

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: P226076

Luminaire Tested: **FW-LD2-126-1000-40-PC-R4-LGW**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P226076
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-LD2-126-1000-40-PC-R4-LGW
Description: NIGHT CONDOR LED FLOODLIGHT
Light Source: (56) 4000 CCT, 80 CRI LEDS
 ELO89N028E840M
Ballast/Driver: OSRAM
 OT25WPRG1250C

Summary

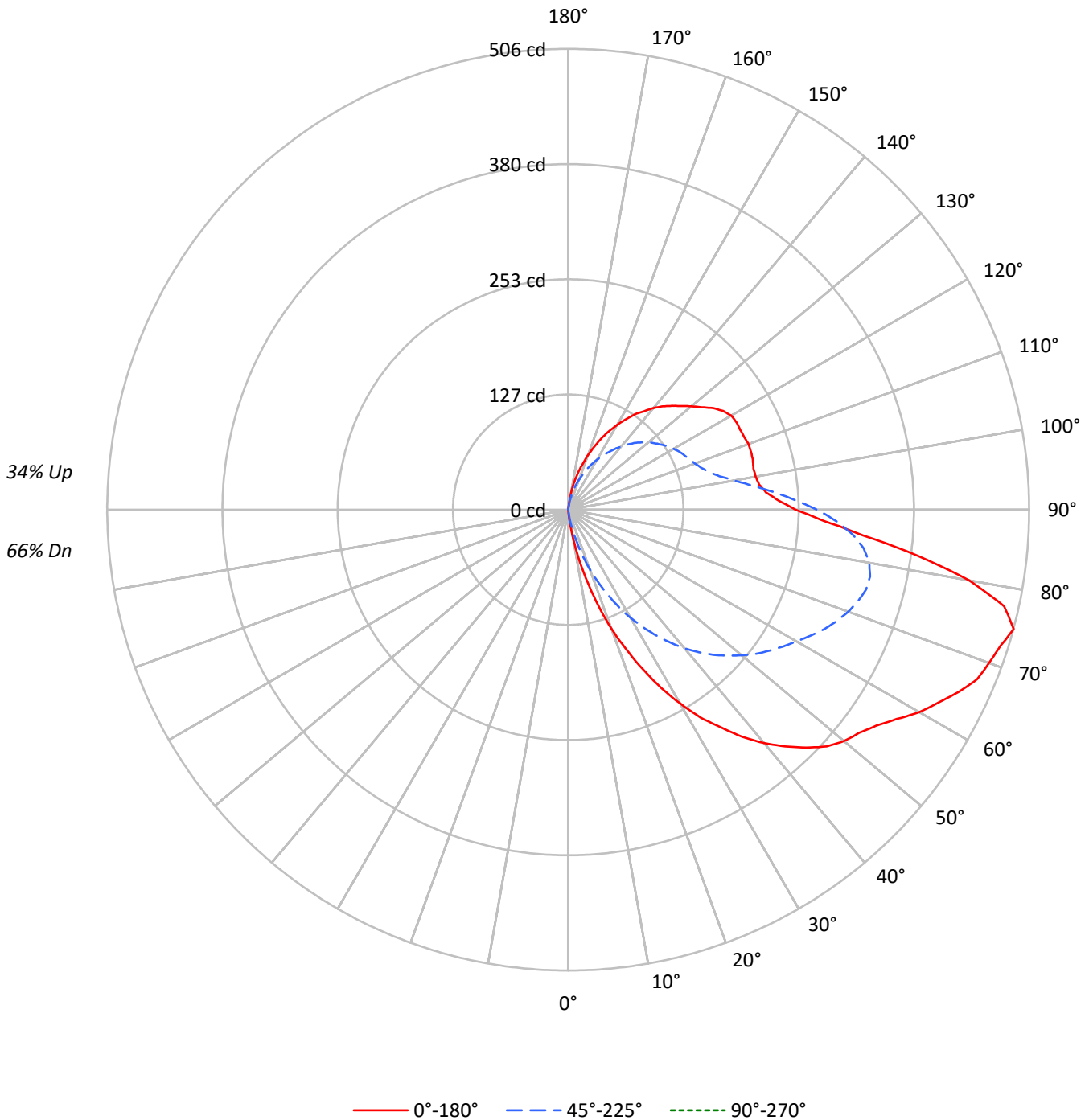
Lumens per Lamp: N/A
Luminaire Lumens: 1031.0 lumens
Efficiency: N/A
Efficacy: 74.2 lumens/watt
Spacing Criteria (0/90/45): - / - / -
Luminous Opening: (L: 0 ' x W: 1 ' x H: 0.5 '
CIE Type: Semi-Direct

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

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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	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°			



