

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: P573460

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

Issue Date: 10/13/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P573460  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2108-332-20)  
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-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 2700K, 820mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

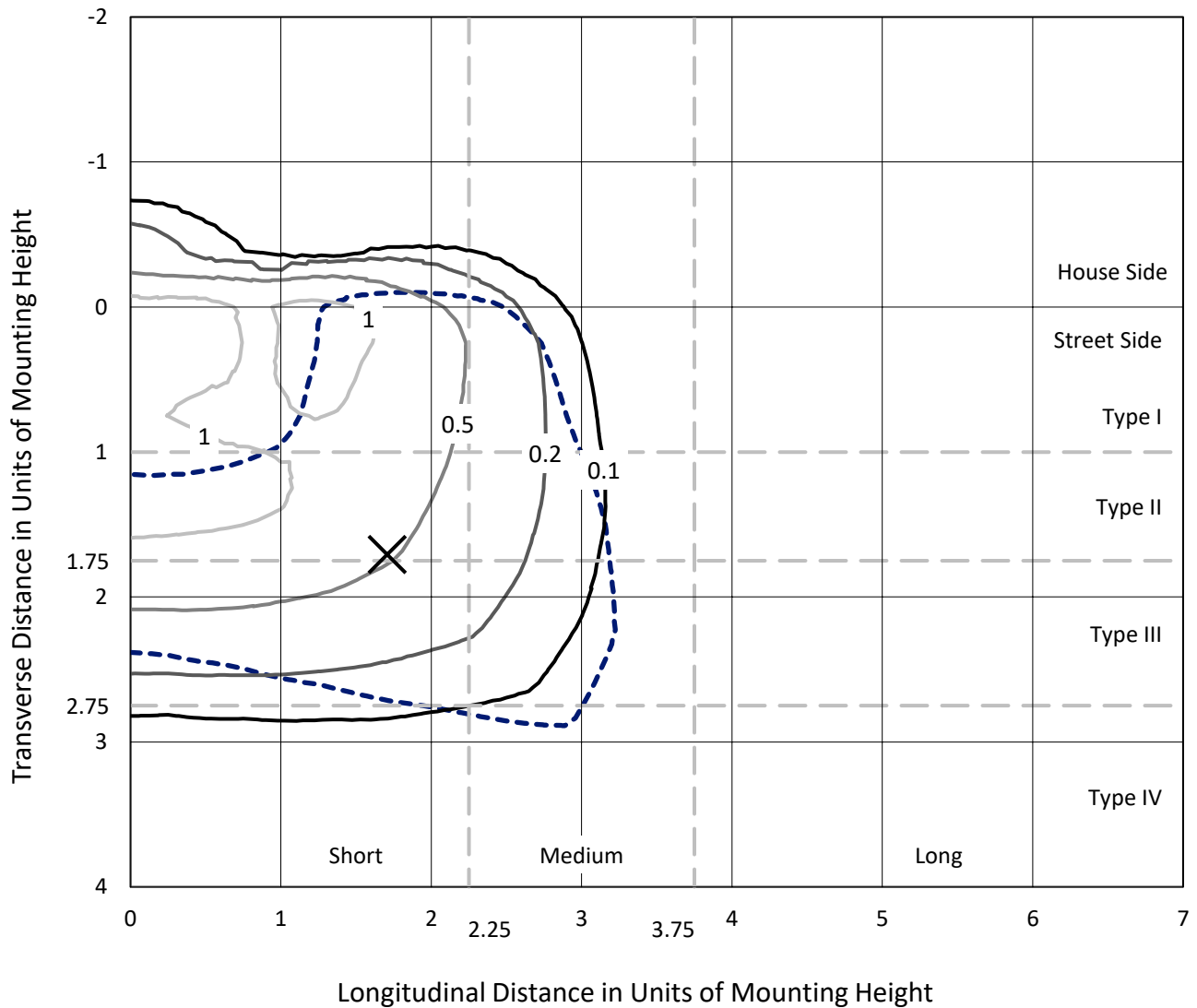
Lumens per Lamp: N/A  
Luminaire Lumens: 7254 lumens  
Efficiency: N/A  
Efficacy: 87.4 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B1 - U0 - G2  
  
Input Watts (W): 83  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage 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

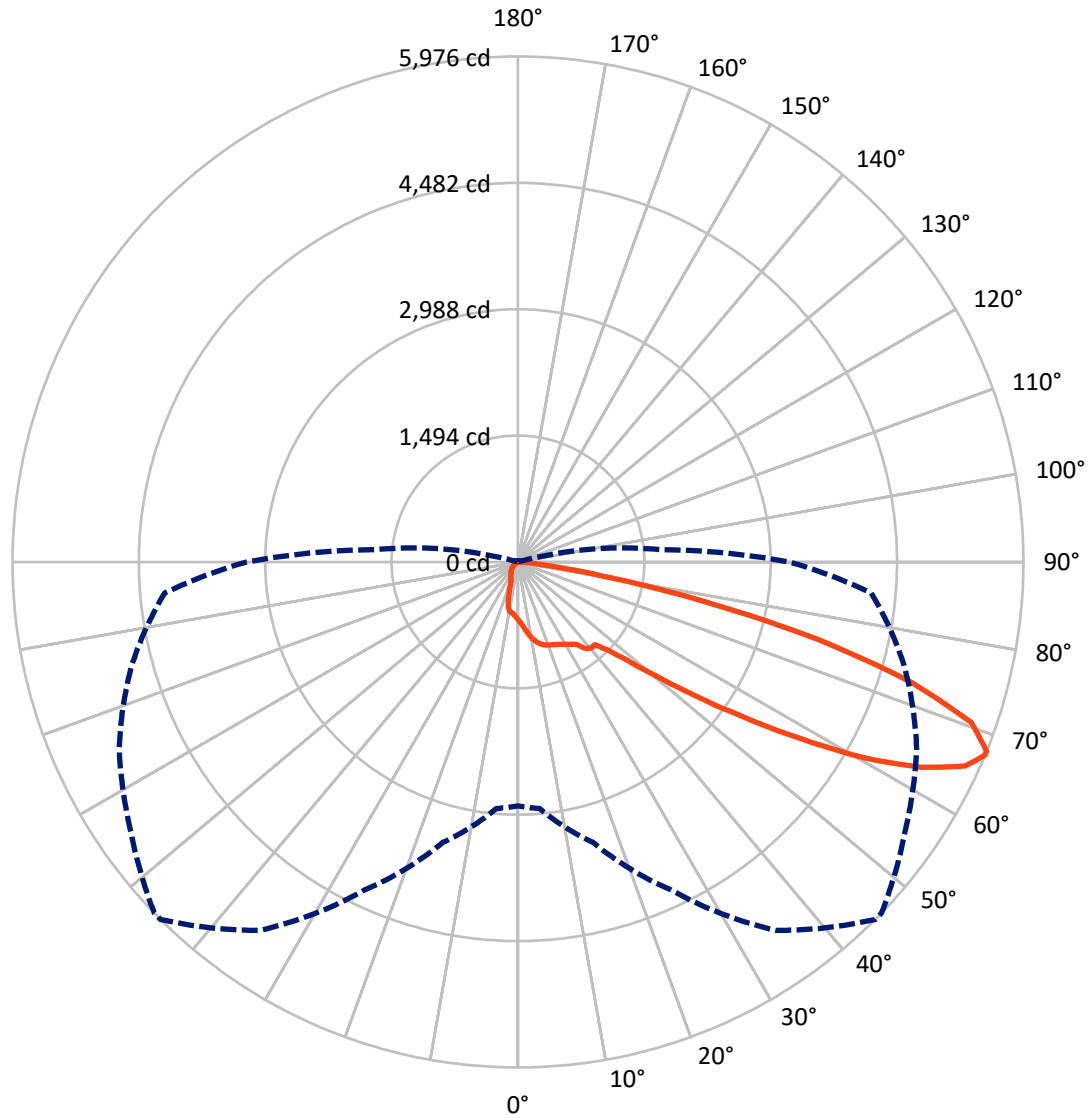
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.6 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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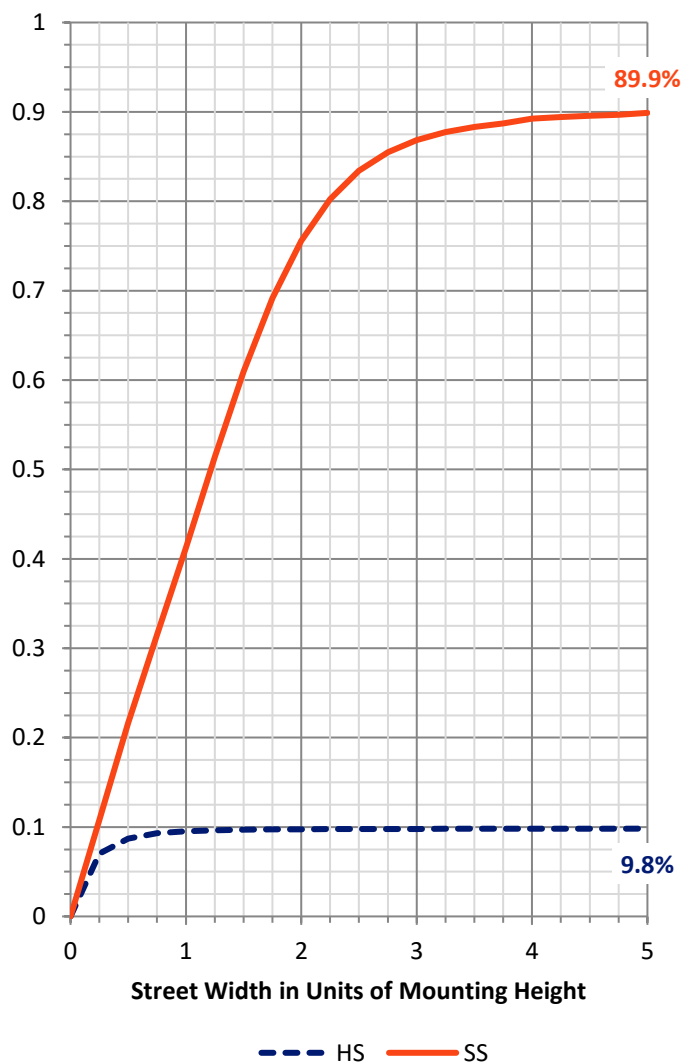
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 718.8    | 0.0    | 718.8  |
|                    | % Fixture | 9.9      | 0.0    | 9.9    |
| <b>Street Side</b> | Lumens    | 6535.2   | 0.0    | 6535.2 |
|                    | % Fixture | 90.1     | 0.0    | 90.1   |
| <b>Total</b>       | Lumens    | 7254.0   | 0.0    | 7254.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 68.9   | 0.9       |
| 10°-20°   | 208.2  | 2.9       |
| 20°-30°   | 333.0  | 4.6       |
| 30°-40°   | 479.2  | 6.6       |
