

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: P1309109

Luminaire Tested: LDSQA3D09R409030DE010 3LSQCA45R 1MW

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1309109
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: LDSQA3D09R409030DE010 3LSQCA45R 1MW
Description: 3in Adjustable LED luminaire with, R40 optic, 3000K CCT AND, 90CRI , 3LSQCA45R 1MW TRIM
Light Source: -
Ballast/Driver: -

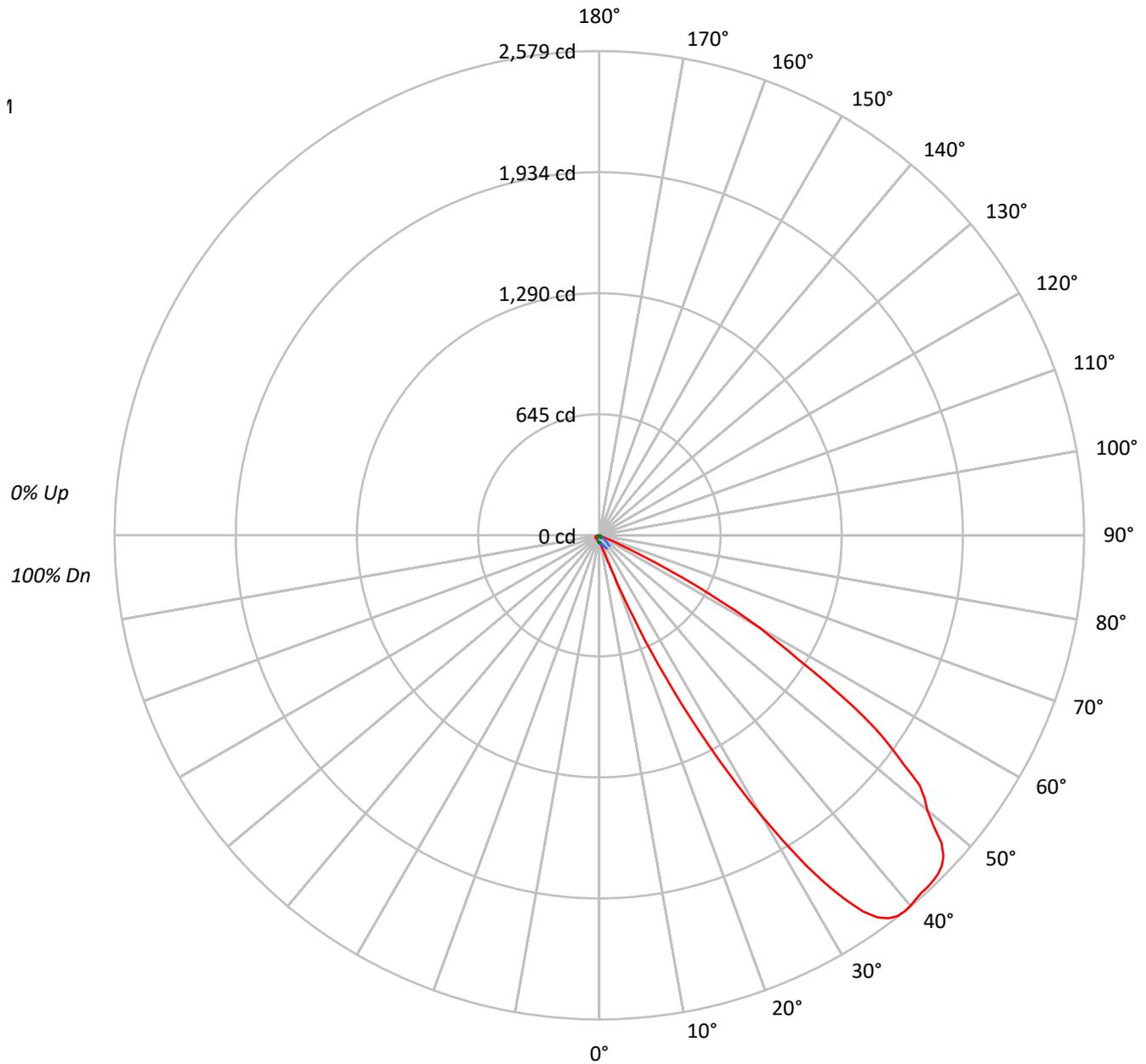
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 797.0 lumens
Efficiency: N/A
Efficacy: 71.8 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): 11.1
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: P1309109
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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 | | | | |
| 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 | 99 | 97 | 94 | 96 | 93 | 91 | 92 | 90 | 88 | 88 | 88 | 88 | 86 |
| 2 | 100 | 93 | 86 | 81 | 98 | 91 | 85 | 80 | 87 | 82 | 78 | 84 | 80 | 76 | 81 | 78 | 75 | 75 | 75 | 75 | 72 |
| 3 | 91 | 81 | 73 | 66 | 89 | 79 | 72 | 66 | 76 | 70 | 65 | 73 | 68 | 64 | 71 | 66 | 62 | 62 | 62 | 62 | 60 |
| 4 | 82 | 70 | 62 | 55 | 80 | 69 | 61 | 54 | 67 | 59 | 54 | 64 | 58 | 53 | 62 | 57 | 52 | 52 | 52 | 52 | 50 |
| 5 | 75 | 62 | 52 | 46 | 73 | 60 | 52 | 45 | 58 | 51 | 45 | 56 | 50 | 44 | 54 | 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 | 39 | 32 | 60 | 47 | 38 | 32 | 45 | 37 | 32 | 44 | 37 | 31 | 42 | 36 | 31 | 31 | 31 | 31 | 29 |
| 8 | 57 | 42 | 33 | 27 | 55 | 42 | 33 | 27 | 40 | 32 | 27 | 39 | 32 | 27 | 38 | 31 | 26 | 26 | 26 | 26 | 24 |
| 9 | 52 | 38 | 29 | 23 | 51 | 37 | 29 | 23 | 36 | 28 | 23 | 35 | 28 | 23 | 34 | 27 | 23 | 23 | 23 | 23 | 21 |
| 10 | 48 | 34 | 25 | 20 | 47 | 33 | 25 | 20 | 32 | 25 | 20 | 31 | 24 | 20 | 30 | 24 | 19 | 19 | 19 | 19 | 18 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° | 135° | 180° |
|-----|--------|-------|------|------|-------|
| 0° | 7061 | 7061 | 7061 | 7061 | 7061 |
| 5° | 7849 | 7589 | 6967 | 6327 | 6206 |
| 10° | 9478 | 8062 | 6401 | 5754 | 5631 |
| 15° | 15530 | 8737 | 5474 | 5081 | 5224 |
| 20° | 41054 | 10337 | 4564 | 4564 | 4967 |
| 25° | 158273 | 12789 | 3611 | 4181 | 4865 |
| 30° | 341472 | 17023 | 2903 | 4077 | 4813 |
| 35° | 513986 | 20162 | 2460 | 3995 | 4920 |
| 40° | 579071 | 20234 | 2136 | 4114 | 5261 |
| 45° | 620906 | 15685 | 1973 | 4287 | 5699 |
| 50° | 610293 | 9806 | 1768 | 4501 | 6270 |
| 55° | 536897 | 4834 | 1772 | 5044 | 7026 |
| 60° | 339830 | 999 | 2032 | 5546 | 7819 |
| 65° | 69481 | 285 | 2078 | 5950 | 8639 |
| 70° | 1460 | 352 | 2216 | 6647 | 9970 |
| 75° | 1464 | 998 | 2462 | 7320 | 11179 |
| 80° | 1488 | 694 | 2876 | 8034 | 13092 |
| 85° | 1383 | 1383 | 5730 | 8695 | 14425 |

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 47°
 Luminance: 632124 cd/sqm



