

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: P1316696

Luminaire Tested: P3SQAS02R359830DE010 E3SQCA451MW

Issue Date: 1/29/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1316696  
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: P3SQAS02R359830DE010 E3SQCA451MW  
Description: 3in Adjustable LED luminaire with, R35 optic, 3000K CCT AND, 98CRI , E3SQCA451MW TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

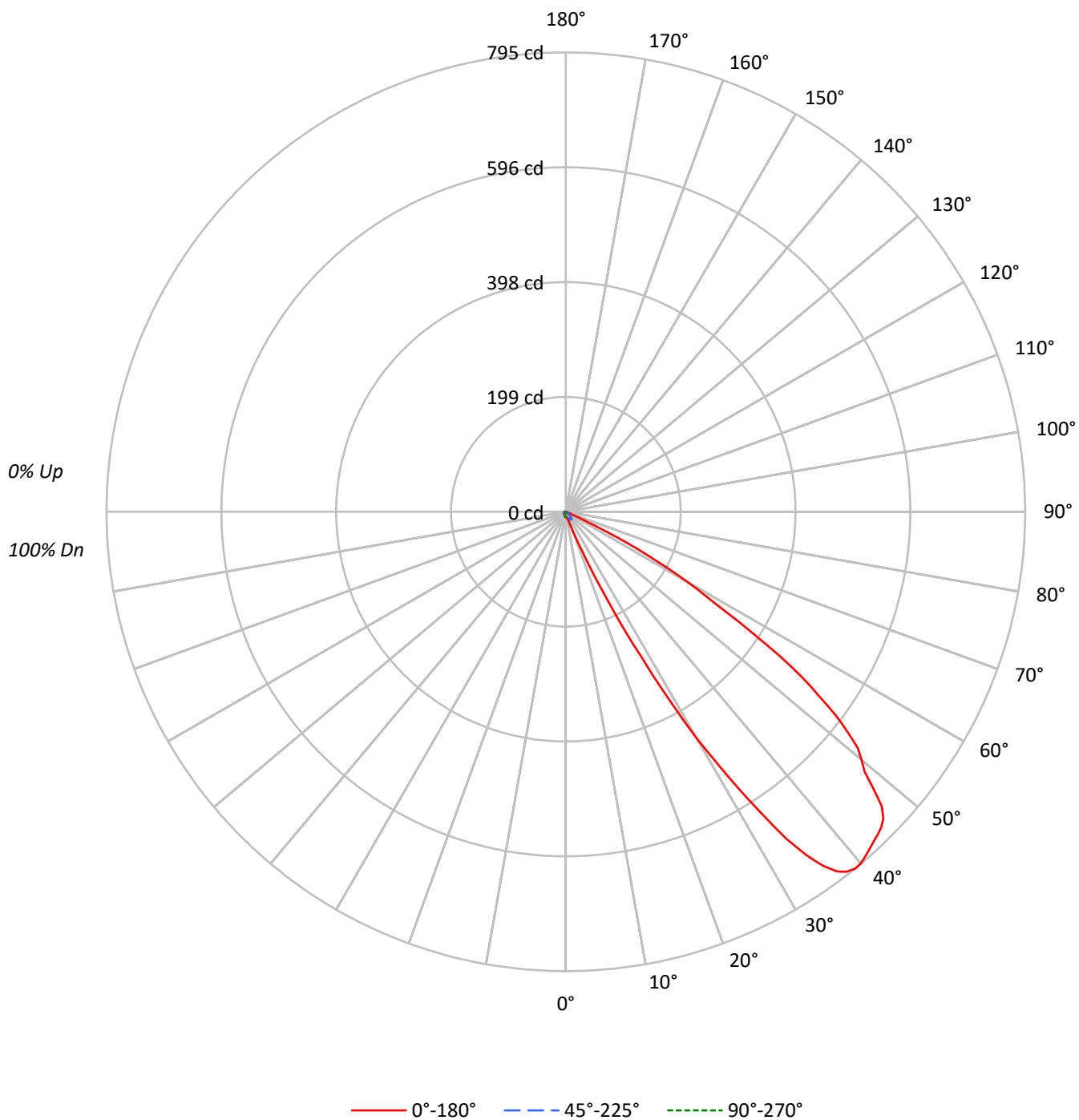
Lumens per Lamp: N/A  
Luminaire Lumens: 198.0 lumens  
Efficiency: N/A  
Efficacy: 55.0 lumens/watt  
Spacing Criteria (0/90/45): 4.01 / 0.66 / 1.41  
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')  
CIE Type: Direct

