

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: P1317666

Luminaire Tested: LDSQA3D17R459827DE010 3LSQCA45R 1MW

Issue Date: 1/29/2026

**Test Information**

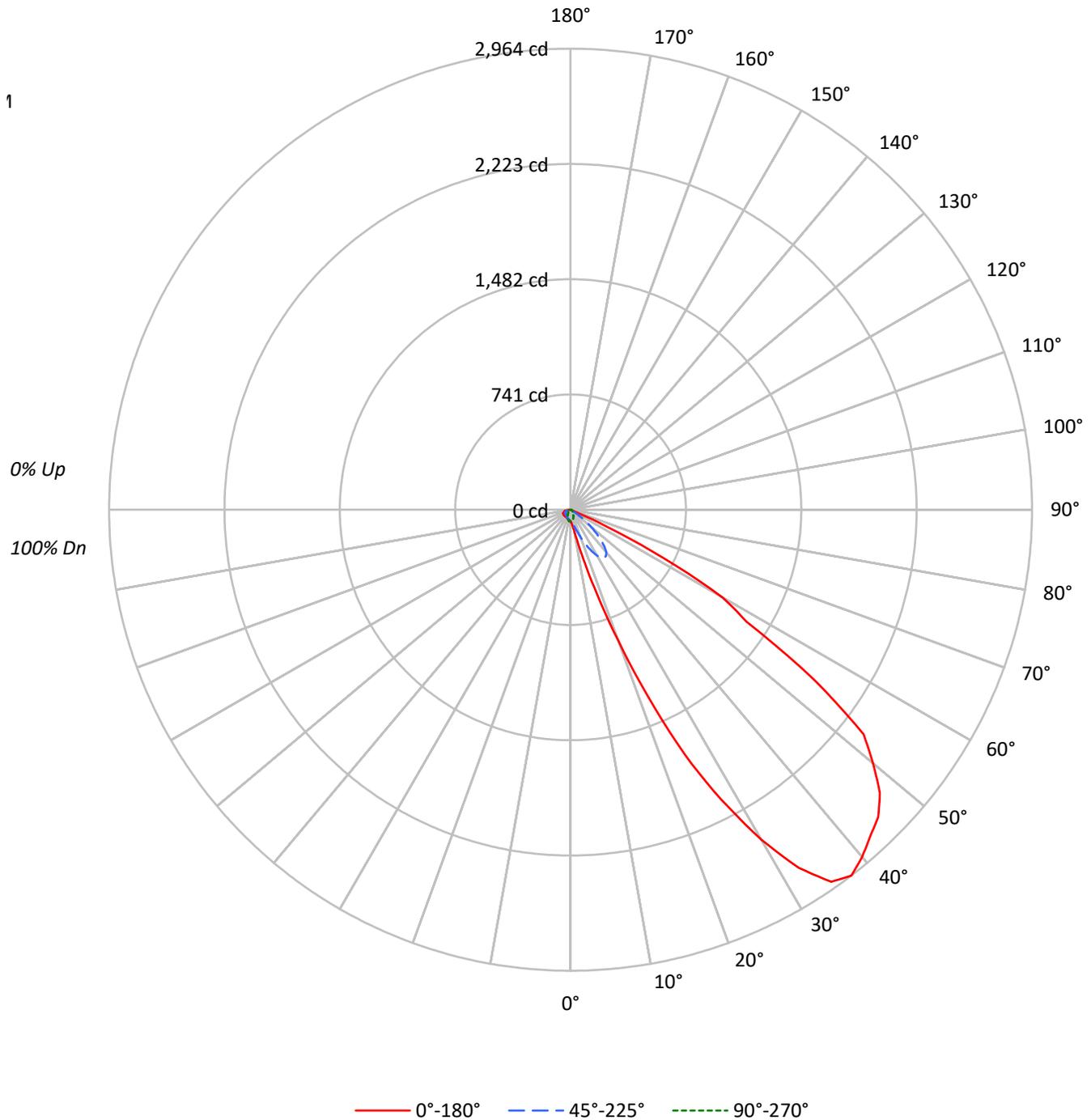
Test Method: LM-79-2019  
Report Number: P1317666  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-84)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/29/2026  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: PORTFOLIO  
Catalog Number: LDSQA3D17R459827DE010 3LSQCA45R 1MW  
Description: 3in Adjustable LED luminaire with, R45 optic, 2700K CCT AND, 98CRI , 3LSQCA45R 1MW TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1324.0 lumens  
Efficiency: N/A  
Efficacy: 64.9 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): 20.4  
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  | 0   |
| RCR |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 102 | 102 | 102 | 100 |
| 1   | 110 | 106 | 102 | 99  | 107 | 104 | 100 | 97  | 99  | 97  | 94  | 96  | 93  | 91  | 92  | 90  | 88  | 88  | 88  | 88  | 86  |
| 2   | 100 | 93  | 86  | 81  | 98  | 91  | 85  | 80  | 87  | 83  | 78  | 84  | 80  | 77  | 81  | 78  | 75  | 75  | 75  | 75  | 73  |
| 3   | 91  | 81  | 73  | 67  | 89  | 80  | 72  | 66  | 77  | 70  | 65  | 74  | 69  | 64  | 71  | 67  | 63  | 63  | 63  | 63  | 61  |
| 4   | 83  | 71  | 62  | 56  | 81  | 70  | 62  | 55  | 67  | 60  | 55  | 65  | 59  | 54  | 63  | 58  | 53  | 53  | 53  | 53  | 51  |
| 5   | 76  | 63  | 53  | 47  | 73  | 61  | 53  | 46  | 59  | 52  | 46  | 57  | 51  | 45  | 55  | 50  | 45  | 45  | 45  | 45  | 43  |
| 6   | 69  | 55  | 46  | 39  | 67  | 54  | 46  | 39  | 52  | 45  | 39  | 51  | 44  | 39  | 49  | 43  | 38  | 38  | 38  | 38  | 36  |
| 7   | 63  | 49  | 40  | 34  | 61  | 48  | 40  | 33  | 47  | 39  | 33  | 45  | 38  | 33  | 44  | 37  | 33  | 33  | 33  | 33  | 31  |
| 8   | 58  | 44  | 35  | 29  | 56  | 43  | 35  | 29  | 42  | 34  | 29  | 40  | 33  | 28  | 39  | 33  | 28  | 28  | 28  | 28  | 26  |
| 9   | 53  | 39  | 31  | 25  | 52  | 39  | 30  | 25  | 38  | 30  | 25  | 36  | 29  | 25  | 35  | 29  | 24  | 24  | 24  | 24  | 22  |
| 10  | 49  | 36  | 27  | 22  | 48  | 35  | 27  | 22  | 34  | 27  | 21  | 33  | 26  | 21  | 32  | 26  | 21  | 21  | 21  | 21  | 19  |

