

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: P241348

Luminaire Tested: **FVS8M-3-LD4-50-1LO-P125-UNV-EDC1**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P241348
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-LD4-50-1LO-P125-UNV-EDC1
Description: FAILSAFE FVS8M LED FIXTURE
3FT LENGTH, 1-MODULE LED WITH P125 LENS
Light Source: (84) 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

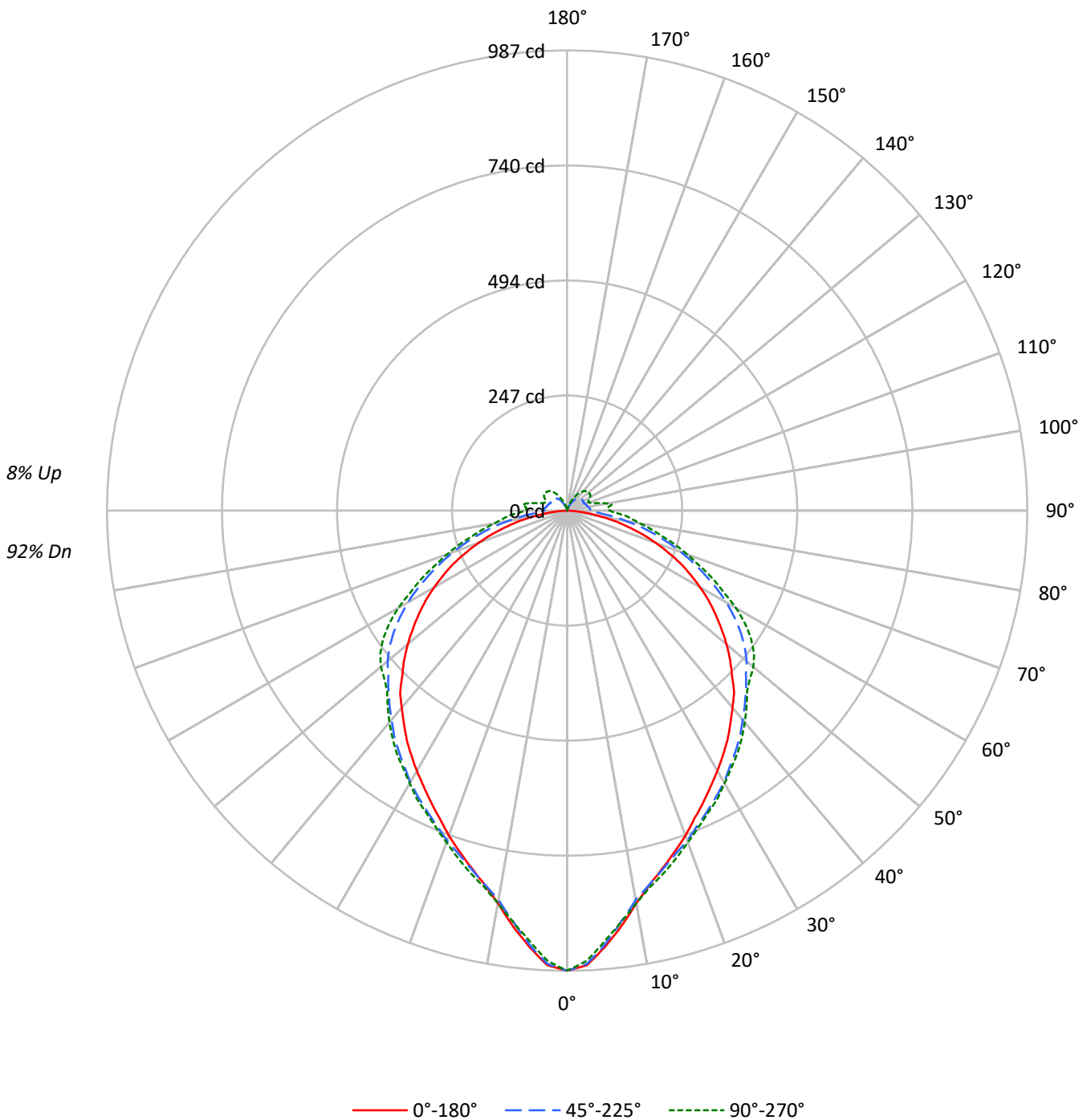
Lumens per Lamp: N/A
Luminaire Lumens: 2635.0 lumens
Efficiency: N/A
Efficacy: 124.3 lumens/watt
Spacing Criteria (0/90/45): 0.98 / 1.03 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.65' x L: 2.85' x H: 0.15')
CIE Type: Direct

