

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: P241349

Luminaire Tested: **FVS8M-3-LD4-30-1STD-P125-UNV-EDC1**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P241349
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-LD4-30-1STD-P125-UNV-EDC1
Description: FAILSAFE FVS8M LED FIXTURE
3FT LENGTH, 1-MODULE LED WITH P125 LENS
Light Source: (84) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

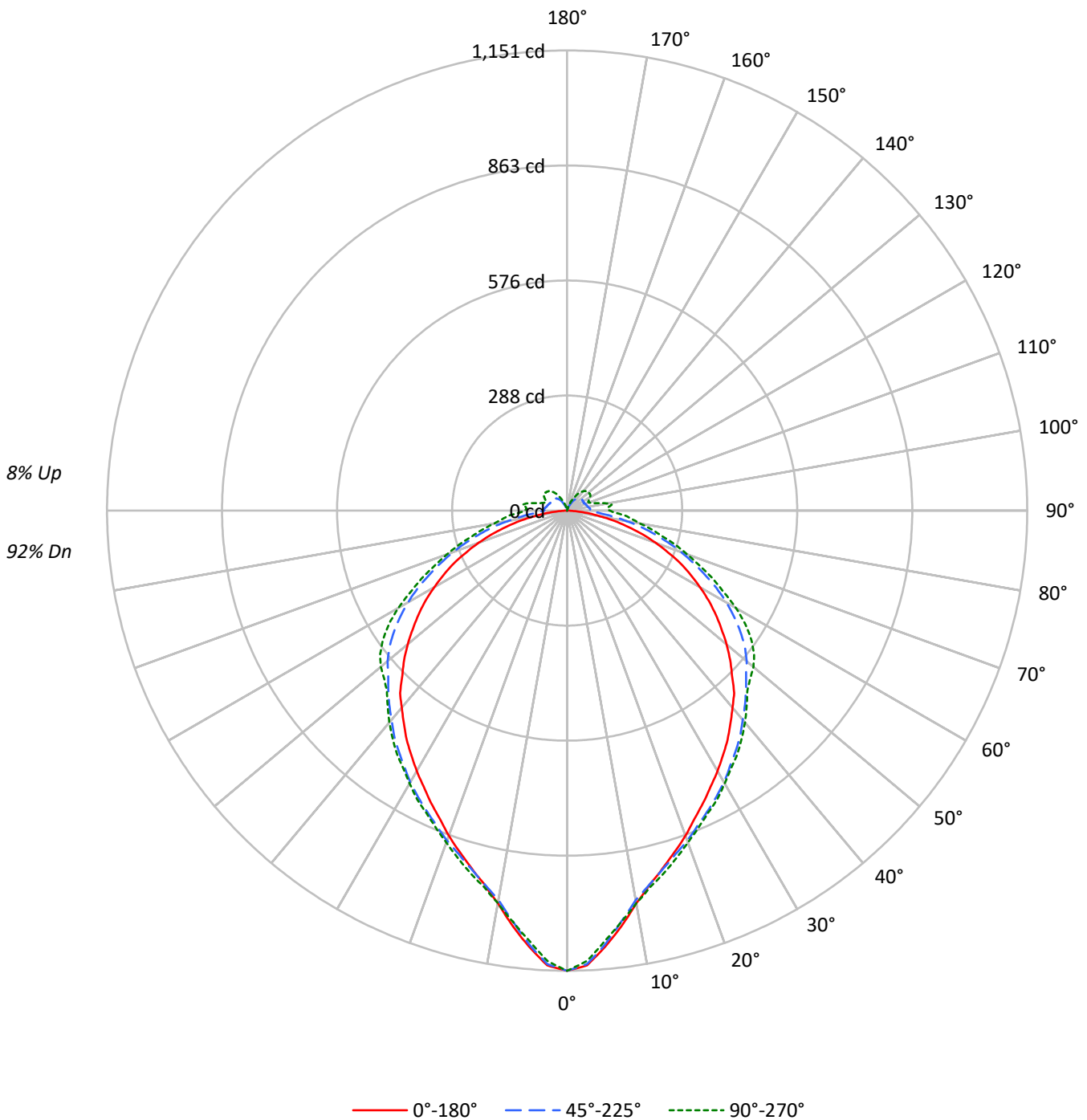
Lumens per Lamp: N/A
Luminaire Lumens: 3074.0 lumens
Efficiency: N/A
Efficacy: 107.9 lumens/watt
Spacing Criteria (0/90/45): 0.98 / 1.03 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.65' x L: 2.85' x H: 0.15')
CIE Type: Direct

