

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: P197477

Luminaire Tested: **8WSL-LD2-90-UPL15-UNV-L830-CD2-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P197477
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-LD2-90-UPL15-UNV-L830-CD2-U
Description: 8FT. Linear Wavestream System, 15% Uplight, L830
Light Source: (476) 3000K CCT, 80 CRI LEDS
EL236N0119D830
Ballast/Driver: OSRAM
OT50W

Summary

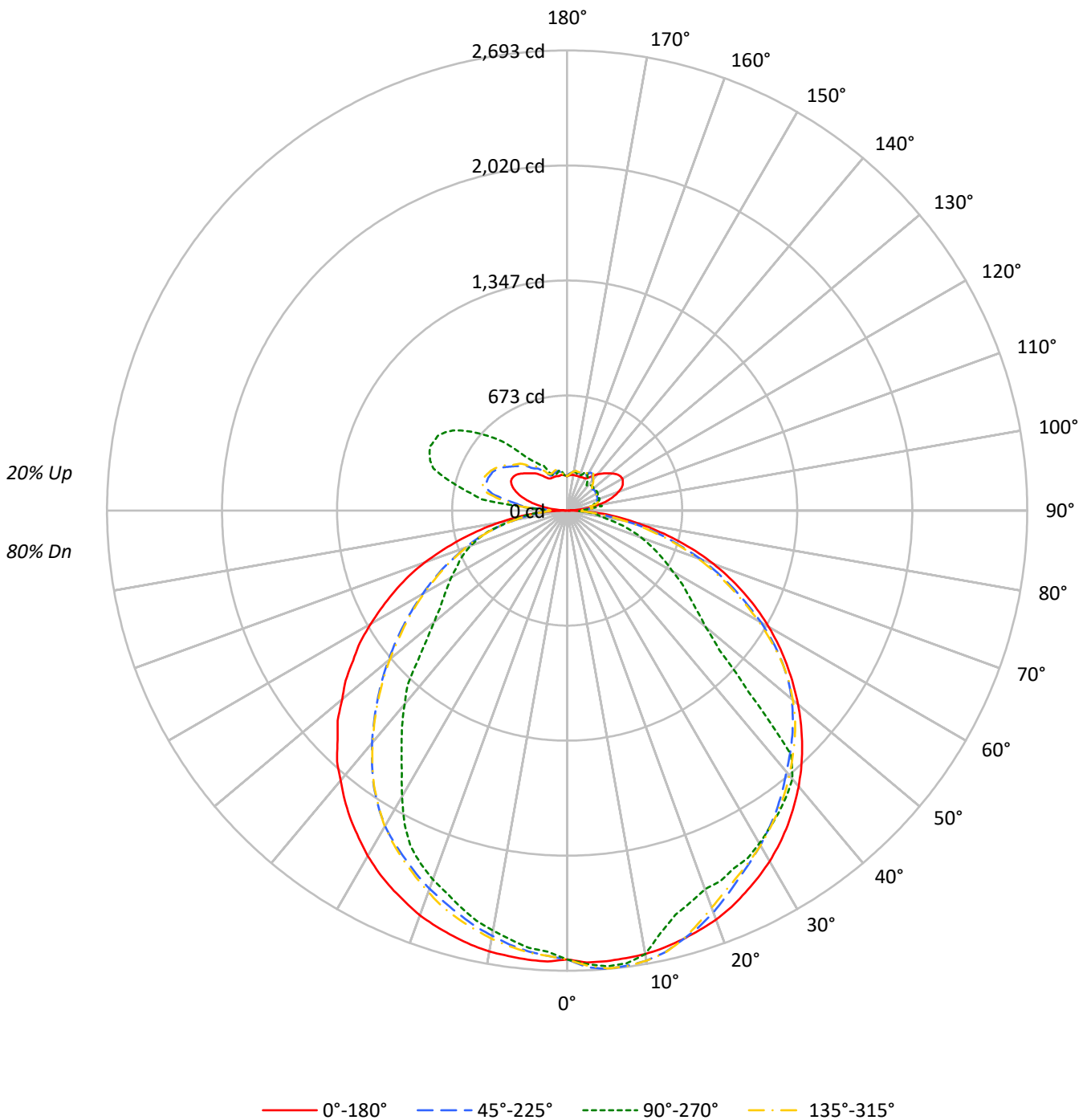
Lumens per Lamp: N/A
Luminaire Lumens: 9294.6 lumens
Efficiency: N/A
Efficacy: 115.3 lumens/watt
Spacing Criteria (0/90/45): 1.32 / 1.19 / 1.35
Luminous Opening: Rectangular (W 0.5' x L: 7.6' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 80.6
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: P197477

