

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: P550742

Luminaire Tested: **FCC-X-2-LD4-1LO-30-UNV-93-97-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: P550742
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-93-97-ED1D
Description: FCC CORNER MOUNT LUMINAIRE WITH .156 CLEAR TEMPERED GLASS 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

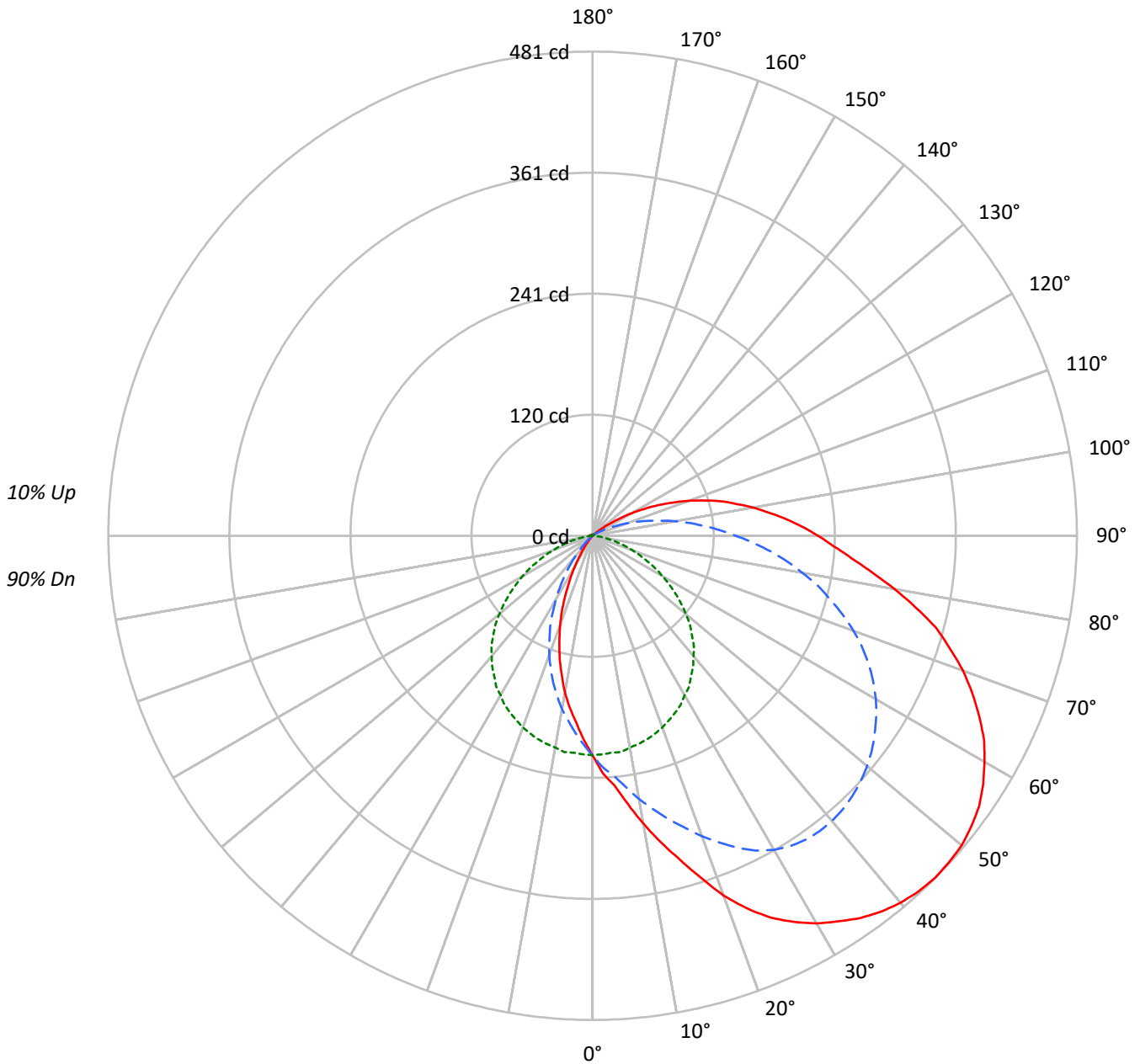
Lumens per Lamp: N/A
Luminaire Lumens: 1078.0 lumens
Efficiency: N/A
Efficacy: 92.1 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

Input Watts (W): 11.7
Input Voltage (V): NR
Input Current (A_{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: P550742