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 3.8 | 0.5 |
| 10°-20° | 12.6 | 1.6 |
| 20°-30° | 61.9 | 7.8 |
| 30°-40° | 201.4 | 25.3 |
| 40°-50° | 277.6 | 34.8 |
| 50°-60° | 193.4 | 24.3 |
| 60°-70° | 36.6 | 4.6 |
| 70°-80° | 6.6 | 0.8 |
| 80°-90° | 3.1 | 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° | 78.4 | 9.8 |
| 0°-40° | 279.7 | 35.1 |
| 0°-60° | 750.7 | 94.2 |
| 0°-90° | 797.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 797.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 45° | 90° | 135° | 180° | Flux |
|-----|------|-----|-----|------|------|------|
| 0° | 41 | 41 | 41 | 41 | 41 | |
| 5° | 45 | 44 | 40 | 37 | 36 | 5 |
| 15° | 87 | 49 | 31 | 28 | 29 | 32 |
| 25° | 833 | 67 | 19 | 22 | 26 | 429 |
| 35° | 2445 | 96 | 12 | 19 | 23 | 1477 |
| 45° | 2549 | 64 | 8 | 18 | 23 | 1939 |
| 55° | 1788 | 16 | 6 | 17 | 23 | 1528 |
| 65° | 170 | 1 | 5 | 15 | 21 | 302 |
| 75° | 2 | 2 | 4 | 11 | 17 | 2 |
| 85° | 1 | 1 | 3 | 4 | 7 | 1 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P1309109

