

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: P241497

Luminaire Tested: **FVS8M-4-LD4-30-1HI-PA187-UNV-EDC1**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P241497
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1711-410-35)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: FVS8M-4-LD4-30-1HI-PA187-UNV-EDC1
Description: FAILSAFE FVS8M LED FIXTURE
4FT LENGTH, 1-MODULE LED WITH PA187 LENS
Light Source: (84) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

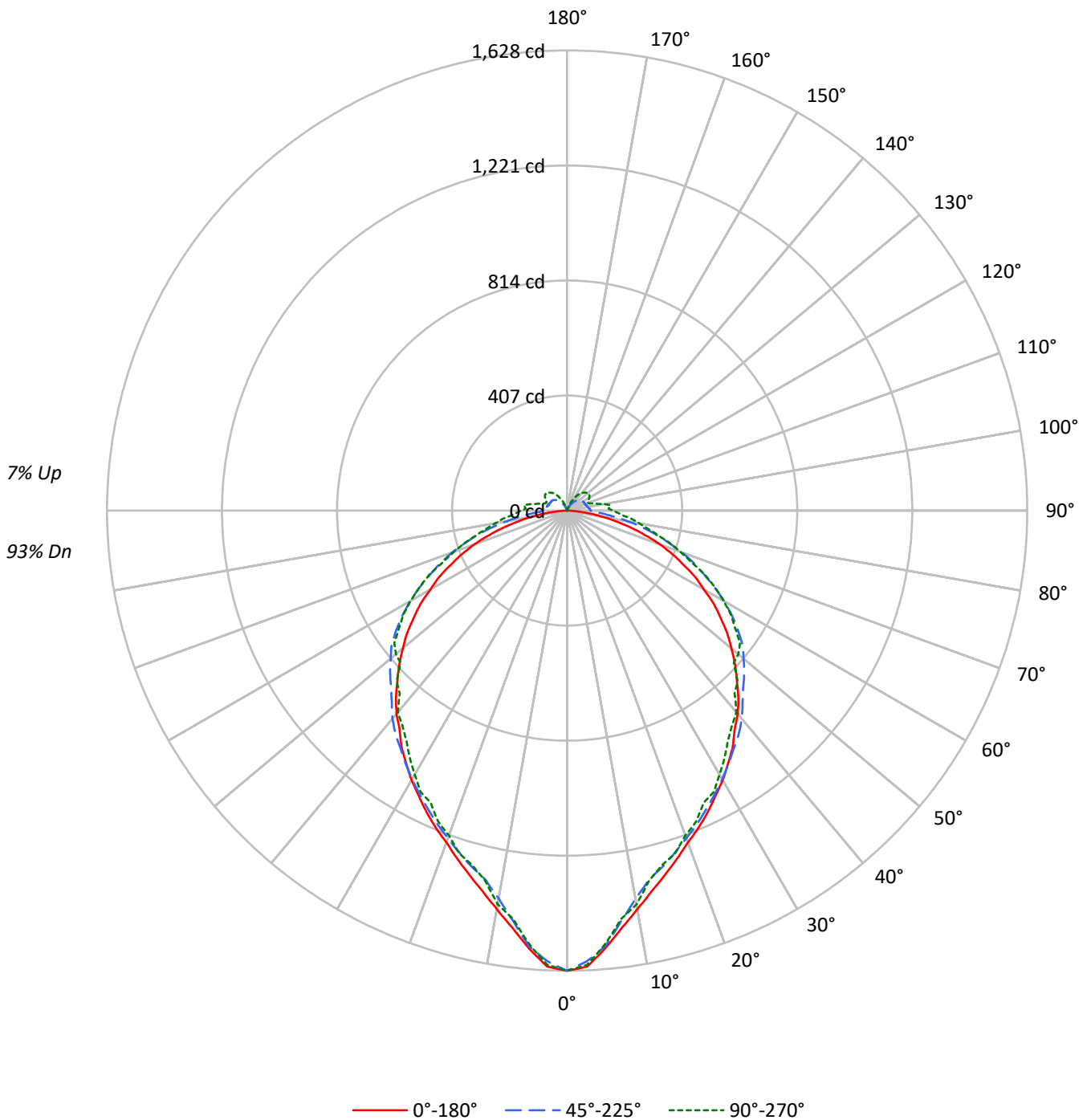
Lumens per Lamp: N/A
Luminaire Lumens: 4301.0 lumens
Efficiency: N/A
Efficacy: 97.3 lumens/watt
Spacing Criteria (0/90/45): 1.01 / 0.99 / 1.23
Luminous Opening: Rectangular w/ Sides (W: 0.65' x L: 3.73' x H: 0.15')
CIE Type: Direct

