

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: P226081

Luminaire Tested: **FW-LD2-612-750-35-PC-R4-LGW**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P226081
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-LD2-612-750-35-PC-R4-LGW
Description: NIGHT CONDOR LED FLOODLIGHT
Light Source: (28) 3500 CCT, 80 CRI LEDS
 EL089N028E835M
Ballast/Driver: OSRAM
 OT25WPRG1250C

Summary

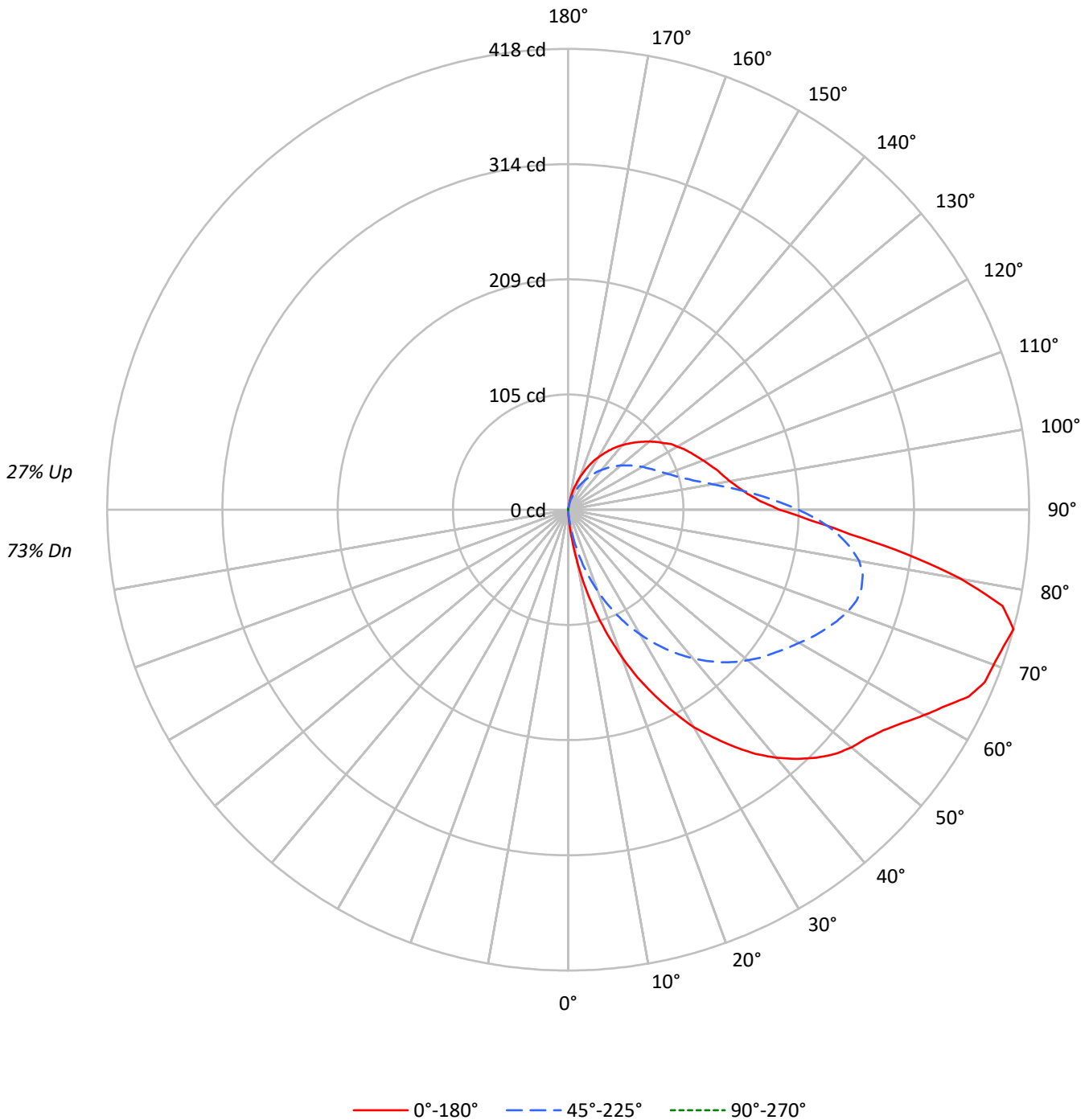
Lumens per Lamp: N/A
Luminaire Lumens: 797.0 lumens
Efficiency: N/A
Efficacy: 76.6 lumens/watt
Spacing Criteria (0/90/45): - / - / -
Luminous Opening: (L: 0 ' x W: 0.5 ' x H: 1 '
CIE Type: Semi-Direct

