

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: P258076

Luminaire Tested: **ARCH-L-AF72-200-D-U-T2U-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P258076  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1802-616-3)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-AF72-200-D-U-T2U-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 4000K, 860mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS  
WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 17260.2 lumens  
Efficiency: N/A  
Efficacy: 85.9 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Short - Full Cutoff  
BUG Rating: B2 - U0 - G2

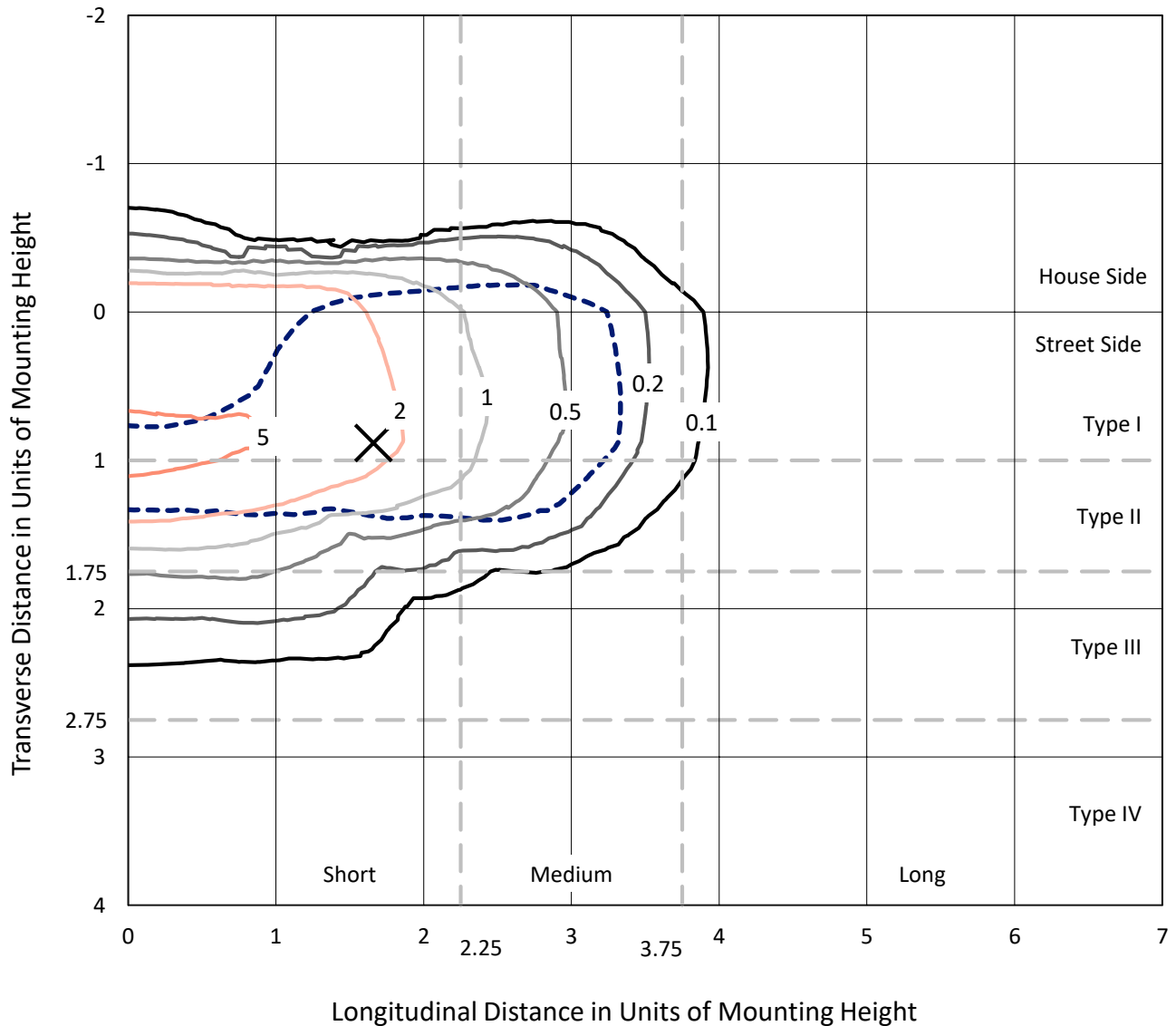
Input Watts (W): 201  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

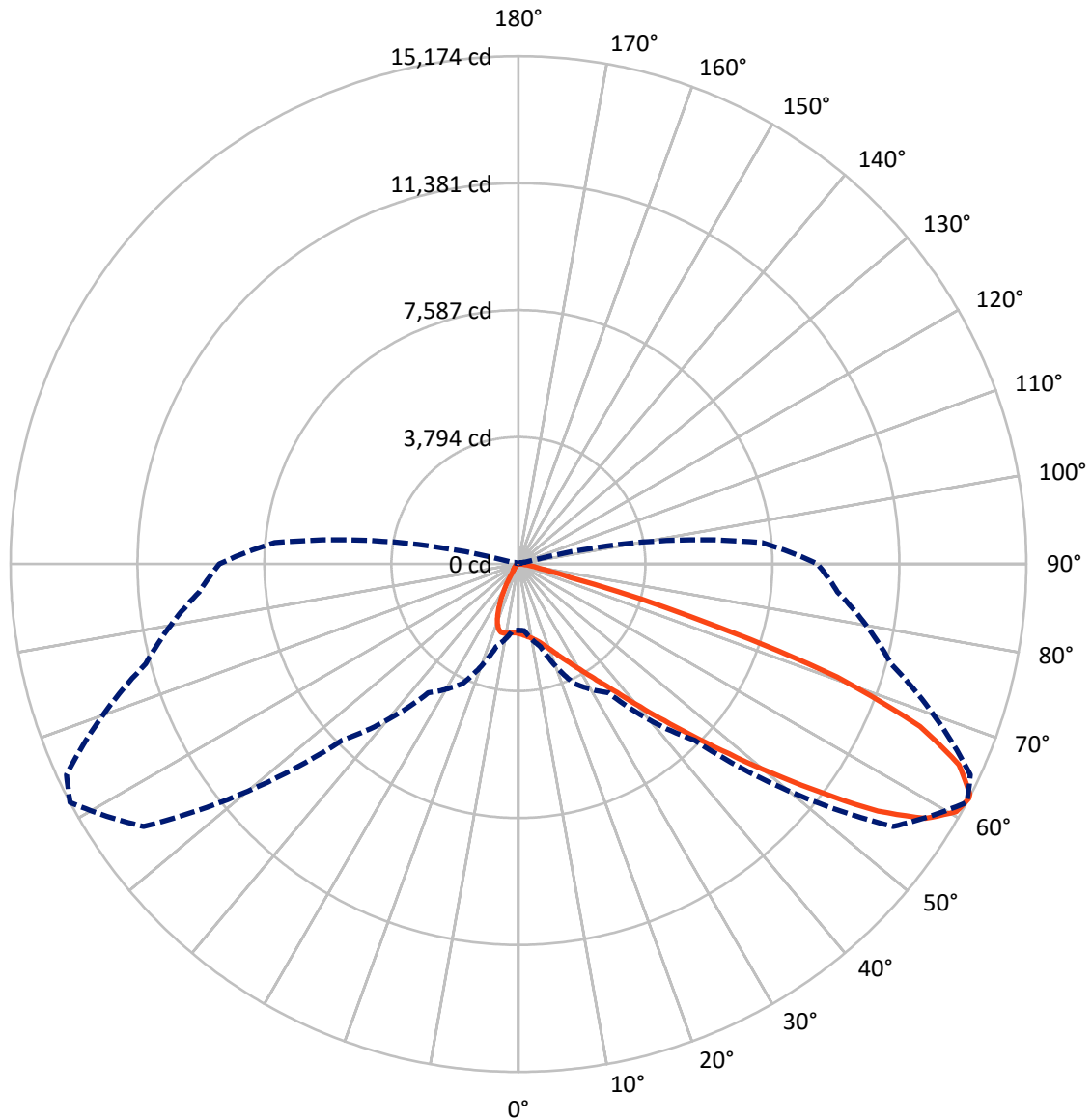
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.4 fc  
 Type II - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 62-Deg Lateral    - - - Horizontal Cone Through 62-Deg Vertical

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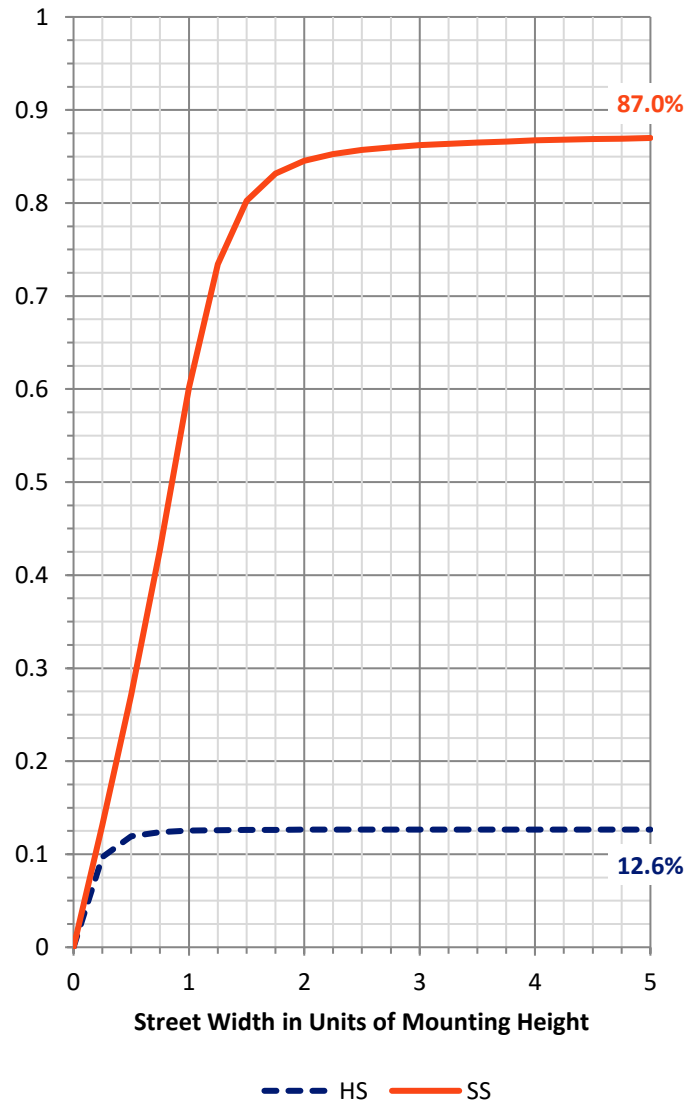
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 2206.9   | 0.0    | 2206.9  |
|                    | % Fixture | 12.8     | 0.0    | 12.8    |
| <b>Street Side</b> | Lumens    | 15053.3  | 0.0    | 15053.3 |
|                    | % Fixture | 87.2     | 0.0    | 87.2    |
| <b>Total</b>       | Lumens    | 17260.2  | 0.0    | 17260.2 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**Coefficient of Utilization**

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 200.1   | 1.2       |
| 10°-20°   | 558.8   | 3.2       |
| 20°-30°   | 938.4   | 5.4       |
