

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: P1320147

Luminaire Tested: LDSQA3D13R459840DE010 3LSQCA45R 1MMS

Issue Date: 1/29/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1320147  
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: PORTFOLIO  
Catalog Number: LDSQA3D13R459840DE010 3LSQCA45R 1MMS  
Description: 3in Adjustable LED luminaire with, R45 optic, 4000K CCT AND, 98CRI , 3LSQCA45R 1MMS TRII  
Light Source: -  
Ballast/Driver: -

**Summary**

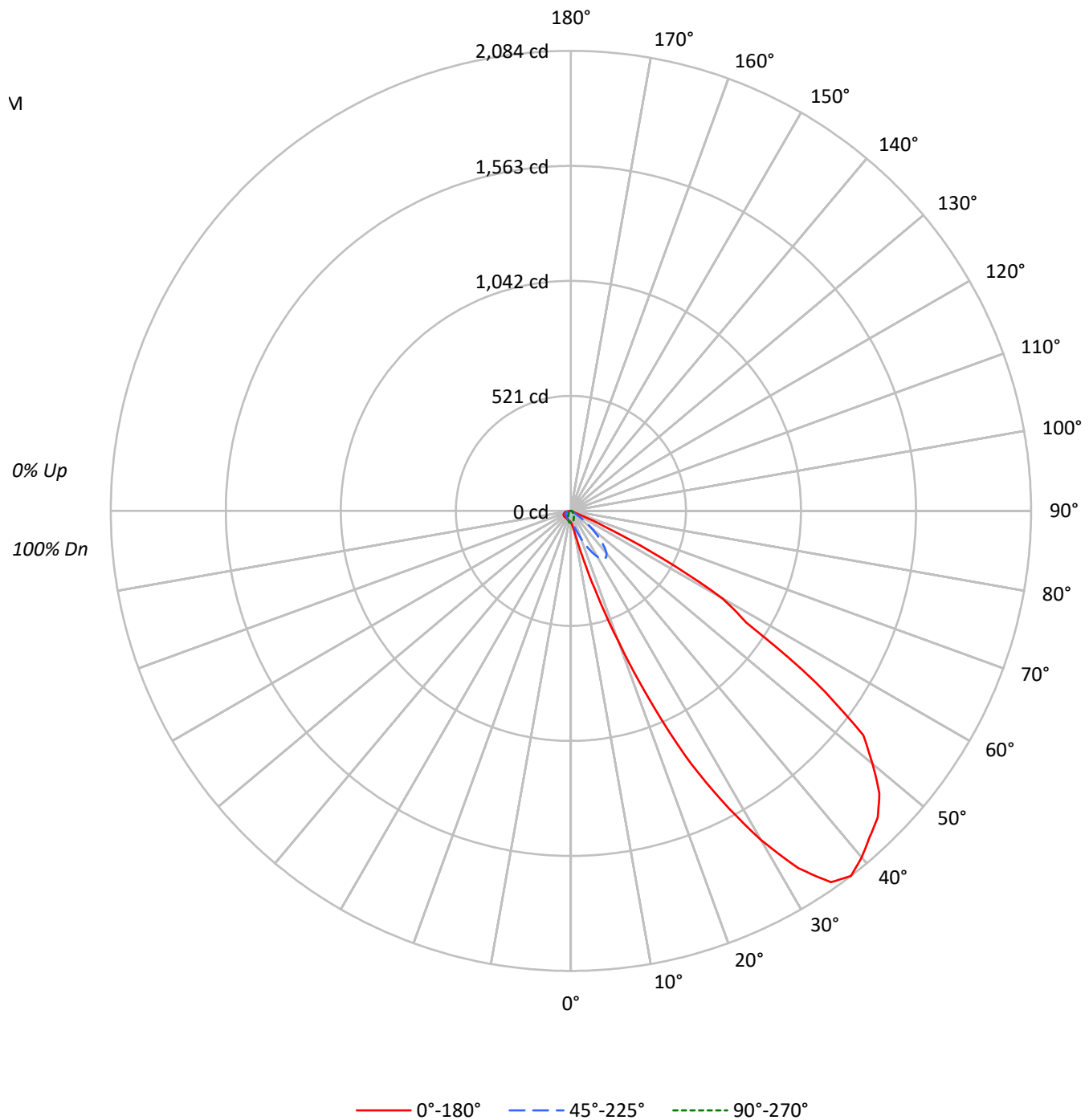
Lumens per Lamp: N/A  
Luminaire Lumens: 931.0 lumens  
Efficiency: N/A  
Efficacy: 64.2 lumens/watt  
Spacing Criteria (0/90/45): 3.81 / 0.82 / 1.83  
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')  
CIE Type: Direct

