

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: P1334517

Luminaire Tested: P3A02R209840DE010 E3CA301MW

Issue Date: 2/13/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1334517  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-60)  
Test Lab: INNOVATION CENTER  
Issue Date: 2/13/2026  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: IRiS  
Catalog Number: P3A02R209840DE010 E3CA301MW  
Description: 3in Adjustable LED luminaire with, R20 optic, 4000K CCT AND, 98CRI , E3CA301MW TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

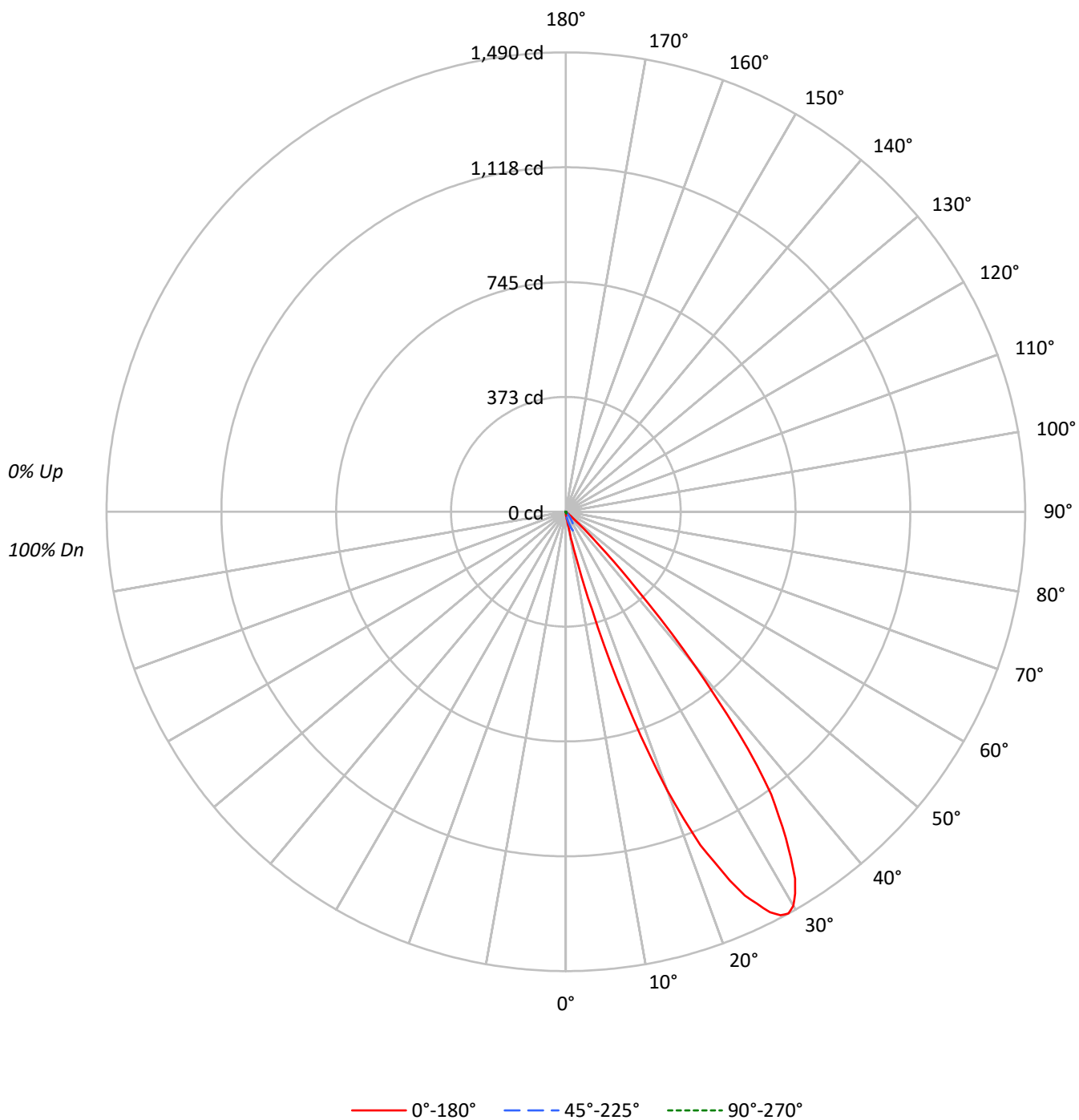
Lumens per Lamp: N/A  
Luminaire Lumens: 209.1 lumens  
Efficiency: N/A  
Efficacy: 58.1 lumens/watt  
Spacing Criteria (0/90/45): 2.3 / 0.54 / 1.19  
Luminous Opening: Circular (Dia: 0.25' x H: 0')  
CIE Type: Direct

