

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: P241339

Luminaire Tested: **FVS8M-2-LD4-40-3STD-P125-UNV-EDC1**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-79-08  
Report Number: P241339  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1711-410-13)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: FVS8M-2-LD4-40-3STD-P125-UNV-EDC1  
Description: FAILSAFE FVS8M LED FIXTURE  
2FT LENGTH, 3-MODULE LED WITH P125 LENS  
Light Source: (126) 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

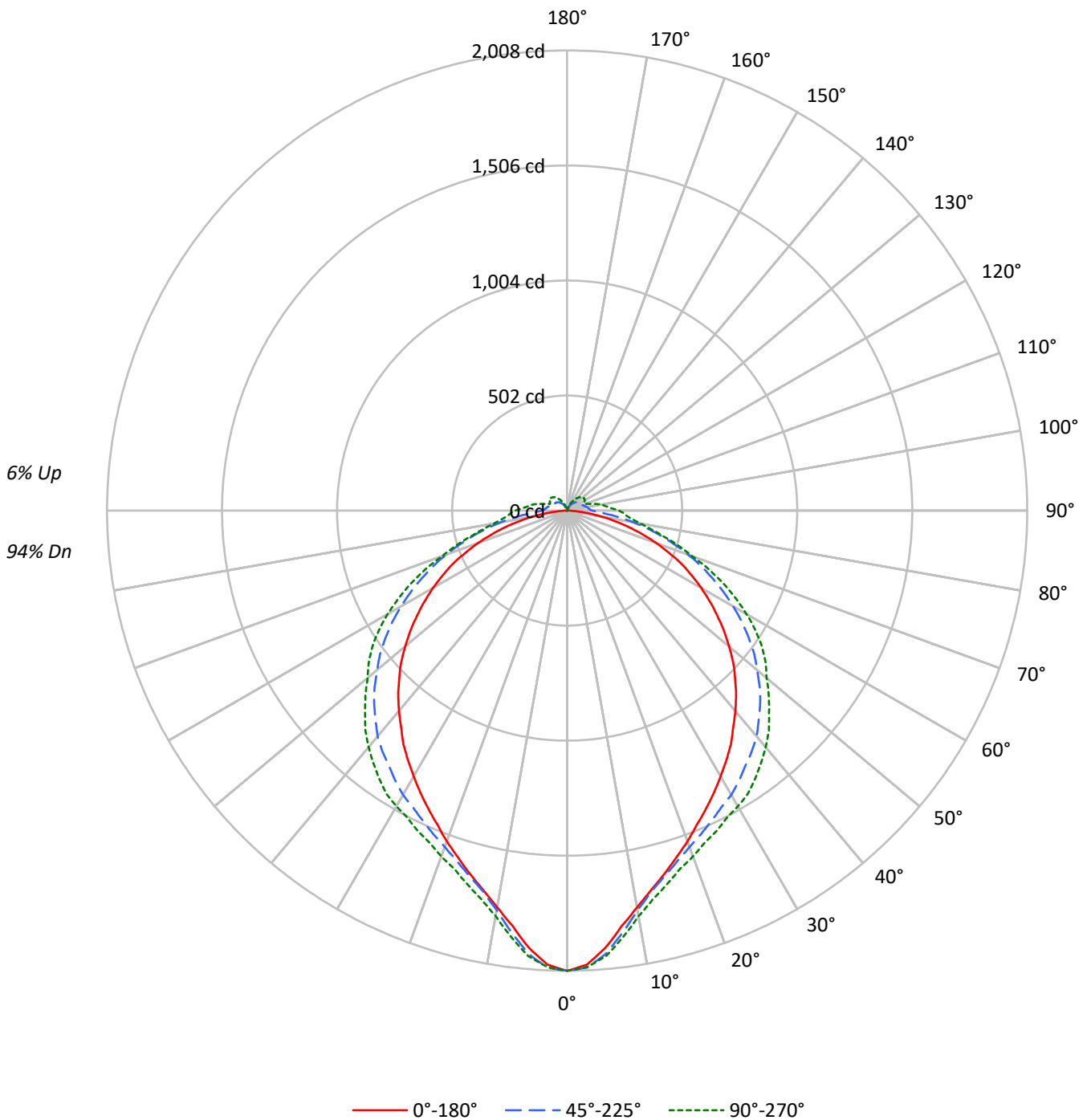
Lumens per Lamp: N/A  
Luminaire Lumens: 5537.0 lumens  
Efficiency: N/A  
Efficacy: 109.4 lumens/watt  
Spacing Criteria (0/90/45): 1 / 1.11 / 1.29  
Luminous Opening: Rectangular w/ Sides (W: 0.65' x L: 1.85' x H: 0.15')  
CIE Type: Direct

