

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: P648369

Luminaire Tested: **GALN-SA4B-835-U-SL2-GRSBK**

Issue Date: 5/27/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P648369  
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-SA4B-835-U-SL2-GRSBK  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 80 CRI, 3500K, 800mA 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: 10287.8 lumens  
Efficiency: N/A  
Efficacy: 62.7 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B2 - U0 - G1

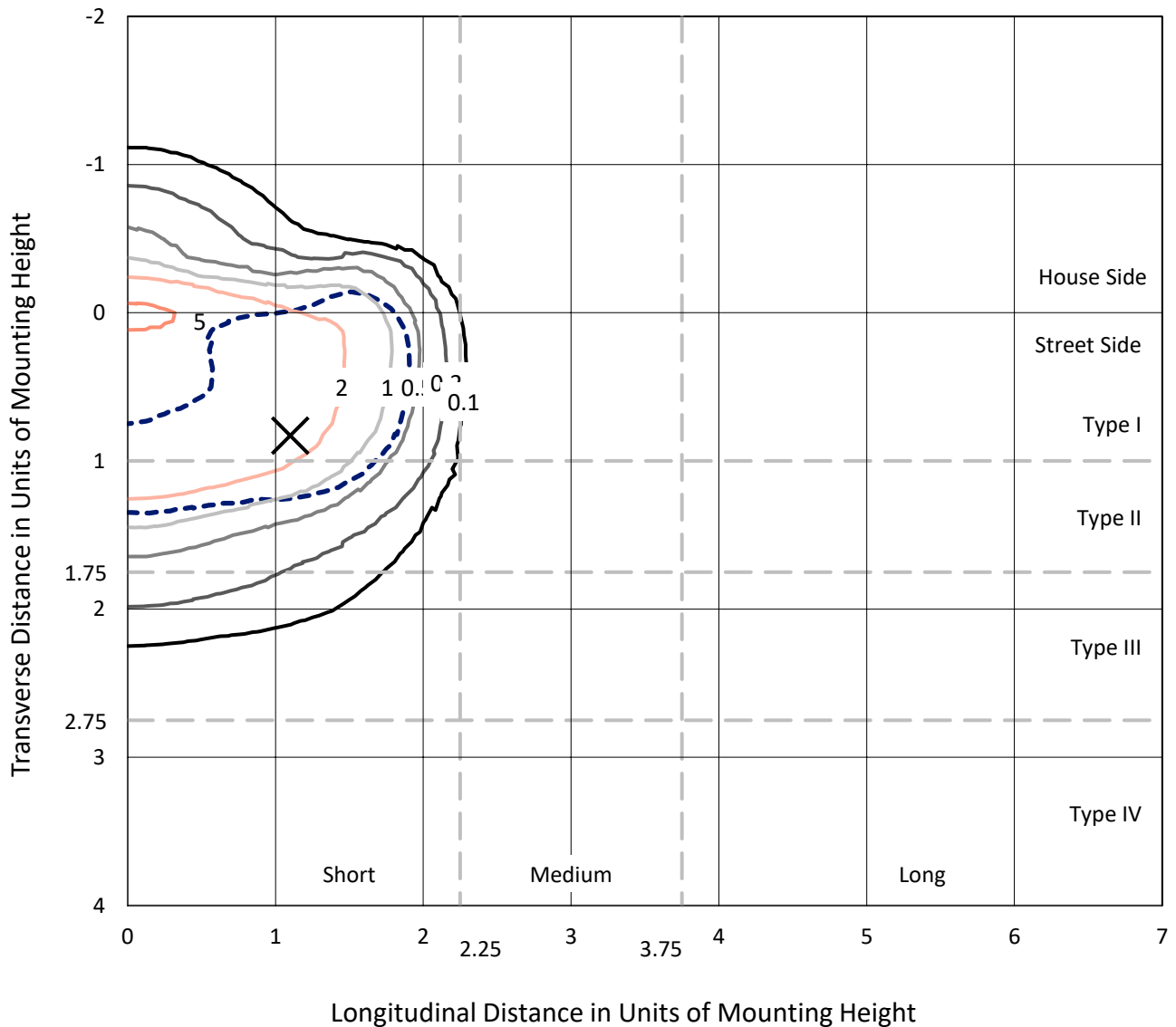
Input Watts (W): 164  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

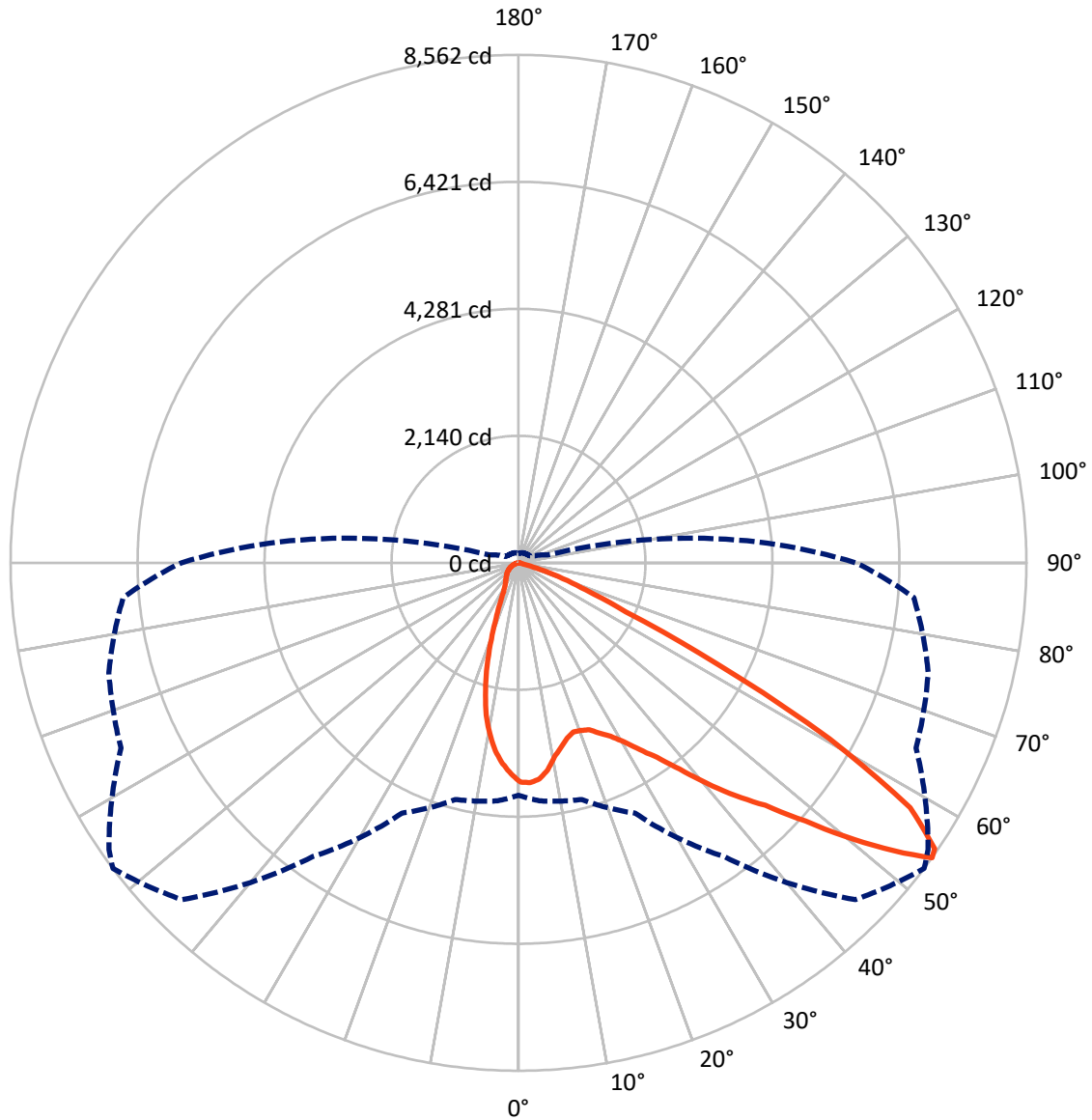
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.9 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 53-Deg Lateral      - - - Horizontal Cone Through 54-Deg Vertical

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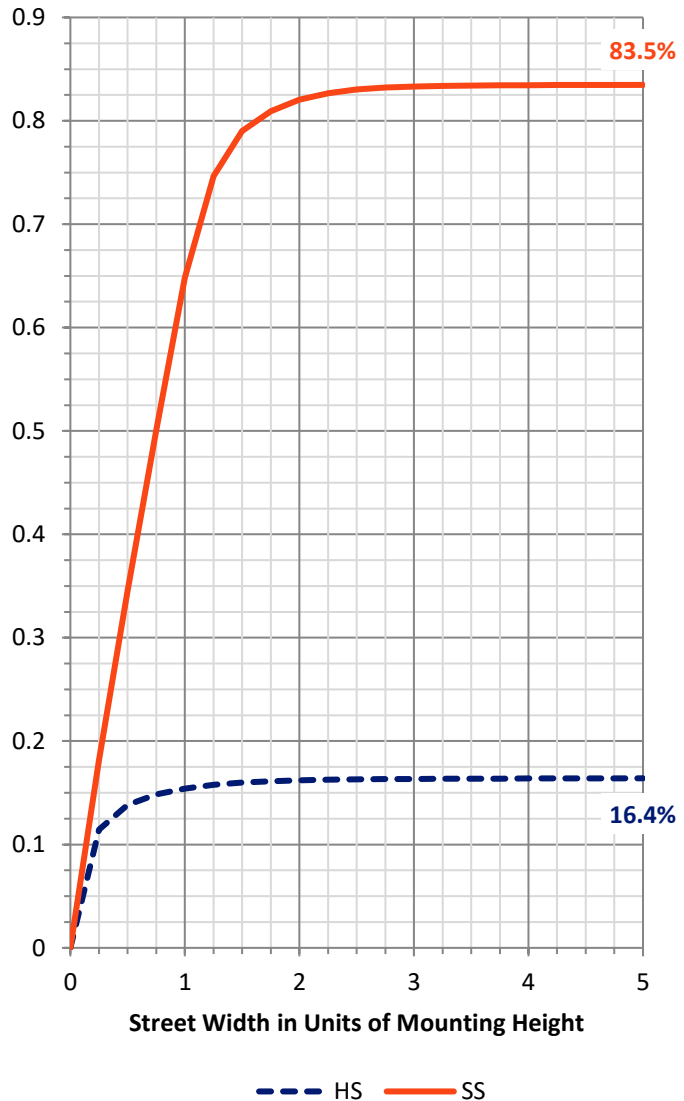
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 1702.1   | 0.0    | 1702.1  |
|                    | % Fixture | 16.5     | 0.0    | 16.5    |
| <b>Street Side</b> | Lumens    | 8585.7   | 0.0    | 8585.7  |
|                    | % Fixture | 83.5     | 0.0    | 83.5    |
| <b>Total</b>       | Lumens    | 10287.8  | 0.0    | 10287.8 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 317.0   | 3.1       |
| 10°-20°   | 726.9   | 7.1       |
| 20°-30°   | 1033.0  | 10.0      |
| 30°-40°   | 1594.3  | 15.5      |
| 40°-50°   | 2499.7  | 24.3      |
| 50°-60°   | 2903.7  | 28.2      |
