

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: P836594

Luminaire Tested: **ARCH3-50-722-U-T2R-HSS**

Issue Date: 5/16/2024

### Test Information

Test Method: LM-79-08  
Report Number: P836594  
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: ARCH3-50-722-U-T2R-HSS  
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 2200K, 425mA 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: 5465 lumens  
Efficiency: N/A  
Efficacy: 102.0 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): 53.6  
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



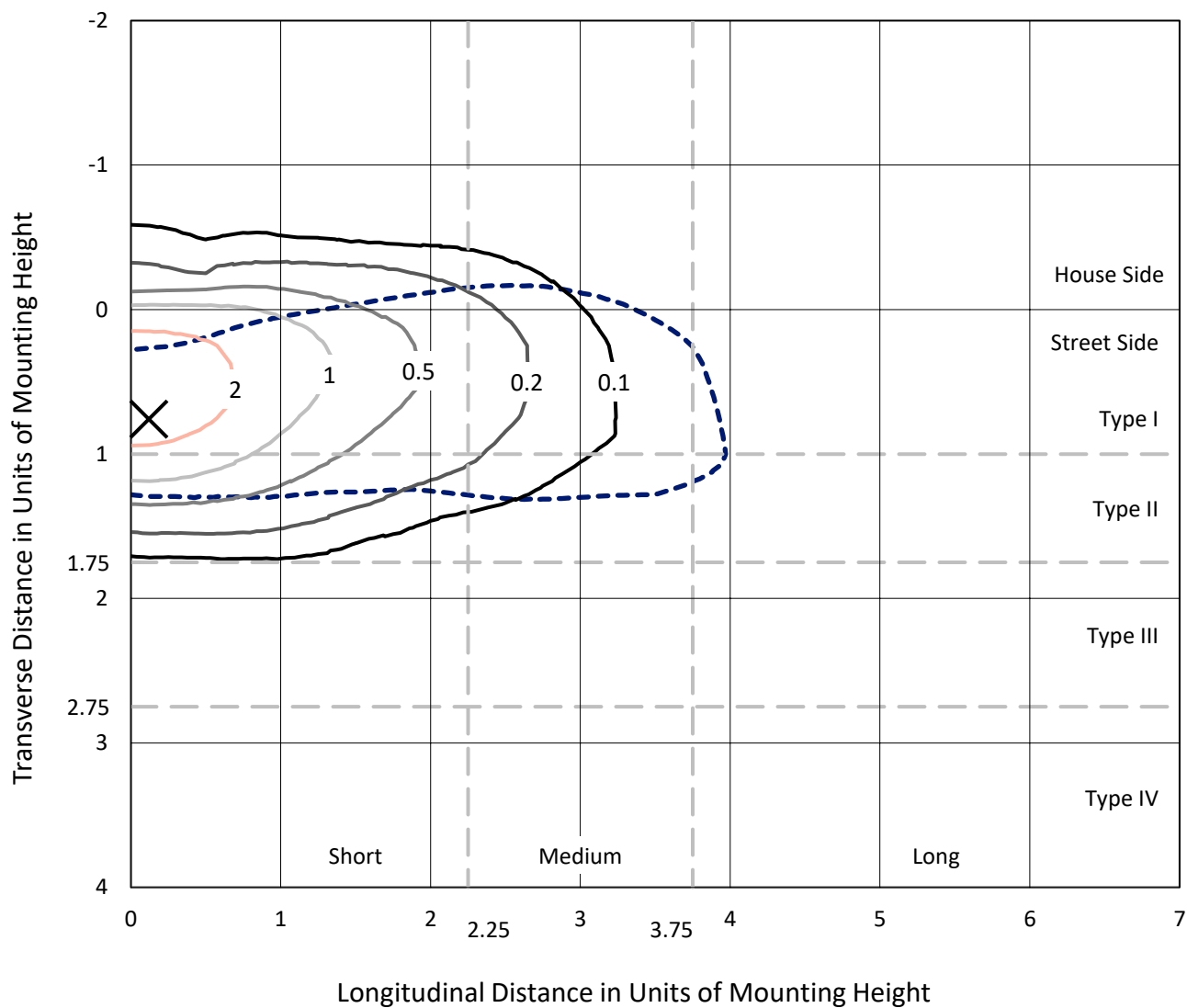
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## Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd

