

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: P572732

Luminaire Tested: **ARCH-S-PA2-110-727-U-T4W**

Issue Date: 10/13/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P572732  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2108-332-19)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/13/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA2-110-727-U-T4W  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 2700K, 1105mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 12532 lumens  
Efficiency: N/A  
Efficacy: 109.7 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B2 - U0 - G2

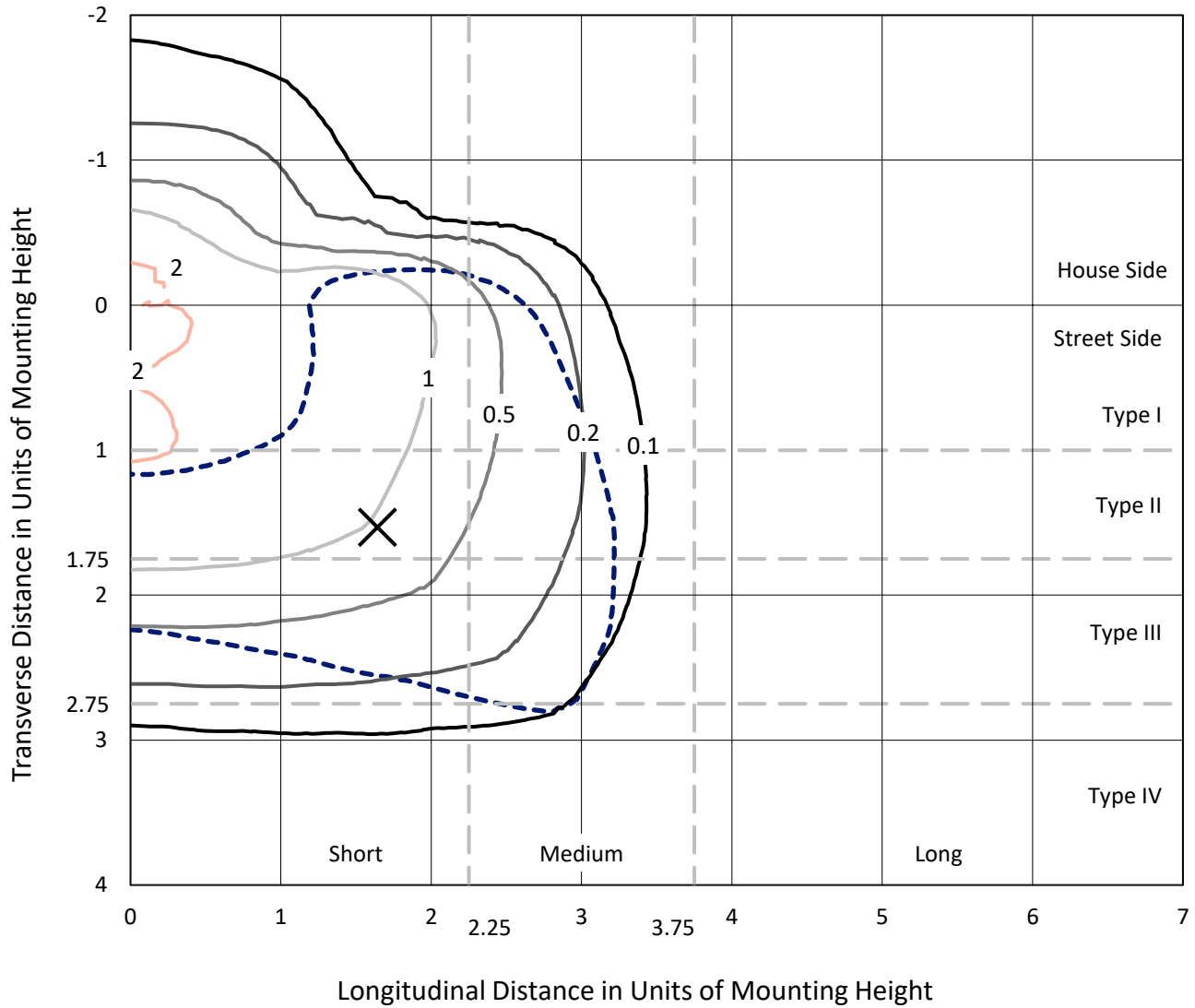
Input Watts (W): 114.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

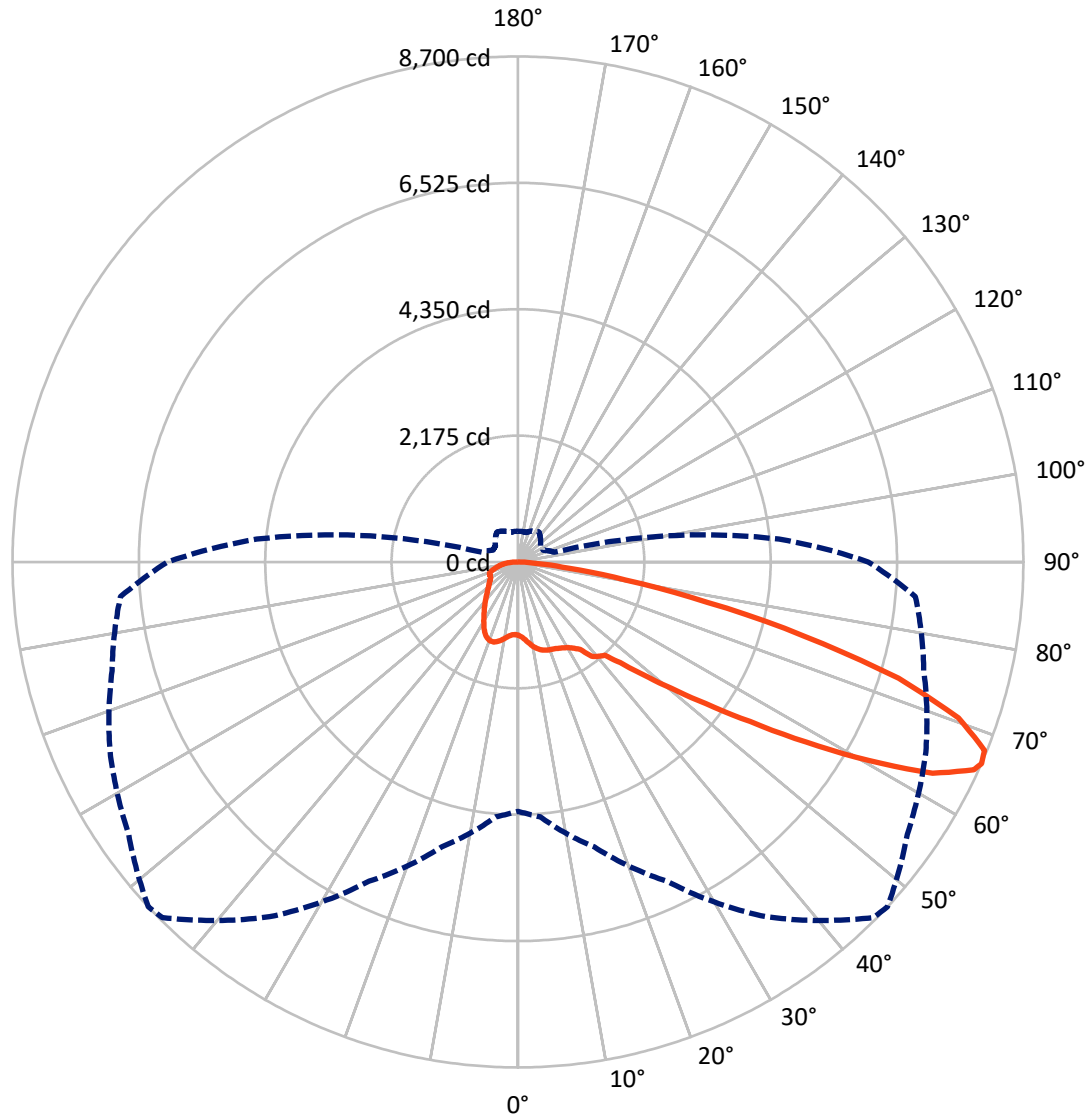
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.5 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 47-Deg Lateral    - - - Horizontal Cone Through 66-Deg Vertical

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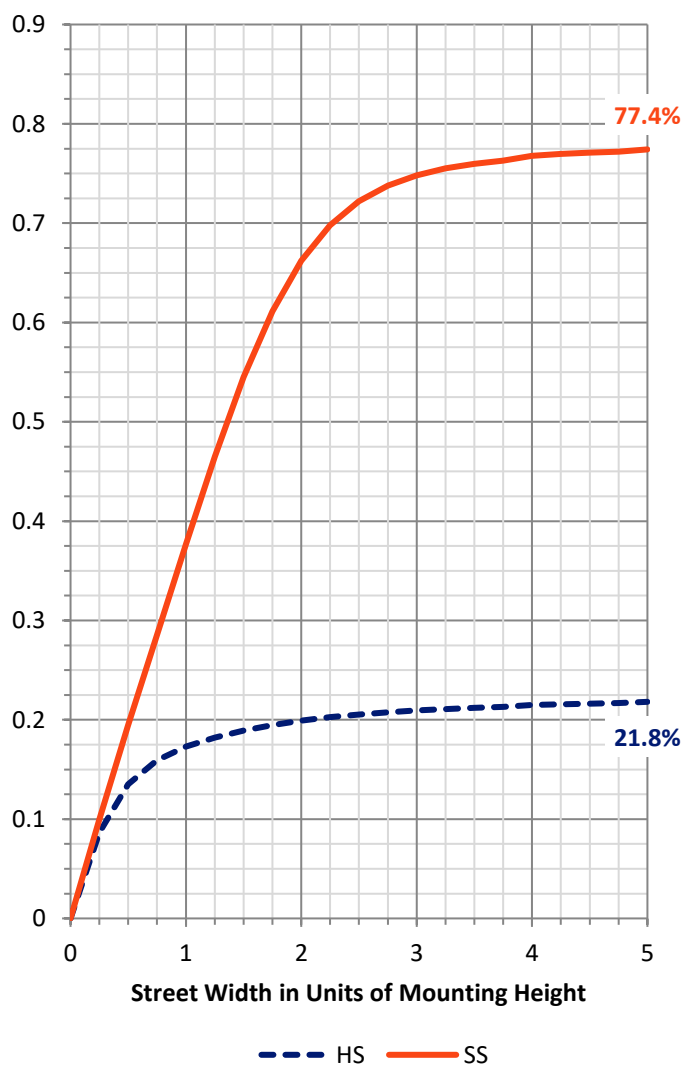
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 2786.2   | 0.0    | 2786.2  |
|                    | % Fixture | 22.2     | 0.0    | 22.2    |
| <b>Street Side</b> | Lumens    | 9745.8   | 0.0    | 9745.8  |
|                    | % Fixture | 77.8     | 0.0    | 77.8    |
