

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: P573112

Luminaire Tested: **ARCH-S-PA2-30-830-U-T2R-HSS**

Issue Date: 10/13/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P573112  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2108-332-14)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/13/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA2-30-830-U-T2R-HSS  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(2) 80 CRI, 3000K, 320mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II  
ROADWAY OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3207 lumens  
Efficiency: N/A  
Efficacy: 95.7 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B0 - U0 - G1

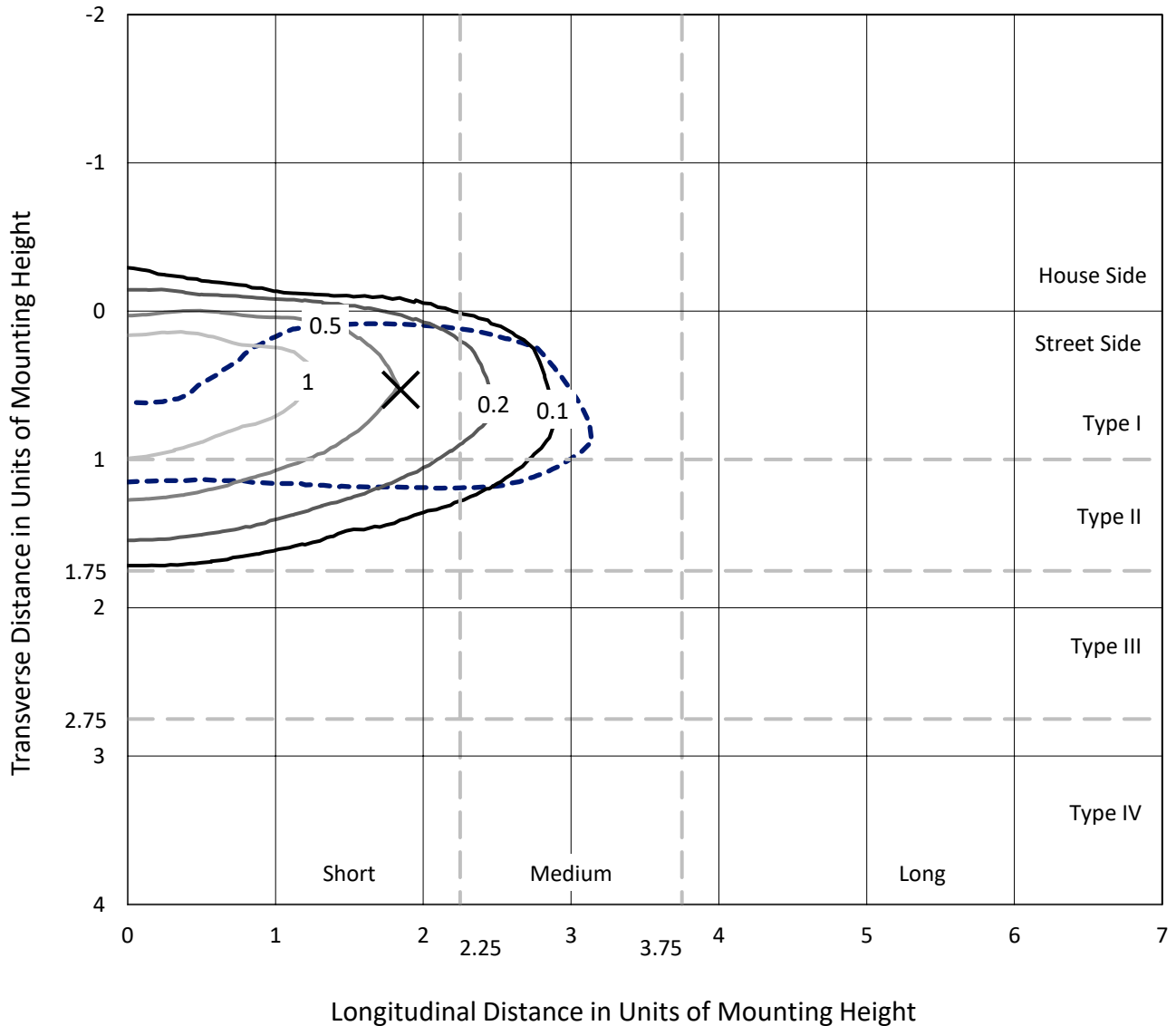
Input Watts (W): 33.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

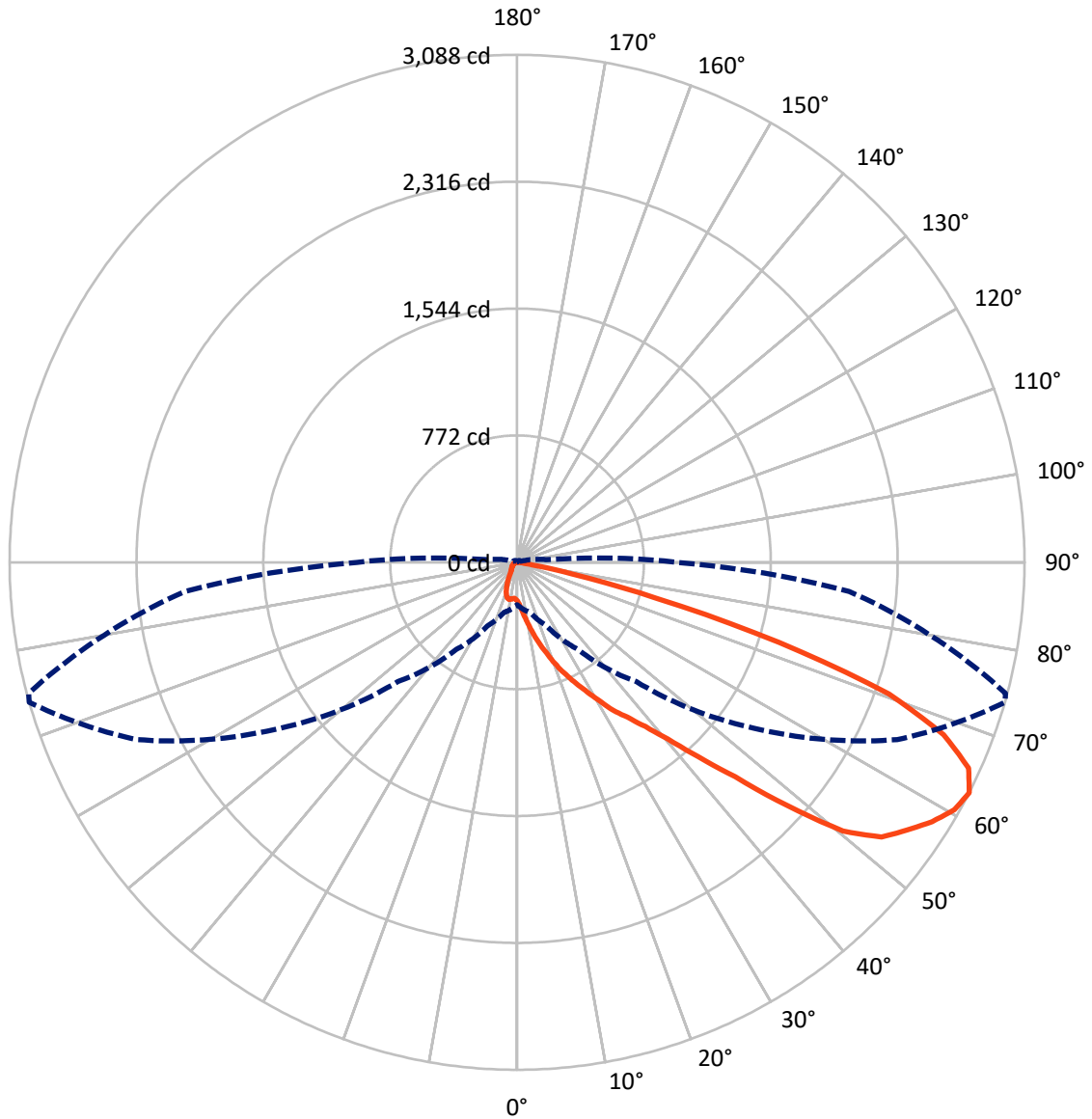
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.5 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 74-Deg Lateral    - - - Horizontal Cone Through 62.5-Deg Vertical

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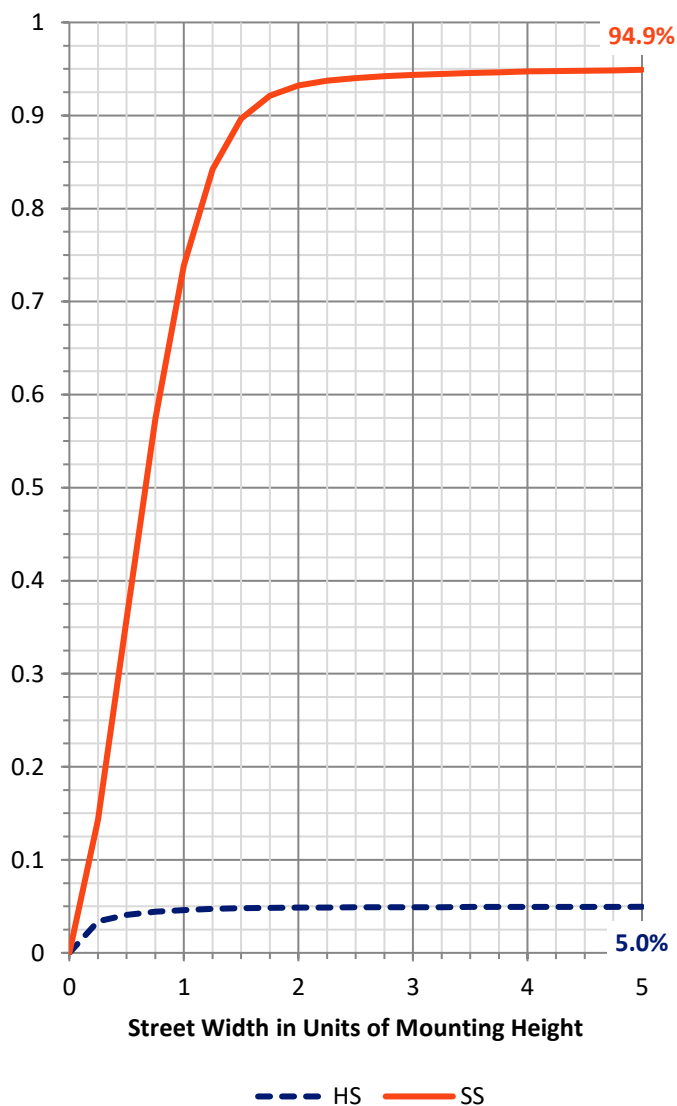
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 159.9    | 0.0    | 159.9  |
|                    | % Fixture | 5.0      | 0.0    | 5.0    |
| <b>Street Side</b> | Lumens    | 3047.1   | 0.0    | 3047.1 |
|                    | % Fixture | 95.0     | 0.0    | 95.0   |
| <b>Total</b>       | Lumens    | 3207.0   | 0.0    | 3207.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 29.4   | 0.9       |
