

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: P241345

Luminaire Tested: **FVS8M-3-LD4-30-1LO-P125-UNV-EDC1**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P241345
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-LD4-30-1LO-P125-UNV-EDC1
Description: FAILSAFE FVS8M LED FIXTURE
3FT LENGTH, 1-MODULE LED WITH P125 LENS
Light Source: (84) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

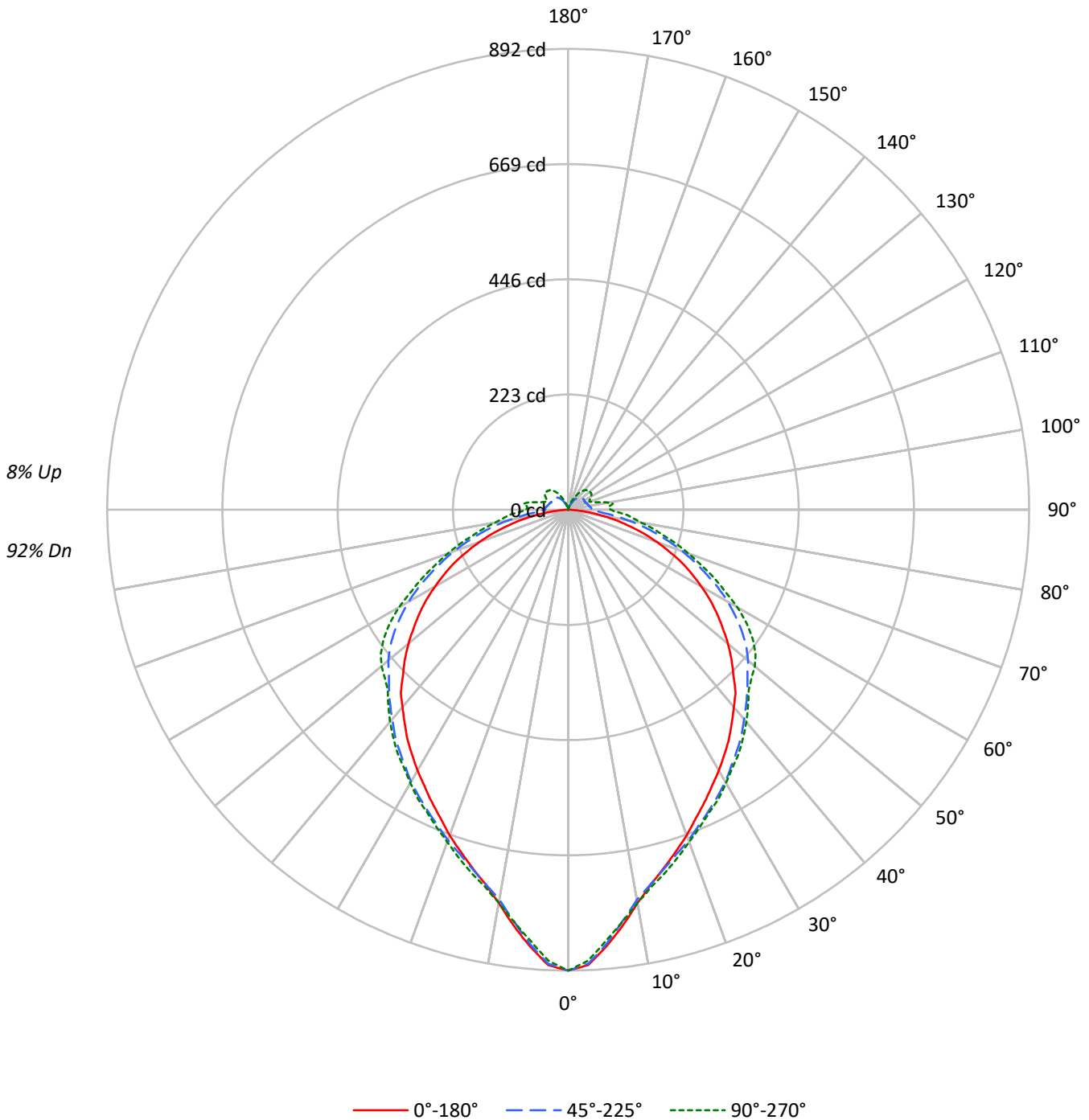
Lumens per Lamp: N/A
Luminaire Lumens: 2382.0 lumens
Efficiency: N/A
Efficacy: 112.4 lumens/watt
Spacing Criteria (0/90/45): 0.98 / 1.03 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.65' x L: 2.85' x H: 0.15')
CIE Type: Direct

