

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: P241383

Luminaire Tested: **FVS8M-4-LD4-40-1LO-P125-UNV-EDC1**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-79-08  
Report Number: P241383  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1711-410-33)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: FVS8M-4-LD4-40-1LO-P125-UNV-EDC1  
Description: FAILSAFE FVS8M LED FIXTURE  
4FT LENGTH, 1-MODULE LED WITH P125 LENS  
Light Source: (84) 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

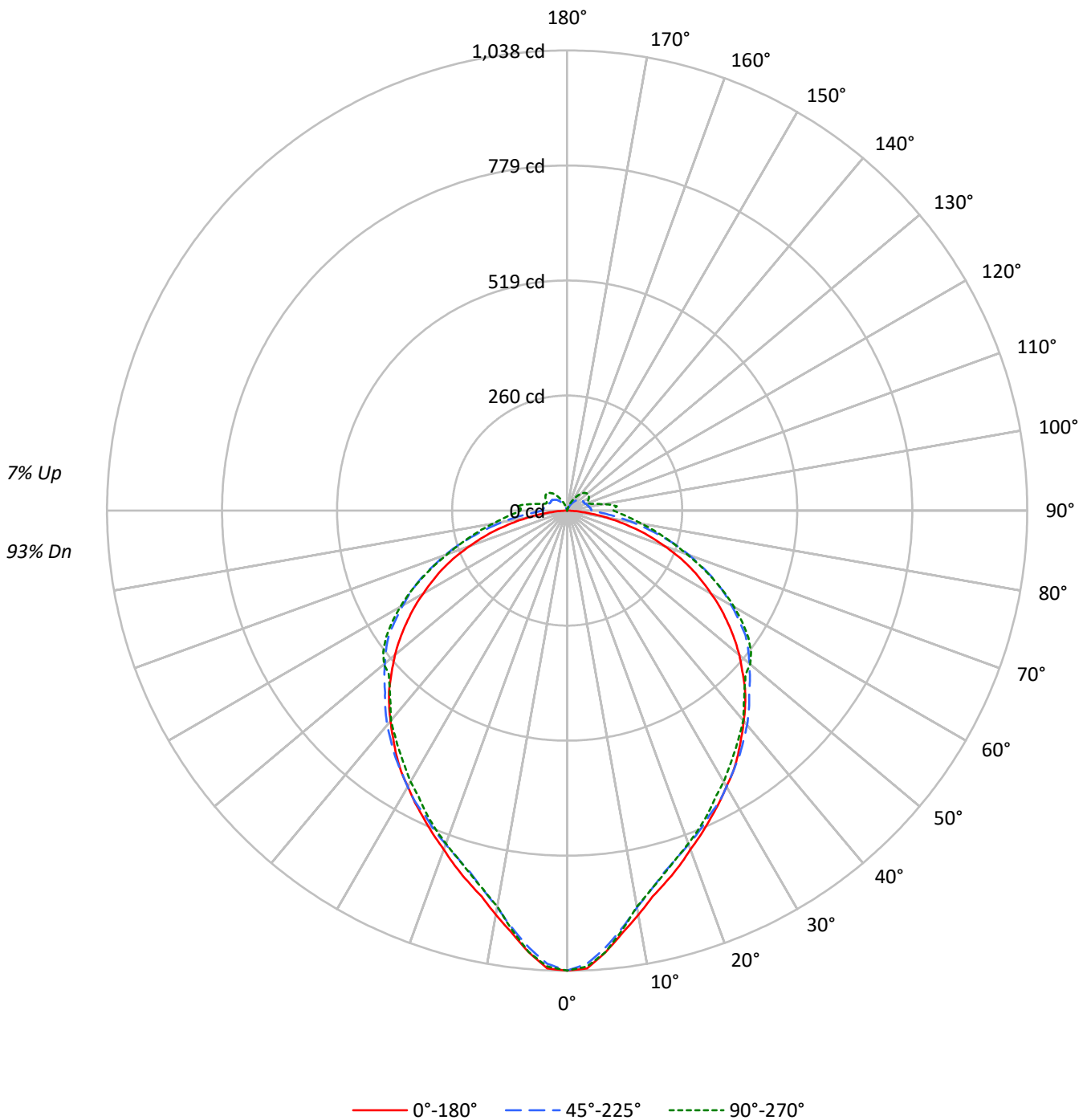
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2843.0 lumens  
Efficiency: N/A  
Efficacy: 120.5 lumens/watt  
Spacing Criteria (0/90/45): 1.04 / 1.02 / 1.25  
Luminous Opening: Rectangular w/ Sides (W: 0.65' x L: 3.73' x H: 0.15')  
CIE Type: Direct  
  
