

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: P1305476

Luminaire Tested: P3SQAS02R509024DE010 E3SQCA451MW

Issue Date: 1/29/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1305476  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-79)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/29/2026  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: IRiS  
Catalog Number: P3SQAS02R509024DE010 E3SQCA451MW  
Description: 3in Adjustable LED luminaire with, R50 optic, 2400K CCT AND, 90CRI , E3SQCA451MW TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

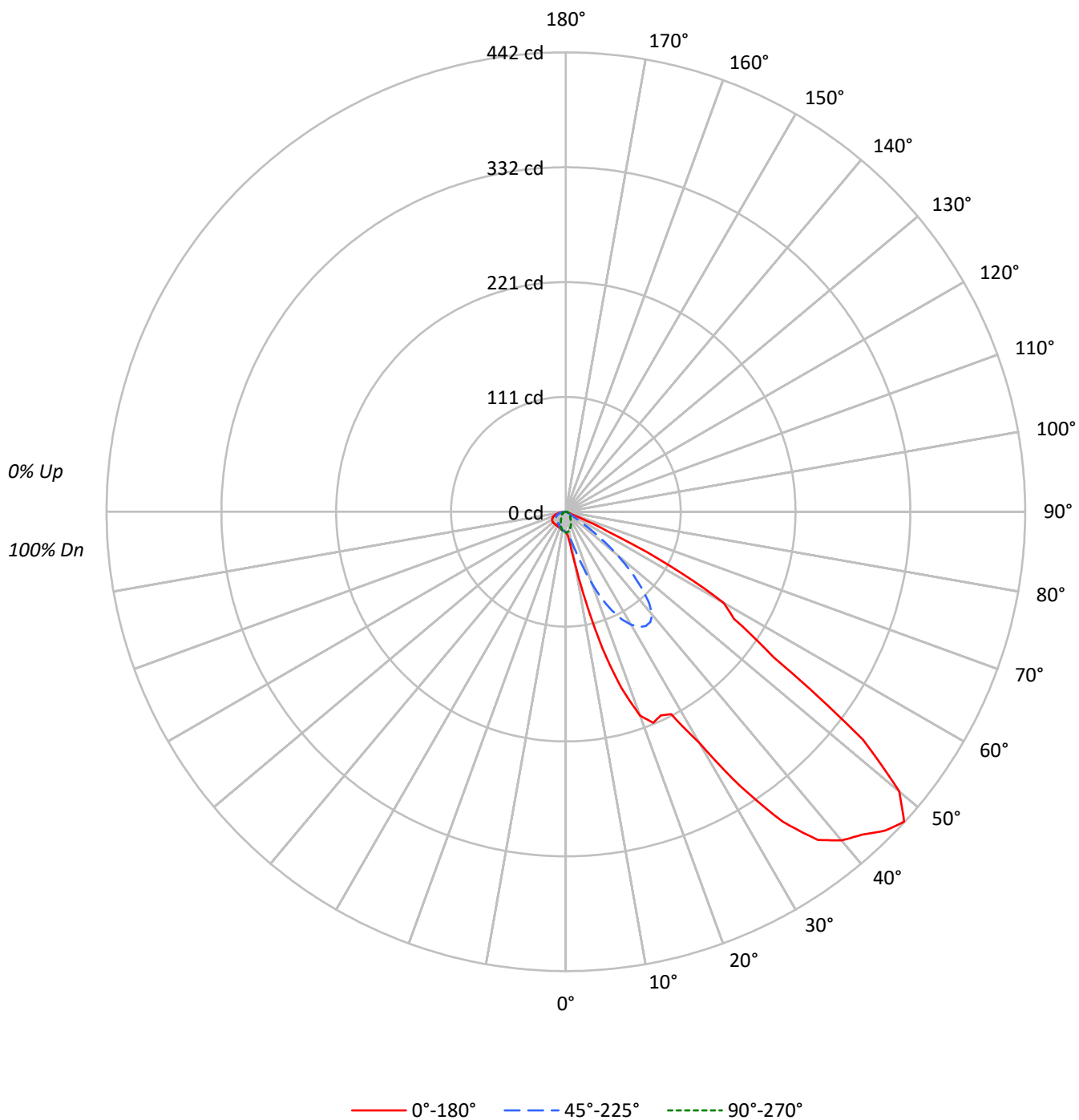
Lumens per Lamp: N/A  
Luminaire Lumens: 249.0 lumens  
Efficiency: N/A  
Efficacy: 69.2 lumens/watt  
Spacing Criteria (0/90/45): 3.58 / 0.83 / 1.91  
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')  
CIE Type: Direct

