

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: P392522

Luminaire Tested: **MWL-2-28-17-UNV-L840-EDD**

Issue Date: 12/2/2019

Test Information

Test Method: LM-79-08
Report Number: P392522
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-2-28-17-UNV-L840-EDD
Description: MWL 2FT MEDICAL LED FIXTURE
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

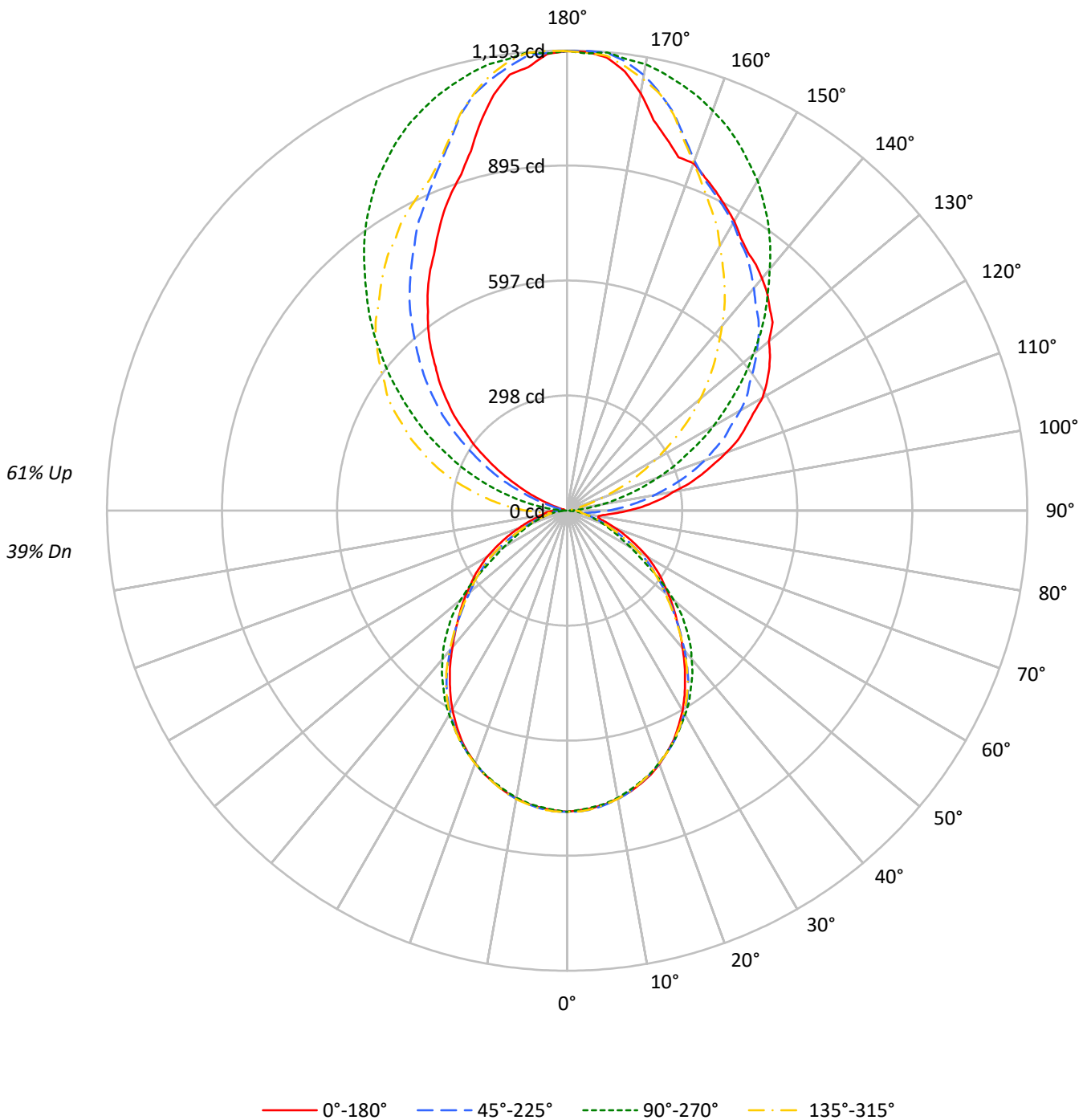
Lumens per Lamp: N/A
Luminaire Lumens: 4615.1 lumens
Efficiency: N/A
Efficacy: 93.4 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 1.17 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 2' x H: 0.42')
CIE Type: Semi-Indirect

