

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: P550844

Luminaire Tested: **FCC-X-2-LD4-1LO-40-UNV-82-86-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: P550844
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-40-UNV-82-86-ED1D
Description: FCC CORNER MOUNT LUMINAIRE WITH .187 CLEAR PC FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 4000K, AND 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

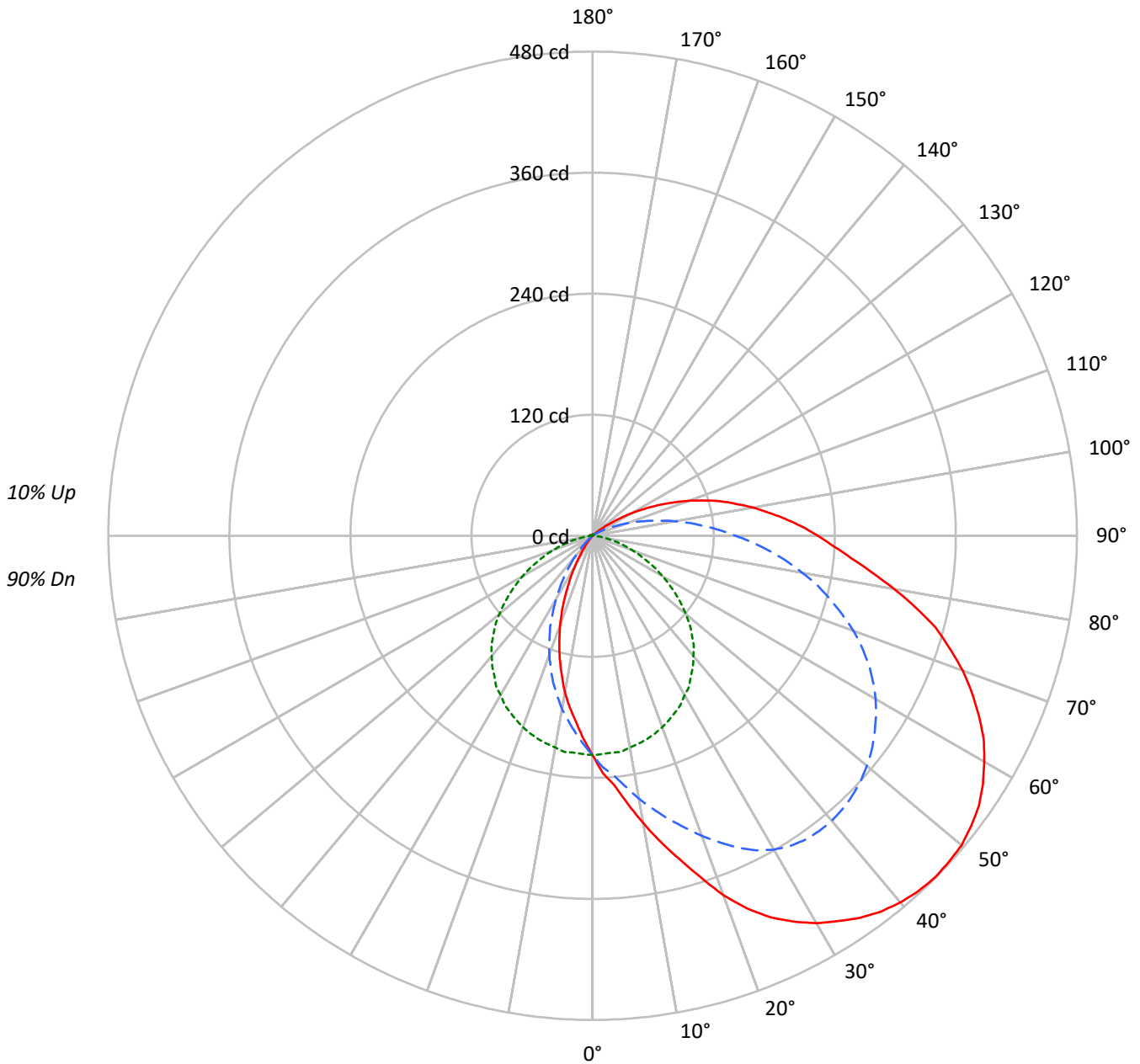
Lumens per Lamp: N/A
Luminaire Lumens: 1075.0 lumens
Efficiency: N/A
Efficacy: 91.9 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

