

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: PORTFOLIO

Report Number: P1307196

Luminaire Tested: LDSQA3D13R459024DE010 3LSQCA45R 1MW

Issue Date: 1/29/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1307196  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-84)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/29/2026  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: PORTFOLIO  
Catalog Number: LDSQA3D13R459024DE010 3LSQCA45R 1MW  
Description: 3in Adjustable LED luminaire with, R45 optic, 2400K CCT AND, 90CRI , 3LSQCA45R 1MW TRIM  
Light Source: -  
Ballast/Driver: -

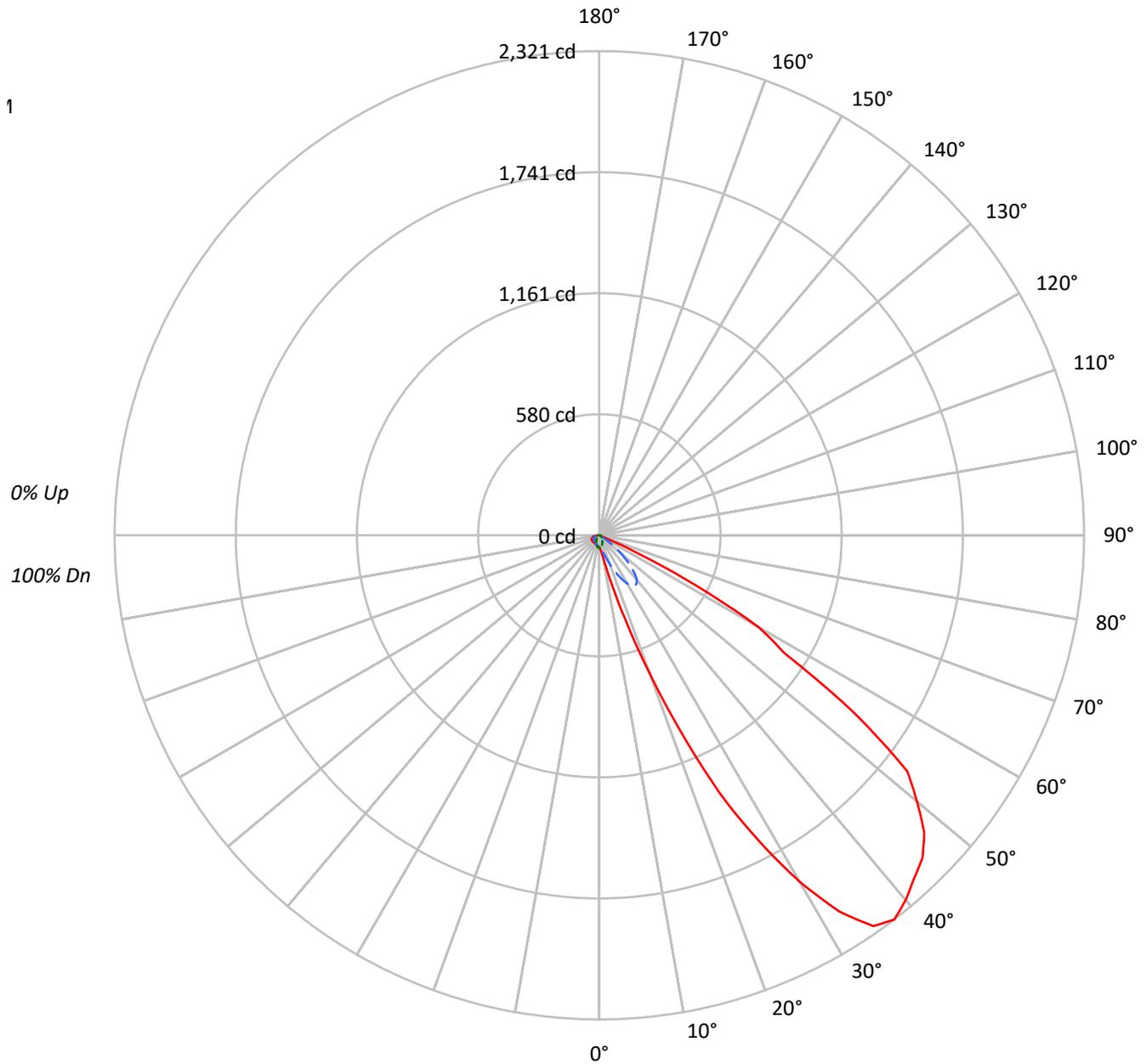
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1037.0 lumens  
Efficiency: N/A  
Efficacy: 71.0 lumens/watt  
Spacing Criteria (0/90/45): 3.81 / 0.82 / 1.83  
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')  
CIE Type: Direct

