

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: PORTFOLIO

Report Number: P1318094

Luminaire Tested: LDSQA3D05R409830DE010 3LSQCA45R 1MMS

Issue Date: 1/29/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1318094  
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: PORTFOLIO  
Catalog Number: LDSQA3D05R409830DE010 3LSQCA45R 1MMS  
Description: 3in Adjustable LED luminaire with, R40 optic, 3000K CCT AND, 98CRI , 3LSQCA45R 1MMS TRII  
Light Source: -  
Ballast/Driver: -

**Summary**

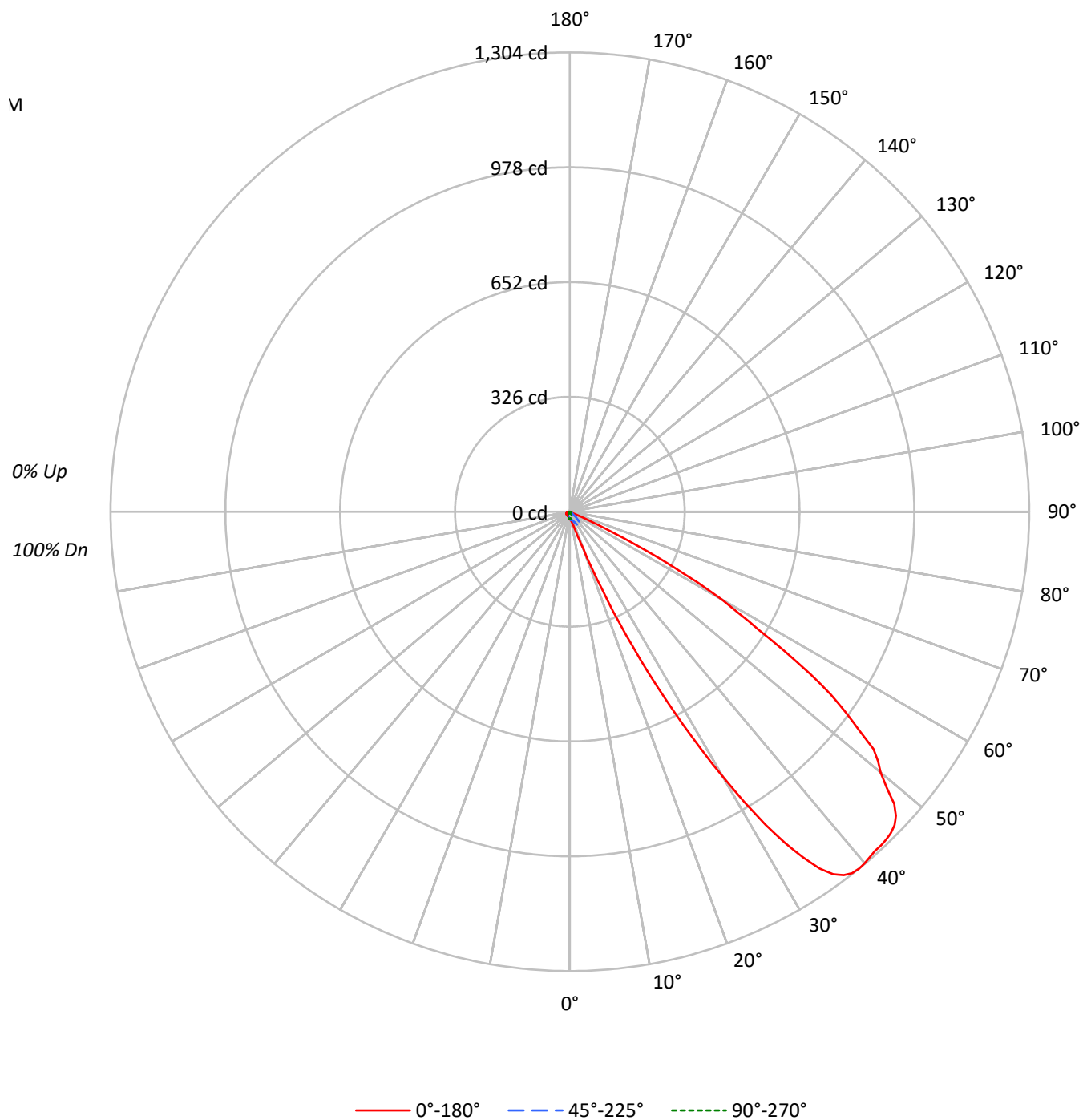
Lumens per Lamp: N/A  
Luminaire Lumens: 403.0 lumens  
Efficiency: N/A  
Efficacy: 56.0 lumens/watt  
Spacing Criteria (0/90/45): 3.99 / 0.73 / 1.54  
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')  
CIE Type: Direct

