

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: P1309598

Luminaire Tested: LDSQA3D20R509030D010 3LSQCA45R 1MW

Issue Date: 1/29/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1309598  
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: LDSQA3D20R509030D010 3LSQCA45R 1MW  
Description: 3in Adjustable LED luminaire with, R50 optic, 3000K CCT AND, 90CRI , 3LSQCA45R 1MW TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

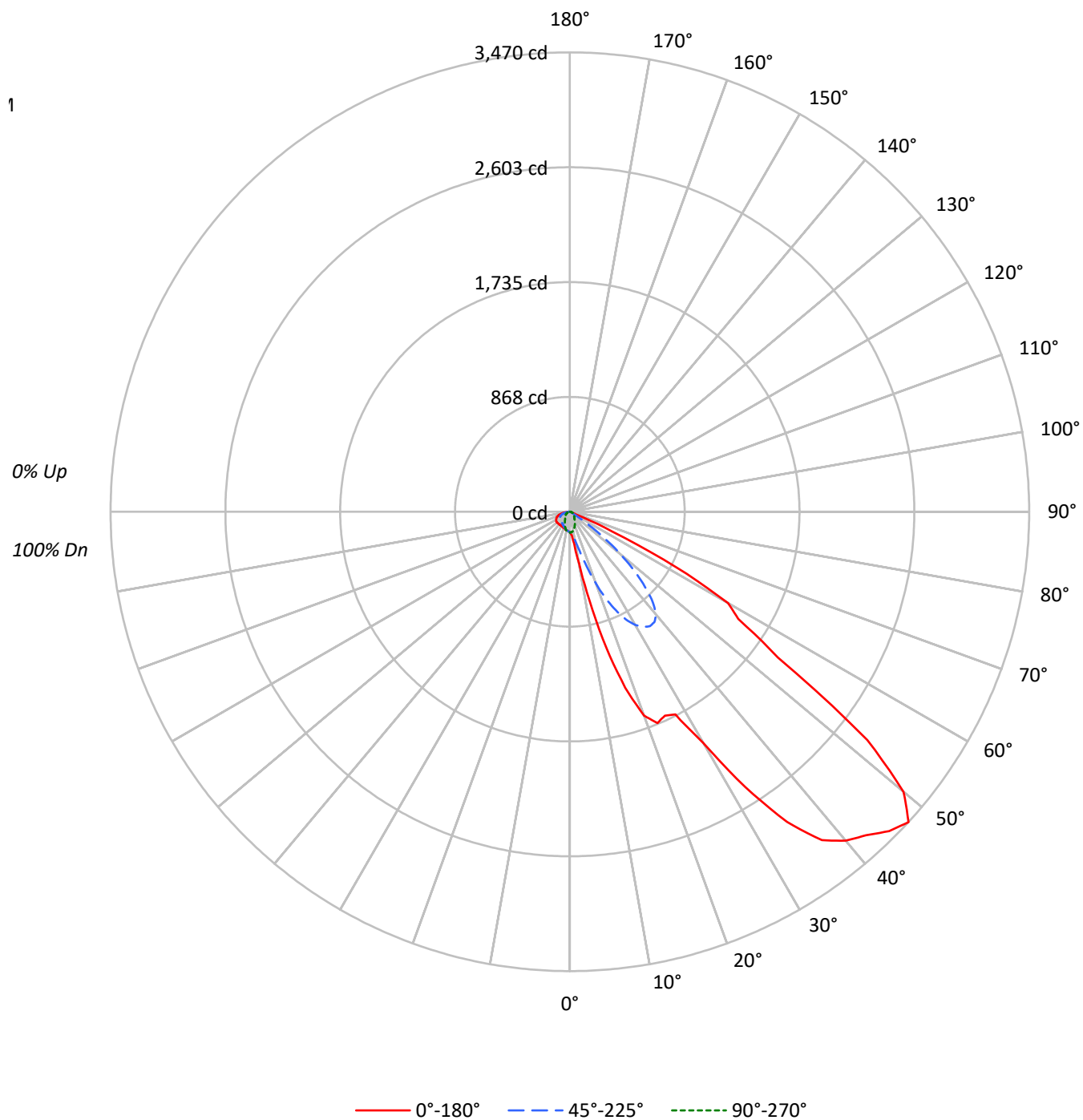
Lumens per Lamp: N/A  
Luminaire Lumens: 1957.0 lumens  
Efficiency: N/A  
Efficacy: 68.0 lumens/watt  
Spacing Criteria (0/90/45): 3.58 / 0.82 / 1.91  
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')  
CIE Type: Direct

