

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: P317877

Luminaire Tested: **GAN-SA3B-827-U-T3R**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P317877  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-10)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: GAN-SA3B-827-U-T3R  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(3) 80 CRI, 2700K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III  
ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 13113 lumens  
Efficiency: N/A  
Efficacy: 105.7 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B2 - U0 - G2

Input Watts (W): 124  
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

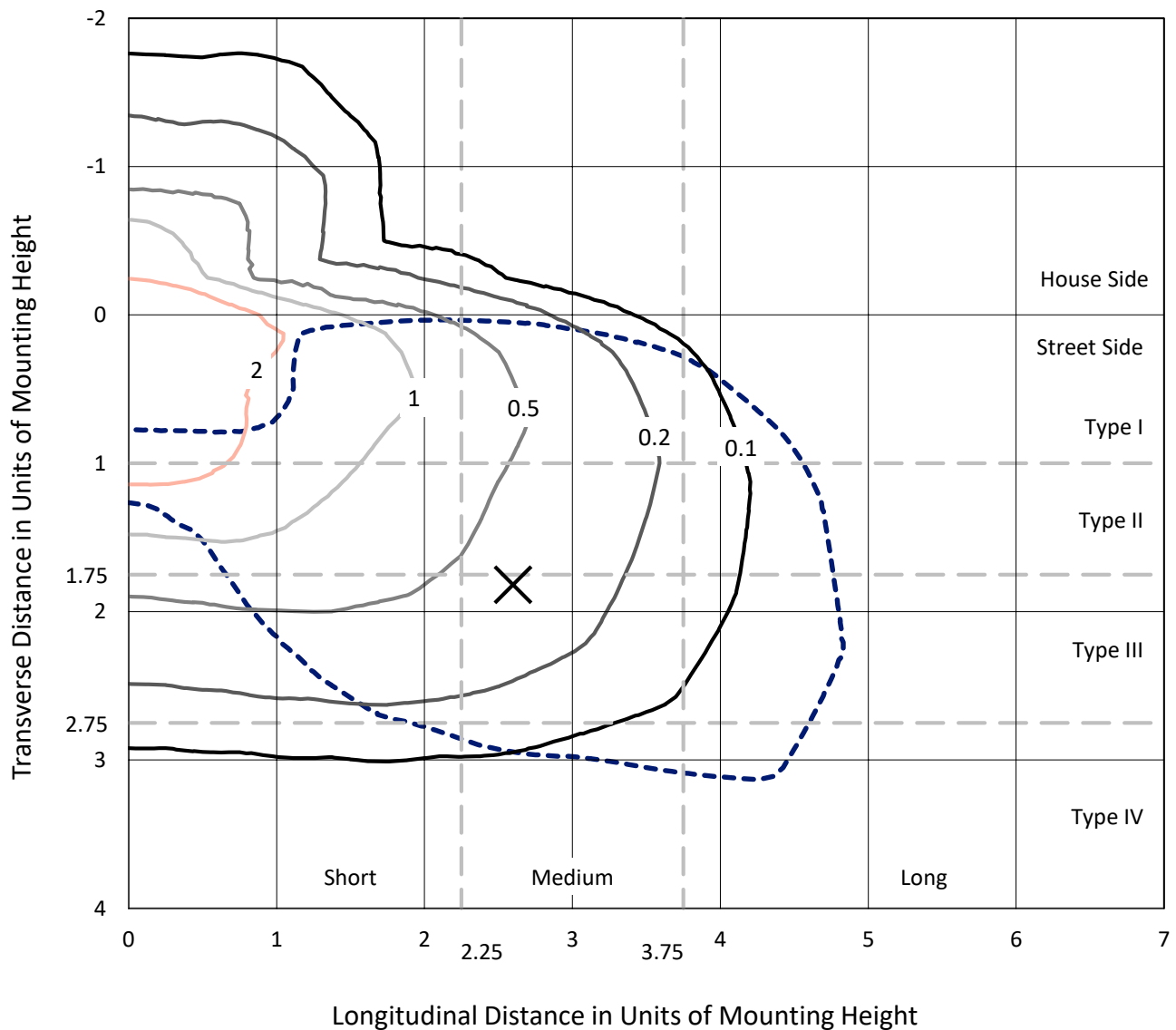


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## Iso-Footcandle Lines of Horizontal Illumination

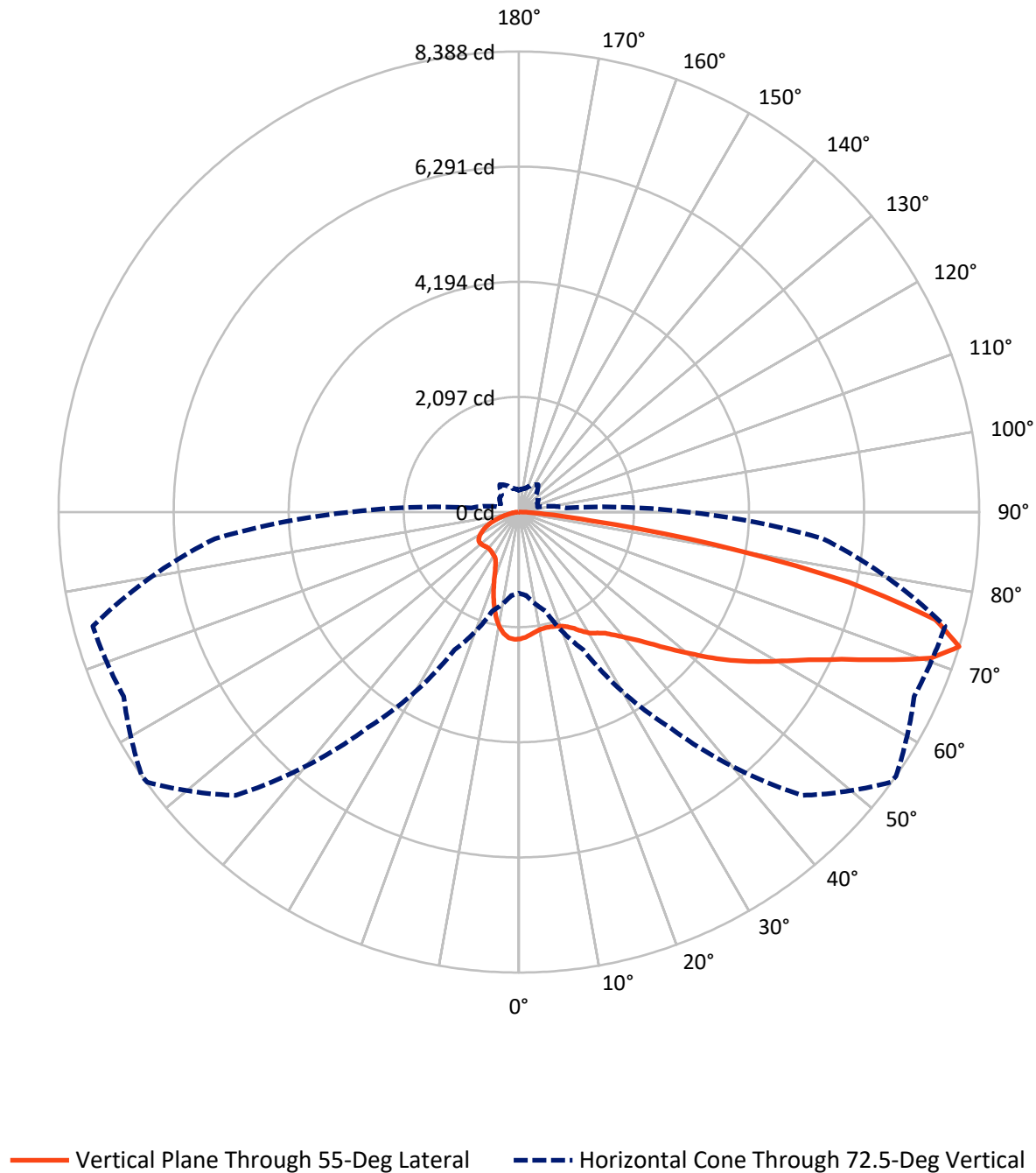
× Max cd  
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.7 fc  
Type IV - Medium - N/A

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## Luminous Intensity Polar Plot



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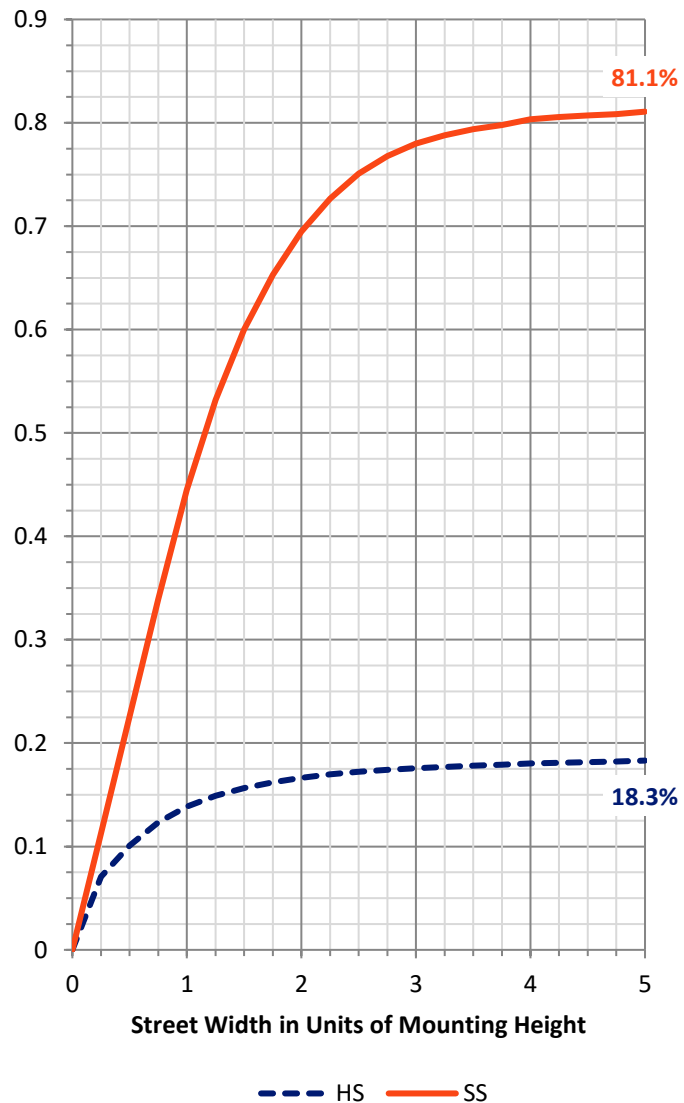
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 2437.3   | 0.0    | 2437.3  |
|                    | % Fixture | 18.6     | 0.0    | 18.6    |
| <b>Street Side</b> | Lumens    | 10675.7  | 0.0    | 10675.7 |
|                    | % Fixture | 81.4     | 0.0    | 81.4    |
| <b>Total</b>       | Lumens    | 13113.0  | 0.0    | 13113.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 209.3   | 1.6       |
