

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: P392526

Luminaire Tested: **MWL-2-28-31-UNV-L930-EDD**

Issue Date: 12/2/2019

**Test Information**

Test Method: LM-79-08  
Report Number: P392526  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-565-25 &  
Test Lab: INNOVATION CENTER  
Issue Date: 12/2/2019  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: MWL-2-28-31-UNV-L930-EDD  
Description: MWL 2FT MEDICAL LED FIXTURE  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

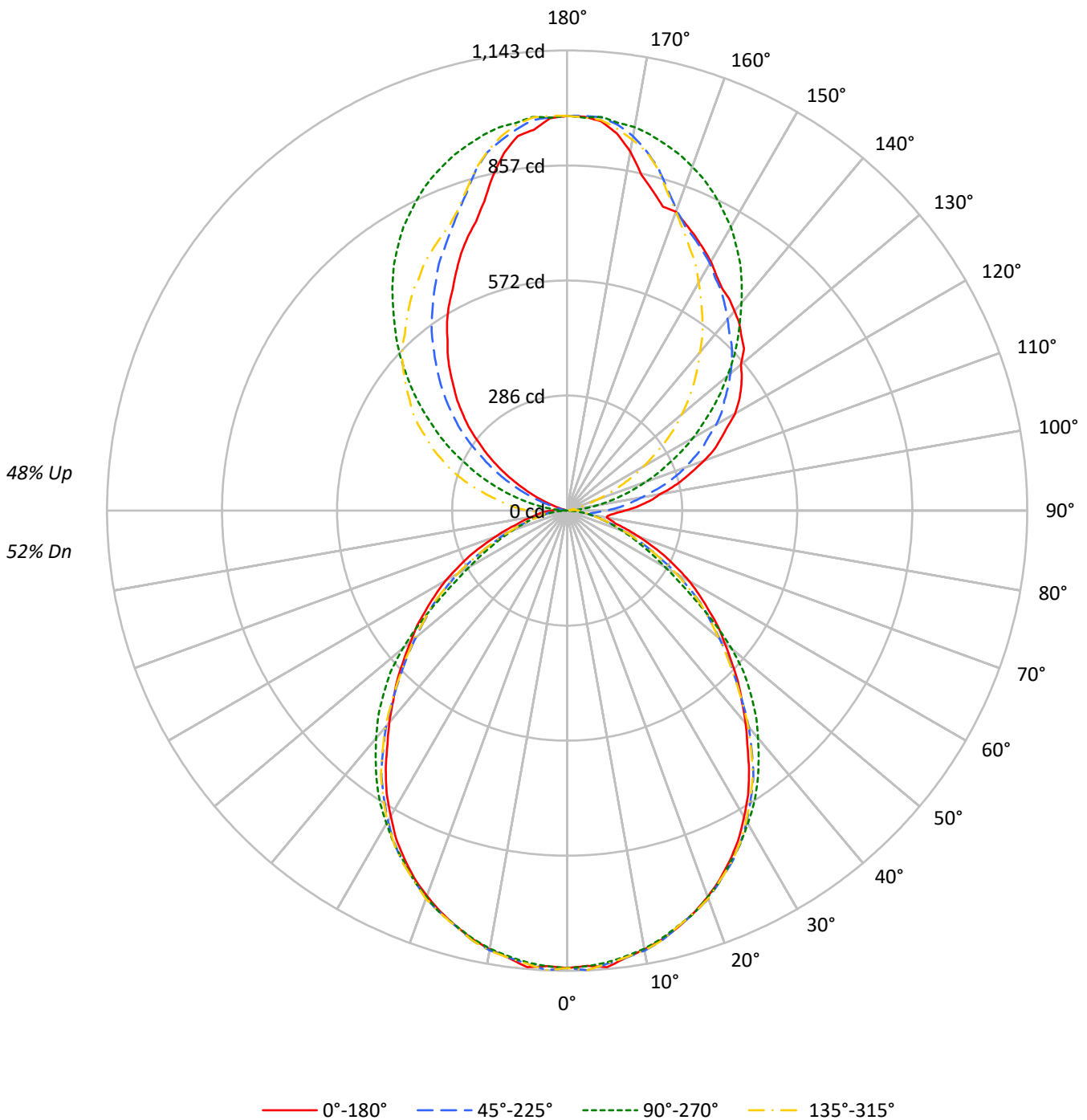
Lumens per Lamp: N/A  
Luminaire Lumens: 4935.2 lumens  
Efficiency: N/A  
Efficacy: 74.5 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 1.18 / 1.25  
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 2' x H: 0.42')  
CIE Type: General Diffuse