| 30°-40°   | 1798.9  | 10.4      |
| 40°-50°   | 3674.3  | 21.3      |
| 50°-60°   | 4862.3  | 28.2      |
| 60°-70°   | 3777.2  | 21.9      |
| 70°-80°   | 1363.4  | 7.9       |
| 80°-90°   | 86.9    | 0.5       |
| 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°    | 17260.2 | 100.0     |
| 0°-180°   | 17260.2 | 100.0     |



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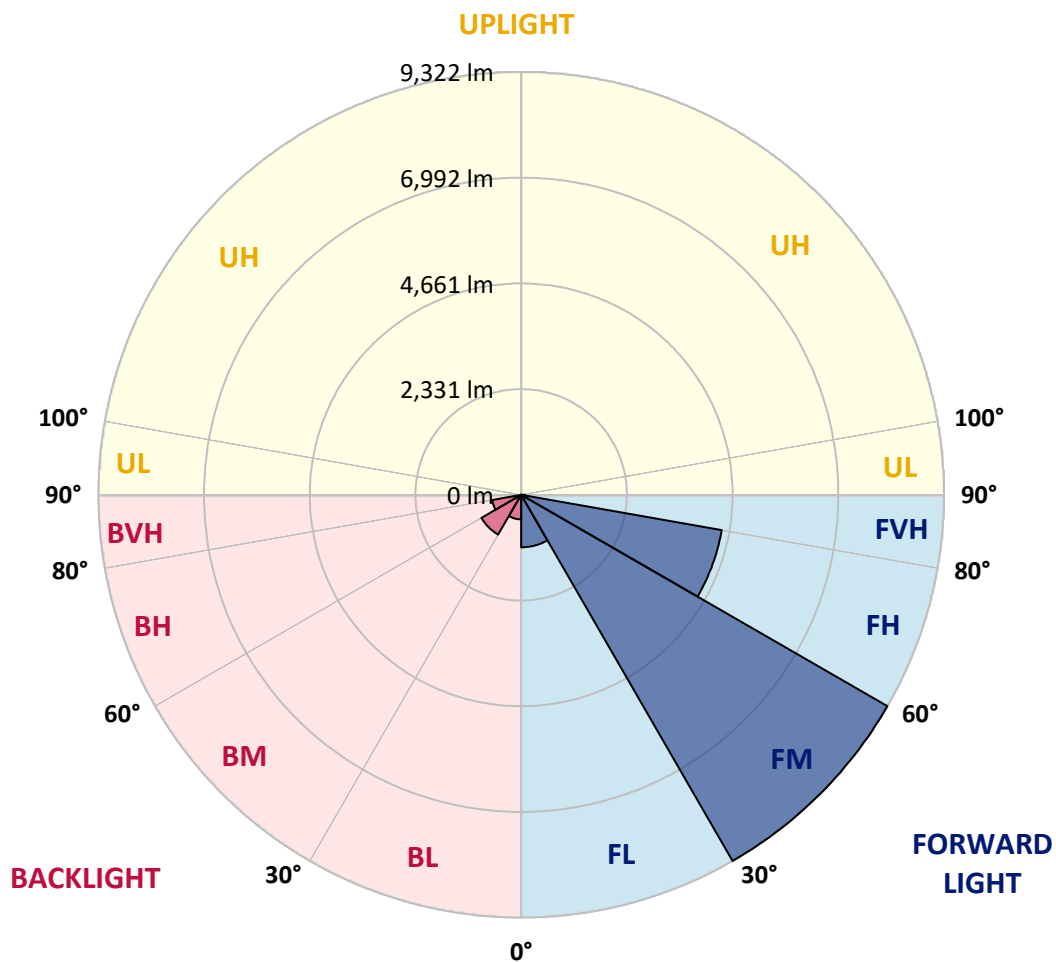
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|--------|-----------|-------------------------|------|---------|
|                |        |           | B                       | U    | G       |
| FL (0°-30°)    | 1157.2 | 6.7       |                         |      |         |
| FM (30°-60°)   | 9322.3 | 54.0      |                         |      |         |
| FH (60°-80°)   | 4490.7 | 26.0      |                         |      | G2/5000 |
| FVH (80°-90°)  | 83.1   | 0.5       |                         |      | G1/100  |
| BL (0°-30°)    | 540.1  | 3.1       | B2/1000                 |      |         |
| BM (30°-60°)   | 1013.2 | 5.9       | B2/2500                 |      |         |
| BH (60°-80°)   | 649.9  | 3.8       | B2/1000                 |      | G2/1000 |
| BVH (80°-90°)  | 3.8    | 0.0       |                         |      | G0/10   |
| UL (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B2-U0-G2**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 55°     | 62°     | 65°     | 75°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 2079.2  | 2079.2  | 2079.2  | 2079.2  | 2079.2  | 2079.2  | 2079.2  | 2079.2  | 2079.2  | 2079.2  | 2079.2  |
| 2.5°  | 2134.4  | 2130.2  | 2125.9  | 2121.7  | 2121.7  | 2117.4  | 2113.2  | 2104.7  | 2096.2  | 2087.7  | 2083.4  |
