

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: P197461

Luminaire Tested: **8WSL-LD2-65-UPL15-UNV-L830-CD1-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P197461
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P28105)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 8WSL-LD2-65-UPL15-UNV-L830-CD1-U
Description: 8FT. Linear Wavestream System, 15% Uplight, L830
Light Source: (476) 3000K CCT, 80 CRI LEDS
EL236N0119D830
Ballast/Driver: OSRAM
OT50W

Summary

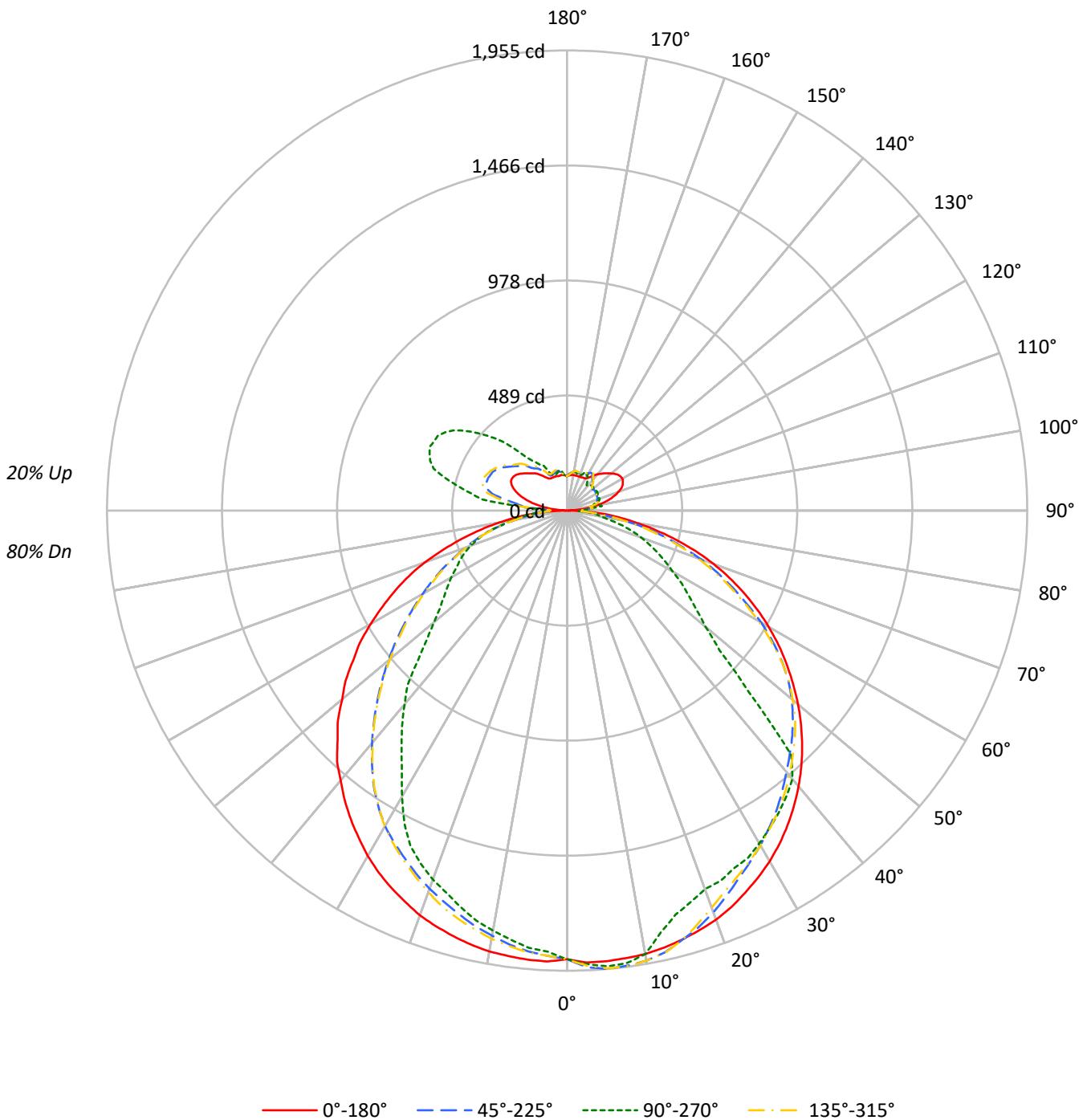
Lumens per Lamp: N/A
Luminaire Lumens: 6746.9 lumens
Efficiency: N/A
Efficacy: 117.1 lumens/watt
Spacing Criteria (0/90/45): 1.32 / 1.19 / 1.35
Luminous Opening: Rectangular (W 0.5' x L: 7.6' x H: 0')
CIE Type: Semi-Direct

