

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: P1316731

Luminaire Tested: P3SQAS02R509830DE010 E3SQCA451MW

Issue Date: 1/29/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1316731  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-79)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/29/2026  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: IRiS  
Catalog Number: P3SQAS02R509830DE010 E3SQCA451MW  
Description: 3in Adjustable LED luminaire with, R50 optic, 3000K CCT AND, 98CRI , E3SQCA451MW TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

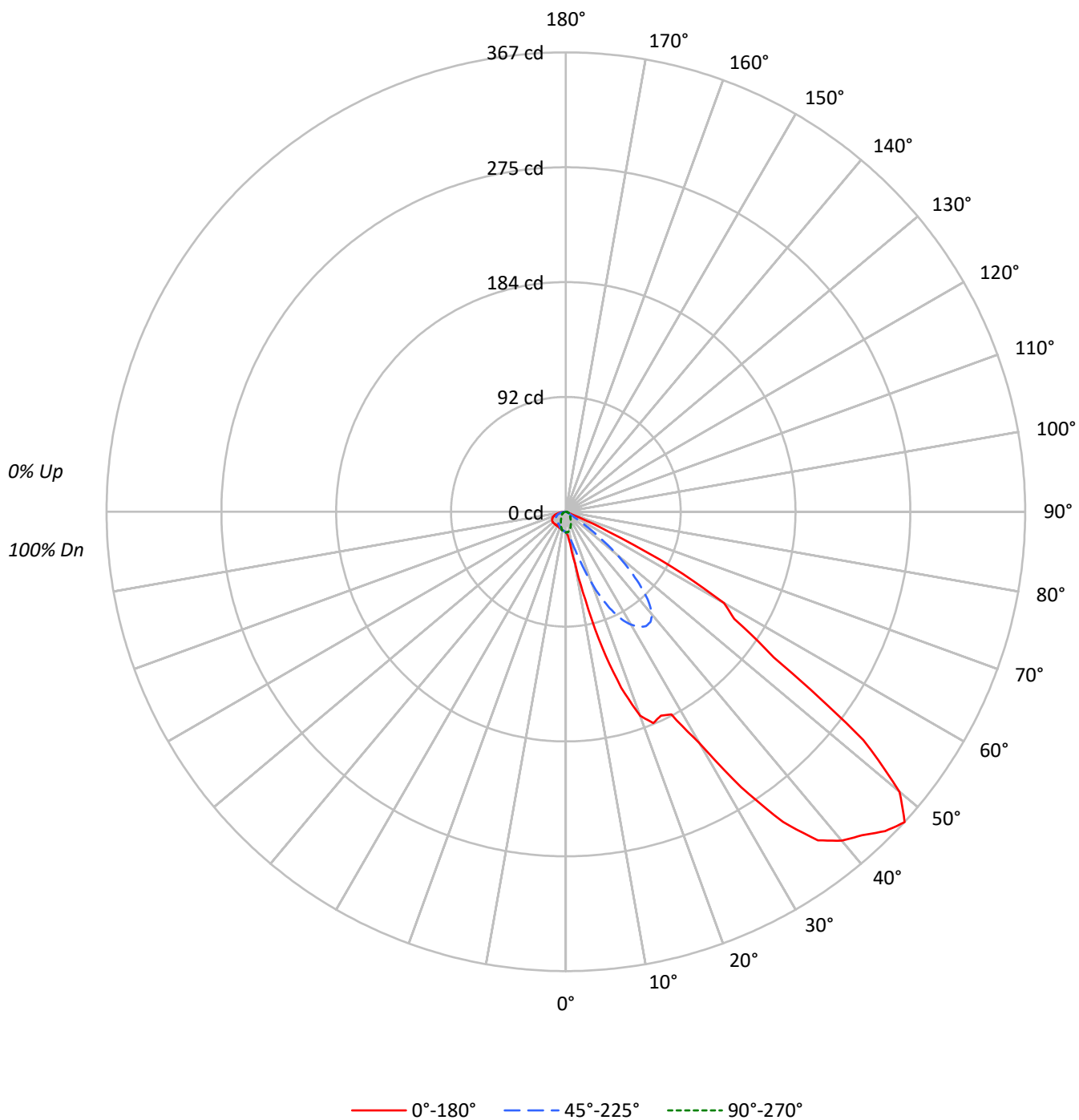
Lumens per Lamp: N/A  
Luminaire Lumens: 207.0 lumens  
Efficiency: N/A  
Efficacy: 57.5 lumens/watt  
Spacing Criteria (0/90/45): 3.58 / 0.83 / 1.91  
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')  
CIE Type: Direct

