

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: P835852

Luminaire Tested: **ARCH3-100-750-U-T3**

Issue Date: 5/16/2024

### Test Information

Test Method: LM-79-08  
Report Number: P835852  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-18)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/16/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH3-100-750-U-T3  
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 5000K, 805mA LIGHTSQUARE WITH 40 LEDS AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: -

### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 16615 lumens  
Efficiency: N/A  
Efficacy: 161.9 lumens/watt  
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B3 - U0 - G3

Input Watts (W): 102.6  
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



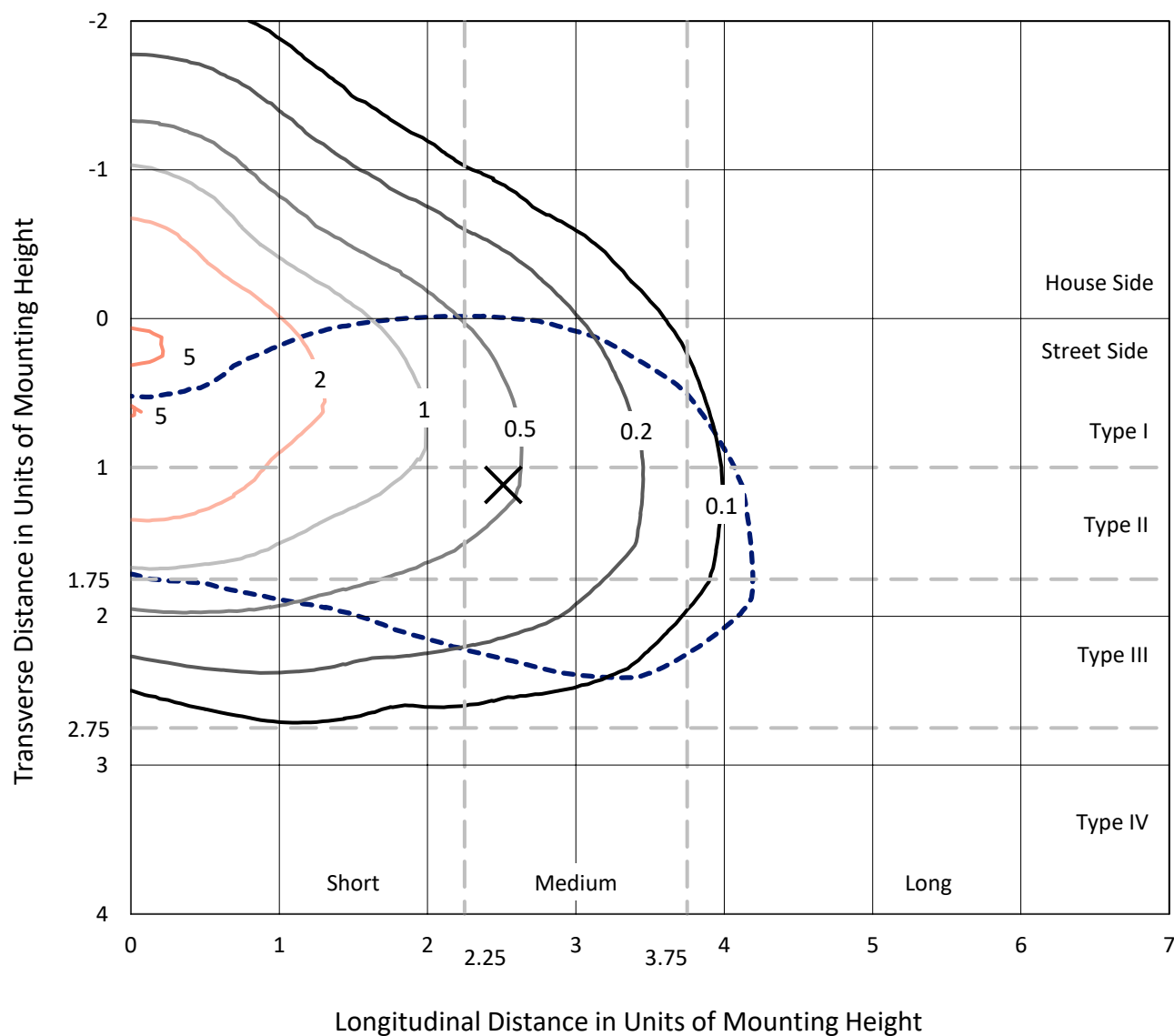
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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

