

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: P1319100

Luminaire Tested: LDSQA3D09R359835DE010 3LSQCA45R 1MW

Issue Date: 1/29/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1319100  
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: PORTFOLIO  
Catalog Number: LDSQA3D09R359835DE010 3LSQCA45R 1MW  
Description: 3in Adjustable LED luminaire with, R35 optic, 3500K CCT AND, 98CRI , 3LSQCA45R 1MW TRIM  
Light Source: -  
Ballast/Driver: -

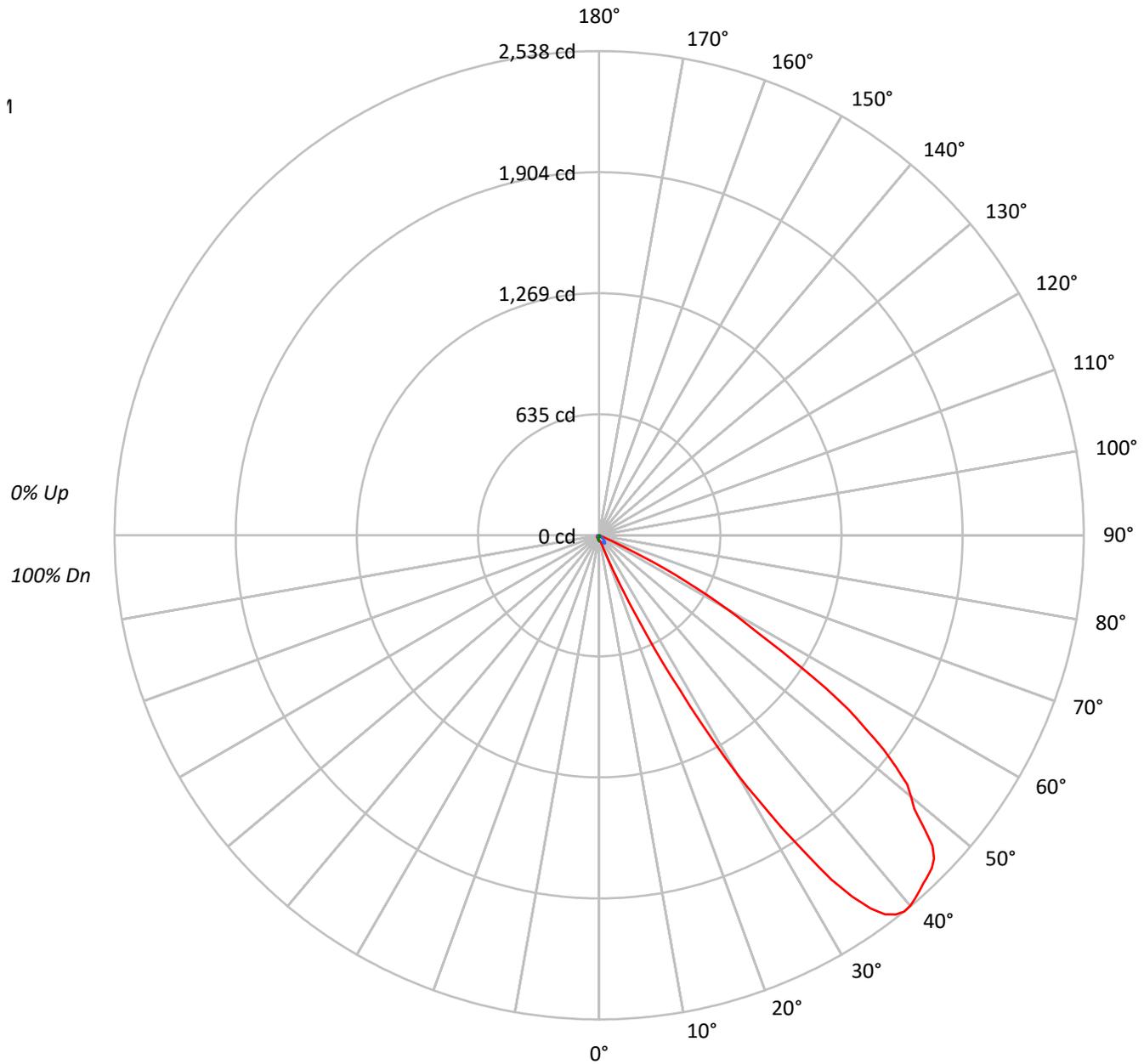
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 632.0 lumens  
Efficiency: N/A  
Efficacy: 57.5 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): 11  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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: P1319100  
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### Luminous Intensity Polar Plot



