

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: P573135

Luminaire Tested: **ARCH-S-PA2-40-727-U-T3**

Issue Date: 10/13/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P573135  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2108-332-38)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/13/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA2-40-727-U-T3  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 2700K, 420mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5603 lumens  
Efficiency: N/A  
Efficacy: 128.8 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B1 - U0 - G2

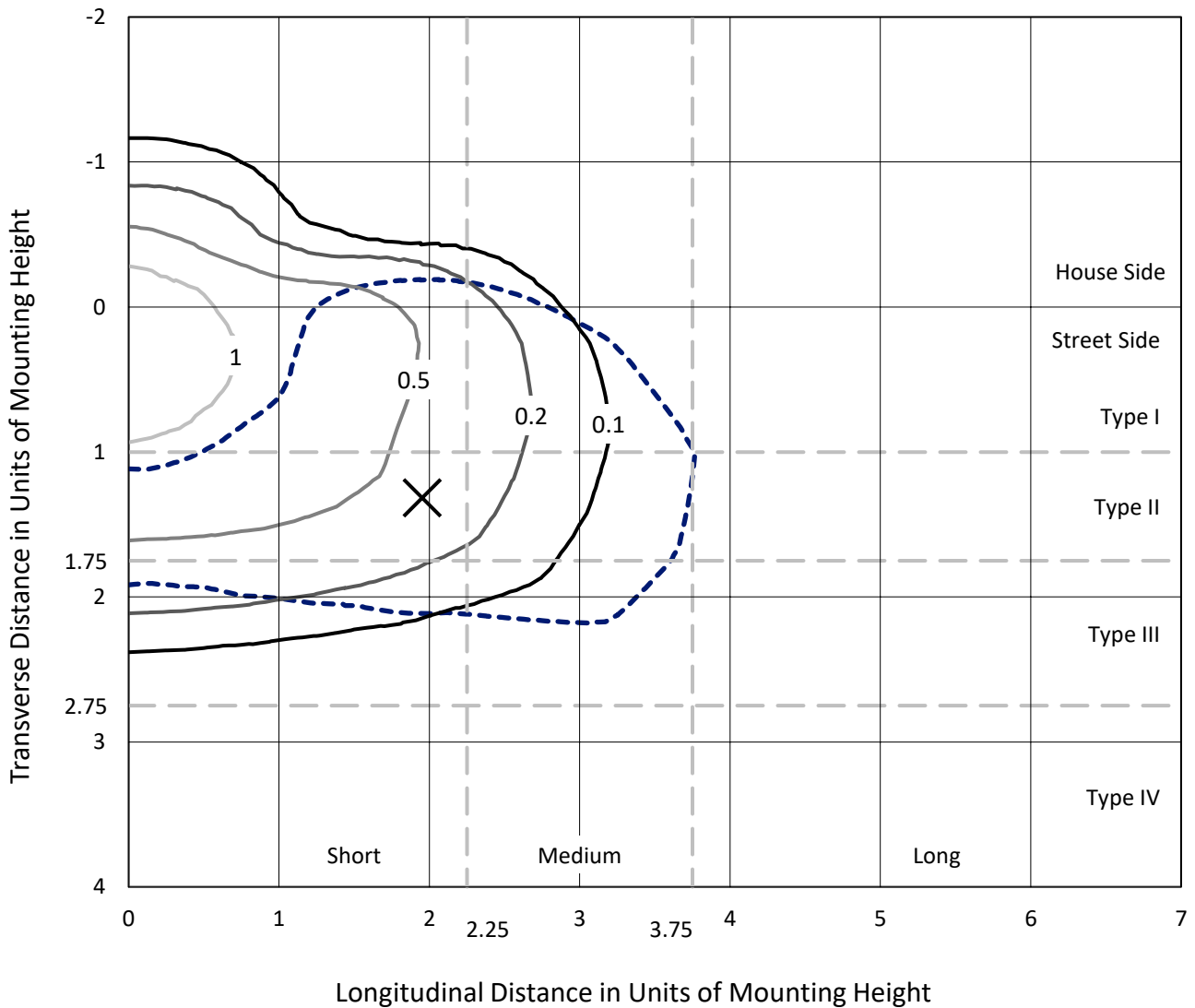
Input Watts (W): 43.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

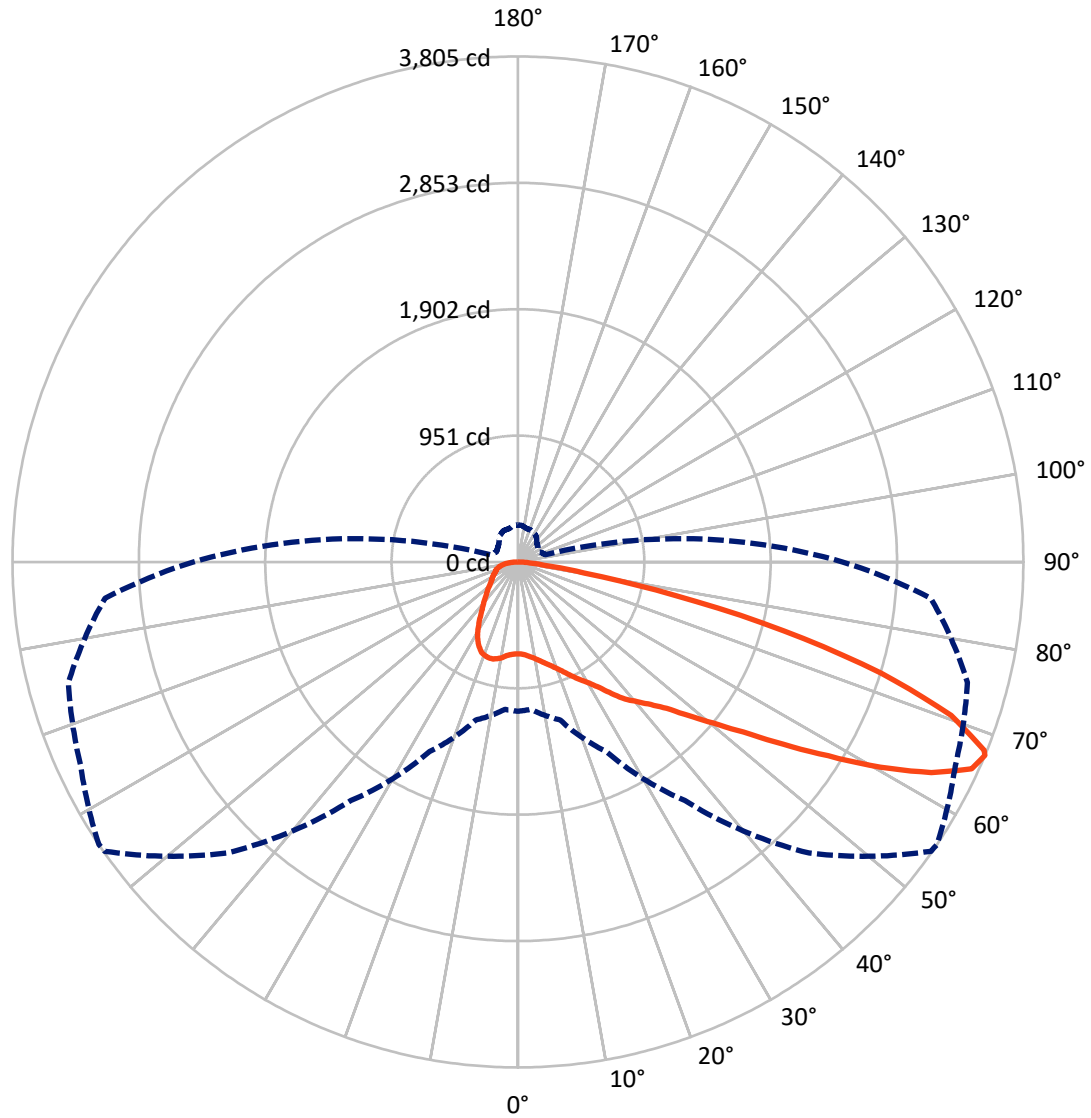
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.2 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 56-Deg Lateral    - - - Horizontal Cone Through 67-Deg Vertical

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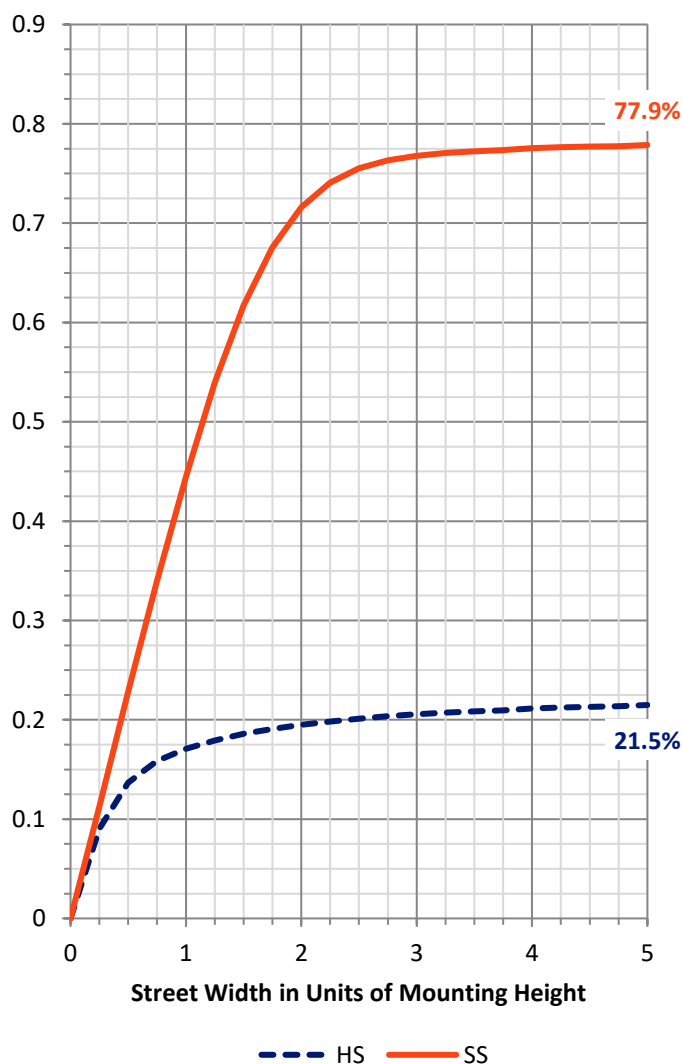
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 1225.8   | 0.0    | 1225.8 |
|                    | % Fixture | 21.9     | 0.0    | 21.9   |
| <b>Street Side</b> | Lumens    | 4377.2   | 0.0    | 4377.2 |
|                    | % Fixture | 78.1     | 0.0    | 78.1   |
| <b>Total</b>       | Lumens    | 5603.0   | 0.0    | 5603.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 68.0   | 1.2       |
| 10°-20°   | 218.2  | 3.9       |
| 20°-30°   | 379.8  | 6.8       |
| 30°-40°   | 556.9  | 9.9       |
