

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: P27167

Luminaire Tested: **FMB-N-2-LD4-1dn/STD-40-UNV-80/86**

Test Date: 12/04/15

**Test Information**

Test Method: LM-79-08  
Report Number: P27167  
Test Lab: INNOVATION CENTER-P2  
Test Date: 12/04/15  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: FMB-N-2-LD4-1dn/STD-40-UNV-80/86  
Description: FAILSAFE LED 2FT FMB WALL MOUNT CORRECTIONAL LUMINAIRE  
Light Source: (42) LUMILEDS 4000K LEDS  
2UT217042A8404A  
Ballast/Driver: (1) OSRAM ELECTRONIC DRIVER  
OT25W

**Summary**

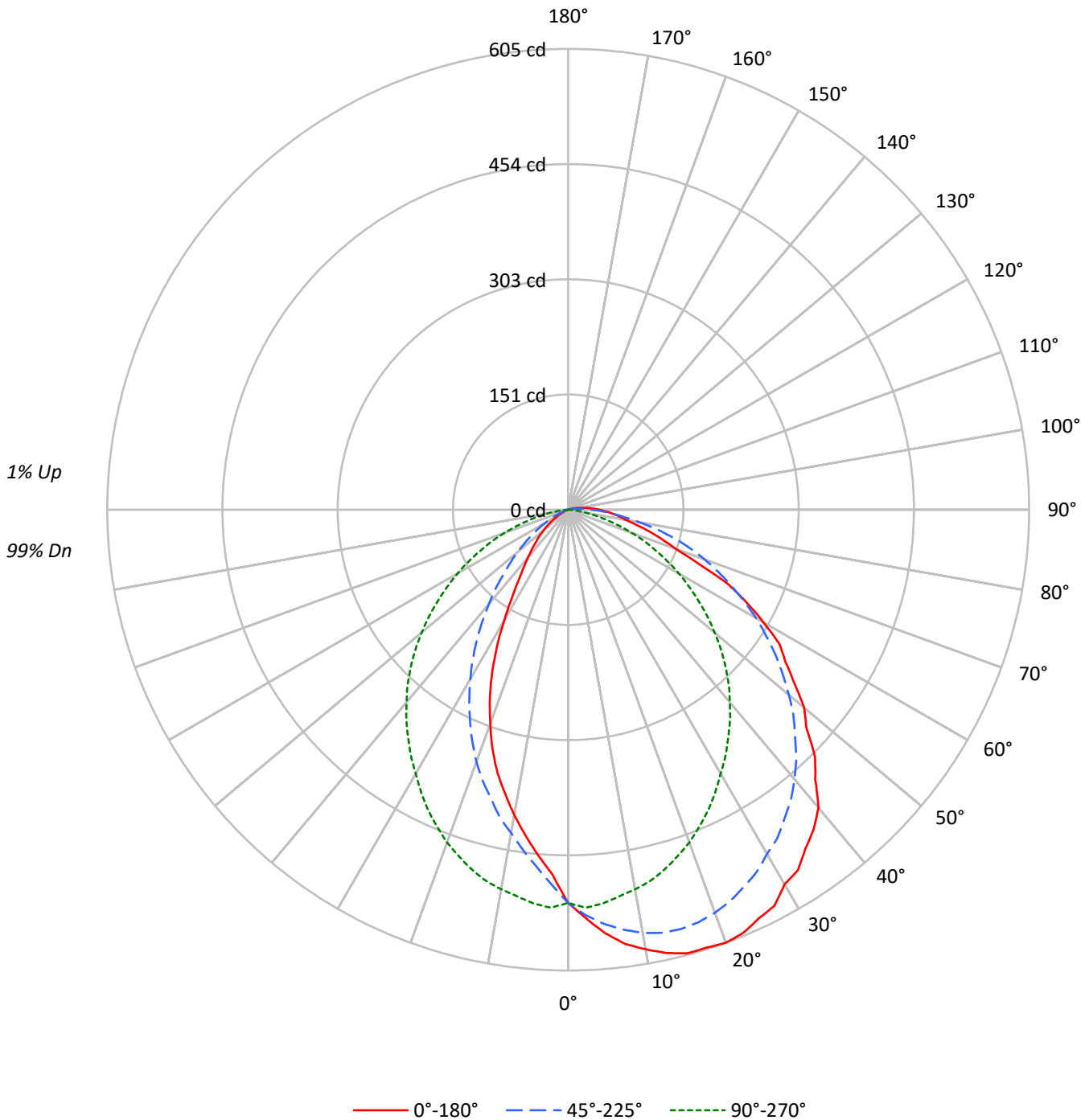
Lumens per Lamp: N/A  
Luminaire Lumens: 1211.6 lumens  
Efficiency: N/A  
Efficacy: 69.6 lumens/watt  
Spacing Criteria (0/90/45): 1.09 / 1.16 / 1.26  
Luminous Opening: Rectangular w/ Sides (W: 1.75' x L: 0.29' x H: 0.04')  
CIE Type: Direct  
  