CATALOG NUMBER: 8WSL-LD2-90-UPL15-UNV-L830-CD2-U

Luminous Intensity Polar Plot





TEST NUMBER: P197477

CATALOG NUMBER: 8WSL-LD2-90-UPL15-UNV-L830-CD2-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° | 7439 | 7439 | 7439 | 7439 |
| 5° | 7528 | 7614 | 7502 | 7305 |
| 10° | 7580 | 7580 | 7537 | 7181 |
| 15° | 7622 | 7180 | 7560 | 7047 |
| 20° | 7680 | 7108 | 7599 | 6926 |
| 25° | 7709 | 7219 | 7615 | 6776 |
| 30° | 7752 | 7357 | 7633 | 6322 |
| 35° | 7778 | 7465 | 7632 | 5839 |
| 40° | 7794 | 7582 | 7626 | 5474 |
| 45° | 7791 | 6027 | 7610 | 4928 |
| 50° | 7773 | 4650 | 7574 | 4478 |
| 55° | 7743 | 4289 | 7549 | 4348 |
| 60° | 7721 | 4048 | 7516 | 4442 |
| 65° | 7660 | 3921 | 7457 | 4648 |
| 70° | 7542 | 3820 | 7342 | 4969 |
| 75° | 7194 | 3630 | 6963 | 5280 |
| 80° | 6739 | 3295 | 6541 | 5262 |
| 85° | 6763 | 4313 | 6273 | 6273 |



TEST NUMBER: P197477

CATALOG NUMBER: 8WSL-LD2-90-UPL15-UNV-L830-CD2-U

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 249.9 | 2.7 |
| 10°-20° | 709.3 | 7.6 |
| 20°-30° | 1071.9 | 11.5 |
| 30°-40° | 1290.0 | 13.9 |
| 40°-50° | 1311.9 | 14.1 |
| 50°-60° | 1141.9 | 12.3 |
| 60°-70° | 890.7 | 9.6 |
| 70°-80° | 550.6 | 5.9 |
| 80°-90° | 193.8 | 2.1 |
| 90°-100° | 182.4 | 2.0 |
| 100°-110° | 353.2 | 3.8 |
| 110°-120° | 386.4 | 4.2 |
| 120°-130° | 338.8 | 3.6 |
| 130°-140° | 253.8 | 2.7 |
| 140°-150° | 173.8 | 1.9 |
| 150°-160° | 110.7 | 1.2 |
| 160°-170° | 64.7 | 0.7 |
| 170°-180° | 20.9 | 0.2 |
| 0°-30° | 2031.1 | 21.9 |
| 0°-40° | 3321.1 | 35.7 |
| 0°-60° | 5774.9 | 62.1 |
| 0°-90° | 7410.0 | 79.7 |
| 90°-120° | 922.0 | 9.9 |
| 90°-150° | 1688.4 | 18.2 |
| 90°-180° | 1885.0 | 20.3 |
| 0°-180° | 9294.6 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 90° | 180° | 270° | 360° | Flux |
|------|------|------|------|------|------|------|
| 0° | 2626 | 2626 | 2626 | 2626 | 2626 | |
| 5° | 2647 | 2678 | 2638 | 2569 | 2647 | 252 |
| 15° | 2599 | 2448 | 2578 | 2403 | 2599 | 735 |
| 25° | 2466 | 2310 | 2436 | 2168 | 2466 | 1138 |
| 35° | 2249 | 2159 | 2207 | 1689 | 2249 | 1407 |
| 45° | 1945 | 1505 | 1900 | 1230 | 1945 | 1500 |
| 55° | 1568 | 868 | 1529 | 880 | 1568 | 1402 |
| 65° | 1143 | 585 | 1113 | 694 | 1143 | 1129 |
| 75° | 657 | 332 | 636 | 482 | 657 | 696 |
| 85° | 208 | 133 | 193 | 193 | 208 | 207 |
| 90° | 3 | 84 | 3 | 133 | 3 | 16 |
| 95° | 81 | 139 | 63 | 277 | 81 | 84 |
| 105° | 259 | 172 | 250 | 739 | 259 | 270 |
| 115° | 359 | 196 | 359 | 886 | 359 | 351 |
| 125° | 365 | 205 | 365 | 817 | 365 | 324 |
| 135° | 308 | 205 | 308 | 597 | 308 | 239 |
| 145° | 241 | 205 | 247 | 356 | 241 | 154 |
| 155° | 214 | 247 | 211 | 244 | 214 | 99 |
| 165° | 211 | 223 | 208 | 226 | 211 | 60 |
| 175° | 208 | 217 | 208 | 211 | 208 | 20 |
| 180° | 202 | 202 | 202 | 202 | 202 | |



