

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: P1309295

Luminaire Tested: LDSQA3D13R509030DE010 3LSQCA45R 1MW

Issue Date: 1/29/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1309295  
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: PORTFOLIO  
Catalog Number: LDSQA3D13R509030DE010 3LSQCA45R 1MW  
Description: 3in Adjustable LED luminaire with, R50 optic, 3000K CCT AND, 90CRI , 3LSQCA45R 1MW TRIM  
Light Source: -  
Ballast/Driver: -

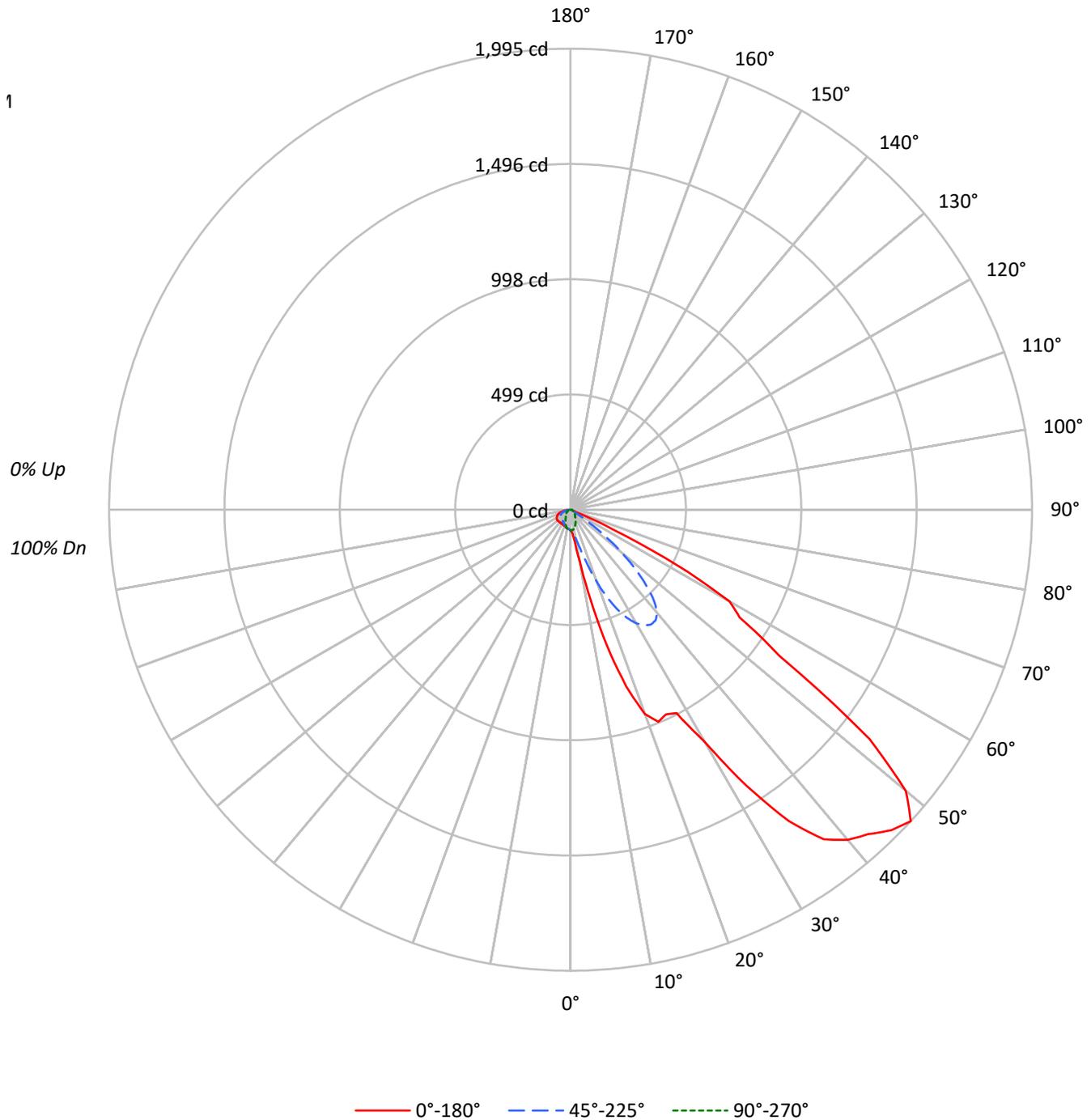
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1125.0 lumens  
Efficiency: N/A  
Efficacy: 77.1 lumens/watt  
Spacing Criteria (0/90/45): 3.58 / 0.83 / 1.91  
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





