

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: P1327118

Luminaire Tested: LDSQA3D09R60W2N902765DE010 3LSQCA45R 1MMS\_6500K

Issue Date: 1/29/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1327118  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-81)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/29/2026  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: PORTFOLIO  
Catalog Number: LDSQA3D09R60W2N902765DE010 3LSQCA45R 1MMS\_6500K  
Description: 3in Adjustable Tunable White LED luminaire with, R60 optic, 6500K CCT AND, 90CRI ,  
3LSQCA45R 1MMS TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

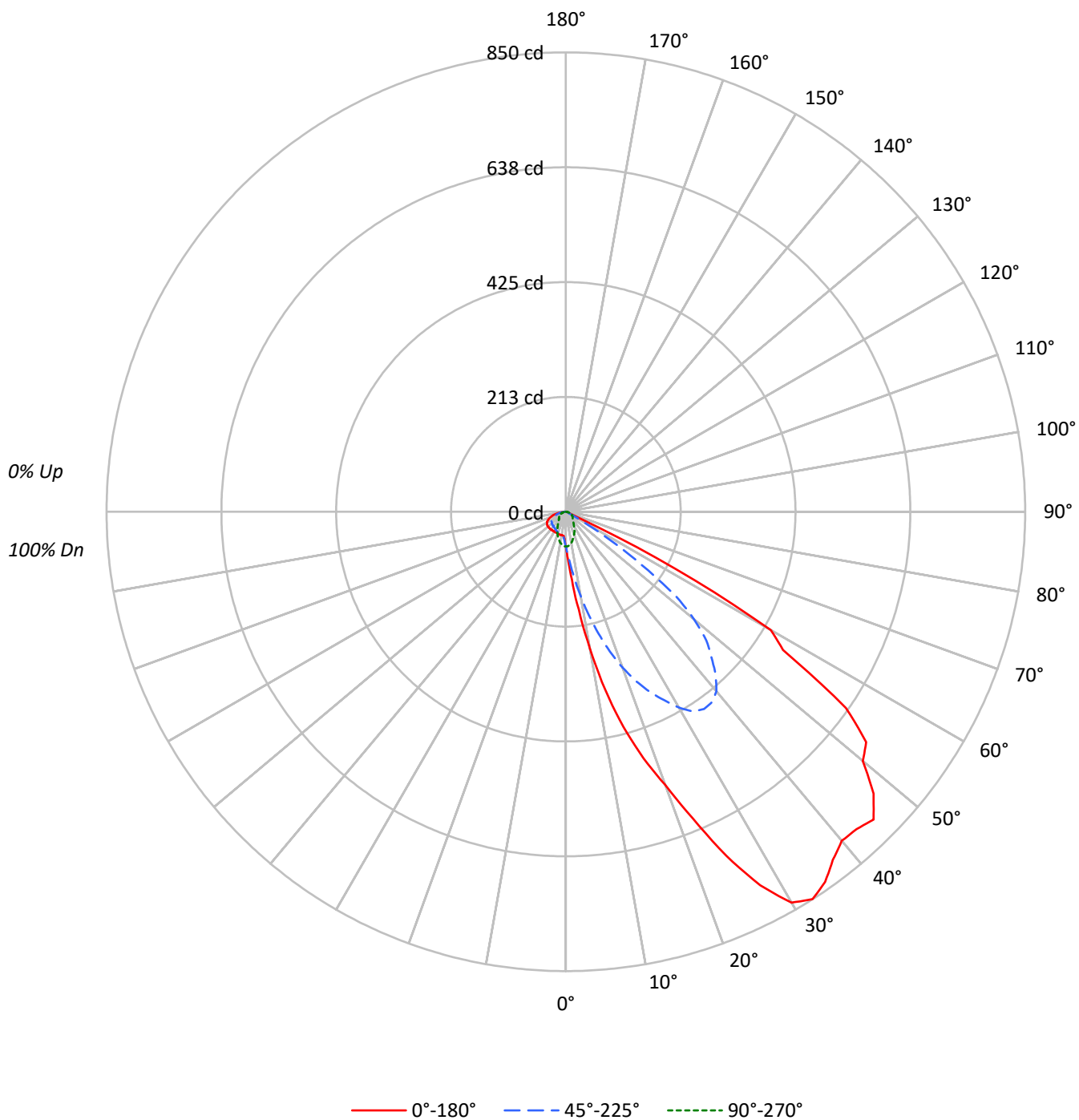
Lumens per Lamp: N/A  
Luminaire Lumens: 647.0 lumens  
Efficiency: N/A  
Efficacy: 71.9 lumens/watt  
Spacing Criteria (0/90/45): 3.38 / 0.84 / 2.07  
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')  
CIE Type: Direct