Input Watts (W): 17.4  
Input Voltage (V): 120.02  
Input Current (Ain): 0.14563  
Voltage Rise (V): NR  
Power Factor: 0.9964  
Total Harmonic Distortion (THDi): 5.99%  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: 24 HR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P27167

CATALOG NUMBER: FMB-N-2-LD4-1dn/STD-40-UNV-80/86

### Luminous Intensity Polar Plot





TEST NUMBER: P27167

CATALOG NUMBER: FMB-N-2-LD4-1dn/STD-40-UNV-80/86

**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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	101	101	101	99
1	109	104	100	97	106	102	98	95	98	95	92	94	91	89	90	88	86	84
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	76	73	71
3	91	81	73	67	89	80	72	66	77	70	65	74	68	64	71	67	63	61
4	84	72	64	58	82	71	63	57	68	62	56	66	60	55	64	59	55	52
5	77	65	56	50	75	64	56	50	62	55	49	60	53	48	58	52	48	46
6	72	59	50	44	70	58	50	44	56	49	43	54	48	43	53	47	42	40
7	67	54	45	39	65	53	45	39	51	44	39	50	43	38	48	42	38	36
8	62	49	41	35	61	48	40	35	47	40	35	46	39	35	45	39	34	32
9	58	45	37	32	57	45	37	32	43	36	32	42	36	31	41	35	31	29
10	55	42	34	29	53	41	34	29	40	33	29	39	33	29	38	33	28	27

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

	0°	90°	180°
0°	10882	10882	10882
5°	11666	10964	9513
10°	12240	10790	8501
15°	12680	10608	7528
20°	12906	10346	6378
25°	12915	10011	5148
30°	12777	9608	3779
35°	12708	9268	2668
40°	12562	8907	2016
45°	11952	8506	1566
50°	11326	8008	1177
55°	10627	7432	824
60°	10008	6805	507
65°	8862	6029	267
70°	6642	5093	0
75°	5846	3966	0
80°	5166	2568	0
85°	5330	1141	0



TEST NUMBER: P27167

CATALOG NUMBER: FMB-N-2-LD4-1dn/STD-40-UNV-80/86

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	48.3	4.0
10°-20°	135.7	11.2
20°-30°	195.4	16.1
30°-40°	218.8	18.1
40°-50°	210.9	17.4
50°-60°	176.7	14.6
60°-70°	124.4	10.3
70°-80°	65.8	5.4
80°-90°	26.6	2.2
90°-100°	7.6	0.6
100°-110°	1.3	0.1
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	379.5	31.3
0°-40°	598.2	49.4
0°-60°	985.9	81.4
0°-90°	1202.6	99.3
90°-120°	8.9	0.7
90°-150°	8.9	0.7
90°-180°	9.0	0.7
0°-180°	1211.6	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	516	516	516	516	516	
5°	558	546	519	471	455	54
15°	603	570	489	392	358	170
25°	592	546	435	305	236	273
35°	543	495	366	209	114	340
45°	458	421	292	120	60	351
55°	348	332	209	58	27	313
65°	232	236	127	18	7	223
75°	110	143	53	1	0	117
85°	58	57	6	0	0	51
90°	41	31	0	0	0	22
95°	26	13	0	0	0	19
105°	7	0	0	0	0	7
115°	0	0	0	0	0	0
125°	0	0	0	0	0	0
135°	0	0	0	0	0	0
145°	0	0	0	0	0	0
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P27167

