

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: P550720

Luminaire Tested: **FCC-X-2-LD4-1LO-30-UNV-82-88-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: P550720
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-82-88-ED1D
Description: FCC CORNER MOUNT LUMINAIRE WITH .187 CLEAR PC FIXTURE SIDE AND .500 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 3000K, AND 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

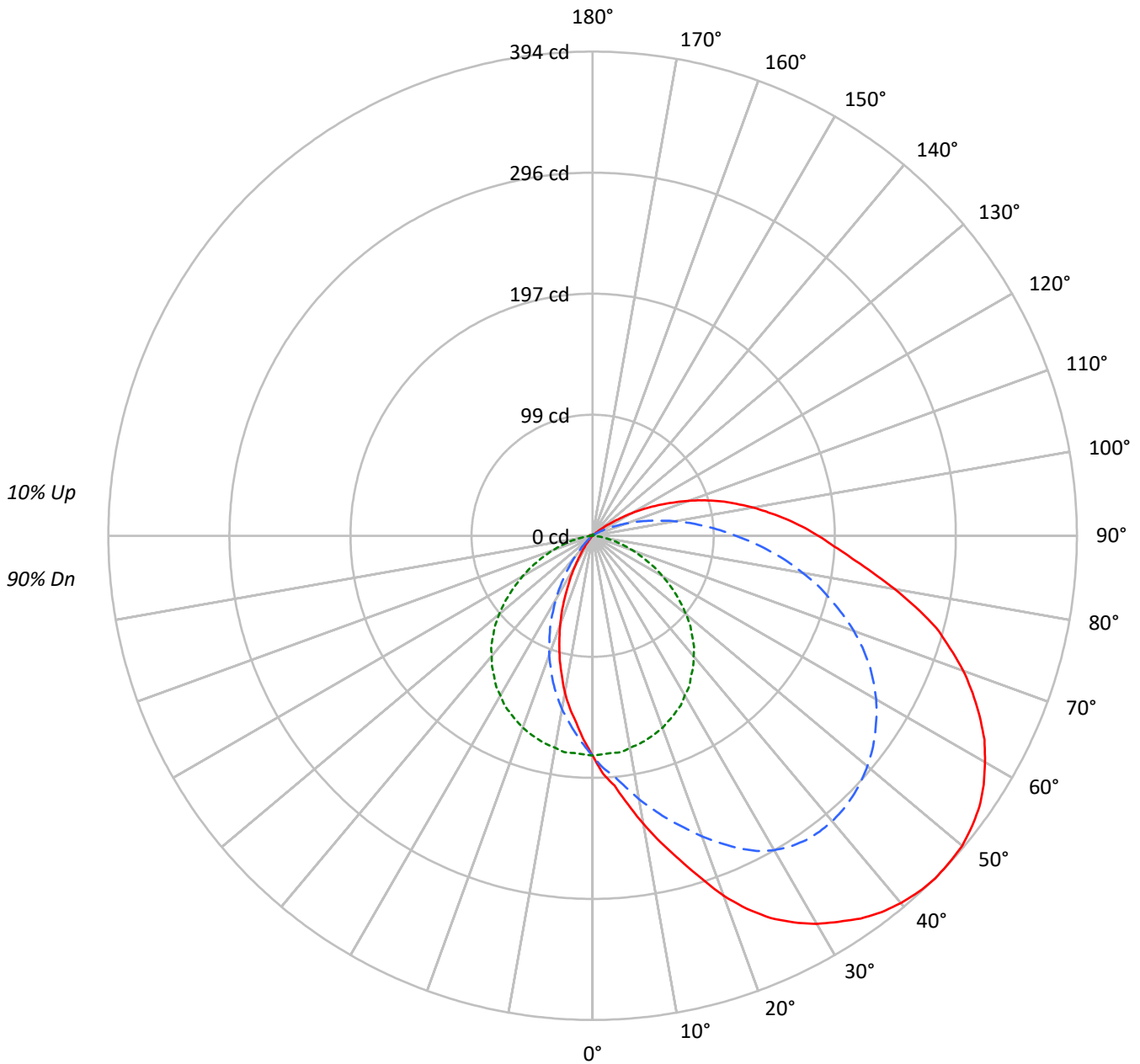
Lumens per Lamp: N/A
Luminaire Lumens: 884.0 lumens
Efficiency: N/A
Efficacy: 75.6 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