Input Watts (W): 10.4
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: P226081

CATALOG NUMBER: FW-LD2-612-750-35-PC-R4-LGW

Luminous Intensity Polar Plot





TEST NUMBER: P226081

CATALOG NUMBER: FW-LD2-612-750-35-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: P226081

CATALOG NUMBER: FW-LD2-612-750-35-PC-R4-LGW

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	0.6	0.1
10°-20°	7.3	0.9
20°-30°	23.1	2.9
30°-40°	44.9	5.6
40°-50°	68.5	8.6
50°-60°	90.6	11.4
60°-70°	113.3	14.2
70°-80°	126.4	15.9
80°-90°	103.5	13.0
90°-100°	68.3	8.6
100°-110°	48.3	6.1
110°-120°	37.0	4.6
120°-130°	27.8	3.5
130°-140°	19.1	2.4
140°-150°	11.4	1.4
150°-160°	5.3	0.7
160°-170°	1.5	0.2
170°-180°	0.1	0.0
0°-30°	31.1	3.9
0°-40°	76.0	9.5
0°-60°	235.1	29.5
0°-90°	578.3	72.6
90°-120°	153.6	19.3
90°-150°	211.9	26.6
90°-180°	219.0	27.5
0°-180°	797.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	0	0	0	0	0	
5°	13	6	0	0	0	2
15°	96	51	0	0	0	28
25°	186	106	0	0	0	87
35°	262	154	0	0	0	165
45°	318	196	0	0	0	246
55°	349	227	0	0	0	315
65°	401	257	0	0	0	394
75°	418	275	0	0	0	429
85°	257	245	0	0	0	233
90°	192	209	0	0	0	106
95°	163	168	0	0	0	131
105°	140	110	0	0	0	148
115°	122	86	0	0	0	122
125°	105	70	0	0	0	95
135°	86	55	0	0	0	67
145°	66	39	0	0	0	42
155°	44	24	0	0	0	20
165°	20	10	0	0	0	6
175°	0	1	0	0	0	0
180°	0	0	0	0	0	