--- 1/2 Max cd

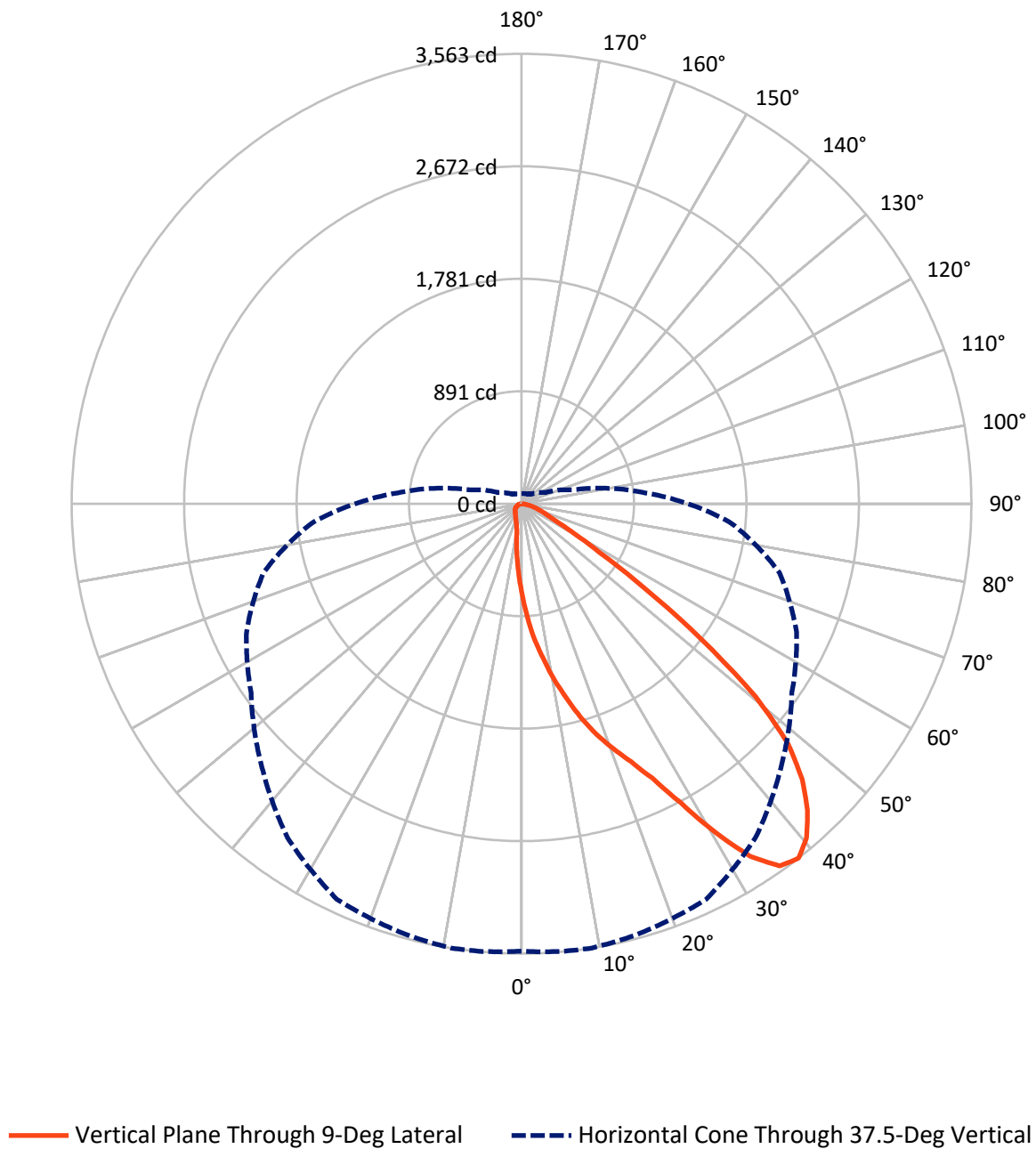


Based on 25 foot mounting height. Maximum calculated value = 3.2 fc  
Type II - Short - N/A

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## Luminous Intensity Polar Plot



