

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: P1309725

Luminaire Tested: LDSQA3D24R409030D010 3LSQCA45R 1MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1309725
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: LDSQA3D24R409030D010 3LSQCA45R 1MMS
Description: 3in Adjustable LED luminaire with, R40 optic, 3000K CCT AND, 90CRI , 3LSQCA45R 1MMS TRII
Light Source: -
Ballast/Driver: -

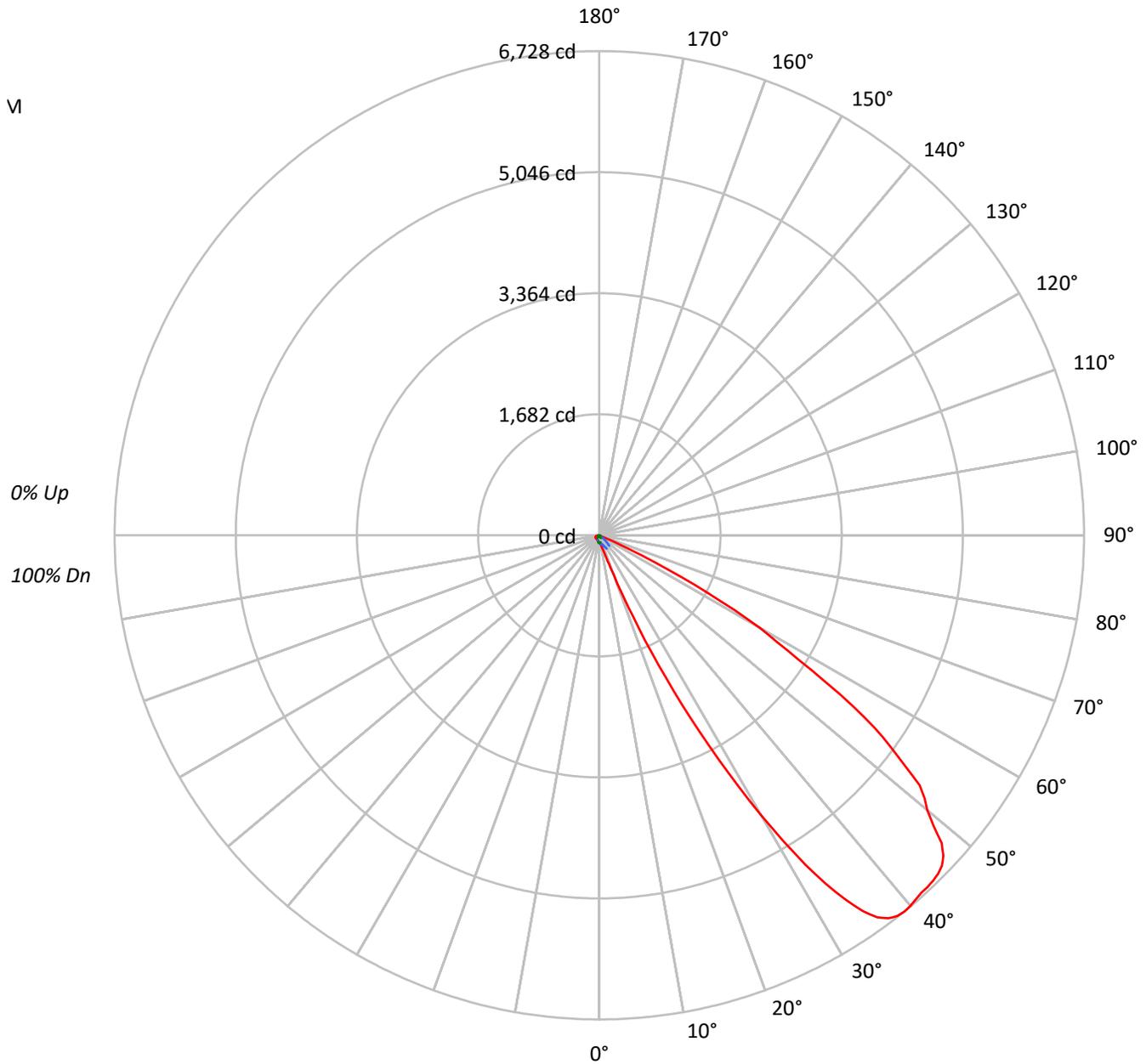
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2079.0 lumens
Efficiency: N/A
Efficacy: 72.2 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): 28.8
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