Input Watts (W): 50.6  
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

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CATALOG NUMBER: FVS8M-2-LD4-40-3STD-P125-UNV-EDC1

### Luminous Intensity Polar Plot





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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	118	118	118	118	114	114	114	114	108	108	108	102	102	102	96	96	96	94
1	106	101	97	93	103	98	94	91	93	90	87	88	85	83	84	81	79	77
2	96	88	81	75	93	85	79	73	81	75	71	77	72	68	73	69	66	63
3	88	77	68	62	85	75	67	61	71	64	59	67	62	57	64	59	55	53
4	80	68	59	52	77	66	58	51	63	56	50	60	54	49	57	52	47	45
5	74	61	51	45	71	59	50	44	56	49	43	54	47	42	51	45	41	39
6	68	54	45	39	66	53	45	38	51	43	38	48	42	37	46	40	36	34
7	63	49	40	34	61	48	40	34	46	39	33	44	37	32	42	36	32	30
8	59	45	36	30	57	44	36	30	42	35	30	40	34	29	39	33	28	26
9	55	41	33	27	53	40	32	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°	18053	18053	18053
5°	17167	17191	17263
10°	15820	15569	15771
15°	14954	14516	14802
20°	14282	13850	14192
25°	13728	13450	13840
30°	13293	13225	13681
35°	12953	12940	13542
40°	12571	12785	13297
45°	12212	12460	12924
50°	11791	12034	12521
55°	11270	11585	12307
60°	10696	10958	11694
65°	10033	10171	10769
70°	8936	9268	9394
75°	7467	8136	8210
80°	5520	6808	7336
85°	2672	5233	7491