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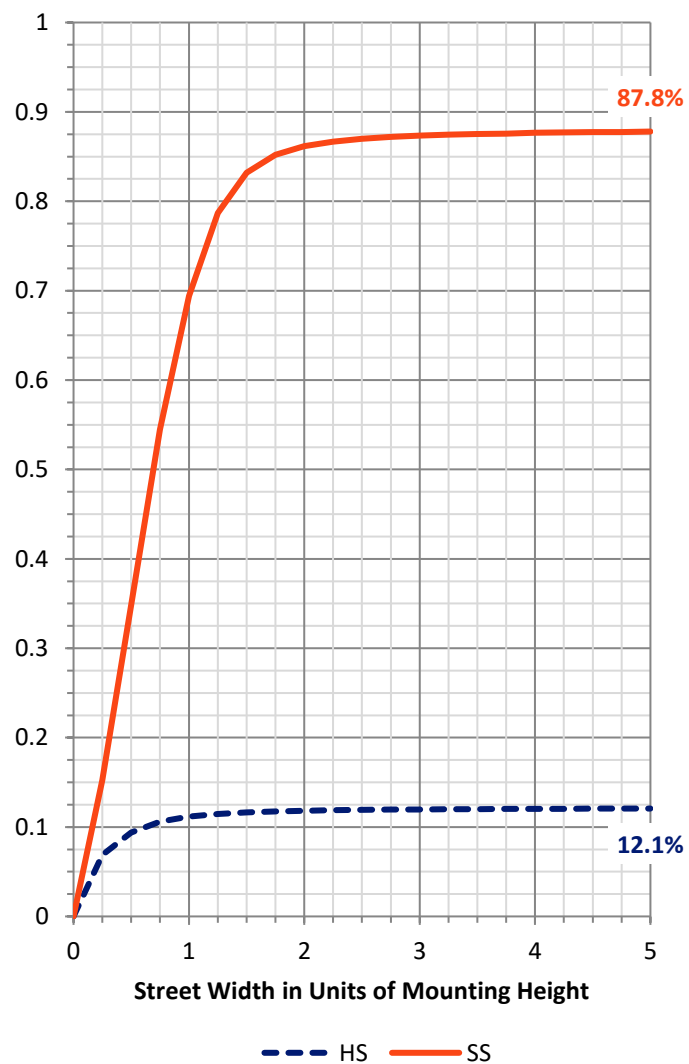
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 664.6    | 0.0    | 664.6  |
|                    | % Fixture | 12.2     | 0.0    | 12.2   |
| <b>Street Side</b> | Lumens    | 4800.4   | 0.0    | 4800.4 |
|                    | % Fixture | 87.8     | 0.0    | 87.8   |
| <b>Total</b>       | Lumens    | 5465.0   | 0.0    | 5465.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 72.6   | 1.3       |
| 10°-20°   | 252.4  | 4.6       |
| 20°-30°   | 518.6  | 9.5       |
| 30°-40°   | 916.6  | 16.8      |
| 40°-50°   | 1217.7 | 22.3      |
| 50°-60°   | 1154.9 | 21.1      |
| 60°-70°   | 881.1  | 16.1      |
| 70°-80°   | 427.1  | 7.8       |
| 80°-90°   | 24.0   | 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°    | 5465.0 | 100.0     |
| 0°-180°   | 5465.0 | 100.0     |

