

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: P550968

Luminaire Tested: **FCC-X-2-LD4-1STD-30-UNV-82-84-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: P550968
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-LD4-1STD-30-UNV-82-84-ED1D
Description: FCC CORNER MOUNT LUMINAIRE WITH .187 CLEAR PC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 3000K, AND 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

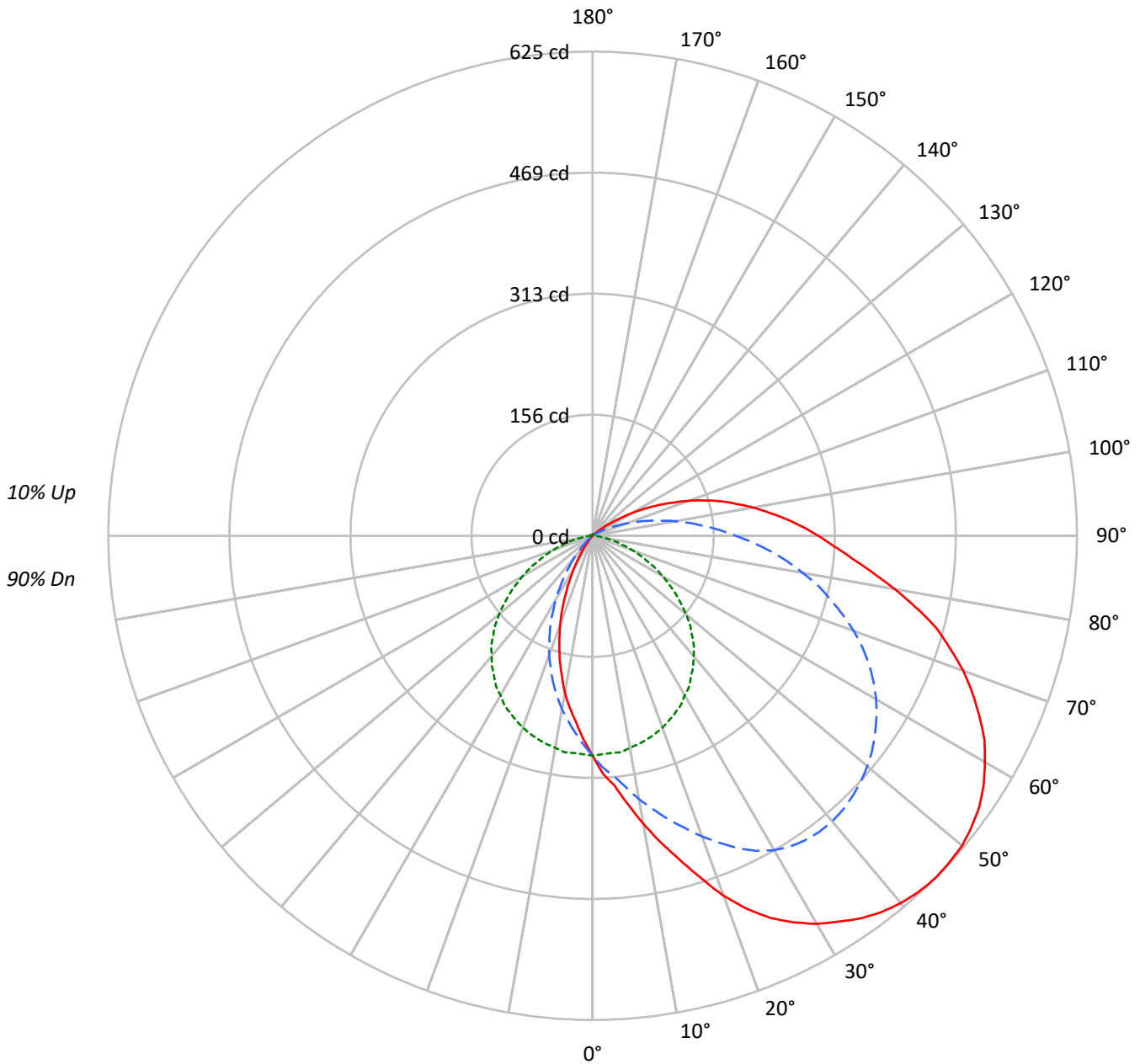
Lumens per Lamp: N/A
Luminaire Lumens: 1402.0 lumens
Efficiency: N/A
Efficacy: 84.0 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

Input Watts (W): 16.7
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: P550968