Input Watts (W): 9  
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



TEST NUMBER: P1327118

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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |    |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|
| RF  | 20  |     |     |     | 20  |     |     |     |     | 20  |     |     |     |     | 20  |     |     |     |    | 20 |
| RC  | 80  |     |     |     | 70  |     |     |     |     | 50  |     |     |     |     | 30  |     |     |     |    | 10 |
| RW  | 70  | 50  | 30  | 10  | 70  | 50  | 30  | 10  | 50  | 30  | 10  | 50  | 30  | 10  | 50  | 30  | 10  | 50  | 30 | 10 |
| RCR |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |    |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |    |    |
| 1   | 110 | 106 | 102 | 99  | 108 | 104 | 100 | 97  | 100 | 97  | 94  | 96  | 93  | 91  | 92  | 90  | 89  | 87  |    |    |
| 2   | 101 | 93  | 87  | 82  | 98  | 91  | 86  | 81  | 88  | 83  | 79  | 85  | 81  | 77  | 82  | 79  | 76  | 74  |    |    |
| 3   | 92  | 82  | 74  | 68  | 90  | 81  | 73  | 68  | 78  | 72  | 67  | 75  | 70  | 65  | 72  | 68  | 64  | 62  |    |    |
| 4   | 84  | 72  | 64  | 58  | 82  | 71  | 63  | 57  | 69  | 62  | 56  | 66  | 60  | 56  | 64  | 59  | 55  | 53  |    |    |
| 5   | 77  | 64  | 55  | 49  | 75  | 63  | 55  | 49  | 61  | 54  | 48  | 59  | 53  | 48  | 57  | 52  | 47  | 45  |    |    |
| 6   | 70  | 57  | 48  | 42  | 69  | 56  | 48  | 42  | 54  | 47  | 41  | 53  | 46  | 41  | 51  | 45  | 41  | 39  |    |    |
| 7   | 65  | 51  | 42  | 36  | 63  | 50  | 42  | 36  | 49  | 41  | 36  | 47  | 41  | 36  | 46  | 40  | 35  | 33  |    |    |
| 8   | 60  | 46  | 38  | 32  | 58  | 45  | 37  | 32  | 44  | 37  | 31  | 43  | 36  | 31  | 42  | 36  | 31  | 29  |    |    |
| 9   | 55  | 42  | 33  | 28  | 54  | 41  | 33  | 28  | 40  | 33  | 28  | 39  | 32  | 27  | 38  | 32  | 27  | 25  |    |    |
| 10  | 52  | 38  | 30  | 25  | 50  | 38  | 30  | 25  | 37  | 29  | 24  | 36  | 29  | 24  | 35  | 29  | 24  | 22  |    |    |

