

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: P241315

Luminaire Tested: **FVS8M-2-LD4-40-1STD-P125-UNV-EDC1**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-79-08  
Report Number: P241315  
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-LD4-40-1STD-P125-UNV-EDC1  
Description: FAILSAFE FVS8M LED FIXTURE  
2FT LENGTH, 1-MODULE LED WITH P125 LENS  
Light Source: (42) 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

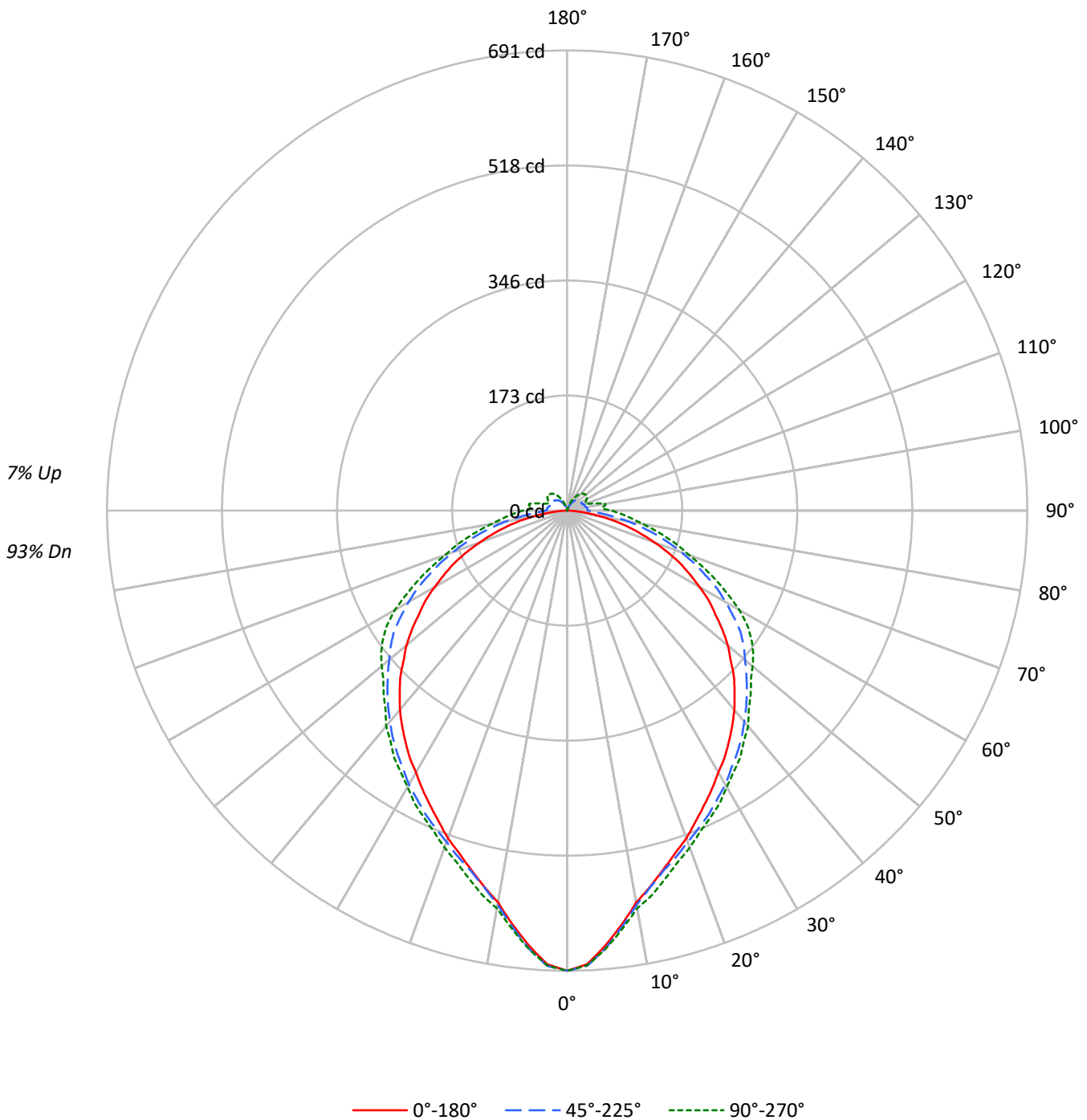
Lumens per Lamp: N/A  
Luminaire Lumens: 1841.0 lumens  
Efficiency: N/A  
Efficacy: 107.0 lumens/watt  
Spacing Criteria (0/90/45): 0.99 / 1.04 / 1.24  
Luminous Opening: Rectangular w/ Sides (W: 0.65' x L: 1.85' x H: 0.15')  
CIE Type: Direct

