

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: P550898

Luminaire Tested: **FCC-X-2-LD4-1LO-50-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: P550898
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-81-94-ED1D
Description: FCC CORNER MOUNT LUMINAIRE WITH .156 CLEAR PC FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES AND 5000K, AND 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

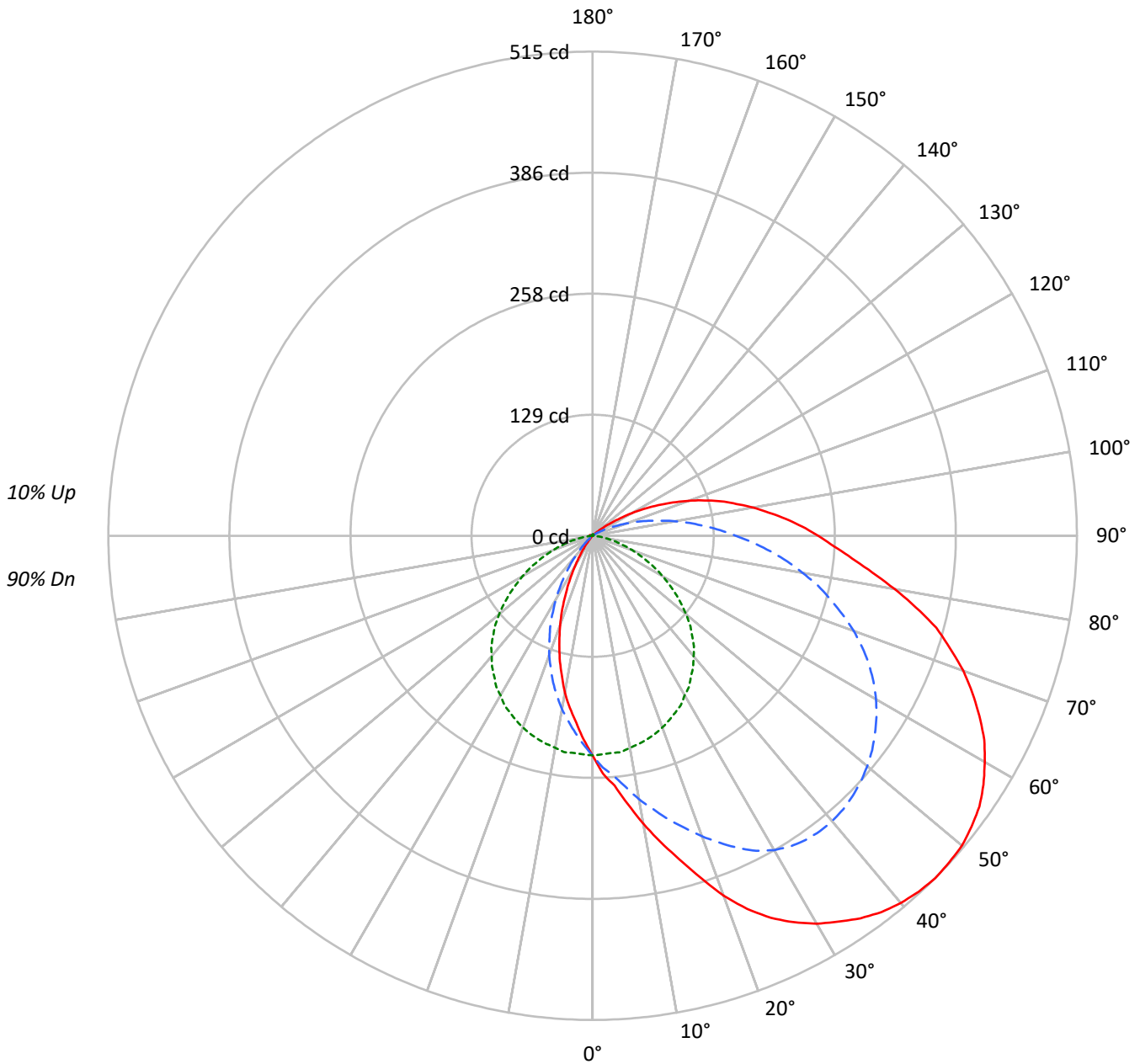
Lumens per Lamp: N/A
Luminaire Lumens: 1155.0 lumens
Efficiency: N/A
Efficacy: 98.7 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

