

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: P550852

Luminaire Tested: **FCC-X-2-LD4-1LO-40-UNV-82-96-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: P550852  
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-40-UNV-82-96-ED1D  
Description: FCC CORNER MOUNT LUMINAIRE WITH .187 CLEAR PC FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES AND 4000K, AND 80 CRI LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

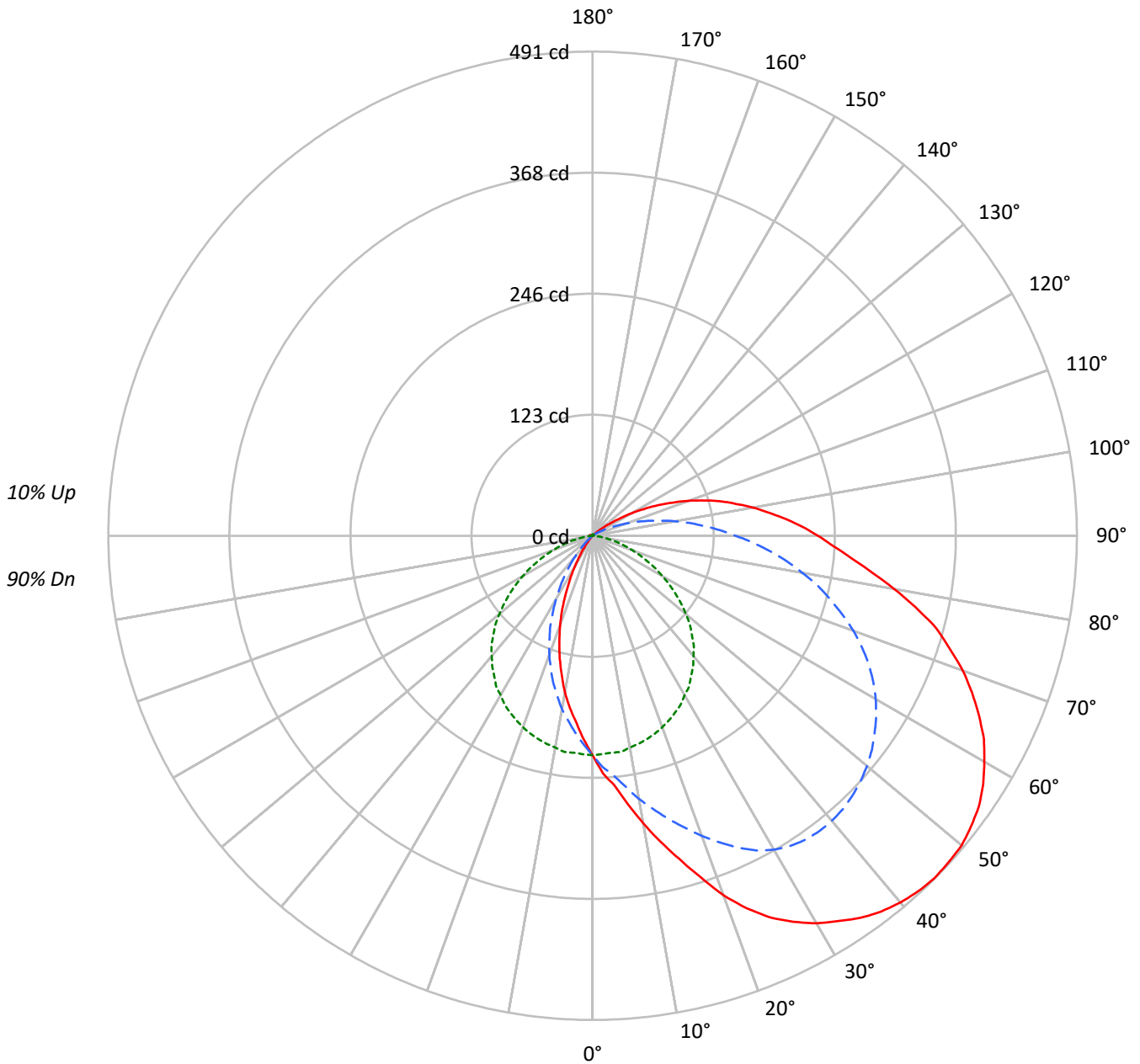
Lumens per Lamp: N/A  
Luminaire Lumens: 1100.1 lumens  
Efficiency: N/A  
Efficacy: 94.0 lumens/watt  
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59  
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')  
CIE Type: Semi-Direct

Input Watts (W): 11.7  
Input Voltage (V): NR  
Input Current (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: P550852

