

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: P241310

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

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P241310
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-LD4-35-1LO-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

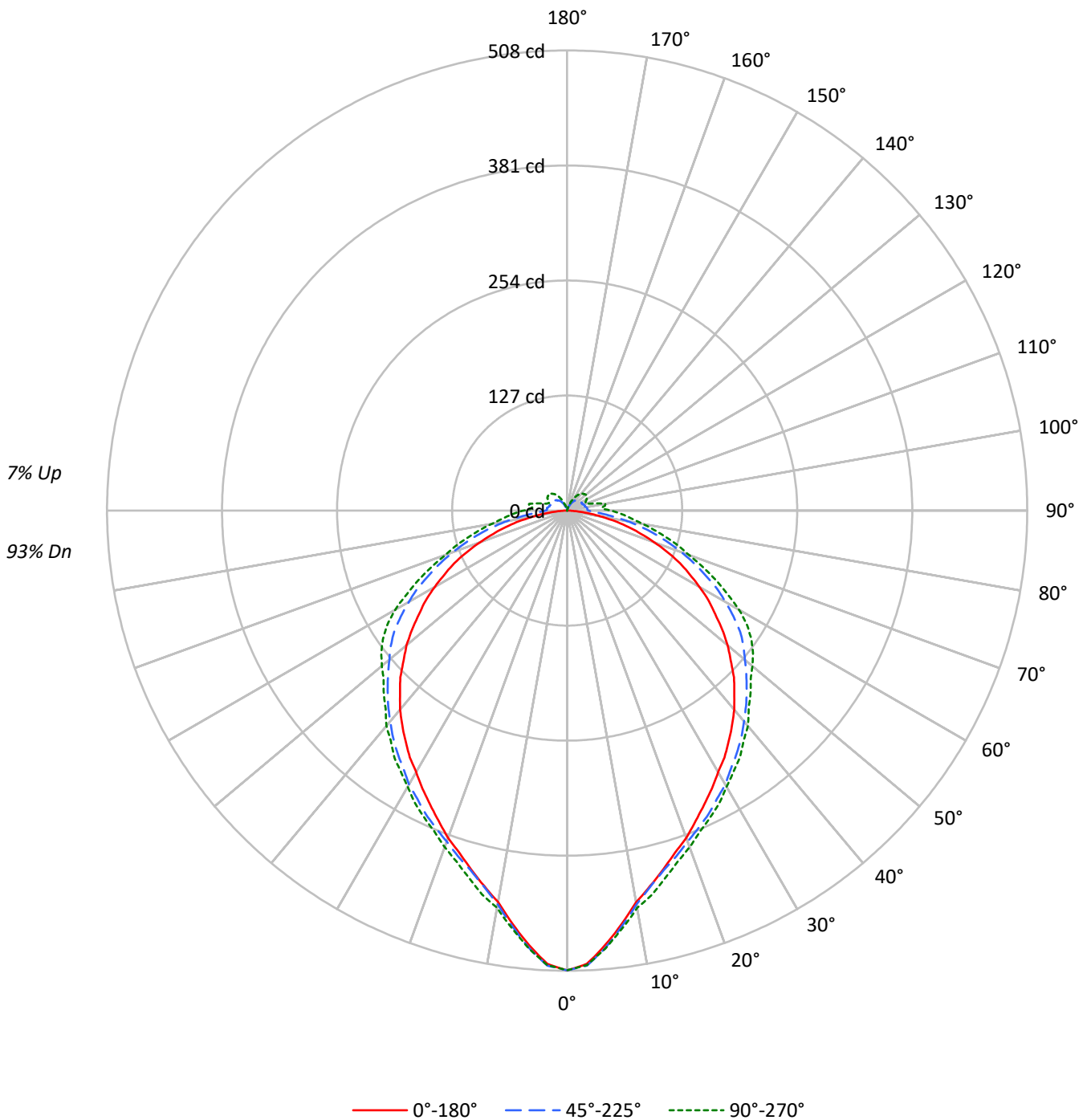
Lumens per Lamp: N/A
Luminaire Lumens: 1352.0 lumens
Efficiency: N/A
Efficacy: 109.0 lumens/watt
Spacing Criteria (0/90/45): 0.99 / 1.04 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.65' x L: 1.85' x H: 0.15')
CIE Type: Direct