— 0°-180°    - - - 45°-225°    ····· 90°-270°



TEST NUMBER: P1319100

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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| RF  | 20  |     |     |     | 20  |     |     |     | 20  |     |     |     | 20  |     |     |     | 20  |     |     |     |     |
| RC  | 80  |     |     |     | 70  |     |     |     | 50  |     |     |     | 30  |     |     |     | 10  |     |     | 0   |     |
| RW  | 70  | 50  | 30  | 10  | 70  | 50  | 30  | 10  | 50  | 30  | 10  | 50  | 30  | 10  | 50  | 30  | 10  | 50  | 30  | 10  | 0   |
| RCR |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 102 | 102 | 102 | 100 |
| 1   | 110 | 106 | 102 | 99  | 107 | 104 | 100 | 97  | 100 | 97  | 94  | 96  | 93  | 91  | 92  | 90  | 89  | 89  | 89  | 89  | 87  |
| 2   | 100 | 93  | 86  | 81  | 98  | 91  | 85  | 80  | 87  | 83  | 78  | 84  | 80  | 77  | 81  | 78  | 75  | 75  | 75  | 75  | 73  |
| 3   | 91  | 81  | 73  | 67  | 89  | 79  | 72  | 66  | 76  | 70  | 65  | 74  | 68  | 64  | 71  | 67  | 63  | 63  | 63  | 63  | 61  |
| 4   | 83  | 71  | 62  | 55  | 80  | 69  | 61  | 55  | 67  | 60  | 54  | 64  | 58  | 53  | 62  | 57  | 52  | 52  | 52  | 52  | 50  |
| 5   | 75  | 62  | 52  | 46  | 73  | 61  | 52  | 45  | 58  | 51  | 45  | 56  | 50  | 44  | 55  | 49  | 44  | 44  | 44  | 44  | 42  |
| 6   | 68  | 54  | 45  | 38  | 66  | 53  | 44  | 38  | 51  | 43  | 38  | 50  | 43  | 37  | 48  | 42  | 37  | 37  | 37  | 37  | 35  |
| 7   | 62  | 48  | 38  | 32  | 60  | 47  | 38  | 32  | 45  | 37  | 32  | 44  | 37  | 31  | 42  | 36  | 31  | 31  | 31  | 31  | 29  |
| 8   | 57  | 42  | 33  | 27  | 55  | 41  | 33  | 27  | 40  | 32  | 27  | 39  | 32  | 26  | 38  | 31  | 26  | 26  | 26  | 26  | 24  |
| 9   | 52  | 38  | 29  | 23  | 50  | 37  | 29  | 23  | 36  | 28  | 23  | 35  | 28  | 22  | 34  | 27  | 22  | 22  | 22  | 22  | 20  |
| 10  | 48  | 34  | 25  | 19  | 46  | 33  | 25  | 19  | 32  | 25  | 19  | 31  | 24  | 19  | 30  | 24  | 19  | 19  | 19  | 19  | 17  |

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

|     | 0°     | 45°   | 90°  | 135° | 180° |
|-----|--------|-------|------|------|------|
| 0°  | 5012   | 5012  | 5012 | 5012 | 5012 |
| 5°  | 5428   | 5325  | 4927 | 4443 | 4339 |
| 10° | 5684   | 5194  | 4389 | 3795 | 3795 |
| 15° | 8130   | 5081  | 3566 | 3263 | 3352 |
| 20° | 20399  | 5443  | 2822 | 2822 | 3134 |
| 25° | 94652  | 6936  | 2166 | 2603 | 2926 |
| 30° | 287719 | 9426  | 1710 | 2386 | 2943 |
| 35° | 486276 | 10912 | 1430 | 2271 | 2880 |
| 40° | 570010 | 10769 | 1147 | 2316 | 3080 |
| 45° | 600277 | 7648  | 974  | 2509 | 3337 |
| 50° | 571389 | 4582  | 911  | 2599 | 3671 |
| 55° | 478796 | 1892  | 1021 | 2913 | 4294 |
| 60° | 268047 | 379   | 1171 | 3341 | 4719 |
| 65° | 46253  | 245   | 1182 | 3708 | 5338 |
| 70° | 856    | 302   | 1460 | 4028 | 6043 |
| 75° | 732    | 399   | 1930 | 4525 | 6854 |
| 80° | 595    | 595   | 2281 | 5058 | 7934 |
| 85° | 0      | 1186  | 4545 | 5730 | 9090 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 46°  
 Luminance: 604538 cd/sqm



