

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: McGRAW-EDISON

Report Number: P529037

Luminaire Tested: **GALN-SA4A-830-U-SL2-GRSBK**

Issue Date: 5/27/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P529037  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-057-17)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/27/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GALN-SA4A-830-U-SL2-GRSBK  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 80 CRI, 3000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II SPILL  
LIGHT ELIMINATOR OPTICS WITH BLACK GLARE REDUCTION SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8391 lumens  
Efficiency: N/A  
Efficacy: 69.3 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B2 - U0 - G1

Input Watts (W): 121  
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

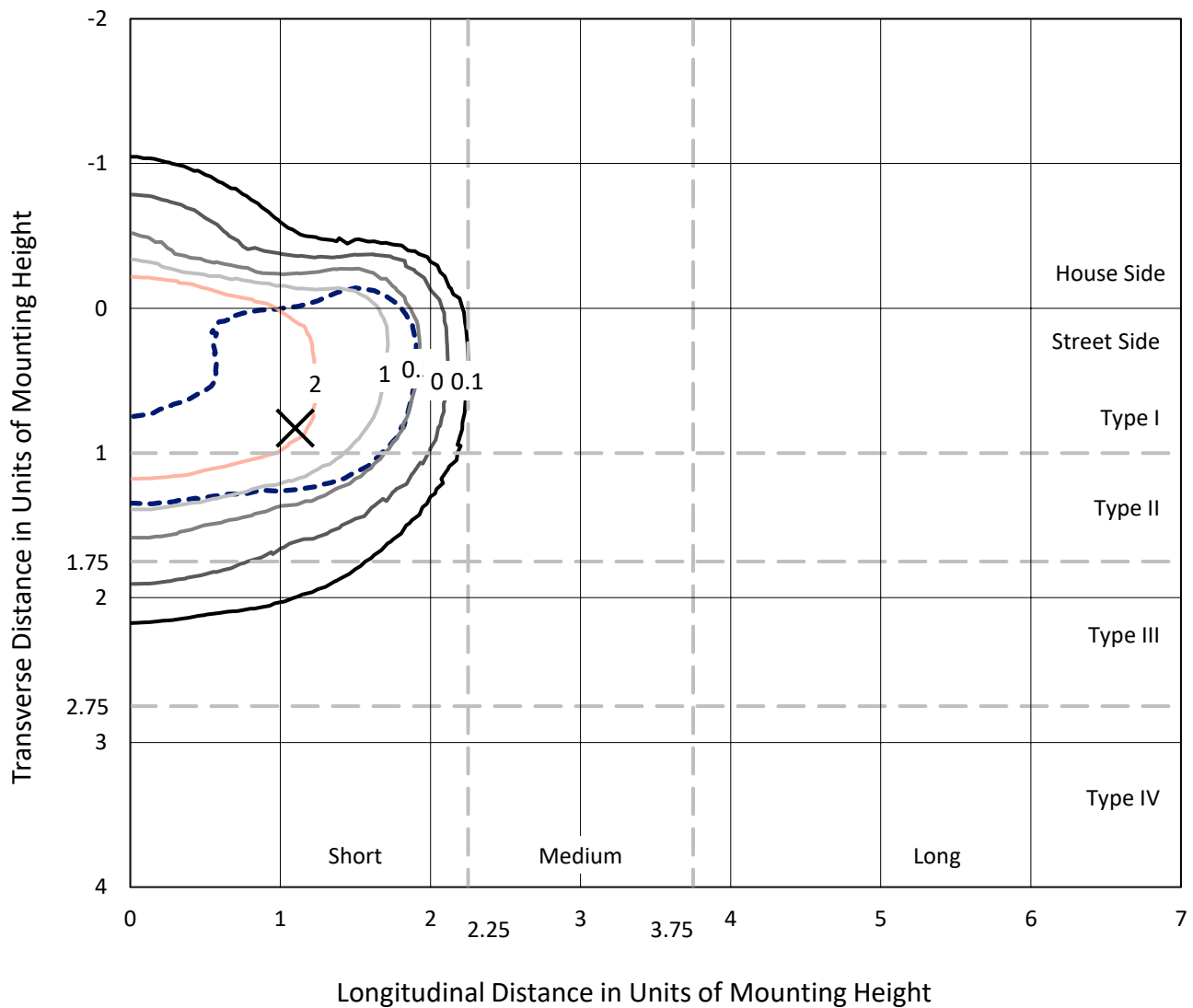


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## Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