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



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| RF | 20 | | | | 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 | 0 |
| 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 | 107 | 104 | 100 | 97 | 99 | 97 | 94 | 96 | 93 | 91 | 92 | 90 | 88 | 86 |
| 2 | 100 | 93 | 86 | 81 | 98 | 91 | 85 | 80 | 87 | 82 | 78 | 84 | 80 | 76 | 81 | 78 | 75 | 72 |
| 3 | 91 | 81 | 73 | 66 | 89 | 79 | 72 | 66 | 76 | 70 | 65 | 73 | 68 | 64 | 71 | 66 | 62 | 60 |
| 4 | 82 | 70 | 62 | 55 | 80 | 69 | 61 | 54 | 67 | 59 | 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 | 38 | 50 | 43 | 37 | 48 | 42 | 37 | 35 |
| 7 | 62 | 48 | 39 | 32 | 60 | 47 | 38 | 32 | 45 | 37 | 32 | 44 | 37 | 31 | 42 | 36 | 31 | 29 |
| 8 | 57 | 42 | 33 | 27 | 55 | 42 | 33 | 27 | 40 | 32 | 27 | 39 | 32 | 27 | 38 | 31 | 26 | 24 |
| 9 | 52 | 38 | 29 | 23 | 51 | 37 | 29 | 23 | 36 | 28 | 23 | 35 | 28 | 23 | 34 | 27 | 23 | 21 |
| 10 | 48 | 34 | 25 | 20 | 47 | 33 | 25 | 20 | 32 | 25 | 20 | 31 | 24 | 20 | 30 | 24 | 19 | 18 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° | 135° | 180° |
|-----|---------|-------|-------|-------|-------|
| 0° | 18411 | 18411 | 18411 | 18411 | 18411 |
| 5° | 20469 | 19812 | 18152 | 16510 | 16182 |
| 10° | 24710 | 21038 | 16701 | 15022 | 14690 |
| 15° | 40509 | 22804 | 14299 | 13283 | 13622 |
| 20° | 107070 | 26941 | 11895 | 11895 | 12939 |
| 25° | 412890 | 33388 | 9425 | 10889 | 12694 |
| 30° | 890759 | 44427 | 7597 | 10639 | 12529 |
| 35° | 1340733 | 52582 | 6412 | 10428 | 12846 |
| 40° | 1510503 | 52788 | 5576 | 10724 | 13737 |
| 45° | 1619671 | 40918 | 5115 | 11155 | 14881 |
| 50° | 1591965 | 25587 | 4608 | 11762 | 16371 |
| 55° | 1400537 | 12611 | 4594 | 13181 | 18346 |
| 60° | 886499 | 2618 | 5270 | 14467 | 20391 |
| 65° | 181303 | 774 | 5461 | 15567 | 22576 |
| 70° | 3827 | 957 | 5791 | 17322 | 25983 |
| 75° | 3793 | 2529 | 6321 | 19031 | 29212 |
| 80° | 3769 | 1884 | 7538 | 20828 | 34118 |
| 85° | 3754 | 3754 | 15018 | 22724 | 37742 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 47°
 Luminance: 1648922 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 10.0 | 0.5 |
| 10°-20° | 32.9 | 1.6 |
| 20°-30° | 161.5 | 7.8 |
| 30°-40° | 525.2 | 25.3 |
| 40°-50° | 724.1 | 34.8 |
| 50°-60° | 504.4 | 24.3 |
| 60°-70° | 95.6 | 4.6 |
| 70°-80° | 17.3 | 0.8 |
| 80°-90° | 8.0 | 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° | 204.4 | 9.8 |
| 0°-40° | 729.7 | 35.1 |
| 0°-60° | 1958.1 | 94.2 |
| 0°-90° | 2079.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 2079.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 45° | 90° | 135° | 180° | Flux |
|-----|------|-----|-----|------|------|------|
| 0° | 107 | 107 | 107 | 107 | 107 | |
| 5° | 118 | 115 | 105 | 96 | 94 | 12 |
| 15° | 227 | 128 | 80 | 74 | 76 | 83 |
| 25° | 2173 | 176 | 50 | 57 | 67 | 1119 |
| 35° | 6377 | 250 | 30 | 50 | 61 | 3854 |
| 45° | 6650 | 168 | 21 | 46 | 61 | 5057 |
| 55° | 4664 | 42 | 15 | 44 | 61 | 3987 |
| 65° | 445 | 2 | 13 | 38 | 55 | 787 |
| 75° | 6 | 4 | 10 | 29 | 44 | 6 |
| 85° | 2 | 2 | 8 | 12 | 19 | 2 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P1309725

