

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: P392610

Luminaire Tested: **MWL-3-44-28-UNV-L930-EDD**

Issue Date: 12/2/2019

**Test Information**

Test Method: LM-79-08  
Report Number: P392610  
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-3-44-28-UNV-L930-EDD  
Description: MWL 3FT MEDICAL LED FIXTURE  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

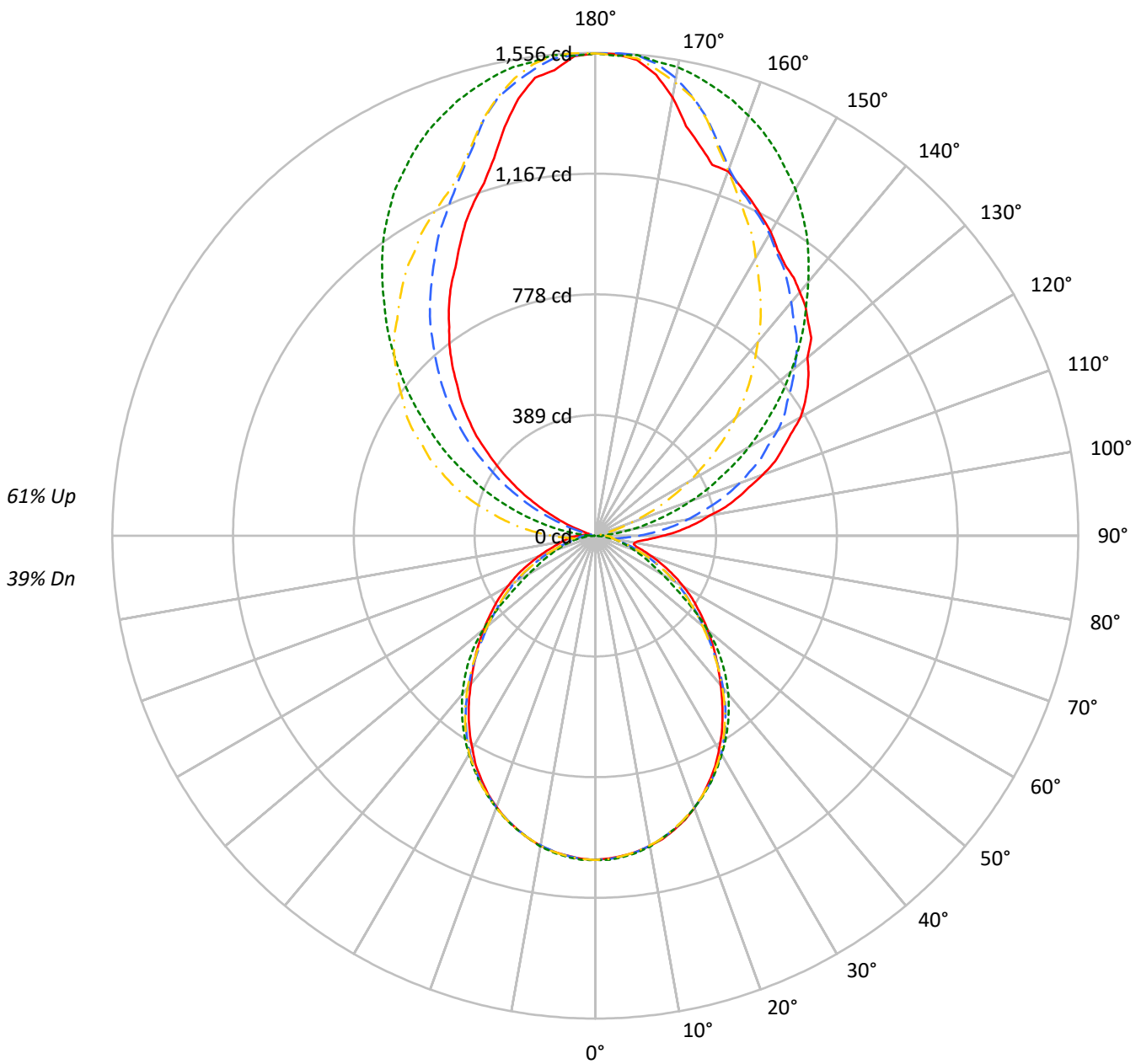
Lumens per Lamp: N/A  
Luminaire Lumens: 6114.2 lumens  
Efficiency: N/A  
Efficacy: 73.3 lumens/watt  
Spacing Criteria (0/90/45): 1.14 / 1.17 / 1.24  
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 3' x H: 0.42')  
CIE Type: Semi-Indirect

