

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: P550468

Luminaire Tested: **FCC-X-2-LD4-1HI-30-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: P550468
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-LD4-1HI-30-UNV-82-96-ED1D
Description: FCC CORNER MOUNT LUMINAIRE WITH .187 CLEAR PC FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES AND 3000K, AND 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

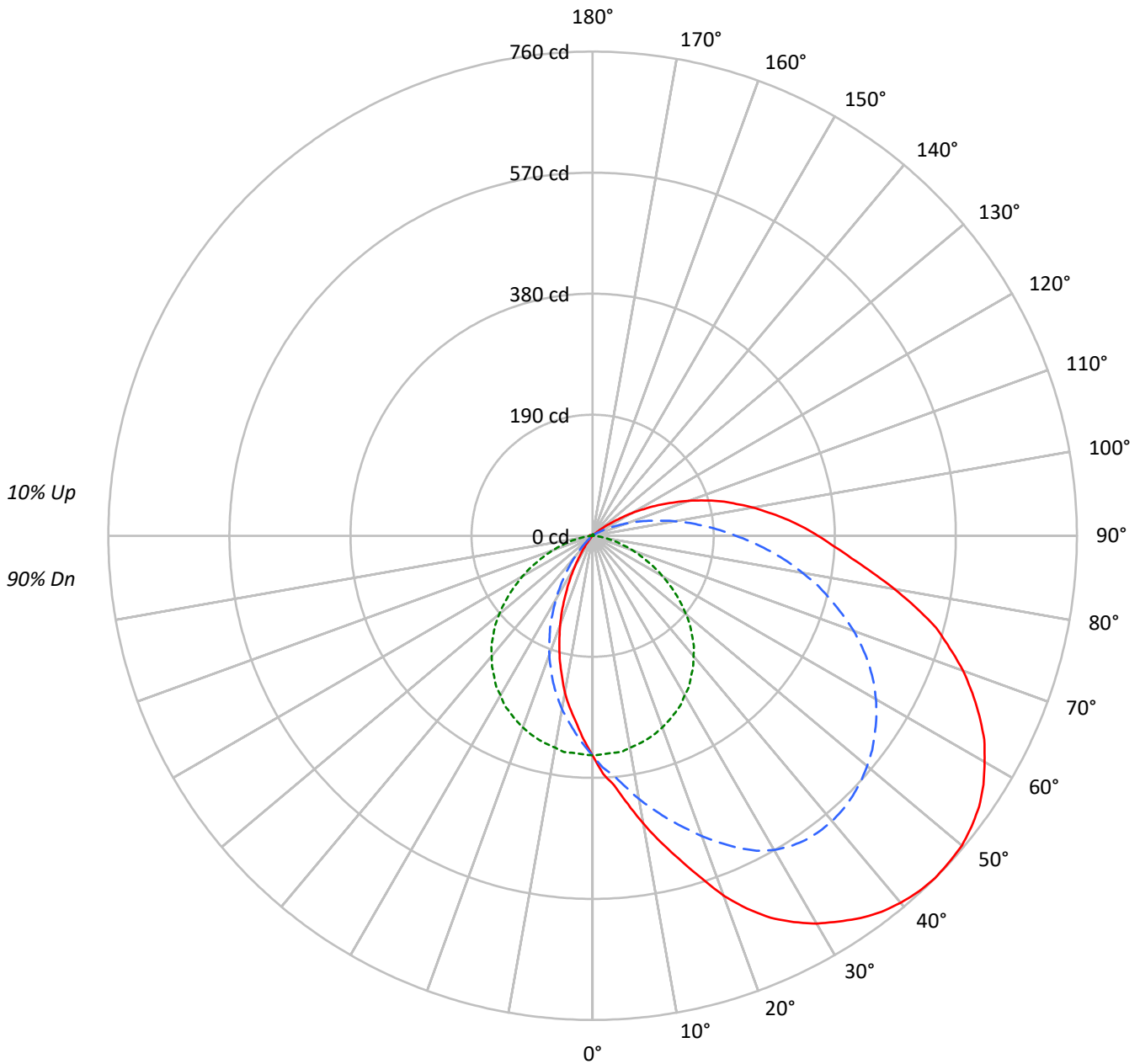
Lumens per Lamp: N/A
Luminaire Lumens: 1704.0 lumens
Efficiency: N/A
Efficacy: 78.5 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

Input Watts (W): 21.7
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: P550468

