

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: P319508

Luminaire Tested: **GAN-SA4A-830-U-SL2**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P319508  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-20)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: GAN-SA4A-830-U-SL2  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 80 CRI, 3000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II SPILL  
LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 14634 lumens  
Efficiency: N/A  
Efficacy: 113.4 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B2 - U0 - G3

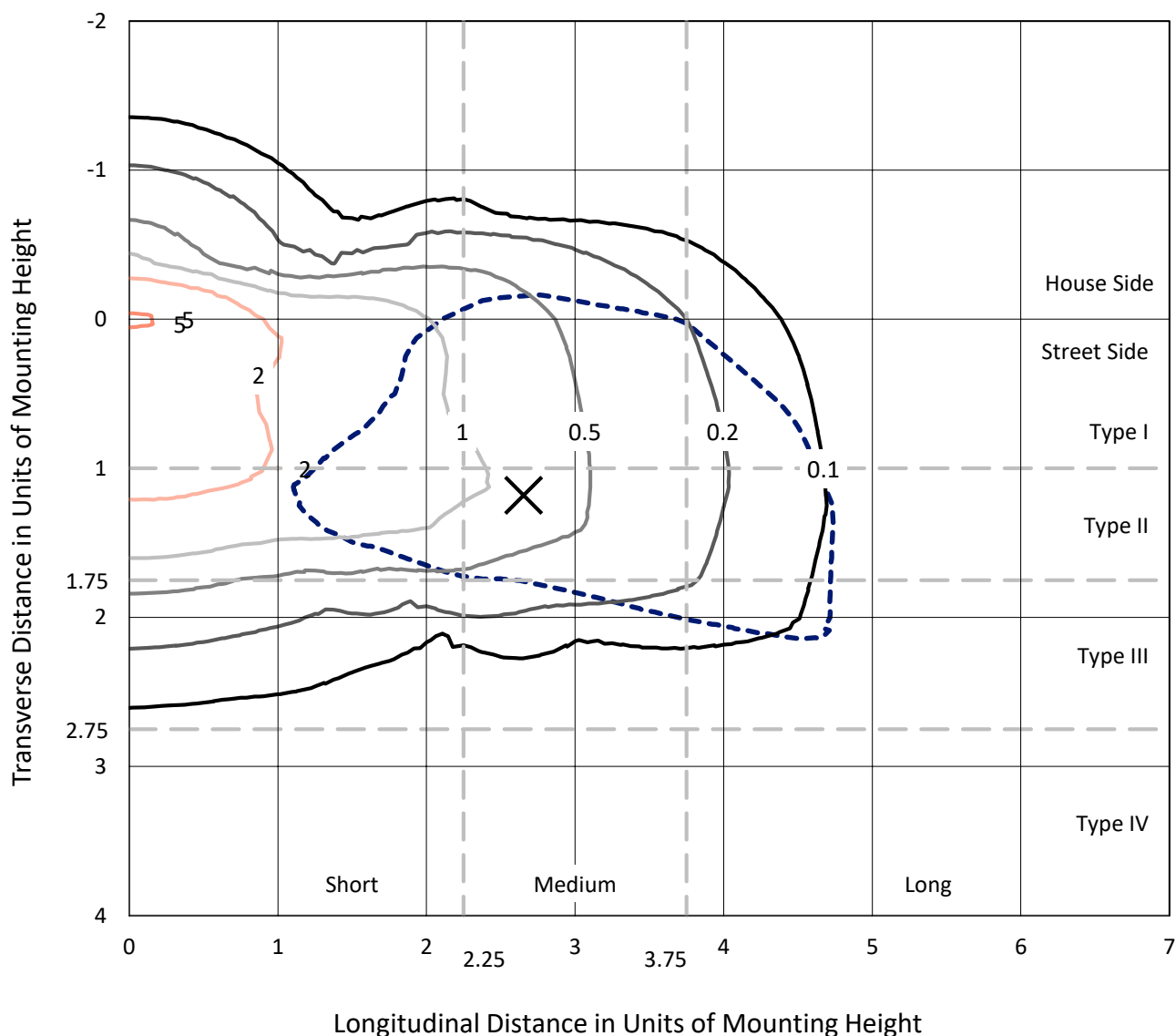
Input Watts (W): 129  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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## Iso-Footcandle Lines of Horizontal Illumination

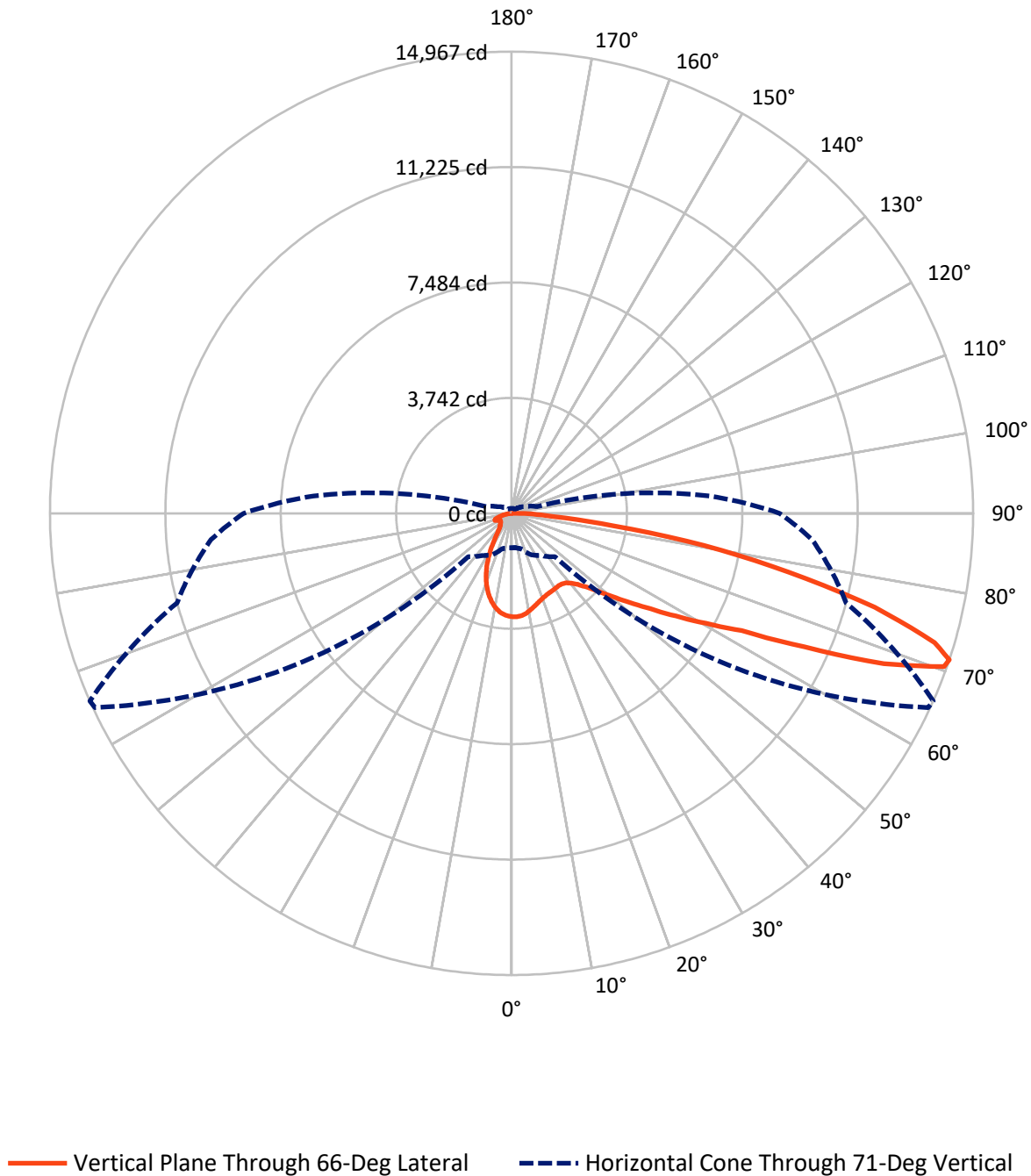
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.4 fc  
 Type III - Medium - N/A

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## Luminous Intensity Polar Plot



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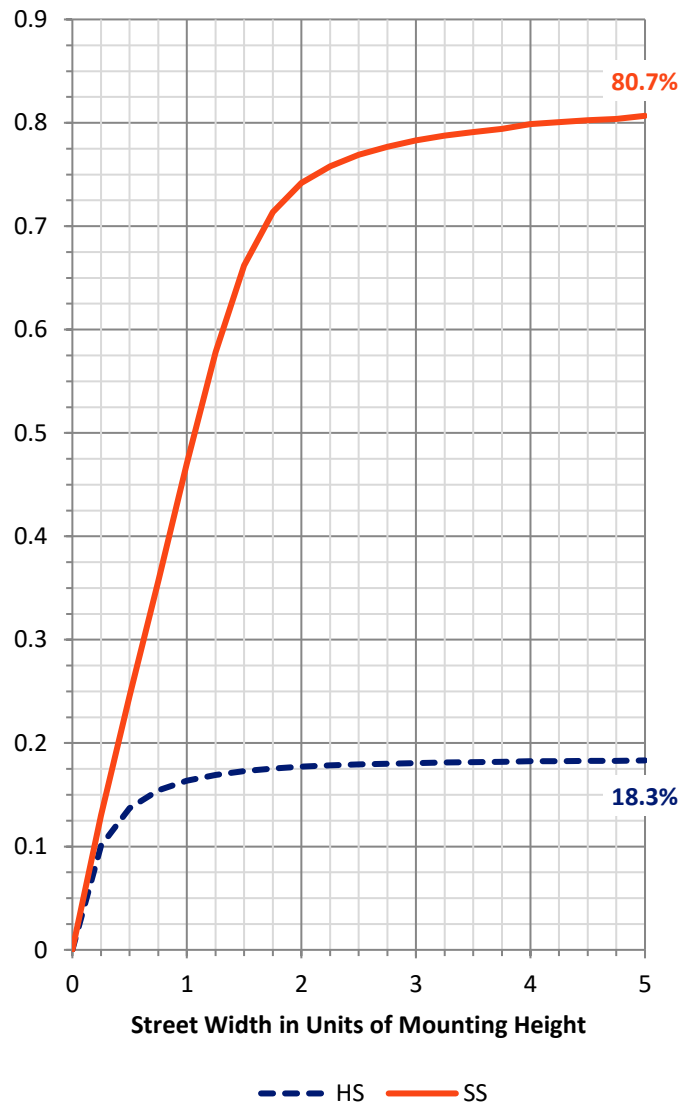
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 2712.1   | 0.0    | 2712.1  |
|                    | % Fixture | 18.5     | 0.0    | 18.5    |
| <b>Street Side</b> | Lumens    | 11921.9  | 0.0    | 11921.9 |
|                    | % Fixture | 81.5     | 0.0    | 81.5    |
