

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: P551674

Luminaire Tested: **FCC-X-2-LD4-2LO-50-UNV-82-85-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: P551674
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-82-85-ED1D
Description: FCC CORNER MOUNT LUMINAIRE WITH .187 CLEAR PC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 5000K, AND 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

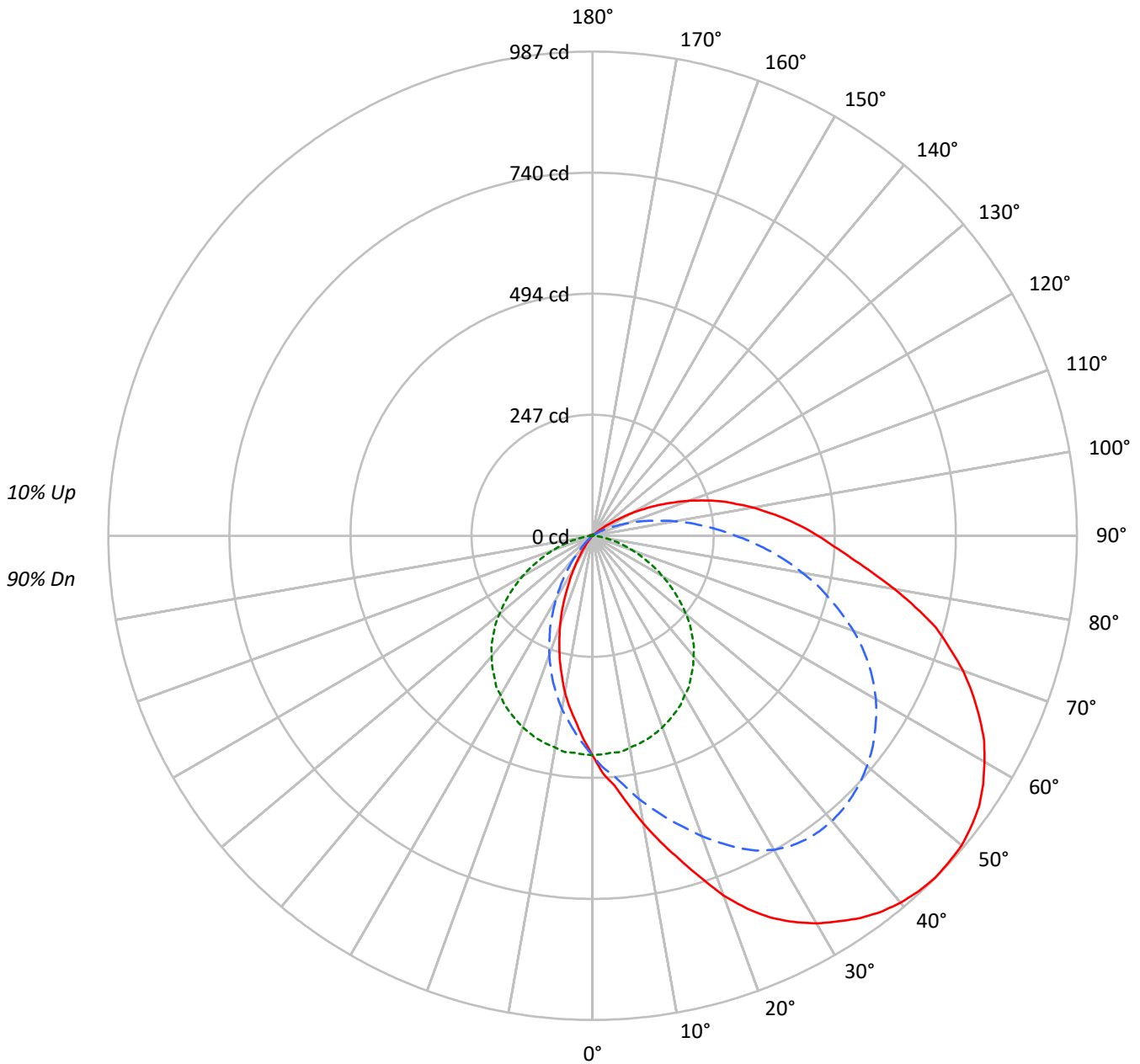
Lumens per Lamp: N/A
Luminaire Lumens: 2212.0 lumens
Efficiency: N/A
Efficacy: 94.1 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

