

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: FAIL-SAFE

Report Number: P838130

Luminaire Tested: **ORLG-24-4-INS-ASY2R-LD4-2LO-50-120-EDD**

Issue Date: 5/21/2024

Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269

**Test Information**

Test Method: LM-79-08  
Report Number: P838130  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 5/21/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: ORLG-24-4-INS-ASY2R-LD4-2LO-50-120-EDD  
Description: 2FT x 4FT ORL LED LUMINAIRE WITH asymmetric/symmetric lens v2 and  
RFI grid  
Light Source: 5000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

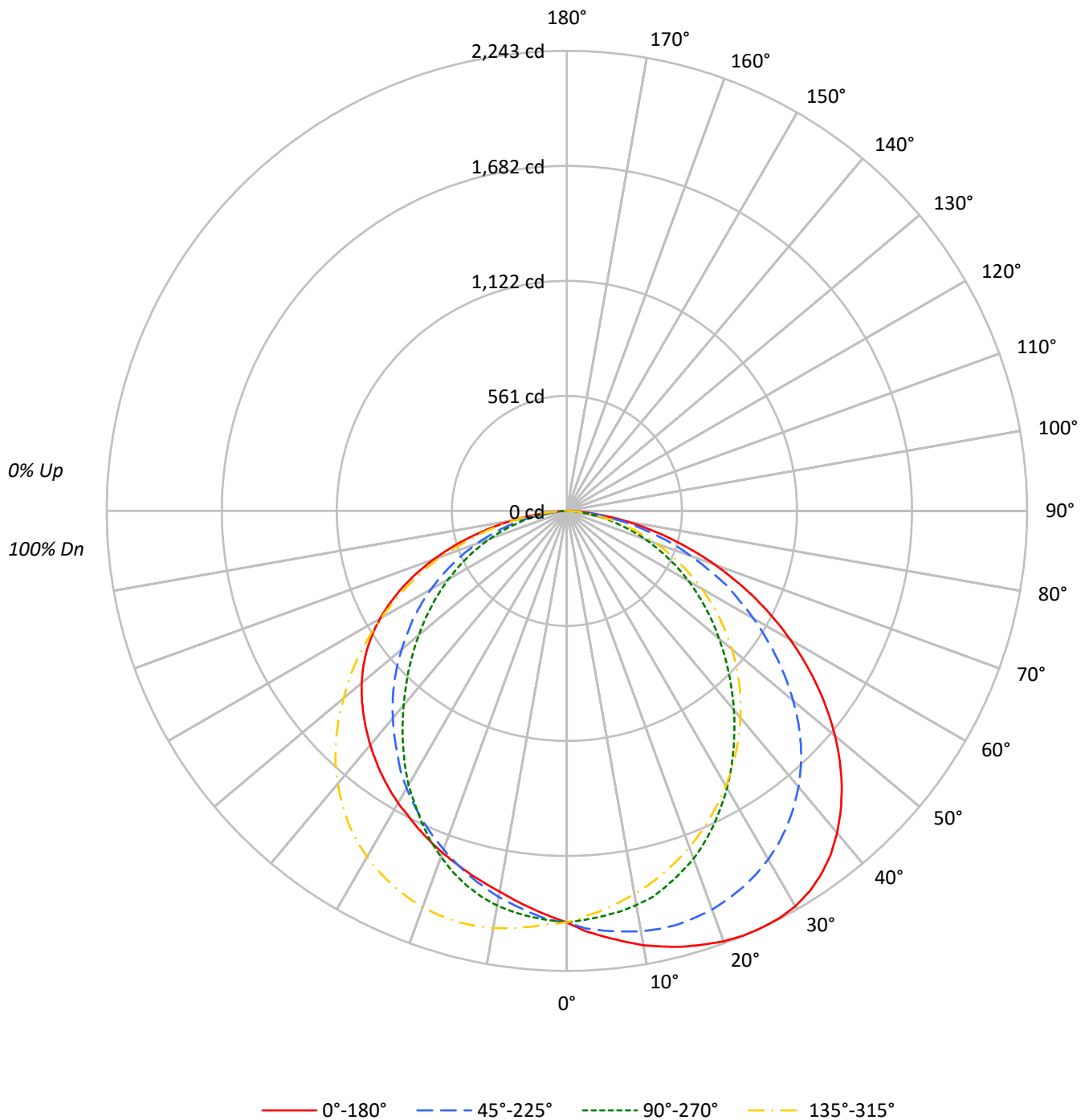
Lumens per Lamp: N/A  
Luminaire Lumens: 5885.7 lumens  
Efficiency: N/A  
Efficacy: 125.8 lumens/watt  
Spacing Criteria (0/90/45): 1.43 / 1.16 / 1.4  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 46.8  
Input Voltage (V): 120  
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: P838130

