

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: P241334

Luminaire Tested: **FVS8M-2-LD4-35-3LO-P125-UNV-EDC1**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-79-08  
Report Number: P241334  
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-LD4-35-3LO-P125-UNV-EDC1  
Description: FAILSAFE FVS8M LED FIXTURE  
2FT LENGTH, 3-MODULE LED WITH P125 LENS  
Light Source: (126) 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

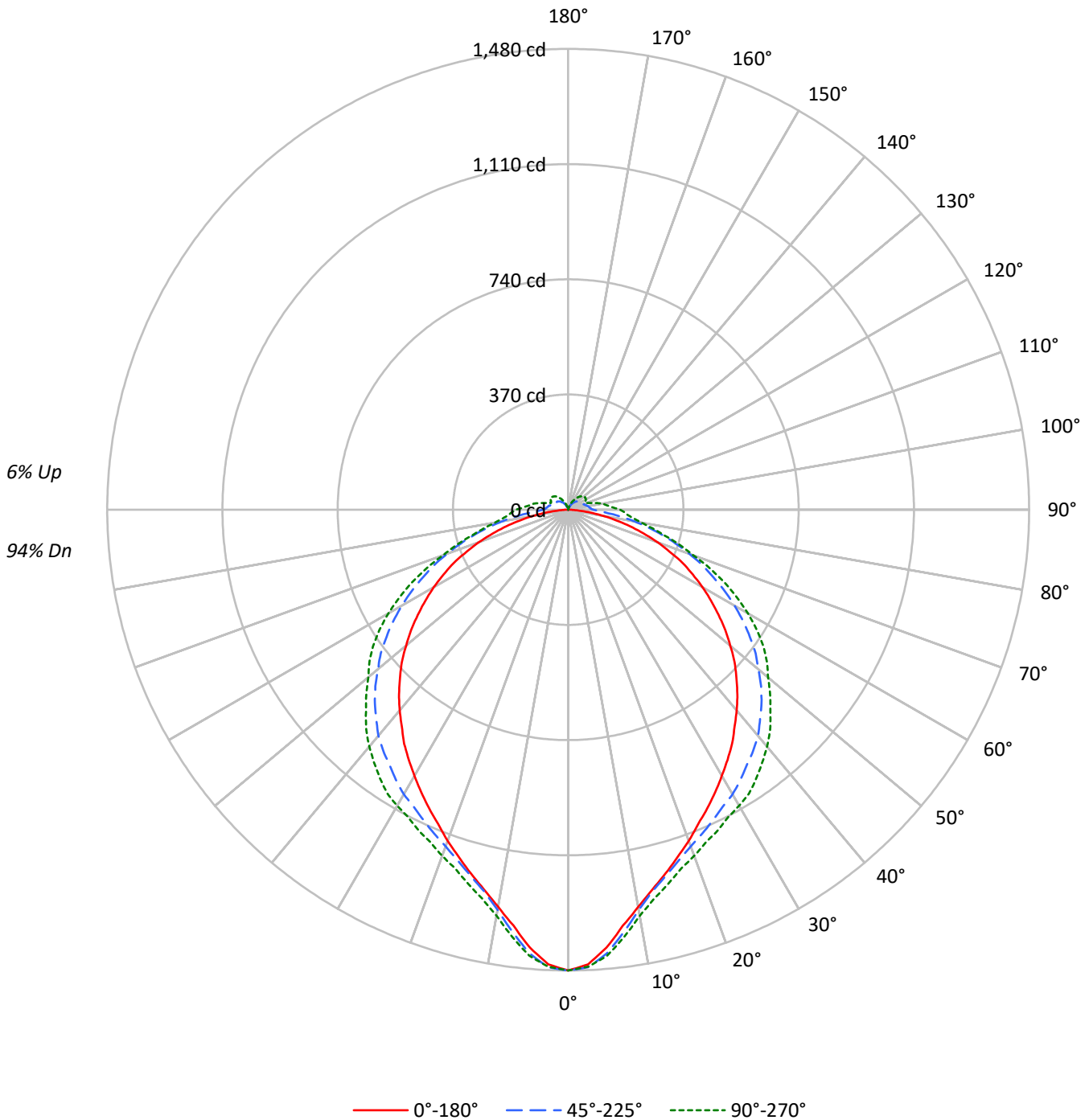
Lumens per Lamp: N/A  
Luminaire Lumens: 4080.0 lumens  
Efficiency: N/A  
Efficacy: 113.3 lumens/watt  
Spacing Criteria (0/90/45): 1 / 1.11 / 1.29  
Luminous Opening: Rectangular w/ Sides (W: 0.65' x L: 1.85' x H: 0.15')  
CIE Type: Direct

Input Watts (W): 36  
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-LD4-35-3LO-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°	13303	13303	13303
5°	12650	12667	12720
10°	11657	11472	11621
15°	11020	10696	10906
20°	10524	10205	10458
25°	10115	9911	10198
30°	9795	9744	10080
35°	9545	9535	9978
40°	9263	9421	9798
45°	8998	9182	9523
50°	8688	8867	9226
55°	8304	8535	9069
60°	7881	8074	8617
65°	7393	7495	7936
70°	6585	6828	6922
75°	5501	5995	6050
80°	4070	5016	5407
85°	1971	3856	5518



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	132.3	3.2
10°-20°	344.7	8.4
20°-30°	507.8	12.4
30°-40°	623.4	15.3
40°-50°	663.1	16.3
50°-60°	620.5	15.2
60°-70°	492.1	12.1
70°-80°	307.2	7.5
80°-90°	137.9	3.4
90°-100°	74.0	1.8
100°-110°	53.9	1.3
110°-120°	39.4	1.0
120°-130°	34.8	0.9
130°-140°	26.2	0.6
140°-150°	15.4	0.4
150°-160°	6.2	0.2
160°-170°	1.2	0.0
170°-180°	0.0	0.0
0°-30°	984.8	24.1
0°-40°	1608.2	39.4
0°-60°	2891.8	70.9
0°-90°	3828.9	93.8
90°-120°	167.3	4.1
90°-150°	243.7	6.0
90°-180°	251.0	6.2
0°-180°	4080.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1480	1480	1480	1480	1480	
5°	1412	1419	1430	1433	1438	131
15°	1209	1210	1216	1228	1243	341
