

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: P550820

Luminaire Tested: **FCC-X-2-LD4-1LO-40-UNV-80-96-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: P550820
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-LD4-1LO-40-UNV-80-96-ED1D
Description: FCC CORNER MOUNT LUMINAIRE WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES AND 4000K, AND 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

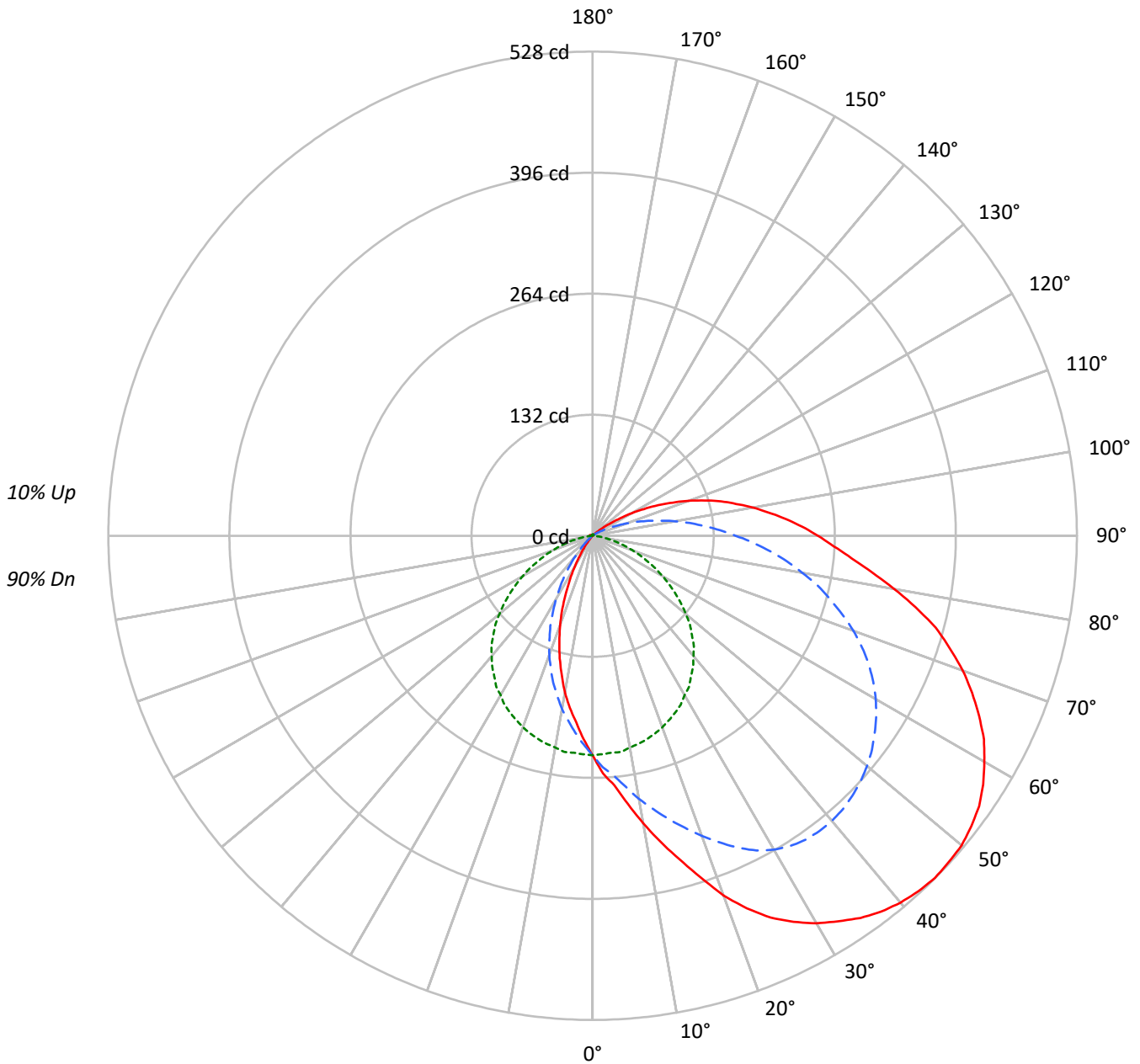
Lumens per Lamp: N/A
Luminaire Lumens: 1182.9 lumens
Efficiency: N/A
Efficacy: 101.1 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

Input Watts (W): 11.7
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: P550820

