

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: P241347

Luminaire Tested: **FVS8M-3-LD4-40-1LO-P125-UNV-EDC1**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P241347
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1711-410-18)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: FVS8M-3-LD4-40-1LO-P125-UNV-EDC1
Description: FAILSAFE FVS8M LED FIXTURE
3FT LENGTH, 1-MODULE LED WITH P125 LENS
Light Source: (84) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

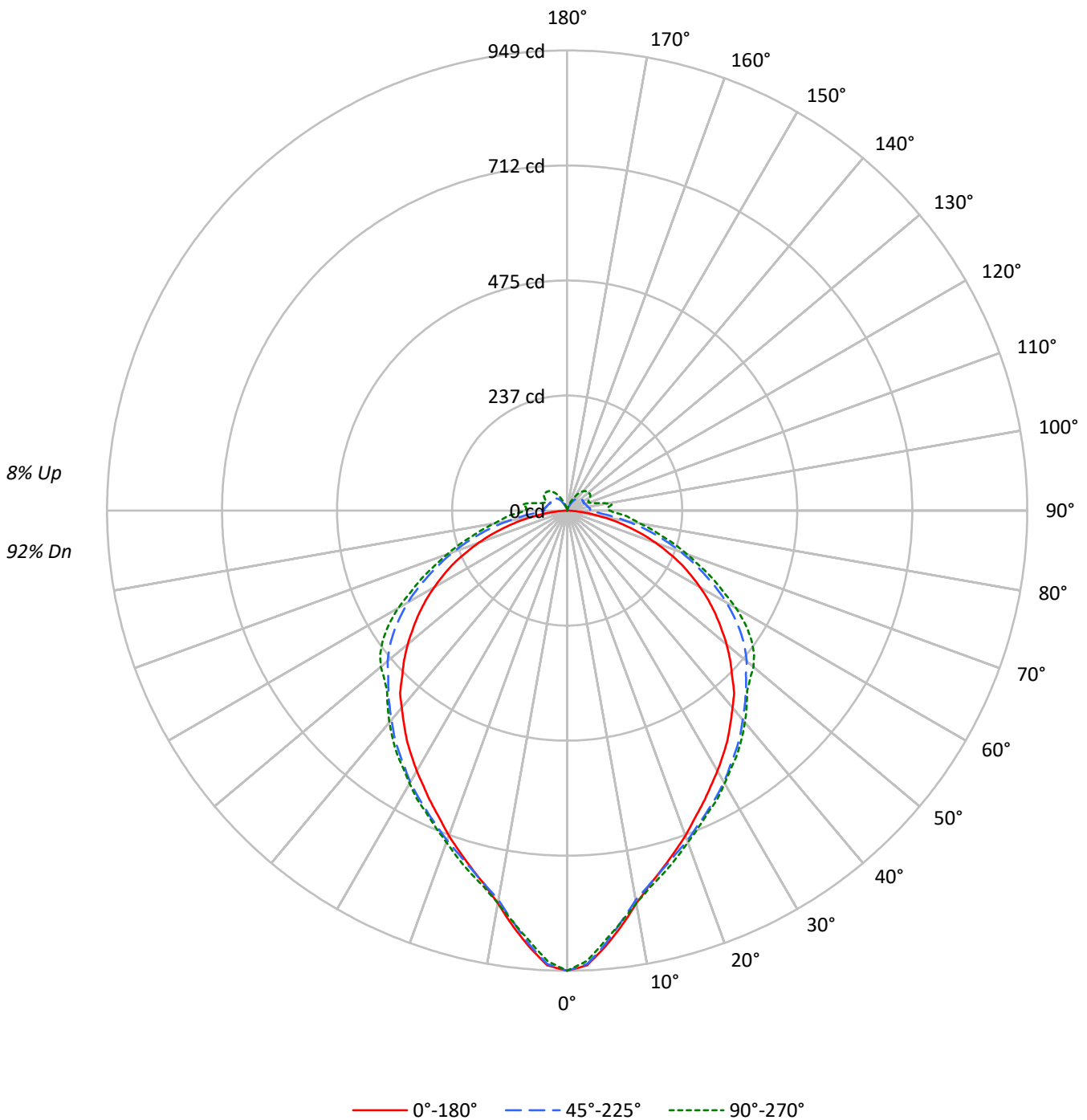
Lumens per Lamp: N/A
Luminaire Lumens: 2534.0 lumens
Efficiency: N/A
Efficacy: 119.5 lumens/watt
Spacing Criteria (0/90/45): 0.98 / 1.03 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.65' x L: 2.85' x H: 0.15')
CIE Type: Direct

