

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: P835182

Luminaire Tested: **ORLG-24-2-INS-ASY2-LD4-4HI-27-120-EDD**

Issue Date: 5/16/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P835182  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 5/16/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: ORLG-24-2-INS-ASY2-LD4-4HI-27-120-EDD  
Description: 2FT x 2FT ORL LED LUMINAIRE WITH asymmetric/symmetric lens v2  
Light Source: 2700K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

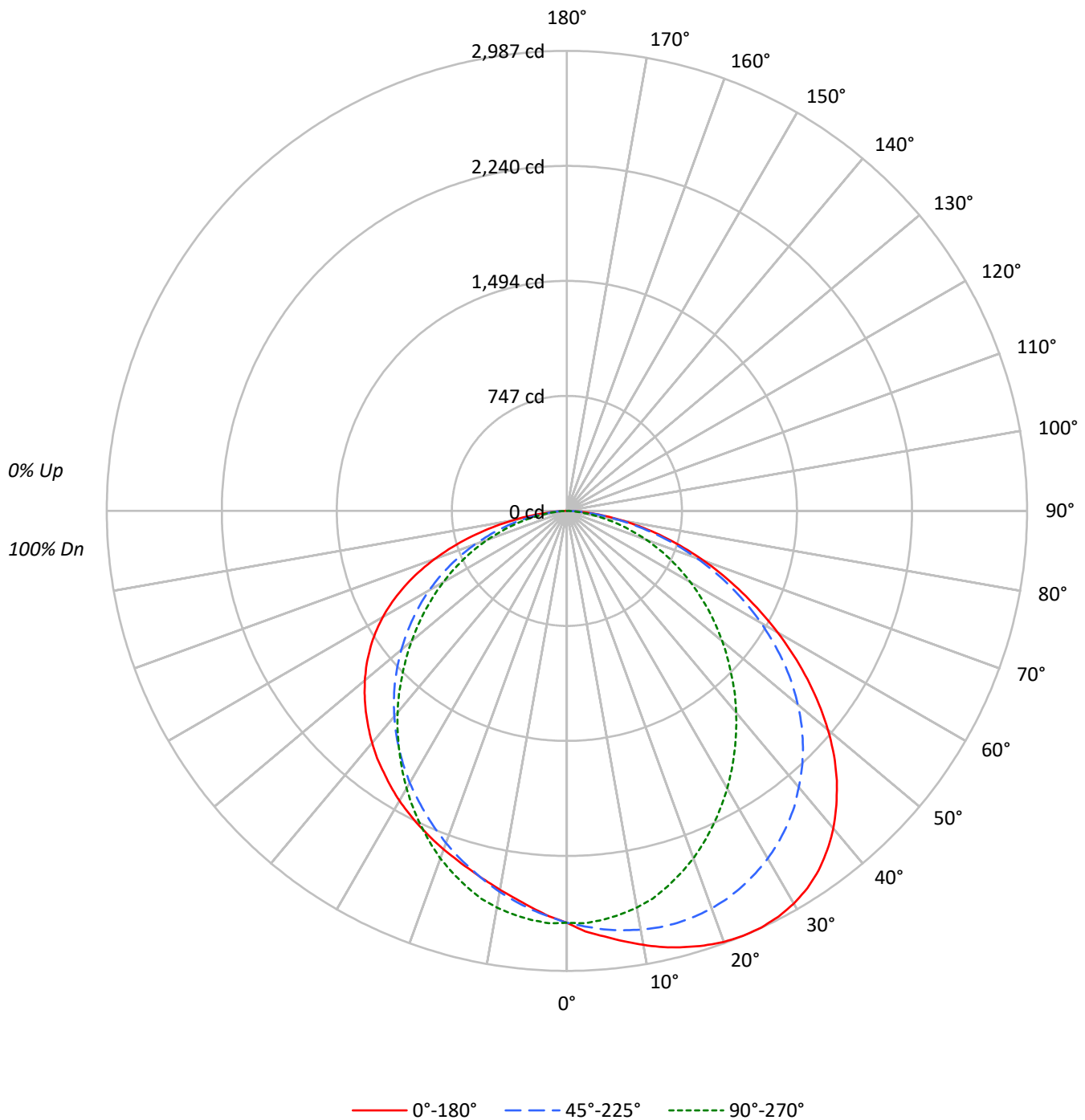
Lumens per Lamp: N/A  
Luminaire Lumens: 7865.6 lumens  
Efficiency: N/A  
Efficacy: 89.4 lumens/watt  
Spacing Criteria (0/90/45): 1.41 / 1.17 / 1.4  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 88  
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: P835182

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

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

|     | 0°   | 90°  | 180° |
|-----|------|------|------|
| 0°  | 7196 | 7196 | 7196 |
| 5°  | 7492 | 7199 | 6986 |
| 10° | 7819 | 7145 | 6824 |
| 15° | 8171 | 7031 | 6727 |
| 20° | 8528 | 6876 | 6698 |
| 25° | 8863 | 6676 | 6709 |
| 30° | 9152 | 6467 | 6752 |
| 35° | 9360 | 6236 | 6809 |
| 40° | 9455 | 6006 | 6909 |
| 45° | 9429 | 5752 | 7022 |
| 50° | 9262 | 5510 | 7167 |
| 55° | 8945 | 5256 | 7316 |
| 60° | 8509 | 4986 | 7427 |
| 65° | 7990 | 4682 | 7417 |
| 70° | 7436 | 4318 | 7197 |
| 75° | 6752 | 3792 | 6636 |
| 80° | 5797 | 3116 | 5597 |
| 85° | 4421 | 2130 | 3844 |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 253.6  | 3.2       |
| 10°-20°   | 732.4  | 9.3       |
| 20°-30°   | 1122.0 | 14.3      |
| 30°-40°   | 1369.3 | 17.4      |
| 40°-50°   | 1431.9 | 18.2      |
| 50°-60°   | 1296.0 | 16.5      |
| 60°-70°   | 981.5  | 12.5      |
| 70°-80°   | 547.0  | 7.0       |
| 80°-90°   | 131.9  | 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°    | 2108.0 | 26.8      |
| 0°-40°    | 3477.2 | 44.2      |
| 0°-60°    | 6205.2 | 78.9      |