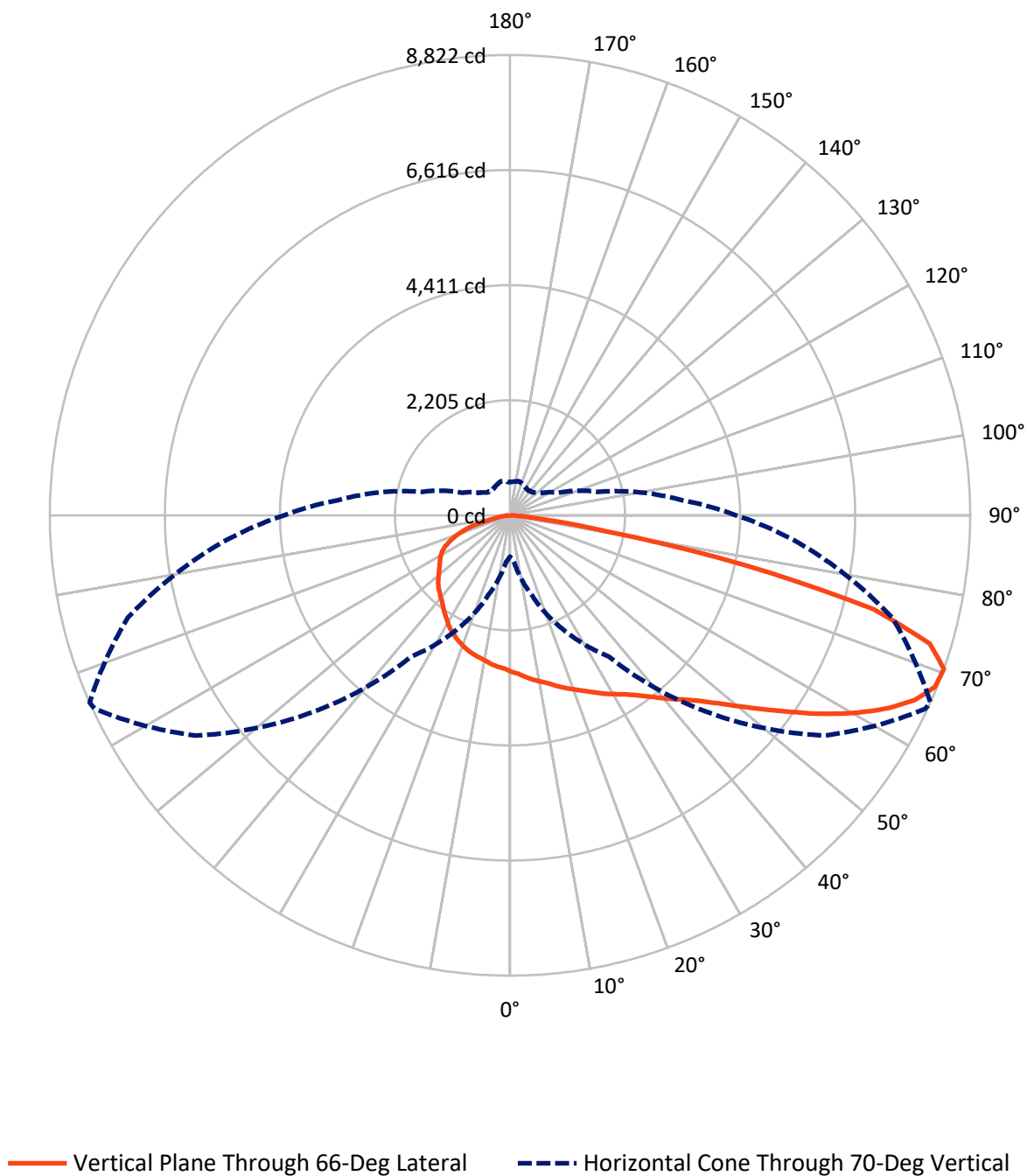


Based on 25 foot mounting height. Maximum calculated value = 5.2 fc

Type III - Medium - N/A

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## Luminous Intensity Polar Plot



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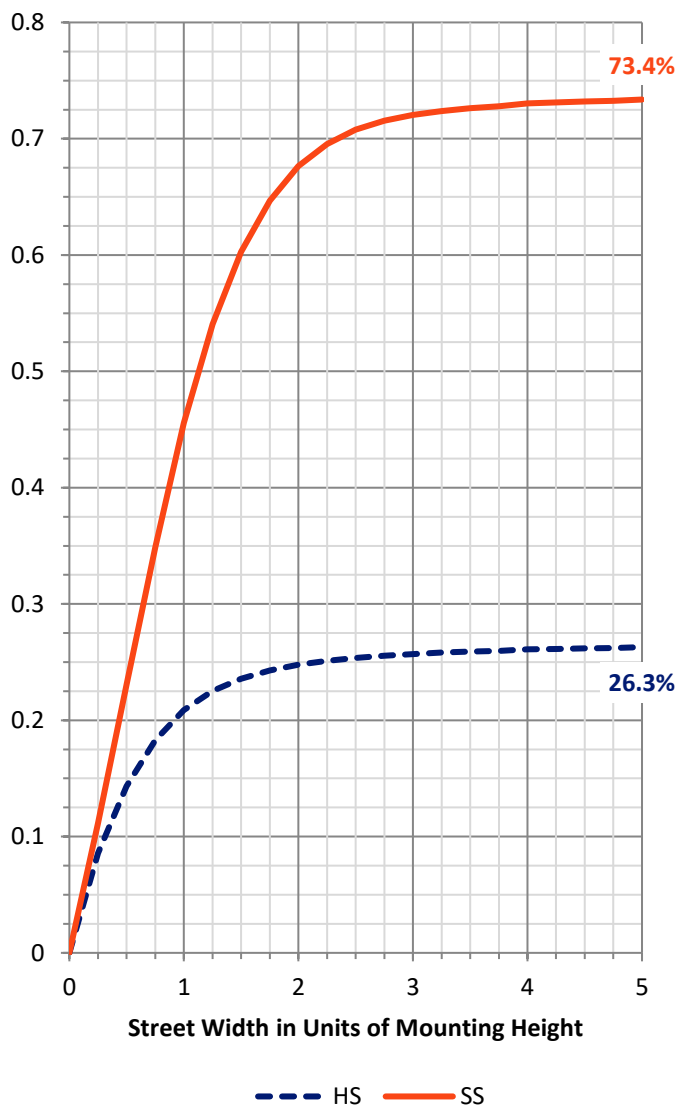
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 4402.6   | 0.0    | 4402.6  |
|                    | % Fixture | 26.5     | 0.0    | 26.5    |
| <b>Street Side</b> | Lumens    | 12212.4  | 0.0    | 12212.4 |
|                    | % Fixture | 73.5     | 0.0    | 73.5    |
| <b>Total</b>       | Lumens    | 16615.0  | 0.0    | 16615.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 288.1   | 1.7       |
| 10°-20°   | 864.3   | 5.2       |
| 20°-30°   | 1448.9  | 8.7       |
| 30°-40°   | 2169.4  | 13.1      |
| 40°-50°   | 2900.5  | 17.5      |
| 50°-60°   | 3386.5  | 20.4      |
| 60°-70°   | 3367.3  | 20.3      |
| 70°-80°   | 1993.5  | 12.0      |
| 80°-90°   | 196.5   | 1.2       |
| 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°    | 16615.0 | 100.0     |
| 0°-180°   | 16615.0 | 100.0     |

