

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: P573294

Luminaire Tested: **ARCH-S-PA2-60-727-U-T2U-HSS**

Issue Date: 10/13/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P573294  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2108-332-16)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/13/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA2-60-727-U-T2U-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 2700K, 625mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II U OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

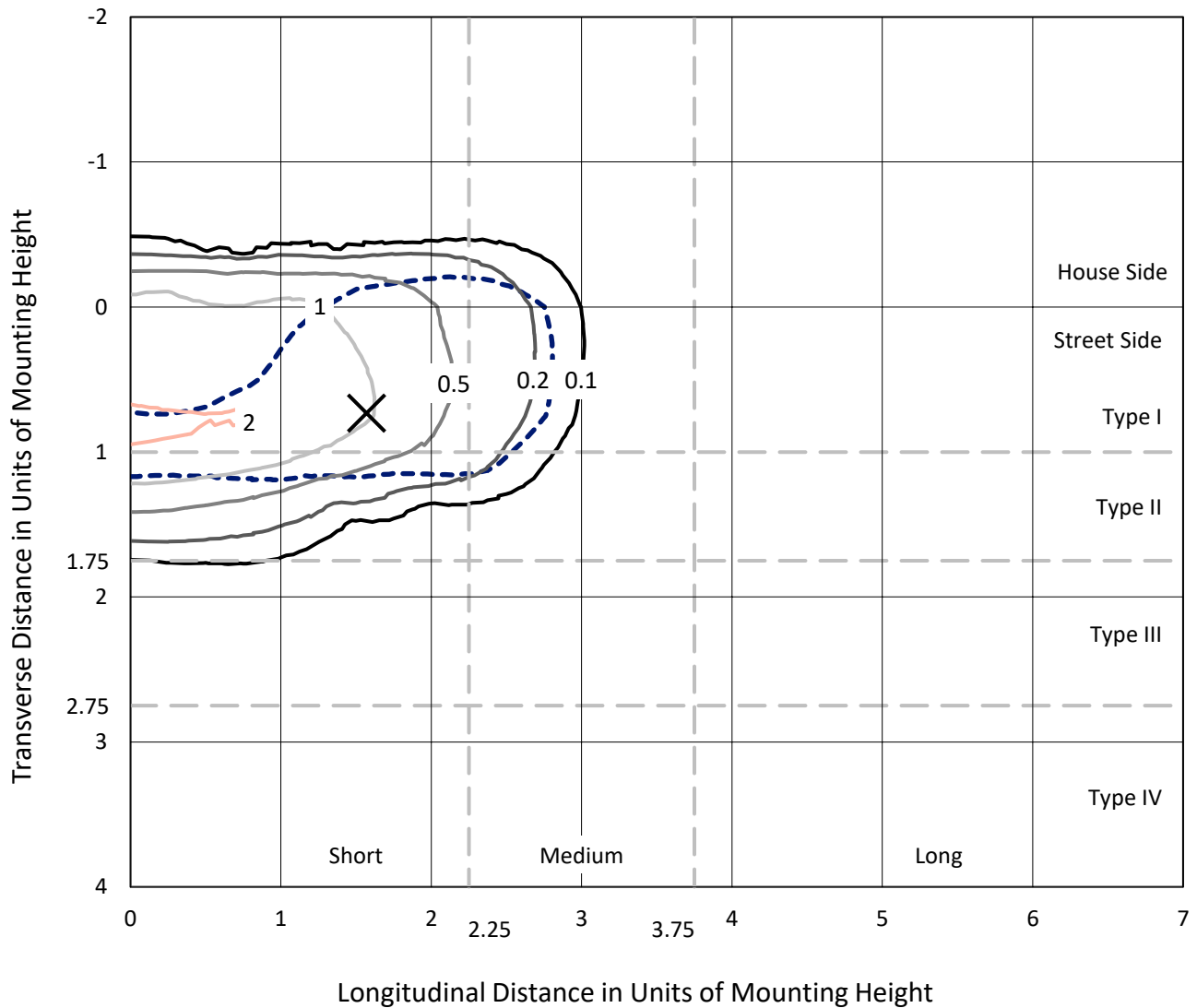
Lumens per Lamp: N/A  
Luminaire Lumens: 5436 lumens  
Efficiency: N/A  
Efficacy: 86.1 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B1 - U0 - G1  
  
Input Watts (W): 63.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
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

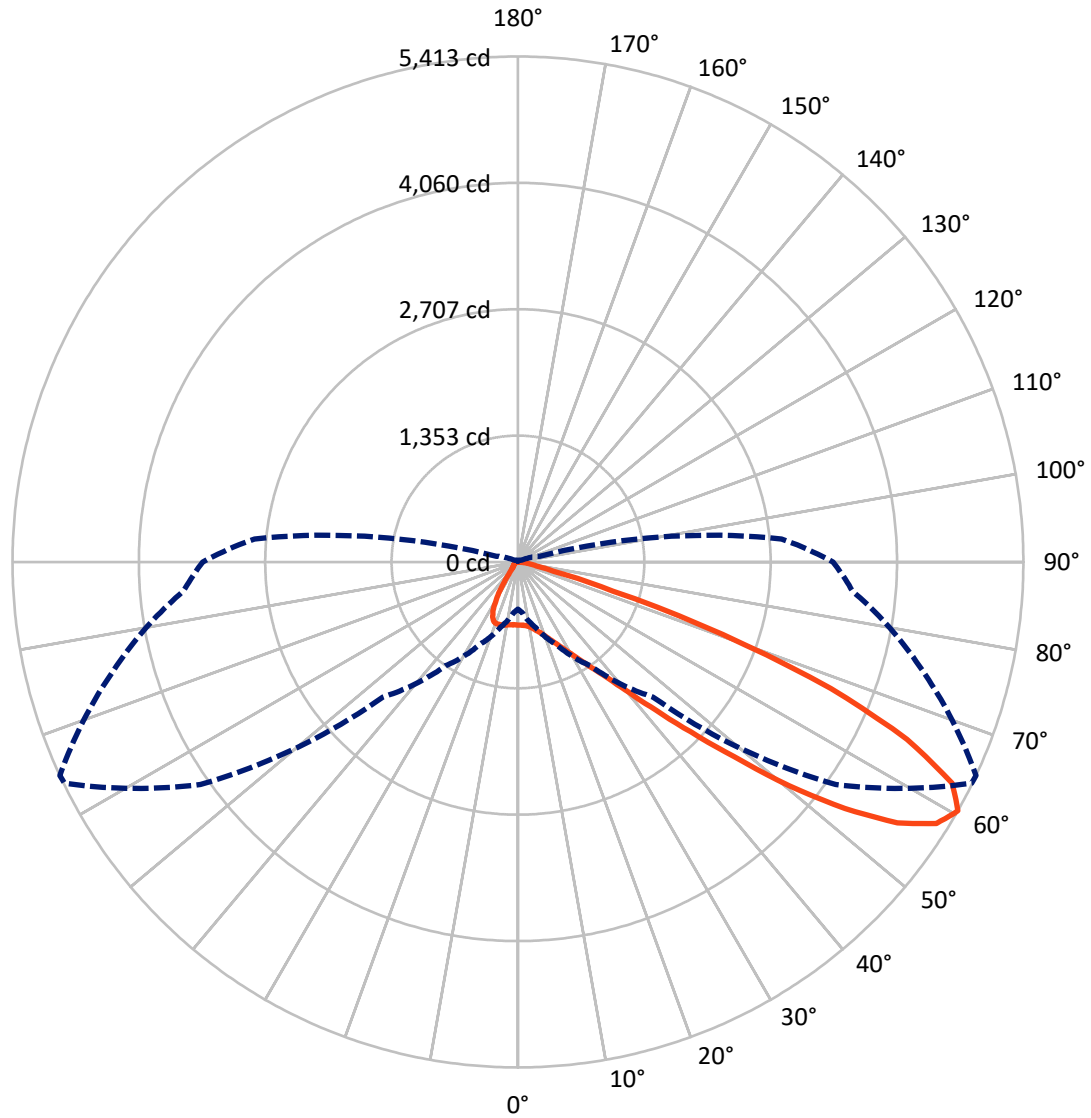
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.3 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral      - - - Horizontal Cone Through 60-Deg Vertical

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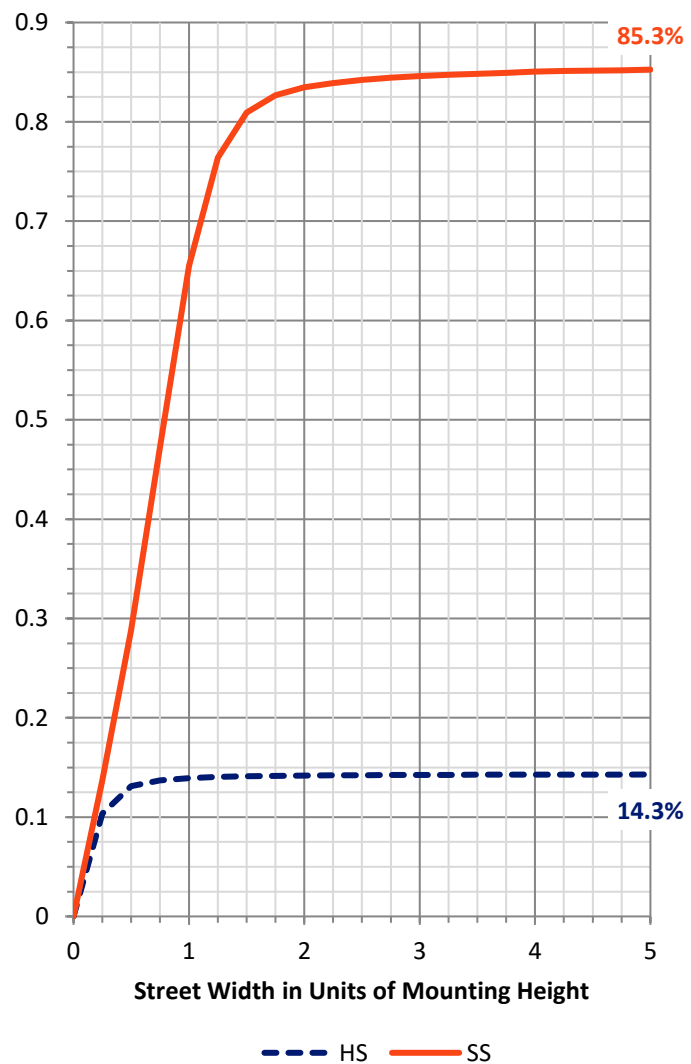
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 787.0    | 0.0    | 787.0  |
|                    | % Fixture | 14.5     | 0.0    | 14.5   |
| <b>Street Side</b> | Lumens    | 4649.0   | 0.0    | 4649.0 |
|                    | % Fixture | 85.5     | 0.0    | 85.5   |