Input Watts (W): 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

TEST NUMBER: P1316696

CATALOG NUMBER: P3SQAS02R359830DE010 E3SQCA451MW

### Luminous Intensity Polar Plot



TEST NUMBER: P1316696

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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   | 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°  | 1567   | 1567 | 1567 | 1567 | 1567 |
| 5°  | 1694   | 1677 | 1539 | 1383 | 1366 |
| 10° | 1784   | 1626 | 1382 | 1189 | 1189 |
| 15° | 2550   | 1587 | 1123 | 1016 | 1052 |
| 20° | 6396   | 1704 | 880  | 880  | 990  |
| 25° | 29644  | 2166 | 684  | 817  | 912  |
| 30° | 90146  | 2943 | 537  | 756  | 915  |
| 35° | 152344 | 3427 | 442  | 715  | 904  |
| 40° | 178575 | 3372 | 360  | 719  | 967  |
| 45° | 188052 | 2387 | 317  | 779  | 1047 |
| 50° | 179005 | 1447 | 295  | 804  | 1152 |
| 55° | 150010 | 601  | 330  | 901  | 1351 |
| 60° | 83976  | 138  | 379  | 1033 | 1481 |
| 65° | 14507  | 82   | 367  | 1182 | 1671 |
| 70° | 252    | 101  | 453  | 1259 | 1913 |
| 75° | 266    | 133  | 599  | 1397 | 2129 |
| 80° | 198    | 198  | 694  | 1587 | 2479 |
| 85° | 0      | 395  | 1383 | 1778 | 2766 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 46°

Luminance: 189389 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 0.8    | 0.4       |
| 10°-20°   | 2.3    | 1.2       |
| 20°-30°   | 12.1   | 6.1       |
| 30°-40°   | 52.5   | 26.5      |
| 40°-50°   | 74.8   | 37.8      |
| 50°-60°   | 46.4   | 23.4      |
| 60°-70°   | 7.1    | 3.6       |
| 70°-80°   | 1.3    | 0.7       |
| 80°-90°   | 0.7    | 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°    | 15.3   | 7.7       |
| 0°-40°    | 67.8   | 34.2      |
| 0°-60°    | 189.0  | 95.4      |
| 0°-90°    | 198.0  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 198.0  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | 45° | 90° | 135° | 180° | Flux |
|-----|-----|-----|-----|------|------|------|
| 0°  | 9   | 9   | 9   | 9    | 9    |      |
| 5°  | 10  | 10  | 9   | 8    | 8    | 1    |
| 15° | 14  | 9   | 6   | 6    | 6    | 5    |
| 25° | 156 | 11  | 4   | 4    | 5    | 93   |
| 35° | 725 | 16  | 2   | 3    | 4    | 435  |
| 45° | 772 | 10  | 1   | 3    | 4    | 583  |
| 55° | 500 | 2   | 1   | 3    | 4    | 425  |
| 65° | 36  | 0   | 1   | 3    | 4    | 73   |
| 75° | 0   | 0   | 1   | 2    | 3    | 0    |
| 85° | 0   | 0   | 1   | 1    | 1    | 0    |
| 90° | 0   | 0   | 0   | 0    | 0    |      |

