

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: P1318551

Luminaire Tested: LDSQA3D17R509830DE010 3LSQCA45R 1MW

Issue Date: 1/29/2026

**Test Information**

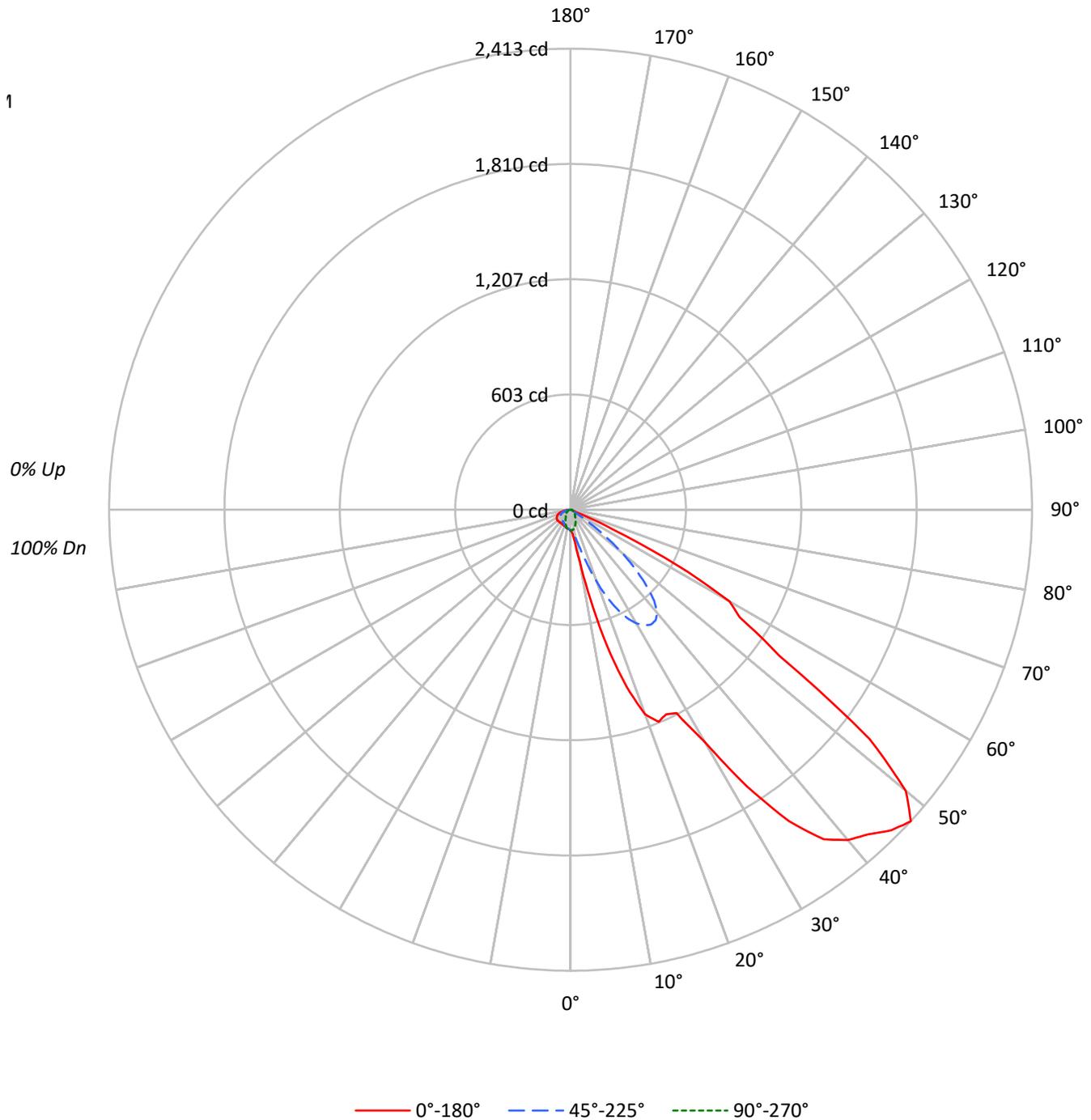
Test Method: LM-79-2019  
Report Number: P1318551  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-79)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/29/2026  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: PORTFOLIO  
Catalog Number: LDSQA3D17R509830DE010 3LSQCA45R 1MW  
Description: 3in Adjustable LED luminaire with, R50 optic, 3000K CCT AND, 98CRI , 3LSQCA45R 1MW TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1361.0 lumens  
Efficiency: N/A  
Efficacy: 66.7 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): 20.4  
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  | 55  | 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°  | 18634  | 18634  | 18634 | 18634 | 18634 |
| 5°  | 22146  | 20728  | 18498 | 17686 | 17478 |
| 10° | 47690  | 25690  | 17680 | 17068 | 17261 |
| 15° | 132047 | 42132  | 15922 | 16350 | 16974 |
| 20° | 208769 | 73897  | 13782 | 15725 | 16586 |
| 25° | 224497 | 108562 | 11839 | 15183 | 16760 |
| 30° | 278670 | 136283 | 10281 | 14955 | 17301 |
| 35° | 418177 | 154215 | 8893  | 15075 | 18291 |
| 40° | 507173 | 158566 | 7936  | 15603 | 19290 |
| 45° | 577796 | 136004 | 7721  | 16611 | 21190 |
| 50° | 613240 | 93856  | 7877  | 17951 | 23632 |
| 55° | 400608 | 37773  | 7777  | 19427 | 26123 |
| 60° | 330392 | 6476   | 7681  | 21046 | 28761 |
| 65° | 99637  | 3342   | 7172  | 22535 | 31623 |
| 70° | 4129   | 3575   | 7100  | 23062 | 34342 |
| 75° | 3926   | 3926   | 7053  | 23489 | 37530 |
| 80° | 3471   | 3471   | 7042  | 23307 | 38481 |
| 85° | 2371   | 4742   | 9287  | 23317 | 37149 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 47.5°  
 Luminance: 615228 cd/sqm