Input Watts (W): 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

TEST NUMBER: P1320147

CATALOG NUMBER: LDSQA3D13R459840DE010 3LSQCA45R 1MMS

### Luminous Intensity Polar Plot



TEST NUMBER: P1320147

CATALOG NUMBER: LDSQA3D13R459840DE010 3LSQCA45R 1MMS

**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 |
| 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°  | 9266   | 9266  | 9266 | 9266  | 9266  |
| 5°  | 11030  | 10235 | 9180 | 8506  | 8506  |
| 10° | 17628  | 11979 | 8604 | 8079  | 8079  |
| 15° | 43897  | 16047 | 7809 | 7542  | 7809  |
| 20° | 115610 | 23972 | 6763 | 7184  | 7606  |
| 25° | 232137 | 35516 | 5853 | 6727  | 7449  |
| 30° | 342208 | 47569 | 4733 | 6582  | 7656  |
| 35° | 431675 | 55799 | 4037 | 6476  | 7926  |
| 40° | 460545 | 56385 | 3642 | 6745  | 8476  |
| 45° | 478522 | 47031 | 3361 | 7307  | 9182  |
| 50° | 477774 | 32768 | 3296 | 7824  | 10315 |
| 55° | 406073 | 14563 | 3453 | 8768  | 11320 |
| 60° | 272904 | 2928  | 3444 | 9817  | 12986 |
| 65° | 72415  | 1263  | 3464 | 10677 | 14752 |
| 70° | 1913   | 1561  | 3474 | 11632 | 16667 |
| 75° | 1530   | 1530  | 3593 | 12310 | 18964 |
| 80° | 1488   | 2281  | 3769 | 12992 | 21323 |
| 85° | 1581   | 2964  | 6126 | 13635 | 21341 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 10°

Vertical Angle: 47.5°

Luminance: 490852 cd/sqm

TEST NUMBER: P1320147

CATALOG NUMBER: LDSQA3D13R459840DE010 3LSQCA45R 1MMS

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 5.4    | 0.6       |
| 10°-20°   | 26.3   | 2.8       |
| 20°-30°   | 108.3  | 11.6      |
| 30°-40°   | 228.3  | 24.5      |
| 40°-50°   | 281.6  | 30.2      |
| 50°-60°   | 211.1  | 22.7      |
| 60°-70°   | 54.3   | 5.8       |
| 70°-80°   | 11.3   | 1.2       |
| 80°-90°   | 4.6    | 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°    | 139.9  | 15.0      |
| 0°-40°    | 368.2  | 39.5      |
| 0°-60°    | 860.9  | 92.5      |
| 0°-90°    | 931.0  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 931.0  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 45° | 90° | 135° | 180° | Flux |
|-----|------|-----|-----|------|------|------|
| 0°  | 54   | 54  | 54  | 54   | 54   |      |
| 5°  | 64   | 59  | 53  | 49   | 49   | 7    |
| 15° | 246  | 90  | 44  | 42   | 44   | 90   |
| 25° | 1222 | 187 | 31  | 35   | 39   | 569  |
| 35° | 2053 | 265 | 19  | 31   | 38   | 1251 |
| 45° | 1965 | 193 | 14  | 30   | 38   | 1503 |
| 55° | 1352 | 48  | 12  | 29   | 38   | 1168 |
| 65° | 178  | 3   | 8   | 26   | 36   | 256  |
| 75° | 2    | 2   | 5   | 18   | 28   | 3    |
| 85° | 1    | 2   | 3   | 7    | 11   | 1    |
| 90° | 0    | 0   | 0   | 0    | 0    |      |