Input Watts (W): 49.4
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: P392522
CATALOG NUMBER: MWL-2-28-17-UNV-L840-EDD

Luminous Intensity Polar Plot





TEST NUMBER: P392522

CATALOG NUMBER: MWL-2-28-17-UNV-L840-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 | 50 | 30 | 10 | 0 | |
| RCR | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 104 | 104 | 104 | 104 | 95 | 95 | 95 | 95 | 77 | 77 | 77 | 61 | 61 | 61 | 46 | 46 | 46 | 39 | | | | |
| 1 | 95 | 91 | 87 | 84 | 86 | 83 | 80 | 77 | 68 | 65 | 63 | 53 | 52 | 51 | 40 | 39 | 39 | 33 | | | | |
| 2 | 87 | 80 | 74 | 69 | 79 | 73 | 68 | 63 | 59 | 56 | 53 | 47 | 45 | 43 | 36 | 34 | 33 | 28 | | | | |
| 3 | 80 | 70 | 63 | 58 | 72 | 64 | 58 | 53 | 53 | 48 | 45 | 42 | 39 | 36 | 32 | 30 | 28 | 24 | | | | |
| 4 | 73 | 62 | 55 | 49 | 66 | 57 | 51 | 45 | 47 | 42 | 38 | 38 | 34 | 31 | 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 | 41 | 35 | 30 | 34 | 29 | 26 | 28 | 24 | 21 | 22 | 19 | 17 | 14 | | | | |
| 8 | 53 | 41 | 33 | 28 | 48 | 38 | 31 | 26 | 31 | 26 | 23 | 26 | 22 | 19 | 20 | 17 | 15 | 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° | 10087 | 10087 | 10087 | 10087 |
| 5° | 9848 | 9201 | 9848 | 9201 |
| 10° | 9590 | 8428 | 9590 | 8428 |
| 15° | 9291 | 7690 | 9258 | 7690 |
| 20° | 8939 | 7018 | 8905 | 7018 |
| 25° | 8505 | 6390 | 8472 | 6390 |
| 30° | 7971 | 5781 | 7927 | 5781 |
| 35° | 7333 | 5188 | 7299 | 5188 |
| 40° | 6687 | 4604 | 6638 | 4604 |
| 45° | 6077 | 4002 | 6039 | 4002 |
| 50° | 5570 | 3313 | 5530 | 3313 |
| 55° | 5089 | 2453 | 5059 | 2453 |
| 60° | 4564 | 1782 | 4547 | 1782 |
| 65° | 3876 | 1319 | 3876 | 1319 |
| 70° | 3187 | 985 | 3206 | 985 |
| 75° | 2575 | 694 | 2645 | 694 |
| 80° | 2820 | 455 | 2274 | 455 |
| 85° | 4778 | 200 | 2380 | 200 |