| 5°    | 2172.5  | 2168.3  | 2164.1  | 2168.3  | 2164.1  | 2164.1  | 2159.9  | 2151.4  | 2142.9  | 2130.2  | 2117.4  |
| 7.5°  | 2202.3  | 2198.0  | 2193.8  | 2198.0  | 2202.3  | 2206.5  | 2210.8  | 2202.3  | 2198.0  | 2181.0  | 2168.3  |
| 10°   | 2240.5  | 2236.3  | 2232.0  | 2240.5  | 2240.5  | 2261.6  | 2265.9  | 2261.6  | 2257.4  | 2244.7  | 2223.5  |
| 12.5° | 2295.6  | 2299.9  | 2299.9  | 2308.4  | 2316.9  | 2342.4  | 2350.8  | 2338.1  | 2338.1  | 2321.1  | 2295.6  |
| 15°   | 2397.5  | 2397.5  | 2397.5  | 2406.0  | 2410.2  | 2444.1  | 2452.6  | 2439.9  | 2448.4  | 2418.7  | 2393.2  |
| 17.5° | 2495.1  | 2499.3  | 2507.8  | 2524.7  | 2524.7  | 2554.5  | 2571.5  | 2571.5  | 2588.4  | 2550.2  | 2516.3  |
| 20°   | 2592.7  | 2596.9  | 2609.6  | 2647.8  | 2647.8  | 2686.1  | 2715.7  | 2728.4  | 2745.4  | 2707.2  | 2647.8  |
| 22.5° | 2698.7  | 2698.7  | 2719.9  | 2779.4  | 2766.7  | 2843.0  | 2898.2  | 2919.4  | 2936.4  | 2885.4  | 2792.1  |
| 25°   | 2860.0  | 2843.0  | 2860.0  | 2915.2  | 2906.7  | 3012.8  | 3114.6  | 3135.9  | 3157.0  | 3097.6  | 2957.6  |
| 27.5° | 3165.5  | 3140.0  | 3080.6  | 3084.9  | 3084.9  | 3208.0  | 3352.2  | 3381.9  | 3394.7  | 3343.7  | 3169.7  |
| 30°   | 3776.5  | 3776.5  | 3555.9  | 3407.3  | 3309.8  | 3420.1  | 3623.8  | 3674.7  | 3691.7  | 3615.3  | 3386.2  |
| 32.5° | 4841.6  | 4841.6  | 4434.3  | 4056.6  | 3687.4  | 3687.4  | 3920.9  | 4014.2  | 4031.1  | 3942.0  | 3674.7  |
| 35°   | 6199.5  | 6191.0  | 5580.0  | 5062.3  | 4340.9  | 4069.3  | 4268.8  | 4425.8  | 4476.7  | 4357.9  | 4048.1  |
| 37.5° | 7642.2  | 7587.0  | 6929.4  | 6335.2  | 5346.6  | 4680.4  | 4739.7  | 4947.7  | 4994.4  | 4896.8  | 4531.9  |
