

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: P550786

Luminaire Tested: **FCC-X-2-LD4-1LO-35-UNV-82-94-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: P550786
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-82-94-ED1D
Description: FCC CORNER MOUNT LUMINAIRE WITH .187 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

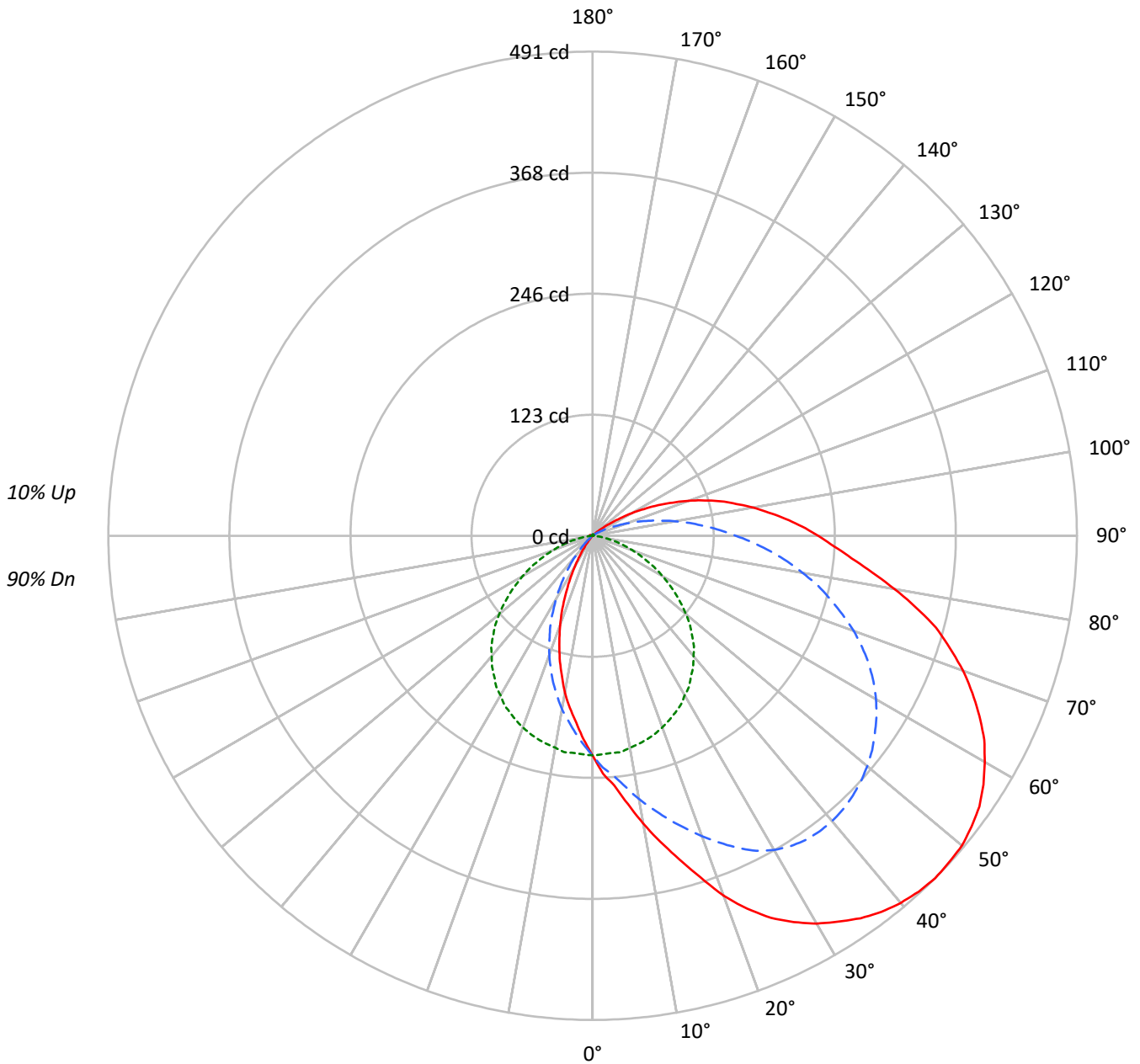
Lumens per Lamp: N/A
Luminaire Lumens: 1101.1 lumens
Efficiency: N/A
Efficacy: 94.1 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