Input Watts (W): 83.426  
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: P392610  
CATALOG NUMBER: MWL-3-44-28-UNV-L930-EDD

### Luminous Intensity Polar Plot



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



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**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   | 105 | 105 | 105 | 105 | 95 | 95 | 95 | 95 | 77 | 77 | 77 | 61 | 61 | 61 | 46 | 46 | 46 | 39 |
| 1   | 95  | 91  | 87  | 84  | 87 | 83 | 80 | 77 | 68 | 66 | 64 | 54 | 52 | 51 | 41 | 40 | 39 | 33 |
| 2   | 87  | 80  | 74  | 69  | 79 | 73 | 68 | 63 | 60 | 56 | 53 | 48 | 45 | 43 | 36 | 35 | 33 | 28 |
| 3   | 80  | 70  | 63  | 58  | 72 | 64 | 58 | 53 | 53 | 48 | 45 | 42 | 39 | 37 | 32 | 30 | 29 | 24 |
| 4   | 73  | 62  | 55  | 49  | 66 | 57 | 51 | 45 | 47 | 42 | 38 | 38 | 34 | 32 | 29 | 27 | 25 | 21 |
| 5   | 67  | 56  | 48  | 42  | 61 | 51 | 44 | 39 | 42 | 37 | 33 | 34 | 30 | 27 | 26 | 24 | 22 | 18 |
| 6   | 62  | 50  | 42  | 37  | 56 | 46 | 39 | 34 | 38 | 33 | 29 | 31 | 27 | 24 | 24 | 21 | 19 | 16 |
| 7   | 57  | 45  | 37  | 32  | 52 | 42 | 35 | 30 | 35 | 29 | 26 | 28 | 24 | 21 | 22 | 19 | 17 | 15 |
| 8   | 53  | 41  | 33  | 28  | 48 | 38 | 31 | 26 | 32 | 26 | 23 | 26 | 22 | 19 | 20 | 18 | 16 | 13 |
| 9   | 49  | 37  | 30  | 25  | 45 | 34 | 28 | 24 | 29 | 24 | 20 | 24 | 20 | 17 | 19 | 16 | 14 | 12 |
| 10  | 46  | 34  | 27  | 23  | 42 | 32 | 25 | 21 | 27 | 22 | 18 | 22 | 18 | 16 | 17 | 15 | 13 | 11 |

