

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: io LED

Report Number: P251559

Luminaire Tested: **LD4B40D010 EU4B30508040 4LBSW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P251559
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-10)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD4B40D010 EU4B30508040 4LBSW1LI
Description: PORTFOLIO 4 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3906.0 lumens
Efficiency: N/A
Efficacy: 90.8 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.19
Luminous Opening: Circular (Dia: 0.38' x H: 0')
CIE Type: Direct

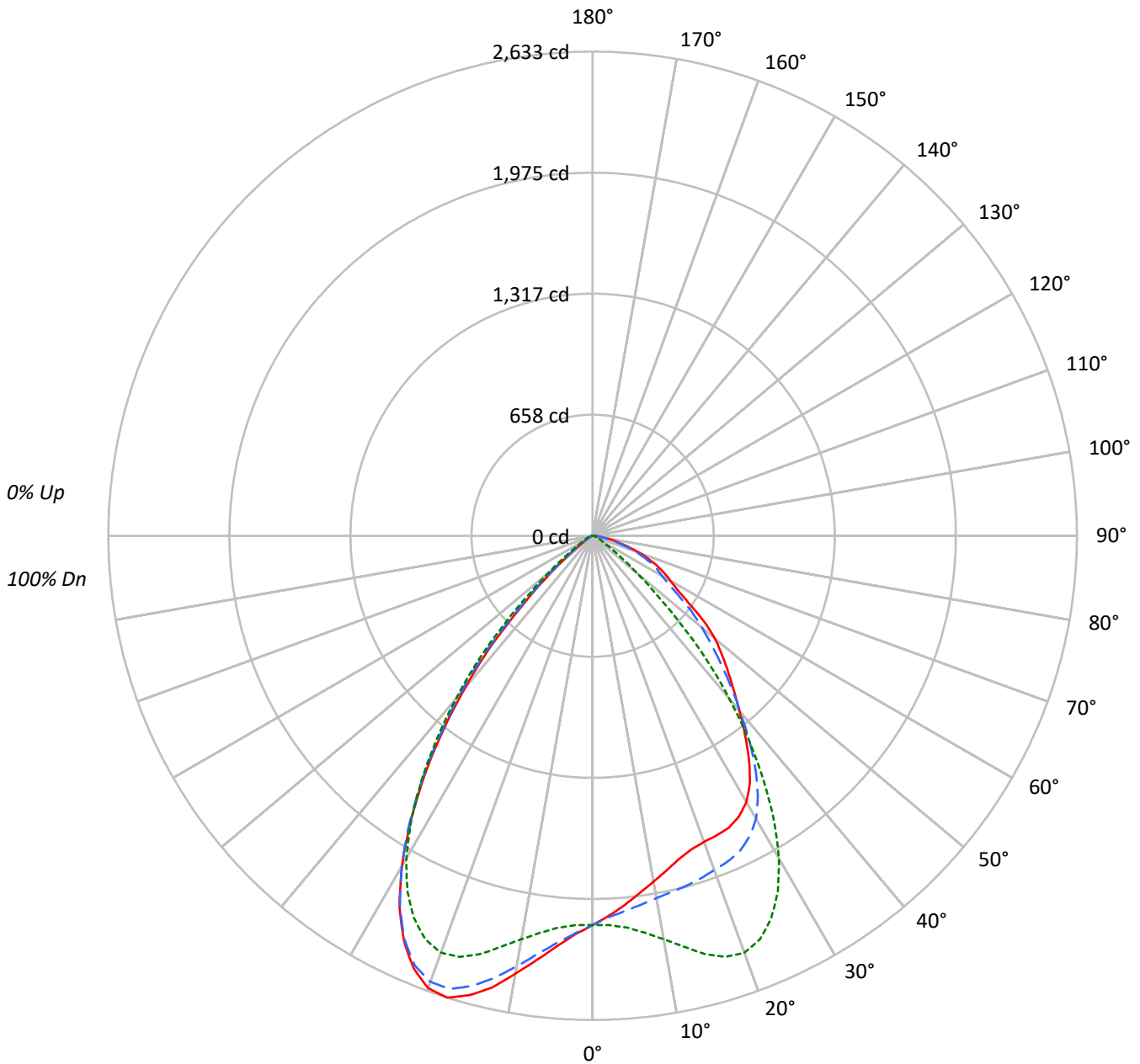
Input Watts (W): 43.02
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P251559

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Luminous Intensity Polar Plot





