

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: P1307565

Luminaire Tested: P3SQAS02R509030DE010 E3SQCA451MMS

Issue Date: 1/29/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1307565  
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: P3SQAS02R509030DE010 E3SQCA451MMS  
Description: 3in Adjustable LED luminaire with, R50 optic, 3000K CCT AND, 90CRI , E3SQCA451MMS TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

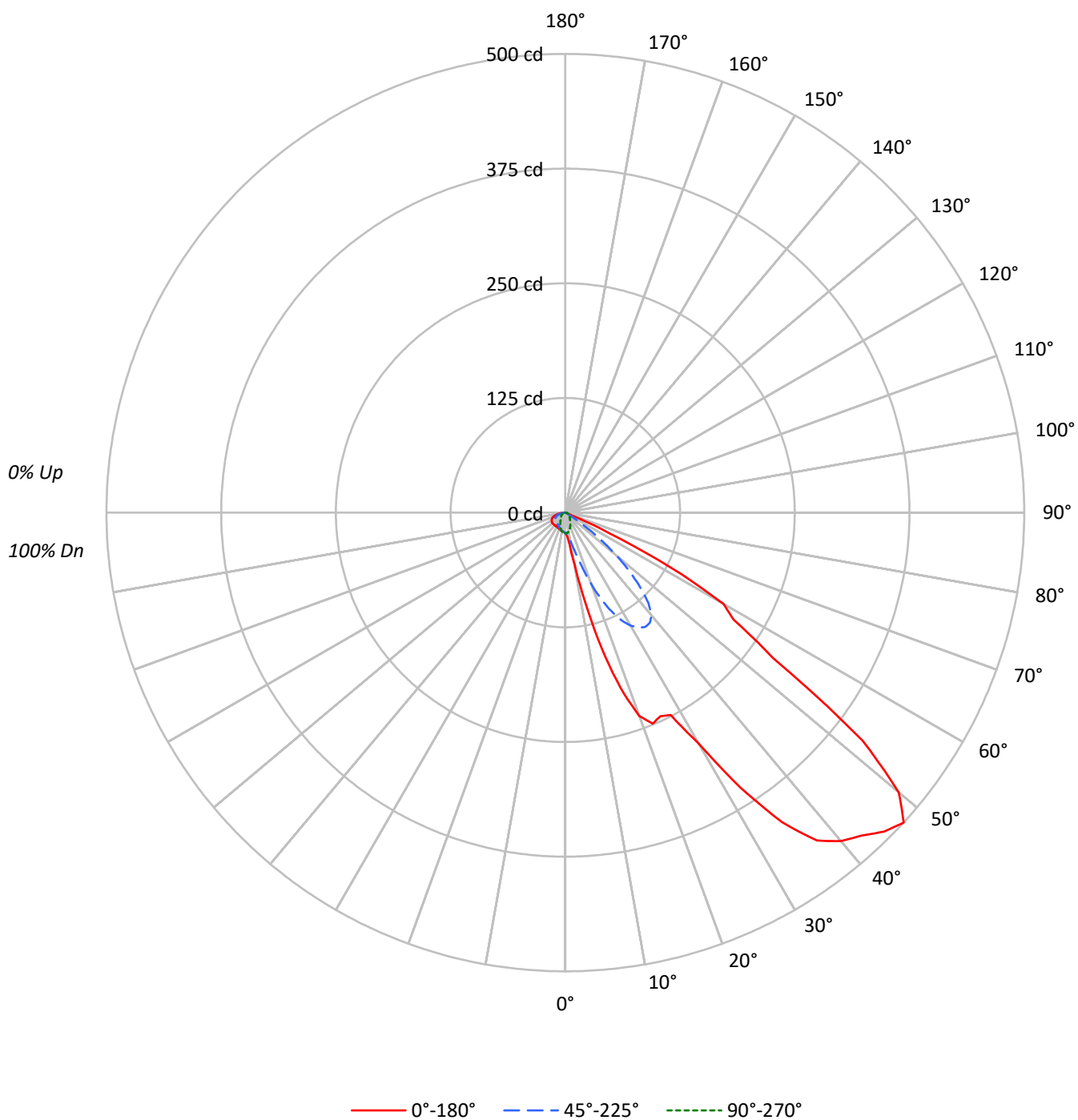
Lumens per Lamp: N/A  
Luminaire Lumens: 282.0 lumens  
Efficiency: N/A  
Efficacy: 78.3 lumens/watt  
Spacing Criteria (0/90/45): 3.58 / 0.82 / 1.91  
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')  
CIE Type: Direct