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

|     | 0°     | 45°   | 90°   | 135°  | 180°  |
|-----|--------|-------|-------|-------|-------|
| 0°  | 11039  | 11039 | 11039 | 11039 | 11039 |
| 5°  | 21766  | 16977 | 10874 | 8229  | 7831  |
| 10° | 44944  | 27666 | 10178 | 7502  | 7607  |
| 15° | 73512  | 41526 | 9129  | 7542  | 7756  |
| 20° | 98621  | 56266 | 8192  | 7551  | 7863  |
| 25° | 133437 | 69854 | 7145  | 7487  | 8152  |
| 30° | 166073 | 83166 | 5966  | 7477  | 8531  |
| 35° | 175828 | 93727 | 5067  | 7674  | 8893  |
| 40° | 178643 | 97460 | 4631  | 7936  | 9645  |
| 45° | 196114 | 92821 | 4433  | 8452  | 10449 |
| 50° | 192240 | 83193 | 4421  | 8976  | 11494 |
| 55° | 190005 | 51044 | 4414  | 9698  | 12701 |
| 60° | 150729 | 12159 | 4650  | 10333 | 13778 |
| 65° | 9577   | 2160  | 4564  | 10555 | 14874 |
| 70° | 2065   | 2367  | 4431  | 10977 | 15711 |
| 75° | 1930   | 2329  | 3926  | 10580 | 16037 |
| 80° | 1785   | 2380  | 4066  | 10513 | 15174 |
| 85° | 1186   | 2371  | 4742  | 9287  | 15018 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 15°

