

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: P550937

Luminaire Tested: **FCC-X-2-LD4-1STD-30-UNV-80-85-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: P550937  
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-80-85-ED1D-90  
Description: FCC CORNER MOUNT LUMINAIRE WITH .125 PRISMATIC ACRYLIC 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**

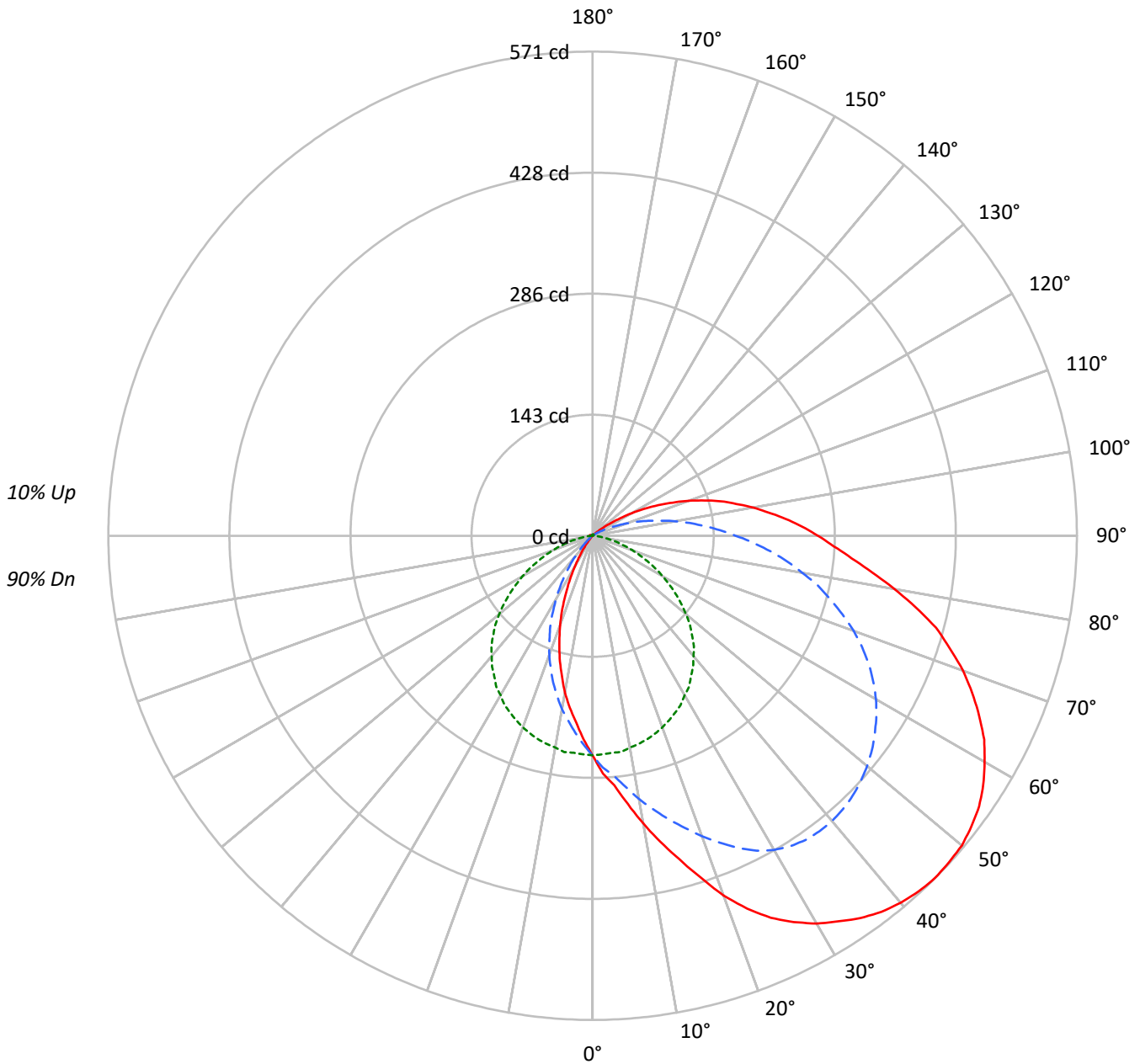
Lumens per Lamp: N/A  
Luminaire Lumens: 1280.0 lumens  
Efficiency: N/A  
Efficacy: 76.6 lumens/watt  
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59  
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')  
CIE Type: Semi-Direct

