

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: P550688

Luminaire Tested: **FCC-X-2-LD4-1LO-30-UNV-80-88-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: P550688
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-80-88-ED1D
Description: FCC CORNER MOUNT LUMINAIRE WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .500 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 3000K, AND 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

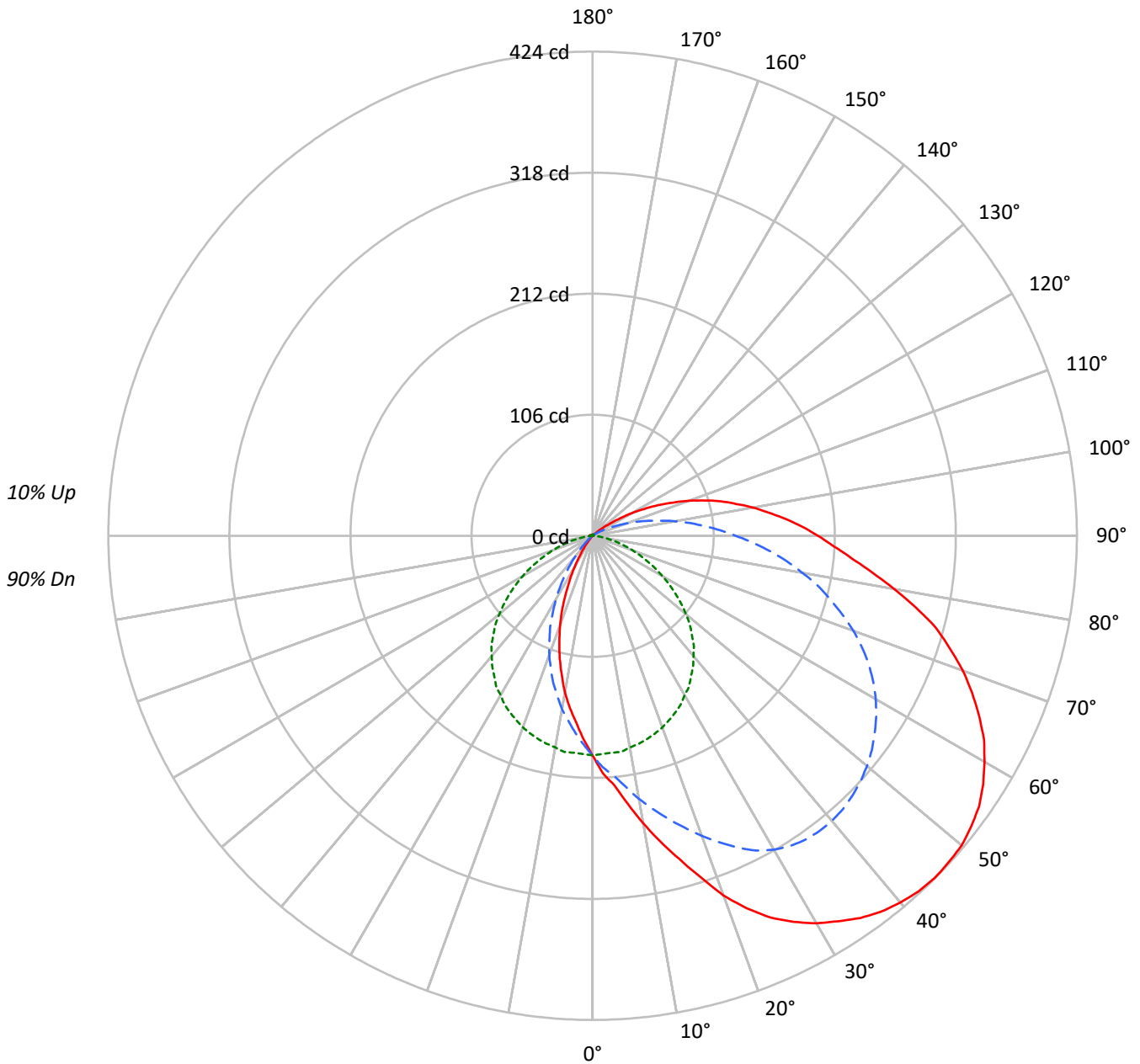
Lumens per Lamp: N/A
Luminaire Lumens: 949.9 lumens
Efficiency: N/A
Efficacy: 81.2 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

Input Watts (W): 11.7
Input Voltage (V): NR
Input Current (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

