

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: P241318

Luminaire Tested: **FVS8M-2-LD4-35-1HI-P125-UNV-EDC1**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-79-08  
Report Number: P241318  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1711-410-3)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: FVS8M-2-LD4-35-1HI-P125-UNV-EDC1  
Description: FAILSAFE FVS8M LED FIXTURE  
2FT LENGTH, 1-MODULE LED WITH P125 LENS  
Light Source: (42) 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

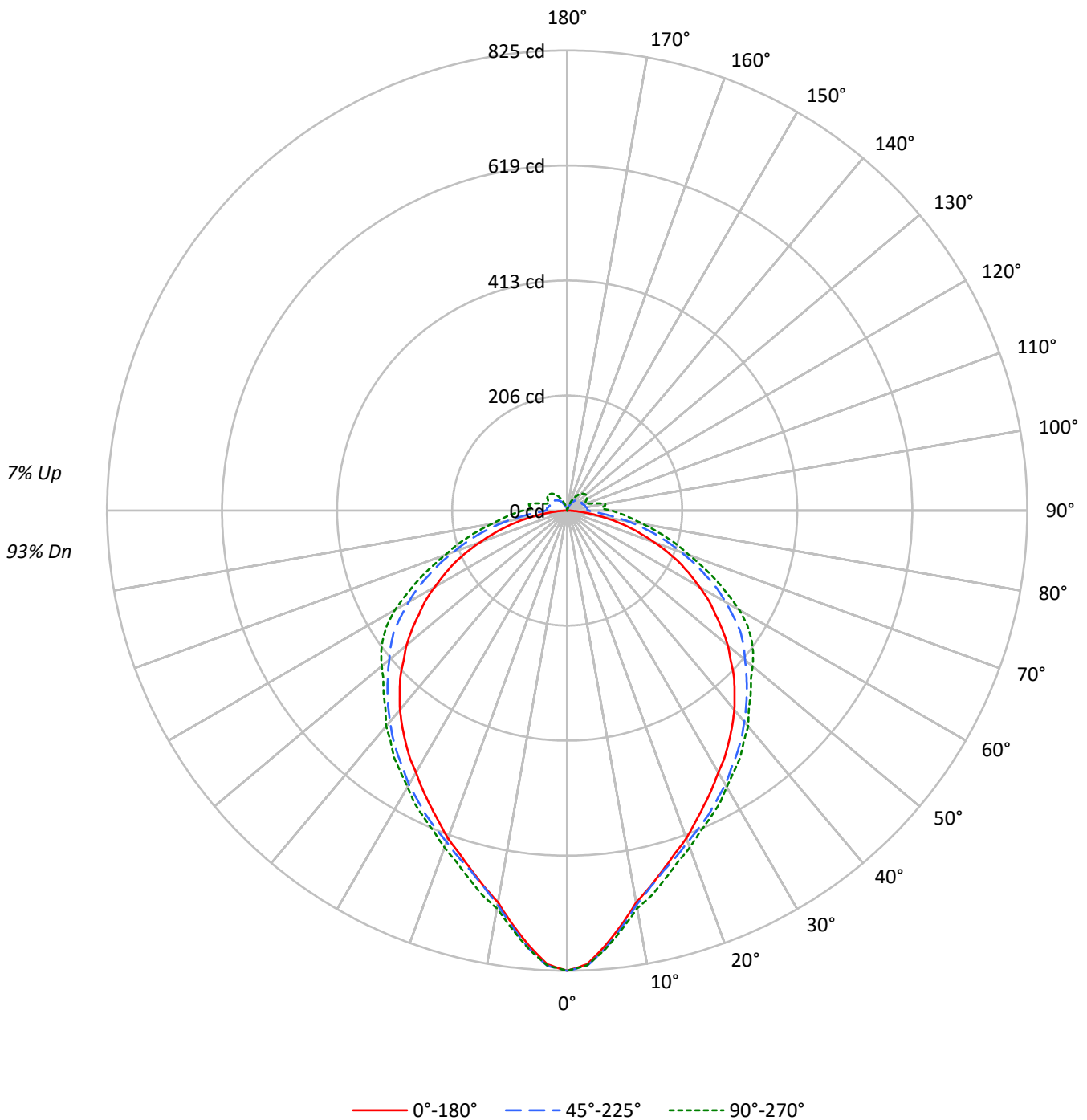
Lumens per Lamp: N/A  
Luminaire Lumens: 2198.0 lumens  
Efficiency: N/A  
Efficacy: 98.6 lumens/watt  
Spacing Criteria (0/90/45): 0.99 / 1.04 / 1.24  
Luminous Opening: Rectangular w/ Sides (W: 0.65' x L: 1.85' x H: 0.15')  
CIE Type: Direct

