

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: P573510

Luminaire Tested: **ARCH-S-PA2-80-827-U-T2U-HSS**

Issue Date: 10/13/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P573510  
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-PA2-80-827-U-T2U-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(2) 80 CRI, 2700K, 820mA 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: 5976 lumens  
Efficiency: N/A  
Efficacy: 72.0 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B1 - U0 - G1

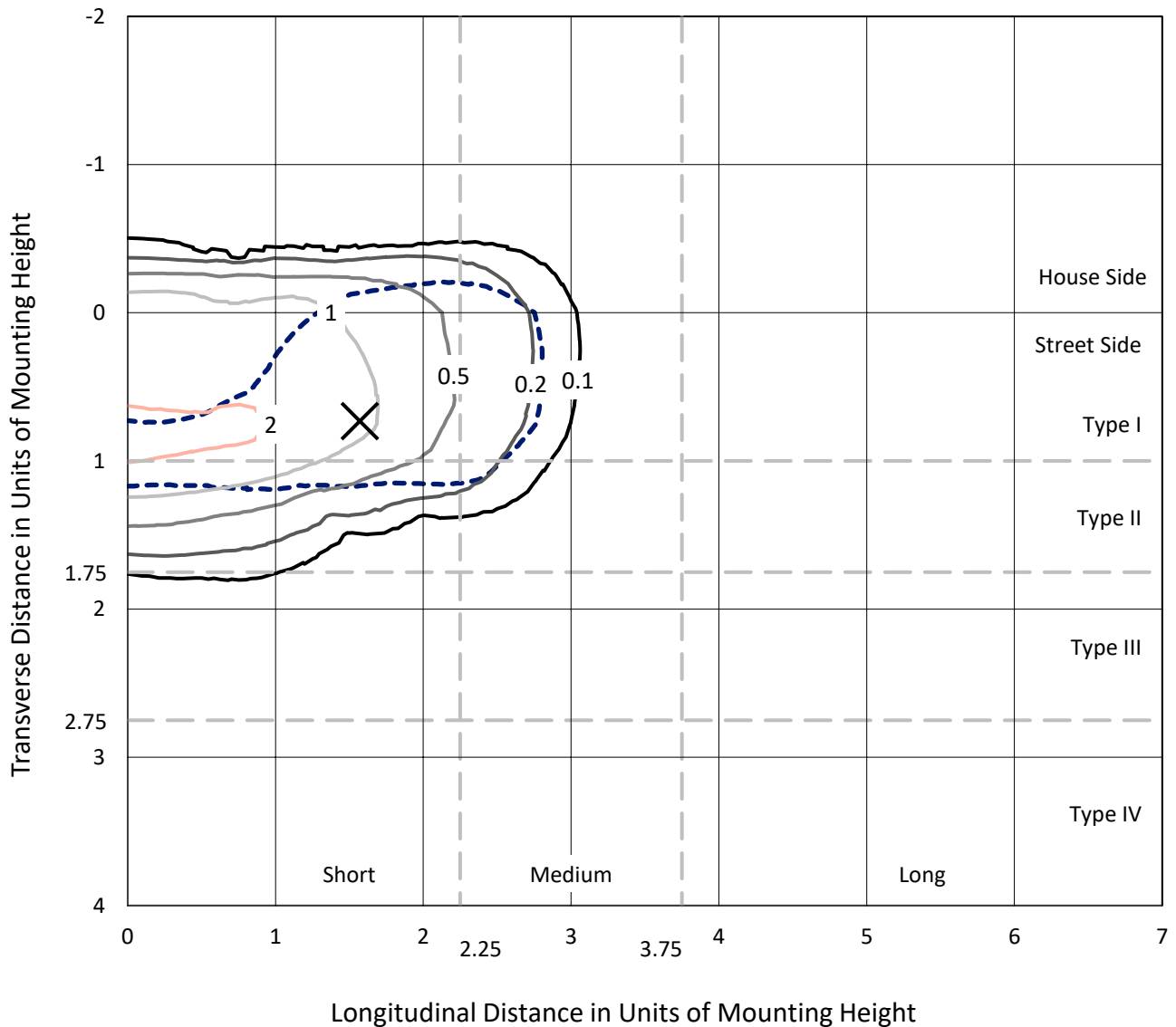
Input Watts (W): 83  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

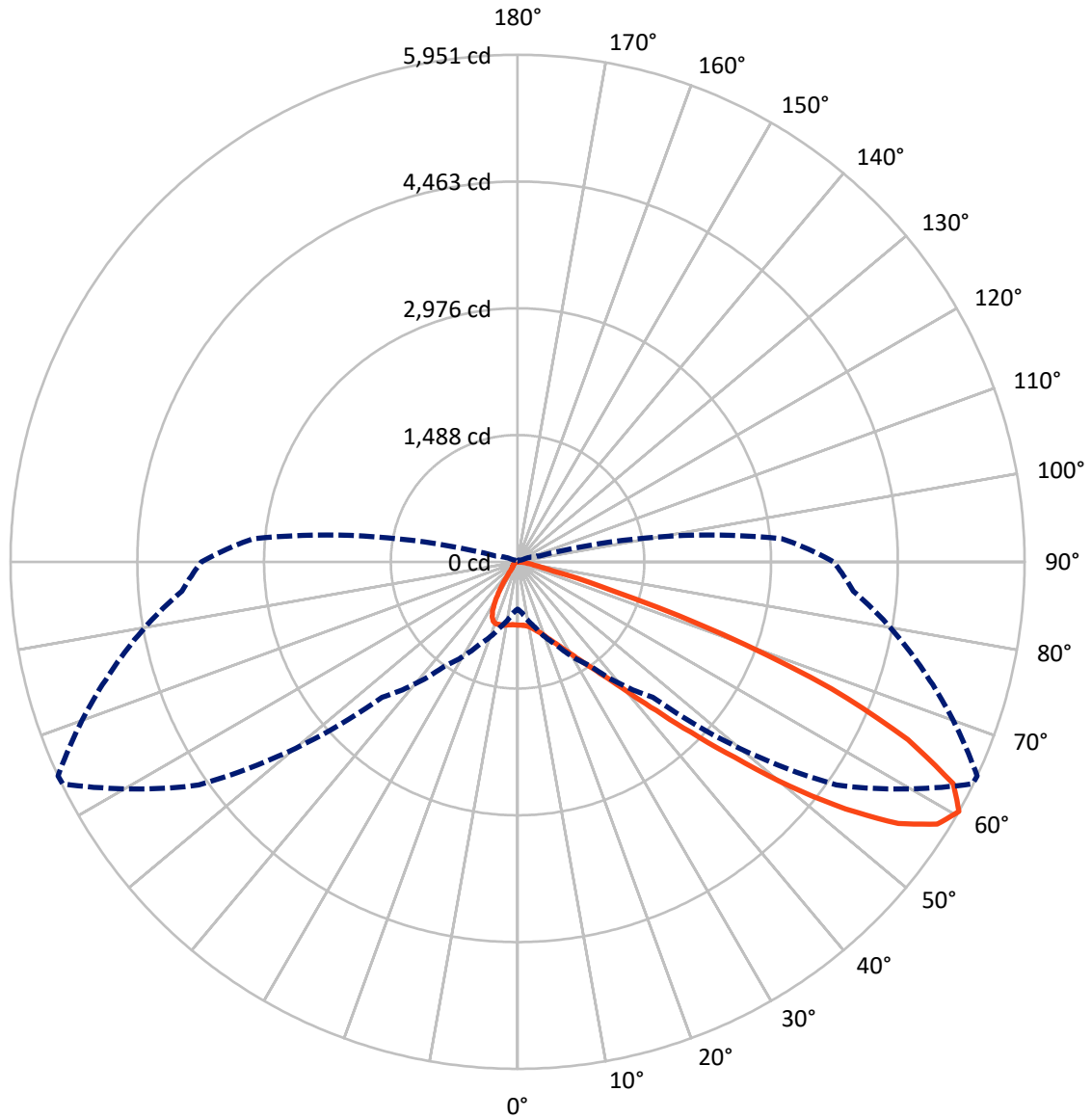
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.6 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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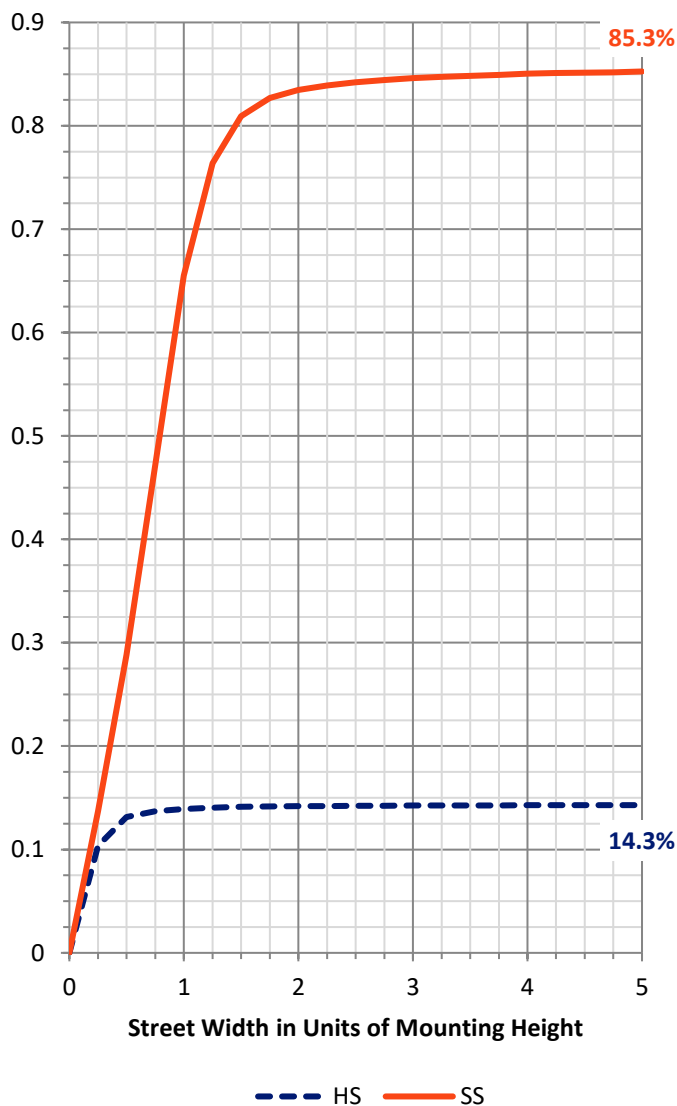
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 865.2    | 0.0    | 865.2  |
|                    | % Fixture | 14.5     | 0.0    | 14.5   |
| <b>Street Side</b> | Lumens    | 5110.8   | 0.0    | 5110.8 |
|                    | % Fixture | 85.5     | 0.0    | 85.5   |
| <b>Total</b>       | Lumens    | 5976.0   | 0.0    | 5976.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 70.4   | 1.2       |
| 10°-20°   | 199.6  | 3.3       |
| 20°-30°   | 339.1  | 5.7       |
| 30°-40°   | 699.7  | 11.7      |
| 40°-50°   | 1407.1 | 23.5      |
| 50°-60°   | 1721.9 | 28.8      |