Input Watts (W): 21.2
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

TEST NUMBER: P241347

CATALOG NUMBER: FVS8M-3-LD4-40-1LO-P125-UNV-EDC1

Luminous Intensity Polar Plot





TEST NUMBER: P241347

CATALOG NUMBER: FVS8M-3-LD4-40-1LO-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	95	95	95	92
1	106	101	97	92	103	98	94	90	92	89	86	87	84	82	82	80	78	76
2	96	88	81	75	93	85	79	73	80	75	70	76	71	68	72	68	65	62
3	88	77	68	62	84	75	67	61	70	64	59	67	61	57	63	59	55	52
4	80	68	59	52	77	66	58	51	62	55	50	59	53	48	56	51	47	44
5	74	60	51	45	71	59	50	44	56	49	43	53	47	42	50	45	41	38
6	68	54	45	39	65	53	45	38	50	43	37	48	41	37	46	40	36	33
7	63	49	40	34	61	48	40	34	46	38	33	44	37	32	42	36	32	29
8	59	45	36	31	57	44	36	30	42	35	30	40	34	29	38	33	28	26
9	55	41	33	27	53	40	33	27	39	32	27	37	31	26	35	30	26	24
10	51	38	30	25	50	37	30	25	36	29	24	34	28	24	33	27	23	21

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5541	5541	5541
5°	5267	5176	5122
10°	4831	4671	4688
15°	4550	4393	4408
20°	4352	4201	4181
25°	4181	4040	4008
30°	4060	3920	3875
35°	3970	3798	3768
40°	3878	3688	3655
45°	3778	3601	3539
50°	3677	3561	3590
55°	3549	3473	3568
60°	3398	3307	3378
65°	3214	3051	3080
70°	2910	2780	2774
75°	2477	2425	2474
80°	1880	1979	2240
85°	981	1465	2264



TEST NUMBER: P241347

CATALOG NUMBER: FVS8M-3-LD4-40-1LO-P125-UNV-EDC1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	83.2	3.3
10°-20°	216.2	8.5
20°-30°	314.6	12.4
30°-40°	376.5	14.9
40°-50°	397.8	15.7
50°-60°	380.9	15.0
60°-70°	300.4	11.9
70°-80°	187.8	7.4
80°-90°	81.9	3.2
90°-100°	46.8	1.8
100°-110°	39.4	1.6
110°-120°	31.8	1.3
120°-130°	30.0	1.2
130°-140°	24.2	1.0
140°-150°	15.4	0.6
150°-160°	6.1	0.2
160°-170°	1.2	0.0
170°-180°	0.0	0.0
0°-30°	614.0	24.2
0°-40°	990.4	39.1
0°-60°	1769.1	69.8
0°-90°	2339.2	92.3
90°-120°	117.9	4.7
90°-150°	187.4	7.4
90°-180°	195.0	7.7
0°-180°	2534.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	949	949	949	949	949	
5°	903	900	898	894	891	84
15°	763	758	765	772	773	215
25°	664	674	684	691	688	306
35°	577	592	606	617	612	361
45°	481	499	521	528	525	372
55°	374	398	436	458	464	334
65°	258	281	314	324	331	254
75°	131	154	186	200	202	139
85°	23	43	71	101	121	29
90°	0	19	47	68	88	1
95°	0	19	48	62	86	0
105°	0	19	42	58	59	0
115°	0	18	38	45	49	0
125°	0	17	38	51	58	0
135°	1	14	35	48	56	0
145°	1	9	28	39	44	0
155°	1	4	14	22	24	0
165°	1	1	3	6	8	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P241347