**Coefficient of Utilization**



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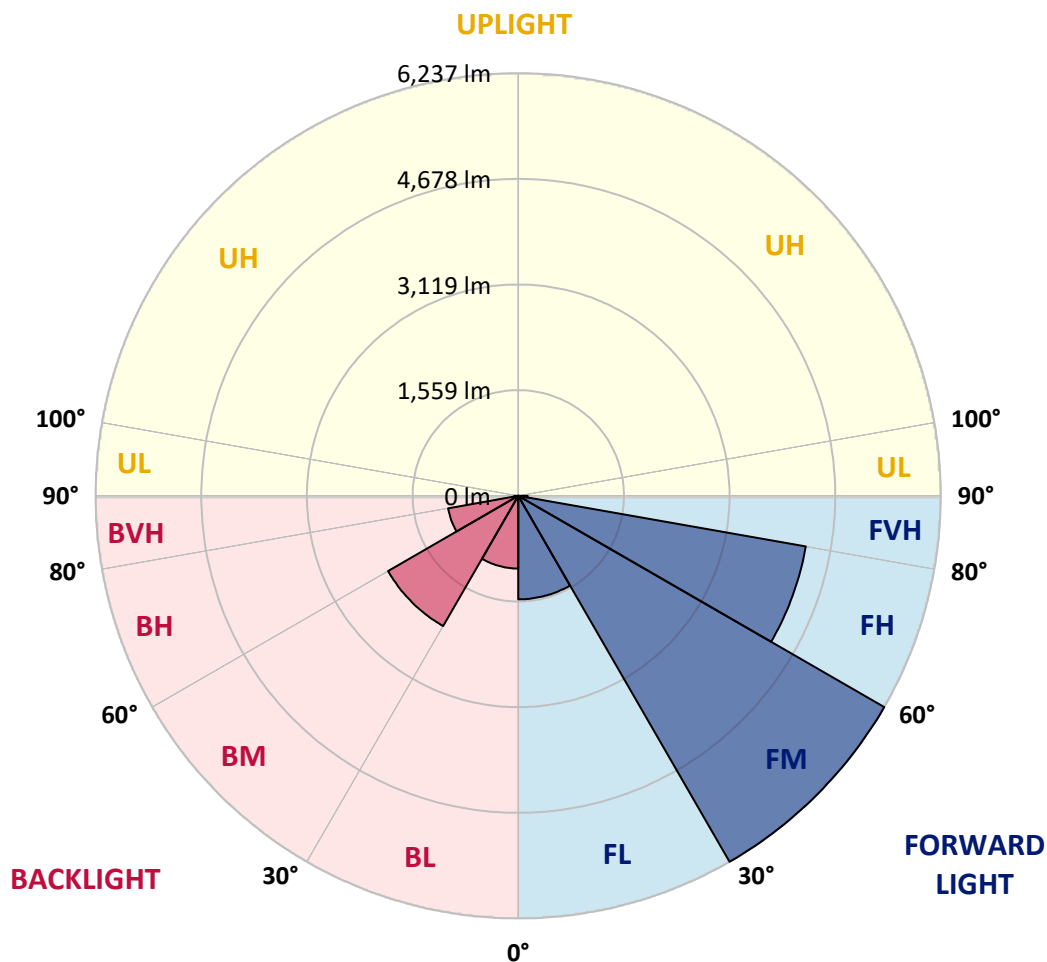
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 1528.1 | 9.2       |                         |      |         |
| FM   | (30°-60°)   | 6237.0 | 37.5      |                         |      |         |
| FH   | (60°-80°)   | 4309.1 | 25.9      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 138.1  | 0.8       |                         |      | G2/225  |
| BL   | (0°-30°)    | 1073.2 | 6.5       | B3/2500                 |      |         |
| BM   | (30°-60°)   | 2219.4 | 13.4      | B2/2500                 |      |         |
| BH   | (60°-80°)   | 1051.7 | 6.3       | B3/2500                 |      | G3/2500 |
| BVH  | (80°-90°)   | 58.4   | 0.4       |                         |      | 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 III Medium



