

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: P323628

Luminaire Tested: **GAN-SA4A-827-U-SL3-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P323628  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-23)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: GAN-SA4A-827-U-SL3-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III  
SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 11806 lumens  
Efficiency: N/A  
Efficacy: 91.5 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B1 - U0 - G2

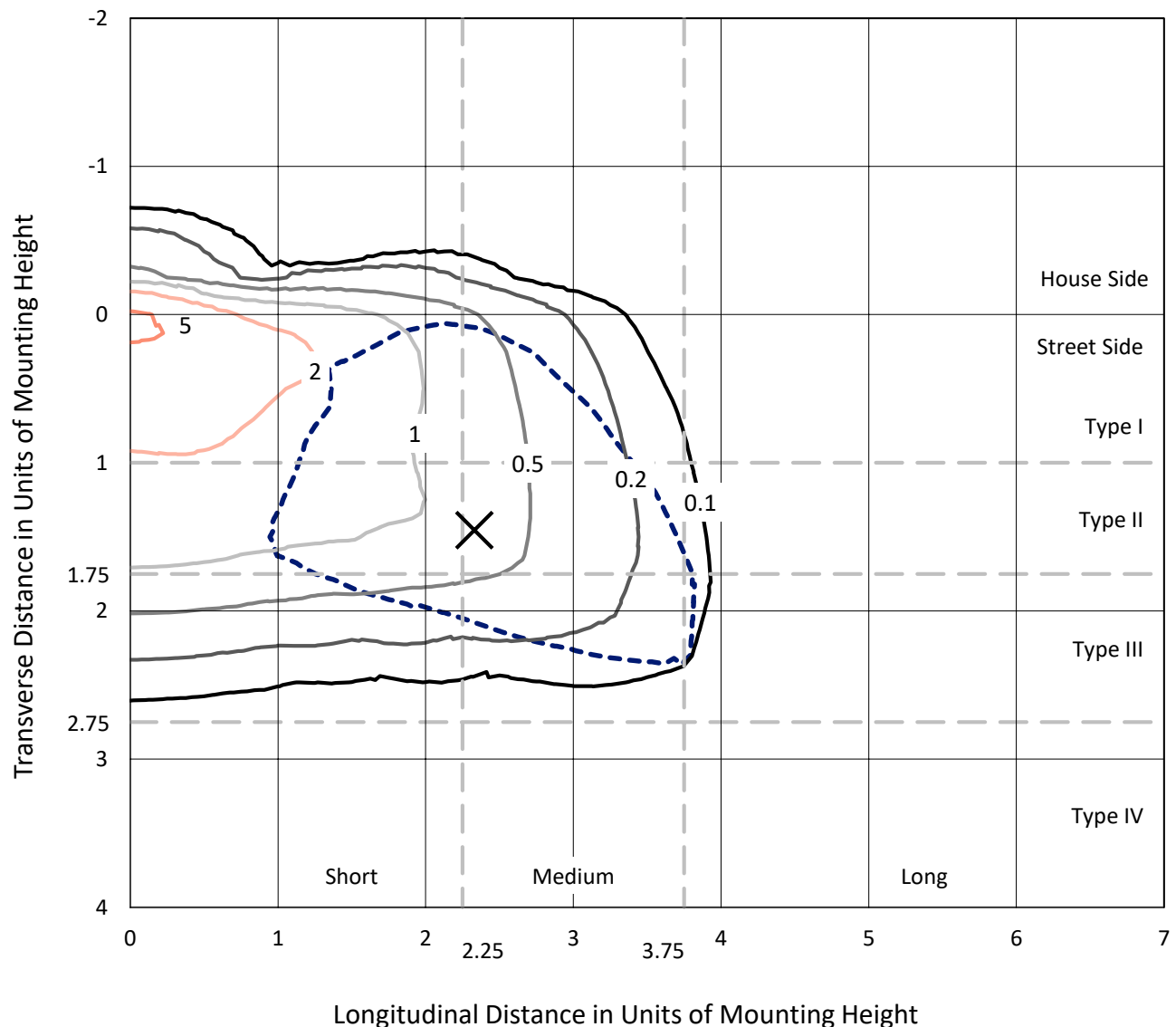
Input Watts (W): 129  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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## Iso-Footcandle Lines of Horizontal Illumination

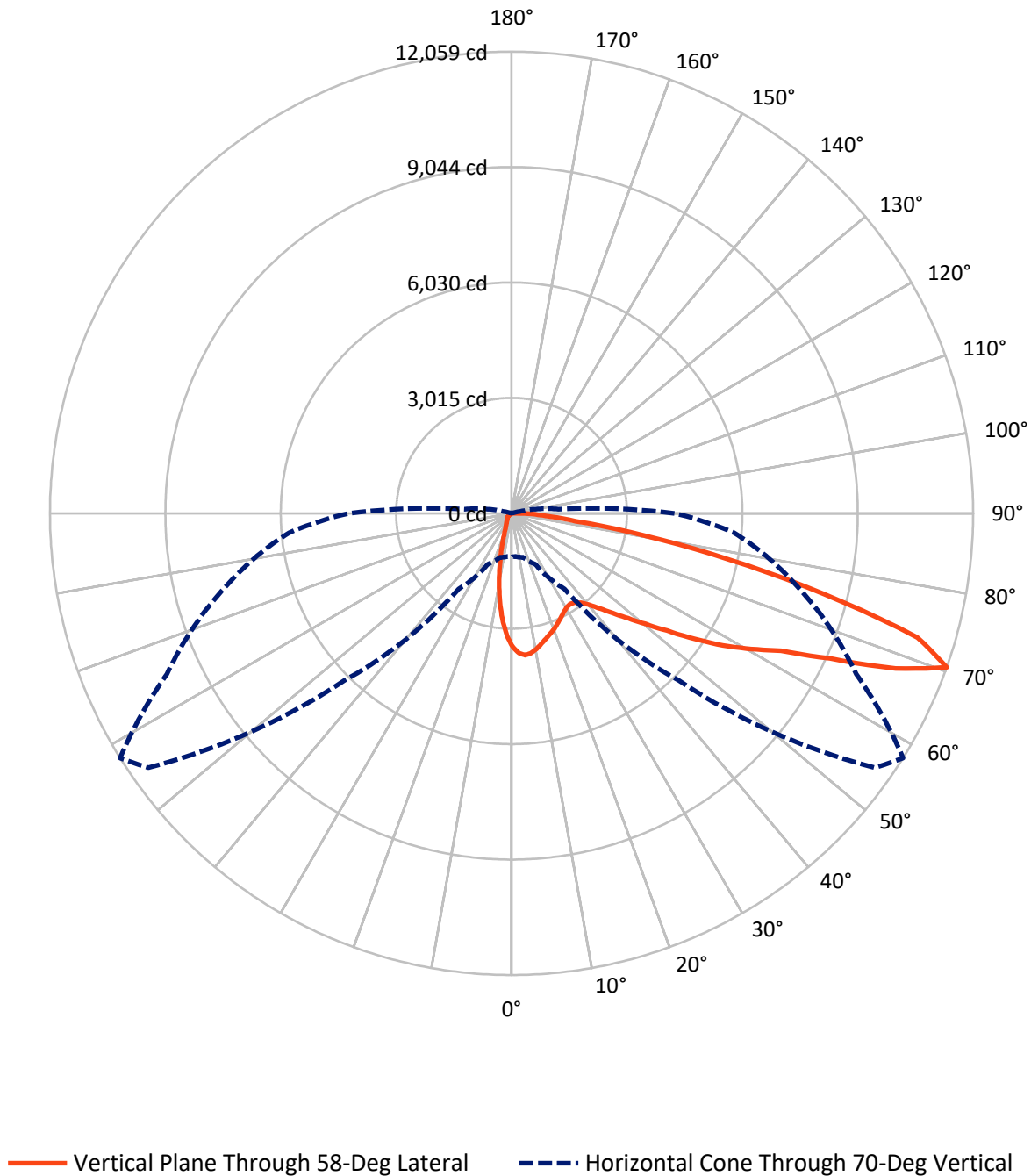
✕ Max cd  
 - - - 1/2 Max cd



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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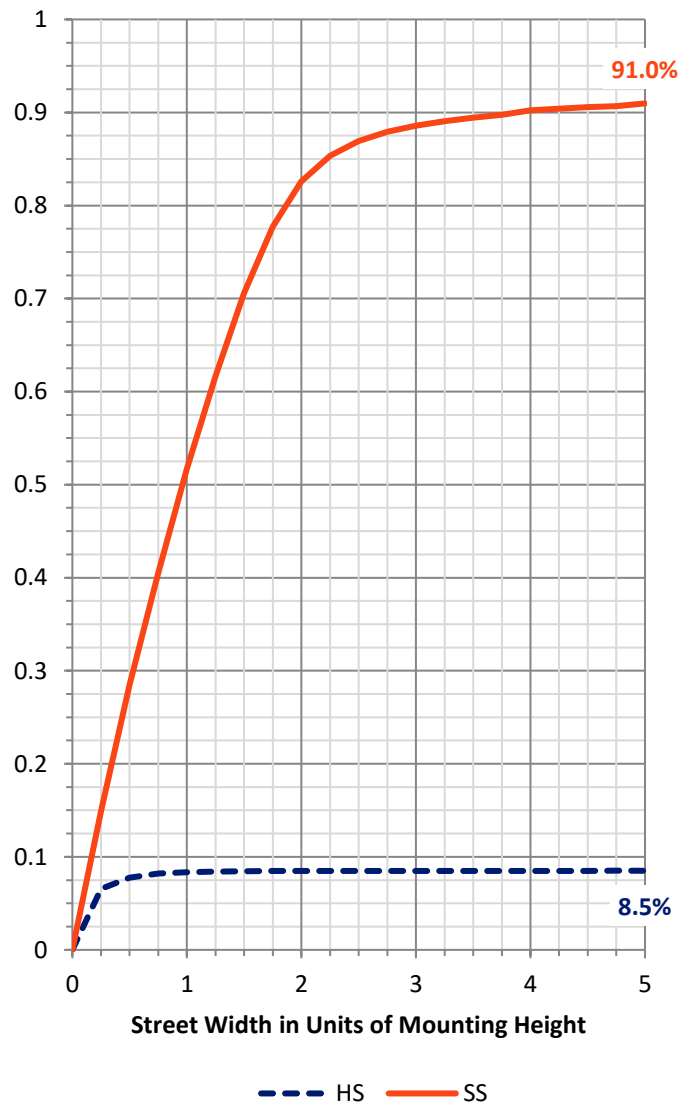
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 1010.3   | 0.0    | 1010.3  |
|                    | % Fixture | 8.6      | 0.0    | 8.6     |
| <b>Street Side</b> | Lumens    | 10795.7  | 0.0    | 10795.7 |
|                    | % Fixture | 91.4     | 0.0    | 91.4    |
| <b>Total</b>       | Lumens    | 11806.0  | 0.0    | 11806.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 285.2   | 2.4       |
| 10°-20°   | 598.5   | 5.1       |
| 20°-30°   | 786.9   | 6.7       |
| 30°-40°   | 1042.1  | 8.8       |
| 40°-50°   | 1557.6  | 13.2      |
| 50°-60°   | 2495.3  | 21.1      |
