

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: P838238

Luminaire Tested: **ORLG-24-4-INS-ASY2R-LD4-2LO-50-120-EDD-90**

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: P838238  
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-90  
Description: 2FT x 4FT ORL LED LUMINAIRE WITH asymmetric/symmetric lens v2 and  
RFI grid  
Light Source: 5000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

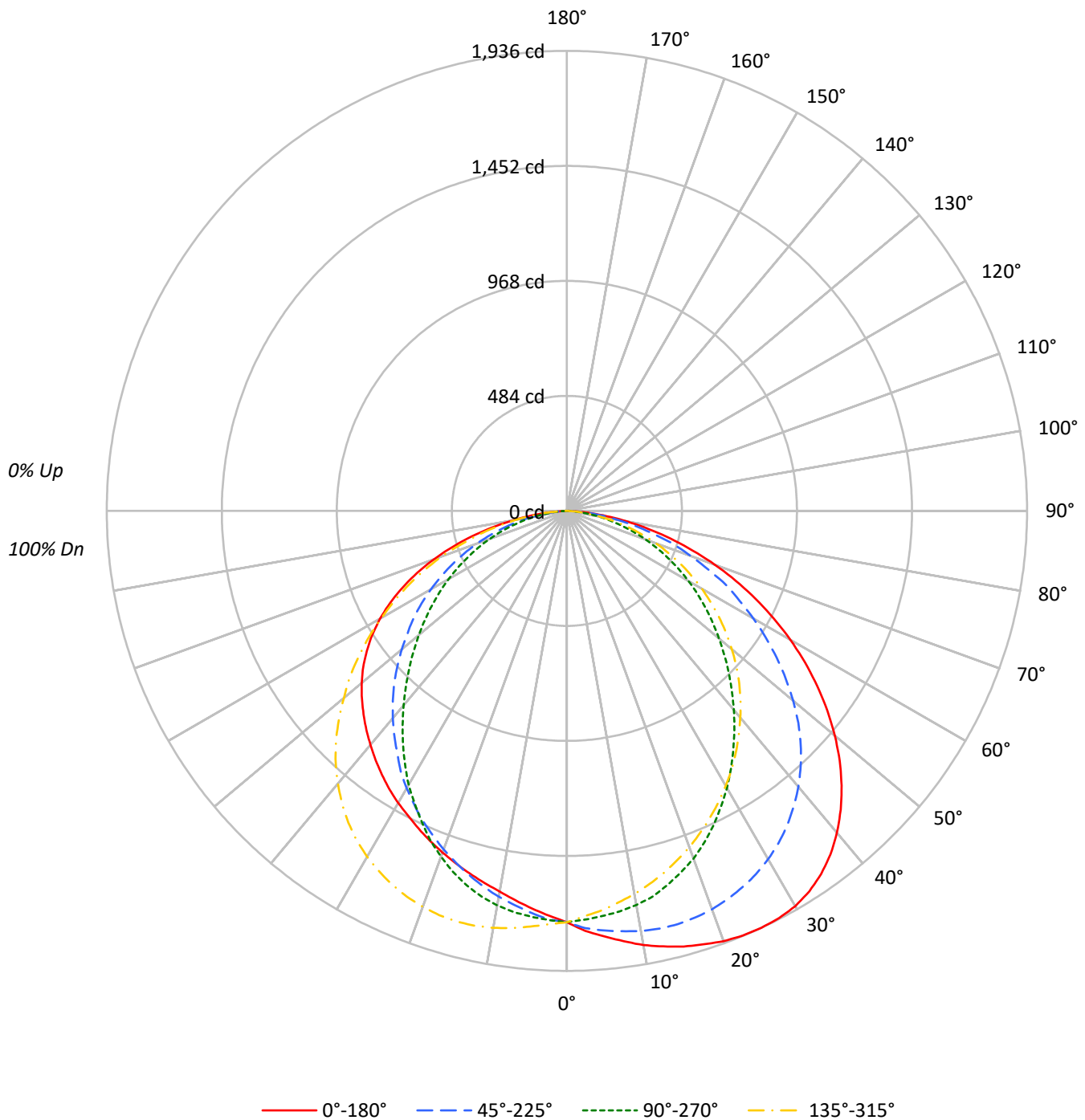
Lumens per Lamp: N/A  
Luminaire Lumens: 5077.8 lumens  
Efficiency: N/A  
Efficacy: 108.5 lumens/watt  
Spacing Criteria (0/90/45): 1.43 / 1.16 / 1.4  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

