

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: IRiS

Report Number: P1346051

Luminaire Tested: P3A13R409735DE010 E3CA301MW

Issue Date: 2/13/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1346051  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-64)  
Test Lab: INNOVATION CENTER  
Issue Date: 2/13/2026  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: IRiS  
Catalog Number: P3A13R409735DE010 E3CA301MW  
Description: 3in Adjustable LED luminaire with, R40 optic, 3500K CCT AND, 97CRI , E3CA301MW TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

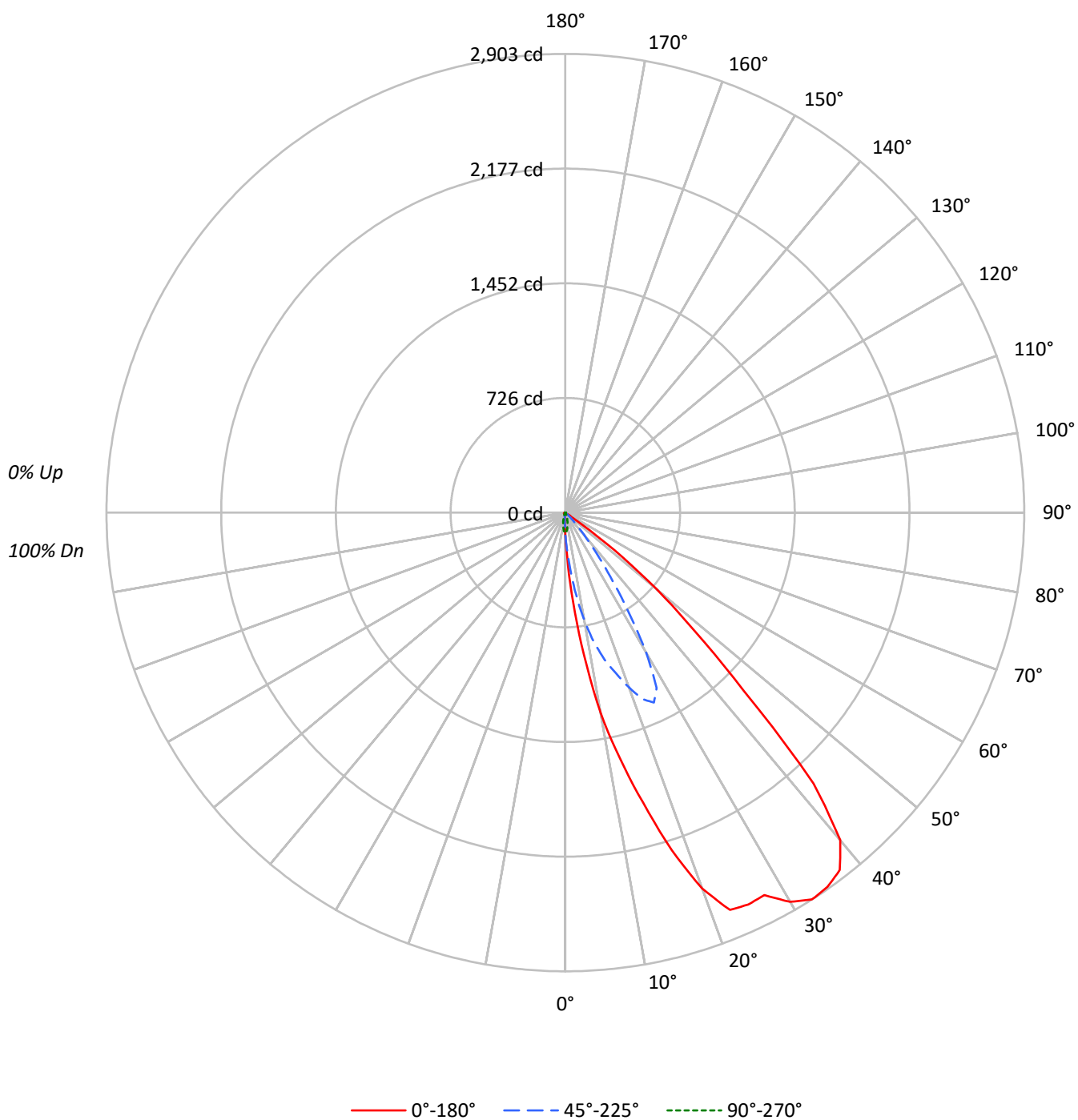
Lumens per Lamp: N/A  
Luminaire Lumens: 1070.9 lumens  
Efficiency: N/A  
Efficacy: 73.4 lumens/watt  
Spacing Criteria (0/90/45): 2.53 / 0.42 / 1.24  
Luminous Opening: Circular (Dia: 0.25' x H: 0')  
CIE Type: Direct

