

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: P835969

Luminaire Tested: **ARCH3-120-730-U-T3**

Issue Date: 5/16/2024

### Test Information

Test Method: LM-79-08  
Report Number: P835969  
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: ARCH3-120-730-U-T3  
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 3000K, 965mA LIGHTSQUARE WITH 40 LEDS AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: -

### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 18347 lumens  
Efficiency: N/A  
Efficacy: 149.5 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): 122.7  
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



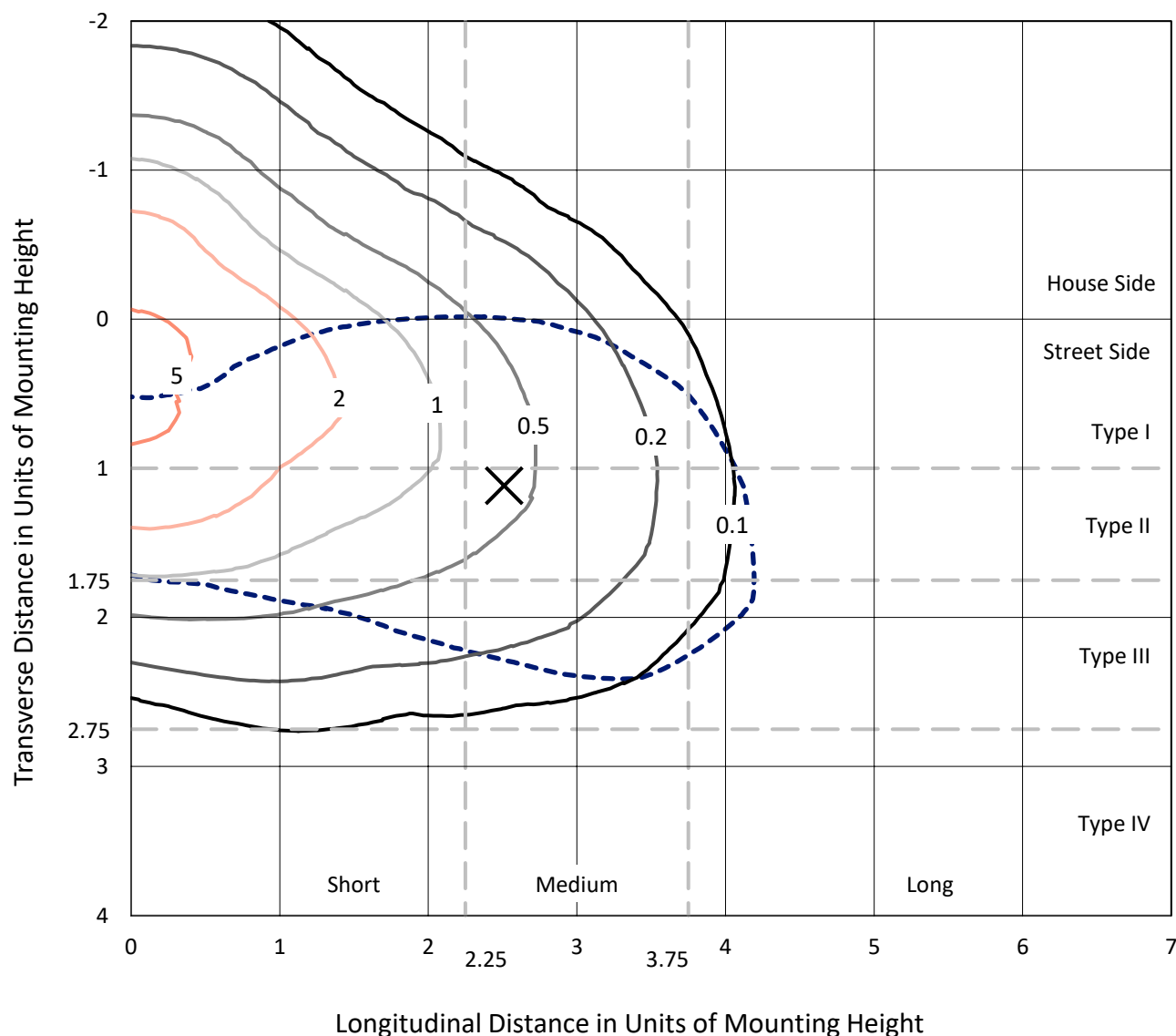
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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd

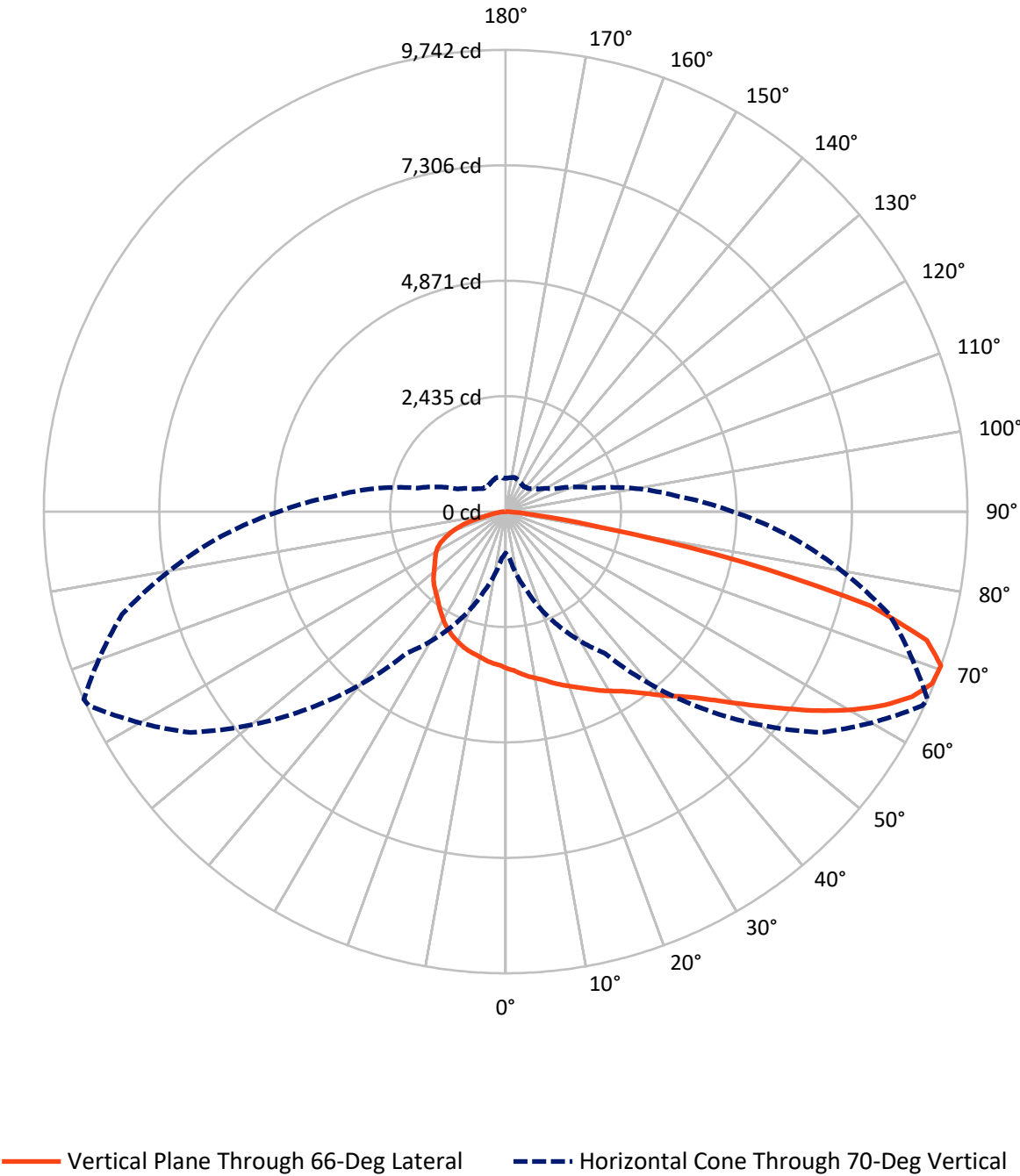
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.7 fc  
Type III - Medium - N/A

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Luminous Intensity Polar Plot



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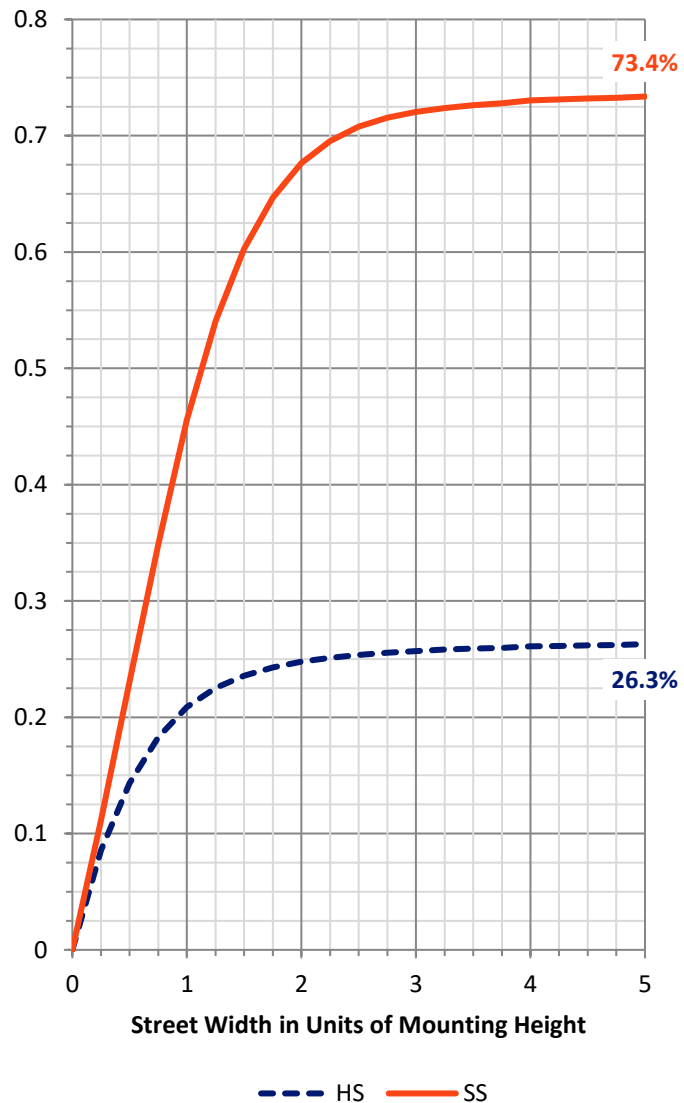
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 4861.5   | 0.0    | 4861.5  |
|                    | % Fixture | 26.5     | 0.0    | 26.5    |
| <b>Street Side</b> | Lumens    | 13485.5  | 0.0    | 13485.5 |
|                    | % Fixture | 73.5     | 0.0    | 73.5    |
| <b>Total</b>       | Lumens    | 18347.0  | 0.0    | 18347.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 318.2   | 1.7       |