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: P197461

CATALOG NUMBER: 8WSL-LD2-65-UPL15-UNV-L830-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P197461

CATALOG NUMBER: 8WSL-LD2-65-UPL15-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 | 114 | 114 | 114 | 114 | 109 | 109 | 109 | 109 | 100 | 100 | 100 | 91 | 91 | 91 | 83 | 83 | 83 | 80 |
| 1 | 104 | 99 | 95 | 91 | 99 | 95 | 91 | 88 | 87 | 84 | 81 | 80 | 77 | 75 | 73 | 71 | 70 | 66 |
| 2 | 94 | 86 | 80 | 74 | 90 | 83 | 77 | 72 | 76 | 71 | 67 | 70 | 66 | 62 | 64 | 61 | 58 | 55 |
| 3 | 86 | 76 | 68 | 62 | 82 | 73 | 66 | 60 | 67 | 61 | 56 | 61 | 57 | 53 | 56 | 53 | 49 | 46 |
| 4 | 79 | 67 | 59 | 52 | 75 | 64 | 57 | 51 | 59 | 53 | 48 | 55 | 49 | 45 | 50 | 46 | 42 | 40 |
| 5 | 72 | 60 | 51 | 45 | 69 | 58 | 50 | 44 | 53 | 46 | 41 | 49 | 43 | 39 | 45 | 41 | 37 | 34 |
| 6 | 67 | 54 | 45 | 39 | 64 | 52 | 44 | 38 | 48 | 41 | 36 | 44 | 39 | 34 | 41 | 36 | 32 | 30 |
| 7 | 62 | 49 | 40 | 34 | 59 | 47 | 39 | 33 | 44 | 37 | 32 | 40 | 35 | 30 | 38 | 33 | 29 | 26 |
| 8 | 58 | 44 | 36 | 30 | 55 | 43 | 35 | 30 | 40 | 33 | 28 | 37 | 31 | 27 | 34 | 29 | 26 | 24 |
| 9 | 54 | 41 | 33 | 27 | 51 | 39 | 32 | 27 | 37 | 30 | 26 | 34 | 28 | 24 | 32 | 27 | 23 | 21 |
| 10 | 50 | 37 | 30 | 25 | 48 | 36 | 29 | 24 | 34 | 27 | 23 | 32 | 26 | 22 | 30 | 25 | 21 | 19 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 90° | 180° | 270° |
|-----|------|------|------|------|
| 0° | 5400 | 5400 | 5400 | 5400 |
| 5° | 5465 | 5526 | 5446 | 5302 |
| 10° | 5502 | 5502 | 5471 | 5213 |
| 15° | 5533 | 5212 | 5488 | 5116 |
| 20° | 5575 | 5159 | 5516 | 5028 |
| 25° | 5596 | 5240 | 5527 | 4919 |
| 30° | 5627 | 5341 | 5541 | 4589 |
| 35° | 5646 | 5419 | 5540 | 4238 |
| 40° | 5657 | 5504 | 5536 | 3974 |
| 45° | 5656 | 4375 | 5524 | 3577 |
| 50° | 5642 | 3376 | 5498 | 3250 |
| 55° | 5621 | 3113 | 5480 | 3156 |
| 60° | 5605 | 2939 | 5456 | 3224 |
| 65° | 5560 | 2846 | 5414 | 3374 |
| 70° | 5474 | 2774 | 5329 | 3608 |
| 75° | 5223 | 2635 | 5054 | 3833 |
| 80° | 4892 | 2391 | 4749 | 3820 |
| 85° | 4908 | 3130 | 4553 | 4553 |



