

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: P392604

Luminaire Tested: **MWL-3-37-57-UNV-L830-EDD**

Issue Date: 12/2/2019

Test Information

Test Method: LM-79-08
Report Number: P392604
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-565-13 &
Test Lab: INNOVATION CENTER
Issue Date: 12/2/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: MWL-3-37-57-UNV-L830-EDD
Description: MWL 3FT MEDICAL LED FIXTURE
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9071.0 lumens
Efficiency: N/A
Efficacy: 86.2 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.17 / 1.25
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 3' x H: 0.42')
CIE Type: Semi-Direct

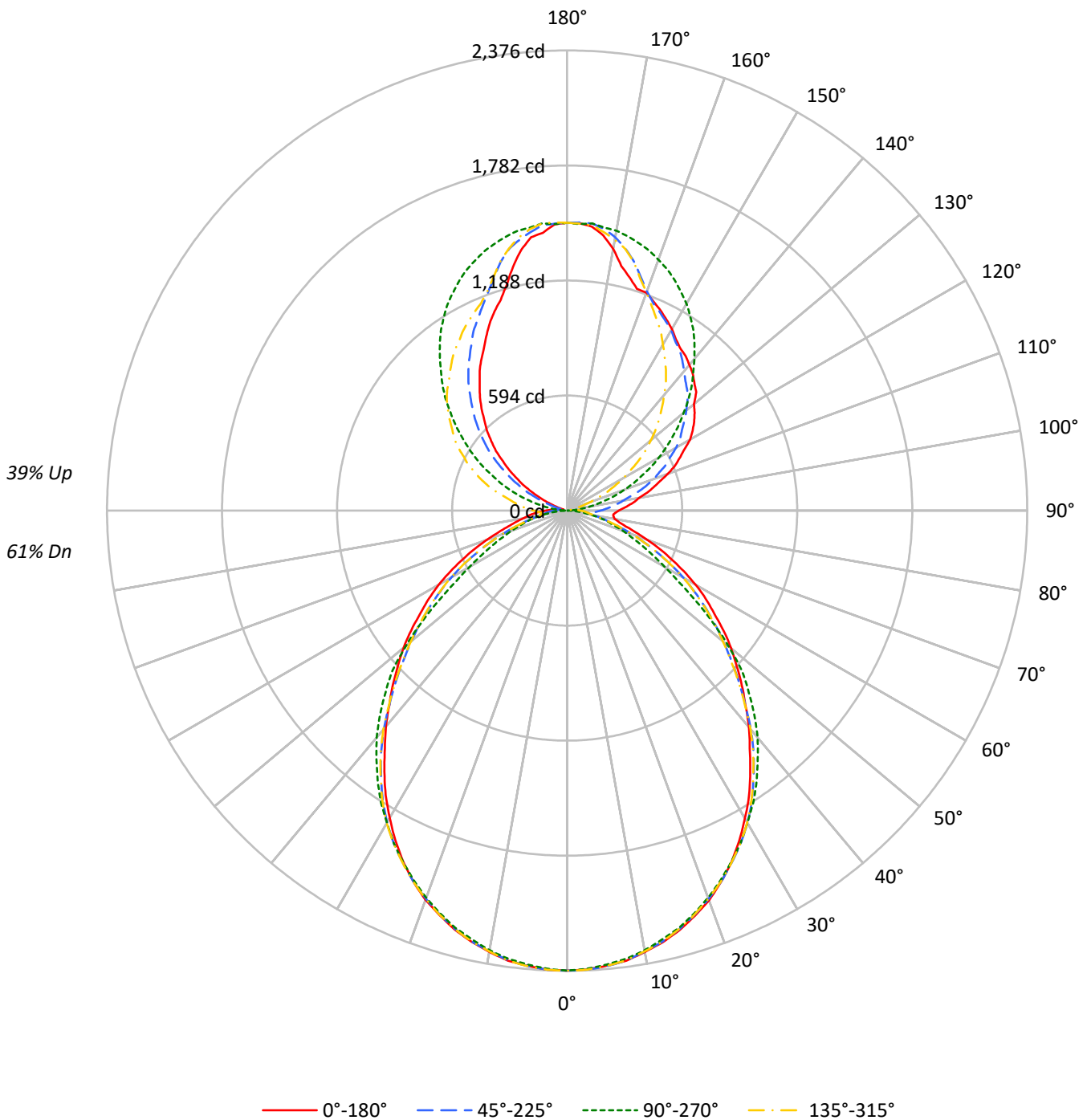
Input Watts (W): 105.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P392604