25°	1057	1071	1100	1129	1136	488
35°	918	950	1000	1051	1053	573
45°	764	810	878	910	918	589
55°	589	642	712	748	765	527
65°	406	449	515	546	554	399
75°	205	248	311	334	321	218
85°	36	76	129	161	192	47
90°	1	36	80	118	167	2
95°	0	31	70	102	132	0
105°	0	25	57	77	83	0
115°	0	22	47	56	60	0
125°	0	19	44	60	67	0
135°	1	14	38	53	61	0
145°	1	9	27	39	45	0
155°	1	3	14	22	25	0
165°	1	1	3	7	8	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°	1479.9	1479.9	1479.9	1479.9	1479.9	1479.9	1479.9	1479.9	1479.9	1479.9	1479.9
2.5°	1461.2	1463.0	1463.6	1464.2	1464.2	1466.0	1466.0	1467.2	1469.0	1470.2	1470.8
5°	1411.6	1415.2	1412.2	1415.2	1417.6	1418.8	1420.7	1421.9	1425.5	1429.1	1430.3
7.5°	1346.9	1348.1	1349.9	1351.7	1354.2	1353.6	1354.8	1359.0	1363.2	1368.7	1368.1
10°	1294.9	1294.9	1294.9	1294.9	1294.9	1296.7	1297.3	1299.1	1302.2	1307.6	1304.6
12.5°	1249.0	1250.2	1252.0	1251.4	1250.2	1249.6	1247.8	1250.2	1250.8	1254.4	1253.2
15°	1209.1	1207.3	1209.1	1210.3	1209.1	1210.3	1209.7	1211.5	1210.9	1212.1	1215.7
17.5°	1168.6	1172.8	1174.0	1171.0	1172.2	1173.4	1174.0	1173.4	1173.4	1178.2	1180.7
20°	1131.7	1133.5	1133.5	1132.9	1135.3	1135.9	1138.9	1138.9	1142.0	1148.0	1150.4
22.5°	1091.8	1095.4	1097.8	1097.2	1103.9	1103.9	1104.5	1106.9	1115.4	1117.8	1125.6
25°	1057.3	1061.0	1062.2	1064.6	1069.4	1070.6	1070.6	1080.9	1083.9	1091.2	1099.6
27.5°	1022.3	1024.7	1025.9	1030.1	1038.0	1038.0	1041.0	1051.3	1057.9	1066.4	1074.9
30°	986.6	992.0	992.0	998.7	1005.3	1007.2	1014.4	1023.5	1034.4	1041.6	1055.5
32.5°	952.1	954.6	957.0	967.3	974.5	980.0	985.4	996.9	1005.9	1018.6	1028.9
35°	917.7	920.7	923.1	934.0	940.7	949.7	956.4	970.9	980.0	992.0	999.9
37.5°	877.2	882.0	887.5	895.9	909.2	916.5	922.5	940.1	950.3	961.2	975.7
40°	841.5	846.3	852.4	861.5	876.0	881.4	889.3	903.8	920.7	933.4	947.9
42.5°	804.0	809.5	815.5	826.4	837.9	845.1	854.2	869.3	886.2	902.0	911.6
45°	763.5	768.4	776.2	786.5	801.0	810.1	817.3	835.5	848.8	865.1	877.8