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: P551674

CATALOG NUMBER: FCC-X-2-LD4-2LO-50-UNV-82-85-ED1D

Luminous Intensity Polar Plot





TEST NUMBER: P551674

CATALOG NUMBER: FCC-X-2-LD4-2LO-50-UNV-82-85-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°	4816	4816	4816
5°	5287	4746	3960
10°	5982	4687	3263
15°	6705	4628	2543
20°	7562	4552	1872
25°	8273	4464	1230
30°	8801	4347	693
35°	9259	4222	305
40°	9665	4067	73
45°	10012	3871	0
50°	10305	3613	0
55°	10528	3285	0
60°	10639	2906	0
65°	10683	2473	0
70°	10648	2017	0
75°	10512	1486	9
80°	10086	910	45
85°	9750	432	63



TEST NUMBER: P551674

CATALOG NUMBER: FCC-X-2-LD4-2LO-50-UNV-82-85-ED1D

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	42.9	1.9
10°-20°	128.3	5.8
20°-30°	207.8	9.4
30°-40°	267.0	12.1
40°-50°	302.2	13.7
50°-60°	313.1	14.2
60°-70°	295.3	13.3
70°-80°	247.4	11.2
80°-90°	179.3	8.1
90°-100°	117.9	5.3
100°-110°	68.1	3.1
110°-120°	30.0	1.4
120°-130°	8.1	0.4
130°-140°	1.9	0.1
140°-150°	1.2	0.1
150°-160°	0.9	0.0
160°-170°	0.5	0.0
170°-180°	0.2	0.0
0°-30°	379.0	17.1
0°-40°	646.0	29.2
0°-60°	1261.2	57.0
0°-90°	1983.2	89.7
90°-120°	216.0	9.8
90°-150°	227.2	10.3
90°-180°	229.0	10.4
0°-180°	2212.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	447	447	447	447	447	
5°	511	490	444	403	382	51
15°	682	598	429	310	259	197
25°	859	702	398	204	128	397
35°	951	757	349	99	31	597
45°	987	749	286	23	0	762
55°	962	702	206	0	0	859
65°	869	621	123	0	0	860
75°	724	501	52	1	1	760
85°	530	363	8	2	3	453
90°	459	292	2	3	4	252
95°	394	228	1	4	5	309
105°	271	118	1	3	5	286
115°	148	39	2	2	3	148
125°	44	5	2	2	2	44
135°	2	2	3	2	2	4
145°	1	2	2	2	2	0
155°	1	2	2	2	1	0
165°	1	2	2	2	0	0
175°	1	2	3	2	1	0
180°	2	2	2	2	2	