Input Watts (W): 66.256  
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: P392526  
CATALOG NUMBER: MWL-2-28-31-UNV-L930-EDD

### Luminous Intensity Polar Plot





TEST NUMBER: P392526

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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   | 108 | 108 | 108 | 108 | 100 | 100 | 100 | 100 | 85 | 85 | 85 | 71 | 71 | 71 | 58 | 58 | 58 | 52 |
| 1   | 99  | 94  | 91  | 87  | 91  | 88  | 84  | 81  | 75 | 72 | 70 | 63 | 61 | 60 | 52 | 51 | 50 | 45 |
| 2   | 90  | 83  | 77  | 72  | 83  | 77  | 72  | 67  | 66 | 62 | 59 | 56 | 53 | 51 | 46 | 44 | 43 | 38 |
| 3   | 83  | 73  | 66  | 60  | 76  | 68  | 62  | 57  | 59 | 54 | 50 | 50 | 46 | 43 | 41 | 39 | 37 | 33 |
| 4   | 76  | 65  | 57  | 51  | 70  | 61  | 54  | 49  | 52 | 47 | 43 | 45 | 41 | 37 | 37 | 34 | 32 | 29 |
| 5   | 70  | 58  | 50  | 44  | 64  | 54  | 47  | 42  | 47 | 42 | 37 | 40 | 36 | 33 | 34 | 31 | 28 | 25 |
| 6   | 64  | 52  | 44  | 39  | 59  | 49  | 42  | 37  | 43 | 37 | 33 | 36 | 32 | 29 | 31 | 28 | 25 | 22 |
| 7   | 60  | 47  | 40  | 34  | 55  | 44  | 37  | 32  | 39 | 33 | 29 | 33 | 29 | 26 | 28 | 25 | 22 | 20 |
| 8   | 55  | 43  | 35  | 30  | 51  | 40  | 34  | 29  | 35 | 30 | 26 | 31 | 26 | 23 | 26 | 23 | 20 | 18 |
| 9   | 52  | 39  | 32  | 27  | 48  | 37  | 30  | 26  | 32 | 27 | 23 | 28 | 24 | 21 | 24 | 21 | 18 | 16 |
| 10  | 48  | 36  | 29  | 24  | 45  | 34  | 28  | 23  | 30 | 25 | 21 | 26 | 22 | 19 | 22 | 19 | 17 | 15 |