Input Watts (W): 44.2
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: P241497

CATALOG NUMBER: FVS8M-4-LD4-30-1HI-PA187-UNV-EDC1

Luminous Intensity Polar Plot





TEST NUMBER: P241497

CATALOG NUMBER: FVS8M-4-LD4-30-1HI-PA187-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 | 117 | 117 | 117 | 117 | 114 | 114 | 114 | 114 | 107 | 107 | 107 | 101 | 101 | 101 | 95 | 95 | 95 | 93 |
| 1 | 106 | 101 | 97 | 92 | 103 | 98 | 94 | 90 | 92 | 89 | 86 | 87 | 85 | 82 | 83 | 80 | 78 | 76 |
| 2 | 96 | 88 | 81 | 75 | 93 | 85 | 79 | 73 | 80 | 75 | 70 | 76 | 72 | 68 | 72 | 68 | 65 | 62 |
| 3 | 88 | 77 | 68 | 62 | 84 | 75 | 67 | 61 | 71 | 64 | 59 | 67 | 61 | 57 | 63 | 59 | 55 | 52 |
| 4 | 80 | 68 | 59 | 52 | 77 | 66 | 58 | 51 | 63 | 55 | 50 | 59 | 53 | 48 | 56 | 51 | 47 | 44 |
| 5 | 74 | 61 | 51 | 45 | 71 | 59 | 50 | 44 | 56 | 49 | 43 | 53 | 47 | 42 | 51 | 45 | 41 | 38 |
| 6 | 68 | 54 | 45 | 39 | 65 | 53 | 45 | 38 | 51 | 43 | 38 | 48 | 42 | 37 | 46 | 40 | 36 | 34 |
| 7 | 63 | 49 | 41 | 34 | 61 | 48 | 40 | 34 | 46 | 39 | 33 | 44 | 37 | 32 | 42 | 36 | 32 | 30 |
| 8 | 59 | 45 | 36 | 31 | 57 | 44 | 36 | 30 | 42 | 35 | 30 | 40 | 34 | 29 | 39 | 33 | 28 | 26 |
| 9 | 55 | 41 | 33 | 28 | 53 | 40 | 33 | 27 | 39 | 32 | 27 | 37 | 31 | 26 | 36 | 30 | 26 | 24 |
| 10 | 51 | 38 | 30 | 25 | 50 | 37 | 30 | 25 | 36 | 29 | 24 | 34 | 28 | 24 | 33 | 27 | 23 | 22 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 7276 | 7276 | 7276 |
| 5° | 6947 | 6825 | 6774 |
| 10° | 6452 | 6124 | 6170 |
| 15° | 6112 | 5748 | 5664 |
| 20° | 5858 | 5491 | 5375 |
| 25° | 5700 | 5286 | 5092 |
| 30° | 5555 | 5109 | 4923 |
| 35° | 5422 | 4956 | 4672 |
| 40° | 5305 | 4848 | 4569 |
| 45° | 5163 | 4689 | 4396 |
| 50° | 5040 | 4633 | 4331 |
| 55° | 4891 | 4536 | 4276 |
| 60° | 4682 | 4333 | 4107 |
| 65° | 4439 | 4028 | 3838 |
| 70° | 4115 | 3723 | 3434 |
| 75° | 3513 | 3287 | 3083 |
| 80° | 2732 | 2722 | 2907 |
| 85° | 1432 | 2072 | 2840 |