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	0.3	0.0
10°-20°	6.0	0.6
20°-30°	23.1	2.2
30°-40°	48.9	4.7
40°-50°	78.2	7.6
50°-60°	106.7	10.3
60°-70°	135.2	13.1
70°-80°	154.4	15.0
80°-90°	131.3	12.7
90°-100°	91.4	8.9
100°-110°	71.4	6.9
110°-120°	61.7	6.0
120°-130°	50.0	4.8
130°-140°	35.7	3.5
140°-150°	22.3	2.2
150°-160°	10.9	1.1
160°-170°	3.2	0.3
170°-180°	0.2	0.0
0°-30°	29.4	2.9
0°-40°	78.3	7.6
0°-60°	263.2	25.5
0°-90°	684.1	66.4
90°-120°	224.6	21.8
90°-150°	332.5	32.3
90°-180°	347.0	33.7
0°-180°	1031.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	0	0	0	0	0	
5°	2	1	0	0	0	1
15°	83	37	0	0	0	26
25°	193	103	0	0	0	91
35°	292	168	0	0	0	184
45°	369	225	0	0	0	286
55°	413	270	0	0	0	374
65°	473	310	0	0	0	468
75°	506	339	0	0	0	519
85°	325	314	0	0	0	293
90°	250	273	0	0	0	138
95°	218	225	0	0	0	177
105°	210	160	0	0	0	222
115°	208	141	0	0	0	207
125°	194	125	0	0	0	174
135°	161	104	0	0	0	125
145°	128	77	0	0	0	80
155°	87	49	0	0	0	40
165°	42	23	0	0	0	13
175°	1	1	0	0	0	1
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°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.0	0.0
5°	2.4	3.2	2.4	1.6	1.6	0.8	0.8	0.8	0.8	0.8	0.0
7.5°	13.8	13.8	13.0	9.7	6.5	3.2	1.6	0.8	0.8	0.8	0.0
10°	34.0	33.2	31.6	25.9	19.4	11.3	4.9	1.6	0.8	0.8	0.0
12.5°	58.3	56.7	52.7	46.2	35.6	23.5	12.2	3.2	0.8	0.8	0.0
15°	82.6	83.4	77.0	67.2	53.5	37.3	21.9	7.3	0.8	0.8	0.0
17.5°	111.0	110.2	103.7	90.7	73.7	53.5	32.4	13.8	1.6	0.8	0.0
20°	139.3	138.5	130.4	114.2	94.0	69.7	43.7	19.4	3.2	0.8	0.0
22.5°	165.2	165.2	155.5	138.5	114.2	86.7	55.9	26.7	5.7	0.8	0.0
25°	192.8	192.8	180.6	161.2	134.5	102.9	68.9	34.0	8.1	0.8	0.0
27.5°	220.3	217.9	204.9	183.1	154.7	120.7	81.8	42.1	10.5	0.8	0.0
30°	245.4	243.8	229.2	204.9	174.2	136.9	94.0	50.2	13.8	0.8	0.0
32.5°	270.6	268.1	252.7	226.8	192.8	153.1	106.1	58.3	17.0	0.8	0.0
35°	291.6	290.8	275.4	247.1	211.4	168.5	118.3	64.8	20.3	0.8	0.0
37.5°	314.3	311.9	294.9	265.7	229.2	183.9	129.6	71.3	23.5	0.8	0.0
40°	334.5	332.1	314.3	285.1	247.1	198.5	139.3	78.6	25.9	0.8	0.0
42.5°	352.4	349.9	332.1	301.3	263.3	212.2	149.0	84.2	29.2	0.8	0.0
45°	369.4	366.9	348.3	318.3	278.7	225.2	158.8	89.9	31.6	0.8	0.0
47.5°	384.8	381.5	363.7	332.9	293.2	237.3	167.7	95.6	34.0	0.8	0.0
50°	395.3	392.9	377.5	347.5	306.2	248.7	176.6	101.3	37.3	1.6	0.0
52.5°	402.6	401.0	388.8	361.3	319.2	260.0	184.7	106.1	39.7	1.6	0.0
55°	413.1	412.3	399.4	374.2	331.3	269.7	192.0	111.8	42.1	1.6	0.0
57.5°	427.7	426.1	412.3	387.2	343.5	279.5	199.3	116.6	44.6	2.4	0.0
60°	444.7	442.3	426.9	399.4	355.6	289.2	207.4	121.5	47.0	3.2	0.0
62.5°	458.5	456.1	442.3	413.1	368.6	299.7	214.7	126.4	49.4	3.2	0.0
65°	473.1	469.8	455.2	427.7	380.7	310.2	222.0	132.0	51.8	4.1	0.0
67.5°	486.0	483.6	469.8	441.5	392.9	319.2	229.2	136.1	54.3	4.1	0.0
70°	491.7	490.9	481.2	453.6	402.6	327.3	235.7	140.9	55.9	4.9	0.0
72.5°	497.4	496.6	488.5	461.7	410.7	333.7	241.4	144.2	57.5	5.7	0.0