| 60°-70°   | 1097.2  | 10.7      |
| 70°-80°   | 104.3   | 1.0       |
| 80°-90°   | 11.7    | 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°    | 10287.8 | 100.0     |
| 0°-180°   | 10287.8 | 100.0     |

**Coefficient of Utilization**

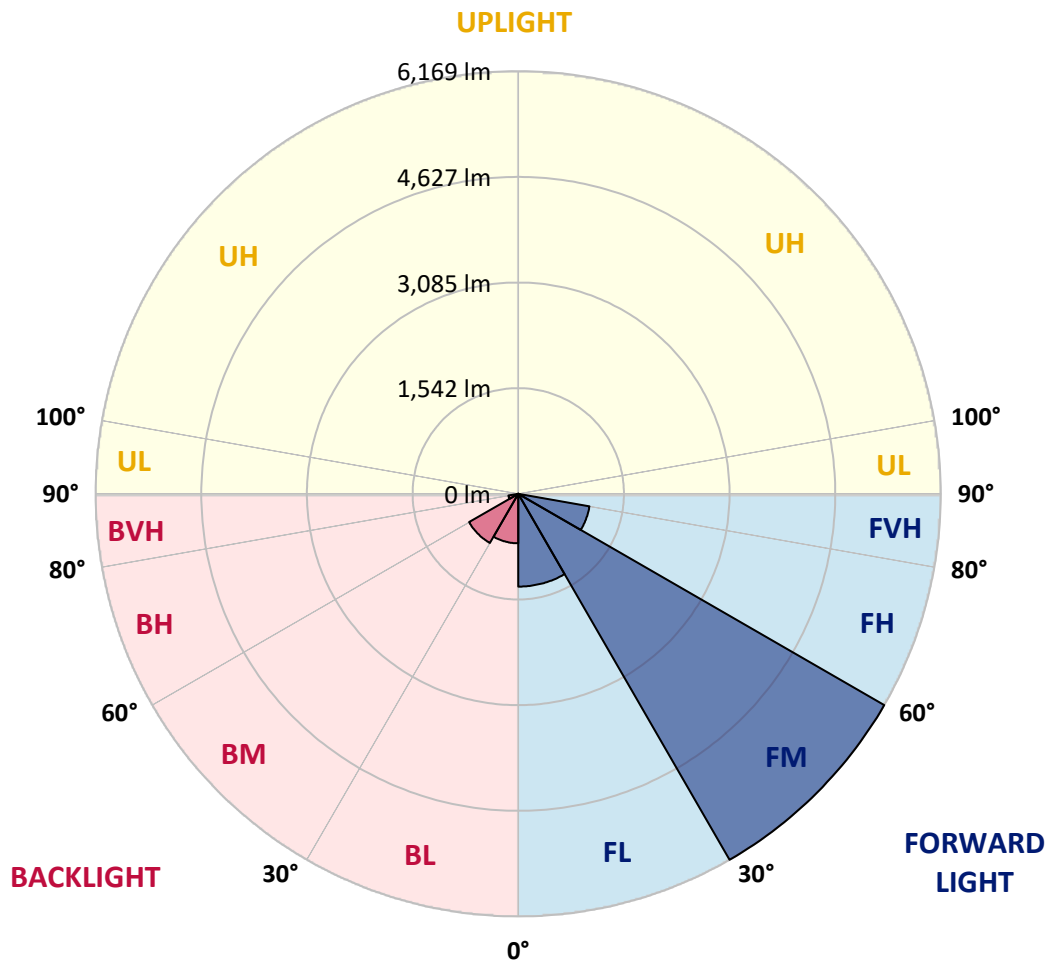


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|--------|-----------|-------------------------|------|---------|
|                |        |           | B                       | U    | G       |
| FL (0°-30°)    | 1354.6 | 13.2      |                         |      |         |
| FM (30°-60°)   | 6169.3 | 60.0      |                         |      |         |
| FH (60°-80°)   | 1055.7 | 10.3      |                         |      | G1/1800 |
| FVH (80°-90°)  | 6.1    | 0.1       |                         |      | G0/10   |
| BL (0°-30°)    | 722.3  | 7.0       | B2/1000                 |      |         |
| BM (30°-60°)   | 828.3  | 8.1       | B1/1000                 |      |         |
| BH (60°-80°)   | 145.8  | 1.4       | B1/500                  |      | G1/500  |
| BVH (80°-90°)  | 5.7    | 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°    | 3695.2 | 3695.2 | 3695.2 | 3695.2 | 3695.2 | 3695.2 | 3695.2 | 3695.2 | 3695.2 | 3695.2 | 3695.2 |
| 2.5°  | 3676.0 | 3643.5 | 3676.0 | 3679.9 | 3702.9 | 3723.9 | 3710.6 | 3741.3 | 3723.9 | 3704.8 | 3699.0 |
| 5°    | 3379.0 | 3423.0 | 3425.0 | 3494.0 | 3478.6 | 3605.2 | 3660.7 | 3645.4 | 3739.3 | 3733.6 | 3720.1 |
| 7.5°  | 3112.6 | 3095.4 | 3118.3 | 3198.8 | 3300.4 | 3446.1 | 3526.6 | 3524.7 | 3658.8 | 3754.6 | 3745.0 |