Input Watts (W): 22.3  
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: P241318

CATALOG NUMBER: FVS8M-2-LD4-35-1HI-P125-UNV-EDC1

### Luminous Intensity Polar Plot





TEST NUMBER: P241318

CATALOG NUMBER: FVS8M-2-LD4-35-1HI-P125-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	96	96	96	93
1	106	101	97	93	103	98	94	90	93	89	86	88	85	82	83	81	79	76
2	96	88	81	75	93	85	79	73	81	75	71	76	72	68	72	69	65	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	53	49	57	51	47	45
5	74	61	51	45	71	59	51	44	56	49	43	53	47	42	51	45	41	39
6	68	55	45	39	66	53	45	39	51	43	38	48	42	37	46	40	36	34
7	63	49	41	34	61	48	40	34	46	39	33	44	37	33	42	36	32	30
8	59	45	36	31	57	44	36	30	42	35	30	40	34	29	39	33	29	27
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	35	28	24	33	28	23	22

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

	0°	45°	90°
0°	7417	7417	7417
5°	7016	6977	6980
10°	6422	6308	6356
15°	6073	5880	5985
20°	5814	5606	5682
25°	5568	5414	5451
30°	5380	5237	5254
35°	5258	5064	5125
40°	5134	4909	4978
45°	4989	4766	4826
50°	4811	4634	4783
55°	4569	4545	4784
60°	4342	4299	4610
65°	4066	3978	4213
70°	3600	3592	3766
75°	3053	3151	3453
80°	2209	2557	3114
85°	1119	1869	3018



TEST NUMBER: P241318

CATALOG NUMBER: FVS8M-2-LD4-35-1HI-P125-UNV-EDC1

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	72.9	3.3
10°-20°	189.6	8.6
20°-30°	276.1	12.6
30°-40°	330.5	15.0
40°-50°	347.7	15.8
50°-60°	330.8	15.0
60°-70°	262.7	12.0
70°-80°	165.3	7.5
80°-90°	71.9	3.3
90°-100°	36.8	1.7
100°-110°	31.2	1.4
110°-120°	24.2	1.1
120°-130°	22.8	1.0
130°-140°	18.2	0.8
140°-150°	11.7	0.5
150°-160°	4.9	0.2
160°-170°	0.9	0.0
170°-180°	0.0	0.0
0°-30°	538.5	24.5
0°-40°	869.0	39.5
0°-60°	1547.5	70.4
0°-90°	2047.4	93.1
90°-120°	92.2	4.2
90°-150°	144.9	6.6
90°-180°	151.0	6.9
0°-180°	2198.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	825	825	825	825	825	
5°	783	788	788	790	789	73
15°	666	666	668	675	682	188
25°	582	590	601	608	608	269
35°	506	519	531	540	541	316
45°	423	432	456	464	465	326
55°	324	344	379	401	404	291
65°	223	242	273	288	294	219
75°	114	133	164	180	183	120
85°	21	37	63	87	105	26
90°	0	16	38	61	78	1
95°	0	15	36	48	63	0
105°	0	15	32	46	49	0
115°	0	14	29	34	36	0
125°	0	13	29	39	43	0
135°	0	10	26	37	42	0
145°	0	7	21	30	34	0
155°	0	3	11	18	20	0
165°	0	0	2	5	6	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P241318

