

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: P241324

Luminaire Tested: **FVS8M-2-LD4-50-2LO-P125-UNV-EDC1**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-79-08  
Report Number: P241324  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1711-410-8)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: FVS8M-2-LD4-50-2LO-P125-UNV-EDC1  
Description: FAILSAFE FVS8M LED FIXTURE  
2FT LENGTH, 2-MODULE LED WITH P125 LENS  
Light Source: (84) 5000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

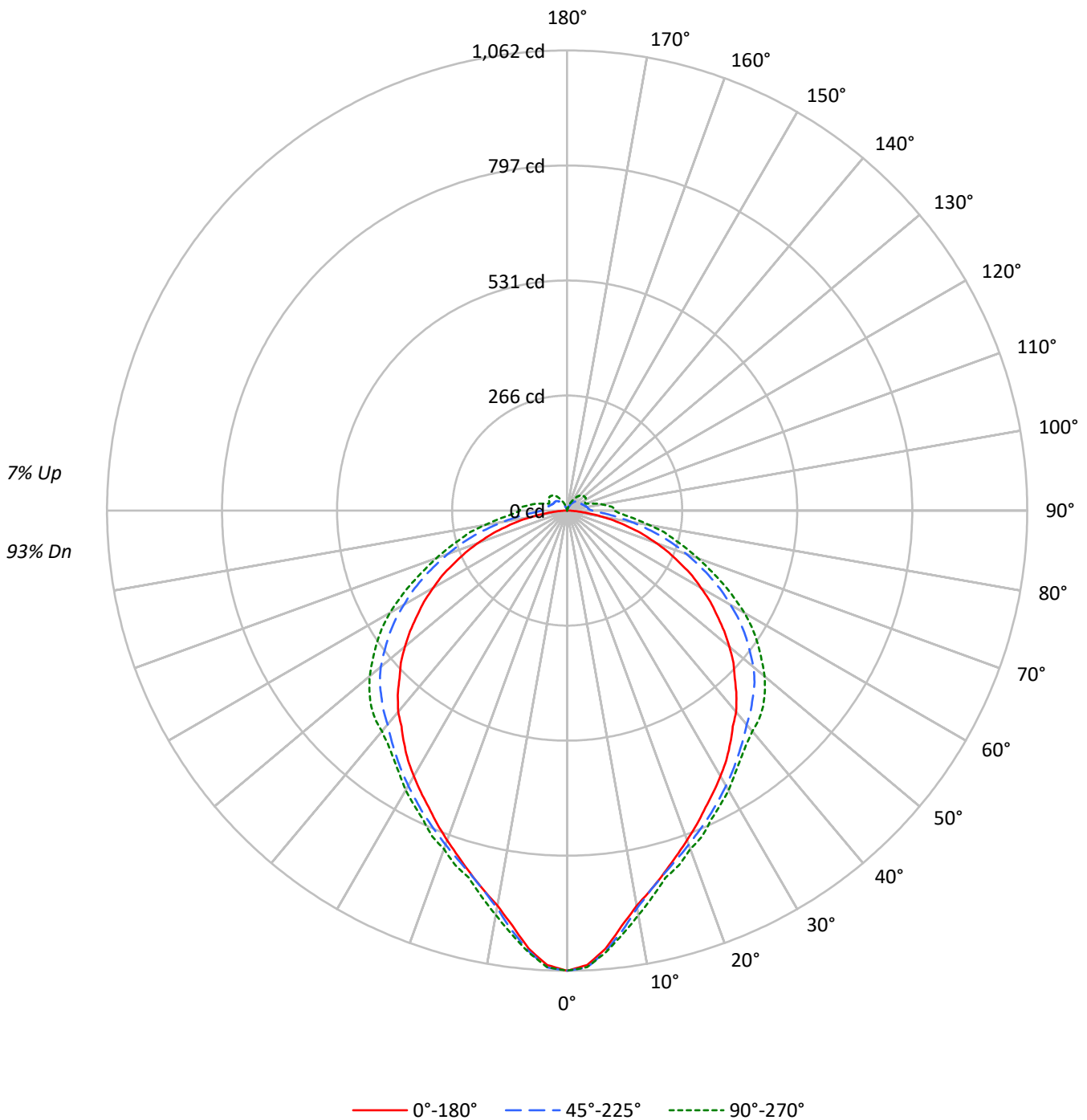
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2892.0 lumens  
Efficiency: N/A  
Efficacy: 122.0 lumens/watt  
Spacing Criteria (0/90/45): 1 / 1.05 / 1.26  
Luminous Opening: Rectangular w/ Sides (W: 0.65' x L: 1.85' x H: 0.15')  
CIE Type: Direct  
  
