

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: P1336110

Luminaire Tested: P3A02R459740DE010 E3A301WMH

Issue Date: 2/13/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1336110  
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: P3A02R459740DE010 E3A301WMH  
Description: 3in Adjustable LED luminaire with, R45 optic, 4000K CCT AND, 97CRI , E3A301WMH TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

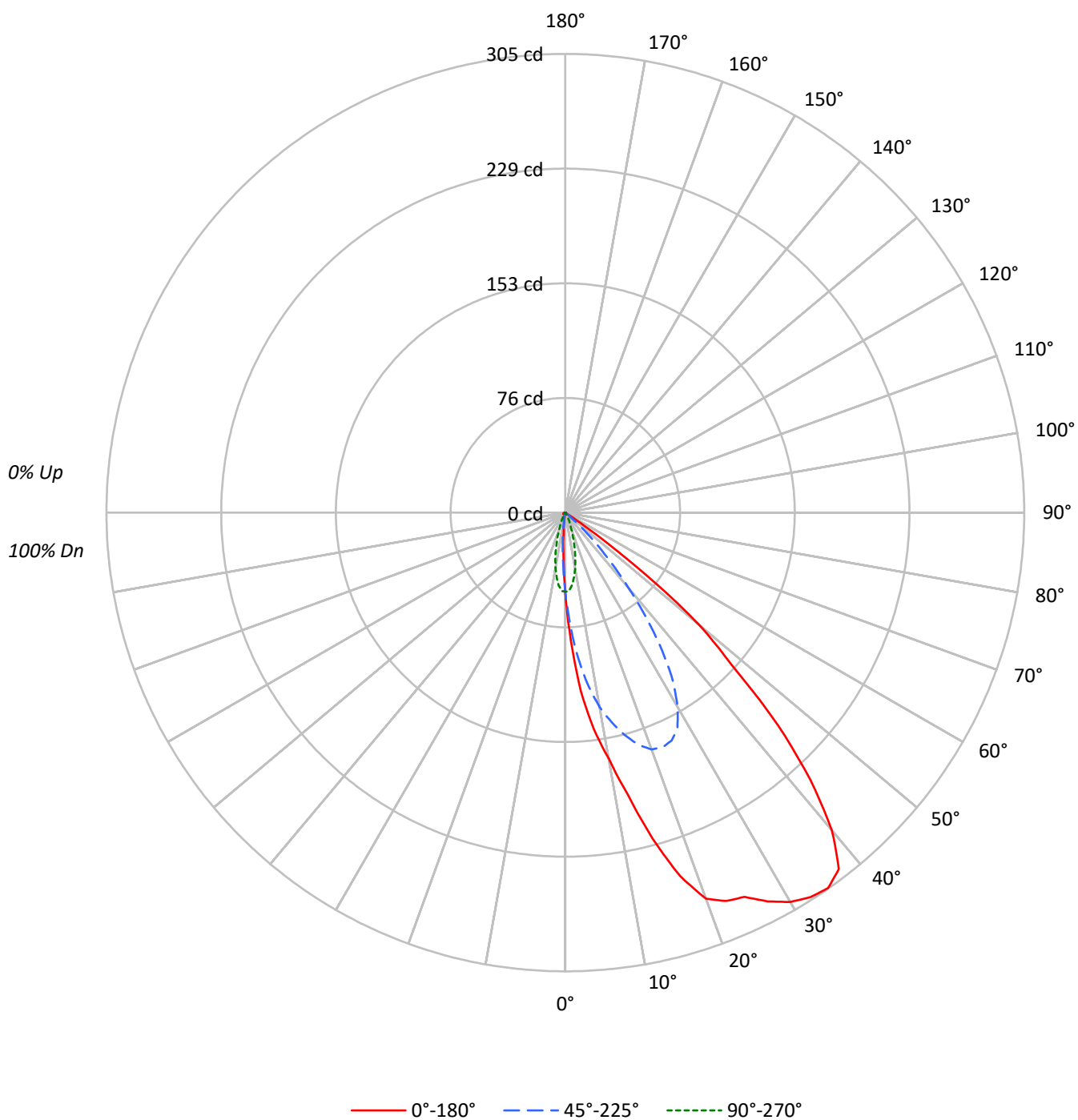
Lumens per Lamp: N/A  
Luminaire Lumens: 138.0 lumens  
Efficiency: N/A  
Efficacy: 38.3 lumens/watt  
Spacing Criteria (0/90/45): 2.13 / 0.47 / 1.22  
Luminous Opening: Circular (Dia: 0.25' x H: 0')  
CIE Type: Direct

