

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: P1335491

Luminaire Tested: P3A02R359835DE010 E3A451WH

Issue Date: 2/13/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1335491  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-77)  
Test Lab: INNOVATION CENTER  
Issue Date: 2/13/2026  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: IRiS  
Catalog Number: P3A02R359835DE010 E3A451WH  
Description: 3in Adjustable LED luminaire with, R35 optic, 3500K CCT AND, 98CRI , E3A451WH TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

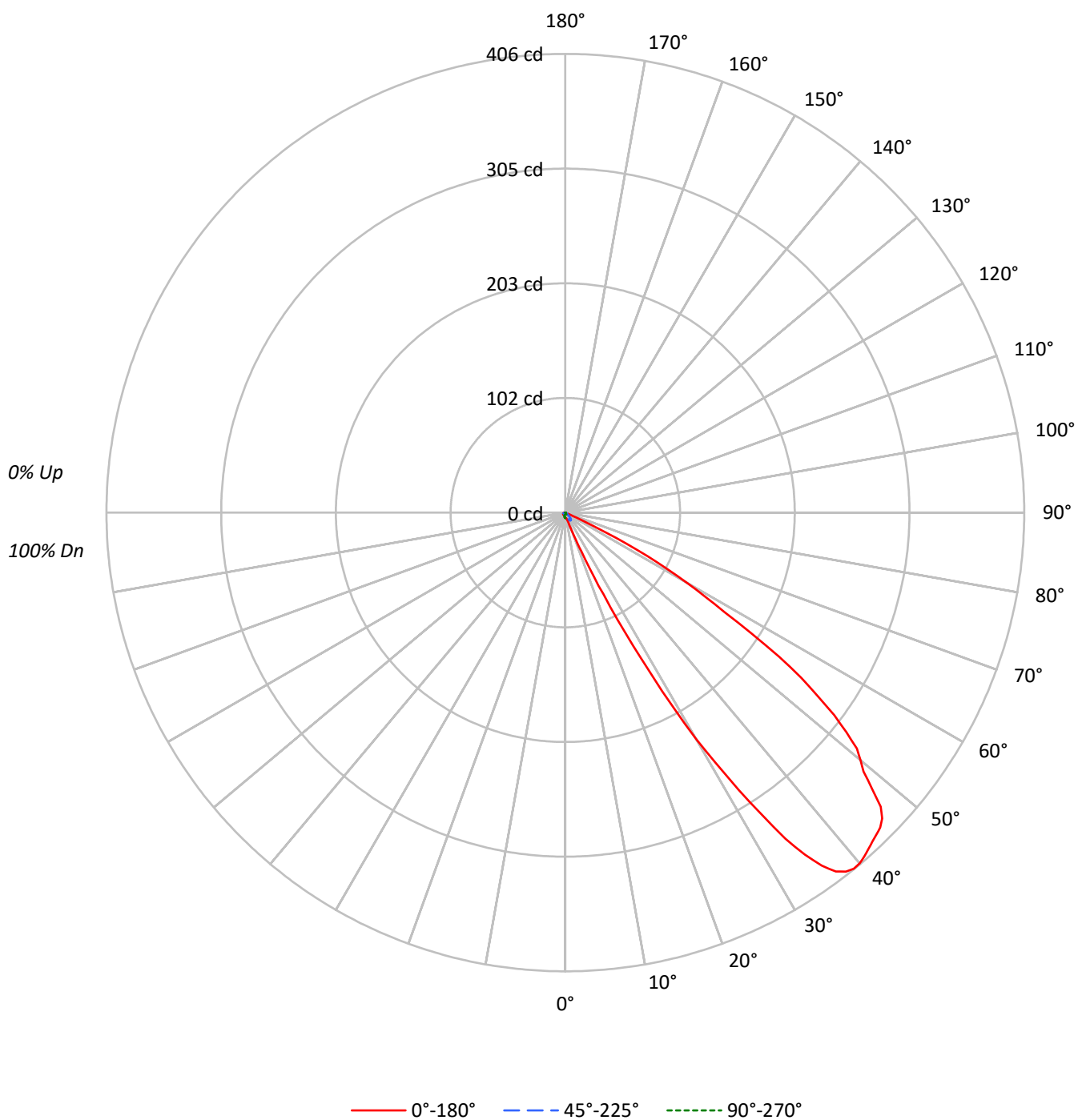
Lumens per Lamp: N/A  
Luminaire Lumens: 101.0 lumens  
Efficiency: N/A  
Efficacy: 28.1 lumens/watt  
Spacing Criteria (0/90/45): 4.01 / 0.67 / 1.41  
Luminous Opening: Circular (Dia: 0.25' x H: 0')  
CIE Type: Direct