TEST NUMBER: P392522

CATALOG NUMBER: MWL-2-28-17-UNV-L840-EDD

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 73.4 | 1.6 |
| 10°-20° | 206.2 | 4.5 |
| 20°-30° | 301.6 | 6.5 |
| 30°-40° | 340.6 | 7.4 |
| 40°-50° | 316.2 | 6.9 |
| 50°-60° | 248.6 | 5.4 |
| 60°-70° | 157.3 | 3.4 |
| 70°-80° | 79.0 | 1.7 |
| 80°-90° | 54.7 | 1.2 |
| 90°-100° | 92.5 | 2.0 |
| 100°-110° | 183.2 | 4.0 |
| 110°-120° | 316.1 | 6.9 |
| 120°-130° | 429.5 | 9.3 |
| 130°-140° | 489.9 | 10.6 |
| 140°-150° | 489.1 | 10.6 |
| 150°-160° | 426.0 | 9.2 |
| 160°-170° | 299.6 | 6.5 |
| 170°-180° | 111.6 | 2.4 |
| 0°-30° | 581.2 | 12.6 |
| 0°-40° | 921.8 | 20.0 |
| 0°-60° | 1486.6 | 32.2 |
| 0°-90° | 1777.6 | 38.5 |
| 90°-120° | 591.9 | 12.8 |
| 90°-150° | 2000.4 | 43.3 |
| 90°-180° | 2838.0 | 61.5 |
| 0°-180° | 4615.1 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 90° | 180° | 270° | 360° | Flux |
|------|------|------|------|------|------|------|
| 0° | 781 | 781 | 781 | 781 | 781 | |
| 5° | 773 | 772 | 773 | 772 | 773 | 73 |
| 15° | 734 | 729 | 731 | 729 | 734 | 207 |
| 25° | 655 | 657 | 652 | 657 | 655 | 300 |
| 35° | 533 | 559 | 530 | 559 | 533 | 333 |
| 45° | 402 | 438 | 400 | 438 | 402 | 312 |
| 55° | 293 | 264 | 292 | 264 | 293 | 262 |
| 65° | 184 | 136 | 184 | 136 | 184 | 183 |
| 75° | 92 | 66 | 94 | 66 | 92 | 104 |
| 85° | 109 | 17 | 54 | 17 | 109 | 84 |
| 90° | 158 | 1 | 32 | 1 | 158 | 87 |
| 95° | 220 | 34 | 20 | 34 | 220 | 192 |
| 105° | 361 | 167 | 7 | 167 | 361 | 380 |
| 115° | 511 | 340 | 117 | 340 | 511 | 507 |
| 125° | 639 | 532 | 290 | 532 | 639 | 571 |
| 135° | 743 | 727 | 467 | 727 | 743 | 573 |
| 145° | 817 | 909 | 629 | 909 | 817 | 515 |
| 155° | 913 | 1051 | 792 | 1051 | 913 | 421 |
| 165° | 998 | 1144 | 965 | 1144 | 998 | 283 |
| 175° | 1179 | 1192 | 1154 | 1192 | 1179 | 110 |
| 180° | 1191 | 1191 | 1191 | 1191 | 1191 | |



