

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: P1312455

Luminaire Tested: P3SQAS13R359727DE010 E3SQCA451MW

Issue Date: 1/29/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1312455  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-77)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/29/2026  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: IRiS  
Catalog Number: P3SQAS13R359727DE010 E3SQCA451MW  
Description: 3in Adjustable LED luminaire with, R35 optic, 2700K CCT AND, 97CRI , E3SQCA451MW TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

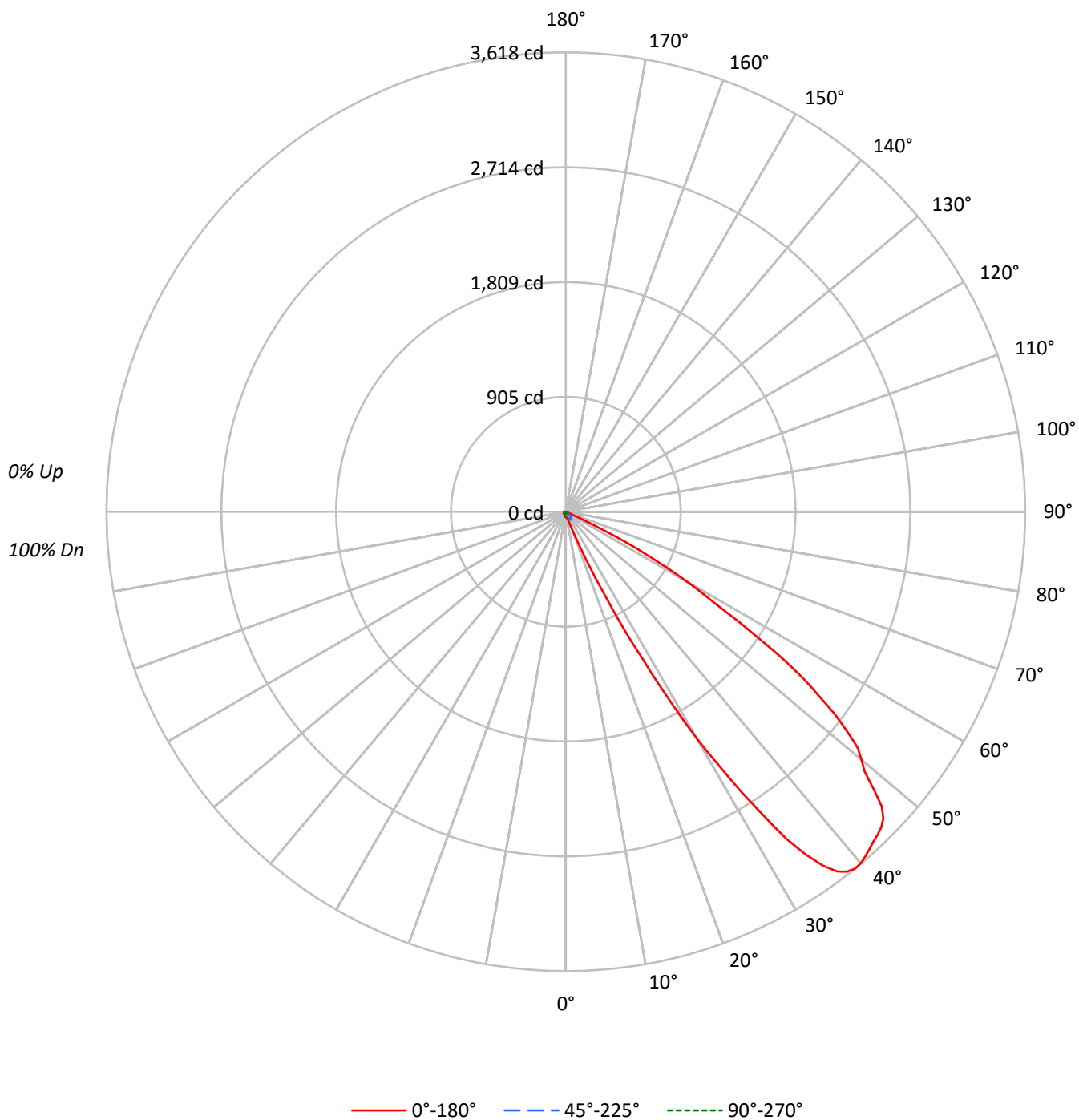
Lumens per Lamp: N/A  
Luminaire Lumens: 901.0 lumens  
Efficiency: N/A  
Efficacy: 61.7 lumens/watt  
Spacing Criteria (0/90/45): 4.01 / 0.66 / 1.41  
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')  
CIE Type: Direct