CATALOG NUMBER: FVS8M-2-LD4-35-1HI-P125-UNV-EDC1

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	825.1	825.1	825.1	825.1	825.1	825.1	825.1	825.1	825.1	825.1	825.1
2.5°	814.3	815.3	814.3	815.3	816.2	817.2	816.2	817.2	817.2	818.2	817.2
5°	782.9	783.9	784.9	786.8	787.8	787.8	786.8	787.8	787.8	786.8	787.8
7.5°	748.6	747.6	748.6	749.6	749.6	750.6	750.6	748.6	749.6	749.6	752.5
10°	713.3	714.3	713.3	714.3	713.3	713.3	713.3	714.3	714.3	715.3	717.3
12.5°	689.8	689.8	687.9	687.9	688.9	688.9	688.9	688.9	687.9	689.8	690.8
15°	666.3	669.3	667.3	668.3	666.3	666.3	665.3	665.3	666.3	664.4	668.3
17.5°	643.8	646.7	645.7	646.7	646.7	644.8	644.8	645.7	646.7	646.7	650.6
20°	625.2	625.2	625.2	627.1	628.1	629.1	628.1	628.1	630.1	631.0	632.0
22.5°	602.6	603.6	607.5	607.5	606.5	608.5	607.5	610.5	612.4	613.4	616.3
25°	582.0	586.0	586.9	586.0	588.9	589.9	590.9	595.8	594.8	596.7	600.7
27.5°	562.4	564.4	567.3	569.3	572.2	570.3	572.2	575.2	574.2	582.0	583.0
30°	541.9	546.8	547.7	550.7	550.7	550.7	555.6	556.6	561.5	563.4	567.3
32.5°	525.2	526.2	529.1	532.1	533.1	536.0	538.0	539.9	542.8	544.8	547.7
35°	505.6	509.5	508.6	511.5	514.4	519.3	519.3	521.3	523.3	529.1	531.1
37.5°	486.0	489.0	489.0	493.9	495.8	498.8	495.8	504.6	507.6	510.5	513.5
40°	466.4	468.4	470.3	472.3	474.3	476.2	479.2	484.1	488.0	490.9	493.9
42.5°	443.9	446.8	448.8	450.7	454.7	456.6	459.6	462.5	468.4	471.3	475.2
45°	423.3	425.3	427.2	429.2	433.1	432.1	437.0	442.9	448.8	451.7	455.6
47.5°	397.8	401.7	405.7	406.6	409.6	413.5	415.5	422.3	428.2	430.2	436.0
50°	376.3	376.3	381.2	384.1	387.0	391.9	393.9	399.8	406.6	412.5	416.4
52.5°	350.8	353.7	356.7	360.6	365.5	368.4	371.4	378.2	387.0	394.9	398.8
55°	324.3	327.3	332.2	336.1	341.0	343.9	348.8	356.7	364.5	371.4	379.2
57.5°	301.8	301.8	304.7	309.6	315.5	319.4	323.4	332.2	342.0	344.9	353.7
60°	274.4	277.3	280.2	285.1	291.0	294.9	297.9	306.7	314.5	322.4	328.3
62.5°	247.9	250.8	253.8	258.7	265.5	269.5	272.4	280.2	289.1	294.9	302.8
65°	223.4	222.4	226.4	232.2	239.1	242.0	245.0	253.8	260.6	266.5	273.4
67.5°	195.0	197.9	200.9	205.8	211.7	215.6	218.5	226.4	232.2	239.1	245.9
70°	166.6	169.5	172.5	179.3	185.2	187.2	190.1	197.9	202.8	212.6	217.5
72.5°	139.1	142.1	146.0	150.9	157.8	159.7	163.6	169.5	177.4	184.2	190.1
75°	113.7	116.6	118.6	123.5	129.3	133.3	136.2	143.1	149.9	156.8	163.6
77.5°	88.2	90.1	93.1	98.0	102.9	106.8	108.8	115.6	122.5	129.3	136.2
80°	61.7	64.7	67.6	72.5	77.4	81.3	84.3	91.1	97.0	103.9	109.7
82.5°	39.2	41.2	45.1	50.0	54.9	56.8	60.8	65.7	72.5	78.4	84.3
85°	20.6	22.5	25.5	29.4	35.3	37.2	40.2	45.1	51.0	56.8	62.7
87.5°	7.8	8.8	11.8	15.7	19.6	22.5	25.5	30.4	35.3	41.2	47.0
90°	0.0	2.0	4.9	8.8	12.7	15.7	17.6	22.5	27.4	32.3	38.2
92.5°	0.0	1.0	3.9	7.8	12.7	14.7	16.7	21.6	26.5	31.4	36.3
95°	0.0	1.0	3.9	7.8	12.7	14.7	16.7	21.6	26.5	31.4	36.3
97.5°	0.0	1.0	3.9	7.8	12.7	14.7	16.7	21.6	26.5	31.4	36.3
100°	0.0	1.0	3.9	7.8	12.7	14.7	16.7	21.6	26.5	31.4	34.3
102.5°	0.0	1.0	3.9	7.8	11.8	14.7	16.7	21.6	26.5	30.4	33.3
105°	0.0	1.0	3.9	7.8	11.8	14.7	16.7	21.6	25.5	29.4	32.3
107.5°	0.0	1.0	3.9	7.8	11.8	13.7	16.7	20.6	24.5	28.4	32.3
110°	0.0	1.0	2.9	6.9	11.8	13.7	15.7	20.6	24.5	28.4	31.4



