

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: P550691

Luminaire Tested: **FCC-X-2-LD4-1LO-30-UNV-80-96-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: P550691
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-80-96-ED1D-90
Description: FCC CORNER MOUNT LUMINAIRE WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES AND 3000K, AND 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

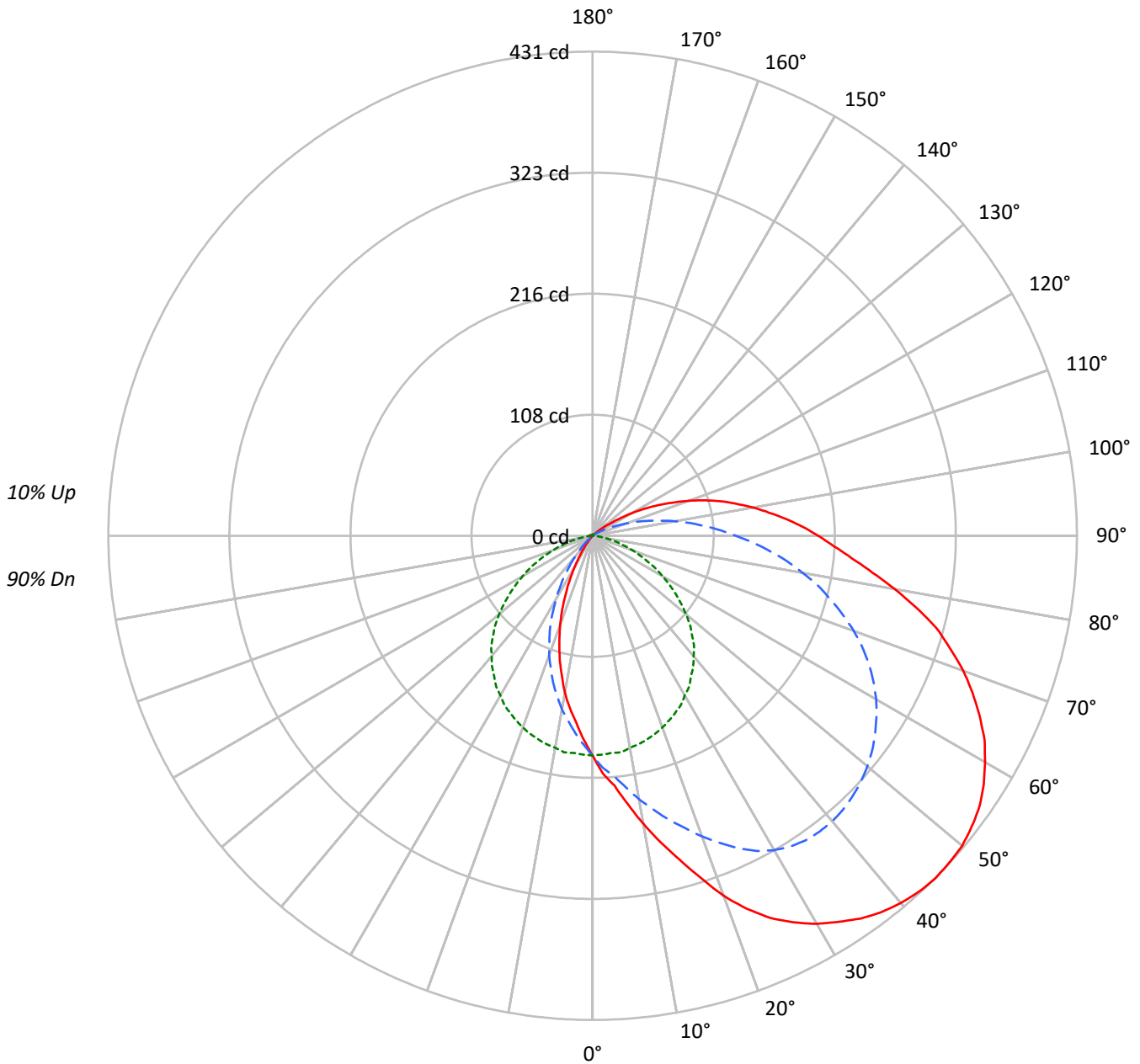
Lumens per Lamp: N/A
Luminaire Lumens: 966.8 lumens
Efficiency: N/A
Efficacy: 82.6 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