Input Watts (W): 23.7  
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-LD4-50-2LO-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	96	96	96	93
1	106	101	97	92	103	98	94	90	93	89	86	88	85	82	83	81	79	76
2	96	88	80	74	93	85	79	73	81	75	70	76	72	68	72	69	65	63
3	88	77	68	61	84	75	67	60	71	64	59	67	61	57	64	59	55	52
4	80	68	59	52	77	66	58	51	63	55	50	59	53	48	56	51	47	44
5	73	60	51	44	71	59	50	44	56	48	43	53	47	42	51	45	41	38
6	68	54	45	39	65	53	44	38	50	43	37	48	42	36	46	40	36	33
7	63	49	40	34	61	48	40	34	46	38	33	44	37	32	42	36	32	30
8	58	45	36	30	56	44	36	30	42	35	29	40	34	29	39	33	28	26
9	55	41	33	27	53	40	32	27	39	31	27	37	31	26	36	30	26	24
10	51	38	30	25	50	37	30	24	36	29	24	34	28	24	33	27	23	21

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

	0°	45°	90°
0°	9545	9545	9545
5°	9094	9038	9052
10°	8333	8190	8321
15°	7890	7628	7697
20°	7529	7278	7348
25°	7228	7005	7059
30°	7026	6769	6844
35°	6824	6566	6616
40°	6675	6407	6560
45°	6449	6343	6633
50°	6247	6245	6556
55°	5950	6017	6371
60°	5644	5698	6109
65°	5229	5320	5659
70°	4722	4839	5218
75°	3984	4256	4802
80°	2917	3503	4367
85°	1456	2697	3946



