

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: P392695

Luminaire Tested: **MWL-4-55-60-UNV-L935-EDD**

Issue Date: 12/2/2019

**Test Information**

Test Method: LM-79-08  
Report Number: P392695  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-565-1 &  
Test Lab: INNOVATION CENTER  
Issue Date: 12/2/2019  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: MWL-4-55-60-UNV-L935-EDD  
Description: MWL 4FT MEDICAL LED FIXTURE  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

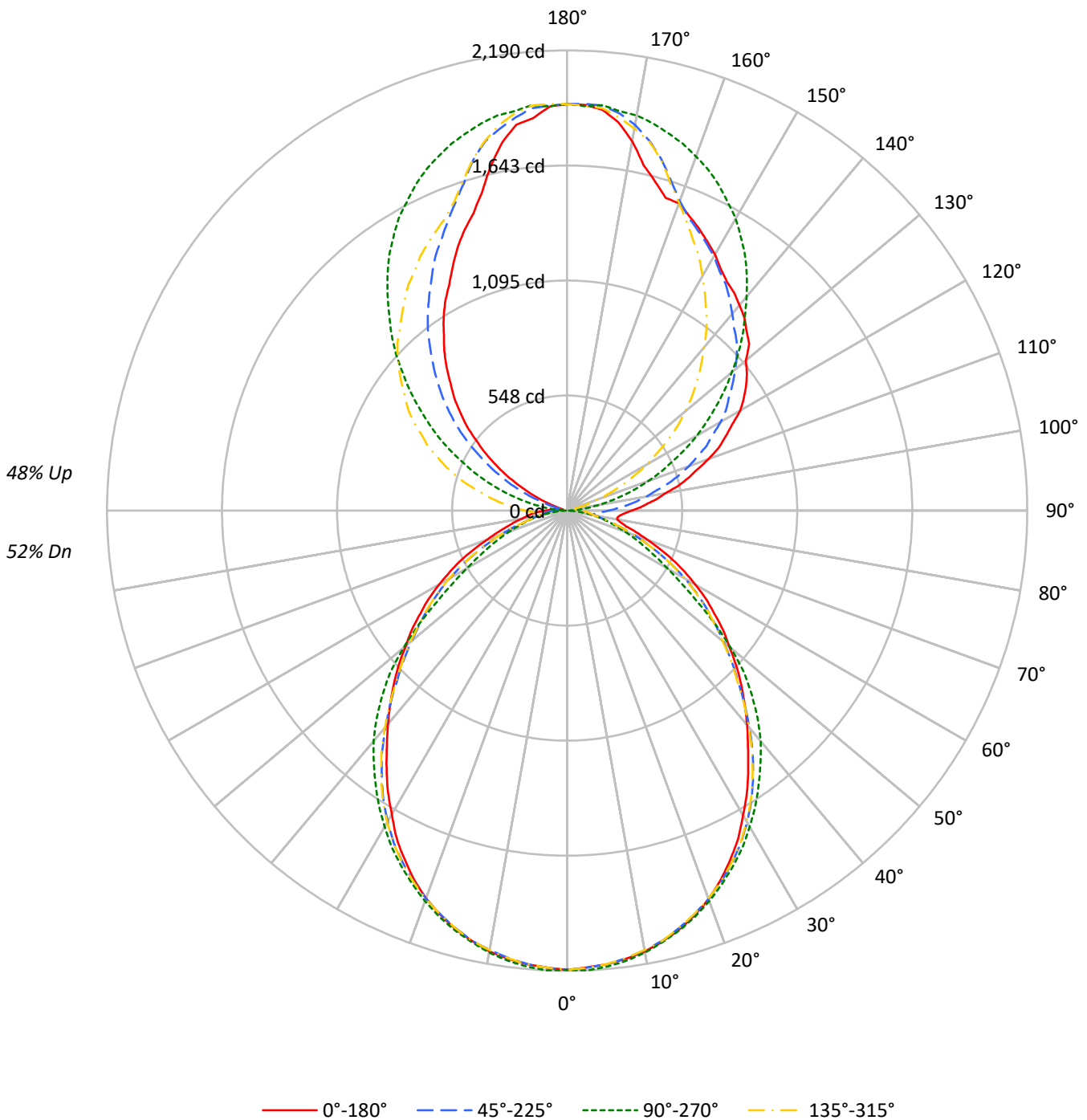
Lumens per Lamp: N/A  
Luminaire Lumens: 9735.2 lumens  
Efficiency: N/A  
Efficacy: 74.6 lumens/watt  
Spacing Criteria (0/90/45): 1.15 / 1.19 / 1.25  
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.42')  
CIE Type: General Diffuse

