

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: P550706

Luminaire Tested: **FCC-X-2-LD4-1LO-30-UNV-81-94-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: P550706  
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-81-94-ED1D  
Description: FCC CORNER MOUNT LUMINAIRE WITH .156 CLEAR PC FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES AND 3000K, AND 80 CRI LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

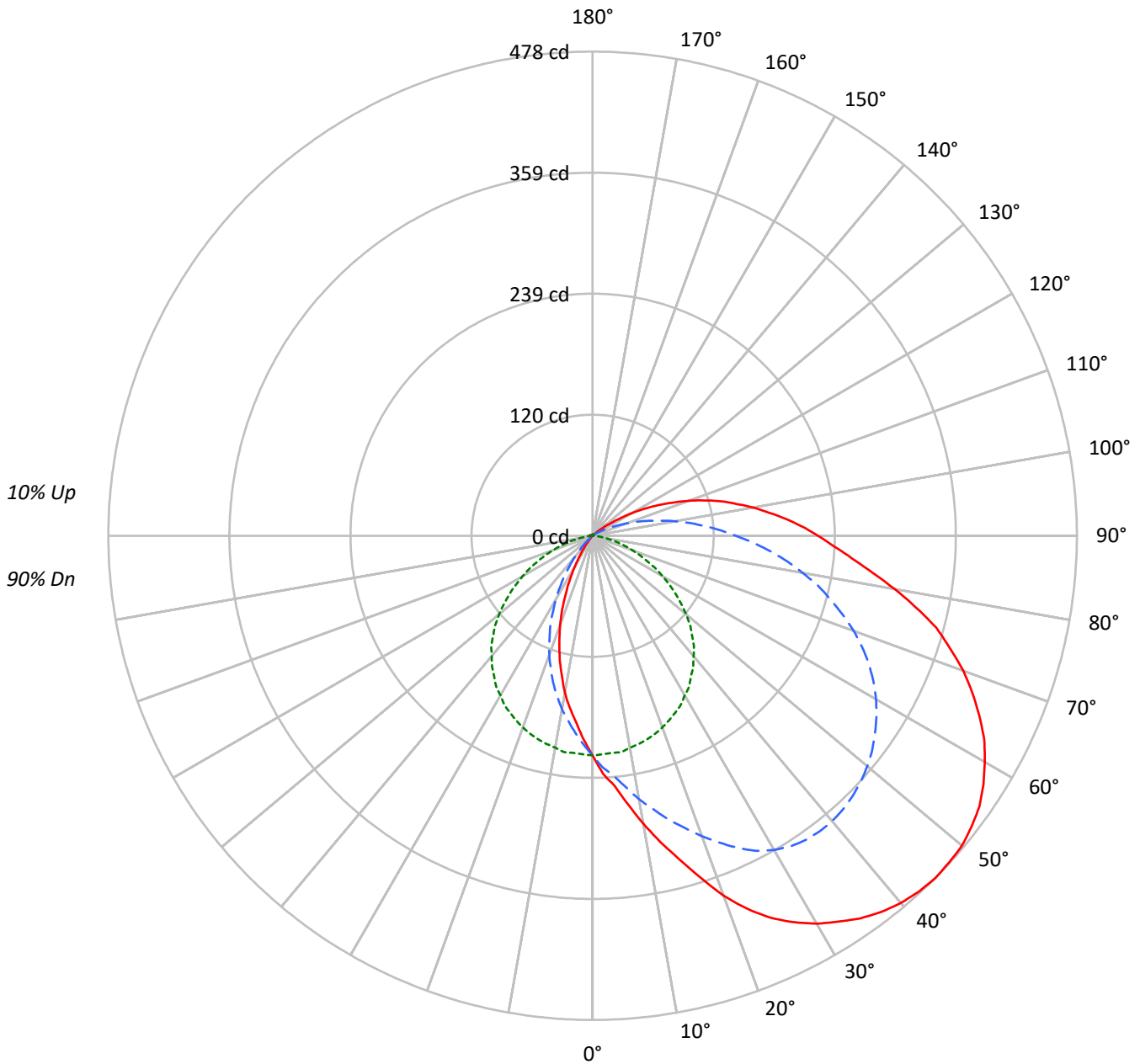
Lumens per Lamp: N/A  
Luminaire Lumens: 1072.0 lumens  
Efficiency: N/A  
Efficacy: 91.6 lumens/watt  
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59  
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')  
CIE Type: Semi-Direct