| 40°   | 8813.3  | 8749.7  | 8219.3  | 7722.9  | 6645.0  | 5656.3  | 5418.7  | 5609.7  | 5664.8  | 5529.0  | 5108.9  |
| 42.5° | 9874.1  | 9717.2  | 9352.2  | 8995.8  | 8138.7  | 7345.2  | 6322.6  | 6398.9  | 6458.3  | 6314.1  | 5758.2  |
| 45°   | 10642.3 | 10400.3 | 10213.7 | 10103.3 | 9649.3  | 9199.5  | 7493.7  | 7340.9  | 7362.2  | 7183.9  | 6466.8  |
| 47.5° | 10663.4 | 10493.7 | 10510.7 | 10799.2 | 10986.0 | 10969.0 | 9017.0  | 8473.9  | 8393.3  | 8096.2  | 7222.1  |
| 50°   | 9645.0  | 9742.7  | 10052.4 | 10875.6 | 11885.5 | 12496.6 | 10829.0 | 9814.8  | 9572.9  | 9038.3  | 7973.2  |
| 52.5° | 7947.7  | 8100.4  | 8681.8  | 10069.4 | 12017.0 | 13502.2 | 12708.7 | 11346.6 | 10913.8 | 9971.8  | 8550.2  |
| 55°   | 6225.0  | 6233.5  | 6844.5  | 8257.5  | 11138.7 | 13684.6 | 14210.8 | 13031.2 | 12369.2 | 10680.4 | 8932.2  |
| 57.5° | 4281.5  | 4514.9  | 5291.4  | 6241.9  | 9157.0  | 12776.7 | 14775.2 | 14338.2 | 13485.3 | 11117.4 | 9199.5  |
| 60°   | 2804.8  | 2817.5  | 3721.4  | 4820.5  | 6233.5  | 10396.1 | 14431.5 | 15029.8 | 14389.0 | 11376.3 | 9382.0  |
| 62°   | 1977.4  | 1998.6  | 2558.7  | 3937.7  | 4697.4  | 7451.3  | 13671.9 | 15174.0 | 14898.3 | 11529.1 | 9572.9  |
| 62.5° | 1833.1  | 1850.1  | 2321.1  | 3717.1  | 4413.0  | 6683.2  | 13400.3 | 15140.1 | 14974.7 | 11580.0 | 9640.8  |
| 65°   | 1345.2  | 1345.2  | 1519.1  | 2554.5  | 3233.4  | 3611.0  | 11355.1 | 14465.4 | 14872.8 | 11987.3 | 9895.4  |
| 67.5° | 1039.6  | 1048.1  | 1107.5  | 1574.2  | 2439.9  | 2189.5  | 7247.6  | 12946.4 | 13812.0 | 12589.9 | 10039.6 |
