

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: P1209977

Luminaire Tested: **ARCH1-40-727-U-T2RE**

Issue Date: 11/5/2025

### Test Information

Test Method: LM-79-08  
Report Number: P1209977  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2510-578-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 11/5/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH1-40-727-U-T2RE  
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 2700K, 1220mA LIGHTSQUARE WITH 10 LEDS AND TYPE II ROADWAY  
ILLUMINANCE OPTICS  
Light Source: -  
Ballast/Driver: -

### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 5524 lumens  
Efficiency: N/A  
Efficacy: 128.5 lumens/watt  
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B1 - U0 - G1  
  
Input Watts (W): 43  
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



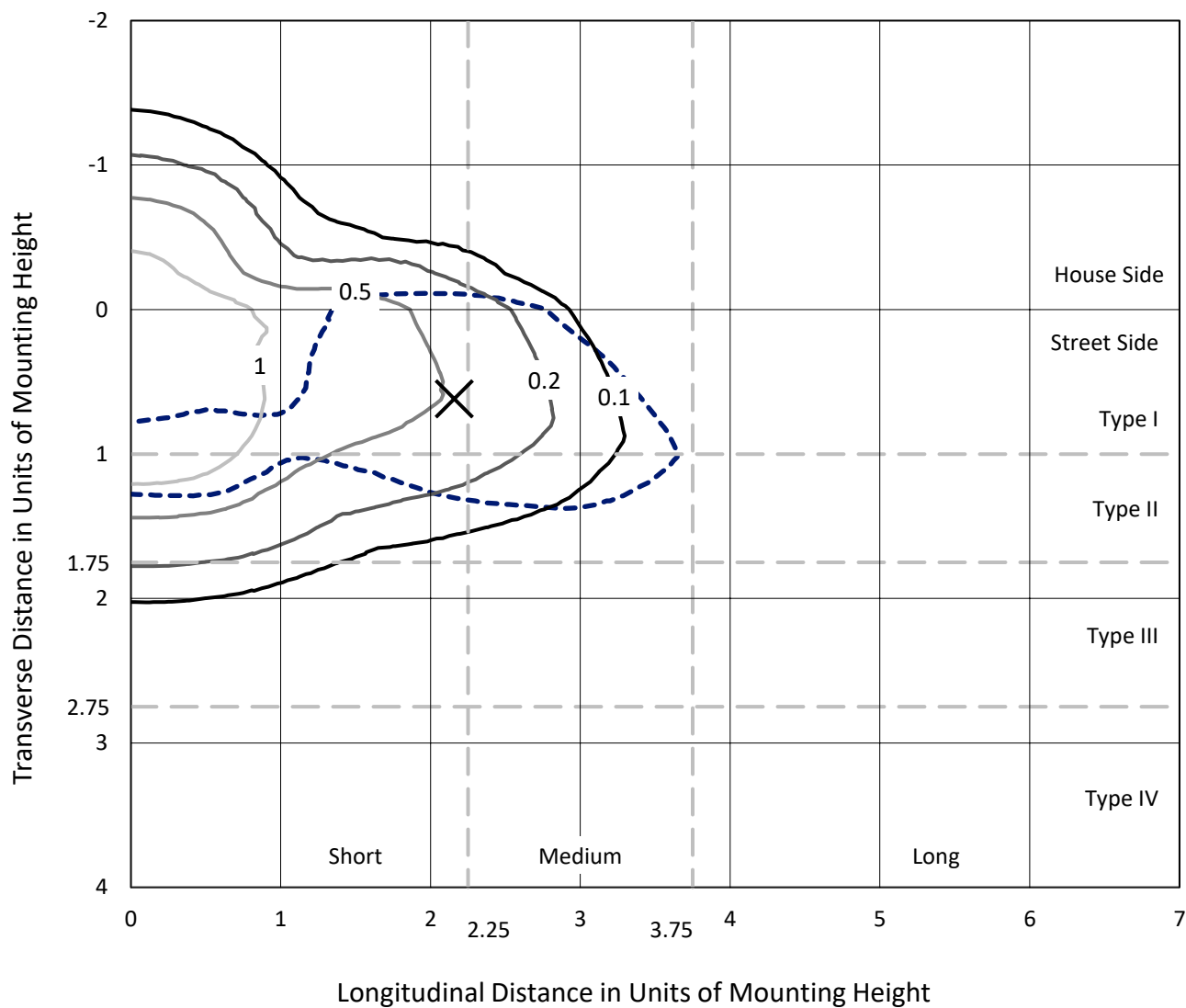
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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