Input Watts (W): 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

TEST NUMBER: P550706

CATALOG NUMBER: FCC-X-2-LD4-1LO-30-UNV-81-94-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°	2334	2334	2334
5°	2562	2300	1918
10°	2900	2271	1582
15°	3249	2243	1232
20°	3665	2207	907
25°	4009	2164	596
30°	4265	2108	336
35°	4487	2046	148
40°	4684	1971	36
45°	4853	1877	0
50°	4994	1752	0
55°	5102	1592	0
60°	5156	1409	0
65°	5177	1199	0
70°	5160	977	0
75°	5095	720	4
80°	4889	443	23
85°	4725	208	31



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	20.8	1.9
10°-20°	62.2	5.8
20°-30°	100.7	9.4
30°-40°	129.4	12.1
40°-50°	146.4	13.7
50°-60°	151.7	14.2
60°-70°	143.1	13.3
70°-80°	119.9	11.2
80°-90°	86.9	8.1
90°-100°	57.1	5.3
100°-110°	33.0	3.1
110°-120°	14.5	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°	183.7	17.1
0°-40°	313.1	29.2
0°-60°	611.2	57.0
0°-90°	961.2	89.7
90°-120°	104.7	9.8
90°-150°	110.1	10.3
90°-180°	111.0	10.4
0°-180°	1072.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	217	217	217	217	217	
5°	248	238	215	195	185	25
15°	331	290	208	150	125	95
25°	416	340	193	99	62	192
35°	461	367	169	48	15	289
45°	478	363	139	11	0	369
55°	466	340	100	0	0	416
65°	421	301	60	0	0	417
75°	351	243	25	0	0	368
85°	257	176	4	1	2	219
90°	223	141	1	2	2	122
95°	191	110	1	2	2	150
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°	216.8	216.8	216.8	216.8	216.8	216.8	216.8	216.8	216.8	216.8	216.8
2.5°	235.1	234.8	234.0	232.6	230.7	227.3	224.6	222.1	218.8	216.0	210.8
5°	247.5	246.1	245.0	243.6	239.2	236.2	231.2	225.7	220.4	215.2	204.7
7.5°	267.4	265.2	263.5	259.7	253.6	246.7	238.9	233.7	230.1	215.5	197.5
10°	288.7	286.7	283.4	276.5	269.0	259.1	248.1	235.6	224.6	212.4	191.2
12.5°	309.7	306.9	302.2	293.4	282.9	270.4	255.2	240.6	224.9	210.5	183.7
15°	330.6	327.6	322.6	311.9	298.1	281.8	263.2	244.7	226.2	208.0	176.0
17.5°	353.6	349.4	342.0	329.8	312.4	292.3	270.4	248.1	225.7	205.0	167.7
20°	378.2	372.4	364.3	348.0	327.6	303.9	277.6	251.4	225.4	201.4	158.3
22.5°	398.6	392.8	384.0	367.1	342.5	313.5	283.7	253.6	224.3	197.2	149.4
25°	416.3	411.6	401.9	382.6	356.6	323.7	289.5	255.2	222.6	192.8	140.0
27.5°	430.1	425.7	414.9	395.0	368.5	332.9	293.9	256.1	220.4	188.4	130.4
30°	442.2	437.8	424.8	404.4	376.5	340.0	298.3	256.3	217.7	181.8	119.9
32.5°	451.6	447.5	434.2	412.4	382.0	345.0	300.8	256.1	214.1	177.1	108.6
35°	461.0	456.9	441.4	418.2	386.2	347.2	302.7	254.7	209.7	169.3	97.8
37.5°	468.2	463.5	447.8	422.1	388.1	347.8	302.5	252.7	205.0	163.0	87.0
40°	473.2	468.2	451.4	424.3	388.7	346.9	300.3	249.4	199.4	155.0	75.7
42.5°	476.5	471.0	453.0	427.6	387.5	344.7	296.9	245.3	193.4	148.1	64.9
45°	478.2	472.4	453.3	424.8	385.6	340.6	292.0	240.0	186.7	138.7	54.1
