

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: P1306073

Luminaire Tested: P3SQASS17R309024DE010 E3SQCA451MMS

Issue Date: 1/29/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1306073  
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: P3SQASS17R309024DE010 E3SQCA451MMS  
Description: 3in Adjustable LED luminaire with, R30 optic, 2400K CCT AND, 90CRI , E3SQCA451MMS TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

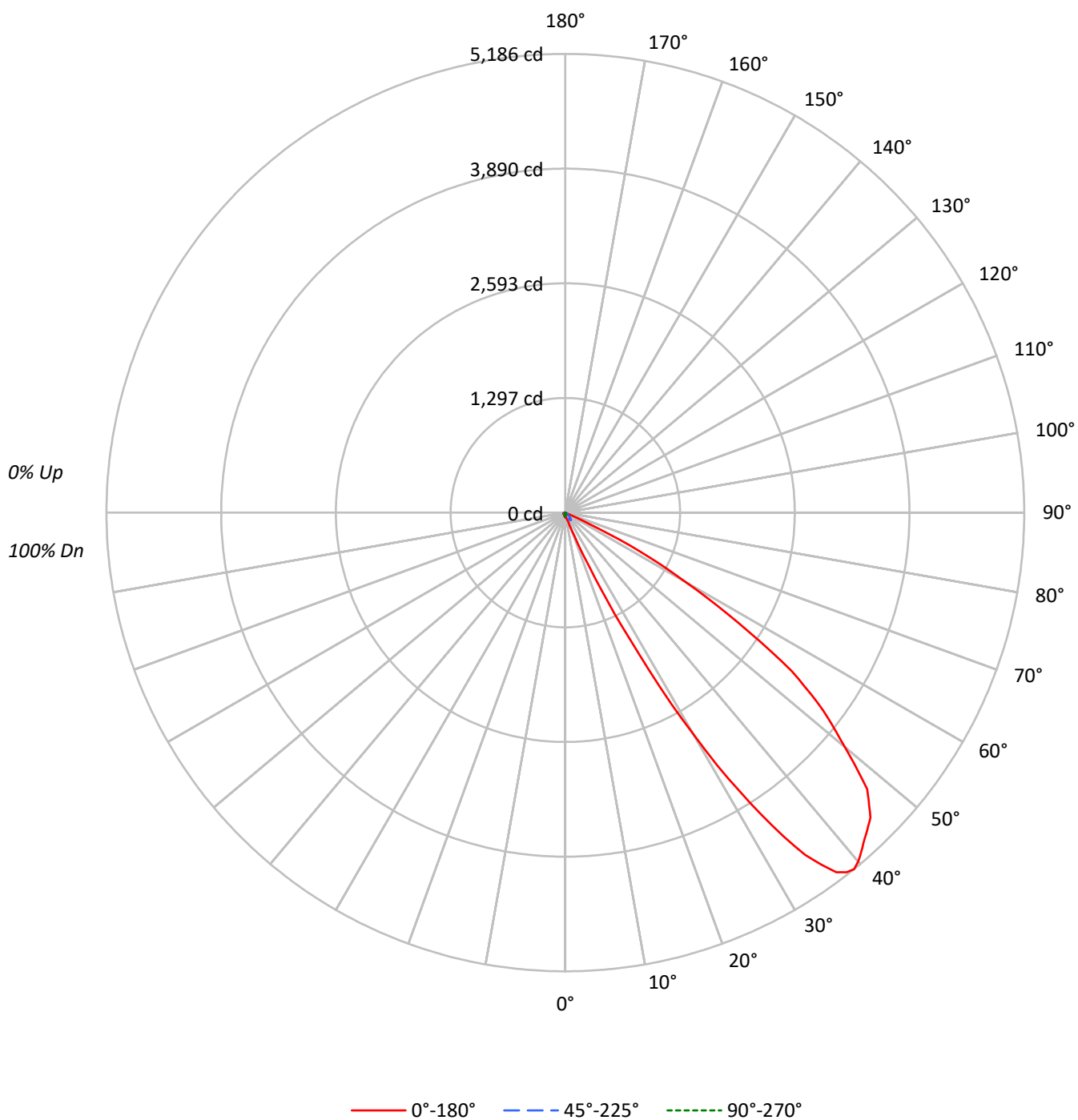
Lumens per Lamp: N/A  
Luminaire Lumens: 1348.0 lumens  
Efficiency: N/A  
Efficacy: 63.6 lumens/watt  
Spacing Criteria (0/90/45): 4.07 / 0.66 / 1.44  
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')  
CIE Type: Direct

