

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: P572764

Luminaire Tested: **ARCH-S-PA2-110-750-U-T2U**

Issue Date: 10/13/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P572764  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2108-332-15)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/13/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA2-110-750-U-T2U  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 5000K, 1105mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II U OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 14854 lumens  
Efficiency: N/A  
Efficacy: 130.1 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B3 - U0 - G3

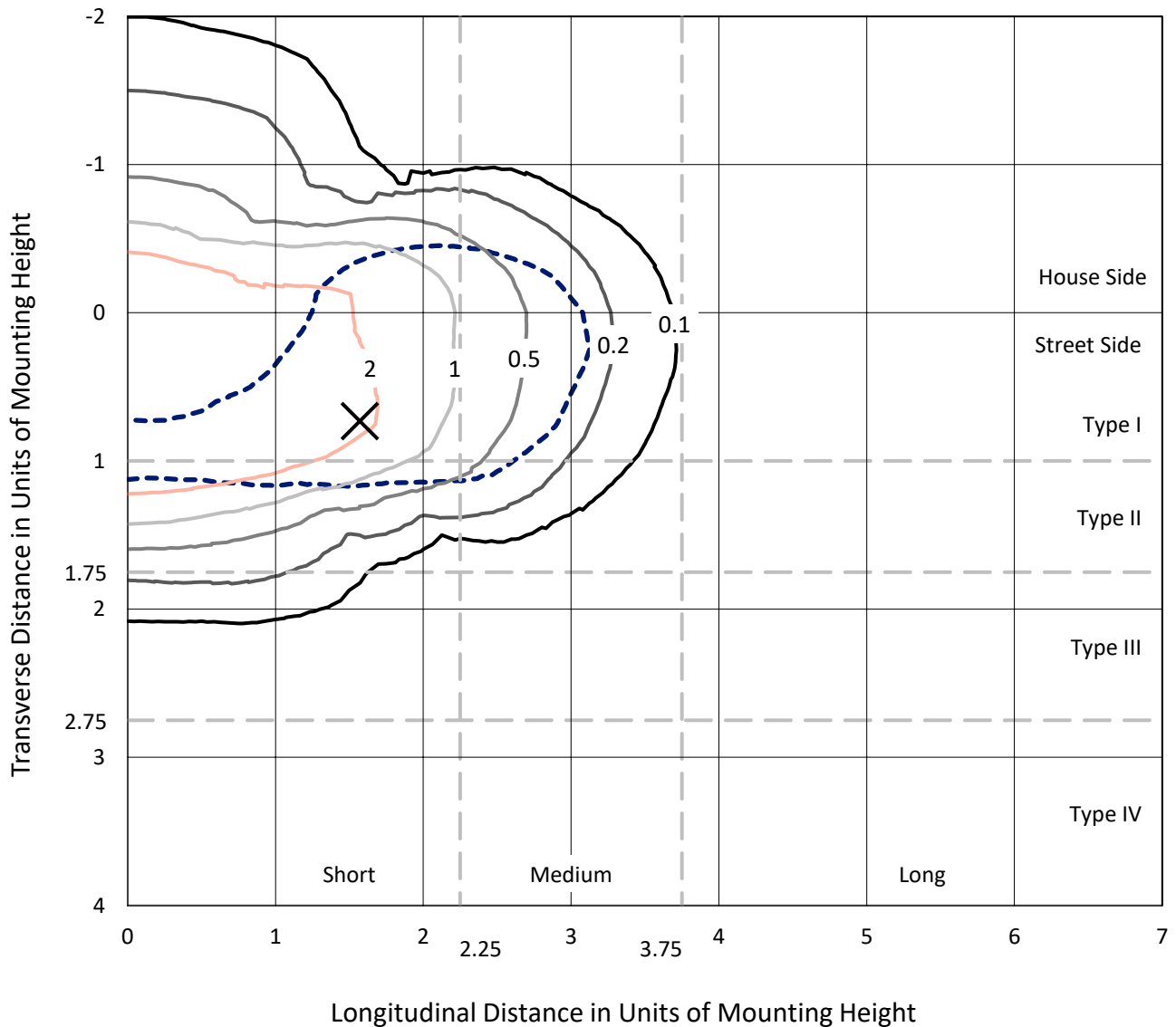
Input Watts (W): 114.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

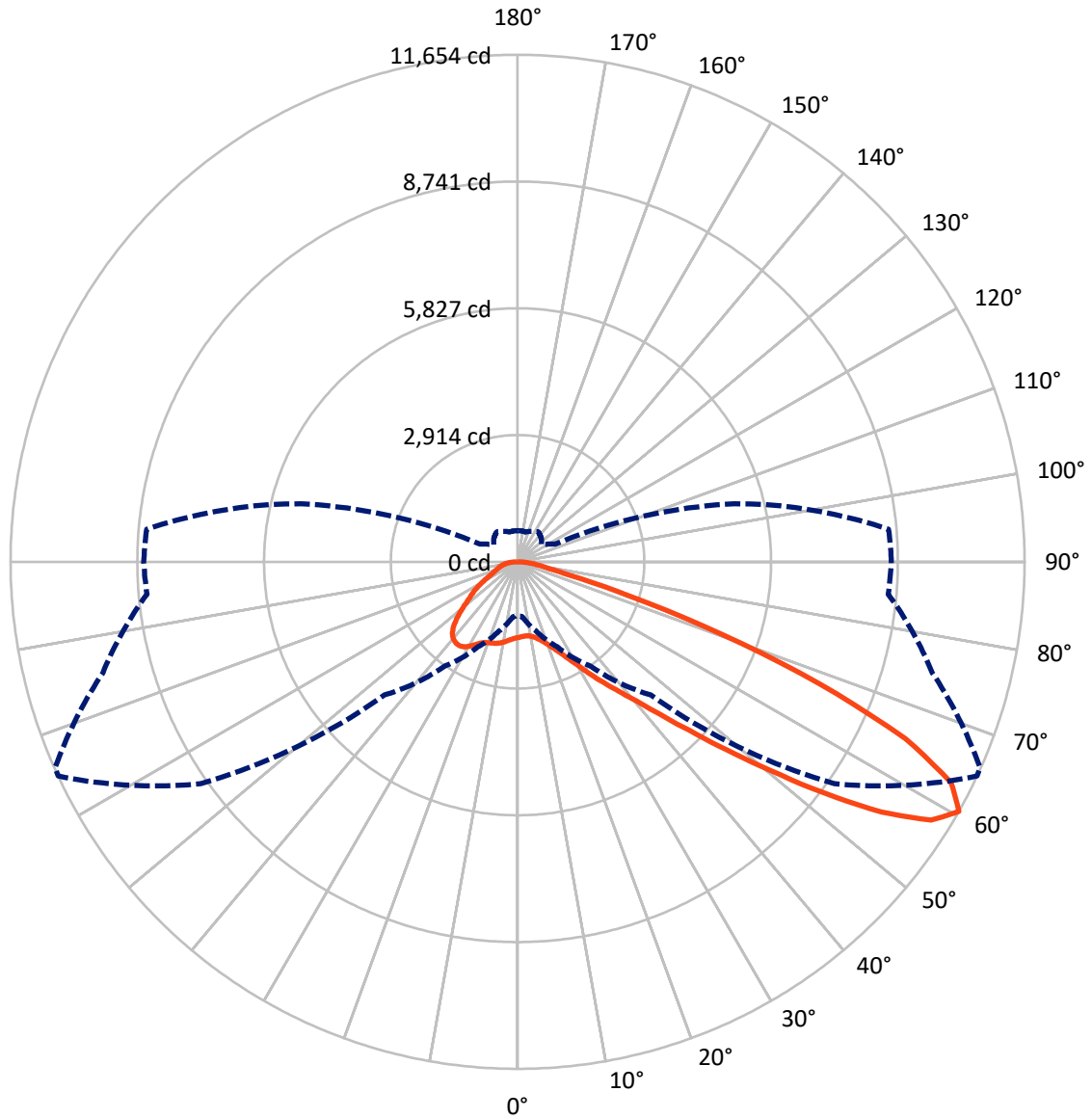
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5 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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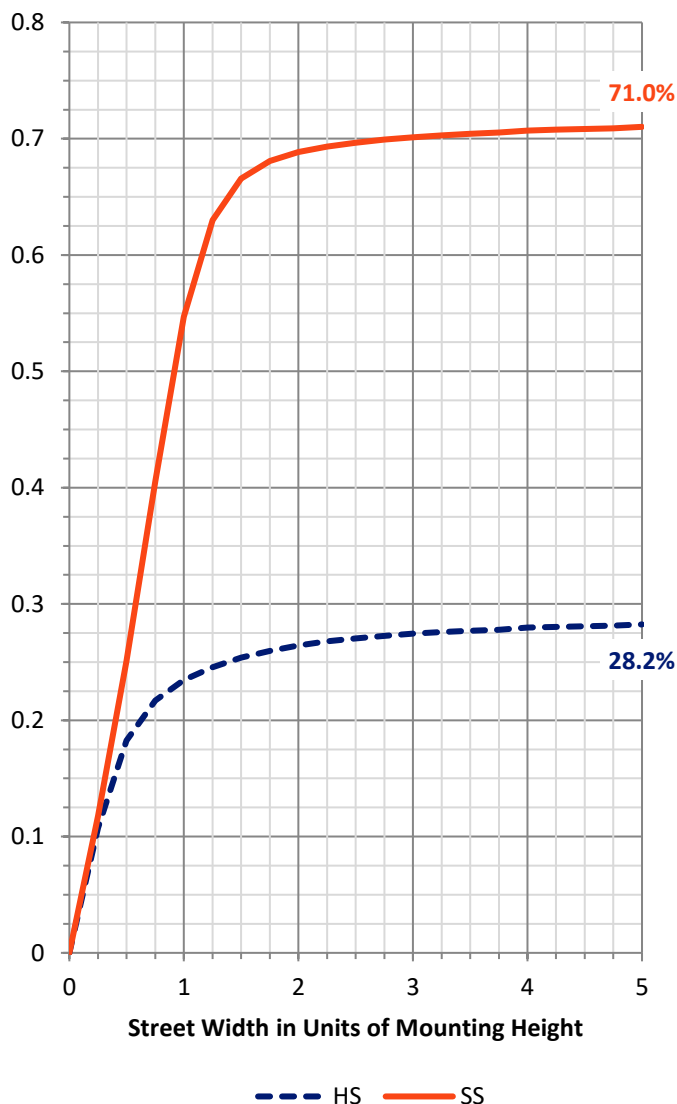
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 4252.3   | 0.0    | 4252.3  |
|                    | % Fixture | 28.6     | 0.0    | 28.6    |
| <b>Street Side</b> | Lumens    | 10601.7  | 0.0    | 10601.7 |
|                    | % Fixture | 71.4     | 0.0    | 71.4    |
| <b>Total</b>       | Lumens    | 14854.0  | 0.0    | 14854.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 168.4   | 1.1       |
| 10°-20°   | 541.9   | 3.6       |
| 20°-30°   | 1038.9  | 7.0       |
| 30°-40°   | 1804.2  | 12.1      |
| 40°-50°   | 3060.0  | 20.6      |
