

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: P226087

Luminaire Tested: **FW-LD2-612-1250-35-PC-R4-LGW**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-79-08  
Report Number: P226087  
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-LD2-612-1250-35-PC-R4-LGW  
Description: NIGHT CONDOR LED FLOODLIGHT  
Light Source: (28) 3500 CCT, 80 CRI LEDS  
                  EL089N028E835M  
Ballast/Driver: OSRAM  
                  OT25WPRG1250C

**Summary**

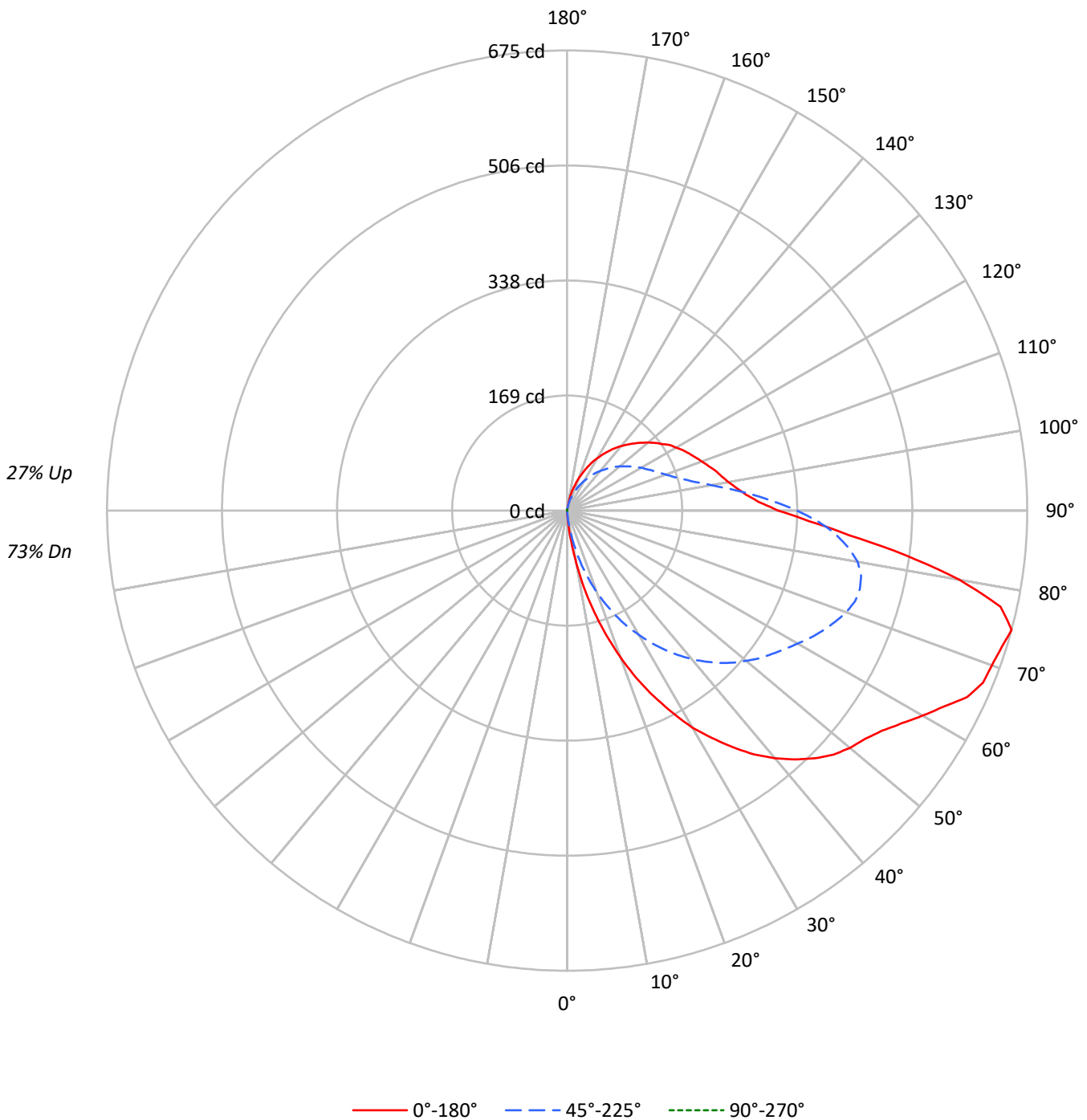
Lumens per Lamp: N/A  
Luminaire Lumens: 1287.0 lumens  
Efficiency: N/A  
Efficacy: 71.9 lumens/watt  
Spacing Criteria (0/90/45): - / - / -  
Luminous Opening: (L: 0 ' x W: 0.5 ' x H: 1 '  
CIE Type: Semi-Direct

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

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CATALOG NUMBER: FW-LD2-612-1250-35-PC-R4-LGW

