

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: P550789

Luminaire Tested: **FCC-X-2-LD4-1LO-35-UNV-82-97-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: P550789
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-82-97-ED1D-90
Description: FCC CORNER MOUNT LUMINAIRE WITH .187 CLEAR PC FIXTURE SIDE AND .375 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES AND 3500K, AND 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

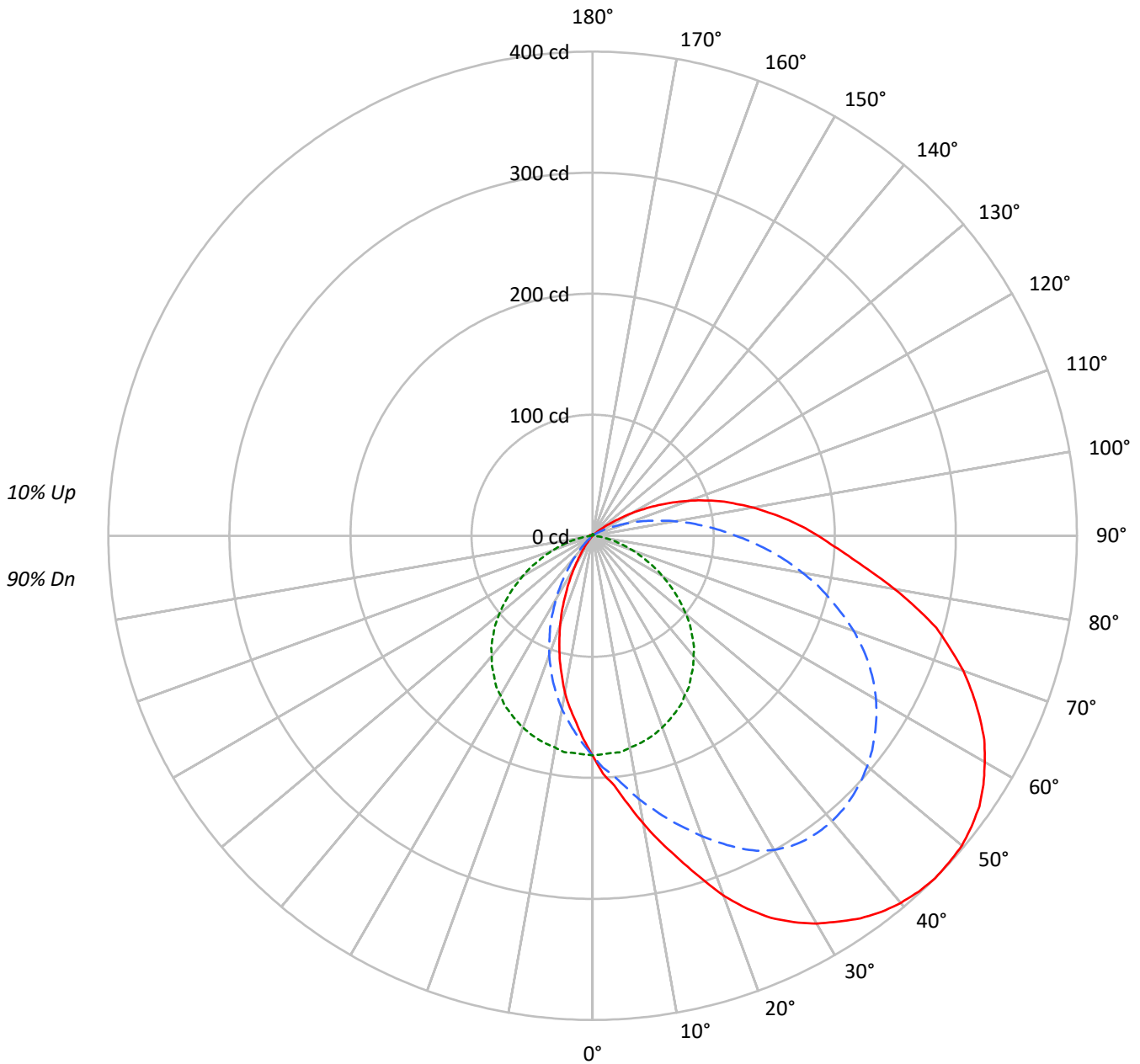
Lumens per Lamp: N/A
Luminaire Lumens: 897.0 lumens
Efficiency: N/A
Efficacy: 76.7 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

