

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: P241382

Luminaire Tested: **FVS8M-4-LD4-35-1LO-P125-UNV-EDC1**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-79-08  
Report Number: P241382  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1711-410-33)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: FVS8M-4-LD4-35-1LO-P125-UNV-EDC1  
Description: FAILSAFE FVS8M LED FIXTURE  
4FT LENGTH, 1-MODULE LED WITH P125 LENS  
Light Source: (84) 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

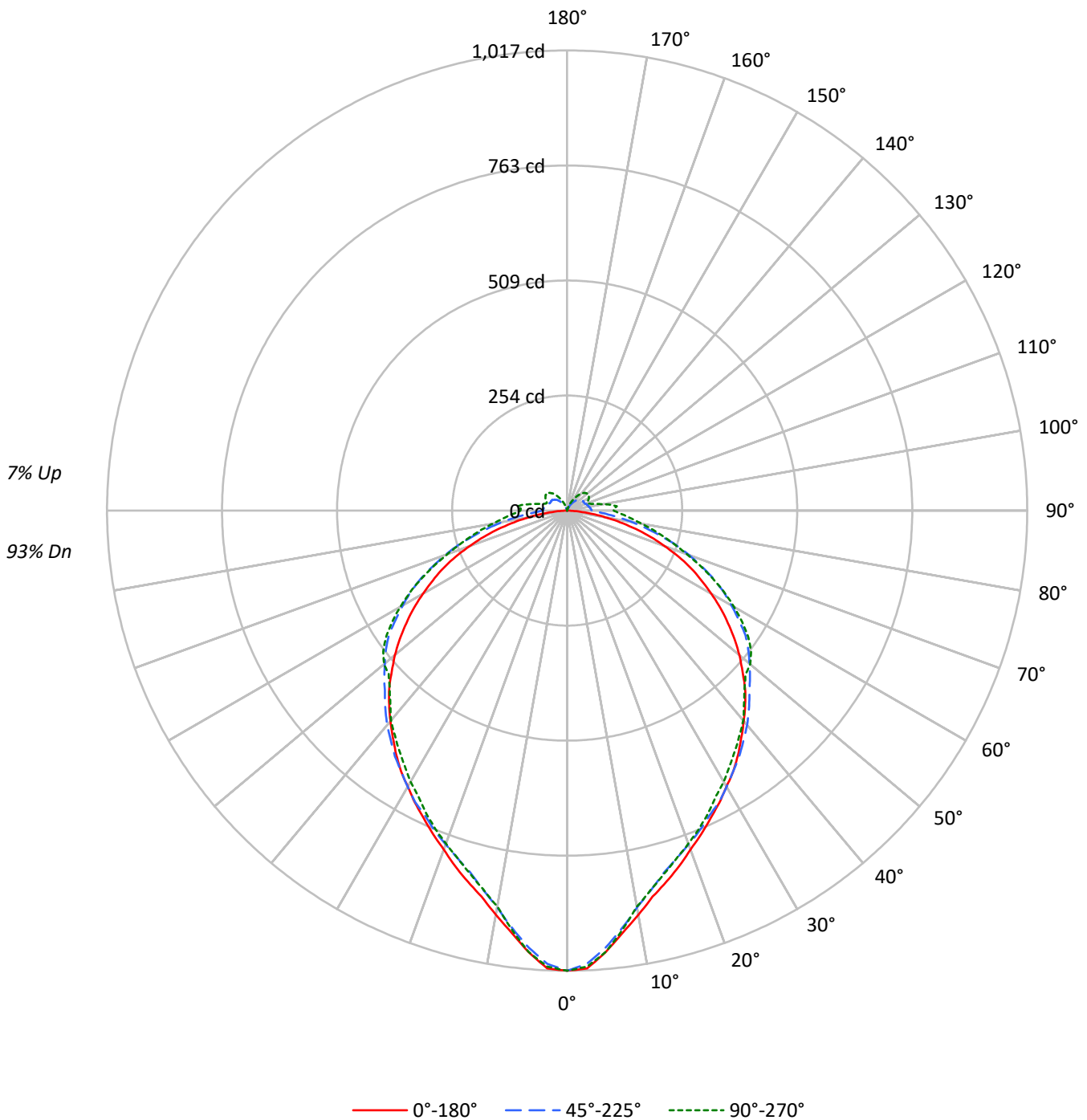
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2786.0 lumens  
Efficiency: N/A  
Efficacy: 118.1 lumens/watt  
Spacing Criteria (0/90/45): 1.04 / 1.02 / 1.25  
Luminous Opening: Rectangular w/ Sides (W: 0.65' x L: 3.73' x H: 0.15')  
CIE Type: Direct