TEST NUMBER: P241497

CATALOG NUMBER: FVS8M-4-LD4-30-1HI-PA187-UNV-EDC1

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 143.0 | 3.3 |
| 10°-20° | 370.7 | 8.6 |
| 20°-30° | 538.5 | 12.5 |
| 30°-40° | 640.5 | 14.9 |
| 40°-50° | 671.0 | 15.6 |
| 50°-60° | 640.0 | 14.9 |
| 60°-70° | 510.6 | 11.9 |
| 70°-80° | 323.1 | 7.5 |
| 80°-90° | 143.6 | 3.3 |
| 90°-100° | 82.0 | 1.9 |
| 100°-110° | 66.0 | 1.5 |
| 110°-120° | 54.7 | 1.3 |
| 120°-130° | 49.7 | 1.2 |
| 130°-140° | 37.2 | 0.9 |
| 140°-150° | 21.4 | 0.5 |
| 150°-160° | 7.6 | 0.2 |
| 160°-170° | 1.2 | 0.0 |
| 170°-180° | 0.0 | 0.0 |
| 0°-30° | 1052.2 | 24.5 |
| 0°-40° | 1692.8 | 39.4 |
| 0°-60° | 3003.8 | 69.8 |
| 0°-90° | 3981.1 | 92.6 |
| 90°-120° | 202.7 | 4.7 |
| 90°-150° | 311.1 | 7.2 |
| 90°-180° | 320.0 | 7.4 |
| 0°-180° | 4301.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|------|------|-------|------|-------|------|------|
| 0° | 1628 | 1628 | 1628 | 1628 | 1628 | |
| 5° | 1554 | 1546 | 1546 | 1545 | 1540 | 144 |
| 15° | 1335 | 1326 | 1305 | 1308 | 1298 | 376 |
| 25° | 1177 | 1178 | 1166 | 1168 | 1141 | 542 |
| 35° | 1021 | 1033 | 1027 | 1015 | 992 | 638 |
| 45° | 849 | 879 | 881 | 863 | 853 | 656 |
| 55° | 663 | 699 | 738 | 744 | 726 | 593 |
| 65° | 455 | 493 | 534 | 537 | 539 | 451 |
| 75° | 233 | 277 | 323 | 338 | 329 | 248 |
| 85° | 40 | 77 | 127 | 174 | 198 | 53 |
| 90° | 1 | 34 | 82 | 128 | 163 | 2 |
| 95° | 0 | 32 | 80 | 113 | 150 | 0 |
| 105° | 0 | 31 | 70 | 97 | 95 | 0 |
| 115° | 0 | 29 | 66 | 83 | 83 | 1 |
| 125° | 1 | 25 | 63 | 87 | 96 | 1 |
| 135° | 1 | 18 | 52 | 78 | 90 | 1 |
| 145° | 1 | 8 | 34 | 59 | 69 | 1 |
| 155° | 1 | 3 | 14 | 28 | 34 | 0 |
| 165° | 2 | 1 | 3 | 6 | 8 | 0 |
| 175° | 0 | 0 | 0 | 0 | 0 | 0 |
| 180° | 0 | 0 | 0 | 0 | 0 | 0 |



