

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: P550788

Luminaire Tested: **FCC-X-2-LD4-1LO-35-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: P550788
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-35-UNV-82-96-ED1D
Description: FCC CORNER MOUNT LUMINAIRE WITH .187 CLEAR PC FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES AND 3500K, AND 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

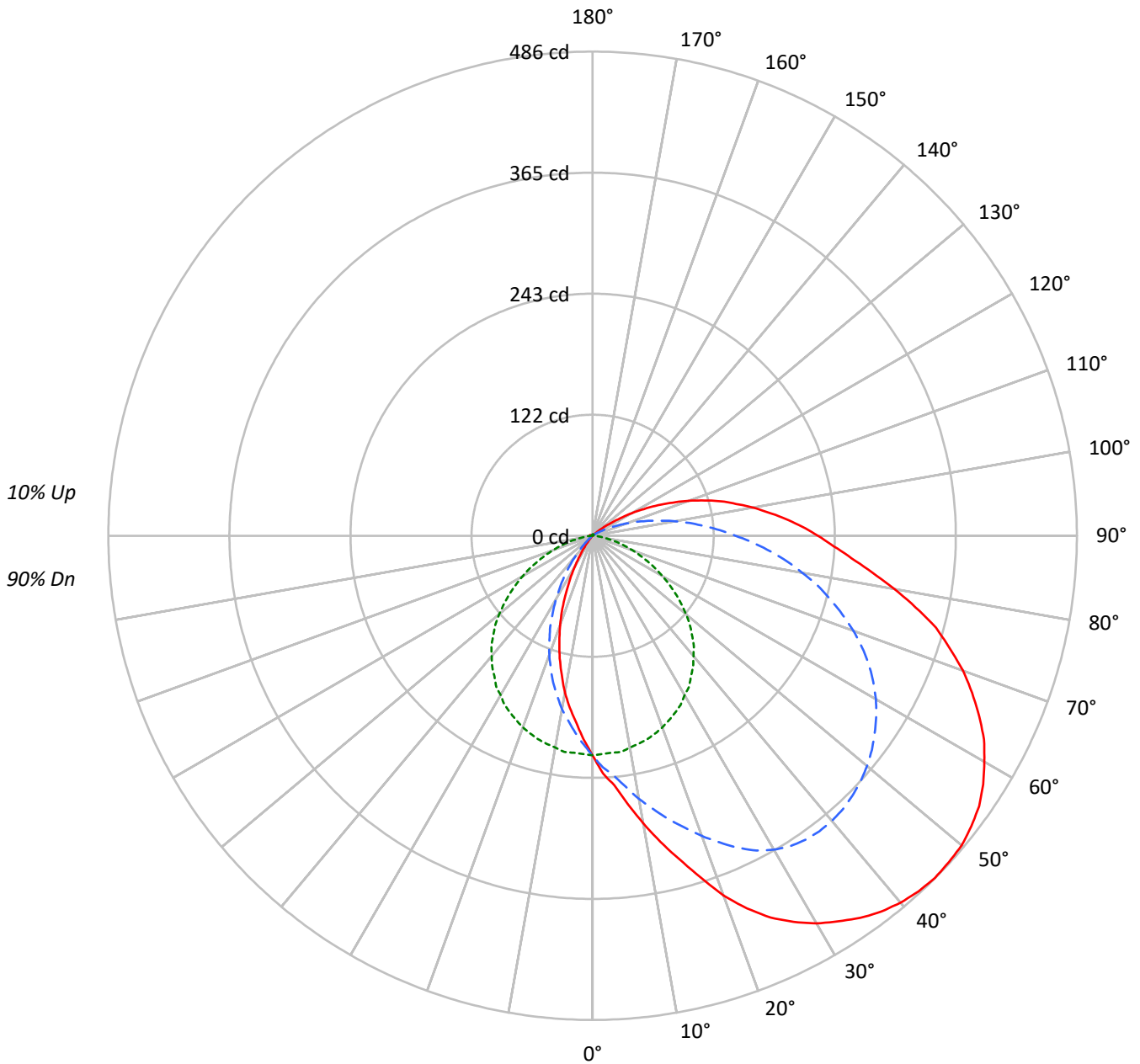
Lumens per Lamp: N/A
Luminaire Lumens: 1088.9 lumens
Efficiency: N/A
Efficacy: 93.1 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

