

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: P232032

Luminaire Tested: **FVS4M-3-LD4-30-1STD-PFS125-UNV-EDC1**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-79-08  
Report Number: P232032  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1706-121-24)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: FVS4M-3-LD4-30-1STD-PFS125-UNV-EDC1  
Description: FAILSAFE FVS LED FIXTURE  
3FT LENGTH, 1-MODULE LED WITH PFS125 LENS  
Light Source: (84) 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

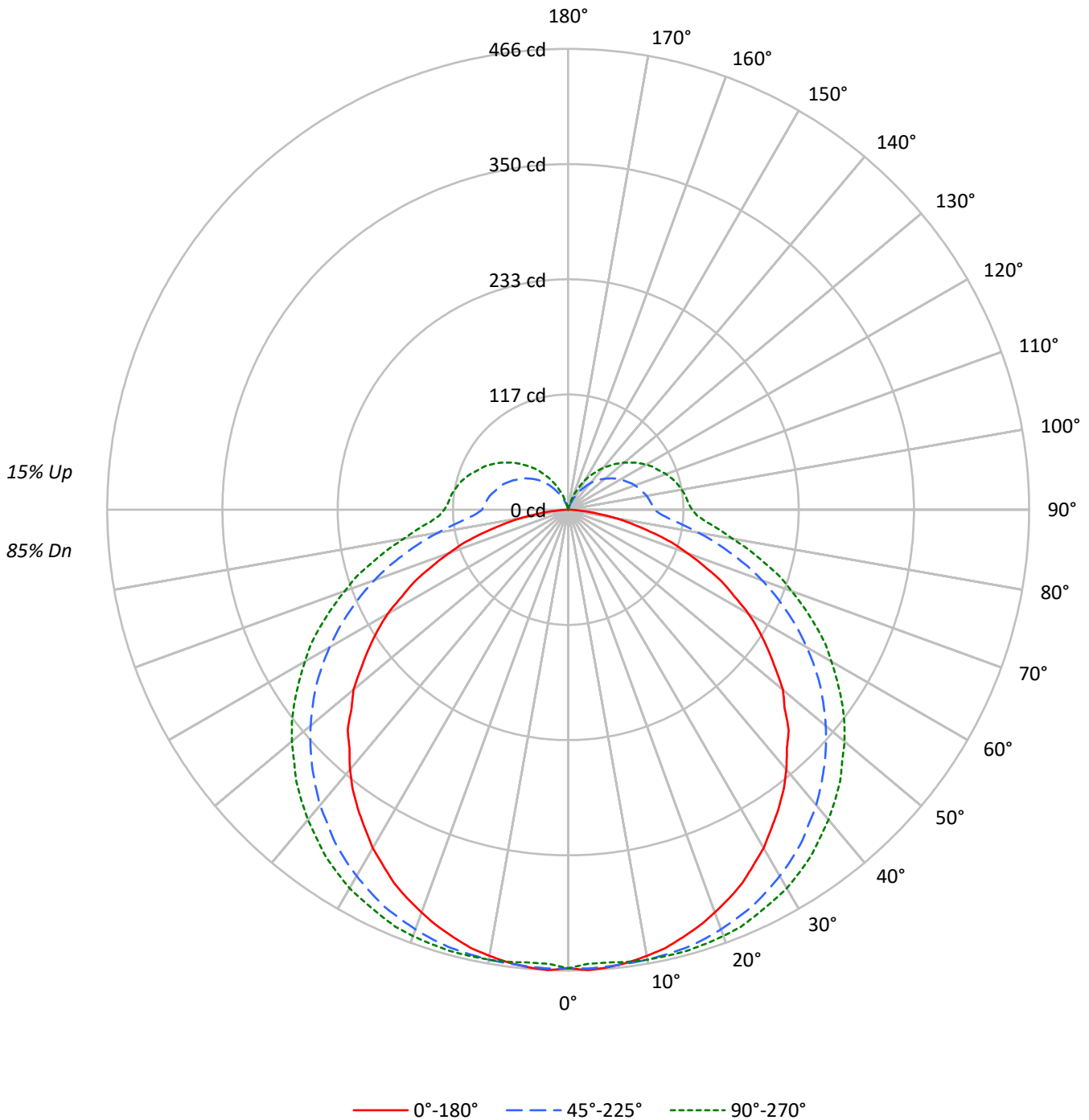
Lumens per Lamp: N/A  
Luminaire Lumens: 1988.0 lumens  
Efficiency: N/A  
Efficacy: 69.8 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.42 / 1.5  
Luminous Opening: Rectangular w/ Sides (W: 0.31' x L: 2.92' x H: 0.19')  
CIE Type: Semi-Direct