Input Watts (W): 28.8  
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 |
| 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 | 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°  | 26781  | 26781  | 26781 | 26781 | 26781 |
| 5°  | 31845  | 29805  | 26589 | 25431 | 25137 |
| 10° | 68588  | 36952  | 25427 | 24536 | 24833 |
| 15° | 189870 | 60586  | 22911 | 23500 | 24409 |
| 20° | 300187 | 106263 | 19830 | 22616 | 23862 |
| 25° | 322817 | 156107 | 17026 | 21834 | 24095 |
| 30° | 400694 | 195982 | 14796 | 21517 | 24878 |
| 35° | 601322 | 221766 | 12804 | 21676 | 26302 |
| 40° | 729273 | 228013 | 11398 | 22415 | 27743 |
| 45° | 830806 | 195554 | 11106 | 23869 | 30469 |
| 50° | 881787 | 134957 | 11333 | 25802 | 33974 |
| 55° | 576051 | 54317  | 11170 | 27924 | 37563 |
| 60° | 475093 | 9300   | 11057 | 30277 | 41333 |
| 65° | 143282 | 4809   | 10351 | 32357 | 45479 |
| 70° | 5942   | 5086   | 10222 | 33184 | 49347 |
| 75° | 5656   | 5656   | 10114 | 33737 | 53965 |
| 80° | 5058   | 5058   | 10017 | 33523 | 55342 |
| 85° | 3359   | 6719   | 13437 | 33395 | 53353 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 47.5°