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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  | 0   |
| 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°  | 15397  | 15397  | 15397 | 15397 | 15397 |
| 5°  | 18308  | 17132  | 15283 | 14608 | 14453 |
| 10° | 39418  | 21248  | 14620 | 14113 | 14270 |
| 15° | 109154 | 34822  | 13158 | 13515 | 14032 |
| 20° | 172572 | 61086  | 11400 | 12994 | 13709 |
| 25° | 185580 | 89731  | 9786  | 12561 | 13853 |
| 30° | 230346 | 112657 | 8511  | 12369 | 14298 |
| 35° | 345664 | 127472 | 7359  | 12468 | 15117 |
| 40° | 419223 | 131070 | 6565  | 12882 | 15940 |
| 45° | 477596 | 112427 | 6381  | 13737 | 17512 |
| 50° | 506898 | 77593  | 6511  | 14843 | 19532 |
| 55° | 331158 | 31227  | 6426  | 16034 | 21589 |
| 60° | 273111 | 5339   | 6372  | 17394 | 23767 |
| 65° | 82358  | 2771   | 5950  | 18623 | 26122 |
| 70° | 3424   | 2921   | 5891  | 19084 | 28400 |
| 75° | 3261   | 3261   | 5789  | 19430 | 31008 |
| 80° | 2876   | 2876   | 5752  | 19241 | 31836 |
| 85° | 1976   | 3754   | 7707  | 19168 | 30629 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 47.5°  
 Luminance: 508543 cd/sqm



