

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: P241328

Luminaire Tested: **FVS8M-2-LD4-50-2STD-P125-UNV-EDC1**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P241328
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1711-410-8)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: FVS8M-2-LD4-50-2STD-P125-UNV-EDC1
Description: FAILSAFE FVS8M LED FIXTURE
2FT LENGTH, 2-MODULE LED WITH P125 LENS
Light Source: (84) 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

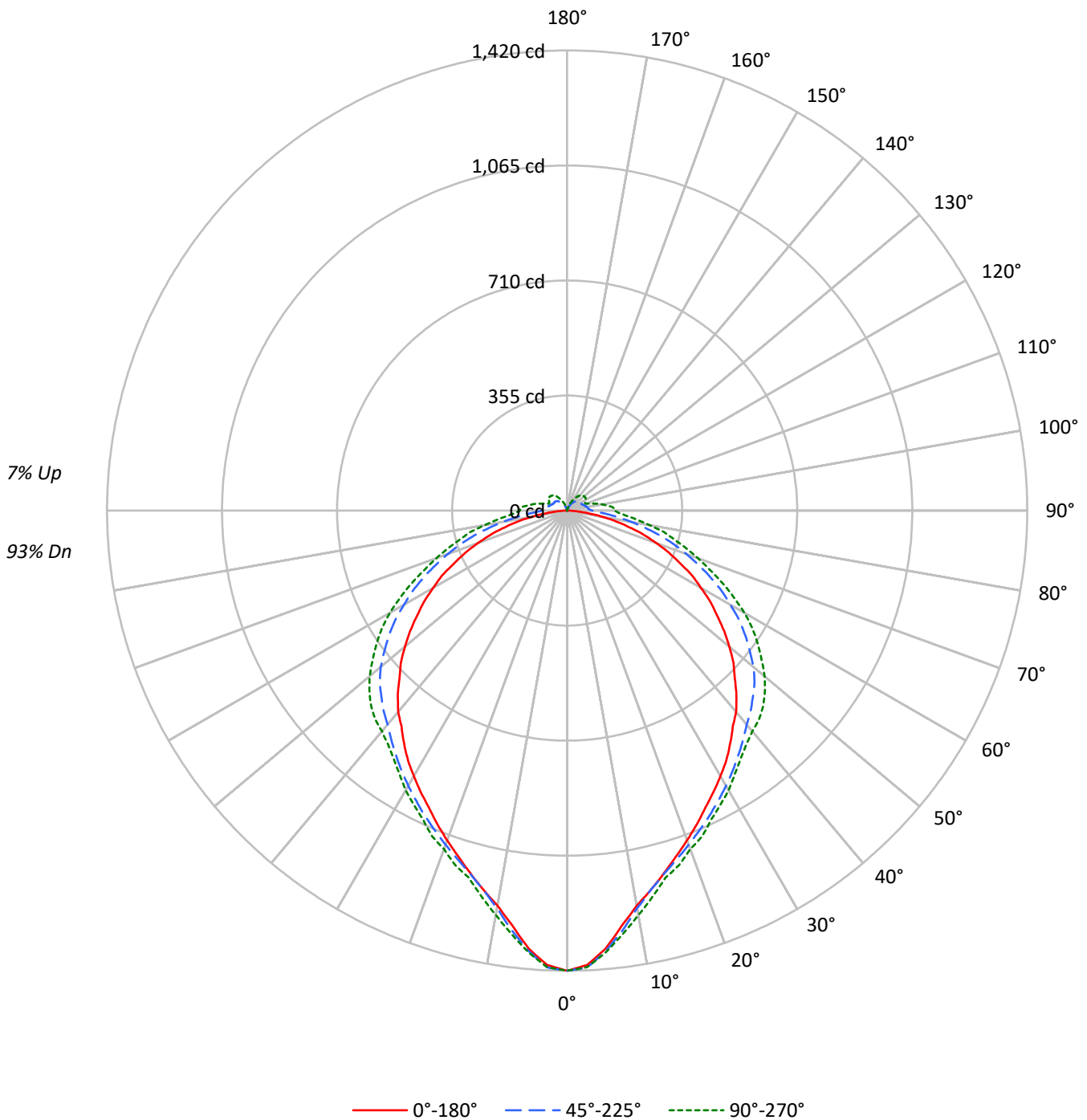
Lumens per Lamp: N/A
Luminaire Lumens: 3867.0 lumens
Efficiency: N/A
Efficacy: 115.1 lumens/watt
Spacing Criteria (0/90/45): 1 / 1.05 / 1.26
Luminous Opening: Rectangular w/ Sides (W: 0.65' x L: 1.85' x H: 0.15')
CIE Type: Direct

