

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: P399436

Luminaire Tested: **ARCH-L-PA3-140-750-U-T2R**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399436  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-9)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-PA3-140-750-U-T2R  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 5000K, 620mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 22631 lumens  
Efficiency: N/A  
Efficacy: 158.3 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B3 - U0 - G3

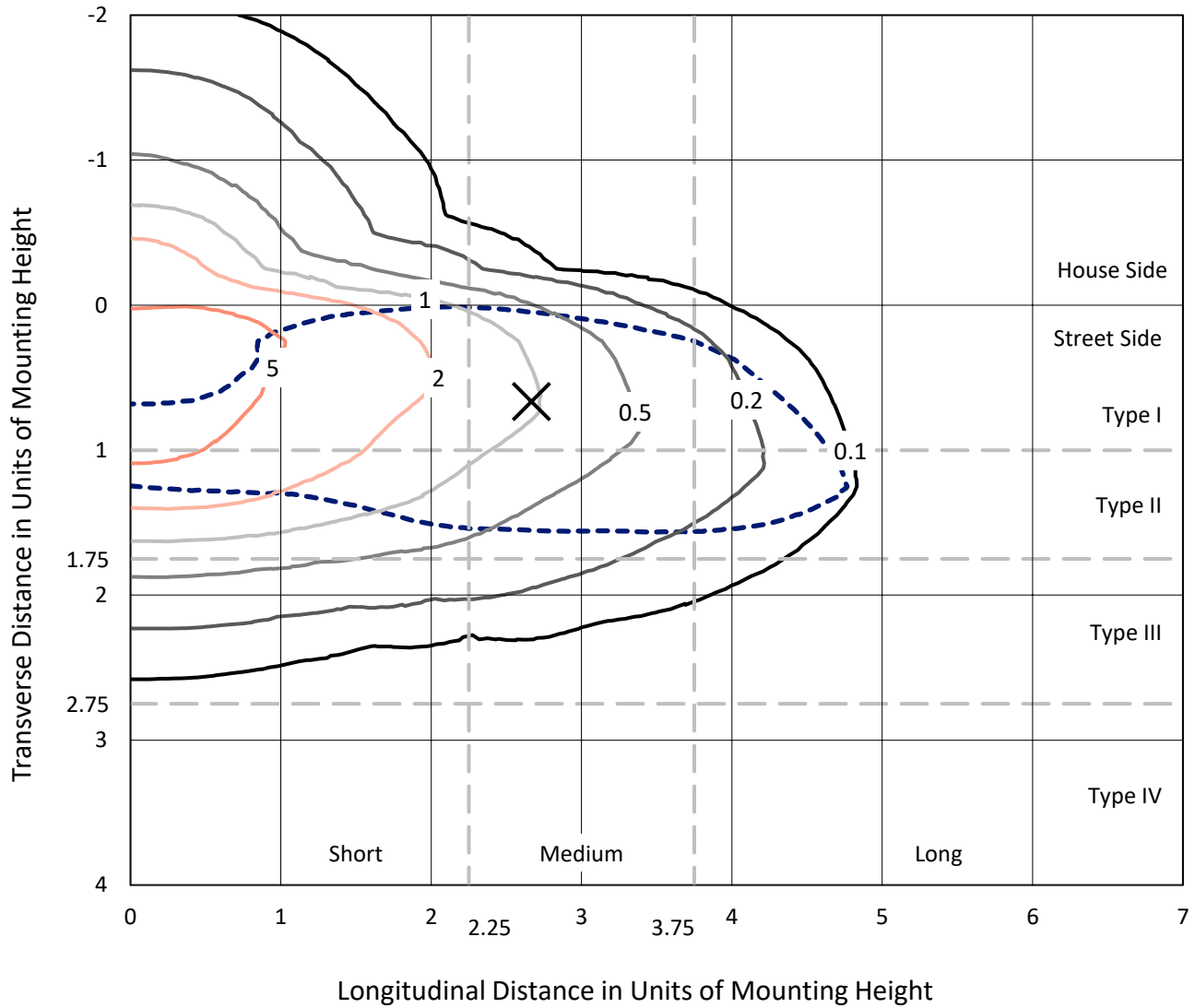
Input Watts (W): 143  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

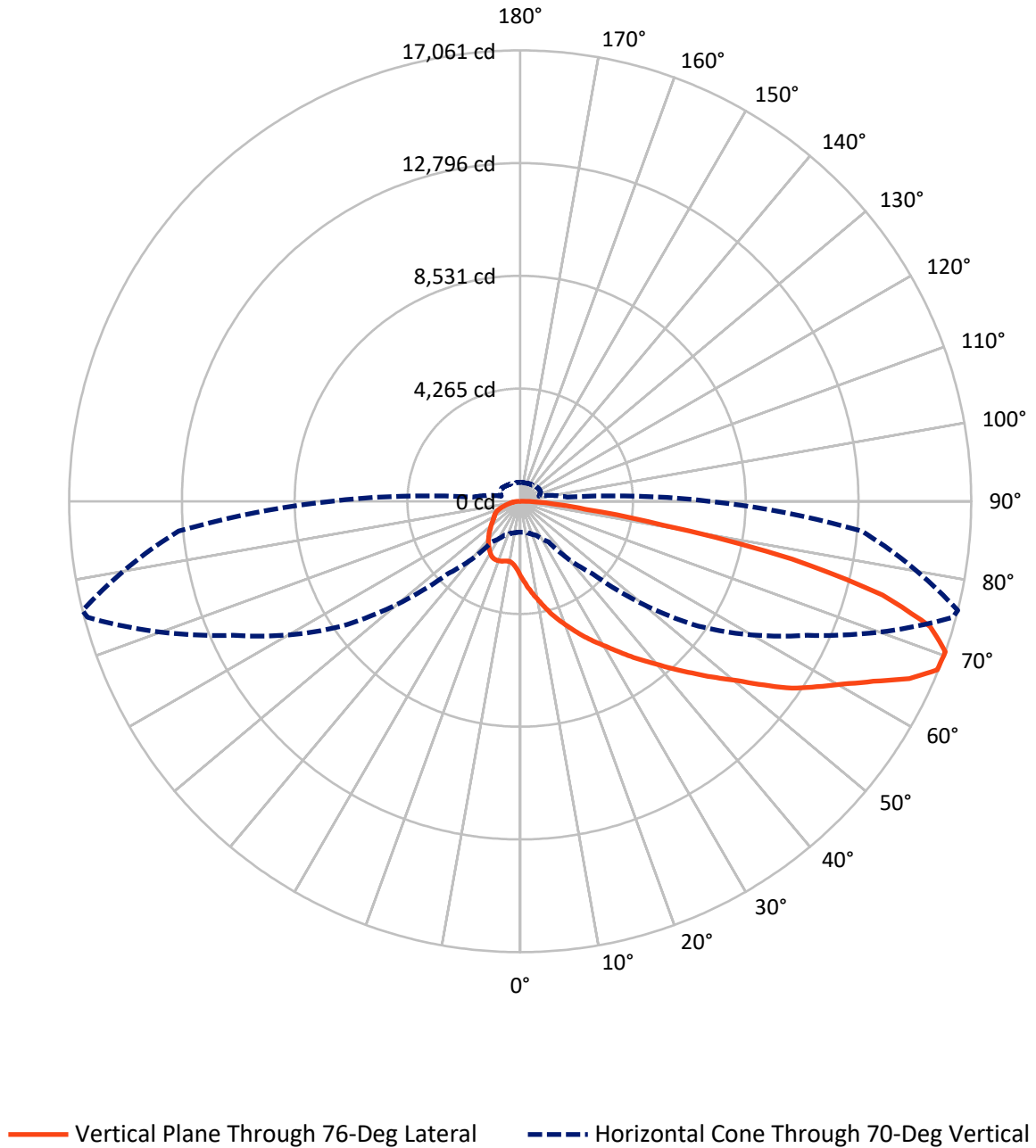
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.7 fc  
 Type II - Medium - N/A

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### Luminous Intensity Polar Plot



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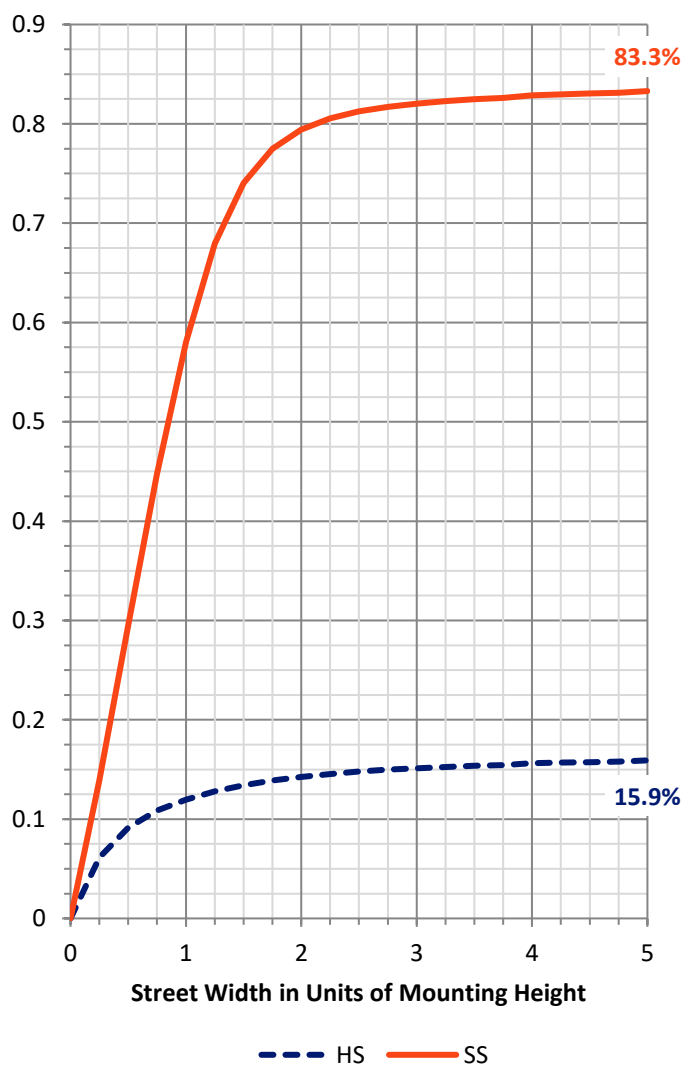
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 3694.7   | 0.0    | 3694.7  |
|                    | % Fixture | 16.3     | 0.0    | 16.3    |
| <b>Street Side</b> | Lumens    | 18936.3  | 0.0    | 18936.3 |
|                    | % Fixture | 83.7     | 0.0    | 83.7    |
| <b>Total</b>       | Lumens    | 22631.0  | 0.0    | 22631.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 294.1   | 1.3       |
| 10°-20°   | 999.4   | 4.4       |
| 20°-30°   | 1788.1  | 7.9       |
| 30°-40°   | 2892.5  | 12.8      |
| 40°-50°   | 4184.4  | 18.5      |
| 50°-60°   | 4789.3  | 21.2      |
| 60°-70°   | 4405.6  | 19.5      |
| 70°-80°   | 2724.4  | 12.0      |