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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### 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  | 50  | 30  | 10  |
| RCR |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 102 | 102 | 100 |
| 1   | 110 | 106 | 102 | 98  | 107 | 103 | 100 | 97  | 99  | 96  | 94  | 95  | 93  | 91  | 92  | 90  | 88  | 86  | 86  | 86  |
| 2   | 100 | 93  | 86  | 81  | 98  | 91  | 85  | 80  | 87  | 82  | 78  | 84  | 80  | 76  | 81  | 78  | 75  | 73  | 73  | 73  |
| 3   | 91  | 81  | 73  | 67  | 89  | 80  | 72  | 66  | 77  | 70  | 65  | 74  | 69  | 64  | 71  | 67  | 63  | 61  | 61  | 61  |
| 4   | 83  | 71  | 63  | 56  | 81  | 70  | 62  | 55  | 67  | 60  | 55  | 65  | 59  | 54  | 63  | 58  | 53  | 51  | 51  | 51  |
| 5   | 76  | 63  | 54  | 47  | 74  | 62  | 53  | 47  | 60  | 52  | 46  | 58  | 51  | 46  | 56  | 50  | 45  | 43  | 43  | 43  |
| 6   | 69  | 56  | 47  | 40  | 67  | 55  | 46  | 40  | 53  | 45  | 39  | 51  | 44  | 39  | 50  | 43  | 39  | 37  | 37  | 37  |
| 7   | 63  | 50  | 41  | 34  | 62  | 49  | 40  | 34  | 47  | 39  | 34  | 46  | 39  | 34  | 44  | 38  | 33  | 31  | 31  | 31  |
| 8   | 58  | 44  | 36  | 30  | 57  | 44  | 35  | 29  | 42  | 35  | 29  | 41  | 34  | 29  | 40  | 34  | 29  | 27  | 27  | 27  |
| 9   | 54  | 40  | 31  | 26  | 53  | 39  | 31  | 26  | 38  | 31  | 25  | 37  | 30  | 25  | 36  | 30  | 25  | 23  | 23  | 23  |
| 10  | 50  | 36  | 28  | 23  | 49  | 36  | 28  | 22  | 35  | 27  | 22  | 34  | 27  | 22  | 33  | 27  | 22  | 20  | 20  | 20  |

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

|     | 0°    | 45°   | 90°  | 135° | 180° |
|-----|-------|-------|------|------|------|
| 0°  | 2824  | 2824  | 2824 | 2824 | 2824 |
| 5°  | 3371  | 3146  | 2818 | 2697 | 2662 |
| 10° | 7257  | 3900  | 2693 | 2588 | 2623 |
| 15° | 20076 | 6401  | 2425 | 2478 | 2585 |
| 20° | 31762 | 11235 | 2089 | 2401 | 2529 |
| 25° | 34148 | 16513 | 1805 | 2318 | 2546 |
| 30° | 42378 | 20722 | 1571 | 2267 | 2625 |
| 35° | 63599 | 23463 | 1346 | 2292 | 2775 |
| 40° | 77136 | 24123 | 1214 | 2361 | 2945 |
| 45° | 87876 | 20678 | 1169 | 2533 | 3215 |
| 50° | 93267 | 14281 | 1206 | 2733 | 3590 |
| 55° | 60923 | 5735  | 1171 | 2943 | 3963 |
| 60° | 50255 | 999   | 1171 | 3203 | 4374 |
| 65° | 15160 | 530   | 1100 | 3423 | 4809 |
| 70° | 655   | 554   | 1057 | 3525 | 5237 |
| 75° | 599   | 599   | 1065 | 3593 | 5723 |
| 80° | 496   | 496   | 1091 | 3570 | 5852 |
| 85° | 395   | 790   | 1383 | 3557 | 5730 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 47.5°

