

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: P573405

Luminaire Tested: **ARCH-S-PA2-70-740-U-T3**

Issue Date: 10/13/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P573405  
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-PA2-70-740-U-T3  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 4000K, 725mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10707 lumens  
Efficiency: N/A  
Efficacy: 146.3 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B2 - U0 - G2

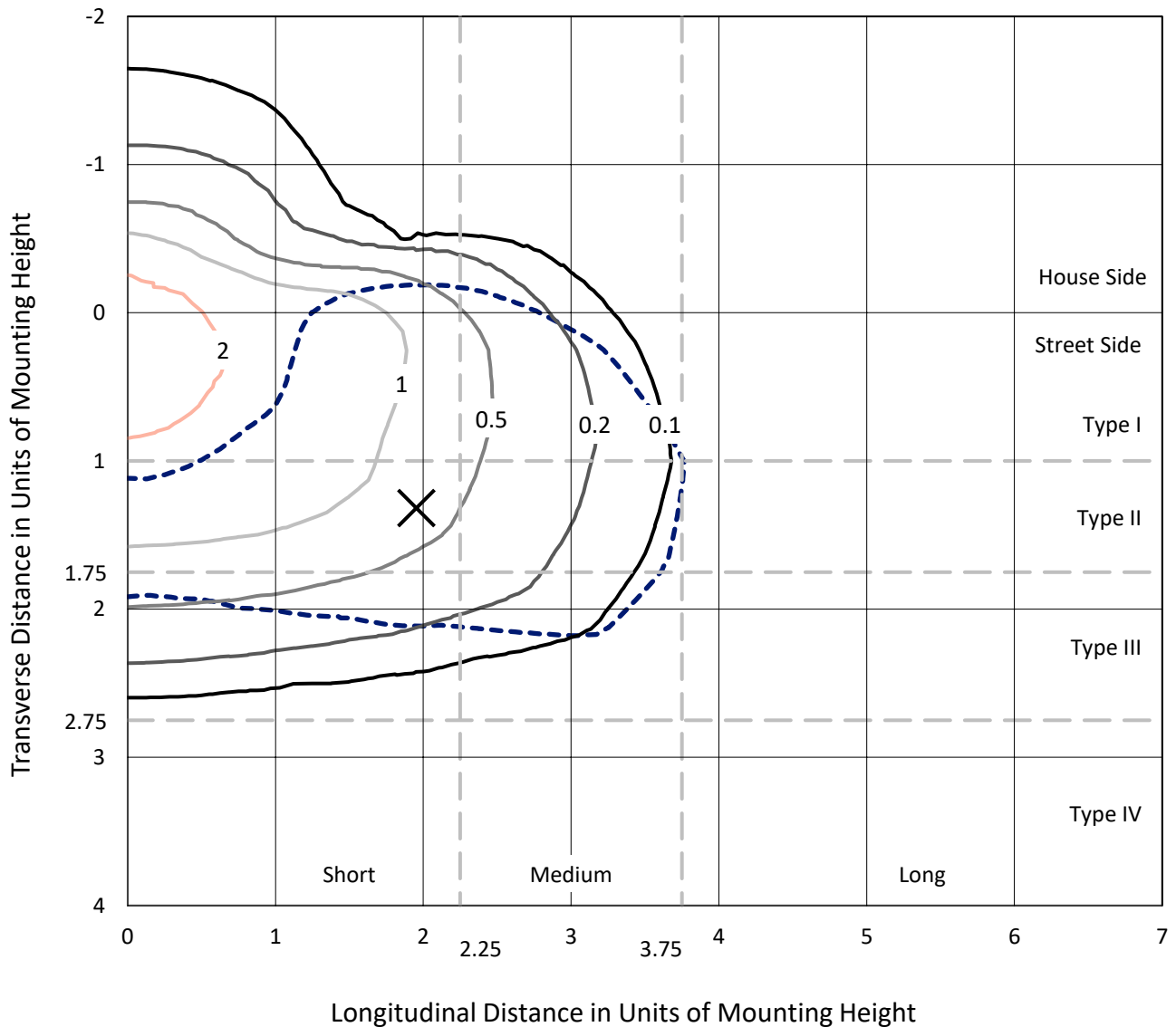
Input Watts (W): 73.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

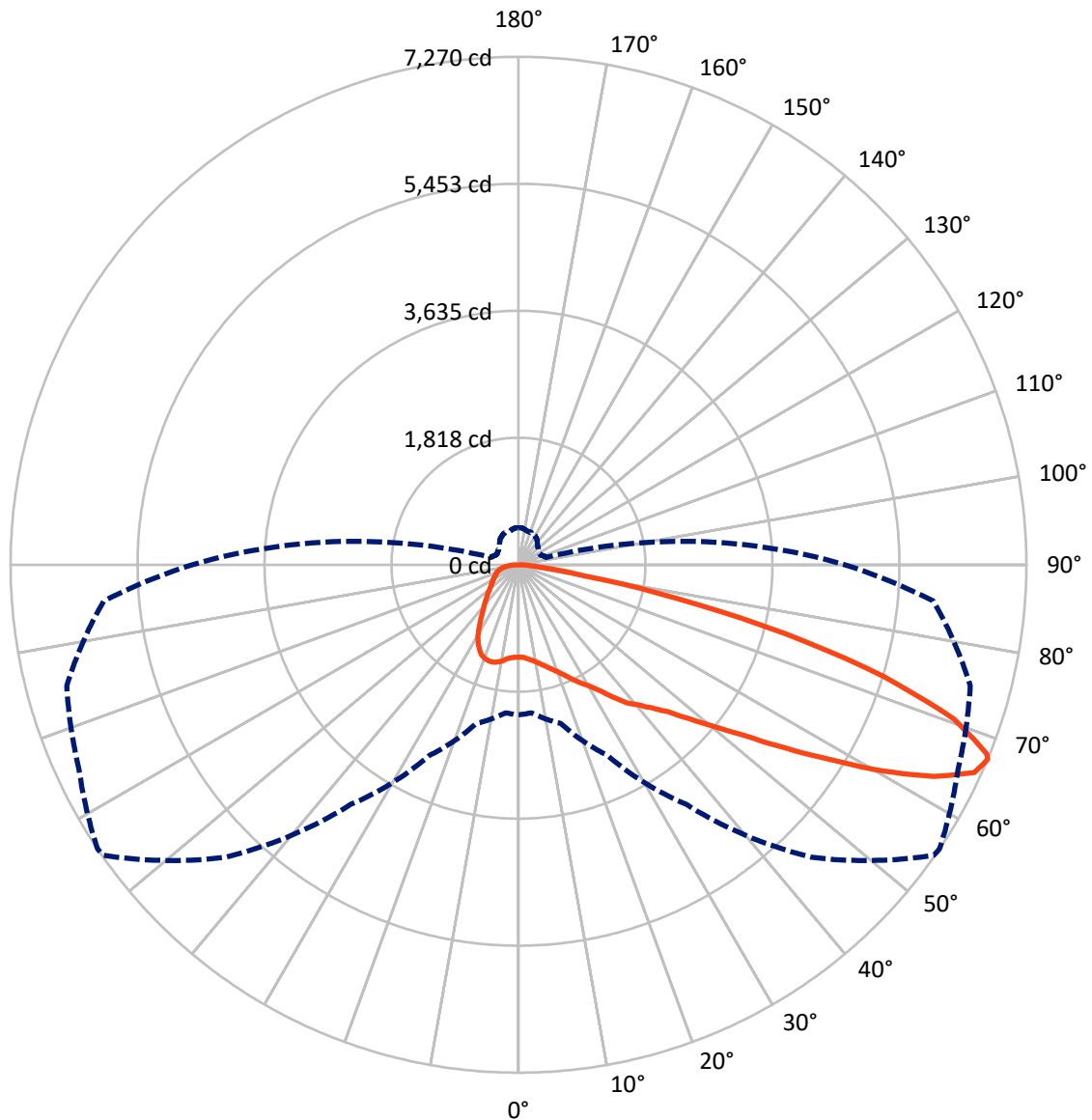
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.3 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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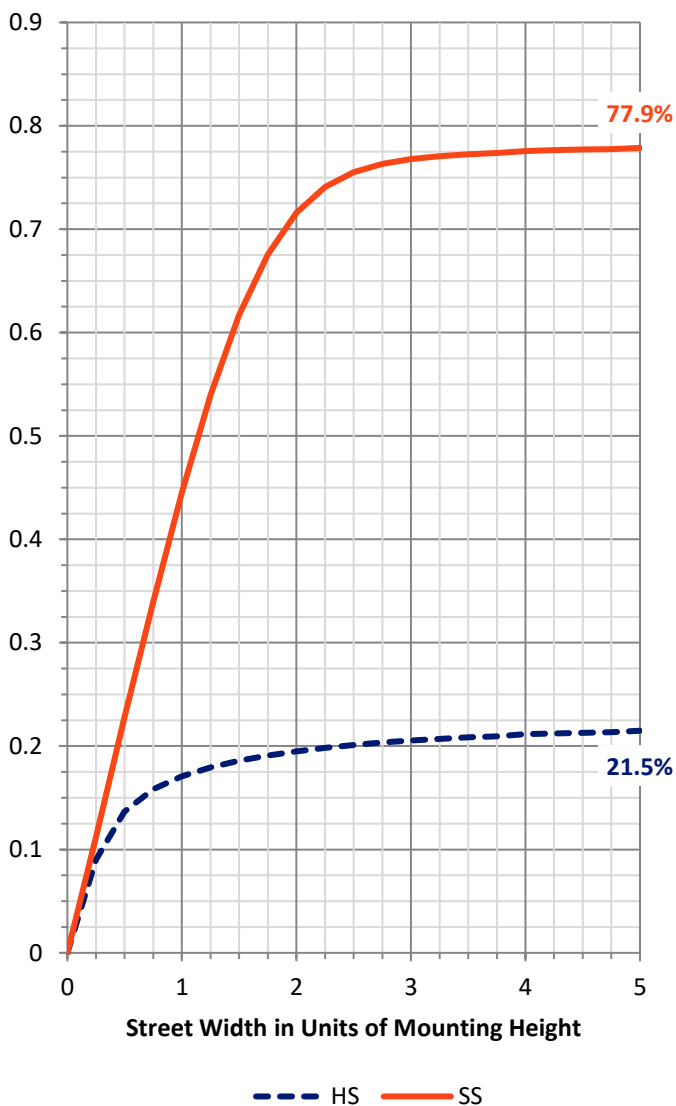
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 2342.5   | 0.0    | 2342.5  |
|                    | % Fixture | 21.9     | 0.0    | 21.9    |
| <b>Street Side</b> | Lumens    | 8364.5   | 0.0    | 8364.5  |
|                    | % Fixture | 78.1     | 0.0    | 78.1    |
| <b>Total</b>       | Lumens    | 10707.0  | 0.0    | 10707.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 130.0   | 1.2       |
| 10°-20°   | 417.1   | 3.9       |
| 20°-30°   | 725.9   | 6.8       |
