

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: P550810

Luminaire Tested: **FCC-X-2-LD4-1LO-40-UNV-80-85-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: P550810
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-40-UNV-80-85-ED1D
Description: FCC CORNER MOUNT LUMINAIRE WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 4000K, AND 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

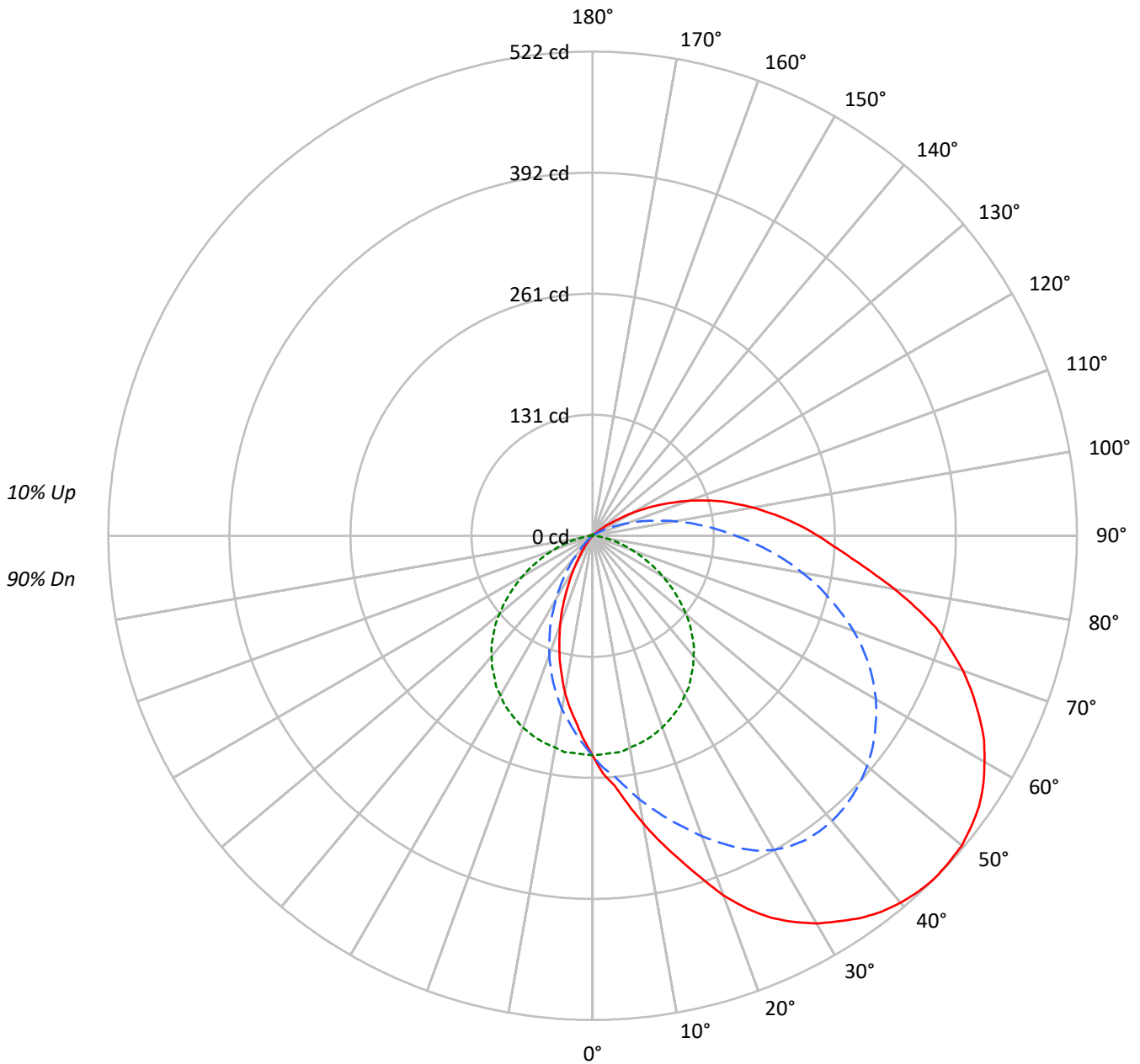
Lumens per Lamp: N/A
Luminaire Lumens: 1170.0 lumens
Efficiency: N/A
Efficacy: 100.0 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

Input Watts (W): 11.7
Input Voltage (V): NR
Input Current (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

