

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: P1344051

Luminaire Tested: P3A13R209827DE010 E3CA301MW

Issue Date: 2/13/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1344051  
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: P3A13R209827DE010 E3CA301MW  
Description: 3in Adjustable LED luminaire with, R20 optic, 2700K CCT AND, 98CRI , E3CA301MW TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

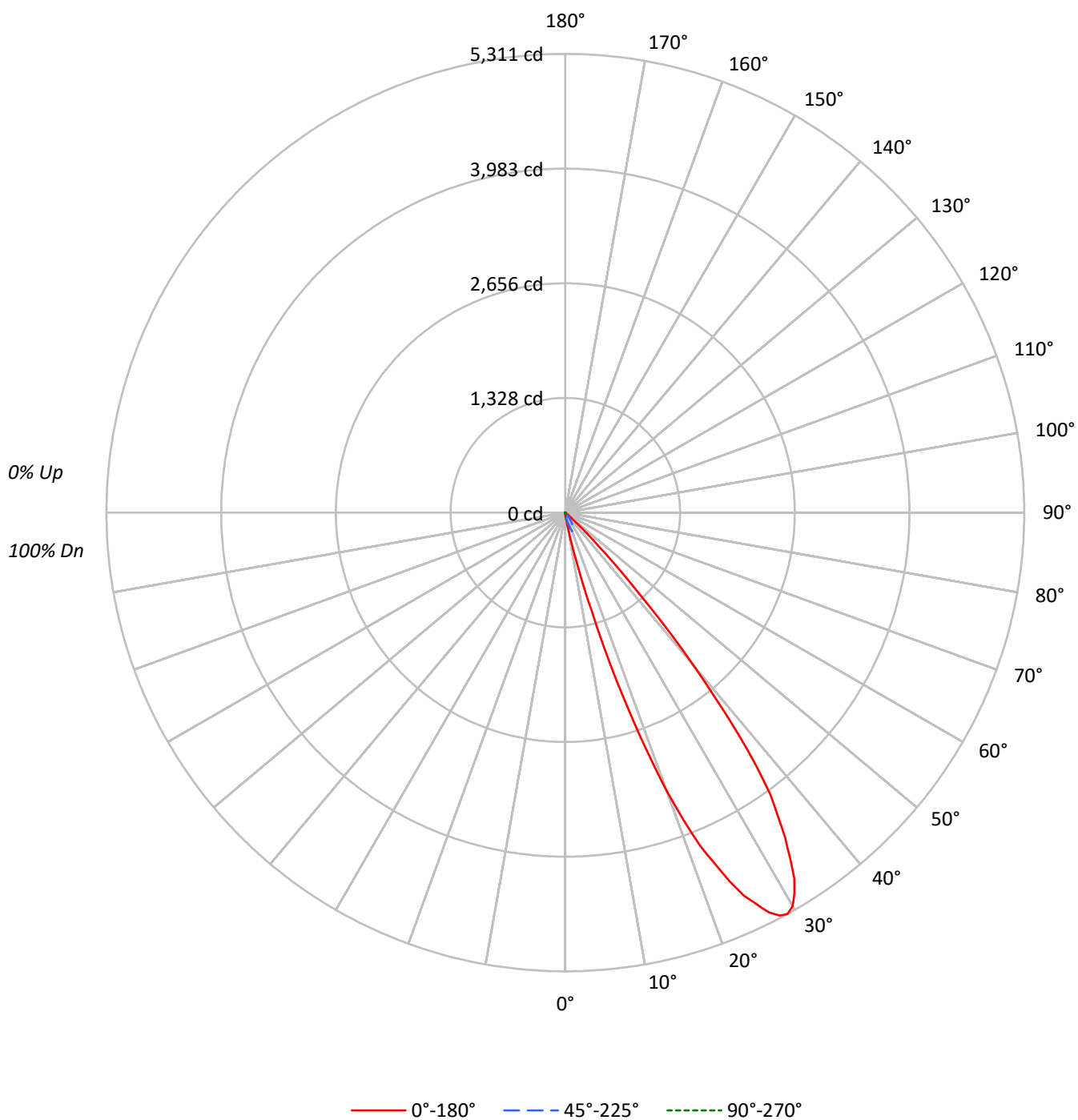
Lumens per Lamp: N/A  
Luminaire Lumens: 745.1 lumens  
Efficiency: N/A  
Efficacy: 51.4 lumens/watt  
Spacing Criteria (0/90/45): 2.29 / 0.53 / 1.19  
Luminous Opening: Circular (Dia: 0.25' x H: 0')  
CIE Type: Direct

