

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: FAIL-SAFE

Report Number: P834197

Luminaire Tested: **ORLG-12-4-INS-ASY2-LD4-3STD-27-120-EDD**

Issue Date: 5/16/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P834197  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 5/16/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: ORLG-12-4-INS-ASY2-LD4-3STD-27-120-EDD  
Description: 1FT x 4FT ORL LED LUMINAIRE WITH asymmetric/symmetric lens v2  
Light Source: 2700K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

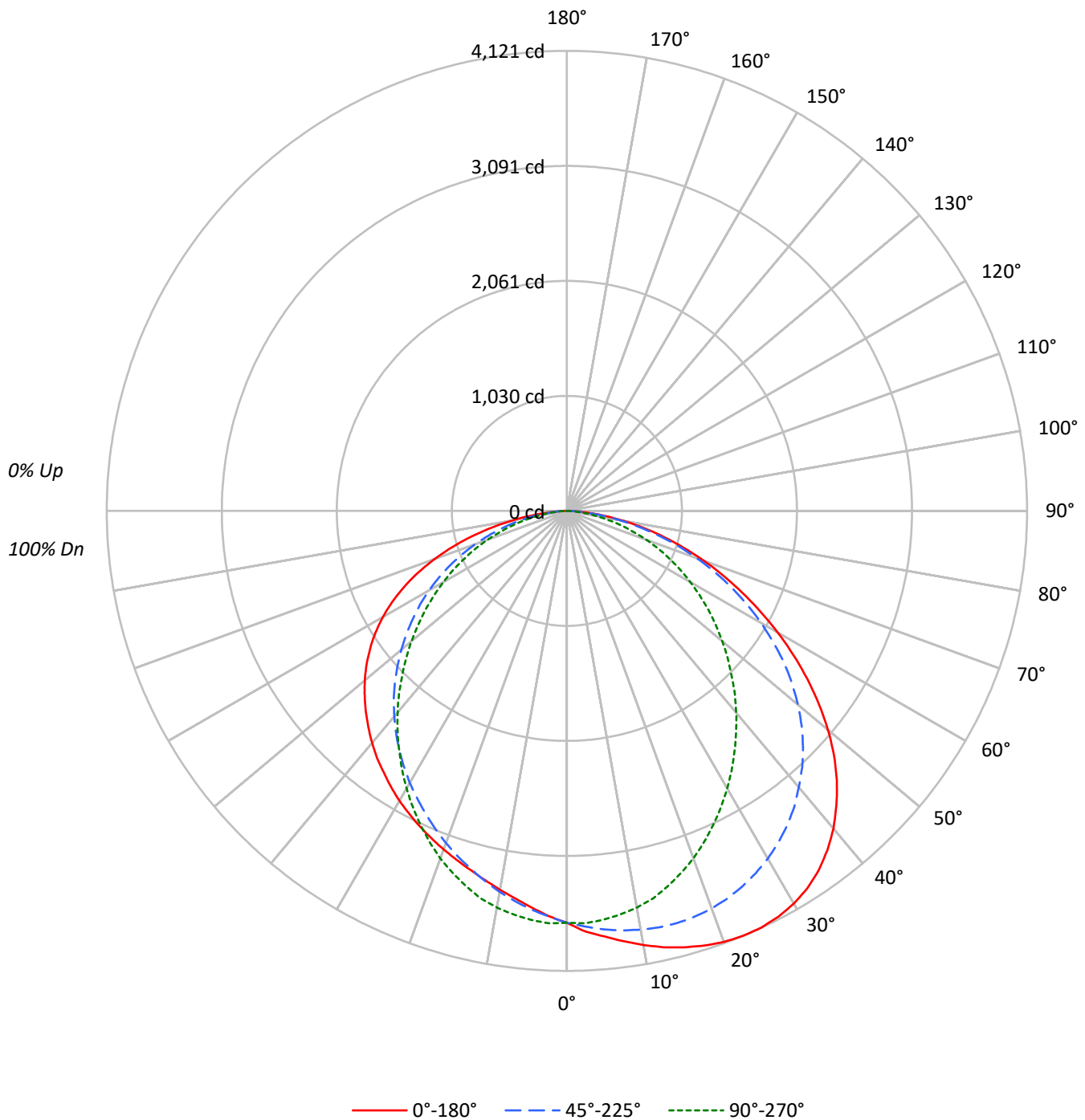
Lumens per Lamp: N/A  
Luminaire Lumens: 10852.6 lumens  
Efficiency: N/A  
Efficacy: 108.6 lumens/watt  
Spacing Criteria (0/90/45): 1.41 / 1.17 / 1.4  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 99.9  
Input Voltage (V): 120  
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: 28.75 FT