| 40°-50°   | 840.7  | 11.6      |
| 50°-60°   | 1771.4 | 24.4      |
| 60°-70°   | 2449.6 | 33.8      |
| 70°-80°   | 1025.5 | 14.1      |
| 80°-90°   | 77.6   | 1.1       |
| 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°    | 7254.0 | 100.0     |
| 0°-180°   | 7254.0 | 100.0     |

**Coefficient of Utilization**

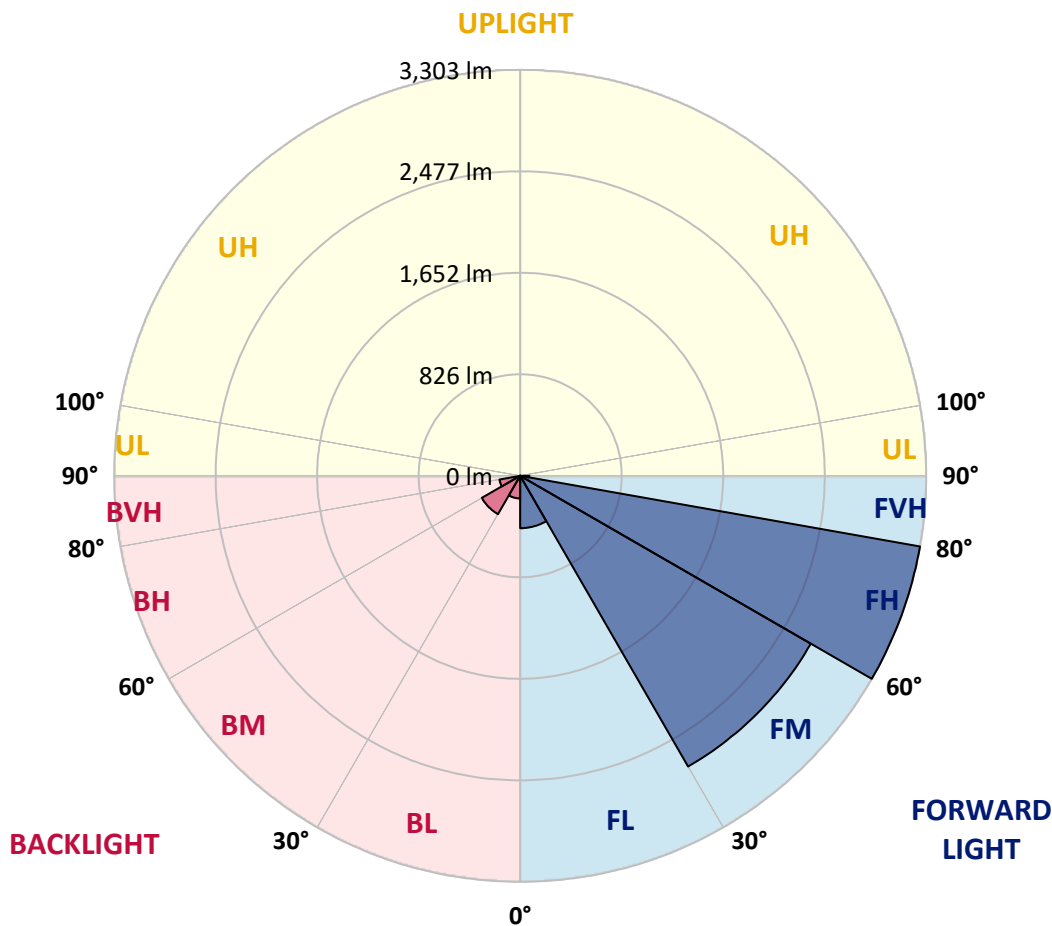


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|--------|-----------|-------------------------|------|---------|
|                |        |           | B                       | U    | G       |
| FL (0°-30°)    | 425.8  | 5.9       |                         |      |         |
| FM (30°-60°)   | 2731.2 | 37.7      |                         |      |         |
| FH (60°-80°)   | 3303.3 | 45.5      |                         |      | G2/5000 |
| FVH (80°-90°)  | 74.9   | 1.0       |                         |      | G1/100  |
| BL (0°-30°)    | 184.2  | 2.5       | B1/500                  |      |         |
| BM (30°-60°)   | 360.1  | 5.0       | B1/1000                 |      |         |
| BH (60°-80°)   | 171.8  | 2.4       | B1/500                  |      | G1/500  |
| BVH (80°-90°)  | 2.6    | 0.0       |                         |      | G0/10   |
| UL (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B1-U0-G2**  
 Type III Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 46°    | 55°    | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 686.0  | 686.0  | 686.0  | 686.0  | 686.0  | 686.0  | 686.0  | 686.0  | 686.0  | 686.0  | 686.0  |
