

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: P550684

Luminaire Tested: **FCC-X-2-LD4-1LO-30-UNV-80-86-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: P550684
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-30-UNV-80-86-ED1D
Description: FCC CORNER MOUNT LUMINAIRE WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 3000K, AND 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

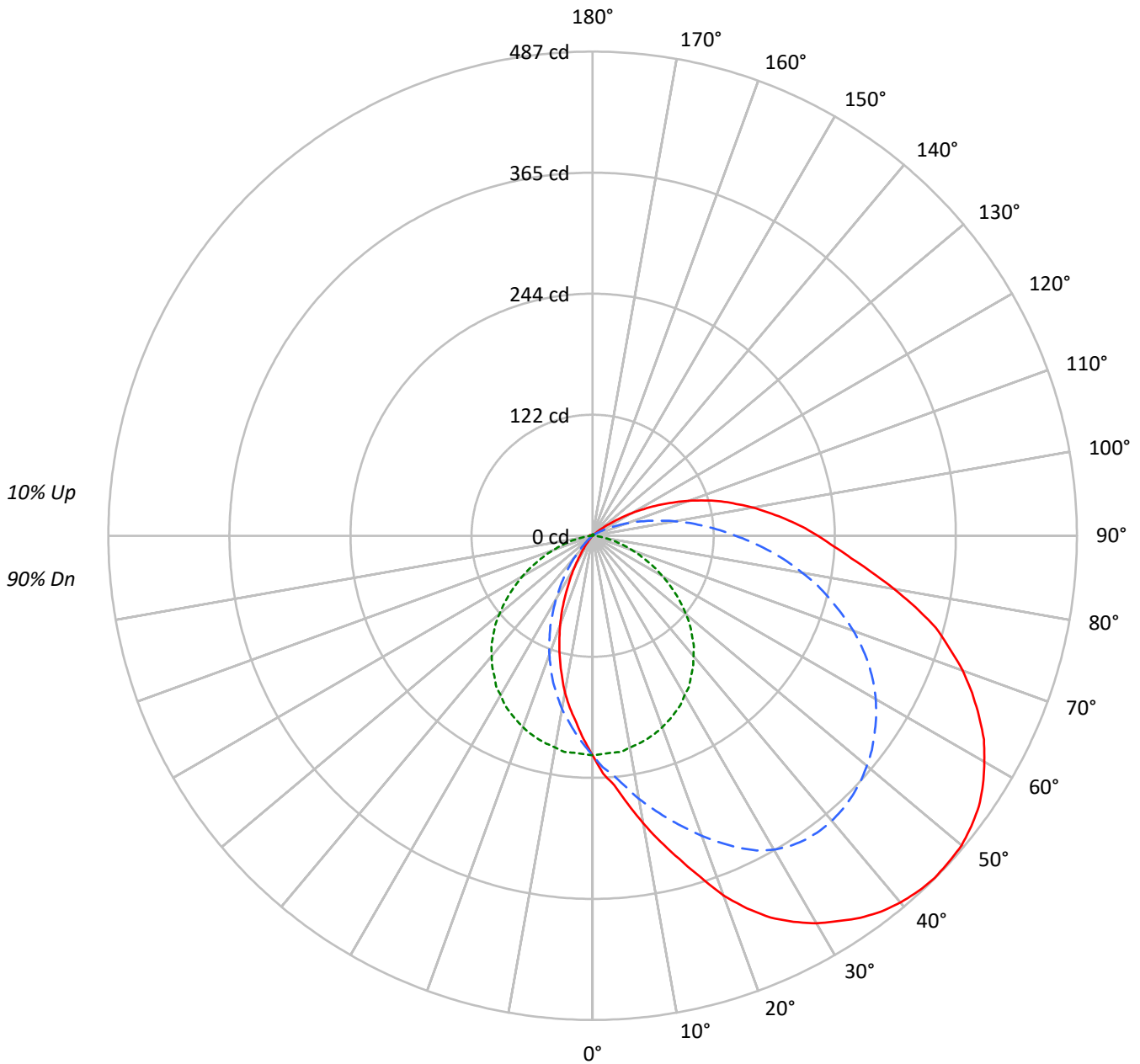
Lumens per Lamp: N/A
Luminaire Lumens: 1090.9 lumens
Efficiency: N/A
Efficacy: 93.2 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

Input Watts (W): 11.7
Input Voltage (V): NR
Input Current (A_{in}): 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: P550684