CATALOG NUMBER: MWL-3-37-57-UNV-L830-EDD

Luminous Intensity Polar Plot





TEST NUMBER: P392604

CATALOG NUMBER: MWL-3-37-57-UNV-L830-EDD

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 | 110 | 110 | 110 | 110 | 103 | 103 | 103 | 103 | 89 | 89 | 89 | 77 | 77 | 77 | 66 | 66 | 66 | 61 |
| 1 | 100 | 96 | 92 | 89 | 94 | 90 | 87 | 84 | 79 | 76 | 74 | 68 | 66 | 65 | 59 | 57 | 56 | 51 |
| 2 | 92 | 84 | 78 | 73 | 86 | 79 | 74 | 69 | 69 | 65 | 62 | 60 | 57 | 55 | 52 | 50 | 48 | 44 |
| 3 | 84 | 75 | 67 | 61 | 78 | 70 | 64 | 58 | 62 | 57 | 52 | 54 | 50 | 47 | 46 | 44 | 41 | 38 |
| 4 | 77 | 66 | 58 | 52 | 72 | 62 | 55 | 50 | 55 | 50 | 45 | 48 | 44 | 40 | 42 | 39 | 36 | 33 |
| 5 | 71 | 59 | 51 | 45 | 66 | 56 | 49 | 43 | 49 | 44 | 39 | 43 | 39 | 35 | 38 | 34 | 32 | 29 |
| 6 | 66 | 53 | 45 | 40 | 61 | 50 | 43 | 38 | 45 | 39 | 34 | 39 | 35 | 31 | 35 | 31 | 28 | 25 |
| 7 | 61 | 48 | 40 | 35 | 57 | 46 | 39 | 33 | 41 | 35 | 31 | 36 | 31 | 28 | 32 | 28 | 25 | 23 |
| 8 | 56 | 44 | 36 | 31 | 53 | 42 | 35 | 30 | 37 | 31 | 27 | 33 | 28 | 25 | 29 | 25 | 23 | 20 |
| 9 | 53 | 40 | 33 | 28 | 49 | 38 | 31 | 27 | 34 | 29 | 25 | 31 | 26 | 22 | 27 | 23 | 20 | 18 |
| 10 | 49 | 37 | 30 | 25 | 46 | 35 | 29 | 24 | 32 | 26 | 22 | 28 | 24 | 20 | 25 | 21 | 19 | 17 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 90° | 180° | 270° |
|-----|-------|-------|-------|-------|
| 0° | 20456 | 20456 | 20456 | 20456 |
| 5° | 20146 | 18699 | 20146 | 18699 |
| 10° | 19750 | 17137 | 19750 | 17137 |
| 15° | 19280 | 15682 | 19254 | 15682 |
| 20° | 18679 | 14294 | 18653 | 14294 |
| 25° | 17891 | 12978 | 17864 | 12978 |
| 30° | 16902 | 11729 | 16863 | 11729 |
| 35° | 15787 | 10543 | 15758 | 10543 |
| 40° | 14705 | 9350 | 14664 | 9350 |
| 45° | 13638 | 8075 | 13603 | 8075 |
| 50° | 12707 | 6644 | 12670 | 6644 |
| 55° | 11611 | 4987 | 11585 | 4987 |
| 60° | 10627 | 3662 | 10612 | 3662 |
| 65° | 9318 | 2756 | 9318 | 2756 |
| 70° | 7998 | 2065 | 8016 | 2065 |
| 75° | 6819 | 1486 | 6889 | 1486 |
| 80° | 6938 | 950 | 6383 | 950 |
| 85° | 9107 | 390 | 6510 | 390 |



