

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: P1320155

Luminaire Tested: LDSQA3D13R509840DE010 3LSQCA45R 1MB

Issue Date: 1/29/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1320155  
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: LDSQA3D13R509840DE010 3LSQCA45R 1MB  
Description: 3in Adjustable LED luminaire with, R50 optic, 4000K CCT AND, 98CRI , 3LSQCA45R 1MB TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

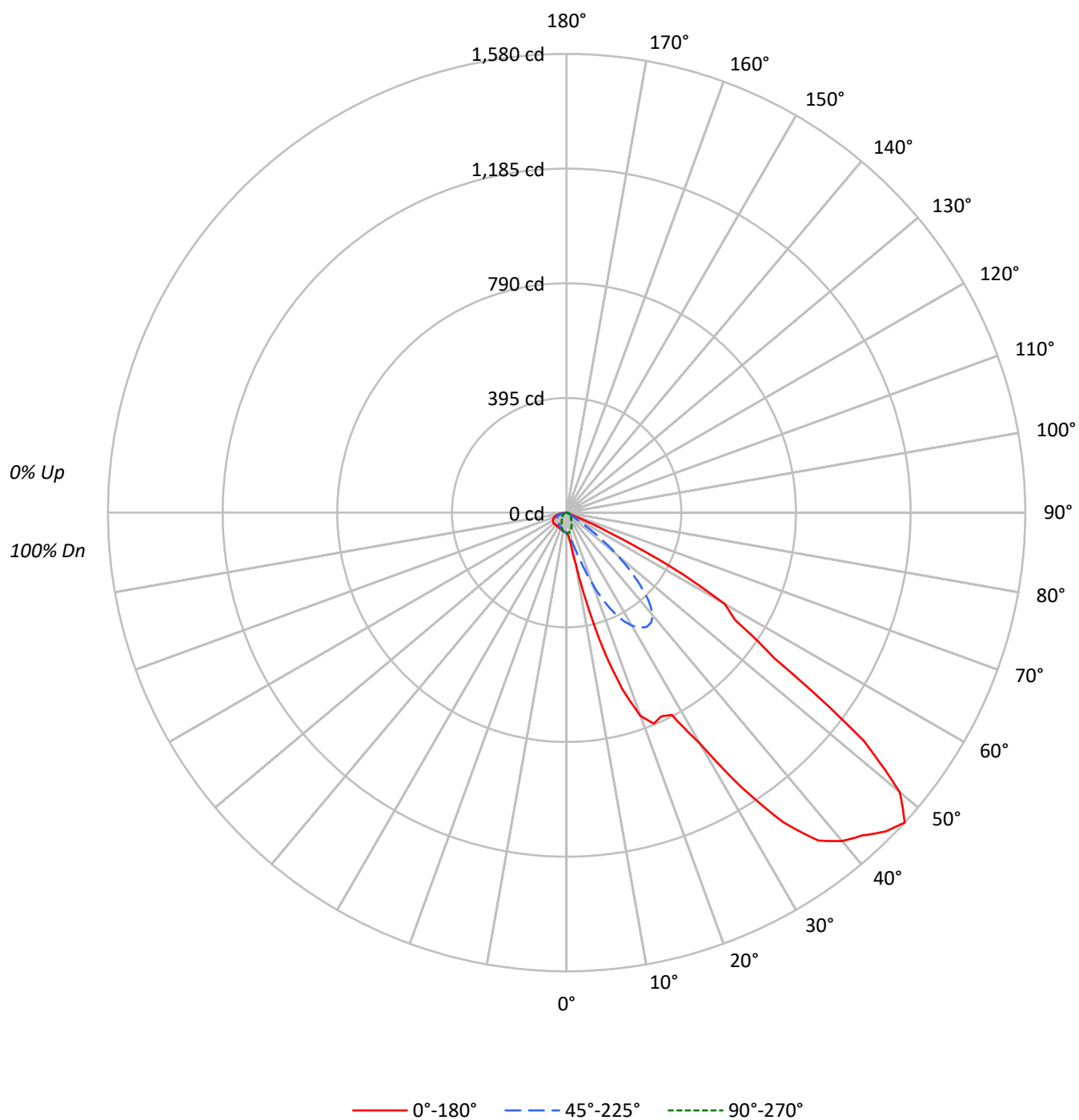
Lumens per Lamp: N/A  
Luminaire Lumens: 891.0 lumens  
Efficiency: N/A  
Efficacy: 61.4 lumens/watt  
Spacing Criteria (0/90/45): 3.58 / 0.82 / 1.91  
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')  
CIE Type: Direct

