

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: P266397

Luminaire Tested: **UTLD-AF24-60-D-U-SL3-7027**

Issue Date: 5/28/2020

### Test Information

Test Method: LM-79-08  
Report Number: P266397  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1710-388-12-U0)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 5/28/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: UTLD-AF24-60-D-U-SL3-7027  
Description: TRADITIONAIRE LED DOWNLIGHT LUMINAIRE  
(1) 70 CRI, 2700K, 800mA LIGHT ENGINE WITH 24 LEDS AND TYPE III SPILL  
LIGHT ELIMINATOR OPTICS  
PHOTOMETRIC DATA REPORTED FOR LOWER HEMISPHERE ONLY. MINIMAL LIGHT IN  
UPPER HEMISPHERE NOT REPORTED.  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 5540.5 lumens  
Efficiency: N/A  
Efficacy: 86.6 lumens/watt  
Luminous Opening: Rectangular w/ Sides (W: 1.21' x L: 1.21' x H: 0.96')  
IES Classification: Type III - Medium - Non-Cutoff  
BUG Rating: B1 - U0 - G2

Input Watts (W): 64  
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: 28.75 FT

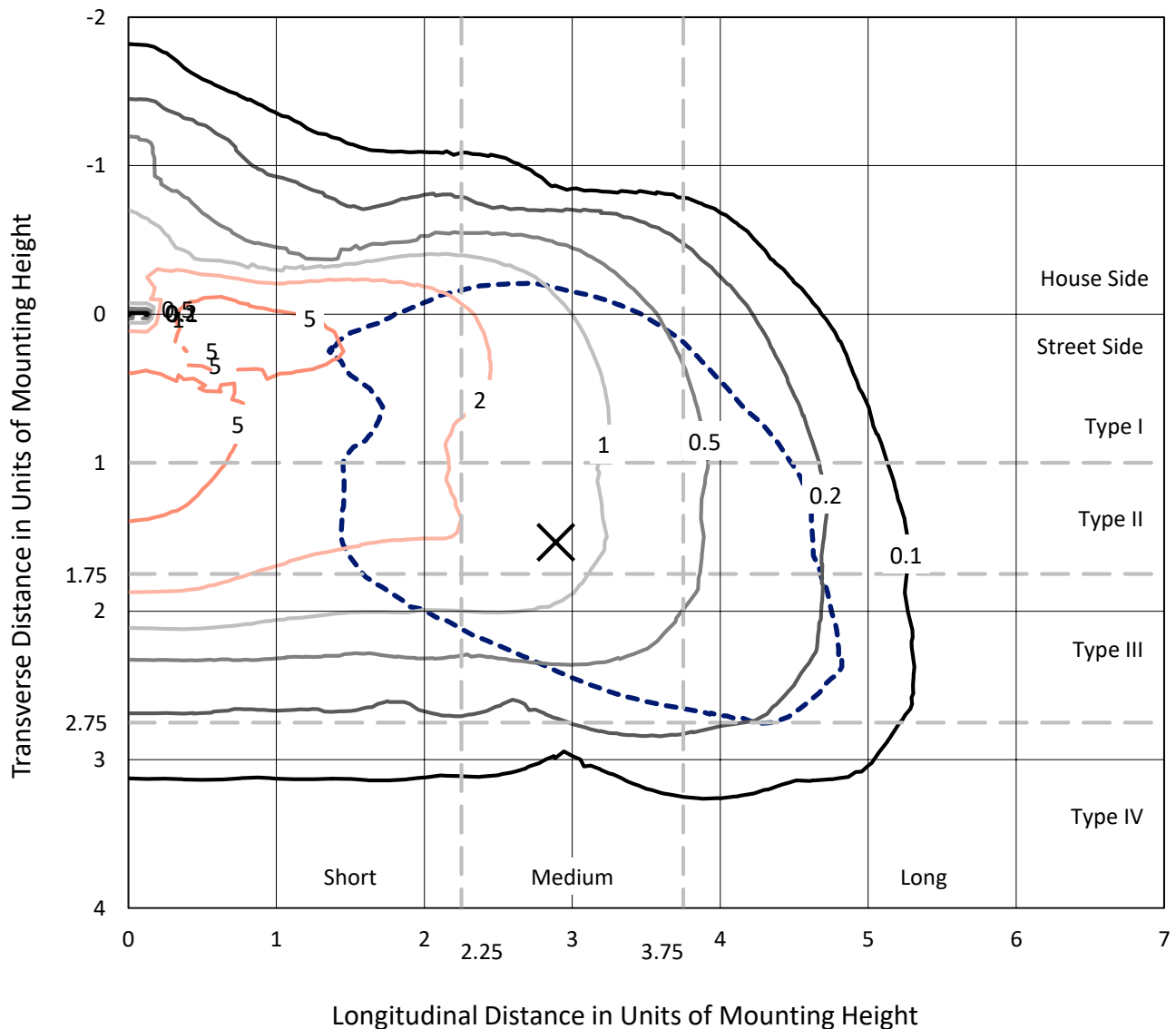


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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
- - - 1/2 Max cd

