

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: P241351

Luminaire Tested: **FVS8M-3-LD4-40-1STD-P125-UNV-EDC1**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P241351
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-LD4-40-1STD-P125-UNV-EDC1
Description: FAILSAFE FVS8M LED FIXTURE
3FT LENGTH, 1-MODULE LED WITH P125 LENS
Light Source: (84) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

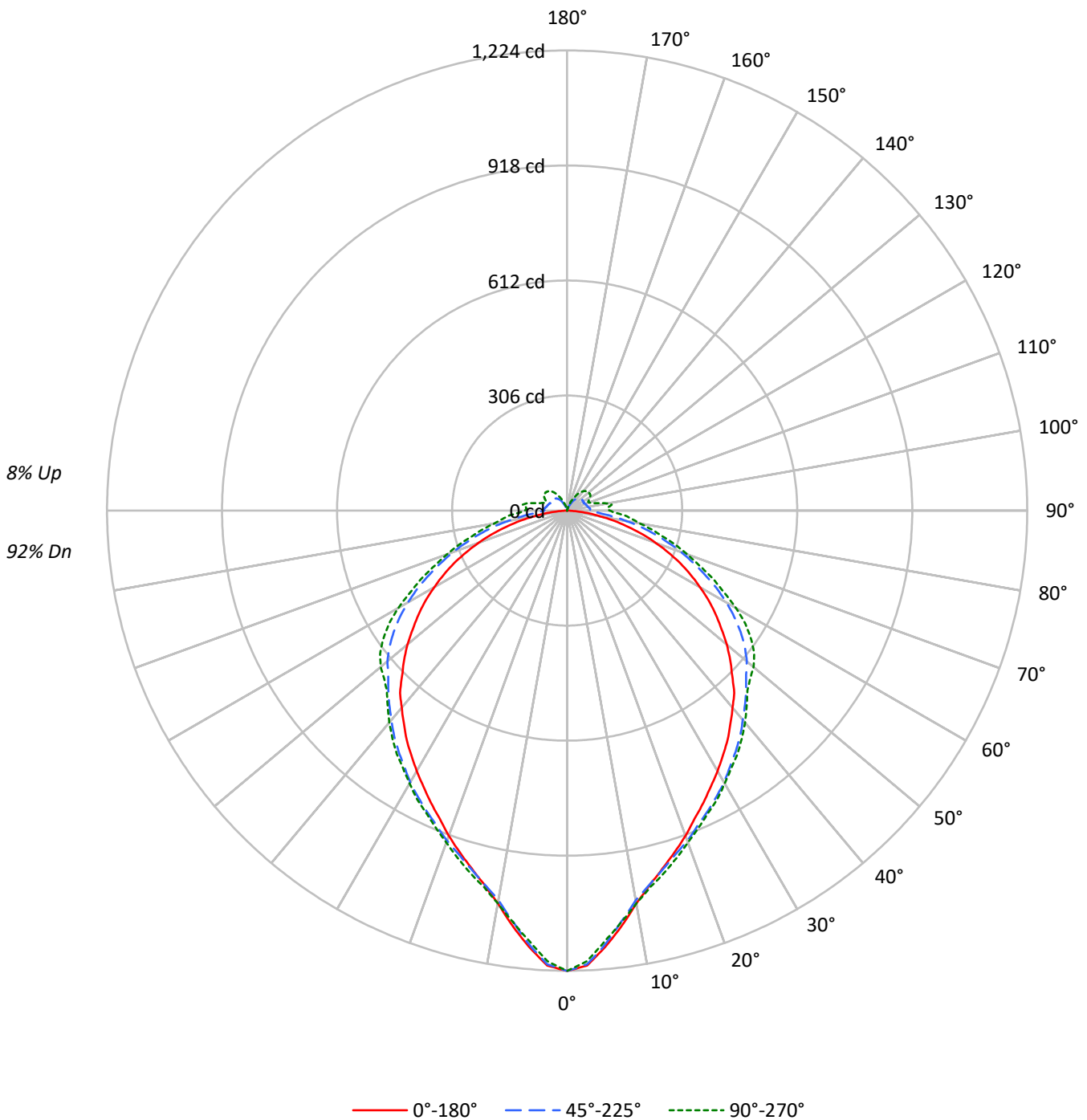
Lumens per Lamp: N/A
Luminaire Lumens: 3270.0 lumens
Efficiency: N/A
Efficacy: 114.7 lumens/watt
Spacing Criteria (0/90/45): 0.98 / 1.03 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.65' x L: 2.85' x H: 0.15')
CIE Type: Direct

