

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: P550909

Luminaire Tested: **FCC-X-2-LD4-1LO-50-UNV-82-87-ED1D-90**

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: P550909
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-82-87-ED1D-90
Description: FCC CORNER MOUNT LUMINAIRE WITH .187 CLEAR PC FIXTURE SIDE AND .375 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 5000K, AND 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

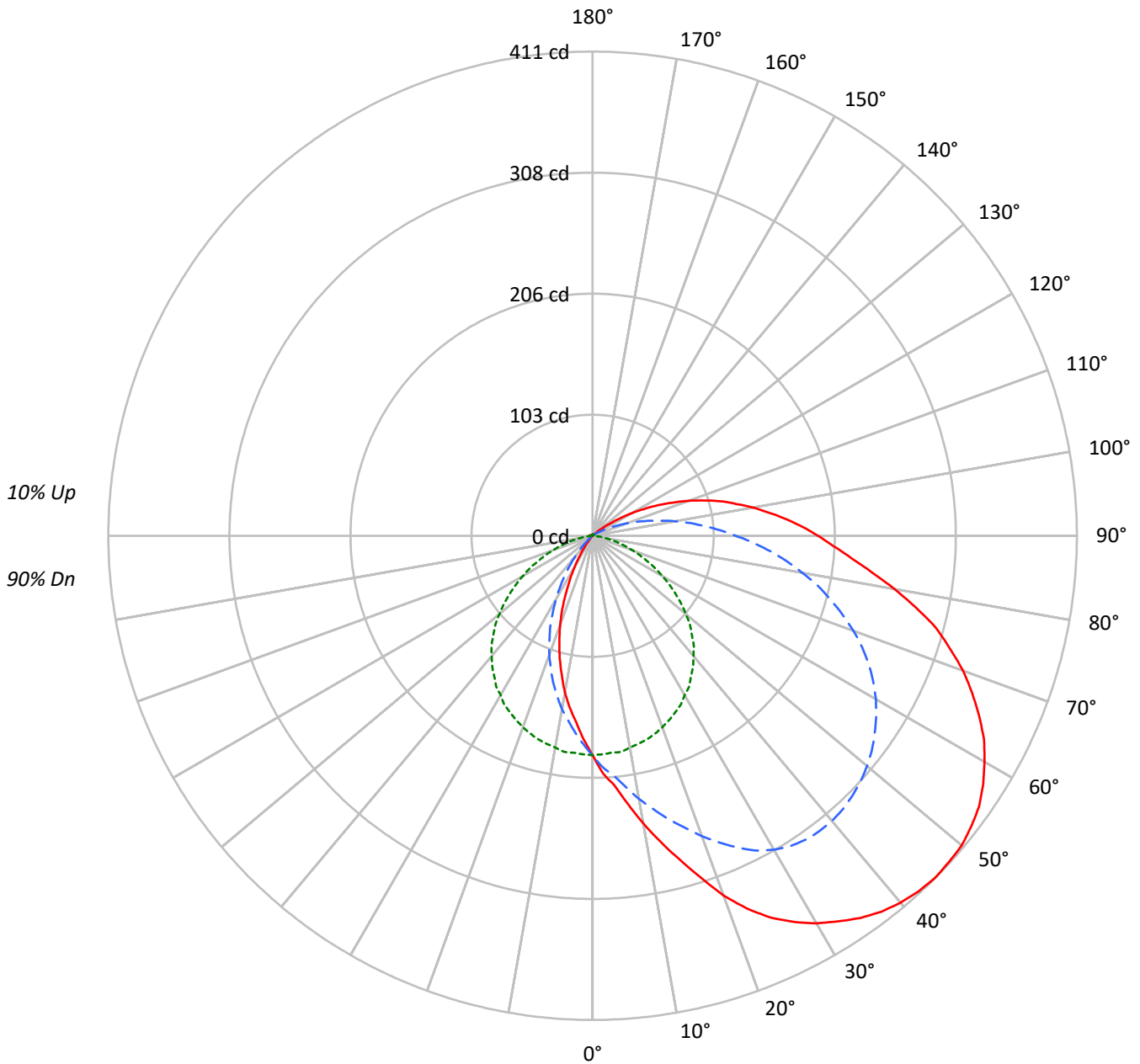
Lumens per Lamp: N/A
Luminaire Lumens: 920.9 lumens
Efficiency: N/A
Efficacy: 78.7 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

