

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: P197409

Luminaire Tested: **8WSL-LD2-65-UPL8-UNV-L830-CD1-U**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-79-08  
Report Number: P197409  
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: 8WSL-LD2-65-UPL8-UNV-L830-CD1-U  
Description: 8FT. Linear Wavestream System, 8% Uplight, L830  
Light Source: (476) 3000K CCT, 80 CRI LEDS  
EL236N0119D830  
Ballast/Driver: OSRAM  
OT50W

**Summary**

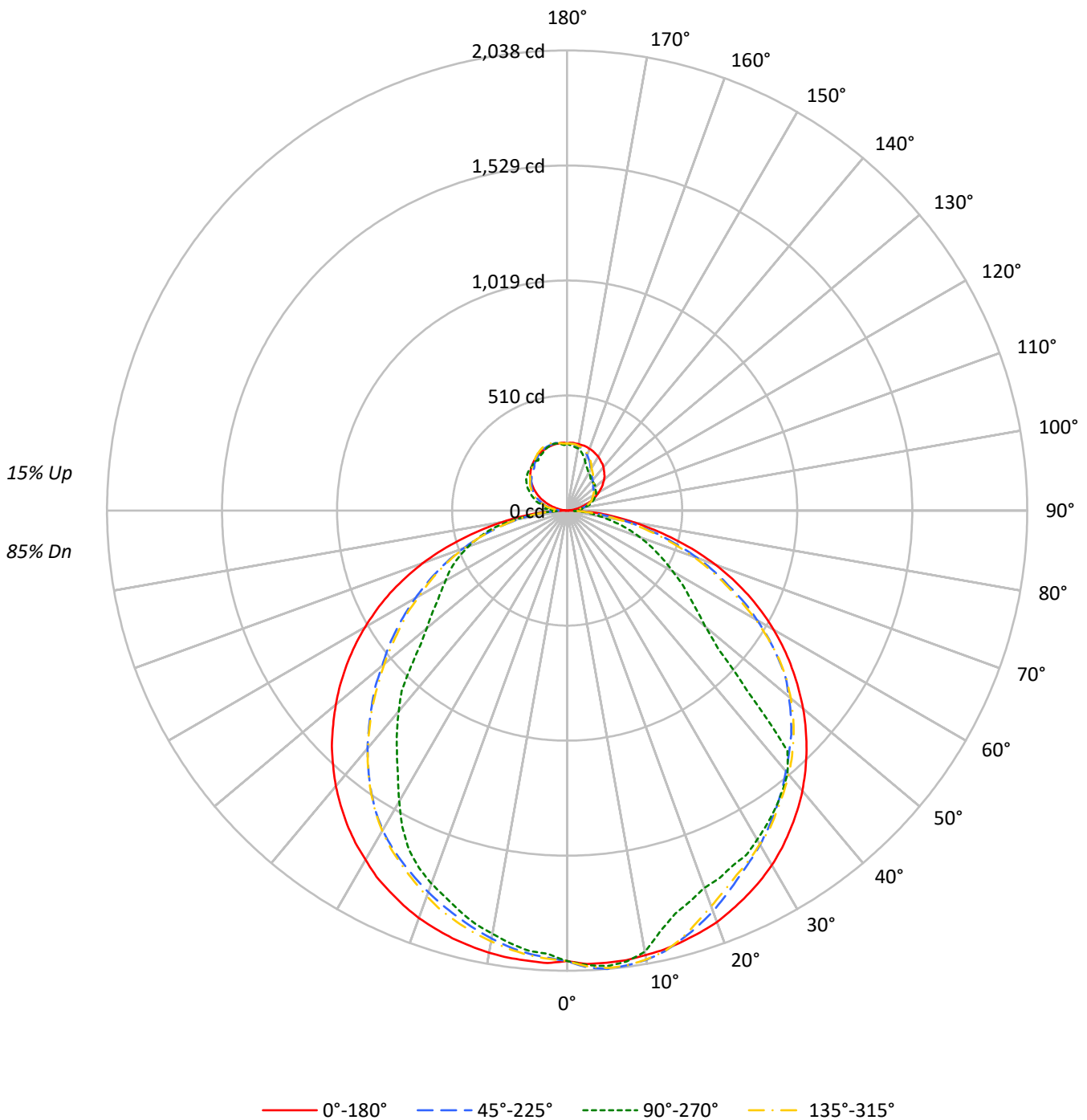
Lumens per Lamp: N/A  
Luminaire Lumens: 6617.8 lumens  
Efficiency: N/A  
Efficacy: 114.9 lumens/watt  
Spacing Criteria (0/90/45): 1.34 / 1.19 / 1.36  
Luminous Opening: Rectangular (W 0.5' x L: 7.6' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 57.6  
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: P197409