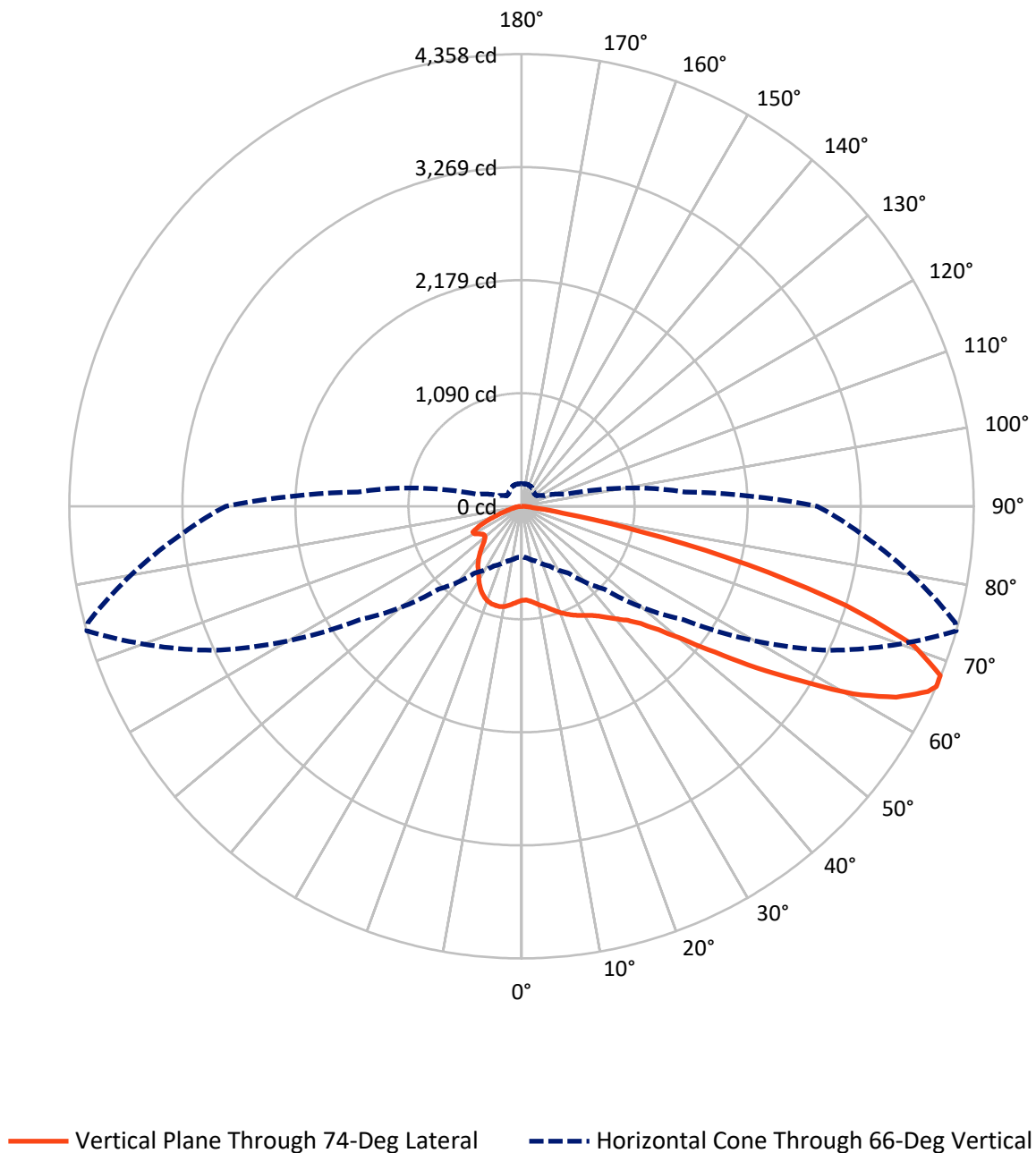


Based on 25 foot mounting height. Maximum calculated value = 1.7 fc  
Type II - Short - N/A

