

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: P550765

Luminaire Tested: **FCC-X-2-LD4-1LO-35-UNV-81-87-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: P550765
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-81-87-ED1D-90
Description: FCC CORNER MOUNT LUMINAIRE WITH .156 CLEAR PC FIXTURE SIDE AND .375 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 3500K, AND 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

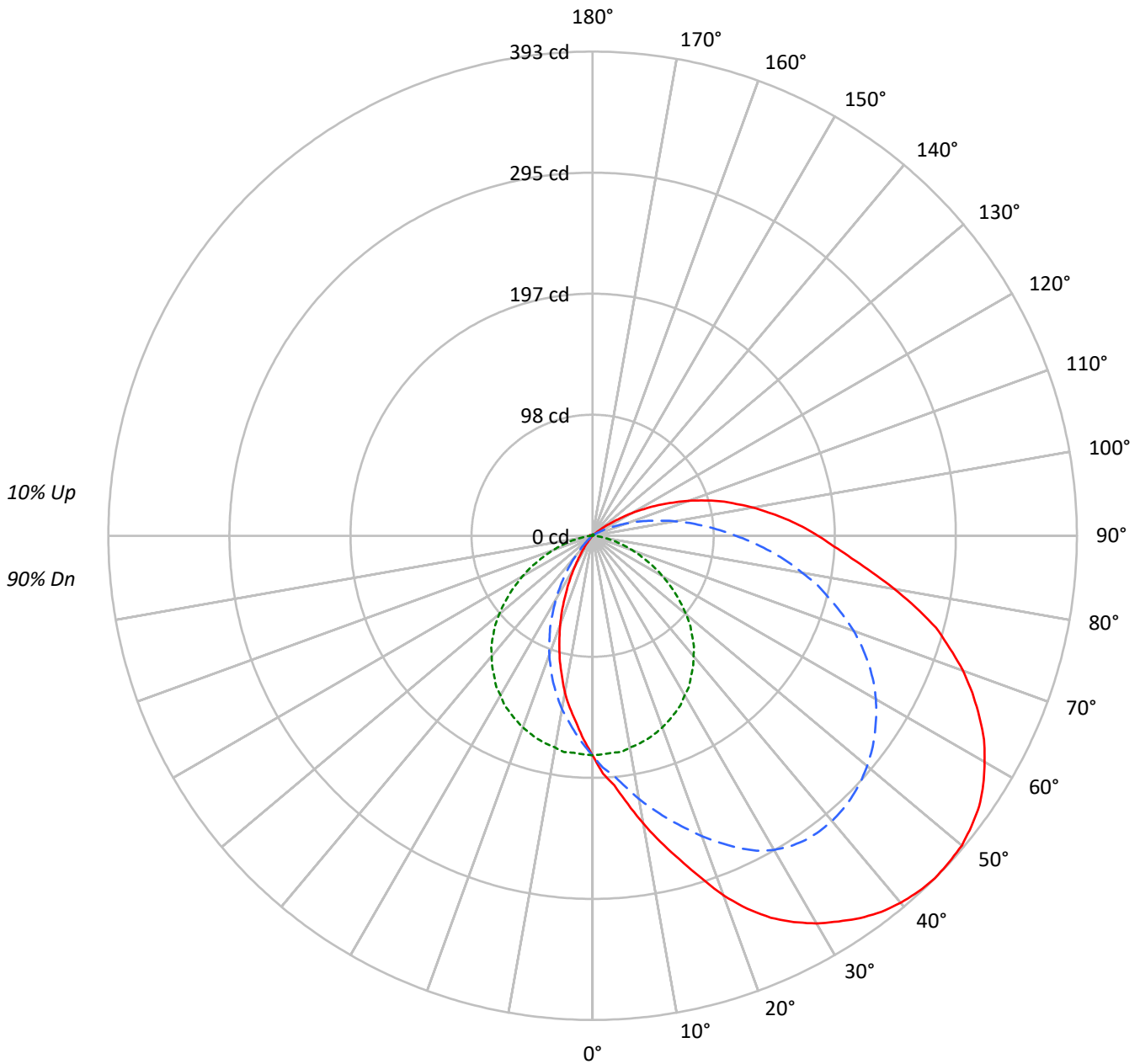
Lumens per Lamp: N/A
Luminaire Lumens: 881.0 lumens
Efficiency: N/A
Efficacy: 75.3 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

