

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: P550969

Luminaire Tested: **FCC-X-2-LD4-1STD-30-UNV-82-85-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: P550969
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-LD4-1STD-30-UNV-82-85-ED1D-90
Description: FCC CORNER MOUNT LUMINAIRE WITH .187 CLEAR PC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 3000K, AND 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

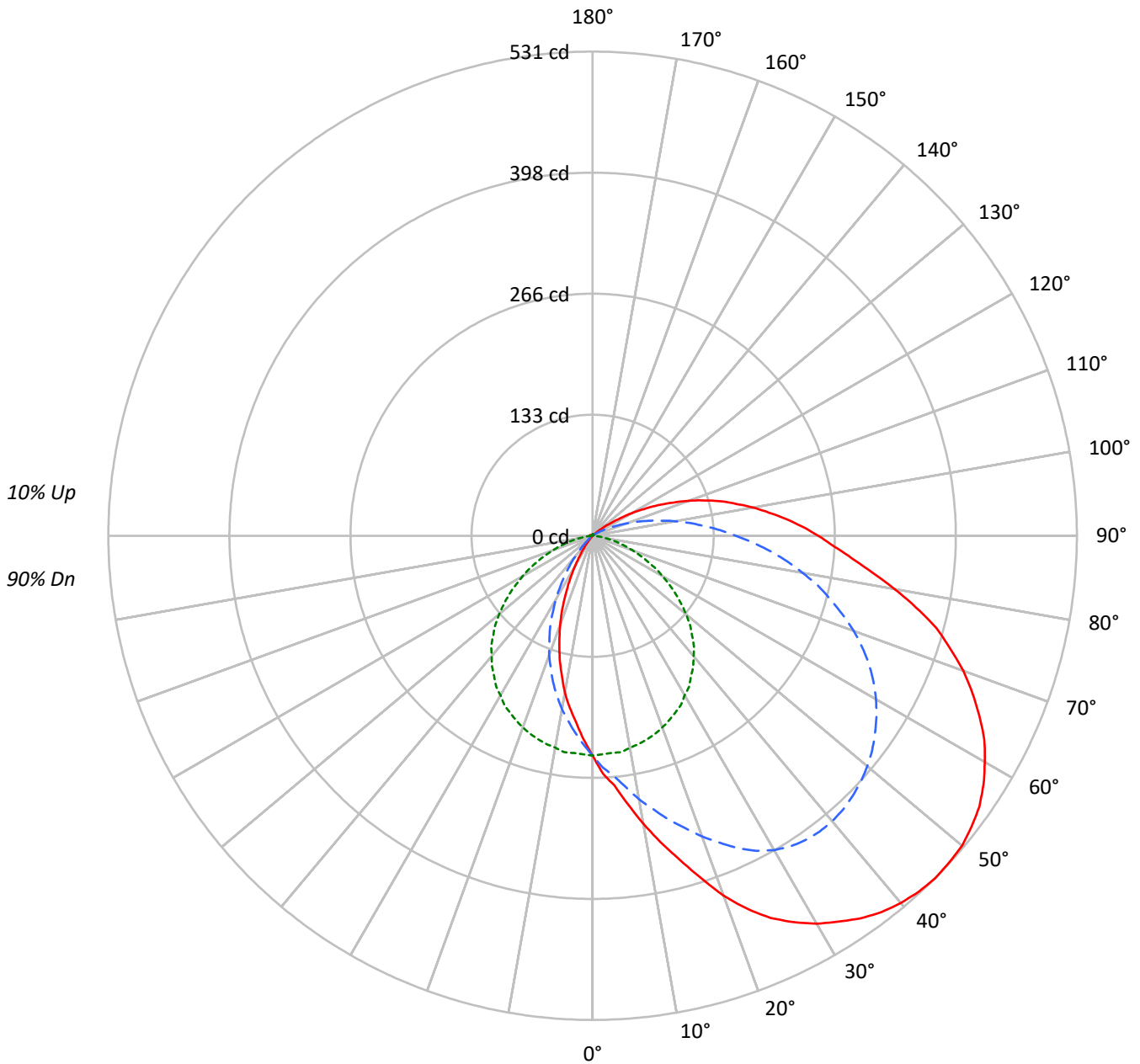
Lumens per Lamp: N/A
Luminaire Lumens: 1190.9 lumens
Efficiency: N/A
Efficacy: 71.3 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

Input Watts (W): 16.7
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: P550969