| 2.5°  | 763.7  | 750.3  | 747.7  | 745.0  | 736.9  | 726.2  | 728.9  | 720.9  | 707.5  | 699.4  | 691.4  |
| 5°    | 857.5  | 844.1  | 838.8  | 822.7  | 806.6  | 782.5  | 782.5  | 761.1  | 736.9  | 715.5  | 694.1  |
| 7.5°  | 954.0  | 943.3  | 932.6  | 908.5  | 884.3  | 852.2  | 849.5  | 817.3  | 779.8  | 747.7  | 712.8  |
| 10°   | 1034.4 | 1026.4 | 1013.0 | 983.5  | 951.3  | 916.5  | 908.5  | 879.0  | 830.7  | 787.9  | 742.3  |
| 12.5° | 1098.7 | 1090.7 | 1071.9 | 1042.4 | 1002.3 | 967.4  | 964.7  | 927.2  | 879.0  | 833.4  | 777.1  |
| 15°   | 1147.0 | 1133.6 | 1112.1 | 1080.0 | 1039.8 | 1007.6 | 1002.3 | 970.1  | 924.5  | 873.6  | 806.6  |
| 17.5° | 1155.0 | 1147.0 | 1128.2 | 1093.4 | 1058.5 | 1031.7 | 1029.0 | 1004.9 | 964.7  | 911.1  | 841.5  |
| 20°   | 1133.6 | 1130.9 | 1114.8 | 1088.0 | 1061.2 | 1047.8 | 1045.1 | 1029.0 | 996.9  | 948.7  | 879.0  |
| 22.5° | 1101.4 | 1098.7 | 1088.0 | 1074.6 | 1063.9 | 1061.2 | 1061.2 | 1055.8 | 1037.1 | 991.5  | 927.2  |
| 25°   | 1080.0 | 1077.3 | 1071.9 | 1063.9 | 1063.9 | 1080.0 | 1082.6 | 1088.0 | 1071.9 | 1037.1 | 967.4  |
| 27.5° | 1082.6 | 1077.3 | 1071.9 | 1063.9 | 1074.6 | 1104.1 | 1106.8 | 1120.2 | 1106.8 | 1074.6 | 1013.0 |
| 30°   | 1120.2 | 1112.1 | 1096.0 | 1077.3 | 1090.7 | 1130.9 | 1133.6 | 1149.6 | 1138.9 | 1122.8 | 1063.9 |
| 32.5° | 1179.1 | 1173.8 | 1141.6 | 1109.4 | 1117.5 | 1157.7 | 1163.0 | 1192.5 | 1205.9 | 1181.8 | 1109.4 |
| 35°   | 1264.9 | 1246.1 | 1205.9 | 1173.8 | 1168.4 | 1197.9 | 1205.9 | 1254.2 | 1289.0 | 1230.0 | 1136.2 |