**AVERAGE LUMINANCE (cd/sqm):**

|     | 0°   | 90°  | 180° | 270° |
|-----|------|------|------|------|
| 0°  | 8996 | 8996 | 8996 | 8996 |
| 5°  | 8837 | 8259 | 8837 | 8259 |
| 10° | 8655 | 7559 | 8655 | 7559 |
| 15° | 8433 | 6884 | 8403 | 6884 |
| 20° | 8144 | 6270 | 8116 | 6270 |
| 25° | 7771 | 5691 | 7742 | 5691 |
| 30° | 7332 | 5132 | 7291 | 5132 |
| 35° | 6843 | 4599 | 6812 | 4599 |
| 40° | 6324 | 4074 | 6279 | 4074 |
| 45° | 5864 | 3523 | 5828 | 3523 |
| 50° | 5429 | 2889 | 5391 | 2889 |
| 55° | 5004 | 2137 | 4976 | 2137 |
| 60° | 4544 | 1577 | 4527 | 1577 |
| 65° | 4058 | 1192 | 4058 | 1192 |
| 70° | 3506 | 883  | 3524 | 883  |
| 75° | 3011 | 638  | 3083 | 638  |
| 80° | 3567 | 423  | 2988 | 423  |
| 85° | 6052 | 176  | 3330 | 176  |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 98.3   | 1.6       |
| 10°-20°   | 275.9  | 4.5       |
| 20°-30°   | 402.5  | 6.6       |
| 30°-40°   | 455.0  | 7.4       |
| 40°-50°   | 425.4  | 7.0       |
| 50°-60°   | 335.8  | 5.5       |
| 60°-70°   | 219.8  | 3.6       |
| 70°-80°   | 115.3  | 1.9       |
| 80°-90°   | 77.4   | 1.3       |
| 90°-100°  | 124.5  | 2.0       |
| 100°-110° | 240.6  | 3.9       |
| 110°-120° | 412.7  | 6.8       |
| 120°-130° | 560.8  | 9.2       |
| 130°-140° | 639.7  | 10.5      |
| 140°-150° | 638.2  | 10.4      |
| 150°-160° | 555.8  | 9.1       |
| 160°-170° | 391.0  | 6.4       |
| 170°-180° | 145.6  | 2.4       |
| 0°-30°    | 776.7  | 12.7      |
| 0°-40°    | 1231.7 | 20.1      |
| 0°-60°    | 1992.9 | 32.6      |
| 0°-90°    | 2405.3 | 39.3      |
| 90°-120°  | 777.8  | 12.7      |
| 90°-150°  | 2616.4 | 42.8      |
| 90°-180°  | 3709.0 | 60.7      |
| 0°-180°   | 6114.2 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 90°  | 180° | 270° | 360° | Flux |
|------|------|------|------|------|------|------|
| 0°   | 1045 | 1045 | 1045 | 1045 | 1045 |      |
| 5°   | 1035 | 1039 | 1035 | 1039 | 1035 | 98   |
| 15°  | 981  | 979  | 978  | 979  | 981  | 276  |
| 25°  | 871  | 878  | 868  | 878  | 871  | 400  |
| 35°  | 714  | 744  | 711  | 744  | 714  | 446  |
| 45°  | 548  | 579  | 545  | 579  | 548  | 423  |
| 55°  | 399  | 346  | 397  | 346  | 399  | 358  |
| 65°  | 258  | 184  | 258  | 184  | 258  | 256  |
| 75°  | 137  | 91   | 141  | 91   | 137  | 155  |
| 85°  | 158  | 22   | 87   | 22   | 158  | 123  |
| 90°  | 217  | 2    | 52   | 2    | 217  | 120  |
| 95°  | 295  | 45   | 35   | 45   | 295  | 258  |
| 105° | 476  | 217  | 14   | 217  | 476  | 501  |
| 115° | 667  | 443  | 153  | 443  | 667  | 662  |
| 125° | 835  | 695  | 379  | 695  | 835  | 746  |
| 135° | 970  | 948  | 610  | 948  | 970  | 749  |
| 145° | 1066 | 1187 | 821  | 1187 | 1066 | 672  |
| 155° | 1191 | 1373 | 1033 | 1373 | 1191 | 549  |
| 165° | 1302 | 1494 | 1259 | 1494 | 1302 | 369  |
| 175° | 1539 | 1555 | 1506 | 1555 | 1539 | 143  |
| 180° | 1554 | 1554 | 1554 | 1554 | 1554 |      |