| <b>Total</b>       | Lumens    | 14634.0  | 0.0    | 14634.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 295.1   | 2.0       |
| 10°-20°   | 707.8   | 4.8       |
| 20°-30°   | 950.7   | 6.5       |
| 30°-40°   | 1250.6  | 8.5       |
| 40°-50°   | 1819.3  | 12.4      |
| 50°-60°   | 2842.0  | 19.4      |
| 60°-70°   | 3560.0  | 24.3      |
| 70°-80°   | 2715.5  | 18.6      |
| 80°-90°   | 493.1   | 3.4       |
| 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°    | 14634.0 | 100.0     |
| 0°-180°   | 14634.0 | 100.0     |

**Coefficient of Utilization**



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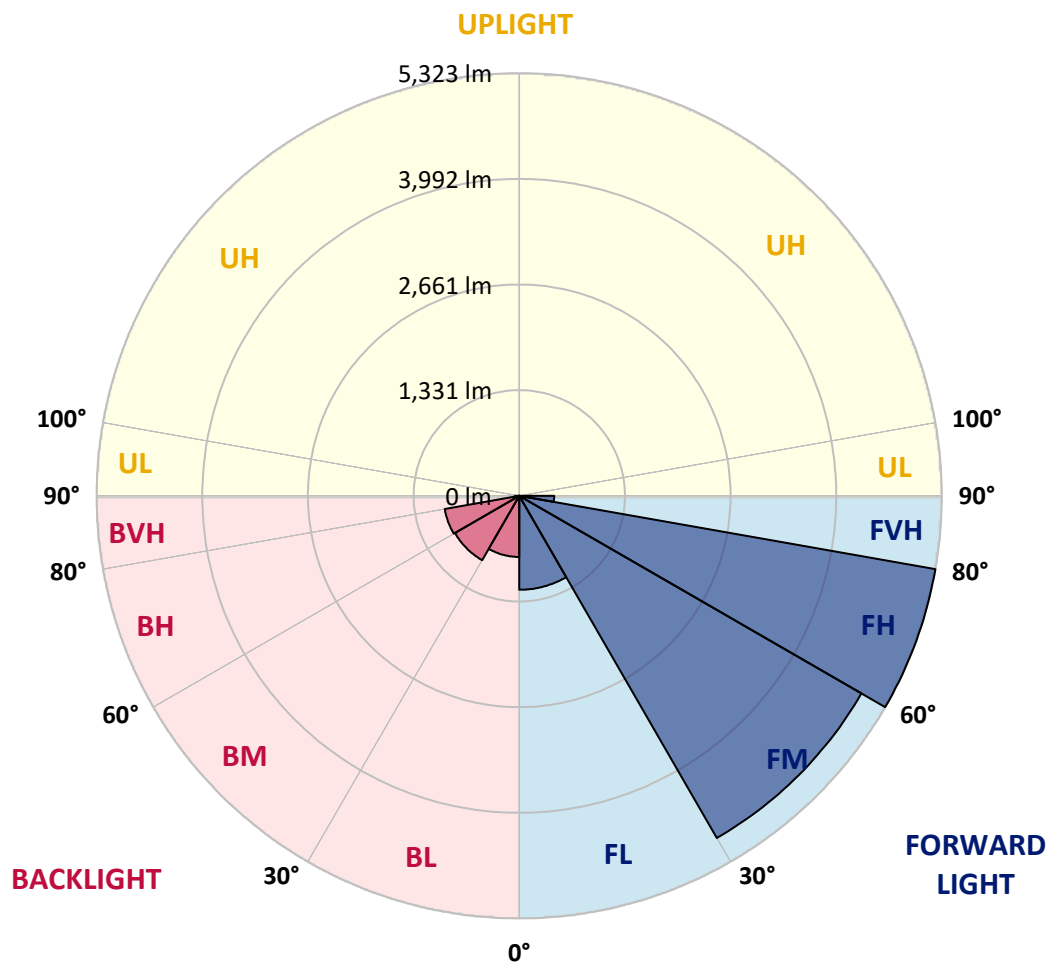
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 1183.4 | 8.1       |                         |      |         |
| FM   | (30°-60°)   | 4976.3 | 34.0      |                         |      |         |
| FH   | (60°-80°)   | 5322.5 | 36.4      |                         |      | G3/7500 |
| FVH  | (80°-90°)   | 439.7  | 3.0       |                         |      | G3/500  |
| BL   | (0°-30°)    | 770.2  | 5.3       | B2/1000                 |      |         |
| BM   | (30°-60°)   | 935.6  | 6.4       | B1/1000                 |      |         |
| BH   | (60°-80°)   | 953.0  | 6.5       | B2/1000                 |      | G2/1000 |
| BVH  | (80°-90°)   | 53.4   | 0.4       |                         |      | G1/100  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B2-U0-G3**