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

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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°	2371	2371	2371
5°	2603	2336	1949
10°	2945	2308	1606
15°	3301	2278	1252
20°	3723	2242	922
25°	4073	2198	606
30°	4333	2140	341
35°	4558	2078	150
40°	4758	2002	36
45°	4929	1907	0
50°	5073	1780	0
55°	5183	1618	0
60°	5238	1430	0
65°	5259	1217	0
70°	5242	993	0
75°	5176	732	4
80°	4966	446	23
85°	4800	214	31



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	21.1	1.9
10°-20°	63.2	5.8
20°-30°	102.3	9.4
30°-40°	131.4	12.1
40°-50°	148.8	13.7
50°-60°	154.1	14.2
60°-70°	145.4	13.3
70°-80°	121.8	11.2
80°-90°	88.3	8.1
90°-100°	58.0	5.3
100°-110°	33.5	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°	186.6	17.1
0°-40°	318.0	29.2
0°-60°	620.9	57.0
0°-90°	976.4	89.7
90°-120°	106.3	9.8
90°-150°	111.8	10.3
90°-180°	113.0	10.4
0°-180°	1088.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	220	220	220	220	220	
5°	251	241	219	198	188	25
15°	336	294	211	153	127	97
25°	423	346	196	100	63	195
35°	468	372	172	49	15	294
45°	486	369	141	11	0	375
55°	473	346	102	0	0	423
65°	428	306	61	0	0	423
75°	357	247	26	0	0	374
85°	261	179	4	1	2	223
90°	226	144	1	2	2	124
95°	194	112	1	2	2	152
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	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
0°	220.3	220.3	220.3	220.3	220.3	220.3	220.3	220.3	220.3	220.3	220.3
2.5°	238.8	238.5	237.7	236.3	234.3	230.9	228.1	225.6	222.2	219.4	214.1
5°	251.4	250.0	248.9	247.5	243.0	239.9	234.9	229.3	223.9	218.6	207.9
7.5°	271.6	269.4	267.7	263.8	257.6	250.6	242.7	237.4	233.7	218.9	200.6
10°	293.2	291.3	287.9	280.9	273.3	263.2	252.0	239.4	228.1	215.8	194.2
12.5°	314.6	311.8	307.0	298.0	287.3	274.7	259.3	244.4	228.4	213.8	186.6
15°	335.9	332.8	327.8	316.8	302.8	286.2	267.4	248.6	229.8	211.3	178.7
17.5°	359.2	355.0	347.4	335.0	317.4	296.9	274.7	252.0	229.3	208.2	170.3
20°	384.2	378.3	370.1	353.6	332.8	308.7	282.0	255.4	229.0	204.6	160.8
22.5°	404.9	399.0	390.0	372.9	348.0	318.5	288.2	257.6	227.9	200.4	151.8
25°	422.9	418.1	408.3	388.6	362.3	328.9	294.1	259.3	226.2	195.9	142.3
27.5°	436.9	432.4	421.5	401.3	374.3	338.1	298.6	260.1	223.9	191.4	132.4
30°	449.3	444.8	431.6	410.8	382.5	345.4	303.1	260.4	221.1	184.6	121.8
32.5°	458.8	454.6	441.1	419.0	388.1	350.5	305.6	260.1	217.5	179.9	110.3
35°	468.3	464.1	448.4	424.8	392.3	352.7	307.5	258.7	213.0	172.0	99.3
37.5°	475.6	470.9	454.9	428.8	394.3	353.3	307.3	256.8	208.2	165.6	88.4
40°	480.7	475.6	458.5	431.0	394.8	352.4	305.0	253.4	202.6	157.4	76.9
42.5°	484.1	478.4	460.2	434.4	393.7	350.2	301.7	249.2	196.4	150.4	65.9
45°	485.7	479.8	460.5	431.6	391.7	346.0	296.6	243.8	189.7	140.9	55.0
47.5°	484.9	478.4	459.1	428.5	388.1	341.5	291.0	237.4	181.6	132.4	44.6
50°	483.5	476.8	456.0	424.6	383.0	335.9	284.8	229.5	173.1	122.1	35.4
52.5°	479.0	472.3	452.6	419.0	377.1	329.4	276.4	221.4	164.2	112.0	26.9
55°	473.4	467.2	446.7	413.9	369.6	321.6	268.5	212.7	155.5	101.6	19.4
57.5°	464.7	459.1	439.4	405.8	362.0	312.9	259.8	203.2	144.5	91.2	13.5
60°	454.0	448.4	429.3	396.5	353.3	303.1	250.3	193.3	134.7	80.8	8.4
62.5°	442.8	437.5	417.5	385.0	342.3	292.7	239.9	183.5	124.3	71.3	5.1
65°	427.9	422.9	404.9	371.2	330.3	281.5	228.4	171.7	113.6	60.6	2.8
67.5°	412.2	407.7	389.5	358.6	316.2	269.1	216.6	160.2	102.4	51.4	1.4
70°	395.4	389.8	372.9	341.5	301.9	255.1	203.7	148.4	91.8	42.4	0.0
72.5°	375.7	371.5	355.3	325.5	285.4	240.2	190.5	135.5	80.0	33.7	0.3
75°	356.7	351.3	336.5	308.4	269.1	224.5	175.9	123.5	68.5	25.8	0.3
77.5°	332.0	330.3	316.2	289.0	253.7	209.3	159.9	108.9	57.5	18.5	0.3
80°	307.3	305.6	294.6	269.7	235.7	191.4	145.1	95.1	46.9	12.3	0.3
82.5°	282.9	280.6	270.2	249.5	217.5	176.2	129.6	81.4	37.0	7.6	0.3
85°	261.0	258.2	246.9	227.9	198.7	159.1	113.6	67.9	27.5	4.2	0.6
87.5°	242.2	240.2	227.9	208.2	179.6	143.1	99.6	55.0	19.4	2.0	0.8
90°	226.2	222.0	211.0	190.3	161.6	125.4	84.7	44.1	12.9	1.1	1.1
92.5°	210.5	206.8	194.7	173.4	145.6	110.3	70.4	33.7	8.1	0.6	1.4
95°	194.2	190.3	178.5	158.8	129.4	94.8	57.8	24.7	4.5	0.6	1.4
97.5°	178.2	174.5	162.2	142.5	114.8	81.4	45.7	17.4	2.2	0.6	1.1
100°	163.3	159.1	147.9	128.2	100.2	67.9	35.4	11.2	1.4	0.6	1.1
102.5°	147.6	144.2	132.7	113.6	85.0	55.3	26.4	7.0	0.6	0.6	0.8
105°	133.6	129.4	118.1	98.5	72.4	43.5	18.5	4.2	0.6	0.6	0.8