Vertical Angle: 52.5°

Luminance: 206974 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 8.0    | 1.2       |
| 10°-20°   | 40.3   | 6.2       |
| 20°-30°   | 93.6   | 14.5      |
| 30°-40°   | 145.4  | 22.5      |
| 40°-50°   | 165.7  | 25.6      |
| 50°-60°   | 139.6  | 21.6      |
| 60°-70°   | 40.5   | 6.3       |
| 70°-80°   | 10.4   | 1.6       |
| 80°-90°   | 3.5    | 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°    | 141.9  | 21.9      |
| 0°-40°    | 287.3  | 44.4      |
| 0°-60°    | 592.6  | 91.6      |
| 0°-90°    | 647.0  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 647.0  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | 45° | 90° | 135° | 180° | Flux |
|-----|-----|-----|-----|------|------|------|
| 0°  | 64  | 64  | 64  | 64   | 64   |      |
| 5°  | 126 | 98  | 63  | 48   | 45   | 16   |
| 15° | 412 | 233 | 51  | 42   | 44   | 119  |
| 25° | 702 | 368 | 38  | 39   | 43   | 326  |
| 35° | 836 | 446 | 24  | 36   | 42   | 520  |
| 45° | 805 | 381 | 18  | 35   | 43   | 605  |
| 55° | 633 | 170 | 15  | 32   | 42   | 532  |
| 65° | 24  | 5   | 11  | 26   | 36   | 116  |
| 75° | 3   | 4   | 6   | 16   | 24   | 3    |
| 85° | 1   | 1   | 2   | 5    | 8    | 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°    | 64.1  | 64.1  | 64.1  | 64.1  | 64.1  | 64.1  | 64.1  | 64.1  | 64.1  | 64.1  | 64.1 |
| 2.5°  | 86.5  | 85.9  | 85.9  | 85.3  | 84.7  | 84.1  | 82.3  | 81.8  | 78.2  | 71.2  | 64.1 |
| 5°    | 125.9 | 125.3 | 123.5 | 122.9 | 120.0 | 115.9 | 111.7 | 107.6 | 98.2  | 78.2  | 62.9 |
| 7.5°  | 182.3 | 183.5 | 182.3 | 175.9 | 171.7 | 165.3 | 152.9 | 144.1 | 125.3 | 85.3  | 60.6 |
| 10°   | 257.0 | 257.0 | 255.2 | 245.3 | 236.4 | 224.1 | 208.2 | 192.9 | 158.2 | 91.7  | 58.2 |
| 12.5° | 338.2 | 339.9 | 331.1 | 322.9 | 307.0 | 291.7 | 270.0 | 247.0 | 195.8 | 97.0  | 55.3 |
| 15°   | 412.3 | 411.1 | 402.3 | 391.7 | 375.2 | 354.1 | 331.1 | 301.7 | 232.9 | 100.6 | 51.2 |
| 17.5° | 478.2 | 475.8 | 468.2 | 456.4 | 436.4 | 412.9 | 383.5 | 351.7 | 271.1 | 103.5 | 48.2 |
| 20°   | 538.1 | 529.9 | 521.1 | 508.7 | 489.3 | 464.6 | 434.0 | 398.2 | 307.0 | 103.5 | 44.7 |
| 22.5° | 614.0 | 605.8 | 593.4 | 574.6 | 548.7 | 518.1 | 482.3 | 441.7 | 338.8 | 101.2 | 41.2 |
| 25°   | 702.2 | 695.8 | 674.6 | 650.5 | 617.0 | 580.5 | 538.7 | 484.0 | 367.6 | 97.6  | 37.6 |
| 27.5° | 779.3 | 772.2 | 751.0 | 715.8 | 675.2 | 631.7 | 587.5 | 531.7 | 392.9 | 91.2  | 33.5 |
| 30°   | 835.1 | 826.3 | 809.9 | 776.3 | 726.9 | 674.0 | 621.7 | 568.1 | 418.2 | 83.5  | 30.0 |
| 32.5° | 849.9 | 848.7 | 836.3 | 811.6 | 767.5 | 709.3 | 646.9 | 588.7 | 438.2 | 73.5  | 27.1 |
| 35°   | 836.3 | 838.1 | 835.7 | 823.4 | 791.0 | 734.0 | 663.4 | 599.9 | 445.8 | 63.5  | 24.1 |
| 37.5° | 811.6 | 814.0 | 818.1 | 819.9 | 799.3 | 748.7 | 672.8 | 604.6 | 444.0 | 53.5  | 22.3 |
| 40°   | 794.6 | 793.4 | 793.4 | 805.2 | 801.0 | 755.2 | 674.0 | 601.1 | 433.5 | 42.9  | 20.6 |
| 42.5° | 796.3 | 783.4 | 774.6 | 793.4 | 799.3 | 752.2 | 666.4 | 591.7 | 410.5 | 32.9  | 18.8 |
| 45°   | 805.2 | 777.5 | 762.2 | 786.3 | 795.7 | 742.2 | 652.2 | 577.5 | 381.1 | 22.9  | 18.2 |
| 47.5° | 772.2 | 754.0 | 751.6 | 785.7 | 789.3 | 725.2 | 630.5 | 555.2 | 352.9 | 15.9  | 17.1 |