| 80°-90°   | 553.2   | 2.4       |
| 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°    | 22631.0 | 100.0     |
| 0°-180°   | 22631.0 | 100.0     |

**Coefficient of Utilization**



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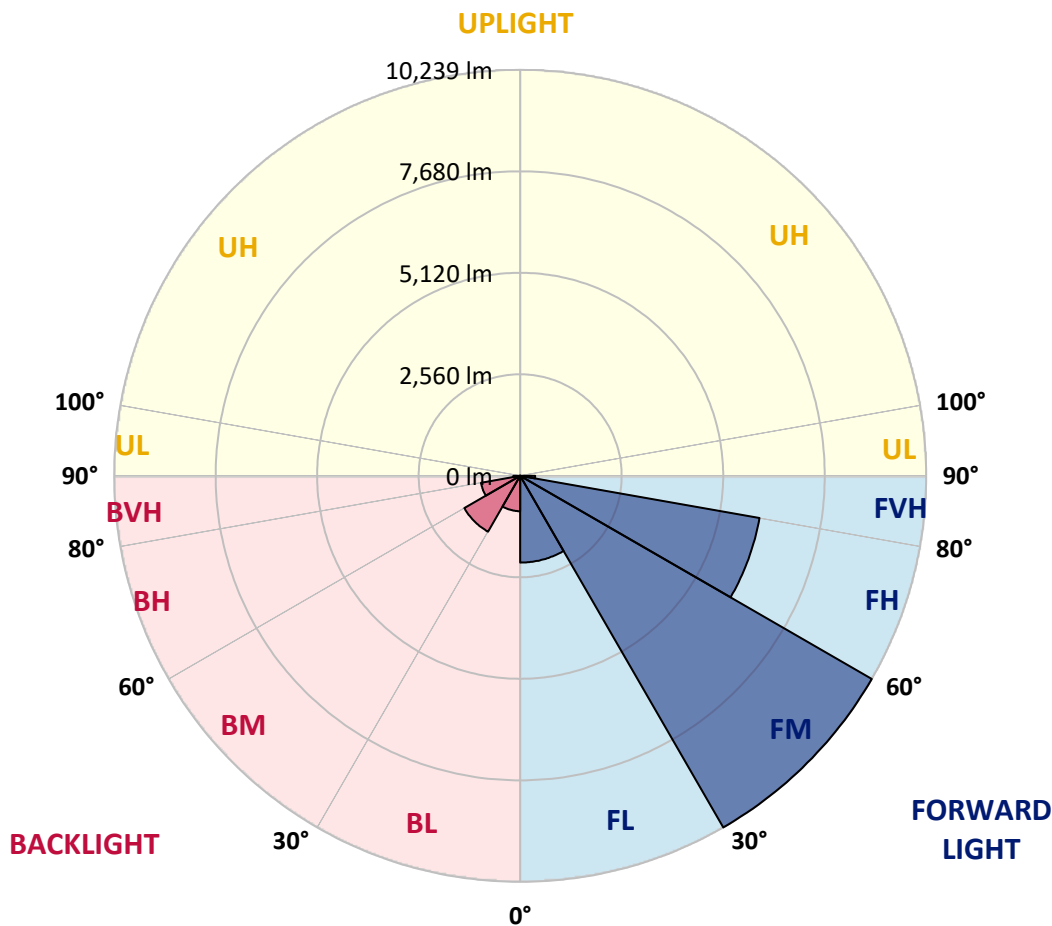
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|---------|-----------|-------------------------|------|---------|
|                |         |           | B                       | U    | G       |
| FL (0°-30°)    | 2189.2  | 9.7       |                         |      |         |
| FM (30°-60°)   | 10239.5 | 45.2      |                         |      |         |
| FH (60°-80°)   | 6127.9  | 27.1      |                         |      | G3/7500 |
| FVH (80°-90°)  | 379.8   | 1.7       |                         |      | G3/500  |
| BL (0°-30°)    | 892.4   | 3.9       | B2/1000                 |      |         |
| BM (30°-60°)   | 1626.8  | 7.2       | B2/2500                 |      |         |
| BH (60°-80°)   | 1002.1  | 4.4       | B3/2500                 |      | G3/2500 |
| BVH (80°-90°)  | 173.4   | 0.8       |                         |      | G2/225  |
| UL (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |         |
| UH (100°-180°) | 0.0     | 0.0       |                         | U0/0 |         |

**BUG Rating: B3-U0-G3**

Type II Medium





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 55°     | 65°     | 75°     | 76°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 2830.1  | 2830.1  | 2830.1  | 2830.1  | 2830.1  | 2830.1  | 2830.1  | 2830.1  | 2830.1  | 2830.1  | 2830.1  |
