

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: P231999

Luminaire Tested: **FVS4M-4-LD4-50-2STD-PFS125-UNV-EDC1**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P231999
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1706-121-19)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: FVS4M-4-LD4-50-2STD-PFS125-UNV-EDC1
Description: FAILSAFE FVS LED FIXTURE
4FT LENGTH, 2-MODULE LED WITH PFS125 LENS
Light Source: (168) 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

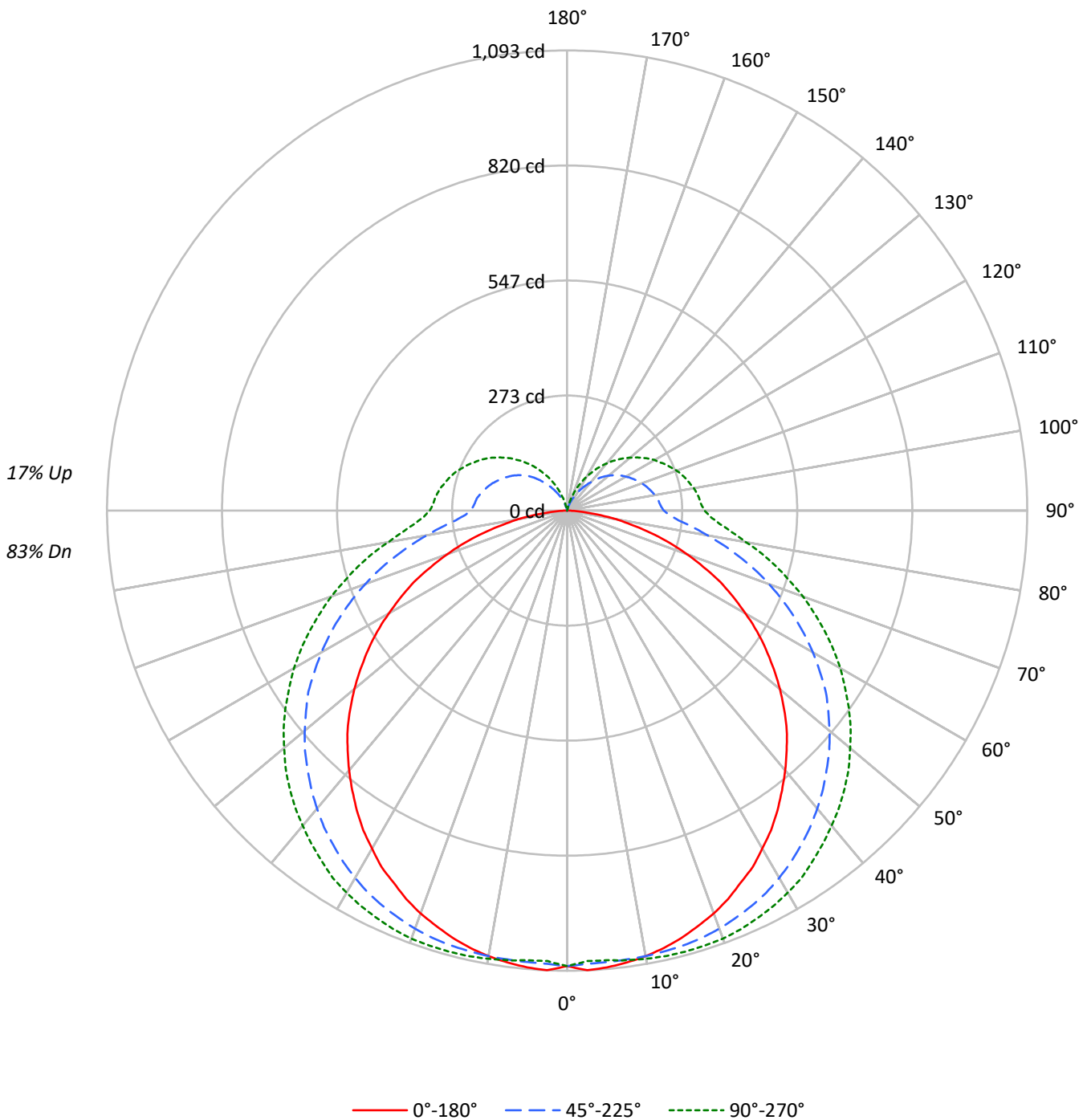
Lumens per Lamp: N/A
Luminaire Lumens: 4849.0 lumens
Efficiency: N/A
Efficacy: 71.8 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.44 / 1.52
Luminous Opening: Rectangular w/ Sides (W: 0.31' x L: 3.79' x H: 0.19')
CIE Type: Semi-Direct

