

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: P550874

Luminaire Tested: **FCC-X-2-LD4-1LO-50-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: P550874
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-50-UNV-80-85-ED1D
Description: FCC CORNER MOUNT LUMINAIRE WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 5000K, AND 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

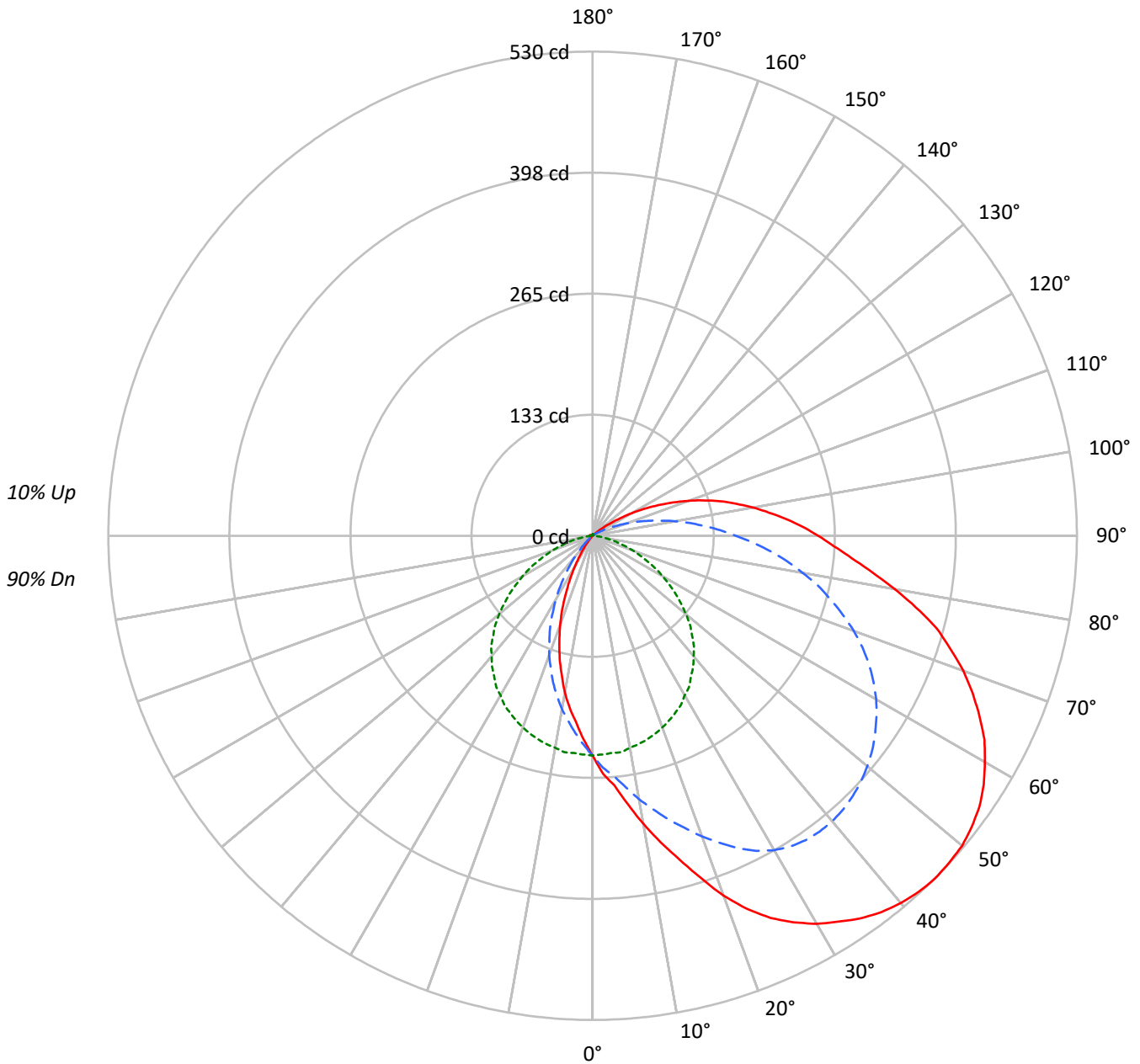
Lumens per Lamp: N/A
Luminaire Lumens: 1188.9 lumens
Efficiency: N/A
Efficacy: 101.6 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

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

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CATALOG NUMBER: FCC-X-2-LD4-1LO-50-UNV-80-85-ED1D

Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20				20
RC	80				70				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	93	93	93	90
1	103	96	91	86	99	93	88	83	87	83	79	81	78	74	76	73	70	76	73	70	67
2	92	82	74	67	88	79	72	65	74	67	62	69	64	59	64	60	56	64	60	56	53
3	83	71	61	54	79	68	60	53	64	56	50	59	53	48	55	50	46	55	50	46	43
4	75	62	52	44	72	60	51	44	56	48	42	52	45	40	49	43	38	49	43	38	36
5	69	55	45	38	66	53	44	37	50	42	35	46	39	34	43	38	33	43	38	33	30
6	63	49	39	32	61	47	38	32	44	36	31	42	35	29	39	33	28	39	33	28	26
7	58	44	35	28	56	43	34	28	40	32	27	38	31	26	36	29	25	36	29	25	23
8	54	40	31	25	52	39	30	24	37	29	24	34	28	23	32	26	22	32	26	22	20
9	51	36	28	22	49	35	27	22	33	26	21	32	25	20	30	24	20	30	24	20	18
10	47	33	25	20	45	33	25	19	31	24	19	29	23	18	28	22	18	28	22	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	2589	2589	2589
5°	2842	2551	2128
10°	3216	2520	1754
15°	3604	2488	1367
20°	4064	2447	1007
25°	4447	2400	661
30°	4731	2337	372
35°	4976	2269	164
40°	5195	2186	40
45°	5382	2081	0
50°	5539	1943	0
55°	5659	1766	0
60°	5719	1561	0
65°	5742	1330	0
70°	5724	1085	0
75°	5651	800	4
80°	5422	490	24
85°	5240	234	33



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	23.0	1.9
10°-20°	69.0	5.8
20°-30°	111.7	9.4
30°-40°	143.5	12.1
40°-50°	162.4	13.7
50°-60°	168.3	14.2
60°-70°	158.7	13.3
70°-80°	133.0	11.2
80°-90°	96.4	8.1
90°-100°	63.4	5.3
100°-110°	36.6	3.1
110°-120°	16.1	1.4
120°-130°	4.4	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
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0°-30°	203.7	17.1
0°-40°	347.2	29.2
0°-60°	677.9	57.0
0°-90°	1066.0	89.7
90°-120°	116.1	9.8
90°-150°	122.1	10.3
90°-180°	123.0	10.3
0°-180°	1188.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	240	240	240	240	240	
5°	274	264	239	217	206	28
15°	367	322	231	167	139	106
25°	462	377	214	110	69	213
35°	511	407	188	53	17	321
45°	530	403	154	12	0	409
55°	517	377	111	0	0	462
65°	467	334	66	0	0	462
75°	389	269	28	0	0	408
85°	285	195	5	1	2	243
90°	247	157	1	2	2	135
95°	212	122	1	2	3	166
105°	146	63	1	2	2	154
115°	79	21	1	1	2	79
125°	24	3	1	1	1	24
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°	240.5	240.5	240.5	240.5	240.5	240.5	240.5	240.5	240.5	240.5	240.5
2.5°	260.7	260.4	259.5	258.0	255.8	252.1	249.1	246.3	242.7	239.6	233.8
5°	274.5	273.0	271.8	270.2	265.3	262.0	256.4	250.3	244.5	238.7	227.0
7.5°	296.6	294.1	292.3	288.0	281.3	273.6	265.0	259.2	255.2	239.0	219.1
10°	320.2	318.0	314.3	306.7	298.4	287.4	275.1	261.3	249.1	235.6	212.0
12.5°	343.4	340.4	335.2	325.4	313.7	299.9	283.1	266.9	249.4	233.5	203.7
15°	366.7	363.4	357.8	345.9	330.6	312.5	292.0	271.5	250.9	230.7	195.2
17.5°	392.2	387.6	379.3	365.8	346.5	324.1	299.9	275.1	250.3	227.3	186.0
20°	419.4	413.0	404.1	386.0	363.4	337.0	307.9	278.8	250.0	223.3	175.6
22.5°	442.1	435.7	425.9	407.2	379.9	347.7	314.6	281.3	248.8	218.8	165.8
25°	461.7	456.5	445.8	424.3	395.5	359.1	321.1	283.1	246.9	213.9	155.3
27.5°	477.0	472.1	460.2	438.1	408.7	369.2	326.0	284.0	244.5	208.9	144.6
30°	490.5	485.6	471.2	448.5	417.6	377.2	330.9	284.3	241.4	201.6	133.0
32.5°	500.9	496.3	481.6	457.4	423.7	382.7	333.6	284.0	237.4	196.4	120.4
35°	511.3	506.7	489.6	463.9	428.3	385.1	335.8	282.5	232.5	187.8	108.5
37.5°	519.3	514.1	496.6	468.1	430.5	385.7	335.5	280.3	227.3	180.8	96.5
40°	524.8	519.3	500.6	470.6	431.1	384.8	333.0	276.7	221.2	171.9	83.9
42.5°	528.5	522.4	502.5	474.3	429.8	382.4	329.4	272.1	214.5	164.2	72.0
45°	530.3	523.9	502.8	471.2	427.7	377.8	323.8	266.2	207.1	153.8	60.0
47.5°	529.4	522.4	501.2	467.8	423.7	372.9	317.7	259.2	198.2	144.6	48.7
50°	527.9	520.5	497.9	463.5	418.2	366.7	311.0	250.6	189.0	133.3	38.6
52.5°	523.0	515.6	494.2	457.4	411.8	359.7	301.8	241.7	179.2	122.2	29.4
55°	516.9	510.1	487.8	451.9	403.5	351.1	293.2	232.2	169.7	110.9	21.1
57.5°	507.4	501.2	479.8	443.0	395.2	341.6	283.7	221.8	157.8	99.6	14.7
60°	495.7	489.6	468.8	432.9	385.7	330.9	273.3	211.1	147.1	88.2	9.2
62.5°	483.5	477.6	455.9	420.3	373.8	319.6	262.0	200.4	135.7	77.8	5.5
65°	467.2	461.7	442.1	405.3	360.6	307.3	249.4	187.5	124.1	66.2	3.1
67.5°	450.1	445.2	425.3	391.6	345.3	293.8	236.5	174.9	111.8	56.1	1.5
70°	431.7	425.6	407.2	372.9	329.7	278.5	222.4	162.1	100.2	46.3	0.0
72.5°	410.2	405.6	387.9	355.4	311.6	262.3	208.0	148.0	87.3	36.8	0.3
75°	389.4	383.6	367.3	336.7	293.8	245.1	192.1	134.8	74.8	28.2	0.3
77.5°	362.4	360.6	345.3	315.6	277.0	228.6	174.6	118.9	62.8	20.2	0.3
80°	335.5	333.6	321.7	294.4	257.4	208.9	158.4	103.9	51.2	13.5	0.3
82.5°	308.8	306.4	295.0	272.4	237.4	192.4	141.5	88.8	40.4	8.3	0.3
85°	284.9	281.9	269.6	248.8	216.9	173.7	124.1	74.1	30.0	4.6	0.6
87.5°	264.4	262.3	248.8	227.3	196.1	156.3	108.8	60.0	21.1	2.1	0.9
90°	246.9	242.3	230.4	207.7	176.5	137.0	92.5	48.1	14.1	1.2	1.2
92.5°	229.8	225.8	212.6	189.3	159.0	120.4	76.9	36.8	8.9	0.6	1.5
95°	212.0	207.7	194.9	173.4	141.2	103.6	63.1	27.0	4.9	0.6	1.5
97.5°	194.5	190.6	177.1	155.6	125.3	88.8	49.9	19.0	2.5	0.6	1.2
100°	178.3	173.7	161.5	140.0	109.4	74.1	38.6	12.3	1.5	0.6	1.2
102.5°	161.2	157.5	144.9	124.1	92.8	60.4	28.8	7.7	0.6	0.6	0.9
105°	145.8	141.2	129.0	107.5	79.0	47.5	20.2	4.6	0.6	0.6	0.9



