

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: P241353

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

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P241353
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-LD4-30-1HI-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

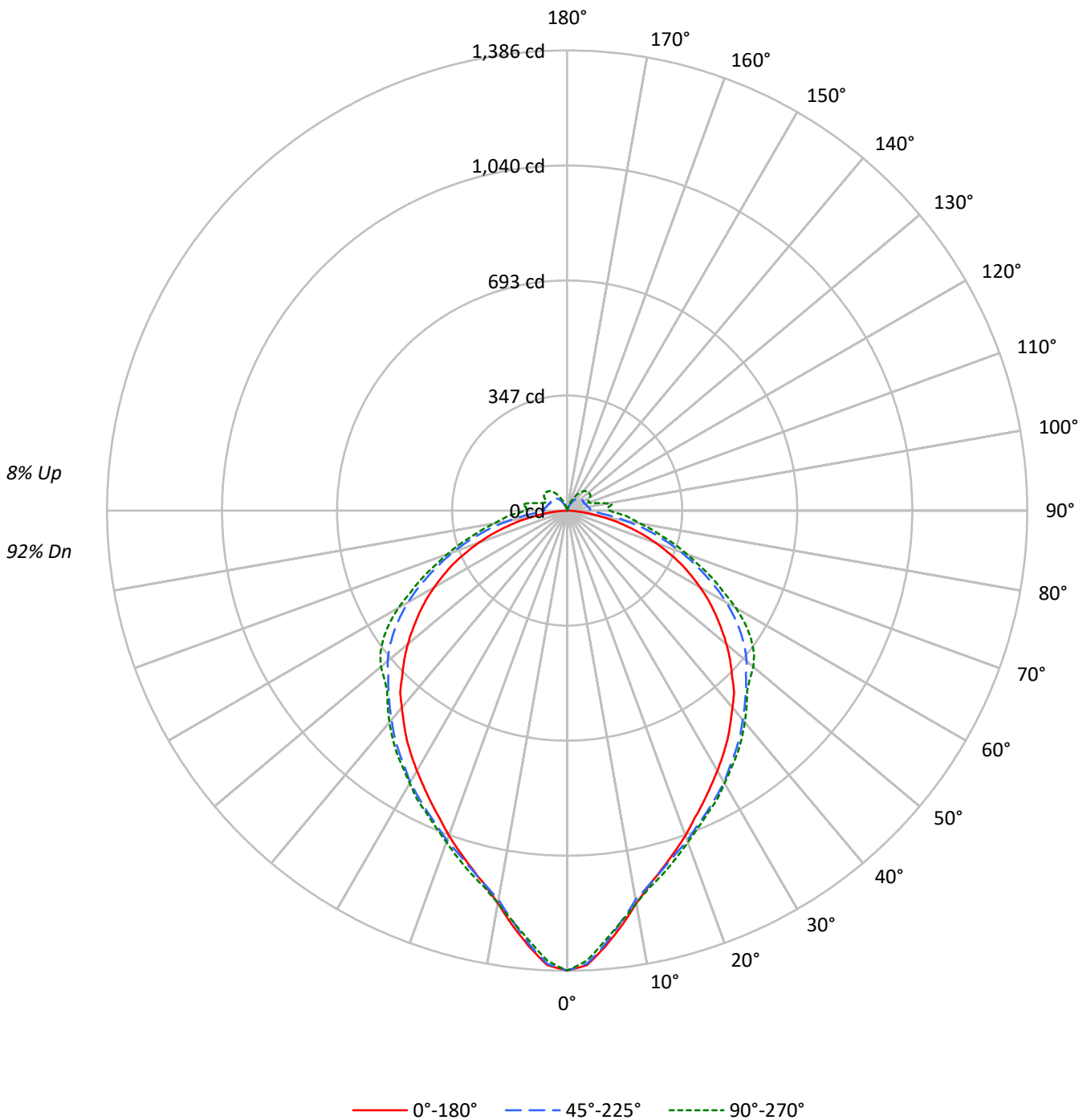
Lumens per Lamp: N/A
Luminaire Lumens: 3700.0 lumens
Efficiency: N/A
Efficacy: 102.8 lumens/watt
Spacing Criteria (0/90/45): 0.98 / 1.03 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.65' x L: 2.85' x H: 0.15')
CIE Type: Direct

