

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: P392675

Luminaire Tested: **MWL-4-42-33-UNV-L940-EDD**

Issue Date: 12/2/2019

Test Information

Test Method: LM-79-08
Report Number: P392675
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-565-1 &
Test Lab: INNOVATION CENTER
Issue Date: 12/2/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: MWL-4-42-33-UNV-L940-EDD
Description: MWL 4FT MEDICAL LED FIXTURE
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

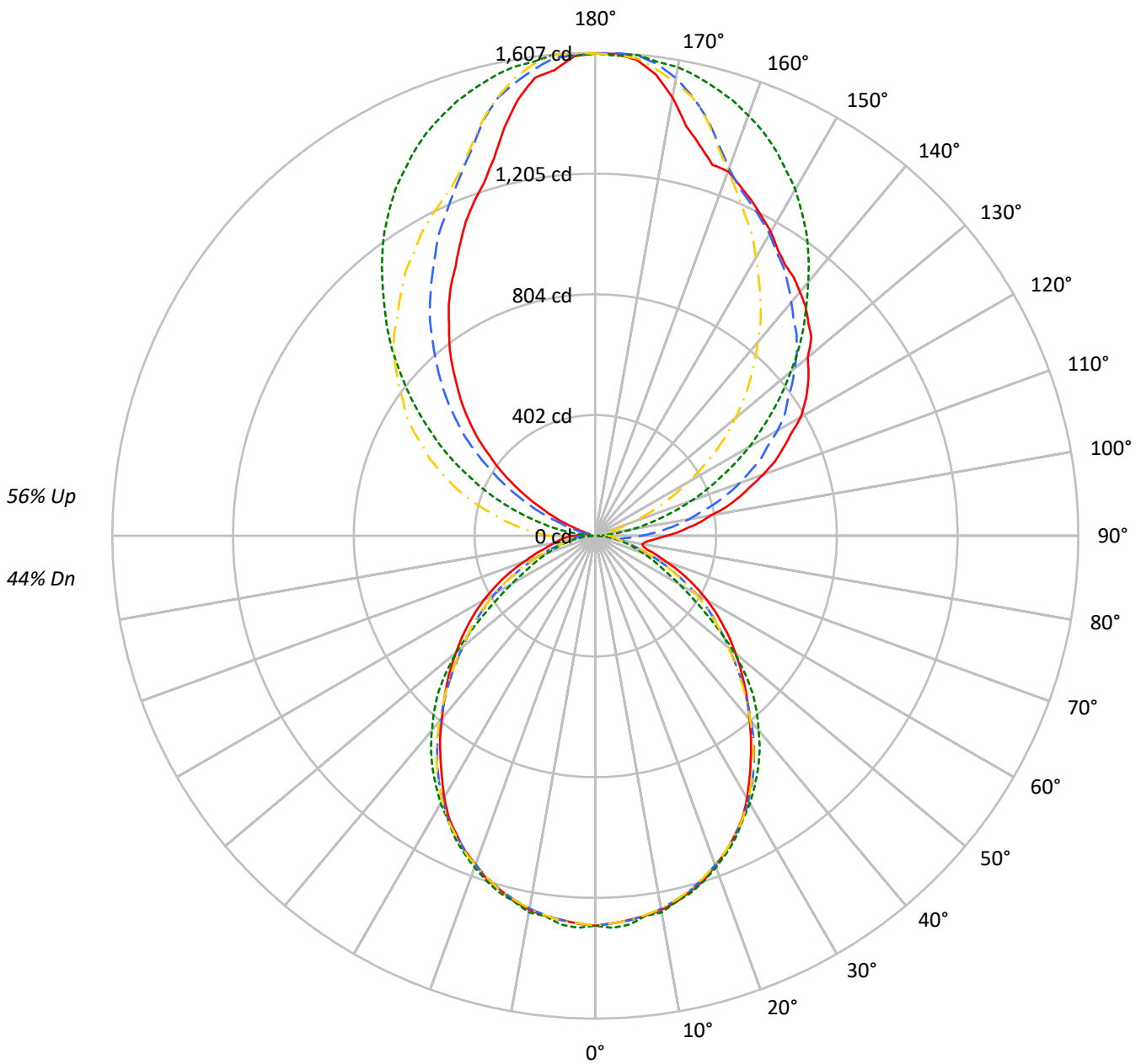
Lumens per Lamp: N/A
Luminaire Lumens: 6893.3 lumens
Efficiency: N/A
Efficacy: 88.5 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.18 / 1.25
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.42')
CIE Type: General Diffuse