| 0°-90°    | 7865.6 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 7865.6 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 45°  | 90°  | 135° | 180° | Flux |
|-----|------|------|------|------|------|------|
| 0°  | 2674 | 2674 | 2674 | 2674 | 2674 |      |
| 5°  | 2773 | 2727 | 2665 | 2600 | 2586 | 267  |
| 15° | 2933 | 2770 | 2524 | 2406 | 2414 | 832  |
| 25° | 2985 | 2692 | 2248 | 2169 | 2260 | 1377 |
| 35° | 2849 | 2492 | 1898 | 1896 | 2073 | 1779 |
| 45° | 2478 | 2167 | 1512 | 1578 | 1845 | 1906 |
| 55° | 1907 | 1721 | 1120 | 1219 | 1559 | 1701 |
| 65° | 1255 | 1180 | 735  | 836  | 1165 | 1245 |
| 75° | 649  | 613  | 365  | 435  | 638  | 689  |
| 85° | 143  | 126  | 69   | 92   | 124  | 172  |
| 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°    | 2674.0 | 2674.0 | 2674.0 | 2674.0 | 2674.0 | 2674.0 | 2674.0 | 2674.0 | 2674.0 | 2674.0 | 2674.0 |
| 2.5°  | 2733.0 | 2720.2 | 2709.6 | 2713.7 | 2716.1 | 2707.9 | 2700.9 | 2702.0 | 2695.0 | 2708.5 | 2676.9 |
| 5°    | 2773.4 | 2761.7 | 2749.4 | 2754.1 | 2749.4 | 2737.1 | 2727.2 | 2724.3 | 2705.6 | 2713.2 | 2681.0 |
| 7.5°  | 2818.4 | 2805.5 | 2787.4 | 2792.6 | 2782.7 | 2759.9 | 2747.1 | 2739.5 | 2710.8 | 2711.4 | 2675.7 |
| 10°   | 2861.6 | 2850.5 | 2826.0 | 2829.5 | 2811.3 | 2781.0 | 2760.5 | 2750.0 | 2709.6 | 2703.8 | 2667.0 |
| 12.5° | 2901.9 | 2886.7 | 2860.4 | 2862.2 | 2835.9 | 2795.6 | 2769.3 | 2754.1 | 2701.5 | 2683.9 | 2647.7 |
| 15°   | 2932.9 | 2918.3 | 2886.7 | 2886.2 | 2852.3 | 2799.7 | 2769.8 | 2748.8 | 2682.2 | 2654.7 | 2616.7 |
| 17.5° | 2959.2 | 2945.8 | 2906.6 | 2905.4 | 2864.5 | 2797.9 | 2762.2 | 2735.9 | 2654.1 | 2620.2 | 2578.1 |
| 20°   | 2977.9 | 2964.5 | 2920.6 | 2916.5 | 2867.5 | 2789.1 | 2746.5 | 2713.2 | 2617.3 | 2577.0 | 2530.2 |
| 22.5° | 2986.7 | 2973.2 | 2923.6 | 2917.7 | 2860.4 | 2771.6 | 2723.7 | 2684.5 | 2575.2 | 2522.6 | 2474.1 |
| 25°   | 2984.9 | 2972.1 | 2916.0 | 2910.1 | 2847.0 | 2745.3 | 2691.5 | 2646.5 | 2522.0 | 2460.1 | 2412.1 |
| 27.5° | 2970.3 | 2960.4 | 2901.4 | 2893.8 | 2822.4 | 2709.6 | 2652.4 | 2602.7 | 2463.0 | 2394.0 | 2342.0 |
