

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: P241314

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

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-79-08  
Report Number: P241314  
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-LD4-35-1STD-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

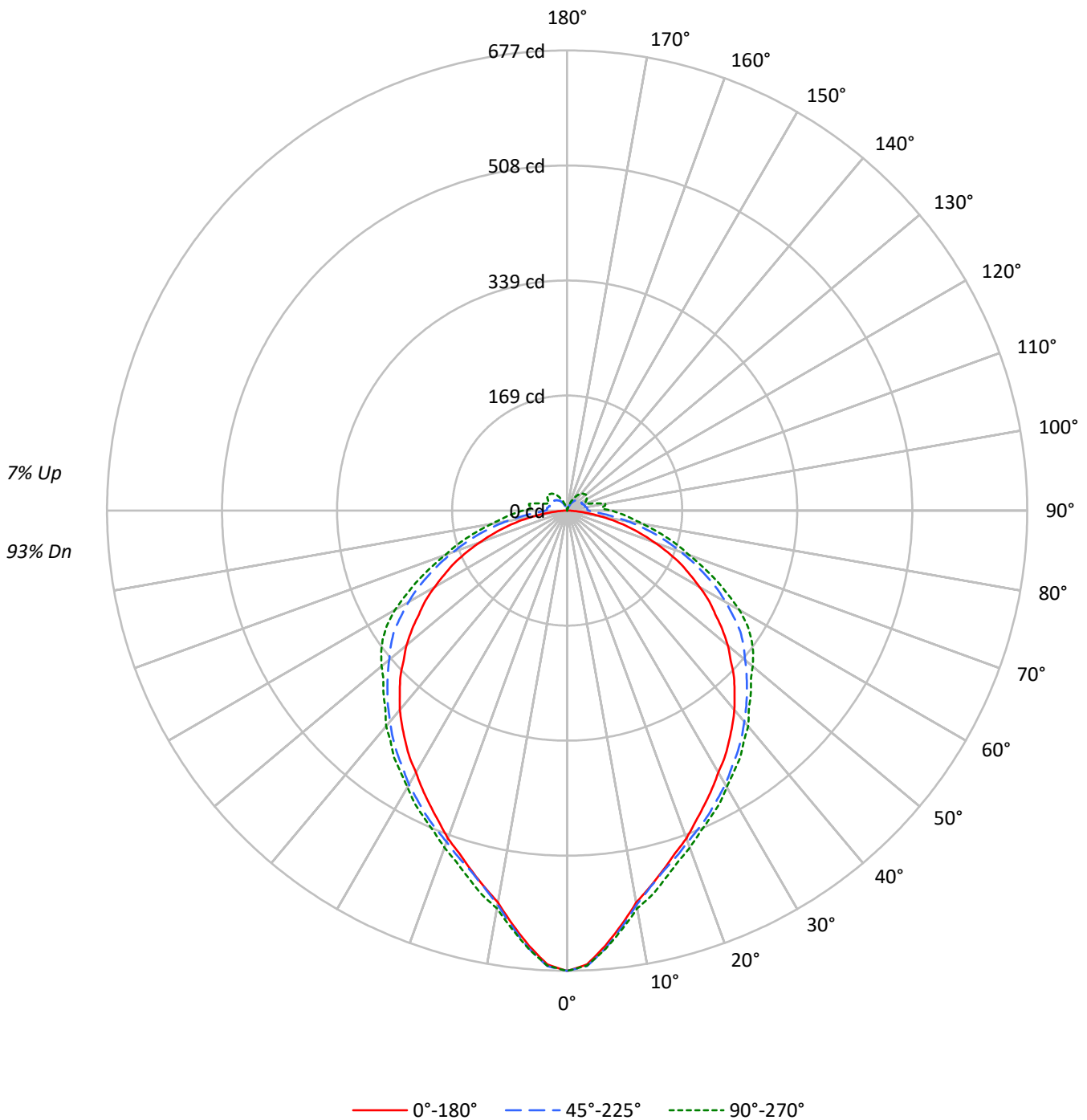
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1804.0 lumens  
Efficiency: N/A  
Efficacy: 104.9 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): 17.2  
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-2-LD4-35-1STD-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	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°	6087	6087	6087
5°	5759	5726	5728
10°	5271	5177	5217
15°	4984	4826	4911
20°	4772	4601	4664
25°	4570	4444	4474
30°	4415	4298	4313
35°	4316	4157	4206
40°	4214	4028	4086
45°	4094	3912	3961
50°	3948	3804	3926
55°	3750	3730	3926
60°	3563	3528	3783
65°	3338	3265	3458
70°	2954	2948	3091
75°	2505	2586	2835
80°	1815	2100	2556
85°	918	1535	2480



