

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: P232036

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

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-79-08  
Report Number: P232036  
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-LD4-30-1HI-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**

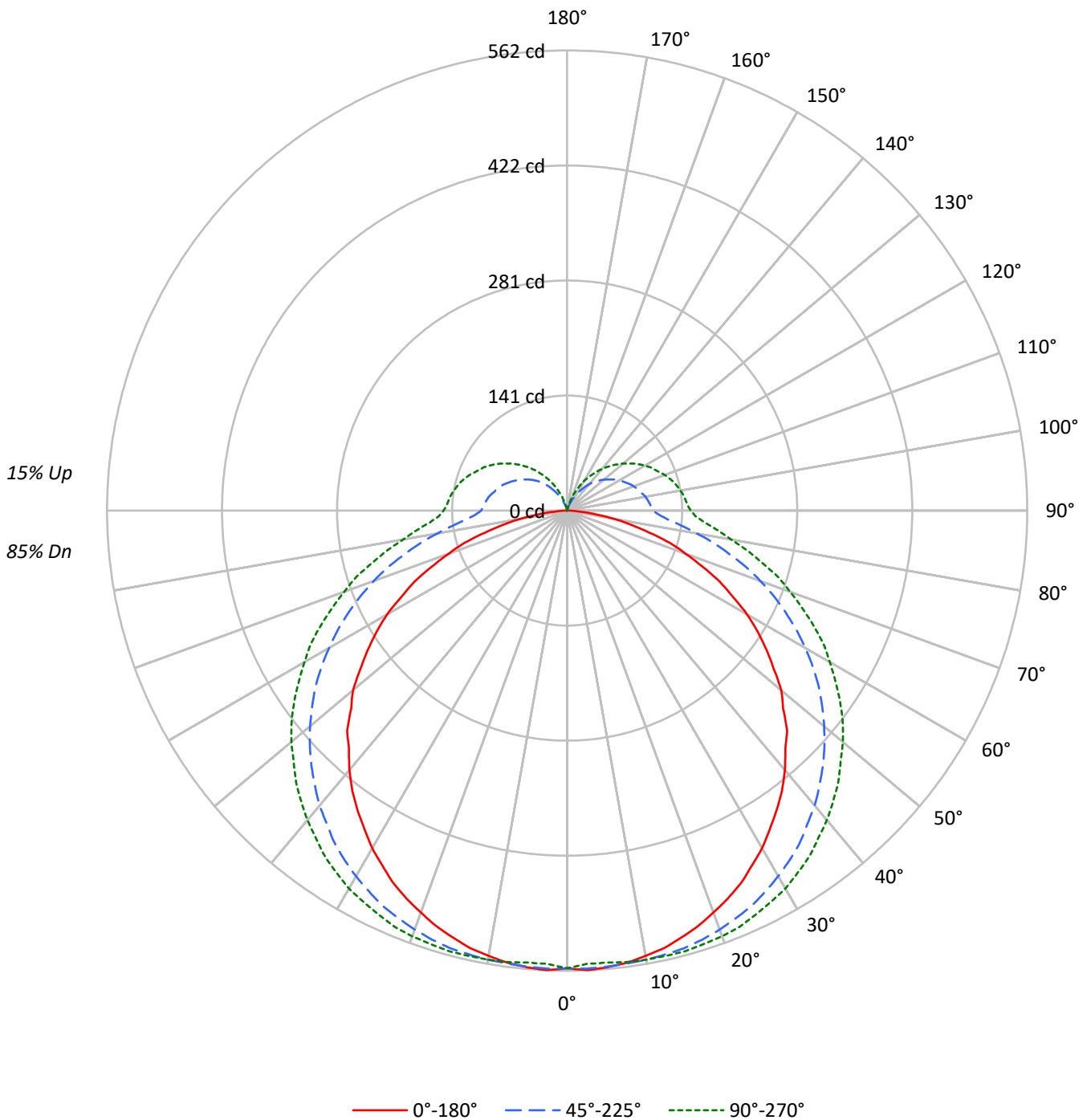
Lumens per Lamp: N/A  
Luminaire Lumens: 2397.0 lumens  
Efficiency: N/A  
Efficacy: 66.0 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.42 / 1.5  
Luminous Opening: Rectangular w/ Sides (W: 0.31' x L: 2.92' x H: 0.19')  
CIE Type: Semi-Direct

