

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: P550826

Luminaire Tested: **FCC-X-2-LD4-1LO-40-UNV-81-85-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: P550826  
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-81-85-ED1D  
Description: FCC CORNER MOUNT LUMINAIRE WITH .156 CLEAR PC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 4000K, AND 80 CRI LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

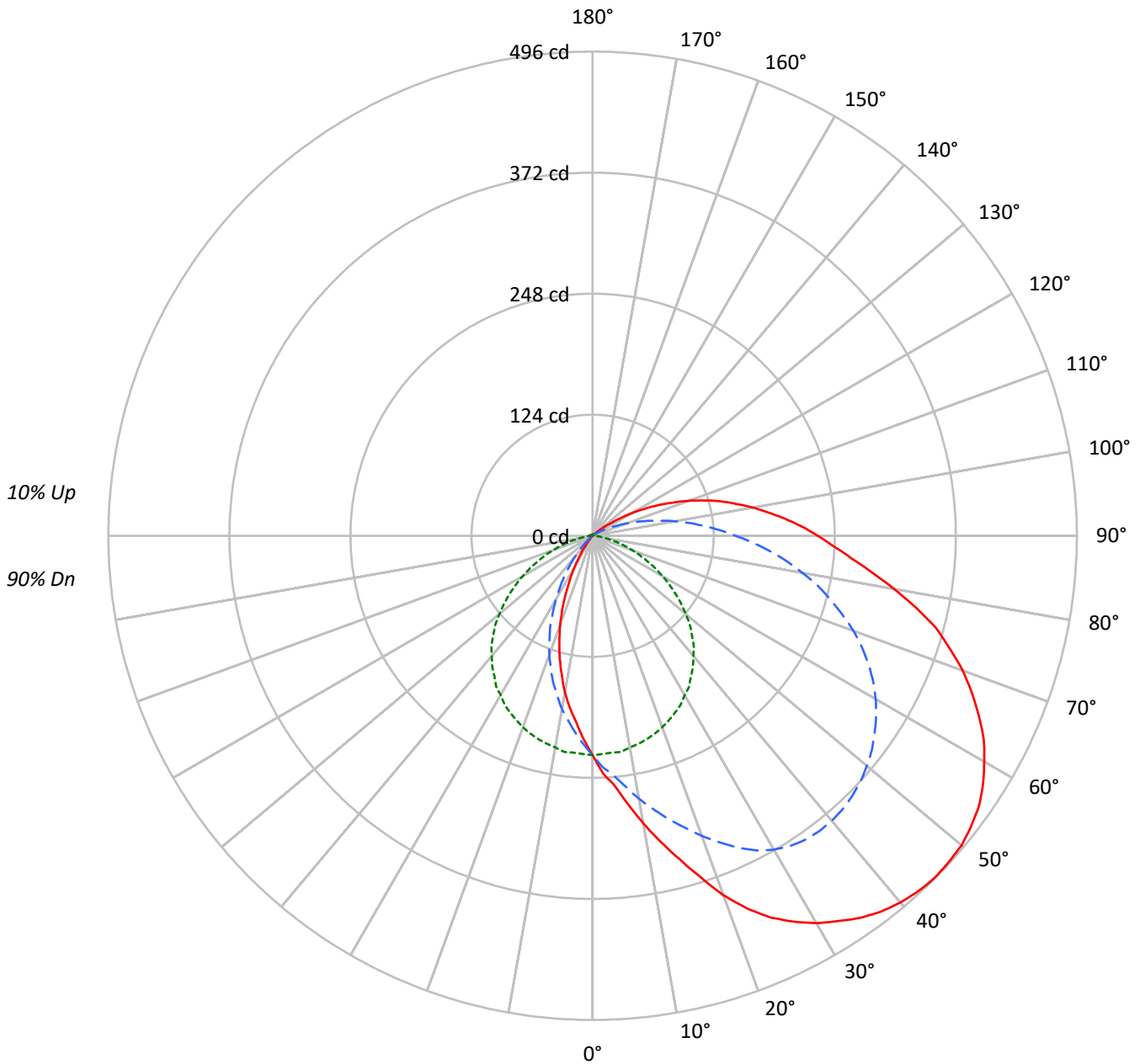
Lumens per Lamp: N/A  
Luminaire Lumens: 1111.0 lumens  
Efficiency: N/A  
Efficacy: 95.0 lumens/watt  
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59  
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')  
CIE Type: Semi-Direct