TEST NUMBER: P392610

CATALOG NUMBER: MWL-3-44-28-UNV-L930-EDD

**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    | 112.5° | 135°   | 157.5° | 180°   | 202.5° | 225°   |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°     | 1044.7 | 1044.7 | 1044.7 | 1044.7 | 1044.7 | 1044.7 | 1044.7 | 1044.7 | 1044.7 | 1044.7 | 1044.7 |
| 2.5°   | 1040.6 | 1042.8 | 1042.4 | 1044.4 | 1045.2 | 1043.3 | 1042.4 | 1042.8 | 1041.7 | 1042.8 | 1042.4 |
| 5°     | 1034.7 | 1036.9 | 1036.5 | 1037.4 | 1039.1 | 1037.4 | 1035.5 | 1036.9 | 1034.7 | 1036.9 | 1035.5 |
| 7.5°   | 1026.5 | 1028.7 | 1027.0 | 1029.0 | 1029.7 | 1027.8 | 1025.9 | 1027.5 | 1026.5 | 1027.5 | 1025.9 |
| 10°    | 1014.1 | 1015.1 | 1014.3 | 1015.1 | 1016.9 | 1014.1 | 1013.2 | 1012.9 | 1014.1 | 1012.9 | 1013.2 |
| 12.5°  | 1001.0 | 1000.0 | 998.0  | 998.8  | 997.8  | 998.8  | 998.0  | 997.8  | 998.8  | 997.8  | 998.0  |
| 15°    | 981.1  | 980.5  | 979.4  | 981.1  | 979.1  | 980.0  | 978.3  | 978.3  | 977.7  | 978.3  | 978.3  |
| 17.5°  | 959.9  | 958.5  | 956.6  | 958.0  | 958.0  | 958.0  | 955.5  | 957.5  | 956.6  | 957.5  | 955.5  |
| 20°    | 933.7  | 934.3  | 932.9  | 934.4  | 933.2  | 933.2  | 931.8  | 932.1  | 930.4  | 932.1  | 931.8  |
| 22.5°  | 903.8  | 905.5  | 905.1  | 908.1  | 906.2  | 907.1  | 903.9  | 903.3  | 901.6  | 903.3  | 903.9  |
| 25°    | 870.9  | 873.5  | 878.2  | 879.4  | 878.3  | 878.3  | 876.0  | 870.1  | 867.6  | 870.1  | 876.0  |
| 27.5°  | 837.1  | 839.6  | 844.4  | 848.4  | 847.0  | 847.3  | 842.2  | 836.3  | 833.7  | 836.3  | 842.2  |
| 30°    | 796.5  | 801.6  | 811.7  | 816.6  | 814.1  | 814.4  | 808.4  | 798.3  | 792.1  | 798.3  | 808.4  |
| 32.5°  | 757.7  | 761.9  | 772.8  | 781.9  | 780.6  | 779.7  | 769.6  | 757.5  | 753.3  | 757.5  | 769.6  |
| 35°    | 714.3  | 716.8  | 731.2  | 743.8  | 743.9  | 740.6  | 727.9  | 713.5  | 711.0  | 713.5  | 727.9  |
| 37.5°  | 671.2  | 672.0  | 687.2  | 705.0  | 706.2  | 701.7  | 684.0  | 668.7  | 667.9  | 668.7  | 684.0  |
| 40°    | 628.1  | 626.4  | 639.9  | 660.8  | 666.5  | 658.6  | 635.5  | 622.0  | 623.7  | 622.0  | 635.5  |
| 42.5°  | 587.5  | 581.6  | 592.3  | 616.0  | 623.3  | 613.8  | 589.1  | 577.2  | 583.1  | 577.2  | 589.1  |
| 45°    | 548.4  | 538.2  | 544.1  | 565.3  | 578.6  | 563.1  | 539.7  | 534.9  | 545.0  | 534.9  | 539.7  |
| 47.5°  | 509.5  | 500.2  | 497.7  | 514.3  | 529.5  | 513.2  | 493.3  | 496.9  | 506.2  | 496.9  | 493.3  |
| 50°    | 472.3  | 462.2  | 454.5  | 464.5  | 472.7  | 462.3  | 450.1  | 457.8  | 469.0  | 457.8  | 450.1  |