| 30°   | 2945.2 | 2937.6 | 2875.1 | 2868.0 | 2792.1 | 2670.5 | 2606.8 | 2549.5 | 2399.3 | 2321.6 | 2268.9 |
| 32.5° | 2904.9 | 2897.8 | 2834.7 | 2828.3 | 2751.1 | 2620.2 | 2553.6 | 2494.6 | 2329.7 | 2243.8 | 2191.2 |
| 35°   | 2849.3 | 2845.2 | 2783.9 | 2776.9 | 2698.5 | 2562.9 | 2492.2 | 2427.3 | 2257.3 | 2160.2 | 2110.0 |
| 37.5° | 2776.3 | 2776.3 | 2717.2 | 2709.6 | 2633.1 | 2492.8 | 2423.2 | 2354.3 | 2175.4 | 2072.6 | 2022.9 |
| 40°   | 2691.5 | 2699.1 | 2638.9 | 2631.3 | 2557.1 | 2417.4 | 2341.4 | 2268.9 | 2087.2 | 1980.2 | 1931.7 |
| 42.5° | 2589.8 | 2596.8 | 2546.6 | 2539.6 | 2470.0 | 2330.3 | 2259.6 | 2180.7 | 1994.8 | 1886.1 | 1835.8 |
| 45°   | 2477.6 | 2487.0 | 2442.0 | 2436.7 | 2371.8 | 2235.0 | 2167.2 | 2087.2 | 1898.4 | 1787.9 | 1738.8 |
| 47.5° | 2352.5 | 2364.8 | 2325.6 | 2322.7 | 2262.5 | 2137.4 | 2066.7 | 1985.5 | 1797.3 | 1685.6 | 1639.5 |
| 50°   | 2212.3 | 2229.8 | 2197.6 | 2197.6 | 2143.9 | 2019.4 | 1958.0 | 1876.8 | 1692.1 | 1580.4 | 1534.8 |
| 52.5° | 2062.0 | 2084.3 | 2060.3 | 2060.9 | 2017.0 | 1905.4 | 1841.7 | 1762.2 | 1582.2 | 1472.3 | 1430.2 |
| 55°   | 1906.6 | 1928.2 | 1913.0 | 1915.3 | 1880.9 | 1779.2 | 1721.3 | 1642.4 | 1470.0 | 1363.0 | 1323.3 |
| 57.5° | 1744.1 | 1767.5 | 1757.5 | 1762.2 | 1738.2 | 1647.1 | 1586.9 | 1517.9 | 1354.2 | 1248.4 | 1214.5 |
| 60°   | 1581.0 | 1603.2 | 1598.0 | 1604.4 | 1589.2 | 1510.3 | 1455.4 | 1384.0 | 1237.9 | 1136.2 | 1106.4 |
| 62.5° | 1416.2 | 1436.6 | 1435.5 | 1442.5 | 1434.3 | 1368.8 | 1319.8 | 1259.0 | 1117.5 | 1024.0 | 996.5  |
| 65°   | 1254.9 | 1272.4 | 1271.2 | 1278.8 | 1277.1 | 1224.5 | 1180.1 | 1124.5 | 997.1  | 911.2  | 887.2  |
| 67.5° | 1098.2 | 1112.8 | 1108.8 | 1117.5 | 1119.9 | 1077.8 | 1039.2 | 989.5  | 882.6  | 799.0  | 778.5  |
| 70°   | 945.1  | 955.0  | 949.8  | 955.6  | 960.9  | 929.3  | 896.6  | 852.8  | 760.4  | 686.8  | 669.8  |
| 72.5° | 794.9  | 801.9  | 793.7  | 799.6  | 804.2  | 781.4  | 754.6  | 716.6  | 640.0  | 576.3  | 562.3  |
| 75°   | 649.4  | 659.3  | 642.3  | 648.2  | 651.7  | 628.9  | 613.1  | 582.1  | 516.1  | 467.0  | 457.6  |