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## Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 1345.2   | 0.0    | 1345.2 |
|                    | % Fixture | 24.4     | 0.0    | 24.4   |
| <b>Street Side</b> | Lumens    | 4178.8   | 0.0    | 4178.8 |
|                    | % Fixture | 75.6     | 0.0    | 75.6   |
| <b>Total</b>       | Lumens    | 5524.0   | 0.0    | 5524.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 86.4   | 1.6       |
| 10°-20°   | 265.6  | 4.8       |
| 20°-30°   | 498.5  | 9.0       |
| 30°-40°   | 766.8  | 13.9      |
| 40°-50°   | 1031.4 | 18.7      |
| 50°-60°   | 1219.8 | 22.1      |
| 60°-70°   | 1128.3 | 20.4      |
| 70°-80°   | 474.7  | 8.6       |
| 80°-90°   | 52.5   | 1.0       |
| 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°    | 5524.0 | 100.0     |
| 0°-180°   | 5524.0 | 100.0     |

**Coefficient of Utilization**



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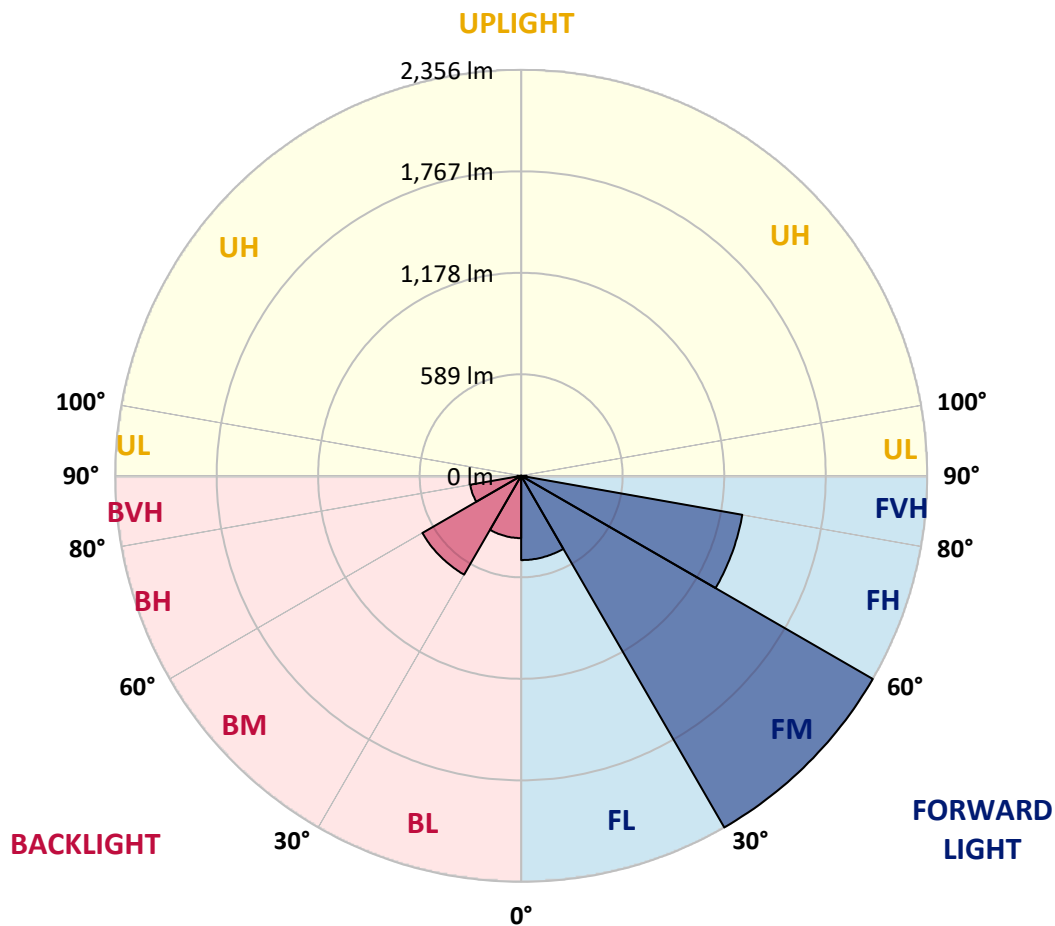
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 488.9  | 8.9       |                         |      |         |
| FM   | (30°-60°)   | 2355.7 | 42.6      |                         |      |         |
| FH   | (60°-80°)   | 1302.7 | 23.6      |                         |      | G1/1800 |
| FVH  | (80°-90°)   | 31.4   | 0.6       |                         |      | G1/100  |
| BL   | (0°-30°)    | 361.6  | 6.5       | B1/500                  |      |         |
| BM   | (30°-60°)   | 662.3  | 12.0      | B1/1000                 |      |         |
| BH   | (60°-80°)   | 300.3  | 5.4       | B1/500                  |      | G1/500  |
| BVH  | (80°-90°)   | 21.1   | 0.4       |                         |      | 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°    | 74°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 905.6  | 905.6  | 905.6  | 905.6  | 905.6  | 905.6  | 905.6  | 905.6  | 905.6  | 905.6  | 905.6  |