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

|     | 0°    | 90°   | 180°  | 270°  |
|-----|-------|-------|-------|-------|
| 0°  | 14677 | 14677 | 14677 | 14677 |
| 5°  | 14495 | 13437 | 14495 | 13437 |
| 10° | 14001 | 12321 | 14001 | 12321 |
| 15° | 13554 | 11257 | 13528 | 11257 |
| 20° | 13044 | 10295 | 13016 | 10295 |
| 25° | 12439 | 9345  | 12413 | 9345  |
| 30° | 11699 | 8486  | 11663 | 8486  |
| 35° | 10838 | 7644  | 10811 | 7644  |
| 40° | 9900  | 6764  | 9860  | 6764  |
| 45° | 9061  | 5889  | 9030  | 5889  |
| 50° | 8207  | 4895  | 8173  | 4895  |
| 55° | 7423  | 3634  | 7399  | 3634  |
| 60° | 6640  | 2655  | 6625  | 2655  |
| 65° | 5655  | 1972  | 5655  | 1972  |
| 70° | 4537  | 1464  | 4551  | 1464  |
| 75° | 3504  | 1022  | 3560  | 1022  |
| 80° | 3410  | 649   | 2963  | 649   |
| 85° | 4830  | 273   | 2858  | 273   |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 107.2  | 2.2       |
| 10°-20°   | 301.5  | 6.1       |
| 20°-30°   | 442.1  | 9.0       |
| 30°-40°   | 501.6  | 10.2      |
| 40°-50°   | 468.0  | 9.5       |
| 50°-60°   | 367.2  | 7.4       |
| 60°-70°   | 229.2  | 4.6       |
| 70°-80°   | 111.2  | 2.3       |
| 80°-90°   | 62.9   | 1.3       |
| 90°-100°  | 81.7   | 1.7       |
| 100°-110° | 151.3  | 3.1       |
| 110°-120° | 260.7  | 5.3       |
| 120°-130° | 354.3  | 7.2       |
| 130°-140° | 404.1  | 8.2       |
| 140°-150° | 403.0  | 8.2       |
| 150°-160° | 350.9  | 7.1       |
| 160°-170° | 246.7  | 5.0       |
| 170°-180° | 91.9   | 1.9       |
| 0°-30°    | 850.7  | 17.2      |
| 0°-40°    | 1352.3 | 27.4      |
| 0°-60°    | 2187.5 | 44.3      |
| 0°-90°    | 2590.7 | 52.5      |
| 90°-120°  | 493.7  | 10.0      |
| 90°-150°  | 1655.0 | 33.5      |
| 90°-180°  | 2344.0 | 47.5      |
| 0°-180°   | 4935.2 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 90°  | 180° | 270° | 360° | Flux |
|------|------|------|------|------|------|------|
| 0°   | 1136 | 1136 | 1136 | 1136 | 1136 |      |
| 5°   | 1138 | 1127 | 1138 | 1127 | 1138 | 107  |
| 15°  | 1070 | 1067 | 1068 | 1067 | 1070 | 302  |
| 25°  | 958  | 962  | 956  | 962  | 958  | 440  |
| 35°  | 788  | 824  | 786  | 824  | 788  | 491  |
| 45°  | 599  | 645  | 597  | 645  | 599  | 462  |
| 55°  | 428  | 392  | 426  | 392  | 428  | 384  |
| 65°  | 268  | 203  | 268  | 203  | 268  | 264  |
| 75°  | 125  | 97   | 127  | 97   | 125  | 141  |
| 85°  | 110  | 23   | 65   | 23   | 110  | 88   |
| 90°  | 143  | 2    | 39   | 2    | 143  | 79   |
| 95°  | 190  | 28   | 26   | 28   | 190  | 165  |
| 105° | 298  | 137  | 6    | 137  | 298  | 314  |
| 115° | 421  | 280  | 97   | 280  | 421  | 417  |
| 125° | 527  | 439  | 240  | 439  | 527  | 471  |
| 135° | 612  | 599  | 386  | 599  | 612  | 473  |
| 145° | 672  | 749  | 518  | 749  | 672  | 424  |
| 155° | 752  | 866  | 652  | 866  | 752  | 347  |
| 165° | 822  | 942  | 795  | 942  | 822  | 233  |
| 175° | 970  | 982  | 950  | 982  | 970  | 90   |
| 180° | 980  | 980  | 980  | 980  | 980  |      |



