

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: P550906

Luminaire Tested: **FCC-X-2-LD4-1LO-50-UNV-82-85-ED1D**

Issue Date: 7/9/2021

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.



**Test Information**

Test Method: LM-79-08  
Report Number: P550906  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2105-248-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/9/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: FCC-X-2-LD4-1LO-50-UNV-82-85-ED1D  
Description: FCC CORNER MOUNT LUMINAIRE WITH .187 CLEAR PC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 5000K, AND 80 CRI LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

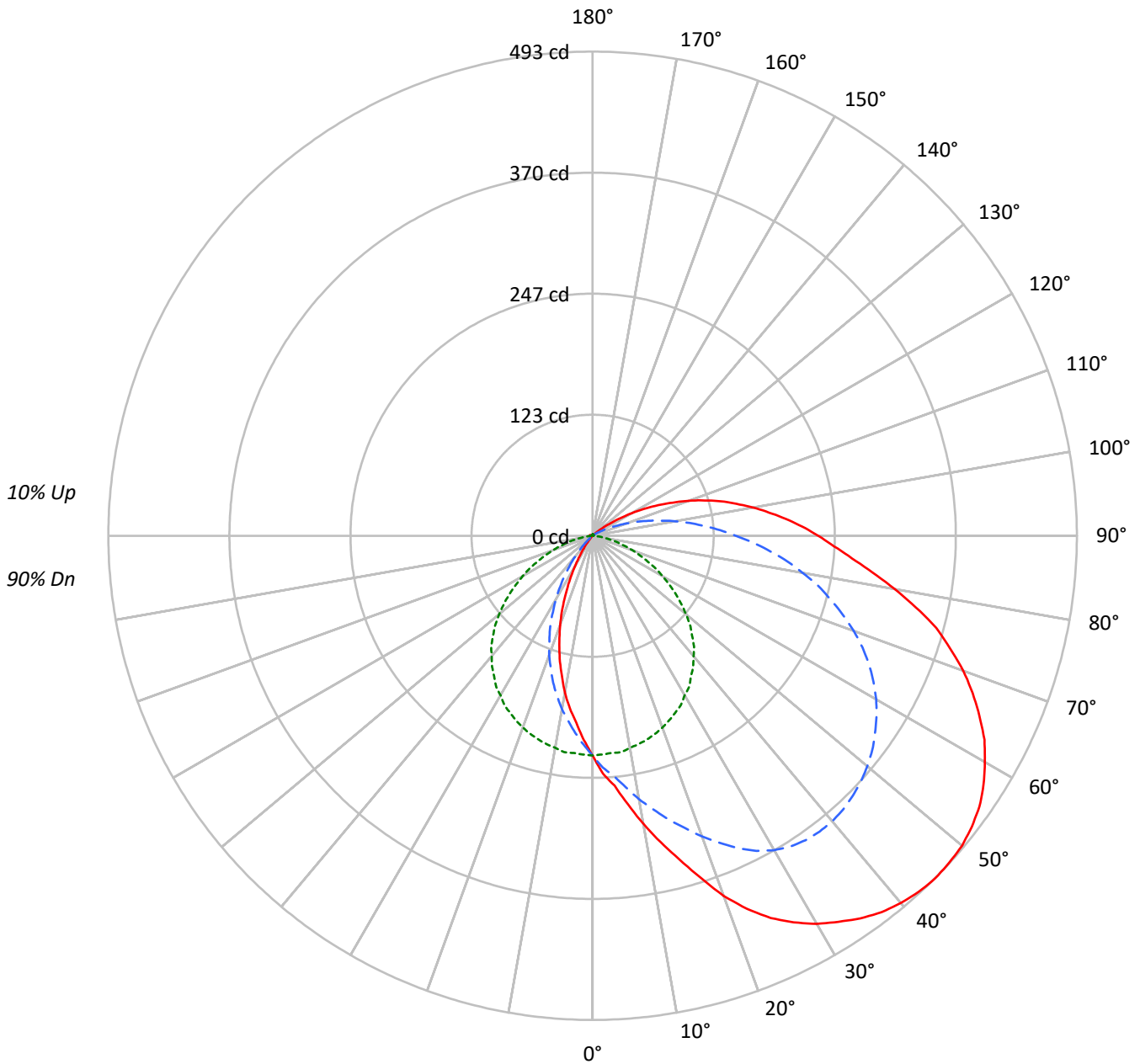
Lumens per Lamp: N/A  
Luminaire Lumens: 1106.0 lumens  
Efficiency: N/A  
Efficacy: 94.5 lumens/watt  
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59  
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')  
CIE Type: Semi-Direct