Input Watts (W): 21.2
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

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Luminous Intensity Polar Plot





TEST NUMBER: P241345

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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°	5209	5209	5209
5°	4951	4865	4814
10°	4541	4391	4407
15°	4277	4129	4143
20°	4091	3949	3930
25°	3930	3798	3767
30°	3817	3684	3642
35°	3732	3570	3542
40°	3644	3467	3436
45°	3551	3385	3327
50°	3456	3348	3374
55°	3336	3264	3354
60°	3194	3108	3175
65°	3022	2868	2895
70°	2737	2613	2608
75°	2327	2280	2326
80°	1768	1861	2106
85°	922	1378	2129



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.2	3.3
10°-20°	203.2	8.5
20°-30°	295.7	12.4
30°-40°	353.9	14.9
40°-50°	373.9	15.7
50°-60°	358.1	15.0
60°-70°	282.4	11.9
70°-80°	176.5	7.4
80°-90°	77.0	3.2
90°-100°	44.0	1.8
100°-110°	37.0	1.6
110°-120°	29.9	1.3
120°-130°	28.2	1.2
130°-140°	22.7	1.0
140°-150°	14.5	0.6
150°-160°	5.7	0.2
160°-170°	1.1	0.0
170°-180°	0.0	0.0
0°-30°	577.1	24.2
0°-40°	931.0	39.1
0°-60°	1663.0	69.8
0°-90°	2198.9	92.3
90°-120°	110.8	4.7
90°-150°	176.2	7.4
90°-180°	183.0	7.7
0°-180°	2382.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	892	892	892	892	892	
5°	848	846	844	840	838	79
15°	717	713	719	726	727	202
25°	624	634	643	650	646	288
35°	542	556	569	580	576	339
45°	452	469	490	497	494	350
55°	352	375	410	430	436	314
65°	243	264	295	305	311	239
75°	123	145	175	188	190	131
85°	22	40	67	95	114	28
90°	0	18	44	64	82	1
95°	0	18	45	58	80	0
105°	0	18	39	54	56	0
115°	0	17	36	42	46	0
125°	0	16	36	48	54	0
135°	1	13	33	45	53	0
145°	1	8	26	37	42	0
155°	1	4	13	21	22	0
165°	1	1	3	6	7	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P241345