| 60°-70°   | 1218.2 | 20.4      |
| 70°-80°   | 293.6  | 4.9       |
| 80°-90°   | 26.5   | 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°    | 5976.0 | 100.0     |
| 0°-180°   | 5976.0 | 100.0     |

**Coefficient of Utilization**

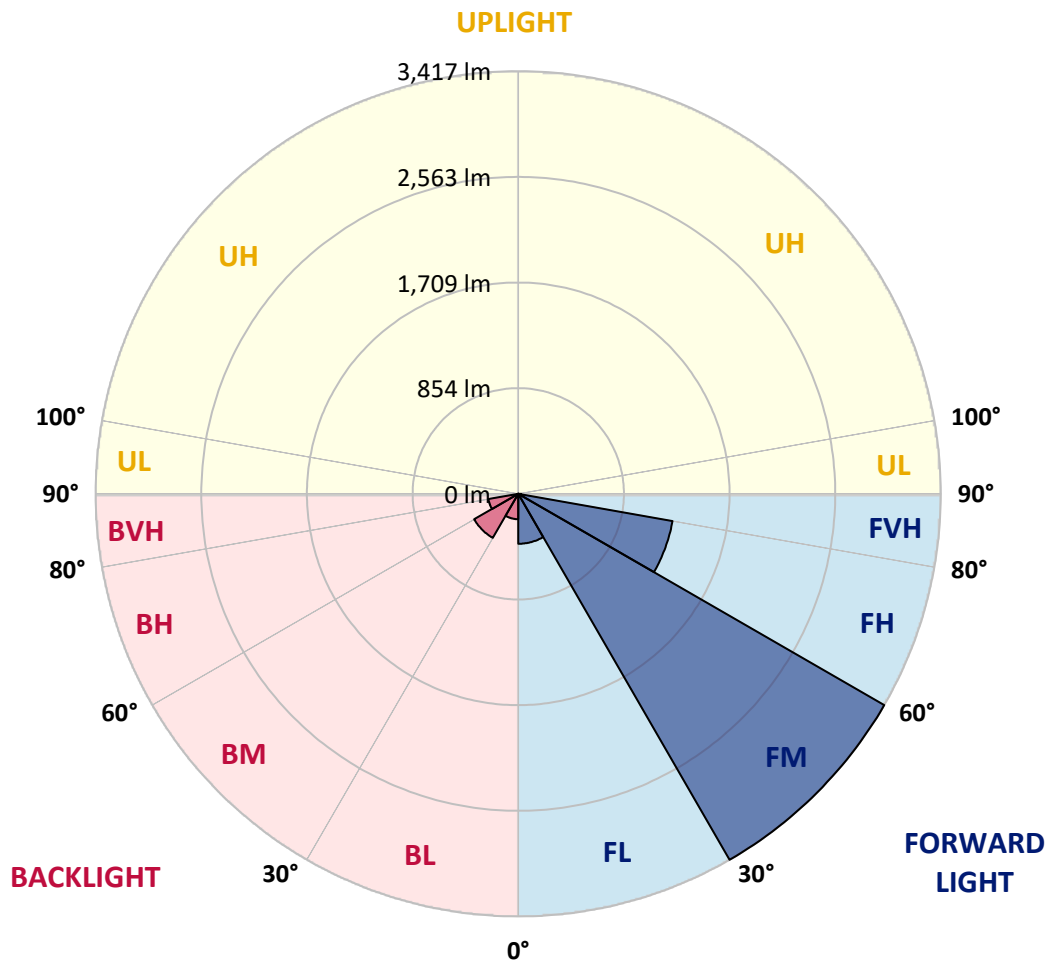


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|--------|-----------|-------------------------|------|---------|
|                |        |           | B                       | U    | G       |
| FL (0°-30°)    | 404.0  | 6.8       |                         |      |         |
| FM (30°-60°)   | 3417.3 | 57.2      |                         |      |         |
| FH (60°-80°)   | 1266.5 | 21.2      |                         |      | G1/1800 |
| FVH (80°-90°)  | 23.1   | 0.4       |                         |      | G1/100  |
| BL (0°-30°)    | 205.1  | 3.4       | B1/500                  |      |         |
| BM (30°-60°)   | 411.4  | 6.9       | B1/1000                 |      |         |
| BH (60°-80°)   | 245.2  | 4.1       | B1/500                  |      | G1/500  |
| BVH (80°-90°)  | 3.5    | 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°    | 744.5  | 744.5  | 744.5  | 744.5  | 744.5  | 744.5  | 744.5  | 744.5  | 744.5  | 744.5  | 744.5  |
| 2.5°  | 746.8  | 744.5  | 744.5  | 744.5  | 746.8  | 746.8  | 749.2  | 744.5  | 744.5  | 744.5  | 744.5  |
| 5°    | 742.1  | 739.7  | 739.7  | 742.1  | 744.5  | 744.5  | 749.2  | 749.2  | 749.2  | 751.5  | 751.5  |