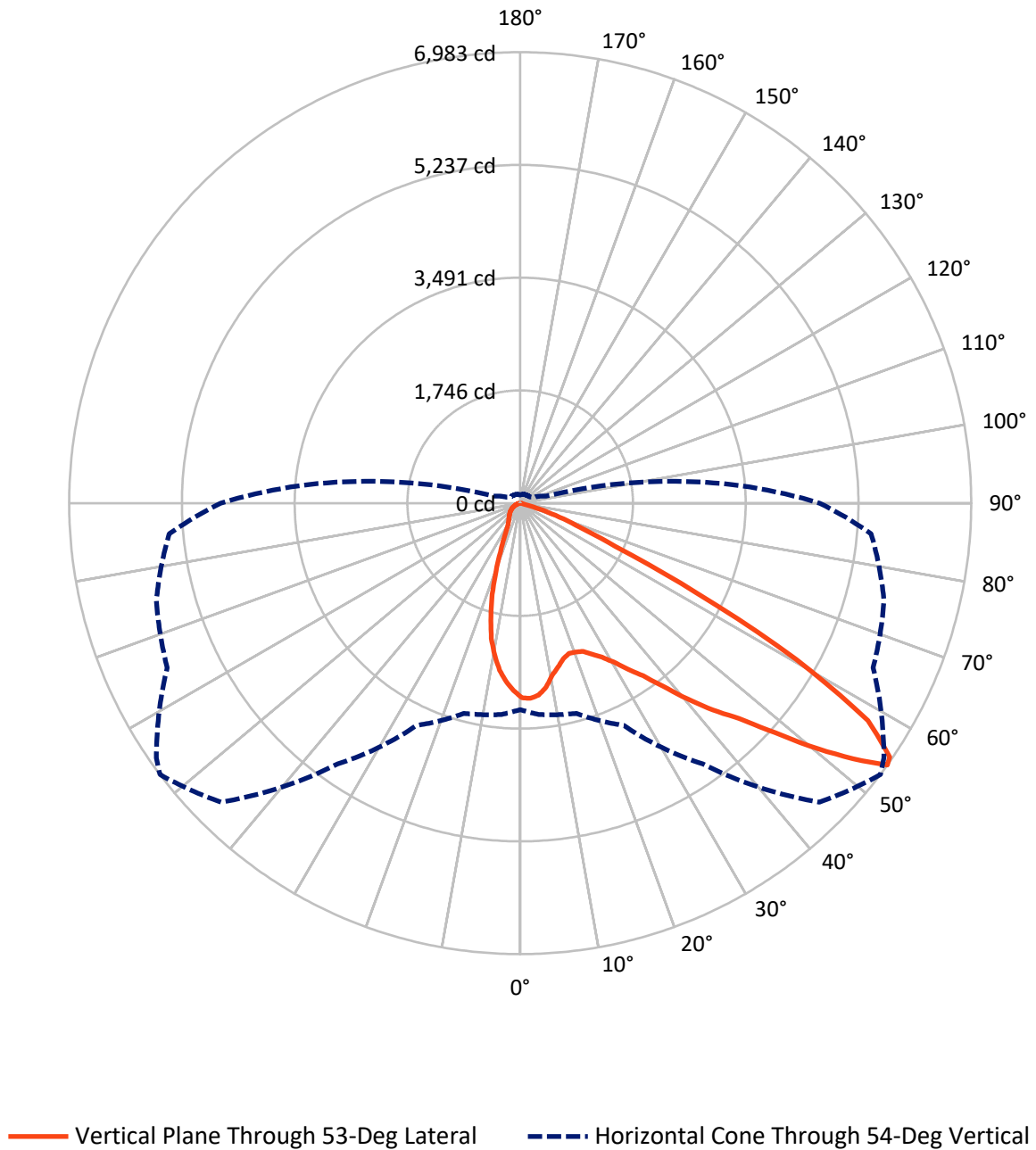


Based on 25 foot mounting height. Maximum calculated value = 4.8 fc  
 Type II - Short - N/A

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## Luminous Intensity Polar Plot