Input Watts (W): 14.5  
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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CATALOG NUMBER: P3A13R209827DE010 E3CA301MW

### 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°  | 5636    | 5636  | 5636 | 5636 | 5636 |
| 5°  | 12943   | 9663  | 5349 | 3280 | 2818 |
| 10° | 40792   | 16856 | 4364 | 1804 | 1358 |
| 15° | 264224  | 31147 | 3224 | 613  | 159  |
| 20° | 797439  | 53321 | 2217 | 0    | 0    |
| 25° | 1184294 | 53810 | 1307 | 0    | 0    |
| 30° | 1331800 | 40892 | 506  | 0    | 0    |
| 35° | 1149096 | 24414 | 375  | 0    | 0    |
| 40° | 661668  | 8330  | 0    | 0    | 0    |
| 45° | 161381  | 3349  | 217  | 0    | 217  |
| 50° | 19377   | 921   | 239  | 239  | 682  |
| 55° | 2600    | 0     | 535  | 535  | 1032 |
| 60° | 307     | 0     | 877  | 877  | 1491 |
| 65° | 363     | 363   | 1401 | 1401 | 2127 |
| 70° | 449     | 449   | 1731 | 1731 | 2180 |
| 75° | 0       | 593   | 2288 | 1694 | 2288 |
| 80° | 0       | 884   | 2526 | 1768 | 2526 |
| 85° | 0       | 1761  | 5032 | 1761 | 1761 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 2.5°