| 30°-40°   | 1064.3  | 9.9       |
| 40°-50°   | 1557.2  | 14.5      |
| 50°-60°   | 2433.7  | 22.7      |
| 60°-70°   | 2892.6  | 27.0      |
| 70°-80°   | 1317.4  | 12.3      |
| 80°-90°   | 168.9   | 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°    | 10707.0 | 100.0     |
| 0°-180°   | 10707.0 | 100.0     |

**Coefficient of Utilization**

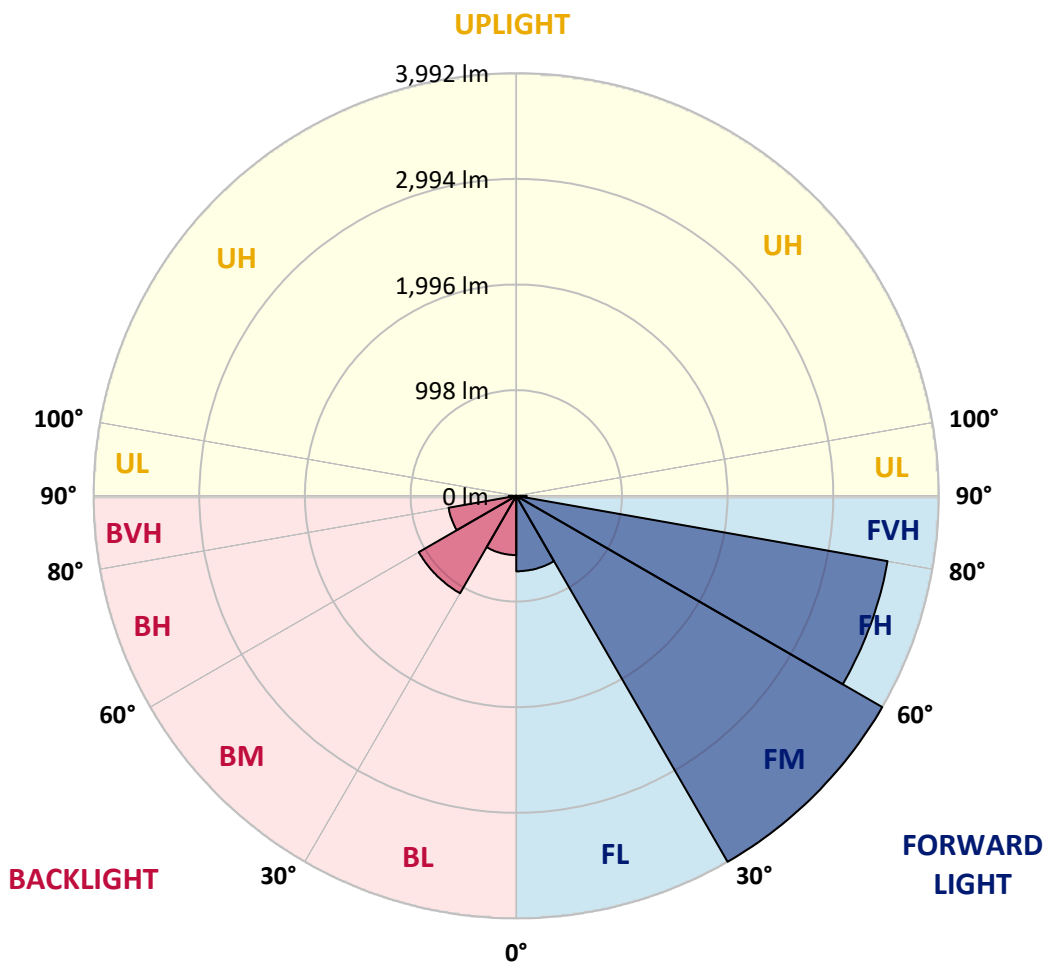


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|--------|-----------|-------------------------|------|---------|
|                |        |           | B                       | U    | G       |
| FL (0°-30°)    | 713.2  | 6.7       |                         |      |         |
| FM (30°-60°)   | 3991.9 | 37.3      |                         |      |         |
| FH (60°-80°)   | 3561.0 | 33.3      |                         |      | G2/5000 |
| FVH (80°-90°)  | 98.5   | 0.9       |                         |      | G1/100  |
| BL (0°-30°)    | 559.8  | 5.2       | B2/1000                 |      |         |
| BM (30°-60°)   | 1063.3 | 9.9       | B2/2500                 |      |         |
| BH (60°-80°)   | 648.9  | 6.1       | B2/1000                 |      | G2/1000 |
| BVH (80°-90°)  | 70.4   | 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°    | 55°    | 56°    | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1321.9 | 1321.9 | 1321.9 | 1321.9 | 1321.9 | 1321.9 | 1321.9 | 1321.9 | 1321.9 | 1321.9 | 1321.9 |