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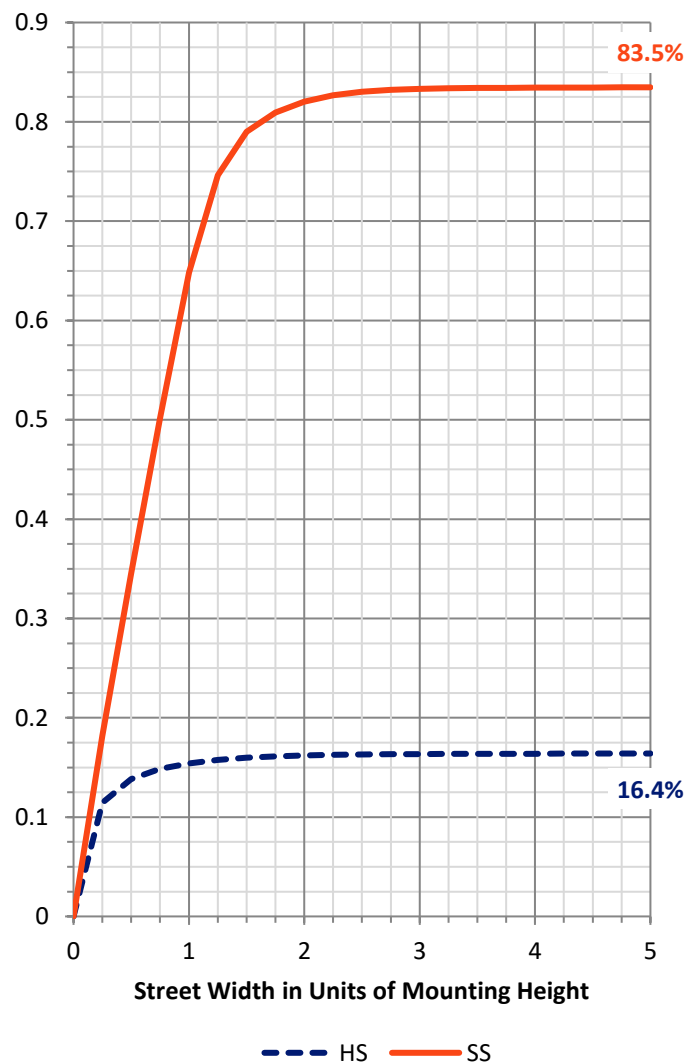
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 1388.3   | 0.0    | 1388.3 |
|                    | % Fixture | 16.5     | 0.0    | 16.5   |
| <b>Street Side</b> | Lumens    | 7002.7   | 0.0    | 7002.7 |
|                    | % Fixture | 83.5     | 0.0    | 83.5   |
| <b>Total</b>       | Lumens    | 8391.0   | 0.0    | 8391.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 258.6  | 3.1       |
| 10°-20°   | 592.9  | 7.1       |
| 20°-30°   | 842.6  | 10.0      |
| 30°-40°   | 1300.3 | 15.5      |
| 40°-50°   | 2038.8 | 24.3      |
| 50°-60°   | 2368.3 | 28.2      |
| 60°-70°   | 894.9  | 10.7      |
| 70°-80°   | 85.1   | 1.0       |
| 80°-90°   | 9.6    | 0.1       |
| 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°    | 8391.0 | 100.0     |
| 0°-180°   | 8391.0 | 100.0     |