Input Watts (W): 130.492  
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: P392695  
CATALOG NUMBER: MWL-4-55-60-UNV-L935-EDD

### Luminous Intensity Polar Plot





TEST NUMBER: P392695

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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   | 98  | 94  | 90  | 87  | 91  | 87  | 84  | 81  | 74 | 72 | 70 | 63 | 61 | 59 | 52 | 51 | 50 | 44 |
| 2   | 90  | 83  | 77  | 71  | 83  | 77  | 71  | 67  | 66 | 62 | 58 | 55 | 53 | 50 | 46 | 44 | 42 | 38 |
| 3   | 82  | 73  | 66  | 60  | 76  | 68  | 61  | 56  | 58 | 53 | 49 | 49 | 46 | 43 | 41 | 38 | 36 | 32 |
| 4   | 75  | 65  | 57  | 51  | 70  | 60  | 53  | 48  | 52 | 47 | 42 | 44 | 40 | 37 | 37 | 34 | 32 | 28 |
| 5   | 69  | 58  | 50  | 44  | 64  | 54  | 47  | 42  | 47 | 41 | 37 | 40 | 36 | 32 | 33 | 30 | 28 | 25 |
| 6   | 64  | 52  | 44  | 38  | 59  | 49  | 41  | 36  | 42 | 36 | 32 | 36 | 32 | 28 | 30 | 27 | 25 | 22 |
| 7   | 59  | 47  | 39  | 34  | 55  | 44  | 37  | 32  | 38 | 33 | 29 | 33 | 29 | 25 | 28 | 25 | 22 | 19 |
| 8   | 55  | 43  | 35  | 30  | 51  | 40  | 33  | 28  | 35 | 29 | 25 | 30 | 26 | 23 | 26 | 22 | 20 | 17 |
| 9   | 51  | 39  | 32  | 27  | 48  | 37  | 30  | 25  | 32 | 27 | 23 | 28 | 23 | 20 | 24 | 20 | 18 | 16 |
| 10  | 48  | 36  | 29  | 24  | 44  | 34  | 27  | 23  | 30 | 24 | 21 | 26 | 21 | 18 | 22 | 19 | 16 | 14 |