| 10°-20°   | 123.3  | 3.8       |
| 20°-30°   | 264.7  | 8.3       |
| 30°-40°   | 464.2  | 14.5      |
| 40°-50°   | 719.6  | 22.4      |
| 50°-60°   | 829.6  | 25.9      |
| 60°-70°   | 582.8  | 18.2      |
| 70°-80°   | 181.6  | 5.7       |
| 80°-90°   | 12.0   | 0.4       |
| 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°    | 3207.0 | 100.0     |
| 0°-180°   | 3207.0 | 100.0     |

**Coefficient of Utilization**

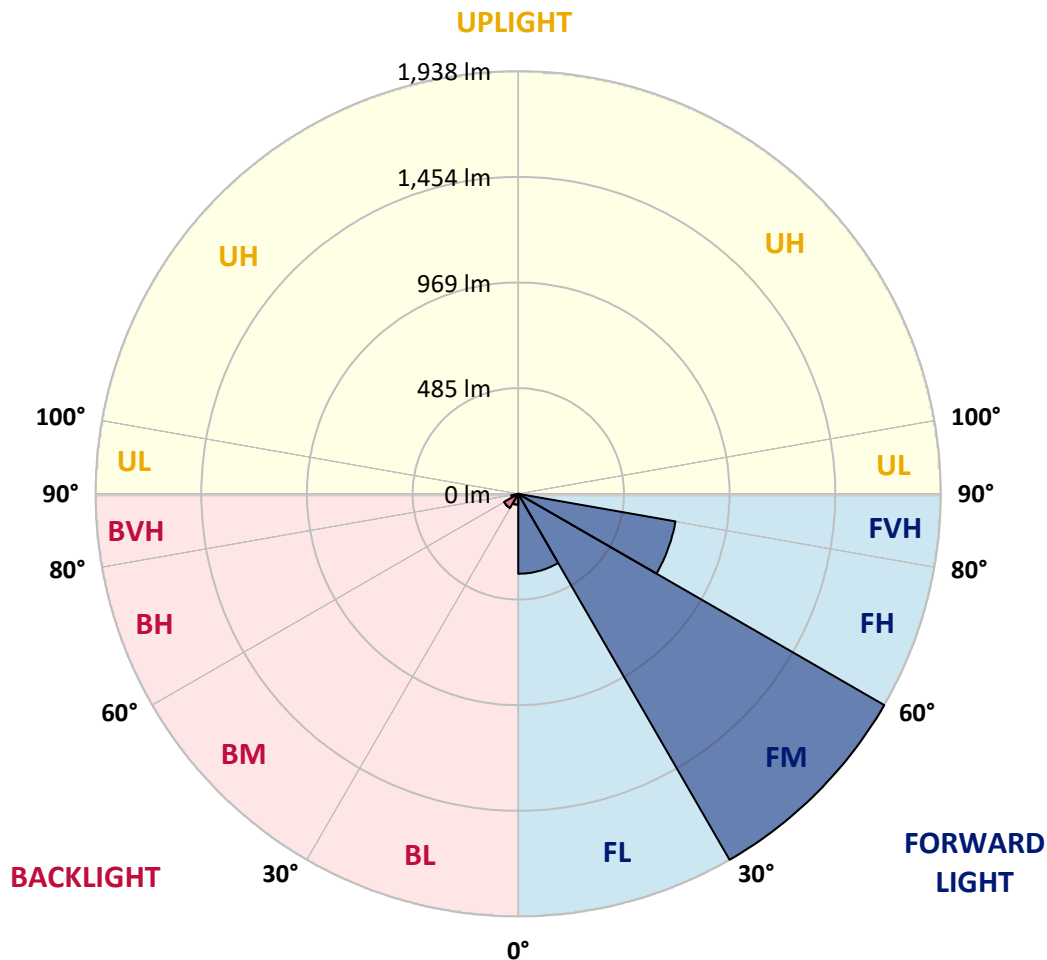


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|--------|-----------|-------------------------|------|---------|
|                |        |           | B                       | U    | G       |
| FL (0°-30°)    | 366.6  | 11.4      |                         |      |         |
| FM (30°-60°)   | 1938.1 | 60.4      |                         |      |         |
| FH (60°-80°)   | 732.0  | 22.8      |                         |      | G1/1800 |
| FVH (80°-90°)  | 10.3   | 0.3       |                         |      | G1/100  |
| BL (0°-30°)    | 50.8   | 1.6       | B0/110                  |      |         |
| BM (30°-60°)   | 75.2   | 2.3       | B0/220                  |      |         |
| BH (60°-80°)   | 32.4   | 1.0       | B0/110                  |      | G0/110  |
| BVH (80°-90°)  | 1.6    | 0.1       |                         |      | G0/10   |
| UL (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B0-U0-G1**  
