

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: P550770

Luminaire Tested: **FCC-X-2-LD4-1LO-35-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: P550770
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-35-UNV-81-94-ED1D
Description: FCC CORNER MOUNT LUMINAIRE WITH .156 CLEAR PC FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES AND 3500K, AND 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

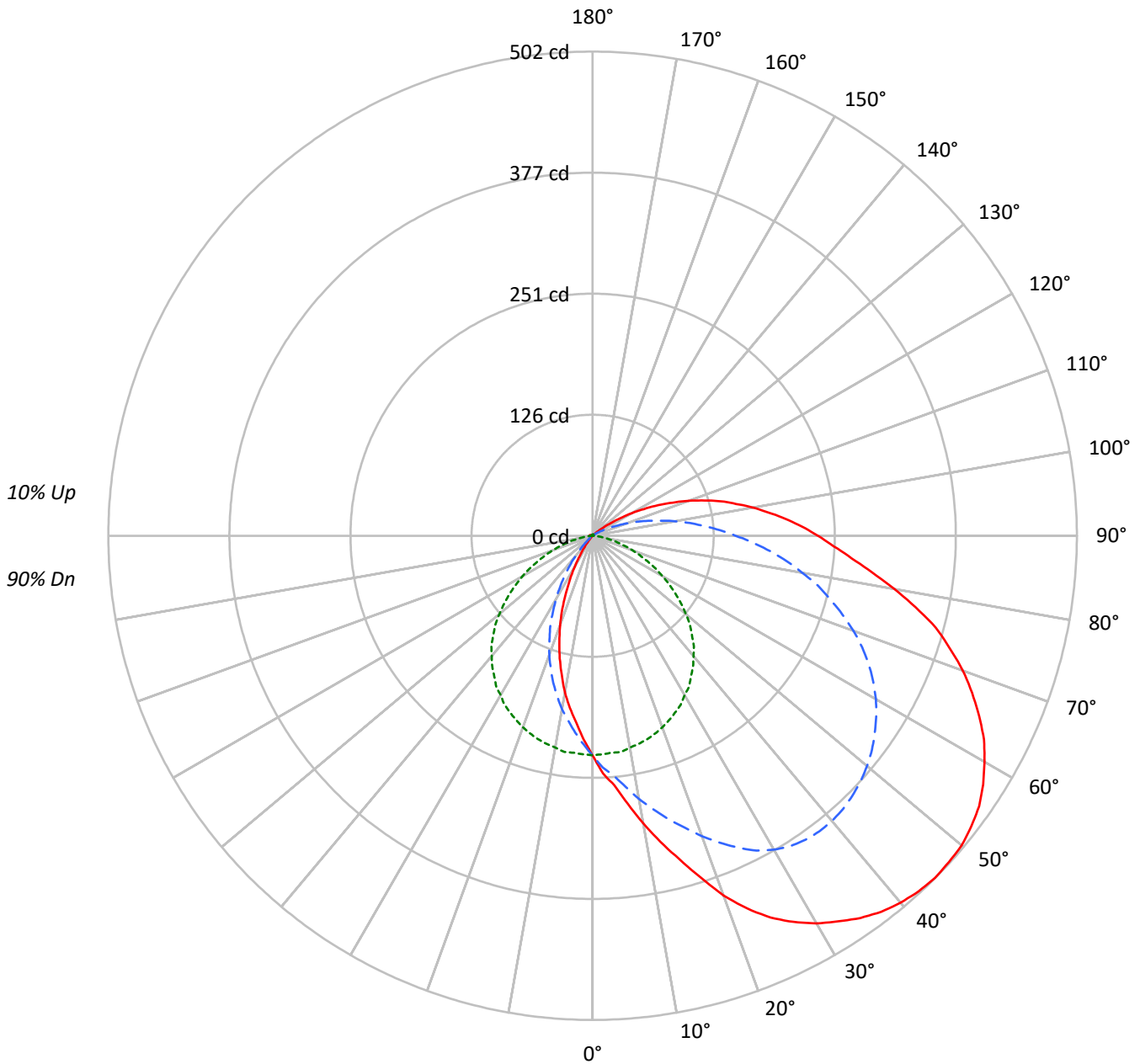
Lumens per Lamp: N/A
Luminaire Lumens: 1125.1 lumens
Efficiency: N/A
Efficacy: 96.2 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