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

|     | 0°    | 90°   | 180°  | 270°  |
|-----|-------|-------|-------|-------|
| 0°  | 14117 | 14117 | 14117 | 14117 |
| 5°  | 13924 | 12988 | 13924 | 12988 |
| 10° | 13718 | 11907 | 13718 | 11907 |
| 15° | 13425 | 10904 | 13398 | 10904 |
| 20° | 13032 | 9967  | 13005 | 9967  |
| 25° | 12472 | 9073  | 12445 | 9073  |
| 30° | 11776 | 8214  | 11737 | 8214  |
| 35° | 11038 | 7371  | 11008 | 7371  |
| 40° | 10326 | 6571  | 10283 | 6571  |
| 45° | 9686  | 5678  | 9652  | 5678  |
| 50° | 8995  | 4655  | 8958  | 4655  |
| 55° | 8380  | 3507  | 8353  | 3507  |
| 60° | 7707  | 2606  | 7691  | 2606  |
| 65° | 6926  | 1975  | 6926  | 1975  |
| 70° | 5955  | 1462  | 5974  | 1462  |
| 75° | 5230  | 1063  | 5304  | 1063  |
| 80° | 5642  | 689   | 5034  | 689   |
| 85° | 8578  | 311   | 5578  | 311   |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 206.0  | 2.1       |
| 10°-20°   | 581.0  | 6.0       |
| 20°-30°   | 852.0  | 8.8       |
| 30°-40°   | 964.9  | 9.9       |
| 40°-50°   | 909.1  | 9.3       |
| 50°-60°   | 727.1  | 7.5       |
| 60°-70°   | 477.7  | 4.9       |
| 70°-80°   | 245.0  | 2.5       |
| 80°-90°   | 138.1  | 1.4       |
| 90°-100°  | 168.4  | 1.7       |
| 100°-110° | 301.8  | 3.1       |
| 110°-120° | 514.3  | 5.3       |
| 120°-130° | 698.6  | 7.2       |
| 130°-140° | 796.7  | 8.2       |
| 140°-150° | 794.7  | 8.2       |
| 150°-160° | 691.9  | 7.1       |
| 160°-170° | 486.7  | 5.0       |
| 170°-180° | 181.3  | 1.9       |
| 0°-30°    | 1639.1 | 16.8      |
| 0°-40°    | 2604.0 | 26.7      |
| 0°-60°    | 4240.1 | 43.6      |
| 0°-90°    | 5101.0 | 52.4      |
| 90°-120°  | 984.5  | 10.1      |
| 90°-150°  | 3274.4 | 33.6      |
| 90°-180°  | 4634.0 | 47.6      |
| 0°-180°   | 9735.2 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 90°  | 180° | 270° | 360° | Flux |
|------|------|------|------|------|------|------|
| 0°   | 2186 | 2186 | 2186 | 2186 | 2186 |      |
| 5°   | 2167 | 2179 | 2167 | 2179 | 2167 | 206  |
| 15°  | 2064 | 2068 | 2060 | 2068 | 2064 | 581  |
| 25°  | 1835 | 1867 | 1831 | 1867 | 1835 | 843  |
| 35°  | 1502 | 1590 | 1498 | 1590 | 1502 | 940  |
| 45°  | 1171 | 1243 | 1167 | 1243 | 1171 | 903  |
| 55°  | 855  | 756  | 852  | 756  | 855  | 767  |
| 65°  | 554  | 406  | 554  | 406  | 554  | 548  |
| 75°  | 291  | 202  | 295  | 202  | 291  | 323  |
| 85°  | 254  | 52   | 165  | 52   | 254  | 205  |
| 90°  | 307  | 2    | 102  | 2    | 307  | 169  |
| 95°  | 385  | 56   | 62   | 56   | 385  | 334  |
| 105° | 596  | 271  | 21   | 271  | 596  | 628  |
| 115° | 831  | 552  | 192  | 552  | 831  | 824  |
| 125° | 1040 | 866  | 473  | 866  | 1040 | 929  |
| 135° | 1208 | 1181 | 760  | 1181 | 1208 | 932  |
| 145° | 1327 | 1477 | 1023 | 1477 | 1327 | 837  |
| 155° | 1482 | 1709 | 1286 | 1709 | 1482 | 684  |
| 165° | 1620 | 1859 | 1567 | 1859 | 1620 | 460  |
| 175° | 1915 | 1936 | 1874 | 1936 | 1915 | 179  |
| 180° | 1934 | 1934 | 1934 | 1934 | 1934 |      |