CATALOG NUMBER: 8WSL-LD2-65-UPL8-UNV-L830-CD1-U

### Luminous Intensity Polar Plot





TEST NUMBER: P197409

CATALOG NUMBER: 8WSL-LD2-65-UPL8-UNV-L830-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°  | 5652 | 5652 | 5652 | 5652 |
| 5°  | 5716 | 5758 | 5691 | 5564 |
| 10° | 5751 | 5708 | 5720 | 5474 |
| 15° | 5795 | 5419 | 5751 | 5387 |
| 20° | 5847 | 5357 | 5789 | 5300 |
| 25° | 5882 | 5421 | 5815 | 5181 |
| 30° | 5932 | 5506 | 5841 | 4863 |
| 35° | 5961 | 5562 | 5872 | 4543 |
| 40° | 5995 | 5616 | 5893 | 4289 |
| 45° | 6007 | 4518 | 5905 | 3919 |
| 50° | 6015 | 3511 | 5893 | 3577 |
| 55° | 6003 | 3249 | 5887 | 3471 |
| 60° | 5990 | 3061 | 5857 | 3521 |
| 65° | 5928 | 2935 | 5798 | 3694 |
| 70° | 5768 | 2831 | 5626 | 3857 |
| 75° | 5401 | 2665 | 5237 | 4068 |
| 80° | 4913 | 2439 | 4704 | 3868 |
| 85° | 4791 | 2639 | 4303 | 3471 |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 189.7  | 2.9       |
| 10°-20°   | 538.6  | 8.1       |
| 20°-30°   | 815.3  | 12.3      |
| 30°-40°   | 984.5  | 14.9      |
| 40°-50°   | 1005.2 | 15.2      |
| 50°-60°   | 878.8  | 13.3      |
| 60°-70°   | 681.1  | 10.3      |
| 70°-80°   | 409.5  | 6.2       |
| 80°-90°   | 126.4  | 1.9       |
| 90°-100°  | 53.3   | 0.8       |
| 100°-110° | 101.9  | 1.5       |
| 110°-120° | 138.4  | 2.1       |
| 120°-130° | 157.4  | 2.4       |
| 130°-140° | 159.6  | 2.4       |
| 140°-150° | 146.9  | 2.2       |
| 150°-160° | 121.2  | 1.8       |
| 160°-170° | 81.5   | 1.2       |
| 170°-180° | 28.3   | 0.4       |
| 0°-30°    | 1543.6 | 23.3      |
| 0°-40°    | 2528.1 | 38.2      |
| 0°-60°    | 4412.1 | 66.7      |
| 0°-90°    | 5629.1 | 85.1      |
| 90°-120°  | 293.6  | 4.4       |
| 90°-150°  | 757.6  | 11.4      |
| 90°-180°  | 989.0  | 14.9      |
| 0°-180°   | 6617.8 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 90°  | 180° | 270° | 360° | Flux |
|------|------|------|------|------|------|------|
| 0°   | 1995 | 1995 | 1995 | 1995 | 1995 |      |
| 5°   | 2010 | 2025 | 2002 | 1957 | 2010 | 192  |
| 15°  | 1976 | 1848 | 1961 | 1837 | 1976 | 559  |
| 25°  | 1882 | 1735 | 1861 | 1658 | 1882 | 869  |
| 35°  | 1724 | 1608 | 1698 | 1314 | 1724 | 1079 |
| 45°  | 1500 | 1128 | 1474 | 978  | 1500 | 1157 |
| 55°  | 1216 | 658  | 1192 | 703  | 1216 | 1086 |
| 65°  | 884  | 438  | 865  | 551  | 884  | 873  |
| 75°  | 494  | 244  | 478  | 372  | 494  | 524  |
| 85°  | 147  | 81   | 132  | 107  | 147  | 149  |
| 90°  | 2    | 45   | 2    | 51   | 2    | 10   |
| 95°  | 13   | 62   | 13   | 98   | 13   | 16   |
| 105° | 68   | 105  | 66   | 132  | 68   | 73   |
| 115° | 132  | 135  | 130  | 179  | 132  | 131  |
| 125° | 190  | 154  | 186  | 220  | 190  | 169  |
| 135° | 233  | 169  | 231  | 244  | 233  | 180  |
| 145° | 263  | 179  | 261  | 258  | 263  | 165  |
| 155° | 284  | 209  | 282  | 273  | 284  | 131  |
| 165° | 297  | 261  | 295  | 297  | 297  | 84   |
| 175° | 301  | 286  | 301  | 295  | 301  | 29   |
| 180° | 297  | 297  | 297  | 297  | 297  |      |