TEST NUMBER: P241497

CATALOG NUMBER: FVS8M-4-LD4-30-1HI-PA187-UNV-EDC1

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 22.5° | 25° | 30° | 35° | 40° | 45° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1628.1 | 1628.1 | 1628.1 | 1628.1 | 1628.1 | 1628.1 | 1628.1 | 1628.1 | 1628.1 | 1628.1 | 1628.1 |
| 2.5° | 1614.9 | 1612.1 | 1605.5 | 1607.4 | 1609.3 | 1607.4 | 1609.3 | 1609.3 | 1605.5 | 1601.8 | 1596.1 |
| 5° | 1553.8 | 1548.2 | 1547.3 | 1548.2 | 1549.1 | 1546.3 | 1548.2 | 1550.1 | 1547.3 | 1551.0 | 1546.3 |
| 7.5° | 1488.0 | 1483.3 | 1482.4 | 1481.5 | 1480.5 | 1478.6 | 1479.6 | 1482.4 | 1478.6 | 1470.2 | 1464.5 |
| 10° | 1431.6 | 1425.1 | 1421.3 | 1418.5 | 1418.5 | 1417.5 | 1419.4 | 1414.7 | 1407.2 | 1401.6 | 1394.0 |
| 12.5° | 1379.9 | 1376.2 | 1372.4 | 1374.3 | 1370.5 | 1369.6 | 1367.7 | 1360.2 | 1354.6 | 1348.0 | 1336.7 |
| 15° | 1334.8 | 1333.9 | 1328.2 | 1330.1 | 1325.4 | 1326.4 | 1324.5 | 1321.7 | 1311.3 | 1304.7 | 1304.7 |
| 17.5° | 1291.6 | 1292.5 | 1292.5 | 1293.5 | 1285.9 | 1285.9 | 1285.9 | 1282.2 | 1273.7 | 1270.9 | 1269.0 |
| 20° | 1249.3 | 1251.2 | 1250.2 | 1248.3 | 1249.3 | 1248.3 | 1249.3 | 1245.5 | 1237.1 | 1238.0 | 1233.3 |
| 22.5° | 1214.5 | 1213.6 | 1211.7 | 1213.6 | 1212.6 | 1210.7 | 1211.7 | 1207.9 | 1204.2 | 1203.2 | 1200.4 |
| 25° | 1176.9 | 1176.9 | 1172.2 | 1176.9 | 1176.0 | 1177.8 | 1176.9 | 1179.7 | 1174.1 | 1172.2 | 1165.6 |
| 27.5° | 1137.4 | 1134.6 | 1135.5 | 1140.2 | 1143.1 | 1143.1 | 1139.3 | 1141.2 | 1142.1 | 1131.8 | 1130.8 |
| 30° | 1100.8 | 1099.8 | 1097.0 | 1102.6 | 1106.4 | 1103.6 | 1105.5 | 1109.2 | 1109.2 | 1098.9 | 1097.0 |
| 32.5° | 1060.3 | 1058.5 | 1060.3 | 1066.0 | 1066.9 | 1072.6 | 1075.4 | 1073.5 | 1072.6 | 1063.2 | 1063.2 |
| 35° | 1020.9 | 1019.9 | 1022.7 | 1026.5 | 1031.2 | 1033.1 | 1038.7 | 1042.5 | 1036.8 | 1028.4 | 1027.4 |
| 37.5° | 973.9 | 979.5 | 979.5 | 986.1 | 992.7 | 997.4 | 1000.2 | 1004.9 | 997.4 | 991.7 | 997.4 |
| 40° | 939.1 | 936.3 | 935.3 | 946.6 | 952.2 | 956.9 | 961.6 | 964.5 | 957.9 | 959.8 | 961.6 |
| 42.5° | 896.8 | 892.1 | 898.7 | 906.2 | 913.7 | 918.4 | 920.3 | 927.8 | 921.2 | 925.0 | 918.4 |
| 45° | 848.8 | 850.7 | 854.5 | 858.2 | 874.2 | 878.9 | 880.8 | 881.7 | 887.4 | 886.4 | 880.8 |
| 47.5° | 805.6 | 805.6 | 811.2 | 817.8 | 830.0 | 836.6 | 839.4 | 841.3 | 843.2 | 843.2 | 849.8 |