**Coefficient of Utilization**



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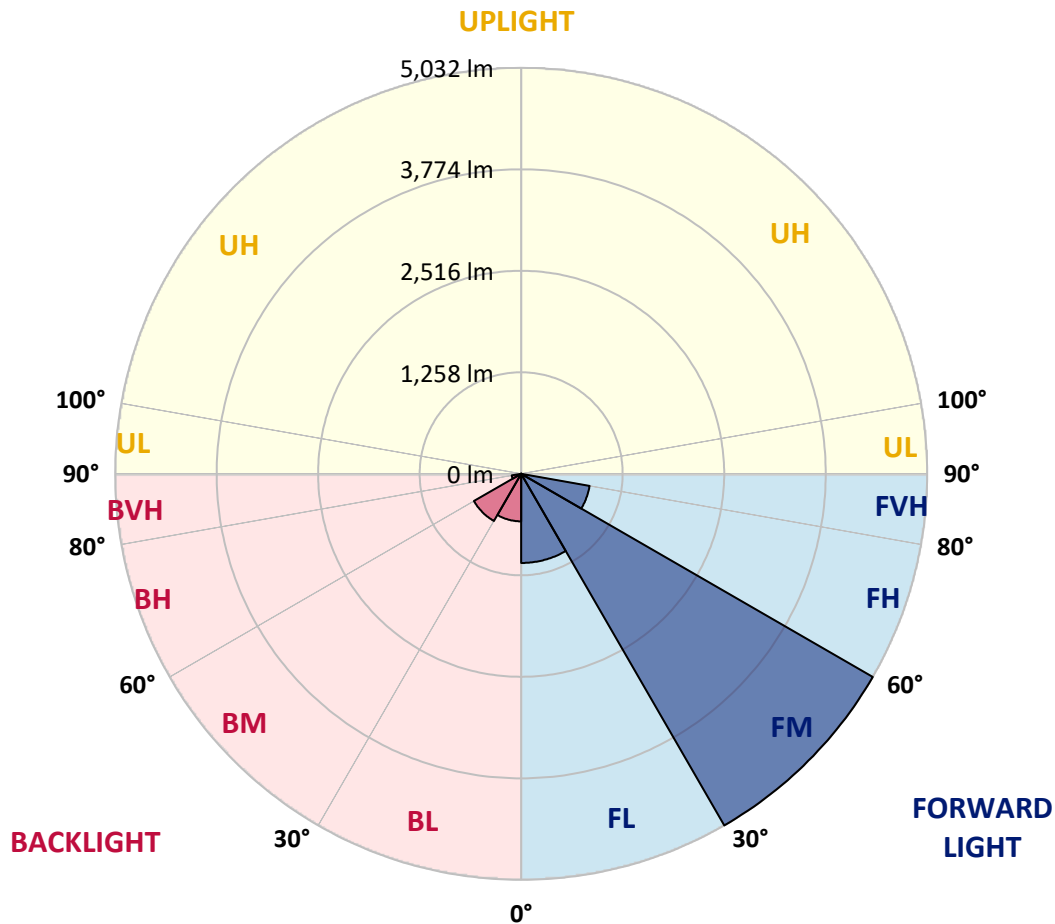
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 1104.9 | 13.2      |                         |      |         |
| FM   | (30°-60°)   | 5031.8 | 60.0      |                         |      |         |
| FH   | (60°-80°)   | 861.0  | 10.3      |                         |      | G1/1800 |
| FVH  | (80°-90°)   | 4.9    | 0.1       |                         |      | G0/10   |
| BL   | (0°-30°)    | 589.1  | 7.0       | B2/1000                 |      |         |
| BM   | (30°-60°)   | 675.6  | 8.1       | B1/1000                 |      |         |
| BH   | (60°-80°)   | 119.0  | 1.4       | B1/500                  |      | G1/500  |
| BVH  | (80°-90°)   | 4.6    | 0.1       |                         |      | G0/10   |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B2-U0-G1**

