

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: P550783

Luminaire Tested: **FCC-X-2-LD4-1LO-35-UNV-82-88-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: P550783
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-82-88-ED1D-90
Description: FCC CORNER MOUNT LUMINAIRE WITH .187 CLEAR PC FIXTURE SIDE AND .500 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 3500K, AND 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

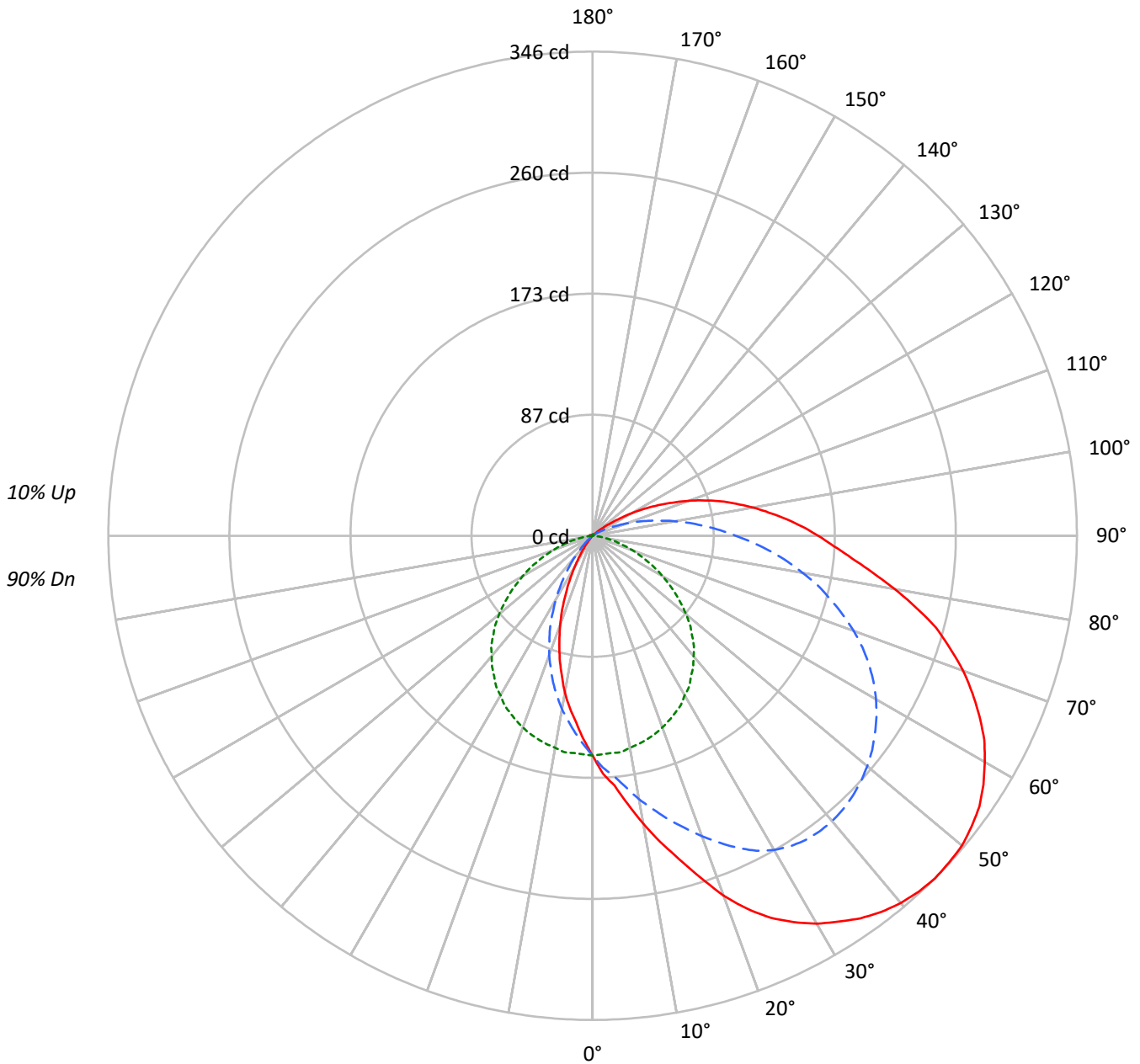
Lumens per Lamp: N/A
Luminaire Lumens: 776.0 lumens
Efficiency: N/A
Efficacy: 66.3 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