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°    | 5°    | 10°   | 15°   | 20°   | 25°   | 30°   | 45°  | 67.5° | 90° | 112.5° |
|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|-----|--------|
| 0°    | 9.1   | 9.1   | 9.1   | 9.1   | 9.1   | 9.1   | 9.1   | 9.1  | 9.1   | 9.1 | 9.1    |
| 2.5°  | 9.5   | 9.5   | 9.5   | 9.5   | 9.5   | 9.5   | 9.5   | 9.5  | 9.5   | 9.1 | 8.9    |
| 5°    | 9.8   | 9.8   | 9.7   | 9.7   | 9.7   | 9.7   | 9.7   | 9.7  | 9.3   | 8.9 | 8.4    |
| 7.5°  | 10.0  | 10.0  | 9.8   | 9.8   | 9.8   | 9.8   | 9.7   | 9.5  | 9.1   | 8.4 | 7.9    |
| 10°   | 10.2  | 10.2  | 10.2  | 10.2  | 10.0  | 9.8   | 9.7   | 9.3  | 8.8   | 7.9 | 7.3    |
| 12.5° | 11.4  | 11.4  | 11.3  | 10.9  | 10.5  | 10.2  | 9.8   | 9.1  | 8.0   | 7.1 | 6.6    |
| 15°   | 14.3  | 14.1  | 13.8  | 13.2  | 12.5  | 11.6  | 10.9  | 8.9  | 7.3   | 6.3 | 5.9    |
| 17.5° | 20.0  | 19.7  | 19.1  | 17.3  | 15.7  | 14.1  | 12.7  | 8.9  | 6.6   | 5.5 | 5.2    |
| 20°   | 34.9  | 35.0  | 31.3  | 27.0  | 23.4  | 19.5  | 15.9  | 9.3  | 5.9   | 4.8 | 4.6    |
| 22.5° | 72.7  | 69.9  | 60.9  | 50.6  | 38.6  | 29.8  | 22.5  | 10.2 | 5.2   | 4.1 | 4.1    |
| 25°   | 156.0 | 145.1 | 123.5 | 93.3  | 65.8  | 46.7  | 32.7  | 11.4 | 4.6   | 3.6 | 3.8    |
| 27.5° | 284.9 | 275.1 | 231.6 | 174.4 | 115.8 | 70.4  | 44.3  | 13.0 | 4.1   | 3.0 | 3.4    |
| 30°   | 453.3 | 426.1 | 369.5 | 286.0 | 193.6 | 107.8 | 59.5  | 14.8 | 3.4   | 2.7 | 3.2    |
| 31°   | 505.8 | 493.3 | 424.3 | 330.8 | 226.8 | 128.0 | 66.0  | 15.4 | 3.2   | 2.7 | 3.0    |
| 32°   | 568.2 | 546.0 | 484.2 | 380.0 | 260.6 | 146.0 | 73.6  | 15.9 | 3.0   | 2.3 | 3.0    |
| 33°   | 624.0 | 602.5 | 527.3 | 423.3 | 294.7 | 166.6 | 81.9  | 16.1 | 2.7   | 2.3 | 2.9    |
| 34°   | 682.6 | 653.3 | 578.8 | 468.5 | 329.8 | 188.7 | 89.4  | 16.3 | 2.5   | 2.1 | 2.9    |
| 35°   | 724.6 | 695.3 | 623.1 | 504.2 | 360.0 | 208.4 | 97.9  | 16.3 | 2.3   | 2.1 | 2.7    |
| 36°   | 757.1 | 731.4 | 661.3 | 541.0 | 390.0 | 226.1 | 104.7 | 16.3 | 2.0   | 2.0 | 2.7    |
| 37°   | 779.5 | 755.0 | 687.1 | 572.7 | 412.9 | 241.8 | 110.8 | 16.3 | 1.8   | 2.0 | 2.7    |
| 38°   | 790.4 | 770.0 | 711.9 | 595.7 | 435.0 | 254.2 | 115.6 | 15.9 | 1.6   | 1.8 | 2.5    |
