

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: P241354

Luminaire Tested: **FVS8M-3-LD4-35-1HI-P125-UNV-EDC1**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-79-08  
Report Number: P241354  
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-LD4-35-1HI-P125-UNV-EDC1  
Description: FAILSAFE FVS8M LED FIXTURE  
3FT LENGTH, 1-MODULE LED WITH P125 LENS  
Light Source: (84) 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

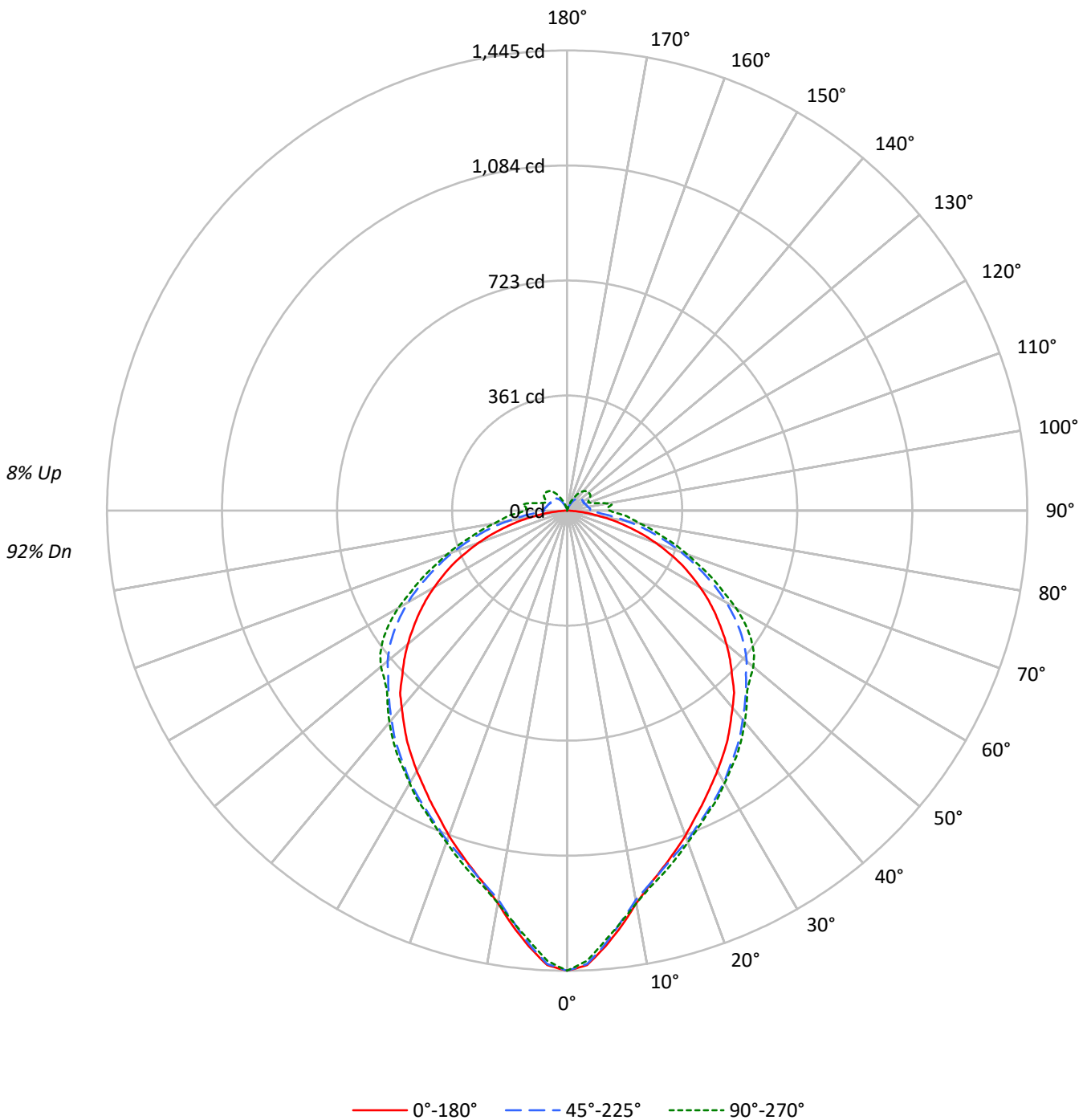
Lumens per Lamp: N/A  
Luminaire Lumens: 3858.0 lumens  
Efficiency: N/A  
Efficacy: 107.2 lumens/watt  
Spacing Criteria (0/90/45): 0.98 / 1.03 / 1.24  
Luminous Opening: Rectangular w/ Sides (W: 0.65' x L: 2.85' x H: 0.15')  
CIE Type: Direct

Input Watts (W): 36  
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°	8436	8436	8436
5°	8019	7880	7797
10°	7355	7112	7137
15°	6926	6688	6710
20°	6625	6396	6365
25°	6366	6151	6102
30°	6182	5967	5899
35°	6044	5782	5737
40°	5903	5615	5565
45°	5753	5483	5388
50°	5598	5422	5465
55°	5404	5287	5433
60°	5174	5035	5143
65°	4894	4645	4690
70°	4432	4233	4224
75°	3771	3693	3769
80°	2863	3015	3411
85°	1493	2231	3448



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	126.6	3.3
10°-20°	329.1	8.5
20°-30°	479.0	12.4
30°-40°	573.2	14.9
40°-50°	605.6	15.7
50°-60°	580.0	15.0
60°-70°	457.4	11.9
70°-80°	285.9	7.4
80°-90°	124.7	3.2
90°-100°	71.2	1.8
100°-110°	60.0	1.6
110°-120°	48.3	1.3
120°-130°	45.6	1.2
130°-140°	36.8	1.0
140°-150°	23.5	0.6
150°-160°	9.3	0.2
160°-170°	1.8	0.0
170°-180°	0.0	0.0
0°-30°	934.7	24.2
0°-40°	1507.9	39.1
0°-60°	2693.5	69.8
0°-90°	3561.5	92.3
90°-120°	179.5	4.7
90°-150°	285.3	7.4
90°-180°	297.0	7.7
0°-180°	3858.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1445	1445	1445	1445	1445	
5°	1374	1370	1367	1360	1356	127
15°	1161	1155	1164	1176	1177	328
25°	1012	1026	1042	1053	1047	467
35°	878	901	922	939	932	549