TEST NUMBER: P251559

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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|---|--|--|--|--|--|--|----|--|--|--|--|--|--|--|--|---|
| RF | 20 | | | | | | | | | 20 | | | | | | | | | 20 | | | | | | | | | 20 | | | | | | | | | |
| RC | 80 | | | | | | | | | 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 | 100 | | | | | | | | | | | | | | | | | | | |
| 1 | 112 | 108 | 105 | 102 | 109 | 106 | 103 | 101 | 102 | 100 | 98 | 98 | 96 | 95 | 95 | 93 | 92 | 90 | | | | | | | | | | | | | | | | | | | |
| 2 | 104 | 98 | 93 | 89 | 102 | 96 | 92 | 88 | 93 | 89 | 86 | 90 | 87 | 84 | 87 | 85 | 82 | 80 | | | | | | | | | | | | | | | | | | | |
| 3 | 97 | 89 | 83 | 78 | 95 | 88 | 82 | 77 | 85 | 80 | 76 | 82 | 78 | 75 | 80 | 77 | 74 | 72 | | | | | | | | | | | | | | | | | | | |
| 4 | 91 | 81 | 75 | 69 | 89 | 80 | 74 | 69 | 78 | 72 | 68 | 76 | 71 | 67 | 74 | 70 | 66 | 64 | | | | | | | | | | | | | | | | | | | |
| 5 | 85 | 75 | 67 | 62 | 83 | 74 | 67 | 62 | 72 | 66 | 61 | 70 | 65 | 60 | 68 | 64 | 60 | 58 | | | | | | | | | | | | | | | | | | | |
| 6 | 79 | 69 | 61 | 56 | 78 | 68 | 61 | 56 | 66 | 60 | 55 | 64 | 59 | 55 | 63 | 58 | 54 | 53 | | | | | | | | | | | | | | | | | | | |
| 7 | 75 | 63 | 56 | 51 | 73 | 62 | 55 | 51 | 61 | 55 | 50 | 60 | 54 | 50 | 58 | 53 | 50 | 48 | | | | | | | | | | | | | | | | | | | |
| 8 | 70 | 58 | 51 | 46 | 69 | 58 | 51 | 46 | 57 | 50 | 46 | 55 | 50 | 46 | 54 | 49 | 45 | 44 | | | | | | | | | | | | | | | | | | | |
| 9 | 66 | 54 | 47 | 42 | 65 | 54 | 47 | 42 | 53 | 46 | 42 | 52 | 46 | 42 | 51 | 46 | 42 | 40 | | | | | | | | | | | | | | | | | | | |
| 10 | 62 | 51 | 44 | 39 | 61 | 50 | 43 | 39 | 49 | 43 | 39 | 48 | 43 | 39 | 47 | 42 | 39 | 37 | | | | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 90° | 180° |
|-----|--------|--------|--------|
| 0° | 206290 | 206290 | 206290 |
| 5° | 197069 | 209240 | 219238 |
| 10° | 188957 | 220407 | 239269 |
| 15° | 183449 | 237540 | 260957 |
| 20° | 183696 | 250186 | 271395 |
| 25° | 188387 | 246928 | 261187 |
| 30° | 188136 | 227939 | 233217 |
| 35° | 176213 | 192655 | 190026 |
| 40° | 157845 | 146942 | 137108 |
| 45° | 143202 | 93309 | 76549 |
| 50° | 131559 | 47335 | 32674 |
| 55° | 107980 | 21120 | 10806 |
| 60° | 94788 | 11851 | 5925 |
| 65° | 89221 | 8924 | 4451 |
| 70° | 76366 | 7095 | 3932 |
| 75° | 58252 | 5196 | 3125 |
| 80° | 41868 | 3087 | 1571 |
| 85° | 30862 | 0 | 0 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 205.6 | 5.3 |
| 10°-20° | 640.8 | 16.4 |
| 20°-30° | 991.4 | 25.4 |
| 30°-40° | 976.8 | 25.0 |
| 40°-50° | 599.8 | 15.4 |
| 50°-60° | 266.7 | 6.8 |
| 60°-70° | 149.0 | 3.8 |
| 70°-80° | 64.5 | 1.7 |
| 80°-90° | 11.5 | 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° | 1837.8 | 47.0 |
| 0°-40° | 2814.5 | 72.1 |
| 0°-60° | 3681.0 | 94.2 |
| 0°-90° | 3906.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 3906.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 45° | 90° | 135° | 180° | Flux |
|-----|------|------|------|------|------|------|
| 0° | 2117 | 2117 | 2117 | 2117 | 2117 | |
| 5° | 2014 | 2048 | 2139 | 2222 | 2241 | 189 |
| 15° | 1818 | 1970 | 2354 | 2534 | 2586 | 516 |
| 25° | 1752 | 1893 | 2296 | 2421 | 2429 | 804 |
| 35° | 1481 | 1542 | 1619 | 1614 | 1597 | 919 |
| 45° | 1039 | 986 | 677 | 591 | 555 | 805 |
| 55° | 636 | 575 | 124 | 72 | 64 | 584 |
| 65° | 387 | 348 | 39 | 22 | 19 | 379 |
| 75° | 155 | 133 | 14 | 8 | 8 | 170 |
| 85° | 28 | 22 | 0 | 0 | 0 | 34 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P251559