| 2.5°  | 1342.2 | 1336.4 | 1333.5 | 1336.4 | 1333.5 | 1327.7 | 1330.6 | 1327.7 | 1324.8 | 1321.9 | 1321.9 |
| 5°    | 1359.6 | 1353.8 | 1350.9 | 1353.8 | 1356.7 | 1350.9 | 1350.9 | 1350.9 | 1342.2 | 1339.3 | 1333.5 |
| 7.5°  | 1371.2 | 1362.5 | 1362.5 | 1368.3 | 1374.1 | 1377.0 | 1382.8 | 1379.9 | 1371.2 | 1365.4 | 1353.8 |
| 10°   | 1408.9 | 1397.3 | 1397.3 | 1397.3 | 1403.1 | 1408.9 | 1414.7 | 1417.6 | 1414.7 | 1411.8 | 1403.1 |
| 12.5° | 1466.8 | 1455.2 | 1455.2 | 1455.2 | 1455.2 | 1452.3 | 1461.0 | 1463.9 | 1469.7 | 1469.7 | 1455.2 |
| 15°   | 1545.1 | 1530.6 | 1524.8 | 1513.2 | 1510.3 | 1504.5 | 1516.1 | 1516.1 | 1524.8 | 1527.7 | 1513.2 |
| 17.5° | 1620.5 | 1603.1 | 1597.3 | 1585.7 | 1574.1 | 1559.6 | 1571.2 | 1574.1 | 1591.5 | 1594.4 | 1571.2 |
| 20°   | 1698.8 | 1693.0 | 1684.3 | 1666.9 | 1646.6 | 1632.1 | 1643.7 | 1640.8 | 1655.3 | 1661.1 | 1632.1 |
| 22.5° | 1800.2 | 1785.7 | 1779.9 | 1756.7 | 1733.5 | 1719.0 | 1719.0 | 1724.8 | 1739.3 | 1739.3 | 1695.9 |
| 25°   | 1922.0 | 1901.7 | 1887.2 | 1861.1 | 1832.1 | 1814.7 | 1817.6 | 1823.4 | 1843.7 | 1829.2 | 1762.5 |
| 27.5° | 2072.7 | 2052.4 | 2032.1 | 1979.9 | 1951.0 | 1916.2 | 1913.3 | 1919.1 | 1951.0 | 1913.3 | 1826.3 |
| 30°   | 2214.8 | 2206.1 | 2188.7 | 2148.1 | 2101.7 | 2043.7 | 2017.6 | 2020.5 | 2043.7 | 1991.5 | 1881.4 |