CATALOG NUMBER: FCC-X-2-LD4-1STD-30-UNV-82-84-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°	3053	3053	3053
5°	3351	3008	2509
10°	3792	2971	2068
15°	4249	2933	1612
20°	4793	2886	1187
25°	5243	2830	779
30°	5579	2756	439
35°	5868	2676	194
40°	6125	2578	47
45°	6346	2455	0
50°	6532	2290	0
55°	6672	2083	0
60°	6743	1840	0
65°	6771	1567	0
70°	6748	1279	0
75°	6663	942	6
80°	6393	577	29
85°	6180	275	40



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	27.2	1.9
10°-20°	81.3	5.8
20°-30°	131.7	9.4
30°-40°	169.2	12.1
40°-50°	191.5	13.7
50°-60°	198.4	14.2
60°-70°	187.1	13.3
70°-80°	156.8	11.2
80°-90°	113.7	8.1
90°-100°	74.7	5.3
100°-110°	43.1	3.1
110°-120°	19.0	1.4
120°-130°	5.2	0.4
130°-140°	1.2	0.1
140°-150°	0.8	0.1
150°-160°	0.5	0.0
160°-170°	0.3	0.0
170°-180°	0.1	0.0
0°-30°	240.2	17.1
0°-40°	409.4	29.2
0°-60°	799.4	57.0
0°-90°	1257.0	89.7
90°-120°	136.9	9.8
90°-150°	144.0	10.3
90°-180°	145.0	10.3
0°-180°	1402.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	284	284	284	284	284	
5°	324	311	281	255	242	33
15°	432	379	272	196	164	125
25°	544	445	252	129	81	252
35°	603	480	222	63	20	378
45°	625	475	181	14	0	483
55°	609	445	131	0	0	544
65°	551	394	78	0	0	545
75°	459	318	33	0	0	482
85°	336	230	5	1	2	287
90°	291	185	1	2	2	160
95°	250	144	1	2	3	196
105°	172	75	1	2	3	181
115°	94	25	1	1	2	94
125°	28	3	1	1	1	28
135°	1	1	2	1	1	3
145°	0	1	1	1	1	0
155°	1	1	1	1	0	0
165°	1	1	1	1	0	0
175°	1	1	2	1	0	0
180°	1	1	1	1	1	