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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 22.5° | 25° | 30° | 35° | 40° | 45° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 2116.7 | 2116.7 | 2116.7 | 2116.7 | 2116.7 | 2116.7 | 2116.7 | 2116.7 | 2116.7 | 2116.7 | 2116.7 |
| 2.5° | 2066.9 | 2066.9 | 2066.9 | 2066.9 | 2072.4 | 2064.2 | 2072.4 | 2072.4 | 2080.7 | 2083.5 | 2075.2 |
| 5° | 2014.4 | 2011.6 | 2014.4 | 2014.4 | 2019.9 | 2017.2 | 2025.5 | 2031.0 | 2042.0 | 2047.6 | 2047.6 |
| 7.5° | 1959.1 | 1959.1 | 1959.1 | 1964.7 | 1973.0 | 1970.2 | 1978.5 | 1986.8 | 2003.4 | 2014.4 | 2022.7 |
| 10° | 1909.4 | 1906.6 | 1914.9 | 1917.7 | 1926.0 | 1926.0 | 1939.8 | 1948.1 | 1967.4 | 1989.5 | 2000.6 |
| 12.5° | 1862.4 | 1859.7 | 1865.2 | 1873.5 | 1887.3 | 1887.3 | 1898.4 | 1912.2 | 1939.8 | 1964.7 | 1984.0 |
| 15° | 1818.2 | 1821.0 | 1829.3 | 1834.8 | 1851.4 | 1851.4 | 1865.2 | 1881.8 | 1912.2 | 1942.6 | 1970.2 |
| 17.5° | 1787.8 | 1790.6 | 1796.1 | 1804.4 | 1821.0 | 1821.0 | 1834.8 | 1854.1 | 1887.3 | 1920.5 | 1953.6 |
| 20° | 1771.2 | 1774.0 | 1779.5 | 1787.8 | 1801.6 | 1804.4 | 1815.5 | 1837.6 | 1868.0 | 1903.9 | 1934.3 |
| 22.5° | 1763.0 | 1768.5 | 1774.0 | 1779.5 | 1793.4 | 1793.4 | 1807.2 | 1823.7 | 1854.1 | 1890.1 | 1917.7 |
| 25° | 1751.9 | 1757.4 | 1760.2 | 1768.5 | 1779.5 | 1779.5 | 1787.8 | 1807.2 | 1834.8 | 1865.2 | 1892.8 |
| 27.5° | 1721.5 | 1727.0 | 1729.8 | 1738.1 | 1749.1 | 1746.4 | 1757.4 | 1771.2 | 1796.1 | 1823.7 | 1845.9 |
| 30° | 1671.8 | 1674.5 | 1680.1 | 1682.8 | 1691.1 | 1691.1 | 1699.4 | 1713.2 | 1729.8 | 1754.7 | 1776.8 |
| 32.5° | 1591.6 | 1597.2 | 1599.9 | 1602.7 | 1611.0 | 1608.2 | 1611.0 | 1619.3 | 1635.8 | 1658.0 | 1671.8 |
| 35° | 1481.1 | 1492.2 | 1492.2 | 1497.7 | 1500.4 | 1497.7 | 1497.7 | 1508.7 | 1517.0 | 1533.6 | 1541.9 |
| 37.5° | 1359.5 | 1367.8 | 1365.0 | 1370.6 | 1373.3 | 1365.0 | 1370.6 | 1373.3 | 1384.4 | 1392.7 | 1395.4 |
