

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: P1336142

Luminaire Tested: P3A02R459830DE010 E3A301WMH

Issue Date: 2/13/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1336142  
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: P3A02R459830DE010 E3A301WMH  
Description: 3in Adjustable LED luminaire with, R45 optic, 3000K CCT AND, 98CRI , E3A301WMH TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

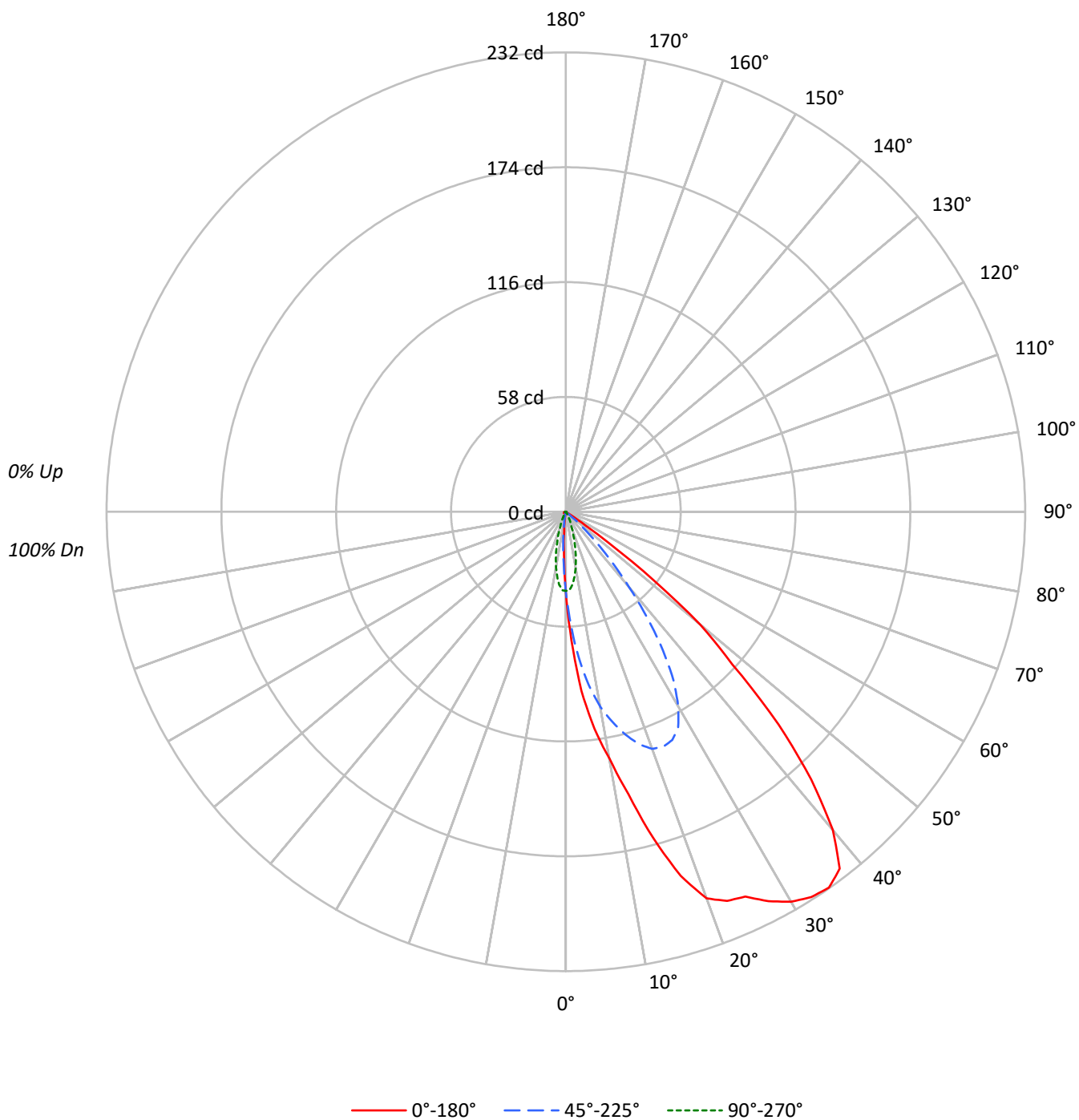
Lumens per Lamp: N/A  
Luminaire Lumens: 105.1 lumens  
Efficiency: N/A  
Efficacy: 29.2 lumens/watt  
Spacing Criteria (0/90/45): 2.13 / 0.47 / 1.22  
Luminous Opening: Circular (Dia: 0.25' x H: 0')  
CIE Type: Direct