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-LD4-40-1STD-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°	6211	6211	6211
5°	5877	5844	5846
10°	5379	5283	5324
15°	5086	4924	5012
20°	4869	4696	4759
25°	4664	4535	4566
30°	4507	4387	4401
35°	4405	4242	4292
40°	4301	4111	4170
45°	4179	3992	4042
50°	4030	3882	4006
55°	3828	3807	4006
60°	3636	3600	3860
65°	3405	3332	3528
70°	3015	3009	3155
75°	2556	2640	2893
80°	1851	2142	2608
85°	934	1565	2529



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	61.1	3.3
10°-20°	158.8	8.6
20°-30°	231.2	12.6
30°-40°	276.8	15.0
40°-50°	291.2	15.8
50°-60°	277.0	15.0
60°-70°	220.0	12.0
70°-80°	138.5	7.5
80°-90°	60.2	3.3
90°-100°	30.8	1.7
100°-110°	26.1	1.4
110°-120°	20.3	1.1
120°-130°	19.1	1.0
130°-140°	15.2	0.8
140°-150°	9.8	0.5
150°-160°	4.1	0.2
160°-170°	0.7	0.0
170°-180°	0.0	0.0
0°-30°	451.0	24.5
0°-40°	727.9	39.5
0°-60°	1296.1	70.4
0°-90°	1714.8	93.1
90°-120°	77.2	4.2
90°-150°	121.3	6.6
90°-180°	126.0	6.8
0°-180°	1841.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	691	691	691	691	691	
5°	656	660	660	662	661	61
15°	558	558	560	566	571	157
25°	488	494	503	510	509	225
35°	424	435	445	452	453	265
45°	355	362	382	388	390	273
55°	272	288	318	336	338	244
65°	187	203	229	241	246	184
75°	95	112	137	151	154	100
85°	17	31	52	73	88	22
90°	0	13	32	51	66	1
95°	0	12	30	40	52	0
105°	0	12	27	39	41	0
115°	0	12	25	29	30	0
125°	0	11	25	33	36	0
135°	0	8	22	31	35	0
145°	0	6	17	25	29	0
155°	0	2	9	15	16	0
165°	0	0	2	4	5	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°	691.0	691.0	691.0	691.0	691.0	691.0	691.0	691.0	691.0	691.0	691.0
2.5°	682.0	682.8	682.0	682.8	683.7	684.5	683.7	684.5	684.5	685.3	684.5
5°	655.8	656.6	657.4	659.0	659.9	659.9	659.0	659.9	659.9	659.0	659.9
7.5°	627.0	626.2	627.0	627.9	627.9	628.7	628.7	627.0	627.9	627.9	630.3
10°	597.5	598.3	597.5	598.3	597.5	597.5	597.5	598.3	598.3	599.1	600.8
12.5°	577.8	577.8	576.1	576.1	577.0	577.0	577.0	577.0	576.1	577.8	578.6
15°	558.1	560.6	558.9	559.7	558.1	558.1	557.3	557.3	558.1	556.4	559.7
17.5°	539.2	541.7	540.9	541.7	541.7	540.0	540.0	540.9	541.7	541.7	545.0
20°	523.6	523.6	523.6	525.3	526.1	526.9	526.1	526.1	527.7	528.5	529.4
22.5°	504.7	505.6	508.8	508.8	508.0	509.7	508.8	511.3	513.0	513.8	516.2