 Type II Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 74°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 234.8  | 234.8  | 234.8  | 234.8  | 234.8  | 234.8  | 234.8  | 234.8  | 234.8  | 234.8  | 234.8  |
| 2.5°  | 326.2  | 320.5  | 313.8  | 308.1  | 296.8  | 288.9  | 278.8  | 267.5  | 255.1  | 253.9  | 243.8  |
| 5°    | 457.1  | 440.2  | 440.2  | 425.5  | 408.6  | 378.1  | 349.9  | 314.9  | 288.9  | 286.7  | 259.6  |
| 7.5°  | 591.4  | 577.9  | 570.0  | 547.4  | 520.3  | 486.5  | 441.3  | 382.6  | 335.2  | 327.3  | 283.3  |
| 10°   | 716.7  | 706.5  | 691.9  | 673.8  | 650.1  | 594.8  | 538.4  | 461.6  | 386.0  | 380.4  | 311.5  |
| 12.5° | 813.8  | 801.4  | 794.6  | 786.7  | 756.2  | 712.2  | 638.8  | 541.8  | 451.5  | 439.1  | 339.7  |
| 15°   | 887.1  | 881.5  | 874.7  | 874.7  | 858.9  | 816.0  | 740.4  | 627.5  | 514.7  | 500.0  | 375.8  |
| 17.5° | 945.8  | 939.0  | 937.9  | 944.7  | 940.2  | 909.7  | 838.6  | 709.9  | 580.1  | 568.8  | 413.1  |
| 20°   | 1011.3 | 1002.3 | 1002.3 | 1007.9 | 1006.8 | 989.8  | 927.8  | 804.7  | 656.9  | 636.6  | 456.0  |
| 22.5° | 1103.8 | 1098.2 | 1093.7 | 1084.6 | 1077.9 | 1062.1 | 1007.9 | 897.3  | 730.2  | 711.1  | 500.0  |
| 25°   | 1228.0 | 1221.2 | 1200.9 | 1185.1 | 1155.8 | 1132.1 | 1085.8 | 979.7  | 804.7  | 783.3  | 542.9  |
| 27.5° | 1348.8 | 1335.2 | 1316.0 | 1295.7 | 1263.0 | 1222.3 | 1164.8 | 1057.6 | 882.6  | 860.0  | 586.9  |
| 30°   | 1476.3 | 1466.1 | 1442.4 | 1409.7 | 1369.1 | 1323.9 | 1255.1 | 1151.2 | 971.8  | 946.9  | 634.3  |
| 32.5° | 1577.9 | 1562.1 | 1540.6 | 1509.0 | 1467.3 | 1435.7 | 1361.2 | 1253.9 | 1074.5 | 1041.8 | 684.0  |