Vertical Angle: 45°

Luminance: 162435 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 3.4    | 0.5       |
| 10°-20°   | 69.0   | 9.3       |
| 20°-30°   | 300.9  | 40.4      |
| 30°-40°   | 303.1  | 40.7      |
| 40°-50°   | 60.8   | 8.2       |
| 50°-60°   | 3.1    | 0.4       |
| 60°-70°   | 2.0    | 0.3       |
| 70°-80°   | 1.8    | 0.2       |
| 80°-90°   | 0.9    | 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°    | 373.4  | 50.1      |
| 0°-40°    | 676.5  | 90.8      |
| 0°-60°    | 740.3  | 99.4      |
| 0°-90°    | 745.1  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 745.1  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 45° | 90° | 135° | 180° | Flux |
|-----|------|-----|-----|------|------|------|
| 0°  | 26   | 26  | 26  | 26   | 26   |      |
| 5°  | 59   | 44  | 24  | 15   | 13   | 9    |
| 15° | 1164 | 137 | 14  | 3    | 1    | 456  |
| 25° | 4895 | 222 | 5   | 0    | 0    | 2207 |
| 35° | 4293 | 91  | 1   | 0    | 0    | 2554 |
| 45° | 520  | 11  | 1   | 0    | 1    | 567  |
| 55° | 7    | 0   | 1   | 1    | 3    | 13   |
| 65° | 1    | 1   | 3   | 3    | 4    | 1    |
| 75° | 0    | 1   | 3   | 2    | 3    | 0    |
| 85° | 0    | 1   | 2   | 1    | 1    | 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°    | 25.7   | 25.7   | 25.7   | 25.7   | 25.7   | 25.7   | 25.7   | 25.7   | 25.7   | 25.7   | 25.7  |
| 2.5°  | 38.5   | 38.5   | 37.8   | 37.8   | 37.2   | 37.8   | 36.5   | 37.2   | 37.2   | 36.5   | 33.1  |
| 5°    | 58.8   | 60.2   | 59.5   | 59.5   | 58.8   | 59.5   | 58.1   | 56.8   | 55.4   | 55.4   | 43.9  |
| 7.5°  | 96.7   | 96.0   | 94.6   | 95.3   | 93.3   | 91.9   | 90.6   | 89.9   | 85.8   | 83.8   | 57.5  |
| 10°   | 183.2  | 187.2  | 183.8  | 183.2  | 171.0  | 170.3  | 162.2  | 150.7  | 140.6  | 135.2  | 75.7  |
| 12.5° | 504.2  | 525.8  | 492.0  | 475.8  | 466.4  | 429.9  | 414.3  | 374.4  | 335.9  | 306.9  | 96.0  |
| 15°   | 1163.9 | 1217.3 | 1149.0 | 1153.7 | 1097.0 | 992.9  | 901.6  | 823.2  | 730.6  | 637.4  | 137.2 |
| 17.5° | 2280.5 | 2237.2 | 2200.0 | 2137.2 | 2021.6 | 1868.8 | 1672.2 | 1472.8 | 1300.4 | 1120.0 | 191.3 |
| 20°   | 3417.3 | 3378.8 | 3294.3 | 3157.1 | 3009.7 | 2783.3 | 2549.5 | 2250.0 | 1960.1 | 1688.4 | 228.5 |
| 21°   | 3808.6 | 3795.8 | 3657.2 | 3572.8 | 3345.7 | 3129.4 | 2859.7 | 2539.3 | 2212.9 | 1891.1 | 234.5 |
| 22°   | 4158.1 | 4081.0 | 4006.7 | 3881.6 | 3655.9 | 3420.7 | 3120.6 | 2783.3 | 2429.2 | 2071.6 | 235.2 |
| 23°   | 4400.1 | 4364.9 | 4294.6 | 4153.4 | 3929.0 | 3652.5 | 3336.2 | 2983.4 | 2610.3 | 2199.4 | 233.2 |
| 24°   | 4667.7 | 4623.1 | 4520.4 | 4355.4 | 4129.0 | 3856.0 | 3495.0 | 3144.9 | 2739.4 | 2306.8 | 227.8 |
| 25°   | 4894.8 | 4825.2 | 4703.5 | 4525.8 | 4278.4 | 3996.5 | 3633.6 | 3249.0 | 2829.3 | 2379.1 | 222.4 |
| 26°   | 5042.2 | 5004.3 | 4848.2 | 4654.9 | 4389.9 | 4099.3 | 3728.9 | 3328.8 | 2887.4 | 2412.3 | 213.6 |
