

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: METALUX

Report Number: P192468

Luminaire Tested: **4WSL-LD2-60-UPL8-UNV-L850-CD1-U**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-79-08  
Report Number: P192468  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P28106)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 4WSL-LD2-60-UPL8-UNV-L850-CD1-U  
Description: 4FT Linear Wavestream System, 8% Uplight, L850  
Light Source: (238) 5000K CCT, 80 CRI LEDS  
EL236N0119D850  
Ballast/Driver: OSRAM  
OT50W

**Summary**

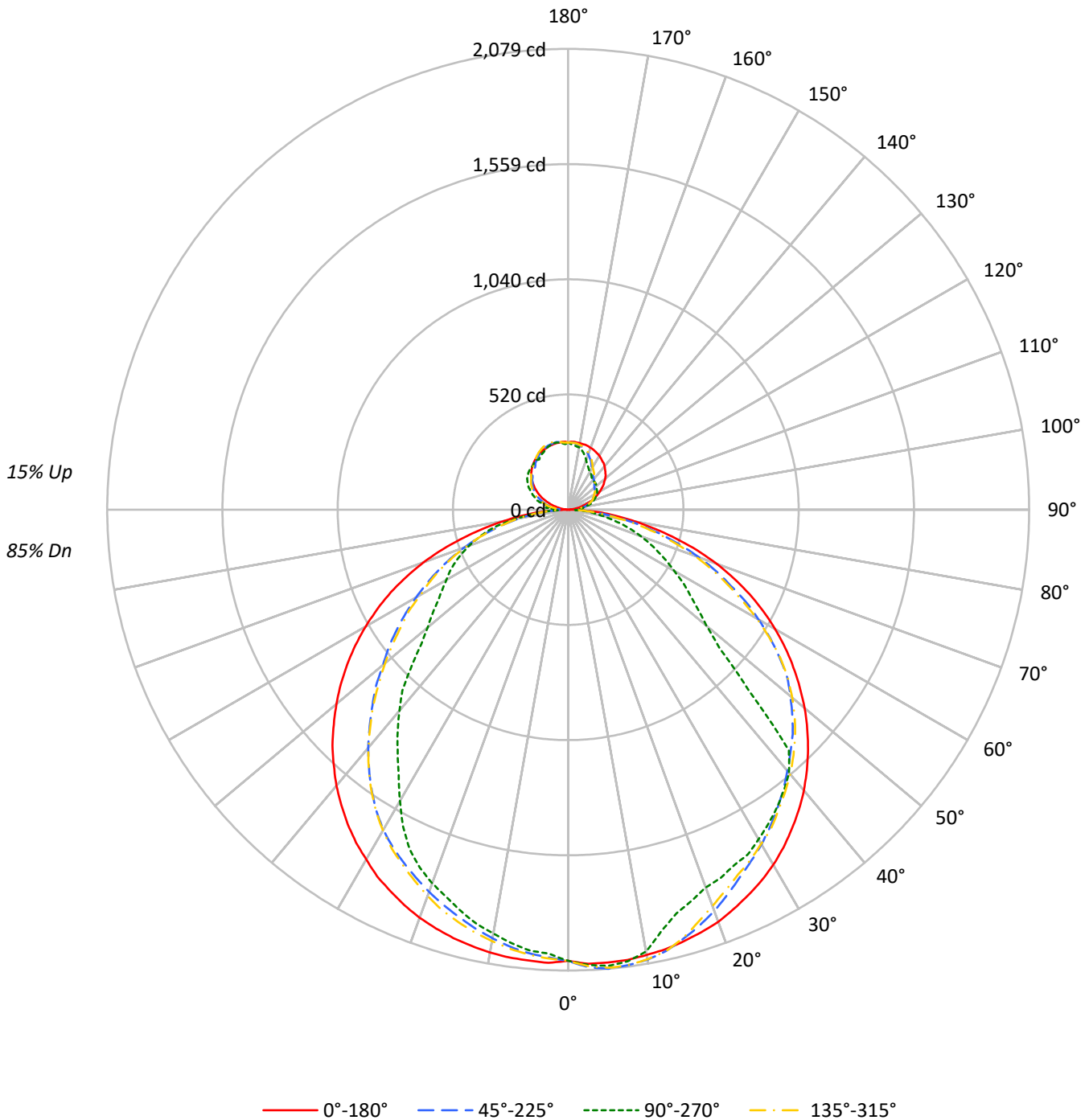
Lumens per Lamp: N/A  
Luminaire Lumens: 6751.0 lumens  
Efficiency: N/A  
Efficacy: 120.1 lumens/watt  
Spacing Criteria (0/90/45): 1.34 / 1.19 / 1.36  
Luminous Opening: Rectangular (W 0.5' x L: 3.8' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 56.2  
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: P192468