TEST NUMBER: P392695

CATALOG NUMBER: MWL-4-55-60-UNV-L935-EDD

**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    | 112.5° | 135°   | 157.5° | 180°   | 202.5° | 225°   |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°     | 2185.8 | 2185.8 | 2185.8 | 2185.8 | 2185.8 | 2185.8 | 2185.8 | 2185.8 | 2185.8 | 2185.8 | 2185.8 |
| 2.5°   | 2175.7 | 2182.7 | 2177.0 | 2189.3 | 2190.2 | 2188.0 | 2177.0 | 2182.7 | 2177.2 | 2182.7 | 2177.0 |
| 5°     | 2167.3 | 2173.4 | 2167.7 | 2177.8 | 2178.6 | 2177.8 | 2166.3 | 2173.4 | 2167.3 | 2173.4 | 2166.3 |
| 7.5°   | 2150.9 | 2157.0 | 2148.4 | 2161.7 | 2160.9 | 2160.4 | 2147.2 | 2155.6 | 2150.9 | 2155.6 | 2147.2 |
| 10°    | 2130.2 | 2129.8 | 2124.7 | 2135.8 | 2135.8 | 2134.4 | 2123.3 | 2127.1 | 2130.2 | 2127.1 | 2123.3 |
| 12.5°  | 2099.8 | 2100.1 | 2096.2 | 2104.7 | 2102.5 | 2104.7 | 2096.2 | 2097.5 | 2097.1 | 2097.5 | 2096.2 |
| 15°    | 2063.9 | 2060.3 | 2057.2 | 2069.1 | 2067.8 | 2067.8 | 2055.9 | 2057.6 | 2059.7 | 2057.6 | 2055.9 |
| 17.5°  | 2018.9 | 2017.9 | 2014.0 | 2024.4 | 2025.3 | 2024.4 | 2012.6 | 2016.5 | 2014.8 | 2016.5 | 2012.6 |
| 20°    | 1968.0 | 1967.5 | 1966.5 | 1977.9 | 1978.1 | 1976.4 | 1965.1 | 1964.8 | 1964.0 | 1964.8 | 1965.1 |
| 22.5°  | 1904.8 | 1911.5 | 1912.2 | 1926.1 | 1923.8 | 1924.7 | 1910.8 | 1908.8 | 1902.0 | 1908.8 | 1910.8 |
| 25°    | 1835.2 | 1841.2 | 1852.5 | 1868.4 | 1867.0 | 1867.0 | 1849.8 | 1837.0 | 1831.2 | 1837.0 | 1849.8 |
| 27.5°  | 1762.3 | 1770.8 | 1788.0 | 1808.7 | 1806.8 | 1807.3 | 1785.3 | 1766.7 | 1758.2 | 1766.7 | 1785.3 |
| 30°    | 1674.0 | 1685.1 | 1712.3 | 1739.7 | 1737.3 | 1737.0 | 1708.1 | 1681.0 | 1668.5 | 1681.0 | 1708.1 |
| 32.5°  | 1592.7 | 1601.1 | 1632.5 | 1668.5 | 1666.6 | 1665.7 | 1628.5 | 1595.6 | 1587.1 | 1595.6 | 1628.5 |
| 35°    | 1502.2 | 1510.7 | 1543.0 | 1588.8 | 1589.6 | 1584.5 | 1538.8 | 1506.5 | 1498.1 | 1506.5 | 1538.8 |
| 37.5°  | 1413.2 | 1418.3 | 1450.5 | 1504.8 | 1511.4 | 1500.6 | 1446.3 | 1414.1 | 1409.0 | 1414.1 | 1446.3 |
| 40°    | 1331.8 | 1326.7 | 1348.7 | 1411.0 | 1433.4 | 1408.2 | 1343.2 | 1321.2 | 1326.3 | 1321.2 | 1343.2 |
| 42.5°  | 1250.3 | 1240.2 | 1249.8 | 1313.4 | 1341.8 | 1310.7 | 1245.7 | 1234.6 | 1244.8 | 1234.6 | 1245.7 |
| 45°    | 1171.0 | 1149.0 | 1149.7 | 1210.0 | 1243.4 | 1207.2 | 1144.3 | 1144.7 | 1166.8 | 1144.7 | 1144.3 |
| 47.5°  | 1091.2 | 1070.1 | 1061.5 | 1106.0 | 1143.3 | 1104.6 | 1056.0 | 1065.9 | 1087.1 | 1065.9 | 1056.0 |
| 50°    | 1006.4 | 992.9  | 970.8  | 1000.9 | 1015.5 | 998.0  | 965.3  | 987.3  | 1002.3 | 987.3  | 965.3  |
