

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: P1345469

Luminaire Tested: P3A13R359040DE010 E3A451GPH

Issue Date: 2/13/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1345469  
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: P3A13R359040DE010 E3A451GPH  
Description: 3in Adjustable LED luminaire with, R35 optic, 4000K CCT AND, 90CRI , E3A451GPH TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

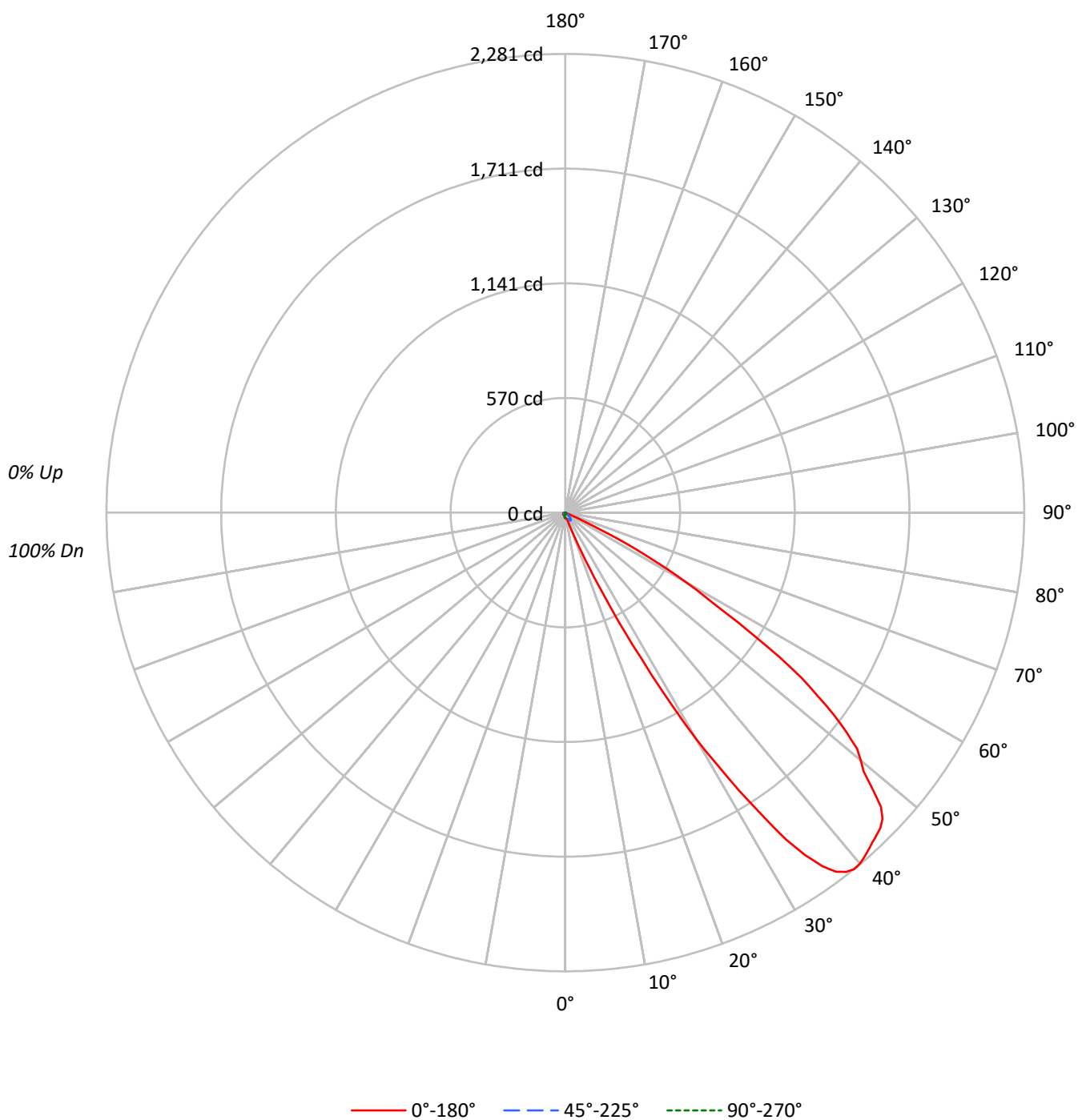
Lumens per Lamp: N/A  
Luminaire Lumens: 568.0 lumens  
Efficiency: N/A  
Efficacy: 38.9 lumens/watt  
Spacing Criteria (0/90/45): 4.01 / 0.66 / 1.41  
Luminous Opening: Circular (Dia: 0.25' x H: 0')  
CIE Type: Direct