| 2.5°  | 902.7  | 901.3  | 904.1  | 908.4  | 910.5  | 907.0  | 905.6  | 904.9  | 904.9  | 902.7  | 906.3  |
| 5°    | 860.1  | 859.4  | 865.8  | 873.6  | 888.5  | 899.2  | 913.4  | 921.9  | 919.1  | 914.8  | 917.7  |
| 7.5°  | 804.6  | 803.2  | 811.0  | 826.0  | 846.6  | 870.0  | 904.9  | 931.9  | 942.5  | 941.1  | 940.4  |
| 10°   | 826.0  | 824.5  | 823.8  | 819.6  | 826.7  | 849.4  | 885.7  | 933.3  | 969.5  | 970.3  | 971.0  |
| 12.5° | 899.9  | 903.4  | 899.9  | 886.4  | 870.7  | 862.2  | 883.5  | 936.8  | 992.3  | 996.6  | 1014.3 |
| 15°   | 1000.8 | 997.3  | 990.2  | 974.5  | 950.3  | 924.8  | 909.1  | 953.2  | 1025.0 | 1028.5 | 1067.6 |
| 17.5° | 1089.7 | 1092.5 | 1088.2 | 1073.3 | 1044.9 | 1011.5 | 963.9  | 981.6  | 1059.8 | 1069.8 | 1124.5 |
| 20°   | 1186.3 | 1197.7 | 1192.0 | 1173.5 | 1150.1 | 1100.3 | 1040.6 | 1022.9 | 1098.2 | 1105.3 | 1183.5 |
| 22.5° | 1297.9 | 1310.0 | 1299.4 | 1281.6 | 1262.4 | 1201.3 | 1124.5 | 1073.3 | 1130.2 | 1145.1 | 1240.4 |
| 25°   | 1431.6 | 1442.9 | 1433.0 | 1405.3 | 1381.1 | 1306.5 | 1214.8 | 1130.2 | 1161.5 | 1177.8 | 1286.6 |
| 27.5° | 1537.5 | 1546.0 | 1555.2 | 1538.9 | 1501.9 | 1424.5 | 1308.6 | 1189.2 | 1192.7 | 1209.8 | 1329.2 |
| 30°   | 1632.0 | 1653.3 | 1661.2 | 1663.3 | 1632.0 | 1545.3 | 1404.6 | 1250.3 | 1219.7 | 1237.5 | 1371.9 |
| 32.5° | 1761.4 | 1793.4 | 1780.6 | 1793.4 | 1774.9 | 1659.0 | 1504.1 | 1313.6 | 1254.6 | 1270.9 | 1412.4 |
| 35°   | 1950.5 | 1976.0 | 1942.6 | 1932.7 | 1902.8 | 1774.2 | 1600.0 | 1379.0 | 1300.8 | 1318.5 | 1450.8 |
| 37.5° | 2153.7 | 2182.9 | 2134.6 | 2094.7 | 2037.9 | 1887.9 | 1682.5 | 1465.0 | 1364.7 | 1379.0 | 1486.3 |
| 40°   | 2331.4 | 2355.6 | 2313.7 | 2261.1 | 2165.8 | 1988.1 | 1753.6 | 1525.4 | 1428.7 | 1446.5 | 1527.5 |
| 42.5° | 2495.6 | 2511.3 | 2464.4 | 2413.9 | 2286.7 | 2078.4 | 1830.3 | 1589.4 | 1503.4 | 1520.4 | 1560.9 |
| 45°   | 2662.0 | 2674.1 | 2608.7 | 2536.9 | 2387.6 | 2160.9 | 1914.9 | 1678.9 | 1612.8 | 1635.6 | 1615.0 |