| 2.5°  | 3606.8  | 3580.0  | 3577.1  | 3535.4  | 3496.7  | 3392.6  | 3318.2  | 3187.2  | 3056.3  | 3053.3  | 2922.4  |
| 5°    | 4169.3  | 4142.5  | 4127.6  | 4077.0  | 4011.5  | 3874.7  | 3740.7  | 3538.4  | 3315.2  | 3300.3  | 3053.3  |
| 7.5°  | 4550.2  | 4526.4  | 4496.6  | 4475.8  | 4413.3  | 4291.3  | 4127.6  | 3886.6  | 3580.0  | 3550.3  | 3205.1  |
| 10°   | 4806.1  | 4791.2  | 4785.3  | 4770.4  | 4731.7  | 4633.5  | 4475.8  | 4219.9  | 3844.9  | 3812.2  | 3365.8  |
| 12.5° | 4916.2  | 4910.3  | 4937.1  | 4978.7  | 4993.6  | 4954.9  | 4803.1  | 4562.1  | 4136.5  | 4100.8  | 3559.2  |
| 15°   | 4788.3  | 4794.2  | 4862.7  | 5005.5  | 5157.3  | 5240.6  | 5151.3  | 4916.2  | 4466.9  | 4416.3  | 3785.4  |
| 17.5° | 4728.7  | 4737.7  | 4785.3  | 4922.2  | 5136.4  | 5395.3  | 5437.0  | 5252.5  | 4785.3  | 4713.9  | 4023.4  |
| 20°   | 4832.9  | 4844.8  | 4880.5  | 4987.6  | 5136.4  | 5413.2  | 5630.4  | 5573.9  | 5097.8  | 5023.4  | 4252.6  |
| 22.5° | 5097.8  | 5112.6  | 5109.7  | 5178.1  | 5279.3  | 5469.7  | 5737.6  | 5877.4  | 5425.1  | 5341.8  | 4490.7  |
| 25°   | 5663.2  | 5651.3  | 5550.1  | 5517.4  | 5544.1  | 5666.2  | 5880.4  | 6169.1  | 5767.3  | 5684.0  | 4740.6  |
| 27.5° | 6431.0  | 6416.1  | 6231.6  | 6064.9  | 5916.1  | 5969.7  | 6082.8  | 6404.2  | 6115.5  | 6020.3  | 4978.7  |
| 30°   | 7252.3  | 7234.5  | 7020.2  | 6749.4  | 6419.1  | 6341.7  | 6326.8  | 6609.5  | 6466.7  | 6365.5  | 5231.7  |
| 32.5° | 8052.8  | 8038.0  | 7808.8  | 7493.4  | 7038.1  | 6805.9  | 6663.1  | 6838.7  | 6865.5  | 6767.3  | 5508.4  |
| 35°   | 8782.0  | 8782.0  | 8585.5  | 8210.6  | 7695.7  | 7344.6  | 7109.5  | 7121.4  | 7323.7  | 7210.7  | 5823.9  |