Input Watts (W): 14.6  
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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CATALOG NUMBER: P3A13R409735DE010 E3CA301MW

### 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   | 112 | 109 | 106 | 104 | 110 | 107 | 104 | 102 | 103 | 101 | 99  | 99  | 97  | 96  | 96  | 94  | 93  | 91  |    |    |
| 2   | 105 | 100 | 95  | 91  | 103 | 98  | 94  | 90  | 95  | 91  | 88  | 92  | 89  | 86  | 89  | 86  | 84  | 82  |    |    |
| 3   | 99  | 91  | 85  | 80  | 97  | 90  | 84  | 80  | 87  | 82  | 78  | 84  | 80  | 77  | 82  | 79  | 76  | 74  |    |    |
| 4   | 92  | 83  | 77  | 71  | 90  | 82  | 76  | 71  | 80  | 74  | 70  | 78  | 73  | 69  | 76  | 72  | 68  | 67  |    |    |
| 5   | 86  | 76  | 69  | 64  | 84  | 75  | 68  | 64  | 73  | 67  | 63  | 71  | 66  | 62  | 70  | 65  | 62  | 60  |    |    |
| 6   | 80  | 70  | 62  | 57  | 79  | 69  | 62  | 57  | 67  | 61  | 57  | 66  | 60  | 56  | 64  | 60  | 56  | 54  |    |    |
| 7   | 75  | 64  | 57  | 52  | 74  | 63  | 56  | 52  | 62  | 56  | 51  | 61  | 55  | 51  | 59  | 54  | 51  | 49  |    |    |
| 8   | 70  | 59  | 52  | 47  | 69  | 58  | 51  | 47  | 57  | 51  | 46  | 56  | 50  | 46  | 55  | 50  | 46  | 44  |    |    |
| 9   | 66  | 54  | 47  | 42  | 65  | 54  | 47  | 42  | 53  | 46  | 42  | 52  | 46  | 42  | 51  | 46  | 42  | 40  |    |    |
| 10  | 62  | 50  | 43  | 39  | 61  | 50  | 43  | 39  | 49  | 43  | 38  | 48  | 42  | 38  | 47  | 42  | 38  | 37  |    |    |