Input Watts (W): 33.6
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

TEST NUMBER: P241328

CATALOG NUMBER: FVS8M-2-LD4-50-2STD-P125-UNV-EDC1

Luminous Intensity Polar Plot





TEST NUMBER: P241328

CATALOG NUMBER: FVS8M-2-LD4-50-2STD-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	96	96	96	93
1	106	101	97	92	103	98	94	90	93	89	86	88	85	82	83	81	79	76
2	96	88	80	74	93	85	79	73	81	75	70	76	72	68	72	69	65	63
3	88	77	68	61	84	75	67	60	71	64	59	67	61	57	64	59	55	52
4	80	68	59	52	77	66	58	51	63	55	50	59	53	48	56	51	47	44
5	73	60	51	44	71	59	50	44	56	48	43	53	47	42	51	45	41	38
6	68	54	45	39	65	53	44	38	50	43	37	48	42	36	46	40	36	33
7	63	49	40	34	61	48	40	34	46	38	33	44	37	32	42	36	32	30
8	58	45	36	30	56	44	36	30	42	35	29	40	34	29	39	33	28	26
9	55	41	33	27	53	40	32	27	39	31	27	37	31	26	36	30	26	24
10	51	38	30	25	50	37	30	24	36	29	24	34	28	24	33	27	23	21

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12763	12763	12763
5°	12160	12084	12104
10°	11142	10951	11125
15°	10550	10200	10292
20°	10068	9732	9826
25°	9665	9367	9439
30°	9395	9051	9151
35°	9124	8781	8845
40°	8926	8567	8772
45°	8623	8482	8869
50°	8353	8351	8767
55°	7956	8045	8519
60°	7547	7619	8167
65°	6990	7114	7568
70°	6315	6470	6976
75°	5330	5693	6421
80°	3902	4685	5838
85°	1944	3606	5273



TEST NUMBER: P241328

CATALOG NUMBER: FVS8M-2-LD4-50-2STD-P125-UNV-EDC1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	126.4	3.3
10°-20°	328.7	8.5
20°-30°	478.3	12.4
30°-40°	573.9	14.8
40°-50°	619.0	16.0
50°-60°	586.3	15.2
60°-70°	467.3	12.1
70°-80°	299.6	7.7
80°-90°	133.1	3.4
90°-100°	70.2	1.8
100°-110°	53.5	1.4
110°-120°	39.9	1.0
120°-130°	36.2	0.9
130°-140°	28.4	0.7
140°-150°	17.3	0.4
150°-160°	7.2	0.2
160°-170°	1.6	0.0
170°-180°	0.0	0.0
0°-30°	933.4	24.1
0°-40°	1507.3	39.0
0°-60°	2712.6	70.1
0°-90°	3612.6	93.4
90°-120°	163.6	4.2
90°-150°	245.6	6.4
90°-180°	254.0	6.6
0°-180°	3867.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1420	1420	1420	1420	1420	
5°	1357	1359	1364	1370	1368	125
15°	1158	1155	1159	1174	1173	326
25°	1010	1021	1039	1054	1052	467
35°	877	897	921	939	934	549
45°	732	761	811	851	855	566
55°	565	606	671	708	719	506
65°	384	428	489	513	528	382
75°	198	236	296	331	341	211
85°	36	69	121	163	183	46
90°	0	31	78	106	146	2
95°	0	28	66	95	138	0
105°	0	26	57	78	84	0
115°	0	22	49	57	60	0
125°	0	19	47	62	69	0
135°	0	15	41	58	66	0
145°	1	10	30	44	51	0
155°	1	4	16	26	29	0
165°	1	1	4	9	10	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P241328