Input Watts (W): 3.6  
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: P3A02R359835DE010 E3A451WH

### 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  | 30  | 10  |
| RCR |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 |
| 1   | 110 | 106 | 102 | 99  | 107 | 104 | 100 | 97  | 99  | 97  | 94  | 96  | 93  | 91  | 92  | 90  | 89  |
| 2   | 100 | 93  | 86  | 81  | 98  | 91  | 85  | 80  | 87  | 83  | 78  | 84  | 80  | 77  | 81  | 78  | 75  |
| 3   | 91  | 81  | 73  | 67  | 89  | 79  | 72  | 66  | 76  | 70  | 65  | 74  | 68  | 64  | 71  | 67  | 63  |
| 4   | 83  | 71  | 62  | 55  | 80  | 69  | 61  | 55  | 67  | 60  | 54  | 64  | 58  | 53  | 62  | 57  | 52  |
| 5   | 75  | 62  | 52  | 46  | 73  | 61  | 52  | 45  | 58  | 51  | 45  | 56  | 50  | 44  | 55  | 49  | 44  |
| 6   | 68  | 54  | 45  | 38  | 66  | 53  | 44  | 38  | 51  | 43  | 38  | 50  | 43  | 37  | 48  | 42  | 37  |
| 7   | 62  | 48  | 38  | 32  | 60  | 47  | 38  | 32  | 45  | 37  | 32  | 44  | 37  | 31  | 42  | 36  | 31  |
| 8   | 57  | 42  | 33  | 27  | 55  | 41  | 33  | 27  | 40  | 32  | 27  | 39  | 32  | 26  | 38  | 31  | 26  |
| 9   | 52  | 38  | 29  | 23  | 50  | 37  | 29  | 23  | 36  | 28  | 23  | 35  | 28  | 22  | 34  | 27  | 22  |
| 10  | 48  | 34  | 25  | 19  | 46  | 33  | 25  | 19  | 32  | 25  | 19  | 31  | 24  | 19  | 30  | 24  | 19  |

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

|     | 0°     | 45°  | 90°  | 135° | 180° |
|-----|--------|------|------|------|------|
| 0°  | 1009   | 1009 | 1009 | 1009 | 1009 |
| 5°  | 1101   | 1079 | 1013 | 902  | 880  |
| 10° | 1158   | 1047 | 891  | 779  | 779  |
| 15° | 1657   | 1044 | 726  | 658  | 681  |
| 20° | 4154   | 1097 | 583  | 583  | 630  |
| 25° | 19259  | 1403 | 436  | 532  | 605  |
| 30° | 58541  | 1924 | 354  | 481  | 608  |
| 35° | 98939  | 2222 | 294  | 455  | 589  |
| 40° | 115989 | 2204 | 229  | 458  | 630  |
| 45° | 122152 | 1551 | 186  | 496  | 682  |
| 50° | 116261 | 921  | 171  | 512  | 751  |
| 55° | 97411  | 382  | 191  | 573  | 879  |
| 60° | 54557  | 88   | 219  | 658  | 965  |
| 65° | 9391   | 52   | 259  | 778  | 1090 |
| 70° | 192    | 64   | 321  | 833  | 1218 |
| 75° | 169    | 85   | 424  | 932  | 1356 |
| 80° | 126    | 126  | 505  | 1010 | 1642 |
| 85° | 0      | 252  | 1006 | 1258 | 1761 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 46°

Luminance: 123015 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 0.4    | 0.4       |
| 10°-20°   | 1.2    | 1.2       |
| 20°-30°   | 6.2    | 6.1       |
| 30°-40°   | 26.8   | 26.5      |
| 40°-50°   | 38.2   | 37.8      |
| 50°-60°   | 23.6   | 23.4      |
| 60°-70°   | 3.6    | 3.6       |
| 70°-80°   | 0.7    | 0.7       |
| 80°-90°   | 0.4    | 0.3       |
| 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°    | 7.8    | 7.7       |
| 0°-40°    | 34.6   | 34.2      |
| 0°-60°    | 96.4   | 95.4      |
| 0°-90°    | 101.0  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 101.0  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | 45° | 90° | 135° | 180° | Flux |
|-----|-----|-----|-----|------|------|------|
| 0°  | 5   | 5   | 5   | 5    | 5    |      |
| 5°  | 5   | 5   | 5   | 4    | 4    | 0    |
| 15° | 7   | 5   | 3   | 3    | 3    | 3    |
| 25° | 80  | 6   | 2   | 2    | 2    | 48   |
| 35° | 370 | 8   | 1   | 2    | 2    | 222  |
| 45° | 394 | 5   | 1   | 2    | 2    | 298  |
| 55° | 255 | 1   | 0   | 2    | 2    | 217  |
| 65° | 18  | 0   | 0   | 2    | 2    | 37   |
| 75° | 0   | 0   | 0   | 1    | 2    | 0    |
| 85° | 0   | 0   | 0   | 0    | 1    | 0    |
| 90° | 0   | 0   | 0   | 0    | 0    |      |

