

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: P241346

Luminaire Tested: **FVS8M-3-LD4-35-1LO-P125-UNV-EDC1**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-79-08  
Report Number: P241346  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1711-410-18)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: FVS8M-3-LD4-35-1LO-P125-UNV-EDC1  
Description: FAILSAFE FVS8M LED FIXTURE  
3FT LENGTH, 1-MODULE LED WITH P125 LENS  
Light Source: (84) 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

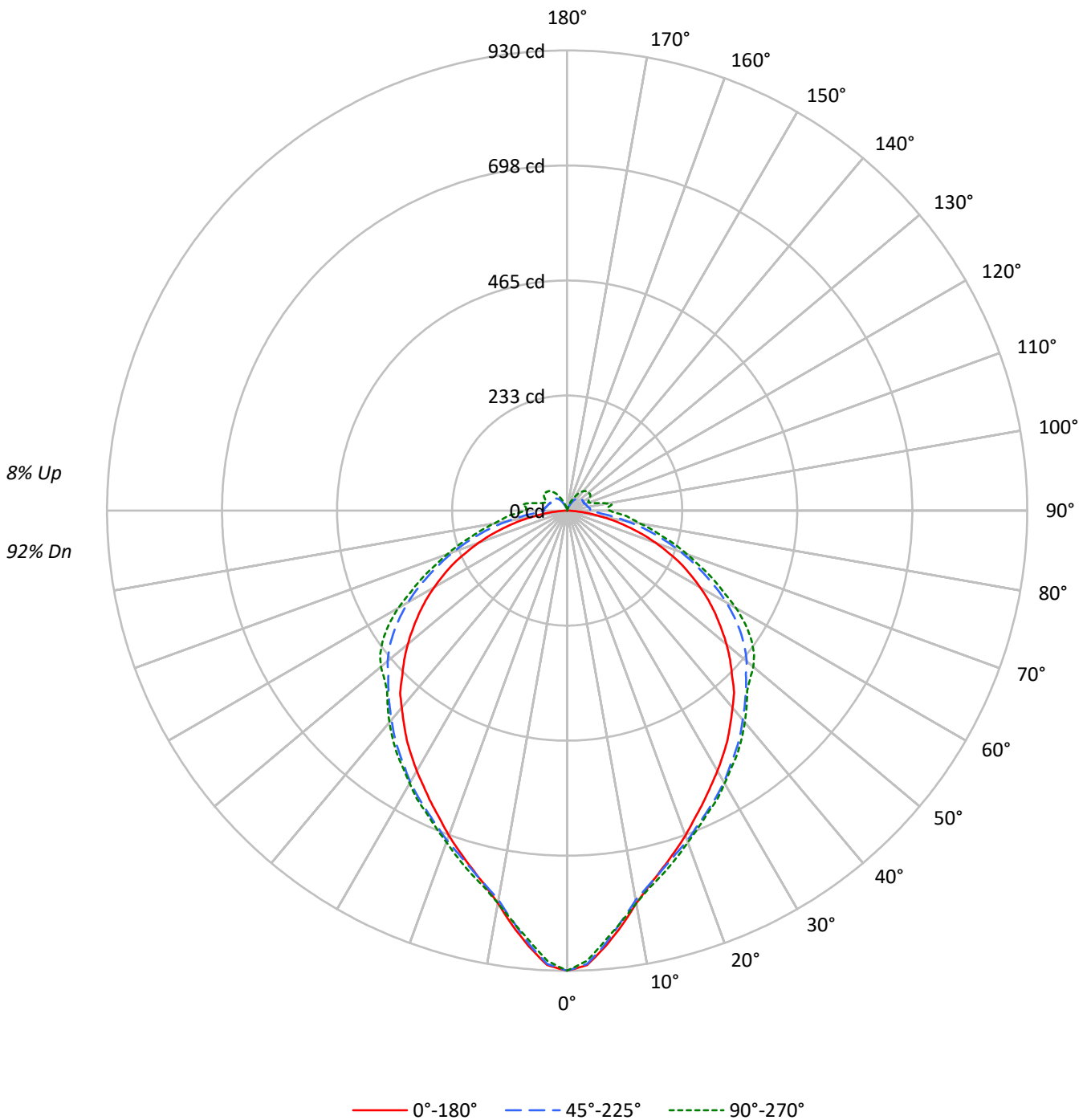
Lumens per Lamp: N/A  
Luminaire Lumens: 2483.0 lumens  
Efficiency: N/A  
Efficacy: 117.1 lumens/watt  
Spacing Criteria (0/90/45): 0.98 / 1.03 / 1.24  
Luminous Opening: Rectangular w/ Sides (W: 0.65' x L: 2.85' x H: 0.15')  
CIE Type: Direct