CATALOG NUMBER: FMB-N-2-LD4-1dn/STD-40-UNV-80/86

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	516	516	516	516	516	516	516	516	516	516	516
2.5°	537	536	535	535	535	535	535	536	535	535	533
5°	558	557	556	555	554	552	552	551	549	547	546
7.5°	575	575	573	572	570	569	567	566	563	560	556
10°	586	585	584	582	580	578	577	574	572	568	564
12.5°	596	595	593	591	588	586	585	581	578	574	569
15°	603	603	601	597	594	592	591	587	581	575	570
17.5°	603	602	601	599	597	594	592	587	580	574	568
20°	605	605	603	599	594	591	587	582	577	571	563
22.5°	601	600	596	591	589	587	585	579	570	562	556
25°	592	589	589	588	585	580	577	569	563	555	546
27.5°	586	585	583	577	570	569	568	564	555	545	536
30°	568	567	566	566	564	562	559	547	541	533	522
32.5°	561	559	559	557	548	544	542	539	530	518	511
35°	543	543	539	536	535	536	534	524	514	505	495
37.5°	529	527	526	528	522	518	512	509	501	491	480
40°	511	508	507	502	500	501	499	492	482	473	462
42.5°	480	478	482	482	483	479	474	471	463	454	443
45°	458	458	456	453	449	451	451	448	441	432	421
47.5°	424	421	423	424	426	427	423	421	416	409	401
50°	404	400	404	401	396	395	395	396	391	386	378
52.5°	374	374	371	371	372	373	372	368	366	362	355
55°	348	347	351	351	348	346	343	345	341	337	332
57.5°	329	327	327	324	322	323	322	319	317	313	308
60°	296	296	297	299	299	300	297	296	292	289	285
62.5°	264	265	270	271	273	271	272	272	268	264	260
65°	232	231	236	238	241	244	246	246	245	240	236
67.5°	184	185	193	200	209	211	216	220	221	217	213
70°	150	151	155	160	168	173	182	189	194	194	190
72.5°	129	130	132	134	137	140	145	156	165	170	167
75°	110	110	112	115	117	118	121	126	135	143	143
77.5°	91	92	94	96	99	100	102	105	110	115	119
80°	77	77	79	80	83	84	86	88	91	92	95
82.5°	67	67	67	68	69	69	71	72	75	74	74
85°	58	58	58	57	57	57	57	58	60	59	57
87.5°	49	49	49	48	48	47	46	45	46	46	44
90°	41	41	41	39	39	38	37	35	34	33	31
92.5°	33	33	33	31	31	30	29	27	25	23	21
95°	26	26	25	24	23	22	21	19	18	16	13
97.5°	19	20	19	18	17	16	15	14	12	10	8
100°	14	14	13	13	12	11	11	9	8	7	5
102.5°	9	9	9	9	8	8	7	6	5	5	3
105°	7	6	6	6	6	5	5	4	2	0	0
107.5°	4	4	4	3	2	1	0	0	0	0	0
110°	0	0	0	0	0	0	0	0	0	0	0



