

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: P573461

Luminaire Tested: **ARCH-S-PA2-80-727-U-T4W**

Issue Date: 10/13/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P573461  
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-PA2-80-727-U-T4W  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 2700K, 820mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9861 lumens  
Efficiency: N/A  
Efficacy: 118.8 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B2 - U0 - G2

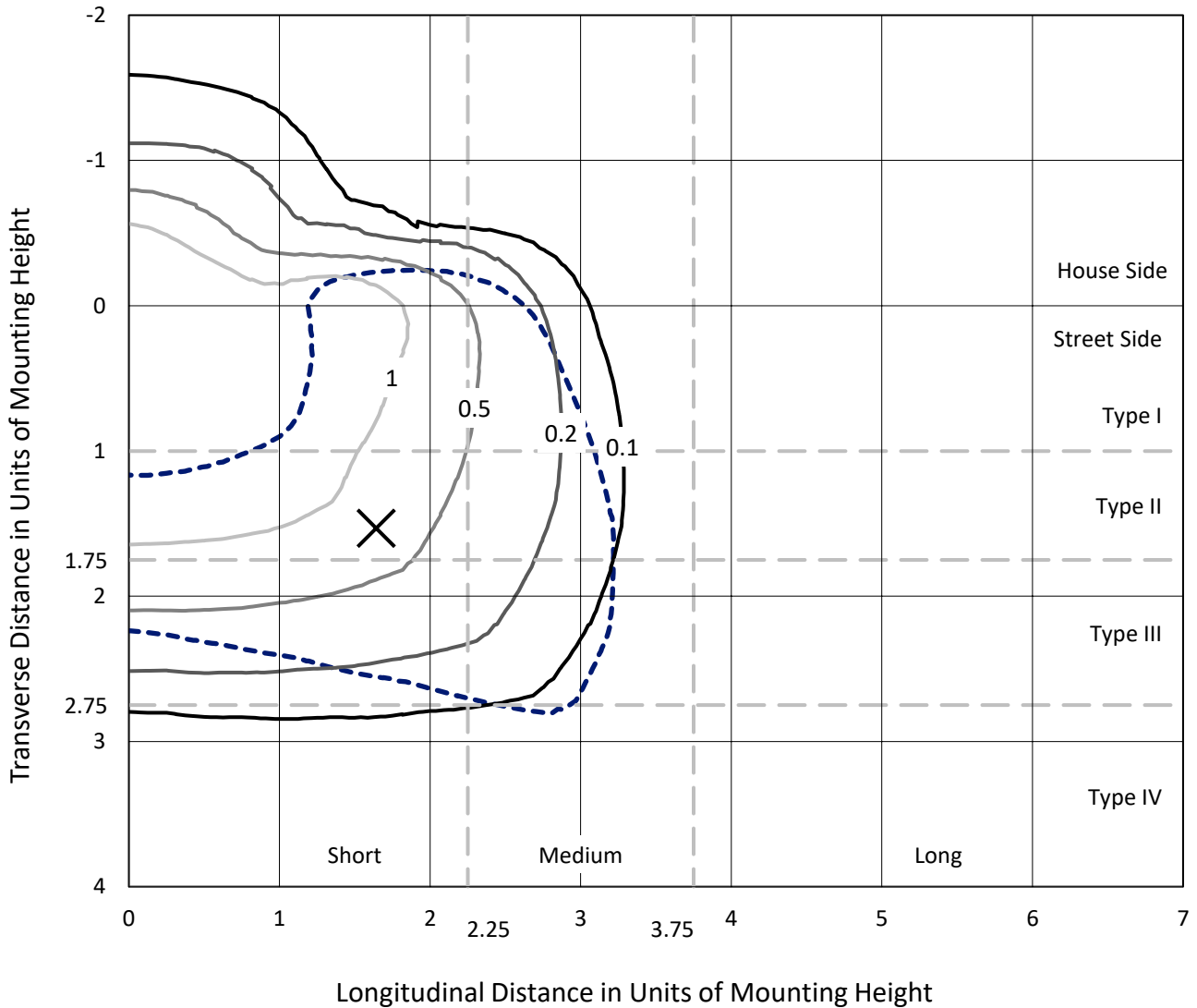
Input Watts (W): 83  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

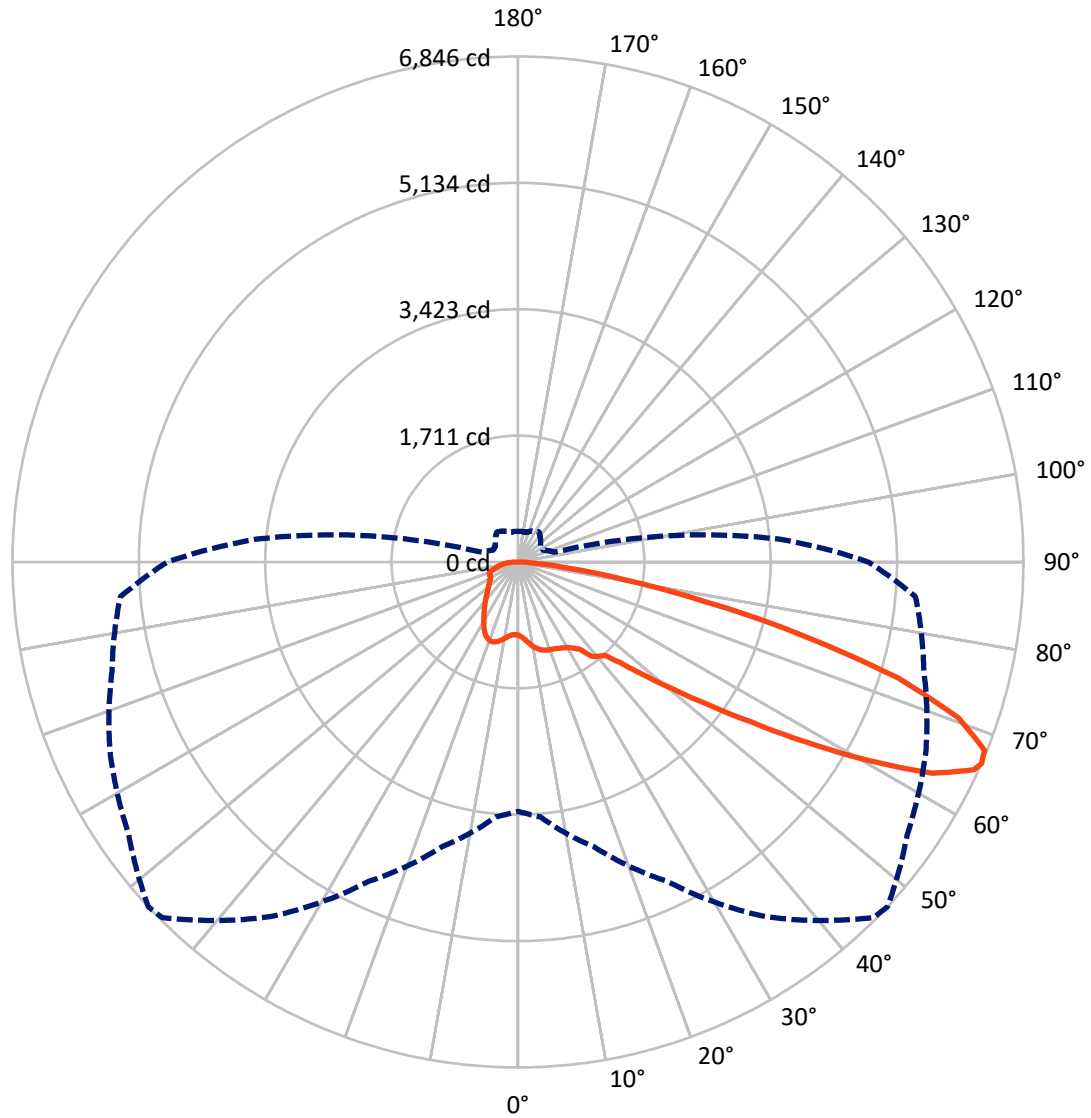
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2 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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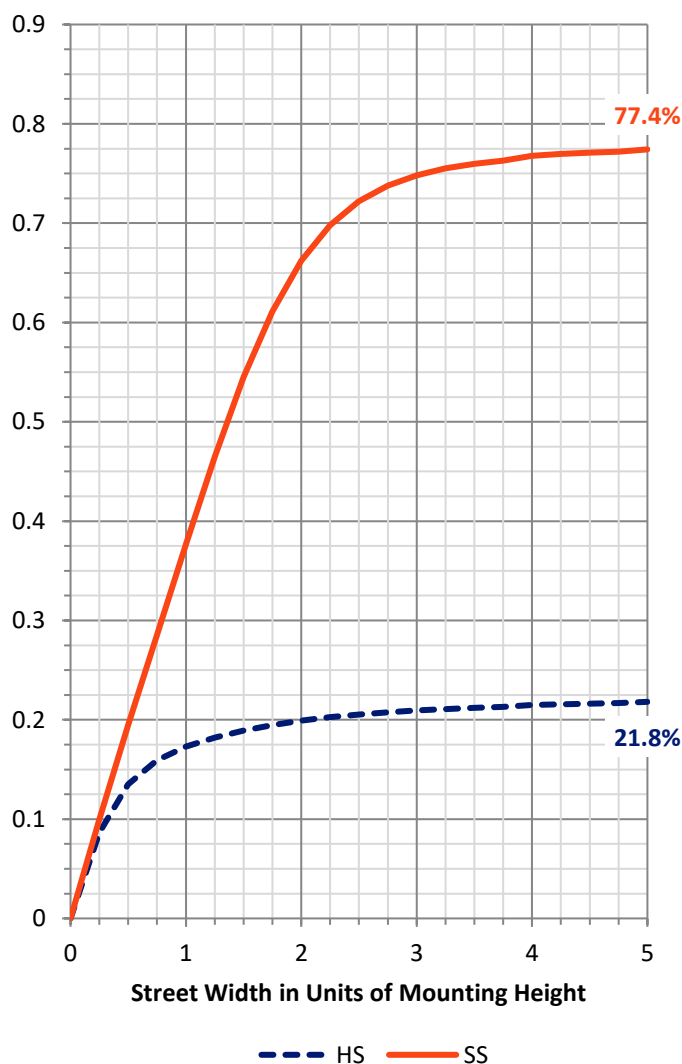
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 2192.4   | 0.0    | 2192.4 |
|                    | % Fixture | 22.2     | 0.0    | 22.2   |
| <b>Street Side</b> | Lumens    | 7668.6   | 0.0    | 7668.6 |
|                    | % Fixture | 77.8     | 0.0    | 77.8   |
| <b>Total</b>       | Lumens    | 9861.0   | 0.0    | 9861.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 100.9  | 1.0       |
| 10°-20°   | 331.0  | 3.4       |
| 20°-30°   | 552.0  | 5.6       |
| 30°-40°   | 801.6  | 8.1       |
| 40°-50°   | 1225.9 | 12.4      |
| 50°-60°   | 2317.3 | 23.5      |
| 60°-70°   | 2994.3 | 30.4      |
| 70°-80°   | 1345.9 | 13.6      |