TEST NUMBER: P1320147

CATALOG NUMBER: LDSQA3D13R459840DE010 3LSQCA45R 1MMS

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 10°    | 15°    | 20°    | 25°    | 30°    | 45°   | 67.5° | 90°  | 112.5° |
|-------|--------|--------|--------|--------|--------|--------|--------|-------|-------|------|--------|
| 0°    | 53.8   | 53.8   | 53.8   | 53.8   | 53.8   | 53.8   | 53.8   | 53.8  | 53.8  | 53.8 | 53.8   |
| 2.5°  | 56.9   | 56.9   | 56.9   | 56.9   | 56.9   | 56.9   | 56.9   | 56.2  | 55.4  | 53.8 | 52.3   |
| 5°    | 63.8   | 63.1   | 63.1   | 63.1   | 62.3   | 61.5   | 61.5   | 59.2  | 56.2  | 53.1 | 50.8   |
| 7.5°  | 75.4   | 75.4   | 74.6   | 73.1   | 72.3   | 70.8   | 69.2   | 63.1  | 56.2  | 51.5 | 48.5   |
| 10°   | 100.8  | 99.2   | 96.9   | 95.4   | 91.5   | 86.2   | 82.3   | 68.5  | 55.4  | 49.2 | 46.9   |
| 12.5° | 150.8  | 153.9  | 146.2  | 138.5  | 127.7  | 117.7  | 105.4  | 77.7  | 55.4  | 46.9 | 44.6   |
| 15°   | 246.2  | 251.5  | 236.9  | 221.5  | 195.4  | 170.8  | 147.7  | 90.0  | 53.8  | 43.8 | 41.5   |
| 17.5° | 402.3  | 409.2  | 384.6  | 348.5  | 307.7  | 258.5  | 216.2  | 106.9 | 52.3  | 40.8 | 39.2   |
| 20°   | 630.8  | 630.0  | 582.3  | 536.9  | 458.5  | 386.2  | 306.9  | 130.8 | 50.0  | 36.9 | 36.9   |
| 22.5° | 911.6  | 914.7  | 856.2  | 774.6  | 663.1  | 546.9  | 420.8  | 158.5 | 46.9  | 33.8 | 34.6   |
| 25°   | 1221.6 | 1195.4 | 1126.2 | 1027.0 | 884.7  | 723.9  | 557.7  | 186.9 | 43.8  | 30.8 | 32.3   |
| 27.5° | 1480.1 | 1454.7 | 1375.4 | 1257.7 | 1104.7 | 913.9  | 697.0  | 215.4 | 40.0  | 27.7 | 30.0   |
| 30°   | 1720.8 | 1688.5 | 1593.1 | 1460.1 | 1277.7 | 1071.6 | 827.7  | 239.2 | 35.4  | 23.8 | 27.7   |
| 32.5° | 1919.3 | 1890.1 | 1781.6 | 1627.0 | 1428.5 | 1207.0 | 938.5  | 257.7 | 30.8  | 21.5 | 26.2   |
| 35°   | 2053.2 | 2023.2 | 1923.2 | 1753.1 | 1537.0 | 1305.4 | 1028.5 | 265.4 | 26.9  | 19.2 | 25.4   |
| 37.5° | 2083.9 | 2067.8 | 1996.2 | 1837.0 | 1611.6 | 1368.5 | 1086.2 | 263.1 | 22.3  | 17.7 | 23.8   |
| 40°   | 2048.5 | 2052.4 | 2018.5 | 1886.2 | 1651.6 | 1395.4 | 1110.0 | 250.8 | 18.5  | 16.2 | 23.1   |
| 42.5° | 2003.2 | 2013.2 | 2010.9 | 1906.2 | 1668.5 | 1397.0 | 1100.0 | 226.2 | 14.6  | 14.6 | 22.3   |
| 45°   | 1964.7 | 1974.7 | 1988.5 | 1897.8 | 1657.0 | 1377.0 | 1068.5 | 193.1 | 10.8  | 13.8 | 22.3   |
| 47.5° | 1894.7 | 1905.5 | 1925.5 | 1830.1 | 1598.5 | 1325.4 | 1011.6 | 156.9 | 7.7   | 13.1 | 21.5   |
| 50°   | 1783.2 | 1788.5 | 1783.2 | 1676.2 | 1486.2 | 1242.4 | 919.3  | 122.3 | 5.4   | 12.3 | 21.5   |
| 52.5° | 1668.5 | 1657.8 | 1613.1 | 1477.8 | 1307.7 | 1110.8 | 803.1  | 86.9  | 3.8   | 11.5 | 20.8   |
| 55°   | 1352.4 | 1335.4 | 1302.4 | 1219.3 | 1122.4 | 949.3  | 649.3  | 48.5  | 3.8   | 11.5 | 20.0   |
| 57.5° | 942.3  | 951.6  | 963.1  | 946.2  | 901.6  | 747.7  | 493.1  | 21.5  | 3.8   | 10.8 | 20.0   |
| 60°   | 792.3  | 784.6  | 785.4  | 774.6  | 700.8  | 545.4  | 339.2  | 8.5   | 3.8   | 10.0 | 19.2   |
| 62.5° | 473.1  | 478.5  | 488.5  | 490.8  | 417.7  | 304.6  | 177.7  | 3.8   | 3.8   | 9.2  | 18.5   |
| 65°   | 177.7  | 186.2  | 163.1  | 141.5  | 112.3  | 82.3   | 41.5   | 3.1   | 4.6   | 8.5  | 16.9   |
| 67.5° | 5.4    | 6.2    | 7.7    | 6.9    | 6.9    | 6.2    | 4.6    | 3.1   | 4.6   | 7.7  | 16.2   |
| 70°   | 3.8    | 3.8    | 3.8    | 3.8    | 3.8    | 3.1    | 3.1    | 3.1   | 3.8   | 6.9  | 14.6   |
| 72.5° | 3.1    | 3.1    | 3.1    | 3.1    | 3.1    | 3.1    | 3.1    | 3.1   | 3.8   | 6.2  | 13.1   |
| 75°   | 2.3    | 3.1    | 2.3    | 2.3    | 2.3    | 2.3    | 2.3    | 2.3   | 3.8   | 5.4  | 10.8   |
| 77.5° | 2.3    | 2.3    | 2.3    | 2.3    | 2.3    | 2.3    | 2.3    | 2.3   | 3.1   | 4.6  | 9.2    |
| 80°   | 1.5    | 1.5    | 1.5    | 1.5    | 1.5    | 1.5    | 1.5    | 2.3   | 3.1   | 3.8  | 7.7    |
| 82.5° | 1.5    | 1.5    | 1.5    | 0.8    | 1.5    | 1.5    | 1.5    | 1.5   | 3.1   | 3.1  | 6.2    |
| 85°   | 0.8    | 0.8    | 0.8    | 0.8    | 0.8    | 0.8    | 0.8    | 1.5   | 2.3   | 3.1  | 3.8    |
| 87.5° | 0.0    | 0.0    | 0.0    | 0.0    | 0.8    | 0.8    | 0.8    | 1.5   | 2.3   | 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    |

