

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: P1316473

Luminaire Tested: LDSQA3D09R509740DE010 3LSQCA45R 1MMS

Issue Date: 1/29/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1316473  
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: LDSQA3D09R509740DE010 3LSQCA45R 1MMS  
Description: 3in Adjustable LED luminaire with, R50 optic, 4000K CCT AND, 97CRI , 3LSQCA45R 1MMS TRII  
Light Source: -  
Ballast/Driver: -

**Summary**

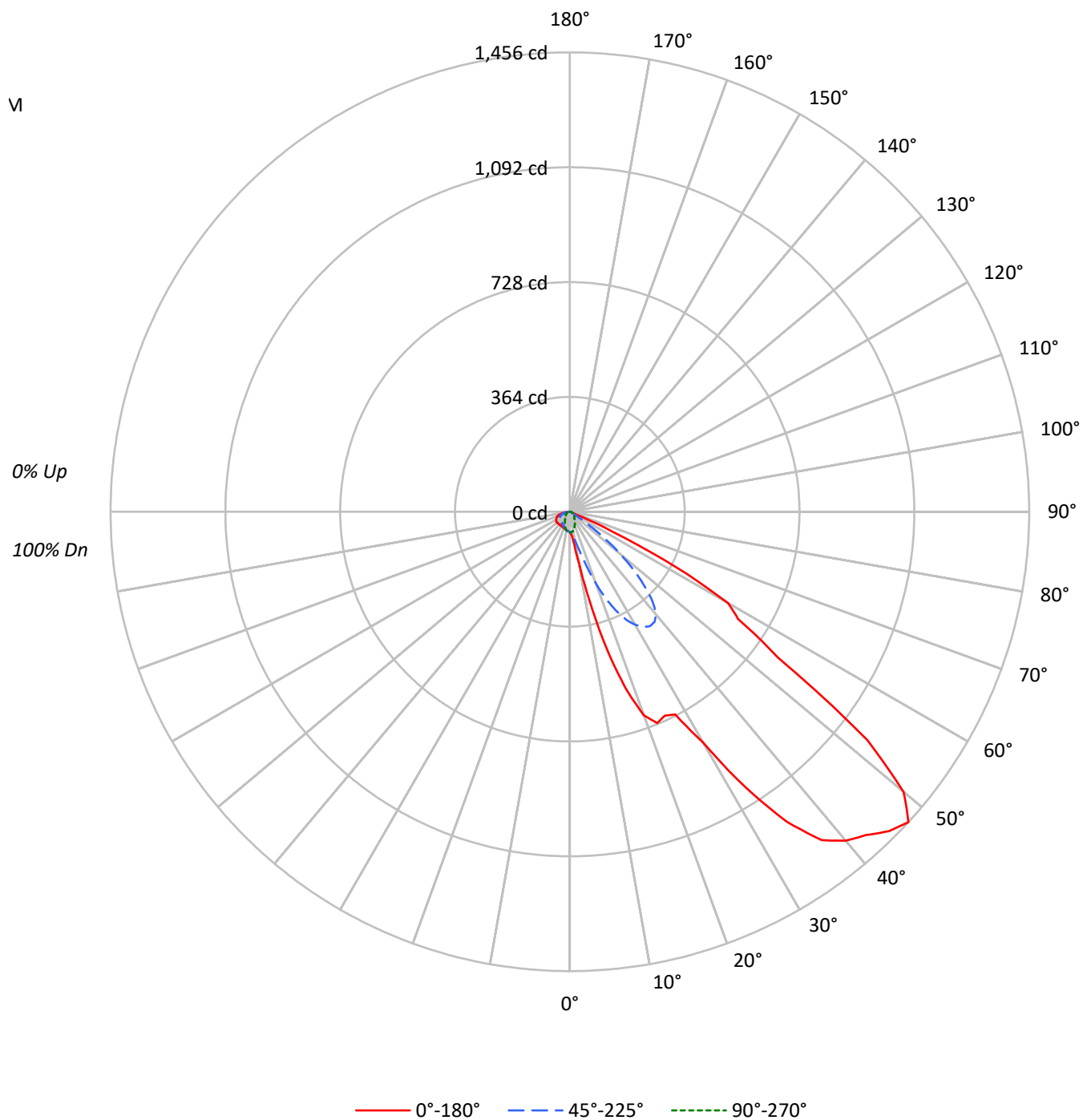
Lumens per Lamp: N/A  
Luminaire Lumens: 821.0 lumens  
Efficiency: N/A  
Efficacy: 74.0 lumens/watt  
Spacing Criteria (0/90/45): 3.58 / 0.82 / 1.91  
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')  
CIE Type: Direct

