

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: P241316

Luminaire Tested: **FVS8M-2-LD4-50-1STD-P125-UNV-EDC1**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P241316
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1711-410-3)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: FVS8M-2-LD4-50-1STD-P125-UNV-EDC1
Description: FAILSAFE FVS8M LED FIXTURE
2FT LENGTH, 1-MODULE LED WITH P125 LENS
Light Source: (42) 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

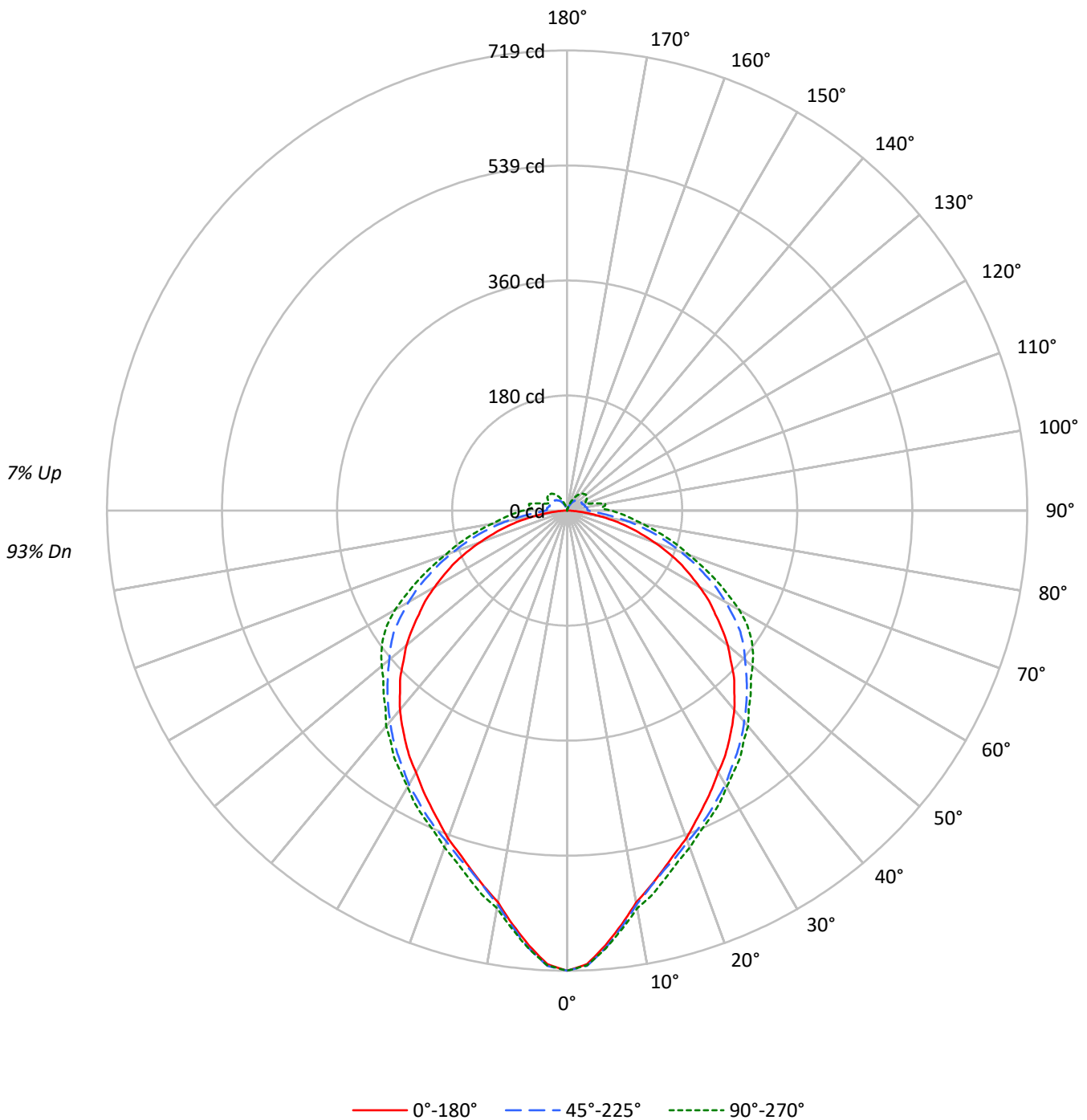
Lumens per Lamp: N/A
Luminaire Lumens: 1915.0 lumens
Efficiency: N/A
Efficacy: 111.3 lumens/watt
Spacing Criteria (0/90/45): 0.99 / 1.04 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.65' x L: 1.85' x H: 0.15')
CIE Type: Direct