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-40-UNV-82-86-ED1D

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°	2340	2340	2340
5°	2569	2307	1924
10°	2908	2278	1586
15°	3259	2249	1236
20°	3675	2212	910
25°	4020	2169	597
30°	4277	2113	337
35°	4499	2052	148
40°	4697	1976	36
45°	4866	1882	0
50°	5008	1756	0
55°	5116	1597	0
60°	5171	1412	0
65°	5192	1201	0
70°	5175	979	0
75°	5109	723	4
80°	4902	443	23
85°	4738	214	31



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	20.8	1.9
10°-20°	62.4	5.8
20°-30°	101.0	9.4
30°-40°	129.7	12.1
40°-50°	146.9	13.7
50°-60°	152.1	14.2
60°-70°	143.5	13.3
70°-80°	120.3	11.2
80°-90°	87.2	8.1
90°-100°	57.3	5.3
100°-110°	33.1	3.1
110°-120°	14.6	1.4
120°-130°	3.9	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°	184.2	17.1
0°-40°	313.9	29.2
0°-60°	612.9	57.0
0°-90°	963.8	89.7
90°-120°	105.0	9.8
90°-150°	110.4	10.3
90°-180°	111.0	10.3
0°-180°	1075.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	217	217	217	217	217	
5°	248	238	216	196	186	25
15°	332	291	209	151	126	96
25°	417	341	193	99	62	193
35°	462	368	170	48	15	290
45°	480	364	139	11	0	370
55°	467	341	100	0	0	417
65°	422	302	60	0	0	418
75°	352	244	26	0	0	369
85°	258	177	4	1	2	220
90°	223	142	1	2	2	122
95°	192	111	1	2	2	150
105°	132	57	1	1	2	139
115°	72	19	1	1	1	72
125°	21	3	1	1	1	21
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	



