

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: P1315981

Luminaire Tested: P3SQAS05R409827DE010 E3SQCA451MB

Issue Date: 1/29/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1315981  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-78)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/29/2026  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: IRiS  
Catalog Number: P3SQAS05R409827DE010 E3SQCA451MB  
Description: 3in Adjustable LED luminaire with, R40 optic, 2700K CCT AND, 98CRI , E3SQCA451MB TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

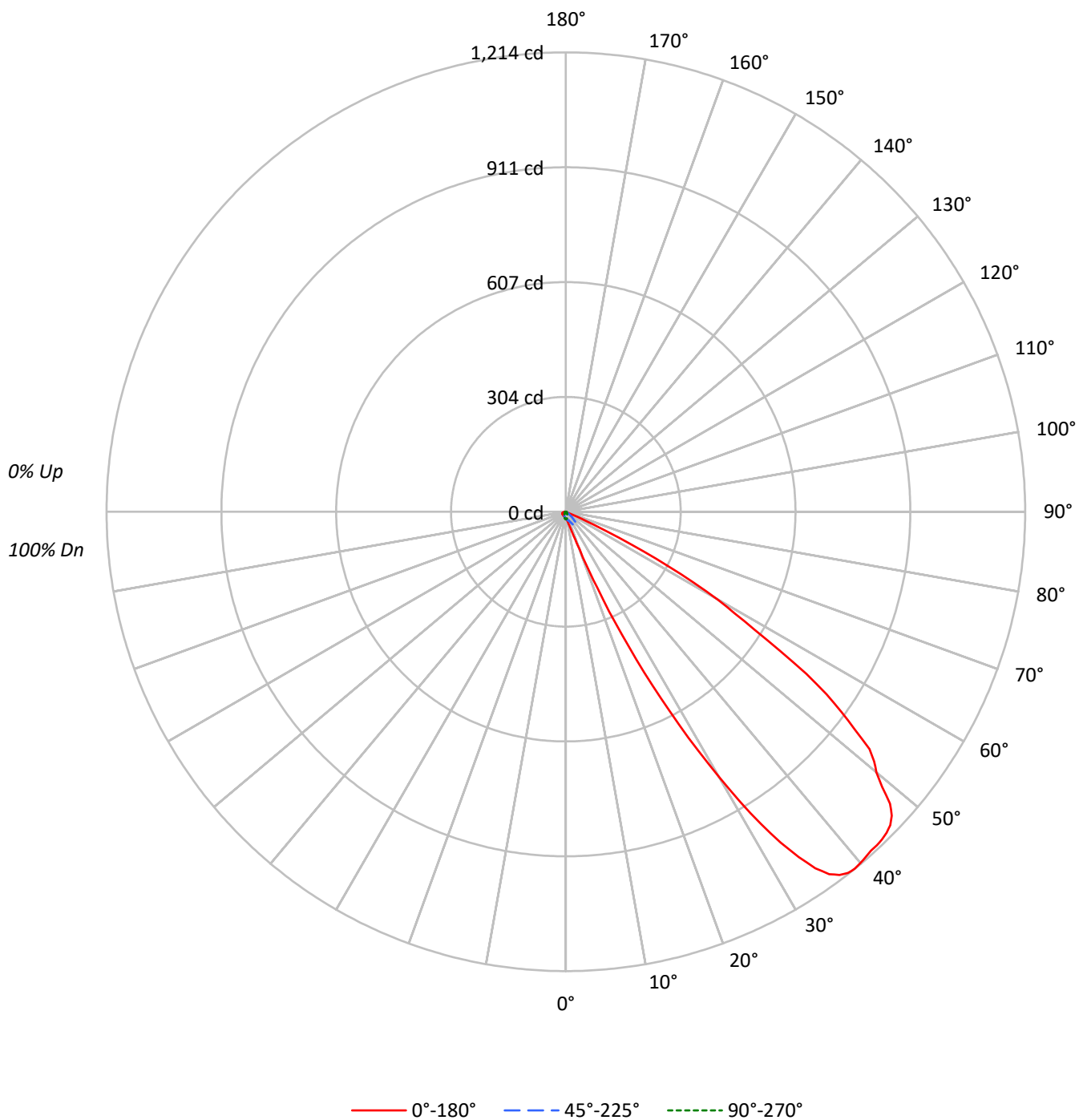
Lumens per Lamp: N/A  
Luminaire Lumens: 375.0 lumens  
Efficiency: N/A  
Efficacy: 52.1 lumens/watt  
Spacing Criteria (0/90/45): 3.99 / 0.73 / 1.54  
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')  
CIE Type: Direct