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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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°	2514	2514	2514
5°	2761	2478	2067
10°	3124	2448	1704
15°	3500	2416	1328
20°	3948	2378	978
25°	4320	2331	642
30°	4596	2270	362
35°	4834	2204	160
40°	5046	2124	39
45°	5228	2022	0
50°	5381	1887	0
55°	5497	1715	0
60°	5555	1517	0
65°	5579	1291	0
70°	5559	1052	0
75°	5489	777	4
80°	5267	475	24
85°	5091	229	33



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	22.4	1.9
10°-20°	67.0	5.8
20°-30°	108.5	9.4
30°-40°	139.4	12.1
40°-50°	157.8	13.7
50°-60°	163.5	14.2
60°-70°	154.2	13.3
70°-80°	129.2	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°	197.9	17.1
0°-40°	337.3	29.2
0°-60°	658.5	57.0
0°-90°	1035.6	89.7
90°-120°	112.8	9.8
90°-150°	118.7	10.3
90°-180°	119.0	10.3
0°-180°	1155.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	234	234	234	234	234	
5°	267	256	232	210	200	27
15°	356	312	224	162	135	103
25°	448	366	208	106	67	207
35°	497	395	182	52	16	312
45°	515	391	149	12	0	398
55°	502	367	108	0	0	448
65°	454	324	64	0	0	449
75°	378	262	27	0	0	397
85°	277	190	4	1	2	236
90°	240	152	1	2	2	132
95°	206	119	1	2	3	162
105°	142	61	1	2	2	149
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°	233.6	233.6	233.6	233.6	233.6	233.6	233.6	233.6	233.6	233.6	233.6
2.5°	253.3	253.0	252.1	250.6	248.5	244.9	242.0	239.3	235.7	232.7	227.1
5°	266.7	265.2	264.0	262.5	257.7	254.5	249.1	243.2	237.5	231.8	220.5
7.5°	288.1	285.7	283.9	279.8	273.2	265.8	257.4	251.8	247.9	232.1	212.8
10°	311.0	308.9	305.4	297.9	289.9	279.2	267.3	253.9	242.0	228.9	206.0
12.5°	333.6	330.7	325.6	316.1	304.8	291.4	275.0	259.2	242.3	226.8	197.9
15°	356.2	353.0	347.6	336.0	321.1	303.6	283.6	263.7	243.7	224.1	189.6
17.5°	380.9	376.5	368.4	355.4	336.6	314.9	291.4	267.3	243.2	220.8	180.7
20°	407.4	401.2	392.6	375.0	353.0	327.4	299.1	270.8	242.9	217.0	170.5
22.5°	429.5	423.2	413.7	395.5	369.0	337.8	305.7	273.2	241.7	212.5	161.0
25°	448.5	443.4	433.0	412.2	384.2	348.8	311.9	275.0	239.9	207.7	150.9
27.5°	463.4	458.6	447.0	425.6	397.0	358.6	316.7	275.9	237.5	203.0	140.5
30°	476.5	471.7	457.7	435.7	405.7	366.4	321.4	276.2	234.5	195.8	129.2
32.5°	486.6	482.1	467.9	444.3	411.6	371.7	324.1	275.9	230.7	190.8	117.0
35°	496.7	492.3	475.6	450.6	416.1	374.1	326.2	274.4	225.9	182.4	105.4
37.5°	504.5	499.4	482.4	454.8	418.2	374.7	325.9	272.3	220.8	175.6	93.7
40°	509.8	504.5	486.3	457.1	418.7	373.8	323.5	268.7	214.9	167.0	81.5
42.5°	513.4	507.4	488.1	460.7	417.6	371.4	319.9	264.3	208.3	159.5	69.9