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-LD4-50-1LO-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	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°	5762	5762	5762
5°	5477	5382	5326
10°	5024	4858	4875
15°	4731	4568	4583
20°	4525	4369	4347
25°	4347	4201	4167
30°	4223	4076	4029
35°	4128	3949	3919
40°	4032	3835	3801
45°	3929	3744	3680
50°	3823	3703	3733
55°	3690	3611	3711
60°	3534	3439	3513
65°	3342	3172	3203
70°	3027	2891	2885
75°	2575	2522	2574
80°	1955	2059	2330
85°	1019	1523	2356



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.5	3.3
10°-20°	224.8	8.5
20°-30°	327.2	12.4
30°-40°	391.5	14.9
40°-50°	413.6	15.7
50°-60°	396.1	15.0
60°-70°	312.4	11.9
70°-80°	195.3	7.4
80°-90°	85.2	3.2
90°-100°	48.6	1.8
100°-110°	41.0	1.6
110°-120°	33.0	1.3
120°-130°	31.2	1.2
130°-140°	25.1	1.0
140°-150°	16.0	0.6
150°-160°	6.3	0.2
160°-170°	1.3	0.0
170°-180°	0.0	0.0
0°-30°	638.4	24.2
0°-40°	1029.9	39.1
0°-60°	1839.6	69.8
0°-90°	2432.5	92.3
90°-120°	122.6	4.7
90°-150°	194.9	7.4
90°-180°	203.0	7.7
0°-180°	2635.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	987	987	987	987	987	
5°	938	936	934	929	926	87
15°	793	789	795	803	804	224
25°	691	701	712	719	715	319
35°	600	615	630	641	637	375
45°	500	519	542	550	546	387
55°	389	414	454	476	482	348
65°	268	292	326	337	344	264
75°	136	161	194	208	210	145
85°	24	45	74	105	126	31
90°	0	20	49	71	91	1
95°	0	20	50	64	89	0
105°	0	20	44	60	62	0
115°	0	19	40	47	51	0
125°	0	17	40	53	60	0
135°	1	15	36	50	58	0
145°	1	9	29	41	46	0
155°	1	4	14	23	25	0
165°	1	1	3	7	8	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P241348