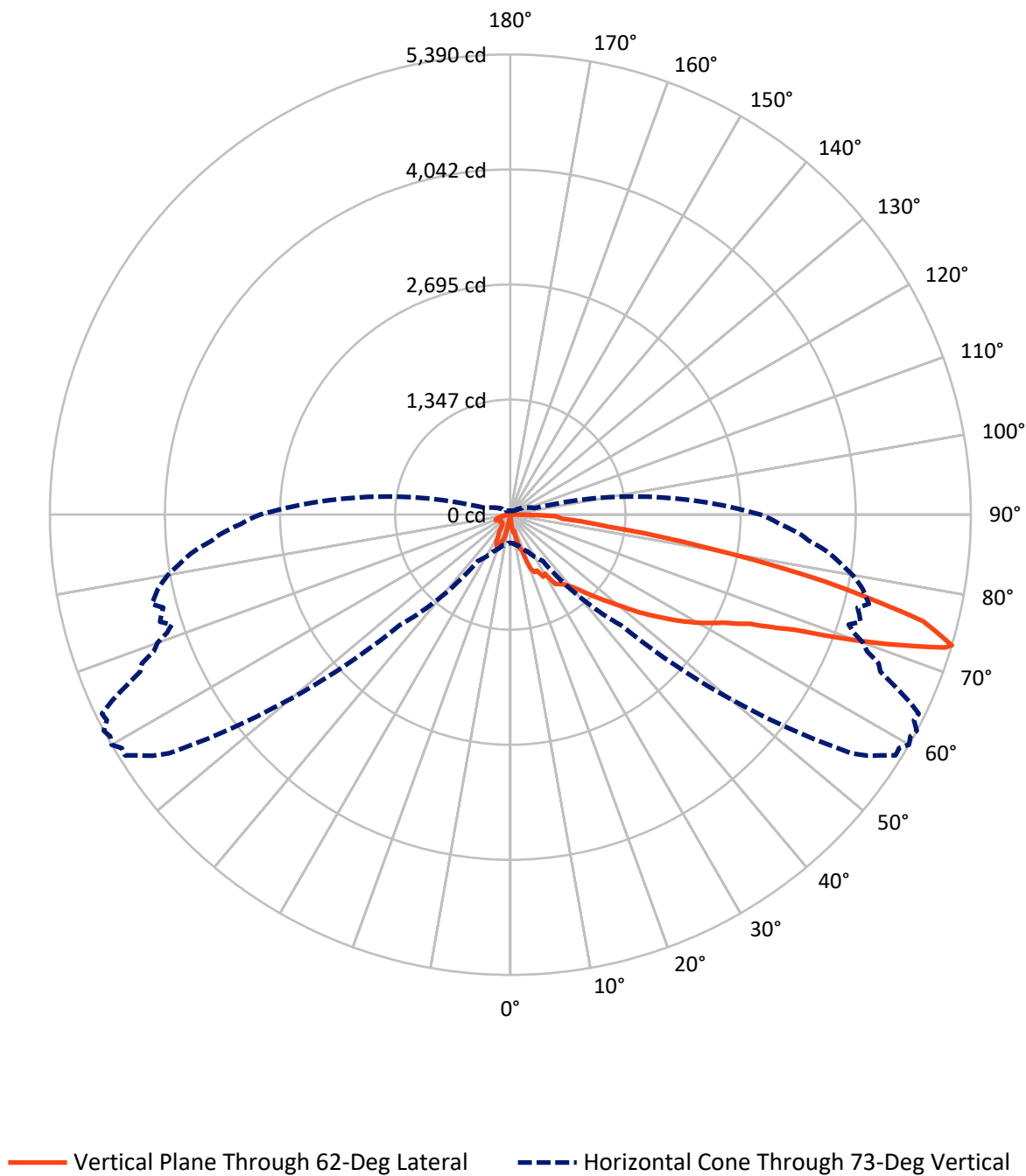


Based on 10 foot mounting height. Maximum calculated value = 8.7 fc  
Type III - Medium - Non-Cutoff

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## Luminous Intensity Polar Plot



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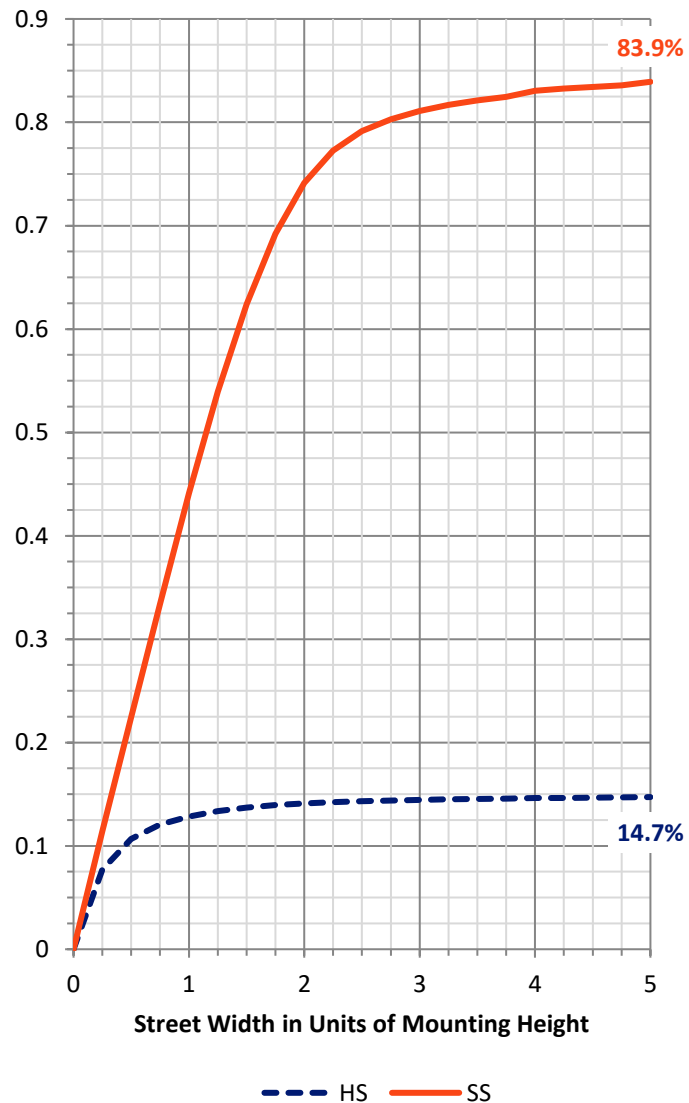
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 828.8    | 0.0    | 828.8  |
|                    | % Fixture | 15.0     | 0.0    | 15.0   |
| <b>Street Side</b> | Lumens    | 4711.7   | 0.0    | 4711.7 |
|                    | % Fixture | 85.0     | 0.0    | 85.0   |
| <b>Total</b>       | Lumens    | 5540.5   | 0.0    | 5540.5 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 8.8    | 0.2       |
| 10°-20°   | 97.1   | 1.8       |
| 20°-30°   | 258.9  | 4.7       |
| 30°-40°   | 467.5  | 8.4       |
| 40°-50°   | 755.9  | 13.6      |
| 50°-60°   | 1159.5 | 20.9      |
| 60°-70°   | 1431.6 | 25.8      |
| 70°-80°   | 1154.3 | 20.8      |
| 80°-90°   | 206.6  | 3.7       |
| 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°    | 5540.5 | 100.0     |
| 0°-180°   | 5540.5 | 100.0     |