Input Watts (W): 36.3  
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	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°	6602	6602	6602
5°	6600	6365	6241
10°	6548	6168	6040
15°	6487	6007	5867
20°	6415	5844	5706
25°	6353	5697	5544
30°	6261	5532	5398
35°	6158	5376	5235
40°	6051	5202	5060
45°	5963	5018	4890
50°	5828	4827	4710
55°	5606	4624	4513
60°	5398	4373	4290
65°	5057	4098	4056
70°	4516	3785	3776
75°	3823	3396	3469
80°	2876	2983	3136
85°	1351	2619	2904



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	53.2	2.2
10°-20°	155.6	6.5
20°-30°	243.6	10.2
30°-40°	305.8	12.8
40°-50°	334.5	14.0
50°-60°	326.4	13.6
60°-70°	280.7	11.7
70°-80°	204.2	8.5
80°-90°	125.4	5.2
90°-100°	97.2	4.1
100°-110°	85.8	3.6
110°-120°	70.3	2.9
120°-130°	52.7	2.2
130°-140°	34.9	1.5
140°-150°	18.9	0.8
150°-160°	7.0	0.3
160°-170°	0.9	0.0
170°-180°	0.0	0.0
0°-30°	452.3	18.9
0°-40°	758.1	31.6
0°-60°	1419.0	59.2
0°-90°	2029.3	84.7
90°-120°	253.3	10.6
90°-150°	359.8	15.0
90°-180°	368.0	15.4
0°-180°	2397.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	559	559	559	559	559	
5°	560	558	559	558	554	53
15°	540	543	553	558	557	152
25°	502	513	533	544	544	231
35°	446	467	496	512	516	279
45°	380	406	442	463	468	292
55°	297	332	375	401	407	266
65°	206	246	294	325	332	202
75°	104	152	205	237	246	111
85°	17	68	123	158	168	23
90°	0	50	105	140	151	1
95°	0	47	101	135	145	0
105°	0	41	91	125	135	0
115°	0	34	80	110	118	0
125°	0	27	66	92	100	0
135°	0	18	51	72	78	0
145°	0	9	33	50	54	0
155°	0	3	15	26	29	0
165°	1	0	2	4	6	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°	25°	30°	35°	40°	45°	50°
0°	559.0	559.0	559.0	559.0	559.0	559.0	559.0	559.0	559.0	559.0	559.0
2.5°	561.8	559.9	559.0	559.0	559.9	559.9	560.9	561.8	560.9	559.9	559.0
5°	559.9	558.0	557.0	557.0	558.0	559.0	559.0	559.9	559.9	559.0	559.0
7.5°	557.0	555.1	554.1	554.1	555.1	556.1	558.0	559.0	559.0	558.0	559.0
10°	552.2	550.3	549.3	550.3	551.3	553.2	555.1	556.1	557.0	557.0	557.0
12.5°	547.4	545.5	544.5	545.5	547.4	549.3	551.3	553.2	554.1	555.1	556.1
15°	539.7	538.8	537.8	539.7	541.6	544.5	547.4	549.3	551.3	553.2	554.1
17.5°	532.0	531.1	531.1	532.0	534.9	537.8	541.6	545.5	547.4	549.3	550.3
20°	522.4	521.4	521.4	524.3	527.2	531.1	534.9	539.7	541.6	544.5	546.5
22.5°	512.8	511.8	512.8	515.7	519.5	524.3	529.1	533.0	535.9	538.8	541.6