Input Watts (W): 14.6  
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

TEST NUMBER: P1312455

CATALOG NUMBER: P3SQAS13R359727DE010 E3SQCA451MW

### Luminous Intensity Polar Plot



TEST NUMBER: P1312455

CATALOG NUMBER: P3SQAS13R359727DE010 E3SQCA451MW

**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  | 107 | 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  | 61  | 52  | 45  | 58  | 51  | 45  | 56  | 50  | 44  | 55  | 49  | 44  | 42  |    |    |
| 6   | 68  | 54  | 45  | 38  | 66  | 53  | 44  | 38  | 51  | 43  | 38  | 50  | 43  | 37  | 48  | 42  | 37  | 35  |    |    |
| 7   | 62  | 48  | 38  | 32  | 60  | 47  | 38  | 32  | 45  | 37  | 32  | 44  | 37  | 31  | 42  | 36  | 31  | 29  |    |    |
| 8   | 57  | 42  | 33  | 27  | 55  | 41  | 33  | 27  | 40  | 32  | 27  | 39  | 32  | 26  | 38  | 31  | 26  | 24  |    |    |
| 9   | 52  | 38  | 29  | 23  | 50  | 37  | 29  | 23  | 36  | 28  | 23  | 35  | 28  | 22  | 34  | 27  | 22  | 20  |    |    |
| 10  | 48  | 34  | 25  | 19  | 46  | 33  | 25  | 19  | 32  | 25  | 19  | 31  | 24  | 19  | 30  | 24  | 19  | 17  |    |    |

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

|     | 0°     | 45°   | 90°  | 135° | 180°  |
|-----|--------|-------|------|------|-------|
| 0°  | 7147   | 7147  | 7147 | 7147 | 7147  |
| 5°  | 7728   | 7589  | 7036 | 6327 | 6189  |
| 10° | 8114   | 7397  | 6261 | 5404 | 5404  |
| 15° | 11607  | 7257  | 5081 | 4636 | 4778  |
| 20° | 29067  | 7753  | 4032 | 4032 | 4472  |
| 25° | 134938 | 9900  | 3097 | 3706 | 4181  |
| 30° | 410180 | 13423 | 2426 | 3401 | 4196  |
| 35° | 693241 | 15558 | 2060 | 3259 | 4100  |
| 40° | 812614 | 15355 | 1641 | 3282 | 4384  |
| 45° | 855795 | 10887 | 1388 | 3556 | 4749  |
| 50° | 814590 | 6538  | 1313 | 3697 | 5225  |
| 55° | 682583 | 2672  | 1471 | 4144 | 6095  |
| 60° | 382128 | 551   | 1688 | 4753 | 6717  |
| 65° | 65976  | 326   | 1671 | 5298 | 7621  |
| 70° | 1209   | 403   | 2065 | 5740 | 8611  |
| 75° | 1065   | 532   | 2728 | 6521 | 9715  |
| 80° | 793    | 793   | 3273 | 7240 | 11306 |
| 85° | 0      | 1581  | 6521 | 8102 | 12844 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 46°