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

|     | 0°     | 45°    | 90°   | 135°  | 180°  |
|-----|--------|--------|-------|-------|-------|
| 0°  | 27783  | 27783  | 27783 | 27783 | 27783 |
| 5°  | 125335 | 79903  | 24895 | 9553  | 6978  |
| 10° | 287414 | 154395 | 17546 | 3429  | 2627  |
| 15° | 431331 | 219048 | 10897 | 1839  | 1635  |
| 20° | 590595 | 274587 | 6347  | 1050  | 1260  |
| 25° | 662070 | 320849 | 3291  | 871   | 1089  |
| 30° | 720136 | 259002 | 1367  | 684   | 1139  |
| 35° | 773952 | 132534 | 482   | 964   | 1446  |
| 40° | 774222 | 52870  | 258   | 1031  | 1803  |
| 45° | 494315 | 17676  | 558   | 1675  | 2512  |
| 50° | 256606 | 2149   | 921   | 2149  | 3104  |
| 55° | 22135  | 344    | 1032  | 2753  | 3823  |
| 60° | 789    | 395    | 1184  | 3158  | 4386  |
| 65° | 934    | 467    | 1868  | 3269  | 4722  |
| 70° | 577    | 577    | 2308  | 3462  | 4616  |
| 75° | 763    | 763    | 2288  | 3813  | 5338  |
| 80° | 1137   | 1137   | 3410  | 3410  | 4546  |
| 85° | 0      | 2264   | 6793  | 4529  | 4529  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 494315 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 24.7   | 2.3       |
| 10°-20°   | 145.0  | 13.5      |
| 20°-30°   | 317.5  | 29.6      |
| 30°-40°   | 361.7  | 33.8      |
| 40°-50°   | 190.8  | 17.8      |
| 50°-60°   | 22.5   | 2.1       |
| 60°-70°   | 4.0    | 0.4       |
| 70°-80°   | 3.3    | 0.3       |
| 80°-90°   | 1.5    | 0.1       |
| 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°    | 487.1  | 45.5      |
| 0°-40°    | 848.8  | 79.3      |
| 0°-60°    | 1062.1 | 99.2      |
| 0°-90°    | 1070.9 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1070.9 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 45°  | 90° | 135° | 180° | Flux |
|-----|------|------|-----|------|------|------|
| 0°  | 127  | 127  | 127 | 127  | 127  |      |
| 5°  | 569  | 363  | 113 | 43   | 32   | 77   |
| 15° | 1900 | 965  | 48  | 8    | 7    | 560  |
| 25° | 2736 | 1326 | 14  | 4    | 4    | 1261 |
| 35° | 2891 | 495  | 2   | 4    | 5    | 1792 |
| 45° | 1594 | 57   | 2   | 5    | 8    | 1285 |
| 55° | 58   | 1    | 3   | 7    | 10   | 180  |
| 65° | 2    | 1    | 4   | 6    | 9    | 2    |
| 75° | 1    | 1    | 3   | 4    | 6    | 1    |
| 85° | 0    | 1    | 3   | 2    | 2    | 0    |
| 90° | 0    | 0    | 0   | 0    | 0    |      |