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°	2105	2105	2105
5°	2312	2075	1731
10°	2616	2049	1426
15°	2931	2023	1111
20°	3306	1990	819
25°	3616	1952	537
30°	3847	1901	303
35°	4048	1845	133
40°	4225	1778	32
45°	4377	1693	0
50°	4505	1580	0
55°	4603	1436	0
60°	4652	1271	0
65°	4670	1081	0
70°	4655	881	0
75°	4596	649	3
80°	4409	399	19
85°	4261	188	28



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	18.7	1.9
10°-20°	56.1	5.8
20°-30°	90.8	9.4
30°-40°	116.7	12.1
40°-50°	132.1	13.7
50°-60°	136.9	14.2
60°-70°	129.1	13.4
70°-80°	108.2	11.2
80°-90°	78.4	8.1
90°-100°	51.5	5.3
100°-110°	29.7	3.1
110°-120°	13.1	1.4
120°-130°	3.5	0.4
130°-140°	0.8	0.1
140°-150°	0.5	0.1
150°-160°	0.4	0.0
160°-170°	0.2	0.0
170°-180°	0.1	0.0
0°-30°	165.7	17.1
0°-40°	282.4	29.2
0°-60°	551.3	57.0
0°-90°	867.0	89.7
90°-120°	94.4	9.8
90°-150°	99.2	10.3
90°-180°	100.0	10.3
0°-180°	966.8	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	196	196	196	196	196	
5°	223	214	194	176	167	23
15°	298	262	188	136	113	86
25°	376	307	174	89	56	174
35°	416	331	153	43	14	261
45°	431	328	125	10	0	333
55°	420	307	90	0	0	375
65°	380	272	54	0	0	376
75°	317	219	23	0	0	332
85°	232	159	4	1	2	198
90°	201	127	1	2	2	110
95°	172	100	0	2	2	135
105°	119	51	0	1	2	125
115°	64	17	1	1	1	65
125°	19	2	1	1	1	19
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°	195.6	195.6	195.6	195.6	195.6	195.6	195.6	195.6	195.6	195.6	195.6
2.5°	212.0	211.8	211.0	209.8	208.1	205.1	202.6	200.3	197.3	194.9	190.1
5°	223.3	222.0	221.0	219.8	215.8	213.0	208.6	203.6	198.8	194.1	184.6
7.5°	241.2	239.2	237.7	234.2	228.7	222.5	215.5	210.8	207.6	194.4	178.2
10°	260.4	258.6	255.7	249.4	242.7	233.7	223.8	212.5	202.6	191.6	172.4
12.5°	279.3	276.8	272.6	264.6	255.2	243.9	230.2	217.0	202.8	189.9	165.7
15°	298.3	295.5	291.0	281.3	268.9	254.2	237.5	220.8	204.1	187.6	158.7
17.5°	318.9	315.2	308.5	297.5	281.8	263.6	243.9	223.8	203.6	184.9	151.2
20°	341.1	335.9	328.7	314.0	295.5	274.1	250.4	226.7	203.3	181.6	142.8
22.5°	359.6	354.3	346.4	331.2	309.0	282.8	255.9	228.7	202.3	177.9	134.8
25°	375.5	371.3	362.5	345.1	321.7	292.0	261.1	230.2	200.8	173.9	126.3
27.5°	388.0	384.0	374.3	356.3	332.4	300.3	265.1	231.0	198.8	169.9	117.6
30°	398.9	394.9	383.2	364.8	339.6	306.7	269.1	231.2	196.3	164.0	108.1
32.5°	407.4	403.7	391.7	372.0	344.6	311.2	271.3	231.0	193.1	159.7	97.9
35°	415.9	412.1	398.2	377.2	348.3	313.2	273.1	229.7	189.1	152.7	88.2
37.5°	422.3	418.1	403.9	380.7	350.1	313.7	272.8	228.0	184.9	147.0	78.5
40°	426.8	422.3	407.1	382.7	350.6	313.0	270.9	225.0	179.9	139.8	68.3
42.5°	429.8	424.8	408.6	385.7	349.6	311.0	267.9	221.3	174.4	133.6	58.6
45°	431.3	426.1	408.9	383.2	347.8	307.2	263.4	216.5	168.4	125.1	48.8
47.5°	430.6	424.8	407.6	380.5	344.6	303.2	258.4	210.8	161.2	117.6	39.6
50°	429.3	423.3	404.9	377.0	340.1	298.3	252.9	203.8	153.7	108.4	31.4
52.5°	425.3	419.4	401.9	372.0	334.9	292.5	245.4	196.6	145.8	99.4	23.9
55°	420.4	414.9	396.7	367.5	328.2	285.6	238.5	188.9	138.0	90.2	17.2
57.5°	412.6	407.6	390.2	360.3	321.4	277.8	230.7	180.4	128.3	81.0	12.0
60°	403.2	398.2	381.2	352.1	313.7	269.1	222.3	171.7	119.6	71.8	7.5
62.5°	393.2	388.5	370.8	341.9	304.0	259.9	213.0	163.0	110.4	63.3	4.5
65°	380.0	375.5	359.6	329.7	293.3	249.9	202.8	152.5	100.9	53.8	2.5
67.5°	366.0	362.0	345.9	318.4	280.8	239.0	192.4	142.3	90.9	45.6	1.2
70°	351.1	346.1	331.2	303.2	268.1	226.5	180.9	131.8	81.5	37.6	0.0
72.5°	333.6	329.9	315.5	289.0	253.4	213.3	169.2	120.4	71.0	29.9	0.2
75°	316.7	312.0	298.8	273.8	239.0	199.3	156.2	109.6	60.8	22.9	0.2
77.5°	294.8	293.3	280.8	256.6	225.3	185.9	142.0	96.7	51.1	16.4	0.2
80°	272.8	271.3	261.6	239.5	209.3	169.9	128.8	84.5	41.6	11.0	0.2
82.5°	251.2	249.2	240.0	221.5	193.1	156.5	115.1	72.3	32.9	6.7	0.2
85°	231.7	229.2	219.3	202.3	176.4	141.3	100.9	60.3	24.4	3.7	0.5
87.5°	215.0	213.3	202.3	184.9	159.5	127.1	88.5	48.8	17.2	1.7	0.7
90°	200.8	197.1	187.4	168.9	143.5	111.4	75.3	39.1	11.5	1.0	1.0
92.5°	186.9	183.6	172.9	154.0	129.3	97.9	62.5	29.9	7.2	0.5	1.2
95°	172.4	168.9	158.5	141.0	114.9	84.2	51.3	21.9	4.0	0.5	1.2
97.5°	158.2	155.0	144.0	126.6	101.9	72.3	40.6	15.4	2.0	0.5	1.0
100°	145.0	141.3	131.3	113.9	89.0	60.3	31.4	10.0	1.2	0.5	1.0
102.5°	131.1	128.1	117.9	100.9	75.5	49.1	23.4	6.2	0.5	0.5	0.7
105°	118.6	114.9	104.9	87.5	64.3	38.6	16.4	3.7	0.5	0.5	0.7



