

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: P241309

Luminaire Tested: **FVS8M-2-LD4-30-1LO-P125-UNV-EDC1**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P241309
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-LD4-30-1LO-P125-UNV-EDC1
Description: FAILSAFE FVS8M LED FIXTURE
2FT LENGTH, 1-MODULE LED WITH P125 LENS
Light Source: (42) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

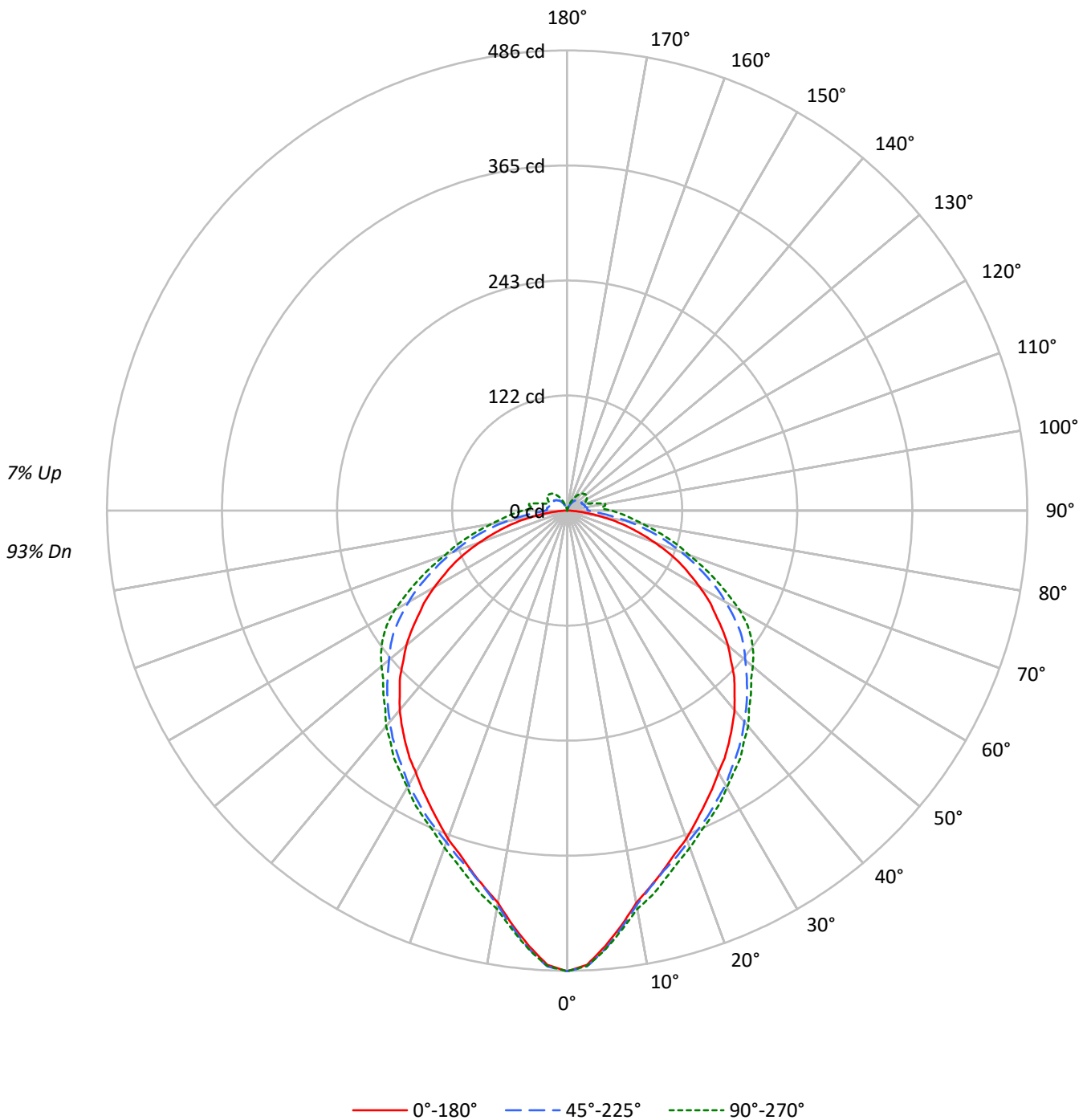
Lumens per Lamp: N/A
Luminaire Lumens: 1296.0 lumens
Efficiency: N/A
Efficacy: 104.5 lumens/watt
Spacing Criteria (0/90/45): 0.99 / 1.04 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.65' x L: 1.85' x H: 0.15')
CIE Type: Direct

