

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: P551648

Luminaire Tested: **FCC-X-2-LD4-2LO-50-UNV-80-88-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: P551648
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-LD4-2LO-50-UNV-80-88-ED1D
Description: FCC CORNER MOUNT LUMINAIRE WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .500 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 5000K, AND 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

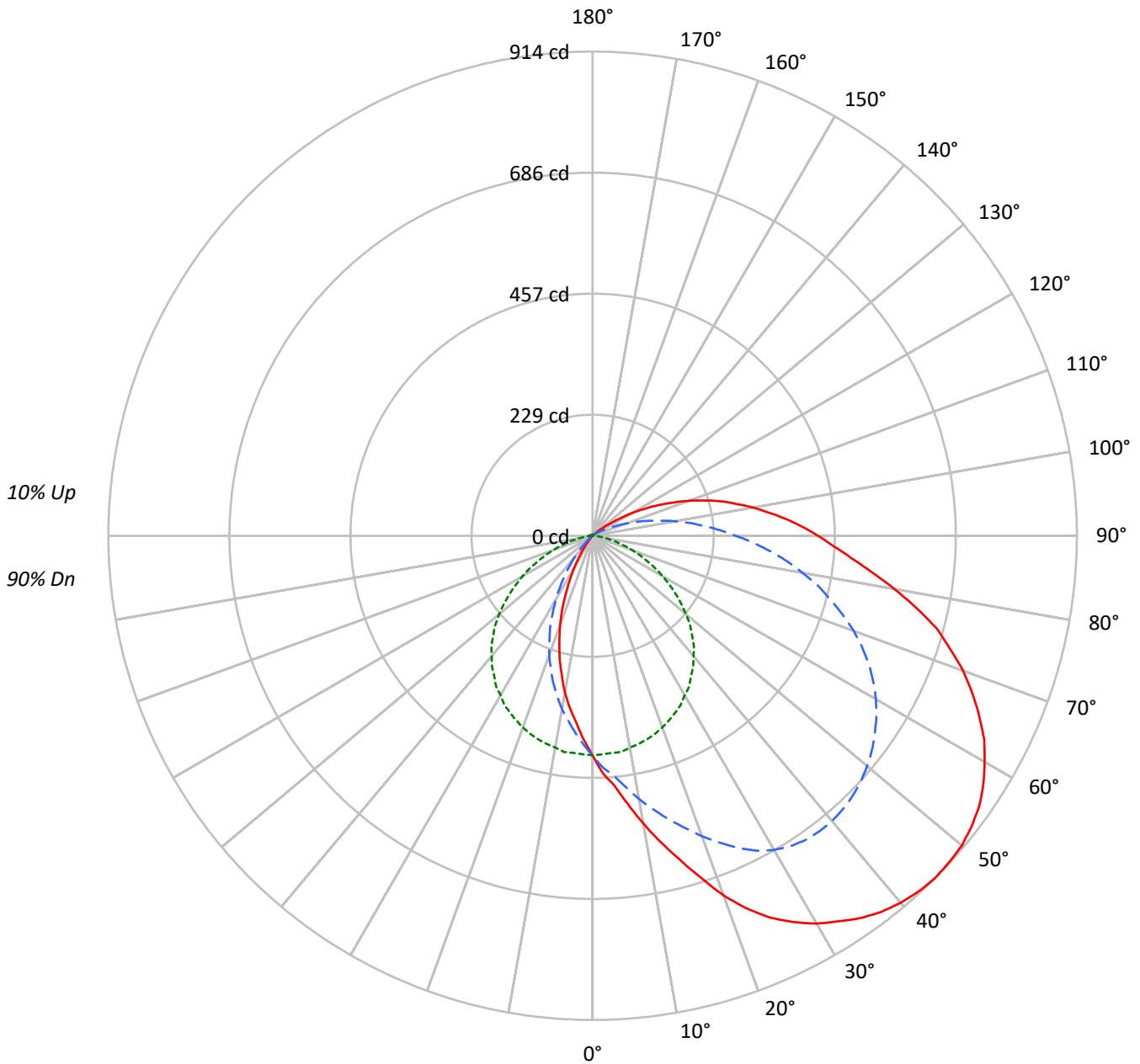
Lumens per Lamp: N/A
Luminaire Lumens: 2049.0 lumens
Efficiency: N/A
Efficacy: 87.2 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

Input Watts (W): 23.5
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: P551648

