

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: P1335056

Luminaire Tested: P3A02R309727DE010 E3A451H

Issue Date: 2/13/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1335056  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-76)  
Test Lab: INNOVATION CENTER  
Issue Date: 2/13/2026  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: IRiS  
Catalog Number: P3A02R309727DE010 E3A451H  
Description: 3in Adjustable LED luminaire with, R30 optic, 2700K CCT AND, 97CRI , E3A451H TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

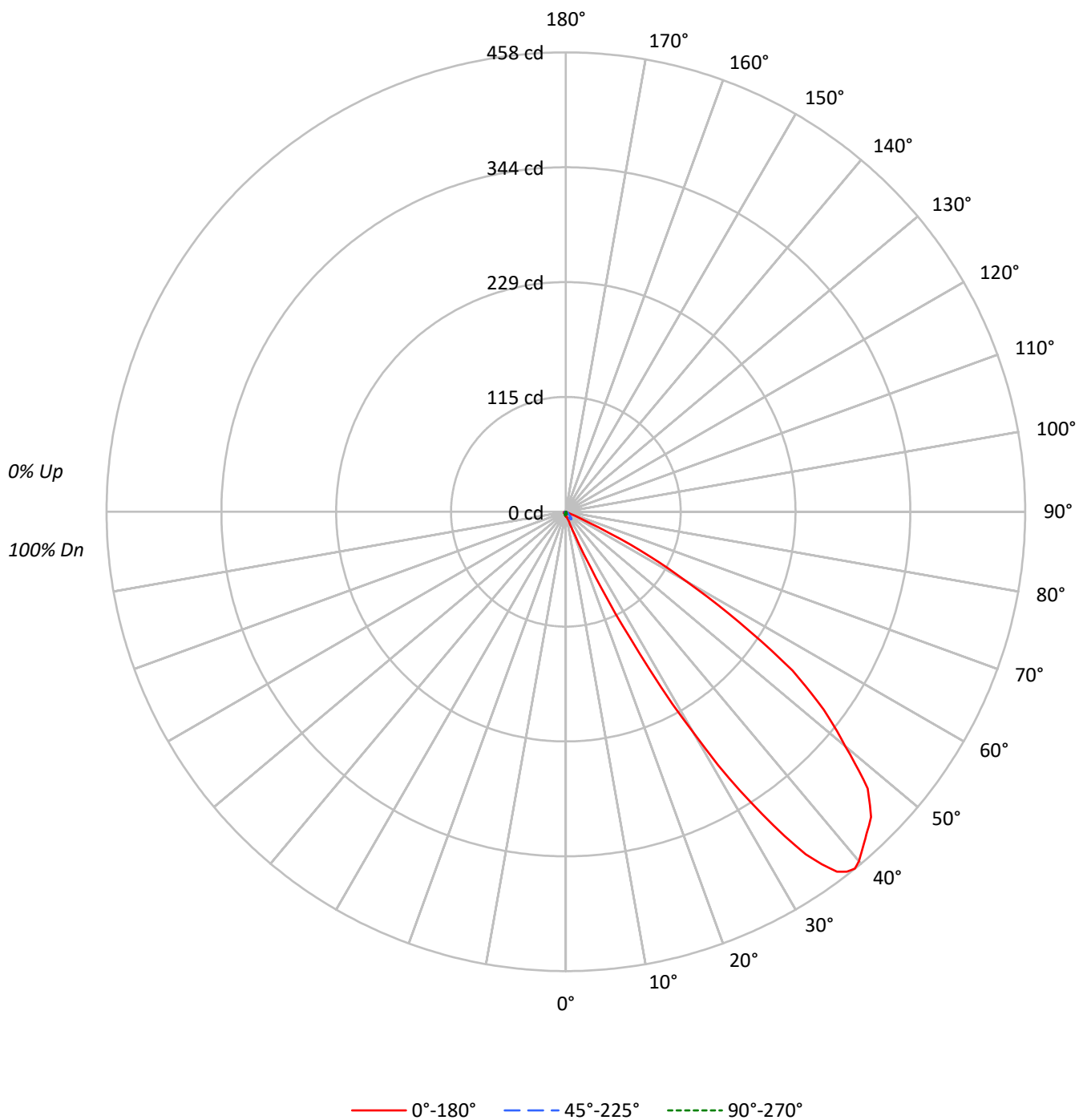
Lumens per Lamp: N/A  
Luminaire Lumens: 119.0 lumens  
Efficiency: N/A  
Efficacy: 33.1 lumens/watt  
Spacing Criteria (0/90/45): 4.07 / 0.66 / 1.44  
Luminous Opening: Circular (Dia: 0.25' x H: 0')  
CIE Type: Direct