25°	502.2	501.2	502.2	506.0	509.9	515.7	521.4	525.3	529.1	533.0	535.9
27.5°	488.7	488.7	489.7	493.5	499.3	506.0	510.9	516.6	520.5	524.3	528.2
30°	476.2	475.3	477.2	482.0	487.8	495.5	501.2	507.0	511.8	515.7	519.5
32.5°	460.8	460.8	464.7	469.5	476.2	483.0	489.7	496.4	501.2	506.0	510.9
35°	446.4	446.4	448.3	456.0	462.8	470.4	478.1	483.9	489.7	495.5	499.3
37.5°	431.0	431.0	434.9	440.6	448.3	457.0	463.7	471.4	476.2	482.0	487.8
40°	413.7	414.6	418.5	425.2	433.9	441.6	450.2	457.9	464.7	470.4	475.3
42.5°	394.4	395.4	401.2	408.9	417.5	426.2	433.9	442.5	449.3	456.0	460.8
45°	380.0	378.1	384.8	392.5	401.2	410.8	419.5	428.1	434.9	441.6	447.4
47.5°	357.9	359.8	366.5	374.2	383.9	392.5	403.1	411.8	419.5	426.2	432.9
50°	341.5	341.5	347.3	356.0	365.6	375.2	385.8	394.4	402.1	409.8	416.6
52.5°	318.4	320.4	328.1	337.7	346.3	356.0	366.5	377.1	384.8	392.5	399.3
55°	297.3	299.2	307.9	316.5	326.1	338.6	348.3	356.9	366.5	375.2	381.9
57.5°	276.1	278.0	285.7	296.3	305.9	317.5	329.0	338.6	347.3	356.0	363.7
60°	254.0	255.9	263.6	274.2	284.8	296.3	306.9	317.5	327.1	335.8	344.4
62.5°	228.0	232.8	240.5	250.1	263.6	275.1	286.7	296.3	307.9	315.6	325.2
65°	205.9	208.8	217.4	228.0	239.6	252.1	264.6	275.1	284.8	294.4	303.0
67.5°	178.9	183.8	193.4	204.9	217.4	229.0	242.4	254.0	263.6	273.2	280.9
70°	153.9	158.7	169.3	181.8	192.4	205.9	218.4	229.9	240.5	251.1	258.8
72.5°	131.8	133.7	144.3	156.8	169.3	182.8	194.3	207.8	217.4	229.0	236.7
75°	103.9	110.6	119.3	132.8	145.3	159.7	171.2	183.8	194.3	204.9	212.6
77.5°	79.9	85.6	97.2	108.7	123.1	135.7	150.1	161.6	172.2	183.8	192.4
80°	57.7	63.5	73.1	87.5	99.1	114.5	127.0	139.5	151.0	160.7	170.3
82.5°	35.6	41.4	52.9	65.4	79.9	94.3	105.8	118.3	130.8	140.5	150.1
85°	17.3	24.1	34.6	48.1	60.6	76.0	89.5	101.0	113.5	123.1	133.7
87.5°	5.8	10.6	22.1	34.6	49.1	63.5	77.0	88.5	101.0	111.6	121.2
90°	0.0	4.8	16.4	28.9	43.3	56.8	70.2	82.7	94.3	104.9	114.5
92.5°	0.0	4.8	14.4	27.9	41.4	54.8	68.3	80.8	92.4	102.9	112.6
95°	0.0	3.8	13.5	26.9	40.4	53.9	66.4	78.9	90.4	101.0	110.6
97.5°	0.0	3.8	13.5	26.0	38.5	52.0	65.4	77.0	88.5	99.1	108.7
100°	0.0	3.8	12.5	24.1	37.5	50.0	63.5	75.0	86.6	97.2	106.8
102.5°	0.0	2.9	11.5	23.1	35.6	49.1	61.6	73.1	84.7	94.3	103.9
105°	0.0	2.9	11.5	22.1	34.6	47.1	59.6	71.2	81.8	91.4	101.0
107.5°	0.0	1.9	10.6	21.2	32.7	45.2	57.7	68.3	79.9	89.5	98.1
110°	0.0	1.9	9.6	20.2	31.7	43.3	54.8	66.4	77.0	86.6	95.2