TEST NUMBER: P1335491

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°    | 5°    | 10°   | 15°   | 20°   | 25°   | 30°  | 45° | 67.5° | 90° | 112.5° |
|-------|-------|-------|-------|-------|-------|-------|------|-----|-------|-----|--------|
| 0°    | 4.6   | 4.6   | 4.6   | 4.6   | 4.6   | 4.6   | 4.6  | 4.6 | 4.6   | 4.6 | 4.6    |
| 2.5°  | 4.8   | 4.8   | 4.8   | 4.8   | 4.8   | 4.8   | 4.8  | 4.8 | 4.8   | 4.6 | 4.6    |
| 5°    | 5.0   | 5.0   | 4.9   | 4.9   | 4.9   | 4.9   | 4.9  | 4.9 | 4.7   | 4.6 | 4.3    |
| 7.5°  | 5.1   | 5.1   | 5.0   | 5.0   | 5.0   | 5.0   | 4.9  | 4.8 | 4.6   | 4.3 | 4.0    |
| 10°   | 5.2   | 5.2   | 5.2   | 5.2   | 5.1   | 5.0   | 4.9  | 4.7 | 4.5   | 4.0 | 3.7    |
| 12.5° | 5.8   | 5.8   | 5.7   | 5.6   | 5.4   | 5.2   | 5.0  | 4.6 | 4.1   | 3.6 | 3.4    |
| 15°   | 7.3   | 7.2   | 7.0   | 6.7   | 6.4   | 5.9   | 5.6  | 4.6 | 3.7   | 3.2 | 3.0    |
| 17.5° | 10.2  | 10.0  | 9.8   | 8.8   | 8.0   | 7.2   | 6.5  | 4.6 | 3.4   | 2.8 | 2.6    |
| 20°   | 17.8  | 17.9  | 16.0  | 13.8  | 11.9  | 9.9   | 8.1  | 4.7 | 3.0   | 2.5 | 2.4    |
| 22.5° | 37.1  | 35.6  | 31.1  | 25.8  | 19.7  | 15.2  | 11.5 | 5.2 | 2.6   | 2.1 | 2.1    |
| 25°   | 79.6  | 74.0  | 63.0  | 47.6  | 33.6  | 23.8  | 16.7 | 5.8 | 2.4   | 1.8 | 1.9    |
| 27.5° | 145.3 | 140.3 | 118.2 | 89.0  | 59.1  | 35.9  | 22.6 | 6.7 | 2.1   | 1.5 | 1.7    |
| 30°   | 231.2 | 217.4 | 188.5 | 145.9 | 98.7  | 55.0  | 30.4 | 7.6 | 1.7   | 1.4 | 1.6    |
| 31°   | 258.0 | 251.6 | 216.4 | 168.8 | 115.7 | 65.3  | 33.6 | 7.8 | 1.6   | 1.4 | 1.5    |
| 32°   | 289.8 | 278.5 | 247.0 | 193.8 | 132.9 | 74.5  | 37.6 | 8.1 | 1.5   | 1.2 | 1.5    |
| 33°   | 318.3 | 307.3 | 269.0 | 215.9 | 150.3 | 85.0  | 41.8 | 8.2 | 1.4   | 1.2 | 1.5    |
| 34°   | 348.2 | 333.2 | 295.2 | 239.0 | 168.2 | 96.3  | 45.6 | 8.3 | 1.3   | 1.1 | 1.5    |
| 35°   | 369.6 | 354.7 | 317.8 | 257.2 | 183.6 | 106.3 | 50.0 | 8.3 | 1.2   | 1.1 | 1.4    |
| 36°   | 386.2 | 373.1 | 337.3 | 276.0 | 198.9 | 115.3 | 53.4 | 8.3 | 1.0   | 1.0 | 1.4    |
| 37°   | 397.6 | 385.1 | 350.5 | 292.1 | 210.6 | 123.4 | 56.5 | 8.3 | 0.9   | 1.0 | 1.4    |
| 38°   | 403.2 | 392.8 | 363.1 | 303.9 | 221.9 | 129.6 | 59.0 | 8.1 | 0.8   | 0.9 | 1.3    |