| 10°-20°   | 954.4   | 5.2       |
| 20°-30°   | 1599.9  | 8.7       |
| 30°-40°   | 2395.6  | 13.1      |
| 40°-50°   | 3202.9  | 17.5      |
| 50°-60°   | 3739.5  | 20.4      |
| 60°-70°   | 3718.3  | 20.3      |
| 70°-80°   | 2201.3  | 12.0      |
| 80°-90°   | 217.0   | 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°    | 18347.0 | 100.0     |
| 0°-180°   | 18347.0 | 100.0     |

**Coefficient of Utilization**



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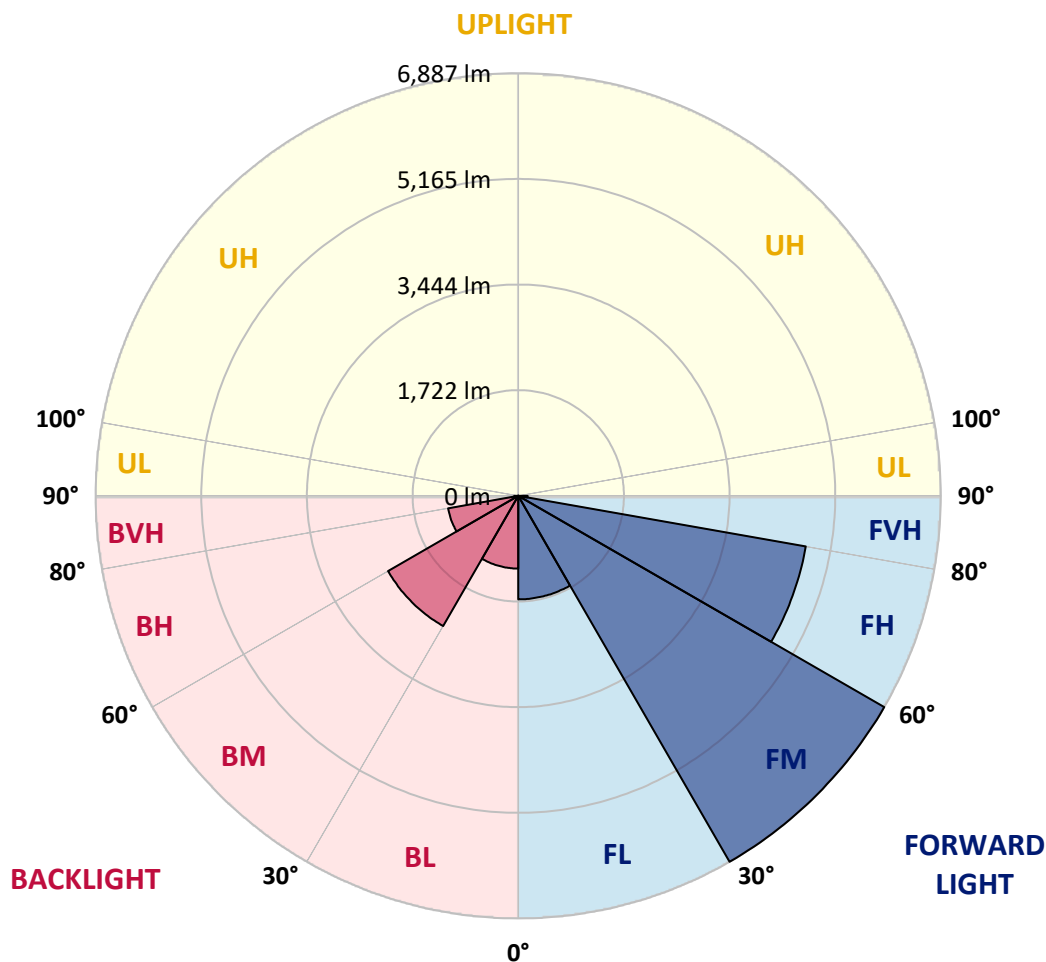
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 1687.4 | 9.2       |                         |      |         |
| FM   | (30°-60°)   | 6887.2 | 37.5      |                         |      |         |
| FH   | (60°-80°)   | 4758.3 | 25.9      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 152.5  | 0.8       |                         |      | G2/225  |
| BL   | (0°-30°)    | 1185.0 | 6.5       | B3/2500                 |      |         |
| BM   | (30°-60°)   | 2450.7 | 13.4      | B2/2500                 |      |         |
| BH   | (60°-80°)   | 1161.3 | 6.3       | B3/2500                 |      | G3/2500 |
| BVH  | (80°-90°)   | 64.5   | 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°    | 3311.2 | 3311.2 | 3311.2 | 3311.2 | 3311.2 | 3311.2 | 3311.2 | 3311.2 | 3311.2 | 3311.2 | 3311.2 |
| 2.5°  | 3433.0 | 3427.5 | 3424.8 | 3414.0 | 3389.7 | 3400.5 | 3376.1 | 3359.9 | 3357.2 | 3319.3 | 3297.7 |
| 5°    | 3573.6 | 3570.9 | 3565.5 | 3549.3 | 3511.4 | 3516.8 | 3476.2 | 3446.5 | 3438.4 | 3378.8 | 3332.9 |