Input Watts (W): 21.2  
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

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CATALOG NUMBER: FVS8M-3-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			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	92
1	106	101	97	92	103	98	94	90	92	89	86	87	84	82	82	80	78	76
2	96	88	81	75	93	85	79	73	80	75	70	76	71	68	72	68	65	62
3	88	77	68	62	84	75	67	61	70	64	59	67	61	57	63	59	55	52
4	80	68	59	52	77	66	58	51	62	55	50	59	53	48	56	51	47	44
5	74	60	51	45	71	59	50	44	56	49	43	53	47	42	50	45	41	38
6	68	54	45	39	65	53	45	38	50	43	37	48	41	37	46	40	36	33
7	63	49	40	34	61	48	40	34	46	38	33	44	37	32	42	36	32	29
8	59	45	36	31	57	44	36	30	42	35	30	40	34	29	38	33	28	26
9	55	41	33	27	53	40	33	27	39	32	27	37	31	26	35	30	26	24
10	51	38	30	25	50	37	30	25	36	29	24	34	28	24	33	27	23	21

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

	0°	45°	90°
0°	5430	5430	5430
5°	5161	5071	5018
10°	4734	4577	4593
15°	4458	4305	4319
20°	4264	4117	4097
25°	4097	3959	3927
30°	3979	3841	3797
35°	3890	3721	3693
40°	3799	3614	3582
45°	3702	3529	3468
50°	3603	3489	3518
55°	3477	3403	3497
60°	3330	3240	3310
65°	3151	2989	3018
70°	2852	2724	2718
75°	2427	2376	2425
80°	1843	1939	2196
85°	960	1436	2219