Input Watts (W): 11.7
Input Voltage (V): NR
Input Current (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									
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°	1953	1953	1953
5°	2144	1925	1606
10°	2426	1900	1323
15°	2719	1876	1031
20°	3066	1846	760
25°	3355	1810	499
30°	3569	1763	281
35°	3755	1712	124
40°	3919	1649	30
45°	4060	1570	0
50°	4178	1465	0
55°	4269	1333	0
60°	4315	1179	0
65°	4332	1002	0
70°	4318	818	0
75°	4263	604	3
80°	4090	370	19
85°	3954	178	26



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	17.4	1.9
10°-20°	52.0	5.8
20°-30°	84.3	9.4
30°-40°	108.3	12.1
40°-50°	122.5	13.7
50°-60°	127.0	14.2
60°-70°	119.7	13.3
70°-80°	100.3	11.2
80°-90°	72.7	8.1
90°-100°	47.8	5.3
100°-110°	27.6	3.1
110°-120°	12.2	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°	153.7	17.1
0°-40°	261.9	29.2
0°-60°	511.4	57.0
0°-90°	804.2	89.7
90°-120°	87.6	9.8
90°-150°	92.1	10.3
90°-180°	93.0	10.4
0°-180°	897.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	181	181	181	181	181	
5°	207	199	180	163	155	21
15°	277	243	174	126	105	80
25°	348	285	161	83	52	161
35°	386	307	142	40	13	242
45°	400	304	116	9	0	309
55°	390	285	84	0	0	348
65°	352	252	50	0	0	349
75°	294	203	21	0	0	308
85°	215	147	4	1	1	184
90°	186	118	1	1	2	102
95°	160	92	0	2	2	125
105°	110	48	0	1	2	116
115°	60	16	1	1	1	60
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°	181.4	181.4	181.4	181.4	181.4	181.4	181.4	181.4	181.4	181.4	181.4
2.5°	196.7	196.5	195.8	194.6	193.0	190.2	187.9	185.8	183.1	180.7	176.4
5°	207.1	205.9	205.0	203.9	200.2	197.6	193.5	188.8	184.4	180.1	171.3
7.5°	223.7	221.9	220.5	217.3	212.2	206.4	199.9	195.5	192.5	180.3	165.3
10°	241.5	239.9	237.1	231.4	225.1	216.8	207.6	197.2	187.9	177.7	159.9
12.5°	259.1	256.8	252.9	245.5	236.7	226.3	213.6	201.3	188.1	176.1	153.7
15°	276.7	274.1	270.0	261.0	249.4	235.8	220.3	204.8	189.3	174.0	147.2
17.5°	295.9	292.4	286.1	276.0	261.4	244.5	226.3	207.6	188.8	171.5	140.3
20°	316.4	311.6	304.9	291.2	274.1	254.2	232.3	210.3	188.6	168.5	132.4
22.5°	333.5	328.7	321.3	307.2	286.6	262.3	237.4	212.2	187.7	165.0	125.0
25°	348.3	344.4	336.3	320.1	298.4	270.9	242.2	213.6	186.3	161.3	117.2
27.5°	359.9	356.2	347.2	330.5	308.3	278.5	245.9	214.3	184.4	157.6	109.1
30°	370.0	366.4	355.5	338.4	315.0	284.5	249.6	214.5	182.1	152.1	100.3
32.5°	377.9	374.4	363.3	345.1	319.7	288.7	251.7	214.3	179.1	148.2	90.8
35°	385.8	382.3	369.4	349.9	323.1	290.5	253.3	213.1	175.4	141.7	81.8
37.5°	391.8	387.8	374.7	353.2	324.7	291.0	253.1	211.5	171.5	136.4	72.8
40°	395.9	391.8	377.7	355.0	325.2	290.3	251.2	208.7	166.9	129.7	63.3
42.5°	398.7	394.1	379.1	357.8	324.3	288.5	248.5	205.2	161.8	123.9	54.3
45°	400.1	395.2	379.3	355.5	322.7	285.0	244.3	200.9	156.2	116.0	45.3
47.5°	399.4	394.1	378.1	352.9	319.7	281.3	239.7	195.5	149.5	109.1	36.8
