

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: PORTFOLIO

Report Number: P1311038

Luminaire Tested: LDSQA3D02R509040DE010 3LSQCA45R 1MW

Issue Date: 1/29/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1311038  
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: PORTFOLIO  
Catalog Number: LDSQA3D02R509040DE010 3LSQCA45R 1MW  
Description: 3in Adjustable LED luminaire with, R50 optic, 4000K CCT AND, 90CRI , 3LSQCA45R 1MW TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

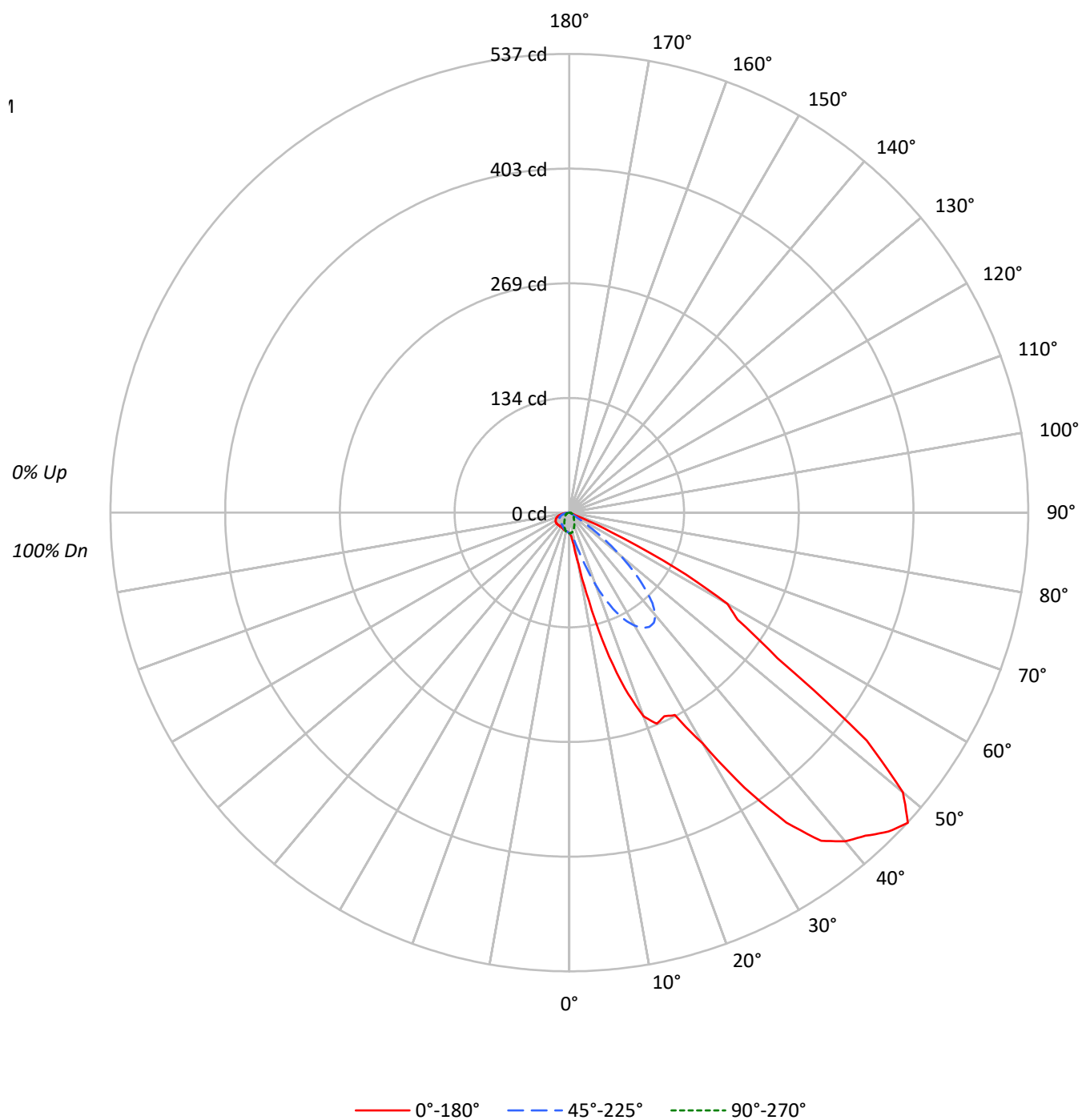
Lumens per Lamp: N/A  
Luminaire Lumens: 303.0 lumens  
Efficiency: N/A  
Efficacy: 84.2 lumens/watt  
Spacing Criteria (0/90/45): 3.58 / 0.82 / 1.91  
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')  
CIE Type: Direct