Luminance: 93582 cd/sqm

TEST NUMBER: P1316731

CATALOG NUMBER: P3SQAS02R509830DE010 E3SQCA451MW

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 1.7    | 0.8       |
| 10°-20°   | 9.8    | 4.7       |
| 20°-30°   | 25.2   | 12.2      |
| 30°-40°   | 45.3   | 21.9      |
| 40°-50°   | 60.5   | 29.2      |
| 50°-60°   | 46.0   | 22.2      |
| 60°-70°   | 14.0   | 6.8       |
| 70°-80°   | 3.4    | 1.6       |
| 80°-90°   | 1.2    | 0.6       |
| 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°    | 36.7   | 17.7      |
| 0°-40°    | 82.0   | 39.6      |
| 0°-60°    | 188.5  | 91.0      |
| 0°-90°    | 207.0  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 207.0  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | 45° | 90° | 135° | 180° | Flux |
|-----|-----|-----|-----|------|------|------|
| 0°  | 16  | 16  | 16  | 16   | 16   |      |
| 5°  | 20  | 18  | 16  | 16   | 15   | 3    |
| 15° | 113 | 36  | 14  | 14   | 14   | 33   |
| 25° | 180 | 87  | 10  | 12   | 13   | 86   |
| 35° | 302 | 112 | 6   | 11   | 13   | 186  |
| 45° | 361 | 85  | 5   | 10   | 13   | 276  |
| 55° | 203 | 19  | 4   | 10   | 13   | 202  |
| 65° | 37  | 1   | 3   | 8    | 12   | 51   |
| 75° | 1   | 1   | 2   | 5    | 9    | 1    |
| 85° | 0   | 0   | 1   | 2    | 3    | 0    |
| 90° | 0   | 0   | 0   | 0    | 0    |      |