| <b>Total</b>       | Lumens    | 12532.0  | 0.0    | 12532.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 128.2   | 1.0       |
| 10°-20°   | 420.6   | 3.4       |
| 20°-30°   | 701.5   | 5.6       |
| 30°-40°   | 1018.7  | 8.1       |
| 40°-50°   | 1558.0  | 12.4      |
| 50°-60°   | 2945.0  | 23.5      |
| 60°-70°   | 3805.4  | 30.4      |
| 70°-80°   | 1710.5  | 13.6      |
| 80°-90°   | 244.0   | 1.9       |
| 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°    | 12532.0 | 100.0     |
| 0°-180°   | 12532.0 | 100.0     |

**Coefficient of Utilization**

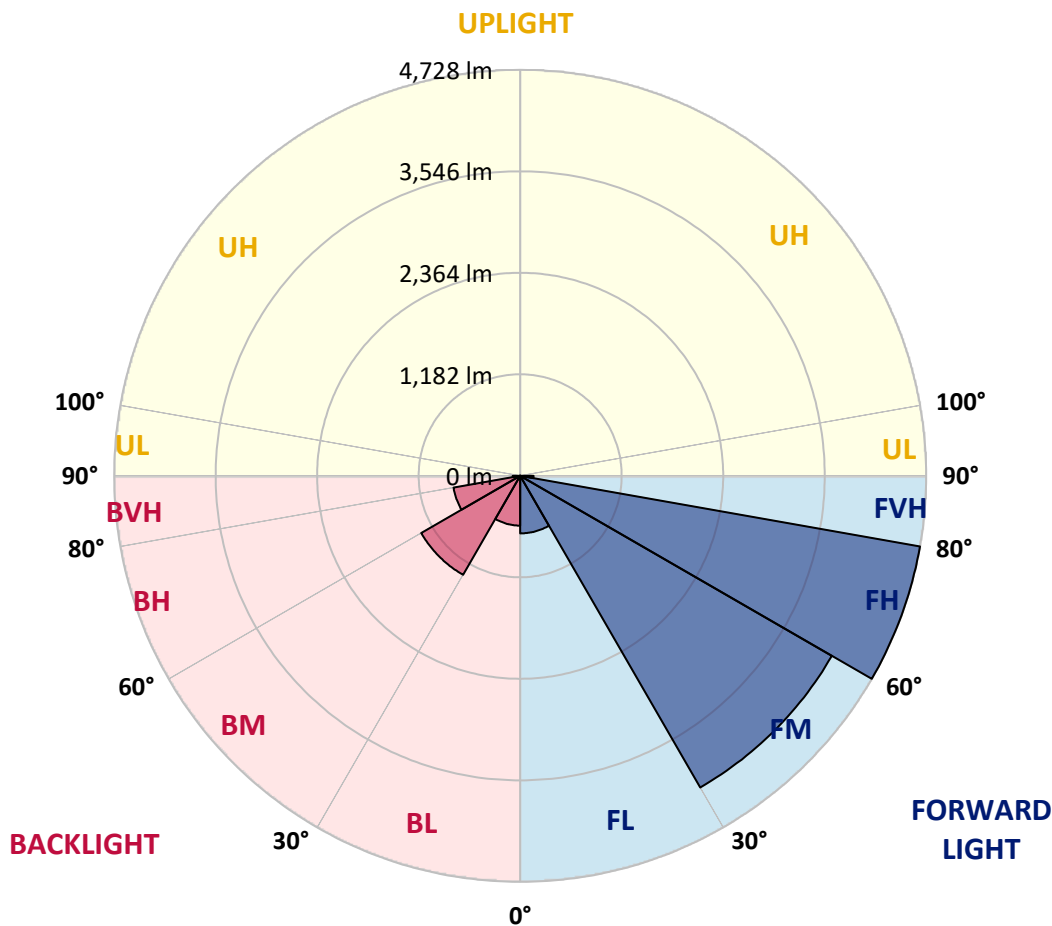


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|--------|-----------|-------------------------|------|---------|
|                |        |           | B                       | U    | G       |
| FL (0°-30°)    | 670.5  | 5.4       |                         |      |         |
| FM (30°-60°)   | 4190.9 | 33.4      |                         |      |         |
| FH (60°-80°)   | 4727.5 | 37.7      |                         |      | G2/5000 |
| FVH (80°-90°)  | 156.8  | 1.3       |                         |      | G2/225  |
| BL (0°-30°)    | 579.8  | 4.6       | B2/1000                 |      |         |
| BM (30°-60°)   | 1330.8 | 10.6      | B2/2500                 |      |         |
| BH (60°-80°)   | 788.4  | 6.3       | B2/1000                 |      | G2/1000 |
| BVH (80°-90°)  | 87.2   | 0.7       |                         |      | G1/100  |