Input Watts (W): 67.5
Input Voltage (V): 120
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: P231999

CATALOG NUMBER: FVS4M-4-LD4-50-2STD-PFS125-UNV-EDC1

Luminous Intensity Polar Plot





TEST NUMBER: P231999

CATALOG NUMBER: FVS4M-4-LD4-50-2STD-PFS125-UNV-EDC1

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 | 115 | 115 | 115 | 115 | 110 | 110 | 110 | 110 | 102 | 102 | 102 | 94 | 94 | 94 | 87 | 87 | 87 | 83 |
| 1 | 103 | 97 | 92 | 88 | 98 | 93 | 89 | 85 | 86 | 82 | 79 | 79 | 76 | 74 | 73 | 71 | 68 | 65 |
| 2 | 93 | 83 | 76 | 69 | 88 | 80 | 73 | 67 | 74 | 68 | 63 | 68 | 63 | 59 | 63 | 59 | 56 | 52 |
| 3 | 84 | 72 | 64 | 57 | 80 | 70 | 62 | 55 | 64 | 57 | 52 | 59 | 54 | 49 | 55 | 50 | 46 | 43 |
| 4 | 76 | 64 | 54 | 47 | 73 | 61 | 53 | 46 | 57 | 49 | 44 | 52 | 46 | 41 | 48 | 43 | 39 | 36 |
| 5 | 70 | 56 | 47 | 40 | 67 | 54 | 46 | 39 | 50 | 43 | 37 | 47 | 40 | 35 | 43 | 38 | 33 | 31 |
| 6 | 64 | 51 | 41 | 35 | 61 | 49 | 40 | 34 | 45 | 38 | 32 | 42 | 36 | 31 | 39 | 33 | 29 | 27 |
| 7 | 59 | 46 | 37 | 30 | 57 | 44 | 36 | 30 | 41 | 34 | 28 | 38 | 32 | 27 | 35 | 30 | 26 | 23 |
| 8 | 55 | 41 | 33 | 27 | 53 | 40 | 32 | 26 | 37 | 30 | 25 | 35 | 28 | 24 | 32 | 27 | 23 | 21 |
| 9 | 51 | 38 | 29 | 24 | 49 | 37 | 29 | 23 | 34 | 27 | 22 | 32 | 26 | 21 | 30 | 24 | 20 | 18 |
| 10 | 48 | 35 | 27 | 21 | 46 | 34 | 26 | 21 | 32 | 25 | 20 | 29 | 24 | 19 | 28 | 22 | 18 | 17 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 9828 | 9828 | 9828 |
| 5° | 9889 | 9437 | 9288 |
| 10° | 9828 | 9171 | 9018 |
| 15° | 9750 | 8955 | 8788 |
| 20° | 9670 | 8753 | 8584 |
| 25° | 9554 | 8554 | 8368 |
| 30° | 9452 | 8353 | 8163 |
| 35° | 9330 | 8131 | 7938 |
| 40° | 9175 | 7910 | 7706 |
| 45° | 9031 | 7671 | 7485 |
| 50° | 8804 | 7434 | 7231 |
| 55° | 8539 | 7176 | 6965 |
| 60° | 8190 | 6822 | 6676 |
| 65° | 7805 | 6436 | 6337 |
| 70° | 7085 | 5989 | 5978 |
| 75° | 6136 | 5472 | 5575 |
| 80° | 4797 | 4904 | 5122 |
| 85° | 2451 | 4425 | 4827 |



