

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: P1306394

Luminaire Tested: P3SQAS02R309027DE010 E3SQCA451MB

Issue Date: 1/29/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1306394  
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: P3SQAS02R309027DE010 E3SQCA451MB  
Description: 3in Adjustable LED luminaire with, R30 optic, 2700K CCT AND, 90CRI , E3SQCA451MB TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

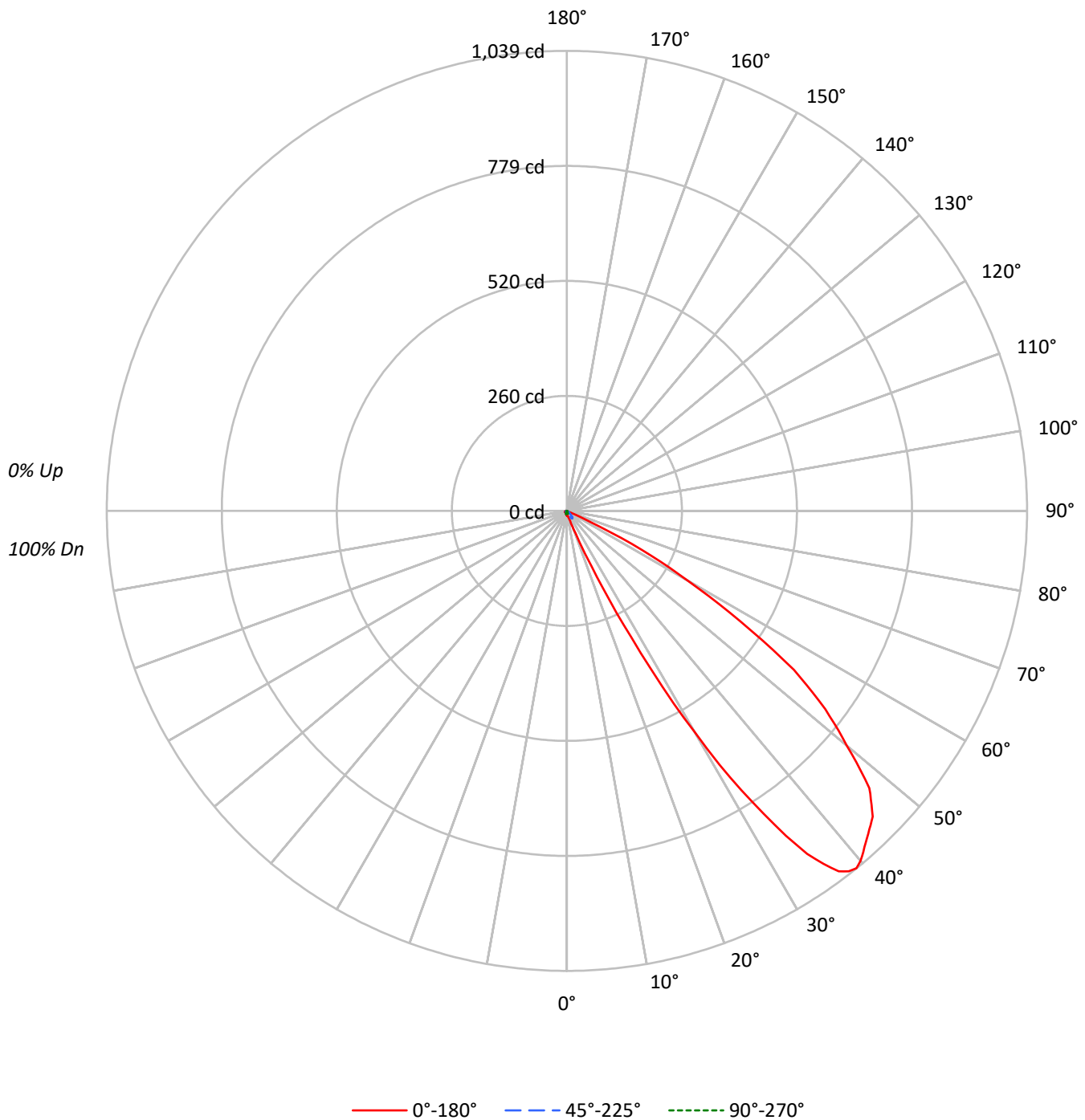
Lumens per Lamp: N/A  
Luminaire Lumens: 270.0 lumens  
Efficiency: N/A  
Efficacy: 75.0 lumens/watt  
Spacing Criteria (0/90/45): 4.07 / 0.66 / 1.44  
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')  
CIE Type: Direct

