

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: P1305819

Luminaire Tested: P3SQAS09R609024DE010 E3SQCA451MW

Issue Date: 1/29/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1305819  
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: P3SQAS09R609024DE010 E3SQCA451MW  
Description: 3in Adjustable LED luminaire with, R60 optic, 2400K CCT AND, 90CRI , E3SQCA451MW TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

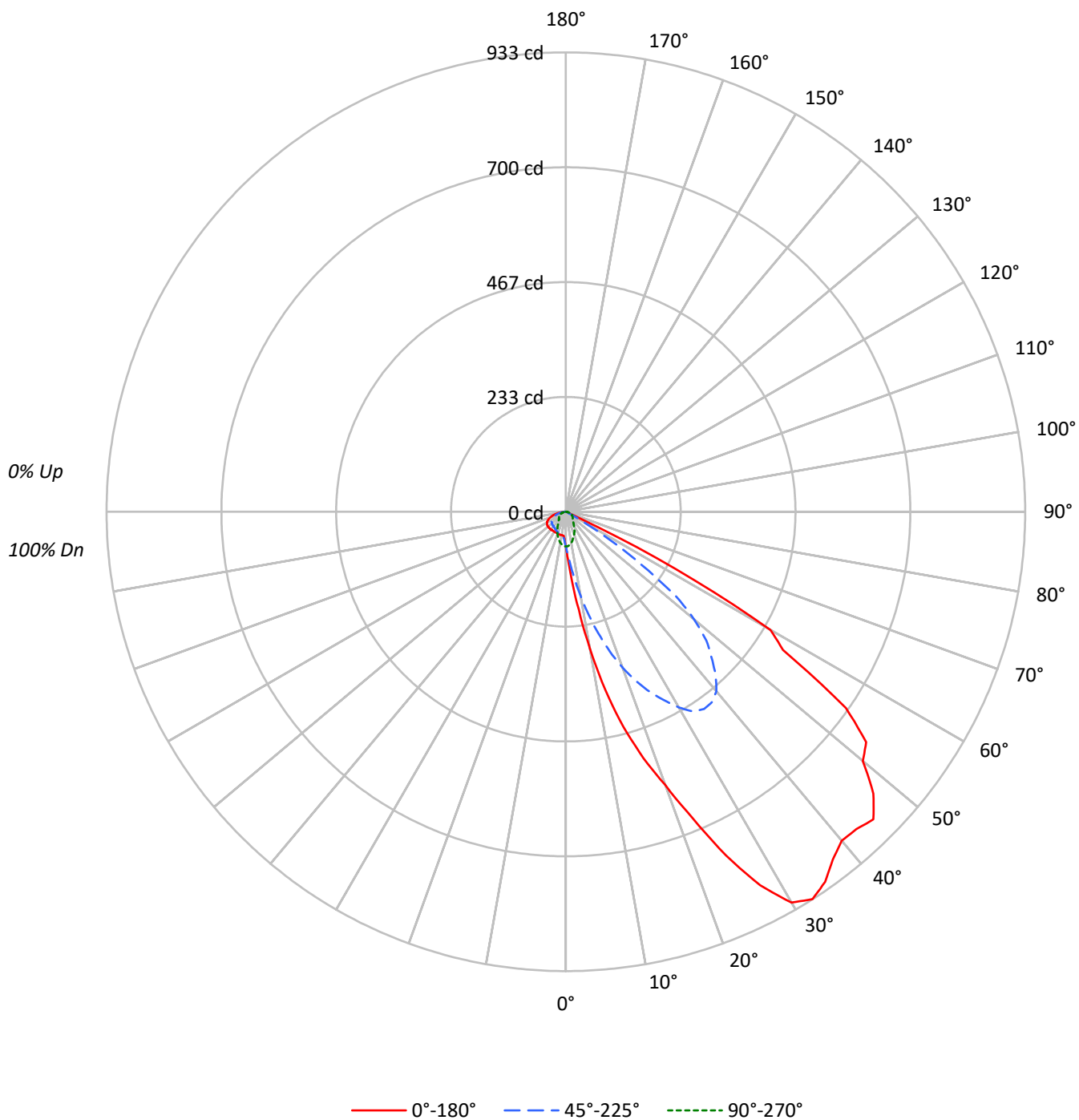
Lumens per Lamp: N/A  
Luminaire Lumens: 710.0 lumens  
Efficiency: N/A  
Efficacy: 64.0 lumens/watt  
Spacing Criteria (0/90/45): 3.39 / 0.84 / 2.07  
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')  
CIE Type: Direct