TEST NUMBER: P550844

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
0°	217.4	217.4	217.4	217.4	217.4	217.4	217.4	217.4	217.4	217.4	217.4
2.5°	235.7	235.5	234.6	233.2	231.3	228.0	225.2	222.7	219.4	216.6	211.4
5°	248.2	246.8	245.7	244.3	239.9	236.8	231.9	226.3	221.0	215.8	205.3
7.5°	268.1	265.9	264.3	260.4	254.3	247.4	239.6	234.3	230.7	216.1	198.1
10°	289.5	287.5	284.2	277.3	269.8	259.8	248.7	236.3	225.2	213.0	191.7
12.5°	310.5	307.7	303.0	294.2	283.7	271.2	255.9	241.3	225.5	211.1	184.2
15°	331.6	328.5	323.5	312.7	298.9	282.5	264.0	245.4	226.9	208.6	176.5
17.5°	354.6	350.4	342.9	330.7	313.3	293.1	271.2	248.7	226.3	205.5	168.1
20°	379.2	373.4	365.4	349.0	328.5	304.7	278.4	252.1	226.0	201.9	158.7
22.5°	399.7	393.9	385.0	368.1	343.5	314.4	284.5	254.3	224.9	197.8	149.9
25°	417.4	412.7	403.0	383.6	357.6	324.6	290.3	255.9	223.3	193.3	140.4
27.5°	431.3	426.9	416.1	396.1	369.5	333.8	294.7	256.8	221.0	188.9	130.7
30°	443.5	439.0	426.0	405.5	377.6	341.0	299.2	257.1	218.3	182.3	120.2
32.5°	452.9	448.7	435.4	413.6	383.1	346.0	301.7	256.8	214.7	177.6	108.9
35°	462.3	458.2	442.6	419.4	387.2	348.2	303.6	255.4	210.2	169.8	98.1
37.5°	469.5	464.8	449.0	423.3	389.2	348.7	303.3	253.5	205.5	163.4	87.3
40°	474.5	469.5	452.6	425.5	389.7	347.9	301.1	250.1	200.0	155.4	75.9
42.5°	477.8	472.3	454.3	428.8	388.6	345.7	297.8	246.0	193.9	148.5	65.1
45°	479.5	473.7	454.6	426.0	386.7	341.5	292.8	240.7	187.3	139.1	54.3
47.5°	478.7	472.3	453.2	423.0	383.1	337.1	287.3	234.3	179.2	130.7	44.0
50°	477.3	470.6	450.1	419.1	378.1	331.6	281.2	226.6	170.9	120.5	34.9
52.5°	472.8	466.2	446.8	413.6	372.3	325.2	272.8	218.6	162.0	110.5	26.6
55°	467.3	461.2	441.0	408.6	364.8	317.4	265.1	210.0	153.5	100.3	19.1
57.5°	458.7	453.2	433.8	400.5	357.3	308.9	256.5	200.5	142.7	90.0	13.3
60°	448.2	442.6	423.8	391.4	348.7	299.2	247.1	190.9	133.0	79.8	8.3
62.5°	437.1	431.8	412.2	380.0	337.9	288.9	236.8	181.2	122.7	70.4	5.0
65°	422.4	417.4	399.7	366.5	326.0	277.8	225.5	169.5	112.2	59.8	2.8
67.5°	406.9	402.5	384.5	354.0	312.2	265.6	213.8	158.2	101.1	50.7	1.4
70°	390.3	384.8	368.1	337.1	298.1	251.8	201.1	146.5	90.6	41.8	0.0
72.5°	370.9	366.8	350.7	321.3	281.7	237.1	188.1	133.8	78.9	33.2	0.3
75°	352.1	346.8	332.1	304.4	265.6	221.6	173.7	121.9	67.6	25.5	0.3
77.5°	327.7	326.0	312.2	285.3	250.4	206.6	157.9	107.5	56.8	18.3	0.3
80°	303.3	301.7	290.9	266.2	232.7	188.9	143.2	93.9	46.3	12.2	0.3
82.5°	279.2	277.0	266.8	246.3	214.7	174.0	128.0	80.3	36.6	7.5	0.3
85°	257.6	254.8	243.8	224.9	196.1	157.1	112.2	67.0	27.1	4.2	0.6
87.5°	239.1	237.1	224.9	205.5	177.3	141.3	98.3	54.3	19.1	1.9	0.8
90°	223.3	219.1	208.3	187.8	159.6	123.8	83.7	43.5	12.7	1.1	1.1
92.5°	207.8	204.2	192.2	171.2	143.8	108.9	69.5	33.2	8.0	0.6	1.4
95°	191.7	187.8	176.2	156.8	127.7	93.6	57.1	24.4	4.4	0.6	1.4
97.5°	175.9	172.3	160.1	140.7	113.3	80.3	45.2	17.2	2.2	0.6	1.1
100°	161.2	157.1	146.0	126.6	98.9	67.0	34.9	11.1	1.4	0.6	1.1
102.5°	145.7	142.4	131.0	112.2	83.9	54.6	26.0	6.9	0.6	0.6	0.8
105°	131.9	127.7	116.6	97.2	71.5	42.9	18.3	4.2	0.6	0.6	0.8