TEST NUMBER: P834197

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### Luminous Intensity Polar Plot



Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| RF  | 20  |     |     |     | 20  |     |     |     | 20  |     |     |     | 20  |     |     |     | 20  |
| RC  | 80  |     |     |     | 70  |     |     |     | 50  |     |     |     | 30  |     |     |     | 10  |
| RW  | 70  | 50  | 30  | 10  | 70  | 50  | 30  | 10  | 50  | 30  | 10  | 50  | 30  | 10  | 50  | 30  | 10  |
| RCR |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 |
| 1   | 109 | 104 | 100 | 96  | 106 | 102 | 98  | 94  | 97  | 94  | 91  | 94  | 91  | 88  | 90  | 88  | 86  |
| 2   | 99  | 90  | 84  | 78  | 96  | 89  | 82  | 77  | 85  | 80  | 75  | 82  | 77  | 73  | 79  | 75  | 72  |
| 3   | 90  | 79  | 71  | 65  | 87  | 78  | 70  | 64  | 75  | 68  | 63  | 72  | 66  | 62  | 69  | 65  | 61  |
| 4   | 82  | 70  | 61  | 55  | 80  | 69  | 61  | 54  | 66  | 59  | 53  | 64  | 58  | 53  | 62  | 56  | 52  |
| 5   | 76  | 63  | 54  | 47  | 73  | 61  | 53  | 47  | 59  | 52  | 46  | 57  | 51  | 46  | 55  | 50  | 45  |
| 6   | 70  | 56  | 47  | 41  | 68  | 55  | 47  | 41  | 54  | 46  | 40  | 52  | 45  | 40  | 50  | 44  | 40  |
| 7   | 65  | 51  | 42  | 36  | 63  | 50  | 42  | 36  | 49  | 41  | 36  | 47  | 40  | 35  | 46  | 40  | 35  |
| 8   | 60  | 46  | 38  | 32  | 59  | 46  | 38  | 32  | 44  | 37  | 32  | 43  | 36  | 31  | 42  | 36  | 31  |
| 9   | 56  | 43  | 34  | 29  | 55  | 42  | 34  | 29  | 41  | 34  | 29  | 40  | 33  | 28  | 39  | 33  | 28  |
| 10  | 53  | 39  | 31  | 26  | 51  | 39  | 31  | 26  | 38  | 31  | 26  | 37  | 30  | 26  | 36  | 30  | 26  |

**AVERAGE LUMINANCE (cd/sqm):**

|     | 0°    | 90°  | 180°  |
|-----|-------|------|-------|
| 0°  | 9928  | 9928 | 9928  |
| 5°  | 10336 | 9933 | 9639  |
| 10° | 10789 | 9859 | 9416  |
| 15° | 11274 | 9701 | 9281  |
| 20° | 11766 | 9487 | 9242  |
| 25° | 12229 | 9212 | 9257  |
| 30° | 12627 | 8923 | 9317  |
| 35° | 12915 | 8605 | 9394  |
| 40° | 13045 | 8286 | 9533  |
| 45° | 13010 | 7936 | 9689  |
| 50° | 12779 | 7603 | 9889  |
| 55° | 12342 | 7253 | 10094 |
| 60° | 11740 | 6879 | 10247 |
| 65° | 11025 | 6460 | 10234 |
| 70° | 10260 | 5958 | 9930  |
| 75° | 9316  | 5232 | 9156  |
| 80° | 7998  | 4299 | 7724  |
| 85° | 6101  | 2939 | 5304  |



