

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: P1336030

Luminaire Tested: P3A02R459040DE010 E3A301WMH

Issue Date: 2/13/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1336030  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-69)  
Test Lab: INNOVATION CENTER  
Issue Date: 2/13/2026  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: IRiS  
Catalog Number: P3A02R459040DE010 E3A301WMH  
Description: 3in Adjustable LED luminaire with, R45 optic, 4000K CCT AND, 90CRI , E3A301WMH TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

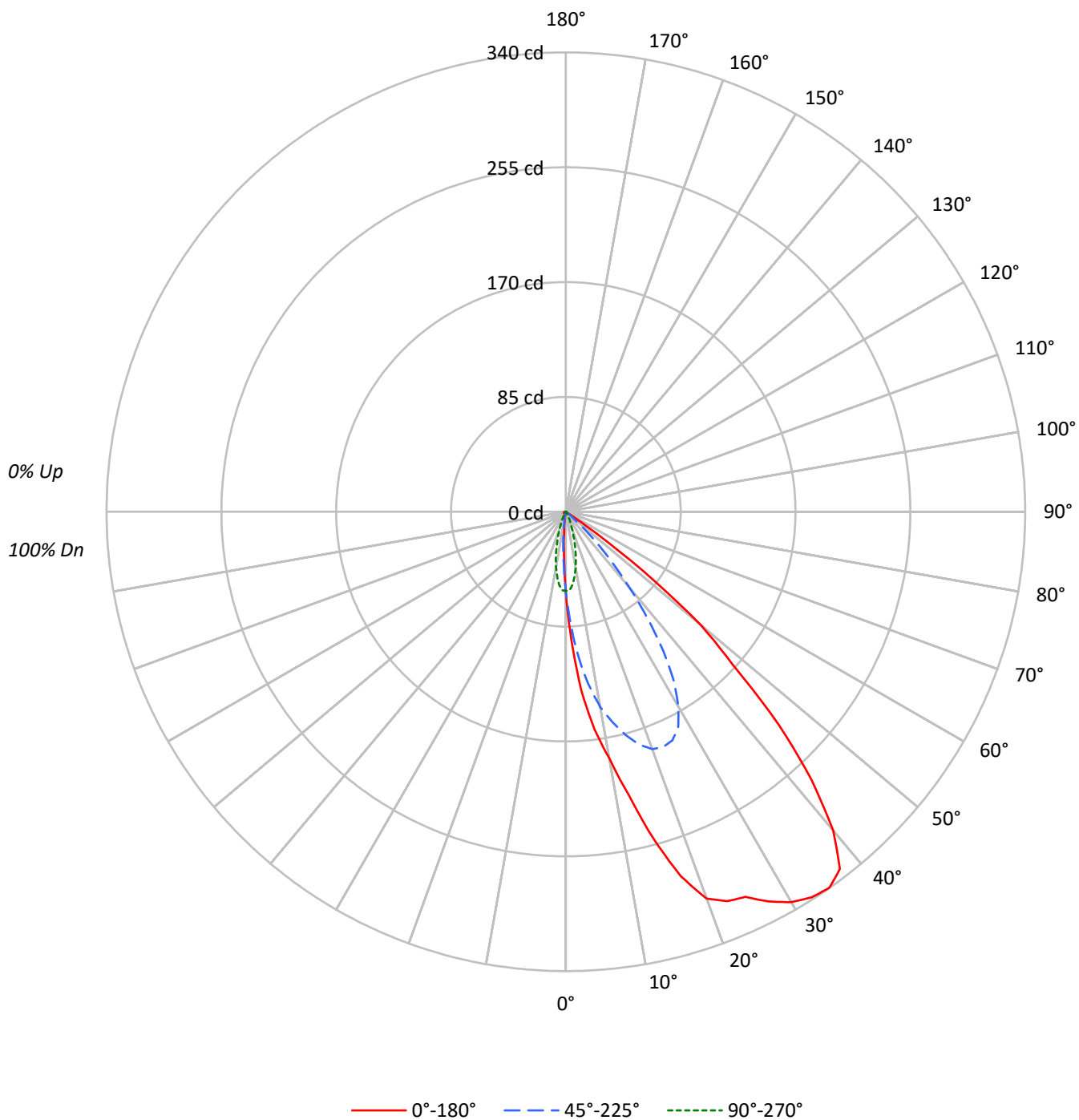
Lumens per Lamp: N/A  
Luminaire Lumens: 154.0 lumens  
Efficiency: N/A  
Efficacy: 42.8 lumens/watt  
Spacing Criteria (0/90/45): 2.13 / 0.47 / 1.22  
Luminous Opening: Circular (Dia: 0.25' x H: 0')  
CIE Type: Direct