| 10°-20°   | 557.2   | 4.2       |
| 20°-30°   | 918.7   | 7.0       |
| 30°-40°   | 1359.0  | 10.4      |
| 40°-50°   | 1896.8  | 14.5      |
| 50°-60°   | 2469.7  | 18.8      |
| 60°-70°   | 3035.2  | 23.1      |
| 70°-80°   | 2379.2  | 18.1      |
| 80°-90°   | 287.9   | 2.2       |
| 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°    | 13113.0 | 100.0     |
| 0°-180°   | 13113.0 | 100.0     |

**Coefficient of Utilization**



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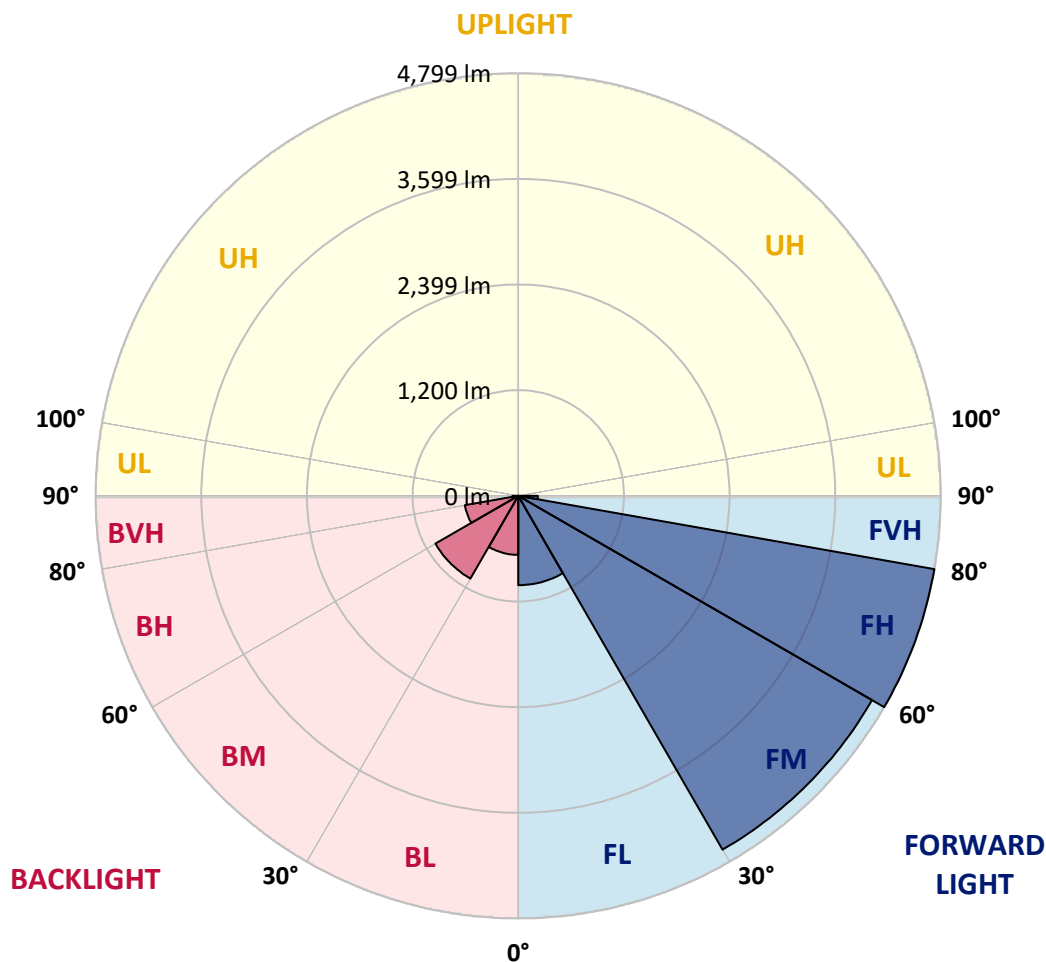
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 1014.6 | 7.7       |                         |      |         |
| FM   | (30°-60°)   | 4639.6 | 35.4      |                         |      |         |
| FH   | (60°-80°)   | 4798.9 | 36.6      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 222.6  | 1.7       |                         |      | G2/225  |
| BL   | (0°-30°)    | 670.6  | 5.1       | B2/1000                 |      |         |
| BM   | (30°-60°)   | 1085.8 | 8.3       | B2/2500                 |      |         |
| BH   | (60°-80°)   | 615.5  | 4.7       | B2/1000                 |      | G2/1000 |
| BVH  | (80°-90°)   | 65.3   | 0.5       |                         |      | 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 IV Medium



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 54°    | 55°    | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 2312.9 | 2312.9 | 2312.9 | 2312.9 | 2312.9 | 2312.9 | 2312.9 | 2312.9 | 2312.9 | 2312.9 | 2312.9 |
