

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: P1341555

Luminaire Tested: P3A09R309840DE010 E3A451GPH

Issue Date: 2/13/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1341555  
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: P3A09R309840DE010 E3A451GPH  
Description: 3in Adjustable LED luminaire with, R30 optic, 4000K CCT AND, 98CRI , E3A451GPH TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

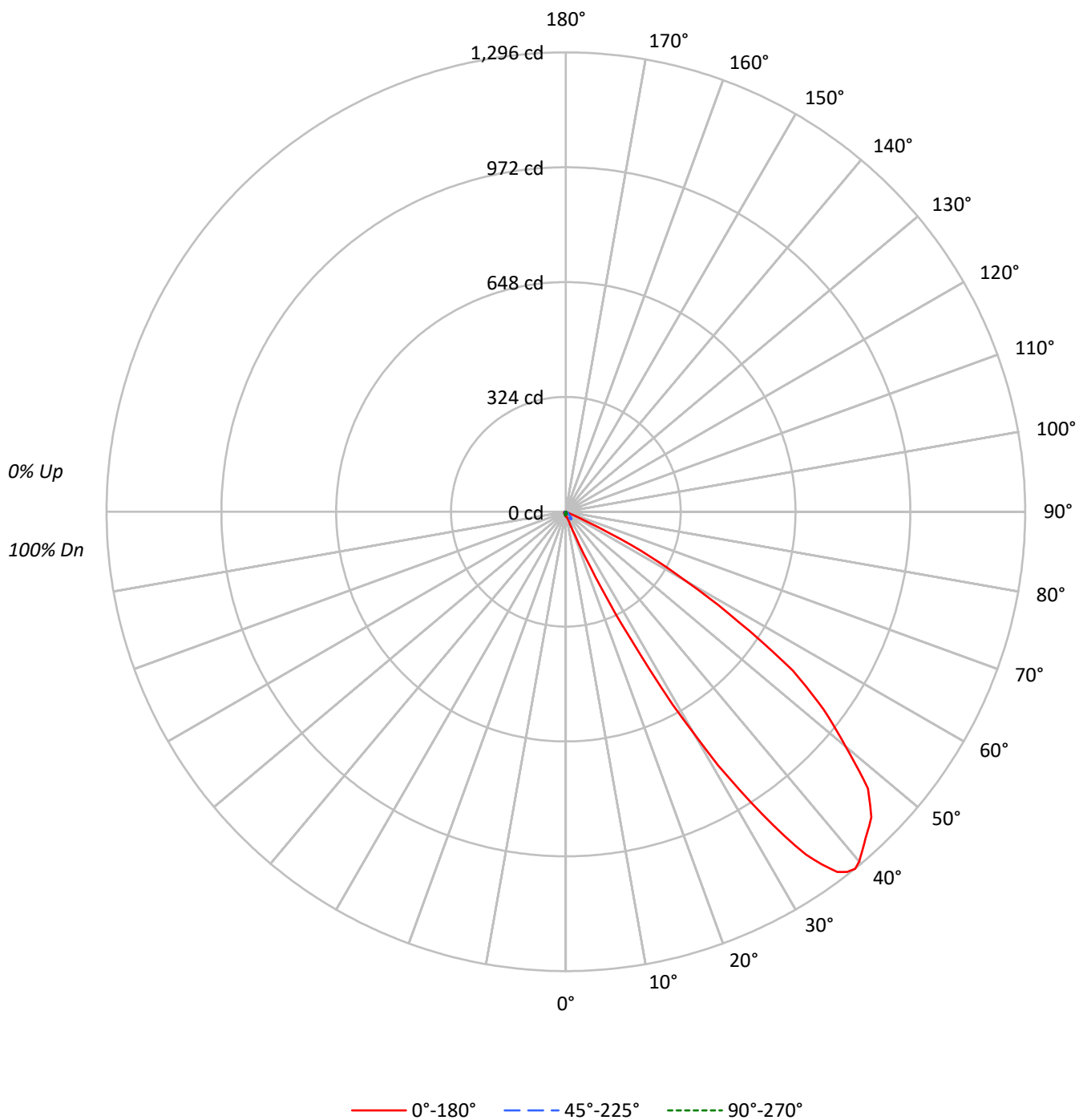
Lumens per Lamp: N/A  
Luminaire Lumens: 337.0 lumens  
Efficiency: N/A  
Efficacy: 30.6 lumens/watt  
Spacing Criteria (0/90/45): 4.07 / 0.65 / 1.44  
Luminous Opening: Circular (Dia: 0.25' x H: 0')  
CIE Type: Direct