CATALOG NUMBER: FVS8M-3-LD4-40-1LO-P125-UNV-EDC1

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	948.9	948.9	948.9	948.9	948.9	948.9	948.9	948.9	948.9	948.9	948.9
2.5°	938.6	936.0	934.1	936.0	934.7	935.4	936.0	937.3	937.3	938.6	936.0
5°	902.6	902.6	900.0	901.9	901.3	900.0	900.6	901.3	901.9	900.6	898.1
7.5°	863.3	860.1	858.8	856.8	855.6	856.8	856.2	856.8	857.5	857.5	854.9
10°	822.1	820.8	816.9	817.6	816.9	817.6	819.5	820.2	818.2	816.3	815.0
12.5°	789.3	785.4	785.4	786.7	786.0	786.7	784.7	782.8	786.0	788.6	788.6
15°	762.9	759.6	757.7	760.3	759.6	758.4	759.0	759.6	761.6	763.5	764.8
17.5°	737.8	735.2	733.9	736.5	735.8	735.8	736.5	739.0	742.9	742.9	742.9
20°	713.3	710.1	710.7	714.6	714.6	715.9	716.5	718.4	721.0	723.6	724.2
22.5°	686.9	686.3	687.5	691.4	692.0	693.3	695.9	699.8	701.1	702.3	703.0
25°	664.4	663.1	666.9	668.9	672.1	674.0	676.0	677.9	682.4	684.3	684.3
27.5°	641.2	641.2	643.8	647.6	650.8	654.7	656.6	658.6	661.8	664.4	665.7
30°	619.9	618.0	621.2	626.4	631.5	634.1	635.4	638.6	641.8	645.1	647.0
32.5°	598.1	596.8	600.6	603.9	609.6	610.9	612.9	618.7	621.2	623.2	625.1
35°	576.8	575.5	578.1	583.2	589.0	591.6	592.3	598.7	601.9	603.9	605.8
37.5°	553.0	554.9	556.2	561.4	565.2	567.8	571.0	576.2	580.7	582.6	585.8
40°	530.5	531.7	533.0	537.5	543.3	545.9	547.8	554.9	559.4	562.0	563.3
42.5°	509.9	507.3	509.9	515.7	519.5	522.7	525.3	531.1	536.3	542.0	542.7
45°	480.9	482.8	487.3	492.5	497.6	498.9	501.5	507.9	512.4	518.2	521.4
47.5°	455.8	458.4	460.3	466.1	472.5	474.5	477.7	484.1	491.8	497.6	500.2
50°	429.4	432.6	435.2	440.3	446.8	450.0	454.5	462.2	469.3	477.0	483.5
52.5°	401.1	404.9	409.4	412.7	421.0	424.2	428.1	437.8	447.4	455.1	461.6
55°	374.0	377.2	382.4	386.9	395.3	398.5	402.4	412.7	423.0	430.0	436.5
57.5°	346.3	347.6	352.1	357.9	366.3	372.1	375.3	385.0	394.0	401.7	408.8
60°	316.7	319.3	323.2	329.6	339.3	341.8	345.7	356.6	365.7	373.4	379.2
62.5°	287.1	289.7	293.6	301.3	306.4	310.9	316.7	326.4	333.5	339.9	347.6
65°	258.1	259.4	263.3	270.4	277.5	280.7	284.5	293.6	300.6	308.4	313.5
67.5°	225.3	228.5	233.0	238.2	245.3	249.8	253.0	260.1	269.1	278.1	281.3
70°	194.4	197.0	200.9	206.0	213.7	216.9	221.5	229.2	236.9	245.3	250.4
72.5°	163.5	165.4	168.0	174.5	181.5	185.4	189.3	197.0	206.6	212.4	217.6
75°	130.7	133.9	137.8	143.6	150.0	154.5	157.7	165.4	172.5	179.0	186.0
77.5°	101.1	103.6	107.5	112.0	120.4	124.9	127.5	134.5	142.3	146.8	155.1
80°	72.1	74.0	78.5	83.7	90.1	93.3	97.2	103.6	110.1	116.5	124.2
82.5°	45.7	47.0	51.5	56.7	63.1	66.3	69.5	76.0	81.8	89.5	95.9
85°	23.2	24.5	29.0	33.5	40.6	43.1	45.1	52.1	59.2	65.0	70.8
87.5°	7.1	9.0	12.9	18.0	23.8	26.4	29.0	35.4	41.2	47.6	54.7
90°	0.0	1.9	5.8	10.3	16.1	19.3	21.9	28.3	34.8	41.2	47.0
92.5°	0.0	1.9	5.2	10.3	16.1	19.3	21.9	28.3	34.8	40.6	47.6
95°	0.0	1.9	5.2	10.3	16.1	19.3	22.5	28.3	34.8	41.8	47.6
97.5°	0.0	1.3	5.2	10.3	16.1	19.3	22.5	28.3	35.4	41.2	45.1
100°	0.0	1.3	5.2	10.3	16.1	19.3	21.9	29.0	34.8	39.3	43.8
102.5°	0.0	1.3	5.2	10.3	16.1	19.3	22.5	28.3	32.8	38.0	42.5
105°	0.0	1.3	5.2	10.3	16.1	19.3	21.9	27.0	32.2	37.3	41.8
107.5°	0.0	1.3	5.2	10.3	15.5	18.7	21.2	26.4	31.5	36.7	40.6
110°	0.0	1.3	4.5	9.7	15.5	18.0	21.2	26.4	31.5	36.1	39.9