TEST NUMBER: P231999

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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 103.1 | 2.1 |
| 10°-20° | 302.7 | 6.2 |
| 20°-30° | 476.0 | 9.8 |
| 30°-40° | 600.5 | 12.4 |
| 40°-50° | 660.9 | 13.6 |
| 50°-60° | 649.5 | 13.4 |
| 60°-70° | 564.7 | 11.6 |
| 70°-80° | 419.8 | 8.7 |
| 80°-90° | 268.0 | 5.5 |
| 90°-100° | 211.6 | 4.4 |
| 100°-110° | 187.5 | 3.9 |
| 110°-120° | 154.0 | 3.2 |
| 120°-130° | 115.8 | 2.4 |
| 130°-140° | 76.2 | 1.6 |
| 140°-150° | 41.1 | 0.8 |
| 150°-160° | 15.6 | 0.3 |
| 160°-170° | 2.1 | 0.0 |
| 170°-180° | 0.0 | 0.0 |
| 0°-30° | 881.8 | 18.2 |
| 0°-40° | 1482.3 | 30.6 |
| 0°-60° | 2792.7 | 57.6 |
| 0°-90° | 4045.1 | 83.4 |
| 90°-120° | 553.1 | 11.4 |
| 90°-150° | 786.2 | 16.2 |
| 90°-180° | 804.0 | 16.6 |
| 0°-180° | 4849.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1082 | 1082 | 1082 | 1082 | 1082 | |
| 5° | 1089 | 1085 | 1076 | 1078 | 1072 | 103 |
| 15° | 1050 | 1056 | 1069 | 1086 | 1085 | 296 |
| 25° | 975 | 1002 | 1036 | 1066 | 1068 | 450 |
| 35° | 870 | 914 | 969 | 1010 | 1016 | 544 |
| 45° | 738 | 798 | 871 | 921 | 932 | 568 |
| 55° | 577 | 659 | 750 | 803 | 817 | 516 |
| 65° | 402 | 492 | 594 | 658 | 674 | 394 |
| 75° | 207 | 310 | 423 | 493 | 514 | 218 |
| 85° | 37 | 148 | 265 | 340 | 364 | 47 |
| 90° | 0 | 109 | 230 | 304 | 326 | 1 |
| 95° | 0 | 103 | 220 | 293 | 316 | 0 |
| 105° | 0 | 90 | 201 | 271 | 292 | 0 |
| 115° | 0 | 76 | 176 | 241 | 259 | 0 |
| 125° | 0 | 60 | 146 | 202 | 219 | 0 |
| 135° | 0 | 39 | 110 | 158 | 171 | 0 |
| 145° | 1 | 21 | 69 | 111 | 121 | 1 |
| 155° | 1 | 7 | 32 | 56 | 66 | 0 |
| 165° | 1 | 0 | 5 | 9 | 15 | 0 |
| 175° | 0 | 0 | 0 | 0 | 0 | 0 |
| 180° | 0 | 0 | 0 | 0 | 0 | 0 |