25°	487.5	490.8	491.6	490.8	493.3	494.1	494.9	499.0	498.2	499.8	503.1
27.5°	471.1	472.7	475.2	476.8	479.3	477.7	479.3	481.8	480.9	487.5	488.3
30°	453.9	458.0	458.8	461.2	461.2	461.2	465.3	466.2	470.3	471.9	475.2
32.5°	439.9	440.7	443.2	445.7	446.5	448.9	450.6	452.2	454.7	456.3	458.8
35°	423.5	426.8	426.0	428.4	430.9	435.0	435.0	436.6	438.3	443.2	444.8
37.5°	407.1	409.5	409.5	413.6	415.3	417.7	415.3	422.7	425.1	427.6	430.1
40°	390.7	392.3	393.9	395.6	397.2	398.9	401.3	405.4	408.7	411.2	413.6
42.5°	371.8	374.2	375.9	377.5	380.8	382.5	384.9	387.4	392.3	394.8	398.1
45°	354.6	356.2	357.8	359.5	362.8	361.9	366.0	371.0	375.9	378.4	381.6
47.5°	333.2	336.5	339.8	340.6	343.1	346.3	348.0	353.7	358.7	360.3	365.2
50°	315.2	315.2	319.3	321.7	324.2	328.3	329.9	334.9	340.6	345.5	348.8
52.5°	293.8	296.3	298.7	302.0	306.1	308.6	311.1	316.8	324.2	330.8	334.0
55°	271.7	274.1	278.2	281.5	285.6	288.1	292.2	298.7	305.3	311.1	317.6
57.5°	252.8	252.8	255.2	259.3	264.3	267.6	270.8	278.2	286.4	288.9	296.3
60°	229.8	232.3	234.7	238.8	243.8	247.0	249.5	256.9	263.5	270.0	274.9
62.5°	207.6	210.1	212.6	216.7	222.4	225.7	228.2	234.7	242.1	247.0	253.6
65°	187.1	186.3	189.6	194.5	200.3	202.7	205.2	212.6	218.3	223.2	229.0
67.5°	163.3	165.8	168.2	172.4	177.3	180.6	183.0	189.6	194.5	200.3	206.0
70°	139.5	142.0	144.4	150.2	155.1	156.8	159.2	165.8	169.9	178.1	182.2
72.5°	116.5	119.0	122.3	126.4	132.1	133.8	137.1	142.0	148.6	154.3	159.2
75°	95.2	97.7	99.3	103.4	108.3	111.6	114.1	119.8	125.6	131.3	137.1
77.5°	73.9	75.5	78.0	82.1	86.2	89.5	91.1	96.8	102.6	108.3	114.1
80°	51.7	54.2	56.6	60.7	64.8	68.1	70.6	76.3	81.3	87.0	91.9
82.5°	32.8	34.5	37.8	41.9	46.0	47.6	50.9	55.0	60.7	65.7	70.6
85°	17.2	18.9	21.3	24.6	29.5	31.2	33.6	37.8	42.7	47.6	52.5
87.5°	6.6	7.4	9.8	13.1	16.4	18.9	21.3	25.4	29.5	34.5	39.4
90°	0.0	1.6	4.1	7.4	10.7	13.1	14.8	18.9	23.0	27.1	32.0
92.5°	0.0	0.8	3.3	6.6	10.7	12.3	14.0	18.1	22.2	26.3	30.4
95°	0.0	0.8	3.3	6.6	10.7	12.3	14.0	18.1	22.2	26.3	30.4
97.5°	0.0	0.8	3.3	6.6	10.7	12.3	14.0	18.1	22.2	26.3	30.4
100°	0.0	0.8	3.3	6.6	10.7	12.3	14.0	18.1	22.2	26.3	28.7
102.5°	0.0	0.8	3.3	6.6	9.8	12.3	14.0	18.1	22.2	25.4	27.9
105°	0.0	0.8	3.3	6.6	9.8	12.3	14.0	18.1	21.3	24.6	27.1
107.5°	0.0	0.8	3.3	6.6	9.8	11.5	14.0	17.2	20.5	23.8	27.1
110°	0.0	0.8	2.5	5.7	9.8	11.5	13.1	17.2	20.5	23.8	26.3