| 37.5° | 1334.5 | 1318.5 | 1254.2 | 1203.2 | 1232.7 | 1299.7 | 1302.4 | 1361.3 | 1331.9 | 1235.4 | 1179.1 |
| 40°   | 1570.4 | 1567.7 | 1455.1 | 1294.4 | 1262.2 | 1337.2 | 1347.9 | 1358.7 | 1345.3 | 1297.0 | 1272.9 |
| 42.5° | 1950.9 | 1918.7 | 1792.8 | 1546.3 | 1326.5 | 1334.5 | 1339.9 | 1396.2 | 1465.9 | 1444.4 | 1452.5 |
| 45°   | 2363.6 | 2336.8 | 2194.8 | 1883.9 | 1546.3 | 1479.3 | 1484.6 | 1575.7 | 1709.7 | 1736.5 | 1779.4 |
| 47.5° | 2744.1 | 2701.3 | 2620.9 | 2307.3 | 1921.4 | 1725.8 | 1736.5 | 1846.4 | 2068.8 | 2127.8 | 2194.8 |
| 50°   | 3065.7 | 3036.2 | 2961.2 | 2754.9 | 2382.4 | 2114.4 | 2125.1 | 2216.2 | 2505.6 | 2599.4 | 2685.2 |
| 52.5° | 3532.0 | 3491.8 | 3347.1 | 3250.6 | 2969.2 | 2620.9 | 2596.7 | 2693.2 | 3025.5 | 3087.1 | 3202.4 |
| 55°   | 3960.8 | 3877.7 | 3791.9 | 3751.7 | 3633.8 | 3226.5 | 3218.5 | 3237.2 | 3513.2 | 3545.4 | 3751.7 |
| 57.5° | 4143.0 | 4126.9 | 4199.3 | 4333.3 | 4360.1 | 3939.3 | 3904.5 | 3832.1 | 4049.2 | 4046.5 | 4287.7 |
| 60°   | 4258.2 | 4258.2 | 4451.2 | 4783.5 | 4997.9 | 4700.4 | 4652.2 | 4427.1 | 4504.8 | 4507.5 | 4729.9 |
| 62.5° | 4185.9 | 4204.6 | 4504.8 | 5005.9 | 5437.3 | 5346.2 | 5314.1 | 4936.2 | 4930.9 | 4869.2 | 4946.9 |
| 65°   | 3738.3 | 3770.5 | 4252.9 | 4882.6 | 5598.1 | 5812.5 | 5799.1 | 5370.4 | 5214.9 | 4989.8 | 4815.6 |
| 67°   | 3049.6 | 3108.6 | 3692.8 | 4437.8 | 5415.9 | 5973.3 | 5976.0 | 5557.9 | 5217.6 | 4788.8 | 4352.0 |
| 67.5° | 2883.5 | 2926.4 | 3432.8 | 4277.0 | 5316.8 | 5976.0 | 5976.0 | 5582.1 | 5201.5 | 4727.2 | 4191.2 |