Input Watts (W): 23.6  
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-4-LD4-35-1LO-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	117	117	117	117	114	114	114	114	107	107	107	101	101	101	95	95	95	93
1	106	101	96	92	103	98	94	90	92	89	86	87	85	82	83	80	78	76
2	96	88	80	74	93	85	78	73	80	75	70	76	71	67	72	68	65	62
3	87	77	68	61	84	74	67	60	70	64	58	67	61	56	63	59	55	52
4	80	68	59	52	77	66	57	51	62	55	49	59	53	48	56	51	47	44
5	73	60	51	44	71	59	50	44	56	48	43	53	47	42	50	45	40	38
6	68	54	45	39	65	53	44	38	50	43	37	48	41	36	46	40	35	33
7	63	49	40	34	61	48	40	34	46	38	33	44	37	32	42	36	31	29
8	58	45	36	30	56	44	36	30	42	35	29	40	34	29	38	33	28	26
9	55	41	33	27	53	40	32	27	38	31	26	37	31	26	35	30	25	24
10	51	38	30	25	49	37	30	24	36	29	24	34	28	24	33	27	23	21

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

	0°	45°	90°
0°	4545	4545	4545
5°	4379	4282	4307
10°	4088	3911	3878
15°	3886	3648	3623
20°	3737	3496	3443
25°	3632	3372	3291
30°	3554	3283	3158
35°	3497	3199	3049
40°	3431	3119	2970
45°	3384	3031	2859
50°	3301	2990	2895
55°	3202	2959	2882
60°	3080	2832	2738
65°	2951	2695	2528
70°	2693	2472	2267
75°	2364	2157	2055
80°	1828	1810	1885
85°	989	1417	1847