Input Watts (W): 11  
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°  | 2873   | 2873 | 2873 | 2873 | 2873 |
| 5°  | 3060   | 2994 | 2818 | 2553 | 2509 |
| 10° | 3340   | 2961 | 2472 | 2204 | 2160 |
| 15° | 4904   | 2974 | 2066 | 1862 | 1930 |
| 20° | 12321  | 3244 | 1587 | 1587 | 1797 |
| 25° | 57221  | 4041 | 1234 | 1452 | 1645 |
| 30° | 182129 | 5596 | 937  | 1367 | 1646 |
| 35° | 316038 | 6826 | 750  | 1285 | 1660 |
| 40° | 368605 | 6813 | 573  | 1288 | 1718 |
| 45° | 378024 | 4838 | 620  | 1395 | 1861 |
| 50° | 351545 | 2695 | 478  | 1467 | 2115 |
| 55° | 298771 | 1415 | 535  | 1644 | 2370 |
| 60° | 172574 | 395  | 614  | 1754 | 2631 |
| 65° | 35179  | 0    | 726  | 2075 | 2958 |
| 70° | 577    | 192  | 898  | 2372 | 3462 |
| 75° | 508    | 254  | 932  | 2372 | 4067 |
| 80° | 379    | 379  | 1389 | 2904 | 4672 |
| 85° | 0      | 755  | 2768 | 2768 | 5787 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 378024 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 1.2    | 0.4       |
| 10°-20°   | 3.4    | 1.0       |
| 20°-30°   | 19.4   | 5.8       |
| 30°-40°   | 90.8   | 26.9      |
| 40°-50°   | 128.4  | 38.1      |
| 50°-60°   | 79.0   | 23.4      |
| 60°-70°   | 12.0   | 3.6       |
| 70°-80°   | 1.9    | 0.6       |
| 80°-90°   | 1.0    | 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°    | 24.0   | 7.1       |
| 0°-40°    | 114.8  | 34.1      |
| 0°-60°    | 322.1  | 95.6      |
| 0°-90°    | 337.0  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 337.0  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 45° | 90° | 135° | 180° | Flux |
|-----|------|-----|-----|------|------|------|
| 0°  | 13   | 13  | 13  | 13   | 13   |      |
| 5°  | 14   | 14  | 13  | 12   | 11   | 1    |
| 15° | 22   | 13  | 9   | 8    | 8    | 8    |
| 25° | 236  | 17  | 5   | 6    | 7    | 146  |
| 35° | 1181 | 26  | 3   | 5    | 6    | 709  |
| 45° | 1219 | 16  | 2   | 4    | 6    | 924  |
| 55° | 782  | 4   | 1   | 4    | 6    | 665  |
| 65° | 68   | 0   | 1   | 4    | 6    | 123  |
| 75° | 1    | 0   | 1   | 3    | 5    | 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°    | 13.1   | 13.1   | 13.1   | 13.1   | 13.1  | 13.1  | 13.1 | 13.1  | 13.1 | 13.1   | 13.1 |
| 2.5°  | 13.3   | 13.3   | 13.6   | 13.6   | 13.3  | 13.6  | 13.6 | 13.6  | 13.1 | 12.8   | 12.2 |
| 5°    | 13.9   | 13.9   | 13.9   | 14.2   | 13.9  | 13.9  | 13.6 | 13.3  | 12.8 | 11.9   | 11.6 |
| 7.5°  | 14.5   | 14.5   | 14.2   | 14.5   | 14.2  | 14.2  | 13.6 | 13.1  | 12.2 | 11.4   | 10.8 |
| 10°   | 15.0   | 15.0   | 14.8   | 14.8   | 14.5  | 14.5  | 13.3 | 12.5  | 11.1 | 10.2   | 9.9  |
| 12.5° | 16.7   | 16.7   | 16.5   | 16.2   | 15.6  | 15.3  | 13.1 | 11.6  | 9.9  | 9.1    | 8.8  |
| 15°   | 21.6   | 21.3   | 20.7   | 19.9   | 18.5  | 18.2  | 13.1 | 10.8  | 9.1  | 8.2    | 8.2  |
| 17.5° | 29.5   | 29.2   | 28.4   | 26.1   | 23.6  | 22.7  | 13.1 | 9.7   | 7.9  | 7.4    | 7.4  |
| 20°   | 52.8   | 50.5   | 46.3   | 40.6   | 34.6  | 31.5  | 13.9 | 8.5   | 6.8  | 6.5    | 6.8  |
| 21°   | 69.0   | 66.7   | 61.3   | 51.9   | 41.4  | 38.0  | 14.5 | 8.2   | 6.5  | 6.2    | 6.8  |
| 22°   | 94.0   | 91.4   | 80.3   | 67.6   | 52.5  | 46.6  | 14.8 | 7.7   | 6.0  | 6.0    | 6.5  |
| 23°   | 131.2  | 126.9  | 108.2  | 87.7   | 65.6  | 57.1  | 15.3 | 7.4   | 5.7  | 6.0    | 6.2  |