Input Watts (W): 3.6  
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



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**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  | 108 | 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  | 60  | 52  | 45  | 58  | 51  | 45  | 56  | 50  | 44  | 54  | 49  | 44  | 42  |    |    |
| 6   | 68  | 54  | 45  | 38  | 66  | 53  | 44  | 38  | 51  | 43  | 37  | 49  | 42  | 37  | 48  | 42  | 37  | 35  |    |    |
| 7   | 62  | 48  | 38  | 32  | 60  | 47  | 38  | 32  | 45  | 37  | 31  | 44  | 36  | 31  | 42  | 36  | 31  | 29  |    |    |
| 8   | 56  | 42  | 33  | 27  | 55  | 41  | 33  | 27  | 40  | 32  | 26  | 39  | 32  | 26  | 37  | 31  | 26  | 24  |    |    |
| 9   | 52  | 37  | 29  | 23  | 50  | 37  | 28  | 23  | 36  | 28  | 22  | 34  | 27  | 22  | 33  | 27  | 22  | 20  |    |    |
| 10  | 48  | 33  | 25  | 19  | 46  | 33  | 25  | 19  | 32  | 24  | 19  | 31  | 24  | 19  | 30  | 24  | 19  | 17  |    |    |

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

|     | 0°     | 45°  | 90°  | 135° | 180° |
|-----|--------|------|------|------|------|
| 0°  | 1009   | 1009 | 1009 | 1009 | 1009 |
| 5°  | 1079   | 1057 | 991  | 902  | 880  |
| 10° | 1180   | 1047 | 868  | 779  | 757  |
| 15° | 1725   | 1044 | 726  | 658  | 681  |
| 20° | 4340   | 1143 | 560  | 560  | 630  |
| 25° | 20203  | 1428 | 436  | 508  | 581  |
| 30° | 64314  | 1975 | 329  | 481  | 582  |
| 35° | 111601 | 2409 | 268  | 455  | 589  |
| 40° | 130158 | 2405 | 200  | 458  | 601  |
| 45° | 133471 | 1706 | 217  | 496  | 651  |
| 50° | 124141 | 955  | 171  | 512  | 751  |
| 55° | 105516 | 497  | 191  | 573  | 841  |
| 60° | 60916  | 132  | 219  | 614  | 921  |
| 65° | 12453  | 0    | 259  | 726  | 1038 |
| 70° | 192    | 64   | 321  | 833  | 1218 |
| 75° | 169    | 85   | 339  | 847  | 1440 |
| 80° | 126    | 126  | 505  | 1010 | 1642 |
| 85° | 0      | 252  | 1006 | 1006 | 2013 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 133471 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 0.4    | 0.3       |
| 10°-20°   | 1.2    | 1.0       |
| 20°-30°   | 6.9    | 5.8       |
| 30°-40°   | 32.0   | 26.9      |
| 40°-50°   | 45.3   | 38.1      |
| 50°-60°   | 27.9   | 23.4      |
| 60°-70°   | 4.2    | 3.6       |
| 70°-80°   | 0.7    | 0.6       |
| 80°-90°   | 0.3    | 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°    | 8.5    | 7.1       |
| 0°-40°    | 40.5   | 34.1      |
| 0°-60°    | 113.7  | 95.6      |
| 0°-90°    | 119.0  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 119.0  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | 45° | 90° | 135° | 180° | Flux |
|-----|-----|-----|-----|------|------|------|
| 0°  | 5   | 5   | 5   | 5    | 5    |      |
| 5°  | 5   | 5   | 4   | 4    | 4    | 0    |
| 15° | 8   | 5   | 3   | 3    | 3    | 3    |
| 25° | 84  | 6   | 2   | 2    | 2    | 51   |
| 35° | 417 | 9   | 1   | 2    | 2    | 250  |
| 45° | 430 | 6   | 1   | 2    | 2    | 326  |
| 55° | 276 | 1   | 0   | 2    | 2    | 235  |
| 65° | 24  | 0   | 0   | 1    | 2    | 43   |
| 75° | 0   | 0   | 0   | 1    | 2    | 0    |
| 85° | 0   | 0   | 0   | 0    | 1    | 0    |
| 90° | 0   | 0   | 0   | 0    | 0    |      |