CATALOG NUMBER: FCC-X-2-LD4-2LO-50-UNV-80-88-ED1D

Luminous Intensity Polar Plot





TEST NUMBER: P551648

CATALOG NUMBER: FCC-X-2-LD4-2LO-50-UNV-80-88-ED1D

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°	4462	4462	4462
5°	4898	4396	3668
10°	5542	4342	3022
15°	6211	4287	2356
20°	7005	4217	1735
25°	7663	4135	1139
30°	8153	4027	641
35°	8577	3911	282
40°	8952	3767	68
45°	9275	3586	0
50°	9546	3348	0
55°	9752	3043	0
60°	9856	2692	0
65°	9897	2290	0
70°	9863	1867	0
75°	9738	1378	7
80°	9343	842	42
85°	9030	402	59



TEST NUMBER: P551648

CATALOG NUMBER: FCC-X-2-LD4-2LO-50-UNV-80-88-ED1D

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.7	1.9
10°-20°	118.9	5.8
20°-30°	192.5	9.4
30°-40°	247.3	12.1
40°-50°	279.9	13.7
50°-60°	290.0	14.2
60°-70°	273.5	13.3
70°-80°	229.2	11.2
80°-90°	166.1	8.1
90°-100°	109.2	5.3
100°-110°	63.1	3.1
110°-120°	27.8	1.4
120°-130°	7.5	0.4
130°-140°	1.7	0.1
140°-150°	1.1	0.1
150°-160°	0.8	0.0
160°-170°	0.5	0.0
170°-180°	0.2	0.0
0°-30°	351.1	17.1
0°-40°	598.3	29.2
0°-60°	1168.3	57.0
0°-90°	1837.1	89.7
90°-120°	200.1	9.8
90°-150°	210.5	10.3
90°-180°	212.0	10.3
0°-180°	2049.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	414	414	414	414	414	
5°	473	454	411	373	354	48
15°	632	554	398	287	240	182
25°	796	650	368	189	118	368
35°	881	701	324	92	29	553
45°	914	694	265	21	0	706
55°	891	650	191	0	0	795
65°	805	576	114	0	0	797
75°	671	464	49	0	0	704
85°	491	337	8	2	3	419
90°	426	270	2	3	4	233
95°	365	211	1	4	5	287
105°	251	109	1	3	4	265
115°	137	36	2	2	3	137
125°	41	5	2	2	2	41
135°	2	2	3	2	2	4
145°	0	2	2	2	2	0
155°	1	2	2	2	0	0
165°	1	2	2	2	0	0
175°	1	2	3	2	0	0
180°	2	2	2	2	2	