TEST NUMBER: P550968

CATALOG NUMBER: FCC-X-2-LD4-1STD-30-UNV-82-84-ED1D

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
0°	283.6	283.6	283.6	283.6	283.6	283.6	283.6	283.6	283.6	283.6	283.6
2.5°	307.4	307.1	306.0	304.2	301.7	297.3	293.7	290.5	286.1	282.5	275.6
5°	323.7	321.9	320.4	318.6	312.9	308.9	302.4	295.2	288.3	281.4	267.7
7.5°	349.7	346.8	344.6	339.6	331.6	322.6	312.5	305.6	300.9	281.8	258.3
10°	377.5	375.0	370.7	361.6	351.9	338.9	324.4	308.2	293.7	277.8	250.0
12.5°	405.0	401.4	395.2	383.7	369.9	353.7	333.8	314.7	294.1	275.3	240.2
15°	432.4	428.5	422.0	407.9	389.8	368.5	344.3	320.1	295.9	272.0	230.1
17.5°	462.4	457.0	447.2	431.3	408.6	382.2	353.7	324.4	295.2	268.1	219.3
20°	494.6	487.0	476.5	455.2	428.5	397.4	363.1	328.7	294.8	263.4	207.0
22.5°	521.3	513.7	502.2	480.1	448.0	410.0	371.0	331.6	293.3	257.9	195.4
25°	544.4	538.3	525.6	500.3	466.4	423.4	378.6	333.8	291.2	252.2	183.2
27.5°	562.5	556.7	542.6	516.6	481.9	435.3	384.4	334.9	288.3	246.4	170.5
30°	578.4	572.6	555.6	528.9	492.4	444.7	390.2	335.3	284.7	237.7	156.8
32.5°	590.7	585.2	567.9	539.4	499.6	451.2	393.4	334.9	280.0	231.6	142.0
35°	602.9	597.5	577.3	547.0	505.0	454.1	395.9	333.1	274.2	221.5	127.9
37.5°	612.3	606.2	585.6	552.0	507.6	454.8	395.6	330.6	268.1	213.1	113.8
40°	618.8	612.3	590.3	554.9	508.3	453.7	392.7	326.2	260.8	202.7	99.0
42.5°	623.2	616.0	592.5	559.2	506.9	450.9	388.4	320.8	252.9	193.6	84.9
45°	625.3	617.8	592.8	555.6	504.3	445.4	381.9	313.9	244.2	181.4	70.8
47.5°	624.3	616.0	591.0	551.6	499.6	439.7	374.6	305.6	233.7	170.5	57.4
50°	622.5	613.8	587.1	546.6	493.1	432.4	366.7	295.5	222.9	157.1	45.5
52.5°	616.7	608.0	582.7	539.4	485.5	424.1	355.8	285.0	211.3	144.1	34.7
55°	609.4	601.5	575.1	532.9	475.8	414.0	345.7	273.8	200.1	130.8	24.9
57.5°	598.3	591.0	565.7	522.4	466.0	402.8	334.5	261.6	186.1	117.4	17.3
60°	584.5	577.3	552.7	510.5	454.8	390.2	322.2	248.9	173.4	104.0	10.8
62.5°	570.1	563.2	537.6	495.7	440.7	376.8	308.9	236.3	160.0	91.8	6.5
65°	550.9	544.4	521.3	478.0	425.2	362.3	294.1	221.1	146.3	78.0	3.6
67.5°	530.7	524.9	501.4	461.7	407.1	346.5	278.9	206.3	131.9	66.1	1.8
70°	509.0	501.8	480.1	439.7	388.7	328.4	262.3	191.1	118.1	54.6	0.0
72.5°	483.7	478.3	457.4	419.1	367.4	309.2	245.3	174.5	103.0	43.4	0.4
75°	459.2	452.3	433.2	397.0	346.5	289.0	226.5	159.0	88.1	33.2	0.4
77.5°	427.4	425.2	407.1	372.1	326.6	269.5	205.9	140.2	74.1	23.8	0.4
80°	395.6	393.4	379.3	347.2	303.5	246.4	186.8	122.5	60.3	15.9	0.4
82.5°	364.2	361.3	347.9	321.2	280.0	226.9	166.9	104.8	47.7	9.8	0.4
85°	336.0	332.4	317.9	293.3	255.8	204.8	146.3	87.4	35.4	5.4	0.7
87.5°	311.8	309.2	293.3	268.1	231.2	184.2	128.2	70.8	24.9	2.5	1.1
90°	291.2	285.8	271.7	244.9	208.1	161.5	109.1	56.7	16.6	1.4	1.4
92.5°	270.9	266.3	250.7	223.3	187.5	142.0	90.7	43.4	10.5	0.7	1.8
95°	250.0	244.9	229.8	204.5	166.5	122.1	74.4	31.8	5.8	0.7	1.8
97.5°	229.4	224.7	208.8	183.5	147.8	104.8	58.9	22.4	2.9	0.7	1.4
100°	210.3	204.8	190.4	165.1	129.0	87.4	45.5	14.5	1.8	0.7	1.4
102.5°	190.0	185.7	170.9	146.3	109.5	71.2	34.0	9.0	0.7	0.7	1.1
105°	172.0	166.5	152.1	126.8	93.2	56.0	23.8	5.4	0.7	0.7	1.1



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CATALOG NUMBER: FCC-X-2-LD4-1STD-30-UNV-82-84-ED1D

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	112.0	107.7	95.0	73.7	47.3	22.0	6.5	1.1	1.1	1.1	1.1
115°	93.6	87.1	75.9	57.1	35.0	14.5	3.3	1.1	1.1	1.1	1.1
117.5°	74.8	69.4	61.4	43.4	23.1	9.4	1.8	1.1	1.1	1.1	1.1
120°	58.5	53.5	44.4	30.0	15.5	5.4	0.7	1.1	1.1	1.1	1.1
122.5°	41.9	37.9	30.0	19.5	9.4	2.5	1.1	1.1	1.4	1.4	1.1
125°	27.8	25.6	19.9	11.9	5.8	1.1	1.1	1.1	1.4	1.4	1.1
127.5°	18.1	16.3	11.6	6.9	2.5	1.1	1.1	1.4	1.4	1.4	1.1
130°	10.1	9.0	6.9	4.0	1.1	1.1	1.1	1.4	1.4	1.4	1.1
132.5°	5.8	5.4	3.6	0.7	1.1	1.1	1.1	1.4	1.4	1.4	1.4
135°	1.4	0.7	0.7	0.7	1.1	1.1	1.4	1.4	1.8	1.8	1.4
137.5°	0.4	0.4	0.7	0.7	1.1	1.1	1.4	1.8	1.8	1.8	1.4
140°	0.4	0.4	0.7	1.1	1.1	1.1	1.4	1.8	1.8	1.8	1.4
142.5°	0.4	0.7	0.7	1.1	1.1	1.4	1.4	1.8	1.8	1.4	1.4
145°	0.4	0.7	0.7	1.1	1.1	1.4	1.4	1.8	1.4	1.4	1.4
147.5°	0.7	0.7	0.7	1.1	1.1	1.4	1.4	1.8	1.8	1.4	1.4
150°	0.4	0.7	0.7	1.1	1.4	1.4	1.4	1.8	1.4	1.4	1.4
152.5°	0.4	0.7	0.7	1.1	1.4	1.4	1.4	1.8	1.4	1.4	1.4
155°	0.7	0.7	0.7	1.1	1.4	1.4	1.4	1.8	1.4	1.4	1.8
157.5°	0.7	0.7	0.7	1.1	1.4	1.4	1.4	1.8	1.4	1.4	1.8
160°	0.7	0.7	0.7	1.1	1.1	1.4	1.4	1.4	1.4	1.4	1.4
162.5°	0.7	0.7	0.7	1.1	1.1	1.4	1.4	1.4	1.4	1.4	1.4
165°	0.7	0.7	0.7	0.7	1.1	1.1	1.4	1.4	1.4	1.4	1.4
167.5°	0.7	0.7	0.7	1.1	1.1	1.1	1.4	1.4	1.4	1.4	1.4
170°	0.7	0.7	0.7	1.1	1.1	1.1	1.4	1.8	1.8	1.8	1.8
172.5°	0.7	0.7	0.7	1.1	1.1	1.4	1.4	1.8	1.8	1.8	1.8
175°	0.7	0.7	0.7	1.1	1.1	1.4	1.4	1.8	1.8	1.8	1.8
177.5°	0.4	0.7	0.7	1.1	1.1	1.4	1.4	1.8	1.8	1.8	1.4
180°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1