Input Watts (W): 12.4
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

TEST NUMBER: P241310

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

Luminous Intensity Polar Plot





TEST NUMBER: P241310

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

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°	4562	4562	4562
5°	4316	4292	4293
10°	3950	3880	3910
15°	3736	3617	3681
20°	3576	3449	3495
25°	3425	3330	3353
30°	3309	3222	3232
35°	3235	3115	3152
40°	3158	3019	3062
45°	3069	2932	2969
50°	2959	2851	2942
55°	2811	2796	2942
60°	2671	2644	2835
65°	2501	2448	2591
70°	2215	2210	2316
75°	1877	1939	2124
80°	1360	1573	1916
85°	690	1150	1858



TEST NUMBER: P241310

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

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.8	3.3
10°-20°	116.6	8.6
20°-30°	169.8	12.6
30°-40°	203.3	15.0
40°-50°	213.8	15.8
50°-60°	203.5	15.0
60°-70°	161.6	12.0
70°-80°	101.7	7.5
80°-90°	44.2	3.3
90°-100°	22.6	1.7
100°-110°	19.2	1.4
110°-120°	14.9	1.1
120°-130°	14.0	1.0
130°-140°	11.2	0.8
140°-150°	7.2	0.5
150°-160°	3.0	0.2
160°-170°	0.5	0.0
170°-180°	0.0	0.0
0°-30°	331.2	24.5
0°-40°	534.5	39.5
0°-60°	951.9	70.4
0°-90°	1259.3	93.1
90°-120°	56.7	4.2
90°-150°	89.1	6.6
90°-180°	93.0	6.9
0°-180°	1352.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	508	508	508	508	508	
5°	482	485	485	486	485	45
15°	410	410	411	415	420	116
25°	358	363	370	374	374	165
35°	311	319	327	332	333	195
45°	260	266	280	285	286	200
55°	200	212	233	246	248	179
65°	137	149	168	177	181	135
75°	70	82	101	111	113	74
85°	13	23	39	54	64	16
90°	0	10	24	37	48	1
95°	0	9	22	30	39	0
105°	0	9	20	28	30	0
115°	0	8	18	21	22	0
125°	0	8	18	24	26	0
135°	0	6	16	23	26	0
145°	0	4	13	19	21	0
155°	0	2	7	11	12	0
165°	0	0	1	3	4	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P241310