| 2.5°  | 2237.6 | 2232.2 | 2238.9 | 2248.2 | 2258.4 | 2272.1 | 2280.1 | 2283.6 | 2297.3 | 2302.7 | 2314.2 |
| 5°    | 2133.9 | 2131.3 | 2142.3 | 2158.3 | 2180.9 | 2212.8 | 2238.4 | 2243.3 | 2279.6 | 2305.3 | 2328.8 |
| 7.5°  | 2058.6 | 2058.6 | 2071.5 | 2090.5 | 2115.8 | 2158.7 | 2195.0 | 2201.7 | 2263.2 | 2318.6 | 2362.0 |
| 10°   | 1998.8 | 2001.0 | 2016.1 | 2038.7 | 2068.4 | 2114.0 | 2162.3 | 2169.8 | 2258.8 | 2349.6 | 2418.7 |
| 12.5° | 1959.0 | 1964.3 | 1978.0 | 1998.4 | 2035.1 | 2090.5 | 2151.6 | 2161.8 | 2268.1 | 2393.9 | 2486.9 |
| 15°   | 1984.2 | 1993.1 | 1994.4 | 2002.8 | 2023.2 | 2083.4 | 2157.8 | 2168.5 | 2288.0 | 2439.1 | 2564.4 |
| 17.5° | 2094.9 | 2098.0 | 2084.3 | 2066.6 | 2056.9 | 2095.4 | 2176.4 | 2187.5 | 2312.0 | 2483.8 | 2638.8 |
| 20°   | 2263.2 | 2261.5 | 2231.8 | 2184.0 | 2134.4 | 2140.6 | 2207.0 | 2218.5 | 2344.3 | 2523.2 | 2713.2 |
| 22.5° | 2475.8 | 2469.6 | 2424.0 | 2335.9 | 2251.3 | 2215.9 | 2260.6 | 2270.3 | 2393.0 | 2579.5 | 2793.0 |
| 25°   | 2733.6 | 2719.9 | 2659.6 | 2541.4 | 2416.9 | 2325.7 | 2341.2 | 2350.5 | 2463.9 | 2642.4 | 2866.0 |
| 27.5° | 3005.6 | 2991.8 | 2915.2 | 2772.1 | 2606.5 | 2464.3 | 2452.4 | 2460.3 | 2544.5 | 2688.9 | 2920.1 |
| 30°   | 3289.9 | 3275.3 | 3205.3 | 3045.0 | 2807.6 | 2607.8 | 2556.0 | 2559.1 | 2601.2 | 2714.1 | 2964.4 |
| 32.5° | 3575.6 | 3561.8 | 3483.4 | 3297.4 | 3025.9 | 2762.0 | 2630.9 | 2626.9 | 2635.3 | 2740.3 | 3014.4 |
| 35°   | 3865.2 | 3870.5 | 3778.9 | 3572.9 | 3267.8 | 2933.4 | 2719.4 | 2711.0 | 2692.4 | 2793.8 | 3085.3 |
| 37.5° | 4175.3 | 4171.7 | 4053.0 | 3837.8 | 3520.7 | 3119.4 | 2846.6 | 2845.2 | 2781.0 | 2895.3 | 3196.4 |