| 27°   | 5195.6 | 5126.0 | 4972.5 | 4750.2 | 4462.9 | 4166.2 | 3783.0 | 3367.3 | 2907.7 | 2413.6 | 202.8 |
| 28°   | 5283.4 | 5207.7 | 5034.0 | 4800.2 | 4510.2 | 4203.4 | 3814.1 | 3379.5 | 2903.6 | 2392.7 | 189.9 |
| 29°   | 5311.2 | 5215.9 | 5046.2 | 4808.3 | 4521.7 | 4206.1 | 3809.3 | 3361.9 | 2867.8 | 2341.3 | 175.1 |
| 30°   | 5259.8 | 5162.5 | 5001.6 | 4769.8 | 4485.2 | 4172.3 | 3765.4 | 3303.8 | 2804.3 | 2267.6 | 161.5 |
| 31°   | 5147.6 | 5065.1 | 4909.7 | 4677.2 | 4404.1 | 4093.2 | 3666.0 | 3208.5 | 2696.1 | 2168.9 | 146.0 |
| 32°   | 4999.6 | 4918.5 | 4765.7 | 4555.5 | 4277.7 | 3964.1 | 3530.2 | 3059.8 | 2569.1 | 2021.6 | 130.4 |
| 33°   | 4777.2 | 4730.6 | 4593.4 | 4392.6 | 4114.8 | 3779.6 | 3347.7 | 2882.0 | 2387.9 | 1858.0 | 116.9 |
| 34°   | 4552.1 | 4493.3 | 4397.4 | 4177.7 | 3878.9 | 3544.4 | 3109.8 | 2636.7 | 2166.9 | 1674.9 | 104.1 |
| 35°   | 4292.6 | 4257.4 | 4106.7 | 3931.0 | 3630.9 | 3288.9 | 2857.0 | 2398.1 | 1909.4 | 1470.7 | 91.2  |
| 36°   | 4041.2 | 3987.1 | 3815.4 | 3629.5 | 3338.2 | 2968.5 | 2542.0 | 2110.8 | 1687.0 | 1279.5 | 77.7  |
| 37°   | 3676.2 | 3593.7 | 3471.4 | 3275.4 | 2934.7 | 2619.8 | 2230.4 | 1830.3 | 1413.3 | 1072.6 | 62.9  |
| 38°   | 3247.0 | 3208.5 | 3038.8 | 2841.4 | 2559.6 | 2260.9 | 1875.6 | 1536.3 | 1165.9 | 895.6  | 48.0  |
| 39°   | 2740.7 | 2740.1 | 2577.9 | 2435.2 | 2159.5 | 1890.5 | 1543.1 | 1247.0 | 962.5  | 721.2  | 37.2  |
| 40°   | 2311.5 | 2231.8 | 2131.8 | 1952.7 | 1741.1 | 1512.6 | 1208.5 | 976.0  | 746.9  | 581.3  | 29.1  |
| 42.5° | 1211.9 | 1205.1 | 1146.3 | 1011.8 | 893.5  | 759.0  | 603.6  | 502.9  | 393.4  | 320.4  | 18.2  |
| 45°   | 520.4  | 523.8  | 483.3  | 463.0  | 417.0  | 360.9  | 304.8  | 254.1  | 217.6  | 176.4  | 10.8  |
| 47.5° | 131.8  | 126.4  | 125.0  | 129.8  | 129.8  | 125.7  | 112.9  | 106.1  | 98.0   | 89.9   | 6.1   |
| 50°   | 56.8   | 55.4   | 54.1   | 54.1   | 50.7   | 48.7   | 45.3   | 41.2   | 37.8   | 33.8   | 2.7   |
| 52.5° | 21.0   | 21.6   | 22.3   | 21.6   | 21.6   | 21.0   | 21.0   | 20.3   | 18.2   | 16.2   | 1.4   |
| 55°   | 6.8    | 6.8    | 6.8    | 7.4    | 7.4    | 8.1    | 8.1    | 8.1    | 8.1    | 7.4    | 0.0   |
| 57.5° | 1.4    | 1.4    | 2.0    | 2.0    | 2.0    | 2.0    | 2.0    | 2.0    | 2.7    | 2.7    | 0.0   |
| 60°   | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.0    | 0.0    | 0.0    | 0.0   |
| 62.5° | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7   |
| 65°   | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7   |
| 67.5° | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7   |
| 70°   | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7   |
| 72.5° | 0.7    | 0.0    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7   |
| 75°   | 0.0    | 0.0    | 0.0    | 0.7    | 0.0    | 0.7    | 0.7    | 0.0    | 0.7    | 0.7    | 0.7   |
| 77.5° | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.7    | 0.7   |
| 80°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.7   |