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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CATALOG NUMBER: P3A02R209840DE010 E3CA301MW

### 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  | 50  | 30 | 10 |
| RCR |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |    |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |    |    |
| 1   | 113 | 109 | 107 | 104 | 110 | 107 | 105 | 102 | 103 | 101 | 99  | 99  | 98  | 96  | 96  | 95  | 93  | 92  |    |    |
| 2   | 106 | 100 | 96  | 92  | 104 | 99  | 94  | 91  | 95  | 92  | 89  | 92  | 89  | 87  | 89  | 87  | 85  | 83  |    |    |
| 3   | 99  | 92  | 86  | 81  | 97  | 90  | 85  | 81  | 88  | 83  | 79  | 85  | 81  | 78  | 83  | 80  | 77  | 75  |    |    |
| 4   | 93  | 84  | 78  | 73  | 91  | 83  | 77  | 72  | 81  | 75  | 71  | 79  | 74  | 71  | 77  | 73  | 70  | 68  |    |    |
| 5   | 87  | 77  | 70  | 65  | 85  | 76  | 70  | 65  | 74  | 69  | 64  | 72  | 68  | 64  | 71  | 67  | 63  | 61  |    |    |
| 6   | 81  | 71  | 64  | 59  | 80  | 70  | 63  | 58  | 68  | 62  | 58  | 67  | 62  | 58  | 65  | 61  | 57  | 55  |    |    |
| 7   | 76  | 65  | 58  | 53  | 74  | 64  | 57  | 53  | 63  | 57  | 52  | 62  | 56  | 52  | 60  | 55  | 52  | 50  |    |    |
| 8   | 71  | 60  | 53  | 48  | 70  | 59  | 52  | 48  | 58  | 52  | 47  | 57  | 51  | 47  | 56  | 51  | 47  | 45  |    |    |
| 9   | 66  | 55  | 48  | 43  | 65  | 54  | 48  | 43  | 53  | 47  | 43  | 52  | 47  | 43  | 51  | 46  | 43  | 41  |    |    |
| 10  | 62  | 51  | 44  | 39  | 61  | 50  | 44  | 39  | 49  | 43  | 39  | 48  | 43  | 39  | 48  | 42  | 39  | 37  |    |    |

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

|     | 0°     | 45°   | 90°  | 135° | 180° |
|-----|--------|-------|------|------|------|
| 0°  | 1579   | 1579  | 1579 | 1579 | 1579 |
| 5°  | 3632   | 2707  | 1497 | 924  | 792  |
| 10° | 11445  | 4720  | 1225 | 512  | 379  |
| 15° | 74121  | 8740  | 908  | 182  | 45   |
| 20° | 223716 | 14958 | 630  | 0    | 0    |
| 25° | 332245 | 15098 | 363  | 0    | 0    |
| 30° | 373627 | 11470 | 152  | 0    | 0    |
| 35° | 322355 | 6853  | 107  | 0    | 0    |
| 40° | 185634 | 2347  | 0    | 0    | 0    |
| 45° | 45276  | 930   | 62   | 0    | 62   |
| 50° | 5424   | 273   | 68   | 68   | 205  |
| 55° | 726    | 0     | 153  | 153  | 306  |
| 60° | 88     | 0     | 263  | 263  | 395  |
| 65° | 104    | 104   | 415  | 415  | 571  |
| 70° | 128    | 128   | 513  | 513  | 577  |
| 75° | 0      | 169   | 678  | 508  | 678  |
| 80° | 0      | 253   | 758  | 505  | 758  |
| 85° | 0      | 503   | 1510 | 503  | 503  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 2.5°