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  | 32  | 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°  | 1808   | 1808 | 1808 | 1808 | 1808 |
| 5°  | 1919   | 1884 | 1763 | 1608 | 1573 |
| 10° | 2116   | 1871 | 1556 | 1399 | 1347 |
| 15° | 3085   | 1872 | 1302 | 1177 | 1212 |
| 20° | 7753   | 2034 | 1008 | 1008 | 1118 |
| 25° | 36010  | 2546 | 779  | 912  | 1045 |
| 30° | 114606 | 3520 | 597  | 855  | 1034 |
| 35° | 198871 | 4310 | 484  | 820  | 1051 |
| 40° | 231948 | 4294 | 360  | 809  | 1079 |
| 45° | 237860 | 3044 | 390  | 877  | 1169 |
| 50° | 221204 | 1715 | 295  | 911  | 1340 |
| 55° | 187993 | 901  | 330  | 1021 | 1501 |
| 60° | 108569 | 241  | 379  | 1102 | 1653 |
| 65° | 22169  | 0    | 448  | 1304 | 1834 |
| 70° | 352    | 101  | 554  | 1511 | 2165 |
| 75° | 333    | 133  | 599  | 1530 | 2595 |
| 80° | 198    | 198  | 893  | 1785 | 2975 |
| 85° | 0      | 395  | 1778 | 1778 | 3557 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 237860 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 0.9    | 0.4       |
| 10°-20°   | 2.7    | 1.0       |
| 20°-30°   | 15.6   | 5.8       |
| 30°-40°   | 72.7   | 26.9      |
| 40°-50°   | 102.8  | 38.1      |
| 50°-60°   | 63.3   | 23.4      |
| 60°-70°   | 9.6    | 3.6       |
| 70°-80°   | 1.5    | 0.6       |
| 80°-90°   | 0.8    | 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°    | 19.2   | 7.1       |
| 0°-40°    | 92.0   | 34.1      |
| 0°-60°    | 258.0  | 95.6      |
| 0°-90°    | 270.0  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 270.0  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | 45° | 90° | 135° | 180° | Flux |
|-----|-----|-----|-----|------|------|------|
| 0°  | 10  | 10  | 10  | 10   | 10   |      |
| 5°  | 11  | 11  | 10  | 9    | 9    | 1    |
| 15° | 17  | 10  | 7   | 7    | 7    | 6    |
| 25° | 190 | 13  | 4   | 5    | 6    | 117  |
| 35° | 946 | 20  | 2   | 4    | 5    | 568  |
| 45° | 977 | 12  | 2   | 4    | 5    | 740  |
| 55° | 626 | 3   | 1   | 3    | 5    | 533  |
| 65° | 54  | 0   | 1   | 3    | 4    | 98   |
| 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°    | 10.5   | 10.5   | 10.5  | 10.5  | 10.5  | 10.5  | 10.5 | 10.5  | 10.5 | 10.5   | 10.5 |
| 2.5°  | 10.7   | 10.7   | 10.9  | 10.9  | 10.7  | 10.9  | 10.9 | 10.9  | 10.5 | 10.2   | 9.8  |
| 5°    | 11.1   | 11.1   | 11.1  | 11.4  | 11.1  | 11.1  | 10.9 | 10.7  | 10.2 | 9.6    | 9.3  |
| 7.5°  | 11.6   | 11.6   | 11.4  | 11.6  | 11.4  | 11.4  | 10.9 | 10.5  | 9.8  | 9.1    | 8.6  |
| 10°   | 12.1   | 12.1   | 11.8  | 11.8  | 11.6  | 11.6  | 10.7 | 10.0  | 8.9  | 8.2    | 8.0  |
| 12.5° | 13.4   | 13.4   | 13.2  | 13.0  | 12.5  | 12.3  | 10.5 | 9.3   | 8.0  | 7.3    | 7.1  |
| 15°   | 17.3   | 17.1   | 16.6  | 15.9  | 14.8  | 14.6  | 10.5 | 8.6   | 7.3  | 6.6    | 6.6  |
| 17.5° | 23.7   | 23.4   | 22.7  | 20.9  | 18.9  | 18.2  | 10.5 | 7.7   | 6.4  | 5.9    | 5.9  |
| 20°   | 42.3   | 40.5   | 37.1  | 32.5  | 27.7  | 25.2  | 11.1 | 6.8   | 5.5  | 5.2    | 5.5  |
| 21°   | 55.3   | 53.4   | 49.1  | 41.6  | 33.2  | 30.5  | 11.6 | 6.6   | 5.2  | 5.0    | 5.5  |
| 22°   | 75.3   | 73.2   | 64.4  | 54.1  | 42.1  | 37.3  | 11.8 | 6.1   | 4.8  | 4.8    | 5.2  |
| 23°   | 105.1  | 101.7  | 86.7  | 70.3  | 52.5  | 45.7  | 12.3 | 5.9   | 4.5  | 4.8    | 5.0  |