Luminance: 861834 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 3.7    | 0.4       |
| 10°-20°   | 10.6   | 1.2       |
| 20°-30°   | 55.3   | 6.1       |
| 30°-40°   | 238.8  | 26.5      |
| 40°-50°   | 340.6  | 37.8      |
| 50°-60°   | 210.9  | 23.4      |
| 60°-70°   | 32.1   | 3.6       |
| 70°-80°   | 6.0    | 0.7       |
| 80°-90°   | 3.0    | 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°    | 69.6   | 7.7       |
| 0°-40°    | 308.4  | 34.2      |
| 0°-60°    | 859.9  | 95.4      |
| 0°-90°    | 901.0  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 901.0  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 45° | 90° | 135° | 180° | Flux |
|-----|------|-----|-----|------|------|------|
| 0°  | 42   | 42  | 42  | 42   | 42   |      |
| 5°  | 45   | 44  | 41  | 37   | 36   | 4    |
| 15° | 65   | 41  | 28  | 26   | 27   | 23   |
| 25° | 710  | 52  | 16  | 20   | 22   | 425  |
| 35° | 3297 | 74  | 10  | 16   | 20   | 1980 |
| 45° | 3514 | 45  | 6   | 15   | 20   | 2655 |
| 55° | 2273 | 9   | 5   | 14   | 20   | 1936 |
| 65° | 162  | 1   | 4   | 13   | 19   | 331  |
| 75° | 2    | 1   | 4   | 10   | 15   | 2    |
| 85° | 0    | 1   | 3   | 4    | 6    | 0    |
| 90° | 0    | 0   | 0   | 0    | 0    |      |