TEST NUMBER: P551648

CATALOG NUMBER: FCC-X-2-LD4-2LO-50-UNV-80-88-ED1D

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
0°	414.5	414.5	414.5	414.5	414.5	414.5	414.5	414.5	414.5	414.5	414.5
2.5°	449.3	448.8	447.2	444.6	440.9	434.5	429.2	424.5	418.2	412.9	402.8
5°	473.1	470.4	468.3	465.7	457.2	451.4	441.9	431.4	421.3	411.3	391.2
7.5°	511.1	506.9	503.7	496.3	484.7	471.5	456.7	446.7	439.8	411.8	377.5
10°	551.7	548.0	541.7	528.5	514.3	495.2	474.1	450.4	429.2	406.0	365.4
12.5°	591.9	586.6	577.6	560.7	540.7	516.9	487.9	459.9	429.8	402.3	351.1
15°	632.0	626.2	616.7	596.1	569.7	538.5	503.2	467.8	432.4	397.6	336.3
17.5°	675.8	667.9	653.6	630.4	597.1	558.6	516.9	474.1	431.4	391.8	320.5
20°	722.8	711.7	696.4	665.3	626.2	580.8	530.6	480.5	430.8	384.9	302.5
22.5°	761.9	750.8	733.9	701.7	654.7	599.3	542.2	484.7	428.7	377.0	285.6
25°	795.7	786.7	768.2	731.3	681.6	618.8	553.3	487.9	425.6	368.5	267.7
27.5°	822.1	813.6	793.0	755.0	704.3	636.2	561.8	489.4	421.3	360.1	249.2
30°	845.3	836.8	812.0	773.0	719.6	649.9	570.2	490.0	416.0	347.4	229.1
32.5°	863.2	855.3	830.0	788.3	730.2	659.4	575.0	489.4	409.2	338.4	207.5
35°	881.2	873.3	843.7	799.4	738.1	663.7	578.7	486.8	400.7	323.7	186.9
37.5°	894.9	885.9	855.9	806.8	741.8	664.7	578.1	483.1	391.8	311.5	166.3
40°	904.4	894.9	862.7	811.0	742.9	663.1	573.9	476.8	381.2	296.2	144.7
42.5°	910.8	900.2	865.9	817.3	740.8	658.9	567.6	468.8	369.6	283.0	124.1
45°	913.9	902.8	866.4	812.0	737.1	651.0	558.1	458.8	356.9	265.0	103.5
47.5°	912.3	900.2	863.8	806.2	730.2	642.6	547.5	446.7	341.6	249.2	83.9
50°	909.7	897.0	858.0	798.8	720.7	632.0	535.9	431.9	325.8	229.7	66.5
52.5°	901.3	888.6	851.6	788.3	709.6	619.8	520.1	416.6	308.9	210.7	50.7
55°	890.7	879.1	840.5	778.8	695.3	605.1	505.3	400.2	292.5	191.1	36.4
57.5°	874.3	863.8	826.8	763.5	681.1	588.7	488.9	382.3	271.9	171.6	25.3
60°	854.3	843.7	807.8	746.0	664.7	570.2	471.0	363.8	253.4	152.1	15.8
62.5°	833.2	823.1	785.6	724.4	644.1	550.7	451.4	345.3	233.9	134.1	9.5
65°	805.2	795.7	761.9	698.5	621.4	529.6	429.8	323.1	213.8	114.0	5.3
67.5°	775.6	767.2	732.8	674.8	595.0	506.3	407.6	301.5	192.7	96.6	2.6
70°	743.9	733.4	701.7	642.6	568.1	479.9	383.3	279.3	172.6	79.7	0.0
72.5°	707.0	699.0	668.4	612.5	537.0	452.0	358.5	255.0	150.5	63.4	0.5
75°	671.1	661.0	633.0	580.2	506.3	422.4	331.0	232.3	128.8	48.6	0.5
77.5°	624.6	621.4	595.0	543.8	477.3	393.9	300.9	204.9	108.2	34.8	0.5
80°	578.1	575.0	554.4	507.4	443.5	360.1	273.0	179.0	88.2	23.2	0.5
82.5°	532.2	528.0	508.4	469.4	409.2	331.6	243.9	153.1	69.7	14.3	0.5
85°	491.0	485.7	464.6	428.7	373.8	299.4	213.8	127.8	51.7	7.9	1.1
87.5°	455.6	452.0	428.7	391.8	337.9	269.3	187.4	103.5	36.4	3.7	1.6
90°	425.6	417.6	397.0	358.0	304.1	236.0	159.4	82.9	24.3	2.1	2.1
92.5°	396.0	389.1	366.4	326.3	274.0	207.5	132.5	63.4	15.3	1.1	2.6
95°	365.4	358.0	335.8	298.8	243.4	178.5	108.8	46.5	8.4	1.1	2.6
97.5°	335.3	328.4	305.2	268.2	215.9	153.1	86.1	32.7	4.2	1.1	2.1
100°	307.3	299.4	278.2	241.3	188.5	127.8	66.5	21.1	2.6	1.1	2.1
102.5°	277.7	271.4	249.7	213.8	160.0	104.0	49.6	13.2	1.1	1.1	1.6
105°	251.3	243.4	222.3	185.3	136.2	81.8	34.8	7.9	1.1	1.1	1.6



TEST NUMBER: P551648

CATALOG NUMBER: FCC-X-2-LD4-2LO-50-UNV-80-88-ED1D

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	163.7	157.3	138.9	107.7	69.2	32.2	9.5	1.6	1.6	1.6	1.6
115°	136.7	127.2	110.9	83.4	51.2	21.1	4.8	1.6	1.6	1.6	1.6
117.5°	109.3	101.4	89.8	63.4	33.8	13.7	2.6	1.6	1.6	1.6	1.6
120°	85.5	78.1	64.9	43.8	22.7	7.9	1.1	1.6	1.6	1.6	1.6
122.5°	61.2	55.4	43.8	28.5	13.7	3.7	1.6	1.6	2.1	2.1	1.6
125°	40.7	37.5	29.0	17.4	8.4	1.6	1.6	1.6	2.1	2.1	1.6
127.5°	26.4	23.8	16.9	10.0	3.7	1.6	1.6	2.1	2.1	2.1	1.6
130°	14.8	13.2	10.0	5.8	1.6	1.6	1.6	2.1	2.1	2.1	1.6
132.5°	8.4	7.9	5.3	1.1	1.6	1.6	1.6	2.1	2.1	2.1	2.1
135°	2.1	1.1	1.1	1.1	1.6	1.6	2.1	2.1	2.6	2.6	2.1
137.5°	0.5	0.5	1.1	1.1	1.6	1.6	2.1	2.6	2.6	2.6	2.1
140°	0.5	0.5	1.1	1.6	1.6	1.6	2.1	2.6	2.6	2.6	2.1
142.5°	0.5	1.1	1.1	1.6	1.6	2.1	2.1	2.6	2.6	2.1	2.1
145°	0.5	1.1	1.1	1.6	1.6	2.1	2.1	2.6	2.1	2.1	2.1
147.5°	1.1	1.1	1.1	1.6	1.6	2.1	2.1	2.6	2.6	2.1	2.1
150°	0.5	1.1	1.1	1.6	2.1	2.1	2.1	2.6	2.1	2.1	2.1
152.5°	0.5	1.1	1.1	1.6	2.1	2.1	2.1	2.6	2.1	2.1	2.1
155°	1.1	1.1	1.1	1.6	2.1	2.1	2.1	2.6	2.1	2.1	2.6
157.5°	1.1	1.1	1.1	1.6	2.1	2.1	2.1	2.6	2.1	2.1	2.6
160°	1.1	1.1	1.1	1.6	1.6	2.1	2.1	2.1	2.1	2.1	2.1
162.5°	1.1	1.1	1.1	1.6	1.6	2.1	2.1	2.1	2.1	2.1	2.1
165°	1.1	1.1	1.1	1.1	1.6	1.6	2.1	2.1	2.1	2.1	2.1
167.5°	1.1	1.1	1.1	1.6	1.6	1.6	2.1	2.1	2.1	2.1	2.1
170°	1.1	1.1	1.1	1.6	1.6	1.6	2.1	2.6	2.6	2.6	2.6
172.5°	1.1	1.1	1.1	1.6	1.6	2.1	2.1	2.6	2.6	2.6	2.6
175°	1.1	1.1	1.1	1.6	1.6	2.1	2.1	2.6	2.6	2.6	2.6
177.5°	0.5	1.1	1.1	1.6	1.6	2.1	2.1	2.6	2.6	2.6	2.1
180°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6