Input Watts (W): 11.1  
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: P1305819

CATALOG NUMBER: P3SQAS09R609024DE010 E3SQCA451MW

### Luminous Intensity Polar Plot



TEST NUMBER: P1305819

CATALOG NUMBER: P3SQAS09R609024DE010 E3SQCA451MW

**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°  | 12107  | 12107  | 12107 | 12107 | 12107 |
| 5°  | 23875  | 18637  | 11946 | 9042  | 8592  |
| 10° | 49316  | 30359  | 11175 | 8237  | 8359  |
| 15° | 80662  | 45573  | 10003 | 8291  | 8523  |
| 20° | 108224 | 61746  | 8999  | 8284  | 8632  |
| 25° | 146435 | 76657  | 7848  | 8209  | 8950  |
| 30° | 182260 | 91259  | 6543  | 8213  | 9367  |
| 35° | 192963 | 102852 | 5571  | 8410  | 9776  |
| 40° | 196021 | 106947 | 5081  | 8701  | 10589 |
| 45° | 215209 | 101857 | 4871  | 9280  | 11472 |
| 50° | 210969 | 91311  | 4850  | 9860  | 12620 |
| 55° | 208501 | 55999  | 4834  | 10659 | 13962 |
| 60° | 165403 | 13330  | 5098  | 11332 | 15121 |
| 65° | 10514  | 2364   | 5012  | 11573 | 16301 |
| 70° | 2266   | 2618   | 4884  | 12035 | 17221 |
| 75° | 2129   | 2595   | 4325  | 11578 | 17634 |
| 80° | 1884   | 2579   | 4463  | 11505 | 16662 |
| 85° | 1186   | 2569   | 5138  | 10275 | 16599 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 15°

Vertical Angle: 52.5°

Luminance: 227146 cd/sqm

TEST NUMBER: P1305819

CATALOG NUMBER: P3SQAS09R609024DE010 E3SQCA451MW

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 8.8    | 1.2       |
| 10°-20°   | 44.3   | 6.2       |
| 20°-30°   | 102.7  | 14.5      |
| 30°-40°   | 159.6  | 22.5      |
| 40°-50°   | 181.9  | 25.6      |
| 50°-60°   | 153.2  | 21.6      |
| 60°-70°   | 44.4   | 6.3       |
| 70°-80°   | 11.4   | 1.6       |
| 80°-90°   | 3.8    | 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°    | 155.7  | 21.9      |
| 0°-40°    | 315.3  | 44.4      |
| 0°-60°    | 650.3  | 91.6      |
| 0°-90°    | 710.0  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 710.0  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | 45° | 90° | 135° | 180° | Flux |
|-----|-----|-----|-----|------|------|------|
| 0°  | 70  | 70  | 70  | 70   | 70   |      |
| 5°  | 138 | 108 | 69  | 52   | 50   | 18   |
| 15° | 452 | 256 | 56  | 46   | 48   | 131  |
| 25° | 771 | 403 | 41  | 43   | 47   | 358  |
| 35° | 918 | 489 | 26  | 40   | 46   | 570  |
| 45° | 884 | 418 | 20  | 38   | 47   | 664  |
| 55° | 694 | 186 | 16  | 36   | 46   | 584  |
| 65° | 26  | 6   | 12  | 28   | 40   | 128  |
| 75° | 3   | 4   | 6   | 17   | 26   | 3    |
| 85° | 1   | 1   | 3   | 5    | 8    | 1    |
| 90° | 0   | 0   | 0   | 0    | 0    |      |