Input Watts (W): 7.2  
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: P1315981

CATALOG NUMBER: P3SQAS05R409827DE010 E3SQCA451MB

### Luminous Intensity Polar Plot



TEST NUMBER: P1315981

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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  |
| RCR |     |     |     |     |  |     |     |     |     |  |     |     |     |  |     |     |     |  |     |     |     |
| 0   | 119 | 119 | 119 | 119 |  | 116 | 116 | 116 | 116 |  | 111 | 111 | 111 |  | 106 | 106 | 106 |  | 102 | 102 | 102 |
| 1   | 110 | 106 | 102 | 99  |  | 107 | 104 | 100 | 97  |  | 99  | 97  | 94  |  | 96  | 93  | 91  |  | 92  | 90  | 88  |
| 2   | 100 | 93  | 86  | 81  |  | 98  | 91  | 85  | 80  |  | 87  | 82  | 78  |  | 84  | 80  | 76  |  | 81  | 78  | 75  |
| 3   | 91  | 81  | 73  | 66  |  | 89  | 79  | 72  | 66  |  | 76  | 70  | 65  |  | 73  | 68  | 64  |  | 71  | 66  | 62  |
| 4   | 82  | 70  | 62  | 55  |  | 80  | 69  | 61  | 54  |  | 67  | 59  | 54  |  | 64  | 58  | 53  |  | 62  | 57  | 52  |
| 5   | 75  | 62  | 52  | 46  |  | 73  | 60  | 52  | 45  |  | 58  | 51  | 45  |  | 56  | 50  | 44  |  | 54  | 49  | 44  |
| 6   | 68  | 54  | 45  | 38  |  | 66  | 53  | 44  | 38  |  | 51  | 43  | 38  |  | 50  | 43  | 37  |  | 48  | 42  | 37  |
| 7   | 62  | 48  | 39  | 32  |  | 60  | 47  | 38  | 32  |  | 45  | 37  | 32  |  | 44  | 37  | 31  |  | 42  | 36  | 31  |
| 8   | 57  | 42  | 33  | 27  |  | 55  | 42  | 33  | 27  |  | 40  | 32  | 27  |  | 39  | 32  | 27  |  | 38  | 31  | 26  |
| 9   | 52  | 38  | 29  | 23  |  | 51  | 37  | 29  | 23  |  | 36  | 28  | 23  |  | 35  | 28  | 23  |  | 34  | 27  | 23  |
| 10  | 48  | 34  | 25  | 20  |  | 47  | 33  | 25  | 20  |  | 32  | 25  | 20  |  | 31  | 24  | 20  |  | 30  | 24  | 19  |

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

|     | 0°     | 45°  | 90°  | 135° | 180° |
|-----|--------|------|------|------|------|
| 0°  | 3324   | 3324 | 3324 | 3324 | 3324 |
| 5°  | 3700   | 3579 | 3267 | 2974 | 2922 |
| 10° | 4459   | 3795 | 3008 | 2711 | 2658 |
| 15° | 7310   | 4119 | 2585 | 2389 | 2461 |
| 20° | 19317  | 4857 | 2144 | 2144 | 2328 |
| 25° | 74471  | 6024 | 1710 | 1957 | 2299 |
| 30° | 160663 | 8014 | 1372 | 1909 | 2267 |
| 35° | 241824 | 9482 | 1156 | 1892 | 2313 |
| 40° | 272460 | 9532 | 1012 | 1933 | 2473 |
| 45° | 292150 | 7380 | 926  | 2022 | 2679 |
| 50° | 287142 | 4608 | 831  | 2117 | 2947 |
| 55° | 252610 | 2282 | 841  | 2372 | 3303 |
| 60° | 159891 | 482  | 964  | 2618 | 3686 |
| 65° | 32683  | 122  | 978  | 2812 | 4075 |
| 70° | 705    | 151  | 1057 | 3122 | 4683 |
| 75° | 665    | 466  | 1131 | 3460 | 5257 |
| 80° | 694    | 298  | 1389 | 3769 | 6149 |
| 85° | 593    | 593  | 2766 | 4150 | 6719 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 47°