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

TEST NUMBER: P1336110

CATALOG NUMBER: P3A02R459740DE010 E3A301WMH

### 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  | 93  | 90  | 95  | 91  | 88  | 91  | 88  | 86  | 89  | 86  | 84  | 84  | 84  | 82  |
| 3   | 99  | 91  | 85  | 80  | 96  | 89  | 84  | 80  | 87  | 82  | 78  | 84  | 80  | 77  | 82  | 79  | 76  | 76  | 76  | 74  |
| 4   | 92  | 83  | 76  | 71  | 90  | 82  | 76  | 71  | 80  | 74  | 70  | 77  | 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   | 81  | 70  | 63  | 57  | 79  | 69  | 62  | 57  | 67  | 61  | 57  | 66  | 60  | 56  | 64  | 60  | 56  | 56  | 56  | 54  |
| 7   | 75  | 64  | 57  | 52  | 74  | 63  | 57  | 52  | 62  | 56  | 51  | 61  | 55  | 51  | 60  | 55  | 51  | 51  | 51  | 49  |
| 8   | 71  | 59  | 52  | 47  | 69  | 59  | 52  | 47  | 57  | 51  | 47  | 56  | 51  | 47  | 55  | 50  | 46  | 46  | 46  | 45  |
| 9   | 66  | 55  | 48  | 43  | 65  | 54  | 47  | 43  | 53  | 47  | 43  | 52  | 47  | 43  | 51  | 46  | 42  | 42  | 42  | 41  |
| 10  | 62  | 51  | 44  | 39  | 61  | 50  | 44  | 39  | 49  | 43  | 39  | 49  | 43  | 39  | 48  | 43  | 39  | 39  | 39  | 37  |

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

|     | 0°    | 45°   | 90°   | 135°  | 180°  |
|-----|-------|-------|-------|-------|-------|
| 0°  | 11512 | 11512 | 11512 | 11512 | 11512 |
| 5°  | 26238 | 21285 | 10764 | 4314  | 2950  |
| 10° | 36984 | 29236 | 8328  | 957   | 445   |
| 15° | 50965 | 34802 | 5312  | 318   | 272   |
| 20° | 63729 | 39087 | 2777  | 210   | 210   |
| 25° | 68181 | 40454 | 1282  | 169   | 194   |
| 30° | 75683 | 37778 | 582   | 177   | 203   |
| 35° | 81539 | 30115 | 187   | 187   | 241   |
| 40° | 78891 | 18664 | 86    | 229   | 286   |
| 45° | 61960 | 8807  | 93    | 279   | 372   |
| 50° | 39811 | 1023  | 171   | 341   | 478   |
| 55° | 6040  | 76    | 191   | 459   | 573   |
| 60° | 88    | 88    | 219   | 526   | 614   |
| 65° | 104   | 104   | 259   | 519   | 726   |
| 70° | 128   | 128   | 321   | 577   | 833   |
| 75° | 85    | 169   | 424   | 678   | 847   |
| 80° | 126   | 253   | 379   | 758   | 1010  |
| 85° | 0     | 252   | 503   | 755   | 755   |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 61960 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 5.7    | 4.2       |
| 10°-20°   | 20.8   | 15.1      |
| 20°-30°   | 36.5   | 26.5      |
| 30°-40°   | 41.5   | 30.0      |
| 40°-50°   | 26.8   | 19.5      |
| 50°-60°   | 5.3    | 3.8       |
| 60°-70°   | 0.6    | 0.5       |
| 70°-80°   | 0.5    | 0.4       |
| 80°-90°   | 0.2    | 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°    | 63.0   | 45.7      |
| 0°-40°    | 104.5  | 75.7      |
| 0°-60°    | 136.6  | 99.0      |
| 0°-90°    | 138.0  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 138.0  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | 45° | 90° | 135° | 180° | Flux |
|-----|-----|-----|-----|------|------|------|
| 0°  | 52  | 52  | 52  | 52   | 52   |      |
| 5°  | 119 | 97  | 49  | 20   | 13   | 13   |
| 15° | 224 | 153 | 23  | 1    | 1    | 65   |
| 25° | 282 | 167 | 5   | 1    | 1    | 132  |
| 35° | 305 | 112 | 1   | 1    | 1    | 187  |
| 45° | 200 | 28  | 0   | 1    | 1    | 151  |
| 55° | 16  | 0   | 0   | 1    | 2    | 30   |
| 65° | 0   | 0   | 0   | 1    | 1    | 0    |
| 75° | 0   | 0   | 0   | 1    | 1    | 0    |
| 85° | 0   | 0   | 0   | 0    | 0    | 0    |
| 90° | 0   | 0   | 0   | 0    | 0    |      |