| 60°-70°   | 3145.3  | 26.6      |
| 70°-80°   | 1696.5  | 14.4      |
| 80°-90°   | 198.6   | 1.7       |
| 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°    | 11806.0 | 100.0     |
| 0°-180°   | 11806.0 | 100.0     |

**Coefficient of Utilization**



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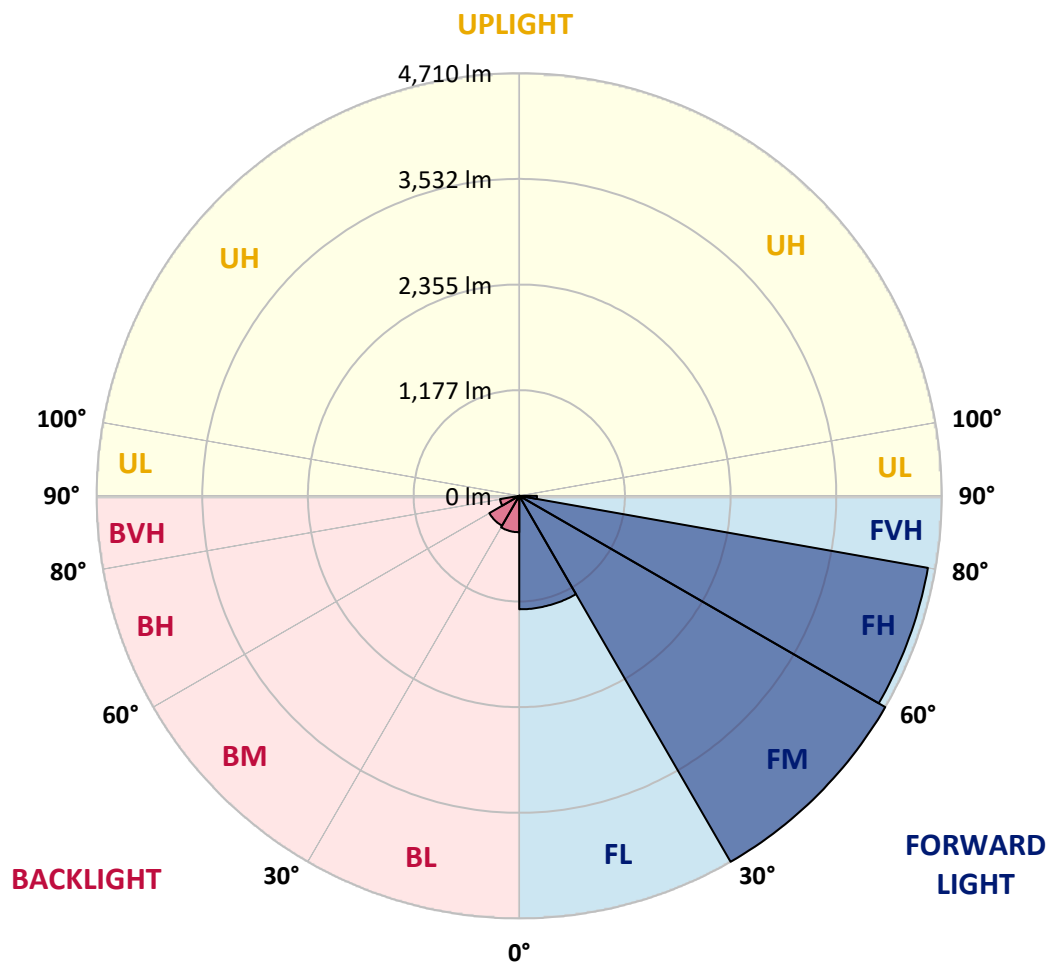
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 1264.7 | 10.7      |                         |      |         |
| FM   | (30°-60°)   | 4709.6 | 39.9      |                         |      |         |
| FH   | (60°-80°)   | 4624.5 | 39.2      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 196.9  | 1.7       |                         |      | G2/225  |
| BL   | (0°-30°)    | 405.9  | 3.4       | B1/500                  |      |         |
| BM   | (30°-60°)   | 385.4  | 3.3       | B1/1000                 |      |         |
| BH   | (60°-80°)   | 217.3  | 1.8       | B1/500                  |      | G1/500  |
| BVH  | (80°-90°)   | 1.7    | 0.0       |                         |      | G0/10   |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B1-U0-G2**

Type III Medium



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°     | 58°     | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|---------|---------|--------|--------|--------|
| 0°    | 3487.4 | 3487.4 | 3487.4 | 3487.4 | 3487.4 | 3487.4 | 3487.4  | 3487.4  | 3487.4 | 3487.4 | 3487.4 |
| 2.5°  | 3776.6 | 3767.3 | 3763.8 | 3757.9 | 3735.3 | 3713.3 | 3669.6  | 3657.3  | 3629.8 | 3564.5 | 3495.3 |