CATALOG NUMBER: FVS8M-3-LD4-30-1LO-P125-UNV-EDC1

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	892.0	892.0	892.0	892.0	892.0	892.0	892.0	892.0	892.0	892.0	892.0
2.5°	882.3	879.9	878.1	879.9	878.7	879.3	879.9	881.1	881.1	882.3	879.9
5°	848.4	848.4	846.0	847.8	847.2	846.0	846.6	847.2	847.8	846.6	844.2
7.5°	811.5	808.5	807.3	805.5	804.2	805.5	804.8	805.5	806.1	806.1	803.6
10°	772.8	771.6	767.9	768.5	767.9	768.5	770.4	771.0	769.1	767.3	766.1
12.5°	741.9	738.3	738.3	739.5	738.9	739.5	737.7	735.9	738.9	741.3	741.3
15°	717.1	714.1	712.3	714.7	714.1	712.9	713.5	714.1	715.9	717.7	718.9
17.5°	693.5	691.1	689.9	692.3	691.7	691.7	692.3	694.7	698.3	698.3	698.3
20°	670.5	667.5	668.1	671.7	671.7	672.9	673.5	675.3	677.8	680.2	680.8
22.5°	645.7	645.1	646.3	649.9	650.5	651.7	654.2	657.8	659.0	660.2	660.8
25°	624.5	623.3	626.9	628.7	631.8	633.6	635.4	637.2	641.5	643.3	643.3
27.5°	602.7	602.7	605.1	608.8	611.8	615.4	617.3	619.1	622.1	624.5	625.7
30°	582.8	580.9	584.0	588.8	593.7	596.1	597.3	600.3	603.3	606.4	608.2
32.5°	562.2	561.0	564.6	567.6	573.1	574.3	576.1	581.5	584.0	585.8	587.6
35°	542.2	541.0	543.4	548.3	553.7	556.1	556.7	562.8	565.8	567.6	569.4
37.5°	519.8	521.6	522.8	527.7	531.3	533.7	536.8	541.6	545.8	547.7	550.7
40°	498.6	499.9	501.1	505.3	510.7	513.2	515.0	521.6	525.9	528.3	529.5
42.5°	479.3	476.9	479.3	484.7	488.4	491.4	493.8	499.2	504.1	509.5	510.1
45°	452.0	453.9	458.1	462.9	467.8	469.0	471.4	477.5	481.7	487.1	490.2
47.5°	428.4	430.9	432.7	438.1	444.2	446.0	449.0	455.1	462.3	467.8	470.2
50°	403.6	406.7	409.1	413.9	420.0	423.0	427.2	434.5	441.2	448.4	454.5
52.5°	377.0	380.6	384.9	387.9	395.8	398.8	402.4	411.5	420.6	427.8	433.9
55°	351.6	354.6	359.5	363.7	371.6	374.6	378.2	387.9	397.6	404.2	410.3
57.5°	325.6	326.8	331.0	336.5	344.3	349.8	352.8	361.9	370.4	377.6	384.3
60°	297.7	300.2	303.8	309.8	318.9	321.3	325.0	335.3	343.7	351.0	356.4
62.5°	269.9	272.3	275.9	283.2	288.1	292.3	297.7	306.8	313.5	319.5	326.8
65°	242.7	243.9	247.5	254.2	260.8	263.8	267.5	275.9	282.6	289.9	294.7
67.5°	211.8	214.8	219.1	223.9	230.6	234.8	237.8	244.5	253.0	261.4	264.4
70°	182.8	185.2	188.8	193.6	200.9	203.9	208.2	215.4	222.7	230.6	235.4
72.5°	153.7	155.5	157.9	164.0	170.7	174.3	177.9	185.2	194.3	199.7	204.5
75°	122.8	125.9	129.5	134.9	141.0	145.2	148.3	155.5	162.2	168.2	174.9
77.5°	95.0	97.4	101.1	105.3	113.2	117.4	119.8	126.5	133.7	138.0	145.8
80°	67.8	69.6	73.8	78.7	84.7	87.7	91.4	97.4	103.5	109.5	116.8
82.5°	43.0	44.2	48.4	53.3	59.3	62.3	65.4	71.4	76.9	84.1	90.2
85°	21.8	23.0	27.2	31.5	38.1	40.5	42.4	49.0	55.7	61.1	66.6
87.5°	6.7	8.5	12.1	16.9	22.4	24.8	27.2	33.3	38.7	44.8	51.4
90°	0.0	1.8	5.4	9.7	15.1	18.2	20.6	26.6	32.7	38.7	44.2
92.5°	0.0	1.8	4.8	9.7	15.1	18.2	20.6	26.6	32.7	38.1	44.8
95°	0.0	1.8	4.8	9.7	15.1	18.2	21.2	26.6	32.7	39.3	44.8
97.5°	0.0	1.2	4.8	9.7	15.1	18.2	21.2	26.6	33.3	38.7	42.4
100°	0.0	1.2	4.8	9.7	15.1	18.2	20.6	27.2	32.7	36.9	41.2
102.5°	0.0	1.2	4.8	9.7	15.1	18.2	21.2	26.6	30.9	35.7	39.9
105°	0.0	1.2	4.8	9.7	15.1	18.2	20.6	25.4	30.3	35.1	39.3
107.5°	0.0	1.2	4.8	9.7	14.5	17.5	20.0	24.8	29.7	34.5	38.1
110°	0.0	1.2	4.2	9.1	14.5	16.9	20.0	24.8	29.7	33.9	37.5