**Coefficient of Utilization**



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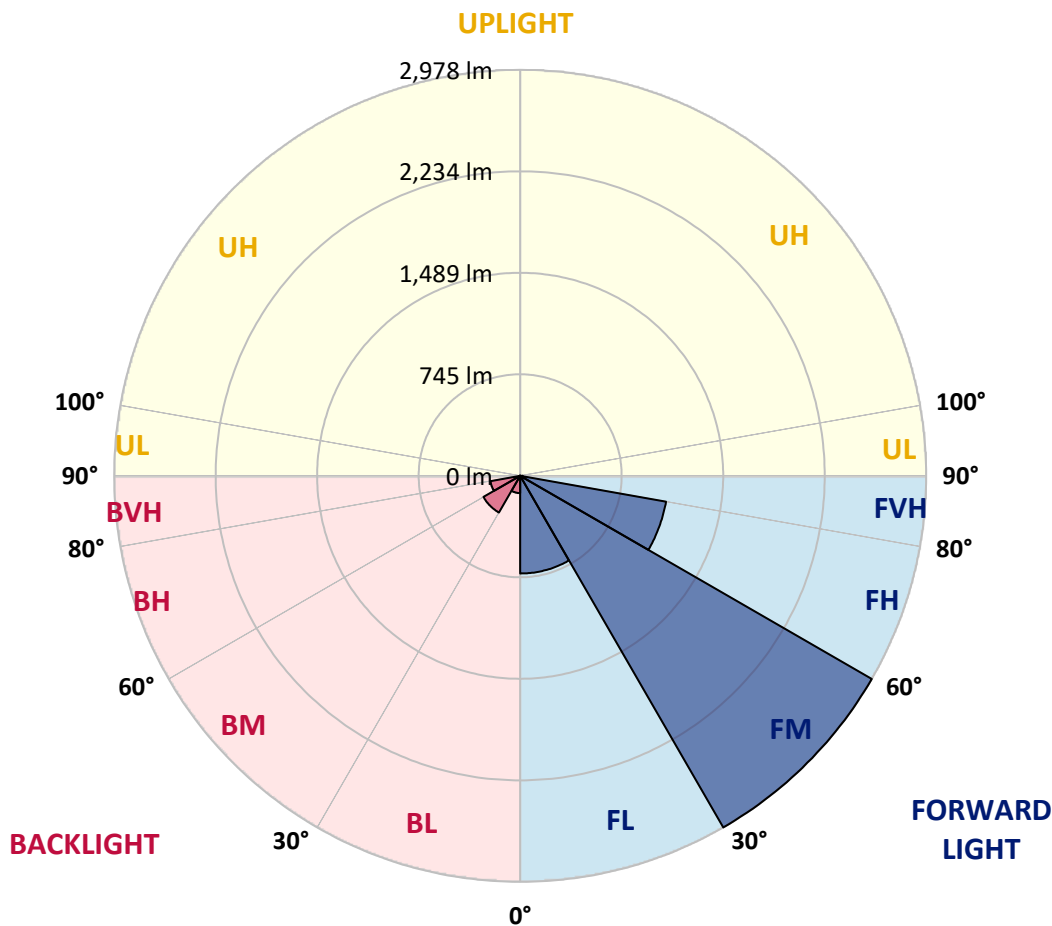
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 716.7  | 13.1      |                         |      |         |
| FM   | (30°-60°)   | 2978.2 | 54.5      |                         |      |         |
| FH   | (60°-80°)   | 1086.4 | 19.9      |                         |      | G1/1800 |
| FVH  | (80°-90°)   | 19.0   | 0.3       |                         |      | G1/100  |
| BL   | (0°-30°)    | 126.8  | 2.3       | B1/500                  |      |         |
| BM   | (30°-60°)   | 311.0  | 5.7       | B1/1000                 |      |         |
| BH   | (60°-80°)   | 221.8  | 4.1       | B1/500                  |      | G1/500  |
| BVH  | (80°-90°)   | 5.0    | 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°    | 722.4  | 722.4  | 722.4  | 722.4  | 722.4  | 722.4  | 722.4  | 722.4  | 722.4  | 722.4  | 722.4  |
| 2.5°  | 895.2  | 879.5  | 897.4  | 895.2  | 879.5  | 869.4  | 837.9  | 827.9  | 790.8  | 763.9  | 740.4  |
| 5°    | 1079.1 | 1063.4 | 1079.1 | 1074.6 | 1052.2 | 1027.5 | 975.9  | 942.3  | 876.1  | 817.8  | 765.0  |
| 7.5°  | 1231.7 | 1231.7 | 1238.4 | 1239.5 | 1212.6 | 1174.5 | 1110.5 | 1060.1 | 966.9  | 877.2  | 793.1  |
| 10°   | 1396.6 | 1397.7 | 1412.3 | 1402.2 | 1366.3 | 1314.7 | 1233.9 | 1170.0 | 1057.8 | 940.0  | 820.0  |
| 12.5° | 1572.7 | 1573.8 | 1578.3 | 1573.8 | 1531.2 | 1465.0 | 1367.4 | 1283.3 | 1154.3 | 1011.8 | 857.0  |
| 15°   | 1748.8 | 1749.9 | 1755.5 | 1747.7 | 1700.6 | 1623.2 | 1512.1 | 1408.9 | 1256.4 | 1092.6 | 901.9  |
| 17.5° | 1913.7 | 1915.9 | 1920.4 | 1910.3 | 1861.0 | 1769.0 | 1655.7 | 1531.2 | 1365.2 | 1179.0 | 952.4  |
| 20°   | 2061.8 | 2064.0 | 2067.4 | 2053.9 | 2004.6 | 1912.6 | 1790.3 | 1660.2 | 1476.2 | 1267.6 | 1007.3 |
| 22.5° | 2211.0 | 2213.2 | 2218.8 | 2200.9 | 2145.9 | 2040.5 | 1920.4 | 1785.8 | 1594.0 | 1365.2 | 1071.3 |
| 25°   | 2401.7 | 2403.9 | 2408.4 | 2382.6 | 2307.4 | 2184.0 | 2057.3 | 1919.3 | 1721.9 | 1475.1 | 1149.8 |
| 27.5° | 2681.0 | 2678.7 | 2678.7 | 2631.6 | 2502.6 | 2342.2 | 2195.3 | 2055.0 | 1859.9 | 1592.9 | 1236.2 |