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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20				20
RC	80				70				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	93	93	93	90
1	103	96	91	86	99	93	88	83	87	83	79	81	78	74	76	73	70	76	73	70	67
2	92	82	74	67	88	79	72	65	74	67	62	69	64	59	64	60	56	64	60	56	53
3	83	71	61	54	79	68	60	53	64	56	50	59	53	48	55	50	46	55	50	46	43
4	75	62	52	44	72	60	51	44	56	48	42	52	45	40	49	43	38	49	43	38	36
5	69	55	45	38	66	53	44	37	50	42	35	46	39	34	43	38	33	43	38	33	30
6	63	49	39	32	61	47	38	32	44	36	31	42	35	29	39	33	28	39	33	28	26
7	58	44	35	28	56	43	34	28	40	32	27	38	31	26	36	29	25	36	29	25	23
8	54	40	31	25	52	39	30	24	37	29	24	34	28	23	32	26	22	32	26	22	20
9	51	36	28	22	49	35	27	22	33	26	21	32	25	20	30	24	20	30	24	20	18
10	47	33	25	20	45	33	25	19	31	24	19	29	23	18	28	22	18	28	22	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	2069	2069	2069
5°	2270	2038	1701
10°	2569	2013	1401
15°	2879	1987	1092
20°	3247	1956	804
25°	3553	1918	528
30°	3780	1868	297
35°	3977	1814	131
40°	4150	1746	32
45°	4300	1663	0
50°	4426	1552	0
55°	4522	1411	0
60°	4570	1248	0
65°	4588	1063	0
70°	4573	867	0
75°	4514	638	3
80°	4331	392	19
85°	4188	188	28