Type III Medium





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°     | 65°     | 66°     | 75°     | 85°    |
|-------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|--------|
| 0°    | 3352.4 | 3352.4 | 3352.4 | 3352.4 | 3352.4 | 3352.4 | 3352.4  | 3352.4  | 3352.4  | 3352.4  | 3352.4 |
| 2.5°  | 3290.2 | 3285.2 | 3300.3 | 3316.0 | 3322.1 | 3332.2 | 3347.3  | 3355.9  | 3355.4  | 3356.9  | 3351.9 |
| 5°    | 3071.9 | 3065.4 | 3095.7 | 3120.5 | 3167.9 | 3221.5 | 3286.7  | 3333.2  | 3334.2  | 3360.5  | 3367.5 |
| 7.5°  | 2865.3 | 2860.8 | 2895.6 | 2935.5 | 2990.6 | 3072.5 | 3178.1  | 3278.1  | 3284.2  | 3355.4  | 3380.2 |
| 10°   | 2699.6 | 2698.6 | 2732.4 | 2775.9 | 2840.0 | 2931.5 | 3052.7  | 3199.3  | 3208.4  | 3331.1  | 3382.2 |
| 12.5° | 2570.2 | 2572.3 | 2601.6 | 2651.1 | 2718.8 | 2814.3 | 2945.6  | 3110.9  | 3125.5  | 3292.7  | 3370.6 |
| 15°   | 2474.7 | 2482.8 | 2506.6 | 2556.6 | 2623.3 | 2720.3 | 2855.2  | 3029.0  | 3051.2  | 3249.8  | 3364.0 |
| 17.5° | 2420.2 | 2429.3 | 2445.9 | 2487.4 | 2550.0 | 2643.5 | 2771.3  | 2961.8  | 2982.0  | 3217.0  | 3364.5 |
| 20°   | 2404.0 | 2411.6 | 2421.2 | 2446.4 | 2499.5 | 2584.4 | 2705.1  | 2901.2  | 2922.9  | 3190.7  | 3369.5 |
| 22.5° | 2435.8 | 2441.4 | 2442.4 | 2440.4 | 2472.7 | 2541.9 | 2657.1  | 2856.7  | 2880.0  | 3173.5  | 3373.1 |
| 25°   | 2504.0 | 2511.6 | 2506.1 | 2487.4 | 2476.8 | 2519.2 | 2632.4  | 2827.4  | 2850.6  | 3160.9  | 3366.0 |