| 40°-50°   | 814.9  | 14.5      |
| 50°-60°   | 1273.5 | 22.7      |
| 60°-70°   | 1513.7 | 27.0      |
| 70°-80°   | 689.4  | 12.3      |
| 80°-90°   | 88.4   | 1.6       |
| 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°    | 5603.0 | 100.0     |
| 0°-180°   | 5603.0 | 100.0     |

**Coefficient of Utilization**



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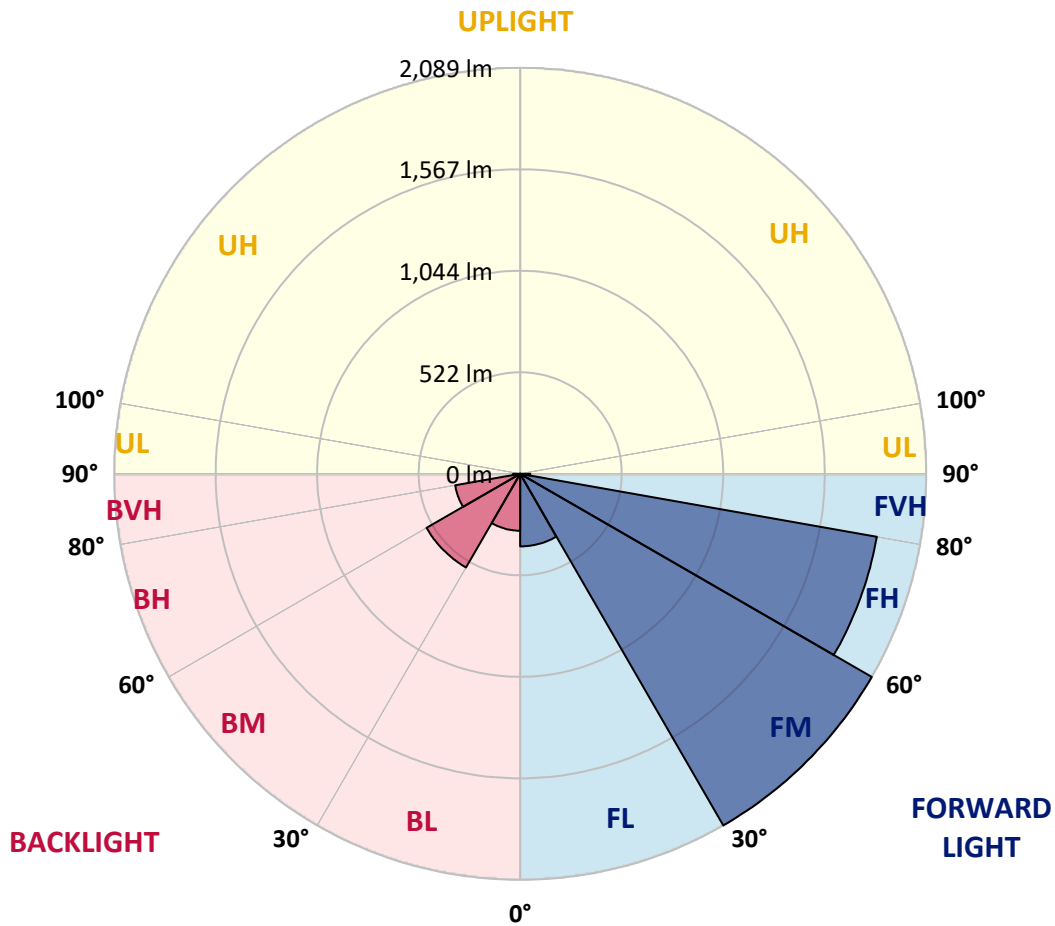
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|--------|-----------|-------------------------|------|---------|
|                |        |           | B                       | U    | G       |
| FL (0°-30°)    | 373.2  | 6.7       |                         |      |         |
| FM (30°-60°)   | 2088.9 | 37.3      |                         |      |         |
| FH (60°-80°)   | 1863.5 | 33.3      |                         |      | G2/5000 |
| FVH (80°-90°)  | 51.5   | 0.9       |                         |      | G1/100  |
| BL (0°-30°)    | 292.9  | 5.2       | B1/500                  |      |         |
| BM (30°-60°)   | 556.4  | 9.9       | B1/1000                 |      |         |
| BH (60°-80°)   | 339.6  | 6.1       | B1/500                  |      | G1/500  |
| BVH (80°-90°)  | 36.9   | 0.7       |                         |      | 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 Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 56°    | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 691.8  | 691.8  | 691.8  | 691.8  | 691.8  | 691.8  | 691.8  | 691.8  | 691.8  | 691.8  | 691.8  |