Input Watts (W): 11.1  
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: P1316473

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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°  | 11229  | 11229 | 11229 | 11229 | 11229 |
| 5°  | 13364  | 12499 | 11151 | 10667 | 10546 |
| 10° | 28768  | 15494 | 10668 | 10300 | 10423 |
| 15° | 79664  | 25407 | 9610  | 9860  | 10234 |
| 20° | 125929 | 44573 | 8321  | 9494  | 10007 |
| 25° | 135432 | 65483 | 7145  | 9159  | 10109 |
| 30° | 168101 | 82211 | 6205  | 9028  | 10440 |
| 35° | 252252 | 93033 | 5361  | 9104  | 11038 |
| 40° | 305936 | 95661 | 4789  | 9398  | 11646 |
| 45° | 348534 | 82031 | 4652  | 10010 | 12787 |
| 50° | 369932 | 56614 | 4742  | 10824 | 14254 |
| 55° | 241680 | 22790 | 4684  | 11710 | 15764 |
| 60° | 199330 | 3892  | 4650  | 12710 | 17326 |
| 65° | 60108  | 2038  | 4320  | 13570 | 19072 |
| 70° | 2518   | 2165  | 4280  | 13948 | 20696 |
| 75° | 2329   | 2329  | 4259  | 14173 | 22624 |
| 80° | 2083   | 2083  | 4265  | 14083 | 23208 |
| 85° | 1383   | 2766  | 5533  | 14030 | 22329 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle:  $47.5^\circ$