| 37.5° | 9430.7  | 9427.7  | 9213.5  | 8844.4  | 8350.4  | 7948.7  | 7657.1  | 7463.6  | 7761.2  | 7663.0  | 6154.2  |
| 40°   | 9945.5  | 9924.7  | 9767.0  | 9445.6  | 8948.6  | 8549.8  | 8255.2  | 7865.4  | 8249.3  | 8160.0  | 6505.4  |
| 42.5° | 10320.5 | 10308.6 | 10201.5 | 9921.7  | 9448.6  | 9073.6  | 8871.2  | 8371.3  | 8802.8  | 8713.5  | 6916.0  |
| 45°   | 10466.3 | 10490.1 | 10490.1 | 10225.3 | 9850.3  | 9508.1  | 9418.8  | 8927.8  | 9400.9  | 9311.7  | 7356.5  |
| 47.5° | 10231.2 | 10293.7 | 10421.7 | 10439.5 | 10109.2 | 9877.1  | 9906.8  | 9487.2  | 10017.0 | 9969.3  | 7838.6  |
| 50°   | 9496.2  | 9612.2  | 9892.0  | 10397.9 | 10213.4 | 10159.8 | 10323.5 | 10058.6 | 10677.6 | 10662.7 | 8424.8  |
| 52.5° | 7600.5  | 7883.2  | 8755.2  | 9662.8  | 10141.9 | 10290.7 | 10737.1 | 10701.4 | 11528.7 | 11552.5 | 9189.7  |
| 55°   | 5829.8  | 5937.0  | 6945.8  | 8490.3  | 9704.5  | 10249.1 | 11013.9 | 11329.3 | 12451.3 | 12481.0 | 9892.0  |
| 57.5° | 4713.9  | 4785.3  | 5335.8  | 6945.8  | 8707.6  | 10022.9 | 11231.1 | 11695.4 | 13159.5 | 13236.9 | 10516.9 |
| 60°   | 3734.8  | 3838.9  | 4208.0  | 5315.0  | 7311.8  | 9478.3  | 11382.9 | 12103.1 | 13921.4 | 14037.4 | 11263.9 |
| 62.5° | 2776.5  | 2827.1  | 3175.3  | 3937.1  | 5788.2  | 8499.2  | 11302.6 | 12546.5 | 14855.8 | 14995.7 | 12162.6 |
| 65°   | 1976.0  | 2020.7  | 2267.7  | 2800.3  | 4279.4  | 7175.0  | 10835.3 | 12876.8 | 16028.3 | 16171.2 | 13067.3 |
| 67.5° | 1479.0  | 1496.9  | 1636.8  | 1958.2  | 2883.7  | 5573.9  | 9889.0  | 12820.3 | 16885.4 | 17013.4 | 13430.3 |
| 70°   | 1169.5  | 1175.5  | 1243.9  | 1416.5  | 1874.8  | 3880.6  | 8231.4  | 11990.0 | 16947.9 | 17061.0 | 12972.1 |