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°	2397	2397	2397
5°	2632	2362	1971
10°	2978	2333	1624
15°	3337	2303	1266
20°	3764	2266	932
25°	4117	2222	612
30°	4381	2164	344
35°	4608	2101	152
40°	4811	2025	37
45°	4984	1927	0
50°	5129	1798	0
55°	5240	1635	0
60°	5295	1446	0
65°	5317	1231	0
70°	5299	1003	0
75°	5233	740	4
80°	5021	453	23
85°	4852	219	31



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	21.3	1.9
10°-20°	63.9	5.8
20°-30°	103.4	9.4
30°-40°	132.9	12.1
40°-50°	150.4	13.7
50°-60°	155.8	14.2
60°-70°	147.0	13.3
70°-80°	123.2	11.2
80°-90°	89.3	8.1
90°-100°	58.7	5.3
100°-110°	33.9	3.1
110°-120°	15.0	1.4
120°-130°	4.1	0.4
130°-140°	0.9	0.1
140°-150°	0.6	0.1
150°-160°	0.4	0.0
160°-170°	0.2	0.0
170°-180°	0.1	0.0
0°-30°	188.6	17.1
0°-40°	321.5	29.2
0°-60°	627.8	57.0
0°-90°	987.2	89.7
90°-120°	107.5	9.8
90°-150°	113.2	10.3
90°-180°	114.0	10.4
0°-180°	1101.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	223	223	223	223	223	
5°	254	244	221	201	190	26
15°	340	298	214	154	129	98
25°	428	349	198	102	64	198
35°	474	377	174	49	16	297
45°	491	373	142	11	0	379
55°	479	349	103	0	0	427
65°	433	309	61	0	0	428
75°	361	250	26	0	0	378
85°	264	181	4	1	2	225
90°	229	145	1	2	2	125
95°	196	113	1	2	3	154
105°	135	59	1	1	2	142
115°	74	19	1	1	1	74
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°	222.7	222.7	222.7	222.7	222.7	222.7	222.7	222.7	222.7	222.7	222.7
2.5°	241.4	241.1	240.3	238.9	236.9	233.5	230.6	228.1	224.7	221.9	216.5
5°	254.2	252.8	251.6	250.2	245.7	242.6	237.5	231.8	226.4	221.0	210.2
7.5°	274.6	272.4	270.7	266.7	260.4	253.3	245.4	240.0	236.3	221.3	202.8
10°	296.5	294.5	291.1	284.0	276.3	266.1	254.8	242.0	230.6	218.2	196.3
12.5°	318.0	315.2	310.4	301.3	290.5	277.7	262.1	247.1	230.9	216.2	188.7
15°	339.6	336.5	331.4	320.3	306.1	289.4	270.4	251.4	232.4	213.6	180.7
17.5°	363.1	358.9	351.2	338.7	320.9	300.2	277.7	254.8	231.8	210.5	172.2
20°	388.4	382.4	374.2	357.5	336.5	312.1	285.1	258.2	231.5	206.8	162.6
22.5°	409.4	403.4	394.3	377.0	351.8	322.0	291.4	260.4	230.4	202.6	153.5
25°	427.5	422.7	412.8	392.9	366.3	332.5	297.3	262.1	228.7	198.0	143.8
27.5°	441.7	437.2	426.1	405.7	378.5	341.9	301.9	263.0	226.4	193.5	133.9
30°	454.2	449.7	436.3	415.3	386.7	349.2	306.4	263.3	223.6	186.7	123.1
32.5°	463.9	459.6	446.0	423.6	392.4	354.3	309.0	263.0	219.9	181.9	111.5
