

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: P241381

Luminaire Tested: **FVS8M-4-LD4-30-1LO-P125-UNV-EDC1**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P241381
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-LD4-30-1LO-P125-UNV-EDC1
Description: FAILSAFE FVS8M LED FIXTURE
4FT LENGTH, 1-MODULE LED WITH P125 LENS
Light Source: (84) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

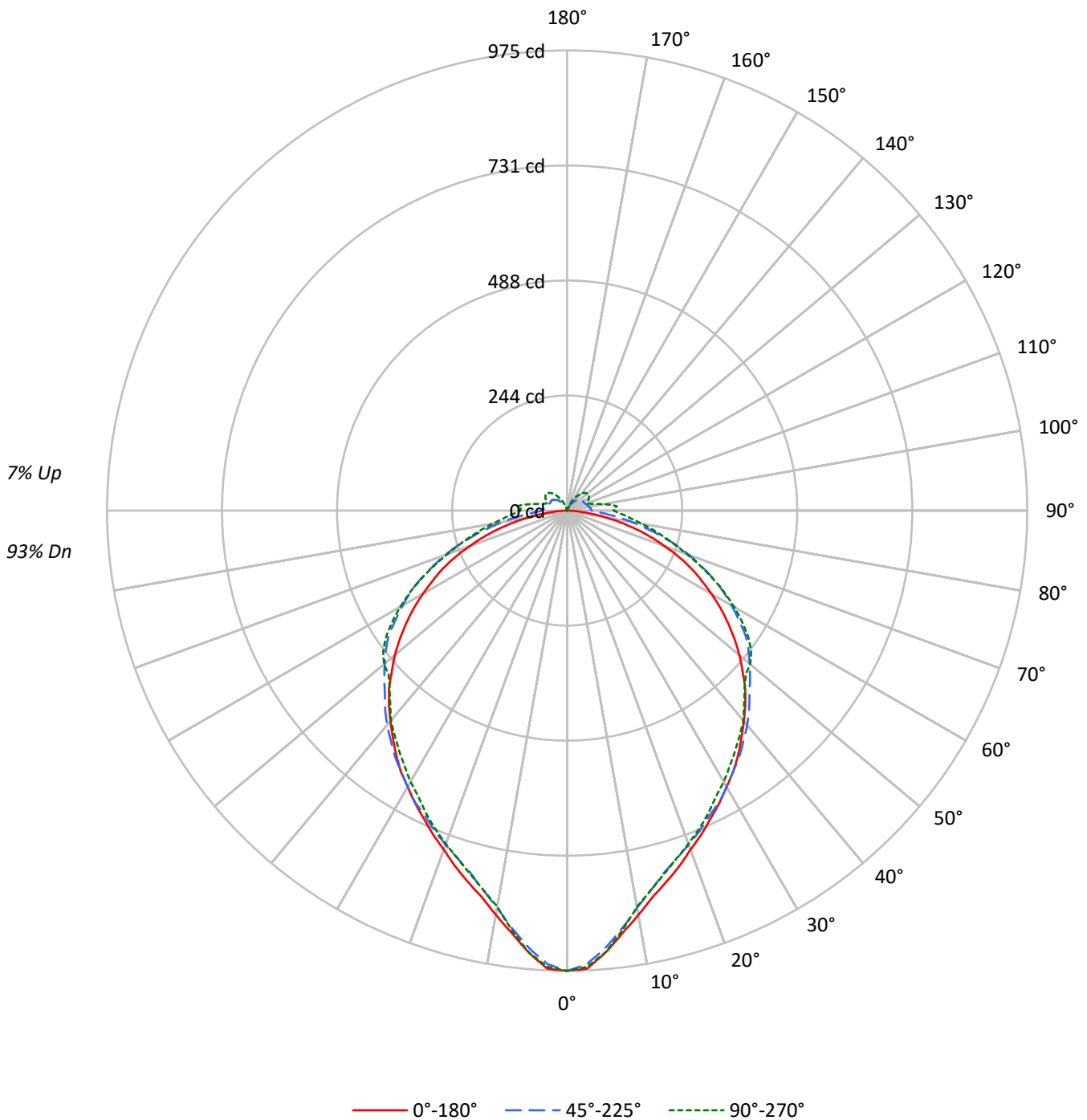
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2672.0 lumens
Efficiency: N/A
Efficacy: 113.2 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-LD4-30-1LO-P125-UNV-EDC1