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### Luminous Intensity Polar Plot



Cooper Lighting Solutions Photometric Lab

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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  | 50  | 30 | 10 |
| RCR |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |    |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |    |    |
| 1   | 109 | 104 | 100 | 96  | 106 | 102 | 98  | 94  | 97  | 94  | 91  | 94  | 91  | 89  | 90  | 88  | 86  | 84  |    |    |
| 2   | 99  | 91  | 84  | 78  | 96  | 89  | 82  | 77  | 85  | 80  | 75  | 82  | 77  | 73  | 79  | 75  | 72  | 70  |    |    |
| 3   | 90  | 79  | 71  | 65  | 88  | 78  | 70  | 64  | 75  | 68  | 63  | 72  | 66  | 62  | 69  | 65  | 61  | 59  |    |    |
| 4   | 82  | 70  | 61  | 55  | 80  | 69  | 61  | 54  | 66  | 59  | 53  | 64  | 58  | 53  | 62  | 56  | 52  | 50  |    |    |
| 5   | 76  | 63  | 54  | 47  | 74  | 62  | 53  | 47  | 59  | 52  | 46  | 57  | 51  | 46  | 56  | 50  | 45  | 43  |    |    |
| 6   | 70  | 56  | 47  | 41  | 68  | 55  | 47  | 41  | 54  | 46  | 40  | 52  | 45  | 40  | 50  | 44  | 40  | 38  |    |    |
| 7   | 65  | 51  | 42  | 36  | 63  | 50  | 42  | 36  | 49  | 41  | 36  | 47  | 40  | 35  | 46  | 40  | 35  | 33  |    |    |
| 8   | 60  | 47  | 38  | 32  | 59  | 46  | 38  | 32  | 45  | 37  | 32  | 43  | 37  | 32  | 42  | 36  | 31  | 29  |    |    |
| 9   | 56  | 43  | 34  | 29  | 55  | 42  | 34  | 29  | 41  | 34  | 29  | 40  | 33  | 28  | 39  | 33  | 28  | 26  |    |    |
| 10  | 53  | 39  | 31  | 26  | 51  | 39  | 31  | 26  | 38  | 31  | 26  | 37  | 30  | 26  | 36  | 30  | 26  | 24  |    |    |

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

|     | 0°   | 90°  | 180° | 270° |
|-----|------|------|------|------|
| 0°  | 2699 | 2699 | 2699 | 2699 |
| 5°  | 2813 | 2680 | 2629 | 2684 |
| 10° | 2938 | 2666 | 2576 | 2670 |
| 15° | 3064 | 2632 | 2551 | 2633 |
| 20° | 3198 | 2584 | 2539 | 2570 |
| 25° | 3331 | 2512 | 2539 | 2486 |
| 30° | 3459 | 2425 | 2556 | 2398 |
| 35° | 3551 | 2325 | 2582 | 2288 |
| 40° | 3598 | 2225 | 2618 | 2175 |
| 45° | 3605 | 2124 | 2669 | 2070 |
| 50° | 3571 | 2027 | 2734 | 1973 |
| 55° | 3497 | 1936 | 2795 | 1882 |
| 60° | 3387 | 1842 | 2832 | 1794 |
| 65° | 3236 | 1734 | 2817 | 1694 |
| 70° | 3023 | 1607 | 2717 | 1578 |
| 75° | 2720 | 1433 | 2494 | 1425 |
| 80° | 2306 | 1200 | 2096 | 1218 |
| 85° | 1604 | 795  | 1329 | 817  |

Classified

Scaled Data Report

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P838130

CATALOG NUMBER: ORLG-24-4-INS-ASY2R-LD4-2LO-50-120-EDD

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 190.5  | 3.2       |
| 10°-20°   | 551.6  | 9.4       |
| 20°-30°   | 845.3  | 14.4      |
| 30°-40°   | 1027.8 | 17.5      |
| 40°-50°   | 1068.5 | 18.2      |
| 50°-60°   | 965.1  | 16.4      |
| 60°-70°   | 733.8  | 12.5      |
| 70°-80°   | 409.1  | 7.0       |
| 80°-90°   | 94.2   | 1.6       |
| 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°    | 1587.3 | 27.0      |
| 0°-40°    | 2615.1 | 44.4      |
| 0°-60°    | 4648.7 | 79.0      |
| 0°-90°    | 5885.7 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 5885.7 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 90°  | 180° | 270° | 360° | Flux |
|-----|------|------|------|------|------|------|
| 0°  | 2006 | 2006 | 2006 | 2006 | 2006 |      |
| 5°  | 2083 | 1984 | 1947 | 1987 | 2083 | 201  |
| 15° | 2200 | 1890 | 1831 | 1890 | 2200 | 624  |
| 25° | 2243 | 1692 | 1710 | 1675 | 2243 | 1036 |
| 35° | 2162 | 1416 | 1572 | 1393 | 2162 | 1350 |
| 45° | 1895 | 1116 | 1402 | 1088 | 1895 | 1459 |
| 55° | 1491 | 826  | 1191 | 802  | 1491 | 1331 |
| 65° | 1016 | 545  | 885  | 532  | 1016 | 1004 |
| 75° | 523  | 276  | 480  | 274  | 523  | 556  |
| 85° | 104  | 52   | 86   | 53   | 104  | 131  |
| 90° | 0    | 0    | 0    | 0    | 0    |      |