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	179.5	3.2
10°-20°	467.8	8.4
20°-30°	689.1	12.4
30°-40°	846.0	15.3
40°-50°	899.9	16.3
50°-60°	842.1	15.2
60°-70°	667.8	12.1
70°-80°	416.8	7.5
80°-90°	187.1	3.4
90°-100°	100.4	1.8
100°-110°	73.1	1.3
110°-120°	53.5	1.0
120°-130°	47.2	0.9
130°-140°	35.5	0.6
140°-150°	20.9	0.4
150°-160°	8.4	0.2
160°-170°	1.6	0.0
170°-180°	0.0	0.0
0°-30°	1336.4	24.1
0°-40°	2182.5	39.4
0°-60°	3924.5	70.9
0°-90°	5196.2	93.8
90°-120°	227.0	4.1
90°-150°	330.7	6.0
90°-180°	341.0	6.2
0°-180°	5537.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2008	2008	2008	2008	2008	
5°	1916	1926	1941	1945	1951	178
15°	1641	1642	1650	1667	1687	462
25°	1435	1453	1492	1532	1542	662
35°	1245	1289	1357	1426	1429	778
45°	1036	1099	1191	1235	1246	800
55°	800	871	966	1015	1039	715
65°	551	609	699	741	752	541
75°	278	336	422	454	436	296
85°	49	103	176	219	260	63
90°	1	48	109	161	226	3
95°	0	43	95	138	180	0
105°	0	34	78	105	113	0
115°	0	30	64	76	82	0
125°	0	25	60	82	91	0
135°	1	20	51	72	83	1
145°	1	12	37	53	61	1
155°	1	4	19	30	34	0
165°	1	1	4	9	11	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	2008.4	2008.4	2008.4	2008.4	2008.4	2008.4	2008.4	2008.4	2008.4	2008.4	2008.4
2.5°	1983.0	1985.4	1986.2	1987.1	1987.1	1989.5	1989.5	1991.2	1993.6	1995.3	1996.1
5°	1915.7	1920.6	1916.5	1920.6	1923.9	1925.5	1928.0	1929.6	1934.5	1939.5	1941.1
7.5°	1827.9	1829.5	1832.0	1834.5	1837.7	1836.9	1838.6	1844.3	1850.0	1857.4	1856.6
10°	1757.3	1757.3	1757.3	1757.3	1757.3	1759.8	1760.6	1763.1	1767.2	1774.6	1770.5
12.5°	1695.0	1696.6	1699.1	1698.3	1696.6	1695.8	1693.3	1696.6	1697.4	1702.4	1700.7
15°	1640.8	1638.4	1640.8	1642.5	1640.8	1642.5	1641.7	1644.1	1643.3	1644.9	1649.9
17.5°	1585.9	1591.6	1593.3	1589.1	1590.8	1592.4	1593.3	1592.4	1592.4	1599.0	1602.3
20°	1535.8	1538.3	1538.3	1537.5	1540.7	1541.6	1545.7	1545.7	1549.8	1558.0	1561.3
22.5°	1481.7	1486.6	1489.9	1489.1	1498.1	1498.1	1498.9	1502.2	1513.7	1517.0	1527.6
25°	1434.9	1439.8	1441.5	1444.8	1451.3	1453.0	1453.0	1466.9	1471.0	1480.9	1492.3
27.5°	1387.3	1390.6	1392.2	1398.0	1408.7	1408.7	1412.8	1426.7	1435.7	1447.2	1458.7
30°	1338.9	1346.3	1346.3	1355.3	1364.4	1366.8	1376.7	1389.0	1403.7	1413.6	1432.5
32.5°	1292.2	1295.4	1298.7	1312.7	1322.5	1329.9	1337.3	1352.9	1365.2	1382.4	1396.4
35°	1245.4	1249.5	1252.8	1267.5	1276.6	1288.9	1297.9	1317.6	1329.9	1346.3	1357.0
37.5°	1190.4	1197.0	1204.4	1215.9	1233.9	1243.8	1252.0	1275.8	1289.7	1304.5	1324.2
40°	1142.0	1148.6	1156.8	1169.1	1188.8	1196.2	1206.8	1226.5	1249.5	1266.7	1286.4
42.5°	1091.2	1098.5	1106.7	1121.5	1137.1	1146.9	1159.3	1179.8	1202.7	1224.1	1237.2
45°	1036.2	1042.8	1053.4	1067.4	1087.1	1099.4	1109.2	1133.8	1151.9	1174.0	1191.2
47.5°	983.7	987.0	998.4	1017.3	1034.5	1049.3	1059.2	1080.5	1104.3	1120.7	1139.6
50°	922.2	926.3	938.6	957.4	980.4	994.3	1000.1	1026.3	1046.0	1067.4	1081.3
52.5°	862.3	868.8	883.6	900.8	922.2	934.5	945.1	964.0	989.4	1008.3	1029.6
55°	799.9	808.1	821.2	840.1	859.0	871.3	883.6	904.9	927.9	950.0	966.5
57.5°	737.6	745.8	758.9	777.8	796.6	806.5	818.8	840.9	867.2	888.5	904.1
60°	676.0	681.8	695.7	712.1	731.0	743.3	752.3	775.3	799.9	818.8	836.8
62.5°	612.0	617.8	629.3	644.8	666.2	676.8	685.0	708.8	731.8	749.9	769.6
65°	551.3	551.3	565.3	578.4	596.4	608.8	621.1	641.6	661.3	680.9	699.0
67.5°	478.3	485.7	495.5	510.3	530.8	541.5	553.8	573.5	591.5	615.3	632.5
70°	413.5	416.8	428.3	444.7	461.1	471.7	484.0	502.1	522.6	543.9	561.2
72.5°	343.8	350.3	360.2	379.0	392.2	402.8	414.3	433.2	452.9	474.2	491.4
75°	278.1	283.9	293.7	308.5	325.7	336.4	345.4	365.1	384.0	407.7	422.5
77.5°	215.8	218.2	228.9	242.8	264.2	269.9	280.6	298.6	320.0	338.8	356.9
80°	154.2	159.2	167.4	180.5	199.4	208.4	217.4	237.1	255.2	275.7	292.1
82.5°	96.8	104.2	110.8	128.0	142.8	150.1	160.8	178.0	198.5	215.8	230.5
85°	49.2	55.0	64.8	77.1	93.5	102.6	109.9	128.8	146.0	162.4	175.6
87.5°	18.9	23.0	31.2	44.3	59.1	66.5	75.5	91.1	107.5	120.6	133.7
90°	0.8	5.7	14.8	27.1	41.0	48.4	55.8	71.4	85.3	97.6	109.1
92.5°	0.0	4.1	12.3	24.6	37.7	44.3	51.7	64.8	76.3	87.8	99.3
95°	0.0	3.3	11.5	23.0	35.3	42.7	49.2	61.5	73.0	83.7	95.2
97.5°	0.0	3.3	10.7	22.2	34.5	41.0	46.8	58.2	68.9	80.4	91.1
100°	0.0	3.3	10.7	21.3	32.8	38.6	44.3	55.0	66.5	77.1	87.0
102.5°	0.0	2.5	9.8	19.7	31.2	36.9	41.8	52.5	63.2	73.0	82.9
105°	0.0	2.5	9.0	18.9	29.5	34.5	40.2	50.9	60.7	69.7	77.9
107.5°	0.0	2.5	9.0	18.0	27.9	33.6	38.6	48.4	58.2	66.5	73.8
110°	0.0	1.6	8.2	17.2	27.1	32.0	36.9	46.8	55.8	63.2	70.6