Input Watts (W): 3.6  
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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### 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  |
| RCR |     |     |     |     |     |     |     |     |     |     |     |  |     |     |     |  |     |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 |  | 106 | 106 | 106 |  | 102 |
| 1   | 112 | 109 | 106 | 104 | 110 | 107 | 104 | 102 | 103 | 101 | 99  |  | 99  | 97  | 96  |  | 96  |
| 2   | 105 | 100 | 95  | 91  | 103 | 98  | 93  | 90  | 94  | 91  | 88  |  | 91  | 88  | 86  |  | 89  |
| 3   | 99  | 91  | 85  | 80  | 96  | 89  | 84  | 80  | 87  | 82  | 78  |  | 84  | 80  | 77  |  | 82  |
| 4   | 92  | 83  | 76  | 71  | 90  | 82  | 76  | 71  | 80  | 74  | 70  |  | 77  | 73  | 69  |  | 76  |
| 5   | 86  | 76  | 69  | 64  | 84  | 75  | 68  | 64  | 73  | 67  | 63  |  | 71  | 66  | 62  |  | 70  |
| 6   | 81  | 70  | 63  | 57  | 79  | 69  | 62  | 57  | 67  | 61  | 57  |  | 66  | 60  | 56  |  | 64  |
| 7   | 75  | 64  | 57  | 52  | 74  | 63  | 57  | 52  | 62  | 56  | 51  |  | 61  | 55  | 51  |  | 60  |
| 8   | 71  | 59  | 52  | 47  | 69  | 59  | 52  | 47  | 57  | 51  | 47  |  | 56  | 51  | 47  |  | 55  |
| 9   | 66  | 55  | 48  | 43  | 65  | 54  | 47  | 43  | 53  | 47  | 43  |  | 52  | 47  | 43  |  | 51  |
| 10  | 62  | 51  | 44  | 39  | 61  | 50  | 44  | 39  | 49  | 43  | 39  |  | 49  | 43  | 39  |  | 48  |

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

|     | 0°    | 45°   | 90°   | 135°  | 180°  |
|-----|-------|-------|-------|-------|-------|
| 0°  | 12850 | 12850 | 12850 | 12850 | 12850 |
| 5°  | 29276 | 23751 | 12018 | 4821  | 3280  |
| 10° | 41260 | 32642 | 9285  | 1069  | 490   |
| 15° | 56868 | 38820 | 5925  | 341   | 295   |
| 20° | 71103 | 43614 | 3104  | 233   | 233   |
| 25° | 76093 | 45148 | 1428  | 194   | 218   |
| 30° | 84469 | 42158 | 658   | 203   | 228   |
| 35° | 90989 | 33622 | 214   | 214   | 268   |
| 40° | 88051 | 20839 | 115   | 258   | 344   |
| 45° | 69123 | 9830  | 124   | 310   | 403   |
| 50° | 44416 | 1126  | 171   | 409   | 512   |
| 55° | 6729  | 115   | 191   | 497   | 650   |
| 60° | 132   | 132   | 219   | 570   | 658   |
| 65° | 156   | 156   | 259   | 623   | 778   |
| 70° | 192   | 192   | 321   | 641   | 898   |
| 75° | 85    | 254   | 424   | 763   | 1017  |
| 80° | 126   | 379   | 505   | 758   | 1137  |
| 85° | 0     | 252   | 755   | 1006  | 1006  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 69123 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 6.4    | 4.2       |
| 10°-20°   | 23.2   | 15.1      |
| 20°-30°   | 40.7   | 26.4      |
| 30°-40°   | 46.3   | 30.0      |
| 40°-50°   | 30.0   | 19.4      |
| 50°-60°   | 5.9    | 3.8       |
| 60°-70°   | 0.7    | 0.5       |
| 70°-80°   | 0.6    | 0.4       |
| 80°-90°   | 0.3    | 0.2       |
| 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°    | 70.3   | 45.7      |
| 0°-40°    | 116.6  | 75.7      |
| 0°-60°    | 152.4  | 99.0      |
| 0°-90°    | 154.0  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 154.0  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | 45° | 90° | 135° | 180° | Flux |
|-----|-----|-----|-----|------|------|------|
| 0°  | 59  | 59  | 59  | 59   | 59   |      |
| 5°  | 133 | 108 | 55  | 22   | 15   | 14   |
| 15° | 250 | 171 | 26  | 2    | 1    | 72   |
| 25° | 314 | 187 | 6   | 1    | 1    | 147  |
| 35° | 340 | 126 | 1   | 1    | 1    | 209  |
| 45° | 223 | 32  | 0   | 1    | 1    | 168  |
| 55° | 18  | 0   | 0   | 1    | 2    | 34   |
| 65° | 0   | 0   | 0   | 1    | 2    | 0    |
| 75° | 0   | 0   | 0   | 1    | 1    | 0    |
| 85° | 0   | 0   | 0   | 0    | 0    | 0    |
| 90° | 0   | 0   | 0   | 0    | 0    |      |