| 39°   | 405.5 | 397.1 | 370.9 | 313.8 | 230.4 | 135.1 | 60.8 | 7.9 | 0.7   | 0.9 | 1.3    |
| 40°   | 405.2 | 397.8 | 375.3 | 320.7 | 237.2 | 138.9 | 61.8 | 7.7 | 0.6   | 0.8 | 1.3    |
| 41°   | 403.1 | 396.7 | 377.6 | 326.5 | 241.3 | 141.4 | 62.1 | 7.4 | 0.5   | 0.8 | 1.2    |
| 42°   | 400.7 | 394.9 | 378.3 | 329.6 | 244.0 | 142.2 | 61.4 | 7.0 | 0.5   | 0.7 | 1.2    |
| 43°   | 398.2 | 392.9 | 378.3 | 330.6 | 244.6 | 141.7 | 60.2 | 6.4 | 0.5   | 0.7 | 1.2    |
| 44°   | 396.2 | 391.1 | 377.1 | 330.3 | 243.3 | 139.6 | 58.0 | 5.7 | 0.4   | 0.7 | 1.2    |
| 45°   | 393.9 | 388.9 | 375.5 | 328.6 | 240.6 | 136.0 | 55.3 | 5.0 | 0.3   | 0.6 | 1.2    |
| 46°   | 389.7 | 385.8 | 372.8 | 325.0 | 236.4 | 131.1 | 51.8 | 4.6 | 0.2   | 0.6 | 1.1    |
| 47°   | 381.6 | 378.2 | 367.5 | 319.7 | 230.9 | 125.3 | 48.2 | 4.1 | 0.2   | 0.6 | 1.1    |
| 48°   | 365.2 | 365.2 | 356.9 | 309.9 | 222.0 | 118.0 | 44.5 | 3.6 | 0.2   | 0.6 | 1.1    |
| 49°   | 349.5 | 347.8 | 337.6 | 292.6 | 209.3 | 109.2 | 40.6 | 3.3 | 0.1   | 0.6 | 1.1    |
| 50°   | 340.8 | 337.3 | 320.5 | 272.2 | 193.1 | 97.1  | 36.4 | 2.7 | 0.1   | 0.5 | 1.1    |
| 51°   | 331.8 | 326.7 | 306.9 | 253.7 | 173.8 | 85.4  | 31.8 | 2.2 | 0.1   | 0.5 | 1.0    |
| 52°   | 315.5 | 310.6 | 288.5 | 236.1 | 155.0 | 73.5  | 27.4 | 1.8 | 0.1   | 0.5 | 1.1    |
| 53°   | 297.9 | 290.9 | 266.9 | 216.8 | 138.5 | 62.9  | 23.0 | 1.5 | 0.1   | 0.5 | 1.0    |
| 54°   | 275.7 | 272.6 | 245.0 | 193.1 | 119.2 | 52.7  | 18.9 | 1.3 | 0.1   | 0.5 | 1.0    |
| 55°   | 254.8 | 250.3 | 221.6 | 168.9 | 101.7 | 43.2  | 15.8 | 1.0 | 0.1   | 0.5 | 1.0    |
| 56°   | 228.2 | 221.4 | 194.5 | 146.6 | 83.9  | 34.8  | 13.3 | 0.8 | 0.1   | 0.5 | 1.0    |
| 57°   | 196.5 | 189.2 | 167.9 | 121.9 | 65.8  | 26.5  | 11.1 | 0.6 | 0.1   | 0.5 | 1.0    |
| 58°   | 166.2 | 159.9 | 137.1 | 94.1  | 49.6  | 18.4  | 9.2  | 0.5 | 0.1   | 0.5 | 1.0    |
| 59°   | 143.6 | 136.7 | 114.1 | 72.4  | 34.5  | 13.6  | 6.9  | 0.4 | 0.1   | 0.5 | 1.0    |
| 60°   | 124.4 | 115.4 | 91.8  | 56.1  | 24.6  | 9.8   | 5.1  | 0.2 | 0.2   | 0.5 | 1.0    |
| 62.5° | 71.7  | 63.3  | 43.9  | 22.8  | 10.1  | 5.0   | 2.5  | 0.1 | 0.2   | 0.5 | 1.0    |
| 65°   | 18.1  | 16.1  | 10.5  | 4.9   | 2.8   | 1.7   | 0.9  | 0.1 | 0.2   | 0.5 | 0.9    |