CATALOG NUMBER: 4WSL-LD2-60-UPL8-UNV-L850-CD1-U

### Luminous Intensity Polar Plot





TEST NUMBER: P192468

CATALOG NUMBER: 4WSL-LD2-60-UPL8-UNV-L850-CD1-U

**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 | 0  |
| RCR |     |     |     |     |     |     |     |     |     |     |     |    |    |    |    |    |    |    |
| 0   | 115 | 115 | 115 | 115 | 111 | 111 | 111 | 111 | 103 | 103 | 103 | 95 | 95 | 95 | 88 | 88 | 88 | 85 |
| 1   | 105 | 101 | 96  | 92  | 101 | 97  | 93  | 90  | 90  | 87  | 84  | 83 | 81 | 79 | 78 | 76 | 74 | 71 |
| 2   | 96  | 88  | 81  | 75  | 92  | 84  | 78  | 73  | 78  | 73  | 69  | 73 | 69 | 65 | 68 | 65 | 62 | 59 |
| 3   | 87  | 77  | 69  | 62  | 83  | 74  | 67  | 61  | 69  | 63  | 58  | 64 | 59 | 55 | 60 | 56 | 52 | 50 |
| 4   | 80  | 68  | 59  | 53  | 76  | 66  | 58  | 52  | 61  | 55  | 49  | 57 | 52 | 47 | 53 | 49 | 45 | 42 |
| 5   | 73  | 61  | 52  | 45  | 70  | 59  | 51  | 44  | 55  | 48  | 43  | 51 | 45 | 41 | 48 | 43 | 39 | 37 |
| 6   | 68  | 55  | 46  | 40  | 65  | 53  | 45  | 39  | 50  | 43  | 37  | 47 | 40 | 36 | 44 | 38 | 34 | 32 |
| 7   | 63  | 49  | 41  | 35  | 60  | 48  | 40  | 34  | 45  | 38  | 33  | 42 | 36 | 32 | 40 | 35 | 31 | 28 |
| 8   | 58  | 45  | 37  | 31  | 56  | 44  | 36  | 30  | 41  | 34  | 29  | 39 | 33 | 28 | 37 | 31 | 27 | 25 |
| 9   | 54  | 41  | 33  | 28  | 52  | 40  | 33  | 27  | 38  | 31  | 26  | 36 | 30 | 26 | 34 | 29 | 25 | 23 |
| 10  | 51  | 38  | 30  | 25  | 49  | 37  | 30  | 25  | 35  | 28  | 24  | 33 | 27 | 23 | 31 | 26 | 22 | 21 |

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

|     | 0°    | 90°   | 180°  | 270°  |
|-----|-------|-------|-------|-------|
| 0°  | 11530 | 11530 | 11530 | 11530 |
| 5°  | 11661 | 11748 | 11612 | 11352 |
| 10° | 11734 | 11646 | 11671 | 11169 |
| 15° | 11822 | 11056 | 11733 | 10992 |
| 20° | 11929 | 10931 | 11811 | 10812 |
| 25° | 12000 | 11061 | 11864 | 10570 |
| 30° | 12103 | 11233 | 11918 | 9922  |
| 35° | 12162 | 11348 | 11981 | 9269  |
| 40° | 12232 | 11458 | 12023 | 8751  |
| 45° | 12256 | 9218  | 12047 | 7997  |
| 50° | 12273 | 7164  | 12023 | 7298  |
| 55° | 12247 | 6629  | 12010 | 7081  |
| 60° | 12222 | 6246  | 11950 | 7185  |
| 65° | 12094 | 5988  | 11831 | 7536  |
| 70° | 11767 | 5776  | 11479 | 7870  |
| 75° | 11019 | 5437  | 10684 | 8300  |
| 80° | 10026 | 4975  | 9598  | 7892  |
| 85° | 9776  | 5382  | 8782  | 7085  |