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 75°    | 85°    | 90°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 2006.1 | 2006.1 | 2006.1 | 2006.1 | 2006.1 | 2006.1 | 2006.1 | 2006.1 | 2006.1 | 2006.1 | 2006.1 |
| 2.5°  | 2050.6 | 2020.6 | 2021.1 | 2047.3 | 2027.2 | 2037.0 | 2008.9 | 2019.7 | 2016.4 | 2018.8 | 1995.8 |
| 5°    | 2082.9 | 2050.6 | 2050.1 | 2072.6 | 2050.1 | 2054.3 | 2018.8 | 2025.8 | 2015.5 | 2008.9 | 1984.1 |
| 7.5°  | 2117.0 | 2084.7 | 2081.5 | 2101.1 | 2071.6 | 2068.4 | 2029.1 | 2029.1 | 2010.3 | 1994.0 | 1970.6 |
| 10°   | 2150.7 | 2117.5 | 2113.3 | 2128.3 | 2091.8 | 2081.0 | 2033.3 | 2025.8 | 2001.0 | 1976.6 | 1951.4 |
| 12.5° | 2176.0 | 2142.3 | 2139.0 | 2148.4 | 2107.2 | 2087.5 | 2033.3 | 2018.8 | 1982.3 | 1948.1 | 1928.4 |
| 15°   | 2199.9 | 2165.2 | 2156.3 | 2161.0 | 2113.8 | 2087.5 | 2026.7 | 2004.2 | 1957.5 | 1912.5 | 1889.6 |
| 17.5° | 2216.7 | 2183.5 | 2174.6 | 2174.1 | 2117.0 | 2079.6 | 2012.7 | 1981.8 | 1925.6 | 1871.4 | 1848.4 |
| 20°   | 2233.5 | 2200.3 | 2189.1 | 2180.7 | 2116.1 | 2068.8 | 1992.1 | 1950.4 | 1884.9 | 1824.1 | 1804.9 |
| 22.5° | 2242.0 | 2207.8 | 2195.6 | 2183.0 | 2110.0 | 2049.2 | 1966.8 | 1913.9 | 1839.1 | 1766.5 | 1750.6 |
| 25°   | 2243.4 | 2208.3 | 2195.2 | 2176.9 | 2097.8 | 2025.8 | 1934.1 | 1869.9 | 1786.2 | 1705.7 | 1692.1 |
| 27.5° | 2239.6 | 2201.3 | 2188.2 | 2166.2 | 2079.6 | 1997.2 | 1895.2 | 1819.9 | 1730.0 | 1641.1 | 1626.6 |
| 30°   | 2226.5 | 2187.7 | 2175.1 | 2146.5 | 2053.9 | 1962.1 | 1852.6 | 1764.2 | 1667.8 | 1573.3 | 1560.6 |
| 32.5° | 2200.3 | 2162.4 | 2152.1 | 2123.6 | 2025.8 | 1921.4 | 1803.0 | 1704.3 | 1599.0 | 1508.7 | 1490.0 |
| 35°   | 2162.0 | 2124.0 | 2117.5 | 2087.5 | 1986.5 | 1872.8 | 1748.7 | 1638.8 | 1526.0 | 1433.8 | 1415.6 |
| 37.5° | 2111.9 | 2080.1 | 2070.2 | 2040.8 | 1940.1 | 1817.5 | 1686.5 | 1567.6 | 1451.6 | 1352.4 | 1341.2 |
| 40°   | 2048.7 | 2018.8 | 2011.3 | 1985.1 | 1886.3 | 1756.2 | 1619.1 | 1494.2 | 1374.9 | 1282.7 | 1266.8 |
| 42.5° | 1976.6 | 1948.6 | 1944.4 | 1917.2 | 1819.9 | 1688.4 | 1546.1 | 1417.9 | 1294.8 | 1205.9 | 1190.0 |