CATALOG NUMBER: FCC-X-2-LD4-1HI-30-UNV-82-96-ED1D

Luminous Intensity Polar Plot





TEST NUMBER: P550468

CATALOG NUMBER: FCC-X-2-LD4-1HI-30-UNV-82-96-ED1D

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°	3710	3710	3710
5°	4073	3655	3050
10°	4608	3611	2514
15°	5165	3565	1959
20°	5825	3507	1442
25°	6373	3440	948
30°	6780	3349	533
35°	7132	3253	235
40°	7445	3132	56
45°	7713	2982	0
50°	7938	2784	0
55°	8109	2530	0
60°	8196	2239	0
65°	8230	1904	0
70°	8203	1553	0
75°	8099	1146	6
80°	7770	700	36
85°	7509	336	48



TEST NUMBER: P550468

CATALOG NUMBER: FCC-X-2-LD4-1HI-30-UNV-82-96-ED1D

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	33.0	1.9
10°-20°	98.9	5.8
20°-30°	160.1	9.4
30°-40°	205.6	12.1
40°-50°	232.8	13.7
50°-60°	241.2	14.2
60°-70°	227.5	13.3
70°-80°	190.6	11.2
80°-90°	138.2	8.1
90°-100°	90.8	5.3
100°-110°	52.4	3.1
110°-120°	23.1	1.4
120°-130°	6.3	0.4
130°-140°	1.4	0.1
140°-150°	0.9	0.1
150°-160°	0.7	0.0
160°-170°	0.4	0.0
170°-180°	0.1	0.0
0°-30°	292.0	17.1
0°-40°	497.6	29.2
0°-60°	971.6	57.0
0°-90°	1527.8	89.7
90°-120°	166.4	9.8
90°-150°	175.1	10.3
90°-180°	176.0	10.3
0°-180°	1704.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	345	345	345	345	345	
5°	393	378	342	310	295	40
15°	526	461	331	239	199	152
25°	662	541	306	157	98	306
35°	733	583	269	76	24	460
45°	760	577	220	18	0	587
55°	741	541	159	0	0	661
65°	670	479	95	0	0	662
75°	558	386	40	0	0	585
85°	408	280	7	2	3	349
90°	354	225	2	3	3	194
95°	304	175	1	3	4	238
105°	209	91	1	2	4	221
115°	114	30	1	1	2	114
125°	34	4	2	1	2	34
135°	2	1	2	2	1	3
145°	0	2	2	1	1	0
155°	1	2	2	1	0	0
165°	1	1	2	1	0	0
175°	1	2	2	1	0	0
180°	1	1	1	1	1	



