

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: P1309615

Luminaire Tested: P3SQAS24R459035D010 E3SQCA451MB

Issue Date: 1/29/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1309615  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-84)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/29/2026  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: IRiS  
Catalog Number: P3SQAS24R459035D010 E3SQCA451MB  
Description: 3in Adjustable LED luminaire with, R45 optic, 3500K CCT AND, 90CRI , E3SQCA451MB TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

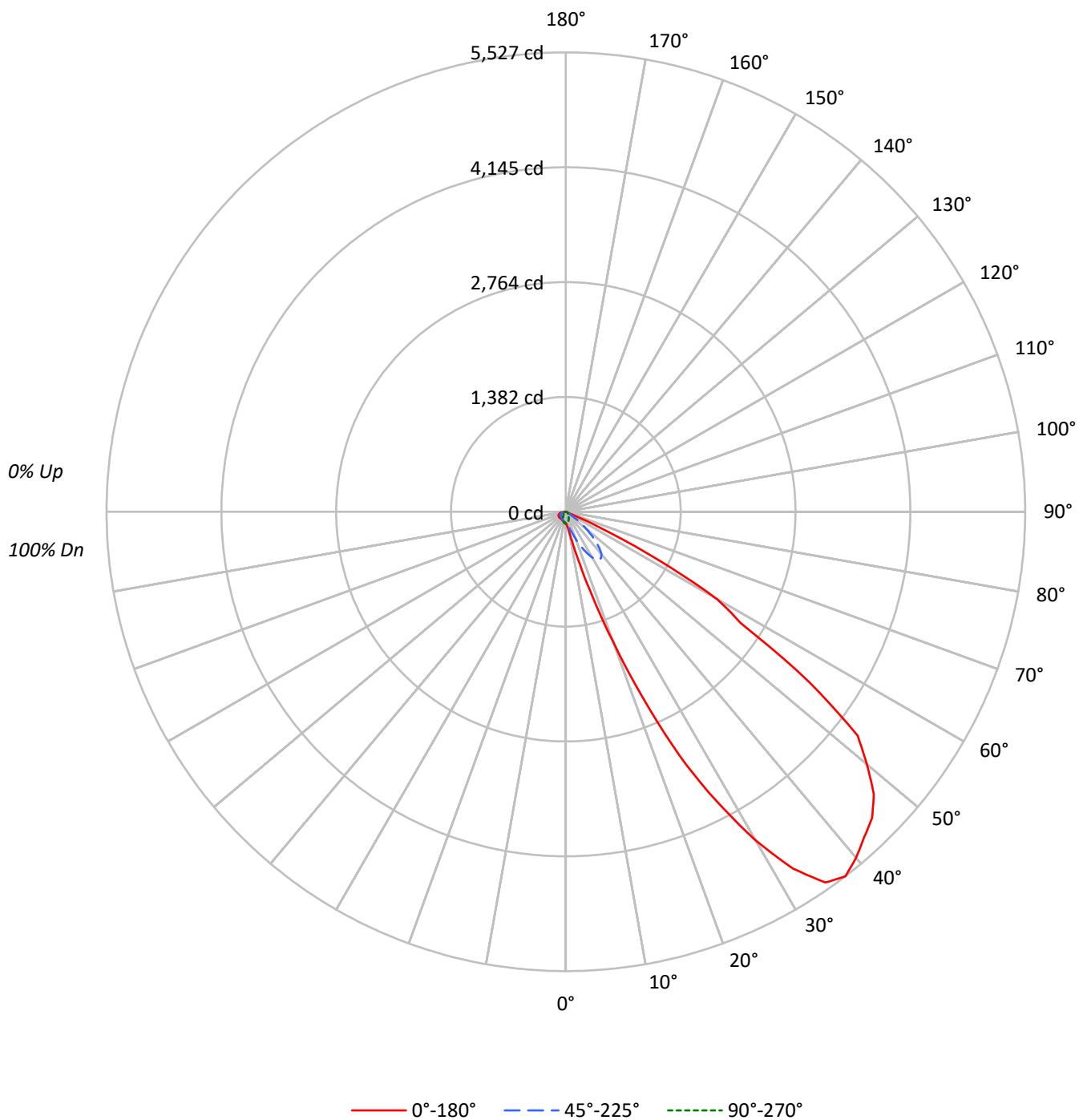
Lumens per Lamp: N/A  
Luminaire Lumens: 2469.0 lumens  
Efficiency: N/A  
Efficacy: 85.7 lumens/watt  
Spacing Criteria (0/90/45): 3.81 / 0.82 / 1.83  
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')  
CIE Type: Direct

