

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: P842441

Luminaire Tested: **ARCH4-50-722-U-T2R-HSS**

Issue Date: 5/27/2024

### Test Information

Test Method: LM-79-08  
Report Number: P842441  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-329-2)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/27/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH4-50-722-U-T2R-HSS  
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 2200K, 435mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II  
ROADWAY OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

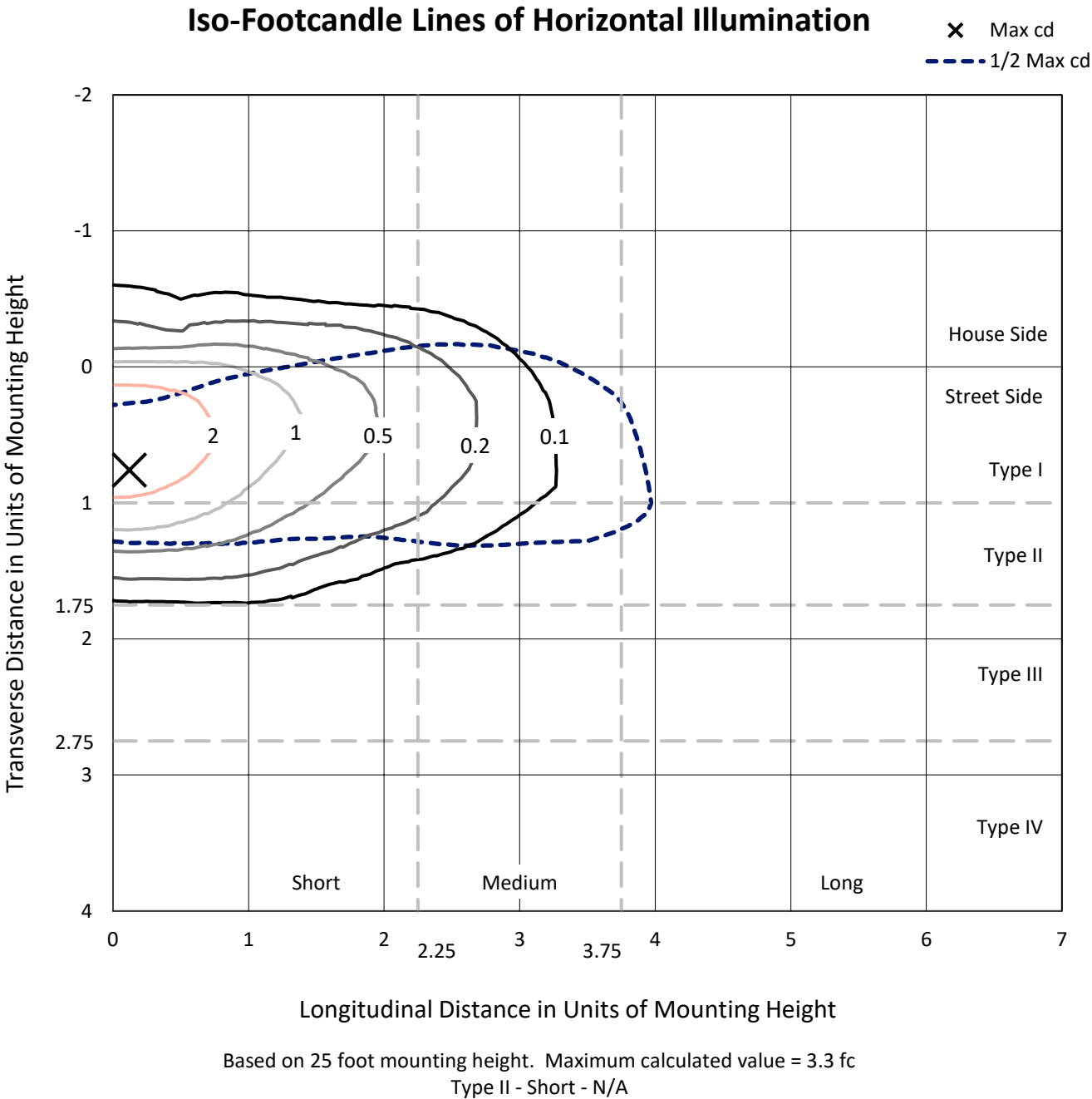
### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 5683 lumens  
Efficiency: N/A  
Efficacy: 106.8 lumens/watt  
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B1 - U0 - G1