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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CATALOG NUMBER: FCC-X-2-LD4-1LO-35-UNV-81-87-ED1D-90

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°	1918	1918	1918
5°	2106	1890	1577
10°	2383	1867	1300
15°	2670	1843	1013
20°	3012	1813	746
25°	3295	1779	490
30°	3505	1732	276
35°	3688	1682	122
40°	3849	1620	30
45°	3988	1543	0
50°	4104	1440	0
55°	4193	1309	0
60°	4237	1157	0
65°	4255	984	0
70°	4241	804	0
75°	4186	593	3
80°	4018	363	18
85°	3883	173	26



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	17.1	1.9
10°-20°	51.1	5.8
20°-30°	82.8	9.4
30°-40°	106.3	12.1
40°-50°	120.4	13.7
50°-60°	124.7	14.2
60°-70°	117.6	13.3
70°-80°	98.5	11.2
80°-90°	71.4	8.1
90°-100°	46.9	5.3
100°-110°	27.1	3.1
110°-120°	12.0	1.4
120°-130°	3.2	0.4
130°-140°	0.7	0.1
140°-150°	0.5	0.1
150°-160°	0.3	0.0
160°-170°	0.2	0.0
170°-180°	0.1	0.0
0°-30°	150.9	17.1
0°-40°	257.3	29.2
0°-60°	502.3	57.0
0°-90°	789.9	89.7
90°-120°	86.0	9.8
90°-150°	90.5	10.3
90°-180°	91.0	10.3
0°-180°	881.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	178	178	178	178	178	
5°	203	195	177	160	152	21
15°	272	238	171	124	103	78
25°	342	280	158	81	51	158
35°	379	301	139	40	12	238
45°	393	298	114	9	0	303
55°	383	280	82	0	0	342
65°	346	247	49	0	0	343
75°	288	200	21	0	0	303
85°	211	145	3	1	1	180
90°	183	116	1	1	2	100
95°	157	91	0	2	2	123
105°	108	47	0	1	2	114
115°	59	16	1	1	1	59
125°	18	2	1	1	1	17
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°	178.2	178.2	178.2	178.2	178.2	178.2	178.2	178.2	178.2	178.2	178.2
2.5°	193.2	193.0	192.3	191.1	189.6	186.8	184.6	182.5	179.8	177.5	173.2
5°	203.4	202.3	201.4	200.2	196.6	194.1	190.0	185.5	181.2	176.8	168.2
7.5°	219.7	217.9	216.6	213.4	208.4	202.7	196.4	192.1	189.1	177.1	162.3
10°	237.2	235.6	232.9	227.2	221.1	212.9	203.9	193.6	184.6	174.6	157.1
12.5°	254.5	252.2	248.4	241.1	232.5	222.2	209.8	197.7	184.8	173.0	151.0
15°	271.7	269.2	265.2	256.3	244.9	231.6	216.3	201.1	185.9	170.9	144.6
17.5°	290.6	287.2	281.0	271.1	256.8	240.2	222.2	203.9	185.5	168.4	137.8
20°	310.8	306.0	299.4	286.0	269.2	249.7	228.1	206.6	185.2	165.5	130.1
22.5°	327.6	322.8	315.5	301.7	281.5	257.7	233.1	208.4	184.3	162.1	122.8