| 80°-90°   | 192.0  | 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°    | 9861.0 | 100.0     |
| 0°-180°   | 9861.0 | 100.0     |

**Coefficient of Utilization**



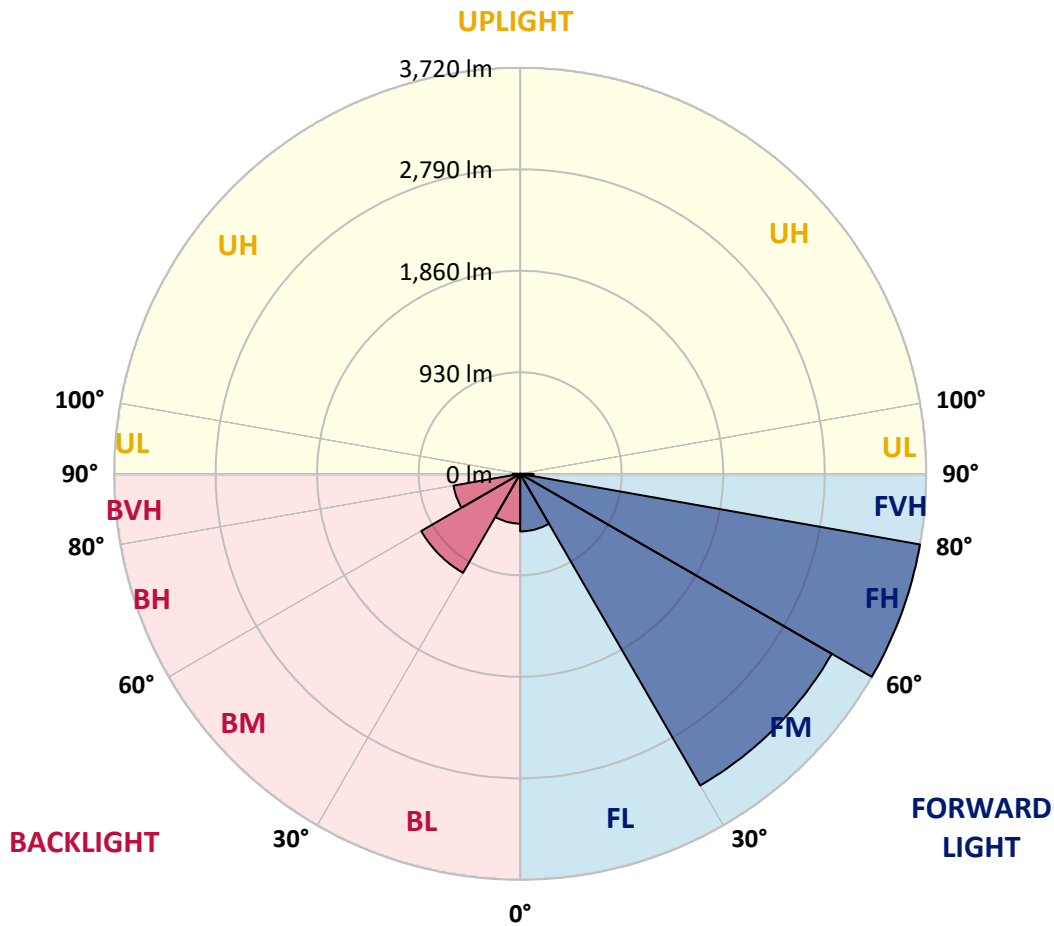
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|--------|-----------|-------------------------|------|---------|
|                |        |           | B                       | U    | G       |
| FL (0°-30°)    | 527.6  | 5.4       |                         |      |         |
| FM (30°-60°)   | 3297.7 | 33.4      |                         |      |         |
| FH (60°-80°)   | 3719.9 | 37.7      |                         |      | G2/5000 |
| FVH (80°-90°)  | 123.4  | 1.3       |                         |      | G2/225  |
| BL (0°-30°)    | 456.3  | 4.6       | B1/500                  |      |         |
| BM (30°-60°)   | 1047.2 | 10.6      | B2/2500                 |      |         |
| BH (60°-80°)   | 620.3  | 6.3       | B2/1000                 |      | G2/1000 |
| BVH (80°-90°)  | 68.6   | 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°    | 991.3  | 991.3  | 991.3  | 991.3  | 991.3  | 991.3  | 991.3  | 991.3  | 991.3  | 991.3  | 991.3  |
| 2.5°  | 1047.6 | 1039.6 | 1034.2 | 1031.5 | 1026.2 | 1015.4 | 1015.4 | 1012.8 | 1002.0 | 996.7  | 994.0  |
| 5°    | 1130.7 | 1125.3 | 1111.9 | 1101.2 | 1085.1 | 1063.7 | 1061.0 | 1044.9 | 1023.5 | 1007.4 | 996.7  |
| 7.5°  | 1211.0 | 1205.7 | 1192.3 | 1176.2 | 1149.4 | 1122.6 | 1114.6 | 1093.1 | 1058.3 | 1034.2 | 1015.4 |