Input Watts (W): 23.6  
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-4-LD4-40-1LO-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	93
1	106	101	96	92	103	98	94	90	92	89	86	87	85	82	83	80	78	76
2	96	88	80	74	93	85	78	73	80	75	70	76	71	67	72	68	65	62
3	87	77	68	61	84	74	67	60	70	64	58	67	61	56	63	59	55	52
4	80	68	59	52	77	66	57	51	62	55	49	59	53	48	56	51	47	44
5	73	60	51	44	71	59	50	44	56	48	43	53	47	42	50	45	40	38
6	68	54	45	39	65	53	44	38	50	43	37	48	41	36	46	40	35	33
7	63	49	40	34	61	48	40	34	46	38	33	44	37	32	42	36	31	29
8	58	45	36	30	56	44	36	30	42	35	29	40	34	29	38	33	28	26
9	55	41	33	27	53	40	32	27	38	31	26	37	31	26	35	30	25	24
10	51	38	30	25	49	37	30	24	36	29	24	34	28	24	33	27	23	21

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

	0°	45°	90°
0°	4638	4638	4638
5°	4469	4369	4395
10°	4171	3991	3957
15°	3966	3722	3697
20°	3814	3567	3513
25°	3707	3441	3358
30°	3627	3350	3223
35°	3569	3264	3112
40°	3501	3183	3031
45°	3453	3093	2918
50°	3368	3051	2954
55°	3267	3020	2941
60°	3143	2890	2794
65°	3012	2750	2580
70°	2748	2522	2314
75°	2413	2200	2097
80°	1864	1847	1923
85°	1010	1445	1885