TEST NUMBER: P1312455

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 10°    | 15°    | 20°    | 25°    | 30°   | 45°  | 67.5° | 90°  | 112.5° |
|-------|--------|--------|--------|--------|--------|--------|-------|------|-------|------|--------|
| 0°    | 41.5   | 41.5   | 41.5   | 41.5   | 41.5   | 41.5   | 41.5  | 41.5 | 41.5  | 41.5 | 41.5   |
| 2.5°  | 43.1   | 43.1   | 43.1   | 43.1   | 43.1   | 43.1   | 43.1  | 43.1 | 43.1  | 41.5 | 40.7   |
| 5°    | 44.7   | 44.7   | 43.9   | 43.9   | 43.9   | 43.9   | 43.9  | 43.9 | 42.3  | 40.7 | 38.2   |
| 7.5°  | 45.5   | 45.5   | 44.7   | 44.7   | 44.7   | 44.7   | 43.9  | 43.1 | 41.5  | 38.2 | 35.8   |
| 10°   | 46.4   | 46.4   | 46.4   | 46.4   | 45.5   | 44.7   | 43.9  | 42.3 | 39.9  | 35.8 | 33.3   |
| 12.5° | 52.1   | 52.1   | 51.2   | 49.6   | 48.0   | 46.4   | 44.7  | 41.5 | 36.6  | 32.5 | 30.1   |
| 15°   | 65.1   | 64.3   | 62.6   | 60.2   | 56.9   | 52.9   | 49.6  | 40.7 | 33.3  | 28.5 | 26.8   |
| 17.5° | 91.1   | 89.5   | 87.0   | 78.9   | 71.6   | 64.3   | 57.7  | 40.7 | 30.1  | 25.2 | 23.6   |
| 20°   | 158.6  | 159.4  | 142.3  | 122.8  | 106.5  | 88.7   | 72.4  | 42.3 | 26.8  | 22.0 | 21.1   |
| 22.5° | 331.0  | 318.0  | 277.4  | 230.2  | 175.7  | 135.8  | 102.5 | 46.4 | 23.6  | 18.7 | 18.7   |
| 25°   | 710.1  | 660.4  | 562.0  | 424.6  | 299.3  | 212.3  | 148.8 | 52.1 | 21.1  | 16.3 | 17.1   |
| 27.5° | 1296.5 | 1251.7 | 1054.1 | 793.8  | 527.0  | 320.5  | 201.7 | 59.4 | 18.7  | 13.8 | 15.5   |
| 30°   | 2062.6 | 1939.0 | 1681.2 | 1301.4 | 880.9  | 490.4  | 270.8 | 67.5 | 15.5  | 12.2 | 14.6   |
| 31°   | 2301.8 | 2244.8 | 1930.9 | 1505.5 | 1032.1 | 582.4  | 300.1 | 69.9 | 14.6  | 12.2 | 13.8   |
| 32°   | 2585.6 | 2484.8 | 2203.4 | 1729.2 | 1185.9 | 664.5  | 335.1 | 72.4 | 13.8  | 10.6 | 13.8   |
| 33°   | 2839.4 | 2741.8 | 2399.4 | 1926.0 | 1341.2 | 758.0  | 372.5 | 73.2 | 12.2  | 10.6 | 13.0   |
| 34°   | 3106.2 | 2972.8 | 2633.6 | 2131.8 | 1500.6 | 858.9  | 406.7 | 74.0 | 11.4  | 9.8  | 13.0   |
| 35°   | 3297.3 | 3163.9 | 2835.3 | 2294.4 | 1638.1 | 948.4  | 445.7 | 74.0 | 10.6  | 9.8  | 12.2   |
| 36°   | 3445.3 | 3328.2 | 3009.4 | 2462.0 | 1774.7 | 1028.9 | 476.6 | 74.0 | 8.9   | 8.9  | 12.2   |
| 37°   | 3547.0 | 3435.6 | 3126.5 | 2606.0 | 1878.8 | 1100.5 | 504.3 | 74.0 | 8.1   | 8.9  | 12.2   |
| 38°   | 3596.6 | 3503.9 | 3239.6 | 2710.9 | 1979.7 | 1156.6 | 526.2 | 72.4 | 7.3   | 8.1  | 11.4   |
| 39°   | 3617.8 | 3542.1 | 3308.7 | 2799.5 | 2055.3 | 1205.4 | 542.5 | 70.8 | 6.5   | 8.1  | 11.4   |
| 40°   | 3614.5 | 3548.6 | 3347.7 | 2860.5 | 2116.3 | 1238.7 | 551.4 | 68.3 | 5.7   | 7.3  | 11.4   |
| 41°   | 3595.8 | 3538.9 | 3368.1 | 2912.6 | 2152.9 | 1261.5 | 553.9 | 65.9 | 4.9   | 7.3  | 10.6   |
| 42°   | 3574.7 | 3522.6 | 3374.6 | 2940.2 | 2176.5 | 1268.8 | 547.4 | 62.6 | 4.9   | 6.5  | 10.6   |
| 43°   | 3552.7 | 3504.7 | 3374.6 | 2949.2 | 2182.2 | 1263.9 | 536.8 | 56.9 | 4.1   | 6.5  | 10.6   |
| 44°   | 3534.8 | 3489.3 | 3364.0 | 2946.8 | 2170.0 | 1245.2 | 517.3 | 50.4 | 3.3   | 6.5  | 10.6   |
| 45°   | 3513.7 | 3468.9 | 3350.2 | 2931.3 | 2146.4 | 1213.5 | 492.9 | 44.7 | 2.4   | 5.7  | 10.6   |
| 46°   | 3476.2 | 3441.3 | 3325.8 | 2899.6 | 2109.0 | 1169.6 | 462.0 | 40.7 | 1.6   | 5.7  | 9.8    |
| 47°   | 3403.9 | 3373.8 | 3278.6 | 2852.4 | 2059.4 | 1117.5 | 430.3 | 36.6 | 1.6   | 5.7  | 9.8    |
| 48°   | 3258.3 | 3257.4 | 3184.2 | 2764.6 | 1980.5 | 1052.5 | 396.9 | 32.5 | 1.6   | 5.7  | 9.8    |
| 49°   | 3117.6 | 3102.9 | 3011.8 | 2610.0 | 1867.4 | 974.4  | 361.9 | 29.3 | 0.8   | 5.7  | 9.8    |
| 50°   | 3040.3 | 3008.6 | 2858.9 | 2427.8 | 1722.7 | 866.2  | 324.5 | 24.4 | 0.8   | 4.9  | 9.8    |
| 51°   | 2959.8 | 2914.2 | 2737.7 | 2263.5 | 1550.2 | 762.1  | 283.9 | 19.5 | 0.8   | 4.9  | 8.9    |
| 52°   | 2814.2 | 2771.1 | 2573.4 | 2106.6 | 1382.7 | 655.6  | 244.8 | 16.3 | 0.8   | 4.9  | 9.8    |
| 53°   | 2657.2 | 2595.4 | 2380.7 | 1934.1 | 1235.5 | 561.2  | 205.0 | 13.8 | 0.8   | 4.9  | 8.9    |
| 54°   | 2459.6 | 2431.9 | 2185.5 | 1722.7 | 1063.0 | 470.1  | 168.4 | 11.4 | 0.8   | 4.9  | 8.9    |
| 55°   | 2273.3 | 2232.6 | 1976.4 | 1506.3 | 906.9  | 385.5  | 140.7 | 8.9  | 0.8   | 4.9  | 8.9    |
| 56°   | 2035.8 | 1974.8 | 1734.9 | 1307.9 | 748.3  | 310.7  | 118.7 | 7.3  | 0.8   | 4.9  | 8.9    |
| 57°   | 1752.8 | 1687.7 | 1498.2 | 1087.4 | 587.2  | 236.7  | 99.2  | 5.7  | 0.8   | 4.9  | 8.9    |
| 58°   | 1482.7 | 1426.6 | 1223.3 | 839.4  | 442.5  | 164.3  | 82.1  | 4.1  | 0.8   | 4.1  | 8.9    |
| 59°   | 1281.0 | 1219.2 | 1017.5 | 645.8  | 307.4  | 121.2  | 61.8  | 3.3  | 0.8   | 4.9  | 8.9    |
| 60°   | 1109.4 | 1029.7 | 819.0  | 500.2  | 219.6  | 87.0   | 45.5  | 1.6  | 1.6   | 4.9  | 8.9    |
| 62.5° | 639.3  | 564.5  | 391.2  | 203.3  | 90.3   | 44.7   | 22.0  | 0.8  | 1.6   | 4.9  | 8.9    |
| 65°   | 161.9  | 144.0  | 93.5   | 43.9   | 25.2   | 15.5   | 8.1   | 0.8  | 1.6   | 4.1  | 8.1    |



