

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: P550873

Luminaire Tested: **FCC-X-2-LD4-1LO-50-UNV-80-85-ED1D-90**

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: P550873
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-50-UNV-80-85-ED1D-90
Description: FCC CORNER MOUNT LUMINAIRE WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 5000K, AND 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

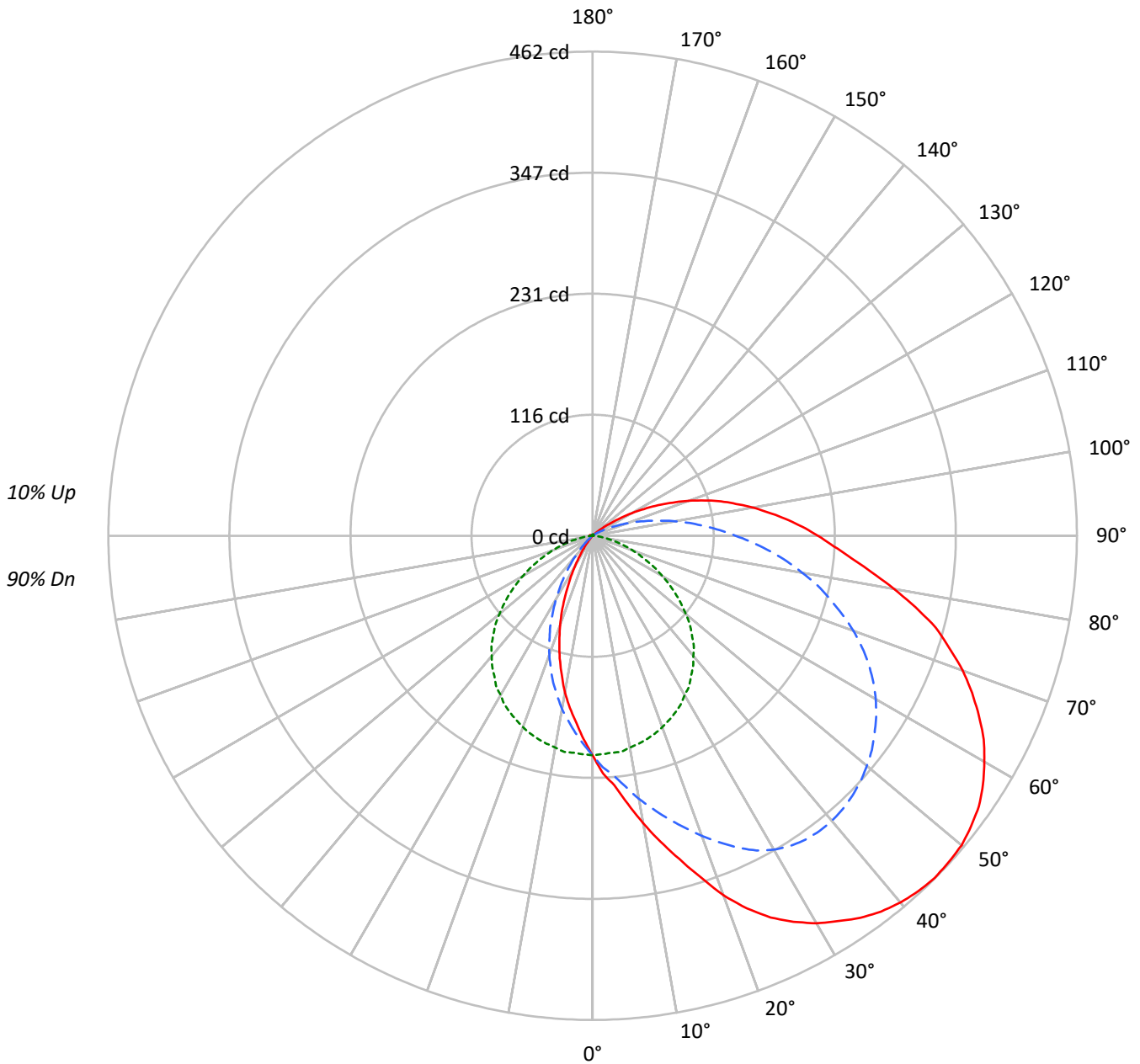
Lumens per Lamp: N/A
Luminaire Lumens: 1035.0 lumens
Efficiency: N/A
Efficacy: 88.5 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