Input Watts (W): 53.2  
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

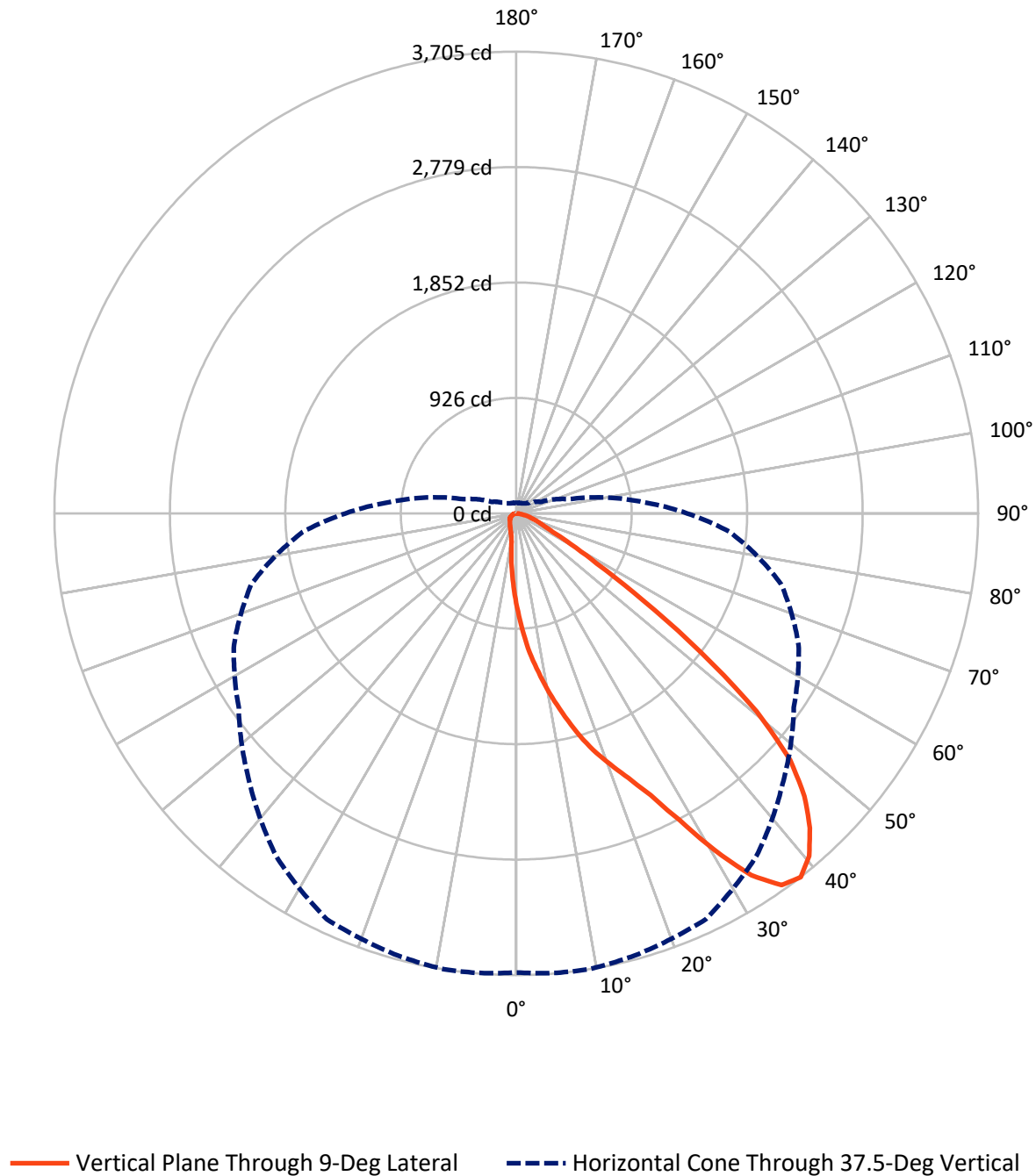


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## Luminous Intensity Polar Plot