TEST NUMBER: P241347

CATALOG NUMBER: FVS8M-3-LD4-40-1LO-P125-UNV-EDC1

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	0.0	1.3	4.5	9.7	15.5	18.0	20.6	26.4	30.9	35.4	38.6
115°	0.0	1.3	4.5	9.7	14.8	18.0	20.6	26.4	30.9	35.4	38.0
117.5°	0.0	1.3	4.5	9.7	14.8	18.0	20.6	25.8	30.9	34.8	38.0
120°	0.0	0.6	4.5	9.0	14.8	17.4	20.6	25.8	30.9	34.8	38.0
122.5°	0.0	0.6	3.9	9.0	14.2	17.4	20.0	25.8	30.3	34.8	38.0
125°	0.0	0.6	3.9	9.0	14.2	16.7	19.3	25.1	30.3	34.8	38.0
127.5°	0.6	0.6	3.9	8.4	13.5	16.1	18.7	24.5	29.6	34.1	38.0
130°	0.0	0.6	3.2	7.7	12.9	15.5	18.0	23.8	29.0	32.8	36.7
132.5°	0.6	0.6	3.2	7.1	12.2	14.8	17.4	22.5	28.3	32.2	36.1
135°	0.6	0.6	2.6	6.4	11.6	14.2	16.7	21.2	27.0	30.9	34.8
137.5°	0.6	0.6	2.6	5.8	10.3	12.9	15.5	20.6	25.1	29.6	33.5
140°	0.6	0.6	1.9	5.2	9.7	11.6	14.2	19.3	23.8	28.3	32.2
142.5°	0.6	0.6	1.9	4.5	8.4	10.3	12.9	17.4	21.9	26.4	30.3
145°	0.6	0.6	1.3	3.9	7.1	9.0	10.9	15.5	20.0	23.8	27.7
147.5°	0.6	0.6	1.3	3.2	5.8	7.7	9.7	13.5	17.4	21.2	24.5
150°	0.6	0.6	0.6	2.6	4.5	5.8	7.7	10.9	14.2	17.4	20.6
152.5°	0.6	0.6	0.6	1.9	3.9	4.5	5.8	9.0	11.6	14.2	16.7
155°	0.6	0.6	0.6	1.3	2.6	3.9	4.5	6.4	9.0	10.9	13.5
157.5°	0.6	0.6	0.6	1.3	1.9	2.6	3.2	5.2	6.4	8.4	10.3
160°	0.6	0.6	0.6	0.6	1.3	1.9	2.6	3.2	4.5	5.8	7.1
162.5°	0.6	0.6	0.6	0.6	1.3	1.3	1.9	2.6	3.2	3.9	5.2
165°	0.6	0.6	0.6	0.6	0.6	1.3	1.3	1.9	2.6	2.6	3.2
167.5°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	1.3	1.3	1.9	1.9
170°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	1.3
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: P241347

