

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: P1345549

Luminaire Tested: P3A13R359740DE010 E3A451GPH

Issue Date: 2/13/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1345549  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-77)  
Test Lab: INNOVATION CENTER  
Issue Date: 2/13/2026  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: IRiS  
Catalog Number: P3A13R359740DE010 E3A451GPH  
Description: 3in Adjustable LED luminaire with, R35 optic, 4000K CCT AND, 97CRI , E3A451GPH TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

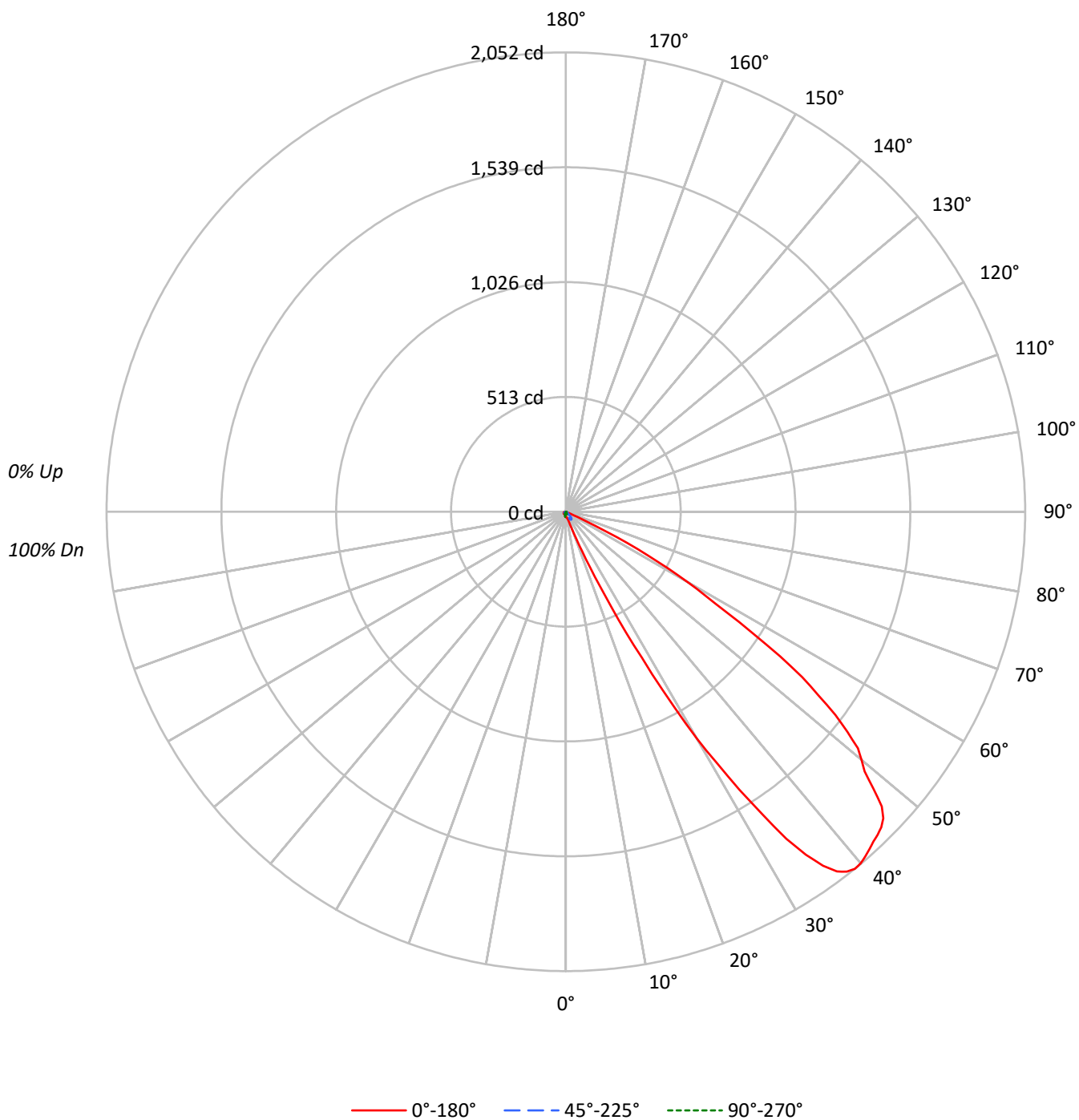
Lumens per Lamp: N/A  
Luminaire Lumens: 511.0 lumens  
Efficiency: N/A  
Efficacy: 35.0 lumens/watt  
Spacing Criteria (0/90/45): 4.01 / 0.66 / 1.41  
Luminous Opening: Circular (Dia: 0.25' x H: 0')  
CIE Type: Direct

