

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: P550812

Luminaire Tested: **FCC-X-2-LD4-1LO-40-UNV-80-86-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: P550812
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-80-86-ED1D
Description: FCC CORNER MOUNT LUMINAIRE WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 4000K, AND 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

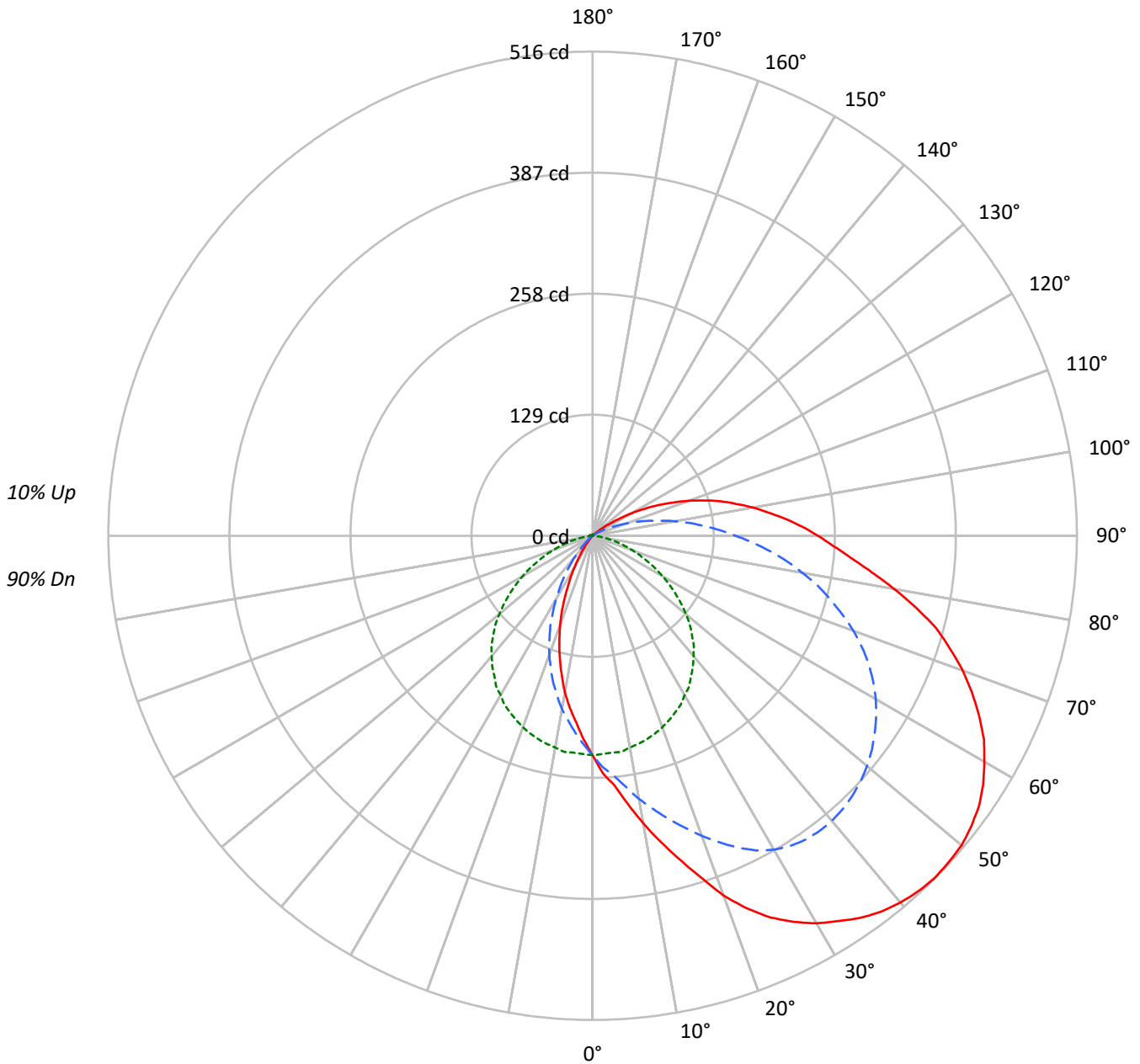
Lumens per Lamp: N/A
Luminaire Lumens: 1156.1 lumens
Efficiency: N/A
Efficacy: 98.8 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