| 10°   | 1280.7 | 1272.7 | 1256.6 | 1235.1 | 1205.7 | 1176.2 | 1168.2 | 1144.0 | 1109.2 | 1074.4 | 1042.2 |
| 12.5° | 1326.2 | 1320.9 | 1302.1 | 1275.3 | 1243.2 | 1213.7 | 1208.4 | 1186.9 | 1152.1 | 1114.6 | 1074.4 |
| 15°   | 1347.7 | 1345.0 | 1323.6 | 1296.8 | 1264.6 | 1240.5 | 1237.8 | 1219.1 | 1189.6 | 1152.1 | 1106.5 |
| 17.5° | 1342.3 | 1339.6 | 1320.9 | 1294.1 | 1270.0 | 1256.6 | 1256.6 | 1243.2 | 1219.1 | 1186.9 | 1138.7 |
| 20°   | 1315.5 | 1315.5 | 1299.4 | 1280.7 | 1267.3 | 1264.6 | 1264.6 | 1261.9 | 1245.9 | 1219.1 | 1170.8 |
| 22.5° | 1288.7 | 1288.7 | 1278.0 | 1264.6 | 1261.9 | 1272.7 | 1275.3 | 1280.7 | 1275.3 | 1253.9 | 1211.0 |
| 25°   | 1294.1 | 1291.4 | 1278.0 | 1261.9 | 1264.6 | 1288.7 | 1294.1 | 1307.5 | 1304.8 | 1288.7 | 1251.2 |
| 27.5° | 1353.0 | 1350.4 | 1315.5 | 1283.4 | 1280.7 | 1310.2 | 1315.5 | 1334.3 | 1334.3 | 1320.9 | 1296.8 |
| 30°   | 1500.4 | 1505.8 | 1441.4 | 1361.1 | 1320.9 | 1339.6 | 1345.0 | 1366.4 | 1377.1 | 1382.5 | 1363.7 |
| 32.5° | 1725.5 | 1717.4 | 1621.0 | 1489.7 | 1401.3 | 1382.5 | 1390.5 | 1409.3 | 1446.8 | 1457.5 | 1412.0 |
| 35°   | 1953.2 | 1958.5 | 1864.8 | 1698.7 | 1529.9 | 1460.2 | 1454.8 | 1481.6 | 1537.9 | 1489.7 | 1409.3 |
| 37.5° | 2164.9 | 2156.8 | 2047.0 | 1867.5 | 1698.7 | 1618.3 | 1621.0 | 1610.2 | 1562.0 | 1465.6 | 1428.1 |
| 40°   | 2395.3 | 2373.8 | 2282.7 | 2052.3 | 1838.0 | 1704.0 | 1679.9 | 1588.8 | 1548.6 | 1508.4 | 1503.1 |
| 42.5° | 2623.0 | 2625.7 | 2550.7 | 2322.9 | 2004.1 | 1765.6 | 1728.1 | 1634.4 | 1661.1 | 1653.1 | 1647.8 |