TEST NUMBER: P226081

CATALOG NUMBER: FW-LD2-612-750-35-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°	2.4	1.8	1.8	1.8	1.2	0.6	0.6	0.6	0.6	0.0	0.0
5°	12.9	12.2	11.6	10.4	8.0	5.5	3.1	1.2	0.6	0.0	0.0
7.5°	28.8	29.4	27.5	23.9	19.0	14.1	8.6	4.3	1.2	0.6	0.0
10°	49.6	49.6	47.1	41.6	33.7	25.1	15.9	8.0	1.8	0.6	0.0
12.5°	72.8	71.6	67.9	60.0	49.6	37.3	25.1	12.9	3.7	0.6	0.0
15°	95.5	93.6	88.7	80.2	67.3	51.4	34.3	18.4	6.1	0.6	0.0
17.5°	118.7	118.1	112.0	100.4	84.5	64.9	44.1	23.9	8.0	0.6	0.0
20°	142.0	140.8	132.8	119.9	101.6	78.9	54.5	30.0	10.4	0.6	0.0
22.5°	164.6	162.8	154.2	138.9	117.5	92.4	64.3	36.1	12.9	0.6	0.0
25°	186.0	184.2	175.6	157.3	134.0	105.9	74.0	42.2	15.9	0.6	0.0
27.5°	206.8	205.6	194.6	175.6	149.3	118.7	83.8	48.3	18.4	1.2	0.0
30°	227.7	225.2	213.6	192.2	164.0	130.4	93.6	54.5	20.8	1.2	0.0
32.5°	244.8	243.6	230.7	208.7	178.1	142.6	102.2	60.6	23.3	1.8	0.0
35°	262.5	261.3	247.9	224.6	192.2	154.2	111.4	66.1	25.7	1.8	0.0
37.5°	279.1	276.6	263.8	238.7	205.0	165.2	120.6	71.6	28.2	2.4	0.0
40°	293.7	291.9	277.8	252.7	217.9	176.2	128.5	75.9	30.0	2.4	0.0
42.5°	306.6	305.4	291.3	265.0	230.1	186.0	135.2	80.8	31.8	2.4	0.0
45°	318.2	316.4	302.3	276.6	241.1	195.8	142.0	85.1	33.7	2.4	0.0
47.5°	328.0	326.2	312.1	285.8	250.9	204.4	148.1	88.7	34.9	3.1	0.0
50°	335.4	334.1	321.3	296.2	260.1	212.4	154.2	91.8	36.7	3.1	0.0
52.5°	340.9	339.6	329.2	305.4	268.7	220.3	160.3	95.5	37.9	3.1	0.0
55°	348.8	347.6	337.2	314.6	277.8	227.0	165.2	98.5	39.8	3.1	0.0
57.5°	359.8	358.6	347.0	325.0	287.0	234.4	170.7	102.2	41.0	3.7	0.0
60°	372.7	371.5	358.6	334.1	296.2	241.7	176.2	105.9	42.8	3.7	0.0
62.5°	385.5	383.7	372.1	346.4	306.6	249.7	181.1	108.9	44.1	3.7	0.0
65°	400.8	398.4	383.7	357.4	315.8	257.0	186.7	112.0	45.3	3.7	0.0
67.5°	408.8	407.0	394.1	368.4	324.3	263.8	190.9	114.4	46.5	4.3	0.0
70°	410.6	409.4	401.5	376.4	331.7	269.9	195.2	117.5	47.7	4.3	0.0
72.5°	413.7	413.1	404.5	381.3	336.6	274.2	198.3	119.3	48.3	4.3	0.0
75°	418.0	415.5	402.7	380.0	337.8	275.4	200.1	119.9	49.0	4.3	0.0
77.5°	403.3	400.8	391.1	370.9	333.5	273.6	199.5	119.9	49.0	4.3	0.0
80°	361.7	362.9	365.4	354.9	323.7	268.0	195.8	118.1	47.7	4.3	0.0
82.5°	309.7	312.1	327.4	328.0	306.0	257.6	190.3	115.1	47.1	4.3	0.0
85°	257.0	260.1	281.5	297.4	285.2	244.8	182.4	110.8	45.3	4.3	0.0
87.5°	219.7	221.5	238.7	261.9	260.1	228.3	171.4	105.3	43.5	4.3	0.0
90°	191.5	193.4	206.2	228.3	233.8	208.7	159.7	99.1	41.0	3.7	0.0
92.5°	174.4	175.6	183.6	197.7	205.6	187.9	146.9	91.8	38.6	3.7	0.0
95°	163.4	163.4	167.1	175.6	179.9	168.3	133.4	84.5	36.1	3.7	0.0
97.5°	155.4	155.4	156.1	158.5	160.3	149.3	119.9	77.7	33.7	3.1	0.0
100°	148.7	148.1	147.5	146.3	143.8	132.8	107.7	71.0	31.2	3.1	0.0
102.5°	143.8	143.8	141.4	137.1	131.0	119.3	97.9	64.9	28.8	3.1	0.0
105°	139.5	138.9	135.9	129.7	122.4	109.5	89.3	60.0	26.3	3.1	0.0
107.5°	134.6	134.0	131.0	124.2	115.1	101.6	82.6	55.1	24.5	2.4	0.0
110°	130.4	130.4	126.1	119.3	108.9	95.5	76.5	51.4	23.3	2.4	0.0



