

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: P392494

Luminaire Tested: **MWL-2-18-23-UNV-L935-EDD**

Issue Date: 12/2/2019

Test Information

Test Method: LM-79-08
Report Number: P392494
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-2-18-23-UNV-L935-EDD
Description: MWL 2FT MEDICAL LED FIXTURE
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

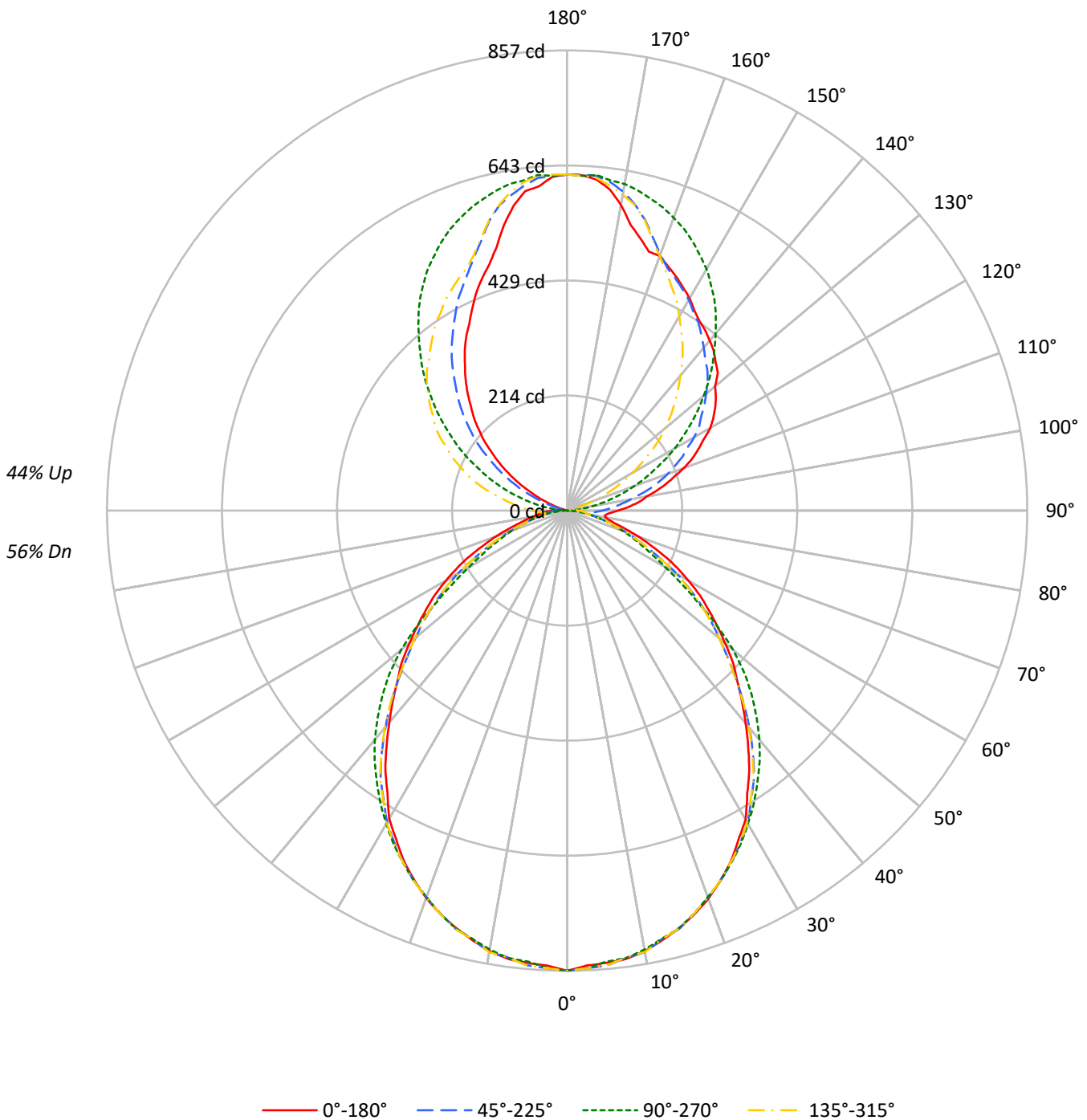
Lumens per Lamp: N/A
Luminaire Lumens: 3440.4 lumens
Efficiency: N/A
Efficacy: 86.7 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.18 / 1.25
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 2' x H: 0.42')
CIE Type: General Diffuse