TEST NUMBER: P1305819

CATALOG NUMBER: P3SQAS09R609024DE010 E3SQCA451MW

**CANDELA DISTRIBUTION (FULL):**

|       | 0°    | 5°    | 10°   | 15°   | 20°   | 25°   | 30°   | 35°   | 45°   | 67.5° | 90°  |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| 0°    | 70.3  | 70.3  | 70.3  | 70.3  | 70.3  | 70.3  | 70.3  | 70.3  | 70.3  | 70.3  | 70.3 |
| 2.5°  | 94.9  | 94.2  | 94.2  | 93.6  | 92.9  | 92.3  | 90.4  | 89.7  | 85.8  | 78.1  | 70.3 |
| 5°    | 138.1 | 137.5 | 135.5 | 134.9 | 131.7 | 127.1 | 122.6 | 118.1 | 107.8 | 85.8  | 69.1 |
| 7.5°  | 200.1 | 201.4 | 200.1 | 193.0 | 188.5 | 181.4 | 167.8 | 158.1 | 137.5 | 93.6  | 66.5 |
| 10°   | 282.0 | 282.0 | 280.1 | 269.1 | 259.5 | 245.9 | 228.5 | 211.7 | 173.6 | 100.7 | 63.9 |
| 12.5° | 371.1 | 373.0 | 363.4 | 354.3 | 336.9 | 320.1 | 296.2 | 271.1 | 214.9 | 106.5 | 60.7 |
| 15°   | 452.4 | 451.1 | 441.5 | 429.8 | 411.8 | 388.5 | 363.4 | 331.1 | 255.6 | 110.4 | 56.1 |
| 17.5° | 524.7 | 522.1 | 513.7 | 500.8 | 478.9 | 453.1 | 420.8 | 385.9 | 297.5 | 113.6 | 52.9 |
| 20°   | 590.5 | 581.5 | 571.8 | 558.3 | 537.0 | 509.9 | 476.3 | 436.9 | 336.9 | 113.6 | 49.1 |
| 22.5° | 673.8 | 664.8 | 651.2 | 630.6 | 602.2 | 568.6 | 529.2 | 484.7 | 371.8 | 111.0 | 45.2 |
| 25°   | 770.6 | 763.5 | 740.3 | 713.8 | 677.0 | 637.0 | 591.2 | 531.2 | 403.4 | 107.1 | 41.3 |
| 27.5° | 855.2 | 847.4 | 824.2 | 785.5 | 740.9 | 693.2 | 644.8 | 583.4 | 431.1 | 100.0 | 36.8 |
| 30°   | 916.5 | 906.8 | 888.7 | 851.9 | 797.7 | 739.6 | 682.2 | 623.5 | 458.9 | 91.6  | 32.9 |
| 32.5° | 932.6 | 931.3 | 917.8 | 890.7 | 842.2 | 778.4 | 709.9 | 646.0 | 480.8 | 80.7  | 29.7 |
| 35°   | 917.8 | 919.7 | 917.1 | 903.6 | 868.1 | 805.5 | 728.0 | 658.3 | 489.2 | 69.7  | 26.5 |
| 37.5° | 890.7 | 893.2 | 897.8 | 899.7 | 877.1 | 821.6 | 738.3 | 663.5 | 487.3 | 58.7  | 24.5 |
| 40°   | 871.9 | 870.6 | 870.6 | 883.6 | 879.0 | 828.7 | 739.6 | 659.6 | 475.7 | 47.1  | 22.6 |
| 42.5° | 873.9 | 859.7 | 850.0 | 870.6 | 877.1 | 825.5 | 731.2 | 649.3 | 450.5 | 36.1  | 20.7 |
| 45°   | 883.6 | 853.2 | 836.4 | 862.9 | 873.2 | 814.5 | 715.7 | 633.8 | 418.2 | 25.2  | 20.0 |
| 47.5° | 847.4 | 827.4 | 824.8 | 862.3 | 866.1 | 795.8 | 691.9 | 609.3 | 387.2 | 17.4  | 18.7 |
| 50°   | 787.4 | 784.2 | 797.7 | 836.4 | 837.1 | 764.8 | 664.8 | 564.7 | 340.8 | 12.3  | 18.1 |
| 52.5° | 768.7 | 770.6 | 782.9 | 802.9 | 784.2 | 712.5 | 615.7 | 527.3 | 282.0 | 9.7   | 17.4 |
| 55°   | 694.4 | 697.7 | 709.3 | 721.6 | 708.0 | 648.6 | 556.3 | 482.1 | 186.5 | 9.0   | 16.1 |
| 57.5° | 522.8 | 531.2 | 552.5 | 563.4 | 564.7 | 528.6 | 504.1 | 415.6 | 105.2 | 9.0   | 15.5 |
| 60°   | 480.2 | 469.2 | 459.5 | 436.9 | 416.3 | 411.8 | 414.3 | 311.7 | 38.7  | 8.4   | 14.8 |
| 62.5° | 251.1 | 245.9 | 260.7 | 270.4 | 273.0 | 287.2 | 268.5 | 164.6 | 8.4   | 8.4   | 13.6 |
| 65°   | 25.8  | 25.8  | 31.6  | 42.0  | 69.7  | 92.9  | 88.4  | 47.8  | 5.8   | 7.7   | 12.3 |
| 67.5° | 7.7   | 7.7   | 7.7   | 9.0   | 11.6  | 11.6  | 9.7   | 7.1   | 5.8   | 7.1   | 11.0 |
| 70°   | 4.5   | 4.5   | 4.5   | 4.5   | 4.5   | 4.5   | 5.2   | 4.5   | 5.2   | 6.5   | 9.7  |
| 72.5° | 3.9   | 3.9   | 3.9   | 3.9   | 4.5   | 4.5   | 4.5   | 4.5   | 4.5   | 5.8   | 8.4  |
| 75°   | 3.2   | 3.2   | 3.2   | 3.2   | 3.2   | 3.2   | 3.2   | 3.9   | 3.9   | 4.5   | 6.5  |
| 77.5° | 2.6   | 2.6   | 2.6   | 2.6   | 2.6   | 2.6   | 3.2   | 3.2   | 3.2   | 3.9   | 5.2  |
| 80°   | 1.9   | 1.9   | 1.9   | 1.9   | 1.9   | 2.6   | 2.6   | 2.6   | 2.6   | 3.2   | 4.5  |
| 82.5° | 1.3   | 1.3   | 1.3   | 1.3   | 1.9   | 1.9   | 1.9   | 1.9   | 1.9   | 2.6   | 3.2  |
| 85°   | 0.6   | 1.3   | 1.3   | 1.3   | 1.3   | 1.3   | 1.3   | 1.3   | 1.3   | 1.9   | 2.6  |
| 87.5° | 0.6   | 0.6   | 0.6   | 0.6   | 0.6   | 0.6   | 0.6   | 0.6   | 1.3   | 1.3   | 1.9  |
| 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: P1305819

