

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: P392507

Luminaire Tested: **MWL-2-22-17-UNV-L940-EDD**

Issue Date: 12/2/2019

**Test Information**

Test Method: LM-79-08  
Report Number: P392507  
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-2-22-17-UNV-L940-EDD  
Description: MWL 2FT MEDICAL LED FIXTURE  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

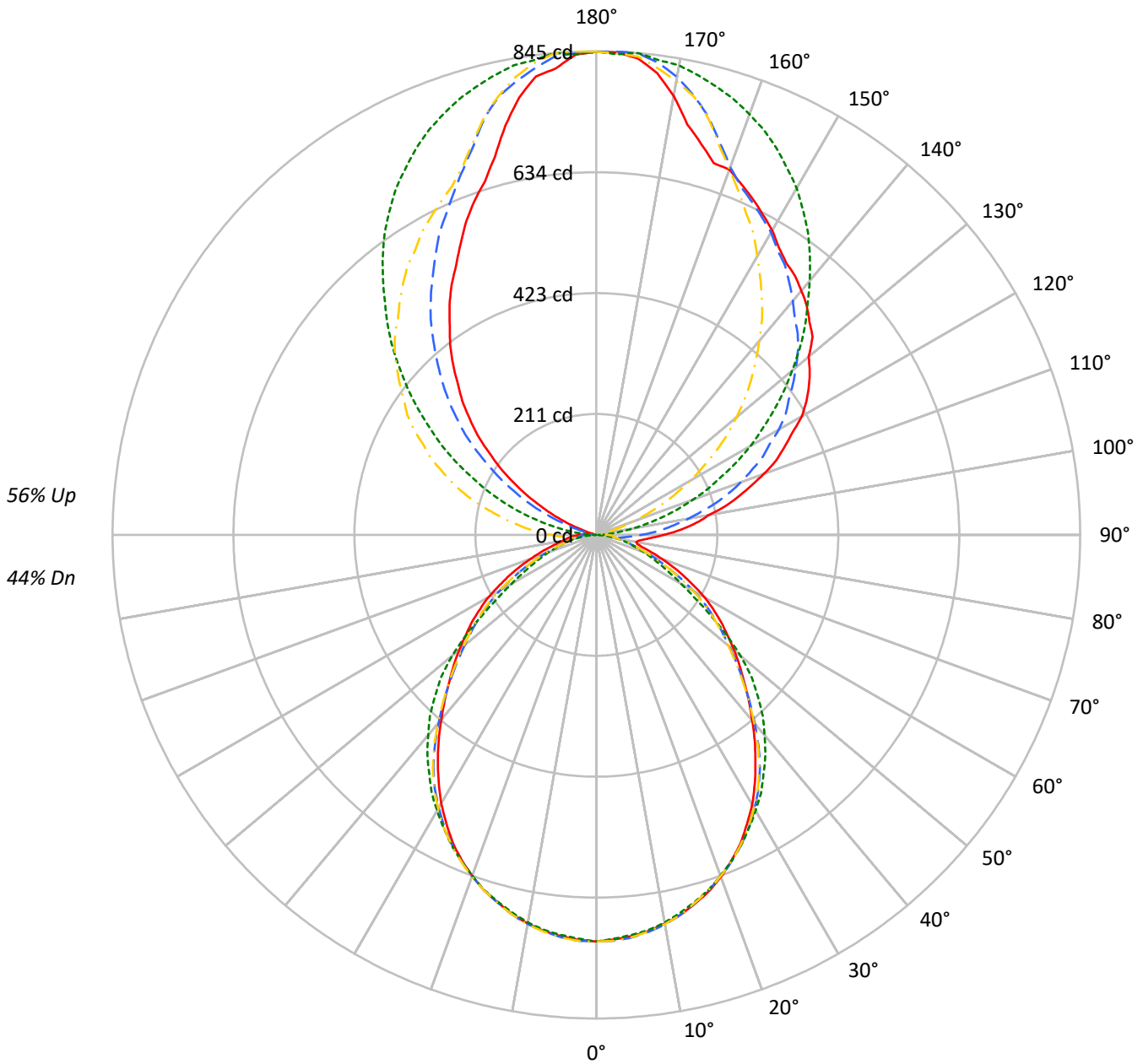
Lumens per Lamp: N/A  
Luminaire Lumens: 3625.4 lumens  
Efficiency: N/A  
Efficacy: 94.0 lumens/watt  
Spacing Criteria (0/90/45): 1.15 / 1.17 / 1.24  
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 2' x H: 0.42')  
CIE Type: General Diffuse