Input Watts (W): 39.693
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: P392494
CATALOG NUMBER: MWL-2-18-23-UNV-L935-EDD

Luminous Intensity Polar Plot





TEST NUMBER: P392494

CATALOG NUMBER: MWL-2-18-23-UNV-L935-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 | 109 | 109 | 109 | 109 | 101 | 101 | 101 | 101 | 87 | 87 | 87 | 74 | 74 | 74 | 62 | 62 | 62 | 56 |
| 1 | 100 | 95 | 91 | 88 | 92 | 89 | 86 | 83 | 77 | 74 | 72 | 66 | 64 | 62 | 55 | 54 | 53 | 48 |
| 2 | 91 | 84 | 78 | 73 | 85 | 78 | 73 | 69 | 68 | 64 | 60 | 58 | 55 | 53 | 49 | 47 | 45 | 41 |
| 3 | 83 | 74 | 67 | 61 | 77 | 69 | 63 | 58 | 60 | 55 | 51 | 52 | 48 | 45 | 44 | 41 | 39 | 35 |
| 4 | 77 | 66 | 58 | 52 | 71 | 62 | 55 | 50 | 54 | 48 | 44 | 47 | 42 | 39 | 40 | 37 | 34 | 31 |
| 5 | 70 | 59 | 51 | 45 | 65 | 55 | 48 | 43 | 48 | 43 | 38 | 42 | 38 | 34 | 36 | 33 | 30 | 27 |
| 6 | 65 | 53 | 45 | 39 | 60 | 50 | 43 | 37 | 44 | 38 | 34 | 38 | 34 | 30 | 33 | 29 | 27 | 24 |
| 7 | 60 | 48 | 40 | 35 | 56 | 45 | 38 | 33 | 40 | 34 | 30 | 35 | 30 | 27 | 30 | 27 | 24 | 21 |
| 8 | 56 | 44 | 36 | 31 | 52 | 41 | 34 | 29 | 36 | 31 | 27 | 32 | 27 | 24 | 28 | 24 | 21 | 19 |
| 9 | 52 | 40 | 33 | 28 | 49 | 38 | 31 | 26 | 34 | 28 | 24 | 29 | 25 | 22 | 26 | 22 | 19 | 17 |
| 10 | 49 | 37 | 30 | 25 | 46 | 35 | 28 | 24 | 31 | 26 | 22 | 27 | 23 | 20 | 24 | 20 | 18 | 16 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 90° | 180° | 270° |
|-----|-------|-------|-------|-------|
| 0° | 11067 | 11067 | 11067 | 11067 |
| 5° | 10765 | 10051 | 10765 | 10051 |
| 10° | 10538 | 9254 | 10538 | 9254 |
| 15° | 10197 | 8489 | 10180 | 8489 |
| 20° | 9828 | 7721 | 9811 | 7721 |
| 25° | 9367 | 7032 | 9350 | 7032 |
| 30° | 8846 | 6368 | 8822 | 6368 |
| 35° | 8137 | 5728 | 8120 | 5728 |
| 40° | 7422 | 5108 | 7396 | 5108 |
| 45° | 6764 | 4441 | 6744 | 4441 |
| 50° | 6182 | 3696 | 6161 | 3696 |
| 55° | 5569 | 2744 | 5556 | 2744 |
| 60° | 4943 | 1993 | 4936 | 1993 |
| 65° | 4223 | 1493 | 4223 | 1493 |
| 70° | 3389 | 1102 | 3399 | 1102 |
| 75° | 2580 | 779 | 2614 | 779 |
| 80° | 2458 | 479 | 2169 | 479 |
| 85° | 3270 | 204 | 2012 | 204 |



