

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: P1309988

Luminaire Tested: P3SQAS05R609040DE010 E3SQCA451MW

Issue Date: 1/29/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1309988  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-81)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/29/2026  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: IRiS  
Catalog Number: P3SQAS05R609040DE010 E3SQCA451MW  
Description: 3in Adjustable LED luminaire with, R60 optic, 4000K CCT AND, 90CRI , E3SQCA451MW TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

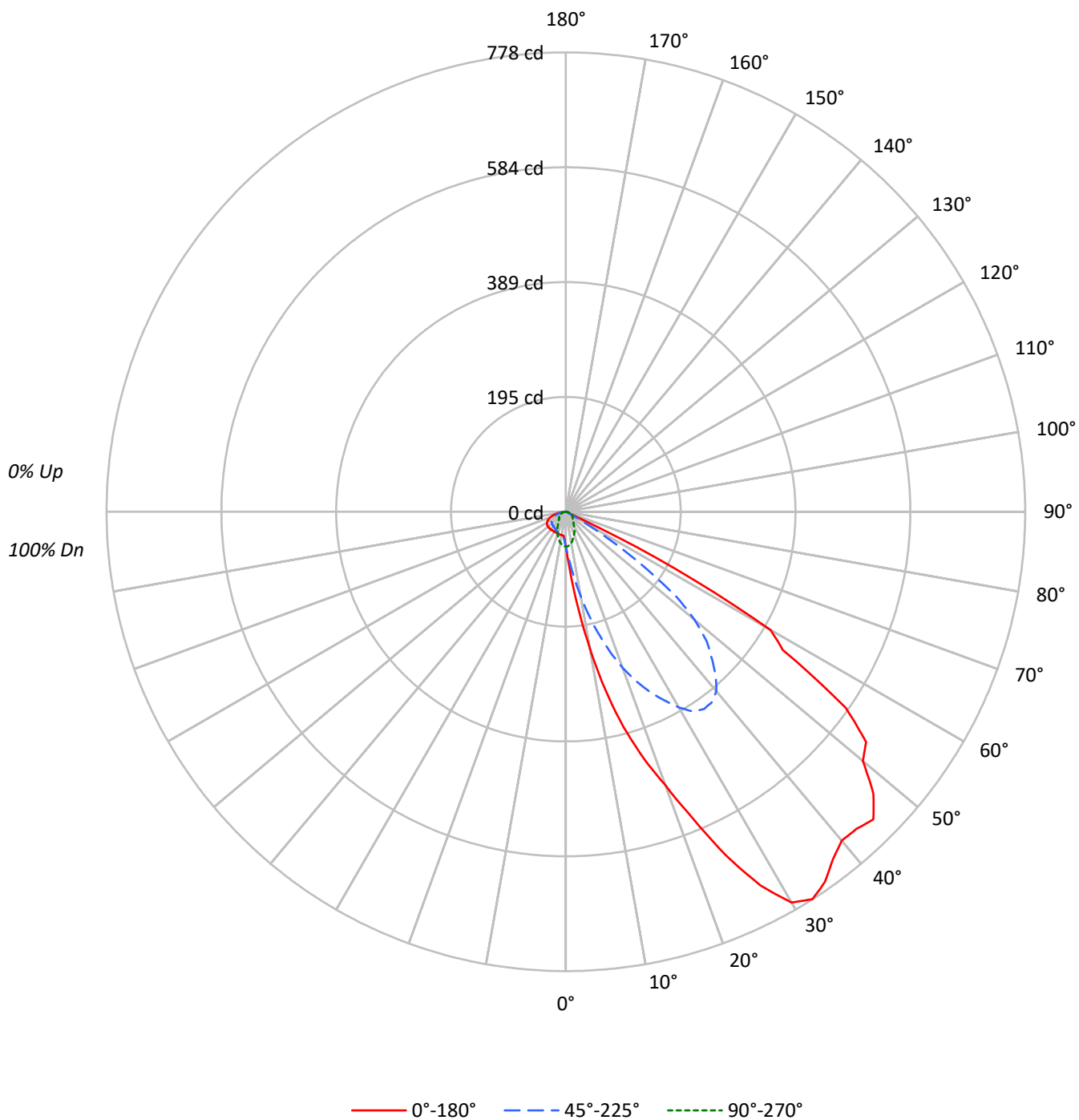
Lumens per Lamp: N/A  
Luminaire Lumens: 592.0 lumens  
Efficiency: N/A  
Efficacy: 82.2 lumens/watt  
Spacing Criteria (0/90/45): 3.38 / 0.84 / 2.07  
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')  
CIE Type: Direct