| 52.5°  | 435.1  | 425.8  | 412.9  | 414.5  | 410.9  | 412.3  | 409.6  | 421.4  | 431.8  | 421.4  | 409.6  |
| 55°    | 399.4  | 390.9  | 374.0  | 365.3  | 345.6  | 363.1  | 370.7  | 387.6  | 397.2  | 387.6  | 370.7  |
| 57.5°  | 365.6  | 357.9  | 336.8  | 315.4  | 294.0  | 313.2  | 333.5  | 354.7  | 363.4  | 354.7  | 333.5  |
| 60°    | 327.3  | 323.1  | 298.5  | 266.2  | 250.1  | 265.0  | 296.3  | 320.9  | 326.1  | 320.9  | 296.3  |
| 62.5°  | 293.5  | 288.4  | 260.5  | 224.7  | 211.8  | 223.6  | 258.3  | 286.2  | 292.3  | 286.2  | 258.3  |
| 65°    | 258.5  | 250.9  | 222.2  | 187.5  | 183.9  | 186.5  | 221.1  | 249.8  | 258.5  | 249.8  | 221.1  |
| 67.5°  | 223.9  | 216.3  | 189.2  | 157.7  | 155.1  | 157.7  | 188.2  | 215.2  | 223.9  | 215.2  | 188.2  |
| 70°    | 192.4  | 180.5  | 156.9  | 129.8  | 131.5  | 129.8  | 156.9  | 181.6  | 193.4  | 181.6  | 156.9  |
| 72.5°  | 163.6  | 146.7  | 129.0  | 107.0  | 110.2  | 105.9  | 129.0  | 147.8  | 165.8  | 147.8  | 129.0  |
| 75°    | 137.4  | 118.9  | 100.0  | 85.6   | 90.7   | 85.6   | 101.1  | 119.9  | 140.7  | 119.9  | 101.1  |
| 77.5°  | 126.8  | 101.3  | 78.0   | 67.9   | 74.7   | 67.9   | 79.1   | 98.0   | 122.4  | 98.0   | 79.1   |
| 80°    | 128.6  | 99.8   | 64.4   | 51.8   | 56.9   | 51.8   | 62.2   | 82.2   | 107.7  | 82.2   | 62.2   |
| 82.5°  | 137.1  | 111.2  | 67.4   | 36.6   | 39.1   | 36.6   | 54.2   | 71.7   | 95.4   | 71.7   | 54.2   |
| 85°    | 158.5  | 133.9  | 83.2   | 31.4   | 22.2   | 29.2   | 51.3   | 67.0   | 87.2   | 67.0   | 51.3   |
| 87.5°  | 185.3  | 167.0  | 108.2  | 41.1   | 5.9    | 25.8   | 45.6   | 61.6   | 72.3   | 61.6   | 45.6   |
| 90°    | 217.1  | 202.0  | 141.0  | 58.3   | 1.9    | 16.6   | 32.3   | 47.2   | 52.5   | 47.2   | 32.3   |
| 92.5°  | 257.9  | 241.3  | 176.5  | 86.4   | 18.4   | 10.7   | 26.2   | 38.2   | 42.7   | 38.2   | 26.2   |
| 95°    | 294.8  | 286.5  | 217.8  | 116.8  | 44.8   | 7.0    | 20.2   | 31.8   | 34.6   | 31.8   | 20.2   |
| 97.5°  | 336.3  | 329.1  | 260.3  | 154.6  | 78.8   | 14.0   | 17.6   | 27.2   | 28.9   | 27.2   | 17.6   |
| 100°   | 373.2  | 369.6  | 302.8  | 201.7  | 120.5  | 37.1   | 11.9   | 24.8   | 27.4   | 24.8   | 11.9   |
| 102.5° | 429.9  | 413.3  | 344.5  | 246.8  | 165.5  | 68.9   | 17.3   | 18.1   | 21.5   | 18.1   | 17.3   |
| 105°   | 475.8  | 457.1  | 398.3  | 294.0  | 217.1  | 111.7  | 43.7   | 15.8   | 13.6   | 15.8   | 43.7   |
| 107.5° | 518.8  | 507.8  | 446.6  | 342.3  | 272.1  | 161.2  | 81.0   | 42.4   | 26.9   | 42.4   | 81.0   |
| 110°   | 573.7  | 560.5  | 493.9  | 390.6  | 329.1  | 213.9  | 123.8  | 77.4   | 59.9   | 77.4   | 123.8  |



