

Scaled data based on original data using  
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: IRiS

Report Number: P1340521

Luminaire Tested: P3A09R209830DE010 E3CA301MW

Issue Date: 2/13/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1340521  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-60)  
Test Lab: INNOVATION CENTER  
Issue Date: 2/13/2026  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: IRiS  
Catalog Number: P3A09R209830DE010 E3CA301MW  
Description: 3in Adjustable LED luminaire with, R20 optic, 3000K CCT AND, 98CRI , E3CA301MW TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

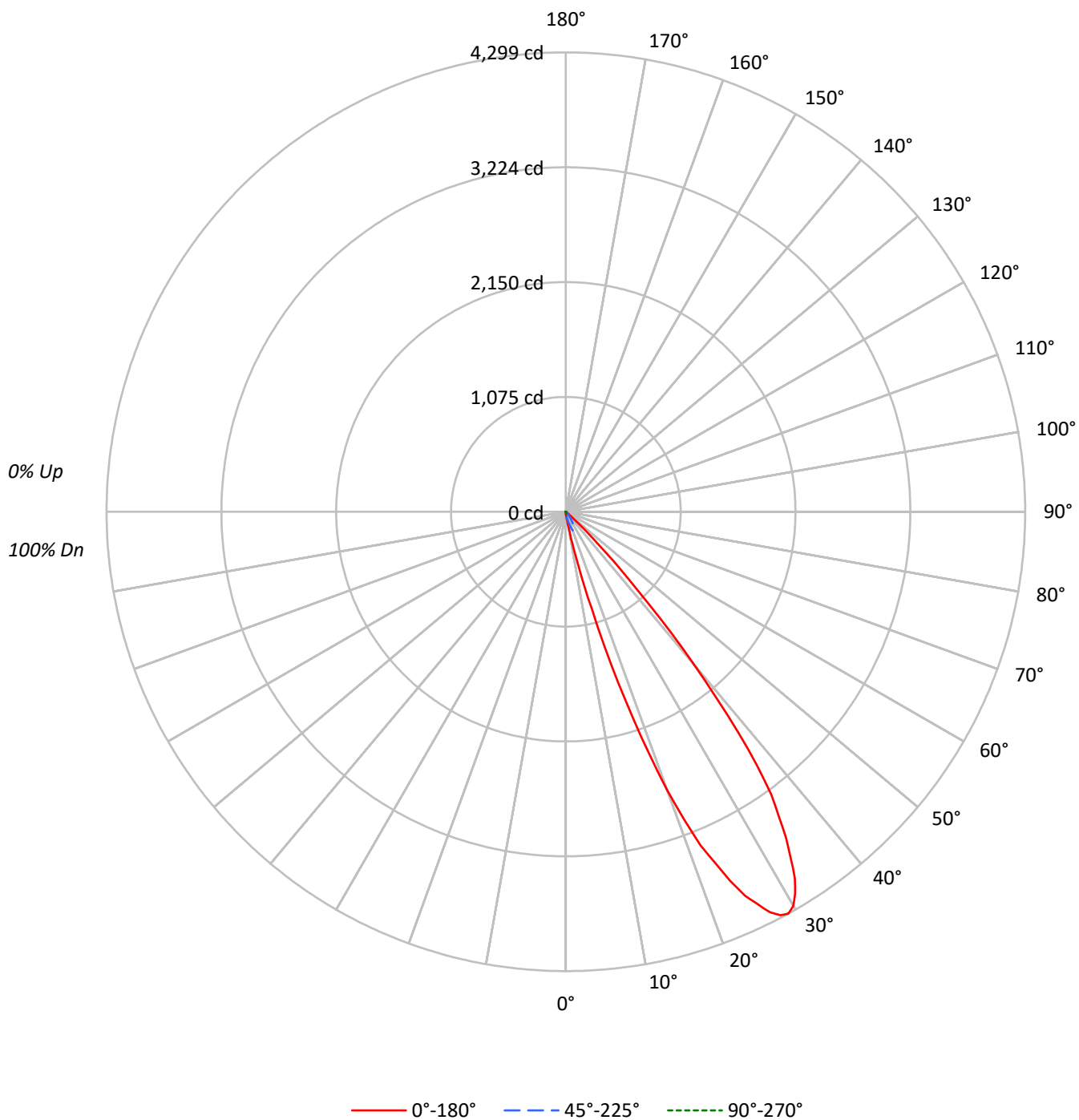
Lumens per Lamp: N/A  
Luminaire Lumens: 602.9 lumens  
Efficiency: N/A  
Efficacy: 54.8 lumens/watt  
Spacing Criteria (0/90/45): 2.29 / 0.53 / 1.19  
Luminous Opening: Circular (Dia: 0.25' x H: 0')  
CIE Type: Direct