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°    | 5°    | 10°   | 15°   | 20°   | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° |
|-------|-------|-------|-------|-------|-------|-------|-----|-------|-----|--------|------|
| 0°    | 4.6   | 4.6   | 4.6   | 4.6   | 4.6   | 4.6   | 4.6 | 4.6   | 4.6 | 4.6    | 4.6  |
| 2.5°  | 4.7   | 4.7   | 4.8   | 4.8   | 4.7   | 4.8   | 4.8 | 4.8   | 4.6 | 4.5    | 4.3  |
| 5°    | 4.9   | 4.9   | 4.9   | 5.0   | 4.9   | 4.9   | 4.8 | 4.7   | 4.5 | 4.2    | 4.1  |
| 7.5°  | 5.1   | 5.1   | 5.0   | 5.1   | 5.0   | 5.0   | 4.8 | 4.6   | 4.3 | 4.0    | 3.8  |
| 10°   | 5.3   | 5.3   | 5.2   | 5.2   | 5.1   | 5.1   | 4.7 | 4.4   | 3.9 | 3.6    | 3.5  |
| 12.5° | 5.9   | 5.9   | 5.8   | 5.7   | 5.5   | 5.4   | 4.6 | 4.1   | 3.5 | 3.2    | 3.1  |
| 15°   | 7.6   | 7.5   | 7.3   | 7.0   | 6.5   | 6.4   | 4.6 | 3.8   | 3.2 | 2.9    | 2.9  |
| 17.5° | 10.4  | 10.3  | 10.0  | 9.2   | 8.3   | 8.0   | 4.6 | 3.4   | 2.8 | 2.6    | 2.6  |
| 20°   | 18.6  | 17.8  | 16.3  | 14.3  | 12.2  | 11.1  | 4.9 | 3.0   | 2.4 | 2.3    | 2.4  |
| 21°   | 24.4  | 23.6  | 21.7  | 18.3  | 14.6  | 13.4  | 5.1 | 2.9   | 2.3 | 2.2    | 2.4  |
| 22°   | 33.2  | 32.3  | 28.4  | 23.9  | 18.5  | 16.4  | 5.2 | 2.7   | 2.1 | 2.1    | 2.3  |
| 23°   | 46.3  | 44.8  | 38.2  | 31.0  | 23.2  | 20.1  | 5.4 | 2.6   | 2.0 | 2.1    | 2.2  |
| 24°   | 60.6  | 59.3  | 51.8  | 41.0  | 29.6  | 25.3  | 5.6 | 2.5   | 1.9 | 1.9    | 2.1  |
| 25°   | 83.5  | 82.0  | 68.7  | 51.7  | 37.5  | 30.4  | 5.9 | 2.3   | 1.8 | 1.8    | 2.1  |
| 26°   | 113.1 | 106.2 | 88.4  | 66.7  | 46.2  | 38.1  | 6.2 | 2.2   | 1.7 | 1.8    | 2.0  |
| 27°   | 141.1 | 135.4 | 115.5 | 85.5  | 57.1  | 46.8  | 6.6 | 2.1   | 1.6 | 1.7    | 2.0  |
| 28°   | 178.0 | 170.0 | 144.8 | 108.2 | 72.0  | 56.6  | 7.0 | 2.0   | 1.5 | 1.7    | 1.9  |
| 29°   | 219.3 | 208.1 | 177.7 | 133.6 | 88.7  | 67.7  | 7.4 | 1.9   | 1.4 | 1.6    | 1.9  |
| 30°   | 254.0 | 243.5 | 213.1 | 163.8 | 108.0 | 82.2  | 7.8 | 1.8   | 1.3 | 1.6    | 1.9  |
| 31°   | 294.7 | 278.8 | 242.0 | 189.4 | 124.5 | 96.7  | 8.2 | 1.6   | 1.2 | 1.5    | 1.8  |
| 32°   | 327.7 | 316.6 | 277.5 | 218.2 | 146.3 | 112.8 | 8.5 | 1.5   | 1.2 | 1.5    | 1.8  |