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	81.5	3.3
10°-20°	211.8	8.5
20°-30°	308.3	12.4
30°-40°	368.9	14.9
40°-50°	389.8	15.7
50°-60°	373.3	15.0
60°-70°	294.4	11.9
70°-80°	184.0	7.4
80°-90°	80.2	3.2
90°-100°	45.8	1.8
100°-110°	38.6	1.6
110°-120°	31.1	1.3
120°-130°	29.4	1.2
130°-140°	23.7	1.0
140°-150°	15.1	0.6
150°-160°	6.0	0.2
160°-170°	1.2	0.0
170°-180°	0.0	0.0
0°-30°	601.6	24.2
0°-40°	970.5	39.1
0°-60°	1733.5	69.8
0°-90°	2292.2	92.3
90°-120°	115.5	4.7
90°-150°	183.7	7.4
90°-180°	191.0	7.7
0°-180°	2483.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	930	930	930	930	930	
5°	884	882	880	876	873	82
15°	748	743	749	757	758	211
25°	651	660	670	678	674	300
35°	565	580	594	604	600	353
45°	471	489	511	518	515	364
55°	366	390	428	448	454	328
65°	253	275	307	318	324	249
75°	128	151	182	196	198	137
85°	23	42	69	99	119	29
90°	0	19	46	67	86	1
95°	0	19	47	61	84	0
105°	0	19	41	57	58	0
115°	0	18	37	44	48	0
125°	0	16	37	50	57	0
135°	1	14	34	47	55	0
145°	1	9	27	38	44	0
155°	1	4	13	21	23	0
165°	1	1	3	6	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°	929.8	929.8	929.8	929.8	929.8	929.8	929.8	929.8	929.8	929.8	929.8
2.5°	919.7	917.2	915.3	917.2	915.9	916.6	917.2	918.5	918.5	919.7	917.2
5°	884.4	884.4	881.9	883.8	883.1	881.9	882.5	883.1	883.8	882.5	880.0
7.5°	845.9	842.8	841.5	839.6	838.3	839.6	839.0	839.6	840.2	840.2	837.7
10°	805.5	804.3	800.5	801.1	800.5	801.1	803.0	803.6	801.8	799.9	798.6
12.5°	773.4	769.6	769.6	770.8	770.2	770.8	769.0	767.1	770.2	772.7	772.7
15°	747.5	744.4	742.5	745.0	744.4	743.1	743.7	744.4	746.2	748.1	749.4
17.5°	722.9	720.4	719.1	721.6	721.0	721.0	721.6	724.2	728.0	728.0	728.0
20°	698.9	695.8	696.4	700.2	700.2	701.5	702.1	704.0	706.5	709.0	709.7
22.5°	673.1	672.4	673.7	677.5	678.1	679.4	681.9	685.7	686.9	688.2	688.8
25°	651.0	649.7	653.5	655.4	658.6	660.5	662.3	664.2	668.7	670.5	670.5
27.5°	628.3	628.3	630.8	634.6	637.7	641.5	643.4	645.3	648.5	651.0	652.3
30°	607.5	605.6	608.7	613.8	618.8	621.3	622.6	625.8	628.9	632.1	634.0
32.5°	586.0	584.8	588.5	591.7	597.4	598.6	600.5	606.2	608.7	610.6	612.5
35°	565.2	563.9	566.5	571.5	577.2	579.7	580.3	586.7	589.8	591.7	593.6
37.5°	541.9	543.8	545.0	550.1	553.8	556.4	559.5	564.6	569.0	570.9	574.0
40°	519.8	521.0	522.3	526.7	532.4	534.9	536.8	543.8	548.2	550.7	552.0
42.5°	499.6	497.1	499.6	505.3	509.1	512.2	514.7	520.4	525.5	531.1	531.8
45°	471.2	473.1	477.5	482.6	487.6	488.9	491.4	497.7	502.1	507.8	511.0
47.5°	446.6	449.1	451.0	456.7	463.0	464.9	468.1	474.4	481.9	487.6	490.1
50°	420.7	423.9	426.4	431.5	437.8	440.9	445.3	452.9	459.9	467.4	473.7
52.5°	393.0	396.8	401.2	404.3	412.5	415.7	419.5	428.9	438.4	446.0	452.3
55°	366.5	369.7	374.7	379.1	387.3	390.5	394.3	404.3	414.4	421.4	427.7
57.5°	339.4	340.6	345.1	350.7	358.9	364.6	367.8	377.2	386.1	393.6	400.6
60°	310.4	312.9	316.7	323.0	332.4	335.0	338.7	349.5	358.3	365.9	371.5
62.5°	281.3	283.9	287.6	295.2	300.3	304.7	310.4	319.8	326.8	333.1	340.6
65°	253.0	254.2	258.0	264.9	271.9	275.0	278.8	287.6	294.6	302.2	307.2
67.5°	220.8	223.9	228.4	233.4	240.3	244.8	247.9	254.8	263.7	272.5	275.7
70°	190.5	193.0	196.8	201.9	209.4	212.6	217.0	224.6	232.1	240.3	245.4
72.5°	160.2	162.1	164.6	170.9	177.9	181.7	185.5	193.0	202.5	208.2	213.2
75°	128.1	131.2	135.0	140.7	147.0	151.4	154.5	162.1	169.1	175.4	182.3
77.5°	99.0	101.6	105.3	109.8	118.0	122.4	124.9	131.8	139.4	143.8	152.0
80°	70.7	72.5	77.0	82.0	88.3	91.5	95.3	101.6	107.9	114.2	121.7
82.5°	44.8	46.0	50.5	55.5	61.8	65.0	68.1	74.4	80.1	87.7	94.0
85°	22.7	24.0	28.4	32.8	39.7	42.3	44.2	51.1	58.0	63.7	69.4
87.5°	6.9	8.8	12.6	17.7	23.3	25.9	28.4	34.7	40.4	46.7	53.6
90°	0.0	1.9	5.7	10.1	15.8	18.9	21.4	27.8	34.1	40.4	46.0
92.5°	0.0	1.9	5.0	10.1	15.8	18.9	21.4	27.8	34.1	39.7	46.7
95°	0.0	1.9	5.0	10.1	15.8	18.9	22.1	27.8	34.1	41.0	46.7
97.5°	0.0	1.3	5.0	10.1	15.8	18.9	22.1	27.8	34.7	40.4	44.2
100°	0.0	1.3	5.0	10.1	15.8	18.9	21.4	28.4	34.1	38.5	42.9
102.5°	0.0	1.3	5.0	10.1	15.8	18.9	22.1	27.8	32.2	37.2	41.6
105°	0.0	1.3	5.0	10.1	15.8	18.9	21.4	26.5	31.5	36.6	41.0
107.5°	0.0	1.3	5.0	10.1	15.1	18.3	20.8	25.9	30.9	36.0	39.7
110°	0.0	1.3	4.4	9.5	15.1	17.7	20.8	25.9	30.9	35.3	39.1



