

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: P550777

Luminaire Tested: **FCC-X-2-LD4-1LO-35-UNV-82-85-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: P550777
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-82-85-ED1D-90
Description: FCC CORNER MOUNT LUMINAIRE WITH .187 CLEAR PC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 3500K, AND 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

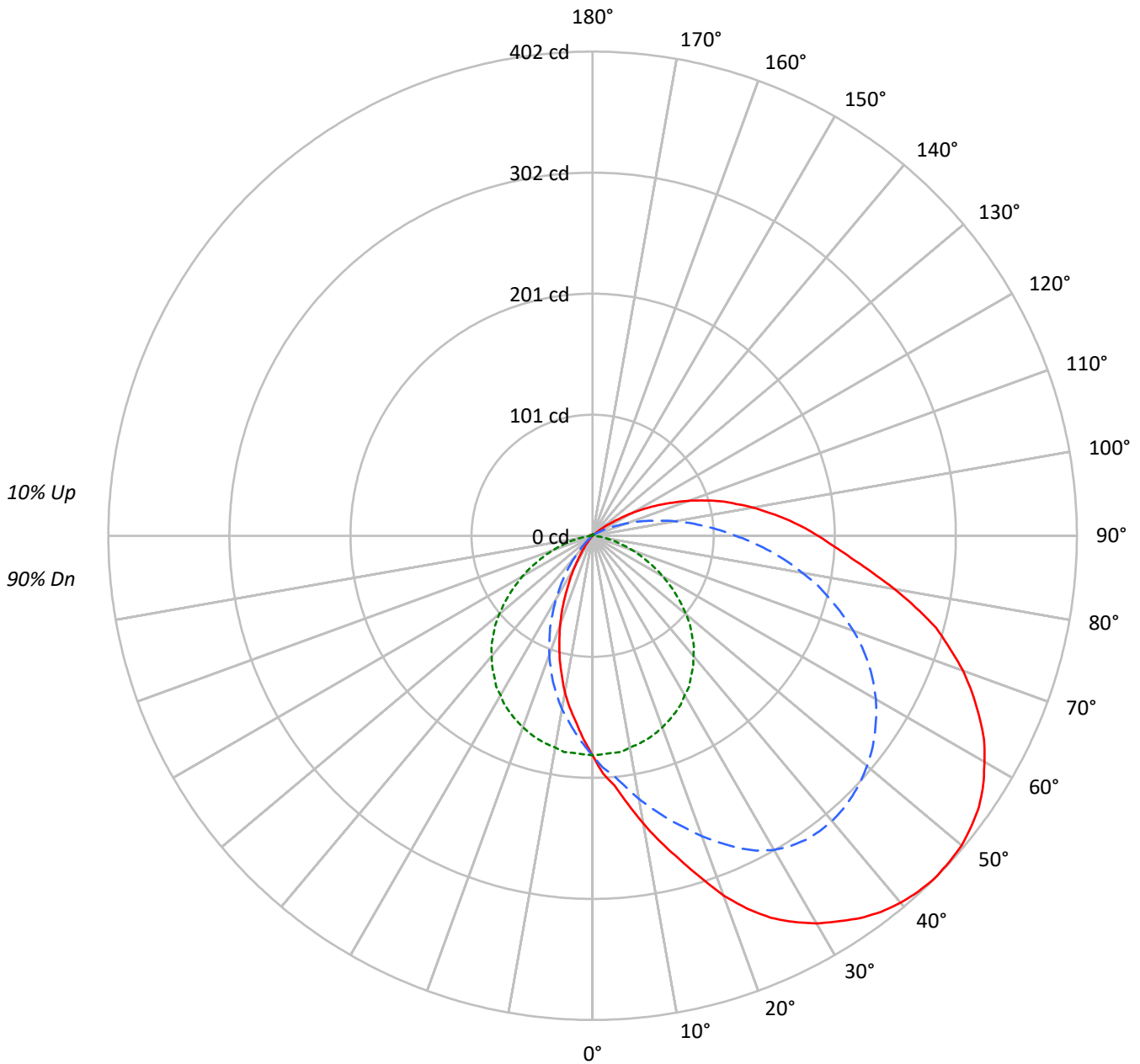
Lumens per Lamp: N/A
Luminaire Lumens: 901.0 lumens
Efficiency: N/A
Efficacy: 77.0 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