CATALOG NUMBER: FCC-X-2-LD4-1LO-40-UNV-80-96-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°	2576	2576	2576
5°	2827	2538	2117
10°	3199	2507	1746
15°	3586	2475	1360
20°	4044	2434	1001
25°	4425	2388	658
30°	4707	2325	370
35°	4952	2258	164
40°	5169	2175	40
45°	5355	2070	0
50°	5511	1933	0
55°	5631	1756	0
60°	5690	1554	0
65°	5714	1322	0
70°	5694	1078	0
75°	5622	794	4
80°	5394	486	24
85°	5214	234	33



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	22.9	1.9
10°-20°	68.6	5.8
20°-30°	111.1	9.4
30°-40°	142.8	12.1
40°-50°	161.6	13.7
50°-60°	167.4	14.2
60°-70°	157.9	13.3
70°-80°	132.3	11.2
80°-90°	95.9	8.1
90°-100°	63.0	5.3
100°-110°	36.4	3.1
110°-120°	16.1	1.4
120°-130°	4.3	0.4
130°-140°	1.0	0.1
140°-150°	0.6	0.1
150°-160°	0.5	0.0
160°-170°	0.3	0.0
170°-180°	0.1	0.0
0°-30°	202.7	17.1
0°-40°	345.5	29.2
0°-60°	674.5	57.0
0°-90°	1060.6	89.7
90°-120°	115.5	9.8
90°-150°	121.4	10.3
90°-180°	122.0	10.3
0°-180°	1182.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	239	239	239	239	239	
5°	273	262	238	216	204	28
15°	365	320	230	166	138	105
25°	459	375	213	109	68	212
35°	509	405	187	53	17	319
45°	528	401	153	12	0	407
55°	514	375	110	0	0	459
65°	465	332	66	0	0	460
75°	387	268	28	0	0	406
85°	284	194	5	1	2	242
90°	246	156	1	2	2	135
95°	211	122	1	2	3	165
105°	145	63	1	2	2	153
115°	79	21	1	1	2	79
125°	24	3	1	1	1	23
135°	1	1	2	1	1	2
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	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
0°	239.3	239.3	239.3	239.3	239.3	239.3	239.3	239.3	239.3	239.3	239.3
2.5°	259.4	259.1	258.2	256.7	254.5	250.9	247.8	245.1	241.4	238.4	232.6
5°	273.1	271.6	270.4	268.9	264.0	260.6	255.1	249.0	243.3	237.5	225.9
7.5°	295.1	292.6	290.8	286.5	279.8	272.2	263.7	257.9	253.9	237.8	218.0
10°	318.5	316.4	312.8	305.1	296.9	285.9	273.7	260.0	247.8	234.4	210.9
12.5°	341.7	338.7	333.5	323.7	312.1	298.4	281.7	265.5	248.1	232.3	202.7
15°	364.9	361.5	356.0	344.2	328.9	310.9	290.5	270.1	249.7	229.5	194.2
17.5°	390.2	385.6	377.4	364.0	344.8	322.5	298.4	273.7	249.0	226.2	185.0
20°	417.3	410.9	402.1	384.1	361.5	335.3	306.4	277.4	248.7	222.2	174.7
22.5°	439.9	433.5	423.7	405.1	378.0	346.0	313.1	279.8	247.5	217.6	164.9
25°	459.4	454.2	443.5	422.2	393.5	357.3	319.5	281.7	245.7	212.8	154.5
27.5°	474.6	469.7	457.9	435.9	406.6	367.3	324.3	282.6	243.3	207.9	143.9
30°	488.0	483.2	468.8	446.3	415.5	375.2	329.2	282.9	240.2	200.6	132.3
32.5°	498.4	493.8	479.2	455.1	421.6	380.7	332.0	282.6	236.2	195.4	119.8
35°	508.8	504.2	487.1	461.5	426.2	383.2	334.1	281.1	231.4	186.9	107.9
37.5°	516.7	511.5	494.1	465.8	428.3	383.8	333.8	278.9	226.2	179.9	96.0
40°	522.2	516.7	498.1	468.2	428.9	382.9	331.4	275.3	220.1	171.0	83.5
42.5°	525.8	519.7	499.9	471.9	427.7	380.4	327.7	270.7	213.4	163.4	71.6
45°	527.7	521.3	500.2	468.8	425.5	375.9	322.2	264.9	206.1	153.0	59.7
47.5°	526.7	519.7	498.7	465.5	421.6	371.0	316.1	257.9	197.2	143.9	48.5
50°	525.2	517.9	495.4	461.2	416.1	364.9	309.4	249.4	188.1	132.6	38.4
52.5°	520.3	513.0	491.7	455.1	409.7	357.9	300.3	240.5	178.3	121.6	29.3
55°	514.3	507.5	485.3	449.6	401.5	349.3	291.7	231.1	168.9	110.3	21.0
57.5°	504.8	498.7	477.4	440.8	393.2	339.9	282.3	220.7	157.0	99.1	14.6
60°	493.2	487.1	466.4	430.7	383.8	329.2	271.9	210.0	146.3	87.8	9.1
62.5°	481.0	475.2	453.6	418.2	371.9	317.9	260.6	199.4	135.0	77.4	5.5
65°	464.9	459.4	439.9	403.3	358.8	305.7	248.1	186.6	123.5	65.8	3.0
67.5°	447.8	442.9	423.1	389.6	343.5	292.3	235.3	174.1	111.3	55.8	1.5
70°	429.5	423.4	405.1	371.0	328.0	277.1	221.3	161.3	99.7	46.0	0.0
72.5°	408.2	403.6	385.9	353.6	310.0	260.9	207.0	147.2	86.9	36.6	0.3
75°	387.4	381.6	365.5	335.0	292.3	243.9	191.1	134.1	74.4	28.0	0.3
77.5°	360.6	358.8	343.5	314.0	275.6	227.4	173.8	118.3	62.5	20.1	0.3
80°	333.8	332.0	320.1	292.9	256.1	207.9	157.6	103.3	50.9	13.4	0.3
82.5°	307.3	304.8	293.6	271.0	236.2	191.4	140.8	88.4	40.2	8.2	0.3
85°	283.5	280.4	268.3	247.5	215.8	172.8	123.5	73.8	29.9	4.6	0.6
87.5°	263.1	260.9	247.5	226.2	195.1	155.5	108.2	59.7	21.0	2.1	0.9
90°	245.7	241.1	229.2	206.7	175.6	136.3	92.1	47.9	14.0	1.2	1.2
92.5°	228.6	224.7	211.6	188.4	158.2	119.8	76.5	36.6	8.8	0.6	1.5
95°	210.9	206.7	193.9	172.5	140.5	103.0	62.8	26.8	4.9	0.6	1.5
97.5°	193.6	189.6	176.2	154.9	124.7	88.4	49.7	18.9	2.4	0.6	1.2
100°	177.4	172.8	160.6	139.3	108.8	73.8	38.4	12.2	1.5	0.6	1.2
102.5°	160.3	156.7	144.2	123.5	92.4	60.1	28.7	7.6	0.6	0.6	0.9
105°	145.1	140.5	128.3	107.0	78.6	47.2	20.1	4.6	0.6	0.6	0.9