| 40°   | 4382.5 | 4384.8 | 4312.6 | 4108.8 | 3776.2 | 3325.3 | 3009.5 | 3006.4 | 2922.3 | 3047.2 | 3342.2 |
| 42.5° | 4463.6 | 4478.2 | 4496.8 | 4367.5 | 4043.7 | 3564.1 | 3204.0 | 3199.5 | 3119.4 | 3265.1 | 3513.6 |
| 45°   | 4469.4 | 4498.6 | 4613.7 | 4597.4 | 4314.8 | 3837.3 | 3452.4 | 3440.0 | 3382.5 | 3554.8 | 3718.2 |
| 47.5° | 4419.8 | 4449.9 | 4641.2 | 4734.2 | 4557.1 | 4125.7 | 3743.0 | 3733.2 | 3683.6 | 3917.1 | 3939.6 |
| 50°   | 4311.2 | 4340.0 | 4584.5 | 4801.1 | 4756.4 | 4402.9 | 4077.8 | 4052.1 | 4025.6 | 4335.6 | 4193.0 |
| 52.5° | 4107.9 | 4163.3 | 4508.8 | 4817.0 | 4875.5 | 4649.2 | 4429.9 | 4413.1 | 4427.7 | 4777.2 | 4446.8 |
| 55°   | 3626.5 | 3688.5 | 4313.5 | 4803.8 | 4963.6 | 4856.0 | 4782.0 | 4781.2 | 4856.9 | 5240.5 | 4719.2 |
| 57.5° | 3356.8 | 3400.6 | 3915.7 | 4781.2 | 5068.2 | 5061.5 | 5130.6 | 5139.0 | 5286.5 | 5744.9 | 5004.4 |
| 60°   | 3204.4 | 3250.5 | 3714.2 | 4697.5 | 5230.3 | 5327.3 | 5486.3 | 5503.1 | 5723.2 | 6303.4 | 5347.6 |
| 62.5° | 3065.8 | 3116.3 | 3589.3 | 4526.9 | 5421.2 | 5707.3 | 5912.3 | 5927.4 | 6185.6 | 6877.4 | 5679.4 |
| 65°   | 2828.8 | 2886.0 | 3406.4 | 4414.9 | 5594.8 | 6202.9 | 6454.0 | 6464.2 | 6716.7 | 7478.9 | 5933.2 |
| 67.5° | 2494.0 | 2546.3 | 3061.4 | 4167.3 | 5723.2 | 6804.8 | 7174.2 | 7179.9 | 7243.3 | 7903.6 | 6062.9 |
| 70°   | 2102.9 | 2122.8 | 2569.7 | 3656.2 | 5571.3 | 7367.7 | 7963.4 | 7964.8 | 7723.4 | 8175.6 | 6041.7 |
| 72.5° | 1477.5 | 1524.5 | 1865.5 | 2767.7 | 4787.8 | 7299.1 | 8373.1 | 8388.2 | 7946.6 | 8038.3 | 5558.9 |
