

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: P799237

Luminaire Tested: **ARCH2-100-727-U-T2U**

Issue Date: 4/4/2024

### Test Information

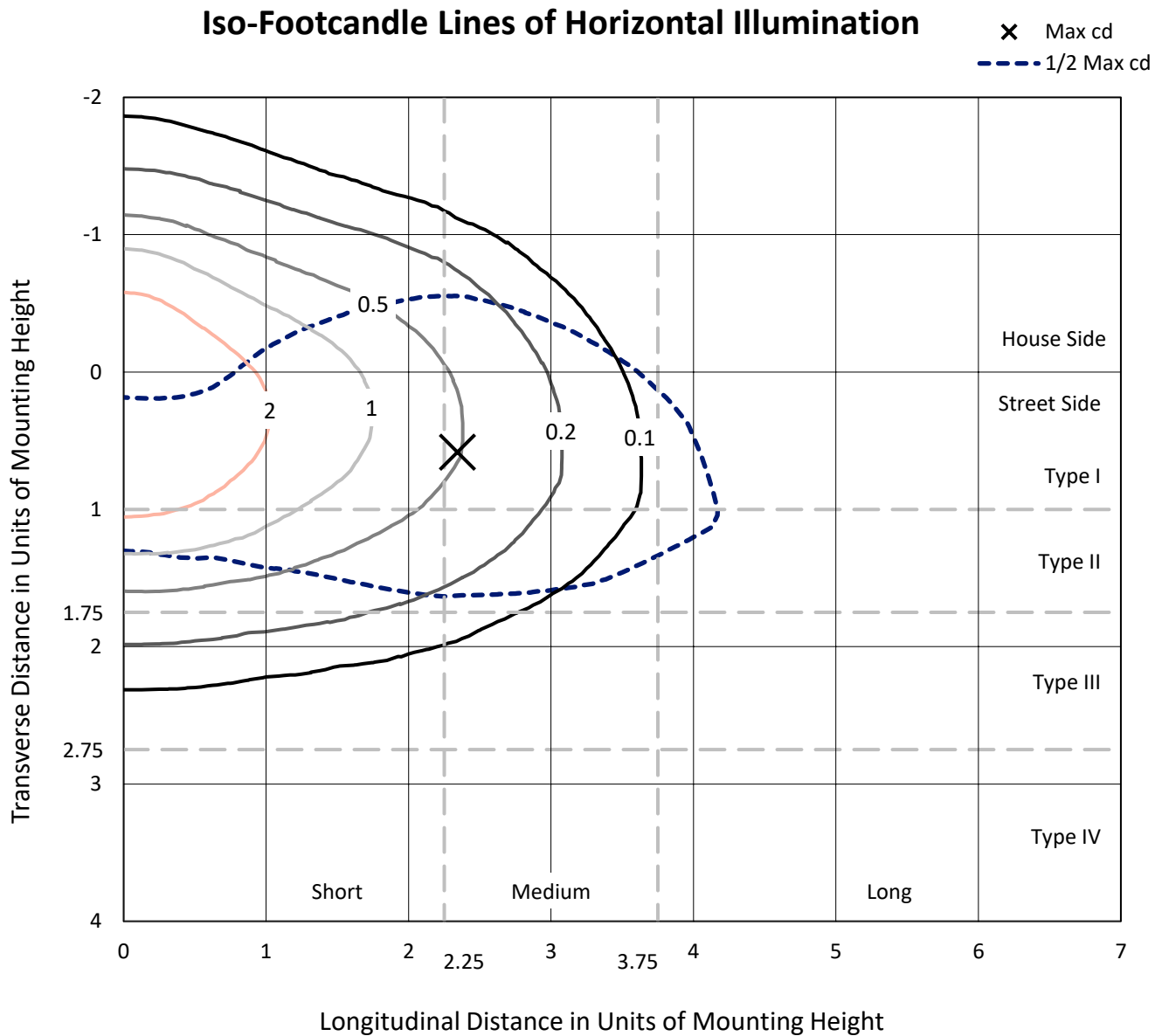
Test Method: LM-79-08  
Report Number: P799237  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-18)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/4/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH2-100-727-U-T2U  
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 2700K, 760mA LIGHTSQUARES WITH 10 LEDS EACH AND TYPE II U OPTICS  
Light Source: -  
Ballast/Driver: -

### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 12258 lumens  
Efficiency: N/A  
Efficacy: 118.7 lumens/watt  
Luminous Opening: Rectangular (W 0.67' x L: 0.33' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B3 - U0 - G3  
  
Input Watts (W): 103.3  
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

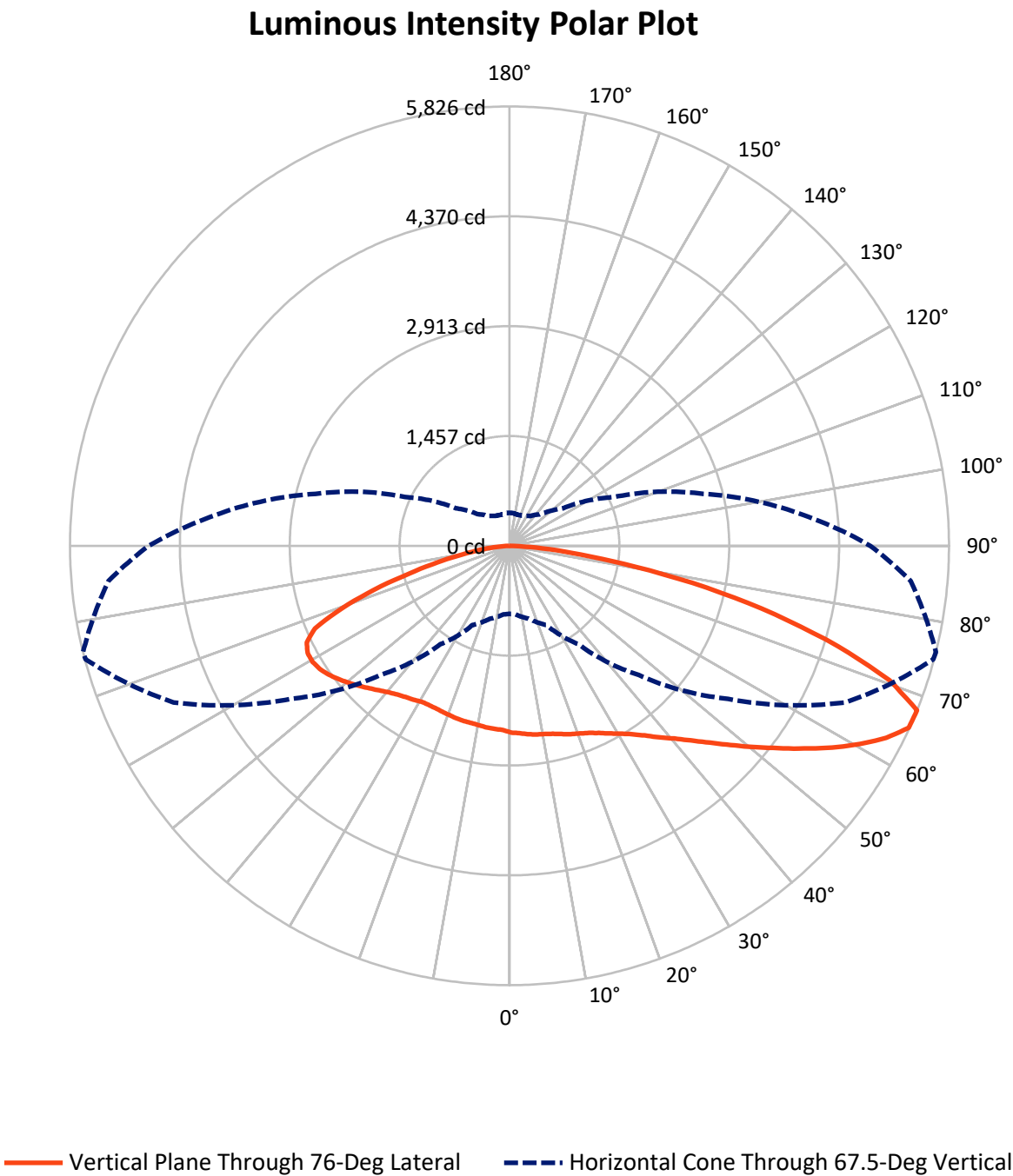


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Based on 25 foot mounting height. Maximum calculated value = 4.5 fc  
Type II - Medium - N/A

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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 4142.0   | 0.0    | 4142.0  |
|                    | % Fixture | 33.8     | 0.0    | 33.8    |
| <b>Street Side</b> | Lumens    | 8116.0   | 0.0    | 8116.0  |
|                    | % Fixture | 66.2     | 0.0    | 66.2    |
| <b>Total</b>       | Lumens    | 12258.0  | 0.0    | 12258.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 238.8   | 1.9       |