TEST NUMBER: P1316731

CATALOG NUMBER: P3SQAS02R509830DE010 E3SQCA451MW

**CANDELA DISTRIBUTION (FULL):**

|       | 0°    | 5°    | 10°   | 15°   | 20°   | 25°   | 30°   | 35°   | 45°   | 67.5° | 90°  |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| 0°    | 16.4  | 16.4  | 16.4  | 16.4  | 16.4  | 16.4  | 16.4  | 16.4  | 16.4  | 16.4  | 16.4 |
| 2.5°  | 17.5  | 17.5  | 17.5  | 17.5  | 17.5  | 17.5  | 17.3  | 17.3  | 17.3  | 17.0  | 16.6 |
| 5°    | 19.5  | 19.7  | 19.5  | 19.5  | 19.1  | 19.1  | 18.8  | 18.8  | 18.2  | 17.2  | 16.3 |
| 7.5°  | 25.6  | 25.4  | 25.2  | 24.5  | 24.0  | 22.7  | 22.2  | 21.3  | 19.7  | 17.2  | 15.9 |
| 10°   | 41.5  | 40.4  | 39.7  | 38.1  | 34.7  | 32.5  | 29.7  | 26.8  | 22.3  | 17.2  | 15.4 |
| 12.5° | 72.1  | 71.9  | 69.7  | 64.4  | 59.5  | 52.9  | 46.0  | 39.0  | 27.5  | 16.8  | 14.7 |
| 15°   | 112.6 | 111.0 | 108.0 | 101.7 | 93.2  | 82.8  | 70.3  | 57.9  | 35.9  | 16.3  | 13.6 |
| 17.5° | 147.3 | 145.4 | 143.0 | 136.8 | 126.9 | 113.9 | 98.9  | 81.9  | 47.4  | 15.6  | 12.5 |
| 20°   | 173.3 | 172.0 | 170.0 | 165.0 | 155.7 | 143.9 | 127.1 | 106.6 | 61.3  | 14.7  | 11.4 |
| 22.5° | 182.7 | 182.5 | 182.9 | 181.1 | 176.5 | 167.2 | 151.1 | 129.6 | 75.1  | 13.6  | 10.4 |
| 25°   | 179.7 | 179.5 | 181.8 | 184.2 | 185.2 | 181.5 | 169.1 | 148.2 | 86.9  | 12.7  | 9.5  |
| 27.5° | 182.5 | 182.0 | 180.9 | 181.3 | 184.3 | 186.5 | 180.8 | 162.5 | 97.1  | 11.4  | 8.6  |
| 30°   | 213.1 | 210.1 | 205.3 | 197.0 | 191.0 | 190.4 | 187.9 | 173.8 | 104.2 | 10.2  | 7.9  |
| 32.5° | 260.9 | 257.1 | 248.3 | 233.1 | 218.7 | 207.6 | 199.7 | 183.3 | 109.2 | 8.9   | 7.0  |
| 35°   | 302.5 | 299.8 | 289.6 | 274.6 | 253.9 | 233.1 | 218.8 | 197.2 | 111.6 | 7.9   | 6.4  |
| 37.5° | 330.8 | 329.7 | 319.7 | 303.6 | 282.5 | 258.0 | 239.0 | 211.5 | 111.0 | 6.6   | 5.9  |
| 40°   | 343.1 | 339.9 | 331.5 | 317.9 | 296.6 | 274.6 | 254.6 | 220.6 | 107.3 | 5.4   | 5.4  |
| 42.5° | 350.4 | 346.9 | 337.7 | 324.9 | 303.9 | 280.5 | 256.4 | 216.7 | 98.3  | 4.3   | 5.2  |
| 45°   | 360.8 | 357.1 | 345.1 | 331.3 | 310.2 | 283.0 | 249.4 | 202.8 | 84.9  | 3.2   | 4.8  |
| 47.5° | 367.1 | 364.6 | 355.6 | 341.9 | 316.3 | 279.5 | 233.3 | 189.7 | 70.1  | 2.5   | 4.6  |
| 50°   | 348.1 | 345.6 | 339.0 | 329.5 | 312.4 | 267.5 | 219.2 | 168.6 | 53.3  | 2.0   | 4.5  |
| 52.5° | 299.7 | 301.8 | 303.1 | 305.7 | 293.2 | 240.7 | 198.1 | 151.8 | 35.9  | 1.6   | 4.1  |
| 55°   | 202.9 | 206.1 | 209.7 | 220.5 | 235.1 | 214.2 | 175.9 | 131.2 | 19.1  | 1.6   | 3.9  |
| 57.5° | 159.5 | 158.4 | 157.3 | 156.6 | 168.1 | 176.6 | 154.7 | 105.0 | 8.2   | 1.6   | 3.6  |
| 60°   | 145.9 | 142.7 | 140.5 | 141.1 | 146.8 | 143.4 | 122.5 | 68.5  | 2.9   | 1.6   | 3.4  |
| 62.5° | 95.7  | 98.2  | 103.0 | 111.2 | 107.3 | 92.1  | 71.2  | 27.2  | 1.4   | 1.6   | 3.0  |
| 65°   | 37.2  | 35.9  | 37.2  | 39.5  | 34.1  | 25.4  | 15.9  | 4.8   | 1.3   | 1.4   | 2.7  |
| 67.5° | 5.0   | 4.5   | 3.4   | 2.1   | 2.0   | 1.8   | 1.4   | 1.3   | 1.3   | 1.4   | 2.5  |
| 70°   | 1.3   | 1.3   | 1.3   | 1.3   | 1.3   | 1.3   | 1.3   | 1.1   | 1.1   | 1.3   | 2.1  |
| 72.5° | 1.1   | 1.1   | 1.1   | 1.1   | 1.1   | 1.1   | 1.1   | 1.1   | 1.1   | 1.3   | 1.8  |
| 75°   | 0.9   | 0.9   | 0.9   | 0.9   | 0.9   | 0.9   | 0.9   | 0.9   | 0.9   | 1.1   | 1.6  |
| 77.5° | 0.7   | 0.7   | 0.7   | 0.7   | 0.7   | 0.7   | 0.7   | 0.7   | 0.7   | 0.9   | 1.3  |
| 80°   | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   | 0.7   | 1.1  |
| 82.5° | 0.4   | 0.4   | 0.4   | 0.4   | 0.4   | 0.4   | 0.4   | 0.5   | 0.5   | 0.7   | 0.9  |
| 85°   | 0.2   | 0.4   | 0.2   | 0.4   | 0.4   | 0.4   | 0.4   | 0.4   | 0.4   | 0.5   | 0.7  |
| 87.5° | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.4   | 0.5   | 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  |

