

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: P551066

Luminaire Tested: **FCC-X-2-LD4-1STD-40-UNV-80-85-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: P551066  
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-40-UNV-80-85-ED1D  
Description: FCC CORNER MOUNT LUMINAIRE WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 4000K, AND 80 CRI LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

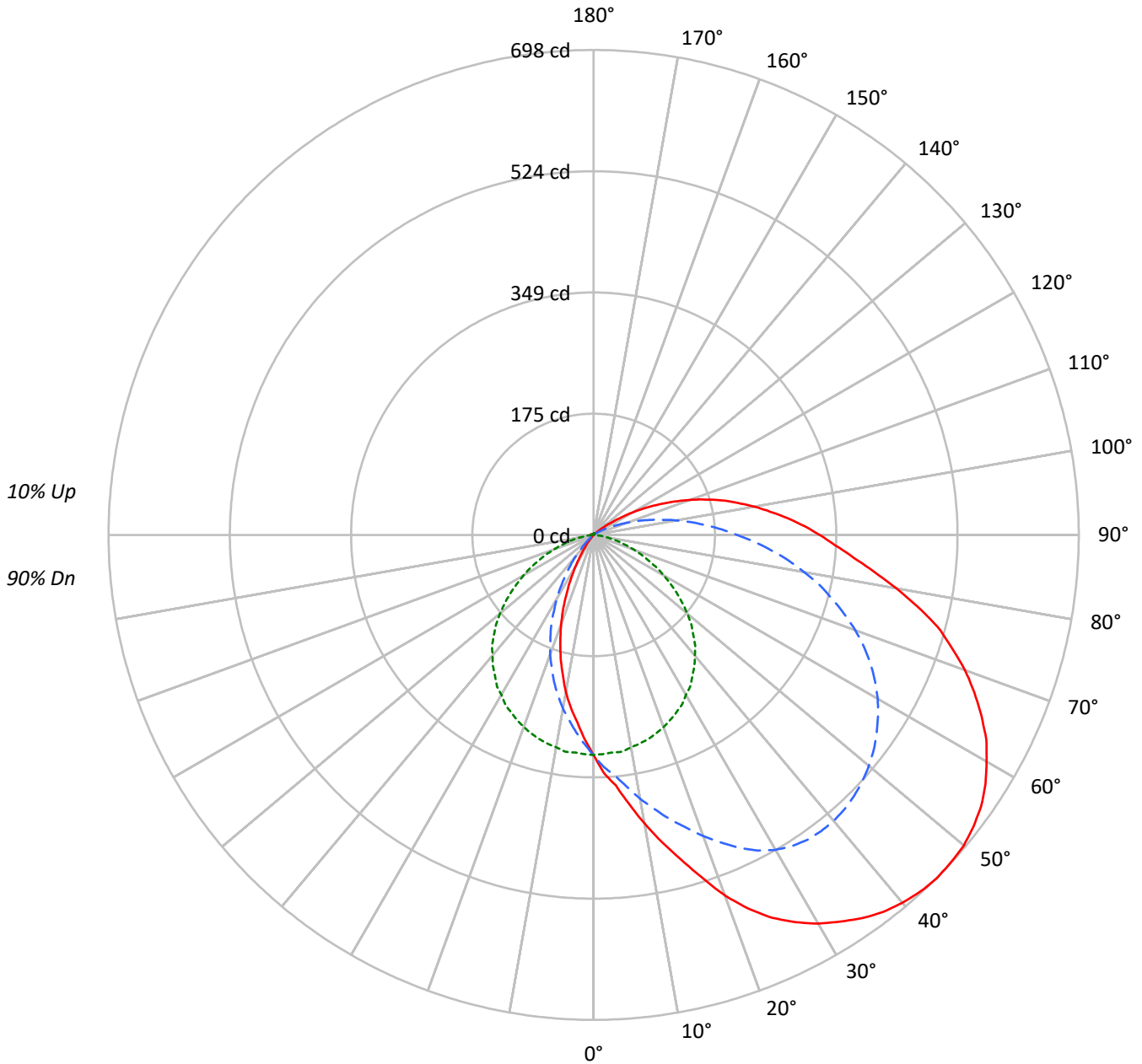
Lumens per Lamp: N/A  
Luminaire Lumens: 1565.9 lumens  
Efficiency: N/A  
Efficacy: 93.8 lumens/watt  
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59  
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')  
CIE Type: Semi-Direct

Input Watts (W): 16.7  
Input Voltage (V): NR  
Input Current (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: P551066