| 70°   | 895.4   | 891.1   | 933.5   | 1043.8  | 1761.0  | 1455.5  | 3191.0  | 10103.3 | 11567.2 | 12437.1 | 9908.1  |
| 72.5° | 662.0   | 666.2   | 763.8   | 916.6   | 1226.3  | 946.2   | 1442.8  | 5363.5  | 7502.2  | 9734.2  | 8490.9  |
| 75°   | 424.3   | 428.6   | 538.9   | 721.4   | 882.6   | 619.5   | 831.7   | 1599.7  | 3072.1  | 5397.5  | 5193.8  |
| 77.5° | 284.3   | 292.8   | 352.2   | 504.9   | 772.3   | 386.2   | 521.9   | 670.4   | 925.1   | 2024.0  | 1862.8  |
| 80°   | 191.0   | 191.0   | 224.8   | 339.4   | 487.9   | 322.5   | 280.1   | 445.6   | 479.5   | 628.0   | 314.0   |
| 82.5° | 127.3   | 127.3   | 148.5   | 224.8   | 318.2   | 288.6   | 169.7   | 241.8   | 280.1   | 314.0   | 110.4   |
| 85°   | 76.4    | 76.4    | 101.9   | 140.0   | 208.0   | 161.2   | 110.4   | 135.7   | 144.2   | 199.5   | 59.4    |
| 87.5° | 46.6    | 42.5    | 67.9    | 97.6    | 110.4   | 97.6    | 72.1    | 72.1    | 76.4    | 110.4   | 29.7    |
| 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°    | 2079.2 | 2079.2 | 2079.2 | 2079.2 | 2079.2 | 2079.2 | 2079.2 | 2079.2 | 2079.2 | 2079.2 | 2079.2 |
| 2.5°  | 2075.0 | 2070.8 | 2066.5 | 2058.0 | 2045.3 | 2036.8 | 2028.3 | 2019.8 | 2011.3 | 2011.3 | 2024.0 |
| 5°    | 2113.2 | 2100.4 | 2083.4 | 2066.5 | 2041.0 | 2024.0 | 2011.3 | 1994.3 | 1985.9 | 1985.9 | 1990.2 |
| 7.5°  | 2159.9 | 2147.1 | 2117.4 | 2087.7 | 2049.5 | 2019.8 | 1990.2 | 1951.9 | 1922.2 | 1909.4 | 1922.2 |
| 10°   | 2210.8 | 2193.8 | 2151.4 | 2104.7 | 2062.3 | 1985.9 | 1888.3 | 1769.5 | 1667.6 | 1621.0 | 1642.1 |
| 12.5° | 2274.4 | 2253.2 | 2202.3 | 2138.6 | 2041.0 | 1854.3 | 1612.5 | 1336.7 | 1162.7 | 1082.1 | 1099.1 |
| 15°   | 2367.7 | 2338.1 | 2265.9 | 2168.3 | 1951.9 | 1548.8 | 1154.2 | 836.0  | 674.6  | 606.8  | 615.3  |