TEST NUMBER: P197409

CATALOG NUMBER: 8WSL-LD2-65-UPL8-UNV-L830-CD1-U

**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    | 112.5° | 135°   | 157.5° | 180°   | 202.5° | 225°   |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°     | 1995.2 | 1995.2 | 1995.2 | 1995.2 | 1995.2 | 1995.2 | 1995.2 | 1995.2 | 1995.2 | 1995.2 | 1995.2 |
| 2.5°   | 2010.1 | 1999.4 | 2025.1 | 2029.4 | 2014.4 | 2018.7 | 2020.8 | 1997.3 | 2005.9 | 1973.8 | 1982.4 |
| 5°     | 2010.1 | 2008.0 | 2037.9 | 2033.6 | 2025.1 | 2027.2 | 2033.6 | 2005.9 | 2001.6 | 1963.1 | 1969.5 |
| 7.5°   | 2008.0 | 2012.3 | 2031.5 | 2027.2 | 2014.4 | 2020.8 | 2031.5 | 2010.1 | 1997.3 | 1952.5 | 1950.3 |
| 10°    | 1999.4 | 2005.9 | 2020.8 | 2008.0 | 1984.5 | 1995.2 | 2018.7 | 2005.9 | 1988.8 | 1935.4 | 1924.7 |
| 12.5°  | 1990.9 | 1995.2 | 1999.4 | 1946.0 | 1907.6 | 1933.2 | 1999.4 | 1995.2 | 1976.0 | 1916.1 | 1896.9 |
| 15°    | 1976.0 | 1982.4 | 1965.3 | 1888.4 | 1847.8 | 1873.4 | 1961.0 | 1978.1 | 1961.0 | 1888.4 | 1864.9 |
| 17.5°  | 1958.9 | 1965.3 | 1929.0 | 1843.5 | 1813.6 | 1826.4 | 1911.9 | 1956.7 | 1941.8 | 1862.7 | 1832.8 |
| 20°    | 1939.6 | 1946.0 | 1888.4 | 1796.5 | 1777.3 | 1788.0 | 1864.9 | 1933.2 | 1920.4 | 1832.8 | 1798.6 |
| 22.5°  | 1911.9 | 1922.5 | 1841.4 | 1764.5 | 1762.3 | 1762.3 | 1820.0 | 1905.5 | 1892.6 | 1796.5 | 1760.2 |
| 25°    | 1882.0 | 1892.6 | 1794.4 | 1734.6 | 1734.6 | 1734.6 | 1779.4 | 1869.1 | 1860.6 | 1758.1 | 1721.7 |
| 27.5°  | 1849.9 | 1860.6 | 1751.7 | 1713.2 | 1719.6 | 1708.9 | 1745.2 | 1828.6 | 1828.6 | 1719.6 | 1681.2 |
| 30°    | 1813.6 | 1824.3 | 1708.9 | 1679.0 | 1683.3 | 1679.0 | 1706.8 | 1785.8 | 1785.8 | 1674.8 | 1634.2 |
| 32.5°  | 1770.9 | 1781.6 | 1661.9 | 1638.4 | 1647.0 | 1642.7 | 1670.5 | 1743.1 | 1745.2 | 1627.8 | 1578.6 |
| 35°    | 1723.9 | 1736.7 | 1612.8 | 1600.0 | 1608.5 | 1602.1 | 1621.3 | 1698.2 | 1698.2 | 1576.5 | 1514.5 |
| 37.5°  | 1674.8 | 1687.6 | 1561.5 | 1557.3 | 1565.8 | 1559.4 | 1574.4 | 1651.3 | 1647.0 | 1523.1 | 1446.2 |
| 40°    | 1621.3 | 1636.3 | 1508.1 | 1508.1 | 1518.8 | 1514.5 | 1527.4 | 1602.1 | 1593.6 | 1469.7 | 1375.7 |
| 42.5°  | 1561.5 | 1580.8 | 1454.7 | 1456.9 | 1444.0 | 1461.1 | 1474.0 | 1550.9 | 1533.8 | 1409.9 | 1298.8 |
| 45°    | 1499.6 | 1523.1 | 1403.5 | 1365.0 | 1127.9 | 1350.1 | 1418.4 | 1499.6 | 1474.0 | 1350.1 | 1224.0 |
| 47.5°  | 1433.4 | 1463.3 | 1343.6 | 1202.7 | 907.9  | 1183.4 | 1358.6 | 1435.5 | 1405.6 | 1286.0 | 1151.4 |
| 50°    | 1365.0 | 1399.2 | 1281.7 | 1063.8 | 796.8  | 1042.4 | 1292.4 | 1371.4 | 1337.2 | 1219.7 | 1068.1 |