Luminance: 371115 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 6.8    | 0.8       |
| 10°-20°   | 38.9   | 4.7       |
| 20°-30°   | 99.9   | 12.2      |
| 30°-40°   | 179.5  | 21.9      |
| 40°-50°   | 239.8  | 29.2      |
| 50°-60°   | 182.6  | 22.2      |
| 60°-70°   | 55.4   | 6.8       |
| 70°-80°   | 13.2   | 1.6       |
| 80°-90°   | 4.8    | 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°    | 145.6  | 17.7      |
| 0°-40°    | 325.1  | 39.6      |
| 0°-60°    | 747.5  | 91.1      |
| 0°-90°    | 821.0  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 821.0  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 45° | 90° | 135° | 180° | Flux |
|-----|------|-----|-----|------|------|------|
| 0°  | 65   | 65  | 65  | 65   | 65   |      |
| 5°  | 77   | 72  | 64  | 62   | 61   | 10   |
| 15° | 447  | 142 | 54  | 55   | 57   | 131  |
| 25° | 713  | 345 | 38  | 48   | 53   | 340  |
| 35° | 1200 | 442 | 26  | 43   | 52   | 737  |
| 45° | 1431 | 337 | 19  | 41   | 52   | 1094 |
| 55° | 805  | 76  | 16  | 39   | 52   | 801  |
| 65° | 148  | 5   | 11  | 33   | 47   | 204  |
| 75° | 4    | 4   | 6   | 21   | 34   | 4    |
| 85° | 1    | 1   | 3   | 7    | 11   | 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°    | 65.2   | 65.2   | 65.2   | 65.2   | 65.2   | 65.2   | 65.2   | 65.2  | 65.2  | 65.2  | 65.2 |
| 2.5°  | 69.5   | 69.5   | 69.5   | 69.5   | 69.5   | 69.5   | 68.8   | 68.8  | 68.8  | 67.4  | 65.9 |
| 5°    | 77.3   | 78.0   | 77.3   | 77.3   | 75.9   | 75.9   | 74.5   | 74.5  | 72.3  | 68.1  | 64.5 |
| 7.5°  | 101.4  | 100.7  | 100.0  | 97.2   | 95.0   | 90.1   | 87.9   | 84.4  | 78.0  | 68.1  | 63.1 |
| 10°   | 164.5  | 160.3  | 157.4  | 151.0  | 137.6  | 129.1  | 117.7  | 106.4 | 88.6  | 68.1  | 61.0 |
| 12.5° | 285.8  | 285.1  | 276.6  | 255.3  | 236.1  | 209.9  | 182.2  | 154.6 | 109.2 | 66.7  | 58.1 |
| 15°   | 446.8  | 440.4  | 428.3  | 403.5  | 369.5  | 328.3  | 278.7  | 229.8 | 142.5 | 64.5  | 53.9 |
| 17.5° | 584.3  | 576.5  | 567.3  | 542.5  | 503.5  | 451.7  | 392.1  | 324.8 | 187.9 | 61.7  | 49.6 |
| 20°   | 687.1  | 682.2  | 674.4  | 654.5  | 617.7  | 570.8  | 504.2  | 422.6 | 243.2 | 58.1  | 45.4 |
| 22.5° | 724.7  | 724.0  | 725.4  | 718.3  | 699.9  | 663.0  | 599.2  | 514.1 | 297.8 | 53.9  | 41.1 |
| 25°   | 712.7  | 712.0  | 721.2  | 730.4  | 734.7  | 719.8  | 670.8  | 587.9 | 344.6 | 50.3  | 37.6 |
| 27.5° | 724.0  | 721.9  | 717.6  | 719.1  | 731.1  | 739.6  | 716.9  | 644.6 | 385.1 | 45.4  | 34.0 |
| 30°   | 845.3  | 833.2  | 814.1  | 781.5  | 757.4  | 755.2  | 745.3  | 689.3 | 413.4 | 40.4  | 31.2 |
| 32.5° | 1034.6 | 1019.7 | 985.0  | 924.7  | 867.3  | 823.3  | 792.1  | 726.9 | 433.3 | 35.5  | 27.7 |
| 35°   | 1199.8 | 1189.2 | 1148.8 | 1089.2 | 1007.0 | 924.7  | 868.0  | 782.2 | 442.5 | 31.2  | 25.5 |
| 37.5° | 1311.9 | 1307.6 | 1267.9 | 1204.1 | 1120.4 | 1023.3 | 948.1  | 838.9 | 440.4 | 26.2  | 23.4 |
| 40°   | 1360.8 | 1348.1 | 1314.7 | 1260.8 | 1176.4 | 1089.2 | 1009.8 | 875.1 | 425.5 | 21.3  | 21.3 |
| 42.5° | 1389.9 | 1375.7 | 1339.5 | 1288.5 | 1205.5 | 1112.6 | 1016.9 | 859.5 | 390.0 | 17.0  | 20.6 |
| 45°   | 1431.0 | 1416.1 | 1368.6 | 1314.0 | 1230.3 | 1122.6 | 989.2  | 804.2 | 336.8 | 12.8  | 19.1 |
| 47.5° | 1455.8 | 1445.9 | 1410.5 | 1355.9 | 1254.5 | 1108.4 | 925.4  | 752.4 | 278.0 | 9.9   | 18.4 |