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

|     | 0°     | 45°   | 90°   | 135°  | 180°  |
|-----|--------|-------|-------|-------|-------|
| 0°  | 13192  | 13192 | 13192 | 13192 | 13192 |
| 5°  | 15698  | 14557 | 13052 | 12102 | 12102 |
| 10° | 25060  | 17033 | 12242 | 11472 | 11472 |
| 15° | 62422  | 22822 | 11126 | 10734 | 11126 |
| 20° | 164416 | 34089 | 9622  | 10227 | 10832 |
| 25° | 330133 | 50509 | 8323  | 9558  | 10603 |
| 30° | 486684 | 67654 | 6742  | 9347  | 10878 |
| 35° | 613894 | 79346 | 5740  | 9209  | 11269 |
| 40° | 654970 | 80171 | 5171  | 9600  | 12050 |
| 45° | 680506 | 66881 | 4798  | 10400 | 13055 |
| 50° | 679446 | 46593 | 4689  | 11146 | 14656 |
| 55° | 577462 | 20688 | 4924  | 12491 | 16094 |
| 60° | 388121 | 4133  | 4891  | 13950 | 18462 |
| 65° | 102979 | 1793  | 4890  | 15160 | 20946 |
| 70° | 2769   | 2216  | 4935  | 16516 | 23667 |
| 75° | 2196   | 2196  | 5124  | 17500 | 26949 |
| 80° | 2182   | 3273  | 5455  | 18447 | 30349 |
| 85° | 2174   | 4347  | 8695  | 19365 | 30233 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 10°  
 Vertical Angle: 47.5°  
 Luminance: 698052 cd/sqm