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°	8091	8091	8091
5°	7691	7557	7478
10°	7054	6821	6845
15°	6643	6414	6435
20°	6354	6134	6105
25°	6105	5899	5852
30°	5929	5723	5657
35°	5796	5545	5502
40°	5661	5385	5337
45°	5517	5258	5167
50°	5369	5200	5241
55°	5182	5070	5210
60°	4962	4829	4932
65°	4693	4455	4498
70°	4250	4060	4051
75°	3615	3542	3614
80°	2745	2890	3270
85°	1430	2140	3306



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	121.4	3.3
10°-20°	315.6	8.5
20°-30°	459.4	12.4
30°-40°	549.7	14.9
40°-50°	580.8	15.7
50°-60°	556.2	15.0
60°-70°	438.7	11.9
70°-80°	274.2	7.4
80°-90°	119.6	3.2
90°-100°	68.3	1.8
100°-110°	57.5	1.6
110°-120°	46.4	1.3
120°-130°	43.8	1.2
130°-140°	35.3	1.0
140°-150°	22.5	0.6
150°-160°	8.9	0.2
160°-170°	1.8	0.0
170°-180°	0.0	0.0
0°-30°	896.5	24.2
0°-40°	1446.2	39.1
0°-60°	2583.2	69.8
0°-90°	3415.6	92.3
90°-120°	172.2	4.7
90°-150°	273.7	7.4
90°-180°	284.0	7.7
0°-180°	3700.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1386	1386	1386	1386	1386	
5°	1318	1314	1311	1305	1301	122
15°	1114	1107	1117	1128	1129	314
25°	970	984	999	1010	1004	447
35°	842	864	884	900	894	526
45°	702	728	761	772	767	543
55°	546	582	637	668	677	488
65°	377	410	458	474	483	371
75°	191	226	272	291	295	203
85°	34	63	103	148	177	43
90°	0	28	69	100	128	1
95°	0	28	70	90	125	0
105°	0	28	61	85	86	0
115°	0	26	56	66	71	0
125°	0	24	56	74	85	0
135°	1	21	51	70	82	1
145°	1	13	40	57	65	1
155°	1	6	20	32	35	0
165°	1	2	5	9	11	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°	1385.5	1385.5	1385.5	1385.5	1385.5	1385.5	1385.5	1385.5	1385.5	1385.5	1385.5
2.5°	1370.5	1366.7	1363.9	1366.7	1364.9	1365.8	1366.7	1368.6	1368.6	1370.5	1366.7
5°	1317.9	1317.9	1314.1	1316.9	1316.0	1314.1	1315.0	1316.0	1316.9	1315.0	1311.3
7.5°	1260.5	1255.8	1253.9	1251.1	1249.2	1251.1	1250.2	1251.1	1252.1	1252.1	1248.3
10°	1200.4	1198.5	1192.8	1193.8	1192.8	1193.8	1196.6	1197.5	1194.7	1191.9	1190.0
12.5°	1152.4	1146.8	1146.8	1148.7	1147.7	1148.7	1145.8	1143.0	1147.7	1151.5	1151.5
15°	1113.9	1109.2	1106.4	1110.1	1109.2	1107.3	1108.2	1109.2	1112.0	1114.8	1116.7
17.5°	1077.2	1073.5	1071.6	1075.3	1074.4	1074.4	1075.3	1079.1	1084.7	1084.7	1084.7
20°	1041.5	1036.8	1037.7	1043.4	1043.4	1045.3	1046.2	1049.0	1052.8	1056.5	1057.5
22.5°	1003.0	1002.0	1003.9	1009.5	1010.5	1012.4	1016.1	1021.8	1023.6	1025.5	1026.5
25°	970.1	968.2	973.8	976.6	981.3	984.2	987.0	989.8	996.4	999.2	999.2
27.5°	936.2	936.2	940.0	945.6	950.3	956.0	958.8	961.6	966.3	970.1	971.9
30°	905.2	902.4	907.1	914.6	922.1	925.9	927.8	932.5	937.2	941.9	944.7
32.5°	873.2	871.4	877.0	881.7	890.2	892.0	894.9	903.3	907.1	909.9	912.7
35°	842.2	840.3	844.1	851.6	860.1	863.8	864.8	874.2	878.9	881.7	884.5
37.5°	807.4	810.3	812.1	819.7	825.3	829.1	833.8	841.3	847.9	850.7	855.4
40°	774.5	776.4	778.3	784.9	793.3	797.1	799.9	810.3	816.8	820.6	822.5
42.5°	744.5	740.7	744.5	752.9	758.6	763.3	767.0	775.5	783.0	791.5	792.4
45°	702.2	705.0	711.6	719.1	726.6	728.5	732.2	741.6	748.2	756.7	761.4
47.5°	665.5	669.3	672.1	680.6	690.0	692.8	697.5	706.9	718.1	726.6	730.4