47.5°	724.8	727.3	735.7	749.6	762.3	773.2	780.5	796.2	813.7	825.8	839.7
50°	679.5	682.5	691.6	705.5	722.4	732.7	736.9	756.3	770.8	786.5	796.8
52.5°	635.4	640.2	651.1	663.8	679.5	688.6	696.4	710.3	729.1	743.0	758.7
55°	589.4	595.5	605.1	619.0	632.9	642.0	651.1	666.8	683.7	700.1	712.1
57.5°	543.5	549.5	559.2	573.1	587.0	594.3	603.3	619.6	639.0	654.7	666.2
60°	498.1	502.4	512.6	524.7	538.6	547.7	554.4	571.3	589.4	603.3	616.6
62.5°	451.0	455.2	463.7	475.2	490.9	498.7	504.8	522.3	539.2	552.5	567.1
65°	406.2	406.2	416.5	426.2	439.5	448.6	457.6	472.7	487.3	501.8	515.1
67.5°	352.4	357.9	365.1	376.0	391.1	399.0	408.1	422.6	435.9	453.4	466.1
70°	304.7	307.1	315.6	327.7	339.7	347.6	356.7	370.0	385.1	400.8	413.5
72.5°	253.3	258.1	265.4	279.3	289.0	296.8	305.3	319.2	333.7	349.4	362.1
75°	204.9	209.2	216.4	227.3	240.0	247.9	254.5	269.0	282.9	300.5	311.3
77.5°	159.0	160.8	168.7	178.9	194.7	198.9	206.8	220.1	235.8	249.7	263.0
80°	113.7	117.3	123.3	133.0	146.9	153.6	160.2	174.7	188.0	203.1	215.2
82.5°	71.3	76.8	81.6	94.3	105.2	110.6	118.5	131.2	146.3	159.0	169.9
85°	36.3	40.5	47.8	56.8	68.9	75.6	81.0	94.9	107.6	119.7	129.4
87.5°	13.9	16.9	23.0	32.6	43.5	49.0	55.6	67.1	79.2	88.9	98.5
90°	0.6	4.2	10.9	19.9	30.2	35.7	41.1	52.6	62.9	71.9	80.4
92.5°	0.0	3.0	9.1	18.1	27.8	32.6	38.1	47.8	56.2	64.7	73.1
95°	0.0	2.4	8.5	16.9	26.0	31.4	36.3	45.3	53.8	61.7	70.1
97.5°	0.0	2.4	7.9	16.3	25.4	30.2	34.5	42.9	50.8	59.2	67.1
100°	0.0	2.4	7.9	15.7	24.2	28.4	32.6	40.5	49.0	56.8	64.1
102.5°	0.0	1.8	7.3	14.5	23.0	27.2	30.8	38.7	46.5	53.8	61.1
105°	0.0	1.8	6.6	13.9	21.8	25.4	29.6	37.5	44.7	51.4	57.4
107.5°	0.0	1.8	6.6	13.3	20.6	24.8	28.4	35.7	42.9	49.0	54.4
110°	0.0	1.2	6.0	12.7	19.9	23.6	27.2	34.5	41.1	46.5	52.0



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	0.0	1.2	5.4	12.1	18.7	22.4	26.0	33.2	39.3	44.7	49.0
115°	0.0	1.2	5.4	11.5	18.1	21.8	25.4	32.0	38.1	42.9	47.2
117.5°	0.0	1.2	4.8	10.9	17.5	21.2	24.2	30.8	36.9	41.7	45.9
