

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: P1318259

Luminaire Tested: LDSQA3D09R509830DE010 3LSQCA45R 1MW

Issue Date: 1/29/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1318259  
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: LDSQA3D09R509830DE010 3LSQCA45R 1MW  
Description: 3in Adjustable LED luminaire with, R50 optic, 3000K CCT AND, 98CRI , 3LSQCA45R 1MW TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

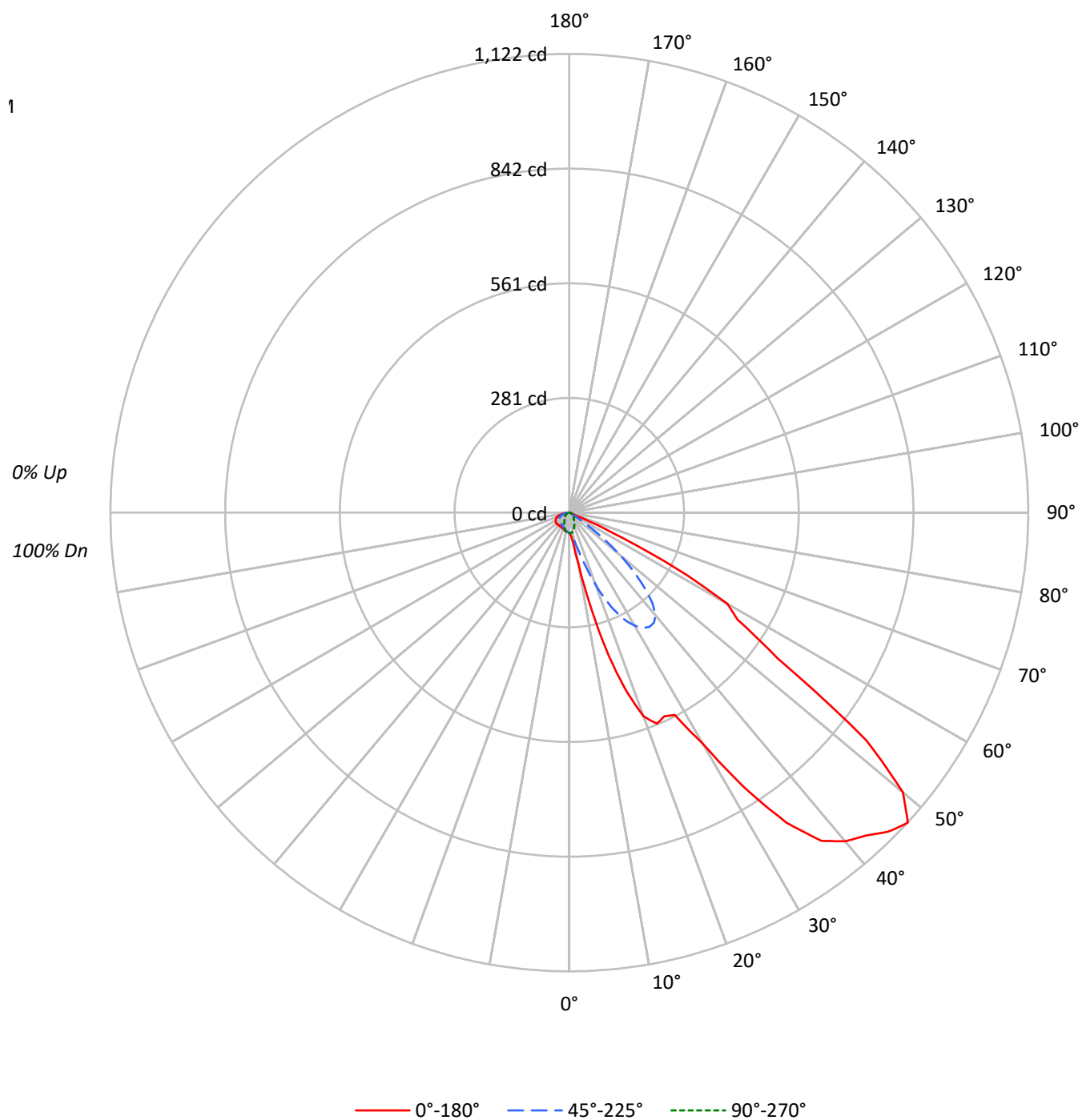
Lumens per Lamp: N/A  
Luminaire Lumens: 633.0 lumens  
Efficiency: N/A  
Efficacy: 57.5 lumens/watt  
Spacing Criteria (0/90/45): 3.58 / 0.82 / 1.91  
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')  
CIE Type: Direct