TEST NUMBER: P392610

CATALOG NUMBER: MWL-3-44-28-UNV-L930-EDD

**CANDELA DISTRIBUTION (continued):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    | 112.5° | 135°   | 157.5° | 180°   | 202.5° | 225°   |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 112.5° | 626.4  | 616.5  | 537.7  | 441.1  | 388.5  | 270.9  | 176.5  | 121.3  | 104.9  | 121.3  | 176.5  |
| 115°   | 667.1  | 661.5  | 589.1  | 488.3  | 443.3  | 335.7  | 235.5  | 172.9  | 153.2  | 172.9  | 235.5  |
| 117.5° | 709.9  | 708.8  | 626.4  | 536.6  | 509.1  | 393.8  | 289.3  | 224.5  | 203.7  | 224.5  | 289.3  |
| 120°   | 763.7  | 754.9  | 678.0  | 584.9  | 571.8  | 455.4  | 348.7  | 283.8  | 263.0  | 283.8  | 348.7  |
| 122.5° | 801.0  | 795.5  | 721.9  | 631.1  | 631.1  | 517.9  | 405.7  | 340.9  | 319.0  | 340.9  | 405.7  |
| 125°   | 835.0  | 832.9  | 754.9  | 677.2  | 694.7  | 576.2  | 469.4  | 403.5  | 379.4  | 403.5  | 469.4  |
| 127.5° | 865.7  | 869.1  | 797.7  | 727.6  | 759.5  | 635.5  | 532.0  | 459.5  | 434.3  | 459.5  | 532.0  |
| 130°   | 892.1  | 903.1  | 838.2  | 773.8  | 821.0  | 700.3  | 588.0  | 515.4  | 499.1  | 515.4  | 588.0  |
| 132.5° | 943.7  | 937.1  | 880.0  | 821.0  | 886.8  | 759.5  | 647.3  | 571.5  | 552.9  | 571.5  | 647.3  |
| 135°   | 970.0  | 972.2  | 916.2  | 862.4  | 948.3  | 819.7  | 703.3  | 628.6  | 610.0  | 628.6  | 703.3  |
| 137.5° | 1001.9 | 995.3  | 944.9  | 911.8  | 1005.4 | 876.7  | 758.1  | 689.0  | 659.3  | 689.0  | 758.1  |
| 140°   | 1025.0 | 1023.8 | 982.1  | 955.8  | 1066.9 | 932.7  | 814.2  | 743.8  | 716.5  | 743.8  | 814.2  |
| 142.5° | 1049.1 | 1055.7 | 1019.4 | 1004.1 | 1128.4 | 992.0  | 874.5  | 797.7  | 771.3  | 797.7  | 874.5  |
| 145°   | 1065.5 | 1079.8 | 1056.8 | 1064.4 | 1186.6 | 1057.8 | 927.3  | 849.2  | 820.8  | 849.2  | 927.3  |
| 147.5° | 1093.0 | 1111.7 | 1084.2 | 1107.3 | 1237.1 | 1116.0 | 979.9  | 903.1  | 877.9  | 903.1  | 979.9  |
| 150°   | 1130.4 | 1139.2 | 1122.6 | 1166.7 | 1289.5 | 1180.8 | 1033.8 | 954.6  | 929.5  | 954.6  | 1033.8 |
| 152.5° | 1160.1 | 1170.9 | 1152.3 | 1231.4 | 1330.2 | 1240.2 | 1093.0 | 1005.2 | 975.5  | 1005.2 | 1093.0 |
| 155°   | 1190.7 | 1195.1 | 1181.9 | 1293.9 | 1373.1 | 1298.3 | 1140.2 | 1061.2 | 1032.7 | 1061.2 | 1140.2 |
| 157.5° | 1219.3 | 1228.0 | 1212.7 | 1341.2 | 1410.3 | 1348.8 | 1194.0 | 1117.2 | 1091.9 | 1117.2 | 1194.0 |
| 160°   | 1250.0 | 1250.0 | 1258.9 | 1396.0 | 1441.0 | 1392.7 | 1251.1 | 1178.6 | 1143.5 | 1178.6 | 1251.1 |
| 162.5° | 1253.3 | 1274.2 | 1321.4 | 1434.4 | 1470.7 | 1431.2 | 1312.6 | 1222.6 | 1191.8 | 1222.6 | 1312.6 |
| 165°   | 1301.6 | 1320.3 | 1391.6 | 1468.5 | 1493.8 | 1465.2 | 1388.4 | 1295.0 | 1258.9 | 1295.0 | 1388.4 |
| 167.5° | 1352.1 | 1391.6 | 1448.8 | 1506.9 | 1515.7 | 1497.1 | 1446.6 | 1381.8 | 1348.8 | 1381.8 | 1446.6 |
| 170°   | 1434.4 | 1468.5 | 1497.1 | 1521.2 | 1533.3 | 1522.3 | 1482.9 | 1451.0 | 1430.1 | 1451.0 | 1482.9 |
| 172.5° | 1498.4 | 1521.2 | 1532.2 | 1547.6 | 1539.8 | 1535.5 | 1515.7 | 1500.3 | 1488.6 | 1500.3 | 1515.7 |
| 175°   | 1539.0 | 1544.2 | 1554.2 | 1548.6 | 1555.2 | 1543.2 | 1544.2 | 1552.0 | 1506.0 | 1552.0 | 1544.2 |
| 177.5° | 1553.3 | 1561.8 | 1556.4 | 1546.4 | 1547.6 | 1545.4 | 1549.8 | 1554.2 | 1546.7 | 1554.2 | 1549.8 |
| 180°   | 1554.2 | 1554.2 | 1554.2 | 1554.2 | 1554.2 | 1554.2 | 1554.2 | 1554.2 | 1554.2 | 1554.2 | 1554.2 |