TEST NUMBER: P197477

CATALOG NUMBER: 8WSL-LD2-90-UPL15-UNV-L830-CD2-U

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° | 202.5° | 225° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 2626.3 | 2626.3 | 2626.3 | 2626.3 | 2626.3 | 2626.3 | 2626.3 | 2626.3 | 2626.3 | 2626.3 | 2626.3 |
| 2.5° | 2647.4 | 2635.3 | 2674.5 | 2677.6 | 2656.5 | 2665.5 | 2665.5 | 2632.3 | 2641.4 | 2602.2 | 2608.2 |
| 5° | 2647.4 | 2650.4 | 2692.6 | 2689.6 | 2677.6 | 2680.6 | 2689.6 | 2647.4 | 2638.4 | 2584.1 | 2590.1 |
| 7.5° | 2641.4 | 2656.5 | 2686.6 | 2683.6 | 2671.5 | 2674.5 | 2689.6 | 2653.4 | 2629.3 | 2566.0 | 2563.0 |
| 10° | 2635.3 | 2650.4 | 2674.5 | 2659.5 | 2635.3 | 2644.4 | 2674.5 | 2650.4 | 2620.3 | 2544.9 | 2526.8 |
| 12.5° | 2620.3 | 2635.3 | 2647.4 | 2572.0 | 2529.8 | 2566.0 | 2650.4 | 2635.3 | 2602.2 | 2514.7 | 2490.6 |
| 15° | 2599.2 | 2617.3 | 2602.2 | 2496.6 | 2448.4 | 2481.6 | 2602.2 | 2614.2 | 2578.1 | 2475.5 | 2445.4 |
| 17.5° | 2575.0 | 2596.2 | 2557.0 | 2439.4 | 2403.2 | 2418.2 | 2538.9 | 2587.1 | 2550.9 | 2436.3 | 2400.2 |
| 20° | 2547.9 | 2572.0 | 2502.7 | 2379.1 | 2357.9 | 2370.0 | 2472.5 | 2557.0 | 2520.8 | 2394.1 | 2354.9 |
| 22.5° | 2511.7 | 2538.9 | 2439.4 | 2336.8 | 2345.9 | 2336.8 | 2412.2 | 2517.8 | 2478.6 | 2348.9 | 2303.7 |
| 25° | 2466.5 | 2496.6 | 2376.0 | 2300.7 | 2309.7 | 2306.7 | 2361.0 | 2466.5 | 2436.3 | 2294.6 | 2246.4 |
| 27.5° | 2421.3 | 2451.4 | 2318.7 | 2276.5 | 2291.6 | 2273.5 | 2312.7 | 2412.2 | 2388.1 | 2237.3 | 2192.1 |
| 30° | 2370.0 | 2403.2 | 2261.5 | 2234.3 | 2249.4 | 2237.3 | 2264.5 | 2357.9 | 2333.8 | 2177.0 | 2131.8 |
| 32.5° | 2312.7 | 2345.9 | 2201.1 | 2183.1 | 2204.2 | 2189.1 | 2207.2 | 2297.6 | 2270.5 | 2110.7 | 2056.4 |
| 35° | 2249.4 | 2282.6 | 2137.8 | 2137.8 | 2158.9 | 2140.8 | 2149.9 | 2237.3 | 2207.2 | 2044.4 | 1972.0 |
| 37.5° | 2180.0 | 2216.2 | 2068.5 | 2083.6 | 2107.7 | 2089.6 | 2089.6 | 2174.0 | 2137.8 | 1972.0 | 1875.5 |
| 40° | 2107.7 | 2146.9 | 1996.1 | 2029.3 | 2050.4 | 2029.3 | 2023.2 | 2107.7 | 2062.4 | 1899.6 | 1776.0 |
| 42.5° | 2029.3 | 2071.5 | 1929.8 | 1969.0 | 1941.8 | 1969.0 | 1953.9 | 2038.3 | 1993.1 | 1821.2 | 1673.5 |
| 45° | 1944.9 | 1999.1 | 1863.4 | 1839.3 | 1504.6 | 1821.2 | 1884.5 | 1966.0 | 1899.6 | 1745.8 | 1571.0 |
| 47.5° | 1857.4 | 1914.7 | 1791.1 | 1616.2 | 1209.1 | 1598.1 | 1809.2 | 1887.6 | 1821.2 | 1664.4 | 1468.4 |
| 50° | 1763.9 | 1830.3 | 1715.7 | 1423.2 | 1055.3 | 1405.1 | 1724.7 | 1806.1 | 1718.7 | 1577.0 | 1365.9 |