TEST NUMBER: P392494

CATALOG NUMBER: MWL-2-18-23-UNV-L935-EDD

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 80.5 | 2.3 |
| 10°-20° | 226.7 | 6.6 |
| 20°-30° | 332.6 | 9.7 |
| 30°-40° | 377.2 | 11.0 |
| 40°-50° | 351.8 | 10.2 |
| 50°-60° | 275.0 | 8.0 |
| 60°-70° | 170.6 | 5.0 |
| 70°-80° | 82.6 | 2.4 |
| 80°-90° | 44.6 | 1.3 |
| 90°-100° | 53.4 | 1.6 |
| 100°-110° | 96.7 | 2.8 |
| 110°-120° | 166.4 | 4.8 |
| 120°-130° | 226.4 | 6.6 |
| 130°-140° | 258.0 | 7.5 |
| 140°-150° | 257.4 | 7.5 |
| 150°-160° | 224.1 | 6.5 |
| 160°-170° | 157.5 | 4.6 |
| 170°-180° | 58.7 | 1.7 |
| 0°-30° | 639.8 | 18.6 |
| 0°-40° | 1017.0 | 29.6 |
| 0°-60° | 1643.8 | 47.8 |
| 0°-90° | 1941.6 | 56.4 |
| 90°-120° | 316.5 | 9.2 |
| 90°-150° | 1058.4 | 30.8 |
| 90°-180° | 1499.0 | 43.6 |
| 0°-180° | 3440.4 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 90° | 180° | 270° | 360° | Flux |
|------|-----|-----|------|------|------|------|
| 0° | 857 | 857 | 857 | 857 | 857 | |
| 5° | 845 | 843 | 845 | 843 | 845 | 80 |
| 15° | 805 | 805 | 804 | 805 | 805 | 227 |
| 25° | 721 | 724 | 720 | 724 | 721 | 331 |
| 35° | 591 | 618 | 590 | 618 | 591 | 369 |
| 45° | 447 | 486 | 446 | 486 | 447 | 347 |
| 55° | 321 | 296 | 320 | 296 | 321 | 288 |
| 65° | 200 | 154 | 200 | 154 | 200 | 197 |
| 75° | 92 | 74 | 93 | 74 | 92 | 104 |
| 85° | 75 | 17 | 46 | 17 | 75 | 61 |
| 90° | 94 | 0 | 28 | 0 | 94 | 52 |
| 95° | 123 | 18 | 19 | 18 | 123 | 107 |
| 105° | 190 | 88 | 4 | 88 | 190 | 200 |
| 115° | 269 | 179 | 63 | 179 | 269 | 267 |
| 125° | 337 | 281 | 154 | 281 | 337 | 301 |
| 135° | 391 | 383 | 246 | 383 | 391 | 302 |
| 145° | 430 | 478 | 332 | 478 | 430 | 271 |
| 155° | 480 | 553 | 417 | 553 | 480 | 222 |
| 165° | 525 | 601 | 508 | 601 | 525 | 149 |
| 175° | 619 | 627 | 606 | 627 | 619 | 58 |
| 180° | 626 | 626 | 626 | 626 | 626 | |