| 45°   | 1894.7 | 1867.6 | 1866.7 | 1840.9 | 1747.3 | 1613.0 | 1469.4 | 1340.7 | 1216.7 | 1124.5 | 1116.1 |
| 47.5° | 1804.4 | 1780.1 | 1780.1 | 1756.2 | 1666.4 | 1530.2 | 1390.3 | 1260.2 | 1138.1 | 1056.6 | 1041.7 |
| 50°   | 1706.2 | 1683.2 | 1676.2 | 1664.5 | 1577.0 | 1439.9 | 1307.0 | 1181.6 | 1060.4 | 982.7  | 968.2  |
| 52.5° | 1601.3 | 1581.7 | 1586.4 | 1564.8 | 1480.1 | 1345.8 | 1222.8 | 1093.1 | 982.2  | 911.6  | 897.1  |
| 55°   | 1490.9 | 1462.8 | 1467.0 | 1459.1 | 1379.1 | 1249.0 | 1128.2 | 1020.1 | 905.5  | 839.0  | 825.5  |
| 57.5° | 1376.3 | 1339.8 | 1354.7 | 1350.0 | 1271.4 | 1149.8 | 1041.7 | 937.3  | 829.2  | 767.9  | 754.8  |
| 60°   | 1258.8 | 1223.7 | 1239.1 | 1234.9 | 1161.0 | 1050.6 | 952.3  | 855.4  | 753.4  | 697.7  | 684.6  |
| 62.5° | 1138.1 | 1105.8 | 1119.8 | 1116.5 | 1048.7 | 949.0  | 863.4  | 774.5  | 677.1  | 627.1  | 614.9  |
| 65°   | 1016.4 | 985.5  | 998.1  | 995.8  | 933.1  | 857.3  | 772.1  | 690.7  | 600.4  | 556.9  | 544.7  |
| 67.5° | 891.9  | 863.4  | 875.1  | 875.1  | 817.5  | 745.0  | 680.4  | 606.0  | 525.0  | 487.6  | 476.4  |
| 70°   | 768.4  | 741.7  | 752.0  | 751.1  | 702.4  | 643.4  | 587.8  | 521.3  | 448.8  | 417.9  | 408.5  |
| 72.5° | 643.9  | 620.5  | 629.9  | 628.9  | 588.2  | 550.3  | 495.1  | 437.5  | 374.4  | 349.6  | 341.1  |
| 75°   | 523.2  | 501.2  | 510.1  | 509.1  | 475.9  | 440.3  | 403.4  | 355.6  | 301.4  | 284.0  | 275.6  |
| 77.5° | 408.1  | 385.6  | 393.1  | 393.1  | 368.7  | 343.0  | 313.5  | 276.6  | 238.2  | 219.5  | 213.4  |
| 80°   | 297.6  | 286.9  | 283.1  | 283.6  | 267.2  | 250.4  | 235.4  | 199.8  | 171.7  | 159.1  | 154.9  |
| 82.5° | 195.6  | 186.7  | 183.0  | 183.9  | 174.5  | 164.3  | 154.9  | 130.1  | 111.4  | 103.9  | 101.5  |
| 85°   | 103.9  | 97.3   | 94.1   | 96.4   | 94.5   | 88.9   | 84.2   | 67.4   | 55.7   | 52.9   | 51.5   |
| 87.5° | 32.8   | 28.5   | 26.2   | 34.6   | 29.5   | 26.2   | 25.3   | 20.1   | 15.4   | 15.4   | 15.0   |
| 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):**