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

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	507.5	507.5	507.5	507.5	507.5	507.5	507.5	507.5	507.5	507.5	507.5
2.5°	500.9	501.5	500.9	501.5	502.1	502.7	502.1	502.7	502.7	503.3	502.7
5°	481.6	482.2	482.8	484.0	484.6	484.6	484.0	484.6	484.6	484.0	484.6
7.5°	460.5	459.9	460.5	461.1	461.1	461.7	461.7	460.5	461.1	461.1	462.9
10°	438.8	439.4	438.8	439.4	438.8	438.8	438.8	439.4	439.4	440.0	441.2
12.5°	424.3	424.3	423.1	423.1	423.7	423.7	423.7	423.7	423.1	424.3	424.9
15°	409.9	411.7	410.5	411.1	409.9	409.9	409.3	409.3	409.9	408.6	411.1
17.5°	396.0	397.8	397.2	397.8	397.8	396.6	396.6	397.2	397.8	397.8	400.2
20°	384.5	384.5	384.5	385.7	386.3	386.9	386.3	386.3	387.6	388.2	388.8
22.5°	370.7	371.3	373.7	373.7	373.1	374.3	373.7	375.5	376.7	377.3	379.1
25°	358.0	360.4	361.0	360.4	362.2	362.8	363.4	366.5	365.9	367.1	369.5
27.5°	346.0	347.2	349.0	350.2	352.0	350.8	352.0	353.8	353.2	358.0	358.6
30°	333.3	336.3	336.9	338.7	338.7	338.7	341.7	342.3	345.4	346.6	349.0
32.5°	323.1	323.7	325.5	327.3	327.9	329.7	330.9	332.1	333.9	335.1	336.9
35°	311.0	313.4	312.8	314.6	316.4	319.4	319.4	320.6	321.9	325.5	326.7
37.5°	299.0	300.8	300.8	303.8	305.0	306.8	305.0	310.4	312.2	314.0	315.8
40°	286.9	288.1	289.3	290.5	291.7	292.9	294.7	297.7	300.2	302.0	303.8
42.5°	273.0	274.8	276.0	277.3	279.7	280.9	282.7	284.5	288.1	289.9	292.3
45°	260.4	261.6	262.8	264.0	266.4	265.8	268.8	272.4	276.0	277.9	280.3
47.5°	244.7	247.1	249.5	250.1	251.9	254.3	255.6	259.8	263.4	264.6	268.2
50°	231.4	231.4	234.5	236.3	238.1	241.1	242.3	245.9	250.1	253.7	256.2
52.5°	215.8	217.6	219.4	221.8	224.8	226.6	228.4	232.7	238.1	242.9	245.3
55°	199.5	201.3	204.3	206.7	209.7	211.6	214.6	219.4	224.2	228.4	233.3
57.5°	185.6	185.6	187.4	190.5	194.1	196.5	198.9	204.3	210.4	212.2	217.6
60°	168.8	170.6	172.4	175.4	179.0	181.4	183.2	188.7	193.5	198.3	201.9
62.5°	152.5	154.3	156.1	159.1	163.3	165.7	167.6	172.4	177.8	181.4	186.2
65°	137.4	136.8	139.2	142.8	147.1	148.9	150.7	156.1	160.3	163.9	168.2
67.5°	119.9	121.8	123.6	126.6	130.2	132.6	134.4	139.2	142.8	147.1	151.3
70°	102.5	104.3	106.1	110.3	113.9	115.1	116.9	121.8	124.8	130.8	133.8
72.5°	85.6	87.4	89.8	92.8	97.0	98.2	100.7	104.3	109.1	113.3	116.9
75°	69.9	71.7	72.9	75.9	79.6	82.0	83.8	88.0	92.2	96.4	100.7
77.5°	54.2	55.5	57.3	60.3	63.3	65.7	66.9	71.1	75.3	79.6	83.8
80°	38.0	39.8	41.6	44.6	47.6	50.0	51.8	56.1	59.7	63.9	67.5
82.5°	24.1	25.3	27.7	30.7	33.8	35.0	37.4	40.4	44.6	48.2	51.8
85°	12.7	13.9	15.7	18.1	21.7	22.9	24.7	27.7	31.3	35.0	38.6
87.5°	4.8	5.4	7.2	9.6	12.1	13.9	15.7	18.7	21.7	25.3	28.9
90°	0.0	1.2	3.0	5.4	7.8	9.6	10.8	13.9	16.9	19.9	23.5
92.5°	0.0	0.6	2.4	4.8	7.8	9.0	10.2	13.3	16.3	19.3	22.3
95°	0.0	0.6	2.4	4.8	7.8	9.0	10.2	13.3	16.3	19.3	22.3
97.5°	0.0	0.6	2.4	4.8	7.8	9.0	10.2	13.3	16.3	19.3	22.3
100°	0.0	0.6	2.4	4.8	7.8	9.0	10.2	13.3	16.3	19.3	21.1
102.5°	0.0	0.6	2.4	4.8	7.2	9.0	10.2	13.3	16.3	18.7	20.5
105°	0.0	0.6	2.4	4.8	7.2	9.0	10.2	13.3	15.7	18.1	19.9
107.5°	0.0	0.6	2.4	4.8	7.2	8.4	10.2	12.7	15.1	17.5	19.9
110°	0.0	0.6	1.8	4.2	7.2	8.4	9.6	12.7	15.1	17.5	19.3



TEST NUMBER: P241310

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

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	0.0	0.6	1.8	4.2	7.2	8.4	9.6	12.7	14.5	16.9	18.7
115°	0.0	0.6	1.8	4.2	6.6	8.4	9.6	12.1	14.5	16.3	18.1
117.5°	0.0	0.6	1.8	4.2	6.6	8.4	9.6	12.1	14.5	16.3	18.1
120°	0.0	0.0	1.8	4.2	6.6	7.8	9.6	12.1	14.5	16.3	18.1
122.5°	0.0	0.0	1.8	4.2	6.6	7.8	9.6	12.1	14.5	16.3	18.1
125°	0.0	0.0	1.8	3.6	6.6	7.8	9.0	12.1	13.9	16.3	18.1
127.5°	0.0	0.0	1.2	3.6	6.0	7.2	9.0	11.5	13.9	16.3	18.1
130°	0.0	0.0	1.2	3.6	5.4	7.2	8.4	11.5	13.3	15.7	17.5
132.5°	0.0	0.0	1.2	3.0	5.4	6.6	7.8	10.8	13.3	15.1	16.9
135°	0.0	0.0	1.2	3.0	4.8	6.0	7.2	9.6	12.1	14.5	16.3
137.5°	0.0	0.0	0.6	2.4	4.8	5.4	6.6	9.0	11.5	13.3	15.1
140°	0.0	0.0	0.6	2.4	4.2	5.4	6.6	8.4	10.8	12.7	14.5
142.5°	0.0	0.0	0.6	1.8	3.6	4.8	6.0	7.8	9.6	12.1	13.9
145°	0.0	0.0	0.6	1.8	3.0	4.2	5.4	7.2	9.0	10.8	12.7
147.5°	0.0	0.0	0.6	1.2	2.4	3.6	4.2	6.6	7.8	9.6	11.5
150°	0.0	0.0	0.0	1.2	2.4	3.0	3.6	5.4	7.2	8.4	10.2
152.5°	0.0	0.0	0.0	0.6	1.8	2.4	3.0	4.2	5.4	7.2	8.4
155°	0.0	0.0	0.0	0.6	1.2	1.8	2.4	3.0	4.2	5.4	6.6
157.5°	0.0	0.0	0.0	0.0	0.6	1.2	1.2	2.4	3.0	4.2	5.4
160°	0.0	0.0	0.0	0.0	0.6	0.6	0.6	1.2	2.4	3.0	3.6
162.5°	0.0	0.0	0.0	0.0	0.0	0.6	0.6	1.2	1.2	1.8	2.4
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.6	1.2	1.2
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.6	0.6
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