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: P550826

CATALOG NUMBER: FCC-X-2-LD4-1LO-40-UNV-81-85-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°	2419	2419	2419
5°	2655	2383	1989
10°	3005	2354	1639
15°	3368	2325	1278
20°	3798	2287	940
25°	4155	2242	617
30°	4420	2184	348
35°	4650	2121	153
40°	4854	2042	37
45°	5028	1944	0
50°	5176	1815	0
55°	5288	1650	0
60°	5344	1458	0
65°	5366	1241	0
70°	5348	1012	0
75°	5281	746	4
80°	5066	457	23
85°	4896	219	31



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	21.5	1.9
10°-20°	64.5	5.8
20°-30°	104.4	9.4
30°-40°	134.1	12.1
40°-50°	151.8	13.7
50°-60°	157.2	14.2
60°-70°	148.3	13.3
70°-80°	124.3	11.2
80°-90°	90.1	8.1
90°-100°	59.2	5.3
100°-110°	34.2	3.1
110°-120°	15.1	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°	190.4	17.1
0°-40°	324.4	29.2
0°-60°	633.5	57.0
0°-90°	996.1	89.7
90°-120°	108.5	9.8
90°-150°	114.2	10.3
90°-180°	115.0	10.4
0°-180°	1111.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	225	225	225	225	225	
5°	256	246	223	202	192	26
15°	343	300	216	156	130	99
25°	431	353	200	102	64	199
35°	478	380	176	50	16	300
45°	496	376	144	12	0	383
55°	483	353	104	0	0	431
65°	437	312	62	0	0	432
75°	364	252	26	0	0	382
85°	266	182	4	1	2	227
90°	231	146	1	2	2	127
95°	198	114	1	2	3	155
105°	136	59	1	1	2	144
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°	224.7	224.7	224.7	224.7	224.7	224.7	224.7	224.7	224.7	224.7	224.7
2.5°	243.6	243.3	242.5	241.0	239.0	235.6	232.7	230.2	226.7	223.9	218.4
5°	256.5	255.1	253.9	252.5	247.9	244.8	239.6	233.9	228.5	223.0	212.1
7.5°	277.1	274.8	273.1	269.1	262.8	255.6	247.6	242.2	238.5	223.3	204.7
10°	299.2	297.2	293.7	286.6	278.8	268.5	257.1	244.2	232.7	220.1	198.1
12.5°	320.9	318.1	313.2	304.0	293.1	280.3	264.5	249.3	233.0	218.1	190.4
15°	342.7	339.5	334.4	323.2	308.9	292.0	272.8	253.6	234.5	215.6	182.4
17.5°	366.4	362.1	354.4	341.8	323.8	302.9	280.3	257.1	233.9	212.4	173.8
20°	391.9	385.9	377.6	360.7	339.5	314.9	287.7	260.5	233.6	208.7	164.0
22.5°	413.1	407.1	397.9	380.5	355.0	324.9	294.0	262.8	232.5	204.4	154.9
25°	431.4	426.6	416.5	396.5	369.6	335.5	300.0	264.5	230.7	199.8	145.1
27.5°	445.7	441.2	430.0	409.4	381.9	345.0	304.6	265.4	228.5	195.2	135.1
30°	458.3	453.8	440.3	419.1	390.2	352.4	309.2	265.7	225.6	188.4	124.2
32.5°	468.1	463.8	450.0	427.4	395.9	357.6	311.8	265.4	221.9	183.5	112.5
35°	477.8	473.5	457.5	433.4	400.2	359.9	313.8	263.9	217.3	175.5	101.3
37.5°	485.2	480.4	464.1	437.4	402.2	360.4	313.5	261.9	212.4	168.9	90.2
40°	490.4	485.2	467.8	439.7	402.8	359.6	311.2	258.5	206.7	160.6	78.4
42.5°	493.8	488.1	469.5	443.2	401.6	357.3	307.7	254.2	200.4	153.4	67.3
45°	495.5	489.5	469.8	440.3	399.6	353.0	302.6	248.8	193.5	143.7	56.1
47.5°	494.7	488.1	468.4	437.1	395.9	348.4	296.9	242.2	185.2	135.1	45.5
50°	493.3	486.4	465.2	433.1	390.8	342.7	290.6	234.2	176.6	124.5	36.1
52.5°	488.7	481.8	461.8	427.4	384.8	336.1	282.0	225.9	167.5	114.2	27.5
55°	483.0	476.7	455.8	422.3	377.0	328.1	274.0	217.0	158.6	103.6	19.8
57.5°	474.1	468.4	448.3	414.0	369.3	319.2	265.1	207.3	147.4	93.0	13.7
60°	463.2	457.5	438.0	404.5	360.4	309.2	255.4	197.2	137.4	82.4	8.6
62.5°	451.7	446.3	426.0	392.8	349.3	298.6	244.8	187.2	126.8	72.7	5.2
65°	436.6	431.4	413.1	378.7	336.9	287.1	233.0	175.2	115.9	61.8	2.9
67.5°	420.5	416.0	397.4	365.9	322.6	274.5	221.0	163.5	104.5	52.4	1.4
70°	403.4	397.6	380.5	348.4	308.0	260.2	207.8	151.4	93.6	43.2	0.0
72.5°	383.3	379.0	362.4	332.1	291.1	245.1	194.4	138.3	81.6	34.4	0.3
75°	363.9	358.4	343.2	314.6	274.5	229.0	179.5	126.0	69.9	26.3	0.3
77.5°	338.7	336.9	322.6	294.9	258.8	213.6	163.2	111.1	58.7	18.9	0.3
80°	313.5	311.8	300.6	275.1	240.5	195.2	148.0	97.0	47.8	12.6	0.3
82.5°	288.6	286.3	275.7	254.5	221.9	179.8	132.3	83.0	37.8	7.7	0.3
85°	266.2	263.4	251.9	232.5	202.7	162.3	115.9	69.3	28.1	4.3	0.6
87.5°	247.1	245.1	232.5	212.4	183.2	146.0	101.6	56.1	19.8	2.0	0.9
90°	230.7	226.4	215.3	194.1	164.9	128.0	86.5	44.9	13.2	1.1	1.1
92.5°	214.7	211.0	198.7	176.9	148.6	112.5	71.9	34.4	8.3	0.6	1.4
95°	198.1	194.1	182.1	162.0	132.0	96.8	59.0	25.2	4.6	0.6	1.4
97.5°	181.8	178.1	165.5	145.4	117.1	83.0	46.7	17.7	2.3	0.6	1.1
100°	166.6	162.3	150.9	130.8	102.2	69.3	36.1	11.5	1.4	0.6	1.1
102.5°	150.6	147.1	135.4	115.9	86.7	56.4	26.9	7.2	0.6	0.6	0.9
105°	136.3	132.0	120.5	100.5	73.9	44.4	18.9	4.3	0.6	0.6	0.9