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**CANDELA DISTRIBUTION (continued):**

|       | 0°  | 5°  | 10° | 15° | 20° | 25° | 30° | 45° | 67.5° | 90° | 112.5° |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-------|-----|--------|
| 67.5° | 0.6 | 0.6 | 0.6 | 0.5 | 0.5 | 0.4 | 0.2 | 0.1 | 0.2   | 0.5 | 0.9    |
| 70°   | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2   | 0.5 | 0.8    |
| 72.5° | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3   | 0.5 | 0.7    |
| 75°   | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3   | 0.5 | 0.7    |
| 77.5° | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3   | 0.4 | 0.6    |
| 80°   | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3   | 0.4 | 0.5    |
| 82.5° | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3   | 0.4 | 0.5    |
| 85°   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.3   | 0.4 | 0.4    |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3   | 0.4 | 0.3    |
| 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: P1335491

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**CANDELA DISTRIBUTION (continued):**

|       | 135° | 157.5° | 180° |
|-------|------|--------|------|
| 0°    | 4.6  | 4.6    | 4.6  |
| 2.5°  | 4.4  | 4.4    | 4.4  |
| 5°    | 4.1  | 4.1    | 4.0  |
| 7.5°  | 3.8  | 3.7    | 3.7  |
| 10°   | 3.5  | 3.5    | 3.5  |
| 12.5° | 3.2  | 3.2    | 3.2  |
| 15°   | 2.9  | 3.0    | 3.0  |
| 17.5° | 2.6  | 2.8    | 2.8  |
| 20°   | 2.5  | 2.6    | 2.7  |
| 22.5° | 2.3  | 2.5    | 2.6  |
| 25°   | 2.2  | 2.4    | 2.5  |
| 27.5° | 2.0  | 2.3    | 2.5  |
| 30°   | 1.9  | 2.2    | 2.4  |
| 31°   | 1.9  | 2.2    | 2.3  |
| 32°   | 1.8  | 2.2    | 2.3  |
| 33°   | 1.8  | 2.2    | 2.3  |
| 34°   | 1.8  | 2.1    | 2.3  |
| 35°   | 1.7  | 2.1    | 2.2  |
| 36°   | 1.7  | 2.1    | 2.2  |
| 37°   | 1.7  | 2.1    | 2.3  |
| 38°   | 1.7  | 2.1    | 2.2  |
| 39°   | 1.6  | 2.1    | 2.2  |
| 40°   | 1.6  | 2.1    | 2.2  |
| 41°   | 1.6  | 2.1    | 2.2  |
| 42°   | 1.6  | 2.1    | 2.2  |
| 43°   | 1.6  | 2.1    | 2.2  |
| 44°   | 1.6  | 2.0    | 2.2  |
| 45°   | 1.6  | 2.0    | 2.2  |
| 46°   | 1.6  | 2.1    | 2.2  |
| 47°   | 1.6  | 2.1    | 2.3  |
| 48°   | 1.6  | 2.0    | 2.2  |
| 49°   | 1.5  | 2.0    | 2.2  |
| 50°   | 1.5  | 2.0    | 2.2  |
| 51°   | 1.5  | 2.1    | 2.3  |
| 52°   | 1.5  | 2.1    | 2.3  |
| 53°   | 1.5  | 2.1    | 2.3  |
| 54°   | 1.5  | 2.1    | 2.2  |
| 55°   | 1.5  | 2.1    | 2.3  |
| 56°   | 1.5  | 2.1    | 2.2  |
| 57°   | 1.5  | 2.1    | 2.2  |
| 58°   | 1.5  | 2.0    | 2.2  |
| 59°   | 1.5  | 2.0    | 2.2  |
| 60°   | 1.5  | 2.0    | 2.2  |
| 62.5° | 1.5  | 2.0    | 2.2  |
| 65°   | 1.5  | 1.9    | 2.1  |





TEST NUMBER: P1335491

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**CANDELA DISTRIBUTION (continued):**

|       | 135° | 157.5° | 180° |
|-------|------|--------|------|
| 67.5° | 1.4  | 1.9    | 2.0  |
| 70°   | 1.3  | 1.8    | 1.9  |
| 72.5° | 1.2  | 1.7    | 1.8  |
| 75°   | 1.1  | 1.5    | 1.6  |
| 77.5° | 0.9  | 1.4    | 1.5  |
| 80°   | 0.8  | 1.2    | 1.3  |
| 82.5° | 0.6  | 1.0    | 1.1  |
| 85°   | 0.5  | 0.7    | 0.7  |
| 87.5° | 0.2  | 0.4    | 0.4  |
| 90°   | 0.0  | 0.0    | 0.0  |

(END OF REPORT)