TEST NUMBER: P192468

CATALOG NUMBER: 4WSL-LD2-60-UPL8-UNV-L850-CD1-U

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 193.5  | 2.9       |
| 10°-20°   | 549.4  | 8.1       |
| 20°-30°   | 831.8  | 12.3      |
| 30°-40°   | 1004.3 | 14.9      |
| 40°-50°   | 1025.4 | 15.2      |
| 50°-60°   | 896.5  | 13.3      |
| 60°-70°   | 694.8  | 10.3      |
| 70°-80°   | 417.8  | 6.2       |
| 80°-90°   | 129.0  | 1.9       |
| 90°-100°  | 54.4   | 0.8       |
| 100°-110° | 104.0  | 1.5       |
| 110°-120° | 141.2  | 2.1       |
| 120°-130° | 160.5  | 2.4       |
| 130°-140° | 162.9  | 2.4       |
| 140°-150° | 149.9  | 2.2       |
| 150°-160° | 123.7  | 1.8       |
| 160°-170° | 83.2   | 1.2       |
| 170°-180° | 28.9   | 0.4       |
| 0°-30°    | 1574.7 | 23.3      |
| 0°-40°    | 2579.0 | 38.2      |
| 0°-60°    | 4500.9 | 66.7      |
| 0°-90°    | 5742.4 | 85.1      |
| 90°-120°  | 299.5  | 4.4       |
| 90°-150°  | 772.8  | 11.4      |
| 90°-180°  | 1009.0 | 14.9      |
| 0°-180°   | 6751.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 90°  | 180° | 270° | 360° | Flux |
|------|------|------|------|------|------|------|
| 0°   | 2035 | 2035 | 2035 | 2035 | 2035 |      |
| 5°   | 2051 | 2066 | 2042 | 1996 | 2051 | 195  |
| 15°  | 2016 | 1885 | 2000 | 1874 | 2016 | 570  |
| 25°  | 1920 | 1770 | 1898 | 1691 | 1920 | 886  |
| 35°  | 1759 | 1641 | 1732 | 1340 | 1759 | 1101 |
| 45°  | 1530 | 1151 | 1504 | 998  | 1530 | 1180 |
| 55°  | 1240 | 671  | 1216 | 717  | 1240 | 1108 |
| 65°  | 902  | 447  | 883  | 562  | 902  | 890  |
| 75°  | 503  | 248  | 488  | 379  | 503  | 534  |
| 85°  | 150  | 83   | 135  | 109  | 150  | 152  |
| 90°  | 2    | 46   | 2    | 52   | 2    | 10   |
| 95°  | 13   | 63   | 13   | 100  | 13   | 17   |
| 105° | 70   | 107  | 68   | 135  | 70   | 75   |
| 115° | 135  | 137  | 133  | 183  | 135  | 134  |
| 125° | 194  | 157  | 190  | 224  | 194  | 172  |
| 135° | 238  | 172  | 235  | 248  | 238  | 183  |
| 145° | 268  | 183  | 266  | 264  | 268  | 168  |
| 155° | 290  | 214  | 288  | 279  | 290  | 134  |
| 165° | 303  | 266  | 301  | 303  | 303  | 85   |
| 175° | 307  | 292  | 307  | 301  | 307  | 29   |
| 180° | 303  | 303  | 303  | 303  | 303  |      |