Input Watts (W): 11  
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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### Luminous Intensity Polar Plot



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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   | 113 | 109 | 107 | 104 | 110 | 107 | 105 | 102 | 103 | 101 | 99  |  | 99  | 98  | 96  |  | 96  |
| 2   | 106 | 100 | 96  | 92  | 104 | 99  | 94  | 91  | 95  | 92  | 89  |  | 92  | 89  | 87  |  | 89  |
| 3   | 99  | 92  | 86  | 81  | 97  | 90  | 85  | 81  | 88  | 83  | 79  |  | 85  | 81  | 78  |  | 83  |
| 4   | 93  | 84  | 78  | 73  | 91  | 83  | 77  | 72  | 81  | 76  | 71  |  | 79  | 74  | 71  |  | 77  |
| 5   | 87  | 77  | 70  | 65  | 85  | 76  | 70  | 65  | 74  | 69  | 64  |  | 72  | 68  | 64  |  | 71  |
| 6   | 81  | 71  | 64  | 59  | 80  | 70  | 63  | 58  | 68  | 62  | 58  |  | 67  | 62  | 58  |  | 65  |
| 7   | 76  | 65  | 58  | 53  | 74  | 64  | 57  | 53  | 63  | 57  | 52  |  | 62  | 56  | 52  |  | 60  |
| 8   | 71  | 60  | 53  | 48  | 70  | 59  | 52  | 48  | 58  | 52  | 47  |  | 57  | 51  | 47  |  | 56  |
| 9   | 66  | 55  | 48  | 43  | 65  | 54  | 48  | 43  | 53  | 47  | 43  |  | 52  | 47  | 43  |  | 51  |
| 10  | 62  | 51  | 44  | 39  | 61  | 50  | 44  | 39  | 49  | 43  | 39  |  | 48  | 43  | 39  |  | 48  |

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

|     | 0°      | 45°   | 90°  | 135° | 180° |
|-----|---------|-------|------|------|------|
| 0°  | 4561    | 4561  | 4561 | 4561 | 4561 |
| 5°  | 10478   | 7836  | 4336 | 2641 | 2289 |
| 10° | 33021   | 13649 | 3540 | 1470 | 1091 |
| 15° | 213849  | 25221 | 2611 | 499  | 114  |
| 20° | 645456  | 43147 | 1797 | 0    | 0    |
| 25° | 958555  | 43551 | 1065 | 0    | 0    |
| 30° | 1077963 | 33094 | 405  | 0    | 0    |
| 35° | 930070  | 19782 | 294  | 0    | 0    |
| 40° | 535575  | 6727  | 0    | 0    | 0    |
| 45° | 130618  | 2729  | 155  | 0    | 155  |
| 50° | 15692   | 751   | 171  | 171  | 546  |
| 55° | 2103    | 0     | 421  | 421  | 841  |
| 60° | 219     | 0     | 702  | 702  | 1184 |
| 65° | 259     | 259   | 1141 | 1141 | 1712 |
| 70° | 321     | 321   | 1410 | 1410 | 1731 |
| 75° | 0       | 424   | 1864 | 1356 | 1864 |
| 80° | 0       | 631   | 2020 | 1389 | 2020 |
| 85° | 0       | 1258  | 4026 | 1258 | 1258 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 2.5°

