

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: P232064

Luminaire Tested: **FVS4M-3-LD4-30-2LO-PFS125-UNV-EDC1**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-79-08  
Report Number: P232064  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1706-121-29)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: FVS4M-3-LD4-30-2LO-PFS125-UNV-EDC1  
Description: FAILSAFE FVS LED FIXTURE  
3FT LENGTH, 2-MODULE LED WITH PFS125 LENS  
Light Source: (168) 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

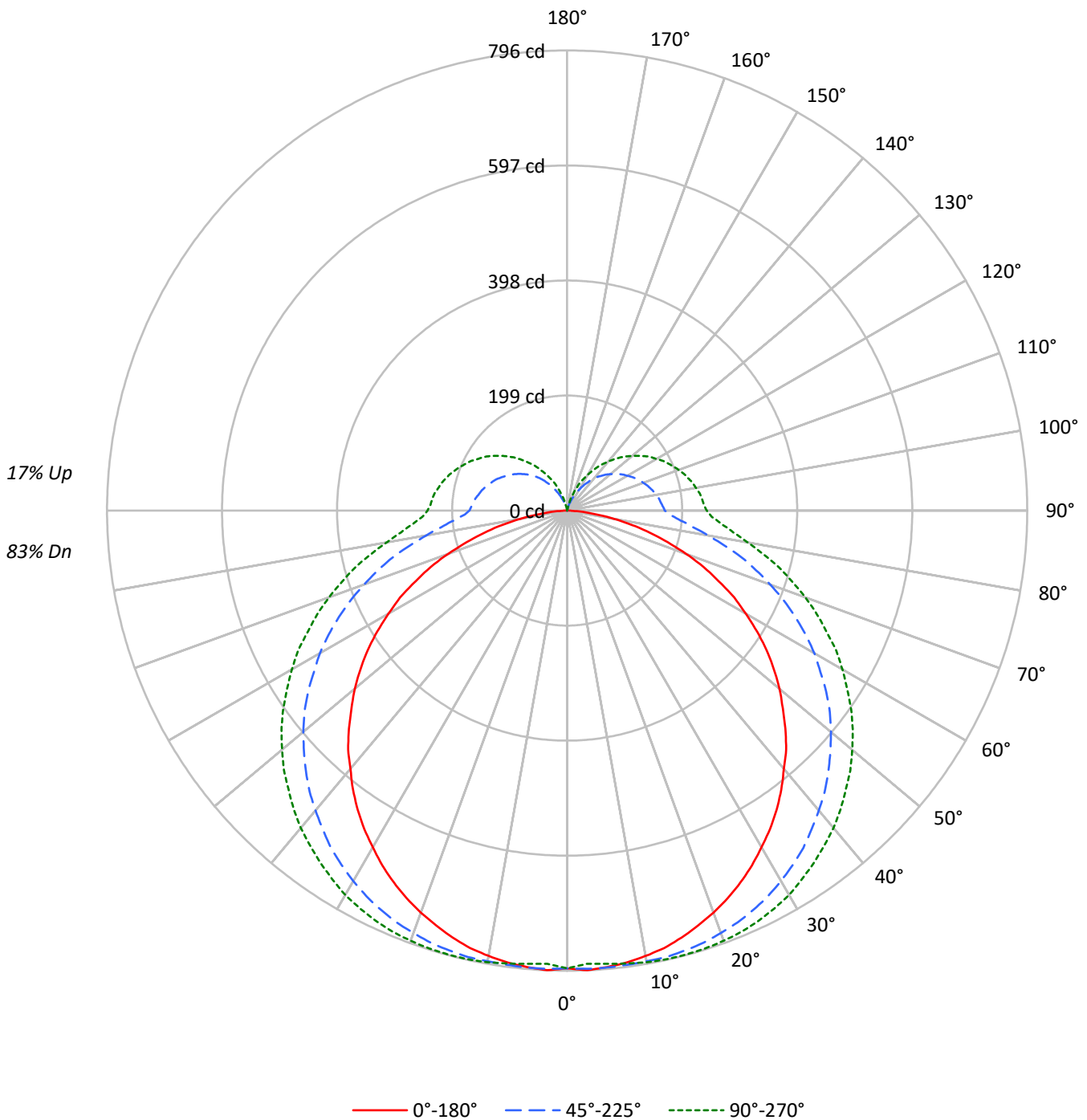
Lumens per Lamp: N/A  
Luminaire Lumens: 3567.0 lumens  
Efficiency: N/A  
Efficacy: 62.8 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.44 / 1.52  
Luminous Opening: Rectangular w/ Sides (W: 0.31' x L: 2.92' x H: 0.19')  
CIE Type: Semi-Direct