| 32.5° | 2336.5 | 2324.9 | 2316.2 | 2287.2 | 2255.3 | 2185.8 | 2151.0 | 2153.9 | 2151.0 | 2087.2 | 1948.1 |
| 35°   | 2481.5 | 2464.1 | 2458.3 | 2432.2 | 2391.6 | 2345.2 | 2330.7 | 2324.9 | 2307.5 | 2220.6 | 2035.0 |
| 37.5° | 2620.6 | 2603.2 | 2594.5 | 2580.0 | 2548.1 | 2507.5 | 2507.5 | 2504.6 | 2469.9 | 2348.1 | 2122.0 |
| 40°   | 2785.8 | 2765.5 | 2739.5 | 2730.8 | 2704.7 | 2675.7 | 2652.5 | 2638.0 | 2577.1 | 2467.0 | 2290.1 |
| 42.5° | 2985.9 | 2974.3 | 2959.8 | 2922.1 | 2881.5 | 2875.7 | 2809.0 | 2803.2 | 2759.7 | 2696.0 | 2527.8 |
| 45°   | 3272.8 | 3249.7 | 3229.4 | 3217.8 | 3168.5 | 3116.3 | 3023.5 | 3000.4 | 3000.4 | 2985.9 | 2806.1 |
| 47.5° | 3562.7 | 3522.2 | 3551.1 | 3542.4 | 3530.9 | 3472.9 | 3293.1 | 3296.0 | 3290.2 | 3327.9 | 3214.9 |
| 50°   | 3757.0 | 3733.8 | 3814.9 | 3852.6 | 3933.8 | 3933.8 | 3675.8 | 3643.9 | 3667.1 | 3777.3 | 3632.3 |
| 52.5° | 3907.7 | 3893.2 | 3986.0 | 4133.8 | 4374.4 | 4397.6 | 4130.9 | 4064.2 | 4096.1 | 4252.7 | 4194.7 |
| 55°   | 4029.5 | 4015.0 | 4122.2 | 4380.2 | 4765.8 | 4907.8 | 4655.6 | 4626.6 | 4562.9 | 4731.0 | 4748.4 |
| 57.5° | 4101.9 | 4070.0 | 4232.4 | 4577.4 | 5084.7 | 5412.2 | 5270.2 | 5261.5 | 5113.6 | 5270.2 | 5348.5 |
| 60°   | 3991.8 | 3971.5 | 4194.7 | 4658.5 | 5342.7 | 5887.7 | 5992.0 | 5992.0 | 5728.2 | 5812.3 | 5907.9 |