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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	2.5	5.7	9.8	11.5	13.1	17.2	19.7	23.0	25.4
115°	0.0	0.8	2.5	5.7	9.0	11.5	13.1	16.4	19.7	22.2	24.6
117.5°	0.0	0.8	2.5	5.7	9.0	11.5	13.1	16.4	19.7	22.2	24.6
120°	0.0	0.0	2.5	5.7	9.0	10.7	13.1	16.4	19.7	22.2	24.6
122.5°	0.0	0.0	2.5	5.7	9.0	10.7	13.1	16.4	19.7	22.2	24.6
125°	0.0	0.0	2.5	4.9	9.0	10.7	12.3	16.4	18.9	22.2	24.6
127.5°	0.0	0.0	1.6	4.9	8.2	9.8	12.3	15.6	18.9	22.2	24.6
130°	0.0	0.0	1.6	4.9	7.4	9.8	11.5	15.6	18.1	21.3	23.8
132.5°	0.0	0.0	1.6	4.1	7.4	9.0	10.7	14.8	18.1	20.5	23.0
135°	0.0	0.0	1.6	4.1	6.6	8.2	9.8	13.1	16.4	19.7	22.2
137.5°	0.0	0.0	0.8	3.3	6.6	7.4	9.0	12.3	15.6	18.1	20.5
140°	0.0	0.0	0.8	3.3	5.7	7.4	9.0	11.5	14.8	17.2	19.7
142.5°	0.0	0.0	0.8	2.5	4.9	6.6	8.2	10.7	13.1	16.4	18.9
145°	0.0	0.0	0.8	2.5	4.1	5.7	7.4	9.8	12.3	14.8	17.2
147.5°	0.0	0.0	0.8	1.6	3.3	4.9	5.7	9.0	10.7	13.1	15.6
150°	0.0	0.0	0.0	1.6	3.3	4.1	4.9	7.4	9.8	11.5	14.0
152.5°	0.0	0.0	0.0	0.8	2.5	3.3	4.1	5.7	7.4	9.8	11.5
155°	0.0	0.0	0.0	0.8	1.6	2.5	3.3	4.1	5.7	7.4	9.0
157.5°	0.0	0.0	0.0	0.0	0.8	1.6	1.6	3.3	4.1	5.7	7.4
160°	0.0	0.0	0.0	0.0	0.8	0.8	0.8	1.6	3.3	4.1	4.9
162.5°	0.0	0.0	0.0	0.0	0.0	0.8	0.8	1.6	1.6	2.5	3.3
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°	691.0	691.0	691.0	691.0	691.0	691.0	691.0	691.0	691.0	691.0
2.5°	684.5	684.5	684.5	683.7	683.7	683.7	683.7	683.7	684.5	683.7
5°	660.7	660.7	659.9	660.7	661.5	660.7	661.5	660.7	660.7	660.7
7.5°	631.1	631.1	631.1	631.1	632.0	632.0	632.0	632.8	633.6	633.6
10°	601.6	602.4	602.4	602.4	602.4	604.1	604.9	604.9	605.7	606.5
12.5°	579.4	579.4	581.9	585.2	586.0	587.6	589.3	588.5	588.5	590.9
15°	561.4	563.8	564.7	564.7	565.5	566.3	568.8	569.6	568.8	571.2
17.5°	545.8	545.8	549.9	550.7	550.7	551.5	551.5	552.3	552.3	553.2
20°	531.8	532.6	534.3	535.1	536.8	537.6	539.2	538.4	540.0	538.4
22.5°	517.1	517.9	522.8	523.6	523.6	522.8	521.2	522.8	522.8	522.0
25°	503.9	506.4	508.0	510.5	509.7	510.5	511.3	509.7	508.8	508.8
27.5°	490.0	491.6	494.9	495.7	495.7	494.1	494.1	494.1	493.3	495.7
30°	477.7	480.9	481.8	479.3	480.1	482.6	483.4	482.6	480.9	479.3
32.5°	461.2	462.9	465.3	471.1	470.3	469.5	465.3	464.5	464.5	465.3
35°	446.5	449.8	453.9	451.4	452.2	452.2	453.9	453.0	449.8	453.0
37.5°	431.7	436.6	436.6	440.7	439.1	437.4	435.0	436.6	435.8	435.8
40°	416.1	418.6	422.7	421.9	421.0	422.7	422.7	422.7	422.7	422.7
42.5°	400.5	403.8	403.8	404.6	407.9	408.7	407.9	402.2	404.6	403.8
45°	383.3	386.6	388.2	389.8	388.2	387.4	389.0	389.8	388.2	389.8
47.5°	368.5	368.5	373.4	372.6	372.6	374.2	372.6	372.6	371.8	374.2
50°	352.1	357.0	357.8	360.3	360.3	359.5	359.5	360.3	363.6	363.6
52.5°	339.0	343.9	347.2	348.0	348.0	350.4	352.9	352.1	353.7	352.1
55°	322.5	325.8	329.9	332.4	335.7	335.7	335.7	337.3	337.3	338.1
57.5°	302.0	305.3	307.8	313.5	315.2	314.3	315.2	318.4	317.6	320.9
60°	279.9	284.0	287.3	288.1	289.7	291.4	292.2	293.8	295.5	298.7
62.5°	256.9	260.2	264.3	263.5	265.1	266.7	268.4	269.2	272.5	271.7
65°	233.9	236.4	238.8	239.7	241.3	239.7	242.9	244.6	244.6	246.2
67.5°	210.9	212.6	215.8	216.7	217.5	217.5	216.7	219.1	220.0	220.0
70°	186.3	190.4	192.9	194.5	193.7	194.5	193.7	193.7	195.3	194.5
72.5°	164.1	167.4	169.9	172.4	172.4	172.4	172.4	173.2	174.0	174.8
75°	141.2	145.3	149.4	150.2	151.0	151.0	152.7	153.5	153.5	153.5
77.5°	118.2	123.1	126.4	128.9	129.7	131.3	132.1	133.8	133.8	133.8
80°	96.0	100.9	104.2	108.3	110.0	110.8	112.4	114.9	114.9	114.9
82.5°	75.5	80.4	85.4	87.8	90.3	92.7	95.2	96.8	98.5	100.1
85°	56.6	62.4	67.3	71.4	73.0	74.7	78.0	82.1	86.2	87.8
87.5°	44.3	48.4	53.3	57.5	59.9	62.4	66.5	69.8	74.7	77.1
90°	36.1	40.2	45.1	50.1	50.9	52.5	55.0	59.1	62.4	65.7
92.5°	34.5	38.6	41.9	42.7	43.5	44.3	46.0	48.4	51.7	55.0
95°	35.3	36.9	37.8	39.4	40.2	41.9	43.5	46.8	50.9	52.5
97.5°	32.8	34.5	36.9	39.4	40.2	41.9	45.1	50.1	55.0	57.5
100°	31.2	34.5	36.9	39.4	41.0	42.7	47.6	53.3	57.5	58.3
102.5°	31.2	33.6	36.1	39.4	41.0	42.7	46.8	49.2	49.2	49.2
105°	30.4	32.8	35.3	37.8	38.6	39.4	41.0	41.0	41.0	41.0
107.5°	29.5	31.2	33.6	34.5	34.5	35.3	35.3	35.3	35.3	34.5
110°	27.9	29.5	31.2	31.2	31.2	31.2	31.2	31.2	31.2	31.2