Input Watts (W): 28.8  
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

TEST NUMBER: P1309615

CATALOG NUMBER: P3SQAS24R459035D010 E3SQCA451MB

### Luminous Intensity Polar Plot



TEST NUMBER: P1309615

CATALOG NUMBER: P3SQAS24R459035D010 E3SQCA451MB

**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 | 99  | 107 | 104 | 100 | 97  | 99  | 97  | 94  | 96  | 93  | 91  | 92  | 90  | 88  | 86  |    |    |
| 2   | 100 | 93  | 86  | 81  | 98  | 91  | 85  | 80  | 87  | 83  | 78  | 84  | 80  | 77  | 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  | 62  | 56  | 81  | 70  | 62  | 55  | 67  | 60  | 55  | 65  | 59  | 54  | 63  | 58  | 53  | 51  |    |    |
| 5   | 76  | 63  | 53  | 47  | 73  | 61  | 53  | 46  | 59  | 52  | 46  | 57  | 51  | 45  | 55  | 50  | 45  | 43  |    |    |
| 6   | 69  | 55  | 46  | 39  | 67  | 54  | 46  | 39  | 52  | 45  | 39  | 51  | 44  | 39  | 49  | 43  | 38  | 36  |    |    |
| 7   | 63  | 49  | 40  | 34  | 61  | 48  | 40  | 33  | 47  | 39  | 33  | 45  | 38  | 33  | 44  | 37  | 33  | 31  |    |    |
| 8   | 58  | 44  | 35  | 29  | 56  | 43  | 35  | 29  | 42  | 34  | 29  | 40  | 33  | 28  | 39  | 33  | 28  | 26  |    |    |
| 9   | 53  | 39  | 31  | 25  | 52  | 39  | 30  | 25  | 38  | 30  | 25  | 36  | 29  | 25  | 35  | 29  | 24  | 22  |    |    |
| 10  | 49  | 36  | 27  | 22  | 48  | 35  | 27  | 22  | 34  | 27  | 21  | 33  | 26  | 21  | 32  | 26  | 21  | 19  |    |    |

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

|     | 0°      | 45°    | 90°   | 135°  | 180°  |
|-----|---------|--------|-------|-------|-------|
| 0°  | 24593   | 24593  | 24593 | 24593 | 24593 |
| 5°  | 29269   | 27160  | 24342 | 22578 | 22578 |
| 10° | 46728   | 31758  | 22839 | 21405 | 21405 |
| 15° | 116393  | 42560  | 20736 | 20005 | 20736 |
| 20° | 306602  | 63560  | 17943 | 19061 | 20197 |
| 25° | 615610  | 94196  | 15506 | 17825 | 19763 |
| 30° | 907543  | 126180 | 12568 | 17441 | 20284 |
| 35° | 1144784 | 147970 | 10722 | 17156 | 21025 |
| 40° | 1221383 | 149528 | 9622  | 17896 | 22482 |
| 45° | 1269043 | 124727 | 8939  | 19387 | 24356 |
| 50° | 1267018 | 86917  | 8735  | 20765 | 27329 |
| 55° | 1076886 | 38584  | 9188  | 23270 | 30026 |
| 60° | 723783  | 7716   | 9128  | 26006 | 34445 |
| 65° | 192061  | 3342   | 9128  | 28281 | 39081 |
| 70° | 5136    | 4129   | 9265  | 30817 | 44161 |
| 75° | 4059    | 4059   | 9515  | 32605 | 50239 |
| 80° | 4066    | 6050   | 10116 | 34415 | 56631 |
| 85° | 3952    | 8102   | 16203 | 36359 | 56515 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 10°