| 10°-20°   | 729.9   | 6.0       |
| 20°-30°   | 1240.2  | 10.1      |
| 30°-40°   | 1764.6  | 14.4      |
| 40°-50°   | 2228.7  | 18.2      |
| 50°-60°   | 2412.9  | 19.7      |
| 60°-70°   | 2244.3  | 18.3      |
| 70°-80°   | 1205.4  | 9.8       |
| 80°-90°   | 193.2   | 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°    | 12258.0 | 100.0     |
| 0°-180°   | 12258.0 | 100.0     |

**Coefficient of Utilization**



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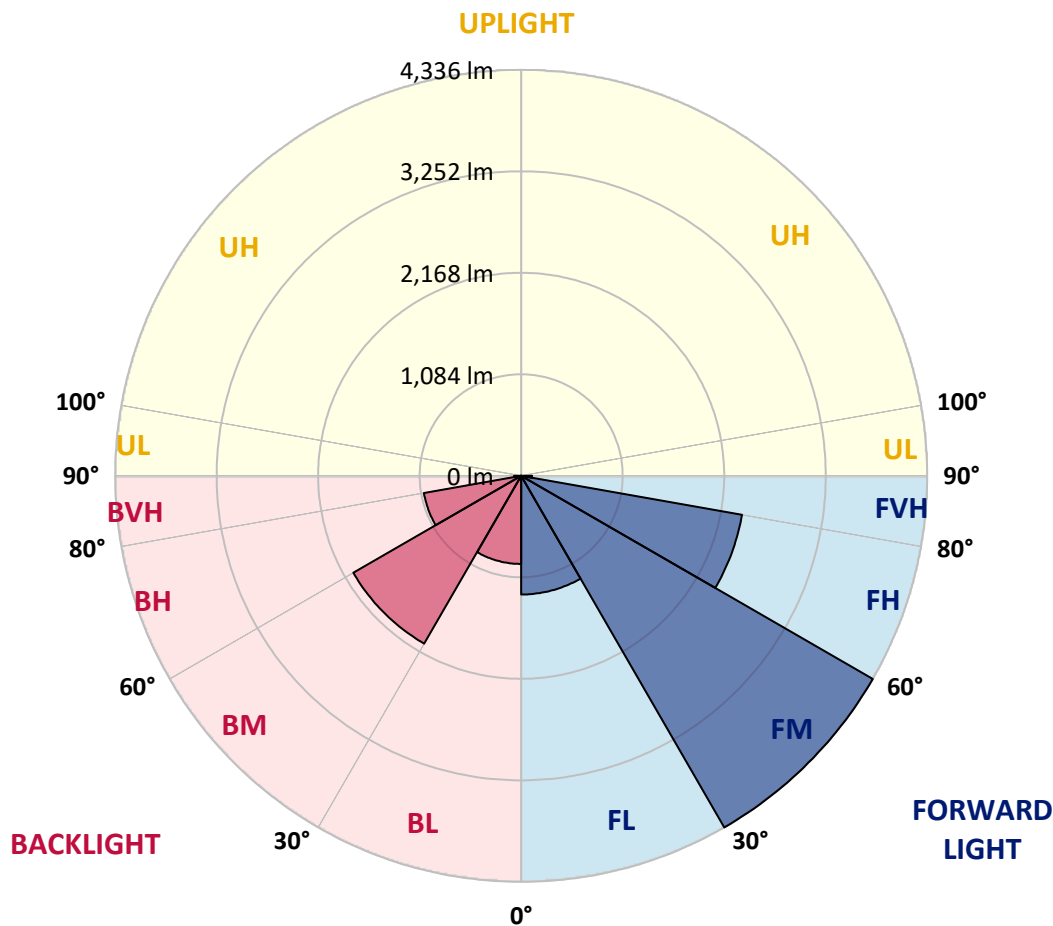
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 1267.6 | 10.3      |                         |      |         |
| FM   | (30°-60°)   | 4336.4 | 35.4      |                         |      |         |
| FH   | (60°-80°)   | 2395.1 | 19.5      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 116.8  | 1.0       |                         |      | G2/225  |
| BL   | (0°-30°)    | 941.3  | 7.7       | B2/1000                 |      |         |
| BM   | (30°-60°)   | 2069.8 | 16.9      | B2/2500                 |      |         |
| BH   | (60°-80°)   | 1054.6 | 8.6       | B3/2500                 |      | G3/2500 |
| BVH  | (80°-90°)   | 76.3   | 0.6       |                         |      | G1/100  |
| 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°    | 2476.1 | 2476.1 | 2476.1 | 2476.1 | 2476.1 | 2476.1 | 2476.1 | 2476.1 | 2476.1 | 2476.1 | 2476.1 |
| 2.5°  | 2551.2 | 2546.6 | 2528.4 | 2530.7 | 2530.7 | 2528.4 | 2501.1 | 2489.7 | 2489.7 | 2487.5 | 2462.4 |
