

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: P1308630

Luminaire Tested: P3SQAS02R309035DE010 E3SQCA451MB

Issue Date: 1/29/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1308630  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-76)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/29/2026  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: IRiS  
Catalog Number: P3SQAS02R309035DE010 E3SQCA451MB  
Description: 3in Adjustable LED luminaire with, R30 optic, 3500K CCT AND, 90CRI , E3SQCA451MB TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

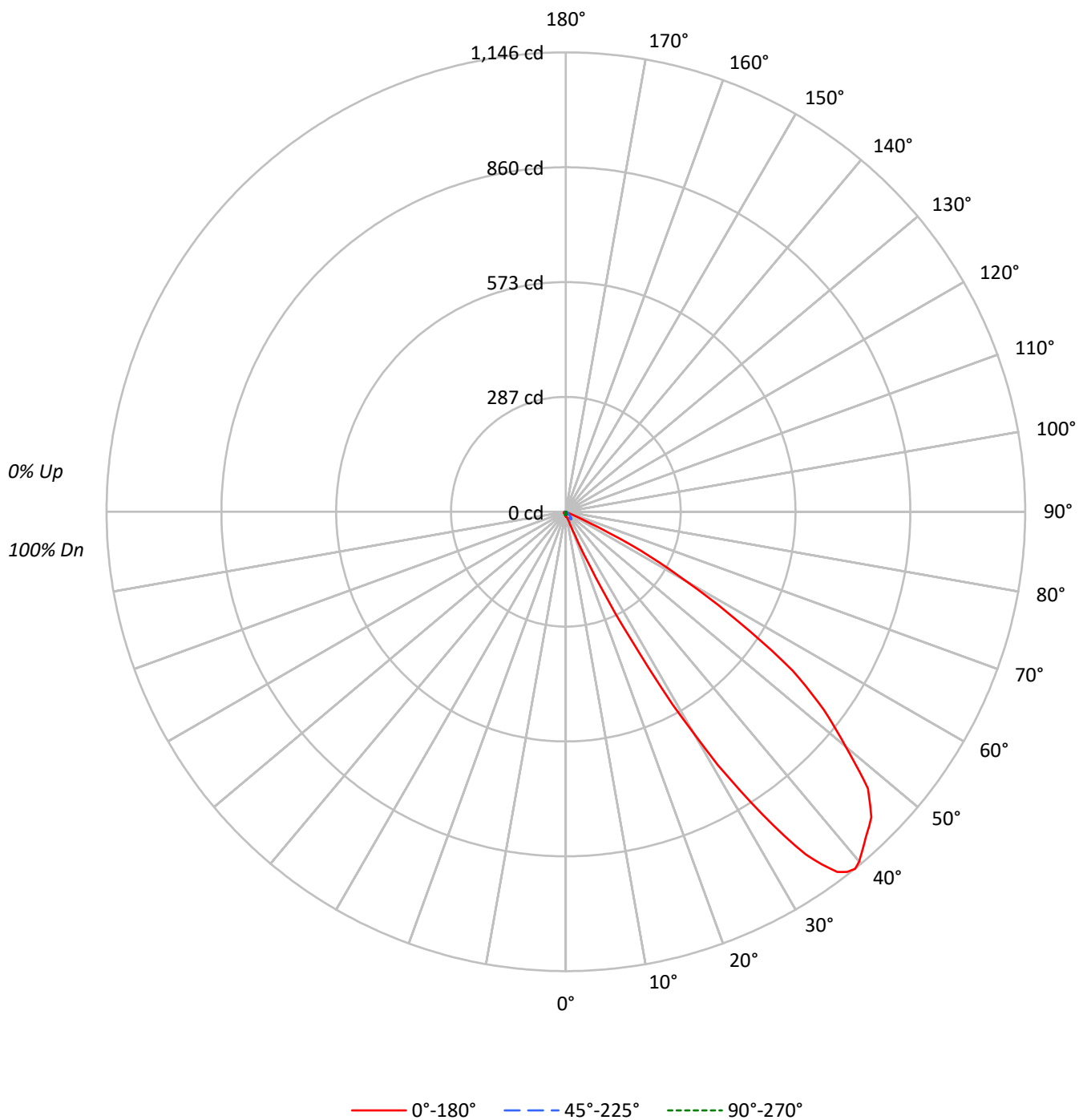
Lumens per Lamp: N/A  
Luminaire Lumens: 298.1 lumens  
Efficiency: N/A  
Efficacy: 82.8 lumens/watt  
Spacing Criteria (0/90/45): 4.07 / 0.66 / 1.44  
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')  
CIE Type: Direct