| 5°    | 3779.5 | 3779.0 | 3789.3 | 3786.9 | 3779.0 | 3768.7 | 3737.3  | 3721.1  | 3674.5 | 3581.2 | 3454.5 |
| 7.5°  | 3597.4 | 3606.7 | 3629.8 | 3648.5 | 3670.1 | 3698.0 | 3702.0  | 3686.3  | 3648.0 | 3547.3 | 3379.4 |
| 10°   | 3352.9 | 3367.7 | 3400.1 | 3436.9 | 3493.3 | 3549.3 | 3599.4  | 3597.4  | 3584.1 | 3485.0 | 3289.1 |
| 12.5° | 3108.0 | 3125.1 | 3162.5 | 3216.9 | 3297.0 | 3388.3 | 3477.6  | 3489.9  | 3512.0 | 3429.0 | 3205.7 |
| 15°   | 2893.4 | 2908.2 | 2945.0 | 3011.7 | 3110.9 | 3233.6 | 3364.7  | 3387.3  | 3444.2 | 3385.3 | 3135.9 |
| 17.5° | 2711.3 | 2720.6 | 2747.6 | 2821.8 | 2936.6 | 3085.4 | 3255.7  | 3299.9  | 3384.8 | 3351.0 | 3075.6 |
| 20°   | 2584.2 | 2585.6 | 2603.3 | 2655.3 | 2770.2 | 2936.6 | 3142.8  | 3206.1  | 3322.0 | 3321.5 | 3013.2 |
| 22.5° | 2521.3 | 2516.4 | 2519.8 | 2549.8 | 2634.2 | 2794.8 | 3029.9  | 3105.0  | 3265.5 | 3296.5 | 2949.9 |
| 25°   | 2509.5 | 2505.6 | 2495.8 | 2499.7 | 2550.8 | 2670.6 | 2916.0  | 3002.9  | 3216.0 | 3281.3 | 2894.9 |
| 27.5° | 2546.4 | 2550.3 | 2533.6 | 2515.9 | 2519.8 | 2590.0 | 2814.9  | 2915.5  | 3175.7 | 3281.3 | 2856.1 |
| 30°   | 2620.5 | 2622.5 | 2610.2 | 2587.1 | 2556.2 | 2567.5 | 2744.7  | 2845.3  | 3155.6 | 3303.8 | 2831.6 |
| 32.5° | 2702.5 | 2713.3 | 2711.8 | 2693.1 | 2649.0 | 2603.3 | 2728.0  | 2819.8  | 3154.1 | 3353.9 | 2829.1 |
| 35°   | 2804.1 | 2816.4 | 2837.0 | 2833.1 | 2786.9 | 2711.8 | 2784.9  | 2857.1  | 3183.1 | 3436.4 | 2855.6 |
| 37.5° | 2912.1 | 2930.7 | 2974.9 | 2996.0 | 2966.1 | 2881.2 | 2912.6  | 2964.1  | 3260.6 | 3569.9 | 2922.9 |