| 30°   | 3026.5 | 3020.9 | 3017.5 | 2953.6 | 2769.6 | 2520.6 | 2336.6 | 2181.8 | 1992.2 | 1717.4 | 1329.3 |
| 32.5° | 3336.1 | 3336.1 | 3329.4 | 3262.0 | 3066.9 | 2760.6 | 2486.9 | 2305.2 | 2120.1 | 1843.0 | 1425.7 |
| 35°   | 3518.9 | 3526.8 | 3523.4 | 3472.9 | 3330.5 | 3018.6 | 2690.0 | 2453.3 | 2254.7 | 1974.3 | 1541.3 |
| 37.5° | 3543.6 | 3559.3 | 3562.7 | 3532.4 | 3457.2 | 3229.5 | 2915.4 | 2613.7 | 2402.8 | 2115.6 | 1653.5 |
| 40°   | 3443.8 | 3477.4 | 3477.4 | 3472.9 | 3446.0 | 3329.4 | 3105.0 | 2799.9 | 2555.3 | 2262.6 | 1766.8 |
| 42.5° | 3290.1 | 3324.9 | 3320.4 | 3337.2 | 3330.5 | 3305.8 | 3211.6 | 2973.8 | 2707.9 | 2414.0 | 1870.0 |
| 45°   | 3089.3 | 3125.2 | 3116.2 | 3146.5 | 3160.0 | 3186.9 | 3200.4 | 3094.9 | 2858.2 | 2578.9 | 1985.5 |
| 47.5° | 2767.4 | 2827.9 | 2841.4 | 2895.2 | 2951.3 | 3035.5 | 3099.4 | 3138.7 | 2998.4 | 2756.1 | 2111.1 |
| 50°   | 2291.7 | 2377.0 | 2403.9 | 2517.2 | 2670.9 | 2844.8 | 2948.0 | 3084.8 | 3097.2 | 2937.9 | 2246.9 |
| 52.5° | 1641.1 | 1739.8 | 1781.3 | 1967.5 | 2283.9 | 2586.8 | 2773.0 | 2965.9 | 3135.3 | 3111.7 | 2393.8 |
| 55°   | 1061.2 | 1145.3 | 1185.7 | 1360.7 | 1781.3 | 2257.0 | 2566.6 | 2812.2 | 3114.0 | 3271.0 | 2562.1 |
| 57.5° | 654.0  | 702.2  | 729.1  | 879.5  | 1266.5 | 1834.1 | 2296.2 | 2670.9 | 3048.9 | 3409.0 | 2737.1 |
| 60°   | 440.8  | 468.9  | 482.4  | 553.0  | 860.4  | 1370.8 | 1924.9 | 2522.8 | 2963.7 | 3502.1 | 2896.4 |
| 62.5° | 292.8  | 301.8  | 315.2  | 359.0  | 567.6  | 962.5  | 1478.5 | 2258.1 | 2899.7 | 3507.7 | 3014.1 |
| 65°   | 226.6  | 231.1  | 236.7  | 255.8  | 350.0  | 673.0  | 1039.9 | 1829.6 | 2804.4 | 3388.8 | 3051.2 |
| 67.5° | 178.4  | 182.8  | 189.6  | 199.7  | 253.5  | 456.6  | 707.8  | 1340.5 | 2609.2 | 3202.6 | 2990.6 |
| 70°   | 140.2  | 143.6  | 148.1  | 157.0  | 197.4  | 330.9  | 467.8  | 890.7  | 2215.5 | 3025.4 | 2799.9 |
| 72.5° | 111.1  | 114.4  | 118.9  | 127.9  | 160.4  | 242.3  | 320.8  | 555.3  | 1708.4 | 2808.9 | 2433.1 |
| 75°   | 87.5   | 89.7   | 93.1   | 102.1  | 129.0  | 188.5  | 217.6  | 332.0  | 1161.0 | 2412.9 | 1895.8 |