Input Watts (W): 11.7  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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: P550906

CATALOG NUMBER: FCC-X-2-LD4-1LO-50-UNV-82-85-ED1D

### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				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	50	30	10	0
RCR																					
0	117	117	117	117	113	113	113	113	105	105	105	99	99	99	93	93	93	93	93	93	90
1	103	96	91	86	99	93	88	83	87	83	79	81	78	74	76	73	70	76	73	70	67
2	92	82	74	67	88	79	72	65	74	67	62	69	64	59	64	60	56	64	60	56	53
3	83	71	61	54	79	68	60	53	64	56	50	59	53	48	55	50	46	55	50	46	43
4	75	62	52	44	72	60	51	44	56	48	42	52	45	40	49	43	38	49	43	38	36
5	69	55	45	38	66	53	44	37	50	42	35	46	39	34	43	38	33	43	38	33	30
6	63	49	39	32	61	47	38	32	44	36	31	42	35	29	39	33	28	39	33	28	26
7	58	44	35	28	56	43	34	28	40	32	27	38	31	26	36	29	25	36	29	25	23
8	54	40	31	25	52	39	30	24	37	29	24	34	28	23	32	26	22	32	26	22	20
9	51	36	28	22	49	35	27	22	33	26	21	32	25	20	30	24	20	30	24	20	18
10	47	33	25	20	45	33	25	19	31	24	19	29	23	18	28	22	18	28	22	18	16

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	2408	2408	2408
5°	2644	2373	1979
10°	2991	2344	1631
15°	3352	2314	1272
20°	3781	2277	936
25°	4137	2232	614
30°	4401	2174	346
35°	4629	2111	153
40°	4832	2034	37
45°	5006	1936	0
50°	5152	1807	0
55°	5264	1643	0
60°	5320	1453	0
65°	5342	1237	0
70°	5325	1007	0
75°	5256	743	4
80°	5044	453	23
85°	4874	219	31