TEST NUMBER: P392494

CATALOG NUMBER: MWL-2-18-23-UNV-L935-EDD

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° | 202.5° | 225° |
|--------|-------|-------|-------|-------|-------|--------|-------|--------|-------|--------|-------|
| 0° | 856.8 | 856.8 | 856.8 | 856.8 | 856.8 | 856.8 | 856.8 | 856.8 | 856.8 | 856.8 | 856.8 |
| 2.5° | 847.9 | 857.1 | 853.0 | 852.6 | 852.6 | 852.1 | 853.0 | 857.1 | 848.3 | 857.1 | 853.0 |
| 5° | 845.4 | 852.1 | 850.5 | 849.6 | 843.0 | 849.6 | 850.0 | 852.1 | 845.4 | 852.1 | 850.0 |
| 7.5° | 842.4 | 845.9 | 840.0 | 842.1 | 840.5 | 841.8 | 839.6 | 845.5 | 842.4 | 845.5 | 839.6 |
| 10° | 833.0 | 834.2 | 835.0 | 830.9 | 830.0 | 830.5 | 834.6 | 833.3 | 833.0 | 833.3 | 834.6 |
| 12.5° | 819.6 | 820.9 | 817.1 | 819.6 | 816.6 | 819.6 | 817.1 | 819.9 | 818.8 | 819.9 | 817.1 |
| 15° | 805.1 | 809.1 | 806.3 | 803.8 | 804.9 | 803.3 | 805.8 | 808.3 | 803.8 | 808.3 | 805.8 |
| 17.5° | 788.4 | 790.0 | 787.1 | 786.5 | 786.5 | 786.5 | 786.5 | 789.6 | 787.1 | 789.6 | 786.5 |
| 20° | 769.2 | 769.5 | 767.0 | 765.7 | 766.1 | 765.3 | 766.5 | 768.7 | 767.9 | 768.7 | 766.5 |
| 22.5° | 745.4 | 749.5 | 746.1 | 748.1 | 746.1 | 747.8 | 745.6 | 748.7 | 744.5 | 748.7 | 745.6 |
| 25° | 721.1 | 723.6 | 723.2 | 726.5 | 723.5 | 726.0 | 722.3 | 722.3 | 719.8 | 722.3 | 722.3 |
| 27.5° | 691.1 | 694.5 | 698.2 | 701.1 | 700.2 | 700.6 | 697.3 | 693.1 | 689.8 | 693.1 | 697.3 |
| 30° | 664.4 | 662.7 | 671.9 | 674.0 | 673.5 | 673.1 | 670.6 | 661.4 | 662.6 | 661.4 | 670.6 |
| 32.5° | 624.3 | 629.3 | 637.7 | 647.3 | 647.2 | 646.4 | 636.4 | 627.6 | 622.6 | 627.6 | 636.4 |
| 35° | 591.3 | 594.7 | 607.2 | 618.1 | 617.6 | 616.7 | 605.9 | 593.4 | 590.1 | 593.4 | 605.9 |
| 37.5° | 553.8 | 554.7 | 568.0 | 586.3 | 588.8 | 585.0 | 566.7 | 553.3 | 552.5 | 553.3 | 566.7 |
| 40° | 517.1 | 516.3 | 527.9 | 549.2 | 557.1 | 548.3 | 526.2 | 514.5 | 515.3 | 514.5 | 526.2 |
| 42.5° | 482.1 | 478.7 | 486.7 | 514.2 | 522.1 | 513.3 | 485.3 | 477.0 | 480.3 | 477.0 | 485.3 |
| 45° | 447.4 | 443.3 | 445.8 | 470.8 | 486.2 | 469.8 | 444.0 | 441.9 | 446.1 | 441.9 | 444.0 |
| 47.5° | 419.0 | 408.2 | 405.7 | 426.9 | 447.8 | 426.5 | 403.9 | 406.9 | 417.7 | 406.9 | 403.9 |