| 27.5° | 2606.6 | 2607.6 | 2603.1 | 2578.8 | 2528.8 | 2521.7 | 2624.8  | 2810.2  | 2832.5  | 3146.2  | 3351.4 |
| 30°   | 2746.1 | 2752.6 | 2744.5 | 2711.7 | 2629.9 | 2562.1 | 2633.9  | 2793.6  | 2813.8  | 3127.5  | 3327.6 |
| 32.5° | 2909.3 | 2925.4 | 2924.9 | 2890.6 | 2773.3 | 2652.6 | 2671.3  | 2783.4  | 2799.1  | 3107.8  | 3298.8 |
| 35°   | 3078.5 | 3100.7 | 3142.2 | 3127.5 | 2982.5 | 2795.6 | 2743.0  | 2799.6  | 2810.2  | 3105.3  | 3278.6 |
| 37.5° | 3254.3 | 3276.6 | 3362.0 | 3401.4 | 3231.6 | 3000.2 | 2856.2  | 2856.7  | 2861.8  | 3136.1  | 3277.1 |
| 40°   | 3438.3 | 3462.0 | 3590.3 | 3692.9 | 3554.5 | 3259.4 | 3038.6  | 2976.0  | 2970.4  | 3211.9  | 3306.9 |
| 42.5° | 3695.9 | 3717.2 | 3871.3 | 4002.1 | 3912.7 | 3591.4 | 3290.7  | 3159.9  | 3148.2  | 3360.5  | 3402.4 |
| 45°   | 4021.8 | 4040.0 | 4203.7 | 4343.7 | 4297.7 | 3970.3 | 3607.5  | 3413.0  | 3411.0  | 3608.0  | 3595.9 |
| 47.5° | 4409.4 | 4423.5 | 4570.5 | 4705.9 | 4722.6 | 4406.3 | 4005.7  | 3803.6  | 3770.7  | 3947.6  | 3895.5 |
| 50°   | 4813.1 | 4828.7 | 4928.8 | 5074.3 | 5198.1 | 4989.9 | 4518.0  | 4282.0  | 4238.1  | 4395.7  | 4319.9 |
| 52.5° | 5080.3 | 5101.1 | 5188.0 | 5372.4 | 5732.6 | 5629.5 | 5123.8  | 4862.1  | 4795.4  | 4938.9  | 4880.8 |
| 55°   | 4961.1 | 5007.6 | 5140.5 | 5436.0 | 6160.1 | 6606.7 | 5871.1  | 5538.6  | 5463.3  | 5582.6  | 5548.2 |
