

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: P226077

Luminaire Tested: **FW-LD2-126-1000-50-PC-R4-LGW**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P226077
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1705-064-7)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: FW-LD2-126-1000-50-PC-R4-LGW
Description: NIGHT CONDOR LED FLOODLIGHT
Light Source: (56) 5000 CCT, 80 CRI LEDS
 EL089N028E850M
Ballast/Driver: OSRAM
 OT25WPRG1250C

Summary

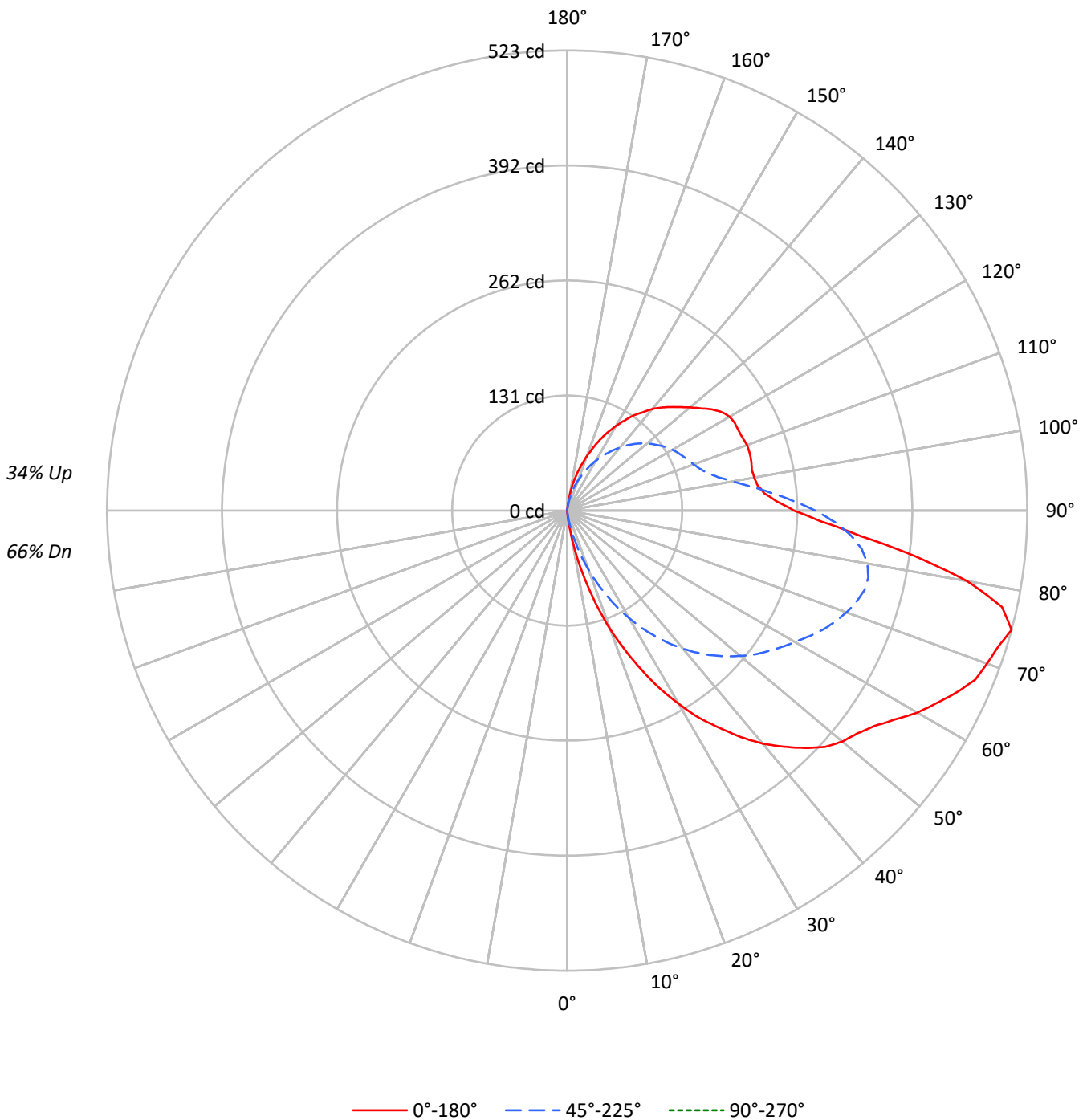
Lumens per Lamp: N/A
Luminaire Lumens: 1065.0 lumens
Efficiency: N/A
Efficacy: 76.6 lumens/watt
Spacing Criteria (0/90/45): - / - / -
Luminous Opening: (L: 0 ' x W: 1 ' x H: 0.5 '
CIE Type: Semi-Direct