| 50° | 384.0 | 378.2 | 369.8 | 385.2 | 403.1 | 384.3 | 368.1 | 376.4 | 382.7 | 376.4 | 368.1 |
| 52.5° | 351.5 | 349.0 | 336.8 | 343.4 | 351.4 | 342.7 | 335.5 | 347.2 | 350.2 | 347.2 | 335.5 |
| 55° | 320.9 | 316.8 | 303.4 | 301.3 | 295.9 | 300.5 | 302.2 | 315.5 | 320.1 | 315.5 | 302.2 |
| 57.5° | 292.5 | 286.7 | 268.4 | 261.3 | 251.7 | 260.4 | 267.1 | 285.4 | 291.7 | 285.4 | 267.1 |
| 60° | 260.4 | 255.4 | 236.3 | 218.3 | 210.8 | 217.9 | 235.4 | 254.6 | 260.0 | 254.6 | 235.4 |
| 62.5° | 230.4 | 222.0 | 198.7 | 181.6 | 179.5 | 181.1 | 197.9 | 221.2 | 230.0 | 221.2 | 197.9 |
| 65° | 199.9 | 187.4 | 167.4 | 150.7 | 153.6 | 150.3 | 167.0 | 187.0 | 199.9 | 187.0 | 167.0 |
| 67.5° | 167.4 | 156.5 | 139.0 | 123.6 | 130.3 | 123.6 | 138.6 | 156.1 | 167.4 | 156.1 | 138.6 |
| 70° | 141.1 | 127.8 | 113.6 | 101.9 | 109.4 | 101.9 | 113.6 | 128.1 | 141.5 | 128.1 | 113.6 |
| 72.5° | 114.4 | 102.7 | 91.0 | 83.5 | 88.9 | 83.0 | 91.0 | 103.1 | 115.2 | 103.1 | 91.0 |
| 75° | 91.9 | 81.0 | 71.4 | 65.5 | 73.9 | 65.5 | 71.9 | 81.5 | 93.1 | 81.5 | 71.9 |
| 77.5° | 79.6 | 67.0 | 53.8 | 52.1 | 58.8 | 52.1 | 54.4 | 65.6 | 77.7 | 65.6 | 54.4 |
| 80° | 72.1 | 62.2 | 42.6 | 38.8 | 43.0 | 38.8 | 41.8 | 55.1 | 63.6 | 55.1 | 41.8 |
| 82.5° | 70.9 | 63.6 | 41.3 | 28.0 | 30.5 | 28.0 | 36.0 | 47.7 | 54.2 | 47.7 | 36.0 |
| 85° | 74.6 | 70.2 | 45.1 | 21.7 | 17.1 | 21.0 | 32.4 | 43.2 | 45.9 | 43.2 | 32.4 |
| 87.5° | 82.9 | 81.5 | 53.8 | 23.5 | 4.1 | 17.2 | 28.6 | 39.2 | 37.4 | 39.2 | 28.6 |
| 90° | 94.3 | 93.3 | 65.5 | 27.7 | 0.4 | 11.0 | 21.7 | 31.1 | 28.1 | 31.1 | 21.7 |
| 92.5° | 109.6 | 106.8 | 77.7 | 35.6 | 7.1 | 5.1 | 17.2 | 25.1 | 23.0 | 25.1 | 17.2 |
| 95° | 123.4 | 120.8 | 90.8 | 46.8 | 17.7 | 2.6 | 11.4 | 18.5 | 18.9 | 18.5 | 11.4 |
| 97.5° | 138.7 | 134.9 | 104.4 | 62.6 | 32.2 | 6.1 | 6.8 | 13.5 | 15.1 | 13.5 | 6.8 |
| 100° | 150.1 | 147.1 | 120.9 | 81.6 | 49.0 | 15.4 | 3.9 | 8.5 | 11.0 | 8.5 | 3.9 |
| 102.5° | 170.3 | 164.1 | 139.0 | 99.8 | 67.0 | 28.2 | 7.4 | 5.2 | 6.0 | 5.2 | 7.4 |
| 105° | 189.8 | 183.5 | 160.7 | 118.6 | 87.8 | 45.4 | 18.0 | 6.1 | 3.9 | 6.1 | 18.0 |
| 107.5° | 208.7 | 204.2 | 180.1 | 138.1 | 109.9 | 65.2 | 33.0 | 17.2 | 11.0 | 17.2 | 33.0 |
| 110° | 230.8 | 225.5 | 199.0 | 157.6 | 132.9 | 86.5 | 50.2 | 31.3 | 24.2 | 31.3 | 50.2 |