Input Watts (W): 77.871
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: P392675
CATALOG NUMBER: MWL-4-42-33-UNV-L940-EDD

Luminous Intensity Polar Plot



— 0°-180° - - 45°-225° - - - 90°-270° - - - 135°-315°



TEST NUMBER: P392675

CATALOG NUMBER: MWL-4-42-33-UNV-L940-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 | 106 | 106 | 106 | 106 | 97 | 97 | 97 | 97 | 80 | 80 | 80 | 65 | 65 | 65 | 51 | 51 | 51 | 44 |
| 1 | 97 | 92 | 88 | 85 | 88 | 85 | 81 | 78 | 70 | 68 | 66 | 57 | 56 | 54 | 45 | 44 | 43 | 37 |
| 2 | 88 | 81 | 75 | 70 | 80 | 74 | 69 | 65 | 62 | 58 | 55 | 50 | 48 | 46 | 40 | 38 | 37 | 32 |
| 3 | 81 | 71 | 64 | 58 | 73 | 66 | 59 | 54 | 55 | 50 | 46 | 45 | 42 | 39 | 36 | 33 | 31 | 27 |
| 4 | 74 | 63 | 56 | 50 | 67 | 58 | 52 | 46 | 49 | 44 | 40 | 40 | 36 | 34 | 32 | 29 | 27 | 24 |
| 5 | 68 | 56 | 49 | 43 | 62 | 52 | 45 | 40 | 44 | 39 | 34 | 36 | 32 | 29 | 29 | 26 | 24 | 21 |
| 6 | 63 | 51 | 43 | 37 | 57 | 47 | 40 | 35 | 40 | 34 | 30 | 33 | 29 | 26 | 26 | 23 | 21 | 18 |
| 7 | 58 | 46 | 38 | 33 | 53 | 42 | 35 | 31 | 36 | 31 | 27 | 30 | 26 | 23 | 24 | 21 | 19 | 16 |
| 8 | 54 | 42 | 34 | 29 | 49 | 39 | 32 | 27 | 33 | 27 | 24 | 27 | 23 | 20 | 22 | 19 | 17 | 15 |
| 9 | 50 | 38 | 31 | 26 | 46 | 35 | 29 | 24 | 30 | 25 | 21 | 25 | 21 | 18 | 21 | 18 | 15 | 13 |
| 10 | 47 | 35 | 28 | 23 | 43 | 32 | 26 | 22 | 28 | 23 | 19 | 23 | 19 | 17 | 19 | 16 | 14 | 12 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 90° | 180° | 270° |
|-----|------|------|------|------|
| 0° | 8384 | 8384 | 8384 | 8384 |
| 5° | 8248 | 7745 | 8248 | 7745 |
| 10° | 8141 | 7095 | 8141 | 7095 |
| 15° | 7961 | 6488 | 7939 | 6488 |
| 20° | 7730 | 5918 | 7708 | 5918 |
| 25° | 7467 | 5380 | 7444 | 5380 |
| 30° | 7101 | 4864 | 7070 | 4864 |
| 35° | 6626 | 4378 | 6601 | 4378 |
| 40° | 6186 | 3877 | 6151 | 3877 |
| 45° | 5807 | 3375 | 5778 | 3375 |
| 50° | 5436 | 2761 | 5405 | 2761 |
| 55° | 5083 | 2065 | 5061 | 2065 |
| 60° | 4695 | 1528 | 4682 | 1528 |
| 65° | 4242 | 1136 | 4242 | 1136 |
| 70° | 3659 | 852 | 3675 | 852 |
| 75° | 3216 | 625 | 3277 | 625 |
| 80° | 3720 | 403 | 3215 | 403 |
| 85° | 6163 | 186 | 3670 | 186 |