TEST NUMBER: P550820

CATALOG NUMBER: FCC-X-2-LD4-1LO-40-UNV-80-96-ED1D

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	94.5	90.8	80.2	62.2	39.9	18.6	5.5	0.9	0.9	0.9	0.9
115°	79.0	73.5	64.0	48.2	29.6	12.2	2.7	0.9	0.9	0.9	0.9
117.5°	63.1	58.5	51.8	36.6	19.5	7.9	1.5	0.9	0.9	0.9	0.9
120°	49.4	45.1	37.5	25.3	13.1	4.6	0.6	0.9	0.9	0.9	0.9
122.5°	35.4	32.0	25.3	16.5	7.9	2.1	0.9	0.9	1.2	1.2	0.9
125°	23.5	21.6	16.8	10.1	4.9	0.9	0.9	0.9	1.2	1.2	0.9
127.5°	15.2	13.7	9.8	5.8	2.1	0.9	0.9	1.2	1.2	1.2	0.9
130°	8.5	7.6	5.8	3.4	0.9	0.9	0.9	1.2	1.2	1.2	0.9
132.5°	4.9	4.6	3.0	0.6	0.9	0.9	0.9	1.2	1.2	1.2	1.2
135°	1.2	0.6	0.6	0.6	0.9	0.9	1.2	1.2	1.5	1.5	1.2
137.5°	0.3	0.3	0.6	0.6	0.9	0.9	1.2	1.5	1.5	1.5	1.2
140°	0.3	0.3	0.6	0.9	0.9	0.9	1.2	1.5	1.5	1.5	1.2
142.5°	0.3	0.6	0.6	0.9	0.9	1.2	1.2	1.5	1.5	1.2	1.2
145°	0.3	0.6	0.6	0.9	0.9	1.2	1.2	1.5	1.2	1.2	1.2
147.5°	0.6	0.6	0.6	0.9	0.9	1.2	1.2	1.5	1.5	1.2	1.2
150°	0.3	0.6	0.6	0.9	1.2	1.2	1.2	1.5	1.2	1.2	1.2
152.5°	0.3	0.6	0.6	0.9	1.2	1.2	1.2	1.5	1.2	1.2	1.2
155°	0.6	0.6	0.6	0.9	1.2	1.2	1.2	1.5	1.2	1.2	1.5
157.5°	0.6	0.6	0.6	0.9	1.2	1.2	1.2	1.5	1.2	1.2	1.5
160°	0.6	0.6	0.6	0.9	0.9	1.2	1.2	1.2	1.2	1.2	1.2
162.5°	0.6	0.6	0.6	0.9	0.9	1.2	1.2	1.2	1.2	1.2	1.2
165°	0.6	0.6	0.6	0.6	0.9	0.9	1.2	1.2	1.2	1.2	1.2
167.5°	0.6	0.6	0.6	0.9	0.9	0.9	1.2	1.2	1.2	1.2	1.2
170°	0.6	0.6	0.6	0.9	0.9	0.9	1.2	1.5	1.5	1.5	1.5
172.5°	0.6	0.6	0.6	0.9	0.9	1.2	1.2	1.5	1.5	1.5	1.5
175°	0.6	0.6	0.6	0.9	0.9	1.2	1.2	1.5	1.5	1.5	1.5
177.5°	0.3	0.6	0.6	0.9	0.9	1.2	1.2	1.5	1.5	1.5	1.2
180°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9