Input Watts (W): 13.9
Input Voltage (V): NR
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: P226077

CATALOG NUMBER: FW-LD2-126-1000-50-PC-R4-LGW

Luminous Intensity Polar Plot





TEST NUMBER: P226077

CATALOG NUMBER: FW-LD2-126-1000-50-PC-R4-LGW

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	111	111	111	111	105	105	105	105	92	92	92		81	81	81		71	71	71	66
1	94	87	80	74	88	81	75	70	70	66	61		61	57	53		52	49	46	41
2	83	71	62	54	77	66	58	51	57	50	45		49	43	38		41	37	33	28
3	74	60	50	41	68	56	46	39	48	40	34		40	34	29		34	29	24	20
4	66	52	41	33	61	48	38	31	41	33	27		34	28	23		28	23	19	15
5	60	45	34	27	55	42	32	25	36	28	22		30	23	18		25	19	15	12
6	55	40	29	22	50	37	27	21	31	24	18		26	20	15		22	16	12	9
7	50	35	25	19	46	33	24	17	28	20	15		24	17	12		20	14	10	7
8	46	32	22	16	43	29	21	15	25	18	13		21	15	11		18	12	9	6
9	43	28	20	14	40	27	18	13	23	16	11		19	13	9		16	11	7	5
10	40	26	17	12	37	24	16	11	21	14	9		18	12	8		15	10	6	4

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	Luminous shape not found,		
5°	reference photometric report, or contact		
10°	the photometric lab for calculations.		
15°			
20°			
25°			
30°			
35°			
40°			
45°			
50°			
55°			
60°			
65°			
70°			
75°			
80°			
85°			



TEST NUMBER: P226077

CATALOG NUMBER: FW-LD2-126-1000-50-PC-R4-LGW

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	0.3	0.0
10°-20°	6.2	0.6
20°-30°	23.9	2.2
30°-40°	50.5	4.7
40°-50°	80.8	7.6
50°-60°	110.2	10.3
60°-70°	139.7	13.1
70°-80°	159.5	15.0
80°-90°	135.6	12.7
90°-100°	94.5	8.9
100°-110°	73.7	6.9
110°-120°	63.8	6.0
120°-130°	51.6	4.8
130°-140°	36.9	3.5
140°-150°	23.0	2.2
150°-160°	11.3	1.1
160°-170°	3.4	0.3
170°-180°	0.2	0.0
0°-30°	30.4	2.9
0°-40°	80.9	7.6
0°-60°	271.9	25.5
0°-90°	706.7	66.4
90°-120°	232.0	21.8
90°-150°	343.5	32.3
90°-180°	358.0	33.6
0°-180°	1065.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	0	0	0	0	0	
5°	2	1	0	0	0	1
15°	85	38	0	0	0	26
25°	199	106	0	0	0	94
35°	301	174	0	0	0	190
45°	382	233	0	0	0	295
55°	427	279	0	0	0	386
65°	489	320	0	0	0	484
75°	523	350	0	0	0	536
85°	336	324	0	0	0	302
90°	258	282	0	0	0	143
95°	225	233	0	0	0	183
105°	217	165	0	0	0	229
115°	215	146	0	0	0	214
125°	201	129	0	0	0	179
135°	166	107	0	0	0	129
145°	132	80	0	0	0	83
155°	90	51	0	0	0	42
165°	44	23	0	0	0	13
175°	1	1	0	0	0	1
180°	0	0	0	0	0	