45°	515.2	508.9	488.4	457.7	415.5	367.0	314.6	258.6	201.2	149.4	58.3
47.5°	514.3	507.4	486.9	454.5	411.6	362.2	308.6	251.8	192.6	140.5	47.3
50°	512.8	505.7	483.6	450.3	406.2	356.2	302.1	243.5	183.6	129.5	37.5
52.5°	508.0	500.9	480.1	444.3	400.0	349.4	293.2	234.8	174.1	118.7	28.6
55°	502.1	495.5	473.8	439.0	392.0	341.1	284.8	225.6	164.9	107.7	20.5
57.5°	492.9	486.9	466.1	430.4	383.9	331.8	275.6	215.5	153.3	96.7	14.3
60°	481.5	475.6	455.4	420.5	374.7	321.4	265.5	205.1	142.9	85.7	8.9
62.5°	469.6	464.0	442.9	408.3	363.1	310.4	254.5	194.6	131.8	75.6	5.4
65°	453.9	448.5	429.5	393.7	350.3	298.5	242.3	182.1	120.5	64.3	3.0
67.5°	437.2	432.4	413.1	380.4	335.4	285.4	229.8	169.9	108.6	54.5	1.5
70°	419.3	413.4	395.5	362.2	320.2	270.5	216.1	157.4	97.3	44.9	0.0
72.5°	398.5	394.0	376.8	345.2	302.7	254.8	202.1	143.7	84.8	35.7	0.3
75°	378.3	372.6	356.8	327.1	285.4	238.1	186.6	131.0	72.6	27.4	0.3
77.5°	352.1	350.3	335.4	306.5	269.0	222.0	169.6	115.5	61.0	19.6	0.3
80°	325.9	324.1	312.5	286.0	250.0	203.0	153.9	100.9	49.7	13.1	0.3
82.5°	300.0	297.6	286.6	264.6	230.7	186.9	137.5	86.3	39.3	8.0	0.3
85°	276.8	273.8	261.9	241.7	210.7	168.7	120.5	72.0	29.2	4.5	0.6
87.5°	256.8	254.8	241.7	220.8	190.5	151.8	105.7	58.3	20.5	2.1	0.9
90°	239.9	235.4	223.8	201.8	171.4	133.0	89.9	46.7	13.7	1.2	1.2
92.5°	223.2	219.3	206.5	183.9	154.5	117.0	74.7	35.7	8.6	0.6	1.5
95°	206.0	201.8	189.3	168.5	137.2	100.6	61.3	26.2	4.8	0.6	1.5
97.5°	189.0	185.1	172.0	151.2	121.7	86.3	48.5	18.5	2.4	0.6	1.2
100°	173.2	168.7	156.8	136.0	106.2	72.0	37.5	11.9	1.5	0.6	1.2
102.5°	156.5	153.0	140.8	120.5	90.2	58.6	28.0	7.4	0.6	0.6	0.9
105°	141.7	137.2	125.3	104.5	76.8	46.1	19.6	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	88.7	78.3	60.7	39.0	18.2	5.4	0.9	0.9	0.9	0.9
115°	77.1	71.7	62.5	47.0	28.9	11.9	2.7	0.9	0.9	0.9	0.9
117.5°	61.6	57.1	50.6	35.7	19.0	7.7	1.5	0.9	0.9	0.9	0.9
120°	48.2	44.0	36.6	24.7	12.8	4.5	0.6	0.9	0.9	0.9	0.9
122.5°	34.5	31.2	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°	233.6	233.6	233.6
2.5°	222.3	218.2	217.0
5°	210.4	203.6	199.7
7.5°	198.5	189.3	184.8
10°	187.5	174.4	169.6
12.5°	174.4	159.2	151.8
15°	161.9	142.3	135.1
17.5°	147.9	125.9	117.6
20°	134.8	109.5	100.9
22.5°	119.9	93.5	83.9
25°	106.5	77.4	66.7
27.5°	91.7	61.0	51.8
30°	77.7	46.7	37.5
32.5°	64.3	34.2	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°	19.3	3.6	2.1
45°	11.9	1.8	0.0
47.5°	6.8	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°	125.0	121.4	109.5	89.9	62.8	35.1	13.1	2.4	0.6	0.9	0.9
110°	108.9	106.0	93.7	74.7	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)