

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: P241325

Luminaire Tested: **FVS8M-2-LD4-30-2STD-P125-UNV-EDC1**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P241325
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-LD4-30-2STD-P125-UNV-EDC1
Description: FAILSAFE FVS8M LED FIXTURE
2FT LENGTH, 2-MODULE LED WITH P125 LENS
Light Source: (84) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

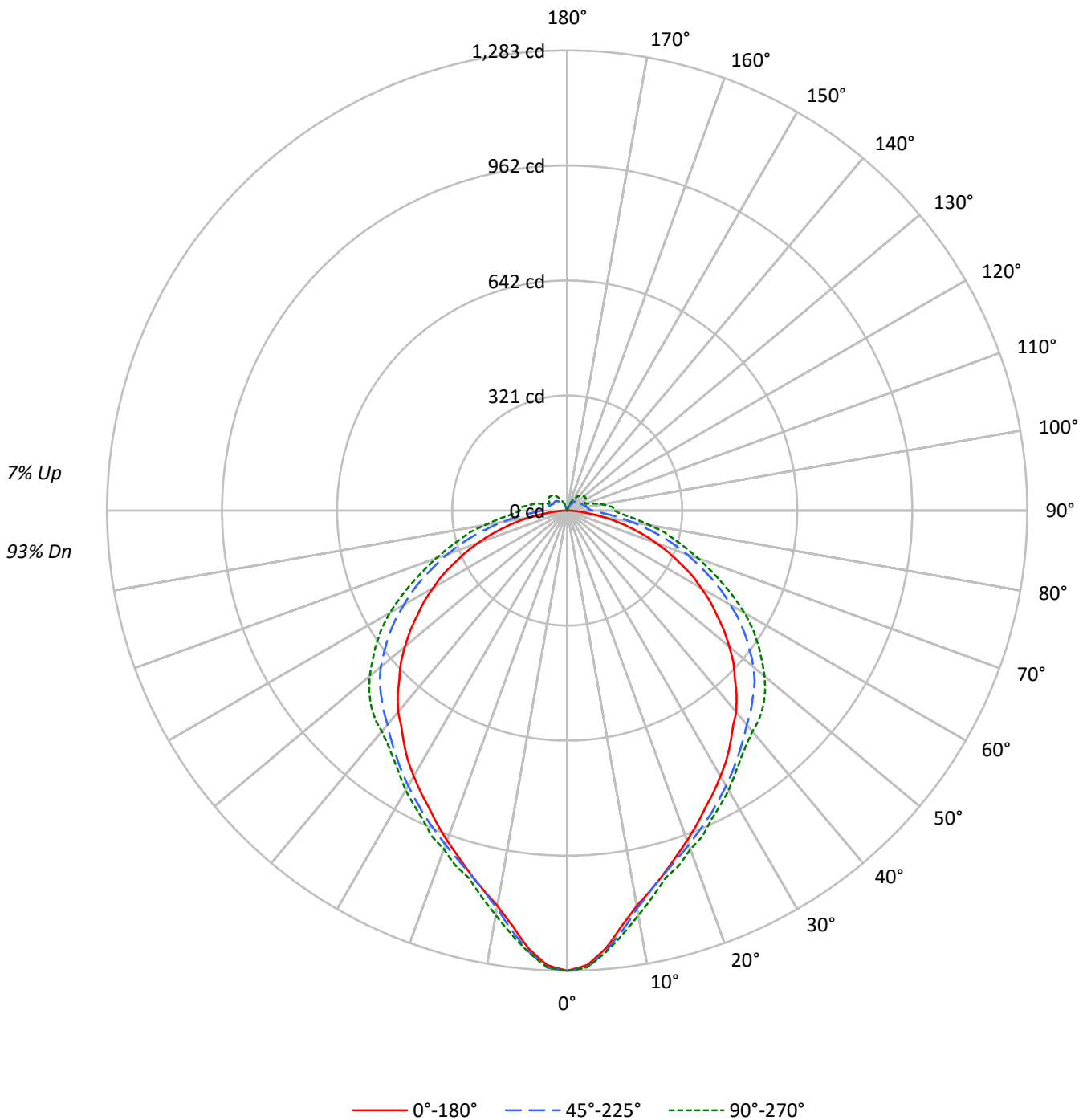
Lumens per Lamp: N/A
Luminaire Lumens: 3495.0 lumens
Efficiency: N/A
Efficacy: 104.0 lumens/watt
Spacing Criteria (0/90/45): 1 / 1.05 / 1.26
Luminous Opening: Rectangular w/ Sides (W: 0.65' x L: 1.85' x H: 0.15')
CIE Type: Direct

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

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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	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°	11535	11535	11535
5°	10989	10922	10940
10°	10070	9897	10055
15°	9535	9218	9302
20°	9100	8795	8880
25°	8735	8465	8531
30°	8492	8180	8270
35°	8247	7936	7994
40°	8067	7743	7928
45°	7794	7666	8015
50°	7550	7548	7923
55°	7191	7271	7699
60°	6821	6885	7382
65°	6319	6430	6840
70°	5708	5848	6306
75°	4817	5144	5803
80°	3526	4235	5277
85°	1754	3257	4767



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.3	3.3
10°-20°	297.1	8.5
20°-30°	432.3	12.4
30°-40°	518.7	14.8
40°-50°	559.4	16.0
50°-60°	529.9	15.2
60°-70°	422.4	12.1
70°-80°	270.8	7.7
80°-90°	120.3	3.4
90°-100°	63.5	1.8
100°-110°	48.4	1.4
110°-120°	36.1	1.0
120°-130°	32.7	0.9
130°-140°	25.7	0.7
140°-150°	15.7	0.4
150°-160°	6.5	0.2
160°-170°	1.4	0.0
170°-180°	0.0	0.0
0°-30°	843.6	24.1
0°-40°	1362.3	39.0
0°-60°	2451.6	70.1
0°-90°	3265.1	93.4
90°-120°	147.9	4.2
90°-150°	222.0	6.4
90°-180°	230.0	6.6
0°-180°	3495.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1283	1283	1283	1283	1283	
5°	1226	1229	1233	1238	1236	113