| UL (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B2-U0-G2**  
 Type III Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 47°    | 55°    | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1259.8 | 1259.8 | 1259.8 | 1259.8 | 1259.8 | 1259.8 | 1259.8 | 1259.8 | 1259.8 | 1259.8 | 1259.8 |
| 2.5°  | 1331.4 | 1321.1 | 1314.3 | 1310.9 | 1304.1 | 1290.5 | 1290.5 | 1287.1 | 1273.5 | 1266.7 | 1263.3 |
| 5°    | 1436.9 | 1430.1 | 1413.1 | 1399.5 | 1379.0 | 1351.8 | 1348.4 | 1327.9 | 1300.7 | 1280.3 | 1266.7 |
| 7.5°  | 1539.1 | 1532.2 | 1515.2 | 1494.8 | 1460.7 | 1426.7 | 1416.5 | 1389.2 | 1345.0 | 1314.3 | 1290.5 |
| 10°   | 1627.6 | 1617.4 | 1596.9 | 1569.7 | 1532.2 | 1494.8 | 1484.6 | 1453.9 | 1409.7 | 1365.4 | 1324.5 |
| 12.5° | 1685.5 | 1678.7 | 1654.8 | 1620.8 | 1579.9 | 1542.5 | 1535.7 | 1508.4 | 1464.1 | 1416.5 | 1365.4 |
| 15°   | 1712.7 | 1709.3 | 1682.1 | 1648.0 | 1607.2 | 1576.5 | 1573.1 | 1549.3 | 1511.8 | 1464.1 | 1406.3 |
| 17.5° | 1705.9 | 1702.5 | 1678.7 | 1644.6 | 1614.0 | 1596.9 | 1596.9 | 1579.9 | 1549.3 | 1508.4 | 1447.1 |
| 20°   | 1671.9 | 1671.9 | 1651.4 | 1627.6 | 1610.6 | 1607.2 | 1607.2 | 1603.8 | 1583.3 | 1549.3 | 1488.0 |
| 22.5° | 1637.8 | 1637.8 | 1624.2 | 1607.2 | 1603.8 | 1617.4 | 1620.8 | 1627.6 | 1620.8 | 1593.5 | 1539.1 |
| 25°   | 1644.6 | 1641.2 | 1624.2 | 1603.8 | 1607.2 | 1637.8 | 1644.6 | 1661.6 | 1658.2 | 1637.8 | 1590.1 |