TEST NUMBER: P392604

CATALOG NUMBER: MWL-3-37-57-UNV-L830-EDD

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 223.7 | 2.5 |
| 10°-20° | 629.7 | 6.9 |
| 20°-30° | 922.9 | 10.2 |
| 30°-40° | 1046.7 | 11.5 |
| 40°-50° | 984.2 | 10.8 |
| 50°-60° | 781.3 | 8.6 |
| 60°-70° | 508.2 | 5.6 |
| 70°-80° | 259.5 | 2.9 |
| 80°-90° | 136.3 | 1.5 |
| 90°-100° | 141.7 | 1.6 |
| 100°-110° | 233.7 | 2.6 |
| 110°-120° | 396.2 | 4.4 |
| 120°-130° | 537.5 | 5.9 |
| 130°-140° | 612.9 | 6.8 |
| 140°-150° | 611.1 | 6.7 |
| 150°-160° | 531.9 | 5.9 |
| 160°-170° | 374.1 | 4.1 |
| 170°-180° | 139.3 | 1.5 |
| 0°-30° | 1776.3 | 19.6 |
| 0°-40° | 2823.0 | 31.1 |
| 0°-60° | 4588.5 | 50.6 |
| 0°-90° | 5492.5 | 60.5 |
| 90°-120° | 771.7 | 8.5 |
| 90°-150° | 2533.2 | 27.9 |
| 90°-180° | 3579.0 | 39.5 |
| 0°-180° | 9071.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 90° | 180° | 270° | 360° | Flux |
|------|------|------|------|------|------|------|
| 0° | 2376 | 2376 | 2376 | 2376 | 2376 | |
| 5° | 2359 | 2352 | 2359 | 2352 | 2359 | 224 |
| 15° | 2243 | 2230 | 2240 | 2230 | 2243 | 631 |
| 25° | 2005 | 2003 | 2002 | 2003 | 2005 | 921 |
| 35° | 1648 | 1705 | 1645 | 1705 | 1648 | 1031 |
| 45° | 1275 | 1326 | 1272 | 1326 | 1275 | 985 |
| 55° | 927 | 807 | 925 | 807 | 927 | 834 |
| 65° | 594 | 425 | 594 | 425 | 594 | 591 |
| 75° | 311 | 211 | 314 | 211 | 311 | 343 |
| 85° | 238 | 49 | 170 | 49 | 238 | 199 |
| 90° | 266 | 2 | 109 | 2 | 266 | 147 |
| 95° | 320 | 43 | 71 | 43 | 320 | 274 |
| 105° | 461 | 208 | 20 | 208 | 461 | 488 |
| 115° | 640 | 424 | 150 | 424 | 640 | 635 |
| 125° | 800 | 665 | 365 | 665 | 800 | 715 |
| 135° | 929 | 908 | 586 | 908 | 929 | 717 |
| 145° | 1021 | 1136 | 787 | 1136 | 1021 | 643 |
| 155° | 1140 | 1313 | 989 | 1313 | 1140 | 526 |
| 165° | 1246 | 1429 | 1205 | 1429 | 1246 | 353 |
| 175° | 1472 | 1488 | 1440 | 1488 | 1472 | 137 |
| 180° | 1486 | 1486 | 1486 | 1486 | 1486 | |



