

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: P241313

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

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P241313
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-LD4-30-1STD-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

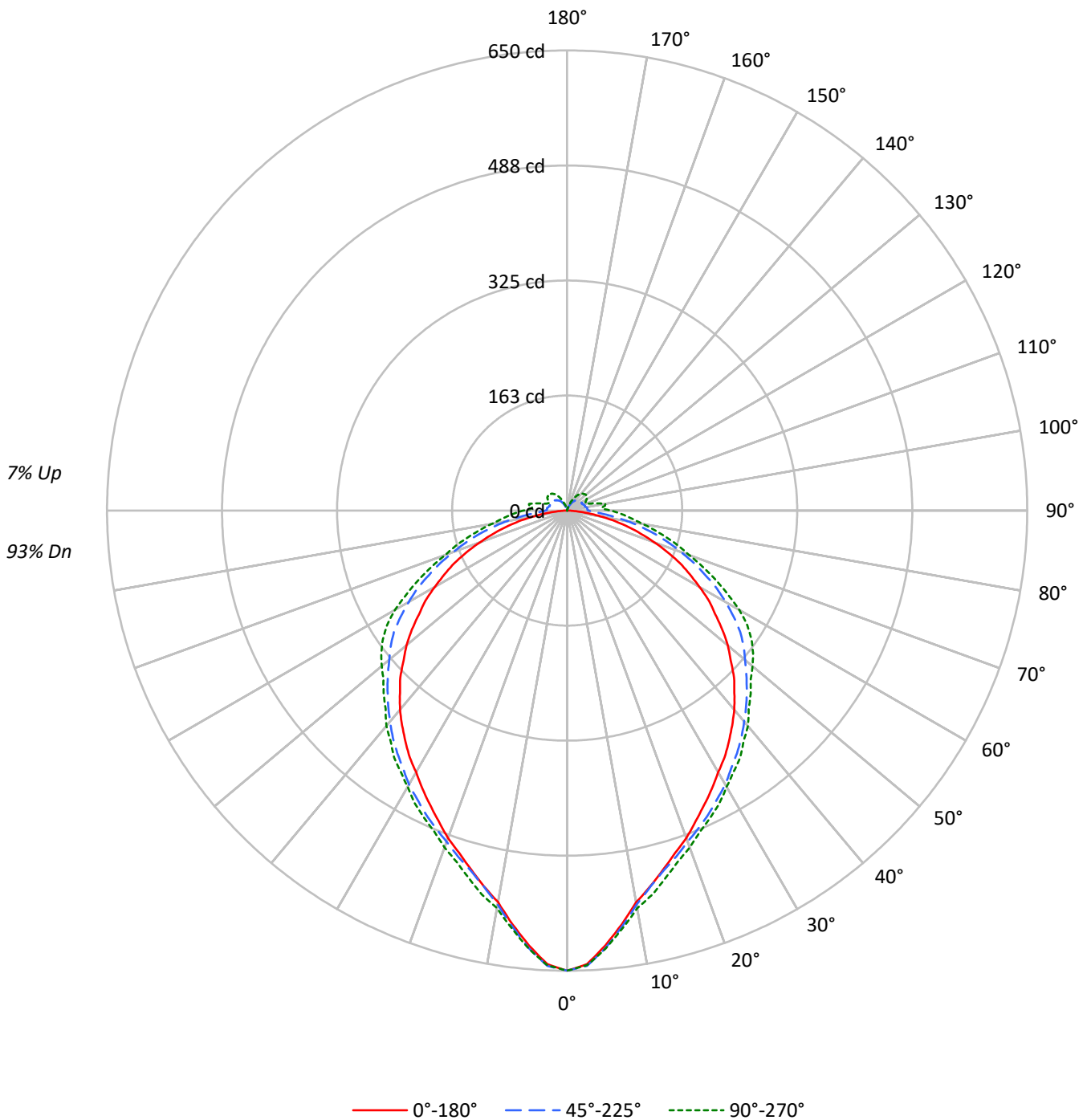
Lumens per Lamp: N/A
Luminaire Lumens: 1731.0 lumens
Efficiency: N/A
Efficacy: 100.6 lumens/watt
Spacing Criteria (0/90/45): 0.99 / 1.04 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.65' x L: 1.85' x H: 0.15')
CIE Type: Direct

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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Luminous Intensity Polar Plot