Input Watts (W): 11  
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

TEST NUMBER: P1318259

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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 | 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°  | 8663   | 8663  | 8663 | 8663  | 8663  |
| 5°  | 10304  | 9647  | 8609 | 8229  | 8125  |
| 10° | 22175  | 11944 | 8219 | 7940  | 8027  |
| 15° | 61424  | 19595 | 7417 | 7595  | 7899  |
| 20° | 97099  | 34364 | 6415 | 7313  | 7716  |
| 25° | 104420 | 50490 | 5511 | 7069  | 7791  |
| 30° | 129601 | 63398 | 4793 | 6960  | 8054  |
| 35° | 194498 | 71736 | 4142 | 7022  | 8515  |
| 40° | 235882 | 73741 | 3687 | 7262  | 8970  |
| 45° | 268719 | 63252 | 3605 | 7721  | 9864  |
| 50° | 285212 | 43646 | 3671 | 8359  | 10985 |
| 55° | 186342 | 17565 | 3603 | 9038  | 12161 |
| 60° | 153657 | 2997  | 3582 | 9782  | 13364 |
| 65° | 46334  | 1549  | 3342 | 10473 | 14711 |
| 70° | 1913   | 1662  | 3323 | 10726 | 15962 |
| 75° | 1797   | 1797  | 3261 | 10913 | 17434 |
| 80° | 1587   | 1587  | 3273 | 10811 | 17852 |
| 85° | 988    | 2174  | 4347 | 10868 | 17191 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle:  $47.5^\circ$

Luminance: 286150 cd/sqm

TEST NUMBER: P1318259

CATALOG NUMBER: LDSQA3D09R509830DE010 3LSQCA45R 1MW

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 5.2    | 0.8       |
| 10°-20°   | 30.0   | 4.7       |
| 20°-30°   | 77.1   | 12.2      |
| 30°-40°   | 138.4  | 21.9      |
| 40°-50°   | 184.9  | 29.2      |
| 50°-60°   | 140.8  | 22.2      |
| 60°-70°   | 42.7   | 6.8       |
| 70°-80°   | 10.2   | 1.6       |
| 80°-90°   | 3.7    | 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°    | 112.3  | 17.7      |
| 0°-40°    | 250.7  | 39.6      |
| 0°-60°    | 576.4  | 91.1      |
| 0°-90°    | 633.0  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 633.0  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 45° | 90° | 135° | 180° | Flux |
|-----|------|-----|-----|------|------|------|
| 0°  | 50   | 50  | 50  | 50   | 50   |      |
| 5°  | 60   | 56  | 50  | 48   | 47   | 8    |
| 15° | 344  | 110 | 42  | 43   | 44   | 101  |
| 25° | 550  | 266 | 29  | 37   | 41   | 262  |
| 35° | 925  | 341 | 20  | 33   | 40   | 568  |
| 45° | 1103 | 260 | 15  | 32   | 40   | 844  |
| 55° | 621  | 58  | 12  | 30   | 40   | 617  |
| 65° | 114  | 4   | 8   | 26   | 36   | 157  |
| 75° | 3    | 3   | 5   | 16   | 26   | 3    |
| 85° | 0    | 1   | 2   | 6    | 9    | 1    |
| 90° | 0    | 0   | 0   | 0    | 0    |      |