|       | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   | 185°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 2006.1 | 2006.1 | 2006.1 | 2006.1 | 2006.1 | 2006.1 | 2006.1 | 2006.1 | 2006.1 | 2006.1 | 2006.1 |
| 2.5°  | 2003.3 | 2003.3 | 1985.1 | 1980.9 | 1979.0 | 1981.3 | 1963.1 | 1959.8 | 1986.0 | 1977.1 | 1957.0 |
| 5°    | 1987.4 | 1986.5 | 1960.7 | 1956.1 | 1956.1 | 1953.2 | 1932.7 | 1928.0 | 1954.2 | 1946.7 | 1924.7 |
| 7.5°  | 1967.7 | 1964.9 | 1934.5 | 1931.2 | 1926.6 | 1924.7 | 1901.8 | 1898.5 | 1921.0 | 1916.3 | 1895.7 |
| 10°   | 1943.9 | 1941.1 | 1905.0 | 1902.7 | 1897.6 | 1893.8 | 1872.3 | 1869.9 | 1892.9 | 1885.4 | 1869.0 |
| 12.5° | 1912.5 | 1907.4 | 1870.4 | 1868.1 | 1863.9 | 1862.5 | 1841.4 | 1840.5 | 1865.7 | 1858.2 | 1840.9 |
| 15°   | 1871.4 | 1867.1 | 1826.0 | 1826.9 | 1827.4 | 1827.4 | 1810.5 | 1809.6 | 1834.4 | 1831.1 | 1812.4 |
| 17.5° | 1826.0 | 1820.3 | 1781.0 | 1783.8 | 1787.1 | 1790.9 | 1777.8 | 1780.1 | 1806.3 | 1802.1 | 1785.2 |
| 20°   | 1774.5 | 1768.9 | 1730.5 | 1738.5 | 1745.5 | 1753.0 | 1744.5 | 1751.1 | 1775.4 | 1773.5 | 1760.9 |
| 22.5° | 1716.9 | 1711.3 | 1675.7 | 1687.9 | 1699.6 | 1713.7 | 1709.9 | 1717.4 | 1743.1 | 1742.7 | 1731.4 |
| 25°   | 1646.7 | 1648.1 | 1616.8 | 1631.8 | 1651.4 | 1671.1 | 1672.5 | 1684.6 | 1713.2 | 1710.4 | 1700.1 |
| 27.5° | 1581.2 | 1583.1 | 1549.9 | 1575.1 | 1601.3 | 1626.6 | 1632.7 | 1649.5 | 1678.6 | 1676.2 | 1667.3 |
| 30°   | 1512.4 | 1514.8 | 1482.5 | 1517.1 | 1548.9 | 1579.8 | 1592.9 | 1615.8 | 1645.3 | 1645.3 | 1636.0 |
| 32.5° | 1440.8 | 1445.0 | 1411.4 | 1457.7 | 1494.6 | 1530.7 | 1553.6 | 1577.5 | 1611.2 | 1610.2 | 1602.3 |
| 35°   | 1367.4 | 1372.0 | 1341.2 | 1400.1 | 1437.1 | 1481.1 | 1509.6 | 1541.4 | 1571.4 | 1571.9 | 1565.8 |
| 37.5° | 1292.5 | 1298.1 | 1270.0 | 1334.6 | 1376.7 | 1428.7 | 1465.2 | 1497.0 | 1530.2 | 1532.1 | 1526.5 |
| 40°   | 1218.1 | 1224.2 | 1199.8 | 1262.1 | 1315.4 | 1373.4 | 1415.6 | 1453.0 | 1489.5 | 1490.4 | 1486.7 |
| 42.5° | 1143.7 | 1150.2 | 1132.0 | 1192.8 | 1253.2 | 1315.4 | 1365.0 | 1407.6 | 1445.0 | 1447.4 | 1443.2 |
| 45°   | 1071.1 | 1076.8 | 1063.7 | 1130.1 | 1188.1 | 1256.0 | 1313.1 | 1361.3 | 1399.2 | 1402.5 | 1401.1 |
| 47.5° | 999.1  | 1004.2 | 992.5  | 1053.4 | 1120.3 | 1192.3 | 1258.3 | 1311.7 | 1351.9 | 1355.7 | 1354.7 |
| 50°   | 928.4  | 932.6  | 920.0  | 983.6  | 1050.1 | 1126.8 | 1195.6 | 1257.4 | 1302.3 | 1306.1 | 1305.6 |
| 52.5° | 858.2  | 862.4  | 851.7  | 918.6  | 979.0  | 1059.9 | 1134.8 | 1201.7 | 1246.2 | 1251.8 | 1252.7 |
| 55°   | 790.4  | 792.2  | 783.8  | 847.9  | 906.4  | 991.1  | 1077.2 | 1142.3 | 1186.7 | 1191.4 | 1194.2 |
| 57.5° | 722.5  | 723.0  | 716.0  | 777.3  | 833.4  | 920.0  | 1010.3 | 1078.6 | 1120.8 | 1125.4 | 1129.6 |
| 60°   | 655.1  | 654.7  | 646.7  | 706.1  | 760.0  | 845.6  | 939.7  | 1007.5 | 1048.2 | 1052.4 | 1058.0 |
| 62.5° | 588.2  | 586.8  | 579.8  | 634.5  | 685.1  | 769.8  | 864.3  | 929.8  | 968.7  | 971.5  | 979.0  |
| 65°   | 521.8  | 520.4  | 513.8  | 564.4  | 610.2  | 691.2  | 783.8  | 846.1  | 881.2  | 884.9  | 883.5  |
| 67.5° | 456.3  | 453.4  | 448.3  | 493.7  | 535.3  | 610.2  | 699.1  | 758.6  | 787.6  | 790.8  | 799.7  |
| 70°   | 390.7  | 387.5  | 375.8  | 424.0  | 460.5  | 527.4  | 610.2  | 663.1  | 687.4  | 690.7  | 689.3  |
| 72.5° | 326.2  | 322.9  | 310.3  | 354.7  | 385.6  | 444.1  | 518.0  | 562.0  | 583.1  | 585.9  | 585.9  |
| 75°   | 263.5  | 261.6  | 253.6  | 287.3  | 313.1  | 360.8  | 423.5  | 460.0  | 476.4  | 479.7  | 478.7  |
| 77.5° | 203.1  | 201.7  | 193.7  | 222.7  | 242.9  | 278.4  | 329.0  | 357.5  | 369.7  | 373.4  | 381.4  |
| 80°   | 145.5  | 145.1  | 132.4  | 161.0  | 169.9  | 199.8  | 236.8  | 258.8  | 265.3  | 270.5  | 276.1  |
| 82.5° | 93.1   | 93.6   | 81.0   | 105.3  | 109.0  | 128.2  | 151.1  | 164.7  | 169.4  | 173.6  | 177.8  |
| 85°   | 45.4   | 47.3   | 40.2   | 55.7   | 56.2   | 66.0   | 75.8   | 81.0   | 82.8   | 86.1   | 89.8   |
| 87.5° | 11.7   | 13.6   | 7.5    | 15.9   | 14.0   | 18.3   | 21.1   | 22.5   | 22.0   | 24.3   | 25.7   |
| 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):**