45°	732	760	794	805	800	566
55°	570	607	664	697	706	509
65°	393	427	477	494	504	386
75°	199	235	283	304	308	212
85°	35	66	108	154	184	45
90°	0	29	72	104	133	1
95°	0	29	72	94	130	0
105°	0	29	64	88	90	0
115°	0	27	58	69	74	0
125°	0	26	58	77	88	0
135°	1	22	53	74	85	1
145°	1	14	42	60	68	1
155°	1	6	21	33	36	0
165°	1	2	5	10	12	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°	1444.7	1444.7	1444.7	1444.7	1444.7	1444.7	1444.7	1444.7	1444.7	1444.7	1444.7
2.5°	1429.0	1425.1	1422.2	1425.1	1423.1	1424.1	1425.1	1427.1	1427.1	1429.0	1425.1
5°	1374.1	1374.1	1370.2	1373.2	1372.2	1370.2	1371.2	1372.2	1373.2	1371.2	1367.3
7.5°	1314.3	1309.4	1307.5	1304.5	1302.6	1304.5	1303.6	1304.5	1305.5	1305.5	1301.6
10°	1251.6	1249.7	1243.8	1244.8	1243.8	1244.8	1247.7	1248.7	1245.7	1242.8	1240.8
12.5°	1201.6	1195.8	1195.8	1197.7	1196.7	1197.7	1194.8	1191.8	1196.7	1200.7	1200.7
15°	1161.4	1156.5	1153.6	1157.5	1156.5	1154.6	1155.6	1156.5	1159.5	1162.4	1164.4
17.5°	1123.2	1119.3	1117.3	1121.3	1120.3	1120.3	1121.3	1125.2	1131.1	1131.1	1131.1
20°	1086.0	1081.1	1082.1	1087.9	1087.9	1089.9	1090.9	1093.8	1097.7	1101.7	1102.6
22.5°	1045.8	1044.8	1046.8	1052.7	1053.6	1055.6	1059.5	1065.4	1067.4	1069.3	1070.3
25°	1011.5	1009.5	1015.4	1018.4	1023.3	1026.2	1029.1	1032.1	1038.9	1041.9	1041.9
27.5°	976.2	976.2	980.1	986.0	990.9	996.8	999.7	1002.7	1007.6	1011.5	1013.5
30°	943.9	940.9	945.8	953.7	961.5	965.4	967.4	972.3	977.2	982.1	985.0
32.5°	910.5	908.6	914.5	919.4	928.2	930.1	933.1	941.9	945.8	948.8	951.7
35°	878.2	876.2	880.2	888.0	896.8	900.7	901.7	911.5	916.4	919.4	922.3
37.5°	841.9	844.9	846.8	854.7	860.6	864.5	869.4	877.2	884.1	887.0	891.9
40°	807.6	809.6	811.5	818.4	827.2	831.1	834.1	844.9	851.7	855.7	857.6
42.5°	776.3	772.3	776.3	785.1	791.0	795.9	799.8	808.6	816.4	825.3	826.2
45°	732.2	735.1	742.0	749.8	757.6	759.6	763.5	773.3	780.2	789.0	793.9
47.5°	693.9	697.9	700.8	709.6	719.4	722.4	727.3	737.1	748.8	757.6	761.6