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  | 30  | 10  |
| RCR |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 |
| 1   | 110 | 106 | 102 | 98  | 107 | 103 | 100 | 97  | 99  | 96  | 94  | 95  | 93  | 91  | 92  | 90  | 88  |
| 2   | 100 | 93  | 86  | 81  | 98  | 91  | 85  | 80  | 87  | 82  | 78  | 84  | 80  | 76  | 81  | 78  | 75  |
| 3   | 91  | 81  | 73  | 67  | 89  | 80  | 72  | 66  | 77  | 70  | 65  | 74  | 69  | 64  | 71  | 67  | 63  |
| 4   | 83  | 71  | 63  | 56  | 81  | 70  | 62  | 56  | 67  | 60  | 55  | 65  | 59  | 54  | 63  | 58  | 53  |
| 5   | 76  | 63  | 54  | 47  | 74  | 62  | 53  | 47  | 60  | 52  | 46  | 58  | 51  | 46  | 56  | 50  | 45  |
| 6   | 69  | 56  | 47  | 40  | 67  | 55  | 46  | 40  | 53  | 45  | 39  | 51  | 44  | 39  | 50  | 43  | 39  |
| 7   | 63  | 50  | 41  | 34  | 62  | 49  | 40  | 34  | 47  | 39  | 34  | 46  | 39  | 34  | 44  | 38  | 33  |
| 8   | 58  | 44  | 36  | 30  | 57  | 44  | 35  | 29  | 42  | 35  | 29  | 41  | 34  | 29  | 40  | 34  | 29  |
| 9   | 54  | 40  | 31  | 26  | 53  | 39  | 31  | 26  | 38  | 31  | 25  | 37  | 30  | 25  | 36  | 30  | 25  |
| 10  | 50  | 36  | 28  | 23  | 49  | 36  | 28  | 22  | 35  | 27  | 22  | 34  | 27  | 22  | 33  | 27  | 22  |

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

|     | 0°     | 45°   | 90°  | 135° | 180° |
|-----|--------|-------|------|------|------|
| 0°  | 3410   | 3410  | 3410 | 3410 | 3410 |
| 5°  | 4045   | 3786  | 3388 | 3233 | 3198 |
| 10° | 8726   | 4704  | 3235 | 3130 | 3165 |
| 15° | 24159  | 7702  | 2906 | 2995 | 3102 |
| 20° | 38195  | 13526 | 2529 | 2877 | 3042 |
| 25° | 41065  | 19858 | 2166 | 2774 | 3059 |
| 30° | 50989  | 24938 | 1889 | 2744 | 3162 |
| 35° | 76508  | 28215 | 1619 | 2754 | 3343 |
| 40° | 92783  | 29002 | 1461 | 2855 | 3530 |
| 45° | 105705 | 24892 | 1413 | 3044 | 3873 |
| 50° | 112183 | 17174 | 1447 | 3296 | 4314 |
| 55° | 73294  | 6906  | 1411 | 3543 | 4774 |
| 60° | 60450  | 1171  | 1412 | 3858 | 5270 |
| 65° | 18216  | 611   | 1304 | 4116 | 5787 |
| 70° | 755    | 655   | 1309 | 4230 | 6294 |
| 75° | 732    | 732   | 1264 | 4325 | 6854 |
| 80° | 595    | 595   | 1289 | 4265 | 7042 |
| 85° | 395    | 790   | 1778 | 4347 | 6719 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 47.5°