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

TEST NUMBER: P550777

CATALOG NUMBER: FCC-X-2-LD4-1LO-35-UNV-82-85-ED1D-90

Luminous Intensity Polar Plot





TEST NUMBER: P550777

CATALOG NUMBER: FCC-X-2-LD4-1LO-35-UNV-82-85-ED1D-90

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°	1962	1962	1962
5°	2153	1933	1613
10°	2437	1909	1329
15°	2731	1885	1036
20°	3080	1854	763
25°	3370	1819	501
30°	3585	1771	283
35°	3771	1719	125
40°	3937	1656	30
45°	4079	1576	0
50°	4197	1472	0
55°	4288	1338	0
60°	4333	1184	0
65°	4352	1006	0
70°	4337	822	0
75°	4282	607	3
80°	4108	370	19
85°	3971	178	26



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	17.5	1.9
10°-20°	52.3	5.8
20°-30°	84.6	9.4
30°-40°	108.7	12.1
40°-50°	123.1	13.7
50°-60°	127.5	14.2
60°-70°	120.3	13.3
70°-80°	100.8	11.2
80°-90°	73.1	8.1
90°-100°	48.0	5.3
100°-110°	27.7	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°	154.4	17.1
0°-40°	263.1	29.2
0°-60°	513.7	57.0
0°-90°	807.8	89.7
90°-120°	88.0	9.8
90°-150°	92.6	10.3
90°-180°	93.0	10.3
0°-180°	901.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	182	182	182	182	182	
5°	208	200	181	164	156	21
15°	278	244	175	126	105	80
25°	350	286	162	83	52	162
35°	388	308	142	40	13	243
45°	402	305	116	9	0	310
55°	392	286	84	0	0	350
65°	354	253	50	0	0	350
75°	295	204	21	0	0	310
85°	216	148	4	1	1	184
90°	187	119	1	1	2	103
95°	161	93	0	2	2	126
105°	110	48	0	1	2	117
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°	182.3	182.3	182.3	182.3	182.3	182.3	182.3	182.3	182.3	182.3	182.3
2.5°	197.6	197.3	196.6	195.5	193.9	191.1	188.8	186.7	183.9	181.6	177.1
5°	208.0	206.9	205.9	204.8	201.1	198.5	194.3	189.7	185.3	180.9	172.0
7.5°	224.7	222.9	221.5	218.2	213.1	207.3	200.8	196.4	193.4	181.1	166.0
10°	242.6	241.0	238.2	232.4	226.1	217.8	208.5	198.0	188.8	178.5	160.7
12.5°	260.3	257.9	254.0	246.6	237.7	227.3	214.5	202.2	189.0	176.9	154.4
15°	277.9	275.3	271.2	262.1	250.5	236.8	221.3	205.7	190.1	174.8	147.9
17.5°	297.2	293.7	287.4	277.2	262.6	245.6	227.3	208.5	189.7	172.3	140.9
20°	317.8	313.0	306.2	292.5	275.3	255.4	233.3	211.3	189.4	169.2	133.0
22.5°	335.0	330.1	322.7	308.5	287.9	263.5	238.4	213.1	188.5	165.8	125.6
25°	349.9	345.9	337.8	321.6	299.7	272.1	243.3	214.5	187.1	162.1	117.7
27.5°	361.5	357.8	348.7	332.0	309.7	279.8	247.0	215.2	185.3	158.3	109.6
30°	371.7	368.0	357.1	339.9	316.4	285.8	250.7	215.5	182.9	152.8	100.8
32.5°	379.6	376.1	365.0	346.6	321.1	290.0	252.8	215.2	179.9	148.8	91.2
35°	387.5	384.0	371.0	351.5	324.6	291.8	254.5	214.1	176.2	142.3	82.2
37.5°	393.5	389.6	376.3	354.8	326.2	292.3	254.2	212.4	172.3	137.0	73.1
40°	397.7	393.5	379.4	356.6	326.7	291.6	252.4	209.6	167.6	130.2	63.6
42.5°	400.5	395.8	380.8	359.4	325.7	289.7	249.6	206.2	162.5	124.4	54.6
45°	401.9	397.0	381.0	357.1	324.1	286.3	245.4	201.8	156.9	116.5	45.5
47.5°	401.2	395.8	379.8	354.5	321.1	282.5	240.8	196.4	150.2	109.6	36.9
50°	400.0	394.5	377.3	351.3	316.9	277.9	235.6	189.9	143.2	101.0	29.3
52.5°	396.3	390.7	374.5	346.6	312.0	272.6	228.7	183.2	135.8	92.6	22.3
55°	391.7	386.6	369.6	342.4	305.8	266.1	222.2	176.0	128.6	84.0	16.0
57.5°	384.5	379.8	363.6	335.7	299.5	258.9	215.0	168.1	119.6	75.5	11.1
60°	375.6	371.0	355.2	328.1	292.3	250.7	207.1	160.0	111.4	66.9	7.0
62.5°	366.4	361.9	345.5	318.5	283.2	242.1	198.5	151.8	102.8	59.0	4.2
65°	354.1	349.9	335.0	307.2	273.3	232.9	189.0	142.1	94.0	50.1	2.3
67.5°	341.1	337.3	322.2	296.7	261.7	222.6	179.2	132.6	84.7	42.5	1.2
70°	327.1	322.5	308.5	282.5	249.8	211.0	168.6	122.8	75.9	35.1	0.0
72.5°	310.9	307.4	293.9	269.3	236.1	198.7	157.6	112.1	66.2	27.9	0.2
75°	295.1	290.7	278.4	255.2	222.6	185.7	145.6	102.2	56.6	21.4	0.2
77.5°	274.7	273.3	261.7	239.1	209.9	173.2	132.3	90.1	47.6	15.3	0.2
80°	254.2	252.8	243.8	223.1	195.0	158.3	120.0	78.7	38.8	10.2	0.2
82.5°	234.0	232.2	223.6	206.4	179.9	145.8	107.3	67.3	30.6	6.3	0.2
85°	215.9	213.6	204.3	188.5	164.4	131.6	94.0	56.2	22.8	3.5	0.5
87.5°	200.4	198.7	188.5	172.3	148.6	118.4	82.4	45.5	16.0	1.6	0.7
90°	187.1	183.6	174.6	157.4	133.7	103.8	70.1	36.5	10.7	0.9	0.9
92.5°	174.1	171.1	161.1	143.5	120.5	91.2	58.3	27.9	6.7	0.5	1.2
95°	160.7	157.4	147.7	131.4	107.0	78.5	47.8	20.4	3.7	0.5	1.2
97.5°	147.4	144.4	134.2	117.9	95.0	67.3	37.8	14.4	1.9	0.5	0.9
100°	135.1	131.6	122.4	106.1	82.9	56.2	29.3	9.3	1.2	0.5	0.9
102.5°	122.1	119.3	109.8	94.0	70.3	45.7	21.8	5.8	0.5	0.5	0.7
105°	110.5	107.0	97.7	81.5	59.9	36.0	15.3	3.5	0.5	0.5	0.7



