

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: P551656

Luminaire Tested: **FCC-X-2-LD4-2LO-50-UNV-81-84-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: P551656
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-81-84-ED1D
Description: FCC CORNER MOUNT LUMINAIRE WITH .156 CLEAR PC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 5000K, AND 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

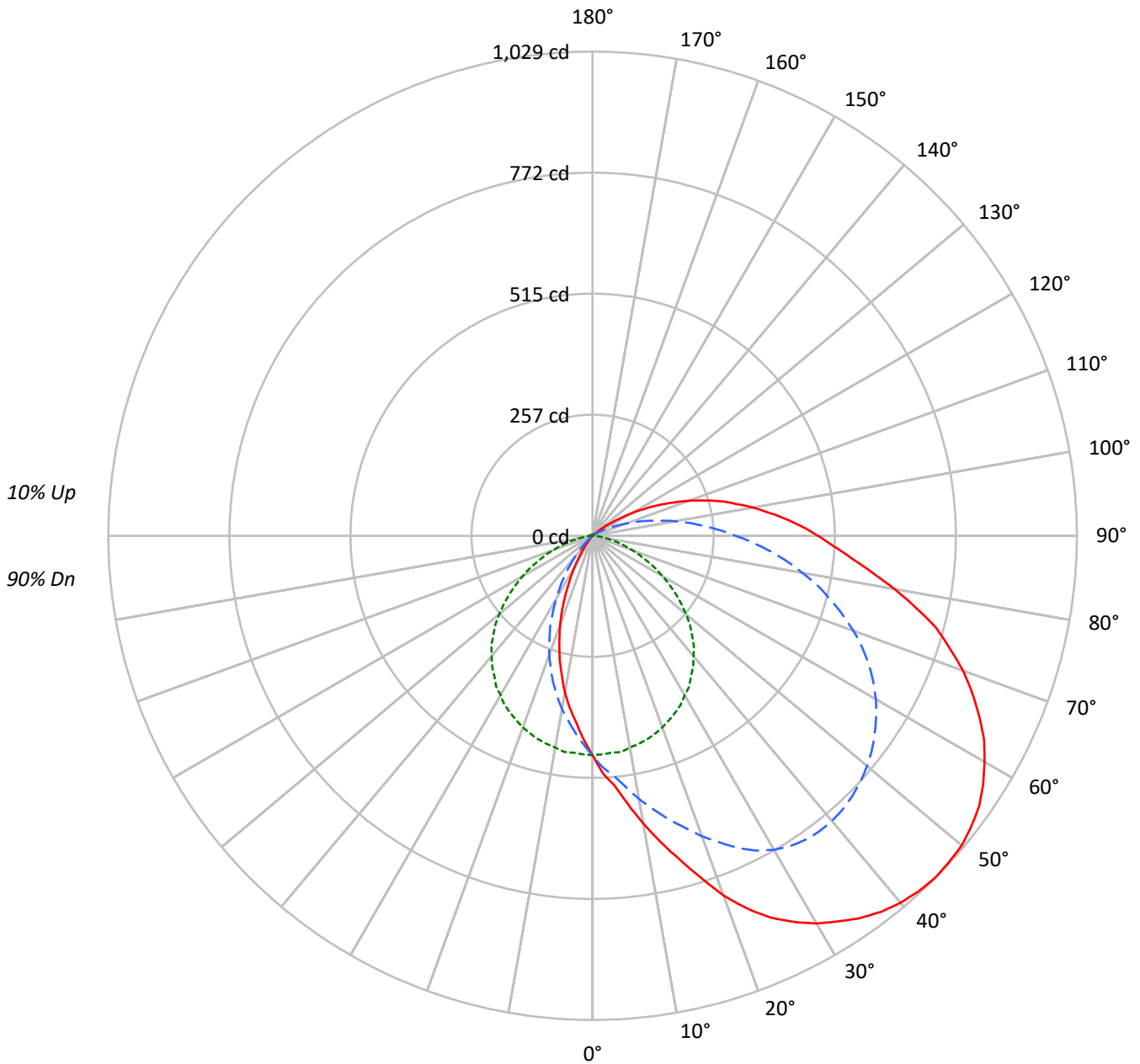
Lumens per Lamp: N/A
Luminaire Lumens: 2306.1 lumens
Efficiency: N/A
Efficacy: 98.1 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

Input Watts (W): 23.5
Input Voltage (V): NR
Input Current (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: P551656