Vertical Angle: 47.5°

Luminance: 1301707 cd/sqm

TEST NUMBER: P1309615

CATALOG NUMBER: P3SQAS24R459035D010 E3SQCA451MB

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 14.2   | 0.6       |
| 10°-20°   | 69.6   | 2.8       |
| 20°-30°   | 287.2  | 11.6      |
| 30°-40°   | 605.3  | 24.5      |
| 40°-50°   | 746.8  | 30.2      |
| 50°-60°   | 559.8  | 22.7      |
| 60°-70°   | 144.1  | 5.8       |
| 70°-80°   | 29.9   | 1.2       |
| 80°-90°   | 12.1   | 0.5       |
| 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°    | 371.1  | 15.0      |
| 0°-40°    | 976.4  | 39.5      |
| 0°-60°    | 2283.0 | 92.5      |
| 0°-90°    | 2469.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 2469.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 45° | 90° | 135° | 180° | Flux |
|-----|------|-----|-----|------|------|------|
| 0°  | 143  | 143 | 143 | 143  | 143  |      |
| 5°  | 169  | 157 | 141 | 131  | 131  | 19   |
| 15° | 653  | 239 | 116 | 112  | 116  | 239  |
| 25° | 3240 | 496 | 82  | 94   | 104  | 1509 |
| 35° | 5445 | 704 | 51  | 82   | 100  | 3318 |
| 45° | 5210 | 512 | 37  | 80   | 100  | 3987 |
| 55° | 3586 | 128 | 31  | 78   | 100  | 3097 |
| 65° | 471  | 8   | 22  | 69   | 96   | 679  |
| 75° | 6    | 6   | 14  | 49   | 76   | 7    |
| 85° | 2    | 4   | 8   | 18   | 29   | 2    |
| 90° | 0    | 0   | 0   | 0    | 0    |      |