| <b>Total</b>       | Lumens    | 5436.0   | 0.0    | 5436.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 64.0   | 1.2       |
| 10°-20°   | 181.6  | 3.3       |
| 20°-30°   | 308.4  | 5.7       |
| 30°-40°   | 636.5  | 11.7      |
| 40°-50°   | 1280.0 | 23.5      |
| 50°-60°   | 1566.3 | 28.8      |
| 60°-70°   | 1108.1 | 20.4      |
| 70°-80°   | 267.0  | 4.9       |
| 80°-90°   | 24.1   | 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°    | 5436.0 | 100.0     |
| 0°-180°   | 5436.0 | 100.0     |

**Coefficient of Utilization**

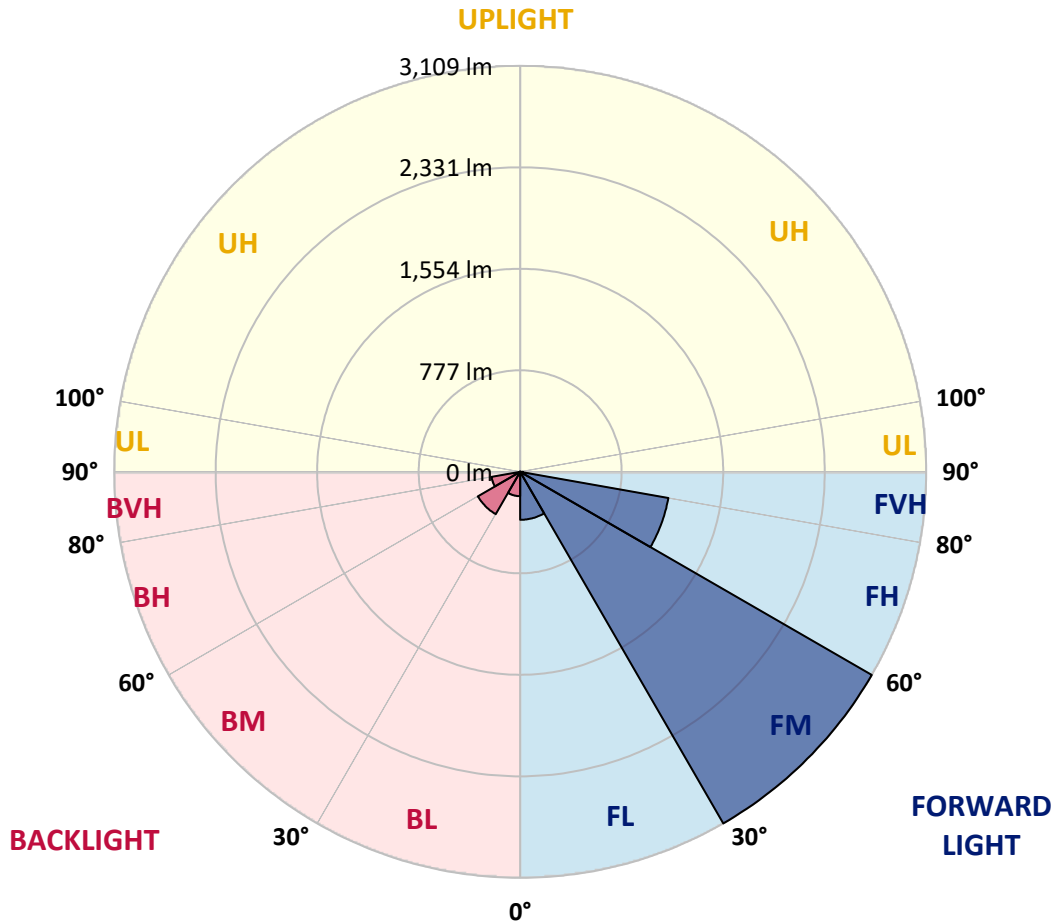


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|--------|-----------|-------------------------|------|---------|
|                |        |           | B                       | U    | G       |
| FL (0°-30°)    | 367.4  | 6.8       |                         |      |         |
| FM (30°-60°)   | 3108.5 | 57.2      |                         |      |         |
| FH (60°-80°)   | 1152.0 | 21.2      |                         |      | G1/1800 |
| FVH (80°-90°)  | 21.0   | 0.4       |                         |      | G1/100  |
| BL (0°-30°)    | 186.6  | 3.4       | B1/500                  |      |         |
| BM (30°-60°)   | 374.2  | 6.9       | B1/1000                 |      |         |
| BH (60°-80°)   | 223.1  | 4.1       | B1/500                  |      | G1/500  |
| BVH (80°-90°)  | 3.1    | 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°     | 15°    | 25°    | 35°    | 45°    | 55°    | 64°    | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 677.2  | 677.2  | 677.2  | 677.2  | 677.2  | 677.2  | 677.2  | 677.2  | 677.2  | 677.2  | 677.2  |