| 50° | 758.6 | 759.5 | 765.2 | 774.6 | 784.0 | 789.6 | 794.3 | 801.8 | 807.5 | 810.3 | 815.0 |
| 52.5° | 714.4 | 713.5 | 723.8 | 730.4 | 738.9 | 746.4 | 751.1 | 761.4 | 768.0 | 771.8 | 783.0 |
| 55° | 662.7 | 665.5 | 672.1 | 681.5 | 693.7 | 699.4 | 704.1 | 715.4 | 721.9 | 731.3 | 737.9 |
| 57.5° | 615.7 | 617.6 | 621.3 | 630.7 | 644.8 | 647.7 | 654.2 | 666.5 | 672.1 | 683.4 | 690.9 |
| 60° | 559.3 | 566.8 | 571.5 | 582.8 | 589.4 | 594.1 | 604.4 | 620.4 | 627.0 | 636.4 | 642.0 |
| 62.5° | 511.4 | 512.3 | 518.9 | 529.2 | 536.7 | 545.2 | 555.5 | 566.8 | 576.2 | 583.7 | 587.5 |
| 65° | 455.0 | 458.7 | 469.1 | 474.7 | 486.9 | 492.6 | 501.0 | 511.4 | 520.8 | 529.2 | 533.9 |
| 67.5° | 402.3 | 405.1 | 410.8 | 421.1 | 433.3 | 439.0 | 443.7 | 455.9 | 470.0 | 478.5 | 485.0 |
| 70° | 348.7 | 352.5 | 355.3 | 368.5 | 376.0 | 383.5 | 390.1 | 406.1 | 419.2 | 423.9 | 431.5 |
| 72.5° | 289.5 | 295.2 | 299.9 | 312.1 | 324.3 | 329.9 | 338.4 | 352.5 | 361.9 | 370.4 | 376.0 |
| 75° | 233.1 | 238.8 | 247.2 | 256.6 | 267.0 | 277.3 | 283.9 | 294.2 | 305.5 | 314.9 | 323.4 |
| 77.5° | 179.5 | 182.4 | 191.8 | 204.0 | 213.4 | 222.8 | 227.5 | 238.8 | 251.9 | 260.4 | 271.7 |
| 80° | 129.7 | 131.6 | 141.9 | 149.5 | 162.6 | 167.3 | 173.0 | 186.1 | 198.3 | 208.7 | 218.1 |
| 82.5° | 83.7 | 84.6 | 93.1 | 103.4 | 112.8 | 120.3 | 125.0 | 137.2 | 149.5 | 160.7 | 169.2 |
| 85° | 40.4 | 44.2 | 51.7 | 61.1 | 73.3 | 77.1 | 82.7 | 95.9 | 106.2 | 116.6 | 126.9 |
| 87.5° | 13.2 | 16.0 | 22.6 | 32.0 | 42.3 | 47.0 | 52.6 | 63.0 | 75.2 | 86.5 | 95.9 |
| 90° | 0.9 | 3.8 | 10.3 | 18.8 | 29.1 | 33.8 | 38.5 | 49.8 | 61.1 | 71.4 | 81.8 |
| 92.5° | 0.0 | 2.8 | 9.4 | 17.9 | 27.3 | 32.0 | 37.6 | 48.9 | 59.2 | 70.5 | 81.8 |
| 95° | 0.0 | 2.8 | 8.5 | 16.9 | 27.3 | 32.0 | 37.6 | 48.9 | 59.2 | 70.5 | 79.9 |
| 97.5° | 0.0 | 1.9 | 8.5 | 16.9 | 27.3 | 32.0 | 37.6 | 47.9 | 59.2 | 67.7 | 76.1 |
| 100° | 0.0 | 1.9 | 8.5 | 16.9 | 26.3 | 32.0 | 36.7 | 47.9 | 56.4 | 65.8 | 74.3 |
| 102.5° | 0.0 | 1.9 | 8.5 | 16.9 | 26.3 | 31.0 | 36.7 | 46.1 | 55.5 | 63.9 | 72.4 |
| 105° | 0.0 | 1.9 | 7.5 | 16.9 | 26.3 | 31.0 | 35.7 | 45.1 | 53.6 | 62.0 | 70.5 |
| 107.5° | 0.0 | 1.9 | 7.5 | 16.0 | 25.4 | 30.1 | 35.7 | 44.2 | 53.6 | 61.1 | 68.6 |
| 110° | 0.0 | 1.9 | 7.5 | 16.0 | 25.4 | 30.1 | 34.8 | 44.2 | 52.6 | 60.2 | 67.7 |