Input Watts (W): 56.8  
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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CATALOG NUMBER: FVS4M-3-LD4-30-2LO-PFS125-UNV-EDC1

### 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	110	110	110	110	102	102	102	94	94	94	86	86	86	83
1	103	97	92	88	98	93	89	84	86	82	79	79	76	73	73	70	68	65
2	92	83	76	69	88	80	73	67	74	68	63	68	63	59	62	59	55	52
3	84	72	64	57	80	69	61	55	64	57	52	59	53	49	54	50	46	43
4	76	64	54	47	73	61	53	46	56	49	43	52	46	41	48	43	39	36
5	70	56	47	40	66	54	46	39	50	43	37	46	40	35	43	38	33	31
6	64	50	41	35	61	49	40	34	45	38	32	42	35	31	39	33	29	26
7	59	46	37	30	57	44	35	30	41	33	28	38	32	27	35	30	25	23
8	55	41	33	27	53	40	32	26	37	30	25	35	28	24	32	27	23	20
9	51	38	29	24	49	37	29	23	34	27	22	32	26	21	30	24	20	18
10	48	35	27	21	46	34	26	21	31	25	20	29	23	19	27	22	18	16

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

	0°	45°	90°
0°	9351	9351	9351
5°	9343	9034	8864
10°	9276	8769	8604
15°	9191	8555	8374
20°	9087	8345	8167
25°	8980	8148	7973
30°	8840	7938	7777
35°	8715	7726	7553
40°	8529	7487	7351
45°	8375	7260	7118
50°	8184	7019	6896
55°	7947	6744	6651
60°	7585	6432	6367
65°	7102	6065	6045
70°	6430	5632	5712
75°	5483	5176	5342
80°	4092	4598	4897
85°	2179	4187	4630