TEST NUMBER: P392610

CATALOG NUMBER: MWL-3-44-28-UNV-L930-EDD

**CANDELA DISTRIBUTION (continued):**

|        | 247.5° | 270°   | 292.5° | 315°   | 337.5° | 360°   |
|--------|--------|--------|--------|--------|--------|--------|
| 0°     | 1044.7 | 1044.7 | 1044.7 | 1044.7 | 1044.7 | 1044.7 |
| 2.5°   | 1043.3 | 1045.2 | 1044.4 | 1042.4 | 1042.8 | 1040.6 |
| 5°     | 1037.4 | 1039.1 | 1037.4 | 1036.5 | 1036.9 | 1034.7 |
| 7.5°   | 1027.8 | 1029.7 | 1029.0 | 1027.0 | 1028.7 | 1026.5 |
| 10°    | 1014.1 | 1016.9 | 1015.1 | 1014.3 | 1015.1 | 1014.1 |
| 12.5°  | 998.8  | 997.8  | 998.8  | 998.0  | 1000.0 | 1001.0 |
| 15°    | 980.0  | 979.1  | 981.1  | 979.4  | 980.5  | 981.1  |
| 17.5°  | 958.0  | 958.0  | 958.0  | 956.6  | 958.5  | 959.9  |
| 20°    | 933.2  | 933.2  | 934.4  | 932.9  | 934.3  | 933.7  |
| 22.5°  | 907.1  | 906.2  | 908.1  | 905.1  | 905.5  | 903.8  |
| 25°    | 878.3  | 878.3  | 879.4  | 878.2  | 873.5  | 870.9  |
| 27.5°  | 847.3  | 847.0  | 848.4  | 844.4  | 839.6  | 837.1  |
| 30°    | 814.4  | 814.1  | 816.6  | 811.7  | 801.6  | 796.5  |
| 32.5°  | 779.7  | 780.6  | 781.9  | 772.8  | 761.9  | 757.7  |
| 35°    | 740.6  | 743.9  | 743.8  | 731.2  | 716.8  | 714.3  |
| 37.5°  | 701.7  | 706.2  | 705.0  | 687.2  | 672.0  | 671.2  |
| 40°    | 658.6  | 666.5  | 660.8  | 639.9  | 626.4  | 628.1  |
| 42.5°  | 613.8  | 623.3  | 616.0  | 592.3  | 581.6  | 587.5  |
| 45°    | 563.1  | 578.6  | 565.3  | 544.1  | 538.2  | 548.4  |
| 47.5°  | 513.2  | 529.5  | 514.3  | 497.7  | 500.2  | 509.5  |
| 50°    | 462.3  | 472.7  | 464.5  | 454.5  | 462.2  | 472.3  |
| 52.5°  | 412.3  | 410.9  | 414.5  | 412.9  | 425.8  | 435.1  |
| 55°    | 363.1  | 345.6  | 365.3  | 374.0  | 390.9  | 399.4  |
| 57.5°  | 313.2  | 294.0  | 315.4  | 336.8  | 357.9  | 365.6  |
| 60°    | 265.0  | 250.1  | 266.2  | 298.5  | 323.1  | 327.3  |
| 62.5°  | 223.6  | 211.8  | 224.7  | 260.5  | 288.4  | 293.5  |
| 65°    | 186.5  | 183.9  | 187.5  | 222.2  | 250.9  | 258.5  |
| 67.5°  | 157.7  | 155.1  | 157.7  | 189.2  | 216.3  | 223.9  |
| 70°    | 129.8  | 131.5  | 129.8  | 156.9  | 180.5  | 192.4  |
| 72.5°  | 105.9  | 110.2  | 107.0  | 129.0  | 146.7  | 163.6  |
| 75°    | 85.6   | 90.7   | 85.6   | 100.0  | 118.9  | 137.4  |
| 77.5°  | 67.9   | 74.7   | 67.9   | 78.0   | 101.3  | 126.8  |
| 80°    | 51.8   | 56.9   | 51.8   | 64.4   | 99.8   | 128.6  |
| 82.5°  | 36.6   | 39.1   | 36.6   | 67.4   | 111.2  | 137.1  |
| 85°    | 29.2   | 22.2   | 31.4   | 83.2   | 133.9  | 158.5  |
| 87.5°  | 25.8   | 5.9    | 41.1   | 108.2  | 167.0  | 185.3  |
| 90°    | 16.6   | 1.9    | 58.3   | 141.0  | 202.0  | 217.1  |
| 92.5°  | 10.7   | 18.4   | 86.4   | 176.5  | 241.3  | 257.9  |
| 95°    | 7.0    | 44.8   | 116.8  | 217.8  | 286.5  | 294.8  |
| 97.5°  | 14.0   | 78.8   | 154.6  | 260.3  | 329.1  | 336.3  |
| 100°   | 37.1   | 120.5  | 201.7  | 302.8  | 369.6  | 373.2  |
| 102.5° | 68.9   | 165.5  | 246.8  | 344.5  | 413.3  | 429.9  |
| 105°   | 111.7  | 217.1  | 294.0  | 398.3  | 457.1  | 475.8  |
| 107.5° | 161.2  | 272.1  | 342.3  | 446.6  | 507.8  | 518.8  |
| 110°   | 213.9  | 329.1  | 390.6  | 493.9  | 560.5  | 573.7  |