Luminance: 297426 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 1.8    | 0.5       |
| 10°-20°   | 5.9    | 1.6       |
| 20°-30°   | 29.1   | 7.8       |
| 30°-40°   | 94.7   | 25.3      |
| 40°-50°   | 130.6  | 34.8      |
| 50°-60°   | 91.0   | 24.3      |
| 60°-70°   | 17.2   | 4.6       |
| 70°-80°   | 3.1    | 0.8       |
| 80°-90°   | 1.4    | 0.4       |
| 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°    | 36.9   | 9.8       |
| 0°-40°    | 131.6  | 35.1      |
| 0°-60°    | 353.2  | 94.2      |
| 0°-90°    | 375.0  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 375.0  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 45° | 90° | 135° | 180° | Flux |
|-----|------|-----|-----|------|------|------|
| 0°  | 19   | 19  | 19  | 19   | 19   |      |
| 5°  | 21   | 21  | 19  | 17   | 17   | 2    |
| 15° | 41   | 23  | 14  | 13   | 14   | 15   |
| 25° | 392  | 32  | 9   | 10   | 12   | 202  |
| 35° | 1150 | 45  | 6   | 9    | 11   | 695  |
| 45° | 1200 | 30  | 4   | 8    | 11   | 912  |
| 55° | 841  | 8   | 3   | 8    | 11   | 719  |
| 65° | 80   | 0   | 2   | 7    | 10   | 142  |
| 75° | 1    | 1   | 2   | 5    | 8    | 1    |
| 85° | 0    | 0   | 1   | 2    | 3    | 0    |
| 90° | 0    | 0   | 0   | 0    | 0    |      |