TEST NUMBER: P392604

CATALOG NUMBER: MWL-3-37-57-UNV-L830-EDD

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° | 202.5° | 225° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 2375.5 | 2375.5 | 2375.5 | 2375.5 | 2375.5 | 2375.5 | 2375.5 | 2375.5 | 2375.5 | 2375.5 | 2375.5 |
| 2.5° | 2371.4 | 2372.6 | 2372.7 | 2369.9 | 2368.0 | 2368.8 | 2372.7 | 2372.6 | 2372.5 | 2372.6 | 2372.7 |
| 5° | 2358.9 | 2362.0 | 2361.2 | 2356.4 | 2352.5 | 2356.4 | 2360.1 | 2362.0 | 2358.9 | 2362.0 | 2360.1 |
| 7.5° | 2343.7 | 2342.8 | 2342.8 | 2336.2 | 2333.3 | 2335.1 | 2341.9 | 2341.9 | 2343.7 | 2341.9 | 2341.9 |
| 10° | 2314.0 | 2315.0 | 2311.1 | 2308.3 | 2305.4 | 2307.3 | 2310.2 | 2313.0 | 2314.0 | 2313.0 | 2310.2 |
| 12.5° | 2282.4 | 2280.4 | 2278.5 | 2273.7 | 2267.8 | 2273.7 | 2278.5 | 2278.4 | 2280.4 | 2278.4 | 2278.5 |
| 15° | 2243.2 | 2236.3 | 2237.2 | 2234.3 | 2230.4 | 2233.3 | 2236.2 | 2234.2 | 2240.1 | 2234.2 | 2236.2 |
| 17.5° | 2193.3 | 2190.2 | 2188.3 | 2186.3 | 2180.5 | 2186.3 | 2187.2 | 2189.2 | 2190.2 | 2189.2 | 2187.2 |
| 20° | 2141.4 | 2137.5 | 2133.6 | 2133.5 | 2127.6 | 2132.4 | 2132.5 | 2135.5 | 2138.4 | 2135.5 | 2132.5 |
| 22.5° | 2076.1 | 2076.1 | 2075.0 | 2073.0 | 2067.1 | 2071.9 | 2073.9 | 2074.0 | 2074.0 | 2074.0 | 2073.9 |
| 25° | 2005.0 | 2006.0 | 2008.8 | 2009.6 | 2002.8 | 2008.6 | 2006.7 | 2002.9 | 2001.9 | 2002.9 | 2006.7 |
| 27.5° | 1923.4 | 1930.1 | 1939.6 | 1941.6 | 1937.5 | 1940.5 | 1937.6 | 1927.1 | 1920.4 | 1927.1 | 1937.6 |
| 30° | 1836.1 | 1841.8 | 1862.9 | 1872.4 | 1860.7 | 1870.4 | 1859.9 | 1838.8 | 1831.9 | 1838.8 | 1859.9 |
| 32.5° | 1747.8 | 1749.7 | 1775.6 | 1789.9 | 1787.9 | 1787.9 | 1772.5 | 1745.5 | 1743.6 | 1745.5 | 1772.5 |
| 35° | 1647.8 | 1649.7 | 1678.5 | 1705.4 | 1705.2 | 1702.3 | 1675.5 | 1646.7 | 1644.8 | 1646.7 | 1675.5 |
| 37.5° | 1549.0 | 1550.9 | 1581.6 | 1611.3 | 1617.0 | 1608.3 | 1578.5 | 1547.8 | 1545.9 | 1547.8 | 1578.5 |
| 40° | 1460.6 | 1450.1 | 1476.0 | 1511.5 | 1529.7 | 1509.4 | 1471.9 | 1446.0 | 1456.5 | 1446.0 | 1471.9 |
| 42.5° | 1362.7 | 1349.3 | 1361.8 | 1407.8 | 1429.8 | 1405.7 | 1358.6 | 1345.2 | 1358.6 | 1345.2 | 1358.6 |
| 45° | 1275.4 | 1252.3 | 1256.2 | 1297.4 | 1326.2 | 1295.3 | 1251.9 | 1249.2 | 1272.2 | 1249.2 | 1251.9 |
| 47.5° | 1187.1 | 1163.1 | 1151.5 | 1187.9 | 1224.4 | 1186.9 | 1147.3 | 1159.9 | 1183.9 | 1159.9 | 1147.3 |