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 66°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 2998.6 | 2998.6 | 2998.6 | 2998.6 | 2998.6 | 2998.6 | 2998.6 | 2998.6 | 2998.6 | 2998.6 | 2998.6 |
| 2.5°  | 3108.9 | 3104.0 | 3101.5 | 3091.7 | 3069.7 | 3079.5 | 3057.4 | 3042.7 | 3040.3 | 3006.0 | 2986.4 |
| 5°    | 3236.3 | 3233.8 | 3228.9 | 3214.2 | 3179.9 | 3184.8 | 3148.1 | 3121.1 | 3113.8 | 3059.9 | 3018.2 |
| 7.5°  | 3344.1 | 3339.2 | 3336.7 | 3317.1 | 3280.4 | 3277.9 | 3233.8 | 3194.6 | 3182.4 | 3108.9 | 3045.2 |
| 10°   | 3427.4 | 3420.0 | 3424.9 | 3405.3 | 3366.1 | 3358.8 | 3302.4 | 3251.0 | 3238.7 | 3145.6 | 3057.4 |
| 12.5° | 3498.4 | 3493.5 | 3500.9 | 3483.7 | 3451.9 | 3444.5 | 3388.2 | 3322.0 | 3307.3 | 3199.5 | 3084.4 |
| 15°   | 3576.8 | 3559.6 | 3574.3 | 3567.0 | 3544.9 | 3542.5 | 3491.1 | 3417.6 | 3398.0 | 3268.1 | 3126.0 |
| 17.5° | 3618.4 | 3608.6 | 3625.8 | 3628.2 | 3618.4 | 3635.6 | 3586.6 | 3498.4 | 3481.3 | 3331.8 | 3162.8 |
| 20°   | 3647.8 | 3633.1 | 3652.7 | 3667.4 | 3674.8 | 3709.1 | 3669.9 | 3584.1 | 3564.5 | 3393.1 | 3197.1 |
| 22.5° | 3748.3 | 3716.4 | 3718.9 | 3728.7 | 3733.6 | 3782.6 | 3758.1 | 3674.8 | 3655.2 | 3469.0 | 3238.7 |
| 25°   | 4000.6 | 3936.9 | 3895.3 | 3865.9 | 3831.6 | 3873.2 | 3858.5 | 3777.7 | 3760.5 | 3559.6 | 3290.2 |
| 27.5° | 4392.6 | 4311.8 | 4228.5 | 4142.7 | 4008.0 | 3990.8 | 3966.3 | 3892.8 | 3873.2 | 3650.3 | 3341.6 |
| 30°   | 4838.5 | 4757.6 | 4659.6 | 4522.4 | 4270.1 | 4137.8 | 4081.5 | 4000.6 | 3978.6 | 3731.1 | 3390.6 |
| 32.5° | 5281.9 | 5210.9 | 5112.9 | 4946.3 | 4586.1 | 4316.7 | 4196.6 | 4113.3 | 4091.3 | 3819.3 | 3449.4 |
| 35°   | 5627.3 | 5583.2 | 5519.5 | 5311.3 | 4899.7 | 4527.3 | 4363.2 | 4262.8 | 4238.3 | 3959.0 | 3557.2 |
| 37.5° | 5906.6 | 5874.8 | 5820.9 | 5602.8 | 5127.6 | 4738.0 | 4554.3 | 4439.1 | 4412.2 | 4110.9 | 3672.3 |
| 40°   | 6318.2 | 6234.9 | 6190.8 | 5874.8 | 5326.0 | 4929.1 | 4769.9 | 4649.8 | 4620.4 | 4272.6 | 3765.4 |
| 42.5° | 6668.5 | 6607.3 | 6553.4 | 6117.3 | 5514.6 | 5093.3 | 4973.2 | 4863.0 | 4823.8 | 4431.8 | 3865.9 |