TEST NUMBER: P241315

CATALOG NUMBER: FVS8M-2-LD4-40-1STD-P125-UNV-EDC1

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	27.1	28.7	28.7	29.5	29.5	29.5	29.5	30.4	29.5	29.5
115°	26.3	27.9	27.9	28.7	28.7	28.7	29.5	30.4	30.4	30.4
117.5°	26.3	27.9	28.7	29.5	29.5	30.4	31.2	32.0	32.0	32.0
120°	26.3	27.9	29.5	30.4	31.2	31.2	32.8	33.6	33.6	33.6
122.5°	27.1	28.7	30.4	31.2	32.0	32.8	33.6	34.5	35.3	35.3
125°	27.1	28.7	31.2	32.0	32.8	32.8	33.6	35.3	35.3	36.1
127.5°	26.3	28.7	31.2	32.0	32.8	33.6	34.5	35.3	36.1	36.1
130°	26.3	28.7	30.4	32.0	32.8	33.6	34.5	35.3	36.1	36.9
132.5°	25.4	27.1	29.5	31.2	32.0	32.8	33.6	35.3	36.1	36.1
135°	24.6	26.3	28.7	30.4	31.2	32.0	33.6	34.5	35.3	35.3
137.5°	23.0	25.4	27.1	28.7	29.5	30.4	32.0	33.6	33.6	34.5
140°	22.2	23.8	26.3	27.9	28.7	29.5	30.4	32.0	32.8	32.8
142.5°	20.5	23.0	24.6	26.3	27.1	27.9	28.7	30.4	31.2	31.2
145°	18.9	21.3	23.0	24.6	25.4	26.3	27.1	27.9	28.7	28.7
147.5°	17.2	19.7	21.3	22.2	23.0	23.8	24.6	25.4	26.3	26.3
150°	15.6	17.2	18.9	19.7	20.5	21.3	22.2	22.2	23.0	23.0
152.5°	13.1	14.8	16.4	17.2	18.1	18.1	18.9	19.7	19.7	19.7
155°	10.7	12.3	13.1	14.0	14.8	15.6	15.6	16.4	16.4	16.4
157.5°	8.2	9.8	10.7	11.5	12.3	12.3	13.1	13.1	13.1	13.1
160°	5.7	7.4	8.2	9.0	9.0	9.0	9.8	9.8	9.8	9.8
162.5°	4.1	4.9	5.7	6.6	6.6	6.6	6.6	7.4	7.4	7.4
165°	2.5	3.3	3.3	4.1	4.1	4.1	4.9	4.9	4.9	4.9
167.5°	0.8	1.6	1.6	2.5	2.5	2.5	2.5	2.5	3.3	3.3
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)