TEST NUMBER: P197461

CATALOG NUMBER: 8WSL-LD2-65-UPL15-UNV-L830-CD1-U

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 181.4 | 2.7 |
| 10°-20° | 514.9 | 7.6 |
| 20°-30° | 778.1 | 11.5 |
| 30°-40° | 936.4 | 13.9 |
| 40°-50° | 952.3 | 14.1 |
| 50°-60° | 828.9 | 12.3 |
| 60°-70° | 646.6 | 9.6 |
| 70°-80° | 399.7 | 5.9 |
| 80°-90° | 140.6 | 2.1 |
| 90°-100° | 132.4 | 2.0 |
| 100°-110° | 256.4 | 3.8 |
| 110°-120° | 280.5 | 4.2 |
| 120°-130° | 245.9 | 3.6 |
| 130°-140° | 184.3 | 2.7 |
| 140°-150° | 126.1 | 1.9 |
| 150°-160° | 80.3 | 1.2 |
| 160°-170° | 47.0 | 0.7 |
| 170°-180° | 15.1 | 0.2 |
| 0°-30° | 1474.3 | 21.9 |
| 0°-40° | 2410.8 | 35.7 |
| 0°-60° | 4192.0 | 62.1 |
| 0°-90° | 5378.9 | 79.7 |
| 90°-120° | 669.3 | 9.9 |
| 90°-150° | 1225.6 | 18.2 |
| 90°-180° | 1368.0 | 20.3 |
| 0°-180° | 6746.9 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 90° | 180° | 270° | 360° | Flux |
|------|------|------|------|------|------|------|
| 0° | 1906 | 1906 | 1906 | 1906 | 1906 | |
| 5° | 1922 | 1944 | 1915 | 1865 | 1922 | 183 |
| 15° | 1887 | 1777 | 1871 | 1744 | 1887 | 533 |
| 25° | 1790 | 1677 | 1768 | 1574 | 1790 | 826 |
| 35° | 1633 | 1567 | 1602 | 1226 | 1633 | 1022 |
| 45° | 1412 | 1092 | 1379 | 893 | 1412 | 1089 |
| 55° | 1138 | 630 | 1110 | 639 | 1138 | 1018 |
| 65° | 830 | 425 | 808 | 503 | 830 | 820 |
| 75° | 477 | 241 | 462 | 350 | 477 | 505 |
| 85° | 151 | 96 | 140 | 140 | 151 | 151 |
| 90° | 2 | 61 | 2 | 96 | 2 | 11 |
| 95° | 59 | 101 | 46 | 201 | 59 | 61 |
| 105° | 188 | 125 | 182 | 536 | 188 | 196 |
| 115° | 260 | 142 | 260 | 644 | 260 | 255 |
| 125° | 265 | 149 | 265 | 593 | 265 | 235 |
| 135° | 223 | 149 | 223 | 433 | 223 | 173 |
| 145° | 175 | 149 | 180 | 258 | 175 | 112 |
| 155° | 155 | 180 | 153 | 177 | 155 | 72 |
| 165° | 153 | 162 | 151 | 164 | 153 | 43 |
| 175° | 151 | 158 | 151 | 153 | 151 | 14 |
| 180° | 147 | 147 | 147 | 147 | 147 | |