| 39°   | 795.0 | 778.4 | 727.1 | 615.2 | 451.7 | 264.9 | 119.2 | 15.6 | 1.4   | 1.8 | 2.5    |
| 40°   | 794.3 | 779.8 | 735.7 | 628.6 | 465.1 | 272.2 | 121.2 | 15.0 | 1.3   | 1.6 | 2.5    |
| 41°   | 790.2 | 777.7 | 740.2 | 640.1 | 473.1 | 277.2 | 121.7 | 14.5 | 1.1   | 1.6 | 2.3    |
| 42°   | 785.6 | 774.1 | 741.6 | 646.1 | 478.3 | 278.8 | 120.3 | 13.8 | 1.1   | 1.4 | 2.3    |
| 43°   | 780.7 | 770.2 | 741.6 | 648.1 | 479.6 | 277.8 | 118.0 | 12.5 | 0.9   | 1.4 | 2.3    |
| 44°   | 776.8 | 766.8 | 739.3 | 647.6 | 476.9 | 273.6 | 113.7 | 11.1 | 0.7   | 1.4 | 2.3    |
| 45°   | 772.1 | 762.3 | 736.2 | 644.2 | 471.7 | 266.7 | 108.3 | 9.8  | 0.5   | 1.3 | 2.3    |
| 46°   | 763.9 | 756.2 | 730.9 | 637.2 | 463.5 | 257.0 | 101.5 | 8.9  | 0.4   | 1.3 | 2.1    |
| 47°   | 748.0 | 741.4 | 720.5 | 626.8 | 452.6 | 245.6 | 94.6  | 8.0  | 0.4   | 1.3 | 2.1    |
| 48°   | 716.0 | 715.8 | 699.8 | 607.5 | 435.2 | 231.3 | 87.2  | 7.1  | 0.4   | 1.3 | 2.1    |
| 49°   | 685.1 | 681.9 | 661.9 | 573.6 | 410.4 | 214.1 | 79.5  | 6.4  | 0.2   | 1.3 | 2.1    |
| 50°   | 668.1 | 661.1 | 628.3 | 533.5 | 378.6 | 190.4 | 71.3  | 5.4  | 0.2   | 1.1 | 2.1    |
| 51°   | 650.4 | 640.4 | 601.6 | 497.4 | 340.7 | 167.5 | 62.4  | 4.3  | 0.2   | 1.1 | 2.0    |
| 52°   | 618.4 | 609.0 | 565.5 | 462.9 | 303.9 | 144.1 | 53.8  | 3.6  | 0.2   | 1.1 | 2.1    |
| 53°   | 583.9 | 570.4 | 523.2 | 425.0 | 271.5 | 123.3 | 45.0  | 3.0  | 0.2   | 1.1 | 2.0    |
| 54°   | 540.5 | 534.4 | 480.3 | 378.6 | 233.6 | 103.3 | 37.0  | 2.5  | 0.2   | 1.1 | 2.0    |
| 55°   | 499.6 | 490.6 | 434.3 | 331.0 | 199.3 | 84.7  | 30.9  | 2.0  | 0.2   | 1.1 | 2.0    |
| 56°   | 447.4 | 434.0 | 381.2 | 287.4 | 164.4 | 68.3  | 26.1  | 1.6  | 0.2   | 1.1 | 2.0    |
| 57°   | 385.2 | 370.9 | 329.2 | 239.0 | 129.0 | 52.0  | 21.8  | 1.3  | 0.2   | 1.1 | 2.0    |
| 58°   | 325.8 | 313.5 | 268.8 | 184.5 | 97.2  | 36.1  | 18.1  | 0.9  | 0.2   | 0.9 | 2.0    |
| 59°   | 281.5 | 267.9 | 223.6 | 141.9 | 67.6  | 26.6  | 13.6  | 0.7  | 0.2   | 1.1 | 2.0    |
| 60°   | 243.8 | 226.3 | 180.0 | 109.9 | 48.3  | 19.1  | 10.0  | 0.4  | 0.4   | 1.1 | 2.0    |
| 62.5° | 140.5 | 124.0 | 86.0  | 44.7  | 19.8  | 9.8   | 4.8   | 0.2  | 0.4   | 1.1 | 2.0    |
| 65°   | 35.6  | 31.6  | 20.6  | 9.7   | 5.5   | 3.4   | 1.8   | 0.2  | 0.4   | 0.9 | 1.8    |