| 52.5°  | 936.1  | 919.1  | 886.4  | 898.2  | 890.0  | 895.4  | 882.2  | 913.6  | 931.8  | 913.6  | 882.2  |
| 55°    | 855.0  | 845.6  | 809.1  | 790.8  | 756.3  | 788.1  | 805.0  | 841.5  | 852.2  | 841.5  | 805.0  |
| 57.5°  | 783.7  | 776.1  | 729.4  | 689.0  | 644.4  | 686.3  | 725.3  | 772.0  | 780.9  | 772.0  | 725.3  |
| 60°    | 704.3  | 704.3  | 648.3  | 584.2  | 551.1  | 582.8  | 645.5  | 701.5  | 702.9  | 701.5  | 645.5  |
| 62.5°  | 628.8  | 626.2  | 566.8  | 490.9  | 476.0  | 489.5  | 564.2  | 623.5  | 627.4  | 623.5  | 564.2  |
| 65°    | 554.5  | 542.6  | 484.9  | 411.2  | 406.4  | 409.8  | 483.6  | 541.3  | 554.5  | 541.3  | 483.6  |
| 67.5°  | 478.1  | 463.7  | 406.9  | 341.1  | 348.7  | 341.1  | 405.6  | 462.3  | 478.1  | 462.3  | 405.6  |
| 70°    | 405.6  | 385.2  | 338.6  | 281.7  | 290.2  | 281.7  | 338.6  | 386.6  | 406.9  | 386.6  | 338.6  |
| 72.5°  | 346.2  | 313.1  | 272.4  | 230.8  | 243.1  | 229.5  | 272.4  | 314.4  | 348.9  | 314.4  | 272.4  |
| 75°    | 291.1  | 253.8  | 210.8  | 184.6  | 201.5  | 184.6  | 212.2  | 255.1  | 295.2  | 255.1  | 212.2  |
| 77.5°  | 261.3  | 213.5  | 165.1  | 143.0  | 161.6  | 143.0  | 166.4  | 209.3  | 255.8  | 209.3  | 166.4  |
| 80°    | 241.3  | 195.3  | 135.2  | 106.5  | 123.5  | 106.5  | 132.5  | 173.4  | 215.3  | 173.4  | 132.5  |
| 82.5°  | 241.8  | 197.3  | 127.0  | 76.8   | 85.3   | 76.8   | 110.6  | 148.2  | 189.9  | 148.2  | 110.6  |
| 85°    | 253.6  | 215.3  | 140.1  | 63.1   | 52.2   | 60.4   | 100.5  | 132.0  | 164.9  | 132.0  | 100.5  |
| 87.5°  | 275.6  | 247.2  | 162.7  | 71.7   | 17.0   | 52.6   | 84.9   | 116.1  | 135.0  | 116.1  | 84.9   |
| 90°    | 306.8  | 283.0  | 199.2  | 86.8   | 2.2    | 34.9   | 63.9   | 90.5   | 102.0  | 90.5   | 63.9   |
| 92.5°  | 347.4  | 326.8  | 238.7  | 114.8  | 22.7   | 20.5   | 51.6   | 74.1   | 79.8   | 74.1   | 51.6   |
| 95°    | 385.4  | 377.3  | 284.6  | 147.9  | 55.5   | 11.4   | 38.8   | 60.4   | 61.8   | 60.4   | 38.8   |
| 97.5°  | 432.0  | 425.1  | 332.0  | 192.9  | 97.8   | 18.0   | 30.3   | 49.5   | 49.5   | 49.5   | 30.3   |
| 100°   | 473.3  | 470.2  | 381.6  | 251.5  | 150.6  | 46.8   | 19.8   | 41.5   | 43.1   | 41.5   | 19.8   |
| 102.5° | 539.2  | 520.3  | 430.8  | 307.6  | 206.5  | 86.4   | 23.9   | 28.7   | 31.3   | 28.7   | 23.9   |
| 105°   | 595.5  | 573.0  | 496.9  | 366.3  | 270.7  | 139.6  | 55.8   | 24.0   | 20.6   | 24.0   | 55.8   |
| 107.5° | 648.3  | 632.9  | 556.9  | 426.4  | 338.9  | 201.1  | 102.2  | 53.9   | 36.5   | 53.9   | 102.2  |
| 110°   | 714.8  | 698.4  | 615.6  | 486.5  | 410.0  | 266.6  | 155.5  | 97.6   | 75.8   | 97.6   | 155.5  |