Vertical Angle: 45°

Luminance: 131487 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 2.8    | 0.5       |
| 10°-20°   | 55.9   | 9.3       |
| 20°-30°   | 243.6  | 40.4      |
| 30°-40°   | 245.3  | 40.7      |
| 40°-50°   | 49.2   | 8.2       |
| 50°-60°   | 2.5    | 0.4       |
| 60°-70°   | 1.6    | 0.3       |
| 70°-80°   | 1.4    | 0.2       |
| 80°-90°   | 0.7    | 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°-30°    | 302.2  | 50.1      |
| 0°-40°    | 547.5  | 90.8      |
| 0°-60°    | 599.2  | 99.4      |
| 0°-90°    | 602.9  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 602.9  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 45° | 90° | 135° | 180° | Flux |
|-----|------|-----|-----|------|------|------|
| 0°  | 21   | 21  | 21  | 21   | 21   |      |
| 5°  | 48   | 36  | 20  | 12   | 10   | 7    |
| 15° | 942  | 111 | 12  | 2    | 0    | 369  |
| 25° | 3962 | 180 | 4   | 0    | 0    | 1786 |
| 35° | 3474 | 74  | 1   | 0    | 0    | 2067 |
| 45° | 421  | 9   | 0   | 0    | 0    | 459  |
| 55° | 6    | 0   | 1   | 1    | 2    | 10   |
| 65° | 0    | 0   | 2   | 2    | 3    | 0    |
| 75° | 0    | 0   | 2   | 2    | 2    | 0    |
| 85° | 0    | 0   | 2   | 0    | 0    | 0    |
| 90° | 0    | 0   | 0   | 0    | 0    |      |