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	21.4	1.9
10°-20°	64.2	5.8
20°-30°	103.9	9.4
30°-40°	133.5	12.1
40°-50°	151.1	13.7
50°-60°	156.5	14.2
60°-70°	147.6	13.3
70°-80°	123.7	11.2
80°-90°	89.7	8.1
90°-100°	58.9	5.3
100°-110°	34.0	3.1
110°-120°	15.0	1.4
120°-130°	4.1	0.4
130°-140°	0.9	0.1
140°-150°	0.6	0.1
150°-160°	0.4	0.0
160°-170°	0.2	0.0
170°-180°	0.1	0.0
0°-30°	189.5	17.1
0°-40°	323.0	29.2
0°-60°	630.6	57.0
0°-90°	991.6	89.7
90°-120°	108.0	9.8
90°-150°	113.6	10.3
90°-180°	114.0	10.3
0°-180°	1106.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	224	224	224	224	224	
5°	255	245	222	202	191	26
15°	341	299	215	155	129	98
25°	430	351	199	102	64	198
35°	476	378	175	50	16	298
45°	493	375	143	11	0	381
55°	481	351	103	0	0	429
65°	435	311	62	0	0	430
75°	362	251	26	0	0	380
85°	265	182	4	1	2	226
90°	230	146	1	2	2	126
95°	197	114	1	2	3	155
105°	136	59	1	1	2	143
115°	74	20	1	1	1	74
125°	22	3	1	1	1	22
135°	1	1	1	1	1	2
145°	0	1	1	1	1	0
155°	1	1	1	1	0	0
165°	1	1	1	1	0	0
175°	1	1	1	1	0	0
180°	1	1	1	1	1	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
0°	223.7	223.7	223.7	223.7	223.7	223.7	223.7	223.7	223.7	223.7	223.7
2.5°	242.5	242.2	241.4	240.0	238.0	234.5	231.7	229.1	225.7	222.9	217.4
5°	255.4	253.9	252.8	251.4	246.8	243.7	238.5	232.8	227.4	222.0	211.2
7.5°	275.9	273.6	271.9	267.9	261.6	254.5	246.5	241.1	237.4	222.3	203.8
10°	297.8	295.8	292.4	285.3	277.6	267.3	255.9	243.1	231.7	219.2	197.2
12.5°	319.5	316.6	311.8	302.7	291.8	279.0	263.3	248.2	232.0	217.2	189.5
15°	341.1	338.0	332.9	321.8	307.5	290.7	271.6	252.5	233.4	214.6	181.5
17.5°	364.8	360.5	352.8	340.3	322.3	301.5	279.0	255.9	232.8	211.5	173.0
20°	390.2	384.2	375.9	359.1	338.0	313.5	286.4	259.3	232.6	207.8	163.3
22.5°	411.2	405.3	396.1	378.8	353.4	323.5	292.7	261.6	231.4	203.5	154.2
25°	429.5	424.6	414.7	394.7	367.9	334.0	298.7	263.3	229.7	198.9	144.5
27.5°	443.7	439.2	428.1	407.5	380.2	343.4	303.2	264.2	227.4	194.4	134.5
30°	456.3	451.7	438.3	417.2	388.4	350.8	307.8	264.5	224.6	187.5	123.7
32.5°	466.0	461.7	448.0	425.5	394.1	356.0	310.4	264.2	220.9	182.7	112.0
35°	475.6	471.4	455.4	431.5	398.4	358.2	312.3	262.8	216.3	174.7	100.9
37.5°	483.1	478.2	462.0	435.5	400.4	358.8	312.1	260.8	211.5	168.1	89.8
40°	488.2	483.1	465.7	437.7	401.0	357.9	309.8	257.3	205.8	159.9	78.1
42.5°	491.6	485.9	467.4	441.2	399.8	355.7	306.4	253.1	199.5	152.8	67.0
45°	493.3	487.3	467.7	438.3	397.8	351.4	301.2	247.7	192.7	143.1	55.9
47.5°	492.5	485.9	466.2	435.2	394.1	346.8	295.5	241.1	184.4	134.5	45.3
50°	491.0	484.2	463.1	431.2	389.0	341.1	289.3	233.1	175.8	124.0	35.9
52.5°	486.5	479.6	459.7	425.5	383.0	334.6	280.7	224.9	166.7	113.7	27.4
55°	480.8	474.5	453.7	420.4	375.3	326.6	272.7	216.0	157.9	103.2	19.7
57.5°	471.9	466.2	446.3	412.1	367.6	317.8	263.9	206.3	146.8	92.6	13.7
60°	461.1	455.4	436.0	402.7	358.8	307.8	254.2	196.4	136.8	82.1	8.5
62.5°	449.7	444.3	424.1	391.0	347.7	297.2	243.7	186.4	126.3	72.4	5.1
65°	434.6	429.5	411.2	377.0	335.4	285.8	232.0	174.4	115.4	61.6	2.8
67.5°	418.7	414.1	395.6	364.2	321.2	273.3	220.0	162.7	104.0	52.2	1.4
70°	401.6	395.9	378.8	346.8	306.6	259.1	206.9	150.8	93.2	43.0	0.0
72.5°	381.6	377.3	360.8	330.6	289.8	244.0	193.5	137.7	81.2	34.2	0.3
75°	362.2	356.8	341.7	313.2	273.3	228.0	178.7	125.4	69.5	26.2	0.3
77.5°	337.1	335.4	321.2	293.5	257.6	212.6	162.4	110.6	58.4	18.8	0.3
80°	312.1	310.4	299.2	273.9	239.4	194.4	147.3	96.6	47.6	12.5	0.3
82.5°	287.3	285.0	274.4	253.4	220.9	179.0	131.7	82.6	37.6	7.7	0.3
85°	265.0	262.2	250.8	231.4	201.8	161.6	115.4	69.0	27.9	4.3	0.6
87.5°	245.9	244.0	231.4	211.5	182.4	145.3	101.2	55.9	19.7	2.0	0.9
90°	229.7	225.4	214.3	193.2	164.2	127.4	86.1	44.7	13.1	1.1	1.1
92.5°	213.7	210.0	197.8	176.1	147.9	112.0	71.5	34.2	8.3	0.6	1.4
95°	197.2	193.2	181.3	161.3	131.4	96.3	58.7	25.1	4.6	0.6	1.4
97.5°	181.0	177.3	164.7	144.8	116.6	82.6	46.5	17.7	2.3	0.6	1.1
100°	165.9	161.6	150.2	130.2	101.7	69.0	35.9	11.4	1.4	0.6	1.1
102.5°	149.9	146.5	134.8	115.4	86.4	56.1	26.8	7.1	0.6	0.6	0.9
105°	135.7	131.4	120.0	100.0	73.5	44.2	18.8	4.3	0.6	0.6	0.9



