

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: P1310469

Luminaire Tested: P3SQAS17R609040DE010 E3SQCA451MMS

Issue Date: 1/29/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1310469  
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: P3SQAS17R609040DE010 E3SQCA451MMS  
Description: 3in Adjustable LED luminaire with, R60 optic, 4000K CCT AND, 90CRI , E3SQCA451MMS TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

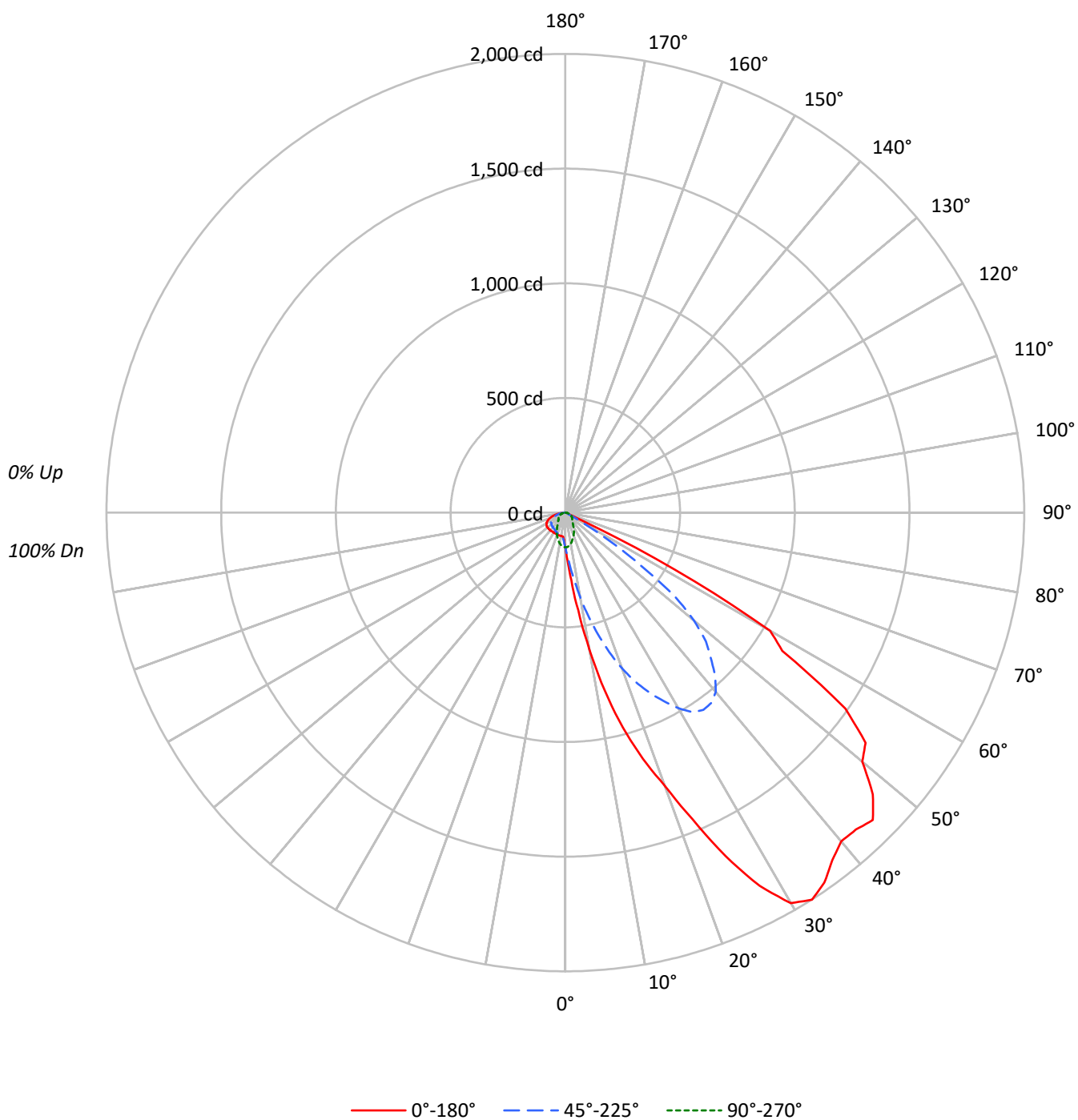
Lumens per Lamp: N/A  
Luminaire Lumens: 1523.0 lumens  
Efficiency: N/A  
Efficacy: 71.8 lumens/watt  
Spacing Criteria (0/90/45): 3.38 / 0.84 / 2.07  
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')  
CIE Type: Direct