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	92.4	3.3
10°-20°	240.9	8.5
20°-30°	351.2	12.4
30°-40°	420.9	14.8
40°-50°	445.2	15.7
50°-60°	428.0	15.1
60°-70°	344.1	12.1
70°-80°	218.1	7.7
80°-90°	96.3	3.4
90°-100°	55.6	2.0
100°-110°	42.4	1.5
110°-120°	34.3	1.2
120°-130°	31.3	1.1
130°-140°	23.6	0.8
140°-150°	13.4	0.5
150°-160°	4.6	0.2
160°-170°	0.6	0.0
170°-180°	0.0	0.0
0°-30°	684.5	24.1
0°-40°	1105.4	38.9
0°-60°	1978.6	69.6
0°-90°	2637.2	92.8
90°-120°	132.3	4.7
90°-150°	200.6	7.1
90°-180°	206.0	7.2
0°-180°	2843.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1038	1038	1038	1038	1038	
5°	1000	996	990	1001	999	93
15°	866	858	845	846	847	244
25°	765	767	759	759	753	353
35°	672	677	677	670	660	420
45°	568	579	581	577	566	437
55°	443	462	491	498	499	396
65°	309	329	364	363	362	304
75°	160	184	216	228	224	169
85°	28	54	88	113	132	36
90°	1	25	56	81	105	1
95°	0	24	53	76	113	0
105°	0	21	47	59	58	0
115°	1	19	42	50	52	0
125°	1	16	41	54	59	1
135°	1	12	35	48	56	0
145°	1	5	22	36	41	0
155°	1	1	8	18	20	0
165°	1	1	1	3	4	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°	1037.7	1037.7	1037.7	1037.7	1037.7	1037.7	1037.7	1037.7	1037.7	1037.7	1037.7
2.5°	1033.5	1031.0	1027.4	1029.2	1029.2	1029.8	1030.4	1030.4	1029.2	1027.4	1023.2
5°	999.5	997.1	992.8	993.4	994.0	995.9	996.5	996.5	994.0	992.8	989.8
7.5°	960.1	957.7	955.8	955.8	956.4	957.0	958.9	955.8	954.0	952.8	949.8
10°	925.5	924.3	918.8	919.4	918.2	918.2	919.4	918.8	915.2	912.2	908.5
12.5°	891.5	889.7	889.1	887.9	886.1	885.5	886.1	885.5	882.4	879.4	875.8
15°	866.1	861.8	860.0	860.6	857.6	857.6	857.0	858.8	854.5	849.7	844.8
17.5°	840.6	838.2	832.7	833.9	833.3	834.5	835.1	834.5	830.3	825.4	821.8
20°	813.3	811.5	812.1	812.1	809.7	810.3	810.9	809.7	806.0	801.2	801.2
22.5°	790.3	787.2	786.6	784.8	787.2	787.8	787.8	788.4	786.0	782.4	781.2
25°	765.4	764.2	763.0	764.8	766.0	766.6	766.6	765.4	763.6	760.5	758.7
27.5°	743.0	739.3	740.5	742.3	744.2	746.6	746.6	743.6	743.0	739.3	741.7
30°	718.7	715.7	716.3	718.1	721.1	723.5	723.5	725.4	722.3	720.5	719.3
32.5°	697.5	691.4	692.0	696.3	701.1	701.7	702.3	703.5	700.5	699.3	696.9
35°	672.0	669.0	667.1	673.8	676.2	676.8	679.3	681.1	678.7	677.5	676.8
37.5°	645.3	642.9	642.9	647.7	652.6	655.0	655.6	656.2	656.8	653.8	653.2
40°	619.8	617.4	618.0	621.7	626.5	628.3	631.4	633.8	631.4	630.1	631.4
42.5°	594.4	590.1	593.8	597.4	602.2	603.5	607.1	611.3	608.3	605.9	607.1
45°	567.7	563.4	567.1	571.9	575.0	578.6	579.2	581.6	581.6	581.6	581.0
47.5°	536.1	535.5	537.4	542.8	547.7	549.5	551.9	554.3	558.0	561.0	559.2
50°	507.0	504.6	509.5	513.7	519.2	522.8	526.4	531.9	532.5	533.1	536.7
52.5°	475.5	474.9	479.1	484.0	489.4	494.9	497.9	501.6	504.6	510.1	514.9
55°	442.7	443.3	447.0	453.7	460.3	461.5	465.8	474.9	480.9	485.8	491.3
57.5°	410.6	410.0	416.1	421.5	427.0	433.6	437.3	445.2	449.4	455.5	458.5
60°	375.4	376.6	382.7	383.9	395.4	403.3	404.5	409.4	415.4	421.5	428.2
62.5°	341.5	342.7	348.1	354.2	361.5	365.1	367.5	377.2	383.3	393.0	397.9
65°	308.7	309.3	313.0	319.6	326.3	329.3	335.4	346.3	351.2	357.8	364.5
67.5°	272.3	273.5	278.4	282.0	291.1	296.6	302.0	309.3	313.0	322.0	326.9
70°	232.9	234.7	241.4	245.6	256.5	260.8	265.0	269.9	278.4	286.9	292.3
72.5°	197.7	197.7	203.8	209.2	220.8	222.0	225.6	234.7	244.4	250.5	256.5
75°	160.1	161.9	165.6	172.9	181.9	183.8	189.8	199.5	206.2	212.9	216.5
77.5°	122.5	124.9	130.4	137.7	143.7	149.8	154.0	161.9	168.6	174.1	180.7
80°	88.5	90.4	95.8	100.7	110.4	114.6	118.3	126.2	132.8	140.1	148.0
82.5°	57.0	57.6	63.7	69.7	77.0	81.9	85.5	92.8	102.5	109.8	117.1
85°	28.5	30.3	36.4	41.8	50.9	54.0	57.6	66.1	74.0	83.1	88.5
87.5°	8.5	11.5	17.0	23.0	30.3	34.0	37.6	45.5	53.4	60.6	67.3
90°	0.6	2.4	7.3	13.9	21.2	24.9	28.5	36.4	43.7	49.7	55.8
92.5°	0.0	1.8	6.7	13.3	20.6	24.3	27.9	35.2	41.8	47.9	54.0
95°	0.0	1.8	6.7	12.7	20.0	23.7	27.3	34.0	40.6	47.3	53.4
97.5°	0.0	1.8	6.1	12.7	19.4	23.0	26.7	33.4	40.0	46.1	51.6
100°	0.0	1.8	6.1	12.1	18.8	22.4	25.5	32.1	38.8	44.9	50.3
102.5°	0.0	1.2	5.5	11.5	18.2	21.8	24.9	31.5	38.2	43.7	48.5
105°	0.0	1.2	5.5	10.9	17.6	21.2	24.3	30.9	37.0	42.5	47.3
107.5°	0.0	1.2	4.9	10.9	17.6	20.6	24.3	30.3	36.4	41.2	46.1
110°	0.0	0.6	4.9	10.3	17.0	20.6	23.7	29.7	35.8	40.6	44.3