Input Watts (W): 21.2  
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: P1306073

CATALOG NUMBER: P3SQASS17R309024DE010 E3SQCA451MMS

### Luminous Intensity Polar Plot



TEST NUMBER: P1306073

CATALOG NUMBER: P3SQASS17R309024DE010 E3SQCA451MMS

**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°  | 8990    | 8990  | 8990 | 8990 | 8990  |
| 5°  | 9612    | 9422  | 8834 | 8056 | 7849  |
| 10° | 10528   | 9339  | 7747 | 6943 | 6750  |
| 15° | 15387   | 9307  | 6472 | 5866 | 6080  |
| 20° | 38708   | 10190 | 5003 | 5003 | 5627  |
| 25° | 179746  | 12732 | 3877 | 4523 | 5188  |
| 30° | 572216  | 17619 | 2943 | 4295 | 5190  |
| 35° | 992882  | 21487 | 2397 | 4058 | 5256  |
| 40° | 1157961 | 21448 | 1776 | 4092 | 5351  |
| 45° | 1187548 | 15222 | 1924 | 4433 | 5797  |
| 50° | 1104384 | 8520  | 1527 | 4555 | 6698  |
| 55° | 938616  | 4444  | 1711 | 5104 | 7507  |
| 60° | 542088  | 1171  | 1963 | 5477 | 8198  |
| 65° | 110599  | 0     | 2323 | 6479 | 9251  |
| 70° | 1712    | 554   | 2870 | 7452 | 10877 |
| 75° | 1530    | 732   | 2994 | 7586 | 12843 |
| 80° | 1091    | 1091  | 4463 | 9025 | 14679 |
| 85° | 0       | 2174  | 8892 | 8892 | 17982 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1187548 cd/sqm

TEST NUMBER: P1306073

CATALOG NUMBER: P3SQASS17R309024DE010 E3SQCA451MMS

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 4.7    | 0.4       |
| 10°-20°   | 13.6   | 1.0       |
| 20°-30°   | 77.7   | 5.8       |
| 30°-40°   | 363.1  | 26.9      |
| 40°-50°   | 513.4  | 38.1      |
| 50°-60°   | 315.9  | 23.4      |
| 60°-70°   | 48.1   | 3.6       |
| 70°-80°   | 7.6    | 0.6       |
| 80°-90°   | 3.8    | 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°    | 96.0   | 7.1       |
| 0°-40°    | 459.1  | 34.1      |
| 0°-60°    | 1288.5 | 95.6      |
| 0°-90°    | 1348.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1348.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 45° | 90° | 135° | 180° | Flux |
|-----|------|-----|-----|------|------|------|
| 0°  | 52   | 52  | 52  | 52   | 52   |      |
| 5°  | 56   | 54  | 51  | 47   | 45   | 5    |
| 15° | 86   | 52  | 36  | 33   | 34   | 31   |
| 25° | 946  | 67  | 20  | 24   | 27   | 582  |
| 35° | 4722 | 102 | 11  | 19   | 25   | 2834 |
| 45° | 4876 | 62  | 8   | 18   | 24   | 3696 |
| 55° | 3126 | 15  | 6   | 17   | 25   | 2660 |
| 65° | 271  | 0   | 6   | 16   | 23   | 491  |
| 75° | 2    | 1   | 4   | 11   | 19   | 2    |
| 85° | 0    | 1   | 4   | 4    | 9    | 0    |
| 90° | 0    | 0   | 0   | 0    | 0    |      |