| 77.5° | 508.5  | 514.3  | 505.0  | 502.7  | 505.0  | 488.6  | 476.4  | 452.4  | 402.7  | 362.4  | 356.5  |
| 80°   | 374.1  | 377.6  | 368.2  | 365.9  | 367.6  | 355.9  | 346.6  | 329.1  | 294.0  | 263.6  | 261.3  |
| 82.5° | 250.7  | 252.5  | 244.3  | 242.0  | 243.1  | 239.6  | 228.5  | 216.3  | 199.9  | 174.2  | 173.6  |
| 85°   | 143.2  | 143.2  | 137.4  | 135.0  | 136.2  | 130.3  | 126.2  | 119.8  | 113.4  | 95.9   | 97.0   |
| 87.5° | 52.6   | 52.6   | 49.7   | 49.1   | 54.9   | 48.5   | 46.8   | 43.8   | 45.6   | 36.2   | 38.6   |
| 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):**

|       | 80°    | 90°    | 100°   | 110°   | 112.5° | 120°   | 130°   | 135°   | 140°   | 150°   | 157.5° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 2674.0 | 2674.0 | 2674.0 | 2674.0 | 2674.0 | 2674.0 | 2674.0 | 2674.0 | 2674.0 | 2674.0 | 2674.0 |
| 2.5°  | 2685.7 | 2679.8 | 2674.6 | 2656.5 | 2664.1 | 2645.4 | 2644.2 | 2637.2 | 2631.9 | 2622.0 | 2634.8 |
| 5°    | 2676.9 | 2665.2 | 2650.0 | 2628.4 | 2634.8 | 2612.6 | 2607.9 | 2599.8 | 2592.7 | 2579.9 | 2589.8 |
| 7.5°  | 2662.9 | 2643.6 | 2619.6 | 2592.2 | 2600.9 | 2573.5 | 2566.4 | 2557.7 | 2551.8 | 2536.6 | 2545.4 |
| 10°   | 2642.4 | 2615.0 | 2586.9 | 2553.6 | 2560.0 | 2530.2 | 2521.4 | 2512.1 | 2506.8 | 2493.4 | 2502.2 |
| 12.5° | 2610.9 | 2577.6 | 2539.6 | 2503.3 | 2510.3 | 2482.3 | 2470.6 | 2460.7 | 2458.9 | 2447.8 | 2458.3 |
| 15°   | 2570.0 | 2523.8 | 2484.6 | 2446.0 | 2454.2 | 2421.5 | 2416.2 | 2406.3 | 2409.2 | 2401.6 | 2414.5 |
| 17.5° | 2517.9 | 2464.7 | 2422.1 | 2380.6 | 2388.8 | 2361.3 | 2357.2 | 2352.5 | 2355.5 | 2354.3 | 2368.3 |
| 20°   | 2459.5 | 2401.0 | 2351.9 | 2311.0 | 2315.7 | 2294.1 | 2295.8 | 2294.7 | 2300.5 | 2306.9 | 2326.2 |
| 22.5° | 2393.4 | 2327.4 | 2276.0 | 2233.9 | 2240.9 | 2222.2 | 2230.4 | 2232.7 | 2242.6 | 2257.3 | 2281.8 |
| 25°   | 2319.2 | 2248.5 | 2194.7 | 2155.0 | 2161.4 | 2149.1 | 2163.2 | 2169.0 | 2184.8 | 2209.3 | 2234.5 |
| 27.5° | 2241.5 | 2166.7 | 2109.4 | 2071.4 | 2083.7 | 2071.4 | 2092.4 | 2104.1 | 2128.1 | 2155.0 | 2186.0 |