TEST NUMBER: P392522

CATALOG NUMBER: MWL-2-28-17-UNV-L840-EDD

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° | 202.5° | 225° |
|--------|-------|-------|-------|-------|-------|--------|-------|--------|-------|--------|-------|
| 0° | 780.9 | 780.9 | 780.9 | 780.9 | 780.9 | 780.9 | 780.9 | 780.9 | 780.9 | 780.9 | 780.9 |
| 2.5° | 777.4 | 779.0 | 780.7 | 778.6 | 776.6 | 777.7 | 780.7 | 779.0 | 778.2 | 779.0 | 780.7 |
| 5° | 773.4 | 775.0 | 776.7 | 773.7 | 771.7 | 773.7 | 775.9 | 775.0 | 773.4 | 775.0 | 775.9 |
| 7.5° | 767.2 | 768.9 | 768.9 | 767.7 | 765.7 | 766.9 | 768.0 | 768.0 | 767.2 | 768.0 | 768.0 |
| 10° | 758.0 | 759.9 | 759.9 | 757.9 | 755.9 | 757.0 | 759.0 | 758.2 | 758.0 | 758.2 | 759.0 |
| 12.5° | 747.7 | 747.9 | 747.0 | 745.0 | 743.2 | 745.0 | 747.0 | 746.2 | 746.0 | 746.2 | 747.0 |
| 15° | 733.6 | 732.9 | 732.0 | 731.0 | 729.2 | 730.2 | 731.2 | 731.2 | 731.0 | 731.2 | 731.2 |
| 17.5° | 718.6 | 716.9 | 716.0 | 716.2 | 715.2 | 716.2 | 715.2 | 716.0 | 716.0 | 716.0 | 715.2 |
| 20° | 699.6 | 699.7 | 698.0 | 698.2 | 696.4 | 697.4 | 697.2 | 698.0 | 697.0 | 698.0 | 697.2 |
| 22.5° | 677.7 | 678.7 | 679.0 | 678.2 | 677.4 | 677.4 | 678.2 | 677.0 | 676.0 | 677.0 | 678.2 |
| 25° | 654.7 | 655.7 | 657.9 | 657.2 | 657.4 | 656.4 | 656.2 | 653.2 | 652.2 | 653.2 | 656.2 |
| 27.5° | 626.7 | 630.7 | 633.9 | 635.0 | 634.4 | 634.2 | 632.2 | 628.2 | 624.2 | 628.2 | 632.2 |
| 30° | 598.7 | 601.7 | 607.7 | 612.9 | 611.4 | 611.2 | 605.2 | 599.2 | 595.4 | 599.2 | 605.2 |
| 32.5° | 566.7 | 570.7 | 579.7 | 586.9 | 588.2 | 585.2 | 577.2 | 567.4 | 563.4 | 567.4 | 577.2 |
| 35° | 532.9 | 534.9 | 547.9 | 557.9 | 559.4 | 555.4 | 545.4 | 532.4 | 530.4 | 532.4 | 545.4 |
| 37.5° | 499.9 | 498.9 | 511.9 | 529.9 | 533.2 | 527.4 | 509.4 | 496.4 | 497.4 | 496.4 | 509.4 |
| 40° | 465.9 | 463.9 | 473.9 | 497.0 | 502.2 | 495.4 | 470.5 | 460.5 | 462.5 | 460.5 | 470.5 |
| 42.5° | 433.9 | 431.9 | 436.0 | 463.0 | 473.2 | 461.4 | 433.5 | 428.5 | 430.5 | 428.5 | 433.5 |
| 45° | 402.0 | 399.0 | 400.0 | 424.0 | 438.2 | 422.4 | 396.7 | 396.5 | 399.5 | 396.5 | 396.7 |
| 47.5° | 374.0 | 369.0 | 366.0 | 383.2 | 404.2 | 382.4 | 362.7 | 366.5 | 371.5 | 366.5 | 362.7 |
| 50° | 346.0 | 341.0 | 333.0 | 345.2 | 361.4 | 343.5 | 329.7 | 337.7 | 343.5 | 337.7 | 329.7 |