CATALOG NUMBER: FCC-X-2-LD4-1STD-30-UNV-82-85-ED1D-90

Luminous Intensity Polar Plot





TEST NUMBER: P550969

CATALOG NUMBER: FCC-X-2-LD4-1STD-30-UNV-82-85-ED1D-90

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°	2593	2593	2593
5°	2847	2556	2132
10°	3221	2524	1757
15°	3610	2492	1369
20°	4071	2451	1008
25°	4454	2404	662
30°	4739	2341	373
35°	4985	2273	164
40°	5204	2190	40
45°	5391	2085	0
50°	5549	1946	0
55°	5668	1769	0
60°	5729	1564	0
65°	5752	1332	0
70°	5733	1085	0
75°	5661	800	4
80°	5430	490	24
85°	5249	234	33



TEST NUMBER: P550969

CATALOG NUMBER: FCC-X-2-LD4-1STD-30-UNV-82-85-ED1D-90

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	23.1	1.9
10°-20°	69.1	5.8
20°-30°	111.9	9.4
30°-40°	143.7	12.1
40°-50°	162.7	13.7
50°-60°	168.6	14.2
60°-70°	159.0	13.3
70°-80°	133.2	11.2
80°-90°	96.6	8.1
90°-100°	63.5	5.3
100°-110°	36.6	3.1
110°-120°	16.2	1.4
120°-130°	4.4	0.4
130°-140°	1.0	0.1
140°-150°	0.6	0.1
150°-160°	0.5	0.0
160°-170°	0.3	0.0
170°-180°	0.1	0.0
0°-30°	204.1	17.1
0°-40°	347.8	29.2
0°-60°	679.1	57.0
0°-90°	1067.8	89.7
90°-120°	116.3	9.8
90°-150°	122.3	10.3
90°-180°	123.0	10.3
0°-180°	1190.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	241	241	241	241	241	
5°	275	264	239	217	206	28
15°	367	322	231	167	139	106
25°	462	378	214	110	69	214
35°	512	407	188	53	17	321
45°	531	403	154	12	0	410
55°	518	378	111	0	0	462
65°	468	334	66	0	0	463
75°	390	270	28	0	0	409
85°	285	196	5	1	2	244
90°	247	157	1	2	2	136
95°	212	123	1	2	3	167
105°	146	63	1	2	2	154
115°	80	21	1	1	2	80
125°	24	3	1	1	1	24
135°	1	1	2	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	2	1	0	0
180°	1	1	1	1	1	