TEST NUMBER: P1336110

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°    | 5°    | 10°   | 15°   | 20°   | 25°   | 30°   | 35°   | 40°   | 45°   | 50°   |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°    | 52.5  | 52.5  | 52.5  | 52.5  | 52.5  | 52.5  | 52.5  | 52.5  | 52.5  | 52.5  | 52.5  |
| 2.5°  | 85.3  | 85.1  | 85.4  | 83.1  | 83.0  | 81.2  | 80.8  | 78.8  | 76.2  | 74.9  | 71.9  |
| 5°    | 119.2 | 118.1 | 118.1 | 115.3 | 114.4 | 112.4 | 109.1 | 104.9 | 101.4 | 96.7  | 91.6  |
| 7.5°  | 145.4 | 145.2 | 145.2 | 142.8 | 140.5 | 137.7 | 133.2 | 128.5 | 122.9 | 115.6 | 108.3 |
| 10°   | 166.1 | 166.4 | 165.4 | 163.2 | 159.8 | 156.8 | 151.5 | 145.8 | 139.0 | 131.3 | 121.5 |
| 12.5° | 192.2 | 189.6 | 188.8 | 183.8 | 179.6 | 173.8 | 167.5 | 160.9 | 152.5 | 142.9 | 131.8 |
| 15°   | 224.5 | 221.2 | 218.0 | 211.4 | 204.3 | 195.4 | 185.5 | 175.8 | 164.9 | 153.3 | 139.4 |
| 17.5° | 253.3 | 253.3 | 249.1 | 238.7 | 229.4 | 216.3 | 202.9 | 190.0 | 177.2 | 161.8 | 144.5 |
| 20°   | 273.1 | 272.0 | 268.8 | 261.2 | 250.7 | 235.8 | 218.4 | 200.2 | 184.8 | 167.5 | 147.4 |
| 22.5° | 279.5 | 279.3 | 279.4 | 274.9 | 266.5 | 251.0 | 229.7 | 208.3 | 188.9 | 168.8 | 146.0 |
| 25°   | 281.8 | 282.3 | 283.4 | 281.7 | 275.4 | 259.9 | 236.6 | 212.1 | 190.2 | 167.2 | 140.7 |
| 27.5° | 291.4 | 290.5 | 291.8 | 290.6 | 283.4 | 265.0 | 238.0 | 211.2 | 187.4 | 161.3 | 131.2 |
| 30°   | 298.9 | 298.7 | 300.9 | 299.8 | 290.5 | 268.2 | 236.7 | 207.7 | 180.6 | 149.2 | 116.3 |
| 32.5° | 303.2 | 303.3 | 303.9 | 299.6 | 285.8 | 261.2 | 230.5 | 200.7 | 167.8 | 133.4 | 96.9  |
| 35°   | 304.6 | 303.9 | 300.6 | 290.1 | 271.2 | 244.9 | 215.1 | 184.0 | 150.4 | 112.5 | 76.6  |
| 37.5° | 298.6 | 295.0 | 286.7 | 271.0 | 249.1 | 224.5 | 195.5 | 162.8 | 126.5 | 88.9  | 57.1  |
| 40°   | 275.6 | 270.9 | 260.4 | 244.3 | 223.9 | 200.1 | 170.5 | 136.3 | 98.1  | 65.2  | 40.2  |
| 42.5° | 241.2 | 238.8 | 227.8 | 213.9 | 196.5 | 172.5 | 142.0 | 107.3 | 72.6  | 45.0  | 25.6  |
| 45°   | 199.8 | 196.7 | 189.7 | 177.4 | 163.8 | 138.6 | 110.1 | 76.9  | 49.5  | 28.4  | 12.7  |