CATALOG NUMBER: LDSQA3D09R409030DE010 3LSQCA45R 1MW

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|--------|-------|-------|------|-------|------|
| 0° | 41.0 | 41.0 | 41.0 | 41.0 | 41.0 | 41.0 | 41.0 | 41.0 | 41.0 | 41.0 | 41.0 |
| 2.5° | 42.5 | 42.5 | 42.5 | 42.5 | 42.5 | 42.5 | 42.5 | 42.5 | 42.5 | 41.7 | 41.0 |
| 5° | 45.4 | 45.4 | 45.4 | 45.4 | 44.6 | 44.6 | 44.6 | 43.9 | 43.9 | 42.5 | 40.3 |
| 7.5° | 48.3 | 48.3 | 48.3 | 48.3 | 47.6 | 46.8 | 46.1 | 46.1 | 45.4 | 41.7 | 38.8 |
| 10° | 54.2 | 54.2 | 53.4 | 52.7 | 52.0 | 50.5 | 49.8 | 48.3 | 46.1 | 41.0 | 36.6 |
| 12.5° | 65.9 | 64.4 | 63.7 | 62.2 | 60.0 | 57.1 | 54.2 | 52.0 | 46.8 | 39.5 | 34.4 |
| 15° | 87.1 | 85.6 | 82.7 | 78.3 | 73.9 | 68.1 | 62.9 | 57.8 | 49.0 | 37.3 | 30.7 |
| 17.5° | 124.4 | 120.0 | 115.6 | 108.3 | 97.3 | 87.1 | 76.1 | 66.6 | 52.0 | 35.1 | 27.8 |
| 20° | 224.0 | 221.0 | 194.7 | 174.2 | 141.3 | 117.8 | 95.9 | 79.8 | 56.4 | 32.9 | 24.9 |
| 22.5° | 461.9 | 431.1 | 387.9 | 317.7 | 247.4 | 182.3 | 132.5 | 100.3 | 60.8 | 30.0 | 22.0 |
| 25° | 832.9 | 784.6 | 691.7 | 556.3 | 410.6 | 290.6 | 191.8 | 131.0 | 67.3 | 27.1 | 19.0 |
| 27.5° | 1261.1 | 1212.1 | 1067.9 | 881.2 | 643.4 | 438.4 | 273.7 | 173.5 | 76.1 | 24.2 | 16.8 |
| 30° | 1717.1 | 1675.4 | 1492.4 | 1234.0 | 906.9 | 614.1 | 366.7 | 216.7 | 85.6 | 21.2 | 14.6 |
| 31° | 1900.8 | 1847.4 | 1649.8 | 1374.6 | 1030.6 | 686.6 | 404.0 | 235.0 | 89.3 | 20.5 | 13.9 |
| 32° | 2069.9 | 2009.2 | 1804.2 | 1509.2 | 1130.8 | 764.9 | 445.0 | 251.1 | 92.2 | 19.0 | 13.2 |
| 33° | 2215.6 | 2144.6 | 1946.9 | 1636.6 | 1241.4 | 838.1 | 487.5 | 266.4 | 94.4 | 17.6 | 12.4 |
| 34° | 2339.3 | 2277.8 | 2065.5 | 1764.7 | 1339.4 | 908.3 | 529.2 | 281.8 | 95.9 | 16.8 | 11.7 |
| 35° | 2444.7 | 2389.0 | 2179.0 | 1862.0 | 1435.3 | 976.4 | 567.2 | 296.4 | 95.9 | 15.4 | 11.7 |
| 36° | 2515.7 | 2467.3 | 2277.0 | 1961.6 | 1515.8 | 1034.2 | 599.5 | 309.6 | 95.9 | 13.9 | 11.0 |
| 37° | 2554.4 | 2507.6 | 2341.5 | 2043.6 | 1594.9 | 1091.3 | 628.7 | 319.9 | 95.2 | 13.2 | 10.2 |
| 38° | 2574.2 | 2533.2 | 2389.0 | 2110.2 | 1649.8 | 1132.3 | 654.3 | 327.9 | 94.4 | 11.7 | 10.2 |
| 39° | 2579.3 | 2544.9 | 2419.0 | 2158.5 | 1703.2 | 1173.3 | 672.6 | 332.3 | 92.2 | 11.0 | 9.5 |