TEST NUMBER: P27167

CATALOG NUMBER: FMB-N-2-LD4-1dn/STD-40-UNV-80/86

**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	0	0	0	0	0	0	0	0	0	0	0
115°	0	0	0	0	0	0	0	0	0	0	0
117.5°	0	0	0	0	0	0	0	0	0	0	0
120°	0	0	0	0	0	0	0	0	0	0	0
122.5°	0	0	0	0	0	0	0	0	0	0	0
125°	0	0	0	0	0	0	0	0	0	0	0
127.5°	0	0	0	0	0	0	0	0	0	0	0
130°	0	0	0	0	0	0	0	0	0	0	0
132.5°	0	0	0	0	0	0	0	0	0	0	0
135°	0	0	0	0	0	0	0	0	0	0	0
137.5°	0	0	0	0	0	0	0	0	0	0	0
140°	0	0	0	0	0	0	0	0	0	0	0
142.5°	0	0	0	0	0	0	0	0	0	0	0
145°	0	0	0	0	0	0	0	0	0	0	0
147.5°	0	0	0	0	0	0	0	0	0	0	0
150°	0	0	0	0	0	0	0	0	0	0	0
152.5°	0	0	0	0	0	0	0	0	0	0	0
155°	0	0	0	0	0	0	0	0	0	0	0
157.5°	0	0	0	0	0	0	0	0	0	0	0
160°	0	0	0	0	0	0	0	0	0	0	0
162.5°	0	0	0	0	0	0	0	0	0	0	0
165°	0	0	0	0	0	0	0	0	0	0	0
167.5°	0	0	0	0	0	0	0	0	0	0	0
170°	0	0	0	0	0	0	0	0	0	0	0
172.5°	0	0	0	0	0	0	0	0	0	0	0
175°	0	0	0	0	0	0	0	0	0	0	0
177.5°	0	0	0	0	0	0	0	0	0	0	0
180°	0	0	0	0	0	0	0	0	0	0	0



TEST NUMBER: P27167

CATALOG NUMBER: FMB-N-2-LD4-1dn/STD-40-UNV-80/86

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	516	516	516	516	516	516	516	516	516	516	516
2.5°	531	531	529	528	528	527	527	525	524	523	520
5°	542	540	538	537	536	534	531	527	522	519	512
7.5°	552	548	545	541	539	536	530	524	518	512	504
10°	560	554	549	543	541	537	531	523	515	506	497
12.5°	563	557	551	543	540	537	529	519	510	499	487
15°	563	556	549	541	536	532	522	512	502	489	476
17.5°	560	551	542	536	531	526	515	503	491	477	463
20°	554	544	535	526	521	516	505	494	480	465	449
22.5°	546	535	526	517	512	507	495	481	466	450	435
25°	536	525	514	504	499	494	481	466	451	435	418
27.5°	524	513	502	491	485	481	466	451	435	418	401
30°	512	499	488	476	470	464	449	435	418	400	385
32.5°	497	485	472	460	453	446	433	417	400	384	367
35°	483	470	456	443	435	428	414	399	383	366	349
37.5°	466	454	440	424	417	410	397	382	366	349	331
40°	448	435	421	405	399	392	378	363	348	330	313
42.5°	430	417	404	388	381	373	360	345	328	312	293
45°	408	397	383	369	362	354	340	325	309	292	274
47.5°	388	378	363	349	342	334	321	305	288	272	253
50°	366	357	343	329	322	314	299	285	269	251	232
52.5°	347	335	322	309	302	294	280	265	248	230	213
55°	324	314	301	288	281	274	259	244	227	209	191
57.5°	302	292	279	266	259	252	238	224	206	188	170
60°	278	269	257	244	238	231	217	202	186	168	150
62.5°	254	246	235	222	216	210	196	182	165	147	129
65°	232	223	212	200	194	187	174	161	145	127	109
67.5°	208	200	190	177	172	166	153	140	124	108	90
70°	184	176	167	155	149	143	131	119	104	88	72
72.5°	162	154	145	134	127	123	110	99	85	70	56
75°	140	131	123	112	106	101	90	77	67	53	40
77.5°	118	110	101	91	86	81	70	60	49	38	27
80°	96	90	82	72	67	63	52	44	34	24	17
82.5°	75	71	64	55	50	46	37	29	21	14	8
85°	56	53	47	40	35	32	24	18	12	6	3
87.5°	41	38	33	27	23	20	14	9	5	2	1
90°	29	25	21	16	13	11	7	4	2	0	0
92.5°	19	15	12	9	7	6	3	1	0	0	0
95°	11	9	6	4	3	2	0	0	0	0	0
97.5°	6	5	3	2	0	0	0	0	0	0	0
100°	4	3	0	0	0	0	0	0	0	0	0
102.5°	0	0	0	0	0	0	0	0	0	0	0
105°	0	0	0	0	0	0	0	0	0	0	0
107.5°	0	0	0	0	0	0	0	0	0	0	0
110°	0	0	0	0	0	0	1	1	1	0	0