CATALOG NUMBER: FVS8M-3-LD4-50-1LO-P125-UNV-EDC1

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	986.7	986.7	986.7	986.7	986.7	986.7	986.7	986.7	986.7	986.7	986.7
2.5°	976.0	973.3	971.3	973.3	972.0	972.7	973.3	974.7	974.7	976.0	973.3
5°	938.5	938.5	935.9	937.9	937.2	935.9	936.5	937.2	937.9	936.5	933.8
7.5°	897.7	894.3	893.0	891.0	889.7	891.0	890.3	891.0	891.7	891.7	889.0
10°	854.9	853.5	849.5	850.2	849.5	850.2	852.2	852.8	850.8	848.8	847.5
12.5°	820.7	816.7	816.7	818.0	817.4	818.0	816.0	814.0	817.4	820.0	820.0
15°	793.3	789.9	787.9	790.6	789.9	788.6	789.2	789.9	791.9	793.9	795.3
17.5°	767.2	764.5	763.1	765.8	765.2	765.2	765.8	768.5	772.5	772.5	772.5
20°	741.7	738.4	739.0	743.1	743.1	744.4	745.1	747.1	749.8	752.4	753.1
22.5°	714.3	713.6	714.9	719.0	719.6	721.0	723.6	727.7	729.0	730.3	731.0
25°	690.8	689.5	693.5	695.5	698.9	700.9	702.9	704.9	709.6	711.6	711.6
27.5°	666.7	666.7	669.4	673.4	676.8	680.8	682.8	684.8	688.2	690.8	692.2
30°	644.7	642.6	646.0	651.3	656.7	659.4	660.7	664.1	667.4	670.8	672.8
32.5°	621.9	620.6	624.6	627.9	633.9	635.3	637.3	643.3	646.0	648.0	650.0
35°	599.8	598.5	601.1	606.5	612.5	615.2	615.9	622.6	625.9	627.9	629.9
37.5°	575.0	577.0	578.4	583.7	587.8	590.4	593.8	599.1	603.8	605.8	609.2
40°	551.6	552.9	554.3	559.0	565.0	567.7	569.7	577.0	581.7	584.4	585.7
42.5°	530.2	527.5	530.2	536.2	540.2	543.6	546.2	552.3	557.6	563.7	564.3
45°	500.1	502.1	506.8	512.1	517.5	518.8	521.5	528.2	532.9	538.9	542.2
47.5°	474.0	476.6	478.6	484.7	491.4	493.4	496.7	503.4	511.4	517.5	520.1
50°	446.5	449.9	452.5	457.9	464.6	467.9	472.6	480.6	488.0	496.0	502.7
52.5°	417.1	421.1	425.8	429.1	437.8	441.1	445.2	455.2	465.2	473.3	480.0
55°	388.9	392.3	397.6	402.3	411.0	414.4	418.4	429.1	439.8	447.2	453.9
57.5°	360.1	361.5	366.2	372.2	380.9	386.9	390.3	400.3	409.7	417.7	425.1
60°	329.4	332.0	336.1	342.7	352.8	355.5	359.5	370.9	380.2	388.3	394.3
62.5°	298.6	301.2	305.3	313.3	318.6	323.3	329.4	339.4	346.8	353.5	361.5
65°	268.4	269.8	273.8	281.2	288.5	291.9	295.9	305.3	312.6	320.7	326.0
67.5°	234.3	237.6	242.3	247.7	255.1	259.7	263.1	270.4	279.8	289.2	292.5
70°	202.2	204.8	208.9	214.2	222.2	225.6	230.3	238.3	246.3	255.1	260.4
72.5°	170.0	172.0	174.7	181.4	188.8	192.8	196.8	204.8	214.9	220.9	226.3
75°	135.9	139.2	143.3	149.3	156.0	160.7	164.0	172.0	179.4	186.1	193.5
77.5°	105.1	107.8	111.8	116.5	125.2	129.9	132.5	139.9	147.9	152.6	161.3
80°	75.0	77.0	81.7	87.0	93.7	97.1	101.1	107.8	114.5	121.2	129.2
82.5°	47.5	48.9	53.6	58.9	65.6	69.0	72.3	79.0	85.0	93.0	99.7
85°	24.1	25.4	30.1	34.8	42.2	44.9	46.9	54.2	61.6	67.6	73.6
87.5°	7.4	9.4	13.4	18.7	24.8	27.4	30.1	36.8	42.8	49.5	56.9
90°	0.0	2.0	6.0	10.7	16.7	20.1	22.8	29.5	36.1	42.8	48.9
92.5°	0.0	2.0	5.4	10.7	16.7	20.1	22.8	29.5	36.1	42.2	49.5
95°	0.0	2.0	5.4	10.7	16.7	20.1	23.4	29.5	36.1	43.5	49.5
97.5°	0.0	1.3	5.4	10.7	16.7	20.1	23.4	29.5	36.8	42.8	46.9
100°	0.0	1.3	5.4	10.7	16.7	20.1	22.8	30.1	36.1	40.8	45.5
102.5°	0.0	1.3	5.4	10.7	16.7	20.1	23.4	29.5	34.1	39.5	44.2
105°	0.0	1.3	5.4	10.7	16.7	20.1	22.8	28.1	33.5	38.8	43.5
107.5°	0.0	1.3	5.4	10.7	16.1	19.4	22.1	27.4	32.8	38.2	42.2
110°	0.0	1.3	4.7	10.0	16.1	18.7	22.1	27.4	32.8	37.5	41.5



