

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: P241323

Luminaire Tested: **FVS8M-2-LD4-40-2LO-P125-UNV-EDC1**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P241323
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-LD4-40-2LO-P125-UNV-EDC1
Description: FAILSAFE FVS8M LED FIXTURE
2FT LENGTH, 2-MODULE LED WITH P125 LENS
Light Source: (84) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

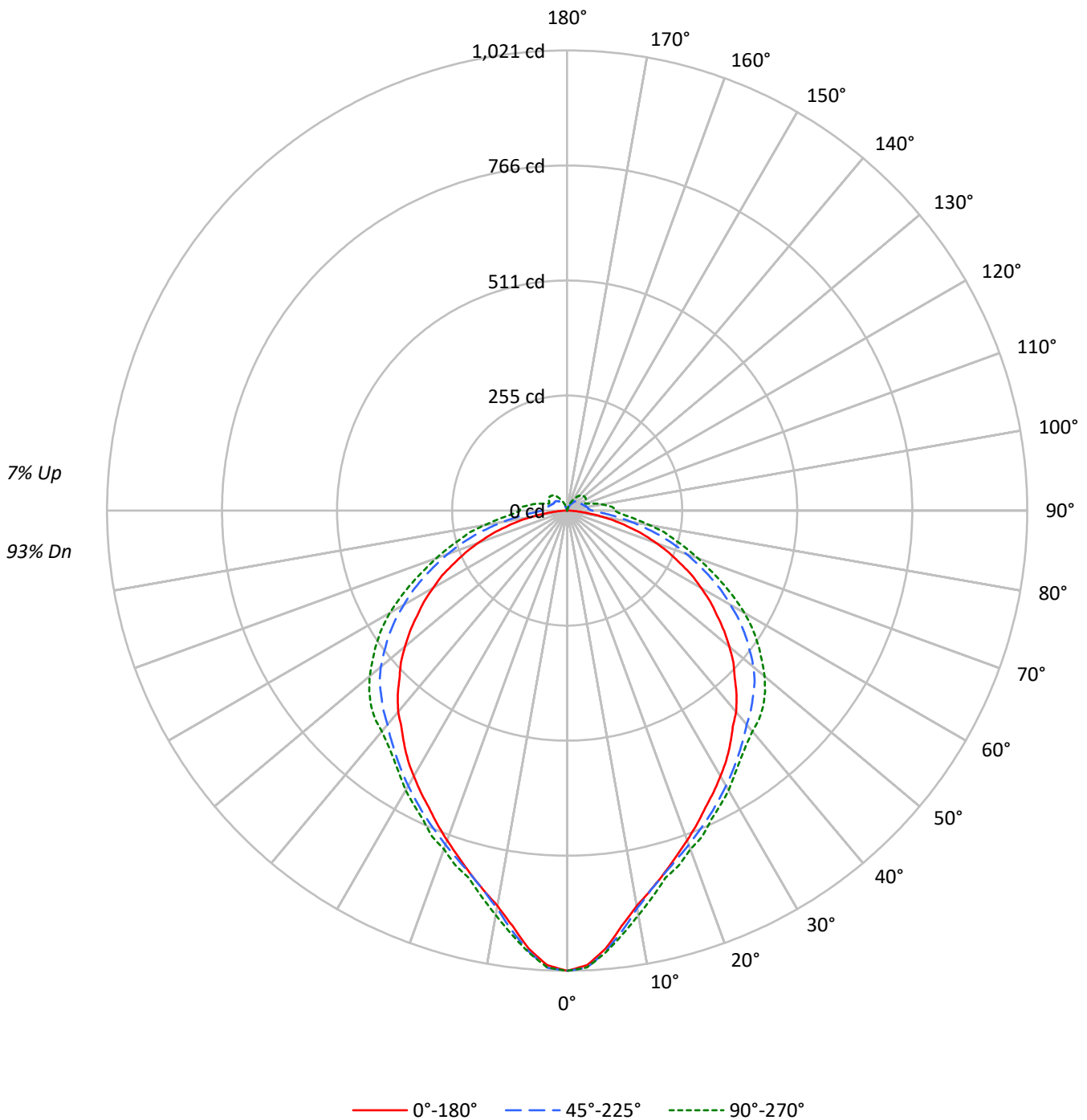
Lumens per Lamp: N/A
Luminaire Lumens: 2781.0 lumens
Efficiency: N/A
Efficacy: 117.3 lumens/watt
Spacing Criteria (0/90/45): 1 / 1.05 / 1.26
Luminous Opening: Rectangular w/ Sides (W: 0.65' x L: 1.85' x H: 0.15')
CIE Type: Direct