### 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	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°			



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1.0	0.1
10°-20°	11.9	0.9
20°-30°	37.4	2.9
30°-40°	72.6	5.6
40°-50°	110.7	8.6
50°-60°	146.2	11.4
60°-70°	182.9	14.2
70°-80°	204.1	15.9
80°-90°	167.2	13.0
90°-100°	110.3	8.6
100°-110°	78.0	6.1
110°-120°	59.8	4.6
120°-130°	44.8	3.5
130°-140°	30.8	2.4
140°-150°	18.4	1.4
150°-160°	8.6	0.7
160°-170°	2.4	0.2
170°-180°	0.1	0.0
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0°-30°	50.2	3.9
0°-40°	122.7	9.5
0°-60°	379.6	29.5
0°-90°	933.8	72.6
90°-120°	248.1	19.3
90°-150°	342.1	26.6
90°-180°	353.0	27.4
0°-180°	1287.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	0	0	0	0	0	
5°	21	9	0	0	0	4
15°	154	83	0	0	0	46
25°	300	171	0	0	0	141
35°	424	249	0	0	0	267
45°	514	316	0	0	0	397
55°	563	367	0	0	0	509
65°	647	415	0	0	0	636
75°	675	445	0	0	0	692
85°	415	395	0	0	0	377
90°	309	337	0	0	0	172
95°	264	272	0	0	0	211
105°	225	177	0	0	0	238
115°	198	138	0	0	0	196
125°	170	113	0	0	0	153
135°	139	89	0	0	0	108
145°	107	63	0	0	0	67
155°	70	38	0	0	0	33
165°	32	16	0	0	0	10
175°	0	1	0	0	0	0
180°	0	0	0	0	0	