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	94.5	3.3
10°-20°	245.8	8.5
20°-30°	357.7	12.4
30°-40°	429.2	14.8
40°-50°	462.9	16.0
50°-60°	438.5	15.2
60°-70°	349.5	12.1
70°-80°	224.1	7.7
80°-90°	99.5	3.4
90°-100°	52.5	1.8
100°-110°	40.0	1.4
110°-120°	29.8	1.0
120°-130°	27.1	0.9
130°-140°	21.3	0.7
140°-150°	13.0	0.4
150°-160°	5.4	0.2
160°-170°	1.2	0.0
170°-180°	0.0	0.0
0°-30°	698.1	24.1
0°-40°	1127.3	39.0
0°-60°	2028.7	70.1
0°-90°	2701.8	93.4
90°-120°	122.4	4.2
90°-150°	183.7	6.4
90°-180°	190.0	6.6
0°-180°	2892.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1062	1062	1062	1062	1062	
5°	1015	1017	1020	1024	1023	94
15°	866	864	867	878	877	244
25°	756	764	777	788	787	349
35°	656	671	689	702	698	411
45°	547	569	606	636	640	423
55°	422	454	502	529	538	379
65°	287	320	366	384	395	286
75°	148	176	221	248	255	158
85°	27	52	90	122	137	34
90°	0	23	58	80	109	1
95°	0	21	49	71	103	0
105°	0	19	43	59	62	0
115°	0	17	36	43	45	0
125°	0	14	35	46	52	0
135°	0	12	31	43	49	0
145°	1	8	22	33	38	0
155°	1	3	12	19	22	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°	1061.9	1061.9	1061.9	1061.9	1061.9	1061.9	1061.9	1061.9	1061.9	1061.9	1061.9
2.5°	1049.8	1049.8	1049.8	1049.8	1051.1	1050.4	1051.7	1052.3	1053.6	1054.3	1055.5
5°	1014.8	1014.8	1013.5	1014.1	1014.8	1016.7	1016.0	1018.6	1019.9	1021.8	1020.5
7.5°	966.3	968.9	967.6	968.3	967.6	968.9	971.4	972.1	975.3	977.2	977.2
10°	925.6	925.6	923.0	923.7	923.7	924.9	924.9	926.9	928.8	931.9	931.3
12.5°	895.6	895.6	892.5	893.1	891.2	891.8	891.8	892.5	893.7	895.6	895.6
15°	865.7	863.2	863.2	864.4	864.4	863.8	864.4	864.4	864.4	865.7	867.0
17.5°	836.4	836.4	837.0	836.4	837.7	837.0	837.0	838.9	840.2	840.2	842.8
20°	809.6	810.3	809.6	811.6	813.5	813.5	813.5	815.4	815.4	817.9	820.5
22.5°	782.9	783.5	785.4	784.8	787.3	787.3	786.7	790.5	792.4	795.0	798.2
25°	755.5	756.1	757.4	760.0	761.2	763.8	765.1	767.0	772.1	773.3	777.2
27.5°	731.9	731.3	732.6	737.7	737.7	739.6	742.1	746.6	747.2	752.9	754.9
30°	707.7	707.7	707.7	713.5	714.7	717.3	719.8	723.6	726.8	730.0	733.2
32.5°	683.5	681.0	682.9	687.3	693.7	693.7	695.0	701.3	703.9	707.7	711.5
35°	656.1	656.8	659.3	661.9	667.6	670.8	673.3	677.1	680.3	683.5	688.6
37.5°	628.1	630.6	633.2	636.4	640.2	644.0	646.6	651.7	658.7	661.9	667.0
40°	606.4	605.2	607.1	609.6	614.1	617.9	622.4	628.1	634.5	639.6	644.7
42.5°	578.4	577.1	582.2	584.1	591.1	592.4	597.5	604.5	612.8	619.8	626.8
45°	547.2	549.7	552.9	558.7	563.1	568.9	573.3	580.3	591.1	600.1	606.4
47.5°	520.4	519.8	523.6	530.0	537.0	541.5	545.9	556.1	567.6	577.1	586.7
50°	488.6	490.5	494.3	501.3	510.2	512.8	516.6	529.4	540.2	552.3	561.2
52.5°	456.7	457.4	463.1	470.1	479.7	484.1	489.9	500.7	511.5	522.3	531.3
55°	422.3	424.2	431.9	438.3	448.5	453.6	459.9	470.8	482.2	493.0	502.0
57.5°	391.8	393.0	398.1	406.4	417.2	421.1	428.1	440.2	450.4	461.8	470.8
60°	356.7	359.3	364.4	374.6	382.8	386.7	394.3	405.8	416.0	426.8	435.1
62.5°	325.5	325.5	330.0	340.2	348.4	353.5	359.9	369.5	381.6	391.1	402.0
65°	287.3	291.1	297.5	304.5	314.0	319.8	324.2	334.4	344.6	355.5	365.6
67.5°	254.2	256.7	261.2	269.5	280.3	282.8	289.8	300.0	309.0	318.5	328.1
70°	218.5	220.4	226.1	234.4	243.3	246.5	252.9	262.4	272.0	282.8	293.0
72.5°	184.7	186.0	192.4	198.7	207.7	213.4	217.2	225.5	236.3	247.8	257.4
75°	148.4	151.0	156.1	163.1	172.0	176.5	181.5	190.5	200.7	210.9	221.0
77.5°	116.6	116.6	121.7	129.3	137.0	142.1	146.5	156.1	166.3	175.2	184.1
80°	81.5	84.7	88.5	95.6	103.8	109.6	112.1	121.0	131.2	140.1	150.3
82.5°	52.9	54.8	59.2	66.2	73.9	77.1	81.5	90.5	100.0	110.2	118.5
85°	26.8	29.3	33.8	40.1	47.8	51.6	55.4	65.0	72.6	81.5	90.5
87.5°	10.2	11.5	15.9	22.3	29.3	33.1	36.3	44.6	52.2	61.2	70.1
90°	0.0	2.5	7.0	12.7	19.7	22.9	26.8	34.4	41.4	49.7	58.0
92.5°	0.0	1.9	5.7	11.5	17.8	21.7	24.8	31.9	38.9	46.5	52.2
95°	0.0	1.9	5.7	11.5	17.8	21.0	24.2	31.2	38.2	44.6	49.0
97.5°	0.0	1.3	5.7	11.5	17.2	20.4	23.6	30.6	36.9	42.7	47.8
100°	0.0	1.3	5.1	10.8	16.6	19.7	23.6	29.9	35.0	40.8	46.5
102.5°	0.0	1.3	5.1	10.2	16.6	19.7	22.9	28.7	33.8	39.5	44.6
105°	0.0	1.3	4.5	10.2	15.9	19.1	21.7	27.4	33.1	38.2	42.7
107.5°	0.0	1.3	4.5	9.6	15.3	17.8	21.0	26.8	31.9	36.3	40.8
110°	0.0	1.3	4.5	8.9	14.7	17.8	20.4	26.1	30.6	35.0	38.9