| 47.5° | 149.8 | 150.0 | 145.3 | 136.0 | 122.6 | 101.6 | 75.4  | 51.6  | 31.0  | 14.7  | 2.9   |
| 50°   | 116.7 | 115.1 | 108.4 | 98.8  | 83.2  | 67.6  | 48.7  | 32.5  | 16.4  | 3.0   | 0.2   |
| 52.5° | 64.6  | 65.7  | 62.1  | 59.0  | 50.9  | 40.4  | 28.7  | 16.5  | 3.5   | 0.3   | 0.2   |
| 55°   | 15.8  | 16.7  | 16.0  | 16.4  | 17.0  | 15.1  | 11.7  | 3.2   | 0.3   | 0.2   | 0.2   |
| 57.5° | 0.3   | 0.3   | 0.3   | 0.3   | 0.6   | 0.8   | 0.8   | 0.2   | 0.2   | 0.2   | 0.2   |
| 60°   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   |
| 62.5° | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   |
| 65°   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   |
| 67.5° | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   |
| 70°   | 0.2   | 0.2   | 0.2   | 0.1   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   |
| 72.5° | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.2   | 0.2   | 0.2   |
| 75°   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.2   | 0.2   | 0.2   |
| 77.5° | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.2   | 0.2   |
| 80°   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.2   | 0.2   |
| 82.5° | 0.0   | 0.0   | 0.0   | 0.0   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.2   |
| 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°    | 52.5  | 52.5  | 52.5  | 52.5 | 52.5   | 52.5 | 52.5   | 52.5 |
| 2.5°  | 70.4  | 68.2  | 64.2  | 52.2 | 41.9   | 33.8 | 29.0   | 28.5 |
| 5°    | 87.1  | 81.2  | 72.7  | 48.9 | 30.9   | 19.6 | 14.2   | 13.4 |
| 7.5°  | 100.4 | 92.1  | 78.9  | 43.6 | 21.1   | 10.0 | 5.5    | 4.6  |
| 10°   | 111.4 | 99.6  | 82.2  | 37.4 | 13.3   | 4.3  | 2.3    | 2.0  |
| 12.5° | 118.9 | 104.7 | 82.7  | 30.5 | 7.6    | 2.1  | 1.5    | 1.4  |
| 15°   | 123.7 | 106.3 | 80.0  | 23.4 | 4.3    | 1.4  | 1.3    | 1.2  |
| 17.5° | 125.7 | 104.9 | 74.7  | 17.0 | 2.3    | 1.0  | 1.0    | 1.0  |
| 20°   | 124.8 | 100.4 | 66.8  | 11.9 | 1.5    | 0.9  | 0.9    | 0.9  |