| 30°   | 2159.1 | 2081.3 | 2022.3 | 1988.4 | 2000.1 | 1989.0 | 2022.9 | 2038.7 | 2062.6 | 2099.4 | 2136.3 |
| 32.5° | 2072.6 | 1990.7 | 1932.9 | 1906.6 | 1914.8 | 1913.0 | 1951.0 | 1968.5 | 2000.7 | 2042.8 | 2081.9 |
| 35°   | 1983.7 | 1898.4 | 1839.9 | 1817.7 | 1827.7 | 1830.0 | 1875.6 | 1896.0 | 1931.1 | 1982.0 | 2024.1 |
| 37.5° | 1892.0 | 1804.9 | 1747.6 | 1729.5 | 1738.2 | 1747.0 | 1800.2 | 1820.7 | 1860.4 | 1915.9 | 1962.1 |
| 40°   | 1796.7 | 1709.6 | 1653.5 | 1638.9 | 1647.6 | 1657.0 | 1714.9 | 1742.9 | 1786.2 | 1846.4 | 1896.6 |
| 42.5° | 1700.2 | 1613.2 | 1558.8 | 1548.3 | 1557.1 | 1575.2 | 1636.5 | 1662.8 | 1708.4 | 1775.1 | 1830.6 |
| 45°   | 1602.1 | 1511.5 | 1464.1 | 1455.9 | 1465.3 | 1486.3 | 1546.5 | 1578.1 | 1626.6 | 1699.7 | 1759.3 |
| 47.5° | 1502.7 | 1414.4 | 1369.4 | 1364.2 | 1373.5 | 1396.9 | 1463.5 | 1492.2 | 1543.6 | 1621.3 | 1685.6 |
| 50°   | 1402.2 | 1316.2 | 1273.0 | 1271.2 | 1280.0 | 1305.1 | 1368.8 | 1402.7 | 1455.9 | 1543.0 | 1609.1 |
| 52.5° | 1300.5 | 1218.1 | 1178.9 | 1178.9 | 1187.1 | 1212.8 | 1277.1 | 1312.2 | 1367.1 | 1458.9 | 1531.9 |
| 55°   | 1198.8 | 1120.4 | 1083.0 | 1086.0 | 1097.7 | 1119.9 | 1182.4 | 1219.2 | 1274.7 | 1370.0 | 1447.2 |
| 57.5° | 1097.1 | 1022.8 | 988.9  | 993.0  | 1004.1 | 1026.3 | 1087.7 | 1129.2 | 1179.5 | 1278.3 | 1357.2 |
| 60°   | 996.5  | 926.4  | 896.6  | 901.3  | 911.2  | 933.4  | 997.1  | 1032.8 | 1083.0 | 1183.6 | 1262.5 |
| 62.5° | 894.8  | 831.1  | 803.1  | 808.9  | 817.7  | 839.9  | 900.1  | 934.6  | 984.3  | 1083.0 | 1162.5 |
| 65°   | 794.3  | 735.3  | 711.3  | 717.2  | 725.3  | 745.8  | 802.5  | 835.8  | 883.1  | 979.6  | 1055.6 |
| 67.5° | 694.9  | 641.2  | 621.3  | 627.1  | 633.6  | 652.9  | 699.6  | 735.9  | 780.3  | 872.0  | 943.9  |
| 70°   | 596.8  | 548.8  | 531.3  | 537.1  | 543.0  | 560.5  | 601.4  | 634.7  | 675.7  | 759.8  | 826.5  |
| 72.5° | 499.7  | 453.0  | 444.2  | 449.5  | 454.1  | 469.3  | 508.5  | 534.8  | 570.5  | 645.3  | 702.5  |
