

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: P550775

Luminaire Tested: **FCC-X-2-LD4-1LO-35-UNV-82-84-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: P550775
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-82-84-ED1D-90
Description: FCC CORNER MOUNT LUMINAIRE WITH .187 CLEAR PC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 3500K, AND 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

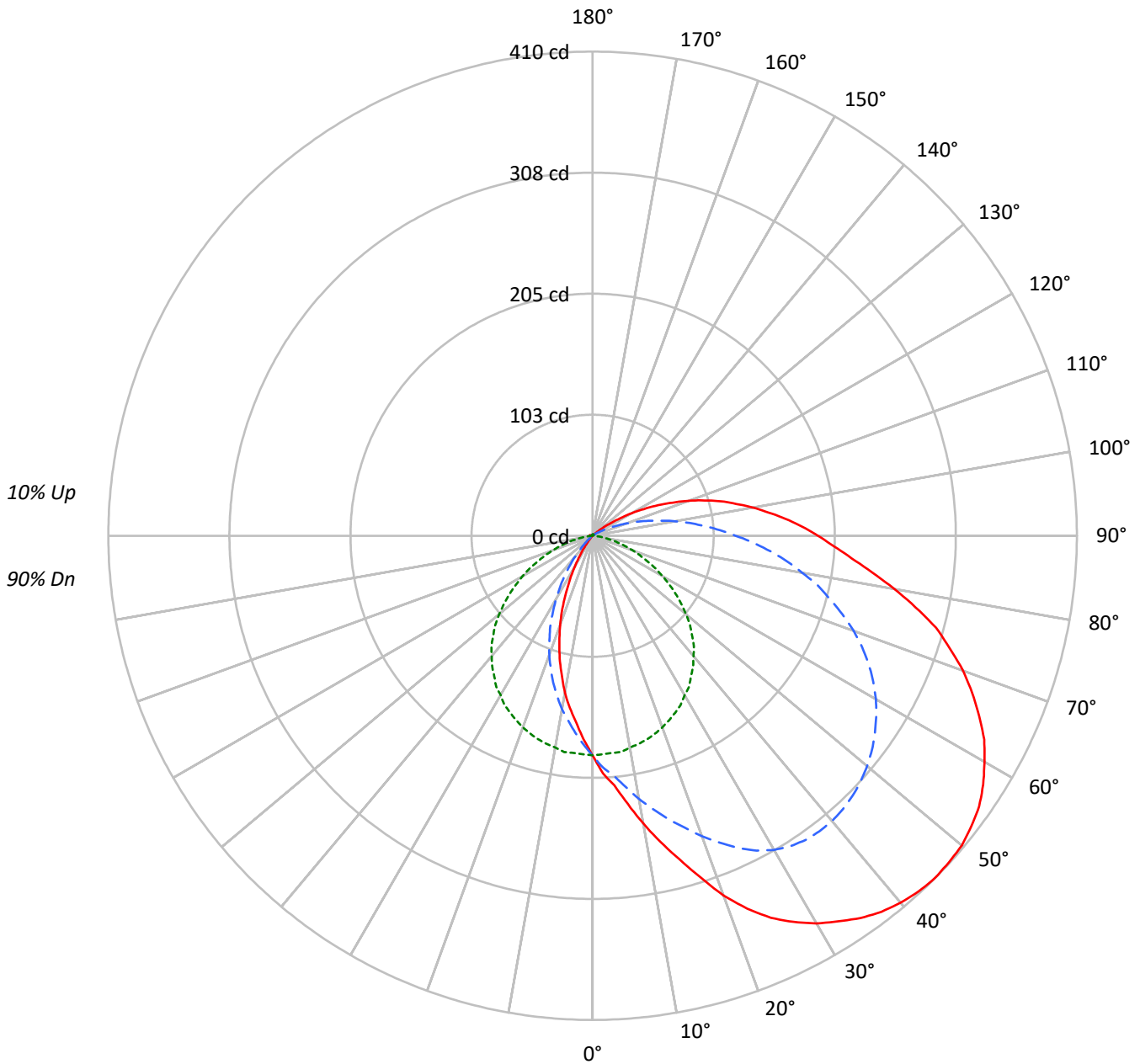
Lumens per Lamp: N/A
Luminaire Lumens: 918.9 lumens
Efficiency: N/A
Efficacy: 78.5 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