TEST NUMBER: P392526

CATALOG NUMBER: MWL-2-28-31-UNV-L930-EDD

**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    | 112.5° | 135°   | 157.5° | 180°   | 202.5° | 225°   |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°     | 1136.3 | 1136.3 | 1136.3 | 1136.3 | 1136.3 | 1136.3 | 1136.3 | 1136.3 | 1136.3 | 1136.3 | 1136.3 |
| 2.5°   | 1131.7 | 1138.8 | 1142.7 | 1131.9 | 1132.8 | 1131.2 | 1142.7 | 1138.8 | 1132.4 | 1138.8 | 1142.7 |
| 5°     | 1138.3 | 1130.6 | 1130.3 | 1129.5 | 1127.0 | 1129.5 | 1129.7 | 1130.6 | 1138.3 | 1130.6 | 1129.7 |
| 7.5°   | 1120.1 | 1125.5 | 1119.8 | 1118.9 | 1116.4 | 1118.1 | 1119.1 | 1124.8 | 1120.1 | 1124.8 | 1119.1 |
| 10°    | 1106.7 | 1110.8 | 1110.0 | 1104.1 | 1105.0 | 1103.4 | 1109.2 | 1109.3 | 1106.7 | 1109.3 | 1109.2 |
| 12.5°  | 1090.9 | 1093.5 | 1092.8 | 1086.2 | 1088.0 | 1086.2 | 1092.8 | 1092.1 | 1089.4 | 1092.1 | 1092.8 |
| 15°    | 1070.2 | 1069.6 | 1068.9 | 1066.5 | 1067.4 | 1065.8 | 1068.2 | 1068.2 | 1068.1 | 1068.2 | 1068.2 |
| 17.5°  | 1047.2 | 1049.1 | 1048.3 | 1048.5 | 1048.5 | 1048.5 | 1047.7 | 1048.3 | 1045.1 | 1048.3 | 1047.7 |
| 20°    | 1020.9 | 1025.1 | 1026.1 | 1021.4 | 1021.6 | 1020.8 | 1025.5 | 1023.7 | 1018.7 | 1023.7 | 1025.5 |
| 22.5°  | 991.4  | 992.2  | 994.1  | 987.7  | 994.4  | 987.0  | 993.5  | 990.8  | 989.9  | 990.8  | 993.5  |
| 25°    | 957.6  | 958.5  | 966.1  | 962.2  | 961.5  | 961.5  | 964.7  | 956.4  | 955.6  | 956.4  | 964.7  |
| 27.5°  | 921.5  | 921.5  | 931.5  | 928.3  | 931.9  | 927.7  | 930.2  | 919.4  | 919.4  | 919.4  | 930.2  |
| 30°    | 878.7  | 886.1  | 891.9  | 903.6  | 897.4  | 902.2  | 889.8  | 884.1  | 876.0  | 884.1  | 889.8  |
| 32.5°  | 836.8  | 840.9  | 849.2  | 857.5  | 863.5  | 856.1  | 847.0  | 838.2  | 834.1  | 838.2  | 847.0  |
| 35°    | 787.6  | 787.6  | 806.5  | 822.1  | 824.2  | 820.1  | 804.5  | 785.6  | 785.6  | 785.6  | 804.5  |
| 37.5°  | 735.0  | 736.6  | 753.1  | 777.0  | 781.3  | 774.8  | 751.1  | 734.6  | 732.9  | 734.6  | 751.1  |
| 40°    | 689.8  | 686.5  | 702.1  | 732.6  | 737.7  | 731.3  | 699.3  | 683.7  | 687.0  | 683.7  | 699.3  |
| 42.5°  | 642.1  | 637.1  | 644.6  | 682.5  | 695.0  | 681.2  | 642.6  | 634.4  | 639.3  | 634.4  | 642.6  |
| 45°    | 599.4  | 589.6  | 591.2  | 626.6  | 644.8  | 625.2  | 588.4  | 587.5  | 597.3  | 587.5  | 588.4  |
| 47.5°  | 552.5  | 549.3  | 542.7  | 565.9  | 595.5  | 565.2  | 540.0  | 547.2  | 550.5  | 547.2  | 540.0  |
| 50°    | 509.8  | 503.2  | 493.3  | 512.5  | 533.9  | 511.0  | 490.6  | 500.5  | 507.7  | 500.5  | 490.6  |