| 2.5°  | 702.4  | 699.3  | 697.8  | 699.3  | 697.8  | 694.8  | 696.3  | 694.8  | 693.3  | 691.8  | 691.8  |
| 5°    | 711.5  | 708.4  | 706.9  | 708.4  | 710.0  | 706.9  | 706.9  | 706.9  | 702.4  | 700.9  | 697.8  |
| 7.5°  | 717.5  | 713.0  | 713.0  | 716.0  | 719.1  | 720.6  | 723.6  | 722.1  | 717.5  | 714.5  | 708.4  |
| 10°   | 737.3  | 731.2  | 731.2  | 731.2  | 734.2  | 737.3  | 740.3  | 741.8  | 740.3  | 738.8  | 734.2  |
| 12.5° | 767.6  | 761.5  | 761.5  | 761.5  | 761.5  | 760.0  | 764.6  | 766.1  | 769.1  | 769.1  | 761.5  |
| 15°   | 808.6  | 801.0  | 797.9  | 791.9  | 790.4  | 787.3  | 793.4  | 793.4  | 797.9  | 799.5  | 791.9  |
| 17.5° | 848.0  | 838.9  | 835.9  | 829.8  | 823.7  | 816.1  | 822.2  | 823.7  | 832.8  | 834.3  | 822.2  |
| 20°   | 889.0  | 885.9  | 881.4  | 872.3  | 861.7  | 854.1  | 860.1  | 858.6  | 866.2  | 869.2  | 854.1  |
| 22.5° | 942.1  | 934.5  | 931.4  | 919.3  | 907.2  | 899.6  | 899.6  | 902.6  | 910.2  | 910.2  | 887.4  |
| 25°   | 1005.8 | 995.2  | 987.6  | 973.9  | 958.7  | 949.6  | 951.2  | 954.2  | 964.8  | 957.2  | 922.3  |
| 27.5° | 1084.7 | 1074.0 | 1063.4 | 1036.1 | 1020.9 | 1002.7 | 1001.2 | 1004.3 | 1020.9 | 1001.2 | 955.7  |
| 30°   | 1159.0 | 1154.4 | 1145.3 | 1124.1 | 1099.8 | 1069.5 | 1055.8 | 1057.3 | 1069.5 | 1042.2 | 984.5  |
| 32.5° | 1222.7 | 1216.6 | 1212.1 | 1196.9 | 1180.2 | 1143.8 | 1125.6 | 1127.1 | 1125.6 | 1092.2 | 1019.4 |
| 35°   | 1298.6 | 1289.4 | 1286.4 | 1272.8 | 1251.5 | 1227.3 | 1219.7 | 1216.6 | 1207.5 | 1162.0 | 1064.9 |