Input Watts (W): 21.2  
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

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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  |
| RCR |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 |
| 1   | 110 | 106 | 102 | 99  | 108 | 104 | 100 | 97  | 100 | 97  | 94  | 96  | 93  | 91  | 92  | 90  | 89  |
| 2   | 101 | 93  | 87  | 82  | 98  | 91  | 86  | 81  | 88  | 83  | 79  | 85  | 81  | 77  | 82  | 79  | 76  |
| 3   | 92  | 82  | 74  | 68  | 90  | 81  | 73  | 68  | 78  | 72  | 67  | 75  | 70  | 65  | 72  | 68  | 64  |
| 4   | 84  | 72  | 64  | 58  | 82  | 71  | 63  | 57  | 69  | 62  | 56  | 66  | 60  | 56  | 64  | 59  | 55  |
| 5   | 77  | 64  | 55  | 49  | 75  | 63  | 55  | 49  | 61  | 54  | 48  | 59  | 53  | 48  | 57  | 52  | 47  |
| 6   | 70  | 57  | 48  | 42  | 69  | 56  | 48  | 42  | 54  | 47  | 41  | 53  | 46  | 41  | 51  | 45  | 41  |
| 7   | 65  | 51  | 42  | 36  | 63  | 50  | 42  | 36  | 49  | 41  | 36  | 47  | 41  | 36  | 46  | 40  | 35  |
| 8   | 60  | 46  | 38  | 32  | 58  | 45  | 37  | 32  | 44  | 37  | 31  | 43  | 36  | 31  | 42  | 36  | 31  |
| 9   | 55  | 42  | 33  | 28  | 54  | 41  | 33  | 28  | 40  | 33  | 28  | 39  | 32  | 27  | 38  | 32  | 27  |
| 10  | 52  | 38  | 30  | 25  | 50  | 38  | 30  | 25  | 37  | 29  | 24  | 36  | 29  | 24  | 35  | 29  | 24  |

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

|     | 0°     | 45°    | 90°   | 135°  | 180°  |
|-----|--------|--------|-------|-------|-------|
| 0°  | 25988  | 25988  | 25988 | 25988 | 25988 |
| 5°  | 51224  | 39970  | 25604 | 19380 | 18429 |
| 10° | 105802 | 65125  | 23976 | 17680 | 17908 |
| 15° | 173038 | 97743  | 21467 | 17776 | 18258 |
| 20° | 232173 | 132453 | 19281 | 17759 | 18529 |
| 25° | 314114 | 164430 | 16836 | 17634 | 19212 |
| 30° | 390950 | 195743 | 14040 | 17619 | 20105 |
| 35° | 413909 | 220631 | 11942 | 18039 | 20961 |
| 40° | 420505 | 229385 | 10904 | 18683 | 22729 |
| 45° | 461618 | 218497 | 10449 | 19899 | 24624 |
| 50° | 452535 | 195857 | 10396 | 21140 | 27088 |
| 55° | 447269 | 120134 | 10389 | 22850 | 29936 |
| 60° | 354779 | 28623  | 10953 | 24318 | 32412 |
| 65° | 22576  | 5094   | 10718 | 24818 | 34965 |
| 70° | 4884   | 5589   | 10474 | 25782 | 36960 |
| 75° | 4591   | 5523   | 9183  | 24887 | 37796 |
| 80° | 4166   | 5455   | 9620  | 24696 | 35704 |
| 85° | 2766   | 5533   | 10868 | 21934 | 35569 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 15°