| 7.5°  | 751.5  | 746.8  | 746.8  | 749.2  | 751.5  | 751.5  | 756.2  | 758.6  | 758.6  | 763.3  | 765.7  |
| 10°   | 763.3  | 761.0  | 761.0  | 765.7  | 770.4  | 770.4  | 777.4  | 777.4  | 777.4  | 782.2  | 784.5  |
| 12.5° | 779.8  | 777.4  | 777.4  | 784.5  | 791.6  | 796.3  | 801.0  | 803.4  | 805.7  | 805.7  | 805.7  |
| 15°   | 803.4  | 801.0  | 801.0  | 808.1  | 817.5  | 829.3  | 836.3  | 836.3  | 841.1  | 838.7  | 829.3  |
| 17.5° | 836.3  | 834.0  | 836.3  | 841.1  | 852.8  | 864.6  | 878.7  | 881.1  | 878.7  | 874.0  | 859.9  |
| 20°   | 890.5  | 883.5  | 888.2  | 899.9  | 899.9  | 907.0  | 925.9  | 932.9  | 935.3  | 921.2  | 895.2  |
| 22.5° | 947.1  | 947.1  | 951.8  | 965.9  | 956.5  | 965.9  | 982.4  | 994.2  | 998.9  | 987.1  | 944.7  |
| 25°   | 1053.1 | 1057.8 | 1050.7 | 1046.0 | 1022.5 | 1027.2 | 1048.4 | 1071.9 | 1071.9 | 1062.5 | 1001.3 |
| 27.5° | 1286.3 | 1281.6 | 1232.1 | 1163.8 | 1102.6 | 1107.3 | 1128.5 | 1159.1 | 1161.5 | 1140.2 | 1057.8 |
| 30°   | 1620.9 | 1625.6 | 1529.0 | 1373.5 | 1239.2 | 1203.9 | 1227.4 | 1262.8 | 1267.5 | 1232.1 | 1130.8 |
| 32.5° | 2143.9 | 2103.8 | 1924.8 | 1717.4 | 1465.4 | 1338.1 | 1347.6 | 1385.3 | 1399.4 | 1368.8 | 1246.3 |
| 35°   | 2820.0 | 2725.8 | 2457.2 | 2200.4 | 1835.2 | 1578.4 | 1505.4 | 1545.5 | 1552.5 | 1536.0 | 1390.0 |
| 37.5° | 3222.9 | 3147.5 | 2973.1 | 2739.9 | 2311.1 | 1898.8 | 1712.7 | 1752.8 | 1745.7 | 1712.7 | 1533.7 |