| 10°   | 2865.3 | 2863.4 | 2911.4 | 2974.5 | 3060.8 | 3214.1 | 3325.3 | 3380.9 | 3589.8 | 3735.5 | 3756.5 |
| 12.5° | 2698.6 | 2690.9 | 2742.7 | 2794.4 | 2930.5 | 3049.3 | 3191.1 | 3218.0 | 3457.6 | 3668.4 | 3702.9 |
| 15°   | 2589.3 | 2606.6 | 2610.4 | 2710.1 | 2796.3 | 2953.5 | 3064.7 | 3120.3 | 3396.3 | 3614.7 | 3747.0 |
| 17.5° | 2570.2 | 2593.1 | 2595.1 | 2677.5 | 2769.5 | 2901.7 | 2999.5 | 3074.2 | 3344.5 | 3641.6 | 3748.8 |
| 20°   | 2608.5 | 2595.1 | 2606.6 | 2658.4 | 2748.4 | 2874.9 | 3016.7 | 3041.6 | 3327.2 | 3655.0 | 3770.0 |
| 22.5° | 2717.7 | 2713.9 | 2685.1 | 2727.3 | 2790.6 | 2922.9 | 3057.0 | 3095.4 | 3377.1 | 3723.9 | 3787.2 |
| 25°   | 2838.5 | 2859.6 | 2832.7 | 2827.0 | 2871.1 | 3001.4 | 3179.7 | 3229.5 | 3543.8 | 3848.5 | 3840.8 |
| 27.5° | 3064.7 | 3043.6 | 3043.6 | 3016.7 | 3005.2 | 3068.5 | 3311.9 | 3394.3 | 3729.7 | 4009.5 | 3902.2 |
| 30°   | 3281.2 | 3304.3 | 3287.0 | 3296.6 | 3219.9 | 3214.1 | 3499.7 | 3601.3 | 4059.4 | 4254.9 | 4032.5 |
| 32.5° | 3624.3 | 3593.7 | 3622.4 | 3597.5 | 3495.9 | 3392.4 | 3754.6 | 3860.0 | 4458.0 | 4536.6 | 4228.0 |
| 35°   | 3909.9 | 3896.4 | 4019.1 | 4015.3 | 3850.5 | 3748.8 | 4024.9 | 4182.0 | 4735.9 | 4873.9 | 4458.0 |
| 37.5° | 4316.2 | 4291.3 | 4431.2 | 4498.3 | 4350.7 | 4199.3 | 4412.0 | 4594.1 | 4994.7 | 5144.2 | 4693.8 |
| 40°   | 4734.0 | 4797.3 | 4985.1 | 5096.2 | 4939.1 | 4737.9 | 4885.5 | 4941.0 | 5167.2 | 5320.5 | 4854.8 |
| 42.5° | 5263.0 | 5355.0 | 5546.7 | 5642.5 | 5629.1 | 5410.6 | 5366.5 | 5364.6 | 5291.7 | 5270.7 | 4973.6 |