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 10°    | 15°    | 20°    | 25°    | 30°    | 35°    | 40°    | 45°    | 67.5° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|
| 0°    | 126.7  | 126.7  | 126.7  | 126.7  | 126.7  | 126.7  | 126.7  | 126.7  | 126.7  | 126.7  | 126.7 |
| 2.5°  | 282.4  | 282.4  | 281.5  | 273.4  | 272.5  | 271.6  | 257.1  | 253.5  | 236.3  | 224.5  | 171.1 |
| 5°    | 569.4  | 556.7  | 555.8  | 541.3  | 516.9  | 484.3  | 463.5  | 430.0  | 397.4  | 363.0  | 210.9 |
| 7.5°  | 907.0  | 917.9  | 888.0  | 872.6  | 818.3  | 779.4  | 719.6  | 667.1  | 593.8  | 525.0  | 243.5 |
| 10°   | 1290.8 | 1271.8 | 1241.9 | 1212.0 | 1153.2 | 1083.5 | 994.8  | 901.6  | 795.7  | 693.4  | 261.6 |
| 12.5° | 1590.4 | 1566.0 | 1547.9 | 1507.1 | 1449.2 | 1359.6 | 1253.7 | 1128.8 | 988.5  | 840.9  | 260.7 |
| 15°   | 1900.0 | 1875.6 | 1834.8 | 1798.6 | 1712.6 | 1612.1 | 1497.2 | 1332.4 | 1160.5 | 964.9  | 241.7 |
| 17.5° | 2240.3 | 2208.7 | 2163.4 | 2108.2 | 2024.9 | 1913.6 | 1767.8 | 1566.9 | 1323.4 | 1066.3 | 207.3 |
| 20°   | 2530.9 | 2511.9 | 2466.6 | 2401.5 | 2320.0 | 2211.4 | 2043.0 | 1820.3 | 1523.4 | 1176.7 | 164.7 |
| 22.5° | 2721.0 | 2703.8 | 2673.0 | 2616.0 | 2554.4 | 2438.6 | 2284.7 | 2040.3 | 1690.9 | 1277.2 | 124.9 |
| 25°   | 2736.4 | 2729.1 | 2721.0 | 2702.0 | 2664.9 | 2582.5 | 2432.2 | 2168.8 | 1795.0 | 1326.1 | 92.3  |
| 27.5° | 2728.2 | 2725.5 | 2723.7 | 2713.8 | 2689.3 | 2607.9 | 2454.0 | 2187.8 | 1781.4 | 1250.1 | 67.9  |
| 30°   | 2844.1 | 2836.0 | 2831.4 | 2798.8 | 2734.6 | 2608.8 | 2407.8 | 2085.6 | 1583.2 | 1022.9 | 48.9  |
| 32.5° | 2902.9 | 2901.1 | 2896.6 | 2864.9 | 2774.4 | 2610.6 | 2330.0 | 1838.4 | 1255.5 | 738.6  | 33.5  |
| 35°   | 2891.2 | 2882.1 | 2865.8 | 2807.0 | 2681.2 | 2475.7 | 2078.3 | 1468.2 | 906.1  | 495.1  | 21.7  |
| 37.5° | 2851.3 | 2830.5 | 2798.8 | 2692.9 | 2525.5 | 2244.9 | 1685.5 | 1080.8 | 616.4  | 320.4  | 12.7  |
| 40°   | 2704.7 | 2676.6 | 2626.9 | 2497.4 | 2277.5 | 1850.2 | 1246.4 | 730.5  | 404.6  | 184.7  | 3.6   |
| 42.5° | 2325.4 | 2289.2 | 2253.0 | 2108.2 | 1856.5 | 1379.5 | 820.1  | 451.7  | 230.8  | 101.4  | 0.9   |
| 45°   | 1594.0 | 1548.8 | 1499.0 | 1394.0 | 1192.1 | 835.5  | 487.9  | 254.4  | 119.5  | 57.0   | 0.9   |
| 47.5° | 1107.0 | 1086.2 | 999.3  | 865.4  | 663.5  | 442.6  | 252.5  | 124.9  | 63.4   | 26.3   | 0.9   |
| 50°   | 752.2  | 728.7  | 627.3  | 497.9  | 353.0  | 211.8  | 115.9  | 62.5   | 28.1   | 6.3    | 0.9   |
| 52.5° | 394.7  | 365.7  | 301.4  | 229.9  | 143.0  | 88.7   | 50.7   | 27.2   | 8.1    | 0.9    | 0.9   |
| 55°   | 57.9   | 53.4   | 43.4   | 35.3   | 31.7   | 24.4   | 14.5   | 6.3    | 0.9    | 0.9    | 1.8   |
| 57.5° | 1.8    | 1.8    | 1.8    | 1.8    | 2.7    | 2.7    | 1.8    | 0.9    | 0.9    | 0.9    | 1.8   |
| 60°   | 1.8    | 1.8    | 1.8    | 1.8    | 1.8    | 0.9    | 0.9    | 0.9    | 0.9    | 0.9    | 1.8   |
| 62.5° | 1.8    | 1.8    | 1.8    | 1.8    | 1.8    | 0.9    | 0.9    | 0.9    | 0.9    | 0.9    | 1.8   |
| 65°   | 1.8    | 1.8    | 1.8    | 1.8    | 1.8    | 0.9    | 0.9    | 0.9    | 0.9    | 0.9    | 1.8   |
| 67.5° | 1.8    | 1.8    | 1.8    | 1.8    | 0.9    | 0.9    | 0.9    | 0.9    | 0.9    | 1.8    | 2.7   |
| 70°   | 0.9    | 0.9    | 0.9    | 0.9    | 0.9    | 0.9    | 0.9    | 0.9    | 0.9    | 0.9    | 2.7   |
| 72.5° | 0.9    | 0.9    | 0.9    | 0.9    | 0.9    | 0.9    | 0.9    | 0.9    | 0.9    | 1.8    | 2.7   |
| 75°   | 0.9    | 0.9    | 0.9    | 0.9    | 0.9    | 0.9    | 0.9    | 0.9    | 0.9    | 0.9    | 2.7   |
| 77.5° | 0.9    | 0.9    | 0.9    | 0.9    | 0.9    | 0.9    | 0.9    | 0.9    | 0.9    | 1.8    | 2.7   |
| 80°   | 0.9    | 0.9    | 0.9    | 0.9    | 0.9    | 0.9    | 0.9    | 0.9    | 0.9    | 0.9    | 1.8   |
| 82.5° | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.9    | 0.9    | 0.9    | 0.9    | 0.9    | 2.7   |
| 85°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.9    | 0.9    | 0.9    | 1.8   |
| 87.5° | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.9    | 0.9    | 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):**