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: P550909

CATALOG NUMBER: FCC-X-2-LD4-1LO-50-UNV-82-87-ED1D-90

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°	2005	2005	2005
5°	2201	1976	1648
10°	2491	1952	1359
15°	2792	1927	1058
20°	3149	1895	780
25°	3444	1858	512
30°	3664	1811	288
35°	3855	1758	127
40°	4024	1693	31
45°	4169	1612	0
50°	4291	1504	0
55°	4384	1368	0
60°	4430	1209	0
65°	4448	1030	0
70°	4434	839	0
75°	4376	618	3
80°	4200	377	19
85°	4059	183	26



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	17.8	1.9
10°-20°	53.4	5.8
20°-30°	86.5	9.4
30°-40°	111.1	12.1
40°-50°	125.8	13.7
50°-60°	130.3	14.2
60°-70°	122.9	13.3
70°-80°	103.0	11.2
80°-90°	74.7	8.1
90°-100°	49.1	5.3
100°-110°	28.3	3.1
110°-120°	12.5	1.4
120°-130°	3.4	0.4
130°-140°	0.8	0.1
140°-150°	0.5	0.1
150°-160°	0.4	0.0
160°-170°	0.2	0.0
170°-180°	0.1	0.0
0°-30°	157.8	17.1
0°-40°	269.0	29.2
0°-60°	525.1	57.0
0°-90°	825.7	89.7
90°-120°	89.9	9.8
90°-150°	94.6	10.3
90°-180°	95.0	10.3
0°-180°	920.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	186	186	186	186	186	
5°	213	204	185	168	159	21
15°	284	249	179	129	108	82
25°	358	292	166	85	53	165
35°	396	315	146	41	13	248
45°	411	312	119	10	0	317
55°	400	292	86	0	0	358
65°	362	259	51	0	0	358
75°	302	209	22	0	0	316
85°	221	151	4	1	1	188
90°	191	121	1	1	2	105
95°	164	95	0	2	2	129
105°	113	49	0	1	2	119
115°	62	16	1	1	1	62
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°	186.3	186.3	186.3	186.3	186.3	186.3	186.3	186.3	186.3	186.3	186.3
2.5°	202.0	201.7	201.0	199.8	198.2	195.3	192.9	190.8	188.0	185.6	181.1
5°	212.6	211.5	210.5	209.3	205.5	202.9	198.6	193.9	189.4	184.9	175.9
7.5°	229.7	227.8	226.4	223.1	217.9	211.9	205.3	200.8	197.7	185.1	169.7
10°	248.0	246.3	243.5	237.6	231.1	222.6	213.1	202.4	192.9	182.5	164.2
12.5°	266.0	263.7	259.6	252.0	243.0	232.3	219.3	206.7	193.2	180.8	157.8
15°	284.1	281.5	277.2	267.9	256.1	242.1	226.2	210.3	194.4	178.7	151.2
17.5°	303.8	300.2	293.8	283.4	268.4	251.1	232.3	213.1	193.9	176.1	144.1
20°	324.9	319.9	313.0	299.0	281.5	261.1	238.5	216.0	193.7	173.0	136.0
22.5°	342.5	337.5	329.9	315.4	294.3	269.4	243.7	217.9	192.7	169.4	128.4
25°	357.6	353.6	345.3	328.7	306.4	278.1	248.7	219.3	191.3	165.6	120.3