| 27.5° | 1719.5 | 1716.1 | 1671.9 | 1631.0 | 1627.6 | 1665.0 | 1671.9 | 1695.7 | 1695.7 | 1678.7 | 1648.0 |
| 30°   | 1906.8 | 1913.6 | 1831.9 | 1729.7 | 1678.7 | 1702.5 | 1709.3 | 1736.5 | 1750.2 | 1757.0 | 1733.1 |
| 32.5° | 2192.8 | 2182.6 | 2060.0 | 1893.2 | 1780.8 | 1757.0 | 1767.2 | 1791.0 | 1838.7 | 1852.3 | 1794.4 |
| 35°   | 2482.2 | 2489.0 | 2369.9 | 2158.8 | 1944.3 | 1855.7 | 1848.9 | 1883.0 | 1954.5 | 1893.2 | 1791.0 |
| 37.5° | 2751.2 | 2741.0 | 2601.4 | 2373.3 | 2158.8 | 2056.6 | 2060.0 | 2046.4 | 1985.1 | 1862.5 | 1814.9 |
| 40°   | 3044.1 | 3016.8 | 2901.1 | 2608.2 | 2335.8 | 2165.6 | 2134.9 | 2019.2 | 1968.1 | 1917.0 | 1910.2 |
| 42.5° | 3333.5 | 3336.9 | 3241.6 | 2952.1 | 2546.9 | 2243.9 | 2196.2 | 2077.0 | 2111.1 | 2100.9 | 2094.1 |
| 45°   | 3697.8 | 3697.8 | 3602.5 | 3333.5 | 2880.6 | 2536.7 | 2472.0 | 2329.0 | 2383.5 | 2424.4 | 2506.1 |
| 47.5° | 4031.5 | 4011.1 | 3983.8 | 3755.7 | 3316.5 | 2918.1 | 2890.8 | 2727.4 | 2870.4 | 2996.4 | 3163.2 |
| 50°   | 4385.6 | 4358.4 | 4341.4 | 4201.8 | 3888.5 | 3496.9 | 3415.2 | 3245.0 | 3558.2 | 3793.2 | 4103.0 |
| 52.5° | 4937.2 | 4889.6 | 4801.0 | 4722.7 | 4600.1 | 4147.3 | 4045.1 | 3919.1 | 4324.3 | 4620.6 | 5253.9 |
| 55°   | 5434.4 | 5393.5 | 5308.4 | 5366.3 | 5349.2 | 4937.2 | 4848.7 | 4729.5 | 5168.8 | 5529.7 | 6255.0 |
| 57.5° | 5618.2 | 5621.6 | 5737.4 | 6047.3 | 6210.7 | 5972.4 | 5846.4 | 5727.2 | 6098.3 | 6265.2 | 6918.9 |