|       | 90°   | 112.5° | 135°  | 157.5° | 180°  |
|-------|-------|--------|-------|--------|-------|
| 0°    | 126.7 | 126.7  | 126.7 | 126.7  | 126.7 |
| 2.5°  | 124.9 | 92.3   | 71.5  | 61.6   | 60.6  |
| 5°    | 113.1 | 66.1   | 43.4  | 33.5   | 31.7  |
| 7.5°  | 96.0  | 46.2   | 25.3  | 18.1   | 17.2  |
| 10°   | 78.8  | 31.7   | 15.4  | 12.7   | 11.8  |
| 12.5° | 62.5  | 20.8   | 10.9  | 10.0   | 9.1   |
| 15°   | 48.0  | 13.6   | 8.1   | 7.2    | 7.2   |
| 17.5° | 36.2  | 9.1    | 6.3   | 6.3    | 6.3   |
| 20°   | 27.2  | 6.3    | 4.5   | 5.4    | 5.4   |
| 22.5° | 19.0  | 4.5    | 3.6   | 4.5    | 4.5   |
| 25°   | 13.6  | 3.6    | 3.6   | 4.5    | 4.5   |
| 27.5° | 9.1   | 2.7    | 2.7   | 3.6    | 4.5   |
| 30°   | 5.4   | 1.8    | 2.7   | 3.6    | 4.5   |
| 32.5° | 2.7   | 1.8    | 2.7   | 4.5    | 4.5   |
| 35°   | 1.8   | 2.7    | 3.6   | 4.5    | 5.4   |
| 37.5° | 0.9   | 2.7    | 3.6   | 5.4    | 5.4   |
| 40°   | 0.9   | 2.7    | 3.6   | 5.4    | 6.3   |
| 42.5° | 1.8   | 3.6    | 4.5   | 6.3    | 7.2   |
| 45°   | 1.8   | 3.6    | 5.4   | 7.2    | 8.1   |
| 47.5° | 1.8   | 3.6    | 6.3   | 8.1    | 8.1   |
| 50°   | 2.7   | 4.5    | 6.3   | 8.1    | 9.1   |
| 52.5° | 2.7   | 4.5    | 6.3   | 9.1    | 10.0  |
| 55°   | 2.7   | 4.5    | 7.2   | 9.1    | 10.0  |
| 57.5° | 2.7   | 5.4    | 7.2   | 9.1    | 10.0  |
| 60°   | 2.7   | 4.5    | 7.2   | 9.1    | 10.0  |
| 62.5° | 3.6   | 4.5    | 6.3   | 9.1    | 9.1   |
| 65°   | 3.6   | 4.5    | 6.3   | 9.1    | 9.1   |
| 67.5° | 3.6   | 4.5    | 6.3   | 8.1    | 8.1   |
| 70°   | 3.6   | 4.5    | 5.4   | 7.2    | 7.2   |
| 72.5° | 3.6   | 4.5    | 5.4   | 6.3    | 7.2   |
| 75°   | 2.7   | 3.6    | 4.5   | 5.4    | 6.3   |
| 77.5° | 2.7   | 3.6    | 3.6   | 5.4    | 5.4   |
| 80°   | 2.7   | 2.7    | 2.7   | 3.6    | 3.6   |
| 82.5° | 2.7   | 2.7    | 1.8   | 2.7    | 2.7   |
| 85°   | 2.7   | 1.8    | 1.8   | 1.8    | 1.8   |
| 87.5° | 1.8   | 1.8    | 0.9   | 0.9    | 0.9   |
| 90°   | 0.0   | 0.0    | 0.0   | 0.0    | 0.0   |

(END OF REPORT)