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 11.3   | 0.8       |
| 10°-20°   | 64.4   | 4.7       |
| 20°-30°   | 165.7  | 12.2      |
| 30°-40°   | 297.6  | 21.9      |
| 40°-50°   | 397.5  | 29.2      |
| 50°-60°   | 302.8  | 22.2      |
| 60°-70°   | 91.9   | 6.8       |
| 70°-80°   | 22.0   | 1.6       |
| 80°-90°   | 7.9    | 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°    | 241.4  | 17.7      |
| 0°-40°    | 539.0  | 39.6      |
| 0°-60°    | 1239.2 | 91.1      |
| 0°-90°    | 1361.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1361.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 45° | 90° | 135° | 180° | Flux |
|-----|------|-----|-----|------|------|------|
| 0°  | 108  | 108 | 108 | 108  | 108  |      |
| 5°  | 128  | 120 | 107 | 102  | 101  | 16   |
| 15° | 741  | 236 | 89  | 92   | 95   | 218  |
| 25° | 1181 | 571 | 62  | 80   | 88   | 564  |
| 35° | 1989 | 734 | 42  | 72   | 87   | 1221 |
| 45° | 2372 | 558 | 32  | 68   | 87   | 1814 |
| 55° | 1334 | 126 | 26  | 65   | 87   | 1327 |
| 65° | 244  | 8   | 18  | 55   | 78   | 338  |
| 75° | 6    | 6   | 11  | 35   | 56   | 6    |
| 85° | 1    | 2   | 5   | 12   | 19   | 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°    | 108.2  | 108.2  | 108.2  | 108.2  | 108.2  | 108.2  | 108.2  | 108.2  | 108.2 | 108.2 | 108.2 |
| 2.5°  | 115.2  | 115.2  | 115.2  | 115.2  | 115.2  | 115.2  | 114.0  | 114.0  | 114.0 | 111.7 | 109.3 |
| 5°    | 128.1  | 129.3  | 128.1  | 128.1  | 125.8  | 125.8  | 123.4  | 123.4  | 119.9 | 112.9 | 107.0 |
| 7.5°  | 168.1  | 166.9  | 165.8  | 161.1  | 157.5  | 149.3  | 145.8  | 139.9  | 129.3 | 112.9 | 104.6 |
| 10°   | 272.7  | 265.7  | 261.0  | 250.4  | 228.1  | 213.9  | 195.1  | 176.3  | 146.9 | 112.9 | 101.1 |
| 12.5° | 473.7  | 472.6  | 458.5  | 423.2  | 391.5  | 348.0  | 302.1  | 256.3  | 181.0 | 110.5 | 96.4  |
| 15°   | 740.6  | 730.0  | 710.0  | 668.9  | 612.5  | 544.3  | 462.0  | 380.9  | 236.3 | 107.0 | 89.3  |
| 17.5° | 968.7  | 955.7  | 940.4  | 899.3  | 834.6  | 748.8  | 650.1  | 538.4  | 311.5 | 102.3 | 82.3  |
| 20°   | 1139.1 | 1130.9 | 1117.9 | 1085.0 | 1023.9 | 946.3  | 835.8  | 700.6  | 403.2 | 96.4  | 75.2  |
| 22.5° | 1201.4 | 1200.2 | 1202.6 | 1190.8 | 1160.3 | 1099.1 | 993.3  | 852.3  | 493.7 | 89.3  | 68.2  |