Input Watts (W): 7.2  
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

TEST NUMBER: P1309988

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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 | 100 |    |    |
| 1   | 110 | 106 | 102 | 99  | 108 | 104 | 100 | 97  | 100 | 97  | 94  | 96  | 93  | 91  | 92  | 90  | 89  | 87  |    |    |
| 2   | 101 | 93  | 87  | 82  | 98  | 91  | 86  | 81  | 88  | 83  | 79  | 85  | 81  | 77  | 82  | 79  | 76  | 74  |    |    |
| 3   | 92  | 82  | 74  | 68  | 90  | 81  | 73  | 68  | 78  | 72  | 67  | 75  | 70  | 65  | 72  | 68  | 64  | 62  |    |    |
| 4   | 84  | 72  | 64  | 58  | 82  | 71  | 63  | 57  | 69  | 62  | 56  | 66  | 60  | 56  | 64  | 59  | 55  | 53  |    |    |
| 5   | 77  | 64  | 55  | 49  | 75  | 63  | 55  | 49  | 61  | 54  | 48  | 59  | 53  | 48  | 57  | 52  | 47  | 45  |    |    |
| 6   | 70  | 57  | 48  | 42  | 69  | 56  | 48  | 42  | 54  | 47  | 41  | 53  | 46  | 41  | 51  | 45  | 41  | 39  |    |    |
| 7   | 65  | 51  | 42  | 36  | 63  | 50  | 42  | 36  | 49  | 41  | 36  | 47  | 41  | 36  | 46  | 40  | 35  | 33  |    |    |
| 8   | 60  | 46  | 38  | 32  | 58  | 45  | 37  | 32  | 44  | 37  | 31  | 43  | 36  | 31  | 42  | 36  | 31  | 29  |    |    |
| 9   | 55  | 42  | 33  | 28  | 54  | 41  | 33  | 28  | 40  | 33  | 28  | 39  | 32  | 27  | 38  | 32  | 27  | 25  |    |    |
| 10  | 52  | 38  | 30  | 25  | 50  | 38  | 30  | 25  | 37  | 29  | 24  | 36  | 29  | 24  | 35  | 29  | 24  | 22  |    |    |

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

|     | 0°     | 45°   | 90°   | 135°  | 180°  |
|-----|--------|-------|-------|-------|-------|
| 0°  | 10109  | 10109 | 10109 | 10109 | 10109 |
| 5°  | 19916  | 15542 | 9958  | 7538  | 7157  |
| 10° | 41132  | 25323 | 9321  | 6873  | 6960  |
| 15° | 67254  | 37995 | 8344  | 6900  | 7096  |
| 20° | 90245  | 51482 | 7496  | 6909  | 7203  |
| 25° | 122092 | 63906 | 6537  | 6860  | 7468  |
| 30° | 151973 | 76086 | 5449  | 6841  | 7815  |
| 35° | 160879 | 85759 | 4646  | 7022  | 8136  |
| 40° | 163445 | 89164 | 4227  | 7262  | 8835  |
| 45° | 179430 | 84929 | 4067  | 7745  | 9572  |
| 50° | 175897 | 76119 | 4046  | 8225  | 10530 |
| 55° | 173851 | 46691 | 4054  | 8888  | 11620 |
| 60° | 137916 | 11126 | 4271  | 9438  | 12607 |
| 65° | 8762   | 1956  | 4157  | 9658  | 13611 |
| 70° | 1913   | 2165  | 4079  | 10021 | 14351 |
| 75° | 1797   | 2129  | 3593  | 9649  | 14706 |
| 80° | 1587   | 2182  | 3769  | 9620  | 13885 |
| 85° | 988    | 2174  | 4347  | 8497  | 13832 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 15°