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	77.2	74.3	65.5	50.8	32.6	15.2	4.5	0.7	0.7	0.7	0.7
115°	64.5	60.1	52.3	39.4	24.2	10.0	2.2	0.7	0.7	0.7	0.7
117.5°	51.6	47.8	42.4	29.9	15.9	6.5	1.2	0.7	0.7	0.7	0.7
120°	40.4	36.9	30.6	20.7	10.7	3.7	0.5	0.7	0.7	0.7	0.7
122.5°	28.9	26.2	20.7	13.5	6.5	1.7	0.7	0.7	1.0	1.0	0.7
125°	19.2	17.7	13.7	8.2	4.0	0.7	0.7	0.7	1.0	1.0	0.7
127.5°	12.5	11.2	8.0	4.7	1.7	0.7	0.7	1.0	1.0	1.0	0.7
130°	7.0	6.2	4.7	2.7	0.7	0.7	0.7	1.0	1.0	1.0	0.7
132.5°	4.0	3.7	2.5	0.5	0.7	0.7	0.7	1.0	1.0	1.0	1.0
135°	1.0	0.5	0.5	0.5	0.7	0.7	1.0	1.0	1.2	1.2	1.0
137.5°	0.2	0.2	0.5	0.5	0.7	0.7	1.0	1.2	1.2	1.2	1.0
140°	0.2	0.2	0.5	0.7	0.7	0.7	1.0	1.2	1.2	1.2	1.0
142.5°	0.2	0.5	0.5	0.7	0.7	1.0	1.0	1.2	1.2	1.0	1.0
145°	0.2	0.5	0.5	0.7	0.7	1.0	1.0	1.2	1.0	1.0	1.0
147.5°	0.5	0.5	0.5	0.7	0.7	1.0	1.0	1.2	1.2	1.0	1.0
150°	0.2	0.5	0.5	0.7	1.0	1.0	1.0	1.2	1.0	1.0	1.0
152.5°	0.2	0.5	0.5	0.7	1.0	1.0	1.0	1.2	1.0	1.0	1.0
155°	0.5	0.5	0.5	0.7	1.0	1.0	1.0	1.2	1.0	1.0	1.2
157.5°	0.5	0.5	0.5	0.7	1.0	1.0	1.0	1.2	1.0	1.0	1.2
160°	0.5	0.5	0.5	0.7	0.7	1.0	1.0	1.0	1.0	1.0	1.0
162.5°	0.5	0.5	0.5	0.7	0.7	1.0	1.0	1.0	1.0	1.0	1.0
165°	0.5	0.5	0.5	0.5	0.7	0.7	1.0	1.0	1.0	1.0	1.0
167.5°	0.5	0.5	0.5	0.7	0.7	0.7	1.0	1.0	1.0	1.0	1.0
170°	0.5	0.5	0.5	0.7	0.7	0.7	1.0	1.2	1.2	1.2	1.2
172.5°	0.5	0.5	0.5	0.7	0.7	1.0	1.0	1.2	1.2	1.2	1.2
175°	0.5	0.5	0.5	0.7	0.7	1.0	1.0	1.2	1.2	1.2	1.2
177.5°	0.2	0.5	0.5	0.7	0.7	1.0	1.0	1.2	1.2	1.2	1.0
180°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	195.6	195.6	195.6
2.5°	186.1	182.6	181.6
5°	176.2	170.4	167.2
7.5°	166.2	158.5	154.7
10°	157.0	146.0	142.0
12.5°	146.0	133.3	127.1
15°	135.6	119.1	113.1
17.5°	123.8	105.4	98.4
20°	112.9	91.7	84.5
22.5°	100.4	78.2	70.3
25°	89.2	64.8	55.8
27.5°	76.7	51.1	43.4
30°	65.0	39.1	31.4
32.5°	53.8	28.7	21.7
35°	43.4	19.4	13.7
37.5°	33.4	12.0	7.0
40°	24.2	6.2	3.2
42.5°	16.2	3.0	1.7
45°	10.0	1.5	0.0
47.5°	5.7	0.0	0.0
50°	3.0	0.0	0.0
52.5°	1.2	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°	0.2	0.2	0.2
77.5°	0.2	0.5	0.7
80°	0.5	1.0	1.2
82.5°	1.0	1.2	1.2
85°	1.0	1.2	1.5
87.5°	1.2	1.5	1.7
90°	1.5	1.7	1.7
92.5°	1.5	2.0	2.0
95°	1.7	2.0	2.2
97.5°	2.0	2.2	2.2
100°	1.7	2.2	2.5
102.5°	1.5	2.2	2.2
105°	1.2	1.7	2.0