| 37.5° | 1371.4 | 1362.3 | 1357.7 | 1350.1 | 1333.4 | 1312.2 | 1312.2 | 1310.7 | 1292.5 | 1228.8 | 1110.4 |
| 40°   | 1457.8 | 1447.2 | 1433.6 | 1429.0 | 1415.4 | 1400.2 | 1388.1 | 1380.5 | 1348.6 | 1291.0 | 1198.4 |
| 42.5° | 1562.5 | 1556.4 | 1548.9 | 1529.1 | 1507.9 | 1504.9 | 1470.0 | 1466.9 | 1444.2 | 1410.8 | 1322.8 |
| 45°   | 1712.7 | 1700.6 | 1689.9 | 1683.9 | 1658.1 | 1630.8 | 1582.2 | 1570.1 | 1570.1 | 1562.5 | 1468.5 |
| 47.5° | 1864.4 | 1843.2 | 1858.3 | 1853.8 | 1847.7 | 1817.4 | 1723.3 | 1724.8 | 1721.8 | 1741.5 | 1682.4 |
| 50°   | 1966.0 | 1953.9 | 1996.4 | 2016.1 | 2058.6 | 2058.6 | 1923.6 | 1906.9 | 1919.0 | 1976.6 | 1900.8 |
| 52.5° | 2044.9 | 2037.3 | 2085.9 | 2163.2 | 2289.1 | 2301.3 | 2161.7 | 2126.8 | 2143.5 | 2225.4 | 2195.1 |
| 55°   | 2108.6 | 2101.0 | 2157.2 | 2292.2 | 2493.9 | 2568.3 | 2436.3 | 2421.1 | 2387.8 | 2475.7 | 2484.8 |
| 57.5° | 2146.6 | 2129.9 | 2214.8 | 2395.3 | 2660.8 | 2832.2 | 2757.9 | 2753.4 | 2676.0 | 2757.9 | 2798.9 |
| 60°   | 2088.9 | 2078.3 | 2195.1 | 2437.8 | 2795.8 | 3081.0 | 3135.6 | 3135.6 | 2997.6 | 3041.6 | 3091.6 |
| 62.5° | 1902.3 | 1888.7 | 2011.5 | 2339.2 | 2812.5 | 3284.3 | 3510.3 | 3492.1 | 3307.1 | 3305.5 | 3261.5 |
| 65°   | 1547.3 | 1530.7 | 1668.7 | 2014.6 | 2601.7 | 3308.6 | 3763.7 | 3753.1 | 3539.2 | 3478.5 | 3272.2 |
| 67°   | 1124.1 | 1113.5 | 1231.8 | 1574.6 | 2192.1 | 3097.7 | 3795.5 | 3804.6 | 3631.7 | 3502.7 | 3118.9 |
| 67.5° | 1008.8 | 1007.3 | 1105.9 | 1445.7 | 2072.2 | 3020.3 | 3774.3 | 3783.4 | 3630.2 | 3483.0 | 3058.3 |