TEST NUMBER: P226077

CATALOG NUMBER: FW-LD2-126-1000-50-PC-R4-LGW

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.0	0.0
5°	2.5	3.3	2.5	1.7	1.7	0.8	0.8	0.8	0.8	0.8	0.0
7.5°	14.2	14.2	13.4	10.0	6.7	3.3	1.7	0.8	0.8	0.8	0.0
10°	35.1	34.3	32.6	26.8	20.1	11.7	5.0	1.7	0.8	0.8	0.0
12.5°	60.2	58.6	54.4	47.7	36.8	24.3	12.6	3.3	0.8	0.8	0.0
15°	85.3	86.2	79.5	69.5	55.2	38.5	22.6	7.5	0.8	0.8	0.0
17.5°	114.6	113.8	107.1	93.7	76.1	55.2	33.5	14.2	1.7	0.8	0.0
20°	143.9	143.1	134.7	118.0	97.1	72.0	45.2	20.1	3.3	0.8	0.0
22.5°	170.7	170.7	160.7	143.1	118.0	89.5	57.7	27.6	5.9	0.8	0.0
25°	199.1	199.1	186.6	166.5	138.9	106.3	71.1	35.1	8.4	0.8	0.0
27.5°	227.6	225.1	211.7	189.1	159.8	124.7	84.5	43.5	10.9	0.8	0.0
30°	253.5	251.9	236.8	211.7	179.9	141.4	97.1	51.9	14.2	0.8	0.0
32.5°	279.5	277.0	261.1	234.3	199.1	158.1	109.6	60.2	17.6	0.8	0.0
35°	301.2	300.4	284.5	255.2	218.4	174.0	122.2	66.9	20.9	0.8	0.0
37.5°	324.7	322.2	304.6	274.5	236.8	189.9	133.9	73.6	24.3	0.8	0.0
40°	345.6	343.1	324.7	294.5	255.2	205.0	143.9	81.2	26.8	0.8	0.0
42.5°	364.0	361.5	343.1	311.3	271.9	219.2	154.0	87.0	30.1	0.8	0.0
45°	381.6	379.0	359.8	328.8	287.8	232.6	164.0	92.9	32.6	0.8	0.0
47.5°	397.5	394.1	375.7	343.9	302.9	245.2	173.2	98.7	35.1	0.8	0.0
50°	408.3	405.8	389.9	359.0	316.3	256.9	182.4	104.6	38.5	1.7	0.0
52.5°	415.9	414.2	401.6	373.2	329.7	268.6	190.8	109.6	41.0	1.7	0.0
55°	426.7	425.9	412.5	386.6	342.2	278.6	198.3	115.5	43.5	1.7	0.0
57.5°	441.8	440.1	425.9	400.0	354.8	288.7	205.8	120.5	46.0	2.5	0.0
60°	459.4	456.9	441.0	412.5	367.3	298.7	214.2	125.5	48.5	3.3	0.0
62.5°	473.6	471.1	456.9	426.7	380.7	309.6	221.7	130.5	51.0	3.3	0.0
65°	488.7	485.3	470.3	441.8	393.3	320.5	229.3	136.4	53.6	4.2	0.0
67.5°	502.1	499.5	485.3	456.0	405.8	329.7	236.8	140.6	56.1	4.2	0.0
70°	507.9	507.1	497.0	468.6	415.9	338.0	243.5	145.6	57.7	5.0	0.0
72.5°	513.8	512.9	504.6	476.9	424.2	344.7	249.4	148.9	59.4	5.9	0.0
75°	523.0	519.6	505.4	478.6	428.4	349.8	252.7	151.5	61.1	5.9	0.0
77.5°	506.2	507.1	495.4	472.8	426.7	350.6	255.2	153.1	61.9	5.9	0.0
80°	461.9	461.9	466.9	455.2	417.5	346.4	253.5	152.3	61.9	6.7	0.0
82.5°	399.1	399.1	420.1	426.7	400.8	338.0	248.5	149.8	61.1	6.7	0.0
85°	335.5	340.6	365.7	388.3	375.7	323.8	240.1	145.6	59.4	6.7	0.0
87.5°	289.5	290.4	313.8	345.6	346.4	304.6	228.4	139.7	57.7	6.7	0.0
90°	257.7	258.6	277.0	304.6	314.6	282.0	214.2	132.2	55.2	6.7	0.0
92.5°	238.5	238.5	249.4	269.4	280.3	256.9	197.5	123.8	51.9	6.7	0.0
95°	225.1	225.9	231.8	244.3	251.9	232.6	181.6	114.6	49.4	5.9	0.0
97.5°	218.4	219.2	221.7	227.6	227.6	210.0	165.7	105.4	46.0	5.9	0.0
100°	215.9	215.0	215.9	215.9	210.9	190.8	151.5	97.9	42.7	5.9	0.0
102.5°	215.0	215.0	213.4	208.4	198.3	175.7	138.9	90.4	40.2	5.0	0.0
105°	216.7	215.9	212.5	204.2	189.9	164.8	129.7	85.3	38.5	5.0	0.0
107.5°	217.6	216.7	211.7	200.8	184.1	158.1	123.0	81.2	36.8	5.0	0.0
110°	217.6	216.7	210.9	199.1	179.9	153.1	118.0	77.8	35.1	5.0	0.0