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°	7150	7150	7150
5°	6797	6679	6609
10°	6234	6028	6050
15°	5871	5669	5687
20°	5616	5421	5395
25°	5395	5214	5172
30°	5240	5058	5000
35°	5123	4901	4863
40°	5003	4759	4717
45°	4876	4647	4567
50°	4745	4596	4633
55°	4580	4481	4604
60°	4385	4267	4359
65°	4148	3937	3975
70°	3756	3588	3580
75°	3195	3130	3194
80°	2425	2554	2892
85°	1265	1891	2922



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	107.3	3.3
10°-20°	279.0	8.5
20°-30°	406.0	12.4
30°-40°	485.8	14.9
40°-50°	513.3	15.7
50°-60°	491.6	15.0
60°-70°	387.7	11.9
70°-80°	242.3	7.4
80°-90°	105.7	3.2
90°-100°	60.4	1.8
100°-110°	50.8	1.6
110°-120°	41.0	1.3
120°-130°	38.7	1.2
130°-140°	31.2	1.0
140°-150°	19.9	0.6
150°-160°	7.9	0.2
160°-170°	1.6	0.0
170°-180°	0.0	0.0
0°-30°	792.3	24.2
0°-40°	1278.1	39.1
0°-60°	2283.0	69.8
0°-90°	3018.7	92.3
90°-120°	152.2	4.7
90°-150°	241.9	7.4
90°-180°	251.0	7.7
0°-180°	3270.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1224	1224	1224	1224	1224	
5°	1165	1161	1159	1153	1150	108
15°	984	979	987	997	998	278
25°	857	870	883	892	887	395
35°	744	764	782	796	790	465
45°	621	644	673	682	678	480
55°	483	514	563	591	598	431
65°	333	362	405	419	427	328
75°	169	199	240	258	261	180
85°	30	56	91	130	156	38
90°	0	25	61	88	113	1
95°	0	25	62	80	110	0
105°	0	25	54	75	76	0
115°	0	23	49	58	63	0
125°	0	22	49	66	75	0
135°	1	18	45	62	72	1
145°	1	12	36	51	57	1
155°	1	5	17	28	31	0
165°	1	2	4	8	10	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°	1224.5	1224.5	1224.5	1224.5	1224.5	1224.5	1224.5	1224.5	1224.5	1224.5	1224.5
2.5°	1211.2	1207.9	1205.4	1207.9	1206.2	1207.1	1207.9	1209.6	1209.6	1211.2	1207.9
5°	1164.7	1164.7	1161.4	1163.9	1163.0	1161.4	1162.2	1163.0	1163.9	1162.2	1158.9
7.5°	1114.0	1109.9	1108.2	1105.7	1104.1	1105.7	1104.9	1105.7	1106.6	1106.6	1103.2
10°	1060.9	1059.2	1054.2	1055.0	1054.2	1055.0	1057.5	1058.4	1055.9	1053.4	1051.7
12.5°	1018.5	1013.5	1013.5	1015.2	1014.3	1015.2	1012.7	1010.2	1014.3	1017.7	1017.7
15°	984.4	980.3	977.8	981.1	980.3	978.6	979.4	980.3	982.8	985.3	986.9
17.5°	952.0	948.7	947.0	950.4	949.5	949.5	950.4	953.7	958.7	958.7	958.7
20°	920.5	916.3	917.1	922.1	922.1	923.8	924.6	927.1	930.4	933.8	934.6
22.5°	886.4	885.6	887.2	892.2	893.1	894.7	898.0	903.0	904.7	906.3	907.2
25°	857.3	855.7	860.7	863.1	867.3	869.8	872.3	874.8	880.6	883.1	883.1
27.5°	827.4	827.4	830.7	835.7	839.9	844.9	847.4	849.9	854.0	857.3	859.0
30°	800.0	797.5	801.7	808.3	815.0	818.3	819.9	824.1	828.3	832.4	834.9
32.5°	771.8	770.1	775.1	779.2	786.7	788.4	790.9	798.3	801.7	804.2	806.7
35°	744.3	742.7	746.0	752.7	760.1	763.5	764.3	772.6	776.7	779.2	781.7
37.5°	713.6	716.1	717.8	724.4	729.4	732.7	736.9	743.5	749.3	751.8	756.0
40°	684.5	686.2	687.9	693.7	701.1	704.5	707.0	716.1	721.9	725.2	726.9
42.5°	657.9	654.6	657.9	665.4	670.4	674.6	677.9	685.4	692.0	699.5	700.3
45°	620.6	623.1	628.9	635.5	642.2	643.8	647.2	655.5	661.3	668.7	672.9
47.5°	588.2	591.5	594.0	601.5	609.8	612.3	616.4	624.7	634.7	642.2	645.5
50°	554.1	558.3	561.6	568.2	576.5	580.7	586.5	596.5	605.6	615.6	623.9
52.5°	517.6	522.5	528.4	532.5	543.3	547.5	552.4	564.9	577.4	587.3	595.6
55°	482.7	486.8	493.5	499.3	510.1	514.2	519.2	532.5	545.8	554.9	563.2
57.5°	446.9	448.6	454.4	461.9	472.7	480.2	484.3	496.8	508.4	518.4	527.5
60°	408.7	412.0	417.0	425.3	437.8	441.1	446.1	460.2	471.9	481.8	489.3
62.5°	370.5	373.8	378.8	388.8	395.4	401.2	408.7	421.2	430.3	438.6	448.6
65°	333.1	334.8	339.8	348.9	358.1	362.2	367.2	378.8	388.0	397.9	404.6
67.5°	290.8	294.9	300.7	307.4	316.5	322.3	326.5	335.6	347.3	358.9	363.0
70°	250.9	254.2	259.2	265.8	275.8	280.0	285.8	295.7	305.7	316.5	323.2
72.5°	211.0	213.5	216.8	225.1	234.3	239.3	244.2	254.2	266.7	274.1	280.8
75°	168.6	172.8	177.8	185.3	193.6	199.4	203.5	213.5	222.6	230.9	240.1
77.5°	130.4	133.7	138.7	144.5	155.3	161.2	164.5	173.6	183.6	189.4	200.2
80°	93.0	95.5	101.4	108.0	116.3	120.5	125.4	133.7	142.1	150.4	160.3
82.5°	59.0	60.6	66.5	73.1	81.4	85.6	89.7	98.0	105.5	115.5	123.8
85°	29.9	31.6	37.4	43.2	52.3	55.7	58.2	67.3	76.4	83.9	91.4
87.5°	9.1	11.6	16.6	23.3	30.7	34.1	37.4	45.7	53.2	61.5	70.6
90°	0.0	2.5	7.5	13.3	20.8	24.9	28.2	36.6	44.9	53.2	60.6
92.5°	0.0	2.5	6.6	13.3	20.8	24.9	28.2	36.6	44.9	52.3	61.5
95°	0.0	2.5	6.6	13.3	20.8	24.9	29.1	36.6	44.9	54.0	61.5
97.5°	0.0	1.7	6.6	13.3	20.8	24.9	29.1	36.6	45.7	53.2	58.2
100°	0.0	1.7	6.6	13.3	20.8	24.9	28.2	37.4	44.9	50.7	56.5
102.5°	0.0	1.7	6.6	13.3	20.8	24.9	29.1	36.6	42.4	49.0	54.8
105°	0.0	1.7	6.6	13.3	20.8	24.9	28.2	34.9	41.5	48.2	54.0
107.5°	0.0	1.7	6.6	13.3	19.9	24.1	27.4	34.1	40.7	47.4	52.3
110°	0.0	1.7	5.8	12.5	19.9	23.3	27.4	34.1	40.7	46.5	51.5