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: P241309

CATALOG NUMBER: FVS8M-2-LD4-30-1LO-P125-UNV-EDC1

Luminous Intensity Polar Plot





TEST NUMBER: P241309

CATALOG NUMBER: FVS8M-2-LD4-30-1LO-P125-UNV-EDC1

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				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°	4373	4373	4373
5°	4137	4114	4115
10°	3786	3719	3748
15°	3581	3467	3528
20°	3428	3306	3350
25°	3283	3192	3214
30°	3172	3088	3098
35°	3100	2986	3022
40°	3027	2894	2935
45°	2942	2811	2846
50°	2837	2732	2820
55°	2694	2680	2820
60°	2560	2534	2718
65°	2397	2346	2483
70°	2122	2119	2220
75°	1799	1858	2035
80°	1303	1508	1836
85°	657	1103	1780



TEST NUMBER: P241309

CATALOG NUMBER: FVS8M-2-LD4-30-1LO-P125-UNV-EDC1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	43.0	3.3
10°-20°	111.8	8.6
20°-30°	162.8	12.6
30°-40°	194.9	15.0
40°-50°	205.0	15.8
50°-60°	195.0	15.0
60°-70°	154.9	12.0
70°-80°	97.5	7.5
80°-90°	42.4	3.3
90°-100°	21.7	1.7
100°-110°	18.4	1.4
110°-120°	14.3	1.1
120°-130°	13.4	1.0
130°-140°	10.7	0.8
140°-150°	6.9	0.5
150°-160°	2.9	0.2
160°-170°	0.5	0.0
170°-180°	0.0	0.0
0°-30°	317.5	24.5
0°-40°	512.4	39.5
0°-60°	912.4	70.4
0°-90°	1207.2	93.1
90°-120°	54.4	4.2
90°-150°	85.4	6.6
90°-180°	89.0	6.9
0°-180°	1296.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	486	486	486	486	486	
5°	462	464	464	466	465	43
15°	393	393	394	398	402	111
25°	343	348	354	359	358	158
35°	298	306	313	318	319	187
45°	250	255	269	273	274	192
55°	191	203	224	236	238	172
65°	132	143	161	170	173	129
75°	67	79	96	106	108	71
85°	12	22	37	51	62	15
90°	0	9	22	36	46	1
95°	0	9	21	28	37	0
105°	0	9	19	27	29	0
115°	0	8	17	20	21	0
125°	0	8	17	23	25	0
135°	0	6	16	22	25	0
145°	0	4	12	18	20	0
155°	0	2	6	10	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: P241309