TEST NUMBER: P551674

CATALOG NUMBER: FCC-X-2-LD4-2LO-50-UNV-82-85-ED1D

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
0°	447.4	447.4	447.4	447.4	447.4	447.4	447.4	447.4	447.4	447.4	447.4
2.5°	485.1	484.5	482.8	479.9	475.9	469.1	463.4	458.3	451.4	445.7	434.9
5°	510.7	507.9	505.6	502.7	493.6	487.3	477.1	465.7	454.8	444.0	422.4
7.5°	551.7	547.2	543.8	535.8	523.2	509.0	493.0	482.2	474.8	444.6	407.5
10°	595.6	591.6	584.8	570.6	555.2	534.6	511.8	486.2	463.4	438.3	394.4
12.5°	638.9	633.2	623.6	605.3	583.7	558.0	526.7	496.5	464.0	434.3	379.0
15°	682.3	676.0	665.7	643.5	615.0	581.4	543.2	505.0	466.8	429.2	363.1
17.5°	729.6	721.0	705.6	680.6	644.6	603.0	558.0	511.8	465.7	422.9	346.0
20°	780.3	768.3	751.8	718.2	676.0	627.0	572.8	518.7	465.1	415.5	326.6
22.5°	822.5	810.5	792.3	757.5	706.8	646.9	585.4	523.2	462.8	407.0	308.4
25°	859.0	849.3	829.3	789.4	735.8	668.0	597.3	526.7	459.4	397.8	289.0
27.5°	887.5	878.3	856.1	815.1	760.4	686.8	606.5	528.4	454.8	388.7	269.0
30°	912.5	903.4	876.6	834.5	776.9	701.6	615.6	528.9	449.1	375.0	247.4
32.5°	931.9	923.4	896.0	851.0	788.3	711.9	620.7	528.4	441.7	365.4	224.0
35°	951.3	942.7	910.8	863.0	796.8	716.5	624.7	525.5	432.6	349.4	201.8
37.5°	966.1	956.4	923.9	870.9	800.8	717.6	624.1	521.5	422.9	336.3	179.5
40°	976.4	966.1	931.3	875.5	802.0	715.9	619.6	514.7	411.5	319.8	156.2
42.5°	983.2	971.8	934.8	882.3	799.7	711.3	612.7	506.1	399.0	305.5	133.9
45°	986.6	974.7	935.3	876.6	795.7	702.8	602.5	495.3	385.3	286.1	111.7
47.5°	984.9	971.8	932.5	870.4	788.3	693.7	591.1	482.2	368.8	269.0	90.6
50°	982.1	968.4	926.2	862.4	778.0	682.3	578.5	466.2	351.7	247.9	71.8
52.5°	973.0	959.3	919.4	851.0	766.1	669.2	561.4	449.7	333.4	227.4	54.7
55°	961.6	949.0	907.4	840.7	750.7	653.2	545.5	432.0	315.8	206.3	39.3
57.5°	943.9	932.5	892.6	824.2	735.3	635.5	527.8	412.7	293.5	185.2	27.4
60°	922.2	910.8	872.1	805.4	717.6	615.6	508.4	392.7	273.6	164.2	17.1
62.5°	899.4	888.6	848.1	782.0	695.4	594.5	487.3	372.8	252.5	144.8	10.3
65°	869.2	859.0	822.5	754.1	670.9	571.7	464.0	348.8	230.8	123.1	5.7
67.5°	837.3	828.2	791.1	728.4	642.4	546.6	440.0	325.5	208.0	104.3	2.8
70°	803.1	791.7	757.5	693.7	613.3	518.1	413.8	301.5	186.4	86.1	0.0
72.5°	763.2	754.7	721.6	661.2	579.7	487.9	387.0	275.3	162.4	68.4	0.6
75°	724.4	713.6	683.4	626.4	546.6	456.0	357.4	250.8	139.1	52.4	0.6
77.5°	674.3	670.9	642.4	587.1	515.3	425.2	324.9	221.2	116.8	37.6	0.6
80°	624.1	620.7	598.5	547.8	478.8	388.7	294.7	193.2	95.2	25.1	0.6
82.5°	574.5	570.0	548.9	506.7	441.7	357.9	263.3	165.3	75.2	15.4	0.6
85°	530.1	524.4	501.6	462.8	403.5	323.2	230.8	137.9	55.9	8.5	1.1
87.5°	491.9	487.9	462.8	422.9	364.8	290.7	202.3	111.7	39.3	4.0	1.7
90°	459.4	450.9	428.6	386.4	328.3	254.8	172.1	89.5	26.2	2.3	2.3
92.5°	427.5	420.1	395.6	352.2	295.8	224.0	143.1	68.4	16.5	1.1	2.8
95°	394.4	386.4	362.5	322.6	262.8	192.7	117.4	50.2	9.1	1.1	2.8
97.5°	361.9	354.5	329.4	289.5	233.1	165.3	92.9	35.3	4.6	1.1	2.3
100°	331.7	323.2	300.4	260.5	203.5	137.9	71.8	22.8	2.8	1.1	2.3
102.5°	299.8	293.0	269.6	230.8	172.7	112.3	53.6	14.2	1.1	1.1	1.7
105°	271.3	262.8	240.0	200.1	147.1	88.3	37.6	8.5	1.1	1.1	1.7



TEST NUMBER: P551674

CATALOG NUMBER: FCC-X-2-LD4-2LO-50-UNV-82-85-ED1D

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	176.7	169.9	149.9	116.3	74.7	34.8	10.3	1.7	1.7	1.7	1.7
115°	147.6	137.4	119.7	90.1	55.3	22.8	5.1	1.7	1.7	1.7	1.7
117.5°	118.0	109.4	96.9	68.4	36.5	14.8	2.8	1.7	1.7	1.7	1.7
120°	92.3	84.4	70.1	47.3	24.5	8.5	1.1	1.7	1.7	1.7	1.7
122.5°	66.1	59.8	47.3	30.8	14.8	4.0	1.7	1.7	2.3	2.3	1.7
125°	43.9	40.5	31.3	18.8	9.1	1.7	1.7	1.7	2.3	2.3	1.7
127.5°	28.5	25.6	18.2	10.8	4.0	1.7	1.7	2.3	2.3	2.3	1.7
130°	16.0	14.2	10.8	6.3	1.7	1.7	1.7	2.3	2.3	2.3	1.7
132.5°	9.1	8.5	5.7	1.1	1.7	1.7	1.7	2.3	2.3	2.3	2.3
135°	2.3	1.1	1.1	1.1	1.7	1.7	2.3	2.3	2.8	2.8	2.3
137.5°	0.6	0.6	1.1	1.1	1.7	1.7	2.3	2.8	2.8	2.8	2.3
140°	0.6	0.6	1.1	1.7	1.7	1.7	2.3	2.8	2.8	2.8	2.3
142.5°	0.6	1.1	1.1	1.7	1.7	2.3	2.3	2.8	2.8	2.3	2.3
145°	0.6	1.1	1.1	1.7	1.7	2.3	2.3	2.8	2.3	2.3	2.3
147.5°	1.1	1.1	1.1	1.7	1.7	2.3	2.3	2.8	2.8	2.3	2.3
150°	0.6	1.1	1.1	1.7	2.3	2.3	2.3	2.8	2.3	2.3	2.3
152.5°	0.6	1.1	1.1	1.7	2.3	2.3	2.3	2.8	2.3	2.3	2.3
155°	1.1	1.1	1.1	1.7	2.3	2.3	2.3	2.8	2.3	2.3	2.8
157.5°	1.1	1.1	1.1	1.7	2.3	2.3	2.3	2.8	2.3	2.3	2.8
160°	1.1	1.1	1.1	1.7	1.7	2.3	2.3	2.3	2.3	2.3	2.3
162.5°	1.1	1.1	1.1	1.7	1.7	2.3	2.3	2.3	2.3	2.3	2.3
165°	1.1	1.1	1.1	1.1	1.7	1.7	2.3	2.3	2.3	2.3	2.3
167.5°	1.1	1.1	1.1	1.7	1.7	1.7	2.3	2.3	2.3	2.3	2.3
170°	1.1	1.1	1.1	1.7	1.7	1.7	2.3	2.8	2.8	2.8	2.8
172.5°	1.1	1.1	1.1	1.7	1.7	2.3	2.3	2.8	2.8	2.8	2.8
175°	1.1	1.1	1.1	1.7	1.7	2.3	2.3	2.8	2.8	2.8	2.8
177.5°	0.6	1.1	1.1	1.7	1.7	2.3	2.3	2.8	2.8	2.8	2.3
180°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7