| 52.5°  | 1290.2 | 1328.7 | 1221.9 | 942.0  | 722.0  | 922.8  | 1224.0 | 1309.5 | 1266.7 | 1149.3 | 999.7  |
| 55°    | 1215.5 | 1256.1 | 1140.7 | 837.4  | 657.9  | 820.3  | 1145.0 | 1230.4 | 1192.0 | 1076.6 | 925.0  |
| 57.5°  | 1138.6 | 1179.2 | 1059.5 | 745.5  | 602.4  | 728.4  | 1055.3 | 1157.8 | 1115.1 | 1001.9 | 850.2  |
| 60°    | 1057.4 | 1098.0 | 972.0  | 662.2  | 540.4  | 649.4  | 963.4  | 1076.6 | 1033.9 | 925.0  | 777.6  |
| 62.5°  | 972.0  | 1012.5 | 888.6  | 585.3  | 489.2  | 574.6  | 863.0  | 997.6  | 950.6  | 843.8  | 702.8  |
| 65°    | 884.4  | 914.3  | 790.4  | 512.7  | 437.9  | 504.1  | 773.3  | 899.3  | 865.1  | 758.3  | 632.3  |
| 67.5°  | 792.5  | 822.4  | 704.9  | 448.6  | 388.8  | 440.0  | 685.7  | 811.7  | 773.3  | 675.0  | 561.8  |
| 70°    | 696.4  | 722.0  | 615.2  | 386.6  | 341.8  | 380.2  | 593.9  | 713.5  | 679.3  | 587.4  | 487.0  |
| 72.5°  | 598.1  | 621.6  | 519.1  | 329.0  | 292.7  | 324.7  | 497.7  | 615.2  | 581.0  | 495.6  | 418.7  |
| 75°    | 493.5  | 517.0  | 429.4  | 271.3  | 243.5  | 267.0  | 410.1  | 510.5  | 478.5  | 408.0  | 348.2  |
| 77.5°  | 395.2  | 423.0  | 339.6  | 213.6  | 194.4  | 209.3  | 322.6  | 412.3  | 380.2  | 326.8  | 279.8  |
| 80°    | 301.2  | 324.7  | 252.1  | 162.3  | 149.5  | 160.2  | 235.0  | 314.0  | 288.4  | 252.1  | 217.9  |
| 82.5°  | 217.9  | 230.7  | 173.0  | 119.6  | 113.2  | 117.5  | 160.2  | 222.2  | 209.3  | 181.6  | 160.2  |
| 85°    | 147.4  | 145.3  | 106.8  | 83.3   | 81.2   | 83.3   | 96.1   | 134.6  | 132.4  | 121.8  | 102.5  |
| 87.5°  | 61.9   | 57.7   | 49.1   | 34.2   | 29.9   | 32.0   | 38.5   | 51.3   | 49.1   | 51.3   | 49.1   |
| 90°    | 2.1    | 21.4   | 34.2   | 42.7   | 44.9   | 42.7   | 34.2   | 21.4   | 2.1    | 23.5   | 38.5   |
| 92.5°  | 4.3    | 27.8   | 40.6   | 47.0   | 51.3   | 47.0   | 38.5   | 27.8   | 4.3    | 36.3   | 38.5   |
| 95°    | 12.8   | 38.5   | 47.0   | 57.7   | 61.9   | 57.7   | 47.0   | 36.3   | 12.8   | 32.0   | 57.7   |
| 97.5°  | 25.6   | 49.1   | 55.5   | 64.1   | 66.2   | 61.9   | 53.4   | 49.1   | 23.5   | 57.7   | 59.8   |
| 100°   | 38.5   | 61.9   | 72.6   | 72.6   | 74.8   | 72.6   | 70.5   | 59.8   | 36.3   | 64.1   | 72.6   |
| 102.5° | 53.4   | 70.5   | 83.3   | 89.7   | 89.7   | 89.7   | 83.3   | 70.5   | 49.1   | 79.0   | 100.4  |
| 105°   | 68.4   | 76.9   | 91.9   | 100.4  | 104.7  | 100.4  | 91.9   | 79.0   | 66.2   | 91.9   | 106.8  |
| 107.5° | 85.4   | 83.3   | 100.4  | 108.9  | 113.2  | 108.9  | 100.4  | 85.4   | 81.2   | 102.5  | 119.6  |
| 110°   | 102.5  | 91.9   | 108.9  | 117.5  | 119.6  | 117.5  | 108.9  | 91.9   | 98.3   | 115.4  | 132.4  |