| 57.5° | 4419.0 | 4482.6 | 4664.0 | 5120.3 | 6220.2 | 7467.7 | 7000.8  | 6335.4  | 6282.3  | 6248.0  | 6263.6 |
| 60°   | 3428.2 | 3489.3 | 3714.1 | 4308.8 | 5801.3 | 8096.2 | 8701.0  | 7317.6  | 7240.8  | 6915.9  | 6930.1 |
| 62.5° | 2426.2 | 2395.4 | 2549.5 | 2984.5 | 4714.0 | 8170.0 | 10635.6 | 8631.3  | 8378.6  | 7621.3  | 7559.1 |
| 65°   | 1850.2 | 1843.2 | 1912.4 | 2050.8 | 2855.2 | 7287.3 | 11788.1 | 10839.2 | 10444.6 | 8450.9  | 8304.4 |
| 67.5° | 1520.3 | 1507.7 | 1575.9 | 1777.5 | 1838.6 | 4701.4 | 11813.4 | 13400.9 | 13013.3 | 9483.6  | 9166.3 |
| 70°   | 1250.0 | 1235.9 | 1299.5 | 1559.7 | 1699.2 | 2384.3 | 9942.4  | 14901.0 | 14880.3 | 10791.2 | 9817.1 |
| 71°   | 1120.7 | 1110.6 | 1186.8 | 1475.8 | 1669.4 | 1987.2 | 8584.3  | 14905.0 | 14967.2 | 11233.8 | 9778.7 |
| 72.5° | 912.5  | 916.0  | 996.9  | 1313.7 | 1647.1 | 1754.8 | 6309.1  | 14210.3 | 14341.7 | 11655.7 | 9429.6 |
| 75°   | 606.3  | 609.3  | 715.4  | 1010.5 | 1597.1 | 1716.9 | 3467.6  | 11924.0 | 12165.5 | 11403.1 | 8604.5 |
| 77.5° | 407.2  | 406.2  | 478.5  | 693.2  | 1391.5 | 1716.9 | 2033.1  | 8918.3  | 9183.5  | 9073.4  | 6633.5 |
| 80°   | 280.4  | 278.4  | 329.4  | 478.5  | 1053.5 | 1737.6 | 1571.8  | 6250.0  | 6330.3  | 4900.0  | 2696.0 |
| 82.5° | 171.8  | 173.3  | 215.2  | 338.0  | 717.0  | 1563.8 | 1483.9  | 3407.9  | 3320.5  | 1374.3  | 673.5  |
| 85°   | 98.5   | 98.0   | 137.4  | 228.9  | 460.3  | 1319.7 | 1447.0  | 1466.8  | 1345.5  | 413.8   | 243.5  |
