

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: P1307337

Luminaire Tested: P3SQAS24R309027D010 E3SQCA451MMS

Issue Date: 1/29/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1307337  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-76)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/29/2026  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: IRiS  
Catalog Number: P3SQAS24R309027D010 E3SQCA451MMS  
Description: 3in Adjustable LED luminaire with, R30 optic, 2700K CCT AND, 90CRI , E3SQCA451MMS TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

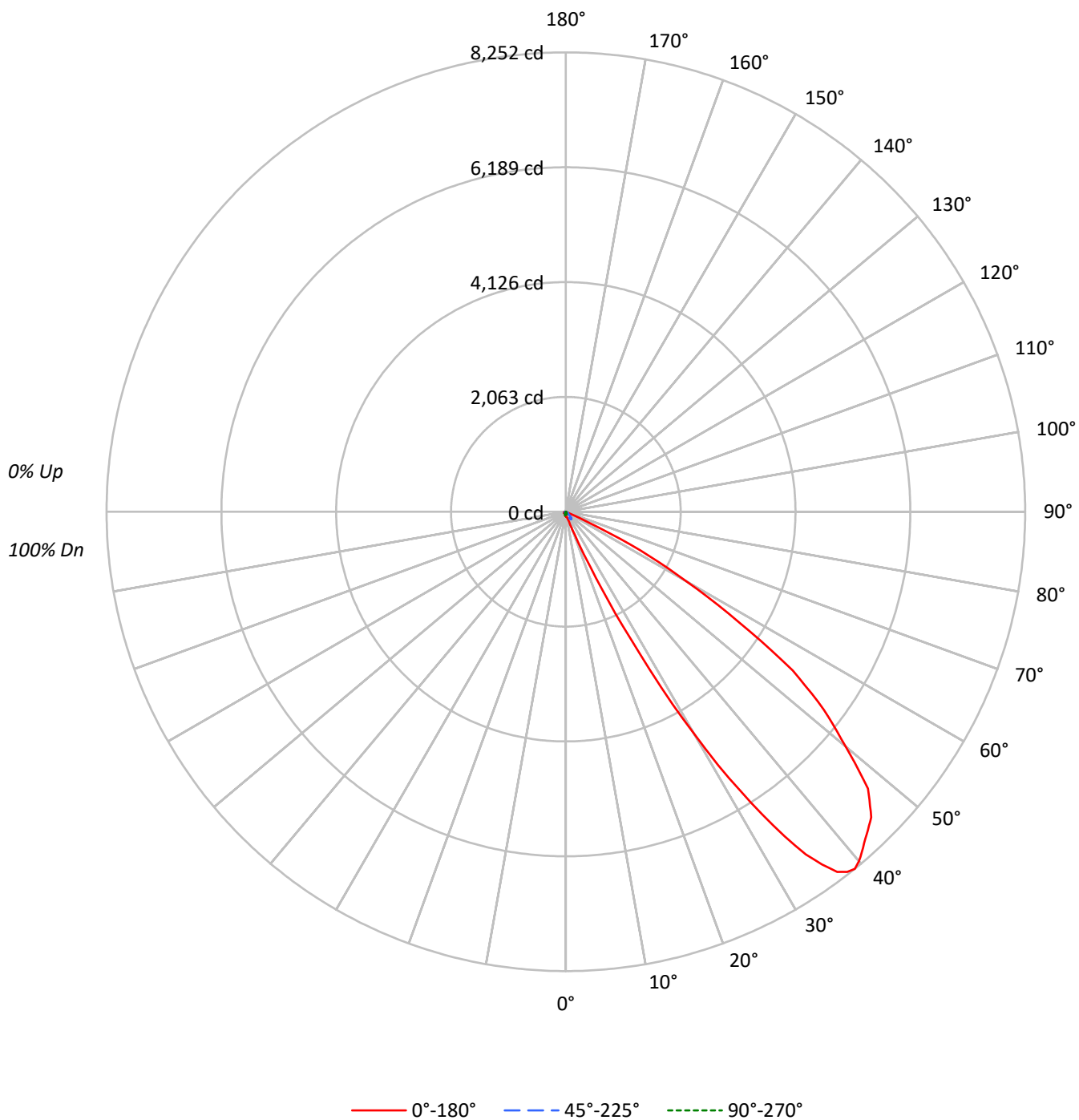
Lumens per Lamp: N/A  
Luminaire Lumens: 2145.0 lumens  
Efficiency: N/A  
Efficacy: 74.5 lumens/watt  
Spacing Criteria (0/90/45): 4.07 / 0.66 / 1.44  
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')  
CIE Type: Direct