TEST NUMBER: P241497

CATALOG NUMBER: FVS8M-4-LD4-30-1HI-PA187-UNV-EDC1

CANDELA DISTRIBUTION (continued):

| | 0° | 5° | 10° | 15° | 20° | 22.5° | 25° | 30° | 35° | 40° | 45° |
|--------|-----|-----|-----|------|------|-------|------|------|------|------|------|
| 112.5° | 0.0 | 0.9 | 6.6 | 15.0 | 25.4 | 30.1 | 34.8 | 43.2 | 51.7 | 60.2 | 66.7 |
| 115° | 0.0 | 0.9 | 6.6 | 15.0 | 24.4 | 29.1 | 33.8 | 43.2 | 51.7 | 59.2 | 65.8 |
| 117.5° | 0.9 | 0.9 | 6.6 | 14.1 | 23.5 | 28.2 | 32.9 | 42.3 | 50.8 | 58.3 | 64.9 |
| 120° | 0.9 | 0.9 | 5.6 | 13.2 | 22.6 | 27.3 | 32.0 | 41.4 | 49.8 | 58.3 | 64.9 |
| 122.5° | 0.9 | 0.9 | 4.7 | 12.2 | 21.6 | 26.3 | 31.0 | 40.4 | 48.9 | 57.3 | 64.9 |
| 125° | 0.9 | 0.9 | 4.7 | 12.2 | 20.7 | 25.4 | 30.1 | 38.5 | 47.0 | 55.5 | 63.0 |
| 127.5° | 0.9 | 0.9 | 3.8 | 11.3 | 19.7 | 23.5 | 28.2 | 37.6 | 45.1 | 53.6 | 61.1 |
| 130° | 0.9 | 0.9 | 2.8 | 9.4 | 17.9 | 21.6 | 26.3 | 34.8 | 43.2 | 50.8 | 58.3 |
| 132.5° | 0.9 | 0.9 | 2.8 | 8.5 | 16.0 | 19.7 | 23.5 | 32.9 | 40.4 | 47.9 | 55.5 |
| 135° | 0.9 | 0.9 | 1.9 | 7.5 | 14.1 | 17.9 | 20.7 | 29.1 | 37.6 | 44.2 | 51.7 |
| 137.5° | 0.9 | 0.9 | 1.9 | 5.6 | 12.2 | 15.0 | 18.8 | 25.4 | 33.8 | 40.4 | 47.9 |
| 140° | 0.9 | 0.9 | 1.9 | 4.7 | 10.3 | 13.2 | 16.0 | 22.6 | 29.1 | 36.7 | 43.2 |
| 142.5° | 0.9 | 0.9 | 0.9 | 3.8 | 8.5 | 10.3 | 13.2 | 18.8 | 25.4 | 32.0 | 38.5 |
| 145° | 0.9 | 0.9 | 0.9 | 2.8 | 6.6 | 8.5 | 11.3 | 16.0 | 21.6 | 28.2 | 33.8 |
| 147.5° | 0.9 | 0.9 | 0.9 | 1.9 | 4.7 | 6.6 | 8.5 | 13.2 | 17.9 | 23.5 | 28.2 |
| 150° | 0.9 | 0.9 | 0.9 | 1.9 | 3.8 | 5.6 | 6.6 | 10.3 | 14.1 | 18.8 | 23.5 |
| 152.5° | 0.9 | 0.9 | 0.9 | 0.9 | 2.8 | 3.8 | 5.6 | 8.5 | 11.3 | 15.0 | 18.8 |
| 155° | 0.9 | 0.9 | 0.9 | 0.9 | 1.9 | 2.8 | 3.8 | 5.6 | 8.5 | 11.3 | 14.1 |
| 157.5° | 0.9 | 0.9 | 0.9 | 0.9 | 1.9 | 1.9 | 2.8 | 3.8 | 5.6 | 8.5 | 10.3 |
| 160° | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 1.9 | 1.9 | 2.8 | 3.8 | 5.6 | 6.6 |
| 162.5° | 1.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 1.9 | 1.9 | 2.8 | 3.8 | 4.7 |
| 165° | 1.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 1.9 | 1.9 | 2.8 |
| 167.5° | 1.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 |
| 170° | 1.9 | 1.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 |
| 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 |