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 7.6    | 0.6       |
| 10°-20°   | 37.4   | 2.8       |
| 20°-30°   | 154.0  | 11.6      |
| 30°-40°   | 324.6  | 24.5      |
| 40°-50°   | 400.5  | 30.2      |
| 50°-60°   | 300.2  | 22.7      |
| 60°-70°   | 77.2   | 5.8       |
| 70°-80°   | 16.0   | 1.2       |
| 80°-90°   | 6.5    | 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°    | 199.0  | 15.0      |
| 0°-40°    | 523.6  | 39.5      |
| 0°-60°    | 1224.2 | 92.5      |
| 0°-90°    | 1324.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1324.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 45° | 90° | 135° | 180° | Flux |
|-----|------|-----|-----|------|------|------|
| 0°  | 77   | 77  | 77  | 77   | 77   |      |
| 5°  | 91   | 84  | 76  | 70   | 70   | 10   |
| 15° | 350  | 128 | 62  | 60   | 62   | 128  |
| 25° | 1737 | 266 | 44  | 50   | 56   | 809  |
| 35° | 2920 | 377 | 27  | 44   | 54   | 1779 |
| 45° | 2794 | 275 | 20  | 43   | 54   | 2138 |
| 55° | 1923 | 69  | 16  | 42   | 54   | 1661 |
| 65° | 253  | 4   | 12  | 37   | 51   | 364  |
| 75° | 3    | 3   | 8   | 26   | 40   | 4    |
| 85° | 1    | 2   | 4   | 10   | 15   | 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°    | 76.6   | 76.6   | 76.6   | 76.6   | 76.6   | 76.6   | 76.6   | 76.6  | 76.6  | 76.6 | 76.6   |
| 2.5°  | 81.0   | 81.0   | 81.0   | 81.0   | 81.0   | 81.0   | 81.0   | 79.9  | 78.8  | 76.6 | 74.4   |
| 5°    | 90.8   | 89.7   | 89.7   | 89.7   | 88.6   | 87.5   | 87.5   | 84.2  | 79.9  | 75.5 | 72.2   |
| 7.5°  | 107.2  | 107.2  | 106.1  | 103.9  | 102.8  | 100.6  | 98.5   | 89.7  | 79.9  | 73.3 | 68.9   |
| 10°   | 143.3  | 141.1  | 137.8  | 135.7  | 130.2  | 122.5  | 117.1  | 97.4  | 78.8  | 70.0 | 66.7   |
| 12.5° | 214.4  | 218.8  | 207.9  | 196.9  | 181.6  | 167.4  | 149.9  | 110.5 | 78.8  | 66.7 | 63.5   |
| 15°   | 350.1  | 357.7  | 336.9  | 315.1  | 277.9  | 242.9  | 210.0  | 128.0 | 76.6  | 62.4 | 59.1   |
| 17.5° | 572.2  | 582.0  | 547.0  | 495.6  | 437.6  | 367.6  | 307.4  | 152.1 | 74.4  | 58.0 | 55.8   |