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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	3.8	8.3	14.7	17.2	19.7	24.8	29.9	33.8	37.6
115°	0.0	0.6	3.8	8.3	14.0	16.6	19.1	24.2	28.7	33.1	36.3
117.5°	0.0	0.6	3.8	8.3	13.4	15.9	19.1	23.6	28.0	32.5	35.7
120°	0.0	0.6	3.2	7.6	12.7	15.3	18.5	23.6	28.0	31.9	35.0
122.5°	0.0	0.6	3.2	7.6	12.1	14.7	17.8	22.9	27.4	31.9	35.0
125°	0.0	0.6	3.2	7.0	12.1	14.0	17.2	22.3	27.4	31.2	35.0
127.5°	0.0	0.6	2.5	7.0	11.5	14.0	16.6	21.7	26.1	30.6	34.4
130°	0.0	0.6	2.5	6.4	10.8	13.4	15.9	20.4	25.5	29.9	33.8
132.5°	0.0	0.6	2.5	5.7	10.2	12.7	14.7	19.1	23.6	28.7	32.5
135°	0.0	0.6	1.9	5.1	9.6	11.5	14.0	18.5	22.3	26.8	30.6
137.5°	0.0	0.6	1.9	5.1	8.9	10.8	13.4	17.2	21.0	24.8	28.7
140°	0.0	0.0	1.3	4.5	7.6	9.6	12.1	15.9	19.7	23.6	26.8
142.5°	0.6	0.0	1.3	3.8	7.0	8.9	10.8	14.7	18.5	21.7	24.8
145°	0.6	0.0	0.6	3.2	5.7	7.6	8.9	12.7	16.6	19.7	22.3
147.5°	0.6	0.0	0.6	2.5	5.1	6.4	7.6	10.8	14.0	17.2	20.4
150°	0.6	0.0	0.6	1.9	3.8	5.1	6.4	8.9	12.1	15.3	17.8
152.5°	0.6	0.6	0.6	1.3	3.2	3.8	5.1	7.6	10.2	12.7	14.7
155°	0.6	0.6	0.6	0.6	1.9	3.2	3.8	5.7	8.3	10.2	12.1
157.5°	0.6	0.6	0.0	0.6	1.3	1.9	2.5	4.5	6.4	7.6	9.6
160°	0.6	0.6	0.0	0.6	1.3	1.3	1.9	3.2	4.5	5.7	7.0
162.5°	0.6	0.6	0.0	0.6	0.6	0.6	1.3	1.9	3.2	3.8	5.1
165°	0.6	0.6	0.6	0.0	0.6	0.6	0.6	1.3	1.9	2.5	3.2
167.5°	0.6	0.6	0.6	0.0	0.0	0.0	0.0	0.6	0.6	1.3	1.9
170°	0.6	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.6	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°	1061.9	1061.9	1061.9	1061.9	1061.9	1061.9	1061.9	1061.9	1061.9	1061.9
2.5°	1056.8	1056.2	1056.2	1055.5	1056.2	1055.5	1055.5	1056.2	1055.5	1054.9
5°	1023.7	1024.3	1025.0	1023.7	1024.3	1023.7	1023.7	1023.0	1023.7	1023.0
7.5°	978.4	980.4	981.6	981.0	982.9	982.3	983.5	984.8	985.5	985.5
10°	933.9	935.1	937.0	939.6	940.9	942.1	944.1	946.6	947.2	947.9
12.5°	898.2	900.7	901.4	902.6	903.9	903.3	907.7	909.7	912.8	912.2
15°	868.2	872.1	873.3	877.2	877.8	879.1	882.9	879.7	879.1	877.2
17.5°	844.7	848.5	849.1	849.1	849.8	851.7	855.5	856.1	857.4	858.1
20°	821.7	824.3	826.8	828.8	830.0	830.7	832.6	830.0	830.7	831.3
22.5°	799.4	802.0	805.8	807.7	810.3	812.2	812.2	811.6	810.3	814.1