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	0.0	1.7	5.8	12.5	19.9	23.3	26.6	34.1	39.9	45.7	49.8
115°	0.0	1.7	5.8	12.5	19.1	23.3	26.6	34.1	39.9	45.7	49.0
117.5°	0.0	1.7	5.8	12.5	19.1	23.3	26.6	33.2	39.9	44.9	49.0
120°	0.0	0.8	5.8	11.6	19.1	22.4	26.6	33.2	39.9	44.9	49.0
122.5°	0.0	0.8	5.0	11.6	18.3	22.4	25.8	33.2	39.0	44.9	49.0
125°	0.0	0.8	5.0	11.6	18.3	21.6	24.9	32.4	39.0	44.9	49.0
127.5°	0.8	0.8	5.0	10.8	17.4	20.8	24.1	31.6	38.2	44.0	49.0
130°	0.0	0.8	4.2	10.0	16.6	19.9	23.3	30.7	37.4	42.4	47.4
132.5°	0.8	0.8	4.2	9.1	15.8	19.1	22.4	29.1	36.6	41.5	46.5
135°	0.8	0.8	3.3	8.3	15.0	18.3	21.6	27.4	34.9	39.9	44.9
137.5°	0.8	0.8	3.3	7.5	13.3	16.6	19.9	26.6	32.4	38.2	43.2
140°	0.8	0.8	2.5	6.6	12.5	15.0	18.3	24.9	30.7	36.6	41.5
142.5°	0.8	0.8	2.5	5.8	10.8	13.3	16.6	22.4	28.2	34.1	39.0
145°	0.8	0.8	1.7	5.0	9.1	11.6	14.1	19.9	25.8	30.7	35.7
147.5°	0.8	0.8	1.7	4.2	7.5	10.0	12.5	17.4	22.4	27.4	31.6
150°	0.8	0.8	0.8	3.3	5.8	7.5	10.0	14.1	18.3	22.4	26.6
152.5°	0.8	0.8	0.8	2.5	5.0	5.8	7.5	11.6	15.0	18.3	21.6
155°	0.8	0.8	0.8	1.7	3.3	5.0	5.8	8.3	11.6	14.1	17.4
157.5°	0.8	0.8	0.8	1.7	2.5	3.3	4.2	6.6	8.3	10.8	13.3
160°	0.8	0.8	0.8	0.8	1.7	2.5	3.3	4.2	5.8	7.5	9.1
162.5°	0.8	0.8	0.8	0.8	1.7	1.7	2.5	3.3	4.2	5.0	6.6
165°	0.8	0.8	0.8	0.8	0.8	1.7	1.7	2.5	3.3	3.3	4.2
167.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.7	1.7	2.5	2.5
170°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.7
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°	1224.5	1224.5	1224.5	1224.5	1224.5	1224.5	1224.5	1224.5	1224.5	1224.5
2.5°	1206.2	1204.6	1205.4	1205.4	1202.1	1204.6	1203.7	1202.1	1199.6	1199.6
5°	1156.4	1153.1	1153.1	1154.7	1153.1	1153.1	1153.9	1153.1	1153.9	1149.8
7.5°	1102.4	1099.9	1101.6	1102.4	1104.9	1104.1	1104.9	1104.1	1104.1	1104.1
10°	1052.6	1056.7	1055.9	1057.5	1060.0	1059.2	1060.9	1063.4	1062.5	1060.9
12.5°	1017.7	1021.8	1021.8	1026.0	1026.0	1026.8	1029.3	1029.3	1025.1	1025.1
15°	989.4	990.2	991.1	997.7	996.9	998.6	1000.2	998.6	997.7	997.7
17.5°	960.3	961.2	964.5	964.5	966.2	967.0	970.3	969.5	968.6	968.6
20°	935.4	937.1	941.2	943.7	944.6	942.1	944.6	942.9	942.9	939.6
22.5°	911.3	916.3	914.7	916.3	918.0	919.6	919.6	918.0	916.3	913.0