Input Watts (W): 28.5
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





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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	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°	6722	6722	6722
5°	6389	6278	6213
10°	5861	5667	5687
15°	5519	5329	5347
20°	5279	5097	5072
25°	5072	4902	4862
30°	4926	4755	4701
35°	4816	4607	4572
40°	4704	4474	4434
45°	4584	4369	4293
50°	4461	4320	4355
55°	4305	4213	4329
60°	4122	4012	4098
65°	3900	3701	3737
70°	3530	3373	3365
75°	3003	2942	3002
80°	2281	2401	2718
85°	1189	1777	2747



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.9	3.3
10°-20°	262.2	8.5
20°-30°	381.7	12.4
30°-40°	456.7	14.9
40°-50°	482.5	15.7
50°-60°	462.1	15.0
60°-70°	364.5	11.9
70°-80°	227.8	7.4
80°-90°	99.3	3.2
90°-100°	56.7	1.8
100°-110°	47.8	1.6
110°-120°	38.5	1.3
120°-130°	36.4	1.2
130°-140°	29.3	1.0
140°-150°	18.7	0.6
150°-160°	7.4	0.2
160°-170°	1.5	0.0
170°-180°	0.0	0.0
0°-30°	744.8	24.2
0°-40°	1201.5	39.1
0°-60°	2146.1	69.8
0°-90°	2837.7	92.3
90°-120°	143.0	4.7
90°-150°	227.4	7.4
90°-180°	236.0	7.7
0°-180°	3074.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1151	1151	1151	1151	1151	
5°	1095	1092	1089	1084	1081	101
15°	925	920	928	937	938	261
25°	806	818	830	839	834	372
35°	700	718	735	748	743	437
45°	583	605	633	641	637	451
55°	454	483	530	555	562	405
65°	313	340	380	394	401	308
75°	158	187	226	242	245	169
85°	28	52	86	123	147	36
90°	0	23	57	83	106	1
95°	0	23	58	75	104	0
105°	0	23	51	70	72	0
115°	0	22	46	55	59	0
125°	0	20	46	62	70	0
135°	1	17	42	59	68	1
145°	1	11	34	48	54	1
155°	1	5	16	27	29	0
165°	1	2	4	8	9	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°	1151.1	1151.1	1151.1	1151.1	1151.1	1151.1	1151.1	1151.1	1151.1	1151.1	1151.1
2.5°	1138.6	1135.5	1133.2	1135.5	1133.9	1134.7	1135.5	1137.1	1137.1	1138.6	1135.5
5°	1094.9	1094.9	1091.8	1094.1	1093.3	1091.8	1092.6	1093.3	1094.1	1092.6	1089.4
7.5°	1047.3	1043.4	1041.8	1039.4	1037.9	1039.4	1038.7	1039.4	1040.2	1040.2	1037.1
10°	997.3	995.7	991.0	991.8	991.0	991.8	994.2	994.9	992.6	990.2	988.7
12.5°	957.4	952.8	952.8	954.3	953.5	954.3	952.0	949.6	953.5	956.7	956.7
15°	925.4	921.5	919.2	922.3	921.5	920.0	920.7	921.5	923.9	926.2	927.8
17.5°	895.0	891.8	890.3	893.4	892.6	892.6	893.4	896.5	901.2	901.2	901.2
20°	865.3	861.4	862.2	866.9	866.9	868.4	869.2	871.5	874.7	877.8	878.6
22.5°	833.3	832.5	834.1	838.7	839.5	841.1	844.2	848.9	850.5	852.0	852.8
25°	805.9	804.4	809.1	811.4	815.3	817.7	820.0	822.3	827.8	830.2	830.2
27.5°	777.8	777.8	781.0	785.6	789.5	794.2	796.6	798.9	802.8	805.9	807.5
30°	752.1	749.7	753.6	759.9	766.1	769.2	770.8	774.7	778.6	782.5	784.9
32.5°	725.5	723.9	728.6	732.5	739.6	741.1	743.5	750.5	753.6	756.0	758.3
35°	699.7	698.2	701.3	707.5	714.6	717.7	718.5	726.3	730.2	732.5	734.9
37.5°	670.8	673.2	674.7	681.0	685.7	688.8	692.7	699.0	704.4	706.8	710.7
40°	643.5	645.1	646.6	652.1	659.1	662.2	664.6	673.2	678.6	681.8	683.3
42.5°	618.5	615.4	618.5	625.5	630.2	634.1	637.3	644.3	650.5	657.6	658.3
45°	583.4	585.7	591.2	597.4	603.7	605.2	608.4	616.2	621.6	628.7	632.6
47.5°	552.9	556.0	558.4	565.4	573.2	575.6	579.5	587.3	596.6	603.7	606.8
50°	520.9	524.8	527.9	534.2	542.0	545.9	551.4	560.7	569.3	578.7	586.5
52.5°	486.5	491.2	496.7	500.6	510.7	514.6	519.3	531.0	542.8	552.1	559.9
55°	453.7	457.6	463.9	469.4	479.5	483.4	488.1	500.6	513.1	521.7	529.5
57.5°	420.2	421.7	427.2	434.2	444.4	451.4	455.3	467.0	477.9	487.3	495.9
60°	384.2	387.4	392.0	399.8	411.6	414.7	419.4	432.6	443.6	453.0	460.0
62.5°	348.3	351.4	356.1	365.5	371.7	377.2	384.2	395.9	404.5	412.3	421.7
65°	313.2	314.7	319.4	328.0	336.6	340.5	345.2	356.1	364.7	374.1	380.3
67.5°	273.3	277.2	282.7	289.0	297.5	303.0	306.9	315.5	326.4	337.4	341.3
70°	235.8	239.0	243.7	249.9	259.3	263.2	268.6	278.0	287.4	297.5	303.8
72.5°	198.4	200.7	203.8	211.6	220.2	224.9	229.6	239.0	250.7	257.7	264.0
75°	158.5	162.4	167.1	174.2	182.0	187.4	191.3	200.7	209.3	217.1	225.7
77.5°	122.6	125.7	130.4	135.9	146.0	151.5	154.6	163.2	172.6	178.1	188.2
80°	87.5	89.8	95.3	101.5	109.3	113.2	117.9	125.7	133.5	141.4	150.7
82.5°	55.4	57.0	62.5	68.7	76.5	80.4	84.3	92.2	99.2	108.6	116.4
85°	28.1	29.7	35.1	40.6	49.2	52.3	54.7	63.3	71.8	78.9	85.9
87.5°	8.6	10.9	15.6	21.9	28.9	32.0	35.1	43.0	50.0	57.8	66.4
90°	0.0	2.3	7.0	12.5	19.5	23.4	26.6	34.4	42.2	50.0	57.0
92.5°	0.0	2.3	6.2	12.5	19.5	23.4	26.6	34.4	42.2	49.2	57.8
95°	0.0	2.3	6.2	12.5	19.5	23.4	27.3	34.4	42.2	50.8	57.8
97.5°	0.0	1.6	6.2	12.5	19.5	23.4	27.3	34.4	43.0	50.0	54.7
100°	0.0	1.6	6.2	12.5	19.5	23.4	26.6	35.1	42.2	47.6	53.1
102.5°	0.0	1.6	6.2	12.5	19.5	23.4	27.3	34.4	39.8	46.1	51.5
105°	0.0	1.6	6.2	12.5	19.5	23.4	26.6	32.8	39.0	45.3	50.8
107.5°	0.0	1.6	6.2	12.5	18.7	22.6	25.8	32.0	38.3	44.5	49.2
110°	0.0	1.6	5.5	11.7	18.7	21.9	25.8	32.0	38.3	43.7	48.4