| 60°   | 5703.4 | 5693.1 | 5992.8 | 6496.7 | 7027.9 | 7099.4 | 6939.4 | 6694.2 | 6833.8 | 6844.0 | 7480.8 |
| 62.5° | 5519.5 | 5546.7 | 5958.7 | 6684.0 | 7518.2 | 8032.4 | 8008.5 | 7579.5 | 7450.1 | 7307.1 | 7630.6 |
| 65°   | 4821.5 | 4858.9 | 5465.0 | 6350.3 | 7596.5 | 8597.6 | 8621.4 | 8120.9 | 7760.0 | 7361.6 | 7205.0 |
| 66°   | 4290.3 | 4402.7 | 5076.8 | 6060.9 | 7453.5 | 8655.5 | 8699.8 | 8178.8 | 7746.4 | 7232.2 | 6867.9 |
| 67.5° | 3599.1 | 3592.3 | 4344.8 | 5424.2 | 7055.1 | 8604.4 | 8662.3 | 8097.1 | 7562.5 | 6850.8 | 6193.7 |
| 70°   | 2203.0 | 2271.1 | 2918.1 | 4048.5 | 5839.6 | 7967.7 | 8046.0 | 7521.6 | 6769.1 | 5802.1 | 4579.7 |
| 72.5° | 1130.5 | 1242.8 | 1668.4 | 2632.1 | 4239.2 | 6585.3 | 6850.8 | 6316.3 | 5533.1 | 4198.4 | 2795.5 |
| 75°   | 599.3  | 592.5  | 786.6  | 1426.7 | 2707.0 | 4940.6 | 5080.2 | 4736.3 | 3823.8 | 2502.7 | 1423.3 |
| 77.5° | 320.1  | 337.1  | 412.0  | 732.1  | 1488.0 | 3156.4 | 3333.5 | 3054.3 | 2179.2 | 1280.3 | 681.0  |
| 80°   | 217.9  | 228.1  | 279.2  | 412.0  | 807.0  | 1712.7 | 1876.2 | 1627.6 | 1140.7 | 606.1  | 320.1  |
| 82.5° | 139.6  | 146.4  | 190.7  | 255.4  | 483.5  | 830.8  | 875.1  | 834.2  | 558.4  | 343.9  | 194.1  |
| 85°   | 85.1   | 88.5   | 115.8  | 163.4  | 303.0  | 337.1  | 350.7  | 354.1  | 313.3  | 224.7  | 105.6  |