TEST NUMBER: P550906

CATALOG NUMBER: FCC-X-2-LD4-1LO-50-UNV-82-85-ED1D

**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	88.3	84.9	75.0	58.1	37.3	17.4	5.1	0.9	0.9	0.9	0.9
115°	73.8	68.7	59.8	45.0	27.6	11.4	2.6	0.9	0.9	0.9	0.9
117.5°	59.0	54.7	48.4	34.2	18.2	7.4	1.4	0.9	0.9	0.9	0.9
120°	46.2	42.2	35.1	23.7	12.3	4.3	0.6	0.9	0.9	0.9	0.9
122.5°	33.1	29.9	23.7	15.4	7.4	2.0	0.9	0.9	1.1	1.1	0.9
125°	21.9	20.2	15.7	9.4	4.6	0.9	0.9	0.9	1.1	1.1	0.9
127.5°	14.2	12.8	9.1	5.4	2.0	0.9	0.9	1.1	1.1	1.1	0.9
130°	8.0	7.1	5.4	3.1	0.9	0.9	0.9	1.1	1.1	1.1	0.9
132.5°	4.6	4.3	2.8	0.6	0.9	0.9	0.9	1.1	1.1	1.1	1.1
135°	1.1	0.6	0.6	0.6	0.9	0.9	1.1	1.1	1.4	1.4	1.1
137.5°	0.3	0.3	0.6	0.6	0.9	0.9	1.1	1.4	1.4	1.4	1.1
140°	0.3	0.3	0.6	0.9	0.9	0.9	1.1	1.4	1.4	1.4	1.1
142.5°	0.3	0.6	0.6	0.9	0.9	1.1	1.1	1.4	1.4	1.1	1.1
145°	0.3	0.6	0.6	0.9	0.9	1.1	1.1	1.4	1.1	1.1	1.1
147.5°	0.6	0.6	0.6	0.9	0.9	1.1	1.1	1.4	1.4	1.1	1.1
150°	0.3	0.6	0.6	0.9	1.1	1.1	1.1	1.4	1.1	1.1	1.1
152.5°	0.3	0.6	0.6	0.9	1.1	1.1	1.1	1.4	1.1	1.1	1.1
155°	0.6	0.6	0.6	0.9	1.1	1.1	1.1	1.4	1.1	1.1	1.4
157.5°	0.6	0.6	0.6	0.9	1.1	1.1	1.1	1.4	1.1	1.1	1.4
160°	0.6	0.6	0.6	0.9	0.9	1.1	1.1	1.1	1.1	1.1	1.1
162.5°	0.6	0.6	0.6	0.9	0.9	1.1	1.1	1.1	1.1	1.1	1.1
165°	0.6	0.6	0.6	0.6	0.9	0.9	1.1	1.1	1.1	1.1	1.1
167.5°	0.6	0.6	0.6	0.9	0.9	0.9	1.1	1.1	1.1	1.1	1.1
170°	0.6	0.6	0.6	0.9	0.9	0.9	1.1	1.4	1.4	1.4	1.4
172.5°	0.6	0.6	0.6	0.9	0.9	1.1	1.1	1.4	1.4	1.4	1.4
175°	0.6	0.6	0.6	0.9	0.9	1.1	1.1	1.4	1.4	1.4	1.4
177.5°	0.3	0.6	0.6	0.9	0.9	1.1	1.1	1.4	1.4	1.4	1.1
180°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9