| 87.5° | 35.4   | 37.9   | 73.8   | 126.8  | 263.7  | 919.1  | 1227.8  | 762.9   | 687.7   | 186.9   | 110.1  |
| 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°    | 3352.4 | 3352.4 | 3352.4 | 3352.4 | 3352.4 | 3352.4 | 3352.4 | 3352.4 | 3352.4 | 3352.4 | 3352.4 |
| 2.5°  | 3348.3 | 3351.4 | 3347.8 | 3327.6 | 3310.4 | 3282.6 | 3267.0 | 3245.3 | 3238.7 | 3235.7 | 3243.7 |
| 5°    | 3361.0 | 3362.0 | 3332.2 | 3279.1 | 3219.5 | 3149.3 | 3098.7 | 3036.6 | 3007.3 | 2994.6 | 3002.7 |
| 7.5°  | 3372.6 | 3368.0 | 3302.9 | 3201.3 | 3091.1 | 2968.9 | 2860.2 | 2760.7 | 2702.6 | 2678.9 | 2680.9 |
| 10°   | 3374.1 | 3354.9 | 3250.3 | 3093.2 | 2922.4 | 2743.0 | 2576.3 | 2422.7 | 2325.7 | 2262.5 | 2281.7 |
| 12.5° | 3358.4 | 3326.1 | 3173.0 | 2953.2 | 2716.3 | 2471.7 | 2246.4 | 2016.0 | 1877.5 | 1813.4 | 1815.4 |
| 15°   | 3346.3 | 3287.7 | 3078.0 | 2788.5 | 2470.2 | 2146.3 | 1838.6 | 1567.8 | 1420.3 | 1354.6 | 1323.8 |
| 17.5° | 3336.2 | 3246.3 | 2967.9 | 2603.1 | 2179.7 | 1768.9 | 1399.1 | 1157.5 | 1076.7 | 1057.5 | 1049.4 |
| 20°   | 3322.1 | 3202.3 | 2845.1 | 2388.3 | 1848.7 | 1346.5 | 1021.6 | 902.4  | 902.9  | 925.1  | 928.2  |
| 22.5° | 3302.3 | 3152.3 | 2714.2 | 2147.3 | 1493.5 | 980.7  | 800.8  | 766.5  | 801.3  | 843.8  | 851.4  |
| 25°   | 3273.0 | 3093.2 | 2568.7 | 1881.1 | 1138.8 | 753.8  | 684.1  | 682.6  | 725.0  | 769.5  | 776.1  |