Input Watts (W): 28.8  
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  | 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  | 108 | 104 | 100 | 97  | 100 | 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  | 60  | 52  | 45  | 58  | 51  | 45  | 56  | 50  | 44  | 54  | 49  | 44  |
| 6   | 68  | 54  | 45  | 38  | 66  | 53  | 44  | 38  | 51  | 43  | 37  | 49  | 42  | 37  | 48  | 42  | 37  |
| 7   | 62  | 48  | 38  | 32  | 60  | 47  | 38  | 32  | 45  | 37  | 31  | 44  | 36  | 31  | 42  | 36  | 31  |
| 8   | 56  | 42  | 33  | 27  | 55  | 41  | 33  | 27  | 40  | 32  | 26  | 39  | 32  | 26  | 37  | 31  | 26  |
| 9   | 52  | 37  | 29  | 23  | 50  | 37  | 28  | 23  | 36  | 28  | 22  | 34  | 27  | 22  | 33  | 27  | 22  |
| 10  | 48  | 33  | 25  | 19  | 46  | 33  | 25  | 19  | 32  | 24  | 19  | 31  | 24  | 19  | 30  | 24  | 19  |

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

|     | 0°      | 45°   | 90°   | 135°  | 180°  |
|-----|---------|-------|-------|-------|-------|
| 0°  | 14312   | 14312 | 14312 | 14312 | 14312 |
| 5°  | 15300   | 14989 | 14055 | 12810 | 12499 |
| 10° | 16753   | 14847 | 12329 | 11052 | 10738 |
| 15° | 24480   | 14817 | 10306 | 9343  | 9664  |
| 20° | 61599   | 16220 | 7954  | 7954  | 8944  |
| 25° | 286009  | 20257 | 6176  | 7202  | 8247  |
| 30° | 910526  | 28020 | 4673  | 6821  | 8273  |
| 35° | 1579928 | 34186 | 3805  | 6455  | 8368  |
| 40° | 1842608 | 34128 | 2833  | 6497  | 8521  |
| 45° | 1889681 | 24210 | 3069  | 7039  | 9231  |
| 50° | 1757332 | 13557 | 2411  | 7261  | 10664 |
| 55° | 1493588 | 7056  | 2702  | 8137  | 11950 |
| 60° | 862594  | 1860  | 3100  | 8714  | 13054 |
| 65° | 175964  | 0     | 3668  | 10310 | 14711 |
| 70° | 2719    | 906   | 4532  | 11833 | 17272 |
| 75° | 2396    | 1198  | 4791  | 12044 | 20428 |
| 80° | 1785    | 1785  | 7141  | 14381 | 23307 |
| 85° | 0       | 3557  | 14227 | 14227 | 28652 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1889681 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 7.5    | 0.4       |
| 10°-20°   | 21.6   | 1.0       |
| 20°-30°   | 123.7  | 5.8       |
| 30°-40°   | 577.8  | 26.9      |
| 40°-50°   | 817.0  | 38.1      |
| 50°-60°   | 502.6  | 23.4      |
| 60°-70°   | 76.5   | 3.6       |
| 70°-80°   | 12.1   | 0.6       |
| 80°-90°   | 6.0    | 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°    | 152.8  | 7.1       |
| 0°-40°    | 730.6  | 34.1      |
| 0°-60°    | 2050.3 | 95.6      |
| 0°-90°    | 2145.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 2145.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 45° | 90° | 135° | 180° | Flux |
|-----|------|-----|-----|------|------|------|
| 0°  | 83   | 83  | 83  | 83   | 83   |      |
| 5°  | 88   | 87  | 81  | 74   | 72   | 9    |
| 15° | 137  | 83  | 58  | 52   | 54   | 49   |
| 25° | 1505 | 107 | 32  | 38   | 43   | 926  |
| 35° | 7515 | 163 | 18  | 31   | 40   | 4510 |
| 45° | 7759 | 99  | 13  | 29   | 38   | 5882 |
| 55° | 4974 | 24  | 9   | 27   | 40   | 4233 |
| 65° | 432  | 0   | 9   | 25   | 36   | 782  |
| 75° | 4    | 2   | 7   | 18   | 31   | 4    |
| 85° | 0    | 2   | 7   | 7    | 14   | 1    |
| 90° | 0    | 0   | 0   | 0    | 0    |      |