Input Watts (W): 14.6  
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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CATALOG NUMBER: P3A13R359740DE010 E3A451GPH

### Luminous Intensity Polar Plot



TEST NUMBER: P1345549

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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  | 50  | 30  | 10  |
| RCR |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 102 | 102 | 100 |
| 1   | 110 | 106 | 102 | 99  | 107 | 104 | 100 | 97  | 100 | 97  | 94  | 96  | 93  | 91  | 92  | 90  | 89  | 89  | 89  | 87  |
| 2   | 100 | 93  | 86  | 81  | 98  | 91  | 85  | 80  | 87  | 83  | 78  | 84  | 80  | 77  | 81  | 78  | 75  | 75  | 75  | 73  |
| 3   | 91  | 81  | 73  | 67  | 89  | 79  | 72  | 66  | 76  | 70  | 65  | 74  | 68  | 64  | 71  | 67  | 63  | 63  | 63  | 61  |
| 4   | 83  | 71  | 62  | 55  | 80  | 69  | 61  | 55  | 67  | 60  | 54  | 64  | 58  | 53  | 62  | 57  | 52  | 52  | 52  | 50  |
| 5   | 75  | 62  | 52  | 46  | 73  | 61  | 52  | 45  | 58  | 51  | 45  | 56  | 50  | 44  | 55  | 49  | 44  | 44  | 44  | 42  |
| 6   | 68  | 54  | 45  | 38  | 66  | 53  | 44  | 38  | 51  | 43  | 38  | 50  | 43  | 37  | 48  | 42  | 37  | 37  | 37  | 35  |
| 7   | 62  | 48  | 38  | 32  | 60  | 47  | 38  | 32  | 45  | 37  | 32  | 44  | 37  | 31  | 42  | 36  | 31  | 31  | 31  | 29  |
| 8   | 57  | 42  | 33  | 27  | 55  | 41  | 33  | 27  | 40  | 32  | 27  | 39  | 32  | 26  | 38  | 31  | 26  | 26  | 26  | 24  |
| 9   | 52  | 38  | 29  | 23  | 50  | 37  | 29  | 23  | 36  | 28  | 23  | 35  | 28  | 22  | 34  | 27  | 22  | 22  | 22  | 20  |
| 10  | 48  | 34  | 25  | 19  | 46  | 33  | 25  | 19  | 32  | 25  | 19  | 31  | 24  | 19  | 30  | 24  | 19  | 19  | 19  | 17  |

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

|     | 0°     | 45°   | 90°  | 135° | 180° |
|-----|--------|-------|------|------|------|
| 0°  | 5153   | 5153  | 5153 | 5153 | 5153 |
| 5°  | 5591   | 5481  | 5085 | 4578 | 4468 |
| 10° | 5856   | 5344  | 4520 | 3897 | 3897 |
| 15° | 8377   | 5244  | 3655 | 3360 | 3451 |
| 20° | 21002  | 5600  | 2917 | 2917 | 3220 |
| 25° | 97433  | 7138  | 2226 | 2686 | 3024 |
| 30° | 296197 | 9698  | 1747 | 2456 | 3038 |
| 35° | 500611 | 11243 | 1472 | 2356 | 2971 |
| 40° | 586814 | 11078 | 1202 | 2376 | 3177 |
| 45° | 617987 | 7877  | 992  | 2574 | 3442 |
| 50° | 588228 | 4708  | 955  | 2661 | 3787 |
| 55° | 492905 | 1950  | 1070 | 2982 | 4396 |
| 60° | 275943 | 395   | 1228 | 3421 | 4868 |
| 65° | 47632  | 259   | 1193 | 3840 | 5500 |
| 70° | 898    | 321   | 1475 | 4167 | 6219 |
| 75° | 763    | 424   | 1949 | 4660 | 7032 |
| 80° | 631    | 631   | 2273 | 5304 | 8208 |
| 85° | 0      | 1258  | 4529 | 5787 | 9309 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 46°