TEST NUMBER: P1306073

CATALOG NUMBER: P3SQASS17R309024DE010 E3SQCA451MMS

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 10°    | 15°    | 20°    | 22.5°  | 45°   | 67.5° | 90°  | 112.5° | 135° |
|-------|--------|--------|--------|--------|--------|--------|-------|-------|------|--------|------|
| 0°    | 52.2   | 52.2   | 52.2   | 52.2   | 52.2   | 52.2   | 52.2  | 52.2  | 52.2 | 52.2   | 52.2 |
| 2.5°  | 53.4   | 53.4   | 54.5   | 54.5   | 53.4   | 54.5   | 54.5  | 54.5  | 52.2 | 51.1   | 48.8 |
| 5°    | 55.6   | 55.6   | 55.6   | 56.8   | 55.6   | 55.6   | 54.5  | 53.4  | 51.1 | 47.7   | 46.6 |
| 7.5°  | 57.9   | 57.9   | 56.8   | 57.9   | 56.8   | 56.8   | 54.5  | 52.2  | 48.8 | 45.4   | 43.1 |
| 10°   | 60.2   | 60.2   | 59.0   | 59.0   | 57.9   | 57.9   | 53.4  | 50.0  | 44.3 | 40.9   | 39.7 |
| 12.5° | 67.0   | 67.0   | 65.9   | 64.7   | 62.5   | 61.3   | 52.2  | 46.6  | 39.7 | 36.3   | 35.2 |
| 15°   | 86.3   | 85.2   | 82.9   | 79.5   | 73.8   | 72.7   | 52.2  | 43.1  | 36.3 | 32.9   | 32.9 |
| 17.5° | 118.1  | 117.0  | 113.5  | 104.5  | 94.2   | 90.8   | 52.2  | 38.6  | 31.8 | 29.5   | 29.5 |
| 20°   | 211.2  | 202.1  | 185.1  | 162.4  | 138.5  | 126.0  | 55.6  | 34.1  | 27.3 | 26.1   | 27.3 |
| 21°   | 275.9  | 266.8  | 245.3  | 207.8  | 165.8  | 152.2  | 57.9  | 32.9  | 26.1 | 25.0   | 27.3 |
| 22°   | 375.8  | 365.6  | 321.3  | 270.2  | 210.1  | 186.2  | 59.0  | 30.7  | 23.8 | 23.8   | 26.1 |
| 23°   | 524.6  | 507.6  | 432.6  | 350.9  | 262.3  | 228.2  | 61.3  | 29.5  | 22.7 | 23.8   | 25.0 |
| 24°   | 687.0  | 672.2  | 587.1  | 464.4  | 335.0  | 286.1  | 63.6  | 28.4  | 21.6 | 21.6   | 23.8 |
| 25°   | 945.9  | 928.8  | 777.8  | 585.9  | 424.7  | 344.1  | 67.0  | 26.1  | 20.4 | 20.4   | 23.8 |
| 26°   | 1280.8 | 1202.5 | 1001.5 | 755.1  | 523.5  | 431.5  | 70.4  | 25.0  | 19.3 | 20.4   | 22.7 |
| 27°   | 1598.8 | 1534.1 | 1308.1 | 968.6  | 647.2  | 530.3  | 74.9  | 23.8  | 18.2 | 19.3   | 22.7 |
| 28°   | 2016.6 | 1925.8 | 1640.8 | 1225.2 | 815.3  | 641.6  | 79.5  | 22.7  | 17.0 | 19.3   | 21.6 |
| 29°   | 2484.5 | 2357.3 | 2013.2 | 1513.6 | 1004.9 | 766.5  | 84.0  | 21.6  | 15.9 | 18.2   | 21.6 |
| 30°   | 2877.4 | 2758.1 | 2414.1 | 1855.4 | 1222.9 | 931.1  | 88.6  | 20.4  | 14.8 | 18.2   | 21.6 |
| 31°   | 3338.4 | 3157.8 | 2741.1 | 2145.0 | 1410.3 | 1095.8 | 93.1  | 18.2  | 13.6 | 17.0   | 20.4 |
| 32°   | 3711.9 | 3585.9 | 3143.1 | 2472.0 | 1656.7 | 1277.4 | 96.5  | 17.0  | 13.6 | 17.0   | 20.4 |