Input Watts (W): 14.6  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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



— 0°-180°    - - 45°-225°    - - - 90°-270°



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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  | 50  | 30  | 10  | 0   |  |   |
| RCR |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |   |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |  |   |
| 1   | 110 | 106 | 102 | 99  | 107 | 104 | 100 | 97  | 99  | 97  | 94  | 96  | 93  | 91  | 92  | 90  | 88  | 86  | 86  | 86  | 86  | 86  | 86  | 86  |  |   |
| 2   | 100 | 93  | 86  | 81  | 98  | 91  | 85  | 80  | 87  | 83  | 78  | 84  | 80  | 77  | 81  | 78  | 75  | 73  | 73  | 73  | 73  | 73  | 73  | 73  |  |   |
| 3   | 91  | 81  | 73  | 67  | 89  | 80  | 72  | 66  | 77  | 70  | 65  | 74  | 69  | 64  | 71  | 67  | 63  | 61  | 61  | 61  | 61  | 61  | 61  | 61  |  |   |
| 4   | 83  | 71  | 62  | 56  | 81  | 70  | 62  | 55  | 67  | 60  | 55  | 65  | 59  | 54  | 63  | 58  | 53  | 51  | 51  | 51  | 51  | 51  | 51  | 51  |  |   |
| 5   | 76  | 63  | 53  | 47  | 73  | 61  | 53  | 46  | 59  | 52  | 46  | 57  | 51  | 45  | 55  | 50  | 45  | 43  | 43  | 43  | 43  | 43  | 43  | 43  |  |   |
| 6   | 69  | 55  | 46  | 39  | 67  | 54  | 46  | 39  | 52  | 45  | 39  | 51  | 44  | 39  | 49  | 43  | 38  | 36  | 36  | 36  | 36  | 36  | 36  | 36  |  |   |
| 7   | 63  | 49  | 40  | 34  | 61  | 48  | 40  | 33  | 47  | 39  | 33  | 45  | 38  | 33  | 44  | 37  | 33  | 31  | 31  | 31  | 31  | 31  | 31  | 31  |  |   |
| 8   | 58  | 44  | 35  | 29  | 56  | 43  | 35  | 29  | 42  | 34  | 29  | 40  | 33  | 28  | 39  | 33  | 28  | 26  | 26  | 26  | 26  | 26  | 26  | 26  |  |   |
| 9   | 53  | 39  | 31  | 25  | 52  | 39  | 30  | 25  | 38  | 30  | 25  | 36  | 29  | 25  | 35  | 29  | 24  | 22  | 22  | 22  | 22  | 22  | 22  | 22  |  |   |
| 10  | 49  | 36  | 27  | 22  | 48  | 35  | 27  | 22  | 34  | 27  | 21  | 33  | 26  | 21  | 32  | 26  | 21  | 19  | 19  | 19  | 19  | 19  | 19  | 19  |  |   |