TEST NUMBER: P392675

CATALOG NUMBER: MWL-4-42-33-UNV-L940-EDD

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 122.2 | 1.8 |
| 10°-20° | 344.8 | 5.0 |
| 20°-30° | 506.6 | 7.3 |
| 30°-40° | 575.7 | 8.4 |
| 40°-50° | 542.5 | 7.9 |
| 50°-60° | 433.0 | 6.3 |
| 60°-70° | 286.0 | 4.1 |
| 70°-80° | 150.1 | 2.2 |
| 80°-90° | 93.2 | 1.4 |
| 90°-100° | 133.7 | 1.9 |
| 100°-110° | 250.3 | 3.6 |
| 110°-120° | 426.6 | 6.2 |
| 120°-130° | 579.6 | 8.4 |
| 130°-140° | 661.1 | 9.6 |
| 140°-150° | 659.3 | 9.6 |
| 150°-160° | 574.1 | 8.3 |
| 160°-170° | 403.9 | 5.9 |
| 170°-180° | 150.4 | 2.2 |
| 0°-30° | 973.7 | 14.1 |
| 0°-40° | 1549.4 | 22.5 |
| 0°-60° | 2525.0 | 36.6 |
| 0°-90° | 3054.3 | 44.3 |
| 90°-120° | 810.6 | 11.8 |
| 90°-150° | 2710.6 | 39.3 |
| 90°-180° | 3839.0 | 55.7 |
| 0°-180° | 6893.3 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 90° | 180° | 270° | 360° | Flux |
|------|------|------|------|------|------|------|
| 0° | 1298 | 1298 | 1298 | 1298 | 1298 | |
| 5° | 1284 | 1299 | 1284 | 1299 | 1284 | 122 |
| 15° | 1224 | 1230 | 1220 | 1230 | 1224 | 345 |
| 25° | 1099 | 1107 | 1095 | 1107 | 1099 | 505 |
| 35° | 902 | 944 | 898 | 944 | 902 | 565 |
| 45° | 702 | 739 | 698 | 739 | 702 | 542 |
| 55° | 519 | 445 | 516 | 445 | 519 | 464 |
| 65° | 340 | 234 | 340 | 234 | 340 | 336 |
| 75° | 179 | 119 | 182 | 119 | 179 | 201 |
| 85° | 182 | 31 | 108 | 31 | 182 | 145 |
| 90° | 237 | 2 | 67 | 2 | 237 | 131 |
| 95° | 310 | 46 | 42 | 46 | 310 | 271 |
| 105° | 496 | 224 | 19 | 224 | 496 | 522 |
| 115° | 689 | 458 | 159 | 458 | 689 | 684 |
| 125° | 863 | 718 | 392 | 718 | 863 | 771 |
| 135° | 1002 | 980 | 630 | 980 | 1002 | 774 |
| 145° | 1101 | 1226 | 848 | 1226 | 1101 | 694 |
| 155° | 1230 | 1418 | 1067 | 1418 | 1230 | 567 |
| 165° | 1344 | 1543 | 1300 | 1543 | 1344 | 381 |
| 175° | 1590 | 1606 | 1556 | 1606 | 1590 | 148 |
| 180° | 1605 | 1605 | 1605 | 1605 | 1605 | |