TEST NUMBER: P392494

CATALOG NUMBER: MWL-2-18-23-UNV-L935-EDD

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° | 202.5° | 225° |
|--------|-------|-------|-------|-------|-------|--------|-------|--------|-------|--------|-------|
| 112.5° | 252.0 | 248.0 | 216.7 | 177.8 | 156.6 | 109.4 | 71.4 | 49.0 | 42.3 | 49.0 | 71.4 |
| 115° | 269.1 | 266.1 | 237.0 | 196.8 | 178.7 | 135.5 | 94.9 | 69.6 | 62.6 | 69.6 | 94.9 |
| 117.5° | 286.4 | 285.9 | 252.0 | 216.2 | 205.2 | 158.9 | 116.5 | 91.3 | 82.8 | 91.3 | 116.5 |
| 120° | 308.0 | 304.5 | 273.5 | 236.5 | 231.3 | 184.4 | 141.1 | 115.1 | 106.7 | 115.1 | 141.1 |
| 122.5° | 323.0 | 320.7 | 291.2 | 255.0 | 255.0 | 209.5 | 164.1 | 138.0 | 129.3 | 138.0 | 164.1 |
| 125° | 336.7 | 335.8 | 304.5 | 273.5 | 280.6 | 233.0 | 189.7 | 163.3 | 153.5 | 163.3 | 189.7 |
| 127.5° | 349.0 | 350.4 | 321.7 | 293.9 | 306.7 | 256.8 | 214.9 | 185.8 | 175.6 | 185.8 | 214.9 |
| 130° | 359.7 | 364.1 | 338.0 | 312.5 | 331.4 | 282.8 | 237.4 | 208.3 | 201.6 | 208.3 | 237.4 |
| 132.5° | 380.4 | 377.8 | 354.8 | 331.4 | 357.9 | 306.7 | 261.2 | 230.7 | 223.2 | 230.7 | 261.2 |
| 135° | 391.0 | 391.8 | 369.3 | 347.7 | 382.6 | 330.5 | 283.7 | 253.7 | 246.2 | 253.7 | 283.7 |
| 137.5° | 403.8 | 401.2 | 380.9 | 367.6 | 405.6 | 353.4 | 305.7 | 277.9 | 266.0 | 277.9 | 305.7 |
| 140° | 413.1 | 412.6 | 395.9 | 385.3 | 430.2 | 376.0 | 328.2 | 300.0 | 289.0 | 300.0 | 328.2 |
| 142.5° | 422.7 | 425.4 | 410.8 | 404.6 | 454.9 | 399.8 | 352.6 | 321.7 | 311.1 | 321.7 | 352.6 |
| 145° | 430.2 | 435.9 | 426.6 | 428.9 | 478.4 | 426.4 | 374.6 | 343.3 | 331.8 | 343.3 | 374.6 |
| 147.5° | 441.3 | 448.8 | 437.7 | 447.0 | 498.7 | 450.5 | 395.8 | 364.9 | 354.7 | 364.9 | 395.8 |
| 150° | 456.3 | 459.8 | 453.2 | 469.9 | 519.5 | 475.7 | 417.4 | 385.6 | 375.5 | 385.6 | 417.4 |
| 152.5° | 468.1 | 472.5 | 465.0 | 496.0 | 535.7 | 499.6 | 441.3 | 406.0 | 394.0 | 406.0 | 441.3 |
| 155° | 480.5 | 482.3 | 477.0 | 521.2 | 553.0 | 522.9 | 460.2 | 428.4 | 417.0 | 428.4 | 460.2 |
| 157.5° | 492.0 | 495.5 | 488.5 | 540.2 | 568.0 | 543.2 | 481.0 | 451.0 | 440.9 | 451.0 | 481.0 |
| 160° | 504.4 | 504.4 | 507.1 | 562.3 | 580.4 | 560.9 | 504.0 | 475.6 | 461.6 | 475.6 | 504.0 |
| 162.5° | 505.7 | 514.1 | 532.2 | 577.7 | 592.2 | 576.3 | 528.7 | 493.3 | 481.0 | 493.3 | 528.7 |
| 165° | 525.2 | 531.8 | 560.5 | 591.3 | 601.4 | 590.1 | 559.2 | 521.6 | 507.9 | 521.6 | 559.2 |
| 167.5° | 545.4 | 560.5 | 583.5 | 606.8 | 610.3 | 602.8 | 582.5 | 556.5 | 544.1 | 556.5 | 582.5 |
| 170° | 577.7 | 591.3 | 602.8 | 612.6 | 617.4 | 613.0 | 597.1 | 584.3 | 575.9 | 584.3 | 597.1 |
| 172.5° | 603.8 | 612.6 | 617.0 | 623.2 | 620.1 | 618.3 | 610.3 | 604.1 | 599.7 | 604.1 | 610.3 |
| 175° | 619.2 | 621.8 | 625.8 | 624.4 | 627.1 | 622.2 | 621.8 | 624.9 | 606.0 | 624.9 | 621.8 |
| 177.5° | 624.9 | 628.9 | 626.6 | 623.5 | 624.0 | 623.1 | 624.0 | 625.8 | 622.3 | 625.8 | 624.0 |
| 180° | 625.8 | 625.8 | 625.8 | 625.8 | 625.8 | 625.8 | 625.8 | 625.8 | 625.8 | 625.8 | 625.8 |