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	90.6	3.3
10°-20°	236.1	8.5
20°-30°	344.2	12.4
30°-40°	412.4	14.8
40°-50°	436.2	15.7
50°-60°	419.5	15.1
60°-70°	337.2	12.1
70°-80°	213.8	7.7
80°-90°	94.4	3.4
90°-100°	54.5	2.0
100°-110°	41.5	1.5
110°-120°	33.6	1.2
120°-130°	30.7	1.1
130°-140°	23.1	0.8
140°-150°	13.1	0.5
150°-160°	4.5	0.2
160°-170°	0.6	0.0
170°-180°	0.0	0.0
0°-30°	670.8	24.1
0°-40°	1083.3	38.9
0°-60°	1939.0	69.6
0°-90°	2584.3	92.8
90°-120°	129.7	4.7
90°-150°	196.6	7.1
90°-180°	202.0	7.3
0°-180°	2786.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1017	1017	1017	1017	1017	
5°	980	976	970	981	979	91
15°	849	840	828	829	830	239
25°	750	751	744	744	738	346
35°	658	663	663	657	647	412
45°	556	567	569	565	554	428
55°	434	452	481	488	489	388
65°	302	323	357	355	355	297
75°	157	180	212	224	219	166
85°	28	53	87	110	129	36
90°	1	24	55	79	103	1
95°	0	23	52	74	110	0
105°	0	21	46	58	57	0
115°	1	19	41	49	50	0
125°	1	16	40	53	58	1
135°	1	11	34	48	55	0
145°	1	5	22	36	40	0
155°	1	1	8	17	20	0
165°	1	1	1	3	4	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°	1016.9	1016.9	1016.9	1016.9	1016.9	1016.9	1016.9	1016.9	1016.9	1016.9	1016.9
2.5°	1012.7	1010.4	1006.8	1008.6	1008.6	1009.2	1009.8	1009.8	1008.6	1006.8	1002.6
5°	979.5	977.1	972.9	973.5	974.1	975.9	976.5	976.5	974.1	972.9	970.0
7.5°	940.8	938.5	936.7	936.7	937.3	937.9	939.6	936.7	934.9	933.7	930.7
10°	907.0	905.8	900.4	901.0	899.8	899.8	901.0	900.4	896.8	893.9	890.3
12.5°	873.7	871.9	871.3	870.1	868.3	867.7	868.3	867.7	864.8	861.8	858.2
15°	848.7	844.5	842.8	843.4	840.4	840.4	839.8	841.6	837.4	832.7	827.9
17.5°	823.7	821.4	816.0	817.2	816.6	817.8	818.4	817.8	813.6	808.9	805.3
20°	797.0	795.2	795.8	795.8	793.4	794.0	794.6	793.4	789.9	785.1	785.1
22.5°	774.4	771.4	770.9	769.1	771.4	772.0	772.0	772.6	770.3	766.7	765.5
25°	750.0	748.9	747.7	749.5	750.6	751.2	751.2	750.0	748.3	745.3	743.5
27.5°	728.1	724.5	725.7	727.5	729.2	731.6	731.6	728.7	728.1	724.5	726.9
30°	704.3	701.3	701.9	703.7	706.7	709.0	709.0	710.8	707.9	706.1	704.9
32.5°	683.5	677.5	678.1	682.3	687.0	687.6	688.2	689.4	686.5	685.3	682.9
35°	658.5	655.5	653.8	660.3	662.7	663.3	665.7	667.4	665.1	663.9	663.3
37.5°	632.4	630.0	630.0	634.7	639.5	641.9	642.5	643.1	643.7	640.7	640.1
40°	607.4	605.0	605.6	609.2	613.9	615.7	618.7	621.1	618.7	617.5	618.7
42.5°	582.4	578.3	581.9	585.4	590.2	591.4	594.9	599.1	596.1	593.7	594.9
45°	556.3	552.1	555.7	560.5	563.4	567.0	567.6	570.0	570.0	570.0	569.4
47.5°	525.4	524.8	526.6	531.9	536.7	538.5	540.8	543.2	546.8	549.8	548.0
50°	496.9	494.5	499.2	503.4	508.7	512.3	515.9	521.2	521.8	522.4	526.0
52.5°	466.0	465.4	469.5	474.3	479.6	485.0	487.9	491.5	494.5	499.8	504.6
55°	433.9	434.5	438.0	444.6	451.1	452.3	456.4	465.4	471.3	476.1	481.4
57.5°	402.4	401.8	407.7	413.1	418.4	424.9	428.5	436.2	440.4	446.3	449.3
60°	367.9	369.1	375.0	376.2	387.5	395.2	396.4	401.2	407.1	413.1	419.6
62.5°	334.6	335.8	341.1	347.1	354.2	357.8	360.2	369.7	375.6	385.1	389.9
65°	302.5	303.1	306.7	313.2	319.8	322.7	328.7	339.4	344.1	350.7	357.2
67.5°	266.9	268.0	272.8	276.4	285.3	290.6	296.0	303.1	306.7	315.6	320.3
70°	228.2	230.0	236.5	240.7	251.4	255.6	259.7	264.5	272.8	281.1	286.5
72.5°	193.8	193.8	199.7	205.0	216.3	217.5	221.1	230.0	239.5	245.5	251.4
75°	156.9	158.7	162.3	169.4	178.3	180.1	186.0	195.5	202.1	208.6	212.2
77.5°	120.1	122.4	127.8	134.9	140.9	146.8	151.0	158.7	165.2	170.6	177.1
80°	86.8	88.6	93.9	98.7	108.2	112.3	115.9	123.6	130.2	137.3	145.0
82.5°	55.9	56.5	62.4	68.3	75.5	80.2	83.8	90.9	100.4	107.6	114.7
85°	27.9	29.7	35.7	41.0	49.9	52.9	56.5	64.8	72.5	81.4	86.8
87.5°	8.3	11.3	16.6	22.6	29.7	33.3	36.8	44.6	52.3	59.4	66.0
90°	0.6	2.4	7.1	13.7	20.8	24.4	27.9	35.7	42.8	48.7	54.7
92.5°	0.0	1.8	6.5	13.1	20.2	23.8	27.3	34.5	41.0	47.0	52.9
95°	0.0	1.8	6.5	12.5	19.6	23.2	26.7	33.3	39.8	46.4	52.3
97.5°	0.0	1.8	5.9	12.5	19.0	22.6	26.2	32.7	39.2	45.2	50.5
100°	0.0	1.8	5.9	11.9	18.4	22.0	25.0	31.5	38.0	44.0	49.3
102.5°	0.0	1.2	5.3	11.3	17.8	21.4	24.4	30.9	37.4	42.8	47.5
105°	0.0	1.2	5.3	10.7	17.2	20.8	23.8	30.3	36.3	41.6	46.4
107.5°	0.0	1.2	4.8	10.7	17.2	20.2	23.8	29.7	35.7	40.4	45.2
110°	0.0	0.6	4.8	10.1	16.6	20.2	23.2	29.1	35.1	39.8	43.4