| 62.5° | 3635.2 | 3609.1 | 3843.9 | 4470.1 | 5374.5 | 6276.1 | 6708.0 | 6673.3 | 6319.6 | 6316.7 | 6232.6 |
| 65°   | 2956.9 | 2925.0 | 3188.8 | 3849.7 | 4971.6 | 6322.5 | 7192.2 | 7171.9 | 6763.1 | 6647.2 | 6252.9 |
| 67°   | 2148.1 | 2127.8 | 2353.9 | 3009.1 | 4188.9 | 5919.5 | 7253.0 | 7270.4 | 6939.9 | 6693.5 | 5960.1 |
| 67.5° | 1927.8 | 1924.9 | 2113.3 | 2762.6 | 3959.9 | 5771.7 | 7212.4 | 7229.8 | 6937.0 | 6655.9 | 5844.2 |
| 70°   | 898.7  | 939.2  | 1116.1 | 1582.8 | 2669.9 | 4545.5 | 6545.7 | 6612.4 | 6566.0 | 6221.0 | 4922.3 |
| 72.5° | 417.4  | 434.8  | 513.1  | 765.3  | 1435.0 | 2930.8 | 5305.0 | 5464.4 | 5667.3 | 5336.9 | 3899.0 |
| 75°   | 258.0  | 263.8  | 307.3  | 397.1  | 675.4  | 1408.9 | 3777.3 | 3951.2 | 4258.5 | 4015.0 | 2493.0 |
| 77.5° | 202.9  | 205.8  | 234.8  | 284.1  | 394.2  | 605.9  | 2072.7 | 2290.1 | 2690.2 | 2374.2 | 1255.2 |
| 80°   | 150.7  | 156.5  | 179.7  | 220.3  | 278.3  | 310.2  | 881.3  | 962.4  | 1298.7 | 994.3  | 521.8  |
| 82.5° | 110.2  | 116.0  | 139.1  | 159.4  | 194.2  | 197.1  | 359.5  | 379.8  | 556.6  | 402.9  | 226.1  |
| 85°   | 92.8   | 92.8   | 107.3  | 118.9  | 130.5  | 110.2  | 176.8  | 173.9  | 214.5  | 182.6  | 89.9   |
| 87.5° | 43.5   | 46.4   | 101.5  | 75.4   | 63.8   | 46.4   | 52.2   | 55.1   | 66.7   | 72.5   | 34.8   |