| 70°   | 470.3  | 491.5  | 584.0  | 828.3  | 1397.2 | 2378.7 | 3425.4 | 3460.3 | 3436.0 | 3255.5 | 2575.9 |
| 72.5° | 218.4  | 227.5  | 268.5  | 400.5  | 750.9  | 1533.7 | 2776.1 | 2859.5 | 2965.7 | 2792.8 | 2040.4 |
| 75°   | 135.0  | 138.0  | 160.8  | 207.8  | 353.5  | 737.3  | 1976.6 | 2067.7 | 2228.5 | 2101.0 | 1304.6 |
| 77.5° | 106.2  | 107.7  | 122.9  | 148.7  | 206.3  | 317.1  | 1084.7 | 1198.4 | 1407.8 | 1242.4 | 656.9  |
| 80°   | 78.9   | 81.9   | 94.1   | 115.3  | 145.6  | 162.3  | 461.2  | 503.6  | 679.6  | 520.3  | 273.1  |
| 82.5° | 57.6   | 60.7   | 72.8   | 83.4   | 101.6  | 103.2  | 188.1  | 198.7  | 291.3  | 210.9  | 118.3  |
| 85°   | 48.5   | 48.5   | 56.1   | 62.2   | 68.3   | 57.6   | 92.5   | 91.0   | 112.3  | 95.6   | 47.0   |
| 87.5° | 22.8   | 24.3   | 53.1   | 39.4   | 33.4   | 24.3   | 27.3   | 28.8   | 34.9   | 37.9   | 18.2   |
| 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°    | 691.8  | 691.8  | 691.8 | 691.8 | 691.8 | 691.8 | 691.8 | 691.8 | 691.8 | 691.8 | 691.8 |
| 2.5°  | 690.2  | 690.2  | 690.2 | 691.8 | 693.3 | 693.3 | 694.8 | 694.8 | 696.3 | 697.8 | 700.9 |
| 5°    | 696.3  | 696.3  | 694.8 | 696.3 | 699.3 | 700.9 | 703.9 | 706.9 | 710.0 | 713.0 | 714.5 |
| 7.5°  | 708.4  | 706.9  | 706.9 | 706.9 | 710.0 | 713.0 | 717.5 | 720.6 | 725.1 | 726.6 | 729.7 |
| 10°   | 731.2  | 728.2  | 728.2 | 729.7 | 731.2 | 726.6 | 725.1 | 723.6 | 728.2 | 731.2 | 734.2 |
| 12.5° | 758.5  | 755.5  | 753.9 | 749.4 | 743.3 | 734.2 | 726.6 | 720.6 | 722.1 | 725.1 | 729.7 |
| 15°   | 787.3  | 781.3  | 778.2 | 767.6 | 752.4 | 732.7 | 720.6 | 713.0 | 713.0 | 713.0 | 717.5 |