TEST NUMBER: P197409

CATALOG NUMBER: 8WSL-LD2-65-UPL8-UNV-L830-CD1-U

**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   | 112.5° | 135°  | 157.5° | 180°  | 202.5° | 225°  |
|--------|-------|-------|-------|-------|-------|--------|-------|--------|-------|--------|-------|
| 112.5° | 117.5 | 98.3  | 117.5 | 126.0 | 128.2 | 126.0  | 117.5 | 100.4  | 113.2 | 123.9  | 145.3 |
| 115°   | 132.4 | 104.7 | 121.8 | 132.4 | 134.6 | 132.4  | 121.8 | 106.8  | 130.3 | 134.6  | 155.9 |
| 117.5° | 147.4 | 113.2 | 126.0 | 138.9 | 141.0 | 138.9  | 128.2 | 115.4  | 145.3 | 147.4  | 166.6 |
| 120°   | 162.3 | 123.9 | 132.4 | 143.1 | 147.4 | 145.3  | 132.4 | 126.0  | 158.1 | 158.1  | 175.2 |
| 122.5° | 175.2 | 132.4 | 138.9 | 147.4 | 151.7 | 147.4  | 138.9 | 136.7  | 173.0 | 168.8  | 185.8 |
| 125°   | 190.1 | 141.0 | 143.1 | 151.7 | 153.8 | 151.7  | 145.3 | 143.1  | 185.8 | 177.3  | 192.3 |
| 127.5° | 200.8 | 151.7 | 147.4 | 155.9 | 158.1 | 155.9  | 149.5 | 153.8  | 198.7 | 194.4  | 198.7 |
| 130°   | 213.6 | 162.3 | 151.7 | 160.2 | 162.3 | 162.3  | 151.7 | 166.6  | 209.3 | 207.2  | 207.2 |
| 132.5° | 224.3 | 173.0 | 155.9 | 164.5 | 166.6 | 166.6  | 158.1 | 175.2  | 220.0 | 217.9  | 213.6 |
| 135°   | 232.8 | 188.0 | 164.5 | 164.5 | 168.8 | 168.8  | 166.6 | 190.1  | 230.7 | 228.6  | 224.3 |
| 137.5° | 241.4 | 200.8 | 170.9 | 166.6 | 168.8 | 168.8  | 175.2 | 202.9  | 239.3 | 239.3  | 230.7 |
| 140°   | 249.9 | 213.6 | 175.2 | 170.9 | 170.9 | 175.2  | 181.6 | 215.8  | 247.8 | 247.8  | 232.8 |
| 142.5° | 258.5 | 224.3 | 181.6 | 177.3 | 173.0 | 181.6  | 188.0 | 228.6  | 254.2 | 256.3  | 239.3 |
| 145°   | 262.7 | 235.0 | 190.1 | 183.7 | 179.4 | 190.1  | 198.7 | 239.3  | 260.6 | 264.9  | 252.1 |
| 147.5° | 269.2 | 245.7 | 200.8 | 188.0 | 188.0 | 194.4  | 207.2 | 247.8  | 267.0 | 271.3  | 258.5 |
| 150°   | 275.6 | 254.2 | 209.3 | 194.4 | 190.1 | 200.8  | 215.8 | 256.3  | 273.4 | 277.7  | 267.0 |
| 152.5° | 279.8 | 262.7 | 222.2 | 202.9 | 198.7 | 211.5  | 230.7 | 262.7  | 277.7 | 282.0  | 275.6 |
| 155°   | 284.1 | 269.2 | 237.1 | 211.5 | 209.3 | 220.0  | 243.5 | 269.2  | 282.0 | 286.2  | 282.0 |
| 157.5° | 288.4 | 275.6 | 247.8 | 224.3 | 215.8 | 232.8  | 254.2 | 277.7  | 286.2 | 290.5  | 288.4 |
| 160°   | 290.5 | 279.8 | 260.6 | 237.1 | 232.8 | 247.8  | 264.9 | 279.8  | 288.4 | 294.8  | 292.7 |
| 162.5° | 294.8 | 284.1 | 269.2 | 252.1 | 247.8 | 260.6  | 273.4 | 286.2  | 292.7 | 296.9  | 296.9 |
| 165°   | 296.9 | 288.4 | 277.7 | 264.9 | 260.6 | 273.4  | 279.8 | 290.5  | 294.8 | 296.9  | 299.1 |
| 167.5° | 296.9 | 292.7 | 284.1 | 273.4 | 271.3 | 282.0  | 288.4 | 294.8  | 296.9 | 296.9  | 301.2 |
| 170°   | 299.1 | 294.8 | 288.4 | 282.0 | 279.8 | 288.4  | 290.5 | 296.9  | 299.1 | 296.9  | 303.3 |
| 172.5° | 299.1 | 296.9 | 292.7 | 286.2 | 282.0 | 292.7  | 294.8 | 296.9  | 299.1 | 296.9  | 301.2 |
| 175°   | 301.2 | 296.9 | 296.9 | 292.7 | 286.2 | 296.9  | 296.9 | 296.9  | 301.2 | 296.9  | 299.1 |
| 177.5° | 301.2 | 296.9 | 296.9 | 294.8 | 290.5 | 296.9  | 296.9 | 296.9  | 301.2 | 296.9  | 299.1 |
| 180°   | 296.9 | 296.9 | 296.9 | 296.9 | 296.9 | 296.9  | 296.9 | 296.9  | 296.9 | 296.9  | 296.9 |