| 70°   | 1838.4 | 1849.1 | 2401.1 | 3309.6 | 4542.3 | 5686.6 | 5708.0 | 5399.8 | 4737.9 | 3826.8 | 2942.4 |
| 72.5° | 908.5  | 884.3  | 1267.6 | 2130.5 | 3408.7 | 4866.5 | 4922.8 | 4612.0 | 3749.1 | 2500.3 | 1554.3 |
| 75°   | 356.4  | 380.5  | 552.0  | 1133.6 | 2135.8 | 3668.7 | 3711.5 | 3355.1 | 2411.8 | 1289.0 | 613.7  |
| 77.5° | 158.1  | 158.1  | 235.8  | 509.2  | 1122.8 | 2251.0 | 2272.5 | 2047.4 | 1272.9 | 530.6  | 187.6  |
| 80°   | 85.8   | 91.1   | 123.3  | 222.4  | 565.4  | 1034.4 | 1128.2 | 1015.7 | 576.2  | 233.1  | 64.3   |
| 82.5° | 42.9   | 45.6   | 75.0   | 126.0  | 284.1  | 391.3  | 412.7  | 431.5  | 265.3  | 144.7  | 26.8   |
| 85°   | 16.1   | 18.8   | 40.2   | 72.4   | 128.6  | 131.3  | 131.3  | 168.8  | 144.7  | 109.9  | 13.4   |
| 87.5° | 2.7    | 5.4    | 18.8   | 29.5   | 50.9   | 45.6   | 40.2   | 53.6   | 80.4   | 69.7   | 8.0    |
| 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°    | 686.0  | 686.0  | 686.0 | 686.0 | 686.0 | 686.0 | 686.0 | 686.0 | 686.0 | 686.0 | 686.0 |
| 2.5°  | 686.0  | 680.7  | 670.0 | 661.9 | 656.6 | 651.2 | 645.8 | 645.8 | 643.2 | 643.2 | 645.8 |
| 5°    | 686.0  | 675.3  | 653.9 | 640.5 | 629.8 | 621.7 | 616.4 | 616.4 | 613.7 | 616.4 | 619.0 |
| 7.5°  | 699.4  | 683.4  | 653.9 | 629.8 | 616.4 | 603.0 | 597.6 | 594.9 | 594.9 | 597.6 | 594.9 |
| 10°   | 720.9  | 699.4  | 661.9 | 629.8 | 611.0 | 592.2 | 562.8 | 536.0 | 511.8 | 501.1 | 498.4 |
| 12.5° | 747.7  | 720.9  | 675.3 | 637.8 | 608.3 | 544.0 | 463.6 | 412.7 | 380.5 | 364.5 | 359.1 |