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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|--------|--------|-------|-------|-------|-------|
| 0° | 106.9 | 106.9 | 106.9 | 106.9 | 106.9 | 106.9 | 106.9 | 106.9 | 106.9 | 106.9 | 106.9 |
| 2.5° | 110.7 | 110.7 | 110.7 | 110.7 | 110.7 | 110.7 | 110.7 | 110.7 | 110.7 | 108.8 | 106.9 |
| 5° | 118.4 | 118.4 | 118.4 | 118.4 | 116.5 | 116.5 | 116.5 | 114.6 | 114.6 | 110.7 | 105.0 |
| 7.5° | 126.0 | 126.0 | 126.0 | 126.0 | 124.1 | 122.2 | 120.3 | 120.3 | 118.4 | 108.8 | 101.2 |
| 10° | 141.3 | 141.3 | 139.4 | 137.5 | 135.6 | 131.7 | 129.8 | 126.0 | 120.3 | 106.9 | 95.5 |
| 12.5° | 171.8 | 168.0 | 166.1 | 162.3 | 156.6 | 148.9 | 141.3 | 135.6 | 122.2 | 103.1 | 89.7 |
| 15° | 227.2 | 223.4 | 215.7 | 204.3 | 192.8 | 177.6 | 164.2 | 150.8 | 127.9 | 97.4 | 80.2 |
| 17.5° | 324.6 | 313.1 | 301.7 | 282.6 | 253.9 | 227.2 | 198.6 | 173.7 | 135.6 | 91.6 | 72.6 |
| 20° | 584.2 | 576.6 | 507.9 | 454.4 | 368.5 | 307.4 | 250.1 | 208.1 | 147.0 | 85.9 | 64.9 |
| 22.5° | 1204.8 | 1124.6 | 1011.9 | 828.6 | 645.3 | 475.4 | 345.6 | 261.6 | 158.5 | 78.3 | 57.3 |
| 25° | 2172.8 | 2046.7 | 1804.3 | 1451.0 | 1071.1 | 758.0 | 500.2 | 341.8 | 175.7 | 70.6 | 49.6 |
| 27.5° | 3289.7 | 3161.8 | 2785.6 | 2298.8 | 1678.3 | 1143.7 | 714.1 | 452.5 | 198.6 | 63.0 | 43.9 |
| 30° | 4479.2 | 4370.3 | 3893.0 | 3219.0 | 2365.6 | 1601.9 | 956.5 | 565.1 | 223.4 | 55.4 | 38.2 |
| 31° | 4958.4 | 4819.0 | 4303.5 | 3585.6 | 2688.3 | 1790.9 | 1053.9 | 612.9 | 232.9 | 53.5 | 36.3 |
| 32° | 5399.4 | 5241.0 | 4706.4 | 3936.9 | 2949.8 | 1995.2 | 1160.8 | 654.9 | 240.6 | 49.6 | 34.4 |
| 33° | 5779.4 | 5594.2 | 5078.7 | 4269.1 | 3238.1 | 2186.1 | 1271.6 | 695.0 | 246.3 | 45.8 | 32.5 |
| 34° | 6102.0 | 5941.7 | 5388.0 | 4603.3 | 3494.0 | 2369.4 | 1380.4 | 735.1 | 250.1 | 43.9 | 30.5 |
| 35° | 6377.0 | 6231.9 | 5683.9 | 4857.2 | 3744.1 | 2547.0 | 1479.7 | 773.3 | 250.1 | 40.1 | 30.5 |
| 36° | 6562.2 | 6436.2 | 5939.7 | 5116.9 | 3954.1 | 2697.8 | 1563.7 | 807.6 | 250.1 | 36.3 | 28.6 |
| 37° | 6663.4 | 6541.2 | 6107.8 | 5330.7 | 4160.3 | 2846.7 | 1640.1 | 834.4 | 248.2 | 34.4 | 26.7 |
| 38° | 6714.9 | 6608.0 | 6231.9 | 5504.4 | 4303.5 | 2953.6 | 1706.9 | 855.4 | 246.3 | 30.5 | 26.7 |
| 39° | 6728.3 | 6638.5 | 6310.1 | 5630.4 | 4442.9 | 3060.6 | 1754.6 | 866.8 | 240.6 | 28.6 | 24.8 |