Vertical Angle: 45°

Luminance: 45555 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 1.0    | 0.5       |
| 10°-20°   | 19.4   | 9.3       |
| 20°-30°   | 84.4   | 40.4      |
| 30°-40°   | 85.0   | 40.7      |
| 40°-50°   | 17.1   | 8.2       |
| 50°-60°   | 0.9    | 0.4       |
| 60°-70°   | 0.6    | 0.3       |
| 70°-80°   | 0.5    | 0.2       |
| 80°-90°   | 0.3    | 0.1       |
| 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°    | 104.8  | 50.1      |
| 0°-40°    | 189.8  | 90.8      |
| 0°-60°    | 207.7  | 99.3      |
| 0°-90°    | 209.1  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 209.1  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 45° | 90° | 135° | 180° | Flux |
|-----|------|-----|-----|------|------|------|
| 0°  | 7    | 7   | 7   | 7    | 7    |      |
| 5°  | 16   | 12  | 7   | 4    | 4    | 3    |
| 15° | 326  | 38  | 4   | 1    | 0    | 128  |
| 25° | 1373 | 62  | 2   | 0    | 0    | 619  |
| 35° | 1204 | 26  | 0   | 0    | 0    | 717  |
| 45° | 146  | 3   | 0   | 0    | 0    | 159  |
| 55° | 2    | 0   | 0   | 0    | 1    | 4    |
| 65° | 0    | 0   | 1   | 1    | 1    | 0    |
| 75° | 0    | 0   | 1   | 1    | 1    | 0    |
| 85° | 0    | 0   | 1   | 0    | 0    | 0    |
| 90° | 0    | 0   | 0   | 0    | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 2.5°   | 5°     | 7.5°   | 10°    | 12.5°  | 15°    | 17.5° | 20°   | 22.5° | 45°  |
|-------|--------|--------|--------|--------|--------|--------|--------|-------|-------|-------|------|
| 0°    | 7.2    | 7.2    | 7.2    | 7.2    | 7.2    | 7.2    | 7.2    | 7.2   | 7.2   | 7.2   | 7.2  |
| 2.5°  | 10.8   | 10.8   | 10.6   | 10.6   | 10.4   | 10.6   | 10.2   | 10.4  | 10.4  | 10.2  | 9.3  |
| 5°    | 16.5   | 16.9   | 16.7   | 16.7   | 16.5   | 16.7   | 16.3   | 15.9  | 15.5  | 15.5  | 12.3 |
| 7.5°  | 27.1   | 26.9   | 26.5   | 26.7   | 26.2   | 25.8   | 25.4   | 25.2  | 24.1  | 23.5  | 16.1 |
| 10°   | 51.4   | 52.5   | 51.6   | 51.4   | 48.0   | 47.8   | 45.5   | 42.3  | 39.4  | 37.9  | 21.2 |
| 12.5° | 141.5  | 147.5  | 138.0  | 133.5  | 130.8  | 120.6  | 116.2  | 105.0 | 94.2  | 86.1  | 26.9 |
| 15°   | 326.5  | 341.5  | 322.3  | 323.7  | 307.7  | 278.5  | 252.9  | 230.9 | 205.0 | 178.8 | 38.5 |
| 17.5° | 639.8  | 627.6  | 617.2  | 599.6  | 567.1  | 524.3  | 469.1  | 413.2 | 364.8 | 314.2 | 53.7 |
| 20°   | 958.7  | 947.9  | 924.2  | 885.7  | 844.3  | 780.8  | 715.2  | 631.2 | 549.9 | 473.7 | 64.1 |
| 21°   | 1068.5 | 1064.9 | 1026.0 | 1002.3 | 938.6  | 877.9  | 802.3  | 712.4 | 620.8 | 530.5 | 65.8 |
| 22°   | 1166.5 | 1144.9 | 1124.0 | 1088.9 | 1025.6 | 959.6  | 875.4  | 780.8 | 681.5 | 581.2 | 66.0 |
| 23°   | 1234.4 | 1224.5 | 1204.8 | 1165.2 | 1102.2 | 1024.7 | 935.9  | 836.9 | 732.3 | 617.0 | 65.4 |
| 24°   | 1309.5 | 1296.9 | 1268.1 | 1221.9 | 1158.3 | 1081.7 | 980.5  | 882.3 | 768.5 | 647.1 | 63.9 |
| 25°   | 1373.2 | 1353.6 | 1319.5 | 1269.6 | 1200.2 | 1121.2 | 1019.4 | 911.5 | 793.7 | 667.4 | 62.4 |
| 26°   | 1414.5 | 1403.9 | 1360.1 | 1305.9 | 1231.5 | 1150.0 | 1046.1 | 933.8 | 810.0 | 676.7 | 59.9 |