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°    | 5°    | 10°   | 15°   | 20°   | 25°   | 30°   | 35°   | 40°   | 45°   | 50°   |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°    | 58.6  | 58.6  | 58.6  | 58.6  | 58.6  | 58.6  | 58.6  | 58.6  | 58.6  | 58.6  | 58.6  |
| 2.5°  | 95.2  | 94.9  | 95.3  | 92.7  | 92.6  | 90.7  | 90.2  | 88.0  | 85.0  | 83.6  | 80.2  |
| 5°    | 133.0 | 131.8 | 131.8 | 128.7 | 127.6 | 125.4 | 121.7 | 117.1 | 113.2 | 107.9 | 102.3 |
| 7.5°  | 162.3 | 162.0 | 162.0 | 159.3 | 156.7 | 153.6 | 148.6 | 143.3 | 137.2 | 129.0 | 120.8 |
| 10°   | 185.3 | 185.7 | 184.6 | 182.1 | 178.4 | 175.0 | 169.1 | 162.7 | 155.1 | 146.6 | 135.6 |
| 12.5° | 214.4 | 211.6 | 210.7 | 205.2 | 200.4 | 194.0 | 186.9 | 179.5 | 170.1 | 159.4 | 147.1 |
| 15°   | 250.5 | 246.9 | 243.3 | 235.9 | 228.0 | 218.0 | 207.0 | 196.1 | 184.0 | 171.0 | 155.6 |
| 17.5° | 282.7 | 282.7 | 277.9 | 266.3 | 256.0 | 241.4 | 226.4 | 212.0 | 197.7 | 180.6 | 161.2 |
| 20°   | 304.7 | 303.6 | 300.0 | 291.5 | 279.7 | 263.1 | 243.7 | 223.5 | 206.2 | 186.9 | 164.5 |
| 22.5° | 311.9 | 311.7 | 311.8 | 306.8 | 297.4 | 280.1 | 256.3 | 232.5 | 210.8 | 188.4 | 162.9 |
| 25°   | 314.5 | 315.0 | 316.3 | 314.4 | 307.3 | 290.0 | 264.0 | 236.7 | 212.2 | 186.6 | 157.0 |
| 27.5° | 325.2 | 324.2 | 325.6 | 324.3 | 316.3 | 295.7 | 265.6 | 235.7 | 209.2 | 180.1 | 146.4 |
| 30°   | 333.6 | 333.3 | 335.8 | 334.6 | 324.2 | 299.3 | 264.2 | 231.8 | 201.6 | 166.5 | 129.8 |
| 32.5° | 338.3 | 338.5 | 339.1 | 334.3 | 318.9 | 291.5 | 257.2 | 224.0 | 187.3 | 148.9 | 108.2 |
| 35°   | 339.9 | 339.1 | 335.5 | 323.8 | 302.7 | 273.3 | 240.1 | 205.3 | 167.8 | 125.6 | 85.5  |
| 37.5° | 333.2 | 329.2 | 319.9 | 302.4 | 277.9 | 250.5 | 218.2 | 181.7 | 141.2 | 99.2  | 63.8  |
| 40°   | 307.6 | 302.3 | 290.6 | 272.7 | 249.9 | 223.3 | 190.2 | 152.1 | 109.5 | 72.8  | 44.8  |