TEST NUMBER: P1315981

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 10°    | 15°    | 20°   | 25°   | 30°   | 35°   | 45°  | 67.5° | 90°  |
|-------|--------|--------|--------|--------|-------|-------|-------|-------|------|-------|------|
| 0°    | 19.3   | 19.3   | 19.3   | 19.3   | 19.3  | 19.3  | 19.3  | 19.3  | 19.3 | 19.3  | 19.3 |
| 2.5°  | 20.0   | 20.0   | 20.0   | 20.0   | 20.0  | 20.0  | 20.0  | 20.0  | 20.0 | 19.6  | 19.3 |
| 5°    | 21.4   | 21.4   | 21.4   | 21.4   | 21.0  | 21.0  | 21.0  | 20.7  | 20.7 | 20.0  | 18.9 |
| 7.5°  | 22.7   | 22.7   | 22.7   | 22.7   | 22.4  | 22.0  | 21.7  | 21.7  | 21.4 | 19.6  | 18.3 |
| 10°   | 25.5   | 25.5   | 25.1   | 24.8   | 24.5  | 23.8  | 23.4  | 22.7  | 21.7 | 19.3  | 17.2 |
| 12.5° | 31.0   | 30.3   | 30.0   | 29.3   | 28.2  | 26.9  | 25.5  | 24.5  | 22.0 | 18.6  | 16.2 |
| 15°   | 41.0   | 40.3   | 38.9   | 36.8   | 34.8  | 32.0  | 29.6  | 27.2  | 23.1 | 17.6  | 14.5 |
| 17.5° | 58.5   | 56.5   | 54.4   | 51.0   | 45.8  | 41.0  | 35.8  | 31.3  | 24.5 | 16.5  | 13.1 |
| 20°   | 105.4  | 104.0  | 91.6   | 82.0   | 66.5  | 55.4  | 45.1  | 37.5  | 26.5 | 15.5  | 11.7 |
| 22.5° | 217.3  | 202.8  | 182.5  | 149.5  | 116.4 | 85.8  | 62.3  | 47.2  | 28.6 | 14.1  | 10.3 |
| 25°   | 391.9  | 369.2  | 325.4  | 261.7  | 193.2 | 136.7 | 90.2  | 61.6  | 31.7 | 12.7  | 9.0  |
| 27.5° | 593.4  | 570.3  | 502.5  | 414.6  | 302.7 | 206.3 | 128.8 | 81.6  | 35.8 | 11.4  | 7.9  |
| 30°   | 807.9  | 788.3  | 702.2  | 580.6  | 426.7 | 288.9 | 172.5 | 101.9 | 40.3 | 10.0  | 6.9  |
| 31°   | 894.4  | 869.2  | 776.2  | 646.8  | 484.9 | 323.0 | 190.1 | 110.5 | 42.0 | 9.6   | 6.5  |
| 32°   | 973.9  | 945.3  | 848.9  | 710.1  | 532.1 | 359.9 | 209.4 | 118.1 | 43.4 | 9.0   | 6.2  |
| 33°   | 1042.5 | 1009.0 | 916.1  | 770.0  | 584.1 | 394.3 | 229.4 | 125.4 | 44.4 | 8.3   | 5.9  |
| 34°   | 1100.7 | 1071.7 | 971.9  | 830.3  | 630.2 | 427.4 | 249.0 | 132.6 | 45.1 | 7.9   | 5.5  |
| 35°   | 1150.2 | 1124.1 | 1025.2 | 876.1  | 675.3 | 459.4 | 266.9 | 139.5 | 45.1 | 7.2   | 5.5  |
| 36°   | 1183.7 | 1160.9 | 1071.4 | 923.0  | 713.2 | 486.6 | 282.1 | 145.7 | 45.1 | 6.5   | 5.2  |
| 37°   | 1201.9 | 1179.9 | 1101.7 | 961.5  | 750.4 | 513.5 | 295.8 | 150.5 | 44.8 | 6.2   | 4.8  |
| 38°   | 1211.2 | 1191.9 | 1124.1 | 992.9  | 776.2 | 532.8 | 307.9 | 154.3 | 44.4 | 5.5   | 4.8  |
| 39°   | 1213.6 | 1197.4 | 1138.2 | 1015.6 | 801.4 | 552.0 | 316.5 | 156.4 | 43.4 | 5.2   | 4.5  |
| 40°   | 1211.9 | 1197.8 | 1145.8 | 1035.9 | 820.7 | 567.2 | 322.7 | 157.0 | 42.4 | 4.5   | 4.5  |
| 41°   | 1208.4 | 1197.4 | 1151.3 | 1050.0 | 836.2 | 576.8 | 325.1 | 155.7 | 41.0 | 3.8   | 4.1  |
| 42°   | 1205.3 | 1193.3 | 1153.7 | 1059.7 | 846.8 | 581.7 | 324.8 | 152.9 | 38.9 | 3.4   | 4.1  |
| 43°   | 1205.3 | 1191.6 | 1154.0 | 1065.9 | 852.0 | 582.0 | 320.6 | 147.7 | 36.2 | 3.1   | 3.8  |
| 44°   | 1203.3 | 1190.5 | 1155.8 | 1070.0 | 853.4 | 578.9 | 314.1 | 142.2 | 33.1 | 2.8   | 3.8  |
| 45°   | 1199.5 | 1186.1 | 1155.4 | 1070.3 | 851.0 | 571.3 | 303.4 | 135.0 | 30.3 | 2.1   | 3.8  |
| 46°   | 1192.3 | 1180.2 | 1152.3 | 1067.9 | 843.7 | 560.3 | 290.7 | 127.8 | 27.2 | 1.7   | 3.4  |
| 47°   | 1177.8 | 1168.5 | 1144.0 | 1059.7 | 832.7 | 544.1 | 275.5 | 119.5 | 24.8 | 1.4   | 3.4  |
| 48°   | 1153.0 | 1146.5 | 1129.9 | 1041.4 | 811.7 | 524.2 | 259.3 | 110.5 | 22.4 | 1.4   | 3.4  |
| 49°   | 1107.5 | 1102.4 | 1092.7 | 1012.1 | 784.9 | 499.7 | 241.8 | 100.6 | 20.0 | 1.0   | 3.4  |
| 50°   | 1071.7 | 1066.2 | 1046.6 | 962.9  | 746.3 | 468.7 | 222.5 | 90.6  | 17.2 | 0.7   | 3.1  |
| 51°   | 1048.0 | 1039.0 | 1008.0 | 905.7  | 690.1 | 427.4 | 201.5 | 80.6  | 14.5 | 0.7   | 3.1  |
| 52°   | 1018.0 | 1004.6 | 966.0  | 854.4  | 638.8 | 386.1 | 178.7 | 70.6  | 12.7 | 0.7   | 3.1  |
| 53°   | 955.3  | 950.5  | 912.3  | 799.3  | 587.5 | 346.5 | 155.3 | 62.3  | 11.0 | 0.7   | 3.1  |
| 54°   | 900.6  | 893.3  | 841.3  | 722.9  | 531.7 | 302.4 | 131.2 | 55.1  | 9.3  | 0.7   | 3.1  |
| 55°   | 841.3  | 827.2  | 781.1  | 658.5  | 466.3 | 261.7 | 108.1 | 47.5  | 7.6  | 0.7   | 2.8  |
| 56°   | 766.6  | 754.2  | 704.6  | 589.6  | 406.0 | 220.4 | 90.6  | 38.9  | 5.9  | 0.7   | 2.8  |
| 57°   | 675.7  | 664.3  | 626.1  | 504.9  | 343.4 | 180.1 | 73.7  | 31.3  | 4.5  | 0.7   | 2.8  |
| 58°   | 587.9  | 575.1  | 531.4  | 423.6  | 277.2 | 142.9 | 61.6  | 25.5  | 3.4  | 0.7   | 2.8  |
| 59°   | 520.4  | 503.1  | 446.7  | 355.8  | 217.0 | 108.5 | 48.9  | 20.3  | 2.4  | 0.7   | 2.8  |
| 60°   | 464.2  | 450.1  | 391.6  | 296.2  | 170.1 | 79.9  | 36.2  | 15.5  | 1.4  | 0.7   | 2.8  |
| 62.5° | 269.0  | 265.2  | 212.5  | 152.6  | 80.2  | 37.2  | 17.9  | 7.2   | 0.7  | 1.0   | 2.8  |
| 65°   | 80.2   | 69.9   | 54.4   | 32.4   | 20.7  | 12.4  | 6.5   | 2.4   | 0.3  | 1.0   | 2.4  |