TEST NUMBER: P550844

CATALOG NUMBER: FCC-X-2-LD4-1LO-40-UNV-82-86-ED1D

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	85.9	82.5	72.9	56.5	36.3	16.9	5.0	0.8	0.8	0.8	0.8
115°	71.7	66.8	58.2	43.8	26.9	11.1	2.5	0.8	0.8	0.8	0.8
117.5°	57.3	53.2	47.1	33.2	17.7	7.2	1.4	0.8	0.8	0.8	0.8
120°	44.9	41.0	34.1	23.0	11.9	4.2	0.6	0.8	0.8	0.8	0.8
122.5°	32.1	29.1	23.0	15.0	7.2	1.9	0.8	0.8	1.1	1.1	0.8
125°	21.3	19.7	15.2	9.1	4.4	0.8	0.8	0.8	1.1	1.1	0.8
127.5°	13.9	12.5	8.9	5.3	1.9	0.8	0.8	1.1	1.1	1.1	0.8
130°	7.8	6.9	5.3	3.0	0.8	0.8	0.8	1.1	1.1	1.1	0.8
132.5°	4.4	4.2	2.8	0.6	0.8	0.8	0.8	1.1	1.1	1.1	1.1
135°	1.1	0.6	0.6	0.6	0.8	0.8	1.1	1.1	1.4	1.4	1.1
137.5°	0.3	0.3	0.6	0.6	0.8	0.8	1.1	1.4	1.4	1.4	1.1
140°	0.3	0.3	0.6	0.8	0.8	0.8	1.1	1.4	1.4	1.4	1.1
142.5°	0.3	0.6	0.6	0.8	0.8	1.1	1.1	1.4	1.4	1.1	1.1
145°	0.3	0.6	0.6	0.8	0.8	1.1	1.1	1.4	1.1	1.1	1.1
147.5°	0.6	0.6	0.6	0.8	0.8	1.1	1.1	1.4	1.4	1.1	1.1
150°	0.3	0.6	0.6	0.8	1.1	1.1	1.1	1.4	1.1	1.1	1.1
152.5°	0.3	0.6	0.6	0.8	1.1	1.1	1.1	1.4	1.1	1.1	1.1
155°	0.6	0.6	0.6	0.8	1.1	1.1	1.1	1.4	1.1	1.1	1.4
157.5°	0.6	0.6	0.6	0.8	1.1	1.1	1.1	1.4	1.1	1.1	1.4
160°	0.6	0.6	0.6	0.8	0.8	1.1	1.1	1.1	1.1	1.1	1.1
162.5°	0.6	0.6	0.6	0.8	0.8	1.1	1.1	1.1	1.1	1.1	1.1
165°	0.6	0.6	0.6	0.6	0.8	0.8	1.1	1.1	1.1	1.1	1.1
167.5°	0.6	0.6	0.6	0.8	0.8	0.8	1.1	1.1	1.1	1.1	1.1
170°	0.6	0.6	0.6	0.8	0.8	0.8	1.1	1.4	1.4	1.4	1.4
172.5°	0.6	0.6	0.6	0.8	0.8	1.1	1.1	1.4	1.4	1.4	1.4
175°	0.6	0.6	0.6	0.8	0.8	1.1	1.1	1.4	1.4	1.4	1.4
177.5°	0.3	0.6	0.6	0.8	0.8	1.1	1.1	1.4	1.4	1.4	1.1
180°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8



TEST NUMBER: P550844

CATALOG NUMBER: FCC-X-2-LD4-1LO-40-UNV-82-86-ED1D

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	217.4	217.4	217.4
2.5°	206.9	203.0	201.9
5°	195.8	189.5	185.9
7.5°	184.8	176.2	172.0
10°	174.5	162.3	157.9
12.5°	162.3	148.2	141.3
15°	150.7	132.4	125.8
17.5°	137.7	117.2	109.4
20°	125.5	101.9	93.9
22.5°	111.6	87.0	78.1
25°	99.2	72.0	62.0
27.5°	85.3	56.8	48.2
30°	72.3	43.5	34.9
32.5°	59.8	31.9	24.1
35°	48.2	21.6	15.2
37.5°	37.1	13.3	7.8
40°	26.9	6.9	3.6
42.5°	18.0	3.3	1.9
45°	11.1	1.7	0.0
47.5°	6.4	0.0	0.0
50°	3.3	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	0.8
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	1.9
90°	1.7	1.9	1.9
92.5°	1.7	2.2	2.2
95°	1.9	2.2	2.5
97.5°	2.2	2.5	2.5
100°	1.9	2.5	2.8
102.5°	1.7	2.5	2.5
105°	1.4	1.9	2.2



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	1.1	1.4	1.4
115°	0.8	1.1	1.4
117.5°	0.8	1.1	1.1
120°	0.8	0.8	1.1
122.5°	0.8	0.8	1.1
125°	0.8	0.8	1.1
127.5°	1.1	0.8	0.8
130°	0.8	0.8	0.8
132.5°	1.1	0.8	0.8
135°	1.1	0.8	0.8
137.5°	1.1	0.8	0.8
140°	1.1	0.8	0.8
142.5°	1.1	0.8	0.8
145°	0.8	0.8	0.8
147.5°	0.8	0.8	0.8
150°	0.8	0.8	0.6
152.5°	0.8	0.6	0.6
155°	0.8	0.6	0.3
157.5°	1.1	0.6	0.3
160°	0.8	0.6	0.3
162.5°	0.8	0.6	0.3
165°	0.8	0.6	0.0
167.5°	0.8	0.6	0.3
170°	0.8	0.6	0.3
172.5°	0.8	0.6	0.3
175°	0.8	0.3	0.3
177.5°	0.8	0.3	0.3
180°	0.8	0.8	0.8



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	116.3	113.0	101.9	83.7	58.4	32.7	12.2	2.2	0.6	0.8	0.8
110°	101.4	98.6	87.3	69.5	47.1	24.4	8.0	1.4	0.8	0.8	0.8





107.5°	1.1	1.7	1.9
110°	1.1	1.4	1.7



(END OF REPORT)