| 33°   | 359.6 | 344.6 | 306.8 | 245.9 | 165.9 | 129.2 | 8.8 | 1.4   | 1.1 | 1.4    | 1.8  |
| 34°   | 390.0 | 376.3 | 334.6 | 268.2 | 184.4 | 144.8 | 9.0 | 1.2   | 1.1 | 1.4    | 1.7  |
| 35°   | 416.9 | 401.0 | 359.1 | 290.1 | 203.5 | 159.1 | 9.0 | 1.1   | 1.0 | 1.3    | 1.7  |
| 36°   | 434.3 | 422.9 | 380.3 | 311.6 | 220.7 | 172.6 | 9.0 | 1.0   | 0.9 | 1.3    | 1.6  |
| 37°   | 449.3 | 435.9 | 397.4 | 328.2 | 233.5 | 183.4 | 9.0 | 0.9   | 0.9 | 1.3    | 1.6  |
| 38°   | 455.4 | 444.0 | 409.1 | 342.8 | 245.4 | 194.5 | 8.9 | 0.8   | 0.8 | 1.2    | 1.6  |
| 39°   | 457.8 | 447.6 | 417.9 | 353.3 | 254.2 | 201.9 | 8.7 | 0.7   | 0.8 | 1.2    | 1.6  |
| 40°   | 454.7 | 447.0 | 422.4 | 360.2 | 261.2 | 207.3 | 8.4 | 0.6   | 0.7 | 1.2    | 1.6  |
| 42.5° | 441.9 | 436.7 | 421.4 | 367.0 | 267.2 | 211.3 | 7.3 | 0.4   | 0.7 | 1.1    | 1.6  |
| 45°   | 430.4 | 424.8 | 411.3 | 359.9 | 259.4 | 203.4 | 5.5 | 0.2   | 0.7 | 1.1    | 1.6  |
| 47.5° | 408.3 | 404.8 | 394.1 | 341.7 | 242.3 | 185.5 | 3.9 | 0.1   | 0.6 | 1.0    | 1.5  |
| 50°   | 363.9 | 360.6 | 346.5 | 296.7 | 208.4 | 156.9 | 2.8 | 0.1   | 0.5 | 1.0    | 1.5  |
| 52.5° | 324.1 | 320.6 | 300.4 | 246.7 | 160.1 | 115.0 | 1.8 | 0.1   | 0.5 | 1.0    | 1.5  |
| 55°   | 276.0 | 269.8 | 243.4 | 187.2 | 113.5 | 77.1  | 1.3 | 0.1   | 0.5 | 0.9    | 1.5  |
| 57.5° | 204.3 | 195.4 | 171.7 | 127.7 | 65.4  | 41.8  | 0.7 | 0.1   | 0.5 | 0.9    | 1.5  |
| 60°   | 138.9 | 133.6 | 107.5 | 67.4  | 27.9  | 17.6  | 0.3 | 0.1   | 0.5 | 0.9    | 1.4  |
| 62.5° | 84.2  | 77.5  | 54.0  | 28.7  | 12.0  | 8.0   | 0.0 | 0.2   | 0.5 | 0.9    | 1.4  |
| 65°   | 24.0  | 21.3  | 14.1  | 6.5   | 3.4   | 2.6   | 0.0 | 0.2   | 0.5 | 0.9    | 1.4  |
| 67.5° | 0.8   | 0.8   | 0.8   | 0.7   | 0.5   | 0.5   | 0.1 | 0.2   | 0.5 | 0.9    | 1.3  |
| 70°   | 0.3   | 0.3   | 0.3   | 0.2   | 0.2   | 0.1   | 0.1 | 0.2   | 0.5 | 0.8    | 1.3  |
| 72.5° | 0.2   | 0.2   | 0.2   | 0.2   | 0.1   | 0.1   | 0.1 | 0.2   | 0.4 | 0.7    | 1.2  |
| 75°   | 0.2   | 0.2   | 0.2   | 0.1   | 0.1   | 0.1   | 0.1 | 0.3   | 0.4 | 0.7    | 1.0  |
| 77.5° | 0.2   | 0.2   | 0.2   | 0.1   | 0.1   | 0.1   | 0.1 | 0.3   | 0.4 | 0.6    | 1.0  |
| 80°   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1 | 0.3   | 0.4 | 0.6    | 0.8  |