| 40°   | 3472.6 | 3430.2 | 3335.9 | 3227.6 | 2954.3 | 2403.0 | 2054.3 | 2021.4 | 2023.7 | 1976.6 | 1766.9 |
| 42.5° | 3613.9 | 3576.2 | 3540.9 | 3569.2 | 3489.1 | 3317.1 | 2549.1 | 2398.3 | 2384.2 | 2294.6 | 2037.8 |
| 45°   | 3621.0 | 3564.5 | 3606.9 | 3771.8 | 3899.0 | 4127.5 | 3194.6 | 2845.9 | 2853.0 | 2704.6 | 2374.7 |
| 47.5° | 3350.1 | 3305.3 | 3427.8 | 3750.6 | 4172.3 | 4657.6 | 3946.1 | 3458.4 | 3425.5 | 3133.3 | 2716.3 |
| 50°   | 2815.3 | 2812.9 | 2975.5 | 3432.5 | 4172.3 | 4930.9 | 4751.8 | 4177.0 | 4141.6 | 3580.9 | 3027.3 |
| 52.5° | 2228.7 | 2273.4 | 2384.2 | 2817.6 | 3788.3 | 4905.0 | 5345.5 | 4919.1 | 4820.1 | 3979.1 | 3286.5 |
| 55°   | 1733.9 | 1717.4 | 1851.7 | 2150.9 | 3003.8 | 4457.3 | 5538.7 | 5503.4 | 5420.9 | 4332.5 | 3515.0 |
| 57.5° | 1064.9 | 1126.1 | 1307.5 | 1573.7 | 2186.3 | 3505.6 | 5260.7 | 5859.1 | 5809.6 | 4662.3 | 3752.9 |
| 60°   | 553.6  | 600.8  | 796.3  | 1074.3 | 1493.6 | 2247.5 | 4565.7 | 5941.5 | 5951.0 | 4928.5 | 3955.5 |
| 62.5° | 348.7  | 346.3  | 435.8  | 753.9  | 961.2  | 1262.8 | 3545.6 | 5649.4 | 5738.9 | 5133.5 | 4148.7 |
| 65°   | 261.5  | 263.9  | 299.2  | 499.4  | 652.6  | 659.6  | 2103.8 | 4886.1 | 5034.5 | 5187.7 | 4214.7 |
| 67.5° | 242.7  | 245.0  | 261.5  | 327.5  | 490.0  | 440.6  | 925.9  | 3767.1 | 3974.4 | 4688.2 | 3960.2 |
| 70°   | 216.7  | 219.1  | 245.0  | 270.9  | 369.9  | 322.8  | 417.0  | 2268.7 | 2556.1 | 3401.9 | 3168.7 |
| 72.5° | 169.6  | 174.3  | 205.0  | 256.8  | 275.6  | 245.0  | 289.8  | 1003.6 | 1170.9 | 1870.6 | 1814.0 |