TEST NUMBER: P550820

CATALOG NUMBER: FCC-X-2-LD4-1LO-40-UNV-80-96-ED1D

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	239.3	239.3	239.3
2.5°	227.7	223.4	222.2
5°	215.5	208.5	204.5
7.5°	203.3	193.9	189.3
10°	192.0	178.6	173.8
12.5°	178.6	163.1	155.5
15°	165.8	145.7	138.4
17.5°	151.5	128.9	120.4
20°	138.1	112.2	103.3
22.5°	122.8	95.7	86.0
25°	109.1	79.3	68.3
27.5°	93.9	62.5	53.0
30°	79.6	47.9	38.4
32.5°	65.8	35.1	26.5
35°	53.0	23.8	16.8
37.5°	40.8	14.6	8.5
40°	29.6	7.6	4.0
42.5°	19.8	3.7	2.1
45°	12.2	1.8	0.0
47.5°	7.0	0.0	0.0
50°	3.7	0.0	0.0
52.5°	1.5	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°	0.3	0.3	0.3
77.5°	0.3	0.6	0.9
80°	0.6	1.2	1.5
82.5°	1.2	1.5	1.5
85°	1.2	1.5	1.8
87.5°	1.5	1.8	2.1
90°	1.8	2.1	2.1
92.5°	1.8	2.4	2.4
95°	2.1	2.4	2.7
97.5°	2.4	2.7	2.7
100°	2.1	2.7	3.0
102.5°	1.8	2.7	2.7
105°	1.5	2.1	2.4



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	1.2	1.5	1.5
115°	0.9	1.2	1.5
117.5°	0.9	1.2	1.2
120°	0.9	0.9	1.2
122.5°	0.9	0.9	1.2
125°	0.9	0.9	1.2
127.5°	1.2	0.9	0.9
130°	0.9	0.9	0.9
132.5°	1.2	0.9	0.9
135°	1.2	0.9	0.9
137.5°	1.2	0.9	0.9
140°	1.2	0.9	0.9
142.5°	1.2	0.9	0.9
145°	0.9	0.9	0.9
147.5°	0.9	0.9	0.9
150°	0.9	0.9	0.6
152.5°	0.9	0.6	0.6
155°	0.9	0.6	0.3
157.5°	1.2	0.6	0.3
160°	0.9	0.6	0.3
162.5°	0.9	0.6	0.3
165°	0.9	0.6	0.0
167.5°	0.9	0.6	0.3
170°	0.9	0.6	0.3
172.5°	0.9	0.6	0.3
175°	0.9	0.3	0.3
177.5°	0.9	0.3	0.3
180°	0.9	0.9	0.9



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	128.0	124.4	112.2	92.1	64.3	36.0	13.4	2.4	0.6	0.9	0.9
110°	111.6	108.5	96.0	76.5	51.8	26.8	8.8	1.5	0.9	0.9	0.9





107.5°	1.2	1.8	2.1
110°	1.2	1.5	1.8



(END OF REPORT)