| 20°   | 897.1  | 896.0  | 828.1  | 763.6  | 652.0  | 549.2  | 436.5  | 186.0 | 71.1  | 52.5 | 52.5   |
| 22.5° | 1296.4 | 1300.8 | 1217.6 | 1101.6 | 943.0  | 777.8  | 598.4  | 225.4 | 66.7  | 48.1 | 49.2   |
| 25°   | 1737.3 | 1700.1 | 1601.6 | 1460.5 | 1258.1 | 1029.4 | 793.1  | 265.8 | 62.4  | 43.8 | 45.9   |
| 27.5° | 2104.8 | 2068.7 | 1956.1 | 1788.7 | 1571.0 | 1299.7 | 991.2  | 306.3 | 56.9  | 39.4 | 42.7   |
| 30°   | 2447.3 | 2401.3 | 2265.7 | 2076.4 | 1817.1 | 1523.9 | 1177.1 | 340.2 | 50.3  | 33.9 | 39.4   |
| 32.5° | 2729.5 | 2687.9 | 2533.7 | 2313.8 | 2031.5 | 1716.5 | 1334.7 | 366.5 | 43.8  | 30.6 | 37.2   |
| 35°   | 2919.9 | 2877.2 | 2735.0 | 2493.2 | 2185.8 | 1856.5 | 1462.7 | 377.4 | 38.3  | 27.3 | 36.1   |
| 37.5° | 2963.6 | 2940.6 | 2838.9 | 2612.4 | 2291.9 | 1946.2 | 1544.7 | 374.1 | 31.7  | 25.2 | 33.9   |
| 40°   | 2913.3 | 2918.8 | 2870.6 | 2682.5 | 2348.8 | 1984.5 | 1578.6 | 356.6 | 26.3  | 23.0 | 32.8   |
| 42.5° | 2848.7 | 2863.0 | 2859.7 | 2710.9 | 2372.9 | 1986.7 | 1564.4 | 321.6 | 20.8  | 20.8 | 31.7   |
| 45°   | 2794.0 | 2808.3 | 2828.0 | 2698.9 | 2356.5 | 1958.2 | 1519.6 | 274.6 | 15.3  | 19.7 | 31.7   |
| 47.5° | 2694.5 | 2709.8 | 2738.3 | 2602.6 | 2273.3 | 1884.9 | 1438.6 | 223.2 | 10.9  | 18.6 | 30.6   |
| 50°   | 2535.9 | 2543.5 | 2535.9 | 2383.8 | 2113.6 | 1766.8 | 1307.3 | 173.9 | 7.7   | 17.5 | 30.6   |
| 52.5° | 2372.9 | 2357.5 | 2294.1 | 2101.6 | 1859.8 | 1579.7 | 1142.1 | 123.6 | 5.5   | 16.4 | 29.5   |
| 55°   | 1923.2 | 1899.2 | 1852.1 | 1734.0 | 1596.1 | 1350.0 | 923.3  | 68.9  | 5.5   | 16.4 | 28.4   |
| 57.5° | 1340.1 | 1353.3 | 1369.7 | 1345.6 | 1282.2 | 1063.4 | 701.2  | 30.6  | 5.5   | 15.3 | 28.4   |
| 60°   | 1126.8 | 1115.9 | 1117.0 | 1101.6 | 996.6  | 775.6  | 482.4  | 12.0  | 5.5   | 14.2 | 27.3   |
| 62.5° | 672.8  | 680.5  | 694.7  | 698.0  | 594.0  | 433.2  | 252.7  | 5.5   | 5.5   | 13.1 | 26.3   |
| 65°   | 252.7  | 264.7  | 231.9  | 201.3  | 159.7  | 117.1  | 59.1   | 4.4   | 6.6   | 12.0 | 24.1   |
| 67.5° | 7.7    | 8.8    | 10.9   | 9.8    | 9.8    | 8.8    | 6.6    | 4.4   | 6.6   | 10.9 | 23.0   |