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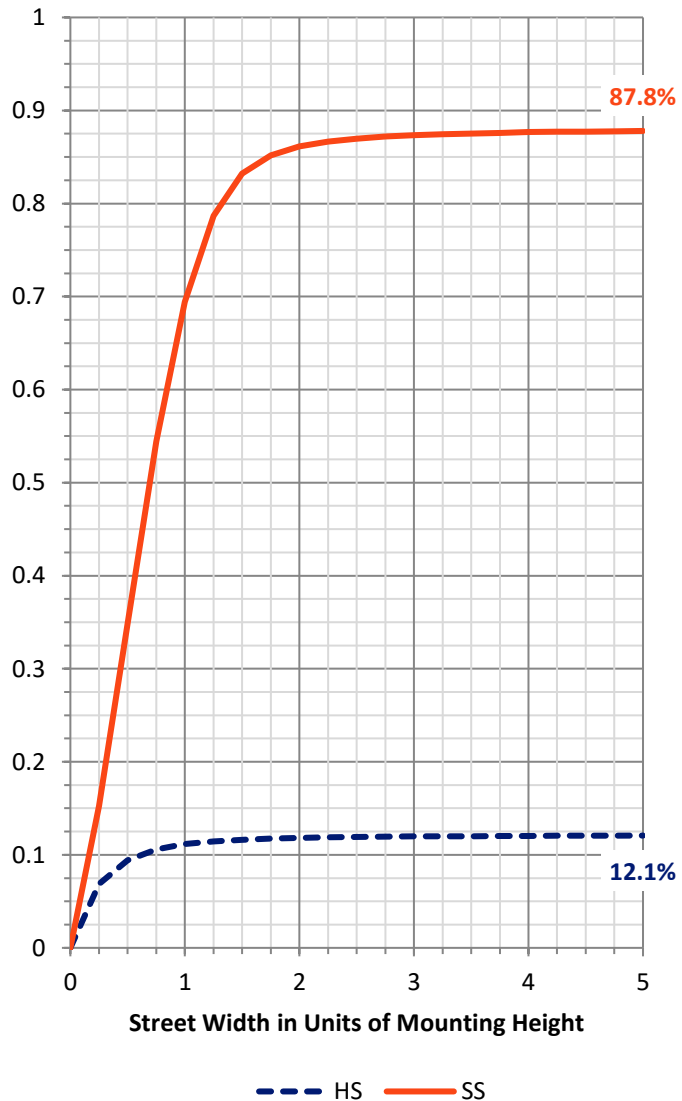
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 691.2    | 0.0    | 691.2  |
|                    | % Fixture | 12.2     | 0.0    | 12.2   |
| <b>Street Side</b> | Lumens    | 4991.8   | 0.0    | 4991.8 |
|                    | % Fixture | 87.8     | 0.0    | 87.8   |
| <b>Total</b>       | Lumens    | 5683.0   | 0.0    | 5683.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 75.5   | 1.3       |
| 10°-20°   | 262.4  | 4.6       |
| 20°-30°   | 539.3  | 9.5       |
| 30°-40°   | 953.2  | 16.8      |
| 40°-50°   | 1266.2 | 22.3      |
| 50°-60°   | 1200.9 | 21.1      |
| 60°-70°   | 916.2  | 16.1      |
| 70°-80°   | 444.2  | 7.8       |
| 80°-90°   | 25.0   | 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°    | 5683.0 | 100.0     |
| 0°-180°   | 5683.0 | 100.0     |