TEST NUMBER: P197461

CATALOG NUMBER: 8WSL-LD2-65-UPL15-UNV-L830-CD1-U

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° | 202.5° | 225° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1906.4 | 1906.4 | 1906.4 | 1906.4 | 1906.4 | 1906.4 | 1906.4 | 1906.4 | 1906.4 | 1906.4 | 1906.4 |
| 2.5° | 1921.8 | 1913.0 | 1941.5 | 1943.6 | 1928.3 | 1934.9 | 1934.9 | 1910.8 | 1917.4 | 1888.9 | 1893.3 |
| 5° | 1921.8 | 1923.9 | 1954.6 | 1952.4 | 1943.6 | 1945.8 | 1952.4 | 1921.8 | 1915.2 | 1875.8 | 1880.2 |
| 7.5° | 1917.4 | 1928.3 | 1950.2 | 1948.0 | 1939.3 | 1941.5 | 1952.4 | 1926.1 | 1908.6 | 1862.7 | 1860.5 |
| 10° | 1913.0 | 1923.9 | 1941.5 | 1930.5 | 1913.0 | 1919.6 | 1941.5 | 1923.9 | 1902.1 | 1847.3 | 1834.2 |
| 12.5° | 1902.1 | 1913.0 | 1921.8 | 1867.0 | 1836.4 | 1862.7 | 1923.9 | 1913.0 | 1888.9 | 1825.4 | 1807.9 |
| 15° | 1886.7 | 1899.9 | 1888.9 | 1812.3 | 1777.3 | 1801.4 | 1888.9 | 1897.7 | 1871.4 | 1797.0 | 1775.1 |
| 17.5° | 1869.2 | 1884.5 | 1856.1 | 1770.7 | 1744.5 | 1755.4 | 1843.0 | 1878.0 | 1851.7 | 1768.5 | 1742.3 |
| 20° | 1849.5 | 1867.0 | 1816.7 | 1727.0 | 1711.6 | 1720.4 | 1794.8 | 1856.1 | 1829.8 | 1737.9 | 1709.4 |
| 22.5° | 1823.3 | 1843.0 | 1770.7 | 1696.3 | 1702.9 | 1696.3 | 1751.0 | 1827.6 | 1799.2 | 1705.1 | 1672.2 |
| 25° | 1790.4 | 1812.3 | 1724.8 | 1670.0 | 1676.6 | 1674.4 | 1713.8 | 1790.4 | 1768.5 | 1665.7 | 1630.6 |
| 27.5° | 1757.6 | 1779.5 | 1683.2 | 1652.5 | 1663.5 | 1650.3 | 1678.8 | 1751.0 | 1733.5 | 1624.1 | 1591.2 |
| 30° | 1720.4 | 1744.5 | 1641.6 | 1621.9 | 1632.8 | 1624.1 | 1643.8 | 1711.6 | 1694.1 | 1580.3 | 1547.5 |
| 32.5° | 1678.8 | 1702.9 | 1597.8 | 1584.7 | 1600.0 | 1589.1 | 1602.2 | 1667.9 | 1648.2 | 1532.1 | 1492.8 |
| 35° | 1632.8 | 1656.9 | 1551.8 | 1551.8 | 1567.2 | 1554.0 | 1560.6 | 1624.1 | 1602.2 | 1484.0 | 1431.5 |
| 37.5° | 1582.5 | 1608.8 | 1501.5 | 1512.5 | 1530.0 | 1516.8 | 1516.8 | 1578.1 | 1551.8 | 1431.5 | 1361.4 |
| 40° | 1530.0 | 1558.4 | 1449.0 | 1473.1 | 1488.4 | 1473.1 | 1468.7 | 1530.0 | 1497.1 | 1378.9 | 1289.2 |
| 42.5° | 1473.1 | 1503.7 | 1400.8 | 1429.3 | 1409.6 | 1429.3 | 1418.3 | 1479.6 | 1446.8 | 1322.0 | 1214.8 |
| 45° | 1411.8 | 1451.2 | 1352.7 | 1335.2 | 1092.2 | 1322.0 | 1368.0 | 1427.1 | 1378.9 | 1267.3 | 1140.4 |
| 47.5° | 1348.3 | 1389.9 | 1300.1 | 1173.2 | 877.7 | 1160.1 | 1313.3 | 1370.2 | 1322.0 | 1208.2 | 1065.9 |