| 45°   | 2909.7 | 2909.7 | 2834.7 | 2623.0 | 2266.7 | 1996.1 | 1945.2 | 1832.6 | 1875.5 | 1907.6 | 1971.9 |
| 47.5° | 3172.3 | 3156.2 | 3134.7 | 2955.2 | 2609.6 | 2296.1 | 2274.7 | 2146.1 | 2258.6 | 2357.8 | 2489.0 |
| 50°   | 3450.9 | 3429.5 | 3416.1 | 3306.2 | 3059.7 | 2751.6 | 2687.3 | 2553.3 | 2799.8 | 2984.7 | 3228.5 |
| 52.5° | 3884.9 | 3847.4 | 3777.8 | 3716.1 | 3619.7 | 3263.4 | 3183.0 | 3083.8 | 3402.7 | 3635.8 | 4134.1 |
| 55°   | 4276.1 | 4244.0 | 4177.0 | 4222.5 | 4209.1 | 3884.9 | 3815.3 | 3721.5 | 4067.1 | 4351.1 | 4921.8 |
| 57.5° | 4420.8 | 4423.5 | 4514.6 | 4758.4 | 4887.0 | 4699.4 | 4600.3 | 4506.5 | 4798.6 | 4929.9 | 5444.3 |
| 60°   | 4487.8 | 4479.7 | 4715.5 | 5112.0 | 5530.0 | 5586.3 | 5460.4 | 5267.4 | 5377.3 | 5385.3 | 5886.4 |
| 62.5° | 4343.1 | 4364.5 | 4688.7 | 5259.4 | 5915.8 | 6320.4 | 6301.6 | 5964.1 | 5862.2 | 5749.7 | 6004.2 |
| 65°   | 3793.8 | 3823.3 | 4300.2 | 4996.8 | 5977.5 | 6765.2 | 6783.9 | 6390.1 | 6106.1 | 5792.6 | 5669.3 |
| 66°   | 3375.9 | 3464.3 | 3994.8 | 4769.1 | 5864.9 | 6810.7 | 6845.5 | 6435.6 | 6095.3 | 5690.8 | 5404.1 |
| 67.5° | 2832.0 | 2826.6 | 3418.8 | 4268.1 | 5551.5 | 6770.5 | 6816.1 | 6371.3 | 5950.7 | 5390.7 | 4873.6 |
| 70°   | 1733.5 | 1787.1 | 2296.1 | 3185.7 | 4595.0 | 6269.5 | 6331.1 | 5918.5 | 5326.4 | 4565.5 | 3603.6 |
| 72.5° | 889.5  | 977.9  | 1312.8 | 2071.1 | 3335.7 | 5181.7 | 5390.7 | 4970.0 | 4353.8 | 3303.5 | 2199.7 |
| 75°   | 471.6  | 466.2  | 618.9  | 1122.6 | 2130.0 | 3887.6 | 3997.5 | 3726.9 | 3008.8 | 1969.3 | 1119.9 |
| 77.5° | 251.9  | 265.2  | 324.2  | 576.0  | 1170.8 | 2483.7 | 2623.0 | 2403.3 | 1714.7 | 1007.4 | 535.9  |