Luminous Intensity Polar Plot





TEST NUMBER: P241381

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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°	4359	4359	4359
5°	4200	4106	4130
10°	3920	3751	3719
15°	3727	3498	3474
20°	3585	3353	3302
25°	3484	3234	3156
30°	3409	3148	3029
35°	3354	3068	2924
40°	3291	2992	2849
45°	3245	2907	2742
50°	3166	2868	2776
55°	3071	2838	2764
60°	2953	2716	2626
65°	2831	2585	2425
70°	2583	2370	2174
75°	2268	2068	1971
80°	1753	1736	1808
85°	950	1358	1771



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.9	3.3
10°-20°	226.4	8.5
20°-30°	330.1	12.4
30°-40°	395.6	14.8
40°-50°	418.4	15.7
50°-60°	402.3	15.1
60°-70°	323.4	12.1
70°-80°	205.0	7.7
80°-90°	90.5	3.4
90°-100°	52.3	2.0
100°-110°	39.9	1.5
110°-120°	32.3	1.2
120°-130°	29.4	1.1
130°-140°	22.2	0.8
140°-150°	12.6	0.5
150°-160°	4.3	0.2
160°-170°	0.6	0.0
170°-180°	0.0	0.0
0°-30°	643.4	24.1
0°-40°	1038.9	38.9
0°-60°	1859.6	69.6
0°-90°	2478.6	92.8
90°-120°	124.4	4.7
90°-150°	188.5	7.1
90°-180°	193.0	7.2
0°-180°	2672.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	975	975	975	975	975	
5°	939	936	930	940	939	87
15°	814	806	794	795	796	229
25°	719	720	713	713	707	332
35°	632	636	636	630	621	395
45°	534	544	546	542	532	410
55°	416	434	462	468	469	372
65°	290	310	343	341	340	285
75°	150	173	204	214	210	159
85°	27	51	83	106	124	34
90°	1	23	52	76	99	1
95°	0	22	50	71	106	0
105°	0	20	44	56	55	0
115°	1	18	39	47	48	0
125°	1	15	39	51	56	1
135°	1	11	32	46	53	0
145°	1	5	21	34	39	0
155°	1	1	8	16	19	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°	975.3	975.3	975.3	975.3	975.3	975.3	975.3	975.3	975.3	975.3	975.3
2.5°	971.3	969.0	965.6	967.3	967.3	967.9	968.5	968.5	967.3	965.6	961.6
5°	939.4	937.1	933.1	933.7	934.3	936.0	936.5	936.5	934.3	933.1	930.3
7.5°	902.3	900.1	898.3	898.3	898.9	899.5	901.2	898.3	896.6	895.5	892.6
10°	869.8	868.7	863.6	864.1	863.0	863.0	864.1	863.6	860.2	857.3	853.9
12.5°	837.9	836.2	835.6	834.5	832.8	832.2	832.8	832.2	829.4	826.5	823.1
15°	814.0	810.0	808.3	808.9	806.0	806.0	805.4	807.1	803.1	798.6	794.0
17.5°	790.0	787.8	782.6	783.8	783.2	784.3	784.9	784.3	780.3	775.8	772.4
20°	764.4	762.7	763.2	763.2	761.0	761.5	762.1	761.0	757.5	753.0	753.0
22.5°	742.7	739.9	739.3	737.6	739.9	740.4	740.4	741.0	738.7	735.3	734.2
