

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: P1346099

Luminaire Tested: P3A13R409830DE010 E3CA301MW

Issue Date: 2/13/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1346099  
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: P3A13R409830DE010 E3CA301MW  
Description: 3in Adjustable LED luminaire with, R40 optic, 3000K CCT AND, 98CRI , E3CA301MW TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

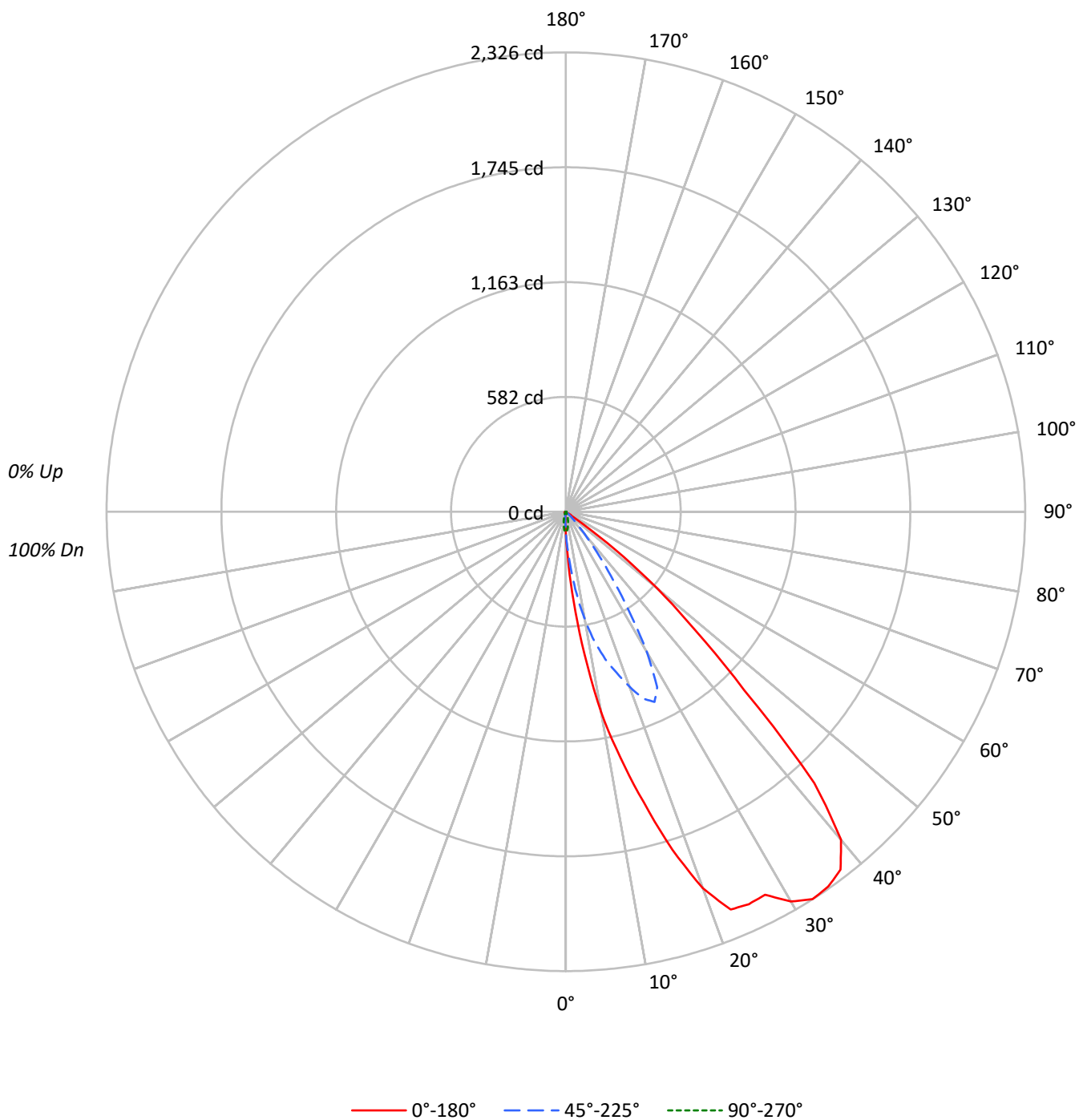
Lumens per Lamp: N/A  
Luminaire Lumens: 858.1 lumens  
Efficiency: N/A  
Efficacy: 59.2 lumens/watt  
Spacing Criteria (0/90/45): 2.53 / 0.42 / 1.24  
Luminous Opening: Circular (Dia: 0.25' x H: 0')  
CIE Type: Direct