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**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 349.9   | 3.2       |
| 10°-20°   | 1010.5  | 9.3       |
| 20°-30°   | 1548.1  | 14.3      |
| 30°-40°   | 1889.2  | 17.4      |
| 40°-50°   | 1975.7  | 18.2      |
| 50°-60°   | 1788.2  | 16.5      |
| 60°-70°   | 1354.2  | 12.5      |
| 70°-80°   | 754.7   | 7.0       |
| 80°-90°   | 182.0   | 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°-30°    | 2908.5  | 26.8      |
| 0°-40°    | 4797.7  | 44.2      |
| 0°-60°    | 8561.6  | 78.9      |
| 0°-90°    | 10852.6 | 100.0     |
| 90°-120°  | 0.0     | 0.0       |
| 90°-150°  | 0.0     | 0.0       |
| 90°-180°  | 0.0     | 0.0       |
| 0°-180°   | 10852.6 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 45°  | 90°  | 135° | 180° | Flux |
|-----|------|------|------|------|------|------|
| 0°  | 3689 | 3689 | 3689 | 3689 | 3689 |      |
| 5°  | 3826 | 3763 | 3677 | 3587 | 3568 | 369  |
| 15° | 4047 | 3822 | 3482 | 3320 | 3331 | 1148 |
| 25° | 4118 | 3714 | 3102 | 2993 | 3118 | 1900 |
| 35° | 3931 | 3439 | 2619 | 2616 | 2860 | 2455 |
| 45° | 3418 | 2990 | 2085 | 2177 | 2546 | 2630 |
| 55° | 2631 | 2375 | 1546 | 1682 | 2152 | 2347 |
| 65° | 1731 | 1628 | 1014 | 1153 | 1607 | 1717 |
| 75° | 896  | 846  | 503  | 601  | 881  | 950  |
| 85° | 198  | 174  | 95   | 127  | 172  | 238  |
| 90° | 0    | 0    | 0    | 0    | 0    |      |