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	59.8	3.3
10°-20°	155.6	8.6
20°-30°	226.6	12.6
30°-40°	271.3	15.0
40°-50°	285.3	15.8
50°-60°	271.5	15.0
60°-70°	215.6	12.0
70°-80°	135.7	7.5
80°-90°	59.0	3.3
90°-100°	30.2	1.7
100°-110°	25.6	1.4
110°-120°	19.9	1.1
120°-130°	18.7	1.0
130°-140°	14.9	0.8
140°-150°	9.6	0.5
150°-160°	4.0	0.2
160°-170°	0.7	0.0
170°-180°	0.0	0.0
0°-30°	442.0	24.5
0°-40°	713.3	39.5
0°-60°	1270.1	70.4
0°-90°	1680.4	93.1
90°-120°	75.7	4.2
90°-150°	118.9	6.6
90°-180°	124.0	6.9
0°-180°	1804.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	677	677	677	677	677	
5°	643	647	647	648	647	60
15°	547	547	548	554	560	154
25°	478	484	493	499	499	220
35°	415	426	436	443	444	260
45°	347	355	374	380	382	267
55°	266	282	311	329	331	239
65°	183	199	224	236	241	180
75°	93	109	134	148	150	98
85°	17	31	52	72	86	21
90°	0	13	31	50	64	1
95°	0	12	30	39	52	0
105°	0	12	26	38	40	0
115°	0	11	24	28	30	0
125°	0	10	24	32	35	0
135°	0	8	22	31	35	0
145°	0	6	17	25	28	0
155°	0	2	9	14	16	0
165°	0	0	2	4	5	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P241314

