

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: P800261

Luminaire Tested: **ARCH2-90-727-U-T2U**

Issue Date: 4/4/2024

### Test Information

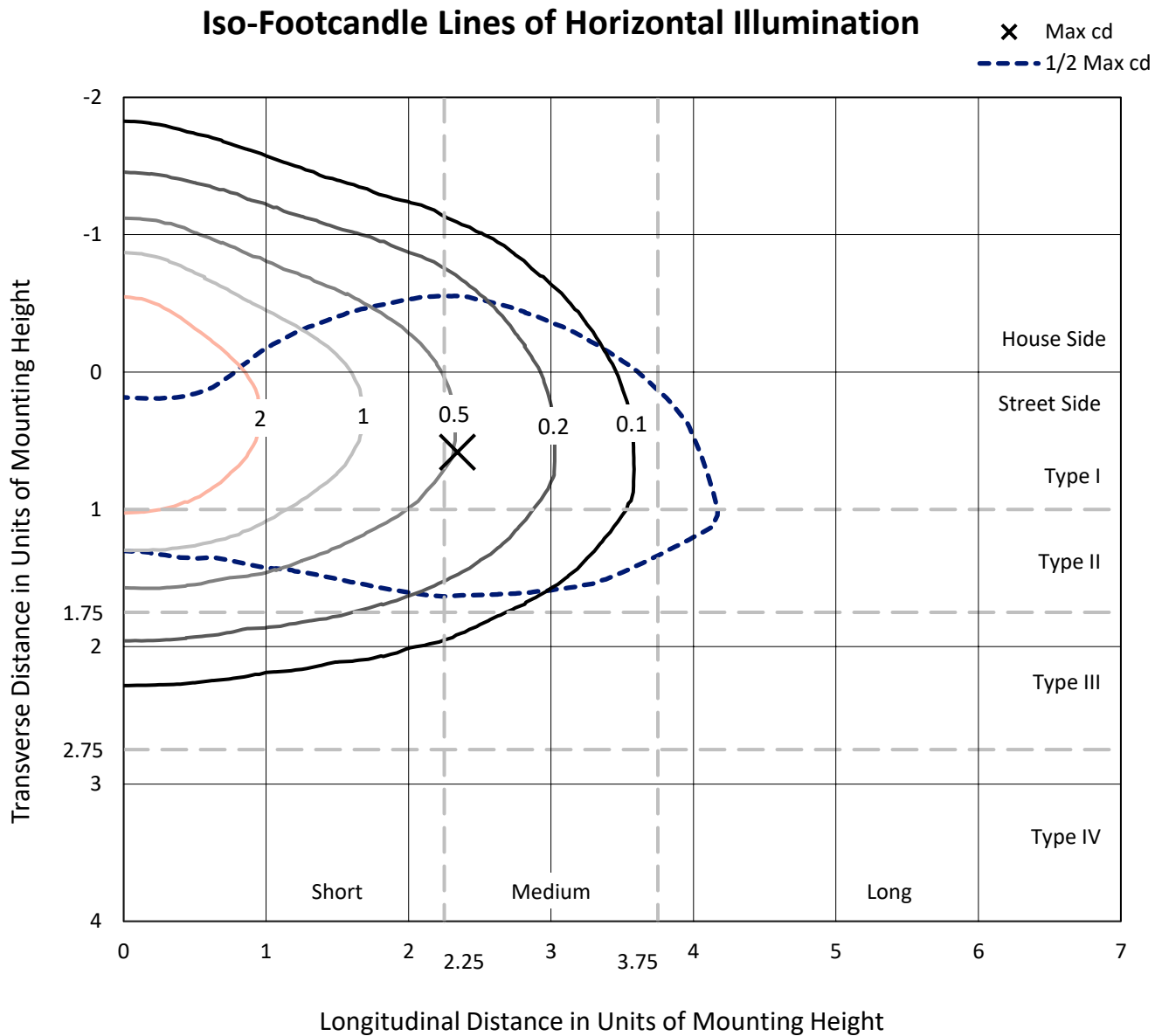
Test Method: LM-79-08  
Report Number: P800261  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-18)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/4/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH2-90-727-U-T2U  
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 2700K, 695mA LIGHTSQUARES WITH 10 LEDS EACH AND TYPE II U OPTICS  
Light Source: -  
Ballast/Driver: -

### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 11506 lumens  
Efficiency: N/A  
Efficacy: 122.8 lumens/watt  
Luminous Opening: Rectangular (W 0.67' x L: 0.33' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B2 - U0 - G2  
  
Input Watts (W): 93.7  
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



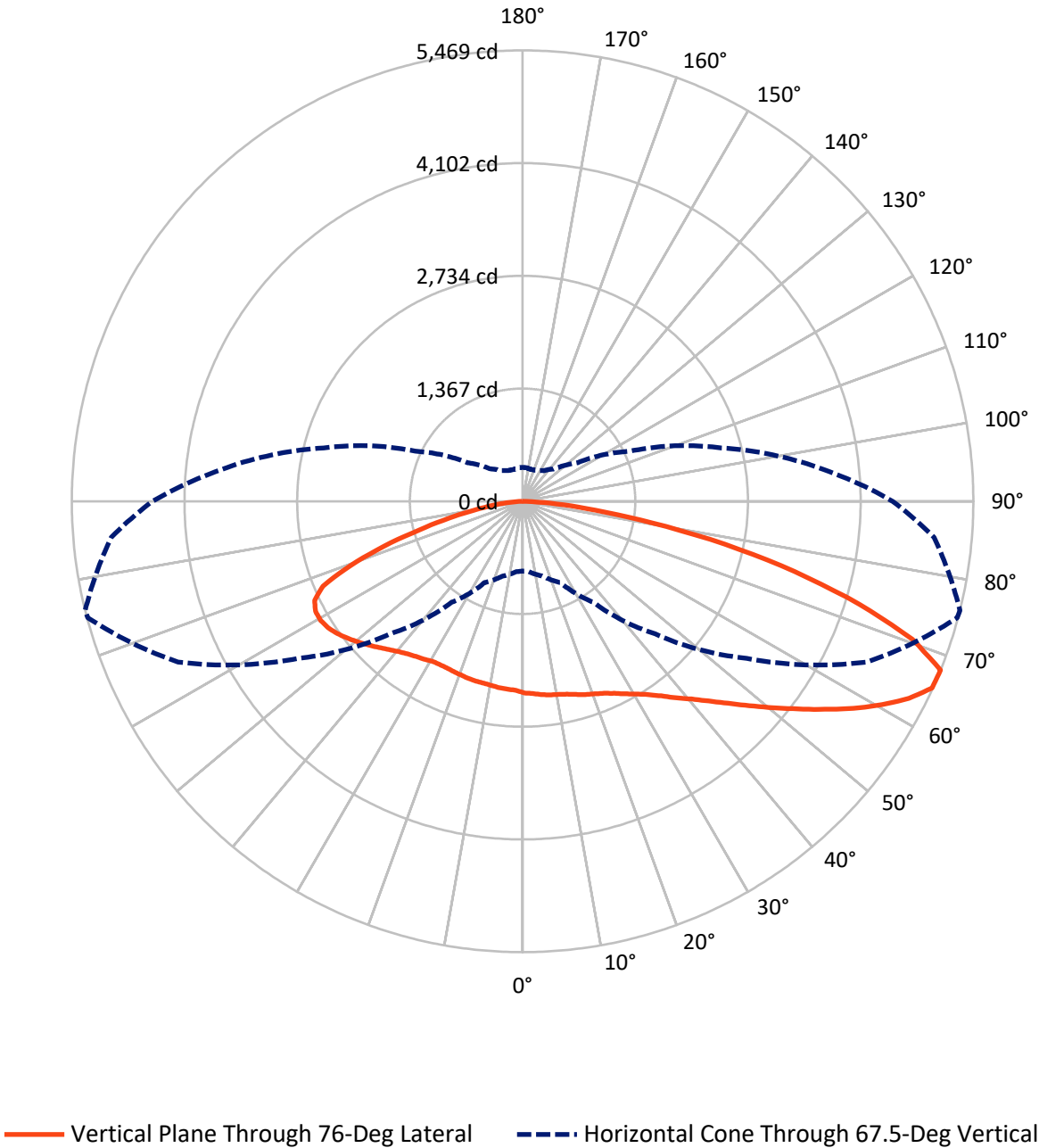
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CATALOG NUMBER: ARCH2-90-727-U-T2U



Based on 25 foot mounting height. Maximum calculated value = 4.2 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    | 3887.9   | 0.0    | 3887.9  |
|                    | % Fixture | 33.8     | 0.0    | 33.8    |
| <b>Street Side</b> | Lumens    | 7618.1   | 0.0    | 7618.1  |
|                    | % Fixture | 66.2     | 0.0    | 66.2    |
| <b>Total</b>       | Lumens    | 11506.0  | 0.0    | 11506.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 224.1   | 1.9       |
| 10°-20°   | 685.2   | 6.0       |