| 50°-60°   | 3810.3  | 25.7      |
| 60°-70°   | 3070.4  | 20.7      |
| 70°-80°   | 1162.7  | 7.8       |
| 80°-90°   | 197.2   | 1.3       |
| 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°    | 14854.0 | 100.0     |
| 0°-180°   | 14854.0 | 100.0     |

**Coefficient of Utilization**

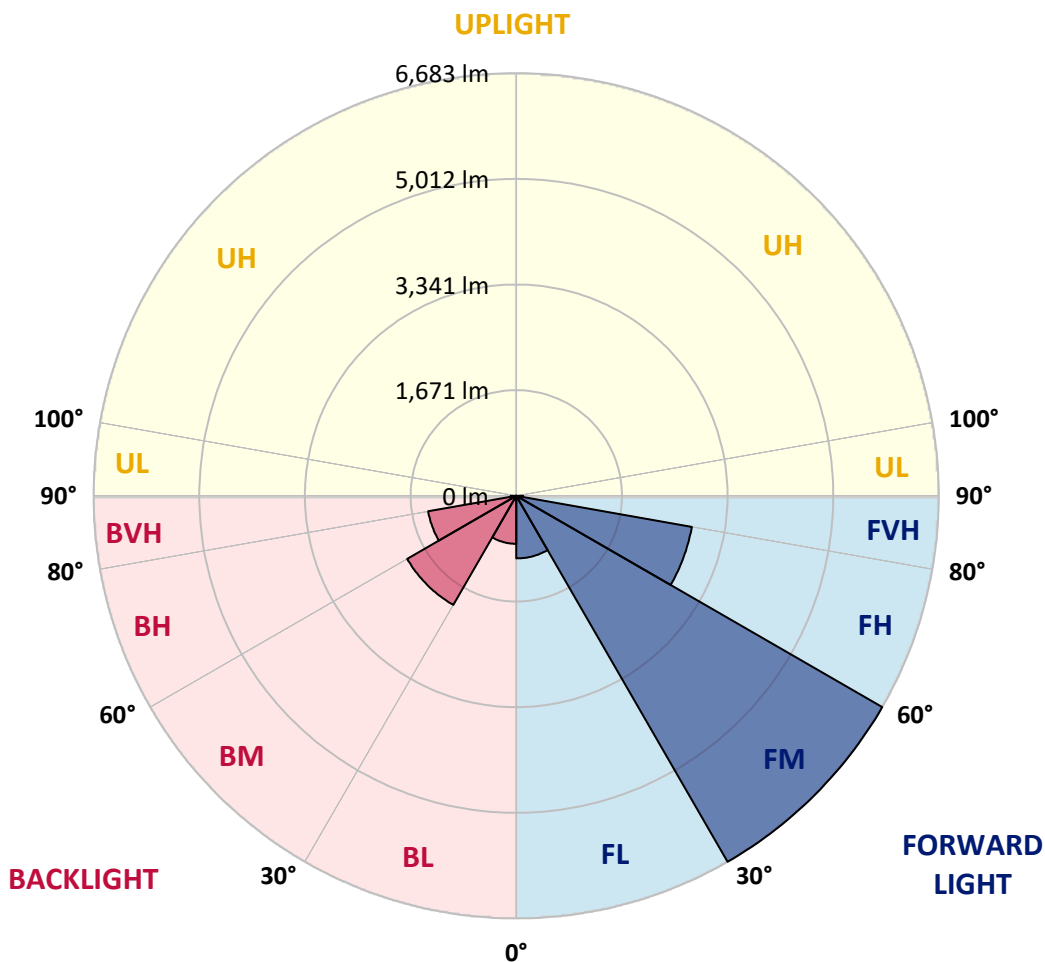


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|--------|-----------|-------------------------|------|---------|
|                |        |           | B                       | U    | G       |
| FL (0°-30°)    | 990.3  | 6.7       |                         |      |         |
| FM (30°-60°)   | 6682.8 | 45.0      |                         |      |         |
| FH (60°-80°)   | 2819.2 | 19.0      |                         |      | G2/5000 |
| FVH (80°-90°)  | 109.4  | 0.7       |                         |      | G2/225  |
| BL (0°-30°)    | 758.9  | 5.1       | B2/1000                 |      |         |
| BM (30°-60°)   | 1991.7 | 13.4      | B2/2500                 |      |         |
| BH (60°-80°)   | 1413.9 | 9.5       | B3/2500                 |      | G3/2500 |
| BVH (80°-90°)  | 87.8   | 0.6       |                         |      | G1/100  |
| UL (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B3-U0-G3**  
 Type II Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°     | 65°     | 66°     | 75°     | 85°    |
|-------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|--------|
| 0°    | 1742.8 | 1742.8 | 1742.8 | 1742.8 | 1742.8 | 1742.8 | 1742.8  | 1742.8  | 1742.8  | 1742.8  | 1742.8 |
