

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: P226088

Luminaire Tested: **FW-LD2-612-1250-40-PC-R4-LGW**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P226088
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1705-064-10)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: FW-LD2-612-1250-40-PC-R4-LGW
Description: NIGHT CONDOR LED FLOODLIGHT
Light Source: (28) 4000 CCT, 80 CRI LEDS
ELO89N028E840M
Ballast/Driver: OSRAM
OT25WPRG1250C

Summary

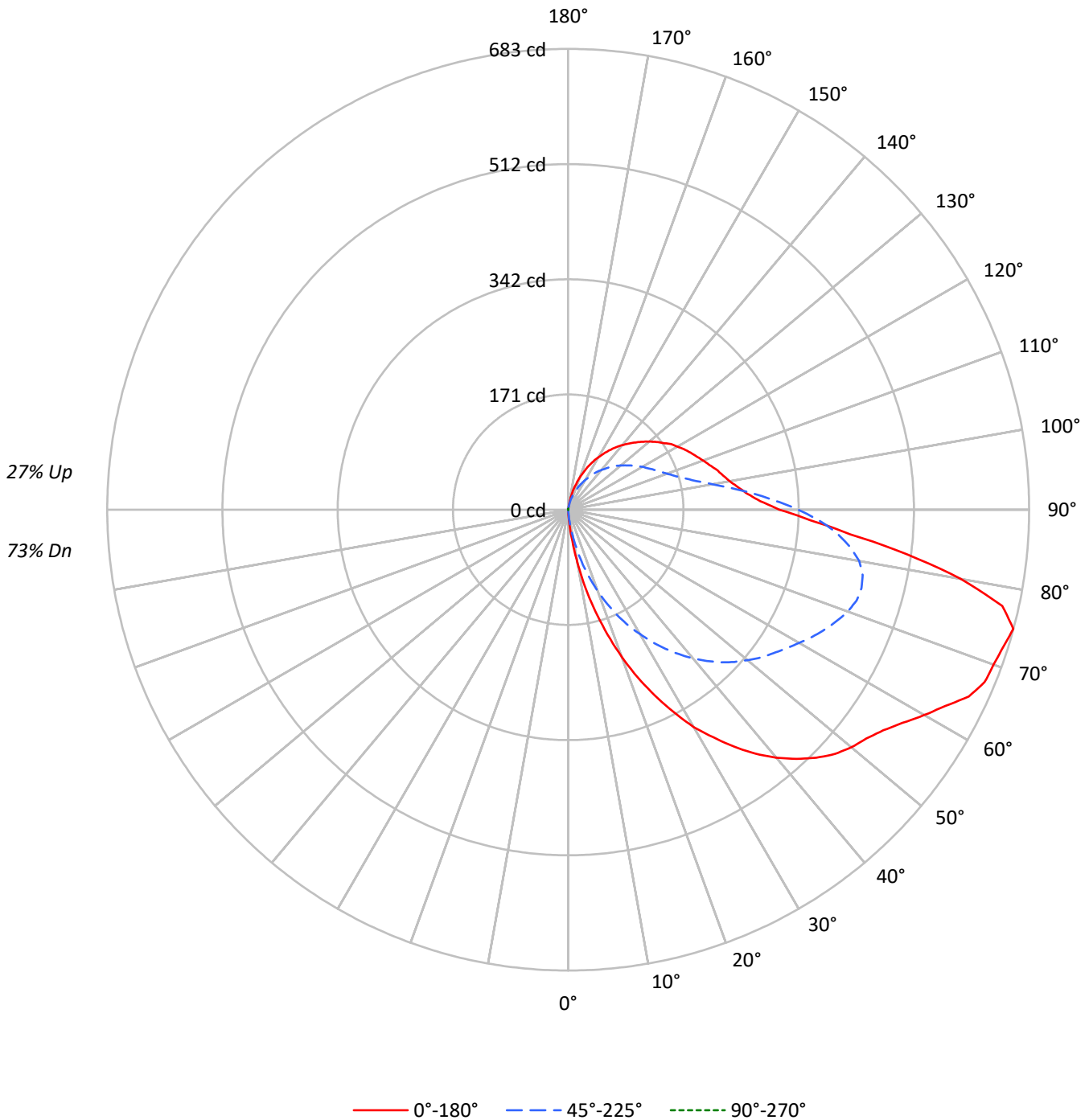
Lumens per Lamp: N/A
Luminaire Lumens: 1302.0 lumens
Efficiency: N/A
Efficacy: 72.7 lumens/watt
Spacing Criteria (0/90/45): - / - / -
Luminous Opening: (L: 0 ' x W: 0.5 ' x H: 1 '
CIE Type: Semi-Direct