| 17.5° | 2478.1 | 2439.9 | 2342.4 | 2159.9 | 1722.8 | 1116.0 | 687.4  | 487.9  | 420.1  | 403.1  | 403.1  |
| 20°   | 2596.9 | 2546.0 | 2418.7 | 2096.2 | 1374.8 | 700.1  | 428.6  | 373.4  | 347.9  | 335.2  | 335.2  |
| 22.5° | 2719.9 | 2652.1 | 2482.3 | 1947.7 | 980.2  | 437.1  | 352.2  | 314.0  | 284.3  | 271.6  | 271.6  |
| 25°   | 2868.5 | 2779.4 | 2546.0 | 1688.8 | 623.8  | 352.2  | 301.3  | 263.1  | 233.3  | 216.5  | 220.7  |
| 27.5° | 3042.5 | 2927.9 | 2601.2 | 1366.4 | 403.1  | 305.6  | 250.3  | 212.2  | 186.7  | 178.2  | 178.2  |
| 30°   | 3225.0 | 3089.1 | 2613.8 | 1022.6 | 326.7  | 263.1  | 208.0  | 174.0  | 157.0  | 148.5  | 148.5  |
| 32.5° | 3475.3 | 3297.1 | 2575.7 | 678.9  | 275.8  | 220.7  | 174.0  | 144.2  | 131.6  | 127.3  | 127.3  |
| 35°   | 3806.3 | 3568.7 | 2486.6 | 420.1  | 233.3  | 182.5  | 144.2  | 127.3  | 114.6  | 110.4  | 110.4  |
| 37.5° | 4226.3 | 3946.2 | 2329.6 | 288.6  | 199.5  | 148.5  | 123.1  | 110.4  | 101.9  | 97.6   | 97.6   |
| 40°   | 4786.5 | 4404.5 | 2125.9 | 250.3  | 169.7  | 127.3  | 106.1  | 97.6   | 89.1   | 89.1   | 89.1   |
| 42.5° | 5380.5 | 4960.4 | 1862.8 | 220.7  | 144.2  | 110.4  | 93.4   | 84.9   | 80.6   | 76.4   | 76.4   |
| 45°   | 6029.8 | 5529.0 | 1536.1 | 195.2  | 123.1  | 97.6   | 84.9   | 72.1   | 67.9   | 67.9   | 67.9   |
| 47.5° | 6674.8 | 6114.6 | 1179.7 | 169.7  | 106.1  | 84.9   | 72.1   | 63.6   | 59.4   | 55.1   | 55.1   |
| 50°   | 7336.7 | 6645.0 | 865.6  | 148.5  | 93.4   | 76.4   | 63.6   | 55.1   | 46.6   | 42.5   | 42.5   |
| 52.5° | 7816.2 | 6963.2 | 632.3  | 127.3  | 80.6   | 63.6   | 50.9   | 42.5   | 34.0   | 29.7   | 29.7   |