Input Watts (W): 14.5  
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: P3A13R409830DE010 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 | 102 | 102 | 100 |
| 1   | 112 | 109 | 106 | 104 | 110 | 107 | 104 | 102 | 103 | 101 | 99  | 99  | 97  | 96  | 96  | 94  | 93  | 93  | 93  | 91  |
| 2   | 105 | 100 | 95  | 91  | 103 | 98  | 94  | 90  | 95  | 91  | 88  | 92  | 89  | 86  | 89  | 86  | 84  | 84  | 84  | 82  |
| 3   | 99  | 91  | 85  | 80  | 97  | 90  | 84  | 80  | 87  | 82  | 78  | 84  | 80  | 77  | 82  | 79  | 76  | 76  | 76  | 74  |
| 4   | 92  | 83  | 77  | 71  | 90  | 82  | 76  | 71  | 80  | 74  | 70  | 78  | 73  | 69  | 76  | 72  | 68  | 68  | 68  | 67  |
| 5   | 86  | 76  | 69  | 64  | 84  | 75  | 68  | 64  | 73  | 67  | 63  | 71  | 66  | 62  | 70  | 65  | 62  | 62  | 62  | 60  |
| 6   | 80  | 70  | 62  | 57  | 79  | 69  | 62  | 57  | 67  | 61  | 57  | 66  | 60  | 56  | 64  | 60  | 56  | 56  | 56  | 54  |
| 7   | 75  | 64  | 57  | 52  | 74  | 63  | 56  | 51  | 62  | 56  | 51  | 61  | 55  | 51  | 59  | 54  | 51  | 51  | 51  | 49  |
| 8   | 70  | 59  | 52  | 47  | 69  | 58  | 51  | 47  | 57  | 51  | 46  | 56  | 50  | 46  | 55  | 50  | 46  | 46  | 46  | 44  |
| 9   | 66  | 54  | 47  | 42  | 65  | 54  | 47  | 42  | 53  | 46  | 42  | 52  | 46  | 42  | 51  | 46  | 42  | 42  | 42  | 40  |
| 10  | 62  | 50  | 43  | 39  | 61  | 50  | 43  | 39  | 49  | 43  | 38  | 48  | 42  | 38  | 47  | 42  | 38  | 38  | 38  | 37  |