| 40° | 1240.7 | 1243.5 | 1243.5 | 1243.5 | 1243.5 | 1240.7 | 1243.5 | 1246.2 | 1254.5 | 1254.5 | 1246.2 |
| 42.5° | 1132.9 | 1135.7 | 1135.7 | 1130.2 | 1135.7 | 1132.9 | 1132.9 | 1132.9 | 1132.9 | 1121.9 | 1113.6 |
| 45° | 1039.0 | 1041.7 | 1041.7 | 1039.0 | 1039.0 | 1033.5 | 1030.7 | 1027.9 | 1019.6 | 1005.8 | 986.5 |
| 47.5° | 950.6 | 956.1 | 958.8 | 953.3 | 950.6 | 945.0 | 945.0 | 928.5 | 917.4 | 900.8 | 873.2 |
| 50° | 867.7 | 873.2 | 873.2 | 867.7 | 867.7 | 859.4 | 851.1 | 845.6 | 829.0 | 809.6 | 776.5 |
| 52.5° | 762.7 | 770.9 | 770.9 | 768.2 | 768.2 | 757.1 | 754.4 | 743.3 | 729.5 | 707.4 | 679.8 |
| 55° | 635.5 | 646.6 | 643.8 | 641.1 | 635.5 | 635.5 | 635.5 | 627.3 | 619.0 | 602.4 | 574.8 |
| 57.5° | 544.4 | 547.1 | 547.1 | 544.4 | 544.4 | 538.8 | 538.8 | 530.5 | 527.8 | 511.2 | 489.1 |
| 60° | 486.3 | 486.3 | 489.1 | 486.3 | 483.6 | 480.8 | 478.0 | 472.5 | 464.2 | 453.2 | 436.6 |
| 62.5° | 439.4 | 442.1 | 442.1 | 439.4 | 436.6 | 433.8 | 431.1 | 425.5 | 420.0 | 411.7 | 395.1 |
| 65° | 386.9 | 392.4 | 389.6 | 386.9 | 384.1 | 381.3 | 381.3 | 375.8 | 370.3 | 364.7 | 348.2 |
| 67.5° | 328.8 | 331.6 | 334.4 | 328.8 | 328.8 | 326.1 | 326.1 | 320.5 | 317.8 | 306.7 | 295.7 |
| 70° | 268.0 | 270.8 | 270.8 | 268.0 | 268.0 | 265.3 | 265.3 | 262.5 | 259.7 | 251.5 | 240.4 |
| 72.5° | 210.0 | 212.8 | 210.0 | 207.2 | 207.2 | 207.2 | 204.5 | 201.7 | 199.0 | 193.4 | 185.1 |
| 75° | 154.7 | 154.7 | 157.5 | 154.7 | 152.0 | 152.0 | 149.2 | 149.2 | 143.7 | 140.9 | 132.6 |
| 77.5° | 110.5 | 113.3 | 110.5 | 110.5 | 107.8 | 105.0 | 105.0 | 102.2 | 102.2 | 99.5 | 94.0 |
| 80° | 74.6 | 74.6 | 77.4 | 74.6 | 71.8 | 74.6 | 71.8 | 69.1 | 69.1 | 66.3 | 60.8 |
| 82.5° | 47.0 | 49.7 | 47.0 | 47.0 | 47.0 | 47.0 | 47.0 | 44.2 | 44.2 | 41.4 | 38.7 |
| 85° | 27.6 | 27.6 | 27.6 | 27.6 | 27.6 | 27.6 | 27.6 | 24.9 | 24.9 | 24.9 | 22.1 |
| 87.5° | 13.8 | 13.8 | 11.1 | 11.1 | 13.8 | 13.8 | 13.8 | 11.1 | 11.1 | 11.1 | 11.1 |
| 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):