CATALOG NUMBER: FVS8M-3-LD4-40-1LO-P125-UNV-EDC1

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	948.9	948.9	948.9	948.9	948.9	948.9	948.9	948.9	948.9	948.9
2.5°	934.7	933.5	934.1	934.1	931.5	933.5	932.8	931.5	929.6	929.6
5°	896.1	893.5	893.5	894.8	893.5	893.5	894.2	893.5	894.2	891.0
7.5°	854.3	852.3	853.6	854.3	856.2	855.6	856.2	855.6	855.6	855.6
10°	815.6	818.9	818.2	819.5	821.4	820.8	822.1	824.0	823.4	822.1
12.5°	788.6	791.8	791.8	795.0	795.0	795.7	797.6	797.6	794.4	794.4
15°	766.7	767.4	768.0	773.2	772.5	773.8	775.1	773.8	773.2	773.2
17.5°	744.2	744.8	747.4	747.4	748.7	749.3	751.9	751.3	750.6	750.6
20°	724.9	726.2	729.4	731.3	732.0	730.0	732.0	730.7	730.7	728.1
22.5°	706.2	710.1	708.8	710.1	711.4	712.6	712.6	711.4	710.1	707.5
25°	686.9	688.2	690.1	691.4	691.4	690.8	690.8	690.1	688.8	687.5
27.5°	668.2	670.2	669.5	673.4	674.7	675.3	674.7	672.1	669.5	670.8
30°	648.3	650.2	652.8	655.4	656.0	652.1	651.5	652.1	649.6	649.6
32.5°	627.7	630.2	634.8	634.1	634.1	636.0	636.0	634.1	630.9	629.6
35°	607.7	612.9	614.2	618.0	616.7	614.8	612.9	612.9	610.9	612.2
37.5°	587.8	591.0	594.8	594.2	594.2	594.8	594.8	592.3	592.9	591.6
40°	567.2	569.7	572.3	572.3	573.6	573.6	571.7	569.7	569.7	570.4
42.5°	544.0	547.8	551.1	551.1	551.7	551.1	551.7	550.4	547.8	547.8
45°	524.7	526.0	528.5	529.2	528.5	528.5	526.6	526.6	526.0	525.3
47.5°	504.7	509.2	509.9	511.1	509.9	509.9	511.1	511.8	513.1	511.8
50°	486.7	492.5	496.3	498.3	498.3	499.6	500.2	500.2	502.1	501.5
52.5°	468.7	472.5	476.4	481.5	482.8	482.8	485.4	484.8	486.0	486.0
55°	442.9	448.1	452.6	456.4	457.7	460.3	459.6	461.6	461.6	463.5
57.5°	415.2	417.8	424.2	426.8	426.2	428.1	428.7	432.0	435.8	435.8
60°	385.6	387.5	390.8	390.8	392.1	392.7	396.6	398.5	399.8	402.4
62.5°	349.6	354.1	356.6	357.3	358.6	361.8	361.8	361.8	363.1	363.7
65°	318.7	321.2	323.8	326.4	324.5	325.1	325.7	326.4	328.3	330.9
67.5°	287.1	289.7	292.3	293.6	291.0	291.6	290.3	292.3	294.2	294.2
70°	254.3	257.5	261.4	260.7	258.1	259.4	258.8	261.4	262.7	263.3
72.5°	222.7	227.2	229.8	229.8	229.8	229.8	230.5	231.8	232.4	233.0
75°	190.6	195.1	198.3	200.9	199.6	201.5	202.8	203.4	202.8	202.1
77.5°	160.9	165.4	168.0	171.9	173.2	174.5	175.7	175.7	177.0	177.0
80°	128.8	134.5	139.1	144.2	146.1	148.7	149.4	151.3	151.3	151.9
82.5°	101.7	108.2	113.3	118.5	121.0	122.3	126.2	129.4	132.6	134.5
85°	77.9	85.0	90.1	96.6	101.1	106.2	113.3	117.2	117.8	121.0
87.5°	61.2	68.2	77.3	84.3	84.3	85.0	86.9	90.1	94.6	97.9
90°	54.1	63.1	65.7	67.0	68.2	69.5	72.1	76.6	83.0	87.6
92.5°	54.7	57.3	59.9	61.8	63.1	65.0	68.2	72.7	79.2	83.7
95°	51.5	54.7	57.9	60.5	61.8	63.7	67.6	73.4	81.1	85.6
97.5°	49.6	53.4	56.0	59.9	61.8	64.4	70.8	79.2	88.8	92.7
100°	48.3	52.1	55.4	59.9	63.1	65.7	73.4	80.5	84.3	85.0
102.5°	47.0	50.9	54.7	59.2	61.8	64.4	68.2	70.8	70.2	70.2
105°	45.7	49.6	52.8	56.0	57.9	58.6	60.5	59.9	59.9	59.2
107.5°	44.4	47.6	50.2	51.5	52.1	52.8	52.8	52.8	52.1	52.1
110°	43.1	45.7	47.0	47.6	47.6	47.6	48.3	48.3	48.3	48.3