Input Watts (W): 38.582  
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: P392507  
CATALOG NUMBER: MWL-2-22-17-UNV-L940-EDD

### Luminous Intensity Polar Plot



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



TEST NUMBER: P392507

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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 | 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  | 89  | 85  | 88 | 85 | 82 | 79 | 71 | 68 | 66 | 57 | 56 | 54 | 45 | 44 | 43 | 38 |    |    |    |   |
| 2   | 88  | 81  | 75  | 70  | 81 | 75 | 69 | 65 | 62 | 59 | 55 | 51 | 48 | 46 | 40 | 39 | 37 | 32 |    |    |    |   |
| 3   | 81  | 72  | 65  | 59  | 74 | 66 | 60 | 55 | 55 | 51 | 47 | 45 | 42 | 39 | 36 | 34 | 32 | 28 |    |    |    |   |
| 4   | 74  | 64  | 56  | 50  | 68 | 59 | 52 | 47 | 49 | 44 | 40 | 41 | 37 | 34 | 32 | 30 | 28 | 24 |    |    |    |   |
| 5   | 68  | 57  | 49  | 43  | 62 | 52 | 45 | 40 | 44 | 39 | 35 | 37 | 33 | 30 | 29 | 27 | 24 | 21 |    |    |    |   |
| 6   | 63  | 51  | 43  | 37  | 57 | 47 | 40 | 35 | 40 | 35 | 31 | 33 | 29 | 26 | 27 | 24 | 22 | 19 |    |    |    |   |
| 7   | 58  | 46  | 38  | 33  | 53 | 43 | 36 | 31 | 36 | 31 | 27 | 30 | 26 | 23 | 25 | 22 | 19 | 17 |    |    |    |   |
| 8   | 54  | 42  | 34  | 29  | 49 | 39 | 32 | 27 | 33 | 28 | 24 | 28 | 24 | 21 | 23 | 20 | 17 | 15 |    |    |    |   |
| 9   | 50  | 38  | 31  | 26  | 46 | 36 | 29 | 25 | 30 | 25 | 22 | 25 | 22 | 19 | 21 | 18 | 16 | 14 |    |    |    |   |
| 10  | 47  | 35  | 28  | 23  | 43 | 33 | 26 | 22 | 28 | 23 | 19 | 24 | 20 | 17 | 19 | 16 | 14 | 12 |    |    |    |   |