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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	677.2	677.2	677.2	677.2	677.2	677.2	677.2	677.2	677.2	677.2	677.2
2.5°	668.3	669.1	668.3	669.1	669.9	670.7	669.9	670.7	670.7	671.5	670.7
5°	642.6	643.4	644.2	645.8	646.6	646.6	645.8	646.6	646.6	645.8	646.6
7.5°	614.4	613.6	614.4	615.2	615.2	616.0	616.0	614.4	615.2	615.2	617.6
10°	585.5	586.3	585.5	586.3	585.5	585.5	585.5	586.3	586.3	587.1	588.7
12.5°	566.2	566.2	564.6	564.6	565.4	565.4	565.4	565.4	564.6	566.2	567.0
15°	546.9	549.3	547.7	548.5	546.9	546.9	546.1	546.1	546.9	545.3	548.5
17.5°	528.4	530.8	530.0	530.8	530.8	529.2	529.2	530.0	530.8	530.8	534.0
20°	513.1	513.1	513.1	514.7	515.5	516.3	515.5	515.5	517.1	517.9	518.7
22.5°	494.6	495.4	498.6	498.6	497.8	499.4	498.6	501.0	502.6	503.4	505.9
25°	477.7	480.9	481.7	480.9	483.3	484.1	484.9	489.0	488.2	489.8	493.0
27.5°	461.6	463.2	465.6	467.3	469.7	468.1	469.7	472.1	471.3	477.7	478.5
30°	444.7	448.8	449.6	452.0	452.0	452.0	456.0	456.8	460.8	462.4	465.6
32.5°	431.1	431.9	434.3	436.7	437.5	439.9	441.5	443.1	445.5	447.2	449.6
35°	415.0	418.2	417.4	419.8	422.2	426.2	426.2	427.8	429.5	434.3	435.9
37.5°	398.9	401.3	401.3	405.3	406.9	409.4	406.9	414.2	416.6	419.0	421.4
40°	382.8	384.4	386.0	387.6	389.2	390.9	393.3	397.3	400.5	402.9	405.3
42.5°	364.3	366.7	368.3	369.9	373.2	374.8	377.2	379.6	384.4	386.8	390.1
45°	347.4	349.0	350.6	352.3	355.5	354.7	358.7	363.5	368.3	370.7	374.0
47.5°	326.5	329.7	333.0	333.8	336.2	339.4	341.0	346.6	351.4	353.1	357.9
50°	308.8	308.8	312.8	315.3	317.7	321.7	323.3	328.1	333.8	338.6	341.8
52.5°	287.9	290.3	292.7	296.0	300.0	302.4	304.8	310.4	317.7	324.1	327.3
55°	266.2	268.6	272.6	275.8	279.9	282.3	286.3	292.7	299.2	304.8	311.2
57.5°	247.7	247.7	250.1	254.1	259.0	262.2	265.4	272.6	280.7	283.1	290.3
60°	225.2	227.6	230.0	234.0	238.9	242.1	244.5	251.7	258.2	264.6	269.4
62.5°	203.5	205.9	208.3	212.3	217.9	221.2	223.6	230.0	237.2	242.1	248.5
65°	183.4	182.6	185.8	190.6	196.2	198.6	201.1	208.3	213.9	218.7	224.4
67.5°	160.0	162.5	164.9	168.9	173.7	176.9	179.3	185.8	190.6	196.2	201.9
70°	136.7	139.1	141.5	147.2	152.0	153.6	156.0	162.5	166.5	174.5	178.5
72.5°	114.2	116.6	119.8	123.9	129.5	131.1	134.3	139.1	145.6	151.2	156.0
75°	93.3	95.7	97.3	101.3	106.2	109.4	111.8	117.4	123.0	128.7	134.3
77.5°	72.4	74.0	76.4	80.4	84.4	87.7	89.3	94.9	100.5	106.2	111.8
80°	50.7	53.1	55.5	59.5	63.5	66.8	69.2	74.8	79.6	85.2	90.1
82.5°	32.2	33.8	37.0	41.0	45.0	46.6	49.9	53.9	59.5	64.3	69.2
85°	16.9	18.5	20.9	24.1	29.0	30.6	33.0	37.0	41.8	46.6	51.5
87.5°	6.4	7.2	9.7	12.9	16.1	18.5	20.9	24.9	29.0	33.8	38.6
90°	0.0	1.6	4.0	7.2	10.5	12.9	14.5	18.5	22.5	26.5	31.4
92.5°	0.0	0.8	3.2	6.4	10.5	12.1	13.7	17.7	21.7	25.7	29.8
95°	0.0	0.8	3.2	6.4	10.5	12.1	13.7	17.7	21.7	25.7	29.8
97.5°	0.0	0.8	3.2	6.4	10.5	12.1	13.7	17.7	21.7	25.7	29.8
100°	0.0	0.8	3.2	6.4	10.5	12.1	13.7	17.7	21.7	25.7	28.1
102.5°	0.0	0.8	3.2	6.4	9.7	12.1	13.7	17.7	21.7	24.9	27.3
105°	0.0	0.8	3.2	6.4	9.7	12.1	13.7	17.7	20.9	24.1	26.5
107.5°	0.0	0.8	3.2	6.4	9.7	11.3	13.7	16.9	20.1	23.3	26.5
110°	0.0	0.8	2.4	5.6	9.7	11.3	12.9	16.9	20.1	23.3	25.7



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	0.0	0.8	2.4	5.6	9.7	11.3	12.9	16.9	19.3	22.5	24.9
115°	0.0	0.8	2.4	5.6	8.8	11.3	12.9	16.1	19.3	21.7	24.1
117.5°	0.0	0.8	2.4	5.6	8.8	11.3	12.9	16.1	19.3	21.7	24.1
120°	0.0	0.0	2.4	5.6	8.8	10.5	12.9	16.1	19.3	21.7	24.1
122.5°	0.0	0.0	2.4	5.6	8.8	10.5	12.9	16.1	19.3	21.7	24.1
125°	0.0	0.0	2.4	4.8	8.8	10.5	12.1	16.1	18.5	21.7	24.1
127.5°	0.0	0.0	1.6	4.8	8.0	9.7	12.1	15.3	18.5	21.7	24.1
130°	0.0	0.0	1.6	4.8	7.2	9.7	11.3	15.3	17.7	20.9	23.3
132.5°	0.0	0.0	1.6	4.0	7.2	8.8	10.5	14.5	17.7	20.1	22.5
135°	0.0	0.0	1.6	4.0	6.4	8.0	9.7	12.9	16.1	19.3	21.7
137.5°	0.0	0.0	0.8	3.2	6.4	7.2	8.8	12.1	15.3	17.7	20.1
140°	0.0	0.0	0.8	3.2	5.6	7.2	8.8	11.3	14.5	16.9	19.3
142.5°	0.0	0.0	0.8	2.4	4.8	6.4	8.0	10.5	12.9	16.1	18.5
145°	0.0	0.0	0.8	2.4	4.0	5.6	7.2	9.7	12.1	14.5	16.9
147.5°	0.0	0.0	0.8	1.6	3.2	4.8	5.6	8.8	10.5	12.9	15.3
150°	0.0	0.0	0.0	1.6	3.2	4.0	4.8	7.2	9.7	11.3	13.7
152.5°	0.0	0.0	0.0	0.8	2.4	3.2	4.0	5.6	7.2	9.7	11.3
155°	0.0	0.0	0.0	0.8	1.6	2.4	3.2	4.0	5.6	7.2	8.8
157.5°	0.0	0.0	0.0	0.0	0.8	1.6	1.6	3.2	4.0	5.6	7.2
160°	0.0	0.0	0.0	0.0	0.8	0.8	0.8	1.6	3.2	4.0	4.8
162.5°	0.0	0.0	0.0	0.0	0.0	0.8	0.8	1.6	1.6	2.4	3.2
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8	1.6	1.6
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8	0.8
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