TEST NUMBER: P241318

CATALOG NUMBER: FVS8M-2-LD4-35-1HI-P125-UNV-EDC1

**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	0.0	1.0	2.9	6.9	11.8	13.7	15.7	20.6	23.5	27.4	30.4
115°	0.0	1.0	2.9	6.9	10.8	13.7	15.7	19.6	23.5	26.5	29.4
117.5°	0.0	1.0	2.9	6.9	10.8	13.7	15.7	19.6	23.5	26.5	29.4
120°	0.0	0.0	2.9	6.9	10.8	12.7	15.7	19.6	23.5	26.5	29.4
122.5°	0.0	0.0	2.9	6.9	10.8	12.7	15.7	19.6	23.5	26.5	29.4
125°	0.0	0.0	2.9	5.9	10.8	12.7	14.7	19.6	22.5	26.5	29.4
127.5°	0.0	0.0	2.0	5.9	9.8	11.8	14.7	18.6	22.5	26.5	29.4
130°	0.0	0.0	2.0	5.9	8.8	11.8	13.7	18.6	21.6	25.5	28.4
132.5°	0.0	0.0	2.0	4.9	8.8	10.8	12.7	17.6	21.6	24.5	27.4
135°	0.0	0.0	2.0	4.9	7.8	9.8	11.8	15.7	19.6	23.5	26.5
137.5°	0.0	0.0	1.0	3.9	7.8	8.8	10.8	14.7	18.6	21.6	24.5
140°	0.0	0.0	1.0	3.9	6.9	8.8	10.8	13.7	17.6	20.6	23.5
142.5°	0.0	0.0	1.0	2.9	5.9	7.8	9.8	12.7	15.7	19.6	22.5
145°	0.0	0.0	1.0	2.9	4.9	6.9	8.8	11.8	14.7	17.6	20.6
147.5°	0.0	0.0	1.0	2.0	3.9	5.9	6.9	10.8	12.7	15.7	18.6
150°	0.0	0.0	0.0	2.0	3.9	4.9	5.9	8.8	11.8	13.7	16.7
152.5°	0.0	0.0	0.0	1.0	2.9	3.9	4.9	6.9	8.8	11.8	13.7
155°	0.0	0.0	0.0	1.0	2.0	2.9	3.9	4.9	6.9	8.8	10.8
157.5°	0.0	0.0	0.0	0.0	1.0	2.0	2.0	3.9	4.9	6.9	8.8
160°	0.0	0.0	0.0	0.0	1.0	1.0	1.0	2.0	3.9	4.9	5.9
162.5°	0.0	0.0	0.0	0.0	0.0	1.0	1.0	2.0	2.0	2.9	3.9
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	2.0	2.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0
170°	0.0	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	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: P241318