Input Watts (W): 17.9
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: P226088

CATALOG NUMBER: FW-LD2-612-1250-40-PC-R4-LGW

Luminous Intensity Polar Plot





TEST NUMBER: P226088

CATALOG NUMBER: FW-LD2-612-1250-40-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	113	113	113	113	107	107	107	107	96	96	96	86	86	86	77	77	77	73
1	95	88	81	75	90	83	77	71	73	68	64	64	60	57	56	53	50	46
2	84	72	63	55	78	68	59	52	59	52	46	52	46	41	45	40	36	32
3	74	61	50	42	69	57	47	39	50	42	35	43	37	31	37	32	27	23
4	67	52	41	33	62	49	39	31	43	34	28	37	30	24	31	26	21	18
5	61	45	35	27	56	42	33	25	37	29	22	32	25	20	27	22	17	14
6	55	40	29	22	51	37	28	21	33	25	18	28	21	16	24	18	14	11
7	51	35	26	19	47	33	24	18	29	21	15	25	19	13	22	16	12	9
8	47	32	22	16	44	30	21	15	26	19	13	23	16	11	20	14	10	7
9	43	29	20	14	40	27	19	13	24	16	11	21	14	10	18	12	8	6
10	40	26	18	12	38	25	17	11	22	15	10	19	13	9	16	11	7	5

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: P226088

CATALOG NUMBER: FW-LD2-612-1250-40-PC-R4-LGW

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.0	0.1
10°-20°	12.0	0.9
20°-30°	37.8	2.9
30°-40°	73.4	5.6
40°-50°	112.0	8.6
50°-60°	147.9	11.4
60°-70°	185.0	14.2
70°-80°	206.4	15.9
80°-90°	169.1	13.0
90°-100°	111.6	8.6
100°-110°	78.9	6.1
110°-120°	60.5	4.6
120°-130°	45.4	3.5
130°-140°	31.2	2.4
140°-150°	18.6	1.4
150°-160°	8.7	0.7
160°-170°	2.4	0.2
170°-180°	0.1	0.0
<hr/>		
0°-30°	50.7	3.9
0°-40°	124.2	9.5
0°-60°	384.1	29.5
0°-90°	944.7	72.6
90°-120°	251.0	19.3
90°-150°	346.1	26.6
90°-180°	357.0	27.4
0°-180°	1302.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	0	0	0	0	0	
5°	21	9	0	0	0	4
15°	156	84	0	0	0	46
25°	304	173	0	0	0	142
35°	429	252	0	0	0	270
45°	520	320	0	0	0	402
55°	570	371	0	0	0	515
65°	655	420	0	0	0	644
75°	683	450	0	0	0	700
85°	420	400	0	0	0	381
90°	313	341	0	0	0	174
95°	267	275	0	0	0	214
105°	228	179	0	0	0	241
115°	200	140	0	0	0	199
125°	172	114	0	0	0	155
135°	141	90	0	0	0	110
145°	108	64	0	0	0	68
155°	71	39	0	0	0	33
165°	32	16	0	0	0	10
175°	0	1	0	0	0	0
180°	0	0	0	0	0	