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	1.0	1.2	1.2
115°	0.7	1.0	1.2
117.5°	0.7	1.0	1.0
120°	0.7	0.7	1.0
122.5°	0.7	0.7	1.0
125°	0.7	0.7	1.0
127.5°	1.0	0.7	0.7
130°	0.7	0.7	0.7
132.5°	1.0	0.7	0.7
135°	1.0	0.7	0.7
137.5°	1.0	0.7	0.7
140°	1.0	0.7	0.7
142.5°	1.0	0.7	0.7
145°	0.7	0.7	0.7
147.5°	0.7	0.7	0.7
150°	0.7	0.7	0.5
152.5°	0.7	0.5	0.5
155°	0.7	0.5	0.2
157.5°	1.0	0.5	0.2
160°	0.7	0.5	0.2
162.5°	0.7	0.5	0.2
165°	0.7	0.5	0.0
167.5°	0.7	0.5	0.2
170°	0.7	0.5	0.2
172.5°	0.7	0.5	0.2
175°	0.7	0.2	0.2
177.5°	0.7	0.2	0.2
180°	0.7	0.7	0.7



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	104.7	101.7	91.7	75.3	52.6	29.4	11.0	2.0	0.5	0.7	0.7
110°	91.2	88.7	78.5	62.5	42.4	21.9	7.2	1.2	0.7	0.7	0.7





107.5°	1.0	1.5	1.7
110°	1.0	1.2	1.5



(END OF REPORT)