CATALOG NUMBER: P3SQAS09R609024DE010 E3SQCA451MW

**CANDELA DISTRIBUTION (continued):**

|       | 112.5° | 135° | 157.5° | 180° |
|-------|--------|------|--------|------|
| 0°    | 70.3   | 70.3 | 70.3   | 70.3 |
| 2.5°  | 63.9   | 59.4 | 56.8   | 55.5 |
| 5°    | 58.1   | 52.3 | 50.3   | 49.7 |
| 7.5°  | 52.9   | 49.1 | 48.4   | 48.4 |
| 10°   | 49.7   | 47.1 | 47.8   | 47.8 |
| 12.5° | 47.8   | 47.1 | 47.8   | 48.4 |
| 15°   | 45.8   | 46.5 | 47.8   | 47.8 |
| 17.5° | 44.5   | 45.8 | 47.1   | 47.8 |
| 20°   | 42.6   | 45.2 | 47.1   | 47.1 |
| 22.5° | 41.3   | 44.5 | 46.5   | 47.1 |
| 25°   | 40.0   | 43.2 | 45.8   | 47.1 |
| 27.5° | 38.1   | 42.6 | 45.8   | 46.5 |
| 30°   | 36.1   | 41.3 | 45.2   | 47.1 |
| 32.5° | 34.2   | 40.7 | 45.2   | 46.5 |
| 35°   | 32.9   | 40.0 | 45.2   | 46.5 |
| 37.5° | 31.6   | 39.4 | 45.2   | 47.1 |
| 40°   | 31.0   | 38.7 | 44.5   | 47.1 |
| 42.5° | 29.7   | 38.7 | 44.5   | 47.1 |
| 45°   | 29.0   | 38.1 | 44.5   | 47.1 |
| 47.5° | 28.4   | 37.4 | 44.5   | 47.1 |
| 50°   | 27.1   | 36.8 | 43.9   | 47.1 |
| 52.5° | 26.5   | 36.1 | 43.9   | 47.1 |
| 55°   | 25.2   | 35.5 | 43.2   | 46.5 |
| 57.5° | 24.5   | 34.2 | 42.6   | 45.2 |
| 60°   | 23.2   | 32.9 | 41.3   | 43.9 |
| 62.5° | 21.3   | 31.0 | 39.4   | 42.6 |
| 65°   | 19.4   | 28.4 | 37.4   | 40.0 |
| 67.5° | 17.4   | 26.5 | 34.9   | 37.4 |
| 70°   | 15.5   | 23.9 | 31.6   | 34.2 |
| 72.5° | 13.6   | 20.7 | 28.4   | 30.3 |
| 75°   | 11.6   | 17.4 | 23.9   | 26.5 |
| 77.5° | 9.0    | 14.2 | 20.0   | 21.9 |
| 80°   | 7.1    | 11.6 | 15.5   | 16.8 |
| 82.5° | 5.8    | 8.4  | 11.6   | 12.3 |
| 85°   | 3.9    | 5.2  | 7.1    | 8.4  |
| 87.5° | 1.9    | 2.6  | 3.2    | 3.9  |
| 90°   | 0.0    | 0.0  | 0.0    | 0.0  |

(END OF REPORT)