CATALOG NUMBER: FCC-X-2-LD4-1LO-40-UNV-82-96-ED1D

### Luminous Intensity Polar Plot





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

RF	20									20									20									20									
RC	80									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	90																			
1	103	96	91	86	99	93	88	83	87	83	79	81	78	74	76	73	70	67																			
2	92	82	74	67	88	79	72	65	74	67	62	69	64	59	64	60	56	53																			
3	83	71	61	54	79	68	60	53	64	56	50	59	53	48	55	50	46	43																			
4	75	62	52	44	72	60	51	44	56	48	42	52	45	40	49	43	38	36																			
5	69	55	45	38	66	53	44	37	50	42	35	46	39	34	43	38	33	30																			
6	63	49	39	32	61	47	38	32	44	36	31	42	35	29	39	33	28	26																			
7	58	44	35	28	56	43	34	28	40	32	27	38	31	26	36	29	25	23																			
8	54	40	31	25	52	39	30	24	37	29	24	34	28	23	32	26	22	20																			
9	51	36	28	22	49	35	27	22	33	26	21	32	25	20	30	24	20	18																			
10	47	33	25	20	45	33	25	19	31	24	19	29	23	18	28	22	18	16																			

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

	0°	90°	180°
0°	2395	2395	2395
5°	2629	2360	1969
10°	2975	2331	1623
15°	3334	2301	1265
20°	3760	2264	931
25°	4114	2220	612
30°	4377	2162	344
35°	4605	2100	152
40°	4806	2022	37
45°	4979	1925	0
50°	5125	1797	0
55°	5236	1634	0
60°	5291	1444	0
65°	5313	1229	0
70°	5295	1003	0
75°	5228	740	4
80°	5016	453	23
85°	4848	219	31



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	21.3	1.9
10°-20°	63.8	5.8
20°-30°	103.3	9.4
30°-40°	132.8	12.1
40°-50°	150.3	13.7
50°-60°	155.7	14.2
60°-70°	146.8	13.3
70°-80°	123.1	11.2
80°-90°	89.2	8.1
90°-100°	58.6	5.3
100°-110°	33.9	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°	188.5	17.1
0°-40°	321.2	29.2
0°-60°	627.2	57.0
0°-90°	986.3	89.7
90°-120°	107.4	9.8
90°-150°	113.1	10.3
90°-180°	114.0	10.4
0°-180°	1100.1	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	222	222	222	222	222	
5°	254	244	221	200	190	26
15°	339	297	213	154	129	98
25°	427	349	198	102	64	197
35°	473	376	174	49	16	297
45°	491	373	142	11	0	379
55°	478	349	103	0	0	427
65°	432	309	61	0	0	428
75°	360	249	26	0	0	378
85°	264	181	4	1	2	225
90°	228	145	1	2	2	125
95°	196	113	1	2	3	154
105°	135	58	1	1	2	142
115°	73	19	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°	222.5	222.5	222.5	222.5	222.5	222.5	222.5	222.5	222.5	222.5	222.5
2.5°	241.2	240.9	240.1	238.7	236.7	233.3	230.4	227.9	224.5	221.7	216.3
5°	254.0	252.5	251.4	250.0	245.5	242.3	237.2	231.6	226.2	220.8	210.0
7.5°	274.4	272.1	270.4	266.4	260.2	253.1	245.2	239.8	236.1	221.1	202.7
10°	296.2	294.2	290.8	283.7	276.1	265.9	254.5	241.8	230.4	218.0	196.1
12.5°	317.7	314.9	310.1	301.0	290.2	277.5	261.9	246.9	230.7	216.0	188.5
15°	339.3	336.2	331.1	320.0	305.8	289.1	270.1	251.1	232.1	213.4	180.6
17.5°	362.8	358.6	350.9	338.4	320.6	299.9	277.5	254.5	231.6	210.3	172.1
20°	388.0	382.1	373.9	357.1	336.2	311.8	284.9	257.9	231.3	206.6	162.4
22.5°	409.0	403.1	394.0	376.7	351.5	321.7	291.1	260.2	230.2	202.4	153.3
25°	427.2	422.3	412.4	392.6	365.9	332.2	297.0	261.9	228.5	197.8	143.7
27.5°	441.3	436.8	425.7	405.3	378.1	341.6	301.6	262.8	226.2	193.3	133.8
30°	453.8	449.3	435.9	415.0	386.3	348.9	306.1	263.0	223.4	186.5	123.0
32.5°	463.4	459.2	445.6	423.2	392.0	354.0	308.7	262.8	219.7	181.7	111.4
35°	473.1	468.8	452.9	429.1	396.3	356.3	310.7	261.3	215.1	173.8	100.3
37.5°	480.4	475.6	459.5	433.1	398.2	356.9	310.4	259.4	210.3	167.2	89.3
40°	485.5	480.4	463.1	435.4	398.8	356.0	308.1	255.9	204.6	159.0	77.7
42.5°	488.9	483.3	464.8	438.8	397.7	353.7	304.7	251.7	198.4	151.9	66.6
45°	490.6	484.7	465.1	435.9	395.7	349.5	299.6	246.3	191.6	142.3	55.6
47.5°	489.8	483.3	463.7	432.8	392.0	345.0	293.9	239.8	183.4	133.8	45.1
50°	488.4	481.6	460.6	428.9	386.9	339.3	287.7	231.9	174.9	123.3	35.7
52.5°	483.8	477.0	457.2	423.2	380.9	332.8	279.2	223.6	165.8	113.1	27.2
55°	478.2	471.9	451.2	418.1	373.3	324.8	271.3	214.9	157.0	102.6	19.6
57.5°	469.4	463.7	443.9	409.9	365.6	316.0	262.5	205.2	146.0	92.1	13.6
60°	458.6	452.9	433.7	400.5	356.9	306.1	252.8	195.3	136.1	81.6	8.5
62.5°	447.3	441.9	421.8	388.9	345.8	295.6	242.3	185.4	125.6	72.0	5.1
65°	432.3	427.2	409.0	375.0	333.6	284.3	230.7	173.5	114.8	61.2	2.8
67.5°	416.4	411.8	393.4	362.2	319.4	271.8	218.8	161.8	103.5	51.9	1.4
70°	399.4	393.7	376.7	345.0	305.0	257.7	205.8	149.9	92.7	42.8	0.0
72.5°	379.5	375.3	358.8	328.8	288.3	242.6	192.5	136.9	80.8	34.0	0.3
75°	360.3	354.9	339.8	311.5	271.8	226.8	177.7	124.7	69.2	26.1	0.3
77.5°	335.3	333.6	319.4	291.9	256.2	211.4	161.6	110.0	58.1	18.7	0.3
80°	310.4	308.7	297.6	272.4	238.1	193.3	146.5	96.1	47.3	12.5	0.3
82.5°	285.7	283.4	273.0	252.0	219.7	178.0	131.0	82.2	37.4	7.7	0.3
85°	263.6	260.8	249.4	230.2	200.7	160.7	114.8	68.6	27.8	4.3	0.6
87.5°	244.6	242.6	230.2	210.3	181.4	144.6	100.6	55.6	19.6	2.0	0.9
90°	228.5	224.2	213.1	192.2	163.3	126.7	85.6	44.5	13.0	1.1	1.1
92.5°	212.6	208.9	196.7	175.2	147.1	111.4	71.1	34.0	8.2	0.6	1.4
95°	196.1	192.2	180.3	160.4	130.7	95.8	58.4	24.9	4.5	0.6	1.4
97.5°	180.0	176.3	163.8	144.0	115.9	82.2	46.2	17.6	2.3	0.6	1.1
100°	165.0	160.7	149.4	129.5	101.2	68.6	35.7	11.3	1.4	0.6	1.1
102.5°	149.1	145.7	134.1	114.8	85.9	55.8	26.6	7.1	0.6	0.6	0.9
105°	134.9	130.7	119.3	99.5	73.1	43.9	18.7	4.3	0.6	0.6	0.9