15°	1046	1044	1048	1061	1060	295
25°	913	923	939	952	951	422
35°	793	811	832	848	844	497
45°	661	688	733	769	773	512
55°	510	548	607	640	650	458
65°	347	386	442	463	477	345
75°	179	213	267	300	308	191
85°	32	62	109	147	166	41
90°	0	28	70	96	132	2
95°	0	25	59	86	125	0
105°	0	23	52	71	75	0
115°	0	20	44	52	55	0
125°	0	17	42	56	62	0
135°	0	14	37	52	59	0
145°	1	9	27	40	46	0
155°	1	4	15	23	26	0
165°	1	1	4	8	9	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P241325

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	1283.3	1283.3	1283.3	1283.3	1283.3	1283.3	1283.3	1283.3	1283.3	1283.3	1283.3
2.5°	1268.7	1268.7	1268.7	1268.7	1270.2	1269.5	1271.0	1271.8	1273.3	1274.1	1275.6
5°	1226.3	1226.3	1224.8	1225.6	1226.3	1228.7	1227.9	1231.0	1232.5	1234.8	1233.3
7.5°	1167.8	1170.9	1169.4	1170.1	1169.4	1170.9	1174.0	1174.8	1178.6	1180.9	1180.9
10°	1118.6	1118.6	1115.5	1116.3	1116.3	1117.8	1117.8	1120.1	1122.4	1126.3	1125.5
12.5°	1082.4	1082.4	1078.5	1079.3	1077.0	1077.8	1077.8	1078.5	1080.1	1082.4	1082.4
15°	1046.2	1043.1	1043.1	1044.7	1044.7	1043.9	1044.7	1044.7	1044.7	1046.2	1047.7
17.5°	1010.8	1010.8	1011.6	1010.8	1012.3	1011.6	1011.6	1013.9	1015.4	1015.4	1018.5
20°	978.5	979.2	978.5	980.8	983.1	983.1	983.1	985.4	985.4	988.5	991.5
22.5°	946.1	946.9	949.2	948.4	951.5	951.5	950.7	955.4	957.7	960.8	964.6
25°	913.0	913.8	915.3	918.4	919.9	923.0	924.6	926.9	933.0	934.6	939.2
27.5°	884.5	883.8	885.3	891.5	891.5	893.8	896.9	902.2	903.0	909.9	912.3
30°	855.3	855.3	855.3	862.2	863.8	866.8	869.9	874.5	878.4	882.2	886.1
32.5°	826.0	823.0	825.3	830.6	838.3	838.3	839.9	847.6	850.7	855.3	859.9
35°	792.9	793.7	796.8	799.9	806.8	810.6	813.7	818.3	822.2	826.0	832.2
37.5°	759.1	762.1	765.2	769.1	773.7	778.3	781.4	787.5	796.0	799.9	806.0
40°	732.9	731.3	733.7	736.7	742.1	746.7	752.1	759.1	766.8	772.9	779.1
42.5°	699.0	697.5	703.6	705.9	714.4	715.9	722.1	730.6	740.6	749.0	757.5