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 10°    | 20°    | 22.5°  | 30°    | 40°    | 45°    | 50°    | 60°    | 67.5°  | 70°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 3689.4 | 3689.4 | 3689.4 | 3689.4 | 3689.4 | 3689.4 | 3689.4 | 3689.4 | 3689.4 | 3689.4 | 3689.4 |
| 2.5°  | 3770.9 | 3753.2 | 3738.6 | 3744.3 | 3747.5 | 3736.2 | 3726.5 | 3728.2 | 3718.5 | 3737.0 | 3693.5 |
| 5°    | 3826.5 | 3810.4 | 3793.5 | 3799.9 | 3793.5 | 3776.5 | 3762.8 | 3758.8 | 3733.0 | 3743.5 | 3699.1 |
| 7.5°  | 3888.6 | 3870.9 | 3845.9 | 3853.2 | 3839.4 | 3808.0 | 3790.2 | 3779.8 | 3740.2 | 3741.1 | 3691.9 |
| 10°   | 3948.3 | 3933.0 | 3899.1 | 3904.0 | 3879.0 | 3837.0 | 3808.8 | 3794.3 | 3738.6 | 3730.6 | 3679.8 |
| 12.5° | 4004.0 | 3983.0 | 3946.7 | 3949.1 | 3912.8 | 3857.2 | 3820.9 | 3799.9 | 3727.3 | 3703.2 | 3653.2 |
| 15°   | 4046.7 | 4026.5 | 3983.0 | 3982.2 | 3935.4 | 3862.8 | 3821.7 | 3792.7 | 3700.7 | 3662.8 | 3610.4 |
| 17.5° | 4083.0 | 4064.4 | 4010.4 | 4008.8 | 3952.3 | 3860.4 | 3811.2 | 3774.9 | 3662.0 | 3615.3 | 3557.2 |
| 20°   | 4108.8 | 4090.2 | 4029.8 | 4024.1 | 3956.4 | 3848.3 | 3789.4 | 3743.5 | 3611.2 | 3555.6 | 3491.1 |
| 22.5° | 4120.9 | 4102.3 | 4033.8 | 4025.7 | 3946.7 | 3824.1 | 3758.0 | 3704.0 | 3553.2 | 3480.6 | 3413.6 |
| 25°   | 4118.5 | 4100.7 | 4023.3 | 4015.2 | 3928.1 | 3787.8 | 3713.6 | 3651.5 | 3479.8 | 3394.3 | 3328.2 |
| 27.5° | 4098.3 | 4084.6 | 4003.1 | 3992.7 | 3894.3 | 3738.6 | 3659.6 | 3591.1 | 3398.3 | 3303.2 | 3231.4 |
| 30°   | 4063.6 | 4053.1 | 3966.9 | 3957.2 | 3852.3 | 3684.6 | 3596.7 | 3517.7 | 3310.4 | 3203.2 | 3130.6 |
| 32.5° | 4008.0 | 3998.3 | 3911.2 | 3902.3 | 3795.9 | 3615.3 | 3523.3 | 3441.9 | 3214.5 | 3095.9 | 3023.3 |
| 35°   | 3931.4 | 3925.7 | 3841.1 | 3831.4 | 3723.3 | 3536.2 | 3438.6 | 3349.1 | 3114.5 | 2980.6 | 2911.2 |
| 37.5° | 3830.6 | 3830.6 | 3749.1 | 3738.6 | 3633.0 | 3439.4 | 3343.5 | 3248.3 | 3001.6 | 2859.6 | 2791.1 |
| 40°   | 3713.6 | 3724.1 | 3641.1 | 3630.6 | 3528.2 | 3335.4 | 3230.6 | 3130.6 | 2879.8 | 2732.2 | 2665.3 |