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

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

|     | 0°     | 45°   | 90°  | 135° | 180° |
|-----|--------|-------|------|------|------|
| 0°  | 3858   | 3858  | 3858 | 3858 | 3858 |
| 5°  | 4581   | 4287  | 3838 | 3665 | 3613 |
| 10° | 9881   | 5316  | 3655 | 3533 | 3585 |
| 15° | 27369  | 8737  | 3299 | 3388 | 3512 |
| 20° | 43253  | 15304 | 2859 | 3262 | 3446 |
| 25° | 46519  | 22499 | 2451 | 3154 | 3477 |
| 30° | 57731  | 28239 | 2128 | 3102 | 3580 |
| 35° | 86642  | 31957 | 1850 | 3133 | 3784 |
| 40° | 105081 | 32846 | 1641 | 3237 | 4002 |
| 45° | 119710 | 28180 | 1607 | 3434 | 4384 |
| 50° | 127053 | 19452 | 1634 | 3724 | 4903 |
| 55° | 83022  | 7837  | 1621 | 4023 | 5405 |
| 60° | 68476  | 1343  | 1584 | 4374 | 5959 |
| 65° | 20661  | 693   | 1508 | 4646 | 6561 |
| 70° | 856    | 755   | 1460 | 4784 | 7100 |
| 75° | 799    | 799   | 1464 | 4858 | 7785 |
| 80° | 694    | 694   | 1488 | 4860 | 7934 |
| 85° | 395    | 988   | 1976 | 4742 | 7707 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 47.5°

Luminance: 127486 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 2.3    | 0.8       |
| 10°-20°   | 13.4   | 4.7       |
| 20°-30°   | 34.3   | 12.2      |
| 30°-40°   | 61.7   | 21.9      |
| 40°-50°   | 82.4   | 29.2      |
| 50°-60°   | 62.7   | 22.2      |
| 60°-70°   | 19.0   | 6.7       |
| 70°-80°   | 4.6    | 1.6       |
| 80°-90°   | 1.6    | 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°    | 50.0   | 17.7      |
| 0°-40°    | 111.7  | 39.6      |
| 0°-60°    | 256.8  | 91.1      |
| 0°-90°    | 282.0  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 282.0  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | 45° | 90° | 135° | 180° | Flux |
|-----|-----|-----|-----|------|------|------|
| 0°  | 22  | 22  | 22  | 22   | 22   |      |
| 5°  | 26  | 25  | 22  | 21   | 21   | 3    |
| 15° | 154 | 49  | 18  | 19   | 20   | 45   |
| 25° | 245 | 118 | 13  | 17   | 18   | 117  |
| 35° | 412 | 152 | 9   | 15   | 18   | 253  |
| 45° | 492 | 116 | 7   | 14   | 18   | 376  |
| 55° | 276 | 26  | 5   | 13   | 18   | 275  |
| 65° | 51  | 2   | 4   | 11   | 16   | 70   |
| 75° | 1   | 1   | 2   | 7    | 12   | 1    |
| 85° | 0   | 0   | 1   | 2    | 4    | 0    |
| 90° | 0   | 0   | 0   | 0    | 0    |      |