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  |
| RW  | 70  | 50  | 30  | 10  |  | 70  | 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 |
| 1   | 110 | 106 | 102 | 99  |  | 108 | 104 | 100 | 97  |  | 100 | 97  | 94  |  | 96  | 93  | 91  |  | 92  | 90  | 89  |
| 2   | 100 | 93  | 86  | 81  |  | 98  | 91  | 85  | 80  |  | 87  | 83  | 78  |  | 84  | 80  | 77  |  | 81  | 78  | 75  |
| 3   | 91  | 81  | 73  | 67  |  | 89  | 79  | 72  | 66  |  | 76  | 70  | 65  |  | 74  | 68  | 64  |  | 71  | 67  | 63  |
| 4   | 83  | 71  | 62  | 55  |  | 80  | 69  | 61  | 55  |  | 67  | 60  | 54  |  | 64  | 58  | 53  |  | 62  | 57  | 52  |
| 5   | 75  | 62  | 52  | 46  |  | 73  | 60  | 52  | 45  |  | 58  | 51  | 45  |  | 56  | 50  | 44  |  | 54  | 49  | 44  |
| 6   | 68  | 54  | 45  | 38  |  | 66  | 53  | 44  | 38  |  | 51  | 43  | 37  |  | 49  | 42  | 37  |  | 48  | 42  | 37  |
| 7   | 62  | 48  | 38  | 32  |  | 60  | 47  | 38  | 32  |  | 45  | 37  | 31  |  | 44  | 36  | 31  |  | 42  | 36  | 31  |
| 8   | 56  | 42  | 33  | 27  |  | 55  | 41  | 33  | 27  |  | 40  | 32  | 26  |  | 39  | 31  | 26  |  | 37  | 31  | 26  |
| 9   | 52  | 37  | 29  | 23  |  | 50  | 37  | 28  | 23  |  | 36  | 28  | 22  |  | 34  | 27  | 22  |  | 33  | 27  | 22  |
| 10  | 48  | 33  | 25  | 19  |  | 46  | 33  | 25  | 19  |  | 32  | 24  | 19  |  | 31  | 24  | 19  |  | 30  | 24  | 19  |