| 42.5° | 3573.3 | 3583.0 | 3513.6 | 3504.0 | 3408.0 | 3215.3 | 3117.7 | 3008.8 | 2752.4 | 2602.4 | 2533.0 |
| 45°   | 3418.5 | 3431.4 | 3369.3 | 3362.0 | 3272.5 | 3083.8 | 2990.3 | 2879.8 | 2619.3 | 2466.9 | 2399.1 |
| 47.5° | 3245.9 | 3262.8 | 3208.8 | 3204.8 | 3121.7 | 2949.1 | 2851.6 | 2739.5 | 2479.8 | 2325.8 | 2262.1 |
| 50°   | 3052.4 | 3076.6 | 3032.2 | 3032.2 | 2958.0 | 2786.2 | 2701.6 | 2589.5 | 2334.6 | 2180.6 | 2117.7 |
| 52.5° | 2845.1 | 2875.8 | 2842.7 | 2843.5 | 2783.0 | 2629.0 | 2541.1 | 2431.4 | 2183.0 | 2031.4 | 1973.3 |
| 55°   | 2630.6 | 2660.4 | 2639.5 | 2642.7 | 2595.1 | 2454.8 | 2375.0 | 2266.1 | 2028.2 | 1880.6 | 1825.8 |
| 57.5° | 2406.4 | 2438.7 | 2425.0 | 2431.4 | 2398.3 | 2272.5 | 2189.5 | 2094.3 | 1868.5 | 1722.5 | 1675.8 |
| 60°   | 2181.4 | 2212.1 | 2204.8 | 2213.7 | 2192.7 | 2083.8 | 2008.0 | 1909.6 | 1708.0 | 1567.7 | 1526.6 |
| 62.5° | 1954.0 | 1982.2 | 1980.6 | 1990.3 | 1979.0 | 1888.7 | 1820.9 | 1737.1 | 1541.9 | 1412.9 | 1375.0 |
| 65°   | 1731.4 | 1755.6 | 1754.0 | 1764.5 | 1762.1 | 1689.5 | 1628.2 | 1551.6 | 1375.8 | 1257.2 | 1224.2 |
| 67.5° | 1515.3 | 1535.5 | 1529.8 | 1541.9 | 1545.1 | 1487.1 | 1433.8 | 1365.3 | 1217.7 | 1102.4 | 1074.2 |
| 70°   | 1304.0 | 1317.7 | 1310.5 | 1318.5 | 1325.8 | 1282.2 | 1237.1 | 1176.6 | 1049.2 | 947.6  | 924.2  |
| 72.5° | 1096.8 | 1106.4 | 1095.1 | 1103.2 | 1109.7 | 1078.2 | 1041.1 | 988.7  | 883.0  | 795.1  | 775.8  |
| 75°   | 896.0  | 909.7  | 886.3  | 894.3  | 899.2  | 867.7  | 846.0  | 803.2  | 712.1  | 644.3  | 631.4  |
| 77.5° | 701.6  | 709.7  | 696.8  | 693.5  | 696.8  | 674.2  | 657.2  | 624.2  | 555.6  | 500.0  | 491.9  |
| 80°   | 516.1  | 521.0  | 508.1  | 504.8  | 507.2  | 491.1  | 478.2  | 454.0  | 405.6  | 363.7  | 360.5  |
| 82.5° | 346.0  | 348.4  | 337.1  | 333.9  | 335.5  | 330.6  | 315.3  | 298.4  | 275.8  | 240.3  | 239.5  |
| 85°   | 197.6  | 197.6  | 189.5  | 186.3  | 187.9  | 179.8  | 174.2  | 165.3  | 156.4  | 132.3  | 133.9  |
| 87.5° | 72.6   | 72.6   | 68.5   | 67.7   | 75.8   | 66.9   | 64.5   | 60.5   | 62.9   | 50.0   | 53.2   |
| 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):**