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°    | 5°    | 10°   | 15°   | 20°   | 25°   | 30°   | 35°   | 45°   | 67.5° | 90°  |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| 0°    | 22.4  | 22.4  | 22.4  | 22.4  | 22.4  | 22.4  | 22.4  | 22.4  | 22.4  | 22.4  | 22.4 |
| 2.5°  | 23.9  | 23.9  | 23.9  | 23.9  | 23.9  | 23.9  | 23.6  | 23.6  | 23.6  | 23.1  | 22.7 |
| 5°    | 26.5  | 26.8  | 26.5  | 26.5  | 26.1  | 26.1  | 25.6  | 25.6  | 24.8  | 23.4  | 22.2 |
| 7.5°  | 34.8  | 34.6  | 34.3  | 33.4  | 32.6  | 30.9  | 30.2  | 29.0  | 26.8  | 23.4  | 21.7 |
| 10°   | 56.5  | 55.0  | 54.1  | 51.9  | 47.3  | 44.3  | 40.4  | 36.5  | 30.4  | 23.4  | 20.9 |
| 12.5° | 98.2  | 97.9  | 95.0  | 87.7  | 81.1  | 72.1  | 62.6  | 53.1  | 37.5  | 22.9  | 20.0 |
| 15°   | 153.5 | 151.3 | 147.1 | 138.6 | 126.9 | 112.8 | 95.7  | 78.9  | 49.0  | 22.2  | 18.5 |
| 17.5° | 200.7 | 198.0 | 194.9 | 186.3 | 172.9 | 155.2 | 134.7 | 111.6 | 64.5  | 21.2  | 17.1 |
| 20°   | 236.0 | 234.3 | 231.6 | 224.8 | 212.2 | 196.1 | 173.2 | 145.2 | 83.5  | 20.0  | 15.6 |
| 22.5° | 248.9 | 248.7 | 249.2 | 246.7 | 240.4 | 227.7 | 205.8 | 176.6 | 102.3 | 18.5  | 14.1 |
| 25°   | 244.8 | 244.5 | 247.7 | 250.9 | 252.3 | 247.2 | 230.4 | 201.9 | 118.4 | 17.3  | 12.9 |
| 27.5° | 248.7 | 248.0 | 246.5 | 247.0 | 251.1 | 254.0 | 246.3 | 221.4 | 132.3 | 15.6  | 11.7 |
| 30°   | 290.3 | 286.2 | 279.6 | 268.4 | 260.1 | 259.4 | 256.0 | 236.8 | 142.0 | 13.9  | 10.7 |
| 32.5° | 355.4 | 350.3 | 338.3 | 317.6 | 297.9 | 282.8 | 272.1 | 249.7 | 148.8 | 12.2  | 9.5  |
| 35°   | 412.1 | 408.5 | 394.6 | 374.1 | 345.9 | 317.6 | 298.1 | 268.7 | 152.0 | 10.7  | 8.8  |
| 37.5° | 450.6 | 449.2 | 435.5 | 413.6 | 384.8 | 351.5 | 325.7 | 288.1 | 151.3 | 9.0   | 8.0  |
| 40°   | 467.4 | 463.0 | 451.6 | 433.1 | 404.1 | 374.1 | 346.9 | 300.6 | 146.1 | 7.3   | 7.3  |
| 42.5° | 477.4 | 472.5 | 460.1 | 442.6 | 414.1 | 382.2 | 349.3 | 295.2 | 134.0 | 5.8   | 7.1  |
| 45°   | 491.5 | 486.4 | 470.1 | 451.3 | 422.6 | 385.6 | 339.8 | 276.2 | 115.7 | 4.4   | 6.6  |
| 47.5° | 500.1 | 496.6 | 484.5 | 465.7 | 430.9 | 380.7 | 317.9 | 258.4 | 95.5  | 3.4   | 6.3  |
| 50°   | 474.2 | 470.8 | 461.8 | 448.9 | 425.5 | 364.4 | 298.6 | 229.7 | 72.6  | 2.7   | 6.1  |
| 52.5° | 408.2 | 411.2 | 412.9 | 416.5 | 399.5 | 327.9 | 269.9 | 206.8 | 49.0  | 2.2   | 5.6  |
| 55°   | 276.5 | 280.8 | 285.7 | 300.3 | 320.3 | 291.8 | 239.7 | 178.8 | 26.1  | 2.2   | 5.4  |
| 57.5° | 217.3 | 215.8 | 214.3 | 213.4 | 229.0 | 240.7 | 210.7 | 143.0 | 11.2  | 2.2   | 4.9  |
| 60°   | 198.8 | 194.4 | 191.4 | 192.2 | 200.0 | 195.3 | 166.8 | 93.3  | 3.9   | 2.2   | 4.6  |
| 62.5° | 130.3 | 133.7 | 140.3 | 151.5 | 146.1 | 125.4 | 96.9  | 37.0  | 1.9   | 2.2   | 4.1  |
| 65°   | 50.7  | 49.0  | 50.7  | 53.8  | 46.5  | 34.6  | 21.7  | 6.6   | 1.7   | 1.9   | 3.7  |
| 67.5° | 6.8   | 6.1   | 4.6   | 2.9   | 2.7   | 2.4   | 1.9   | 1.7   | 1.7   | 1.9   | 3.4  |
| 70°   | 1.7   | 1.7   | 1.7   | 1.7   | 1.7   | 1.7   | 1.7   | 1.5   | 1.5   | 1.7   | 2.9  |
| 72.5° | 1.5   | 1.5   | 1.5   | 1.5   | 1.5   | 1.5   | 1.5   | 1.5   | 1.5   | 1.7   | 2.4  |
| 75°   | 1.2   | 1.2   | 1.2   | 1.2   | 1.2   | 1.2   | 1.2   | 1.2   | 1.2   | 1.5   | 2.2  |
| 77.5° | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.2   | 1.7  |
| 80°   | 0.7   | 0.7   | 0.7   | 0.7   | 0.7   | 0.7   | 0.7   | 0.7   | 0.7   | 1.0   | 1.5  |
| 82.5° | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   | 0.7   | 0.7   | 1.0   | 1.2  |
| 85°   | 0.2   | 0.5   | 0.2   | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   | 0.7   | 1.0  |
| 87.5° | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.5   | 0.7   | 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  |