Luminance: 884655 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 16.2   | 0.8       |
| 10°-20°   | 92.7   | 4.7       |
| 20°-30°   | 238.2  | 12.2      |
| 30°-40°   | 427.9  | 21.9      |
| 40°-50°   | 571.6  | 29.2      |
| 50°-60°   | 435.3  | 22.2      |
| 60°-70°   | 132.1  | 6.8       |
| 70°-80°   | 31.6   | 1.6       |
| 80°-90°   | 11.4   | 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°    | 347.1  | 17.7      |
| 0°-40°    | 775.0  | 39.6      |
| 0°-60°    | 1781.9 | 91.1      |
| 0°-90°    | 1957.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1957.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 45°  | 90° | 135° | 180° | Flux |
|-----|------|------|-----|------|------|------|
| 0°  | 156  | 156  | 156 | 156  | 156  |      |
| 5°  | 184  | 172  | 154 | 147  | 145  | 24   |
| 15° | 1065 | 340  | 128 | 132  | 137  | 313  |
| 25° | 1699 | 822  | 90  | 115  | 127  | 811  |
| 35° | 2860 | 1055 | 61  | 103  | 125  | 1756 |
| 45° | 3411 | 803  | 46  | 98   | 125  | 2608 |
| 55° | 1918 | 181  | 37  | 93   | 125  | 1909 |
| 65° | 352  | 12   | 25  | 79   | 112  | 486  |
| 75° | 8    | 8    | 15  | 51   | 81   | 9    |
| 85° | 2    | 3    | 7   | 17   | 27   | 3    |
| 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°    | 155.5  | 155.5  | 155.5  | 155.5  | 155.5  | 155.5  | 155.5  | 155.5  | 155.5  | 155.5 | 155.5 |
| 2.5°  | 165.7  | 165.7  | 165.7  | 165.7  | 165.7  | 165.7  | 164.0  | 164.0  | 164.0  | 160.6 | 157.2 |
| 5°    | 184.2  | 185.9  | 184.2  | 184.2  | 180.9  | 180.9  | 177.5  | 177.5  | 172.4  | 162.3 | 153.8 |
| 7.5°  | 241.7  | 240.0  | 238.3  | 231.6  | 226.5  | 214.7  | 209.6  | 201.2  | 185.9  | 162.3 | 150.4 |
| 10°   | 392.2  | 382.0  | 375.3  | 360.0  | 327.9  | 307.6  | 280.6  | 253.6  | 211.3  | 162.3 | 145.4 |
| 12.5° | 681.2  | 679.5  | 659.2  | 608.5  | 562.9  | 500.3  | 434.4  | 368.5  | 260.3  | 158.9 | 138.6 |
| 15°   | 1064.9 | 1049.7 | 1021.0 | 961.8  | 880.7  | 782.6  | 664.3  | 547.7  | 339.8  | 153.8 | 128.5 |
| 17.5° | 1392.8 | 1374.2 | 1352.3 | 1293.1 | 1200.1 | 1076.7 | 934.8  | 774.2  | 447.9  | 147.1 | 118.3 |
| 20°   | 1637.9 | 1626.1 | 1607.5 | 1560.2 | 1472.3 | 1360.7 | 1201.8 | 1007.4 | 579.8  | 138.6 | 108.2 |
| 22.5° | 1727.5 | 1725.8 | 1729.2 | 1712.3 | 1668.4 | 1580.5 | 1428.3 | 1225.5 | 709.9  | 128.5 | 98.0  |
| 25°   | 1698.8 | 1697.1 | 1719.1 | 1741.0 | 1751.2 | 1715.7 | 1599.1 | 1401.3 | 821.5  | 120.0 | 89.6  |
| 27.5° | 1725.8 | 1720.8 | 1710.6 | 1714.0 | 1742.7 | 1763.0 | 1708.9 | 1536.5 | 917.9  | 108.2 | 81.1  |
| 30°   | 2014.9 | 1986.1 | 1940.5 | 1862.8 | 1805.3 | 1800.2 | 1776.5 | 1643.0 | 985.5  | 96.3  | 74.4  |
| 32.5° | 2466.2 | 2430.7 | 2347.9 | 2204.2 | 2067.3 | 1962.5 | 1888.1 | 1732.6 | 1032.8 | 84.5  | 65.9  |
| 35°   | 2860.1 | 2834.7 | 2738.3 | 2596.4 | 2400.3 | 2204.2 | 2069.0 | 1864.4 | 1054.8 | 74.4  | 60.9  |
| 37.5° | 3127.1 | 3117.0 | 3022.3 | 2870.2 | 2670.7 | 2439.2 | 2260.0 | 1999.7 | 1049.7 | 62.5  | 55.8  |
| 40°   | 3243.8 | 3213.3 | 3133.9 | 3005.4 | 2804.3 | 2596.4 | 2407.0 | 2085.9 | 1014.2 | 50.7  | 50.7  |
| 42.5° | 3313.1 | 3279.3 | 3193.0 | 3071.3 | 2873.6 | 2652.1 | 2423.9 | 2048.7 | 929.7  | 40.6  | 49.0  |
| 45°   | 3411.1 | 3375.6 | 3262.4 | 3132.2 | 2932.7 | 2675.8 | 2358.0 | 1916.8 | 802.9  | 30.4  | 45.6  |
| 47.5° | 3470.3 | 3446.6 | 3362.1 | 3231.9 | 2990.2 | 2642.0 | 2205.9 | 1793.4 | 662.6  | 23.7  | 43.9  |
