

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: P1314213

Luminaire Tested: P3SQAS09R309735DE010 E3SQCA451MMS

Issue Date: 1/29/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1314213  
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: P3SQAS09R309735DE010 E3SQCA451MMS  
Description: 3in Adjustable LED luminaire with, R30 optic, 3500K CCT AND, 97CRI , E3SQCA451MMS TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

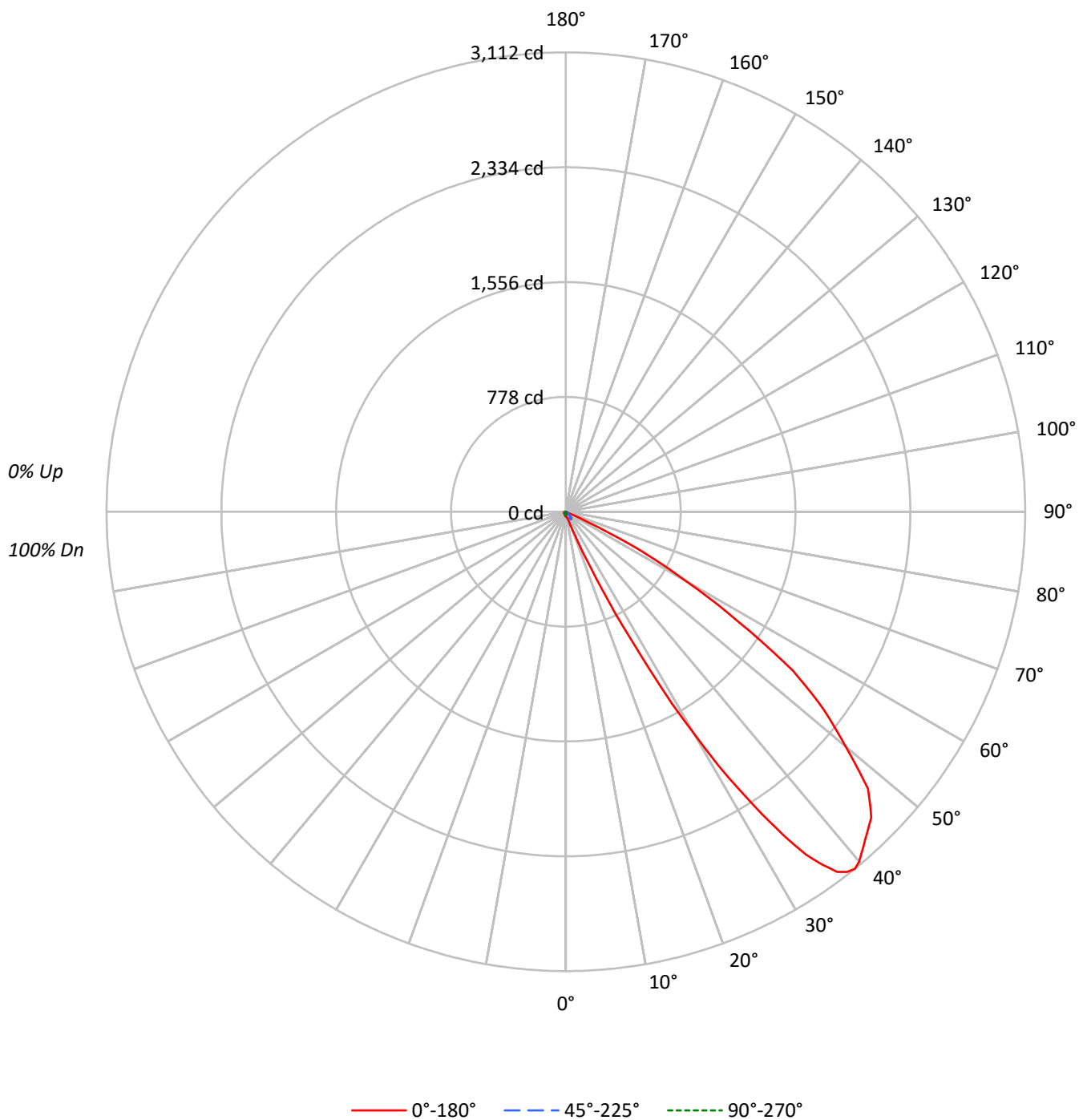
Lumens per Lamp: N/A  
Luminaire Lumens: 809.0 lumens  
Efficiency: N/A  
Efficacy: 72.9 lumens/watt  
Spacing Criteria (0/90/45): 4.07 / 0.66 / 1.44  
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')  
CIE Type: Direct