CATALOG NUMBER: FVS8M-2-LD4-50-2STD-P125-UNV-EDC1

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	1419.9	1419.9	1419.9	1419.9	1419.9	1419.9	1419.9	1419.9	1419.9	1419.9	1419.9
2.5°	1403.7	1403.7	1403.7	1403.7	1405.4	1404.6	1406.3	1407.1	1408.8	1409.7	1411.4
5°	1356.9	1356.9	1355.2	1356.0	1356.9	1359.4	1358.6	1362.0	1363.7	1366.2	1364.5
7.5°	1292.1	1295.5	1293.8	1294.7	1293.8	1295.5	1299.0	1299.8	1304.1	1306.6	1306.6
10°	1237.6	1237.6	1234.2	1235.1	1235.1	1236.8	1236.8	1239.3	1241.9	1246.1	1245.3
12.5°	1197.6	1197.6	1193.3	1194.2	1191.6	1192.5	1192.5	1193.3	1195.0	1197.6	1197.6
15°	1157.6	1154.2	1154.2	1155.9	1155.9	1155.0	1155.9	1155.9	1155.9	1157.6	1159.3
17.5°	1118.4	1118.4	1119.2	1118.4	1120.1	1119.2	1119.2	1121.8	1123.5	1123.5	1126.9
20°	1082.6	1083.5	1082.6	1085.2	1087.7	1087.7	1087.7	1090.3	1090.3	1093.7	1097.1
22.5°	1046.8	1047.7	1050.2	1049.4	1052.8	1052.8	1051.9	1057.0	1059.6	1063.0	1067.3
25°	1010.2	1011.1	1012.8	1016.2	1017.9	1021.3	1023.0	1025.5	1032.3	1034.1	1039.2
27.5°	978.7	977.8	979.5	986.4	986.4	988.9	992.3	998.3	999.1	1006.8	1009.3
30°	946.3	946.3	946.3	954.0	955.7	959.1	962.5	967.6	971.9	976.1	980.4
32.5°	914.0	910.5	913.1	919.1	927.6	927.6	929.3	937.8	941.2	946.3	951.4
35°	877.3	878.2	881.6	885.0	892.7	896.9	900.3	905.4	909.7	914.0	920.8
37.5°	839.8	843.3	846.7	850.9	856.0	861.1	864.5	871.4	880.7	885.0	891.8
40°	810.9	809.2	811.7	815.1	821.1	826.2	832.2	839.8	848.4	855.2	862.0
42.5°	773.4	771.7	778.5	781.1	790.4	792.1	799.0	808.3	819.4	828.8	838.1
45°	731.7	735.1	739.3	747.0	753.0	760.6	766.6	776.0	790.4	802.4	810.9
47.5°	695.9	695.0	700.2	708.7	718.0	724.0	730.0	743.6	758.9	771.7	784.5
50°	653.3	655.9	661.0	670.3	682.3	685.7	690.8	707.8	722.3	738.5	750.4
52.5°	610.7	611.6	619.2	628.6	641.4	647.3	655.0	669.5	684.0	698.5	710.4
55°	564.7	567.3	577.5	586.0	599.6	606.5	615.0	629.5	644.8	659.3	671.2
57.5°	523.8	525.5	532.4	543.4	557.9	563.0	572.4	588.6	602.2	617.5	629.5
60°	477.0	480.4	487.2	500.8	511.9	517.0	527.2	542.6	556.2	570.7	581.8
62.5°	435.3	435.3	441.2	454.8	465.9	472.7	481.3	494.0	510.2	523.0	537.5
65°	384.1	389.3	397.8	407.1	419.9	427.6	433.6	447.2	460.8	475.3	488.9
67.5°	339.9	343.3	349.2	360.3	374.8	378.2	387.6	401.2	413.1	425.9	438.7
70°	292.2	294.7	302.4	313.5	325.4	329.6	338.2	350.9	363.7	378.2	391.8
72.5°	247.0	248.7	257.2	265.8	277.7	285.3	290.5	301.5	316.0	331.3	344.1
75°	198.5	201.9	208.7	218.1	230.0	235.9	242.8	254.7	268.3	281.9	295.6
77.5°	155.9	155.9	162.7	172.9	183.1	189.9	195.9	208.7	222.3	234.2	246.2
80°	109.0	113.3	118.4	127.8	138.8	146.5	149.9	161.8	175.5	187.4	201.0
82.5°	70.7	73.3	79.2	88.6	98.8	103.1	109.0	121.0	133.7	147.4	158.4
85°	35.8	39.2	45.1	53.7	63.9	69.0	74.1	86.9	97.1	109.0	121.0
87.5°	13.6	15.3	21.3	29.8	39.2	44.3	48.6	59.6	69.8	81.8	93.7
90°	0.0	3.4	9.4	17.0	26.4	30.7	35.8	46.0	55.4	66.4	77.5
92.5°	0.0	2.6	7.7	15.3	23.8	29.0	33.2	42.6	52.0	62.2	69.8
95°	0.0	2.6	7.7	15.3	23.8	28.1	32.4	41.7	51.1	59.6	65.6
97.5°	0.0	1.7	7.7	15.3	23.0	27.3	31.5	40.9	49.4	57.1	63.9
100°	0.0	1.7	6.8	14.5	22.1	26.4	31.5	40.0	46.8	54.5	62.2
102.5°	0.0	1.7	6.8	13.6	22.1	26.4	30.7	38.3	45.1	52.8	59.6
105°	0.0	1.7	6.0	13.6	21.3	25.6	29.0	36.6	44.3	51.1	57.1
107.5°	0.0	1.7	6.0	12.8	20.4	23.8	28.1	35.8	42.6	48.6	54.5
110°	0.0	1.7	6.0	11.9	19.6	23.8	27.3	34.9	40.9	46.8	52.0