| 45°   | 6727.3 | 6751.8 | 6724.9 | 6237.3 | 5813.5 | 5255.0 | 5179.0 | 5108.0 | 5071.2 | 4647.4 | 4017.8 |
| 47.5° | 6729.8 | 6729.8 | 6570.5 | 6305.9 | 6183.4 | 5436.2 | 5399.5 | 5424.0 | 5384.8 | 4921.8 | 4199.1 |
| 50°   | 6553.4 | 6585.2 | 6501.9 | 6323.1 | 6281.4 | 5617.5 | 5669.0 | 5801.3 | 5762.1 | 5213.3 | 4395.0 |
| 52.5° | 6188.3 | 6293.7 | 6291.2 | 6296.1 | 6139.4 | 5771.9 | 5953.2 | 6254.5 | 6188.3 | 5541.6 | 4603.3 |
| 55°   | 5544.0 | 5754.7 | 5943.4 | 6105.1 | 6016.9 | 5865.0 | 6301.0 | 6737.1 | 6668.5 | 5909.1 | 4814.0 |
| 57.5° | 4992.8 | 5127.6 | 5362.7 | 5820.9 | 5872.3 | 5945.8 | 6626.9 | 7241.8 | 7180.5 | 6315.7 | 5034.5 |
| 60°   | 4363.2 | 4549.4 | 4784.6 | 5436.2 | 5695.9 | 6051.2 | 6984.6 | 7734.2 | 7675.4 | 6727.3 | 5247.6 |
| 62.5° | 3395.5 | 3635.6 | 4106.0 | 4845.8 | 5438.7 | 6117.3 | 7266.3 | 8167.8 | 8140.9 | 7116.8 | 5438.7 |
| 65°   | 2366.6 | 2579.7 | 3238.7 | 4120.7 | 5029.6 | 6087.9 | 7491.7 | 8554.9 | 8530.4 | 7435.3 | 5573.4 |
| 67.5° | 1381.7 | 1629.2 | 2373.9 | 3317.1 | 4306.9 | 5884.6 | 7565.2 | 8782.7 | 8782.7 | 7628.9 | 5610.2 |
| 70°   | 788.9  | 904.0  | 1565.5 | 2418.0 | 3302.4 | 5323.5 | 7359.4 | 8780.3 | 8821.9 | 7584.8 | 5458.3 |
| 72.5° | 551.2  | 602.7  | 1053.4 | 1626.7 | 2239.2 | 4306.9 | 6820.4 | 8356.5 | 8412.8 | 7168.3 | 4938.9 |
| 75°   | 428.7  | 465.5  | 742.3  | 1109.8 | 1411.1 | 2925.1 | 5642.0 | 7045.8 | 7195.2 | 6110.0 | 3993.3 |
| 77.5° | 325.8  | 352.8  | 433.6  | 693.3  | 904.0  | 1680.6 | 3723.8 | 4620.4 | 4630.2 | 3740.9 | 2141.2 |
| 80°   | 237.6  | 264.6  | 289.1  | 423.8  | 480.2  | 786.4  | 1406.2 | 1930.5 | 1876.6 | 1810.4 | 1158.8 |
| 82.5° | 142.1  | 169.0  | 176.4  | 230.3  | 235.2  | 335.6  | 492.4  | 622.3  | 597.8  | 796.2  | 543.9  |
| 85°   | 61.2   | 85.7   | 90.6   | 105.3  | 100.4  | 137.2  | 196.0  | 164.1  | 147.0  | 169.0  | 117.6  |
| 87.5° | 14.7   | 24.5   | 24.5   | 26.9   | 22.0   | 34.3   | 36.7   | 26.9   | 24.5   | 29.4   | 29.4   |