| 52.5° | 318.0 | 315.0 | 303.2 | 309.2 | 314.4 | 307.5 | 300.7 | 311.7 | 315.5 | 311.7 | 300.7 |
| 55° | 293.2 | 289.2 | 275.2 | 272.4 | 264.5 | 270.7 | 272.7 | 286.7 | 291.5 | 286.7 | 272.7 |
| 57.5° | 266.2 | 264.2 | 247.2 | 235.4 | 221.5 | 233.7 | 244.7 | 261.7 | 264.5 | 261.7 | 244.7 |
| 60° | 240.4 | 235.4 | 215.4 | 198.5 | 188.5 | 197.7 | 213.7 | 233.7 | 239.5 | 233.7 | 213.7 |
| 62.5° | 210.4 | 207.4 | 185.4 | 164.5 | 159.7 | 163.7 | 183.7 | 205.7 | 209.5 | 205.7 | 183.7 |
| 65° | 183.5 | 177.5 | 155.5 | 137.5 | 135.7 | 136.7 | 154.7 | 176.7 | 183.5 | 176.7 | 154.7 |
| 67.5° | 158.5 | 148.5 | 129.5 | 113.7 | 114.7 | 113.7 | 128.7 | 147.7 | 158.5 | 147.7 | 128.7 |
| 70° | 132.7 | 121.7 | 106.7 | 93.7 | 97.7 | 93.7 | 106.7 | 122.5 | 133.5 | 122.5 | 106.7 |
| 72.5° | 111.7 | 98.7 | 86.7 | 76.7 | 79.8 | 75.8 | 86.7 | 99.5 | 113.4 | 99.5 | 86.7 |
| 75° | 91.7 | 78.7 | 67.8 | 60.8 | 65.8 | 60.8 | 68.7 | 79.5 | 94.2 | 79.5 | 68.7 |
| 77.5° | 82.4 | 68.0 | 51.8 | 48.8 | 52.8 | 48.8 | 52.7 | 65.5 | 79.0 | 65.5 | 52.7 |
| 80° | 82.7 | 68.8 | 42.4 | 36.8 | 40.8 | 36.8 | 40.7 | 55.4 | 66.7 | 55.4 | 40.7 |
| 82.5° | 91.9 | 80.3 | 46.5 | 25.8 | 27.8 | 25.8 | 36.4 | 50.0 | 59.9 | 50.0 | 36.4 |
| 85° | 109.0 | 98.5 | 60.0 | 22.4 | 16.8 | 20.7 | 35.6 | 47.3 | 54.3 | 47.3 | 35.6 |
| 87.5° | 131.2 | 124.7 | 79.3 | 31.0 | 4.0 | 19.2 | 31.4 | 43.9 | 44.6 | 43.9 | 31.4 |
| 90° | 158.0 | 152.6 | 105.6 | 44.6 | 0.8 | 12.7 | 22.4 | 34.0 | 31.9 | 34.0 | 22.4 |
| 92.5° | 190.0 | 182.9 | 133.7 | 64.7 | 13.5 | 6.7 | 18.5 | 27.4 | 25.2 | 27.4 | 18.5 |
| 95° | 219.8 | 215.8 | 164.9 | 88.5 | 33.6 | 4.4 | 13.5 | 20.7 | 20.5 | 20.7 | 13.5 |
| 97.5° | 251.8 | 247.6 | 195.9 | 117.7 | 59.7 | 10.1 | 10.0 | 16.4 | 16.4 | 16.4 | 10.0 |
| 100° | 279.6 | 277.8 | 229.7 | 153.9 | 91.7 | 27.8 | 6.9 | 13.7 | 14.7 | 13.7 | 6.9 |
| 102.5° | 323.5 | 311.5 | 264.2 | 188.4 | 126.1 | 52.1 | 13.6 | 8.7 | 10.7 | 8.7 | 13.6 |
| 105° | 360.9 | 349.1 | 305.4 | 225.5 | 166.7 | 85.9 | 33.8 | 11.1 | 6.9 | 11.1 | 33.8 |
| 107.5° | 397.1 | 388.7 | 342.4 | 262.5 | 208.7 | 123.8 | 62.4 | 32.1 | 20.3 | 32.1 | 62.4 |
| 110° | 439.1 | 429.0 | 378.6 | 299.5 | 252.4 | 164.1 | 95.2 | 59.0 | 45.6 | 59.0 | 95.2 |