**Coefficient of Utilization**



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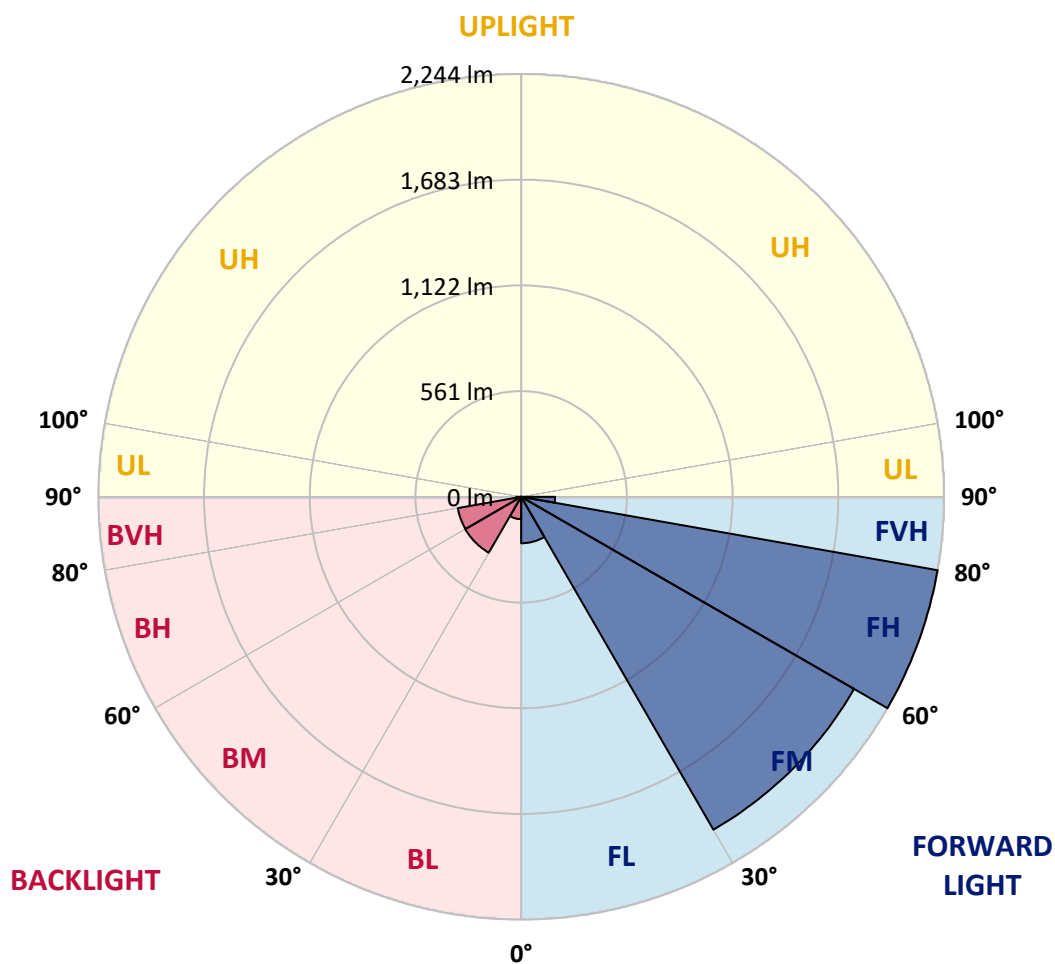
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 246.4  | 4.4       |                         |      |         |
| FM   | (30°-60°)   | 2040.4 | 36.8      |                         |      |         |
| FH   | (60°-80°)   | 2244.4 | 40.5      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 180.4  | 3.3       |                         |      | G2/225  |
| BL   | (0°-30°)    | 118.4  | 2.1       | B1/500                  |      |         |
| BM   | (30°-60°)   | 342.6  | 6.2       | B1/1000                 |      |         |
| BH   | (60°-80°)   | 341.5  | 6.2       | B1/500                  |      | G1/500  |
| BVH  | (80°-90°)   | 26.3   | 0.5       |                         |      | G1/100  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B1-U0-G2**