| 2.5°  | 679.3  | 677.2  | 677.2  | 677.2  | 679.3  | 679.3  | 681.5  | 677.2  | 677.2  | 677.2  | 677.2  |
| 5°    | 675.0  | 672.9  | 672.9  | 675.0  | 677.2  | 677.2  | 681.5  | 681.5  | 681.5  | 683.6  | 683.6  |
| 7.5°  | 683.6  | 679.3  | 679.3  | 681.5  | 683.6  | 683.6  | 687.9  | 690.0  | 690.0  | 694.3  | 696.5  |
| 10°   | 694.3  | 692.2  | 692.2  | 696.5  | 700.8  | 700.8  | 707.2  | 707.2  | 707.2  | 711.5  | 713.6  |
| 12.5° | 709.3  | 707.2  | 707.2  | 713.6  | 720.0  | 724.3  | 728.6  | 730.8  | 732.9  | 732.9  | 732.9  |
| 15°   | 730.8  | 728.6  | 728.6  | 735.1  | 743.6  | 754.3  | 760.8  | 760.8  | 765.1  | 762.9  | 754.3  |
| 17.5° | 760.8  | 758.6  | 760.8  | 765.1  | 775.8  | 786.5  | 799.3  | 801.5  | 799.3  | 795.1  | 782.2  |
| 20°   | 810.1  | 803.6  | 807.9  | 818.6  | 818.6  | 825.1  | 842.2  | 848.6  | 850.8  | 837.9  | 814.3  |
| 22.5° | 861.5  | 861.5  | 865.8  | 878.6  | 870.1  | 878.6  | 893.6  | 904.3  | 908.6  | 897.9  | 859.3  |
| 25°   | 957.9  | 962.2  | 955.8  | 951.5  | 930.1  | 934.4  | 953.6  | 975.1  | 975.1  | 966.5  | 910.8  |
| 27.5° | 1170.1 | 1165.8 | 1120.8 | 1058.6 | 1002.9 | 1007.2 | 1026.5 | 1054.4 | 1056.5 | 1037.2 | 962.2  |
| 30°   | 1474.4 | 1478.7 | 1390.8 | 1249.4 | 1127.2 | 1095.1 | 1116.5 | 1148.7 | 1152.9 | 1120.8 | 1028.6 |
| 32.5° | 1950.1 | 1913.7 | 1750.8 | 1562.3 | 1332.9 | 1217.2 | 1225.8 | 1260.1 | 1272.9 | 1245.1 | 1133.6 |