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

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### Luminous Intensity Polar Plot



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

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

|     | 0°   | 90°  | 180° | 270° |
|-----|------|------|------|------|
| 0°  | 2329 | 2329 | 2329 | 2329 |
| 5°  | 2427 | 2312 | 2268 | 2316 |
| 10° | 2535 | 2300 | 2222 | 2303 |
| 15° | 2644 | 2271 | 2201 | 2271 |
| 20° | 2759 | 2230 | 2191 | 2217 |
| 25° | 2873 | 2167 | 2191 | 2145 |
| 30° | 2984 | 2092 | 2205 | 2069 |
| 35° | 3064 | 2006 | 2227 | 1974 |
| 40° | 3104 | 1920 | 2259 | 1876 |
| 45° | 3111 | 1832 | 2302 | 1786 |
| 50° | 3081 | 1748 | 2359 | 1702 |
| 55° | 3017 | 1671 | 2411 | 1624 |
| 60° | 2922 | 1590 | 2443 | 1548 |
| 65° | 2792 | 1496 | 2430 | 1461 |
| 70° | 2608 | 1387 | 2344 | 1361 |
| 75° | 2347 | 1236 | 2151 | 1230 |
| 80° | 1990 | 1035 | 1808 | 1051 |
| 85° | 1383 | 685  | 1147 | 704  |