25°	719.4	718.2	717.1	718.8	719.9	720.5	720.5	719.4	717.6	714.8	713.1
27.5°	698.3	694.8	696.0	697.7	699.4	701.7	701.7	698.8	698.3	694.8	697.1
30°	675.5	672.6	673.2	674.9	677.7	680.0	680.0	681.7	678.9	677.2	676.0
32.5°	655.5	649.8	650.4	654.4	658.9	659.5	660.1	661.2	658.4	657.2	654.9
35°	631.6	628.7	627.0	633.3	635.6	636.1	638.4	640.1	637.8	636.7	636.1
37.5°	606.5	604.2	604.2	608.8	613.3	615.6	616.2	616.8	617.3	614.5	613.9
40°	582.6	580.3	580.8	584.3	588.8	590.5	593.4	595.7	593.4	592.2	593.4
42.5°	558.6	554.6	558.0	561.5	566.0	567.2	570.6	574.6	571.7	569.4	570.6
45°	533.5	529.5	533.0	537.5	540.4	543.8	544.4	546.6	546.6	546.6	546.1
47.5°	503.9	503.3	505.0	510.2	514.7	516.4	518.7	521.0	524.4	527.3	525.6
50°	476.5	474.3	478.8	482.8	487.9	491.4	494.8	499.9	500.5	501.0	504.5
52.5°	446.9	446.3	450.3	454.9	460.0	465.1	468.0	471.4	474.3	479.4	483.9
55°	416.1	416.7	420.1	426.4	432.6	433.8	437.8	446.3	452.0	456.6	461.7
57.5°	385.9	385.3	391.0	396.2	401.3	407.6	411.0	418.4	422.4	428.1	430.9
60°	352.8	354.0	359.7	360.8	371.6	379.1	380.2	384.8	390.5	396.2	402.4
62.5°	320.9	322.1	327.2	332.9	339.7	343.1	345.4	354.5	360.2	369.4	373.9
65°	290.1	290.7	294.1	300.4	306.7	309.5	315.2	325.5	330.0	336.3	342.6
67.5°	255.9	257.1	261.6	265.1	273.6	278.7	283.9	290.7	294.1	302.7	307.2
70°	218.9	220.6	226.9	230.9	241.1	245.1	249.1	253.7	261.6	269.6	274.7
72.5°	185.8	185.8	191.5	196.7	207.5	208.6	212.0	220.6	229.7	235.4	241.1
75°	150.5	152.2	155.6	162.5	171.0	172.7	178.4	187.5	193.8	200.1	203.5
77.5°	115.1	117.4	122.6	129.4	135.1	140.8	144.8	152.2	158.5	163.6	169.9
80°	83.2	84.9	90.1	94.6	103.7	107.7	111.2	118.6	124.8	131.7	139.1
82.5°	53.6	54.2	59.9	65.6	72.4	77.0	80.4	87.2	96.3	103.2	110.0
85°	26.8	28.5	34.2	39.3	47.9	50.7	54.2	62.1	69.5	78.1	83.2
87.5°	8.0	10.8	16.0	21.7	28.5	31.9	35.3	42.8	50.2	57.0	63.3
90°	0.6	2.3	6.8	13.1	20.0	23.4	26.8	34.2	41.0	46.7	52.4
92.5°	0.0	1.7	6.3	12.5	19.4	22.8	26.2	33.1	39.3	45.0	50.7
95°	0.0	1.7	6.3	12.0	18.8	22.2	25.7	31.9	38.2	44.5	50.2
97.5°	0.0	1.7	5.7	12.0	18.2	21.7	25.1	31.4	37.6	43.3	48.5
100°	0.0	1.7	5.7	11.4	17.7	21.1	23.9	30.2	36.5	42.2	47.3
102.5°	0.0	1.1	5.1	10.8	17.1	20.5	23.4	29.6	35.9	41.0	45.6
105°	0.0	1.1	5.1	10.3	16.5	20.0	22.8	29.1	34.8	39.9	44.5
107.5°	0.0	1.1	4.6	10.3	16.5	19.4	22.8	28.5	34.2	38.8	43.3
110°	0.0	0.6	4.6	9.7	16.0	19.4	22.2	27.9	33.6	38.2	41.6