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	0.0	0.6	4.2	9.7	16.4	20.0	23.0	29.1	34.6	39.4	43.1
115°	0.6	0.6	4.2	9.7	15.8	19.4	22.4	28.5	34.0	38.8	41.8
117.5°	0.0	0.6	3.6	9.1	15.2	18.8	21.8	27.9	33.4	38.2	41.8
120°	0.6	0.6	3.0	8.5	14.6	18.2	21.2	27.3	32.8	37.6	41.8
122.5°	0.6	0.6	3.0	7.9	13.9	17.0	20.6	26.7	32.1	37.6	41.8
125°	0.6	0.6	2.4	7.3	13.3	16.4	19.4	26.1	31.5	36.4	41.2
127.5°	0.6	0.6	1.8	6.7	12.1	15.8	18.8	24.9	30.3	35.2	40.0
130°	0.6	0.6	1.2	5.5	11.5	13.9	17.6	23.7	29.1	34.0	38.2
132.5°	0.6	0.6	1.2	4.9	10.3	12.7	15.8	21.8	27.3	32.1	36.4
135°	0.6	0.6	0.6	3.6	8.5	11.5	13.9	19.4	24.9	30.3	34.6
137.5°	0.6	0.6	0.6	3.0	7.3	9.7	12.1	17.0	22.4	27.3	32.1
140°	0.6	0.6	0.6	2.4	6.1	7.9	10.3	15.2	20.0	24.9	29.1
142.5°	0.6	0.6	0.6	1.8	4.9	6.7	8.5	12.7	17.0	21.8	26.1
145°	0.6	0.6	0.6	1.2	3.6	4.9	6.7	10.3	14.6	18.8	22.4
147.5°	0.6	0.6	0.6	0.6	2.4	3.6	4.9	8.5	11.5	15.2	18.8
150°	0.6	0.6	0.6	0.6	1.8	2.4	3.6	6.1	9.1	12.1	15.2
152.5°	0.6	0.6	0.6	0.6	1.2	1.8	2.4	4.2	6.7	9.1	11.5
155°	0.6	0.6	0.6	0.6	0.6	1.2	1.8	3.0	4.9	6.7	8.5
157.5°	0.6	0.6	0.6	0.6	0.6	0.6	1.2	1.8	3.0	4.2	6.1
160°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	1.2	1.8	3.0	3.6
162.5°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	1.2	1.2	1.8
165°	1.2	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	1.2
167.5°	1.2	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
170°	1.2	1.2	0.6	0.6	0.6	0.6	0.6	0.6	0.6	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°	1037.7	1037.7	1037.7	1037.7	1037.7	1037.7	1037.7	1037.7	1037.7	1037.7
2.5°	1024.4	1027.4	1029.8	1029.8	1029.8	1031.0	1031.0	1030.4	1031.0	1029.2
5°	992.2	997.1	998.9	1001.3	1000.7	1000.1	998.9	1001.3	1000.1	998.9
7.5°	951.6	956.4	954.0	955.2	956.4	955.2	955.8	956.4	954.0	954.0
10°	908.5	910.3	908.5	909.7	909.7	907.3	908.5	908.5	907.3	906.7
12.5°	874.0	873.4	872.7	873.4	874.0	876.4	875.2	877.6	877.0	875.2
15°	843.0	845.5	846.7	848.5	846.1	847.9	850.3	849.1	849.1	847.3
17.5°	824.2	826.7	824.2	827.3	828.5	827.9	827.3	823.6	826.0	821.8
20°	798.8	803.0	806.0	801.8	801.8	802.4	801.8	800.6	801.8	799.4
22.5°	783.0	782.4	781.8	784.8	785.4	784.8	781.2	780.0	776.3	776.9