TEST NUMBER: P192468

CATALOG NUMBER: 4WSL-LD2-60-UPL8-UNV-L850-CD1-U

**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    | 112.5° | 135°   | 157.5° | 180°   | 202.5° | 225°   |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°     | 2035.3 | 2035.3 | 2035.3 | 2035.3 | 2035.3 | 2035.3 | 2035.3 | 2035.3 | 2035.3 | 2035.3 | 2035.3 |
| 2.5°   | 2050.6 | 2039.7 | 2065.8 | 2070.2 | 2054.9 | 2059.3 | 2061.5 | 2037.5 | 2046.2 | 2013.5 | 2022.3 |
| 5°     | 2050.6 | 2048.4 | 2078.9 | 2074.6 | 2065.8 | 2068.0 | 2074.6 | 2046.2 | 2041.9 | 2002.6 | 2009.2 |
| 7.5°   | 2048.4 | 2052.8 | 2072.4 | 2068.0 | 2054.9 | 2061.5 | 2072.4 | 2050.6 | 2037.5 | 1991.8 | 1989.6 |
| 10°    | 2039.7 | 2046.2 | 2061.5 | 2048.4 | 2024.4 | 2035.3 | 2059.3 | 2046.2 | 2028.8 | 1974.3 | 1963.4 |
| 12.5°  | 2031.0 | 2035.3 | 2039.7 | 1985.2 | 1946.0 | 1972.1 | 2039.7 | 2035.3 | 2015.7 | 1954.7 | 1935.1 |
| 15°    | 2015.7 | 2022.3 | 2004.8 | 1926.4 | 1885.0 | 1911.1 | 2000.5 | 2017.9 | 2000.5 | 1926.4 | 1902.4 |
| 17.5°  | 1998.3 | 2004.8 | 1967.8 | 1880.6 | 1850.1 | 1863.2 | 1950.3 | 1996.1 | 1980.9 | 1900.2 | 1869.7 |
| 20°    | 1978.7 | 1985.2 | 1926.4 | 1832.7 | 1813.1 | 1824.0 | 1902.4 | 1972.1 | 1959.1 | 1869.7 | 1834.9 |
| 22.5°  | 1950.3 | 1961.2 | 1878.4 | 1800.0 | 1797.8 | 1797.8 | 1856.6 | 1943.8 | 1930.7 | 1832.7 | 1795.6 |
| 25°    | 1919.8 | 1930.7 | 1830.5 | 1769.5 | 1769.5 | 1769.5 | 1815.2 | 1906.8 | 1898.0 | 1793.4 | 1756.4 |
| 27.5°  | 1887.2 | 1898.0 | 1786.9 | 1747.7 | 1754.2 | 1743.3 | 1780.4 | 1865.4 | 1865.4 | 1754.2 | 1715.0 |
| 30°    | 1850.1 | 1861.0 | 1743.3 | 1712.8 | 1717.2 | 1712.8 | 1741.1 | 1821.8 | 1821.8 | 1708.5 | 1667.1 |
| 32.5°  | 1806.5 | 1817.4 | 1695.4 | 1671.4 | 1680.1 | 1675.8 | 1704.1 | 1778.2 | 1780.4 | 1660.5 | 1610.4 |
| 35°    | 1758.6 | 1771.7 | 1645.3 | 1632.2 | 1640.9 | 1634.4 | 1654.0 | 1732.4 | 1732.4 | 1608.2 | 1545.0 |
| 37.5°  | 1708.5 | 1721.5 | 1593.0 | 1588.6 | 1597.3 | 1590.8 | 1606.0 | 1684.5 | 1680.1 | 1553.7 | 1475.3 |
| 40°    | 1654.0 | 1669.2 | 1538.5 | 1538.5 | 1549.4 | 1545.0 | 1558.1 | 1634.4 | 1625.7 | 1499.3 | 1403.4 |
| 42.5°  | 1593.0 | 1612.6 | 1484.0 | 1486.2 | 1473.1 | 1490.5 | 1503.6 | 1582.1 | 1564.6 | 1438.2 | 1324.9 |
| 45°    | 1529.8 | 1553.7 | 1431.7 | 1392.5 | 1150.6 | 1377.2 | 1447.0 | 1529.8 | 1503.6 | 1377.2 | 1248.7 |
| 47.5°  | 1462.2 | 1492.7 | 1370.7 | 1226.9 | 926.1  | 1207.3 | 1385.9 | 1464.4 | 1433.9 | 1311.9 | 1174.6 |
| 50°    | 1392.5 | 1427.3 | 1307.5 | 1085.2 | 812.8  | 1063.4 | 1318.4 | 1399.0 | 1364.2 | 1244.3 | 1089.6 |