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

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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°	2254	2254	2254
5°	2474	2221	1853
10°	2799	2193	1527
15°	3137	2165	1190
20°	3538	2130	876
25°	3871	2090	575
30°	4118	2034	324
35°	4332	1976	143
40°	4522	1903	35
45°	4684	1812	0
50°	4822	1691	0
55°	4926	1537	0
60°	4978	1359	0
65°	4999	1157	0
70°	4982	944	0
75°	4919	695	4
80°	4719	424	21
85°	4561	203	29



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	20.1	1.9
10°-20°	60.0	5.8
20°-30°	97.2	9.4
30°-40°	124.9	12.1
40°-50°	141.4	13.7
50°-60°	146.5	14.2
60°-70°	138.1	13.3
70°-80°	115.8	11.2
80°-90°	83.9	8.1
90°-100°	55.1	5.3
100°-110°	31.8	3.1
110°-120°	14.1	1.4
120°-130°	3.8	0.4
130°-140°	0.9	0.1
140°-150°	0.6	0.1
150°-160°	0.4	0.0
160°-170°	0.2	0.0
170°-180°	0.1	0.0
0°-30°	177.3	17.1
0°-40°	302.2	29.2
0°-60°	590.1	57.0
0°-90°	928.0	89.7
90°-120°	101.1	9.8
90°-150°	106.3	10.3
90°-180°	107.0	10.3
0°-180°	1035.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	209	209	209	209	209	
5°	239	230	208	189	179	24
15°	319	280	201	145	121	92
25°	402	328	186	96	60	186
35°	445	354	164	46	15	279
45°	462	351	134	11	0	356
55°	450	328	96	0	0	402
65°	407	291	58	0	0	402
75°	339	235	24	0	0	356
85°	248	170	4	1	2	212
90°	215	136	1	2	2	118
95°	185	106	0	2	2	145
105°	127	55	0	1	2	134
115°	69	18	1	1	1	69
125°	20	3	1	1	1	21
135°	1	1	1	1	1	2
145°	0	1	1	1	1	0
155°	0	1	1	1	0	0
165°	0	1	1	1	0	0
175°	0	1	1	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°	209.4	209.4	209.4	209.4	209.4	209.4	209.4	209.4	209.4	209.4	209.4
2.5°	227.0	226.7	225.9	224.6	222.7	219.5	216.8	214.4	211.2	208.6	203.5
5°	239.0	237.6	236.6	235.2	231.0	228.0	223.2	217.9	212.8	207.8	197.6
7.5°	258.2	256.0	254.4	250.7	244.8	238.2	230.7	225.6	222.2	208.0	190.7
10°	278.7	276.8	273.6	267.0	259.8	250.2	239.5	227.5	216.8	205.1	184.6
12.5°	299.0	296.3	291.8	283.2	273.1	261.1	246.4	232.3	217.1	203.2	177.4
15°	319.2	316.3	311.5	301.1	287.8	272.0	254.2	236.3	218.4	200.8	169.9
17.5°	341.4	337.4	330.2	318.4	301.6	282.2	261.1	239.5	217.9	197.9	161.9
20°	365.1	359.5	351.8	336.0	316.3	293.4	268.0	242.7	217.6	194.4	152.8
22.5°	384.8	379.2	370.7	354.4	330.7	302.7	273.9	244.8	216.6	190.4	144.3