TEST NUMBER: P27167

CATALOG NUMBER: FMB-N-2-LD4-1dn/STD-40-UNV-80/86

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
112.5°	0	0	0	0	0	0	0	0	0	0	0
115°	0	0	0	0	0	0	0	0	0	0	0
117.5°	0	0	0	0	0	0	0	0	0	0	0
120°	0	0	0	0	0	0	0	0	0	0	0
122.5°	0	0	0	0	0	0	0	0	0	0	0
125°	0	0	0	0	0	0	0	0	0	0	0
127.5°	0	0	0	0	0	0	0	0	0	0	0
130°	0	0	0	0	0	0	0	0	0	0	0
132.5°	0	0	0	0	0	0	0	0	0	0	0
135°	0	0	0	0	0	0	0	0	0	0	0
137.5°	0	0	0	0	0	0	0	0	0	0	0
140°	0	0	0	0	0	0	0	0	0	0	0
142.5°	0	0	0	0	0	0	0	0	0	0	0
145°	0	0	0	0	0	0	0	0	0	0	0
147.5°	0	0	0	0	0	0	0	0	0	0	0
150°	0	0	0	0	0	0	0	0	0	0	0
152.5°	0	0	0	0	0	0	0	0	0	0	0
155°	0	0	0	0	0	0	0	0	0	0	0
157.5°	0	0	0	0	0	0	0	0	0	0	0
160°	0	0	0	0	0	0	0	0	0	0	0
162.5°	0	0	0	0	0	0	0	0	0	0	0
165°	0	0	0	0	0	0	0	0	0	0	0
167.5°	0	0	0	0	0	0	0	0	0	0	0
170°	0	0	0	0	0	0	0	0	0	0	0
172.5°	0	0	0	0	0	0	0	0	0	0	0
175°	0	0	0	0	0	0	0	0	0	0	0
177.5°	0	0	0	0	0	0	0	0	0	0	0
180°	0	0	0	0	0	0	0	0	0	0	0