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

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### Luminous Intensity Polar Plot



TEST NUMBER: P1318094

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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°  | 3565   | 3565  | 3565 | 3565 | 3565 |
| 5°  | 3959   | 3838  | 3527 | 3198 | 3129 |
| 10° | 4792   | 4075  | 3235 | 2920 | 2851 |
| 15° | 7845   | 4422  | 2764 | 2567 | 2639 |
| 20° | 20765  | 5223  | 2309 | 2309 | 2511 |
| 25° | 80039  | 6461  | 1824 | 2109 | 2470 |
| 30° | 172675 | 8611  | 1472 | 2068 | 2426 |
| 35° | 259884 | 10197 | 1240 | 2018 | 2481 |
| 40° | 292806 | 10229 | 1079 | 2091 | 2653 |
| 45° | 313973 | 7940  | 999  | 2168 | 2874 |
| 50° | 308576 | 4957  | 884  | 2277 | 3162 |
| 55° | 271496 | 2432  | 901  | 2552 | 3543 |
| 60° | 171844 | 517   | 1033 | 2790 | 3961 |
| 65° | 35128  | 163   | 1060 | 3016 | 4360 |
| 70° | 755    | 201   | 1108 | 3374 | 5035 |
| 75° | 732    | 466   | 1264 | 3726 | 5656 |
| 80° | 694    | 397   | 1488 | 4066 | 6645 |
| 85° | 790    | 790   | 2964 | 4347 | 7311 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 47°

Luminance: 319623 cd/sqm

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 1.9    | 0.5       |
| 10°-20°   | 6.4    | 1.6       |
| 20°-30°   | 31.3   | 7.8       |
| 30°-40°   | 101.8  | 25.3      |
| 40°-50°   | 140.4  | 34.8      |
| 50°-60°   | 97.8   | 24.3      |
| 60°-70°   | 18.5   | 4.6       |
| 70°-80°   | 3.4    | 0.8       |
| 80°-90°   | 1.6    | 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°    | 39.6   | 9.8       |
| 0°-40°    | 141.4  | 35.1      |
| 0°-60°    | 379.6  | 94.2      |
| 0°-90°    | 403.0  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 403.0  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 45° | 90° | 135° | 180° | Flux |
|-----|------|-----|-----|------|------|------|
| 0°  | 21   | 21  | 21  | 21   | 21   |      |
| 5°  | 23   | 22  | 20  | 18   | 18   | 2    |
| 15° | 44   | 25  | 16  | 14   | 15   | 16   |
| 25° | 421  | 34  | 10  | 11   | 13   | 217  |
| 35° | 1236 | 48  | 6   | 10   | 12   | 747  |
| 45° | 1289 | 33  | 4   | 9    | 12   | 980  |
| 55° | 904  | 8   | 3   | 8    | 12   | 773  |
| 65° | 86   | 0   | 3   | 7    | 11   | 152  |
| 75° | 1    | 1   | 2   | 6    | 8    | 1    |
| 85° | 0    | 0   | 2   | 2    | 4    | 0    |
| 90° | 0    | 0   | 0   | 0    | 0    |      |