| 50° | 1280.4 | 1328.6 | 1245.4 | 1033.1 | 766.1 | 1020.0 | 1252.0 | 1311.1 | 1247.6 | 1144.7 | 991.5 |
| 52.5° | 1210.4 | 1262.9 | 1184.1 | 912.7 | 691.7 | 899.6 | 1186.3 | 1247.6 | 1186.3 | 1076.9 | 919.3 |
| 55° | 1138.2 | 1192.9 | 1111.9 | 801.1 | 630.4 | 798.9 | 1109.7 | 1179.8 | 1109.7 | 1009.0 | 847.1 |
| 57.5° | 1065.9 | 1127.2 | 1035.3 | 720.1 | 577.8 | 709.2 | 1024.4 | 1109.7 | 1044.1 | 939.0 | 777.0 |
| 60° | 989.3 | 1046.2 | 952.1 | 632.6 | 518.7 | 630.4 | 939.0 | 1037.5 | 963.1 | 866.8 | 709.2 |
| 62.5° | 910.5 | 974.0 | 862.4 | 556.0 | 470.6 | 553.8 | 847.1 | 956.5 | 884.3 | 792.3 | 643.5 |
| 65° | 829.5 | 890.8 | 777.0 | 494.7 | 424.6 | 490.3 | 761.7 | 873.3 | 807.7 | 717.9 | 582.2 |
| 67.5° | 746.4 | 803.3 | 691.7 | 435.6 | 378.7 | 431.2 | 674.1 | 785.8 | 728.9 | 641.3 | 516.6 |
| 70° | 661.0 | 713.5 | 604.1 | 378.7 | 334.9 | 376.5 | 588.8 | 696.0 | 643.5 | 562.5 | 457.5 |
| 72.5° | 571.3 | 619.4 | 512.2 | 323.9 | 288.9 | 321.8 | 499.0 | 604.1 | 549.4 | 479.3 | 404.9 |
| 75° | 477.2 | 523.1 | 426.8 | 269.2 | 240.8 | 267.0 | 413.7 | 505.6 | 461.8 | 402.7 | 343.6 |
| 77.5° | 387.4 | 433.4 | 339.3 | 207.9 | 183.9 | 203.6 | 323.9 | 413.7 | 376.5 | 326.1 | 280.2 |
| 80° | 299.9 | 337.1 | 249.5 | 155.4 | 146.6 | 155.4 | 243.0 | 317.4 | 291.1 | 256.1 | 218.9 |
| 82.5° | 221.1 | 243.0 | 168.5 | 126.9 | 126.9 | 126.9 | 164.2 | 225.4 | 214.5 | 190.4 | 166.3 |
| 85° | 151.0 | 151.0 | 113.8 | 96.3 | 96.3 | 96.3 | 111.6 | 133.5 | 140.1 | 126.9 | 126.9 |
| 87.5° | 63.5 | 65.7 | 59.1 | 52.5 | 50.3 | 52.5 | 56.9 | 54.7 | 54.7 | 61.3 | 76.6 |
| 90° | 2.2 | 28.5 | 48.2 | 59.1 | 61.3 | 56.9 | 43.8 | 26.3 | 2.2 | 37.2 | 67.9 |
| 92.5° | 15.3 | 61.3 | 56.9 | 74.4 | 76.6 | 70.0 | 59.1 | 48.2 | 8.8 | 67.9 | 72.2 |
| 95° | 59.1 | 72.2 | 111.6 | 113.8 | 100.7 | 96.3 | 109.4 | 67.9 | 46.0 | 91.9 | 183.9 |
| 97.5° | 94.1 | 109.4 | 100.7 | 131.3 | 148.8 | 131.3 | 105.1 | 105.1 | 87.6 | 142.3 | 214.5 |
| 100° | 129.1 | 116.0 | 102.9 | 113.8 | 131.3 | 116.0 | 98.5 | 116.0 | 122.6 | 166.3 | 262.7 |
| 102.5° | 162.0 | 129.1 | 129.1 | 111.6 | 113.8 | 109.4 | 124.8 | 126.9 | 153.2 | 188.2 | 323.9 |
| 105° | 188.2 | 133.5 | 135.7 | 126.9 | 124.8 | 126.9 | 135.7 | 135.7 | 181.7 | 207.9 | 352.4 |
| 107.5° | 212.3 | 137.9 | 133.5 | 140.1 | 142.3 | 140.1 | 133.5 | 137.9 | 207.9 | 221.1 | 359.0 |
| 110° | 232.0 | 140.1 | 135.7 | 140.1 | 146.6 | 140.1 | 135.7 | 142.3 | 229.8 | 234.2 | 363.3 |