| 35°   | 2565.2 | 2479.5 | 2235.2 | 2001.6 | 1669.4 | 1435.8 | 1369.4 | 1405.8 | 1412.2 | 1397.2 | 1264.4 |
| 37.5° | 2931.6 | 2863.1 | 2704.5 | 2492.3 | 2102.3 | 1727.3 | 1558.0 | 1594.4 | 1588.0 | 1558.0 | 1395.1 |
| 40°   | 3158.8 | 3120.2 | 3034.5 | 2935.9 | 2687.3 | 2185.9 | 1868.7 | 1838.7 | 1840.8 | 1798.0 | 1607.3 |
| 42.5° | 3287.4 | 3253.1 | 3220.9 | 3246.7 | 3173.8 | 3017.4 | 2318.7 | 2181.6 | 2168.7 | 2087.3 | 1853.7 |
| 45°   | 3293.8 | 3242.4 | 3280.9 | 3431.0 | 3546.7 | 3754.5 | 2905.9 | 2588.8 | 2595.2 | 2460.2 | 2160.1 |
| 47.5° | 3047.4 | 3006.6 | 3118.1 | 3411.7 | 3795.3 | 4236.7 | 3589.5 | 3145.9 | 3115.9 | 2850.2 | 2470.9 |
| 50°   | 2560.9 | 2558.7 | 2706.6 | 3122.4 | 3795.3 | 4485.3 | 4322.4 | 3799.5 | 3767.4 | 3257.4 | 2753.8 |
| 52.5° | 2027.3 | 2068.0 | 2168.7 | 2563.0 | 3446.0 | 4461.7 | 4862.5 | 4474.6 | 4384.6 | 3619.5 | 2989.5 |
| 55°   | 1577.3 | 1562.3 | 1684.4 | 1956.6 | 2732.3 | 4054.6 | 5038.2 | 5006.1 | 4931.1 | 3941.0 | 3197.4 |
| 57.5° | 968.6  | 1024.4 | 1189.4 | 1431.5 | 1988.7 | 3188.8 | 4785.3 | 5329.7 | 5284.7 | 4241.0 | 3413.8 |
| 60°   | 503.6  | 546.5  | 724.3  | 977.2  | 1358.7 | 2044.4 | 4153.1 | 5404.7 | 5413.2 | 4483.2 | 3598.1 |
| 62.5° | 317.2  | 315.0  | 396.5  | 685.8  | 874.3  | 1148.7 | 3225.2 | 5138.9 | 5220.4 | 4669.6 | 3773.8 |
| 65°   | 237.9  | 240.0  | 272.2  | 454.3  | 593.6  | 600.0  | 1913.7 | 4444.6 | 4579.6 | 4718.9 | 3833.8 |
| 67.5° | 220.7  | 222.9  | 237.9  | 297.9  | 445.7  | 400.7  | 842.2  | 3426.7 | 3615.3 | 4264.6 | 3602.4 |