TEST NUMBER: P231999

CATALOG NUMBER: FVS4M-4-LD4-50-2STD-PFS125-UNV-EDC1

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1081.9 | 1081.9 | 1081.9 | 1081.9 | 1081.9 | 1081.9 | 1081.9 | 1081.9 | 1081.9 | 1081.9 | 1081.9 |
| 2.5° | 1092.7 | 1090.9 | 1088.2 | 1087.3 | 1088.2 | 1088.2 | 1088.2 | 1086.4 | 1081.9 | 1077.4 | 1077.4 |
| 5° | 1089.1 | 1088.2 | 1084.6 | 1083.7 | 1084.6 | 1085.5 | 1085.5 | 1083.7 | 1080.1 | 1076.5 | 1076.5 |
| 7.5° | 1082.8 | 1081.9 | 1079.2 | 1078.3 | 1080.1 | 1081.0 | 1081.9 | 1080.1 | 1078.3 | 1075.6 | 1076.5 |
| 10° | 1074.7 | 1072.9 | 1071.1 | 1070.2 | 1072.0 | 1074.7 | 1076.5 | 1076.5 | 1075.6 | 1074.7 | 1077.4 |
| 12.5° | 1064.0 | 1063.1 | 1060.4 | 1061.3 | 1064.0 | 1068.4 | 1071.1 | 1072.9 | 1072.9 | 1072.0 | 1076.5 |
| 15° | 1050.5 | 1050.5 | 1048.7 | 1049.6 | 1053.2 | 1059.5 | 1064.0 | 1066.7 | 1067.6 | 1069.3 | 1073.8 |
| 17.5° | 1034.4 | 1035.3 | 1033.5 | 1035.3 | 1042.5 | 1049.6 | 1055.9 | 1058.6 | 1061.3 | 1064.0 | 1070.2 |
| 20° | 1018.3 | 1018.3 | 1016.5 | 1020.9 | 1028.1 | 1037.1 | 1043.4 | 1048.7 | 1052.3 | 1056.8 | 1063.1 |
| 22.5° | 998.5 | 998.5 | 998.5 | 1003.9 | 1012.9 | 1021.8 | 1031.7 | 1038.0 | 1042.5 | 1046.9 | 1055.0 |
| 25° | 975.2 | 977.9 | 977.0 | 985.1 | 995.8 | 1007.5 | 1016.5 | 1022.7 | 1029.9 | 1036.2 | 1045.1 |
| 27.5° | 954.6 | 952.8 | 954.6 | 963.6 | 976.1 | 986.9 | 999.4 | 1006.6 | 1014.7 | 1023.6 | 1032.6 |
| 30° | 926.8 | 925.9 | 930.4 | 941.2 | 953.7 | 968.1 | 979.7 | 988.7 | 998.5 | 1007.5 | 1018.3 |
| 32.5° | 900.8 | 898.1 | 904.4 | 917.9 | 930.4 | 947.4 | 958.2 | 968.1 | 977.9 | 989.6 | 1000.3 |
| 35° | 870.4 | 869.5 | 876.6 | 890.1 | 906.2 | 922.3 | 936.7 | 948.3 | 958.2 | 969.0 | 982.4 |
| 37.5° | 838.1 | 841.7 | 847.9 | 861.4 | 879.3 | 896.3 | 910.7 | 922.3 | 934.0 | 948.3 | 961.8 |
| 40° | 805.8 | 807.6 | 814.8 | 831.8 | 850.6 | 868.6 | 883.8 | 894.6 | 910.7 | 924.1 | 937.6 |
| 42.5° | 771.8 | 770.9 | 785.2 | 802.2 | 820.2 | 839.9 | 855.1 | 869.5 | 884.7 | 899.0 | 913.4 |
| 45° | 737.7 | 735.0 | 749.3 | 768.2 | 787.9 | 808.5 | 826.4 | 842.6 | 856.9 | 871.3 | 885.6 |
| 47.5° | 699.2 | 700.0 | 715.3 | 734.1 | 755.6 | 776.2 | 801.3 | 811.2 | 826.4 | 844.4 | 858.7 |
| 50° | 659.7 | 659.7 | 677.6 | 698.3 | 718.9 | 743.1 | 761.0 | 778.9 | 797.8 | 813.9 | 829.1 |