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: P1336142

CATALOG NUMBER: P3A02R459830DE010 E3A301WMH

### Luminous Intensity Polar Plot



TEST NUMBER: P1336142

CATALOG NUMBER: P3A02R459830DE010 E3A301WMH

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

|     |     |     |     |     |     |     |     |     |     |     |     |  |     |     |     |  |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|-----|-----|-----|--|-----|-----|-----|-----|
| RF  | 20  |     |     |     | 20  |     |     |     | 20  |     |     |  | 20  |     |     |  | 20  |     |     |     |
| RC  | 80  |     |     |     | 70  |     |     |     | 50  |     |     |  | 30  |     |     |  | 10  |     |     | 0   |
| RW  | 70  | 50  | 30  | 10  | 70  | 50  | 30  | 10  | 50  | 30  | 10  |  | 50  | 30  | 10  |  | 50  | 30  | 10  | 0   |
| 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  | 93  | 90  | 94  | 91  | 88  |  | 91  | 88  | 86  |  | 89  | 86  | 84  | 82  |
| 3   | 99  | 91  | 85  | 80  | 96  | 89  | 84  | 79  | 87  | 82  | 78  |  | 84  | 80  | 77  |  | 82  | 79  | 76  | 74  |
| 4   | 92  | 83  | 76  | 71  | 90  | 82  | 76  | 71  | 80  | 74  | 70  |  | 77  | 73  | 69  |  | 75  | 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  | 63  | 57  | 79  | 69  | 62  | 57  | 67  | 61  | 57  |  | 66  | 60  | 56  |  | 64  | 60  | 56  | 54  |
| 7   | 75  | 64  | 57  | 52  | 74  | 63  | 57  | 52  | 62  | 56  | 51  |  | 61  | 55  | 51  |  | 60  | 55  | 51  | 49  |
| 8   | 71  | 59  | 52  | 47  | 69  | 59  | 52  | 47  | 57  | 51  | 47  |  | 56  | 51  | 47  |  | 55  | 50  | 46  | 45  |
| 9   | 66  | 55  | 48  | 43  | 65  | 54  | 47  | 43  | 53  | 47  | 43  |  | 52  | 47  | 42  |  | 51  | 46  | 42  | 41  |
| 10  | 62  | 51  | 44  | 39  | 61  | 50  | 44  | 39  | 49  | 43  | 39  |  | 48  | 43  | 39  |  | 48  | 43  | 39  | 37  |

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

|     | 0°    | 45°   | 90°  | 135° | 180° |
|-----|-------|-------|------|------|------|
| 0°  | 8771  | 8771  | 8771 | 8771 | 8771 |
| 5°  | 19965 | 16201 | 8188 | 3280 | 2245 |
| 10° | 28145 | 22244 | 6346 | 713  | 334  |
| 15° | 38774 | 26470 | 4041 | 250  | 204  |
| 20° | 48491 | 29729 | 2100 | 163  | 163  |
| 25° | 51874 | 30776 | 968  | 121  | 145  |
| 30° | 57578 | 28739 | 456  | 127  | 152  |
| 35° | 62024 | 22914 | 134  | 134  | 187  |
| 40° | 60027 | 14198 | 86   | 172  | 229  |
| 45° | 47137 | 6698  | 93   | 217  | 279  |
| 50° | 30293 | 785   | 136  | 273  | 375  |
| 55° | 4588  | 76    | 153  | 344  | 421  |
| 60° | 88    | 88    | 175  | 395  | 482  |
| 65° | 104   | 104   | 208  | 415  | 571  |
| 70° | 128   | 128   | 256  | 449  | 641  |
| 75° | 85    | 169   | 339  | 508  | 678  |
| 80° | 126   | 253   | 379  | 505  | 758  |
| 85° | 0     | 252   | 503  | 755  | 755  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 47137 cd/sqm