TEST NUMBER: P197409

CATALOG NUMBER: 8WSL-LD2-65-UPL8-UNV-L830-CD1-U

**CANDELA DISTRIBUTION (continued):**

|        | 247.5° | 270°   | 292.5° | 315°   | 337.5° | 360°   |
|--------|--------|--------|--------|--------|--------|--------|
| 0°     | 1995.2 | 1995.2 | 1995.2 | 1995.2 | 1995.2 | 1995.2 |
| 2.5°   | 1980.2 | 1965.3 | 1969.5 | 1986.6 | 1980.2 | 2010.1 |
| 5°     | 1965.3 | 1956.7 | 1956.7 | 1976.0 | 1973.8 | 2010.1 |
| 7.5°   | 1941.8 | 1933.2 | 1937.5 | 1958.9 | 1963.1 | 2008.0 |
| 10°    | 1914.0 | 1903.3 | 1907.6 | 1937.5 | 1948.2 | 1999.4 |
| 12.5°  | 1884.1 | 1875.6 | 1879.8 | 1914.0 | 1929.0 | 1990.9 |
| 15°    | 1849.9 | 1837.1 | 1849.9 | 1886.2 | 1905.5 | 1976.0 |
| 17.5°  | 1811.5 | 1794.4 | 1809.3 | 1856.3 | 1879.8 | 1958.9 |
| 20°    | 1773.0 | 1758.1 | 1766.6 | 1817.9 | 1852.1 | 1939.6 |
| 22.5°  | 1734.6 | 1713.2 | 1721.7 | 1775.2 | 1817.9 | 1911.9 |
| 25°    | 1689.7 | 1657.7 | 1674.8 | 1732.4 | 1781.6 | 1882.0 |
| 27.5°  | 1629.9 | 1580.8 | 1617.1 | 1689.7 | 1738.8 | 1849.9 |
| 30°    | 1550.9 | 1486.8 | 1540.2 | 1638.4 | 1694.0 | 1813.6 |
| 32.5°  | 1463.3 | 1394.9 | 1454.7 | 1580.8 | 1647.0 | 1770.9 |
| 35°    | 1375.7 | 1313.7 | 1367.1 | 1516.7 | 1597.8 | 1723.9 |
| 37.5°  | 1292.4 | 1239.0 | 1288.1 | 1448.3 | 1546.6 | 1674.8 |
| 40°    | 1213.3 | 1159.9 | 1211.2 | 1373.6 | 1491.0 | 1621.3 |
| 42.5°  | 1134.3 | 1085.2 | 1134.3 | 1294.5 | 1433.4 | 1561.5 |
| 45°    | 1055.3 | 978.4  | 1051.0 | 1217.6 | 1371.4 | 1499.6 |
| 47.5°  | 969.8  | 880.1  | 963.4  | 1134.3 | 1305.2 | 1433.4 |
| 50°    | 888.6  | 811.7  | 884.4  | 1057.4 | 1236.8 | 1365.0 |