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 9.3    | 0.8       |
| 10°-20°   | 53.3   | 4.7       |
| 20°-30°   | 136.9  | 12.2      |
| 30°-40°   | 246.0  | 21.9      |
| 40°-50°   | 328.6  | 29.2      |
| 50°-60°   | 250.3  | 22.2      |
| 60°-70°   | 76.0   | 6.8       |
| 70°-80°   | 18.2   | 1.6       |
| 80°-90°   | 6.6    | 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       |
| 0°-30°    | 199.5  | 17.7      |
| 0°-40°    | 445.5  | 39.6      |
| 0°-60°    | 1024.3 | 91.1      |
| 0°-90°    | 1125.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1125.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 45° | 90° | 135° | 180° | Flux |
|-----|------|-----|-----|------|------|------|
| 0°  | 89   | 89  | 89  | 89   | 89   |      |
| 5°  | 106  | 99  | 88  | 84   | 84   | 14   |
| 15° | 612  | 195 | 74  | 76   | 79   | 180  |
| 25° | 977  | 472 | 52  | 66   | 73   | 466  |
| 35° | 1644 | 606 | 35  | 59   | 72   | 1009 |
| 45° | 1961 | 462 | 26  | 56   | 72   | 1499 |
| 55° | 1103 | 104 | 21  | 53   | 72   | 1097 |
| 65° | 202  | 7   | 15  | 46   | 64   | 280  |
| 75° | 5    | 5   | 9   | 29   | 47   | 5    |
| 85° | 1    | 2   | 4   | 10   | 16   | 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°    | 89.4   | 89.4   | 89.4   | 89.4   | 89.4   | 89.4   | 89.4   | 89.4   | 89.4  | 89.4  | 89.4 |
| 2.5°  | 95.2   | 95.2   | 95.2   | 95.2   | 95.2   | 95.2   | 94.3   | 94.3   | 94.3  | 92.3  | 90.4 |
| 5°    | 105.9  | 106.9  | 105.9  | 105.9  | 104.0  | 104.0  | 102.0  | 102.0  | 99.1  | 93.3  | 88.4 |
| 7.5°  | 139.0  | 138.0  | 137.0  | 133.1  | 130.2  | 123.4  | 120.5  | 115.6  | 106.9 | 93.3  | 86.5 |
| 10°   | 225.4  | 219.6  | 215.7  | 207.0  | 188.5  | 176.9  | 161.3  | 145.8  | 121.5 | 93.3  | 83.6 |
| 12.5° | 391.6  | 390.6  | 379.0  | 349.8  | 323.6  | 287.6  | 249.7  | 211.8  | 149.6 | 91.3  | 79.7 |
| 15°   | 612.2  | 603.4  | 586.9  | 552.9  | 506.3  | 449.9  | 381.9  | 314.8  | 195.3 | 88.4  | 73.8 |
| 17.5° | 800.7  | 790.0  | 777.4  | 743.4  | 689.9  | 619.0  | 537.4  | 445.0  | 257.5 | 84.5  | 68.0 |
| 20°   | 941.6  | 934.8  | 924.1  | 896.9  | 846.4  | 782.2  | 690.9  | 579.1  | 333.3 | 79.7  | 62.2 |
| 22.5° | 993.1  | 992.1  | 994.1  | 984.3  | 959.1  | 908.5  | 821.1  | 704.5  | 408.1 | 73.8  | 56.4 |
| 25°   | 976.6  | 975.6  | 988.2  | 1000.9 | 1006.7 | 986.3  | 919.2  | 805.5  | 472.2 | 69.0  | 51.5 |
| 27.5° | 992.1  | 989.2  | 983.4  | 985.3  | 1001.8 | 1013.5 | 982.4  | 883.3  | 527.6 | 62.2  | 46.6 |
| 30°   | 1158.3 | 1141.8 | 1115.5 | 1070.8 | 1037.8 | 1034.9 | 1021.3 | 944.5  | 566.5 | 55.4  | 42.8 |
| 32.5° | 1417.7 | 1397.3 | 1349.7 | 1267.1 | 1188.4 | 1128.2 | 1085.4 | 996.0  | 593.7 | 48.6  | 37.9 |
| 35°   | 1644.1 | 1629.6 | 1574.2 | 1492.5 | 1379.8 | 1267.1 | 1189.4 | 1071.8 | 606.3 | 42.8  | 35.0 |
| 37.5° | 1797.7 | 1791.8 | 1737.4 | 1650.0 | 1535.3 | 1402.2 | 1299.2 | 1149.5 | 603.4 | 36.0  | 32.1 |
| 40°   | 1864.7 | 1847.2 | 1801.5 | 1727.7 | 1612.1 | 1492.5 | 1383.7 | 1199.1 | 583.0 | 29.2  | 29.2 |
| 42.5° | 1904.5 | 1885.1 | 1835.6 | 1765.6 | 1651.9 | 1524.6 | 1393.4 | 1177.7 | 534.4 | 23.3  | 28.2 |
| 45°   | 1960.9 | 1940.5 | 1875.4 | 1800.6 | 1685.9 | 1538.2 | 1355.5 | 1101.9 | 461.6 | 17.5  | 26.2 |
| 47.5° | 1994.9 | 1981.3 | 1932.7 | 1857.9 | 1718.9 | 1518.8 | 1268.1 | 1031.0 | 380.9 | 13.6  | 25.3 |