| 20°-30°   | 1164.1  | 10.1      |
| 30°-40°   | 1656.4  | 14.4      |
| 40°-50°   | 2091.9  | 18.2      |
| 50°-60°   | 2264.9  | 19.7      |
| 60°-70°   | 2106.6  | 18.3      |
| 70°-80°   | 1131.4  | 9.8       |
| 80°-90°   | 181.3   | 1.6       |
| 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°    | 11506.0 | 100.0     |
| 0°-180°   | 11506.0 | 100.0     |

**Coefficient of Utilization**



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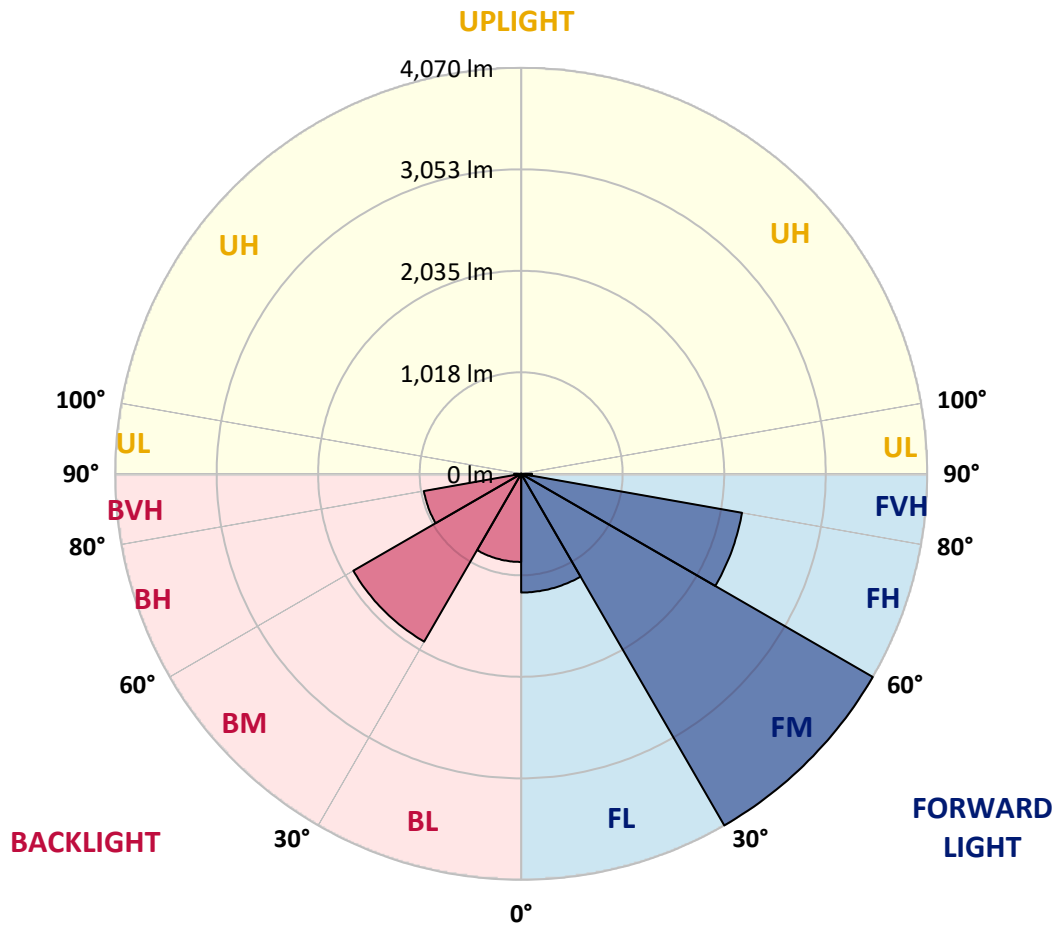
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 1189.8 | 10.3      |                         |      |         |
| FM   | (30°-60°)   | 4070.4 | 35.4      |                         |      |         |
| FH   | (60°-80°)   | 2248.2 | 19.5      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 109.7  | 1.0       |                         |      | G2/225  |
| BL   | (0°-30°)    | 883.5  | 7.7       | B2/1000                 |      |         |
| BM   | (30°-60°)   | 1942.9 | 16.9      | B2/2500                 |      |         |
| BH   | (60°-80°)   | 989.9  | 8.6       | B2/1000                 |      | G2/1000 |
| BVH  | (80°-90°)   | 71.6   | 0.6       |                         |      | 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 II Medium



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 75°    | 76°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 2324.2 | 2324.2 | 2324.2 | 2324.2 | 2324.2 | 2324.2 | 2324.2 | 2324.2 | 2324.2 | 2324.2 | 2324.2 |
| 2.5°  | 2394.7 | 2390.4 | 2373.3 | 2375.5 | 2375.5 | 2373.3 | 2347.7 | 2337.0 | 2337.0 | 2334.9 | 2311.4 |