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CATALOG NUMBER: FCC-X-2-LD4-1LO-40-UNV-80-85-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°	2548	2548	2548
5°	2796	2511	2094
10°	3164	2479	1726
15°	3547	2448	1345
20°	4000	2408	990
25°	4375	2361	650
30°	4656	2300	367
35°	4898	2233	162
40°	5112	2151	39
45°	5296	2047	0
50°	5451	1911	0
55°	5568	1737	0
60°	5628	1536	0
65°	5651	1308	0
70°	5632	1066	0
75°	5561	786	4
80°	5335	482	24
85°	5157	229	33



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	22.7	1.9
10°-20°	67.9	5.8
20°-30°	109.9	9.4
30°-40°	141.2	12.1
40°-50°	159.8	13.7
50°-60°	165.6	14.2
60°-70°	156.2	13.3
70°-80°	130.9	11.2
80°-90°	94.9	8.1
90°-100°	62.3	5.3
100°-110°	36.0	3.1
110°-120°	15.9	1.4
120°-130°	4.3	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°	200.5	17.1
0°-40°	341.7	29.2
0°-60°	667.1	57.0
0°-90°	1049.0	89.7
90°-120°	114.2	9.8
90°-150°	120.2	10.3
90°-180°	121.0	10.3
0°-180°	1170.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	237	237	237	237	237	
5°	270	259	235	213	202	27
15°	361	316	227	164	137	104
25°	454	371	210	108	68	210
35°	503	400	185	52	17	316
45°	522	396	151	12	0	403
55°	509	371	109	0	0	454
65°	460	329	65	0	0	455
75°	383	265	28	0	0	402
85°	280	192	4	1	2	239
90°	243	154	1	2	2	133
95°	209	120	1	2	3	164
105°	144	62	1	2	2	151
115°	78	21	1	1	2	78
125°	23	3	1	1	1	23
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°	236.7	236.7	236.7	236.7	236.7	236.7	236.7	236.7	236.7	236.7	236.7
2.5°	256.6	256.3	255.4	253.8	251.7	248.1	245.1	242.4	238.8	235.8	230.0
5°	270.1	268.6	267.4	265.9	261.1	257.8	252.3	246.3	240.6	234.9	223.4
7.5°	291.8	289.4	287.6	283.4	276.8	269.2	260.8	255.1	251.1	235.2	215.6
10°	315.0	312.9	309.3	301.8	293.6	282.8	270.7	257.2	245.1	231.8	208.6
12.5°	338.0	334.9	329.8	320.2	308.7	295.2	278.6	262.6	245.4	229.7	200.5
15°	360.9	357.6	352.1	340.4	325.3	307.5	287.3	267.1	246.9	227.0	192.0
17.5°	385.9	381.4	373.2	360.0	341.0	319.0	295.2	270.7	246.3	223.7	183.0
20°	412.7	406.4	397.7	379.9	357.6	331.6	303.0	274.3	246.0	219.8	172.7
22.5°	435.0	428.7	419.1	400.7	373.8	342.2	309.6	276.8	244.8	215.3	163.1
25°	454.3	449.2	438.7	417.6	389.2	353.3	316.0	278.6	243.0	210.4	152.9
27.5°	469.4	464.6	452.8	431.1	402.2	363.3	320.8	279.5	240.6	205.6	142.3
30°	482.7	477.8	463.7	441.4	410.9	371.1	325.6	279.8	237.6	198.4	130.8
32.5°	492.9	488.4	473.9	450.1	416.9	376.6	328.3	279.5	233.6	193.2	118.5
35°	503.2	498.7	481.8	456.4	421.5	379.0	330.4	278.0	228.8	184.8	106.7
37.5°	511.0	505.9	488.7	460.7	423.6	379.6	330.1	275.9	223.7	177.9	95.0
40°	516.4	511.0	492.6	463.1	424.2	378.7	327.7	272.2	217.7	169.1	82.6
42.5°	520.1	514.0	494.4	466.7	423.0	376.2	324.1	267.7	211.0	161.6	70.8
45°	521.9	515.5	494.7	463.7	420.9	371.7	318.7	262.0	203.8	151.3	59.1
47.5°	521.0	514.0	493.2	460.4	416.9	366.9	312.6	255.1	195.1	142.3	47.9
50°	519.5	512.2	489.9	456.1	411.5	360.9	306.0	246.6	186.0	131.1	38.0
52.5°	514.6	507.4	486.3	450.1	405.2	353.9	297.0	237.9	176.4	120.3	28.9
55°	508.6	502.0	480.0	444.7	397.1	345.5	288.5	228.5	167.0	109.1	20.8
57.5°	499.3	493.2	472.1	435.9	388.9	336.2	279.2	218.3	155.3	98.0	14.5
60°	487.8	481.8	461.3	426.0	379.6	325.6	268.9	207.7	144.7	86.8	9.0
62.5°	475.7	470.0	448.6	413.6	367.8	314.4	257.8	197.2	133.6	76.6	5.4
65°	459.8	454.3	435.0	398.9	354.8	302.4	245.4	184.5	122.1	65.1	3.0
67.5°	442.9	438.1	418.5	385.3	339.8	289.1	232.7	172.1	110.0	55.2	1.5
70°	424.8	418.8	400.7	366.9	324.4	274.0	218.9	159.5	98.6	45.5	0.0
72.5°	403.7	399.2	381.7	349.7	306.6	258.1	204.7	145.6	85.9	36.2	0.3
75°	383.2	377.5	361.5	331.3	289.1	241.2	189.0	132.7	73.6	27.7	0.3
77.5°	356.7	354.8	339.8	310.5	272.5	224.9	171.8	117.0	61.8	19.9	0.3
80°	330.1	328.3	316.6	289.7	253.2	205.6	155.9	102.2	50.3	13.3	0.3
82.5°	303.9	301.5	290.3	268.0	233.6	189.3	139.3	87.4	39.8	8.1	0.3
85°	280.4	277.4	265.3	244.8	213.4	170.9	122.1	73.0	29.5	4.5	0.6
87.5°	260.2	258.1	244.8	223.7	192.9	153.8	107.0	59.1	20.8	2.1	0.9
90°	243.0	238.5	226.7	204.4	173.7	134.8	91.0	47.3	13.9	1.2	1.2
92.5°	226.1	222.2	209.2	186.3	156.5	118.5	75.7	36.2	8.7	0.6	1.5
95°	208.6	204.4	191.7	170.6	139.0	101.9	62.1	26.5	4.8	0.6	1.5
97.5°	191.4	187.5	174.3	153.2	123.3	87.4	49.1	18.7	2.4	0.6	1.2
100°	175.5	170.9	158.9	137.8	107.6	73.0	38.0	12.1	1.5	0.6	1.2
102.5°	158.6	155.0	142.6	122.1	91.3	59.4	28.3	7.5	0.6	0.6	0.9
105°	143.5	139.0	126.9	105.8	77.8	46.7	19.9	4.5	0.6	0.6	0.9