TEST NUMBER: P392522

CATALOG NUMBER: MWL-2-28-17-UNV-L840-EDD

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° | 202.5° | 225° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 112.5° | 479.5 | 471.9 | 412.2 | 338.2 | 297.8 | 207.9 | 135.5 | 92.7 | 80.0 | 92.7 | 135.5 |
| 115° | 510.6 | 506.4 | 450.9 | 374.4 | 339.9 | 257.5 | 180.1 | 132.2 | 117.0 | 132.2 | 180.1 |
| 117.5° | 543.4 | 542.6 | 479.5 | 411.4 | 390.3 | 302.0 | 221.3 | 171.7 | 155.7 | 171.7 | 221.3 |
| 120° | 584.6 | 577.9 | 519.0 | 448.4 | 438.3 | 349.1 | 266.7 | 217.1 | 201.1 | 217.1 | 266.7 |
| 122.5° | 613.2 | 609.0 | 552.6 | 483.7 | 483.7 | 397.1 | 310.5 | 260.8 | 244.0 | 260.8 | 310.5 |
| 125° | 639.3 | 637.6 | 577.9 | 519.0 | 532.5 | 441.6 | 359.2 | 308.8 | 290.3 | 308.8 | 359.2 |
| 127.5° | 662.8 | 665.3 | 610.7 | 557.7 | 582.1 | 487.1 | 407.2 | 351.7 | 332.3 | 351.7 | 407.2 |
| 130° | 683.0 | 691.4 | 641.8 | 593.0 | 629.2 | 536.7 | 450.0 | 394.5 | 381.9 | 394.5 | 450.0 |
| 132.5° | 722.5 | 717.5 | 673.7 | 629.2 | 679.6 | 582.1 | 495.5 | 437.4 | 423.1 | 437.4 | 495.5 |
| 135° | 742.7 | 744.4 | 701.5 | 660.3 | 726.7 | 627.5 | 538.3 | 481.2 | 466.9 | 481.2 | 538.3 |
| 137.5° | 767.1 | 762.0 | 723.3 | 698.1 | 770.4 | 671.2 | 580.4 | 527.4 | 504.7 | 527.4 | 580.4 |
| 140° | 785.7 | 784.9 | 752.9 | 731.8 | 817.5 | 714.1 | 624.3 | 570.5 | 549.4 | 570.5 | 624.3 |
| 142.5° | 804.2 | 809.3 | 781.5 | 768.8 | 864.6 | 759.5 | 670.5 | 611.7 | 591.5 | 611.7 | 670.5 |
| 145° | 816.8 | 827.8 | 810.1 | 816.0 | 909.2 | 811.0 | 710.9 | 651.2 | 629.3 | 651.2 | 710.9 |
| 147.5° | 837.9 | 852.2 | 831.1 | 848.8 | 947.9 | 855.5 | 751.3 | 692.4 | 673.1 | 692.4 | 751.3 |
| 150° | 866.5 | 873.2 | 860.6 | 894.2 | 987.4 | 905.1 | 792.5 | 731.9 | 712.6 | 731.9 | 792.5 |
| 152.5° | 889.2 | 897.6 | 883.3 | 943.8 | 1018.5 | 950.6 | 837.9 | 770.6 | 747.9 | 770.6 | 837.9 |
| 155° | 912.7 | 916.1 | 906.0 | 991.8 | 1051.3 | 995.1 | 874.0 | 813.5 | 791.6 | 813.5 | 874.0 |
| 157.5° | 934.6 | 941.3 | 929.5 | 1027.9 | 1079.9 | 1033.8 | 915.2 | 856.4 | 837.0 | 856.4 | 915.2 |
| 160° | 958.1 | 958.1 | 964.8 | 1069.0 | 1103.4 | 1066.4 | 959.0 | 903.5 | 876.6 | 903.5 | 959.0 |
| 162.5° | 960.6 | 976.6 | 1012.8 | 1098.4 | 1126.1 | 1095.9 | 1006.1 | 937.1 | 913.6 | 937.1 | 1006.1 |
| 165° | 997.6 | 1011.9 | 1066.6 | 1124.5 | 1143.8 | 1121.9 | 1064.1 | 992.6 | 964.8 | 992.6 | 1064.1 |
| 167.5° | 1036.3 | 1066.6 | 1109.3 | 1153.9 | 1160.6 | 1146.3 | 1107.6 | 1059.0 | 1033.8 | 1059.0 | 1107.6 |
| 170° | 1098.4 | 1125.5 | 1146.3 | 1165.8 | 1175.1 | 1166.7 | 1135.4 | 1112.0 | 1095.0 | 1112.0 | 1135.4 |
| 172.5° | 1148.0 | 1164.8 | 1173.2 | 1186.0 | 1180.1 | 1176.8 | 1160.6 | 1148.9 | 1140.4 | 1148.9 | 1160.6 |
| 175° | 1179.1 | 1182.5 | 1191.1 | 1186.9 | 1191.9 | 1182.6 | 1183.5 | 1188.4 | 1153.9 | 1188.4 | 1183.5 |
| 177.5° | 1190.1 | 1195.9 | 1192.7 | 1185.2 | 1186.0 | 1184.3 | 1187.7 | 1190.1 | 1185.0 | 1190.1 | 1187.7 |
| 180° | 1191.1 | 1191.1 | 1191.1 | 1191.1 | 1191.1 | 1191.1 | 1191.1 | 1191.1 | 1191.1 | 1191.1 | 1191.1 |