Input Watts (W): 14.5  
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°  | 12193  | 12193  | 12193 | 12193 | 12193 |
| 5°  | 14505  | 13571  | 12102 | 11583 | 11445 |
| 10° | 31216  | 16823  | 11577 | 11175 | 11297 |
| 15° | 86439  | 27583  | 10430 | 10698 | 11108 |
| 20° | 136669 | 48385  | 9035  | 10300 | 10868 |
| 25° | 146967 | 71070  | 7753  | 9938  | 10965 |
| 30° | 182439 | 89231  | 6742  | 9804  | 11315 |
| 35° | 273760 | 100960 | 5824  | 9860  | 11963 |
| 40° | 332015 | 103822 | 5193  | 10207 | 12635 |
| 45° | 378248 | 89045  | 5066  | 10863 | 13859 |
| 50° | 401468 | 61437  | 5144  | 11762 | 15460 |
| 55° | 262278 | 24711  | 5074  | 12701 | 17085 |
| 60° | 216312 | 4237   | 5029  | 13778 | 18807 |
| 65° | 65243  | 2201   | 4686  | 14752 | 20702 |
| 70° | 2719   | 2316   | 4633  | 15106 | 22458 |
| 75° | 2529   | 2529   | 4591  | 15371 | 24554 |
| 80° | 2281   | 2281   | 4562  | 15274 | 25191 |
| 85° | 1581   | 2964   | 6126  | 15215 | 24305 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 47.5°