Luminance: 112548 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 2.1    | 0.8       |
| 10°-20°   | 11.8   | 4.7       |
| 20°-30°   | 30.3   | 12.2      |
| 30°-40°   | 54.4   | 21.9      |
| 40°-50°   | 72.7   | 29.2      |
| 50°-60°   | 55.4   | 22.2      |
| 60°-70°   | 16.8   | 6.8       |
| 70°-80°   | 4.0    | 1.6       |
| 80°-90°   | 1.4    | 0.6       |
| 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°    | 44.2   | 17.7      |
| 0°-40°    | 98.6   | 39.6      |
| 0°-60°    | 226.7  | 91.1      |
| 0°-90°    | 249.0  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 249.0  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | 45° | 90° | 135° | 180° | Flux |
|-----|-----|-----|-----|------|------|------|
| 0°  | 20  | 20  | 20  | 20   | 20   |      |
| 5°  | 23  | 22  | 20  | 19   | 18   | 3    |
| 15° | 136 | 43  | 16  | 17   | 17   | 40   |
| 25° | 216 | 104 | 11  | 15   | 16   | 103  |
| 35° | 364 | 134 | 8   | 13   | 16   | 223  |
| 45° | 434 | 102 | 6   | 12   | 16   | 332  |
| 55° | 244 | 23  | 5   | 12   | 16   | 243  |
| 65° | 45  | 2   | 3   | 10   | 14   | 62   |
| 75° | 1   | 1   | 2   | 6    | 10   | 1    |
| 85° | 0   | 0   | 1   | 2    | 3    | 0    |
| 90° | 0   | 0   | 0   | 0    | 0    |      |