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CATALOG NUMBER: FCC-X-2-LD4-1LO-40-UNV-82-96-ED1D

**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	87.9	84.5	74.5	57.8	37.1	17.3	5.1	0.9	0.9	0.9	0.9
115°	73.4	68.3	59.5	44.8	27.5	11.3	2.6	0.9	0.9	0.9	0.9
117.5°	58.7	54.4	48.2	34.0	18.1	7.4	1.4	0.9	0.9	0.9	0.9
120°	45.9	41.9	34.9	23.5	12.2	4.3	0.6	0.9	0.9	0.9	0.9
122.5°	32.9	29.8	23.5	15.3	7.4	2.0	0.9	0.9	1.1	1.1	0.9
125°	21.8	20.1	15.6	9.4	4.5	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°	7.9	7.1	5.4	3.1	0.9	0.9	0.9	1.1	1.1	1.1	0.9
132.5°	4.5	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°	222.5	222.5	222.5
2.5°	211.7	207.8	206.6
5°	200.4	193.9	190.2
7.5°	189.1	180.3	176.0
10°	178.6	166.1	161.6
12.5°	166.1	151.6	144.6
15°	154.2	135.5	128.7
17.5°	140.9	119.9	112.0
20°	128.4	104.3	96.1
22.5°	114.2	89.0	79.9
25°	101.5	73.7	63.5
27.5°	87.3	58.1	49.3
30°	74.0	44.5	35.7
32.5°	61.2	32.6	24.7
35°	49.3	22.1	15.6
37.5°	38.0	13.6	7.9
40°	27.5	7.1	3.7
42.5°	18.4	3.4	2.0
45°	11.3	1.7	0.0
47.5°	6.5	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°	119.0	115.6	104.3	85.6	59.8	33.4	12.5	2.3	0.6	0.9	0.9
110°	103.7	100.9	89.3	71.1	48.2	24.9	8.2	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)