| 52.5° | 618.5 | 622.1 | 638.2 | 661.5 | 685.7 | 706.3 | 725.1 | 746.7 | 764.6 | 781.6 | 796.9 |
| 55° | 577.2 | 580.8 | 601.5 | 622.1 | 648.1 | 669.6 | 690.2 | 709.9 | 728.7 | 750.2 | 763.7 |
| 57.5° | 535.1 | 540.5 | 559.3 | 581.7 | 605.9 | 631.0 | 654.3 | 673.2 | 693.8 | 711.7 | 728.7 |
| 60° | 489.4 | 497.5 | 515.4 | 537.8 | 565.6 | 590.7 | 613.1 | 633.7 | 654.3 | 674.1 | 690.2 |
| 62.5° | 444.6 | 451.8 | 471.5 | 494.8 | 522.6 | 550.4 | 570.1 | 595.2 | 615.8 | 634.6 | 652.5 |
| 65° | 401.6 | 406.9 | 428.5 | 451.8 | 479.5 | 504.6 | 529.7 | 553.0 | 573.7 | 594.3 | 613.1 |
| 67.5° | 350.5 | 360.3 | 380.9 | 406.9 | 434.7 | 460.7 | 484.9 | 510.0 | 532.4 | 552.2 | 571.0 |
| 70° | 303.0 | 311.9 | 332.5 | 360.3 | 389.9 | 418.6 | 443.7 | 467.0 | 490.3 | 510.0 | 528.8 |
| 72.5° | 255.5 | 265.3 | 285.9 | 311.0 | 341.5 | 368.4 | 396.2 | 422.2 | 447.3 | 467.9 | 486.7 |
| 75° | 207.1 | 216.0 | 239.3 | 267.1 | 297.6 | 321.8 | 353.2 | 377.4 | 401.6 | 423.1 | 444.6 |
| 77.5° | 156.0 | 169.4 | 190.9 | 220.5 | 249.2 | 279.7 | 308.3 | 334.3 | 357.6 | 380.9 | 403.4 |
| 80° | 117.4 | 124.6 | 145.2 | 177.5 | 205.3 | 236.6 | 263.5 | 291.3 | 317.3 | 337.9 | 358.5 |
| 82.5° | 71.7 | 82.5 | 108.5 | 133.6 | 167.6 | 194.5 | 225.0 | 251.9 | 277.0 | 300.3 | 320.0 |
| 85° | 36.8 | 48.4 | 70.8 | 101.3 | 132.7 | 164.0 | 190.0 | 217.8 | 242.9 | 265.3 | 285.9 |
| 87.5° | 10.8 | 21.5 | 46.6 | 75.3 | 106.7 | 138.0 | 166.7 | 193.6 | 218.7 | 242.0 | 262.6 |
| 90° | 0.0 | 10.8 | 35.0 | 63.6 | 94.1 | 124.6 | 153.3 | 181.1 | 206.2 | 229.5 | 250.1 |
| 92.5° | 0.0 | 9.9 | 32.3 | 60.1 | 90.5 | 120.1 | 148.8 | 175.7 | 199.9 | 223.2 | 243.8 |
| 95° | 0.0 | 9.0 | 30.5 | 58.3 | 87.8 | 117.4 | 146.1 | 173.0 | 197.2 | 219.6 | 240.2 |
| 97.5° | 0.0 | 8.1 | 28.7 | 55.6 | 85.2 | 113.8 | 142.5 | 169.4 | 193.6 | 216.9 | 237.5 |
| 100° | 0.0 | 7.2 | 27.8 | 53.8 | 82.5 | 110.3 | 138.9 | 164.9 | 189.1 | 211.5 | 232.2 |
| 102.5° | 0.0 | 6.3 | 26.0 | 51.1 | 78.9 | 107.6 | 134.5 | 160.4 | 184.6 | 206.2 | 226.8 |
| 105° | 0.0 | 6.3 | 24.2 | 49.3 | 76.2 | 104.0 | 130.0 | 156.0 | 179.3 | 200.8 | 221.4 |
| 107.5° | 0.0 | 5.4 | 23.3 | 46.6 | 73.5 | 99.5 | 125.5 | 150.6 | 173.9 | 195.4 | 215.1 |
| 110° | 0.0 | 4.5 | 21.5 | 44.8 | 69.9 | 95.9 | 121.9 | 146.1 | 168.5 | 189.1 | 208.8 |