TEST NUMBER: P392675

CATALOG NUMBER: MWL-4-42-33-UNV-L940-EDD

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° | 202.5° | 225° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1298.1 | 1298.1 | 1298.1 | 1298.1 | 1298.1 | 1298.1 | 1298.1 | 1298.1 | 1298.1 | 1298.1 | 1298.1 |
| 2.5° | 1291.1 | 1290.7 | 1291.0 | 1298.6 | 1305.9 | 1297.4 | 1291.0 | 1290.7 | 1292.2 | 1290.7 | 1291.0 |
| 5° | 1283.8 | 1286.1 | 1285.6 | 1293.8 | 1299.2 | 1293.8 | 1284.5 | 1286.1 | 1283.8 | 1286.1 | 1284.5 |
| 7.5° | 1275.8 | 1279.9 | 1274.4 | 1282.8 | 1276.5 | 1281.7 | 1273.4 | 1278.8 | 1275.8 | 1278.8 | 1273.4 |
| 10° | 1264.2 | 1264.4 | 1260.8 | 1269.0 | 1272.6 | 1267.9 | 1259.7 | 1262.1 | 1264.2 | 1262.1 | 1259.7 |
| 12.5° | 1248.2 | 1242.6 | 1241.5 | 1246.9 | 1246.7 | 1246.9 | 1241.5 | 1240.3 | 1246.0 | 1240.3 | 1241.5 |
| 15° | 1223.9 | 1226.2 | 1221.4 | 1226.9 | 1230.3 | 1225.7 | 1220.2 | 1223.9 | 1220.5 | 1223.9 | 1220.2 |
| 17.5° | 1202.0 | 1200.6 | 1195.0 | 1198.4 | 1203.8 | 1198.4 | 1193.8 | 1199.6 | 1198.6 | 1199.6 | 1193.8 |
| 20° | 1167.4 | 1168.9 | 1165.8 | 1174.7 | 1174.5 | 1173.6 | 1164.7 | 1166.8 | 1164.0 | 1166.8 | 1164.7 |
| 22.5° | 1136.1 | 1138.0 | 1136.7 | 1136.4 | 1142.6 | 1135.3 | 1135.5 | 1135.8 | 1134.0 | 1135.8 | 1135.5 |
| 25° | 1098.8 | 1098.8 | 1099.5 | 1109.1 | 1107.1 | 1108.0 | 1097.2 | 1095.4 | 1095.4 | 1095.4 | 1097.2 |
| 27.5° | 1059.6 | 1057.8 | 1064.9 | 1071.1 | 1063.3 | 1069.9 | 1062.6 | 1054.4 | 1056.2 | 1054.4 | 1062.6 |
| 30° | 1009.5 | 1011.3 | 1018.6 | 1034.8 | 1028.7 | 1032.5 | 1015.2 | 1007.9 | 1005.0 | 1007.9 | 1015.2 |
| 32.5° | 954.8 | 962.1 | 972.1 | 993.8 | 987.0 | 991.6 | 968.8 | 957.7 | 950.4 | 957.7 | 968.8 |
| 35° | 901.7 | 904.5 | 920.0 | 946.5 | 944.0 | 943.1 | 916.7 | 901.1 | 898.3 | 901.1 | 916.7 |
| 37.5° | 851.6 | 847.0 | 866.2 | 894.4 | 898.5 | 891.1 | 862.8 | 843.7 | 848.2 | 843.7 | 862.8 |
| 40° | 797.9 | 798.8 | 807.0 | 840.5 | 845.7 | 838.2 | 802.4 | 794.2 | 793.3 | 794.2 | 802.4 |
| 42.5° | 749.6 | 740.5 | 747.6 | 782.2 | 794.7 | 779.9 | 744.1 | 735.9 | 745.0 | 735.9 | 744.1 |
| 45° | 702.0 | 690.2 | 691.1 | 721.1 | 739.1 | 718.9 | 686.5 | 686.7 | 698.5 | 686.7 | 686.5 |
| 47.5° | 655.5 | 641.0 | 633.7 | 657.1 | 672.6 | 656.0 | 629.1 | 637.5 | 652.1 | 637.5 | 629.1 |