| 5°    | 2480.1 | 2473.7 | 2454.5 | 2450.2 | 2441.7 | 2431.0 | 2390.4 | 2366.9 | 2356.2 | 2354.1 | 2322.1 |
| 7.5°  | 2580.5 | 2572.0 | 2548.5 | 2535.7 | 2514.3 | 2486.5 | 2435.3 | 2399.0 | 2373.3 | 2371.2 | 2326.3 |
| 10°   | 2680.9 | 2672.4 | 2644.6 | 2621.1 | 2591.2 | 2546.4 | 2480.1 | 2426.7 | 2386.1 | 2381.9 | 2328.5 |
| 12.5° | 2800.6 | 2792.0 | 2757.8 | 2727.9 | 2683.1 | 2623.3 | 2535.7 | 2463.0 | 2407.5 | 2401.1 | 2334.9 |
| 15°   | 2926.6 | 2913.8 | 2879.6 | 2845.4 | 2789.9 | 2713.0 | 2608.3 | 2512.2 | 2441.7 | 2431.0 | 2354.1 |
| 17.5° | 3031.3 | 3014.2 | 2986.4 | 2952.2 | 2890.3 | 2800.6 | 2680.9 | 2561.3 | 2473.7 | 2465.2 | 2373.3 |
| 20°   | 3121.0 | 3108.2 | 3078.3 | 3046.2 | 2980.0 | 2881.7 | 2749.3 | 2610.4 | 2503.6 | 2492.9 | 2388.3 |
| 22.5° | 3206.4 | 3189.3 | 3172.3 | 3148.8 | 3076.1 | 2967.2 | 2828.3 | 2670.3 | 2542.1 | 2529.3 | 2407.5 |
| 25°   | 3304.7 | 3285.5 | 3279.1 | 3266.3 | 3180.8 | 3069.7 | 2924.5 | 2745.0 | 2595.5 | 2580.5 | 2441.7 |
| 27.5° | 3426.5 | 3405.1 | 3392.3 | 3392.3 | 3289.7 | 3174.4 | 3027.0 | 2832.6 | 2657.4 | 2644.6 | 2484.4 |
| 30°   | 3554.6 | 3529.0 | 3509.8 | 3509.8 | 3394.4 | 3279.1 | 3127.4 | 2920.2 | 2727.9 | 2713.0 | 2539.9 |
| 32.5° | 3667.9 | 3642.2 | 3620.9 | 3618.7 | 3499.1 | 3383.7 | 3232.1 | 3016.3 | 2813.4 | 2794.2 | 2608.3 |
| 35°   | 3755.4 | 3731.9 | 3712.7 | 3717.0 | 3603.8 | 3490.6 | 3349.6 | 3144.5 | 2920.2 | 2898.8 | 2698.0 |
| 37.5° | 3808.8 | 3800.3 | 3789.6 | 3804.6 | 3699.9 | 3593.1 | 3471.3 | 3268.4 | 3042.0 | 3022.7 | 2809.1 |