CATALOG NUMBER: FCC-X-2-LD4-1LO-30-UNV-80-86-ED1D

Luminous Intensity Polar Plot





TEST NUMBER: P550684

CATALOG NUMBER: FCC-X-2-LD4-1LO-30-UNV-80-86-ED1D

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°	2376	2376	2376
5°	2608	2341	1952
10°	2951	2312	1609
15°	3307	2283	1254
20°	3730	2245	924
25°	4081	2202	607
30°	4341	2145	341
35°	4567	2082	151
40°	4767	2006	37
45°	4938	1909	0
50°	5083	1782	0
55°	5193	1621	0
60°	5248	1433	0
65°	5269	1219	0
70°	5252	993	0
75°	5185	734	4
80°	4974	450	23
85°	4808	214	31



TEST NUMBER: P550684

CATALOG NUMBER: FCC-X-2-LD4-1LO-30-UNV-80-86-ED1D

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	21.1	1.9
10°-20°	63.3	5.8
20°-30°	102.5	9.4
30°-40°	131.7	12.1
40°-50°	149.0	13.7
50°-60°	154.4	14.2
60°-70°	145.6	13.3
70°-80°	122.0	11.2
80°-90°	88.5	8.1
90°-100°	58.1	5.3
100°-110°	33.6	3.1
110°-120°	14.8	1.4
120°-130°	4.0	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°	186.9	17.1
0°-40°	318.6	29.2
0°-60°	622.0	57.0
0°-90°	978.2	89.7
90°-120°	106.5	9.8
90°-150°	112.0	10.3
90°-180°	113.0	10.4
0°-180°	1090.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	221	221	221	221	221	
5°	252	242	219	199	189	25
15°	336	295	212	153	128	97
25°	424	346	196	101	63	196
35°	469	373	172	49	16	294
45°	487	370	141	11	0	376
55°	474	346	102	0	0	424
65°	429	306	61	0	0	424
75°	357	247	26	0	0	375
85°	261	179	4	1	2	223
90°	227	144	1	2	2	124
95°	194	112	1	2	2	153
105°	134	58	1	1	2	141
115°	73	19	1	1	1	73
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	