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

|     | 0°     | 45°    | 90°   | 135°  | 180°  |
|-----|--------|--------|-------|-------|-------|
| 0°  | 22257  | 22257  | 22257 | 22257 | 22257 |
| 5°  | 100396 | 64010  | 19943 | 7660  | 5591  |
| 10° | 230256 | 123690 | 14050 | 2739  | 2093  |
| 15° | 345541 | 175483 | 8717  | 1476  | 1317  |
| 20° | 473148 | 219982 | 5087  | 840   | 1027  |
| 25° | 530402 | 257047 | 2637  | 702   | 871   |
| 30° | 576924 | 207475 | 1114  | 557   | 912   |
| 35° | 620029 | 106194 | 402   | 776   | 1178  |
| 40° | 620248 | 42336  | 200   | 830   | 1460  |
| 45° | 396010 | 14172  | 465   | 1364  | 2016  |
| 50° | 205571 | 1740   | 751   | 1740  | 2490  |
| 55° | 17739  | 268    | 841   | 2217  | 3058  |
| 60° | 658    | 307    | 965   | 2544  | 3508  |
| 65° | 778    | 363    | 1505  | 2646  | 3788  |
| 70° | 449    | 449    | 1859  | 2821  | 3719  |
| 75° | 593    | 593    | 1864  | 3050  | 4321  |
| 80° | 884    | 884    | 2778  | 2778  | 3662  |
| 85° | 0      | 1761   | 5535  | 3774  | 3774  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 396010 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 19.8   | 2.3       |
| 10°-20°   | 116.1  | 13.5      |
| 20°-30°   | 254.3  | 29.6      |
| 30°-40°   | 289.7  | 33.8      |
| 40°-50°   | 152.9  | 17.8      |
| 50°-60°   | 18.0   | 2.1       |
| 60°-70°   | 3.3    | 0.4       |
| 70°-80°   | 2.7    | 0.3       |
| 80°-90°   | 1.2    | 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       |
| <hr/>     |        |           |
| 0°-30°    | 390.2  | 45.5      |
| 0°-40°    | 680.0  | 79.2      |
| 0°-60°    | 850.9  | 99.2      |
| 0°-90°    | 858.1  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 858.1  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 45°  | 90° | 135° | 180° | Flux |
|-----|------|------|-----|------|------|------|
| 0°  | 102  | 102  | 102 | 102  | 102  |      |
| 5°  | 456  | 291  | 91  | 35   | 25   | 61   |
| 15° | 1522 | 773  | 38  | 6    | 6    | 448  |
| 25° | 2192 | 1062 | 11  | 3    | 4    | 1010 |
| 35° | 2316 | 397  | 2   | 3    | 4    | 1436 |
| 45° | 1277 | 46   | 2   | 4    | 6    | 1030 |
| 55° | 46   | 1    | 2   | 6    | 8    | 144  |
| 65° | 2    | 1    | 3   | 5    | 7    | 1    |
| 75° | 1    | 1    | 2   | 4    | 5    | 1    |
| 85° | 0    | 1    | 2   | 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°    | 101.5  | 101.5  | 101.5  | 101.5  | 101.5  | 101.5  | 101.5  | 101.5  | 101.5  | 101.5  | 101.5 |
| 2.5°  | 226.3  | 226.3  | 225.5  | 219.0  | 218.3  | 217.5  | 205.9  | 203.0  | 189.3  | 179.8  | 137.1 |
| 5°    | 456.1  | 446.0  | 445.3  | 433.6  | 414.1  | 388.0  | 371.3  | 344.5  | 318.3  | 290.8  | 169.0 |
| 7.5°  | 726.6  | 735.3  | 711.4  | 699.1  | 655.6  | 624.4  | 576.5  | 534.4  | 475.7  | 420.6  | 195.1 |
| 10°   | 1034.1 | 1018.9 | 994.9  | 971.0  | 923.9  | 868.0  | 797.0  | 722.3  | 637.4  | 555.5  | 209.6 |
| 12.5° | 1274.1 | 1254.5 | 1240.0 | 1207.4 | 1161.0 | 1089.2 | 1004.4 | 904.3  | 791.9  | 673.7  | 208.8 |
| 15°   | 1522.1 | 1502.5 | 1469.9 | 1440.9 | 1372.0 | 1291.5 | 1199.4 | 1067.4 | 929.7  | 773.0  | 193.6 |
| 17.5° | 1794.8 | 1769.4 | 1733.1 | 1688.9 | 1622.2 | 1533.0 | 1416.2 | 1255.3 | 1060.2 | 854.2  | 166.1 |
| 20°   | 2027.6 | 2012.3 | 1976.1 | 1923.9 | 1858.6 | 1771.6 | 1636.7 | 1458.3 | 1220.5 | 942.7  | 132.0 |
| 22.5° | 2179.8 | 2166.1 | 2141.4 | 2095.7 | 2046.4 | 1953.6 | 1830.3 | 1634.5 | 1354.6 | 1023.2 | 100.1 |
| 25°   | 2192.2 | 2186.4 | 2179.8 | 2164.6 | 2134.9 | 2068.9 | 1948.5 | 1737.5 | 1438.0 | 1062.4 | 74.0  |
| 27.5° | 2185.7 | 2183.5 | 2182.0 | 2174.0 | 2154.5 | 2089.2 | 1965.9 | 1752.7 | 1427.1 | 1001.5 | 54.4  |
| 30°   | 2278.5 | 2271.9 | 2268.3 | 2242.2 | 2190.7 | 2089.9 | 1928.9 | 1670.8 | 1268.3 | 819.4  | 39.2  |
| 32.5° | 2325.6 | 2324.2 | 2320.5 | 2295.2 | 2222.6 | 2091.4 | 1866.6 | 1472.8 | 1005.8 | 591.7  | 26.8  |
| 35°   | 2316.2 | 2308.9 | 2295.9 | 2248.7 | 2147.9 | 1983.3 | 1665.0 | 1176.2 | 725.9  | 396.7  | 17.4  |