| 52.5°  | 471.9  | 466.2  | 447.5  | 459.0  | 463.2  | 457.6  | 445.4  | 463.5  | 469.9  | 463.5  | 445.4  |
| 55°    | 427.7  | 426.9  | 408.0  | 402.4  | 391.8  | 401.0  | 405.9  | 424.8  | 426.3  | 424.8  | 405.9  |
| 57.5°  | 388.3  | 386.6  | 359.5  | 349.8  | 330.1  | 348.4  | 357.4  | 384.6  | 386.9  | 384.6  | 357.4  |
| 60°    | 349.8  | 344.0  | 314.4  | 290.7  | 280.8  | 290.0  | 313.0  | 342.6  | 349.0  | 342.6  | 313.0  |
| 62.5°  | 307.0  | 303.8  | 267.6  | 242.1  | 239.8  | 241.5  | 266.2  | 302.4  | 306.3  | 302.4  | 266.2  |
| 65°    | 267.7  | 255.3  | 224.9  | 201.9  | 202.9  | 201.2  | 224.3  | 254.6  | 267.7  | 254.6  | 224.3  |
| 67.5°  | 225.7  | 213.3  | 187.0  | 165.9  | 172.4  | 165.9  | 186.4  | 212.7  | 225.7  | 212.7  | 186.4  |
| 70°    | 188.9  | 172.4  | 152.7  | 135.4  | 145.3  | 135.4  | 152.7  | 173.1  | 189.5  | 173.1  | 152.7  |
| 72.5°  | 155.1  | 137.9  | 123.1  | 110.8  | 119.0  | 110.0  | 123.1  | 138.6  | 156.6  | 138.6  | 123.1  |
| 75°    | 124.8  | 109.1  | 95.2   | 88.7   | 96.9   | 88.7   | 96.0   | 109.8  | 126.8  | 109.8  | 96.0   |
| 77.5°  | 110.5  | 91.3   | 72.2   | 68.9   | 78.8   | 68.9   | 72.9   | 89.2   | 107.7  | 89.2   | 72.9   |
| 80°    | 100.0  | 86.2   | 57.8   | 51.6   | 58.2   | 51.6   | 56.5   | 75.2   | 86.9   | 75.2   | 56.5   |
| 82.5°  | 101.1  | 90.7   | 57.1   | 36.8   | 40.2   | 36.8   | 48.9   | 65.8   | 74.8   | 65.8   | 48.9   |
| 85°    | 110.2  | 102.4  | 64.1   | 29.9   | 22.9   | 28.5   | 44.1   | 60.3   | 65.2   | 60.3   | 44.1   |
| 87.5°  | 124.3  | 120.6  | 78.4   | 33.7   | 6.6    | 24.0   | 39.0   | 54.2   | 53.1   | 54.2   | 39.0   |
| 90°    | 143.1  | 140.3  | 97.6   | 41.6   | 1.5    | 15.4   | 29.1   | 42.8   | 39.4   | 42.8   | 29.1   |
| 92.5°  | 168.5  | 162.7  | 118.2  | 55.6   | 11.9   | 8.0    | 23.4   | 34.9   | 33.0   | 34.9   | 23.4   |
| 95°    | 189.7  | 185.7  | 141.3  | 72.7   | 28.4   | 3.6    | 16.8   | 25.3   | 25.9   | 25.3   | 16.8   |
| 97.5°  | 214.4  | 209.4  | 162.7  | 97.6   | 49.9   | 9.2    | 9.9    | 19.3   | 20.9   | 19.3   | 9.9    |
| 100°   | 234.0  | 230.9  | 188.9  | 127.4  | 76.3   | 23.7   | 5.6    | 13.7   | 16.2   | 13.7   | 5.6    |
| 102.5° | 267.7  | 256.9  | 217.2  | 155.8  | 104.5  | 43.7   | 11.2   | 8.0    | 10.5   | 8.0    | 11.2   |
| 105°   | 297.6  | 287.8  | 251.1  | 185.4  | 137.1  | 70.6   | 27.8   | 9.9    | 6.5    | 9.9    | 27.8   |
| 107.5° | 327.4  | 320.4  | 282.4  | 215.8  | 171.6  | 101.8  | 52.1   | 27.2   | 17.5   | 27.2   | 52.1   |
| 110°   | 361.9  | 353.5  | 312.1  | 246.3  | 207.5  | 134.9  | 79.1   | 49.3   | 38.3   | 49.3   | 79.1   |