TEST NUMBER: P550468

CATALOG NUMBER: FCC-X-2-LD4-1HI-30-UNV-82-96-ED1D

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
0°	344.7	344.7	344.7	344.7	344.7	344.7	344.7	344.7	344.7	344.7	344.7
2.5°	373.7	373.2	371.9	369.7	366.6	361.4	357.0	353.0	347.8	343.4	335.0
5°	393.4	391.2	389.5	387.3	380.2	375.4	367.5	358.7	350.4	342.0	325.4
7.5°	425.0	421.5	418.9	412.7	403.1	392.1	379.8	371.5	365.8	342.5	313.9
10°	458.8	455.8	450.5	439.5	427.7	411.9	394.3	374.5	357.0	337.7	303.8
12.5°	492.2	487.8	480.4	466.3	449.6	429.9	405.7	382.4	357.4	334.6	292.0
15°	525.6	520.7	512.8	495.7	473.8	447.9	418.4	389.0	359.6	330.6	279.7
17.5°	562.0	555.4	543.6	524.3	496.6	464.5	429.9	394.3	358.7	325.8	266.5
20°	601.1	591.9	579.1	553.2	520.7	483.0	441.3	399.6	358.3	320.1	251.6
22.5°	633.6	624.4	610.3	583.5	544.5	498.4	450.9	403.1	356.5	313.5	237.5
25°	661.7	654.2	638.9	608.1	566.9	514.6	460.2	405.7	353.9	306.5	222.6
27.5°	683.6	676.6	659.5	627.9	585.7	529.1	467.2	407.0	350.4	299.5	207.2
30°	703.0	695.9	675.3	642.8	598.5	540.5	474.2	407.5	346.0	288.9	190.6
32.5°	717.9	711.3	690.2	655.5	607.2	548.4	478.2	407.0	340.3	281.5	172.6
35°	732.8	726.2	701.7	664.8	613.8	551.9	481.2	404.8	333.3	269.2	155.4
37.5°	744.2	736.8	711.7	670.9	616.9	552.8	480.8	401.8	325.8	259.1	138.3
40°	752.1	744.2	717.5	674.4	617.8	551.5	477.3	396.5	317.0	246.3	120.3
42.5°	757.4	748.6	720.1	679.7	616.0	548.0	472.0	389.9	307.4	235.3	103.2
45°	760.0	750.8	720.5	675.3	613.0	541.4	464.1	381.6	296.8	220.4	86.1
47.5°	758.7	748.6	718.3	670.5	607.2	534.4	455.3	371.5	284.1	207.2	69.8
50°	756.5	746.0	713.5	664.3	599.3	525.6	445.7	359.2	270.9	191.0	55.3
52.5°	749.5	739.0	708.2	655.5	590.1	515.5	432.5	346.4	256.9	175.2	42.2
55°	740.7	731.1	699.0	647.6	578.3	503.2	420.2	332.8	243.3	158.9	30.3
57.5°	727.1	718.3	687.6	634.9	566.4	489.6	406.6	317.9	226.1	142.7	21.1
60°	710.4	701.7	671.8	620.4	552.8	474.2	391.7	302.5	210.8	126.5	13.2
62.5°	692.9	684.5	653.4	602.4	535.7	458.0	375.4	287.2	194.5	111.5	7.9
65°	669.6	661.7	633.6	580.9	516.8	440.4	357.4	268.7	177.8	94.8	4.4
67.5°	645.0	638.0	609.4	561.1	494.8	421.1	339.0	250.7	160.3	80.4	2.2
70°	618.7	609.9	583.5	534.4	472.5	399.1	318.8	232.3	143.6	66.3	0.0
72.5°	587.9	581.3	555.9	509.3	446.5	375.9	298.1	212.1	125.1	52.7	0.4
75°	558.1	549.7	526.5	482.5	421.1	351.3	275.3	193.2	107.1	40.4	0.4
77.5°	519.4	516.8	494.8	452.3	396.9	327.6	250.3	170.4	90.0	29.0	0.4
80°	480.8	478.2	461.0	422.0	368.8	299.5	227.0	148.8	73.3	19.3	0.4
82.5°	442.6	439.1	422.8	390.3	340.3	275.7	202.9	127.3	58.0	11.9	0.4
85°	408.3	404.0	386.4	356.5	310.9	249.0	177.8	106.3	43.0	6.6	0.9
87.5°	378.9	375.9	356.5	325.8	281.0	223.9	155.9	86.1	30.3	3.1	1.3
90°	353.9	347.3	330.2	297.7	252.9	196.3	132.6	68.9	20.2	1.8	1.8
92.5°	329.3	323.6	304.7	271.4	227.9	172.6	110.2	52.7	12.7	0.9	2.2
95°	303.8	297.7	279.3	248.5	202.4	148.4	90.5	38.6	7.0	0.9	2.2
97.5°	278.8	273.1	253.8	223.1	179.6	127.3	71.6	27.2	3.5	0.9	1.8
100°	255.5	249.0	231.4	200.7	156.8	106.3	55.3	17.6	2.2	0.9	1.8
102.5°	231.0	225.7	207.7	177.8	133.0	86.5	41.3	11.0	0.9	0.9	1.3
105°	209.0	202.4	184.9	154.1	113.3	68.1	29.0	6.6	0.9	0.9	1.3



TEST NUMBER: P550468

CATALOG NUMBER: FCC-X-2-LD4-1HI-30-UNV-82-96-ED1D

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	136.1	130.8	115.5	89.6	57.5	26.8	7.9	1.3	1.3	1.3	1.3
115°	113.7	105.8	92.2	69.4	42.6	17.6	4.0	1.3	1.3	1.3	1.3
117.5°	90.9	84.3	74.6	52.7	28.1	11.4	2.2	1.3	1.3	1.3	1.3
120°	71.1	65.0	54.0	36.4	18.9	6.6	0.9	1.3	1.3	1.3	1.3
122.5°	50.9	46.1	36.4	23.7	11.4	3.1	1.3	1.3	1.8	1.8	1.3
125°	33.8	31.2	24.1	14.5	7.0	1.3	1.3	1.3	1.8	1.8	1.3
127.5°	22.0	19.8	14.1	8.3	3.1	1.3	1.3	1.8	1.8	1.8	1.3
130°	12.3	11.0	8.3	4.8	1.3	1.3	1.3	1.8	1.8	1.8	1.3
132.5°	7.0	6.6	4.4	0.9	1.3	1.3	1.3	1.8	1.8	1.8	1.8
135°	1.8	0.9	0.9	0.9	1.3	1.3	1.8	1.8	2.2	2.2	1.8
137.5°	0.4	0.4	0.9	0.9	1.3	1.3	1.8	2.2	2.2	2.2	1.8
140°	0.4	0.4	0.9	1.3	1.3	1.3	1.8	2.2	2.2	2.2	1.8
142.5°	0.4	0.9	0.9	1.3	1.3	1.8	1.8	2.2	2.2	1.8	1.8
145°	0.4	0.9	0.9	1.3	1.3	1.8	1.8	2.2	1.8	1.8	1.8
147.5°	0.9	0.9	0.9	1.3	1.3	1.8	1.8	2.2	2.2	1.8	1.8
150°	0.4	0.9	0.9	1.3	1.8	1.8	1.8	2.2	1.8	1.8	1.8
152.5°	0.4	0.9	0.9	1.3	1.8	1.8	1.8	2.2	1.8	1.8	1.8
155°	0.9	0.9	0.9	1.3	1.8	1.8	1.8	2.2	1.8	1.8	2.2
157.5°	0.9	0.9	0.9	1.3	1.8	1.8	1.8	2.2	1.8	1.8	2.2
160°	0.9	0.9	0.9	1.3	1.3	1.8	1.8	1.8	1.8	1.8	1.8
162.5°	0.9	0.9	0.9	1.3	1.3	1.8	1.8	1.8	1.8	1.8	1.8
165°	0.9	0.9	0.9	0.9	1.3	1.3	1.8	1.8	1.8	1.8	1.8
167.5°	0.9	0.9	0.9	1.3	1.3	1.3	1.8	1.8	1.8	1.8	1.8
170°	0.9	0.9	0.9	1.3	1.3	1.3	1.8	2.2	2.2	2.2	2.2
172.5°	0.9	0.9	0.9	1.3	1.3	1.8	1.8	2.2	2.2	2.2	2.2
175°	0.9	0.9	0.9	1.3	1.3	1.8	1.8	2.2	2.2	2.2	2.2
177.5°	0.4	0.9	0.9	1.3	1.3	1.8	1.8	2.2	2.2	2.2	1.8
180°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3