**Coefficient of Utilization**



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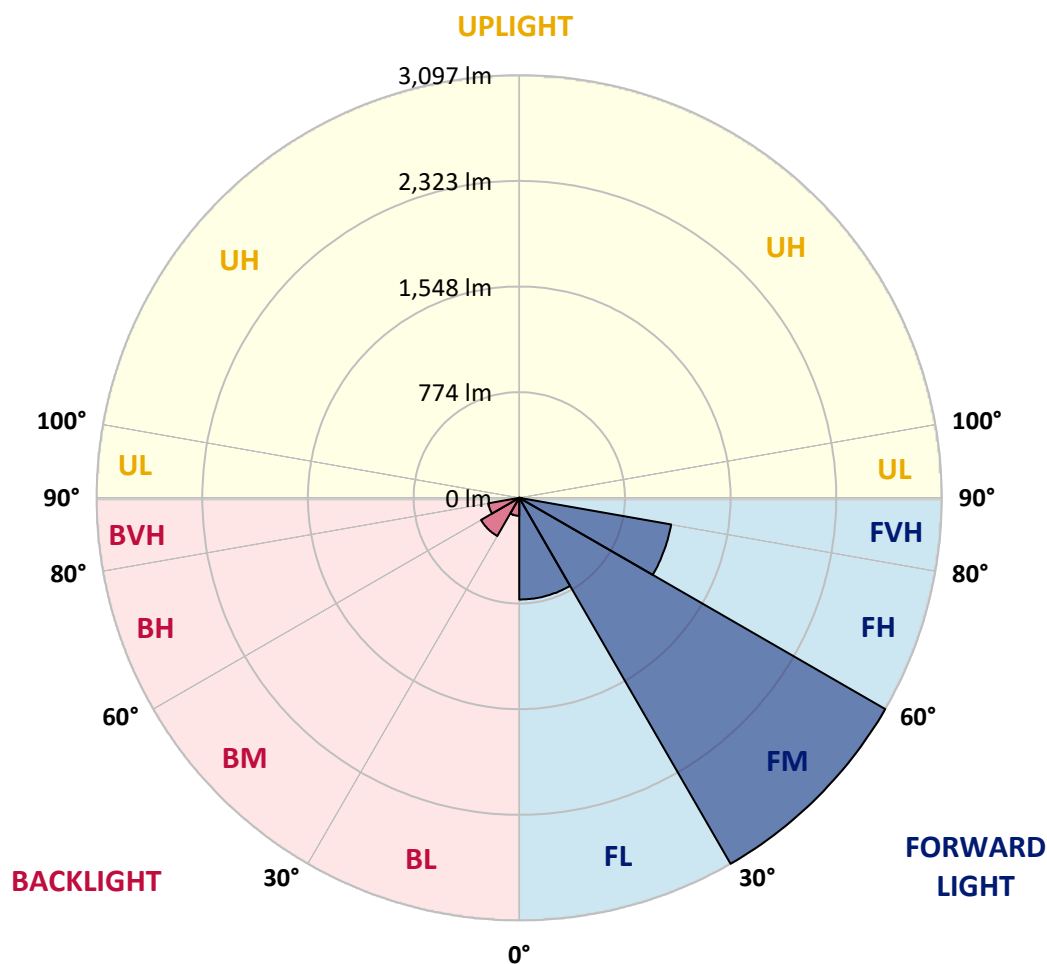
CATALOG NUMBER: ARCH4-50-722-U-T2R-HSS

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

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 745.3  | 13.1      |                         |      |         |
| FM   | (30°-60°)   | 3097.0 | 54.5      |                         |      |         |
| FH   | (60°-80°)   | 1129.8 | 19.9      |                         |      | G1/1800 |
| FVH  | (80°-90°)   | 19.8   | 0.3       |                         |      | G1/100  |
| BL   | (0°-30°)    | 131.9  | 2.3       | B1/500                  |      |         |
| BM   | (30°-60°)   | 323.4  | 5.7       | B1/1000                 |      |         |
| BH   | (60°-80°)   | 230.6  | 4.1       | 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-G1**