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	0.0	1.3	4.4	9.5	15.1	17.7	20.2	25.9	30.3	34.7	37.8
115°	0.0	1.3	4.4	9.5	14.5	17.7	20.2	25.9	30.3	34.7	37.2
117.5°	0.0	1.3	4.4	9.5	14.5	17.7	20.2	25.2	30.3	34.1	37.2
120°	0.0	0.6	4.4	8.8	14.5	17.0	20.2	25.2	30.3	34.1	37.2
122.5°	0.0	0.6	3.8	8.8	13.9	17.0	19.6	25.2	29.6	34.1	37.2
125°	0.0	0.6	3.8	8.8	13.9	16.4	18.9	24.6	29.6	34.1	37.2
127.5°	0.6	0.6	3.8	8.2	13.2	15.8	18.3	24.0	29.0	33.4	37.2
130°	0.0	0.6	3.2	7.6	12.6	15.1	17.7	23.3	28.4	32.2	36.0
132.5°	0.6	0.6	3.2	6.9	12.0	14.5	17.0	22.1	27.8	31.5	35.3
135°	0.6	0.6	2.5	6.3	11.4	13.9	16.4	20.8	26.5	30.3	34.1
137.5°	0.6	0.6	2.5	5.7	10.1	12.6	15.1	20.2	24.6	29.0	32.8
140°	0.6	0.6	1.9	5.0	9.5	11.4	13.9	18.9	23.3	27.8	31.5
142.5°	0.6	0.6	1.9	4.4	8.2	10.1	12.6	17.0	21.4	25.9	29.6
145°	0.6	0.6	1.3	3.8	6.9	8.8	10.7	15.1	19.6	23.3	27.1
147.5°	0.6	0.6	1.3	3.2	5.7	7.6	9.5	13.2	17.0	20.8	24.0
150°	0.6	0.6	0.6	2.5	4.4	5.7	7.6	10.7	13.9	17.0	20.2
152.5°	0.6	0.6	0.6	1.9	3.8	4.4	5.7	8.8	11.4	13.9	16.4
155°	0.6	0.6	0.6	1.3	2.5	3.8	4.4	6.3	8.8	10.7	13.2
157.5°	0.6	0.6	0.6	1.3	1.9	2.5	3.2	5.0	6.3	8.2	10.1
160°	0.6	0.6	0.6	0.6	1.3	1.9	2.5	3.2	4.4	5.7	6.9
162.5°	0.6	0.6	0.6	0.6	1.3	1.3	1.9	2.5	3.2	3.8	5.0
165°	0.6	0.6	0.6	0.6	0.6	1.3	1.3	1.9	2.5	2.5	3.2
167.5°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	1.3	1.3	1.9	1.9
170°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	1.3
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°	929.8	929.8	929.8	929.8	929.8	929.8	929.8	929.8	929.8	929.8
2.5°	915.9	914.7	915.3	915.3	912.8	914.7	914.0	912.8	910.9	910.9
5°	878.1	875.6	875.6	876.8	875.6	875.6	876.2	875.6	876.2	873.0
7.5°	837.1	835.2	836.5	837.1	839.0	838.3	839.0	838.3	838.3	838.3
10°	799.2	802.4	801.8	803.0	804.9	804.3	805.5	807.4	806.8	805.5
12.5°	772.7	775.9	775.9	779.0	779.0	779.7	781.6	781.6	778.4	778.4
15°	751.3	751.9	752.6	757.6	757.0	758.2	759.5	758.2	757.6	757.6
17.5°	729.2	729.8	732.4	732.4	733.6	734.3	736.8	736.2	735.5	735.5
20°	710.3	711.6	714.7	716.6	717.2	715.3	717.2	716.0	716.0	713.4
22.5°	692.0	695.8	694.5	695.8	697.0	698.3	698.3	697.0	695.8	693.3
25°	673.1	674.3	676.2	677.5	677.5	676.9	676.9	676.2	675.0	673.7