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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### Luminous Intensity Polar Plot



TEST NUMBER: P1345469

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

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

|     | 0°     | 45°   | 90°  | 135° | 180°  |
|-----|--------|-------|------|------|-------|
| 0°  | 5723   | 5723  | 5723 | 5723 | 5723  |
| 5°  | 6207   | 6097  | 5635 | 5085 | 4975  |
| 10° | 6502   | 5945  | 5032 | 4342 | 4342  |
| 15° | 9308   | 5812  | 4064 | 3723 | 3837  |
| 20° | 23335  | 6231  | 3220 | 3220 | 3594  |
| 25° | 108297 | 7936  | 2492 | 2976 | 3339  |
| 30° | 329241 | 10786 | 1950 | 2735 | 3368  |
| 35° | 556452 | 12501 | 1660 | 2597 | 3293  |
| 40° | 652251 | 12337 | 1317 | 2634 | 3521  |
| 45° | 686893 | 8745  | 1116 | 2853 | 3814  |
| 50° | 653829 | 5254  | 1058 | 2968 | 4196  |
| 55° | 547880 | 2141  | 1185 | 3326 | 4893  |
| 60° | 306730 | 439   | 1360 | 3815 | 5394  |
| 65° | 52924  | 259   | 1349 | 4255 | 6123  |
| 70° | 962    | 321   | 1667 | 4616 | 6924  |
| 75° | 847    | 424   | 2203 | 5253 | 7795  |
| 80° | 631    | 631   | 2652 | 5809 | 9092  |
| 85° | 0      | 1258  | 5284 | 6542 | 10315 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 46°