50°	653.7	658.6	662.6	670.4	680.2	685.1	692.0	703.7	714.5	726.3	736.1
52.5°	610.6	616.5	623.4	628.3	641.0	645.9	651.8	666.5	681.2	692.9	702.8
55°	569.5	574.4	582.2	589.1	601.8	606.7	612.6	628.3	643.9	654.7	664.5
57.5°	527.3	529.3	536.1	545.0	557.7	566.5	571.4	586.1	599.8	611.6	622.4
60°	482.2	486.1	492.0	501.8	516.5	520.4	526.3	543.0	556.7	568.5	577.3
62.5°	437.1	441.1	446.9	458.7	466.5	473.4	482.2	496.9	507.7	517.5	529.3
65°	393.0	395.0	400.9	411.7	422.4	427.3	433.2	446.9	457.7	469.5	477.3
67.5°	343.0	347.9	354.8	362.6	373.4	380.3	385.2	396.0	409.7	423.4	428.3
70°	296.0	299.9	305.8	313.6	325.4	330.3	337.2	348.9	360.7	373.4	381.3
72.5°	249.0	251.9	255.8	265.6	276.4	282.3	288.2	299.9	314.6	323.4	331.3
75°	199.0	203.9	209.7	218.6	228.4	235.2	240.1	251.9	262.7	272.5	283.3
77.5°	153.9	157.8	163.7	170.5	183.3	190.1	194.1	204.8	216.6	223.5	236.2
80°	109.8	112.7	119.6	127.4	137.2	142.1	148.0	157.8	167.6	177.4	189.2
82.5°	69.6	71.5	78.4	86.3	96.1	101.0	105.9	115.7	124.5	136.2	146.0
85°	35.3	37.2	44.1	51.0	61.7	65.7	68.6	79.4	90.2	99.0	107.8
87.5°	10.8	13.7	19.6	27.4	36.3	40.2	44.1	53.9	62.7	72.5	83.3
90°	0.0	2.9	8.8	15.7	24.5	29.4	33.3	43.1	52.9	62.7	71.5
92.5°	0.0	2.9	7.8	15.7	24.5	29.4	33.3	43.1	52.9	61.7	72.5
95°	0.0	2.9	7.8	15.7	24.5	29.4	34.3	43.1	52.9	63.7	72.5
97.5°	0.0	2.0	7.8	15.7	24.5	29.4	34.3	43.1	53.9	62.7	68.6
100°	0.0	2.0	7.8	15.7	24.5	29.4	33.3	44.1	52.9	59.8	66.6
102.5°	0.0	2.0	7.8	15.7	24.5	29.4	34.3	43.1	50.0	57.8	64.7
105°	0.0	2.0	7.8	15.7	24.5	29.4	33.3	41.2	49.0	56.8	63.7
107.5°	0.0	2.0	7.8	15.7	23.5	28.4	32.3	40.2	48.0	55.9	61.7
110°	0.0	2.0	6.9	14.7	23.5	27.4	32.3	40.2	48.0	54.9	60.8



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	0.0	2.0	6.9	14.7	23.5	27.4	31.4	40.2	47.0	53.9	58.8
115°	0.0	2.0	6.9	14.7	22.5	27.4	31.4	40.2	47.0	53.9	57.8
117.5°	0.0	2.0	6.9	14.7	22.5	27.4	31.4	39.2	47.0	52.9	57.8
120°	0.0	1.0	6.9	13.7	22.5	26.5	31.4	39.2	47.0	52.9	57.8