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 2.6    | 0.4       |
| 10°-20°   | 7.4    | 1.2       |
| 20°-30°   | 38.8   | 6.1       |
| 30°-40°   | 167.5  | 26.5      |
| 40°-50°   | 238.9  | 37.8      |
| 50°-60°   | 148.0  | 23.4      |
| 60°-70°   | 22.5   | 3.6       |
| 70°-80°   | 4.2    | 0.7       |
| 80°-90°   | 2.1    | 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°    | 48.9   | 7.7       |
| 0°-40°    | 216.3  | 34.2      |
| 0°-60°    | 603.2  | 95.4      |
| 0°-90°    | 632.0  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 632.0  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 45° | 90° | 135° | 180° | Flux |
|-----|------|-----|-----|------|------|------|
| 0°  | 29   | 29  | 29  | 29   | 29   |      |
| 5°  | 31   | 31  | 28  | 26   | 25   | 3    |
| 15° | 46   | 28  | 20  | 18   | 19   | 16   |
| 25° | 498  | 36  | 11  | 14   | 15   | 298  |
| 35° | 2313 | 52  | 7   | 11   | 14   | 1389 |
| 45° | 2465 | 31  | 4   | 10   | 14   | 1862 |
| 55° | 1595 | 6   | 3   | 10   | 14   | 1358 |
| 65° | 114  | 1   | 3   | 9    | 13   | 232  |
| 75° | 1    | 1   | 3   | 7    | 10   | 1    |
| 85° | 0    | 1   | 2   | 3    | 5    | 0    |
| 90° | 0    | 0   | 0   | 0    | 0    |      |