CATALOG NUMBER: FCC-X-2-LD4-1STD-40-UNV-80-85-ED1D

### Luminous Intensity Polar Plot





TEST NUMBER: P551066

CATALOG NUMBER: FCC-X-2-LD4-1STD-40-UNV-80-85-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°	3410	3410	3410
5°	3743	3359	2803
10°	4236	3318	2310
15°	4746	3277	1800
20°	5353	3223	1326
25°	5857	3161	871
30°	6231	3078	490
35°	6555	2989	216
40°	6842	2879	51
45°	7089	2741	0
50°	7296	2558	0
55°	7453	2326	0
60°	7532	2056	0
65°	7564	1751	0
70°	7539	1427	0
75°	7443	1052	6
80°	7141	646	32
85°	6902	310	44



TEST NUMBER: P551066

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	30.3	1.9
10°-20°	90.9	5.8
20°-30°	147.1	9.4
30°-40°	189.0	12.1
40°-50°	213.9	13.7
50°-60°	221.6	14.2
60°-70°	209.0	13.3
70°-80°	175.2	11.2
80°-90°	127.0	8.1
90°-100°	83.4	5.3
100°-110°	48.2	3.1
110°-120°	21.3	1.4
120°-130°	5.8	0.4
130°-140°	1.3	0.1
140°-150°	0.9	0.1
150°-160°	0.6	0.0
160°-170°	0.3	0.0
170°-180°	0.1	0.0
0°-30°	268.3	17.1
0°-40°	457.3	29.2
0°-60°	892.9	57.0
0°-90°	1404.0	89.7
90°-120°	152.9	9.8
90°-150°	160.8	10.3
90°-180°	162.0	10.3
0°-180°	1565.9	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	317	317	317	317	317	
5°	362	347	314	285	271	36
15°	483	424	304	220	183	139
25°	608	497	282	144	90	281
35°	674	536	247	70	22	422
45°	698	530	203	16	0	539
55°	681	497	146	0	0	608
65°	615	440	87	0	0	609
75°	513	355	37	0	0	538
85°	375	257	6	2	2	320
90°	325	206	2	2	3	178
95°	279	161	1	3	4	219
105°	192	83	1	2	3	203
115°	104	28	1	1	2	105
125°	31	4	2	1	2	31
135°	2	1	2	2	1	3
145°	0	1	2	1	1	0
155°	1	2	2	1	0	0
165°	1	1	2	1	0	0
175°	1	1	2	1	0	0
180°	1	1	1	1	1	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
0°	316.8	316.8	316.8	316.8	316.8	316.8	316.8	316.8	316.8	316.8	316.8
2.5°	343.4	343.0	341.8	339.8	336.9	332.1	328.1	324.4	319.6	315.6	307.9
5°	361.6	359.5	357.9	355.9	349.4	345.0	337.7	329.7	322.0	314.3	299.0
7.5°	390.6	387.4	385.0	379.3	370.4	360.3	349.0	341.4	336.1	314.7	288.5
10°	421.7	418.9	414.0	403.9	393.0	378.5	362.4	344.2	328.1	310.3	279.2
12.5°	452.3	448.3	441.5	428.5	413.2	395.0	372.9	351.5	328.5	307.5	268.3
15°	483.0	478.6	471.3	455.6	435.4	411.6	384.6	357.5	330.5	303.9	257.0
17.5°	516.5	510.5	499.6	481.8	456.4	426.9	395.0	362.4	329.7	299.4	244.9
20°	552.4	543.9	532.2	508.4	478.6	443.9	405.5	367.2	329.3	294.2	231.2
22.5°	582.3	573.8	560.9	536.3	500.4	458.0	414.4	370.4	327.7	288.1	218.3
25°	608.1	601.2	587.1	558.9	520.9	472.9	422.9	372.9	325.2	281.7	204.6
27.5°	628.3	621.8	606.1	577.0	538.3	486.2	429.3	374.1	322.0	275.2	190.5
30°	646.0	639.6	620.6	590.8	550.0	496.7	435.8	374.5	318.0	265.5	175.1
32.5°	659.8	653.7	634.3	602.5	558.1	504.0	439.4	374.1	312.7	258.7	158.6
35°	673.5	667.4	644.8	610.9	564.1	507.2	442.3	372.0	306.3	247.4	142.8
37.5°	684.0	677.1	654.1	616.6	566.9	508.0	441.9	369.2	299.4	238.1	127.1
40°	691.2	684.0	659.4	619.8	567.8	506.8	438.6	364.4	291.3	226.4	110.6
42.5°	696.1	688.0	661.8	624.7	566.1	503.6	433.8	358.3	282.5	216.3	94.8
45°	698.5	690.0	662.2	620.6	563.3	497.5	426.5	350.7	272.8	202.6	79.1
47.5°	697.3	688.0	660.2	616.2	558.1	491.1	418.5	341.4	261.1	190.5	64.2
50°	695.3	685.6	655.7	610.5	550.8	483.0	409.6	330.1	249.0	175.5	50.8
52.5°	688.8	679.1	650.9	602.5	542.3	473.7	397.5	318.4	236.1	161.0	38.7
55°	680.7	671.9	642.4	595.2	531.4	462.4	386.2	305.9	223.6	146.1	27.8
57.5°	668.2	660.2	631.9	583.5	520.5	449.9	373.7	292.1	207.8	131.1	19.4
60°	652.9	644.8	617.4	570.2	508.0	435.8	359.9	278.0	193.7	116.2	12.1
62.5°	636.8	629.1	600.4	553.6	492.3	420.9	345.0	263.9	178.8	102.5	7.3
65°	615.4	608.1	582.3	533.9	474.9	404.7	328.5	247.0	163.4	87.2	4.0
67.5°	592.8	586.3	560.1	515.7	454.8	387.0	311.5	230.4	147.3	73.8	2.0
70°	568.6	560.5	536.3	491.1	434.2	366.8	293.0	213.5	132.0	60.9	0.0
72.5°	540.3	534.3	510.9	468.1	410.4	345.4	274.0	194.9	115.0	48.4	0.4
75°	512.9	505.2	483.8	443.5	387.0	322.8	253.0	177.5	98.5	37.1	0.4
77.5°	477.4	474.9	454.8	415.6	364.8	301.0	230.0	156.6	82.7	26.6	0.4
80°	441.9	439.4	423.7	387.8	339.0	275.2	208.6	136.8	67.4	17.8	0.4
82.5°	406.7	403.5	388.6	358.7	312.7	253.4	186.4	117.0	53.3	10.9	0.4
85°	375.3	371.2	355.1	327.7	285.7	228.8	163.4	97.7	39.5	6.1	0.8
87.5°	348.2	345.4	327.7	299.4	258.3	205.8	143.3	79.1	27.8	2.8	1.2
90°	325.2	319.2	303.4	273.6	232.4	180.4	121.9	63.4	18.6	1.6	1.6
92.5°	302.6	297.4	280.0	249.4	209.4	158.6	101.3	48.4	11.7	0.8	2.0
95°	279.2	273.6	256.6	228.4	186.0	136.4	83.1	35.5	6.5	0.8	2.0
97.5°	256.2	251.0	233.2	205.0	165.0	117.0	65.8	25.0	3.2	0.8	1.6
100°	234.8	228.8	212.7	184.4	144.1	97.7	50.8	16.1	2.0	0.8	1.6
102.5°	212.3	207.4	190.9	163.4	122.3	79.5	37.9	10.1	0.8	0.8	1.2
105°	192.1	186.0	169.9	141.6	104.1	62.5	26.6	6.1	0.8	0.8	1.2