122.5°	0.0	1.0	5.9	13.7	21.6	26.5	30.4	39.2	46.1	52.9	57.8
125°	0.0	1.0	5.9	13.7	21.6	25.5	29.4	38.2	46.1	52.9	57.8
127.5°	1.0	1.0	5.9	12.7	20.6	24.5	28.4	37.2	45.1	51.9	57.8
130°	0.0	1.0	4.9	11.8	19.6	23.5	27.4	36.3	44.1	50.0	55.9
132.5°	1.0	1.0	4.9	10.8	18.6	22.5	26.5	34.3	43.1	49.0	54.9
135°	1.0	1.0	3.9	9.8	17.6	21.6	25.5	32.3	41.2	47.0	52.9
137.5°	1.0	1.0	3.9	8.8	15.7	19.6	23.5	31.4	38.2	45.1	51.0
140°	1.0	1.0	2.9	7.8	14.7	17.6	21.6	29.4	36.3	43.1	49.0
142.5°	1.0	1.0	2.9	6.9	12.7	15.7	19.6	26.5	33.3	40.2	46.1
145°	1.0	1.0	2.0	5.9	10.8	13.7	16.7	23.5	30.4	36.3	42.1
147.5°	1.0	1.0	2.0	4.9	8.8	11.8	14.7	20.6	26.5	32.3	37.2
150°	1.0	1.0	1.0	3.9	6.9	8.8	11.8	16.7	21.6	26.5	31.4
152.5°	1.0	1.0	1.0	2.9	5.9	6.9	8.8	13.7	17.6	21.6	25.5
155°	1.0	1.0	1.0	2.0	3.9	5.9	6.9	9.8	13.7	16.7	20.6
157.5°	1.0	1.0	1.0	2.0	2.9	3.9	4.9	7.8	9.8	12.7	15.7
160°	1.0	1.0	1.0	1.0	2.0	2.9	3.9	4.9	6.9	8.8	10.8
162.5°	1.0	1.0	1.0	1.0	2.0	2.0	2.9	3.9	4.9	5.9	7.8
165°	1.0	1.0	1.0	1.0	1.0	2.0	2.0	2.9	3.9	3.9	4.9
167.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0	2.0	2.9	2.9
170°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0
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°	1444.7	1444.7	1444.7	1444.7	1444.7	1444.7	1444.7	1444.7	1444.7	1444.7
2.5°	1423.1	1421.2	1422.2	1422.2	1418.2	1421.2	1420.2	1418.2	1415.3	1415.3
5°	1364.3	1360.4	1360.4	1362.4	1360.4	1360.4	1361.4	1360.4	1361.4	1356.5
7.5°	1300.6	1297.7	1299.6	1300.6	1303.6	1302.6	1303.6	1302.6	1302.6	1302.6
10°	1241.8	1246.7	1245.7	1247.7	1250.6	1249.7	1251.6	1254.6	1253.6	1251.6
12.5°	1200.7	1205.6	1205.6	1210.5	1210.5	1211.4	1214.4	1214.4	1209.5	1209.5
15°	1167.3	1168.3	1169.3	1177.1	1176.2	1178.1	1180.1	1178.1	1177.1	1177.1
17.5°	1133.0	1134.0	1137.9	1137.9	1139.9	1140.9	1144.8	1143.8	1142.8	1142.8
20°	1103.6	1105.6	1110.5	1113.4	1114.4	1111.5	1114.4	1112.4	1112.4	1108.5