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**CANDELA DISTRIBUTION (continued):**

|       | 0°  | 5°  | 10° | 15° | 20° | 25° | 30° | 45° | 67.5° | 90° | 112.5° |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-------|-----|--------|
| 67.5° | 5.7 | 5.7 | 5.7 | 4.9 | 4.1 | 3.3 | 1.6 | 0.8 | 1.6   | 4.1 | 8.1    |
| 70°   | 2.4 | 2.4 | 2.4 | 1.6 | 1.6 | 0.8 | 0.8 | 0.8 | 1.6   | 4.1 | 7.3    |
| 72.5° | 1.6 | 1.6 | 1.6 | 1.6 | 0.8 | 0.8 | 0.8 | 0.8 | 2.4   | 4.1 | 6.5    |
| 75°   | 1.6 | 1.6 | 1.6 | 1.6 | 0.8 | 0.8 | 0.8 | 0.8 | 2.4   | 4.1 | 6.5    |
| 77.5° | 1.6 | 1.6 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 2.4   | 3.3 | 5.7    |
| 80°   | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 2.4   | 3.3 | 4.9    |
| 82.5° | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 2.4   | 3.3 | 4.1    |
| 85°   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.8 | 0.0 | 0.8 | 2.4   | 3.3 | 3.3    |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.8 | 2.4   | 3.3 | 2.4    |
| 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: P1312455