TEST NUMBER: P551066

CATALOG NUMBER: FCC-X-2-LD4-1STD-40-UNV-80-85-ED1D

**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	125.1	120.2	106.1	82.3	52.9	24.6	7.3	1.2	1.2	1.2	1.2
115°	104.5	97.2	84.7	63.8	39.1	16.1	3.6	1.2	1.2	1.2	1.2
117.5°	83.5	77.5	68.6	48.4	25.8	10.5	2.0	1.2	1.2	1.2	1.2
120°	65.4	59.7	49.6	33.5	17.4	6.1	0.8	1.2	1.2	1.2	1.2
122.5°	46.8	42.4	33.5	21.8	10.5	2.8	1.2	1.2	1.6	1.6	1.2
125°	31.1	28.7	22.2	13.3	6.5	1.2	1.2	1.2	1.6	1.6	1.2
127.5°	20.2	18.2	12.9	7.7	2.8	1.2	1.2	1.6	1.6	1.6	1.2
130°	11.3	10.1	7.7	4.4	1.2	1.2	1.2	1.6	1.6	1.6	1.2
132.5°	6.5	6.1	4.0	0.8	1.2	1.2	1.2	1.6	1.6	1.6	1.6
135°	1.6	0.8	0.8	0.8	1.2	1.2	1.6	1.6	2.0	2.0	1.6
137.5°	0.4	0.4	0.8	0.8	1.2	1.2	1.6	2.0	2.0	2.0	1.6
140°	0.4	0.4	0.8	1.2	1.2	1.2	1.6	2.0	2.0	2.0	1.6
142.5°	0.4	0.8	0.8	1.2	1.2	1.6	1.6	2.0	2.0	1.6	1.6
145°	0.4	0.8	0.8	1.2	1.2	1.6	1.6	2.0	1.6	1.6	1.6
147.5°	0.8	0.8	0.8	1.2	1.2	1.6	1.6	2.0	2.0	1.6	1.6
150°	0.4	0.8	0.8	1.2	1.6	1.6	1.6	2.0	1.6	1.6	1.6
152.5°	0.4	0.8	0.8	1.2	1.6	1.6	1.6	2.0	1.6	1.6	1.6
155°	0.8	0.8	0.8	1.2	1.6	1.6	1.6	2.0	1.6	1.6	2.0
157.5°	0.8	0.8	0.8	1.2	1.6	1.6	1.6	2.0	1.6	1.6	2.0
160°	0.8	0.8	0.8	1.2	1.2	1.6	1.6	1.6	1.6	1.6	1.6
162.5°	0.8	0.8	0.8	1.2	1.2	1.6	1.6	1.6	1.6	1.6	1.6
165°	0.8	0.8	0.8	0.8	1.2	1.2	1.6	1.6	1.6	1.6	1.6
167.5°	0.8	0.8	0.8	1.2	1.2	1.2	1.6	1.6	1.6	1.6	1.6
170°	0.8	0.8	0.8	1.2	1.2	1.2	1.6	2.0	2.0	2.0	2.0
172.5°	0.8	0.8	0.8	1.2	1.2	1.6	1.6	2.0	2.0	2.0	2.0
175°	0.8	0.8	0.8	1.2	1.2	1.6	1.6	2.0	2.0	2.0	2.0
177.5°	0.4	0.8	0.8	1.2	1.2	1.6	1.6	2.0	2.0	2.0	1.6
180°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2