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									
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°	2450	2450	2450
5°	2688	2413	2013
10°	3042	2384	1659
15°	3410	2354	1293
20°	3846	2315	953
25°	4208	2270	625
30°	4476	2211	352
35°	4709	2147	155
40°	4916	2068	38
45°	5092	1969	0
50°	5241	1838	0
55°	5354	1670	0
60°	5411	1478	0
65°	5434	1257	0
70°	5415	1026	0
75°	5346	757	4
80°	5129	464	23
85°	4958	219	31



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	21.8	1.9
10°-20°	65.3	5.8
20°-30°	105.7	9.4
30°-40°	135.8	12.1
40°-50°	153.7	13.7
50°-60°	159.2	14.2
60°-70°	150.2	13.3
70°-80°	125.8	11.2
80°-90°	91.2	8.1
90°-100°	59.9	5.3
100°-110°	34.6	3.1
110°-120°	15.3	1.4
120°-130°	4.2	0.4
130°-140°	1.0	0.1
140°-150°	0.6	0.1
150°-160°	0.4	0.0
160°-170°	0.3	0.0
170°-180°	0.1	0.0
0°-30°	192.8	17.1
0°-40°	328.5	29.2
0°-60°	641.4	57.0
0°-90°	1008.6	89.7
90°-120°	109.9	9.8
90°-150°	115.6	10.3
90°-180°	116.0	10.3
0°-180°	1125.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	228	228	228	228	228	
5°	260	249	226	205	194	26
15°	347	304	218	158	132	100
25°	437	357	202	104	65	202
35°	484	385	178	50	16	303
45°	502	381	146	12	0	387
55°	489	357	105	0	0	437
65°	442	316	63	0	0	437
75°	368	255	27	0	0	386
85°	270	185	4	1	2	230
90°	234	148	1	2	2	128
95°	201	116	1	2	3	157
105°	138	60	1	1	2	146
115°	75	20	1	1	1	75
125°	22	3	1	1	1	22
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	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
0°	227.6	227.6	227.6	227.6	227.6	227.6	227.6	227.6	227.6	227.6	227.6
2.5°	246.7	246.4	245.5	244.1	242.1	238.6	235.7	233.1	229.6	226.7	221.2
5°	259.7	258.3	257.1	255.7	251.0	247.9	242.6	236.8	231.3	225.8	214.8
7.5°	280.6	278.3	276.6	272.5	266.1	258.9	250.8	245.2	241.5	226.1	207.3
10°	302.9	300.9	297.4	290.2	282.3	271.9	260.3	247.3	235.7	222.9	200.6
12.5°	325.0	322.1	317.1	307.9	296.8	283.8	267.9	252.5	236.0	220.9	192.8
15°	347.0	343.8	338.6	327.3	312.8	295.7	276.3	256.8	237.4	218.3	184.7
17.5°	371.1	366.7	358.9	346.1	327.9	306.7	283.8	260.3	236.8	215.1	176.0
20°	396.9	390.8	382.4	365.3	343.8	318.9	291.3	263.8	236.5	211.3	166.1
22.5°	418.3	412.2	402.9	385.3	359.5	329.0	297.7	266.1	235.4	207.0	156.8
25°	436.9	431.9	421.8	401.5	374.2	339.7	303.8	267.9	233.6	202.3	147.0