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**CANDELA DISTRIBUTION (continued):**

|       | 0°  | 5°  | 10° | 15° | 20° | 25° | 30° | 35° | 45° | 67.5° | 90° |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|-----|
| 67.5° | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 1.4 | 0.7 | 0.3 | 1.0   | 2.4 |
| 70°   | 1.4 | 1.0 | 1.0 | 1.0 | 1.0 | 0.7 | 0.7 | 0.3 | 0.3 | 1.0   | 2.1 |
| 72.5° | 1.0 | 1.0 | 1.0 | 1.0 | 0.7 | 0.7 | 0.7 | 0.3 | 0.7 | 1.0   | 1.7 |
| 75°   | 1.0 | 0.7 | 0.7 | 0.7 | 0.7 | 0.3 | 0.3 | 0.3 | 0.7 | 1.0   | 1.7 |
| 77.5° | 0.7 | 0.7 | 0.7 | 0.7 | 0.3 | 0.3 | 0.3 | 0.3 | 0.7 | 1.0   | 1.7 |
| 80°   | 0.7 | 0.7 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 1.0   | 1.4 |
| 82.5° | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 1.0   | 1.4 |
| 85°   | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 1.0   | 1.4 |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.3 | 1.0   | 1.0 |
| 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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**CANDELA DISTRIBUTION (continued):**