Type II Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 53°    | 55°    | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 3013.9 | 3013.9 | 3013.9 | 3013.9 | 3013.9 | 3013.9 | 3013.9 | 3013.9 | 3013.9 | 3013.9 | 3013.9 |
| 2.5°  | 2998.3 | 2971.7 | 2998.3 | 3001.4 | 3020.2 | 3037.4 | 3026.4 | 3051.4 | 3037.4 | 3021.7 | 3017.0 |
| 5°    | 2756.0 | 2791.9 | 2793.5 | 2849.8 | 2837.3 | 2940.4 | 2985.8 | 2973.3 | 3049.9 | 3045.2 | 3034.2 |
| 7.5°  | 2538.7 | 2524.6 | 2543.4 | 2609.0 | 2691.9 | 2810.7 | 2876.3 | 2874.8 | 2984.2 | 3062.4 | 3054.5 |
| 10°   | 2337.0 | 2335.5 | 2374.5 | 2426.1 | 2496.5 | 2621.5 | 2712.2 | 2757.5 | 2927.9 | 3046.7 | 3063.9 |
| 12.5° | 2201.0 | 2194.8 | 2237.0 | 2279.2 | 2390.2 | 2487.1 | 2602.8 | 2624.7 | 2820.1 | 2992.0 | 3020.2 |
| 15°   | 2111.9 | 2126.0 | 2129.1 | 2210.4 | 2280.8 | 2408.9 | 2499.6 | 2544.9 | 2770.0 | 2948.3 | 3056.1 |
| 17.5° | 2096.3 | 2115.0 | 2116.6 | 2183.8 | 2258.9 | 2366.7 | 2446.5 | 2507.4 | 2727.8 | 2970.1 | 3057.7 |
| 20°   | 2127.6 | 2116.6 | 2126.0 | 2168.2 | 2241.7 | 2344.8 | 2460.5 | 2480.8 | 2713.8 | 2981.1 | 3074.9 |
| 22.5° | 2216.7 | 2213.5 | 2190.1 | 2224.5 | 2276.1 | 2383.9 | 2493.4 | 2524.6 | 2754.4 | 3037.4 | 3088.9 |
| 25°   | 2315.1 | 2332.3 | 2310.5 | 2305.8 | 2341.7 | 2448.0 | 2593.4 | 2634.0 | 2890.4 | 3139.0 | 3132.7 |
| 27.5° | 2499.6 | 2482.4 | 2482.4 | 2460.5 | 2451.1 | 2502.7 | 2701.3 | 2768.5 | 3042.0 | 3270.3 | 3182.7 |
| 30°   | 2676.2 | 2695.0 | 2680.9 | 2688.8 | 2626.2 | 2621.5 | 2854.5 | 2937.3 | 3310.9 | 3470.4 | 3289.0 |
| 32.5° | 2956.1 | 2931.1 | 2954.5 | 2934.2 | 2851.3 | 2766.9 | 3062.4 | 3148.3 | 3636.1 | 3700.2 | 3448.5 |
| 35°   | 3189.0 | 3178.0 | 3278.1 | 3275.0 | 3140.5 | 3057.7 | 3282.8 | 3411.0 | 3862.7 | 3975.3 | 3636.1 |
| 37.5° | 3520.4 | 3500.1 | 3614.2 | 3668.9 | 3548.5 | 3425.0 | 3598.6 | 3747.1 | 4073.8 | 4195.7 | 3828.3 |
| 40°   | 3861.2 | 3912.8 | 4066.0 | 4156.6 | 4028.4 | 3864.3 | 3984.7 | 4030.0 | 4214.5 | 4339.5 | 3959.7 |
| 42.5° | 4292.6 | 4367.7 | 4524.0 | 4602.1 | 4591.2 | 4413.0 | 4377.0 | 4375.5 | 4316.1 | 4298.9 | 4056.6 |
| 45°   | 4706.9 | 4678.7 | 4919.5 | 5089.9 | 5227.4 | 5175.9 | 4755.3 | 4708.4 | 4477.1 | 4359.8 | 4081.6 |
| 47.5° | 4888.2 | 4878.8 | 5043.0 | 5346.2 | 5815.2 | 5879.3 | 5305.6 | 5124.3 | 4749.1 | 4616.2 | 4217.6 |
| 50°   | 4653.7 | 4702.2 | 4864.8 | 5200.9 | 5919.9 | 6409.2 | 5980.9 | 5737.1 | 5066.4 | 4928.9 | 4539.6 |
| 52.5° | 3887.8 | 3920.6 | 4075.3 | 4502.1 | 5563.5 | 6721.9 | 6628.1 | 6487.4 | 5649.5 | 5421.3 | 5100.8 |
| 54°   | 3196.8 | 3284.3 | 3368.8 | 3797.1 | 4928.9 | 6548.4 | 6982.9 | 6875.1 | 6029.4 | 5830.8 | 5454.1 |
| 55°   | 2784.1 | 2835.7 | 2896.7 | 3323.4 | 4489.6 | 6254.5 | 6942.3 | 6951.7 | 6284.2 | 5959.0 | 5691.7 |