| 24°   | 171.7  | 168.1  | 146.8  | 116.1  | 83.7  | 71.5  | 15.9 | 7.1   | 5.4  | 5.4    | 6.0  |
| 25°   | 236.5  | 232.2  | 194.5  | 146.5  | 106.2 | 86.0  | 16.7 | 6.5   | 5.1  | 5.1    | 6.0  |
| 26°   | 320.2  | 300.6  | 250.4  | 188.8  | 130.9 | 107.9 | 17.6 | 6.2   | 4.8  | 5.1    | 5.7  |
| 27°   | 399.7  | 383.5  | 327.0  | 242.1  | 161.8 | 132.6 | 18.7 | 6.0   | 4.5  | 4.8    | 5.7  |
| 28°   | 504.2  | 481.5  | 410.2  | 306.3  | 203.8 | 160.4 | 19.9 | 5.7   | 4.3  | 4.8    | 5.4  |
| 29°   | 621.1  | 589.3  | 503.3  | 378.4  | 251.2 | 191.6 | 21.0 | 5.4   | 4.0  | 4.5    | 5.4  |
| 30°   | 719.3  | 689.5  | 603.5  | 463.9  | 305.7 | 232.8 | 22.1 | 5.1   | 3.7  | 4.5    | 5.4  |
| 31°   | 834.6  | 789.5  | 685.3  | 536.2  | 352.6 | 273.9 | 23.3 | 4.5   | 3.4  | 4.3    | 5.1  |
| 32°   | 928.0  | 896.5  | 785.8  | 618.0  | 414.2 | 319.4 | 24.1 | 4.3   | 3.4  | 4.3    | 5.1  |
| 33°   | 1018.3 | 976.0  | 868.9  | 696.3  | 469.8 | 365.9 | 25.0 | 4.0   | 3.1  | 4.0    | 5.1  |
| 34°   | 1104.6 | 1065.7 | 947.6  | 759.6  | 522.3 | 410.2 | 25.5 | 3.4   | 3.1  | 4.0    | 4.8  |
| 35°   | 1180.6 | 1135.5 | 1016.8 | 821.5  | 576.3 | 450.5 | 25.5 | 3.1   | 2.8  | 3.7    | 4.8  |
| 36°   | 1230.0 | 1197.7 | 1077.0 | 882.6  | 625.1 | 488.8 | 25.5 | 2.8   | 2.6  | 3.7    | 4.5  |
| 37°   | 1272.3 | 1234.6 | 1125.3 | 929.4  | 661.1 | 519.5 | 25.5 | 2.6   | 2.6  | 3.7    | 4.5  |
| 38°   | 1289.6 | 1257.3 | 1158.5 | 970.9  | 694.9 | 550.7 | 25.3 | 2.3   | 2.3  | 3.4    | 4.5  |
| 39°   | 1296.5 | 1267.5 | 1183.5 | 1000.7 | 719.9 | 571.7 | 24.7 | 2.0   | 2.3  | 3.4    | 4.5  |
| 40°   | 1287.7 | 1265.8 | 1196.2 | 1020.0 | 739.8 | 587.1 | 23.8 | 1.7   | 2.0  | 3.4    | 4.5  |
| 42.5° | 1251.3 | 1236.8 | 1193.4 | 1039.3 | 756.8 | 598.4 | 20.7 | 1.1   | 2.0  | 3.1    | 4.5  |
| 45°   | 1219.0 | 1203.1 | 1164.7 | 1019.1 | 734.7 | 576.0 | 15.6 | 0.6   | 2.0  | 3.1    | 4.5  |
| 47.5° | 1156.2 | 1146.3 | 1116.2 | 967.7  | 686.1 | 525.5 | 11.1 | 0.3   | 1.7  | 2.8    | 4.3  |
| 50°   | 1030.5 | 1021.1 | 981.4  | 840.3  | 590.2 | 444.3 | 7.9  | 0.3   | 1.4  | 2.8    | 4.3  |
| 52.5° | 917.8  | 907.8  | 850.8  | 698.6  | 453.3 | 325.6 | 5.1  | 0.3   | 1.4  | 2.8    | 4.3  |
| 55°   | 781.5  | 764.2  | 689.2  | 530.3  | 321.3 | 218.3 | 3.7  | 0.3   | 1.4  | 2.6    | 4.3  |
| 57.5° | 578.5  | 553.3  | 486.3  | 361.7  | 185.1 | 118.4 | 2.0  | 0.3   | 1.4  | 2.6    | 4.3  |
| 60°   | 393.5  | 378.4  | 304.3  | 190.8  | 78.9  | 50.0  | 0.9  | 0.3   | 1.4  | 2.6    | 4.0  |
| 62.5° | 238.5  | 219.4  | 153.0  | 81.2   | 34.1  | 22.7  | 0.0  | 0.6   | 1.4  | 2.6    | 4.0  |
| 65°   | 67.8   | 60.2   | 40.0   | 18.5   | 9.7   | 7.4   | 0.0  | 0.6   | 1.4  | 2.6    | 4.0  |
| 67.5° | 2.3    | 2.3    | 2.3    | 2.0    | 1.4   | 1.4   | 0.3  | 0.6   | 1.4  | 2.6    | 3.7  |
| 70°   | 0.9    | 0.9    | 0.9    | 0.6    | 0.6   | 0.3   | 0.3  | 0.6   | 1.4  | 2.3    | 3.7  |
| 72.5° | 0.6    | 0.6    | 0.6    | 0.6    | 0.3   | 0.3   | 0.3  | 0.6   | 1.1  | 2.0    | 3.4  |
| 75°   | 0.6    | 0.6    | 0.6    | 0.3    | 0.3   | 0.3   | 0.3  | 0.9   | 1.1  | 2.0    | 2.8  |
| 77.5° | 0.6    | 0.6    | 0.6    | 0.3    | 0.3   | 0.3   | 0.3  | 0.9   | 1.1  | 1.7    | 2.8  |
| 80°   | 0.3    | 0.3    | 0.3    | 0.3    | 0.3   | 0.3   | 0.3  | 0.9   | 1.1  | 1.7    | 2.3  |