CATALOG NUMBER: FCC-X-2-LD4-2LO-50-UNV-81-84-ED1D

Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20				20
RC	80				70				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	93	93	93	90
1	103	96	91	86	99	93	88	83	87	83	79	81	78	74	76	73	70	70	70	70	67
2	92	82	74	67	88	79	72	65	74	67	62	69	64	59	64	60	56	56	56	56	53
3	83	71	61	54	79	68	60	53	64	56	50	59	53	48	55	50	46	46	46	46	43
4	75	62	52	44	72	60	51	44	56	48	42	52	45	40	49	43	38	38	38	38	36
5	69	55	45	38	66	53	44	37	50	42	35	46	39	34	43	38	33	33	33	33	30
6	63	49	39	32	61	47	38	32	44	36	31	42	35	29	39	33	28	28	28	28	26
7	58	44	35	28	56	43	34	28	40	32	27	38	31	26	36	29	25	25	25	25	23
8	54	40	31	25	52	39	30	24	37	29	24	34	28	23	32	26	22	22	22	22	20
9	51	36	28	22	49	35	27	22	33	26	21	32	25	20	30	24	20	20	20	20	18
10	47	33	25	20	45	33	25	19	31	24	19	29	23	18	28	22	18	18	18	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	5020	5020	5020
5°	5512	4948	4127
10°	6237	4886	3402
15°	6990	4824	2651
20°	7884	4746	1952
25°	8625	4655	1282
30°	9175	4533	722
35°	9652	4401	318
40°	10076	4239	76
45°	10439	4036	0
50°	10743	3768	0
55°	10975	3425	0
60°	11091	3028	0
65°	11138	2577	0
70°	11100	2101	0
75°	10959	1551	9
80°	10516	947	48
85°	10163	453	66



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.7	1.9
10°-20°	133.8	5.8
20°-30°	216.6	9.4
30°-40°	278.3	12.1
40°-50°	315.0	13.7
50°-60°	326.4	14.2
60°-70°	307.8	13.3
70°-80°	257.9	11.2
80°-90°	187.0	8.1
90°-100°	122.9	5.3
100°-110°	71.0	3.1
110°-120°	31.3	1.4
120°-130°	8.5	0.4
130°-140°	2.0	0.1
140°-150°	1.3	0.1
150°-160°	0.9	0.0
160°-170°	0.5	0.0
170°-180°	0.2	0.0
0°-30°	395.1	17.1
0°-40°	673.4	29.2
0°-60°	1314.8	57.0
0°-90°	2067.5	89.7
90°-120°	225.2	9.8
90°-150°	236.9	10.3
90°-180°	239.0	10.4
0°-180°	2306.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	466	466	466	466	466	
5°	532	511	463	420	399	54
15°	711	624	447	323	270	205
25°	896	732	415	213	133	414
35°	992	789	364	103	33	622
45°	1029	781	298	24	0	794
55°	1002	732	215	0	0	895
65°	906	648	128	0	0	897
75°	755	523	55	1	1	792
85°	553	379	9	2	4	472
90°	479	304	2	4	4	263
95°	411	237	1	4	5	323
105°	283	123	1	3	5	298
115°	154	41	2	2	3	154
125°	46	6	2	2	2	46
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	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
0°	466.4	466.4	466.4	466.4	466.4	466.4	466.4	466.4	466.4	466.4	466.4
2.5°	505.7	505.1	503.3	500.3	496.2	489.0	483.1	477.7	470.6	464.7	453.4
5°	532.4	529.4	527.1	524.1	514.6	508.0	497.3	485.5	474.2	462.9	440.3
7.5°	575.2	570.4	566.9	558.5	545.5	530.6	514.0	502.7	495.0	463.5	424.9
10°	620.9	616.8	609.7	594.8	578.8	557.4	533.6	506.9	483.1	456.9	411.2
12.5°	666.1	660.2	650.1	631.0	608.5	581.7	549.0	517.5	483.7	452.8	395.1
15°	711.3	704.7	694.0	670.9	641.1	606.1	566.3	526.5	486.7	447.4	378.5
17.5°	760.6	751.7	735.6	709.5	672.0	628.7	581.7	533.6	485.5	440.9	360.7
20°	813.5	801.0	783.8	748.7	704.7	653.6	597.2	540.7	484.9	433.2	340.5
22.5°	857.4	845.0	825.9	789.7	736.8	674.4	610.2	545.5	482.5	424.3	321.5
25°	895.5	885.4	864.6	823.0	767.1	696.4	622.7	549.0	478.9	414.8	301.3
27.5°	925.2	915.7	892.5	849.7	792.7	716.0	632.2	550.8	474.2	405.2	280.5
30°	951.3	941.8	913.9	869.9	809.9	731.5	641.7	551.4	468.2	391.0	257.9
32.5°	971.5	962.6	934.1	887.1	821.8	742.2	647.1	550.8	460.5	380.9	233.5
35°	991.7	982.8	949.5	899.6	830.7	746.9	651.2	547.9	451.0	364.2	210.3
37.5°	1007.2	997.1	963.2	907.9	834.9	748.1	650.7	543.7	440.9	350.6	187.2
40°	1017.9	1007.2	970.9	912.7	836.0	746.3	645.9	536.6	429.0	333.3	162.8
42.5°	1025.0	1013.1	974.5	919.8	833.7	741.6	638.8	527.7	415.9	318.5	139.6
45°	1028.6	1016.1	975.1	913.9	829.5	732.7	628.1	516.4	401.7	298.3	116.5
47.5°	1026.8	1013.1	972.1	907.3	821.8	723.1	616.2	502.7	384.4	280.5	94.5
50°	1023.8	1009.5	965.6	899.0	811.1	711.3	603.1	486.1	366.6	258.5	74.9
52.5°	1014.3	1000.0	958.4	887.1	798.6	697.6	585.3	468.8	347.6	237.1	57.0
55°	1002.4	989.3	946.0	876.4	782.6	681.0	568.7	450.4	329.2	215.1	41.0
57.5°	984.0	972.1	930.5	859.2	766.5	662.5	550.2	430.2	306.0	193.1	28.5
60°	961.4	949.5	909.1	839.6	748.1	641.7	530.0	409.4	285.2	171.1	17.8
62.5°	937.7	926.4	884.2	815.2	724.9	619.8	508.0	388.6	263.2	150.9	10.7
65°	906.2	895.5	857.4	786.1	699.4	596.0	483.7	363.7	240.7	128.3	5.9
67.5°	872.9	863.4	824.8	759.4	669.7	569.8	458.7	339.3	216.9	108.7	3.0
70°	837.2	825.3	789.7	723.1	639.4	540.1	431.4	314.3	194.3	89.7	0.0
72.5°	795.6	786.7	752.3	689.3	604.3	508.6	403.5	287.0	169.3	71.3	0.6
75°	755.2	743.9	712.4	653.0	569.8	475.4	372.6	261.4	145.0	54.7	0.6
77.5°	702.9	699.4	669.7	612.0	537.2	443.3	338.7	230.6	121.8	39.2	0.6
80°	650.7	647.1	623.9	571.0	499.1	405.2	307.2	201.4	99.2	26.1	0.6
82.5°	599.0	594.2	572.2	528.2	460.5	373.2	274.5	172.3	78.4	16.0	0.6
85°	552.6	546.7	522.9	482.5	420.7	336.9	240.7	143.8	58.2	8.9	1.2
87.5°	512.8	508.6	482.5	440.9	380.3	303.0	210.9	116.5	41.0	4.2	1.8
90°	478.9	470.0	446.8	402.9	342.3	265.6	179.4	93.3	27.3	2.4	2.4
92.5°	445.7	437.9	412.4	367.2	308.4	233.5	149.1	71.3	17.2	1.2	3.0
95°	411.2	402.9	377.9	336.3	273.9	200.8	122.4	52.3	9.5	1.2	3.0
97.5°	377.3	369.6	343.4	301.9	243.0	172.3	96.9	36.8	4.8	1.2	2.4
100°	345.8	336.9	313.1	271.6	212.1	143.8	74.9	23.8	3.0	1.2	2.4
102.5°	312.6	305.4	281.1	240.7	180.0	117.1	55.9	14.9	1.2	1.2	1.8
105°	282.8	273.9	250.2	208.6	153.3	92.1	39.2	8.9	1.2	1.2	1.8