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CATALOG NUMBER: MWL-4-55-60-UNV-L935-EDD

**CANDELA DISTRIBUTION (continued):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    | 112.5° | 135°   | 157.5° | 180°   | 202.5° | 225°   |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 112.5° | 780.3  | 768.2  | 670.2  | 549.2  | 483.7  | 337.7  | 221.0  | 152.2  | 131.7  | 152.2  | 221.0  |
| 115°   | 830.9  | 823.2  | 733.1  | 608.0  | 552.0  | 418.2  | 293.4  | 215.6  | 191.8  | 215.6  | 293.4  |
| 117.5° | 884.1  | 882.0  | 779.5  | 668.9  | 634.8  | 491.4  | 360.3  | 279.7  | 254.6  | 279.7  | 360.3  |
| 120°   | 951.1  | 940.1  | 843.7  | 729.1  | 712.6  | 567.9  | 434.0  | 354.3  | 328.4  | 354.3  | 434.0  |
| 122.5° | 997.4  | 990.7  | 898.3  | 786.4  | 786.4  | 645.7  | 505.1  | 425.3  | 398.0  | 425.3  | 505.1  |
| 125°   | 1039.9 | 1037.0 | 940.1  | 843.7  | 865.6  | 718.1  | 585.1  | 503.2  | 473.1  | 503.2  | 585.1  |
| 127.5° | 1078.0 | 1082.2 | 993.4  | 906.6  | 946.2  | 791.8  | 663.0  | 572.8  | 541.4  | 572.8  | 663.0  |
| 130°   | 1110.8 | 1124.5 | 1043.9 | 963.9  | 1022.5 | 872.4  | 732.6  | 642.4  | 622.0  | 642.4  | 732.6  |
| 132.5° | 1175.0 | 1166.8 | 1095.8 | 1023.4 | 1104.5 | 946.9  | 806.3  | 712.1  | 688.9  | 712.1  | 806.3  |
| 135°   | 1207.8 | 1210.5 | 1140.8 | 1074.0 | 1181.0 | 1020.7 | 875.9  | 783.2  | 759.9  | 783.2  | 875.9  |
| 137.5° | 1247.4 | 1239.1 | 1176.4 | 1135.4 | 1252.0 | 1091.7 | 944.3  | 858.2  | 821.3  | 858.2  | 944.3  |
| 140°   | 1276.1 | 1274.7 | 1222.8 | 1190.0 | 1328.4 | 1161.4 | 1013.9 | 926.5  | 892.3  | 926.5  | 1013.9 |
| 142.5° | 1306.1 | 1315.1 | 1269.2 | 1250.1 | 1405.0 | 1235.1 | 1089.0 | 994.2  | 960.7  | 994.2  | 1089.0 |
| 145°   | 1327.4 | 1345.2 | 1315.7 | 1325.2 | 1477.3 | 1317.0 | 1154.5 | 1058.4 | 1022.9 | 1058.4 | 1154.5 |
| 147.5° | 1361.6 | 1384.8 | 1349.8 | 1378.5 | 1540.1 | 1389.4 | 1220.1 | 1125.3 | 1094.0 | 1125.3 | 1220.1 |
| 150°   | 1407.1 | 1418.1 | 1397.6 | 1452.2 | 1604.2 | 1470.0 | 1287.0 | 1188.7 | 1157.2 | 1188.7 | 1287.0 |
| 152.5° | 1444.0 | 1457.6 | 1434.5 | 1532.8 | 1654.8 | 1543.7 | 1360.7 | 1251.5 | 1214.6 | 1251.5 | 1360.7 |
| 155°   | 1482.2 | 1487.7 | 1471.2 | 1610.6 | 1708.9 | 1616.0 | 1419.5 | 1321.1 | 1285.6 | 1321.1 | 1419.5 |
| 157.5° | 1517.8 | 1528.7 | 1509.6 | 1669.3 | 1755.3 | 1678.9 | 1486.3 | 1390.8 | 1359.3 | 1390.8 | 1486.3 |
| 160°   | 1556.0 | 1556.0 | 1566.9 | 1737.6 | 1793.5 | 1733.5 | 1557.4 | 1467.2 | 1423.5 | 1467.2 | 1557.4 |
| 162.5° | 1560.0 | 1586.0 | 1644.7 | 1785.4 | 1830.5 | 1781.3 | 1633.8 | 1521.8 | 1483.6 | 1521.8 | 1633.8 |
| 165°   | 1620.1 | 1643.4 | 1732.2 | 1827.7 | 1859.1 | 1823.7 | 1728.0 | 1612.0 | 1566.9 | 1612.0 | 1728.0 |
| 167.5° | 1683.0 | 1732.2 | 1803.1 | 1876.3 | 1887.2 | 1864.0 | 1800.4 | 1719.8 | 1678.9 | 1719.8 | 1800.4 |
| 170°   | 1784.6 | 1827.7 | 1863.2 | 1893.3 | 1909.2 | 1894.7 | 1845.5 | 1805.9 | 1779.0 | 1805.9 | 1845.5 |
| 172.5° | 1864.3 | 1893.3 | 1906.9 | 1926.9 | 1917.3 | 1911.8 | 1886.4 | 1867.3 | 1852.0 | 1867.3 | 1886.4 |
| 175°   | 1914.8 | 1921.9 | 1934.3 | 1928.2 | 1936.4 | 1921.4 | 1921.9 | 1931.4 | 1873.8 | 1931.4 | 1921.9 |
| 177.5° | 1932.6 | 1943.8 | 1937.0 | 1925.6 | 1926.9 | 1924.2 | 1928.8 | 1934.3 | 1924.4 | 1934.3 | 1928.8 |
| 180°   | 1934.3 | 1934.3 | 1934.3 | 1934.3 | 1934.3 | 1934.3 | 1934.3 | 1934.3 | 1934.3 | 1934.3 | 1934.3 |