|       | 80°    | 90°    | 100°   | 110°   | 112.5° | 120°   | 130°   | 135°   | 140°   | 150°   | 157.5° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 3689.4 | 3689.4 | 3689.4 | 3689.4 | 3689.4 | 3689.4 | 3689.4 | 3689.4 | 3689.4 | 3689.4 | 3689.4 |
| 2.5°  | 3705.6 | 3697.5 | 3690.3 | 3665.3 | 3675.7 | 3649.9 | 3648.3 | 3638.6 | 3631.4 | 3617.7 | 3635.4 |
| 5°    | 3693.5 | 3677.3 | 3656.4 | 3626.5 | 3635.4 | 3604.8 | 3598.3 | 3587.0 | 3577.3 | 3559.6 | 3573.3 |
| 7.5°  | 3674.1 | 3647.5 | 3614.4 | 3576.5 | 3588.6 | 3550.7 | 3541.1 | 3529.0 | 3520.9 | 3499.9 | 3512.0 |
| 10°   | 3645.9 | 3608.0 | 3569.3 | 3523.3 | 3532.2 | 3491.1 | 3479.0 | 3466.1 | 3458.8 | 3440.3 | 3452.4 |
| 12.5° | 3602.3 | 3556.4 | 3504.0 | 3454.0 | 3463.6 | 3424.9 | 3408.8 | 3395.1 | 3392.7 | 3377.4 | 3391.9 |
| 15°   | 3545.9 | 3482.2 | 3428.2 | 3374.9 | 3386.2 | 3341.1 | 3333.8 | 3320.1 | 3324.1 | 3313.6 | 3331.4 |
| 17.5° | 3474.1 | 3400.7 | 3341.9 | 3284.6 | 3295.9 | 3258.0 | 3252.4 | 3245.9 | 3249.9 | 3248.3 | 3267.7 |
| 20°   | 3393.5 | 3312.8 | 3245.1 | 3188.6 | 3195.1 | 3165.3 | 3167.7 | 3166.1 | 3174.1 | 3183.0 | 3209.6 |
| 22.5° | 3302.4 | 3211.2 | 3140.3 | 3082.2 | 3091.9 | 3066.1 | 3077.4 | 3080.6 | 3094.3 | 3114.5 | 3148.3 |
| 25°   | 3199.9 | 3102.4 | 3028.2 | 2973.3 | 2982.2 | 2965.3 | 2984.6 | 2992.7 | 3014.5 | 3048.3 | 3083.0 |
| 27.5° | 3092.7 | 2989.5 | 2910.4 | 2858.0 | 2874.9 | 2858.0 | 2887.0 | 2903.2 | 2936.2 | 2973.3 | 3016.1 |
| 30°   | 2979.0 | 2871.7 | 2790.3 | 2743.5 | 2759.6 | 2744.3 | 2791.1 | 2812.8 | 2845.9 | 2896.7 | 2947.5 |
| 32.5° | 2859.6 | 2746.7 | 2666.9 | 2630.6 | 2641.9 | 2639.5 | 2691.9 | 2716.1 | 2760.4 | 2818.5 | 2872.5 |
| 35°   | 2737.0 | 2619.3 | 2538.7 | 2508.0 | 2521.7 | 2525.0 | 2587.9 | 2616.1 | 2664.5 | 2734.6 | 2792.7 |
| 37.5° | 2610.4 | 2490.3 | 2411.2 | 2386.2 | 2398.3 | 2410.4 | 2483.8 | 2512.0 | 2566.9 | 2643.5 | 2707.2 |
| 40°   | 2479.0 | 2358.8 | 2281.4 | 2261.2 | 2273.3 | 2286.2 | 2366.1 | 2404.8 | 2464.5 | 2547.5 | 2616.9 |
| 42.5° | 2345.9 | 2225.8 | 2150.8 | 2136.2 | 2148.3 | 2173.3 | 2258.0 | 2294.3 | 2357.2 | 2449.1 | 2525.8 |
| 45°   | 2210.4 | 2085.4 | 2020.1 | 2008.8 | 2021.7 | 2050.8 | 2133.8 | 2177.4 | 2244.3 | 2345.1 | 2427.4 |
| 47.5° | 2073.3 | 1951.6 | 1889.5 | 1882.2 | 1895.1 | 1927.4 | 2019.3 | 2058.8 | 2129.8 | 2237.1 | 2325.8 |
| 50°   | 1934.6 | 1816.1 | 1756.4 | 1754.0 | 1766.1 | 1800.8 | 1888.7 | 1935.4 | 2008.8 | 2129.0 | 2220.1 |
| 52.5° | 1794.3 | 1680.6 | 1626.6 | 1626.6 | 1637.9 | 1673.4 | 1762.1 | 1810.4 | 1886.3 | 2012.9 | 2113.7 |
| 55°   | 1654.0 | 1545.9 | 1494.3 | 1498.4 | 1514.5 | 1545.1 | 1631.4 | 1682.2 | 1758.8 | 1890.3 | 1996.7 |
| 57.5° | 1513.7 | 1411.3 | 1364.5 | 1370.1 | 1385.5 | 1416.1 | 1500.8 | 1558.0 | 1627.4 | 1763.7 | 1872.5 |
| 60°   | 1375.0 | 1278.2 | 1237.1 | 1243.5 | 1257.2 | 1287.9 | 1375.8 | 1425.0 | 1494.3 | 1633.0 | 1741.9 |
| 62.5° | 1234.7 | 1146.8 | 1108.0 | 1116.1 | 1128.2 | 1158.8 | 1241.9 | 1289.5 | 1358.0 | 1494.3 | 1604.0 |
| 65°   | 1095.9 | 1014.5 | 981.4  | 989.5  | 1000.8 | 1029.0 | 1107.2 | 1153.2 | 1218.5 | 1351.6 | 1456.4 |
| 67.5° | 958.9  | 884.7  | 857.2  | 865.3  | 874.2  | 900.8  | 965.3  | 1015.3 | 1076.6 | 1203.2 | 1302.4 |
| 70°   | 823.4  | 757.2  | 733.1  | 741.1  | 749.2  | 773.4  | 829.8  | 875.8  | 932.2  | 1048.4 | 1140.3 |
| 72.5° | 689.5  | 625.0  | 612.9  | 620.1  | 626.6  | 647.6  | 701.6  | 737.9  | 787.1  | 890.3  | 969.3  |
| 75°   | 558.9  | 503.2  | 495.2  | 502.4  | 508.1  | 524.2  | 569.3  | 600.8  | 641.9  | 731.4  | 796.0  |
| 77.5° | 433.1  | 386.3  | 383.1  | 388.7  | 394.3  | 405.6  | 441.1  | 474.2  | 506.4  | 572.6  | 629.8  |
| 80°   | 315.3  | 277.4  | 277.4  | 283.1  | 281.4  | 295.2  | 320.2  | 346.8  | 370.2  | 417.7  | 459.7  |
| 82.5° | 208.1  | 178.2  | 182.3  | 186.3  | 188.7  | 194.4  | 209.7  | 229.8  | 244.4  | 273.4  | 300.8  |
| 85°   | 115.3  | 95.2   | 99.2   | 102.4  | 100.8  | 107.3  | 115.3  | 127.4  | 134.7  | 148.4  | 162.9  |
| 87.5° | 42.7   | 35.5   | 36.3   | 38.7   | 40.3   | 43.5   | 43.5   | 50.8   | 51.6   | 53.2   | 56.5   |
| 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):**