| 40° | 6718.7 | 6640.4 | 6352.1 | 5743.1 | 4549.8 | 3144.6 | 1789.0 | 870.6 | 234.8 | 24.8 | 24.8 |
| 41° | 6699.6 | 6638.5 | 6382.7 | 5821.4 | 4635.7 | 3198.0 | 1802.4 | 863.0 | 227.2 | 21.0 | 22.9 |
| 42° | 6682.5 | 6615.6 | 6396.1 | 5874.8 | 4694.9 | 3224.8 | 1800.4 | 847.7 | 215.7 | 19.1 | 22.9 |
| 43° | 6682.5 | 6606.1 | 6398.0 | 5909.2 | 4723.5 | 3226.7 | 1777.5 | 819.1 | 200.5 | 17.2 | 21.0 |
| 44° | 6671.0 | 6600.4 | 6407.5 | 5932.1 | 4731.2 | 3209.5 | 1741.3 | 788.5 | 183.3 | 15.3 | 21.0 |
| 45° | 6650.0 | 6575.5 | 6405.6 | 5934.0 | 4717.8 | 3167.5 | 1682.1 | 748.4 | 168.0 | 11.5 | 21.0 |
| 46° | 6609.9 | 6543.1 | 6388.4 | 5920.7 | 4677.7 | 3106.4 | 1611.4 | 708.3 | 150.8 | 9.5 | 19.1 |
| 47° | 6529.7 | 6478.2 | 6342.6 | 5874.8 | 4616.6 | 3016.7 | 1527.4 | 662.5 | 137.5 | 7.6 | 19.1 |
| 48° | 6392.2 | 6356.0 | 6264.3 | 5773.6 | 4500.2 | 2905.9 | 1437.7 | 612.9 | 124.1 | 7.6 | 19.1 |
| 49° | 6140.2 | 6111.6 | 6058.1 | 5611.4 | 4351.2 | 2770.4 | 1340.3 | 557.5 | 110.7 | 5.7 | 19.1 |
| 50° | 5941.7 | 5911.1 | 5802.3 | 5338.3 | 4137.4 | 2598.5 | 1233.4 | 502.1 | 95.5 | 3.8 | 17.2 |
| 51° | 5809.9 | 5760.3 | 5588.4 | 5021.4 | 3826.2 | 2369.4 | 1116.9 | 446.8 | 80.2 | 3.8 | 17.2 |
| 52° | 5643.8 | 5569.3 | 5355.5 | 4736.9 | 3541.7 | 2140.3 | 990.9 | 391.4 | 70.6 | 3.8 | 17.2 |
| 53° | 5296.3 | 5269.6 | 5057.7 | 4431.4 | 3257.2 | 1920.7 | 861.1 | 345.6 | 61.1 | 3.8 | 17.2 |
| 54° | 4992.7 | 4952.7 | 4664.4 | 4007.6 | 2947.9 | 1676.3 | 727.4 | 305.5 | 51.6 | 3.8 | 17.2 |
| 55° | 4664.4 | 4586.1 | 4330.2 | 3650.5 | 2585.2 | 1451.0 | 599.5 | 263.5 | 42.0 | 3.8 | 15.3 |
| 56° | 4250.0 | 4181.3 | 3906.4 | 3268.7 | 2251.0 | 1221.9 | 502.1 | 215.7 | 32.5 | 3.8 | 15.3 |
| 57° | 3746.0 | 3683.0 | 3471.1 | 2799.0 | 1903.5 | 998.5 | 408.6 | 173.7 | 24.8 | 3.8 | 15.3 |
| 58° | 3259.1 | 3188.5 | 2946.0 | 2348.4 | 1537.0 | 792.3 | 341.8 | 141.3 | 19.1 | 3.8 | 15.3 |
| 59° | 2884.9 | 2789.4 | 2476.3 | 1972.3 | 1202.8 | 601.4 | 271.1 | 112.6 | 13.4 | 3.8 | 15.3 |
| 60° | 2573.7 | 2495.4 | 2170.8 | 1642.0 | 943.2 | 443.0 | 200.5 | 85.9 | 7.6 | 3.8 | 15.3 |
| 62.5° | 1491.1 | 1470.1 | 1178.0 | 845.8 | 444.9 | 206.2 | 99.3 | 40.1 | 3.8 | 5.7 | 15.3 |
| 65° | 444.9 | 387.6 | 301.7 | 179.5 | 114.6 | 68.7 | 36.3 | 13.4 | 1.9 | 5.7 | 13.4 |