TEST NUMBER: P550968

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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	283.6	283.6	283.6
2.5°	269.9	264.8	263.4
5°	255.4	247.1	242.4
7.5°	241.0	229.8	224.3
10°	227.6	211.7	205.9
12.5°	211.7	193.3	184.2
15°	196.5	172.7	164.0
17.5°	179.5	152.8	142.7
20°	163.7	132.9	122.5
22.5°	145.6	113.4	101.9
25°	129.3	93.9	80.9
27.5°	111.3	74.1	62.9
30°	94.3	56.7	45.5
32.5°	78.0	41.5	31.4
35°	62.9	28.2	19.9
37.5°	48.4	17.3	10.1
40°	35.0	9.0	4.7
42.5°	23.5	4.3	2.5
45°	14.5	2.2	0.0
47.5°	8.3	0.0	0.0
50°	4.3	0.0	0.0
52.5°	1.8	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°	0.4	0.4	0.4
77.5°	0.4	0.7	1.1
80°	0.7	1.4	1.8
82.5°	1.4	1.8	1.8
85°	1.4	1.8	2.2
87.5°	1.8	2.2	2.5
90°	2.2	2.5	2.5
92.5°	2.2	2.9	2.9
95°	2.5	2.9	3.3
97.5°	2.9	3.3	3.3
100°	2.5	3.3	3.6
102.5°	2.2	3.3	3.3
105°	1.8	2.5	2.9



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CATALOG NUMBER: FCC-X-2-LD4-1STD-30-UNV-82-84-ED1D

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	1.4	1.8	1.8
115°	1.1	1.4	1.8
117.5°	1.1	1.4	1.4
120°	1.1	1.1	1.4
122.5°	1.1	1.1	1.4
125°	1.1	1.1	1.4
127.5°	1.4	1.1	1.1
130°	1.1	1.1	1.1
132.5°	1.4	1.1	1.1
135°	1.4	1.1	1.1
137.5°	1.4	1.1	1.1
140°	1.4	1.1	1.1
142.5°	1.4	1.1	1.1
145°	1.1	1.1	1.1
147.5°	1.1	1.1	1.1
150°	1.1	1.1	0.7
152.5°	1.1	0.7	0.7
155°	1.1	0.7	0.4
157.5°	1.4	0.7	0.4
160°	1.1	0.7	0.4
162.5°	1.1	0.7	0.4
165°	1.1	0.7	0.0
167.5°	1.1	0.7	0.4
170°	1.1	0.7	0.4
172.5°	1.1	0.7	0.4
175°	1.1	0.4	0.4
177.5°	1.1	0.4	0.4
180°	1.1	1.1	1.1



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	151.7	147.4	132.9	109.1	76.2	42.6	15.9	2.9	0.7	1.1	1.1
110°	132.2	128.6	113.8	90.7	61.4	31.8	10.5	1.8	1.1	1.1	1.1





107.5°	1.4	2.2	2.5
110°	1.4	1.8	2.2



(END OF REPORT)