|       | 195°   | 205°   | 215°   | 225°   | 235°   | 245°   | 255°   | 265°   | 270°   | 275°   | 285°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 2006.1 | 2006.1 | 2006.1 | 2006.1 | 2006.1 | 2006.1 | 2006.1 | 2006.1 | 2006.1 | 2006.1 | 2006.1 |
| 2.5°  | 1963.5 | 1978.5 | 1971.0 | 1995.4 | 2004.7 | 1989.7 | 2015.9 | 2016.4 | 1997.7 | 2019.7 | 2031.9 |
| 5°    | 1933.1 | 1948.6 | 1943.9 | 1969.2 | 1980.9 | 1967.7 | 1999.6 | 2005.7 | 1987.4 | 2012.2 | 2031.9 |
| 7.5°  | 1902.2 | 1920.5 | 1914.4 | 1940.1 | 1954.2 | 1943.9 | 1978.0 | 1987.9 | 1973.8 | 2001.0 | 2027.2 |
| 10°   | 1875.6 | 1891.0 | 1884.5 | 1911.6 | 1923.8 | 1915.3 | 1949.0 | 1967.3 | 1954.2 | 1987.4 | 2018.8 |
| 12.5° | 1849.4 | 1862.0 | 1854.5 | 1877.0 | 1888.7 | 1877.9 | 1919.1 | 1935.9 | 1926.6 | 1961.2 | 2001.4 |
| 15°   | 1815.7 | 1829.7 | 1819.4 | 1839.5 | 1848.4 | 1839.1 | 1872.8 | 1901.8 | 1890.1 | 1928.0 | 1972.4 |
| 17.5° | 1789.9 | 1797.9 | 1783.8 | 1799.8 | 1804.9 | 1792.3 | 1826.4 | 1855.0 | 1846.5 | 1887.7 | 1939.2 |
| 20°   | 1761.4 | 1767.9 | 1748.3 | 1757.2 | 1756.7 | 1740.8 | 1772.1 | 1800.2 | 1794.6 | 1840.0 | 1898.5 |
| 22.5° | 1729.6 | 1732.8 | 1709.9 | 1711.8 | 1710.8 | 1684.6 | 1712.7 | 1741.3 | 1738.9 | 1784.8 | 1850.3 |
| 25°   | 1695.9 | 1696.3 | 1666.9 | 1665.9 | 1655.6 | 1624.7 | 1649.5 | 1681.8 | 1674.8 | 1724.4 | 1793.2 |
| 27.5° | 1662.6 | 1658.0 | 1622.4 | 1614.0 | 1597.6 | 1560.6 | 1582.6 | 1611.6 | 1607.4 | 1656.1 | 1732.4 |
| 30°   | 1627.1 | 1621.0 | 1577.5 | 1562.0 | 1538.2 | 1495.6 | 1513.8 | 1541.0 | 1543.3 | 1585.9 | 1665.9 |
| 32.5° | 1593.4 | 1577.9 | 1529.7 | 1507.3 | 1477.3 | 1427.7 | 1437.6 | 1465.2 | 1468.9 | 1512.0 | 1594.3 |
| 35°   | 1549.9 | 1539.6 | 1480.1 | 1441.8 | 1412.3 | 1358.0 | 1368.3 | 1387.5 | 1393.1 | 1435.2 | 1519.0 |
| 37.5° | 1508.7 | 1492.3 | 1429.1 | 1382.3 | 1344.4 | 1287.3 | 1290.2 | 1309.8 | 1315.4 | 1358.0 | 1440.8 |
| 40°   | 1466.1 | 1442.7 | 1374.9 | 1320.1 | 1276.6 | 1216.7 | 1213.4 | 1234.0 | 1238.2 | 1279.9 | 1354.7 |
| 42.5° | 1420.7 | 1392.6 | 1316.4 | 1256.5 | 1206.4 | 1145.6 | 1139.0 | 1156.8 | 1161.5 | 1202.2 | 1275.6 |