25°	401.9	397.4	388.0	369.4	344.3	312.6	279.5	246.4	215.0	186.2	135.2
27.5°	415.2	411.0	400.6	381.4	355.8	321.4	283.8	247.2	212.8	181.9	125.9
30°	427.0	422.7	410.2	390.4	363.5	328.3	288.0	247.5	210.2	175.5	115.7
32.5°	436.0	432.0	419.2	398.2	368.8	333.1	290.4	247.2	206.7	171.0	104.8
35°	445.1	441.1	426.2	403.8	372.8	335.2	292.3	245.9	202.4	163.5	94.4
37.5°	452.0	447.5	432.3	407.5	374.7	335.8	292.0	244.0	197.9	157.4	84.0
40°	456.8	452.0	435.8	409.6	375.2	335.0	289.9	240.8	192.6	149.6	73.1
42.5°	460.0	454.7	437.4	412.8	374.2	332.8	286.7	236.8	186.7	142.9	62.7
45°	461.6	456.0	437.6	410.2	372.3	328.8	281.9	231.8	180.3	133.9	52.3
47.5°	460.8	454.7	436.3	407.2	368.8	324.6	276.6	225.6	172.6	125.9	42.4
50°	459.5	453.1	433.4	403.5	364.0	319.2	270.7	218.2	164.6	116.0	33.6
52.5°	455.2	448.8	430.2	398.2	358.4	313.1	262.7	210.4	156.0	106.4	25.6
55°	449.9	444.0	424.6	393.4	351.2	305.6	255.2	202.2	147.7	96.5	18.4
57.5°	441.6	436.3	417.6	385.6	344.0	297.4	247.0	193.1	137.3	86.7	12.8
60°	431.5	426.2	408.0	376.8	335.8	288.0	237.9	183.8	128.0	76.8	8.0
62.5°	420.8	415.8	396.8	365.9	325.4	278.2	228.0	174.4	118.1	67.7	4.8
65°	406.7	401.9	384.8	352.8	313.9	267.5	217.1	163.2	108.0	57.6	2.7
67.5°	391.8	387.5	370.2	340.8	300.6	255.8	205.9	152.3	97.3	48.8	1.3
70°	375.8	370.4	354.4	324.6	287.0	242.4	193.6	141.1	87.2	40.3	0.0
72.5°	357.1	353.1	337.6	309.4	271.2	228.3	181.1	128.8	76.0	32.0	0.3
75°	339.0	333.9	319.8	293.1	255.8	213.4	167.2	117.3	65.1	24.5	0.3
77.5°	315.5	313.9	300.6	274.7	241.1	199.0	152.0	103.5	54.7	17.6	0.3
80°	292.0	290.4	280.0	256.3	224.0	181.9	137.9	90.4	44.5	11.7	0.3
82.5°	268.8	266.7	256.8	237.1	206.7	167.5	123.2	77.3	35.2	7.2	0.3
85°	248.0	245.4	234.7	216.6	188.8	151.2	108.0	64.5	26.1	4.0	0.5
87.5°	230.2	228.3	216.6	197.9	170.7	136.0	94.7	52.3	18.4	1.9	0.8
90°	215.0	211.0	200.6	180.8	153.6	119.2	80.5	41.9	12.3	1.1	1.1
92.5°	200.0	196.6	185.1	164.8	138.4	104.8	66.9	32.0	7.7	0.5	1.3
95°	184.6	180.8	169.6	150.9	122.9	90.1	54.9	23.5	4.3	0.5	1.3
97.5°	169.4	165.9	154.1	135.5	109.1	77.3	43.5	16.5	2.1	0.5	1.1
100°	155.2	151.2	140.5	121.9	95.2	64.5	33.6	10.7	1.3	0.5	1.1
102.5°	140.3	137.1	126.1	108.0	80.8	52.5	25.1	6.7	0.5	0.5	0.8
105°	126.9	122.9	112.3	93.6	68.8	41.3	17.6	4.0	0.5	0.5	0.8