| | 50° | 55° | 60° | 65° | 67.5° | 70° | 75° | 80° | 85° | 90° | 95° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 2116.7 | 2116.7 | 2116.7 | 2116.7 | 2116.7 | 2116.7 | 2116.7 | 2116.7 | 2116.7 | 2116.7 | 2116.7 |
| 2.5° | 2086.3 | 2089.0 | 2094.5 | 2102.8 | 2102.8 | 2097.3 | 2111.1 | 2111.1 | 2116.7 | 2119.4 | 2130.5 |
| 5° | 2064.2 | 2069.7 | 2080.7 | 2094.5 | 2097.3 | 2094.5 | 2113.9 | 2122.2 | 2130.5 | 2138.8 | 2155.3 |
| 7.5° | 2044.8 | 2055.9 | 2075.2 | 2094.5 | 2102.8 | 2102.8 | 2133.2 | 2144.3 | 2160.9 | 2177.4 | 2196.8 |
| 10° | 2033.8 | 2050.3 | 2078.0 | 2108.4 | 2116.7 | 2124.9 | 2160.9 | 2183.0 | 2205.1 | 2227.2 | 2254.8 |
| 12.5° | 2019.9 | 2050.3 | 2086.3 | 2124.9 | 2141.5 | 2152.6 | 2202.3 | 2229.9 | 2260.3 | 2288.0 | 2323.9 |
| 15° | 2017.2 | 2053.1 | 2100.1 | 2149.8 | 2171.9 | 2188.5 | 2243.8 | 2282.4 | 2318.4 | 2354.3 | 2390.2 |
| 17.5° | 2006.1 | 2050.3 | 2108.4 | 2163.6 | 2191.3 | 2213.4 | 2276.9 | 2323.9 | 2365.3 | 2401.3 | 2442.7 |
| 20° | 1992.3 | 2042.0 | 2105.6 | 2166.4 | 2196.8 | 2218.9 | 2288.0 | 2332.2 | 2379.2 | 2412.3 | 2451.0 |
| 22.5° | 1973.0 | 2022.7 | 2086.3 | 2147.0 | 2174.7 | 2194.0 | 2263.1 | 2301.8 | 2343.2 | 2376.4 | 2412.3 |
| 25° | 1939.8 | 1986.8 | 2042.0 | 2091.8 | 2119.4 | 2136.0 | 2196.8 | 2232.7 | 2263.1 | 2296.3 | 2329.4 |
| 27.5° | 1892.8 | 1928.8 | 1975.7 | 2011.6 | 2028.2 | 2044.8 | 2094.5 | 2124.9 | 2152.6 | 2180.2 | 2202.3 |
| 30° | 1809.9 | 1837.6 | 1870.7 | 1901.1 | 1917.7 | 1920.5 | 1967.4 | 1984.0 | 2006.1 | 2025.5 | 2042.0 |
| 32.5° | 1699.4 | 1721.5 | 1740.8 | 1757.4 | 1768.5 | 1771.2 | 1807.2 | 1812.7 | 1834.8 | 1834.8 | 1859.7 |
| 35° | 1558.5 | 1569.5 | 1583.3 | 1583.3 | 1591.6 | 1583.3 | 1608.2 | 1613.7 | 1616.5 | 1619.3 | 1638.6 |
| 37.5° | 1398.2 | 1403.7 | 1412.0 | 1395.4 | 1395.4 | 1387.2 | 1395.4 | 1401.0 | 1389.9 | 1389.9 | 1403.7 |