| 45°   | 5770.9 | 5736.4 | 6031.5 | 6240.5 | 6409.2 | 6345.9 | 5830.3 | 5772.8 | 5489.1 | 5345.4 | 5004.2 |
| 47.5° | 5993.2 | 5981.7 | 6183.0 | 6554.8 | 7129.8 | 7208.4 | 6504.9 | 6282.6 | 5822.6 | 5659.8 | 5171.0 |
| 50°   | 5705.7 | 5765.2 | 5964.5 | 6376.5 | 7258.2 | 7858.1 | 7333.0 | 7033.9 | 6211.7 | 6043.0 | 5565.8 |
| 52.5° | 4766.6 | 4806.8 | 4996.6 | 5519.8 | 6821.2 | 8241.4 | 8126.4 | 7953.9 | 6926.7 | 6646.8 | 6253.9 |
| 54°   | 3919.5 | 4026.8 | 4130.3 | 4655.4 | 6043.0 | 8028.6 | 8561.5 | 8429.2 | 7392.4 | 7148.9 | 6687.1 |
| 55°   | 3413.5 | 3476.8 | 3551.5 | 4074.7 | 5504.5 | 7668.3 | 8511.7 | 8523.1 | 7704.7 | 7306.1 | 6978.3 |
| 57.5° | 2493.5 | 2537.6 | 2460.9 | 2692.8 | 3779.5 | 6227.0 | 7785.3 | 8095.8 | 8126.4 | 7541.9 | 7156.6 |
| 60°   | 1905.1 | 1924.3 | 1838.0 | 1874.4 | 2349.8 | 4274.0 | 6022.0 | 6395.7 | 7331.0 | 6591.2 | 6062.2 |
| 62.5° | 1477.7 | 1481.5 | 1479.6 | 1542.9 | 1619.6 | 2514.6 | 3766.2 | 4097.7 | 5054.1 | 4680.4 | 4116.9 |
| 65°   | 1088.6 | 1071.4 | 1102.1 | 1293.7 | 1381.8 | 1581.2 | 1983.7 | 2225.2 | 2746.5 | 2319.1 | 1657.8 |
| 67.5° | 705.3  | 711.0  | 741.7  | 962.2  | 1184.4 | 1213.2 | 1220.9 | 1201.7 | 1203.6 | 663.1  | 415.9  |
| 70°   | 423.6  | 433.2  | 423.6  | 544.3  | 847.1  | 870.1  | 795.4  | 776.2  | 605.7  | 157.1  | 155.3  |
| 72.5° | 251.1  | 237.6  | 212.7  | 233.8  | 352.7  | 421.6  | 379.5  | 377.6  | 237.6  | 92.0   | 92.0   |
| 75°   | 105.4  | 95.8   | 78.6   | 70.9   | 93.9   | 90.0   | 90.0   | 80.5   | 63.3   | 61.3   | 57.5   |