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CANDELA DISTRIBUTION (continued):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 45° | 67.5° | 90° |
|-------|------|------|------|------|------|------|-----|-----|-----|-------|------|
| 67.5° | 13.4 | 13.4 | 13.4 | 13.4 | 13.4 | 13.4 | 7.6 | 3.8 | 1.9 | 5.7 | 13.4 |
| 70° | 7.6 | 5.7 | 5.7 | 5.7 | 5.7 | 3.8 | 3.8 | 1.9 | 1.9 | 5.7 | 11.5 |
| 72.5° | 5.7 | 5.7 | 5.7 | 5.7 | 3.8 | 3.8 | 3.8 | 1.9 | 3.8 | 5.7 | 9.5 |
| 75° | 5.7 | 3.8 | 3.8 | 3.8 | 3.8 | 1.9 | 1.9 | 1.9 | 3.8 | 5.7 | 9.5 |
| 77.5° | 3.8 | 3.8 | 3.8 | 3.8 | 1.9 | 1.9 | 1.9 | 1.9 | 3.8 | 5.7 | 9.5 |
| 80° | 3.8 | 3.8 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 5.7 | 7.6 |
| 82.5° | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 5.7 | 7.6 |
| 85° | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 5.7 | 7.6 |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.9 | 1.9 | 5.7 | 5.7 |
| 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: P1309725

