

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: P550787

Luminaire Tested: **FCC-X-2-LD4-1LO-35-UNV-82-96-ED1D-90**

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: P550787
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-82-96-ED1D-90
Description: FCC CORNER MOUNT LUMINAIRE WITH .187 CLEAR PC FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES AND 3500K, AND 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

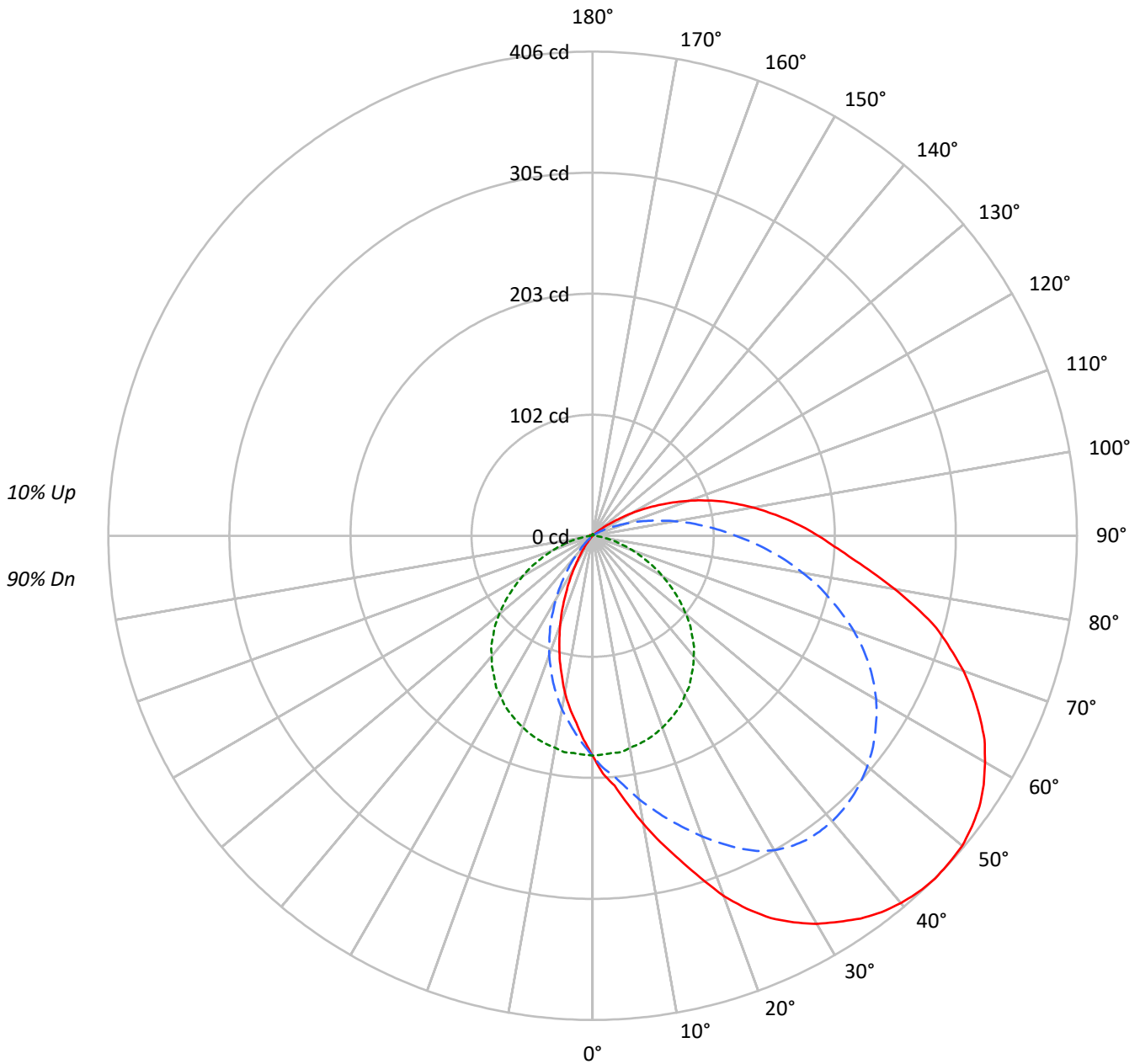
Lumens per Lamp: N/A
Luminaire Lumens: 911.0 lumens
Efficiency: N/A
Efficacy: 77.9 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