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CATALOG NUMBER: FCC-X-2-LD4-1LO-40-UNV-80-85-ED1D

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	93.5	89.8	79.3	61.5	39.5	18.4	5.4	0.9	0.9	0.9	0.9
115°	78.1	72.7	63.3	47.6	29.2	12.1	2.7	0.9	0.9	0.9	0.9
117.5°	62.4	57.9	51.3	36.2	19.3	7.8	1.5	0.9	0.9	0.9	0.9
120°	48.8	44.6	37.1	25.0	13.0	4.5	0.6	0.9	0.9	0.9	0.9
122.5°	35.0	31.7	25.0	16.3	7.8	2.1	0.9	0.9	1.2	1.2	0.9
125°	23.2	21.4	16.6	9.9	4.8	0.9	0.9	0.9	1.2	1.2	0.9
127.5°	15.1	13.6	9.6	5.7	2.1	0.9	0.9	1.2	1.2	1.2	0.9
130°	8.4	7.5	5.7	3.3	0.9	0.9	0.9	1.2	1.2	1.2	0.9
132.5°	4.8	4.5	3.0	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



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	236.7	236.7	236.7
2.5°	225.2	221.0	219.8
5°	213.1	206.2	202.3
7.5°	201.1	191.7	187.2
10°	189.9	176.7	171.8
12.5°	176.7	161.3	153.8
15°	164.0	144.1	136.9
17.5°	149.8	127.5	119.1
20°	136.6	110.9	102.2
22.5°	121.5	94.7	85.0
25°	107.9	78.4	67.5
27.5°	92.9	61.8	52.5
30°	78.7	47.3	38.0
32.5°	65.1	34.7	26.2
35°	52.5	23.5	16.6
37.5°	40.4	14.5	8.4
40°	29.2	7.5	3.9
42.5°	19.6	3.6	2.1
45°	12.1	1.8	0.0
47.5°	6.9	0.0	0.0
50°	3.6	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	2.4	2.4
95°	2.1	2.4	2.7
97.5°	2.4	2.7	2.7
100°	2.1	2.7	3.0
102.5°	1.8	2.7	2.7
105°	1.5	2.1	2.4



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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°	126.6	123.0	110.9	91.0	63.6	35.6	13.3	2.4	0.6	0.9	0.9
110°	110.3	107.3	95.0	75.7	51.3	26.5	8.7	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)