TEST NUMBER: P392494

CATALOG NUMBER: MWL-2-18-23-UNV-L935-EDD

CANDELA DISTRIBUTION (continued):

| | 247.5° | 270° | 292.5° | 315° | 337.5° | 360° |
|--------|--------|-------|--------|-------|--------|-------|
| 0° | 856.8 | 856.8 | 856.8 | 856.8 | 856.8 | 856.8 |
| 2.5° | 852.1 | 852.6 | 852.6 | 853.0 | 857.1 | 847.9 |
| 5° | 849.6 | 843.0 | 849.6 | 850.5 | 852.1 | 845.4 |
| 7.5° | 841.8 | 840.5 | 842.1 | 840.0 | 845.9 | 842.4 |
| 10° | 830.5 | 830.0 | 830.9 | 835.0 | 834.2 | 833.0 |
| 12.5° | 819.6 | 816.6 | 819.6 | 817.1 | 820.9 | 819.6 |
| 15° | 803.3 | 804.9 | 803.8 | 806.3 | 809.1 | 805.1 |
| 17.5° | 786.5 | 786.5 | 786.5 | 787.1 | 790.0 | 788.4 |
| 20° | 765.3 | 766.1 | 765.7 | 767.0 | 769.5 | 769.2 |
| 22.5° | 747.8 | 746.1 | 748.1 | 746.1 | 749.5 | 745.4 |
| 25° | 726.0 | 723.5 | 726.5 | 723.2 | 723.6 | 721.1 |
| 27.5° | 700.6 | 700.2 | 701.1 | 698.2 | 694.5 | 691.1 |
| 30° | 673.1 | 673.5 | 674.0 | 671.9 | 662.7 | 664.4 |
| 32.5° | 646.4 | 647.2 | 647.3 | 637.7 | 629.3 | 624.3 |
| 35° | 616.7 | 617.6 | 618.1 | 607.2 | 594.7 | 591.3 |
| 37.5° | 585.0 | 588.8 | 586.3 | 568.0 | 554.7 | 553.8 |
| 40° | 548.3 | 557.1 | 549.2 | 527.9 | 516.3 | 517.1 |
| 42.5° | 513.3 | 522.1 | 514.2 | 486.7 | 478.7 | 482.1 |
| 45° | 469.8 | 486.2 | 470.8 | 445.8 | 443.3 | 447.4 |
| 47.5° | 426.5 | 447.8 | 426.9 | 405.7 | 408.2 | 419.0 |
| 50° | 384.3 | 403.1 | 385.2 | 369.8 | 378.2 | 384.0 |
| 52.5° | 342.7 | 351.4 | 343.4 | 336.8 | 349.0 | 351.5 |
| 55° | 300.5 | 295.9 | 301.3 | 303.4 | 316.8 | 320.9 |
| 57.5° | 260.4 | 251.7 | 261.3 | 268.4 | 286.7 | 292.5 |
| 60° | 217.9 | 210.8 | 218.3 | 236.3 | 255.4 | 260.4 |
| 62.5° | 181.1 | 179.5 | 181.6 | 198.7 | 222.0 | 230.4 |
| 65° | 150.3 | 153.6 | 150.7 | 167.4 | 187.4 | 199.9 |
| 67.5° | 123.6 | 130.3 | 123.6 | 139.0 | 156.5 | 167.4 |
| 70° | 101.9 | 109.4 | 101.9 | 113.6 | 127.8 | 141.1 |
| 72.5° | 83.0 | 88.9 | 83.5 | 91.0 | 102.7 | 114.4 |
| 75° | 65.5 | 73.9 | 65.5 | 71.4 | 81.0 | 91.9 |
| 77.5° | 52.1 | 58.8 | 52.1 | 53.8 | 67.0 | 79.6 |
| 80° | 38.8 | 43.0 | 38.8 | 42.6 | 62.2 | 72.1 |
| 82.5° | 28.0 | 30.5 | 28.0 | 41.3 | 63.6 | 70.9 |
| 85° | 21.0 | 17.1 | 21.7 | 45.1 | 70.2 | 74.6 |
| 87.5° | 17.2 | 4.1 | 23.5 | 53.8 | 81.5 | 82.9 |
| 90° | 11.0 | 0.4 | 27.7 | 65.5 | 93.3 | 94.3 |
| 92.5° | 5.1 | 7.1 | 35.6 | 77.7 | 106.8 | 109.6 |
| 95° | 2.6 | 17.7 | 46.8 | 90.8 | 120.8 | 123.4 |
| 97.5° | 6.1 | 32.2 | 62.6 | 104.4 | 134.9 | 138.7 |
| 100° | 15.4 | 49.0 | 81.6 | 120.9 | 147.1 | 150.1 |
| 102.5° | 28.2 | 67.0 | 99.8 | 139.0 | 164.1 | 170.3 |
| 105° | 45.4 | 87.8 | 118.6 | 160.7 | 183.5 | 189.8 |
| 107.5° | 65.2 | 109.9 | 138.1 | 180.1 | 204.2 | 208.7 |
| 110° | 86.5 | 132.9 | 157.6 | 199.0 | 225.5 | 230.8 |



