

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: P550694

Luminaire Tested: **FCC-X-2-LD4-1LO-30-UNV-80-97-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: P550694  
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-30-UNV-80-97-ED1D  
Description: FCC CORNER MOUNT LUMINAIRE WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .375 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES AND 3000K, AND 80 CRI LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

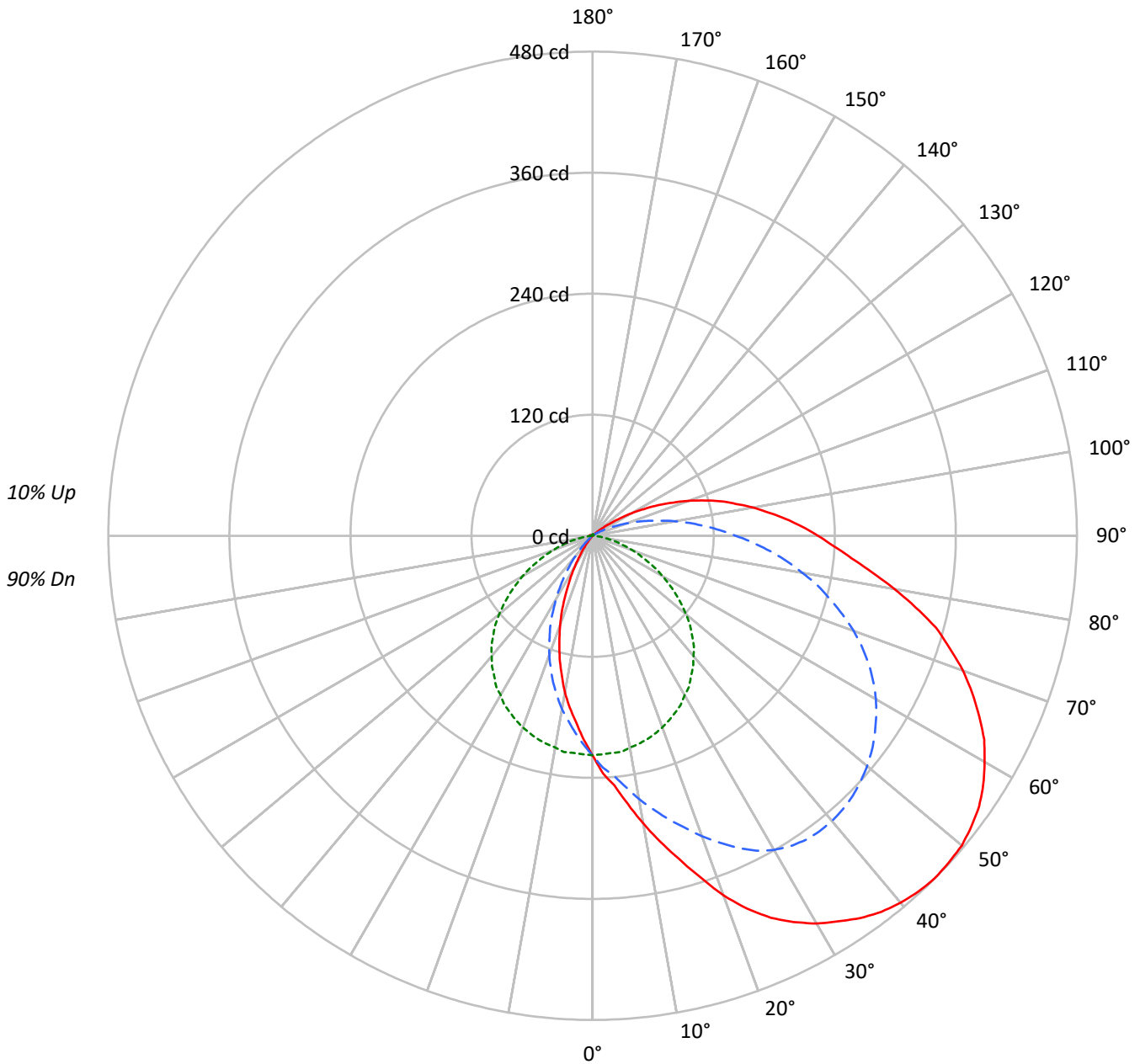
Lumens per Lamp: N/A  
Luminaire Lumens: 1076.0 lumens  
Efficiency: N/A  
Efficacy: 92.0 lumens/watt  
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59  
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')  
CIE Type: Semi-Direct

Input Watts (W): 11.7  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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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CATALOG NUMBER: FCC-X-2-LD4-1LO-30-UNV-80-97-ED1D