45°	661.3	664.4	668.2	675.1	680.5	687.5	692.8	701.3	714.4	725.2	732.9
47.5°	629.0	628.2	632.8	640.5	649.0	654.4	659.7	672.1	685.9	697.5	709.0
50°	590.5	592.8	597.4	605.9	616.6	619.7	624.3	639.7	652.8	667.4	678.2
52.5°	552.0	552.7	559.7	568.1	579.7	585.1	592.0	605.1	618.2	631.3	642.0
55°	510.4	512.7	521.9	529.6	542.0	548.1	555.8	568.9	582.8	595.9	606.6
57.5°	473.4	475.0	481.1	491.2	504.2	508.9	517.3	532.0	544.3	558.1	568.9
60°	431.1	434.2	440.3	452.7	462.7	467.3	476.5	490.4	502.7	515.8	525.8
62.5°	393.4	393.4	398.8	411.1	421.1	427.3	435.0	446.5	461.1	472.7	485.8
65°	347.2	351.8	359.5	368.0	379.5	386.5	391.8	404.2	416.5	429.6	441.9
67.5°	307.2	310.2	315.6	325.6	338.7	341.8	350.3	362.6	373.4	384.9	396.5
70°	264.1	266.4	273.3	283.3	294.1	297.9	305.6	317.2	328.7	341.8	354.1
72.5°	223.3	224.8	232.5	240.2	251.0	257.9	262.5	272.5	285.6	299.5	311.0
75°	179.4	182.5	188.6	197.1	207.9	213.2	219.4	230.2	242.5	254.8	267.1
77.5°	140.9	140.9	147.0	156.3	165.5	171.7	177.1	188.6	200.9	211.7	222.5
80°	98.5	102.4	107.0	115.5	125.5	132.4	135.5	146.3	158.6	169.4	181.7
82.5°	63.9	66.2	71.6	80.1	89.3	93.1	98.5	109.3	120.9	133.2	143.2
85°	32.3	35.4	40.8	48.5	57.7	62.4	67.0	78.5	87.8	98.5	109.3
87.5°	12.3	13.9	19.2	26.9	35.4	40.0	43.9	53.9	63.1	73.9	84.7
90°	0.0	3.1	8.5	15.4	23.9	27.7	32.3	41.6	50.0	60.0	70.1
92.5°	0.0	2.3	6.9	13.9	21.6	26.2	30.0	38.5	47.0	56.2	63.1
95°	0.0	2.3	6.9	13.9	21.6	25.4	29.3	37.7	46.2	53.9	59.3
97.5°	0.0	1.5	6.9	13.9	20.8	24.6	28.5	37.0	44.7	51.6	57.7
100°	0.0	1.5	6.2	13.1	20.0	23.9	28.5	36.2	42.3	49.3	56.2
102.5°	0.0	1.5	6.2	12.3	20.0	23.9	27.7	34.6	40.8	47.7	53.9
105°	0.0	1.5	5.4	12.3	19.2	23.1	26.2	33.1	40.0	46.2	51.6
107.5°	0.0	1.5	5.4	11.5	18.5	21.6	25.4	32.3	38.5	43.9	49.3
110°	0.0	1.5	5.4	10.8	17.7	21.6	24.6	31.6	37.0	42.3	47.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	0.0	0.8	4.6	10.0	17.7	20.8	23.9	30.0	36.2	40.8	45.4
115°	0.0	0.8	4.6	10.0	16.9	20.0	23.1	29.3	34.6	40.0	43.9