| 72.5° | 970.2   | 967.2   | 1005.9  | 1089.2  | 1306.4  | 2455.1  | 6097.7  | 10448.5 | 16144.4 | 16221.8 | 11692.4 |
| 75°   | 800.5   | 806.5   | 833.3   | 880.9   | 996.9   | 1618.9  | 3952.0  | 8335.6  | 14242.8 | 14159.4 | 9811.6  |
| 77.5° | 672.6   | 669.6   | 681.5   | 723.1   | 806.5   | 1163.6  | 2315.3  | 6023.3  | 10555.6 | 10513.9 | 6439.9  |
| 80°   | 541.6   | 547.6   | 565.4   | 601.1   | 678.5   | 886.8   | 1368.9  | 3758.6  | 5663.2  | 5511.4  | 3077.1  |
| 82.5° | 363.1   | 419.6   | 455.3   | 497.0   | 586.3   | 654.7   | 869.0   | 1910.5  | 2532.5  | 2493.8  | 1395.7  |
| 85°   | 172.6   | 229.1   | 339.3   | 386.9   | 476.1   | 410.7   | 589.2   | 910.6   | 1267.7  | 1252.9  | 502.9   |
| 87.5° | 35.7    | 35.7    | 181.5   | 217.2   | 294.6   | 175.6   | 327.4   | 395.8   | 613.0   | 574.4   | 205.3   |
| 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°    | 2830.1 | 2830.1 | 2830.1 | 2830.1 | 2830.1 | 2830.1 | 2830.1 | 2830.1 | 2830.1 | 2830.1 | 2830.1 |
| 2.5°  | 2845.0 | 2764.6 | 2603.9 | 2476.0 | 2345.0 | 2270.6 | 2178.4 | 2133.7 | 2124.8 | 2101.0 | 2118.9 |
| 5°    | 2895.6 | 2737.8 | 2434.3 | 2234.9 | 2101.0 | 2035.5 | 2002.8 | 1990.9 | 1987.9 | 1982.0 | 1982.0 |
| 7.5°  | 2964.0 | 2723.0 | 2327.2 | 2124.8 | 2038.5 | 2017.7 | 2026.6 | 2044.5 | 2047.4 | 2053.4 | 2050.4 |
| 10°   | 3047.3 | 2725.9 | 2267.7 | 2098.0 | 2056.4 | 2059.3 | 2089.1 | 2112.9 | 2124.8 | 2133.7 | 2130.8 |
| 12.5° | 3163.4 | 2761.7 | 2258.7 | 2115.9 | 2098.0 | 2109.9 | 2139.7 | 2163.5 | 2175.4 | 2178.4 | 2178.4 |