27.5°	369.5	365.7	356.5	339.4	316.6	286.0	252.5	220.0	189.4	161.9	112.0
30°	379.9	376.2	365.0	347.4	323.5	292.1	256.3	220.2	187.0	156.2	103.0
32.5°	388.0	384.5	373.1	354.3	328.2	296.4	258.4	220.0	183.9	152.1	93.3
35°	396.1	392.5	379.2	359.3	331.8	298.3	260.1	218.8	180.1	145.5	84.0
37.5°	402.3	398.2	384.7	362.6	333.4	298.8	259.9	217.1	176.1	140.0	74.8
40°	406.5	402.3	387.8	364.5	333.9	298.1	258.0	214.3	171.3	133.1	65.0
42.5°	409.4	404.6	389.2	367.4	333.0	296.2	255.1	210.7	166.1	127.2	55.8
45°	410.8	405.8	389.4	365.0	331.3	292.6	250.8	206.2	160.4	119.1	46.5
47.5°	410.1	404.6	388.3	362.4	328.2	288.8	246.1	200.8	153.5	112.0	37.7
50°	408.9	403.2	385.6	359.1	323.9	284.1	240.9	194.1	146.4	103.2	29.9
52.5°	405.1	399.4	382.8	354.3	319.0	278.6	233.8	187.2	138.8	94.7	22.8
55°	400.4	395.1	377.8	350.0	312.6	272.0	227.1	179.9	131.5	85.9	16.4
57.5°	393.0	388.3	371.6	343.2	306.1	264.6	219.8	171.8	122.2	77.1	11.4
60°	384.0	379.2	363.1	335.3	298.8	256.3	211.7	163.5	113.9	68.3	7.1
62.5°	374.5	370.0	353.1	325.6	289.5	247.5	202.9	155.2	105.1	60.3	4.3
65°	361.9	357.6	342.5	314.0	279.3	238.0	193.2	145.2	96.1	51.3	2.4
67.5°	348.6	344.8	329.4	303.3	267.5	227.6	183.2	135.5	86.6	43.4	1.2
70°	334.4	329.6	315.4	288.8	255.4	215.7	172.3	125.5	77.6	35.8	0.0
72.5°	317.8	314.2	300.4	275.3	241.4	203.1	161.1	114.6	67.6	28.5	0.2
75°	301.6	297.1	284.5	260.8	227.6	189.9	148.8	104.4	57.9	21.8	0.2
77.5°	280.7	279.3	267.5	244.4	214.5	177.0	135.3	92.1	48.7	15.7	0.2
80°	259.9	258.4	249.2	228.1	199.3	161.9	122.7	80.5	39.6	10.4	0.2
82.5°	239.2	237.3	228.5	211.0	183.9	149.0	109.6	68.8	31.3	6.4	0.2
85°	220.7	218.3	208.8	192.7	168.0	134.6	96.1	57.4	23.3	3.6	0.5
87.5°	204.8	203.1	192.7	176.1	151.9	121.0	84.2	46.5	16.4	1.7	0.7
90°	191.3	187.7	178.5	160.9	136.7	106.1	71.7	37.3	10.9	0.9	0.9
92.5°	178.0	174.9	164.7	146.7	123.2	93.3	59.6	28.5	6.9	0.5	1.2
95°	164.2	160.9	150.9	134.3	109.4	80.2	48.9	20.9	3.8	0.5	1.2
97.5°	150.7	147.6	137.2	120.6	97.1	68.8	38.7	14.7	1.9	0.5	0.9
100°	138.1	134.6	125.1	108.5	84.7	57.4	29.9	9.5	1.2	0.5	0.9
102.5°	124.8	122.0	112.3	96.1	71.9	46.8	22.3	5.9	0.5	0.5	0.7
105°	113.0	109.4	99.9	83.3	61.2	36.8	15.7	3.6	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°	73.6	70.7	62.4	48.4	31.1	14.5	4.3	0.7	0.7	0.7	0.7