| 80°   | 171.5  | 179.5  | 219.7  | 324.2  | 635.0  | 1347.7 | 1476.3 | 1280.7 | 897.6  | 476.9  | 251.9  |
| 82.5° | 109.9  | 115.2  | 150.0  | 200.9  | 380.5  | 653.7  | 688.6  | 656.4  | 439.4  | 270.6  | 152.7  |
| 85°   | 67.0   | 69.7   | 91.1   | 128.6  | 238.5  | 265.2  | 276.0  | 278.6  | 246.5  | 176.8  | 83.1   |
| 87.5° | 32.2   | 34.8   | 50.9   | 64.3   | 112.5  | 96.5   | 88.4   | 91.1   | 136.6  | 104.5  | 37.5   |
| 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°    | 991.3  | 991.3  | 991.3  | 991.3  | 991.3  | 991.3  | 991.3  | 991.3  | 991.3  | 991.3  | 991.3  |
| 2.5°  | 991.3  | 988.7  | 983.3  | 980.6  | 983.3  | 983.3  | 983.3  | 986.0  | 991.3  | 991.3  | 994.0  |
| 5°    | 991.3  | 986.0  | 980.6  | 980.6  | 986.0  | 991.3  | 996.7  | 1007.4 | 1012.8 | 1015.4 | 1015.4 |
| 7.5°  | 1004.7 | 999.4  | 994.0  | 994.0  | 1002.0 | 1012.8 | 1023.5 | 1036.9 | 1050.3 | 1061.0 | 1061.0 |
| 10°   | 1031.5 | 1023.5 | 1018.1 | 1020.8 | 1034.2 | 1047.6 | 1061.0 | 1077.1 | 1090.5 | 1103.9 | 1103.9 |
| 12.5° | 1061.0 | 1053.0 | 1044.9 | 1050.3 | 1069.0 | 1085.1 | 1098.5 | 1106.5 | 1119.9 | 1130.7 | 1130.7 |
| 15°   | 1090.5 | 1077.1 | 1074.4 | 1085.1 | 1103.9 | 1114.6 | 1119.9 | 1119.9 | 1125.3 | 1136.0 | 1136.0 |
| 17.5° | 1122.6 | 1109.2 | 1106.5 | 1117.3 | 1133.3 | 1133.3 | 1122.6 | 1114.6 | 1111.9 | 1119.9 | 1122.6 |
| 20°   | 1154.8 | 1141.4 | 1141.4 | 1149.4 | 1146.7 | 1128.0 | 1109.2 | 1095.8 | 1085.1 | 1093.1 | 1095.8 |