TEST NUMBER: P392526

CATALOG NUMBER: MWL-2-28-31-UNV-L930-EDD

**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   | 112.5° | 135°  | 157.5° | 180°  | 202.5° | 225°  |
|--------|-------|-------|-------|-------|-------|--------|-------|--------|-------|--------|-------|
| 112.5° | 395.1 | 388.8 | 339.8 | 278.9 | 244.9 | 171.8  | 112.3 | 77.0   | 66.6  | 77.0   | 112.3 |
| 115°   | 420.7 | 417.2 | 371.6 | 308.7 | 280.3 | 212.6  | 148.9 | 109.5  | 97.0  | 109.5  | 148.9 |
| 117.5° | 447.6 | 446.9 | 395.1 | 339.1 | 321.7 | 249.2  | 182.8 | 142.0  | 128.8 | 142.0  | 182.8 |
| 120°   | 481.5 | 476.0 | 427.6 | 369.5 | 361.2 | 287.8  | 220.1 | 179.4  | 166.2 | 179.4  | 220.1 |
| 122.5° | 505.8 | 501.5 | 455.2 | 398.5 | 398.5 | 327.4  | 256.1 | 215.3  | 202.3 | 215.3  | 256.1 |
| 125°   | 527.3 | 525.9 | 476.8 | 427.6 | 438.7 | 363.9  | 297.0 | 255.5  | 240.4 | 255.5  | 297.0 |
| 127.5° | 546.6 | 548.6 | 503.8 | 460.2 | 480.3 | 402.1  | 336.4 | 290.8  | 274.9 | 290.8  | 336.4 |
| 130°   | 563.3 | 570.1 | 529.4 | 489.2 | 519.0 | 443.0  | 371.7 | 326.0  | 315.7 | 326.0  | 371.7 |
| 132.5° | 595.7 | 591.6 | 555.6 | 519.0 | 560.4 | 480.3  | 409.1 | 361.3  | 349.6 | 361.3  | 409.1 |
| 135°   | 612.3 | 613.7 | 578.5 | 544.6 | 599.2 | 517.6  | 444.3 | 397.3  | 385.6 | 397.3  | 444.3 |
| 137.5° | 632.4 | 628.2 | 596.4 | 575.7 | 635.1 | 553.6  | 478.9 | 435.3  | 416.7 | 435.3  | 478.9 |
| 140°   | 646.8 | 646.2 | 619.9 | 603.3 | 673.8 | 588.8  | 514.1 | 469.9  | 452.6 | 469.9  | 514.1 |
| 142.5° | 662.0 | 666.3 | 643.4 | 633.8 | 712.6 | 626.1  | 552.2 | 503.8  | 487.2 | 503.8  | 552.2 |
| 145°   | 672.4 | 682.3 | 666.9 | 671.7 | 749.2 | 667.7  | 585.4 | 537.1  | 518.3 | 537.1  | 585.4 |
| 147.5° | 690.6 | 702.4 | 685.0 | 698.8 | 781.1 | 704.2  | 619.4 | 571.0  | 555.1 | 571.0  | 619.4 |
| 150°   | 714.1 | 719.6 | 709.2 | 736.1 | 813.5 | 745.0  | 653.2 | 603.4  | 587.6 | 603.4  | 653.2 |
| 152.5° | 732.8 | 739.7 | 727.9 | 776.9 | 839.1 | 782.4  | 690.6 | 635.3  | 616.6 | 635.3  | 690.6 |
| 155°   | 752.1 | 754.9 | 746.6 | 816.3 | 866.1 | 819.0  | 720.2 | 670.5  | 652.5 | 670.5  | 720.2 |
| 157.5° | 770.1 | 775.6 | 765.1 | 846.0 | 889.6 | 850.8  | 753.4 | 705.8  | 689.9 | 705.8  | 753.4 |
| 160°   | 789.5 | 789.5 | 794.1 | 880.6 | 908.9 | 878.5  | 789.4 | 744.6  | 722.5 | 744.6  | 789.4 |
| 162.5° | 791.5 | 804.7 | 833.6 | 904.8 | 927.6 | 902.8  | 828.1 | 772.2  | 752.8 | 772.2  | 828.1 |
| 165°   | 821.9 | 832.9 | 877.9 | 926.3 | 942.1 | 924.1  | 875.7 | 817.0  | 794.9 | 817.0  | 875.7 |
| 167.5° | 853.7 | 877.9 | 913.8 | 950.4 | 956.0 | 944.2  | 912.4 | 871.6  | 851.7 | 871.6  | 912.4 |
| 170°   | 904.8 | 926.3 | 944.2 | 959.4 | 967.1 | 960.1  | 935.2 | 915.2  | 902.0 | 915.2  | 935.2 |
| 172.5° | 944.8 | 959.4 | 966.3 | 976.0 | 971.2 | 968.5  | 956.0 | 946.4  | 938.5 | 946.4  | 956.0 |
| 175°   | 970.3 | 973.9 | 980.2 | 977.5 | 981.7 | 974.0  | 973.9 | 978.8  | 949.6 | 978.8  | 973.9 |
| 177.5° | 979.4 | 984.1 | 981.5 | 976.2 | 976.8 | 975.4  | 977.4 | 979.4  | 975.2 | 979.4  | 977.4 |
| 180°   | 980.2 | 980.2 | 980.2 | 980.2 | 980.2 | 980.2  | 980.2 | 980.2  | 980.2 | 980.2  | 980.2 |