TEST NUMBER: P1309615

CATALOG NUMBER: P3SQAS24R459035D010 E3SQCA451MB

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 10°    | 15°    | 20°    | 25°    | 30°    | 45°   | 67.5° | 90°   | 112.5° |
|-------|--------|--------|--------|--------|--------|--------|--------|-------|-------|-------|--------|
| 0°    | 142.8  | 142.8  | 142.8  | 142.8  | 142.8  | 142.8  | 142.8  | 142.8 | 142.8 | 142.8 | 142.8  |
| 2.5°  | 151.0  | 151.0  | 151.0  | 151.0  | 151.0  | 151.0  | 151.0  | 148.9 | 146.9 | 142.8 | 138.7  |
| 5°    | 169.3  | 167.3  | 167.3  | 167.3  | 165.2  | 163.2  | 163.2  | 157.1 | 148.9 | 140.8 | 134.6  |
| 7.5°  | 199.9  | 199.9  | 197.9  | 193.8  | 191.8  | 187.7  | 183.6  | 167.3 | 148.9 | 136.7 | 128.5  |
| 10°   | 267.2  | 263.2  | 257.0  | 253.0  | 242.8  | 228.5  | 218.3  | 181.6 | 146.9 | 130.6 | 124.4  |
| 12.5° | 399.9  | 408.0  | 387.6  | 367.2  | 338.7  | 312.1  | 279.5  | 206.0 | 146.9 | 124.4 | 118.3  |
| 15°   | 652.8  | 667.1  | 628.3  | 587.5  | 518.2  | 452.9  | 391.7  | 238.7 | 142.8 | 116.3 | 110.2  |
| 17.5° | 1067.0 | 1085.3 | 1020.0 | 924.2  | 816.0  | 685.5  | 573.3  | 283.6 | 138.7 | 108.1 | 104.0  |
| 20°   | 1672.9 | 1670.8 | 1544.3 | 1424.0 | 1215.9 | 1024.1 | 814.0  | 346.8 | 132.6 | 97.9  | 97.9   |
| 22.5° | 2417.5 | 2425.6 | 2270.6 | 2054.4 | 1758.5 | 1450.5 | 1115.9 | 420.3 | 124.4 | 89.8  | 91.8   |
| 25°   | 3239.6 | 3170.3 | 2986.7 | 2723.5 | 2346.1 | 1919.7 | 1479.1 | 495.7 | 116.3 | 81.6  | 85.7   |
| 27.5° | 3925.1 | 3857.8 | 3647.7 | 3335.5 | 2929.5 | 2423.6 | 1848.3 | 571.2 | 106.1 | 73.4  | 79.6   |
| 30°   | 4563.6 | 4478.0 | 4225.0 | 3872.1 | 3388.6 | 2841.8 | 2195.1 | 634.5 | 93.8  | 63.2  | 73.4   |
| 32.5° | 5090.0 | 5012.5 | 4724.8 | 4314.8 | 3788.4 | 3200.9 | 2488.9 | 683.4 | 81.6  | 57.1  | 69.4   |
| 35°   | 5445.0 | 5365.4 | 5100.2 | 4649.3 | 4076.1 | 3462.0 | 2727.6 | 703.8 | 71.4  | 51.0  | 67.3   |
| 37.5° | 5526.6 | 5483.7 | 5294.0 | 4871.7 | 4274.0 | 3629.3 | 2880.6 | 697.7 | 59.2  | 46.9  | 63.2   |
| 40°   | 5432.7 | 5442.9 | 5353.2 | 5002.3 | 4380.0 | 3700.7 | 2943.8 | 665.1 | 49.0  | 42.8  | 61.2   |
| 42.5° | 5312.4 | 5338.9 | 5332.8 | 5055.3 | 4424.9 | 3704.8 | 2917.3 | 599.8 | 38.8  | 38.8  | 59.2   |
| 45°   | 5210.4 | 5236.9 | 5273.6 | 5032.9 | 4394.3 | 3651.7 | 2833.7 | 512.1 | 28.6  | 36.7  | 59.2   |
| 47.5° | 5024.7 | 5053.3 | 5106.3 | 4853.3 | 4239.3 | 3515.0 | 2682.7 | 416.2 | 20.4  | 34.7  | 57.1   |
| 50°   | 4728.9 | 4743.2 | 4728.9 | 4445.3 | 3941.4 | 3294.7 | 2437.9 | 324.4 | 14.3  | 32.6  | 57.1   |
| 52.5° | 4424.9 | 4396.4 | 4278.0 | 3919.0 | 3468.1 | 2945.9 | 2129.8 | 230.5 | 10.2  | 30.6  | 55.1   |
| 55°   | 3586.5 | 3541.6 | 3453.8 | 3233.5 | 2976.5 | 2517.5 | 1721.8 | 128.5 | 10.2  | 30.6  | 53.0   |
| 57.5° | 2499.1 | 2523.6 | 2554.2 | 2509.3 | 2391.0 | 1983.0 | 1307.7 | 57.1  | 10.2  | 28.6  | 53.0   |
| 60°   | 2101.3 | 2080.9 | 2082.9 | 2054.4 | 1858.5 | 1446.4 | 899.7  | 22.4  | 10.2  | 26.5  | 51.0   |
| 62.5° | 1254.6 | 1268.9 | 1295.4 | 1301.6 | 1107.8 | 807.9  | 471.3  | 10.2  | 10.2  | 24.5  | 49.0   |
| 65°   | 471.3  | 493.7  | 432.5  | 375.4  | 297.9  | 218.3  | 110.2  | 8.2   | 12.2  | 22.4  | 44.9   |
| 67.5° | 14.3   | 16.3   | 20.4   | 18.4   | 18.4   | 16.3   | 12.2   | 8.2   | 12.2  | 20.4  | 42.8   |
| 70°   | 10.2   | 10.2   | 10.2   | 10.2   | 10.2   | 8.2    | 8.2    | 8.2   | 10.2  | 18.4  | 38.8   |
| 72.5° | 8.2    | 8.2    | 8.2    | 8.2    | 8.2    | 8.2    | 8.2    | 8.2   | 10.2  | 16.3  | 34.7   |
| 75°   | 6.1    | 8.2    | 6.1    | 6.1    | 6.1    | 6.1    | 6.1    | 6.1   | 10.2  | 14.3  | 28.6   |
| 77.5° | 6.1    | 6.1    | 6.1    | 6.1    | 6.1    | 6.1    | 6.1    | 6.1   | 8.2   | 12.2  | 24.5   |
| 80°   | 4.1    | 4.1    | 4.1    | 4.1    | 4.1    | 4.1    | 4.1    | 6.1   | 8.2   | 10.2  | 20.4   |
| 82.5° | 4.1    | 4.1    | 4.1    | 2.0    | 4.1    | 4.1    | 4.1    | 4.1   | 8.2   | 8.2   | 16.3   |
| 85°   | 2.0    | 2.0    | 2.0    | 2.0    | 2.0    | 2.0    | 2.0    | 4.1   | 6.1   | 8.2   | 10.2   |
| 87.5° | 0.0    | 0.0    | 0.0    | 0.0    | 2.0    | 2.0    | 2.0    | 4.1   | 6.1   | 6.1   | 6.1    |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0   | 0.0   | 0.0   | 0.0    |