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	88.7	85.3	75.3	58.4	37.5	17.5	5.2	0.9	0.9	0.9	0.9
115°	74.1	69.0	60.1	45.2	27.8	11.5	2.6	0.9	0.9	0.9	0.9
117.5°	59.3	55.0	48.7	34.4	18.3	7.4	1.4	0.9	0.9	0.9	0.9
120°	46.4	42.4	35.2	23.8	12.3	4.3	0.6	0.9	0.9	0.9	0.9
122.5°	33.2	30.1	23.8	15.5	7.4	2.0	0.9	0.9	1.1	1.1	0.9
125°	22.0	20.3	15.7	9.4	4.6	0.9	0.9	0.9	1.1	1.1	0.9
127.5°	14.3	12.9	9.2	5.4	2.0	0.9	0.9	1.1	1.1	1.1	0.9
130°	8.0	7.2	5.4	3.1	0.9	0.9	0.9	1.1	1.1	1.1	0.9
132.5°	4.6	4.3	2.9	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°	224.7	224.7	224.7
2.5°	213.9	209.8	208.7
5°	202.4	195.8	192.1
7.5°	190.9	182.1	177.8
10°	180.4	167.8	163.2
12.5°	167.8	153.2	146.0
15°	155.7	136.8	130.0
17.5°	142.3	121.1	113.1
20°	129.7	105.4	97.0
22.5°	115.4	89.9	80.7
25°	102.5	74.4	64.1
27.5°	88.2	58.7	49.8
30°	74.7	44.9	36.1
32.5°	61.8	32.9	24.9
35°	49.8	22.3	15.7
37.5°	38.4	13.7	8.0
40°	27.8	7.2	3.7
42.5°	18.6	3.4	2.0
45°	11.5	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	2.9
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°	120.2	116.8	105.4	86.5	60.4	33.8	12.6	2.3	0.6	0.9	0.9
110°	104.8	101.9	90.2	71.9	48.7	25.2	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)