TEST NUMBER: P392526

CATALOG NUMBER: MWL-2-28-31-UNV-L930-EDD

**CANDELA DISTRIBUTION (continued):**

|        | 247.5° | 270°   | 292.5° | 315°   | 337.5° | 360°   |
|--------|--------|--------|--------|--------|--------|--------|
| 0°     | 1136.3 | 1136.3 | 1136.3 | 1136.3 | 1136.3 | 1136.3 |
| 2.5°   | 1131.2 | 1132.8 | 1131.9 | 1142.7 | 1138.8 | 1131.7 |
| 5°     | 1129.5 | 1127.0 | 1129.5 | 1130.3 | 1130.6 | 1138.3 |
| 7.5°   | 1118.1 | 1116.4 | 1118.9 | 1119.8 | 1125.5 | 1120.1 |
| 10°    | 1103.4 | 1105.0 | 1104.1 | 1110.0 | 1110.8 | 1106.7 |
| 12.5°  | 1086.2 | 1088.0 | 1086.2 | 1092.8 | 1093.5 | 1090.9 |
| 15°    | 1065.8 | 1067.4 | 1066.5 | 1068.9 | 1069.6 | 1070.2 |
| 17.5°  | 1048.5 | 1048.5 | 1048.5 | 1048.3 | 1049.1 | 1047.2 |
| 20°    | 1020.8 | 1021.6 | 1021.4 | 1026.1 | 1025.1 | 1020.9 |
| 22.5°  | 987.0  | 994.4  | 987.7  | 994.1  | 992.2  | 991.4  |
| 25°    | 961.5  | 961.5  | 962.2  | 966.1  | 958.5  | 957.6  |
| 27.5°  | 927.7  | 931.9  | 928.3  | 931.5  | 921.5  | 921.5  |
| 30°    | 902.2  | 897.4  | 903.6  | 891.9  | 886.1  | 878.7  |
| 32.5°  | 856.1  | 863.5  | 857.5  | 849.2  | 840.9  | 836.8  |
| 35°    | 820.1  | 824.2  | 822.1  | 806.5  | 787.6  | 787.6  |
| 37.5°  | 774.8  | 781.3  | 777.0  | 753.1  | 736.6  | 735.0  |
| 40°    | 731.3  | 737.7  | 732.6  | 702.1  | 686.5  | 689.8  |
| 42.5°  | 681.2  | 695.0  | 682.5  | 644.6  | 637.1  | 642.1  |
| 45°    | 625.2  | 644.8  | 626.6  | 591.2  | 589.6  | 599.4  |
| 47.5°  | 565.2  | 595.5  | 565.9  | 542.7  | 549.3  | 552.5  |
| 50°    | 511.0  | 533.9  | 512.5  | 493.3  | 503.2  | 509.8  |
| 52.5°  | 457.6  | 463.2  | 459.0  | 447.5  | 466.2  | 471.9  |
| 55°    | 401.0  | 391.8  | 402.4  | 408.0  | 426.9  | 427.7  |
| 57.5°  | 348.4  | 330.1  | 349.8  | 359.5  | 386.6  | 388.3  |
| 60°    | 290.0  | 280.8  | 290.7  | 314.4  | 344.0  | 349.8  |
| 62.5°  | 241.5  | 239.8  | 242.1  | 267.6  | 303.8  | 307.0  |
| 65°    | 201.2  | 202.9  | 201.9  | 224.9  | 255.3  | 267.7  |
| 67.5°  | 165.9  | 172.4  | 165.9  | 187.0  | 213.3  | 225.7  |
| 70°    | 135.4  | 145.3  | 135.4  | 152.7  | 172.4  | 188.9  |
| 72.5°  | 110.0  | 119.0  | 110.8  | 123.1  | 137.9  | 155.1  |
| 75°    | 88.7   | 96.9   | 88.7   | 95.2   | 109.1  | 124.8  |
| 77.5°  | 68.9   | 78.8   | 68.9   | 72.2   | 91.3   | 110.5  |
| 80°    | 51.6   | 58.2   | 51.6   | 57.8   | 86.2   | 100.0  |
| 82.5°  | 36.8   | 40.2   | 36.8   | 57.1   | 90.7   | 101.1  |
| 85°    | 28.5   | 22.9   | 29.9   | 64.1   | 102.4  | 110.2  |
| 87.5°  | 24.0   | 6.6    | 33.7   | 78.4   | 120.6  | 124.3  |
| 90°    | 15.4   | 1.5    | 41.6   | 97.6   | 140.3  | 143.1  |
| 92.5°  | 8.0    | 11.9   | 55.6   | 118.2  | 162.7  | 168.5  |
| 95°    | 3.6    | 28.4   | 72.7   | 141.3  | 185.7  | 189.7  |
| 97.5°  | 9.2    | 49.9   | 97.6   | 162.7  | 209.4  | 214.4  |
| 100°   | 23.7   | 76.3   | 127.4  | 188.9  | 230.9  | 234.0  |
| 102.5° | 43.7   | 104.5  | 155.8  | 217.2  | 256.9  | 267.7  |
| 105°   | 70.6   | 137.1  | 185.4  | 251.1  | 287.8  | 297.6  |
| 107.5° | 101.8  | 171.6  | 215.8  | 282.4  | 320.4  | 327.4  |
| 110°   | 134.9  | 207.5  | 246.3  | 312.1  | 353.5  | 361.9  |