| 50° | 1105.5 | 1076.7 | 1053.6 | 1068.9 | 1087.0 | 1066.8 | 1049.4 | 1072.4 | 1102.3 | 1072.4 | 1049.4 |
| 52.5° | 1018.1 | 994.1 | 959.5 | 961.4 | 947.8 | 959.3 | 956.3 | 989.9 | 1014.9 | 989.9 | 956.3 |
| 55° | 926.8 | 912.4 | 868.3 | 845.1 | 806.6 | 843.0 | 865.1 | 909.3 | 924.7 | 909.3 | 865.1 |
| 57.5° | 849.1 | 832.7 | 779.9 | 729.9 | 680.9 | 727.8 | 776.8 | 829.6 | 847.0 | 829.6 | 776.8 |
| 60° | 765.5 | 752.0 | 692.5 | 615.6 | 581.0 | 614.6 | 690.4 | 749.9 | 764.4 | 749.9 | 690.4 |
| 62.5° | 679.1 | 669.5 | 604.2 | 516.7 | 497.4 | 515.7 | 602.1 | 667.3 | 678.0 | 667.3 | 602.1 |
| 65° | 593.5 | 581.0 | 512.9 | 433.2 | 425.4 | 432.2 | 511.8 | 580.0 | 593.5 | 580.0 | 511.8 |
| 67.5° | 515.8 | 496.6 | 433.2 | 361.1 | 360.2 | 361.1 | 432.2 | 495.5 | 515.8 | 495.5 | 432.2 |
| 70° | 438.9 | 412.0 | 354.4 | 300.7 | 307.4 | 300.7 | 354.4 | 413.1 | 439.9 | 413.1 | 354.4 |
| 72.5° | 368.8 | 337.1 | 286.3 | 245.0 | 253.5 | 243.9 | 286.3 | 338.2 | 370.9 | 338.2 | 286.3 |
| 75° | 311.2 | 268.0 | 225.7 | 195.9 | 211.3 | 195.9 | 226.7 | 269.1 | 314.4 | 269.1 | 226.7 |
| 77.5° | 273.5 | 224.2 | 174.8 | 150.8 | 169.0 | 150.8 | 175.9 | 221.1 | 269.4 | 221.1 | 175.9 |
| 80° | 250.1 | 199.5 | 141.5 | 114.3 | 127.8 | 114.3 | 139.4 | 182.8 | 230.1 | 182.8 | 139.4 |
| 82.5° | 241.6 | 191.9 | 128.2 | 82.7 | 88.4 | 82.7 | 115.6 | 154.2 | 201.8 | 154.2 | 115.6 |
| 85° | 238.5 | 201.2 | 133.0 | 64.7 | 49.1 | 62.6 | 102.5 | 137.3 | 170.5 | 137.3 | 102.5 |
| 87.5° | 249.5 | 220.8 | 148.0 | 66.9 | 14.4 | 52.3 | 88.2 | 120.2 | 141.5 | 120.2 | 88.2 |
| 90° | 266.3 | 245.3 | 172.3 | 75.5 | 2.0 | 35.7 | 68.5 | 97.5 | 109.0 | 97.5 | 68.5 |
| 92.5° | 293.3 | 275.9 | 199.6 | 93.6 | 17.8 | 21.3 | 56.0 | 82.0 | 87.8 | 82.0 | 56.0 |
| 95° | 319.8 | 309.6 | 231.2 | 113.8 | 42.9 | 9.0 | 42.5 | 66.4 | 71.3 | 66.4 | 42.5 |
| 97.5° | 352.4 | 343.4 | 260.0 | 148.7 | 75.4 | 14.5 | 28.4 | 55.1 | 58.9 | 55.1 | 28.4 |
| 100° | 376.0 | 368.2 | 294.7 | 193.7 | 116.2 | 36.5 | 16.9 | 39.1 | 45.8 | 39.1 | 16.9 |
| 102.5° | 421.4 | 404.0 | 331.0 | 236.7 | 159.2 | 66.9 | 18.6 | 26.6 | 31.4 | 26.6 | 18.6 |
| 105° | 461.2 | 441.7 | 382.3 | 281.8 | 208.4 | 107.8 | 43.8 | 20.3 | 19.8 | 20.3 | 43.8 |
| 107.5° | 500.4 | 488.0 | 428.5 | 327.9 | 260.8 | 154.9 | 79.4 | 43.6 | 30.8 | 43.6 | 79.4 |
| 110° | 551.9 | 537.4 | 473.5 | 374.1 | 315.3 | 205.3 | 120.3 | 76.1 | 61.3 | 76.1 | 120.3 |