Input Watts (W): 17.2
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: P241316

CATALOG NUMBER: FVS8M-2-LD4-50-1STD-P125-UNV-EDC1

Luminous Intensity Polar Plot





TEST NUMBER: P241316

CATALOG NUMBER: FVS8M-2-LD4-50-1STD-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	93	103	98	94	90	93	89	86	88	85	82	83	81	79	76
2	96	88	81	75	93	85	79	73	81	75	71	76	72	68	72	69	65	63
3	88	77	68	62	85	75	67	61	71	64	59	67	62	57	64	59	55	53
4	80	68	59	52	77	66	58	51	63	56	50	60	53	49	57	51	47	45
5	74	61	51	45	71	59	51	44	56	49	43	53	47	42	51	45	41	39
6	68	55	45	39	66	53	45	39	51	43	38	48	42	37	46	40	36	34
7	63	49	41	34	61	48	40	34	46	39	33	44	37	33	42	36	32	30
8	59	45	36	31	57	44	36	30	42	35	30	40	34	29	39	33	29	27
9	55	41	33	28	53	40	33	27	39	32	27	37	31	26	36	30	26	24
10	51	38	30	25	50	37	30	25	36	29	24	35	28	24	33	28	23	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6461	6461	6461
5°	6113	6079	6081
10°	5595	5495	5538
15°	5291	5122	5214
20°	5065	4884	4950
25°	4852	4717	4750
30°	4687	4563	4578
35°	4581	4412	4465
40°	4473	4277	4338
45°	4346	4153	4205
50°	4191	4038	4167
55°	3982	3960	4168
60°	3781	3745	4017
65°	3542	3466	3670
70°	3136	3129	3281
75°	2658	2746	3008
80°	1926	2228	2712
85°	972	1627	2630



TEST NUMBER: P241316

CATALOG NUMBER: FVS8M-2-LD4-50-1STD-P125-UNV-EDC1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.5	3.3
10°-20°	165.1	8.6
20°-30°	240.5	12.6
30°-40°	288.0	15.0
40°-50°	302.9	15.8
50°-60°	288.2	15.0
60°-70°	228.9	12.0
70°-80°	144.1	7.5
80°-90°	62.6	3.3
90°-100°	32.0	1.7
100°-110°	27.2	1.4
110°-120°	21.1	1.1
120°-130°	19.8	1.0
130°-140°	15.9	0.8
140°-150°	10.2	0.5
150°-160°	4.3	0.2
160°-170°	0.8	0.0
170°-180°	0.0	0.0
0°-30°	469.2	24.5
0°-40°	757.1	39.5
0°-60°	1348.2	70.4
0°-90°	1783.8	93.1
90°-120°	80.3	4.2
90°-150°	126.2	6.6
90°-180°	131.0	6.8
0°-180°	1915.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	719	719	719	719	719	
5°	682	686	686	688	687	63
15°	580	580	582	588	594	164
25°	507	514	523	530	529	234
35°	440	452	463	470	471	276
45°	369	376	397	404	406	284
55°	283	300	330	349	352	254
65°	195	211	238	251	256	191
75°	99	116	143	157	160	105
85°	18	32	55	76	91	22
90°	0	14	33	53	68	1
95°	0	13	32	42	55	0
105°	0	13	28	40	43	0
115°	0	12	26	30	32	0
125°	0	11	26	34	38	0
135°	0	8	23	32	37	0
145°	0	6	18	26	30	0
155°	0	3	9	15	17	0
165°	0	0	2	4	5	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P241316