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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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°	2517	2517	2517
5°	2763	2480	2069
10°	3127	2450	1706
15°	3504	2419	1329
20°	3952	2380	979
25°	4323	2333	642
30°	4600	2272	362
35°	4839	2206	160
40°	5051	2125	39
45°	5232	2023	0
50°	5385	1889	0
55°	5502	1717	0
60°	5561	1518	0
65°	5584	1291	0
70°	5564	1054	0
75°	5494	777	4
80°	5272	475	24
85°	5095	229	33



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	22.4	1.9
10°-20°	67.1	5.8
20°-30°	108.6	9.4
30°-40°	139.5	12.1
40°-50°	157.9	13.7
50°-60°	163.6	14.2
60°-70°	154.3	13.3
70°-80°	129.3	11.2
80°-90°	93.7	8.1
90°-100°	61.6	5.3
100°-110°	35.6	3.1
110°-120°	15.7	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°	198.1	17.1
0°-40°	337.6	29.2
0°-60°	659.1	57.0
0°-90°	1036.5	89.7
90°-120°	112.9	9.8
90°-150°	118.8	10.3
90°-180°	120.0	10.4
0°-180°	1156.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	234	234	234	234	234	
5°	267	256	232	211	200	27
15°	357	313	224	162	135	103
25°	449	367	208	107	67	207
35°	497	395	183	52	16	312
45°	516	392	150	12	0	398
55°	502	367	108	0	0	449
65°	454	325	64	0	0	449
75°	379	262	27	0	0	397
85°	277	190	4	1	2	237
90°	240	152	1	2	2	132
95°	206	119	1	2	3	162
105°	142	62	1	2	2	150
115°	77	20	1	1	2	77
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°	233.8	233.8	233.8	233.8	233.8	233.8	233.8	233.8	233.8	233.8	233.8
2.5°	253.5	253.2	252.3	250.8	248.7	245.2	242.2	239.5	235.9	232.9	227.3
5°	266.9	265.4	264.2	262.7	258.0	254.7	249.3	243.4	237.7	232.0	220.7
7.5°	288.3	286.0	284.2	280.0	273.4	266.0	257.7	252.0	248.1	232.3	213.0
10°	311.3	309.2	305.6	298.2	290.1	279.4	267.5	254.1	242.2	229.1	206.1
12.5°	333.9	330.9	325.9	316.3	305.0	291.6	275.2	259.4	242.5	227.0	198.1
15°	356.6	353.3	347.9	336.3	321.4	303.8	283.9	263.9	244.0	224.3	189.7
17.5°	381.3	376.8	368.8	355.7	336.9	315.2	291.6	267.5	243.4	221.0	180.8
20°	407.8	401.5	392.9	375.3	353.3	327.7	299.4	271.1	243.1	217.2	170.7
22.5°	429.8	423.6	414.0	395.9	369.4	338.1	305.9	273.4	241.9	212.7	161.1
25°	448.9	443.8	433.4	412.6	384.6	349.1	312.2	275.2	240.1	207.9	151.0
27.5°	463.8	459.0	447.4	426.0	397.4	358.9	316.9	276.1	237.7	203.2	140.6
30°	476.9	472.1	458.1	436.1	406.0	366.7	321.7	276.4	234.7	196.0	129.3
32.5°	487.0	482.6	468.3	444.7	412.0	372.0	324.4	276.1	230.9	190.9	117.1
35°	497.2	492.7	476.0	451.0	416.4	374.4	326.5	274.6	226.1	182.6	105.4
37.5°	504.9	499.8	482.9	455.2	418.5	375.0	326.2	272.6	221.0	175.7	93.8
40°	510.3	504.9	486.7	457.5	419.1	374.1	323.8	269.0	215.1	167.1	81.6
42.5°	513.8	507.9	488.5	461.1	417.9	371.7	320.2	264.5	208.5	159.7	70.0
45°	515.6	509.4	488.8	458.1	415.8	367.3	314.9	258.9	201.4	149.5	58.4
47.5°	514.7	507.9	487.3	454.9	412.0	362.5	308.9	252.0	192.7	140.6	47.4
50°	513.2	506.1	484.0	450.7	406.6	356.6	302.3	243.7	183.8	129.6	37.5
52.5°	508.5	501.3	480.5	444.7	400.3	349.7	293.4	235.0	174.3	118.9	28.6
55°	502.5	496.0	474.2	439.4	392.3	341.4	285.1	225.8	165.0	107.8	20.6
57.5°	493.3	487.3	466.5	430.7	384.3	332.1	275.8	215.7	153.4	96.8	14.3
60°	482.0	476.0	455.7	420.9	375.0	321.7	265.7	205.2	143.0	85.8	8.9
62.5°	470.0	464.4	443.2	408.7	363.4	310.7	254.7	194.8	132.0	75.7	5.4
65°	454.3	448.9	429.8	394.1	350.6	298.8	242.5	182.3	120.6	64.3	3.0
67.5°	437.6	432.8	413.4	380.7	335.7	285.7	230.0	170.1	108.7	54.5	1.5
70°	419.7	413.7	395.9	362.5	320.5	270.8	216.3	157.6	97.4	45.0	0.0
72.5°	398.9	394.4	377.1	345.5	302.9	255.0	202.3	143.9	84.9	35.7	0.3
75°	378.6	372.9	357.2	327.4	285.7	238.3	186.8	131.1	72.7	27.4	0.3
77.5°	352.4	350.6	335.7	306.8	269.3	222.2	169.8	115.6	61.1	19.7	0.3
80°	326.2	324.4	312.8	286.3	250.2	203.2	154.0	101.0	49.7	13.1	0.3
82.5°	300.3	297.9	286.9	264.8	230.9	187.1	137.6	86.4	39.3	8.0	0.3
85°	277.0	274.0	262.1	241.9	210.9	168.9	120.6	72.1	29.2	4.5	0.6
87.5°	257.1	255.0	241.9	221.0	190.6	151.9	105.7	58.4	20.6	2.1	0.9
90°	240.1	235.6	224.0	202.0	171.6	133.1	90.0	46.8	13.7	1.2	1.2
92.5°	223.4	219.5	206.7	184.1	154.6	117.1	74.8	35.7	8.6	0.6	1.5
95°	206.1	202.0	189.4	168.6	137.3	100.7	61.4	26.2	4.8	0.6	1.5
97.5°	189.1	185.3	172.2	151.3	121.8	86.4	48.6	18.5	2.4	0.6	1.2
100°	173.4	168.9	157.0	136.1	106.3	72.1	37.5	11.9	1.5	0.6	1.2
102.5°	156.7	153.1	140.9	120.6	90.3	58.7	28.0	7.4	0.6	0.6	0.9
105°	141.8	137.3	125.4	104.6	76.9	46.2	19.7	4.5	0.6	0.6	0.9