50°	627.0	631.7	635.4	643.0	652.4	657.1	663.6	674.9	685.3	696.5	705.9
52.5°	585.6	591.3	597.8	602.5	614.8	619.5	625.1	639.2	653.3	664.6	674.0
55°	546.1	550.8	558.4	564.9	577.2	581.9	587.5	602.5	617.6	627.9	637.3
57.5°	505.7	507.6	514.2	522.6	534.9	543.3	548.0	562.1	575.3	586.6	596.9
60°	462.5	466.2	471.9	481.3	495.4	499.1	504.8	520.8	533.9	545.2	553.7
62.5°	419.2	423.0	428.6	439.9	447.4	454.0	462.5	476.6	486.9	496.3	507.6
65°	376.9	378.8	384.5	394.8	405.1	409.8	415.5	428.6	439.0	450.3	457.8
67.5°	329.0	333.7	340.3	347.8	358.1	364.7	369.4	379.8	392.9	406.1	410.8
70°	283.9	287.6	293.3	300.8	312.1	316.8	323.4	334.6	345.9	358.1	365.7
72.5°	238.8	241.6	245.3	254.7	265.1	270.7	276.4	287.6	301.7	310.2	317.7
75°	190.8	195.5	201.2	209.6	219.0	225.6	230.3	241.6	251.9	261.3	271.7
77.5°	147.6	151.3	157.0	163.6	175.8	182.4	186.1	196.5	207.7	214.3	226.5
80°	105.3	108.1	114.7	122.2	131.6	136.3	141.9	151.3	160.7	170.1	181.4
82.5°	66.7	68.6	75.2	82.7	92.1	96.8	101.5	110.9	119.4	130.7	140.1
85°	33.8	35.7	42.3	48.9	59.2	63.0	65.8	76.1	86.5	94.9	103.4
87.5°	10.3	13.2	18.8	26.3	34.8	38.5	42.3	51.7	60.2	69.6	79.9
90°	0.0	2.8	8.5	15.0	23.5	28.2	32.0	41.4	50.8	60.2	68.6
92.5°	0.0	2.8	7.5	15.0	23.5	28.2	32.0	41.4	50.8	59.2	69.6
95°	0.0	2.8	7.5	15.0	23.5	28.2	32.9	41.4	50.8	61.1	69.6
97.5°	0.0	1.9	7.5	15.0	23.5	28.2	32.9	41.4	51.7	60.2	65.8
100°	0.0	1.9	7.5	15.0	23.5	28.2	32.0	42.3	50.8	57.3	63.9
102.5°	0.0	1.9	7.5	15.0	23.5	28.2	32.9	41.4	47.9	55.5	62.0
105°	0.0	1.9	7.5	15.0	23.5	28.2	32.0	39.5	47.0	54.5	61.1
107.5°	0.0	1.9	7.5	15.0	22.6	27.3	31.0	38.5	46.1	53.6	59.2
110°	0.0	1.9	6.6	14.1	22.6	26.3	31.0	38.5	46.1	52.6	58.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	0.0	1.9	6.6	14.1	22.6	26.3	30.1	38.5	45.1	51.7	56.4
115°	0.0	1.9	6.6	14.1	21.6	26.3	30.1	38.5	45.1	51.7	55.5
117.5°	0.0	1.9	6.6	14.1	21.6	26.3	30.1	37.6	45.1	50.8	55.5
120°	0.0	0.9	6.6	13.2	21.6	25.4	30.1	37.6	45.1	50.8	55.5
122.5°	0.0	0.9	5.6	13.2	20.7	25.4	29.1	37.6	44.2	50.8	55.5
125°	0.0	0.9	5.6	13.2	20.7	24.4	28.2	36.7	44.2	50.8	55.5
127.5°	0.9	0.9	5.6	12.2	19.7	23.5	27.3	35.7	43.2	49.8	55.5
130°	0.0	0.9	4.7	11.3	18.8	22.6	26.3	34.8	42.3	47.9	53.6
132.5°	0.9	0.9	4.7	10.3	17.9	21.6	25.4	32.9	41.4	47.0	52.6
135°	0.9	0.9	3.8	9.4	16.9	20.7	24.4	31.0	39.5	45.1	50.8
137.5°	0.9	0.9	3.8	8.5	15.0	18.8	22.6	30.1	36.7	43.2	48.9
140°	0.9	0.9	2.8	7.5	14.1	16.9	20.7	28.2	34.8	41.4	47.0
142.5°	0.9	0.9	2.8	6.6	12.2	15.0	18.8	25.4	32.0	38.5	44.2
145°	0.9	0.9	1.9	5.6	10.3	13.2	16.0	22.6	29.1	34.8	40.4
147.5°	0.9	0.9	1.9	4.7	8.5	11.3	14.1	19.7	25.4	31.0	35.7
150°	0.9	0.9	0.9	3.8	6.6	8.5	11.3	16.0	20.7	25.4	30.1
152.5°	0.9	0.9	0.9	2.8	5.6	6.6	8.5	13.2	16.9	20.7	24.4
155°	0.9	0.9	0.9	1.9	3.8	5.6	6.6	9.4	13.2	16.0	19.7
157.5°	0.9	0.9	0.9	1.9	2.8	3.8	4.7	7.5	9.4	12.2	15.0
160°	0.9	0.9	0.9	0.9	1.9	2.8	3.8	4.7	6.6	8.5	10.3
162.5°	0.9	0.9	0.9	0.9	1.9	1.9	2.8	3.8	4.7	5.6	7.5
165°	0.9	0.9	0.9	0.9	0.9	1.9	1.9	2.8	3.8	3.8	4.7
167.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.9	1.9	2.8	2.8
170°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.9