| 77.5° | 21.1   | 21.1   | 15.3   | 17.2   | 23.0   | 26.9   | 32.6   | 32.6   | 38.4   | 38.4   | 36.4   |
| 80°   | 0.0    | 1.9    | 5.7    | 11.5   | 17.2   | 24.9   | 28.7   | 28.7   | 32.6   | 32.6   | 26.9   |
| 82.5° | 0.0    | 1.9    | 5.7    | 11.5   | 15.3   | 23.0   | 28.7   | 28.7   | 32.6   | 34.5   | 28.7   |
| 85°   | 0.0    | 1.9    | 5.7    | 9.6    | 15.3   | 19.2   | 19.2   | 17.2   | 13.4   | 11.5   | 7.7    |
| 87.5° | 0.0    | 0.0    | 1.9    | 3.8    | 1.9    | 3.8    | 3.8    | 3.8    | 3.8    | 3.8    | 3.8    |
| 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°    | 3695.2 | 3695.2 | 3695.2 | 3695.2 | 3695.2 | 3695.2 | 3695.2 | 3695.2 | 3695.2 | 3695.2 | 3695.2 |
| 2.5°  | 3712.4 | 3710.6 | 3664.5 | 3589.8 | 3572.5 | 3509.3 | 3501.7 | 3463.3 | 3484.4 | 3413.5 | 3405.8 |
| 5°    | 3681.8 | 3658.8 | 3603.2 | 3555.3 | 3415.4 | 3315.7 | 3237.2 | 3141.3 | 3085.7 | 3095.4 | 3058.9 |
| 7.5°  | 3725.9 | 3666.5 | 3568.8 | 3402.0 | 3231.4 | 3057.0 | 2963.1 | 2767.6 | 2696.7 | 2591.3 | 2575.9 |
| 10°   | 3679.9 | 3635.8 | 3484.4 | 3208.4 | 2972.7 | 2721.6 | 2501.1 | 2284.6 | 2119.7 | 2048.9 | 2033.5 |
| 12.5° | 3676.0 | 3599.4 | 3346.4 | 3039.8 | 2698.6 | 2338.3 | 2018.2 | 1748.0 | 1585.0 | 1493.0 | 1472.0 |
| 15°   | 3616.6 | 3524.7 | 3191.1 | 2779.1 | 2307.6 | 1859.1 | 1510.3 | 1249.6 | 1125.0 | 1071.4 | 1086.7 |
| 17.5° | 3622.4 | 3484.4 | 3035.9 | 2503.1 | 1922.3 | 1364.6 | 1031.1 | 897.0  | 864.4  | 877.8  | 877.8  |
| 20°   | 3616.6 | 3394.3 | 2848.1 | 2185.0 | 1472.0 | 946.8  | 757.1  | 709.2  | 730.2  | 772.4  | 762.8  |
