

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: P1317529

Luminaire Tested: LDSQA3D13R509827DE010 3LSQCA45R 1MW

Issue Date: 1/29/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1317529  
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: LDSQA3D13R509827DE010 3LSQCA45R 1MW  
Description: 3in Adjustable LED luminaire with, R50 optic, 2700K CCT AND, 98CRI , 3LSQCA45R 1MW TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

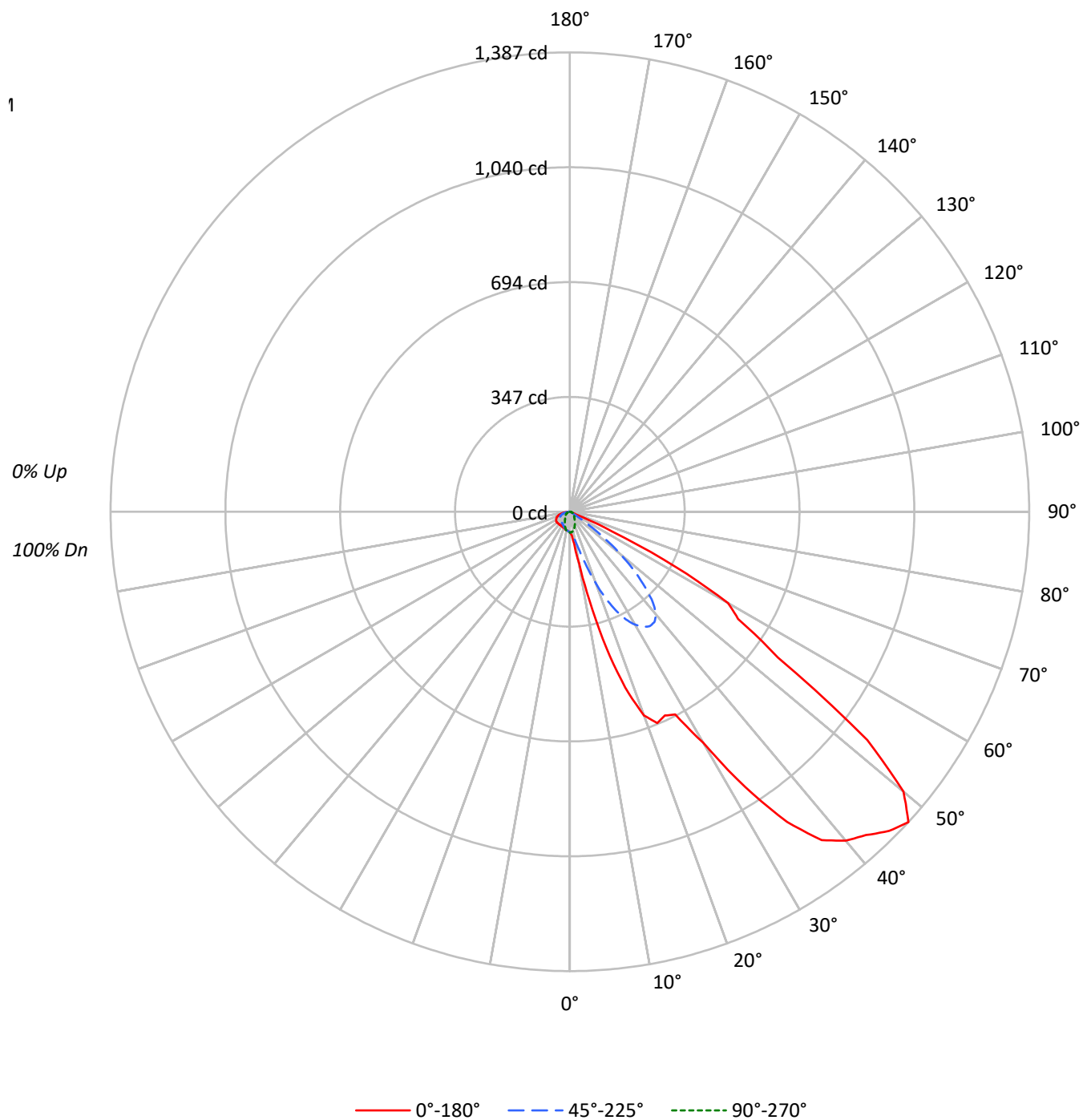
Lumens per Lamp: N/A  
Luminaire Lumens: 782.0 lumens  
Efficiency: N/A  
Efficacy: 53.9 lumens/watt  
Spacing Criteria (0/90/45): 3.58 / 0.83 / 1.91  
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')  
CIE Type: Direct