TEST NUMBER: P241347

CATALOG NUMBER: FVS8M-3-LD4-40-1LO-P125-UNV-EDC1

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	41.8	43.8	44.4	45.1	45.1	45.1	46.4	47.0	47.0	47.0
115°	40.6	42.5	43.8	44.4	45.1	45.7	47.0	48.3	48.9	48.9
117.5°	40.6	43.1	44.4	46.4	47.0	47.6	48.9	50.9	51.5	51.5
120°	41.2	43.8	46.4	48.3	48.9	49.6	51.5	53.4	54.1	54.7
122.5°	41.8	44.4	47.0	49.6	50.2	50.9	52.8	54.7	56.0	56.7
125°	41.8	45.1	47.6	50.2	50.9	52.1	53.4	55.4	56.7	57.9
127.5°	41.2	44.4	47.6	50.2	51.5	52.1	54.1	55.4	57.3	57.9
130°	40.6	43.8	46.4	48.9	50.2	51.5	54.1	56.0	57.3	57.9
132.5°	39.3	42.5	45.7	48.3	49.6	50.9	53.4	55.4	56.7	57.3
135°	38.0	41.8	44.4	47.0	48.3	49.6	52.1	54.1	55.4	56.0
137.5°	37.3	40.6	43.1	45.7	47.0	48.3	50.9	52.1	54.1	54.7
140°	35.4	38.6	41.2	43.8	45.1	46.4	48.3	50.2	51.5	52.1
142.5°	34.1	36.7	39.3	41.2	42.5	43.8	45.7	47.0	48.3	48.9
145°	31.5	34.1	36.7	38.6	39.3	40.6	41.8	43.1	44.4	44.4
147.5°	27.7	30.9	32.8	34.8	35.4	36.7	38.0	38.6	39.3	39.9
150°	23.8	26.4	29.0	30.3	30.9	31.5	32.8	33.5	34.1	34.1
152.5°	19.3	21.9	23.8	25.8	26.4	27.0	27.7	28.3	29.0	29.0
155°	15.5	17.4	20.0	20.6	21.9	21.9	23.2	23.8	23.8	23.8
157.5°	11.6	13.5	14.8	16.7	17.4	17.4	18.7	18.7	19.3	19.3
160°	8.4	9.7	10.9	12.9	13.5	13.5	14.2	14.8	14.8	14.8
162.5°	5.8	7.1	7.7	9.0	9.7	10.3	10.3	10.9	10.9	10.9
165°	3.9	4.5	5.2	5.8	6.4	6.4	7.1	7.7	7.7	7.7
167.5°	2.6	2.6	3.2	3.2	3.9	3.9	4.5	4.5	4.5	5.2
170°	1.3	1.3	1.3	1.9	1.9	1.9	1.9	2.6	2.6	2.6
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)