TEST NUMBER: P241313

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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°	5841	5841	5841
5°	5526	5494	5497
10°	5058	4968	5006
15°	4782	4631	4713
20°	4578	4415	4474
25°	4386	4263	4293
30°	4236	4125	4138
35°	4141	3989	4036
40°	4043	3865	3920
45°	3929	3753	3801
50°	3788	3650	3767
55°	3598	3579	3767
60°	3419	3385	3630
65°	3201	3133	3317
70°	2835	2829	2966
75°	2403	2482	2720
80°	1740	2014	2451
85°	880	1472	2379



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.4	3.3
10°-20°	149.3	8.6
20°-30°	217.4	12.6
30°-40°	260.3	15.0
40°-50°	273.8	15.8
50°-60°	260.5	15.0
60°-70°	206.9	12.0
70°-80°	130.2	7.5
80°-90°	56.6	3.3
90°-100°	29.0	1.7
100°-110°	24.6	1.4
110°-120°	19.1	1.1
120°-130°	17.9	1.0
130°-140°	14.3	0.8
140°-150°	9.2	0.5
150°-160°	3.9	0.2
160°-170°	0.7	0.0
170°-180°	0.0	0.0
0°-30°	424.1	24.5
0°-40°	684.4	39.5
0°-60°	1218.7	70.4
0°-90°	1612.4	93.1
90°-120°	72.6	4.2
90°-150°	114.1	6.6
90°-180°	119.0	6.9
0°-180°	1731.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	650	650	650	650	650	
5°	617	620	620	622	621	57
15°	525	525	526	532	537	148
25°	458	465	473	479	478	212
35°	398	409	418	425	426	249
45°	333	340	359	365	366	256
55°	255	271	299	316	318	229
65°	176	191	215	227	232	173
75°	90	105	129	142	144	94
85°	16	29	49	69	83	20
90°	0	12	30	48	62	1
95°	0	12	29	38	49	0
105°	0	12	26	36	39	0
115°	0	11	23	27	29	0
125°	0	10	23	31	34	0
135°	0	8	21	29	33	0
145°	0	5	16	24	27	0
155°	0	2	8	14	15	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°	649.8	649.8	649.8	649.8	649.8	649.8	649.8	649.8	649.8	649.8	649.8
2.5°	641.3	642.0	641.3	642.0	642.8	643.6	642.8	643.6	643.6	644.4	643.6
5°	616.6	617.3	618.1	619.7	620.4	620.4	619.7	620.4	620.4	619.7	620.4
7.5°	589.6	588.8	589.6	590.3	590.3	591.1	591.1	589.6	590.3	590.3	592.7
10°	561.8	562.6	561.8	562.6	561.8	561.8	561.8	562.6	562.6	563.3	564.9
12.5°	543.3	543.3	541.7	541.7	542.5	542.5	542.5	542.5	541.7	543.3	544.0
15°	524.7	527.1	525.5	526.3	524.7	524.7	524.0	524.0	524.7	523.2	526.3
17.5°	507.0	509.3	508.5	509.3	509.3	507.8	507.8	508.5	509.3	509.3	512.4
20°	492.3	492.3	492.3	493.9	494.6	495.4	494.6	494.6	496.2	497.0	497.7
22.5°	474.6	475.4	478.4	478.4	477.7	479.2	478.4	480.8	482.3	483.1	485.4
25°	458.4	461.5	462.2	461.5	463.8	464.6	465.3	469.2	468.4	470.0	473.0