Luminance: 402776 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 7.4    | 0.8       |
| 10°-20°   | 42.2   | 4.7       |
| 20°-30°   | 108.5  | 12.2      |
| 30°-40°   | 194.8  | 21.9      |
| 40°-50°   | 260.2  | 29.2      |
| 50°-60°   | 198.2  | 22.2      |
| 60°-70°   | 60.2   | 6.8       |
| 70°-80°   | 14.4   | 1.6       |
| 80°-90°   | 5.2    | 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°    | 158.0  | 17.7      |
| 0°-40°    | 352.8  | 39.6      |
| 0°-60°    | 811.3  | 91.1      |
| 0°-90°    | 891.0  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 891.0  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 45° | 90° | 135° | 180° | Flux |
|-----|------|-----|-----|------|------|------|
| 0°  | 71   | 71  | 71  | 71   | 71   |      |
| 5°  | 84   | 78  | 70  | 67   | 66   | 11   |
| 15° | 485  | 155 | 58  | 60   | 62   | 143  |
| 25° | 773  | 374 | 41  | 52   | 58   | 369  |
| 35° | 1302 | 480 | 28  | 47   | 57   | 799  |
| 45° | 1553 | 366 | 21  | 45   | 57   | 1187 |
| 55° | 874  | 82  | 17  | 42   | 57   | 869  |
| 65° | 160  | 5   | 12  | 36   | 51   | 221  |
| 75° | 4    | 4   | 7   | 23   | 37   | 4    |
| 85° | 1    | 2   | 3   | 8    | 12   | 1    |
| 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°    | 70.8   | 70.8   | 70.8   | 70.8   | 70.8   | 70.8   | 70.8   | 70.8  | 70.8  | 70.8  | 70.8 |
| 2.5°  | 75.4   | 75.4   | 75.4   | 75.4   | 75.4   | 75.4   | 74.7   | 74.7  | 74.7  | 73.1  | 71.6 |
| 5°    | 83.9   | 84.7   | 83.9   | 83.9   | 82.3   | 82.3   | 80.8   | 80.8  | 78.5  | 73.9  | 70.0 |
| 7.5°  | 110.1  | 109.3  | 108.5  | 105.4  | 103.1  | 97.7   | 95.4   | 91.6  | 84.7  | 73.9  | 68.5 |
| 10°   | 178.5  | 173.9  | 170.8  | 163.9  | 149.3  | 140.1  | 127.8  | 115.4 | 96.2  | 73.9  | 66.2 |
| 12.5° | 310.1  | 309.4  | 300.1  | 277.1  | 256.3  | 227.8  | 197.8  | 167.8 | 118.5 | 72.3  | 63.1 |
| 15°   | 484.8  | 477.9  | 464.8  | 437.9  | 401.0  | 356.3  | 302.4  | 249.3 | 154.7 | 70.0  | 58.5 |
| 17.5° | 634.1  | 625.7  | 615.7  | 588.7  | 546.4  | 490.2  | 425.6  | 352.5 | 203.9 | 67.0  | 53.9 |
| 20°   | 745.7  | 740.3  | 731.9  | 710.3  | 670.3  | 619.5  | 547.2  | 458.7 | 264.0 | 63.1  | 49.3 |
| 22.5° | 786.5  | 785.8  | 787.3  | 779.6  | 759.6  | 719.6  | 650.3  | 558.0 | 323.2 | 58.5  | 44.6 |
| 25°   | 773.4  | 772.7  | 782.7  | 792.7  | 797.3  | 781.1  | 728.0  | 638.0 | 374.0 | 54.6  | 40.8 |
| 27.5° | 785.8  | 783.4  | 778.8  | 780.4  | 793.4  | 802.7  | 778.1  | 699.6 | 417.9 | 49.3  | 36.9 |
| 30°   | 917.4  | 904.3  | 883.5  | 848.1  | 821.9  | 819.6  | 808.8  | 748.0 | 448.7 | 43.9  | 33.9 |
| 32.5° | 1122.8 | 1106.7 | 1069.0 | 1003.5 | 941.2  | 893.5  | 859.6  | 788.8 | 470.2 | 38.5  | 30.0 |
| 35°   | 1302.1 | 1290.6 | 1246.7 | 1182.1 | 1092.8 | 1003.5 | 942.0  | 848.9 | 480.2 | 33.9  | 27.7 |
| 37.5° | 1423.7 | 1419.1 | 1376.0 | 1306.8 | 1216.0 | 1110.5 | 1028.9 | 910.4 | 477.9 | 28.5  | 25.4 |
| 40°   | 1476.8 | 1463.0 | 1426.8 | 1368.3 | 1276.8 | 1182.1 | 1095.9 | 949.7 | 461.8 | 23.1  | 23.1 |
| 42.5° | 1508.4 | 1493.0 | 1453.8 | 1398.3 | 1308.3 | 1207.5 | 1103.6 | 932.7 | 423.3 | 18.5  | 22.3 |
| 45°   | 1553.0 | 1536.9 | 1485.3 | 1426.1 | 1335.2 | 1218.3 | 1073.6 | 872.7 | 365.6 | 13.9  | 20.8 |
| 47.5° | 1580.0 | 1569.2 | 1530.7 | 1471.5 | 1361.4 | 1202.9 | 1004.3 | 816.5 | 301.7 | 10.8  | 20.0 |