| 52.5° | 1667.4 | 1739.8 | 1631.3 | 1257.4 | 952.8 | 1239.3 | 1634.3 | 1718.7 | 1634.3 | 1483.5 | 1266.4 |
| 55° | 1567.9 | 1643.3 | 1531.8 | 1103.6 | 868.4 | 1100.6 | 1528.7 | 1625.2 | 1528.7 | 1390.0 | 1166.9 |
| 57.5° | 1468.4 | 1552.9 | 1426.2 | 992.0 | 796.0 | 976.9 | 1411.1 | 1528.7 | 1438.3 | 1293.6 | 1070.4 |
| 60° | 1362.9 | 1441.3 | 1311.6 | 871.4 | 714.6 | 868.4 | 1293.6 | 1429.2 | 1326.7 | 1194.0 | 976.9 |
| 62.5° | 1254.4 | 1341.8 | 1188.0 | 765.9 | 648.3 | 762.9 | 1166.9 | 1317.7 | 1218.2 | 1091.5 | 886.5 |
| 65° | 1142.8 | 1227.2 | 1070.4 | 681.5 | 585.0 | 675.4 | 1049.3 | 1203.1 | 1112.6 | 989.0 | 802.1 |
| 67.5° | 1028.2 | 1106.6 | 952.8 | 600.0 | 521.6 | 594.0 | 928.7 | 1082.5 | 1004.1 | 883.5 | 711.6 |
| 70° | 910.6 | 983.0 | 832.2 | 521.6 | 461.3 | 518.6 | 811.1 | 958.9 | 886.5 | 774.9 | 630.2 |
| 72.5° | 787.0 | 853.3 | 705.6 | 446.3 | 398.0 | 443.2 | 687.5 | 832.2 | 756.8 | 660.3 | 557.8 |
| 75° | 657.3 | 720.7 | 588.0 | 370.9 | 331.7 | 367.9 | 569.9 | 696.5 | 636.2 | 554.8 | 473.4 |
| 77.5° | 533.7 | 597.0 | 467.4 | 286.5 | 253.3 | 280.4 | 446.3 | 569.9 | 518.6 | 449.3 | 386.0 |
| 80° | 413.1 | 464.4 | 343.7 | 214.1 | 202.0 | 214.1 | 334.7 | 437.2 | 401.0 | 352.8 | 301.5 |
| 82.5° | 304.5 | 334.7 | 232.2 | 174.9 | 174.9 | 174.9 | 226.1 | 310.6 | 295.5 | 262.3 | 229.2 |
| 85° | 208.1 | 208.1 | 156.8 | 132.7 | 132.7 | 132.7 | 153.8 | 183.9 | 193.0 | 174.9 | 174.9 |
| 87.5° | 87.4 | 90.5 | 81.4 | 72.4 | 69.4 | 72.4 | 78.4 | 75.4 | 75.4 | 84.4 | 105.5 |
| 90° | 3.0 | 39.2 | 66.3 | 81.4 | 84.4 | 78.4 | 60.3 | 36.2 | 3.0 | 51.3 | 93.5 |
| 92.5° | 21.1 | 84.4 | 78.4 | 102.5 | 105.5 | 96.5 | 81.4 | 66.3 | 12.1 | 93.5 | 99.5 |
| 95° | 81.4 | 99.5 | 153.8 | 156.8 | 138.7 | 132.7 | 150.8 | 93.5 | 63.3 | 126.6 | 253.3 |
| 97.5° | 129.7 | 150.8 | 138.7 | 180.9 | 205.0 | 180.9 | 144.7 | 144.7 | 120.6 | 196.0 | 295.5 |
| 100° | 177.9 | 159.8 | 141.7 | 156.8 | 180.9 | 159.8 | 135.7 | 159.8 | 168.9 | 229.2 | 361.8 |
| 102.5° | 223.1 | 177.9 | 177.9 | 153.8 | 156.8 | 150.8 | 171.9 | 174.9 | 211.1 | 259.3 | 446.3 |
| 105° | 259.3 | 183.9 | 186.9 | 174.9 | 171.9 | 174.9 | 186.9 | 186.9 | 250.3 | 286.5 | 485.5 |
| 107.5° | 292.5 | 190.0 | 183.9 | 193.0 | 196.0 | 193.0 | 183.9 | 190.0 | 286.5 | 304.5 | 494.5 |
| 110° | 319.6 | 193.0 | 186.9 | 193.0 | 202.0 | 193.0 | 186.9 | 196.0 | 316.6 | 322.6 | 500.5 |