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 2.5°   | 5°     | 7.5°   | 10°    | 12.5°  | 15°    | 17.5°  | 20°    | 22.5°  | 45°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|
| 0°    | 20.8   | 20.8   | 20.8   | 20.8   | 20.8   | 20.8   | 20.8   | 20.8   | 20.8   | 20.8   | 20.8  |
| 2.5°  | 31.2   | 31.2   | 30.6   | 30.6   | 30.1   | 30.6   | 29.5   | 30.1   | 30.1   | 29.5   | 26.8  |
| 5°    | 47.6   | 48.7   | 48.1   | 48.1   | 47.6   | 48.1   | 47.0   | 46.0   | 44.9   | 44.9   | 35.6  |
| 7.5°  | 78.2   | 77.7   | 76.6   | 77.1   | 75.5   | 74.4   | 73.3   | 72.8   | 69.5   | 67.8   | 46.5  |
| 10°   | 148.3  | 151.5  | 148.8  | 148.3  | 138.4  | 137.9  | 131.3  | 122.0  | 113.8  | 109.4  | 61.3  |
| 12.5° | 408.1  | 425.6  | 398.3  | 385.1  | 377.5  | 347.9  | 335.4  | 303.1  | 271.9  | 248.4  | 77.7  |
| 15°   | 942.0  | 985.3  | 930.0  | 933.8  | 887.9  | 803.6  | 729.8  | 666.3  | 591.4  | 515.9  | 111.1 |
| 17.5° | 1845.8 | 1810.8 | 1780.7 | 1729.8 | 1636.3 | 1512.6 | 1353.4 | 1192.1 | 1052.6 | 906.5  | 154.8 |
| 20°   | 2766.0 | 2734.8 | 2666.4 | 2555.3 | 2436.1 | 2252.8 | 2063.5 | 1821.2 | 1586.5 | 1366.6 | 184.9 |
| 21°   | 3082.7 | 3072.3 | 2960.2 | 2891.8 | 2708.0 | 2532.9 | 2314.6 | 2055.3 | 1791.1 | 1530.7 | 189.8 |
| 22°   | 3365.5 | 3303.2 | 3243.0 | 3141.8 | 2959.1 | 2768.7 | 2525.8 | 2252.8 | 1966.1 | 1676.8 | 190.4 |
| 23°   | 3561.4 | 3532.9 | 3476.0 | 3361.7 | 3180.1 | 2956.3 | 2700.3 | 2414.7 | 2112.8 | 1780.1 | 188.7 |
| 24°   | 3778.0 | 3741.9 | 3658.8 | 3525.3 | 3342.0 | 3121.0 | 2828.9 | 2545.5 | 2217.3 | 1867.1 | 184.4 |
| 25°   | 3961.8 | 3905.5 | 3807.0 | 3663.1 | 3462.9 | 3234.8 | 2941.0 | 2629.7 | 2290.0 | 1925.7 | 180.0 |
| 26°   | 4081.1 | 4050.5 | 3924.1 | 3767.6 | 3553.2 | 3317.9 | 3018.2 | 2694.3 | 2337.1 | 1952.5 | 172.9 |
| 27°   | 4205.3 | 4148.9 | 4024.7 | 3844.8 | 3612.3 | 3372.1 | 3061.9 | 2725.5 | 2353.5 | 1953.6 | 164.1 |
| 28°   | 4276.4 | 4215.1 | 4074.5 | 3885.2 | 3650.6 | 3402.2 | 3087.1 | 2735.3 | 2350.2 | 1936.6 | 153.7 |
| 29°   | 4298.8 | 4221.7 | 4084.4 | 3891.8 | 3659.9 | 3404.4 | 3083.3 | 2721.1 | 2321.2 | 1895.0 | 141.7 |
| 30°   | 4257.3 | 4178.5 | 4048.3 | 3860.6 | 3630.3 | 3377.0 | 3047.7 | 2674.0 | 2269.8 | 1835.4 | 130.7 |
| 31°   | 4166.4 | 4099.7 | 3973.9 | 3785.7 | 3564.7 | 3313.0 | 2967.3 | 2596.9 | 2182.2 | 1755.5 | 118.2 |
| 32°   | 4046.6 | 3981.0 | 3857.3 | 3687.2 | 3462.4 | 3208.5 | 2857.3 | 2476.6 | 2079.4 | 1636.3 | 105.6 |