| 52.5°  | 818.2  | 756.2  | 813.9  | 978.4  | 1166.3 | 1290.2 |
| 55°    | 751.9  | 702.8  | 751.9  | 901.5  | 1091.6 | 1215.5 |
| 57.5°  | 692.1  | 660.1  | 694.3  | 835.2  | 1014.7 | 1138.6 |
| 60°    | 640.8  | 621.6  | 643.0  | 754.1  | 937.8  | 1057.4 |
| 62.5°  | 591.7  | 589.6  | 593.9  | 690.0  | 856.6  | 972.0  |
| 65°    | 540.4  | 551.1  | 540.4  | 621.6  | 775.4  | 884.4  |
| 67.5°  | 489.2  | 510.5  | 493.5  | 553.3  | 687.8  | 792.5  |
| 70°    | 442.2  | 465.7  | 442.2  | 482.8  | 600.3  | 696.4  |
| 72.5°  | 388.8  | 418.7  | 388.8  | 416.6  | 508.4  | 598.1  |
| 75°    | 337.5  | 371.7  | 339.6  | 348.2  | 420.8  | 493.5  |
| 77.5°  | 282.0  | 314.0  | 288.4  | 282.0  | 339.6  | 395.2  |
| 80°    | 224.3  | 237.1  | 224.3  | 222.2  | 262.7  | 301.2  |
| 82.5°  | 155.9  | 166.6  | 155.9  | 162.3  | 192.3  | 217.9  |
| 85°    | 102.5  | 106.8  | 102.5  | 104.7  | 128.2  | 147.4  |
| 87.5°  | 42.7   | 42.7   | 42.7   | 53.4   | 57.7   | 61.9   |
| 90°    | 47.0   | 51.3   | 47.0   | 38.5   | 23.5   | 2.1    |
| 92.5°  | 49.1   | 53.4   | 49.1   | 42.7   | 27.8   | 4.3    |
| 95°    | 87.6   | 98.3   | 83.3   | 53.4   | 44.9   | 12.8   |
| 97.5°  | 70.5   | 76.9   | 72.6   | 61.9   | 55.5   | 25.6   |
| 100°   | 83.3   | 89.7   | 83.3   | 87.6   | 68.4   | 38.5   |
| 102.5° | 98.3   | 102.5  | 100.4  | 102.5  | 83.3   | 53.4   |
| 105°   | 128.2  | 132.4  | 128.2  | 111.1  | 96.1   | 68.4   |
| 107.5° | 136.7  | 147.4  | 138.9  | 123.9  | 108.9  | 85.4   |
| 110°   | 147.4  | 155.9  | 149.5  | 136.7  | 119.6  | 102.5  |