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°	1385.5	1385.5	1385.5	1385.5	1385.5	1385.5	1385.5	1385.5	1385.5	1385.5
2.5°	1364.9	1363.0	1363.9	1363.9	1360.2	1363.0	1362.0	1360.2	1357.3	1357.3
5°	1308.5	1304.7	1304.7	1306.6	1304.7	1304.7	1305.6	1304.7	1305.6	1300.9
7.5°	1247.4	1244.5	1246.4	1247.4	1250.2	1249.2	1250.2	1249.2	1249.2	1249.2
10°	1191.0	1195.7	1194.7	1196.6	1199.4	1198.5	1200.4	1203.2	1202.2	1200.4
12.5°	1151.5	1156.2	1156.2	1160.9	1160.9	1161.8	1164.6	1164.6	1159.9	1159.9
15°	1119.5	1120.5	1121.4	1128.9	1128.0	1129.9	1131.7	1129.9	1128.9	1128.9
17.5°	1086.6	1087.6	1091.3	1091.3	1093.2	1094.1	1097.9	1097.0	1096.0	1096.0
20°	1058.4	1060.3	1065.0	1067.8	1068.8	1065.9	1068.8	1066.9	1066.9	1063.1
22.5°	1031.2	1036.8	1034.9	1036.8	1038.7	1040.6	1040.6	1038.7	1036.8	1033.0
25°	1003.0	1004.8	1007.7	1009.5	1009.5	1008.6	1008.6	1007.7	1005.8	1003.9
27.5°	975.7	978.5	977.6	983.2	985.1	986.0	985.1	981.3	977.6	979.5
30°	946.6	949.4	953.1	956.9	957.8	952.2	951.3	952.2	948.4	948.4
32.5°	916.5	920.2	926.8	925.9	925.9	928.7	928.7	925.9	921.2	919.3
35°	887.3	894.9	896.7	902.4	900.5	897.7	894.9	894.9	892.0	893.9
37.5°	858.2	862.9	868.5	867.6	867.6	868.5	868.5	864.8	865.7	863.8
40°	828.1	831.9	835.6	835.6	837.5	837.5	834.7	831.9	831.9	832.8
42.5°	794.3	799.9	804.6	804.6	805.6	804.6	805.6	803.7	799.9	799.9
45°	766.1	768.0	771.7	772.7	771.7	771.7	768.9	768.9	768.0	767.0
47.5°	736.9	743.5	744.5	746.3	744.5	744.5	746.3	747.3	749.2	747.3
50°	710.6	719.1	724.7	727.5	727.5	729.4	730.4	730.4	733.2	732.2
52.5°	684.3	690.0	695.6	703.1	705.0	705.0	708.7	707.8	709.7	709.7
55°	646.7	654.2	660.8	666.5	668.3	672.1	671.2	674.0	674.0	676.8
57.5°	606.3	610.1	619.5	623.2	622.3	625.1	626.0	630.7	636.4	636.4
60°	563.1	565.9	570.6	570.6	572.5	573.4	579.0	581.9	583.7	587.5
62.5°	510.4	517.0	520.8	521.7	523.6	528.3	528.3	528.3	530.2	531.1
65°	465.3	469.1	472.8	476.6	473.8	474.7	475.6	476.6	479.4	483.2
67.5°	419.2	423.0	426.8	428.6	424.9	425.8	423.9	426.8	429.6	429.6
70°	371.3	376.0	381.6	380.7	376.9	378.8	377.9	381.6	383.5	384.5
72.5°	325.2	331.8	335.6	335.6	335.6	335.6	336.5	338.4	339.3	340.3
75°	278.2	284.8	289.5	293.3	291.4	294.2	296.1	297.0	296.1	295.2
77.5°	235.0	241.6	245.3	251.0	252.9	254.7	256.6	256.6	258.5	258.5
80°	188.0	196.5	203.0	210.6	213.4	217.1	218.1	220.9	220.9	221.8
82.5°	148.5	157.9	165.4	173.0	176.7	178.6	184.2	188.9	193.6	196.5
85°	113.7	124.1	131.6	141.0	147.6	155.1	165.4	171.1	172.0	176.7
87.5°	89.3	99.6	112.8	123.1	123.1	124.1	126.9	131.6	138.2	142.9
90°	79.0	92.1	95.9	97.8	99.6	101.5	105.3	111.9	121.3	127.8
92.5°	79.9	83.7	87.4	90.2	92.1	94.9	99.6	106.2	115.6	122.2
95°	75.2	79.9	84.6	88.4	90.2	93.1	98.7	107.2	118.4	125.0
97.5°	72.4	78.0	81.8	87.4	90.2	94.0	103.4	115.6	129.7	135.4
100°	70.5	76.1	80.8	87.4	92.1	95.9	107.2	117.5	123.1	124.1
102.5°	68.6	74.3	79.9	86.5	90.2	94.0	99.6	103.4	102.5	102.5
105°	66.7	72.4	77.1	81.8	84.6	85.5	88.4	87.4	87.4	86.5
107.5°	64.9	69.6	73.3	75.2	76.1	77.1	77.1	77.1	76.1	76.1
110°	63.0	66.7	68.6	69.6	69.6	69.6	70.5	70.5	70.5	70.5