Vertical Angle: 52.5°

Luminance: 189378 cd/sqm

TEST NUMBER: P1309988

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 7.3    | 1.2       |
| 10°-20°   | 36.9   | 6.2       |
| 20°-30°   | 85.6   | 14.5      |
| 30°-40°   | 133.1  | 22.5      |
| 40°-50°   | 151.6  | 25.6      |
| 50°-60°   | 127.7  | 21.6      |
| 60°-70°   | 37.1   | 6.3       |
| 70°-80°   | 9.5    | 1.6       |
| 80°-90°   | 3.2    | 0.5       |
| 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°    | 129.8  | 21.9      |
| 0°-40°    | 262.9  | 44.4      |
| 0°-60°    | 542.2  | 91.6      |
| 0°-90°    | 592.0  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 592.0  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | 45° | 90° | 135° | 180° | Flux |
|-----|-----|-----|-----|------|------|------|
| 0°  | 59  | 59  | 59  | 59   | 59   |      |
| 5°  | 115 | 90  | 58  | 44   | 41   | 15   |
| 15° | 377 | 213 | 47  | 39   | 40   | 109  |
| 25° | 642 | 336 | 34  | 36   | 39   | 298  |
| 35° | 765 | 408 | 22  | 33   | 39   | 475  |
| 45° | 737 | 349 | 17  | 32   | 39   | 554  |
| 55° | 579 | 156 | 14  | 30   | 39   | 487  |
| 65° | 22  | 5   | 10  | 24   | 33   | 106  |
| 75° | 3   | 3   | 5   | 14   | 22   | 3    |
| 85° | 0   | 1   | 2   | 4    | 7    | 1    |
| 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°    | 58.7  | 58.7  | 58.7  | 58.7  | 58.7  | 58.7  | 58.7  | 58.7  | 58.7  | 58.7  | 58.7 |
| 2.5°  | 79.1  | 78.6  | 78.6  | 78.0  | 77.5  | 77.0  | 75.3  | 74.8  | 71.6  | 65.1  | 58.7 |
| 5°    | 115.2 | 114.6 | 113.0 | 112.5 | 109.8 | 106.0 | 102.2 | 98.5  | 89.9  | 71.6  | 57.6 |
| 7.5°  | 166.8 | 167.9 | 166.8 | 160.9 | 157.1 | 151.2 | 139.9 | 131.8 | 114.6 | 78.0  | 55.4 |
| 10°   | 235.2 | 235.2 | 233.6 | 224.4 | 216.3 | 205.0 | 190.5 | 176.5 | 144.8 | 83.9  | 53.3 |
| 12.5° | 309.4 | 311.0 | 303.0 | 295.4 | 280.9 | 266.9 | 247.0 | 226.0 | 179.2 | 88.8  | 50.6 |
| 15°   | 377.2 | 376.2 | 368.1 | 358.4 | 343.3 | 324.0 | 303.0 | 276.1 | 213.1 | 92.0  | 46.8 |
| 17.5° | 437.5 | 435.4 | 428.4 | 417.6 | 399.3 | 377.8 | 350.9 | 321.8 | 248.1 | 94.7  | 44.1 |
| 20°   | 492.4 | 484.9 | 476.8 | 465.5 | 447.7 | 425.1 | 397.1 | 364.3 | 280.9 | 94.7  | 40.9 |
| 22.5° | 561.8 | 554.3 | 543.0 | 525.8 | 502.1 | 474.1 | 441.3 | 404.1 | 310.0 | 92.6  | 37.7 |
| 25°   | 642.5 | 636.6 | 617.2 | 595.2 | 564.5 | 531.1 | 492.9 | 442.9 | 336.3 | 89.3  | 34.4 |