TEST NUMBER: P1319100

CATALOG NUMBER: LDSQA3D09R359835DE010 3LSQCA45R 1MW

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 10°    | 15°    | 20°    | 25°   | 30°   | 45°  | 67.5° | 90°  | 112.5° |
|-------|--------|--------|--------|--------|--------|-------|-------|------|-------|------|--------|
| 0°    | 29.1   | 29.1   | 29.1   | 29.1   | 29.1   | 29.1  | 29.1  | 29.1 | 29.1  | 29.1 | 29.1   |
| 2.5°  | 30.2   | 30.2   | 30.2   | 30.2   | 30.2   | 30.2  | 30.2  | 30.2 | 30.2  | 29.1 | 28.5   |
| 5°    | 31.4   | 31.4   | 30.8   | 30.8   | 30.8   | 30.8  | 30.8  | 30.8 | 29.7  | 28.5 | 26.8   |
| 7.5°  | 31.9   | 31.9   | 31.4   | 31.4   | 31.4   | 31.4  | 30.8  | 30.2 | 29.1  | 26.8 | 25.1   |
| 10°   | 32.5   | 32.5   | 32.5   | 32.5   | 31.9   | 31.4  | 30.8  | 29.7 | 28.0  | 25.1 | 23.4   |
| 12.5° | 36.5   | 36.5   | 35.9   | 34.8   | 33.7   | 32.5  | 31.4  | 29.1 | 25.7  | 22.8 | 21.1   |
| 15°   | 45.6   | 45.1   | 43.9   | 42.2   | 39.9   | 37.1  | 34.8  | 28.5 | 23.4  | 20.0 | 18.8   |
| 17.5° | 63.9   | 62.8   | 61.0   | 55.3   | 50.2   | 45.1  | 40.5  | 28.5 | 21.1  | 17.7 | 16.5   |
| 20°   | 111.3  | 111.8  | 99.8   | 86.1   | 74.7   | 62.2  | 50.8  | 29.7 | 18.8  | 15.4 | 14.8   |
| 22.5° | 232.2  | 223.1  | 194.5  | 161.5  | 123.2  | 95.3  | 71.9  | 32.5 | 16.5  | 13.1 | 13.1   |
| 25°   | 498.1  | 463.3  | 394.2  | 297.8  | 209.9  | 148.9 | 104.4 | 36.5 | 14.8  | 11.4 | 12.0   |
| 27.5° | 909.4  | 878.0  | 739.4  | 556.8  | 369.7  | 224.8 | 141.5 | 41.6 | 13.1  | 9.7  | 10.8   |
| 30°   | 1446.8 | 1360.1 | 1179.3 | 912.8  | 617.9  | 344.0 | 190.0 | 47.4 | 10.8  | 8.6  | 10.3   |
| 31°   | 1614.6 | 1574.6 | 1354.4 | 1056.0 | 724.0  | 408.5 | 210.5 | 49.1 | 10.3  | 8.6  | 9.7    |
| 32°   | 1813.7 | 1742.9 | 1545.5 | 1212.9 | 831.8  | 466.1 | 235.1 | 50.8 | 9.7   | 7.4  | 9.7    |
| 33°   | 1991.7 | 1923.2 | 1683.0 | 1351.0 | 940.8  | 531.7 | 261.3 | 51.3 | 8.6   | 7.4  | 9.1    |
| 34°   | 2178.8 | 2085.2 | 1847.3 | 1495.3 | 1052.6 | 602.5 | 285.3 | 51.9 | 8.0   | 6.8  | 9.1    |
| 35°   | 2312.9 | 2219.3 | 1988.8 | 1609.4 | 1149.0 | 665.2 | 312.6 | 51.9 | 7.4   | 6.8  | 8.6    |
| 36°   | 2416.7 | 2334.5 | 2110.9 | 1726.9 | 1244.9 | 721.7 | 334.3 | 51.9 | 6.3   | 6.3  | 8.6    |
| 37°   | 2488.0 | 2409.9 | 2193.1 | 1827.9 | 1317.9 | 771.9 | 353.7 | 51.9 | 5.7   | 6.3  | 8.6    |
| 38°   | 2522.8 | 2457.8 | 2272.4 | 1901.5 | 1388.6 | 811.3 | 369.1 | 50.8 | 5.1   | 5.7  | 8.0    |
| 39°   | 2537.7 | 2484.6 | 2320.9 | 1963.7 | 1441.7 | 845.5 | 380.5 | 49.6 | 4.6   | 5.7  | 8.0    |
| 40°   | 2535.4 | 2489.2 | 2348.2 | 2006.5 | 1484.5 | 868.9 | 386.8 | 47.9 | 4.0   | 5.1  | 8.0    |
| 41°   | 2522.2 | 2482.3 | 2362.5 | 2043.0 | 1510.2 | 884.9 | 388.5 | 46.2 | 3.4   | 5.1  | 7.4    |
| 42°   | 2507.4 | 2470.9 | 2367.1 | 2062.4 | 1526.7 | 890.0 | 384.0 | 43.9 | 3.4   | 4.6  | 7.4    |
| 43°   | 2492.0 | 2458.4 | 2367.1 | 2068.7 | 1530.7 | 886.6 | 376.5 | 39.9 | 2.9   | 4.6  | 7.4    |
| 44°   | 2479.5 | 2447.5 | 2359.7 | 2067.0 | 1522.1 | 873.5 | 362.8 | 35.4 | 2.3   | 4.6  | 7.4    |
| 45°   | 2464.6 | 2433.2 | 2350.0 | 2056.1 | 1505.6 | 851.2 | 345.7 | 31.4 | 1.7   | 4.0  | 7.4    |
| 46°   | 2438.4 | 2413.9 | 2332.8 | 2033.9 | 1479.3 | 820.4 | 324.1 | 28.5 | 1.1   | 4.0  | 6.8    |
| 47°   | 2387.6 | 2366.5 | 2299.7 | 2000.8 | 1444.5 | 783.9 | 301.8 | 25.7 | 1.1   | 4.0  | 6.8    |
| 48°   | 2285.5 | 2284.9 | 2233.6 | 1939.2 | 1389.2 | 738.2 | 278.4 | 22.8 | 1.1   | 4.0  | 6.8    |
| 49°   | 2186.8 | 2176.5 | 2112.6 | 1830.8 | 1309.9 | 683.5 | 253.9 | 20.5 | 0.6   | 4.0  | 6.8    |
| 50°   | 2132.6 | 2110.3 | 2005.4 | 1703.0 | 1208.4 | 607.6 | 227.6 | 17.1 | 0.6   | 3.4  | 6.8    |
| 51°   | 2076.1 | 2044.2 | 1920.4 | 1587.7 | 1087.4 | 534.6 | 199.1 | 13.7 | 0.6   | 3.4  | 6.3    |
| 52°   | 1974.0 | 1943.7 | 1805.1 | 1477.6 | 969.9  | 459.8 | 171.7 | 11.4 | 0.6   | 3.4  | 6.8    |
| 53°   | 1863.9 | 1820.5 | 1669.9 | 1356.7 | 866.6  | 393.7 | 143.8 | 9.7  | 0.6   | 3.4  | 6.3    |
| 54°   | 1725.2 | 1705.8 | 1533.0 | 1208.4 | 745.7  | 329.8 | 118.1 | 8.0  | 0.6   | 3.4  | 6.3    |
| 55°   | 1594.6 | 1566.1 | 1386.4 | 1056.6 | 636.1  | 270.4 | 98.7  | 6.3  | 0.6   | 3.4  | 6.3    |
| 56°   | 1428.0 | 1385.2 | 1216.9 | 917.4  | 524.9  | 217.9 | 83.3  | 5.1  | 0.6   | 3.4  | 6.3    |
| 57°   | 1229.5 | 1183.8 | 1050.9 | 762.8  | 411.9  | 166.0 | 69.6  | 4.0  | 0.6   | 3.4  | 6.3    |
| 58°   | 1040.0 | 1000.7 | 858.1  | 588.8  | 310.4  | 115.2 | 57.6  | 2.9  | 0.6   | 2.9  | 6.3    |
| 59°   | 898.6  | 855.2  | 713.7  | 453.0  | 215.7  | 85.0  | 43.4  | 2.3  | 0.6   | 3.4  | 6.3    |
| 60°   | 778.2  | 722.3  | 574.5  | 350.9  | 154.0  | 61.0  | 31.9  | 1.1  | 1.1   | 3.4  | 6.3    |
| 62.5° | 448.4  | 395.9  | 274.4  | 142.6  | 63.3   | 31.4  | 15.4  | 0.6  | 1.1   | 3.4  | 6.3    |
| 65°   | 113.5  | 101.0  | 65.6   | 30.8   | 17.7   | 10.8  | 5.7   | 0.6  | 1.1   | 2.9  | 5.7    |