Type III Medium





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 56°    | 57°    | 58°    | 59°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    |
| 2.5°  | 23.0   | 18.4   | 17.1   | 13.1   | 8.5    | 3.4    | 1.3    | 1.3    | 1.3    | 1.3    | 1.3    |
| 5°    | 229.5  | 229.5  | 229.5  | 231.6  | 231.6  | 212.4  | 26.3   | 25.6   | 25.1   | 23.0   | 19.8   |
| 7.5°  | 220.4  | 219.7  | 220.4  | 221.7  | 223.0  | 224.9  | 228.9  | 228.9  | 228.3  | 228.3  | 229.5  |
| 10°   | 414.5  | 415.7  | 336.1  | 240.7  | 221.1  | 221.1  | 224.3  | 224.9  | 224.3  | 224.3  | 224.3  |
| 12.5° | 403.2  | 401.9  | 403.2  | 405.9  | 413.1  | 233.5  | 225.7  | 228.3  | 230.2  | 232.2  | 232.2  |
| 15°   | 417.1  | 412.4  | 399.2  | 395.3  | 401.4  | 369.1  | 433.5  | 434.8  | 429.6  | 423.0  | 397.3  |
| 17.5° | 554.0  | 551.9  | 556.0  | 538.2  | 399.9  | 536.7  | 521.6  | 519.7  | 489.4  | 409.2  | 397.3  |
| 20°   | 544.7  | 544.1  | 544.7  | 548.0  | 632.9  | 525.6  | 517.1  | 518.4  | 494.6  | 507.3  | 571.1  |
| 22.5° | 713.2  | 712.4  | 710.5  | 556.5  | 619.7  | 596.7  | 644.7  | 650.0  | 653.2  | 659.9  | 696.6  |
| 25°   | 740.7  | 735.4  | 723.0  | 671.0  | 615.1  | 692.8  | 633.6  | 640.1  | 644.1  | 669.6  | 701.2  |
| 27.5° | 991.4  | 976.8  | 855.8  | 728.9  | 693.3  | 683.5  | 745.4  | 789.4  | 801.3  | 811.1  | 819.7  |
| 30°   | 1127.6 | 1095.4 | 1013.7 | 913.8  | 757.8  | 738.8  | 778.9  | 786.7  | 813.8  | 835.5  | 807.1  |
| 32.5° | 1509.2 | 1448.5 | 1244.6 | 1006.6 | 886.7  | 837.4  | 785.5  | 799.3  | 884.8  | 899.3  | 906.5  |
| 35°   | 1595.8 | 1543.9 | 1398.7 | 1219.0 | 973.0  | 898.7  | 905.9  | 921.7  | 951.2  | 919.7  | 966.3  |
| 37.5° | 1600.5 | 1586.0 | 1513.6 | 1341.3 | 1131.4 | 1014.4 | 969.0  | 999.3  | 1003.1 | 976.3  | 1019.7 |
| 40°   | 1617.6 | 1624.2 | 1669.6 | 1479.5 | 1262.4 | 1164.4 | 1065.7 | 1102.0 | 1062.4 | 1094.0 | 1102.0 |
| 42.5° | 1704.4 | 1723.6 | 1807.7 | 1651.2 | 1409.1 | 1305.1 | 1213.0 | 1244.0 | 1184.8 | 1226.8 | 1199.2 |
| 45°   | 1934.1 | 1947.2 | 1981.4 | 1784.0 | 1582.8 | 1441.3 | 1397.3 | 1415.6 | 1354.5 | 1395.2 | 1336.0 |
| 47.5° | 2220.9 | 2203.2 | 2174.8 | 1908.4 | 1738.0 | 1591.9 | 1582.2 | 1546.0 | 1542.0 | 1551.8 | 1506.5 |
| 50°   | 2442.0 | 2416.3 | 2307.7 | 2032.1 | 1867.5 | 1742.0 | 1779.5 | 1711.0 | 1757.8 | 1717.6 | 1717.6 |
| 52.5° | 2530.7 | 2503.8 | 2387.2 | 2114.3 | 1968.9 | 1893.9 | 1990.6 | 1905.8 | 1968.2 | 1885.4 | 1936.7 |
| 55°   | 2518.8 | 2505.1 | 2420.3 | 2158.4 | 2047.1 | 2045.9 | 2199.2 | 2132.0 | 2182.7 | 2084.6 | 2163.7 |
| 57.5° | 2438.5 | 2438.0 | 2411.1 | 2199.8 | 2118.3 | 2183.4 | 2416.3 | 2385.3 | 2405.0 | 2355.0 | 2400.5 |
| 60°   | 2224.2 | 2229.5 | 2290.6 | 2201.7 | 2219.0 | 2325.4 | 2630.1 | 2660.3 | 2634.6 | 2622.8 | 2656.9 |
| 62.5° | 1811.7 | 1822.2 | 1986.1 | 2069.5 | 2279.4 | 2528.1 | 2841.2 | 2925.4 | 2841.2 | 2907.6 | 2901.7 |
| 65°   | 1193.3 | 1234.1 | 1492.7 | 1795.9 | 2213.7 | 2806.3 | 3214.1 | 3287.2 | 3154.4 | 3237.2 | 3212.2 |
| 67.5° | 628.3  | 644.7  | 826.3  | 1251.2 | 1947.2 | 2964.2 | 3974.7 | 4004.3 | 3827.3 | 3908.3 | 3818.1 |
| 70°   | 436.1  | 440.8  | 484.8  | 666.5  | 1315.7 | 2800.5 | 4712.8 | 4863.5 | 4791.6 | 4841.1 | 4707.5 |
| 72.5° | 344.7  | 351.2  | 395.3  | 490.7  | 695.9  | 2095.2 | 4910.8 | 5109.4 | 5200.2 | 5342.9 | 5323.9 |
| 73°   | 331.6  | 335.4  | 378.9  | 478.3  | 659.9  | 1832.2 | 4866.7 | 5048.3 | 5173.2 | 5317.2 | 5308.2 |
| 75°   | 243.4  | 258.5  | 322.3  | 440.1  | 600.0  | 992.6  | 4245.7 | 4457.5 | 4666.8 | 4823.3 | 4849.0 |
| 77.5° | 125.0  | 125.0  | 147.3  | 353.3  | 563.7  | 636.1  | 2855.1 | 3077.4 | 3395.8 | 3517.5 | 3571.4 |
| 80°   | 103.2  | 103.9  | 110.5  | 155.2  | 516.3  | 625.6  | 1529.5 | 1798.5 | 2035.4 | 2178.7 | 2244.5 |
| 82.5° | 78.3   | 86.9   | 96.7   | 107.3  | 240.7  | 638.8  | 756.6  | 905.9  | 1033.5 | 1104.6 | 1157.7 |
| 85°   | 59.2   | 63.8   | 84.9   | 90.1   | 123.6  | 765.0  | 626.8  | 634.2  | 638.1  | 638.8  | 655.9  |
| 87.5° | 34.2   | 36.8   | 65.8   | 74.3   | 87.5   | 640.8  | 701.2  | 659.1  | 619.7  | 592.7  | 556.0  |
| 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):**