| 7.5°  | 3692.7 | 3687.2 | 3684.5 | 3662.9 | 3622.3 | 3619.6 | 3570.9 | 3527.6 | 3514.1 | 3433.0 | 3362.6 |
| 10°   | 3784.6 | 3776.5 | 3781.9 | 3760.3 | 3717.0 | 3708.9 | 3646.7 | 3589.9 | 3576.3 | 3473.5 | 3376.1 |
| 12.5° | 3863.1 | 3857.7 | 3865.8 | 3846.9 | 3811.7 | 3803.6 | 3741.3 | 3668.3 | 3652.1 | 3533.0 | 3405.9 |
| 15°   | 3949.7 | 3930.7 | 3946.9 | 3938.8 | 3914.5 | 3911.8 | 3855.0 | 3773.8 | 3752.2 | 3608.8 | 3451.9 |
| 17.5° | 3995.6 | 3984.8 | 4003.8 | 4006.5 | 3995.6 | 4014.6 | 3960.5 | 3863.1 | 3844.1 | 3679.1 | 3492.5 |
| 20°   | 4028.1 | 4011.9 | 4033.5 | 4049.7 | 4057.9 | 4095.7 | 4052.5 | 3957.8 | 3936.1 | 3746.8 | 3530.3 |
| 22.5° | 4139.0 | 4103.9 | 4106.6 | 4117.4 | 4122.8 | 4176.9 | 4149.8 | 4057.9 | 4036.2 | 3830.6 | 3576.3 |
| 25°   | 4417.7 | 4347.3 | 4301.3 | 4268.9 | 4231.0 | 4277.0 | 4260.8 | 4171.5 | 4152.5 | 3930.7 | 3633.1 |
| 27.5° | 4850.5 | 4761.2 | 4669.2 | 4574.6 | 4425.8 | 4406.8 | 4379.8 | 4298.6 | 4277.0 | 4030.8 | 3689.9 |
| 30°   | 5342.9 | 5253.6 | 5145.4 | 4993.9 | 4715.2 | 4569.2 | 4506.9 | 4417.7 | 4393.3 | 4120.1 | 3744.1 |
| 32.5° | 5832.5 | 5754.0 | 5645.8 | 5461.9 | 5064.2 | 4766.6 | 4634.1 | 4542.1 | 4517.8 | 4217.5 | 3809.0 |
| 35°   | 6213.9 | 6165.2 | 6094.9 | 5865.0 | 5410.5 | 4999.3 | 4818.0 | 4707.1 | 4680.1 | 4371.7 | 3928.0 |
| 37.5° | 6522.3 | 6487.2 | 6427.7 | 6186.9 | 5662.1 | 5231.9 | 5029.0 | 4901.9 | 4872.1 | 4539.4 | 4055.2 |
| 40°   | 6976.8 | 6884.8 | 6836.1 | 6487.2 | 5881.2 | 5442.9 | 5267.1 | 5134.5 | 5102.1 | 4717.9 | 4158.0 |