| 27.5° | 3231.6 | 3015.9 | 2407.0 | 1595.1 | 839.2  | 640.7  | 612.9  | 623.5  | 654.8  | 687.1  | 689.7  |
| 30°   | 3176.0 | 2925.9 | 2228.7 | 1293.5 | 657.8  | 570.4  | 567.4  | 577.0  | 596.2  | 618.9  | 621.0  |
| 32.5° | 3114.9 | 2834.5 | 2038.2 | 1001.4 | 563.4  | 532.5  | 535.6  | 540.1  | 549.2  | 558.3  | 560.3  |
| 35°   | 3059.3 | 2741.0 | 1843.2 | 760.9  | 518.4  | 507.8  | 505.8  | 504.7  | 505.8  | 502.7  | 503.2  |
| 37.5° | 3023.4 | 2663.7 | 1640.1 | 605.8  | 492.6  | 486.1  | 480.0  | 472.4  | 463.8  | 458.8  | 459.8  |
| 40°   | 3010.3 | 2606.1 | 1434.4 | 523.4  | 471.4  | 466.9  | 455.2  | 439.1  | 429.0  | 425.9  | 425.9  |
| 42.5° | 3045.7 | 2576.3 | 1235.9 | 482.0  | 453.7  | 446.1  | 426.9  | 408.2  | 400.7  | 400.2  | 399.7  |
| 45°   | 3153.8 | 2588.4 | 1046.9 | 459.3  | 437.6  | 422.9  | 397.6  | 382.0  | 376.9  | 377.9  | 377.4  |
| 47.5° | 3347.8 | 2664.7 | 885.2  | 444.1  | 421.4  | 402.2  | 373.9  | 361.3  | 355.2  | 355.2  | 355.7  |
| 50°   | 3677.8 | 2843.1 | 756.4  | 431.5  | 407.7  | 383.0  | 356.7  | 341.0  | 333.0  | 332.5  | 332.5  |
| 52.5° | 4158.2 | 3162.4 | 676.0  | 420.9  | 392.6  | 365.8  | 339.5  | 319.8  | 310.2  | 308.2  | 307.2  |
| 55°   | 4760.5 | 3620.2 | 653.8  | 413.8  | 372.4  | 347.1  | 318.8  | 299.1  | 288.5  | 284.0  | 283.4  |
| 57.5° | 5434.0 | 4176.9 | 697.8  | 405.2  | 351.7  | 324.9  | 296.1  | 277.4  | 266.3  | 260.7  | 260.2  |