| 27°   | 1457.6 | 1438.0 | 1395.0 | 1332.6 | 1252.0 | 1168.8 | 1061.3 | 944.6 | 815.7 | 677.1 | 56.9 |
| 28°   | 1482.2 | 1461.0 | 1412.2 | 1346.6 | 1265.3 | 1179.2 | 1070.0 | 948.1 | 814.6 | 671.2 | 53.3 |
| 29°   | 1490.0 | 1463.2 | 1415.6 | 1348.9 | 1268.5 | 1180.0 | 1068.7 | 943.1 | 804.5 | 656.8 | 49.1 |
| 30°   | 1475.6 | 1448.3 | 1403.1 | 1338.1 | 1258.3 | 1170.5 | 1056.3 | 926.8 | 786.7 | 636.2 | 45.3 |
| 31°   | 1444.1 | 1421.0 | 1377.3 | 1312.1 | 1235.5 | 1148.3 | 1028.5 | 900.1 | 756.4 | 608.5 | 41.0 |
| 32°   | 1402.6 | 1379.8 | 1337.0 | 1278.0 | 1200.1 | 1112.1 | 990.3  | 858.4 | 720.7 | 567.1 | 36.6 |
| 33°   | 1340.2 | 1327.1 | 1288.6 | 1232.3 | 1154.4 | 1060.3 | 939.2  | 808.5 | 669.9 | 521.2 | 32.8 |
| 34°   | 1277.0 | 1260.5 | 1233.6 | 1172.0 | 1088.2 | 994.3  | 872.4  | 739.7 | 607.9 | 469.9 | 29.2 |
| 35°   | 1204.2 | 1194.4 | 1152.1 | 1102.8 | 1018.6 | 922.7  | 801.5  | 672.7 | 535.7 | 412.6 | 25.6 |
| 36°   | 1133.7 | 1118.5 | 1070.4 | 1018.2 | 936.5  | 832.8  | 713.1  | 592.2 | 473.3 | 358.9 | 21.8 |
| 37°   | 1031.3 | 1008.2 | 973.8  | 918.9  | 823.3  | 734.9  | 625.7  | 513.5 | 396.5 | 300.9 | 17.6 |
| 38°   | 910.9  | 900.1  | 852.5  | 797.1  | 718.1  | 634.3  | 526.2  | 431.0 | 327.1 | 251.2 | 13.5 |
| 39°   | 768.9  | 768.7  | 723.2  | 683.2  | 605.8  | 530.3  | 432.9  | 349.8 | 270.0 | 202.3 | 10.4 |
| 40°   | 648.5  | 626.1  | 598.0  | 547.8  | 488.4  | 424.4  | 339.0  | 273.8 | 209.5 | 163.1 | 8.2  |
| 42.5° | 340.0  | 338.1  | 321.6  | 283.8  | 250.7  | 212.9  | 169.3  | 141.1 | 110.4 | 89.9  | 5.1  |
| 45°   | 146.0  | 146.9  | 135.6  | 129.9  | 117.0  | 101.3  | 85.5   | 71.3  | 61.1  | 49.5  | 3.0  |
| 47.5° | 37.0   | 35.5   | 35.1   | 36.4   | 36.4   | 35.3   | 31.7   | 29.8  | 27.5  | 25.2  | 1.7  |
| 50°   | 15.9   | 15.5   | 15.2   | 15.2   | 14.2   | 13.7   | 12.7   | 11.6  | 10.6  | 9.5   | 0.8  |
| 52.5° | 5.9    | 6.1    | 6.3    | 6.1    | 6.1    | 5.9    | 5.9    | 5.7   | 5.1   | 4.6   | 0.4  |
| 55°   | 1.9    | 1.9    | 1.9    | 2.1    | 2.1    | 2.3    | 2.3    | 2.3   | 2.3   | 2.1   | 0.0  |
| 57.5° | 0.4    | 0.4    | 0.6    | 0.6    | 0.6    | 0.6    | 0.6    | 0.6   | 0.8   | 0.8   | 0.0  |
| 60°   | 0.2    | 0.2    | 0.2    | 0.2    | 0.2    | 0.2    | 0.2    | 0.0   | 0.0   | 0.0   | 0.0  |
| 62.5° | 0.2    | 0.2    | 0.2    | 0.2    | 0.2    | 0.2    | 0.2    | 0.2   | 0.2   | 0.2   | 0.2  |
| 65°   | 0.2    | 0.2    | 0.2    | 0.2    | 0.2    | 0.2    | 0.2    | 0.2   | 0.2   | 0.2   | 0.2  |
| 67.5° | 0.2    | 0.2    | 0.2    | 0.2    | 0.2    | 0.2    | 0.2    | 0.2   | 0.2   | 0.2   | 0.2  |
| 70°   | 0.2    | 0.2    | 0.2    | 0.2    | 0.2    | 0.2    | 0.2    | 0.2   | 0.2   | 0.2   | 0.2  |
| 72.5° | 0.2    | 0.0    | 0.2    | 0.2    | 0.2    | 0.2    | 0.2    | 0.2   | 0.2   | 0.2   | 0.2  |
| 75°   | 0.0    | 0.0    | 0.0    | 0.2    | 0.0    | 0.2    | 0.2    | 0.0   | 0.2   | 0.2   | 0.2  |
| 77.5° | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0   | 0.0   | 0.2   | 0.2  |
| 80°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0   | 0.0   | 0.0   | 0.2  |