| 52.5°  | 1316.2 | 1355.4 | 1246.5 | 961.0  | 736.6  | 941.4  | 1248.7 | 1335.8 | 1292.2 | 1172.4 | 1019.8 |
| 55°    | 1239.9 | 1281.3 | 1163.7 | 854.2  | 671.2  | 836.8  | 1168.0 | 1255.2 | 1216.0 | 1098.3 | 943.6  |
| 57.5°  | 1161.5 | 1202.9 | 1080.9 | 760.5  | 614.5  | 743.1  | 1076.5 | 1181.1 | 1137.5 | 1022.0 | 867.3  |
| 60°    | 1078.7 | 1120.1 | 991.5  | 675.5  | 551.3  | 662.5  | 982.8  | 1098.3 | 1054.7 | 943.6  | 793.2  |
| 62.5°  | 991.5  | 1032.9 | 906.5  | 597.1  | 499.0  | 586.2  | 880.4  | 1017.7 | 969.7  | 860.8  | 716.9  |
| 65°    | 902.2  | 932.7  | 806.3  | 523.0  | 446.7  | 514.3  | 788.9  | 917.4  | 882.6  | 773.6  | 645.0  |
| 67.5°  | 808.5  | 839.0  | 719.1  | 457.6  | 396.6  | 448.9  | 699.5  | 828.1  | 788.9  | 688.6  | 573.1  |
| 70°    | 710.4  | 736.6  | 627.6  | 394.4  | 348.7  | 387.9  | 605.8  | 727.8  | 693.0  | 599.3  | 496.8  |
| 72.5°  | 610.2  | 634.1  | 529.5  | 335.6  | 298.5  | 331.2  | 507.7  | 627.6  | 592.7  | 505.6  | 427.1  |
| 75°    | 503.4  | 527.4  | 438.0  | 276.8  | 248.4  | 272.4  | 418.4  | 520.8  | 488.1  | 416.2  | 355.2  |
| 77.5°  | 403.1  | 431.5  | 346.5  | 217.9  | 198.3  | 213.6  | 329.1  | 420.6  | 387.9  | 333.4  | 285.5  |
| 80°    | 307.3  | 331.2  | 257.1  | 165.6  | 152.5  | 163.4  | 239.7  | 320.3  | 294.2  | 257.1  | 222.3  |
| 82.5°  | 222.3  | 235.3  | 176.5  | 122.0  | 115.5  | 119.9  | 163.4  | 226.6  | 213.6  | 185.2  | 163.4  |
| 85°    | 150.4  | 148.2  | 109.0  | 85.0   | 82.8   | 85.0   | 98.1   | 137.3  | 135.1  | 124.2  | 104.6  |
| 87.5°  | 63.2   | 58.8   | 50.1   | 34.9   | 30.5   | 32.7   | 39.2   | 52.3   | 50.1   | 52.3   | 50.1   |
| 90°    | 2.2    | 21.8   | 34.9   | 43.6   | 45.8   | 43.6   | 34.9   | 21.8   | 2.2    | 24.0   | 39.2   |
| 92.5°  | 4.4    | 28.3   | 41.4   | 47.9   | 52.3   | 47.9   | 39.2   | 28.3   | 4.4    | 37.0   | 39.2   |
| 95°    | 13.1   | 39.2   | 47.9   | 58.8   | 63.2   | 58.8   | 47.9   | 37.0   | 13.1   | 32.7   | 58.8   |
| 97.5°  | 26.1   | 50.1   | 56.7   | 65.4   | 67.6   | 63.2   | 54.5   | 50.1   | 24.0   | 58.8   | 61.0   |
| 100°   | 39.2   | 63.2   | 74.1   | 74.1   | 76.3   | 74.1   | 71.9   | 61.0   | 37.0   | 65.4   | 74.1   |
| 102.5° | 54.5   | 71.9   | 85.0   | 91.5   | 91.5   | 91.5   | 85.0   | 71.9   | 50.1   | 80.6   | 102.4  |
| 105°   | 69.7   | 78.4   | 93.7   | 102.4  | 106.8  | 102.4  | 93.7   | 80.6   | 67.6   | 93.7   | 109.0  |
| 107.5° | 87.2   | 85.0   | 102.4  | 111.1  | 115.5  | 111.1  | 102.4  | 87.2   | 82.8   | 104.6  | 122.0  |
| 110°   | 104.6  | 93.7   | 111.1  | 119.9  | 122.0  | 119.9  | 111.1  | 93.7   | 100.2  | 117.7  | 135.1  |