### 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°	2342	2342	2342
5°	2571	2309	1926
10°	2910	2280	1587
15°	3262	2251	1237
20°	3679	2214	911
25°	4024	2172	598
30°	4281	2114	337
35°	4503	2054	148
40°	4701	1978	36
45°	4870	1884	0
50°	5013	1758	0
55°	5121	1599	0
60°	5175	1414	0
65°	5197	1203	0
70°	5180	982	0
75°	5114	723	4
80°	4906	443	23
85°	4743	214	31



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	20.8	1.9
10°-20°	62.4	5.8
20°-30°	101.1	9.4
30°-40°	129.9	12.1
40°-50°	147.0	13.7
50°-60°	152.3	14.2
60°-70°	143.6	13.3
70°-80°	120.4	11.2
80°-90°	87.2	8.1
90°-100°	57.3	5.3
100°-110°	33.1	3.1
110°-120°	14.6	1.4
120°-130°	3.9	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°	184.4	17.1
0°-40°	314.2	29.2
0°-60°	613.5	57.0
0°-90°	964.7	89.7
90°-120°	105.1	9.8
90°-150°	110.5	10.3
90°-180°	111.0	10.3
0°-180°	1076.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	218	218	218	218	218	
5°	248	239	216	196	186	25
15°	332	291	209	151	126	96
25°	418	341	194	99	62	193
35°	463	368	170	48	15	290
45°	480	364	139	11	0	371
55°	468	341	100	0	0	418
65°	423	302	60	0	0	418
75°	352	244	26	0	0	370
85°	258	177	4	1	2	220
90°	224	142	1	2	2	123
95°	192	111	1	2	2	151
105°	132	57	1	1	2	139
115°	72	19	1	1	1	72
125°	21	3	1	1	1	21
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°	217.6	217.6	217.6	217.6	217.6	217.6	217.6	217.6	217.6	217.6	217.6
2.5°	235.9	235.7	234.8	233.5	231.5	228.2	225.4	222.9	219.6	216.8	211.5
5°	248.4	247.0	245.9	244.5	240.1	237.1	232.1	226.5	221.3	216.0	205.4
7.5°	268.4	266.2	264.5	260.6	254.5	247.6	239.8	234.6	231.0	216.3	198.2
10°	289.7	287.8	284.5	277.5	270.1	260.1	249.0	236.5	225.4	213.2	191.9
12.5°	310.8	308.0	303.3	294.4	283.9	271.4	256.2	241.5	225.7	211.3	184.4
15°	331.9	328.8	323.8	313.0	299.2	282.8	264.2	245.7	227.1	208.8	176.6
17.5°	354.9	350.7	343.2	331.0	313.6	293.3	271.4	249.0	226.5	205.7	168.3
20°	379.6	373.7	365.7	349.3	328.8	305.0	278.6	252.3	226.2	202.1	158.9
22.5°	400.1	394.3	385.4	368.5	343.8	314.7	284.7	254.5	225.1	198.0	150.0
25°	417.8	413.1	403.4	384.0	357.9	324.9	290.6	256.2	223.5	193.5	140.6
27.5°	431.7	427.3	416.4	396.5	369.9	334.1	295.0	257.0	221.3	189.1	130.9
30°	443.9	439.5	426.4	405.9	377.9	341.3	299.4	257.3	218.5	182.4	120.3
32.5°	453.3	449.2	435.9	413.9	383.5	346.3	301.9	257.0	214.9	177.7	109.0
35°	462.7	458.6	443.1	419.8	387.6	348.5	303.9	255.6	210.4	170.0	98.1
37.5°	470.0	465.2	449.4	423.7	389.6	349.1	303.6	253.7	205.7	163.6	87.3
40°	474.9	470.0	453.0	425.9	390.1	348.2	301.4	250.4	200.2	155.5	76.0
42.5°	478.3	472.7	454.7	429.2	389.0	346.0	298.1	246.2	194.1	148.6	65.2
45°	479.9	474.1	455.0	426.4	387.1	341.9	293.1	240.9	187.4	139.2	54.3
47.5°	479.1	472.7	453.6	423.4	383.5	337.4	287.5	234.6	179.4	130.9	44.1
50°	477.7	471.1	450.5	419.5	378.5	331.9	281.4	226.8	171.1	120.6	34.9
52.5°	473.3	466.6	447.2	413.9	372.6	325.5	273.1	218.8	162.2	110.6	26.6
55°	467.7	461.6	441.4	409.0	365.2	317.7	265.3	210.2	153.6	100.4	19.1
57.5°	459.1	453.6	434.2	400.9	357.7	309.1	256.7	200.7	142.8	90.1	13.3
60°	448.6	443.1	424.2	391.8	349.1	299.4	247.3	191.0	133.1	79.9	8.3
62.5°	437.5	432.2	412.6	380.4	338.3	289.2	237.1	181.3	122.8	70.4	5.0
65°	422.8	417.8	400.1	366.8	326.3	278.1	225.7	169.7	112.3	59.9	2.8
67.5°	407.3	402.9	384.8	354.3	312.5	265.9	214.0	158.3	101.2	50.7	1.4
70°	390.7	385.1	368.5	337.4	298.3	252.0	201.3	146.7	90.7	41.9	0.0
72.5°	371.3	367.1	351.0	321.6	282.0	237.3	188.3	133.9	79.0	33.3	0.3
75°	352.4	347.1	332.4	304.7	265.9	221.8	173.8	122.0	67.7	25.5	0.3
77.5°	328.0	326.3	312.5	285.6	250.6	206.8	158.0	107.6	56.8	18.3	0.3
80°	303.6	301.9	291.1	266.4	232.9	189.1	143.3	94.0	46.3	12.2	0.3
82.5°	279.5	277.3	267.0	246.5	214.9	174.1	128.1	80.4	36.6	7.5	0.3
85°	257.9	255.1	244.0	225.1	196.3	157.2	112.3	67.1	27.2	4.2	0.6
87.5°	239.3	237.3	225.1	205.7	177.4	141.4	98.4	54.3	19.1	1.9	0.8
90°	223.5	219.3	208.5	188.0	159.7	123.9	83.7	43.5	12.8	1.1	1.1
92.5°	207.9	204.3	192.4	171.3	143.9	109.0	69.6	33.3	8.0	0.6	1.4
95°	191.9	188.0	176.3	156.9	127.8	93.7	57.1	24.4	4.4	0.6	1.4
97.5°	176.1	172.5	160.3	140.8	113.4	80.4	45.2	17.2	2.2	0.6	1.1
100°	161.4	157.2	146.1	126.7	99.0	67.1	34.9	11.1	1.4	0.6	1.1
102.5°	145.8	142.5	131.1	112.3	84.0	54.6	26.1	6.9	0.6	0.6	0.8
105°	132.0	127.8	116.7	97.3	71.5	43.0	18.3	4.2	0.6	0.6	0.8