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

|     | 0°     | 45°   | 90°   | 135°  | 180°  |
|-----|--------|-------|-------|-------|-------|
| 0°  | 10333  | 10333 | 10333 | 10333 | 10333 |
| 5°  | 12292  | 11410 | 10217 | 9474  | 9474  |
| 10° | 19621  | 13343 | 9583  | 8989  | 8989  |
| 15° | 48889  | 17883 | 8701  | 8398  | 8701  |
| 20° | 128769 | 26703 | 7533  | 8009  | 8486  |
| 25° | 258569 | 39564 | 6518  | 7487  | 8304  |
| 30° | 381186 | 52998 | 5290  | 7318  | 8511  |
| 35° | 480809 | 62148 | 4499  | 7211  | 8830  |
| 40° | 512996 | 62792 | 4047  | 7509  | 9442  |
| 45° | 533006 | 52390 | 3751  | 8135  | 10230 |
| 50° | 532164 | 36492 | 3671  | 8735  | 11467 |
| 55° | 452283 | 16214 | 3873  | 9789  | 12611 |
| 60° | 304007 | 3238  | 3823  | 10919 | 14467 |
| 65° | 80647  | 1386  | 3831  | 11859 | 16423 |
| 70° | 2165   | 1712  | 3877  | 12941 | 18530 |
| 75° | 1730   | 1730  | 3993  | 13708 | 21094 |
| 80° | 1686   | 2579  | 4265  | 14480 | 23803 |
| 85° | 1778   | 3359  | 6719  | 15215 | 23712 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 10°  
 Vertical Angle: 47.5°  
 Luminance: 546731 cd/sqm