Input Watts (W): 11.1  
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: P1314213

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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  | 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°  | 5391   | 5391  | 5391 | 5391 | 5391  |
| 5°  | 5774   | 5653  | 5307 | 4823 | 4720  |
| 10° | 6313   | 5596  | 4652 | 4180 | 4057  |
| 15° | 9236   | 5581  | 3887 | 3530 | 3637  |
| 20° | 23239  | 6121  | 3006 | 3006 | 3372  |
| 25° | 107878 | 7639  | 2337 | 2717 | 3116  |
| 30° | 343401 | 10580 | 1770 | 2565 | 3122  |
| 35° | 595876 | 12888 | 1430 | 2439 | 3154  |
| 40° | 694943 | 12860 | 1079 | 2451 | 3215  |
| 45° | 712704 | 9133  | 1169 | 2655 | 3483  |
| 50° | 662781 | 5117  | 911  | 2733 | 4019  |
| 55° | 563320 | 2672  | 1021 | 3063 | 4504  |
| 60° | 325329 | 689   | 1171 | 3272 | 4926  |
| 65° | 66384  | 0     | 1386 | 3871 | 5542  |
| 70° | 1007   | 352   | 1712 | 4482 | 6496  |
| 75° | 932    | 466   | 1797 | 4525 | 7719  |
| 80° | 694    | 694   | 2678 | 5455 | 8827  |
| 85° | 0      | 1383  | 5335 | 5335 | 10868 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 712704 cd/sqm

TEST NUMBER: P1314213

CATALOG NUMBER: P3SQAS09R309735DE010 E3SQCA451MMS

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 2.8    | 0.4       |
| 10°-20°   | 8.2    | 1.0       |
| 20°-30°   | 46.7   | 5.8       |
| 30°-40°   | 217.9  | 26.9      |
| 40°-50°   | 308.1  | 38.1      |
| 50°-60°   | 189.6  | 23.4      |
| 60°-70°   | 28.9   | 3.6       |
| 70°-80°   | 4.6    | 0.6       |
| 80°-90°   | 2.3    | 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°    | 57.6   | 7.1       |
| 0°-40°    | 275.5  | 34.1      |
| 0°-60°    | 773.3  | 95.6      |
| 0°-90°    | 809.0  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 809.0  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 45° | 90° | 135° | 180° | Flux |
|-----|------|-----|-----|------|------|------|
| 0°  | 31   | 31  | 31  | 31   | 31   |      |
| 5°  | 33   | 33  | 31  | 28   | 27   | 3    |
| 15° | 52   | 31  | 22  | 20   | 20   | 18   |
| 25° | 568  | 40  | 12  | 14   | 16   | 349  |
| 35° | 2834 | 61  | 7   | 12   | 15   | 1701 |
| 45° | 2926 | 38  | 5   | 11   | 14   | 2218 |
| 55° | 1876 | 9   | 3   | 10   | 15   | 1596 |
| 65° | 163  | 0   | 3   | 10   | 14   | 295  |
| 75° | 1    | 1   | 3   | 7    | 12   | 1    |
| 85° | 0    | 1   | 3   | 3    | 6    | 0    |
| 90° | 0    | 0   | 0   | 0    | 0    |      |