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	0.0	1.6	7.4	16.4	25.4	30.4	35.3	45.1	53.3	60.7	66.5
115°	0.0	1.6	7.4	15.6	24.6	29.5	34.5	43.5	51.7	58.2	64.0
117.5°	0.0	1.6	6.6	14.8	23.8	28.7	32.8	41.8	50.0	56.6	62.4
120°	0.0	1.6	6.6	13.9	23.0	27.9	32.0	41.0	48.4	55.8	61.5
122.5°	0.0	0.8	5.7	13.1	22.2	26.3	31.2	39.4	47.6	55.0	60.7
125°	0.0	0.8	5.7	12.3	21.3	25.4	30.4	38.6	46.8	54.1	59.9
127.5°	0.0	0.8	4.9	11.5	19.7	23.8	28.7	36.9	45.1	52.5	58.2
130°	0.0	0.8	4.1	10.7	18.9	23.0	27.1	35.3	42.7	50.0	55.8
132.5°	0.8	0.8	4.1	9.8	17.2	21.3	25.4	32.8	40.2	47.6	53.3
135°	0.8	0.8	3.3	9.0	15.6	19.7	23.0	31.2	37.7	45.1	50.9
137.5°	0.8	0.8	3.3	8.2	14.8	18.0	21.3	28.7	35.3	41.8	47.6
140°	0.8	0.8	2.5	7.4	13.1	16.4	19.7	26.3	32.8	38.6	44.3
142.5°	0.8	0.8	1.6	5.7	11.5	13.9	17.2	23.8	29.5	35.3	40.2
145°	0.8	0.8	1.6	4.9	9.8	12.3	14.8	20.5	26.3	31.2	36.9
147.5°	0.8	0.8	0.8	4.1	7.4	9.8	12.3	18.0	23.0	27.9	32.8
150°	0.8	0.8	0.8	2.5	5.7	8.2	9.8	14.8	18.9	23.8	27.9
152.5°	0.8	0.8	0.8	1.6	4.9	5.7	8.2	11.5	15.6	19.7	23.8
155°	0.8	0.8	0.8	1.6	3.3	4.1	5.7	9.0	12.3	15.6	18.9
157.5°	0.8	0.8	0.8	0.8	2.5	3.3	4.1	6.6	9.0	11.5	14.8
160°	0.8	0.8	0.8	0.8	1.6	1.6	2.5	4.1	6.6	8.2	10.7
162.5°	0.8	0.8	0.8	0.8	0.8	0.8	1.6	2.5	4.1	5.7	7.4
165°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.6	2.5	3.3	4.1
167.5°	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.8	0.8	1.6	2.5
170°	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8
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):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	2008.4	2008.4	2008.4	2008.4	2008.4	2008.4	2008.4	2008.4	2008.4	2008.4
2.5°	1996.9	1996.1	1996.9	1996.1	1996.1	1995.3	1996.1	1995.3	1993.6	1993.6
5°	1941.1	1946.9	1947.7	1949.3	1945.2	1947.7	1947.7	1947.7	1947.7	1951.0
7.5°	1861.5	1869.7	1869.7	1869.7	1873.8	1874.7	1877.1	1877.1	1876.3	1876.3
10°	1777.0	1783.6	1786.1	1786.9	1791.8	1791.8	1795.9	1794.3	1796.7	1796.7
12.5°	1701.5	1704.8	1713.9	1722.1	1721.2	1725.3	1729.4	1732.7	1730.3	1735.2
15°	1651.5	1657.2	1661.3	1663.8	1667.1	1672.0	1676.1	1681.0	1682.7	1686.8
17.5°	1602.3	1610.5	1617.9	1626.1	1630.2	1631.8	1634.3	1636.7	1639.2	1639.2
20°	1569.5	1576.0	1581.8	1585.0	1589.1	1593.3	1594.1	1599.0	1600.6	1605.6
22.5°	1535.8	1540.7	1548.1	1556.3	1558.8	1562.1	1563.7	1566.2	1570.3	1568.6
25°	1503.0	1512.0	1521.9	1526.0	1531.7	1536.6	1539.9	1544.8	1546.5	1542.4