22.5°	1075.2	1081.1	1079.1	1081.1	1083.0	1085.0	1085.0	1083.0	1081.1	1077.2
25°	1045.8	1047.8	1050.7	1052.7	1052.7	1051.7	1051.7	1050.7	1048.7	1046.8
27.5°	1017.4	1020.3	1019.3	1025.2	1027.2	1028.2	1027.2	1023.3	1019.3	1021.3
30°	987.0	989.9	993.8	997.8	998.7	992.9	991.9	992.9	988.9	988.9
32.5°	955.6	959.5	966.4	965.4	965.4	968.4	968.4	965.4	960.5	958.6
35°	925.2	933.1	935.0	940.9	939.0	936.0	933.1	933.1	930.1	932.1
37.5°	894.9	899.8	905.6	904.7	904.7	905.6	905.6	901.7	902.7	900.7
40°	863.5	867.4	871.3	871.3	873.3	873.3	870.4	867.4	867.4	868.4
42.5°	828.2	834.1	839.0	839.0	840.0	839.0	840.0	838.0	834.1	834.1
45°	798.8	800.8	804.7	805.7	804.7	804.7	801.7	801.7	800.8	799.8
47.5°	768.4	775.3	776.3	778.2	776.3	776.3	778.2	779.2	781.2	779.2
50°	741.0	749.8	755.7	758.6	758.6	760.6	761.6	761.6	764.5	763.5
52.5°	713.5	719.4	725.3	733.1	735.1	735.1	739.0	738.0	740.0	740.0
55°	674.3	682.2	689.0	694.9	696.9	700.8	699.8	702.8	702.8	705.7
57.5°	632.2	636.1	645.9	649.8	648.8	651.8	652.8	657.7	663.5	663.5
60°	587.1	590.0	594.9	594.9	596.9	597.9	603.8	606.7	608.7	612.6
62.5°	532.2	539.1	543.0	544.0	545.9	550.8	550.8	550.8	552.8	553.8
65°	485.2	489.1	493.0	496.9	494.0	495.0	495.9	496.9	499.9	503.8
67.5°	437.1	441.1	445.0	446.9	443.0	444.0	442.0	445.0	447.9	447.9
70°	387.1	392.1	397.9	397.0	393.0	395.0	394.0	397.9	399.9	400.9
72.5°	339.1	346.0	349.9	349.9	349.9	349.9	350.9	352.8	353.8	354.8
75°	290.1	297.0	301.9	305.8	303.8	306.8	308.7	309.7	308.7	307.8
77.5°	245.0	251.9	255.8	261.7	263.7	265.6	267.6	267.6	269.5	269.5
80°	196.0	204.8	211.7	219.5	222.5	226.4	227.4	230.3	230.3	231.3
82.5°	154.9	164.7	172.5	180.3	184.3	186.2	192.1	197.0	201.9	204.8
85°	118.6	129.4	137.2	147.0	153.9	161.7	172.5	178.4	179.4	184.3
87.5°	93.1	103.9	117.6	128.4	128.4	129.4	132.3	137.2	144.1	149.0
90°	82.3	96.1	100.0	101.9	103.9	105.9	109.8	116.6	126.4	133.3
92.5°	83.3	87.2	91.2	94.1	96.1	99.0	103.9	110.8	120.6	127.4