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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 | 0.9   | 1.1 | 1.1    | 1.7  |
| 85°   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0   | 0.3 | 0.9   | 1.1 | 0.9    | 1.1  |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0   | 0.3 | 0.9   | 0.9 | 0.9    | 0.6  |
| 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°    | 13.1   | 13.1 |
| 2.5°  | 12.2   | 12.2 |
| 5°    | 11.4   | 11.4 |
| 7.5°  | 10.5   | 10.5 |
| 10°   | 9.7    | 9.7  |
| 12.5° | 9.1    | 9.1  |
| 15°   | 8.2    | 8.5  |
| 17.5° | 7.7    | 7.9  |
| 20°   | 7.4    | 7.7  |
| 21°   | 7.4    | 7.7  |
| 22°   | 7.1    | 7.4  |
| 23°   | 7.1    | 7.4  |
| 24°   | 6.8    | 7.1  |
| 25°   | 6.5    | 6.8  |
| 26°   | 6.5    | 6.8  |
| 27°   | 6.5    | 6.8  |
| 28°   | 6.2    | 6.8  |
| 29°   | 6.2    | 6.5  |
| 30°   | 6.2    | 6.5  |
| 31°   | 6.0    | 6.5  |
| 32°   | 6.0    | 6.5  |
| 33°   | 6.0    | 6.2  |
| 34°   | 5.7    | 6.2  |
| 35°   | 5.7    | 6.2  |
| 36°   | 5.7    | 6.2  |
| 37°   | 5.7    | 6.0  |
| 38°   | 5.7    | 6.2  |
| 39°   | 5.7    | 6.0  |
| 40°   | 5.7    | 6.0  |
| 42.5° | 5.7    | 6.0  |
| 45°   | 5.7    | 6.0  |
| 47.5° | 5.7    | 6.2  |
| 50°   | 5.7    | 6.2  |
| 52.5° | 5.7    | 6.2  |
| 55°   | 5.7    | 6.2  |
| 57.5° | 5.7    | 6.0  |
| 60°   | 5.7    | 6.0  |
| 62.5° | 5.4    | 6.0  |
| 65°   | 5.4    | 5.7  |
| 67.5° | 5.4    | 5.7  |
| 70°   | 5.1    | 5.4  |
| 72.5° | 4.8    | 5.1  |
| 75°   | 4.3    | 4.8  |
| 77.5° | 4.0    | 4.3  |
| 80°   | 3.4    | 3.7  |

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CATALOG NUMBER: P3A09R309840DE010 E3A451GPH

**CANDELA DISTRIBUTION (continued):**

|       | 157.5° | 180° |
|-------|--------|------|
| 82.5° | 2.8    | 2.8  |
| 85°   | 2.0    | 2.3  |
| 87.5° | 1.1    | 1.1  |
| 90°   | 0.0    | 0.0  |

(END OF REPORT)