TEST NUMBER: P192468

CATALOG NUMBER: 4WSL-LD2-60-UPL8-UNV-L850-CD1-U

**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   | 112.5° | 135°  | 157.5° | 180°  | 202.5° | 225°  |
|--------|-------|-------|-------|-------|-------|--------|-------|--------|-------|--------|-------|
| 112.5° | 119.9 | 100.2 | 119.9 | 128.6 | 130.7 | 128.6  | 119.9 | 102.4  | 115.5 | 126.4  | 148.2 |
| 115°   | 135.1 | 106.8 | 124.2 | 135.1 | 137.3 | 135.1  | 124.2 | 109.0  | 132.9 | 137.3  | 159.1 |
| 117.5° | 150.4 | 115.5 | 128.6 | 141.6 | 143.8 | 141.6  | 130.7 | 117.7  | 148.2 | 150.4  | 170.0 |
| 120°   | 165.6 | 126.4 | 135.1 | 146.0 | 150.4 | 148.2  | 135.1 | 128.6  | 161.3 | 161.3  | 178.7 |
| 122.5° | 178.7 | 135.1 | 141.6 | 150.4 | 154.7 | 150.4  | 141.6 | 139.5  | 176.5 | 172.2  | 189.6 |
| 125°   | 193.9 | 143.8 | 146.0 | 154.7 | 156.9 | 154.7  | 148.2 | 146.0  | 189.6 | 180.9  | 196.1 |
| 127.5° | 204.8 | 154.7 | 150.4 | 159.1 | 161.3 | 159.1  | 152.5 | 156.9  | 202.7 | 198.3  | 202.7 |
| 130°   | 217.9 | 165.6 | 154.7 | 163.4 | 165.6 | 165.6  | 154.7 | 170.0  | 213.6 | 211.4  | 211.4 |
| 132.5° | 228.8 | 176.5 | 159.1 | 167.8 | 170.0 | 170.0  | 161.3 | 178.7  | 224.5 | 222.3  | 217.9 |
| 135°   | 237.5 | 191.8 | 167.8 | 167.8 | 172.2 | 172.2  | 170.0 | 193.9  | 235.3 | 233.2  | 228.8 |
| 137.5° | 246.2 | 204.8 | 174.3 | 170.0 | 172.2 | 172.2  | 178.7 | 207.0  | 244.1 | 244.1  | 235.3 |
| 140°   | 255.0 | 217.9 | 178.7 | 174.3 | 174.3 | 178.7  | 185.2 | 220.1  | 252.8 | 252.8  | 237.5 |
| 142.5° | 263.7 | 228.8 | 185.2 | 180.9 | 176.5 | 185.2  | 191.8 | 233.2  | 259.3 | 261.5  | 244.1 |
| 145°   | 268.0 | 239.7 | 193.9 | 187.4 | 183.0 | 193.9  | 202.7 | 244.1  | 265.9 | 270.2  | 257.1 |
| 147.5° | 274.6 | 250.6 | 204.8 | 191.8 | 191.8 | 198.3  | 211.4 | 252.8  | 272.4 | 276.8  | 263.7 |
| 150°   | 281.1 | 259.3 | 213.6 | 198.3 | 193.9 | 204.8  | 220.1 | 261.5  | 278.9 | 283.3  | 272.4 |
| 152.5° | 285.5 | 268.0 | 226.6 | 207.0 | 202.7 | 215.7  | 235.3 | 268.0  | 283.3 | 287.6  | 281.1 |
| 155°   | 289.8 | 274.6 | 241.9 | 215.7 | 213.6 | 224.5  | 248.4 | 274.6  | 287.6 | 292.0  | 287.6 |
| 157.5° | 294.2 | 281.1 | 252.8 | 228.8 | 220.1 | 237.5  | 259.3 | 283.3  | 292.0 | 296.4  | 294.2 |
| 160°   | 296.4 | 285.5 | 265.9 | 241.9 | 237.5 | 252.8  | 270.2 | 285.5  | 294.2 | 300.7  | 298.5 |
| 162.5° | 300.7 | 289.8 | 274.6 | 257.1 | 252.8 | 265.9  | 278.9 | 292.0  | 298.5 | 302.9  | 302.9 |
| 165°   | 302.9 | 294.2 | 283.3 | 270.2 | 265.9 | 278.9  | 285.5 | 296.4  | 300.7 | 302.9  | 305.1 |
| 167.5° | 302.9 | 298.5 | 289.8 | 278.9 | 276.8 | 287.6  | 294.2 | 300.7  | 302.9 | 302.9  | 307.3 |
| 170°   | 305.1 | 300.7 | 294.2 | 287.6 | 285.5 | 294.2  | 296.4 | 302.9  | 305.1 | 302.9  | 309.4 |
| 172.5° | 305.1 | 302.9 | 298.5 | 292.0 | 287.6 | 298.5  | 300.7 | 302.9  | 305.1 | 302.9  | 307.3 |
| 175°   | 307.3 | 302.9 | 302.9 | 298.5 | 292.0 | 302.9  | 302.9 | 302.9  | 307.3 | 302.9  | 305.1 |
| 177.5° | 307.3 | 302.9 | 302.9 | 300.7 | 296.4 | 302.9  | 302.9 | 302.9  | 307.3 | 302.9  | 305.1 |
| 180°   | 302.9 | 302.9 | 302.9 | 302.9 | 302.9 | 302.9  | 302.9 | 302.9  | 302.9 | 302.9  | 302.9 |