TEST NUMBER: P392695

CATALOG NUMBER: MWL-4-55-60-UNV-L935-EDD

**CANDELA DISTRIBUTION (continued):**

|        | 247.5° | 270°   | 292.5° | 315°   | 337.5° | 360°   |
|--------|--------|--------|--------|--------|--------|--------|
| 0°     | 2185.8 | 2185.8 | 2185.8 | 2185.8 | 2185.8 | 2185.8 |
| 2.5°   | 2188.0 | 2190.2 | 2189.3 | 2177.0 | 2182.7 | 2175.7 |
| 5°     | 2177.8 | 2178.6 | 2177.8 | 2167.7 | 2173.4 | 2167.3 |
| 7.5°   | 2160.4 | 2160.9 | 2161.7 | 2148.4 | 2157.0 | 2150.9 |
| 10°    | 2134.4 | 2135.8 | 2135.8 | 2124.7 | 2129.8 | 2130.2 |
| 12.5°  | 2104.7 | 2102.5 | 2104.7 | 2096.2 | 2100.1 | 2099.8 |
| 15°    | 2067.8 | 2067.8 | 2069.1 | 2057.2 | 2060.3 | 2063.9 |
| 17.5°  | 2024.4 | 2025.3 | 2024.4 | 2014.0 | 2017.9 | 2018.9 |
| 20°    | 1976.4 | 1978.1 | 1977.9 | 1966.5 | 1967.5 | 1968.0 |
| 22.5°  | 1924.7 | 1923.8 | 1926.1 | 1912.2 | 1911.5 | 1904.8 |
| 25°    | 1867.0 | 1867.0 | 1868.4 | 1852.5 | 1841.2 | 1835.2 |
| 27.5°  | 1807.3 | 1806.8 | 1808.7 | 1788.0 | 1770.8 | 1762.3 |
| 30°    | 1737.0 | 1737.3 | 1739.7 | 1712.3 | 1685.1 | 1674.0 |
| 32.5°  | 1665.7 | 1666.6 | 1668.5 | 1632.5 | 1601.1 | 1592.7 |
| 35°    | 1584.5 | 1589.6 | 1588.8 | 1543.0 | 1510.7 | 1502.2 |
| 37.5°  | 1500.6 | 1511.4 | 1504.8 | 1450.5 | 1418.3 | 1413.2 |
| 40°    | 1408.2 | 1433.4 | 1411.0 | 1348.7 | 1326.7 | 1331.8 |
| 42.5°  | 1310.7 | 1341.8 | 1313.4 | 1249.8 | 1240.2 | 1250.3 |
| 45°    | 1207.2 | 1243.4 | 1210.0 | 1149.7 | 1149.0 | 1171.0 |
| 47.5°  | 1104.6 | 1143.3 | 1106.0 | 1061.5 | 1070.1 | 1091.2 |
| 50°    | 998.0  | 1015.5 | 1000.9 | 970.8  | 992.9  | 1006.4 |
| 52.5°  | 895.4  | 890.0  | 898.2  | 886.4  | 919.1  | 936.1  |
| 55°    | 788.1  | 756.3  | 790.8  | 809.1  | 845.6  | 855.0  |
| 57.5°  | 686.3  | 644.4  | 689.0  | 729.4  | 776.1  | 783.7  |
| 60°    | 582.8  | 551.1  | 584.2  | 648.3  | 704.3  | 704.3  |
| 62.5°  | 489.5  | 476.0  | 490.9  | 566.8  | 626.2  | 628.8  |
| 65°    | 409.8  | 406.4  | 411.2  | 484.9  | 542.6  | 554.5  |
| 67.5°  | 341.1  | 348.7  | 341.1  | 406.9  | 463.7  | 478.1  |
| 70°    | 281.7  | 290.2  | 281.7  | 338.6  | 385.2  | 405.6  |
| 72.5°  | 229.5  | 243.1  | 230.8  | 272.4  | 313.1  | 346.2  |
| 75°    | 184.6  | 201.5  | 184.6  | 210.8  | 253.8  | 291.1  |
| 77.5°  | 143.0  | 161.6  | 143.0  | 165.1  | 213.5  | 261.3  |
| 80°    | 106.5  | 123.5  | 106.5  | 135.2  | 195.3  | 241.3  |
| 82.5°  | 76.8   | 85.3   | 76.8   | 127.0  | 197.3  | 241.8  |
| 85°    | 60.4   | 52.2   | 63.1   | 140.1  | 215.3  | 253.6  |
| 87.5°  | 52.6   | 17.0   | 71.7   | 162.7  | 247.2  | 275.6  |
| 90°    | 34.9   | 2.2    | 86.8   | 199.2  | 283.0  | 306.8  |
| 92.5°  | 20.5   | 22.7   | 114.8  | 238.7  | 326.8  | 347.4  |
| 95°    | 11.4   | 55.5   | 147.9  | 284.6  | 377.3  | 385.4  |
| 97.5°  | 18.0   | 97.8   | 192.9  | 332.0  | 425.1  | 432.0  |
| 100°   | 46.8   | 150.6  | 251.5  | 381.6  | 470.2  | 473.3  |
| 102.5° | 86.4   | 206.5  | 307.6  | 430.8  | 520.3  | 539.2  |
| 105°   | 139.6  | 270.7  | 366.3  | 496.9  | 573.0  | 595.5  |
| 107.5° | 201.1  | 338.9  | 426.4  | 556.9  | 632.9  | 648.3  |
| 110°   | 266.6  | 410.0  | 486.5  | 615.6  | 698.4  | 714.8  |