| 75°   | 906.2  | 955.8  | 1170.2 | 1677.3 | 3037.4 | 5740.5 | 7736.2 | 7840.8 | 7528.1 | 7167.1 | 4541.1 |
| 77.5° | 605.9  | 624.5  | 763.6  | 977.9  | 1376.1 | 3302.7 | 5947.8 | 6144.4 | 6253.8 | 5226.7 | 2904.1 |
| 80°   | 337.9  | 373.4  | 506.2  | 607.7  | 612.1  | 1312.3 | 3566.3 | 3612.3 | 3479.5 | 2081.2 | 896.0  |
| 82.5° | 178.9  | 198.4  | 337.9  | 357.0  | 334.0  | 439.4  | 1329.2 | 1330.5 | 1111.7 | 558.1  | 266.2  |
| 85°   | 138.6  | 155.0  | 231.6  | 217.9  | 170.5  | 194.9  | 438.5  | 462.4  | 378.2  | 228.5  | 86.8   |
| 87.5° | 69.1   | 85.9   | 157.2  | 138.2  | 66.9   | 55.8   | 156.8  | 167.4  | 149.3  | 89.5   | 31.4   |
| 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°    | 2312.9 | 2312.9 | 2312.9 | 2312.9 | 2312.9 | 2312.9 | 2312.9 | 2312.9 | 2312.9 | 2312.9 | 2312.9 |
| 2.5°  | 2318.6 | 2322.6 | 2327.5 | 2322.2 | 2320.4 | 2313.3 | 2301.3 | 2298.7 | 2292.5 | 2292.9 | 2296.5 |
| 5°    | 2339.0 | 2345.6 | 2343.0 | 2322.6 | 2298.2 | 2264.1 | 2228.7 | 2198.6 | 2178.7 | 2177.3 | 2176.0 |
| 7.5°  | 2378.0 | 2382.4 | 2361.6 | 2303.6 | 2235.3 | 2156.5 | 2082.1 | 2017.0 | 1977.6 | 1967.8 | 1965.6 |
| 10°   | 2439.1 | 2438.2 | 2381.1 | 2264.1 | 2128.2 | 1987.3 | 1867.7 | 1777.4 | 1724.7 | 1709.2 | 1705.2 |
| 12.5° | 2507.3 | 2497.1 | 2387.7 | 2192.4 | 1976.7 | 1781.4 | 1629.9 | 1529.4 | 1474.4 | 1456.7 | 1452.3 |
| 15°   | 2577.7 | 2552.5 | 2371.3 | 2085.2 | 1790.7 | 1559.5 | 1400.5 | 1307.5 | 1277.8 | 1268.0 | 1266.3 |
| 17.5° | 2643.3 | 2594.5 | 2324.4 | 1939.9 | 1578.5 | 1338.5 | 1214.4 | 1177.2 | 1184.3 | 1197.2 | 1197.6 |