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 10°    | 15°    | 20°   | 25°   | 30°   | 35°   | 45°  | 67.5° | 90°  |
|-------|--------|--------|--------|--------|-------|-------|-------|-------|------|-------|------|
| 0°    | 20.7   | 20.7   | 20.7   | 20.7   | 20.7  | 20.7  | 20.7  | 20.7  | 20.7 | 20.7  | 20.7 |
| 2.5°  | 21.5   | 21.5   | 21.5   | 21.5   | 21.5  | 21.5  | 21.5  | 21.5  | 21.5 | 21.1  | 20.7 |
| 5°    | 22.9   | 22.9   | 22.9   | 22.9   | 22.6  | 22.6  | 22.6  | 22.2  | 22.2 | 21.5  | 20.4 |
| 7.5°  | 24.4   | 24.4   | 24.4   | 24.4   | 24.1  | 23.7  | 23.3  | 23.3  | 22.9 | 21.1  | 19.6 |
| 10°   | 27.4   | 27.4   | 27.0   | 26.6   | 26.3  | 25.5  | 25.2  | 24.4  | 23.3 | 20.7  | 18.5 |
| 12.5° | 33.3   | 32.6   | 32.2   | 31.5   | 30.3  | 28.9  | 27.4  | 26.3  | 23.7 | 20.0  | 17.4 |
| 15°   | 44.0   | 43.3   | 41.8   | 39.6   | 37.4  | 34.4  | 31.8  | 29.2  | 24.8 | 18.9  | 15.5 |
| 17.5° | 62.9   | 60.7   | 58.5   | 54.8   | 49.2  | 44.0  | 38.5  | 33.7  | 26.3 | 17.8  | 14.1 |
| 20°   | 113.3  | 111.8  | 98.4   | 88.1   | 71.4  | 59.6  | 48.5  | 40.3  | 28.5 | 16.7  | 12.6 |
| 22.5° | 233.5  | 218.0  | 196.2  | 160.6  | 125.1 | 92.2  | 67.0  | 50.7  | 30.7 | 15.2  | 11.1 |
| 25°   | 421.2  | 396.7  | 349.7  | 281.3  | 207.6 | 146.9 | 97.0  | 66.2  | 34.0 | 13.7  | 9.6  |
| 27.5° | 637.7  | 612.9  | 540.0  | 445.6  | 325.3 | 221.7 | 138.4 | 87.7  | 38.5 | 12.2  | 8.5  |
| 30°   | 868.3  | 847.2  | 754.6  | 624.0  | 458.6 | 310.5 | 185.4 | 109.5 | 43.3 | 10.7  | 7.4  |
| 31°   | 961.1  | 934.1  | 834.2  | 695.0  | 521.1 | 347.2 | 204.3 | 118.8 | 45.2 | 10.4  | 7.0  |
| 32°   | 1046.6 | 1015.9 | 912.3  | 763.1  | 571.8 | 386.8 | 225.0 | 126.9 | 46.6 | 9.6   | 6.7  |
| 33°   | 1120.3 | 1084.4 | 984.5  | 827.5  | 627.7 | 423.8 | 246.5 | 134.7 | 47.7 | 8.9   | 6.3  |
| 34°   | 1182.8 | 1151.7 | 1044.4 | 892.3  | 677.3 | 459.3 | 267.6 | 142.5 | 48.5 | 8.5   | 5.9  |
| 35°   | 1236.1 | 1208.0 | 1101.8 | 941.5  | 725.8 | 493.7 | 286.8 | 149.9 | 48.5 | 7.8   | 5.9  |
| 36°   | 1272.0 | 1247.6 | 1151.4 | 991.9  | 766.5 | 523.0 | 303.1 | 156.6 | 48.5 | 7.0   | 5.6  |
| 37°   | 1291.6 | 1268.0 | 1183.9 | 1033.3 | 806.4 | 551.8 | 317.9 | 161.7 | 48.1 | 6.7   | 5.2  |
| 38°   | 1301.6 | 1280.9 | 1208.0 | 1067.0 | 834.2 | 572.5 | 330.9 | 165.8 | 47.7 | 5.9   | 5.2  |
| 39°   | 1304.2 | 1286.8 | 1223.2 | 1091.4 | 861.2 | 593.3 | 340.1 | 168.0 | 46.6 | 5.6   | 4.8  |
| 40°   | 1302.4 | 1287.2 | 1231.3 | 1113.3 | 881.9 | 609.6 | 346.8 | 168.8 | 45.5 | 4.8   | 4.8  |
| 41°   | 1298.7 | 1286.8 | 1237.2 | 1128.4 | 898.6 | 619.9 | 349.4 | 167.3 | 44.0 | 4.1   | 4.4  |
| 42°   | 1295.3 | 1282.4 | 1239.8 | 1138.8 | 910.1 | 625.1 | 349.0 | 164.3 | 41.8 | 3.7   | 4.4  |
| 43°   | 1295.3 | 1280.5 | 1240.2 | 1145.5 | 915.6 | 625.5 | 344.6 | 158.8 | 38.9 | 3.3   | 4.1  |
| 44°   | 1293.1 | 1279.4 | 1242.1 | 1149.9 | 917.1 | 622.1 | 337.5 | 152.9 | 35.5 | 3.0   | 4.1  |
| 45°   | 1289.1 | 1274.6 | 1241.7 | 1150.3 | 914.5 | 614.0 | 326.1 | 145.1 | 32.6 | 2.2   | 4.1  |
| 46°   | 1281.3 | 1268.3 | 1238.4 | 1147.7 | 906.7 | 602.2 | 312.4 | 137.3 | 29.2 | 1.9   | 3.7  |
| 47°   | 1265.7 | 1255.7 | 1229.5 | 1138.8 | 894.9 | 584.8 | 296.1 | 128.4 | 26.6 | 1.5   | 3.7  |
| 48°   | 1239.1 | 1232.1 | 1214.3 | 1119.2 | 872.3 | 563.3 | 278.7 | 118.8 | 24.1 | 1.5   | 3.7  |
| 49°   | 1190.2 | 1184.7 | 1174.3 | 1087.7 | 843.5 | 537.0 | 259.8 | 108.1 | 21.5 | 1.1   | 3.7  |
| 50°   | 1151.7 | 1145.8 | 1124.7 | 1034.8 | 802.0 | 503.7 | 239.1 | 97.3  | 18.5 | 0.7   | 3.3  |
| 51°   | 1126.2 | 1116.6 | 1083.3 | 973.4  | 741.7 | 459.3 | 216.5 | 86.6  | 15.5 | 0.7   | 3.3  |
| 52°   | 1094.0 | 1079.6 | 1038.1 | 918.2  | 686.5 | 414.9 | 192.1 | 75.9  | 13.7 | 0.7   | 3.3  |
| 53°   | 1026.7 | 1021.5 | 980.4  | 859.0  | 631.4 | 372.3 | 166.9 | 67.0  | 11.8 | 0.7   | 3.3  |
| 54°   | 967.8  | 960.0  | 904.2  | 776.8  | 571.4 | 324.9 | 141.0 | 59.2  | 10.0 | 0.7   | 3.3  |
| 55°   | 904.2  | 889.0  | 839.4  | 707.6  | 501.1 | 281.3 | 116.2 | 51.1  | 8.1  | 0.7   | 3.0  |
| 56°   | 823.8  | 810.5  | 757.2  | 633.6  | 436.3 | 236.9 | 97.3  | 41.8  | 6.3  | 0.7   | 3.0  |
| 57°   | 726.1  | 713.9  | 672.8  | 542.6  | 369.0 | 193.6 | 79.2  | 33.7  | 4.8  | 0.7   | 3.0  |
| 58°   | 631.8  | 618.1  | 571.1  | 455.2  | 297.9 | 153.6 | 66.2  | 27.4  | 3.7  | 0.7   | 3.0  |
| 59°   | 559.2  | 540.7  | 480.0  | 382.3  | 233.2 | 116.6 | 52.6  | 21.8  | 2.6  | 0.7   | 3.0  |
| 60°   | 498.9  | 483.7  | 420.8  | 318.3  | 182.8 | 85.9  | 38.9  | 16.7  | 1.5  | 0.7   | 3.0  |
| 62.5° | 289.0  | 285.0  | 228.4  | 164.0  | 86.2  | 40.0  | 19.2  | 7.8   | 0.7  | 1.1   | 3.0  |
| 65°   | 86.2   | 75.1   | 58.5   | 34.8   | 22.2  | 13.3  | 7.0   | 2.6   | 0.4  | 1.1   | 2.6  |