| 50°   | 1891.9 | 1878.3 | 1842.4 | 1790.9 | 1697.6 | 1453.7 | 1191.3 | 916.3  | 289.6 | 10.7  | 24.3 |
| 52.5° | 1628.6 | 1640.2 | 1647.0 | 1661.6 | 1593.6 | 1307.9 | 1076.7 | 825.0  | 195.3 | 8.7   | 22.3 |
| 55°   | 1102.9 | 1120.4 | 1139.8 | 1198.1 | 1277.8 | 1164.1 | 956.2  | 713.2  | 104.0 | 8.7   | 21.4 |
| 57.5° | 866.8  | 860.9  | 855.1  | 851.2  | 913.4  | 960.0  | 840.5  | 570.4  | 44.7  | 8.7   | 19.4 |
| 60°   | 792.9  | 775.4  | 763.8  | 766.7  | 797.8  | 779.3  | 665.6  | 372.2  | 15.5  | 8.7   | 18.5 |
| 62.5° | 519.9  | 533.5  | 559.7  | 604.4  | 583.0  | 500.4  | 386.7  | 147.7  | 7.8   | 8.7   | 16.5 |
| 65°   | 202.1  | 195.3  | 202.1  | 214.7  | 185.6  | 138.0  | 86.5   | 26.2   | 6.8   | 7.8   | 14.6 |
| 67.5° | 27.2   | 24.3   | 18.5   | 11.7   | 10.7   | 9.7    | 7.8    | 6.8    | 6.8   | 7.8   | 13.6 |
| 70°   | 6.8    | 6.8    | 6.8    | 6.8    | 6.8    | 6.8    | 6.8    | 5.8    | 5.8   | 6.8   | 11.7 |
| 72.5° | 5.8    | 5.8    | 5.8    | 5.8    | 5.8    | 5.8    | 5.8    | 5.8    | 5.8   | 6.8   | 9.7  |
| 75°   | 4.9    | 4.9    | 4.9    | 4.9    | 4.9    | 4.9    | 4.9    | 4.9    | 4.9   | 5.8   | 8.7  |
| 77.5° | 3.9    | 3.9    | 3.9    | 3.9    | 3.9    | 3.9    | 3.9    | 3.9    | 3.9   | 4.9   | 6.8  |
| 80°   | 2.9    | 2.9    | 2.9    | 2.9    | 2.9    | 2.9    | 2.9    | 2.9    | 2.9   | 3.9   | 5.8  |
| 82.5° | 1.9    | 1.9    | 1.9    | 1.9    | 1.9    | 1.9    | 1.9    | 2.9    | 2.9   | 3.9   | 4.9  |
| 85°   | 1.0    | 1.9    | 1.0    | 1.9    | 1.9    | 1.9    | 1.9    | 1.9    | 1.9   | 2.9   | 3.9  |
| 87.5° | 1.0    | 1.0    | 1.0    | 1.0    | 1.0    | 1.0    | 1.0    | 1.0    | 1.9   | 2.9   | 2.9  |
| 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°    | 89.4   | 89.4 | 89.4   | 89.4 |
| 2.5°  | 88.4   | 86.5 | 86.5   | 86.5 |
| 5°    | 86.5   | 84.5 | 84.5   | 83.6 |
| 7.5°  | 83.6   | 82.6 | 82.6   | 82.6 |
| 10°   | 81.6   | 80.7 | 81.6   | 81.6 |
| 12.5° | 77.7   | 78.7 | 79.7   | 79.7 |
| 15°   | 73.8   | 75.8 | 77.7   | 78.7 |
| 17.5° | 70.0   | 73.8 | 75.8   | 76.8 |
| 20°   | 66.1   | 70.9 | 73.8   | 74.8 |
| 22.5° | 63.2   | 68.0 | 71.9   | 73.8 |
| 25°   | 59.3   | 66.1 | 70.9   | 72.9 |
| 27.5° | 55.4   | 63.2 | 69.0   | 71.9 |
| 30°   | 52.5   | 62.2 | 69.0   | 71.9 |
| 32.5° | 49.6   | 60.2 | 68.0   | 70.9 |
| 35°   | 47.6   | 59.3 | 68.0   | 71.9 |
| 37.5° | 45.7   | 58.3 | 68.0   | 70.9 |
| 40°   | 44.7   | 57.3 | 68.0   | 70.9 |
| 42.5° | 43.7   | 57.3 | 68.0   | 71.9 |
| 45°   | 41.8   | 56.4 | 68.0   | 71.9 |
| 47.5° | 40.8   | 56.4 | 68.0   | 71.9 |
| 50°   | 39.8   | 55.4 | 68.0   | 72.9 |
| 52.5° | 38.9   | 54.4 | 68.0   | 72.9 |
| 55°   | 36.9   | 53.4 | 67.0   | 71.9 |
| 57.5° | 36.0   | 52.5 | 66.1   | 70.0 |
| 60°   | 34.0   | 50.5 | 64.1   | 69.0 |
| 62.5° | 32.1   | 48.6 | 62.2   | 66.1 |
| 65°   | 29.2   | 45.7 | 59.3   | 64.1 |
| 67.5° | 26.2   | 41.8 | 56.4   | 61.2 |
| 70°   | 23.3   | 37.9 | 52.5   | 56.4 |
| 72.5° | 20.4   | 34.0 | 48.6   | 51.5 |
| 75°   | 17.5   | 29.2 | 42.8   | 46.6 |
| 77.5° | 14.6   | 25.3 | 36.0   | 38.9 |
| 80°   | 10.7   | 19.4 | 29.2   | 32.1 |
| 82.5° | 8.7    | 14.6 | 21.4   | 23.3 |
| 85°   | 5.8    | 9.7  | 13.6   | 15.5 |
| 87.5° | 2.9    | 4.9  | 6.8    | 7.8  |
| 90°   | 0.0    | 0.0  | 0.0    | 0.0  |

(END OF REPORT)