Luminance: 691784 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 2.4    | 0.4       |
| 10°-20°   | 6.7    | 1.2       |
| 20°-30°   | 34.9   | 6.1       |
| 30°-40°   | 150.5  | 26.5      |
| 40°-50°   | 214.7  | 37.8      |
| 50°-60°   | 133.0  | 23.4      |
| 60°-70°   | 20.2   | 3.6       |
| 70°-80°   | 3.8    | 0.7       |
| 80°-90°   | 1.9    | 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°    | 43.9   | 7.7       |
| 0°-40°    | 194.4  | 34.2      |
| 0°-60°    | 542.1  | 95.4      |
| 0°-90°    | 568.0  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 568.0  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 45° | 90° | 135° | 180° | Flux |
|-----|------|-----|-----|------|------|------|
| 0°  | 26   | 26  | 26  | 26   | 26   |      |
| 5°  | 28   | 28  | 26  | 23   | 23   | 3    |
| 15° | 41   | 26  | 18  | 16   | 17   | 15   |
| 25° | 448  | 33  | 10  | 12   | 14   | 268  |
| 35° | 2079 | 47  | 6   | 10   | 12   | 1248 |
| 45° | 2215 | 28  | 4   | 9    | 12   | 1673 |
| 55° | 1433 | 6   | 3   | 9    | 13   | 1221 |
| 65° | 102  | 0   | 3   | 8    | 12   | 208  |
| 75° | 1    | 0   | 3   | 6    | 9    | 1    |
| 85° | 0    | 0   | 2   | 3    | 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°    | 26.1   | 26.1   | 26.1   | 26.1   | 26.1   | 26.1  | 26.1  | 26.1 | 26.1  | 26.1 | 26.1   |
| 2.5°  | 27.2   | 27.2   | 27.2   | 27.2   | 27.2   | 27.2  | 27.2  | 27.2 | 27.2  | 26.1 | 25.6   |
| 5°    | 28.2   | 28.2   | 27.7   | 27.7   | 27.7   | 27.7  | 27.7  | 27.7 | 26.7  | 25.6 | 24.1   |
| 7.5°  | 28.7   | 28.7   | 28.2   | 28.2   | 28.2   | 28.2  | 27.7  | 27.2 | 26.1  | 24.1 | 22.6   |
| 10°   | 29.2   | 29.2   | 29.2   | 29.2   | 28.7   | 28.2  | 27.7  | 26.7 | 25.1  | 22.6 | 21.0   |
| 12.5° | 32.8   | 32.8   | 32.3   | 31.3   | 30.3   | 29.2  | 28.2  | 26.1 | 23.1  | 20.5 | 19.0   |
| 15°   | 41.0   | 40.5   | 39.5   | 37.9   | 35.9   | 33.3  | 31.3  | 25.6 | 21.0  | 17.9 | 16.9   |
| 17.5° | 57.4   | 56.4   | 54.9   | 49.7   | 45.1   | 40.5  | 36.4  | 25.6 | 19.0  | 15.9 | 14.9   |
| 20°   | 100.0  | 100.5  | 89.7   | 77.4   | 67.2   | 55.9  | 45.6  | 26.7 | 16.9  | 13.8 | 13.3   |
| 22.5° | 208.7  | 200.5  | 174.8  | 145.1  | 110.8  | 85.6  | 64.6  | 29.2 | 14.9  | 11.8 | 11.8   |
| 25°   | 447.6  | 416.3  | 354.3  | 267.7  | 188.7  | 133.8 | 93.8  | 32.8 | 13.3  | 10.3 | 10.8   |
| 27.5° | 817.3  | 789.1  | 664.5  | 500.4  | 332.3  | 202.0 | 127.2 | 37.4 | 11.8  | 8.7  | 9.7    |
| 30°   | 1300.3 | 1222.4 | 1059.8 | 820.4  | 555.3  | 309.2 | 170.7 | 42.6 | 9.7   | 7.7  | 9.2    |
| 31°   | 1451.1 | 1415.2 | 1217.2 | 949.1  | 650.7  | 367.1 | 189.2 | 44.1 | 9.2   | 7.7  | 8.7    |
| 32°   | 1630.0 | 1566.4 | 1389.0 | 1090.1 | 747.6  | 418.9 | 211.2 | 45.6 | 8.7   | 6.7  | 8.7    |
| 33°   | 1790.0 | 1728.5 | 1512.6 | 1214.2 | 845.5  | 477.9 | 234.8 | 46.1 | 7.7   | 6.7  | 8.2    |