Classified

Scaled Data Report

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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 164.3  | 3.2       |
| 10°-20°   | 475.8  | 9.4       |
| 20°-30°   | 729.3  | 14.4      |
| 30°-40°   | 886.7  | 17.5      |
| 40°-50°   | 921.8  | 18.2      |
| 50°-60°   | 832.7  | 16.4      |
| 60°-70°   | 633.0  | 12.5      |
| 70°-80°   | 352.9  | 7.0       |
| 80°-90°   | 81.3   | 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°    | 1369.4 | 27.0      |
| 0°-40°    | 2256.2 | 44.4      |
| 0°-60°    | 4010.6 | 79.0      |
| 0°-90°    | 5077.8 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 5077.8 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 90°  | 180° | 270° | 360° | Flux |
|-----|------|------|------|------|------|------|
| 0°  | 1731 | 1731 | 1731 | 1731 | 1731 |      |
| 5°  | 1797 | 1712 | 1680 | 1715 | 1797 | 173  |
| 15° | 1898 | 1630 | 1580 | 1631 | 1898 | 538  |
| 25° | 1936 | 1460 | 1476 | 1445 | 1936 | 894  |
| 35° | 1865 | 1221 | 1356 | 1202 | 1865 | 1165 |
| 45° | 1635 | 963  | 1210 | 939  | 1635 | 1259 |
| 55° | 1286 | 712  | 1028 | 692  | 1286 | 1148 |
| 65° | 877  | 470  | 763  | 459  | 877  | 867  |
| 75° | 451  | 238  | 414  | 237  | 451  | 479  |
| 85° | 90   | 44   | 74   | 46   | 90   | 113  |
| 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°    | 1730.8 | 1730.8 | 1730.8 | 1730.8 | 1730.8 | 1730.8 | 1730.8 | 1730.8 | 1730.8 | 1730.8 | 1730.8 |
| 2.5°  | 1769.1 | 1743.3 | 1743.7 | 1766.3 | 1748.9 | 1757.4 | 1733.2 | 1742.5 | 1739.7 | 1741.7 | 1721.9 |
| 5°    | 1797.0 | 1769.1 | 1768.7 | 1788.1 | 1768.7 | 1772.4 | 1741.7 | 1747.7 | 1738.8 | 1733.2 | 1711.8 |
| 7.5°  | 1826.5 | 1798.6 | 1795.8 | 1812.7 | 1787.3 | 1784.5 | 1750.6 | 1750.6 | 1734.4 | 1720.3 | 1700.1 |
| 10°   | 1855.5 | 1826.9 | 1823.2 | 1836.1 | 1804.7 | 1795.4 | 1754.2 | 1747.7 | 1726.3 | 1705.3 | 1683.5 |
| 12.5° | 1877.3 | 1848.3 | 1845.4 | 1853.5 | 1818.0 | 1801.0 | 1754.2 | 1741.7 | 1710.2 | 1680.7 | 1663.8 |
| 15°   | 1897.9 | 1868.0 | 1860.4 | 1864.4 | 1823.6 | 1801.0 | 1748.5 | 1729.2 | 1688.8 | 1650.0 | 1630.2 |
| 17.5° | 1912.4 | 1883.8 | 1876.1 | 1875.7 | 1826.5 | 1794.2 | 1736.4 | 1709.8 | 1661.3 | 1614.5 | 1594.7 |
| 20°   | 1927.0 | 1898.3 | 1888.6 | 1881.4 | 1825.6 | 1784.9 | 1718.7 | 1682.7 | 1626.2 | 1573.7 | 1557.2 |
| 22.5° | 1934.2 | 1904.8 | 1894.3 | 1883.4 | 1820.4 | 1767.9 | 1696.9 | 1651.2 | 1586.6 | 1524.1 | 1510.3 |
| 25°   | 1935.5 | 1905.2 | 1893.9 | 1878.1 | 1809.9 | 1747.7 | 1668.6 | 1613.3 | 1541.0 | 1471.6 | 1459.9 |
| 27.5° | 1932.2 | 1899.1 | 1887.8 | 1868.8 | 1794.2 | 1723.1 | 1635.1 | 1570.1 | 1492.6 | 1415.9 | 1403.4 |