| 5°    | 2642.2 | 2635.4 | 2614.9 | 2610.4 | 2601.3 | 2589.9 | 2546.6 | 2521.6 | 2510.2 | 2508.0 | 2473.8 |
| 7.5°  | 2749.2 | 2740.1 | 2715.0 | 2701.4 | 2678.6 | 2649.1 | 2594.4 | 2555.7 | 2528.4 | 2526.2 | 2478.4 |
| 10°   | 2856.2 | 2847.0 | 2817.5 | 2792.4 | 2760.6 | 2712.8 | 2642.2 | 2585.3 | 2542.1 | 2537.5 | 2480.6 |
| 12.5° | 2983.6 | 2974.5 | 2938.1 | 2906.2 | 2858.4 | 2794.7 | 2701.4 | 2624.0 | 2564.8 | 2558.0 | 2487.5 |
| 15°   | 3117.9 | 3104.2 | 3067.8 | 3031.4 | 2972.2 | 2890.3 | 2778.8 | 2676.4 | 2601.3 | 2589.9 | 2508.0 |
| 17.5° | 3229.4 | 3211.2 | 3181.6 | 3145.2 | 3079.2 | 2983.6 | 2856.2 | 2728.7 | 2635.4 | 2626.3 | 2528.4 |
| 20°   | 3325.0 | 3311.3 | 3279.5 | 3245.3 | 3174.8 | 3070.1 | 2929.0 | 2781.0 | 2667.3 | 2655.9 | 2544.4 |
| 22.5° | 3416.0 | 3397.8 | 3379.6 | 3354.6 | 3277.2 | 3161.1 | 3013.2 | 2844.8 | 2708.2 | 2694.6 | 2564.8 |
| 25°   | 3520.7 | 3500.2 | 3493.4 | 3479.7 | 3388.7 | 3270.3 | 3115.6 | 2924.4 | 2765.1 | 2749.2 | 2601.3 |
| 27.5° | 3650.4 | 3627.7 | 3614.0 | 3614.0 | 3504.8 | 3381.9 | 3224.8 | 3017.7 | 2831.1 | 2817.5 | 2646.8 |
| 30°   | 3787.0 | 3759.6 | 3739.2 | 3739.2 | 3616.3 | 3493.4 | 3331.8 | 3111.0 | 2906.2 | 2890.3 | 2705.9 |
| 32.5° | 3907.6 | 3880.3 | 3857.5 | 3855.2 | 3727.8 | 3604.9 | 3443.3 | 3213.5 | 2997.3 | 2976.8 | 2778.8 |
| 35°   | 4000.9 | 3975.9 | 3955.4 | 3959.9 | 3839.3 | 3718.7 | 3568.5 | 3350.0 | 3111.0 | 3088.3 | 2874.4 |
| 37.5° | 4057.8 | 4048.7 | 4037.3 | 4053.2 | 3941.7 | 3827.9 | 3698.2 | 3482.0 | 3240.8 | 3220.3 | 2992.7 |