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°	1984	1984	1984
5°	2177	1955	1630
10°	2464	1930	1344
15°	2761	1906	1048
20°	3115	1875	771
25°	3407	1839	507
30°	3625	1791	285
35°	3813	1739	126
40°	3980	1675	31
45°	4123	1594	0
50°	4244	1488	0
55°	4336	1354	0
60°	4382	1196	0
65°	4400	1018	0
70°	4386	829	0
75°	4330	613	3
80°	4153	374	19
85°	4015	178	26



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	17.7	1.9
10°-20°	52.9	5.8
20°-30°	85.6	9.4
30°-40°	109.9	12.1
40°-50°	124.5	13.7
50°-60°	128.9	14.2
60°-70°	121.6	13.3
70°-80°	101.9	11.2
80°-90°	73.9	8.1
90°-100°	48.6	5.3
100°-110°	28.0	3.1
110°-120°	12.4	1.4
120°-130°	3.3	0.4
130°-140°	0.8	0.1
140°-150°	0.5	0.1
150°-160°	0.4	0.0
160°-170°	0.2	0.0
170°-180°	0.1	0.0
0°-30°	156.1	17.1
0°-40°	266.0	29.2
0°-60°	519.4	57.0
0°-90°	816.8	89.7
90°-120°	89.0	9.8
90°-150°	93.6	10.3
90°-180°	94.0	10.3
0°-180°	911.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	184	184	184	184	184	
5°	210	202	183	166	158	21
15°	281	246	177	128	107	81
25°	354	289	164	84	53	163
35°	392	312	144	41	13	246
45°	406	309	118	9	0	314
55°	396	289	85	0	0	354
65°	358	256	51	0	0	354
75°	298	206	22	0	0	313
85°	218	150	4	1	1	186
90°	189	120	1	1	2	104
95°	162	94	0	2	2	127
105°	112	48	0	1	2	118
115°	61	16	1	1	1	61
125°	18	2	1	1	1	18
135°	1	1	1	1	1	2
145°	0	1	1	1	1	0
155°	0	1	1	1	0	0
165°	0	1	1	1	0	0
175°	0	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°	184.3	184.3	184.3	184.3	184.3	184.3	184.3	184.3	184.3	184.3	184.3
2.5°	199.8	199.5	198.8	197.7	196.0	193.2	190.8	188.7	185.9	183.6	179.1
5°	210.3	209.2	208.2	207.0	203.3	200.7	196.5	191.8	187.3	182.9	173.9
7.5°	227.2	225.4	223.9	220.7	215.5	209.6	203.1	198.6	195.5	183.1	167.8
10°	245.3	243.7	240.8	235.0	228.6	220.2	210.8	200.2	190.8	180.5	162.4
12.5°	263.1	260.8	256.8	249.3	240.4	229.8	216.9	204.5	191.1	178.9	156.1
15°	281.0	278.4	274.2	265.0	253.3	239.4	223.7	208.0	192.3	176.8	149.5
17.5°	300.5	297.0	290.6	280.3	265.5	248.4	229.8	210.8	191.8	174.2	142.5
20°	321.4	316.4	309.6	295.8	278.4	258.2	235.9	213.6	191.6	171.1	134.5
22.5°	338.7	333.8	326.3	312.0	291.1	266.4	241.1	215.5	190.6	167.6	127.0
25°	353.8	349.8	341.6	325.1	303.1	275.1	246.0	216.9	189.2	163.9	119.0
27.5°	365.5	361.7	352.6	335.7	313.1	282.9	249.8	217.6	187.3	160.1	110.8
30°	375.8	372.1	361.0	343.7	320.0	289.0	253.5	217.8	185.0	154.5	101.9
32.5°	383.8	380.3	369.0	350.5	324.6	293.2	255.6	217.6	181.9	150.5	92.3
35°	391.8	388.3	375.1	355.4	328.2	295.1	257.3	216.4	178.2	143.9	83.1
37.5°	397.9	393.9	380.5	358.7	329.8	295.5	257.0	214.8	174.2	138.5	73.9
40°	402.1	397.9	383.6	360.6	330.3	294.8	255.2	212.0	169.5	131.7	64.3
42.5°	404.9	400.2	385.0	363.4	329.3	293.0	252.3	208.5	164.3	125.8	55.2
45°	406.3	401.4	385.2	361.0	327.7	289.4	248.1	204.0	158.7	117.8	46.0
47.5°	405.6	400.2	384.0	358.5	324.6	285.7	243.4	198.6	151.9	110.8	37.3
50°	404.5	398.8	381.5	355.2	320.4	281.0	238.3	192.0	144.8	102.1	29.6
52.5°	400.7	395.1	378.6	350.5	315.5	275.6	231.2	185.2	137.3	93.7	22.5
55°	396.0	390.8	373.7	346.2	309.2	269.0	224.6	177.9	130.0	85.0	16.2
57.5°	388.7	384.0	367.6	339.4	302.8	261.7	217.4	170.0	120.9	76.3	11.3
60°	379.8	375.1	359.2	331.7	295.5	253.5	209.4	161.7	112.7	67.6	7.0
62.5°	370.4	366.0	349.3	322.1	286.4	244.8	200.7	153.5	104.0	59.6	4.2
65°	358.0	353.8	338.7	310.6	276.3	235.4	191.1	143.7	95.1	50.7	2.3
67.5°	344.8	341.1	325.8	300.0	264.6	225.1	181.2	134.0	85.7	43.0	1.2
70°	330.8	326.1	312.0	285.7	252.6	213.4	170.4	124.2	76.8	35.4	0.0
72.5°	314.3	310.8	297.2	272.3	238.7	200.9	159.4	113.4	66.9	28.2	0.2
75°	298.4	293.9	281.5	258.0	225.1	187.8	147.2	103.3	57.3	21.6	0.2
77.5°	277.7	276.3	264.6	241.8	212.2	175.1	133.8	91.1	48.1	15.5	0.2
80°	257.0	255.6	246.5	225.6	197.2	160.1	121.4	79.6	39.2	10.3	0.2
82.5°	236.6	234.7	226.1	208.7	181.9	147.4	108.5	68.1	31.0	6.3	0.2
85°	218.3	216.0	206.6	190.6	166.2	133.1	95.1	56.8	23.0	3.5	0.5
87.5°	202.6	200.9	190.6	174.2	150.2	119.7	83.3	46.0	16.2	1.6	0.7
90°	189.2	185.7	176.5	159.2	135.2	104.9	70.9	36.9	10.8	0.9	0.9
92.5°	176.1	173.0	162.9	145.1	121.8	92.3	58.9	28.2	6.8	0.5	1.2
95°	162.4	159.2	149.3	132.9	108.2	79.3	48.4	20.7	3.8	0.5	1.2
97.5°	149.1	146.0	135.7	119.2	96.0	68.1	38.3	14.6	1.9	0.5	0.9
100°	136.6	133.1	123.7	107.3	83.8	56.8	29.6	9.4	1.2	0.5	0.9
102.5°	123.5	120.7	111.0	95.1	71.1	46.2	22.1	5.9	0.5	0.5	0.7
105°	111.7	108.2	98.8	82.4	60.6	36.4	15.5	3.5	0.5	0.5	0.7