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 10°    | 15°    | 20°    | 22.5°  | 45°   | 67.5° | 90°  | 112.5° | 135° |
|-------|--------|--------|--------|--------|--------|--------|-------|-------|------|--------|------|
| 0°    | 83.1   | 83.1   | 83.1   | 83.1   | 83.1   | 83.1   | 83.1  | 83.1  | 83.1 | 83.1   | 83.1 |
| 2.5°  | 84.9   | 84.9   | 86.7   | 86.7   | 84.9   | 86.7   | 86.7  | 86.7  | 83.1 | 81.3   | 77.7 |
| 5°    | 88.5   | 88.5   | 88.5   | 90.3   | 88.5   | 88.5   | 86.7  | 84.9  | 81.3 | 75.9   | 74.1 |
| 7.5°  | 92.1   | 92.1   | 90.3   | 92.1   | 90.3   | 90.3   | 86.7  | 83.1  | 77.7 | 72.3   | 68.7 |
| 10°   | 95.8   | 95.8   | 94.0   | 94.0   | 92.1   | 92.1   | 84.9  | 79.5  | 70.5 | 65.0   | 63.2 |
| 12.5° | 106.6  | 106.6  | 104.8  | 103.0  | 99.4   | 97.6   | 83.1  | 74.1  | 63.2 | 57.8   | 56.0 |
| 15°   | 137.3  | 135.5  | 131.9  | 126.5  | 117.4  | 115.6  | 83.1  | 68.7  | 57.8 | 52.4   | 52.4 |
| 17.5° | 187.9  | 186.1  | 180.7  | 166.2  | 150.0  | 144.5  | 83.1  | 61.4  | 50.6 | 47.0   | 47.0 |
| 20°   | 336.1  | 321.6  | 294.5  | 258.4  | 220.4  | 200.6  | 88.5  | 54.2  | 43.4 | 41.6   | 43.4 |
| 21°   | 439.1  | 424.6  | 390.3  | 330.7  | 263.8  | 242.1  | 92.1  | 52.4  | 41.6 | 39.8   | 43.4 |
| 22°   | 598.1  | 581.8  | 511.3  | 430.0  | 334.3  | 296.3  | 94.0  | 48.8  | 37.9 | 37.9   | 41.6 |
| 23°   | 834.8  | 807.7  | 688.4  | 558.3  | 417.4  | 363.2  | 97.6  | 47.0  | 36.1 | 37.9   | 39.8 |
| 24°   | 1093.1 | 1069.7 | 934.1  | 739.0  | 533.0  | 455.3  | 101.2 | 45.2  | 34.3 | 34.3   | 37.9 |
| 25°   | 1505.1 | 1478.0 | 1237.7 | 932.3  | 675.8  | 547.5  | 106.6 | 41.6  | 32.5 | 32.5   | 37.9 |
| 26°   | 2038.1 | 1913.5 | 1593.6 | 1201.6 | 833.0  | 686.6  | 112.0 | 39.8  | 30.7 | 32.5   | 36.1 |
| 27°   | 2544.1 | 2441.1 | 2081.5 | 1541.2 | 1029.9 | 843.8  | 119.3 | 37.9  | 28.9 | 30.7   | 36.1 |
| 28°   | 3209.0 | 3064.4 | 2610.9 | 1949.6 | 1297.3 | 1020.9 | 126.5 | 36.1  | 27.1 | 30.7   | 34.3 |
| 29°   | 3953.4 | 3751.0 | 3203.6 | 2408.5 | 1599.1 | 1219.6 | 133.7 | 34.3  | 25.3 | 28.9   | 34.3 |
| 30°   | 4578.6 | 4388.9 | 3841.4 | 2952.4 | 1946.0 | 1481.6 | 140.9 | 32.5  | 23.5 | 28.9   | 34.3 |
| 31°   | 5312.2 | 5024.9 | 4361.8 | 3413.2 | 2244.1 | 1743.6 | 148.2 | 28.9  | 21.7 | 27.1   | 32.5 |
| 32°   | 5906.6 | 5706.1 | 5001.4 | 3933.5 | 2636.2 | 2032.7 | 153.6 | 27.1  | 21.7 | 27.1   | 32.5 |