| 33°   | 4073.0 | 3903.8 | 3475.8 | 2785.4 | 1879.2 | 1463.7 | 99.9  | 15.9  | 12.5 | 15.9   | 20.4 |
| 34°   | 4418.2 | 4262.7 | 3790.3 | 3038.6 | 2089.3 | 1640.8 | 102.2 | 13.6  | 12.5 | 15.9   | 19.3 |
| 35°   | 4722.5 | 4542.0 | 4067.4 | 3286.1 | 2305.1 | 1802.0 | 102.2 | 12.5  | 11.4 | 14.8   | 19.3 |
| 36°   | 4920.1 | 4790.7 | 4308.1 | 3530.3 | 2500.4 | 1955.3 | 102.2 | 11.4  | 10.2 | 14.8   | 18.2 |
| 37°   | 5089.3 | 4938.3 | 4501.1 | 3717.6 | 2644.6 | 2078.0 | 102.2 | 10.2  | 10.2 | 14.8   | 18.2 |
| 38°   | 5158.6 | 5029.1 | 4634.0 | 3883.4 | 2779.7 | 2202.9 | 101.1 | 9.1   | 9.1  | 13.6   | 18.2 |
| 39°   | 5185.8 | 5070.0 | 4733.9 | 4002.6 | 2879.6 | 2286.9 | 98.8  | 7.9   | 9.1  | 13.6   | 18.2 |
| 40°   | 5150.6 | 5063.2 | 4785.0 | 4079.8 | 2959.1 | 2348.2 | 95.4  | 6.8   | 7.9  | 13.6   | 18.2 |
| 42.5° | 5005.3 | 4947.4 | 4773.6 | 4157.1 | 3027.2 | 2393.6 | 82.9  | 4.5   | 7.9  | 12.5   | 18.2 |
| 45°   | 4875.8 | 4812.2 | 4658.9 | 4076.4 | 2938.7 | 2303.9 | 62.5  | 2.3   | 7.9  | 12.5   | 18.2 |
| 47.5° | 4624.9 | 4585.1 | 4464.8 | 3870.9 | 2744.5 | 2101.8 | 44.3  | 1.1   | 6.8  | 11.4   | 17.0 |
| 50°   | 4121.9 | 4084.4 | 3925.4 | 3361.1 | 2360.7 | 1777.1 | 31.8  | 1.1   | 5.7  | 11.4   | 17.0 |
| 52.5° | 3671.1 | 3631.3 | 3403.1 | 2794.5 | 1813.4 | 1302.4 | 20.4  | 1.1   | 5.7  | 11.4   | 17.0 |
| 55°   | 3126.0 | 3056.8 | 2757.0 | 2121.1 | 1285.4 | 873.2  | 14.8  | 1.1   | 5.7  | 10.2   | 17.0 |
| 57.5° | 2314.1 | 2213.1 | 1945.1 | 1446.6 | 740.3  | 473.5  | 7.9   | 1.1   | 5.7  | 10.2   | 17.0 |
| 60°   | 1573.8 | 1513.6 | 1217.3 | 763.1  | 315.7  | 199.8  | 3.4   | 1.1   | 5.7  | 10.2   | 15.9 |
| 62.5° | 953.8  | 877.7  | 612.0  | 324.8  | 136.3  | 90.8   | 0.0   | 2.3   | 5.7  | 10.2   | 15.9 |
| 65°   | 271.4  | 240.7  | 160.1  | 73.8   | 38.6   | 29.5   | 0.0   | 2.3   | 5.7  | 10.2   | 15.9 |
| 67.5° | 9.1    | 9.1    | 9.1    | 7.9    | 5.7    | 5.7    | 1.1   | 2.3   | 5.7  | 10.2   | 14.8 |
| 70°   | 3.4    | 3.4    | 3.4    | 2.3    | 2.3    | 1.1    | 1.1   | 2.3   | 5.7  | 9.1    | 14.8 |
| 72.5° | 2.3    | 2.3    | 2.3    | 2.3    | 1.1    | 1.1    | 1.1   | 2.3   | 4.5  | 7.9    | 13.6 |
| 75°   | 2.3    | 2.3    | 2.3    | 1.1    | 1.1    | 1.1    | 1.1   | 3.4   | 4.5  | 7.9    | 11.4 |
| 77.5° | 2.3    | 2.3    | 2.3    | 1.1    | 1.1    | 1.1    | 1.1   | 3.4   | 4.5  | 6.8    | 11.4 |
| 80°   | 1.1    | 1.1    | 1.1    | 1.1    | 1.1    | 1.1    | 1.1   | 3.4   | 4.5  | 6.8    | 9.1  |