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

TEST NUMBER: P550775

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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°	2001	2001	2001
5°	2197	1972	1645
10°	2486	1947	1356
15°	2786	1923	1056
20°	3142	1891	778
25°	3437	1855	510
30°	3656	1806	287
35°	3846	1754	127
40°	4015	1689	31
45°	4160	1609	0
50°	4281	1501	0
55°	4374	1365	0
60°	4420	1207	0
65°	4438	1026	0
70°	4424	839	0
75°	4368	618	3
80°	4190	377	19
85°	4050	183	26



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	17.8	1.9
10°-20°	53.3	5.8
20°-30°	86.3	9.4
30°-40°	110.9	12.1
40°-50°	125.5	13.7
50°-60°	130.1	14.2
60°-70°	122.7	13.3
70°-80°	102.8	11.2
80°-90°	74.5	8.1
90°-100°	49.0	5.3
100°-110°	28.3	3.1
110°-120°	12.5	1.4
120°-130°	3.4	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°	157.5	17.1
0°-40°	268.4	29.2
0°-60°	524.0	57.0
0°-90°	824.0	89.7
90°-120°	89.7	9.8
90°-150°	94.4	10.3
90°-180°	95.0	10.3
0°-180°	918.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	186	186	186	186	186	
5°	212	204	184	167	159	21
15°	284	248	178	129	108	82
25°	357	292	165	85	53	165
35°	395	314	145	41	13	248
45°	410	311	119	10	0	316
55°	400	292	86	0	0	357
65°	361	258	51	0	0	357
75°	301	208	22	0	0	316
85°	220	151	4	1	1	188
90°	191	121	1	1	2	105
95°	164	95	0	2	2	129
105°	113	49	0	1	2	119
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°	185.9	185.9	185.9	185.9	185.9	185.9	185.9	185.9	185.9	185.9	185.9
2.5°	201.5	201.3	200.6	199.4	197.7	194.9	192.5	190.4	187.5	185.2	180.7
5°	212.2	211.0	210.0	208.9	205.1	202.5	198.2	193.5	189.0	184.5	175.5
7.5°	229.2	227.3	225.9	222.6	217.4	211.5	204.8	200.3	197.3	184.7	169.3
10°	247.5	245.8	243.0	237.0	230.6	222.1	212.7	202.0	192.5	182.1	163.9
12.5°	265.5	263.1	259.1	251.5	242.5	231.8	218.8	206.3	192.8	180.4	157.5
15°	283.5	280.9	276.6	267.4	255.5	241.5	225.7	209.8	193.9	178.3	150.8
17.5°	303.1	299.6	293.2	282.7	267.8	250.5	231.8	212.7	193.5	175.7	143.7
20°	324.2	319.2	312.3	298.4	280.9	260.5	238.0	215.5	193.2	172.6	135.7
22.5°	341.7	336.7	329.2	314.7	293.6	268.8	243.2	217.4	192.3	169.1	128.1
25°	356.9	352.8	344.6	328.0	305.7	277.5	248.2	218.8	190.9	165.3	120.1
27.5°	368.7	364.9	355.7	338.6	315.9	285.3	252.0	219.5	189.0	161.5	111.8
30°	379.1	375.3	364.2	346.7	322.8	291.5	255.7	219.8	186.6	155.8	102.8
32.5°	387.2	383.6	372.3	353.5	327.5	295.8	257.9	219.5	183.5	151.8	93.1
35°	395.2	391.7	378.4	358.5	331.1	297.7	259.5	218.3	179.7	145.2	83.8
37.5°	401.4	397.4	383.9	361.8	332.7	298.1	259.3	216.7	175.7	139.7	74.6
40°	405.6	401.4	386.9	363.7	333.2	297.4	257.4	213.8	171.0	132.8	64.9
42.5°	408.5	403.8	388.4	366.6	332.2	295.5	254.6	210.3	165.8	126.9	55.6
45°	409.9	404.9	388.6	364.2	330.6	292.0	250.3	205.8	160.1	118.9	46.4
47.5°	409.2	403.8	387.4	361.6	327.5	288.2	245.6	200.3	153.2	111.8	37.7
50°	408.0	402.3	384.8	358.3	323.2	283.5	240.4	193.7	146.1	103.0	29.8
52.5°	404.2	398.5	382.0	353.5	318.3	278.0	233.3	186.8	138.5	94.5	22.7
55°	399.5	394.3	377.0	349.3	311.9	271.4	226.6	179.5	131.2	85.7	16.3
57.5°	392.1	387.4	370.8	342.4	305.5	264.0	219.3	171.4	122.0	77.0	11.4
60°	383.1	378.4	362.3	334.6	298.1	255.7	211.2	163.2	113.7	68.2	7.1
62.5°	373.7	369.2	352.4	324.9	288.9	247.0	202.5	154.9	104.9	60.1	4.3
65°	361.1	356.9	341.7	313.3	278.7	237.5	192.8	144.9	95.9	51.1	2.4
67.5°	347.9	344.1	328.7	302.6	266.9	227.1	182.8	135.2	86.4	43.3	1.2
70°	333.7	328.9	314.7	288.2	254.8	215.3	171.9	125.3	77.4	35.8	0.0
72.5°	317.1	313.5	299.8	274.7	240.8	202.7	160.8	114.4	67.5	28.4	0.2
75°	301.0	296.5	283.9	260.2	227.1	189.4	148.5	104.2	57.8	21.8	0.2
77.5°	280.1	278.7	266.9	243.9	214.1	176.7	135.0	91.9	48.5	15.6	0.2
80°	259.3	257.9	248.6	227.6	198.9	161.5	122.4	80.3	39.5	10.4	0.2
82.5°	238.7	236.8	228.0	210.5	183.5	148.7	109.4	68.7	31.3	6.4	0.2
85°	220.2	217.9	208.4	192.3	167.7	134.3	95.9	57.3	23.2	3.6	0.5
87.5°	204.4	202.7	192.3	175.7	151.6	120.8	84.1	46.4	16.3	1.7	0.7
90°	190.9	187.3	178.1	160.6	136.4	105.9	71.5	37.2	10.9	0.9	0.9
92.5°	177.6	174.5	164.3	146.3	122.9	93.1	59.4	28.4	6.9	0.5	1.2
95°	163.9	160.6	150.6	134.0	109.2	80.0	48.8	20.8	3.8	0.5	1.2
97.5°	150.4	147.3	136.9	120.3	96.9	68.7	38.6	14.7	1.9	0.5	0.9
100°	137.8	134.3	124.8	108.2	84.5	57.3	29.8	9.5	1.2	0.5	0.9
102.5°	124.6	121.7	112.0	95.9	71.8	46.7	22.3	5.9	0.5	0.5	0.7
105°	112.7	109.2	99.7	83.1	61.1	36.7	15.6	3.6	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°	73.4	70.6	62.3	48.3	31.0	14.4	4.3	0.7	0.7	0.7	0.7
115°	61.3	57.1	49.7	37.4	23.0	9.5	2.1	0.7	0.7	0.7	0.7
117.5°	49.0	45.5	40.3	28.4	15.2	6.2	1.2	0.7	0.7	0.7	0.7
120°	38.4	35.0	29.1	19.7	10.2	3.6	0.5	0.7	0.7	0.7	0.7
122.5°	27.5	24.9	19.7	12.8	6.2	1.7	0.7	0.7	0.9	0.9	0.7
125°	18.2	16.8	13.0	7.8	3.8	0.7	0.7	0.7	0.9	0.9	0.7
127.5°	11.8	10.7	7.6	4.5	1.7	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	3.6	2.4	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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CATALOG NUMBER: FCC-X-2-LD4-1LO-35-UNV-82-84-ED1D-90