25°	342.1	338.2	330.3	314.4	293.1	266.1	237.9	209.8	183.0	158.5	115.1
27.5°	353.5	349.8	341.0	324.6	302.8	273.6	241.5	210.4	181.2	154.8	107.2
30°	363.4	359.8	349.1	332.3	309.4	279.5	245.2	210.7	178.9	149.4	98.5
32.5°	371.2	367.8	356.9	338.9	314.0	283.5	247.2	210.4	175.9	145.5	89.2
35°	378.9	375.5	362.8	343.7	317.4	285.4	248.8	209.3	172.3	139.2	80.4
37.5°	384.8	380.9	368.0	346.9	319.0	285.8	248.6	207.7	168.4	133.9	71.5
40°	388.9	384.8	370.9	348.7	319.4	285.1	246.8	205.0	163.9	127.4	62.2
42.5°	391.6	387.1	372.3	351.4	318.5	283.3	244.0	201.6	158.9	121.7	53.3
45°	393.0	388.2	372.5	349.1	316.9	279.9	240.0	197.3	153.5	114.0	44.5
47.5°	392.3	387.1	371.4	346.6	314.0	276.3	235.4	192.1	146.9	107.2	36.1
50°	391.1	385.7	368.9	343.5	309.9	271.7	230.4	185.7	140.1	98.8	28.6
52.5°	387.5	382.1	366.2	338.9	305.1	266.5	223.6	179.1	132.8	90.6	21.8
55°	383.0	378.0	361.4	334.8	299.0	260.2	217.3	172.1	125.8	82.2	15.7
57.5°	375.9	371.4	355.5	328.3	292.8	253.1	210.2	164.4	116.9	73.8	10.9
60°	367.3	362.8	347.3	320.8	285.8	245.2	202.5	156.4	109.0	65.4	6.8
62.5°	358.2	353.9	337.8	311.5	277.0	236.8	194.1	148.5	100.6	57.7	4.1
65°	346.2	342.1	327.6	300.3	267.2	227.7	184.8	138.9	91.9	49.0	2.3
67.5°	333.5	329.8	315.1	290.1	255.8	217.7	175.3	129.6	82.9	41.5	1.1
70°	319.9	315.3	301.7	276.3	244.3	206.4	164.8	120.1	74.2	34.3	0.0
72.5°	304.0	300.6	287.4	263.3	230.9	194.3	154.1	109.6	64.7	27.2	0.2
75°	288.5	284.2	272.2	249.5	217.7	181.6	142.3	99.9	55.4	20.9	0.2
77.5°	268.6	267.2	255.8	233.8	205.2	169.4	129.4	88.1	46.5	15.0	0.2
80°	248.6	247.2	238.4	218.2	190.7	154.8	117.4	77.0	37.9	10.0	0.2
82.5°	228.8	227.0	218.6	201.8	175.9	142.6	104.9	65.8	30.0	6.1	0.2
85°	211.1	208.9	199.8	184.3	160.7	128.7	91.9	54.9	22.2	3.4	0.5
87.5°	195.9	194.3	184.3	168.4	145.3	115.8	80.6	44.5	15.7	1.6	0.7
90°	183.0	179.6	170.7	153.9	130.8	101.5	68.6	35.6	10.4	0.9	0.9
92.5°	170.3	167.3	157.5	140.3	117.8	89.2	57.0	27.2	6.6	0.5	1.1
95°	157.1	153.9	144.4	128.5	104.7	76.7	46.8	20.0	3.6	0.5	1.1
97.5°	144.2	141.2	131.2	115.3	92.8	65.8	37.0	14.1	1.8	0.5	0.9
100°	132.1	128.7	119.6	103.7	81.0	54.9	28.6	9.1	1.1	0.5	0.9
102.5°	119.4	116.7	107.4	91.9	68.8	44.7	21.3	5.7	0.5	0.5	0.7
105°	108.1	104.7	95.6	79.7	58.6	35.2	15.0	3.4	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°	70.4	67.6	59.7	46.3	29.7	13.8	4.1	0.7	0.7	0.7	0.7