| 40°   | 3836.6 | 3830.2 | 3872.9 | 3892.2 | 3781.1 | 3684.9 | 3593.1 | 3396.6 | 3174.4 | 3153.0 | 2937.3 |
| 42.5° | 3877.2 | 3930.6 | 3947.7 | 3943.4 | 3840.9 | 3755.4 | 3704.2 | 3535.4 | 3330.3 | 3311.1 | 3091.1 |
| 45°   | 3731.9 | 3719.1 | 3813.1 | 3864.4 | 3845.2 | 3800.3 | 3808.8 | 3702.0 | 3511.9 | 3492.7 | 3268.4 |
| 47.5° | 3537.5 | 3520.5 | 3573.9 | 3699.9 | 3774.7 | 3817.4 | 3902.8 | 3875.1 | 3721.3 | 3704.2 | 3475.6 |
| 50°   | 3127.4 | 3150.9 | 3349.6 | 3518.3 | 3665.7 | 3813.1 | 3981.9 | 4060.9 | 3952.0 | 3934.9 | 3697.8 |
| 52.5° | 2672.4 | 2695.9 | 2903.1 | 3291.9 | 3533.3 | 3781.1 | 4039.6 | 4246.8 | 4201.9 | 4182.7 | 3934.9 |
| 55°   | 2341.3 | 2392.5 | 2627.5 | 2909.5 | 3345.3 | 3680.7 | 4073.7 | 4436.9 | 4471.1 | 4454.0 | 4193.4 |
| 57.5° | 2012.3 | 2050.8 | 2228.1 | 2478.0 | 3088.9 | 3505.5 | 4071.6 | 4614.2 | 4753.0 | 4736.0 | 4456.1 |
| 60°   | 1625.6 | 1674.8 | 1815.8 | 2084.9 | 2747.2 | 3296.2 | 4011.8 | 4753.0 | 5024.3 | 5011.5 | 4710.3 |
| 62.5° | 1360.8 | 1375.7 | 1476.1 | 1709.0 | 2307.1 | 3031.3 | 3877.2 | 4827.8 | 5270.0 | 5261.5 | 4938.9 |
| 65°   | 1095.9 | 1098.0 | 1189.9 | 1384.3 | 1882.0 | 2702.3 | 3648.6 | 4800.0 | 5455.9 | 5460.1 | 5103.4 |
| 67.5° | 845.9  | 856.6  | 939.9  | 1087.3 | 1495.3 | 2275.1 | 3321.8 | 4612.1 | 5458.0 | 5468.7 | 5009.4 |
| 70°   | 585.3  | 593.9  | 719.9  | 863.0  | 1155.7 | 1813.6 | 2879.6 | 4114.3 | 5009.4 | 5017.9 | 4490.3 |
| 72.5° | 412.3  | 416.6  | 551.1  | 690.0  | 903.6  | 1367.2 | 2172.5 | 3403.0 | 4270.3 | 4276.7 | 3776.8 |