| 42.5° | 269.2 | 266.5 | 254.2 | 238.7 | 219.3 | 192.5 | 158.4 | 119.8 | 81.0  | 50.2  | 28.6  |
| 45°   | 222.9 | 219.5 | 211.7 | 198.0 | 182.8 | 154.7 | 122.9 | 85.8  | 55.3  | 31.7  | 14.2  |
| 47.5° | 167.2 | 167.4 | 162.1 | 151.7 | 136.8 | 113.3 | 84.1  | 57.6  | 34.6  | 16.4  | 3.2   |
| 50°   | 130.2 | 128.4 | 120.9 | 110.2 | 92.9  | 75.5  | 54.3  | 36.3  | 18.3  | 3.3   | 0.3   |
| 52.5° | 72.1  | 73.3  | 69.3  | 65.8  | 56.8  | 45.1  | 32.1  | 18.4  | 3.9   | 0.4   | 0.3   |
| 55°   | 17.6  | 18.7  | 17.9  | 18.3  | 18.9  | 16.9  | 13.0  | 3.6   | 0.4   | 0.3   | 0.3   |
| 57.5° | 0.4   | 0.4   | 0.4   | 0.4   | 0.6   | 0.9   | 0.9   | 0.3   | 0.3   | 0.3   | 0.3   |
| 60°   | 0.3   | 0.3   | 0.3   | 0.3   | 0.3   | 0.3   | 0.3   | 0.3   | 0.3   | 0.3   | 0.3   |
| 62.5° | 0.3   | 0.3   | 0.3   | 0.3   | 0.3   | 0.3   | 0.3   | 0.3   | 0.3   | 0.3   | 0.3   |
| 65°   | 0.3   | 0.3   | 0.3   | 0.3   | 0.3   | 0.3   | 0.3   | 0.3   | 0.3   | 0.3   | 0.3   |
| 67.5° | 0.3   | 0.3   | 0.3   | 0.3   | 0.3   | 0.3   | 0.3   | 0.3   | 0.3   | 0.3   | 0.3   |
| 70°   | 0.3   | 0.3   | 0.3   | 0.1   | 0.3   | 0.3   | 0.3   | 0.3   | 0.3   | 0.3   | 0.3   |
| 72.5° | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.3   | 0.3   | 0.3   |
| 75°   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.3   | 0.3   | 0.3   |
| 77.5° | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.3   | 0.3   |
| 80°   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.3   | 0.3   |
| 82.5° | 0.0   | 0.0   | 0.0   | 0.0   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.3   |
| 85°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   |
| 87.5° | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.1   | 0.1   | 0.1   | 0.1   |
| 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):**