TEST NUMBER: P551674

CATALOG NUMBER: FCC-X-2-LD4-2LO-50-UNV-82-85-ED1D

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	447.4	447.4	447.4
2.5°	425.8	417.8	415.5
5°	403.0	389.9	382.5
7.5°	380.2	362.5	354.0
10°	359.1	334.0	324.9
12.5°	334.0	304.9	290.7
15°	310.1	272.5	258.8
17.5°	283.3	241.1	225.1
20°	258.2	209.8	193.2
22.5°	229.7	179.0	160.7
25°	204.1	148.2	127.7
27.5°	175.6	116.8	99.2
30°	148.8	89.5	71.8
32.5°	123.1	65.5	49.6
35°	99.2	44.5	31.3
37.5°	76.4	27.4	16.0
40°	55.3	14.2	7.4
42.5°	37.0	6.8	4.0
45°	22.8	3.4	0.0
47.5°	13.1	0.0	0.0
50°	6.8	0.0	0.0
52.5°	2.8	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°	0.6	0.6	0.6
77.5°	0.6	1.1	1.7
80°	1.1	2.3	2.8
82.5°	2.3	2.8	2.8
85°	2.3	2.8	3.4
87.5°	2.8	3.4	4.0
90°	3.4	4.0	4.0
92.5°	3.4	4.6	4.6
95°	4.0	4.6	5.1
97.5°	4.6	5.1	5.1
100°	4.0	5.1	5.7
102.5°	3.4	5.1	5.1
105°	2.8	4.0	4.6



TEST NUMBER: P551674

CATALOG NUMBER: FCC-X-2-LD4-2LO-50-UNV-82-85-ED1D

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	2.3	2.8	2.8
115°	1.7	2.3	2.8
117.5°	1.7	2.3	2.3
120°	1.7	1.7	2.3
122.5°	1.7	1.7	2.3
125°	1.7	1.7	2.3
127.5°	2.3	1.7	1.7
130°	1.7	1.7	1.7
132.5°	2.3	1.7	1.7
135°	2.3	1.7	1.7
137.5°	2.3	1.7	1.7
140°	2.3	1.7	1.7
142.5°	2.3	1.7	1.7
145°	1.7	1.7	1.7
147.5°	1.7	1.7	1.7
150°	1.7	1.7	1.1
152.5°	1.7	1.1	1.1
155°	1.7	1.1	0.6
157.5°	2.3	1.1	0.6
160°	1.7	1.1	0.6
162.5°	1.7	1.1	0.6
165°	1.7	1.1	0.0
167.5°	1.7	1.1	0.6
170°	1.7	1.1	0.6
172.5°	1.7	1.1	0.6
175°	1.7	0.6	0.6
177.5°	1.7	0.6	0.6
180°	1.7	1.7	1.7



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	239.4	232.6	209.8	172.1	120.3	67.3	25.1	4.6	1.1	1.7	1.7
110°	208.6	202.9	179.5	143.1	96.9	50.2	16.5	2.8	1.7	1.7	1.7





107.5°	2.3	3.4	4.0
110°	2.3	2.8	3.4



(END OF REPORT)