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

|     | 0°   | 90°  | 180° | 270° |
|-----|------|------|------|------|
| 0°  | 9175 | 9175 | 9175 | 9175 |
| 5°  | 8963 | 8366 | 8963 | 8366 |
| 10° | 8724 | 7666 | 8724 | 7666 |
| 15° | 8445 | 6999 | 8422 | 6999 |
| 20° | 8125 | 6387 | 8101 | 6387 |
| 25° | 7730 | 5814 | 7708 | 5814 |
| 30° | 7244 | 5260 | 7212 | 5260 |
| 35° | 6664 | 4720 | 6640 | 4720 |
| 40° | 6075 | 4187 | 6041 | 4187 |
| 45° | 5522 | 3639 | 5495 | 3639 |
| 50° | 5058 | 3012 | 5031 | 3012 |
| 55° | 4622 | 2230 | 4601 | 2230 |
| 60° | 4144 | 1620 | 4135 | 1620 |
| 65° | 3522 | 1198 | 3522 | 1198 |
| 70° | 2894 | 894  | 2911 | 894  |
| 75° | 2336 | 632  | 2387 | 632  |
| 80° | 2414 | 414  | 2025 | 414  |
| 85° | 3739 | 181  | 2043 | 181  |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 66.8   | 1.8       |
| 10°-20°   | 187.6  | 5.2       |
| 20°-30°   | 274.4  | 7.6       |
| 30°-40°   | 309.7  | 8.5       |
| 40°-50°   | 287.5  | 7.9       |
| 50°-60°   | 226.0  | 6.2       |
| 60°-70°   | 142.9  | 3.9       |
| 70°-80°   | 71.5   | 2.0       |
| 80°-90°   | 45.2   | 1.2       |
| 90°-100°  | 67.8   | 1.9       |
| 100°-110° | 130.1  | 3.6       |
| 110°-120° | 224.2  | 6.2       |
| 120°-130° | 304.4  | 8.4       |
| 130°-140° | 347.3  | 9.6       |
| 140°-150° | 346.8  | 9.6       |
| 150°-160° | 302.0  | 8.3       |
| 160°-170° | 212.3  | 5.9       |
| 170°-180° | 79.1   | 2.2       |
| 0°-30°    | 528.7  | 14.6      |
| 0°-40°    | 838.4  | 23.1      |
| 0°-60°    | 1351.9 | 37.3      |
| 0°-90°    | 1611.5 | 44.4      |
| 90°-120°  | 422.1  | 11.6      |
| 90°-150°  | 1420.5 | 39.2      |
| 90°-180°  | 2014.0 | 55.6      |
| 0°-180°   | 3625.4 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°  | 90° | 180° | 270° | 360° | Flux |
|------|-----|-----|------|------|------|------|
| 0°   | 710 | 710 | 710  | 710  | 710  |      |
| 5°   | 704 | 702 | 704  | 702  | 704  | 67   |
| 15°  | 667 | 664 | 665  | 664  | 667  | 188  |
| 25°  | 595 | 598 | 593  | 598  | 595  | 273  |
| 35°  | 484 | 509 | 482  | 509  | 484  | 303  |
| 45°  | 365 | 398 | 364  | 398  | 365  | 283  |
| 55°  | 266 | 240 | 265  | 240  | 266  | 238  |
| 65°  | 167 | 123 | 167  | 123  | 167  | 166  |
| 75°  | 83  | 60  | 85   | 60   | 83   | 93   |
| 85°  | 85  | 15  | 47   | 15   | 85   | 67   |
| 90°  | 117 | 1   | 28   | 1    | 117  | 65   |
| 95°  | 159 | 24  | 18   | 24   | 159  | 139  |
| 105° | 256 | 118 | 5    | 118  | 256  | 270  |
| 115° | 362 | 241 | 83   | 241  | 362  | 359  |
| 125° | 453 | 378 | 206  | 378  | 453  | 405  |
| 135° | 526 | 515 | 331  | 515  | 526  | 406  |
| 145° | 579 | 644 | 446  | 644  | 579  | 365  |
| 155° | 647 | 745 | 561  | 745  | 647  | 298  |
| 165° | 707 | 811 | 684  | 811  | 707  | 201  |
| 175° | 836 | 845 | 818  | 845  | 836  | 78   |
| 180° | 844 | 844 | 844  | 844  | 844  |      |