| 15°   | 3315.2 | 2836.1 | 2279.6 | 2154.6 | 2139.7 | 2148.6 | 2166.5 | 2175.4 | 2178.4 | 2175.4 | 2175.4 |
| 17.5° | 3481.8 | 2925.3 | 2309.3 | 2178.4 | 2154.6 | 2145.6 | 2139.7 | 2130.8 | 2112.9 | 2101.0 | 2101.0 |
| 20°   | 3642.5 | 3005.7 | 2324.2 | 2175.4 | 2133.7 | 2098.0 | 2062.3 | 2017.7 | 1987.9 | 1964.1 | 1964.1 |
| 22.5° | 3803.2 | 3080.1 | 2324.2 | 2142.7 | 2077.2 | 2008.7 | 1934.4 | 1862.9 | 1818.3 | 1788.5 | 1788.5 |
| 25°   | 3972.9 | 3151.5 | 2306.3 | 2086.1 | 1987.9 | 1889.7 | 1788.5 | 1699.3 | 1654.6 | 1624.9 | 1618.9 |
| 27.5° | 4115.7 | 3193.2 | 2258.7 | 2005.8 | 1877.8 | 1752.8 | 1636.8 | 1544.5 | 1511.8 | 1485.0 | 1485.0 |
| 30°   | 4267.5 | 3219.9 | 2169.4 | 1901.6 | 1752.8 | 1610.0 | 1490.9 | 1416.5 | 1380.8 | 1342.1 | 1339.2 |
| 32.5° | 4437.1 | 3237.8 | 2068.3 | 1791.5 | 1624.9 | 1473.1 | 1371.9 | 1312.4 | 1235.0 | 1193.3 | 1187.4 |
| 35°   | 4633.5 | 3261.6 | 1961.1 | 1666.5 | 1496.9 | 1360.0 | 1300.5 | 1202.3 | 1127.9 | 1092.2 | 1089.2 |
| 37.5° | 4841.8 | 3279.5 | 1845.1 | 1556.4 | 1380.8 | 1285.6 | 1226.1 | 1110.0 | 1044.5 | 991.0  | 985.0  |
| 40°   | 5062.0 | 3279.5 | 1726.0 | 1449.3 | 1288.6 | 1252.9 | 1139.8 | 1035.6 | 925.5  | 898.7  | 892.8  |
| 42.5° | 5306.1 | 3273.5 | 1607.0 | 1345.1 | 1202.3 | 1178.5 | 1089.2 | 979.1  | 922.5  | 898.7  | 892.8  |
| 45°   | 5565.0 | 3252.7 | 1493.9 | 1226.1 | 1113.0 | 1065.4 | 996.9  | 967.2  | 943.4  | 943.4  | 943.4  |
| 47.5° | 5859.6 | 3234.8 | 1365.9 | 1118.9 | 1047.5 | 994.0  | 943.4  | 925.5  | 922.5  | 931.5  | 940.4  |
| 50°   | 6237.5 | 3228.9 | 1258.8 | 1041.6 | 996.9  | 934.4  | 928.5  | 913.6  | 916.6  | 916.6  | 916.6  |
