

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: P550680

Luminaire Tested: **FCC-X-2-LD4-1LO-30-UNV-80-84-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: P550680
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-30-UNV-80-84-ED1D
Description: FCC CORNER MOUNT LUMINAIRE WITH .125 PRISMATIC ACRYLIC 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

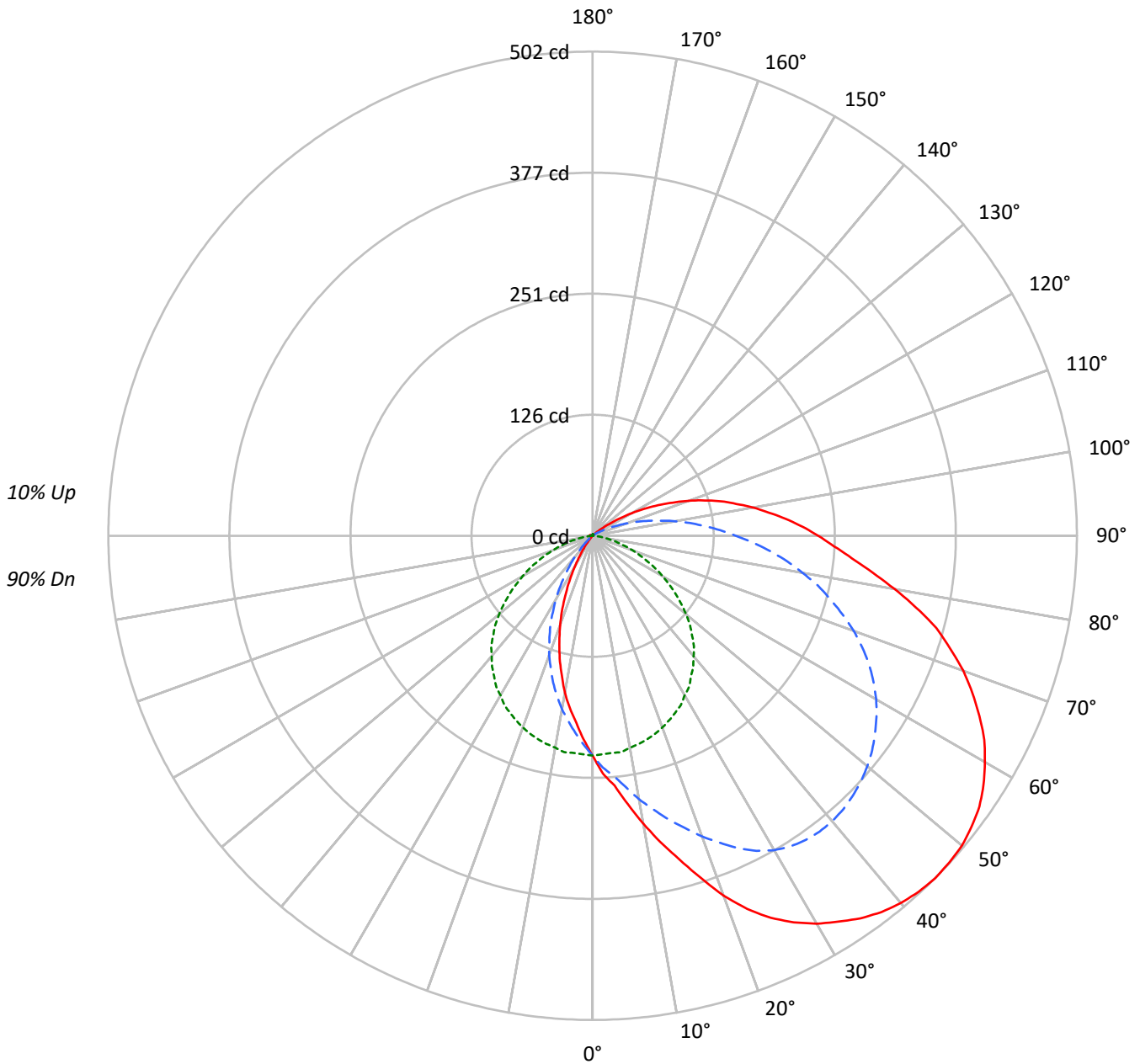
Lumens per Lamp: N/A
Luminaire Lumens: 1126.1 lumens
Efficiency: N/A
Efficacy: 96.3 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

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°	2452	2452	2452
5°	2692	2416	2016
10°	3045	2386	1661
15°	3413	2356	1294
20°	3849	2317	954
25°	4211	2273	626
30°	4480	2213	353
35°	4713	2150	156
40°	4920	2070	38
45°	5096	1971	0
50°	5245	1839	0
55°	5359	1672	0
60°	5416	1479	0
65°	5439	1259	0
70°	5420	1026	0
75°	5352	757	4
80°	5134	464	24
85°	4962	224	31