27.5°	654.8	656.7	656.0	659.8	661.1	661.7	661.1	658.6	656.0	657.3
30°	635.2	637.1	639.6	642.2	642.8	639.0	638.4	639.0	636.5	636.5
32.5°	615.0	617.6	622.0	621.3	621.3	623.2	623.2	621.3	618.2	616.9
35°	595.5	600.5	601.8	605.6	604.3	602.4	600.5	600.5	598.6	599.9
37.5°	575.9	579.1	582.9	582.2	582.2	582.9	582.9	580.3	581.0	579.7
40°	555.7	558.3	560.8	560.8	562.0	562.0	560.2	558.3	558.3	558.9
42.5°	533.0	536.8	540.0	540.0	540.6	540.0	540.6	539.3	536.8	536.8
45°	514.1	515.4	517.9	518.5	517.9	517.9	516.0	516.0	515.4	514.7
47.5°	494.6	499.0	499.6	500.9	499.6	499.6	500.9	501.5	502.8	501.5
50°	476.9	482.6	486.4	488.2	488.2	489.5	490.1	490.1	492.0	491.4
52.5°	459.2	463.0	466.8	471.8	473.1	473.1	475.6	475.0	476.3	476.3
55°	434.0	439.0	443.5	447.2	448.5	451.0	450.4	452.3	452.3	454.2
57.5°	406.9	409.4	415.7	418.2	417.6	419.5	420.1	423.3	427.1	427.1
60°	377.9	379.7	382.9	382.9	384.2	384.8	388.6	390.5	391.7	394.3
62.5°	342.5	346.9	349.5	350.1	351.4	354.5	354.5	354.5	355.8	356.4
65°	312.2	314.8	317.3	319.8	317.9	318.6	319.2	319.8	321.7	324.2
67.5°	281.3	283.9	286.4	287.6	285.1	285.8	284.5	286.4	288.3	288.3
70°	249.2	252.3	256.1	255.5	253.0	254.2	253.6	256.1	257.4	258.0
72.5°	218.3	222.7	225.2	225.2	225.2	225.2	225.8	227.1	227.7	228.4
75°	186.7	191.1	194.3	196.8	195.6	197.4	198.7	199.3	198.7	198.1
77.5°	157.7	162.1	164.6	168.4	169.7	170.9	172.2	172.2	173.5	173.5
80°	126.2	131.8	136.3	141.3	143.2	145.7	146.3	148.2	148.2	148.9
82.5°	99.7	106.0	111.0	116.1	118.6	119.9	123.6	126.8	129.9	131.8
85°	76.3	83.3	88.3	94.6	99.0	104.1	111.0	114.8	115.4	118.6
87.5°	59.9	66.9	75.7	82.6	82.6	83.3	85.2	88.3	92.7	95.9
90°	53.0	61.8	64.3	65.6	66.9	68.1	70.7	75.1	81.4	85.8
92.5°	53.6	56.1	58.7	60.6	61.8	63.7	66.9	71.3	77.6	82.0
95°	50.5	53.6	56.8	59.3	60.6	62.4	66.2	71.9	79.5	83.9
97.5°	48.6	52.4	54.9	58.7	60.6	63.1	69.4	77.6	87.1	90.8
100°	47.3	51.1	54.2	58.7	61.8	64.3	71.9	78.9	82.6	83.3
102.5°	46.0	49.8	53.6	58.0	60.6	63.1	66.9	69.4	68.8	68.8
105°	44.8	48.6	51.7	54.9	56.8	57.4	59.3	58.7	58.7	58.0
107.5°	43.5	46.7	49.2	50.5	51.1	51.7	51.7	51.7	51.1	51.1
110°	42.3	44.8	46.0	46.7	46.7	46.7	47.3	47.3	47.3	47.3