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 6.0    | 0.6       |
| 10°-20°   | 29.3   | 2.8       |
| 20°-30°   | 120.6  | 11.6      |
| 30°-40°   | 254.2  | 24.5      |
| 40°-50°   | 313.7  | 30.2      |
| 50°-60°   | 235.1  | 22.7      |
| 60°-70°   | 60.5   | 5.8       |
| 70°-80°   | 12.5   | 1.2       |
| 80°-90°   | 5.1    | 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°    | 155.8  | 15.0      |
| 0°-40°    | 410.1  | 39.5      |
| 0°-60°    | 958.9  | 92.5      |
| 0°-90°    | 1037.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1037.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 45° | 90° | 135° | 180° | Flux |
|-----|------|-----|-----|------|------|------|
| 0°  | 60   | 60  | 60  | 60   | 60   |      |
| 5°  | 71   | 66  | 59  | 55   | 55   | 8    |
| 15° | 274  | 100 | 49  | 47   | 49   | 100  |
| 25° | 1361 | 208 | 34  | 39   | 44   | 634  |
| 35° | 2287 | 296 | 21  | 34   | 42   | 1394 |
| 45° | 2188 | 215 | 15  | 33   | 42   | 1675 |
| 55° | 1506 | 54  | 13  | 33   | 42   | 1301 |
| 65° | 198  | 3   | 9   | 29   | 40   | 285  |
| 75° | 3    | 3   | 6   | 21   | 32   | 3    |
| 85° | 1    | 2   | 3   | 8    | 12   | 1    |
| 90° | 0    | 0   | 0   | 0    | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 10°    | 15°    | 20°    | 25°    | 30°    | 45°   | 67.5° | 90°  | 112.5° |
|-------|--------|--------|--------|--------|--------|--------|--------|-------|-------|------|--------|
| 0°    | 60.0   | 60.0   | 60.0   | 60.0   | 60.0   | 60.0   | 60.0   | 60.0  | 60.0  | 60.0 | 60.0   |
| 2.5°  | 63.4   | 63.4   | 63.4   | 63.4   | 63.4   | 63.4   | 63.4   | 62.5  | 61.7  | 60.0 | 58.3   |
| 5°    | 71.1   | 70.3   | 70.3   | 70.3   | 69.4   | 68.5   | 68.5   | 66.0  | 62.5  | 59.1 | 56.6   |
| 7.5°  | 84.0   | 84.0   | 83.1   | 81.4   | 80.5   | 78.8   | 77.1   | 70.3  | 62.5  | 57.4 | 54.0   |
| 10°   | 112.2  | 110.5  | 108.0  | 106.2  | 102.0  | 96.0   | 91.7   | 76.3  | 61.7  | 54.8 | 52.3   |
| 12.5° | 167.9  | 171.4  | 162.8  | 154.2  | 142.2  | 131.1  | 117.4  | 86.5  | 61.7  | 52.3 | 49.7   |
| 15°   | 274.2  | 280.2  | 263.9  | 246.8  | 217.6  | 190.2  | 164.5  | 100.3 | 60.0  | 48.8 | 46.3   |
| 17.5° | 448.1  | 455.8  | 428.4  | 388.2  | 342.7  | 287.9  | 240.8  | 119.1 | 58.3  | 45.4 | 43.7   |
| 20°   | 702.6  | 701.8  | 648.6  | 598.1  | 510.7  | 430.1  | 341.9  | 145.7 | 55.7  | 41.1 | 41.1   |
| 22.5° | 1015.4 | 1018.8 | 953.7  | 862.8  | 738.6  | 609.2  | 468.7  | 176.5 | 52.3  | 37.7 | 38.6   |
| 25°   | 1360.7 | 1331.5 | 1254.4 | 1143.9 | 985.4  | 806.3  | 621.2  | 208.2 | 48.8  | 34.3 | 36.0   |
| 27.5° | 1648.6 | 1620.3 | 1532.0 | 1400.9 | 1230.4 | 1017.9 | 776.3  | 239.9 | 44.6  | 30.8 | 33.4   |
| 30°   | 1916.8 | 1880.8 | 1774.5 | 1626.3 | 1423.2 | 1193.6 | 922.0  | 266.5 | 39.4  | 26.6 | 30.8   |
| 32.5° | 2137.8 | 2105.3 | 1984.5 | 1812.2 | 1591.2 | 1344.4 | 1045.4 | 287.0 | 34.3  | 24.0 | 29.1   |
| 35°   | 2286.9 | 2253.5 | 2142.1 | 1952.8 | 1712.0 | 1454.1 | 1145.6 | 295.6 | 30.0  | 21.4 | 28.3   |
| 37.5° | 2321.2 | 2303.2 | 2223.5 | 2046.2 | 1795.1 | 1524.3 | 1209.9 | 293.0 | 24.8  | 19.7 | 26.6   |
| 40°   | 2281.8 | 2286.1 | 2248.4 | 2101.0 | 1839.7 | 1554.3 | 1236.4 | 279.3 | 20.6  | 18.0 | 25.7   |
| 42.5° | 2231.2 | 2242.4 | 2239.8 | 2123.3 | 1858.5 | 1556.0 | 1225.3 | 251.9 | 16.3  | 16.3 | 24.8   |
| 45°   | 2188.4 | 2199.5 | 2215.0 | 2113.8 | 1845.7 | 1533.8 | 1190.2 | 215.1 | 12.0  | 15.4 | 24.8   |
| 47.5° | 2110.4 | 2122.4 | 2144.7 | 2038.4 | 1780.5 | 1476.3 | 1126.8 | 174.8 | 8.6   | 14.6 | 24.0   |
| 50°   | 1986.2 | 1992.2 | 1986.2 | 1867.1 | 1655.4 | 1383.8 | 1023.9 | 136.2 | 6.0   | 13.7 | 24.0   |
| 52.5° | 1858.5 | 1846.5 | 1796.8 | 1646.0 | 1456.6 | 1237.3 | 894.5  | 96.8  | 4.3   | 12.9 | 23.1   |
| 55°   | 1506.3 | 1487.5 | 1450.6 | 1358.1 | 1250.1 | 1057.4 | 723.2  | 54.0  | 4.3   | 12.9 | 22.3   |
| 57.5° | 1049.6 | 1059.9 | 1072.8 | 1053.9 | 1004.2 | 832.9  | 549.2  | 24.0  | 4.3   | 12.0 | 22.3   |
| 60°   | 882.6  | 874.0  | 874.8  | 862.8  | 780.6  | 607.5  | 377.9  | 9.4   | 4.3   | 11.1 | 21.4   |
| 62.5° | 527.0  | 533.0  | 544.1  | 546.7  | 465.3  | 339.3  | 197.9  | 4.3   | 4.3   | 10.3 | 20.6   |
| 65°   | 197.9  | 207.4  | 181.7  | 157.7  | 125.1  | 91.7   | 46.3   | 3.4   | 5.1   | 9.4  | 18.9   |
| 67.5° | 6.0    | 6.9    | 8.6    | 7.7    | 7.7    | 6.9    | 5.1    | 3.4   | 5.1   | 8.6  | 18.0   |
| 70°   | 4.3    | 4.3    | 4.3    | 4.3    | 4.3    | 3.4    | 3.4    | 3.4   | 4.3   | 7.7  | 16.3   |
| 72.5° | 3.4    | 3.4    | 3.4    | 3.4    | 3.4    | 3.4    | 3.4    | 3.4   | 4.3   | 6.9  | 14.6   |
| 75°   | 2.6    | 3.4    | 2.6    | 2.6    | 2.6    | 2.6    | 2.6    | 2.6   | 4.3   | 6.0  | 12.0   |
| 77.5° | 2.6    | 2.6    | 2.6    | 2.6    | 2.6    | 2.6    | 2.6    | 2.6   | 3.4   | 5.1  | 10.3   |
| 80°   | 1.7    | 1.7    | 1.7    | 1.7    | 1.7    | 1.7    | 1.7    | 2.6   | 3.4   | 4.3  | 8.6    |
| 82.5° | 1.7    | 1.7    | 1.7    | 0.9    | 1.7    | 1.7    | 1.7    | 1.7   | 3.4   | 3.4  | 6.9    |
| 85°   | 0.9    | 0.9    | 0.9    | 0.9    | 0.9    | 0.9    | 0.9    | 1.7   | 2.6   | 3.4  | 4.3    |
| 87.5° | 0.0    | 0.0    | 0.0    | 0.0    | 0.9    | 0.9    | 0.9    | 1.7   | 2.6   | 2.6  | 2.6    |
| 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):**