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**CANDELA DISTRIBUTION (continued):**

|       | 112.5° | 135° | 157.5° | 180° |
|-------|--------|------|--------|------|
| 0°    | 22.4   | 22.4 | 22.4   | 22.4 |
| 2.5°  | 22.2   | 21.7 | 21.7   | 21.7 |
| 5°    | 21.7   | 21.2 | 21.2   | 20.9 |
| 7.5°  | 20.9   | 20.7 | 20.7   | 20.7 |
| 10°   | 20.5   | 20.2 | 20.5   | 20.5 |
| 12.5° | 19.5   | 19.7 | 20.0   | 20.0 |
| 15°   | 18.5   | 19.0 | 19.5   | 19.7 |
| 17.5° | 17.5   | 18.5 | 19.0   | 19.2 |
| 20°   | 16.6   | 17.8 | 18.5   | 18.8 |
| 22.5° | 15.8   | 17.1 | 18.0   | 18.5 |
| 25°   | 14.9   | 16.6 | 17.8   | 18.3 |
| 27.5° | 13.9   | 15.8 | 17.3   | 18.0 |
| 30°   | 13.2   | 15.6 | 17.3   | 18.0 |
| 32.5° | 12.4   | 15.1 | 17.1   | 17.8 |
| 35°   | 11.9   | 14.9 | 17.1   | 18.0 |
| 37.5° | 11.4   | 14.6 | 17.1   | 17.8 |
| 40°   | 11.2   | 14.4 | 17.1   | 17.8 |
| 42.5° | 11.0   | 14.4 | 17.1   | 18.0 |
| 45°   | 10.5   | 14.1 | 17.1   | 18.0 |
| 47.5° | 10.2   | 14.1 | 17.1   | 18.0 |
| 50°   | 10.0   | 13.9 | 17.1   | 18.3 |
| 52.5° | 9.7    | 13.6 | 17.1   | 18.3 |
| 55°   | 9.3    | 13.4 | 16.8   | 18.0 |
| 57.5° | 9.0    | 13.2 | 16.6   | 17.5 |
| 60°   | 8.5    | 12.7 | 16.1   | 17.3 |
| 62.5° | 8.0    | 12.2 | 15.6   | 16.6 |
| 65°   | 7.3    | 11.4 | 14.9   | 16.1 |
| 67.5° | 6.6    | 10.5 | 14.1   | 15.3 |
| 70°   | 5.8    | 9.5  | 13.2   | 14.1 |
| 72.5° | 5.1    | 8.5  | 12.2   | 12.9 |
| 75°   | 4.4    | 7.3  | 10.7   | 11.7 |
| 77.5° | 3.7    | 6.3  | 9.0    | 9.7  |
| 80°   | 2.7    | 4.9  | 7.3    | 8.0  |
| 82.5° | 2.2    | 3.7  | 5.4    | 5.8  |
| 85°   | 1.5    | 2.4  | 3.4    | 3.9  |
| 87.5° | 0.7    | 1.2  | 1.7    | 1.9  |
| 90°   | 0.0    | 0.0  | 0.0    | 0.0  |

(END OF REPORT)