| 20°   | 2707.5 | 2622.9 | 2249.1 | 1756.6 | 1354.8 | 1156.4 | 1114.3 | 1141.8 | 1175.5 | 1201.6 | 1205.1 |
| 22.5° | 2770.8 | 2642.8 | 2152.1 | 1544.9 | 1154.7 | 1054.1 | 1083.8 | 1133.8 | 1172.4 | 1200.7 | 1205.6 |
| 25°   | 2824.0 | 2647.7 | 2018.3 | 1319.0 | 1015.6 | 1015.6 | 1069.2 | 1116.6 | 1154.7 | 1182.6 | 1187.4 |
| 27.5° | 2843.5 | 2614.9 | 1829.6 | 1109.9 | 945.6  | 997.9  | 1048.8 | 1088.2 | 1120.6 | 1150.2 | 1155.5 |
| 30°   | 2851.0 | 2554.2 | 1611.7 | 942.1  | 916.8  | 978.8  | 1021.3 | 1055.0 | 1085.6 | 1113.5 | 1118.3 |
| 32.5° | 2852.3 | 2481.2 | 1380.5 | 846.8  | 896.9  | 958.9  | 987.2  | 1016.9 | 1049.7 | 1060.8 | 1062.5 |
| 35°   | 2860.7 | 2394.8 | 1136.9 | 798.1  | 878.3  | 940.3  | 962.9  | 984.1  | 931.0  | 935.0  | 938.5  |
| 37.5° | 2885.1 | 2309.3 | 933.2  | 770.7  | 866.3  | 930.5  | 957.6  | 880.5  | 838.9  | 829.1  | 827.8  |
| 40°   | 2930.7 | 2218.1 | 782.2  | 748.5  | 861.9  | 935.4  | 923.5  | 822.0  | 750.3  | 696.7  | 688.7  |
| 42.5° | 2994.0 | 2119.7 | 685.6  | 733.9  | 865.0  | 958.9  | 876.1  | 765.8  | 646.6  | 612.1  | 607.7  |
| 45°   | 3065.3 | 2016.5 | 633.4  | 723.7  | 875.6  | 977.0  | 866.3  | 690.9  | 598.4  | 572.2  | 570.0  |
| 47.5° | 3134.4 | 1890.3 | 606.3  | 719.3  | 890.2  | 962.4  | 825.1  | 667.9  | 575.3  | 561.6  | 562.9  |
| 50°   | 3213.7 | 1776.5 | 589.9  | 714.4  | 903.1  | 953.1  | 778.6  | 655.9  | 566.5  | 583.3  | 601.0  |
| 52.5° | 3280.6 | 1658.7 | 575.3  | 704.7  | 908.0  | 936.7  | 766.7  | 658.2  | 566.5  | 598.8  | 615.6  |