|       | 112.5° | 135° | 157.5° | 180° |
|-------|--------|------|--------|------|
| 0°    | 19.3   | 19.3 | 19.3   | 19.3 |
| 2.5°  | 18.6   | 18.3 | 17.9   | 17.9 |
| 5°    | 17.9   | 17.2 | 17.2   | 16.9 |
| 7.5°  | 16.9   | 16.2 | 16.2   | 16.2 |
| 10°   | 15.8   | 15.5 | 15.5   | 15.2 |
| 12.5° | 14.5   | 14.5 | 14.5   | 14.5 |
| 15°   | 13.4   | 13.4 | 13.8   | 13.8 |
| 17.5° | 12.1   | 12.4 | 13.1   | 13.4 |
| 20°   | 11.0   | 11.7 | 12.4   | 12.7 |
| 22.5° | 10.3   | 11.0 | 12.1   | 12.4 |
| 25°   | 9.3    | 10.3 | 11.7   | 12.1 |
| 27.5° | 8.6    | 10.0 | 11.0   | 11.7 |
| 30°   | 7.9    | 9.6  | 10.7   | 11.4 |
| 31°   | 7.9    | 9.3  | 10.7   | 11.4 |
| 32°   | 7.6    | 9.0  | 10.7   | 11.0 |
| 33°   | 7.6    | 9.0  | 10.7   | 11.0 |
| 34°   | 7.2    | 9.0  | 10.3   | 11.0 |
| 35°   | 7.2    | 9.0  | 10.3   | 11.0 |
| 36°   | 6.9    | 8.6  | 10.3   | 11.0 |
| 37°   | 6.9    | 8.6  | 10.3   | 11.0 |
| 38°   | 6.5    | 8.6  | 10.3   | 11.0 |
| 39°   | 6.5    | 8.6  | 10.3   | 11.0 |
| 40°   | 6.5    | 8.6  | 10.3   | 11.0 |
| 41°   | 6.2    | 8.6  | 10.3   | 11.0 |
| 42°   | 6.2    | 8.6  | 10.3   | 11.0 |
| 43°   | 6.2    | 8.3  | 10.3   | 11.0 |
| 44°   | 6.2    | 8.3  | 10.3   | 11.0 |
| 45°   | 5.9    | 8.3  | 10.3   | 11.0 |
| 46°   | 5.9    | 8.3  | 10.3   | 11.0 |
| 47°   | 5.9    | 8.3  | 10.3   | 11.0 |
| 48°   | 5.9    | 8.3  | 10.3   | 11.0 |
| 49°   | 5.9    | 8.3  | 10.3   | 11.0 |
| 50°   | 5.5    | 7.9  | 10.3   | 11.0 |
| 51°   | 5.5    | 7.9  | 10.3   | 11.0 |
| 52°   | 5.5    | 7.9  | 10.3   | 11.0 |
| 53°   | 5.5    | 7.9  | 10.3   | 11.0 |
| 54°   | 5.2    | 7.9  | 10.3   | 11.0 |
| 55°   | 5.2    | 7.9  | 10.3   | 11.0 |
| 56°   | 5.2    | 7.9  | 10.3   | 10.7 |
| 57°   | 5.2    | 7.9  | 10.0   | 10.7 |
| 58°   | 5.2    | 7.6  | 10.0   | 10.7 |
| 59°   | 5.2    | 7.6  | 10.0   | 10.7 |
| 60°   | 5.2    | 7.6  | 10.0   | 10.7 |
| 62.5° | 4.8    | 7.6  | 9.6    | 10.3 |
| 65°   | 4.5    | 6.9  | 9.6    | 10.0 |





TEST NUMBER: P1315981

CATALOG NUMBER: P3SQAS05R409827DE010 E3SQCA451MB

**CANDELA DISTRIBUTION (continued):**

|       | 112.5° | 135° | 157.5° | 180° |
|-------|--------|------|--------|------|
| 67.5° | 4.5    | 6.5  | 9.0    | 9.6  |
| 70°   | 4.1    | 6.2  | 8.6    | 9.3  |
| 72.5° | 3.4    | 5.9  | 7.9    | 8.6  |
| 75°   | 3.1    | 5.2  | 7.2    | 7.9  |
| 77.5° | 2.8    | 4.5  | 6.5    | 6.9  |
| 80°   | 2.4    | 3.8  | 5.5    | 6.2  |
| 82.5° | 1.7    | 2.8  | 4.5    | 4.8  |
| 85°   | 1.4    | 2.1  | 3.1    | 3.4  |
| 87.5° | 1.0    | 1.0  | 1.7    | 1.7  |
| 90°   | 0.0    | 0.0  | 0.0    | 0.0  |

(END OF REPORT)