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**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	677.2	677.2	677.2	677.2	677.2	677.2	677.2	677.2	677.2	677.2
2.5°	670.7	670.7	670.7	669.9	669.9	669.9	669.9	669.9	670.7	669.9
5°	647.4	647.4	646.6	647.4	648.2	647.4	648.2	647.4	647.4	647.4
7.5°	618.5	618.5	618.5	618.5	619.3	619.3	619.3	620.1	620.9	620.9
10°	589.5	590.3	590.3	590.3	590.3	591.9	592.7	592.7	593.5	594.3
12.5°	567.8	567.8	570.2	573.4	574.2	575.8	577.4	576.6	576.6	579.0
15°	550.1	552.5	553.3	553.3	554.1	554.9	557.3	558.1	557.3	559.7
17.5°	534.8	534.8	538.8	539.6	539.6	540.4	540.4	541.2	541.2	542.0
20°	521.1	521.9	523.6	524.4	526.0	526.8	528.4	527.6	529.2	527.6
22.5°	506.7	507.5	512.3	513.1	513.1	512.3	510.7	512.3	512.3	511.5
25°	493.8	496.2	497.8	500.2	499.4	500.2	501.0	499.4	498.6	498.6
27.5°	480.1	481.7	484.9	485.8	485.8	484.1	484.1	484.1	483.3	485.8
30°	468.1	471.3	472.1	469.7	470.5	472.9	473.7	472.9	471.3	469.7
32.5°	452.0	453.6	456.0	461.6	460.8	460.0	456.0	455.2	455.2	456.0
35°	437.5	440.7	444.7	442.3	443.1	443.1	444.7	443.9	440.7	443.9
37.5°	423.0	427.8	427.8	431.9	430.3	428.7	426.2	427.8	427.0	427.0
40°	407.7	410.2	414.2	413.4	412.6	414.2	414.2	414.2	414.2	414.2
42.5°	392.5	395.7	395.7	396.5	399.7	400.5	399.7	394.1	396.5	395.7
45°	375.6	378.8	380.4	382.0	380.4	379.6	381.2	382.0	380.4	382.0
47.5°	361.1	361.1	365.9	365.1	365.1	366.7	365.1	365.1	364.3	366.7
50°	345.0	349.8	350.6	353.1	353.1	352.3	352.3	353.1	356.3	356.3
52.5°	332.1	337.0	340.2	341.0	341.0	343.4	345.8	345.0	346.6	345.0
55°	316.1	319.3	323.3	325.7	328.9	328.9	328.9	330.5	330.5	331.3
57.5°	296.0	299.2	301.6	307.2	308.8	308.0	308.8	312.0	311.2	314.5
60°	274.2	278.3	281.5	282.3	283.9	285.5	286.3	287.9	289.5	292.7
62.5°	251.7	254.9	259.0	258.2	259.8	261.4	263.0	263.8	267.0	266.2
65°	229.2	231.6	234.0	234.8	236.4	234.8	238.1	239.7	239.7	241.3
67.5°	206.7	208.3	211.5	212.3	213.1	213.1	212.3	214.7	215.5	215.5
70°	182.6	186.6	189.0	190.6	189.8	190.6	189.8	189.8	191.4	190.6
72.5°	160.8	164.1	166.5	168.9	168.9	168.9	168.9	169.7	170.5	171.3
75°	138.3	142.3	146.4	147.2	148.0	148.0	149.6	150.4	150.4	150.4
77.5°	115.8	120.6	123.9	126.3	127.1	128.7	129.5	131.1	131.1	131.1
80°	94.1	98.9	102.1	106.2	107.8	108.6	110.2	112.6	112.6	112.6
82.5°	74.0	78.8	83.6	86.1	88.5	90.9	93.3	94.9	96.5	98.1
85°	55.5	61.1	65.9	70.0	71.6	73.2	76.4	80.4	84.4	86.1
87.5°	43.4	47.4	52.3	56.3	58.7	61.1	65.1	68.4	73.2	75.6
90°	35.4	39.4	44.2	49.1	49.9	51.5	53.9	57.9	61.1	64.3
92.5°	33.8	37.8	41.0	41.8	42.6	43.4	45.0	47.4	50.7	53.9
95°	34.6	36.2	37.0	38.6	39.4	41.0	42.6	45.8	49.9	51.5
97.5°	32.2	33.8	36.2	38.6	39.4	41.0	44.2	49.1	53.9	56.3
100°	30.6	33.8	36.2	38.6	40.2	41.8	46.6	52.3	56.3	57.1
102.5°	30.6	33.0	35.4	38.6	40.2	41.8	45.8	48.3	48.3	48.3
105°	29.8	32.2	34.6	37.0	37.8	38.6	40.2	40.2	40.2	40.2
107.5°	29.0	30.6	33.0	33.8	33.8	34.6	34.6	34.6	34.6	33.8
110°	27.3	29.0	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6