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: P550720

CATALOG NUMBER: FCC-X-2-LD4-1LO-30-UNV-82-88-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°	1925	1925	1925
5°	2113	1896	1582
10°	2391	1874	1304
15°	2680	1849	1016
20°	3022	1820	748
25°	3306	1784	491
30°	3517	1738	277
35°	3700	1687	122
40°	3862	1625	30
45°	4001	1547	0
50°	4119	1444	0
55°	4207	1314	0
60°	4252	1161	0
65°	4270	988	0
70°	4256	806	0
75°	4201	596	3
80°	4030	363	18
85°	3895	173	26



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	17.1	1.9
10°-20°	51.3	5.8
20°-30°	83.0	9.4
30°-40°	106.7	12.1
40°-50°	120.8	13.7
50°-60°	125.1	14.2
60°-70°	118.0	13.3
70°-80°	98.9	11.2
80°-90°	71.7	8.1
90°-100°	47.1	5.3
100°-110°	27.2	3.1
110°-120°	12.0	1.4
120°-130°	3.3	0.4
130°-140°	0.7	0.1
140°-150°	0.5	0.1
150°-160°	0.3	0.0
160°-170°	0.2	0.0
170°-180°	0.1	0.0
0°-30°	151.5	17.1
0°-40°	258.1	29.2
0°-60°	504.0	57.0
0°-90°	792.6	89.7
90°-120°	86.3	9.8
90°-150°	90.8	10.3
90°-180°	91.0	10.3
0°-180°	884.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	179	179	179	179	179	
5°	204	196	177	161	153	21
15°	273	239	172	124	103	79
25°	343	281	159	82	51	159
35°	380	302	140	40	12	238
45°	394	299	114	9	0	304
55°	384	280	82	0	0	343
65°	347	248	49	0	0	344
75°	290	200	21	0	0	304
85°	212	145	3	1	1	181
90°	184	116	1	1	2	101
95°	158	91	0	2	2	124
105°	108	47	0	1	2	114
115°	59	16	1	1	1	59
125°	18	2	1	1	1	18
135°	1	1	1	1	1	2
145°	0	1	1	1	1	0
155°	0	1	1	1	0	0
165°	0	1	1	1	0	0
175°	0	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°	178.8	178.8	178.8	178.8	178.8	178.8	178.8	178.8	178.8	178.8	178.8
2.5°	193.8	193.6	192.9	191.8	190.2	187.5	185.2	183.1	180.4	178.1	173.8
5°	204.1	203.0	202.0	200.9	197.3	194.8	190.7	186.1	181.8	177.4	168.8
7.5°	220.5	218.7	217.3	214.1	209.1	203.4	197.0	192.7	189.7	177.7	162.9
10°	238.0	236.4	233.7	228.0	221.9	213.7	204.6	194.3	185.2	175.2	157.6
12.5°	255.3	253.1	249.2	241.9	233.3	223.0	210.5	198.4	185.4	173.6	151.5
15°	272.7	270.2	266.1	257.2	245.8	232.3	217.1	201.8	186.6	171.5	145.1
17.5°	291.6	288.1	282.0	272.0	257.6	241.0	223.0	204.6	186.1	169.0	138.3
20°	311.8	307.1	300.4	287.0	270.2	250.6	228.9	207.3	185.9	166.1	130.5
22.5°	328.7	323.9	316.6	302.7	282.5	258.5	233.9	209.1	185.0	162.6	123.2
25°	343.3	339.4	331.4	315.5	294.1	267.0	238.7	210.5	183.6	159.0	115.5
27.5°	354.7	351.0	342.1	325.7	303.9	274.5	242.4	211.2	181.8	155.4	107.5
30°	364.7	361.0	350.3	333.5	310.5	280.4	246.0	211.4	179.5	149.9	98.9
32.5°	372.4	369.0	358.1	340.1	315.0	284.5	248.1	211.2	176.5	146.0	89.5
35°	380.2	376.8	364.0	344.9	318.4	286.3	249.7	210.0	172.9	139.6	80.6
37.5°	386.1	382.2	369.2	348.1	320.0	286.8	249.4	208.4	169.0	134.4	71.8
40°	390.2	386.1	372.2	349.9	320.5	286.1	247.6	205.7	164.5	127.8	62.4
42.5°	392.9	388.4	373.6	352.6	319.6	284.3	244.9	202.3	159.5	122.1	53.5
45°	394.3	389.5	373.8	350.3	318.0	280.9	240.8	197.9	154.0	114.3	44.6
47.5°	393.6	388.4	372.7	347.8	315.0	277.2	236.2	192.7	147.4	107.5	36.2
50°	392.5	387.0	370.2	344.6	310.9	272.7	231.2	186.3	140.5	99.1	28.7
52.5°	388.8	383.4	367.4	340.1	306.1	267.4	224.4	179.7	133.3	90.9	21.9
55°	384.3	379.3	362.6	336.0	300.0	261.0	218.0	172.7	126.2	82.5	15.7
57.5°	377.2	372.7	356.7	329.4	293.8	254.0	210.9	164.9	117.3	74.0	10.9
60°	368.6	364.0	348.5	321.9	286.8	246.0	203.2	156.9	109.3	65.6	6.8
62.5°	359.4	355.1	338.9	312.5	277.9	237.6	194.8	149.0	100.9	57.9	4.1
65°	347.4	343.3	328.7	301.4	268.1	228.5	185.4	139.4	92.3	49.2	2.3
67.5°	334.6	331.0	316.2	291.1	256.7	218.4	175.9	130.1	83.1	41.7	1.1
70°	321.0	316.4	302.7	277.2	245.1	207.1	165.4	120.5	74.5	34.4	0.0
72.5°	305.0	301.6	288.4	264.2	231.7	195.0	154.7	110.0	64.9	27.3	0.2
75°	289.5	285.2	273.1	250.3	218.4	182.2	142.8	100.2	55.6	21.0	0.2
77.5°	269.5	268.1	256.7	234.6	205.9	169.9	129.8	88.4	46.7	15.0	0.2
80°	249.4	248.1	239.2	218.9	191.3	155.4	117.8	77.2	38.0	10.0	0.2
82.5°	229.6	227.8	219.4	202.5	176.5	143.0	105.2	66.1	30.1	6.2	0.2
85°	211.8	209.6	200.5	185.0	161.3	129.2	92.3	55.1	22.3	3.4	0.5
87.5°	196.6	195.0	185.0	169.0	145.8	116.2	80.9	44.6	15.7	1.6	0.7
90°	183.6	180.2	171.3	154.4	131.2	101.8	68.8	35.8	10.5	0.9	0.9
92.5°	170.8	167.9	158.1	140.8	118.2	89.5	57.2	27.3	6.6	0.5	1.1
95°	157.6	154.4	144.9	128.9	105.0	77.0	46.9	20.0	3.6	0.5	1.1
97.5°	144.6	141.7	131.7	115.7	93.2	66.1	37.1	14.1	1.8	0.5	0.9
100°	132.6	129.2	120.0	104.1	81.3	55.1	28.7	9.1	1.1	0.5	0.9
102.5°	119.8	117.1	107.7	92.3	69.0	44.9	21.4	5.7	0.5	0.5	0.7
105°	108.4	105.0	95.9	80.0	58.8	35.3	15.0	3.4	0.5	0.5	0.7