| 45°   | 1374.9 | 1341.2 | 1256.5 | 1190.9 | 1136.2 | 1074.0 | 1067.4 | 1081.0 | 1088.0 | 1126.4 | 1197.0 |
| 47.5° | 1326.2 | 1286.9 | 1194.7 | 1121.7 | 1065.1 | 1002.8 | 994.9  | 1008.4 | 1014.1 | 1052.0 | 1118.9 |
| 50°   | 1275.2 | 1227.4 | 1131.0 | 1050.6 | 994.4  | 933.1  | 921.4  | 937.3  | 942.5  | 978.0  | 1043.5 |
| 52.5° | 1219.0 | 1166.1 | 1063.2 | 979.0  | 922.8  | 864.3  | 850.3  | 865.7  | 871.8  | 906.4  | 966.8  |
| 55°   | 1159.6 | 1102.5 | 994.9  | 913.0  | 852.1  | 795.1  | 783.4  | 789.4  | 802.5  | 835.3  | 891.5  |
| 57.5° | 1092.7 | 1036.1 | 922.8  | 839.5  | 781.0  | 726.3  | 716.4  | 722.1  | 734.2  | 766.0  | 816.6  |
| 60°   | 1021.5 | 961.6  | 849.3  | 766.0  | 709.4  | 657.5  | 648.6  | 653.7  | 666.8  | 695.8  | 742.6  |
| 62.5° | 951.4  | 884.0  | 773.5  | 690.7  | 639.2  | 591.0  | 588.7  | 586.8  | 599.0  | 627.1  | 668.2  |
| 65°   | 866.2  | 801.6  | 694.4  | 615.8  | 569.0  | 525.5  | 516.2  | 520.4  | 532.1  | 557.8  | 600.9  |
| 67.5° | 774.9  | 716.4  | 613.5  | 541.0  | 499.3  | 460.5  | 452.5  | 454.4  | 466.6  | 489.0  | 526.4  |
| 70°   | 678.1  | 626.6  | 530.7  | 465.6  | 430.5  | 394.0  | 388.9  | 389.3  | 401.0  | 420.7  | 453.4  |
| 72.5° | 576.5  | 530.2  | 446.9  | 391.2  | 362.2  | 336.0  | 331.3  | 325.7  | 336.5  | 353.3  | 381.4  |
| 75°   | 473.1  | 432.4  | 363.6  | 318.2  | 295.3  | 273.3  | 269.1  | 263.5  | 274.2  | 288.7  | 310.7  |
| 77.5° | 368.7  | 336.0  | 282.6  | 247.5  | 229.8  | 213.4  | 209.6  | 203.6  | 214.3  | 225.1  | 242.4  |
| 80°   | 266.7  | 242.9  | 211.0  | 174.1  | 168.0  | 157.2  | 153.5  | 146.9  | 157.2  | 164.3  | 177.4  |
| 82.5° | 172.2  | 156.3  | 138.0  | 112.3  | 111.4  | 103.4  | 101.5  | 94.1   | 103.4  | 107.6  | 117.5  |
| 85°   | 87.0   | 79.6   | 74.9   | 57.1   | 59.0   | 53.8   | 53.3   | 45.4   | 52.9   | 54.8   | 60.4   |
| 87.5° | 24.8   | 26.2   | 23.4   | 14.0   | 17.8   | 16.8   | 16.8   | 12.2   | 16.8   | 16.8   | 19.2   |
| 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: P838130