27.5°	442.9	444.5	446.8	448.3	450.7	449.1	450.7	453.0	452.2	458.4	459.2
30°	426.7	430.6	431.4	433.7	433.7	433.7	437.5	438.3	442.2	443.7	446.8
32.5°	413.6	414.4	416.7	419.0	419.8	422.1	423.7	425.2	427.5	429.1	431.4
35°	398.2	401.3	400.5	402.8	405.1	409.0	409.0	410.5	412.1	416.7	418.3
37.5°	382.8	385.1	385.1	388.9	390.5	392.8	390.5	397.4	399.7	402.0	404.4
40°	367.3	368.9	370.4	372.0	373.5	375.0	377.4	381.2	384.3	386.6	388.9
42.5°	349.6	351.9	353.4	355.0	358.1	359.6	361.9	364.2	368.9	371.2	374.3
45°	333.4	334.9	336.5	338.0	341.1	340.3	344.2	348.8	353.4	355.7	358.8
47.5°	313.3	316.4	319.5	320.2	322.6	325.7	327.2	332.6	337.2	338.8	343.4
50°	296.3	296.3	300.2	302.5	304.8	308.7	310.2	314.8	320.2	324.9	328.0
52.5°	276.3	278.6	280.9	284.0	287.8	290.2	292.5	297.9	304.8	311.0	314.1
55°	255.4	257.7	261.6	264.7	268.5	270.9	274.7	280.9	287.1	292.5	298.6
57.5°	237.7	237.7	240.0	243.9	248.5	251.6	254.7	261.6	269.3	271.6	278.6
60°	216.1	218.4	220.7	224.6	229.2	232.3	234.6	241.5	247.7	253.9	258.5
62.5°	195.2	197.6	199.9	203.7	209.1	212.2	214.5	220.7	227.6	232.3	238.5
65°	175.9	175.2	178.3	182.9	188.3	190.6	192.9	199.9	205.3	209.9	215.3
67.5°	153.6	155.9	158.2	162.1	166.7	169.8	172.1	178.3	182.9	188.3	193.7
70°	131.2	133.5	135.8	141.2	145.8	147.4	149.7	155.9	159.7	167.5	171.3
72.5°	109.6	111.9	115.0	118.8	124.2	125.8	128.9	133.5	139.7	145.1	149.7
75°	89.5	91.8	93.4	97.2	101.9	104.9	107.3	112.7	118.1	123.5	128.9
77.5°	69.5	71.0	73.3	77.2	81.0	84.1	85.7	91.1	96.5	101.9	107.3
80°	48.6	50.9	53.2	57.1	61.0	64.0	66.4	71.8	76.4	81.8	86.4
82.5°	30.9	32.4	35.5	39.4	43.2	44.8	47.8	51.7	57.1	61.7	66.4
85°	16.2	17.7	20.1	23.2	27.8	29.3	31.6	35.5	40.1	44.8	49.4
87.5°	6.2	6.9	9.3	12.3	15.4	17.7	20.1	23.9	27.8	32.4	37.0
90°	0.0	1.5	3.9	6.9	10.0	12.3	13.9	17.7	21.6	25.5	30.1
92.5°	0.0	0.8	3.1	6.2	10.0	11.6	13.1	17.0	20.8	24.7	28.6
95°	0.0	0.8	3.1	6.2	10.0	11.6	13.1	17.0	20.8	24.7	28.6
97.5°	0.0	0.8	3.1	6.2	10.0	11.6	13.1	17.0	20.8	24.7	28.6
100°	0.0	0.8	3.1	6.2	10.0	11.6	13.1	17.0	20.8	24.7	27.0
102.5°	0.0	0.8	3.1	6.2	9.3	11.6	13.1	17.0	20.8	23.9	26.2
105°	0.0	0.8	3.1	6.2	9.3	11.6	13.1	17.0	20.1	23.2	25.5
107.5°	0.0	0.8	3.1	6.2	9.3	10.8	13.1	16.2	19.3	22.4	25.5
110°	0.0	0.8	2.3	5.4	9.3	10.8	12.3	16.2	19.3	22.4	24.7