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  | 50  | 30 | 10 |
| RCR |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |    |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |    |    |
| 1   | 110 | 106 | 102 | 98  | 107 | 103 | 100 | 97  | 99  | 96  | 94  | 95  | 93  | 91  | 92  | 90  | 88  | 86  |    |    |
| 2   | 100 | 93  | 86  | 81  | 98  | 91  | 85  | 80  | 87  | 82  | 78  | 84  | 80  | 76  | 81  | 78  | 75  | 73  |    |    |
| 3   | 91  | 81  | 73  | 67  | 89  | 80  | 72  | 66  | 77  | 70  | 65  | 74  | 69  | 64  | 71  | 67  | 63  | 61  |    |    |
| 4   | 83  | 71  | 63  | 56  | 81  | 70  | 62  | 55  | 67  | 60  | 55  | 65  | 59  | 54  | 63  | 58  | 53  | 51  |    |    |
| 5   | 76  | 63  | 54  | 47  | 74  | 62  | 53  | 47  | 60  | 52  | 46  | 58  | 51  | 46  | 56  | 50  | 45  | 43  |    |    |
| 6   | 69  | 56  | 47  | 40  | 67  | 55  | 46  | 40  | 53  | 45  | 39  | 51  | 44  | 39  | 50  | 43  | 39  | 37  |    |    |
| 7   | 63  | 50  | 41  | 34  | 62  | 49  | 40  | 34  | 47  | 39  | 34  | 46  | 39  | 34  | 44  | 38  | 33  | 31  |    |    |
| 8   | 58  | 44  | 36  | 30  | 57  | 44  | 35  | 29  | 42  | 35  | 29  | 41  | 34  | 29  | 40  | 34  | 29  | 27  |    |    |
| 9   | 54  | 40  | 31  | 26  | 53  | 39  | 31  | 26  | 38  | 31  | 25  | 37  | 30  | 25  | 36  | 30  | 25  | 23  |    |    |
| 10  | 50  | 36  | 28  | 23  | 49  | 36  | 28  | 22  | 35  | 27  | 22  | 34  | 27  | 22  | 33  | 27  | 22  | 20  |    |    |

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

|     | 0°     | 45°   | 90°  | 135° | 180° |
|-----|--------|-------|------|------|------|
| 0°  | 4151   | 4151  | 4151 | 4151 | 4151 |
| 5°  | 4927   | 4616  | 4115 | 3942 | 3890 |
| 10° | 10615  | 5719  | 3935 | 3795 | 3847 |
| 15° | 29401  | 9378  | 3548 | 3637 | 3780 |
| 20° | 46479  | 16458 | 3061 | 3501 | 3702 |
| 25° | 49977  | 24171 | 2641 | 3382 | 3725 |
| 30° | 62046  | 30347 | 2287 | 3321 | 3858 |
| 35° | 93096  | 34333 | 1976 | 3364 | 4079 |
| 40° | 112905 | 35297 | 1776 | 3462 | 4294 |
| 45° | 128624 | 30274 | 1729 | 3702 | 4725 |
| 50° | 136538 | 20899 | 1742 | 3992 | 5251 |
| 55° | 89178  | 8407  | 1742 | 4324 | 5825 |
| 60° | 73574  | 1447  | 1722 | 4684 | 6407 |
| 65° | 22169  | 734   | 1589 | 5012 | 7050 |
| 70° | 906    | 806   | 1561 | 5136 | 7654 |
| 75° | 865    | 865   | 1597 | 5257 | 8384 |
| 80° | 793    | 793   | 1587 | 5157 | 8529 |
| 85° | 593    | 988   | 1976 | 5138 | 8299 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 47.5°