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	0.0	1.9	8.7	19.2	29.8	41.4	52.9	63.5	74.1	83.7	91.4
115°	0.0	1.9	8.7	18.3	28.9	39.4	51.0	61.6	71.2	79.9	88.5
117.5°	0.0	1.0	7.7	16.4	26.9	37.5	48.1	58.7	68.3	77.0	84.7
120°	0.0	1.0	6.7	15.4	25.0	35.6	46.2	55.8	65.4	73.1	80.8
122.5°	0.0	1.0	5.8	14.4	24.1	33.7	43.3	52.9	61.6	70.2	77.9
125°	0.0	1.0	5.8	13.5	22.1	31.7	40.4	50.0	58.7	66.4	73.1
127.5°	0.0	1.0	4.8	11.5	20.2	28.9	38.5	47.1	54.8	62.5	69.3
130°	0.0	1.0	3.8	10.6	18.3	26.9	35.6	43.3	51.0	58.7	65.4
132.5°	0.0	0.0	2.9	8.7	16.4	25.0	32.7	40.4	48.1	54.8	60.6
135°	0.0	0.0	2.9	7.7	14.4	22.1	29.8	37.5	44.3	51.0	56.8
137.5°	0.0	0.0	1.9	6.7	12.5	19.2	26.9	33.7	40.4	47.1	52.0
140°	0.0	0.0	1.9	5.8	10.6	16.4	23.1	29.8	36.6	42.3	48.1
142.5°	0.0	0.0	1.0	3.8	8.7	14.4	20.2	26.0	31.7	37.5	43.3
145°	0.0	0.0	1.0	2.9	6.7	11.5	17.3	22.1	27.9	32.7	38.5
147.5°	0.0	0.0	1.0	1.9	5.8	9.6	14.4	18.3	23.1	27.9	32.7
150°	0.0	0.0	0.0	1.9	3.8	7.7	11.5	15.4	19.2	23.1	26.9
152.5°	0.0	0.0	0.0	1.0	2.9	5.8	8.7	12.5	15.4	18.3	22.1
155°	0.0	0.0	0.0	1.0	1.9	3.8	6.7	9.6	11.5	15.4	17.3
157.5°	1.0	0.0	0.0	1.0	1.0	2.9	4.8	6.7	8.7	10.6	12.5
160°	1.0	0.0	0.0	0.0	1.0	1.9	2.9	3.8	5.8	7.7	9.6
162.5°	1.0	1.0	0.0	0.0	0.0	1.0	1.9	2.9	3.8	4.8	5.8
165°	1.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	1.9	1.9	2.9
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