TEST NUMBER: P241345

CATALOG NUMBER: FVS8M-3-LD4-30-1LO-P125-UNV-EDC1

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	0.0	1.2	4.2	9.1	14.5	16.9	19.4	24.8	29.0	33.3	36.3
115°	0.0	1.2	4.2	9.1	13.9	16.9	19.4	24.8	29.0	33.3	35.7
117.5°	0.0	1.2	4.2	9.1	13.9	16.9	19.4	24.2	29.0	32.7	35.7
120°	0.0	0.6	4.2	8.5	13.9	16.3	19.4	24.2	29.0	32.7	35.7
122.5°	0.0	0.6	3.6	8.5	13.3	16.3	18.8	24.2	28.4	32.7	35.7
125°	0.0	0.6	3.6	8.5	13.3	15.7	18.2	23.6	28.4	32.7	35.7
127.5°	0.6	0.6	3.6	7.9	12.7	15.1	17.5	23.0	27.8	32.1	35.7
130°	0.0	0.6	3.0	7.3	12.1	14.5	16.9	22.4	27.2	30.9	34.5
132.5°	0.6	0.6	3.0	6.7	11.5	13.9	16.3	21.2	26.6	30.3	33.9
135°	0.6	0.6	2.4	6.1	10.9	13.3	15.7	20.0	25.4	29.0	32.7
137.5°	0.6	0.6	2.4	5.4	9.7	12.1	14.5	19.4	23.6	27.8	31.5
140°	0.6	0.6	1.8	4.8	9.1	10.9	13.3	18.2	22.4	26.6	30.3
142.5°	0.6	0.6	1.8	4.2	7.9	9.7	12.1	16.3	20.6	24.8	28.4
145°	0.6	0.6	1.2	3.6	6.7	8.5	10.3	14.5	18.8	22.4	26.0
147.5°	0.6	0.6	1.2	3.0	5.4	7.3	9.1	12.7	16.3	20.0	23.0
150°	0.6	0.6	0.6	2.4	4.2	5.4	7.3	10.3	13.3	16.3	19.4
152.5°	0.6	0.6	0.6	1.8	3.6	4.2	5.4	8.5	10.9	13.3	15.7
155°	0.6	0.6	0.6	1.2	2.4	3.6	4.2	6.1	8.5	10.3	12.7
157.5°	0.6	0.6	0.6	1.2	1.8	2.4	3.0	4.8	6.1	7.9	9.7
160°	0.6	0.6	0.6	0.6	1.2	1.8	2.4	3.0	4.2	5.4	6.7
162.5°	0.6	0.6	0.6	0.6	1.2	1.2	1.8	2.4	3.0	3.6	4.8
165°	0.6	0.6	0.6	0.6	0.6	1.2	1.2	1.8	2.4	2.4	3.0
167.5°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	1.2	1.2	1.8	1.8
170°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	1.2
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: P241345

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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	892.0	892.0	892.0	892.0	892.0	892.0	892.0	892.0	892.0	892.0
2.5°	878.7	877.5	878.1	878.1	875.6	877.5	876.9	875.6	873.8	873.8
5°	842.4	839.9	839.9	841.2	839.9	839.9	840.6	839.9	840.6	837.5
7.5°	803.0	801.2	802.4	803.0	804.8	804.2	804.8	804.2	804.2	804.2
10°	766.7	769.7	769.1	770.4	772.2	771.6	772.8	774.6	774.0	772.8
12.5°	741.3	744.3	744.3	747.4	747.4	748.0	749.8	749.8	746.8	746.8
15°	720.7	721.3	721.9	726.8	726.2	727.4	728.6	727.4	726.8	726.8
17.5°	699.6	700.2	702.6	702.6	703.8	704.4	706.8	706.2	705.6	705.6
20°	681.4	682.6	685.6	687.4	688.1	686.2	688.1	686.8	686.8	684.4
22.5°	663.8	667.5	666.3	667.5	668.7	669.9	669.9	668.7	667.5	665.1
25°	645.7	646.9	648.7	649.9	649.9	649.3	649.3	648.7	647.5	646.3
27.5°	628.1	630.0	629.4	633.0	634.2	634.8	634.2	631.8	629.4	630.6
30°	609.4	611.2	613.6	616.0	616.6	613.0	612.4	613.0	610.6	610.6
32.5°	590.0	592.4	596.7	596.1	596.1	597.9	597.9	596.1	593.0	591.8
35°	571.3	576.1	577.3	580.9	579.7	577.9	576.1	576.1	574.3	575.5
37.5°	552.5	555.5	559.2	558.6	558.6	559.2	559.2	556.7	557.3	556.1
40°	533.1	535.6	538.0	538.0	539.2	539.2	537.4	535.6	535.6	536.2
42.5°	511.4	515.0	518.0	518.0	518.6	518.0	518.6	517.4	515.0	515.0
45°	493.2	494.4	496.8	497.4	496.8	496.8	495.0	495.0	494.4	493.8
47.5°	474.4	478.7	479.3	480.5	479.3	479.3	480.5	481.1	482.3	481.1
50°	457.5	462.9	466.6	468.4	468.4	469.6	470.2	470.2	472.0	471.4
52.5°	440.5	444.2	447.8	452.7	453.9	453.9	456.3	455.7	456.9	456.9
55°	416.3	421.2	425.4	429.0	430.3	432.7	432.1	433.9	433.9	435.7
57.5°	390.3	392.7	398.8	401.2	400.6	402.4	403.0	406.1	409.7	409.7
60°	362.5	364.3	367.3	367.3	368.5	369.1	372.8	374.6	375.8	378.2
62.5°	328.6	332.8	335.3	335.9	337.1	340.1	340.1	340.1	341.3	341.9
65°	299.5	302.0	304.4	306.8	305.0	305.6	306.2	306.8	308.6	311.0
67.5°	269.9	272.3	274.7	275.9	273.5	274.1	272.9	274.7	276.6	276.6
70°	239.0	242.1	245.7	245.1	242.7	243.9	243.3	245.7	246.9	247.5
72.5°	209.4	213.6	216.0	216.0	216.0	216.0	216.6	217.9	218.5	219.1
75°	179.1	183.4	186.4	188.8	187.6	189.4	190.6	191.2	190.6	190.0
77.5°	151.3	155.5	157.9	161.6	162.8	164.0	165.2	165.2	166.4	166.4
80°	121.0	126.5	130.7	135.6	137.4	139.8	140.4	142.2	142.2	142.8
82.5°	95.6	101.7	106.5	111.3	113.8	115.0	118.6	121.6	124.7	126.5
85°	73.2	79.9	84.7	90.8	95.0	99.8	106.5	110.1	110.7	113.8
87.5°	57.5	64.1	72.6	79.3	79.3	79.9	81.7	84.7	89.0	92.0
90°	50.8	59.3	61.7	62.9	64.1	65.4	67.8	72.0	78.1	82.3
92.5°	51.4	53.9	56.3	58.1	59.3	61.1	64.1	68.4	74.4	78.7
95°	48.4	51.4	54.5	56.9	58.1	59.9	63.5	69.0	76.2	80.5
97.5°	46.6	50.2	52.6	56.3	58.1	60.5	66.6	74.4	83.5	87.1
100°	45.4	49.0	52.0	56.3	59.3	61.7	69.0	75.6	79.3	79.9
102.5°	44.2	47.8	51.4	55.7	58.1	60.5	64.1	66.6	66.0	66.0
105°	43.0	46.6	49.6	52.6	54.5	55.1	56.9	56.3	56.3	55.7
107.5°	41.8	44.8	47.2	48.4	49.0	49.6	49.6	49.6	49.0	49.0
110°	40.5	43.0	44.2	44.8	44.8	44.8	45.4	45.4	45.4	45.4