| 35°   | 1659.1 | 1646.7 | 1618.5 | 1588.0 | 1556.4 | 1547.4 | 1466.1 | 1337.5 | 1156.9 | 1126.4 | 737.0  |
| 37.5° | 1711.1 | 1698.6 | 1674.9 | 1644.5 | 1632.0 | 1647.9 | 1594.8 | 1451.5 | 1267.5 | 1229.1 | 798.0  |
| 40°   | 1751.7 | 1737.0 | 1717.8 | 1704.3 | 1699.8 | 1743.8 | 1738.1 | 1599.3 | 1413.1 | 1390.5 | 881.5  |
| 42.5° | 1781.0 | 1766.4 | 1753.9 | 1752.8 | 1782.2 | 1867.9 | 1931.1 | 1805.9 | 1616.2 | 1570.0 | 988.7  |
| 45°   | 1743.8 | 1731.4 | 1738.1 | 1777.6 | 1848.8 | 1984.2 | 2164.8 | 2098.2 | 1861.2 | 1828.4 | 1160.3 |
| 47.5° | 1639.9 | 1632.0 | 1662.5 | 1734.8 | 1866.8 | 2055.3 | 2390.5 | 2418.7 | 2211.1 | 2161.4 | 1382.6 |
| 50°   | 1477.4 | 1476.3 | 1524.8 | 1623.0 | 1810.4 | 2082.4 | 2504.5 | 2726.9 | 2570.0 | 2519.2 | 1563.2 |
| 52.5° | 1257.3 | 1252.8 | 1323.9 | 1460.5 | 1677.2 | 2031.6 | 2526.0 | 2849.9 | 2777.6 | 2717.8 | 1677.2 |
| 55°   | 1007.9 | 997.7  | 1082.4 | 1232.5 | 1480.8 | 1883.7 | 2468.4 | 2877.0 | 2877.0 | 2822.8 | 1761.8 |
| 57.5° | 708.8  | 724.6  | 794.6  | 975.2  | 1238.1 | 1662.5 | 2326.2 | 2852.1 | 2977.4 | 2931.1 | 1875.8 |
| 60°   | 447.0  | 453.7  | 530.5  | 676.1  | 939.0  | 1366.8 | 2072.2 | 2744.9 | 3057.6 | 3030.5 | 1967.3 |
| 62.5° | 257.3  | 278.8  | 317.2  | 427.8  | 647.9  | 1027.1 | 1758.5 | 2551.9 | 3088.0 | 3076.7 | 2027.1 |
| 65°   | 156.9  | 159.1  | 177.2  | 241.5  | 398.4  | 700.9  | 1407.4 | 2283.3 | 3019.2 | 3029.3 | 2015.8 |
| 67.5° | 117.4  | 117.4  | 123.0  | 152.4  | 226.9  | 445.8  | 1038.4 | 1957.1 | 2799.1 | 2831.8 | 1909.7 |