| 42.5° | 7363.7 | 7296.0 | 7236.5 | 6755.0 | 6089.5 | 5624.2 | 5491.6 | 5369.9 | 5326.6 | 4893.8 | 4268.9 |
| 45°   | 7428.6 | 7455.6 | 7425.9 | 6887.5 | 6419.5 | 5802.7 | 5718.9 | 5640.4 | 5599.9 | 5131.8 | 4436.6 |
| 47.5° | 7431.3 | 7431.3 | 7255.5 | 6963.3 | 6828.0 | 6002.9 | 5962.4 | 5989.4 | 5946.1 | 5434.8 | 4636.8 |
| 50°   | 7236.5 | 7271.7 | 7179.7 | 6982.2 | 6936.2 | 6203.1 | 6259.9 | 6406.0 | 6362.7 | 5756.8 | 4853.2 |
| 52.5° | 6833.4 | 6949.8 | 6947.1 | 6952.5 | 6779.3 | 6373.5 | 6573.7 | 6906.5 | 6833.4 | 6119.3 | 5083.1 |
| 55°   | 6122.0 | 6354.6 | 6562.9 | 6741.5 | 6644.1 | 6476.3 | 6957.9 | 7439.4 | 7363.7 | 6525.0 | 5315.8 |
| 57.5° | 5513.3 | 5662.1 | 5921.8 | 6427.7 | 6484.5 | 6565.6 | 7317.7 | 7996.7 | 7929.1 | 6974.1 | 5559.3 |
| 60°   | 4818.0 | 5023.6 | 5283.3 | 6002.9 | 6289.7 | 6681.9 | 7712.6 | 8540.4 | 8475.5 | 7428.6 | 5794.6 |
| 62.5° | 3749.5 | 4014.6 | 4534.0 | 5351.0 | 6005.6 | 6755.0 | 8023.7 | 9019.3 | 8989.5 | 7858.7 | 6005.6 |
| 65°   | 2613.3 | 2848.6 | 3576.3 | 4550.2 | 5553.9 | 6722.5 | 8272.6 | 9446.7 | 9419.7 | 8210.4 | 6154.4 |
| 67.5° | 1525.8 | 1799.0 | 2621.4 | 3662.9 | 4755.8 | 6498.0 | 8353.8 | 9698.3 | 9698.3 | 8424.1 | 6195.0 |
| 70°   | 871.1  | 998.2  | 1728.6 | 2670.1 | 3646.7 | 5878.5 | 8126.5 | 9695.6 | 9741.6 | 8375.4 | 6027.3 |
| 72.5° | 608.7  | 665.5  | 1163.3 | 1796.3 | 2472.6 | 4755.8 | 7531.4 | 9227.6 | 9289.8 | 7915.5 | 5453.8 |
| 75°   | 473.4  | 514.0  | 819.7  | 1225.5 | 1558.2 | 3230.1 | 6230.2 | 7780.3 | 7945.3 | 6746.9 | 4409.5 |