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	21.8	1.9
10°-20°	65.3	5.8
20°-30°	105.8	9.4
30°-40°	135.9	12.1
40°-50°	153.8	13.7
50°-60°	159.4	14.2
60°-70°	150.3	13.3
70°-80°	126.0	11.2
80°-90°	91.3	8.1
90°-100°	60.0	5.3
100°-110°	34.7	3.1
110°-120°	15.3	1.4
120°-130°	4.2	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°	192.9	17.1
0°-40°	328.8	29.2
0°-60°	642.0	57.0
0°-90°	1009.6	89.6
90°-120°	110.0	9.8
90°-150°	115.8	10.3
90°-180°	117.0	10.4
0°-180°	1126.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	228	228	228	228	228	
5°	260	250	226	205	195	26
15°	347	304	218	158	132	100
25°	437	357	202	104	65	202
35°	484	385	178	50	16	304
45°	502	381	146	12	0	388
55°	490	357	105	0	0	437
65°	442	316	63	0	0	438
75°	369	255	27	0	0	387
85°	270	185	4	1	2	230
90°	234	148	1	2	2	128
95°	201	116	1	2	3	158
105°	138	60	1	2	2	146
115°	75	20	1	1	2	75
125°	22	3	1	1	1	22
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°	227.8	227.8	227.8	227.8	227.8	227.8	227.8	227.8	227.8	227.8	227.8
2.5°	246.9	246.6	245.8	244.3	242.3	238.8	235.9	233.3	229.8	226.9	221.4
5°	260.0	258.5	257.4	255.9	251.3	248.1	242.9	237.0	231.5	226.0	215.0
7.5°	280.9	278.5	276.8	272.7	266.4	259.1	251.0	245.5	241.7	226.3	207.5
10°	303.2	301.2	297.7	290.4	282.6	272.2	260.5	247.5	235.9	223.1	200.8
12.5°	325.3	322.3	317.4	308.1	297.1	284.1	268.1	252.7	236.2	221.1	192.9
15°	347.3	344.1	338.9	327.6	313.1	295.9	276.5	257.1	237.6	218.5	184.8
17.5°	371.4	367.0	359.2	346.4	328.2	307.0	284.1	260.5	237.0	215.3	176.1
20°	397.2	391.1	382.7	365.6	344.1	319.2	291.6	264.0	236.8	211.5	166.3
22.5°	418.7	412.6	403.3	385.6	359.8	329.3	298.0	266.4	235.6	207.2	157.0
25°	437.2	432.3	422.2	401.8	374.6	340.0	304.1	268.1	233.9	202.5	147.1
27.5°	451.8	447.1	435.8	414.9	387.1	349.6	308.7	269.0	231.5	197.9	136.9
30°	464.5	459.9	446.2	424.8	395.5	357.2	313.4	269.3	228.6	190.9	125.9
32.5°	474.4	470.0	456.1	433.2	401.3	362.4	316.0	269.0	224.9	186.0	114.0
35°	484.2	479.9	463.6	439.3	405.6	364.7	318.0	267.5	220.2	177.9	102.7
37.5°	491.8	486.9	470.3	443.3	407.7	365.3	317.7	265.5	215.3	171.2	91.4
40°	497.0	491.8	474.1	445.7	408.2	364.4	315.4	262.0	209.5	162.8	79.5
42.5°	500.5	494.7	475.8	449.1	407.1	362.1	311.9	257.6	203.1	155.5	68.2
45°	502.2	496.1	476.1	446.2	405.0	357.7	306.7	252.1	196.1	145.7	56.9
47.5°	501.4	494.7	474.7	443.0	401.3	353.1	300.9	245.5	187.7	136.9	46.1
50°	499.9	493.0	471.5	439.0	396.0	347.3	294.5	237.3	179.0	126.2	36.6
52.5°	495.3	488.3	468.0	433.2	390.0	340.6	285.8	228.9	169.7	115.8	27.9
55°	489.5	483.1	461.9	428.0	382.1	332.5	277.7	219.9	160.7	105.0	20.0
57.5°	480.5	474.7	454.4	419.5	374.3	323.5	268.7	210.1	149.4	94.3	13.9
60°	469.5	463.6	443.9	410.0	365.3	313.4	258.8	199.9	139.3	83.6	8.7
62.5°	457.8	452.3	431.7	398.1	354.0	302.6	248.1	189.8	128.5	73.7	5.2
65°	442.5	437.2	418.7	383.9	341.5	291.0	236.2	177.6	117.5	62.7	2.9
67.5°	426.2	421.6	402.7	370.8	327.0	278.2	224.0	165.7	105.9	53.1	1.5
70°	408.8	403.0	385.6	353.1	312.2	263.7	210.6	153.5	94.9	43.8	0.0
72.5°	388.5	384.2	367.3	336.6	295.1	248.4	197.0	140.1	82.7	34.8	0.3
75°	368.8	363.3	347.9	318.9	278.2	232.1	181.9	127.7	70.8	26.7	0.3
77.5°	343.2	341.5	327.0	298.8	262.3	216.4	165.4	112.6	59.5	19.1	0.3
80°	317.7	316.0	304.7	278.8	243.7	197.9	150.0	98.4	48.5	12.8	0.3
82.5°	292.5	290.1	279.4	257.9	224.9	182.2	134.0	84.1	38.3	7.8	0.3
85°	269.8	266.9	255.3	235.6	205.4	164.5	117.5	70.2	28.4	4.4	0.6
87.5°	250.4	248.4	235.6	215.3	185.7	148.0	103.0	56.9	20.0	2.0	0.9
90°	233.9	229.5	218.2	196.7	167.1	129.7	87.6	45.6	13.3	1.2	1.2
92.5°	217.6	213.8	201.4	179.3	150.6	114.0	72.8	34.8	8.4	0.6	1.5
95°	200.8	196.7	184.5	164.2	133.8	98.1	59.8	25.5	4.6	0.6	1.5
97.5°	184.2	180.5	167.7	147.4	118.7	84.1	47.3	18.0	2.3	0.6	1.2
100°	168.9	164.5	152.9	132.6	103.6	70.2	36.6	11.6	1.5	0.6	1.2
102.5°	152.6	149.1	137.2	117.5	87.9	57.2	27.3	7.3	0.6	0.6	0.9
105°	138.1	133.8	122.2	101.8	74.9	45.0	19.1	4.4	0.6	0.6	0.9