25°	760.5	758.7	765.4	761.8	758.7	758.7	756.9	754.5	752.7	752.7
27.5°	739.3	742.3	739.3	739.9	739.3	739.9	732.0	729.0	729.0	726.6
30°	721.7	719.3	719.9	715.7	713.2	712.6	710.8	708.4	706.6	706.0
32.5°	696.3	697.5	695.6	693.8	693.2	691.4	690.2	687.2	684.7	682.3
35°	675.6	673.8	673.2	674.4	670.2	667.1	665.9	664.1	662.9	660.5
37.5°	653.2	650.8	651.4	647.1	647.7	647.1	643.5	640.5	639.9	638.6
40°	627.7	628.9	626.5	626.5	621.0	620.4	619.8	619.8	618.0	618.0
42.5°	605.3	605.3	604.1	602.2	600.4	599.2	595.6	595.0	592.5	590.1
45°	582.2	581.0	579.2	578.0	576.8	575.0	570.1	568.3	567.1	565.9
47.5°	561.6	559.2	559.2	555.5	551.3	551.3	550.1	547.1	545.8	545.8
50°	539.2	542.8	544.6	541.6	540.4	539.2	538.0	538.6	537.4	539.2
52.5°	519.8	522.8	522.2	523.4	524.6	526.4	524.0	525.8	524.6	522.8
55°	494.9	497.3	496.1	494.9	497.9	497.9	501.0	499.8	499.1	499.1
57.5°	464.0	467.0	467.0	468.2	468.8	467.0	471.2	469.4	470.0	468.2
60°	431.8	431.2	433.0	436.7	437.3	434.9	434.2	436.7	434.9	434.9
62.5°	400.3	401.5	402.1	400.3	399.1	400.3	397.9	400.3	400.3	399.7
65°	366.3	367.5	368.1	365.7	362.7	363.3	360.9	362.1	362.7	362.1
67.5°	329.3	332.4	331.1	330.5	328.7	325.1	324.5	323.3	324.5	324.5
70°	294.1	297.2	294.1	294.8	294.8	291.7	289.9	287.5	287.5	286.9
72.5°	259.6	261.4	260.8	260.8	261.4	259.6	256.5	255.3	254.1	254.1
75°	223.2	226.8	226.8	227.4	228.0	226.8	226.8	225.0	223.2	223.8
77.5°	188.0	191.7	194.7	196.5	196.5	197.1	198.3	197.7	196.5	196.5
80°	155.3	160.7	163.8	167.4	168.0	168.0	170.4	171.0	171.0	170.4
82.5°	124.3	129.8	133.4	137.1	137.7	138.9	143.1	145.0	148.6	148.6
85°	94.6	100.7	104.9	109.8	112.8	114.6	118.3	123.1	128.0	131.6
87.5°	72.8	78.8	84.9	89.8	92.2	94.0	98.9	104.9	111.0	115.8
90°	62.5	67.9	73.4	77.6	80.7	82.5	87.3	92.8	100.1	104.9
92.5°	60.0	65.5	69.7	74.6	77.0	78.8	84.9	92.2	100.7	104.9
95°	58.2	63.1	67.9	73.4	75.8	78.8	86.7	97.0	108.6	112.8
97.5°	57.0	61.9	66.7	72.2	75.2	78.2	87.3	95.2	100.1	100.1
100°	55.2	60.0	64.9	69.7	72.2	75.2	80.7	83.1	83.1	83.1
102.5°	53.4	57.6	61.9	64.9	66.7	67.9	70.4	71.0	69.7	68.5
105°	51.6	54.6	57.0	58.8	59.4	60.0	60.6	60.6	59.4	58.2
107.5°	49.7	51.6	53.4	53.4	54.0	54.0	54.6	54.0	52.8	51.6
110°	47.3	49.1	49.7	50.3	50.3	50.3	50.9	50.9	49.7	49.1