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**CANDELA DISTRIBUTION (continued):**

|       | 0°  | 5°  | 10° | 15° | 20° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° |
|-------|-----|-----|-----|-----|-----|-------|-----|-------|-----|--------|------|
| 82.5° | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0   | 0.1 | 0.3   | 0.4 | 0.4    | 0.6  |
| 85°   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0   | 0.1 | 0.3   | 0.4 | 0.3    | 0.4  |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0   | 0.1 | 0.3   | 0.3 | 0.3    | 0.2  |
| 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: P1335056

CATALOG NUMBER: P3A02R309727DE010 E3A451H

**CANDELA DISTRIBUTION (continued):**

|       | 157.5° | 180° |
|-------|--------|------|
| 0°    | 4.6    | 4.6  |
| 2.5°  | 4.3    | 4.3  |
| 5°    | 4.0    | 4.0  |
| 7.5°  | 3.7    | 3.7  |
| 10°   | 3.4    | 3.4  |
| 12.5° | 3.2    | 3.2  |
| 15°   | 2.9    | 3.0  |
| 17.5° | 2.7    | 2.8  |
| 20°   | 2.6    | 2.7  |
| 21°   | 2.6    | 2.7  |
| 22°   | 2.5    | 2.6  |
| 23°   | 2.5    | 2.6  |
| 24°   | 2.4    | 2.5  |
| 25°   | 2.3    | 2.4  |
| 26°   | 2.3    | 2.4  |
| 27°   | 2.3    | 2.4  |
| 28°   | 2.2    | 2.4  |
| 29°   | 2.2    | 2.3  |
| 30°   | 2.2    | 2.3  |
| 31°   | 2.1    | 2.3  |
| 32°   | 2.1    | 2.3  |
| 33°   | 2.1    | 2.2  |
| 34°   | 2.0    | 2.2  |
| 35°   | 2.0    | 2.2  |
| 36°   | 2.0    | 2.2  |
| 37°   | 2.0    | 2.1  |
| 38°   | 2.0    | 2.2  |
| 39°   | 2.0    | 2.1  |
| 40°   | 2.0    | 2.1  |
| 42.5° | 2.0    | 2.1  |
| 45°   | 2.0    | 2.1  |
| 47.5° | 2.0    | 2.2  |
| 50°   | 2.0    | 2.2  |
| 52.5° | 2.0    | 2.2  |
| 55°   | 2.0    | 2.2  |
| 57.5° | 2.0    | 2.1  |
| 60°   | 2.0    | 2.1  |
| 62.5° | 1.9    | 2.1  |
| 65°   | 1.9    | 2.0  |
| 67.5° | 1.9    | 2.0  |
| 70°   | 1.8    | 1.9  |
| 72.5° | 1.7    | 1.8  |
| 75°   | 1.5    | 1.7  |
| 77.5° | 1.4    | 1.5  |
| 80°   | 1.2    | 1.3  |



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CATALOG NUMBER: P3A02R309727DE010 E3A451H

**CANDELA DISTRIBUTION (continued):**

|       | 157.5° | 180° |
|-------|--------|------|
| 82.5° | 1.0    | 1.0  |
| 85°   | 0.7    | 0.8  |
| 87.5° | 0.4    | 0.4  |
| 90°   | 0.0    | 0.0  |

(END OF REPORT)