TEST NUMBER: P241310

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

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	507.5	507.5	507.5	507.5	507.5	507.5	507.5	507.5	507.5	507.5
2.5°	502.7	502.7	502.7	502.1	502.1	502.1	502.1	502.1	502.7	502.1
5°	485.2	485.2	484.6	485.2	485.8	485.2	485.8	485.2	485.2	485.2
7.5°	463.5	463.5	463.5	463.5	464.1	464.1	464.1	464.7	465.3	465.3
10°	441.8	442.4	442.4	442.4	442.4	443.6	444.2	444.2	444.8	445.4
12.5°	425.5	425.5	427.3	429.7	430.3	431.6	432.8	432.2	432.2	434.0
15°	412.3	414.1	414.7	414.7	415.3	415.9	417.7	418.3	417.7	419.5
17.5°	400.8	400.8	403.8	404.4	404.4	405.0	405.0	405.6	405.6	406.2
20°	390.6	391.2	392.4	393.0	394.2	394.8	396.0	395.4	396.6	395.4
22.5°	379.7	380.3	383.9	384.5	384.5	383.9	382.7	383.9	383.9	383.3
25°	370.1	371.9	373.1	374.9	374.3	374.9	375.5	374.3	373.7	373.7
27.5°	359.8	361.0	363.4	364.0	364.0	362.8	362.8	362.8	362.2	364.0
30°	350.8	353.2	353.8	352.0	352.6	354.4	355.0	354.4	353.2	352.0
32.5°	338.7	339.9	341.7	346.0	345.4	344.8	341.7	341.1	341.1	341.7
35°	327.9	330.3	333.3	331.5	332.1	332.1	333.3	332.7	330.3	332.7
37.5°	317.0	320.6	320.6	323.7	322.5	321.3	319.4	320.6	320.0	320.0
40°	305.6	307.4	310.4	309.8	309.2	310.4	310.4	310.4	310.4	310.4
42.5°	294.1	296.5	296.5	297.1	299.6	300.2	299.6	295.3	297.1	296.5
45°	281.5	283.9	285.1	286.3	285.1	284.5	285.7	286.3	285.1	286.3
47.5°	270.6	270.6	274.2	273.6	273.6	274.8	273.6	273.6	273.0	274.8
50°	258.6	262.2	262.8	264.6	264.6	264.0	264.0	264.6	267.0	267.0
52.5°	248.9	252.5	255.0	255.6	255.6	257.4	259.2	258.6	259.8	258.6
55°	236.9	239.3	242.3	244.1	246.5	246.5	246.5	247.7	247.7	248.3
57.5°	221.8	224.2	226.0	230.2	231.4	230.8	231.4	233.9	233.3	235.7
60°	205.5	208.5	211.0	211.6	212.8	214.0	214.6	215.8	217.0	219.4
62.5°	188.7	191.1	194.1	193.5	194.7	195.9	197.1	197.7	200.1	199.5
65°	171.8	173.6	175.4	176.0	177.2	176.0	178.4	179.6	179.6	180.8
67.5°	154.9	156.1	158.5	159.1	159.7	159.7	159.1	160.9	161.5	161.5
70°	136.8	139.8	141.6	142.8	142.2	142.8	142.2	142.2	143.4	142.8
72.5°	120.5	123.0	124.8	126.6	126.6	126.6	126.6	127.2	127.8	128.4
75°	103.7	106.7	109.7	110.3	110.9	110.9	112.1	112.7	112.7	112.7
77.5°	86.8	90.4	92.8	94.6	95.2	96.4	97.0	98.2	98.2	98.2
80°	70.5	74.1	76.5	79.6	80.8	81.4	82.6	84.4	84.4	84.4
82.5°	55.5	59.1	62.7	64.5	66.3	68.1	69.9	71.1	72.3	73.5
85°	41.6	45.8	49.4	52.4	53.6	54.8	57.3	60.3	63.3	64.5
87.5°	32.5	35.6	39.2	42.2	44.0	45.8	48.8	51.2	54.8	56.7
90°	26.5	29.5	33.1	36.8	37.4	38.6	40.4	43.4	45.8	48.2
92.5°	25.3	28.3	30.7	31.3	31.9	32.5	33.8	35.6	38.0	40.4
95°	25.9	27.1	27.7	28.9	29.5	30.7	31.9	34.4	37.4	38.6
97.5°	24.1	25.3	27.1	28.9	29.5	30.7	33.1	36.8	40.4	42.2
100°	22.9	25.3	27.1	28.9	30.1	31.3	35.0	39.2	42.2	42.8
102.5°	22.9	24.7	26.5	28.9	30.1	31.3	34.4	36.2	36.2	36.2
105°	22.3	24.1	25.9	27.7	28.3	28.9	30.1	30.1	30.1	30.1
107.5°	21.7	22.9	24.7	25.3	25.3	25.9	25.9	25.9	25.9	25.3
110°	20.5	21.7	22.9	22.9	22.9	22.9	22.9	22.9	22.9	22.9