| 47.5° | 2691.8 | 2695.4 | 2684.0 | 2635.7 | 2467.2 | 2239.8 | 2019.4 | 1799.1 | 1779.9 | 1804.7 | 1708.1 |
| 50°   | 2485.0 | 2517.0 | 2587.3 | 2635.0 | 2499.2 | 2305.9 | 2123.9 | 1971.1 | 2010.2 | 2042.1 | 1901.4 |
| 52.5° | 2083.4 | 2113.9 | 2276.7 | 2457.3 | 2422.4 | 2320.8 | 2236.2 | 2189.3 | 2335.0 | 2373.4 | 2164.4 |
| 55°   | 1659.7 | 1686.7 | 1858.8 | 2118.9 | 2174.4 | 2252.5 | 2356.3 | 2467.9 | 2749.4 | 2775.0 | 2453.0 |
| 57.5° | 1366.9 | 1381.8 | 1504.8 | 1755.0 | 1843.8 | 2034.3 | 2421.0 | 2799.2 | 3170.9 | 3210.0 | 2703.9 |
| 60°   | 1120.9 | 1137.3 | 1229.0 | 1435.1 | 1553.1 | 1722.3 | 2369.8 | 3126.1 | 3674.2 | 3674.2 | 3025.9 |
| 62.5° | 843.7  | 857.9  | 943.2  | 1104.6 | 1302.9 | 1457.9 | 2206.3 | 3342.9 | 4053.7 | 4036.7 | 3259.0 |
| 65°   | 579.3  | 590.7  | 652.5  | 759.9  | 938.3  | 1242.5 | 1983.1 | 3345.8 | 4305.4 | 4282.6 | 3358.6 |
| 66°   | 486.2  | 496.1  | 548.7  | 635.5  | 785.4  | 1127.3 | 1904.3 | 3285.3 | 4358.0 | 4326.0 | 3316.6 |
| 67.5° | 383.8  | 390.9  | 425.8  | 477.0  | 575.8  | 912.7  | 1779.9 | 3114.0 | 4353.0 | 4333.8 | 3210.0 |
| 70°   | 274.4  | 279.3  | 304.9  | 315.6  | 340.5  | 528.1  | 1413.8 | 2727.4 | 4004.0 | 4009.7 | 2790.6 |
| 72.5° | 212.5  | 220.3  | 236.0  | 238.1  | 232.4  | 280.8  | 857.9  | 2275.3 | 3275.4 | 3273.3 | 2071.3 |
| 75°   | 171.3  | 175.6  | 183.4  | 187.7  | 186.2  | 181.3  | 363.2  | 1697.4 | 2254.7 | 2281.0 | 1160.0 |
| 77.5° | 135.1  | 134.3  | 141.5  | 147.1  | 151.4  | 142.2  | 166.3  | 995.1  | 1182.1 | 1148.7 | 435.7  |
| 80°   | 99.5   | 99.5   | 109.5  | 111.6  | 118.0  | 119.4  | 110.9  | 383.8  | 405.9  | 368.9  | 113.0  |
| 82.5° | 65.4   | 65.4   | 76.1   | 77.5   | 83.9   | 93.1   | 80.3   | 115.2  | 112.3  | 106.6  | 51.2   |
| 85°   | 35.5   | 34.1   | 37.7   | 42.6   | 46.2   | 54.7   | 48.3   | 57.6   | 59.0   | 58.3   | 34.1   |