CATALOG NUMBER: FVS8M-2-LD4-30-1LO-P125-UNV-EDC1

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	486.5	486.5	486.5	486.5	486.5	486.5	486.5	486.5	486.5	486.5	486.5
2.5°	480.1	480.7	480.1	480.7	481.3	481.9	481.3	481.9	481.9	482.4	481.9
5°	461.6	462.2	462.8	463.9	464.5	464.5	463.9	464.5	464.5	463.9	464.5
7.5°	441.4	440.8	441.4	442.0	442.0	442.6	442.6	441.4	442.0	442.0	443.7
10°	420.6	421.2	420.6	421.2	420.6	420.6	420.6	421.2	421.2	421.8	422.9
12.5°	406.7	406.7	405.6	405.6	406.2	406.2	406.2	406.2	405.6	406.7	407.3
15°	392.9	394.6	393.5	394.0	392.9	392.9	392.3	392.3	392.9	391.7	394.0
17.5°	379.6	381.3	380.7	381.3	381.3	380.2	380.2	380.7	381.3	381.3	383.6
20°	368.6	368.6	368.6	369.8	370.3	370.9	370.3	370.3	371.5	372.1	372.7
22.5°	355.3	355.9	358.2	358.2	357.6	358.8	358.2	359.9	361.1	361.7	363.4
25°	343.2	345.5	346.1	345.5	347.2	347.8	348.4	351.3	350.7	351.9	354.2
27.5°	331.6	332.8	334.5	335.7	337.4	336.3	337.4	339.1	338.6	343.2	343.8
30°	319.5	322.4	323.0	324.7	324.7	324.7	327.6	328.2	331.1	332.2	334.5
32.5°	309.7	310.3	312.0	313.7	314.3	316.0	317.2	318.3	320.1	321.2	323.0
35°	298.1	300.4	299.9	301.6	303.3	306.2	306.2	307.4	308.5	312.0	313.1
37.5°	286.6	288.3	288.3	291.2	292.3	294.1	292.3	297.5	299.3	301.0	302.7
40°	275.0	276.2	277.3	278.5	279.6	280.8	282.5	285.4	287.7	289.5	291.2
42.5°	261.7	263.5	264.6	265.8	268.1	269.2	271.0	272.7	276.2	277.9	280.2
45°	249.6	250.7	251.9	253.1	255.4	254.8	257.7	261.1	264.6	266.3	268.7
47.5°	234.6	236.9	239.2	239.8	241.5	243.8	245.0	249.0	252.5	253.6	257.1
50°	221.9	221.9	224.7	226.5	228.2	231.1	232.3	235.7	239.8	243.2	245.5
52.5°	206.8	208.6	210.3	212.6	215.5	217.2	219.0	223.0	228.2	232.8	235.1
55°	191.2	193.0	195.9	198.2	201.1	202.8	205.7	210.3	214.9	219.0	223.6
57.5°	177.9	177.9	179.7	182.6	186.0	188.3	190.7	195.9	201.6	203.4	208.6
60°	161.8	163.5	165.2	168.1	171.6	173.9	175.6	180.8	185.5	190.1	193.5
62.5°	146.2	147.9	149.6	152.5	156.6	158.9	160.6	165.2	170.4	173.9	178.5
65°	131.7	131.2	133.5	136.9	141.0	142.7	144.4	149.6	153.7	157.2	161.2
67.5°	115.0	116.7	118.4	121.3	124.8	127.1	128.8	133.5	136.9	141.0	145.0
70°	98.2	100.0	101.7	105.7	109.2	110.4	112.1	116.7	119.6	125.4	128.3
72.5°	82.0	83.8	86.1	89.0	93.0	94.2	96.5	100.0	104.6	108.6	112.1
75°	67.0	68.8	69.9	72.8	76.3	78.6	80.3	84.4	88.4	92.4	96.5
77.5°	52.0	53.2	54.9	57.8	60.7	63.0	64.1	68.2	72.2	76.3	80.3
80°	36.4	38.1	39.9	42.8	45.6	48.0	49.7	53.7	57.2	61.2	64.7
82.5°	23.1	24.3	26.6	29.5	32.4	33.5	35.8	38.7	42.8	46.2	49.7
85°	12.1	13.3	15.0	17.3	20.8	22.0	23.7	26.6	30.0	33.5	37.0
87.5°	4.6	5.2	6.9	9.2	11.6	13.3	15.0	17.9	20.8	24.3	27.7
90°	0.0	1.2	2.9	5.2	7.5	9.2	10.4	13.3	16.2	19.1	22.5
92.5°	0.0	0.6	2.3	4.6	7.5	8.7	9.8	12.7	15.6	18.5	21.4
95°	0.0	0.6	2.3	4.6	7.5	8.7	9.8	12.7	15.6	18.5	21.4
97.5°	0.0	0.6	2.3	4.6	7.5	8.7	9.8	12.7	15.6	18.5	21.4
100°	0.0	0.6	2.3	4.6	7.5	8.7	9.8	12.7	15.6	18.5	20.2
102.5°	0.0	0.6	2.3	4.6	6.9	8.7	9.8	12.7	15.6	17.9	19.6
105°	0.0	0.6	2.3	4.6	6.9	8.7	9.8	12.7	15.0	17.3	19.1
107.5°	0.0	0.6	2.3	4.6	6.9	8.1	9.8	12.1	14.4	16.8	19.1
110°	0.0	0.6	1.7	4.0	6.9	8.1	9.2	12.1	14.4	16.8	18.5