35°	473.5	469.2	453.4	429.5	396.6	356.6	310.9	261.6	215.3	173.9	100.4
37.5°	480.9	476.1	459.9	433.5	398.6	357.2	310.7	259.6	210.5	167.4	89.4
40°	486.0	480.9	463.6	435.8	399.2	356.3	308.4	256.2	204.8	159.2	77.7
42.5°	489.4	483.7	465.3	439.2	398.0	354.1	305.0	251.9	198.6	152.1	66.7
45°	491.1	485.1	465.6	436.3	396.0	349.8	299.9	246.5	191.8	142.4	55.6
47.5°	490.2	483.7	464.1	433.2	392.4	345.3	294.2	240.0	183.6	133.9	45.1
50°	488.8	482.0	461.0	429.2	387.3	339.6	288.0	232.1	175.0	123.4	35.7
52.5°	484.3	477.5	457.6	423.6	381.3	333.1	279.4	223.8	166.0	113.2	27.2
55°	478.6	472.4	451.7	418.5	373.6	325.1	271.5	215.0	157.2	102.7	19.6
57.5°	469.8	464.1	444.3	410.2	366.0	316.3	262.7	205.4	146.1	92.2	13.6
60°	459.0	453.4	434.1	400.9	357.2	306.4	253.1	195.5	136.2	81.7	8.5
62.5°	447.7	442.3	422.1	389.2	346.1	295.9	242.6	185.5	125.7	72.1	5.1
65°	432.6	427.5	409.4	375.3	333.9	284.6	230.9	173.6	114.9	61.3	2.8
67.5°	416.8	412.2	393.8	362.6	319.7	272.1	219.0	162.0	103.6	51.9	1.4
70°	399.7	394.1	377.0	345.3	305.3	257.9	206.0	150.1	92.8	42.8	0.0
72.5°	379.9	375.6	359.2	329.1	288.5	242.8	192.6	137.0	80.9	34.0	0.3
75°	360.6	355.2	340.2	311.8	272.1	227.0	177.9	124.8	69.2	26.1	0.3
77.5°	335.6	333.9	319.7	292.2	256.5	211.6	161.7	110.1	58.2	18.7	0.3
80°	310.7	309.0	297.9	272.6	238.3	193.5	146.7	96.2	47.4	12.5	0.3
82.5°	286.0	283.7	273.2	252.2	219.9	178.2	131.1	82.3	37.4	7.7	0.3
85°	263.8	261.0	249.7	230.4	200.9	160.9	114.9	68.7	27.8	4.3	0.6
87.5°	244.8	242.8	230.4	210.5	181.6	144.7	100.7	55.6	19.6	2.0	0.9
90°	228.7	224.4	213.3	192.3	163.4	126.8	85.7	44.5	13.1	1.1	1.1
92.5°	212.8	209.1	196.9	175.3	147.2	111.5	71.2	34.0	8.2	0.6	1.4
95°	196.3	192.3	180.4	160.6	130.8	95.9	58.4	25.0	4.5	0.6	1.4
97.5°	180.2	176.5	164.0	144.1	116.0	82.3	46.2	17.6	2.3	0.6	1.1
100°	165.1	160.9	149.5	129.7	101.3	68.7	35.7	11.3	1.4	0.6	1.1
102.5°	149.2	145.8	134.2	114.9	86.0	55.9	26.7	7.1	0.6	0.6	0.9
105°	135.0	130.8	119.4	99.6	73.2	44.0	18.7	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°	87.9	84.5	74.6	57.9	37.2	17.3	5.1	0.9	0.9	0.9	0.9
115°	73.5	68.4	59.6	44.8	27.5	11.3	2.6	0.9	0.9	0.9	0.9
117.5°	58.7	54.5	48.2	34.0	18.2	7.4	1.4	0.9	0.9	0.9	0.9
120°	46.0	42.0	34.9	23.5	12.2	4.3	0.6	0.9	0.9	0.9	0.9
122.5°	32.9	29.8	23.5	15.3	7.4	2.0	0.9	0.9	1.1	1.1	0.9
