

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: P1314265

Luminaire Tested: P3SQAS09R509735DE010 E3SQCA451MMS

Issue Date: 1/29/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1314265  
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: P3SQAS09R509735DE010 E3SQCA451MMS  
Description: 3in Adjustable LED luminaire with, R50 optic, 3500K CCT AND, 97CRI , E3SQCA451MMS TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

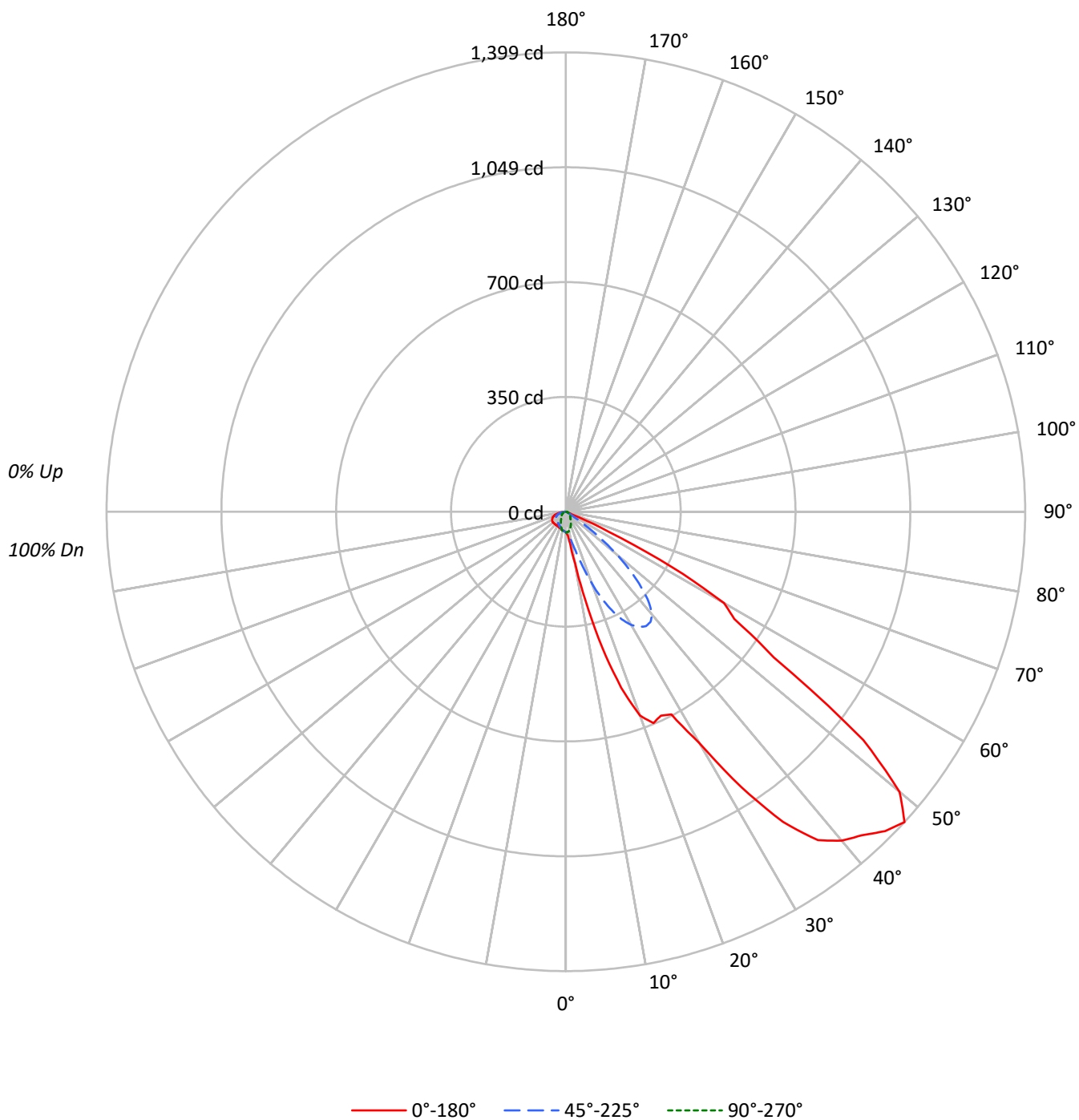
Lumens per Lamp: N/A  
Luminaire Lumens: 789.0 lumens  
Efficiency: N/A  
Efficacy: 71.1 lumens/watt  
Spacing Criteria (0/90/45): 3.58 / 0.82 / 1.91  
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')  
CIE Type: Direct