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CATALOG NUMBER: FCC-X-2-LD4-1LO-35-UNV-82-96-ED1D

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	87.0	83.6	73.8	57.2	36.8	17.1	5.1	0.8	0.8	0.8	0.8
115°	72.7	67.6	58.9	44.3	27.2	11.2	2.5	0.8	0.8	0.8	0.8
117.5°	58.1	53.9	47.7	33.7	18.0	7.3	1.4	0.8	0.8	0.8	0.8
120°	45.5	41.5	34.5	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	19.9	15.4	9.3	4.5	0.8	0.8	0.8	1.1	1.1	0.8
127.5°	14.0	12.6	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



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	220.3	220.3	220.3
2.5°	209.6	205.7	204.6
5°	198.4	191.9	188.3
7.5°	187.2	178.5	174.3
10°	176.8	164.4	159.9
12.5°	164.4	150.1	143.1
15°	152.7	134.1	127.4
17.5°	139.5	118.7	110.8
20°	127.1	103.3	95.1
22.5°	113.1	88.1	79.1
25°	100.5	73.0	62.9
27.5°	86.4	57.5	48.8
30°	73.2	44.1	35.4
32.5°	60.6	32.3	24.4
35°	48.8	21.9	15.4
37.5°	37.6	13.5	7.9
40°	27.2	7.0	3.6
42.5°	18.2	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



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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°	117.9	114.5	103.3	84.7	59.2	33.1	12.3	2.2	0.6	0.8	0.8
110°	102.7	99.9	88.4	70.4	47.7	24.7	8.1	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)