95°	78.4	83.3	88.2	92.1	94.1	97.0	102.9	111.7	123.5	130.4
97.5°	75.5	81.4	85.3	91.2	94.1	98.0	107.8	120.6	135.3	141.1
100°	73.5	79.4	84.3	91.2	96.1	100.0	111.7	122.5	128.4	129.4
102.5°	71.5	77.4	83.3	90.2	94.1	98.0	103.9	107.8	106.8	106.8
105°	69.6	75.5	80.4	85.3	88.2	89.2	92.1	91.2	91.2	90.2
107.5°	67.6	72.5	76.4	78.4	79.4	80.4	80.4	80.4	79.4	79.4
110°	65.7	69.6	71.5	72.5	72.5	72.5	73.5	73.5	73.5	73.5





TEST NUMBER: P241354

CATALOG NUMBER: FVS8M-3-LD4-35-1HI-P125-UNV-EDC1

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	63.7	66.6	67.6	68.6	68.6	68.6	70.6	71.5	71.5	71.5
115°	61.7	64.7	66.6	67.6	68.6	69.6	71.5	73.5	74.5	74.5
117.5°	61.7	65.7	67.6	70.6	71.5	72.5	74.5	77.4	78.4	78.4
120°	62.7	66.6	70.6	73.5	74.5	75.5	78.4	81.4	82.3	83.3
122.5°	63.7	67.6	71.5	75.5	76.4	77.4	80.4	83.3	85.3	86.3
125°	63.7	68.6	72.5	76.4	77.4	79.4	81.4	84.3	86.3	88.2
127.5°	62.7	67.6	72.5	76.4	78.4	79.4	82.3	84.3	87.2	88.2
130°	61.7	66.6	70.6	74.5	76.4	78.4	82.3	85.3	87.2	88.2
132.5°	59.8	64.7	69.6	73.5	75.5	77.4	81.4	84.3	86.3	87.2
135°	57.8	63.7	67.6	71.5	73.5	75.5	79.4	82.3	84.3	85.3
137.5°	56.8	61.7	65.7	69.6	71.5	73.5	77.4	79.4	82.3	83.3
140°	53.9	58.8	62.7	66.6	68.6	70.6	73.5	76.4	78.4	79.4
142.5°	51.9	55.9	59.8	62.7	64.7	66.6	69.6	71.5	73.5	74.5
145°	48.0	51.9	55.9	58.8	59.8	61.7	63.7	65.7	67.6	67.6
147.5°	42.1	47.0	50.0	52.9	53.9	55.9	57.8	58.8	59.8	60.8
150°	36.3	40.2	44.1	46.1	47.0	48.0	50.0	51.0	51.9	51.9
152.5°	29.4	33.3	36.3	39.2	40.2	41.2	42.1	43.1	44.1	44.1
155°	23.5	26.5	30.4	31.4	33.3	33.3	35.3	36.3	36.3	36.3
157.5°	17.6	20.6	22.5	25.5	26.5	26.5	28.4	28.4	29.4	29.4
160°	12.7	14.7	16.7	19.6	20.6	20.6	21.6	22.5	22.5	22.5
162.5°	8.8	10.8	11.8	13.7	14.7	15.7	15.7	16.7	16.7	16.7
165°	5.9	6.9	7.8	8.8	9.8	9.8	10.8	11.8	11.8	11.8
167.5°	3.9	3.9	4.9	4.9	5.9	5.9	6.9	6.9	6.9	7.8
170°	2.0	2.0	2.0	2.9	2.9	2.9	2.9	3.9	3.9	3.9
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)