TEST NUMBER: P1318259

CATALOG NUMBER: LDSQA3D09R509830DE010 3LSQCA45R 1MW

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 10°    | 15°    | 20°   | 25°   | 30°   | 35°   | 45°   | 67.5° | 90°  |
|-------|--------|--------|--------|--------|-------|-------|-------|-------|-------|-------|------|
| 0°    | 50.3   | 50.3   | 50.3   | 50.3   | 50.3  | 50.3  | 50.3  | 50.3  | 50.3  | 50.3  | 50.3 |
| 2.5°  | 53.6   | 53.6   | 53.6   | 53.6   | 53.6  | 53.6  | 53.0  | 53.0  | 53.0  | 51.9  | 50.8 |
| 5°    | 59.6   | 60.1   | 59.6   | 59.6   | 58.5  | 58.5  | 57.4  | 57.4  | 55.8  | 52.5  | 49.8 |
| 7.5°  | 78.2   | 77.6   | 77.1   | 74.9   | 73.3  | 69.4  | 67.8  | 65.1  | 60.1  | 52.5  | 48.7 |
| 10°   | 126.8  | 123.6  | 121.4  | 116.5  | 106.1 | 99.5  | 90.8  | 82.0  | 68.3  | 52.5  | 47.0 |
| 12.5° | 220.3  | 219.8  | 213.2  | 196.8  | 182.1 | 161.8 | 140.5 | 119.2 | 84.2  | 51.4  | 44.8 |
| 15°   | 344.5  | 339.5  | 330.2  | 311.1  | 284.9 | 253.1 | 214.9 | 177.1 | 109.9 | 49.8  | 41.6 |
| 17.5° | 450.5  | 444.5  | 437.4  | 418.3  | 388.2 | 348.3 | 302.4 | 250.4 | 144.9 | 47.6  | 38.3 |
| 20°   | 529.8  | 526.0  | 520.0  | 504.6  | 476.2 | 440.1 | 388.7 | 325.9 | 187.5 | 44.8  | 35.0 |
| 22.5° | 558.8  | 558.2  | 559.3  | 553.9  | 539.6 | 511.2 | 462.0 | 396.4 | 229.6 | 41.6  | 31.7 |
| 25°   | 549.5  | 548.9  | 556.0  | 563.1  | 566.4 | 554.9 | 517.2 | 453.3 | 265.7 | 38.8  | 29.0 |
| 27.5° | 558.2  | 556.6  | 553.3  | 554.4  | 563.7 | 570.3 | 552.8 | 497.0 | 296.9 | 35.0  | 26.2 |
| 30°   | 651.7  | 642.4  | 627.7  | 602.5  | 583.9 | 582.3 | 574.6 | 531.4 | 318.8 | 31.2  | 24.1 |
| 32.5° | 797.7  | 786.2  | 759.4  | 713.0  | 668.7 | 634.8 | 610.7 | 560.4 | 334.1 | 27.3  | 21.3 |
| 35°   | 925.1  | 916.9  | 885.7  | 839.8  | 776.4 | 713.0 | 669.2 | 603.1 | 341.2 | 24.1  | 19.7 |
| 37.5° | 1011.5 | 1008.2 | 977.6  | 928.4  | 863.9 | 789.0 | 731.0 | 646.8 | 339.5 | 20.2  | 18.0 |
| 40°   | 1049.2 | 1039.4 | 1013.7 | 972.1  | 907.1 | 839.8 | 778.6 | 674.7 | 328.0 | 16.4  | 16.4 |
| 42.5° | 1071.6 | 1060.7 | 1032.8 | 993.4  | 929.5 | 857.8 | 784.0 | 662.7 | 300.7 | 13.1  | 15.9 |
| 45°   | 1103.3 | 1091.9 | 1055.2 | 1013.1 | 948.6 | 865.5 | 762.7 | 620.0 | 259.7 | 9.8   | 14.8 |
| 47.5° | 1122.5 | 1114.8 | 1087.5 | 1045.4 | 967.2 | 854.6 | 713.5 | 580.1 | 214.3 | 7.7   | 14.2 |
| 50°   | 1064.5 | 1056.9 | 1036.6 | 1007.7 | 955.2 | 817.9 | 670.3 | 515.6 | 162.9 | 6.0   | 13.7 |
| 52.5° | 916.3  | 922.9  | 926.7  | 934.9  | 896.7 | 735.9 | 605.8 | 464.2 | 109.9 | 4.9   | 12.6 |
| 55°   | 620.6  | 630.4  | 641.3  | 674.1  | 719.0 | 655.0 | 538.0 | 401.3 | 58.5  | 4.9   | 12.0 |
| 57.5° | 487.7  | 484.4  | 481.1  | 479.0  | 513.9 | 540.2 | 472.9 | 320.9 | 25.2  | 4.9   | 10.9 |
| 60°   | 446.1  | 436.3  | 429.7  | 431.4  | 448.9 | 438.5 | 374.5 | 209.4 | 8.7   | 4.9   | 10.4 |
| 62.5° | 292.5  | 300.2  | 314.9  | 340.1  | 328.0 | 281.6 | 217.6 | 83.1  | 4.4   | 4.9   | 9.3  |
| 65°   | 113.7  | 109.9  | 113.7  | 120.8  | 104.4 | 77.6  | 48.7  | 14.8  | 3.8   | 4.4   | 8.2  |
| 67.5° | 15.3   | 13.7   | 10.4   | 6.6    | 6.0   | 5.5   | 4.4   | 3.8   | 3.8   | 4.4   | 7.7  |
| 70°   | 3.8    | 3.8    | 3.8    | 3.8    | 3.8   | 3.8   | 3.8   | 3.3   | 3.3   | 3.8   | 6.6  |
| 72.5° | 3.3    | 3.3    | 3.3    | 3.3    | 3.3   | 3.3   | 3.3   | 3.3   | 3.3   | 3.8   | 5.5  |
| 75°   | 2.7    | 2.7    | 2.7    | 2.7    | 2.7   | 2.7   | 2.7   | 2.7   | 2.7   | 3.3   | 4.9  |
| 77.5° | 2.2    | 2.2    | 2.2    | 2.2    | 2.2   | 2.2   | 2.2   | 2.2   | 2.2   | 2.7   | 3.8  |
| 80°   | 1.6    | 1.6    | 1.6    | 1.6    | 1.6   | 1.6   | 1.6   | 1.6   | 1.6   | 2.2   | 3.3  |
| 82.5° | 1.1    | 1.1    | 1.1    | 1.1    | 1.1   | 1.1   | 1.1   | 1.6   | 1.6   | 2.2   | 2.7  |
| 85°   | 0.5    | 1.1    | 0.5    | 1.1    | 1.1   | 1.1   | 1.1   | 1.1   | 1.1   | 1.6   | 2.2  |
| 87.5° | 0.5    | 0.5    | 0.5    | 0.5    | 0.5   | 0.5   | 0.5   | 0.5   | 1.1   | 1.6   | 1.6  |
| 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):**