120°	0.0	1.2	4.8	10.3	16.9	20.6	23.6	30.2	35.7	41.1	45.3
122.5°	0.0	0.6	4.2	9.7	16.3	19.3	23.0	29.0	35.1	40.5	44.7
125°	0.0	0.6	4.2	9.1	15.7	18.7	22.4	28.4	34.5	39.9	44.1
127.5°	0.0	0.6	3.6	8.5	14.5	17.5	21.2	27.2	33.2	38.7	42.9
130°	0.0	0.6	3.0	7.9	13.9	16.9	19.9	26.0	31.4	36.9	41.1
132.5°	0.6	0.6	3.0	7.3	12.7	15.7	18.7	24.2	29.6	35.1	39.3
135°	0.6	0.6	2.4	6.6	11.5	14.5	16.9	23.0	27.8	33.2	37.5
137.5°	0.6	0.6	2.4	6.0	10.9	13.3	15.7	21.2	26.0	30.8	35.1
140°	0.6	0.6	1.8	5.4	9.7	12.1	14.5	19.3	24.2	28.4	32.6
142.5°	0.6	0.6	1.2	4.2	8.5	10.3	12.7	17.5	21.8	26.0	29.6
145°	0.6	0.6	1.2	3.6	7.3	9.1	10.9	15.1	19.3	23.0	27.2
147.5°	0.6	0.6	0.6	3.0	5.4	7.3	9.1	13.3	16.9	20.6	24.2
150°	0.6	0.6	0.6	1.8	4.2	6.0	7.3	10.9	13.9	17.5	20.6
152.5°	0.6	0.6	0.6	1.2	3.6	4.2	6.0	8.5	11.5	14.5	17.5
155°	0.6	0.6	0.6	1.2	2.4	3.0	4.2	6.6	9.1	11.5	13.9
157.5°	0.6	0.6	0.6	0.6	1.8	2.4	3.0	4.8	6.6	8.5	10.9
160°	0.6	0.6	0.6	0.6	1.2	1.2	1.8	3.0	4.8	6.0	7.9
162.5°	0.6	0.6	0.6	0.6	0.6	0.6	1.2	1.8	3.0	4.2	5.4
165°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	1.2	1.8	2.4	3.0
167.5°	0.6	0.6	0.6	0.0	0.0	0.0	0.0	0.6	0.6	1.2	1.8
170°	0.6	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.6
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°	1479.9	1479.9	1479.9	1479.9	1479.9	1479.9	1479.9	1479.9	1479.9	1479.9
2.5°	1471.4	1470.8	1471.4	1470.8	1470.8	1470.2	1470.8	1470.2	1469.0	1469.0
5°	1430.3	1434.6	1435.2	1436.4	1433.4	1435.2	1435.2	1435.2	1435.2	1437.6
7.5°	1371.7	1377.7	1377.7	1377.7	1380.8	1381.4	1383.2	1383.2	1382.6	1382.6
10°	1309.4	1314.3	1316.1	1316.7	1320.3	1320.3	1323.3	1322.1	1323.9	1323.9
12.5°	1253.8	1256.2	1262.9	1268.9	1268.3	1271.3	1274.4	1276.8	1275.0	1278.6
15°	1216.9	1221.2	1224.2	1226.0	1228.4	1232.0	1235.1	1238.7	1239.9	1242.9
17.5°	1180.7	1186.7	1192.1	1198.2	1201.2	1202.4	1204.2	1206.0	1207.9	1207.9
20°	1156.5	1161.3	1165.5	1168.0	1171.0	1174.0	1174.6	1178.2	1179.4	1183.1