117.5°	0.0	0.8	4.6	10.0	16.2	19.2	23.1	28.5	33.9	39.3	43.1
120°	0.0	0.8	3.8	9.2	15.4	18.5	22.3	28.5	33.9	38.5	42.3
122.5°	0.0	0.8	3.8	9.2	14.6	17.7	21.6	27.7	33.1	38.5	42.3
125°	0.0	0.8	3.8	8.5	14.6	16.9	20.8	26.9	33.1	37.7	42.3
127.5°	0.0	0.8	3.1	8.5	13.9	16.9	20.0	26.2	31.6	37.0	41.6
130°	0.0	0.8	3.1	7.7	13.1	16.2	19.2	24.6	30.8	36.2	40.8
132.5°	0.0	0.8	3.1	6.9	12.3	15.4	17.7	23.1	28.5	34.6	39.3
135°	0.0	0.8	2.3	6.2	11.5	13.9	16.9	22.3	26.9	32.3	37.0
137.5°	0.0	0.8	2.3	6.2	10.8	13.1	16.2	20.8	25.4	30.0	34.6
140°	0.0	0.0	1.5	5.4	9.2	11.5	14.6	19.2	23.9	28.5	32.3
142.5°	0.8	0.0	1.5	4.6	8.5	10.8	13.1	17.7	22.3	26.2	30.0
145°	0.8	0.0	0.8	3.8	6.9	9.2	10.8	15.4	20.0	23.9	26.9
147.5°	0.8	0.0	0.8	3.1	6.2	7.7	9.2	13.1	16.9	20.8	24.6
150°	0.8	0.0	0.8	2.3	4.6	6.2	7.7	10.8	14.6	18.5	21.6
152.5°	0.8	0.8	0.8	1.5	3.8	4.6	6.2	9.2	12.3	15.4	17.7
155°	0.8	0.8	0.8	0.8	2.3	3.8	4.6	6.9	10.0	12.3	14.6
157.5°	0.8	0.8	0.0	0.8	1.5	2.3	3.1	5.4	7.7	9.2	11.5
160°	0.8	0.8	0.0	0.8	1.5	1.5	2.3	3.8	5.4	6.9	8.5
162.5°	0.8	0.8	0.0	0.8	0.8	0.8	1.5	2.3	3.8	4.6	6.2
165°	0.8	0.8	0.8	0.0	0.8	0.8	0.8	1.5	2.3	3.1	3.8
167.5°	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.8	0.8	1.5	2.3
170°	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.8	0.8	0.8
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°	1283.3	1283.3	1283.3	1283.3	1283.3	1283.3	1283.3	1283.3	1283.3	1283.3
2.5°	1277.2	1276.4	1276.4	1275.6	1276.4	1275.6	1275.6	1276.4	1275.6	1274.8
5°	1237.1	1237.9	1238.7	1237.1	1237.9	1237.1	1237.1	1236.4	1237.1	1236.4
7.5°	1182.5	1184.8	1186.3	1185.5	1187.9	1187.1	1188.6	1190.2	1190.9	1190.9
10°	1128.6	1130.1	1132.4	1135.5	1137.0	1138.6	1140.9	1144.0	1144.7	1145.5
12.5°	1085.5	1088.5	1089.3	1090.9	1092.4	1091.6	1097.0	1099.3	1103.2	1102.4
15°	1049.3	1053.9	1055.4	1060.1	1060.8	1062.4	1067.0	1063.1	1062.4	1060.1
17.5°	1020.8	1025.4	1026.2	1026.2	1027.0	1029.3	1033.9	1034.7	1036.2	1037.0