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

TEST NUMBER: P232032

CATALOG NUMBER: FVS4M-3-LD4-30-1STD-PFS125-UNV-EDC1

### Luminous Intensity Polar Plot





TEST NUMBER: P232032

CATALOG NUMBER: FVS4M-3-LD4-30-1STD-PFS125-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	115	115	115	115	111	111	111	111	103	103	103	95	95	95	88	88	88	85
1	103	98	93	88	99	94	89	85	87	83	80	80	77	75	74	72	70	67
2	93	84	76	70	89	81	74	68	75	69	64	69	64	60	64	60	57	54
3	84	73	64	57	80	70	62	56	65	58	53	60	55	50	56	51	47	44
4	77	64	55	48	73	62	53	47	57	50	44	53	47	42	49	44	40	37
5	70	57	48	41	67	55	46	40	51	44	38	47	41	36	44	39	34	32
6	65	51	42	35	62	49	41	34	46	38	33	43	36	31	40	34	30	27
7	60	46	37	31	57	44	36	30	41	34	29	39	32	28	36	31	26	24
8	56	42	33	27	53	40	32	27	38	31	26	35	29	24	33	28	23	21
9	52	38	30	24	50	37	29	24	35	28	23	33	26	22	30	25	21	19
10	48	35	27	22	46	34	26	21	32	25	21	30	24	20	28	23	19	17

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	5475	5475	5475
5°	5475	5279	5177
10°	5431	5116	5010
15°	5380	4982	4866
20°	5321	4847	4732
25°	5269	4725	4598
30°	5194	4588	4477
35°	5107	4458	4342
40°	5019	4315	4197
45°	4946	4161	4056
50°	4835	4004	3906
55°	4650	3835	3742
60°	4476	3627	3558
65°	4195	3399	3364
70°	3747	3140	3132
75°	3172	2818	2878
80°	2387	2474	2601
85°	1125	2172	2407



TEST NUMBER: P232032

CATALOG NUMBER: FVS4M-3-LD4-30-1STD-PFS125-UNV-EDC1

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	44.1	2.2
10°-20°	129.0	6.5
20°-30°	202.0	10.2
30°-40°	253.6	12.8
40°-50°	277.4	14.0
50°-60°	270.7	13.6
60°-70°	232.8	11.7
70°-80°	169.4	8.5
80°-90°	104.0	5.2
90°-100°	80.6	4.1
100°-110°	71.1	3.6
110°-120°	58.3	2.9
120°-130°	43.7	2.2
130°-140°	28.9	1.5
140°-150°	15.7	0.8
150°-160°	5.8	0.3
160°-170°	0.8	0.0
170°-180°	0.0	0.0
0°-30°	375.2	18.9
0°-40°	628.8	31.6
0°-60°	1176.9	59.2
0°-90°	1683.0	84.7
90°-120°	210.1	10.6
90°-150°	298.4	15.0
90°-180°	305.0	15.3
0°-180°	1988.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	464	464	464	464	464	
5°	464	463	464	463	460	44
15°	448	450	459	462	462	126
25°	416	425	442	451	452	192
35°	370	387	411	424	428	232
45°	315	337	366	384	389	242
55°	247	276	311	332	338	221
65°	171	204	244	269	275	168
75°	86	126	170	196	204	92
85°	14	57	102	131	140	19
90°	0	42	87	116	125	1
95°	0	39	84	112	120	0
105°	0	34	76	103	112	0
115°	0	28	66	91	98	0
125°	0	22	55	77	83	0
135°	0	15	42	59	65	0
145°	0	8	27	41	45	0
155°	0	2	13	22	24	0
165°	1	0	2	3	5	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P232032