| 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°    | 2998.6 | 2998.6 | 2998.6 | 2998.6 | 2998.6 | 2998.6 | 2998.6 | 2998.6 | 2998.6 | 2998.6 | 2998.6 |
| 2.5°  | 2981.5 | 2974.1 | 2976.6 | 2934.9 | 2922.7 | 2910.4 | 2903.1 | 2898.2 | 2893.3 | 2900.6 | 2908.0 |
| 5°    | 3003.5 | 2986.4 | 2966.8 | 2905.5 | 2881.0 | 2854.1 | 2834.5 | 2817.3 | 2810.0 | 2810.0 | 2817.3 |
| 7.5°  | 3020.7 | 2991.3 | 2949.6 | 2868.8 | 2824.7 | 2787.9 | 2756.1 | 2734.0 | 2721.8 | 2721.8 | 2729.1 |
| 10°   | 3023.1 | 2981.5 | 2915.3 | 2817.3 | 2758.5 | 2704.6 | 2667.9 | 2643.4 | 2626.3 | 2626.3 | 2631.2 |
| 12.5° | 3037.8 | 2981.5 | 2895.7 | 2778.1 | 2704.6 | 2638.5 | 2594.4 | 2557.7 | 2550.3 | 2550.3 | 2555.2 |
| 15°   | 3062.3 | 2993.7 | 2883.5 | 2743.8 | 2655.6 | 2579.7 | 2530.7 | 2491.5 | 2476.8 | 2486.6 | 2489.1 |
| 17.5° | 3084.4 | 3001.1 | 2861.4 | 2699.7 | 2594.4 | 2511.1 | 2457.2 | 2422.9 | 2403.3 | 2425.4 | 2425.4 |
| 20°   | 3099.1 | 3001.1 | 2829.6 | 2643.4 | 2528.3 | 2435.2 | 2383.7 | 2342.1 | 2327.4 | 2354.3 | 2356.8 |
| 22.5° | 3121.1 | 2998.6 | 2795.3 | 2587.1 | 2457.2 | 2359.2 | 2307.8 | 2275.9 | 2268.6 | 2298.0 | 2307.8 |
| 25°   | 3145.6 | 3003.5 | 2758.5 | 2523.4 | 2378.8 | 2283.3 | 2244.1 | 2229.4 | 2234.3 | 2271.0 | 2283.3 |
| 27.5° | 3172.6 | 3013.3 | 2721.8 | 2452.3 | 2293.1 | 2207.3 | 2185.3 | 2192.6 | 2212.2 | 2258.8 | 2273.5 |
| 30°   | 3197.1 | 3015.8 | 2670.3 | 2369.0 | 2195.1 | 2114.2 | 2124.0 | 2155.9 | 2185.3 | 2231.8 | 2249.0 |
| 32.5° | 3228.9 | 3018.2 | 2616.5 | 2278.4 | 2089.7 | 2030.9 | 2075.0 | 2126.5 | 2155.9 | 2200.0 | 2219.6 |
| 35°   | 3307.3 | 3059.9 | 2574.8 | 2190.2 | 1991.7 | 1959.9 | 2033.4 | 2099.5 | 2116.7 | 2155.9 | 2173.0 |
| 37.5° | 3398.0 | 3128.5 | 2552.8 | 2099.5 | 1896.2 | 1888.8 | 1981.9 | 2048.1 | 2053.0 | 2077.5 | 2094.6 |
| 40°   | 3454.3 | 3157.9 | 2528.3 | 2023.6 | 1810.4 | 1815.3 | 1910.9 | 1962.3 | 1952.5 | 1969.7 | 1981.9 |
| 42.5° | 3510.6 | 3167.7 | 2476.8 | 1959.9 | 1729.6 | 1734.5 | 1808.0 | 1844.7 | 1849.6 | 1886.4 | 1903.5 |