TEST NUMBER: P197461

CATALOG NUMBER: 8WSL-LD2-65-UPL15-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° | 249.5 | 142.3 | 140.1 | 137.9 | 144.5 | 137.9 | 140.1 | 146.6 | 247.3 | 240.8 | 363.3 |
| 115° | 260.5 | 144.5 | 140.1 | 140.1 | 142.3 | 140.1 | 142.3 | 148.8 | 260.5 | 243.0 | 359.0 |
| 117.5° | 267.0 | 148.8 | 142.3 | 144.5 | 146.6 | 144.5 | 142.3 | 153.2 | 269.2 | 251.7 | 356.8 |
| 120° | 271.4 | 164.2 | 142.3 | 146.6 | 148.8 | 146.6 | 142.3 | 166.3 | 271.4 | 256.1 | 348.0 |
| 122.5° | 269.2 | 170.7 | 144.5 | 146.6 | 151.0 | 146.6 | 144.5 | 172.9 | 269.2 | 253.9 | 337.1 |
| 125° | 264.8 | 177.3 | 144.5 | 144.5 | 148.8 | 146.6 | 146.6 | 177.3 | 264.8 | 249.5 | 321.8 |
| 127.5° | 256.1 | 192.6 | 144.5 | 146.6 | 146.6 | 146.6 | 146.6 | 190.4 | 256.1 | 251.7 | 306.4 |
| 130° | 245.1 | 203.6 | 140.1 | 148.8 | 146.6 | 151.0 | 144.5 | 203.6 | 245.1 | 245.1 | 293.3 |
| 132.5° | 234.2 | 207.9 | 140.1 | 148.8 | 148.8 | 151.0 | 142.3 | 207.9 | 234.2 | 236.4 | 280.2 |
| 135° | 223.3 | 212.3 | 148.8 | 146.6 | 148.8 | 148.8 | 151.0 | 212.3 | 223.3 | 227.6 | 271.4 |
| 137.5° | 212.3 | 214.5 | 159.8 | 140.1 | 146.6 | 142.3 | 164.2 | 214.5 | 214.5 | 214.5 | 258.3 |
| 140° | 201.4 | 212.3 | 168.5 | 135.7 | 137.9 | 140.1 | 172.9 | 214.5 | 205.7 | 207.9 | 236.4 |
| 142.5° | 188.2 | 205.7 | 175.1 | 146.6 | 135.7 | 151.0 | 179.5 | 212.3 | 192.6 | 201.4 | 225.4 |
| 145° | 175.1 | 199.2 | 188.2 | 162.0 | 148.8 | 168.5 | 194.8 | 205.7 | 179.5 | 197.0 | 218.9 |
| 147.5° | 164.2 | 188.2 | 190.4 | 170.7 | 164.2 | 177.3 | 197.0 | 197.0 | 166.3 | 188.2 | 203.6 |
| 150° | 157.6 | 177.3 | 183.9 | 177.3 | 170.7 | 186.0 | 192.6 | 181.7 | 157.6 | 181.7 | 190.4 |
| 152.5° | 155.4 | 168.5 | 168.5 | 186.0 | 183.9 | 194.8 | 177.3 | 172.9 | 153.2 | 175.1 | 172.9 |
| 155° | 155.4 | 166.3 | 162.0 | 170.7 | 179.5 | 179.5 | 168.5 | 168.5 | 153.2 | 175.1 | 164.2 |
| 157.5° | 153.2 | 168.5 | 162.0 | 159.8 | 164.2 | 168.5 | 168.5 | 170.7 | 153.2 | 170.7 | 164.2 |
| 160° | 153.2 | 170.7 | 164.2 | 157.6 | 159.8 | 166.3 | 170.7 | 170.7 | 153.2 | 170.7 | 166.3 |
| 162.5° | 153.2 | 166.3 | 166.3 | 159.8 | 159.8 | 168.5 | 170.7 | 168.5 | 153.2 | 166.3 | 170.7 |
| 165° | 153.2 | 166.3 | 168.5 | 164.2 | 162.0 | 172.9 | 170.7 | 164.2 | 151.0 | 164.2 | 172.9 |
| 167.5° | 153.2 | 162.0 | 170.7 | 166.3 | 166.3 | 172.9 | 172.9 | 162.0 | 151.0 | 157.6 | 172.9 |
| 170° | 153.2 | 159.8 | 168.5 | 166.3 | 168.5 | 175.1 | 168.5 | 159.8 | 153.2 | 155.4 | 166.3 |
| 172.5° | 153.2 | 155.4 | 164.2 | 166.3 | 166.3 | 170.7 | 164.2 | 155.4 | 153.2 | 151.0 | 159.8 |
| 175° | 151.0 | 155.4 | 159.8 | 159.8 | 157.6 | 164.2 | 157.6 | 153.2 | 151.0 | 148.8 | 153.2 |
| 177.5° | 148.8 | 151.0 | 155.4 | 155.4 | 151.0 | 155.4 | 151.0 | 148.8 | 148.8 | 146.6 | 151.0 |
| 180° | 146.6 | 146.6 | 146.6 | 146.6 | 146.6 | 146.6 | 146.6 | 146.6 | 146.6 | 146.6 | 146.6 |