| 34°   | 1958.2 | 1874.1 | 1660.3 | 1343.9 | 946.0  | 541.5 | 256.4 | 46.7 | 7.2   | 6.2  | 8.2    |
| 35°   | 2078.7 | 1994.6 | 1787.4 | 1446.4 | 1032.7 | 597.9 | 281.0 | 46.7 | 6.7   | 6.2  | 7.7    |
| 36°   | 2172.0 | 2098.1 | 1897.1 | 1552.1 | 1118.8 | 648.6 | 300.5 | 46.7 | 5.6   | 5.6  | 7.7    |
| 37°   | 2236.1 | 2165.8 | 1971.0 | 1642.8 | 1184.4 | 693.7 | 317.9 | 46.7 | 5.1   | 5.6  | 7.7    |
| 38°   | 2267.3 | 2208.9 | 2042.2 | 1709.0 | 1248.0 | 729.1 | 331.7 | 45.6 | 4.6   | 5.1  | 7.2    |
| 39°   | 2280.7 | 2233.0 | 2085.8 | 1764.9 | 1295.7 | 759.9 | 342.0 | 44.6 | 4.1   | 5.1  | 7.2    |
| 40°   | 2278.6 | 2237.1 | 2110.4 | 1803.3 | 1334.2 | 780.9 | 347.6 | 43.1 | 3.6   | 4.6  | 7.2    |
| 41°   | 2266.8 | 2230.9 | 2123.3 | 1836.1 | 1357.2 | 795.3 | 349.2 | 41.5 | 3.1   | 4.6  | 6.7    |
| 42°   | 2253.5 | 2220.7 | 2127.4 | 1853.6 | 1372.1 | 799.9 | 345.1 | 39.5 | 3.1   | 4.1  | 6.7    |
| 43°   | 2239.7 | 2209.4 | 2127.4 | 1859.2 | 1375.7 | 796.8 | 338.4 | 35.9 | 2.6   | 4.1  | 6.7    |
| 44°   | 2228.4 | 2199.7 | 2120.7 | 1857.7 | 1368.0 | 785.0 | 326.1 | 31.8 | 2.1   | 4.1  | 6.7    |
| 45°   | 2215.0 | 2186.8 | 2112.0 | 1847.9 | 1353.1 | 765.0 | 310.7 | 28.2 | 1.5   | 3.6  | 6.7    |
| 46°   | 2191.5 | 2169.4 | 2096.6 | 1827.9 | 1329.5 | 737.3 | 291.2 | 25.6 | 1.0   | 3.6  | 6.2    |
| 47°   | 2145.8 | 2126.9 | 2066.9 | 1798.2 | 1298.3 | 704.5 | 271.2 | 23.1 | 1.0   | 3.6  | 6.2    |
| 48°   | 2054.0 | 2053.5 | 2007.4 | 1742.8 | 1248.5 | 663.5 | 250.2 | 20.5 | 1.0   | 3.6  | 6.2    |
| 49°   | 1965.3 | 1956.1 | 1898.7 | 1645.4 | 1177.3 | 614.3 | 228.2 | 18.5 | 0.5   | 3.6  | 6.2    |
| 50°   | 1916.6 | 1896.6 | 1802.3 | 1530.5 | 1086.0 | 546.1 | 204.6 | 15.4 | 0.5   | 3.1  | 6.2    |
| 51°   | 1865.9 | 1837.2 | 1725.9 | 1427.0 | 977.3  | 480.4 | 178.9 | 12.3 | 0.5   | 3.1  | 5.6    |
| 52°   | 1774.1 | 1746.9 | 1622.3 | 1328.0 | 871.7  | 413.3 | 154.3 | 10.3 | 0.5   | 3.1  | 6.2    |
| 53°   | 1675.1 | 1636.2 | 1500.8 | 1219.3 | 778.9  | 353.8 | 129.2 | 8.7  | 0.5   | 3.1  | 5.6    |
| 54°   | 1550.5 | 1533.1 | 1377.7 | 1086.0 | 670.2  | 296.4 | 106.1 | 7.2  | 0.5   | 3.1  | 5.6    |
| 55°   | 1433.1 | 1407.5 | 1246.0 | 949.6  | 571.7  | 243.0 | 88.7  | 5.6  | 0.5   | 3.1  | 5.6    |
| 56°   | 1283.4 | 1244.9 | 1093.7 | 824.5  | 471.7  | 195.9 | 74.9  | 4.6  | 0.5   | 3.1  | 5.6    |
| 57°   | 1105.0 | 1063.9 | 944.5  | 685.5  | 370.2  | 149.2 | 62.6  | 3.6  | 0.5   | 3.1  | 5.6    |
| 58°   | 934.7  | 899.3  | 771.2  | 529.1  | 278.9  | 103.6 | 51.8  | 2.6  | 0.5   | 2.6  | 5.6    |
| 59°   | 807.6  | 768.6  | 641.4  | 407.1  | 193.8  | 76.4  | 39.0  | 2.1  | 0.5   | 3.1  | 5.6    |
| 60°   | 699.4  | 649.1  | 516.3  | 315.3  | 138.4  | 54.9  | 28.7  | 1.0  | 1.0   | 3.1  | 5.6    |
| 62.5° | 403.0  | 355.8  | 246.6  | 128.2  | 56.9   | 28.2  | 13.8  | 0.5  | 1.0   | 3.1  | 5.6    |
| 65°   | 102.0  | 90.8   | 59.0   | 27.7   | 15.9   | 9.7   | 5.1   | 0.5  | 1.0   | 2.6  | 5.1    |