TEST NUMBER: P241328

CATALOG NUMBER: FVS8M-2-LD4-50-2STD-P125-UNV-EDC1

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	0.0	0.9	5.1	11.1	19.6	23.0	26.4	33.2	40.0	45.1	50.3
115°	0.0	0.9	5.1	11.1	18.7	22.1	25.6	32.4	38.3	44.3	48.6
117.5°	0.0	0.9	5.1	11.1	17.9	21.3	25.6	31.5	37.5	43.4	47.7
120°	0.0	0.9	4.3	10.2	17.0	20.4	24.7	31.5	37.5	42.6	46.8
122.5°	0.0	0.9	4.3	10.2	16.2	19.6	23.8	30.7	36.6	42.6	46.8
125°	0.0	0.9	4.3	9.4	16.2	18.7	23.0	29.8	36.6	41.7	46.8
127.5°	0.0	0.9	3.4	9.4	15.3	18.7	22.1	29.0	34.9	40.9	46.0
130°	0.0	0.9	3.4	8.5	14.5	17.9	21.3	27.3	34.1	40.0	45.1
132.5°	0.0	0.9	3.4	7.7	13.6	17.0	19.6	25.6	31.5	38.3	43.4
135°	0.0	0.9	2.6	6.8	12.8	15.3	18.7	24.7	29.8	35.8	40.9
137.5°	0.0	0.9	2.6	6.8	11.9	14.5	17.9	23.0	28.1	33.2	38.3
140°	0.0	0.0	1.7	6.0	10.2	12.8	16.2	21.3	26.4	31.5	35.8
142.5°	0.9	0.0	1.7	5.1	9.4	11.9	14.5	19.6	24.7	29.0	33.2
145°	0.9	0.0	0.9	4.3	7.7	10.2	11.9	17.0	22.1	26.4	29.8
147.5°	0.9	0.0	0.9	3.4	6.8	8.5	10.2	14.5	18.7	23.0	27.3
150°	0.9	0.0	0.9	2.6	5.1	6.8	8.5	11.9	16.2	20.4	23.8
152.5°	0.9	0.9	0.9	1.7	4.3	5.1	6.8	10.2	13.6	17.0	19.6
155°	0.9	0.9	0.9	0.9	2.6	4.3	5.1	7.7	11.1	13.6	16.2
157.5°	0.9	0.9	0.0	0.9	1.7	2.6	3.4	6.0	8.5	10.2	12.8
160°	0.9	0.9	0.0	0.9	1.7	1.7	2.6	4.3	6.0	7.7	9.4
162.5°	0.9	0.9	0.0	0.9	0.9	0.9	1.7	2.6	4.3	5.1	6.8
165°	0.9	0.9	0.9	0.0	0.9	0.9	0.9	1.7	2.6	3.4	4.3
167.5°	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.9	0.9	1.7	2.6
170°	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.9	0.9	0.9
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