27.5°	451.4	446.7	435.4	414.5	386.7	349.3	308.4	268.7	231.3	197.7	136.8
30°	464.1	459.5	445.8	424.4	395.1	356.8	313.1	269.0	228.4	190.7	125.8
32.5°	474.0	469.6	455.7	432.8	400.9	362.1	315.7	268.7	224.7	185.8	113.9
35°	483.8	479.5	463.2	438.9	405.3	364.4	317.7	267.3	220.0	177.7	102.6
37.5°	491.4	486.4	469.9	442.9	407.3	365.0	317.4	265.2	215.1	171.0	91.3
40°	496.6	491.4	473.7	445.3	407.9	364.1	315.1	261.8	209.3	162.6	79.4
42.5°	500.1	494.3	475.4	448.7	406.7	361.8	311.6	257.4	202.9	155.4	68.1
45°	501.8	495.7	475.7	445.8	404.7	357.4	306.4	251.9	196.0	145.5	56.8
47.5°	500.9	494.3	474.3	442.7	400.9	352.8	300.6	245.2	187.6	136.8	46.1
50°	499.5	492.5	471.1	438.6	395.7	347.0	294.2	237.1	178.9	126.1	36.5
52.5°	494.8	487.9	467.6	432.8	389.6	340.3	285.5	228.7	169.6	115.7	27.8
55°	489.0	482.7	461.5	427.6	381.8	332.2	277.4	219.7	160.6	104.9	20.0
57.5°	480.1	474.3	454.0	419.2	374.0	323.2	268.4	209.9	149.3	94.2	13.9
60°	469.0	463.2	443.5	409.6	365.0	313.1	258.6	199.7	139.1	83.5	8.7
62.5°	457.4	451.9	431.4	397.7	353.7	302.4	247.9	189.6	128.4	73.6	5.2
65°	442.1	436.9	418.3	383.5	341.2	290.8	236.0	177.4	117.4	62.6	2.9
67.5°	425.8	421.2	402.4	370.5	326.7	278.0	223.8	165.5	105.8	53.0	1.4
70°	408.4	402.7	385.3	352.8	311.9	263.5	210.5	153.3	94.8	43.8	0.0
72.5°	388.2	383.8	367.0	336.3	294.8	248.1	196.8	140.0	82.6	34.8	0.3
75°	368.4	362.9	347.6	318.6	278.0	231.9	181.8	127.5	70.7	26.7	0.3
77.5°	342.9	341.2	326.7	298.6	262.1	216.3	165.2	112.5	59.4	19.1	0.3
80°	317.4	315.7	304.4	278.6	243.5	197.7	149.9	98.3	48.4	12.8	0.3
82.5°	292.2	289.9	279.2	257.7	224.7	182.0	133.9	84.1	38.3	7.8	0.3
85°	269.6	266.7	255.1	235.4	205.2	164.4	117.4	70.2	28.4	4.3	0.6
87.5°	250.2	248.1	235.4	215.1	185.5	147.8	102.9	56.8	20.0	2.0	0.9
90°	233.6	229.3	218.0	196.5	167.0	129.6	87.5	45.5	13.3	1.2	1.2
92.5°	217.4	213.6	201.2	179.1	150.5	113.9	72.8	34.8	8.4	0.6	1.4
95°	200.6	196.5	184.4	164.1	133.6	98.0	59.7	25.5	4.6	0.6	1.4
97.5°	184.1	180.3	167.6	147.3	118.6	84.1	47.3	18.0	2.3	0.6	1.2
100°	168.7	164.4	152.8	132.5	103.5	70.2	36.5	11.6	1.4	0.6	1.2
102.5°	152.5	149.0	137.1	117.4	87.8	57.1	27.2	7.2	0.6	0.6	0.9
105°	138.0	133.6	122.0	101.7	74.8	44.9	19.1	4.3	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°	89.9	86.4	76.2	59.1	38.0	17.7	5.2	0.9	0.9	0.9	0.9