| 2.5°  | 1702.1 | 1702.1 | 1702.1 | 1706.2 | 1710.2 | 1714.3 | 1722.5  | 1722.5  | 1722.5  | 1726.5  | 1734.7 |
| 5°    | 1669.5 | 1665.5 | 1669.5 | 1673.6 | 1681.7 | 1689.9 | 1706.2  | 1714.3  | 1714.3  | 1730.6  | 1746.9 |
| 7.5°  | 1673.6 | 1665.5 | 1665.5 | 1669.5 | 1677.7 | 1685.8 | 1702.1  | 1714.3  | 1718.4  | 1738.7  | 1767.3 |
| 10°   | 1714.3 | 1702.1 | 1702.1 | 1706.2 | 1706.2 | 1714.3 | 1726.5  | 1742.8  | 1746.9  | 1767.3  | 1795.8 |
| 12.5° | 1799.8 | 1787.6 | 1783.5 | 1771.3 | 1759.1 | 1767.3 | 1779.5  | 1783.5  | 1787.6  | 1799.8  | 1828.3 |
| 15°   | 1979.0 | 1958.6 | 1926.1 | 1901.6 | 1869.1 | 1848.7 | 1844.6  | 1848.7  | 1848.7  | 1852.8  | 1869.1 |
| 17.5° | 2235.5 | 2211.1 | 2162.2 | 2109.3 | 2031.9 | 1966.8 | 1946.4  | 1930.1  | 1930.1  | 1917.9  | 1917.9 |
| 20°   | 2549.1 | 2512.4 | 2455.4 | 2378.1 | 2264.0 | 2146.0 | 2076.7  | 2040.1  | 2027.9  | 2007.5  | 1979.0 |
| 22.5° | 2911.5 | 2887.1 | 2813.8 | 2695.7 | 2524.6 | 2365.8 | 2251.8  | 2170.4  | 2170.4  | 2121.5  | 2060.4 |
| 25°   | 3339.0 | 3294.3 | 3208.7 | 3070.3 | 2838.2 | 2610.2 | 2455.4  | 2337.3  | 2325.1  | 2247.8  | 2150.0 |
| 27.5° | 3754.4 | 3725.9 | 3620.0 | 3436.8 | 3159.9 | 2895.2 | 2679.4  | 2540.9  | 2520.6  | 2398.4  | 2247.8 |
| 30°   | 4259.3 | 4226.7 | 4067.9 | 3811.4 | 3514.1 | 3212.8 | 2960.4  | 2781.2  | 2760.8  | 2593.9  | 2382.1 |
| 32.5° | 4886.4 | 4776.5 | 4581.0 | 4287.8 | 3905.1 | 3567.1 | 3278.0  | 3086.6  | 3062.2  | 2870.8  | 2618.3 |
| 35°   | 5647.9 | 5554.2 | 5216.2 | 4906.8 | 4450.7 | 4006.9 | 3660.7  | 3408.3  | 3375.7  | 3147.7  | 2830.0 |
| 37.5° | 6185.4 | 6140.6 | 5908.5 | 5664.2 | 5143.0 | 4544.4 | 4120.9  | 3770.7  | 3738.1  | 3436.8  | 3025.5 |