| 40° | 1246.2 | 1235.2 | 1224.1 | 1207.5 | 1199.3 | 1182.7 | 1182.7 | 1168.9 | 1160.6 | 1155.0 | 1157.8 |
| 42.5° | 1099.8 | 1074.9 | 1050.0 | 1014.1 | 997.5 | 981.0 | 964.4 | 945.0 | 939.5 | 925.7 | 917.4 |
| 45° | 958.8 | 922.9 | 889.8 | 831.7 | 798.6 | 782.0 | 746.1 | 707.4 | 682.5 | 677.0 | 654.9 |
| 47.5° | 840.0 | 787.5 | 732.3 | 663.2 | 630.0 | 599.6 | 547.1 | 514.0 | 480.8 | 464.2 | 450.4 |
| 50° | 735.0 | 688.1 | 616.2 | 541.6 | 500.1 | 469.8 | 411.7 | 373.0 | 337.1 | 312.2 | 295.7 |
| 52.5° | 643.8 | 591.3 | 525.0 | 439.4 | 397.9 | 364.7 | 301.2 | 257.0 | 226.6 | 201.7 | 182.4 |
| 55° | 541.6 | 500.1 | 433.8 | 353.7 | 312.2 | 273.6 | 218.3 | 171.3 | 140.9 | 124.3 | 110.5 |
| 57.5° | 467.0 | 431.1 | 367.5 | 290.1 | 251.5 | 215.5 | 160.3 | 121.6 | 96.7 | 80.1 | 71.8 |
| 60° | 417.3 | 384.1 | 328.8 | 254.2 | 218.3 | 185.1 | 132.6 | 96.7 | 74.6 | 60.8 | 55.3 |
| 62.5° | 375.8 | 342.6 | 292.9 | 223.8 | 193.4 | 160.3 | 113.3 | 80.1 | 60.8 | 49.7 | 41.4 |
| 65° | 328.8 | 298.4 | 254.2 | 193.4 | 165.8 | 138.2 | 96.7 | 66.3 | 49.7 | 38.7 | 33.2 |
| 67.5° | 279.1 | 251.5 | 212.8 | 160.3 | 138.2 | 116.1 | 77.4 | 55.3 | 41.4 | 33.2 | 27.6 |
| 70° | 226.6 | 204.5 | 168.6 | 129.9 | 110.5 | 91.2 | 63.6 | 44.2 | 30.4 | 24.9 | 22.1 |
| 72.5° | 174.1 | 154.7 | 129.9 | 99.5 | 82.9 | 69.1 | 47.0 | 33.2 | 24.9 | 19.3 | 16.6 |
| 75° | 124.3 | 110.5 | 91.2 | 71.8 | 60.8 | 49.7 | 35.9 | 24.9 | 16.6 | 13.8 | 11.1 |
| 77.5° | 85.7 | 77.4 | 63.6 | 49.7 | 41.4 | 35.9 | 24.9 | 16.6 | 13.8 | 11.1 | 8.3 |
| 80° | 55.3 | 49.7 | 41.4 | 30.4 | 24.9 | 22.1 | 13.8 | 11.1 | 8.3 | 5.5 | 5.5 |
| 82.5° | 33.2 | 30.4 | 24.9 | 16.6 | 13.8 | 11.1 | 8.3 | 5.5 | 5.5 | 2.8 | 2.8 |
| 85° | 19.3 | 16.6 | 11.1 | 8.3 | 8.3 | 5.5 | 5.5 | 2.8 | 2.8 | 0.0 | 0.0 |
| 87.5° | 8.3 | 5.5 | 5.5 | 2.8 | 2.8 | 2.8 | 2.8 | 0.0 | 0.0 | 0.0 | 0.0 |
| 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):