| 57.5° | 2033.8 | 2069.7 | 2007.2 | 2196.3 | 3082.7 | 5078.9 | 6349.8 | 6603.1 | 6628.1 | 6151.3 | 5837.1 |
| 60°   | 1553.8 | 1569.5 | 1499.1 | 1528.8 | 1916.5 | 3486.0 | 4911.7 | 5216.5 | 5979.4 | 5375.9 | 4944.5 |
| 62.5° | 1205.2 | 1208.4 | 1206.8 | 1258.4 | 1320.9 | 2051.0 | 3071.7 | 3342.2 | 4122.2 | 3817.4 | 3357.8 |
| 65°   | 887.9  | 873.8  | 898.9  | 1055.2 | 1127.1 | 1289.7 | 1617.9 | 1814.9 | 2240.1 | 1891.5 | 1352.2 |
| 67.5° | 575.3  | 580.0  | 605.0  | 784.7  | 966.1  | 989.5  | 995.8  | 980.1  | 981.7  | 540.9  | 339.2  |
| 70°   | 345.5  | 353.3  | 345.5  | 444.0  | 690.9  | 709.7  | 648.7  | 633.1  | 494.0  | 128.2  | 126.6  |
| 72.5° | 204.8  | 193.8  | 173.5  | 190.7  | 287.6  | 343.9  | 309.5  | 308.0  | 193.8  | 75.0   | 75.0   |
| 75°   | 86.0   | 78.2   | 64.1   | 57.8   | 76.6   | 73.5   | 73.5   | 65.7   | 51.6   | 50.0   | 46.9   |
| 77.5° | 17.2   | 17.2   | 12.5   | 14.1   | 18.8   | 21.9   | 26.6   | 26.6   | 31.3   | 31.3   | 29.7   |
| 80°   | 0.0    | 1.6    | 4.7    | 9.4    | 14.1   | 20.3   | 23.4   | 23.4   | 26.6   | 26.6   | 21.9   |
| 82.5° | 0.0    | 1.6    | 4.7    | 9.4    | 12.5   | 18.8   | 23.4   | 23.4   | 26.6   | 28.1   | 23.4   |
| 85°   | 0.0    | 1.6    | 4.7    | 7.8    | 12.5   | 15.6   | 15.6   | 14.1   | 10.9   | 9.4    | 6.3    |
| 87.5° | 0.0    | 0.0    | 1.6    | 3.1    | 1.6    | 3.1    | 3.1    | 3.1    | 3.1    | 3.1    | 3.1    |
| 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°    | 3013.9 | 3013.9 | 3013.9 | 3013.9 | 3013.9 | 3013.9 | 3013.9 | 3013.9 | 3013.9 | 3013.9 | 3013.9 |
| 2.5°  | 3028.0 | 3026.4 | 2988.9 | 2927.9 | 2913.9 | 2862.3 | 2856.0 | 2824.8 | 2842.0 | 2784.1 | 2777.9 |
| 5°    | 3003.0 | 2984.2 | 2938.9 | 2899.8 | 2785.7 | 2704.4 | 2640.3 | 2562.1 | 2516.8 | 2524.6 | 2494.9 |
| 7.5°  | 3038.9 | 2990.5 | 2910.7 | 2774.7 | 2635.6 | 2493.4 | 2416.8 | 2257.3 | 2199.5 | 2113.5 | 2101.0 |
| 10°   | 3001.4 | 2965.4 | 2842.0 | 2616.8 | 2424.6 | 2219.8 | 2040.0 | 1863.4 | 1728.9 | 1671.1 | 1658.6 |
| 12.5° | 2998.3 | 2935.7 | 2729.4 | 2479.3 | 2201.0 | 1907.1 | 1646.1 | 1425.7 | 1292.8 | 1217.8 | 1200.6 |
| 15°   | 2949.8 | 2874.8 | 2602.8 | 2266.7 | 1882.1 | 1516.3 | 1231.8 | 1019.2 | 917.6  | 873.8  | 886.4  |
| 17.5° | 2954.5 | 2842.0 | 2476.2 | 2041.6 | 1567.9 | 1113.0 | 841.0  | 731.6  | 705.0  | 716.0  | 716.0  |
| 20°   | 2949.8 | 2768.5 | 2323.0 | 1782.1 | 1200.6 | 772.2  | 617.5  | 578.4  | 595.6  | 630.0  | 622.2  |
| 22.5° | 2924.8 | 2734.1 | 2182.3 | 1508.5 | 883.2  | 572.1  | 495.5  | 497.1  | 523.7  | 565.9  | 575.3  |
| 25°   | 2943.6 | 2657.5 | 2004.1 | 1231.8 | 644.1  | 456.5  | 429.9  | 440.8  | 469.0  | 500.2  | 506.5  |
| 27.5° | 2929.5 | 2602.8 | 1818.0 | 956.7  | 470.5  | 392.4  | 390.8  | 403.3  | 415.8  | 439.3  | 439.3  |