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**CANDELA DISTRIBUTION (continued):**

|       | 0°  | 5°  | 10° | 15° | 20° | 25° | 30° | 45° | 67.5° | 90° | 112.5° |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-------|-----|--------|
| 67.5° | 3.6 | 3.6 | 3.6 | 3.1 | 2.6 | 2.1 | 1.0 | 0.5 | 1.0   | 2.6 | 5.1    |
| 70°   | 1.5 | 1.5 | 1.5 | 1.0 | 1.0 | 0.5 | 0.5 | 0.5 | 1.0   | 2.6 | 4.6    |
| 72.5° | 1.0 | 1.0 | 1.0 | 1.0 | 0.5 | 0.5 | 0.5 | 0.5 | 1.5   | 2.6 | 4.1    |
| 75°   | 1.0 | 1.0 | 1.0 | 1.0 | 0.5 | 0.5 | 0.5 | 0.5 | 1.5   | 2.6 | 4.1    |
| 77.5° | 1.0 | 1.0 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 1.5   | 2.1 | 3.6    |
| 80°   | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 1.5   | 2.1 | 3.1    |
| 82.5° | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 1.5   | 2.1 | 2.6    |
| 85°   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 | 0.0 | 0.5 | 1.5   | 2.1 | 2.1    |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 | 1.5   | 2.1 | 1.5    |
| 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°    | 26.1 | 26.1   | 26.1 |
| 2.5°  | 24.6 | 24.6   | 24.6 |
| 5°    | 23.1 | 23.1   | 22.6 |
| 7.5°  | 21.5 | 21.0   | 21.0 |
| 10°   | 19.5 | 19.5   | 19.5 |
| 12.5° | 17.9 | 17.9   | 17.9 |
| 15°   | 16.4 | 16.9   | 16.9 |
| 17.5° | 14.9 | 15.9   | 15.9 |
| 20°   | 13.8 | 14.9   | 15.4 |
| 22.5° | 12.8 | 13.8   | 14.4 |
| 25°   | 12.3 | 13.3   | 13.8 |
| 27.5° | 11.3 | 12.8   | 13.8 |
| 30°   | 10.8 | 12.3   | 13.3 |
| 31°   | 10.8 | 12.3   | 12.8 |
| 32°   | 10.3 | 12.3   | 12.8 |
| 33°   | 10.3 | 12.3   | 12.8 |
| 34°   | 10.3 | 11.8   | 12.8 |
| 35°   | 9.7  | 11.8   | 12.3 |
| 36°   | 9.7  | 11.8   | 12.3 |
| 37°   | 9.7  | 11.8   | 12.8 |
| 38°   | 9.7  | 11.8   | 12.3 |
| 39°   | 9.2  | 11.8   | 12.3 |
| 40°   | 9.2  | 11.8   | 12.3 |
| 41°   | 9.2  | 11.8   | 12.3 |
| 42°   | 9.2  | 11.8   | 12.3 |
| 43°   | 9.2  | 11.8   | 12.3 |
| 44°   | 9.2  | 11.3   | 12.3 |
| 45°   | 9.2  | 11.3   | 12.3 |
| 46°   | 9.2  | 11.8   | 12.3 |
| 47°   | 9.2  | 11.8   | 12.8 |
| 48°   | 9.2  | 11.3   | 12.3 |
| 49°   | 8.7  | 11.3   | 12.3 |
| 50°   | 8.7  | 11.3   | 12.3 |
| 51°   | 8.7  | 11.8   | 12.8 |
| 52°   | 8.7  | 11.8   | 12.8 |
| 53°   | 8.7  | 11.8   | 12.8 |
| 54°   | 8.7  | 11.8   | 12.3 |
| 55°   | 8.7  | 11.8   | 12.8 |
| 56°   | 8.7  | 11.8   | 12.3 |
| 57°   | 8.7  | 11.8   | 12.3 |
| 58°   | 8.7  | 11.3   | 12.3 |
| 59°   | 8.7  | 11.3   | 12.3 |
| 60°   | 8.7  | 11.3   | 12.3 |
| 62.5° | 8.2  | 11.3   | 12.3 |
| 65°   | 8.2  | 10.8   | 11.8 |



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**CANDELA DISTRIBUTION (continued):**

|       | 135° | 157.5° | 180° |
|-------|------|--------|------|
| 67.5° | 7.7  | 10.8   | 11.3 |
| 70°   | 7.2  | 10.3   | 10.8 |
| 72.5° | 6.7  | 9.7    | 10.3 |
| 75°   | 6.2  | 8.7    | 9.2  |
| 77.5° | 5.1  | 7.7    | 8.7  |
| 80°   | 4.6  | 6.7    | 7.2  |
| 82.5° | 3.6  | 5.6    | 6.2  |
| 85°   | 2.6  | 4.1    | 4.1  |
| 87.5° | 1.0  | 2.1    | 2.1  |
| 90°   | 0.0  | 0.0    | 0.0  |

(END OF REPORT)