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CATALOG NUMBER: LDSQA3D09R359835DE010 3LSQCA45R 1MW

**CANDELA DISTRIBUTION (continued):**

|       | 0°  | 5°  | 10° | 15° | 20° | 25° | 30° | 45° | 67.5° | 90° | 112.5° |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-------|-----|--------|
| 67.5° | 4.0 | 4.0 | 4.0 | 3.4 | 2.9 | 2.3 | 1.1 | 0.6 | 1.1   | 2.9 | 5.7    |
| 70°   | 1.7 | 1.7 | 1.7 | 1.1 | 1.1 | 0.6 | 0.6 | 0.6 | 1.1   | 2.9 | 5.1    |
| 72.5° | 1.1 | 1.1 | 1.1 | 1.1 | 0.6 | 0.6 | 0.6 | 0.6 | 1.7   | 2.9 | 4.6    |
| 75°   | 1.1 | 1.1 | 1.1 | 1.1 | 0.6 | 0.6 | 0.6 | 0.6 | 1.7   | 2.9 | 4.6    |
| 77.5° | 1.1 | 1.1 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 1.7   | 2.3 | 4.0    |
| 80°   | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 1.7   | 2.3 | 3.4    |
| 82.5° | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 1.7   | 2.3 | 2.9    |
| 85°   | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.6 | 0.0 | 0.6 | 1.7   | 2.3 | 2.3    |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.6 | 1.7   | 2.3 | 1.7    |
| 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):**