| 25°   | 1181.4 | 1180.3 | 1195.5 | 1210.8 | 1217.9 | 1193.2 | 1112.1 | 974.5  | 571.3 | 83.5  | 62.3  |
| 27.5° | 1200.2 | 1196.7 | 1189.7 | 1192.0 | 1212.0 | 1226.1 | 1188.5 | 1068.6 | 638.3 | 75.2  | 56.4  |
| 30°   | 1401.3 | 1381.3 | 1349.5 | 1295.5 | 1255.5 | 1252.0 | 1235.5 | 1142.6 | 685.3 | 67.0  | 51.7  |
| 32.5° | 1715.1 | 1690.4 | 1632.8 | 1532.9 | 1437.7 | 1364.8 | 1313.1 | 1204.9 | 718.3 | 58.8  | 45.8  |
| 35°   | 1989.0 | 1971.4 | 1904.4 | 1805.6 | 1669.3 | 1532.9 | 1438.9 | 1296.6 | 733.5 | 51.7  | 42.3  |
| 37.5° | 2174.8 | 2167.7 | 2101.9 | 1996.1 | 1857.4 | 1696.3 | 1571.7 | 1390.7 | 730.0 | 43.5  | 38.8  |
| 40°   | 2255.9 | 2234.7 | 2179.5 | 2090.1 | 1950.2 | 1805.6 | 1674.0 | 1450.6 | 705.3 | 35.3  | 35.3  |
| 42.5° | 2304.1 | 2280.6 | 2220.6 | 2136.0 | 1998.4 | 1844.4 | 1685.7 | 1424.8 | 646.6 | 28.2  | 34.1  |
| 45°   | 2372.3 | 2347.6 | 2268.8 | 2178.3 | 2039.6 | 1860.9 | 1639.9 | 1333.1 | 558.4 | 21.2  | 31.7  |
| 47.5° | 2413.4 | 2396.9 | 2338.2 | 2247.6 | 2079.5 | 1837.4 | 1534.1 | 1247.3 | 460.8 | 16.5  | 30.6  |
| 50°   | 2288.8 | 2272.3 | 2228.8 | 2166.5 | 2053.7 | 1758.6 | 1441.2 | 1108.5 | 350.3 | 12.9  | 29.4  |
| 52.5° | 1970.2 | 1984.3 | 1992.6 | 2010.2 | 1927.9 | 1582.3 | 1302.5 | 998.0  | 236.3 | 10.6  | 27.0  |
| 55°   | 1334.2 | 1355.4 | 1378.9 | 1449.5 | 1545.8 | 1408.3 | 1156.7 | 862.9  | 125.8 | 10.6  | 25.9  |
| 57.5° | 1048.6 | 1041.5 | 1034.5 | 1029.8 | 1105.0 | 1161.4 | 1016.8 | 690.0  | 54.1  | 10.6  | 23.5  |
| 60°   | 959.2  | 938.1  | 924.0  | 927.5  | 965.1  | 942.8  | 805.3  | 450.2  | 18.8  | 10.6  | 22.3  |
| 62.5° | 628.9  | 645.4  | 677.1  | 731.2  | 705.3  | 605.4  | 467.9  | 178.7  | 9.4   | 10.6  | 20.0  |
| 65°   | 244.5  | 236.3  | 244.5  | 259.8  | 224.5  | 166.9  | 104.6  | 31.7   | 8.2   | 9.4   | 17.6  |
| 67.5° | 32.9   | 29.4   | 22.3   | 14.1   | 12.9   | 11.8   | 9.4    | 8.2    | 8.2   | 9.4   | 16.5  |
| 70°   | 8.2    | 8.2    | 8.2    | 8.2    | 8.2    | 8.2    | 8.2    | 7.1    | 7.1   | 8.2   | 14.1  |
| 72.5° | 7.1    | 7.1    | 7.1    | 7.1    | 7.1    | 7.1    | 7.1    | 7.1    | 7.1   | 8.2   | 11.8  |
| 75°   | 5.9    | 5.9    | 5.9    | 5.9    | 5.9    | 5.9    | 5.9    | 5.9    | 5.9   | 7.1   | 10.6  |