TEST NUMBER: P392507

CATALOG NUMBER: MWL-2-22-17-UNV-L940-EDD

**CANDELA DISTRIBUTION (FULL):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   | 112.5° | 135°  | 157.5° | 180°  | 202.5° | 225°  |
|--------|-------|-------|-------|-------|-------|--------|-------|--------|-------|--------|-------|
| 0°     | 710.3 | 710.3 | 710.3 | 710.3 | 710.3 | 710.3  | 710.3 | 710.3  | 710.3 | 710.3  | 710.3 |
| 2.5°   | 707.6 | 708.7 | 709.9 | 707.8 | 706.0 | 707.2  | 709.9 | 708.7  | 708.2 | 708.7  | 709.9 |
| 5°     | 703.9 | 705.1 | 706.3 | 703.6 | 701.7 | 703.6  | 705.7 | 705.1  | 703.9 | 705.1  | 705.7 |
| 7.5°   | 698.2 | 699.4 | 699.4 | 698.1 | 696.3 | 697.5  | 698.7 | 698.7  | 698.2 | 698.7  | 698.7 |
| 10°    | 689.6 | 691.2 | 691.2 | 689.3 | 687.5 | 688.7  | 690.5 | 690.0  | 689.6 | 690.0  | 690.5 |
| 12.5°  | 679.9 | 680.2 | 679.6 | 677.8 | 676.3 | 677.8  | 679.6 | 679.0  | 678.7 | 679.0  | 679.6 |
| 15°    | 666.8 | 666.6 | 665.9 | 665.0 | 663.6 | 664.5  | 665.4 | 665.4  | 665.0 | 665.4  | 665.4 |
| 17.5°  | 653.2 | 652.0 | 651.3 | 651.7 | 650.8 | 651.7  | 650.8 | 651.3  | 651.3 | 651.3  | 650.8 |
| 20°    | 635.9 | 636.1 | 634.9 | 635.3 | 633.8 | 634.7  | 634.4 | 634.9  | 634.0 | 634.9  | 634.4 |
| 22.5°  | 616.1 | 617.0 | 617.6 | 617.1 | 616.5 | 616.5  | 617.1 | 615.8  | 614.9 | 615.8  | 617.1 |
| 25°    | 595.1 | 596.0 | 598.2 | 598.0 | 598.2 | 597.3  | 597.0 | 594.3  | 593.4 | 594.3  | 597.0 |
| 27.5°  | 569.6 | 573.3 | 576.4 | 577.5 | 577.3 | 577.0  | 575.2 | 571.5  | 567.9 | 571.5  | 575.2 |
| 30°    | 544.1 | 546.8 | 552.3 | 557.2 | 556.3 | 556.0  | 550.6 | 545.1  | 541.7 | 545.1  | 550.6 |
| 32.5°  | 515.0 | 518.6 | 526.8 | 533.5 | 535.1 | 532.4  | 525.1 | 516.2  | 512.6 | 516.2  | 525.1 |
| 35°    | 484.3 | 486.2 | 498.0 | 507.1 | 508.9 | 505.3  | 496.2 | 484.3  | 482.5 | 484.3  | 496.2 |
| 37.5°  | 454.3 | 453.4 | 465.2 | 481.6 | 485.0 | 479.8  | 463.4 | 451.5  | 452.5 | 451.5  | 463.4 |
| 40°    | 423.3 | 421.5 | 430.6 | 451.8 | 456.7 | 450.6  | 428.2 | 419.1  | 420.9 | 419.1  | 428.2 |
| 42.5°  | 394.1 | 392.3 | 396.2 | 420.8 | 430.3 | 419.7  | 394.5 | 390.0  | 391.8 | 390.0  | 394.5 |
| 45°    | 365.3 | 362.5 | 363.4 | 385.3 | 398.4 | 384.1  | 361.1 | 360.8  | 363.5 | 360.8  | 361.1 |
| 47.5°  | 339.7 | 335.2 | 332.5 | 348.3 | 367.4 | 347.7  | 330.1 | 333.5  | 338.0 | 333.5  | 330.1 |
| 50°    | 314.2 | 309.7 | 302.4 | 313.7 | 328.5 | 312.5  | 300.0 | 307.3  | 312.5 | 307.3  | 300.0 |