TEST NUMBER: P392695

CATALOG NUMBER: MWL-4-55-60-UNV-L935-EDD

**CANDELA DISTRIBUTION (continued):**

|        | 247.5° | 270°   | 292.5° | 315°   | 337.5° | 360°   |
|--------|--------|--------|--------|--------|--------|--------|
| 112.5° | 337.7  | 483.7  | 549.2  | 670.2  | 768.2  | 780.3  |
| 115°   | 418.2  | 552.0  | 608.0  | 733.1  | 823.2  | 830.9  |
| 117.5° | 491.4  | 634.8  | 668.9  | 779.5  | 882.0  | 884.1  |
| 120°   | 567.9  | 712.6  | 729.1  | 843.7  | 940.1  | 951.1  |
| 122.5° | 645.7  | 786.4  | 786.4  | 898.3  | 990.7  | 997.4  |
| 125°   | 718.1  | 865.6  | 843.7  | 940.1  | 1037.0 | 1039.9 |
| 127.5° | 791.8  | 946.2  | 906.6  | 993.4  | 1082.2 | 1078.0 |
| 130°   | 872.4  | 1022.5 | 963.9  | 1043.9 | 1124.5 | 1110.8 |
| 132.5° | 946.9  | 1104.5 | 1023.4 | 1095.8 | 1166.8 | 1175.0 |
| 135°   | 1020.7 | 1181.0 | 1074.0 | 1140.8 | 1210.5 | 1207.8 |
| 137.5° | 1091.7 | 1252.0 | 1135.4 | 1176.4 | 1239.1 | 1247.4 |
| 140°   | 1161.4 | 1328.4 | 1190.0 | 1222.8 | 1274.7 | 1276.1 |
| 142.5° | 1235.1 | 1405.0 | 1250.1 | 1269.2 | 1315.1 | 1306.1 |
| 145°   | 1317.0 | 1477.3 | 1325.2 | 1315.7 | 1345.2 | 1327.4 |
| 147.5° | 1389.4 | 1540.1 | 1378.5 | 1349.8 | 1384.8 | 1361.6 |
| 150°   | 1470.0 | 1604.2 | 1452.2 | 1397.6 | 1418.1 | 1407.1 |
| 152.5° | 1543.7 | 1654.8 | 1532.8 | 1434.5 | 1457.6 | 1444.0 |
| 155°   | 1616.0 | 1708.9 | 1610.6 | 1471.2 | 1487.7 | 1482.2 |
| 157.5° | 1678.9 | 1755.3 | 1669.3 | 1509.6 | 1528.7 | 1517.8 |
| 160°   | 1733.5 | 1793.5 | 1737.6 | 1566.9 | 1556.0 | 1556.0 |
| 162.5° | 1781.3 | 1830.5 | 1785.4 | 1644.7 | 1586.0 | 1560.0 |
| 165°   | 1823.7 | 1859.1 | 1827.7 | 1732.2 | 1643.4 | 1620.1 |
| 167.5° | 1864.0 | 1887.2 | 1876.3 | 1803.1 | 1732.2 | 1683.0 |
| 170°   | 1894.7 | 1909.2 | 1893.3 | 1863.2 | 1827.7 | 1784.6 |
| 172.5° | 1911.8 | 1917.3 | 1926.9 | 1906.9 | 1893.3 | 1864.3 |
| 175°   | 1921.4 | 1936.4 | 1928.2 | 1934.3 | 1921.9 | 1914.8 |
| 177.5° | 1924.2 | 1926.9 | 1925.6 | 1937.0 | 1943.8 | 1932.6 |
| 180°   | 1934.3 | 1934.3 | 1934.3 | 1934.3 | 1934.3 | 1934.3 |

(END OF REPORT)