Type II Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 9°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 751.2  | 751.2  | 751.2  | 751.2  | 751.2  | 751.2  | 751.2  | 751.2  | 751.2  | 751.2  | 751.2  |
| 2.5°  | 930.9  | 914.5  | 933.2  | 930.9  | 914.5  | 904.0  | 871.4  | 860.9  | 822.4  | 794.4  | 769.9  |
| 5°    | 1122.2 | 1105.8 | 1122.2 | 1117.5 | 1094.2 | 1068.5 | 1014.9 | 979.9  | 911.0  | 850.4  | 795.6  |
| 7.5°  | 1280.8 | 1280.8 | 1287.8 | 1289.0 | 1261.0 | 1221.3 | 1154.8 | 1102.3 | 1005.5 | 912.2  | 824.7  |
| 10°   | 1452.3 | 1453.5 | 1468.6 | 1458.1 | 1420.8 | 1367.1 | 1283.1 | 1216.7 | 1100.0 | 977.5  | 852.7  |
| 12.5° | 1635.4 | 1636.6 | 1641.3 | 1636.6 | 1592.3 | 1523.4 | 1422.0 | 1334.5 | 1200.3 | 1052.2 | 891.2  |
| 15°   | 1818.6 | 1819.7 | 1825.6 | 1817.4 | 1768.4 | 1687.9 | 1572.4 | 1465.1 | 1306.5 | 1136.2 | 937.9  |
| 17.5° | 1990.0 | 1992.4 | 1997.0 | 1986.5 | 1935.2 | 1839.6 | 1721.7 | 1592.3 | 1419.6 | 1226.0 | 990.4  |
| 20°   | 2144.0 | 2146.4 | 2149.9 | 2135.9 | 2084.5 | 1988.9 | 1861.7 | 1726.4 | 1535.1 | 1318.1 | 1047.5 |
| 22.5° | 2299.2 | 2301.5 | 2307.3 | 2288.7 | 2231.5 | 2121.9 | 1997.0 | 1857.1 | 1657.6 | 1419.6 | 1114.0 |
| 25°   | 2497.5 | 2499.8 | 2504.5 | 2477.6 | 2399.5 | 2271.2 | 2139.4 | 1995.9 | 1790.6 | 1533.9 | 1195.7 |
| 27.5° | 2787.9 | 2785.6 | 2785.6 | 2736.6 | 2602.5 | 2435.6 | 2282.8 | 2137.0 | 1934.1 | 1656.4 | 1285.5 |
| 30°   | 3147.2 | 3141.4 | 3137.9 | 3071.4 | 2880.1 | 2621.1 | 2429.8 | 2268.8 | 2071.7 | 1785.9 | 1382.3 |
| 32.5° | 3469.2 | 3469.2 | 3462.2 | 3392.2 | 3189.2 | 2870.7 | 2586.1 | 2397.2 | 2204.7 | 1916.6 | 1482.6 |
| 35°   | 3659.3 | 3667.5 | 3664.0 | 3611.5 | 3463.3 | 3139.0 | 2797.3 | 2551.1 | 2344.7 | 2053.0 | 1602.8 |
| 37.5° | 3685.0 | 3701.3 | 3704.8 | 3673.3 | 3595.1 | 3358.3 | 3031.7 | 2717.9 | 2498.6 | 2200.0 | 1719.4 |
| 40°   | 3581.1 | 3616.1 | 3616.1 | 3611.5 | 3583.5 | 3462.2 | 3228.9 | 2911.6 | 2657.3 | 2352.8 | 1837.2 |
| 42.5° | 3421.3 | 3457.5 | 3452.8 | 3470.3 | 3463.3 | 3437.7 | 3339.7 | 3092.4 | 2815.9 | 2510.3 | 1944.5 |
| 45°   | 3212.5 | 3249.9 | 3240.5 | 3272.0 | 3286.0 | 3314.0 | 3328.0 | 3218.4 | 2972.2 | 2681.8 | 2064.7 |
| 47.5° | 2877.7 | 2940.7 | 2954.7 | 3010.7 | 3069.1 | 3156.5 | 3223.0 | 3263.9 | 3118.0 | 2866.1 | 2195.3 |
| 50°   | 2383.2 | 2471.8 | 2499.8 | 2617.6 | 2777.4 | 2958.2 | 3065.6 | 3207.9 | 3220.7 | 3055.1 | 2336.5 |
| 52.5° | 1706.6 | 1809.2 | 1852.4 | 2046.0 | 2375.0 | 2689.9 | 2883.6 | 3084.2 | 3260.4 | 3235.9 | 2489.3 |
| 55°   | 1103.5 | 1191.0 | 1233.0 | 1415.0 | 1852.4 | 2347.0 | 2668.9 | 2924.4 | 3238.2 | 3401.5 | 2664.3 |