TEST NUMBER: P226088

CATALOG NUMBER: FW-LD2-612-1250-40-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°	4.0	3.0	3.0	3.0	2.0	1.0	1.0	1.0	1.0	0.0	0.0
5°	21.0	20.0	19.0	17.0	13.0	9.0	5.0	2.0	1.0	0.0	0.0
7.5°	47.0	48.0	45.0	39.0	31.0	23.0	14.0	7.0	2.0	1.0	0.0
10°	81.0	81.0	77.0	68.0	55.0	41.0	26.0	13.0	3.0	1.0	0.0
12.5°	119.0	117.0	111.0	98.0	81.0	61.0	41.0	21.0	6.0	1.0	0.0
15°	156.0	153.0	145.0	131.0	110.0	84.0	56.0	30.0	10.0	1.0	0.0
17.5°	193.9	193.0	183.0	164.0	138.0	106.0	72.0	39.0	13.0	1.0	0.0
20°	231.9	229.9	216.9	195.9	166.0	129.0	89.0	49.0	17.0	1.0	0.0
22.5°	268.9	265.9	251.9	226.9	192.0	151.0	105.0	59.0	21.0	1.0	0.0
25°	303.9	300.9	286.9	256.9	218.9	173.0	121.0	69.0	26.0	1.0	0.0
27.5°	337.9	335.9	317.9	286.9	243.9	193.9	137.0	79.0	30.0	2.0	0.0
30°	371.9	367.9	348.9	313.9	267.9	212.9	153.0	89.0	34.0	2.0	0.0
32.5°	399.9	397.9	376.9	340.9	290.9	232.9	167.0	99.0	38.0	3.0	0.0
35°	428.9	426.9	404.9	366.9	313.9	251.9	182.0	108.0	42.0	3.0	0.0
37.5°	455.9	451.9	430.9	389.9	334.9	269.9	196.9	117.0	46.0	4.0	0.0
40°	479.9	476.9	453.9	412.9	355.9	287.9	209.9	124.0	49.0	4.0	0.0
42.5°	500.9	498.9	475.9	432.9	375.9	303.9	220.9	132.0	52.0	4.0	0.0
45°	519.9	516.9	493.9	451.9	393.9	319.9	231.9	139.0	55.0	4.0	0.0
47.5°	535.9	532.9	509.9	466.9	409.9	333.9	241.9	145.0	57.0	5.0	0.0
50°	547.9	545.9	524.9	483.9	424.9	346.9	251.9	150.0	60.0	5.0	0.0
52.5°	556.9	554.9	537.9	498.9	438.9	359.9	261.9	156.0	62.0	5.0	0.0
55°	569.9	567.9	550.9	513.9	453.9	370.9	269.9	161.0	65.0	5.0	0.0
57.5°	587.8	585.8	566.9	530.9	468.9	382.9	278.9	167.0	67.0	6.0	0.0
60°	608.8	606.8	585.8	545.9	483.9	394.9	287.9	173.0	70.0	6.0	0.0
62.5°	629.8	626.8	607.8	565.9	500.9	407.9	295.9	178.0	72.0	6.0	0.0
65°	654.8	650.8	626.8	583.8	515.9	419.9	304.9	183.0	74.0	6.0	0.0
67.5°	667.8	664.8	643.8	601.8	529.9	430.9	311.9	187.0	76.0	7.0	0.0
70°	670.8	668.8	655.8	614.8	541.9	440.9	318.9	192.0	78.0	7.0	0.0
72.5°	675.8	674.8	660.8	622.8	549.9	447.9	323.9	194.9	79.0	7.0	0.0
75°	682.8	678.8	657.8	620.8	551.9	449.9	326.9	195.9	80.0	7.0	0.0
77.5°	658.8	654.8	638.8	605.8	544.9	446.9	325.9	195.9	80.0	7.0	0.0
80°	590.8	592.8	596.8	579.9	528.9	437.9	319.9	193.0	78.0	7.0	0.0
82.5°	505.9	509.9	534.9	535.9	499.9	420.9	310.9	188.0	77.0	7.0	0.0
85°	419.9	424.9	459.9	485.9	465.9	399.9	297.9	181.0	74.0	7.0	0.0
87.5°	358.9	361.9	389.9	427.9	424.9	372.9	279.9	172.0	71.0	7.0	0.0
90°	312.9	315.9	336.9	372.9	381.9	340.9	260.9	162.0	67.0	6.0	0.0
92.5°	284.9	286.9	299.9	322.9	335.9	306.9	239.9	150.0	63.0	6.0	0.0
95°	266.9	266.9	272.9	286.9	293.9	274.9	217.9	138.0	59.0	6.0	0.0
97.5°	253.9	253.9	254.9	258.9	261.9	243.9	195.9	127.0	55.0	5.0	0.0
100°	242.9	241.9	240.9	238.9	234.9	216.9	176.0	116.0	51.0	5.0	0.0
102.5°	234.9	234.9	230.9	223.9	213.9	194.9	160.0	106.0	47.0	5.0	0.0
105°	227.9	226.9	221.9	211.9	199.9	179.0	146.0	98.0	43.0	5.0	0.0
107.5°	219.9	218.9	213.9	202.9	188.0	166.0	135.0	90.0	40.0	4.0	0.0
110°	212.9	212.9	205.9	194.9	178.0	156.0	125.0	84.0	38.0	4.0	0.0