| 75°   | 124.9  | 127.2  | 155.5  | 197.9  | 242.7  | 174.3  | 223.8  | 398.1  | 435.8  | 702.1  | 598.4  |
| 77.5° | 87.2   | 87.2   | 108.4  | 148.4  | 202.6  | 122.5  | 160.2  | 214.4  | 219.1  | 261.5  | 172.0  |
| 80°   | 54.2   | 56.5   | 68.3   | 101.3  | 124.9  | 117.8  | 98.9   | 143.7  | 143.7  | 136.6  | 70.7   |
| 82.5° | 30.6   | 33.0   | 47.1   | 68.3   | 84.8   | 80.1   | 63.6   | 82.5   | 84.8   | 87.2   | 40.1   |
| 85°   | 14.1   | 16.5   | 28.3   | 42.4   | 49.5   | 37.7   | 37.7   | 42.4   | 42.4   | 56.5   | 23.6   |
| 87.5° | 2.4    | 2.4    | 14.1   | 18.8   | 16.5   | 18.8   | 18.8   | 23.6   | 23.6   | 28.3   | 11.8   |
| 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°    | 744.5  | 744.5  | 744.5 | 744.5 | 744.5 | 744.5 | 744.5 | 744.5 | 744.5 | 744.5 | 744.5 |
| 2.5°  | 742.1  | 742.1  | 742.1 | 739.7 | 739.7 | 737.4 | 732.7 | 732.7 | 732.7 | 732.7 | 735.0 |
| 5°    | 751.5  | 749.2  | 746.8 | 739.7 | 735.0 | 725.6 | 716.2 | 713.8 | 706.8 | 706.8 | 709.1 |
| 7.5°  | 763.3  | 763.3  | 756.2 | 744.5 | 732.7 | 716.2 | 699.7 | 687.9 | 676.1 | 673.8 | 671.4 |
| 10°   | 784.5  | 779.8  | 772.7 | 751.5 | 732.7 | 706.8 | 680.9 | 650.2 | 626.7 | 614.9 | 610.2 |
| 12.5° | 801.0  | 798.6  | 784.5 | 761.0 | 730.3 | 690.3 | 631.4 | 560.7 | 504.2 | 473.5 | 473.5 |
| 15°   | 824.6  | 819.8  | 798.6 | 765.7 | 723.3 | 629.0 | 508.9 | 400.5 | 339.2 | 306.3 | 301.6 |