47.5°	477.3	471.0	451.9	421.8	382.0	336.2	286.4	233.7	178.7	130.4	43.9
50°	475.9	469.3	448.9	417.9	377.1	330.6	280.4	226.0	170.4	120.2	34.8
52.5°	471.5	464.9	445.6	412.4	371.3	324.3	272.1	217.9	161.6	110.2	26.5
55°	466.0	459.9	439.8	407.4	363.8	316.6	264.4	209.4	153.0	100.0	19.1
57.5°	457.4	451.9	432.6	399.4	356.3	308.0	255.8	200.0	142.3	89.8	13.3
60°	446.9	441.4	422.6	390.3	347.8	298.3	246.4	190.3	132.6	79.6	8.3
62.5°	435.9	430.6	411.0	379.0	337.0	288.1	236.2	180.7	122.4	70.2	5.0
65°	421.2	416.3	398.6	365.5	325.1	277.1	224.9	169.1	111.9	59.7	2.8
67.5°	405.8	401.4	383.4	353.0	311.3	264.9	213.2	157.7	100.8	50.5	1.4
70°	389.2	383.7	367.1	336.2	297.2	251.1	200.5	146.1	90.3	41.7	0.0
72.5°	369.9	365.7	349.7	320.4	280.9	236.5	187.6	133.4	78.7	33.1	0.3
75°	351.1	345.8	331.2	303.6	264.9	221.0	173.2	121.5	67.4	25.4	0.3
77.5°	326.8	325.1	311.3	284.5	249.7	206.1	157.5	107.2	56.6	18.2	0.3
80°	302.5	300.8	290.0	265.5	232.0	188.4	142.8	93.6	46.1	12.2	0.3
82.5°	278.4	276.2	266.0	245.6	214.1	173.5	127.6	80.1	36.5	7.5	0.3
85°	256.9	254.1	243.1	224.3	195.6	156.6	111.9	66.8	27.1	4.1	0.6
87.5°	238.4	236.5	224.3	205.0	176.8	140.9	98.1	54.1	19.1	1.9	0.8
90°	222.6	218.5	207.7	187.3	159.1	123.5	83.4	43.4	12.7	1.1	1.1
92.5°	207.2	203.6	191.7	170.7	143.4	108.6	69.3	33.1	8.0	0.6	1.4
95°	191.2	187.3	175.7	156.3	127.3	93.4	56.9	24.3	4.4	0.6	1.4
97.5°	175.4	171.8	159.7	140.3	113.0	80.1	45.0	17.1	2.2	0.6	1.1
100°	160.8	156.6	145.6	126.2	98.6	66.8	34.8	11.0	1.4	0.6	1.1
102.5°	145.3	142.0	130.7	111.9	83.7	54.4	26.0	6.9	0.6	0.6	0.8
105°	131.5	127.3	116.3	97.0	71.3	42.8	18.2	4.1	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°	85.6	82.3	72.6	56.4	36.2	16.8	5.0	0.8	0.8	0.8	0.8
115°	71.5	66.6	58.0	43.6	26.8	11.0	2.5	0.8	0.8	0.8	0.8
117.5°	57.2	53.0	47.0	33.1	17.7	7.2	1.4	0.8	0.8	0.8	0.8
120°	44.7	40.9	34.0	22.9	11.9	4.1	0.6	0.8	0.8	0.8	0.8
122.5°	32.0	29.0	22.9	14.9	7.2	1.9	0.8	0.8	1.1	1.1	0.8
125°	21.3	19.6	15.2	9.1	4.4	0.8	0.8	0.8	1.1	1.1	0.8
127.5°	13.8	12.4	8.8	5.2	1.9	0.8	0.8	1.1	1.1	1.1	0.8
130°	7.7	6.9	5.2	3.0	0.8	0.8	0.8	1.1	1.1	1.1	0.8
132.5°	4.4	4.1	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°	216.8	216.8	216.8
2.5°	206.3	202.5	201.4
5°	195.3	188.9	185.3
7.5°	184.2	175.7	171.5
10°	174.0	161.9	157.5
12.5°	161.9	147.8	140.9
15°	150.3	132.0	125.4
17.5°	137.3	116.8	109.1
20°	125.1	101.7	93.6
22.5°	111.3	86.7	77.9
25°	98.9	71.8	61.9
27.5°	85.1	56.6	48.1
30°	72.1	43.4	34.8
32.5°	59.7	31.8	24.0
35°	48.1	21.5	15.2
37.5°	37.0	13.3	7.7
40°	26.8	6.9	3.6
42.5°	18.0	3.3	1.9
45°	11.0	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°	116.0	112.7	101.7	83.4	58.3	32.6	12.2	2.2	0.6	0.8	0.8
110°	101.1	98.3	87.0	69.3	47.0	24.3	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)