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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	2.3	5.4	9.3	10.8	12.3	16.2	18.5	21.6	23.9
115°	0.0	0.8	2.3	5.4	8.5	10.8	12.3	15.4	18.5	20.8	23.2
117.5°	0.0	0.8	2.3	5.4	8.5	10.8	12.3	15.4	18.5	20.8	23.2
120°	0.0	0.0	2.3	5.4	8.5	10.0	12.3	15.4	18.5	20.8	23.2
122.5°	0.0	0.0	2.3	5.4	8.5	10.0	12.3	15.4	18.5	20.8	23.2
125°	0.0	0.0	2.3	4.6	8.5	10.0	11.6	15.4	17.7	20.8	23.2
127.5°	0.0	0.0	1.5	4.6	7.7	9.3	11.6	14.7	17.7	20.8	23.2
130°	0.0	0.0	1.5	4.6	6.9	9.3	10.8	14.7	17.0	20.1	22.4
132.5°	0.0	0.0	1.5	3.9	6.9	8.5	10.0	13.9	17.0	19.3	21.6
135°	0.0	0.0	1.5	3.9	6.2	7.7	9.3	12.3	15.4	18.5	20.8
137.5°	0.0	0.0	0.8	3.1	6.2	6.9	8.5	11.6	14.7	17.0	19.3
140°	0.0	0.0	0.8	3.1	5.4	6.9	8.5	10.8	13.9	16.2	18.5
142.5°	0.0	0.0	0.8	2.3	4.6	6.2	7.7	10.0	12.3	15.4	17.7
145°	0.0	0.0	0.8	2.3	3.9	5.4	6.9	9.3	11.6	13.9	16.2
147.5°	0.0	0.0	0.8	1.5	3.1	4.6	5.4	8.5	10.0	12.3	14.7
150°	0.0	0.0	0.0	1.5	3.1	3.9	4.6	6.9	9.3	10.8	13.1
152.5°	0.0	0.0	0.0	0.8	2.3	3.1	3.9	5.4	6.9	9.3	10.8
155°	0.0	0.0	0.0	0.8	1.5	2.3	3.1	3.9	5.4	6.9	8.5
157.5°	0.0	0.0	0.0	0.0	0.8	1.5	1.5	3.1	3.9	5.4	6.9
160°	0.0	0.0	0.0	0.0	0.8	0.8	0.8	1.5	3.1	3.9	4.6
162.5°	0.0	0.0	0.0	0.0	0.0	0.8	0.8	1.5	1.5	2.3	3.1
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8	1.5	1.5
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°	649.8	649.8	649.8	649.8	649.8	649.8	649.8	649.8	649.8	649.8
2.5°	643.6	643.6	643.6	642.8	642.8	642.8	642.8	642.8	643.6	642.8
5°	621.2	621.2	620.4	621.2	622.0	621.2	622.0	621.2	621.2	621.2
7.5°	593.4	593.4	593.4	593.4	594.2	594.2	594.2	595.0	595.7	595.7
10°	565.6	566.4	566.4	566.4	566.4	568.0	568.7	568.7	569.5	570.3
12.5°	544.8	544.8	547.1	550.2	551.0	552.5	554.1	553.3	553.3	555.6
15°	527.8	530.1	530.9	530.9	531.7	532.5	534.8	535.5	534.8	537.1
17.5°	513.2	513.2	517.0	517.8	517.8	518.6	518.6	519.3	519.3	520.1
20°	500.1	500.8	502.4	503.1	504.7	505.5	507.0	506.2	507.8	506.2
22.5°	486.2	486.9	491.6	492.3	492.3	491.6	490.0	491.6	491.6	490.8
25°	473.8	476.1	477.7	480.0	479.2	480.0	480.8	479.2	478.4	478.4
27.5°	460.7	462.2	465.3	466.1	466.1	464.6	464.6	464.6	463.8	466.1
30°	449.1	452.2	453.0	450.7	451.4	453.7	454.5	453.7	452.2	450.7
32.5°	433.7	435.2	437.5	442.9	442.2	441.4	437.5	436.8	436.8	437.5
35°	419.8	422.9	426.7	424.4	425.2	425.2	426.7	426.0	422.9	426.0
37.5°	405.9	410.5	410.5	414.4	412.9	411.3	409.0	410.5	409.8	409.8
40°	391.2	393.6	397.4	396.6	395.9	397.4	397.4	397.4	397.4	397.4
42.5°	376.6	379.7	379.7	380.4	383.5	384.3	383.5	378.1	380.4	379.7
45°	360.4	363.5	365.0	366.5	365.0	364.2	365.8	366.5	365.0	366.5
47.5°	346.5	346.5	351.1	350.3	350.3	351.9	350.3	350.3	349.6	351.9
50°	331.1	335.7	336.5	338.8	338.8	338.0	338.0	338.8	341.9	341.9
52.5°	318.7	323.3	326.4	327.2	327.2	329.5	331.8	331.1	332.6	331.1
55°	303.3	306.4	310.2	312.5	315.6	315.6	315.6	317.2	317.2	317.9
57.5°	284.0	287.1	289.4	294.8	296.3	295.6	296.3	299.4	298.6	301.7
60°	263.1	267.0	270.1	270.9	272.4	273.9	274.7	276.3	277.8	280.9
62.5°	241.5	244.6	248.5	247.7	249.3	250.8	252.3	253.1	256.2	255.4
65°	219.9	222.2	224.6	225.3	226.9	225.3	228.4	230.0	230.0	231.5
67.5°	198.3	199.9	203.0	203.7	204.5	204.5	203.7	206.0	206.8	206.8
70°	175.2	179.0	181.3	182.9	182.1	182.9	182.1	182.1	183.7	182.9
72.5°	154.3	157.4	159.7	162.1	162.1	162.1	162.1	162.8	163.6	164.4
75°	132.7	136.6	140.4	141.2	142.0	142.0	143.5	144.3	144.3	144.3
77.5°	111.1	115.8	118.8	121.2	121.9	123.5	124.2	125.8	125.8	125.8
80°	90.3	94.9	98.0	101.9	103.4	104.2	105.7	108.0	108.0	108.0
82.5°	71.0	75.6	80.3	82.6	84.9	87.2	89.5	91.1	92.6	94.1
85°	53.2	58.6	63.3	67.1	68.7	70.2	73.3	77.2	81.0	82.6
87.5°	41.7	45.5	50.2	54.0	56.3	58.6	62.5	65.6	70.2	72.5
90°	34.0	37.8	42.4	47.1	47.8	49.4	51.7	55.6	58.6	61.7
92.5°	32.4	36.3	39.4	40.1	40.9	41.7	43.2	45.5	48.6	51.7
95°	33.2	34.7	35.5	37.0	37.8	39.4	40.9	44.0	47.8	49.4
97.5°	30.9	32.4	34.7	37.0	37.8	39.4	42.4	47.1	51.7	54.0
100°	29.3	32.4	34.7	37.0	38.6	40.1	44.8	50.2	54.0	54.8
102.5°	29.3	31.6	34.0	37.0	38.6	40.1	44.0	46.3	46.3	46.3
105°	28.6	30.9	33.2	35.5	36.3	37.0	38.6	38.6	38.6	38.6
107.5°	27.8	29.3	31.6	32.4	32.4	33.2	33.2	33.2	33.2	32.4
110°	26.2	27.8	29.3	29.3	29.3	29.3	29.3	29.3	29.3	29.3