| 75°   | 307.6  | 311.9  | 388.8  | 523.4  | 692.1  | 946.3  | 1484.7 | 2606.2 | 3411.5 | 3411.5 | 2982.1 |
| 77.5° | 217.9  | 220.0  | 252.1  | 361.0  | 461.4  | 638.7  | 892.9  | 1706.8 | 2503.6 | 2507.9 | 2172.5 |
| 80°   | 147.4  | 149.5  | 164.5  | 243.5  | 288.4  | 346.1  | 484.9  | 895.1  | 1578.7 | 1585.1 | 1380.0 |
| 82.5° | 76.9   | 81.2   | 91.9   | 123.9  | 145.3  | 192.3  | 249.9  | 455.0  | 873.7  | 890.8  | 828.8  |
| 85°   | 29.9   | 29.9   | 34.2   | 40.6   | 53.4   | 74.8   | 115.4  | 173.0  | 395.2  | 408.0  | 365.3  |
| 87.5° | 10.7   | 10.7   | 12.8   | 12.8   | 15.0   | 17.1   | 19.2   | 25.6   | 44.9   | 44.9   | 42.7   |
| 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°    | 2324.2 | 2324.2 | 2324.2 | 2324.2 | 2324.2 | 2324.2 | 2324.2 | 2324.2 | 2324.2 | 2324.2 | 2324.2 |
| 2.5°  | 2302.8 | 2302.8 | 2292.1 | 2296.4 | 2294.3 | 2290.0 | 2285.7 | 2292.1 | 2285.7 | 2270.8 | 2268.6 |
| 5°    | 2307.1 | 2302.8 | 2285.7 | 2283.6 | 2277.2 | 2268.6 | 2258.0 | 2262.2 | 2251.6 | 2238.7 | 2236.6 |
| 7.5°  | 2309.2 | 2300.7 | 2277.2 | 2268.6 | 2255.8 | 2238.7 | 2221.6 | 2221.6 | 2206.7 | 2193.9 | 2191.7 |
| 10°   | 2305.0 | 2294.3 | 2262.2 | 2245.1 | 2221.6 | 2196.0 | 2172.5 | 2166.1 | 2149.0 | 2134.1 | 2134.1 |
| 12.5° | 2307.1 | 2292.1 | 2251.6 | 2223.8 | 2191.7 | 2159.7 | 2129.8 | 2121.2 | 2106.3 | 2091.3 | 2089.2 |
| 15°   | 2319.9 | 2298.6 | 2247.3 | 2211.0 | 2164.0 | 2127.7 | 2095.6 | 2089.2 | 2076.4 | 2065.7 | 2065.7 |
| 17.5° | 2332.7 | 2305.0 | 2240.9 | 2189.6 | 2131.9 | 2091.3 | 2061.4 | 2061.4 | 2052.9 | 2046.5 | 2046.5 |