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	86.0	82.6	72.9	56.6	36.3	16.9	5.0	0.8	0.8	0.8	0.8
115°	71.8	66.8	58.2	43.8	26.9	11.1	2.5	0.8	0.8	0.8	0.8
117.5°	57.4	53.2	47.1	33.3	17.7	7.2	1.4	0.8	0.8	0.8	0.8
120°	44.9	41.0	34.1	23.0	11.9	4.2	0.6	0.8	0.8	0.8	0.8
122.5°	32.2	29.1	23.0	15.0	7.2	1.9	0.8	0.8	1.1	1.1	0.8
125°	21.3	19.7	15.2	9.1	4.4	0.8	0.8	0.8	1.1	1.1	0.8
127.5°	13.9	12.5	8.9	5.3	1.9	0.8	0.8	1.1	1.1	1.1	0.8
130°	7.8	6.9	5.3	3.0	0.8	0.8	0.8	1.1	1.1	1.1	0.8
132.5°	4.4	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°	217.6	217.6	217.6
2.5°	207.1	203.2	202.1
5°	196.0	189.6	186.0
7.5°	184.9	176.3	172.2
10°	174.7	162.5	158.0
12.5°	162.5	148.3	141.4
15°	150.8	132.5	125.9
17.5°	137.8	117.3	109.5
20°	125.6	102.0	94.0
22.5°	111.7	87.1	78.2
25°	99.3	72.1	62.1
27.5°	85.4	56.8	48.2
30°	72.4	43.5	34.9
32.5°	59.9	31.9	24.1
35°	48.2	21.6	15.2
37.5°	37.2	13.3	7.8
40°	26.9	6.9	3.6
42.5°	18.0	3.3	1.9
45°	11.1	1.7	0.0
47.5°	6.4	0.0	0.0
50°	3.3	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	1.9
90°	1.7	1.9	1.9
92.5°	1.7	2.2	2.2
95°	1.9	2.2	2.5
97.5°	2.2	2.5	2.5
100°	1.9	2.5	2.8
102.5°	1.7	2.5	2.5
105°	1.4	1.9	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°	116.4	113.1	102.0	83.7	58.5	32.7	12.2	2.2	0.6	0.8	0.8
110°	101.5	98.7	87.3	69.6	47.1	24.4	8.0	1.4	0.8	0.8	0.8







107.5°	1.1	1.7	1.9
110°	1.1	1.4	1.7



(END OF REPORT)