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**CANDELA DISTRIBUTION (continued):**

|       | 0°  | 5°  | 10° | 15° | 20° | 25° | 30° | 45° | 67.5° | 90° | 112.5° |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-------|-----|--------|
| 67.5° | 1.3 | 1.3 | 1.3 | 1.1 | 0.9 | 0.7 | 0.4 | 0.2 | 0.4   | 0.9 | 1.8    |
| 70°   | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 | 0.2 | 0.2 | 0.2 | 0.4   | 0.9 | 1.6    |
| 72.5° | 0.4 | 0.4 | 0.4 | 0.4 | 0.2 | 0.2 | 0.2 | 0.2 | 0.5   | 0.9 | 1.4    |
| 75°   | 0.4 | 0.4 | 0.4 | 0.4 | 0.2 | 0.2 | 0.2 | 0.2 | 0.5   | 0.9 | 1.4    |
| 77.5° | 0.4 | 0.4 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.5   | 0.7 | 1.3    |
| 80°   | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.5   | 0.7 | 1.1    |
| 82.5° | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.5   | 0.7 | 0.9    |
| 85°   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.2 | 0.5   | 0.7 | 0.7    |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.5   | 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    |

TEST NUMBER: P1316696

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**CANDELA DISTRIBUTION (continued):**

|       | 135° | 157.5° | 180° |
|-------|------|--------|------|
| 0°    | 9.1  | 9.1    | 9.1  |
| 2.5°  | 8.6  | 8.6    | 8.6  |
| 5°    | 8.0  | 8.0    | 7.9  |
| 7.5°  | 7.5  | 7.3    | 7.3  |
| 10°   | 6.8  | 6.8    | 6.8  |
| 12.5° | 6.3  | 6.3    | 6.3  |
| 15°   | 5.7  | 5.9    | 5.9  |
| 17.5° | 5.2  | 5.5    | 5.5  |
| 20°   | 4.8  | 5.2    | 5.4  |
| 22.5° | 4.5  | 4.8    | 5.0  |
| 25°   | 4.3  | 4.6    | 4.8  |
| 27.5° | 3.9  | 4.5    | 4.8  |
| 30°   | 3.8  | 4.3    | 4.6  |
| 31°   | 3.8  | 4.3    | 4.5  |
| 32°   | 3.6  | 4.3    | 4.5  |
| 33°   | 3.6  | 4.3    | 4.5  |
| 34°   | 3.6  | 4.1    | 4.5  |
| 35°   | 3.4  | 4.1    | 4.3  |
| 36°   | 3.4  | 4.1    | 4.3  |
| 37°   | 3.4  | 4.1    | 4.5  |
| 38°   | 3.4  | 4.1    | 4.3  |
| 39°   | 3.2  | 4.1    | 4.3  |
| 40°   | 3.2  | 4.1    | 4.3  |
| 41°   | 3.2  | 4.1    | 4.3  |
| 42°   | 3.2  | 4.1    | 4.3  |
| 43°   | 3.2  | 4.1    | 4.3  |
| 44°   | 3.2  | 3.9    | 4.3  |
| 45°   | 3.2  | 3.9    | 4.3  |
| 46°   | 3.2  | 4.1    | 4.3  |
| 47°   | 3.2  | 4.1    | 4.5  |
| 48°   | 3.2  | 3.9    | 4.3  |
| 49°   | 3.0  | 3.9    | 4.3  |
| 50°   | 3.0  | 3.9    | 4.3  |
| 51°   | 3.0  | 4.1    | 4.5  |
| 52°   | 3.0  | 4.1    | 4.5  |
| 53°   | 3.0  | 4.1    | 4.5  |
| 54°   | 3.0  | 4.1    | 4.3  |
| 55°   | 3.0  | 4.1    | 4.5  |
| 56°   | 3.0  | 4.1    | 4.3  |
| 57°   | 3.0  | 4.1    | 4.3  |
| 58°   | 3.0  | 3.9    | 4.3  |
| 59°   | 3.0  | 3.9    | 4.3  |
| 60°   | 3.0  | 3.9    | 4.3  |
| 62.5° | 2.9  | 3.9    | 4.3  |
| 65°   | 2.9  | 3.8    | 4.1  |





TEST NUMBER: P1316696

CATALOG NUMBER: P3SQAS02R359830DE010 E3SQCA451MW

**CANDELA DISTRIBUTION (continued):**

|       | 135° | 157.5° | 180° |
|-------|------|--------|------|
| 67.5° | 2.7  | 3.8    | 3.9  |
| 70°   | 2.5  | 3.6    | 3.8  |
| 72.5° | 2.3  | 3.4    | 3.6  |
| 75°   | 2.1  | 3.0    | 3.2  |
| 77.5° | 1.8  | 2.7    | 3.0  |
| 80°   | 1.6  | 2.3    | 2.5  |
| 82.5° | 1.3  | 2.0    | 2.1  |
| 85°   | 0.9  | 1.4    | 1.4  |
| 87.5° | 0.4  | 0.7    | 0.7  |
| 90°   | 0.0  | 0.0    | 0.0  |

(END OF REPORT)