TEST NUMBER: P551066

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**CANDELA DISTRIBUTION (continued):**

	135°	157.5°	180°
0°	316.8	316.8	316.8
2.5°	301.4	295.8	294.2
5°	285.3	276.0	270.8
7.5°	269.1	256.6	250.6
10°	254.2	236.5	230.0
12.5°	236.5	215.9	205.8
15°	219.5	192.9	183.2
17.5°	200.6	170.7	159.4
20°	182.8	148.5	136.8
22.5°	162.6	126.7	113.8
25°	144.5	104.9	90.4
27.5°	124.3	82.7	70.2
30°	105.3	63.4	50.8
32.5°	87.2	46.4	35.1
35°	70.2	31.5	22.2
37.5°	54.1	19.4	11.3
40°	39.1	10.1	5.2
42.5°	26.2	4.8	2.8
45°	16.1	2.4	0.0
47.5°	9.3	0.0	0.0
50°	4.8	0.0	0.0
52.5°	2.0	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°	0.4	0.4	0.4
77.5°	0.4	0.8	1.2
80°	0.8	1.6	2.0
82.5°	1.6	2.0	2.0
85°	1.6	2.0	2.4
87.5°	2.0	2.4	2.8
90°	2.4	2.8	2.8
92.5°	2.4	3.2	3.2
95°	2.8	3.2	3.6
97.5°	3.2	3.6	3.6
100°	2.8	3.6	4.0
102.5°	2.4	3.6	3.6
105°	2.0	2.8	3.2





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CATALOG NUMBER: FCC-X-2-LD4-1STD-40-UNV-80-85-ED1D

**CANDELA DISTRIBUTION (continued):**

	135°	157.5°	180°
112.5°	1.6	2.0	2.0
115°	1.2	1.6	2.0
117.5°	1.2	1.6	1.6
120°	1.2	1.2	1.6
122.5°	1.2	1.2	1.6
125°	1.2	1.2	1.6
127.5°	1.6	1.2	1.2
130°	1.2	1.2	1.2
132.5°	1.6	1.2	1.2
135°	1.6	1.2	1.2
137.5°	1.6	1.2	1.2
140°	1.6	1.2	1.2
142.5°	1.6	1.2	1.2
145°	1.2	1.2	1.2
147.5°	1.2	1.2	1.2
150°	1.2	1.2	0.8
152.5°	1.2	0.8	0.8
155°	1.2	0.8	0.4
157.5°	1.6	0.8	0.4
160°	1.2	0.8	0.4
162.5°	1.2	0.8	0.4
165°	1.2	0.8	0.0
167.5°	1.2	0.8	0.4
170°	1.2	0.8	0.4
172.5°	1.2	0.8	0.4
175°	1.2	0.4	0.4
177.5°	1.2	0.4	0.4
180°	1.2	1.2	1.2



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	169.5	164.6	148.5	121.9	85.1	47.6	17.8	3.2	0.8	1.2	1.2
110°	147.7	143.7	127.1	101.3	68.6	35.5	11.7	2.0	1.2	1.2	1.2







107.5°	1.6	2.4	2.8
110°	1.6	2.0	2.4



(END OF REPORT)