Input Watts (W): 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  | 0   |  |  |
| 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°  | 10695  | 10695 | 10695 | 10695 | 10695 |
| 5°  | 12724  | 11911 | 10632 | 10165 | 10044 |
| 10° | 27404  | 14760 | 10160 | 9811  | 9916  |
| 15° | 75866  | 24213 | 9147  | 9396  | 9753  |
| 20° | 119954 | 42465 | 7918  | 9035  | 9530  |
| 25° | 128990 | 62386 | 6803  | 8722  | 9634  |
| 30° | 160107 | 78313 | 5906  | 8591  | 9943  |
| 35° | 240289 | 88618 | 5109  | 8662  | 10512 |
| 40° | 291413 | 91120 | 4564  | 8970  | 11084 |
| 45° | 331972 | 78134 | 4433  | 9548  | 12178 |
| 50° | 352356 | 53934 | 4528  | 10315 | 13584 |
| 55° | 230180 | 21709 | 4474  | 11140 | 15013 |
| 60° | 189858 | 3720  | 4409  | 12090 | 16533 |
| 65° | 57256  | 1915  | 4116  | 12918 | 18175 |
| 70° | 2367   | 2065  | 4079  | 13243 | 19739 |
| 75° | 2262   | 2262  | 4059  | 13508 | 21560 |
| 80° | 1984   | 1984  | 4066  | 13389 | 22117 |
| 85° | 1383   | 2766  | 5335  | 13437 | 21341 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle:  $47.5^\circ$