Luminance: 622337 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 2.1    | 0.4       |
| 10°-20°   | 6.0    | 1.2       |
| 20°-30°   | 31.4   | 6.1       |
| 30°-40°   | 135.4  | 26.5      |
| 40°-50°   | 193.1  | 37.8      |
| 50°-60°   | 119.6  | 23.4      |
| 60°-70°   | 18.2   | 3.6       |
| 70°-80°   | 3.4    | 0.7       |
| 80°-90°   | 1.7    | 0.3       |
| 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°    | 39.5   | 7.7       |
| 0°-40°    | 174.9  | 34.2      |
| 0°-60°    | 487.7  | 95.4      |
| 0°-90°    | 511.0  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 511.0  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 45° | 90° | 135° | 180° | Flux |
|-----|------|-----|-----|------|------|------|
| 0°  | 24   | 24  | 24  | 24   | 24   |      |
| 5°  | 25   | 25  | 23  | 21   | 20   | 2    |
| 15° | 37   | 23  | 16  | 15   | 15   | 13   |
| 25° | 403  | 30  | 9   | 11   | 12   | 241  |
| 35° | 1870 | 42  | 6   | 9    | 11   | 1123 |
| 45° | 1993 | 25  | 3   | 8    | 11   | 1506 |
| 55° | 1289 | 5   | 3   | 8    | 12   | 1098 |
| 65° | 92   | 0   | 2   | 7    | 11   | 188  |
| 75° | 1    | 0   | 2   | 6    | 8    | 1    |
| 85° | 0    | 0   | 2   | 2    | 4    | 0    |
| 90° | 0    | 0   | 0   | 0    | 0    |      |