115°	75.1	69.9	60.9	45.8	28.1	11.6	2.6	0.9	0.9	0.9	0.9
117.5°	60.0	55.7	49.3	34.8	18.6	7.5	1.4	0.9	0.9	0.9	0.9
120°	47.0	42.9	35.7	24.1	12.5	4.3	0.6	0.9	0.9	0.9	0.9
122.5°	33.6	30.4	24.1	15.7	7.5	2.0	0.9	0.9	1.2	1.2	0.9
125°	22.3	20.6	15.9	9.6	4.6	0.9	0.9	0.9	1.2	1.2	0.9
127.5°	14.5	13.0	9.3	5.5	2.0	0.9	0.9	1.2	1.2	1.2	0.9
130°	8.1	7.2	5.5	3.2	0.9	0.9	0.9	1.2	1.2	1.2	0.9
132.5°	4.6	4.3	2.9	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	1.4	1.4	1.2
137.5°	0.3	0.3	0.6	0.6	0.9	0.9	1.2	1.4	1.4	1.4	1.2
140°	0.3	0.3	0.6	0.9	0.9	0.9	1.2	1.4	1.4	1.4	1.2
142.5°	0.3	0.6	0.6	0.9	0.9	1.2	1.2	1.4	1.4	1.2	1.2
145°	0.3	0.6	0.6	0.9	0.9	1.2	1.2	1.4	1.2	1.2	1.2
147.5°	0.6	0.6	0.6	0.9	0.9	1.2	1.2	1.4	1.4	1.2	1.2
150°	0.3	0.6	0.6	0.9	1.2	1.2	1.2	1.4	1.2	1.2	1.2
152.5°	0.3	0.6	0.6	0.9	1.2	1.2	1.2	1.4	1.2	1.2	1.2
155°	0.6	0.6	0.6	0.9	1.2	1.2	1.2	1.4	1.2	1.2	1.4
157.5°	0.6	0.6	0.6	0.9	1.2	1.2	1.2	1.4	1.2	1.2	1.4
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	1.4	1.4	1.4	1.4
172.5°	0.6	0.6	0.6	0.9	0.9	1.2	1.2	1.4	1.4	1.4	1.4
175°	0.6	0.6	0.6	0.9	0.9	1.2	1.2	1.4	1.4	1.4	1.4
177.5°	0.3	0.6	0.6	0.9	0.9	1.2	1.2	1.4	1.4	1.4	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°	227.6	227.6	227.6
2.5°	216.5	212.5	211.3
5°	204.9	198.3	194.5
7.5°	193.4	184.4	180.0
10°	182.6	169.9	165.2
12.5°	169.9	155.1	147.8
15°	157.7	138.6	131.6
17.5°	144.1	122.6	114.5
20°	131.3	106.7	98.3
22.5°	116.8	91.0	81.7
25°	103.8	75.4	64.9
27.5°	89.3	59.4	50.4
30°	75.7	45.5	36.5
32.5°	62.6	33.3	25.2
35°	50.4	22.6	15.9
37.5°	38.8	13.9	8.1
40°	28.1	7.2	3.8
42.5°	18.8	3.5	2.0
45°	11.6	1.7	0.0
47.5°	6.7	0.0	0.0
50°	3.5	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	0.9
80°	0.6	1.2	1.4
82.5°	1.2	1.4	1.4
85°	1.2	1.4	1.7
87.5°	1.4	1.7	2.0
90°	1.7	2.0	2.0
92.5°	1.7	2.3	2.3
95°	2.0	2.3	2.6
97.5°	2.3	2.6	2.6
100°	2.0	2.6	2.9
102.5°	1.7	2.6	2.6
105°	1.4	2.0	2.3



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	1.2	1.4	1.4
115°	0.9	1.2	1.4
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°	121.8	118.3	106.7	87.5	61.2	34.2	12.8	2.3	0.6	0.9	0.9
110°	106.1	103.2	91.3	72.8	49.3	25.5	8.4	1.4	0.9	0.9	0.9





107.5°	1.2	1.7	2.0
110°	1.2	1.4	1.7



(END OF REPORT)