|       | 135° | 157.5° | 180° |
|-------|------|--------|------|
| 0°    | 29.1 | 29.1   | 29.1 |
| 2.5°  | 27.4 | 27.4   | 27.4 |
| 5°    | 25.7 | 25.7   | 25.1 |
| 7.5°  | 24.0 | 23.4   | 23.4 |
| 10°   | 21.7 | 21.7   | 21.7 |
| 12.5° | 20.0 | 20.0   | 20.0 |
| 15°   | 18.3 | 18.8   | 18.8 |
| 17.5° | 16.5 | 17.7   | 17.7 |
| 20°   | 15.4 | 16.5   | 17.1 |
| 22.5° | 14.3 | 15.4   | 16.0 |
| 25°   | 13.7 | 14.8   | 15.4 |
| 27.5° | 12.6 | 14.3   | 15.4 |
| 30°   | 12.0 | 13.7   | 14.8 |
| 31°   | 12.0 | 13.7   | 14.3 |
| 32°   | 11.4 | 13.7   | 14.3 |
| 33°   | 11.4 | 13.7   | 14.3 |
| 34°   | 11.4 | 13.1   | 14.3 |
| 35°   | 10.8 | 13.1   | 13.7 |
| 36°   | 10.8 | 13.1   | 13.7 |
| 37°   | 10.8 | 13.1   | 14.3 |
| 38°   | 10.8 | 13.1   | 13.7 |
| 39°   | 10.3 | 13.1   | 13.7 |
| 40°   | 10.3 | 13.1   | 13.7 |
| 41°   | 10.3 | 13.1   | 13.7 |
| 42°   | 10.3 | 13.1   | 13.7 |
| 43°   | 10.3 | 13.1   | 13.7 |
| 44°   | 10.3 | 12.6   | 13.7 |
| 45°   | 10.3 | 12.6   | 13.7 |
| 46°   | 10.3 | 13.1   | 13.7 |
| 47°   | 10.3 | 13.1   | 14.3 |
| 48°   | 10.3 | 12.6   | 13.7 |
| 49°   | 9.7  | 12.6   | 13.7 |
| 50°   | 9.7  | 12.6   | 13.7 |
| 51°   | 9.7  | 13.1   | 14.3 |
| 52°   | 9.7  | 13.1   | 14.3 |
| 53°   | 9.7  | 13.1   | 14.3 |
| 54°   | 9.7  | 13.1   | 13.7 |
| 55°   | 9.7  | 13.1   | 14.3 |
| 56°   | 9.7  | 13.1   | 13.7 |
| 57°   | 9.7  | 13.1   | 13.7 |
| 58°   | 9.7  | 12.6   | 13.7 |
| 59°   | 9.7  | 12.6   | 13.7 |
| 60°   | 9.7  | 12.6   | 13.7 |
| 62.5° | 9.1  | 12.6   | 13.7 |
| 65°   | 9.1  | 12.0   | 13.1 |



TEST NUMBER: P1319100  
CATALOG NUMBER: LDSQA3D09R359835DE010 3LSQCA45R 1MW

**CANDELA DISTRIBUTION (continued):**

|       | 135° | 157.5° | 180° |
|-------|------|--------|------|
| 67.5° | 8.6  | 12.0   | 12.6 |
| 70°   | 8.0  | 11.4   | 12.0 |
| 72.5° | 7.4  | 10.8   | 11.4 |
| 75°   | 6.8  | 9.7    | 10.3 |
| 77.5° | 5.7  | 8.6    | 9.7  |
| 80°   | 5.1  | 7.4    | 8.0  |
| 82.5° | 4.0  | 6.3    | 6.8  |
| 85°   | 2.9  | 4.6    | 4.6  |
| 87.5° | 1.1  | 2.3    | 2.3  |
| 90°   | 0.0  | 0.0    | 0.0  |

(END OF REPORT)