Vertical Angle: 52.5°

Luminance: 487222 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 18.8   | 1.2       |
| 10°-20°   | 94.9   | 6.2       |
| 20°-30°   | 220.2  | 14.5      |
| 30°-40°   | 342.3  | 22.5      |
| 40°-50°   | 390.1  | 25.6      |
| 50°-60°   | 328.5  | 21.6      |
| 60°-70°   | 95.3   | 6.3       |
| 70°-80°   | 24.4   | 1.6       |
| 80°-90°   | 8.3    | 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°    | 334.0  | 21.9      |
| 0°-40°    | 676.4  | 44.4      |
| 0°-60°    | 1395.0 | 91.6      |
| 0°-90°    | 1523.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1523.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 45°  | 90° | 135° | 180° | Flux |
|-----|------|------|-----|------|------|------|
| 0°  | 151  | 151  | 151 | 151  | 151  |      |
| 5°  | 296  | 231  | 148 | 112  | 107  | 38   |
| 15° | 970  | 548  | 120 | 100  | 102  | 281  |
| 25° | 1653 | 865  | 89  | 93   | 101  | 768  |
| 35° | 1969 | 1049 | 57  | 86   | 100  | 1223 |
| 45° | 1895 | 897  | 43  | 82   | 101  | 1425 |
| 55° | 1490 | 400  | 35  | 76   | 100  | 1253 |
| 65° | 55   | 12   | 26  | 61   | 86   | 274  |
| 75° | 7    | 8    | 14  | 37   | 57   | 7    |
| 85° | 1    | 3    | 6   | 11   | 18   | 2    |
| 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°    | 150.9  | 150.9  | 150.9  | 150.9  | 150.9  | 150.9  | 150.9  | 150.9  | 150.9  | 150.9 | 150.9 |
| 2.5°  | 203.5  | 202.1  | 202.1  | 200.7  | 199.4  | 198.0  | 193.8  | 192.4  | 184.1  | 167.5 | 150.9 |
| 5°    | 296.3  | 294.9  | 290.7  | 289.3  | 282.4  | 272.7  | 263.0  | 253.4  | 231.2  | 184.1 | 148.1 |
| 7.5°  | 429.2  | 431.9  | 429.2  | 413.9  | 404.3  | 389.0  | 360.0  | 339.2  | 294.9  | 200.7 | 142.6 |
| 10°   | 605.0  | 605.0  | 600.8  | 577.3  | 556.5  | 527.5  | 490.1  | 454.1  | 372.4  | 216.0 | 137.1 |
| 12.5° | 796.0  | 800.2  | 779.4  | 760.1  | 722.7  | 686.7  | 635.5  | 581.5  | 461.0  | 228.4 | 130.1 |
| 15°   | 970.5  | 967.7  | 946.9  | 922.0  | 883.3  | 833.4  | 779.4  | 710.2  | 548.2  | 236.7 | 120.4 |
| 17.5° | 1125.5 | 1120.0 | 1102.0 | 1074.3 | 1027.2 | 971.9  | 902.6  | 827.9  | 638.2  | 243.7 | 113.5 |
| 20°   | 1266.8 | 1247.4 | 1226.6 | 1197.5 | 1151.8 | 1093.7 | 1021.7 | 937.3  | 722.7  | 243.7 | 105.2 |