TEST NUMBER: P241345

CATALOG NUMBER: FVS8M-3-LD4-30-1LO-P125-UNV-EDC1

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	39.3	41.2	41.8	42.4	42.4	42.4	43.6	44.2	44.2	44.2
115°	38.1	39.9	41.2	41.8	42.4	43.0	44.2	45.4	46.0	46.0
117.5°	38.1	40.5	41.8	43.6	44.2	44.8	46.0	47.8	48.4	48.4
120°	38.7	41.2	43.6	45.4	46.0	46.6	48.4	50.2	50.8	51.4
122.5°	39.3	41.8	44.2	46.6	47.2	47.8	49.6	51.4	52.6	53.3
125°	39.3	42.4	44.8	47.2	47.8	49.0	50.2	52.0	53.3	54.5
127.5°	38.7	41.8	44.8	47.2	48.4	49.0	50.8	52.0	53.9	54.5
130°	38.1	41.2	43.6	46.0	47.2	48.4	50.8	52.6	53.9	54.5
132.5°	36.9	39.9	43.0	45.4	46.6	47.8	50.2	52.0	53.3	53.9
135°	35.7	39.3	41.8	44.2	45.4	46.6	49.0	50.8	52.0	52.6
137.5°	35.1	38.1	40.5	43.0	44.2	45.4	47.8	49.0	50.8	51.4
140°	33.3	36.3	38.7	41.2	42.4	43.6	45.4	47.2	48.4	49.0
142.5°	32.1	34.5	36.9	38.7	39.9	41.2	43.0	44.2	45.4	46.0
145°	29.7	32.1	34.5	36.3	36.9	38.1	39.3	40.5	41.8	41.8
147.5°	26.0	29.0	30.9	32.7	33.3	34.5	35.7	36.3	36.9	37.5
150°	22.4	24.8	27.2	28.4	29.0	29.7	30.9	31.5	32.1	32.1
152.5°	18.2	20.6	22.4	24.2	24.8	25.4	26.0	26.6	27.2	27.2
155°	14.5	16.3	18.8	19.4	20.6	20.6	21.8	22.4	22.4	22.4
157.5°	10.9	12.7	13.9	15.7	16.3	16.3	17.5	17.5	18.2	18.2
160°	7.9	9.1	10.3	12.1	12.7	12.7	13.3	13.9	13.9	13.9
162.5°	5.4	6.7	7.3	8.5	9.1	9.7	9.7	10.3	10.3	10.3
165°	3.6	4.2	4.8	5.4	6.1	6.1	6.7	7.3	7.3	7.3
167.5°	2.4	2.4	3.0	3.0	3.6	3.6	4.2	4.2	4.2	4.8
170°	1.2	1.2	1.2	1.8	1.8	1.8	1.8	2.4	2.4	2.4
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)