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	0.0	0.6	4.2	9.5	16.0	19.6	22.6	28.5	33.9	38.6	42.2
115°	0.6	0.6	4.2	9.5	15.5	19.0	22.0	27.9	33.3	38.0	41.0
117.5°	0.0	0.6	3.6	8.9	14.9	18.4	21.4	27.3	32.7	37.4	41.0
120°	0.6	0.6	3.0	8.3	14.3	17.8	20.8	26.7	32.1	36.8	41.0
122.5°	0.6	0.6	3.0	7.7	13.7	16.6	20.2	26.2	31.5	36.8	41.0
125°	0.6	0.6	2.4	7.1	13.1	16.0	19.0	25.6	30.9	35.7	40.4
127.5°	0.6	0.6	1.8	6.5	11.9	15.5	18.4	24.4	29.7	34.5	39.2
130°	0.6	0.6	1.2	5.3	11.3	13.7	17.2	23.2	28.5	33.3	37.4
132.5°	0.6	0.6	1.2	4.8	10.1	12.5	15.5	21.4	26.7	31.5	35.7
135°	0.6	0.6	0.6	3.6	8.3	11.3	13.7	19.0	24.4	29.7	33.9
137.5°	0.6	0.6	0.6	3.0	7.1	9.5	11.9	16.6	22.0	26.7	31.5
140°	0.6	0.6	0.6	2.4	5.9	7.7	10.1	14.9	19.6	24.4	28.5
142.5°	0.6	0.6	0.6	1.8	4.8	6.5	8.3	12.5	16.6	21.4	25.6
145°	0.6	0.6	0.6	1.2	3.6	4.8	6.5	10.1	14.3	18.4	22.0
147.5°	0.6	0.6	0.6	0.6	2.4	3.6	4.8	8.3	11.3	14.9	18.4
150°	0.6	0.6	0.6	0.6	1.8	2.4	3.6	5.9	8.9	11.9	14.9
152.5°	0.6	0.6	0.6	0.6	1.2	1.8	2.4	4.2	6.5	8.9	11.3
155°	0.6	0.6	0.6	0.6	0.6	1.2	1.8	3.0	4.8	6.5	8.3
157.5°	0.6	0.6	0.6	0.6	0.6	0.6	1.2	1.8	3.0	4.2	5.9
160°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	1.2	1.8	3.0	3.6
162.5°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	1.2	1.2	1.8
165°	1.2	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	1.2
167.5°	1.2	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
170°	1.2	1.2	0.6	0.6	0.6	0.6	0.6	0.6	0.6	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):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	1016.9	1016.9	1016.9	1016.9	1016.9	1016.9	1016.9	1016.9	1016.9	1016.9
2.5°	1003.8	1006.8	1009.2	1009.2	1009.2	1010.4	1010.4	1009.8	1010.4	1008.6
5°	972.3	977.1	978.9	981.2	980.7	980.1	978.9	981.2	980.1	978.9
7.5°	932.5	937.3	934.9	936.1	937.3	936.1	936.7	937.3	934.9	934.9
10°	890.3	892.1	890.3	891.5	891.5	889.1	890.3	890.3	889.1	888.5
12.5°	856.4	855.8	855.2	855.8	856.4	858.8	857.6	860.0	859.4	857.6
15°	826.1	828.5	829.7	831.5	829.1	830.9	833.3	832.1	832.1	830.3
17.5°	807.7	810.1	807.7	810.7	811.9	811.3	810.7	807.1	809.5	805.3
20°	782.7	786.9	789.9	785.7	785.7	786.3	785.7	784.5	785.7	783.3
22.5°	767.3	766.7	766.1	769.1	769.7	769.1	765.5	764.3	760.7	761.3