27.5°	1473.5	1479.2	1498.1	1507.1	1511.2	1511.2	1511.2	1516.1	1515.3	1510.4
30°	1440.7	1457.1	1470.2	1474.3	1477.6	1481.7	1486.6	1489.1	1487.4	1489.9
32.5°	1410.3	1421.8	1439.0	1450.5	1453.8	1457.9	1460.3	1464.4	1466.1	1466.9
35°	1375.8	1393.1	1414.4	1420.1	1425.9	1431.6	1433.3	1430.8	1434.1	1429.2
37.5°	1340.6	1364.4	1369.3	1384.0	1386.5	1386.5	1387.3	1389.0	1390.6	1389.0
40°	1302.8	1311.0	1329.1	1334.0	1335.6	1338.1	1343.0	1343.8	1344.7	1347.9
42.5°	1254.4	1268.4	1276.6	1293.0	1293.8	1293.8	1293.8	1296.3	1300.4	1302.8
45°	1200.3	1215.9	1227.3	1235.5	1234.7	1238.8	1242.9	1242.9	1245.4	1246.2
47.5°	1152.7	1160.1	1166.6	1174.8	1181.4	1181.4	1183.9	1187.1	1190.4	1193.7
50°	1093.6	1106.7	1114.1	1122.3	1120.7	1124.0	1132.2	1136.3	1134.6	1136.3
52.5°	1039.5	1049.3	1061.6	1066.5	1072.3	1076.4	1077.2	1083.8	1088.7	1092.0
55°	982.0	989.4	1001.7	1014.9	1014.9	1016.5	1026.3	1032.1	1038.6	1038.6
57.5°	918.9	931.2	945.1	949.2	955.8	963.2	970.6	973.0	975.5	974.7
60°	849.1	866.4	879.5	888.5	891.8	895.1	895.1	904.1	904.9	904.9
62.5°	785.1	799.9	809.8	813.0	813.9	818.8	820.4	823.7	822.1	828.6
65°	715.4	728.5	735.1	738.4	740.8	740.0	742.5	745.8	752.3	751.5
67.5°	649.8	654.7	661.3	666.2	666.2	670.3	672.7	676.8	669.5	668.6
70°	577.6	588.2	591.5	600.5	597.3	597.3	590.7	585.0	577.6	579.2
72.5°	507.0	516.0	525.9	522.6	522.6	520.1	515.2	510.3	505.4	508.7
75°	436.5	448.8	454.5	453.7	453.7	452.1	446.3	443.0	439.7	435.6
77.5°	372.5	379.0	386.4	389.7	390.5	389.7	384.0	378.2	377.4	375.8
80°	303.6	311.8	319.1	324.9	325.7	325.7	324.1	324.1	321.6	323.2
82.5°	240.4	249.4	260.1	266.6	268.3	272.4	274.0	276.5	281.4	285.5
85°	184.6	197.7	207.6	215.8	219.1	221.5	230.5	241.2	252.7	260.1
87.5°	146.0	157.5	169.0	178.0	183.0	189.5	200.2	215.8	233.8	246.1
90°	121.4	132.9	145.2	155.9	160.8	166.5	179.7	195.3	216.6	226.4
92.5°	109.9	122.2	132.1	141.1	146.0	151.0	163.3	176.4	192.0	198.5
95°	105.8	114.9	123.1	132.9	137.8	143.6	153.4	164.1	173.9	179.7
97.5°	100.1	109.1	118.1	126.3	131.3	135.4	142.8	152.6	160.8	164.1
100°	96.0	104.2	111.6	119.0	123.1	126.3	135.4	144.4	149.3	151.8
102.5°	91.1	98.5	105.0	111.6	114.9	118.1	125.5	130.4	132.1	132.1
105°	85.3	92.7	98.5	104.2	105.0	107.5	111.6	113.2	113.2	113.2
107.5°	80.4	86.1	91.1	94.3	95.2	96.0	96.8	96.8	95.2	95.2
110°	76.3	80.4	83.7	85.3	84.5	85.3	85.3	84.5	84.5	84.5