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	0.0	1.6	5.5	11.7	18.7	21.9	25.0	32.0	37.5	43.0	46.9
115°	0.0	1.6	5.5	11.7	18.0	21.9	25.0	32.0	37.5	43.0	46.1
117.5°	0.0	1.6	5.5	11.7	18.0	21.9	25.0	31.2	37.5	42.2	46.1
120°	0.0	0.8	5.5	10.9	18.0	21.1	25.0	31.2	37.5	42.2	46.1
122.5°	0.0	0.8	4.7	10.9	17.2	21.1	24.2	31.2	36.7	42.2	46.1
125°	0.0	0.8	4.7	10.9	17.2	20.3	23.4	30.5	36.7	42.2	46.1
127.5°	0.8	0.8	4.7	10.2	16.4	19.5	22.6	29.7	35.9	41.4	46.1
130°	0.0	0.8	3.9	9.4	15.6	18.7	21.9	28.9	35.1	39.8	44.5
132.5°	0.8	0.8	3.9	8.6	14.8	18.0	21.1	27.3	34.4	39.0	43.7
135°	0.8	0.8	3.1	7.8	14.1	17.2	20.3	25.8	32.8	37.5	42.2
137.5°	0.8	0.8	3.1	7.0	12.5	15.6	18.7	25.0	30.5	35.9	40.6
140°	0.8	0.8	2.3	6.2	11.7	14.1	17.2	23.4	28.9	34.4	39.0
142.5°	0.8	0.8	2.3	5.5	10.2	12.5	15.6	21.1	26.6	32.0	36.7
145°	0.8	0.8	1.6	4.7	8.6	10.9	13.3	18.7	24.2	28.9	33.6
147.5°	0.8	0.8	1.6	3.9	7.0	9.4	11.7	16.4	21.1	25.8	29.7
150°	0.8	0.8	0.8	3.1	5.5	7.0	9.4	13.3	17.2	21.1	25.0
152.5°	0.8	0.8	0.8	2.3	4.7	5.5	7.0	10.9	14.1	17.2	20.3
155°	0.8	0.8	0.8	1.6	3.1	4.7	5.5	7.8	10.9	13.3	16.4
157.5°	0.8	0.8	0.8	1.6	2.3	3.1	3.9	6.2	7.8	10.2	12.5
160°	0.8	0.8	0.8	0.8	1.6	2.3	3.1	3.9	5.5	7.0	8.6
162.5°	0.8	0.8	0.8	0.8	1.6	1.6	2.3	3.1	3.9	4.7	6.2
165°	0.8	0.8	0.8	0.8	0.8	1.6	1.6	2.3	3.1	3.1	3.9
167.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.6	1.6	2.3	2.3
170°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.6
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°	1151.1	1151.1	1151.1	1151.1	1151.1	1151.1	1151.1	1151.1	1151.1	1151.1
2.5°	1133.9	1132.4	1133.2	1133.2	1130.0	1132.4	1131.6	1130.0	1127.7	1127.7
5°	1087.1	1084.0	1084.0	1085.5	1084.0	1084.0	1084.7	1084.0	1084.7	1080.8
7.5°	1036.3	1034.0	1035.5	1036.3	1038.7	1037.9	1038.7	1037.9	1037.9	1037.9
10°	989.5	993.4	992.6	994.2	996.5	995.7	997.3	999.6	998.8	997.3
12.5°	956.7	960.6	960.6	964.5	964.5	965.3	967.6	967.6	963.7	963.7
15°	930.1	930.9	931.7	937.9	937.1	938.7	940.3	938.7	937.9	937.9
17.5°	902.8	903.6	906.7	906.7	908.2	909.0	912.2	911.4	910.6	910.6
20°	879.4	880.9	884.8	887.2	887.9	885.6	887.9	886.4	886.4	883.3
22.5°	856.7	861.4	859.8	861.4	863.0	864.5	864.5	863.0	861.4	858.3