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	72.8	70.0	61.7	47.9	30.8	14.3	4.2	0.7	0.7	0.7	0.7
115°	60.8	56.6	49.3	37.1	22.8	9.4	2.1	0.7	0.7	0.7	0.7
117.5°	48.6	45.1	39.9	28.2	15.0	6.1	1.2	0.7	0.7	0.7	0.7
120°	38.0	34.7	28.9	19.5	10.1	3.5	0.5	0.7	0.7	0.7	0.7
122.5°	27.2	24.6	19.5	12.7	6.1	1.6	0.7	0.7	0.9	0.9	0.7
125°	18.1	16.7	12.9	7.7	3.8	0.7	0.7	0.7	0.9	0.9	0.7
127.5°	11.7	10.6	7.5	4.5	1.6	0.7	0.7	0.9	0.9	0.9	0.7
130°	6.6	5.9	4.5	2.6	0.7	0.7	0.7	0.9	0.9	0.9	0.7
132.5°	3.8	3.5	2.3	0.5	0.7	0.7	0.7	0.9	0.9	0.9	0.9
135°	0.9	0.5	0.5	0.5	0.7	0.7	0.9	0.9	1.2	1.2	0.9
137.5°	0.2	0.2	0.5	0.5	0.7	0.7	0.9	1.2	1.2	1.2	0.9
140°	0.2	0.2	0.5	0.7	0.7	0.7	0.9	1.2	1.2	1.2	0.9
142.5°	0.2	0.5	0.5	0.7	0.7	0.9	0.9	1.2	1.2	0.9	0.9
145°	0.2	0.5	0.5	0.7	0.7	0.9	0.9	1.2	0.9	0.9	0.9
147.5°	0.5	0.5	0.5	0.7	0.7	0.9	0.9	1.2	1.2	0.9	0.9
150°	0.2	0.5	0.5	0.7	0.9	0.9	0.9	1.2	0.9	0.9	0.9
152.5°	0.2	0.5	0.5	0.7	0.9	0.9	0.9	1.2	0.9	0.9	0.9
155°	0.5	0.5	0.5	0.7	0.9	0.9	0.9	1.2	0.9	0.9	1.2
157.5°	0.5	0.5	0.5	0.7	0.9	0.9	0.9	1.2	0.9	0.9	1.2
160°	0.5	0.5	0.5	0.7	0.7	0.9	0.9	0.9	0.9	0.9	0.9
162.5°	0.5	0.5	0.5	0.7	0.7	0.9	0.9	0.9	0.9	0.9	0.9
165°	0.5	0.5	0.5	0.5	0.7	0.7	0.9	0.9	0.9	0.9	0.9
167.5°	0.5	0.5	0.5	0.7	0.7	0.7	0.9	0.9	0.9	0.9	0.9
170°	0.5	0.5	0.5	0.7	0.7	0.7	0.9	1.2	1.2	1.2	1.2
172.5°	0.5	0.5	0.5	0.7	0.7	0.9	0.9	1.2	1.2	1.2	1.2
175°	0.5	0.5	0.5	0.7	0.7	0.9	0.9	1.2	1.2	1.2	1.2
177.5°	0.2	0.5	0.5	0.7	0.7	0.9	0.9	1.2	1.2	1.2	0.9
180°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	184.3	184.3	184.3
2.5°	175.4	172.1	171.1
5°	166.0	160.6	157.5
7.5°	156.6	149.3	145.8
10°	147.9	137.6	133.8
12.5°	137.6	125.6	119.7
15°	127.7	112.2	106.6
17.5°	116.7	99.3	92.7
20°	106.3	86.4	79.6
22.5°	94.6	73.7	66.2
25°	84.0	61.0	52.6
27.5°	72.3	48.1	40.8
30°	61.3	36.9	29.6
32.5°	50.7	27.0	20.4
35°	40.8	18.3	12.9
37.5°	31.5	11.3	6.6
40°	22.8	5.9	3.1
42.5°	15.3	2.8	1.6
45°	9.4	1.4	0.0
47.5°	5.4	0.0	0.0
50°	2.8	0.0	0.0
52.5°	1.2	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°	0.2	0.2	0.2
77.5°	0.2	0.5	0.7
80°	0.5	0.9	1.2
82.5°	0.9	1.2	1.2
85°	0.9	1.2	1.4
87.5°	1.2	1.4	1.6
90°	1.4	1.6	1.6
92.5°	1.4	1.9	1.9
95°	1.6	1.9	2.1
97.5°	1.9	2.1	2.1
100°	1.6	2.1	2.3
102.5°	1.4	2.1	2.1
105°	1.2	1.6	1.9