TEST NUMBER: P392494

CATALOG NUMBER: MWL-2-18-23-UNV-L935-EDD

CANDELA DISTRIBUTION (continued):

| | 247.5° | 270° | 292.5° | 315° | 337.5° | 360° |
|--------|--------|-------|--------|-------|--------|-------|
| 112.5° | 109.4 | 156.6 | 177.8 | 216.7 | 248.0 | 252.0 |
| 115° | 135.5 | 178.7 | 196.8 | 237.0 | 266.1 | 269.1 |
| 117.5° | 158.9 | 205.2 | 216.2 | 252.0 | 285.9 | 286.4 |
| 120° | 184.4 | 231.3 | 236.5 | 273.5 | 304.5 | 308.0 |
| 122.5° | 209.5 | 255.0 | 255.0 | 291.2 | 320.7 | 323.0 |
| 125° | 233.0 | 280.6 | 273.5 | 304.5 | 335.8 | 336.7 |
| 127.5° | 256.8 | 306.7 | 293.9 | 321.7 | 350.4 | 349.0 |
| 130° | 282.8 | 331.4 | 312.5 | 338.0 | 364.1 | 359.7 |
| 132.5° | 306.7 | 357.9 | 331.4 | 354.8 | 377.8 | 380.4 |
| 135° | 330.5 | 382.6 | 347.7 | 369.3 | 391.8 | 391.0 |
| 137.5° | 353.4 | 405.6 | 367.6 | 380.9 | 401.2 | 403.8 |
| 140° | 376.0 | 430.2 | 385.3 | 395.9 | 412.6 | 413.1 |
| 142.5° | 399.8 | 454.9 | 404.6 | 410.8 | 425.4 | 422.7 |
| 145° | 426.4 | 478.4 | 428.9 | 426.6 | 435.9 | 430.2 |
| 147.5° | 450.5 | 498.7 | 447.0 | 437.7 | 448.8 | 441.3 |
| 150° | 475.7 | 519.5 | 469.9 | 453.2 | 459.8 | 456.3 |
| 152.5° | 499.6 | 535.7 | 496.0 | 465.0 | 472.5 | 468.1 |
| 155° | 522.9 | 553.0 | 521.2 | 477.0 | 482.3 | 480.5 |
| 157.5° | 543.2 | 568.0 | 540.2 | 488.5 | 495.5 | 492.0 |
| 160° | 560.9 | 580.4 | 562.3 | 507.1 | 504.4 | 504.4 |
| 162.5° | 576.3 | 592.2 | 577.7 | 532.2 | 514.1 | 505.7 |
| 165° | 590.1 | 601.4 | 591.3 | 560.5 | 531.8 | 525.2 |
| 167.5° | 602.8 | 610.3 | 606.8 | 583.5 | 560.5 | 545.4 |
| 170° | 613.0 | 617.4 | 612.6 | 602.8 | 591.3 | 577.7 |
| 172.5° | 618.3 | 620.1 | 623.2 | 617.0 | 612.6 | 603.8 |
| 175° | 622.2 | 627.1 | 624.4 | 625.8 | 621.8 | 619.2 |
| 177.5° | 623.1 | 624.0 | 623.5 | 626.6 | 628.9 | 624.9 |
| 180° | 625.8 | 625.8 | 625.8 | 625.8 | 625.8 | 625.8 |

(END OF REPORT)