| 52.5°  | 288.7 | 286.0 | 275.4 | 280.9 | 285.7 | 279.7  | 273.6 | 283.6  | 287.0 | 283.6  | 273.6 |
| 55°    | 266.3 | 262.7 | 249.9 | 247.5 | 240.5 | 246.3  | 248.1 | 260.8  | 265.1 | 260.8  | 248.1 |
| 57.5°  | 241.7 | 239.9 | 224.4 | 213.7 | 201.4 | 212.6  | 222.6 | 238.1  | 240.5 | 238.1  | 222.6 |
| 60°    | 218.3 | 213.7 | 195.5 | 180.4 | 171.3 | 179.8  | 194.3 | 212.6  | 217.8 | 212.6  | 194.3 |
| 62.5°  | 191.0 | 188.2 | 168.2 | 149.4 | 145.1 | 148.8  | 167.0 | 187.0  | 190.4 | 187.0  | 167.0 |
| 65°    | 166.7 | 161.3 | 141.2 | 124.8 | 123.3 | 124.2  | 140.6 | 160.6  | 166.7 | 160.6  | 140.6 |
| 67.5°  | 144.0 | 134.8 | 117.5 | 103.2 | 104.1 | 103.2  | 116.9 | 134.2  | 144.0 | 134.2  | 116.9 |
| 70°    | 120.5 | 110.5 | 96.8  | 85.0  | 88.7  | 85.0   | 96.8  | 111.2  | 121.2 | 111.2  | 96.8  |
| 72.5°  | 101.4 | 89.6  | 78.6  | 69.5  | 72.6  | 69.0   | 78.6  | 90.2   | 102.6 | 90.2   | 78.6  |
| 75°    | 83.2  | 71.3  | 61.7  | 55.3  | 59.9  | 55.3   | 62.2  | 72.0   | 85.0  | 72.0   | 62.2  |
| 77.5°  | 73.3  | 61.0  | 47.1  | 44.4  | 48.0  | 44.4   | 47.7  | 59.2   | 71.0  | 59.2   | 47.7  |
| 80°    | 70.8  | 59.3  | 37.9  | 33.4  | 37.1  | 33.4   | 36.7  | 49.7   | 59.4  | 49.7   | 36.7  |
| 82.5°  | 75.0  | 66.1  | 39.6  | 23.4  | 25.2  | 23.4   | 32.4  | 44.6   | 52.4  | 44.6   | 32.4  |
| 85°    | 85.3  | 77.5  | 48.1  | 19.7  | 15.2  | 18.5   | 30.9  | 41.2   | 46.6  | 41.2   | 30.9  |
| 87.5°  | 99.5  | 95.0  | 60.9  | 25.0  | 3.6   | 16.7   | 26.9  | 37.8   | 38.1  | 37.8   | 26.9  |
| 90°    | 117.3 | 114.0 | 78.7  | 33.9  | 0.6   | 11.2   | 19.7  | 30.0   | 27.9  | 30.0   | 19.7  |
| 92.5°  | 138.9 | 134.5 | 97.9  | 46.8  | 9.6   | 5.7    | 16.4  | 24.2   | 22.1  | 24.2   | 16.4  |
| 95°    | 159.4 | 156.7 | 119.1 | 62.9  | 23.9  | 3.3    | 11.8  | 18.5   | 18.2  | 18.5   | 11.8  |
| 97.5°  | 181.0 | 178.0 | 139.8 | 83.4  | 42.3  | 7.1    | 8.1   | 14.2   | 14.2  | 14.2   | 8.1   |
| 100°   | 199.7 | 198.3 | 163.0 | 109.1 | 65.0  | 19.7   | 5.1   | 11.1   | 12.0  | 11.1   | 5.1   |
| 102.5° | 230.1 | 221.0 | 187.4 | 133.5 | 89.4  | 36.9   | 9.8   | 6.6    | 8.4   | 6.6    | 9.8   |
| 105°   | 255.9 | 247.5 | 216.6 | 160.0 | 118.3 | 61.0   | 24.1  | 8.0    | 5.1   | 8.0    | 24.1  |
| 107.5° | 281.5 | 275.6 | 242.8 | 186.2 | 148.1 | 87.9   | 44.4  | 23.0   | 14.6  | 23.0   | 44.4  |
| 110°   | 311.3 | 304.1 | 268.4 | 212.4 | 179.0 | 116.5  | 67.6  | 42.0   | 32.5  | 42.0   | 67.6  |