|       | 160°   | 170°   | 180°   |
|-------|--------|--------|--------|
| 0°    | 3689.4 | 3689.4 | 3689.4 |
| 2.5°  | 3601.5 | 3620.9 | 3635.4 |
| 5°    | 3539.4 | 3555.6 | 3568.5 |
| 7.5°  | 3479.0 | 3493.5 | 3504.8 |
| 10°   | 3421.7 | 3437.8 | 3445.9 |
| 12.5° | 3362.8 | 3381.4 | 3387.8 |
| 15°   | 3304.8 | 3323.3 | 3331.4 |
| 17.5° | 3245.1 | 3269.3 | 3278.2 |
| 20°   | 3189.5 | 3220.1 | 3227.4 |
| 22.5° | 3133.0 | 3164.5 | 3173.3 |
| 25°   | 3071.7 | 3108.8 | 3117.7 |
| 27.5° | 3006.4 | 3050.7 | 3059.6 |
| 30°   | 2941.1 | 2989.5 | 2998.3 |
| 32.5° | 2870.9 | 2923.3 | 2931.4 |
| 35°   | 2797.5 | 2849.9 | 2859.6 |
| 37.5° | 2716.1 | 2773.3 | 2792.7 |
| 40°   | 2631.4 | 2693.5 | 2713.7 |
| 42.5° | 2542.7 | 2610.4 | 2631.4 |
| 45°   | 2447.5 | 2521.7 | 2545.9 |
| 47.5° | 2351.6 | 2435.4 | 2456.4 |
| 50°   | 2247.5 | 2337.1 | 2362.1 |
| 52.5° | 2138.7 | 2236.2 | 2261.2 |
| 55°   | 2025.8 | 2124.2 | 2151.6 |
| 57.5° | 1903.2 | 2004.8 | 2033.8 |
| 60°   | 1775.0 | 1876.6 | 1904.0 |
| 62.5° | 1643.5 | 1735.5 | 1762.1 |
| 65°   | 1496.7 | 1583.0 | 1607.2 |
| 67.5° | 1341.1 | 1420.1 | 1440.3 |
| 70°   | 1175.8 | 1244.3 | 1262.1 |
| 72.5° | 1003.2 | 1050.8 | 1074.2 |
| 75°   | 825.0  | 862.9  | 880.6  |
| 77.5° | 646.0  | 672.6  | 687.1  |
| 80°   | 471.0  | 486.3  | 498.4  |
| 82.5° | 308.1  | 314.5  | 323.4  |
| 85°   | 166.1  | 166.1  | 171.8  |
| 87.5° | 56.5   | 54.0   | 56.5   |
| 90°   | 0.0    | 0.0    | 0.0    |

(END OF REPORT)