TEST NUMBER: P550969

CATALOG NUMBER: FCC-X-2-LD4-1STD-30-UNV-82-85-ED1D-90

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
0°	240.9	240.9	240.9	240.9	240.9	240.9	240.9	240.9	240.9	240.9	240.9
2.5°	261.2	260.9	259.9	258.4	256.3	252.6	249.5	246.7	243.1	240.0	234.2
5°	275.0	273.4	272.2	270.7	265.8	262.4	256.9	250.7	244.9	239.1	227.4
7.5°	297.1	294.6	292.8	288.5	281.7	274.1	265.5	259.6	255.6	239.4	219.4
10°	320.7	318.6	314.9	307.2	298.9	287.9	275.6	261.8	249.5	236.0	212.4
12.5°	344.0	341.0	335.7	325.9	314.3	300.4	283.6	267.3	249.8	233.9	204.1
15°	367.4	364.0	358.5	346.5	331.1	313.0	292.5	271.9	251.3	231.1	195.5
17.5°	392.8	388.2	379.9	366.4	347.1	324.7	300.4	275.6	250.7	227.7	186.3
20°	420.1	413.7	404.8	386.7	364.0	337.6	308.4	279.3	250.4	223.7	175.8
22.5°	442.8	436.4	426.6	407.9	380.5	348.3	315.2	281.7	249.2	219.1	166.0
25°	462.5	457.3	446.5	425.0	396.2	359.7	321.6	283.6	247.4	214.2	155.6
27.5°	477.8	472.9	461.0	438.9	409.4	369.8	326.5	284.5	244.9	209.3	144.9
30°	491.3	486.4	472.0	449.3	418.3	377.8	331.4	284.8	241.8	201.9	133.2
32.5°	501.8	497.2	482.4	458.2	424.4	383.3	334.2	284.5	237.8	196.7	120.6
35°	512.2	507.6	490.4	464.6	429.0	385.8	336.4	283.0	232.9	188.1	108.6
37.5°	520.2	515.0	497.5	468.9	431.2	386.4	336.0	280.8	227.7	181.1	96.7
40°	525.7	520.2	501.5	471.4	431.8	385.5	333.6	277.1	221.6	172.2	84.1
42.5°	529.4	523.3	503.3	475.1	430.6	383.0	329.9	272.5	214.8	164.5	72.1
45°	531.2	524.8	503.6	472.0	428.4	378.4	324.4	266.7	207.5	154.1	60.2
47.5°	530.3	523.3	502.1	468.6	424.4	373.5	318.2	259.6	198.6	144.9	48.8
50°	528.8	521.4	498.7	464.3	418.9	367.4	311.5	251.0	189.4	133.5	38.7
52.5°	523.9	516.5	495.0	458.2	412.5	360.3	302.3	242.1	179.5	122.5	29.5
55°	517.7	511.0	488.6	452.7	404.2	351.7	293.7	232.6	170.0	111.1	21.2
57.5°	508.2	502.1	480.6	443.8	395.9	342.2	284.2	222.2	158.0	99.7	14.7
60°	496.6	490.4	469.5	433.6	386.4	331.4	273.7	211.4	147.3	88.4	9.2
62.5°	484.3	478.4	456.7	421.1	374.4	320.1	262.4	200.7	136.0	78.0	5.5
65°	468.0	462.5	442.8	406.0	361.2	307.8	249.8	187.8	124.3	66.3	3.1
67.5°	450.8	445.9	426.0	392.2	345.9	294.3	236.9	175.2	112.0	56.2	1.5
70°	432.4	426.3	407.9	373.5	330.2	279.0	222.8	162.3	100.4	46.3	0.0
72.5°	410.9	406.3	388.5	356.0	312.1	262.7	208.4	148.2	87.5	36.8	0.3
75°	390.1	384.2	368.0	337.3	294.3	245.5	192.4	135.0	74.9	28.2	0.3
77.5°	363.1	361.2	345.9	316.1	277.4	228.9	174.9	119.1	62.9	20.3	0.3
80°	336.0	334.2	322.2	294.9	257.8	209.3	158.7	104.0	51.3	13.5	0.3
82.5°	309.3	306.9	295.5	272.8	237.8	192.7	141.8	89.0	40.5	8.3	0.3
85°	285.4	282.3	270.1	249.2	217.3	174.0	124.3	74.3	30.1	4.6	0.6
87.5°	264.8	262.7	249.2	227.7	196.4	156.5	108.9	60.2	21.2	2.1	0.9
90°	247.4	242.8	230.8	208.1	176.8	137.2	92.7	48.2	14.1	1.2	1.2
92.5°	230.2	226.2	213.0	189.7	159.3	120.6	77.0	36.8	8.9	0.6	1.5
95°	212.4	208.1	195.2	173.7	141.5	103.7	63.2	27.0	4.9	0.6	1.5
97.5°	194.9	190.9	177.4	155.9	125.5	89.0	50.0	19.0	2.5	0.6	1.2
100°	178.6	174.0	161.7	140.2	109.6	74.3	38.7	12.3	1.5	0.6	1.2
102.5°	161.4	157.7	145.2	124.3	93.0	60.5	28.8	7.7	0.6	0.6	0.9
105°	146.1	141.5	129.2	107.7	79.2	47.6	20.3	4.6	0.6	0.6	0.9



TEST NUMBER: P550969

CATALOG NUMBER: FCC-X-2-LD4-1STD-30-UNV-82-85-ED1D-90

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	95.1	91.5	80.7	62.6	40.2	18.7	5.5	0.9	0.9	0.9	0.9
115°	79.5	74.0	64.4	48.5	29.8	12.3	2.8	0.9	0.9	0.9	0.9
117.5°	63.5	58.9	52.2	36.8	19.6	8.0	1.5	0.9	0.9	0.9	0.9
120°	49.7	45.4	37.7	25.5	13.2	4.6	0.6	0.9	0.9	0.9	0.9
122.5°	35.6	32.2	25.5	16.6	8.0	2.1	0.9	0.9	1.2	1.2	0.9
125°	23.6	21.8	16.9	10.1	4.9	0.9	0.9	0.9	1.2	1.2	0.9
127.5°	15.3	13.8	9.8	5.8	2.1	0.9	0.9	1.2	1.2	1.2	0.9
130°	8.6	7.7	5.8	3.4	0.9	0.9	0.9	1.2	1.2	1.2	0.9
132.5°	4.9	4.6	3.1	0.6	0.9	0.9	0.9	1.2	1.2	1.2	1.2
135°	1.2	0.6	0.6	0.6	0.9	0.9	1.2	1.2	1.5	1.5	1.2
137.5°	0.3	0.3	0.6	0.6	0.9	0.9	1.2	1.5	1.5	1.5	1.2
140°	0.3	0.3	0.6	0.9	0.9	0.9	1.2	1.5	1.5	1.5	1.2
142.5°	0.3	0.6	0.6	0.9	0.9	1.2	1.2	1.5	1.5	1.2	1.2
145°	0.3	0.6	0.6	0.9	0.9	1.2	1.2	1.5	1.2	1.2	1.2
147.5°	0.6	0.6	0.6	0.9	0.9	1.2	1.2	1.5	1.5	1.2	1.2
150°	0.3	0.6	0.6	0.9	1.2	1.2	1.2	1.5	1.2	1.2	1.2
152.5°	0.3	0.6	0.6	0.9	1.2	1.2	1.2	1.5	1.2	1.2	1.2
155°	0.6	0.6	0.6	0.9	1.2	1.2	1.2	1.5	1.2	1.2	1.5
157.5°	0.6	0.6	0.6	0.9	1.2	1.2	1.2	1.5	1.2	1.2	1.5
160°	0.6	0.6	0.6	0.9	0.9	1.2	1.2	1.2	1.2	1.2	1.2
162.5°	0.6	0.6	0.6	0.9	0.9	1.2	1.2	1.2	1.2	1.2	1.2
165°	0.6	0.6	0.6	0.6	0.9	0.9	1.2	1.2	1.2	1.2	1.2
167.5°	0.6	0.6	0.6	0.9	0.9	0.9	1.2	1.2	1.2	1.2	1.2
170°	0.6	0.6	0.6	0.9	0.9	0.9	1.2	1.5	1.5	1.5	1.5
172.5°	0.6	0.6	0.6	0.9	0.9	1.2	1.2	1.5	1.5	1.5	1.5
175°	0.6	0.6	0.6	0.9	0.9	1.2	1.2	1.5	1.5	1.5	1.5
177.5°	0.3	0.6	0.6	0.9	0.9	1.2	1.2	1.5	1.5	1.5	1.2
180°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9