| | 100° | 105° | 110° | 112.5° | 115° | 120° | 125° | 130° | 135° | 140° | 145° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 2116.7 | 2116.7 | 2116.7 | 2116.7 | 2116.7 | 2116.7 | 2116.7 | 2116.7 | 2116.7 | 2116.7 | 2116.7 |
| 2.5° | 2124.9 | 2138.8 | 2136.0 | 2144.3 | 2141.5 | 2141.5 | 2155.3 | 2149.8 | 2163.6 | 2163.6 | 2166.4 |
| 5° | 2155.3 | 2174.7 | 2174.7 | 2188.5 | 2185.7 | 2191.3 | 2205.1 | 2205.1 | 2221.7 | 2227.2 | 2227.2 |
| 7.5° | 2199.5 | 2224.4 | 2229.9 | 2243.8 | 2246.5 | 2257.6 | 2268.6 | 2271.4 | 2293.5 | 2299.0 | 2301.8 |
| 10° | 2260.3 | 2290.7 | 2299.0 | 2312.8 | 2318.4 | 2329.4 | 2343.2 | 2348.8 | 2376.4 | 2379.2 | 2390.2 |
| 12.5° | 2334.9 | 2368.1 | 2376.4 | 2393.0 | 2395.7 | 2409.6 | 2428.9 | 2434.4 | 2462.1 | 2470.3 | 2478.6 |
| 15° | 2406.8 | 2437.2 | 2451.0 | 2467.6 | 2470.3 | 2486.9 | 2503.5 | 2509.0 | 2533.9 | 2545.0 | 2553.2 |
| 17.5° | 2456.5 | 2492.5 | 2500.7 | 2522.9 | 2522.9 | 2536.7 | 2553.2 | 2558.8 | 2583.6 | 2591.9 | 2597.5 |
| 20° | 2467.6 | 2500.7 | 2511.8 | 2528.4 | 2531.1 | 2539.4 | 2553.2 | 2558.8 | 2580.9 | 2583.6 | 2591.9 |
| 22.5° | 2426.1 | 2459.3 | 2464.8 | 2481.4 | 2484.2 | 2492.5 | 2503.5 | 2500.7 | 2528.4 | 2525.6 | 2528.4 |
| 25° | 2337.7 | 2368.1 | 2368.1 | 2387.5 | 2384.7 | 2393.0 | 2398.5 | 2395.7 | 2420.6 | 2420.6 | 2420.6 |
| 27.5° | 2210.6 | 2238.2 | 2241.0 | 2254.8 | 2246.5 | 2249.3 | 2254.8 | 2252.1 | 2268.6 | 2268.6 | 2268.6 |
| 30° | 2053.1 | 2075.2 | 2066.9 | 2078.0 | 2072.4 | 2078.0 | 2072.4 | 2069.7 | 2075.2 | 2080.7 | 2078.0 |
| 32.5° | 1856.9 | 1873.5 | 1873.5 | 1876.2 | 1876.2 | 1859.7 | 1854.1 | 1854.1 | 1851.4 | 1848.6 | 1848.6 |
| 35° | 1630.3 | 1644.1 | 1638.6 | 1638.6 | 1635.8 | 1619.3 | 1611.0 | 1605.5 | 1613.7 | 1597.2 | 1608.2 |
| 37.5° | 1398.2 | 1401.0 | 1392.7 | 1389.9 | 1376.1 | 1376.1 | 1362.3 | 1351.2 | 1356.8 | 1354.0 | 1342.9 |
| 40° | 1144.0 | 1155.0 | 1138.5 | 1132.9 | 1141.2 | 1130.2 | 1116.4 | 1102.5 | 1113.6 | 1099.8 | 1105.3 |
| 42.5° | 895.3 | 892.5 | 887.0 | 887.0 | 887.0 | 870.4 | 867.7 | 864.9 | 867.7 | 856.6 | 848.3 |
| 45° | 646.6 | 638.3 | 630.0 | 630.0 | 619.0 | 613.4 | 613.4 | 605.2 | 591.3 | 591.3 | 574.8 |
| 47.5° | 436.6 | 417.3 | 411.7 | 409.0 | 403.4 | 403.4 | 397.9 | 392.4 | 389.6 | 375.8 | 375.8 |
| 50° | 284.6 | 265.3 | 259.7 | 257.0 | 259.7 | 254.2 | 248.7 | 243.2 | 237.6 | 234.9 | 229.4 |
| 52.5° | 171.3 | 163.0 | 157.5 | 154.7 | 149.2 | 146.5 | 143.7 | 138.2 | 135.4 | 135.4 | 132.6 |
| 55° | 102.2 | 94.0 | 82.9 | 82.9 | 82.9 | 80.1 | 77.4 | 74.6 | 71.8 | 71.8 | 69.1 |
| 57.5° | 63.6 | 58.0 | 52.5 | 49.7 | 49.7 | 49.7 | 47.0 | 47.0 | 47.0 | 47.0 | 44.2 |
| 60° | 47.0 | 41.4 | 38.7 | 38.7 | 38.7 | 35.9 | 35.9 | 35.9 | 35.9 | 33.2 | 33.2 |
| 62.5° | 35.9 | 33.2 | 30.4 | 30.4 | 27.6 | 27.6 | 27.6 | 27.6 | 27.6 | 27.6 | 24.9 |
| 65° | 30.4 | 24.9 | 24.9 | 22.1 | 22.1 | 22.1 | 22.1 | 22.1 | 22.1 | 22.1 | 22.1 |
| 67.5° | 22.1 | 19.3 | 19.3 | 19.3 | 19.3 | 16.6 | 16.6 | 16.6 | 16.6 | 16.6 | 16.6 |
| 70° | 16.6 | 16.6 | 13.8 | 13.8 | 13.8 | 13.8 | 13.8 | 13.8 | 13.8 | 13.8 | 13.8 |
| 72.5° | 13.8 | 11.1 | 11.1 | 11.1 | 11.1 | 11.1 | 11.1 | 11.1 | 11.1 | 11.1 | 11.1 |
| 75° | 11.1 | 11.1 | 8.3 | 8.3 | 8.3 | 8.3 | 8.3 | 8.3 | 8.3 | 8.3 | 8.3 |
| 77.5° | 8.3 | 8.3 | 8.3 | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 |
| 80° | 5.5 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 |
| 82.5° | 2.8 | 2.8 | 2.8 | 2.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 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: P251559