| 50°   | 1498.4 | 1487.6 | 1459.1 | 1418.4 | 1344.5 | 1151.3 | 943.5  | 725.7 | 229.3 | 8.5   | 19.2 |
| 52.5° | 1289.8 | 1299.1 | 1304.5 | 1316.0 | 1262.1 | 1035.9 | 852.7  | 653.4 | 154.7 | 6.9   | 17.7 |
| 55°   | 873.5  | 887.3  | 902.7  | 948.9  | 1012.0 | 922.0  | 757.3  | 564.9 | 82.3  | 6.9   | 16.9 |
| 57.5° | 686.5  | 681.9  | 677.2  | 674.2  | 723.4  | 760.4  | 665.7  | 451.8 | 35.4  | 6.9   | 15.4 |
| 60°   | 628.0  | 614.1  | 604.9  | 607.2  | 631.8  | 617.2  | 527.2  | 294.8 | 12.3  | 6.9   | 14.6 |
| 62.5° | 411.7  | 422.5  | 443.3  | 478.7  | 461.8  | 396.3  | 306.3  | 117.0 | 6.2   | 6.9   | 13.1 |
| 65°   | 160.1  | 154.7  | 160.1  | 170.1  | 147.0  | 109.3  | 68.5   | 20.8  | 5.4   | 6.2   | 11.5 |
| 67.5° | 21.5   | 19.2   | 14.6   | 9.2    | 8.5    | 7.7    | 6.2    | 5.4   | 5.4   | 6.2   | 10.8 |
| 70°   | 5.4    | 5.4    | 5.4    | 5.4    | 5.4    | 5.4    | 5.4    | 4.6   | 4.6   | 5.4   | 9.2  |
| 72.5° | 4.6    | 4.6    | 4.6    | 4.6    | 4.6    | 4.6    | 4.6    | 4.6   | 4.6   | 5.4   | 7.7  |
| 75°   | 3.8    | 3.8    | 3.8    | 3.8    | 3.8    | 3.8    | 3.8    | 3.8   | 3.8   | 4.6   | 6.9  |
| 77.5° | 3.1    | 3.1    | 3.1    | 3.1    | 3.1    | 3.1    | 3.1    | 3.1   | 3.1   | 3.8   | 5.4  |
| 80°   | 2.3    | 2.3    | 2.3    | 2.3    | 2.3    | 2.3    | 2.3    | 2.3   | 2.3   | 3.1   | 4.6  |
| 82.5° | 1.5    | 1.5    | 1.5    | 1.5    | 1.5    | 1.5    | 1.5    | 2.3   | 2.3   | 3.1   | 3.8  |
| 85°   | 0.8    | 1.5    | 0.8    | 1.5    | 1.5    | 1.5    | 1.5    | 1.5   | 1.5   | 2.3   | 3.1  |
| 87.5° | 0.8    | 0.8    | 0.8    | 0.8    | 0.8    | 0.8    | 0.8    | 0.8   | 1.5   | 2.3   | 2.3  |
| 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°    | 70.8   | 70.8 | 70.8   | 70.8 |
| 2.5°  | 70.0   | 68.5 | 68.5   | 68.5 |
| 5°    | 68.5   | 67.0 | 67.0   | 66.2 |
| 7.5°  | 66.2   | 65.4 | 65.4   | 65.4 |
| 10°   | 64.6   | 63.9 | 64.6   | 64.6 |
| 12.5° | 61.6   | 62.3 | 63.1   | 63.1 |
| 15°   | 58.5   | 60.0 | 61.6   | 62.3 |
| 17.5° | 55.4   | 58.5 | 60.0   | 60.8 |
| 20°   | 52.3   | 56.2 | 58.5   | 59.3 |
| 22.5° | 50.0   | 53.9 | 56.9   | 58.5 |
| 25°   | 46.9   | 52.3 | 56.2   | 57.7 |
| 27.5° | 43.9   | 50.0 | 54.6   | 56.9 |
| 30°   | 41.6   | 49.3 | 54.6   | 56.9 |
| 32.5° | 39.2   | 47.7 | 53.9   | 56.2 |
| 35°   | 37.7   | 46.9 | 53.9   | 56.9 |
| 37.5° | 36.2   | 46.2 | 53.9   | 56.2 |
| 40°   | 35.4   | 45.4 | 53.9   | 56.2 |
| 42.5° | 34.6   | 45.4 | 53.9   | 56.9 |
| 45°   | 33.1   | 44.6 | 53.9   | 56.9 |
| 47.5° | 32.3   | 44.6 | 53.9   | 56.9 |
| 50°   | 31.6   | 43.9 | 53.9   | 57.7 |
| 52.5° | 30.8   | 43.1 | 53.9   | 57.7 |
| 55°   | 29.2   | 42.3 | 53.1   | 56.9 |
| 57.5° | 28.5   | 41.6 | 52.3   | 55.4 |
| 60°   | 26.9   | 40.0 | 50.8   | 54.6 |
| 62.5° | 25.4   | 38.5 | 49.3   | 52.3 |
| 65°   | 23.1   | 36.2 | 46.9   | 50.8 |
| 67.5° | 20.8   | 33.1 | 44.6   | 48.5 |
| 70°   | 18.5   | 30.0 | 41.6   | 44.6 |
| 72.5° | 16.2   | 26.9 | 38.5   | 40.8 |
| 75°   | 13.9   | 23.1 | 33.9   | 36.9 |
| 77.5° | 11.5   | 20.0 | 28.5   | 30.8 |
| 80°   | 8.5    | 15.4 | 23.1   | 25.4 |
| 82.5° | 6.9    | 11.5 | 16.9   | 18.5 |
| 85°   | 4.6    | 7.7  | 10.8   | 12.3 |
| 87.5° | 2.3    | 3.8  | 5.4    | 6.2  |
| 90°   | 0.0    | 0.0  | 0.0    | 0.0  |

(END OF REPORT)