CATALOG NUMBER: FVS8M-2-LD4-50-1STD-P125-UNV-EDC1

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	718.8	718.8	718.8	718.8	718.8	718.8	718.8	718.8	718.8	718.8	718.8
2.5°	709.4	710.3	709.4	710.3	711.1	712.0	711.1	712.0	712.0	712.8	712.0
5°	682.1	683.0	683.8	685.5	686.4	686.4	685.5	686.4	686.4	685.5	686.4
7.5°	652.2	651.4	652.2	653.1	653.1	653.9	653.9	652.2	653.1	653.1	655.7
10°	621.5	622.4	621.5	622.4	621.5	621.5	621.5	622.4	622.4	623.2	624.9
12.5°	601.0	601.0	599.3	599.3	600.2	600.2	600.2	600.2	599.3	601.0	601.9
15°	580.5	583.1	581.4	582.2	580.5	580.5	579.7	579.7	580.5	578.8	582.2
17.5°	560.9	563.4	562.6	563.4	563.4	561.7	561.7	562.6	563.4	563.4	566.9
20°	544.7	544.7	544.7	546.4	547.2	548.1	547.2	547.2	548.9	549.8	550.6
22.5°	525.0	525.9	529.3	529.3	528.4	530.2	529.3	531.9	533.6	534.4	537.0
25°	507.1	510.5	511.4	510.5	513.1	513.9	514.8	519.1	518.2	519.9	523.3
27.5°	490.0	491.7	494.3	496.0	498.6	496.9	498.6	501.1	500.3	507.1	508.0
30°	472.1	476.4	477.2	479.8	479.8	479.8	484.1	484.9	489.2	490.9	494.3
32.5°	457.6	458.4	461.0	463.6	464.4	467.0	468.7	470.4	473.0	474.7	477.2
35°	440.5	443.9	443.1	445.6	448.2	452.5	452.5	454.2	455.9	461.0	462.7
37.5°	423.4	426.0	426.0	430.3	432.0	434.5	432.0	439.7	442.2	444.8	447.3
40°	406.4	408.1	409.8	411.5	413.2	414.9	417.5	421.7	425.1	427.7	430.3
42.5°	386.7	389.3	391.0	392.7	396.1	397.8	400.4	403.0	408.1	410.6	414.0
45°	368.8	370.5	372.2	373.9	377.3	376.5	380.8	385.9	391.0	393.6	397.0
47.5°	346.6	350.0	353.4	354.3	356.9	360.3	362.0	367.9	373.1	374.8	379.9
50°	327.8	327.8	332.1	334.7	337.2	341.5	343.2	348.3	354.3	359.4	362.8
52.5°	305.6	308.2	310.8	314.2	318.4	321.0	323.6	329.5	337.2	344.0	347.5
55°	282.6	285.1	289.4	292.8	297.1	299.7	303.9	310.8	317.6	323.6	330.4
57.5°	262.9	262.9	265.5	269.8	274.9	278.3	281.7	289.4	297.9	300.5	308.2
60°	239.0	241.6	244.2	248.4	253.6	257.0	259.5	267.2	274.0	280.9	286.0
62.5°	216.0	218.6	221.1	225.4	231.4	234.8	237.3	244.2	251.8	257.0	263.8
65°	194.6	193.8	197.2	202.3	208.3	210.9	213.4	221.1	227.1	232.2	238.2
67.5°	169.9	172.4	175.0	179.3	184.4	187.8	190.4	197.2	202.3	208.3	214.3
70°	145.1	147.7	150.3	156.2	161.4	163.1	165.6	172.4	176.7	185.3	189.5
72.5°	121.2	123.8	127.2	131.5	137.4	139.2	142.6	147.7	154.5	160.5	165.6
75°	99.0	101.6	103.3	107.6	112.7	116.1	118.7	124.6	130.6	136.6	142.6
77.5°	76.8	78.5	81.1	85.4	89.6	93.1	94.8	100.7	106.7	112.7	118.7
80°	53.8	56.3	58.9	63.2	67.4	70.9	73.4	79.4	84.5	90.5	95.6
82.5°	34.1	35.9	39.3	43.5	47.8	49.5	52.9	57.2	63.2	68.3	73.4
85°	17.9	19.6	22.2	25.6	30.7	32.4	35.0	39.3	44.4	49.5	54.6
87.5°	6.8	7.7	10.2	13.7	17.1	19.6	22.2	26.5	30.7	35.9	41.0
90°	0.0	1.7	4.3	7.7	11.1	13.7	15.4	19.6	23.9	28.2	33.3
92.5°	0.0	0.9	3.4	6.8	11.1	12.8	14.5	18.8	23.1	27.3	31.6
95°	0.0	0.9	3.4	6.8	11.1	12.8	14.5	18.8	23.1	27.3	31.6
97.5°	0.0	0.9	3.4	6.8	11.1	12.8	14.5	18.8	23.1	27.3	31.6
100°	0.0	0.9	3.4	6.8	11.1	12.8	14.5	18.8	23.1	27.3	29.9
102.5°	0.0	0.9	3.4	6.8	10.2	12.8	14.5	18.8	23.1	26.5	29.0
105°	0.0	0.9	3.4	6.8	10.2	12.8	14.5	18.8	22.2	25.6	28.2
107.5°	0.0	0.9	3.4	6.8	10.2	12.0	14.5	17.9	21.3	24.8	28.2
110°	0.0	0.9	2.6	6.0	10.2	12.0	13.7	17.9	21.3	24.8	27.3