TEST NUMBER: P241314

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

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	26.5	28.1	28.1	29.0	29.0	29.0	29.0	29.8	29.0	29.0
115°	25.7	27.3	27.3	28.1	28.1	28.1	29.0	29.8	29.8	29.8
117.5°	25.7	27.3	28.1	29.0	29.0	29.8	30.6	31.4	31.4	31.4
120°	25.7	27.3	29.0	29.8	30.6	30.6	32.2	33.0	33.0	33.0
122.5°	26.5	28.1	29.8	30.6	31.4	32.2	33.0	33.8	34.6	34.6
125°	26.5	28.1	30.6	31.4	32.2	32.2	33.0	34.6	34.6	35.4
127.5°	25.7	28.1	30.6	31.4	32.2	33.0	33.8	34.6	35.4	35.4
130°	25.7	28.1	29.8	31.4	32.2	33.0	33.8	34.6	35.4	36.2
132.5°	24.9	26.5	29.0	30.6	31.4	32.2	33.0	34.6	35.4	35.4
135°	24.1	25.7	28.1	29.8	30.6	31.4	33.0	33.8	34.6	34.6
137.5°	22.5	24.9	26.5	28.1	29.0	29.8	31.4	33.0	33.0	33.8
140°	21.7	23.3	25.7	27.3	28.1	29.0	29.8	31.4	32.2	32.2
142.5°	20.1	22.5	24.1	25.7	26.5	27.3	28.1	29.8	30.6	30.6
145°	18.5	20.9	22.5	24.1	24.9	25.7	26.5	27.3	28.1	28.1
147.5°	16.9	19.3	20.9	21.7	22.5	23.3	24.1	24.9	25.7	25.7
150°	15.3	16.9	18.5	19.3	20.1	20.9	21.7	21.7	22.5	22.5
152.5°	12.9	14.5	16.1	16.9	17.7	17.7	18.5	19.3	19.3	19.3
155°	10.5	12.1	12.9	13.7	14.5	15.3	15.3	16.1	16.1	16.1
157.5°	8.0	9.7	10.5	11.3	12.1	12.1	12.9	12.9	12.9	12.9
160°	5.6	7.2	8.0	8.8	8.8	8.8	9.7	9.7	9.7	9.7
162.5°	4.0	4.8	5.6	6.4	6.4	6.4	6.4	7.2	7.2	7.2
165°	2.4	3.2	3.2	4.0	4.0	4.0	4.8	4.8	4.8	4.8
167.5°	0.8	1.6	1.6	2.4	2.4	2.4	2.4	2.4	3.2	3.2
170°	0.0	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
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)