| 22.5° | 1195.0 | 1181.6 | 1176.2 | 1165.5 | 1141.4 | 1103.9 | 1074.4 | 1058.3 | 1050.3 | 1055.6 | 1061.0 |
| 25°   | 1235.1 | 1224.4 | 1211.0 | 1173.5 | 1117.3 | 1058.3 | 1020.8 | 1007.4 | 1010.1 | 1020.8 | 1026.2 |
| 27.5° | 1286.1 | 1280.7 | 1248.5 | 1168.2 | 1074.4 | 994.0  | 956.5  | 953.8  | 964.5  | 980.6  | 988.7  |
| 30°   | 1347.7 | 1339.6 | 1283.4 | 1152.1 | 1015.4 | 919.0  | 892.2  | 897.6  | 913.6  | 927.0  | 935.1  |
| 32.5° | 1390.5 | 1385.2 | 1299.4 | 1114.6 | 943.1  | 852.0  | 830.6  | 830.6  | 838.6  | 857.4  | 865.4  |
| 35°   | 1403.9 | 1425.4 | 1310.2 | 1058.3 | 857.4  | 793.1  | 771.6  | 758.2  | 758.2  | 774.3  | 779.7  |
| 37.5° | 1449.5 | 1497.7 | 1315.5 | 983.3  | 787.7  | 739.5  | 712.7  | 688.6  | 680.5  | 677.9  | 677.9  |
| 40°   | 1554.0 | 1610.2 | 1312.8 | 886.8  | 720.7  | 685.9  | 653.7  | 626.9  | 605.5  | 576.0  | 578.7  |
| 42.5° | 1736.2 | 1779.0 | 1304.8 | 785.0  | 661.8  | 637.7  | 605.5  | 573.4  | 538.5  | 506.4  | 503.7  |
| 45°   | 2087.2 | 2022.8 | 1283.4 | 696.6  | 608.2  | 594.8  | 565.3  | 527.8  | 484.9  | 455.5  | 455.5  |
| 47.5° | 2641.8 | 2464.9 | 1270.0 | 613.6  | 560.0  | 557.3  | 530.5  | 490.3  | 447.4  | 426.0  | 423.3  |
| 50°   | 3402.7 | 3075.8 | 1291.4 | 554.6  | 517.1  | 525.1  | 503.7  | 466.2  | 431.4  | 412.6  | 409.9  |
| 52.5° | 4276.1 | 3732.2 | 1315.5 | 517.1  | 484.9  | 501.0  | 490.3  | 455.5  | 420.6  | 404.6  | 401.9  |
| 55°   | 4951.3 | 4265.4 | 1280.7 | 482.3  | 452.8  | 476.9  | 476.9  | 444.8  | 415.3  | 399.2  | 399.2  |