TEST NUMBER: P392507

CATALOG NUMBER: MWL-2-22-17-UNV-L940-EDD

**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 22.5° | 45°   | 67.5° | 90°   | 112.5° | 135°  | 157.5° | 180°  | 202.5° | 225°  |
|--------|-------|-------|-------|-------|-------|--------|-------|--------|-------|--------|-------|
| 112.5° | 339.9 | 334.6 | 292.3 | 239.8 | 211.2 | 147.5  | 96.2  | 65.9   | 56.9  | 65.9   | 96.2  |
| 115°   | 362.0 | 359.0 | 319.6 | 265.4 | 241.0 | 182.6  | 127.8 | 93.8   | 83.1  | 93.8   | 127.8 |
| 117.5° | 385.2 | 384.6 | 339.9 | 291.6 | 276.8 | 214.2  | 157.0 | 121.8  | 110.5 | 121.8  | 157.0 |
| 120°   | 414.4 | 409.6 | 367.9 | 317.9 | 310.7 | 247.5  | 189.1 | 154.1  | 142.7 | 154.1  | 189.1 |
| 122.5° | 434.7 | 431.7 | 391.8 | 342.8 | 342.8 | 281.5  | 220.1 | 185.0  | 173.1 | 185.0  | 220.1 |
| 125°   | 453.1 | 451.9 | 409.6 | 367.9 | 377.5 | 313.1  | 254.7 | 218.9  | 205.8 | 218.9  | 254.7 |
| 127.5° | 469.8 | 471.6 | 432.9 | 395.3 | 412.6 | 345.3  | 288.6 | 249.4  | 235.6 | 249.4  | 288.6 |
| 130°   | 484.1 | 490.1 | 454.9 | 420.4 | 446.0 | 380.4  | 319.1 | 279.7  | 270.8 | 279.7  | 319.1 |
| 132.5° | 512.1 | 508.5 | 477.5 | 446.0 | 481.7 | 412.6  | 351.2 | 310.1  | 300.0 | 310.1  | 351.2 |
| 135°   | 526.4 | 527.6 | 497.2 | 468.0 | 515.0 | 444.8  | 381.7 | 341.1  | 331.0 | 341.1  | 381.7 |
| 137.5° | 543.7 | 540.1 | 512.7 | 494.8 | 546.0 | 475.8  | 411.4 | 373.9  | 357.8 | 373.9  | 411.4 |
| 140°   | 557.0 | 556.5 | 533.8 | 518.7 | 579.5 | 506.1  | 442.7 | 404.5  | 389.7 | 404.5  | 442.7 |
| 142.5° | 570.2 | 573.8 | 554.1 | 544.8 | 612.8 | 538.3  | 475.5 | 433.8  | 419.5 | 433.8  | 475.5 |
| 145°   | 579.1 | 586.8 | 574.4 | 578.5 | 644.3 | 575.0  | 504.1 | 461.7  | 446.3 | 461.7  | 504.1 |
| 147.5° | 594.0 | 604.2 | 589.3 | 601.8 | 671.8 | 606.5  | 532.6 | 491.0  | 477.2 | 491.0  | 532.6 |
| 150°   | 614.3 | 619.1 | 610.1 | 633.9 | 699.7 | 641.7  | 561.9 | 519.0  | 505.3 | 519.0  | 561.9 |
| 152.5° | 630.4 | 636.3 | 626.2 | 669.1 | 721.8 | 673.8  | 594.0 | 546.4  | 530.3 | 546.4  | 594.0 |
| 155°   | 647.1 | 649.4 | 642.3 | 703.1 | 745.0 | 705.5  | 619.6 | 576.7  | 561.2 | 576.7  | 619.6 |
| 157.5° | 662.6 | 667.3 | 659.0 | 728.7 | 765.3 | 732.9  | 648.9 | 607.2  | 593.4 | 607.2  | 648.9 |
| 160°   | 679.2 | 679.2 | 684.0 | 757.6 | 782.0 | 755.8  | 679.9 | 640.5  | 621.5 | 640.5  | 679.9 |
| 162.5° | 681.0 | 692.3 | 717.9 | 778.4 | 798.0 | 776.6  | 713.2 | 664.4  | 647.6 | 664.4  | 713.2 |
| 165°   | 707.2 | 717.4 | 756.1 | 796.8 | 810.6 | 795.1  | 754.3 | 703.6  | 684.0 | 703.6  | 754.3 |
| 167.5° | 734.6 | 756.1 | 786.2 | 817.7 | 822.4 | 812.3  | 785.0 | 750.7  | 732.9 | 750.7  | 785.0 |
| 170°   | 778.4 | 797.8 | 812.3 | 826.4 | 832.9 | 827.0  | 804.6 | 788.3  | 776.0 | 788.3  | 804.6 |
| 172.5° | 813.5 | 825.5 | 831.5 | 840.7 | 836.5 | 834.1  | 822.4 | 814.2  | 808.2 | 814.2  | 822.4 |
| 175°   | 835.6 | 838.0 | 844.2 | 841.3 | 844.9 | 838.3  | 838.9 | 842.1  | 817.7 | 842.1  | 838.9 |
| 177.5° | 843.3 | 847.5 | 845.4 | 840.1 | 840.7 | 839.5  | 841.9 | 843.3  | 839.8 | 843.3  | 841.9 |
| 180°   | 844.2 | 844.2 | 844.2 | 844.2 | 844.2 | 844.2  | 844.2 | 844.2  | 844.2 | 844.2  | 844.2 |