TEST NUMBER: P197461

CATALOG NUMBER: 8WSL-LD2-65-UPL15-UNV-L830-CD1-U

CANDELA DISTRIBUTION (continued):

| | 247.5° | 270° | 292.5° | 315° | 337.5° | 360° |
|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1906.4 | 1906.4 | 1906.4 | 1906.4 | 1906.4 | 1906.4 |
| 2.5° | 1891.1 | 1875.8 | 1880.2 | 1893.3 | 1891.1 | 1921.8 |
| 5° | 1871.4 | 1864.8 | 1864.8 | 1884.5 | 1882.4 | 1921.8 |
| 7.5° | 1849.5 | 1838.6 | 1845.1 | 1867.0 | 1873.6 | 1917.4 |
| 10° | 1821.1 | 1812.3 | 1814.5 | 1847.3 | 1858.3 | 1913.0 |
| 12.5° | 1792.6 | 1783.9 | 1790.4 | 1821.1 | 1836.4 | 1902.1 |
| 15° | 1759.8 | 1744.5 | 1762.0 | 1794.8 | 1814.5 | 1886.7 |
| 17.5° | 1720.4 | 1702.9 | 1720.4 | 1764.2 | 1788.2 | 1869.2 |
| 20° | 1685.4 | 1667.9 | 1678.8 | 1724.8 | 1757.6 | 1849.5 |
| 22.5° | 1646.0 | 1624.1 | 1632.8 | 1683.2 | 1724.8 | 1823.3 |
| 25° | 1602.2 | 1573.7 | 1586.9 | 1641.6 | 1687.6 | 1790.4 |
| 27.5° | 1545.3 | 1497.1 | 1530.0 | 1597.8 | 1641.6 | 1757.6 |
| 30° | 1466.5 | 1403.0 | 1455.5 | 1549.7 | 1600.0 | 1720.4 |
| 32.5° | 1374.6 | 1306.7 | 1363.6 | 1490.6 | 1551.8 | 1678.8 |
| 35° | 1284.8 | 1225.7 | 1278.3 | 1429.3 | 1503.7 | 1632.8 |
| 37.5° | 1206.0 | 1151.3 | 1199.5 | 1359.2 | 1451.2 | 1582.5 |
| 40° | 1125.0 | 1074.7 | 1122.8 | 1284.8 | 1398.6 | 1530.0 |
| 42.5° | 1050.6 | 1002.5 | 1048.4 | 1210.4 | 1341.7 | 1473.1 |
| 45° | 971.8 | 893.0 | 967.4 | 1133.8 | 1280.4 | 1411.8 |
| 47.5° | 888.6 | 805.5 | 882.1 | 1059.4 | 1219.2 | 1348.3 |
| 50° | 812.0 | 737.6 | 807.7 | 982.8 | 1153.5 | 1280.4 |
| 52.5° | 744.2 | 680.7 | 742.0 | 906.2 | 1085.6 | 1210.4 |
| 55° | 680.7 | 639.1 | 682.9 | 836.1 | 1022.2 | 1138.2 |
| 57.5° | 630.4 | 601.9 | 632.6 | 768.3 | 952.1 | 1065.9 |
| 60° | 586.6 | 569.1 | 588.8 | 700.4 | 877.7 | 989.3 |
| 62.5° | 538.4 | 531.9 | 538.4 | 634.7 | 805.5 | 910.5 |
| 65° | 496.9 | 503.4 | 496.9 | 575.7 | 728.9 | 829.5 |
| 67.5° | 457.5 | 472.8 | 459.6 | 512.2 | 652.3 | 746.4 |
| 70° | 413.7 | 435.6 | 415.9 | 455.3 | 573.5 | 661.0 |
| 72.5° | 367.7 | 394.0 | 367.7 | 400.5 | 490.3 | 571.3 |
| 75° | 319.6 | 350.2 | 321.8 | 341.5 | 411.5 | 477.2 |
| 77.5° | 267.0 | 286.7 | 271.4 | 278.0 | 334.9 | 387.4 |
| 80° | 212.3 | 234.2 | 214.5 | 218.9 | 264.8 | 299.9 |
| 82.5° | 177.3 | 192.6 | 179.5 | 166.3 | 197.0 | 221.1 |
| 85° | 131.3 | 140.1 | 135.7 | 129.1 | 135.7 | 151.0 |
| 87.5° | 81.0 | 85.4 | 81.0 | 81.0 | 70.0 | 63.5 |
| 90° | 89.7 | 96.3 | 89.7 | 70.0 | 39.4 | 2.2 |
| 92.5° | 91.9 | 100.7 | 91.9 | 76.6 | 74.4 | 15.3 |
| 95° | 205.7 | 201.4 | 218.9 | 199.2 | 113.8 | 59.1 |
| 97.5° | 319.6 | 365.5 | 330.5 | 238.6 | 153.2 | 94.1 |
| 100° | 367.7 | 411.5 | 383.0 | 297.7 | 175.1 | 129.1 |
| 102.5° | 424.6 | 472.8 | 442.1 | 348.0 | 197.0 | 162.0 |
| 105° | 494.7 | 536.3 | 510.0 | 367.7 | 216.7 | 188.2 |
| 107.5° | 531.9 | 595.3 | 542.8 | 376.5 | 229.8 | 212.3 |
| 110° | 551.6 | 619.4 | 569.1 | 378.7 | 240.8 | 232.0 |