| 77.5° | 359.8  | 389.6  | 478.8  | 765.6  | 998.2  | 1855.8 | 4112.0 | 5102.1 | 5112.9 | 4130.9 | 2364.4 |
| 80°   | 262.4  | 292.2  | 319.2  | 468.0  | 530.2  | 868.4  | 1552.8 | 2131.7 | 2072.2 | 1999.2 | 1279.6 |
| 82.5° | 156.9  | 186.7  | 194.8  | 254.3  | 259.7  | 370.6  | 543.8  | 687.1  | 660.1  | 879.2  | 600.6  |
| 85°   | 67.6   | 94.7   | 100.1  | 116.3  | 110.9  | 151.5  | 216.4  | 181.3  | 162.3  | 186.7  | 129.9  |
| 87.5° | 16.2   | 27.1   | 27.1   | 29.8   | 24.3   | 37.9   | 40.6   | 29.8   | 27.1   | 32.5   | 32.5   |
| 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°    | 3311.2 | 3311.2 | 3311.2 | 3311.2 | 3311.2 | 3311.2 | 3311.2 | 3311.2 | 3311.2 | 3311.2 | 3311.2 |
| 2.5°  | 3292.3 | 3284.2 | 3286.9 | 3240.9 | 3227.4 | 3213.8 | 3205.7 | 3200.3 | 3194.9 | 3203.0 | 3211.1 |
| 5°    | 3316.6 | 3297.7 | 3276.0 | 3208.4 | 3181.4 | 3151.6 | 3130.0 | 3111.0 | 3102.9 | 3102.9 | 3111.0 |
| 7.5°  | 3335.6 | 3303.1 | 3257.1 | 3167.8 | 3119.1 | 3078.6 | 3043.4 | 3019.0 | 3005.5 | 3005.5 | 3013.6 |
| 10°   | 3338.3 | 3292.3 | 3219.2 | 3111.0 | 3046.1 | 2986.6 | 2946.0 | 2919.0 | 2900.0 | 2900.0 | 2905.4 |
| 12.5° | 3354.5 | 3292.3 | 3197.6 | 3067.7 | 2986.6 | 2913.5 | 2864.9 | 2824.3 | 2816.2 | 2816.2 | 2821.6 |
| 15°   | 3381.6 | 3305.8 | 3184.1 | 3029.9 | 2932.5 | 2848.6 | 2794.5 | 2751.2 | 2735.0 | 2745.8 | 2748.5 |
| 17.5° | 3405.9 | 3313.9 | 3159.7 | 2981.2 | 2864.9 | 2772.9 | 2713.4 | 2675.5 | 2653.8 | 2678.2 | 2678.2 |