CATALOG NUMBER: LDSQA3D24R409030D010 3LSQCA45R 1MMS

CANDELA DISTRIBUTION (continued):

| | 112.5° | 135° | 157.5° | 180° |
|-------|--------|-------|--------|-------|
| 0° | 106.9 | 106.9 | 106.9 | 106.9 |
| 2.5° | 103.1 | 101.2 | 99.3 | 99.3 |
| 5° | 99.3 | 95.5 | 95.5 | 93.6 |
| 7.5° | 93.6 | 89.7 | 89.7 | 89.7 |
| 10° | 87.8 | 85.9 | 85.9 | 84.0 |
| 12.5° | 80.2 | 80.2 | 80.2 | 80.2 |
| 15° | 74.5 | 74.5 | 76.4 | 76.4 |
| 17.5° | 66.8 | 68.7 | 72.6 | 74.5 |
| 20° | 61.1 | 64.9 | 68.7 | 70.6 |
| 22.5° | 57.3 | 61.1 | 66.8 | 68.7 |
| 25° | 51.6 | 57.3 | 64.9 | 66.8 |
| 27.5° | 47.7 | 55.4 | 61.1 | 64.9 |
| 30° | 43.9 | 53.5 | 59.2 | 63.0 |
| 31° | 43.9 | 51.6 | 59.2 | 63.0 |
| 32° | 42.0 | 49.6 | 59.2 | 61.1 |
| 33° | 42.0 | 49.6 | 59.2 | 61.1 |
| 34° | 40.1 | 49.6 | 57.3 | 61.1 |
| 35° | 40.1 | 49.6 | 57.3 | 61.1 |
| 36° | 38.2 | 47.7 | 57.3 | 61.1 |
| 37° | 38.2 | 47.7 | 57.3 | 61.1 |
| 38° | 36.3 | 47.7 | 57.3 | 61.1 |
| 39° | 36.3 | 47.7 | 57.3 | 61.1 |
| 40° | 36.3 | 47.7 | 57.3 | 61.1 |
| 41° | 34.4 | 47.7 | 57.3 | 61.1 |
| 42° | 34.4 | 47.7 | 57.3 | 61.1 |
| 43° | 34.4 | 45.8 | 57.3 | 61.1 |
| 44° | 34.4 | 45.8 | 57.3 | 61.1 |
| 45° | 32.5 | 45.8 | 57.3 | 61.1 |
| 46° | 32.5 | 45.8 | 57.3 | 61.1 |
| 47° | 32.5 | 45.8 | 57.3 | 61.1 |
| 48° | 32.5 | 45.8 | 57.3 | 61.1 |
| 49° | 32.5 | 45.8 | 57.3 | 61.1 |
| 50° | 30.5 | 43.9 | 57.3 | 61.1 |
| 51° | 30.5 | 43.9 | 57.3 | 61.1 |
| 52° | 30.5 | 43.9 | 57.3 | 61.1 |
| 53° | 30.5 | 43.9 | 57.3 | 61.1 |
| 54° | 28.6 | 43.9 | 57.3 | 61.1 |
| 55° | 28.6 | 43.9 | 57.3 | 61.1 |
| 56° | 28.6 | 43.9 | 57.3 | 59.2 |
| 57° | 28.6 | 43.9 | 55.4 | 59.2 |
| 58° | 28.6 | 42.0 | 55.4 | 59.2 |
| 59° | 28.6 | 42.0 | 55.4 | 59.2 |
| 60° | 28.6 | 42.0 | 55.4 | 59.2 |
| 62.5° | 26.7 | 42.0 | 53.5 | 57.3 |
| 65° | 24.8 | 38.2 | 53.5 | 55.4 |



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CATALOG NUMBER: LDSQA3D24R409030D010 3LSQCA45R 1MMS

CANDELA DISTRIBUTION (continued):

| | 112.5° | 135° | 157.5° | 180° |
|-------|--------|------|--------|------|
| 67.5° | 24.8 | 36.3 | 49.6 | 53.5 |
| 70° | 22.9 | 34.4 | 47.7 | 51.6 |
| 72.5° | 19.1 | 32.5 | 43.9 | 47.7 |
| 75° | 17.2 | 28.6 | 40.1 | 43.9 |
| 77.5° | 15.3 | 24.8 | 36.3 | 38.2 |
| 80° | 13.4 | 21.0 | 30.5 | 34.4 |
| 82.5° | 9.5 | 15.3 | 24.8 | 26.7 |
| 85° | 7.6 | 11.5 | 17.2 | 19.1 |
| 87.5° | 5.7 | 5.7 | 9.5 | 9.5 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)