TEST NUMBER: P392522

CATALOG NUMBER: MWL-2-28-17-UNV-L840-EDD

CANDELA DISTRIBUTION (continued):

| | 247.5° | 270° | 292.5° | 315° | 337.5° | 360° |
|--------|--------|-------|--------|-------|--------|-------|
| 0° | 780.9 | 780.9 | 780.9 | 780.9 | 780.9 | 780.9 |
| 2.5° | 777.7 | 776.6 | 778.6 | 780.7 | 779.0 | 777.4 |
| 5° | 773.7 | 771.7 | 773.7 | 776.7 | 775.0 | 773.4 |
| 7.5° | 766.9 | 765.7 | 767.7 | 768.9 | 768.9 | 767.2 |
| 10° | 757.0 | 755.9 | 757.9 | 759.9 | 759.9 | 758.0 |
| 12.5° | 745.0 | 743.2 | 745.0 | 747.0 | 747.9 | 747.7 |
| 15° | 730.2 | 729.2 | 731.0 | 732.0 | 732.9 | 733.6 |
| 17.5° | 716.2 | 715.2 | 716.2 | 716.0 | 716.9 | 718.6 |
| 20° | 697.4 | 696.4 | 698.2 | 698.0 | 699.7 | 699.6 |
| 22.5° | 677.4 | 677.4 | 678.2 | 679.0 | 678.7 | 677.7 |
| 25° | 656.4 | 657.4 | 657.2 | 657.9 | 655.7 | 654.7 |
| 27.5° | 634.2 | 634.4 | 635.0 | 633.9 | 630.7 | 626.7 |
| 30° | 611.2 | 611.4 | 612.9 | 607.7 | 601.7 | 598.7 |
| 32.5° | 585.2 | 588.2 | 586.9 | 579.7 | 570.7 | 566.7 |
| 35° | 555.4 | 559.4 | 557.9 | 547.9 | 534.9 | 532.9 |
| 37.5° | 527.4 | 533.2 | 529.9 | 511.9 | 498.9 | 499.9 |
| 40° | 495.4 | 502.2 | 497.0 | 473.9 | 463.9 | 465.9 |
| 42.5° | 461.4 | 473.2 | 463.0 | 436.0 | 431.9 | 433.9 |
| 45° | 422.4 | 438.2 | 424.0 | 400.0 | 399.0 | 402.0 |
| 47.5° | 382.4 | 404.2 | 383.2 | 366.0 | 369.0 | 374.0 |
| 50° | 343.5 | 361.4 | 345.2 | 333.0 | 341.0 | 346.0 |
| 52.5° | 307.5 | 314.4 | 309.2 | 303.2 | 315.0 | 318.0 |
| 55° | 270.7 | 264.5 | 272.4 | 275.2 | 289.2 | 293.2 |
| 57.5° | 233.7 | 221.5 | 235.4 | 247.2 | 264.2 | 266.2 |
| 60° | 197.7 | 188.5 | 198.5 | 215.4 | 235.4 | 240.4 |
| 62.5° | 163.7 | 159.7 | 164.5 | 185.4 | 207.4 | 210.4 |
| 65° | 136.7 | 135.7 | 137.5 | 155.5 | 177.5 | 183.5 |
| 67.5° | 113.7 | 114.7 | 113.7 | 129.5 | 148.5 | 158.5 |
| 70° | 93.7 | 97.7 | 93.7 | 106.7 | 121.7 | 132.7 |
| 72.5° | 75.8 | 79.8 | 76.7 | 86.7 | 98.7 | 111.7 |
| 75° | 60.8 | 65.8 | 60.8 | 67.8 | 78.7 | 91.7 |
| 77.5° | 48.8 | 52.8 | 48.8 | 51.8 | 68.0 | 82.4 |
| 80° | 36.8 | 40.8 | 36.8 | 42.4 | 68.8 | 82.7 |
| 82.5° | 25.8 | 27.8 | 25.8 | 46.5 | 80.3 | 91.9 |
| 85° | 20.7 | 16.8 | 22.4 | 60.0 | 98.5 | 109.0 |
| 87.5° | 19.2 | 4.0 | 31.0 | 79.3 | 124.7 | 131.2 |
| 90° | 12.7 | 0.8 | 44.6 | 105.6 | 152.6 | 158.0 |
| 92.5° | 6.7 | 13.5 | 64.7 | 133.7 | 182.9 | 190.0 |
| 95° | 4.4 | 33.6 | 88.5 | 164.9 | 215.8 | 219.8 |
| 97.5° | 10.1 | 59.7 | 117.7 | 195.9 | 247.6 | 251.8 |
| 100° | 27.8 | 91.7 | 153.9 | 229.7 | 277.8 | 279.6 |
| 102.5° | 52.1 | 126.1 | 188.4 | 264.2 | 311.5 | 323.5 |
| 105° | 85.9 | 166.7 | 225.5 | 305.4 | 349.1 | 360.9 |
| 107.5° | 123.8 | 208.7 | 262.5 | 342.4 | 388.7 | 397.1 |
| 110° | 164.1 | 252.4 | 299.5 | 378.6 | 429.0 | 439.1 |