| 87.5° | 7.1    | 6.4    | 10.0   | 11.4   | 12.8   | 17.1   | 15.6   | 23.5   | 32.7   | 32.0   | 14.9   |
| 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°    | 905.6  | 905.6  | 905.6 | 905.6 | 905.6 | 905.6 | 905.6 | 905.6 | 905.6 | 905.6 | 905.6 |
| 2.5°  | 911.3  | 910.5  | 918.4 | 927.6 | 938.3 | 944.7 | 947.5 | 952.5 | 948.9 | 950.3 | 954.6 |
| 5°    | 924.8  | 926.9  | 938.3 | 950.3 | 955.3 | 951.8 | 944.0 | 941.1 | 934.7 | 933.3 | 931.9 |
| 7.5°  | 944.7  | 948.2  | 959.6 | 962.4 | 947.5 | 922.6 | 904.9 | 894.9 | 884.2 | 881.4 | 880.0 |
| 10°   | 977.4  | 979.5  | 982.3 | 953.2 | 916.2 | 882.8 | 860.8 | 851.5 | 844.4 | 838.8 | 840.2 |
| 12.5° | 1018.6 | 1017.2 | 995.1 | 934.7 | 882.1 | 848.0 | 833.1 | 827.4 | 822.4 | 818.8 | 818.1 |
| 15°   | 1070.5 | 1060.5 | 997.3 | 909.1 | 850.1 | 821.7 | 811.0 | 808.9 | 803.2 | 803.2 | 802.5 |
| 17.5° | 1123.1 | 1097.5 | 995.8 | 882.1 | 819.6 | 803.9 | 797.5 | 796.1 | 794.7 | 794.0 | 796.1 |
| 20°   | 1175.7 | 1130.2 | 984.5 | 848.7 | 798.2 | 789.0 | 787.6 | 788.3 | 786.9 | 789.0 | 787.6 |
| 22.5° | 1221.9 | 1151.5 | 963.1 | 813.2 | 783.3 | 782.6 | 779.0 | 780.5 | 785.4 | 786.2 | 788.3 |
| 25°   | 1257.4 | 1159.3 | 931.9 | 780.5 | 772.6 | 771.2 | 775.5 | 781.2 | 785.4 | 786.2 | 789.7 |
| 27.5° | 1286.6 | 1155.1 | 892.8 | 754.9 | 754.2 | 762.0 | 774.8 | 776.9 | 777.6 | 777.6 | 774.8 |
| 30°   | 1308.6 | 1145.8 | 843.0 | 726.4 | 730.0 | 749.2 | 761.3 | 761.3 | 755.6 | 754.2 | 758.4 |
| 32.5° | 1313.6 | 1133.7 | 789.0 | 697.3 | 703.0 | 725.7 | 740.7 | 735.7 | 729.3 | 729.3 | 732.1 |
| 35°   | 1317.8 | 1117.4 | 745.6 | 657.5 | 666.0 | 693.0 | 707.3 | 697.3 | 690.2 | 688.1 | 687.3 |
| 37.5° | 1316.4 | 1111.0 | 706.5 | 607.0 | 618.4 | 644.7 | 653.9 | 644.7 | 634.0 | 629.1 | 635.5 |
| 40°   | 1317.8 | 1106.7 | 657.5 | 551.6 | 563.0 | 578.6 | 590.7 | 583.6 | 573.6 | 560.8 | 567.2 |
| 42.5° | 1326.4 | 1112.4 | 603.5 | 497.6 | 497.6 | 506.1 | 526.7 | 521.7 | 497.6 | 492.6 | 498.3 |