TEST NUMBER: P550468

CATALOG NUMBER: FCC-X-2-LD4-1HI-30-UNV-82-96-ED1D

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	344.7	344.7	344.7
2.5°	328.0	321.8	320.1
5°	310.4	300.3	294.6
7.5°	292.9	279.3	272.7
10°	276.6	257.3	250.3
12.5°	257.3	234.9	223.9
15°	238.9	209.9	199.3
17.5°	218.2	185.7	173.4
20°	198.9	161.6	148.8
22.5°	176.9	137.9	123.8
25°	157.2	114.2	98.4
27.5°	135.2	90.0	76.4
30°	114.6	68.9	55.3
32.5°	94.8	50.5	38.2
35°	76.4	34.2	24.1
37.5°	58.8	21.1	12.3
40°	42.6	11.0	5.7
42.5°	28.5	5.3	3.1
45°	17.6	2.6	0.0
47.5°	10.1	0.0	0.0
50°	5.3	0.0	0.0
52.5°	2.2	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°	0.4	0.4	0.4
77.5°	0.4	0.9	1.3
80°	0.9	1.8	2.2
82.5°	1.8	2.2	2.2
85°	1.8	2.2	2.6
87.5°	2.2	2.6	3.1
90°	2.6	3.1	3.1
92.5°	2.6	3.5	3.5
95°	3.1	3.5	4.0
97.5°	3.5	4.0	4.0
100°	3.1	4.0	4.4
102.5°	2.6	4.0	4.0
105°	2.2	3.1	3.5



TEST NUMBER: P550468

CATALOG NUMBER: FCC-X-2-LD4-1HI-30-UNV-82-96-ED1D

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	1.8	2.2	2.2
115°	1.3	1.8	2.2
117.5°	1.3	1.8	1.8
120°	1.3	1.3	1.8
122.5°	1.3	1.3	1.8
125°	1.3	1.3	1.8
127.5°	1.8	1.3	1.3
130°	1.3	1.3	1.3
132.5°	1.8	1.3	1.3
135°	1.8	1.3	1.3
137.5°	1.8	1.3	1.3
140°	1.8	1.3	1.3
142.5°	1.8	1.3	1.3
145°	1.3	1.3	1.3
147.5°	1.3	1.3	1.3
150°	1.3	1.3	0.9
152.5°	1.3	0.9	0.9
155°	1.3	0.9	0.4
157.5°	1.8	0.9	0.4
160°	1.3	0.9	0.4
162.5°	1.3	0.9	0.4
165°	1.3	0.9	0.0
167.5°	1.3	0.9	0.4
170°	1.3	0.9	0.4
172.5°	1.3	0.9	0.4
175°	1.3	0.4	0.4
177.5°	1.3	0.4	0.4
180°	1.3	1.3	1.3



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	184.4	179.1	161.6	132.6	92.6	51.8	19.3	3.5	0.9	1.3	1.3
110°	160.7	156.3	138.3	110.2	74.6	38.6	12.7	2.2	1.3	1.3	1.3





107.5°	1.8	2.6	3.1
110°	1.8	2.2	2.6



(END OF REPORT)