TEST NUMBER: P226077

CATALOG NUMBER: FW-LD2-126-1000-50-PC-R4-LGW

CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	215.9	215.0	209.2	197.5	177.4	148.9	114.6	75.3	34.3	4.2	0.0
115°	215.0	214.2	208.4	195.0	174.0	145.6	111.3	72.8	32.6	4.2	0.0
117.5°	215.0	214.2	206.7	191.6	170.7	142.2	107.9	70.3	31.0	4.2	0.0
120°	213.4	212.5	203.3	187.4	166.5	138.1	104.6	66.9	30.1	4.2	0.0
122.5°	208.4	206.7	197.5	181.6	160.7	133.9	100.4	64.4	28.4	4.2	0.0
125°	200.8	199.1	189.9	175.7	154.8	128.9	97.1	61.1	27.6	3.3	0.0
127.5°	190.8	189.9	181.6	168.2	149.8	123.8	92.9	58.6	25.9	3.3	0.0
130°	182.4	180.7	174.0	159.8	142.2	118.8	88.7	55.2	24.3	3.3	0.0
132.5°	174.0	172.4	165.7	153.1	135.6	113.0	83.7	51.9	22.6	3.3	0.0
135°	166.5	165.7	158.1	144.8	128.9	107.1	79.5	48.5	20.9	2.5	0.0
137.5°	159.0	158.1	149.8	137.2	121.3	100.4	74.5	45.2	20.1	2.5	0.0
140°	150.6	148.9	142.2	129.7	113.8	93.7	69.5	42.7	18.4	2.5	0.0
142.5°	140.6	140.6	133.0	120.5	105.4	87.0	64.4	39.3	16.7	1.7	0.0
145°	132.2	131.4	123.8	112.1	97.1	79.5	58.6	36.0	15.9	1.7	0.0
147.5°	121.3	120.5	114.6	102.9	89.5	72.8	53.6	32.6	14.2	1.7	0.0
150°	111.3	110.5	104.6	93.7	81.2	65.3	47.7	29.3	12.6	1.7	0.0
152.5°	100.4	99.6	94.6	84.5	72.8	58.6	41.8	25.9	10.9	0.8	0.0
155°	89.5	88.7	83.7	75.3	64.4	51.0	36.8	22.6	10.0	0.8	0.0
157.5°	77.0	77.0	72.8	65.3	55.2	43.5	31.8	19.2	8.4	0.8	0.0
160°	66.1	65.3	61.9	55.2	46.9	36.8	26.8	15.9	5.9	0.8	0.0
162.5°	54.4	54.4	51.9	46.0	38.5	30.1	21.8	11.7	4.2	0.8	0.0
165°	43.5	42.7	41.0	36.0	31.0	23.4	15.1	7.5	2.5	0.8	0.0
167.5°	32.6	32.6	31.0	27.6	22.6	15.1	9.2	5.0	1.7	0.8	0.0
170°	22.6	22.6	20.9	15.9	10.9	7.5	5.0	2.5	0.8	0.8	0.0
172.5°	8.4	8.4	7.5	5.0	4.2	3.3	2.5	0.8	0.8	0.8	0.0
175°	0.8	1.7	1.7	1.7	1.7	0.8	0.8	0.8	0.8	0.8	0.0
177.5°	0.0	0.0	0.0	0.0	0.8	0.8	0.8	0.8	0.8	0.8	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: P226077

CATALOG NUMBER: FW-LD2-126-1000-50-PC-R4-LGW

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
47.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
52.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
57.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
62.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P226077

CATALOG NUMBER: FW-LD2-126-1000-50-PC-R4-LGW

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	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
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)