TEST NUMBER: P226088

CATALOG NUMBER: FW-LD2-612-1250-40-PC-R4-LGW

CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	205.9	205.9	199.9	188.0	170.0	147.0	117.0	78.0	35.0	4.0	0.0
115°	199.9	198.9	193.0	181.0	163.0	140.0	110.0	73.0	33.0	3.0	0.0
117.5°	193.9	193.0	187.0	174.0	156.0	133.0	104.0	68.0	30.0	3.0	0.0
120°	187.0	186.0	180.0	167.0	149.0	127.0	98.0	64.0	28.0	3.0	0.0
122.5°	181.0	179.0	173.0	160.0	143.0	120.0	93.0	59.0	26.0	3.0	0.0
125°	172.0	172.0	165.0	153.0	136.0	114.0	87.0	55.0	23.0	2.0	0.0
127.5°	165.0	164.0	158.0	146.0	130.0	108.0	82.0	51.0	22.0	2.0	0.0
130°	157.0	156.0	150.0	139.0	123.0	102.0	77.0	48.0	20.0	2.0	0.0
132.5°	149.0	148.0	142.0	131.0	116.0	96.0	72.0	44.0	18.0	2.0	0.0
135°	141.0	141.0	134.0	123.0	109.0	90.0	67.0	41.0	16.0	2.0	0.0
137.5°	133.0	132.0	127.0	116.0	101.0	83.0	62.0	37.0	15.0	2.0	0.0
140°	125.0	124.0	118.0	108.0	94.0	77.0	57.0	34.0	13.0	1.0	0.0
142.5°	117.0	116.0	110.0	100.0	87.0	71.0	52.0	30.0	12.0	1.0	0.0
145°	108.0	107.0	102.0	92.0	79.0	64.0	46.0	27.0	11.0	1.0	0.0
147.5°	99.0	99.0	93.0	84.0	72.0	57.0	41.0	24.0	9.0	1.0	0.0
150°	90.0	90.0	84.0	76.0	64.0	51.0	36.0	21.0	8.0	1.0	0.0
152.5°	81.0	80.0	76.0	68.0	57.0	45.0	31.0	18.0	7.0	1.0	0.0
155°	71.0	71.0	66.0	60.0	50.0	39.0	27.0	15.0	6.0	1.0	0.0
157.5°	61.0	61.0	57.0	51.0	42.0	32.0	22.0	12.0	5.0	1.0	0.0
160°	52.0	51.0	48.0	43.0	35.0	27.0	18.0	10.0	4.0	1.0	1.0
162.5°	41.0	41.0	39.0	34.0	28.0	21.0	14.0	8.0	3.0	1.0	0.0
165°	32.0	32.0	30.0	26.0	22.0	16.0	10.0	5.0	2.0	1.0	0.0
167.5°	23.0	23.0	21.0	19.0	14.0	10.0	6.0	4.0	2.0	1.0	1.0
170°	12.0	12.0	11.0	9.0	7.0	5.0	3.0	2.0	1.0	1.0	1.0
172.5°	2.0	2.0	2.0	2.0	2.0	1.0	1.0	1.0	1.0	1.0	0.0
175°	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0	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: P226088

CATALOG NUMBER: FW-LD2-612-1250-40-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: P226088

CATALOG NUMBER: FW-LD2-612-1250-40-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)