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	75.5	2.1
10°-20°	221.7	6.2
20°-30°	348.4	9.8
30°-40°	439.1	12.3
40°-50°	483.3	13.5
50°-60°	475.2	13.3
60°-70°	413.5	11.6
70°-80°	307.8	8.6
80°-90°	197.4	5.5
90°-100°	156.8	4.4
100°-110°	139.3	3.9
110°-120°	115.1	3.2
120°-130°	87.3	2.4
130°-140°	58.8	1.6
140°-150°	32.8	0.9
150°-160°	13.1	0.4
160°-170°	2.1	0.1
170°-180°	0.0	0.0
0°-30°	645.6	18.1
0°-40°	1084.7	30.4
0°-60°	2043.2	57.3
0°-90°	2961.9	83.0
90°-120°	411.1	11.5
90°-150°	590.0	16.5
90°-180°	605.0	17.0
0°-180°	3567.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	792	792	792	792	792	
5°	793	792	793	791	787	75
15°	765	772	788	796	795	216
25°	710	731	762	781	783	327
35°	632	667	712	739	744	395
45°	534	582	639	674	682	412
55°	421	480	547	589	600	376
65°	289	358	436	483	495	287
75°	149	226	312	362	379	157
85°	28	107	197	251	268	34
90°	1	80	169	225	241	2
95°	1	76	162	218	234	1
105°	1	67	149	201	217	1
115°	1	57	131	178	193	1
125°	1	46	110	151	164	1
135°	1	33	85	119	130	1
145°	1	19	57	85	92	1
155°	1	8	28	48	53	0
165°	1	1	6	11	14	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°	791.8	791.8	791.8	791.8	791.8	791.8	791.8	791.8	791.8	791.8	791.8
2.5°	795.8	794.2	791.8	791.8	793.4	794.2	795.8	795.8	795.0	793.4	792.6
5°	792.6	791.8	789.4	789.4	791.0	792.6	794.2	794.2	794.2	793.4	792.6
7.5°	788.6	787.0	785.4	785.4	787.8	789.4	791.8	792.6	793.4	792.6	793.4
10°	782.3	781.5	779.9	780.7	783.1	785.4	787.8	790.2	791.8	791.8	793.4
12.5°	775.1	773.5	771.9	773.5	776.7	779.9	784.7	787.0	789.4	791.0	791.8
15°	764.7	763.9	763.1	765.5	769.5	774.3	779.1	783.1	785.4	787.8	790.2
17.5°	752.8	752.8	752.8	756.0	760.8	767.1	771.9	776.7	780.7	783.9	787.0
20°	740.0	739.2	740.0	744.8	752.0	757.6	763.9	769.5	774.3	777.5	781.5
22.5°	725.7	725.7	727.3	732.1	740.0	748.0	754.4	760.8	766.3	771.1	775.1
25°	709.8	710.6	713.0	718.5	727.3	735.3	743.2	750.4	757.6	762.3	767.9
27.5°	692.2	692.2	696.2	703.4	713.0	721.7	730.5	738.5	746.4	752.0	757.6
30°	672.3	673.9	677.9	687.5	697.0	707.4	716.1	725.7	732.9	740.0	746.4
32.5°	653.2	654.0	658.8	668.3	680.3	690.7	700.2	711.4	718.5	726.5	733.7
35°	631.7	633.3	638.9	649.2	661.2	673.1	684.3	694.6	703.4	712.2	719.3
37.5°	608.6	611.0	618.2	628.5	641.3	653.2	665.2	676.3	686.7	694.6	704.2
40°	583.1	587.1	594.3	607.8	620.6	632.5	645.2	656.4	667.6	677.1	686.7
42.5°	560.8	562.4	571.2	584.7	599.0	613.4	626.1	638.1	649.2	659.6	667.6
45°	533.7	537.7	546.5	559.2	574.4	590.3	606.2	615.0	627.7	638.9	648.4
47.5°	505.8	510.6	521.8	536.1	551.2	565.6	579.1	594.3	606.2	617.4	628.5
50°	479.6	484.3	494.7	510.6	525.0	540.9	556.8	570.4	583.1	595.9	606.2
52.5°	450.9	454.9	467.6	482.7	499.5	515.4	530.5	546.5	559.2	572.8	583.1
55°	421.4	425.4	438.1	454.1	471.6	489.1	504.2	521.0	532.9	547.3	559.2
57.5°	389.5	396.7	407.1	423.8	441.3	458.8	476.4	492.3	506.6	519.4	532.9
60°	356.9	364.0	377.6	394.3	411.0	430.2	447.7	463.6	478.8	493.9	505.0
62.5°	325.8	331.4	344.9	362.5	380.8	399.1	419.0	434.1	451.7	465.2	478.8
65°	289.2	297.1	312.3	329.8	348.1	367.2	385.6	403.9	420.6	435.7	449.3
67.5°	255.7	262.1	279.6	295.5	315.5	334.6	356.9	373.6	390.3	405.5	418.2
70°	219.1	229.4	241.4	263.7	282.8	304.3	322.6	341.7	358.5	373.6	387.9
72.5°	182.4	192.8	209.5	227.8	248.5	270.8	290.0	308.3	325.8	342.5	356.1
75°	149.0	156.9	174.5	194.4	216.7	235.8	255.7	276.4	294.7	312.3	325.0
77.5°	114.7	124.3	139.4	159.3	181.6	205.5	225.4	243.8	262.9	278.0	294.7
80°	82.1	90.0	107.5	126.7	149.8	172.1	193.6	213.5	231.0	247.7	262.9
82.5°	51.0	60.5	77.3	100.4	121.9	145.0	164.9	184.8	203.9	219.9	235.0
85°	27.9	35.1	53.4	73.3	96.4	117.9	141.0	160.1	180.0	196.8	213.5
87.5°	9.6	17.5	34.3	55.8	78.9	99.6	122.7	142.6	160.9	178.4	194.4
90°	0.8	8.8	26.3	47.0	69.3	91.6	113.1	133.0	152.2	168.9	184.8
92.5°	0.8	8.0	23.9	44.6	66.9	88.4	109.9	129.8	148.2	165.7	180.8
95°	0.8	7.2	23.1	43.0	65.3	86.8	107.5	127.5	145.8	162.5	177.6
97.5°	0.8	7.2	22.3	42.2	62.9	84.4	105.2	125.1	143.4	160.1	175.3
100°	0.8	6.4	20.7	39.8	61.3	82.1	102.8	121.9	140.2	156.1	172.1
102.5°	0.8	5.6	19.9	39.0	58.9	79.7	99.6	118.7	136.2	152.9	168.1
105°	0.8	5.6	19.1	37.4	57.4	77.3	96.4	115.5	133.0	149.0	163.3
107.5°	0.8	4.8	18.3	35.8	55.0	74.9	94.0	112.3	129.0	145.0	159.3
110°	0.8	4.8	17.5	34.3	52.6	71.7	90.8	108.3	125.1	140.2	154.5