TEST NUMBER: P392526

CATALOG NUMBER: MWL-2-28-31-UNV-L930-EDD

**CANDELA DISTRIBUTION (continued):**

|        | 247.5° | 270°  | 292.5° | 315°  | 337.5° | 360°  |
|--------|--------|-------|--------|-------|--------|-------|
| 112.5° | 171.8  | 244.9 | 278.9  | 339.8 | 388.8  | 395.1 |
| 115°   | 212.6  | 280.3 | 308.7  | 371.6 | 417.2  | 420.7 |
| 117.5° | 249.2  | 321.7 | 339.1  | 395.1 | 446.9  | 447.6 |
| 120°   | 287.8  | 361.2 | 369.5  | 427.6 | 476.0  | 481.5 |
| 122.5° | 327.4  | 398.5 | 398.5  | 455.2 | 501.5  | 505.8 |
| 125°   | 363.9  | 438.7 | 427.6  | 476.8 | 525.9  | 527.3 |
| 127.5° | 402.1  | 480.3 | 460.2  | 503.8 | 548.6  | 546.6 |
| 130°   | 443.0  | 519.0 | 489.2  | 529.4 | 570.1  | 563.3 |
| 132.5° | 480.3  | 560.4 | 519.0  | 555.6 | 591.6  | 595.7 |
| 135°   | 517.6  | 599.2 | 544.6  | 578.5 | 613.7  | 612.3 |
| 137.5° | 553.6  | 635.1 | 575.7  | 596.4 | 628.2  | 632.4 |
| 140°   | 588.8  | 673.8 | 603.3  | 619.9 | 646.2  | 646.8 |
| 142.5° | 626.1  | 712.6 | 633.8  | 643.4 | 666.3  | 662.0 |
| 145°   | 667.7  | 749.2 | 671.7  | 666.9 | 682.3  | 672.4 |
| 147.5° | 704.2  | 781.1 | 698.8  | 685.0 | 702.4  | 690.6 |
| 150°   | 745.0  | 813.5 | 736.1  | 709.2 | 719.6  | 714.1 |
| 152.5° | 782.4  | 839.1 | 776.9  | 727.9 | 739.7  | 732.8 |
| 155°   | 819.0  | 866.1 | 816.3  | 746.6 | 754.9  | 752.1 |
| 157.5° | 850.8  | 889.6 | 846.0  | 765.1 | 775.6  | 770.1 |
| 160°   | 878.5  | 908.9 | 880.6  | 794.1 | 789.5  | 789.5 |
| 162.5° | 902.8  | 927.6 | 904.8  | 833.6 | 804.7  | 791.5 |
| 165°   | 924.1  | 942.1 | 926.3  | 877.9 | 832.9  | 821.9 |
| 167.5° | 944.2  | 956.0 | 950.4  | 913.8 | 877.9  | 853.7 |
| 170°   | 960.1  | 967.1 | 959.4  | 944.2 | 926.3  | 904.8 |
| 172.5° | 968.5  | 971.2 | 976.0  | 966.3 | 959.4  | 944.8 |
| 175°   | 974.0  | 981.7 | 977.5  | 980.2 | 973.9  | 970.3 |
| 177.5° | 975.4  | 976.8 | 976.2  | 981.5 | 984.1  | 979.4 |
| 180°   | 980.2  | 980.2 | 980.2  | 980.2 | 980.2  | 980.2 |

(END OF REPORT)