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°    | 5°    | 10°   | 15°   | 20°   | 25°   | 30°   | 35°   | 45°   | 67.5° | 90°  |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| 0°    | 19.8  | 19.8  | 19.8  | 19.8  | 19.8  | 19.8  | 19.8  | 19.8  | 19.8  | 19.8  | 19.8 |
| 2.5°  | 21.1  | 21.1  | 21.1  | 21.1  | 21.1  | 21.1  | 20.9  | 20.9  | 20.9  | 20.4  | 20.0 |
| 5°    | 23.4  | 23.7  | 23.4  | 23.4  | 23.0  | 23.0  | 22.6  | 22.6  | 21.9  | 20.6  | 19.6 |
| 7.5°  | 30.8  | 30.5  | 30.3  | 29.5  | 28.8  | 27.3  | 26.7  | 25.6  | 23.7  | 20.6  | 19.1 |
| 10°   | 49.9  | 48.6  | 47.7  | 45.8  | 41.7  | 39.1  | 35.7  | 32.3  | 26.9  | 20.6  | 18.5 |
| 12.5° | 86.7  | 86.5  | 83.9  | 77.4  | 71.6  | 63.7  | 55.3  | 46.9  | 33.1  | 20.2  | 17.6 |
| 15°   | 135.5 | 133.6 | 129.9 | 122.4 | 112.1 | 99.6  | 84.5  | 69.7  | 43.2  | 19.6  | 16.3 |
| 17.5° | 177.2 | 174.9 | 172.1 | 164.5 | 152.7 | 137.0 | 118.9 | 98.5  | 57.0  | 18.7  | 15.1 |
| 20°   | 208.4 | 206.9 | 204.5 | 198.5 | 187.3 | 173.1 | 152.9 | 128.2 | 73.8  | 17.6  | 13.8 |
| 22.5° | 219.8 | 219.6 | 220.0 | 217.9 | 212.3 | 201.1 | 181.7 | 155.9 | 90.3  | 16.3  | 12.5 |
| 25°   | 216.1 | 215.9 | 218.7 | 221.5 | 222.8 | 218.3 | 203.5 | 178.3 | 104.5 | 15.3  | 11.4 |
| 27.5° | 219.6 | 218.9 | 217.7 | 218.1 | 221.7 | 224.3 | 217.4 | 195.5 | 116.8 | 13.8  | 10.3 |
| 30°   | 256.4 | 252.7 | 246.9 | 237.0 | 229.7 | 229.1 | 226.0 | 209.0 | 125.4 | 12.3  | 9.5  |
| 32.5° | 313.8 | 309.3 | 298.7 | 280.5 | 263.0 | 249.7 | 240.2 | 220.4 | 131.4 | 10.8  | 8.4  |
| 35°   | 363.9 | 360.7 | 348.4 | 330.3 | 305.4 | 280.5 | 263.2 | 237.2 | 134.2 | 9.5   | 7.7  |
| 37.5° | 397.9 | 396.6 | 384.5 | 365.2 | 339.8 | 310.3 | 287.6 | 254.4 | 133.6 | 8.0   | 7.1  |
| 40°   | 412.7 | 408.9 | 398.7 | 382.4 | 356.8 | 330.3 | 306.3 | 265.4 | 129.0 | 6.5   | 6.5  |
| 42.5° | 421.5 | 417.2 | 406.3 | 390.8 | 365.6 | 337.4 | 308.4 | 260.7 | 118.3 | 5.2   | 6.2  |
| 45°   | 434.0 | 429.5 | 415.1 | 398.5 | 373.1 | 340.5 | 300.0 | 243.9 | 102.2 | 3.9   | 5.8  |
| 47.5° | 441.5 | 438.5 | 427.8 | 411.2 | 380.5 | 336.2 | 280.7 | 228.2 | 84.3  | 3.0   | 5.6  |
| 50°   | 418.7 | 415.7 | 407.8 | 396.4 | 375.7 | 321.7 | 263.7 | 202.8 | 64.1  | 2.4   | 5.4  |
| 52.5° | 360.5 | 363.0 | 364.5 | 367.8 | 352.7 | 289.5 | 238.3 | 182.6 | 43.2  | 1.9   | 4.9  |
| 55°   | 244.1 | 248.0 | 252.3 | 265.2 | 282.8 | 257.7 | 211.6 | 157.9 | 23.0  | 1.9   | 4.7  |
| 57.5° | 191.8 | 190.6 | 189.3 | 188.4 | 202.2 | 212.5 | 186.0 | 126.2 | 9.9   | 1.9   | 4.3  |
| 60°   | 175.5 | 171.6 | 169.0 | 169.7 | 176.6 | 172.5 | 147.3 | 82.4  | 3.4   | 1.9   | 4.1  |
| 62.5° | 115.1 | 118.1 | 123.9 | 133.8 | 129.0 | 110.8 | 85.6  | 32.7  | 1.7   | 1.9   | 3.7  |
| 65°   | 44.7  | 43.2  | 44.7  | 47.5  | 41.1  | 30.5  | 19.1  | 5.8   | 1.5   | 1.7   | 3.2  |
| 67.5° | 6.0   | 5.4   | 4.1   | 2.6   | 2.4   | 2.2   | 1.7   | 1.5   | 1.5   | 1.7   | 3.0  |
| 70°   | 1.5   | 1.5   | 1.5   | 1.5   | 1.5   | 1.5   | 1.5   | 1.3   | 1.3   | 1.5   | 2.6  |
| 72.5° | 1.3   | 1.3   | 1.3   | 1.3   | 1.3   | 1.3   | 1.3   | 1.3   | 1.3   | 1.5   | 2.2  |
| 75°   | 1.1   | 1.1   | 1.1   | 1.1   | 1.1   | 1.1   | 1.1   | 1.1   | 1.1   | 1.3   | 1.9  |
| 77.5° | 0.9   | 0.9   | 0.9   | 0.9   | 0.9   | 0.9   | 0.9   | 0.9   | 0.9   | 1.1   | 1.5  |
| 80°   | 0.6   | 0.6   | 0.6   | 0.6   | 0.6   | 0.6   | 0.6   | 0.6   | 0.6   | 0.9   | 1.3  |
| 82.5° | 0.4   | 0.4   | 0.4   | 0.4   | 0.4   | 0.4   | 0.4   | 0.6   | 0.6   | 0.9   | 1.1  |
| 85°   | 0.2   | 0.4   | 0.2   | 0.4   | 0.4   | 0.4   | 0.4   | 0.4   | 0.4   | 0.6   | 0.9  |
| 87.5° | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.4   | 0.6   | 0.6  |
| 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):**