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°	1690	1690	1690
5°	1855	1665	1389
10°	2099	1645	1145
15°	2352	1624	892
20°	2652	1597	657
25°	2902	1567	431
30°	3087	1526	243
35°	3248	1481	107
40°	3390	1427	26
45°	3512	1359	0
50°	3615	1268	0
55°	3693	1153	0
60°	3732	1019	0
65°	3747	868	0
70°	3735	707	0
75°	3687	522	3
80°	3539	319	16
85°	3421	153	22



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	15.0	1.9
10°-20°	45.0	5.8
20°-30°	72.9	9.4
30°-40°	93.7	12.1
40°-50°	106.0	13.7
50°-60°	109.8	14.2
60°-70°	103.6	13.3
70°-80°	86.8	11.2
80°-90°	62.9	8.1
90°-100°	41.4	5.3
100°-110°	23.9	3.1
110°-120°	10.5	1.4
120°-130°	2.9	0.4
130°-140°	0.7	0.1
140°-150°	0.4	0.1
150°-160°	0.3	0.0
160°-170°	0.2	0.0
170°-180°	0.1	0.0
0°-30°	133.0	17.1
0°-40°	226.6	29.2
0°-60°	442.5	57.0
0°-90°	695.8	89.7
90°-120°	75.8	9.8
90°-150°	79.7	10.3
90°-180°	80.0	10.3
0°-180°	776.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	157	157	157	157	157	
5°	179	172	156	141	134	18
15°	239	210	151	109	91	69
25°	301	246	140	72	45	139
35°	334	265	123	35	11	209
45°	346	263	100	8	0	267
55°	337	246	72	0	0	301
65°	305	218	43	0	0	302
75°	254	176	18	0	0	267
85°	186	128	3	1	1	159
90°	161	102	1	1	1	88
95°	138	80	0	1	2	109
105°	95	41	0	1	2	100
115°	52	14	1	1	1	52
125°	15	2	1	1	1	15
135°	1	1	1	1	1	1
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°	157.0	157.0	157.0	157.0	157.0	157.0	157.0	157.0	157.0	157.0	157.0
2.5°	170.2	170.0	169.4	168.4	167.0	164.6	162.6	160.8	158.4	156.4	152.6
5°	179.2	178.2	177.4	176.4	173.2	171.0	167.4	163.4	159.6	155.8	148.2
7.5°	193.6	192.0	190.8	188.0	183.6	178.6	173.0	169.2	166.6	156.0	143.0
10°	209.0	207.6	205.2	200.2	194.8	187.6	179.6	170.6	162.6	153.8	138.4
12.5°	224.2	222.2	218.8	212.4	204.8	195.8	184.8	174.2	162.8	152.4	133.0
15°	239.3	237.1	233.5	225.8	215.8	204.0	190.6	177.2	163.8	150.6	127.4
17.5°	255.9	252.9	247.5	238.7	226.2	211.6	195.8	179.6	163.4	148.4	121.4
20°	273.7	269.5	263.7	251.9	237.1	220.0	201.0	182.0	163.2	145.8	114.6
22.5°	288.5	284.3	277.9	265.7	247.9	227.0	205.4	183.6	162.4	142.8	108.2
25°	301.3	297.9	290.9	276.9	258.1	234.3	209.6	184.8	161.2	139.6	101.4
27.5°	311.3	308.1	300.3	285.9	266.7	240.9	212.8	185.4	159.6	136.4	94.4
30°	320.1	316.9	307.5	292.7	272.5	246.1	216.0	185.6	157.6	131.6	86.8
32.5°	326.9	323.9	314.3	298.5	276.5	249.7	217.8	185.4	155.0	128.2	78.6
35°	333.7	330.7	319.5	302.7	279.5	251.3	219.2	184.4	151.8	122.6	70.8
37.5°	338.9	335.5	324.1	305.5	280.9	251.7	219.0	183.0	148.4	118.0	63.0
40°	342.5	338.9	326.7	307.1	281.3	251.1	217.4	180.6	144.4	112.2	54.8
42.5°	344.9	340.9	327.9	309.5	280.5	249.5	215.0	177.6	140.0	107.2	47.0
45°	346.1	341.9	328.1	307.5	279.1	246.5	211.4	173.8	135.2	100.4	39.2
47.5°	345.5	340.9	327.1	305.3	276.5	243.3	207.4	169.2	129.4	94.4	31.8
50°	344.5	339.7	324.9	302.5	272.9	239.3	203.0	163.6	123.4	87.0	25.2
52.5°	341.3	336.5	322.5	298.5	268.7	234.7	197.0	157.8	117.0	79.8	19.2
55°	337.3	332.9	318.3	294.9	263.3	229.2	191.4	151.6	110.8	72.4	13.8
57.5°	331.1	327.1	313.1	289.1	257.9	223.0	185.2	144.8	103.0	65.0	9.6
60°	323.5	319.5	305.9	282.5	251.7	216.0	178.4	137.8	96.0	57.6	6.0
62.5°	315.5	311.7	297.5	274.3	243.9	208.6	171.0	130.8	88.6	50.8	3.6
65°	304.9	301.3	288.5	264.5	235.3	200.6	162.8	122.4	81.0	43.2	2.0
67.5°	293.7	290.5	277.5	255.5	225.4	191.8	154.4	114.2	73.0	36.6	1.0
70°	281.7	277.7	265.7	243.3	215.2	181.8	145.2	105.8	65.4	30.2	0.0
72.5°	267.7	264.7	253.1	232.0	203.4	171.2	135.8	96.6	57.0	24.0	0.2
75°	254.1	250.3	239.7	219.8	191.8	160.0	125.4	88.0	48.8	18.4	0.2
77.5°	236.5	235.3	225.4	206.0	180.8	149.2	114.0	77.6	41.0	13.2	0.2
80°	219.0	217.8	210.0	192.2	168.0	136.4	103.4	67.8	33.4	8.8	0.2
82.5°	201.6	200.0	192.6	177.8	155.0	125.6	92.4	58.0	26.4	5.4	0.2
85°	186.0	184.0	176.0	162.4	141.6	113.4	81.0	48.4	19.6	3.0	0.4
87.5°	172.6	171.2	162.4	148.4	128.0	102.0	71.0	39.2	13.8	1.4	0.6
90°	161.2	158.2	150.4	135.6	115.2	89.4	60.4	31.4	9.2	0.8	0.8
92.5°	150.0	147.4	138.8	123.6	103.8	78.6	50.2	24.0	5.8	0.4	1.0
95°	138.4	135.6	127.2	113.2	92.2	67.6	41.2	17.6	3.2	0.4	1.0
97.5°	127.0	124.4	115.6	101.6	81.8	58.0	32.6	12.4	1.6	0.4	0.8
100°	116.4	113.4	105.4	91.4	71.4	48.4	25.2	8.0	1.0	0.4	0.8
102.5°	105.2	102.8	94.6	81.0	60.6	39.4	18.8	5.0	0.4	0.4	0.6
105°	95.2	92.2	84.2	70.2	51.6	31.0	13.2	3.0	0.4	0.4	0.6