| 50°   | 3291.1 | 3267.4 | 3204.9 | 3115.3 | 2953.0 | 2528.7 | 2072.4 | 1594.0 | 503.7  | 18.6  | 42.3  |
| 52.5° | 2833.0 | 2853.3 | 2865.1 | 2890.5 | 2772.2 | 2275.2 | 1872.9 | 1435.1 | 339.8  | 15.2  | 38.9  |
| 55°   | 1918.5 | 1949.0 | 1982.8 | 2084.2 | 2222.8 | 2025.0 | 1663.3 | 1240.7 | 180.9  | 15.2  | 37.2  |
| 57.5° | 1507.8 | 1497.6 | 1487.5 | 1480.7 | 1588.9 | 1670.1 | 1462.1 | 992.2  | 77.8   | 15.2  | 33.8  |
| 60°   | 1379.3 | 1348.9 | 1328.6 | 1333.7 | 1387.8 | 1355.7 | 1157.9 | 647.4  | 27.0   | 15.2  | 32.1  |
| 62.5° | 904.3  | 928.0  | 973.6  | 1051.4 | 1014.2 | 870.5  | 672.8  | 256.9  | 13.5   | 15.2  | 28.7  |
| 65°   | 351.6  | 339.8  | 351.6  | 373.6  | 322.9  | 240.0  | 150.4  | 45.6   | 11.8   | 13.5  | 25.4  |
| 67.5° | 47.3   | 42.3   | 32.1   | 20.3   | 18.6   | 16.9   | 13.5   | 11.8   | 11.8   | 13.5  | 23.7  |
| 70°   | 11.8   | 11.8   | 11.8   | 11.8   | 11.8   | 11.8   | 11.8   | 10.1   | 10.1   | 11.8  | 20.3  |
| 72.5° | 10.1   | 10.1   | 10.1   | 10.1   | 10.1   | 10.1   | 10.1   | 10.1   | 10.1   | 11.8  | 16.9  |
| 75°   | 8.5    | 8.5    | 8.5    | 8.5    | 8.5    | 8.5    | 8.5    | 8.5    | 8.5    | 10.1  | 15.2  |
| 77.5° | 6.8    | 6.8    | 6.8    | 6.8    | 6.8    | 6.8    | 6.8    | 6.8    | 6.8    | 8.5   | 11.8  |
| 80°   | 5.1    | 5.1    | 5.1    | 5.1    | 5.1    | 5.1    | 5.1    | 5.1    | 5.1    | 6.8   | 10.1  |
| 82.5° | 3.4    | 3.4    | 3.4    | 3.4    | 3.4    | 3.4    | 3.4    | 5.1    | 5.1    | 6.8   | 8.5   |
| 85°   | 1.7    | 3.4    | 1.7    | 3.4    | 3.4    | 3.4    | 3.4    | 3.4    | 3.4    | 5.1   | 6.8   |
| 87.5° | 1.7    | 1.7    | 1.7    | 1.7    | 1.7    | 1.7    | 1.7    | 1.7    | 3.4    | 5.1   | 5.1   |
| 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°    | 155.5  | 155.5 | 155.5  | 155.5 |
| 2.5°  | 153.8  | 150.4 | 150.4  | 150.4 |
| 5°    | 150.4  | 147.1 | 147.1  | 145.4 |
| 7.5°  | 145.4  | 143.7 | 143.7  | 143.7 |
| 10°   | 142.0  | 140.3 | 142.0  | 142.0 |
| 12.5° | 135.2  | 136.9 | 138.6  | 138.6 |
| 15°   | 128.5  | 131.8 | 135.2  | 136.9 |
| 17.5° | 121.7  | 128.5 | 131.8  | 133.5 |
| 20°   | 114.9  | 123.4 | 128.5  | 130.2 |
| 22.5° | 109.9  | 118.3 | 125.1  | 128.5 |
| 25°   | 103.1  | 114.9 | 123.4  | 126.8 |
| 27.5° | 96.3   | 109.9 | 120.0  | 125.1 |
| 30°   | 91.3   | 108.2 | 120.0  | 125.1 |
| 32.5° | 86.2   | 104.8 | 118.3  | 123.4 |
| 35°   | 82.8   | 103.1 | 118.3  | 125.1 |
| 37.5° | 79.4   | 101.4 | 118.3  | 123.4 |
| 40°   | 77.8   | 99.7  | 118.3  | 123.4 |
| 42.5° | 76.1   | 99.7  | 118.3  | 125.1 |
| 45°   | 72.7   | 98.0  | 118.3  | 125.1 |
| 47.5° | 71.0   | 98.0  | 118.3  | 125.1 |
| 50°   | 69.3   | 96.3  | 118.3  | 126.8 |
| 52.5° | 67.6   | 94.7  | 118.3  | 126.8 |
| 55°   | 64.2   | 93.0  | 116.6  | 125.1 |
| 57.5° | 62.5   | 91.3  | 114.9  | 121.7 |
| 60°   | 59.2   | 87.9  | 111.6  | 120.0 |
| 62.5° | 55.8   | 84.5  | 108.2  | 114.9 |
| 65°   | 50.7   | 79.4  | 103.1  | 111.6 |
| 67.5° | 45.6   | 72.7  | 98.0   | 106.5 |
| 70°   | 40.6   | 65.9  | 91.3   | 98.0  |
| 72.5° | 35.5   | 59.2  | 84.5   | 89.6  |
| 75°   | 30.4   | 50.7  | 74.4   | 81.1  |
| 77.5° | 25.4   | 43.9  | 62.5   | 67.6  |
| 80°   | 18.6   | 33.8  | 50.7   | 55.8  |
| 82.5° | 15.2   | 25.4  | 37.2   | 40.6  |
| 85°   | 10.1   | 16.9  | 23.7   | 27.0  |
| 87.5° | 5.1    | 8.5   | 11.8   | 13.5  |
| 90°   | 0.0    | 0.0   | 0.0    | 0.0   |

(END OF REPORT)