| 40°   | 3016.7 | 3037.8 | 3118.3 | 3201.2 | 3178.7 | 3091.3 | 3106.0  | 3147.2  | 3398.6 | 3761.9 | 3050.5 |
| 42.5° | 3119.3 | 3150.7 | 3269.0 | 3405.5 | 3432.5 | 3362.7 | 3370.6  | 3403.5  | 3603.3 | 4026.0 | 3259.2 |
| 45°   | 3242.0 | 3277.3 | 3452.6 | 3621.0 | 3693.1 | 3662.7 | 3696.1  | 3717.7  | 3870.8 | 4375.0 | 3540.5 |
| 47.5° | 3422.1 | 3462.9 | 3677.9 | 3869.9 | 3996.5 | 4016.1 | 4083.4  | 4097.6  | 4209.1 | 4781.5 | 3907.2 |
| 50°   | 3773.6 | 3784.9 | 3979.3 | 4153.6 | 4336.2 | 4454.0 | 4530.6  | 4541.4  | 4618.5 | 5225.8 | 4365.2 |
| 52.5° | 4215.9 | 4223.3 | 4333.3 | 4450.1 | 4657.8 | 4898.3 | 5077.5  | 5092.7  | 5108.9 | 5658.7 | 4817.3 |
| 55°   | 4655.3 | 4654.3 | 4727.0 | 4795.7 | 5033.3 | 5382.8 | 5771.6  | 5781.0  | 5664.6 | 6069.6 | 5162.9 |
| 57.5° | 4929.7 | 4956.2 | 5066.7 | 5155.1 | 5486.9 | 5935.1 | 6474.6  | 6509.0  | 6248.3 | 6374.0 | 5504.6 |
| 60°   | 4842.4 | 4855.1 | 5100.1 | 5427.0 | 6052.0 | 6720.1 | 7186.0  | 7194.8  | 6687.2 | 6677.9 | 5936.6 |
| 62.5° | 4125.6 | 4132.5 | 4517.4 | 5191.4 | 6338.2 | 7738.2 | 8044.1  | 7900.2  | 7191.9 | 7099.6 | 6453.5 |
| 65°   | 2827.7 | 2872.3 | 3193.9 | 4026.9 | 5812.4 | 8376.9 | 9372.5  | 9134.4  | 7961.1 | 7707.3 | 6920.9 |
| 67.5° | 1665.2 | 1655.8 | 1814.9 | 2428.5 | 4269.0 | 7952.8 | 11052.9 | 10816.3 | 9010.2 | 8114.3 | 6783.9 |
| 70°   | 1137.4 | 1131.1 | 1191.9 | 1470.3 | 2409.9 | 6169.3 | 11581.6 | 12059.2 | 9936.5 | 7840.4 | 5838.4 |
| 72.5° | 812.0  | 815.4  | 905.2  | 1142.4 | 1513.0 | 3594.5 | 9959.6  | 11090.2 | 9646.4 | 6835.0 | 4437.8 |