TEST NUMBER: P197477

CATALOG NUMBER: 8WSL-LD2-90-UPL15-UNV-L830-CD2-U

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° | 202.5° | 225° |
|--------|-------|-------|-------|-------|-------|--------|-------|--------|-------|--------|-------|
| 112.5° | 343.7 | 196.0 | 193.0 | 190.0 | 199.0 | 190.0 | 193.0 | 202.0 | 340.7 | 331.7 | 500.5 |
| 115° | 358.8 | 199.0 | 193.0 | 193.0 | 196.0 | 193.0 | 196.0 | 205.0 | 358.8 | 334.7 | 494.5 |
| 117.5° | 367.9 | 205.0 | 196.0 | 199.0 | 202.0 | 199.0 | 196.0 | 211.1 | 370.9 | 346.8 | 491.5 |
| 120° | 373.9 | 226.1 | 196.0 | 202.0 | 205.0 | 202.0 | 196.0 | 229.2 | 373.9 | 352.8 | 479.4 |
| 122.5° | 370.9 | 235.2 | 199.0 | 202.0 | 208.1 | 202.0 | 199.0 | 238.2 | 370.9 | 349.8 | 464.4 |
| 125° | 364.8 | 244.2 | 199.0 | 199.0 | 205.0 | 202.0 | 202.0 | 244.2 | 364.8 | 343.7 | 443.2 |
| 127.5° | 352.8 | 265.3 | 199.0 | 202.0 | 202.0 | 202.0 | 202.0 | 262.3 | 352.8 | 346.8 | 422.1 |
| 130° | 337.7 | 280.4 | 193.0 | 205.0 | 202.0 | 208.1 | 199.0 | 280.4 | 337.7 | 337.7 | 404.0 |
| 132.5° | 322.6 | 286.5 | 193.0 | 205.0 | 205.0 | 208.1 | 196.0 | 286.5 | 322.6 | 325.6 | 386.0 |
| 135° | 307.6 | 292.5 | 205.0 | 202.0 | 205.0 | 205.0 | 208.1 | 292.5 | 307.6 | 313.6 | 373.9 |
| 137.5° | 292.5 | 295.5 | 220.1 | 193.0 | 202.0 | 196.0 | 226.1 | 295.5 | 295.5 | 295.5 | 355.8 |
| 140° | 277.4 | 292.5 | 232.2 | 186.9 | 190.0 | 193.0 | 238.2 | 295.5 | 283.4 | 286.5 | 325.6 |
| 142.5° | 259.3 | 283.4 | 241.2 | 202.0 | 186.9 | 208.1 | 247.3 | 292.5 | 265.3 | 277.4 | 310.6 |