TEST NUMBER: P241497

CATALOG NUMBER: FVS8M-4-LD4-30-1HI-PA187-UNV-EDC1

CANDELA DISTRIBUTION (continued):

| | 50° | 55° | 60° | 65° | 67.5° | 70° | 75° | 80° | 85° | 90° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1628.1 | 1628.1 | 1628.1 | 1628.1 | 1628.1 | 1628.1 | 1628.1 | 1628.1 | 1628.1 | 1628.1 |
| 2.5° | 1595.2 | 1602.7 | 1604.6 | 1607.4 | 1606.5 | 1609.3 | 1610.2 | 1612.1 | 1610.2 | 1608.4 |
| 5° | 1545.4 | 1550.1 | 1548.2 | 1545.4 | 1545.4 | 1544.4 | 1542.6 | 1542.6 | 1543.5 | 1539.7 |
| 7.5° | 1458.9 | 1464.5 | 1466.4 | 1467.4 | 1468.3 | 1466.4 | 1466.4 | 1465.5 | 1459.8 | 1458.0 |
| 10° | 1386.5 | 1385.6 | 1388.4 | 1394.0 | 1398.7 | 1399.7 | 1407.2 | 1411.0 | 1411.0 | 1413.8 |
| 12.5° | 1339.5 | 1348.0 | 1347.0 | 1349.9 | 1343.3 | 1340.5 | 1348.0 | 1342.3 | 1341.4 | 1340.5 |
| 15° | 1301.9 | 1301.9 | 1303.8 | 1306.6 | 1308.5 | 1309.4 | 1306.6 | 1300.0 | 1294.4 | 1298.2 |
| 17.5° | 1265.3 | 1270.9 | 1266.2 | 1254.9 | 1254.0 | 1257.7 | 1262.4 | 1267.1 | 1269.0 | 1270.9 |
| 20° | 1235.2 | 1227.7 | 1228.6 | 1240.8 | 1243.6 | 1242.7 | 1236.1 | 1231.4 | 1226.7 | 1223.0 |
| 22.5° | 1191.9 | 1203.2 | 1207.9 | 1198.5 | 1193.8 | 1193.8 | 1197.6 | 1196.6 | 1199.5 | 1191.9 |
| 25° | 1166.6 | 1167.5 | 1160.9 | 1168.4 | 1168.4 | 1169.4 | 1159.0 | 1151.5 | 1142.1 | 1141.2 |
| 27.5° | 1129.9 | 1127.1 | 1135.5 | 1129.9 | 1119.6 | 1116.7 | 1115.8 | 1119.6 | 1121.4 | 1122.4 |
| 30° | 1096.1 | 1098.9 | 1082.9 | 1090.4 | 1097.0 | 1098.9 | 1097.9 | 1082.9 | 1078.2 | 1078.2 |
| 32.5° | 1069.7 | 1057.5 | 1064.1 | 1065.0 | 1056.6 | 1050.9 | 1040.6 | 1041.5 | 1040.6 | 1036.8 |
| 35° | 1027.4 | 1026.5 | 1033.1 | 1019.0 | 1015.2 | 1014.3 | 1019.0 | 1013.3 | 1001.1 | 991.7 |
| 37.5° | 988.0 | 994.5 | 984.2 | 991.7 | 988.0 | 978.6 | 964.5 | 958.8 | 957.9 | 957.9 |
| 40° | 961.6 | 951.3 | 955.1 | 937.2 | 930.6 | 934.4 | 937.2 | 936.3 | 932.5 | 931.6 |
| 42.5° | 921.2 | 921.2 | 909.9 | 903.4 | 905.2 | 906.2 | 896.8 | 887.4 | 881.7 | 877.0 |
| 45° | 882.7 | 876.1 | 872.3 | 873.3 | 862.9 | 856.4 | 850.7 | 854.5 | 849.8 | 852.6 |
| 47.5° | 848.8 | 838.5 | 838.5 | 820.6 | 821.6 | 826.3 | 823.5 | 808.4 | 803.7 | 799.0 |
| 50° | 813.1 | 820.6 | 804.7 | 809.4 | 807.5 | 799.0 | 790.6 | 790.6 | 796.2 | 790.6 |
| 52.5° | 780.2 | 784.9 | 785.9 | 780.2 | 773.6 | 774.6 | 782.1 | 777.4 | 771.8 | 770.8 |
| 55° | 741.7 | 739.8 | 743.6 | 741.7 | 743.6 | 746.4 | 736.0 | 731.3 | 729.5 | 725.7 |
| 57.5° | 692.8 | 698.4 | 691.8 | 703.1 | 698.4 | 690.9 | 691.8 | 691.8 | 691.8 | 687.1 |
| 60° | 643.9 | 644.8 | 650.5 | 643.9 | 642.0 | 645.8 | 645.8 | 642.0 | 638.3 | 639.2 |
| 62.5° | 594.1 | 595.0 | 594.1 | 590.3 | 595.0 | 591.3 | 585.6 | 585.6 | 591.3 | 589.4 |
| 65° | 537.7 | 543.3 | 538.6 | 537.7 | 536.7 | 533.0 | 537.7 | 539.6 | 537.7 | 538.6 |
| 67.5° | 489.7 | 490.7 | 489.7 | 485.0 | 483.2 | 485.0 | 482.2 | 476.6 | 477.5 | 474.7 |
| 70° | 437.1 | 436.2 | 438.0 | 435.2 | 436.2 | 437.1 | 429.6 | 424.9 | 425.8 | 425.8 |
| 72.5° | 382.6 | 385.4 | 385.4 | 388.2 | 387.3 | 384.5 | 381.6 | 379.8 | 378.8 | 378.8 |
| 75° | 330.9 | 335.6 | 336.5 | 338.4 | 337.5 | 336.5 | 336.5 | 332.8 | 329.9 | 329.0 |
| 77.5° | 278.2 | 282.9 | 290.5 | 288.6 | 290.5 | 290.5 | 292.3 | 287.6 | 290.5 | 290.5 |
| 80° | 226.5 | 232.2 | 239.7 | 245.3 | 247.2 | 248.2 | 250.0 | 251.9 | 257.6 | 257.6 |
| 82.5° | 179.5 | 186.1 | 195.5 | 203.0 | 208.7 | 210.6 | 218.1 | 225.6 | 229.4 | 231.2 |
| 85° | 137.2 | 147.6 | 157.0 | 166.4 | 173.9 | 179.5 | 186.1 | 188.9 | 194.6 | 198.3 |
| 87.5° | 107.2 | 118.4 | 130.7 | 142.9 | 147.6 | 150.4 | 156.0 | 162.6 | 172.0 | 177.7 |
| 90° | 94.0 | 106.2 | 117.5 | 126.0 | 127.8 | 130.7 | 137.2 | 144.8 | 155.1 | 162.6 |
| 92.5° | 93.1 | 102.5 | 110.0 | 115.6 | 118.4 | 122.2 | 127.8 | 131.6 | 140.1 | 146.6 |
| 95° | 88.4 | 96.8 | 104.3 | 110.0 | 112.8 | 115.6 | 121.3 | 130.7 | 142.9 | 150.4 |
| 97.5° | 85.5 | 94.0 | 99.6 | 106.2 | 110.0 | 113.7 | 126.0 | 140.1 | 150.4 | 153.2 |
| 100° | 82.7 | 90.2 | 96.8 | 105.3 | 110.0 | 114.7 | 125.0 | 130.7 | 132.5 | 130.7 |
| 102.5° | 79.9 | 87.4 | 94.9 | 102.5 | 105.3 | 109.0 | 113.7 | 112.8 | 111.9 | 110.0 |
| 105° | 78.0 | 84.6 | 91.2 | 95.9 | 96.8 | 98.7 | 99.6 | 98.7 | 96.8 | 94.9 |
| 107.5° | 76.1 | 81.8 | 86.5 | 88.4 | 89.3 | 90.2 | 90.2 | 88.4 | 86.5 | 84.6 |
| 110° | 73.3 | 79.0 | 81.8 | 83.7 | 83.7 | 84.6 | 83.7 | 82.7 | 79.9 | 79.0 |