| 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°    | 1321.9 | 1321.9 | 1321.9 | 1321.9 | 1321.9 | 1321.9 | 1321.9 | 1321.9 | 1321.9 | 1321.9 | 1321.9 |
| 2.5°  | 1319.0 | 1319.0 | 1319.0 | 1321.9 | 1324.8 | 1324.8 | 1327.7 | 1327.7 | 1330.6 | 1333.5 | 1339.3 |
| 5°    | 1330.6 | 1330.6 | 1327.7 | 1330.6 | 1336.4 | 1339.3 | 1345.1 | 1350.9 | 1356.7 | 1362.5 | 1365.4 |
| 7.5°  | 1353.8 | 1350.9 | 1350.9 | 1350.9 | 1356.7 | 1362.5 | 1371.2 | 1377.0 | 1385.7 | 1388.6 | 1394.4 |
| 10°   | 1397.3 | 1391.5 | 1391.5 | 1394.4 | 1397.3 | 1388.6 | 1385.7 | 1382.8 | 1391.5 | 1397.3 | 1403.1 |
| 12.5° | 1449.4 | 1443.6 | 1440.7 | 1432.1 | 1420.5 | 1403.1 | 1388.6 | 1377.0 | 1379.9 | 1385.7 | 1394.4 |
| 15°   | 1504.5 | 1492.9 | 1487.1 | 1466.8 | 1437.9 | 1400.2 | 1377.0 | 1362.5 | 1362.5 | 1362.5 | 1371.2 |
| 17.5° | 1562.5 | 1550.9 | 1527.7 | 1490.0 | 1435.0 | 1382.8 | 1353.8 | 1327.7 | 1316.1 | 1313.2 | 1319.0 |
| 20°   | 1617.6 | 1600.2 | 1562.5 | 1504.5 | 1417.6 | 1348.0 | 1310.3 | 1266.8 | 1249.4 | 1237.8 | 1243.6 |
| 22.5° | 1669.8 | 1646.6 | 1594.4 | 1504.5 | 1388.6 | 1295.8 | 1229.1 | 1171.2 | 1142.2 | 1136.4 | 1139.3 |
| 25°   | 1724.8 | 1695.9 | 1626.3 | 1487.1 | 1324.8 | 1217.5 | 1124.8 | 1063.9 | 1026.2 | 1020.4 | 1029.1 |
| 27.5° | 1779.9 | 1736.4 | 1652.4 | 1440.7 | 1252.3 | 1110.3 | 1011.7 | 953.7  | 933.4  | 921.8  | 924.7  |
| 30°   | 1826.3 | 1785.7 | 1678.5 | 1377.0 | 1153.8 | 985.6  | 895.8  | 869.7  | 855.2  | 849.4  | 849.4  |