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CANDELA DISTRIBUTION (continued):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|--------|-----|-----|------|------|------|------|-------|-------|-------|-------|-------|
| 112.5° | 0.0 | 3.6 | 19.7 | 42.1 | 66.3 | 91.4 | 116.5 | 139.8 | 162.2 | 182.0 | 200.8 |
| 115° | 0.0 | 2.7 | 18.8 | 39.4 | 63.6 | 87.8 | 111.1 | 134.5 | 156.0 | 175.7 | 193.6 |
| 117.5° | 0.0 | 1.8 | 17.0 | 36.8 | 60.1 | 83.4 | 106.7 | 129.1 | 149.7 | 168.5 | 186.4 |
| 120° | 0.0 | 1.8 | 15.2 | 35.0 | 56.5 | 78.9 | 101.3 | 122.8 | 143.4 | 161.3 | 178.4 |
| 122.5° | 0.0 | 0.9 | 13.4 | 32.3 | 52.9 | 74.4 | 95.9 | 116.5 | 135.3 | 154.2 | 170.3 |
| 125° | 0.0 | 0.9 | 11.7 | 29.6 | 49.3 | 69.9 | 90.5 | 110.3 | 129.1 | 146.1 | 162.2 |
| 127.5° | 0.0 | 0.9 | 9.9 | 26.0 | 44.8 | 64.5 | 84.3 | 103.1 | 121.9 | 138.0 | 153.3 |
| 130° | 0.0 | 0.9 | 8.1 | 23.3 | 40.3 | 59.2 | 78.0 | 95.9 | 113.8 | 129.1 | 144.3 |
| 132.5° | 0.0 | 0.9 | 6.3 | 19.7 | 35.9 | 52.9 | 69.9 | 87.8 | 104.0 | 120.1 | 134.5 |
| 135° | 0.0 | 0.0 | 4.5 | 17.0 | 31.4 | 47.5 | 62.7 | 78.9 | 95.0 | 110.3 | 124.6 |
| 137.5° | 0.9 | 0.9 | 3.6 | 14.3 | 27.8 | 41.2 | 56.5 | 70.8 | 85.2 | 99.5 | 113.8 |
| 140° | 0.9 | 0.9 | 2.7 | 11.7 | 23.3 | 36.8 | 49.3 | 62.7 | 76.2 | 88.7 | 101.3 |
| 142.5° | 0.9 | 0.9 | 1.8 | 9.0 | 19.7 | 31.4 | 43.0 | 55.6 | 67.2 | 78.0 | 89.6 |
| 145° | 0.9 | 0.9 | 1.8 | 6.3 | 16.1 | 26.0 | 37.6 | 47.5 | 58.3 | 69.0 | 78.0 |
| 147.5° | 0.9 | 0.9 | 0.9 | 4.5 | 12.5 | 21.5 | 31.4 | 40.3 | 50.2 | 59.2 | 67.2 |
| 150° | 0.9 | 0.9 | 0.9 | 3.6 | 9.9 | 17.9 | 26.0 | 33.2 | 42.1 | 49.3 | 57.4 |
| 152.5° | 0.9 | 0.9 | 0.9 | 2.7 | 7.2 | 14.3 | 20.6 | 27.8 | 34.1 | 41.2 | 46.6 |
| 155° | 0.9 | 0.9 | 0.9 | 1.8 | 4.5 | 9.9 | 16.1 | 21.5 | 26.9 | 32.3 | 37.6 |
| 157.5° | 0.9 | 0.9 | 0.9 | 0.9 | 2.7 | 6.3 | 11.7 | 16.1 | 20.6 | 24.2 | 29.6 |
| 160° | 0.9 | 0.9 | 0.9 | 0.9 | 1.8 | 3.6 | 7.2 | 10.8 | 14.3 | 17.9 | 20.6 |
| 162.5° | 0.9 | 0.9 | 0.9 | 0.0 | 0.9 | 1.8 | 3.6 | 6.3 | 9.0 | 11.7 | 13.4 |
| 165° | 0.9 | 0.9 | 0.9 | 0.0 | 0.0 | 0.0 | 0.9 | 1.8 | 3.6 | 5.4 | 6.3 |
| 167.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 170° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 172.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 175° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 177.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 180° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