TEST NUMBER: P241316

CATALOG NUMBER: FVS8M-2-LD4-50-1STD-P125-UNV-EDC1

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	0.0	0.9	2.6	6.0	10.2	12.0	13.7	17.9	20.5	23.9	26.5
115°	0.0	0.9	2.6	6.0	9.4	12.0	13.7	17.1	20.5	23.1	25.6
117.5°	0.0	0.9	2.6	6.0	9.4	12.0	13.7	17.1	20.5	23.1	25.6
120°	0.0	0.0	2.6	6.0	9.4	11.1	13.7	17.1	20.5	23.1	25.6
122.5°	0.0	0.0	2.6	6.0	9.4	11.1	13.7	17.1	20.5	23.1	25.6
125°	0.0	0.0	2.6	5.1	9.4	11.1	12.8	17.1	19.6	23.1	25.6
127.5°	0.0	0.0	1.7	5.1	8.5	10.2	12.8	16.2	19.6	23.1	25.6
130°	0.0	0.0	1.7	5.1	7.7	10.2	12.0	16.2	18.8	22.2	24.8
132.5°	0.0	0.0	1.7	4.3	7.7	9.4	11.1	15.4	18.8	21.3	23.9
135°	0.0	0.0	1.7	4.3	6.8	8.5	10.2	13.7	17.1	20.5	23.1
137.5°	0.0	0.0	0.9	3.4	6.8	7.7	9.4	12.8	16.2	18.8	21.3
140°	0.0	0.0	0.9	3.4	6.0	7.7	9.4	12.0	15.4	17.9	20.5
142.5°	0.0	0.0	0.9	2.6	5.1	6.8	8.5	11.1	13.7	17.1	19.6
145°	0.0	0.0	0.9	2.6	4.3	6.0	7.7	10.2	12.8	15.4	17.9
147.5°	0.0	0.0	0.9	1.7	3.4	5.1	6.0	9.4	11.1	13.7	16.2
150°	0.0	0.0	0.0	1.7	3.4	4.3	5.1	7.7	10.2	12.0	14.5
152.5°	0.0	0.0	0.0	0.9	2.6	3.4	4.3	6.0	7.7	10.2	12.0
155°	0.0	0.0	0.0	0.9	1.7	2.6	3.4	4.3	6.0	7.7	9.4
157.5°	0.0	0.0	0.0	0.0	0.9	1.7	1.7	3.4	4.3	6.0	7.7
160°	0.0	0.0	0.0	0.0	0.9	0.9	0.9	1.7	3.4	4.3	5.1
162.5°	0.0	0.0	0.0	0.0	0.0	0.9	0.9	1.7	1.7	2.6	3.4
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.9	1.7	1.7
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.9	0.9
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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: P241316