TEST NUMBER: P241348

CATALOG NUMBER: FVS8M-3-LD4-50-1LO-P125-UNV-EDC1

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	0.0	1.3	4.7	10.0	16.1	18.7	21.4	27.4	32.1	36.8	40.2
115°	0.0	1.3	4.7	10.0	15.4	18.7	21.4	27.4	32.1	36.8	39.5
117.5°	0.0	1.3	4.7	10.0	15.4	18.7	21.4	26.8	32.1	36.1	39.5
120°	0.0	0.7	4.7	9.4	15.4	18.1	21.4	26.8	32.1	36.1	39.5
122.5°	0.0	0.7	4.0	9.4	14.7	18.1	20.8	26.8	31.5	36.1	39.5
125°	0.0	0.7	4.0	9.4	14.7	17.4	20.1	26.1	31.5	36.1	39.5
127.5°	0.7	0.7	4.0	8.7	14.1	16.7	19.4	25.4	30.8	35.5	39.5
130°	0.0	0.7	3.3	8.0	13.4	16.1	18.7	24.8	30.1	34.1	38.2
132.5°	0.7	0.7	3.3	7.4	12.7	15.4	18.1	23.4	29.5	33.5	37.5
135°	0.7	0.7	2.7	6.7	12.0	14.7	17.4	22.1	28.1	32.1	36.1
137.5°	0.7	0.7	2.7	6.0	10.7	13.4	16.1	21.4	26.1	30.8	34.8
140°	0.7	0.7	2.0	5.4	10.0	12.0	14.7	20.1	24.8	29.5	33.5
142.5°	0.7	0.7	2.0	4.7	8.7	10.7	13.4	18.1	22.8	27.4	31.5
145°	0.7	0.7	1.3	4.0	7.4	9.4	11.4	16.1	20.8	24.8	28.8
147.5°	0.7	0.7	1.3	3.3	6.0	8.0	10.0	14.1	18.1	22.1	25.4
150°	0.7	0.7	0.7	2.7	4.7	6.0	8.0	11.4	14.7	18.1	21.4
152.5°	0.7	0.7	0.7	2.0	4.0	4.7	6.0	9.4	12.0	14.7	17.4
155°	0.7	0.7	0.7	1.3	2.7	4.0	4.7	6.7	9.4	11.4	14.1
157.5°	0.7	0.7	0.7	1.3	2.0	2.7	3.3	5.4	6.7	8.7	10.7
160°	0.7	0.7	0.7	0.7	1.3	2.0	2.7	3.3	4.7	6.0	7.4
162.5°	0.7	0.7	0.7	0.7	1.3	1.3	2.0	2.7	3.3	4.0	5.4
165°	0.7	0.7	0.7	0.7	0.7	1.3	1.3	2.0	2.7	2.7	3.3
167.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	1.3	1.3	2.0	2.0
170°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	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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CATALOG NUMBER: FVS8M-3-LD4-50-1LO-P125-UNV-EDC1

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	986.7	986.7	986.7	986.7	986.7	986.7	986.7	986.7	986.7	986.7
2.5°	972.0	970.7	971.3	971.3	968.7	970.7	970.0	968.7	966.6	966.6
5°	931.8	929.2	929.2	930.5	929.2	929.2	929.8	929.2	929.8	926.5
7.5°	888.3	886.3	887.7	888.3	890.3	889.7	890.3	889.7	889.7	889.7
10°	848.2	851.5	850.8	852.2	854.2	853.5	854.9	856.9	856.2	854.9
12.5°	820.0	823.4	823.4	826.7	826.7	827.4	829.4	829.4	826.1	826.1
15°	797.3	798.0	798.6	804.0	803.3	804.6	806.0	804.6	804.0	804.0
17.5°	773.9	774.5	777.2	777.2	778.5	779.2	781.9	781.2	780.5	780.5
20°	753.8	755.1	758.5	760.5	761.1	759.1	761.1	759.8	759.8	757.1
22.5°	734.4	738.4	737.0	738.4	739.7	741.1	741.1	739.7	738.4	735.7
25°	714.3	715.6	717.6	719.0	719.0	718.3	718.3	717.6	716.3	714.9
27.5°	694.9	696.9	696.2	700.2	701.6	702.2	701.6	698.9	696.2	697.5
30°	674.1	676.1	678.8	681.5	682.1	678.1	677.5	678.1	675.4	675.4
32.5°	652.7	655.4	660.1	659.4	659.4	661.4	661.4	659.4	656.0	654.7
35°	631.9	637.3	638.6	642.6	641.3	639.3	637.3	637.3	635.3	636.6
37.5°	611.2	614.5	618.5	617.9	617.9	618.5	618.5	615.9	616.5	615.2
40°	589.8	592.4	595.1	595.1	596.5	596.5	594.4	592.4	592.4	593.1
42.5°	565.7	569.7	573.0	573.0	573.7	573.0	573.7	572.4	569.7	569.7
45°	545.6	546.9	549.6	550.3	549.6	549.6	547.6	547.6	546.9	546.2
47.5°	524.8	529.5	530.2	531.5	530.2	530.2	531.5	532.2	533.5	532.2
50°	506.1	512.1	516.1	518.1	518.1	519.5	520.1	520.1	522.1	521.5
52.5°	487.3	491.4	495.4	500.7	502.1	502.1	504.7	504.1	505.4	505.4
55°	460.6	465.9	470.6	474.6	476.0	478.6	478.0	480.0	480.0	482.0
57.5°	431.8	434.5	441.1	443.8	443.2	445.2	445.8	449.2	453.2	453.2
60°	401.0	403.0	406.3	406.3	407.7	408.3	412.4	414.4	415.7	418.4
62.5°	363.5	368.2	370.9	371.5	372.9	376.2	376.2	376.2	377.6	378.2
65°	331.4	334.0	336.7	339.4	337.4	338.1	338.7	339.4	341.4	344.1
67.5°	298.6	301.2	303.9	305.3	302.6	303.2	301.9	303.9	305.9	305.9
70°	264.4	267.8	271.8	271.1	268.4	269.8	269.1	271.8	273.1	273.8
72.5°	231.6	236.3	239.0	239.0	239.0	239.0	239.7	241.0	241.7	242.3
75°	198.1	202.8	206.2	208.9	207.5	209.5	210.9	211.5	210.9	210.2
77.5°	167.4	172.0	174.7	178.7	180.1	181.4	182.8	182.8	184.1	184.1
80°	133.9	139.9	144.6	150.0	152.0	154.6	155.3	157.3	157.3	158.0
82.5°	105.8	112.5	117.8	123.2	125.9	127.2	131.2	134.6	137.9	139.9
85°	81.0	88.4	93.7	100.4	105.1	110.5	117.8	121.8	122.5	125.9
87.5°	63.6	71.0	80.3	87.7	87.7	88.4	90.4	93.7	98.4	101.8
90°	56.2	65.6	68.3	69.6	71.0	72.3	75.0	79.7	86.4	91.0
92.5°	56.9	59.6	62.3	64.3	65.6	67.6	71.0	75.6	82.3	87.0
95°	53.6	56.9	60.2	62.9	64.3	66.3	70.3	76.3	84.3	89.0
97.5°	51.5	55.6	58.2	62.3	64.3	66.9	73.6	82.3	92.4	96.4
100°	50.2	54.2	57.6	62.3	65.6	68.3	76.3	83.7	87.7	88.4
102.5°	48.9	52.9	56.9	61.6	64.3	66.9	71.0	73.6	73.0	73.0
105°	47.5	51.5	54.9	58.2	60.2	60.9	62.9	62.3	62.3	61.6
107.5°	46.2	49.5	52.2	53.6	54.2	54.9	54.9	54.9	54.2	54.2
110°	44.9	47.5	48.9	49.5	49.5	49.5	50.2	50.2	50.2	50.2