| 70°   | 197.2  | 199.3  | 222.9  | 246.4  | 336.5  | 293.6  | 379.3  | 2063.7 | 2325.2 | 3094.5 | 2882.3 |
| 72.5° | 154.3  | 158.6  | 186.4  | 233.6  | 250.7  | 222.9  | 263.6  | 912.9  | 1065.1 | 1701.5 | 1650.1 |
| 75°   | 113.6  | 115.7  | 141.4  | 180.0  | 220.7  | 158.6  | 203.6  | 362.2  | 396.5  | 638.6  | 544.3  |
| 77.5° | 79.3   | 79.3   | 98.6   | 135.0  | 184.3  | 111.4  | 145.7  | 195.0  | 199.3  | 237.9  | 156.4  |
| 80°   | 49.3   | 51.4   | 62.1   | 92.1   | 113.6  | 107.2  | 90.0   | 130.7  | 130.7  | 124.3  | 64.3   |
| 82.5° | 27.9   | 30.0   | 42.9   | 62.1   | 77.1   | 72.9   | 57.9   | 75.0   | 77.1   | 79.3   | 36.4   |
| 85°   | 12.9   | 15.0   | 25.7   | 38.6   | 45.0   | 34.3   | 34.3   | 38.6   | 38.6   | 51.4   | 21.4   |
| 87.5° | 2.1    | 2.1    | 12.9   | 17.1   | 15.0   | 17.1   | 17.1   | 21.4   | 21.4   | 25.7   | 10.7   |
| 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°    | 677.2  | 677.2  | 677.2 | 677.2 | 677.2 | 677.2 | 677.2 | 677.2 | 677.2 | 677.2 | 677.2 |
| 2.5°  | 675.0  | 675.0  | 675.0 | 672.9 | 672.9 | 670.8 | 666.5 | 666.5 | 666.5 | 666.5 | 668.6 |
| 5°    | 683.6  | 681.5  | 679.3 | 672.9 | 668.6 | 660.0 | 651.5 | 649.3 | 642.9 | 642.9 | 645.0 |
| 7.5°  | 694.3  | 694.3  | 687.9 | 677.2 | 666.5 | 651.5 | 636.5 | 625.8 | 615.0 | 612.9 | 610.8 |
| 10°   | 713.6  | 709.3  | 702.9 | 683.6 | 666.5 | 642.9 | 619.3 | 591.5 | 570.0 | 559.3 | 555.0 |
| 12.5° | 728.6  | 726.5  | 713.6 | 692.2 | 664.3 | 627.9 | 574.3 | 510.0 | 458.6 | 430.7 | 430.7 |