TEST NUMBER: P1320147

CATALOG NUMBER: LDSQA3D13R459840DE010 3LSQCA45R 1MMS

**CANDELA DISTRIBUTION (continued):**

|       | 135° | 157.5° | 180° |
|-------|------|--------|------|
| 0°    | 53.8 | 53.8   | 53.8 |
| 2.5°  | 50.8 | 50.8   | 50.8 |
| 5°    | 49.2 | 49.2   | 49.2 |
| 7.5°  | 47.7 | 47.7   | 47.7 |
| 10°   | 46.2 | 46.2   | 46.2 |
| 12.5° | 44.6 | 44.6   | 45.4 |
| 15°   | 42.3 | 43.8   | 43.8 |
| 17.5° | 40.8 | 42.3   | 43.1 |
| 20°   | 39.2 | 40.8   | 41.5 |
| 22.5° | 36.9 | 39.2   | 40.8 |
| 25°   | 35.4 | 38.5   | 39.2 |
| 27.5° | 33.8 | 37.7   | 39.2 |
| 30°   | 33.1 | 36.9   | 38.5 |
| 32.5° | 31.5 | 36.2   | 37.7 |
| 35°   | 30.8 | 36.2   | 37.7 |
| 37.5° | 30.8 | 35.4   | 37.7 |
| 40°   | 30.0 | 35.4   | 37.7 |
| 42.5° | 30.0 | 35.4   | 37.7 |
| 45°   | 30.0 | 35.4   | 37.7 |
| 47.5° | 29.2 | 35.4   | 38.5 |
| 50°   | 29.2 | 36.2   | 38.5 |
| 52.5° | 29.2 | 36.2   | 38.5 |
| 55°   | 29.2 | 36.2   | 37.7 |
| 57.5° | 28.5 | 35.4   | 37.7 |
| 60°   | 28.5 | 35.4   | 37.7 |
| 62.5° | 26.9 | 34.6   | 36.9 |
| 65°   | 26.2 | 33.8   | 36.2 |
| 67.5° | 24.6 | 33.1   | 34.6 |
| 70°   | 23.1 | 30.8   | 33.1 |
| 72.5° | 20.8 | 29.2   | 31.5 |
| 75°   | 18.5 | 26.9   | 28.5 |
| 77.5° | 16.2 | 23.8   | 25.4 |
| 80°   | 13.1 | 20.0   | 21.5 |
| 82.5° | 10.0 | 15.4   | 16.2 |
| 85°   | 6.9  | 10.0   | 10.8 |
| 87.5° | 3.1  | 4.6    | 5.4  |
| 90°   | 0.0  | 0.0    | 0.0  |

(END OF REPORT)