| 22.5° | 3586.0 | 3352.2 | 2675.6 | 1849.5 | 1082.9 | 701.5  | 607.5  | 609.5  | 642.1  | 693.8  | 705.3  |
| 25°   | 3609.0 | 3258.2 | 2457.1 | 1510.3 | 789.7  | 559.6  | 527.0  | 540.5  | 575.0  | 613.3  | 621.0  |
| 27.5° | 3591.7 | 3191.1 | 2229.0 | 1172.9 | 576.9  | 481.1  | 479.1  | 494.5  | 509.8  | 538.5  | 538.5  |
| 30°   | 3610.9 | 3129.8 | 2004.8 | 872.0  | 475.3  | 440.8  | 433.2  | 444.7  | 460.0  | 465.7  | 463.8  |
| 32.5° | 3681.8 | 3083.8 | 1746.0 | 651.6  | 419.8  | 402.5  | 402.5  | 402.5  | 400.6  | 408.3  | 410.1  |
| 35°   | 3837.0 | 3091.5 | 1517.9 | 504.1  | 383.4  | 369.9  | 364.2  | 356.5  | 352.7  | 356.5  | 358.4  |
| 37.5° | 4005.7 | 3087.7 | 1282.2 | 429.3  | 356.5  | 345.0  | 331.6  | 320.1  | 318.1  | 322.0  | 316.3  |
| 40°   | 4080.4 | 3124.1 | 1063.7 | 385.2  | 331.6  | 318.1  | 297.1  | 287.5  | 289.4  | 293.2  | 289.4  |
| 42.5° | 4182.0 | 3135.6 | 921.9  | 350.7  | 308.6  | 287.5  | 274.0  | 262.5  | 260.7  | 266.4  | 264.5  |
| 45°   | 4180.1 | 3070.4 | 772.4  | 331.6  | 287.5  | 264.5  | 247.3  | 237.6  | 237.6  | 241.5  | 243.4  |
| 47.5° | 4302.8 | 3060.8 | 663.1  | 314.3  | 272.2  | 249.2  | 228.1  | 220.4  | 218.5  | 218.5  | 214.7  |
| 50°   | 4588.4 | 3195.0 | 578.8  | 295.2  | 253.0  | 231.9  | 214.7  | 205.1  | 197.4  | 193.6  | 191.7  |
| 52.5° | 5146.1 | 3612.8 | 513.6  | 272.2  | 231.9  | 214.7  | 199.4  | 191.7  | 182.0  | 172.5  | 170.6  |
| 54°   | 5686.5 | 4044.0 | 509.8  | 253.0  | 214.7  | 203.2  | 189.7  | 185.9  | 174.4  | 161.0  | 157.1  |