CATALOG NUMBER: LD4B40D010 EU4B30508040 4LBSW1LI

CANDELA DISTRIBUTION (continued):

| | 150° | 155° | 157.5° | 160° | 165° | 170° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 2116.7 | 2116.7 | 2116.7 | 2116.7 | 2116.7 | 2116.7 | 2116.7 | 2116.7 |
| 2.5° | 2166.4 | 2180.2 | 2166.4 | 2166.4 | 2174.7 | 2171.9 | 2177.4 | 2169.2 |
| 5° | 2229.9 | 2249.3 | 2235.5 | 2232.7 | 2246.5 | 2243.8 | 2246.5 | 2241.0 |
| 7.5° | 2307.3 | 2326.7 | 2312.8 | 2312.8 | 2326.7 | 2323.9 | 2332.2 | 2326.7 |
| 10° | 2395.7 | 2417.8 | 2398.5 | 2401.3 | 2420.6 | 2417.8 | 2417.8 | 2417.8 |
| 12.5° | 2486.9 | 2509.0 | 2498.0 | 2498.0 | 2511.8 | 2514.6 | 2517.3 | 2514.6 |
| 15° | 2561.5 | 2583.6 | 2569.8 | 2569.8 | 2589.2 | 2586.4 | 2589.2 | 2586.4 |
| 17.5° | 2605.7 | 2627.9 | 2611.3 | 2611.3 | 2627.9 | 2627.9 | 2630.6 | 2633.4 |
| 20° | 2594.7 | 2619.6 | 2605.7 | 2600.2 | 2619.6 | 2619.6 | 2616.8 | 2616.8 |
| 22.5° | 2531.1 | 2553.2 | 2542.2 | 2536.7 | 2550.5 | 2545.0 | 2542.2 | 2545.0 |
| 25° | 2420.6 | 2442.7 | 2420.6 | 2420.6 | 2431.7 | 2428.9 | 2431.7 | 2428.9 |
| 27.5° | 2271.4 | 2288.0 | 2265.9 | 2263.1 | 2274.2 | 2268.6 | 2265.9 | 2274.2 |
| 30° | 2072.4 | 2089.0 | 2078.0 | 2069.7 | 2083.5 | 2075.2 | 2069.7 | 2072.4 |
| 32.5° | 1845.9 | 1856.9 | 1851.4 | 1837.6 | 1845.9 | 1840.3 | 1837.6 | 1840.3 |
| 35° | 1597.2 | 1611.0 | 1588.9 | 1586.1 | 1599.9 | 1588.9 | 1583.3 | 1597.2 |
| 37.5° | 1340.2 | 1356.8 | 1337.4 | 1340.2 | 1331.9 | 1334.7 | 1329.1 | 1337.4 |
| 40° | 1097.0 | 1094.2 | 1088.7 | 1086.0 | 1088.7 | 1080.4 | 1086.0 | 1077.7 |
| 42.5° | 834.5 | 840.0 | 837.3 | 834.5 | 837.3 | 826.2 | 820.7 | 831.7 |
| 45° | 580.3 | 577.5 | 572.0 | 566.5 | 566.5 | 563.7 | 563.7 | 555.4 |
| 47.5° | 373.0 | 370.3 | 359.2 | 362.0 | 367.5 | 362.0 | 353.7 | 364.7 |
| 50° | 226.6 | 223.8 | 223.8 | 221.1 | 226.6 | 221.1 | 215.5 | 215.5 |
| 52.5° | 127.1 | 127.1 | 124.3 | 124.3 | 124.3 | 124.3 | 121.6 | 118.8 |
| 55° | 69.1 | 66.3 | 66.3 | 66.3 | 63.6 | 63.6 | 63.6 | 63.6 |
| 57.5° | 44.2 | 44.2 | 44.2 | 44.2 | 44.2 | 44.2 | 41.4 | 41.4 |
| 60° | 33.2 | 33.2 | 33.2 | 33.2 | 30.4 | 33.2 | 30.4 | 30.4 |
| 62.5° | 24.9 | 24.9 | 24.9 | 24.9 | 24.9 | 24.9 | 24.9 | 24.9 |
| 65° | 19.3 | 19.3 | 19.3 | 19.3 | 19.3 | 19.3 | 19.3 | 19.3 |
| 67.5° | 16.6 | 16.6 | 16.6 | 16.6 | 16.6 | 16.6 | 16.6 | 16.6 |
| 70° | 13.8 | 13.8 | 13.8 | 13.8 | 13.8 | 13.8 | 13.8 | 13.8 |
| 72.5° | 11.1 | 11.1 | 11.1 | 11.1 | 11.1 | 11.1 | 11.1 | 11.1 |
| 75° | 8.3 | 8.3 | 8.3 | 8.3 | 8.3 | 8.3 | 8.3 | 8.3 |
| 77.5° | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 |
| 80° | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 |
| 82.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



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













(END OF REPORT)