| 17.5° | 848.1  | 838.7  | 812.8 | 768.0 | 692.6 | 518.3 | 355.7 | 256.8 | 214.4 | 197.9 | 193.2 |
| 20°   | 876.4  | 859.9  | 822.2 | 770.4 | 617.2 | 376.9 | 230.9 | 172.0 | 155.5 | 148.4 | 150.8 |
| 22.5° | 914.1  | 885.8  | 831.6 | 756.2 | 504.2 | 245.0 | 162.6 | 139.0 | 129.6 | 122.5 | 122.5 |
| 25°   | 961.2  | 921.2  | 848.1 | 716.2 | 365.2 | 164.9 | 129.6 | 115.4 | 106.0 | 101.3 | 98.9  |
| 27.5° | 1003.6 | 954.1  | 864.6 | 645.5 | 233.2 | 129.6 | 108.4 | 96.6  | 87.2  | 84.8  | 82.5  |
| 30°   | 1060.1 | 991.8  | 881.1 | 532.4 | 153.1 | 106.0 | 91.9  | 80.1  | 73.0  | 70.7  | 70.7  |
| 32.5° | 1156.7 | 1064.9 | 911.7 | 405.2 | 115.4 | 91.9  | 77.7  | 68.3  | 63.6  | 61.3  | 61.3  |
| 35°   | 1269.8 | 1154.4 | 937.6 | 282.7 | 98.9  | 77.7  | 66.0  | 58.9  | 56.5  | 54.2  | 54.2  |
| 37.5° | 1387.6 | 1260.4 | 942.4 | 179.0 | 87.2  | 68.3  | 58.9  | 54.2  | 49.5  | 49.5  | 49.5  |
| 40°   | 1599.6 | 1446.5 | 921.2 | 120.2 | 75.4  | 61.3  | 51.8  | 49.5  | 44.8  | 44.8  | 44.8  |
| 42.5° | 1847.0 | 1672.7 | 867.0 | 96.6  | 68.3  | 54.2  | 49.5  | 44.8  | 40.1  | 40.1  | 37.7  |
| 45°   | 2167.4 | 1929.5 | 775.1 | 84.8  | 61.3  | 49.5  | 44.8  | 40.1  | 37.7  | 35.3  | 35.3  |
| 47.5° | 2469.0 | 2221.6 | 687.9 | 75.4  | 56.5  | 47.1  | 40.1  | 35.3  | 33.0  | 33.0  | 33.0  |
| 50°   | 2756.4 | 2445.4 | 586.6 | 70.7  | 51.8  | 44.8  | 37.7  | 33.0  | 30.6  | 28.3  | 28.3  |
| 52.5° | 2963.7 | 2622.1 | 492.4 | 63.6  | 47.1  | 40.1  | 35.3  | 30.6  | 25.9  | 23.6  | 23.6  |