| 15°   | 777.1  | 745.0  | 691.4 | 648.5 | 568.1 | 447.5 | 343.0 | 286.7 | 268.0 | 270.7 | 273.3 |
| 17.5° | 809.3  | 774.5  | 715.5 | 643.2 | 487.7 | 332.3 | 251.9 | 238.5 | 246.5 | 254.6 | 254.6 |
| 20°   | 841.5  | 803.9  | 739.6 | 603.0 | 383.2 | 246.5 | 225.1 | 227.8 | 235.8 | 243.9 | 243.9 |
| 22.5° | 884.3  | 844.1  | 763.7 | 533.3 | 284.1 | 214.4 | 214.4 | 219.7 | 225.1 | 233.1 | 233.1 |
| 25°   | 929.9  | 889.7  | 779.8 | 447.5 | 211.7 | 201.0 | 203.7 | 209.0 | 214.4 | 222.4 | 222.4 |
| 27.5° | 978.1  | 937.9  | 777.1 | 345.7 | 184.9 | 184.9 | 187.6 | 195.6 | 201.0 | 209.0 | 209.0 |
| 30°   | 1031.7 | 996.9  | 747.7 | 251.9 | 171.5 | 168.8 | 168.8 | 176.9 | 184.9 | 190.3 | 192.9 |
| 32.5° | 1077.3 | 1047.8 | 696.8 | 190.3 | 160.8 | 155.4 | 152.7 | 155.4 | 163.5 | 168.8 | 171.5 |
| 35°   | 1114.8 | 1104.1 | 621.7 | 163.5 | 150.1 | 142.0 | 136.7 | 134.0 | 136.7 | 136.7 | 139.4 |
| 37.5° | 1184.5 | 1187.2 | 533.3 | 152.7 | 142.0 | 131.3 | 120.6 | 112.6 | 107.2 | 104.5 | 101.8 |
| 40°   | 1315.8 | 1313.1 | 439.5 | 144.7 | 134.0 | 120.6 | 104.5 | 93.8  | 80.4  | 75.0  | 75.0  |
| 42.5° | 1500.7 | 1460.5 | 335.0 | 136.7 | 126.0 | 109.9 | 88.4  | 72.4  | 59.0  | 56.3  | 56.3  |
| 45°   | 1833.0 | 1666.8 | 251.9 | 131.3 | 117.9 | 96.5  | 72.4  | 53.6  | 45.6  | 42.9  | 42.9  |
| 47.5° | 2200.1 | 1905.3 | 201.0 | 123.3 | 109.9 | 85.8  | 56.3  | 42.9  | 34.8  | 34.8  | 34.8  |
| 50°   | 2604.8 | 2133.1 | 168.8 | 115.2 | 96.5  | 72.4  | 45.6  | 34.8  | 32.2  | 29.5  | 32.2  |
| 52.5° | 3047.0 | 2312.7 | 147.4 | 104.5 | 83.1  | 59.0  | 37.5  | 32.2  | 26.8  | 26.8  | 26.8  |