Input Watts (W): 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

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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°  | 10798  | 10798 | 10798 | 10798 | 10798 |
| 5°  | 12845  | 12015 | 10719 | 10252 | 10131 |
| 10° | 27648  | 14900 | 10248 | 9898  | 10003 |
| 15° | 76543  | 24427 | 9236  | 9485  | 9842  |
| 20° | 121035 | 42850 | 7991  | 9109  | 9622  |
| 25° | 130149 | 62937 | 6860  | 8798  | 9710  |
| 30° | 161539 | 79009 | 5966  | 8671  | 10023 |
| 35° | 242434 | 89396 | 5151  | 8746  | 10596 |
| 40° | 294020 | 91929 | 4586  | 9038  | 11174 |
| 45° | 334943 | 78840 | 4481  | 9621  | 12275 |
| 50° | 355517 | 54417 | 4555  | 10396 | 13691 |
| 55° | 232252 | 21889 | 4504  | 11260 | 15133 |
| 60° | 191546 | 3754  | 4443  | 12193 | 16671 |
| 65° | 57745  | 1956  | 4157  | 13040 | 18338 |
| 70° | 2417   | 2065  | 4129  | 13394 | 19890 |
| 75° | 2262   | 2262  | 4059  | 13575 | 21759 |
| 80° | 1984   | 1984  | 4066  | 13488 | 22315 |
| 85° | 1383   | 2766  | 5335  | 13437 | 21539 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 47.5°