| 22.5° | 120.4 | 92.7  | 57.0  | 8.0  | 1.0    | 0.8  | 0.8    | 0.8  |
| 25°   | 111.7 | 82.2  | 46.6  | 5.3  | 0.7    | 0.7  | 0.8    | 0.8  |
| 27.5° | 98.8  | 69.2  | 35.7  | 3.6  | 0.6    | 0.7  | 0.8    | 0.8  |
| 30°   | 82.5  | 54.8  | 25.6  | 2.3  | 0.6    | 0.7  | 0.7    | 0.8  |
| 32.5° | 65.6  | 39.9  | 16.8  | 1.4  | 0.5    | 0.7  | 0.8    | 0.9  |
| 35°   | 47.5  | 27.2  | 10.7  | 0.7  | 0.6    | 0.7  | 0.8    | 0.9  |
| 37.5° | 33.4  | 17.8  | 6.2   | 0.5  | 0.6    | 0.7  | 0.9    | 0.9  |
| 40°   | 21.7  | 9.9   | 2.3   | 0.3  | 0.6    | 0.8  | 0.9    | 1.0  |
| 42.5° | 11.3  | 3.5   | 0.5   | 0.3  | 0.6    | 0.8  | 1.0    | 1.2  |
| 45°   | 2.9   | 0.5   | 0.1   | 0.3  | 0.7    | 0.9  | 1.2    | 1.2  |
| 47.5° | 0.3   | 0.1   | 0.1   | 0.5  | 0.7    | 1.0  | 1.2    | 1.3  |
| 50°   | 0.1   | 0.2   | 0.2   | 0.5  | 0.7    | 1.0  | 1.3    | 1.4  |
| 52.5° | 0.2   | 0.2   | 0.2   | 0.5  | 0.8    | 1.0  | 1.4    | 1.5  |
| 55°   | 0.2   | 0.2   | 0.2   | 0.5  | 0.8    | 1.2  | 1.4    | 1.5  |
| 57.5° | 0.2   | 0.2   | 0.2   | 0.5  | 0.8    | 1.2  | 1.4    | 1.4  |
| 60°   | 0.2   | 0.2   | 0.2   | 0.5  | 0.8    | 1.2  | 1.4    | 1.4  |
| 62.5° | 0.2   | 0.2   | 0.3   | 0.5  | 0.8    | 1.0  | 1.4    | 1.4  |
| 65°   | 0.2   | 0.3   | 0.3   | 0.5  | 0.8    | 1.0  | 1.3    | 1.4  |
| 67.5° | 0.2   | 0.2   | 0.3   | 0.5  | 0.8    | 1.0  | 1.3    | 1.4  |
| 70°   | 0.2   | 0.2   | 0.3   | 0.5  | 0.7    | 0.9  | 1.2    | 1.3  |
| 72.5° | 0.2   | 0.2   | 0.3   | 0.5  | 0.7    | 0.9  | 1.0    | 1.2  |
| 75°   | 0.2   | 0.2   | 0.3   | 0.5  | 0.6    | 0.8  | 1.0    | 1.0  |
| 77.5° | 0.2   | 0.2   | 0.3   | 0.3  | 0.6    | 0.7  | 0.9    | 0.9  |
| 80°   | 0.2   | 0.2   | 0.3   | 0.3  | 0.5    | 0.6  | 0.7    | 0.8  |
| 82.5° | 0.2   | 0.2   | 0.2   | 0.3  | 0.3    | 0.5  | 0.6    | 0.6  |
| 85°   | 0.2   | 0.2   | 0.2   | 0.2  | 0.2    | 0.3  | 0.3    | 0.3  |
| 87.5° | 0.1   | 0.2   | 0.2   | 0.2  | 0.2    | 0.2  | 0.2    | 0.1  |
| 90°   | 0.0   | 0.0   | 0.0   | 0.0  | 0.0    | 0.0  | 0.0    | 0.0  |

(END OF REPORT)