| 50° | 608.2 | 594.5 | 579.9 | 594.2 | 602.2 | 591.9 | 575.4 | 589.9 | 604.7 | 589.9 | 575.4 |
| 52.5° | 564.4 | 548.9 | 530.4 | 532.3 | 523.0 | 530.0 | 527.1 | 544.4 | 561.0 | 544.4 | 527.1 |
| 55° | 518.6 | 504.9 | 482.2 | 467.4 | 445.3 | 465.1 | 478.8 | 501.6 | 516.3 | 501.6 | 478.8 |
| 57.5° | 474.9 | 464.8 | 435.7 | 406.4 | 376.9 | 404.1 | 432.3 | 461.5 | 472.6 | 461.5 | 432.3 |
| 60° | 429.1 | 420.9 | 387.2 | 345.0 | 323.2 | 343.9 | 384.9 | 418.7 | 427.9 | 418.7 | 384.9 |
| 62.5° | 383.6 | 377.2 | 338.0 | 289.5 | 272.0 | 288.4 | 335.7 | 374.9 | 382.4 | 374.9 | 335.7 |
| 65° | 339.6 | 329.5 | 289.5 | 243.9 | 233.7 | 242.8 | 288.4 | 328.5 | 339.6 | 328.5 | 288.4 |
| 67.5° | 294.9 | 283.1 | 244.8 | 202.7 | 200.9 | 202.7 | 243.7 | 282.0 | 294.9 | 282.0 | 243.7 |
| 70° | 249.2 | 237.3 | 203.6 | 168.1 | 169.0 | 168.1 | 203.6 | 238.4 | 250.3 | 238.4 | 203.6 |
| 72.5° | 214.6 | 194.5 | 167.2 | 138.9 | 142.3 | 137.8 | 167.2 | 195.6 | 216.8 | 195.6 | 167.2 |
| 75° | 179.0 | 157.2 | 131.4 | 110.4 | 118.6 | 110.4 | 132.6 | 158.3 | 182.4 | 158.3 | 132.6 |
| 77.5° | 162.5 | 133.5 | 102.2 | 88.6 | 94.0 | 88.6 | 103.4 | 130.0 | 158.1 | 130.0 | 103.4 |
| 80° | 159.1 | 125.6 | 82.9 | 66.7 | 72.2 | 66.7 | 80.6 | 107.5 | 137.5 | 107.5 | 80.6 |
| 82.5° | 166.2 | 134.1 | 82.8 | 47.6 | 50.3 | 47.6 | 69.2 | 93.4 | 123.2 | 93.4 | 69.2 |
| 85° | 182.2 | 154.4 | 97.8 | 40.1 | 31.2 | 37.8 | 64.9 | 85.4 | 108.5 | 85.4 | 64.9 |
| 87.5° | 206.6 | 184.6 | 120.5 | 48.8 | 8.2 | 33.0 | 55.9 | 75.8 | 89.9 | 75.8 | 55.9 |
| 90° | 237.2 | 218.5 | 154.1 | 65.3 | 2.0 | 22.3 | 41.9 | 58.8 | 67.1 | 58.8 | 41.9 |
| 92.5° | 276.1 | 258.8 | 187.8 | 92.3 | 19.0 | 14.1 | 32.5 | 49.2 | 53.9 | 49.2 | 32.5 |
| 95° | 310.2 | 303.4 | 230.1 | 121.4 | 46.2 | 8.2 | 26.1 | 40.5 | 41.6 | 40.5 | 26.1 |
| 97.5° | 353.7 | 347.1 | 272.7 | 159.5 | 81.4 | 14.5 | 22.3 | 35.5 | 36.4 | 35.5 | 22.3 |
| 100° | 390.6 | 387.7 | 316.4 | 208.3 | 124.5 | 38.3 | 16.1 | 31.8 | 33.6 | 31.8 | 16.1 |
| 102.5° | 447.9 | 431.6 | 357.4 | 254.7 | 170.9 | 71.2 | 19.8 | 23.6 | 26.3 | 23.6 | 19.8 |
| 105° | 495.9 | 477.3 | 412.0 | 303.5 | 224.1 | 115.3 | 46.0 | 21.8 | 18.9 | 21.8 | 46.0 |
| 107.5° | 539.2 | 525.2 | 461.9 | 353.3 | 280.8 | 166.4 | 84.6 | 44.6 | 31.5 | 44.6 | 84.6 |
| 110° | 593.1 | 578.6 | 510.6 | 404.1 | 339.7 | 221.7 | 128.7 | 80.0 | 62.8 | 80.0 | 128.7 |