| 17.5° | 817.7  | 811.6  | 799.5 | 779.7 | 750.9 | 723.6 | 708.4 | 694.8 | 688.7 | 687.2 | 690.2 |
| 20°   | 846.5  | 837.4  | 817.7 | 787.3 | 741.8 | 705.4 | 685.7 | 662.9 | 653.8 | 647.8 | 650.8 |
| 22.5° | 873.8  | 861.7  | 834.3 | 787.3 | 726.6 | 678.1 | 643.2 | 612.9 | 597.7 | 594.7 | 596.2 |
| 25°   | 902.6  | 887.4  | 851.0 | 778.2 | 693.3 | 637.1 | 588.6 | 556.7 | 537.0 | 534.0 | 538.5 |
| 27.5° | 931.4  | 908.7  | 864.7 | 753.9 | 655.3 | 581.0 | 529.4 | 499.1 | 488.5 | 482.4 | 483.9 |
| 30°   | 955.7  | 934.5  | 878.3 | 720.6 | 603.8 | 515.8 | 468.8 | 455.1 | 447.5 | 444.5 | 444.5 |
| 32.5° | 987.6  | 967.8  | 887.4 | 681.1 | 543.1 | 456.6 | 426.3 | 415.7 | 409.6 | 402.0 | 403.5 |
| 35°   | 1027.0 | 1008.8 | 882.9 | 631.1 | 485.4 | 417.2 | 392.9 | 377.7 | 364.1 | 353.5 | 351.9 |
| 37.5° | 1080.1 | 1066.4 | 860.1 | 570.4 | 432.3 | 388.4 | 364.1 | 344.4 | 324.6 | 308.0 | 304.9 |
| 40°   | 1168.1 | 1136.2 | 826.8 | 503.6 | 395.9 | 365.6 | 336.8 | 312.5 | 288.2 | 270.0 | 265.5 |
| 42.5° | 1280.3 | 1213.6 | 781.3 | 435.4 | 365.6 | 341.3 | 312.5 | 280.6 | 257.9 | 241.2 | 241.2 |
| 45°   | 1410.8 | 1297.0 | 726.6 | 383.8 | 333.7 | 317.1 | 282.2 | 254.9 | 241.2 | 230.6 | 229.1 |
| 47.5° | 1565.5 | 1380.5 | 656.9 | 342.8 | 308.0 | 295.8 | 260.9 | 244.2 | 235.1 | 226.0 | 224.5 |
| 50°   | 1773.4 | 1492.7 | 605.3 | 308.0 | 282.2 | 271.5 | 254.9 | 241.2 | 232.1 | 226.0 | 224.5 |
| 52.5° | 2011.5 | 1636.8 | 568.9 | 280.6 | 260.9 | 256.4 | 253.3 | 242.7 | 233.6 | 229.1 | 227.5 |