| 15°   | 750.1  | 745.8  | 726.5 | 696.5 | 657.9 | 572.2 | 462.9 | 364.3 | 308.6 | 278.6 | 274.3 |
| 17.5° | 771.5  | 762.9  | 739.3 | 698.6 | 630.0 | 471.5 | 323.6 | 233.6 | 195.0 | 180.0 | 175.7 |
| 20°   | 797.2  | 782.2  | 747.9 | 700.8 | 561.5 | 342.9 | 210.0 | 156.4 | 141.4 | 135.0 | 137.2 |
| 22.5° | 831.5  | 805.8  | 756.5 | 687.9 | 458.6 | 222.9 | 147.9 | 126.4 | 117.9 | 111.4 | 111.4 |
| 25°   | 874.3  | 837.9  | 771.5 | 651.5 | 332.2 | 150.0 | 117.9 | 105.0 | 96.4  | 92.1  | 90.0  |
| 27.5° | 912.9  | 867.9  | 786.5 | 587.2 | 212.2 | 117.9 | 98.6  | 87.9  | 79.3  | 77.1  | 75.0  |
| 30°   | 964.4  | 902.2  | 801.5 | 484.3 | 139.3 | 96.4  | 83.6  | 72.9  | 66.4  | 64.3  | 64.3  |
| 32.5° | 1052.2 | 968.6  | 829.3 | 368.6 | 105.0 | 83.6  | 70.7  | 62.1  | 57.9  | 55.7  | 55.7  |
| 35°   | 1155.1 | 1050.1 | 852.9 | 257.2 | 90.0  | 70.7  | 60.0  | 53.6  | 51.4  | 49.3  | 49.3  |
| 37.5° | 1262.2 | 1146.5 | 857.2 | 162.9 | 79.3  | 62.1  | 53.6  | 49.3  | 45.0  | 45.0  | 45.0  |
| 40°   | 1455.1 | 1315.8 | 837.9 | 109.3 | 68.6  | 55.7  | 47.1  | 45.0  | 40.7  | 40.7  | 40.7  |
| 42.5° | 1680.1 | 1521.5 | 788.6 | 87.9  | 62.1  | 49.3  | 45.0  | 40.7  | 36.4  | 36.4  | 34.3  |
| 45°   | 1971.6 | 1755.1 | 705.0 | 77.1  | 55.7  | 45.0  | 40.7  | 36.4  | 34.3  | 32.1  | 32.1  |
| 47.5° | 2245.9 | 2020.9 | 625.8 | 68.6  | 51.4  | 42.9  | 36.4  | 32.1  | 30.0  | 30.0  | 30.0  |
| 50°   | 2507.3 | 2224.4 | 533.6 | 64.3  | 47.1  | 40.7  | 34.3  | 30.0  | 27.9  | 25.7  | 25.7  |