TEST NUMBER: P551648

CATALOG NUMBER: FCC-X-2-LD4-2LO-50-UNV-80-88-ED1D

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	414.5	414.5	414.5
2.5°	394.4	387.0	384.9
5°	373.3	361.1	354.3
7.5°	352.2	335.8	327.9
10°	332.6	309.4	300.9
12.5°	309.4	282.5	269.3
15°	287.2	252.4	239.7
17.5°	262.4	223.3	208.6
20°	239.2	194.3	179.0
22.5°	212.8	165.8	148.9
25°	189.0	137.3	118.3
27.5°	162.6	108.2	91.9
30°	137.8	82.9	66.5
32.5°	114.0	60.7	45.9
35°	91.9	41.2	29.0
37.5°	70.7	25.3	14.8
40°	51.2	13.2	6.9
42.5°	34.3	6.3	3.7
45°	21.1	3.2	0.0
47.5°	12.1	0.0	0.0
50°	6.3	0.0	0.0
52.5°	2.6	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°	0.5	0.5	0.5
77.5°	0.5	1.1	1.6
80°	1.1	2.1	2.6
82.5°	2.1	2.6	2.6
85°	2.1	2.6	3.2
87.5°	2.6	3.2	3.7
90°	3.2	3.7	3.7
92.5°	3.2	4.2	4.2
95°	3.7	4.2	4.8
97.5°	4.2	4.8	4.8
100°	3.7	4.8	5.3
102.5°	3.2	4.8	4.8
105°	2.6	3.7	4.2



TEST NUMBER: P551648

CATALOG NUMBER: FCC-X-2-LD4-2LO-50-UNV-80-88-ED1D

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	2.1	2.6	2.6
115°	1.6	2.1	2.6
117.5°	1.6	2.1	2.1
120°	1.6	1.6	2.1
122.5°	1.6	1.6	2.1
125°	1.6	1.6	2.1
127.5°	2.1	1.6	1.6
130°	1.6	1.6	1.6
132.5°	2.1	1.6	1.6
135°	2.1	1.6	1.6
137.5°	2.1	1.6	1.6
140°	2.1	1.6	1.6
142.5°	2.1	1.6	1.6
145°	1.6	1.6	1.6
147.5°	1.6	1.6	1.6
150°	1.6	1.6	1.1
152.5°	1.6	1.1	1.1
155°	1.6	1.1	0.5
157.5°	2.1	1.1	0.5
160°	1.6	1.1	0.5
162.5°	1.6	1.1	0.5
165°	1.6	1.1	0.0
167.5°	1.6	1.1	0.5
170°	1.6	1.1	0.5
172.5°	1.6	1.1	0.5
175°	1.6	0.5	0.5
177.5°	1.6	0.5	0.5
180°	1.6	1.6	1.6



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	221.8	215.4	194.3	159.4	111.4	62.3	23.2	4.2	1.1	1.6	1.6
110°	193.2	188.0	166.3	132.5	89.8	46.5	15.3	2.6	1.6	1.6	1.6





107.5°	2.1	3.2	3.7
110°	2.1	2.6	3.2



(END OF REPORT)