TEST NUMBER: P241309

CATALOG NUMBER: FVS8M-2-LD4-30-1LO-P125-UNV-EDC1

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	0.0	0.6	1.7	4.0	6.9	8.1	9.2	12.1	13.9	16.2	17.9
115°	0.0	0.6	1.7	4.0	6.4	8.1	9.2	11.6	13.9	15.6	17.3
117.5°	0.0	0.6	1.7	4.0	6.4	8.1	9.2	11.6	13.9	15.6	17.3
120°	0.0	0.0	1.7	4.0	6.4	7.5	9.2	11.6	13.9	15.6	17.3
122.5°	0.0	0.0	1.7	4.0	6.4	7.5	9.2	11.6	13.9	15.6	17.3
125°	0.0	0.0	1.7	3.5	6.4	7.5	8.7	11.6	13.3	15.6	17.3
127.5°	0.0	0.0	1.2	3.5	5.8	6.9	8.7	11.0	13.3	15.6	17.3
130°	0.0	0.0	1.2	3.5	5.2	6.9	8.1	11.0	12.7	15.0	16.8
132.5°	0.0	0.0	1.2	2.9	5.2	6.4	7.5	10.4	12.7	14.4	16.2
135°	0.0	0.0	1.2	2.9	4.6	5.8	6.9	9.2	11.6	13.9	15.6
137.5°	0.0	0.0	0.6	2.3	4.6	5.2	6.4	8.7	11.0	12.7	14.4
140°	0.0	0.0	0.6	2.3	4.0	5.2	6.4	8.1	10.4	12.1	13.9
142.5°	0.0	0.0	0.6	1.7	3.5	4.6	5.8	7.5	9.2	11.6	13.3
145°	0.0	0.0	0.6	1.7	2.9	4.0	5.2	6.9	8.7	10.4	12.1
147.5°	0.0	0.0	0.6	1.2	2.3	3.5	4.0	6.4	7.5	9.2	11.0
150°	0.0	0.0	0.0	1.2	2.3	2.9	3.5	5.2	6.9	8.1	9.8
152.5°	0.0	0.0	0.0	0.6	1.7	2.3	2.9	4.0	5.2	6.9	8.1
155°	0.0	0.0	0.0	0.6	1.2	1.7	2.3	2.9	4.0	5.2	6.4
157.5°	0.0	0.0	0.0	0.0	0.6	1.2	1.2	2.3	2.9	4.0	5.2
160°	0.0	0.0	0.0	0.0	0.6	0.6	0.6	1.2	2.3	2.9	3.5
162.5°	0.0	0.0	0.0	0.0	0.0	0.6	0.6	1.2	1.2	1.7	2.3
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: P241309

CATALOG NUMBER: FVS8M-2-LD4-30-1LO-P125-UNV-EDC1

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	486.5	486.5	486.5	486.5	486.5	486.5	486.5	486.5	486.5	486.5
2.5°	481.9	481.9	481.9	481.3	481.3	481.3	481.3	481.3	481.9	481.3
5°	465.1	465.1	464.5	465.1	465.7	465.1	465.7	465.1	465.1	465.1
7.5°	444.3	444.3	444.3	444.3	444.9	444.9	444.9	445.5	446.0	446.0
10°	423.5	424.1	424.1	424.1	424.1	425.2	425.8	425.8	426.4	427.0
12.5°	407.9	407.9	409.6	411.9	412.5	413.7	414.8	414.3	414.3	416.0
15°	395.2	396.9	397.5	397.5	398.1	398.7	400.4	401.0	400.4	402.1
17.5°	384.2	384.2	387.1	387.7	387.7	388.3	388.3	388.8	388.8	389.4
20°	374.4	375.0	376.1	376.7	377.9	378.4	379.6	379.0	380.2	379.0
22.5°	364.0	364.6	368.0	368.6	368.6	368.0	366.9	368.0	368.0	367.5
25°	354.7	356.5	357.6	359.4	358.8	359.4	359.9	358.8	358.2	358.2
27.5°	344.9	346.1	348.4	349.0	349.0	347.8	347.8	347.8	347.2	349.0
30°	336.3	338.6	339.1	337.4	338.0	339.7	340.3	339.7	338.6	337.4
32.5°	324.7	325.9	327.6	331.6	331.1	330.5	327.6	327.0	327.0	327.6
35°	314.3	316.6	319.5	317.8	318.3	318.3	319.5	318.9	316.6	318.9
37.5°	303.9	307.4	307.4	310.3	309.1	307.9	306.2	307.4	306.8	306.8
40°	292.9	294.7	297.5	297.0	296.4	297.5	297.5	297.5	297.5	297.5
42.5°	281.9	284.3	284.3	284.8	287.1	287.7	287.1	283.1	284.8	284.3
45°	269.8	272.1	273.3	274.4	273.3	272.7	273.9	274.4	273.3	274.4
47.5°	259.4	259.4	262.9	262.3	262.3	263.5	262.3	262.3	261.7	263.5
50°	247.9	251.3	251.9	253.6	253.6	253.1	253.1	253.6	255.9	255.9
52.5°	238.6	242.1	244.4	245.0	245.0	246.7	248.4	247.9	249.0	247.9
55°	227.1	229.4	232.3	234.0	236.3	236.3	236.3	237.5	237.5	238.0
57.5°	212.6	214.9	216.7	220.7	221.9	221.3	221.9	224.2	223.6	225.9
60°	197.0	199.9	202.2	202.8	203.9	205.1	205.7	206.8	208.0	210.3
62.5°	180.8	183.1	186.0	185.5	186.6	187.8	188.9	189.5	191.8	191.2
65°	164.7	166.4	168.1	168.7	169.9	168.7	171.0	172.2	172.2	173.3
67.5°	148.5	149.6	152.0	152.5	153.1	153.1	152.5	154.3	154.8	154.8
70°	131.2	134.0	135.8	136.9	136.4	136.9	136.4	136.4	137.5	136.9
72.5°	115.6	117.9	119.6	121.3	121.3	121.3	121.3	121.9	122.5	123.1
75°	99.4	102.3	105.2	105.7	106.3	106.3	107.5	108.0	108.0	108.0
77.5°	83.2	86.7	89.0	90.7	91.3	92.4	93.0	94.2	94.2	94.2
80°	67.6	71.1	73.4	76.3	77.4	78.0	79.2	80.9	80.9	80.9
82.5°	53.2	56.6	60.1	61.8	63.6	65.3	67.0	68.2	69.3	70.5
85°	39.9	43.9	47.4	50.3	51.4	52.6	54.9	57.8	60.7	61.8
87.5°	31.2	34.1	37.6	40.4	42.2	43.9	46.8	49.1	52.6	54.3
90°	25.4	28.3	31.8	35.2	35.8	37.0	38.7	41.6	43.9	46.2
92.5°	24.3	27.2	29.5	30.0	30.6	31.2	32.4	34.1	36.4	38.7
95°	24.8	26.0	26.6	27.7	28.3	29.5	30.6	32.9	35.8	37.0
97.5°	23.1	24.3	26.0	27.7	28.3	29.5	31.8	35.2	38.7	40.4
100°	22.0	24.3	26.0	27.7	28.9	30.0	33.5	37.6	40.4	41.0
102.5°	22.0	23.7	25.4	27.7	28.9	30.0	32.9	34.7	34.7	34.7
105°	21.4	23.1	24.8	26.6	27.2	27.7	28.9	28.9	28.9	28.9
107.5°	20.8	22.0	23.7	24.3	24.3	24.8	24.8	24.8	24.8	24.3
110°	19.6	20.8	22.0	22.0	22.0	22.0	22.0	22.0	22.0	22.0