TEST NUMBER: P550874

CATALOG NUMBER: FCC-X-2-LD4-1LO-50-UNV-80-85-ED1D

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	95.0	91.3	80.6	62.5	40.1	18.7	5.5	0.9	0.9	0.9	0.9
115°	79.4	73.8	64.3	48.4	29.7	12.3	2.8	0.9	0.9	0.9	0.9
117.5°	63.4	58.8	52.1	36.8	19.6	8.0	1.5	0.9	0.9	0.9	0.9
120°	49.6	45.3	37.7	25.4	13.2	4.6	0.6	0.9	0.9	0.9	0.9
122.5°	35.5	32.2	25.4	16.5	8.0	2.1	0.9	0.9	1.2	1.2	0.9
125°	23.6	21.8	16.9	10.1	4.9	0.9	0.9	0.9	1.2	1.2	0.9
127.5°	15.3	13.8	9.8	5.8	2.1	0.9	0.9	1.2	1.2	1.2	0.9
130°	8.6	7.7	5.8	3.4	0.9	0.9	0.9	1.2	1.2	1.2	0.9
132.5°	4.9	4.6	3.1	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°	240.5	240.5	240.5
2.5°	228.9	224.6	223.3
5°	216.6	209.6	205.6
7.5°	204.4	194.9	190.3
10°	193.0	179.5	174.6
12.5°	179.5	163.9	156.3
15°	166.7	146.4	139.1
17.5°	152.3	129.6	121.0
20°	138.8	112.7	103.9
22.5°	123.5	96.2	86.4
25°	109.7	79.7	68.6
27.5°	94.4	62.8	53.3
30°	80.0	48.1	38.6
32.5°	66.2	35.2	26.7
35°	53.3	23.9	16.9
37.5°	41.1	14.7	8.6
40°	29.7	7.7	4.0
42.5°	19.9	3.7	2.1
45°	12.3	1.8	0.0
47.5°	7.0	0.0	0.0
50°	3.7	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	2.5	2.5
95°	2.1	2.5	2.8
97.5°	2.5	2.8	2.8
100°	2.1	2.8	3.1
102.5°	1.8	2.8	2.8
105°	1.5	2.1	2.5



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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°	128.7	125.0	112.7	92.5	64.6	36.2	13.5	2.5	0.6	0.9	0.9
110°	112.1	109.1	96.5	76.9	52.1	27.0	8.9	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)