25°	745.3	743.5	750.0	746.5	743.5	743.5	741.7	739.4	737.6	737.6
27.5°	724.5	727.5	724.5	725.1	724.5	725.1	717.4	714.4	714.4	712.0
30°	707.3	704.9	705.5	701.3	698.9	698.3	696.6	694.2	692.4	691.8
32.5°	682.3	683.5	681.7	679.9	679.3	677.5	676.4	673.4	671.0	668.6
35°	662.1	660.3	659.7	660.9	656.7	653.8	652.6	650.8	649.6	647.2
37.5°	640.1	637.7	638.3	634.2	634.7	634.2	630.6	627.6	627.0	625.8
40°	615.1	616.3	613.9	613.9	608.6	608.0	607.4	607.4	605.6	605.6
42.5°	593.1	593.1	592.0	590.2	588.4	587.2	583.6	583.0	580.7	578.3
45°	570.6	569.4	567.6	566.4	565.2	563.4	558.7	556.9	555.7	554.5
47.5°	550.4	548.0	548.0	544.4	540.2	540.2	539.1	536.1	534.9	534.9
50°	528.4	531.9	533.7	530.7	529.6	528.4	527.2	527.8	526.6	528.4
52.5°	509.3	512.3	511.7	512.9	514.1	515.9	513.5	515.3	514.1	512.3
55°	485.0	487.4	486.2	485.0	487.9	487.9	490.9	489.7	489.1	489.1
57.5°	454.7	457.6	457.6	458.8	459.4	457.6	461.8	460.0	460.6	458.8
60°	423.2	422.6	424.4	427.9	428.5	426.1	425.5	427.9	426.1	426.1
62.5°	392.3	393.4	394.0	392.3	391.1	392.3	389.9	392.3	392.3	391.7
65°	359.0	360.2	360.8	358.4	355.4	356.0	353.6	354.8	355.4	354.8
67.5°	322.7	325.7	324.5	323.9	322.1	318.6	318.0	316.8	318.0	318.0
70°	288.3	291.2	288.3	288.8	288.8	285.9	284.1	281.7	281.7	281.1
72.5°	254.4	256.2	255.6	255.6	256.2	254.4	251.4	250.2	249.0	249.0
75°	218.7	222.3	222.3	222.9	223.5	222.3	222.3	220.5	218.7	219.3
77.5°	184.2	187.8	190.8	192.6	192.6	193.2	194.3	193.8	192.6	192.6
80°	152.1	157.5	160.5	164.0	164.6	164.6	167.0	167.6	167.6	167.0
82.5°	121.8	127.2	130.8	134.3	134.9	136.1	140.3	142.0	145.6	145.6
85°	92.7	98.7	102.8	107.6	110.5	112.3	115.9	120.6	125.4	129.0
87.5°	71.3	77.3	83.2	88.0	90.3	92.1	96.9	102.8	108.8	113.5
90°	61.2	66.6	71.9	76.1	79.0	80.8	85.6	90.9	98.1	102.8
92.5°	58.8	64.2	68.3	73.1	75.5	77.3	83.2	90.3	98.7	102.8
95°	57.1	61.8	66.6	71.9	74.3	77.3	85.0	95.1	106.4	110.5
97.5°	55.9	60.6	65.4	70.7	73.7	76.7	85.6	93.3	98.1	98.1
100°	54.1	58.8	63.6	68.3	70.7	73.7	79.0	81.4	81.4	81.4
102.5°	52.3	56.5	60.6	63.6	65.4	66.6	68.9	69.5	68.3	67.2
105°	50.5	53.5	55.9	57.7	58.2	58.8	59.4	59.4	58.2	57.1
107.5°	48.7	50.5	52.3	52.3	52.9	52.9	53.5	52.9	51.7	50.5
110°	46.4	48.1	48.7	49.3	49.3	49.3	49.9	49.9	48.7	48.1