TEST NUMBER: P27167

CATALOG NUMBER: FMB-N-2-LD4-1dn/STD-40-UNV-80/86

**CANDELA DISTRIBUTION (continued):**

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	516	516	516	516	516	516	516	516	516	516	516
2.5°	514	511	508	506	505	501	499	497	493	491	489
5°	506	501	495	493	490	484	479	476	471	469	465
7.5°	496	489	481	478	474	468	461	456	451	447	443
10°	487	477	468	463	460	452	444	438	431	427	422
12.5°	475	464	454	449	444	435	426	420	414	408	402
15°	463	450	439	433	428	419	408	401	392	386	379
17.5°	449	435	422	417	411	401	391	382	373	364	357
20°	434	420	407	400	394	383	372	362	352	344	333
22.5°	419	404	390	383	377	365	351	340	329	319	307
25°	402	387	373	366	359	345	333	320	305	294	281
27.5°	386	370	355	348	340	326	313	297	281	269	254
30°	369	351	337	329	321	307	291	273	257	243	227
32.5°	350	334	319	310	302	287	268	250	233	217	199
35°	332	315	300	291	283	266	246	228	209	192	172
37.5°	314	297	281	272	264	244	225	206	185	165	147
40°	296	279	263	252	244	224	204	183	162	142	125
42.5°	277	259	243	233	223	203	183	161	141	121	106
45°	257	239	223	213	203	183	163	141	120	104	90
47.5°	236	219	203	194	182	163	143	121	103	88	75
50°	216	198	183	173	163	143	123	103	87	73	62
52.5°	195	178	163	152	143	124	104	88	72	60	52
55°	174	157	142	132	124	105	87	70	58	48	41
57.5°	153	137	122	113	105	88	71	58	46	38	32
60°	132	116	102	94	87	71	56	45	35	28	24
62.5°	111	98	84	76	69	56	42	33	26	20	18
65°	92	79	66	60	54	41	31	23	18	14	12
67.5°	74	61	50	45	39	29	21	15	12	10	8
70°	57	45	36	31	27	19	13	9	8	6	6
72.5°	42	32	24	20	17	11	8	6	5	4	3
75°	29	20	14	12	10	6	5	4	1	0	0
77.5°	18	12	7	6	5	4	2	0	0	0	0
80°	10	6	4	3	3	0	0	0	0	0	0
82.5°	5	3	1	0	0	0	0	0	0	0	0
85°	2	0	0	0	0	0	0	0	0	0	0
87.5°	0	0	0	0	0	0	0	0	0	0	0
90°	0	0	0	0	0	0	0	0	0	0	0
92.5°	0	0	0	0	0	0	0	0	0	0	0
95°	0	0	0	0	0	0	0	0	0	0	0
97.5°	0	0	0	0	0	0	0	0	0	0	0
100°	0	0	0	0	0	0	0	0	0	0	0
102.5°	0	0	0	0	0	0	0	0	0	0	0
105°	0	0	0	0	0	0	0	0	0	0	0
107.5°	0	0	0	0	0	0	0	0	0	0	0
110°	0	0	0	0	0	0	0	0	0	0	0



TEST NUMBER: P27167

CATALOG NUMBER: FMB-N-2-LD4-1dn/STD-40-UNV-80/86

**CANDELA DISTRIBUTION (continued):**

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
112.5°	0	0	0	0	0	0	0	0	0	0	0
115°	0	0	0	0	0	0	0	0	0	0	0
117.5°	0	0	0	0	0	0	0	0	0	0	0
120°	0	0	0	0	0	0	0	0	0	0	0
122.5°	0	0	0	0	0	0	0	0	0	0	0
125°	0	0	0	0	0	0	0	0	0	0	0
127.5°	0	0	0	0	0	0	0	0	0	0	0
130°	0	0	0	0	0	0	0	0	0	0	0
132.5°	0	0	0	0	0	0	0	0	0	0	0
135°	0	0	0	0	0	0	0	0	0	0	0
137.5°	0	0	0	0	0	0	0	0	0	0	0
140°	0	0	0	0	0	0	0	0	0	0	0
142.5°	0	0	0	0	0	0	0	0	0	0	0
145°	0	0	0	0	0	0	0	0	0	0	0
147.5°	0	0	0	0	0	0	0	0	0	0	0
150°	0	0	0	0	0	0	0	0	0	0	0
152.5°	0	0	0	0	0	0	0	0	0	0	0
155°	0	0	0	0	0	0	0	0	0	0	0
157.5°	0	0	0	0	0	0	0	0	0	0	0
160°	0	0	0	0	0	0	0	0	0	0	0
162.5°	0	0	0	0	0	0	0	0	0	0	0
165°	0	0	0	0	0	0	0	0	0	0	0
167.5°	0	0	0	0	0	0	0	0	0	0	0
170°	0	0	0	0	0	0	0	0	0	0	0
172.5°	0	0	0	0	0	0	0	0	0	0	0
175°	0	0	0	0	0	0	0	0	0	0	0
177.5°	0	0	0	0	0	0	0	0	0	0	0
180°	0	0	0	0	0	0	0	0	0	0	0