| 145° | 241.2 | 274.4 | 259.3 | 223.1 | 205.0 | 232.2 | 268.4 | 283.4 | 247.3 | 271.4 | 301.5 |
| 147.5° | 226.1 | 259.3 | 262.3 | 235.2 | 226.1 | 244.2 | 271.4 | 271.4 | 229.2 | 259.3 | 280.4 |
| 150° | 217.1 | 244.2 | 253.3 | 244.2 | 235.2 | 256.3 | 265.3 | 250.3 | 217.1 | 250.3 | 262.3 |
| 152.5° | 214.1 | 232.2 | 232.2 | 256.3 | 253.3 | 268.4 | 244.2 | 238.2 | 211.1 | 241.2 | 238.2 |
| 155° | 214.1 | 229.2 | 223.1 | 235.2 | 247.3 | 247.3 | 232.2 | 232.2 | 211.1 | 241.2 | 226.1 |
| 157.5° | 211.1 | 232.2 | 223.1 | 220.1 | 226.1 | 232.2 | 232.2 | 235.2 | 211.1 | 235.2 | 226.1 |
| 160° | 211.1 | 235.2 | 226.1 | 217.1 | 220.1 | 229.2 | 235.2 | 235.2 | 211.1 | 235.2 | 229.2 |
| 162.5° | 211.1 | 229.2 | 229.2 | 220.1 | 220.1 | 232.2 | 235.2 | 232.2 | 211.1 | 229.2 | 235.2 |
| 165° | 211.1 | 229.2 | 232.2 | 226.1 | 223.1 | 238.2 | 235.2 | 226.1 | 208.1 | 226.1 | 238.2 |
| 167.5° | 211.1 | 223.1 | 235.2 | 229.2 | 229.2 | 238.2 | 238.2 | 223.1 | 208.1 | 217.1 | 238.2 |
| 170° | 211.1 | 220.1 | 232.2 | 229.2 | 232.2 | 241.2 | 232.2 | 220.1 | 211.1 | 214.1 | 229.2 |
| 172.5° | 211.1 | 214.1 | 226.1 | 229.2 | 229.2 | 235.2 | 226.1 | 214.1 | 211.1 | 208.1 | 220.1 |
| 175° | 208.1 | 214.1 | 220.1 | 220.1 | 217.1 | 226.1 | 217.1 | 211.1 | 208.1 | 205.0 | 211.1 |
| 177.5° | 205.0 | 208.1 | 214.1 | 214.1 | 208.1 | 214.1 | 208.1 | 205.0 | 205.0 | 202.0 | 208.1 |
| 180° | 202.0 | 202.0 | 202.0 | 202.0 | 202.0 | 202.0 | 202.0 | 202.0 | 202.0 | 202.0 | 202.0 |



TEST NUMBER: P197477

CATALOG NUMBER: 8WSL-LD2-90-UPL15-UNV-L830-CD2-U

CANDELA DISTRIBUTION (continued):