| 55°   | 3443.6 | 2433.3 | 123.3 | 91.1  | 69.7  | 48.2  | 34.8  | 26.8  | 24.1  | 21.4  | 18.8  |
| 57.5° | 3802.7 | 2497.6 | 99.2  | 77.7  | 53.6  | 40.2  | 29.5  | 21.4  | 18.8  | 13.4  | 13.4  |
| 60°   | 3987.6 | 2438.6 | 77.7  | 61.6  | 42.9  | 32.2  | 24.1  | 18.8  | 13.4  | 8.0   | 8.0   |
| 62.5° | 4017.0 | 2285.9 | 61.6  | 48.2  | 37.5  | 26.8  | 18.8  | 13.4  | 8.0   | 5.4   | 5.4   |
| 65°   | 3759.8 | 2017.9 | 50.9  | 40.2  | 29.5  | 21.4  | 16.1  | 10.7  | 5.4   | 2.7   | 2.7   |
| 67°   | 3298.9 | 1736.5 | 45.6  | 34.8  | 26.8  | 18.8  | 13.4  | 8.0   | 5.4   | 2.7   | 0.0   |
| 67.5° | 3207.7 | 1685.6 | 42.9  | 34.8  | 26.8  | 18.8  | 13.4  | 8.0   | 5.4   | 2.7   | 0.0   |
| 70°   | 2106.3 | 1165.7 | 40.2  | 32.2  | 24.1  | 16.1  | 10.7  | 8.0   | 2.7   | 0.0   | 0.0   |
| 72.5° | 1149.6 | 586.9  | 37.5  | 29.5  | 21.4  | 16.1  | 10.7  | 5.4   | 2.7   | 0.0   | 0.0   |
| 75°   | 420.7  | 222.4  | 32.2  | 26.8  | 18.8  | 16.1  | 10.7  | 5.4   | 2.7   | 0.0   | 0.0   |
| 77.5° | 142.0  | 77.7   | 29.5  | 26.8  | 21.4  | 16.1  | 10.7  | 5.4   | 2.7   | 0.0   | 0.0   |
| 80°   | 48.2   | 34.8   | 24.1  | 21.4  | 16.1  | 13.4  | 10.7  | 5.4   | 2.7   | 0.0   | 0.0   |
| 82.5° | 18.8   | 10.7   | 8.0   | 8.0   | 8.0   | 10.7  | 10.7  | 8.0   | 2.7   | 0.0   | 0.0   |
| 85°   | 8.0    | 5.4    | 2.7   | 2.7   | 2.7   | 2.7   | 2.7   | 2.7   | 2.7   | 0.0   | 0.0   |
| 87.5° | 8.0    | 5.4    | 2.7   | 2.7   | 2.7   | 0.0   | 0.0   | 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)