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	92.3	88.8	78.3	60.8	39.0	18.2	5.4	0.9	0.9	0.9	0.9
115°	77.1	71.8	62.6	47.1	28.9	11.9	2.7	0.9	0.9	0.9	0.9
117.5°	61.7	57.2	50.6	35.7	19.1	7.7	1.5	0.9	0.9	0.9	0.9
120°	48.3	44.1	36.6	24.7	12.8	4.5	0.6	0.9	0.9	0.9	0.9
122.5°	34.6	31.3	24.7	16.1	7.7	2.1	0.9	0.9	1.2	1.2	0.9
125°	22.9	21.1	16.4	9.8	4.8	0.9	0.9	0.9	1.2	1.2	0.9
127.5°	14.9	13.4	9.5	5.7	2.1	0.9	0.9	1.2	1.2	1.2	0.9
130°	8.3	7.4	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°	233.8	233.8	233.8
2.5°	222.5	218.3	217.2
5°	210.6	203.7	199.9
7.5°	198.7	189.4	185.0
10°	187.7	174.6	169.8
12.5°	174.6	159.4	151.9
15°	162.0	142.4	135.2
17.5°	148.0	126.0	117.7
20°	134.9	109.6	101.0
22.5°	120.0	93.5	84.0
25°	106.6	77.4	66.7
27.5°	91.7	61.1	51.8
30°	77.7	46.8	37.5
32.5°	64.3	34.3	25.9
35°	51.8	23.2	16.4
37.5°	39.9	14.3	8.3
40°	28.9	7.4	3.9
42.5°	19.4	3.6	2.1
45°	11.9	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°	125.1	121.5	109.6	90.0	62.9	35.1	13.1	2.4	0.6	0.9	0.9
110°	109.0	106.0	93.8	74.8	50.6	26.2	8.6	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)