TEST NUMBER: P1306073

CATALOG NUMBER: P3SQASS17R309024DE010 E3SQCA451MMS

**CANDELA DISTRIBUTION (continued):**

|       | 0°  | 5°  | 10° | 15° | 20° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° |
|-------|-----|-----|-----|-----|-----|-------|-----|-------|-----|--------|------|
| 82.5° | 1.1 | 1.1 | 1.1 | 0.0 | 0.0 | 0.0   | 1.1 | 3.4   | 4.5 | 4.5    | 6.8  |
| 85°   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0   | 1.1 | 3.4   | 4.5 | 3.4    | 4.5  |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0   | 1.1 | 3.4   | 3.4 | 3.4    | 2.3  |
| 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: P1306073

CATALOG NUMBER: P3SQASS17R309024DE010 E3SQCA451MMS

**CANDELA DISTRIBUTION (continued):**

|       | 157.5° | 180° |
|-------|--------|------|
| 0°    | 52.2   | 52.2 |
| 2.5°  | 48.8   | 48.8 |
| 5°    | 45.4   | 45.4 |
| 7.5°  | 42.0   | 42.0 |
| 10°   | 38.6   | 38.6 |
| 12.5° | 36.3   | 36.3 |
| 15°   | 32.9   | 34.1 |
| 17.5° | 30.7   | 31.8 |
| 20°   | 29.5   | 30.7 |
| 21°   | 29.5   | 30.7 |
| 22°   | 28.4   | 29.5 |
| 23°   | 28.4   | 29.5 |
| 24°   | 27.3   | 28.4 |
| 25°   | 26.1   | 27.3 |
| 26°   | 26.1   | 27.3 |
| 27°   | 26.1   | 27.3 |
| 28°   | 25.0   | 27.3 |
| 29°   | 25.0   | 26.1 |
| 30°   | 25.0   | 26.1 |
| 31°   | 23.8   | 26.1 |
| 32°   | 23.8   | 26.1 |
| 33°   | 23.8   | 25.0 |
| 34°   | 22.7   | 25.0 |
| 35°   | 22.7   | 25.0 |
| 36°   | 22.7   | 25.0 |
| 37°   | 22.7   | 23.8 |
| 38°   | 22.7   | 25.0 |
| 39°   | 22.7   | 23.8 |
| 40°   | 22.7   | 23.8 |
| 42.5° | 22.7   | 23.8 |
| 45°   | 22.7   | 23.8 |
| 47.5° | 22.7   | 25.0 |
| 50°   | 22.7   | 25.0 |
| 52.5° | 22.7   | 25.0 |
| 55°   | 22.7   | 25.0 |
| 57.5° | 22.7   | 23.8 |
| 60°   | 22.7   | 23.8 |
| 62.5° | 21.6   | 23.8 |
| 65°   | 21.6   | 22.7 |
| 67.5° | 21.6   | 22.7 |
| 70°   | 20.4   | 21.6 |
| 72.5° | 19.3   | 20.4 |
| 75°   | 17.0   | 19.3 |
| 77.5° | 15.9   | 17.0 |
| 80°   | 13.6   | 14.8 |



TEST NUMBER: P1306073

CATALOG NUMBER: P3SQASS17R309024DE010 E3SQCA451MMS

**CANDELA DISTRIBUTION (continued):**

|       | 157.5° | 180° |
|-------|--------|------|
| 82.5° | 11.4   | 11.4 |
| 85°   | 7.9    | 9.1  |
| 87.5° | 4.5    | 4.5  |
| 90°   | 0.0    | 0.0  |

(END OF REPORT)