| 33°   | 3866.6 | 3828.9 | 3717.8 | 3555.4 | 3330.5 | 3059.2 | 2709.6 | 2332.7 | 1932.8 | 1503.9 | 94.6  |
| 34°   | 3684.5 | 3636.9 | 3559.2 | 3381.4 | 3139.6 | 2868.8 | 2517.0 | 2134.1 | 1753.9 | 1355.6 | 84.2  |
| 35°   | 3474.4 | 3446.0 | 3324.0 | 3181.7 | 2938.8 | 2662.0 | 2312.4 | 1941.0 | 1545.5 | 1190.4 | 73.9  |
| 36°   | 3270.9 | 3227.1 | 3088.2 | 2937.7 | 2701.9 | 2402.7 | 2057.5 | 1708.5 | 1365.5 | 1035.6 | 62.9  |
| 37°   | 2975.5 | 2908.7 | 2809.7 | 2651.1 | 2375.4 | 2120.4 | 1805.3 | 1481.4 | 1143.9 | 868.2  | 50.9  |
| 38°   | 2628.1 | 2596.9 | 2459.6 | 2299.9 | 2071.7 | 1829.9 | 1518.1 | 1243.5 | 943.7  | 724.9  | 38.8  |
| 39°   | 2218.3 | 2217.8 | 2086.5 | 1971.1 | 1747.9 | 1530.1 | 1248.9 | 1009.3 | 779.0  | 583.7  | 30.1  |
| 40°   | 1871.0 | 1806.4 | 1725.4 | 1580.5 | 1409.2 | 1224.3 | 978.2  | 790.0  | 604.5  | 470.5  | 23.5  |
| 42.5° | 980.9  | 975.4  | 927.8  | 819.0  | 723.2  | 614.4  | 488.5  | 407.0  | 318.4  | 259.3  | 14.8  |
| 45°   | 421.2  | 424.0  | 391.2  | 374.7  | 337.5  | 292.1  | 246.7  | 205.7  | 176.2  | 142.8  | 8.8   |
| 47.5° | 106.7  | 102.3  | 101.2  | 105.0  | 105.0  | 101.8  | 91.4   | 85.9   | 79.3   | 72.8   | 4.9   |
| 50°   | 46.0   | 44.9   | 43.8   | 43.8   | 41.0   | 39.4   | 36.7   | 33.4   | 30.6   | 27.4   | 2.2   |
| 52.5° | 17.0   | 17.5   | 18.1   | 17.5   | 17.5   | 17.0   | 17.0   | 16.4   | 14.8   | 13.1   | 1.1   |
| 55°   | 5.5    | 5.5    | 5.5    | 6.0    | 6.0    | 6.6    | 6.6    | 6.6    | 6.6    | 6.0    | 0.0   |
| 57.5° | 1.1    | 1.1    | 1.6    | 1.6    | 1.6    | 1.6    | 1.6    | 1.6    | 2.2    | 2.2    | 0.0   |
| 60°   | 0.5    | 0.5    | 0.5    | 0.5    | 0.5    | 0.5    | 0.5    | 0.0    | 0.0    | 0.0    | 0.0   |
| 62.5° | 0.5    | 0.5    | 0.5    | 0.5    | 0.5    | 0.5    | 0.5    | 0.5    | 0.5    | 0.5    | 0.5   |
| 65°   | 0.5    | 0.5    | 0.5    | 0.5    | 0.5    | 0.5    | 0.5    | 0.5    | 0.5    | 0.5    | 0.5   |
| 67.5° | 0.5    | 0.5    | 0.5    | 0.5    | 0.5    | 0.5    | 0.5    | 0.5    | 0.5    | 0.5    | 0.5   |
| 70°   | 0.5    | 0.5    | 0.5    | 0.5    | 0.5    | 0.5    | 0.5    | 0.5    | 0.5    | 0.5    | 0.5   |
| 72.5° | 0.5    | 0.0    | 0.5    | 0.5    | 0.5    | 0.5    | 0.5    | 0.5    | 0.5    | 0.5    | 0.5   |
| 75°   | 0.0    | 0.0    | 0.0    | 0.5    | 0.0    | 0.5    | 0.5    | 0.0    | 0.5    | 0.5    | 0.5   |
| 77.5° | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.5    | 0.5   |
| 80°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.5   |