115°	58.8	54.7	47.7	35.9	22.0	9.1	2.0	0.7	0.7	0.7	0.7
117.5°	47.0	43.6	38.6	27.2	14.5	5.9	1.1	0.7	0.7	0.7	0.7
120°	36.8	33.6	27.9	18.8	9.8	3.4	0.5	0.7	0.7	0.7	0.7
122.5°	26.3	23.8	18.8	12.3	5.9	1.6	0.7	0.7	0.9	0.9	0.7
125°	17.5	16.1	12.5	7.5	3.6	0.7	0.7	0.7	0.9	0.9	0.7
127.5°	11.4	10.2	7.3	4.3	1.6	0.7	0.7	0.9	0.9	0.9	0.7
130°	6.4	5.7	4.3	2.5	0.7	0.7	0.7	0.9	0.9	0.9	0.7
132.5°	3.6	3.4	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	1.1	1.1	0.9
137.5°	0.2	0.2	0.5	0.5	0.7	0.7	0.9	1.1	1.1	1.1	0.9
140°	0.2	0.2	0.5	0.7	0.7	0.7	0.9	1.1	1.1	1.1	0.9
142.5°	0.2	0.5	0.5	0.7	0.7	0.9	0.9	1.1	1.1	0.9	0.9
145°	0.2	0.5	0.5	0.7	0.7	0.9	0.9	1.1	0.9	0.9	0.9
147.5°	0.5	0.5	0.5	0.7	0.7	0.9	0.9	1.1	1.1	0.9	0.9
150°	0.2	0.5	0.5	0.7	0.9	0.9	0.9	1.1	0.9	0.9	0.9
152.5°	0.2	0.5	0.5	0.7	0.9	0.9	0.9	1.1	0.9	0.9	0.9
155°	0.5	0.5	0.5	0.7	0.9	0.9	0.9	1.1	0.9	0.9	1.1
157.5°	0.5	0.5	0.5	0.7	0.9	0.9	0.9	1.1	0.9	0.9	1.1
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	1.1	1.1	1.1	1.1
172.5°	0.5	0.5	0.5	0.7	0.7	0.9	0.9	1.1	1.1	1.1	1.1
175°	0.5	0.5	0.5	0.7	0.7	0.9	0.9	1.1	1.1	1.1	1.1
177.5°	0.2	0.5	0.5	0.7	0.7	0.9	0.9	1.1	1.1	1.1	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°	178.2	178.2	178.2
2.5°	169.6	166.4	165.5
5°	160.5	155.3	152.3
7.5°	151.4	144.4	141.0
10°	143.0	133.0	129.4
12.5°	133.0	121.5	115.8
15°	123.5	108.5	103.1
17.5°	112.8	96.0	89.7
20°	102.8	83.5	77.0
22.5°	91.5	71.3	64.0
25°	81.3	59.0	50.9
27.5°	69.9	46.5	39.5
30°	59.3	35.6	28.6
32.5°	49.0	26.1	19.8
35°	39.5	17.7	12.5
37.5°	30.4	10.9	6.4
40°	22.0	5.7	3.0
42.5°	14.8	2.7	1.6
45°	9.1	1.4	0.0
47.5°	5.2	0.0	0.0
50°	2.7	0.0	0.0
52.5°	1.1	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	1.1
82.5°	0.9	1.1	1.1
85°	0.9	1.1	1.4
87.5°	1.1	1.4	1.6
90°	1.4	1.6	1.6
92.5°	1.4	1.8	1.8
95°	1.6	1.8	2.0
97.5°	1.8	2.0	2.0
100°	1.6	2.0	2.3
102.5°	1.4	2.0	2.0
105°	1.1	1.6	1.8



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	0.9	1.1	1.1
115°	0.7	0.9	1.1
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°	95.3	92.6	83.5	68.6	47.9	26.8	10.0	1.8	0.5	0.7	0.7
110°	83.1	80.8	71.5	57.0	38.6	20.0	6.6	1.1	0.7	0.7	0.7





107.5°	0.9	1.4	1.6
110°	0.9	1.1	1.4



(END OF REPORT)