| 27.5° | 713.0 | 706.6 | 687.2 | 654.9 | 617.8 | 578.0 | 537.6 | 486.5 | 359.5 | 83.4  | 30.7 |
| 30°   | 764.2 | 756.1 | 741.0 | 710.3 | 665.1 | 616.7 | 568.8 | 519.8 | 382.6 | 76.4  | 27.4 |
| 32.5° | 777.6 | 776.5 | 765.2 | 742.6 | 702.3 | 649.0 | 591.9 | 538.7 | 400.9 | 67.3  | 24.8 |
| 35°   | 765.2 | 766.8 | 764.7 | 753.4 | 723.8 | 671.6 | 607.0 | 548.9 | 407.9 | 58.1  | 22.1 |
| 37.5° | 742.6 | 744.8 | 748.5 | 750.2 | 731.3 | 685.0 | 615.6 | 553.2 | 406.3 | 49.0  | 20.4 |
| 40°   | 727.0 | 725.9 | 725.9 | 736.7 | 732.9 | 691.0 | 616.7 | 550.0 | 396.6 | 39.3  | 18.8 |
| 42.5° | 728.6 | 716.8 | 708.7 | 725.9 | 731.3 | 688.3 | 609.7 | 541.4 | 375.6 | 30.1  | 17.2 |
| 45°   | 736.7 | 711.4 | 697.4 | 719.5 | 728.1 | 679.1 | 596.8 | 528.4 | 348.7 | 21.0  | 16.7 |
| 47.5° | 706.6 | 689.9 | 687.7 | 718.9 | 722.2 | 663.5 | 576.9 | 508.0 | 322.9 | 14.5  | 15.6 |
| 50°   | 656.5 | 653.8 | 665.1 | 697.4 | 698.0 | 637.7 | 554.3 | 470.9 | 284.1 | 10.2  | 15.1 |
| 52.5° | 640.9 | 642.5 | 652.8 | 669.4 | 653.8 | 594.1 | 513.4 | 439.7 | 235.2 | 8.1   | 14.5 |
| 55°   | 579.0 | 581.7 | 591.4 | 601.6 | 590.3 | 540.8 | 463.9 | 402.0 | 155.5 | 7.5   | 13.5 |
| 57.5° | 435.9 | 442.9 | 460.6 | 469.8 | 470.9 | 440.7 | 420.3 | 346.6 | 87.7  | 7.5   | 12.9 |
| 60°   | 400.4 | 391.2 | 383.2 | 364.3 | 347.1 | 343.3 | 345.5 | 259.9 | 32.3  | 7.0   | 12.4 |
| 62.5° | 209.3 | 205.0 | 217.4 | 225.5 | 227.6 | 239.5 | 223.9 | 137.2 | 7.0   | 7.0   | 11.3 |
| 65°   | 21.5  | 21.5  | 26.4  | 35.0  | 58.1  | 77.5  | 73.7  | 39.8  | 4.8   | 6.5   | 10.2 |
| 67.5° | 6.5   | 6.5   | 6.5   | 7.5   | 9.7   | 9.7   | 8.1   | 5.9   | 4.8   | 5.9   | 9.1  |
| 70°   | 3.8   | 3.8   | 3.8   | 3.8   | 3.8   | 3.8   | 4.3   | 3.8   | 4.3   | 5.4   | 8.1  |
| 72.5° | 3.2   | 3.2   | 3.2   | 3.2   | 3.8   | 3.8   | 3.8   | 3.8   | 3.8   | 4.8   | 7.0  |
| 75°   | 2.7   | 2.7   | 2.7   | 2.7   | 2.7   | 2.7   | 2.7   | 3.2   | 3.2   | 3.8   | 5.4  |
| 77.5° | 2.2   | 2.2   | 2.2   | 2.2   | 2.2   | 2.2   | 2.7   | 2.7   | 2.7   | 3.2   | 4.3  |
| 80°   | 1.6   | 1.6   | 1.6   | 1.6   | 1.6   | 2.2   | 2.2   | 2.2   | 2.2   | 2.7   | 3.8  |
| 82.5° | 1.1   | 1.1   | 1.1   | 1.1   | 1.6   | 1.6   | 1.6   | 1.6   | 1.6   | 2.2   | 2.7  |
| 85°   | 0.5   | 1.1   | 1.1   | 1.1   | 1.1   | 1.1   | 1.1   | 1.1   | 1.1   | 1.6   | 2.2  |
| 87.5° | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   | 1.1   | 1.1   | 1.6  |
| 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):**