Input Watts (W): 16.7  
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

TEST NUMBER: P550937

CATALOG NUMBER: FCC-X-2-LD4-1STD-30-UNV-80-85-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°	2787	2787	2787
5°	3059	2746	2291
10°	3462	2712	1888
15°	3880	2678	1471
20°	4376	2634	1083
25°	4787	2583	712
30°	5093	2516	401
35°	5358	2443	176
40°	5593	2353	43
45°	5794	2241	0
50°	5963	2091	0
55°	6092	1901	0
60°	6157	1681	0
65°	6182	1430	0
70°	6161	1167	0
75°	6083	859	4
80°	5837	526	26
85°	5641	249	37



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	24.8	1.9
10°-20°	74.3	5.8
20°-30°	120.3	9.4
30°-40°	154.5	12.1
40°-50°	174.9	13.7
50°-60°	181.2	14.2
60°-70°	170.9	13.3
70°-80°	143.2	11.2
80°-90°	103.8	8.1
90°-100°	68.2	5.3
100°-110°	39.4	3.1
110°-120°	17.4	1.4
120°-130°	4.7	0.4
130°-140°	1.1	0.1
140°-150°	0.7	0.1
150°-160°	0.5	0.0
160°-170°	0.3	0.0
170°-180°	0.1	0.0
0°-30°	219.3	17.1
0°-40°	373.8	29.2
0°-60°	729.8	57.0
0°-90°	1147.6	89.7
90°-120°	125.0	9.8
90°-150°	131.5	10.3
90°-180°	132.0	10.3
0°-180°	1280.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	259	259	259	259	259	
5°	296	284	257	233	221	30
15°	395	346	248	179	150	114
25°	497	406	230	118	74	230
35°	550	438	202	57	18	345
45°	571	434	166	13	0	441
55°	556	406	119	0	0	497
65°	503	360	71	0	0	498
75°	419	290	30	0	0	440
85°	307	210	5	1	2	262
90°	266	169	1	2	2	146
95°	228	132	1	2	3	179
105°	157	68	1	2	3	166
115°	85	23	1	1	2	86
125°	25	3	1	1	1	25
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	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
0°	258.9	258.9	258.9	258.9	258.9	258.9	258.9	258.9	258.9	258.9	258.9
2.5°	280.7	280.4	279.4	277.7	275.4	271.4	268.1	265.2	261.2	257.9	251.7
5°	295.5	293.9	292.6	290.9	285.6	282.0	276.1	269.5	263.2	256.9	244.4
7.5°	319.3	316.6	314.7	310.0	302.8	294.5	285.3	279.0	274.7	257.3	235.8
10°	344.7	342.4	338.4	330.2	321.3	309.4	296.2	281.3	268.1	253.6	228.2
12.5°	369.7	366.4	360.8	350.3	337.7	322.9	304.8	287.3	268.5	251.3	219.3
15°	394.8	391.2	385.2	372.4	355.9	336.4	314.3	292.2	270.1	248.4	210.1
17.5°	422.2	417.2	408.3	393.8	373.0	349.0	322.9	296.2	269.5	244.7	200.2
20°	451.5	444.6	435.0	415.6	391.2	362.8	331.5	300.1	269.1	240.4	189.0
22.5°	475.9	469.0	458.5	438.3	409.0	374.4	338.7	302.8	267.8	235.5	178.4
25°	497.0	491.4	479.9	456.8	425.8	386.6	345.7	304.8	265.8	230.2	167.2
27.5°	513.5	508.3	495.4	471.7	440.0	397.4	350.9	305.7	263.2	224.9	155.7
30°	528.1	522.8	507.3	482.9	449.6	406.0	356.2	306.1	259.9	217.0	143.1
32.5°	539.3	534.3	518.5	492.4	456.1	412.0	359.2	305.7	255.6	211.4	129.6
35°	550.5	545.5	527.1	499.4	461.1	414.6	361.5	304.1	250.3	202.2	116.8
37.5°	559.1	553.4	534.6	504.0	463.4	415.3	361.2	301.8	244.7	194.6	103.9
40°	565.0	559.1	538.9	506.6	464.1	414.3	358.5	297.8	238.1	185.0	90.4
42.5°	568.9	562.4	540.9	510.6	462.7	411.6	354.6	292.9	230.9	176.8	77.5
45°	570.9	564.0	541.2	507.3	460.4	406.7	348.6	286.6	223.0	165.6	64.6
47.5°	569.9	562.4	539.6	503.6	456.1	401.4	342.0	279.0	213.4	155.7	52.4
50°	568.3	560.4	536.0	499.0	450.2	394.8	334.8	269.8	203.5	143.5	41.6
52.5°	563.0	555.1	532.0	492.4	443.3	387.2	324.9	260.2	192.9	131.6	31.7
55°	556.4	549.2	525.1	486.5	434.4	378.0	315.6	250.0	182.7	119.4	22.8
57.5°	546.2	539.6	516.5	476.9	425.5	367.8	305.4	238.8	169.9	107.2	15.8
60°	533.7	527.1	504.6	466.0	415.3	356.2	294.2	227.2	158.3	95.0	9.9
62.5°	520.5	514.2	490.8	452.5	402.4	344.0	282.0	215.7	146.1	83.8	5.9
65°	503.0	497.0	475.9	436.4	388.2	330.8	268.5	201.9	133.6	71.2	3.3
67.5°	484.5	479.2	457.8	421.5	371.7	316.3	254.6	188.3	120.4	60.4	1.6
70°	464.7	458.1	438.3	401.4	354.9	299.8	239.5	174.5	107.9	49.8	0.0
72.5°	441.6	436.7	417.6	382.6	335.4	282.3	224.0	159.3	94.0	39.6	0.3
75°	419.2	412.9	395.5	362.5	316.3	263.9	206.8	145.1	80.5	30.3	0.3
77.5°	390.2	388.2	371.7	339.7	298.2	246.1	188.0	128.0	67.6	21.8	0.3
80°	361.2	359.2	346.3	317.0	277.1	224.9	170.5	111.8	55.1	14.5	0.3
82.5°	332.5	329.8	317.6	293.2	255.6	207.1	152.4	95.6	43.5	8.9	0.3
85°	306.7	303.4	290.2	267.8	233.5	187.0	133.6	79.8	32.3	4.9	0.7
87.5°	284.6	282.3	267.8	244.7	211.1	168.2	117.1	64.6	22.8	2.3	1.0
90°	265.8	260.9	248.0	223.6	190.0	147.4	99.6	51.8	15.2	1.3	1.3
92.5°	247.4	243.1	228.9	203.8	171.2	129.6	82.8	39.6	9.6	0.7	1.6
95°	228.2	223.6	209.8	186.7	152.0	111.5	67.9	29.0	5.3	0.7	1.6
97.5°	209.4	205.2	190.6	167.6	134.9	95.6	53.8	20.4	2.6	0.7	1.3
100°	192.0	187.0	173.8	150.7	117.7	79.8	41.6	13.2	1.6	0.7	1.3
102.5°	173.5	169.5	156.0	133.6	99.9	65.0	31.0	8.2	0.7	0.7	1.0
105°	157.0	152.0	138.9	115.8	85.1	51.1	21.8	4.9	0.7	0.7	1.0