22.5°	1131.7	1135.3	1140.8	1146.8	1148.6	1151.0	1152.2	1154.1	1157.1	1155.9
25°	1107.5	1114.2	1121.4	1124.4	1128.7	1132.3	1134.7	1138.3	1139.5	1136.5
27.5°	1085.7	1090.0	1103.9	1110.5	1113.6	1113.6	1113.6	1117.2	1116.6	1112.9
30°	1061.6	1073.7	1083.3	1086.3	1088.8	1091.8	1095.4	1097.2	1096.0	1097.8
32.5°	1039.2	1047.7	1060.4	1068.8	1071.2	1074.3	1076.1	1079.1	1080.3	1080.9
35°	1013.8	1026.5	1042.2	1046.4	1050.7	1054.9	1056.1	1054.3	1056.7	1053.1
37.5°	987.8	1005.3	1009.0	1019.8	1021.7	1021.7	1022.3	1023.5	1024.7	1023.5
40°	960.0	966.0	979.3	983.0	984.2	986.0	989.6	990.2	990.8	993.2
42.5°	924.3	934.6	940.7	952.7	953.4	953.4	953.4	955.2	958.2	960.0
45°	884.4	895.9	904.4	910.4	909.8	912.8	915.9	915.9	917.7	918.3
47.5°	849.4	854.8	859.6	865.7	870.5	870.5	872.3	874.8	877.2	879.6
50°	805.8	815.5	821.0	827.0	825.8	828.2	834.3	837.3	836.1	837.3
52.5°	765.9	773.2	782.3	785.9	790.1	793.1	793.8	798.6	802.2	804.6
55°	723.6	729.1	738.1	747.8	747.8	749.0	756.3	760.5	765.3	765.3
57.5°	677.1	686.1	696.4	699.4	704.3	709.7	715.2	717.0	718.8	718.2
60°	625.7	638.4	648.1	654.7	657.1	659.5	659.5	666.2	666.8	666.8
62.5°	578.5	589.4	596.7	599.1	599.7	603.3	604.5	607.0	605.7	610.6
65°	527.2	536.8	541.7	544.1	545.9	545.3	547.1	549.5	554.4	553.8
67.5°	478.8	482.4	487.3	490.9	490.9	493.9	495.7	498.7	493.3	492.7
70°	425.6	433.5	435.9	442.5	440.1	440.1	435.3	431.0	425.6	426.8
72.5°	373.6	380.3	387.5	385.1	385.1	383.3	379.6	376.0	372.4	374.8
75°	321.6	330.7	334.9	334.3	334.3	333.1	328.9	326.4	324.0	321.0
77.5°	274.5	279.3	284.7	287.2	287.8	287.2	282.9	278.7	278.1	276.9
80°	223.7	229.7	235.2	239.4	240.0	240.0	238.8	238.8	237.0	238.2
82.5°	177.1	183.8	191.6	196.5	197.7	200.7	201.9	203.7	207.4	210.4
85°	136.0	145.7	152.9	159.0	161.4	163.2	169.9	177.7	186.2	191.6
87.5°	107.6	116.1	124.5	131.2	134.8	139.6	147.5	159.0	172.3	181.4
90°	89.5	97.9	107.0	114.9	118.5	122.7	132.4	143.9	159.6	166.9
92.5°	81.0	90.1	97.3	104.0	107.6	111.2	120.3	130.0	141.5	146.3