50°	398.2	392.7	375.6	349.7	315.5	276.7	234.6	189.1	142.6	100.5	29.1
52.5°	394.5	389.0	372.8	345.1	310.6	271.4	227.7	182.4	135.2	92.2	22.2
55°	389.9	384.8	368.0	340.9	304.4	264.9	221.2	175.2	128.0	83.7	15.9
57.5°	382.8	378.1	362.0	334.2	298.2	257.7	214.0	167.3	119.0	75.1	11.1
60°	374.0	369.4	353.6	326.6	291.0	249.6	206.2	159.3	110.9	66.6	6.9
62.5°	364.7	360.3	343.9	317.1	282.0	241.1	197.6	151.2	102.4	58.7	4.2
65°	352.5	348.3	333.5	305.8	272.0	231.8	188.1	141.5	93.6	49.9	2.3
67.5°	339.5	335.8	320.8	295.4	260.5	221.7	178.4	132.0	84.4	42.3	1.2
70°	325.7	321.0	307.2	281.3	248.7	210.1	167.8	122.3	75.6	34.9	0.0
72.5°	309.5	306.0	292.6	268.1	235.1	197.9	156.9	111.6	65.9	27.7	0.2
75°	293.8	289.4	277.1	254.0	221.7	184.9	144.9	101.7	56.4	21.3	0.2
77.5°	273.4	272.0	260.5	238.1	208.9	172.4	131.7	89.7	47.4	15.3	0.2
80°	253.1	251.7	242.7	222.1	194.2	157.6	119.5	78.4	38.6	10.2	0.2
82.5°	233.0	231.1	222.6	205.5	179.1	145.2	106.8	67.0	30.5	6.2	0.2
85°	215.0	212.6	203.4	187.7	163.6	131.1	93.6	55.9	22.7	3.5	0.5
87.5°	199.5	197.9	187.7	171.5	147.9	117.9	82.1	45.3	15.9	1.6	0.7
90°	186.3	182.8	173.8	156.7	133.1	103.3	69.8	36.3	10.6	0.9	0.9
92.5°	173.4	170.3	160.4	142.8	120.0	90.8	58.0	27.7	6.7	0.5	1.2
95°	159.9	156.7	147.0	130.8	106.6	78.1	47.6	20.3	3.7	0.5	1.2
97.5°	146.8	143.8	133.6	117.4	94.5	67.0	37.7	14.3	1.8	0.5	0.9
100°	134.5	131.1	121.8	105.6	82.5	55.9	29.1	9.2	1.2	0.5	0.9
102.5°	121.6	118.8	109.3	93.6	70.0	45.5	21.7	5.8	0.5	0.5	0.7
105°	110.0	106.6	97.3	81.1	59.6	35.8	15.3	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°	71.7	68.9	60.8	47.2	30.3	14.1	4.2	0.7	0.7	0.7	0.7
115°	59.9	55.7	48.5	36.5	22.4	9.2	2.1	0.7	0.7	0.7	0.7
117.5°	47.8	44.4	39.3	27.7	14.8	6.0	1.2	0.7	0.7	0.7	0.7
120°	37.4	34.2	28.4	19.2	9.9	3.5	0.5	0.7	0.7	0.7	0.7
122.5°	26.8	24.3	19.2	12.5	6.0	1.6	0.7	0.7	0.9	0.9	0.7
125°	17.8	16.4	12.7	7.6	3.7	0.7	0.7	0.7	0.9	0.9	0.7
127.5°	11.6	10.4	7.4	4.4	1.6	0.7	0.7	0.9	0.9	0.9	0.7
130°	6.5	5.8	4.4	2.5	0.7	0.7	0.7	0.9	0.9	0.9	0.7
132.5°	3.7	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°	181.4	181.4	181.4
2.5°	172.7	169.4	168.5
5°	163.4	158.1	155.1
7.5°	154.2	147.0	143.5
10°	145.6	135.4	131.7
12.5°	135.4	123.7	117.9
15°	125.7	110.5	104.9
17.5°	114.9	97.8	91.3
20°	104.7	85.1	78.4
22.5°	93.1	72.6	65.2
25°	82.7	60.1	51.8
27.5°	71.2	47.4	40.2
30°	60.3	36.3	29.1
32.5°	49.9	26.6	20.1
35°	40.2	18.0	12.7
37.5°	31.0	11.1	6.5
40°	22.4	5.8	3.0
42.5°	15.0	2.8	1.6
45°	9.2	1.4	0.0
47.5°	5.3	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	1.8	1.8
95°	1.6	1.8	2.1
97.5°	1.8	2.1	2.1
100°	1.6	2.1	2.3
102.5°	1.4	2.1	2.1
105°	1.2	1.6	1.8



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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°	97.1	94.3	85.1	69.8	48.8	27.3	10.2	1.8	0.5	0.7	0.7
110°	84.6	82.3	72.8	58.0	39.3	20.3	6.7	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)