CATALOG NUMBER: FVS4M-3-LD4-30-1STD-PFS125-UNV-EDC1

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	463.6	463.6	463.6	463.6	463.6	463.6	463.6	463.6	463.6	463.6	463.6
2.5°	466.0	464.4	463.6	463.6	464.4	464.4	465.2	466.0	465.2	464.4	463.6
5°	464.4	462.8	462.0	462.0	462.8	463.6	463.6	464.4	464.4	463.6	463.6
7.5°	462.0	460.4	459.6	459.6	460.4	461.2	462.8	463.6	463.6	462.8	463.6
10°	458.0	456.4	455.6	456.4	457.2	458.8	460.4	461.2	462.0	462.0	462.0
12.5°	454.0	452.4	451.6	452.4	454.0	455.6	457.2	458.8	459.6	460.4	461.2
15°	447.6	446.8	446.0	447.6	449.2	451.6	454.0	455.6	457.2	458.8	459.6
17.5°	441.2	440.4	440.4	441.2	443.6	446.0	449.2	452.4	454.0	455.6	456.4
20°	433.3	432.5	432.5	434.9	437.3	440.4	443.6	447.6	449.2	451.6	453.2
22.5°	425.3	424.5	425.3	427.7	430.9	434.9	438.8	442.0	444.4	446.8	449.2
25°	416.5	415.7	416.5	419.7	422.9	427.7	432.5	435.7	438.8	442.0	444.4
27.5°	405.3	405.3	406.1	409.3	414.1	419.7	423.7	428.5	431.7	434.9	438.0
30°	395.0	394.2	395.8	399.8	404.5	410.9	415.7	420.5	424.5	427.7	430.9
32.5°	382.2	382.2	385.4	389.4	395.0	400.5	406.1	411.7	415.7	419.7	423.7
35°	370.2	370.2	371.8	378.2	383.8	390.2	396.6	401.3	406.1	410.9	414.1
37.5°	357.5	357.5	360.7	365.4	371.8	379.0	384.6	391.0	395.0	399.8	404.5
40°	343.1	343.9	347.1	352.7	359.9	366.2	373.4	379.8	385.4	390.2	394.2
42.5°	327.1	327.9	332.7	339.1	346.3	353.5	359.9	367.0	372.6	378.2	382.2
45°	315.2	313.6	319.2	325.5	332.7	340.7	347.9	355.1	360.7	366.2	371.0
47.5°	296.8	298.4	304.0	310.4	318.4	325.5	334.3	341.5	347.9	353.5	359.1
50°	283.3	283.3	288.0	295.2	303.2	311.2	320.0	327.1	333.5	339.9	345.5
52.5°	264.1	265.7	272.1	280.1	287.2	295.2	304.0	312.8	319.2	325.5	331.1
55°	246.6	248.1	255.3	262.5	270.5	280.9	288.8	296.0	304.0	311.2	316.8
57.5°	229.0	230.6	237.0	245.8	253.7	263.3	272.9	280.9	288.0	295.2	301.6
60°	210.6	212.2	218.6	227.4	236.2	245.8	254.5	263.3	271.3	278.5	285.6
62.5°	189.1	193.1	199.5	207.5	218.6	228.2	237.8	245.8	255.3	261.7	269.7
65°	170.8	173.1	180.3	189.1	198.7	209.1	219.4	228.2	236.2	244.2	251.3
67.5°	148.4	152.4	160.4	170.0	180.3	189.9	201.1	210.6	218.6	226.6	233.0
70°	127.7	131.7	140.4	150.8	159.6	170.8	181.1	190.7	199.5	208.3	214.6
72.5°	109.3	110.9	119.7	130.1	140.4	151.6	161.2	172.3	180.3	189.9	196.3
75°	86.2	91.8	98.9	110.1	120.5	132.5	142.0	152.4	161.2	170.0	176.3
77.5°	66.2	71.0	80.6	90.2	102.1	112.5	124.5	134.0	142.8	152.4	159.6
80°	47.9	52.7	60.6	72.6	82.2	95.0	105.3	115.7	125.3	133.3	141.2
82.5°	29.5	34.3	43.9	54.3	66.2	78.2	87.8	98.1	108.5	116.5	124.5
85°	14.4	19.9	28.7	39.9	50.3	63.0	74.2	83.8	94.2	102.1	110.9
87.5°	4.8	8.8	18.4	28.7	40.7	52.7	63.8	73.4	83.8	92.6	100.5
90°	0.0	4.0	13.6	23.9	35.9	47.1	58.2	68.6	78.2	87.0	95.0
92.5°	0.0	4.0	12.0	23.1	34.3	45.5	56.7	67.0	76.6	85.4	93.4
95°	0.0	3.2	11.2	22.3	33.5	44.7	55.1	65.4	75.0	83.8	91.8
97.5°	0.0	3.2	11.2	21.5	31.9	43.1	54.3	63.8	73.4	82.2	90.2
100°	0.0	3.2	10.4	19.9	31.1	41.5	52.7	62.2	71.8	80.6	88.6
102.5°	0.0	2.4	9.6	19.1	29.5	40.7	51.1	60.6	70.2	78.2	86.2
105°	0.0	2.4	9.6	18.4	28.7	39.1	49.5	59.0	67.8	75.8	83.8
107.5°	0.0	1.6	8.8	17.6	27.1	37.5	47.9	56.7	66.2	74.2	81.4
110°	0.0	1.6	8.0	16.8	26.3	35.9	45.5	55.1	63.8	71.8	79.0