|       | 60°    | 61°    | 62°    | 63°    | 64°    | 65°    | 66°    | 67°    | 68°    | 69°    | 70°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    |
| 2.5°  | 1.3    | 1.3    | 1.3    | 0.7    | 1.3    | 1.3    | 1.3    | 1.3    | 0.7    | 0.7    | 0.7    |
| 5°    | 17.7   | 14.5   | 14.5   | 11.1   | 9.9    | 7.8    | 5.3    | 4.6    | 3.4    | 2.6    | 1.9    |
| 7.5°  | 229.5  | 224.3  | 180.9  | 146.8  | 95.4   | 35.6   | 28.2   | 26.3   | 24.3   | 21.6   | 18.4   |
| 10°   | 224.3  | 224.3  | 214.4  | 190.1  | 178.9  | 179.7  | 178.9  | 178.9  | 178.9  | 171.0  | 134.1  |
| 12.5° | 215.8  | 193.4  | 199.3  | 259.8  | 273.1  | 281.6  | 332.8  | 339.4  | 441.3  | 444.0  | 446.6  |
| 15°   | 389.4  | 392.1  | 409.2  | 439.5  | 441.3  | 443.4  | 444.0  | 446.0  | 450.1  | 452.6  | 455.3  |
| 17.5° | 400.6  | 425.0  | 438.8  | 438.2  | 440.1  | 442.8  | 447.4  | 451.9  | 455.3  | 460.6  | 464.5  |
| 20°   | 668.3  | 711.1  | 678.2  | 640.1  | 647.9  | 652.6  | 656.5  | 661.2  | 665.7  | 670.3  | 653.2  |
| 22.5° | 715.1  | 721.7  | 728.9  | 733.5  | 705.9  | 703.3  | 680.1  | 671.0  | 669.0  | 643.4  | 678.8  |
| 25°   | 710.5  | 718.4  | 726.3  | 702.6  | 707.9  | 792.0  | 880.9  | 889.4  | 878.3  | 884.8  | 894.1  |
| 27.5° | 825.6  | 834.2  | 822.3  | 834.2  | 870.3  | 878.3  | 880.9  | 873.0  | 911.8  | 907.7  | 890.7  |
| 30°   | 814.5  | 817.6  | 801.8  | 848.5  | 861.1  | 870.3  | 856.5  | 921.0  | 997.9  | 1010.5 | 1086.8 |
| 32.5° | 946.6  | 928.8  | 969.7  | 988.0  | 997.9  | 982.1  | 1025.0 | 1034.8 | 1049.3 | 1071.6 | 1091.4 |
| 35°   | 965.7  | 955.2  | 998.6  | 1005.2 | 1003.9 | 1014.4 | 1034.0 | 1028.2 | 1066.4 | 1086.1 | 1108.5 |
| 37.5° | 992.0  | 1032.2 | 1039.3 | 1044.0 | 1019.7 | 1061.1 | 1051.8 | 1088.7 | 1104.6 | 1122.3 | 1172.9 |
| 40°   | 1069.1 | 1109.8 | 1113.7 | 1101.2 | 1115.7 | 1127.6 | 1136.7 | 1152.5 | 1166.4 | 1196.0 | 1270.9 |
| 42.5° | 1203.2 | 1223.0 | 1217.1 | 1182.8 | 1227.5 | 1201.8 | 1240.6 | 1250.5 | 1266.3 | 1334.7 | 1361.1 |
| 45°   | 1378.8 | 1374.9 | 1358.4 | 1343.3 | 1362.4 | 1357.8 | 1369.6 | 1377.6 | 1422.2 | 1489.3 | 1493.9 |
| 47.5° | 1553.2 | 1547.2 | 1507.7 | 1538.0 | 1503.1 | 1534.0 | 1532.8 | 1538.6 | 1625.6 | 1636.7 | 1655.1 |
| 50°   | 1735.3 | 1726.8 | 1685.4 | 1721.5 | 1689.4 | 1715.7 | 1715.0 | 1748.6 | 1816.4 | 1814.9 | 1832.7 |
| 52.5° | 1927.5 | 1905.0 | 1904.4 | 1889.9 | 1902.5 | 1889.9 | 1895.2 | 1976.8 | 1986.1 | 1996.6 | 2016.2 |
| 55°   | 2136.0 | 2078.0 | 2115.0 | 2057.1 | 2092.6 | 2079.4 | 2094.6 | 2172.2 | 2161.6 | 2160.3 | 2173.4 |
| 57.5° | 2376.7 | 2308.4 | 2350.4 | 2310.4 | 2302.4 | 2278.1 | 2345.8 | 2363.6 | 2347.2 | 2349.2 | 2356.3 |
| 60°   | 2612.9 | 2589.3 | 2574.2 | 2565.6 | 2535.9 | 2515.6 | 2606.3 | 2557.0 | 2535.9 | 2535.2 | 2586.0 |
| 62.5° | 2835.9 | 2843.9 | 2786.0 | 2789.9 | 2762.3 | 2766.2 | 2828.0 | 2768.1 | 2730.7 | 2707.8 | 2759.7 |
| 65°   | 3128.6 | 3168.1 | 3084.6 | 3069.5 | 3017.4 | 3083.9 | 3053.7 | 2993.2 | 2942.5 | 2964.2 | 2940.5 |
| 67.5° | 3697.8 | 3679.3 | 3600.3 | 3532.6 | 3451.6 | 3529.4 | 3449.8 | 3365.5 | 3308.3 | 3360.2 | 3348.4 |
| 70°   | 4654.2 | 4567.4 | 4478.0 | 4365.5 | 4239.1 | 4234.5 | 4061.4 | 3955.0 | 3813.5 | 3809.0 | 3812.1 |
| 72.5° | 5379.8 | 5316.7 | 5322.5 | 5222.6 | 5169.2 | 5047.5 | 4814.7 | 4583.8 | 4513.4 | 4395.6 | 4318.1 |
| 73°   | 5389.0 | 5354.7 | 5389.7 | 5300.9 | 5318.0 | 5134.4 | 4911.5 | 4706.2 | 4651.6 | 4472.7 | 4395.6 |
| 75°   | 4944.4 | 4951.5 | 4992.3 | 5011.5 | 5187.1 | 5083.1 | 4910.1 | 4742.3 | 4659.5 | 4525.3 | 4334.5 |
| 77.5° | 3668.0 | 3775.9 | 3762.8 | 3793.2 | 3901.0 | 3797.8 | 3725.4 | 3684.6 | 3571.4 | 3543.8 | 3369.5 |
| 80°   | 2243.2 | 2293.3 | 2286.6 | 2362.9 | 2339.9 | 2222.1 | 2185.9 | 2042.6 | 1996.6 | 1851.9 | 1723.6 |
| 82.5° | 1175.5 | 1182.1 | 1150.5 | 1139.4 | 1097.3 | 1018.3 | 916.5  | 811.8  | 733.5  | 636.8  | 548.7  |
| 85°   | 646.7  | 619.0  | 609.8  | 582.8  | 547.2  | 496.7  | 455.9  | 394.7  | 344.1  | 283.5  | 234.2  |
| 87.5° | 548.7  | 534.1  | 532.2  | 511.1  | 478.8  | 437.5  | 386.8  | 339.4  | 280.2  | 220.4  | 175.0  |
| 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):**