| 24°   | 137.6  | 134.6  | 117.6 | 93.0  | 67.1  | 57.3  | 12.7 | 5.7   | 4.3  | 4.3    | 4.8  |
| 25°   | 189.5  | 186.0  | 155.8 | 117.4 | 85.1  | 68.9  | 13.4 | 5.2   | 4.1  | 4.1    | 4.8  |
| 26°   | 256.5  | 240.9  | 200.6 | 151.2 | 104.8 | 86.4  | 14.1 | 5.0   | 3.9  | 4.1    | 4.5  |
| 27°   | 320.2  | 307.3  | 262.0 | 194.0 | 129.6 | 106.2 | 15.0 | 4.8   | 3.6  | 3.9    | 4.5  |
| 28°   | 403.9  | 385.7  | 328.6 | 245.4 | 163.3 | 128.5 | 15.9 | 4.5   | 3.4  | 3.9    | 4.3  |
| 29°   | 497.6  | 472.2  | 403.2 | 303.2 | 201.3 | 153.5 | 16.8 | 4.3   | 3.2  | 3.6    | 4.3  |
| 30°   | 576.3  | 552.4  | 483.5 | 371.6 | 244.9 | 186.5 | 17.7 | 4.1   | 3.0  | 3.6    | 4.3  |
| 31°   | 668.7  | 632.5  | 549.0 | 429.6 | 282.5 | 219.5 | 18.6 | 3.6   | 2.7  | 3.4    | 4.1  |
| 32°   | 743.5  | 718.2  | 629.5 | 495.1 | 331.8 | 255.9 | 19.3 | 3.4   | 2.7  | 3.4    | 4.1  |
| 33°   | 815.8  | 781.9  | 696.2 | 557.9 | 376.4 | 293.2 | 20.0 | 3.2   | 2.5  | 3.2    | 4.1  |
| 34°   | 885.0  | 853.8  | 759.2 | 608.6 | 418.5 | 328.6 | 20.5 | 2.7   | 2.5  | 3.2    | 3.9  |
| 35°   | 945.9  | 909.7  | 814.7 | 658.2 | 461.7 | 360.9 | 20.5 | 2.5   | 2.3  | 3.0    | 3.9  |
| 36°   | 985.5  | 959.6  | 862.9 | 707.1 | 500.8 | 391.6 | 20.5 | 2.3   | 2.0  | 3.0    | 3.6  |
| 37°   | 1019.4 | 989.1  | 901.6 | 744.6 | 529.7 | 416.2 | 20.5 | 2.0   | 2.0  | 3.0    | 3.6  |
| 38°   | 1033.2 | 1007.3 | 928.2 | 777.8 | 556.8 | 441.2 | 20.2 | 1.8   | 1.8  | 2.7    | 3.6  |
| 39°   | 1038.7 | 1015.5 | 948.2 | 801.7 | 576.8 | 458.1 | 19.8 | 1.6   | 1.8  | 2.7    | 3.6  |
| 40°   | 1031.7 | 1014.1 | 958.4 | 817.2 | 592.7 | 470.3 | 19.1 | 1.4   | 1.6  | 2.7    | 3.6  |
| 42.5° | 1002.5 | 990.9  | 956.1 | 832.6 | 606.3 | 479.4 | 16.6 | 0.9   | 1.6  | 2.5    | 3.6  |
| 45°   | 976.6  | 963.9  | 933.2 | 816.5 | 588.6 | 461.5 | 12.5 | 0.5   | 1.6  | 2.5    | 3.6  |
| 47.5° | 926.3  | 918.4  | 894.3 | 775.3 | 549.7 | 421.0 | 8.9  | 0.2   | 1.4  | 2.3    | 3.4  |
| 50°   | 825.6  | 818.1  | 786.2 | 673.2 | 472.8 | 355.9 | 6.4  | 0.2   | 1.1  | 2.3    | 3.4  |
| 52.5° | 735.3  | 727.3  | 681.6 | 559.7 | 363.2 | 260.9 | 4.1  | 0.2   | 1.1  | 2.3    | 3.4  |
| 55°   | 626.1  | 612.3  | 552.2 | 424.9 | 257.5 | 174.9 | 3.0  | 0.2   | 1.1  | 2.0    | 3.4  |
| 57.5° | 463.5  | 443.3  | 389.6 | 289.8 | 148.3 | 94.8  | 1.6  | 0.2   | 1.1  | 2.0    | 3.4  |
| 60°   | 315.2  | 303.2  | 243.8 | 152.8 | 63.2  | 40.0  | 0.7  | 0.2   | 1.1  | 2.0    | 3.2  |
| 62.5° | 191.0  | 175.8  | 122.6 | 65.0  | 27.3  | 18.2  | 0.0  | 0.5   | 1.1  | 2.0    | 3.2  |
| 65°   | 54.4   | 48.2   | 32.1  | 14.8  | 7.7   | 5.9   | 0.0  | 0.5   | 1.1  | 2.0    | 3.2  |
| 67.5° | 1.8    | 1.8    | 1.8   | 1.6   | 1.1   | 1.1   | 0.2  | 0.5   | 1.1  | 2.0    | 3.0  |
| 70°   | 0.7    | 0.7    | 0.7   | 0.5   | 0.5   | 0.2   | 0.2  | 0.5   | 1.1  | 1.8    | 3.0  |
| 72.5° | 0.5    | 0.5    | 0.5   | 0.5   | 0.2   | 0.2   | 0.2  | 0.5   | 0.9  | 1.6    | 2.7  |
| 75°   | 0.5    | 0.5    | 0.5   | 0.2   | 0.2   | 0.2   | 0.2  | 0.7   | 0.9  | 1.6    | 2.3  |
| 77.5° | 0.5    | 0.5    | 0.5   | 0.2   | 0.2   | 0.2   | 0.2  | 0.7   | 0.9  | 1.4    | 2.3  |
| 80°   | 0.2    | 0.2    | 0.2   | 0.2   | 0.2   | 0.2   | 0.2  | 0.7   | 0.9  | 1.4    | 1.8  |



