7 | 282.5 | 48.6  | 40.5  | 38.5  | 38.5  | 32.4  | 26.3  | 24.3  | 23.3  |
| 72.5° | 1744.6 | 1262.7 | 180.2 | 39.5  | 34.4  | 32.4  | 32.4  | 27.3  | 23.3  | 20.3  | 19.2  |
| 75°   | 1377.1 | 974.1  | 96.2  | 32.4  | 28.4  | 27.3  | 25.3  | 22.3  | 19.2  | 17.2  | 16.2  |
| 77.5° | 632.8  | 429.3  | 44.6  | 23.3  | 21.3  | 21.3  | 19.2  | 16.2  | 15.2  | 13.2  | 13.2  |
| 80°   | 250.1  | 145.8  | 22.3  | 15.2  | 14.2  | 14.2  | 14.2  | 11.1  | 11.1  | 9.1   | 8.1   |
| 82.5° | 68.9   | 30.4   | 11.1  | 9.1   | 9.1   | 9.1   | 8.1   | 7.1   | 7.1   | 6.1   | 6.1   |
| 85°   | 7.1    | 5.1    | 5.1   | 5.1   | 5.1   | 4.1   | 4.1   | 3.0   | 2.0   | 2.0   | 2.0   |
| 87.5° | 3.0    | 3.0    | 3.0   | 3.0   | 3.0   | 2.0   | 1.0   | 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   |

(END OF REPORT)