| 45°   | 1371.9 | 1143.0 | 549.5 | 443.5 | 435.7 | 441.4 | 462.7 | 441.4 | 426.5 | 426.5 | 431.5 |
| 47.5° | 1482.0 | 1199.8 | 501.8 | 395.9 | 377.4 | 388.8 | 394.5 | 374.6 | 363.2 | 360.4 | 365.4 |
| 50°   | 1706.6 | 1313.6 | 473.4 | 356.8 | 334.1 | 342.6 | 339.1 | 338.3 | 327.0 | 328.4 | 331.2 |
| 52.5° | 2047.8 | 1535.3 | 464.9 | 337.6 | 309.2 | 311.3 | 307.8 | 309.2 | 307.1 | 314.2 | 316.3 |
| 55°   | 2419.6 | 1769.2 | 475.5 | 340.5 | 292.1 | 277.2 | 278.6 | 285.7 | 294.3 | 305.6 | 307.8 |
| 57.5° | 2697.5 | 1886.5 | 503.3 | 359.7 | 270.8 | 248.1 | 251.6 | 265.1 | 281.5 | 290.7 | 295.7 |
| 60°   | 2904.4 | 1872.3 | 543.8 | 364.6 | 245.2 | 221.8 | 228.2 | 248.1 | 262.3 | 270.1 | 275.1 |
| 62.5° | 2971.9 | 1783.4 | 553.7 | 328.4 | 211.8 | 196.9 | 212.5 | 233.1 | 239.5 | 248.1 | 251.6 |
| 65°   | 2916.4 | 1657.6 | 481.2 | 266.6 | 186.2 | 178.4 | 201.2 | 216.8 | 225.3 | 229.6 | 230.3 |
| 66°   | 2851.0 | 1582.3 | 442.1 | 242.4 | 177.0 | 172.7 | 196.9 | 209.7 | 218.2 | 217.5 | 218.2 |
| 67.5° | 2707.5 | 1424.5 | 378.9 | 208.3 | 163.5 | 164.2 | 189.8 | 198.3 | 201.2 | 199.0 | 199.0 |
| 70°   | 2219.1 | 1002.9 | 271.5 | 157.8 | 143.6 | 153.5 | 170.6 | 172.7 | 179.1 | 176.3 | 176.3 |
| 72.5° | 1368.3 | 492.6  | 182.0 | 120.8 | 127.9 | 143.6 | 142.9 | 150.0 | 164.9 | 169.2 | 172.0 |
| 75°   | 672.4  | 199.7  | 120.1 | 102.4 | 114.4 | 120.1 | 118.7 | 136.5 | 157.8 | 176.3 | 182.7 |
| 77.5° | 255.2  | 99.5   | 83.9  | 89.6  | 92.4  | 90.3  | 94.5  | 123.7 | 157.8 | 191.2 | 197.6 |
| 80°   | 78.9   | 68.9   | 66.1  | 73.9  | 69.7  | 66.1  | 71.1  | 102.4 | 133.6 | 145.0 | 145.0 |
| 82.5° | 47.6   | 54.0   | 51.2  | 50.5  | 46.9  | 47.6  | 51.2  | 73.2  | 103.1 | 108.0 | 108.0 |
| 85°   | 33.4   | 35.5   | 29.1  | 27.7  | 27.0  | 26.3  | 26.3  | 42.6  | 61.1  | 60.4  | 62.6  |
| 87.5° | 12.8   | 14.2   | 10.7  | 10.7  | 10.0  | 7.1   | 5.7   | 7.1   | 7.1   | 5.0   | 3.6   |
| 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)