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**CANDELA DISTRIBUTION (continued):**

|       | 0°  | 5°  | 10° | 15° | 20° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° |
|-------|-----|-----|-----|-----|-----|-------|-----|-------|-----|--------|------|
| 82.5° | 0.2 | 0.2 | 0.2 | 0.0 | 0.0 | 0.0   | 0.2 | 0.7   | 0.9 | 0.9    | 1.4  |
| 85°   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0   | 0.2 | 0.7   | 0.9 | 0.7    | 0.9  |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0   | 0.2 | 0.7   | 0.7 | 0.7    | 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°    | 10.5   | 10.5 |
| 2.5°  | 9.8    | 9.8  |
| 5°    | 9.1    | 9.1  |
| 7.5°  | 8.4    | 8.4  |
| 10°   | 7.7    | 7.7  |
| 12.5° | 7.3    | 7.3  |
| 15°   | 6.6    | 6.8  |
| 17.5° | 6.1    | 6.4  |
| 20°   | 5.9    | 6.1  |
| 21°   | 5.9    | 6.1  |
| 22°   | 5.7    | 5.9  |
| 23°   | 5.7    | 5.9  |
| 24°   | 5.5    | 5.7  |
| 25°   | 5.2    | 5.5  |
| 26°   | 5.2    | 5.5  |
| 27°   | 5.2    | 5.5  |
| 28°   | 5.0    | 5.5  |
| 29°   | 5.0    | 5.2  |
| 30°   | 5.0    | 5.2  |
| 31°   | 4.8    | 5.2  |
| 32°   | 4.8    | 5.2  |
| 33°   | 4.8    | 5.0  |
| 34°   | 4.5    | 5.0  |
| 35°   | 4.5    | 5.0  |
| 36°   | 4.5    | 5.0  |
| 37°   | 4.5    | 4.8  |
| 38°   | 4.5    | 5.0  |
| 39°   | 4.5    | 4.8  |
| 40°   | 4.5    | 4.8  |
| 42.5° | 4.5    | 4.8  |
| 45°   | 4.5    | 4.8  |
| 47.5° | 4.5    | 5.0  |
| 50°   | 4.5    | 5.0  |
| 52.5° | 4.5    | 5.0  |
| 55°   | 4.5    | 5.0  |
| 57.5° | 4.5    | 4.8  |
| 60°   | 4.5    | 4.8  |
| 62.5° | 4.3    | 4.8  |
| 65°   | 4.3    | 4.5  |
| 67.5° | 4.3    | 4.5  |
| 70°   | 4.1    | 4.3  |
| 72.5° | 3.9    | 4.1  |
| 75°   | 3.4    | 3.9  |
| 77.5° | 3.2    | 3.4  |
| 80°   | 2.7    | 3.0  |



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CATALOG NUMBER: P3SQAS02R309027DE010 E3SQCA451MB

**CANDELA DISTRIBUTION (continued):**

|       | 157.5° | 180° |
|-------|--------|------|
| 82.5° | 2.3    | 2.3  |
| 85°   | 1.6    | 1.8  |
| 87.5° | 0.9    | 0.9  |
| 90°   | 0.0    | 0.0  |

(END OF REPORT)