TEST NUMBER: P1336142

CATALOG NUMBER: P3A02R459830DE010 E3A301WMH

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 4.4    | 4.2       |
| 10°-20°   | 15.8   | 15.0      |
| 20°-30°   | 27.8   | 26.4      |
| 30°-40°   | 31.5   | 30.0      |
| 40°-50°   | 20.4   | 19.4      |
| 50°-60°   | 4.0    | 3.8       |
| 60°-70°   | 0.5    | 0.5       |
| 70°-80°   | 0.4    | 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°    | 48.0   | 45.6      |
| 0°-40°    | 79.5   | 75.7      |
| 0°-60°    | 103.9  | 98.9      |
| 0°-90°    | 105.1  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 105.1  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | 45° | 90° | 135° | 180° | Flux |
|-----|-----|-----|-----|------|------|------|
| 0°  | 40  | 40  | 40  | 40   | 40   |      |
| 5°  | 91  | 74  | 37  | 15   | 10   | 10   |
| 15° | 171 | 117 | 18  | 1    | 1    | 49   |
| 25° | 214 | 127 | 4   | 0    | 1    | 101  |
| 35° | 232 | 86  | 0   | 0    | 1    | 142  |
| 45° | 152 | 22  | 0   | 1    | 1    | 115  |
| 55° | 12  | 0   | 0   | 1    | 1    | 23   |
| 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: P1336142