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	102.2	98.3	86.7	67.3	43.2	20.1	5.9	1.0	1.0	1.0	1.0
115°	85.4	79.5	69.3	52.1	32.0	13.2	3.0	1.0	1.0	1.0	1.0
117.5°	68.3	63.3	56.1	39.6	21.1	8.6	1.6	1.0	1.0	1.0	1.0
120°	53.4	48.8	40.6	27.4	14.2	4.9	0.7	1.0	1.0	1.0	1.0
122.5°	38.3	34.6	27.4	17.8	8.6	2.3	1.0	1.0	1.3	1.3	1.0
125°	25.4	23.4	18.1	10.9	5.3	1.0	1.0	1.0	1.3	1.3	1.0
127.5°	16.5	14.8	10.6	6.3	2.3	1.0	1.0	1.3	1.3	1.3	1.0
130°	9.2	8.2	6.3	3.6	1.0	1.0	1.0	1.3	1.3	1.3	1.0
132.5°	5.3	4.9	3.3	0.7	1.0	1.0	1.0	1.3	1.3	1.3	1.3
135°	1.3	0.7	0.7	0.7	1.0	1.0	1.3	1.3	1.6	1.6	1.3
137.5°	0.3	0.3	0.7	0.7	1.0	1.0	1.3	1.6	1.6	1.6	1.3
140°	0.3	0.3	0.7	1.0	1.0	1.0	1.3	1.6	1.6	1.6	1.3
142.5°	0.3	0.7	0.7	1.0	1.0	1.3	1.3	1.6	1.6	1.3	1.3
145°	0.3	0.7	0.7	1.0	1.0	1.3	1.3	1.6	1.3	1.3	1.3
147.5°	0.7	0.7	0.7	1.0	1.0	1.3	1.3	1.6	1.6	1.3	1.3
150°	0.3	0.7	0.7	1.0	1.3	1.3	1.3	1.6	1.3	1.3	1.3
152.5°	0.3	0.7	0.7	1.0	1.3	1.3	1.3	1.6	1.3	1.3	1.3
155°	0.7	0.7	0.7	1.0	1.3	1.3	1.3	1.6	1.3	1.3	1.6
157.5°	0.7	0.7	0.7	1.0	1.3	1.3	1.3	1.6	1.3	1.3	1.6
160°	0.7	0.7	0.7	1.0	1.0	1.3	1.3	1.3	1.3	1.3	1.3
162.5°	0.7	0.7	0.7	1.0	1.0	1.3	1.3	1.3	1.3	1.3	1.3
165°	0.7	0.7	0.7	0.7	1.0	1.0	1.3	1.3	1.3	1.3	1.3
167.5°	0.7	0.7	0.7	1.0	1.0	1.0	1.3	1.3	1.3	1.3	1.3
170°	0.7	0.7	0.7	1.0	1.0	1.0	1.3	1.6	1.6	1.6	1.6
172.5°	0.7	0.7	0.7	1.0	1.0	1.3	1.3	1.6	1.6	1.6	1.6
175°	0.7	0.7	0.7	1.0	1.0	1.3	1.3	1.6	1.6	1.6	1.6
177.5°	0.3	0.7	0.7	1.0	1.0	1.3	1.3	1.6	1.6	1.6	1.3
180°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0