CATALOG NUMBER: FCC-X-2-LD4-1LO-30-UNV-93-97-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°	2348	2348	2348
5°	2577	2313	1930
10°	2916	2284	1590
15°	3267	2256	1239
20°	3686	2219	913
25°	4032	2176	599
30°	4289	2119	338
35°	4512	2058	149
40°	4710	1981	36
45°	4879	1886	0
50°	5022	1761	0
55°	5130	1602	0
60°	5185	1416	0
65°	5206	1205	0
70°	5189	982	0
75°	5124	726	4
80°	4916	443	23
85°	4751	214	31



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	20.9	1.9
10°-20°	62.5	5.8
20°-30°	101.3	9.4
30°-40°	130.1	12.1
40°-50°	147.3	13.7
50°-60°	152.6	14.2
60°-70°	143.9	13.3
70°-80°	120.6	11.2
80°-90°	87.4	8.1
90°-100°	57.4	5.3
100°-110°	33.2	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°	184.7	17.1
0°-40°	314.8	29.2
0°-60°	614.6	57.0
0°-90°	966.5	89.7
90°-120°	105.3	9.8
90°-150°	110.7	10.3
90°-180°	111.0	10.3
0°-180°	1078.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	218	218	218	218	218	
5°	249	239	216	196	186	25
15°	332	292	209	151	126	96
25°	419	342	194	99	62	193
35°	464	369	170	48	15	291
45°	481	365	139	11	0	371
55°	469	342	101	0	0	418
65°	424	303	60	0	0	419
75°	353	244	26	0	0	370
85°	258	177	4	1	2	221
90°	224	142	1	2	2	123
95°	192	111	1	2	2	151
105°	132	57	1	1	2	140
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	



TEST NUMBER: P550742

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
0°	218.1	218.1	218.1	218.1	218.1	218.1	218.1	218.1	218.1	218.1	218.1
2.5°	236.4	236.1	235.3	233.9	231.9	228.6	225.8	223.3	220.0	217.2	211.9
5°	248.9	247.5	246.4	245.0	240.6	237.5	232.5	226.9	221.7	216.4	205.8
7.5°	268.9	266.7	265.0	261.1	255.0	248.1	240.3	235.0	231.4	216.7	198.6
10°	290.3	288.3	285.0	278.1	270.6	260.6	249.4	236.9	225.8	213.6	192.2
12.5°	311.4	308.6	303.9	295.0	284.4	271.9	256.7	241.9	226.1	211.7	184.7
15°	332.5	329.4	324.4	313.6	299.7	283.3	264.7	246.1	227.5	209.2	176.9
17.5°	355.6	351.4	343.9	331.7	314.2	293.9	271.9	249.4	226.9	206.1	168.6
20°	380.3	374.4	366.4	350.0	329.4	305.6	279.2	252.8	226.7	202.5	159.2
22.5°	400.8	395.0	386.1	369.2	344.4	315.3	285.3	255.0	225.6	198.3	150.3
25°	418.6	413.9	404.2	384.7	358.6	325.6	291.1	256.7	223.9	193.9	140.8
27.5°	432.5	428.1	417.2	397.2	370.6	334.7	295.6	257.5	221.7	189.4	131.1
30°	444.7	440.3	427.2	406.7	378.6	341.9	300.0	257.8	218.9	182.8	120.6
32.5°	454.2	450.0	436.7	414.7	384.2	346.9	302.5	257.5	215.3	178.1	109.2
35°	463.6	459.4	443.9	420.6	388.3	349.2	304.4	256.1	210.8	170.3	98.3
37.5°	470.8	466.1	450.3	424.4	390.3	349.7	304.2	254.2	206.1	163.9	87.5
40°	475.8	470.8	453.9	426.7	390.8	348.9	301.9	250.8	200.6	155.8	76.1
42.5°	479.2	473.6	455.6	430.0	389.7	346.7	298.6	246.7	194.4	148.9	65.3
45°	480.8	475.0	455.8	427.2	387.8	342.5	293.6	241.4	187.8	139.4	54.4
47.5°	480.0	473.6	454.4	424.2	384.2	338.1	288.1	235.0	179.7	131.1	44.2
50°	478.6	471.9	451.4	420.3	379.2	332.5	281.9	227.2	171.4	120.8	35.0
52.5°	474.2	467.5	448.1	414.7	373.3	326.1	273.6	219.2	162.5	110.8	26.7
55°	468.6	462.5	442.2	409.7	365.8	318.3	265.8	210.6	153.9	100.6	19.2
57.5°	460.0	454.4	435.0	401.7	358.3	309.7	257.2	201.1	143.1	90.3	13.3
60°	449.4	443.9	425.0	392.5	349.7	300.0	247.8	191.4	133.3	80.0	8.3
62.5°	438.3	433.1	413.3	381.1	338.9	289.7	237.5	181.7	123.1	70.6	5.0
65°	423.6	418.6	400.8	367.5	326.9	278.6	226.1	170.0	112.5	60.0	2.8
67.5°	408.1	403.6	385.6	355.0	313.1	266.4	214.4	158.6	101.4	50.8	1.4
70°	391.4	385.8	369.2	338.1	298.9	252.5	201.7	146.9	90.8	41.9	0.0
72.5°	371.9	367.8	351.7	322.2	282.5	237.8	188.6	134.2	79.2	33.3	0.3
75°	353.1	347.8	333.1	305.3	266.4	222.2	174.2	122.2	67.8	25.6	0.3
77.5°	328.6	326.9	313.1	286.1	251.1	207.2	158.3	107.8	56.9	18.3	0.3
80°	304.2	302.5	291.7	266.9	233.3	189.4	143.6	94.2	46.4	12.2	0.3
82.5°	280.0	277.8	267.5	246.9	215.3	174.4	128.3	80.6	36.7	7.5	0.3
85°	258.3	255.6	244.4	225.6	196.7	157.5	112.5	67.2	27.2	4.2	0.6
87.5°	239.7	237.8	225.6	206.1	177.8	141.7	98.6	54.4	19.2	1.9	0.8
90°	223.9	219.7	208.9	188.3	160.0	124.2	83.9	43.6	12.8	1.1	1.1
92.5°	208.3	204.7	192.8	171.7	144.2	109.2	69.7	33.3	8.1	0.6	1.4
95°	192.2	188.3	176.7	157.2	128.1	93.9	57.2	24.4	4.4	0.6	1.4
97.5°	176.4	172.8	160.6	141.1	113.6	80.6	45.3	17.2	2.2	0.6	1.1
100°	161.7	157.5	146.4	126.9	99.2	67.2	35.0	11.1	1.4	0.6	1.1
102.5°	146.1	142.8	131.4	112.5	84.2	54.7	26.1	6.9	0.6	0.6	0.8
105°	132.2	128.1	116.9	97.5	71.7	43.1	18.3	4.2	0.6	0.6	0.8