CATALOG NUMBER: ORLG-24-4-INS-ASY2R-LD4-2LO-50-120-EDD

**CANDELA DISTRIBUTION (continued):**

|       | 295°   | 305°   | 315°   | 325°   | 335°   | 345°   | 355°   | 360°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 2006.1 | 2006.1 | 2006.1 | 2006.1 | 2006.1 | 2006.1 | 2006.1 | 2006.1 |
| 2.5°  | 2008.0 | 2015.9 | 2017.8 | 2017.4 | 2022.5 | 2050.6 | 2041.2 | 2050.6 |
| 5°    | 2012.7 | 2030.5 | 2035.1 | 2041.7 | 2050.1 | 2081.9 | 2071.6 | 2082.9 |
| 7.5°  | 2015.5 | 2042.2 | 2052.4 | 2065.1 | 2078.7 | 2114.2 | 2105.8 | 2117.0 |
| 10°   | 2015.5 | 2050.1 | 2065.1 | 2086.1 | 2104.4 | 2145.6 | 2137.6 | 2150.7 |
| 12.5° | 2007.1 | 2051.5 | 2072.6 | 2102.1 | 2125.5 | 2169.9 | 2166.6 | 2176.0 |
| 15°   | 1989.7 | 2044.5 | 2073.5 | 2111.4 | 2140.4 | 2190.0 | 2188.6 | 2199.9 |
| 17.5° | 1966.3 | 2032.3 | 2067.4 | 2115.2 | 2151.7 | 2207.3 | 2210.6 | 2216.7 |
| 20°   | 1936.9 | 2009.4 | 2055.3 | 2113.8 | 2159.6 | 2220.9 | 2225.1 | 2233.5 |
| 22.5° | 1898.0 | 1981.8 | 2037.0 | 2107.7 | 2160.5 | 2226.5 | 2234.0 | 2242.0 |
| 25°   | 1852.2 | 1948.6 | 2013.1 | 2096.0 | 2155.9 | 2226.1 | 2236.4 | 2243.4 |
| 27.5° | 1799.8 | 1905.5 | 1982.7 | 2077.3 | 2142.8 | 2218.6 | 2231.2 | 2239.6 |
| 30°   | 1738.9 | 1859.7 | 1948.1 | 2052.9 | 2125.0 | 2204.5 | 2218.1 | 2226.5 |
| 32.5° | 1676.2 | 1809.1 | 1906.9 | 2021.6 | 2099.2 | 2182.1 | 2193.8 | 2200.3 |
| 35°   | 1607.9 | 1747.8 | 1857.3 | 1981.3 | 2066.0 | 2146.0 | 2154.9 | 2162.0 |
| 37.5° | 1533.5 | 1681.4 | 1800.7 | 1935.9 | 2019.2 | 2096.0 | 2103.9 | 2111.9 |
| 40°   | 1456.7 | 1611.6 | 1737.0 | 1880.2 | 1963.5 | 2034.7 | 2043.1 | 2048.7 |
| 42.5° | 1379.5 | 1534.4 | 1669.2 | 1814.7 | 1897.6 | 1965.9 | 1971.0 | 1976.6 |
| 45°   | 1301.4 | 1454.4 | 1592.9 | 1742.2 | 1824.1 | 1888.2 | 1890.1 | 1894.7 |
| 47.5° | 1221.8 | 1371.6 | 1509.2 | 1659.4 | 1740.3 | 1798.8 | 1800.7 | 1804.4 |
| 50°   | 1141.8 | 1288.7 | 1419.8 | 1570.0 | 1649.1 | 1710.8 | 1702.4 | 1706.2 |
| 52.5° | 1063.2 | 1201.7 | 1335.5 | 1473.6 | 1551.7 | 1606.5 | 1608.8 | 1601.3 |
| 55°   | 986.0  | 1116.5 | 1239.6 | 1372.5 | 1446.9 | 1489.5 | 1488.1 | 1490.9 |
| 57.5° | 907.8  | 1030.4 | 1143.2 | 1264.9 | 1337.4 | 1377.7 | 1386.1 | 1376.3 |
| 60°   | 828.3  | 943.4  | 1044.5 | 1154.4 | 1224.6 | 1258.3 | 1268.2 | 1258.8 |
| 62.5° | 749.2  | 855.0  | 946.7  | 1042.6 | 1107.6 | 1149.3 | 1148.4 | 1138.1 |
| 65°   | 670.1  | 766.0  | 847.9  | 929.4  | 986.0  | 1027.6 | 1025.8 | 1016.4 |
| 67.5° | 597.1  | 676.2  | 749.7  | 815.6  | 864.8  | 893.3  | 903.2  | 891.9  |
| 70°   | 516.6  | 584.9  | 649.5  | 702.4  | 743.1  | 768.8  | 778.2  | 768.4  |
| 72.5° | 436.1  | 494.2  | 539.6  | 590.6  | 621.9  | 643.4  | 653.3  | 643.9  |
| 75°   | 356.6  | 404.3  | 441.3  | 481.1  | 503.1  | 521.3  | 532.5  | 523.2  |
| 77.5° | 279.4  | 316.3  | 345.8  | 374.8  | 400.1  | 404.3  | 414.1  | 408.1  |
| 80°   | 205.9  | 232.6  | 254.1  | 273.3  | 291.5  | 293.4  | 301.4  | 297.6  |
| 82.5° | 137.1  | 154.9  | 160.5  | 180.6  | 192.3  | 190.5  | 198.4  | 195.6  |
| 85°   | 72.5   | 83.3   | 93.1   | 99.2   | 105.8  | 99.7   | 106.7  | 103.9  |
| 87.5° | 24.3   | 25.7   | 22.5   | 31.8   | 35.1   | 29.9   | 34.2   | 32.8   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)