TEST NUMBER: P392675

CATALOG NUMBER: MWL-4-42-33-UNV-L940-EDD

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° | 202.5° | 225° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 112.5° | 647.5 | 636.4 | 556.0 | 456.2 | 400.9 | 280.6 | 183.1 | 125.4 | 109.2 | 125.4 | 183.1 |
| 115° | 689.4 | 682.9 | 608.1 | 504.9 | 458.5 | 347.4 | 243.2 | 178.6 | 159.1 | 178.6 | 243.2 |
| 117.5° | 733.6 | 732.5 | 646.6 | 554.8 | 526.4 | 407.5 | 298.7 | 232.8 | 211.2 | 232.8 | 298.7 |
| 120° | 789.2 | 780.1 | 699.8 | 604.7 | 591.0 | 470.9 | 359.9 | 293.9 | 272.4 | 293.9 | 359.9 |
| 122.5° | 827.6 | 822.0 | 746.1 | 652.3 | 652.3 | 535.5 | 419.7 | 352.9 | 330.2 | 352.9 | 419.7 |
| 125° | 862.8 | 860.5 | 780.1 | 699.8 | 717.9 | 595.6 | 485.4 | 417.5 | 392.5 | 417.5 | 485.4 |
| 127.5° | 894.5 | 897.9 | 824.3 | 752.0 | 784.8 | 656.8 | 550.0 | 475.2 | 449.2 | 475.2 | 550.0 |
| 130° | 921.9 | 933.1 | 866.2 | 799.6 | 848.3 | 723.7 | 607.9 | 533.1 | 516.0 | 533.1 | 607.9 |
| 132.5° | 975.1 | 968.3 | 909.4 | 849.2 | 916.4 | 785.7 | 669.0 | 590.8 | 571.6 | 590.8 | 669.0 |
| 135° | 1002.3 | 1004.6 | 946.7 | 891.1 | 979.8 | 847.0 | 726.8 | 649.8 | 630.5 | 649.8 | 726.8 |
| 137.5° | 1035.1 | 1028.4 | 976.2 | 942.3 | 1038.7 | 906.0 | 783.5 | 712.1 | 681.5 | 712.1 | 783.5 |
| 140° | 1059.0 | 1057.8 | 1014.8 | 987.5 | 1102.2 | 963.8 | 841.3 | 768.8 | 740.5 | 768.8 | 841.3 |
| 142.5° | 1083.8 | 1090.7 | 1053.2 | 1037.4 | 1165.7 | 1024.9 | 903.6 | 824.3 | 797.1 | 824.3 | 903.6 |
| 145° | 1100.9 | 1115.6 | 1091.8 | 1099.7 | 1225.7 | 1093.0 | 958.1 | 877.6 | 848.1 | 877.6 | 958.1 |
| 147.5° | 1129.2 | 1148.4 | 1120.1 | 1143.9 | 1277.8 | 1153.0 | 1012.5 | 933.1 | 907.1 | 933.1 | 1012.5 |
| 150° | 1167.8 | 1176.8 | 1159.8 | 1205.1 | 1331.1 | 1219.9 | 1068.0 | 986.4 | 960.4 | 986.4 | 1068.0 |
| 152.5° | 1198.3 | 1209.7 | 1190.4 | 1272.0 | 1373.0 | 1281.0 | 1129.2 | 1038.6 | 1007.9 | 1038.6 | 1129.2 |
| 155° | 1230.1 | 1234.5 | 1221.0 | 1336.6 | 1418.1 | 1341.0 | 1178.0 | 1096.3 | 1066.9 | 1096.3 | 1178.0 |
| 157.5° | 1259.5 | 1268.6 | 1252.7 | 1385.3 | 1456.7 | 1393.3 | 1233.4 | 1154.1 | 1128.0 | 1154.1 | 1233.4 |
| 160° | 1291.2 | 1291.2 | 1300.3 | 1441.9 | 1488.4 | 1438.5 | 1292.4 | 1217.6 | 1181.3 | 1217.6 | 1292.4 |
| 162.5° | 1294.7 | 1316.2 | 1364.9 | 1481.6 | 1519.0 | 1478.2 | 1355.8 | 1262.9 | 1231.2 | 1262.9 | 1355.8 |
| 165° | 1344.5 | 1363.7 | 1437.4 | 1516.7 | 1542.8 | 1513.3 | 1434.0 | 1337.7 | 1300.3 | 1337.7 | 1434.0 |
| 167.5° | 1396.6 | 1437.4 | 1496.3 | 1556.4 | 1565.5 | 1546.2 | 1494.1 | 1427.2 | 1393.3 | 1427.2 | 1494.1 |
| 170° | 1480.7 | 1515.8 | 1546.2 | 1571.1 | 1583.6 | 1572.3 | 1531.5 | 1497.7 | 1476.2 | 1497.7 | 1531.5 |
| 172.5° | 1547.6 | 1571.1 | 1582.5 | 1598.3 | 1590.4 | 1585.9 | 1565.5 | 1549.6 | 1537.4 | 1549.6 | 1565.5 |
| 175° | 1589.5 | 1594.9 | 1605.1 | 1599.4 | 1606.3 | 1593.8 | 1594.9 | 1602.9 | 1555.5 | 1602.9 | 1594.9 |
| 177.5° | 1604.2 | 1613.0 | 1607.4 | 1597.2 | 1598.3 | 1596.1 | 1600.6 | 1605.1 | 1597.4 | 1605.1 | 1600.6 |
| 180° | 1605.1 | 1605.1 | 1605.1 | 1605.1 | 1605.1 | 1605.1 | 1605.1 | 1605.1 | 1605.1 | 1605.1 | 1605.1 |