| 20°   | 2339.1 | 2307.1 | 2228.1 | 2159.7 | 2093.5 | 2050.8 | 2023.0 | 2027.3 | 2025.1 | 2023.0 | 2023.0 |
| 22.5° | 2354.1 | 2311.4 | 2217.4 | 2131.9 | 2052.9 | 2008.0 | 1982.4 | 1988.8 | 1986.7 | 1986.7 | 1988.8 |
| 25°   | 2377.6 | 2322.1 | 2208.8 | 2106.3 | 2014.4 | 1965.3 | 1937.5 | 1941.8 | 1941.8 | 1941.8 | 1941.8 |
| 27.5° | 2409.6 | 2343.4 | 2206.7 | 2082.8 | 1976.0 | 1920.4 | 1886.3 | 1886.3 | 1877.7 | 1879.9 | 1882.0 |
| 30°   | 2458.8 | 2384.0 | 2211.0 | 2061.4 | 1935.4 | 1864.9 | 1824.3 | 1817.9 | 1815.8 | 1820.0 | 1822.2 |
| 32.5° | 2518.6 | 2439.5 | 2236.6 | 2046.5 | 1892.7 | 1803.0 | 1751.7 | 1749.5 | 1743.1 | 1743.1 | 1743.1 |
| 35°   | 2593.3 | 2492.9 | 2260.1 | 2044.3 | 1849.9 | 1736.7 | 1681.2 | 1674.8 | 1659.8 | 1653.4 | 1653.4 |
| 37.5° | 2689.5 | 2576.3 | 2287.9 | 2029.4 | 1813.6 | 1672.6 | 1606.4 | 1585.1 | 1568.0 | 1565.8 | 1565.8 |
| 40°   | 2807.0 | 2670.3 | 2328.5 | 2012.3 | 1775.2 | 1606.4 | 1518.8 | 1482.5 | 1484.7 | 1493.2 | 1493.2 |
| 42.5° | 2945.8 | 2785.6 | 2379.7 | 2003.8 | 1719.6 | 1538.1 | 1416.3 | 1373.6 | 1388.5 | 1397.1 | 1399.2 |
| 45°   | 3108.2 | 2922.3 | 2437.4 | 1993.1 | 1668.4 | 1461.2 | 1307.4 | 1253.9 | 1260.4 | 1262.5 | 1264.6 |
| 47.5° | 3296.2 | 3074.0 | 2497.2 | 1984.5 | 1610.7 | 1365.0 | 1187.7 | 1117.2 | 1115.1 | 1102.3 | 1106.6 |
| 50°   | 3492.7 | 3234.2 | 2559.2 | 1969.6 | 1540.2 | 1251.8 | 1061.7 | 978.4  | 961.3  | 942.1  | 944.2  |
| 52.5° | 3702.0 | 3398.7 | 2616.8 | 1946.1 | 1452.6 | 1136.5 | 942.1  | 852.3  | 818.2  | 796.8  | 801.1  |