| 50°   | 1380.7 | 1370.7 | 1344.5 | 1306.9 | 1238.8 | 1060.9 | 869.4  | 668.7 | 211.3 | 7.8   | 17.7 |
| 52.5° | 1188.5 | 1197.0 | 1202.0 | 1212.6 | 1163.0 | 954.5  | 785.7  | 602.1 | 142.5 | 6.4   | 16.3 |
| 55°   | 804.9  | 817.6  | 831.8  | 874.4  | 932.5  | 849.5  | 697.8  | 520.5 | 75.9  | 6.4   | 15.6 |
| 57.5° | 632.5  | 628.3  | 624.0  | 621.2  | 666.6  | 700.6  | 613.4  | 416.3 | 32.6  | 6.4   | 14.2 |
| 60°   | 578.7  | 565.9  | 557.4  | 559.5  | 582.2  | 568.7  | 485.8  | 271.6 | 11.3  | 6.4   | 13.5 |
| 62.5° | 379.4  | 389.3  | 408.5  | 441.1  | 425.5  | 365.2  | 282.2  | 107.8 | 5.7   | 6.4   | 12.1 |
| 65°   | 147.5  | 142.5  | 147.5  | 156.7  | 135.4  | 100.7  | 63.1   | 19.1  | 5.0   | 5.7   | 10.6 |
| 67.5° | 19.9   | 17.7   | 13.5   | 8.5    | 7.8    | 7.1    | 5.7    | 5.0   | 5.0   | 5.7   | 9.9  |
| 70°   | 5.0    | 5.0    | 5.0    | 5.0    | 5.0    | 5.0    | 5.0    | 4.3   | 4.3   | 5.0   | 8.5  |
| 72.5° | 4.3    | 4.3    | 4.3    | 4.3    | 4.3    | 4.3    | 4.3    | 4.3   | 4.3   | 5.0   | 7.1  |
| 75°   | 3.5    | 3.5    | 3.5    | 3.5    | 3.5    | 3.5    | 3.5    | 3.5   | 3.5   | 4.3   | 6.4  |
| 77.5° | 2.8    | 2.8    | 2.8    | 2.8    | 2.8    | 2.8    | 2.8    | 2.8   | 2.8   | 3.5   | 5.0  |
| 80°   | 2.1    | 2.1    | 2.1    | 2.1    | 2.1    | 2.1    | 2.1    | 2.1   | 2.1   | 2.8   | 4.3  |
| 82.5° | 1.4    | 1.4    | 1.4    | 1.4    | 1.4    | 1.4    | 1.4    | 2.1   | 2.1   | 2.8   | 3.5  |
| 85°   | 0.7    | 1.4    | 0.7    | 1.4    | 1.4    | 1.4    | 1.4    | 1.4   | 1.4   | 2.1   | 2.8  |
| 87.5° | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7   | 1.4   | 2.1   | 2.1  |
| 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°    | 65.2   | 65.2 | 65.2   | 65.2 |
| 2.5°  | 64.5   | 63.1 | 63.1   | 63.1 |
| 5°    | 63.1   | 61.7 | 61.7   | 61.0 |
| 7.5°  | 61.0   | 60.3 | 60.3   | 60.3 |
| 10°   | 59.6   | 58.9 | 59.6   | 59.6 |
| 12.5° | 56.7   | 57.4 | 58.1   | 58.1 |
| 15°   | 53.9   | 55.3 | 56.7   | 57.4 |
| 17.5° | 51.1   | 53.9 | 55.3   | 56.0 |
| 20°   | 48.2   | 51.8 | 53.9   | 54.6 |
| 22.5° | 46.1   | 49.6 | 52.5   | 53.9 |
| 25°   | 43.3   | 48.2 | 51.8   | 53.2 |
| 27.5° | 40.4   | 46.1 | 50.3   | 52.5 |
| 30°   | 38.3   | 45.4 | 50.3   | 52.5 |
| 32.5° | 36.2   | 44.0 | 49.6   | 51.8 |
| 35°   | 34.7   | 43.3 | 49.6   | 52.5 |
| 37.5° | 33.3   | 42.5 | 49.6   | 51.8 |
| 40°   | 32.6   | 41.8 | 49.6   | 51.8 |
| 42.5° | 31.9   | 41.8 | 49.6   | 52.5 |
| 45°   | 30.5   | 41.1 | 49.6   | 52.5 |
| 47.5° | 29.8   | 41.1 | 49.6   | 52.5 |
| 50°   | 29.1   | 40.4 | 49.6   | 53.2 |
| 52.5° | 28.4   | 39.7 | 49.6   | 53.2 |
| 55°   | 26.9   | 39.0 | 48.9   | 52.5 |
| 57.5° | 26.2   | 38.3 | 48.2   | 51.1 |
| 60°   | 24.8   | 36.9 | 46.8   | 50.3 |
| 62.5° | 23.4   | 35.5 | 45.4   | 48.2 |
| 65°   | 21.3   | 33.3 | 43.3   | 46.8 |
| 67.5° | 19.1   | 30.5 | 41.1   | 44.7 |
| 70°   | 17.0   | 27.7 | 38.3   | 41.1 |
| 72.5° | 14.9   | 24.8 | 35.5   | 37.6 |
| 75°   | 12.8   | 21.3 | 31.2   | 34.0 |
| 77.5° | 10.6   | 18.4 | 26.2   | 28.4 |
| 80°   | 7.8    | 14.2 | 21.3   | 23.4 |
| 82.5° | 6.4    | 10.6 | 15.6   | 17.0 |
| 85°   | 4.3    | 7.1  | 9.9    | 11.3 |
| 87.5° | 2.1    | 3.5  | 5.0    | 5.7  |
| 90°   | 0.0    | 0.0  | 0.0    | 0.0  |

(END OF REPORT)