Luminance: 136969 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 2.5    | 0.8       |
| 10°-20°   | 14.3   | 4.7       |
| 20°-30°   | 36.9   | 12.2      |
| 30°-40°   | 66.2   | 21.9      |
| 40°-50°   | 88.5   | 29.2      |
| 50°-60°   | 67.4   | 22.2      |
| 60°-70°   | 20.5   | 6.8       |
| 70°-80°   | 4.9    | 1.6       |
| 80°-90°   | 1.8    | 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°    | 53.7   | 17.7      |
| 0°-40°    | 120.0  | 39.6      |
| 0°-60°    | 275.9  | 91.1      |
| 0°-90°    | 303.0  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 303.0  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | 45° | 90° | 135° | 180° | Flux |
|-----|-----|-----|-----|------|------|------|
| 0°  | 24  | 24  | 24  | 24   | 24   |      |
| 5°  | 28  | 27  | 24  | 23   | 22   | 4    |
| 15° | 165 | 53  | 20  | 20   | 21   | 49   |
| 25° | 263 | 127 | 14  | 18   | 20   | 126  |
| 35° | 443 | 163 | 9   | 16   | 19   | 272  |
| 45° | 528 | 124 | 7   | 15   | 19   | 404  |
| 55° | 297 | 28  | 6   | 14   | 19   | 295  |
| 65° | 54  | 2   | 4   | 12   | 17   | 75   |
| 75° | 1   | 1   | 2   | 8    | 13   | 1    |
| 85° | 0   | 0   | 1   | 3    | 4    | 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°    | 24.1  | 24.1  | 24.1  | 24.1  | 24.1  | 24.1  | 24.1  | 24.1  | 24.1  | 24.1  | 24.1 |
| 2.5°  | 25.6  | 25.6  | 25.6  | 25.6  | 25.6  | 25.6  | 25.4  | 25.4  | 25.4  | 24.9  | 24.3 |
| 5°    | 28.5  | 28.8  | 28.5  | 28.5  | 28.0  | 28.0  | 27.5  | 27.5  | 26.7  | 25.1  | 23.8 |
| 7.5°  | 37.4  | 37.2  | 36.9  | 35.9  | 35.1  | 33.2  | 32.5  | 31.1  | 28.8  | 25.1  | 23.3 |
| 10°   | 60.7  | 59.1  | 58.1  | 55.7  | 50.8  | 47.6  | 43.4  | 39.3  | 32.7  | 25.1  | 22.5 |
| 12.5° | 105.5 | 105.2 | 102.1 | 94.2  | 87.2  | 77.5  | 67.3  | 57.1  | 40.3  | 24.6  | 21.5 |
| 15°   | 164.9 | 162.5 | 158.1 | 148.9 | 136.4 | 121.2 | 102.9 | 84.8  | 52.6  | 23.8  | 19.9 |
| 17.5° | 215.7 | 212.8 | 209.4 | 200.2 | 185.8 | 166.7 | 144.7 | 119.9 | 69.4  | 22.8  | 18.3 |
| 20°   | 253.6 | 251.8 | 248.9 | 241.6 | 228.0 | 210.7 | 186.1 | 156.0 | 89.8  | 21.5  | 16.7 |
| 22.5° | 267.5 | 267.2 | 267.7 | 265.1 | 258.3 | 244.7 | 221.1 | 189.7 | 109.9 | 19.9  | 15.2 |
| 25°   | 263.0 | 262.8 | 266.2 | 269.6 | 271.1 | 265.6 | 247.6 | 217.0 | 127.2 | 18.6  | 13.9 |
| 27.5° | 267.2 | 266.4 | 264.9 | 265.4 | 269.8 | 273.0 | 264.6 | 237.9 | 142.1 | 16.7  | 12.6 |
| 30°   | 312.0 | 307.5 | 300.4 | 288.4 | 279.5 | 278.7 | 275.1 | 254.4 | 152.6 | 14.9  | 11.5 |
| 32.5° | 381.8 | 376.3 | 363.5 | 341.3 | 320.1 | 303.8 | 292.3 | 268.3 | 159.9 | 13.1  | 10.2 |
| 35°   | 442.8 | 438.9 | 424.0 | 402.0 | 371.6 | 341.3 | 320.3 | 288.7 | 163.3 | 11.5  | 9.4  |
| 37.5° | 484.2 | 482.6 | 467.9 | 444.4 | 413.5 | 377.7 | 349.9 | 309.6 | 162.5 | 9.7   | 8.6  |
| 40°   | 502.2 | 497.5 | 485.2 | 465.3 | 434.2 | 402.0 | 372.7 | 323.0 | 157.0 | 7.9   | 7.9  |
| 42.5° | 513.0 | 507.7 | 494.4 | 475.5 | 444.9 | 410.6 | 375.3 | 317.2 | 143.9 | 6.3   | 7.6  |
| 45°   | 528.1 | 522.6 | 505.1 | 485.0 | 454.1 | 414.3 | 365.1 | 296.8 | 124.3 | 4.7   | 7.1  |
| 47.5° | 537.3 | 533.6 | 520.5 | 500.4 | 463.0 | 409.1 | 341.5 | 277.7 | 102.6 | 3.7   | 6.8  |