|       | 112.5° | 135° | 157.5° | 180° |
|-------|--------|------|--------|------|
| 0°    | 50.3   | 50.3 | 50.3   | 50.3 |
| 2.5°  | 49.8   | 48.7 | 48.7   | 48.7 |
| 5°    | 48.7   | 47.6 | 47.6   | 47.0 |
| 7.5°  | 47.0   | 46.5 | 46.5   | 46.5 |
| 10°   | 45.9   | 45.4 | 45.9   | 45.9 |
| 12.5° | 43.7   | 44.3 | 44.8   | 44.8 |
| 15°   | 41.6   | 42.6 | 43.7   | 44.3 |
| 17.5° | 39.4   | 41.6 | 42.6   | 43.2 |
| 20°   | 37.2   | 39.9 | 41.6   | 42.1 |
| 22.5° | 35.5   | 38.3 | 40.5   | 41.6 |
| 25°   | 33.4   | 37.2 | 39.9   | 41.0 |
| 27.5° | 31.2   | 35.5 | 38.8   | 40.5 |
| 30°   | 29.5   | 35.0 | 38.8   | 40.5 |
| 32.5° | 27.9   | 33.9 | 38.3   | 39.9 |
| 35°   | 26.8   | 33.4 | 38.3   | 40.5 |
| 37.5° | 25.7   | 32.8 | 38.3   | 39.9 |
| 40°   | 25.2   | 32.3 | 38.3   | 39.9 |
| 42.5° | 24.6   | 32.3 | 38.3   | 40.5 |
| 45°   | 23.5   | 31.7 | 38.3   | 40.5 |
| 47.5° | 23.0   | 31.7 | 38.3   | 40.5 |
| 50°   | 22.4   | 31.2 | 38.3   | 41.0 |
| 52.5° | 21.9   | 30.6 | 38.3   | 41.0 |
| 55°   | 20.8   | 30.1 | 37.7   | 40.5 |
| 57.5° | 20.2   | 29.5 | 37.2   | 39.4 |
| 60°   | 19.1   | 28.4 | 36.1   | 38.8 |
| 62.5° | 18.0   | 27.3 | 35.0   | 37.2 |
| 65°   | 16.4   | 25.7 | 33.4   | 36.1 |
| 67.5° | 14.8   | 23.5 | 31.7   | 34.4 |
| 70°   | 13.1   | 21.3 | 29.5   | 31.7 |
| 72.5° | 11.5   | 19.1 | 27.3   | 29.0 |
| 75°   | 9.8    | 16.4 | 24.1   | 26.2 |
| 77.5° | 8.2    | 14.2 | 20.2   | 21.9 |
| 80°   | 6.0    | 10.9 | 16.4   | 18.0 |
| 82.5° | 4.9    | 8.2  | 12.0   | 13.1 |
| 85°   | 3.3    | 5.5  | 7.7    | 8.7  |
| 87.5° | 1.6    | 2.7  | 3.8    | 4.4  |
| 90°   | 0.0    | 0.0  | 0.0    | 0.0  |

(END OF REPORT)