| 37.5° | 2284.3 | 2267.6 | 2242.2 | 2157.4 | 2023.2 | 1798.4 | 1350.3 | 865.8  | 493.8  | 256.7  | 10.2  |
| 40°   | 2166.8 | 2144.3 | 2104.4 | 2000.7 | 1824.5 | 1482.2 | 998.6  | 585.2  | 324.1  | 147.9  | 2.9   |
| 42.5° | 1863.0 | 1833.9 | 1804.9 | 1688.9 | 1487.3 | 1105.2 | 657.0  | 361.9  | 184.9  | 81.2   | 0.7   |
| 45°   | 1277.0 | 1240.8 | 1200.9 | 1116.8 | 955.0  | 669.3  | 390.9  | 203.8  | 95.7   | 45.7   | 0.7   |
| 47.5° | 886.9  | 870.2  | 800.6  | 693.3  | 531.5  | 354.6  | 202.3  | 100.1  | 50.8   | 21.0   | 0.7   |
| 50°   | 602.6  | 583.8  | 502.5  | 398.8  | 282.8  | 169.7  | 92.8   | 50.0   | 22.5   | 5.1    | 0.7   |
| 52.5° | 316.2  | 293.0  | 241.5  | 184.2  | 114.6  | 71.1   | 40.6   | 21.8   | 6.5    | 0.7    | 0.7   |
| 55°   | 46.4   | 42.8   | 34.8   | 28.3   | 25.4   | 19.6   | 11.6   | 5.1    | 0.7    | 0.7    | 1.5   |
| 57.5° | 1.5    | 1.5    | 1.5    | 1.5    | 2.2    | 2.2    | 1.5    | 0.7    | 0.7    | 0.7    | 1.5   |
| 60°   | 1.5    | 1.5    | 1.5    | 1.5    | 1.5    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 1.5   |
| 62.5° | 1.5    | 1.5    | 1.5    | 1.5    | 1.5    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 1.5   |
| 65°   | 1.5    | 1.5    | 1.5    | 1.5    | 1.5    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 1.5   |
| 67.5° | 1.5    | 1.5    | 1.5    | 1.5    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 1.5    | 2.2   |
| 70°   | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 2.2   |
| 72.5° | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 1.5    | 2.2   |
| 75°   | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 2.2   |
| 77.5° | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 1.5    | 2.2   |
| 80°   | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 1.5   |
| 82.5° | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 2.2   |
| 85°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.7    | 0.7    | 0.7    | 1.5   |
| 87.5° | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.7    | 0.7    | 1.5   |
| 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°    | 101.5 | 101.5  | 101.5 | 101.5  | 101.5 |
| 2.5°  | 100.1 | 74.0   | 57.3  | 49.3   | 48.6  |
| 5°    | 90.6  | 52.9   | 34.8  | 26.8   | 25.4  |
| 7.5°  | 76.9  | 37.0   | 20.3  | 14.5   | 13.8  |
| 10°   | 63.1  | 25.4   | 12.3  | 10.2   | 9.4   |
| 12.5° | 50.0  | 16.7   | 8.7   | 8.0    | 7.3   |
| 15°   | 38.4  | 10.9   | 6.5   | 5.8    | 5.8   |
| 17.5° | 29.0  | 7.3    | 5.1   | 5.1    | 5.1   |
| 20°   | 21.8  | 5.1    | 3.6   | 4.4    | 4.4   |
| 22.5° | 15.2  | 3.6    | 2.9   | 3.6    | 3.6   |
| 25°   | 10.9  | 2.9    | 2.9   | 3.6    | 3.6   |
| 27.5° | 7.3   | 2.2    | 2.2   | 2.9    | 3.6   |
| 30°   | 4.4   | 1.5    | 2.2   | 2.9    | 3.6   |
| 32.5° | 2.2   | 1.5    | 2.2   | 3.6    | 3.6   |
| 35°   | 1.5   | 2.2    | 2.9   | 3.6    | 4.4   |
| 37.5° | 0.7   | 2.2    | 2.9   | 4.4    | 4.4   |
| 40°   | 0.7   | 2.2    | 2.9   | 4.4    | 5.1   |
| 42.5° | 1.5   | 2.9    | 3.6   | 5.1    | 5.8   |
| 45°   | 1.5   | 2.9    | 4.4   | 5.8    | 6.5   |
| 47.5° | 1.5   | 2.9    | 5.1   | 6.5    | 6.5   |
| 50°   | 2.2   | 3.6    | 5.1   | 6.5    | 7.3   |
| 52.5° | 2.2   | 3.6    | 5.1   | 7.3    | 8.0   |
| 55°   | 2.2   | 3.6    | 5.8   | 7.3    | 8.0   |
| 57.5° | 2.2   | 4.4    | 5.8   | 7.3    | 8.0   |
| 60°   | 2.2   | 3.6    | 5.8   | 7.3    | 8.0   |
| 62.5° | 2.9   | 3.6    | 5.1   | 7.3    | 7.3   |
| 65°   | 2.9   | 3.6    | 5.1   | 7.3    | 7.3   |
| 67.5° | 2.9   | 3.6    | 5.1   | 6.5    | 6.5   |
| 70°   | 2.9   | 3.6    | 4.4   | 5.8    | 5.8   |
| 72.5° | 2.9   | 3.6    | 4.4   | 5.1    | 5.8   |
| 75°   | 2.2   | 2.9    | 3.6   | 4.4    | 5.1   |
| 77.5° | 2.2   | 2.9    | 2.9   | 4.4    | 4.4   |
| 80°   | 2.2   | 2.2    | 2.2   | 2.9    | 2.9   |
| 82.5° | 2.2   | 2.2    | 1.5   | 2.2    | 2.2   |
| 85°   | 2.2   | 1.5    | 1.5   | 1.5    | 1.5   |
| 87.5° | 1.5   | 1.5    | 0.7   | 0.7    | 0.7   |
| 90°   | 0.0   | 0.0    | 0.0   | 0.0    | 0.0   |

(END OF REPORT)