TEST NUMBER: P392522

CATALOG NUMBER: MWL-2-28-17-UNV-L840-EDD

CANDELA DISTRIBUTION (continued):

| | 247.5° | 270° | 292.5° | 315° | 337.5° | 360° |
|--------|--------|--------|--------|--------|--------|--------|
| 112.5° | 207.9 | 297.8 | 338.2 | 412.2 | 471.9 | 479.5 |
| 115° | 257.5 | 339.9 | 374.4 | 450.9 | 506.4 | 510.6 |
| 117.5° | 302.0 | 390.3 | 411.4 | 479.5 | 542.6 | 543.4 |
| 120° | 349.1 | 438.3 | 448.4 | 519.0 | 577.9 | 584.6 |
| 122.5° | 397.1 | 483.7 | 483.7 | 552.6 | 609.0 | 613.2 |
| 125° | 441.6 | 532.5 | 519.0 | 577.9 | 637.6 | 639.3 |
| 127.5° | 487.1 | 582.1 | 557.7 | 610.7 | 665.3 | 662.8 |
| 130° | 536.7 | 629.2 | 593.0 | 641.8 | 691.4 | 683.0 |
| 132.5° | 582.1 | 679.6 | 629.2 | 673.7 | 717.5 | 722.5 |
| 135° | 627.5 | 726.7 | 660.3 | 701.5 | 744.4 | 742.7 |
| 137.5° | 671.2 | 770.4 | 698.1 | 723.3 | 762.0 | 767.1 |
| 140° | 714.1 | 817.5 | 731.8 | 752.9 | 784.9 | 785.7 |
| 142.5° | 759.5 | 864.6 | 768.8 | 781.5 | 809.3 | 804.2 |
| 145° | 811.0 | 909.2 | 816.0 | 810.1 | 827.8 | 816.8 |
| 147.5° | 855.5 | 947.9 | 848.8 | 831.1 | 852.2 | 837.9 |
| 150° | 905.1 | 987.4 | 894.2 | 860.6 | 873.2 | 866.5 |
| 152.5° | 950.6 | 1018.5 | 943.8 | 883.3 | 897.6 | 889.2 |
| 155° | 995.1 | 1051.3 | 991.8 | 906.0 | 916.1 | 912.7 |
| 157.5° | 1033.8 | 1079.9 | 1027.9 | 929.5 | 941.3 | 934.6 |
| 160° | 1066.4 | 1103.4 | 1069.0 | 964.8 | 958.1 | 958.1 |
| 162.5° | 1095.9 | 1126.1 | 1098.4 | 1012.8 | 976.6 | 960.6 |
| 165° | 1121.9 | 1143.8 | 1124.5 | 1066.6 | 1011.9 | 997.6 |
| 167.5° | 1146.3 | 1160.6 | 1153.9 | 1109.3 | 1066.6 | 1036.3 |
| 170° | 1166.7 | 1175.1 | 1165.8 | 1146.3 | 1125.5 | 1098.4 |
| 172.5° | 1176.8 | 1180.1 | 1186.0 | 1173.2 | 1164.8 | 1148.0 |
| 175° | 1182.6 | 1191.9 | 1186.9 | 1191.1 | 1182.5 | 1179.1 |
| 177.5° | 1184.3 | 1186.0 | 1185.2 | 1192.7 | 1195.9 | 1190.1 |
| 180° | 1191.1 | 1191.1 | 1191.1 | 1191.1 | 1191.1 | 1191.1 |

(END OF REPORT)