TEST NUMBER: P232032

CATALOG NUMBER: FVS4M-3-LD4-30-1STD-PFS125-UNV-EDC1

**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	0.0	1.6	7.2	16.0	24.7	34.3	43.9	52.7	61.4	69.4	75.8
115°	0.0	1.6	7.2	15.2	23.9	32.7	42.3	51.1	59.0	66.2	73.4
117.5°	0.0	0.8	6.4	13.6	22.3	31.1	39.9	48.7	56.7	63.8	70.2
120°	0.0	0.8	5.6	12.8	20.7	29.5	38.3	46.3	54.3	60.6	67.0
122.5°	0.0	0.8	4.8	12.0	19.9	27.9	35.9	43.9	51.1	58.2	64.6
125°	0.0	0.8	4.8	11.2	18.4	26.3	33.5	41.5	48.7	55.1	60.6
127.5°	0.0	0.8	4.0	9.6	16.8	23.9	31.9	39.1	45.5	51.9	57.4
130°	0.0	0.8	3.2	8.8	15.2	22.3	29.5	35.9	42.3	48.7	54.3
132.5°	0.0	0.0	2.4	7.2	13.6	20.7	27.1	33.5	39.9	45.5	50.3
135°	0.0	0.0	2.4	6.4	12.0	18.4	24.7	31.1	36.7	42.3	47.1
137.5°	0.0	0.0	1.6	5.6	10.4	16.0	22.3	27.9	33.5	39.1	43.1
140°	0.0	0.0	1.6	4.8	8.8	13.6	19.1	24.7	30.3	35.1	39.9
142.5°	0.0	0.0	0.8	3.2	7.2	12.0	16.8	21.5	26.3	31.1	35.9
145°	0.0	0.0	0.8	2.4	5.6	9.6	14.4	18.4	23.1	27.1	31.9
147.5°	0.0	0.0	0.8	1.6	4.8	8.0	12.0	15.2	19.1	23.1	27.1
150°	0.0	0.0	0.0	1.6	3.2	6.4	9.6	12.8	16.0	19.1	22.3
152.5°	0.0	0.0	0.0	0.8	2.4	4.8	7.2	10.4	12.8	15.2	18.4
155°	0.0	0.0	0.0	0.8	1.6	3.2	5.6	8.0	9.6	12.8	14.4
157.5°	0.8	0.0	0.0	0.8	0.8	2.4	4.0	5.6	7.2	8.8	10.4
160°	0.8	0.0	0.0	0.0	0.8	1.6	2.4	3.2	4.8	6.4	8.0
162.5°	0.8	0.8	0.0	0.0	0.0	0.8	1.6	2.4	3.2	4.0	4.8
165°	0.8	0.8	0.0	0.0	0.0	0.0	0.8	0.8	1.6	1.6	2.4
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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: P232032