| 52.5° | 6695.8 | 3175.3 | 1157.6 | 985.0  | 946.3  | 871.9  | 889.8  | 904.7  | 910.6  | 907.7  | 904.7  |
| 55°   | 7032.1 | 3080.1 | 1071.3 | 946.3  | 910.6  | 848.1  | 871.9  | 895.8  | 901.7  | 892.8  | 892.8  |
| 57.5° | 7335.7 | 2946.2 | 1002.9 | 916.6  | 886.8  | 833.3  | 860.0  | 883.8  | 877.9  | 874.9  | 871.9  |
| 60°   | 7683.8 | 2818.2 | 949.3  | 901.7  | 863.0  | 827.3  | 851.1  | 866.0  | 857.1  | 851.1  | 848.1  |
| 62.5° | 8061.8 | 2693.2 | 910.6  | 901.7  | 845.2  | 824.3  | 842.2  | 848.1  | 830.3  | 824.3  | 824.3  |
| 65°   | 8237.4 | 2496.8 | 869.0  | 901.7  | 836.2  | 818.4  | 824.3  | 818.4  | 800.5  | 800.5  | 797.5  |
| 67.5° | 7948.7 | 2172.4 | 815.4  | 889.8  | 848.1  | 809.5  | 797.5  | 788.6  | 767.8  | 767.8  | 761.8  |
| 70°   | 7151.1 | 1785.6 | 738.0  | 851.1  | 851.1  | 806.5  | 761.8  | 741.0  | 717.2  | 726.1  | 714.2  |
| 72.5° | 6109.6 | 1416.5 | 642.8  | 785.6  | 833.3  | 803.5  | 723.1  | 690.4  | 669.6  | 678.5  | 660.7  |
| 75°   | 4949.0 | 1098.1 | 529.7  | 681.5  | 788.6  | 788.6  | 684.5  | 639.8  | 616.0  | 616.0  | 595.2  |
| 77.5° | 3154.5 | 812.4  | 431.5  | 565.4  | 708.3  | 767.8  | 651.7  | 583.3  | 547.6  | 538.6  | 523.8  |
| 80°   | 1562.4 | 571.4  | 354.1  | 449.4  | 604.1  | 720.2  | 627.9  | 517.8  | 467.2  | 449.4  | 422.6  |
| 82.5° | 830.3  | 395.8  | 282.7  | 351.2  | 482.1  | 648.8  | 598.2  | 446.4  | 383.9  | 357.1  | 327.4  |
| 85°   | 372.0  | 244.0  | 226.2  | 267.8  | 366.0  | 532.7  | 538.6  | 366.0  | 294.6  | 351.2  | 258.9  |
| 87.5° | 136.9  | 110.1  | 110.1  | 136.9  | 211.3  | 223.2  | 380.9  | 235.1  | 187.5  | 128.0  | 101.2  |
| 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)