TEST NUMBER: P550684

CATALOG NUMBER: FCC-X-2-LD4-1LO-30-UNV-80-86-ED1D

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
0°	220.7	220.7	220.7	220.7	220.7	220.7	220.7	220.7	220.7	220.7	220.7
2.5°	239.2	239.0	238.1	236.7	234.7	231.4	228.6	226.0	222.7	219.8	214.5
5°	251.9	250.5	249.4	248.0	243.5	240.4	235.3	229.7	224.3	219.0	208.3
7.5°	272.1	269.9	268.2	264.3	258.1	251.0	243.2	237.8	234.2	219.3	201.0
10°	293.8	291.8	288.4	281.4	273.8	263.7	252.5	239.8	228.6	216.2	194.5
12.5°	315.1	312.3	307.6	298.6	287.9	275.2	259.8	244.9	228.8	214.2	186.9
15°	336.5	333.4	328.4	317.4	303.3	286.7	267.9	249.1	230.2	211.7	179.1
17.5°	359.8	355.6	348.0	335.7	318.0	297.4	275.2	252.5	229.7	208.6	170.6
20°	384.9	379.0	370.8	354.2	333.4	309.2	282.5	255.8	229.4	204.9	161.1
22.5°	405.7	399.8	390.8	373.6	348.6	319.1	288.7	258.1	228.3	200.7	152.1
25°	423.7	418.9	409.0	389.4	362.9	329.5	294.6	259.8	226.6	196.2	142.5
27.5°	437.7	433.2	422.2	402.0	375.0	338.8	299.1	260.6	224.3	191.7	132.7
30°	450.1	445.6	432.4	411.6	383.2	346.1	303.6	260.9	221.5	185.0	122.0
32.5°	459.6	455.4	441.9	419.7	388.8	351.1	306.1	260.6	217.9	180.2	110.5
35°	469.2	465.0	449.2	425.6	393.0	353.4	308.1	259.2	213.4	172.3	99.5
37.5°	476.5	471.7	455.7	429.6	395.0	353.9	307.8	257.2	208.6	165.9	88.6
40°	481.6	476.5	459.4	431.8	395.5	353.1	305.6	253.9	203.0	157.7	77.0
42.5°	484.9	479.3	461.0	435.2	394.4	350.8	302.2	249.6	196.8	150.7	66.1
45°	486.6	480.7	461.3	432.4	392.5	346.6	297.1	244.3	190.0	141.1	55.1
47.5°	485.8	479.3	459.9	429.3	388.8	342.1	291.5	237.8	181.9	132.7	44.7
50°	484.4	477.6	456.8	425.3	383.7	336.5	285.3	230.0	173.5	122.3	35.4
52.5°	479.9	473.1	453.5	419.7	377.8	330.0	276.9	221.8	164.5	112.2	27.0
55°	474.3	468.1	447.6	414.7	370.2	322.2	269.0	213.1	155.7	101.8	19.4
57.5°	465.5	459.9	440.2	406.5	362.7	313.5	260.3	203.5	144.8	91.4	13.5
60°	454.9	449.2	430.1	397.2	353.9	303.6	250.8	193.7	134.9	81.0	8.4
62.5°	443.6	438.3	418.3	385.7	343.0	293.2	240.4	183.9	124.5	71.4	5.1
65°	428.7	423.7	405.7	371.9	330.9	282.0	228.8	172.0	113.9	60.7	2.8
67.5°	413.0	408.5	390.2	359.3	316.8	269.6	217.0	160.5	102.6	51.4	1.4
70°	396.1	390.5	373.6	342.1	302.5	255.5	204.1	148.7	91.9	42.4	0.0
72.5°	376.4	372.2	355.9	326.1	285.9	240.6	190.9	135.8	80.1	33.7	0.3
75°	357.3	352.0	337.1	309.0	269.6	224.9	176.3	123.7	68.6	25.9	0.3
77.5°	332.6	330.9	316.8	289.6	254.1	209.7	160.2	109.1	57.6	18.6	0.3
80°	307.8	306.1	295.2	270.2	236.1	191.7	145.3	95.3	46.9	12.4	0.3
82.5°	283.4	281.1	270.7	249.9	217.9	176.5	129.9	81.5	37.1	7.6	0.3
85°	261.4	258.6	247.4	228.3	199.0	159.4	113.9	68.0	27.6	4.2	0.6
87.5°	242.6	240.6	228.3	208.6	179.9	143.4	99.8	55.1	19.4	2.0	0.8
90°	226.6	222.4	211.4	190.6	161.9	125.7	84.9	44.1	12.9	1.1	1.1
92.5°	210.8	207.2	195.1	173.7	145.9	110.5	70.6	33.7	8.2	0.6	1.4
95°	194.5	190.6	178.8	159.1	129.6	95.0	57.9	24.7	4.5	0.6	1.4
97.5°	178.5	174.9	162.5	142.8	115.0	81.5	45.8	17.4	2.2	0.6	1.1
100°	163.6	159.4	148.2	128.5	100.4	68.0	35.4	11.2	1.4	0.6	1.1
102.5°	147.9	144.5	133.0	113.9	85.2	55.4	26.4	7.0	0.6	0.6	0.8
105°	133.8	129.6	118.4	98.7	72.5	43.6	18.6	4.2	0.6	0.6	0.8