TEST NUMBER: P392675

CATALOG NUMBER: MWL-4-42-33-UNV-L940-EDD

CANDELA DISTRIBUTION (continued):

| | 247.5° | 270° | 292.5° | 315° | 337.5° | 360° |
|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1298.1 | 1298.1 | 1298.1 | 1298.1 | 1298.1 | 1298.1 |
| 2.5° | 1297.4 | 1305.9 | 1298.6 | 1291.0 | 1290.7 | 1291.1 |
| 5° | 1293.8 | 1299.2 | 1293.8 | 1285.6 | 1286.1 | 1283.8 |
| 7.5° | 1281.7 | 1276.5 | 1282.8 | 1274.4 | 1279.9 | 1275.8 |
| 10° | 1267.9 | 1272.6 | 1269.0 | 1260.8 | 1264.4 | 1264.2 |
| 12.5° | 1246.9 | 1246.7 | 1246.9 | 1241.5 | 1242.6 | 1248.2 |
| 15° | 1225.7 | 1230.3 | 1226.9 | 1221.4 | 1226.2 | 1223.9 |
| 17.5° | 1198.4 | 1203.8 | 1198.4 | 1195.0 | 1200.6 | 1202.0 |
| 20° | 1173.6 | 1174.5 | 1174.7 | 1165.8 | 1168.9 | 1167.4 |
| 22.5° | 1135.3 | 1142.6 | 1136.4 | 1136.7 | 1138.0 | 1136.1 |
| 25° | 1108.0 | 1107.1 | 1109.1 | 1099.5 | 1098.8 | 1098.8 |
| 27.5° | 1069.9 | 1063.3 | 1071.1 | 1064.9 | 1057.8 | 1059.6 |
| 30° | 1032.5 | 1028.7 | 1034.8 | 1018.6 | 1011.3 | 1009.5 |
| 32.5° | 991.6 | 987.0 | 993.8 | 972.1 | 962.1 | 954.8 |
| 35° | 943.1 | 944.0 | 946.5 | 920.0 | 904.5 | 901.7 |
| 37.5° | 891.1 | 898.5 | 894.4 | 866.2 | 847.0 | 851.6 |
| 40° | 838.2 | 845.7 | 840.5 | 807.0 | 798.8 | 797.9 |
| 42.5° | 779.9 | 794.7 | 782.2 | 747.6 | 740.5 | 749.6 |
| 45° | 718.9 | 739.1 | 721.1 | 691.1 | 690.2 | 702.0 |
| 47.5° | 656.0 | 672.6 | 657.1 | 633.7 | 641.0 | 655.5 |
| 50° | 591.9 | 602.2 | 594.2 | 579.9 | 594.5 | 608.2 |
| 52.5° | 530.0 | 523.0 | 532.3 | 530.4 | 548.9 | 564.4 |
| 55° | 465.1 | 445.3 | 467.4 | 482.2 | 504.9 | 518.6 |
| 57.5° | 404.1 | 376.9 | 406.4 | 435.7 | 464.8 | 474.9 |
| 60° | 343.9 | 323.2 | 345.0 | 387.2 | 420.9 | 429.1 |
| 62.5° | 288.4 | 272.0 | 289.5 | 338.0 | 377.2 | 383.6 |
| 65° | 242.8 | 233.7 | 243.9 | 289.5 | 329.5 | 339.6 |
| 67.5° | 202.7 | 200.9 | 202.7 | 244.8 | 283.1 | 294.9 |
| 70° | 168.1 | 169.0 | 168.1 | 203.6 | 237.3 | 249.2 |
| 72.5° | 137.8 | 142.3 | 138.9 | 167.2 | 194.5 | 214.6 |
| 75° | 110.4 | 118.6 | 110.4 | 131.4 | 157.2 | 179.0 |
| 77.5° | 88.6 | 94.0 | 88.6 | 102.2 | 133.5 | 162.5 |
| 80° | 66.7 | 72.2 | 66.7 | 82.9 | 125.6 | 159.1 |
| 82.5° | 47.6 | 50.3 | 47.6 | 82.8 | 134.1 | 166.2 |
| 85° | 37.8 | 31.2 | 40.1 | 97.8 | 154.4 | 182.2 |
| 87.5° | 33.0 | 8.2 | 48.8 | 120.5 | 184.6 | 206.6 |
| 90° | 22.3 | 2.0 | 65.3 | 154.1 | 218.5 | 237.2 |
| 92.5° | 14.1 | 19.0 | 92.3 | 187.8 | 258.8 | 276.1 |
| 95° | 8.2 | 46.2 | 121.4 | 230.1 | 303.4 | 310.2 |
| 97.5° | 14.5 | 81.4 | 159.5 | 272.7 | 347.1 | 353.7 |
| 100° | 38.3 | 124.5 | 208.3 | 316.4 | 387.7 | 390.6 |
| 102.5° | 71.2 | 170.9 | 254.7 | 357.4 | 431.6 | 447.9 |
| 105° | 115.3 | 224.1 | 303.5 | 412.0 | 477.3 | 495.9 |
| 107.5° | 166.4 | 280.8 | 353.3 | 461.9 | 525.2 | 539.2 |
| 110° | 221.7 | 339.7 | 404.1 | 510.6 | 578.6 | 593.1 |