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**CANDELA DISTRIBUTION (continued):**

|       | 0°  | 2.5° | 5°  | 7.5° | 10° | 12.5° | 15° | 17.5° | 20° | 22.5° | 45° |
|-------|-----|------|-----|------|-----|-------|-----|-------|-----|-------|-----|
| 82.5° | 0.0 | 0.0  | 0.0 | 0.0  | 0.0 | 0.0   | 0.0 | 0.0   | 0.0 | 0.0   | 0.5 |
| 85°   | 0.0 | 0.0  | 0.0 | 0.0  | 0.0 | 0.0   | 0.0 | 0.0   | 0.0 | 0.0   | 0.5 |
| 87.5° | 0.0 | 0.0  | 0.0 | 0.0  | 0.0 | 0.0   | 0.0 | 0.0   | 0.0 | 0.0   | 0.5 |
| 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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CATALOG NUMBER: P3A09R209830DE010 E3CA301MW

**CANDELA DISTRIBUTION (continued):**

|       | 67.5° | 90°  | 112.5° | 135° | 157.5° | 180° |
|-------|-------|------|--------|------|--------|------|
| 0°    | 20.8  | 20.8 | 20.8   | 20.8 | 20.8   | 20.8 |
| 2.5°  | 24.1  | 21.3 | 18.1   | 15.3 | 14.8   | 14.2 |
| 5°    | 26.8  | 19.7 | 14.8   | 12.0 | 10.9   | 10.4 |
| 7.5°  | 29.0  | 18.1 | 12.0   | 8.8  | 7.7    | 7.1  |
| 10°   | 30.1  | 15.9 | 9.8    | 6.6  | 4.9    | 4.9  |
| 12.5° | 30.6  | 13.7 | 7.1    | 4.4  | 2.7    | 2.7  |
| 15°   | 30.1  | 11.5 | 5.5    | 2.2  | 0.5    | 0.5  |
| 17.5° | 27.4  | 9.3  | 3.3    | 0.5  | 0.0    | 0.0  |
| 20°   | 23.5  | 7.7  | 2.2    | 0.0  | 0.0    | 0.0  |
| 21°   | 22.4  | 6.6  | 1.6    | 0.0  | 0.0    | 0.0  |
| 22°   | 20.8  | 6.0  | 1.1    | 0.0  | 0.0    | 0.0  |
| 23°   | 19.1  | 5.5  | 1.1    | 0.0  | 0.0    | 0.0  |
| 24°   | 17.5  | 4.9  | 0.5    | 0.0  | 0.0    | 0.0  |
| 25°   | 16.4  | 4.4  | 0.5    | 0.0  | 0.0    | 0.0  |
| 26°   | 15.3  | 3.8  | 0.5    | 0.0  | 0.0    | 0.0  |
| 27°   | 13.7  | 3.3  | 0.0    | 0.0  | 0.0    | 0.0  |
| 28°   | 12.6  | 2.7  | 0.0    | 0.0  | 0.0    | 0.0  |
| 29°   | 10.9  | 2.2  | 0.0    | 0.0  | 0.0    | 0.0  |
| 30°   | 9.3   | 1.6  | 0.0    | 0.0  | 0.0    | 0.0  |
| 31°   | 7.7   | 1.6  | 0.0    | 0.0  | 0.0    | 0.0  |
| 32°   | 6.6   | 1.1  | 0.0    | 0.0  | 0.0    | 0.0  |
| 33°   | 5.5   | 1.1  | 0.0    | 0.0  | 0.0    | 0.0  |
| 34°   | 4.9   | 1.1  | 0.0    | 0.0  | 0.0    | 0.0  |
| 35°   | 4.4   | 1.1  | 0.0    | 0.0  | 0.0    | 0.0  |
| 36°   | 3.3   | 0.5  | 0.0    | 0.0  | 0.0    | 0.0  |
| 37°   | 2.7   | 0.5  | 0.0    | 0.0  | 0.0    | 0.0  |
| 38°   | 2.2   | 0.5  | 0.0    | 0.0  | 0.0    | 0.0  |
| 39°   | 1.6   | 0.0  | 0.0    | 0.0  | 0.0    | 0.0  |
| 40°   | 1.6   | 0.0  | 0.0    | 0.0  | 0.0    | 0.0  |
| 42.5° | 0.5   | 0.0  | 0.0    | 0.0  | 0.0    | 0.0  |
| 45°   | 0.0   | 0.5  | 0.0    | 0.0  | 0.5    | 0.5  |
| 47.5° | 0.0   | 0.5  | 0.0    | 0.0  | 0.5    | 1.1  |
| 50°   | 0.0   | 0.5  | 0.5    | 0.5  | 1.1    | 1.6  |
| 52.5° | 0.0   | 1.1  | 0.5    | 0.5  | 1.6    | 1.6  |
| 55°   | 0.5   | 1.1  | 0.5    | 1.1  | 2.2    | 2.2  |
| 57.5° | 0.5   | 1.1  | 1.1    | 1.6  | 2.2    | 2.7  |
| 60°   | 1.1   | 1.6  | 1.6    | 1.6  | 2.7    | 2.7  |
| 62.5° | 1.1   | 1.6  | 2.2    | 2.2  | 2.7    | 3.3  |
| 65°   | 1.1   | 2.2  | 2.2    | 2.2  | 2.7    | 3.3  |
| 67.5° | 1.6   | 2.2  | 2.2    | 2.2  | 2.7    | 3.3  |
| 70°   | 1.6   | 2.2  | 2.2    | 2.2  | 2.7    | 2.7  |
| 72.5° | 1.6   | 2.2  | 1.6    | 2.2  | 2.2    | 2.7  |
| 75°   | 1.6   | 2.2  | 1.6    | 1.6  | 2.2    | 2.2  |
| 77.5° | 1.1   | 1.6  | 1.6    | 1.1  | 1.6    | 1.6  |
| 80°   | 1.1   | 1.6  | 1.1    | 1.1  | 1.6    | 1.6  |



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**CANDELA DISTRIBUTION (continued):**

|       | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° |
|-------|-------|-----|--------|------|--------|------|
| 82.5° | 1.1   | 1.6 | 1.1    | 0.5  | 1.1    | 1.1  |
| 85°   | 1.1   | 1.6 | 1.1    | 0.5  | 0.5    | 0.5  |
| 87.5° | 1.1   | 1.6 | 1.1    | 0.5  | 0.0    | 0.5  |
| 90°   | 0.0   | 0.0 | 0.0    | 0.0  | 0.0    | 0.0  |

(END OF REPORT)