CATALOG NUMBER: FVS8M-2-LD4-35-1HI-P125-UNV-EDC1

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	825.1	825.1	825.1	825.1	825.1	825.1	825.1	825.1	825.1	825.1
2.5°	817.2	817.2	817.2	816.2	816.2	816.2	816.2	816.2	817.2	816.2
5°	788.8	788.8	787.8	788.8	789.8	788.8	789.8	788.8	788.8	788.8
7.5°	753.5	753.5	753.5	753.5	754.5	754.5	754.5	755.5	756.5	756.5
10°	718.2	719.2	719.2	719.2	719.2	721.2	722.2	722.2	723.1	724.1
12.5°	691.8	691.8	694.7	698.6	699.6	701.6	703.5	702.6	702.6	705.5
15°	670.2	673.2	674.2	674.2	675.1	676.1	679.1	680.0	679.1	682.0
17.5°	651.6	651.6	656.5	657.5	657.5	658.5	658.5	659.5	659.5	660.4
20°	635.0	635.9	637.9	638.9	640.8	641.8	643.8	642.8	644.8	642.8
22.5°	617.3	618.3	624.2	625.2	625.2	624.2	622.2	624.2	624.2	623.2
25°	601.6	604.6	606.5	609.5	608.5	609.5	610.5	608.5	607.5	607.5
27.5°	585.0	586.9	590.9	591.8	591.8	589.9	589.9	589.9	588.9	591.8
30°	570.3	574.2	575.2	572.2	573.2	576.2	577.1	576.2	574.2	572.2
32.5°	550.7	552.6	555.6	562.4	561.5	560.5	555.6	554.6	554.6	555.6
35°	533.1	537.0	541.9	538.9	539.9	539.9	541.9	540.9	537.0	540.9
37.5°	515.4	521.3	521.3	526.2	524.2	522.3	519.3	521.3	520.3	520.3
40°	496.8	499.7	504.6	503.7	502.7	504.6	504.6	504.6	504.6	504.6
42.5°	478.2	482.1	482.1	483.1	487.0	488.0	487.0	480.1	483.1	482.1
45°	457.6	461.5	463.5	465.4	463.5	462.5	464.5	465.4	463.5	465.4
47.5°	440.0	440.0	445.8	444.9	444.9	446.8	444.9	444.9	443.9	446.8
50°	420.4	426.2	427.2	430.2	430.2	429.2	429.2	430.2	434.1	434.1
52.5°	404.7	410.6	414.5	415.5	415.5	418.4	421.3	420.4	422.3	420.4
55°	385.1	389.0	393.9	396.8	400.8	400.8	400.8	402.7	402.7	403.7
57.5°	360.6	364.5	367.5	374.3	376.3	375.3	376.3	380.2	379.2	383.1
60°	334.1	339.0	343.0	343.9	345.9	347.9	348.8	350.8	352.8	356.7
62.5°	306.7	310.6	315.5	314.5	316.5	318.5	320.4	321.4	325.3	324.3
65°	279.3	282.2	285.1	286.1	288.1	286.1	290.0	292.0	292.0	294.0
67.5°	251.8	253.8	257.7	258.7	259.7	259.7	258.7	261.6	262.6	262.6
70°	222.4	227.3	230.3	232.2	231.3	232.2	231.3	231.3	233.2	232.2
72.5°	196.0	199.9	202.8	205.8	205.8	205.8	205.8	206.8	207.7	208.7
75°	168.5	173.4	178.3	179.3	180.3	180.3	182.3	183.2	183.2	183.2
77.5°	141.1	147.0	150.9	153.8	154.8	156.8	157.8	159.7	159.7	159.7
80°	114.6	120.5	124.4	129.3	131.3	132.3	134.2	137.2	137.2	137.2
82.5°	90.1	96.0	101.9	104.8	107.8	110.7	113.7	115.6	117.6	119.5
85°	67.6	74.5	80.3	85.2	87.2	89.2	93.1	98.0	102.9	104.8
87.5°	52.9	57.8	63.7	68.6	71.5	74.5	79.4	83.3	89.2	92.1
90°	43.1	48.0	53.9	59.8	60.8	62.7	65.7	70.6	74.5	78.4
92.5°	41.2	46.1	50.0	51.0	51.9	52.9	54.9	57.8	61.7	65.7
95°	42.1	44.1	45.1	47.0	48.0	50.0	51.9	55.9	60.8	62.7
97.5°	39.2	41.2	44.1	47.0	48.0	50.0	53.9	59.8	65.7	68.6
100°	37.2	41.2	44.1	47.0	49.0	51.0	56.8	63.7	68.6	69.6
102.5°	37.2	40.2	43.1	47.0	49.0	51.0	55.9	58.8	58.8	58.8
105°	36.3	39.2	42.1	45.1	46.1	47.0	49.0	49.0	49.0	49.0
107.5°	35.3	37.2	40.2	41.2	41.2	42.1	42.1	42.1	42.1	41.2
110°	33.3	35.3	37.2	37.2	37.2	37.2	37.2	37.2	37.2	37.2