| 45°   | 3606.2 | 3194.6 | 2420.5 | 1901.1 | 1656.1 | 1639.0 | 1683.1 | 1732.1 | 1795.7 | 1866.8 | 1886.4 |
| 47.5° | 3733.6 | 3251.0 | 2361.7 | 1830.0 | 1585.1 | 1528.7 | 1545.9 | 1631.6 | 1697.8 | 1763.9 | 1776.1 |
| 50°   | 3863.4 | 3307.3 | 2307.8 | 1744.3 | 1514.0 | 1411.1 | 1418.5 | 1496.9 | 1550.8 | 1602.2 | 1609.6 |
| 52.5° | 3990.8 | 3356.3 | 2261.2 | 1663.5 | 1433.2 | 1271.5 | 1300.9 | 1381.7 | 1418.5 | 1443.0 | 1450.3 |
| 55°   | 4118.2 | 3398.0 | 2219.6 | 1594.9 | 1340.1 | 1161.2 | 1188.2 | 1264.1 | 1300.9 | 1313.1 | 1318.0 |
| 57.5° | 4250.5 | 3447.0 | 2187.7 | 1536.1 | 1234.7 | 1063.2 | 1080.4 | 1134.3 | 1168.6 | 1183.3 | 1178.4 |
| 60°   | 4360.8 | 3488.6 | 2170.6 | 1474.8 | 1129.4 | 972.6  | 967.7  | 1016.7 | 1065.7 | 1080.4 | 1075.5 |
| 62.5° | 4446.5 | 3515.5 | 2143.6 | 1396.4 | 1036.3 | 881.9  | 857.5  | 921.1  | 972.6  | 982.4  | 989.7  |
| 65°   | 4493.0 | 3518.0 | 2077.5 | 1296.0 | 940.7  | 784.0  | 766.8  | 830.5  | 862.4  | 872.2  | 872.2  |
| 67.5° | 4485.7 | 3478.8 | 1947.6 | 1161.2 | 852.6  | 695.8  | 681.1  | 720.3  | 766.8  | 774.2  | 766.8  |
| 70°   | 4333.8 | 3317.1 | 1739.4 | 1019.1 | 747.2  | 617.4  | 590.4  | 629.6  | 673.7  | 646.8  | 634.5  |
| 72.5° | 3902.6 | 2898.2 | 1433.2 | 862.4  | 629.6  | 519.4  | 507.1  | 546.3  | 548.8  | 553.7  | 541.4  |
| 75°   | 3079.5 | 2158.3 | 1073.0 | 671.3  | 509.6  | 436.1  | 433.6  | 426.3  | 436.1  | 455.7  | 441.0  |
| 77.5° | 1616.9 | 1077.9 | 580.6  | 411.6  | 369.9  | 350.3  | 333.2  | 330.7  | 360.1  | 372.4  | 357.7  |
| 80°   | 877.1  | 605.1  | 333.2  | 247.4  | 225.4  | 227.8  | 249.9  | 245.0  | 276.8  | 284.2  | 271.9  |
| 82.5° | 382.2  | 286.6  | 164.1  | 149.4  | 149.4  | 147.0  | 154.3  | 171.5  | 205.8  | 205.8  | 164.1  |
| 85°   | 83.3   | 71.0   | 63.7   | 73.5   | 83.3   | 83.3   | 83.3   | 83.3   | 58.8   | 31.8   | 22.0   |
| 87.5° | 26.9   | 26.9   | 26.9   | 29.4   | 31.8   | 31.8   | 26.9   | 19.6   | 12.2   | 2.4    | 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)