25°	833.3	834.8	837.2	838.7	838.7	838.0	838.0	837.2	835.6	834.1
27.5°	810.6	813.0	812.2	816.9	818.4	819.2	818.4	815.3	812.2	813.8
30°	786.4	788.8	791.9	795.0	795.8	791.1	790.3	791.1	788.0	788.0
32.5°	761.4	764.6	770.0	769.2	769.2	771.6	771.6	769.2	765.3	763.8
35°	737.2	743.5	745.0	749.7	748.2	745.8	743.5	743.5	741.1	742.7
37.5°	713.0	716.9	721.6	720.8	720.8	721.6	721.6	718.5	719.3	717.7
40°	688.0	691.1	694.3	694.3	695.8	695.8	693.5	691.1	691.1	691.9
42.5°	659.9	664.6	668.5	668.5	669.3	668.5	669.3	667.7	664.6	664.6
45°	636.5	638.0	641.2	641.9	641.2	641.2	638.8	638.8	638.0	637.3
47.5°	612.3	617.7	618.5	620.1	618.5	618.5	620.1	620.9	622.4	620.9
50°	590.4	597.4	602.1	604.5	604.5	606.0	606.8	606.8	609.1	608.4
52.5°	568.5	573.2	577.9	584.2	585.7	585.7	588.8	588.1	589.6	589.6
55°	537.3	543.5	549.0	553.7	555.3	558.4	557.6	559.9	559.9	562.3
57.5°	503.7	506.8	514.6	517.8	517.0	519.3	520.1	524.0	528.7	528.7
60°	467.8	470.1	474.0	474.0	475.6	476.4	481.1	483.4	485.0	488.1
62.5°	424.1	429.5	432.6	433.4	435.0	438.9	438.9	438.9	440.5	441.2
65°	386.6	389.7	392.8	395.9	393.6	394.4	395.2	395.9	398.3	401.4
67.5°	348.3	351.4	354.6	356.1	353.0	353.8	352.2	354.6	356.9	356.9
70°	308.5	312.4	317.1	316.3	313.2	314.7	313.9	317.1	318.6	319.4
72.5°	270.2	275.7	278.8	278.8	278.8	278.8	279.6	281.1	281.9	282.7
75°	231.2	236.6	240.5	243.7	242.1	244.4	246.0	246.8	246.0	245.2
77.5°	195.2	200.7	203.8	208.5	210.1	211.6	213.2	213.2	214.8	214.8
80°	156.2	163.2	168.7	174.9	177.3	180.4	181.2	183.5	183.5	184.3
82.5°	123.4	131.2	137.4	143.7	146.8	148.4	153.1	157.0	160.9	163.2
85°	94.5	103.1	109.3	117.1	122.6	128.9	137.4	142.1	142.9	146.8
87.5°	74.2	82.8	93.7	102.3	102.3	103.1	105.4	109.3	114.8	118.7
90°	65.6	76.5	79.7	81.2	82.8	84.3	87.5	92.9	100.7	106.2
92.5°	66.4	69.5	72.6	75.0	76.5	78.9	82.8	88.2	96.1	101.5
95°	62.5	66.4	70.3	73.4	75.0	77.3	82.0	89.0	98.4	103.9
97.5°	60.1	64.8	67.9	72.6	75.0	78.1	85.9	96.1	107.8	112.5
100°	58.6	63.3	67.2	72.6	76.5	79.7	89.0	97.6	102.3	103.1
102.5°	57.0	61.7	66.4	71.8	75.0	78.1	82.8	85.9	85.1	85.1
105°	55.4	60.1	64.0	67.9	70.3	71.1	73.4	72.6	72.6	71.8
107.5°	53.9	57.8	60.9	62.5	63.3	64.0	64.0	64.0	63.3	63.3
110°	52.3	55.4	57.0	57.8	57.8	57.8	58.6	58.6	58.6	58.6