| 75°   | 551.3  | 560.6  | 689.2  | 937.2  | 1326.4 | 1828.6 | 7067.7  | 8430.4  | 7855.1 | 4967.5 | 2550.8 |
| 77.5° | 296.5  | 306.8  | 458.5  | 755.0  | 1199.3 | 1270.5 | 4546.3  | 5802.1  | 4934.2 | 2233.2 | 739.3  |
| 80°   | 123.7  | 129.6  | 214.5  | 548.8  | 1036.3 | 1115.8 | 2675.0  | 3518.4  | 2102.6 | 440.3  | 164.9  |
| 82.5° | 53.5   | 56.5   | 89.3   | 327.4  | 774.7  | 942.1  | 1416.3  | 1692.7  | 637.2  | 96.7   | 83.0   |
| 85°   | 10.3   | 10.8   | 36.8   | 173.3  | 494.3  | 531.7  | 918.0   | 899.8   | 286.2  | 41.7   | 60.4   |
| 87.5° | 0.0    | 0.0    | 8.8    | 54.5   | 145.3  | 289.6  | 560.1   | 553.3   | 97.2   | 20.1   | 22.6   |
| 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°    | 3487.4 | 3487.4 | 3487.4 | 3487.4 | 3487.4 | 3487.4 | 3487.4 | 3487.4 | 3487.4 | 3487.4 | 3487.4 |
| 2.5°  | 3459.9 | 3426.1 | 3354.9 | 3267.0 | 3199.8 | 3125.6 | 3066.7 | 2992.1 | 2959.7 | 2961.2 | 2943.5 |
| 5°    | 3382.4 | 3312.7 | 3155.1 | 2956.3 | 2803.1 | 2645.0 | 2509.0 | 2373.6 | 2293.5 | 2267.5 | 2243.0 |
| 7.5°  | 3271.4 | 3161.0 | 2909.6 | 2603.3 | 2344.1 | 2090.8 | 1870.4 | 1676.5 | 1553.7 | 1493.8 | 1471.8 |
| 10°   | 3146.3 | 2991.1 | 2627.4 | 2223.8 | 1853.7 | 1511.0 | 1225.3 | 976.9  | 877.8  | 810.5  | 793.3  |
| 12.5° | 3036.3 | 2826.2 | 2351.5 | 1834.5 | 1395.2 | 981.8  | 709.4  | 554.7  | 487.5  | 461.0  | 456.5  |
| 15°   | 2932.7 | 2672.0 | 2085.9 | 1482.1 | 966.1  | 604.3  | 451.1  | 398.6  | 382.9  | 378.5  | 378.5  |
| 17.5° | 2835.0 | 2525.2 | 1826.2 | 1135.0 | 639.2  | 423.7  | 373.6  | 361.8  | 356.9  | 356.4  | 356.9  |