| 55°   | 3932.7 | 3567.5 | 2672.4 | 1909.8 | 1360.8 | 1021.1 | 835.3  | 743.4  | 700.7  | 683.6  | 685.7  |
| 57.5° | 4144.2 | 3729.8 | 2713.0 | 1864.9 | 1260.4 | 916.4  | 741.3  | 651.5  | 623.8  | 621.6  | 623.8  |
| 60°   | 4349.3 | 3866.5 | 2730.1 | 1803.0 | 1157.8 | 820.3  | 653.7  | 585.3  | 566.1  | 576.8  | 578.9  |
| 62.5° | 4522.3 | 3954.1 | 2721.5 | 1719.6 | 1053.1 | 728.4  | 583.2  | 534.1  | 521.2  | 542.6  | 544.7  |
| 65°   | 4622.7 | 3981.9 | 2661.7 | 1600.0 | 939.9  | 638.7  | 517.0  | 463.6  | 457.1  | 470.0  | 476.4  |
| 67.5° | 4490.3 | 3808.8 | 2499.4 | 1435.5 | 813.9  | 555.4  | 452.9  | 410.2  | 399.5  | 410.2  | 410.2  |
| 70°   | 3979.7 | 3300.4 | 2114.8 | 1174.9 | 675.0  | 474.2  | 393.1  | 363.2  | 354.6  | 363.2  | 361.0  |
| 72.5° | 3315.4 | 2745.0 | 1666.2 | 916.4  | 531.9  | 399.5  | 341.8  | 314.0  | 305.5  | 296.9  | 292.7  |
| 75°   | 2572.0 | 2084.9 | 1209.1 | 672.9  | 401.6  | 320.4  | 286.3  | 260.6  | 239.3  | 247.8  | 243.5  |
| 77.5° | 1884.1 | 1463.3 | 856.6  | 465.7  | 288.4  | 247.8  | 224.3  | 205.1  | 190.1  | 207.2  | 205.1  |
| 80°   | 1213.4 | 946.3  | 572.5  | 311.9  | 198.7  | 173.0  | 164.5  | 153.8  | 168.8  | 220.0  | 224.3  |
| 82.5° | 741.3  | 600.3  | 341.8  | 202.9  | 130.3  | 115.4  | 106.8  | 106.8  | 173.0  | 190.1  | 192.3  |
| 85°   | 331.1  | 318.3  | 185.8  | 104.7  | 72.6   | 66.2   | 59.8   | 76.9   | 70.5   | 51.3   | 53.4   |
| 87.5° | 53.4   | 55.5   | 40.6   | 36.3   | 27.8   | 27.8   | 21.4   | 15.0   | 10.7   | 6.4    | 6.4    |
| 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)