

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: P1320156

Luminaire Tested: LDSQA3D13R509840DE010 3LSQCA45R 1MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1320156
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 1MMS
Description: 3in Adjustable LED luminaire with, R50 optic, 4000K CCT AND, 98CRI , 3LSQCA45R 1MMS TRII
Light Source: -
Ballast/Driver: -

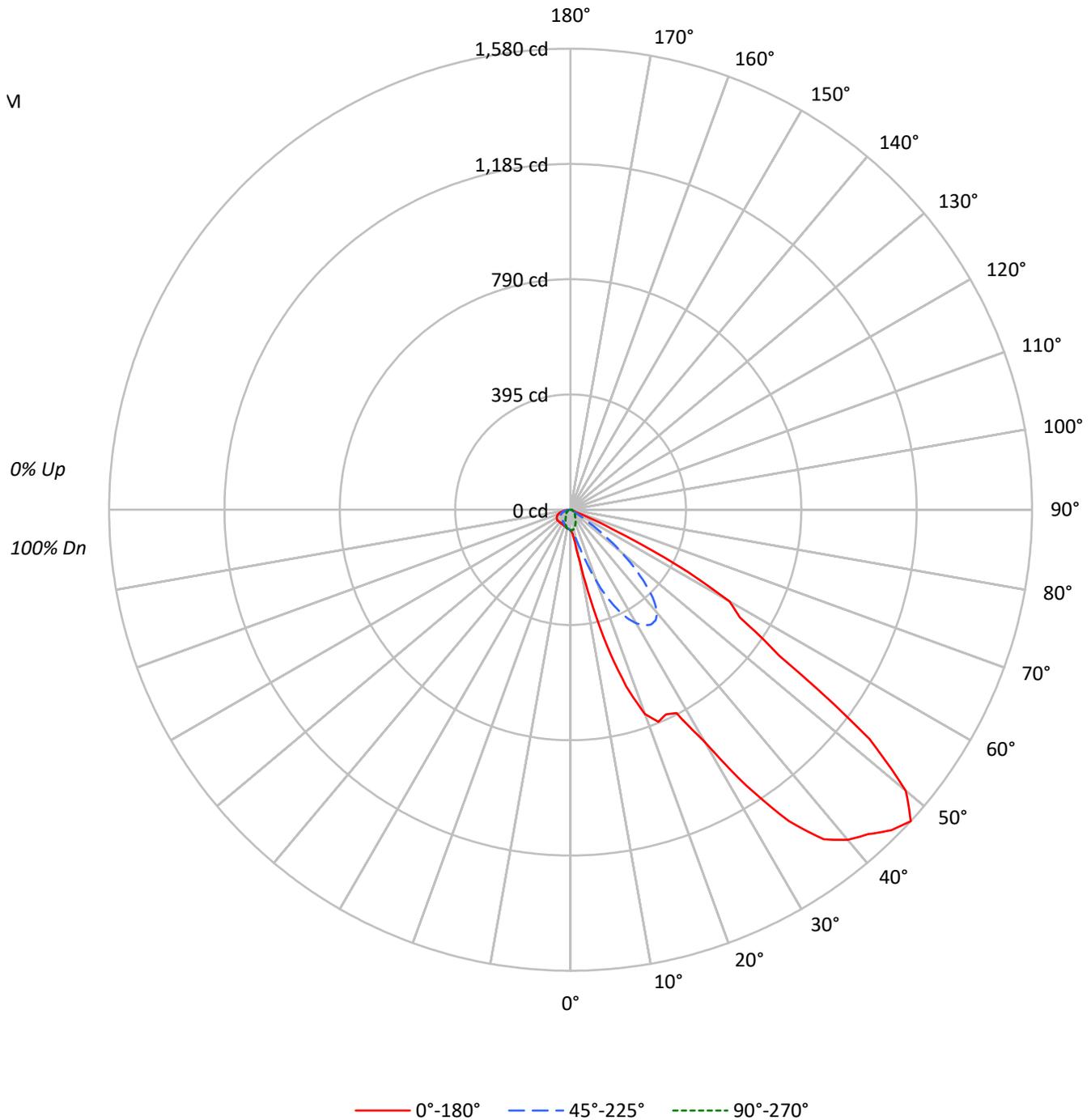
Summary

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





TEST NUMBER: P1320156

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

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)