TEST NUMBER: P27167

CATALOG NUMBER: FMB-N-2-LD4-1dn/STD-40-UNV-80/86

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	516	516	516	516	516	516	516	516
2.5°	485	485	483	482	480	480	479	479
5°	461	459	458	458	456	456	456	455
7.5°	439	437	435	435	433	432	433	431
10°	417	414	412	412	409	408	408	407
12.5°	395	392	390	388	386	383	383	382
15°	374	370	367	366	363	360	359	358
17.5°	349	345	340	338	335	331	331	330
20°	323	317	312	310	305	301	301	299
22.5°	297	289	285	282	277	272	270	269
25°	270	261	256	252	245	240	238	236
27.5°	242	231	225	221	213	206	204	202
30°	213	200	194	188	180	172	169	168
32.5°	184	170	163	159	149	142	140	138
35°	157	142	136	132	124	118	115	114
37.5°	132	120	114	111	103	99	97	96
40°	112	101	96	94	88	84	82	82
42.5°	95	85	81	80	75	72	71	70
45°	80	73	69	68	64	62	61	60
47.5°	67	61	59	57	54	52	51	51
50°	56	51	49	47	45	43	42	42
52.5°	46	42	40	39	37	35	35	34
55°	36	33	32	31	29	28	27	27
57.5°	29	26	25	24	22	21	21	20
60°	21	19	18	18	17	16	15	15
62.5°	15	14	13	13	12	11	11	10
65°	11	9	9	9	8	8	7	7
67.5°	7	7	6	6	6	6	6	6
70°	5	5	4	4	2	0	0	0
72.5°	0	0	0	0	0	0	0	0
75°	0	0	0	0	0	0	0	0
77.5°	0	0	0	0	0	0	0	0
80°	0	0	0	0	0	0	0	0
82.5°	0	0	0	0	0	0	0	0
85°	0	0	0	0	0	0	0	0
87.5°	0	0	0	0	0	0	0	0
90°	0	0	0	0	0	0	0	0
92.5°	0	0	0	0	0	0	0	0
95°	0	0	0	0	0	0	0	0
97.5°	0	0	0	0	0	0	0	0
100°	0	0	0	0	0	0	0	0
102.5°	0	0	0	0	0	0	0	0
105°	0	0	0	0	0	0	0	0
107.5°	0	0	0	0	0	0	0	0
110°	0	0	0	0	0	0	0	0



TEST NUMBER: P27167

CATALOG NUMBER: FMB-N-2-LD4-1dn/STD-40-UNV-80/86

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
112.5°	0	0	0	0	0	0	0	0
115°	0	0	0	0	0	0	0	0
117.5°	0	0	0	0	0	0	0	0
120°	0	0	0	0	0	0	0	0
122.5°	0	0	0	0	0	0	0	0
125°	0	0	0	0	0	0	0	0
127.5°	0	0	0	0	0	0	0	0
130°	0	0	0	0	0	0	0	0
132.5°	0	0	0	0	0	0	0	0
135°	0	0	0	0	0	0	0	0
137.5°	0	0	0	0	0	0	0	0
140°	0	0	0	0	0	0	0	0
142.5°	0	0	0	0	0	0	0	0
145°	0	0	0	0	0	0	0	0
147.5°	0	0	0	0	0	0	0	0
150°	0	0	0	0	0	0	0	0
152.5°	0	0	0	0	0	0	0	0
155°	0	0	0	0	0	0	0	0
157.5°	0	0	0	0	0	0	0	0
160°	0	0	0	0	0	0	0	0
162.5°	0	0	0	0	0	0	0	0
165°	0	0	0	0	0	0	0	0
167.5°	0	0	0	0	0	0	0	0
170°	0	0	0	0	0	0	0	0
172.5°	0	0	0	0	0	0	0	0
175°	0	0	0	0	0	0	0	0
177.5°	0	0	0	0	0	0	0	0
180°	0	0	0	0	0	0	0	0

(END OF REPORT)