| 40°   | 6523.4 | 6478.6 | 6413.4 | 6344.2 | 6055.1 | 5379.1 | 4674.7  | 4198.2  | 4145.3  | 3860.3  | 3416.4 |
| 42.5° | 6698.5 | 6661.8 | 6674.0 | 6812.5 | 6893.9 | 6788.0 | 5464.6  | 4768.3  | 4731.7  | 4385.6  | 3892.8 |
| 45°   | 6596.7 | 6572.2 | 6690.3 | 7056.8 | 7455.9 | 8237.7 | 6478.6  | 5517.6  | 5419.8  | 5008.6  | 4471.1 |
| 47.5° | 6108.0 | 6034.7 | 6311.6 | 6934.6 | 7789.8 | 8929.9 | 7700.2  | 6441.9  | 6336.0  | 5745.6  | 5057.4 |
| 50°   | 5102.2 | 5081.9 | 5460.6 | 6250.5 | 7659.5 | 9202.7 | 9007.3  | 7533.2  | 7455.9  | 6539.7  | 5709.0 |
| 52.5° | 4165.7 | 4157.5 | 4450.7 | 5175.5 | 6828.8 | 9011.4 | 9956.1  | 8832.2  | 8600.1  | 7337.8  | 6417.5 |
| 55°   | 3233.2 | 3229.1 | 3489.7 | 4031.3 | 5448.4 | 8111.4 | 10404.0 | 10155.6 | 9984.6  | 8209.2  | 7146.4 |
| 57.5° | 2211.1 | 2182.6 | 2520.6 | 2931.8 | 4092.4 | 6425.6 | 10110.8 | 11202.1 | 11096.2 | 9133.5  | 7920.1 |
| 60°   | 1229.7 | 1270.5 | 1645.1 | 2154.1 | 2927.8 | 4328.5 | 8889.2  | 11654.1 | 11637.8 | 9870.6  | 8551.2 |
| 62.5° | 871.4  | 887.7  | 1046.5 | 1531.1 | 1926.1 | 2479.9 | 6857.3  | 11185.8 | 11316.1 | 10277.8 | 8909.6 |
| 65°   | 724.8  | 733.0  | 810.3  | 1132.0 | 1408.9 | 1433.3 | 4275.6  | 9797.3  | 9968.3  | 10151.5 | 8986.9 |
| 67.5° | 684.1  | 688.2  | 728.9  | 834.8  | 1103.5 | 1038.4 | 1909.8  | 7480.3  | 7842.7  | 9133.5  | 8482.0 |
| 70°   | 623.0  | 627.1  | 688.2  | 737.0  | 891.8  | 818.5  | 981.4   | 4967.9  | 5456.5  | 7219.7  | 7313.3 |
| 72.5° | 533.4  | 545.6  | 594.5  | 692.2  | 724.8  | 680.0  | 757.4   | 2655.0  | 3139.5  | 4829.4  | 5647.9 |