Luminance: 353500 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 6.5    | 0.8       |
| 10°-20°   | 37.0   | 4.7       |
| 20°-30°   | 95.2   | 12.2      |
| 30°-40°   | 171.0  | 21.9      |
| 40°-50°   | 228.4  | 29.2      |
| 50°-60°   | 174.0  | 22.2      |
| 60°-70°   | 52.8   | 6.8       |
| 70°-80°   | 12.6   | 1.6       |
| 80°-90°   | 4.6    | 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°    | 138.7  | 17.7      |
| 0°-40°    | 309.7  | 39.6      |
| 0°-60°    | 712.0  | 91.1      |
| 0°-90°    | 782.0  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 782.0  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 45° | 90° | 135° | 180° | Flux |
|-----|------|-----|-----|------|------|------|
| 0°  | 62   | 62  | 62  | 62   | 62   |      |
| 5°  | 74   | 69  | 62  | 59   | 58   | 9    |
| 15° | 426  | 136 | 51  | 53   | 55   | 125  |
| 25° | 679  | 328 | 36  | 46   | 51   | 324  |
| 35° | 1143 | 422 | 24  | 41   | 50   | 702  |
| 45° | 1363 | 321 | 18  | 39   | 50   | 1042 |
| 55° | 767  | 72  | 15  | 37   | 50   | 763  |
| 65° | 140  | 5   | 10  | 32   | 45   | 194  |
| 75° | 3    | 3   | 6   | 20   | 32   | 4    |
| 85° | 1    | 1   | 3   | 7    | 11   | 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°    | 62.1   | 62.1   | 62.1   | 62.1   | 62.1   | 62.1   | 62.1  | 62.1  | 62.1  | 62.1  | 62.1 |
| 2.5°  | 66.2   | 66.2   | 66.2   | 66.2   | 66.2   | 66.2   | 65.5  | 65.5  | 65.5  | 64.2  | 62.8 |
| 5°    | 73.6   | 74.3   | 73.6   | 73.6   | 72.3   | 72.3   | 70.9  | 70.9  | 68.9  | 64.8  | 61.5 |
| 7.5°  | 96.6   | 95.9   | 95.2   | 92.5   | 90.5   | 85.8   | 83.8  | 80.4  | 74.3  | 64.8  | 60.1 |
| 10°   | 156.7  | 152.7  | 149.9  | 143.9  | 131.0  | 122.9  | 112.1 | 101.3 | 84.4  | 64.8  | 58.1 |
| 12.5° | 272.2  | 271.5  | 263.4  | 243.2  | 224.9  | 199.9  | 173.6 | 147.2 | 104.0 | 63.5  | 55.4 |
| 15°   | 425.5  | 419.5  | 408.0  | 384.3  | 351.9  | 312.7  | 265.4 | 218.8 | 135.8 | 61.5  | 51.3 |
| 17.5° | 556.6  | 549.1  | 540.4  | 516.7  | 479.6  | 430.3  | 373.5 | 309.4 | 179.0 | 58.8  | 47.3 |
| 20°   | 654.5  | 649.8  | 642.3  | 623.4  | 588.3  | 543.7  | 480.2 | 402.6 | 231.7 | 55.4  | 43.2 |
| 22.5° | 690.3  | 689.6  | 691.0  | 684.2  | 666.7  | 631.5  | 570.8 | 489.7 | 283.7 | 51.3  | 39.2 |
| 25°   | 678.8  | 678.1  | 686.9  | 695.7  | 699.8  | 685.6  | 639.0 | 559.9 | 328.3 | 48.0  | 35.8 |
| 27.5° | 689.6  | 687.6  | 683.5  | 684.9  | 696.4  | 704.5  | 682.9 | 614.0 | 366.8 | 43.2  | 32.4 |
| 30°   | 805.1  | 793.6  | 775.4  | 744.3  | 721.4  | 719.3  | 709.9 | 656.5 | 393.8 | 38.5  | 29.7 |
| 32.5° | 985.5  | 971.3  | 938.2  | 880.8  | 826.1  | 784.2  | 754.5 | 692.3 | 412.7 | 33.8  | 26.3 |
| 35°   | 1142.9 | 1132.7 | 1094.2 | 1037.5 | 959.1  | 880.8  | 826.7 | 745.0 | 421.5 | 29.7  | 24.3 |
| 37.5° | 1249.6 | 1245.5 | 1207.7 | 1146.9 | 1067.2 | 974.7  | 903.1 | 799.1 | 419.5 | 25.0  | 22.3 |
| 40°   | 1296.2 | 1284.0 | 1252.3 | 1200.9 | 1120.6 | 1037.5 | 961.8 | 833.5 | 405.3 | 20.3  | 20.3 |
| 42.5° | 1323.9 | 1310.4 | 1275.9 | 1227.3 | 1148.3 | 1059.8 | 968.6 | 818.6 | 371.5 | 16.2  | 19.6 |
| 45°   | 1363.0 | 1348.9 | 1303.6 | 1251.6 | 1171.9 | 1069.2 | 942.2 | 766.0 | 320.8 | 12.2  | 18.2 |
| 47.5° | 1386.7 | 1377.2 | 1343.5 | 1291.4 | 1194.9 | 1055.7 | 881.5 | 716.6 | 264.8 | 9.5   | 17.6 |