| 20°   | 2732.9 | 2378.5 | 1570.9 | 831.6  | 446.2  | 358.9  | 345.1  | 338.7  | 337.3  | 337.3  | 337.3  |
| 22.5° | 2635.2 | 2231.7 | 1322.5 | 594.0  | 357.9  | 327.4  | 320.6  | 316.1  | 314.7  | 314.2  | 313.2  |
| 25°   | 2541.4 | 2092.3 | 1080.0 | 419.7  | 314.2  | 299.9  | 294.1  | 288.2  | 283.7  | 281.3  | 279.8  |
| 27.5° | 2464.4 | 1968.1 | 854.2  | 336.8  | 283.7  | 271.5  | 264.1  | 255.3  | 244.5  | 239.6  | 237.6  |
| 30°   | 2403.0 | 1854.7 | 658.3  | 284.2  | 255.3  | 243.0  | 231.7  | 216.5  | 200.8  | 192.4  | 191.9  |
| 32.5° | 2354.9 | 1743.2 | 499.7  | 251.3  | 229.7  | 214.5  | 198.3  | 179.2  | 161.0  | 151.7  | 151.2  |
| 35°   | 2331.3 | 1645.0 | 381.9  | 227.3  | 207.2  | 188.0  | 167.9  | 146.8  | 129.1  | 120.3  | 119.3  |
| 37.5° | 2347.0 | 1562.1 | 298.0  | 207.2  | 188.0  | 165.9  | 142.4  | 120.3  | 104.6  | 96.7   | 96.2   |
| 40°   | 2404.5 | 1509.1 | 242.0  | 190.0  | 171.8  | 144.8  | 119.3  | 98.7   | 85.4   | 79.0   | 78.5   |
| 42.5° | 2526.7 | 1489.4 | 206.7  | 175.7  | 156.1  | 125.2  | 99.2   | 81.5   | 69.2   | 64.8   | 63.8   |
| 45°   | 2730.9 | 1518.4 | 182.6  | 162.0  | 139.9  | 106.5  | 82.0   | 66.8   | 56.0   | 52.5   | 52.0   |
| 47.5° | 3002.9 | 1594.5 | 165.4  | 148.7  | 125.2  | 89.8   | 68.2   | 54.0   | 45.7   | 42.2   | 41.7   |
| 50°   | 3353.4 | 1715.2 | 151.2  | 135.5  | 111.4  | 76.1   | 56.5   | 42.7   | 35.3   | 32.9   | 32.9   |
| 52.5° | 3734.9 | 1859.1 | 138.4  | 123.2  | 97.7   | 63.3   | 45.7   | 32.9   | 28.0   | 25.0   | 25.0   |