| 20°   | 3422.1 | 3313.9 | 3124.6 | 2919.0 | 2791.8 | 2689.0 | 2632.2 | 2586.2 | 2570.0 | 2599.7 | 2602.4 |
| 22.5° | 3446.5 | 3311.2 | 3086.7 | 2856.7 | 2713.4 | 2605.1 | 2548.3 | 2513.2 | 2505.1 | 2537.5 | 2548.3 |
| 25°   | 3473.5 | 3316.6 | 3046.1 | 2786.4 | 2626.8 | 2521.3 | 2478.0 | 2461.8 | 2467.2 | 2507.8 | 2521.3 |
| 27.5° | 3503.3 | 3327.4 | 3005.5 | 2707.9 | 2532.1 | 2437.4 | 2413.1 | 2421.2 | 2442.8 | 2494.2 | 2510.5 |
| 30°   | 3530.3 | 3330.2 | 2948.7 | 2616.0 | 2423.9 | 2334.6 | 2345.4 | 2380.6 | 2413.1 | 2464.5 | 2483.4 |
| 32.5° | 3565.5 | 3332.9 | 2889.2 | 2515.9 | 2307.6 | 2242.6 | 2291.3 | 2348.1 | 2380.6 | 2429.3 | 2450.9 |
| 35°   | 3652.1 | 3378.8 | 2843.2 | 2418.5 | 2199.4 | 2164.2 | 2245.4 | 2318.4 | 2337.3 | 2380.6 | 2399.5 |
| 37.5° | 3752.2 | 3454.6 | 2818.9 | 2318.4 | 2093.9 | 2085.7 | 2188.5 | 2261.6 | 2267.0 | 2294.0 | 2313.0 |
| 40°   | 3814.4 | 3487.1 | 2791.8 | 2234.5 | 1999.2 | 2004.6 | 2110.1 | 2166.9 | 2156.1 | 2175.0 | 2188.5 |
| 42.5° | 3876.6 | 3497.9 | 2735.0 | 2164.2 | 1909.9 | 1915.3 | 1996.5 | 2037.0 | 2042.5 | 2083.0 | 2102.0 |
| 45°   | 3982.1 | 3527.6 | 2672.8 | 2099.3 | 1828.7 | 1809.8 | 1858.5 | 1912.6 | 1982.9 | 2061.4 | 2083.0 |
| 47.5° | 4122.8 | 3589.9 | 2607.9 | 2020.8 | 1750.3 | 1688.1 | 1707.0 | 1801.7 | 1874.7 | 1947.8 | 1961.3 |
| 50°   | 4266.2 | 3652.1 | 2548.3 | 1926.1 | 1671.8 | 1558.2 | 1566.3 | 1652.9 | 1712.4 | 1769.2 | 1777.3 |
| 52.5° | 4406.8 | 3706.2 | 2496.9 | 1836.9 | 1582.6 | 1404.0 | 1436.5 | 1525.8 | 1566.3 | 1593.4 | 1601.5 |