TEST NUMBER: P241348

CATALOG NUMBER: FVS8M-3-LD4-50-1LO-P125-UNV-EDC1

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	43.5	45.5	46.2	46.9	46.9	46.9	48.2	48.9	48.9	48.9
115°	42.2	44.2	45.5	46.2	46.9	47.5	48.9	50.2	50.9	50.9
117.5°	42.2	44.9	46.2	48.2	48.9	49.5	50.9	52.9	53.6	53.6
120°	42.8	45.5	48.2	50.2	50.9	51.5	53.6	55.6	56.2	56.9
122.5°	43.5	46.2	48.9	51.5	52.2	52.9	54.9	56.9	58.2	58.9
125°	43.5	46.9	49.5	52.2	52.9	54.2	55.6	57.6	58.9	60.2
127.5°	42.8	46.2	49.5	52.2	53.6	54.2	56.2	57.6	59.6	60.2
130°	42.2	45.5	48.2	50.9	52.2	53.6	56.2	58.2	59.6	60.2
132.5°	40.8	44.2	47.5	50.2	51.5	52.9	55.6	57.6	58.9	59.6
135°	39.5	43.5	46.2	48.9	50.2	51.5	54.2	56.2	57.6	58.2
137.5°	38.8	42.2	44.9	47.5	48.9	50.2	52.9	54.2	56.2	56.9
140°	36.8	40.2	42.8	45.5	46.9	48.2	50.2	52.2	53.6	54.2
142.5°	35.5	38.2	40.8	42.8	44.2	45.5	47.5	48.9	50.2	50.9
145°	32.8	35.5	38.2	40.2	40.8	42.2	43.5	44.9	46.2	46.2
147.5°	28.8	32.1	34.1	36.1	36.8	38.2	39.5	40.2	40.8	41.5
150°	24.8	27.4	30.1	31.5	32.1	32.8	34.1	34.8	35.5	35.5
152.5°	20.1	22.8	24.8	26.8	27.4	28.1	28.8	29.5	30.1	30.1
155°	16.1	18.1	20.8	21.4	22.8	22.8	24.1	24.8	24.8	24.8
157.5°	12.0	14.1	15.4	17.4	18.1	18.1	19.4	19.4	20.1	20.1
160°	8.7	10.0	11.4	13.4	14.1	14.1	14.7	15.4	15.4	15.4
162.5°	6.0	7.4	8.0	9.4	10.0	10.7	10.7	11.4	11.4	11.4
165°	4.0	4.7	5.4	6.0	6.7	6.7	7.4	8.0	8.0	8.0
167.5°	2.7	2.7	3.3	3.3	4.0	4.0	4.7	4.7	4.7	5.4
170°	1.3	1.3	1.3	2.0	2.0	2.0	2.0	2.7	2.7	2.7
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)