Input Watts (W): 23.7
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°	9178	9178	9178
5°	8745	8691	8705
10°	8013	7876	8001
15°	7587	7335	7402
20°	7241	6999	7066
25°	6951	6736	6788
30°	6757	6509	6581
35°	6562	6315	6362
40°	6420	6161	6309
45°	6201	6100	6378
50°	6007	6006	6304
55°	5722	5786	6126
60°	5427	5479	5874
65°	5029	5116	5443
70°	4541	4654	5017
75°	3831	4094	4618
80°	2806	3370	4199
85°	1396	2593	3793



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.9	3.3
10°-20°	236.4	8.5
20°-30°	344.0	12.4
30°-40°	412.7	14.8
40°-50°	445.1	16.0
50°-60°	421.7	15.2
60°-70°	336.1	12.1
70°-80°	215.5	7.7
80°-90°	95.7	3.4
90°-100°	50.5	1.8
100°-110°	38.5	1.4
110°-120°	28.7	1.0
120°-130°	26.1	0.9
130°-140°	20.4	0.7
140°-150°	12.5	0.4
150°-160°	5.2	0.2
160°-170°	1.1	0.0
170°-180°	0.0	0.0
0°-30°	671.3	24.1
0°-40°	1084.0	39.0
0°-60°	1950.8	70.1
0°-90°	2598.1	93.4
90°-120°	117.7	4.2
90°-150°	176.6	6.4
90°-180°	183.0	6.6
0°-180°	2781.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1021	1021	1021	1021	1021	
5°	976	978	981	985	984	90
15°	832	831	834	844	844	235
25°	726	734	747	758	756	336
35°	631	645	662	675	671	395
45°	526	547	583	612	615	407
55°	406	436	483	509	517	364
65°	276	308	352	369	380	275
75°	143	170	213	238	245	152
85°	26	50	87	117	132	33
90°	0	22	56	77	105	1
95°	0	20	47	69	99	0
105°	0	18	41	56	60	0
115°	0	16	35	41	44	0
125°	0	14	34	45	50	0
135°	0	11	29	42	47	0
145°	1	7	21	32	37	0
155°	1	3	12	18	21	0
165°	1	1	3	7	7	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°	1021.1	1021.1	1021.1	1021.1	1021.1	1021.1	1021.1	1021.1	1021.1	1021.1	1021.1
2.5°	1009.5	1009.5	1009.5	1009.5	1010.7	1010.1	1011.3	1012.0	1013.2	1013.8	1015.0
5°	975.8	975.8	974.6	975.2	975.8	977.6	977.0	979.5	980.7	982.5	981.3
7.5°	929.3	931.7	930.5	931.1	930.5	931.7	934.2	934.8	937.8	939.7	939.7
10°	890.1	890.1	887.6	888.2	888.2	889.4	889.4	891.3	893.1	896.2	895.6
12.5°	861.3	861.3	858.2	858.8	857.0	857.6	857.6	858.2	859.4	861.3	861.3
15°	832.5	830.0	830.0	831.2	831.2	830.6	831.2	831.2	831.2	832.5	833.7
17.5°	804.3	804.3	804.9	804.3	805.5	804.9	804.9	806.7	808.0	808.0	810.4
20°	778.6	779.2	778.6	780.4	782.2	782.2	782.2	784.1	784.1	786.5	789.0
22.5°	752.8	753.5	755.3	754.7	757.1	757.1	756.5	760.2	762.0	764.5	767.5
25°	726.5	727.1	728.3	730.8	732.0	734.5	735.7	737.5	742.4	743.7	747.3
27.5°	703.8	703.2	704.4	709.3	709.3	711.2	713.6	717.9	718.5	724.0	725.9
30°	680.6	680.6	680.6	686.1	687.3	689.7	692.2	695.9	698.9	702.0	705.1
32.5°	657.3	654.8	656.7	661.0	667.1	667.1	668.3	674.4	676.9	680.6	684.2
35°	630.9	631.6	634.0	636.5	642.0	645.0	647.5	651.2	654.2	657.3	662.2
37.5°	604.0	606.4	608.9	611.9	615.6	619.3	621.8	626.7	633.4	636.5	641.4
40°	583.2	581.9	583.8	586.2	590.5	594.2	598.5	604.0	610.1	615.0	619.9
42.5°	556.2	555.0	559.9	561.7	568.5	569.7	574.6	581.3	589.3	596.0	602.8
45°	526.2	528.6	531.7	537.2	541.5	547.0	551.3	558.0	568.5	577.0	583.2
47.5°	500.5	499.9	503.5	509.7	516.4	520.7	525.0	534.8	545.8	555.0	564.2
50°	469.8	471.7	475.3	482.1	490.7	493.1	496.8	509.0	519.5	531.1	539.7
52.5°	439.2	439.8	445.3	452.1	461.3	465.5	471.1	481.5	491.9	502.3	510.9
55°	406.1	408.0	415.3	421.4	431.2	436.1	442.3	452.7	463.7	474.1	482.7
57.5°	376.7	378.0	382.9	390.8	401.2	404.9	411.6	423.3	433.1	444.1	452.7
60°	343.0	345.5	350.4	360.2	368.1	371.8	379.2	390.2	400.0	410.4	418.4
62.5°	313.0	313.0	317.3	327.1	335.1	340.0	346.1	355.3	366.9	376.1	386.5
65°	276.3	279.9	286.1	292.8	302.0	307.5	311.8	321.6	331.4	341.8	351.6
67.5°	244.4	246.9	251.2	259.1	269.5	272.0	278.7	288.5	297.1	306.3	315.5
70°	210.1	211.9	217.5	225.4	234.0	237.1	243.2	252.4	261.6	272.0	281.8
72.5°	177.6	178.9	185.0	191.1	199.7	205.2	208.9	216.8	227.3	238.3	247.5
75°	142.7	145.2	150.1	156.8	165.4	169.7	174.6	183.2	193.0	202.8	212.6
77.5°	112.1	112.1	117.0	124.4	131.7	136.6	140.9	150.1	159.9	168.5	177.0
80°	78.4	81.5	85.1	91.9	99.8	105.4	107.8	116.4	126.2	134.8	144.6
82.5°	50.8	52.7	57.0	63.7	71.1	74.1	78.4	87.0	96.2	106.0	113.9
85°	25.7	28.2	32.5	38.6	45.9	49.6	53.3	62.5	69.8	78.4	87.0
87.5°	9.8	11.0	15.3	21.4	28.2	31.9	34.9	42.9	50.2	58.8	67.4
90°	0.0	2.5	6.7	12.3	19.0	22.1	25.7	33.1	39.8	47.8	55.7
92.5°	0.0	1.8	5.5	11.0	17.2	20.8	23.9	30.6	37.4	44.7	50.2
95°	0.0	1.8	5.5	11.0	17.2	20.2	23.3	30.0	36.8	42.9	47.2
97.5°	0.0	1.2	5.5	11.0	16.5	19.6	22.7	29.4	35.5	41.0	45.9
100°	0.0	1.2	4.9	10.4	15.9	19.0	22.7	28.8	33.7	39.2	44.7
102.5°	0.0	1.2	4.9	9.8	15.9	19.0	22.1	27.6	32.5	38.0	42.9
105°	0.0	1.2	4.3	9.8	15.3	18.4	20.8	26.3	31.9	36.8	41.0
107.5°	0.0	1.2	4.3	9.2	14.7	17.2	20.2	25.7	30.6	34.9	39.2
110°	0.0	1.2	4.3	8.6	14.1	17.2	19.6	25.1	29.4	33.7	37.4