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	0.8	4.0	15.9	32.7	50.2	69.3	86.8	105.2	121.1	136.2	149.8
115°	0.8	4.0	15.1	31.1	48.6	66.1	83.6	100.4	116.3	131.4	144.2
117.5°	0.8	3.2	14.3	29.5	46.2	62.9	80.5	96.4	112.3	125.9	138.6
120°	0.8	3.2	12.7	27.1	43.0	59.7	76.5	92.4	106.7	120.3	133.0
122.5°	0.8	2.4	11.9	25.5	41.4	56.6	72.5	87.6	102.8	115.5	127.5
125°	0.8	2.4	11.2	23.9	38.2	53.4	68.5	83.6	97.2	109.9	121.1
127.5°	0.8	1.6	9.6	21.5	35.8	50.2	64.5	78.9	91.6	104.4	115.5
130°	0.8	1.6	8.8	19.9	33.5	47.0	60.5	74.1	86.8	98.0	108.3
132.5°	0.8	1.6	7.2	17.5	30.3	43.8	56.6	69.3	81.3	92.4	102.0
135°	0.8	1.6	6.4	15.9	27.1	39.8	51.8	63.7	75.7	85.2	94.8
137.5°	0.8	0.8	5.6	13.5	23.9	35.8	47.0	58.9	69.3	79.7	88.4
140°	0.8	0.8	4.0	11.2	20.7	31.1	41.4	52.6	62.9	72.5	81.3
142.5°	0.8	0.8	3.2	9.6	17.5	27.1	36.6	47.0	55.8	65.3	74.1
145°	0.8	0.8	2.4	8.0	15.1	23.1	31.1	40.6	48.6	57.4	65.3
147.5°	0.8	0.8	2.4	6.4	12.7	19.1	27.1	34.3	42.2	50.2	56.6
150°	0.8	0.8	1.6	4.8	9.6	15.9	22.3	28.7	35.8	41.4	49.4
152.5°	0.8	0.8	1.6	3.2	7.2	12.7	18.3	23.9	29.5	35.1	40.6
155°	0.8	0.8	0.8	2.4	5.6	9.6	14.3	19.1	23.1	27.9	32.7
157.5°	0.8	0.8	0.8	1.6	4.0	6.4	10.4	14.3	18.3	21.5	25.5
160°	0.8	0.8	0.8	1.6	2.4	4.8	7.2	10.4	13.5	15.9	18.3
162.5°	0.8	0.8	0.8	0.8	1.6	2.4	4.8	7.2	8.8	10.4	12.7
165°	0.8	0.8	0.8	0.8	0.8	1.6	2.4	3.2	4.8	6.4	7.2
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°	791.8	791.8	791.8	791.8	791.8	791.8	791.8	791.8
2.5°	791.8	791.0	790.2	789.4	788.6	787.0	785.4	784.7
5°	792.6	792.6	791.8	791.0	790.2	788.6	787.0	787.0
7.5°	793.4	794.2	794.2	794.2	793.4	792.6	791.0	790.2
10°	795.0	795.0	795.8	795.8	795.8	795.0	794.2	793.4
12.5°	794.2	795.0	796.6	797.4	797.4	796.6	795.0	795.0
15°	792.6	794.2	795.8	796.6	797.4	796.6	795.0	795.0
17.5°	789.4	791.8	794.2	795.8	795.8	795.8	795.0	794.2
20°	785.4	787.8	790.2	792.6	793.4	793.4	792.6	791.8
22.5°	779.1	783.1	786.2	788.6	789.4	789.4	788.6	788.6
25°	771.9	775.9	779.9	782.3	783.9	784.7	783.9	783.1
27.5°	763.1	767.1	771.1	774.3	775.9	776.7	776.7	775.9
30°	753.6	757.6	761.6	765.5	767.1	767.9	767.9	767.9
32.5°	740.0	745.6	750.4	753.6	756.8	756.8	756.8	756.0
35°	725.7	732.1	736.9	741.6	743.2	744.8	744.8	744.0
37.5°	709.8	717.7	722.5	726.5	729.7	730.5	729.7	730.5
40°	693.8	700.2	708.2	710.6	713.8	716.1	715.3	716.9
42.5°	676.3	683.5	689.9	695.4	697.8	698.6	699.4	700.2
45°	658.0	664.4	672.3	676.3	679.5	681.9	681.9	681.9
47.5°	637.3	646.0	653.2	658.0	661.2	663.6	662.8	664.4
50°	615.8	624.5	632.5	636.5	641.3	642.1	642.9	643.7
52.5°	593.5	602.2	610.2	615.8	618.2	620.6	622.1	622.9
55°	569.6	578.3	585.5	591.9	595.9	598.2	598.2	599.8
57.5°	544.1	553.6	562.4	566.4	570.4	573.6	575.1	574.4
60°	518.6	527.4	533.7	541.7	546.5	548.9	549.7	549.7
62.5°	487.5	499.5	506.6	516.2	518.6	521.8	522.6	525.0
65°	462.0	470.8	480.4	485.1	491.5	493.1	495.5	494.7
67.5°	431.0	442.9	450.1	457.2	463.6	466.0	466.0	467.6
70°	399.1	411.8	419.0	427.8	431.8	436.5	438.9	438.1
72.5°	369.6	380.0	389.5	396.7	402.3	405.5	406.3	407.9
75°	339.4	349.7	358.5	365.6	372.8	375.2	377.6	379.2
77.5°	306.7	316.3	328.2	336.2	340.9	345.7	347.3	347.3
80°	276.4	287.6	297.1	305.9	310.7	315.5	318.6	317.0
82.5°	247.7	259.7	271.6	278.8	284.4	289.2	290.8	290.0
85°	225.4	237.4	246.9	254.9	261.3	266.1	267.7	268.5
87.5°	207.9	219.9	230.2	238.2	243.8	247.7	249.3	250.9
90°	198.4	210.3	220.7	228.6	234.2	238.2	240.6	241.4
92.5°	194.4	206.3	215.9	223.8	230.2	234.2	235.8	236.6
95°	192.0	203.1	213.5	221.5	227.0	231.0	233.4	234.2
97.5°	188.8	200.7	210.3	218.3	223.8	228.6	230.2	231.0
100°	184.8	196.8	206.3	214.3	219.9	223.8	226.2	226.2
102.5°	180.8	192.8	202.3	210.3	215.9	219.9	221.5	222.3
105°	176.8	188.0	197.6	204.7	210.3	214.3	216.7	216.7
107.5°	172.1	183.2	192.0	199.9	205.5	208.7	211.1	211.9
110°	167.3	177.6	187.2	194.4	199.9	203.1	205.5	205.5