|       | 71°    | 72°    | 73°    | 74°    | 75°    | 76°    | 77°    | 78°    | 79°    | 80°    | 81°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    |
| 2.5°  | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    |
| 5°    | 1.9    | 1.9    | 1.3    | 1.3    | 1.3    | 1.3    | 1.3    | 1.3    | 1.3    | 1.3    | 1.3    |
| 7.5°  | 14.5   | 10.5   | 8.5    | 5.8    | 4.0    | 2.6    | 2.6    | 2.6    | 1.9    | 1.9    | 1.3    |
| 10°   | 84.3   | 38.2   | 24.3   | 21.0   | 17.7   | 14.5   | 10.5   | 9.3    | 7.8    | 5.8    | 5.8    |
| 12.5° | 448.0  | 450.1  | 451.3  | 410.4  | 350.6  | 314.4  | 312.5  | 309.1  | 307.8  | 307.2  | 307.2  |
| 15°   | 458.6  | 460.6  | 463.2  | 455.9  | 426.2  | 415.7  | 378.2  | 330.2  | 324.3  | 322.3  | 318.4  |
| 17.5° | 466.4  | 446.6  | 427.0  | 432.3  | 433.5  | 437.5  | 440.1  | 496.0  | 461.1  | 423.6  | 466.4  |
| 20°   | 655.9  | 690.7  | 698.0  | 703.9  | 709.8  | 717.0  | 723.0  | 732.2  | 757.8  | 738.8  | 688.8  |
| 22.5° | 691.3  | 698.6  | 706.4  | 716.4  | 723.0  | 735.4  | 769.7  | 754.5  | 746.6  | 749.2  | 747.3  |
| 25°   | 905.2  | 917.7  | 930.1  | 943.9  | 973.7  | 1011.8 | 1014.4 | 1019.7 | 1025.5 | 1027.5 | 1025.5 |
| 27.5° | 904.6  | 917.0  | 935.5  | 981.5  | 1005.8 | 1013.1 | 1023.6 | 1031.6 | 1034.8 | 1034.0 | 998.6  |
| 30°   | 1104.6 | 1132.9 | 1193.3 | 1214.4 | 1231.4 | 1248.6 | 1260.4 | 1268.2 | 1302.5 | 1284.8 | 1313.1 |
| 32.5° | 1117.0 | 1178.8 | 1201.3 | 1222.2 | 1245.9 | 1263.7 | 1282.8 | 1313.7 | 1320.2 | 1336.0 | 1326.2 |
| 35°   | 1172.9 | 1201.8 | 1227.5 | 1255.1 | 1276.9 | 1301.3 | 1338.7 | 1358.4 | 1374.2 | 1365.1 | 1354.5 |
| 37.5° | 1222.2 | 1241.9 | 1270.9 | 1303.3 | 1330.7 | 1386.1 | 1409.7 | 1437.4 | 1432.7 | 1428.1 | 1413.0 |
| 40°   | 1278.8 | 1308.4 | 1344.0 | 1381.5 | 1457.8 | 1475.6 | 1518.9 | 1528.8 | 1526.2 | 1514.4 | 1539.3 |
| 42.5° | 1385.4 | 1418.3 | 1456.4 | 1535.5 | 1559.1 | 1624.2 | 1645.2 | 1651.2 | 1648.5 | 1675.5 | 1676.9 |
| 45°   | 1523.5 | 1557.1 | 1616.3 | 1663.8 | 1744.6 | 1783.5 | 1797.9 | 1813.7 | 1836.7 | 1870.9 | 1846.6 |
| 47.5° | 1686.1 | 1721.0 | 1805.1 | 1861.6 | 1923.5 | 1966.3 | 1994.5 | 2025.5 | 2081.5 | 2067.5 | 2041.3 |
| 50°   | 1861.0 | 1934.7 | 1960.3 | 2064.2 | 2111.6 | 2159.6 | 2200.5 | 2288.0 | 2291.2 | 2278.1 | 2319.6 |
| 52.5° | 2034.0 | 2105.1 | 2190.5 | 2246.5 | 2302.4 | 2343.1 | 2450.4 | 2507.7 | 2516.2 | 2527.4 | 2565.6 |
| 55°   | 2257.7 | 2274.8 | 2363.6 | 2426.1 | 2479.4 | 2548.5 | 2670.2 | 2692.5 | 2711.7 | 2793.2 | 2766.2 |
| 57.5° | 2422.2 | 2501.8 | 2537.4 | 2592.6 | 2641.2 | 2789.9 | 2843.1 | 2866.2 | 2965.6 | 2966.8 | 2941.9 |
| 60°   | 2586.6 | 2664.3 | 2700.5 | 2743.9 | 2826.7 | 2957.0 | 2987.9 | 3035.3 | 3124.8 | 3114.2 | 3101.0 |
| 62.5° | 2802.4 | 2822.1 | 2848.4 | 2892.5 | 3046.4 | 3099.7 | 3133.9 | 3255.6 | 3262.9 | 3260.8 | 3241.2 |
| 65°   | 3021.4 | 3022.1 | 3044.4 | 3123.4 | 3251.8 | 3289.2 | 3379.3 | 3456.9 | 3478.6 | 3475.4 | 3465.5 |
| 67.5° | 3340.4 | 3342.5 | 3362.9 | 3528.6 | 3568.1 | 3599.0 | 3745.8 | 3771.4 | 3773.4 | 3780.0 | 3763.4 |
| 70°   | 3762.8 | 3737.2 | 3803.0 | 3920.1 | 3918.0 | 3991.1 | 4079.3 | 4093.0 | 4081.2 | 4067.4 | 4032.5 |
| 72.5° | 4202.4 | 4129.9 | 4246.4 | 4227.2 | 4200.4 | 4325.2 | 4287.2 | 4240.4 | 4191.8 | 4116.2 | 4047.0 |
| 73°   | 4250.3 | 4164.8 | 4287.2 | 4248.4 | 4208.2 | 4324.6 | 4271.4 | 4220.1 | 4149.6 | 4069.4 | 3963.5 |
| 75°   | 4167.3 | 4083.2 | 4108.2 | 4029.3 | 4039.0 | 4045.1 | 3947.1 | 3852.3 | 3724.7 | 3642.4 | 3486.0 |
| 77.5° | 3283.9 | 3237.9 | 3200.4 | 3166.9 | 3143.2 | 3024.8 | 2847.1 | 2766.9 | 2601.1 | 2498.5 | 2305.7 |
| 80°   | 1655.8 | 1630.9 | 1529.5 | 1498.0 | 1418.3 | 1236.1 | 1157.1 | 1055.9 | 950.5  | 856.5  | 742.0  |
| 82.5° | 484.8  | 430.2  | 388.1  | 366.4  | 339.4  | 304.5  | 276.3  | 261.9  | 240.7  | 234.2  | 219.7  |
| 85°   | 200.6  | 182.3  | 175.7  | 173.6  | 165.7  | 160.4  | 148.7  | 144.7  | 140.1  | 133.6  | 127.0  |
| 87.5° | 146.8  | 130.3  | 120.5  | 113.1  | 107.8  | 103.9  | 98.1   | 94.1   | 89.6   | 86.1   | 83.5   |
| 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):**