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	559.0	559.0	559.0	559.0	559.0	559.0	559.0	559.0
2.5°	559.0	558.0	558.0	557.0	557.0	556.1	555.1	554.1
5°	559.0	558.0	558.0	558.0	557.0	556.1	555.1	554.1
7.5°	559.0	559.0	559.0	558.0	558.0	557.0	556.1	556.1
10°	558.0	558.0	559.0	559.0	559.0	558.0	557.0	557.0
12.5°	557.0	558.0	559.0	559.0	559.0	559.0	558.0	557.0
15°	555.1	557.0	557.0	558.0	558.0	558.0	557.0	557.0
17.5°	552.2	554.1	555.1	556.1	557.0	556.1	555.1	555.1
20°	548.4	551.3	552.2	553.2	554.1	554.1	553.2	553.2
22.5°	544.5	546.5	548.4	549.3	551.3	551.3	550.3	550.3
25°	538.8	540.7	542.6	544.5	545.5	545.5	545.5	544.5
27.5°	531.1	533.9	536.8	538.8	539.7	539.7	539.7	538.8
30°	523.4	526.2	529.1	531.1	533.0	533.0	533.0	533.0
32.5°	513.7	517.6	520.5	522.4	524.3	525.3	524.3	524.3
35°	504.1	508.0	510.9	512.8	514.7	515.7	514.7	515.7
37.5°	492.6	496.4	499.3	503.2	504.1	504.1	504.1	504.1
40°	480.1	483.9	487.8	490.7	492.6	492.6	493.5	493.5
42.5°	466.6	470.4	475.3	479.1	479.1	480.1	481.0	481.0
45°	453.1	457.0	461.8	464.7	466.6	468.5	467.6	468.5
47.5°	438.7	443.5	447.4	451.2	452.2	454.1	454.1	453.1
50°	423.3	428.1	432.0	435.8	438.7	438.7	439.7	439.7
52.5°	406.0	411.8	416.6	421.4	421.4	424.3	425.2	424.3
55°	388.7	393.5	398.3	403.1	405.0	406.0	407.0	407.0
57.5°	370.4	376.2	380.0	384.8	387.7	387.7	389.6	388.7
60°	351.2	356.9	361.7	365.6	369.4	370.4	372.3	370.4
62.5°	331.9	338.6	342.5	346.3	349.2	351.2	353.1	353.1
65°	311.7	317.5	322.3	327.1	329.0	330.0	332.9	331.9
67.5°	289.6	295.4	300.2	305.9	309.8	310.7	312.7	310.7
70°	267.5	274.2	280.0	283.8	285.7	289.6	288.6	289.6
72.5°	244.4	251.1	256.9	261.7	265.5	268.4	269.4	270.3
75°	221.3	229.9	234.7	238.6	243.4	244.4	247.2	246.3
77.5°	201.1	207.8	213.6	217.4	222.2	224.2	225.1	225.1
80°	178.0	185.7	191.5	197.2	199.1	202.0	204.9	203.0
82.5°	158.7	166.4	173.2	178.0	181.8	183.8	184.7	185.7
85°	141.4	149.1	155.9	160.7	164.5	167.4	169.3	168.4
87.5°	129.9	137.6	143.3	149.1	153.9	154.9	156.8	156.8
90°	123.1	130.8	137.6	142.4	146.2	149.1	150.1	151.0
92.5°	120.3	128.0	134.7	139.5	143.3	145.3	147.2	147.2
95°	118.3	126.0	131.8	137.6	141.4	143.3	145.3	145.3
97.5°	117.4	124.1	130.8	134.7	138.5	141.4	142.4	143.3
100°	114.5	122.2	128.0	132.8	136.6	138.5	140.5	140.5
102.5°	111.6	119.3	125.1	129.9	133.7	135.7	136.6	137.6
105°	108.7	116.4	122.2	127.0	129.9	132.8	133.7	134.7
107.5°	105.8	112.6	118.3	123.1	127.0	128.9	129.9	130.8
110°	102.9	109.7	115.4	120.3	123.1	125.1	127.0	127.0





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

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	99.1	105.8	111.6	116.4	119.3	121.2	122.2	122.2
115°	96.2	102.0	107.8	111.6	115.4	117.4	118.3	118.3
117.5°	92.4	98.1	103.9	107.8	110.6	112.6	113.5	114.5
120°	88.5	94.3	99.1	102.9	106.8	108.7	109.7	109.7
122.5°	83.7	89.5	95.2	99.1	102.0	103.9	104.9	104.9
125°	79.9	85.6	90.4	94.3	97.2	98.1	99.1	100.1
127.5°	75.0	80.8	85.6	89.5	91.4	93.3	94.3	94.3
130°	71.2	76.0	80.8	83.7	86.6	88.5	89.5	89.5
132.5°	66.4	71.2	76.0	78.9	80.8	82.7	83.7	83.7
135°	61.6	66.4	70.2	73.1	76.0	77.0	77.9	77.9
137.5°	56.8	61.6	65.4	68.3	70.2	71.2	72.2	72.2
140°	52.0	56.8	59.6	62.5	64.5	65.4	66.4	66.4
142.5°	47.1	51.0	54.8	56.8	58.7	59.6	60.6	60.6
145°	42.3	46.2	48.1	51.0	52.9	53.9	53.9	53.9
147.5°	36.6	41.4	43.3	45.2	47.1	47.1	48.1	48.1
150°	30.8	34.6	37.5	39.4	40.4	41.4	42.3	42.3
152.5°	25.0	28.9	31.7	33.7	34.6	35.6	36.6	35.6
155°	20.2	22.1	25.0	27.9	28.9	28.9	29.8	28.9
157.5°	14.4	16.4	19.2	21.2	23.1	23.1	23.1	23.1
160°	10.6	11.5	13.5	14.4	16.4	17.3	17.3	17.3
162.5°	6.7	7.7	8.7	9.6	9.6	11.5	11.5	10.6
165°	2.9	2.9	3.8	3.8	4.8	5.8	5.8	5.8
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)