TEST NUMBER: P241339

CATALOG NUMBER: FVS8M-2-LD4-40-3STD-P125-UNV-EDC1

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	72.2	75.5	77.1	78.8	78.8	78.8	78.8	80.4	80.4	80.4
115°	68.9	72.2	74.7	76.3	76.3	77.1	78.8	81.2	82.0	82.0
117.5°	67.3	71.4	73.8	76.3	77.9	78.8	82.0	83.7	85.3	85.3
120°	66.5	71.4	75.5	78.8	80.4	82.0	84.5	87.0	88.6	88.6
122.5°	66.5	71.4	76.3	79.6	82.0	82.9	86.1	88.6	90.2	90.2
125°	65.6	71.4	76.3	80.4	82.0	83.7	86.1	88.6	90.2	91.1
127.5°	64.0	69.7	74.7	78.8	80.4	82.9	85.3	87.8	89.4	90.2
130°	61.5	67.3	72.2	76.3	78.8	80.4	83.7	86.1	87.8	87.8
132.5°	59.1	64.8	68.9	73.8	76.3	77.9	81.2	83.7	85.3	85.3
135°	56.6	61.5	65.6	70.6	72.2	74.7	77.9	80.4	82.0	82.9
137.5°	53.3	58.2	62.4	66.5	68.9	70.6	73.8	76.3	77.9	78.8
140°	49.2	54.1	58.2	62.4	64.8	66.5	68.9	71.4	73.0	73.0
142.5°	45.1	50.0	54.1	57.4	59.1	60.7	63.2	65.6	66.5	67.3
145°	41.0	45.1	49.2	52.5	53.3	55.0	57.4	59.1	60.7	60.7
147.5°	36.1	40.2	43.5	45.9	47.6	48.4	50.9	52.5	53.3	54.1
150°	31.2	35.3	37.7	40.2	41.8	42.7	44.3	45.9	46.8	47.6
152.5°	27.1	29.5	32.8	34.5	36.1	36.9	38.6	39.4	40.2	40.2
155°	22.2	24.6	27.1	28.7	30.4	30.4	32.0	32.8	33.6	33.6
157.5°	17.2	19.7	22.2	23.8	24.6	25.4	26.3	27.1	27.1	27.9
160°	12.3	14.8	17.2	18.0	18.9	19.7	20.5	20.5	21.3	21.3
162.5°	9.0	10.7	12.3	13.1	13.9	13.9	14.8	15.6	15.6	15.6
165°	5.7	6.6	8.2	9.0	9.0	9.8	9.8	10.7	10.7	10.7
167.5°	2.5	3.3	4.1	4.9	4.9	5.7	5.7	5.7	6.6	5.7
170°	0.8	0.8	1.6	1.6	1.6	1.6	2.5	2.5	2.5	2.5
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)