TEST NUMBER: P241328

CATALOG NUMBER: FVS8M-2-LD4-50-2STD-P125-UNV-EDC1

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	1419.9	1419.9	1419.9	1419.9	1419.9	1419.9	1419.9	1419.9	1419.9	1419.9
2.5°	1413.1	1412.2	1412.2	1411.4	1412.2	1411.4	1411.4	1412.2	1411.4	1410.5
5°	1368.8	1369.6	1370.5	1368.8	1369.6	1368.8	1368.8	1367.9	1368.8	1367.9
7.5°	1308.3	1310.9	1312.6	1311.7	1314.3	1313.4	1315.1	1316.8	1317.7	1317.7
10°	1248.7	1250.4	1253.0	1256.4	1258.1	1259.8	1262.3	1265.7	1266.6	1267.4
12.5°	1201.0	1204.4	1205.3	1207.0	1208.7	1207.8	1213.8	1216.3	1220.6	1219.7
15°	1161.0	1166.1	1167.8	1172.9	1173.7	1175.4	1180.6	1176.3	1175.4	1172.9
17.5°	1129.4	1134.6	1135.4	1135.4	1136.3	1138.8	1143.9	1144.8	1146.5	1147.3
20°	1098.8	1102.2	1105.6	1108.2	1109.9	1110.7	1113.3	1109.9	1110.7	1111.6
22.5°	1069.0	1072.4	1077.5	1080.0	1083.5	1086.0	1086.0	1085.2	1083.5	1088.6
25°	1044.3	1046.8	1051.9	1051.9	1053.6	1056.2	1052.8	1055.3	1053.6	1051.9
27.5°	1014.5	1021.3	1023.0	1024.7	1026.4	1025.5	1025.5	1024.7	1024.7	1023.8
30°	987.2	989.8	994.9	995.7	997.4	999.1	999.1	1000.8	995.7	996.6
32.5°	959.1	962.5	968.5	970.2	971.0	971.0	968.5	963.4	964.2	963.4
35°	925.9	933.5	939.5	939.5	938.7	939.5	937.8	936.9	934.4	933.5
37.5°	895.2	902.0	908.8	911.4	910.5	912.2	909.7	908.0	908.0	908.8
40°	869.7	874.8	881.6	886.7	886.7	888.4	888.4	888.4	890.1	889.2
42.5°	844.1	853.5	862.0	870.5	873.1	873.1	872.2	873.1	874.8	875.6
45°	822.8	833.0	841.6	848.4	850.9	850.9	852.6	855.2	854.3	855.2
47.5°	796.4	802.4	811.7	816.8	818.6	821.1	823.7	823.7	825.4	827.9
50°	759.8	767.4	775.1	783.6	786.2	786.2	790.4	793.0	793.9	795.6
52.5°	720.6	731.7	738.5	745.3	747.0	748.7	751.3	753.0	753.8	756.4
55°	679.7	691.6	696.7	704.4	707.8	712.1	709.5	716.3	717.2	718.9
57.5°	640.5	649.1	658.4	662.7	662.7	666.1	672.0	673.8	677.2	678.0
60°	592.0	602.2	610.7	612.4	615.8	616.7	620.9	625.2	629.5	632.0
62.5°	544.3	553.7	561.3	563.9	565.6	567.3	572.4	576.6	580.9	580.1
65°	496.6	506.0	511.9	512.8	512.8	517.9	521.3	522.1	528.1	528.1
67.5°	449.7	459.1	462.5	467.6	468.5	467.6	470.2	474.4	478.7	475.3
70°	402.0	409.7	415.7	422.5	420.8	420.8	422.5	425.9	427.6	430.1
72.5°	353.5	362.0	368.8	373.9	375.6	378.2	379.0	380.7	381.6	383.3
75°	306.6	314.3	323.7	330.5	331.3	333.9	336.4	338.2	338.2	340.7
77.5°	258.9	270.9	277.7	286.2	286.2	289.6	297.3	299.0	304.1	305.8
80°	212.9	223.2	235.1	242.8	247.0	251.3	252.1	252.1	254.7	257.2
82.5°	171.2	181.4	195.1	201.0	203.6	204.4	211.2	213.8	217.2	218.9
85°	134.6	148.2	154.2	160.1	162.7	164.4	170.4	174.6	180.6	183.1
87.5°	107.3	113.3	119.2	125.2	127.8	130.3	138.0	143.9	154.2	159.3
90°	85.2	90.3	96.3	103.9	106.5	110.7	118.4	126.9	138.8	145.7
92.5°	75.8	81.8	87.7	95.4	99.7	103.1	111.6	122.7	138.0	145.7
95°	72.4	79.2	86.0	92.0	95.4	99.7	109.0	121.8	133.7	138.0
97.5°	71.5	77.5	82.6	89.4	92.8	97.1	106.5	114.1	119.2	121.8
100°	68.1	74.1	80.1	86.0	90.3	92.8	98.8	104.8	108.2	109.9
102.5°	65.6	70.7	76.7	81.8	84.3	86.9	92.0	96.3	98.0	98.0
105°	63.0	67.3	72.4	75.8	78.4	80.1	82.6	83.5	83.5	83.5
107.5°	59.6	63.9	67.3	69.8	70.7	71.5	71.5	71.5	70.7	69.8
110°	56.2	60.5	62.2	63.0	63.0	63.0	63.0	63.0	63.0	62.2