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

|     | 0°     | 45°  | 90°  | 135° | 180° |
|-----|--------|------|------|------|------|
| 0°  | 1981   | 1981 | 1981 | 1981 | 1981 |
| 5°  | 2126   | 2075 | 1954 | 1781 | 1729 |
| 10° | 2326   | 2064 | 1714 | 1539 | 1486 |
| 15° | 3405   | 2050 | 1426 | 1302 | 1337 |
| 20° | 8559   | 2254 | 1100 | 1100 | 1246 |
| 25° | 39735  | 2812 | 855  | 1007 | 1140 |
| 30° | 126498 | 3898 | 656  | 955  | 1153 |
| 35° | 219496 | 4752 | 526  | 904  | 1156 |
| 40° | 255981 | 4744 | 405  | 899  | 1192 |
| 45° | 262533 | 3361 | 438  | 974  | 1291 |
| 50° | 244139 | 1876 | 348  | 1018 | 1474 |
| 55° | 207510 | 991  | 390  | 1141 | 1651 |
| 60° | 119833 | 276  | 448  | 1206 | 1826 |
| 65° | 24451  | 0    | 530  | 1426 | 2038 |
| 70° | 403    | 151  | 655  | 1662 | 2417 |
| 75° | 333    | 200  | 665  | 1664 | 2861 |
| 80° | 298    | 298  | 992  | 1984 | 3273 |
| 85° | 0      | 593  | 1976 | 1976 | 3952 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 262533 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 1.0    | 0.3       |
| 10°-20°   | 3.0    | 1.0       |
| 20°-30°   | 17.2   | 5.8       |
| 30°-40°   | 80.3   | 26.9      |
| 40°-50°   | 113.5  | 38.1      |
| 50°-60°   | 69.8   | 23.4      |
| 60°-70°   | 10.7   | 3.6       |
| 70°-80°   | 1.7    | 0.6       |
| 80°-90°   | 0.9    | 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°    | 21.2   | 7.1       |
| 0°-40°    | 101.5  | 34.1      |
| 0°-60°    | 284.9  | 95.6      |
| 0°-90°    | 298.1  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 298.1  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 45° | 90° | 135° | 180° | Flux |
|-----|------|-----|-----|------|------|------|
| 0°  | 12   | 12  | 12  | 12   | 12   |      |
| 5°  | 12   | 12  | 11  | 10   | 10   | 1    |
| 15° | 19   | 12  | 8   | 7    | 8    | 7    |
| 25° | 209  | 15  | 4   | 5    | 6    | 129  |
| 35° | 1044 | 23  | 2   | 4    | 6    | 627  |
| 45° | 1078 | 14  | 2   | 4    | 5    | 817  |
| 55° | 691  | 3   | 1   | 4    | 6    | 588  |
| 65° | 60   | 0   | 1   | 4    | 5    | 109  |
| 75° | 0    | 0   | 1   | 2    | 4    | 1    |
| 85° | 0    | 0   | 1   | 1    | 2    | 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°    | 11.5   | 11.5   | 11.5   | 11.5  | 11.5  | 11.5  | 11.5 | 11.5  | 11.5 | 11.5   | 11.5 |
| 2.5°  | 11.8   | 11.8   | 12.0   | 12.0  | 11.8  | 12.0  | 12.0 | 12.0  | 11.5 | 11.3   | 10.8 |
| 5°    | 12.3   | 12.3   | 12.3   | 12.6  | 12.3  | 12.3  | 12.0 | 11.8  | 11.3 | 10.5   | 10.3 |
| 7.5°  | 12.8   | 12.8   | 12.6   | 12.8  | 12.6  | 12.6  | 12.0 | 11.5  | 10.8 | 10.0   | 9.5  |
| 10°   | 13.3   | 13.3   | 13.1   | 13.1  | 12.8  | 12.8  | 11.8 | 11.0  | 9.8  | 9.0    | 8.8  |
| 12.5° | 14.8   | 14.8   | 14.6   | 14.3  | 13.8  | 13.6  | 11.5 | 10.3  | 8.8  | 8.0    | 7.8  |
| 15°   | 19.1   | 18.8   | 18.3   | 17.6  | 16.3  | 16.1  | 11.5 | 9.5   | 8.0  | 7.3    | 7.3  |
| 17.5° | 26.1   | 25.9   | 25.1   | 23.1  | 20.8  | 20.1  | 11.5 | 8.5   | 7.0  | 6.5    | 6.5  |
| 20°   | 46.7   | 44.7   | 40.9   | 35.9  | 30.6  | 27.9  | 12.3 | 7.5   | 6.0  | 5.8    | 6.0  |
| 21°   | 61.0   | 59.0   | 54.2   | 45.9  | 36.6  | 33.6  | 12.8 | 7.3   | 5.8  | 5.5    | 6.0  |
| 22°   | 83.1   | 80.8   | 71.0   | 59.7  | 46.4  | 41.2  | 13.1 | 6.8   | 5.3  | 5.3    | 5.8  |