TEST NUMBER: P241353

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

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	61.1	63.9	64.9	65.8	65.8	65.8	67.7	68.6	68.6	68.6
115°	59.2	62.0	63.9	64.9	65.8	66.7	68.6	70.5	71.4	71.4
117.5°	59.2	63.0	64.9	67.7	68.6	69.6	71.4	74.3	75.2	75.2
120°	60.2	63.9	67.7	70.5	71.4	72.4	75.2	78.0	79.0	79.9
122.5°	61.1	64.9	68.6	72.4	73.3	74.3	77.1	79.9	81.8	82.7
125°	61.1	65.8	69.6	73.3	74.3	76.1	78.0	80.8	82.7	84.6
127.5°	60.2	64.9	69.6	73.3	75.2	76.1	79.0	80.8	83.7	84.6
130°	59.2	63.9	67.7	71.4	73.3	75.2	79.0	81.8	83.7	84.6
132.5°	57.3	62.0	66.7	70.5	72.4	74.3	78.0	80.8	82.7	83.7
135°	55.5	61.1	64.9	68.6	70.5	72.4	76.1	79.0	80.8	81.8
137.5°	54.5	59.2	63.0	66.7	68.6	70.5	74.3	76.1	79.0	79.9
140°	51.7	56.4	60.2	63.9	65.8	67.7	70.5	73.3	75.2	76.1
142.5°	49.8	53.6	57.3	60.2	62.0	63.9	66.7	68.6	70.5	71.4
145°	46.1	49.8	53.6	56.4	57.3	59.2	61.1	63.0	64.9	64.9
147.5°	40.4	45.1	47.9	50.8	51.7	53.6	55.5	56.4	57.3	58.3
150°	34.8	38.5	42.3	44.2	45.1	46.1	47.9	48.9	49.8	49.8
152.5°	28.2	32.0	34.8	37.6	38.5	39.5	40.4	41.4	42.3	42.3
155°	22.6	25.4	29.1	30.1	32.0	32.0	33.8	34.8	34.8	34.8
157.5°	16.9	19.7	21.6	24.4	25.4	25.4	27.3	27.3	28.2	28.2
160°	12.2	14.1	16.0	18.8	19.7	19.7	20.7	21.6	21.6	21.6
162.5°	8.5	10.3	11.3	13.2	14.1	15.0	15.0	16.0	16.0	16.0
165°	5.6	6.6	7.5	8.5	9.4	9.4	10.3	11.3	11.3	11.3
167.5°	3.8	3.8	4.7	4.7	5.6	5.6	6.6	6.6	6.6	7.5
170°	1.9	1.9	1.9	2.8	2.8	2.8	2.8	3.8	3.8	3.8
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)