TEST NUMBER: P392675

CATALOG NUMBER: MWL-4-42-33-UNV-L940-EDD

CANDELA DISTRIBUTION (continued):

| | 247.5° | 270° | 292.5° | 315° | 337.5° | 360° |
|--------|--------|--------|--------|--------|--------|--------|
| 112.5° | 280.6 | 400.9 | 456.2 | 556.0 | 636.4 | 647.5 |
| 115° | 347.4 | 458.5 | 504.9 | 608.1 | 682.9 | 689.4 |
| 117.5° | 407.5 | 526.4 | 554.8 | 646.6 | 732.5 | 733.6 |
| 120° | 470.9 | 591.0 | 604.7 | 699.8 | 780.1 | 789.2 |
| 122.5° | 535.5 | 652.3 | 652.3 | 746.1 | 822.0 | 827.6 |
| 125° | 595.6 | 717.9 | 699.8 | 780.1 | 860.5 | 862.8 |
| 127.5° | 656.8 | 784.8 | 752.0 | 824.3 | 897.9 | 894.5 |
| 130° | 723.7 | 848.3 | 799.6 | 866.2 | 933.1 | 921.9 |
| 132.5° | 785.7 | 916.4 | 849.2 | 909.4 | 968.3 | 975.1 |
| 135° | 847.0 | 979.8 | 891.1 | 946.7 | 1004.6 | 1002.3 |
| 137.5° | 906.0 | 1038.7 | 942.3 | 976.2 | 1028.4 | 1035.1 |
| 140° | 963.8 | 1102.2 | 987.5 | 1014.8 | 1057.8 | 1059.0 |
| 142.5° | 1024.9 | 1165.7 | 1037.4 | 1053.2 | 1090.7 | 1083.8 |
| 145° | 1093.0 | 1225.7 | 1099.7 | 1091.8 | 1115.6 | 1100.9 |
| 147.5° | 1153.0 | 1277.8 | 1143.9 | 1120.1 | 1148.4 | 1129.2 |
| 150° | 1219.9 | 1331.1 | 1205.1 | 1159.8 | 1176.8 | 1167.8 |
| 152.5° | 1281.0 | 1373.0 | 1272.0 | 1190.4 | 1209.7 | 1198.3 |
| 155° | 1341.0 | 1418.1 | 1336.6 | 1221.0 | 1234.5 | 1230.1 |
| 157.5° | 1393.3 | 1456.7 | 1385.3 | 1252.7 | 1268.6 | 1259.5 |
| 160° | 1438.5 | 1488.4 | 1441.9 | 1300.3 | 1291.2 | 1291.2 |
| 162.5° | 1478.2 | 1519.0 | 1481.6 | 1364.9 | 1316.2 | 1294.7 |
| 165° | 1513.3 | 1542.8 | 1516.7 | 1437.4 | 1363.7 | 1344.5 |
| 167.5° | 1546.2 | 1565.5 | 1556.4 | 1496.3 | 1437.4 | 1396.6 |
| 170° | 1572.3 | 1583.6 | 1571.1 | 1546.2 | 1515.8 | 1480.7 |
| 172.5° | 1585.9 | 1590.4 | 1598.3 | 1582.5 | 1571.1 | 1547.6 |
| 175° | 1593.8 | 1606.3 | 1599.4 | 1605.1 | 1594.9 | 1589.5 |
| 177.5° | 1596.1 | 1598.3 | 1597.2 | 1607.4 | 1613.0 | 1604.2 |
| 180° | 1605.1 | 1605.1 | 1605.1 | 1605.1 | 1605.1 | 1605.1 |

(END OF REPORT)