CATALOG NUMBER: P3A02R459830DE010 E3A301WMH

**CANDELA DISTRIBUTION (FULL):**

|       | 0°    | 5°    | 10°   | 15°   | 20°   | 25°   | 30°   | 35°   | 40°   | 45°   | 50°   |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°    | 40.0  | 40.0  | 40.0  | 40.0  | 40.0  | 40.0  | 40.0  | 40.0  | 40.0  | 40.0  | 40.0  |
| 2.5°  | 64.9  | 64.7  | 65.0  | 63.2  | 63.1  | 61.8  | 61.5  | 60.0  | 58.0  | 57.0  | 54.7  |
| 5°    | 90.7  | 89.8  | 89.8  | 87.7  | 87.0  | 85.5  | 83.0  | 79.8  | 77.2  | 73.6  | 69.7  |
| 7.5°  | 110.6 | 110.5 | 110.5 | 108.6 | 106.9 | 104.8 | 101.3 | 97.7  | 93.5  | 88.0  | 82.4  |
| 10°   | 126.4 | 126.6 | 125.8 | 124.2 | 121.6 | 119.3 | 115.3 | 110.9 | 105.7 | 99.9  | 92.5  |
| 12.5° | 146.2 | 144.3 | 143.7 | 139.9 | 136.6 | 132.2 | 127.4 | 122.4 | 116.0 | 108.7 | 100.3 |
| 15°   | 170.8 | 168.3 | 165.9 | 160.9 | 155.4 | 148.7 | 141.1 | 133.7 | 125.5 | 116.6 | 106.1 |
| 17.5° | 192.7 | 192.7 | 189.5 | 181.6 | 174.6 | 164.6 | 154.4 | 144.5 | 134.8 | 123.1 | 109.9 |
| 20°   | 207.8 | 207.0 | 204.5 | 198.7 | 190.7 | 179.4 | 166.1 | 152.4 | 140.6 | 127.4 | 112.1 |
| 22.5° | 212.7 | 212.5 | 212.6 | 209.2 | 202.8 | 191.0 | 174.7 | 158.5 | 143.7 | 128.5 | 111.1 |
| 25°   | 214.4 | 214.8 | 215.7 | 214.3 | 209.5 | 197.8 | 180.0 | 161.4 | 144.7 | 127.2 | 107.0 |
| 27.5° | 221.7 | 221.0 | 222.0 | 221.1 | 215.7 | 201.6 | 181.1 | 160.7 | 142.6 | 122.8 | 99.8  |
| 30°   | 227.4 | 227.3 | 228.9 | 228.1 | 221.0 | 204.1 | 180.1 | 158.1 | 137.4 | 113.5 | 88.5  |
| 32.5° | 230.7 | 230.8 | 231.2 | 228.0 | 217.4 | 198.7 | 175.4 | 152.7 | 127.7 | 101.5 | 73.8  |
| 35°   | 231.7 | 231.2 | 228.8 | 220.8 | 206.4 | 186.3 | 163.7 | 140.0 | 114.4 | 85.6  | 58.3  |
| 37.5° | 227.2 | 224.4 | 218.1 | 206.2 | 189.5 | 170.8 | 148.8 | 123.9 | 96.2  | 67.6  | 43.5  |
| 40°   | 209.7 | 206.1 | 198.1 | 185.9 | 170.4 | 152.3 | 129.7 | 103.7 | 74.6  | 49.6  | 30.6  |
| 42.5° | 183.5 | 181.7 | 173.3 | 162.7 | 149.5 | 131.3 | 108.0 | 81.7  | 55.2  | 34.2  | 19.5  |
| 45°   | 152.0 | 149.6 | 144.4 | 135.0 | 124.6 | 105.5 | 83.8  | 58.5  | 37.7  | 21.6  | 9.7   |
| 47.5° | 114.0 | 114.2 | 110.6 | 103.4 | 93.3  | 77.3  | 57.3  | 39.3  | 23.6  | 11.2  | 2.2   |
| 50°   | 88.8  | 87.5  | 82.5  | 75.2  | 63.3  | 51.5  | 37.1  | 24.8  | 12.5  | 2.3   | 0.2   |
| 52.5° | 49.2  | 50.0  | 47.2  | 44.9  | 38.7  | 30.7  | 21.9  | 12.6  | 2.6   | 0.3   | 0.2   |
| 55°   | 12.0  | 12.7  | 12.2  | 12.5  | 12.9  | 11.5  | 8.9   | 2.5   | 0.3   | 0.2   | 0.2   |
| 57.5° | 0.3   | 0.3   | 0.3   | 0.3   | 0.4   | 0.6   | 0.6   | 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   |