| 52.5° | 2695.9 | 2385.2 | 447.9 | 57.9  | 42.9  | 36.4  | 32.1  | 27.9  | 23.6  | 21.4  | 21.4  |
| 55°   | 2905.9 | 2548.0 | 370.7 | 51.4  | 40.7  | 34.3  | 27.9  | 23.6  | 19.3  | 17.1  | 17.1  |
| 57.5° | 3141.6 | 2706.6 | 300.0 | 47.1  | 38.6  | 30.0  | 23.6  | 19.3  | 15.0  | 12.9  | 12.9  |
| 60°   | 3375.2 | 2833.1 | 240.0 | 42.9  | 34.3  | 27.9  | 21.4  | 15.0  | 10.7  | 8.6   | 8.6   |
| 62.5° | 3608.8 | 2918.8 | 184.3 | 38.6  | 32.1  | 23.6  | 17.1  | 10.7  | 6.4   | 4.3   | 4.3   |
| 65°   | 3705.3 | 2895.2 | 137.2 | 34.3  | 27.9  | 19.3  | 15.0  | 10.7  | 6.4   | 4.3   | 4.3   |
| 67.5° | 3437.4 | 2603.8 | 96.4  | 34.3  | 25.7  | 19.3  | 12.9  | 8.6   | 4.3   | 2.1   | 2.1   |
| 70°   | 2683.0 | 2010.1 | 70.7  | 34.3  | 25.7  | 19.3  | 12.9  | 8.6   | 4.3   | 2.1   | 2.1   |
| 72.5° | 1521.5 | 1118.6 | 53.6  | 30.0  | 23.6  | 17.1  | 12.9  | 8.6   | 4.3   | 2.1   | 2.1   |
| 75°   | 542.2  | 360.0  | 40.7  | 27.9  | 21.4  | 15.0  | 12.9  | 8.6   | 4.3   | 2.1   | 2.1   |
| 77.5° | 130.7  | 92.1   | 32.1  | 23.6  | 19.3  | 15.0  | 10.7  | 8.6   | 6.4   | 2.1   | 2.1   |
| 80°   | 53.6   | 38.6   | 25.7  | 19.3  | 15.0  | 12.9  | 10.7  | 8.6   | 4.3   | 2.1   | 2.1   |
| 82.5° | 23.6   | 19.3   | 10.7  | 10.7  | 8.6   | 8.6   | 8.6   | 8.6   | 4.3   | 2.1   | 2.1   |
| 85°   | 10.7   | 8.6    | 4.3   | 4.3   | 2.1   | 2.1   | 2.1   | 4.3   | 4.3   | 2.1   | 2.1   |
| 87.5° | 6.4    | 4.3    | 4.3   | 4.3   | 2.1   | 2.1   | 2.1   | 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)