| 55°   | 4050.0 | 1984.8 | 124.7  | 113.9  | 81.0   | 52.5   | 34.9   | 25.0   | 20.6   | 19.1   | 19.1   |
| 57.5° | 4364.7 | 2118.8 | 109.0  | 97.7   | 64.8   | 42.7   | 26.5   | 18.7   | 15.2   | 14.2   | 14.2   |
| 60°   | 4772.6 | 2282.7 | 93.8   | 79.5   | 51.1   | 32.4   | 19.6   | 13.3   | 11.3   | 10.8   | 10.8   |
| 62.5° | 5221.3 | 2379.0 | 80.0   | 63.8   | 39.8   | 24.1   | 14.2   | 8.8    | 8.3    | 8.3    | 7.9    |
| 65°   | 5495.8 | 2243.0 | 67.3   | 51.1   | 30.9   | 18.2   | 9.3    | 6.4    | 7.4    | 6.9    | 5.9    |
| 67.5° | 5145.7 | 1756.0 | 55.0   | 39.8   | 24.1   | 13.7   | 5.9    | 4.4    | 7.9    | 6.4    | 4.9    |
| 70°   | 4260.6 | 1229.2 | 42.7   | 28.0   | 19.1   | 11.8   | 3.9    | 2.9    | 8.3    | 6.4    | 3.9    |
| 72.5° | 3188.5 | 822.8  | 33.9   | 18.7   | 14.2   | 10.3   | 3.4    | 1.5    | 7.4    | 5.4    | 3.4    |
| 75°   | 1742.2 | 331.4  | 27.0   | 11.8   | 8.8    | 7.4    | 2.5    | 1.0    | 4.9    | 3.9    | 2.5    |
| 77.5° | 458.5  | 87.4   | 19.6   | 7.9    | 4.9    | 2.9    | 1.5    | 0.5    | 2.5    | 2.0    | 1.0    |
| 80°   | 116.8  | 33.9   | 12.8   | 5.4    | 3.4    | 1.5    | 0.0    | 0.0    | 0.5    | 0.0    | 0.0    |
| 82.5° | 62.3   | 14.2   | 7.9    | 3.9    | 2.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 85°   | 47.1   | 9.3    | 4.4    | 2.5    | 0.5    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 87.5° | 18.2   | 2.9    | 1.5    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 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)