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**CANDELA DISTRIBUTION (continued):**

|       | 0°  | 2.5° | 5°  | 7.5° | 10° | 12.5° | 15° | 17.5° | 20° | 22.5° | 45° |
|-------|-----|------|-----|------|-----|-------|-----|-------|-----|-------|-----|
| 82.5° | 0.0 | 0.0  | 0.0 | 0.0  | 0.0 | 0.0   | 0.0 | 0.0   | 0.0 | 0.0   | 0.2 |
| 85°   | 0.0 | 0.0  | 0.0 | 0.0  | 0.0 | 0.0   | 0.0 | 0.0   | 0.0 | 0.0   | 0.2 |
| 87.5° | 0.0 | 0.0  | 0.0 | 0.0  | 0.0 | 0.0   | 0.0 | 0.0   | 0.0 | 0.0   | 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 |

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CATALOG NUMBER: P3A02R209840DE010 E3CA301MW

**CANDELA DISTRIBUTION (continued):**

|       | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° |
|-------|-------|-----|--------|------|--------|------|
| 0°    | 7.2   | 7.2 | 7.2    | 7.2  | 7.2    | 7.2  |
| 2.5°  | 8.3   | 7.4 | 6.3    | 5.3  | 5.1    | 4.9  |
| 5°    | 9.3   | 6.8 | 5.1    | 4.2  | 3.8    | 3.6  |
| 7.5°  | 10.0  | 6.3 | 4.2    | 3.0  | 2.7    | 2.5  |
| 10°   | 10.4  | 5.5 | 3.4    | 2.3  | 1.7    | 1.7  |
| 12.5° | 10.6  | 4.7 | 2.5    | 1.5  | 0.9    | 0.9  |
| 15°   | 10.4  | 4.0 | 1.9    | 0.8  | 0.2    | 0.2  |
| 17.5° | 9.5   | 3.2 | 1.1    | 0.2  | 0.0    | 0.0  |
| 20°   | 8.2   | 2.7 | 0.8    | 0.0  | 0.0    | 0.0  |
| 21°   | 7.8   | 2.3 | 0.6    | 0.0  | 0.0    | 0.0  |
| 22°   | 7.2   | 2.1 | 0.4    | 0.0  | 0.0    | 0.0  |
| 23°   | 6.6   | 1.9 | 0.4    | 0.0  | 0.0    | 0.0  |
| 24°   | 6.1   | 1.7 | 0.2    | 0.0  | 0.0    | 0.0  |
| 25°   | 5.7   | 1.5 | 0.2    | 0.0  | 0.0    | 0.0  |
| 26°   | 5.3   | 1.3 | 0.2    | 0.0  | 0.0    | 0.0  |
| 27°   | 4.7   | 1.1 | 0.0    | 0.0  | 0.0    | 0.0  |
| 28°   | 4.4   | 0.9 | 0.0    | 0.0  | 0.0    | 0.0  |
| 29°   | 3.8   | 0.8 | 0.0    | 0.0  | 0.0    | 0.0  |
| 30°   | 3.2   | 0.6 | 0.0    | 0.0  | 0.0    | 0.0  |