TEST NUMBER: P241497

CATALOG NUMBER: FVS8M-4-LD4-30-1HI-PA187-UNV-EDC1

CANDELA DISTRIBUTION (continued):

| | 50° | 55° | 60° | 65° | 67.5° | 70° | 75° | 80° | 85° | 90° |
|--------|------|------|------|------|-------|------|------|------|------|------|
| 112.5° | 72.4 | 76.1 | 79.0 | 80.8 | 81.8 | 82.7 | 82.7 | 81.8 | 79.9 | 79.0 |
| 115° | 71.4 | 76.1 | 79.0 | 81.8 | 82.7 | 83.7 | 84.6 | 84.6 | 82.7 | 82.7 |
| 117.5° | 71.4 | 77.1 | 80.8 | 83.7 | 85.5 | 86.5 | 87.4 | 88.4 | 87.4 | 86.5 |
| 120° | 71.4 | 78.0 | 81.8 | 86.5 | 87.4 | 88.4 | 90.2 | 91.2 | 91.2 | 90.2 |
| 122.5° | 71.4 | 78.0 | 82.7 | 86.5 | 88.4 | 89.3 | 92.1 | 93.1 | 93.1 | 93.1 |
| 125° | 70.5 | 77.1 | 81.8 | 85.5 | 87.4 | 89.3 | 92.1 | 94.0 | 94.9 | 95.9 |
| 127.5° | 68.6 | 75.2 | 79.9 | 84.6 | 86.5 | 88.4 | 91.2 | 93.1 | 94.9 | 96.8 |
| 130° | 65.8 | 72.4 | 78.0 | 82.7 | 84.6 | 86.5 | 89.3 | 92.1 | 94.0 | 94.9 |
| 132.5° | 63.0 | 68.6 | 75.2 | 79.9 | 81.8 | 83.7 | 87.4 | 90.2 | 92.1 | 93.1 |
| 135° | 59.2 | 64.9 | 71.4 | 76.1 | 78.0 | 80.8 | 84.6 | 87.4 | 89.3 | 90.2 |
| 137.5° | 54.5 | 61.1 | 66.7 | 72.4 | 74.3 | 76.1 | 80.8 | 83.7 | 85.5 | 85.5 |
| 140° | 50.8 | 56.4 | 63.0 | 67.7 | 70.5 | 72.4 | 76.1 | 79.0 | 80.8 | 81.8 |
| 142.5° | 46.1 | 52.6 | 58.3 | 63.0 | 64.9 | 66.7 | 70.5 | 73.3 | 75.2 | 76.1 |
| 145° | 40.4 | 47.0 | 51.7 | 56.4 | 59.2 | 61.1 | 63.9 | 66.7 | 68.6 | 68.6 |
| 147.5° | 34.8 | 40.4 | 45.1 | 48.9 | 51.7 | 53.6 | 56.4 | 59.2 | 61.1 | 61.1 |
| 150° | 28.2 | 32.9 | 38.5 | 42.3 | 43.2 | 45.1 | 47.9 | 49.8 | 50.8 | 51.7 |
| 152.5° | 22.6 | 26.3 | 31.0 | 33.8 | 35.7 | 37.6 | 39.5 | 41.4 | 42.3 | 42.3 |
| 155° | 16.9 | 20.7 | 23.5 | 27.3 | 28.2 | 30.1 | 31.0 | 32.9 | 32.9 | 33.8 |
| 157.5° | 12.2 | 15.0 | 16.9 | 19.7 | 20.7 | 22.6 | 23.5 | 24.4 | 25.4 | 25.4 |
| 160° | 8.5 | 10.3 | 12.2 | 14.1 | 15.0 | 16.0 | 16.9 | 17.9 | 18.8 | 17.9 |
| 162.5° | 5.6 | 6.6 | 7.5 | 9.4 | 9.4 | 10.3 | 11.3 | 12.2 | 12.2 | 12.2 |
| 165° | 2.8 | 3.8 | 4.7 | 4.7 | 5.6 | 5.6 | 6.6 | 7.5 | 7.5 | 7.5 |
| 167.5° | 1.9 | 1.9 | 1.9 | 2.8 | 2.8 | 2.8 | 2.8 | 3.8 | 3.8 | 3.8 |
| 170° | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 | 0.9 |
| 172.5° | 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 |
| 177.5° | 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 |

(END OF REPORT)