| 50°   | 509.6 | 505.9 | 496.2 | 482.3 | 457.2 | 391.5 | 320.9 | 246.8 | 78.0  | 2.9   | 6.5  |
| 52.5° | 438.6 | 441.8 | 443.6 | 447.5 | 429.2 | 352.3 | 290.0 | 222.2 | 52.6  | 2.4   | 6.0  |
| 55°   | 297.0 | 301.8 | 307.0 | 322.7 | 344.2 | 313.5 | 257.5 | 192.1 | 28.0  | 2.4   | 5.8  |
| 57.5° | 233.4 | 231.9 | 230.3 | 229.3 | 246.0 | 258.6 | 226.4 | 153.6 | 12.0  | 2.4   | 5.2  |
| 60°   | 213.6 | 208.8 | 205.7 | 206.5 | 214.9 | 209.9 | 179.3 | 100.2 | 4.2   | 2.4   | 5.0  |
| 62.5° | 140.0 | 143.7 | 150.7 | 162.8 | 157.0 | 134.8 | 104.2 | 39.8  | 2.1   | 2.4   | 4.4  |
| 65°   | 54.4  | 52.6  | 54.4  | 57.8  | 50.0  | 37.2  | 23.3  | 7.1   | 1.8   | 2.1   | 3.9  |
| 67.5° | 7.3   | 6.5   | 5.0   | 3.1   | 2.9   | 2.6   | 2.1   | 1.8   | 1.8   | 2.1   | 3.7  |
| 70°   | 1.8   | 1.8   | 1.8   | 1.8   | 1.8   | 1.8   | 1.8   | 1.6   | 1.6   | 1.8   | 3.1  |
| 72.5° | 1.6   | 1.6   | 1.6   | 1.6   | 1.6   | 1.6   | 1.6   | 1.6   | 1.6   | 1.8   | 2.6  |
| 75°   | 1.3   | 1.3   | 1.3   | 1.3   | 1.3   | 1.3   | 1.3   | 1.3   | 1.3   | 1.6   | 2.4  |
| 77.5° | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.3   | 1.8  |
| 80°   | 0.8   | 0.8   | 0.8   | 0.8   | 0.8   | 0.8   | 0.8   | 0.8   | 0.8   | 1.0   | 1.6  |
| 82.5° | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   | 0.8   | 0.8   | 1.0   | 1.3  |
| 85°   | 0.3   | 0.5   | 0.3   | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   | 0.8   | 1.0  |
| 87.5° | 0.3   | 0.3   | 0.3   | 0.3   | 0.3   | 0.3   | 0.3   | 0.3   | 0.5   | 0.8   | 0.8  |
| 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°    | 24.1   | 24.1 | 24.1   | 24.1 |
| 2.5°  | 23.8   | 23.3 | 23.3   | 23.3 |
| 5°    | 23.3   | 22.8 | 22.8   | 22.5 |
| 7.5°  | 22.5   | 22.2 | 22.2   | 22.2 |
| 10°   | 22.0   | 21.7 | 22.0   | 22.0 |
| 12.5° | 20.9   | 21.2 | 21.5   | 21.5 |
| 15°   | 19.9   | 20.4 | 20.9   | 21.2 |
| 17.5° | 18.8   | 19.9 | 20.4   | 20.7 |
| 20°   | 17.8   | 19.1 | 19.9   | 20.2 |
| 22.5° | 17.0   | 18.3 | 19.4   | 19.9 |
| 25°   | 16.0   | 17.8 | 19.1   | 19.6 |
| 27.5° | 14.9   | 17.0 | 18.6   | 19.4 |
| 30°   | 14.1   | 16.7 | 18.6   | 19.4 |
| 32.5° | 13.3   | 16.2 | 18.3   | 19.1 |
| 35°   | 12.8   | 16.0 | 18.3   | 19.4 |
| 37.5° | 12.3   | 15.7 | 18.3   | 19.1 |
| 40°   | 12.0   | 15.4 | 18.3   | 19.1 |
| 42.5° | 11.8   | 15.4 | 18.3   | 19.4 |
| 45°   | 11.3   | 15.2 | 18.3   | 19.4 |
| 47.5° | 11.0   | 15.2 | 18.3   | 19.4 |
| 50°   | 10.7   | 14.9 | 18.3   | 19.6 |
| 52.5° | 10.5   | 14.7 | 18.3   | 19.6 |
| 55°   | 9.9    | 14.4 | 18.1   | 19.4 |
| 57.5° | 9.7    | 14.1 | 17.8   | 18.8 |
| 60°   | 9.2    | 13.6 | 17.3   | 18.6 |
| 62.5° | 8.6    | 13.1 | 16.7   | 17.8 |
| 65°   | 7.9    | 12.3 | 16.0   | 17.3 |
| 67.5° | 7.1    | 11.3 | 15.2   | 16.5 |
| 70°   | 6.3    | 10.2 | 14.1   | 15.2 |
| 72.5° | 5.5    | 9.2  | 13.1   | 13.9 |
| 75°   | 4.7    | 7.9  | 11.5   | 12.6 |
| 77.5° | 3.9    | 6.8  | 9.7    | 10.5 |
| 80°   | 2.9    | 5.2  | 7.9    | 8.6  |
| 82.5° | 2.4    | 3.9  | 5.8    | 6.3  |
| 85°   | 1.6    | 2.6  | 3.7    | 4.2  |
| 87.5° | 0.8    | 1.3  | 1.8    | 2.1  |
| 90°   | 0.0    | 0.0  | 0.0    | 0.0  |

(END OF REPORT)