| 77.5° | 43.7   | 53.8   | 61.7   | 70.7   | 94.2   | 130.1  | 144.7  | 184.0  | 490.2  | 1238.4 | 904.1  |
| 80°   | 25.8   | 31.4   | 33.7   | 39.3   | 61.7   | 78.5   | 78.5   | 74.0   | 154.8  | 475.6  | 369.1  |
| 82.5° | 14.6   | 20.2   | 21.3   | 22.4   | 37.0   | 44.9   | 35.9   | 26.9   | 31.4   | 159.3  | 107.7  |
| 85°   | 4.5    | 6.7    | 7.9    | 9.0    | 12.3   | 13.5   | 12.3   | 11.2   | 9.0    | 15.7   | 10.1   |
| 87.5° | 0.0    | 0.0    | 0.0    | 0.0    | 1.1    | 2.2    | 2.2    | 2.2    | 3.4    | 3.4    | 3.4    |
| 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°    | 722.4  | 722.4  | 722.4 | 722.4 | 722.4 | 722.4 | 722.4 | 722.4 | 722.4 | 722.4 | 722.4 |
| 2.5°  | 726.9  | 712.3  | 684.3 | 658.5 | 633.8 | 615.8 | 599.0 | 583.3 | 572.1 | 563.1 | 562.0 |
| 5°    | 737.0  | 707.8  | 654.0 | 603.5 | 557.5 | 519.4 | 486.8 | 461.0 | 442.0 | 428.5 | 427.4 |
| 7.5°  | 750.5  | 705.6  | 623.7 | 548.5 | 480.1 | 425.1 | 378.0 | 343.3 | 318.6 | 308.5 | 300.6 |
| 10°   | 761.7  | 703.3  | 593.4 | 493.6 | 403.8 | 334.3 | 278.2 | 243.4 | 225.5 | 218.7 | 215.4 |
| 12.5° | 780.7  | 705.6  | 567.6 | 443.1 | 337.6 | 255.8 | 213.1 | 194.1 | 186.2 | 180.6 | 179.5 |
| 15°   | 808.8  | 715.7  | 542.9 | 393.7 | 270.3 | 206.4 | 181.7 | 169.4 | 161.5 | 160.4 | 159.3 |
| 17.5° | 836.8  | 724.7  | 520.5 | 343.3 | 224.3 | 179.5 | 162.7 | 152.6 | 146.9 | 145.8 | 145.8 |
| 20°   | 869.4  | 735.9  | 495.8 | 295.0 | 191.8 | 161.5 | 148.1 | 140.2 | 133.5 | 132.4 | 132.4 |
| 22.5° | 907.5  | 751.6  | 472.3 | 252.4 | 170.5 | 148.1 | 136.9 | 127.9 | 122.3 | 121.1 | 121.1 |
| 25°   | 959.1  | 775.1  | 453.2 | 221.0 | 155.9 | 136.9 | 126.8 | 118.9 | 114.4 | 112.2 | 112.2 |
| 27.5° | 1016.3 | 807.7  | 439.7 | 201.9 | 145.8 | 127.9 | 117.8 | 111.1 | 106.6 | 104.3 | 104.3 |
| 30°   | 1080.2 | 843.6  | 430.8 | 194.1 | 140.2 | 120.0 | 111.1 | 104.3 | 98.7  | 97.6  | 97.6  |
| 32.5° | 1150.9 | 885.1  | 425.1 | 195.2 | 139.1 | 114.4 | 104.3 | 97.6  | 93.1  | 90.9  | 90.9  |
| 35°   | 1229.4 | 931.1  | 421.8 | 201.9 | 141.3 | 109.9 | 98.7  | 92.0  | 87.5  | 85.3  | 85.3  |