| 40° | 2575.7 | 2545.7 | 2435.1 | 2201.7 | 1744.2 | 1205.5 | 685.8 | 333.8 | 90.0 | 9.5 | 9.5 |
| 41° | 2568.4 | 2544.9 | 2446.9 | 2231.7 | 1777.1 | 1226.0 | 690.9 | 330.8 | 87.1 | 8.1 | 8.8 |
| 42° | 2561.8 | 2536.2 | 2452.0 | 2252.2 | 1799.8 | 1236.2 | 690.2 | 325.0 | 82.7 | 7.3 | 8.8 |
| 43° | 2561.8 | 2532.5 | 2452.7 | 2265.3 | 1810.8 | 1237.0 | 681.4 | 314.0 | 76.9 | 6.6 | 8.1 |
| 44° | 2557.4 | 2530.3 | 2456.4 | 2274.1 | 1813.7 | 1230.4 | 667.5 | 302.3 | 70.3 | 5.9 | 8.1 |
| 45° | 2549.3 | 2520.8 | 2455.6 | 2274.9 | 1808.6 | 1214.3 | 644.8 | 286.9 | 64.4 | 4.4 | 8.1 |
| 46° | 2534.0 | 2508.3 | 2449.1 | 2269.7 | 1793.2 | 1190.9 | 617.8 | 271.5 | 57.8 | 3.7 | 7.3 |
| 47° | 2503.2 | 2483.5 | 2431.5 | 2252.2 | 1769.8 | 1156.5 | 585.5 | 254.0 | 52.7 | 2.9 | 7.3 |
| 48° | 2450.5 | 2436.6 | 2401.5 | 2213.4 | 1725.2 | 1114.0 | 551.1 | 235.0 | 47.6 | 2.9 | 7.3 |
| 49° | 2353.9 | 2342.9 | 2322.4 | 2151.2 | 1668.1 | 1062.0 | 513.8 | 213.7 | 42.5 | 2.2 | 7.3 |
| 50° | 2277.8 | 2266.1 | 2224.3 | 2046.5 | 1586.1 | 996.2 | 472.8 | 192.5 | 36.6 | 1.5 | 6.6 |
| 51° | 2227.3 | 2208.2 | 2142.4 | 1925.0 | 1466.8 | 908.3 | 428.2 | 171.3 | 30.7 | 1.5 | 6.6 |
| 52° | 2163.6 | 2135.1 | 2053.1 | 1815.9 | 1357.7 | 820.5 | 379.9 | 150.0 | 27.1 | 1.5 | 6.6 |
| 53° | 2030.4 | 2020.1 | 1938.9 | 1698.8 | 1248.7 | 736.3 | 330.1 | 132.5 | 23.4 | 1.5 | 6.6 |
| 54° | 1914.0 | 1898.6 | 1788.1 | 1536.3 | 1130.1 | 642.6 | 278.9 | 117.1 | 19.8 | 1.5 | 6.6 |
| 55° | 1788.1 | 1758.1 | 1660.0 | 1399.5 | 991.0 | 556.3 | 229.8 | 101.0 | 16.1 | 1.5 | 5.9 |
| 56° | 1629.3 | 1602.9 | 1497.5 | 1253.1 | 862.9 | 468.4 | 192.5 | 82.7 | 12.4 | 1.5 | 5.9 |
| 57° | 1436.1 | 1411.9 | 1330.7 | 1073.0 | 729.7 | 382.8 | 156.6 | 66.6 | 9.5 | 1.5 | 5.9 |
| 58° | 1249.4 | 1222.3 | 1129.4 | 900.3 | 589.2 | 303.8 | 131.0 | 54.2 | 7.3 | 1.5 | 5.9 |
| 59° | 1106.0 | 1069.4 | 949.3 | 756.1 | 461.1 | 230.6 | 103.9 | 43.2 | 5.1 | 1.5 | 5.9 |
| 60° | 986.6 | 956.6 | 832.2 | 629.5 | 361.6 | 169.8 | 76.9 | 32.9 | 2.9 | 1.5 | 5.9 |
| 62.5° | 571.6 | 563.6 | 451.6 | 324.2 | 170.5 | 79.0 | 38.1 | 15.4 | 1.5 | 2.2 | 5.9 |
| 65° | 170.5 | 148.6 | 115.6 | 68.8 | 43.9 | 26.3 | 13.9 | 5.1 | 0.7 | 2.2 | 5.1 |