| 75°   | 460.1  | 468.3  | 504.9  | 586.4  | 680.0  | 541.6  | 643.4   | 1209.4  | 1417.1  | 2834.1  | 3575.2 |
| 77.5° | 370.6  | 374.6  | 427.6  | 480.5  | 570.1  | 439.8  | 500.9   | 724.8   | 761.5   | 1384.5  | 1616.6 |
| 80°   | 281.0  | 281.0  | 317.6  | 382.8  | 423.5  | 423.5  | 366.5   | 504.9   | 525.3   | 659.7   | 639.3  |
| 82.5° | 215.8  | 211.7  | 240.2  | 268.8  | 305.4  | 354.3  | 276.9   | 333.9   | 342.0   | 399.1   | 342.0  |
| 85°   | 142.5  | 142.5  | 158.8  | 183.2  | 203.6  | 195.5  | 215.8   | 195.5   | 203.6   | 248.4   | 187.3  |
| 87.5° | 61.1   | 61.1   | 85.5   | 81.4   | 89.6   | 93.7   | 105.9   | 93.7    | 93.7    | 114.0   | 85.5   |
| 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):**

|       | 90°    | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1742.8 | 1742.8 | 1742.8 | 1742.8 | 1742.8 | 1742.8 | 1742.8 | 1742.8 | 1742.8 | 1742.8 | 1742.8 |
| 2.5°  | 1738.7 | 1742.8 | 1751.0 | 1755.0 | 1767.3 | 1771.3 | 1771.3 | 1779.5 | 1779.5 | 1787.6 | 1787.6 |
| 5°    | 1751.0 | 1763.2 | 1775.4 | 1787.6 | 1799.8 | 1803.9 | 1812.0 | 1816.1 | 1816.1 | 1824.3 | 1820.2 |
| 7.5°  | 1775.4 | 1787.6 | 1812.0 | 1824.3 | 1840.5 | 1848.7 | 1844.6 | 1848.7 | 1844.6 | 1848.7 | 1848.7 |
| 10°   | 1808.0 | 1824.3 | 1852.8 | 1869.1 | 1881.3 | 1885.3 | 1873.1 | 1860.9 | 1844.6 | 1844.6 | 1844.6 |
| 12.5° | 1844.6 | 1856.8 | 1893.5 | 1905.7 | 1913.8 | 1901.6 | 1869.1 | 1844.6 | 1832.4 | 1836.5 | 1832.4 |
| 15°   | 1881.3 | 1893.5 | 1922.0 | 1934.2 | 1934.2 | 1897.6 | 1869.1 | 1860.9 | 1856.8 | 1860.9 | 1860.9 |