| 32.5° | 1887.2 | 1849.5 | 1695.9 | 1301.6 | 1037.8 | 872.6  | 814.6  | 794.3  | 782.7  | 768.2  | 771.1  |
| 35°   | 1962.6 | 1927.8 | 1687.2 | 1205.9 | 927.6  | 797.2  | 750.8  | 721.8  | 695.7  | 675.4  | 672.5  |
| 37.5° | 2064.0 | 2037.9 | 1643.7 | 1090.0 | 826.2  | 742.1  | 695.7  | 658.0  | 620.4  | 588.5  | 582.7  |
| 40°   | 2232.1 | 2171.3 | 1579.9 | 962.4  | 756.6  | 698.6  | 643.6  | 597.2  | 550.8  | 516.0  | 507.3  |
| 42.5° | 2446.7 | 2319.1 | 1492.9 | 832.0  | 698.6  | 652.3  | 597.2  | 536.3  | 492.8  | 460.9  | 460.9  |
| 45°   | 2696.0 | 2478.6 | 1388.6 | 733.4  | 637.8  | 605.9  | 539.2  | 487.0  | 460.9  | 440.6  | 437.7  |
| 47.5° | 2991.7 | 2638.0 | 1255.2 | 655.1  | 588.5  | 565.3  | 498.6  | 466.7  | 449.3  | 431.9  | 429.0  |
| 50°   | 3388.8 | 2852.5 | 1156.7 | 588.5  | 539.2  | 518.9  | 487.0  | 460.9  | 443.5  | 431.9  | 429.0  |
| 52.5° | 3843.9 | 3127.9 | 1087.1 | 536.3  | 498.6  | 489.9  | 484.1  | 463.8  | 446.4  | 437.7  | 434.8  |
| 55°   | 4336.7 | 3467.1 | 1020.4 | 492.8  | 466.7  | 478.3  | 489.9  | 469.6  | 458.0  | 446.4  | 440.6  |
| 57.5° | 4800.6 | 3754.1 | 913.2  | 455.1  | 443.5  | 463.8  | 487.0  | 472.5  | 458.0  | 449.3  | 446.4  |
| 60°   | 5116.5 | 3899.0 | 765.3  | 420.3  | 420.3  | 443.5  | 478.3  | 458.0  | 443.5  | 446.4  | 446.4  |