| 87.5° | 40.9   | 44.3   | 64.7   | 81.7   | 143.0  | 122.6  | 112.4  | 115.8  | 173.7  | 132.8  | 47.7   |
| 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°    | 1259.8 | 1259.8 | 1259.8 | 1259.8 | 1259.8 | 1259.8 | 1259.8 | 1259.8 | 1259.8 | 1259.8 | 1259.8 |
| 2.5°  | 1259.8 | 1256.4 | 1249.6 | 1246.2 | 1249.6 | 1249.6 | 1249.6 | 1253.0 | 1259.8 | 1259.8 | 1263.3 |
| 5°    | 1259.8 | 1253.0 | 1246.2 | 1246.2 | 1253.0 | 1259.8 | 1266.7 | 1280.3 | 1287.1 | 1290.5 | 1290.5 |
| 7.5°  | 1276.9 | 1270.1 | 1263.3 | 1263.3 | 1273.5 | 1287.1 | 1300.7 | 1317.7 | 1334.8 | 1348.4 | 1348.4 |
| 10°   | 1310.9 | 1300.7 | 1293.9 | 1297.3 | 1314.3 | 1331.4 | 1348.4 | 1368.8 | 1385.8 | 1402.9 | 1402.9 |
| 12.5° | 1348.4 | 1338.2 | 1327.9 | 1334.8 | 1358.6 | 1379.0 | 1396.0 | 1406.3 | 1423.3 | 1436.9 | 1436.9 |
| 15°   | 1385.8 | 1368.8 | 1365.4 | 1379.0 | 1402.9 | 1416.5 | 1423.3 | 1423.3 | 1430.1 | 1443.7 | 1443.7 |
| 17.5° | 1426.7 | 1409.7 | 1406.3 | 1419.9 | 1440.3 | 1440.3 | 1426.7 | 1416.5 | 1413.1 | 1423.3 | 1426.7 |
| 20°   | 1467.6 | 1450.5 | 1450.5 | 1460.7 | 1457.3 | 1433.5 | 1409.7 | 1392.6 | 1379.0 | 1389.2 | 1392.6 |
| 22.5° | 1518.6 | 1501.6 | 1494.8 | 1481.2 | 1450.5 | 1402.9 | 1365.4 | 1345.0 | 1334.8 | 1341.6 | 1348.4 |
| 25°   | 1569.7 | 1556.1 | 1539.1 | 1491.4 | 1419.9 | 1345.0 | 1297.3 | 1280.3 | 1283.7 | 1297.3 | 1304.1 |
| 27.5° | 1634.4 | 1627.6 | 1586.7 | 1484.6 | 1365.4 | 1263.3 | 1215.6 | 1212.2 | 1225.8 | 1246.2 | 1256.4 |