| 30°   | 2945.1 | 2552.8 | 1635.1 | 711.3  | 387.7  | 359.5  | 353.3  | 362.7  | 375.2  | 379.9  | 378.3  |
| 32.5° | 3003.0 | 2515.2 | 1424.1 | 531.5  | 342.3  | 328.3  | 328.3  | 328.3  | 326.7  | 333.0  | 334.5  |
| 35°   | 3129.6 | 2521.5 | 1238.1 | 411.1  | 312.6  | 301.7  | 297.0  | 290.8  | 287.6  | 290.8  | 292.3  |
| 37.5° | 3267.1 | 2518.4 | 1045.8 | 350.2  | 290.8  | 281.4  | 270.4  | 261.1  | 259.5  | 262.6  | 257.9  |
| 40°   | 3328.1 | 2548.1 | 867.6  | 314.2  | 270.4  | 259.5  | 242.3  | 234.5  | 236.0  | 239.2  | 236.0  |
| 42.5° | 3411.0 | 2557.4 | 751.9  | 286.1  | 251.7  | 234.5  | 223.5  | 214.2  | 212.6  | 217.3  | 215.7  |
| 45°   | 3409.4 | 2504.3 | 630.0  | 270.4  | 234.5  | 215.7  | 201.7  | 193.8  | 193.8  | 197.0  | 198.5  |
| 47.5° | 3509.4 | 2496.5 | 540.9  | 256.4  | 222.0  | 203.2  | 186.0  | 179.8  | 178.2  | 178.2  | 175.1  |
| 50°   | 3742.4 | 2605.9 | 472.1  | 240.7  | 206.3  | 189.2  | 175.1  | 167.3  | 161.0  | 157.9  | 156.3  |
| 52.5° | 4197.3 | 2946.7 | 418.9  | 222.0  | 189.2  | 175.1  | 162.6  | 156.3  | 148.5  | 140.7  | 139.1  |
| 54°   | 4638.1 | 3298.4 | 415.8  | 206.3  | 175.1  | 165.7  | 154.8  | 151.6  | 142.3  | 131.3  | 128.2  |
| 55°   | 4836.6 | 3503.2 | 426.8  | 193.8  | 165.7  | 159.4  | 150.1  | 146.9  | 137.6  | 125.1  | 123.5  |
| 57.5° | 5000.8 | 3582.9 | 420.5  | 161.0  | 150.1  | 148.5  | 140.7  | 136.0  | 125.1  | 107.9  | 104.7  |
| 60°   | 4025.3 | 2709.1 | 301.7  | 142.3  | 137.6  | 134.4  | 128.2  | 125.1  | 111.0  | 92.2   | 90.7   |
| 62.5° | 2543.4 | 1558.5 | 192.3  | 125.1  | 120.4  | 115.7  | 107.9  | 104.7  | 92.2   | 73.5   | 68.8   |
| 65°   | 1083.3 | 645.6  | 129.7  | 111.0  | 103.2  | 95.4   | 89.1   | 84.4   | 73.5   | 54.7   | 53.1   |
| 67.5° | 281.4  | 229.8  | 107.9  | 96.9   | 86.0   | 75.0   | 70.3   | 62.5   | 50.0   | 37.5   | 36.0   |
| 70°   | 126.6  | 115.7  | 90.7   | 81.3   | 68.8   | 57.8   | 51.6   | 43.8   | 32.8   | 25.0   | 23.4   |
| 72.5° | 75.0   | 73.5   | 68.8   | 61.0   | 51.6   | 43.8   | 37.5   | 29.7   | 21.9   | 14.1   | 14.1   |
| 75°   | 46.9   | 45.3   | 46.9   | 42.2   | 36.0   | 32.8   | 28.1   | 20.3   | 12.5   | 6.3    | 6.3    |
| 77.5° | 28.1   | 28.1   | 28.1   | 26.6   | 25.0   | 25.0   | 20.3   | 12.5   | 6.3    | 1.6    | 1.6    |
| 80°   | 21.9   | 21.9   | 23.4   | 21.9   | 21.9   | 21.9   | 17.2   | 9.4    | 3.1    | 0.0    | 0.0    |
| 82.5° | 21.9   | 23.4   | 26.6   | 25.0   | 21.9   | 18.8   | 15.6   | 9.4    | 3.1    | 0.0    | 0.0    |
| 85°   | 6.3    | 4.7    | 7.8    | 10.9   | 15.6   | 14.1   | 10.9   | 7.8    | 3.1    | 0.0    | 0.0    |
| 87.5° | 3.1    | 3.1    | 3.1    | 3.1    | 1.6    | 1.6    | 1.6    | 1.6    | 1.6    | 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)