| 40°   | 4087.4 | 4080.5 | 4126.1 | 4146.5 | 4028.2 | 3925.8 | 3827.9 | 3618.5 | 3381.9 | 3359.1 | 3129.2 |
| 42.5° | 4130.6 | 4187.5 | 4205.7 | 4201.2 | 4091.9 | 4000.9 | 3946.3 | 3766.5 | 3548.0 | 3527.5 | 3293.1 |
| 45°   | 3975.9 | 3962.2 | 4062.3 | 4117.0 | 4096.5 | 4048.7 | 4057.8 | 3944.0 | 3741.4 | 3721.0 | 3482.0 |
| 47.5° | 3768.8 | 3750.5 | 3807.4 | 3941.7 | 4021.4 | 4066.9 | 4157.9 | 4128.3 | 3964.5 | 3946.3 | 3702.8 |
| 50°   | 3331.8 | 3356.8 | 3568.5 | 3748.3 | 3905.3 | 4062.3 | 4242.1 | 4326.3 | 4210.3 | 4192.1 | 3939.4 |
| 52.5° | 2847.0 | 2872.1 | 3092.8 | 3507.0 | 3764.2 | 4028.2 | 4303.6 | 4524.3 | 4476.5 | 4456.0 | 4192.1 |
| 55°   | 2494.3 | 2548.9 | 2799.3 | 3099.7 | 3563.9 | 3921.2 | 4340.0 | 4726.9 | 4763.3 | 4745.1 | 4467.4 |
| 57.5° | 2143.8 | 2184.8 | 2373.7 | 2639.9 | 3290.8 | 3734.6 | 4337.7 | 4915.8 | 5063.7 | 5045.5 | 4747.4 |
| 60°   | 1731.9 | 1784.2 | 1934.4 | 2221.2 | 2926.7 | 3511.6 | 4274.0 | 5063.7 | 5352.7 | 5339.1 | 5018.2 |
| 62.5° | 1449.7 | 1465.6 | 1572.6 | 1820.7 | 2457.9 | 3229.4 | 4130.6 | 5143.3 | 5614.4 | 5605.3 | 5261.7 |
| 65°   | 1167.5 | 1169.8 | 1267.6 | 1474.7 | 2005.0 | 2878.9 | 3887.1 | 5113.8 | 5812.4 | 5817.0 | 5436.9 |
| 67.5° | 901.2  | 912.6  | 1001.4 | 1158.4 | 1593.1 | 2423.7 | 3538.9 | 4913.5 | 5814.7 | 5826.1 | 5336.8 |
| 70°   | 623.6  | 632.7  | 767.0  | 919.4  | 1231.2 | 1932.2 | 3067.8 | 4383.2 | 5336.8 | 5345.9 | 4783.8 |
| 72.5° | 439.2  | 443.8  | 587.2  | 735.1  | 962.7  | 1456.5 | 2314.5 | 3625.4 | 4549.4 | 4556.2 | 4023.6 |