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**CANDELA DISTRIBUTION (continued):**

|       | 0°  | 5°  | 10° | 15° | 20° | 25° | 30° | 35° | 45° | 67.5° | 90° |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|-----|
| 67.5° | 2.6 | 2.6 | 2.6 | 2.6 | 2.6 | 2.6 | 1.5 | 0.7 | 0.4 | 1.1   | 2.6 |
| 70°   | 1.5 | 1.1 | 1.1 | 1.1 | 1.1 | 0.7 | 0.7 | 0.4 | 0.4 | 1.1   | 2.2 |
| 72.5° | 1.1 | 1.1 | 1.1 | 1.1 | 0.7 | 0.7 | 0.7 | 0.4 | 0.7 | 1.1   | 1.9 |
| 75°   | 1.1 | 0.7 | 0.7 | 0.7 | 0.7 | 0.4 | 0.4 | 0.4 | 0.7 | 1.1   | 1.9 |
| 77.5° | 0.7 | 0.7 | 0.7 | 0.7 | 0.4 | 0.4 | 0.4 | 0.4 | 0.7 | 1.1   | 1.9 |
| 80°   | 0.7 | 0.7 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 1.1   | 1.5 |
| 82.5° | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 1.1   | 1.5 |
| 85°   | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 1.1   | 1.5 |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 0.4 | 1.1   | 1.1 |
| 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: P1318094