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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   | 0.7 |
| 85°   | 0.0 | 0.0  | 0.0 | 0.0  | 0.0 | 0.0   | 0.0 | 0.0   | 0.0 | 0.0   | 0.7 |
| 87.5° | 0.0 | 0.0  | 0.0 | 0.0  | 0.0 | 0.0   | 0.0 | 0.0   | 0.0 | 0.0   | 0.7 |
| 90°   | 0.0 | 0.0  | 0.0 | 0.0  | 0.0 | 0.0   | 0.0 | 0.0   | 0.0 | 0.0   | 0.0 |

TEST NUMBER: P1344051

CATALOG NUMBER: P3A13R209827DE010 E3CA301MW

**CANDELA DISTRIBUTION (continued):**

|       | 67.5° | 90°  | 112.5° | 135° | 157.5° | 180° |
|-------|-------|------|--------|------|--------|------|
| 0°    | 25.7  | 25.7 | 25.7   | 25.7 | 25.7   | 25.7 |
| 2.5°  | 29.7  | 26.4 | 22.3   | 18.9 | 18.2   | 17.6 |
| 5°    | 33.1  | 24.3 | 18.2   | 14.9 | 13.5   | 12.8 |
| 7.5°  | 35.8  | 22.3 | 14.9   | 10.8 | 9.5    | 8.8  |
| 10°   | 37.2  | 19.6 | 12.2   | 8.1  | 6.1    | 6.1  |
| 12.5° | 37.8  | 16.9 | 8.8    | 5.4  | 3.4    | 3.4  |
| 15°   | 37.2  | 14.2 | 6.8    | 2.7  | 0.7    | 0.7  |
| 17.5° | 33.8  | 11.5 | 4.1    | 0.7  | 0.0    | 0.0  |
| 20°   | 29.1  | 9.5  | 2.7    | 0.0  | 0.0    | 0.0  |
| 21°   | 27.7  | 8.1  | 2.0    | 0.0  | 0.0    | 0.0  |
| 22°   | 25.7  | 7.4  | 1.4    | 0.0  | 0.0    | 0.0  |
| 23°   | 23.7  | 6.8  | 1.4    | 0.0  | 0.0    | 0.0  |
| 24°   | 21.6  | 6.1  | 0.7    | 0.0  | 0.0    | 0.0  |
| 25°   | 20.3  | 5.4  | 0.7    | 0.0  | 0.0    | 0.0  |
| 26°   | 18.9  | 4.7  | 0.7    | 0.0  | 0.0    | 0.0  |
| 27°   | 16.9  | 4.1  | 0.0    | 0.0  | 0.0    | 0.0  |
| 28°   | 15.5  | 3.4  | 0.0    | 0.0  | 0.0    | 0.0  |
| 29°   | 13.5  | 2.7  | 0.0    | 0.0  | 0.0    | 0.0  |
| 30°   | 11.5  | 2.0  | 0.0    | 0.0  | 0.0    | 0.0  |
| 31°   | 9.5   | 2.0  | 0.0    | 0.0  | 0.0    | 0.0  |
| 32°   | 8.1   | 1.4  | 0.0    | 0.0  | 0.0    | 0.0  |
| 33°   | 6.8   | 1.4  | 0.0    | 0.0  | 0.0    | 0.0  |
| 34°   | 6.1   | 1.4  | 0.0    | 0.0  | 0.0    | 0.0  |
| 35°   | 5.4   | 1.4  | 0.0    | 0.0  | 0.0    | 0.0  |
| 36°   | 4.1   | 0.7  | 0.0    | 0.0  | 0.0    | 0.0  |
| 37°   | 3.4   | 0.7  | 0.0    | 0.0  | 0.0    | 0.0  |
| 38°   | 2.7   | 0.7  | 0.0    | 0.0  | 0.0    | 0.0  |
| 39°   | 2.0   | 0.0  | 0.0    | 0.0  | 0.0    | 0.0  |
| 40°   | 2.0   | 0.0  | 0.0    | 0.0  | 0.0    | 0.0  |
| 42.5° | 0.7   | 0.0  | 0.0    | 0.0  | 0.0    | 0.0  |
| 45°   | 0.0   | 0.7  | 0.0    | 0.0  | 0.7    | 0.7  |
| 47.5° | 0.0   | 0.7  | 0.0    | 0.0  | 0.7    | 1.4  |
| 50°   | 0.0   | 0.7  | 0.7    | 0.7  | 1.4    | 2.0  |
| 52.5° | 0.0   | 1.4  | 0.7    | 0.7  | 2.0    | 2.0  |
| 55°   | 0.7   | 1.4  | 0.7    | 1.4  | 2.7    | 2.7  |
| 57.5° | 0.7   | 1.4  | 1.4    | 2.0  | 2.7    | 3.4  |
| 60°   | 1.4   | 2.0  | 2.0    | 2.0  | 3.4    | 3.4  |
| 62.5° | 1.4   | 2.0  | 2.7    | 2.7  | 3.4    | 4.1  |
| 65°   | 1.4   | 2.7  | 2.7    | 2.7  | 3.4    | 4.1  |
| 67.5° | 2.0   | 2.7  | 2.7    | 2.7  | 3.4    | 4.1  |
| 70°   | 2.0   | 2.7  | 2.7    | 2.7  | 3.4    | 3.4  |
| 72.5° | 2.0   | 2.7  | 2.0    | 2.7  | 2.7    | 3.4  |
| 75°   | 2.0   | 2.7  | 2.0    | 2.0  | 2.7    | 2.7  |
| 77.5° | 1.4   | 2.0  | 2.0    | 1.4  | 2.0    | 2.0  |
| 80°   | 1.4   | 2.0  | 1.4    | 1.4  | 2.0    | 2.0  |



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**CANDELA DISTRIBUTION (continued):**

|       | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° |
|-------|-------|-----|--------|------|--------|------|
| 82.5° | 1.4   | 2.0 | 1.4    | 0.7  | 1.4    | 1.4  |
| 85°   | 1.4   | 2.0 | 1.4    | 0.7  | 0.7    | 0.7  |
| 87.5° | 1.4   | 2.0 | 1.4    | 0.7  | 0.0    | 0.7  |
| 90°   | 0.0   | 0.0 | 0.0    | 0.0  | 0.0    | 0.0  |

(END OF REPORT)