TEST NUMBER: P241382

CATALOG NUMBER: FVS8M-4-LD4-35-1LO-P125-UNV-EDC1

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	44.6	46.4	47.0	47.5	48.1	48.1	49.3	49.3	48.7	48.7
115°	44.0	45.8	47.0	48.1	48.7	49.3	50.5	51.7	51.1	50.5
117.5°	44.0	46.4	48.1	49.3	49.9	51.1	52.9	53.5	53.5	53.5
120°	44.0	47.0	49.3	51.1	51.7	52.9	54.1	55.3	55.9	55.3
122.5°	44.0	47.0	49.9	51.7	52.3	53.5	55.3	56.5	57.1	57.1
125°	44.0	47.0	49.9	51.7	52.9	53.5	55.3	57.1	57.7	58.2
127.5°	42.8	46.4	48.7	51.1	52.3	53.5	55.3	57.1	58.2	58.8
130°	41.6	44.6	47.5	49.9	51.1	52.3	54.7	56.5	57.7	58.2
132.5°	39.8	42.8	45.8	48.1	49.3	50.5	52.9	55.3	56.5	57.1
135°	37.4	41.0	44.0	46.4	47.5	48.7	51.1	53.5	54.7	55.3
137.5°	35.1	38.6	41.6	44.0	45.2	46.4	48.7	50.5	52.3	52.3
140°	32.7	36.3	39.2	41.6	42.8	44.0	45.8	47.5	48.7	49.3
142.5°	29.7	33.3	35.7	38.6	39.8	40.4	42.2	44.0	45.2	45.2
145°	26.2	29.7	32.7	34.5	35.7	36.8	38.0	39.2	40.4	40.4
147.5°	22.0	25.6	28.5	30.3	31.5	32.1	33.3	34.5	35.1	35.1
150°	17.8	20.8	23.8	25.6	26.7	27.3	28.5	29.1	29.7	29.7
152.5°	13.7	16.6	19.0	20.8	22.0	22.6	23.8	23.8	24.4	25.0
155°	10.1	12.5	14.3	16.6	17.2	17.8	18.4	19.6	19.6	19.6
157.5°	7.1	8.9	10.1	11.9	12.5	13.7	14.3	14.9	14.9	14.9
160°	4.8	5.9	7.1	8.3	8.9	9.5	10.1	10.7	10.7	11.3
162.5°	3.0	3.6	4.2	4.8	5.3	5.9	6.5	7.1	7.1	7.1
165°	1.2	1.8	2.4	2.4	3.0	3.0	3.6	4.2	4.2	4.2
167.5°	0.6	0.6	0.6	1.2	1.2	1.2	1.2	1.8	1.8	1.8
170°	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
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)