| 23°   | 116.0  | 112.2  | 95.6   | 77.6  | 58.0  | 50.5  | 13.6 | 6.5   | 5.0  | 5.3    | 5.5  |
| 24°   | 151.9  | 148.6  | 129.8  | 102.7 | 74.1  | 63.3  | 14.1 | 6.3   | 4.8  | 4.8    | 5.3  |
| 25°   | 209.1  | 205.3  | 172.0  | 129.5 | 93.9  | 76.1  | 14.8 | 5.8   | 4.5  | 4.5    | 5.3  |
| 26°   | 283.2  | 265.8  | 221.4  | 166.9 | 115.7 | 95.4  | 15.6 | 5.5   | 4.3  | 4.5    | 5.0  |
| 27°   | 353.4  | 339.1  | 289.2  | 214.1 | 143.1 | 117.2 | 16.6 | 5.3   | 4.0  | 4.3    | 5.0  |
| 28°   | 445.8  | 425.7  | 362.7  | 270.9 | 180.2 | 141.8 | 17.6 | 5.0   | 3.8  | 4.3    | 4.8  |
| 29°   | 549.2  | 521.1  | 445.1  | 334.6 | 222.2 | 169.4 | 18.6 | 4.8   | 3.5  | 4.0    | 4.8  |
| 30°   | 636.1  | 609.7  | 533.7  | 410.2 | 270.4 | 205.8 | 19.6 | 4.5   | 3.3  | 4.0    | 4.8  |
| 31°   | 738.0  | 698.1  | 606.0  | 474.2 | 311.8 | 242.2 | 20.6 | 4.0   | 3.0  | 3.8    | 4.5  |
| 32°   | 820.6  | 792.7  | 694.8  | 546.5 | 366.2 | 282.4 | 21.3 | 3.8   | 3.0  | 3.8    | 4.5  |
| 33°   | 900.4  | 863.0  | 768.4  | 615.8 | 415.4 | 323.6 | 22.1 | 3.5   | 2.8  | 3.5    | 4.5  |
| 34°   | 976.7  | 942.3  | 837.9  | 671.7 | 461.9 | 362.7 | 22.6 | 3.0   | 2.8  | 3.5    | 4.3  |
| 35°   | 1044.0 | 1004.1 | 899.2  | 726.5 | 509.6 | 398.4 | 22.6 | 2.8   | 2.5  | 3.3    | 4.3  |
| 36°   | 1087.7 | 1059.1 | 952.4  | 780.4 | 552.8 | 432.3 | 22.6 | 2.5   | 2.3  | 3.3    | 4.0  |
| 37°   | 1125.1 | 1091.7 | 995.1  | 821.8 | 584.6 | 459.4 | 22.6 | 2.3   | 2.3  | 3.3    | 4.0  |
| 38°   | 1140.4 | 1111.8 | 1024.4 | 858.5 | 614.5 | 487.0 | 22.3 | 2.0   | 2.0  | 3.0    | 4.0  |
| 39°   | 1146.4 | 1120.8 | 1046.5 | 884.9 | 636.6 | 505.6 | 21.8 | 1.8   | 2.0  | 3.0    | 4.0  |
| 40°   | 1138.6 | 1119.3 | 1057.8 | 901.9 | 654.2 | 519.1 | 21.1 | 1.5   | 1.8  | 3.0    | 4.0  |
| 42.5° | 1106.5 | 1093.7 | 1055.3 | 919.0 | 669.2 | 529.2 | 18.3 | 1.0   | 1.8  | 2.8    | 4.0  |
| 45°   | 1077.9 | 1063.8 | 1029.9 | 901.2 | 649.6 | 509.3 | 13.8 | 0.5   | 1.8  | 2.8    | 4.0  |
| 47.5° | 1022.4 | 1013.6 | 987.0  | 855.7 | 606.7 | 464.6 | 9.8  | 0.3   | 1.5  | 2.5    | 3.8  |
| 50°   | 911.2  | 902.9  | 867.8  | 743.0 | 521.9 | 392.9 | 7.0  | 0.3   | 1.3  | 2.5    | 3.8  |
| 52.5° | 811.6  | 802.8  | 752.3  | 617.8 | 400.9 | 287.9 | 4.5  | 0.3   | 1.3  | 2.5    | 3.8  |
| 55°   | 691.1  | 675.8  | 609.5  | 468.9 | 284.2 | 193.0 | 3.3  | 0.3   | 1.3  | 2.3    | 3.8  |
| 57.5° | 511.6  | 489.2  | 430.0  | 319.8 | 163.7 | 104.7 | 1.8  | 0.3   | 1.3  | 2.3    | 3.8  |
| 60°   | 347.9  | 334.6  | 269.1  | 168.7 | 69.8  | 44.2  | 0.8  | 0.3   | 1.3  | 2.3    | 3.5  |
| 62.5° | 210.9  | 194.0  | 135.3  | 71.8  | 30.1  | 20.1  | 0.0  | 0.5   | 1.3  | 2.3    | 3.5  |
| 65°   | 60.0   | 53.2   | 35.4   | 16.3  | 8.5   | 6.5   | 0.0  | 0.5   | 1.3  | 2.3    | 3.5  |
| 67.5° | 2.0    | 2.0    | 2.0    | 1.8   | 1.3   | 1.3   | 0.3  | 0.5   | 1.3  | 2.3    | 3.3  |
| 70°   | 0.8    | 0.8    | 0.8    | 0.5   | 0.5   | 0.3   | 0.3  | 0.5   | 1.3  | 2.0    | 3.3  |
| 72.5° | 0.5    | 0.5    | 0.5    | 0.5   | 0.3   | 0.3   | 0.3  | 0.5   | 1.0  | 1.8    | 3.0  |
| 75°   | 0.5    | 0.5    | 0.5    | 0.3   | 0.3   | 0.3   | 0.3  | 0.8   | 1.0  | 1.8    | 2.5  |
| 77.5° | 0.5    | 0.5    | 0.5    | 0.3   | 0.3   | 0.3   | 0.3  | 0.8   | 1.0  | 1.5    | 2.5  |
| 80°   | 0.3    | 0.3    | 0.3    | 0.3   | 0.3   | 0.3   | 0.3  | 0.8   | 1.0  | 1.5    | 2.0  |