| 55°   | 8168.4 | 7158.5 | 462.5  | 106.1  | 72.1   | 55.1   | 42.5   | 34.0   | 25.5   | 25.5   | 21.2   |
| 57.5° | 8444.2 | 7251.8 | 347.9  | 93.4   | 63.6   | 46.6   | 34.0   | 25.5   | 21.2   | 17.0   | 17.0   |
| 60°   | 8656.3 | 7256.1 | 258.8  | 76.4   | 55.1   | 38.2   | 25.5   | 17.0   | 12.7   | 12.7   | 12.7   |
| 62°   | 8936.4 | 7311.2 | 212.2  | 63.6   | 50.9   | 34.0   | 21.2   | 12.7   | 8.5    | 4.2    | 4.2    |
| 62.5° | 9017.0 | 7332.4 | 203.7  | 63.6   | 46.6   | 29.7   | 17.0   | 12.7   | 8.5    | 4.2    | 4.2    |
| 65°   | 9390.5 | 7370.7 | 157.0  | 50.9   | 38.2   | 25.5   | 12.7   | 8.5    | 0.0    | 0.0    | 0.0    |
| 67.5° | 9729.9 | 7311.2 | 114.6  | 38.2   | 29.7   | 17.0   | 12.7   | 4.2    | 0.0    | 0.0    | 0.0    |
| 70°   | 9695.9 | 6903.9 | 80.6   | 25.5   | 21.2   | 12.7   | 8.5    | 0.0    | 0.0    | 0.0    | 0.0    |
| 72.5° | 7990.2 | 5168.4 | 55.1   | 21.2   | 12.7   | 8.5    | 4.2    | 0.0    | 0.0    | 0.0    | 0.0    |
| 75°   | 4824.6 | 2261.6 | 38.2   | 12.7   | 12.7   | 8.5    | 4.2    | 0.0    | 0.0    | 0.0    | 0.0    |
| 77.5° | 1582.7 | 819.0  | 25.5   | 8.5    | 8.5    | 4.2    | 4.2    | 0.0    | 0.0    | 0.0    | 0.0    |
| 80°   | 258.8  | 135.7  | 12.7   | 8.5    | 8.5    | 4.2    | 4.2    | 0.0    | 0.0    | 0.0    | 0.0    |
| 82.5° | 80.6   | 34.0   | 8.5    | 8.5    | 4.2    | 4.2    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 85°   | 29.7   | 12.7   | 8.5    | 8.5    | 4.2    | 4.2    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 87.5° | 12.7   | 8.5    | 8.5    | 8.5    | 4.2    | 4.2    | 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)