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	62.0	59.6	52.6	40.8	26.2	12.2	3.6	0.6	0.6	0.6	0.6
115°	51.8	48.2	42.0	31.6	19.4	8.0	1.8	0.6	0.6	0.6	0.6
117.5°	41.4	38.4	34.0	24.0	12.8	5.2	1.0	0.6	0.6	0.6	0.6
120°	32.4	29.6	24.6	16.6	8.6	3.0	0.4	0.6	0.6	0.6	0.6
122.5°	23.2	21.0	16.6	10.8	5.2	1.4	0.6	0.6	0.8	0.8	0.6
125°	15.4	14.2	11.0	6.6	3.2	0.6	0.6	0.6	0.8	0.8	0.6
127.5°	10.0	9.0	6.4	3.8	1.4	0.6	0.6	0.8	0.8	0.8	0.6
130°	5.6	5.0	3.8	2.2	0.6	0.6	0.6	0.8	0.8	0.8	0.6
132.5°	3.2	3.0	2.0	0.4	0.6	0.6	0.6	0.8	0.8	0.8	0.8
135°	0.8	0.4	0.4	0.4	0.6	0.6	0.8	0.8	1.0	1.0	0.8
137.5°	0.2	0.2	0.4	0.4	0.6	0.6	0.8	1.0	1.0	1.0	0.8
140°	0.2	0.2	0.4	0.6	0.6	0.6	0.8	1.0	1.0	1.0	0.8
142.5°	0.2	0.4	0.4	0.6	0.6	0.8	0.8	1.0	1.0	0.8	0.8
145°	0.2	0.4	0.4	0.6	0.6	0.8	0.8	1.0	0.8	0.8	0.8
147.5°	0.4	0.4	0.4	0.6	0.6	0.8	0.8	1.0	1.0	0.8	0.8
150°	0.2	0.4	0.4	0.6	0.8	0.8	0.8	1.0	0.8	0.8	0.8
152.5°	0.2	0.4	0.4	0.6	0.8	0.8	0.8	1.0	0.8	0.8	0.8
155°	0.4	0.4	0.4	0.6	0.8	0.8	0.8	1.0	0.8	0.8	1.0
157.5°	0.4	0.4	0.4	0.6	0.8	0.8	0.8	1.0	0.8	0.8	1.0
160°	0.4	0.4	0.4	0.6	0.6	0.8	0.8	0.8	0.8	0.8	0.8
162.5°	0.4	0.4	0.4	0.6	0.6	0.8	0.8	0.8	0.8	0.8	0.8
165°	0.4	0.4	0.4	0.4	0.6	0.6	0.8	0.8	0.8	0.8	0.8
167.5°	0.4	0.4	0.4	0.6	0.6	0.6	0.8	0.8	0.8	0.8	0.8
170°	0.4	0.4	0.4	0.6	0.6	0.6	0.8	1.0	1.0	1.0	1.0
172.5°	0.4	0.4	0.4	0.6	0.6	0.8	0.8	1.0	1.0	1.0	1.0
175°	0.4	0.4	0.4	0.6	0.6	0.8	0.8	1.0	1.0	1.0	1.0
177.5°	0.2	0.4	0.4	0.6	0.6	0.8	0.8	1.0	1.0	1.0	0.8
180°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	157.0	157.0	157.0
2.5°	149.4	146.6	145.8
5°	141.4	136.8	134.2
7.5°	133.4	127.2	124.2
10°	126.0	117.2	114.0
12.5°	117.2	107.0	102.0
15°	108.8	95.6	90.8
17.5°	99.4	84.6	79.0
20°	90.6	73.6	67.8
22.5°	80.6	62.8	56.4
25°	71.6	52.0	44.8
27.5°	61.6	41.0	34.8
30°	52.2	31.4	25.2
32.5°	43.2	23.0	17.4
35°	34.8	15.6	11.0
37.5°	26.8	9.6	5.6
40°	19.4	5.0	2.6
42.5°	13.0	2.4	1.4
45°	8.0	1.2	0.0
47.5°	4.6	0.0	0.0
50°	2.4	0.0	0.0
52.5°	1.0	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	0.4	0.6
80°	0.4	0.8	1.0
82.5°	0.8	1.0	1.0
85°	0.8	1.0	1.2
87.5°	1.0	1.2	1.4
90°	1.2	1.4	1.4
92.5°	1.2	1.6	1.6
95°	1.4	1.6	1.8
97.5°	1.6	1.8	1.8
100°	1.4	1.8	2.0
102.5°	1.2	1.8	1.8
105°	1.0	1.4	1.6