| 30°   | 1920.9 | 1887.4 | 1876.5 | 1851.9 | 1772.0 | 1692.8 | 1598.3 | 1522.0 | 1438.9 | 1357.3 | 1346.4 |
| 32.5° | 1898.3 | 1865.6 | 1856.7 | 1832.1 | 1747.7 | 1657.7 | 1555.6 | 1470.4 | 1379.5 | 1301.6 | 1285.5 |
| 35°   | 1865.2 | 1832.5 | 1826.9 | 1801.0 | 1713.8 | 1615.7 | 1508.7 | 1413.8 | 1316.5 | 1237.0 | 1221.3 |
| 37.5° | 1822.0 | 1794.6 | 1786.1 | 1760.6 | 1673.8 | 1568.1 | 1455.0 | 1352.5 | 1252.4 | 1166.8 | 1157.1 |
| 40°   | 1767.5 | 1741.7 | 1735.2 | 1712.6 | 1627.4 | 1515.2 | 1396.9 | 1289.1 | 1186.1 | 1106.6 | 1092.9 |
| 42.5° | 1705.3 | 1681.1 | 1677.5 | 1654.1 | 1570.1 | 1456.6 | 1333.9 | 1223.3 | 1117.1 | 1040.4 | 1026.7 |
| 45°   | 1634.7 | 1611.3 | 1610.5 | 1588.3 | 1507.5 | 1391.6 | 1267.7 | 1156.7 | 1049.7 | 970.2  | 962.9  |
| 47.5° | 1556.8 | 1535.8 | 1535.8 | 1515.2 | 1437.7 | 1320.2 | 1199.5 | 1087.2 | 981.9  | 911.6  | 898.7  |
| 50°   | 1472.0 | 1452.2 | 1446.1 | 1436.1 | 1360.6 | 1242.3 | 1127.6 | 1019.4 | 914.8  | 847.8  | 835.3  |
| 52.5° | 1381.5 | 1364.6 | 1368.6 | 1350.1 | 1277.0 | 1161.1 | 1054.9 | 943.1  | 847.4  | 786.5  | 773.9  |
| 55°   | 1286.3 | 1262.0 | 1265.7 | 1258.8 | 1189.8 | 1077.5 | 973.4  | 880.1  | 781.2  | 723.9  | 712.2  |
| 57.5° | 1187.4 | 1155.9 | 1168.8 | 1164.7 | 1096.9 | 992.0  | 898.7  | 808.7  | 715.4  | 662.5  | 651.2  |
| 60°   | 1086.0 | 1055.7 | 1069.1 | 1065.4 | 1001.6 | 906.4  | 821.6  | 738.0  | 650.0  | 602.0  | 590.7  |
| 62.5° | 981.9  | 954.0  | 966.1  | 963.3  | 904.7  | 818.8  | 744.9  | 668.2  | 584.2  | 541.0  | 530.5  |
| 65°   | 876.9  | 850.2  | 861.1  | 859.1  | 805.0  | 739.6  | 666.1  | 595.9  | 518.0  | 480.4  | 469.9  |
| 67.5° | 769.5  | 744.9  | 755.0  | 755.0  | 705.3  | 642.7  | 587.0  | 522.8  | 453.0  | 420.7  | 411.0  |
| 70°   | 662.9  | 639.9  | 648.8  | 648.0  | 606.0  | 555.1  | 507.1  | 449.8  | 387.2  | 360.5  | 352.5  |
| 72.5° | 555.5  | 535.3  | 543.4  | 542.6  | 507.5  | 474.8  | 427.1  | 377.5  | 323.0  | 301.6  | 294.3  |
| 75°   | 451.4  | 432.4  | 440.1  | 439.3  | 410.6  | 379.9  | 348.0  | 306.8  | 260.0  | 245.1  | 237.8  |
| 77.5° | 352.0  | 332.7  | 339.1  | 339.1  | 318.1  | 295.9  | 270.5  | 238.6  | 205.5  | 189.3  | 184.1  |
| 80°   | 256.8  | 247.5  | 244.3  | 244.7  | 230.5  | 216.0  | 203.1  | 172.4  | 148.2  | 137.3  | 133.6  |
| 82.5° | 168.8  | 161.1  | 157.9  | 158.7  | 150.6  | 141.7  | 133.6  | 112.2  | 96.1   | 89.6   | 87.6   |
| 85°   | 89.6   | 84.0   | 81.1   | 83.2   | 81.6   | 76.7   | 72.7   | 58.1   | 48.0   | 45.6   | 44.4   |
| 87.5° | 28.3   | 24.6   | 22.6   | 29.9   | 25.4   | 22.6   | 21.8   | 17.4   | 13.3   | 13.3   | 12.9   |