25°	886.4	888.1	890.6	892.2	892.2	891.4	891.4	890.6	888.9	887.2
27.5°	862.3	864.8	864.0	869.0	870.6	871.5	870.6	867.3	864.0	865.6
30°	836.6	839.1	842.4	845.7	846.5	841.5	840.7	841.5	838.2	838.2
32.5°	810.0	813.3	819.1	818.3	818.3	820.8	820.8	818.3	814.1	812.5
35°	784.2	790.9	792.5	797.5	795.9	793.4	790.9	790.9	788.4	790.0
37.5°	758.5	762.6	767.6	766.8	766.8	767.6	767.6	764.3	765.1	763.5
40°	731.9	735.2	738.5	738.5	740.2	740.2	737.7	735.2	735.2	736.0
42.5°	702.0	707.0	711.1	711.1	711.9	711.1	711.9	710.3	707.0	707.0
45°	677.1	678.7	682.0	682.9	682.0	682.0	679.5	679.5	678.7	677.9
47.5°	651.3	657.1	657.9	659.6	657.9	657.9	659.6	660.4	662.1	660.4
50°	628.0	635.5	640.5	643.0	643.0	644.7	645.5	645.5	648.0	647.2
52.5°	604.8	609.8	614.8	621.4	623.1	623.1	626.4	625.6	627.2	627.2
55°	571.6	578.2	584.0	589.0	590.7	594.0	593.2	595.6	595.6	598.1
57.5°	535.8	539.2	547.5	550.8	550.0	552.4	553.3	557.4	562.4	562.4
60°	497.6	500.1	504.3	504.3	505.9	506.8	511.7	514.2	515.9	519.2
62.5°	451.1	456.9	460.2	461.1	462.7	466.9	466.9	466.9	468.5	469.4
65°	411.2	414.5	417.9	421.2	418.7	419.5	420.4	421.2	423.7	427.0
67.5°	370.5	373.8	377.2	378.8	375.5	376.3	374.7	377.2	379.7	379.7
70°	328.1	332.3	337.3	336.5	333.1	334.8	334.0	337.3	338.9	339.8
72.5°	287.4	293.3	296.6	296.6	296.6	296.6	297.4	299.1	299.9	300.7
75°	245.9	251.7	255.9	259.2	257.5	260.0	261.7	262.5	261.7	260.9
77.5°	207.7	213.5	216.8	221.8	223.5	225.1	226.8	226.8	228.5	228.5
80°	166.1	173.6	179.4	186.1	188.6	191.9	192.7	195.2	195.2	196.1
82.5°	131.3	139.6	146.2	152.9	156.2	157.8	162.8	167.0	171.1	173.6
85°	100.5	109.7	116.3	124.6	130.4	137.1	146.2	151.2	152.0	156.2
87.5°	78.9	88.1	99.7	108.8	108.8	109.7	112.2	116.3	122.1	126.3
90°	69.8	81.4	84.7	86.4	88.1	89.7	93.0	98.9	107.2	113.0
92.5°	70.6	73.9	77.3	79.8	81.4	83.9	88.1	93.9	102.2	108.0
95°	66.5	70.6	74.8	78.1	79.8	82.2	87.2	94.7	104.7	110.5
97.5°	64.0	69.0	72.3	77.3	79.8	83.1	91.4	102.2	114.6	119.6
100°	62.3	67.3	71.4	77.3	81.4	84.7	94.7	103.8	108.8	109.7
102.5°	60.6	65.6	70.6	76.4	79.8	83.1	88.1	91.4	90.6	90.6
105°	59.0	64.0	68.1	72.3	74.8	75.6	78.1	77.3	77.3	76.4
107.5°	57.3	61.5	64.8	66.5	67.3	68.1	68.1	68.1	67.3	67.3
110°	55.7	59.0	60.6	61.5	61.5	61.5	62.3	62.3	62.3	62.3