TEST NUMBER: P192468

CATALOG NUMBER: 4WSL-LD2-60-UPL8-UNV-L850-CD1-U

**CANDELA DISTRIBUTION (continued):**

|        | 247.5° | 270°   | 292.5° | 315°   | 337.5° | 360°   |
|--------|--------|--------|--------|--------|--------|--------|
| 0°     | 2035.3 | 2035.3 | 2035.3 | 2035.3 | 2035.3 | 2035.3 |
| 2.5°   | 2020.1 | 2004.8 | 2009.2 | 2026.6 | 2020.1 | 2050.6 |
| 5°     | 2004.8 | 1996.1 | 1996.1 | 2015.7 | 2013.5 | 2050.6 |
| 7.5°   | 1980.9 | 1972.1 | 1976.5 | 1998.3 | 2002.6 | 2048.4 |
| 10°    | 1952.5 | 1941.6 | 1946.0 | 1976.5 | 1987.4 | 2039.7 |
| 12.5°  | 1922.0 | 1913.3 | 1917.7 | 1952.5 | 1967.8 | 2031.0 |
| 15°    | 1887.2 | 1874.1 | 1887.2 | 1924.2 | 1943.8 | 2015.7 |
| 17.5°  | 1847.9 | 1830.5 | 1845.7 | 1893.7 | 1917.7 | 1998.3 |
| 20°    | 1808.7 | 1793.4 | 1802.2 | 1854.5 | 1889.3 | 1978.7 |
| 22.5°  | 1769.5 | 1747.7 | 1756.4 | 1810.9 | 1854.5 | 1950.3 |
| 25°    | 1723.7 | 1691.0 | 1708.5 | 1767.3 | 1817.4 | 1919.8 |
| 27.5°  | 1662.7 | 1612.6 | 1649.6 | 1723.7 | 1773.8 | 1887.2 |
| 30°    | 1582.1 | 1516.7 | 1571.2 | 1671.4 | 1728.1 | 1850.1 |
| 32.5°  | 1492.7 | 1423.0 | 1484.0 | 1612.6 | 1680.1 | 1806.5 |
| 35°    | 1403.4 | 1340.2 | 1394.7 | 1547.2 | 1630.0 | 1758.6 |
| 37.5°  | 1318.4 | 1263.9 | 1314.0 | 1477.5 | 1577.7 | 1708.5 |
| 40°    | 1237.8 | 1183.3 | 1235.6 | 1401.2 | 1521.1 | 1654.0 |
| 42.5°  | 1157.1 | 1107.0 | 1157.1 | 1320.6 | 1462.2 | 1593.0 |
| 45°    | 1076.5 | 998.1  | 1072.1 | 1242.1 | 1399.0 | 1529.8 |
| 47.5°  | 989.3  | 897.8  | 982.8  | 1157.1 | 1331.5 | 1462.2 |
| 50°    | 906.5  | 828.1  | 902.2  | 1078.7 | 1261.7 | 1392.5 |
| 52.5°  | 834.6  | 771.4  | 830.3  | 998.1  | 1189.8 | 1316.2 |
| 55°    | 767.1  | 716.9  | 767.1  | 919.6  | 1113.6 | 1239.9 |
| 57.5°  | 706.0  | 673.4  | 708.2  | 852.1  | 1035.1 | 1161.5 |
| 60°    | 653.7  | 634.1  | 655.9  | 769.2  | 956.7  | 1078.7 |
| 62.5°  | 603.6  | 601.4  | 605.8  | 703.9  | 873.8  | 991.5  |
| 65°    | 551.3  | 562.2  | 551.3  | 634.1  | 791.0  | 902.2  |
| 67.5°  | 499.0  | 520.8  | 503.4  | 564.4  | 701.7  | 808.5  |
| 70°    | 451.1  | 475.1  | 451.1  | 492.5  | 612.3  | 710.4  |
| 72.5°  | 396.6  | 427.1  | 396.6  | 424.9  | 518.6  | 610.2  |
| 75°    | 344.3  | 379.2  | 346.5  | 355.2  | 429.3  | 503.4  |
| 77.5°  | 287.6  | 320.3  | 294.2  | 287.6  | 346.5  | 403.1  |
| 80°    | 228.8  | 241.9  | 228.8  | 226.6  | 268.0  | 307.3  |
| 82.5°  | 159.1  | 170.0  | 159.1  | 165.6  | 196.1  | 222.3  |
| 85°    | 104.6  | 109.0  | 104.6  | 106.8  | 130.7  | 150.4  |
| 87.5°  | 43.6   | 43.6   | 43.6   | 54.5   | 58.8   | 63.2   |
| 90°    | 47.9   | 52.3   | 47.9   | 39.2   | 24.0   | 2.2    |
| 92.5°  | 50.1   | 54.5   | 50.1   | 43.6   | 28.3   | 4.4    |
| 95°    | 89.3   | 100.2  | 85.0   | 54.5   | 45.8   | 13.1   |
| 97.5°  | 71.9   | 78.4   | 74.1   | 63.2   | 56.7   | 26.1   |
| 100°   | 85.0   | 91.5   | 85.0   | 89.3   | 69.7   | 39.2   |
| 102.5° | 100.2  | 104.6  | 102.4  | 104.6  | 85.0   | 54.5   |
| 105°   | 130.7  | 135.1  | 130.7  | 113.3  | 98.1   | 69.7   |
| 107.5° | 139.5  | 150.4  | 141.6  | 126.4  | 111.1  | 87.2   |
| 110°   | 150.4  | 159.1  | 152.5  | 139.5  | 122.0  | 104.6  |