| 75°   | 405.0  | 364.7  | 358.9  | 364.1  | 368.2  | 379.9  | 412.6  | 435.4  | 465.2  | 530.1  | 576.9  |
| 77.5° | 313.9  | 280.0  | 277.6  | 281.7  | 285.8  | 294.0  | 319.7  | 343.7  | 367.1  | 415.0  | 456.5  |
| 80°   | 228.5  | 201.1  | 201.1  | 205.2  | 204.0  | 213.9  | 232.0  | 251.3  | 268.3  | 302.8  | 333.2  |
| 82.5° | 150.8  | 129.2  | 132.1  | 135.0  | 136.8  | 140.9  | 152.0  | 166.6  | 177.1  | 198.1  | 218.0  |
| 85°   | 83.6   | 69.0   | 71.9   | 74.2   | 73.1   | 77.7   | 83.6   | 92.3   | 97.6   | 107.5  | 118.1  |
| 87.5° | 31.0   | 25.7   | 26.3   | 28.1   | 29.2   | 31.6   | 31.6   | 36.8   | 37.4   | 38.6   | 40.9   |
| 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°    | 2674.0 | 2674.0 | 2674.0 |
| 2.5°  | 2610.3 | 2624.3 | 2634.8 |
| 5°    | 2565.3 | 2577.0 | 2586.3 |
| 7.5°  | 2521.4 | 2532.0 | 2540.1 |
| 10°   | 2479.9 | 2491.6 | 2497.5 |
| 12.5° | 2437.3 | 2450.7 | 2455.4 |
| 15°   | 2395.2 | 2408.6 | 2414.5 |
| 17.5° | 2351.9 | 2369.5 | 2375.9 |
| 20°   | 2311.6 | 2333.8 | 2339.1 |
| 22.5° | 2270.7 | 2293.5 | 2299.9 |
| 25°   | 2226.3 | 2253.2 | 2259.6 |
| 27.5° | 2178.9 | 2211.1 | 2217.5 |
| 30°   | 2131.6 | 2166.7 | 2173.1 |
| 32.5° | 2080.7 | 2118.7 | 2124.6 |
| 35°   | 2027.6 | 2065.5 | 2072.6 |
| 37.5° | 1968.5 | 2010.0 | 2024.1 |
| 40°   | 1907.2 | 1952.2 | 1966.8 |
| 42.5° | 1842.9 | 1892.0 | 1907.2 |
| 45°   | 1773.9 | 1827.7 | 1845.2 |
| 47.5° | 1704.3 | 1765.1 | 1780.3 |
| 50°   | 1628.9 | 1693.8 | 1711.9 |
| 52.5° | 1550.0 | 1620.8 | 1638.9 |
| 55°   | 1468.2 | 1539.5 | 1559.4 |
| 57.5° | 1379.4 | 1453.0 | 1474.1 |
| 60°   | 1286.4 | 1360.1 | 1380.0 |
| 62.5° | 1191.2 | 1257.8 | 1277.1 |
| 65°   | 1084.8 | 1147.3 | 1164.9 |
| 67.5° | 972.0  | 1029.3 | 1043.9 |
| 70°   | 852.2  | 901.9  | 914.7  |
| 72.5° | 727.1  | 761.6  | 778.5  |
| 75°   | 597.9  | 625.4  | 638.3  |
| 77.5° | 468.2  | 487.5  | 498.0  |
| 80°   | 341.3  | 352.4  | 361.2  |
| 82.5° | 223.3  | 227.9  | 234.4  |
| 85°   | 120.4  | 120.4  | 124.5  |
| 87.5° | 40.9   | 39.2   | 40.9   |
| 90°   | 0.0    | 0.0    | 0.0    |

(END OF REPORT)