TEST NUMBER: P241318

CATALOG NUMBER: FVS8M-2-LD4-35-1HI-P125-UNV-EDC1

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	32.3	34.3	34.3	35.3	35.3	35.3	35.3	36.3	35.3	35.3
115°	31.4	33.3	33.3	34.3	34.3	34.3	35.3	36.3	36.3	36.3
117.5°	31.4	33.3	34.3	35.3	35.3	36.3	37.2	38.2	38.2	38.2
120°	31.4	33.3	35.3	36.3	37.2	37.2	39.2	40.2	40.2	40.2
122.5°	32.3	34.3	36.3	37.2	38.2	39.2	40.2	41.2	42.1	42.1
125°	32.3	34.3	37.2	38.2	39.2	39.2	40.2	42.1	42.1	43.1
127.5°	31.4	34.3	37.2	38.2	39.2	40.2	41.2	42.1	43.1	43.1
130°	31.4	34.3	36.3	38.2	39.2	40.2	41.2	42.1	43.1	44.1
132.5°	30.4	32.3	35.3	37.2	38.2	39.2	40.2	42.1	43.1	43.1
135°	29.4	31.4	34.3	36.3	37.2	38.2	40.2	41.2	42.1	42.1
137.5°	27.4	30.4	32.3	34.3	35.3	36.3	38.2	40.2	40.2	41.2
140°	26.5	28.4	31.4	33.3	34.3	35.3	36.3	38.2	39.2	39.2
142.5°	24.5	27.4	29.4	31.4	32.3	33.3	34.3	36.3	37.2	37.2
145°	22.5	25.5	27.4	29.4	30.4	31.4	32.3	33.3	34.3	34.3
147.5°	20.6	23.5	25.5	26.5	27.4	28.4	29.4	30.4	31.4	31.4
150°	18.6	20.6	22.5	23.5	24.5	25.5	26.5	26.5	27.4	27.4
152.5°	15.7	17.6	19.6	20.6	21.6	21.6	22.5	23.5	23.5	23.5
155°	12.7	14.7	15.7	16.7	17.6	18.6	18.6	19.6	19.6	19.6
157.5°	9.8	11.8	12.7	13.7	14.7	14.7	15.7	15.7	15.7	15.7
160°	6.9	8.8	9.8	10.8	10.8	10.8	11.8	11.8	11.8	11.8
162.5°	4.9	5.9	6.9	7.8	7.8	7.8	7.8	8.8	8.8	8.8
165°	2.9	3.9	3.9	4.9	4.9	4.9	5.9	5.9	5.9	5.9
167.5°	1.0	2.0	2.0	2.9	2.9	2.9	2.9	2.9	3.9	3.9
170°	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
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)