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	70.6	67.9	59.9	46.5	29.8	13.9	4.1	0.7	0.7	0.7	0.7
115°	59.0	54.9	47.8	36.0	22.1	9.1	2.1	0.7	0.7	0.7	0.7
117.5°	47.2	43.7	38.7	27.3	14.6	5.9	1.1	0.7	0.7	0.7	0.7
120°	36.9	33.7	28.0	18.9	9.8	3.4	0.5	0.7	0.7	0.7	0.7
122.5°	26.4	23.9	18.9	12.3	5.9	1.6	0.7	0.7	0.9	0.9	0.7
125°	17.5	16.2	12.5	7.5	3.6	0.7	0.7	0.7	0.9	0.9	0.7
127.5°	11.4	10.3	7.3	4.3	1.6	0.7	0.7	0.9	0.9	0.9	0.7
130°	6.4	5.7	4.3	2.5	0.7	0.7	0.7	0.9	0.9	0.9	0.7
132.5°	3.6	3.4	2.3	0.5	0.7	0.7	0.7	0.9	0.9	0.9	0.9
135°	0.9	0.5	0.5	0.5	0.7	0.7	0.9	0.9	1.1	1.1	0.9
137.5°	0.2	0.2	0.5	0.5	0.7	0.7	0.9	1.1	1.1	1.1	0.9
140°	0.2	0.2	0.5	0.7	0.7	0.7	0.9	1.1	1.1	1.1	0.9
142.5°	0.2	0.5	0.5	0.7	0.7	0.9	0.9	1.1	1.1	0.9	0.9
145°	0.2	0.5	0.5	0.7	0.7	0.9	0.9	1.1	0.9	0.9	0.9
147.5°	0.5	0.5	0.5	0.7	0.7	0.9	0.9	1.1	1.1	0.9	0.9
150°	0.2	0.5	0.5	0.7	0.9	0.9	0.9	1.1	0.9	0.9	0.9
152.5°	0.2	0.5	0.5	0.7	0.9	0.9	0.9	1.1	0.9	0.9	0.9
155°	0.5	0.5	0.5	0.7	0.9	0.9	0.9	1.1	0.9	0.9	1.1
157.5°	0.5	0.5	0.5	0.7	0.9	0.9	0.9	1.1	0.9	0.9	1.1
160°	0.5	0.5	0.5	0.7	0.7	0.9	0.9	0.9	0.9	0.9	0.9
162.5°	0.5	0.5	0.5	0.7	0.7	0.9	0.9	0.9	0.9	0.9	0.9
165°	0.5	0.5	0.5	0.5	0.7	0.7	0.9	0.9	0.9	0.9	0.9
167.5°	0.5	0.5	0.5	0.7	0.7	0.7	0.9	0.9	0.9	0.9	0.9
170°	0.5	0.5	0.5	0.7	0.7	0.7	0.9	1.1	1.1	1.1	1.1
172.5°	0.5	0.5	0.5	0.7	0.7	0.9	0.9	1.1	1.1	1.1	1.1
175°	0.5	0.5	0.5	0.7	0.7	0.9	0.9	1.1	1.1	1.1	1.1
177.5°	0.2	0.5	0.5	0.7	0.7	0.9	0.9	1.1	1.1	1.1	0.9
180°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	178.8	178.8	178.8
2.5°	170.2	167.0	166.1
5°	161.0	155.8	152.8
7.5°	151.9	144.9	141.5
10°	143.5	133.5	129.8
12.5°	133.5	121.9	116.2
15°	123.9	108.9	103.4
17.5°	113.2	96.4	90.0
20°	103.2	83.8	77.2
22.5°	91.8	71.5	64.2
25°	81.5	59.2	51.0
27.5°	70.2	46.7	39.6
30°	59.5	35.8	28.7
32.5°	49.2	26.2	19.8
35°	39.6	17.8	12.5
37.5°	30.5	10.9	6.4
40°	22.1	5.7	3.0
42.5°	14.8	2.7	1.6
45°	9.1	1.4	0.0
47.5°	5.2	0.0	0.0
50°	2.7	0.0	0.0
52.5°	1.1	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°	0.2	0.2	0.2
77.5°	0.2	0.5	0.7
80°	0.5	0.9	1.1
82.5°	0.9	1.1	1.1
85°	0.9	1.1	1.4
87.5°	1.1	1.4	1.6
90°	1.4	1.6	1.6
92.5°	1.4	1.8	1.8
95°	1.6	1.8	2.1
97.5°	1.8	2.1	2.1
100°	1.6	2.1	2.3
102.5°	1.4	2.1	2.1
105°	1.1	1.6	1.8