TEST NUMBER: P550684

CATALOG NUMBER: FCC-X-2-LD4-1LO-30-UNV-80-86-ED1D

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	87.1	83.8	73.9	57.3	36.8	17.1	5.1	0.8	0.8	0.8	0.8
115°	72.8	67.8	59.0	44.4	27.3	11.2	2.5	0.8	0.8	0.8	0.8
117.5°	58.2	54.0	47.8	33.7	18.0	7.3	1.4	0.8	0.8	0.8	0.8
120°	45.5	41.6	34.6	23.3	12.1	4.2	0.6	0.8	0.8	0.8	0.8
122.5°	32.6	29.5	23.3	15.2	7.3	2.0	0.8	0.8	1.1	1.1	0.8
125°	21.6	20.0	15.5	9.3	4.5	0.8	0.8	0.8	1.1	1.1	0.8
127.5°	14.1	12.7	9.0	5.3	2.0	0.8	0.8	1.1	1.1	1.1	0.8
130°	7.9	7.0	5.3	3.1	0.8	0.8	0.8	1.1	1.1	1.1	0.8
132.5°	4.5	4.2	2.8	0.6	0.8	0.8	0.8	1.1	1.1	1.1	1.1
135°	1.1	0.6	0.6	0.6	0.8	0.8	1.1	1.1	1.4	1.4	1.1
137.5°	0.3	0.3	0.6	0.6	0.8	0.8	1.1	1.4	1.4	1.4	1.1
140°	0.3	0.3	0.6	0.8	0.8	0.8	1.1	1.4	1.4	1.4	1.1
142.5°	0.3	0.6	0.6	0.8	0.8	1.1	1.1	1.4	1.4	1.1	1.1
145°	0.3	0.6	0.6	0.8	0.8	1.1	1.1	1.4	1.1	1.1	1.1
147.5°	0.6	0.6	0.6	0.8	0.8	1.1	1.1	1.4	1.4	1.1	1.1
150°	0.3	0.6	0.6	0.8	1.1	1.1	1.1	1.4	1.1	1.1	1.1
152.5°	0.3	0.6	0.6	0.8	1.1	1.1	1.1	1.4	1.1	1.1	1.1
155°	0.6	0.6	0.6	0.8	1.1	1.1	1.1	1.4	1.1	1.1	1.4
157.5°	0.6	0.6	0.6	0.8	1.1	1.1	1.1	1.4	1.1	1.1	1.4
160°	0.6	0.6	0.6	0.8	0.8	1.1	1.1	1.1	1.1	1.1	1.1
162.5°	0.6	0.6	0.6	0.8	0.8	1.1	1.1	1.1	1.1	1.1	1.1
165°	0.6	0.6	0.6	0.6	0.8	0.8	1.1	1.1	1.1	1.1	1.1
167.5°	0.6	0.6	0.6	0.8	0.8	0.8	1.1	1.1	1.1	1.1	1.1
170°	0.6	0.6	0.6	0.8	0.8	0.8	1.1	1.4	1.4	1.4	1.4
172.5°	0.6	0.6	0.6	0.8	0.8	1.1	1.1	1.4	1.4	1.4	1.4
175°	0.6	0.6	0.6	0.8	0.8	1.1	1.1	1.4	1.4	1.4	1.4
177.5°	0.3	0.6	0.6	0.8	0.8	1.1	1.1	1.4	1.4	1.4	1.1
180°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8



TEST NUMBER: P550684

CATALOG NUMBER: FCC-X-2-LD4-1LO-30-UNV-80-86-ED1D

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	220.7	220.7	220.7
2.5°	210.0	206.1	204.9
5°	198.8	192.3	188.6
7.5°	187.5	178.8	174.6
10°	177.1	164.7	160.2
12.5°	164.7	150.4	143.4
15°	152.9	134.4	127.6
17.5°	139.7	118.9	111.0
20°	127.3	103.5	95.3
22.5°	113.3	88.3	79.3
25°	100.6	73.1	63.0
27.5°	86.6	57.6	48.9
30°	73.4	44.1	35.4
32.5°	60.7	32.3	24.5
35°	48.9	21.9	15.5
37.5°	37.7	13.5	7.9
40°	27.3	7.0	3.7
42.5°	18.3	3.4	2.0
45°	11.2	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	0.8
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	2.2	2.2
95°	2.0	2.2	2.5
97.5°	2.2	2.5	2.5
100°	2.0	2.5	2.8
102.5°	1.7	2.5	2.5
105°	1.4	2.0	2.2



TEST NUMBER: P550684

CATALOG NUMBER: FCC-X-2-LD4-1LO-30-UNV-80-86-ED1D

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	1.1	1.4	1.4
115°	0.8	1.1	1.4
117.5°	0.8	1.1	1.1
120°	0.8	0.8	1.1
122.5°	0.8	0.8	1.1
125°	0.8	0.8	1.1
127.5°	1.1	0.8	0.8
130°	0.8	0.8	0.8
132.5°	1.1	0.8	0.8
135°	1.1	0.8	0.8
137.5°	1.1	0.8	0.8
140°	1.1	0.8	0.8
142.5°	1.1	0.8	0.8
145°	0.8	0.8	0.8
147.5°	0.8	0.8	0.8
150°	0.8	0.8	0.6
152.5°	0.8	0.6	0.6
155°	0.8	0.6	0.3
157.5°	1.1	0.6	0.3
160°	0.8	0.6	0.3
162.5°	0.8	0.6	0.3
165°	0.8	0.6	0.0
167.5°	0.8	0.6	0.3
170°	0.8	0.6	0.3
172.5°	0.8	0.6	0.3
175°	0.8	0.3	0.3
177.5°	0.8	0.3	0.3
180°	0.8	0.8	0.8



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	118.1	114.7	103.5	84.9	59.3	33.2	12.4	2.2	0.6	0.8	0.8
110°	102.9	100.1	88.6	70.6	47.8	24.7	8.2	1.4	0.8	0.8	0.8





107.5°	1.1	1.7	2.0
110°	1.1	1.4	1.7



(END OF REPORT)