TEST NUMBER: P241349

CATALOG NUMBER: FVS8M-3-LD4-30-1STD-P125-UNV-EDC1

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	50.8	53.1	53.9	54.7	54.7	54.7	56.2	57.0	57.0	57.0
115°	49.2	51.5	53.1	53.9	54.7	55.4	57.0	58.6	59.4	59.4
117.5°	49.2	52.3	53.9	56.2	57.0	57.8	59.4	61.7	62.5	62.5
120°	50.0	53.1	56.2	58.6	59.4	60.1	62.5	64.8	65.6	66.4
122.5°	50.8	53.9	57.0	60.1	60.9	61.7	64.0	66.4	67.9	68.7
125°	50.8	54.7	57.8	60.9	61.7	63.3	64.8	67.2	68.7	70.3
127.5°	50.0	53.9	57.8	60.9	62.5	63.3	65.6	67.2	69.5	70.3
130°	49.2	53.1	56.2	59.4	60.9	62.5	65.6	67.9	69.5	70.3
132.5°	47.6	51.5	55.4	58.6	60.1	61.7	64.8	67.2	68.7	69.5
135°	46.1	50.8	53.9	57.0	58.6	60.1	63.3	65.6	67.2	67.9
137.5°	45.3	49.2	52.3	55.4	57.0	58.6	61.7	63.3	65.6	66.4
140°	43.0	46.9	50.0	53.1	54.7	56.2	58.6	60.9	62.5	63.3
142.5°	41.4	44.5	47.6	50.0	51.5	53.1	55.4	57.0	58.6	59.4
145°	38.3	41.4	44.5	46.9	47.6	49.2	50.8	52.3	53.9	53.9
147.5°	33.6	37.5	39.8	42.2	43.0	44.5	46.1	46.9	47.6	48.4
150°	28.9	32.0	35.1	36.7	37.5	38.3	39.8	40.6	41.4	41.4
152.5°	23.4	26.6	28.9	31.2	32.0	32.8	33.6	34.4	35.1	35.1
155°	18.7	21.1	24.2	25.0	26.6	26.6	28.1	28.9	28.9	28.9
157.5°	14.1	16.4	18.0	20.3	21.1	21.1	22.6	22.6	23.4	23.4
160°	10.2	11.7	13.3	15.6	16.4	16.4	17.2	18.0	18.0	18.0
162.5°	7.0	8.6	9.4	10.9	11.7	12.5	12.5	13.3	13.3	13.3
165°	4.7	5.5	6.2	7.0	7.8	7.8	8.6	9.4	9.4	9.4
167.5°	3.1	3.1	3.9	3.9	4.7	4.7	5.5	5.5	5.5	6.2
170°	1.6	1.6	1.6	2.3	2.3	2.3	2.3	3.1	3.1	3.1
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)