TEST NUMBER: P1309615

CATALOG NUMBER: P3SQAS24R459035D010 E3SQCA451MB

**CANDELA DISTRIBUTION (continued):**

|       | 135°  | 157.5° | 180°  |
|-------|-------|--------|-------|
| 0°    | 142.8 | 142.8  | 142.8 |
| 2.5°  | 134.6 | 134.6  | 134.6 |
| 5°    | 130.6 | 130.6  | 130.6 |
| 7.5°  | 126.5 | 126.5  | 126.5 |
| 10°   | 122.4 | 122.4  | 122.4 |
| 12.5° | 118.3 | 118.3  | 120.4 |
| 15°   | 112.2 | 116.3  | 116.3 |
| 17.5° | 108.1 | 112.2  | 114.2 |
| 20°   | 104.0 | 108.1  | 110.2 |
| 22.5° | 97.9  | 104.0  | 108.1 |
| 25°   | 93.8  | 102.0  | 104.0 |
| 27.5° | 89.8  | 100.0  | 104.0 |
| 30°   | 87.7  | 97.9   | 102.0 |
| 32.5° | 83.6  | 95.9   | 100.0 |
| 35°   | 81.6  | 95.9   | 100.0 |
| 37.5° | 81.6  | 93.8   | 100.0 |
| 40°   | 79.6  | 93.8   | 100.0 |
| 42.5° | 79.6  | 93.8   | 100.0 |
| 45°   | 79.6  | 93.8   | 100.0 |
| 47.5° | 77.5  | 93.8   | 102.0 |
| 50°   | 77.5  | 95.9   | 102.0 |
| 52.5° | 77.5  | 95.9   | 102.0 |
| 55°   | 77.5  | 95.9   | 100.0 |
| 57.5° | 75.5  | 93.8   | 100.0 |
| 60°   | 75.5  | 93.8   | 100.0 |
| 62.5° | 71.4  | 91.8   | 97.9  |
| 65°   | 69.4  | 89.8   | 95.9  |
| 67.5° | 65.3  | 87.7   | 91.8  |
| 70°   | 61.2  | 81.6   | 87.7  |
| 72.5° | 55.1  | 77.5   | 83.6  |
| 75°   | 49.0  | 71.4   | 75.5  |
| 77.5° | 42.8  | 63.2   | 67.3  |
| 80°   | 34.7  | 53.0   | 57.1  |
| 82.5° | 26.5  | 40.8   | 42.8  |
| 85°   | 18.4  | 26.5   | 28.6  |
| 87.5° | 8.2   | 12.2   | 14.3  |
| 90°   | 0.0   | 0.0    | 0.0   |

(END OF REPORT)