| 55°   | 2269.4 | 1814.3 | 534.0 | 257.9 | 244.2 | 250.3 | 256.4 | 245.8 | 239.7 | 233.6 | 230.6 |
| 57.5° | 2512.1 | 1964.5 | 477.9 | 238.2 | 232.1 | 242.7 | 254.9 | 247.3 | 239.7 | 235.1 | 233.6 |
| 60°   | 2677.5 | 2040.4 | 400.5 | 220.0 | 220.0 | 232.1 | 250.3 | 239.7 | 232.1 | 233.6 | 233.6 |
| 62.5° | 2730.6 | 2011.5 | 317.1 | 203.3 | 207.8 | 220.0 | 236.7 | 230.6 | 227.5 | 235.1 | 235.1 |
| 65°   | 2651.7 | 1894.7 | 253.3 | 189.6 | 195.7 | 204.8 | 229.1 | 235.1 | 244.2 | 260.9 | 262.4 |
| 67°   | 2445.4 | 1706.6 | 213.9 | 179.0 | 185.1 | 200.2 | 238.2 | 259.4 | 259.4 | 277.6 | 277.6 |
| 67.5° | 2384.7 | 1642.9 | 207.8 | 176.0 | 183.6 | 200.2 | 242.7 | 265.5 | 259.4 | 280.6 | 280.6 |
| 70°   | 1938.7 | 1292.5 | 176.0 | 166.9 | 177.5 | 210.9 | 262.4 | 267.0 | 253.3 | 273.1 | 271.5 |
| 72.5° | 1438.1 | 934.5  | 160.8 | 157.8 | 165.4 | 198.7 | 260.9 | 256.4 | 236.7 | 242.7 | 238.2 |
| 75°   | 889.0  | 541.6  | 148.7 | 145.6 | 150.2 | 176.0 | 241.2 | 233.6 | 210.9 | 206.3 | 201.8 |
| 77.5° | 429.3  | 274.6  | 127.4 | 132.0 | 136.5 | 153.2 | 212.4 | 204.8 | 185.1 | 174.5 | 172.9 |
| 80°   | 186.6  | 141.1  | 109.2 | 116.8 | 118.3 | 130.5 | 176.0 | 166.9 | 148.7 | 132.0 | 132.0 |
| 82.5° | 92.5   | 78.9   | 86.5  | 97.1  | 94.1  | 104.7 | 138.0 | 122.9 | 109.2 | 91.0  | 88.0  |
| 85°   | 42.5   | 45.5   | 63.7  | 72.8  | 63.7  | 65.2  | 94.1  | 86.5  | 68.3  | 51.6  | 53.1  |
| 87.5° | 15.2   | 21.2   | 36.4  | 44.0  | 31.9  | 30.3  | 50.1  | 36.4  | 21.2  | 6.1   | 7.6   |
| 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)