| 55°   | 3194.6 | 2801.1 | 407.6 | 56.5  | 44.8  | 37.7  | 30.6  | 25.9  | 21.2  | 18.8  | 18.8  |
| 57.5° | 3453.7 | 2975.5 | 329.8 | 51.8  | 42.4  | 33.0  | 25.9  | 21.2  | 16.5  | 14.1  | 14.1  |
| 60°   | 3710.5 | 3114.5 | 263.9 | 47.1  | 37.7  | 30.6  | 23.6  | 16.5  | 11.8  | 9.4   | 9.4   |
| 62.5° | 3967.3 | 3208.7 | 202.6 | 42.4  | 35.3  | 25.9  | 18.8  | 11.8  | 7.1   | 4.7   | 4.7   |
| 65°   | 4073.3 | 3182.8 | 150.8 | 37.7  | 30.6  | 21.2  | 16.5  | 11.8  | 7.1   | 4.7   | 4.7   |
| 67.5° | 3778.8 | 2862.4 | 106.0 | 37.7  | 28.3  | 21.2  | 14.1  | 9.4   | 4.7   | 2.4   | 2.4   |
| 70°   | 2949.6 | 2209.8 | 77.7  | 37.7  | 28.3  | 21.2  | 14.1  | 9.4   | 4.7   | 2.4   | 2.4   |
| 72.5° | 1672.7 | 1229.8 | 58.9  | 33.0  | 25.9  | 18.8  | 14.1  | 9.4   | 4.7   | 2.4   | 2.4   |
| 75°   | 596.0  | 395.8  | 44.8  | 30.6  | 23.6  | 16.5  | 14.1  | 9.4   | 4.7   | 2.4   | 2.4   |
| 77.5° | 143.7  | 101.3  | 35.3  | 25.9  | 21.2  | 16.5  | 11.8  | 9.4   | 7.1   | 2.4   | 2.4   |
| 80°   | 58.9   | 42.4   | 28.3  | 21.2  | 16.5  | 14.1  | 11.8  | 9.4   | 4.7   | 2.4   | 2.4   |
| 82.5° | 25.9   | 21.2   | 11.8  | 11.8  | 9.4   | 9.4   | 9.4   | 9.4   | 4.7   | 2.4   | 2.4   |
| 85°   | 11.8   | 9.4    | 4.7   | 4.7   | 2.4   | 2.4   | 2.4   | 4.7   | 4.7   | 2.4   | 2.4   |
| 87.5° | 7.1    | 4.7    | 4.7   | 4.7   | 2.4   | 2.4   | 2.4   | 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)