TEST NUMBER: P241328

CATALOG NUMBER: FVS8M-2-LD4-50-2STD-P125-UNV-EDC1

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	53.7	56.2	57.9	58.8	57.9	58.8	58.8	59.6	59.6	59.6
115°	52.0	54.5	55.4	56.2	57.1	57.1	58.8	59.6	60.5	60.5
117.5°	51.1	53.7	55.4	57.9	57.9	58.8	60.5	62.2	63.0	63.0
120°	51.1	53.7	57.1	59.6	60.5	61.3	63.0	64.7	65.6	65.6
122.5°	51.1	54.5	57.9	60.5	62.2	63.0	64.7	66.4	67.3	68.1
125°	51.1	54.5	58.8	61.3	62.2	63.9	65.6	67.3	68.1	69.0
127.5°	50.3	54.5	57.9	61.3	62.2	63.0	65.6	67.3	68.1	69.0
130°	49.4	53.7	57.1	59.6	61.3	62.2	64.7	66.4	67.3	68.1
132.5°	47.7	52.0	55.4	58.8	59.6	61.3	63.9	65.6	66.4	67.3
135°	46.0	50.3	53.7	57.1	57.9	59.6	62.2	63.9	65.6	65.6
137.5°	43.4	47.7	51.1	54.5	56.2	57.1	59.6	62.2	63.0	63.9
140°	40.9	44.3	48.6	51.1	52.8	54.5	56.2	58.8	59.6	60.5
142.5°	37.5	40.9	44.3	47.7	49.4	50.3	52.8	54.5	56.2	56.2
145°	34.1	36.6	40.0	43.4	44.3	45.1	47.7	49.4	50.3	51.1
147.5°	30.7	33.2	36.6	38.3	39.2	40.9	42.6	44.3	44.3	45.1
150°	26.4	29.0	31.5	33.2	34.9	35.8	37.5	38.3	39.2	39.2
152.5°	23.0	24.7	27.3	29.0	29.8	30.7	31.5	33.2	33.2	34.1
155°	18.7	21.3	23.0	24.7	25.6	26.4	27.3	28.1	28.1	29.0
157.5°	15.3	17.0	18.7	20.4	21.3	21.3	23.0	23.0	23.8	23.0
160°	11.9	13.6	15.3	16.2	17.0	17.0	17.9	18.7	18.7	18.7
162.5°	8.5	10.2	11.1	12.8	12.8	12.8	13.6	14.5	14.5	14.5
165°	6.0	6.8	7.7	8.5	9.4	9.4	9.4	10.2	10.2	10.2
167.5°	3.4	3.4	4.3	5.1	5.1	6.0	6.0	6.0	6.8	6.8
170°	0.9	1.7	1.7	2.6	2.6	2.6	2.6	2.6	3.4	3.4
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)