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CANDELA DISTRIBUTION (continued):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1081.9 | 1081.9 | 1081.9 | 1081.9 | 1081.9 | 1081.9 | 1081.9 | 1081.9 |
| 2.5° | 1078.3 | 1079.2 | 1078.3 | 1077.4 | 1075.6 | 1073.8 | 1072.0 | 1071.1 |
| 5° | 1078.3 | 1079.2 | 1078.3 | 1078.3 | 1076.5 | 1074.7 | 1072.9 | 1072.0 |
| 7.5° | 1080.1 | 1081.0 | 1081.0 | 1081.0 | 1081.0 | 1080.1 | 1078.3 | 1077.4 |
| 10° | 1081.0 | 1083.7 | 1084.6 | 1084.6 | 1084.6 | 1083.7 | 1082.8 | 1081.0 |
| 12.5° | 1081.0 | 1084.6 | 1085.5 | 1086.4 | 1087.3 | 1086.4 | 1084.6 | 1083.7 |
| 15° | 1079.2 | 1083.7 | 1085.5 | 1086.4 | 1087.3 | 1087.3 | 1085.5 | 1084.6 |
| 17.5° | 1076.5 | 1081.0 | 1083.7 | 1084.6 | 1086.4 | 1085.5 | 1084.6 | 1083.7 |
| 20° | 1070.2 | 1075.6 | 1079.2 | 1081.9 | 1082.8 | 1083.7 | 1082.8 | 1081.9 |
| 22.5° | 1063.1 | 1068.4 | 1072.9 | 1075.6 | 1077.4 | 1078.3 | 1077.4 | 1076.5 |
| 25° | 1053.2 | 1059.5 | 1064.9 | 1067.6 | 1069.3 | 1071.1 | 1070.2 | 1068.4 |
| 27.5° | 1041.6 | 1047.8 | 1053.2 | 1056.8 | 1060.4 | 1060.4 | 1060.4 | 1059.5 |
| 30° | 1026.3 | 1034.4 | 1039.8 | 1044.2 | 1046.9 | 1048.7 | 1048.7 | 1047.8 |
| 32.5° | 1011.1 | 1019.1 | 1024.5 | 1029.9 | 1032.6 | 1033.5 | 1034.4 | 1035.3 |
| 35° | 992.3 | 1000.3 | 1007.5 | 1012.0 | 1015.6 | 1017.4 | 1017.4 | 1016.5 |
| 37.5° | 971.6 | 981.5 | 988.7 | 993.2 | 998.5 | 998.5 | 998.5 | 997.6 |
| 40° | 948.3 | 957.3 | 966.3 | 971.6 | 977.0 | 977.9 | 977.0 | 977.0 |
| 42.5° | 925.9 | 934.9 | 943.0 | 949.2 | 952.8 | 954.6 | 955.5 | 956.4 |
| 45° | 899.0 | 909.8 | 917.9 | 925.0 | 928.6 | 931.3 | 932.2 | 932.2 |
| 47.5° | 870.4 | 882.0 | 891.0 | 897.2 | 902.6 | 906.2 | 904.4 | 907.1 |
| 50° | 842.6 | 852.4 | 863.2 | 868.6 | 873.9 | 878.4 | 877.5 | 877.5 |
| 52.5° | 811.2 | 821.1 | 831.8 | 839.9 | 844.4 | 847.9 | 848.8 | 848.8 |
| 55° | 777.1 | 788.8 | 799.5 | 806.7 | 812.1 | 814.8 | 816.6 | 816.6 |
| 57.5° | 743.1 | 754.7 | 764.6 | 774.4 | 779.8 | 784.3 | 784.3 | 782.5 |
| 60° | 706.3 | 718.9 | 729.6 | 737.7 | 746.7 | 747.6 | 748.5 | 749.3 |
| 62.5° | 668.7 | 681.2 | 692.9 | 702.7 | 707.2 | 711.7 | 714.4 | 712.6 |
| 65° | 629.2 | 640.0 | 655.2 | 661.5 | 667.8 | 670.5 | 675.0 | 674.1 |
| 67.5° | 589.8 | 603.2 | 613.1 | 623.9 | 631.0 | 631.9 | 637.3 | 634.6 |
| 70° | 545.0 | 558.4 | 572.8 | 579.9 | 588.0 | 590.7 | 593.4 | 596.1 |
| 72.5° | 503.7 | 518.1 | 529.7 | 540.5 | 545.0 | 549.5 | 553.0 | 553.9 |
| 75° | 460.7 | 477.8 | 486.7 | 498.4 | 504.6 | 508.2 | 513.6 | 514.5 |
| 77.5° | 417.7 | 432.9 | 446.4 | 454.4 | 462.5 | 467.0 | 470.6 | 474.2 |
| 80° | 375.6 | 389.0 | 404.3 | 415.9 | 424.0 | 427.6 | 432.0 | 431.1 |
| 82.5° | 337.9 | 353.2 | 366.6 | 376.5 | 385.4 | 390.8 | 395.3 | 395.3 |
| 85° | 306.6 | 323.6 | 334.3 | 345.1 | 353.2 | 358.5 | 363.0 | 363.9 |
| 87.5° | 283.2 | 298.5 | 312.8 | 321.8 | 330.8 | 336.1 | 339.7 | 340.6 |
| 90° | 268.9 | 285.0 | 298.5 | 309.2 | 317.3 | 322.7 | 326.3 | 326.3 |
| 92.5° | 262.6 | 277.9 | 292.2 | 302.1 | 310.1 | 315.5 | 318.2 | 319.1 |
| 95° | 259.0 | 274.3 | 287.7 | 298.5 | 306.6 | 311.9 | 314.6 | 315.5 |
| 97.5° | 255.5 | 270.7 | 283.2 | 294.9 | 302.1 | 307.4 | 310.1 | 311.0 |
| 100° | 250.1 | 265.3 | 278.8 | 288.6 | 297.6 | 302.1 | 304.8 | 305.7 |
| 102.5° | 244.7 | 259.0 | 272.5 | 282.4 | 290.4 | 294.9 | 298.5 | 298.5 |
| 105° | 238.4 | 254.6 | 266.2 | 276.1 | 284.1 | 289.5 | 291.3 | 292.2 |
| 107.5° | 232.2 | 247.4 | 259.9 | 269.8 | 277.0 | 281.5 | 285.0 | 285.0 |
| 110° | 225.9 | 240.2 | 251.9 | 261.7 | 268.9 | 273.4 | 276.1 | 277.0 |