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CANDELA DISTRIBUTION (continued):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 45° | 67.5° | 90° |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|-----|
| 67.5° | 5.1 | 5.1 | 5.1 | 5.1 | 5.1 | 5.1 | 2.9 | 1.5 | 0.7 | 2.2 | 5.1 |
| 70° | 2.9 | 2.2 | 2.2 | 2.2 | 2.2 | 1.5 | 1.5 | 0.7 | 0.7 | 2.2 | 4.4 |
| 72.5° | 2.2 | 2.2 | 2.2 | 2.2 | 1.5 | 1.5 | 1.5 | 0.7 | 1.5 | 2.2 | 3.7 |
| 75° | 2.2 | 1.5 | 1.5 | 1.5 | 1.5 | 0.7 | 0.7 | 0.7 | 1.5 | 2.2 | 3.7 |
| 77.5° | 1.5 | 1.5 | 1.5 | 1.5 | 0.7 | 0.7 | 0.7 | 0.7 | 1.5 | 2.2 | 3.7 |
| 80° | 1.5 | 1.5 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 2.2 | 2.9 |
| 82.5° | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 2.2 | 2.9 |
| 85° | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 2.2 | 2.9 |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.7 | 0.7 | 2.2 | 2.2 |
| 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: P1309109

CATALOG NUMBER: LDSQA3D09R409030DE010 3LSQCA45R 1MW

CANDELA DISTRIBUTION (continued):