TEST NUMBER: P241383

CATALOG NUMBER: FVS8M-4-LD4-40-1LO-P125-UNV-EDC1

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	45.5	47.3	47.9	48.5	49.1	49.1	50.3	50.3	49.7	49.7
115°	44.9	46.7	47.9	49.1	49.7	50.3	51.6	52.8	52.2	51.6
117.5°	44.9	47.3	49.1	50.3	50.9	52.2	54.0	54.6	54.6	54.6
120°	44.9	47.9	50.3	52.2	52.8	54.0	55.2	56.4	57.0	56.4
122.5°	44.9	47.9	50.9	52.8	53.4	54.6	56.4	57.6	58.2	58.2
125°	44.9	47.9	50.9	52.8	54.0	54.6	56.4	58.2	58.8	59.4
127.5°	43.7	47.3	49.7	52.2	53.4	54.6	56.4	58.2	59.4	60.0
130°	42.5	45.5	48.5	50.9	52.2	53.4	55.8	57.6	58.8	59.4
132.5°	40.6	43.7	46.7	49.1	50.3	51.6	54.0	56.4	57.6	58.2
135°	38.2	41.8	44.9	47.3	48.5	49.7	52.2	54.6	55.8	56.4
137.5°	35.8	39.4	42.5	44.9	46.1	47.3	49.7	51.6	53.4	53.4
140°	33.4	37.0	40.0	42.5	43.7	44.9	46.7	48.5	49.7	50.3
142.5°	30.3	34.0	36.4	39.4	40.6	41.2	43.1	44.9	46.1	46.1
145°	26.7	30.3	33.4	35.2	36.4	37.6	38.8	40.0	41.2	41.2
147.5°	22.4	26.1	29.1	30.9	32.1	32.8	34.0	35.2	35.8	35.8
150°	18.2	21.2	24.3	26.1	27.3	27.9	29.1	29.7	30.3	30.3
152.5°	13.9	17.0	19.4	21.2	22.4	23.0	24.3	24.3	24.9	25.5
155°	10.3	12.7	14.6	17.0	17.6	18.2	18.8	20.0	20.0	20.0
157.5°	7.3	9.1	10.3	12.1	12.7	13.9	14.6	15.2	15.2	15.2
160°	4.9	6.1	7.3	8.5	9.1	9.7	10.3	10.9	10.9	11.5
162.5°	3.0	3.6	4.2	4.9	5.5	6.1	6.7	7.3	7.3	7.3
165°	1.2	1.8	2.4	2.4	3.0	3.0	3.6	4.2	4.2	4.2
167.5°	0.6	0.6	0.6	1.2	1.2	1.2	1.2	1.8	1.8	1.8
170°	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
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)