CATALOG NUMBER: FVS4M-3-LD4-30-1STD-PFS125-UNV-EDC1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	463.6	463.6	463.6	463.6	463.6	463.6	463.6	463.6
2.5°	463.6	462.8	462.8	462.0	462.0	461.2	460.4	459.6
5°	463.6	462.8	462.8	462.8	462.0	461.2	460.4	459.6
7.5°	463.6	463.6	463.6	462.8	462.8	462.0	461.2	461.2
10°	462.8	462.8	463.6	463.6	463.6	462.8	462.0	462.0
12.5°	462.0	462.8	463.6	463.6	463.6	463.6	462.8	462.0
15°	460.4	462.0	462.0	462.8	462.8	462.8	462.0	462.0
17.5°	458.0	459.6	460.4	461.2	462.0	461.2	460.4	460.4
20°	454.8	457.2	458.0	458.8	459.6	459.6	458.8	458.8
22.5°	451.6	453.2	454.8	455.6	457.2	457.2	456.4	456.4
25°	446.8	448.4	450.0	451.6	452.4	452.4	452.4	451.6
27.5°	440.4	442.8	445.2	446.8	447.6	447.6	447.6	446.8
30°	434.1	436.5	438.8	440.4	442.0	442.0	442.0	442.0
32.5°	426.1	429.3	431.7	433.3	434.9	435.7	434.9	434.9
35°	418.1	421.3	423.7	425.3	426.9	427.7	426.9	427.7
37.5°	408.5	411.7	414.1	417.3	418.1	418.1	418.1	418.1
40°	398.2	401.3	404.5	406.9	408.5	408.5	409.3	409.3
42.5°	387.0	390.2	394.2	397.4	397.4	398.2	399.0	399.0
45°	375.8	379.0	383.0	385.4	387.0	388.6	387.8	388.6
47.5°	363.8	367.8	371.0	374.2	375.0	376.6	376.6	375.8
50°	351.1	355.1	358.3	361.5	363.8	363.8	364.6	364.6
52.5°	336.7	341.5	345.5	349.5	349.5	351.9	352.7	351.9
55°	322.4	326.3	330.3	334.3	335.9	336.7	337.5	337.5
57.5°	307.2	312.0	315.2	319.2	321.6	321.6	323.2	322.4
60°	291.2	296.0	300.0	303.2	306.4	307.2	308.8	307.2
62.5°	275.3	280.9	284.1	287.2	289.6	291.2	292.8	292.8
65°	258.5	263.3	267.3	271.3	272.9	273.7	276.1	275.3
67.5°	240.2	245.0	248.9	253.7	256.9	257.7	259.3	257.7
70°	221.8	227.4	232.2	235.4	237.0	240.2	239.4	240.2
72.5°	202.7	208.3	213.0	217.0	220.2	222.6	223.4	224.2
75°	183.5	190.7	194.7	197.9	201.9	202.7	205.1	204.3
77.5°	166.8	172.3	177.1	180.3	184.3	185.9	186.7	186.7
80°	147.6	154.0	158.8	163.6	165.2	167.6	170.0	168.4
82.5°	131.7	138.0	143.6	147.6	150.8	152.4	153.2	154.0
85°	117.3	123.7	129.3	133.3	136.4	138.8	140.4	139.6
87.5°	107.7	114.1	118.9	123.7	127.7	128.5	130.1	130.1
90°	102.1	108.5	114.1	118.1	121.3	123.7	124.5	125.3
92.5°	99.7	106.1	111.7	115.7	118.9	120.5	122.1	122.1
95°	98.1	104.5	109.3	114.1	117.3	118.9	120.5	120.5
97.5°	97.3	102.9	108.5	111.7	114.9	117.3	118.1	118.9
100°	95.0	101.3	106.1	110.1	113.3	114.9	116.5	116.5
102.5°	92.6	98.9	103.7	107.7	110.9	112.5	113.3	114.1
105°	90.2	96.5	101.3	105.3	107.7	110.1	110.9	111.7
107.5°	87.8	93.4	98.1	102.1	105.3	106.9	107.7	108.5
110°	85.4	91.0	95.7	99.7	102.1	103.7	105.3	105.3





TEST NUMBER: P232032

CATALOG NUMBER: FVS4M-3-LD4-30-1STD-PFS125-UNV-EDC1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	82.2	87.8	92.6	96.5	98.9	100.5	101.3	101.3
115°	79.8	84.6	89.4	92.6	95.7	97.3	98.1	98.1
117.5°	76.6	81.4	86.2	89.4	91.8	93.4	94.2	95.0
120°	73.4	78.2	82.2	85.4	88.6	90.2	91.0	91.0
122.5°	69.4	74.2	79.0	82.2	84.6	86.2	87.0	87.0
125°	66.2	71.0	75.0	78.2	80.6	81.4	82.2	83.0
127.5°	62.2	67.0	71.0	74.2	75.8	77.4	78.2	78.2
130°	59.0	63.0	67.0	69.4	71.8	73.4	74.2	74.2
132.5°	55.1	59.0	63.0	65.4	67.0	68.6	69.4	69.4
135°	51.1	55.1	58.2	60.6	63.0	63.8	64.6	64.6
137.5°	47.1	51.1	54.3	56.7	58.2	59.0	59.8	59.8
140°	43.1	47.1	49.5	51.9	53.5	54.3	55.1	55.1
142.5°	39.1	42.3	45.5	47.1	48.7	49.5	50.3	50.3
145°	35.1	38.3	39.9	42.3	43.9	44.7	44.7	44.7
147.5°	30.3	34.3	35.9	37.5	39.1	39.1	39.9	39.9
150°	25.5	28.7	31.1	32.7	33.5	34.3	35.1	35.1
152.5°	20.7	23.9	26.3	27.9	28.7	29.5	30.3	29.5
155°	16.8	18.4	20.7	23.1	23.9	23.9	24.7	23.9
157.5°	12.0	13.6	16.0	17.6	19.1	19.1	19.1	19.1
160°	8.8	9.6	11.2	12.0	13.6	14.4	14.4	14.4
162.5°	5.6	6.4	7.2	8.0	8.0	9.6	9.6	8.8
165°	2.4	2.4	3.2	3.2	4.0	4.8	4.8	4.8
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	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
175°	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
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)