| 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°    | 1730.8 | 1730.8 | 1730.8 | 1730.8 | 1730.8 | 1730.8 | 1730.8 | 1730.8 | 1730.8 | 1730.8 | 1730.8 |
| 2.5°  | 1728.3 | 1728.3 | 1712.6 | 1709.0 | 1707.4 | 1709.4 | 1693.6 | 1690.8 | 1713.4 | 1705.7 | 1688.4 |
| 5°    | 1714.6 | 1713.8 | 1691.6 | 1687.6 | 1687.6 | 1685.2 | 1667.4 | 1663.3 | 1686.0 | 1679.5 | 1660.5 |
| 7.5°  | 1697.7 | 1695.2 | 1669.0 | 1666.2 | 1662.1 | 1660.5 | 1640.7 | 1637.9 | 1657.3 | 1653.3 | 1635.5 |
| 10°   | 1677.1 | 1674.7 | 1643.6 | 1641.5 | 1637.1 | 1633.9 | 1615.3 | 1613.3 | 1633.1 | 1626.6 | 1612.5 |
| 12.5° | 1650.0 | 1645.6 | 1613.7 | 1611.7 | 1608.0 | 1606.8 | 1588.7 | 1587.9 | 1609.7 | 1603.2 | 1588.3 |
| 15°   | 1614.5 | 1610.9 | 1575.3 | 1576.1 | 1576.5 | 1576.5 | 1562.0 | 1561.2 | 1582.6 | 1579.8 | 1563.6 |
| 17.5° | 1575.3 | 1570.5 | 1536.6 | 1539.0 | 1541.8 | 1545.1 | 1533.8 | 1535.8 | 1558.4 | 1554.7 | 1540.2 |
| 20°   | 1530.9 | 1526.1 | 1493.0 | 1499.8 | 1505.9 | 1512.4 | 1505.1 | 1510.7 | 1531.7 | 1530.1 | 1519.2 |
| 22.5° | 1481.3 | 1476.4 | 1445.7 | 1456.2 | 1466.3 | 1478.4 | 1475.2 | 1481.7 | 1503.9 | 1503.5 | 1493.8 |
| 25°   | 1420.7 | 1421.9 | 1394.9 | 1407.8 | 1424.7 | 1441.7 | 1442.9 | 1453.4 | 1478.0 | 1475.6 | 1466.7 |
| 27.5° | 1364.2 | 1365.8 | 1337.1 | 1358.9 | 1381.5 | 1403.4 | 1408.6 | 1423.1 | 1448.2 | 1446.1 | 1438.5 |
| 30°   | 1304.8 | 1306.9 | 1279.0 | 1308.9 | 1336.3 | 1363.0 | 1374.3 | 1394.1 | 1419.5 | 1419.5 | 1411.4 |
| 32.5° | 1243.1 | 1246.7 | 1217.6 | 1257.6 | 1289.5 | 1320.6 | 1340.4 | 1361.0 | 1390.0 | 1389.2 | 1382.4 |
| 35°   | 1179.7 | 1183.7 | 1157.1 | 1207.9 | 1239.8 | 1277.8 | 1302.4 | 1329.9 | 1355.7 | 1356.1 | 1350.9 |
| 37.5° | 1115.1 | 1119.9 | 1095.7 | 1151.4 | 1187.8 | 1232.6 | 1264.1 | 1291.5 | 1320.2 | 1321.8 | 1317.0 |
| 40°   | 1050.9 | 1056.1 | 1035.2 | 1088.8 | 1134.9 | 1184.9 | 1221.3 | 1253.6 | 1285.1 | 1285.9 | 1282.6 |
| 42.5° | 986.7  | 992.4  | 976.6  | 1029.1 | 1081.2 | 1134.9 | 1177.7 | 1214.4 | 1246.7 | 1248.7 | 1245.1 |
| 45°   | 924.1  | 929.0  | 917.7  | 975.0  | 1025.1 | 1083.6 | 1132.9 | 1174.4 | 1207.1 | 1210.0 | 1208.8 |
| 47.5° | 862.0  | 866.4  | 856.3  | 908.8  | 966.5  | 1028.7 | 1085.6 | 1131.6 | 1166.4 | 1169.6 | 1168.8 |
| 50°   | 801.0  | 804.6  | 793.7  | 848.6  | 906.0  | 972.2  | 1031.5 | 1084.8 | 1123.6 | 1126.8 | 1126.4 |
| 52.5° | 740.4  | 744.1  | 734.8  | 792.5  | 844.6  | 914.4  | 979.0  | 1036.8 | 1075.1 | 1080.0 | 1080.8 |
| 55°   | 681.9  | 683.5  | 676.2  | 731.6  | 782.0  | 855.1  | 929.4  | 985.5  | 1023.8 | 1027.9 | 1030.3 |
| 57.5° | 623.4  | 623.8  | 617.7  | 670.6  | 719.0  | 793.7  | 871.6  | 930.6  | 966.9  | 971.0  | 974.6  |