| 55°   | 3359.9 | 1569.7 | 558.5  | 684.3  | 898.7  | 890.2  | 758.3  | 671.4  | 573.1  | 552.7  | 554.5  |
| 57.5° | 3462.2 | 1540.4 | 539.9  | 652.4  | 867.7  | 822.5  | 754.3  | 684.3  | 569.1  | 556.3  | 560.7  |
| 60°   | 3603.9 | 1571.4 | 532.4  | 610.8  | 819.4  | 769.3  | 754.7  | 677.6  | 541.2  | 519.1  | 519.5  |
| 62.5° | 3739.0 | 1606.0 | 531.9  | 584.6  | 760.0  | 721.9  | 744.5  | 655.9  | 527.1  | 514.2  | 519.1  |
| 65°   | 3783.3 | 1571.0 | 510.7  | 555.4  | 693.1  | 665.2  | 725.9  | 632.9  | 516.4  | 496.9  | 496.1  |
| 67.5° | 3723.9 | 1462.5 | 467.7  | 508.0  | 616.5  | 599.3  | 701.6  | 605.5  | 499.6  | 483.7  | 481.0  |
| 70°   | 3547.7 | 1220.2 | 414.6  | 445.6  | 529.3  | 524.8  | 663.0  | 573.6  | 477.0  | 463.3  | 451.8  |
| 72.5° | 3073.3 | 869.4  | 349.5  | 370.7  | 430.9  | 445.1  | 609.9  | 531.9  | 445.1  | 415.4  | 397.7  |
| 75°   | 2524.1 | 643.5  | 287.0  | 291.4  | 327.3  | 365.8  | 536.8  | 483.2  | 407.5  | 357.0  | 343.3  |
| 77.5° | 1545.7 | 393.7  | 228.5  | 230.3  | 234.7  | 291.9  | 442.0  | 428.7  | 359.6  | 297.6  | 287.9  |
| 80°   | 500.5  | 214.8  | 165.2  | 173.6  | 160.3  | 213.9  | 341.9  | 365.0  | 308.7  | 248.9  | 238.3  |
| 82.5° | 190.4  | 125.3  | 111.6  | 117.4  | 111.2  | 143.5  | 249.4  | 292.3  | 252.9  | 204.6  | 166.5  |
| 85°   | 92.1   | 70.9   | 66.0   | 74.0   | 68.7   | 73.5   | 159.4  | 215.3  | 191.8  | 133.3  | 124.0  |
| 87.5° | 32.8   | 31.4   | 25.2   | 34.1   | 29.2   | 26.1   | 48.7   | 108.5  | 126.7  | 91.7   | 81.9   |
| 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)