| 30°   | 1712.7 | 1702.5 | 1631.0 | 1464.1 | 1290.5 | 1167.9 | 1133.9 | 1140.7 | 1161.1 | 1178.1 | 1188.3 |
| 32.5° | 1767.2 | 1760.4 | 1651.4 | 1416.5 | 1198.6 | 1082.8 | 1055.5 | 1055.5 | 1065.8 | 1089.6 | 1099.8 |
| 35°   | 1784.2 | 1811.5 | 1665.0 | 1345.0 | 1089.6 | 1007.9 | 980.6  | 963.6  | 963.6  | 984.0  | 990.9  |
| 37.5° | 1842.1 | 1903.4 | 1671.9 | 1249.6 | 1001.1 | 939.8  | 905.7  | 875.1  | 864.9  | 861.5  | 861.5  |
| 40°   | 1974.9 | 2046.4 | 1668.4 | 1127.1 | 915.9  | 871.7  | 830.8  | 796.8  | 769.5  | 732.1  | 735.5  |
| 42.5° | 2206.4 | 2260.9 | 1658.2 | 997.7  | 841.0  | 810.4  | 769.5  | 728.7  | 684.4  | 643.5  | 640.1  |
| 45°   | 2652.5 | 2570.8 | 1631.0 | 885.3  | 772.9  | 755.9  | 718.5  | 670.8  | 616.3  | 578.8  | 578.8  |
| 47.5° | 3357.3 | 3132.6 | 1614.0 | 779.7  | 711.6  | 708.2  | 674.2  | 623.1  | 568.6  | 541.4  | 538.0  |
| 50°   | 4324.3 | 3908.9 | 1641.2 | 704.8  | 657.2  | 667.4  | 640.1  | 592.5  | 548.2  | 524.4  | 521.0  |
| 52.5° | 5434.4 | 4743.2 | 1671.9 | 657.2  | 616.3  | 636.7  | 623.1  | 578.8  | 534.6  | 514.2  | 510.7  |
| 55°   | 6292.4 | 5420.7 | 1627.6 | 612.9  | 575.4  | 606.1  | 606.1  | 565.2  | 527.8  | 507.3  | 507.3  |
| 57.5° | 6895.1 | 5693.1 | 1474.4 | 572.0  | 541.4  | 578.8  | 589.1  | 558.4  | 524.4  | 517.6  | 517.6  |
| 60°   | 7153.9 | 5679.5 | 1205.4 | 534.6  | 517.6  | 551.6  | 578.8  | 551.6  | 531.2  | 548.2  | 551.6  |