| 37.5° | 1316.9 | 984.9  | 421.8 | 208.6 | 146.9 | 108.8 | 93.1  | 86.4  | 83.0  | 80.8  | 80.8  |
| 40°   | 1398.8 | 1042.1 | 426.3 | 216.5 | 152.6 | 108.8 | 88.6  | 83.0  | 78.5  | 76.3  | 76.3  |
| 42.5° | 1462.8 | 1074.6 | 429.6 | 224.3 | 155.9 | 107.7 | 84.1  | 78.5  | 75.2  | 72.9  | 72.9  |
| 45°   | 1535.7 | 1109.4 | 422.9 | 227.7 | 155.9 | 105.4 | 80.8  | 75.2  | 71.8  | 69.5  | 69.5  |
| 47.5° | 1616.4 | 1152.0 | 421.8 | 230.0 | 152.6 | 101.0 | 77.4  | 71.8  | 69.5  | 67.3  | 67.3  |
| 50°   | 1698.3 | 1199.2 | 424.0 | 228.8 | 148.1 | 94.2  | 72.9  | 69.5  | 66.2  | 63.9  | 63.9  |
| 52.5° | 1791.4 | 1248.5 | 428.5 | 226.6 | 138.0 | 86.4  | 69.5  | 66.2  | 62.8  | 60.6  | 59.5  |
| 55°   | 1894.6 | 1302.4 | 437.5 | 222.1 | 124.5 | 78.5  | 66.2  | 62.8  | 58.3  | 56.1  | 55.0  |
| 57.5° | 2013.5 | 1368.5 | 447.6 | 213.1 | 109.9 | 71.8  | 62.8  | 58.3  | 51.6  | 48.2  | 47.1  |
| 60°   | 2126.8 | 1443.7 | 458.8 | 191.8 | 95.3  | 65.1  | 59.5  | 52.7  | 46.0  | 43.7  | 42.6  |
| 62.5° | 2233.4 | 1517.7 | 464.4 | 153.7 | 80.8  | 59.5  | 56.1  | 48.2  | 41.5  | 39.3  | 38.1  |
| 65°   | 2301.8 | 1598.5 | 452.1 | 104.3 | 66.2  | 55.0  | 51.6  | 44.9  | 38.1  | 34.8  | 34.8  |
| 67.5° | 2306.3 | 1636.6 | 409.4 | 68.4  | 53.8  | 49.4  | 47.1  | 40.4  | 33.7  | 31.4  | 30.3  |
| 70°   | 2193.0 | 1579.4 | 313.0 | 53.8  | 44.9  | 42.6  | 42.6  | 35.9  | 29.2  | 26.9  | 25.8  |
| 72.5° | 1932.8 | 1398.8 | 199.7 | 43.7  | 38.1  | 35.9  | 35.9  | 30.3  | 25.8  | 22.4  | 21.3  |
| 75°   | 1525.6 | 1079.1 | 106.6 | 35.9  | 31.4  | 30.3  | 28.0  | 24.7  | 21.3  | 19.1  | 17.9  |
| 77.5° | 701.1  | 475.6  | 49.4  | 25.8  | 23.6  | 23.6  | 21.3  | 17.9  | 16.8  | 14.6  | 14.6  |
| 80°   | 277.1  | 161.5  | 24.7  | 16.8  | 15.7  | 15.7  | 15.7  | 12.3  | 12.3  | 10.1  | 9.0   |
| 82.5° | 76.3   | 33.7   | 12.3  | 10.1  | 10.1  | 10.1  | 9.0   | 7.9   | 7.9   | 6.7   | 6.7   |
| 85°   | 7.9    | 5.6    | 5.6   | 5.6   | 5.6   | 4.5   | 4.5   | 3.4   | 2.2   | 2.2   | 2.2   |
| 87.5° | 3.4    | 3.4    | 3.4   | 3.4   | 3.4   | 2.2   | 1.1   | 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)