TEST NUMBER: P392604

CATALOG NUMBER: MWL-3-37-57-UNV-L830-EDD

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° | 202.5° | 225° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 112.5° | 601.3 | 590.8 | 515.5 | 422.3 | 372.0 | 259.8 | 170.6 | 118.1 | 103.3 | 118.1 | 170.6 |
| 115° | 640.1 | 633.8 | 564.6 | 468.4 | 424.4 | 322.6 | 227.1 | 167.4 | 149.5 | 167.4 | 227.1 |
| 117.5° | 681.0 | 679.0 | 600.3 | 514.4 | 488.2 | 378.1 | 278.5 | 216.7 | 197.7 | 216.7 | 278.5 |
| 120° | 732.3 | 722.9 | 649.6 | 560.6 | 547.9 | 436.9 | 335.1 | 273.2 | 254.3 | 273.2 | 335.1 |
| 122.5° | 767.9 | 761.7 | 691.5 | 604.6 | 604.6 | 496.6 | 389.6 | 327.7 | 307.8 | 327.7 | 389.6 |
| 125° | 800.4 | 797.4 | 722.9 | 648.6 | 665.4 | 552.2 | 450.4 | 387.5 | 365.4 | 387.5 | 450.4 |
| 127.5° | 829.8 | 832.9 | 763.8 | 696.8 | 727.2 | 608.8 | 510.1 | 442.0 | 417.9 | 442.0 | 510.1 |
| 130° | 854.9 | 865.4 | 802.6 | 741.8 | 785.9 | 671.6 | 563.6 | 495.4 | 479.7 | 495.4 | 563.6 |
| 132.5° | 904.2 | 897.9 | 842.4 | 786.9 | 849.8 | 728.2 | 620.2 | 548.9 | 531.0 | 548.9 | 620.2 |
| 135° | 929.4 | 931.4 | 877.0 | 825.6 | 908.5 | 784.8 | 673.7 | 603.3 | 585.6 | 603.3 | 673.7 |
| 137.5° | 959.7 | 953.5 | 904.3 | 872.9 | 963.0 | 839.3 | 726.1 | 661.0 | 632.7 | 661.0 | 726.1 |
| 140° | 981.8 | 980.8 | 940.0 | 914.8 | 1021.7 | 892.7 | 779.6 | 713.4 | 687.2 | 713.4 | 779.6 |
| 142.5° | 1004.9 | 1011.1 | 976.5 | 960.9 | 1080.4 | 949.4 | 838.2 | 764.8 | 739.6 | 764.8 | 838.2 |
| 145° | 1020.6 | 1034.2 | 1012.2 | 1018.6 | 1136.0 | 1012.3 | 888.5 | 814.0 | 786.8 | 814.0 | 888.5 |
| 147.5° | 1046.8 | 1064.6 | 1037.4 | 1059.5 | 1184.2 | 1067.8 | 937.9 | 865.4 | 841.3 | 865.4 | 937.9 |
| 150° | 1082.4 | 1090.8 | 1074.1 | 1117.0 | 1233.4 | 1130.6 | 989.2 | 914.7 | 890.6 | 914.7 | 989.2 |
| 152.5° | 1110.7 | 1121.2 | 1102.4 | 1177.9 | 1272.2 | 1186.3 | 1045.8 | 962.9 | 934.6 | 962.9 | 1045.8 |
| 155° | 1140.1 | 1144.2 | 1130.7 | 1237.6 | 1313.1 | 1241.9 | 1090.9 | 1016.4 | 989.1 | 1016.4 | 1090.9 |
| 157.5° | 1167.3 | 1175.7 | 1160.1 | 1282.8 | 1348.8 | 1290.1 | 1142.2 | 1069.8 | 1045.8 | 1069.8 | 1142.2 |
| 160° | 1196.7 | 1195.7 | 1204.1 | 1335.2 | 1378.1 | 1332.0 | 1196.8 | 1127.5 | 1095.0 | 1127.5 | 1196.8 |
| 162.5° | 1199.8 | 1218.7 | 1263.9 | 1372.8 | 1407.4 | 1369.6 | 1255.5 | 1169.5 | 1141.1 | 1169.5 | 1255.5 |
| 165° | 1245.9 | 1262.8 | 1331.9 | 1405.2 | 1429.3 | 1402.2 | 1328.7 | 1238.7 | 1205.1 | 1238.7 | 1328.7 |
| 167.5° | 1293.2 | 1331.0 | 1386.4 | 1442.0 | 1450.4 | 1432.5 | 1384.3 | 1321.5 | 1290.1 | 1321.5 | 1384.3 |
| 170° | 1370.9 | 1404.3 | 1432.5 | 1455.6 | 1467.2 | 1456.6 | 1418.9 | 1387.6 | 1366.7 | 1387.6 | 1418.9 |
| 172.5° | 1432.7 | 1454.7 | 1466.1 | 1480.8 | 1473.4 | 1469.2 | 1450.4 | 1434.7 | 1423.3 | 1434.7 | 1450.4 |
| 175° | 1471.5 | 1476.7 | 1487.0 | 1481.9 | 1488.1 | 1476.6 | 1477.6 | 1484.0 | 1440.1 | 1484.0 | 1477.6 |
| 177.5° | 1485.1 | 1493.5 | 1489.1 | 1479.7 | 1480.8 | 1478.7 | 1482.8 | 1486.1 | 1478.9 | 1486.1 | 1482.8 |
| 180° | 1486.1 | 1486.1 | 1486.1 | 1486.1 | 1486.1 | 1486.1 | 1486.1 | 1486.1 | 1486.1 | 1486.1 | 1486.1 |