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	0.0	0.6	3.7	8.0	14.1	16.5	19.0	23.9	28.8	32.5	36.1
115°	0.0	0.6	3.7	8.0	13.5	15.9	18.4	23.3	27.6	31.9	34.9
117.5°	0.0	0.6	3.7	8.0	12.9	15.3	18.4	22.7	27.0	31.2	34.3
120°	0.0	0.6	3.1	7.4	12.3	14.7	17.8	22.7	27.0	30.6	33.7
122.5°	0.0	0.6	3.1	7.4	11.6	14.1	17.2	22.1	26.3	30.6	33.7
125°	0.0	0.6	3.1	6.7	11.6	13.5	16.5	21.4	26.3	30.0	33.7
127.5°	0.0	0.6	2.5	6.7	11.0	13.5	15.9	20.8	25.1	29.4	33.1
130°	0.0	0.6	2.5	6.1	10.4	12.9	15.3	19.6	24.5	28.8	32.5
132.5°	0.0	0.6	2.5	5.5	9.8	12.3	14.1	18.4	22.7	27.6	31.2
135°	0.0	0.6	1.8	4.9	9.2	11.0	13.5	17.8	21.4	25.7	29.4
137.5°	0.0	0.6	1.8	4.9	8.6	10.4	12.9	16.5	20.2	23.9	27.6
140°	0.0	0.0	1.2	4.3	7.4	9.2	11.6	15.3	19.0	22.7	25.7
142.5°	0.6	0.0	1.2	3.7	6.7	8.6	10.4	14.1	17.8	20.8	23.9
145°	0.6	0.0	0.6	3.1	5.5	7.4	8.6	12.3	15.9	19.0	21.4
147.5°	0.6	0.0	0.6	2.5	4.9	6.1	7.4	10.4	13.5	16.5	19.6
150°	0.6	0.0	0.6	1.8	3.7	4.9	6.1	8.6	11.6	14.7	17.2
152.5°	0.6	0.6	0.6	1.2	3.1	3.7	4.9	7.4	9.8	12.3	14.1
155°	0.6	0.6	0.6	0.6	1.8	3.1	3.7	5.5	8.0	9.8	11.6
157.5°	0.6	0.6	0.0	0.6	1.2	1.8	2.5	4.3	6.1	7.4	9.2
160°	0.6	0.6	0.0	0.6	1.2	1.2	1.8	3.1	4.3	5.5	6.7
162.5°	0.6	0.6	0.0	0.6	0.6	0.6	1.2	1.8	3.1	3.7	4.9
165°	0.6	0.6	0.6	0.0	0.6	0.6	0.6	1.2	1.8	2.5	3.1
167.5°	0.6	0.6	0.6	0.0	0.0	0.0	0.0	0.6	0.6	1.2	1.8
170°	0.6	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.6	0.6	0.6
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°	1021.1	1021.1	1021.1	1021.1	1021.1	1021.1	1021.1	1021.1	1021.1	1021.1
2.5°	1016.2	1015.6	1015.6	1015.0	1015.6	1015.0	1015.0	1015.6	1015.0	1014.4
5°	984.4	985.0	985.6	984.4	985.0	984.4	984.4	983.8	984.4	983.8
7.5°	940.9	942.7	944.0	943.3	945.2	944.6	945.8	947.0	947.6	947.6
10°	898.0	899.2	901.1	903.5	904.8	906.0	907.8	910.3	910.9	911.5
12.5°	863.7	866.2	866.8	868.0	869.2	868.6	872.9	874.7	877.8	877.2
15°	834.9	838.6	839.8	843.5	844.1	845.3	849.0	845.9	845.3	843.5
17.5°	812.3	815.9	816.5	816.5	817.2	819.0	822.7	823.3	824.5	825.1
20°	790.2	792.7	795.1	796.9	798.2	798.8	800.6	798.2	798.8	799.4
22.5°	768.8	771.2	774.9	776.7	779.2	781.0	781.0	780.4	779.2	782.9
25°	751.0	752.8	756.5	756.5	757.7	759.6	757.1	759.0	757.7	756.5