TEST NUMBER: P1314213

CATALOG NUMBER: P3SQAS09R309735DE010 E3SQCA451MMS

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 10°    | 15°    | 20°    | 22.5°  | 45°  | 67.5° | 90°  | 112.5° | 135° |
|-------|--------|--------|--------|--------|--------|--------|------|-------|------|--------|------|
| 0°    | 31.3   | 31.3   | 31.3   | 31.3   | 31.3   | 31.3   | 31.3 | 31.3  | 31.3 | 31.3   | 31.3 |
| 2.5°  | 32.0   | 32.0   | 32.7   | 32.7   | 32.0   | 32.7   | 32.7 | 32.7  | 31.3 | 30.7   | 29.3 |
| 5°    | 33.4   | 33.4   | 33.4   | 34.1   | 33.4   | 33.4   | 32.7 | 32.0  | 30.7 | 28.6   | 27.9 |
| 7.5°  | 34.8   | 34.8   | 34.1   | 34.8   | 34.1   | 34.1   | 32.7 | 31.3  | 29.3 | 27.3   | 25.9 |
| 10°   | 36.1   | 36.1   | 35.4   | 35.4   | 34.8   | 34.8   | 32.0 | 30.0  | 26.6 | 24.5   | 23.9 |
| 12.5° | 40.2   | 40.2   | 39.5   | 38.8   | 37.5   | 36.8   | 31.3 | 27.9  | 23.9 | 21.8   | 21.1 |
| 15°   | 51.8   | 51.1   | 49.7   | 47.7   | 44.3   | 43.6   | 31.3 | 25.9  | 21.8 | 19.8   | 19.8 |
| 17.5° | 70.9   | 70.2   | 68.1   | 62.7   | 56.6   | 54.5   | 31.3 | 23.2  | 19.1 | 17.7   | 17.7 |
| 20°   | 126.8  | 121.3  | 111.1  | 97.4   | 83.1   | 75.6   | 33.4 | 20.4  | 16.4 | 15.7   | 16.4 |
| 21°   | 165.6  | 160.1  | 147.2  | 124.7  | 99.5   | 91.3   | 34.8 | 19.8  | 15.7 | 15.0   | 16.4 |
| 22°   | 225.6  | 219.4  | 192.9  | 162.2  | 126.1  | 111.8  | 35.4 | 18.4  | 14.3 | 14.3   | 15.7 |
| 23°   | 314.8  | 304.6  | 259.6  | 210.6  | 157.4  | 137.0  | 36.8 | 17.7  | 13.6 | 14.3   | 15.0 |
| 24°   | 412.3  | 403.4  | 352.3  | 278.7  | 201.0  | 171.7  | 38.2 | 17.0  | 12.9 | 12.9   | 14.3 |
| 25°   | 567.7  | 557.4  | 466.8  | 351.6  | 254.9  | 206.5  | 40.2 | 15.7  | 12.3 | 12.3   | 14.3 |
| 26°   | 768.7  | 721.7  | 601.1  | 453.2  | 314.2  | 259.0  | 42.3 | 15.0  | 11.6 | 12.3   | 13.6 |
| 27°   | 959.5  | 920.7  | 785.1  | 581.3  | 388.4  | 318.2  | 45.0 | 14.3  | 10.9 | 11.6   | 13.6 |
| 28°   | 1210.3 | 1155.8 | 984.7  | 735.3  | 489.3  | 385.0  | 47.7 | 13.6  | 10.2 | 11.6   | 12.9 |
| 29°   | 1491.1 | 1414.7 | 1208.2 | 908.4  | 603.1  | 460.0  | 50.4 | 12.9  | 9.5  | 10.9   | 12.9 |
| 30°   | 1726.8 | 1655.3 | 1448.8 | 1113.5 | 733.9  | 558.8  | 53.2 | 12.3  | 8.9  | 10.9   | 12.9 |
| 31°   | 2003.5 | 1895.2 | 1645.1 | 1287.3 | 846.4  | 657.6  | 55.9 | 10.9  | 8.2  | 10.2   | 12.3 |
| 32°   | 2227.7 | 2152.1 | 1886.3 | 1483.6 | 994.3  | 766.7  | 57.9 | 10.2  | 8.2  | 10.2   | 12.3 |