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	0.8	1.0	1.0
115°	0.6	0.8	1.0
117.5°	0.6	0.8	0.8
120°	0.6	0.6	0.8
122.5°	0.6	0.6	0.8
125°	0.6	0.6	0.8
127.5°	0.8	0.6	0.6
130°	0.6	0.6	0.6
132.5°	0.8	0.6	0.6
135°	0.8	0.6	0.6
137.5°	0.8	0.6	0.6
140°	0.8	0.6	0.6
142.5°	0.8	0.6	0.6
145°	0.6	0.6	0.6
147.5°	0.6	0.6	0.6
150°	0.6	0.6	0.4
152.5°	0.6	0.4	0.4
155°	0.6	0.4	0.2
157.5°	0.8	0.4	0.2
160°	0.6	0.4	0.2
162.5°	0.6	0.4	0.2
165°	0.6	0.4	0.0
167.5°	0.6	0.4	0.2
170°	0.6	0.4	0.2
172.5°	0.6	0.4	0.2
175°	0.6	0.2	0.2
177.5°	0.6	0.2	0.2
180°	0.6	0.6	0.6



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	84.0	81.6	73.6	60.4	42.2	23.6	8.8	1.6	0.4	0.6	0.6
110°	73.2	71.2	63.0	50.2	34.0	17.6	5.8	1.0	0.6	0.6	0.6





107.5°	0.8	1.2	1.4
110°	0.8	1.0	1.2



(END OF REPORT)