CATALOG NUMBER: FVS8M-2-LD4-50-1STD-P125-UNV-EDC1

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	718.8	718.8	718.8	718.8	718.8	718.8	718.8	718.8	718.8	718.8
2.5°	712.0	712.0	712.0	711.1	711.1	711.1	711.1	711.1	712.0	711.1
5°	687.2	687.2	686.4	687.2	688.1	687.2	688.1	687.2	687.2	687.2
7.5°	656.5	656.5	656.5	656.5	657.4	657.4	657.4	658.2	659.1	659.1
10°	625.8	626.6	626.6	626.6	626.6	628.3	629.2	629.2	630.0	630.9
12.5°	602.7	602.7	605.3	608.7	609.5	611.3	613.0	612.1	612.1	614.7
15°	583.9	586.5	587.4	587.4	588.2	589.1	591.6	592.5	591.6	594.2
17.5°	567.7	567.7	572.0	572.8	572.8	573.7	573.7	574.5	574.5	575.4
20°	553.2	554.1	555.8	556.6	558.3	559.2	560.9	560.0	561.7	560.0
22.5°	537.8	538.7	543.8	544.7	544.7	543.8	542.1	543.8	543.8	543.0
25°	524.2	526.7	528.4	531.0	530.2	531.0	531.9	530.2	529.3	529.3
27.5°	509.7	511.4	514.8	515.6	515.6	513.9	513.9	513.9	513.1	515.6
30°	496.9	500.3	501.1	498.6	499.4	502.0	502.8	502.0	500.3	498.6
32.5°	479.8	481.5	484.1	490.0	489.2	488.3	484.1	483.2	483.2	484.1
35°	464.4	467.8	472.1	469.5	470.4	470.4	472.1	471.2	467.8	471.2
37.5°	449.1	454.2	454.2	458.4	456.7	455.0	452.5	454.2	453.3	453.3
40°	432.8	435.4	439.7	438.8	438.0	439.7	439.7	439.7	439.7	439.7
42.5°	416.6	420.0	420.0	420.9	424.3	425.1	424.3	418.3	420.9	420.0
45°	398.7	402.1	403.8	405.5	403.8	403.0	404.7	405.5	403.8	405.5
47.5°	383.3	383.3	388.4	387.6	387.6	389.3	387.6	387.6	386.7	389.3
50°	366.2	371.4	372.2	374.8	374.8	373.9	373.9	374.8	378.2	378.2
52.5°	352.6	357.7	361.1	362.0	362.0	364.5	367.1	366.2	367.9	366.2
55°	335.5	338.9	343.2	345.8	349.2	349.2	349.2	350.9	350.9	351.7
57.5°	314.2	317.6	320.1	326.1	327.8	327.0	327.8	331.2	330.4	333.8
60°	291.1	295.4	298.8	299.7	301.4	303.1	303.9	305.6	307.3	310.8
62.5°	267.2	270.6	274.9	274.0	275.7	277.5	279.2	280.0	283.4	282.6
65°	243.3	245.9	248.4	249.3	251.0	249.3	252.7	254.4	254.4	256.1
67.5°	219.4	221.1	224.5	225.4	226.2	226.2	225.4	227.9	228.8	228.8
70°	193.8	198.1	200.6	202.3	201.5	202.3	201.5	201.5	203.2	202.3
72.5°	170.7	174.2	176.7	179.3	179.3	179.3	179.3	180.1	181.0	181.8
75°	146.8	151.1	155.4	156.2	157.1	157.1	158.8	159.6	159.6	159.6
77.5°	122.9	128.1	131.5	134.0	134.9	136.6	137.4	139.2	139.2	139.2
80°	99.9	105.0	108.4	112.7	114.4	115.3	117.0	119.5	119.5	119.5
82.5°	78.5	83.7	88.8	91.3	93.9	96.5	99.0	100.7	102.4	104.2
85°	58.9	64.9	70.0	74.3	76.0	77.7	81.1	85.4	89.6	91.3
87.5°	46.1	50.4	55.5	59.8	62.3	64.9	69.2	72.6	77.7	80.2
90°	37.6	41.8	47.0	52.1	52.9	54.6	57.2	61.5	64.9	68.3
92.5°	35.9	40.1	43.5	44.4	45.2	46.1	47.8	50.4	53.8	57.2
95°	36.7	38.4	39.3	41.0	41.8	43.5	45.2	48.7	52.9	54.6
97.5°	34.1	35.9	38.4	41.0	41.8	43.5	47.0	52.1	57.2	59.8
100°	32.4	35.9	38.4	41.0	42.7	44.4	49.5	55.5	59.8	60.6
102.5°	32.4	35.0	37.6	41.0	42.7	44.4	48.7	51.2	51.2	51.2
105°	31.6	34.1	36.7	39.3	40.1	41.0	42.7	42.7	42.7	42.7
107.5°	30.7	32.4	35.0	35.9	35.9	36.7	36.7	36.7	36.7	35.9
110°	29.0	30.7	32.4	32.4	32.4	32.4	32.4	32.4	32.4	32.4