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CATALOG NUMBER: FVS4M-3-LD4-30-2LO-PFS125-UNV-EDC1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	161.7	172.1	181.6	188.0	193.6	197.6	199.2	199.2
115°	156.1	166.5	175.3	181.6	187.2	190.4	192.8	192.8
117.5°	150.6	160.9	168.9	175.3	180.0	184.0	185.6	186.4
120°	144.2	153.7	162.5	168.9	173.7	176.8	178.4	178.4
122.5°	137.8	147.4	156.1	161.7	166.5	168.9	171.3	172.1
125°	131.4	141.0	149.0	153.7	158.5	161.7	163.3	164.1
127.5°	125.1	133.0	141.0	146.6	150.6	153.7	155.3	155.3
130°	117.9	125.9	133.0	138.6	142.6	145.0	146.6	147.4
132.5°	110.7	118.7	125.1	130.6	134.6	137.0	137.8	138.6
135°	103.6	110.7	116.3	121.9	125.9	127.5	129.0	129.8
137.5°	95.6	102.8	109.1	113.9	116.3	118.7	119.5	120.3
140°	88.4	94.8	100.4	104.4	107.5	109.1	110.7	110.7
142.5°	80.5	86.8	91.6	95.6	98.0	100.4	102.0	101.2
145°	72.5	78.9	82.8	86.8	89.2	90.8	91.6	92.4
147.5°	64.5	70.1	74.1	78.1	79.7	81.3	82.1	81.3
150°	54.2	60.5	65.3	68.5	70.1	71.7	72.5	71.7
152.5°	45.4	51.8	56.6	58.9	60.5	61.3	62.1	62.1
155°	36.6	41.4	46.2	49.4	51.0	51.8	52.6	53.4
157.5°	28.7	32.7	35.1	39.8	42.2	42.2	42.2	42.2
160°	21.5	23.9	26.3	29.5	31.9	32.7	32.7	32.7
162.5°	14.3	15.9	17.5	19.9	21.5	23.1	23.1	23.1
165°	8.0	8.8	10.4	11.2	11.2	13.5	14.3	13.5
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

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