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**CANDELA DISTRIBUTION (continued):**

|       | 112.5° | 135° | 157.5° | 180° |
|-------|--------|------|--------|------|
| 0°    | 20.7   | 20.7 | 20.7   | 20.7 |
| 2.5°  | 20.0   | 19.6 | 19.2   | 19.2 |
| 5°    | 19.2   | 18.5 | 18.5   | 18.1 |
| 7.5°  | 18.1   | 17.4 | 17.4   | 17.4 |
| 10°   | 17.0   | 16.7 | 16.7   | 16.3 |
| 12.5° | 15.5   | 15.5 | 15.5   | 15.5 |
| 15°   | 14.4   | 14.4 | 14.8   | 14.8 |
| 17.5° | 13.0   | 13.3 | 14.1   | 14.4 |
| 20°   | 11.8   | 12.6 | 13.3   | 13.7 |
| 22.5° | 11.1   | 11.8 | 13.0   | 13.3 |
| 25°   | 10.0   | 11.1 | 12.6   | 13.0 |
| 27.5° | 9.3    | 10.7 | 11.8   | 12.6 |
| 30°   | 8.5    | 10.4 | 11.5   | 12.2 |
| 31°   | 8.5    | 10.0 | 11.5   | 12.2 |
| 32°   | 8.1    | 9.6  | 11.5   | 11.8 |
| 33°   | 8.1    | 9.6  | 11.5   | 11.8 |
| 34°   | 7.8    | 9.6  | 11.1   | 11.8 |
| 35°   | 7.8    | 9.6  | 11.1   | 11.8 |
| 36°   | 7.4    | 9.3  | 11.1   | 11.8 |
| 37°   | 7.4    | 9.3  | 11.1   | 11.8 |
| 38°   | 7.0    | 9.3  | 11.1   | 11.8 |
| 39°   | 7.0    | 9.3  | 11.1   | 11.8 |
| 40°   | 7.0    | 9.3  | 11.1   | 11.8 |
| 41°   | 6.7    | 9.3  | 11.1   | 11.8 |
| 42°   | 6.7    | 9.3  | 11.1   | 11.8 |
| 43°   | 6.7    | 8.9  | 11.1   | 11.8 |
| 44°   | 6.7    | 8.9  | 11.1   | 11.8 |
| 45°   | 6.3    | 8.9  | 11.1   | 11.8 |
| 46°   | 6.3    | 8.9  | 11.1   | 11.8 |
| 47°   | 6.3    | 8.9  | 11.1   | 11.8 |
| 48°   | 6.3    | 8.9  | 11.1   | 11.8 |
| 49°   | 6.3    | 8.9  | 11.1   | 11.8 |
| 50°   | 5.9    | 8.5  | 11.1   | 11.8 |
| 51°   | 5.9    | 8.5  | 11.1   | 11.8 |
| 52°   | 5.9    | 8.5  | 11.1   | 11.8 |
| 53°   | 5.9    | 8.5  | 11.1   | 11.8 |
| 54°   | 5.6    | 8.5  | 11.1   | 11.8 |
| 55°   | 5.6    | 8.5  | 11.1   | 11.8 |
| 56°   | 5.6    | 8.5  | 11.1   | 11.5 |
| 57°   | 5.6    | 8.5  | 10.7   | 11.5 |
| 58°   | 5.6    | 8.1  | 10.7   | 11.5 |
| 59°   | 5.6    | 8.1  | 10.7   | 11.5 |
| 60°   | 5.6    | 8.1  | 10.7   | 11.5 |
| 62.5° | 5.2    | 8.1  | 10.4   | 11.1 |
| 65°   | 4.8    | 7.4  | 10.4   | 10.7 |





TEST NUMBER: P1318094

CATALOG NUMBER: LDSQA3D05R409830DE010 3LSQCA45R 1MMS

**CANDELA DISTRIBUTION (continued):**

|       | 112.5° | 135° | 157.5° | 180° |
|-------|--------|------|--------|------|
| 67.5° | 4.8    | 7.0  | 9.6    | 10.4 |
| 70°   | 4.4    | 6.7  | 9.3    | 10.0 |
| 72.5° | 3.7    | 6.3  | 8.5    | 9.3  |
| 75°   | 3.3    | 5.6  | 7.8    | 8.5  |
| 77.5° | 3.0    | 4.8  | 7.0    | 7.4  |
| 80°   | 2.6    | 4.1  | 5.9    | 6.7  |
| 82.5° | 1.9    | 3.0  | 4.8    | 5.2  |
| 85°   | 1.5    | 2.2  | 3.3    | 3.7  |
| 87.5° | 1.1    | 1.1  | 1.9    | 1.9  |
| 90°   | 0.0    | 0.0  | 0.0    | 0.0  |

(END OF REPORT)