| 60°   | 6115.6 | 4784.8 | 877.1  | 393.1  | 334.5  | 300.6  | 272.8  | 255.7  | 244.5  | 238.5  | 237.5  |
| 62.5° | 6798.2 | 5425.4 | 1243.4 | 392.1  | 322.4  | 277.4  | 249.1  | 234.4  | 223.8  | 217.3  | 215.7  |
| 65°   | 7568.2 | 6126.7 | 1659.8 | 418.9  | 318.3  | 256.2  | 224.8  | 213.2  | 204.1  | 198.1  | 197.6  |
| 67.5° | 8452.4 | 6918.5 | 1619.8 | 473.9  | 332.0  | 237.0  | 202.1  | 193.0  | 186.4  | 181.4  | 180.9  |
| 70°   | 8867.2 | 6794.7 | 1007.0 | 512.8  | 351.2  | 218.3  | 180.4  | 173.8  | 168.8  | 165.2  | 163.7  |
| 71°   | 8693.4 | 6451.6 | 844.3  | 508.3  | 349.1  | 210.2  | 171.8  | 166.7  | 161.7  | 158.7  | 157.1  |
| 72.5° | 8219.5 | 5883.7 | 704.3  | 472.9  | 326.4  | 195.5  | 160.7  | 155.6  | 151.1  | 147.5  | 146.5  |
| 75°   | 7375.7 | 5254.7 | 563.9  | 377.9  | 260.2  | 165.2  | 141.0  | 135.4  | 131.9  | 129.9  | 127.8  |
| 77.5° | 5421.9 | 3750.0 | 436.0  | 298.6  | 191.5  | 134.9  | 120.3  | 116.2  | 112.7  | 109.6  | 108.1  |
| 80°   | 2077.1 | 1452.6 | 293.6  | 222.8  | 140.5  | 106.6  | 97.0   | 95.0   | 91.5   | 89.4   | 89.4   |
| 82.5° | 559.3  | 434.0  | 156.6  | 134.9  | 94.0   | 77.8   | 74.3   | 73.3   | 70.2   | 66.2   | 66.7   |
| 85°   | 226.4  | 191.5  | 87.9   | 74.3   | 57.6   | 46.0   | 50.0   | 50.5   | 47.0   | 41.9   | 42.4   |
| 87.5° | 99.5   | 81.3   | 49.0   | 32.8   | 25.3   | 17.7   | 22.7   | 22.7   | 20.7   | 17.2   | 15.7   |
| 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)