| 57.5° | 680.1  | 730.2  | 758.2  | 914.5  | 1317.0 | 1907.2 | 2387.8 | 2777.4 | 3170.5 | 3545.0 | 2846.3 |
| 60°   | 458.4  | 487.6  | 501.6  | 575.1  | 894.7  | 1425.5 | 2001.7 | 2623.5 | 3081.9 | 3641.8 | 3011.9 |
| 62.5° | 304.5  | 313.8  | 327.8  | 373.3  | 590.2  | 1000.9 | 1537.4 | 2348.2 | 3015.4 | 3647.6 | 3134.4 |
| 65°   | 235.6  | 240.3  | 246.1  | 266.0  | 363.9  | 699.9  | 1081.3 | 1902.6 | 2916.2 | 3524.0 | 3172.9 |
| 67.5° | 185.5  | 190.1  | 197.1  | 207.6  | 263.6  | 474.8  | 736.1  | 1394.0 | 2713.3 | 3330.3 | 3109.9 |
| 70°   | 145.8  | 149.3  | 154.0  | 163.3  | 205.3  | 344.1  | 486.4  | 926.2  | 2303.8 | 3146.0 | 2911.6 |
| 72.5° | 115.5  | 119.0  | 123.6  | 133.0  | 166.8  | 252.0  | 333.6  | 577.4  | 1776.6 | 2920.9 | 2530.1 |
| 75°   | 91.0   | 93.3   | 96.8   | 106.2  | 134.1  | 196.0  | 226.3  | 345.3  | 1207.3 | 2509.1 | 1971.4 |
| 77.5° | 45.5   | 56.0   | 64.2   | 73.5   | 98.0   | 135.3  | 150.5  | 191.3  | 509.8  | 1287.8 | 940.2  |
| 80°   | 26.8   | 32.7   | 35.0   | 40.8   | 64.2   | 81.7   | 81.7   | 77.0   | 161.0  | 494.6  | 383.8  |
| 82.5° | 15.2   | 21.0   | 22.2   | 23.3   | 38.5   | 46.7   | 37.3   | 28.0   | 32.7   | 165.6  | 112.0  |
| 85°   | 4.7    | 7.0    | 8.2    | 9.3    | 12.8   | 14.0   | 12.8   | 11.7   | 9.3    | 16.3   | 10.5   |
| 87.5° | 0.0    | 0.0    | 0.0    | 0.0    | 1.2    | 2.3    | 2.3    | 2.3    | 3.5    | 3.5    | 3.5    |
| 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°    | 751.2  | 751.2  | 751.2 | 751.2 | 751.2 | 751.2 | 751.2 | 751.2 | 751.2 | 751.2 | 751.2 |
| 2.5°  | 755.9  | 740.7  | 711.6 | 684.7 | 659.1 | 640.4 | 622.9 | 606.6 | 594.9 | 585.6 | 584.4 |
| 5°    | 766.4  | 736.1  | 680.1 | 627.6 | 579.7 | 540.1 | 506.3 | 479.4 | 459.6 | 445.6 | 444.4 |
| 7.5°  | 780.4  | 733.7  | 648.6 | 570.4 | 499.3 | 442.1 | 393.1 | 356.9 | 331.3 | 320.8 | 312.6 |
| 10°   | 792.1  | 731.4  | 617.1 | 513.3 | 419.9 | 347.6 | 289.3 | 253.1 | 234.5 | 227.5 | 224.0 |
| 12.5° | 811.9  | 733.7  | 590.2 | 460.8 | 351.1 | 266.0 | 221.6 | 201.8 | 193.6 | 187.8 | 186.6 |
| 15°   | 841.0  | 744.2  | 564.6 | 409.4 | 281.1 | 214.6 | 189.0 | 176.1 | 168.0 | 166.8 | 165.6 |
| 17.5° | 870.2  | 753.6  | 541.3 | 356.9 | 233.3 | 186.6 | 169.1 | 158.6 | 152.8 | 151.6 | 151.6 |
| 20°   | 904.0  | 765.2  | 515.6 | 306.8 | 199.5 | 168.0 | 154.0 | 145.8 | 138.8 | 137.6 | 137.6 |
| 22.5° | 943.7  | 781.6  | 491.1 | 262.5 | 177.3 | 154.0 | 142.3 | 133.0 | 127.1 | 126.0 | 126.0 |
| 25°   | 997.4  | 806.0  | 471.3 | 229.8 | 162.1 | 142.3 | 131.8 | 123.6 | 119.0 | 116.6 | 116.6 |