| 31°   | 2.7   | 0.6 | 0.0    | 0.0  | 0.0    | 0.0  |
| 32°   | 2.3   | 0.4 | 0.0    | 0.0  | 0.0    | 0.0  |
| 33°   | 1.9   | 0.4 | 0.0    | 0.0  | 0.0    | 0.0  |
| 34°   | 1.7   | 0.4 | 0.0    | 0.0  | 0.0    | 0.0  |
| 35°   | 1.5   | 0.4 | 0.0    | 0.0  | 0.0    | 0.0  |
| 36°   | 1.1   | 0.2 | 0.0    | 0.0  | 0.0    | 0.0  |
| 37°   | 0.9   | 0.2 | 0.0    | 0.0  | 0.0    | 0.0  |
| 38°   | 0.8   | 0.2 | 0.0    | 0.0  | 0.0    | 0.0  |
| 39°   | 0.6   | 0.0 | 0.0    | 0.0  | 0.0    | 0.0  |
| 40°   | 0.6   | 0.0 | 0.0    | 0.0  | 0.0    | 0.0  |
| 42.5° | 0.2   | 0.0 | 0.0    | 0.0  | 0.0    | 0.0  |
| 45°   | 0.0   | 0.2 | 0.0    | 0.0  | 0.2    | 0.2  |
| 47.5° | 0.0   | 0.2 | 0.0    | 0.0  | 0.2    | 0.4  |
| 50°   | 0.0   | 0.2 | 0.2    | 0.2  | 0.4    | 0.6  |
| 52.5° | 0.0   | 0.4 | 0.2    | 0.2  | 0.6    | 0.6  |
| 55°   | 0.2   | 0.4 | 0.2    | 0.4  | 0.8    | 0.8  |
| 57.5° | 0.2   | 0.4 | 0.4    | 0.6  | 0.8    | 0.9  |
| 60°   | 0.4   | 0.6 | 0.6    | 0.6  | 0.9    | 0.9  |
| 62.5° | 0.4   | 0.6 | 0.8    | 0.8  | 0.9    | 1.1  |
| 65°   | 0.4   | 0.8 | 0.8    | 0.8  | 0.9    | 1.1  |
| 67.5° | 0.6   | 0.8 | 0.8    | 0.8  | 0.9    | 1.1  |
| 70°   | 0.6   | 0.8 | 0.8    | 0.8  | 0.9    | 0.9  |
| 72.5° | 0.6   | 0.8 | 0.6    | 0.8  | 0.8    | 0.9  |
| 75°   | 0.6   | 0.8 | 0.6    | 0.6  | 0.8    | 0.8  |
| 77.5° | 0.4   | 0.6 | 0.6    | 0.4  | 0.6    | 0.6  |
| 80°   | 0.4   | 0.6 | 0.4    | 0.4  | 0.6    | 0.6  |





TEST NUMBER: P1334517

CATALOG NUMBER: P3A02R209840DE010 E3CA301MW

**CANDELA DISTRIBUTION (continued):**

|       | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° |
|-------|-------|-----|--------|------|--------|------|
| 82.5° | 0.4   | 0.6 | 0.4    | 0.2  | 0.4    | 0.4  |
| 85°   | 0.4   | 0.6 | 0.4    | 0.2  | 0.2    | 0.2  |
| 87.5° | 0.4   | 0.6 | 0.4    | 0.2  | 0.0    | 0.2  |
| 90°   | 0.0   | 0.0 | 0.0    | 0.0  | 0.0    | 0.0  |

(END OF REPORT)