TEST NUMBER: P392604

CATALOG NUMBER: MWL-3-37-57-UNV-L830-EDD

CANDELA DISTRIBUTION (continued):

| | 247.5° | 270° | 292.5° | 315° | 337.5° | 360° |
|--------|--------|--------|--------|--------|--------|--------|
| 0° | 2375.5 | 2375.5 | 2375.5 | 2375.5 | 2375.5 | 2375.5 |
| 2.5° | 2368.8 | 2368.0 | 2369.9 | 2372.7 | 2372.6 | 2371.4 |
| 5° | 2356.4 | 2352.5 | 2356.4 | 2361.2 | 2362.0 | 2358.9 |
| 7.5° | 2335.1 | 2333.3 | 2336.2 | 2342.8 | 2342.8 | 2343.7 |
| 10° | 2307.3 | 2305.4 | 2308.3 | 2311.1 | 2315.0 | 2314.0 |
| 12.5° | 2273.7 | 2267.8 | 2273.7 | 2278.5 | 2280.4 | 2282.4 |
| 15° | 2233.3 | 2230.4 | 2234.3 | 2237.2 | 2236.3 | 2243.2 |
| 17.5° | 2186.3 | 2180.5 | 2186.3 | 2188.3 | 2190.2 | 2193.3 |
| 20° | 2132.4 | 2127.6 | 2133.5 | 2133.6 | 2137.5 | 2141.4 |
| 22.5° | 2071.9 | 2067.1 | 2073.0 | 2075.0 | 2076.1 | 2076.1 |
| 25° | 2008.6 | 2002.8 | 2009.6 | 2008.8 | 2006.0 | 2005.0 |
| 27.5° | 1940.5 | 1937.5 | 1941.6 | 1939.6 | 1930.1 | 1923.4 |
| 30° | 1870.4 | 1860.7 | 1872.4 | 1862.9 | 1841.8 | 1836.1 |
| 32.5° | 1787.9 | 1787.9 | 1789.9 | 1775.6 | 1749.7 | 1747.8 |
| 35° | 1702.3 | 1705.2 | 1705.4 | 1678.5 | 1649.7 | 1647.8 |
| 37.5° | 1608.3 | 1617.0 | 1611.3 | 1581.6 | 1550.9 | 1549.0 |
| 40° | 1509.4 | 1529.7 | 1511.5 | 1476.0 | 1450.1 | 1460.6 |
| 42.5° | 1405.7 | 1429.8 | 1407.8 | 1361.8 | 1349.3 | 1362.7 |
| 45° | 1295.3 | 1326.2 | 1297.4 | 1256.2 | 1252.3 | 1275.4 |
| 47.5° | 1186.9 | 1224.4 | 1187.9 | 1151.5 | 1163.1 | 1187.1 |
| 50° | 1066.8 | 1087.0 | 1068.9 | 1053.6 | 1076.7 | 1105.5 |
| 52.5° | 959.3 | 947.8 | 961.4 | 959.5 | 994.1 | 1018.1 |
| 55° | 843.0 | 806.6 | 845.1 | 868.3 | 912.4 | 926.8 |
| 57.5° | 727.8 | 680.9 | 729.9 | 779.9 | 832.7 | 849.1 |
| 60° | 614.6 | 581.0 | 615.6 | 692.5 | 752.0 | 765.5 |
| 62.5° | 515.7 | 497.4 | 516.7 | 604.2 | 669.5 | 679.1 |
| 65° | 432.2 | 425.4 | 433.2 | 512.9 | 581.0 | 593.5 |
| 67.5° | 361.1 | 360.2 | 361.1 | 433.2 | 496.6 | 515.8 |
| 70° | 300.7 | 307.4 | 300.7 | 354.4 | 412.0 | 438.9 |
| 72.5° | 243.9 | 253.5 | 245.0 | 286.3 | 337.1 | 368.8 |
| 75° | 195.9 | 211.3 | 195.9 | 225.7 | 268.0 | 311.2 |
| 77.5° | 150.8 | 169.0 | 150.8 | 174.8 | 224.2 | 273.5 |
| 80° | 114.3 | 127.8 | 114.3 | 141.5 | 199.5 | 250.1 |
| 82.5° | 82.7 | 88.4 | 82.7 | 128.2 | 191.9 | 241.6 |
| 85° | 62.6 | 49.1 | 64.7 | 133.0 | 201.2 | 238.5 |
| 87.5° | 52.3 | 14.4 | 66.9 | 148.0 | 220.8 | 249.5 |
| 90° | 35.7 | 2.0 | 75.5 | 172.3 | 245.3 | 266.3 |
| 92.5° | 21.3 | 17.8 | 93.6 | 199.6 | 275.9 | 293.3 |
| 95° | 9.0 | 42.9 | 113.8 | 231.2 | 309.6 | 319.8 |
| 97.5° | 14.5 | 75.4 | 148.7 | 260.0 | 343.4 | 352.4 |
| 100° | 36.5 | 116.2 | 193.7 | 294.7 | 368.2 | 376.0 |
| 102.5° | 66.9 | 159.2 | 236.7 | 331.0 | 404.0 | 421.4 |
| 105° | 107.8 | 208.4 | 281.8 | 382.3 | 441.7 | 461.2 |
| 107.5° | 154.9 | 260.8 | 327.9 | 428.5 | 488.0 | 500.4 |
| 110° | 205.3 | 315.3 | 374.1 | 473.5 | 537.4 | 551.9 |