| 60°   | 565.2  | 564.8  | 557.9  | 609.2  | 655.7  | 729.5  | 810.7  | 869.2  | 904.3  | 908.0  | 912.8  |
| 62.5° | 507.5  | 506.3  | 500.2  | 547.5  | 591.1  | 664.1  | 745.7  | 802.2  | 835.7  | 838.1  | 844.6  |
| 65°   | 450.2  | 448.9  | 443.3  | 486.9  | 526.5  | 596.3  | 676.2  | 729.9  | 760.2  | 763.4  | 762.2  |
| 67.5° | 393.6  | 391.2  | 386.8  | 425.9  | 461.9  | 526.5  | 603.2  | 654.4  | 679.5  | 682.3  | 690.0  |
| 70°   | 337.1  | 334.3  | 324.2  | 365.8  | 397.3  | 455.0  | 526.5  | 572.1  | 593.1  | 595.9  | 594.7  |
| 72.5° | 281.4  | 278.6  | 267.7  | 306.0  | 332.7  | 383.1  | 446.9  | 484.9  | 503.0  | 505.5  | 505.5  |
| 75°   | 227.3  | 225.7  | 218.8  | 247.9  | 270.1  | 311.3  | 365.4  | 396.9  | 411.0  | 413.8  | 413.0  |
| 77.5° | 175.2  | 174.0  | 167.1  | 192.2  | 209.5  | 240.2  | 283.8  | 308.4  | 318.9  | 322.2  | 329.0  |
| 80°   | 125.6  | 125.2  | 114.3  | 138.9  | 146.6  | 172.4  | 204.3  | 223.3  | 228.9  | 233.4  | 238.2  |
| 82.5° | 80.3   | 80.7   | 69.8   | 90.8   | 94.1   | 110.6  | 130.4  | 142.1  | 146.1  | 149.8  | 153.4  |
| 85°   | 39.2   | 40.8   | 34.7   | 48.0   | 48.4   | 56.9   | 65.4   | 69.8   | 71.5   | 74.3   | 77.5   |
| 87.5° | 10.1   | 11.7   | 6.5    | 13.7   | 12.1   | 15.7   | 18.2   | 19.4   | 19.0   | 21.0   | 22.2   |
| 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°    | 1730.8 | 1730.8 | 1730.8 | 1730.8 | 1730.8 | 1730.8 | 1730.8 | 1730.8 | 1730.8 | 1730.8 | 1730.8 |
| 2.5°  | 1694.0 | 1707.0 | 1700.5 | 1721.5 | 1729.6 | 1716.6 | 1739.2 | 1739.7 | 1723.5 | 1742.5 | 1753.0 |
| 5°    | 1667.8 | 1681.1 | 1677.1 | 1698.9 | 1709.0 | 1697.7 | 1725.1 | 1730.4 | 1714.6 | 1736.0 | 1753.0 |
| 7.5°  | 1641.1 | 1656.9 | 1651.6 | 1673.8 | 1686.0 | 1677.1 | 1706.5 | 1715.0 | 1702.9 | 1726.3 | 1748.9 |
| 10°   | 1618.1 | 1631.5 | 1625.8 | 1649.2 | 1659.7 | 1652.4 | 1681.5 | 1697.3 | 1686.0 | 1714.6 | 1741.7 |
| 12.5° | 1595.5 | 1606.4 | 1600.0 | 1619.3 | 1629.4 | 1620.2 | 1655.7 | 1670.2 | 1662.1 | 1692.0 | 1726.7 |
| 15°   | 1566.5 | 1578.6 | 1569.7 | 1587.0 | 1594.7 | 1586.6 | 1615.7 | 1640.7 | 1630.6 | 1663.3 | 1701.7 |
| 17.5° | 1544.3 | 1551.1 | 1539.0 | 1552.7 | 1557.2 | 1546.3 | 1575.7 | 1600.4 | 1593.1 | 1628.6 | 1673.0 |
| 20°   | 1519.6 | 1525.3 | 1508.3 | 1516.0 | 1515.6 | 1501.9 | 1528.9 | 1553.1 | 1548.3 | 1587.4 | 1637.9 |
| 22.5° | 1492.2 | 1495.0 | 1475.2 | 1476.8 | 1476.0 | 1453.4 | 1477.6 | 1502.3 | 1500.2 | 1539.8 | 1596.3 |
| 25°   | 1463.1 | 1463.5 | 1438.1 | 1437.3 | 1428.4 | 1401.7 | 1423.1 | 1451.0 | 1444.9 | 1487.7 | 1547.1 |
| 27.5° | 1434.4 | 1430.4 | 1399.7 | 1392.4 | 1378.3 | 1346.4 | 1365.4 | 1390.4 | 1386.8 | 1428.8 | 1494.6 |