|       | 82°    | 83°    | 84°    | 85°    | 86°    | 87°    | 88°    | 89°    | 90°    | 95°    | 105°  |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|
| 0°    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7   |
| 2.5°  | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 1.3    | 1.3   |
| 5°    | 1.3    | 1.3    | 1.3    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 1.3    | 1.3   |
| 7.5°  | 1.3    | 1.3    | 1.3    | 1.3    | 1.3    | 1.3    | 1.3    | 1.3    | 1.3    | 1.3    | 1.3   |
| 10°   | 6.6    | 6.6    | 7.2    | 6.6    | 5.8    | 7.2    | 5.8    | 6.6    | 7.2    | 5.3    | 4.0   |
| 12.5° | 307.2  | 306.5  | 307.8  | 309.1  | 307.8  | 309.1  | 309.8  | 311.8  | 321.1  | 359.2  | 303.3 |
| 15°   | 317.1  | 316.5  | 318.4  | 337.5  | 361.7  | 367.0  | 367.0  | 366.4  | 366.4  | 361.7  | 335.4 |
| 17.5° | 515.1  | 574.2  | 525.6  | 583.4  | 621.0  | 554.6  | 611.7  | 625.6  | 572.3  | 563.1  | 349.4 |
| 20°   | 681.5  | 678.2  | 673.5  | 671.7  | 669.0  | 667.0  | 674.9  | 698.0  | 701.2  | 667.7  | 533.6 |
| 22.5° | 713.8  | 702.6  | 696.6  | 695.9  | 721.0  | 741.5  | 722.2  | 715.7  | 708.6  | 665.7  | 512.5 |
| 25°   | 1004.6 | 977.5  | 1002.6 | 997.3  | 986.1  | 977.5  | 965.7  | 954.4  | 978.3  | 907.2  | 691.3 |
| 27.5° | 1013.1 | 1018.9 | 1008.4 | 998.6  | 987.3  | 981.5  | 1003.1 | 992.6  | 977.5  | 889.4  | 632.1 |
| 30°   | 1301.3 | 1288.7 | 1275.6 | 1261.1 | 1280.2 | 1271.6 | 1251.2 | 1231.4 | 1240.0 | 1122.3 | 729.6 |
| 32.5° | 1314.4 | 1299.8 | 1296.7 | 1309.1 | 1284.8 | 1265.1 | 1256.5 | 1259.2 | 1234.1 | 1086.8 | 648.7 |
| 35°   | 1337.3 | 1353.1 | 1351.2 | 1329.5 | 1307.8 | 1324.9 | 1300.6 | 1274.2 | 1242.6 | 1069.6 | 569.6 |
| 37.5° | 1435.4 | 1428.1 | 1403.8 | 1382.1 | 1397.3 | 1368.3 | 1334.7 | 1300.6 | 1265.7 | 1062.4 | 490.7 |
| 40°   | 1532.1 | 1508.4 | 1482.7 | 1500.4 | 1466.4 | 1431.4 | 1396.0 | 1354.5 | 1311.0 | 1072.9 | 416.5 |
| 42.5° | 1649.2 | 1636.7 | 1653.2 | 1614.3 | 1569.6 | 1530.8 | 1482.7 | 1438.0 | 1388.1 | 1102.5 | 348.6 |
| 45°   | 1823.5 | 1849.3 | 1807.7 | 1765.7 | 1709.7 | 1663.0 | 1613.0 | 1559.1 | 1502.5 | 1163.8 | 289.4 |
| 47.5° | 2070.2 | 2043.3 | 2003.1 | 1946.5 | 1901.2 | 1847.3 | 1790.6 | 1724.8 | 1655.8 | 1263.0 | 248.7 |
| 50°   | 2315.7 | 2269.6 | 2230.8 | 2166.9 | 2109.0 | 2050.6 | 1978.1 | 1917.0 | 1840.6 | 1386.1 | 228.3 |
| 52.5° | 2533.3 | 2487.9 | 2439.3 | 2387.2 | 2328.0 | 2261.7 | 2196.5 | 2118.9 | 2042.6 | 1538.0 | 223.0 |
| 55°   | 2732.6 | 2689.3 | 2630.1 | 2582.6 | 2524.7 | 2457.8 | 2382.0 | 2311.7 | 2232.1 | 1705.2 | 231.0 |
| 57.5° | 2912.9 | 2872.8 | 2818.3 | 2765.0 | 2699.8 | 2641.2 | 2566.8 | 2489.3 | 2403.1 | 1856.3 | 255.8 |
| 60°   | 3063.0 | 3024.8 | 2979.4 | 2924.2 | 2859.7 | 2800.5 | 2731.3 | 2659.6 | 2581.4 | 2021.5 | 327.0 |
| 62.5° | 3214.9 | 3181.9 | 3150.4 | 3112.3 | 3049.0 | 3003.8 | 2939.3 | 2876.7 | 2815.6 | 2252.4 | 430.8 |
| 65°   | 3439.8 | 3430.0 | 3388.5 | 3364.2 | 3320.8 | 3287.8 | 3241.2 | 3169.5 | 3109.7 | 2524.1 | 494.1 |
| 67.5° | 3743.1 | 3723.4 | 3694.4 | 3637.1 | 3595.0 | 3547.8 | 3486.5 | 3415.4 | 3334.6 | 2680.7 | 461.8 |
| 70°   | 3989.2 | 3944.4 | 3881.2 | 3816.1 | 3736.5 | 3651.7 | 3562.9 | 3472.0 | 3365.5 | 2590.5 | 373.6 |
| 72.5° | 3949.7 | 3853.0 | 3729.9 | 3628.7 | 3516.1 | 3414.8 | 3285.9 | 3153.1 | 3032.0 | 2173.4 | 309.1 |
| 73°   | 3871.3 | 3768.7 | 3653.0 | 3506.3 | 3419.5 | 3293.7 | 3157.0 | 3056.4 | 2927.3 | 2044.5 | 296.0 |
| 75°   | 3357.7 | 3235.2 | 3139.8 | 2972.1 | 2849.2 | 2738.7 | 2611.0 | 2482.6 | 2365.0 | 1515.0 | 259.8 |
| 77.5° | 2188.0 | 2078.8 | 1886.0 | 1814.9 | 1668.3 | 1586.6 | 1461.1 | 1404.5 | 1247.2 | 751.3  | 218.4 |
| 80°   | 659.1  | 659.9  | 586.1  | 530.9  | 510.4  | 481.0  | 444.0  | 426.2  | 407.9  | 305.2  | 170.4 |
| 82.5° | 217.7  | 209.1  | 200.6  | 197.9  | 198.6  | 201.3  | 202.6  | 201.3  | 207.9  | 175.0  | 110.5 |
| 85°   | 119.7  | 117.0  | 114.4  | 111.2  | 109.2  | 108.5  | 107.8  | 107.3  | 109.9  | 104.7  | 71.1  |
| 87.5° | 80.3   | 78.3   | 77.0   | 76.3   | 76.3   | 75.0   | 76.3   | 75.0   | 77.0   | 69.1   | 51.4  |
| 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):**