TEST NUMBER: P392507

CATALOG NUMBER: MWL-2-22-17-UNV-L940-EDD

**CANDELA DISTRIBUTION (continued):**

|        | 247.5° | 270°  | 292.5° | 315°  | 337.5° | 360°  |
|--------|--------|-------|--------|-------|--------|-------|
| 0°     | 710.3  | 710.3 | 710.3  | 710.3 | 710.3  | 710.3 |
| 2.5°   | 707.2  | 706.0 | 707.8  | 709.9 | 708.7  | 707.6 |
| 5°     | 703.6  | 701.7 | 703.6  | 706.3 | 705.1  | 703.9 |
| 7.5°   | 697.5  | 696.3 | 698.1  | 699.4 | 699.4  | 698.2 |
| 10°    | 688.7  | 687.5 | 689.3  | 691.2 | 691.2  | 689.6 |
| 12.5°  | 677.8  | 676.3 | 677.8  | 679.6 | 680.2  | 679.9 |
| 15°    | 664.5  | 663.6 | 665.0  | 665.9 | 666.6  | 666.8 |
| 17.5°  | 651.7  | 650.8 | 651.7  | 651.3 | 652.0  | 653.2 |
| 20°    | 634.7  | 633.8 | 635.3  | 634.9 | 636.1  | 635.9 |
| 22.5°  | 616.5  | 616.5 | 617.1  | 617.6 | 617.0  | 616.1 |
| 25°    | 597.3  | 598.2 | 598.0  | 598.2 | 596.0  | 595.1 |
| 27.5°  | 577.0  | 577.3 | 577.5  | 576.4 | 573.3  | 569.6 |
| 30°    | 556.0  | 556.3 | 557.2  | 552.3 | 546.8  | 544.1 |
| 32.5°  | 532.4  | 535.1 | 533.5  | 526.8 | 518.6  | 515.0 |
| 35°    | 505.3  | 508.9 | 507.1  | 498.0 | 486.2  | 484.3 |
| 37.5°  | 479.8  | 485.0 | 481.6  | 465.2 | 453.4  | 454.3 |
| 40°    | 450.6  | 456.7 | 451.8  | 430.6 | 421.5  | 423.3 |
| 42.5°  | 419.7  | 430.3 | 420.8  | 396.2 | 392.3  | 394.1 |
| 45°    | 384.1  | 398.4 | 385.3  | 363.4 | 362.5  | 365.3 |
| 47.5°  | 347.7  | 367.4 | 348.3  | 332.5 | 335.2  | 339.7 |
| 50°    | 312.5  | 328.5 | 313.7  | 302.4 | 309.7  | 314.2 |
| 52.5°  | 279.7  | 285.7 | 280.9  | 275.4 | 286.0  | 288.7 |
| 55°    | 246.3  | 240.5 | 247.5  | 249.9 | 262.7  | 266.3 |
| 57.5°  | 212.6  | 201.4 | 213.7  | 224.4 | 239.9  | 241.7 |
| 60°    | 179.8  | 171.3 | 180.4  | 195.5 | 213.7  | 218.3 |
| 62.5°  | 148.8  | 145.1 | 149.4  | 168.2 | 188.2  | 191.0 |
| 65°    | 124.2  | 123.3 | 124.8  | 141.2 | 161.3  | 166.7 |
| 67.5°  | 103.2  | 104.1 | 103.2  | 117.5 | 134.8  | 144.0 |
| 70°    | 85.0   | 88.7  | 85.0   | 96.8  | 110.5  | 120.5 |
| 72.5°  | 69.0   | 72.6  | 69.5   | 78.6  | 89.6   | 101.4 |
| 75°    | 55.3   | 59.9  | 55.3   | 61.7  | 71.3   | 83.2  |
| 77.5°  | 44.4   | 48.0  | 44.4   | 47.1  | 61.0   | 73.3  |
| 80°    | 33.4   | 37.1  | 33.4   | 37.9  | 59.3   | 70.8  |
| 82.5°  | 23.4   | 25.2  | 23.4   | 39.6  | 66.1   | 75.0  |
| 85°    | 18.5   | 15.2  | 19.7   | 48.1  | 77.5   | 85.3  |
| 87.5°  | 16.7   | 3.6   | 25.0   | 60.9  | 95.0   | 99.5  |
| 90°    | 11.2   | 0.6   | 33.9   | 78.7  | 114.0  | 117.3 |
| 92.5°  | 5.7    | 9.6   | 46.8   | 97.9  | 134.5  | 138.9 |
| 95°    | 3.3    | 23.9  | 62.9   | 119.1 | 156.7  | 159.4 |
| 97.5°  | 7.1    | 42.3  | 83.4   | 139.8 | 178.0  | 181.0 |
| 100°   | 19.7   | 65.0  | 109.1  | 163.0 | 198.3  | 199.7 |
| 102.5° | 36.9   | 89.4  | 133.5  | 187.4 | 221.0  | 230.1 |
| 105°   | 61.0   | 118.3 | 160.0  | 216.6 | 247.5  | 255.9 |
| 107.5° | 87.9   | 148.1 | 186.2  | 242.8 | 275.6  | 281.5 |
| 110°   | 116.5  | 179.0 | 212.4  | 268.4 | 304.1  | 311.3 |