Luminance: 356661 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 6.5    | 0.8       |
| 10°-20°   | 37.4   | 4.7       |
| 20°-30°   | 96.0   | 12.2      |
| 30°-40°   | 172.5  | 21.9      |
| 40°-50°   | 230.4  | 29.2      |
| 50°-60°   | 175.5  | 22.2      |
| 60°-70°   | 53.3   | 6.8       |
| 70°-80°   | 12.7   | 1.6       |
| 80°-90°   | 4.6    | 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       |
| <hr/>     |        |           |
| 0°-30°    | 139.9  | 17.7      |
| 0°-40°    | 312.4  | 39.6      |
| 0°-60°    | 718.4  | 91.1      |
| 0°-90°    | 789.0  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 789.0  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 45° | 90° | 135° | 180° | Flux |
|-----|------|-----|-----|------|------|------|
| 0°  | 63   | 63  | 63  | 63   | 63   |      |
| 5°  | 74   | 70  | 62  | 59   | 59   | 10   |
| 15° | 429  | 137 | 52  | 53   | 55   | 126  |
| 25° | 685  | 331 | 36  | 46   | 51   | 327  |
| 35° | 1153 | 425 | 24  | 42   | 50   | 708  |
| 45° | 1375 | 324 | 18  | 40   | 50   | 1051 |
| 55° | 774  | 73  | 15  | 38   | 50   | 770  |
| 65° | 142  | 5   | 10  | 32   | 45   | 196  |
| 75° | 3    | 3   | 6   | 20   | 33   | 4    |
| 85° | 1    | 1   | 3   | 7    | 11   | 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°    | 62.7   | 62.7   | 62.7   | 62.7   | 62.7   | 62.7   | 62.7  | 62.7  | 62.7  | 62.7  | 62.7 |
| 2.5°  | 66.8   | 66.8   | 66.8   | 66.8   | 66.8   | 66.8   | 66.1  | 66.1  | 66.1  | 64.7  | 63.4 |
| 5°    | 74.3   | 75.0   | 74.3   | 74.3   | 72.9   | 72.9   | 71.6  | 71.6  | 69.5  | 65.4  | 62.0 |
| 7.5°  | 97.5   | 96.8   | 96.1   | 93.4   | 91.3   | 86.5   | 84.5  | 81.1  | 75.0  | 65.4  | 60.7 |
| 10°   | 158.1  | 154.0  | 151.3  | 145.2  | 132.2  | 124.0  | 113.1 | 102.2 | 85.2  | 65.4  | 58.6 |
| 12.5° | 274.6  | 274.0  | 265.8  | 245.3  | 226.9  | 201.7  | 175.1 | 148.6 | 104.9 | 64.1  | 55.9 |
| 15°   | 429.3  | 423.2  | 411.6  | 387.8  | 355.1  | 315.5  | 267.8 | 220.8 | 137.0 | 62.0  | 51.8 |
| 17.5° | 561.5  | 554.1  | 545.2  | 521.3  | 483.9  | 434.1  | 376.9 | 312.1 | 180.6 | 59.3  | 47.7 |
| 20°   | 660.4  | 655.6  | 648.1  | 629.0  | 593.6  | 548.6  | 484.5 | 406.2 | 233.8 | 55.9  | 43.6 |
| 22.5° | 696.5  | 695.8  | 697.2  | 690.3  | 672.6  | 637.2  | 575.9 | 494.1 | 286.2 | 51.8  | 39.5 |
| 25°   | 684.9  | 684.2  | 693.1  | 701.9  | 706.0  | 691.7  | 644.7 | 565.0 | 331.2 | 48.4  | 36.1 |
| 27.5° | 695.8  | 693.8  | 689.7  | 691.0  | 702.6  | 710.8  | 689.0 | 619.5 | 370.0 | 43.6  | 32.7 |
| 30°   | 812.3  | 800.8  | 782.4  | 751.0  | 727.8  | 725.8  | 716.2 | 662.4 | 397.3 | 38.8  | 30.0 |
| 32.5° | 994.3  | 980.0  | 946.6  | 888.7  | 833.5  | 791.2  | 761.2 | 698.5 | 416.4 | 34.1  | 26.6 |
| 35°   | 1153.1 | 1142.9 | 1104.0 | 1046.8 | 967.7  | 888.7  | 834.1 | 751.7 | 425.2 | 30.0  | 24.5 |
| 37.5° | 1260.8 | 1256.7 | 1218.5 | 1157.2 | 1076.8 | 983.4  | 911.2 | 806.2 | 423.2 | 25.2  | 22.5 |
| 40°   | 1307.8 | 1295.5 | 1263.5 | 1211.7 | 1130.6 | 1046.8 | 970.4 | 841.0 | 408.9 | 20.4  | 20.4 |
| 42.5° | 1335.7 | 1322.1 | 1287.3 | 1238.3 | 1158.5 | 1069.3 | 977.3 | 826.0 | 374.8 | 16.4  | 19.8 |
| 45°   | 1375.2 | 1360.9 | 1315.3 | 1262.8 | 1182.4 | 1078.8 | 950.7 | 772.8 | 323.7 | 12.3  | 18.4 |
| 47.5° | 1399.1 | 1389.6 | 1355.5 | 1303.0 | 1205.6 | 1065.2 | 889.3 | 723.1 | 267.1 | 9.5   | 17.7 |