TEST NUMBER: P241346

CATALOG NUMBER: FVS8M-3-LD4-35-1LO-P125-UNV-EDC1

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	41.0	42.9	43.5	44.2	44.2	44.2	45.4	46.0	46.0	46.0
115°	39.7	41.6	42.9	43.5	44.2	44.8	46.0	47.3	47.9	47.9
117.5°	39.7	42.3	43.5	45.4	46.0	46.7	47.9	49.8	50.5	50.5
120°	40.4	42.9	45.4	47.3	47.9	48.6	50.5	52.4	53.0	53.6
122.5°	41.0	43.5	46.0	48.6	49.2	49.8	51.7	53.6	54.9	55.5
125°	41.0	44.2	46.7	49.2	49.8	51.1	52.4	54.2	55.5	56.8
127.5°	40.4	43.5	46.7	49.2	50.5	51.1	53.0	54.2	56.1	56.8
130°	39.7	42.9	45.4	47.9	49.2	50.5	53.0	54.9	56.1	56.8
132.5°	38.5	41.6	44.8	47.3	48.6	49.8	52.4	54.2	55.5	56.1
135°	37.2	41.0	43.5	46.0	47.3	48.6	51.1	53.0	54.2	54.9
137.5°	36.6	39.7	42.3	44.8	46.0	47.3	49.8	51.1	53.0	53.6
140°	34.7	37.8	40.4	42.9	44.2	45.4	47.3	49.2	50.5	51.1
142.5°	33.4	36.0	38.5	40.4	41.6	42.9	44.8	46.0	47.3	47.9
145°	30.9	33.4	36.0	37.8	38.5	39.7	41.0	42.3	43.5	43.5
147.5°	27.1	30.3	32.2	34.1	34.7	36.0	37.2	37.8	38.5	39.1
150°	23.3	25.9	28.4	29.6	30.3	30.9	32.2	32.8	33.4	33.4
152.5°	18.9	21.4	23.3	25.2	25.9	26.5	27.1	27.8	28.4	28.4
155°	15.1	17.0	19.6	20.2	21.4	21.4	22.7	23.3	23.3	23.3
157.5°	11.4	13.2	14.5	16.4	17.0	17.0	18.3	18.3	18.9	18.9
160°	8.2	9.5	10.7	12.6	13.2	13.2	13.9	14.5	14.5	14.5
162.5°	5.7	6.9	7.6	8.8	9.5	10.1	10.1	10.7	10.7	10.7
165°	3.8	4.4	5.0	5.7	6.3	6.3	6.9	7.6	7.6	7.6
167.5°	2.5	2.5	3.2	3.2	3.8	3.8	4.4	4.4	4.4	5.0
170°	1.3	1.3	1.3	1.9	1.9	1.9	1.9	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)