| 62.5° | 5218.0 | 3843.9 | 605.9  | 388.5  | 397.1  | 420.3  | 452.2  | 440.6  | 434.8  | 449.3  | 449.3  |
| 65°   | 5067.3 | 3620.7 | 484.1  | 362.4  | 374.0  | 391.4  | 437.7  | 449.3  | 466.7  | 498.6  | 501.5  |
| 67°   | 4673.0 | 3261.3 | 408.7  | 342.1  | 353.7  | 382.7  | 455.1  | 495.7  | 495.7  | 530.5  | 530.5  |
| 67.5° | 4557.1 | 3139.5 | 397.1  | 336.3  | 350.8  | 382.7  | 463.8  | 507.3  | 495.7  | 536.3  | 536.3  |
| 70°   | 3704.8 | 2469.9 | 336.3  | 318.9  | 339.2  | 402.9  | 501.5  | 510.2  | 484.1  | 521.8  | 518.9  |
| 72.5° | 2748.2 | 1785.7 | 307.3  | 301.5  | 316.0  | 379.8  | 498.6  | 489.9  | 452.2  | 463.8  | 455.1  |
| 75°   | 1698.8 | 1034.9 | 284.1  | 278.3  | 287.0  | 336.3  | 460.9  | 446.4  | 402.9  | 394.2  | 385.6  |
| 77.5° | 820.4  | 524.7  | 243.5  | 252.2  | 260.9  | 292.8  | 405.8  | 391.4  | 353.7  | 333.4  | 330.5  |
| 80°   | 356.6  | 269.6  | 208.7  | 223.2  | 226.1  | 249.3  | 336.3  | 318.9  | 284.1  | 252.2  | 252.2  |
| 82.5° | 176.8  | 150.7  | 165.2  | 185.5  | 179.7  | 200.0  | 263.8  | 234.8  | 208.7  | 173.9  | 168.1  |
| 85°   | 81.2   | 87.0   | 121.8  | 139.1  | 121.8  | 124.7  | 179.7  | 165.2  | 130.5  | 98.6   | 101.5  |
| 87.5° | 29.0   | 40.6   | 69.6   | 84.1   | 60.9   | 58.0   | 95.7   | 69.6   | 40.6   | 11.6   | 14.5   |
| 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)