| 57.5° | 5425.5 | 4479.7 | 1160.1 | 450.1  | 426.0  | 455.5  | 463.5  | 439.4  | 412.6  | 407.2  | 407.2  |
| 60°   | 5629.1 | 4469.0 | 948.5  | 420.6  | 407.2  | 434.0  | 455.5  | 434.0  | 418.0  | 431.4  | 434.0  |
| 62.5° | 5519.3 | 4235.9 | 736.8  | 399.2  | 393.9  | 428.7  | 463.5  | 455.5  | 436.7  | 447.4  | 452.8  |
| 65°   | 5023.6 | 3826.0 | 554.6  | 380.5  | 377.8  | 431.4  | 484.9  | 468.9  | 423.3  | 426.0  | 428.7  |
| 66°   | 4745.0 | 3550.0 | 509.1  | 375.1  | 372.4  | 434.0  | 495.7  | 463.5  | 412.6  | 418.0  | 415.3  |
| 67.5° | 4150.2 | 3116.0 | 447.4  | 364.4  | 361.7  | 434.0  | 509.1  | 452.8  | 399.2  | 407.2  | 399.2  |
| 70°   | 3043.7 | 2205.0 | 383.1  | 351.0  | 345.6  | 426.0  | 506.4  | 431.4  | 369.7  | 364.4  | 351.0  |
| 72.5° | 1765.6 | 1334.3 | 340.3  | 334.9  | 321.5  | 375.1  | 474.2  | 396.5  | 337.6  | 321.5  | 308.1  |
| 75°   | 868.1  | 677.9  | 302.8  | 316.2  | 281.3  | 329.6  | 428.7  | 367.1  | 310.8  | 289.4  | 281.3  |
| 77.5° | 399.2  | 342.9  | 273.3  | 289.4  | 249.2  | 284.0  | 391.2  | 334.9  | 276.0  | 243.8  | 235.8  |
| 80°   | 217.0  | 214.3  | 230.4  | 241.1  | 209.0  | 249.2  | 345.6  | 292.0  | 233.1  | 198.3  | 187.5  |
| 82.5° | 134.0  | 136.6  | 168.8  | 184.9  | 163.4  | 217.0  | 305.4  | 243.8  | 176.8  | 139.3  | 142.0  |
| 85°   | 69.7   | 77.7   | 112.5  | 123.2  | 107.2  | 160.8  | 230.4  | 163.4  | 99.1   | 72.3   | 72.3   |
| 87.5° | 24.1   | 32.2   | 56.3   | 67.0   | 58.9   | 96.5   | 144.7  | 77.7   | 21.4   | 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)