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CATALOG NUMBER: FCC-X-2-LD4-1LO-50-UNV-80-85-ED1D-90

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	82.7	79.5	70.1	54.4	34.9	16.3	4.8	0.8	0.8	0.8	0.8
115°	69.1	64.3	56.0	42.1	25.9	10.7	2.4	0.8	0.8	0.8	0.8
117.5°	55.2	51.2	45.3	32.0	17.1	6.9	1.3	0.8	0.8	0.8	0.8
120°	43.2	39.5	32.8	22.1	11.5	4.0	0.5	0.8	0.8	0.8	0.8
122.5°	30.9	28.0	22.1	14.4	6.9	1.9	0.8	0.8	1.1	1.1	0.8
125°	20.5	18.9	14.7	8.8	4.3	0.8	0.8	0.8	1.1	1.1	0.8
127.5°	13.3	12.0	8.5	5.1	1.9	0.8	0.8	1.1	1.1	1.1	0.8
130°	7.5	6.7	5.1	2.9	0.8	0.8	0.8	1.1	1.1	1.1	0.8
132.5°	4.3	4.0	2.7	0.5	0.8	0.8	0.8	1.1	1.1	1.1	1.1
135°	1.1	0.5	0.5	0.5	0.8	0.8	1.1	1.1	1.3	1.3	1.1
137.5°	0.3	0.3	0.5	0.5	0.8	0.8	1.1	1.3	1.3	1.3	1.1
140°	0.3	0.3	0.5	0.8	0.8	0.8	1.1	1.3	1.3	1.3	1.1
142.5°	0.3	0.5	0.5	0.8	0.8	1.1	1.1	1.3	1.3	1.1	1.1
145°	0.3	0.5	0.5	0.8	0.8	1.1	1.1	1.3	1.1	1.1	1.1
147.5°	0.5	0.5	0.5	0.8	0.8	1.1	1.1	1.3	1.3	1.1	1.1
150°	0.3	0.5	0.5	0.8	1.1	1.1	1.1	1.3	1.1	1.1	1.1
152.5°	0.3	0.5	0.5	0.8	1.1	1.1	1.1	1.3	1.1	1.1	1.1
155°	0.5	0.5	0.5	0.8	1.1	1.1	1.1	1.3	1.1	1.1	1.3
157.5°	0.5	0.5	0.5	0.8	1.1	1.1	1.1	1.3	1.1	1.1	1.3
160°	0.5	0.5	0.5	0.8	0.8	1.1	1.1	1.1	1.1	1.1	1.1
162.5°	0.5	0.5	0.5	0.8	0.8	1.1	1.1	1.1	1.1	1.1	1.1
165°	0.5	0.5	0.5	0.5	0.8	0.8	1.1	1.1	1.1	1.1	1.1
167.5°	0.5	0.5	0.5	0.8	0.8	0.8	1.1	1.1	1.1	1.1	1.1
170°	0.5	0.5	0.5	0.8	0.8	0.8	1.1	1.3	1.3	1.3	1.3
172.5°	0.5	0.5	0.5	0.8	0.8	1.1	1.1	1.3	1.3	1.3	1.3
175°	0.5	0.5	0.5	0.8	0.8	1.1	1.1	1.3	1.3	1.3	1.3
177.5°	0.3	0.5	0.5	0.8	0.8	1.1	1.1	1.3	1.3	1.3	1.1
180°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	209.4	209.4	209.4
2.5°	199.2	195.5	194.4
5°	188.6	182.4	179.0
7.5°	177.9	169.6	165.6
10°	168.0	156.3	152.0
12.5°	156.3	142.7	136.0
15°	145.1	127.5	121.1
17.5°	132.5	112.8	105.3
20°	120.8	98.1	90.4
22.5°	107.5	83.7	75.2
25°	95.5	69.3	59.7
27.5°	82.1	54.7	46.4
30°	69.6	41.9	33.6
32.5°	57.6	30.7	23.2
35°	46.4	20.8	14.7
37.5°	35.7	12.8	7.5
40°	25.9	6.7	3.5
42.5°	17.3	3.2	1.9
45°	10.7	1.6	0.0
47.5°	6.1	0.0	0.0
50°	3.2	0.0	0.0
52.5°	1.3	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	0.5	0.8
80°	0.5	1.1	1.3
82.5°	1.1	1.3	1.3
85°	1.1	1.3	1.6
87.5°	1.3	1.6	1.9
90°	1.6	1.9	1.9
92.5°	1.6	2.1	2.1
95°	1.9	2.1	2.4
97.5°	2.1	2.4	2.4
100°	1.9	2.4	2.7
102.5°	1.6	2.4	2.4
105°	1.3	1.9	2.1



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	1.1	1.3	1.3
115°	0.8	1.1	1.3
117.5°	0.8	1.1	1.1
120°	0.8	0.8	1.1
122.5°	0.8	0.8	1.1
125°	0.8	0.8	1.1
127.5°	1.1	0.8	0.8
130°	0.8	0.8	0.8
132.5°	1.1	0.8	0.8
135°	1.1	0.8	0.8
137.5°	1.1	0.8	0.8
140°	1.1	0.8	0.8
142.5°	1.1	0.8	0.8
145°	0.8	0.8	0.8
147.5°	0.8	0.8	0.8
150°	0.8	0.8	0.5
152.5°	0.8	0.5	0.5
155°	0.8	0.5	0.3
157.5°	1.1	0.5	0.3
160°	0.8	0.5	0.3
162.5°	0.8	0.5	0.3
165°	0.8	0.5	0.0
167.5°	0.8	0.5	0.3
170°	0.8	0.5	0.3
172.5°	0.8	0.5	0.3
175°	0.8	0.3	0.3
177.5°	0.8	0.3	0.3
180°	0.8	0.8	0.8



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	112.0	108.8	98.1	80.5	56.3	31.5	11.7	2.1	0.5	0.8	0.8
110°	97.6	94.9	84.0	66.9	45.3	23.5	7.7	1.3	0.8	0.8	0.8





107.5°	1.1	1.6	1.9
110°	1.1	1.3	1.6



(END OF REPORT)