|       | 115°  | 125°  | 135°  | 145°  | 155°  | 165°  | 175°  | 180°  |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°    | 0.7   | 0.7   | 0.7   | 0.7   | 0.7   | 0.7   | 0.7   | 0.7   |
| 2.5°  | 1.3   | 0.7   | 0.7   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 5°    | 1.3   | 0.7   | 0.7   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 7.5°  | 1.3   | 1.3   | 1.3   | 1.3   | 108.5 | 196.0 | 199.3 | 202.6 |
| 10°   | 2.6   | 2.6   | 178.9 | 203.9 | 203.2 | 200.6 | 196.6 | 196.6 |
| 12.5° | 141.5 | 143.4 | 190.1 | 184.2 | 175.0 | 170.4 | 168.4 | 166.5 |
| 15°   | 259.8 | 358.6 | 178.9 | 157.3 | 246.0 | 244.7 | 236.2 | 235.4 |
| 17.5° | 325.6 | 326.3 | 278.3 | 197.9 | 193.4 | 180.2 | 174.4 | 175.0 |
| 20°   | 481.0 | 294.0 | 288.7 | 201.3 | 145.3 | 195.4 | 216.4 | 218.4 |
| 22.5° | 438.2 | 361.7 | 224.3 | 169.2 | 162.6 | 194.0 | 210.6 | 213.2 |
| 25°   | 431.5 | 284.1 | 195.4 | 167.1 | 153.3 | 180.9 | 245.3 | 250.0 |
| 27.5° | 405.9 | 230.2 | 171.7 | 150.6 | 176.2 | 197.4 | 214.4 | 215.8 |
| 30°   | 326.3 | 177.7 | 142.1 | 147.3 | 157.9 | 168.4 | 199.3 | 202.6 |
| 32.5° | 292.8 | 142.7 | 127.6 | 130.3 | 146.8 | 165.7 | 184.2 | 186.8 |
| 35°   | 221.7 | 136.8 | 118.3 | 121.0 | 135.6 | 152.6 | 189.5 | 193.4 |
| 37.5° | 175.0 | 128.9 | 115.2 | 117.8 | 131.6 | 148.0 | 165.1 | 168.4 |
| 40°   | 152.6 | 125.0 | 114.4 | 111.7 | 123.0 | 131.0 | 144.7 | 146.8 |
| 42.5° | 145.3 | 122.3 | 111.7 | 105.9 | 111.2 | 116.4 | 150.6 | 153.3 |
| 45°   | 143.4 | 121.7 | 108.5 | 97.3  | 100.6 | 104.7 | 181.5 | 189.5 |
| 47.5° | 144.7 | 121.0 | 102.0 | 88.8  | 92.0  | 104.7 | 205.3 | 211.2 |
| 50°   | 147.3 | 120.5 | 94.7  | 83.5  | 95.4  | 119.7 | 200.1 | 200.6 |
| 52.5° | 152.0 | 119.7 | 88.2  | 90.1  | 107.8 | 110.5 | 152.0 | 150.6 |
| 55°   | 155.9 | 115.8 | 90.8  | 90.8  | 86.9  | 85.5  | 105.2 | 103.9 |
| 57.5° | 149.9 | 108.5 | 90.1  | 77.0  | 73.0  | 74.3  | 90.1  | 90.8  |
| 60°   | 141.5 | 104.7 | 81.6  | 71.8  | 69.1  | 71.8  | 94.7  | 95.4  |
| 62.5° | 142.7 | 103.2 | 76.3  | 68.5  | 65.1  | 68.5  | 80.3  | 81.6  |
| 65°   | 163.9 | 107.3 | 74.3  | 62.5  | 61.9  | 63.8  | 63.2  | 63.2  |
| 67.5° | 190.1 | 118.3 | 72.4  | 60.5  | 58.6  | 57.9  | 57.2  | 57.9  |
| 70°   | 207.9 | 125.0 | 71.1  | 58.6  | 54.5  | 53.3  | 52.6  | 53.3  |
| 72.5° | 196.0 | 115.8 | 67.2  | 55.2  | 49.9  | 48.7  | 47.4  | 47.4  |
| 73°   | 190.8 | 113.1 | 65.8  | 53.3  | 49.3  | 47.4  | 46.7  | 47.4  |
| 75°   | 169.2 | 98.6  | 58.6  | 48.7  | 45.4  | 44.0  | 42.8  | 42.8  |
| 77.5° | 134.8 | 78.3  | 49.3  | 42.8  | 40.2  | 39.4  | 38.2  | 38.2  |
| 80°   | 101.2 | 61.9  | 40.2  | 38.2  | 36.2  | 35.6  | 33.5  | 32.2  |
| 82.5° | 73.8  | 51.4  | 32.9  | 34.9  | 32.2  | 30.3  | 28.9  | 26.3  |
| 85°   | 53.3  | 44.0  | 28.9  | 33.5  | 29.6  | 26.9  | 23.0  | 19.0  |
| 87.5° | 38.2  | 38.2  | 26.9  | 35.6  | 26.3  | 20.4  | 13.1  | 7.8   |
| 90°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |

(END OF REPORT)