| 70°   | 101.6  | 101.6  | 102.7  | 111.7  | 140.0  | 264.1  | 686.2  | 1577.9 | 2399.5 | 2396.2 | 1577.9 |
| 72.5° | 80.1   | 83.5   | 90.3   | 94.8   | 106.1  | 154.6  | 401.8  | 1102.7 | 1667.0 | 1706.5 | 1015.8 |
| 75°   | 64.3   | 65.5   | 74.5   | 82.4   | 89.2   | 105.0  | 189.6  | 612.9  | 874.7  | 874.7  | 447.0  |
| 77.5° | 49.7   | 51.9   | 57.6   | 65.5   | 74.5   | 74.5   | 79.0   | 237.0  | 338.6  | 327.3  | 132.1  |
| 80°   | 31.6   | 32.7   | 41.8   | 51.9   | 62.1   | 53.0   | 42.9   | 79.0   | 92.6   | 89.2   | 36.1   |
| 82.5° | 19.2   | 20.3   | 27.1   | 41.8   | 41.8   | 29.3   | 27.1   | 32.7   | 29.3   | 27.1   | 14.7   |
| 85°   | 5.6    | 6.8    | 19.2   | 27.1   | 23.7   | 11.3   | 13.5   | 14.7   | 13.5   | 12.4   | 7.9    |
| 87.5° | 1.1    | 1.1    | 5.6    | 6.8    | 5.6    | 5.6    | 4.5    | 5.6    | 5.6    | 5.6    | 3.4    |
| 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°    | 234.8  | 234.8 | 234.8 | 234.8 | 234.8 | 234.8 | 234.8 | 234.8 | 234.8 | 234.8 | 234.8 |
| 2.5°  | 238.1  | 233.6 | 224.6 | 217.8 | 212.2 | 206.5 | 202.0 | 200.9 | 198.6 | 198.6 | 197.5 |
| 5°    | 248.3  | 238.1 | 221.2 | 209.9 | 200.9 | 193.0 | 186.2 | 179.5 | 177.2 | 174.9 | 176.1 |
| 7.5°  | 264.1  | 248.3 | 224.6 | 207.7 | 191.9 | 173.8 | 159.1 | 146.7 | 137.7 | 135.4 | 132.1 |
| 10°   | 284.4  | 260.7 | 230.2 | 203.2 | 173.8 | 142.2 | 121.9 | 109.5 | 105.0 | 99.3  | 100.5 |
| 12.5° | 304.7  | 275.4 | 234.8 | 190.7 | 143.3 | 111.7 | 94.8  | 86.9  | 83.5  | 82.4  | 83.5  |