| 75°   | 327.7  | 332.3  | 414.2  | 557.6  | 737.4  | 1008.2 | 1581.7 | 2776.5 | 3634.5 | 3634.5 | 3177.0 |
| 77.5° | 232.1  | 234.4  | 268.5  | 384.6  | 491.6  | 680.5  | 951.3  | 1818.4 | 2667.3 | 2671.8 | 2314.5 |
| 80°   | 157.0  | 159.3  | 175.2  | 259.4  | 307.2  | 368.7  | 516.6  | 953.6  | 1681.8 | 1688.7 | 1470.2 |
| 82.5° | 81.9   | 86.5   | 97.9   | 132.0  | 154.8  | 204.8  | 266.3  | 484.7  | 930.8  | 949.0  | 883.0  |
| 85°   | 31.9   | 31.9   | 36.4   | 43.2   | 56.9   | 79.7   | 122.9  | 184.3  | 421.0  | 434.7  | 389.2  |
| 87.5° | 11.4   | 11.4   | 13.7   | 13.7   | 15.9   | 18.2   | 20.5   | 27.3   | 47.8   | 47.8   | 45.5   |
| 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°    | 2476.1 | 2476.1 | 2476.1 | 2476.1 | 2476.1 | 2476.1 | 2476.1 | 2476.1 | 2476.1 | 2476.1 | 2476.1 |
| 2.5°  | 2453.3 | 2453.3 | 2442.0 | 2446.5 | 2444.2 | 2439.7 | 2435.1 | 2442.0 | 2435.1 | 2419.2 | 2416.9 |
| 5°    | 2457.9 | 2453.3 | 2435.1 | 2432.8 | 2426.0 | 2416.9 | 2405.5 | 2410.1 | 2398.7 | 2385.1 | 2382.8 |
| 7.5°  | 2460.2 | 2451.1 | 2426.0 | 2416.9 | 2403.3 | 2385.1 | 2366.8 | 2366.8 | 2350.9 | 2337.3 | 2335.0 |
| 10°   | 2455.6 | 2444.2 | 2410.1 | 2391.9 | 2366.8 | 2339.5 | 2314.5 | 2307.7 | 2289.5 | 2273.5 | 2273.5 |
| 12.5° | 2457.9 | 2442.0 | 2398.7 | 2369.1 | 2335.0 | 2300.9 | 2269.0 | 2259.9 | 2244.0 | 2228.0 | 2225.7 |
| 15°   | 2471.5 | 2448.8 | 2394.2 | 2355.5 | 2305.4 | 2266.7 | 2232.6 | 2225.7 | 2212.1 | 2200.7 | 2200.7 |
| 17.5° | 2485.2 | 2455.6 | 2387.3 | 2332.7 | 2271.3 | 2228.0 | 2196.2 | 2196.2 | 2187.1 | 2180.2 | 2180.2 |