25°	781.0	782.9	786.7	786.7	788.0	789.9	787.3	789.3	788.0	786.7
27.5°	758.7	763.8	765.1	766.3	767.6	767.0	767.0	766.3	766.3	765.7
30°	738.3	740.2	744.0	744.7	745.9	747.2	747.2	748.5	744.7	745.3
32.5°	717.3	719.8	724.3	725.6	726.2	726.2	724.3	720.5	721.1	720.5
35°	692.4	698.2	702.6	702.6	702.0	702.6	701.3	700.7	698.8	698.2
37.5°	669.5	674.6	679.7	681.6	681.0	682.2	680.3	679.1	679.1	679.7
40°	650.4	654.2	659.3	663.1	663.1	664.4	664.4	664.4	665.7	665.0
42.5°	631.3	638.3	644.7	651.0	652.9	652.9	652.3	652.9	654.2	654.8
45°	615.4	623.0	629.4	634.5	636.4	636.4	637.6	639.6	638.9	639.6
47.5°	595.6	600.1	607.1	610.9	612.2	614.1	616.0	616.0	617.3	619.2
50°	568.2	573.9	579.7	586.1	588.0	588.0	591.1	593.1	593.7	595.0
52.5°	538.9	547.2	552.3	557.4	558.7	559.9	561.8	563.1	563.8	565.7
55°	508.3	517.3	521.1	526.8	529.4	532.5	530.6	535.7	536.4	537.6
57.5°	479.0	485.4	492.4	495.6	495.6	498.1	502.6	503.9	506.4	507.1
60°	442.7	450.4	456.7	458.0	460.6	461.2	464.4	467.6	470.8	472.7
62.5°	407.1	414.1	419.8	421.7	423.0	424.2	428.1	431.3	434.4	433.8
65°	371.4	378.4	382.8	383.5	383.5	387.3	389.9	390.5	394.9	394.9
67.5°	336.3	343.3	345.9	349.7	350.4	349.7	351.6	354.8	358.0	355.5
70°	300.7	306.4	310.9	316.0	314.7	314.7	316.0	318.5	319.8	321.7
72.5°	264.4	270.7	275.8	279.6	280.9	282.8	283.5	284.7	285.4	286.7
75°	229.3	235.1	242.1	247.2	247.8	249.7	251.6	252.9	252.9	254.8
77.5°	193.7	202.6	207.7	214.0	214.0	216.6	222.3	223.6	227.4	228.7
80°	159.3	166.9	175.8	181.5	184.7	187.9	188.6	188.6	190.5	192.4
82.5°	128.0	135.7	145.9	150.3	152.2	152.9	158.0	159.9	162.4	163.7
85°	100.6	110.8	115.3	119.8	121.7	122.9	127.4	130.6	135.0	137.0
87.5°	80.3	84.7	89.2	93.6	95.6	97.5	103.2	107.7	115.3	119.1
90°	63.7	67.5	72.0	77.7	79.6	82.8	88.5	94.9	103.8	108.9
92.5°	56.7	61.2	65.6	71.3	74.5	77.1	83.4	91.7	103.2	108.9
95°	54.1	59.2	64.3	68.8	71.3	74.5	81.5	91.1	100.0	103.2
97.5°	53.5	58.0	61.8	66.9	69.4	72.6	79.6	85.4	89.2	91.1
100°	51.0	55.4	59.9	64.3	67.5	69.4	73.9	78.4	80.9	82.2
102.5°	49.0	52.9	57.3	61.2	63.1	65.0	68.8	72.0	73.3	73.3
105°	47.1	50.3	54.1	56.7	58.6	59.9	61.8	62.4	62.4	62.4
107.5°	44.6	47.8	50.3	52.2	52.9	53.5	53.5	53.5	52.9	52.2
110°	42.0	45.2	46.5	47.1	47.1	47.1	47.1	47.1	47.1	46.5