TEST NUMBER: P197461

CATALOG NUMBER: 8WSL-LD2-65-UPL15-UNV-L830-CD1-U

CANDELA DISTRIBUTION (continued):

| | 247.5° | 270° | 292.5° | 315° | 337.5° | 360° |
|--------|--------|-------|--------|-------|--------|-------|
| 112.5° | 566.9 | 632.6 | 580.0 | 378.7 | 245.1 | 249.5 |
| 115° | 566.9 | 643.5 | 580.0 | 372.1 | 251.7 | 260.5 |
| 117.5° | 566.9 | 636.9 | 580.0 | 365.5 | 260.5 | 267.0 |
| 120° | 547.2 | 634.7 | 564.7 | 356.8 | 262.7 | 271.4 |
| 122.5° | 531.9 | 617.2 | 542.8 | 345.8 | 262.7 | 269.2 |
| 125° | 503.4 | 593.2 | 516.6 | 332.7 | 258.3 | 264.8 |
| 127.5° | 472.8 | 558.1 | 483.7 | 317.4 | 260.5 | 256.1 |
| 130° | 444.3 | 518.7 | 450.9 | 302.1 | 251.7 | 245.1 |
| 132.5° | 407.1 | 475.0 | 413.7 | 291.1 | 243.0 | 234.2 |
| 135° | 372.1 | 433.4 | 380.8 | 282.4 | 232.0 | 223.3 |
| 137.5° | 334.9 | 389.6 | 343.6 | 264.8 | 221.1 | 212.3 |
| 140° | 291.1 | 334.9 | 299.9 | 245.1 | 214.5 | 201.4 |
| 142.5° | 262.7 | 286.7 | 271.4 | 236.4 | 205.7 | 188.2 |
| 145° | 245.1 | 258.3 | 251.7 | 227.6 | 201.4 | 175.1 |
| 147.5° | 227.6 | 240.8 | 234.2 | 210.1 | 190.4 | 164.2 |
| 150° | 221.1 | 221.1 | 229.8 | 194.8 | 183.9 | 157.6 |
| 152.5° | 197.0 | 214.5 | 205.7 | 177.3 | 179.5 | 155.4 |
| 155° | 168.5 | 177.3 | 177.3 | 170.7 | 179.5 | 155.4 |
| 157.5° | 157.6 | 164.2 | 166.3 | 170.7 | 175.1 | 153.2 |
| 160° | 157.6 | 159.8 | 166.3 | 172.9 | 172.9 | 153.2 |
| 162.5° | 162.0 | 159.8 | 170.7 | 177.3 | 168.5 | 153.2 |
| 165° | 166.3 | 164.2 | 175.1 | 179.5 | 164.2 | 153.2 |
| 167.5° | 170.7 | 170.7 | 179.5 | 177.3 | 159.8 | 153.2 |
| 170° | 170.7 | 175.1 | 179.5 | 170.7 | 157.6 | 153.2 |
| 172.5° | 164.2 | 166.3 | 170.7 | 159.8 | 151.0 | 153.2 |
| 175° | 155.4 | 153.2 | 159.8 | 153.2 | 151.0 | 151.0 |
| 177.5° | 151.0 | 144.5 | 151.0 | 148.8 | 146.6 | 148.8 |
| 180° | 146.6 | 146.6 | 146.6 | 146.6 | 146.6 | 146.6 |

(END OF REPORT)