TEST NUMBER: P241309

CATALOG NUMBER: FVS8M-2-LD4-30-1LO-P125-UNV-EDC1

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	19.1	20.2	20.2	20.8	20.8	20.8	20.8	21.4	20.8	20.8
115°	18.5	19.6	19.6	20.2	20.2	20.2	20.8	21.4	21.4	21.4
117.5°	18.5	19.6	20.2	20.8	20.8	21.4	22.0	22.5	22.5	22.5
120°	18.5	19.6	20.8	21.4	22.0	22.0	23.1	23.7	23.7	23.7
122.5°	19.1	20.2	21.4	22.0	22.5	23.1	23.7	24.3	24.8	24.8
125°	19.1	20.2	22.0	22.5	23.1	23.1	23.7	24.8	24.8	25.4
127.5°	18.5	20.2	22.0	22.5	23.1	23.7	24.3	24.8	25.4	25.4
130°	18.5	20.2	21.4	22.5	23.1	23.7	24.3	24.8	25.4	26.0
132.5°	17.9	19.1	20.8	22.0	22.5	23.1	23.7	24.8	25.4	25.4
135°	17.3	18.5	20.2	21.4	22.0	22.5	23.7	24.3	24.8	24.8
137.5°	16.2	17.9	19.1	20.2	20.8	21.4	22.5	23.7	23.7	24.3
140°	15.6	16.8	18.5	19.6	20.2	20.8	21.4	22.5	23.1	23.1
142.5°	14.4	16.2	17.3	18.5	19.1	19.6	20.2	21.4	22.0	22.0
145°	13.3	15.0	16.2	17.3	17.9	18.5	19.1	19.6	20.2	20.2
147.5°	12.1	13.9	15.0	15.6	16.2	16.8	17.3	17.9	18.5	18.5
150°	11.0	12.1	13.3	13.9	14.4	15.0	15.6	15.6	16.2	16.2
152.5°	9.2	10.4	11.6	12.1	12.7	12.7	13.3	13.9	13.9	13.9
155°	7.5	8.7	9.2	9.8	10.4	11.0	11.0	11.6	11.6	11.6
157.5°	5.8	6.9	7.5	8.1	8.7	8.7	9.2	9.2	9.2	9.2
160°	4.0	5.2	5.8	6.4	6.4	6.4	6.9	6.9	6.9	6.9
162.5°	2.9	3.5	4.0	4.6	4.6	4.6	4.6	5.2	5.2	5.2
165°	1.7	2.3	2.3	2.9	2.9	2.9	3.5	3.5	3.5	3.5
167.5°	0.6	1.2	1.2	1.7	1.7	1.7	1.7	1.7	2.3	2.3
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)