| 77.5° | 4.7    | 4.7    | 4.7    | 4.7    | 4.7    | 4.7    | 4.7    | 4.7    | 4.7   | 5.9   | 8.2   |
| 80°   | 3.5    | 3.5    | 3.5    | 3.5    | 3.5    | 3.5    | 3.5    | 3.5    | 3.5   | 4.7   | 7.1   |
| 82.5° | 2.4    | 2.4    | 2.4    | 2.4    | 2.4    | 2.4    | 2.4    | 3.5    | 3.5   | 4.7   | 5.9   |
| 85°   | 1.2    | 2.4    | 1.2    | 2.4    | 2.4    | 2.4    | 2.4    | 2.4    | 2.4   | 3.5   | 4.7   |
| 87.5° | 1.2    | 1.2    | 1.2    | 1.2    | 1.2    | 1.2    | 1.2    | 1.2    | 2.4   | 3.5   | 3.5   |
| 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°    | 108.2  | 108.2 | 108.2  | 108.2 |
| 2.5°  | 107.0  | 104.6 | 104.6  | 104.6 |
| 5°    | 104.6  | 102.3 | 102.3  | 101.1 |
| 7.5°  | 101.1  | 99.9  | 99.9   | 99.9  |
| 10°   | 98.7   | 97.6  | 98.7   | 98.7  |
| 12.5° | 94.0   | 95.2  | 96.4   | 96.4  |
| 15°   | 89.3   | 91.7  | 94.0   | 95.2  |
| 17.5° | 84.6   | 89.3  | 91.7   | 92.9  |
| 20°   | 79.9   | 85.8  | 89.3   | 90.5  |
| 22.5° | 76.4   | 82.3  | 87.0   | 89.3  |
| 25°   | 71.7   | 79.9  | 85.8   | 88.2  |
| 27.5° | 67.0   | 76.4  | 83.5   | 87.0  |
| 30°   | 63.5   | 75.2  | 83.5   | 87.0  |
| 32.5° | 60.0   | 72.9  | 82.3   | 85.8  |
| 35°   | 57.6   | 71.7  | 82.3   | 87.0  |
| 37.5° | 55.3   | 70.5  | 82.3   | 85.8  |
| 40°   | 54.1   | 69.4  | 82.3   | 85.8  |
| 42.5° | 52.9   | 69.4  | 82.3   | 87.0  |
| 45°   | 50.5   | 68.2  | 82.3   | 87.0  |
| 47.5° | 49.4   | 68.2  | 82.3   | 87.0  |
| 50°   | 48.2   | 67.0  | 82.3   | 88.2  |
| 52.5° | 47.0   | 65.8  | 82.3   | 88.2  |
| 55°   | 44.7   | 64.7  | 81.1   | 87.0  |
| 57.5° | 43.5   | 63.5  | 79.9   | 84.6  |
| 60°   | 41.1   | 61.1  | 77.6   | 83.5  |
| 62.5° | 38.8   | 58.8  | 75.2   | 79.9  |
| 65°   | 35.3   | 55.3  | 71.7   | 77.6  |
| 67.5° | 31.7   | 50.5  | 68.2   | 74.1  |
| 70°   | 28.2   | 45.8  | 63.5   | 68.2  |
| 72.5° | 24.7   | 41.1  | 58.8   | 62.3  |
| 75°   | 21.2   | 35.3  | 51.7   | 56.4  |
| 77.5° | 17.6   | 30.6  | 43.5   | 47.0  |
| 80°   | 12.9   | 23.5  | 35.3   | 38.8  |
| 82.5° | 10.6   | 17.6  | 25.9   | 28.2  |
| 85°   | 7.1    | 11.8  | 16.5   | 18.8  |
| 87.5° | 3.5    | 5.9   | 8.2    | 9.4   |
| 90°   | 0.0    | 0.0   | 0.0    | 0.0   |

(END OF REPORT)