| 22.5° | 1445.3 | 1426.0 | 1396.9 | 1352.6 | 1291.7 | 1219.7 | 1135.2 | 1039.7 | 797.4  | 238.1 | 96.9  |
| 25°   | 1653.0 | 1637.8 | 1587.9 | 1531.2 | 1452.3 | 1366.4 | 1268.1 | 1139.4 | 865.3  | 229.8 | 88.6  |
| 27.5° | 1834.4 | 1817.8 | 1767.9 | 1684.8 | 1589.3 | 1486.9 | 1383.0 | 1251.5 | 924.8  | 214.6 | 78.9  |
| 30°   | 1965.9 | 1945.1 | 1906.4 | 1827.4 | 1711.2 | 1586.6 | 1463.3 | 1337.4 | 984.3  | 196.6 | 70.6  |
| 32.5° | 2000.5 | 1997.7 | 1968.7 | 1910.5 | 1806.7 | 1669.6 | 1522.9 | 1385.8 | 1031.4 | 173.1 | 63.7  |
| 35°   | 1968.7 | 1972.8 | 1967.3 | 1938.2 | 1862.1 | 1727.8 | 1561.6 | 1412.1 | 1049.4 | 149.5 | 56.8  |
| 37.5° | 1910.5 | 1916.0 | 1925.7 | 1929.9 | 1881.4 | 1762.4 | 1583.8 | 1423.2 | 1045.2 | 126.0 | 52.6  |
| 40°   | 1870.4 | 1867.6 | 1867.6 | 1895.3 | 1885.6 | 1777.6 | 1586.6 | 1414.9 | 1020.3 | 101.1 | 48.5  |
| 42.5° | 1874.5 | 1844.1 | 1823.3 | 1867.6 | 1881.4 | 1770.7 | 1568.6 | 1392.7 | 966.3  | 77.5  | 44.3  |
| 45°   | 1895.3 | 1830.2 | 1794.2 | 1851.0 | 1873.1 | 1747.1 | 1535.3 | 1359.5 | 897.1  | 54.0  | 42.9  |
| 47.5° | 1817.8 | 1774.8 | 1769.3 | 1849.6 | 1857.9 | 1707.0 | 1484.1 | 1306.9 | 830.7  | 37.4  | 40.1  |
| 50°   | 1689.0 | 1682.1 | 1711.2 | 1794.2 | 1795.6 | 1640.5 | 1426.0 | 1211.4 | 731.0  | 26.3  | 38.8  |
| 52.5° | 1648.9 | 1653.0 | 1679.3 | 1722.2 | 1682.1 | 1528.4 | 1320.7 | 1131.1 | 605.0  | 20.8  | 37.4  |
| 55°   | 1489.6 | 1496.6 | 1521.5 | 1547.8 | 1518.7 | 1391.3 | 1193.4 | 1034.2 | 400.1  | 19.4  | 34.6  |
| 57.5° | 1121.4 | 1139.4 | 1185.1 | 1208.6 | 1211.4 | 1133.8 | 1081.2 | 891.6  | 225.7  | 19.4  | 33.2  |
| 60°   | 1030.0 | 1006.5 | 985.7  | 937.3  | 893.0  | 883.3  | 888.8  | 668.7  | 83.1   | 18.0  | 31.8  |
| 62.5° | 538.5  | 527.5  | 559.3  | 580.1  | 585.6  | 616.1  | 575.9  | 353.0  | 18.0   | 18.0  | 29.1  |
| 65°   | 55.4   | 55.4   | 67.8   | 90.0   | 149.5  | 199.4  | 189.7  | 102.4  | 12.5   | 16.6  | 26.3  |
| 67.5° | 16.6   | 16.6   | 16.6   | 19.4   | 24.9   | 24.9   | 20.8   | 15.2   | 12.5   | 15.2  | 23.5  |
| 70°   | 9.7    | 9.7    | 9.7    | 9.7    | 9.7    | 9.7    | 11.1   | 9.7    | 11.1   | 13.8  | 20.8  |
| 72.5° | 8.3    | 8.3    | 8.3    | 8.3    | 9.7    | 9.7    | 9.7    | 9.7    | 9.7    | 12.5  | 18.0  |
| 75°   | 6.9    | 6.9    | 6.9    | 6.9    | 6.9    | 6.9    | 6.9    | 8.3    | 8.3    | 9.7   | 13.8  |