27.5°	729.6	734.5	735.7	736.9	738.1	737.5	737.5	736.9	736.9	736.3
30°	710.0	711.8	715.5	716.1	717.3	718.5	718.5	719.8	716.1	716.7
32.5°	689.7	692.2	696.5	697.7	698.3	698.3	696.5	692.8	693.4	692.8
35°	665.9	671.4	675.7	675.7	675.0	675.7	674.4	673.8	672.0	671.4
37.5°	643.8	648.7	653.6	655.4	654.8	656.1	654.2	653.0	653.0	653.6
40°	625.4	629.1	634.0	637.7	637.7	638.9	638.9	638.9	640.1	639.5
42.5°	607.0	613.8	619.9	626.0	627.9	627.9	627.3	627.9	629.1	629.7
45°	591.7	599.1	605.2	610.1	611.9	611.9	613.2	615.0	614.4	615.0
47.5°	572.7	577.0	583.8	587.4	588.7	590.5	592.3	592.3	593.6	595.4
50°	546.4	551.9	557.4	563.6	565.4	565.4	568.5	570.3	570.9	572.1
52.5°	518.2	526.2	531.1	536.0	537.2	538.4	540.3	541.5	542.1	544.0
55°	488.8	497.4	501.1	506.6	509.0	512.1	510.3	515.2	515.8	517.0
57.5°	460.6	466.8	473.5	476.6	476.6	479.0	483.3	484.5	487.0	487.6
60°	425.7	433.1	439.2	440.4	442.9	443.5	446.6	449.6	452.7	454.5
62.5°	391.4	398.2	403.7	405.5	406.7	408.0	411.6	414.7	417.8	417.2
65°	357.1	363.9	368.1	368.8	368.8	372.4	374.9	375.5	379.8	379.8
67.5°	323.4	330.2	332.6	336.3	336.9	336.3	338.1	341.2	344.3	341.8
70°	289.1	294.6	298.9	303.8	302.6	302.6	303.8	306.3	307.5	309.3
72.5°	254.2	260.3	265.2	268.9	270.1	272.0	272.6	273.8	274.4	275.7
75°	220.5	226.0	232.8	237.7	238.3	240.1	242.0	243.2	243.2	245.0
77.5°	186.2	194.8	199.7	205.8	205.8	208.3	213.8	215.0	218.7	219.9
80°	153.1	160.5	169.1	174.6	177.6	180.7	181.3	181.3	183.2	185.0
82.5°	123.1	130.5	140.3	144.6	146.4	147.0	151.9	153.8	156.2	157.4
85°	96.8	106.6	110.9	115.2	117.0	118.2	122.5	125.6	129.9	131.7
87.5°	77.2	81.5	85.8	90.0	91.9	93.7	99.2	103.5	110.9	114.5
90°	61.3	64.9	69.2	74.7	76.6	79.6	85.1	91.3	99.8	104.7
92.5°	54.5	58.8	63.1	68.6	71.7	74.1	80.2	88.2	99.2	104.7
95°	52.1	57.0	61.9	66.2	68.6	71.7	78.4	87.6	96.2	99.2
97.5°	51.5	55.7	59.4	64.3	66.8	69.8	76.6	82.1	85.8	87.6
100°	49.0	53.3	57.6	61.9	64.9	66.8	71.1	75.3	77.8	79.0
102.5°	47.2	50.8	55.1	58.8	60.6	62.5	66.2	69.2	70.4	70.4
105°	45.3	48.4	52.1	54.5	56.4	57.6	59.4	60.0	60.0	60.0
107.5°	42.9	45.9	48.4	50.2	50.8	51.5	51.5	51.5	50.8	50.2
110°	40.4	43.5	44.7	45.3	45.3	45.3	45.3	45.3	45.3	44.7