| 55°   | 4547.5 | 3752.2 | 2450.9 | 1761.1 | 1479.8 | 1282.3 | 1312.0 | 1395.9 | 1436.5 | 1450.0 | 1455.4 |
| 57.5° | 4693.6 | 3806.3 | 2415.8 | 1696.2 | 1363.4 | 1174.1 | 1193.0 | 1252.5 | 1290.4 | 1306.6 | 1301.2 |
| 60°   | 4815.3 | 3852.3 | 2396.8 | 1628.6 | 1247.1 | 1074.0 | 1068.6 | 1122.7 | 1176.8 | 1193.0 | 1187.6 |
| 62.5° | 4910.0 | 3882.0 | 2367.1 | 1542.0 | 1144.3 | 973.9  | 946.8  | 1017.2 | 1074.0 | 1084.8 | 1092.9 |
| 65°   | 4961.4 | 3884.7 | 2294.0 | 1431.1 | 1038.8 | 865.7  | 846.7  | 917.1  | 952.2  | 963.1  | 963.1  |
| 67.5° | 4953.3 | 3841.4 | 2150.7 | 1282.3 | 941.4  | 768.3  | 752.1  | 795.3  | 846.7  | 854.9  | 846.7  |
| 70°   | 4785.6 | 3662.9 | 1920.7 | 1125.4 | 825.1  | 681.7  | 652.0  | 695.2  | 743.9  | 714.2  | 700.7  |
| 72.5° | 4309.4 | 3200.3 | 1582.6 | 952.2  | 695.2  | 573.5  | 560.0  | 603.3  | 606.0  | 611.4  | 597.9  |
| 75°   | 3400.5 | 2383.3 | 1184.9 | 741.2  | 562.7  | 481.5  | 478.8  | 470.7  | 481.5  | 503.2  | 486.9  |
| 77.5° | 1785.5 | 1190.3 | 641.1  | 454.5  | 408.5  | 386.8  | 367.9  | 365.2  | 397.7  | 411.2  | 395.0  |
| 80°   | 968.5  | 668.2  | 367.9  | 273.2  | 248.9  | 251.6  | 275.9  | 270.5  | 305.7  | 313.8  | 300.3  |
| 82.5° | 422.0  | 316.5  | 181.3  | 165.0  | 165.0  | 162.3  | 170.4  | 189.4  | 227.2  | 227.2  | 181.3  |
| 85°   | 92.0   | 78.5   | 70.3   | 81.2   | 92.0   | 92.0   | 92.0   | 92.0   | 64.9   | 35.2   | 24.3   |
| 87.5° | 29.8   | 29.8   | 29.8   | 32.5   | 35.2   | 35.2   | 29.8   | 21.6   | 13.5   | 2.7    | 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)