| 50°   | 717.5 | 714.6 | 726.9 | 762.2 | 762.8 | 696.9 | 605.8 | 514.6 | 310.5 | 11.2  | 16.5 |
| 52.5° | 700.5 | 702.2 | 713.4 | 731.6 | 714.6 | 649.3 | 561.1 | 480.5 | 257.0 | 8.8   | 15.9 |
| 55°   | 632.8 | 635.8 | 646.4 | 657.5 | 645.2 | 591.1 | 507.0 | 439.3 | 170.0 | 8.2   | 14.7 |
| 57.5° | 476.4 | 484.0 | 503.4 | 513.4 | 514.6 | 481.7 | 459.3 | 378.8 | 95.9  | 8.2   | 14.1 |
| 60°   | 437.6 | 427.6 | 418.7 | 398.2 | 379.3 | 375.2 | 377.6 | 284.1 | 35.3  | 7.6   | 13.5 |
| 62.5° | 228.8 | 224.1 | 237.6 | 246.4 | 248.8 | 261.7 | 244.7 | 150.0 | 7.6   | 7.6   | 12.4 |
| 65°   | 23.5  | 23.5  | 28.8  | 38.2  | 63.5  | 84.7  | 80.6  | 43.5  | 5.3   | 7.1   | 11.2 |
| 67.5° | 7.1   | 7.1   | 7.1   | 8.2   | 10.6  | 10.6  | 8.8   | 6.5   | 5.3   | 6.5   | 10.0 |
| 70°   | 4.1   | 4.1   | 4.1   | 4.1   | 4.1   | 4.1   | 4.7   | 4.1   | 4.7   | 5.9   | 8.8  |
| 72.5° | 3.5   | 3.5   | 3.5   | 3.5   | 4.1   | 4.1   | 4.1   | 4.1   | 4.1   | 5.3   | 7.6  |
| 75°   | 2.9   | 2.9   | 2.9   | 2.9   | 2.9   | 2.9   | 2.9   | 3.5   | 3.5   | 4.1   | 5.9  |
| 77.5° | 2.4   | 2.4   | 2.4   | 2.4   | 2.4   | 2.4   | 2.9   | 2.9   | 2.9   | 3.5   | 4.7  |
| 80°   | 1.8   | 1.8   | 1.8   | 1.8   | 1.8   | 2.4   | 2.4   | 2.4   | 2.4   | 2.9   | 4.1  |
| 82.5° | 1.2   | 1.2   | 1.2   | 1.2   | 1.8   | 1.8   | 1.8   | 1.8   | 1.8   | 2.4   | 2.9  |
| 85°   | 0.6   | 1.2   | 1.2   | 1.2   | 1.2   | 1.2   | 1.2   | 1.2   | 1.2   | 1.8   | 2.4  |
| 87.5° | 0.6   | 0.6   | 0.6   | 0.6   | 0.6   | 0.6   | 0.6   | 0.6   | 1.2   | 1.2   | 1.8  |
| 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°    | 64.1   | 64.1 | 64.1   | 64.1 |
| 2.5°  | 58.2   | 54.1 | 51.8   | 50.6 |
| 5°    | 52.9   | 47.6 | 45.9   | 45.3 |
| 7.5°  | 48.2   | 44.7 | 44.1   | 44.1 |
| 10°   | 45.3   | 42.9 | 43.5   | 43.5 |
| 12.5° | 43.5   | 42.9 | 43.5   | 44.1 |
| 15°   | 41.8   | 42.3 | 43.5   | 43.5 |
| 17.5° | 40.6   | 41.8 | 42.9   | 43.5 |
| 20°   | 38.8   | 41.2 | 42.9   | 42.9 |
| 22.5° | 37.6   | 40.6 | 42.3   | 42.9 |
| 25°   | 36.5   | 39.4 | 41.8   | 42.9 |
| 27.5° | 34.7   | 38.8 | 41.8   | 42.3 |
| 30°   | 32.9   | 37.6 | 41.2   | 42.9 |
| 32.5° | 31.2   | 37.1 | 41.2   | 42.3 |
| 35°   | 30.0   | 36.5 | 41.2   | 42.3 |
| 37.5° | 28.8   | 35.9 | 41.2   | 42.9 |
| 40°   | 28.2   | 35.3 | 40.6   | 42.9 |
| 42.5° | 27.1   | 35.3 | 40.6   | 42.9 |
| 45°   | 26.5   | 34.7 | 40.6   | 42.9 |
| 47.5° | 25.9   | 34.1 | 40.6   | 42.9 |
| 50°   | 24.7   | 33.5 | 40.0   | 42.9 |
| 52.5° | 24.1   | 32.9 | 40.0   | 42.9 |
| 55°   | 22.9   | 32.3 | 39.4   | 42.3 |
| 57.5° | 22.3   | 31.2 | 38.8   | 41.2 |
| 60°   | 21.2   | 30.0 | 37.6   | 40.0 |
| 62.5° | 19.4   | 28.2 | 35.9   | 38.8 |
| 65°   | 17.6   | 25.9 | 34.1   | 36.5 |
| 67.5° | 15.9   | 24.1 | 31.8   | 34.1 |
| 70°   | 14.1   | 21.8 | 28.8   | 31.2 |
| 72.5° | 12.4   | 18.8 | 25.9   | 27.6 |
| 75°   | 10.6   | 15.9 | 21.8   | 24.1 |
| 77.5° | 8.2    | 12.9 | 18.2   | 20.0 |
| 80°   | 6.5    | 10.6 | 14.1   | 15.3 |
| 82.5° | 5.3    | 7.6  | 10.6   | 11.2 |
| 85°   | 3.5    | 4.7  | 6.5    | 7.6  |
| 87.5° | 1.8    | 2.4  | 2.9    | 3.5  |
| 90°   | 0.0    | 0.0  | 0.0    | 0.0  |

(END OF REPORT)