| 20°   | 2492.0 | 2457.9 | 2373.7 | 2300.9 | 2230.3 | 2184.8 | 2155.2 | 2159.8 | 2157.5 | 2155.2 | 2155.2 |
| 22.5° | 2508.0 | 2462.4 | 2362.3 | 2271.3 | 2187.1 | 2139.3 | 2112.0 | 2118.8 | 2116.5 | 2116.5 | 2118.8 |
| 25°   | 2533.0 | 2473.8 | 2353.2 | 2244.0 | 2146.1 | 2093.8 | 2064.2 | 2068.7 | 2068.7 | 2068.7 | 2068.7 |
| 27.5° | 2567.1 | 2496.6 | 2350.9 | 2218.9 | 2105.1 | 2046.0 | 2009.5 | 2009.5 | 2000.4 | 2002.7 | 2005.0 |
| 30°   | 2619.5 | 2539.8 | 2355.5 | 2196.2 | 2061.9 | 1986.8 | 1943.5 | 1936.7 | 1934.4 | 1939.0 | 1941.3 |
| 32.5° | 2683.2 | 2599.0 | 2382.8 | 2180.2 | 2016.4 | 1920.8 | 1866.2 | 1863.9 | 1857.1 | 1857.1 | 1857.1 |
| 35°   | 2762.8 | 2655.9 | 2407.8 | 2178.0 | 1970.9 | 1850.2 | 1791.1 | 1784.2 | 1768.3 | 1761.5 | 1761.5 |
| 37.5° | 2865.3 | 2744.6 | 2437.4 | 2162.0 | 1932.2 | 1782.0 | 1711.4 | 1688.7 | 1670.4 | 1668.2 | 1668.2 |
| 40°   | 2990.4 | 2844.8 | 2480.6 | 2143.8 | 1891.2 | 1711.4 | 1618.1 | 1579.4 | 1581.7 | 1590.8 | 1590.8 |
| 42.5° | 3138.4 | 2967.7 | 2535.3 | 2134.7 | 1832.0 | 1638.6 | 1508.9 | 1463.4 | 1479.3 | 1488.4 | 1490.7 |
| 45°   | 3311.3 | 3113.3 | 2596.7 | 2123.3 | 1777.4 | 1556.7 | 1392.8 | 1335.9 | 1342.7 | 1345.0 | 1347.3 |
| 47.5° | 3511.6 | 3274.9 | 2660.4 | 2114.2 | 1716.0 | 1454.2 | 1265.4 | 1190.3 | 1188.0 | 1174.3 | 1178.9 |
| 50°   | 3721.0 | 3445.6 | 2726.4 | 2098.3 | 1640.9 | 1333.6 | 1131.1 | 1042.3 | 1024.1 | 1003.6 | 1005.9 |
| 52.5° | 3944.0 | 3620.8 | 2787.9 | 2073.3 | 1547.6 | 1210.7 | 1003.6 | 908.1  | 871.6  | 848.9  | 853.4  |