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 10°    | 15°    | 20°    | 25°   | 30°   | 45°  | 67.5° | 90°  | 112.5° |
|-------|--------|--------|--------|--------|--------|-------|-------|------|-------|------|--------|
| 0°    | 23.5   | 23.5   | 23.5   | 23.5   | 23.5   | 23.5  | 23.5  | 23.5 | 23.5  | 23.5 | 23.5   |
| 2.5°  | 24.4   | 24.4   | 24.4   | 24.4   | 24.4   | 24.4  | 24.4  | 24.4 | 24.4  | 23.5 | 23.1   |
| 5°    | 25.4   | 25.4   | 24.9   | 24.9   | 24.9   | 24.9  | 24.9  | 24.9 | 24.0  | 23.1 | 21.7   |
| 7.5°  | 25.8   | 25.8   | 25.4   | 25.4   | 25.4   | 25.4  | 24.9  | 24.4 | 23.5  | 21.7 | 20.3   |
| 10°   | 26.3   | 26.3   | 26.3   | 26.3   | 25.8   | 25.4  | 24.9  | 24.0 | 22.6  | 20.3 | 18.9   |
| 12.5° | 29.5   | 29.5   | 29.1   | 28.1   | 27.2   | 26.3  | 25.4  | 23.5 | 20.8  | 18.5 | 17.1   |
| 15°   | 36.9   | 36.4   | 35.5   | 34.1   | 32.3   | 30.0  | 28.1  | 23.1 | 18.9  | 16.1 | 15.2   |
| 17.5° | 51.7   | 50.7   | 49.4   | 44.7   | 40.6   | 36.4  | 32.8  | 23.1 | 17.1  | 14.3 | 13.4   |
| 20°   | 90.0   | 90.4   | 80.7   | 69.7   | 60.4   | 50.3  | 41.1  | 24.0 | 15.2  | 12.5 | 12.0   |
| 22.5° | 187.7  | 180.4  | 157.3  | 130.5  | 99.6   | 77.0  | 58.1  | 26.3 | 13.4  | 10.6 | 10.6   |
| 25°   | 402.7  | 374.6  | 318.7  | 240.8  | 169.8  | 120.4 | 84.4  | 29.5 | 12.0  | 9.2  | 9.7    |
| 27.5° | 735.3  | 709.9  | 597.8  | 450.2  | 298.9  | 181.7 | 114.4 | 33.7 | 10.6  | 7.8  | 8.8    |
| 30°   | 1169.8 | 1099.7 | 953.5  | 738.1  | 499.6  | 278.2 | 153.6 | 38.3 | 8.8   | 6.9  | 8.3    |
| 31°   | 1305.4 | 1273.2 | 1095.1 | 853.8  | 585.4  | 330.3 | 170.2 | 39.7 | 8.3   | 6.9  | 7.8    |
| 32°   | 1466.4 | 1409.2 | 1249.6 | 980.7  | 672.6  | 376.9 | 190.1 | 41.1 | 7.8   | 6.0  | 7.8    |
| 33°   | 1610.4 | 1555.0 | 1360.8 | 1092.3 | 760.7  | 429.9 | 211.3 | 41.5 | 6.9   | 6.0  | 7.4    |
| 34°   | 1761.7 | 1686.0 | 1493.6 | 1209.0 | 851.1  | 487.1 | 230.6 | 42.0 | 6.5   | 5.5  | 7.4    |
| 35°   | 1870.1 | 1794.4 | 1608.0 | 1301.3 | 929.0  | 537.9 | 252.8 | 42.0 | 6.0   | 5.5  | 6.9    |
| 36°   | 1954.0 | 1887.6 | 1706.8 | 1396.3 | 1006.5 | 583.5 | 270.3 | 42.0 | 5.1   | 5.1  | 6.9    |
| 37°   | 2011.7 | 1948.5 | 1773.2 | 1478.0 | 1065.6 | 624.1 | 286.0 | 42.0 | 4.6   | 5.1  | 6.9    |
| 38°   | 2039.8 | 1987.2 | 1837.3 | 1537.5 | 1122.8 | 655.9 | 298.5 | 41.1 | 4.2   | 4.6  | 6.5    |
| 39°   | 2051.8 | 2008.9 | 1876.5 | 1587.7 | 1165.7 | 683.6 | 307.7 | 40.1 | 3.7   | 4.6  | 6.5    |
| 40°   | 2050.0 | 2012.6 | 1898.7 | 1622.3 | 1200.3 | 702.5 | 312.8 | 38.7 | 3.2   | 4.2  | 6.5    |
| 41°   | 2039.3 | 2007.1 | 1910.2 | 1651.9 | 1221.0 | 715.5 | 314.1 | 37.4 | 2.8   | 4.2  | 6.0    |
| 42°   | 2027.4 | 1997.8 | 1913.9 | 1667.6 | 1234.4 | 719.6 | 310.4 | 35.5 | 2.8   | 3.7  | 6.0    |
| 43°   | 2014.9 | 1987.7 | 1913.9 | 1672.6 | 1237.6 | 716.8 | 304.4 | 32.3 | 2.3   | 3.7  | 6.0    |
| 44°   | 2004.8 | 1978.9 | 1907.9 | 1671.2 | 1230.7 | 706.2 | 293.4 | 28.6 | 1.8   | 3.7  | 6.0    |
| 45°   | 1992.8 | 1967.4 | 1900.0 | 1662.5 | 1217.3 | 688.2 | 279.5 | 25.4 | 1.4   | 3.2  | 6.0    |
| 46°   | 1971.5 | 1951.7 | 1886.2 | 1644.5 | 1196.1 | 663.3 | 262.0 | 23.1 | 0.9   | 3.2  | 5.5    |
| 47°   | 1930.5 | 1913.4 | 1859.4 | 1617.7 | 1168.0 | 633.8 | 244.0 | 20.8 | 0.9   | 3.2  | 5.5    |
| 48°   | 1847.9 | 1847.5 | 1805.9 | 1567.9 | 1123.2 | 596.9 | 225.1 | 18.5 | 0.9   | 3.2  | 5.5    |
| 49°   | 1768.1 | 1759.8 | 1708.1 | 1480.3 | 1059.1 | 552.6 | 205.3 | 16.6 | 0.5   | 3.2  | 5.5    |
| 50°   | 1724.3 | 1706.3 | 1621.4 | 1376.9 | 977.0  | 491.3 | 184.1 | 13.8 | 0.5   | 2.8  | 5.5    |
| 51°   | 1678.6 | 1652.8 | 1552.7 | 1283.8 | 879.2  | 432.2 | 161.0 | 11.1 | 0.5   | 2.8  | 5.1    |
| 52°   | 1596.1 | 1571.6 | 1459.5 | 1194.7 | 784.2  | 371.8 | 138.8 | 9.2  | 0.5   | 2.8  | 5.5    |
| 53°   | 1507.0 | 1472.0 | 1350.2 | 1096.9 | 700.7  | 318.3 | 116.2 | 7.8  | 0.5   | 2.8  | 5.1    |
| 54°   | 1394.9 | 1379.2 | 1239.5 | 977.0  | 602.9  | 266.6 | 95.5  | 6.5  | 0.5   | 2.8  | 5.1    |
| 55°   | 1289.3 | 1266.2 | 1120.9 | 854.3  | 514.3  | 218.6 | 79.8  | 5.1  | 0.5   | 2.8  | 5.1    |
| 56°   | 1154.6 | 1120.0 | 983.9  | 741.7  | 424.4  | 176.2 | 67.3  | 4.2  | 0.5   | 2.8  | 5.1    |
| 57°   | 994.1  | 957.2  | 849.7  | 616.7  | 333.0  | 134.2 | 56.3  | 3.2  | 0.5   | 2.8  | 5.1    |
| 58°   | 840.9  | 809.1  | 693.8  | 476.0  | 250.9  | 93.2  | 46.6  | 2.3  | 0.5   | 2.3  | 5.1    |
| 59°   | 726.5  | 691.5  | 577.1  | 366.3  | 174.4  | 68.7  | 35.1  | 1.8  | 0.5   | 2.8  | 5.1    |
| 60°   | 629.2  | 584.0  | 464.5  | 283.7  | 124.5  | 49.4  | 25.8  | 0.9  | 0.9   | 2.8  | 5.1    |
| 62.5° | 362.6  | 320.1  | 221.9  | 115.3  | 51.2   | 25.4  | 12.5  | 0.5  | 0.9   | 2.8  | 5.1    |
| 65°   | 91.8   | 81.6   | 53.0   | 24.9   | 14.3   | 8.8   | 4.6   | 0.5  | 0.9   | 2.3  | 4.6    |