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	0.9	1.1	1.1
115°	0.7	0.9	1.1
117.5°	0.7	0.9	0.9
120°	0.7	0.7	0.9
122.5°	0.7	0.7	0.9
125°	0.7	0.7	0.9
127.5°	0.9	0.7	0.7
130°	0.7	0.7	0.7
132.5°	0.9	0.7	0.7
135°	0.9	0.7	0.7
137.5°	0.9	0.7	0.7
140°	0.9	0.7	0.7
142.5°	0.9	0.7	0.7
145°	0.7	0.7	0.7
147.5°	0.7	0.7	0.7
150°	0.7	0.7	0.5
152.5°	0.7	0.5	0.5
155°	0.7	0.5	0.2
157.5°	0.9	0.5	0.2
160°	0.7	0.5	0.2
162.5°	0.7	0.5	0.2
165°	0.7	0.5	0.0
167.5°	0.7	0.5	0.2
170°	0.7	0.5	0.2
172.5°	0.7	0.5	0.2
175°	0.7	0.2	0.2
177.5°	0.7	0.2	0.2
180°	0.7	0.7	0.7



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	95.7	92.9	83.8	68.8	48.1	26.9	10.0	1.8	0.5	0.7	0.7
110°	83.4	81.1	71.8	57.2	38.7	20.0	6.6	1.1	0.7	0.7	0.7





107.5°	0.9	1.4	1.6
110°	0.9	1.1	1.4



(END OF REPORT)