| 33°   | 2444.4 | 2342.9 | 2086.0 | 1671.6 | 1127.8 | 878.4  | 60.0 | 9.5   | 7.5  | 9.5    | 12.3 |
| 34°   | 2651.6 | 2558.2 | 2274.7 | 1823.6 | 1253.9 | 984.7  | 61.3 | 8.2   | 7.5  | 9.5    | 11.6 |
| 35°   | 2834.2 | 2725.9 | 2441.0 | 1972.2 | 1383.4 | 1081.5 | 61.3 | 7.5   | 6.8  | 8.9    | 11.6 |
| 36°   | 2952.8 | 2875.1 | 2585.5 | 2118.7 | 1500.6 | 1173.5 | 61.3 | 6.8   | 6.1  | 8.9    | 10.9 |
| 37°   | 3054.3 | 2963.7 | 2701.3 | 2231.1 | 1587.1 | 1247.1 | 61.3 | 6.1   | 6.1  | 8.9    | 10.9 |
| 38°   | 3095.9 | 3018.2 | 2781.1 | 2330.6 | 1668.2 | 1322.0 | 60.7 | 5.5   | 5.5  | 8.2    | 10.9 |
| 39°   | 3112.3 | 3042.8 | 2841.0 | 2402.2 | 1728.2 | 1372.5 | 59.3 | 4.8   | 5.5  | 8.2    | 10.9 |
| 40°   | 3091.1 | 3038.7 | 2871.7 | 2448.5 | 1775.9 | 1409.3 | 57.2 | 4.1   | 4.8  | 8.2    | 10.9 |
| 42.5° | 3003.9 | 2969.2 | 2864.9 | 2494.9 | 1816.8 | 1436.5 | 49.7 | 2.7   | 4.8  | 7.5    | 10.9 |
| 45°   | 2926.2 | 2888.1 | 2796.1 | 2446.5 | 1763.6 | 1382.7 | 37.5 | 1.4   | 4.8  | 7.5    | 10.9 |
| 47.5° | 2775.6 | 2751.8 | 2679.5 | 2323.1 | 1647.1 | 1261.4 | 26.6 | 0.7   | 4.1  | 6.8    | 10.2 |
| 50°   | 2473.7 | 2451.2 | 2355.8 | 2017.1 | 1416.8 | 1066.5 | 19.1 | 0.7   | 3.4  | 6.8    | 10.2 |
| 52.5° | 2203.2 | 2179.3 | 2042.4 | 1677.1 | 1088.3 | 781.6  | 12.3 | 0.7   | 3.4  | 6.8    | 10.2 |
| 55°   | 1876.1 | 1834.5 | 1654.6 | 1273.0 | 771.4  | 524.0  | 8.9  | 0.7   | 3.4  | 6.1    | 10.2 |
| 57.5° | 1388.8 | 1328.2 | 1167.4 | 868.2  | 444.3  | 284.2  | 4.8  | 0.7   | 3.4  | 6.1    | 10.2 |
| 60°   | 944.5  | 908.4  | 730.5  | 457.9  | 189.4  | 119.9  | 2.0  | 0.7   | 3.4  | 6.1    | 9.5  |
| 62.5° | 572.4  | 526.8  | 367.3  | 194.9  | 81.8   | 54.5   | 0.0  | 1.4   | 3.4  | 6.1    | 9.5  |
| 65°   | 162.9  | 144.5  | 96.1   | 44.3   | 23.2   | 17.7   | 0.0  | 1.4   | 3.4  | 6.1    | 9.5  |
| 67.5° | 5.5    | 5.5    | 5.5    | 4.8    | 3.4    | 3.4    | 0.7  | 1.4   | 3.4  | 6.1    | 8.9  |
| 70°   | 2.0    | 2.0    | 2.0    | 1.4    | 1.4    | 0.7    | 0.7  | 1.4   | 3.4  | 5.5    | 8.9  |
| 72.5° | 1.4    | 1.4    | 1.4    | 1.4    | 0.7    | 0.7    | 0.7  | 1.4   | 2.7  | 4.8    | 8.2  |
| 75°   | 1.4    | 1.4    | 1.4    | 0.7    | 0.7    | 0.7    | 0.7  | 2.0   | 2.7  | 4.8    | 6.8  |
| 77.5° | 1.4    | 1.4    | 1.4    | 0.7    | 0.7    | 0.7    | 0.7  | 2.0   | 2.7  | 4.1    | 6.8  |
| 80°   | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7    | 0.7  | 2.0   | 2.7  | 4.1    | 5.5  |