| | 112.5° | 135° | 157.5° | 180° |
|-------|--------|------|--------|------|
| 0° | 41.0 | 41.0 | 41.0 | 41.0 |
| 2.5° | 39.5 | 38.8 | 38.1 | 38.1 |
| 5° | 38.1 | 36.6 | 36.6 | 35.9 |
| 7.5° | 35.9 | 34.4 | 34.4 | 34.4 |
| 10° | 33.7 | 32.9 | 32.9 | 32.2 |
| 12.5° | 30.7 | 30.7 | 30.7 | 30.7 |
| 15° | 28.5 | 28.5 | 29.3 | 29.3 |
| 17.5° | 25.6 | 26.3 | 27.8 | 28.5 |
| 20° | 23.4 | 24.9 | 26.3 | 27.1 |
| 22.5° | 22.0 | 23.4 | 25.6 | 26.3 |
| 25° | 19.8 | 22.0 | 24.9 | 25.6 |
| 27.5° | 18.3 | 21.2 | 23.4 | 24.9 |
| 30° | 16.8 | 20.5 | 22.7 | 24.2 |
| 31° | 16.8 | 19.8 | 22.7 | 24.2 |
| 32° | 16.1 | 19.0 | 22.7 | 23.4 |
| 33° | 16.1 | 19.0 | 22.7 | 23.4 |
| 34° | 15.4 | 19.0 | 22.0 | 23.4 |
| 35° | 15.4 | 19.0 | 22.0 | 23.4 |
| 36° | 14.6 | 18.3 | 22.0 | 23.4 |
| 37° | 14.6 | 18.3 | 22.0 | 23.4 |
| 38° | 13.9 | 18.3 | 22.0 | 23.4 |
| 39° | 13.9 | 18.3 | 22.0 | 23.4 |
| 40° | 13.9 | 18.3 | 22.0 | 23.4 |
| 41° | 13.2 | 18.3 | 22.0 | 23.4 |
| 42° | 13.2 | 18.3 | 22.0 | 23.4 |
| 43° | 13.2 | 17.6 | 22.0 | 23.4 |
| 44° | 13.2 | 17.6 | 22.0 | 23.4 |
| 45° | 12.4 | 17.6 | 22.0 | 23.4 |
| 46° | 12.4 | 17.6 | 22.0 | 23.4 |
| 47° | 12.4 | 17.6 | 22.0 | 23.4 |
| 48° | 12.4 | 17.6 | 22.0 | 23.4 |
| 49° | 12.4 | 17.6 | 22.0 | 23.4 |
| 50° | 11.7 | 16.8 | 22.0 | 23.4 |
| 51° | 11.7 | 16.8 | 22.0 | 23.4 |
| 52° | 11.7 | 16.8 | 22.0 | 23.4 |
| 53° | 11.7 | 16.8 | 22.0 | 23.4 |
| 54° | 11.0 | 16.8 | 22.0 | 23.4 |
| 55° | 11.0 | 16.8 | 22.0 | 23.4 |
| 56° | 11.0 | 16.8 | 22.0 | 22.7 |
| 57° | 11.0 | 16.8 | 21.2 | 22.7 |
| 58° | 11.0 | 16.1 | 21.2 | 22.7 |
| 59° | 11.0 | 16.1 | 21.2 | 22.7 |
| 60° | 11.0 | 16.1 | 21.2 | 22.7 |
| 62.5° | 10.2 | 16.1 | 20.5 | 22.0 |
| 65° | 9.5 | 14.6 | 20.5 | 21.2 |



TEST NUMBER: P1309109

CATALOG NUMBER: LDSQA3D09R409030DE010 3LSQCA45R 1MW

CANDELA DISTRIBUTION (continued):

| | 112.5° | 135° | 157.5° | 180° |
|-------|--------|------|--------|------|
| 67.5° | 9.5 | 13.9 | 19.0 | 20.5 |
| 70° | 8.8 | 13.2 | 18.3 | 19.8 |
| 72.5° | 7.3 | 12.4 | 16.8 | 18.3 |
| 75° | 6.6 | 11.0 | 15.4 | 16.8 |
| 77.5° | 5.9 | 9.5 | 13.9 | 14.6 |
| 80° | 5.1 | 8.1 | 11.7 | 13.2 |
| 82.5° | 3.7 | 5.9 | 9.5 | 10.2 |
| 85° | 2.9 | 4.4 | 6.6 | 7.3 |
| 87.5° | 2.2 | 2.2 | 3.7 | 3.7 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)