| | 247.5° | 270° | 292.5° | 315° | 337.5° | 360° |
|--------|--------|--------|--------|--------|--------|--------|
| 0° | 2626.3 | 2626.3 | 2626.3 | 2626.3 | 2626.3 | 2626.3 |
| 2.5° | 2605.2 | 2584.1 | 2590.1 | 2608.2 | 2605.2 | 2647.4 |
| 5° | 2578.1 | 2569.0 | 2569.0 | 2596.2 | 2593.1 | 2647.4 |
| 7.5° | 2547.9 | 2532.8 | 2541.9 | 2572.0 | 2581.1 | 2641.4 |
| 10° | 2508.7 | 2496.6 | 2499.7 | 2544.9 | 2560.0 | 2635.3 |
| 12.5° | 2469.5 | 2457.4 | 2466.5 | 2508.7 | 2529.8 | 2620.3 |
| 15° | 2424.3 | 2403.2 | 2427.3 | 2472.5 | 2499.7 | 2599.2 |
| 17.5° | 2370.0 | 2345.9 | 2370.0 | 2430.3 | 2463.5 | 2575.0 |
| 20° | 2321.8 | 2297.6 | 2312.7 | 2376.0 | 2421.3 | 2547.9 |
| 22.5° | 2267.5 | 2237.3 | 2249.4 | 2318.7 | 2376.0 | 2511.7 |
| 25° | 2207.2 | 2168.0 | 2186.1 | 2261.5 | 2324.8 | 2466.5 |
| 27.5° | 2128.8 | 2062.4 | 2107.7 | 2201.1 | 2261.5 | 2421.3 |
| 30° | 2020.2 | 1932.8 | 2005.2 | 2134.8 | 2204.2 | 2370.0 |
| 32.5° | 1893.6 | 1800.1 | 1878.5 | 2053.4 | 2137.8 | 2312.7 |
| 35° | 1770.0 | 1688.6 | 1760.9 | 1969.0 | 2071.5 | 2249.4 |
| 37.5° | 1661.4 | 1586.0 | 1652.4 | 1872.5 | 1999.1 | 2180.0 |
| 40° | 1549.9 | 1480.5 | 1546.8 | 1770.0 | 1926.8 | 2107.7 |
| 42.5° | 1447.3 | 1381.0 | 1444.3 | 1667.4 | 1848.4 | 2029.3 |
| 45° | 1338.8 | 1230.2 | 1332.8 | 1561.9 | 1763.9 | 1944.9 |
| 47.5° | 1224.2 | 1109.6 | 1215.2 | 1459.4 | 1679.5 | 1857.4 |
| 50° | 1118.7 | 1016.1 | 1112.6 | 1353.9 | 1589.0 | 1763.9 |
| 52.5° | 1025.2 | 937.7 | 1022.2 | 1248.3 | 1495.6 | 1667.4 |
| 55° | 937.7 | 880.5 | 940.8 | 1151.8 | 1408.1 | 1567.9 |
| 57.5° | 868.4 | 829.2 | 871.4 | 1058.4 | 1311.6 | 1468.4 |
| 60° | 808.1 | 784.0 | 811.1 | 964.9 | 1209.1 | 1362.9 |
| 62.5° | 741.8 | 732.7 | 741.8 | 874.4 | 1109.6 | 1254.4 |
| 65° | 684.5 | 693.5 | 684.5 | 793.0 | 1004.1 | 1142.8 |
| 67.5° | 630.2 | 651.3 | 633.2 | 705.6 | 898.6 | 1028.2 |
| 70° | 569.9 | 600.0 | 572.9 | 627.2 | 790.0 | 910.6 |
| 72.5° | 506.6 | 542.7 | 506.6 | 551.8 | 675.4 | 787.0 |
| 75° | 440.2 | 482.4 | 443.2 | 470.4 | 566.9 | 657.3 |
| 77.5° | 367.9 | 395.0 | 373.9 | 382.9 | 461.3 | 533.7 |
| 80° | 292.5 | 322.6 | 295.5 | 301.5 | 364.8 | 413.1 |
| 82.5° | 244.2 | 265.3 | 247.3 | 229.2 | 271.4 | 304.5 |
| 85° | 180.9 | 193.0 | 186.9 | 177.9 | 186.9 | 208.1 |
| 87.5° | 111.6 | 117.6 | 111.6 | 111.6 | 96.5 | 87.4 |
| 90° | 123.6 | 132.7 | 123.6 | 96.5 | 54.3 | 3.0 |
| 92.5° | 126.6 | 138.7 | 126.6 | 105.5 | 102.5 | 21.1 |
| 95° | 283.4 | 277.4 | 301.5 | 274.4 | 156.8 | 81.4 |
| 97.5° | 440.2 | 503.6 | 455.3 | 328.7 | 211.1 | 129.7 |
| 100° | 506.6 | 566.9 | 527.7 | 410.1 | 241.2 | 177.9 |
| 102.5° | 585.0 | 651.3 | 609.1 | 479.4 | 271.4 | 223.1 |
| 105° | 681.5 | 738.7 | 702.6 | 506.6 | 298.5 | 259.3 |
| 107.5° | 732.7 | 820.2 | 747.8 | 518.6 | 316.6 | 292.5 |
| 110° | 759.8 | 853.3 | 784.0 | 521.6 | 331.7 | 319.6 |