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	0.9	1.2	1.2
115°	0.7	0.9	1.2
117.5°	0.7	0.9	0.9
120°	0.7	0.7	0.9
122.5°	0.7	0.7	0.9
125°	0.7	0.7	0.9
127.5°	0.9	0.7	0.7
130°	0.7	0.7	0.7
132.5°	0.9	0.7	0.7
135°	0.9	0.7	0.7
137.5°	0.9	0.7	0.7
140°	0.9	0.7	0.7
142.5°	0.9	0.7	0.7
145°	0.7	0.7	0.7
147.5°	0.7	0.7	0.7
150°	0.7	0.7	0.5
152.5°	0.7	0.5	0.5
155°	0.7	0.5	0.2
157.5°	0.9	0.5	0.2
160°	0.7	0.5	0.2
162.5°	0.7	0.5	0.2
165°	0.7	0.5	0.0
167.5°	0.7	0.5	0.2
170°	0.7	0.5	0.2
172.5°	0.7	0.5	0.2
175°	0.7	0.2	0.2
177.5°	0.7	0.2	0.2
180°	0.7	0.7	0.7



Report Generated By 670246072 / DESKTOP-MV3F9LC





— 0°-180° - - 45°-225° - - - - 90°-270°







107.5°	98.6	95.8	86.4	70.9	49.5	27.7	10.3	1.9	0.5	0.7	0.7
110°	85.9	83.6	73.9	58.9	39.9	20.7	6.8	1.2	0.7	0.7	0.7





107.5°	0.9	1.4	1.6
110°	0.9	1.2	1.4



(END OF REPORT)