| 30°   | 1403.8 | 1398.5 | 1361.0 | 1347.6 | 1327.0 | 1290.3 | 1306.1 | 1329.5 | 1331.5 | 1368.2 | 1437.3 |
| 32.5° | 1374.7 | 1361.4 | 1319.8 | 1300.4 | 1274.6 | 1231.8 | 1240.2 | 1264.1 | 1267.3 | 1304.4 | 1375.5 |
| 35°   | 1337.1 | 1328.3 | 1277.0 | 1243.9 | 1218.4 | 1171.6 | 1180.5 | 1197.0 | 1201.9 | 1238.2 | 1310.5 |
| 37.5° | 1301.6 | 1287.5 | 1233.0 | 1192.6 | 1159.9 | 1110.6 | 1113.1 | 1130.0 | 1134.9 | 1171.6 | 1243.1 |
| 40°   | 1264.9 | 1244.7 | 1186.1 | 1138.9 | 1101.4 | 1049.7 | 1046.9 | 1064.6 | 1068.3 | 1104.2 | 1168.8 |
| 42.5° | 1225.7 | 1201.5 | 1135.7 | 1084.0 | 1040.8 | 988.3  | 982.7  | 998.0  | 1002.0 | 1037.2 | 1100.6 |
| 45°   | 1186.1 | 1157.1 | 1084.0 | 1027.5 | 980.2  | 926.6  | 920.9  | 932.6  | 938.7  | 971.8  | 1032.7 |
| 47.5° | 1144.2 | 1110.2 | 1030.7 | 967.7  | 918.9  | 865.2  | 858.3  | 870.0  | 874.9  | 907.6  | 965.3  |
| 50°   | 1100.2 | 1059.0 | 975.8  | 906.4  | 857.9  | 805.0  | 794.9  | 808.7  | 813.1  | 843.8  | 900.3  |
| 52.5° | 1051.7 | 1006.1 | 917.3  | 844.6  | 796.1  | 745.7  | 733.6  | 746.9  | 752.1  | 782.0  | 834.1  |
| 55°   | 1000.4 | 951.2  | 858.3  | 787.7  | 735.2  | 685.9  | 675.8  | 681.1  | 692.4  | 720.7  | 769.1  |
| 57.5° | 942.7  | 893.8  | 796.1  | 724.3  | 673.8  | 626.6  | 618.1  | 622.9  | 633.4  | 660.9  | 704.5  |
| 60°   | 881.3  | 829.7  | 732.8  | 660.9  | 612.0  | 567.2  | 559.6  | 564.0  | 575.3  | 600.3  | 640.7  |
| 62.5° | 820.8  | 762.6  | 667.4  | 595.9  | 551.5  | 509.9  | 507.9  | 506.3  | 516.8  | 541.0  | 576.5  |
| 65°   | 747.3  | 691.6  | 599.1  | 531.3  | 490.9  | 453.4  | 445.3  | 448.9  | 459.0  | 481.2  | 518.4  |
| 67.5° | 668.6  | 618.1  | 529.3  | 466.7  | 430.8  | 397.3  | 390.4  | 392.0  | 402.5  | 421.9  | 454.2  |
| 70°   | 585.0  | 540.6  | 457.8  | 401.7  | 371.4  | 339.9  | 335.5  | 335.9  | 346.0  | 362.9  | 391.2  |
| 72.5° | 497.4  | 457.4  | 385.6  | 337.5  | 312.5  | 289.9  | 285.8  | 281.0  | 290.3  | 304.8  | 329.0  |
| 75°   | 408.2  | 373.0  | 313.7  | 274.5  | 254.8  | 235.8  | 232.1  | 227.3  | 236.6  | 249.1  | 268.1  |
| 77.5° | 318.1  | 289.9  | 243.9  | 213.6  | 198.2  | 184.1  | 180.9  | 175.6  | 184.9  | 194.2  | 209.1  |
| 80°   | 230.1  | 209.5  | 182.1  | 150.2  | 144.9  | 135.7  | 132.4  | 126.8  | 135.7  | 141.7  | 153.0  |
| 82.5° | 148.6  | 134.8  | 119.1  | 96.9   | 96.1   | 89.2   | 87.6   | 81.1   | 89.2   | 92.9   | 101.3  |
| 85°   | 75.1   | 68.6   | 64.6   | 49.3   | 50.9   | 46.4   | 46.0   | 39.2   | 45.6   | 47.2   | 52.1   |
| 87.5° | 21.4   | 22.6   | 20.2   | 12.1   | 15.3   | 14.5   | 14.5   | 10.5   | 14.5   | 14.5   | 16.6   |
| 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: P838238