| 33°   | 6481.2 | 6212.0 | 5530.8 | 4432.2 | 2990.3 | 2329.0 | 159.0 | 25.3  | 19.9 | 25.3   | 32.5 |
| 34°   | 7030.5 | 6782.9 | 6031.3 | 4835.2 | 3324.6 | 2610.9 | 162.6 | 21.7  | 19.9 | 25.3   | 30.7 |
| 35°   | 7514.7 | 7227.4 | 6472.2 | 5229.0 | 3667.9 | 2867.5 | 162.6 | 19.9  | 18.1 | 23.5   | 30.7 |
| 36°   | 7829.1 | 7623.1 | 6855.2 | 5617.5 | 3978.7 | 3111.4 | 162.6 | 18.1  | 16.3 | 23.5   | 28.9 |
| 37°   | 8098.3 | 7858.0 | 7162.4 | 5915.7 | 4208.2 | 3306.5 | 162.6 | 16.3  | 16.3 | 23.5   | 28.9 |
| 38°   | 8208.6 | 8002.6 | 7373.8 | 6179.5 | 4423.2 | 3505.3 | 160.8 | 14.5  | 14.5 | 21.7   | 28.9 |
| 39°   | 8251.9 | 8067.6 | 7532.8 | 6369.2 | 4582.2 | 3639.0 | 157.2 | 12.6  | 14.5 | 21.7   | 28.9 |
| 40°   | 8195.9 | 8056.8 | 7614.1 | 6492.0 | 4708.7 | 3736.6 | 151.8 | 10.8  | 12.6 | 21.7   | 28.9 |
| 42.5° | 7964.6 | 7872.5 | 7596.0 | 6614.9 | 4817.1 | 3808.9 | 131.9 | 7.2   | 12.6 | 19.9   | 28.9 |
| 45°   | 7758.6 | 7657.5 | 7413.5 | 6486.6 | 4676.1 | 3666.1 | 99.4  | 3.6   | 12.6 | 19.9   | 28.9 |
| 47.5° | 7359.3 | 7296.1 | 7104.6 | 6159.6 | 4367.2 | 3344.5 | 70.5  | 1.8   | 10.8 | 18.1   | 27.1 |
| 50°   | 6558.9 | 6499.3 | 6246.3 | 5348.3 | 3756.5 | 2827.7 | 50.6  | 1.8   | 9.0  | 18.1   | 27.1 |
| 52.5° | 5841.6 | 5778.3 | 5415.2 | 4446.7 | 2885.6 | 2072.5 | 32.5  | 1.8   | 9.0  | 18.1   | 27.1 |
| 55°   | 4974.3 | 4864.1 | 4387.1 | 3375.2 | 2045.4 | 1389.5 | 23.5  | 1.8   | 9.0  | 16.3   | 27.1 |
| 57.5° | 3682.4 | 3521.6 | 3095.1 | 2301.9 | 1178.1 | 753.5  | 12.6  | 1.8   | 9.0  | 16.3   | 27.1 |
| 60°   | 2504.3 | 2408.5 | 1937.0 | 1214.2 | 502.3  | 318.0  | 5.4   | 1.8   | 9.0  | 16.3   | 25.3 |
| 62.5° | 1517.8 | 1396.7 | 973.9  | 516.8  | 216.8  | 144.5  | 0.0   | 3.6   | 9.0  | 16.3   | 25.3 |
| 65°   | 431.8  | 383.1  | 254.8  | 117.4  | 61.4   | 47.0   | 0.0   | 3.6   | 9.0  | 16.3   | 25.3 |
| 67.5° | 14.5   | 14.5   | 14.5   | 12.6   | 9.0    | 9.0    | 1.8   | 3.6   | 9.0  | 16.3   | 23.5 |
| 70°   | 5.4    | 5.4    | 5.4    | 3.6    | 3.6    | 1.8    | 1.8   | 3.6   | 9.0  | 14.5   | 23.5 |
| 72.5° | 3.6    | 3.6    | 3.6    | 3.6    | 1.8    | 1.8    | 1.8   | 3.6   | 7.2  | 12.6   | 21.7 |
| 75°   | 3.6    | 3.6    | 3.6    | 1.8    | 1.8    | 1.8    | 1.8   | 5.4   | 7.2  | 12.6   | 18.1 |
| 77.5° | 3.6    | 3.6    | 3.6    | 1.8    | 1.8    | 1.8    | 1.8   | 5.4   | 7.2  | 10.8   | 18.1 |
| 80°   | 1.8    | 1.8    | 1.8    | 1.8    | 1.8    | 1.8    | 1.8   | 5.4   | 7.2  | 10.8   | 14.5 |