TEST NUMBER: P231999

CATALOG NUMBER: FVS4M-4-LD4-50-2STD-PFS125-UNV-EDC1

CANDELA DISTRIBUTION (continued):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 217.8 | 232.2 | 243.8 | 253.7 | 259.9 | 264.4 | 267.1 | 267.1 |
| 115° | 209.7 | 224.1 | 235.7 | 245.6 | 251.9 | 256.4 | 258.1 | 259.0 |
| 117.5° | 201.7 | 215.1 | 226.8 | 235.7 | 242.0 | 246.5 | 248.3 | 248.3 |
| 120° | 193.6 | 207.1 | 217.8 | 226.8 | 233.1 | 236.6 | 239.3 | 240.2 |
| 122.5° | 184.6 | 197.2 | 208.0 | 216.9 | 223.2 | 226.8 | 228.6 | 229.5 |
| 125° | 175.7 | 188.2 | 198.1 | 206.2 | 212.4 | 216.0 | 218.7 | 218.7 |
| 127.5° | 166.7 | 178.4 | 188.2 | 195.4 | 200.8 | 204.4 | 206.2 | 207.1 |
| 130° | 156.9 | 166.7 | 176.6 | 183.8 | 190.0 | 192.7 | 195.4 | 195.4 |
| 132.5° | 147.0 | 156.9 | 165.8 | 173.9 | 177.5 | 181.1 | 183.8 | 183.8 |
| 135° | 137.1 | 146.1 | 155.1 | 161.3 | 165.8 | 169.4 | 171.2 | 171.2 |
| 137.5° | 126.4 | 136.2 | 144.3 | 149.7 | 154.2 | 156.9 | 158.7 | 159.6 |
| 140° | 114.7 | 125.5 | 131.8 | 137.1 | 141.6 | 144.3 | 146.1 | 146.1 |
| 142.5° | 101.3 | 112.0 | 120.1 | 126.4 | 129.1 | 130.9 | 133.6 | 133.6 |
| 145° | 88.7 | 98.6 | 108.5 | 113.8 | 117.4 | 119.2 | 120.1 | 121.0 |
| 147.5° | 76.2 | 85.2 | 94.1 | 100.4 | 104.0 | 104.9 | 105.8 | 105.8 |
| 150° | 64.5 | 71.7 | 79.8 | 87.8 | 90.5 | 92.3 | 93.2 | 94.1 |
| 152.5° | 53.8 | 59.2 | 66.3 | 72.6 | 78.0 | 78.9 | 79.8 | 79.8 |
| 155° | 43.0 | 48.4 | 52.9 | 58.3 | 64.5 | 65.4 | 66.3 | 66.3 |
| 157.5° | 33.2 | 36.8 | 40.3 | 43.9 | 49.3 | 52.9 | 52.9 | 53.8 |
| 160° | 23.3 | 26.9 | 28.7 | 31.4 | 35.0 | 39.4 | 39.4 | 39.4 |
| 162.5° | 15.2 | 17.0 | 18.8 | 19.7 | 21.5 | 25.1 | 26.9 | 26.9 |
| 165° | 8.1 | 8.1 | 9.0 | 9.9 | 10.8 | 11.7 | 14.3 | 15.2 |
| 167.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 170° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 172.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 175° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 177.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 180° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)