| 55°   | 4189.8 | 3800.6 | 2847.0 | 2034.6 | 1449.7 | 1087.8 | 889.8  | 792.0  | 746.5  | 728.3  | 730.5  |
| 57.5° | 4415.1 | 3973.6 | 2890.3 | 1986.8 | 1342.7 | 976.3  | 789.7  | 694.1  | 664.5  | 662.3  | 664.5  |
| 60°   | 4633.6 | 4119.2 | 2908.5 | 1920.8 | 1233.5 | 873.9  | 696.4  | 623.6  | 603.1  | 614.5  | 616.7  |
| 62.5° | 4817.9 | 4212.5 | 2899.4 | 1832.0 | 1122.0 | 776.1  | 621.3  | 569.0  | 555.3  | 578.1  | 580.3  |
| 65°   | 4924.9 | 4242.1 | 2835.7 | 1704.6 | 1001.4 | 680.5  | 550.7  | 493.9  | 487.0  | 500.7  | 507.5  |
| 67.5° | 4783.8 | 4057.8 | 2662.7 | 1529.3 | 867.1  | 591.7  | 482.5  | 437.0  | 425.6  | 437.0  | 437.0  |
| 70°   | 4239.8 | 3516.1 | 2253.1 | 1251.7 | 719.2  | 505.2  | 418.8  | 386.9  | 377.8  | 386.9  | 384.6  |
| 72.5° | 3532.1 | 2924.4 | 1775.1 | 976.3  | 566.7  | 425.6  | 364.1  | 334.5  | 325.4  | 316.3  | 311.8  |
| 75°   | 2740.1 | 2221.2 | 1288.1 | 716.9  | 427.9  | 341.4  | 305.0  | 277.6  | 254.9  | 264.0  | 259.4  |
| 77.5° | 2007.3 | 1558.9 | 912.6  | 496.1  | 307.2  | 264.0  | 239.0  | 218.5  | 202.5  | 220.8  | 218.5  |
| 80°   | 1292.7 | 1008.2 | 609.9  | 332.3  | 211.7  | 184.3  | 175.2  | 163.9  | 179.8  | 234.4  | 239.0  |
| 82.5° | 789.7  | 639.5  | 364.1  | 216.2  | 138.8  | 122.9  | 113.8  | 113.8  | 184.3  | 202.5  | 204.8  |
| 85°   | 352.8  | 339.1  | 198.0  | 111.5  | 77.4   | 70.6   | 63.7   | 81.9   | 75.1   | 54.6   | 56.9   |
| 87.5° | 56.9   | 59.2   | 43.2   | 38.7   | 29.6   | 29.6   | 22.8   | 15.9   | 11.4   | 6.8    | 6.8    |
| 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)