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	185.9	185.9	185.9
2.5°	176.9	173.6	172.6
5°	167.4	162.0	158.9
7.5°	157.9	150.6	147.1
10°	149.2	138.8	135.0
12.5°	138.8	126.7	120.8
15°	128.8	113.2	107.5
17.5°	117.7	100.2	93.5
20°	107.3	87.1	80.3
22.5°	95.4	74.4	66.8
25°	84.8	61.6	53.0
27.5°	72.9	48.5	41.2
30°	61.8	37.2	29.8
32.5°	51.1	27.2	20.6
35°	41.2	18.5	13.0
37.5°	31.7	11.4	6.6
40°	23.0	5.9	3.1
42.5°	15.4	2.8	1.7
45°	9.5	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	1.7
90°	1.4	1.7	1.7
92.5°	1.4	1.9	1.9
95°	1.7	1.9	2.1
97.5°	1.9	2.1	2.1
100°	1.7	2.1	2.4
102.5°	1.4	2.1	2.1
105°	1.2	1.7	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°	99.5	96.6	87.1	71.5	50.0	27.9	10.4	1.9	0.5	0.7	0.7
110°	86.7	84.3	74.6	59.4	40.3	20.8	6.9	1.2	0.7	0.7	0.7





107.5°	0.9	1.4	1.7
110°	0.9	1.2	1.4



(END OF REPORT)