| 70°   | 5.5    | 5.5    | 5.5    | 5.5    | 5.5    | 4.4    | 4.4    | 4.4   | 5.5   | 9.8  | 20.8   |
| 72.5° | 4.4    | 4.4    | 4.4    | 4.4    | 4.4    | 4.4    | 4.4    | 4.4   | 5.5   | 8.8  | 18.6   |
| 75°   | 3.3    | 4.4    | 3.3    | 3.3    | 3.3    | 3.3    | 3.3    | 3.3   | 5.5   | 7.7  | 15.3   |
| 77.5° | 3.3    | 3.3    | 3.3    | 3.3    | 3.3    | 3.3    | 3.3    | 3.3   | 4.4   | 6.6  | 13.1   |
| 80°   | 2.2    | 2.2    | 2.2    | 2.2    | 2.2    | 2.2    | 2.2    | 3.3   | 4.4   | 5.5  | 10.9   |
| 82.5° | 2.2    | 2.2    | 2.2    | 1.1    | 2.2    | 2.2    | 2.2    | 2.2   | 4.4   | 4.4  | 8.8    |
| 85°   | 1.1    | 1.1    | 1.1    | 1.1    | 1.1    | 1.1    | 1.1    | 2.2   | 3.3   | 4.4  | 5.5    |
| 87.5° | 0.0    | 0.0    | 0.0    | 0.0    | 1.1    | 1.1    | 1.1    | 2.2   | 3.3   | 3.3  | 3.3    |
| 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°    | 76.6 | 76.6   | 76.6 |
| 2.5°  | 72.2 | 72.2   | 72.2 |
| 5°    | 70.0 | 70.0   | 70.0 |
| 7.5°  | 67.8 | 67.8   | 67.8 |
| 10°   | 65.6 | 65.6   | 65.6 |
| 12.5° | 63.5 | 63.5   | 64.5 |
| 15°   | 60.2 | 62.4   | 62.4 |
| 17.5° | 58.0 | 60.2   | 61.3 |
| 20°   | 55.8 | 58.0   | 59.1 |
| 22.5° | 52.5 | 55.8   | 58.0 |
| 25°   | 50.3 | 54.7   | 55.8 |
| 27.5° | 48.1 | 53.6   | 55.8 |
| 30°   | 47.0 | 52.5   | 54.7 |
| 32.5° | 44.9 | 51.4   | 53.6 |
| 35°   | 43.8 | 51.4   | 53.6 |
| 37.5° | 43.8 | 50.3   | 53.6 |
| 40°   | 42.7 | 50.3   | 53.6 |
| 42.5° | 42.7 | 50.3   | 53.6 |
| 45°   | 42.7 | 50.3   | 53.6 |
| 47.5° | 41.6 | 50.3   | 54.7 |
| 50°   | 41.6 | 51.4   | 54.7 |
| 52.5° | 41.6 | 51.4   | 54.7 |
| 55°   | 41.6 | 51.4   | 53.6 |
| 57.5° | 40.5 | 50.3   | 53.6 |
| 60°   | 40.5 | 50.3   | 53.6 |
| 62.5° | 38.3 | 49.2   | 52.5 |
| 65°   | 37.2 | 48.1   | 51.4 |
| 67.5° | 35.0 | 47.0   | 49.2 |
| 70°   | 32.8 | 43.8   | 47.0 |
| 72.5° | 29.5 | 41.6   | 44.9 |
| 75°   | 26.3 | 38.3   | 40.5 |
| 77.5° | 23.0 | 33.9   | 36.1 |
| 80°   | 18.6 | 28.4   | 30.6 |
| 82.5° | 14.2 | 21.9   | 23.0 |
| 85°   | 9.8  | 14.2   | 15.3 |
| 87.5° | 4.4  | 6.6    | 7.7  |
| 90°   | 0.0  | 0.0    | 0.0  |

(END OF REPORT)