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**CANDELA DISTRIBUTION (continued):**

|       | 0°  | 5°  | 10° | 15° | 20° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° |
|-------|-----|-----|-----|-----|-----|-------|-----|-------|-----|--------|------|
| 82.5° | 1.8 | 1.8 | 1.8 | 0.0 | 0.0 | 0.0   | 1.8 | 5.4   | 7.2 | 7.2    | 10.8 |
| 85°   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0   | 1.8 | 5.4   | 7.2 | 5.4    | 7.2  |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0   | 1.8 | 5.4   | 5.4 | 5.4    | 3.6  |
| 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):**

|       | 157.5° | 180° |
|-------|--------|------|
| 0°    | 83.1   | 83.1 |
| 2.5°  | 77.7   | 77.7 |
| 5°    | 72.3   | 72.3 |
| 7.5°  | 66.9   | 66.9 |
| 10°   | 61.4   | 61.4 |
| 12.5° | 57.8   | 57.8 |
| 15°   | 52.4   | 54.2 |
| 17.5° | 48.8   | 50.6 |
| 20°   | 47.0   | 48.8 |
| 21°   | 47.0   | 48.8 |
| 22°   | 45.2   | 47.0 |
| 23°   | 45.2   | 47.0 |
| 24°   | 43.4   | 45.2 |
| 25°   | 41.6   | 43.4 |
| 26°   | 41.6   | 43.4 |
| 27°   | 41.6   | 43.4 |
| 28°   | 39.8   | 43.4 |
| 29°   | 39.8   | 41.6 |
| 30°   | 39.8   | 41.6 |
| 31°   | 37.9   | 41.6 |
| 32°   | 37.9   | 41.6 |
| 33°   | 37.9   | 39.8 |
| 34°   | 36.1   | 39.8 |
| 35°   | 36.1   | 39.8 |
| 36°   | 36.1   | 39.8 |
| 37°   | 36.1   | 37.9 |
| 38°   | 36.1   | 39.8 |
| 39°   | 36.1   | 37.9 |
| 40°   | 36.1   | 37.9 |
| 42.5° | 36.1   | 37.9 |
| 45°   | 36.1   | 37.9 |
| 47.5° | 36.1   | 39.8 |
| 50°   | 36.1   | 39.8 |
| 52.5° | 36.1   | 39.8 |
| 55°   | 36.1   | 39.8 |
| 57.5° | 36.1   | 37.9 |
| 60°   | 36.1   | 37.9 |
| 62.5° | 34.3   | 37.9 |
| 65°   | 34.3   | 36.1 |
| 67.5° | 34.3   | 36.1 |
| 70°   | 32.5   | 34.3 |
| 72.5° | 30.7   | 32.5 |
| 75°   | 27.1   | 30.7 |
| 77.5° | 25.3   | 27.1 |
| 80°   | 21.7   | 23.5 |



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**CANDELA DISTRIBUTION (continued):**

|       | 157.5° | 180° |
|-------|--------|------|
| 82.5° | 18.1   | 18.1 |
| 85°   | 12.6   | 14.5 |
| 87.5° | 7.2    | 7.2  |
| 90°   | 0.0    | 0.0  |

(END OF REPORT)