20°	993.1	996.2	999.2	1001.6	1003.1	1003.9	1006.2	1003.1	1003.9	1004.6
22.5°	966.1	969.2	973.8	976.1	979.2	981.5	981.5	980.8	979.2	983.8
25°	943.8	946.1	950.7	950.7	952.3	954.6	951.5	953.8	952.3	950.7
27.5°	916.9	923.0	924.6	926.1	927.6	926.9	926.9	926.1	926.1	925.3
30°	892.2	894.5	899.2	899.9	901.5	903.0	903.0	904.6	899.9	900.7
32.5°	866.8	869.9	875.3	876.8	877.6	877.6	875.3	870.7	871.5	870.7
35°	836.8	843.7	849.1	849.1	848.4	849.1	847.6	846.8	844.5	843.7
37.5°	809.1	815.3	821.4	823.7	823.0	824.5	822.2	820.6	820.6	821.4
40°	786.0	790.6	796.8	801.4	801.4	802.9	802.9	802.9	804.5	803.7
42.5°	762.9	771.4	779.1	786.8	789.1	789.1	788.3	789.1	790.6	791.4
45°	743.7	752.9	760.6	766.8	769.1	769.1	770.6	772.9	772.1	772.9
47.5°	719.8	725.2	733.7	738.3	739.8	742.1	744.4	744.4	746.0	748.3
50°	686.7	693.6	700.5	708.2	710.6	710.6	714.4	716.7	717.5	719.0
52.5°	651.3	661.3	667.4	673.6	675.1	676.7	679.0	680.5	681.3	683.6
55°	614.3	625.1	629.7	636.7	639.7	643.6	641.3	647.4	648.2	649.7
57.5°	578.9	586.6	595.1	598.9	598.9	602.0	607.4	608.9	612.0	612.8
60°	535.0	544.3	552.0	553.5	556.6	557.4	561.2	565.1	568.9	571.2
62.5°	491.9	500.4	507.3	509.6	511.2	512.7	517.3	521.2	525.0	524.3
65°	448.8	457.3	462.7	463.4	463.4	468.1	471.1	471.9	477.3	477.3
67.5°	406.5	414.9	418.0	422.6	423.4	422.6	424.9	428.8	432.6	429.6
70°	363.4	370.3	375.7	381.8	380.3	380.3	381.8	384.9	386.5	388.8
72.5°	319.5	327.2	333.3	338.0	339.5	341.8	342.6	344.1	344.9	346.4
75°	277.1	284.1	292.5	298.7	299.5	301.8	304.1	305.6	305.6	307.9
77.5°	234.0	244.8	251.0	258.7	258.7	261.7	268.7	270.2	274.8	276.4
80°	192.5	201.7	212.5	219.4	223.3	227.1	227.9	227.9	230.2	232.5
82.5°	154.7	164.0	176.3	181.7	184.0	184.8	190.9	193.2	196.3	197.8
85°	121.6	134.0	139.3	144.7	147.0	148.6	154.0	157.8	163.2	165.5
87.5°	97.0	102.4	107.8	113.2	115.5	117.8	124.7	130.1	139.3	144.0
90°	77.0	81.6	87.0	93.9	96.2	100.1	107.0	114.7	125.5	131.6
92.5°	68.5	73.9	79.3	86.2	90.1	93.1	100.8	110.9	124.7	131.6