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**CANDELA DISTRIBUTION (continued):**

|       | 0°  | 5°  | 10° | 15° | 20° | 25° | 30° | 45° | 67.5° | 90° | 112.5° |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-------|-----|--------|
| 67.5° | 3.2 | 3.2 | 3.2 | 2.8 | 2.3 | 1.8 | 0.9 | 0.5 | 0.9   | 2.3 | 4.6    |
| 70°   | 1.4 | 1.4 | 1.4 | 0.9 | 0.9 | 0.5 | 0.5 | 0.5 | 0.9   | 2.3 | 4.2    |
| 72.5° | 0.9 | 0.9 | 0.9 | 0.9 | 0.5 | 0.5 | 0.5 | 0.5 | 1.4   | 2.3 | 3.7    |
| 75°   | 0.9 | 0.9 | 0.9 | 0.9 | 0.5 | 0.5 | 0.5 | 0.5 | 1.4   | 2.3 | 3.7    |
| 77.5° | 0.9 | 0.9 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 1.4   | 1.8 | 3.2    |
| 80°   | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 1.4   | 1.8 | 2.8    |
| 82.5° | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 1.4   | 1.8 | 2.3    |
| 85°   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 | 0.0 | 0.5 | 1.4   | 1.8 | 1.8    |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 | 1.4   | 1.8 | 1.4    |
| 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):**