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**CANDELA DISTRIBUTION (continued):**

	135°	157.5°	180°
0°	258.9	258.9	258.9
2.5°	246.4	241.8	240.4
5°	233.2	225.6	221.3
7.5°	220.0	209.8	204.8
10°	207.8	193.3	188.0
12.5°	193.3	176.5	168.2
15°	179.4	157.7	149.7
17.5°	163.9	139.5	130.3
20°	149.4	121.4	111.8
22.5°	132.9	103.6	93.0
25°	118.1	85.8	73.9
27.5°	101.6	67.6	57.4
30°	86.1	51.8	41.6
32.5°	71.2	37.9	28.7
35°	57.4	25.7	18.1
37.5°	44.2	15.8	9.2
40°	32.0	8.2	4.3
42.5°	21.4	4.0	2.3
45°	13.2	2.0	0.0
47.5°	7.6	0.0	0.0
50°	4.0	0.0	0.0
52.5°	1.6	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	0.7	1.0
80°	0.7	1.3	1.6
82.5°	1.3	1.6	1.6
85°	1.3	1.6	2.0
87.5°	1.6	2.0	2.3
90°	2.0	2.3	2.3
92.5°	2.0	2.6	2.6
95°	2.3	2.6	3.0
97.5°	2.6	3.0	3.0
100°	2.3	3.0	3.3
102.5°	2.0	3.0	3.0
105°	1.6	2.3	2.6





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**CANDELA DISTRIBUTION (continued):**

	135°	157.5°	180°
112.5°	1.3	1.6	1.6
115°	1.0	1.3	1.6
117.5°	1.0	1.3	1.3
120°	1.0	1.0	1.3
122.5°	1.0	1.0	1.3
125°	1.0	1.0	1.3
127.5°	1.3	1.0	1.0
130°	1.0	1.0	1.0
132.5°	1.3	1.0	1.0
135°	1.3	1.0	1.0
137.5°	1.3	1.0	1.0
140°	1.3	1.0	1.0
142.5°	1.3	1.0	1.0
145°	1.0	1.0	1.0
147.5°	1.0	1.0	1.0
150°	1.0	1.0	0.7
152.5°	1.0	0.7	0.7
155°	1.0	0.7	0.3
157.5°	1.3	0.7	0.3
160°	1.0	0.7	0.3
162.5°	1.0	0.7	0.3
165°	1.0	0.7	0.0
167.5°	1.0	0.7	0.3
170°	1.0	0.7	0.3
172.5°	1.0	0.7	0.3
175°	1.0	0.3	0.3
177.5°	1.0	0.3	0.3
180°	1.0	1.0	1.0



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	138.5	134.6	121.4	99.6	69.6	38.9	14.5	2.6	0.7	1.0	1.0
110°	120.7	117.4	103.9	82.8	56.1	29.0	9.6	1.6	1.0	1.0	1.0







107.5°	1.3	2.0	2.3
110°	1.3	1.6	2.0



(END OF REPORT)