| 77.5° | 5.5    | 5.5    | 5.5    | 5.5    | 5.5    | 5.5    | 6.9    | 6.9    | 6.9    | 8.3   | 11.1  |
| 80°   | 4.2    | 4.2    | 4.2    | 4.2    | 4.2    | 5.5    | 5.5    | 5.5    | 5.5    | 6.9   | 9.7   |
| 82.5° | 2.8    | 2.8    | 2.8    | 2.8    | 4.2    | 4.2    | 4.2    | 4.2    | 4.2    | 5.5   | 6.9   |
| 85°   | 1.4    | 2.8    | 2.8    | 2.8    | 2.8    | 2.8    | 2.8    | 2.8    | 2.8    | 4.2   | 5.5   |
| 87.5° | 1.4    | 1.4    | 1.4    | 1.4    | 1.4    | 1.4    | 1.4    | 1.4    | 2.8    | 2.8   | 4.2   |
| 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°    | 150.9  | 150.9 | 150.9  | 150.9 |
| 2.5°  | 137.1  | 127.4 | 121.8  | 119.1 |
| 5°    | 124.6  | 112.1 | 108.0  | 106.6 |
| 7.5°  | 113.5  | 105.2 | 103.8  | 103.8 |
| 10°   | 106.6  | 101.1 | 102.4  | 102.4 |
| 12.5° | 102.4  | 101.1 | 102.4  | 103.8 |
| 15°   | 98.3   | 99.7  | 102.4  | 102.4 |
| 17.5° | 95.5   | 98.3  | 101.1  | 102.4 |
| 20°   | 91.4   | 96.9  | 101.1  | 101.1 |
| 22.5° | 88.6   | 95.5  | 99.7   | 101.1 |
| 25°   | 85.8   | 92.8  | 98.3   | 101.1 |
| 27.5° | 81.7   | 91.4  | 98.3   | 99.7  |
| 30°   | 77.5   | 88.6  | 96.9   | 101.1 |
| 32.5° | 73.4   | 87.2  | 96.9   | 99.7  |
| 35°   | 70.6   | 85.8  | 96.9   | 99.7  |
| 37.5° | 67.8   | 84.5  | 96.9   | 101.1 |
| 40°   | 66.5   | 83.1  | 95.5   | 101.1 |
| 42.5° | 63.7   | 83.1  | 95.5   | 101.1 |
| 45°   | 62.3   | 81.7  | 95.5   | 101.1 |
| 47.5° | 60.9   | 80.3  | 95.5   | 101.1 |
| 50°   | 58.1   | 78.9  | 94.1   | 101.1 |
| 52.5° | 56.8   | 77.5  | 94.1   | 101.1 |
| 55°   | 54.0   | 76.1  | 92.8   | 99.7  |
| 57.5° | 52.6   | 73.4  | 91.4   | 96.9  |
| 60°   | 49.8   | 70.6  | 88.6   | 94.1  |
| 62.5° | 45.7   | 66.5  | 84.5   | 91.4  |
| 65°   | 41.5   | 60.9  | 80.3   | 85.8  |
| 67.5° | 37.4   | 56.8  | 74.8   | 80.3  |
| 70°   | 33.2   | 51.2  | 67.8   | 73.4  |
| 72.5° | 29.1   | 44.3  | 60.9   | 65.1  |
| 75°   | 24.9   | 37.4  | 51.2   | 56.8  |
| 77.5° | 19.4   | 30.5  | 42.9   | 47.1  |
| 80°   | 15.2   | 24.9  | 33.2   | 36.0  |
| 82.5° | 12.5   | 18.0  | 24.9   | 26.3  |
| 85°   | 8.3    | 11.1  | 15.2   | 18.0  |
| 87.5° | 4.2    | 5.5   | 6.9    | 8.3   |
| 90°   | 0.0    | 0.0   | 0.0    | 0.0   |

(END OF REPORT)