TEST NUMBER: P241313

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

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	25.5	27.0	27.0	27.8	27.8	27.8	27.8	28.6	27.8	27.8
115°	24.7	26.2	26.2	27.0	27.0	27.0	27.8	28.6	28.6	28.6
117.5°	24.7	26.2	27.0	27.8	27.8	28.6	29.3	30.1	30.1	30.1
120°	24.7	26.2	27.8	28.6	29.3	29.3	30.9	31.6	31.6	31.6
122.5°	25.5	27.0	28.6	29.3	30.1	30.9	31.6	32.4	33.2	33.2
125°	25.5	27.0	29.3	30.1	30.9	30.9	31.6	33.2	33.2	34.0
127.5°	24.7	27.0	29.3	30.1	30.9	31.6	32.4	33.2	34.0	34.0
130°	24.7	27.0	28.6	30.1	30.9	31.6	32.4	33.2	34.0	34.7
132.5°	23.9	25.5	27.8	29.3	30.1	30.9	31.6	33.2	34.0	34.0
135°	23.2	24.7	27.0	28.6	29.3	30.1	31.6	32.4	33.2	33.2
137.5°	21.6	23.9	25.5	27.0	27.8	28.6	30.1	31.6	31.6	32.4
140°	20.8	22.4	24.7	26.2	27.0	27.8	28.6	30.1	30.9	30.9
142.5°	19.3	21.6	23.2	24.7	25.5	26.2	27.0	28.6	29.3	29.3
145°	17.7	20.1	21.6	23.2	23.9	24.7	25.5	26.2	27.0	27.0
147.5°	16.2	18.5	20.1	20.8	21.6	22.4	23.2	23.9	24.7	24.7
150°	14.7	16.2	17.7	18.5	19.3	20.1	20.8	20.8	21.6	21.6
152.5°	12.3	13.9	15.4	16.2	17.0	17.0	17.7	18.5	18.5	18.5
155°	10.0	11.6	12.3	13.1	13.9	14.7	14.7	15.4	15.4	15.4
157.5°	7.7	9.3	10.0	10.8	11.6	11.6	12.3	12.3	12.3	12.3
160°	5.4	6.9	7.7	8.5	8.5	8.5	9.3	9.3	9.3	9.3
162.5°	3.9	4.6	5.4	6.2	6.2	6.2	6.2	6.9	6.9	6.9
165°	2.3	3.1	3.1	3.9	3.9	3.9	4.6	4.6	4.6	4.6
167.5°	0.8	1.5	1.5	2.3	2.3	2.3	2.3	2.3	3.1	3.1
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)