TEST NUMBER: P1336142

CATALOG NUMBER: P3A02R459830DE010 E3A301WMH

**CANDELA DISTRIBUTION (continued):**

|       | 55°  | 60°  | 67.5° | 90°  | 112.5° | 135° | 157.5° | 180° |
|-------|------|------|-------|------|--------|------|--------|------|
| 0°    | 40.0 | 40.0 | 40.0  | 40.0 | 40.0   | 40.0 | 40.0   | 40.0 |
| 2.5°  | 53.6 | 51.9 | 48.8  | 39.7 | 31.9   | 25.7 | 22.0   | 21.7 |
| 5°    | 66.3 | 61.8 | 55.3  | 37.2 | 23.5   | 14.9 | 10.8   | 10.2 |
| 7.5°  | 76.4 | 70.1 | 60.1  | 33.2 | 16.1   | 7.6  | 4.2    | 3.5  |
| 10°   | 84.7 | 75.8 | 62.5  | 28.5 | 10.1   | 3.2  | 1.8    | 1.5  |
| 12.5° | 90.4 | 79.6 | 63.0  | 23.2 | 5.8    | 1.6  | 1.1    | 1.1  |
| 15°   | 94.1 | 80.9 | 60.9  | 17.8 | 3.2    | 1.1  | 1.0    | 0.9  |
| 17.5° | 95.6 | 79.8 | 56.8  | 12.9 | 1.8    | 0.8  | 0.8    | 0.8  |
| 20°   | 94.9 | 76.4 | 50.8  | 9.0  | 1.1    | 0.7  | 0.7    | 0.7  |
| 22.5° | 91.6 | 70.5 | 43.4  | 6.1  | 0.8    | 0.6  | 0.6    | 0.6  |
| 25°   | 85.0 | 62.5 | 35.5  | 4.0  | 0.5    | 0.5  | 0.6    | 0.6  |
| 27.5° | 75.2 | 52.7 | 27.1  | 2.7  | 0.4    | 0.5  | 0.6    | 0.6  |
| 30°   | 62.8 | 41.7 | 19.5  | 1.8  | 0.4    | 0.5  | 0.5    | 0.6  |
| 32.5° | 49.9 | 30.4 | 12.8  | 1.1  | 0.4    | 0.5  | 0.6    | 0.7  |
| 35°   | 36.2 | 20.7 | 8.2   | 0.5  | 0.4    | 0.5  | 0.6    | 0.7  |
| 37.5° | 25.4 | 13.5 | 4.7   | 0.4  | 0.4    | 0.5  | 0.7    | 0.7  |
| 40°   | 16.5 | 7.6  | 1.8   | 0.3  | 0.4    | 0.6  | 0.7    | 0.8  |
| 42.5° | 8.6  | 2.6  | 0.4   | 0.3  | 0.4    | 0.6  | 0.8    | 0.9  |
| 45°   | 2.2  | 0.4  | 0.1   | 0.3  | 0.5    | 0.7  | 0.9    | 0.9  |
| 47.5° | 0.3  | 0.1  | 0.1   | 0.4  | 0.5    | 0.8  | 0.9    | 1.0  |
| 50°   | 0.1  | 0.2  | 0.2   | 0.4  | 0.5    | 0.8  | 1.0    | 1.1  |
| 52.5° | 0.2  | 0.2  | 0.2   | 0.4  | 0.6    | 0.8  | 1.1    | 1.1  |
| 55°   | 0.2  | 0.2  | 0.2   | 0.4  | 0.6    | 0.9  | 1.1    | 1.1  |
| 57.5° | 0.2  | 0.2  | 0.2   | 0.4  | 0.6    | 0.9  | 1.1    | 1.1  |
| 60°   | 0.2  | 0.2  | 0.2   | 0.4  | 0.6    | 0.9  | 1.1    | 1.1  |
| 62.5° | 0.2  | 0.2  | 0.3   | 0.4  | 0.6    | 0.8  | 1.1    | 1.1  |
| 65°   | 0.2  | 0.3  | 0.3   | 0.4  | 0.6    | 0.8  | 1.0    | 1.1  |
| 67.5° | 0.2  | 0.2  | 0.3   | 0.4  | 0.6    | 0.8  | 1.0    | 1.1  |
| 70°   | 0.2  | 0.2  | 0.3   | 0.4  | 0.5    | 0.7  | 0.9    | 1.0  |
| 72.5° | 0.2  | 0.2  | 0.3   | 0.4  | 0.5    | 0.7  | 0.8    | 0.9  |
| 75°   | 0.2  | 0.2  | 0.3   | 0.4  | 0.4    | 0.6  | 0.8    | 0.8  |
| 77.5° | 0.2  | 0.2  | 0.3   | 0.3  | 0.4    | 0.5  | 0.7    | 0.7  |
| 80°   | 0.2  | 0.2  | 0.3   | 0.3  | 0.4    | 0.4  | 0.5    | 0.6  |
| 82.5° | 0.2  | 0.2  | 0.2   | 0.3  | 0.3    | 0.4  | 0.4    | 0.4  |
| 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)