TEST NUMBER: P1314213

CATALOG NUMBER: P3SQAS09R309735DE010 E3SQCA451MMS

**CANDELA DISTRIBUTION (continued):**

|       | 0°  | 5°  | 10° | 15° | 20° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° |
|-------|-----|-----|-----|-----|-----|-------|-----|-------|-----|--------|------|
| 82.5° | 0.7 | 0.7 | 0.7 | 0.0 | 0.0 | 0.0   | 0.7 | 2.0   | 2.7 | 2.7    | 4.1  |
| 85°   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0   | 0.7 | 2.0   | 2.7 | 2.0    | 2.7  |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0   | 0.7 | 2.0   | 2.0 | 2.0    | 1.4  |
| 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: P1314213

CATALOG NUMBER: P3SQAS09R309735DE010 E3SQCA451MMS

**CANDELA DISTRIBUTION (continued):**

|       | 157.5° | 180° |
|-------|--------|------|
| 0°    | 31.3   | 31.3 |
| 2.5°  | 29.3   | 29.3 |
| 5°    | 27.3   | 27.3 |
| 7.5°  | 25.2   | 25.2 |
| 10°   | 23.2   | 23.2 |
| 12.5° | 21.8   | 21.8 |
| 15°   | 19.8   | 20.4 |
| 17.5° | 18.4   | 19.1 |
| 20°   | 17.7   | 18.4 |
| 21°   | 17.7   | 18.4 |
| 22°   | 17.0   | 17.7 |
| 23°   | 17.0   | 17.7 |
| 24°   | 16.4   | 17.0 |
| 25°   | 15.7   | 16.4 |
| 26°   | 15.7   | 16.4 |
| 27°   | 15.7   | 16.4 |
| 28°   | 15.0   | 16.4 |
| 29°   | 15.0   | 15.7 |
| 30°   | 15.0   | 15.7 |
| 31°   | 14.3   | 15.7 |
| 32°   | 14.3   | 15.7 |
| 33°   | 14.3   | 15.0 |
| 34°   | 13.6   | 15.0 |
| 35°   | 13.6   | 15.0 |
| 36°   | 13.6   | 15.0 |
| 37°   | 13.6   | 14.3 |
| 38°   | 13.6   | 15.0 |
| 39°   | 13.6   | 14.3 |
| 40°   | 13.6   | 14.3 |
| 42.5° | 13.6   | 14.3 |
| 45°   | 13.6   | 14.3 |
| 47.5° | 13.6   | 15.0 |
| 50°   | 13.6   | 15.0 |
| 52.5° | 13.6   | 15.0 |
| 55°   | 13.6   | 15.0 |
| 57.5° | 13.6   | 14.3 |
| 60°   | 13.6   | 14.3 |
| 62.5° | 12.9   | 14.3 |
| 65°   | 12.9   | 13.6 |
| 67.5° | 12.9   | 13.6 |
| 70°   | 12.3   | 12.9 |
| 72.5° | 11.6   | 12.3 |
| 75°   | 10.2   | 11.6 |
| 77.5° | 9.5    | 10.2 |
| 80°   | 8.2    | 8.9  |

TEST NUMBER: P1314213

CATALOG NUMBER: P3SQAS09R309735DE010 E3SQCA451MMS

**CANDELA DISTRIBUTION (continued):**

|       | 157.5° | 180° |
|-------|--------|------|
| 82.5° | 6.8    | 6.8  |
| 85°   | 4.8    | 5.5  |
| 87.5° | 2.7    | 2.7  |
| 90°   | 0.0    | 0.0  |

(END OF REPORT)