|       | 55°   | 60°   | 67.5° | 90°  | 112.5° | 135° | 157.5° | 180° |
|-------|-------|-------|-------|------|--------|------|--------|------|
| 0°    | 58.6  | 58.6  | 58.6  | 58.6 | 58.6   | 58.6 | 58.6   | 58.6 |
| 2.5°  | 78.6  | 76.1  | 71.6  | 58.2 | 46.8   | 37.7 | 32.3   | 31.8 |
| 5°    | 97.2  | 90.7  | 81.1  | 54.6 | 34.5   | 21.9 | 15.8   | 14.9 |
| 7.5°  | 112.0 | 102.8 | 88.1  | 48.7 | 23.6   | 11.2 | 6.2    | 5.2  |
| 10°   | 124.3 | 111.1 | 91.7  | 41.7 | 14.8   | 4.8  | 2.6    | 2.2  |
| 12.5° | 132.7 | 116.8 | 92.3  | 34.0 | 8.5    | 2.3  | 1.7    | 1.5  |
| 15°   | 138.1 | 118.6 | 89.3  | 26.1 | 4.8    | 1.5  | 1.4    | 1.3  |
| 17.5° | 140.3 | 117.1 | 83.3  | 18.9 | 2.6    | 1.2  | 1.2    | 1.2  |
| 20°   | 139.2 | 112.0 | 74.6  | 13.3 | 1.7    | 1.0  | 1.0    | 1.0  |
| 22.5° | 134.3 | 103.4 | 63.6  | 8.9  | 1.2    | 0.9  | 0.9    | 0.9  |
| 25°   | 124.7 | 91.7  | 52.0  | 5.9  | 0.8    | 0.8  | 0.9    | 0.9  |
| 27.5° | 110.2 | 77.3  | 39.8  | 4.0  | 0.6    | 0.8  | 0.9    | 0.9  |
| 30°   | 92.1  | 61.2  | 28.6  | 2.6  | 0.6    | 0.8  | 0.8    | 0.9  |
| 32.5° | 73.2  | 44.6  | 18.8  | 1.5  | 0.5    | 0.8  | 0.9    | 1.0  |
| 35°   | 53.1  | 30.4  | 12.0  | 0.8  | 0.6    | 0.8  | 0.9    | 1.0  |
| 37.5° | 37.2  | 19.8  | 7.0   | 0.5  | 0.6    | 0.8  | 1.0    | 1.0  |
| 40°   | 24.2  | 11.1  | 2.6   | 0.4  | 0.6    | 0.9  | 1.0    | 1.2  |
| 42.5° | 12.6  | 3.9   | 0.5   | 0.4  | 0.6    | 0.9  | 1.2    | 1.3  |
| 45°   | 3.2   | 0.5   | 0.1   | 0.4  | 0.8    | 1.0  | 1.3    | 1.3  |
| 47.5° | 0.4   | 0.1   | 0.1   | 0.5  | 0.8    | 1.2  | 1.3    | 1.4  |
| 50°   | 0.1   | 0.3   | 0.3   | 0.5  | 0.8    | 1.2  | 1.4    | 1.5  |
| 52.5° | 0.3   | 0.3   | 0.3   | 0.5  | 0.9    | 1.2  | 1.5    | 1.7  |
| 55°   | 0.3   | 0.3   | 0.3   | 0.5  | 0.9    | 1.3  | 1.5    | 1.7  |
| 57.5° | 0.3   | 0.3   | 0.3   | 0.5  | 0.9    | 1.3  | 1.5    | 1.5  |
| 60°   | 0.3   | 0.3   | 0.3   | 0.5  | 0.9    | 1.3  | 1.5    | 1.5  |
| 62.5° | 0.3   | 0.3   | 0.4   | 0.5  | 0.9    | 1.2  | 1.5    | 1.5  |
| 65°   | 0.3   | 0.4   | 0.4   | 0.5  | 0.9    | 1.2  | 1.4    | 1.5  |
| 67.5° | 0.3   | 0.3   | 0.4   | 0.5  | 0.9    | 1.2  | 1.4    | 1.5  |
| 70°   | 0.3   | 0.3   | 0.4   | 0.5  | 0.8    | 1.0  | 1.3    | 1.4  |
| 72.5° | 0.3   | 0.3   | 0.4   | 0.5  | 0.8    | 1.0  | 1.2    | 1.3  |
| 75°   | 0.3   | 0.3   | 0.4   | 0.5  | 0.6    | 0.9  | 1.2    | 1.2  |
| 77.5° | 0.3   | 0.3   | 0.4   | 0.4  | 0.6    | 0.8  | 1.0    | 1.0  |
| 80°   | 0.3   | 0.3   | 0.4   | 0.4  | 0.5    | 0.6  | 0.8    | 0.9  |
| 82.5° | 0.3   | 0.3   | 0.3   | 0.4  | 0.4    | 0.5  | 0.6    | 0.6  |
| 85°   | 0.3   | 0.3   | 0.3   | 0.3  | 0.3    | 0.4  | 0.4    | 0.4  |
| 87.5° | 0.1   | 0.3   | 0.3   | 0.3  | 0.3    | 0.3  | 0.3    | 0.1  |
| 90°   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0    | 0.0  | 0.0    | 0.0  |

(END OF REPORT)