| 50°   | 1326.9 | 1317.3 | 1292.1 | 1256.0 | 1190.6 | 1019.5 | 835.5 | 642.6 | 203.1 | 7.5   | 17.0 |
| 52.5° | 1142.2 | 1150.4 | 1155.1 | 1165.3 | 1117.6 | 917.3  | 755.1 | 578.6 | 137.0 | 6.1   | 15.7 |
| 55°   | 773.5  | 785.8  | 799.4  | 840.3  | 896.2  | 816.4  | 670.6 | 500.2 | 72.9  | 6.1   | 15.0 |
| 57.5° | 607.9  | 603.8  | 599.7  | 597.0  | 640.6  | 673.3  | 589.5 | 400.0 | 31.3  | 6.1   | 13.6 |
| 60°   | 556.1  | 543.8  | 535.7  | 537.7  | 559.5  | 546.6  | 466.8 | 261.0 | 10.9  | 6.1   | 12.9 |
| 62.5° | 364.6  | 374.1  | 392.5  | 423.9  | 408.9  | 351.0  | 271.2 | 103.6 | 5.5   | 6.1   | 11.6 |
| 65°   | 141.7  | 137.0  | 141.7  | 150.6  | 130.2  | 96.8   | 60.7  | 18.4  | 4.8   | 5.5   | 10.2 |
| 67.5° | 19.1   | 17.0   | 12.9   | 8.2    | 7.5    | 6.8    | 5.5   | 4.8   | 4.8   | 5.5   | 9.5  |
| 70°   | 4.8    | 4.8    | 4.8    | 4.8    | 4.8    | 4.8    | 4.8   | 4.1   | 4.1   | 4.8   | 8.2  |
| 72.5° | 4.1    | 4.1    | 4.1    | 4.1    | 4.1    | 4.1    | 4.1   | 4.1   | 4.1   | 4.8   | 6.8  |
| 75°   | 3.4    | 3.4    | 3.4    | 3.4    | 3.4    | 3.4    | 3.4   | 3.4   | 3.4   | 4.1   | 6.1  |
| 77.5° | 2.7    | 2.7    | 2.7    | 2.7    | 2.7    | 2.7    | 2.7   | 2.7   | 2.7   | 3.4   | 4.8  |
| 80°   | 2.0    | 2.0    | 2.0    | 2.0    | 2.0    | 2.0    | 2.0   | 2.0   | 2.0   | 2.7   | 4.1  |
| 82.5° | 1.4    | 1.4    | 1.4    | 1.4    | 1.4    | 1.4    | 1.4   | 2.0   | 2.0   | 2.7   | 3.4  |
| 85°   | 0.7    | 1.4    | 0.7    | 1.4    | 1.4    | 1.4    | 1.4   | 1.4   | 1.4   | 2.0   | 2.7  |
| 87.5° | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7   | 0.7   | 1.4   | 2.0   | 2.0  |
| 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°    | 62.7   | 62.7 | 62.7   | 62.7 |
| 2.5°  | 62.0   | 60.7 | 60.7   | 60.7 |
| 5°    | 60.7   | 59.3 | 59.3   | 58.6 |
| 7.5°  | 58.6   | 57.9 | 57.9   | 57.9 |
| 10°   | 57.2   | 56.6 | 57.2   | 57.2 |
| 12.5° | 54.5   | 55.2 | 55.9   | 55.9 |
| 15°   | 51.8   | 53.2 | 54.5   | 55.2 |
| 17.5° | 49.1   | 51.8 | 53.2   | 53.8 |
| 20°   | 46.3   | 49.7 | 51.8   | 52.5 |
| 22.5° | 44.3   | 47.7 | 50.4   | 51.8 |
| 25°   | 41.6   | 46.3 | 49.7   | 51.1 |
| 27.5° | 38.8   | 44.3 | 48.4   | 50.4 |
| 30°   | 36.8   | 43.6 | 48.4   | 50.4 |
| 32.5° | 34.8   | 42.3 | 47.7   | 49.7 |
| 35°   | 33.4   | 41.6 | 47.7   | 50.4 |
| 37.5° | 32.0   | 40.9 | 47.7   | 49.7 |
| 40°   | 31.3   | 40.2 | 47.7   | 49.7 |
| 42.5° | 30.7   | 40.2 | 47.7   | 50.4 |
| 45°   | 29.3   | 39.5 | 47.7   | 50.4 |
| 47.5° | 28.6   | 39.5 | 47.7   | 50.4 |
| 50°   | 27.9   | 38.8 | 47.7   | 51.1 |
| 52.5° | 27.3   | 38.2 | 47.7   | 51.1 |
| 55°   | 25.9   | 37.5 | 47.0   | 50.4 |
| 57.5° | 25.2   | 36.8 | 46.3   | 49.1 |
| 60°   | 23.9   | 35.4 | 45.0   | 48.4 |
| 62.5° | 22.5   | 34.1 | 43.6   | 46.3 |
| 65°   | 20.4   | 32.0 | 41.6   | 45.0 |
| 67.5° | 18.4   | 29.3 | 39.5   | 42.9 |
| 70°   | 16.4   | 26.6 | 36.8   | 39.5 |
| 72.5° | 14.3   | 23.9 | 34.1   | 36.1 |
| 75°   | 12.3   | 20.4 | 30.0   | 32.7 |
| 77.5° | 10.2   | 17.7 | 25.2   | 27.3 |
| 80°   | 7.5    | 13.6 | 20.4   | 22.5 |
| 82.5° | 6.1    | 10.2 | 15.0   | 16.4 |
| 85°   | 4.1    | 6.8  | 9.5    | 10.9 |
| 87.5° | 2.0    | 3.4  | 4.8    | 5.5  |
| 90°   | 0.0    | 0.0  | 0.0    | 0.0  |

(END OF REPORT)