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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	4.0	9.1	15.4	18.8	21.7	27.4	32.5	37.1	40.5
115°	0.6	0.6	4.0	9.1	14.8	18.2	21.1	26.8	31.9	36.5	39.3
117.5°	0.0	0.6	3.4	8.6	14.3	17.7	20.5	26.2	31.4	35.9	39.3
120°	0.6	0.6	2.9	8.0	13.7	17.1	20.0	25.7	30.8	35.3	39.3
122.5°	0.6	0.6	2.9	7.4	13.1	16.0	19.4	25.1	30.2	35.3	39.3
125°	0.6	0.6	2.3	6.8	12.5	15.4	18.2	24.5	29.6	34.2	38.8
127.5°	0.6	0.6	1.7	6.3	11.4	14.8	17.7	23.4	28.5	33.1	37.6
130°	0.6	0.6	1.1	5.1	10.8	13.1	16.5	22.2	27.4	31.9	35.9
132.5°	0.6	0.6	1.1	4.6	9.7	12.0	14.8	20.5	25.7	30.2	34.2
135°	0.6	0.6	0.6	3.4	8.0	10.8	13.1	18.2	23.4	28.5	32.5
137.5°	0.6	0.6	0.6	2.9	6.8	9.1	11.4	16.0	21.1	25.7	30.2
140°	0.6	0.6	0.6	2.3	5.7	7.4	9.7	14.3	18.8	23.4	27.4
142.5°	0.6	0.6	0.6	1.7	4.6	6.3	8.0	12.0	16.0	20.5	24.5
145°	0.6	0.6	0.6	1.1	3.4	4.6	6.3	9.7	13.7	17.7	21.1
147.5°	0.6	0.6	0.6	0.6	2.3	3.4	4.6	8.0	10.8	14.3	17.7
150°	0.6	0.6	0.6	0.6	1.7	2.3	3.4	5.7	8.6	11.4	14.3
152.5°	0.6	0.6	0.6	0.6	1.1	1.7	2.3	4.0	6.3	8.6	10.8
155°	0.6	0.6	0.6	0.6	0.6	1.1	1.7	2.9	4.6	6.3	8.0
157.5°	0.6	0.6	0.6	0.6	0.6	0.6	1.1	1.7	2.9	4.0	5.7
160°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	1.1	1.7	2.9	3.4
162.5°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	1.1	1.1	1.7
165°	1.1	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	1.1
167.5°	1.1	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
170°	1.1	1.1	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°	975.3	975.3	975.3	975.3	975.3	975.3	975.3	975.3	975.3	975.3
2.5°	962.8	965.6	967.9	967.9	967.9	969.0	969.0	968.5	969.0	967.3
5°	932.5	937.1	938.8	941.1	940.5	940.0	938.8	941.1	940.0	938.8
7.5°	894.4	898.9	896.6	897.8	898.9	897.8	898.3	898.9	896.6	896.6
10°	853.9	855.6	853.9	855.0	855.0	852.7	853.9	853.9	852.7	852.2
12.5°	821.4	820.8	820.3	820.8	821.4	823.7	822.5	824.8	824.2	822.5
15°	792.3	794.6	795.7	797.4	795.2	796.9	799.2	798.0	798.0	796.3
17.5°	774.6	776.9	774.6	777.5	778.6	778.1	777.5	774.1	776.4	772.4
20°	750.7	754.7	757.5	753.6	753.6	754.1	753.6	752.4	753.6	751.3
22.5°	735.9	735.3	734.7	737.6	738.2	737.6	734.2	733.0	729.6	730.2
25°	714.8	713.1	719.4	715.9	713.1	713.1	711.4	709.1	707.4	707.4
27.5°	694.8	697.7	694.8	695.4	694.8	695.4	688.0	685.2	685.2	682.9
30°	678.3	676.0	676.6	672.6	670.3	669.8	668.1	665.8	664.1	663.5
32.5°	654.4	655.5	653.8	652.1	651.5	649.8	648.7	645.8	643.5	641.3
35°	635.0	633.3	632.7	633.9	629.9	627.0	625.9	624.2	623.0	620.7
37.5°	613.9	611.6	612.2	608.2	608.8	608.2	604.8	601.9	601.4	600.2
40°	590.0	591.1	588.8	588.8	583.7	583.1	582.6	582.6	580.8	580.8
42.5°	568.9	568.9	567.7	566.0	564.3	563.2	559.8	559.2	556.9	554.6
45°	547.2	546.1	544.4	543.2	542.1	540.4	535.8	534.1	533.0	531.8
47.5°	527.8	525.6	525.6	522.1	518.1	518.1	517.0	514.2	513.0	513.0
50°	506.7	510.2	511.9	509.0	507.9	506.7	505.6	506.2	505.0	506.7
52.5°	488.5	491.4	490.8	491.9	493.1	494.8	492.5	494.2	493.1	491.4
55°	465.1	467.4	466.3	465.1	468.0	468.0	470.8	469.7	469.1	469.1
57.5°	436.1	438.9	438.9	440.1	440.6	438.9	442.9	441.2	441.8	440.1
60°	405.9	405.3	407.0	410.4	411.0	408.7	408.1	410.4	408.7	408.7
62.5°	376.2	377.3	377.9	376.2	375.1	376.2	373.9	376.2	376.2	375.6
65°	344.3	345.4	346.0	343.7	340.9	341.4	339.2	340.3	340.9	340.3
67.5°	309.5	312.4	311.2	310.7	308.9	305.5	305.0	303.8	305.0	305.0
70°	276.5	279.3	276.5	277.0	277.0	274.2	272.5	270.2	270.2	269.6
72.5°	244.0	245.7	245.1	245.1	245.7	244.0	241.1	240.0	238.8	238.8
75°	209.8	213.2	213.2	213.8	214.3	213.2	213.2	211.5	209.8	210.3
77.5°	176.7	180.1	183.0	184.7	184.7	185.3	186.4	185.8	184.7	184.7
80°	145.9	151.1	153.9	157.3	157.9	157.9	160.2	160.7	160.7	160.2
82.5°	116.9	122.0	125.4	128.8	129.4	130.5	134.5	136.2	139.7	139.7
85°	88.9	94.6	98.6	103.2	106.0	107.7	111.2	115.7	120.3	123.7
87.5°	68.4	74.1	79.8	84.4	86.6	88.4	92.9	98.6	104.3	108.9
90°	58.7	63.8	69.0	73.0	75.8	77.5	82.1	87.2	94.1	98.6
92.5°	56.4	61.6	65.6	70.1	72.4	74.1	79.8	86.6	94.6	98.6
95°	54.7	59.3	63.8	69.0	71.3	74.1	81.5	91.2	102.0	106.0
97.5°	53.6	58.1	62.7	67.8	70.7	73.5	82.1	89.5	94.1	94.1
100°	51.9	56.4	61.0	65.6	67.8	70.7	75.8	78.1	78.1	78.1
102.5°	50.2	54.2	58.1	61.0	62.7	63.8	66.1	66.7	65.6	64.4
105°	48.5	51.3	53.6	55.3	55.9	56.4	57.0	57.0	55.9	54.7
107.5°	46.7	48.5	50.2	50.2	50.7	50.7	51.3	50.7	49.6	48.5
110°	44.5	46.2	46.7	47.3	47.3	47.3	47.9	47.9	46.7	46.2