TEST NUMBER: P241323

CATALOG NUMBER: FVS8M-2-LD4-40-2LO-P125-UNV-EDC1

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	38.6	40.4	41.7	42.3	41.7	42.3	42.3	42.9	42.9	42.9
115°	37.4	39.2	39.8	40.4	41.0	41.0	42.3	42.9	43.5	43.5
117.5°	36.8	38.6	39.8	41.7	41.7	42.3	43.5	44.7	45.3	45.3
120°	36.8	38.6	41.0	42.9	43.5	44.1	45.3	46.6	47.2	47.2
122.5°	36.8	39.2	41.7	43.5	44.7	45.3	46.6	47.8	48.4	49.0
125°	36.8	39.2	42.3	44.1	44.7	45.9	47.2	48.4	49.0	49.6
127.5°	36.1	39.2	41.7	44.1	44.7	45.3	47.2	48.4	49.0	49.6
130°	35.5	38.6	41.0	42.9	44.1	44.7	46.6	47.8	48.4	49.0
132.5°	34.3	37.4	39.8	42.3	42.9	44.1	45.9	47.2	47.8	48.4
135°	33.1	36.1	38.6	41.0	41.7	42.9	44.7	45.9	47.2	47.2
137.5°	31.2	34.3	36.8	39.2	40.4	41.0	42.9	44.7	45.3	45.9
140°	29.4	31.9	34.9	36.8	38.0	39.2	40.4	42.3	42.9	43.5
142.5°	27.0	29.4	31.9	34.3	35.5	36.1	38.0	39.2	40.4	40.4
145°	24.5	26.3	28.8	31.2	31.9	32.5	34.3	35.5	36.1	36.8
147.5°	22.1	23.9	26.3	27.6	28.2	29.4	30.6	31.9	31.9	32.5
150°	19.0	20.8	22.7	23.9	25.1	25.7	27.0	27.6	28.2	28.2
152.5°	16.5	17.8	19.6	20.8	21.4	22.1	22.7	23.9	23.9	24.5
155°	13.5	15.3	16.5	17.8	18.4	19.0	19.6	20.2	20.2	20.8
157.5°	11.0	12.3	13.5	14.7	15.3	15.3	16.5	16.5	17.2	16.5
160°	8.6	9.8	11.0	11.6	12.3	12.3	12.9	13.5	13.5	13.5
162.5°	6.1	7.4	8.0	9.2	9.2	9.2	9.8	10.4	10.4	10.4
165°	4.3	4.9	5.5	6.1	6.7	6.7	6.7	7.4	7.4	7.4
167.5°	2.5	2.5	3.1	3.7	3.7	4.3	4.3	4.3	4.9	4.9
170°	0.6	1.2	1.2	1.8	1.8	1.8	1.8	1.8	2.5	2.5
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)