|       | 135° | 157.5° | 180° |
|-------|------|--------|------|
| 0°    | 60.0 | 60.0   | 60.0 |
| 2.5°  | 56.6 | 56.6   | 56.6 |
| 5°    | 54.8 | 54.8   | 54.8 |
| 7.5°  | 53.1 | 53.1   | 53.1 |
| 10°   | 51.4 | 51.4   | 51.4 |
| 12.5° | 49.7 | 49.7   | 50.6 |
| 15°   | 47.1 | 48.8   | 48.8 |
| 17.5° | 45.4 | 47.1   | 48.0 |
| 20°   | 43.7 | 45.4   | 46.3 |
| 22.5° | 41.1 | 43.7   | 45.4 |
| 25°   | 39.4 | 42.8   | 43.7 |
| 27.5° | 37.7 | 42.0   | 43.7 |
| 30°   | 36.8 | 41.1   | 42.8 |
| 32.5° | 35.1 | 40.3   | 42.0 |
| 35°   | 34.3 | 40.3   | 42.0 |
| 37.5° | 34.3 | 39.4   | 42.0 |
| 40°   | 33.4 | 39.4   | 42.0 |
| 42.5° | 33.4 | 39.4   | 42.0 |
| 45°   | 33.4 | 39.4   | 42.0 |
| 47.5° | 32.6 | 39.4   | 42.8 |
| 50°   | 32.6 | 40.3   | 42.8 |
| 52.5° | 32.6 | 40.3   | 42.8 |
| 55°   | 32.6 | 40.3   | 42.0 |
| 57.5° | 31.7 | 39.4   | 42.0 |
| 60°   | 31.7 | 39.4   | 42.0 |
| 62.5° | 30.0 | 38.6   | 41.1 |
| 65°   | 29.1 | 37.7   | 40.3 |
| 67.5° | 27.4 | 36.8   | 38.6 |
| 70°   | 25.7 | 34.3   | 36.8 |
| 72.5° | 23.1 | 32.6   | 35.1 |
| 75°   | 20.6 | 30.0   | 31.7 |
| 77.5° | 18.0 | 26.6   | 28.3 |
| 80°   | 14.6 | 22.3   | 24.0 |
| 82.5° | 11.1 | 17.1   | 18.0 |
| 85°   | 7.7  | 11.1   | 12.0 |
| 87.5° | 3.4  | 5.1    | 6.0  |
| 90°   | 0.0  | 0.0    | 0.0  |

(END OF REPORT)