95°	65.4	71.6	77.8	83.1	86.2	90.1	98.5	110.1	120.9	124.7
97.5°	64.7	70.1	74.7	80.8	83.9	87.8	96.2	103.2	107.8	110.1
100°	61.6	67.0	72.4	77.8	81.6	83.9	89.3	94.7	97.8	99.3
102.5°	59.3	63.9	69.3	73.9	76.2	78.5	83.1	87.0	88.5	88.5
105°	57.0	60.8	65.4	68.5	70.8	72.4	74.7	75.4	75.4	75.4
107.5°	53.9	57.7	60.8	63.1	63.9	64.7	64.7	64.7	63.9	63.1
110°	50.8	54.7	56.2	57.0	57.0	57.0	57.0	57.0	57.0	56.2



TEST NUMBER: P241325

CATALOG NUMBER: FVS8M-2-LD4-30-2STD-P125-UNV-EDC1

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	48.5	50.8	52.3	53.1	52.3	53.1	53.1	53.9	53.9	53.9
115°	47.0	49.3	50.0	50.8	51.6	51.6	53.1	53.9	54.7	54.7
117.5°	46.2	48.5	50.0	52.3	52.3	53.1	54.7	56.2	57.0	57.0
120°	46.2	48.5	51.6	53.9	54.7	55.4	57.0	58.5	59.3	59.3
122.5°	46.2	49.3	52.3	54.7	56.2	57.0	58.5	60.0	60.8	61.6
125°	46.2	49.3	53.1	55.4	56.2	57.7	59.3	60.8	61.6	62.4
127.5°	45.4	49.3	52.3	55.4	56.2	57.0	59.3	60.8	61.6	62.4
130°	44.7	48.5	51.6	53.9	55.4	56.2	58.5	60.0	60.8	61.6
132.5°	43.1	47.0	50.0	53.1	53.9	55.4	57.7	59.3	60.0	60.8
135°	41.6	45.4	48.5	51.6	52.3	53.9	56.2	57.7	59.3	59.3
137.5°	39.3	43.1	46.2	49.3	50.8	51.6	53.9	56.2	57.0	57.7
140°	37.0	40.0	43.9	46.2	47.7	49.3	50.8	53.1	53.9	54.7
142.5°	33.9	37.0	40.0	43.1	44.7	45.4	47.7	49.3	50.8	50.8
145°	30.8	33.1	36.2	39.3	40.0	40.8	43.1	44.7	45.4	46.2
147.5°	27.7	30.0	33.1	34.6	35.4	37.0	38.5	40.0	40.0	40.8
150°	23.9	26.2	28.5	30.0	31.6	32.3	33.9	34.6	35.4	35.4
152.5°	20.8	22.3	24.6	26.2	26.9	27.7	28.5	30.0	30.0	30.8
155°	16.9	19.2	20.8	22.3	23.1	23.9	24.6	25.4	25.4	26.2
157.5°	13.9	15.4	16.9	18.5	19.2	19.2	20.8	20.8	21.6	20.8
160°	10.8	12.3	13.9	14.6	15.4	15.4	16.2	16.9	16.9	16.9
162.5°	7.7	9.2	10.0	11.5	11.5	11.5	12.3	13.1	13.1	13.1
165°	5.4	6.2	6.9	7.7	8.5	8.5	8.5	9.2	9.2	9.2
167.5°	3.1	3.1	3.8	4.6	4.6	5.4	5.4	5.4	6.2	6.2
170°	0.8	1.5	1.5	2.3	2.3	2.3	2.3	2.3	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)