TEST NUMBER: P241324

CATALOG NUMBER: FVS8M-2-LD4-50-2LO-P125-UNV-EDC1

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	40.1	42.0	43.3	44.0	43.3	44.0	44.0	44.6	44.6	44.6
115°	38.9	40.8	41.4	42.0	42.7	42.7	44.0	44.6	45.2	45.2
117.5°	38.2	40.1	41.4	43.3	43.3	44.0	45.2	46.5	47.1	47.1
120°	38.2	40.1	42.7	44.6	45.2	45.9	47.1	48.4	49.0	49.0
122.5°	38.2	40.8	43.3	45.2	46.5	47.1	48.4	49.7	50.3	51.0
125°	38.2	40.8	44.0	45.9	46.5	47.8	49.0	50.3	51.0	51.6
127.5°	37.6	40.8	43.3	45.9	46.5	47.1	49.0	50.3	51.0	51.6
130°	36.9	40.1	42.7	44.6	45.9	46.5	48.4	49.7	50.3	51.0
132.5°	35.7	38.9	41.4	44.0	44.6	45.9	47.8	49.0	49.7	50.3
135°	34.4	37.6	40.1	42.7	43.3	44.6	46.5	47.8	49.0	49.0
137.5°	32.5	35.7	38.2	40.8	42.0	42.7	44.6	46.5	47.1	47.8
140°	30.6	33.1	36.3	38.2	39.5	40.8	42.0	44.0	44.6	45.2
142.5°	28.0	30.6	33.1	35.7	36.9	37.6	39.5	40.8	42.0	42.0
145°	25.5	27.4	29.9	32.5	33.1	33.8	35.7	36.9	37.6	38.2
147.5°	22.9	24.8	27.4	28.7	29.3	30.6	31.9	33.1	33.1	33.8
150°	19.7	21.7	23.6	24.8	26.1	26.8	28.0	28.7	29.3	29.3
152.5°	17.2	18.5	20.4	21.7	22.3	22.9	23.6	24.8	24.8	25.5
155°	14.0	15.9	17.2	18.5	19.1	19.7	20.4	21.0	21.0	21.7
157.5°	11.5	12.7	14.0	15.3	15.9	15.9	17.2	17.2	17.8	17.2
160°	8.9	10.2	11.5	12.1	12.7	12.7	13.4	14.0	14.0	14.0
162.5°	6.4	7.6	8.3	9.6	9.6	9.6	10.2	10.8	10.8	10.8
165°	4.5	5.1	5.7	6.4	7.0	7.0	7.0	7.6	7.6	7.6
167.5°	2.5	2.5	3.2	3.8	3.8	4.5	4.5	4.5	5.1	5.1
170°	0.6	1.3	1.3	1.9	1.9	1.9	1.9	1.9	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)