| 15°   | 328.4  | 291.2 | 232.5 | 168.2 | 115.1 | 90.3  | 80.1  | 76.7  | 74.5  | 74.5  | 73.4  |
| 17.5° | 352.1  | 304.7 | 224.6 | 138.8 | 92.6  | 76.7  | 72.2  | 68.8  | 66.6  | 65.5  | 65.5  |
| 20°   | 378.1  | 317.2 | 206.5 | 110.6 | 76.7  | 70.0  | 65.5  | 60.9  | 58.7  | 58.7  | 58.7  |
| 22.5° | 405.2  | 326.2 | 182.8 | 88.0  | 68.8  | 62.1  | 57.6  | 54.2  | 51.9  | 51.9  | 51.9  |
| 25°   | 428.9  | 330.7 | 154.6 | 73.4  | 63.2  | 56.4  | 51.9  | 48.5  | 47.4  | 46.3  | 46.3  |
| 27.5° | 451.5  | 329.6 | 125.3 | 64.3  | 56.4  | 50.8  | 46.3  | 44.0  | 41.8  | 41.8  | 41.8  |
| 30°   | 474.0  | 322.8 | 99.3  | 58.7  | 51.9  | 45.1  | 41.8  | 39.5  | 38.4  | 37.2  | 37.2  |
| 32.5° | 493.2  | 311.5 | 77.9  | 54.2  | 47.4  | 40.6  | 37.2  | 35.0  | 35.0  | 33.9  | 33.9  |
| 35°   | 512.4  | 294.6 | 65.5  | 50.8  | 42.9  | 37.2  | 33.9  | 32.7  | 31.6  | 31.6  | 31.6  |
| 37.5° | 532.7  | 273.1 | 57.6  | 46.3  | 38.4  | 33.9  | 31.6  | 30.5  | 29.3  | 28.2  | 28.2  |
| 40°   | 557.6  | 251.7 | 54.2  | 42.9  | 35.0  | 30.5  | 28.2  | 27.1  | 26.0  | 26.0  | 26.0  |
| 42.5° | 597.1  | 233.6 | 50.8  | 38.4  | 31.6  | 28.2  | 26.0  | 23.7  | 23.7  | 22.6  | 22.6  |
| 45°   | 671.6  | 226.9 | 47.4  | 35.0  | 29.3  | 24.8  | 23.7  | 21.4  | 20.3  | 20.3  | 20.3  |
| 47.5° | 768.6  | 228.0 | 44.0  | 31.6  | 27.1  | 22.6  | 21.4  | 20.3  | 18.1  | 18.1  | 18.1  |
| 50°   | 848.8  | 222.3 | 40.6  | 29.3  | 23.7  | 21.4  | 19.2  | 18.1  | 16.9  | 16.9  | 16.9  |