75°	506.3	503.0	489.3	463.3	414.7	338.6	244.6	146.6	59.1	5.7	0.0
77.5°	490.1	490.9	479.5	457.7	413.1	339.4	247.1	148.2	59.9	5.7	0.0
80°	447.1	447.1	452.0	440.7	404.2	335.4	245.4	147.4	59.9	6.5	0.0
82.5°	386.4	386.4	406.6	413.1	388.0	327.3	240.6	145.0	59.1	6.5	0.0
85°	324.8	329.7	354.0	375.9	363.7	313.5	232.5	140.9	57.5	6.5	0.0
87.5°	280.3	281.1	303.8	334.5	335.4	294.9	221.1	135.3	55.9	6.5	0.0
90°	249.5	250.3	268.1	294.9	304.6	273.0	207.4	128.0	53.5	6.5	0.0
92.5°	230.9	230.9	241.4	260.8	271.4	248.7	191.2	119.9	50.2	6.5	0.0
95°	217.9	218.7	224.4	236.5	243.8	225.2	175.8	111.0	47.8	5.7	0.0
97.5°	211.4	212.2	214.7	220.3	220.3	203.3	160.4	102.1	44.6	5.7	0.0
100°	209.0	208.2	209.0	209.0	204.1	184.7	146.6	94.8	41.3	5.7	0.0
102.5°	208.2	208.2	206.6	201.7	192.0	170.1	134.5	87.5	38.9	4.9	0.0
105°	209.8	209.0	205.8	197.6	183.9	159.6	125.6	82.6	37.3	4.9	0.0
107.5°	210.6	209.8	204.9	194.4	178.2	153.1	119.1	78.6	35.6	4.9	0.0
110°	210.6	209.8	204.1	192.8	174.2	148.2	114.2	75.3	34.0	4.9	0.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	209.0	208.2	202.5	191.2	171.7	144.2	111.0	72.9	33.2	4.1	0.0
115°	208.2	207.4	201.7	188.7	168.5	140.9	107.7	70.5	31.6	4.1	0.0
117.5°	208.2	207.4	200.1	185.5	165.2	137.7	104.5	68.0	30.0	4.1	0.0
120°	206.6	205.8	196.8	181.4	161.2	133.7	101.3	64.8	29.2	4.1	0.0
122.5°	201.7	200.1	191.2	175.8	155.5	129.6	97.2	62.4	27.5	4.1	0.0
125°	194.4	192.8	183.9	170.1	149.9	124.7	94.0	59.1	26.7	3.2	0.0
127.5°	184.7	183.9	175.8	162.8	145.0	119.9	89.9	56.7	25.1	3.2	0.0
130°	176.6	175.0	168.5	154.7	137.7	115.0	85.9	53.5	23.5	3.2	0.0
132.5°	168.5	166.9	160.4	148.2	131.2	109.4	81.0	50.2	21.9	3.2	0.0
135°	161.2	160.4	153.1	140.1	124.7	103.7	77.0	47.0	20.3	2.4	0.0
137.5°	153.9	153.1	145.0	132.8	117.5	97.2	72.1	43.7	19.4	2.4	0.0
140°	145.8	144.2	137.7	125.6	110.2	90.7	67.2	41.3	17.8	2.4	0.0
142.5°	136.1	136.1	128.8	116.6	102.1	84.2	62.4	38.1	16.2	1.6	0.0
145°	128.0	127.2	119.9	108.5	94.0	77.0	56.7	34.8	15.4	1.6	0.0
147.5°	117.5	116.6	111.0	99.6	86.7	70.5	51.8	31.6	13.8	1.6	0.0
150°	107.7	106.9	101.3	90.7	78.6	63.2	46.2	28.4	12.2	1.6	0.0
152.5°	97.2	96.4	91.5	81.8	70.5	56.7	40.5	25.1	10.5	0.8	0.0
155°	86.7	85.9	81.0	72.9	62.4	49.4	35.6	21.9	9.7	0.8	0.0
157.5°	74.5	74.5	70.5	63.2	53.5	42.1	30.8	18.6	8.1	0.8	0.0
160°	64.0	63.2	59.9	53.5	45.4	35.6	25.9	15.4	5.7	0.8	0.0
162.5°	52.7	52.7	50.2	44.6	37.3	29.2	21.1	11.3	4.1	0.8	0.0
165°	42.1	41.3	39.7	34.8	30.0	22.7	14.6	7.3	2.4	0.8	0.0
167.5°	31.6	31.6	30.0	26.7	21.9	14.6	8.9	4.9	1.6	0.8	0.0
170°	21.9	21.9	20.3	15.4	10.5	7.3	4.9	2.4	0.8	0.8	0.0
172.5°	8.1	8.1	7.3	4.9	4.1	3.2	2.4	0.8	0.8	0.8	0.0
175°	0.8	1.6	1.6	1.6	1.6	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



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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: P226076

CATALOG NUMBER: FW-LD2-126-1000-40-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)