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**CANDELA DISTRIBUTION (continued):**

|       | 135° | 157.5° | 180° |
|-------|------|--------|------|
| 0°    | 41.5 | 41.5   | 41.5 |
| 2.5°  | 39.0 | 39.0   | 39.0 |
| 5°    | 36.6 | 36.6   | 35.8 |
| 7.5°  | 34.2 | 33.3   | 33.3 |
| 10°   | 30.9 | 30.9   | 30.9 |
| 12.5° | 28.5 | 28.5   | 28.5 |
| 15°   | 26.0 | 26.8   | 26.8 |
| 17.5° | 23.6 | 25.2   | 25.2 |
| 20°   | 22.0 | 23.6   | 24.4 |
| 22.5° | 20.3 | 22.0   | 22.8 |
| 25°   | 19.5 | 21.1   | 22.0 |
| 27.5° | 17.9 | 20.3   | 22.0 |
| 30°   | 17.1 | 19.5   | 21.1 |
| 31°   | 17.1 | 19.5   | 20.3 |
| 32°   | 16.3 | 19.5   | 20.3 |
| 33°   | 16.3 | 19.5   | 20.3 |
| 34°   | 16.3 | 18.7   | 20.3 |
| 35°   | 15.5 | 18.7   | 19.5 |
| 36°   | 15.5 | 18.7   | 19.5 |
| 37°   | 15.5 | 18.7   | 20.3 |
| 38°   | 15.5 | 18.7   | 19.5 |
| 39°   | 14.6 | 18.7   | 19.5 |
| 40°   | 14.6 | 18.7   | 19.5 |
| 41°   | 14.6 | 18.7   | 19.5 |
| 42°   | 14.6 | 18.7   | 19.5 |
| 43°   | 14.6 | 18.7   | 19.5 |
| 44°   | 14.6 | 17.9   | 19.5 |
| 45°   | 14.6 | 17.9   | 19.5 |
| 46°   | 14.6 | 18.7   | 19.5 |
| 47°   | 14.6 | 18.7   | 20.3 |
| 48°   | 14.6 | 17.9   | 19.5 |
| 49°   | 13.8 | 17.9   | 19.5 |
| 50°   | 13.8 | 17.9   | 19.5 |
| 51°   | 13.8 | 18.7   | 20.3 |
| 52°   | 13.8 | 18.7   | 20.3 |
| 53°   | 13.8 | 18.7   | 20.3 |
| 54°   | 13.8 | 18.7   | 19.5 |
| 55°   | 13.8 | 18.7   | 20.3 |
| 56°   | 13.8 | 18.7   | 19.5 |
| 57°   | 13.8 | 18.7   | 19.5 |
| 58°   | 13.8 | 17.9   | 19.5 |
| 59°   | 13.8 | 17.9   | 19.5 |
| 60°   | 13.8 | 17.9   | 19.5 |
| 62.5° | 13.0 | 17.9   | 19.5 |
| 65°   | 13.0 | 17.1   | 18.7 |



TEST NUMBER: P1312455

CATALOG NUMBER: P3SQAS13R359727DE010 E3SQCA451MW

**CANDELA DISTRIBUTION (continued):**

|       | 135° | 157.5° | 180° |
|-------|------|--------|------|
| 67.5° | 12.2 | 17.1   | 17.9 |
| 70°   | 11.4 | 16.3   | 17.1 |
| 72.5° | 10.6 | 15.5   | 16.3 |
| 75°   | 9.8  | 13.8   | 14.6 |
| 77.5° | 8.1  | 12.2   | 13.8 |
| 80°   | 7.3  | 10.6   | 11.4 |
| 82.5° | 5.7  | 8.9    | 9.8  |
| 85°   | 4.1  | 6.5    | 6.5  |
| 87.5° | 1.6  | 3.3    | 3.3  |
| 90°   | 0.0  | 0.0    | 0.0  |

(END OF REPORT)