TEST NUMBER: P192468

CATALOG NUMBER: 4WSL-LD2-60-UPL8-UNV-L850-CD1-U

**CANDELA DISTRIBUTION (continued):**

|        | 247.5° | 270°  | 292.5° | 315°  | 337.5° | 360°  |
|--------|--------|-------|--------|-------|--------|-------|
| 112.5° | 161.3  | 172.2 | 165.6  | 154.7 | 130.7  | 119.9 |
| 115°   | 174.3  | 183.0 | 178.7  | 165.6 | 143.8  | 135.1 |
| 117.5° | 187.4  | 193.9 | 189.6  | 174.3 | 156.9  | 150.4 |
| 120°   | 198.3  | 207.0 | 202.7  | 185.2 | 167.8  | 165.6 |
| 122.5° | 207.0  | 215.7 | 211.4  | 196.1 | 178.7  | 178.7 |
| 125°   | 215.7  | 224.5 | 220.1  | 204.8 | 187.4  | 193.9 |
| 127.5° | 222.3  | 233.2 | 228.8  | 211.4 | 207.0  | 204.8 |
| 130°   | 231.0  | 237.5 | 235.3  | 217.9 | 217.9  | 217.9 |
| 132.5° | 235.3  | 244.1 | 239.7  | 226.6 | 231.0  | 228.8 |
| 135°   | 237.5  | 248.4 | 244.1  | 237.5 | 241.9  | 237.5 |
| 137.5° | 241.9  | 250.6 | 248.4  | 244.1 | 252.8  | 246.2 |
| 140°   | 248.4  | 252.8 | 255.0  | 248.4 | 261.5  | 255.0 |
| 142.5° | 255.0  | 257.1 | 261.5  | 255.0 | 270.2  | 263.7 |
| 145°   | 259.3  | 263.7 | 268.0  | 268.0 | 276.8  | 268.0 |
| 147.5° | 259.3  | 265.9 | 265.9  | 272.4 | 285.5  | 274.6 |
| 150°   | 265.9  | 261.5 | 274.6  | 281.1 | 289.8  | 281.1 |
| 152.5° | 274.6  | 272.4 | 283.3  | 289.8 | 294.2  | 285.5 |
| 155°   | 276.8  | 278.9 | 285.5  | 296.4 | 298.5  | 289.8 |
| 157.5° | 285.5  | 283.3 | 294.2  | 302.9 | 302.9  | 294.2 |
| 160°   | 292.0  | 292.0 | 302.9  | 307.3 | 305.1  | 296.4 |
| 162.5° | 298.5  | 298.5 | 309.4  | 309.4 | 307.3  | 300.7 |
| 165°   | 302.9  | 302.9 | 313.8  | 311.6 | 307.3  | 302.9 |
| 167.5° | 305.1  | 307.3 | 316.0  | 313.8 | 307.3  | 302.9 |
| 170°   | 307.3  | 307.3 | 316.0  | 311.6 | 307.3  | 305.1 |
| 172.5° | 307.3  | 305.1 | 313.8  | 309.4 | 305.1  | 305.1 |
| 175°   | 305.1  | 300.7 | 309.4  | 305.1 | 305.1  | 307.3 |
| 177.5° | 302.9  | 296.4 | 302.9  | 302.9 | 305.1  | 307.3 |
| 180°   | 302.9  | 302.9 | 302.9  | 302.9 | 302.9  | 302.9 |

(END OF REPORT)