TEST NUMBER: P241381

CATALOG NUMBER: FVS8M-4-LD4-30-1LO-P125-UNV-EDC1

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	42.8	44.5	45.0	45.6	46.2	46.2	47.3	47.3	46.7	46.7
115°	42.2	43.9	45.0	46.2	46.7	47.3	48.5	49.6	49.0	48.5
117.5°	42.2	44.5	46.2	47.3	47.9	49.0	50.7	51.3	51.3	51.3
120°	42.2	45.0	47.3	49.0	49.6	50.7	51.9	53.0	53.6	53.0
122.5°	42.2	45.0	47.9	49.6	50.2	51.3	53.0	54.2	54.7	54.7
125°	42.2	45.0	47.9	49.6	50.7	51.3	53.0	54.7	55.3	55.9
127.5°	41.0	44.5	46.7	49.0	50.2	51.3	53.0	54.7	55.9	56.4
130°	39.9	42.8	45.6	47.9	49.0	50.2	52.4	54.2	55.3	55.9
132.5°	38.2	41.0	43.9	46.2	47.3	48.5	50.7	53.0	54.2	54.7
135°	35.9	39.3	42.2	44.5	45.6	46.7	49.0	51.3	52.4	53.0
137.5°	33.6	37.1	39.9	42.2	43.3	44.5	46.7	48.5	50.2	50.2
140°	31.4	34.8	37.6	39.9	41.0	42.2	43.9	45.6	46.7	47.3
142.5°	28.5	31.9	34.2	37.1	38.2	38.8	40.5	42.2	43.3	43.3
145°	25.1	28.5	31.4	33.1	34.2	35.3	36.5	37.6	38.8	38.8
147.5°	21.1	24.5	27.4	29.1	30.2	30.8	31.9	33.1	33.6	33.6
150°	17.1	20.0	22.8	24.5	25.7	26.2	27.4	27.9	28.5	28.5
152.5°	13.1	16.0	18.2	20.0	21.1	21.7	22.8	22.8	23.4	23.9
155°	9.7	12.0	13.7	16.0	16.5	17.1	17.7	18.8	18.8	18.8
157.5°	6.8	8.6	9.7	11.4	12.0	13.1	13.7	14.3	14.3	14.3
160°	4.6	5.7	6.8	8.0	8.6	9.1	9.7	10.3	10.3	10.8
162.5°	2.9	3.4	4.0	4.6	5.1	5.7	6.3	6.8	6.8	6.8
165°	1.1	1.7	2.3	2.3	2.9	2.9	3.4	4.0	4.0	4.0
167.5°	0.6	0.6	0.6	1.1	1.1	1.1	1.1	1.7	1.7	1.7
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)