TEST NUMBER: P550742

CATALOG NUMBER: FCC-X-2-LD4-1LO-30-UNV-93-97-ED1D

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	86.1	82.8	73.1	56.7	36.4	16.9	5.0	0.8	0.8	0.8	0.8
115°	71.9	66.9	58.3	43.9	26.9	11.1	2.5	0.8	0.8	0.8	0.8
117.5°	57.5	53.3	47.2	33.3	17.8	7.2	1.4	0.8	0.8	0.8	0.8
120°	45.0	41.1	34.2	23.1	11.9	4.2	0.6	0.8	0.8	0.8	0.8
122.5°	32.2	29.2	23.1	15.0	7.2	1.9	0.8	0.8	1.1	1.1	0.8
125°	21.4	19.7	15.3	9.2	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	3.1	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



TEST NUMBER: P550742

CATALOG NUMBER: FCC-X-2-LD4-1LO-30-UNV-93-97-ED1D

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	218.1	218.1	218.1
2.5°	207.5	203.6	202.5
5°	196.4	190.0	186.4
7.5°	185.3	176.7	172.5
10°	175.0	162.8	158.3
12.5°	162.8	148.6	141.7
15°	151.1	132.8	126.1
17.5°	138.1	117.5	109.7
20°	125.8	102.2	94.2
22.5°	111.9	87.2	78.3
25°	99.4	72.2	62.2
27.5°	85.6	56.9	48.3
30°	72.5	43.6	35.0
32.5°	60.0	31.9	24.2
35°	48.3	21.7	15.3
37.5°	37.2	13.3	7.8
40°	26.9	6.9	3.6
42.5°	18.1	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°	116.7	113.3	102.2	83.9	58.6	32.8	12.2	2.2	0.6	0.8	0.8
110°	101.7	98.9	87.5	69.7	47.2	24.4	8.1	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)