TEST NUMBER: P241316

CATALOG NUMBER: FVS8M-2-LD4-50-1STD-P125-UNV-EDC1

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	28.2	29.9	29.9	30.7	30.7	30.7	30.7	31.6	30.7	30.7
115°	27.3	29.0	29.0	29.9	29.9	29.9	30.7	31.6	31.6	31.6
117.5°	27.3	29.0	29.9	30.7	30.7	31.6	32.4	33.3	33.3	33.3
120°	27.3	29.0	30.7	31.6	32.4	32.4	34.1	35.0	35.0	35.0
122.5°	28.2	29.9	31.6	32.4	33.3	34.1	35.0	35.9	36.7	36.7
125°	28.2	29.9	32.4	33.3	34.1	34.1	35.0	36.7	36.7	37.6
127.5°	27.3	29.9	32.4	33.3	34.1	35.0	35.9	36.7	37.6	37.6
130°	27.3	29.9	31.6	33.3	34.1	35.0	35.9	36.7	37.6	38.4
132.5°	26.5	28.2	30.7	32.4	33.3	34.1	35.0	36.7	37.6	37.6
135°	25.6	27.3	29.9	31.6	32.4	33.3	35.0	35.9	36.7	36.7
137.5°	23.9	26.5	28.2	29.9	30.7	31.6	33.3	35.0	35.0	35.9
140°	23.1	24.8	27.3	29.0	29.9	30.7	31.6	33.3	34.1	34.1
142.5°	21.3	23.9	25.6	27.3	28.2	29.0	29.9	31.6	32.4	32.4
145°	19.6	22.2	23.9	25.6	26.5	27.3	28.2	29.0	29.9	29.9
147.5°	17.9	20.5	22.2	23.1	23.9	24.8	25.6	26.5	27.3	27.3
150°	16.2	17.9	19.6	20.5	21.3	22.2	23.1	23.1	23.9	23.9
152.5°	13.7	15.4	17.1	17.9	18.8	18.8	19.6	20.5	20.5	20.5
155°	11.1	12.8	13.7	14.5	15.4	16.2	16.2	17.1	17.1	17.1
157.5°	8.5	10.2	11.1	12.0	12.8	12.8	13.7	13.7	13.7	13.7
160°	6.0	7.7	8.5	9.4	9.4	9.4	10.2	10.2	10.2	10.2
162.5°	4.3	5.1	6.0	6.8	6.8	6.8	6.8	7.7	7.7	7.7
165°	2.6	3.4	3.4	4.3	4.3	4.3	5.1	5.1	5.1	5.1
167.5°	0.9	1.7	1.7	2.6	2.6	2.6	2.6	2.6	3.4	3.4
170°	0.0	0.9	0.9	0.9	0.9	0.9	0.9	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
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)