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	89.9	86.5	76.3	59.2	38.0	17.7	5.2	0.9	0.9	0.9	0.9
115°	75.1	69.9	60.9	45.8	28.1	11.6	2.6	0.9	0.9	0.9	0.9
117.5°	60.1	55.7	49.3	34.8	18.6	7.5	1.5	0.9	0.9	0.9	0.9
120°	47.0	42.9	35.7	24.1	12.5	4.4	0.6	0.9	0.9	0.9	0.9
122.5°	33.7	30.5	24.1	15.7	7.5	2.0	0.9	0.9	1.2	1.2	0.9
125°	22.3	20.6	16.0	9.6	4.6	0.9	0.9	0.9	1.2	1.2	0.9
127.5°	14.5	13.1	9.3	5.5	2.0	0.9	0.9	1.2	1.2	1.2	0.9
130°	8.1	7.3	5.5	3.2	0.9	0.9	0.9	1.2	1.2	1.2	0.9
132.5°	4.6	4.4	2.9	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



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	227.8	227.8	227.8
2.5°	216.7	212.7	211.5
5°	205.1	198.5	194.7
7.5°	193.5	184.5	180.2
10°	182.8	170.0	165.4
12.5°	170.0	155.2	148.0
15°	157.8	138.7	131.7
17.5°	144.2	122.7	114.6
20°	131.4	106.8	98.4
22.5°	116.9	91.1	81.8
25°	103.9	75.4	65.0
27.5°	89.4	59.5	50.5
30°	75.7	45.6	36.6
32.5°	62.7	33.4	25.2
35°	50.5	22.6	16.0
37.5°	38.9	13.9	8.1
40°	28.1	7.3	3.8
42.5°	18.9	3.5	2.0
45°	11.6	1.7	0.0
47.5°	6.7	0.0	0.0
50°	3.5	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	1.7
87.5°	1.5	1.7	2.0
90°	1.7	2.0	2.0
92.5°	1.7	2.3	2.3
95°	2.0	2.3	2.6
97.5°	2.3	2.6	2.6
100°	2.0	2.6	2.9
102.5°	1.7	2.6	2.6
105°	1.5	2.0	2.3



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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°	121.9	118.4	106.8	87.6	61.2	34.2	12.8	2.3	0.6	0.9	0.9
110°	106.2	103.3	91.4	72.8	49.3	25.5	8.4	1.5	0.9	0.9	0.9





107.5°	1.2	1.7	2.0
110°	1.2	1.5	1.7



(END OF REPORT)