TEST NUMBER: P392604

CATALOG NUMBER: MWL-3-37-57-UNV-L830-EDD

CANDELA DISTRIBUTION (continued):

| | 247.5° | 270° | 292.5° | 315° | 337.5° | 360° |
|--------|--------|--------|--------|--------|--------|--------|
| 112.5° | 259.8 | 372.0 | 422.3 | 515.5 | 590.8 | 601.3 |
| 115° | 322.6 | 424.4 | 468.4 | 564.6 | 633.8 | 640.1 |
| 117.5° | 378.1 | 488.2 | 514.4 | 600.3 | 679.0 | 681.0 |
| 120° | 436.9 | 547.9 | 560.6 | 649.6 | 722.9 | 732.3 |
| 122.5° | 496.6 | 604.6 | 604.6 | 691.5 | 761.7 | 767.9 |
| 125° | 552.2 | 665.4 | 648.6 | 722.9 | 797.4 | 800.4 |
| 127.5° | 608.8 | 727.2 | 696.8 | 763.8 | 832.9 | 829.8 |
| 130° | 671.6 | 785.9 | 741.8 | 802.6 | 865.4 | 854.9 |
| 132.5° | 728.2 | 849.8 | 786.9 | 842.4 | 897.9 | 904.2 |
| 135° | 784.8 | 908.5 | 825.6 | 877.0 | 931.4 | 929.4 |
| 137.5° | 839.3 | 963.0 | 872.9 | 904.3 | 953.5 | 959.7 |
| 140° | 892.7 | 1021.7 | 914.8 | 940.0 | 980.8 | 981.8 |
| 142.5° | 949.4 | 1080.4 | 960.9 | 976.5 | 1011.1 | 1004.9 |
| 145° | 1012.3 | 1136.0 | 1018.6 | 1012.2 | 1034.2 | 1020.6 |
| 147.5° | 1067.8 | 1184.2 | 1059.5 | 1037.4 | 1064.6 | 1046.8 |
| 150° | 1130.6 | 1233.4 | 1117.0 | 1074.1 | 1090.8 | 1082.4 |
| 152.5° | 1186.3 | 1272.2 | 1177.9 | 1102.4 | 1121.2 | 1110.7 |
| 155° | 1241.9 | 1313.1 | 1237.6 | 1130.7 | 1144.2 | 1140.1 |
| 157.5° | 1290.1 | 1348.8 | 1282.8 | 1160.1 | 1175.7 | 1167.3 |
| 160° | 1332.0 | 1378.1 | 1335.2 | 1204.1 | 1195.7 | 1196.7 |
| 162.5° | 1369.6 | 1407.4 | 1372.8 | 1263.9 | 1218.7 | 1199.8 |
| 165° | 1402.2 | 1429.3 | 1405.2 | 1331.9 | 1262.8 | 1245.9 |
| 167.5° | 1432.5 | 1450.4 | 1442.0 | 1386.4 | 1331.0 | 1293.2 |
| 170° | 1456.6 | 1467.2 | 1455.6 | 1432.5 | 1404.3 | 1370.9 |
| 172.5° | 1469.2 | 1473.4 | 1480.8 | 1466.1 | 1454.7 | 1432.7 |
| 175° | 1476.6 | 1488.1 | 1481.9 | 1487.0 | 1476.7 | 1471.5 |
| 177.5° | 1478.7 | 1480.8 | 1479.7 | 1489.1 | 1493.5 | 1485.1 |
| 180° | 1486.1 | 1486.1 | 1486.1 | 1486.1 | 1486.1 | 1486.1 |

(END OF REPORT)