|       | 135° | 157.5° | 180° |
|-------|------|--------|------|
| 0°    | 23.5 | 23.5   | 23.5 |
| 2.5°  | 22.1 | 22.1   | 22.1 |
| 5°    | 20.8 | 20.8   | 20.3 |
| 7.5°  | 19.4 | 18.9   | 18.9 |
| 10°   | 17.5 | 17.5   | 17.5 |
| 12.5° | 16.1 | 16.1   | 16.1 |
| 15°   | 14.8 | 15.2   | 15.2 |
| 17.5° | 13.4 | 14.3   | 14.3 |
| 20°   | 12.5 | 13.4   | 13.8 |
| 22.5° | 11.5 | 12.5   | 12.9 |
| 25°   | 11.1 | 12.0   | 12.5 |
| 27.5° | 10.1 | 11.5   | 12.5 |
| 30°   | 9.7  | 11.1   | 12.0 |
| 31°   | 9.7  | 11.1   | 11.5 |
| 32°   | 9.2  | 11.1   | 11.5 |
| 33°   | 9.2  | 11.1   | 11.5 |
| 34°   | 9.2  | 10.6   | 11.5 |
| 35°   | 8.8  | 10.6   | 11.1 |
| 36°   | 8.8  | 10.6   | 11.1 |
| 37°   | 8.8  | 10.6   | 11.5 |
| 38°   | 8.8  | 10.6   | 11.1 |
| 39°   | 8.3  | 10.6   | 11.1 |
| 40°   | 8.3  | 10.6   | 11.1 |
| 41°   | 8.3  | 10.6   | 11.1 |
| 42°   | 8.3  | 10.6   | 11.1 |
| 43°   | 8.3  | 10.6   | 11.1 |
| 44°   | 8.3  | 10.1   | 11.1 |
| 45°   | 8.3  | 10.1   | 11.1 |
| 46°   | 8.3  | 10.6   | 11.1 |
| 47°   | 8.3  | 10.6   | 11.5 |
| 48°   | 8.3  | 10.1   | 11.1 |
| 49°   | 7.8  | 10.1   | 11.1 |
| 50°   | 7.8  | 10.1   | 11.1 |
| 51°   | 7.8  | 10.6   | 11.5 |
| 52°   | 7.8  | 10.6   | 11.5 |
| 53°   | 7.8  | 10.6   | 11.5 |
| 54°   | 7.8  | 10.6   | 11.1 |
| 55°   | 7.8  | 10.6   | 11.5 |
| 56°   | 7.8  | 10.6   | 11.1 |
| 57°   | 7.8  | 10.6   | 11.1 |
| 58°   | 7.8  | 10.1   | 11.1 |
| 59°   | 7.8  | 10.1   | 11.1 |
| 60°   | 7.8  | 10.1   | 11.1 |
| 62.5° | 7.4  | 10.1   | 11.1 |
| 65°   | 7.4  | 9.7    | 10.6 |





TEST NUMBER: P1345549

CATALOG NUMBER: P3A13R359740DE010 E3A451GPH

**CANDELA DISTRIBUTION (continued):**

|       | 135° | 157.5° | 180° |
|-------|------|--------|------|
| 67.5° | 6.9  | 9.7    | 10.1 |
| 70°   | 6.5  | 9.2    | 9.7  |
| 72.5° | 6.0  | 8.8    | 9.2  |
| 75°   | 5.5  | 7.8    | 8.3  |
| 77.5° | 4.6  | 6.9    | 7.8  |
| 80°   | 4.2  | 6.0    | 6.5  |
| 82.5° | 3.2  | 5.1    | 5.5  |
| 85°   | 2.3  | 3.7    | 3.7  |
| 87.5° | 0.9  | 1.8    | 1.8  |
| 90°   | 0.0  | 0.0    | 0.0  |

(END OF REPORT)