| 62.5° | 7014.3 | 5383.3 | 936.4  | 507.3  | 500.5  | 544.8  | 589.1  | 578.8  | 555.0  | 568.6  | 575.4  |
| 65°   | 6384.4 | 4862.3 | 704.8  | 483.5  | 480.1  | 548.2  | 616.3  | 595.9  | 538.0  | 541.4  | 544.8  |
| 66°   | 6030.2 | 4511.6 | 646.9  | 476.7  | 473.3  | 551.6  | 629.9  | 589.1  | 524.4  | 531.2  | 527.8  |
| 67.5° | 5274.3 | 3960.0 | 568.6  | 463.1  | 459.7  | 551.6  | 646.9  | 575.4  | 507.3  | 517.6  | 507.3  |
| 70°   | 3868.1 | 2802.3 | 486.9  | 446.1  | 439.2  | 541.4  | 643.5  | 548.2  | 469.9  | 463.1  | 446.1  |
| 72.5° | 2243.9 | 1695.7 | 432.4  | 425.6  | 408.6  | 476.7  | 602.7  | 503.9  | 429.0  | 408.6  | 391.6  |
| 75°   | 1103.2 | 861.5  | 384.8  | 401.8  | 357.5  | 418.8  | 544.8  | 466.5  | 395.0  | 367.7  | 357.5  |
| 77.5° | 507.3  | 435.8  | 347.3  | 367.7  | 316.7  | 360.9  | 497.1  | 425.6  | 350.7  | 309.9  | 299.6  |
| 80°   | 275.8  | 272.4  | 292.8  | 306.4  | 265.6  | 316.7  | 439.2  | 371.1  | 296.2  | 252.0  | 238.3  |
| 82.5° | 170.2  | 173.7  | 214.5  | 234.9  | 207.7  | 275.8  | 388.2  | 309.9  | 224.7  | 177.1  | 180.5  |
| 85°   | 88.5   | 98.7   | 143.0  | 156.6  | 136.2  | 204.3  | 292.8  | 207.7  | 126.0  | 91.9   | 91.9   |
| 87.5° | 30.6   | 40.9   | 71.5   | 85.1   | 74.9   | 122.6  | 183.9  | 98.7   | 27.2   | 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)