| 17.5° | 1917.9 | 1930.1 | 1954.6 | 1954.6 | 1942.3 | 1913.8 | 1885.3 | 1856.8 | 1836.5 | 1824.3 | 1824.3 |
| 20°   | 1966.8 | 1966.8 | 1974.9 | 1974.9 | 1970.9 | 1926.1 | 1856.8 | 1787.6 | 1746.9 | 1722.5 | 1718.4 |
| 22.5° | 2031.9 | 2015.6 | 1999.4 | 1999.4 | 2015.6 | 1897.6 | 1763.2 | 1657.3 | 1592.2 | 1584.0 | 1567.7 |
| 25°   | 2101.2 | 2064.5 | 2023.8 | 2052.3 | 2023.8 | 1824.3 | 1632.9 | 1490.4 | 1413.0 | 1384.5 | 1392.6 |
| 27.5° | 2174.5 | 2117.4 | 2056.4 | 2137.8 | 1983.1 | 1681.7 | 1449.6 | 1290.8 | 1217.5 | 1197.2 | 1197.2 |
| 30°   | 2276.3 | 2190.7 | 2101.2 | 2227.4 | 1905.7 | 1518.9 | 1233.8 | 1119.8 | 1079.1 | 1062.8 | 1058.7 |
| 32.5° | 2471.7 | 2341.4 | 2211.1 | 2308.8 | 1820.2 | 1307.1 | 1087.2 | 1018.0 | 969.1  | 952.9  | 965.1  |
| 35°   | 2646.8 | 2463.6 | 2378.1 | 2345.5 | 1685.8 | 1136.1 | 997.6  | 936.6  | 895.8  | 875.5  | 875.5  |
| 37.5° | 2805.6 | 2630.5 | 2565.4 | 2345.5 | 1510.7 | 1030.2 | 940.6  | 891.8  | 838.8  | 822.5  | 822.5  |
| 40°   | 3151.7 | 2919.6 | 2805.6 | 2312.9 | 1294.9 | 977.3  | 912.1  | 855.1  | 810.3  | 794.0  | 790.0  |
| 42.5° | 3628.2 | 3314.6 | 3054.0 | 2239.6 | 1111.7 | 952.9  | 895.8  | 830.7  | 794.0  | 781.8  | 777.8  |
| 45°   | 4133.1 | 3856.2 | 3290.2 | 2109.3 | 993.6  | 928.4  | 891.8  | 822.5  | 777.8  | 765.5  | 761.5  |
| 47.5° | 4743.9 | 4458.9 | 3563.0 | 1909.8 | 912.1  | 912.1  | 887.7  | 810.3  | 769.6  | 757.4  | 757.4  |
| 50°   | 5419.8 | 5183.7 | 3909.1 | 1681.7 | 851.1  | 899.9  | 879.6  | 810.3  | 765.5  | 753.3  | 749.3  |
| 52.5° | 6112.1 | 6002.1 | 4271.5 | 1457.8 | 790.0  | 883.6  | 875.5  | 810.3  | 757.4  | 745.2  | 745.2  |