125°	21.8	20.1	15.6	9.4	4.5	0.9	0.9	0.9	1.1	1.1	0.9
127.5°	14.2	12.8	9.1	5.4	2.0	0.9	0.9	1.1	1.1	1.1	0.9
130°	7.9	7.1	5.4	3.1	0.9	0.9	0.9	1.1	1.1	1.1	0.9
132.5°	4.5	4.3	2.8	0.6	0.9	0.9	0.9	1.1	1.1	1.1	1.1
135°	1.1	0.6	0.6	0.6	0.9	0.9	1.1	1.1	1.4	1.4	1.1
137.5°	0.3	0.3	0.6	0.6	0.9	0.9	1.1	1.4	1.4	1.4	1.1
140°	0.3	0.3	0.6	0.9	0.9	0.9	1.1	1.4	1.4	1.4	1.1
142.5°	0.3	0.6	0.6	0.9	0.9	1.1	1.1	1.4	1.4	1.1	1.1
145°	0.3	0.6	0.6	0.9	0.9	1.1	1.1	1.4	1.1	1.1	1.1
147.5°	0.6	0.6	0.6	0.9	0.9	1.1	1.1	1.4	1.4	1.1	1.1
150°	0.3	0.6	0.6	0.9	1.1	1.1	1.1	1.4	1.1	1.1	1.1
152.5°	0.3	0.6	0.6	0.9	1.1	1.1	1.1	1.4	1.1	1.1	1.1
155°	0.6	0.6	0.6	0.9	1.1	1.1	1.1	1.4	1.1	1.1	1.4
157.5°	0.6	0.6	0.6	0.9	1.1	1.1	1.1	1.4	1.1	1.1	1.4
160°	0.6	0.6	0.6	0.9	0.9	1.1	1.1	1.1	1.1	1.1	1.1
162.5°	0.6	0.6	0.6	0.9	0.9	1.1	1.1	1.1	1.1	1.1	1.1
165°	0.6	0.6	0.6	0.6	0.9	0.9	1.1	1.1	1.1	1.1	1.1
167.5°	0.6	0.6	0.6	0.9	0.9	0.9	1.1	1.1	1.1	1.1	1.1
170°	0.6	0.6	0.6	0.9	0.9	0.9	1.1	1.4	1.4	1.4	1.4
172.5°	0.6	0.6	0.6	0.9	0.9	1.1	1.1	1.4	1.4	1.4	1.4
175°	0.6	0.6	0.6	0.9	0.9	1.1	1.1	1.4	1.4	1.4	1.4
177.5°	0.3	0.6	0.6	0.9	0.9	1.1	1.1	1.4	1.4	1.4	1.1
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°	222.7	222.7	222.7
2.5°	211.9	208.0	206.8
5°	200.6	194.1	190.4
7.5°	189.2	180.4	176.2
10°	178.7	166.2	161.7
12.5°	166.2	151.8	144.7
15°	154.3	135.6	128.8
17.5°	141.0	120.0	112.1
20°	128.5	104.4	96.2
22.5°	114.3	89.1	80.0
25°	101.6	73.8	63.5
27.5°	87.4	58.2	49.4
30°	74.0	44.5	35.7
32.5°	61.3	32.6	24.7
35°	49.4	22.1	15.6
37.5°	38.0	13.6	7.9
40°	27.5	7.1	3.7
42.5°	18.4	3.4	2.0
45°	11.3	1.7	0.0
47.5°	6.5	0.0	0.0
50°	3.4	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	1.1	1.4
82.5°	1.1	1.4	1.4
85°	1.1	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	2.8
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°	1.1	1.4	1.4
115°	0.9	1.1	1.4
117.5°	0.9	1.1	1.1
120°	0.9	0.9	1.1
122.5°	0.9	0.9	1.1
125°	0.9	0.9	1.1
127.5°	1.1	0.9	0.9
130°	0.9	0.9	0.9
132.5°	1.1	0.9	0.9
135°	1.1	0.9	0.9
137.5°	1.1	0.9	0.9
140°	1.1	0.9	0.9
142.5°	1.1	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°	1.1	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°	119.2	115.8	104.4	85.7	59.9	33.5	12.5	2.3	0.6	0.9	0.9
110°	103.8	101.0	89.4	71.2	48.2	25.0	8.2	1.4	0.9	0.9	0.9





107.5°	1.1	1.7	2.0
110°	1.1	1.4	1.7



(END OF REPORT)