|       | 112.5° | 135° | 157.5° | 180° |
|-------|--------|------|--------|------|
| 0°    | 19.8   | 19.8 | 19.8   | 19.8 |
| 2.5°  | 19.6   | 19.1 | 19.1   | 19.1 |
| 5°    | 19.1   | 18.7 | 18.7   | 18.5 |
| 7.5°  | 18.5   | 18.3 | 18.3   | 18.3 |
| 10°   | 18.1   | 17.9 | 18.1   | 18.1 |
| 12.5° | 17.2   | 17.4 | 17.6   | 17.6 |
| 15°   | 16.3   | 16.8 | 17.2   | 17.4 |
| 17.5° | 15.5   | 16.3 | 16.8   | 17.0 |
| 20°   | 14.6   | 15.7 | 16.3   | 16.6 |
| 22.5° | 14.0   | 15.1 | 15.9   | 16.3 |
| 25°   | 13.1   | 14.6 | 15.7   | 16.1 |
| 27.5° | 12.3   | 14.0 | 15.3   | 15.9 |
| 30°   | 11.6   | 13.8 | 15.3   | 15.9 |
| 32.5° | 11.0   | 13.3 | 15.1   | 15.7 |
| 35°   | 10.5   | 13.1 | 15.1   | 15.9 |
| 37.5° | 10.1   | 12.9 | 15.1   | 15.7 |
| 40°   | 9.9    | 12.7 | 15.1   | 15.7 |
| 42.5° | 9.7    | 12.7 | 15.1   | 15.9 |
| 45°   | 9.2    | 12.5 | 15.1   | 15.9 |
| 47.5° | 9.0    | 12.5 | 15.1   | 15.9 |
| 50°   | 8.8    | 12.3 | 15.1   | 16.1 |
| 52.5° | 8.6    | 12.0 | 15.1   | 16.1 |
| 55°   | 8.2    | 11.8 | 14.8   | 15.9 |
| 57.5° | 8.0    | 11.6 | 14.6   | 15.5 |
| 60°   | 7.5    | 11.2 | 14.2   | 15.3 |
| 62.5° | 7.1    | 10.8 | 13.8   | 14.6 |
| 65°   | 6.5    | 10.1 | 13.1   | 14.2 |
| 67.5° | 5.8    | 9.2  | 12.5   | 13.5 |
| 70°   | 5.2    | 8.4  | 11.6   | 12.5 |
| 72.5° | 4.5    | 7.5  | 10.8   | 11.4 |
| 75°   | 3.9    | 6.5  | 9.5    | 10.3 |
| 77.5° | 3.2    | 5.6  | 8.0    | 8.6  |
| 80°   | 2.4    | 4.3  | 6.5    | 7.1  |
| 82.5° | 1.9    | 3.2  | 4.7    | 5.2  |
| 85°   | 1.3    | 2.2  | 3.0    | 3.4  |
| 87.5° | 0.6    | 1.1  | 1.5    | 1.7  |
| 90°   | 0.0    | 0.0  | 0.0    | 0.0  |

(END OF REPORT)