| 55°   | 5930.0 | 4295.1 | 523.2  | 237.6  | 203.2  | 195.5  | 184.0  | 180.2  | 168.7  | 153.3  | 151.4  |
| 57.5° | 6131.2 | 4392.9 | 515.6  | 197.4  | 184.0  | 182.0  | 172.5  | 166.8  | 153.3  | 132.2  | 128.4  |
| 60°   | 4935.2 | 3321.5 | 369.9  | 174.4  | 168.7  | 164.8  | 157.1  | 153.3  | 136.1  | 113.1  | 111.2  |
| 62.5° | 3118.3 | 1910.8 | 235.8  | 153.3  | 147.6  | 141.8  | 132.2  | 128.4  | 113.1  | 90.0   | 84.3   |
| 65°   | 1328.2 | 791.5  | 159.1  | 136.1  | 126.5  | 116.9  | 109.2  | 103.5  | 90.0   | 67.1   | 65.1   |
| 67.5° | 345.0  | 281.7  | 132.2  | 118.9  | 105.4  | 92.0   | 86.2   | 76.7   | 61.3   | 46.0   | 44.1   |
| 70°   | 155.3  | 141.8  | 111.2  | 99.7   | 84.3   | 70.9   | 63.3   | 53.6   | 40.2   | 30.7   | 28.7   |
| 72.5° | 92.0   | 90.0   | 84.3   | 74.8   | 63.3   | 53.6   | 46.0   | 36.4   | 26.9   | 17.2   | 17.2   |
| 75°   | 57.5   | 55.6   | 57.5   | 51.8   | 44.1   | 40.2   | 34.5   | 24.9   | 15.3   | 7.7    | 7.7    |
| 77.5° | 34.5   | 34.5   | 34.5   | 32.6   | 30.7   | 30.7   | 24.9   | 15.3   | 7.7    | 1.9    | 1.9    |
| 80°   | 26.9   | 26.9   | 28.7   | 26.9   | 26.9   | 26.9   | 21.1   | 11.5   | 3.8    | 0.0    | 0.0    |
| 82.5° | 26.9   | 28.7   | 32.6   | 30.7   | 26.9   | 23.0   | 19.2   | 11.5   | 3.8    | 0.0    | 0.0    |
| 85°   | 7.7    | 5.7    | 9.6    | 13.4   | 19.2   | 17.2   | 13.4   | 9.6    | 3.8    | 0.0    | 0.0    |
| 87.5° | 3.8    | 3.8    | 3.8    | 3.8    | 1.9    | 1.9    | 1.9    | 1.9    | 1.9    | 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)