95°	78.0	84.6	90.7	97.9	101.6	105.8	113.0	120.9	128.2	132.4
97.5°	73.8	80.4	87.1	93.1	96.7	99.7	105.2	112.4	118.5	120.9
100°	70.7	76.8	82.2	87.7	90.7	93.1	99.7	106.4	110.0	111.8
102.5°	67.1	72.5	77.4	82.2	84.6	87.1	92.5	96.1	97.3	97.3
105°	62.9	68.3	72.5	76.8	77.4	79.2	82.2	83.4	83.4	83.4
107.5°	59.2	63.5	67.1	69.5	70.1	70.7	71.3	71.3	70.1	70.1
110°	56.2	59.2	61.7	62.9	62.3	62.9	62.9	62.3	62.3	62.3





TEST NUMBER: P241334

CATALOG NUMBER: FVS8M-2-LD4-35-3LO-P125-UNV-EDC1

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	53.2	55.6	56.8	58.0	58.0	58.0	58.0	59.2	59.2	59.2
115°	50.8	53.2	55.0	56.2	56.2	56.8	58.0	59.8	60.5	60.5
117.5°	49.6	52.6	54.4	56.2	57.4	58.0	60.5	61.7	62.9	62.9
120°	49.0	52.6	55.6	58.0	59.2	60.5	62.3	64.1	65.3	65.3
122.5°	49.0	52.6	56.2	58.6	60.5	61.1	63.5	65.3	66.5	66.5
125°	48.4	52.6	56.2	59.2	60.5	61.7	63.5	65.3	66.5	67.1
127.5°	47.2	51.4	55.0	58.0	59.2	61.1	62.9	64.7	65.9	66.5
130°	45.3	49.6	53.2	56.2	58.0	59.2	61.7	63.5	64.7	64.7
132.5°	43.5	47.8	50.8	54.4	56.2	57.4	59.8	61.7	62.9	62.9
135°	41.7	45.3	48.4	52.0	53.2	55.0	57.4	59.2	60.5	61.1
137.5°	39.3	42.9	45.9	49.0	50.8	52.0	54.4	56.2	57.4	58.0
140°	36.3	39.9	42.9	45.9	47.8	49.0	50.8	52.6	53.8	53.8
142.5°	33.2	36.9	39.9	42.3	43.5	44.7	46.5	48.4	49.0	49.6
145°	30.2	33.2	36.3	38.7	39.3	40.5	42.3	43.5	44.7	44.7
147.5°	26.6	29.6	32.0	33.9	35.1	35.7	37.5	38.7	39.3	39.9
150°	23.0	26.0	27.8	29.6	30.8	31.4	32.6	33.9	34.5	35.1
152.5°	19.9	21.8	24.2	25.4	26.6	27.2	28.4	29.0	29.6	29.6
155°	16.3	18.1	19.9	21.2	22.4	22.4	23.6	24.2	24.8	24.8
157.5°	12.7	14.5	16.3	17.5	18.1	18.7	19.3	19.9	19.9	20.6
160°	9.1	10.9	12.7	13.3	13.9	14.5	15.1	15.1	15.7	15.7
162.5°	6.6	7.9	9.1	9.7	10.3	10.3	10.9	11.5	11.5	11.5
165°	4.2	4.8	6.0	6.6	6.6	7.3	7.3	7.9	7.9	7.9
167.5°	1.8	2.4	3.0	3.6	3.6	4.2	4.2	4.2	4.8	4.2
170°	0.6	0.6	1.2	1.2	1.2	1.2	1.8	1.8	1.8	1.8
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)