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**CANDELA DISTRIBUTION (continued):**

	135°	157.5°	180°
0°	223.7	223.7	223.7
2.5°	212.9	208.9	207.8
5°	201.5	194.9	191.2
7.5°	190.1	181.3	177.0
10°	179.5	167.0	162.4
12.5°	167.0	152.5	145.3
15°	155.0	136.2	129.4
17.5°	141.6	120.6	112.6
20°	129.1	104.9	96.6
22.5°	114.9	89.5	80.4
25°	102.0	74.1	63.8
27.5°	87.8	58.4	49.6
30°	74.4	44.7	35.9
32.5°	61.6	32.8	24.8
35°	49.6	22.2	15.7
37.5°	38.2	13.7	8.0
40°	27.6	7.1	3.7
42.5°	18.5	3.4	2.0
45°	11.4	1.7	0.0
47.5°	6.6	0.0	0.0
50°	3.4	0.0	0.0
52.5°	1.4	0.0	0.0
55°	0.0	0.0	0.0
57.5°	0.0	0.0	0.0
60°	0.0	0.0	0.0
62.5°	0.0	0.0	0.0
65°	0.0	0.0	0.0
67.5°	0.0	0.0	0.0
70°	0.0	0.0	0.0
72.5°	0.0	0.0	0.0
75°	0.3	0.3	0.3
77.5°	0.3	0.6	0.9
80°	0.6	1.1	1.4
82.5°	1.1	1.4	1.4
85°	1.1	1.4	1.7
87.5°	1.4	1.7	2.0
90°	1.7	2.0	2.0
92.5°	1.7	2.3	2.3
95°	2.0	2.3	2.6
97.5°	2.3	2.6	2.6
100°	2.0	2.6	2.8
102.5°	1.7	2.6	2.6
105°	1.4	2.0	2.3





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**CANDELA DISTRIBUTION (continued):**

	135°	157.5°	180°
112.5°	1.1	1.4	1.4
115°	0.9	1.1	1.4
117.5°	0.9	1.1	1.1
120°	0.9	0.9	1.1
122.5°	0.9	0.9	1.1
125°	0.9	0.9	1.1
127.5°	1.1	0.9	0.9
130°	0.9	0.9	0.9
132.5°	1.1	0.9	0.9
135°	1.1	0.9	0.9
137.5°	1.1	0.9	0.9
140°	1.1	0.9	0.9
142.5°	1.1	0.9	0.9
145°	0.9	0.9	0.9
147.5°	0.9	0.9	0.9
150°	0.9	0.9	0.6
152.5°	0.9	0.6	0.6
155°	0.9	0.6	0.3
157.5°	1.1	0.6	0.3
160°	0.9	0.6	0.3
162.5°	0.9	0.6	0.3
165°	0.9	0.6	0.0
167.5°	0.9	0.6	0.3
170°	0.9	0.6	0.3
172.5°	0.9	0.6	0.3
175°	0.9	0.3	0.3
177.5°	0.9	0.3	0.3
180°	0.9	0.9	0.9



Report Generated By 670246072 / DESKTOP-MV3F9LC





— 0°-180°    - - 45°-225°    - - - - 90°-270°







107.5°	119.7	116.3	104.9	86.1	60.1	33.6	12.5	2.3	0.6	0.9	0.9
110°	104.3	101.5	89.8	71.5	48.4	25.1	8.3	1.4	0.9	0.9	0.9







107.5°	1.1	1.7	2.0
110°	1.1	1.4	1.7



(END OF REPORT)