TEST NUMBER: P392507

CATALOG NUMBER: MWL-2-22-17-UNV-L940-EDD

**CANDELA DISTRIBUTION (continued):**

|        | 247.5° | 270°  | 292.5° | 315°  | 337.5° | 360°  |
|--------|--------|-------|--------|-------|--------|-------|
| 112.5° | 147.5  | 211.2 | 239.8  | 292.3 | 334.6  | 339.9 |
| 115°   | 182.6  | 241.0 | 265.4  | 319.6 | 359.0  | 362.0 |
| 117.5° | 214.2  | 276.8 | 291.6  | 339.9 | 384.6  | 385.2 |
| 120°   | 247.5  | 310.7 | 317.9  | 367.9 | 409.6  | 414.4 |
| 122.5° | 281.5  | 342.8 | 342.8  | 391.8 | 431.7  | 434.7 |
| 125°   | 313.1  | 377.5 | 367.9  | 409.6 | 451.9  | 453.1 |
| 127.5° | 345.3  | 412.6 | 395.3  | 432.9 | 471.6  | 469.8 |
| 130°   | 380.4  | 446.0 | 420.4  | 454.9 | 490.1  | 484.1 |
| 132.5° | 412.6  | 481.7 | 446.0  | 477.5 | 508.5  | 512.1 |
| 135°   | 444.8  | 515.0 | 468.0  | 497.2 | 527.6  | 526.4 |
| 137.5° | 475.8  | 546.0 | 494.8  | 512.7 | 540.1  | 543.7 |
| 140°   | 506.1  | 579.5 | 518.7  | 533.8 | 556.5  | 557.0 |
| 142.5° | 538.3  | 612.8 | 544.8  | 554.1 | 573.8  | 570.2 |
| 145°   | 575.0  | 644.3 | 578.5  | 574.4 | 586.8  | 579.1 |
| 147.5° | 606.5  | 671.8 | 601.8  | 589.3 | 604.2  | 594.0 |
| 150°   | 641.7  | 699.7 | 633.9  | 610.1 | 619.1  | 614.3 |
| 152.5° | 673.8  | 721.8 | 669.1  | 626.2 | 636.3  | 630.4 |
| 155°   | 705.5  | 745.0 | 703.1  | 642.3 | 649.4  | 647.1 |
| 157.5° | 732.9  | 765.3 | 728.7  | 659.0 | 667.3  | 662.6 |
| 160°   | 755.8  | 782.0 | 757.6  | 684.0 | 679.2  | 679.2 |
| 162.5° | 776.6  | 798.0 | 778.4  | 717.9 | 692.3  | 681.0 |
| 165°   | 795.1  | 810.6 | 796.8  | 756.1 | 717.4  | 707.2 |
| 167.5° | 812.3  | 822.4 | 817.7  | 786.2 | 756.1  | 734.6 |
| 170°   | 827.0  | 832.9 | 826.4  | 812.3 | 797.8  | 778.4 |
| 172.5° | 834.1  | 836.5 | 840.7  | 831.5 | 825.5  | 813.5 |
| 175°   | 838.3  | 844.9 | 841.3  | 844.2 | 838.0  | 835.6 |
| 177.5° | 839.5  | 840.7 | 840.1  | 845.4 | 847.5  | 843.3 |
| 180°   | 844.2  | 844.2 | 844.2  | 844.2 | 844.2  | 844.2 |

(END OF REPORT)