| 55°   | 6991.6 | 6902.1 | 4691.0 | 1290.8 | 741.1  | 851.1  | 875.5  | 802.2  | 745.2  | 737.0  | 737.0  |
| 57.5° | 7854.9 | 7822.3 | 5016.7 | 1144.2 | 704.5  | 810.3  | 863.3  | 790.0  | 733.0  | 728.9  | 728.9  |
| 60°   | 8591.9 | 8559.4 | 5155.2 | 961.0  | 667.8  | 769.6  | 838.8  | 769.6  | 712.6  | 716.7  | 716.7  |
| 62.5° | 9048.0 | 8860.7 | 5053.4 | 794.0  | 631.2  | 733.0  | 810.3  | 745.2  | 692.2  | 704.5  | 700.4  |
| 65°   | 9129.4 | 8693.7 | 4658.4 | 663.7  | 590.4  | 692.2  | 777.8  | 716.7  | 663.7  | 692.2  | 688.2  |
| 67.5° | 8530.9 | 7806.0 | 3917.3 | 578.2  | 549.7  | 647.4  | 741.1  | 676.0  | 631.2  | 671.9  | 659.7  |
| 70°   | 7236.0 | 6340.1 | 2899.3 | 513.1  | 509.0  | 594.5  | 692.2  | 627.1  | 586.4  | 606.7  | 590.4  |
| 72.5° | 5387.3 | 4576.9 | 1877.2 | 464.2  | 464.2  | 533.4  | 623.0  | 566.0  | 525.3  | 529.4  | 513.1  |
| 75°   | 3359.4 | 2813.8 | 1066.9 | 419.4  | 419.4  | 472.4  | 553.8  | 496.8  | 468.3  | 452.0  | 472.4  |
| 77.5° | 1527.0 | 1237.9 | 561.9  | 374.6  | 378.7  | 403.1  | 476.4  | 423.5  | 390.9  | 366.5  | 378.7  |
| 80°   | 566.0  | 504.9  | 366.5  | 321.7  | 329.8  | 333.9  | 382.8  | 338.0  | 309.5  | 293.2  | 285.0  |
| 82.5° | 293.2  | 272.8  | 248.4  | 256.5  | 268.8  | 256.5  | 297.3  | 252.5  | 219.9  | 207.7  | 175.1  |
| 85°   | 146.6  | 142.5  | 150.7  | 171.0  | 187.3  | 158.8  | 179.2  | 162.9  | 134.4  | 97.7   | 97.7   |
| 87.5° | 57.0   | 61.1   | 57.0   | 77.4   | 85.5   | 73.3   | 81.4   | 57.0   | 40.7   | 20.4   | 16.3   |
| 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)