| 27.5° | 1056.8 | 839.9  | 457.3 | 210.0 | 151.6 | 133.0 | 122.5 | 115.5 | 110.8 | 108.5 | 108.5 |
| 30°   | 1123.3 | 877.2  | 447.9 | 201.8 | 145.8 | 124.8 | 115.5 | 108.5 | 102.7 | 101.5 | 101.5 |
| 32.5° | 1196.8 | 920.4  | 442.1 | 203.0 | 144.6 | 119.0 | 108.5 | 101.5 | 96.8  | 94.5  | 94.5  |
| 35°   | 1278.5 | 968.2  | 438.6 | 210.0 | 147.0 | 114.3 | 102.7 | 95.7  | 91.0  | 88.7  | 88.7  |
| 37.5° | 1369.5 | 1024.2 | 438.6 | 217.0 | 152.8 | 113.2 | 96.8  | 89.8  | 86.3  | 84.0  | 84.0  |
| 40°   | 1454.6 | 1083.7 | 443.3 | 225.1 | 158.6 | 113.2 | 92.2  | 86.3  | 81.7  | 79.3  | 79.3  |
| 42.5° | 1521.1 | 1117.5 | 446.8 | 233.3 | 162.1 | 112.0 | 87.5  | 81.7  | 78.2  | 75.8  | 75.8  |
| 45°   | 1596.9 | 1153.7 | 439.8 | 236.8 | 162.1 | 109.7 | 84.0  | 78.2  | 74.7  | 72.3  | 72.3  |
| 47.5° | 1680.9 | 1198.0 | 438.6 | 239.1 | 158.6 | 105.0 | 80.5  | 74.7  | 72.3  | 70.0  | 70.0  |
| 50°   | 1766.1 | 1247.0 | 440.9 | 238.0 | 154.0 | 98.0  | 75.8  | 72.3  | 68.8  | 66.5  | 66.5  |
| 52.5° | 1862.9 | 1298.3 | 445.6 | 235.6 | 143.5 | 89.8  | 72.3  | 68.8  | 65.3  | 63.0  | 61.8  |
| 55°   | 1970.2 | 1354.3 | 454.9 | 231.0 | 129.5 | 81.7  | 68.8  | 65.3  | 60.7  | 58.3  | 57.2  |
| 57.5° | 2093.9 | 1423.1 | 465.4 | 221.6 | 114.3 | 74.7  | 65.3  | 60.7  | 53.7  | 50.2  | 49.0  |
| 60°   | 2211.7 | 1501.3 | 477.1 | 199.5 | 99.2  | 67.7  | 61.8  | 54.8  | 47.8  | 45.5  | 44.3  |
| 62.5° | 2322.5 | 1578.3 | 482.9 | 159.8 | 84.0  | 61.8  | 58.3  | 50.2  | 43.2  | 40.8  | 39.7  |
| 65°   | 2393.7 | 1662.3 | 470.1 | 108.5 | 68.8  | 57.2  | 53.7  | 46.7  | 39.7  | 36.2  | 36.2  |
| 67.5° | 2398.3 | 1701.9 | 425.8 | 71.2  | 56.0  | 51.3  | 49.0  | 42.0  | 35.0  | 32.7  | 31.5  |
| 70°   | 2280.5 | 1642.4 | 325.5 | 56.0  | 46.7  | 44.3  | 44.3  | 37.3  | 30.3  | 28.0  | 26.8  |
| 72.5° | 2009.9 | 1454.6 | 207.6 | 45.5  | 39.7  | 37.3  | 37.3  | 31.5  | 26.8  | 23.3  | 22.2  |
| 75°   | 1586.4 | 1122.2 | 110.8 | 37.3  | 32.7  | 31.5  | 29.2  | 25.7  | 22.2  | 19.8  | 18.7  |
| 77.5° | 729.1  | 494.6  | 51.3  | 26.8  | 24.5  | 24.5  | 22.2  | 18.7  | 17.5  | 15.2  | 15.2  |
| 80°   | 288.1  | 168.0  | 25.7  | 17.5  | 16.3  | 16.3  | 16.3  | 12.8  | 12.8  | 10.5  | 9.3   |
| 82.5° | 79.3   | 35.0   | 12.8  | 10.5  | 10.5  | 10.5  | 9.3   | 8.2   | 8.2   | 7.0   | 7.0   |
| 85°   | 8.2    | 5.8    | 5.8   | 5.8   | 5.8   | 4.7   | 4.7   | 3.5   | 2.3   | 2.3   | 2.3   |
| 87.5° | 3.5    | 3.5    | 3.5   | 3.5   | 3.5   | 2.3   | 1.2   | 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)