TEST NUMBER: P550969

CATALOG NUMBER: FCC-X-2-LD4-1STD-30-UNV-82-85-ED1D-90

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	240.9	240.9	240.9
2.5°	229.2	225.0	223.7
5°	217.0	209.9	205.9
7.5°	204.7	195.2	190.6
10°	193.3	179.8	174.9
12.5°	179.8	164.2	156.5
15°	166.9	146.7	139.3
17.5°	152.5	129.8	121.2
20°	139.0	112.9	104.0
22.5°	123.7	96.4	86.5
25°	109.9	79.8	68.7
27.5°	94.5	62.9	53.4
30°	80.1	48.2	38.7
32.5°	66.3	35.3	26.7
35°	53.4	23.9	16.9
37.5°	41.1	14.7	8.6
40°	29.8	7.7	4.0
42.5°	19.9	3.7	2.1
45°	12.3	1.8	0.0
47.5°	7.1	0.0	0.0
50°	3.7	0.0	0.0
52.5°	1.5	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	0.9
80°	0.6	1.2	1.5
82.5°	1.2	1.5	1.5
85°	1.2	1.5	1.8
87.5°	1.5	1.8	2.1
90°	1.8	2.1	2.1
92.5°	1.8	2.5	2.5
95°	2.1	2.5	2.8
97.5°	2.5	2.8	2.8
100°	2.1	2.8	3.1
102.5°	1.8	2.8	2.8
105°	1.5	2.1	2.5



TEST NUMBER: P550969

CATALOG NUMBER: FCC-X-2-LD4-1STD-30-UNV-82-85-ED1D-90

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	1.2	1.5	1.5
115°	0.9	1.2	1.5
117.5°	0.9	1.2	1.2
120°	0.9	0.9	1.2
122.5°	0.9	0.9	1.2
125°	0.9	0.9	1.2
127.5°	1.2	0.9	0.9
130°	0.9	0.9	0.9
132.5°	1.2	0.9	0.9
135°	1.2	0.9	0.9
137.5°	1.2	0.9	0.9
140°	1.2	0.9	0.9
142.5°	1.2	0.9	0.9
145°	0.9	0.9	0.9
147.5°	0.9	0.9	0.9
150°	0.9	0.9	0.6
152.5°	0.9	0.6	0.6
155°	0.9	0.6	0.3
157.5°	1.2	0.6	0.3
160°	0.9	0.6	0.3
162.5°	0.9	0.6	0.3
165°	0.9	0.6	0.0
167.5°	0.9	0.6	0.3
170°	0.9	0.6	0.3
172.5°	0.9	0.6	0.3
175°	0.9	0.3	0.3
177.5°	0.9	0.3	0.3
180°	0.9	0.9	0.9



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	128.9	125.2	112.9	92.7	64.8	36.2	13.5	2.5	0.6	0.9	0.9
110°	112.3	109.3	96.7	77.0	52.2	27.0	8.9	1.5	0.9	0.9	0.9





107.5°	1.2	1.8	2.1
110°	1.2	1.5	1.8



(END OF REPORT)