TEST NUMBER: P226081

CATALOG NUMBER: FW-LD2-612-750-35-PC-R4-LGW

CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	126.1	126.1	122.4	115.1	104.0	90.0	71.6	47.7	21.4	2.4	0.0
115°	122.4	121.8	118.1	110.8	99.8	85.7	67.3	44.7	20.2	1.8	0.0
117.5°	118.7	118.1	114.4	106.5	95.5	81.4	63.6	41.6	18.4	1.8	0.0
120°	114.4	113.8	110.2	102.2	91.2	77.7	60.0	39.2	17.1	1.8	0.0
122.5°	110.8	109.5	105.9	97.9	87.5	73.4	56.9	36.1	15.9	1.8	0.0
125°	105.3	105.3	101.0	93.6	83.2	69.8	53.2	33.7	14.1	1.2	0.0
127.5°	101.0	100.4	96.7	89.3	79.6	66.1	50.2	31.2	13.5	1.2	0.0
130°	96.1	95.5	91.8	85.1	75.3	62.4	47.1	29.4	12.2	1.2	0.0
132.5°	91.2	90.6	86.9	80.2	71.0	58.7	44.1	26.9	11.0	1.2	0.0
135°	86.3	86.3	82.0	75.3	66.7	55.1	41.0	25.1	9.8	1.2	0.0
137.5°	81.4	80.8	77.7	71.0	61.8	50.8	37.9	22.6	9.2	1.2	0.0
140°	76.5	75.9	72.2	66.1	57.5	47.1	34.9	20.8	8.0	0.6	0.0
142.5°	71.6	71.0	67.3	61.2	53.2	43.5	31.8	18.4	7.3	0.6	0.0
145°	66.1	65.5	62.4	56.3	48.3	39.2	28.2	16.5	6.7	0.6	0.0
147.5°	60.6	60.6	56.9	51.4	44.1	34.9	25.1	14.7	5.5	0.6	0.0
150°	55.1	55.1	51.4	46.5	39.2	31.2	22.0	12.9	4.9	0.6	0.0
152.5°	49.6	49.0	46.5	41.6	34.9	27.5	19.0	11.0	4.3	0.6	0.0
155°	43.5	43.5	40.4	36.7	30.6	23.9	16.5	9.2	3.7	0.6	0.0
157.5°	37.3	37.3	34.9	31.2	25.7	19.6	13.5	7.3	3.1	0.6	0.0
160°	31.8	31.2	29.4	26.3	21.4	16.5	11.0	6.1	2.4	0.6	0.6
162.5°	25.1	25.1	23.9	20.8	17.1	12.9	8.6	4.9	1.8	0.6	0.0
165°	19.6	19.6	18.4	15.9	13.5	9.8	6.1	3.1	1.2	0.6	0.0
167.5°	14.1	14.1	12.9	11.6	8.6	6.1	3.7	2.4	1.2	0.6	0.6
170°	7.3	7.3	6.7	5.5	4.3	3.1	1.8	1.2	0.6	0.6	0.6
172.5°	1.2	1.2	1.2	1.2	1.2	0.6	0.6	0.6	0.6	0.6	0.0
175°	0.0	0.0	0.0	0.0	0.6	0.6	0.6	0.6	0.6	0.6	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.6	0.6	0.6	0.6	0.6	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: P226081

CATALOG NUMBER: FW-LD2-612-750-35-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: P226081

CATALOG NUMBER: FW-LD2-612-750-35-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)