| 50°   | 1315.1 | 1305.6 | 1280.6 | 1244.8 | 1180.0 | 1010.5 | 828.1 | 636.9 | 201.3 | 7.4   | 16.9 |
| 52.5° | 1132.0 | 1140.1 | 1144.9 | 1155.0 | 1107.7 | 909.1  | 748.4 | 573.5 | 135.8 | 6.1   | 15.5 |
| 55°   | 766.6  | 778.8  | 792.3  | 832.8  | 888.2  | 809.2  | 664.6 | 495.8 | 72.3  | 6.1   | 14.9 |
| 57.5° | 602.5  | 598.4  | 594.4  | 591.7  | 634.9  | 667.3  | 584.3 | 396.5 | 31.1  | 6.1   | 13.5 |
| 60°   | 551.2  | 539.0  | 530.9  | 532.9  | 554.5  | 541.7  | 462.7 | 258.7 | 10.8  | 6.1   | 12.8 |
| 62.5° | 361.4  | 370.8  | 389.1  | 420.1  | 405.3  | 347.9  | 268.8 | 102.7 | 5.4   | 6.1   | 11.5 |
| 65°   | 140.5  | 135.8  | 140.5  | 149.3  | 129.0  | 95.9   | 60.1  | 18.2  | 4.7   | 5.4   | 10.1 |
| 67.5° | 18.9   | 16.9   | 12.8   | 8.1    | 7.4    | 6.8    | 5.4   | 4.7   | 4.7   | 5.4   | 9.5  |
| 70°   | 4.7    | 4.7    | 4.7    | 4.7    | 4.7    | 4.7    | 4.7   | 4.1   | 4.1   | 4.7   | 8.1  |
| 72.5° | 4.1    | 4.1    | 4.1    | 4.1    | 4.1    | 4.1    | 4.1   | 4.1   | 4.1   | 4.7   | 6.8  |
| 75°   | 3.4    | 3.4    | 3.4    | 3.4    | 3.4    | 3.4    | 3.4   | 3.4   | 3.4   | 4.1   | 6.1  |
| 77.5° | 2.7    | 2.7    | 2.7    | 2.7    | 2.7    | 2.7    | 2.7   | 2.7   | 2.7   | 3.4   | 4.7  |
| 80°   | 2.0    | 2.0    | 2.0    | 2.0    | 2.0    | 2.0    | 2.0   | 2.0   | 2.0   | 2.7   | 4.1  |
| 82.5° | 1.4    | 1.4    | 1.4    | 1.4    | 1.4    | 1.4    | 1.4   | 2.0   | 2.0   | 2.7   | 3.4  |
| 85°   | 0.7    | 1.4    | 0.7    | 1.4    | 1.4    | 1.4    | 1.4   | 1.4   | 1.4   | 2.0   | 2.7  |
| 87.5° | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7   | 0.7   | 1.4   | 2.0   | 2.0  |
| 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°    | 62.1   | 62.1 | 62.1   | 62.1 |
| 2.5°  | 61.5   | 60.1 | 60.1   | 60.1 |
| 5°    | 60.1   | 58.8 | 58.8   | 58.1 |
| 7.5°  | 58.1   | 57.4 | 57.4   | 57.4 |
| 10°   | 56.7   | 56.1 | 56.7   | 56.7 |
| 12.5° | 54.0   | 54.7 | 55.4   | 55.4 |
| 15°   | 51.3   | 52.7 | 54.0   | 54.7 |
| 17.5° | 48.6   | 51.3 | 52.7   | 53.4 |
| 20°   | 45.9   | 49.3 | 51.3   | 52.0 |
| 22.5° | 43.9   | 47.3 | 50.0   | 51.3 |
| 25°   | 41.2   | 45.9 | 49.3   | 50.7 |
| 27.5° | 38.5   | 43.9 | 48.0   | 50.0 |
| 30°   | 36.5   | 43.2 | 48.0   | 50.0 |
| 32.5° | 34.4   | 41.9 | 47.3   | 49.3 |
| 35°   | 33.1   | 41.2 | 47.3   | 50.0 |
| 37.5° | 31.7   | 40.5 | 47.3   | 49.3 |
| 40°   | 31.1   | 39.9 | 47.3   | 49.3 |
| 42.5° | 30.4   | 39.9 | 47.3   | 50.0 |
| 45°   | 29.0   | 39.2 | 47.3   | 50.0 |
| 47.5° | 28.4   | 39.2 | 47.3   | 50.0 |
| 50°   | 27.7   | 38.5 | 47.3   | 50.7 |
| 52.5° | 27.0   | 37.8 | 47.3   | 50.7 |
| 55°   | 25.7   | 37.1 | 46.6   | 50.0 |
| 57.5° | 25.0   | 36.5 | 45.9   | 48.6 |
| 60°   | 23.6   | 35.1 | 44.6   | 48.0 |
| 62.5° | 22.3   | 33.8 | 43.2   | 45.9 |
| 65°   | 20.3   | 31.7 | 41.2   | 44.6 |
| 67.5° | 18.2   | 29.0 | 39.2   | 42.6 |
| 70°   | 16.2   | 26.3 | 36.5   | 39.2 |
| 72.5° | 14.2   | 23.6 | 33.8   | 35.8 |
| 75°   | 12.2   | 20.3 | 29.7   | 32.4 |
| 77.5° | 10.1   | 17.6 | 25.0   | 27.0 |
| 80°   | 7.4    | 13.5 | 20.3   | 22.3 |
| 82.5° | 6.1    | 10.1 | 14.9   | 16.2 |
| 85°   | 4.1    | 6.8  | 9.5    | 10.8 |
| 87.5° | 2.0    | 3.4  | 4.7    | 5.4  |
| 90°   | 0.0    | 0.0  | 0.0    | 0.0  |

(END OF REPORT)