| 52.5° | 880.4  | 212.2 | 37.2  | 27.1  | 22.6  | 19.2  | 18.1  | 16.9  | 15.8  | 15.8  | 15.8  |
| 55°   | 912.0  | 207.7 | 33.9  | 23.7  | 20.3  | 19.2  | 16.9  | 15.8  | 14.7  | 13.5  | 13.5  |
| 57.5° | 969.5  | 209.9 | 30.5  | 22.6  | 19.2  | 18.1  | 15.8  | 13.5  | 11.3  | 10.2  | 10.2  |
| 60°   | 1000.0 | 202.0 | 28.2  | 20.3  | 18.1  | 16.9  | 13.5  | 10.2  | 7.9   | 6.8   | 6.8   |
| 62.5° | 974.0  | 179.5 | 26.0  | 19.2  | 16.9  | 14.7  | 10.2  | 7.9   | 5.6   | 3.4   | 3.4   |
| 65°   | 901.8  | 147.9 | 23.7  | 18.1  | 14.7  | 11.3  | 9.0   | 5.6   | 3.4   | 2.3   | 2.3   |
| 67.5° | 810.4  | 116.3 | 21.4  | 16.9  | 13.5  | 10.2  | 7.9   | 4.5   | 2.3   | 1.1   | 1.1   |
| 70°   | 654.6  | 83.5  | 20.3  | 15.8  | 12.4  | 9.0   | 6.8   | 4.5   | 2.3   | 1.1   | 1.1   |
| 72.5° | 422.1  | 54.2  | 18.1  | 14.7  | 11.3  | 9.0   | 5.6   | 3.4   | 2.3   | 1.1   | 1.1   |
| 75°   | 195.3  | 36.1  | 16.9  | 13.5  | 11.3  | 7.9   | 5.6   | 4.5   | 2.3   | 1.1   | 1.1   |
| 77.5° | 57.6   | 26.0  | 15.8  | 12.4  | 10.2  | 7.9   | 5.6   | 4.5   | 2.3   | 1.1   | 1.1   |
| 80°   | 23.7   | 18.1  | 12.4  | 11.3  | 10.2  | 7.9   | 5.6   | 4.5   | 2.3   | 1.1   | 1.1   |
| 82.5° | 11.3   | 7.9   | 5.6   | 4.5   | 5.6   | 5.6   | 4.5   | 4.5   | 2.3   | 1.1   | 1.1   |
| 85°   | 5.6    | 3.4   | 2.3   | 2.3   | 2.3   | 1.1   | 1.1   | 2.3   | 2.3   | 1.1   | 1.1   |
| 87.5° | 3.4    | 2.3   | 2.3   | 2.3   | 1.1   | 1.1   | 1.1   | 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)