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**CANDELA DISTRIBUTION (continued):**

|       | 0°  | 5°  | 10° | 15° | 20° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° |
|-------|-----|-----|-----|-----|-----|-------|-----|-------|-----|--------|------|
| 82.5° | 0.3 | 0.3 | 0.3 | 0.0 | 0.0 | 0.0   | 0.3 | 0.8   | 1.0 | 1.0    | 1.5  |
| 85°   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0   | 0.3 | 0.8   | 1.0 | 0.8    | 1.0  |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0   | 0.3 | 0.8   | 0.8 | 0.8    | 0.5  |
| 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):**

|       | 157.5° | 180° |
|-------|--------|------|
| 0°    | 11.5   | 11.5 |
| 2.5°  | 10.8   | 10.8 |
| 5°    | 10.0   | 10.0 |
| 7.5°  | 9.3    | 9.3  |
| 10°   | 8.5    | 8.5  |
| 12.5° | 8.0    | 8.0  |
| 15°   | 7.3    | 7.5  |
| 17.5° | 6.8    | 7.0  |
| 20°   | 6.5    | 6.8  |
| 21°   | 6.5    | 6.8  |
| 22°   | 6.3    | 6.5  |
| 23°   | 6.3    | 6.5  |
| 24°   | 6.0    | 6.3  |
| 25°   | 5.8    | 6.0  |
| 26°   | 5.8    | 6.0  |
| 27°   | 5.8    | 6.0  |
| 28°   | 5.5    | 6.0  |
| 29°   | 5.5    | 5.8  |
| 30°   | 5.5    | 5.8  |
| 31°   | 5.3    | 5.8  |
| 32°   | 5.3    | 5.8  |
| 33°   | 5.3    | 5.5  |
| 34°   | 5.0    | 5.5  |
| 35°   | 5.0    | 5.5  |
| 36°   | 5.0    | 5.5  |
| 37°   | 5.0    | 5.3  |
| 38°   | 5.0    | 5.5  |
| 39°   | 5.0    | 5.3  |
| 40°   | 5.0    | 5.3  |
| 42.5° | 5.0    | 5.3  |
| 45°   | 5.0    | 5.3  |
| 47.5° | 5.0    | 5.5  |
| 50°   | 5.0    | 5.5  |
| 52.5° | 5.0    | 5.5  |
| 55°   | 5.0    | 5.5  |
| 57.5° | 5.0    | 5.3  |
| 60°   | 5.0    | 5.3  |
| 62.5° | 4.8    | 5.3  |
| 65°   | 4.8    | 5.0  |
| 67.5° | 4.8    | 5.0  |
| 70°   | 4.5    | 4.8  |
| 72.5° | 4.3    | 4.5  |
| 75°   | 3.8    | 4.3  |
| 77.5° | 3.5    | 3.8  |
| 80°   | 3.0    | 3.3  |



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CATALOG NUMBER: P3SQAS02R309035DE010 E3SQCA451MB

**CANDELA DISTRIBUTION (continued):**

|       | 157.5° | 180° |
|-------|--------|------|
| 82.5° | 2.5    | 2.5  |
| 85°   | 1.8    | 2.0  |
| 87.5° | 1.0    | 1.0  |
| 90°   | 0.0    | 0.0  |

(END OF REPORT)