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CATALOG NUMBER: FCC-X-2-LD4-1LO-35-UNV-82-85-ED1D-90

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	72.0	69.2	61.1	47.4	30.4	14.2	4.2	0.7	0.7	0.7	0.7
115°	60.1	56.0	48.8	36.7	22.5	9.3	2.1	0.7	0.7	0.7	0.7
117.5°	48.1	44.6	39.5	27.9	14.9	6.0	1.2	0.7	0.7	0.7	0.7
120°	37.6	34.4	28.6	19.3	10.0	3.5	0.5	0.7	0.7	0.7	0.7
122.5°	26.9	24.4	19.3	12.5	6.0	1.6	0.7	0.7	0.9	0.9	0.7
125°	17.9	16.5	12.8	7.7	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	2.6	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°	182.3	182.3	182.3
2.5°	173.4	170.2	169.2
5°	164.1	158.8	155.8
7.5°	154.9	147.7	144.2
10°	146.3	136.0	132.3
12.5°	136.0	124.2	118.4
15°	126.3	111.0	105.4
17.5°	115.4	98.2	91.7
20°	105.2	85.4	78.7
22.5°	93.6	72.9	65.5
25°	83.1	60.4	52.0
27.5°	71.5	47.6	40.4
30°	60.6	36.5	29.3
32.5°	50.1	26.7	20.2
35°	40.4	18.1	12.8
37.5°	31.1	11.1	6.5
40°	22.5	5.8	3.0
42.5°	15.1	2.8	1.6
45°	9.3	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	1.9	1.9
95°	1.6	1.9	2.1
97.5°	1.9	2.1	2.1
100°	1.6	2.1	2.3
102.5°	1.4	2.1	2.1
105°	1.2	1.6	1.9



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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°	97.5	94.7	85.4	70.1	49.0	27.4	10.2	1.9	0.5	0.7	0.7
110°	85.0	82.7	73.1	58.3	39.5	20.4	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)