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	184.2	177.1	156.3	121.2	77.8	36.2	10.7	1.8	1.8	1.8	1.8
115°	153.9	143.2	124.8	93.9	57.6	23.8	5.3	1.8	1.8	1.8	1.8
117.5°	123.0	114.1	101.0	71.3	38.0	15.4	3.0	1.8	1.8	1.8	1.8
120°	96.3	87.9	73.1	49.3	25.6	8.9	1.2	1.8	1.8	1.8	1.8
122.5°	68.9	62.4	49.3	32.1	15.4	4.2	1.8	1.8	2.4	2.4	1.8
125°	45.8	42.2	32.7	19.6	9.5	1.8	1.8	1.8	2.4	2.4	1.8
127.5°	29.7	26.7	19.0	11.3	4.2	1.8	1.8	2.4	2.4	2.4	1.8
130°	16.6	14.9	11.3	6.5	1.8	1.8	1.8	2.4	2.4	2.4	1.8
132.5°	9.5	8.9	5.9	1.2	1.8	1.8	1.8	2.4	2.4	2.4	2.4
135°	2.4	1.2	1.2	1.2	1.8	1.8	2.4	2.4	3.0	3.0	2.4
137.5°	0.6	0.6	1.2	1.2	1.8	1.8	2.4	3.0	3.0	3.0	2.4
140°	0.6	0.6	1.2	1.8	1.8	1.8	2.4	3.0	3.0	3.0	2.4
142.5°	0.6	1.2	1.2	1.8	1.8	2.4	2.4	3.0	3.0	2.4	2.4
145°	0.6	1.2	1.2	1.8	1.8	2.4	2.4	3.0	2.4	2.4	2.4
147.5°	1.2	1.2	1.2	1.8	1.8	2.4	2.4	3.0	3.0	2.4	2.4
150°	0.6	1.2	1.2	1.8	2.4	2.4	2.4	3.0	2.4	2.4	2.4
152.5°	0.6	1.2	1.2	1.8	2.4	2.4	2.4	3.0	2.4	2.4	2.4
155°	1.2	1.2	1.2	1.8	2.4	2.4	2.4	3.0	2.4	2.4	3.0
157.5°	1.2	1.2	1.2	1.8	2.4	2.4	2.4	3.0	2.4	2.4	3.0
160°	1.2	1.2	1.2	1.8	1.8	2.4	2.4	2.4	2.4	2.4	2.4
162.5°	1.2	1.2	1.2	1.8	1.8	2.4	2.4	2.4	2.4	2.4	2.4
165°	1.2	1.2	1.2	1.2	1.8	1.8	2.4	2.4	2.4	2.4	2.4
167.5°	1.2	1.2	1.2	1.8	1.8	1.8	2.4	2.4	2.4	2.4	2.4
170°	1.2	1.2	1.2	1.8	1.8	1.8	2.4	3.0	3.0	3.0	3.0
172.5°	1.2	1.2	1.2	1.8	1.8	2.4	2.4	3.0	3.0	3.0	3.0
175°	1.2	1.2	1.2	1.8	1.8	2.4	2.4	3.0	3.0	3.0	3.0
177.5°	0.6	1.2	1.2	1.8	1.8	2.4	2.4	3.0	3.0	3.0	2.4
180°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8