TEST NUMBER: P241310

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

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	19.9	21.1	21.1	21.7	21.7	21.7	21.7	22.3	21.7	21.7
115°	19.3	20.5	20.5	21.1	21.1	21.1	21.7	22.3	22.3	22.3
117.5°	19.3	20.5	21.1	21.7	21.7	22.3	22.9	23.5	23.5	23.5
120°	19.3	20.5	21.7	22.3	22.9	22.9	24.1	24.7	24.7	24.7
122.5°	19.9	21.1	22.3	22.9	23.5	24.1	24.7	25.3	25.9	25.9
125°	19.9	21.1	22.9	23.5	24.1	24.1	24.7	25.9	25.9	26.5
127.5°	19.3	21.1	22.9	23.5	24.1	24.7	25.3	25.9	26.5	26.5
130°	19.3	21.1	22.3	23.5	24.1	24.7	25.3	25.9	26.5	27.1
132.5°	18.7	19.9	21.7	22.9	23.5	24.1	24.7	25.9	26.5	26.5
135°	18.1	19.3	21.1	22.3	22.9	23.5	24.7	25.3	25.9	25.9
137.5°	16.9	18.7	19.9	21.1	21.7	22.3	23.5	24.7	24.7	25.3
140°	16.3	17.5	19.3	20.5	21.1	21.7	22.3	23.5	24.1	24.1
142.5°	15.1	16.9	18.1	19.3	19.9	20.5	21.1	22.3	22.9	22.9
145°	13.9	15.7	16.9	18.1	18.7	19.3	19.9	20.5	21.1	21.1
147.5°	12.7	14.5	15.7	16.3	16.9	17.5	18.1	18.7	19.3	19.3
150°	11.5	12.7	13.9	14.5	15.1	15.7	16.3	16.3	16.9	16.9
152.5°	9.6	10.8	12.1	12.7	13.3	13.3	13.9	14.5	14.5	14.5
155°	7.8	9.0	9.6	10.2	10.8	11.5	11.5	12.1	12.1	12.1
157.5°	6.0	7.2	7.8	8.4	9.0	9.0	9.6	9.6	9.6	9.6
160°	4.2	5.4	6.0	6.6	6.6	6.6	7.2	7.2	7.2	7.2
162.5°	3.0	3.6	4.2	4.8	4.8	4.8	4.8	5.4	5.4	5.4
165°	1.8	2.4	2.4	3.0	3.0	3.0	3.6	3.6	3.6	3.6
167.5°	0.6	1.2	1.2	1.8	1.8	1.8	1.8	1.8	2.4	2.4
170°	0.0	0.6	0.6	0.6	0.6	0.6	0.6	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
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)