115°	61.5	57.2	49.8	37.5	23.0	9.5	2.1	0.7	0.7	0.7	0.7
117.5°	49.1	45.6	40.3	28.5	15.2	6.2	1.2	0.7	0.7	0.7	0.7
120°	38.4	35.1	29.2	19.7	10.2	3.6	0.5	0.7	0.7	0.7	0.7
122.5°	27.5	24.9	19.7	12.8	6.2	1.7	0.7	0.7	0.9	0.9	0.7
125°	18.3	16.8	13.1	7.8	3.8	0.7	0.7	0.7	0.9	0.9	0.7
127.5°	11.9	10.7	7.6	4.5	1.7	0.7	0.7	0.9	0.9	0.9	0.7
130°	6.6	5.9	4.5	2.6	0.7	0.7	0.7	0.9	0.9	0.9	0.7
132.5°	3.8	3.6	2.4	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	1.2	1.2	0.9
137.5°	0.2	0.2	0.5	0.5	0.7	0.7	0.9	1.2	1.2	1.2	0.9
140°	0.2	0.2	0.5	0.7	0.7	0.7	0.9	1.2	1.2	1.2	0.9
142.5°	0.2	0.5	0.5	0.7	0.7	0.9	0.9	1.2	1.2	0.9	0.9
145°	0.2	0.5	0.5	0.7	0.7	0.9	0.9	1.2	0.9	0.9	0.9
147.5°	0.5	0.5	0.5	0.7	0.7	0.9	0.9	1.2	1.2	0.9	0.9
150°	0.2	0.5	0.5	0.7	0.9	0.9	0.9	1.2	0.9	0.9	0.9
152.5°	0.2	0.5	0.5	0.7	0.9	0.9	0.9	1.2	0.9	0.9	0.9
155°	0.5	0.5	0.5	0.7	0.9	0.9	0.9	1.2	0.9	0.9	1.2
157.5°	0.5	0.5	0.5	0.7	0.9	0.9	0.9	1.2	0.9	0.9	1.2
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	1.2	1.2	1.2	1.2
172.5°	0.5	0.5	0.5	0.7	0.7	0.9	0.9	1.2	1.2	1.2	1.2
175°	0.5	0.5	0.5	0.7	0.7	0.9	0.9	1.2	1.2	1.2	1.2
177.5°	0.2	0.5	0.5	0.7	0.7	0.9	0.9	1.2	1.2	1.2	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°	186.3	186.3	186.3
2.5°	177.3	174.0	173.0
5°	167.8	162.3	159.2
7.5°	158.3	150.9	147.4
10°	149.5	139.1	135.3
12.5°	139.1	127.0	121.0
15°	129.1	113.4	107.7
17.5°	117.9	100.4	93.7
20°	107.5	87.3	80.5
22.5°	95.6	74.5	66.9
25°	85.0	61.7	53.2
27.5°	73.1	48.7	41.3
30°	61.9	37.3	29.9
32.5°	51.3	27.3	20.6
35°	41.3	18.5	13.1
37.5°	31.8	11.4	6.6
40°	23.0	5.9	3.1
42.5°	15.4	2.8	1.7
45°	9.5	1.4	0.0
47.5°	5.5	0.0	0.0
50°	2.8	0.0	0.0
52.5°	1.2	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	1.2
82.5°	0.9	1.2	1.2
85°	0.9	1.2	1.4
87.5°	1.2	1.4	1.7
90°	1.4	1.7	1.7
92.5°	1.4	1.9	1.9
95°	1.7	1.9	2.1
97.5°	1.9	2.1	2.1
100°	1.7	2.1	2.4
102.5°	1.4	2.1	2.1
105°	1.2	1.7	1.9



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	0.9	1.2	1.2
115°	0.7	0.9	1.2
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°	99.7	96.8	87.3	71.7	50.1	28.0	10.4	1.9	0.5	0.7	0.7
110°	86.9	84.5	74.8	59.6	40.3	20.9	6.9	1.2	0.7	0.7	0.7





107.5°	0.9	1.4	1.7
110°	0.9	1.2	1.4



(END OF REPORT)