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**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°	20.8	19.8	18.8	16.8	12.8	8.9	4.9	2.0	1.0	0.0	0.0
7.5°	46.4	47.4	44.5	38.5	30.6	22.7	13.8	6.9	2.0	1.0	0.0
10°	80.0	80.0	76.1	67.2	54.4	40.5	25.7	12.8	3.0	1.0	0.0
12.5°	117.6	115.6	109.7	96.8	80.0	60.3	40.5	20.8	5.9	1.0	0.0
15°	154.2	151.2	143.3	129.5	108.7	83.0	55.3	29.6	9.9	1.0	0.0
17.5°	191.7	190.7	180.8	162.1	136.4	104.8	71.2	38.5	12.8	1.0	0.0
20°	229.3	227.3	214.4	193.7	164.0	127.5	88.0	48.4	16.8	1.0	0.0
22.5°	265.8	262.9	249.0	224.3	189.7	149.2	103.8	58.3	20.8	1.0	0.0
25°	300.4	297.5	283.6	254.0	216.4	171.0	119.6	68.2	25.7	1.0	0.0
27.5°	334.0	332.0	314.3	283.6	241.1	191.7	135.4	78.1	29.6	2.0	0.0
30°	367.6	363.7	344.9	310.3	264.8	210.5	151.2	88.0	33.6	2.0	0.0
32.5°	395.3	393.3	372.6	337.0	287.6	230.3	165.0	97.8	37.6	3.0	0.0
35°	423.9	422.0	400.2	362.7	310.3	249.0	179.9	106.7	41.5	3.0	0.0
37.5°	450.6	446.7	425.9	385.4	331.1	266.8	194.7	115.6	45.5	4.0	0.0
40°	474.3	471.4	448.7	408.1	351.8	284.6	207.5	122.5	48.4	4.0	0.0
42.5°	495.1	493.1	470.4	427.9	371.6	300.4	218.4	130.4	51.4	4.0	0.0
45°	513.9	510.9	488.2	446.7	389.4	316.2	229.3	137.4	54.4	4.0	0.0
47.5°	529.7	526.7	504.0	461.5	405.2	330.1	239.2	143.3	56.3	4.9	0.0
50°	541.5	539.6	518.8	478.3	420.0	342.9	249.0	148.2	59.3	4.9	0.0
52.5°	550.4	548.5	531.7	493.1	433.8	355.8	258.9	154.2	61.3	4.9	0.0
55°	563.3	561.3	544.5	507.9	448.7	366.6	266.8	159.1	64.2	4.9	0.0
57.5°	581.1	579.1	560.3	524.7	463.5	378.5	275.7	165.0	66.2	5.9	0.0
60°	601.8	599.9	579.1	539.6	478.3	390.3	284.6	171.0	69.2	5.9	0.0
62.5°	622.6	619.6	600.8	559.3	495.1	403.2	292.5	175.9	71.2	5.9	0.0
65°	647.3	643.3	619.6	577.1	509.9	415.1	301.4	180.8	73.1	5.9	0.0
67.5°	660.1	657.2	636.4	594.9	523.8	425.9	308.3	184.8	75.1	6.9	0.0
70°	663.1	661.1	648.3	607.8	535.6	435.8	315.2	189.7	77.1	6.9	0.0
72.5°	668.0	667.1	653.2	615.7	543.5	442.7	320.2	192.7	78.1	6.9	0.0
75°	675.0	671.0	650.3	613.7	545.5	444.7	323.1	193.7	79.1	6.9	0.0
77.5°	651.2	647.3	631.5	598.9	538.6	441.7	322.2	193.7	79.1	6.9	0.0
80°	584.0	586.0	590.0	573.2	522.8	432.8	316.2	190.7	77.1	6.9	0.0
82.5°	500.0	504.0	528.7	529.7	494.1	416.0	307.3	185.8	76.1	6.9	0.0
85°	415.1	420.0	454.6	480.3	460.5	395.3	294.5	178.9	73.1	6.9	0.0
87.5°	354.8	357.7	385.4	423.0	420.0	368.6	276.7	170.0	70.2	6.9	0.0
90°	309.3	312.3	333.0	368.6	377.5	337.0	257.9	160.1	66.2	5.9	0.0
92.5°	281.6	283.6	296.5	319.2	332.0	303.4	237.2	148.2	62.3	5.9	0.0
95°	263.9	263.9	269.8	283.6	290.5	271.8	215.4	136.4	58.3	5.9	0.0
97.5°	251.0	251.0	252.0	256.0	258.9	241.1	193.7	125.5	54.4	4.9	0.0
100°	240.1	239.2	238.2	236.2	232.2	214.4	173.9	114.6	50.4	4.9	0.0
102.5°	232.2	232.2	228.3	221.4	211.5	192.7	158.1	104.8	46.4	4.9	0.0
105°	225.3	224.3	219.4	209.5	197.6	176.9	144.3	96.8	42.5	4.9	0.0
107.5°	217.4	216.4	211.5	200.6	185.8	164.0	133.4	88.9	39.5	4.0	0.0
110°	210.5	210.5	203.6	192.7	175.9	154.2	123.5	83.0	37.6	4.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	203.6	203.6	197.6	185.8	168.0	145.3	115.6	77.1	34.6	4.0	0.0
115°	197.6	196.7	190.7	178.9	161.1	138.4	108.7	72.1	32.6	3.0	0.0
117.5°	191.7	190.7	184.8	172.0	154.2	131.4	102.8	67.2	29.6	3.0	0.0
120°	184.8	183.8	177.9	165.0	147.2	125.5	96.8	63.2	27.7	3.0	0.0
122.5°	178.9	176.9	171.0	158.1	141.3	118.6	91.9	58.3	25.7	3.0	0.0
125°	170.0	170.0	163.1	151.2	134.4	112.7	86.0	54.4	22.7	2.0	0.0
127.5°	163.1	162.1	156.1	144.3	128.5	106.7	81.0	50.4	21.7	2.0	0.0
130°	155.2	154.2	148.2	137.4	121.6	100.8	76.1	47.4	19.8	2.0	0.0
132.5°	147.2	146.3	140.3	129.5	114.6	94.9	71.2	43.5	17.8	2.0	0.0
135°	139.3	139.3	132.4	121.6	107.7	88.9	66.2	40.5	15.8	2.0	0.0
137.5°	131.4	130.4	125.5	114.6	99.8	82.0	61.3	36.6	14.8	2.0	0.0
140°	123.5	122.5	116.6	106.7	92.9	76.1	56.3	33.6	12.8	1.0	0.0
142.5°	115.6	114.6	108.7	98.8	86.0	70.2	51.4	29.6	11.9	1.0	0.0
145°	106.7	105.7	100.8	90.9	78.1	63.2	45.5	26.7	10.9	1.0	0.0
147.5°	97.8	97.8	91.9	83.0	71.2	56.3	40.5	23.7	8.9	1.0	0.0
150°	88.9	88.9	83.0	75.1	63.2	50.4	35.6	20.8	7.9	1.0	0.0
152.5°	80.0	79.1	75.1	67.2	56.3	44.5	30.6	17.8	6.9	1.0	0.0
155°	70.2	70.2	65.2	59.3	49.4	38.5	26.7	14.8	5.9	1.0	0.0
157.5°	60.3	60.3	56.3	50.4	41.5	31.6	21.7	11.9	4.9	1.0	0.0
160°	51.4	50.4	47.4	42.5	34.6	26.7	17.8	9.9	4.0	1.0	1.0
162.5°	40.5	40.5	38.5	33.6	27.7	20.8	13.8	7.9	3.0	1.0	0.0
165°	31.6	31.6	29.6	25.7	21.7	15.8	9.9	4.9	2.0	1.0	0.0
167.5°	22.7	22.7	20.8	18.8	13.8	9.9	5.9	4.0	2.0	1.0	1.0
170°	11.9	11.9	10.9	8.9	6.9	4.9	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



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**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: P226087

CATALOG NUMBER: FW-LD2-612-1250-35-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)