TEST NUMBER: P197477

CATALOG NUMBER: 8WSL-LD2-90-UPL15-UNV-L830-CD2-U

CANDELA DISTRIBUTION (continued):

| | 247.5° | 270° | 292.5° | 315° | 337.5° | 360° |
|--------|--------|-------|--------|-------|--------|-------|
| 112.5° | 781.0 | 871.4 | 799.0 | 521.6 | 337.7 | 343.7 |
| 115° | 781.0 | 886.5 | 799.0 | 512.6 | 346.8 | 358.8 |
| 117.5° | 781.0 | 877.4 | 799.0 | 503.6 | 358.8 | 367.9 |
| 120° | 753.8 | 874.4 | 777.9 | 491.5 | 361.8 | 373.9 |
| 122.5° | 732.7 | 850.3 | 747.8 | 476.4 | 361.8 | 370.9 |
| 125° | 693.5 | 817.1 | 711.6 | 458.3 | 355.8 | 364.8 |
| 127.5° | 651.3 | 768.9 | 666.4 | 437.2 | 358.8 | 352.8 |
| 130° | 612.1 | 714.6 | 621.1 | 416.1 | 346.8 | 337.7 |
| 132.5° | 560.8 | 654.3 | 569.9 | 401.0 | 334.7 | 322.6 |
| 135° | 512.6 | 597.0 | 524.7 | 389.0 | 319.6 | 307.6 |
| 137.5° | 461.3 | 536.7 | 473.4 | 364.8 | 304.5 | 292.5 |
| 140° | 401.0 | 461.3 | 413.1 | 337.7 | 295.5 | 277.4 |
| 142.5° | 361.8 | 395.0 | 373.9 | 325.6 | 283.4 | 259.3 |
| 145° | 337.7 | 355.8 | 346.8 | 313.6 | 277.4 | 241.2 |
| 147.5° | 313.6 | 331.7 | 322.6 | 289.5 | 262.3 | 226.1 |
| 150° | 304.5 | 304.5 | 316.6 | 268.4 | 253.3 | 217.1 |
| 152.5° | 271.4 | 295.5 | 283.4 | 244.2 | 247.3 | 214.1 |
| 155° | 232.2 | 244.2 | 244.2 | 235.2 | 247.3 | 214.1 |
| 157.5° | 217.1 | 226.1 | 229.2 | 235.2 | 241.2 | 211.1 |
| 160° | 217.1 | 220.1 | 229.2 | 238.2 | 238.2 | 211.1 |
| 162.5° | 223.1 | 220.1 | 235.2 | 244.2 | 232.2 | 211.1 |
| 165° | 229.2 | 226.1 | 241.2 | 247.3 | 226.1 | 211.1 |
| 167.5° | 235.2 | 235.2 | 247.3 | 244.2 | 220.1 | 211.1 |
| 170° | 235.2 | 241.2 | 247.3 | 235.2 | 217.1 | 211.1 |
| 172.5° | 226.1 | 229.2 | 235.2 | 220.1 | 208.1 | 211.1 |
| 175° | 214.1 | 211.1 | 220.1 | 211.1 | 208.1 | 208.1 |
| 177.5° | 208.1 | 199.0 | 208.1 | 205.0 | 202.0 | 205.0 |
| 180° | 202.0 | 202.0 | 202.0 | 202.0 | 202.0 | 202.0 |

(END OF REPORT)