TEST NUMBER: P197409

CATALOG NUMBER: 8WSL-LD2-65-UPL8-UNV-L830-CD1-U

**CANDELA DISTRIBUTION (continued):**

|        | 247.5° | 270°  | 292.5° | 315°  | 337.5° | 360°  |
|--------|--------|-------|--------|-------|--------|-------|
| 112.5° | 158.1  | 168.8 | 162.3  | 151.7 | 128.2  | 117.5 |
| 115°   | 170.9  | 179.4 | 175.2  | 162.3 | 141.0  | 132.4 |
| 117.5° | 183.7  | 190.1 | 185.8  | 170.9 | 153.8  | 147.4 |
| 120°   | 194.4  | 202.9 | 198.7  | 181.6 | 164.5  | 162.3 |
| 122.5° | 202.9  | 211.5 | 207.2  | 192.3 | 175.2  | 175.2 |
| 125°   | 211.5  | 220.0 | 215.8  | 200.8 | 183.7  | 190.1 |
| 127.5° | 217.9  | 228.6 | 224.3  | 207.2 | 202.9  | 200.8 |
| 130°   | 226.4  | 232.8 | 230.7  | 213.6 | 213.6  | 213.6 |
| 132.5° | 230.7  | 239.3 | 235.0  | 222.2 | 226.4  | 224.3 |
| 135°   | 232.8  | 243.5 | 239.3  | 232.8 | 237.1  | 232.8 |
| 137.5° | 237.1  | 245.7 | 243.5  | 239.3 | 247.8  | 241.4 |
| 140°   | 243.5  | 247.8 | 249.9  | 243.5 | 256.3  | 249.9 |
| 142.5° | 249.9  | 252.1 | 256.3  | 249.9 | 264.9  | 258.5 |
| 145°   | 254.2  | 258.5 | 262.7  | 262.7 | 271.3  | 262.7 |
| 147.5° | 254.2  | 260.6 | 260.6  | 267.0 | 279.8  | 269.2 |
| 150°   | 260.6  | 256.3 | 269.2  | 275.6 | 284.1  | 275.6 |
| 152.5° | 269.2  | 267.0 | 277.7  | 284.1 | 288.4  | 279.8 |
| 155°   | 271.3  | 273.4 | 279.8  | 290.5 | 292.7  | 284.1 |
| 157.5° | 279.8  | 277.7 | 288.4  | 296.9 | 296.9  | 288.4 |
| 160°   | 286.2  | 286.2 | 296.9  | 301.2 | 299.1  | 290.5 |
| 162.5° | 292.7  | 292.7 | 303.3  | 303.3 | 301.2  | 294.8 |
| 165°   | 296.9  | 296.9 | 307.6  | 305.5 | 301.2  | 296.9 |
| 167.5° | 299.1  | 301.2 | 309.7  | 307.6 | 301.2  | 296.9 |
| 170°   | 301.2  | 301.2 | 309.7  | 305.5 | 301.2  | 299.1 |
| 172.5° | 301.2  | 299.1 | 307.6  | 303.3 | 299.1  | 299.1 |
| 175°   | 299.1  | 294.8 | 303.3  | 299.1 | 299.1  | 301.2 |
| 177.5° | 296.9  | 290.5 | 296.9  | 296.9 | 299.1  | 301.2 |
| 180°   | 296.9  | 296.9 | 296.9  | 296.9 | 296.9  | 296.9 |

(END OF REPORT)