TEST NUMBER: P241351

CATALOG NUMBER: FVS8M-3-LD4-40-1STD-P125-UNV-EDC1

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	54.0	56.5	57.3	58.2	58.2	58.2	59.8	60.6	60.6	60.6
115°	52.3	54.8	56.5	57.3	58.2	59.0	60.6	62.3	63.1	63.1
117.5°	52.3	55.7	57.3	59.8	60.6	61.5	63.1	65.6	66.5	66.5
120°	53.2	56.5	59.8	62.3	63.1	64.0	66.5	69.0	69.8	70.6
122.5°	54.0	57.3	60.6	64.0	64.8	65.6	68.1	70.6	72.3	73.1
125°	54.0	58.2	61.5	64.8	65.6	67.3	69.0	71.4	73.1	74.8
127.5°	53.2	57.3	61.5	64.8	66.5	67.3	69.8	71.4	73.9	74.8
130°	52.3	56.5	59.8	63.1	64.8	66.5	69.8	72.3	73.9	74.8
132.5°	50.7	54.8	59.0	62.3	64.0	65.6	69.0	71.4	73.1	73.9
135°	49.0	54.0	57.3	60.6	62.3	64.0	67.3	69.8	71.4	72.3
137.5°	48.2	52.3	55.7	59.0	60.6	62.3	65.6	67.3	69.8	70.6
140°	45.7	49.8	53.2	56.5	58.2	59.8	62.3	64.8	66.5	67.3
142.5°	44.0	47.4	50.7	53.2	54.8	56.5	59.0	60.6	62.3	63.1
145°	40.7	44.0	47.4	49.8	50.7	52.3	54.0	55.7	57.3	57.3
147.5°	35.7	39.9	42.4	44.9	45.7	47.4	49.0	49.8	50.7	51.5
150°	30.7	34.1	37.4	39.0	39.9	40.7	42.4	43.2	44.0	44.0
152.5°	24.9	28.2	30.7	33.2	34.1	34.9	35.7	36.6	37.4	37.4
155°	19.9	22.4	25.8	26.6	28.2	28.2	29.9	30.7	30.7	30.7
157.5°	15.0	17.4	19.1	21.6	22.4	22.4	24.1	24.1	24.9	24.9
160°	10.8	12.5	14.1	16.6	17.4	17.4	18.3	19.1	19.1	19.1
162.5°	7.5	9.1	10.0	11.6	12.5	13.3	13.3	14.1	14.1	14.1
165°	5.0	5.8	6.6	7.5	8.3	8.3	9.1	10.0	10.0	10.0
167.5°	3.3	3.3	4.2	4.2	5.0	5.0	5.8	5.8	5.8	6.6
170°	1.7	1.7	1.7	2.5	2.5	2.5	2.5	3.3	3.3	3.3
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)