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CATALOG NUMBER: FCC-X-2-LD4-2LO-50-UNV-81-84-ED1D

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	466.4	466.4	466.4
2.5°	443.9	435.5	433.2
5°	420.1	406.4	398.7
7.5°	396.3	377.9	369.0
10°	374.3	348.2	338.7
12.5°	348.2	317.9	303.0
15°	323.2	284.0	269.8
17.5°	295.3	251.3	234.7
20°	269.2	218.7	201.4
22.5°	239.5	186.6	167.6
25°	212.7	154.5	133.1
27.5°	183.0	121.8	103.4
30°	155.1	93.3	74.9
32.5°	128.3	68.3	51.7
35°	103.4	46.3	32.7
37.5°	79.6	28.5	16.6
40°	57.6	14.9	7.7
42.5°	38.6	7.1	4.2
45°	23.8	3.6	0.0
47.5°	13.7	0.0	0.0
50°	7.1	0.0	0.0
52.5°	3.0	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	1.2	1.8
80°	1.2	2.4	3.0
82.5°	2.4	3.0	3.0
85°	2.4	3.0	3.6
87.5°	3.0	3.6	4.2
90°	3.6	4.2	4.2
92.5°	3.6	4.8	4.8
95°	4.2	4.8	5.3
97.5°	4.8	5.3	5.3
100°	4.2	5.3	5.9
102.5°	3.6	5.3	5.3
105°	3.0	4.2	4.8



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CATALOG NUMBER: FCC-X-2-LD4-2LO-50-UNV-81-84-ED1D

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	2.4	3.0	3.0
115°	1.8	2.4	3.0
117.5°	1.8	2.4	2.4
120°	1.8	1.8	2.4
122.5°	1.8	1.8	2.4
125°	1.8	1.8	2.4
127.5°	2.4	1.8	1.8
130°	1.8	1.8	1.8
132.5°	2.4	1.8	1.8
135°	2.4	1.8	1.8
137.5°	2.4	1.8	1.8
140°	2.4	1.8	1.8
142.5°	2.4	1.8	1.8
145°	1.8	1.8	1.8
147.5°	1.8	1.8	1.8
150°	1.8	1.8	1.2
152.5°	1.8	1.2	1.2
155°	1.8	1.2	0.6
157.5°	2.4	1.2	0.6
160°	1.8	1.2	0.6
162.5°	1.8	1.2	0.6
165°	1.8	1.2	0.0
167.5°	1.8	1.2	0.6
170°	1.8	1.2	0.6
172.5°	1.8	1.2	0.6
175°	1.8	0.6	0.6
177.5°	1.8	0.6	0.6
180°	1.8	1.8	1.8



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	249.6	242.4	218.7	179.4	125.4	70.1	26.1	4.8	1.2	1.8	1.8
110°	217.5	211.5	187.2	149.1	101.0	52.3	17.2	3.0	1.8	1.8	1.8





107.5°	2.4	3.6	4.2
110°	2.4	3.0	3.6



(END OF REPORT)