TEST NUMBER: P1316731

CATALOG NUMBER: P3SQAS02R509830DE010 E3SQCA451MW

**CANDELA DISTRIBUTION (continued):**

|       | 112.5° | 135° | 157.5° | 180° |
|-------|--------|------|--------|------|
| 0°    | 16.4   | 16.4 | 16.4   | 16.4 |
| 2.5°  | 16.3   | 15.9 | 15.9   | 15.9 |
| 5°    | 15.9   | 15.6 | 15.6   | 15.4 |
| 7.5°  | 15.4   | 15.2 | 15.2   | 15.2 |
| 10°   | 15.0   | 14.8 | 15.0   | 15.0 |
| 12.5° | 14.3   | 14.5 | 14.7   | 14.7 |
| 15°   | 13.6   | 13.9 | 14.3   | 14.5 |
| 17.5° | 12.9   | 13.6 | 13.9   | 14.1 |
| 20°   | 12.2   | 13.1 | 13.6   | 13.8 |
| 22.5° | 11.6   | 12.5 | 13.2   | 13.6 |
| 25°   | 10.9   | 12.2 | 13.1   | 13.4 |
| 27.5° | 10.2   | 11.6 | 12.7   | 13.2 |
| 30°   | 9.7    | 11.4 | 12.7   | 13.2 |
| 32.5° | 9.1    | 11.1 | 12.5   | 13.1 |
| 35°   | 8.8    | 10.9 | 12.5   | 13.2 |
| 37.5° | 8.4    | 10.7 | 12.5   | 13.1 |
| 40°   | 8.2    | 10.5 | 12.5   | 13.1 |
| 42.5° | 8.0    | 10.5 | 12.5   | 13.2 |
| 45°   | 7.7    | 10.4 | 12.5   | 13.2 |
| 47.5° | 7.5    | 10.4 | 12.5   | 13.2 |
| 50°   | 7.3    | 10.2 | 12.5   | 13.4 |
| 52.5° | 7.2    | 10.0 | 12.5   | 13.4 |
| 55°   | 6.8    | 9.8  | 12.3   | 13.2 |
| 57.5° | 6.6    | 9.7  | 12.2   | 12.9 |
| 60°   | 6.3    | 9.3  | 11.8   | 12.7 |
| 62.5° | 5.9    | 8.9  | 11.4   | 12.2 |
| 65°   | 5.4    | 8.4  | 10.9   | 11.8 |
| 67.5° | 4.8    | 7.7  | 10.4   | 11.3 |
| 70°   | 4.3    | 7.0  | 9.7    | 10.4 |
| 72.5° | 3.8    | 6.3  | 8.9    | 9.5  |
| 75°   | 3.2    | 5.4  | 7.9    | 8.6  |
| 77.5° | 2.7    | 4.6  | 6.6    | 7.2  |
| 80°   | 2.0    | 3.6  | 5.4    | 5.9  |
| 82.5° | 1.6    | 2.7  | 3.9    | 4.3  |
| 85°   | 1.1    | 1.8  | 2.5    | 2.9  |
| 87.5° | 0.5    | 0.9  | 1.3    | 1.4  |
| 90°   | 0.0    | 0.0  | 0.0    | 0.0  |

(END OF REPORT)