TEST NUMBER: P392610

CATALOG NUMBER: MWL-3-44-28-UNV-L930-EDD

**CANDELA DISTRIBUTION (continued):**

|        | 247.5° | 270°   | 292.5° | 315°   | 337.5° | 360°   |
|--------|--------|--------|--------|--------|--------|--------|
| 112.5° | 270.9  | 388.5  | 441.1  | 537.7  | 616.5  | 626.4  |
| 115°   | 335.7  | 443.3  | 488.3  | 589.1  | 661.5  | 667.1  |
| 117.5° | 393.8  | 509.1  | 536.6  | 626.4  | 708.8  | 709.9  |
| 120°   | 455.4  | 571.8  | 584.9  | 678.0  | 754.9  | 763.7  |
| 122.5° | 517.9  | 631.1  | 631.1  | 721.9  | 795.5  | 801.0  |
| 125°   | 576.2  | 694.7  | 677.2  | 754.9  | 832.9  | 835.0  |
| 127.5° | 635.5  | 759.5  | 727.6  | 797.7  | 869.1  | 865.7  |
| 130°   | 700.3  | 821.0  | 773.8  | 838.2  | 903.1  | 892.1  |
| 132.5° | 759.5  | 886.8  | 821.0  | 880.0  | 937.1  | 943.7  |
| 135°   | 819.7  | 948.3  | 862.4  | 916.2  | 972.2  | 970.0  |
| 137.5° | 876.7  | 1005.4 | 911.8  | 944.9  | 995.3  | 1001.9 |
| 140°   | 932.7  | 1066.9 | 955.8  | 982.1  | 1023.8 | 1025.0 |
| 142.5° | 992.0  | 1128.4 | 1004.1 | 1019.4 | 1055.7 | 1049.1 |
| 145°   | 1057.8 | 1186.6 | 1064.4 | 1056.8 | 1079.8 | 1065.5 |
| 147.5° | 1116.0 | 1237.1 | 1107.3 | 1084.2 | 1111.7 | 1093.0 |
| 150°   | 1180.8 | 1289.5 | 1166.7 | 1122.6 | 1139.2 | 1130.4 |
| 152.5° | 1240.2 | 1330.2 | 1231.4 | 1152.3 | 1170.9 | 1160.1 |
| 155°   | 1298.3 | 1373.1 | 1293.9 | 1181.9 | 1195.1 | 1190.7 |
| 157.5° | 1348.8 | 1410.3 | 1341.2 | 1212.7 | 1228.0 | 1219.3 |
| 160°   | 1392.7 | 1441.0 | 1396.0 | 1258.9 | 1250.0 | 1250.0 |
| 162.5° | 1431.2 | 1470.7 | 1434.4 | 1321.4 | 1274.2 | 1253.3 |
| 165°   | 1465.2 | 1493.8 | 1468.5 | 1391.6 | 1320.3 | 1301.6 |
| 167.5° | 1497.1 | 1515.7 | 1506.9 | 1448.8 | 1391.6 | 1352.1 |
| 170°   | 1522.3 | 1533.3 | 1521.2 | 1497.1 | 1468.5 | 1434.4 |
| 172.5° | 1535.5 | 1539.8 | 1547.6 | 1532.2 | 1521.2 | 1498.4 |
| 175°   | 1543.2 | 1555.2 | 1548.6 | 1554.2 | 1544.2 | 1539.0 |
| 177.5° | 1545.4 | 1547.6 | 1546.4 | 1556.4 | 1561.8 | 1553.3 |
| 180°   | 1554.2 | 1554.2 | 1554.2 | 1554.2 | 1554.2 | 1554.2 |

(END OF REPORT)