CATALOG NUMBER: ORLG-24-4-INS-ASY2R-LD4-2LO-50-120-EDD-90

**CANDELA DISTRIBUTION (continued):**

|       | 295°   | 305°   | 315°   | 325°   | 335°   | 345°   | 355°   | 360°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1730.8 | 1730.8 | 1730.8 | 1730.8 | 1730.8 | 1730.8 | 1730.8 | 1730.8 |
| 2.5°  | 1732.4 | 1739.2 | 1740.9 | 1740.5 | 1744.9 | 1769.1 | 1761.1 | 1769.1 |
| 5°    | 1736.4 | 1751.8 | 1755.8 | 1761.5 | 1768.7 | 1796.2 | 1787.3 | 1797.0 |
| 7.5°  | 1738.8 | 1761.9 | 1770.7 | 1781.6 | 1793.3 | 1824.0 | 1816.8 | 1826.5 |
| 10°   | 1738.8 | 1768.7 | 1781.6 | 1799.8 | 1815.6 | 1851.1 | 1844.2 | 1855.5 |
| 12.5° | 1731.6 | 1769.9 | 1788.1 | 1813.5 | 1833.7 | 1872.1 | 1869.2 | 1877.3 |
| 15°   | 1716.6 | 1763.9 | 1788.9 | 1821.6 | 1846.6 | 1889.4 | 1888.2 | 1897.9 |
| 17.5° | 1696.5 | 1753.4 | 1783.7 | 1824.8 | 1856.3 | 1904.4 | 1907.2 | 1912.4 |
| 20°   | 1671.0 | 1733.6 | 1773.2 | 1823.6 | 1863.2 | 1916.1 | 1919.7 | 1927.0 |
| 22.5° | 1637.5 | 1709.8 | 1757.4 | 1818.4 | 1864.0 | 1920.9 | 1927.4 | 1934.2 |
| 25°   | 1597.9 | 1681.1 | 1736.8 | 1808.3 | 1860.0 | 1920.5 | 1929.4 | 1935.5 |
| 27.5° | 1552.7 | 1644.0 | 1710.6 | 1792.1 | 1848.7 | 1914.1 | 1925.0 | 1932.2 |
| 30°   | 1500.2 | 1604.4 | 1680.7 | 1771.1 | 1833.3 | 1902.0 | 1913.7 | 1920.9 |
| 32.5° | 1446.1 | 1560.8 | 1645.2 | 1744.1 | 1811.1 | 1882.6 | 1892.7 | 1898.3 |
| 35°   | 1387.2 | 1507.9 | 1602.4 | 1709.4 | 1782.4 | 1851.5 | 1859.2 | 1865.2 |
| 37.5° | 1323.0 | 1450.6 | 1553.5 | 1670.2 | 1742.1 | 1808.3 | 1815.2 | 1822.0 |
| 40°   | 1256.8 | 1390.4 | 1498.6 | 1622.2 | 1694.0 | 1755.4 | 1762.7 | 1767.5 |
| 42.5° | 1190.2 | 1323.8 | 1440.1 | 1565.6 | 1637.1 | 1696.1 | 1700.5 | 1705.3 |
| 45°   | 1122.8 | 1254.8 | 1374.3 | 1503.1 | 1573.7 | 1629.0 | 1630.6 | 1634.7 |
| 47.5° | 1054.1 | 1183.3 | 1302.0 | 1431.6 | 1501.5 | 1551.9 | 1553.5 | 1556.8 |
| 50°   | 985.1  | 1111.9 | 1224.9 | 1354.5 | 1422.7 | 1476.0 | 1468.8 | 1472.0 |
| 52.5° | 917.3  | 1036.8 | 1152.2 | 1271.3 | 1338.8 | 1386.0 | 1388.0 | 1381.5 |
| 55°   | 850.6  | 963.3  | 1069.5 | 1184.1 | 1248.3 | 1285.1 | 1283.8 | 1286.3 |
| 57.5° | 783.2  | 889.0  | 986.3  | 1091.3 | 1153.8 | 1188.6 | 1195.8 | 1187.4 |
| 60°   | 714.6  | 813.9  | 901.1  | 996.0  | 1056.5 | 1085.6 | 1094.1 | 1086.0 |
| 62.5° | 646.4  | 737.6  | 816.7  | 899.5  | 955.6  | 991.6  | 990.7  | 981.9  |
| 65°   | 578.1  | 660.9  | 731.6  | 801.8  | 850.6  | 886.6  | 885.0  | 876.9  |
| 67.5° | 515.2  | 583.4  | 646.8  | 703.7  | 746.1  | 770.7  | 779.2  | 769.5  |
| 70°   | 445.7  | 504.7  | 560.4  | 606.0  | 641.1  | 663.3  | 671.4  | 662.9  |
| 72.5° | 376.3  | 426.3  | 465.5  | 509.5  | 536.6  | 555.1  | 563.6  | 555.5  |
| 75°   | 307.6  | 348.8  | 380.7  | 415.0  | 434.0  | 449.8  | 459.4  | 451.4  |
| 77.5° | 241.0  | 272.9  | 298.4  | 323.4  | 345.2  | 348.8  | 357.3  | 352.0  |
| 80°   | 177.6  | 200.7  | 219.2  | 235.8  | 251.5  | 253.1  | 260.0  | 256.8  |
| 82.5° | 118.3  | 133.6  | 138.5  | 155.8  | 165.9  | 164.3  | 171.2  | 168.8  |
| 85°   | 62.6   | 71.9   | 80.3   | 85.6   | 91.2   | 86.0   | 92.0   | 89.6   |
| 87.5° | 21.0   | 22.2   | 19.4   | 27.5   | 30.3   | 25.8   | 29.5   | 28.3   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)