|       | 112.5° | 135° | 157.5° | 180° |
|-------|--------|------|--------|------|
| 0°    | 58.7   | 58.7 | 58.7   | 58.7 |
| 2.5°  | 53.3   | 49.5 | 47.4   | 46.3 |
| 5°    | 48.4   | 43.6 | 42.0   | 41.4 |
| 7.5°  | 44.1   | 40.9 | 40.4   | 40.4 |
| 10°   | 41.4   | 39.3 | 39.8   | 39.8 |
| 12.5° | 39.8   | 39.3 | 39.8   | 40.4 |
| 15°   | 38.2   | 38.7 | 39.8   | 39.8 |
| 17.5° | 37.1   | 38.2 | 39.3   | 39.8 |
| 20°   | 35.5   | 37.7 | 39.3   | 39.3 |
| 22.5° | 34.4   | 37.1 | 38.7   | 39.3 |
| 25°   | 33.4   | 36.1 | 38.2   | 39.3 |
| 27.5° | 31.8   | 35.5 | 38.2   | 38.7 |
| 30°   | 30.1   | 34.4 | 37.7   | 39.3 |
| 32.5° | 28.5   | 33.9 | 37.7   | 38.7 |
| 35°   | 27.4   | 33.4 | 37.7   | 38.7 |
| 37.5° | 26.4   | 32.8 | 37.7   | 39.3 |
| 40°   | 25.8   | 32.3 | 37.1   | 39.3 |
| 42.5° | 24.8   | 32.3 | 37.1   | 39.3 |
| 45°   | 24.2   | 31.8 | 37.1   | 39.3 |
| 47.5° | 23.7   | 31.2 | 37.1   | 39.3 |
| 50°   | 22.6   | 30.7 | 36.6   | 39.3 |
| 52.5° | 22.1   | 30.1 | 36.6   | 39.3 |
| 55°   | 21.0   | 29.6 | 36.1   | 38.7 |
| 57.5° | 20.4   | 28.5 | 35.5   | 37.7 |
| 60°   | 19.4   | 27.4 | 34.4   | 36.6 |
| 62.5° | 17.8   | 25.8 | 32.8   | 35.5 |
| 65°   | 16.1   | 23.7 | 31.2   | 33.4 |
| 67.5° | 14.5   | 22.1 | 29.1   | 31.2 |
| 70°   | 12.9   | 19.9 | 26.4   | 28.5 |
| 72.5° | 11.3   | 17.2 | 23.7   | 25.3 |
| 75°   | 9.7    | 14.5 | 19.9   | 22.1 |
| 77.5° | 7.5    | 11.8 | 16.7   | 18.3 |
| 80°   | 5.9    | 9.7  | 12.9   | 14.0 |
| 82.5° | 4.8    | 7.0  | 9.7    | 10.2 |
| 85°   | 3.2    | 4.3  | 5.9    | 7.0  |
| 87.5° | 1.6    | 2.2  | 2.7    | 3.2  |
| 90°   | 0.0    | 0.0  | 0.0    | 0.0  |

(END OF REPORT)