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	18.4	1.9
10°-20°	55.1	5.8
20°-30°	89.2	9.4
30°-40°	114.7	12.1
40°-50°	129.8	13.7
50°-60°	134.5	14.2
60°-70°	126.8	13.3
70°-80°	106.3	11.2
80°-90°	77.0	8.1
90°-100°	50.6	5.3
100°-110°	29.2	3.1
110°-120°	12.9	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°	162.8	17.1
0°-40°	277.4	29.2
0°-60°	541.7	57.0
0°-90°	851.7	89.7
90°-120°	92.8	9.8
90°-150°	97.6	10.3
90°-180°	98.0	10.3
0°-180°	949.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	192	192	192	192	192	
5°	219	211	191	173	164	22
15°	293	257	184	133	111	84
25°	369	301	171	88	55	170
35°	409	325	150	43	14	256
45°	424	322	123	10	0	327
55°	413	301	89	0	0	369
65°	373	267	53	0	0	369
75°	311	215	22	0	0	326
85°	228	156	4	1	2	194
90°	197	125	1	2	2	108
95°	169	98	0	2	2	133
105°	116	51	0	1	2	123
115°	63	17	1	1	1	64
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°	192.2	192.2	192.2	192.2	192.2	192.2	192.2	192.2	192.2	192.2	192.2
2.5°	208.3	208.1	207.3	206.1	204.4	201.5	199.0	196.8	193.9	191.4	186.8
5°	219.3	218.1	217.1	215.9	212.0	209.3	204.9	200.0	195.3	190.7	181.4
7.5°	237.0	235.0	233.5	230.1	224.7	218.6	211.7	207.1	203.9	190.9	175.0
10°	255.8	254.1	251.2	245.0	238.4	229.6	219.8	208.8	199.0	188.2	169.4
12.5°	274.4	272.0	267.8	260.0	250.7	239.7	226.2	213.2	199.3	186.5	162.8
15°	293.0	290.3	285.9	276.4	264.1	249.7	233.3	216.9	200.5	184.3	155.9
17.5°	313.3	309.7	303.1	292.3	276.9	259.0	239.7	219.8	200.0	181.6	148.6
20°	335.1	330.0	322.9	308.4	290.3	269.3	246.0	222.8	199.8	178.5	140.3
22.5°	353.2	348.1	340.3	325.3	303.5	277.8	251.4	224.7	198.8	174.8	132.4
25°	368.9	364.7	356.2	339.0	316.0	286.9	256.5	226.2	197.3	170.9	124.1
27.5°	381.1	377.2	367.7	350.1	326.6	295.0	260.5	226.9	195.3	166.9	115.5
30°	391.9	388.0	376.5	358.4	333.7	301.3	264.4	227.2	192.9	161.1	106.2
32.5°	400.2	396.6	384.8	365.5	338.5	305.7	266.6	226.9	189.7	156.9	96.2
35°	408.6	404.9	391.2	370.6	342.2	307.7	268.3	225.7	185.8	150.1	86.7
37.5°	414.9	410.8	396.8	374.0	343.9	308.2	268.0	224.0	181.6	144.4	77.1
40°	419.3	414.9	400.0	376.0	344.4	307.5	266.1	221.0	176.7	137.3	67.1
42.5°	422.3	417.4	401.5	378.9	343.4	305.5	263.2	217.4	171.4	131.2	57.5
45°	423.7	418.6	401.7	376.5	341.7	301.8	258.7	212.7	165.5	122.9	48.0
47.5°	423.0	417.4	400.5	373.8	338.5	297.9	253.8	207.1	158.4	115.5	38.9
50°	421.8	415.9	397.8	370.4	334.1	293.0	248.5	200.2	151.0	106.5	30.8
52.5°	417.9	412.0	394.9	365.5	329.0	287.4	241.1	193.1	143.2	97.7	23.5
55°	413.0	407.6	389.7	361.1	322.4	280.5	234.3	185.6	135.6	88.6	16.9
57.5°	405.4	400.5	383.3	354.0	315.8	272.9	226.7	177.2	126.1	79.6	11.8
60°	396.1	391.2	374.5	345.9	308.2	264.4	218.4	168.7	117.5	70.5	7.3
62.5°	386.3	381.6	364.3	335.9	298.6	255.3	209.3	160.1	108.4	62.2	4.4
65°	373.3	368.9	353.2	323.9	288.1	245.5	199.3	149.8	99.1	52.9	2.4
67.5°	359.6	355.7	339.8	312.8	275.9	234.8	189.0	139.8	89.3	44.8	1.2
70°	344.9	340.0	325.3	297.9	263.4	222.5	177.7	129.5	80.0	37.0	0.0
72.5°	327.8	324.1	309.9	284.0	249.0	209.5	166.2	118.2	69.8	29.4	0.2
75°	311.1	306.5	293.5	269.0	234.8	195.8	153.5	107.7	59.7	22.5	0.2
77.5°	289.6	288.1	275.9	252.1	221.3	182.6	139.5	95.0	50.2	16.2	0.2
80°	268.0	266.6	257.0	235.2	205.6	166.9	126.6	83.0	40.9	10.8	0.2
82.5°	246.8	244.8	235.7	217.6	189.7	153.7	113.1	71.0	32.3	6.6	0.2
85°	227.7	225.2	215.4	198.8	173.3	138.8	99.1	59.2	24.0	3.7	0.5
87.5°	211.3	209.5	198.8	181.6	156.7	124.8	86.9	48.0	16.9	1.7	0.7
90°	197.3	193.6	184.1	166.0	141.0	109.4	73.9	38.4	11.3	1.0	1.0
92.5°	183.6	180.4	169.9	151.3	127.0	96.2	61.4	29.4	7.1	0.5	1.2
95°	169.4	166.0	155.7	138.6	112.8	82.7	50.4	21.5	3.9	0.5	1.2
97.5°	155.4	152.3	141.5	124.4	100.1	71.0	39.9	15.2	2.0	0.5	1.0
100°	142.5	138.8	129.0	111.9	87.4	59.2	30.8	9.8	1.2	0.5	1.0
102.5°	128.8	125.8	115.8	99.1	74.2	48.2	23.0	6.1	0.5	0.5	0.7
105°	116.5	112.8	103.1	85.9	63.2	37.9	16.2	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°	75.9	72.9	64.4	49.9	32.1	14.9	4.4	0.7	0.7	0.7	0.7
115°	63.4	59.0	51.4	38.7	23.7	9.8	2.2	0.7	0.7	0.7	0.7
117.5°	50.7	47.0	41.6	29.4	15.7	6.4	1.2	0.7	0.7	0.7	0.7
120°	39.7	36.2	30.1	20.3	10.5	3.7	0.5	0.7	0.7	0.7	0.7
122.5°	28.4	25.7	20.3	13.2	6.4	1.7	0.7	0.7	1.0	1.0	0.7
125°	18.8	17.4	13.5	8.1	3.9	0.7	0.7	0.7	1.0	1.0	0.7
127.5°	12.2	11.0	7.8	4.7	1.7	0.7	0.7	1.0	1.0	1.0	0.7
130°	6.9	6.1	4.7	2.7	0.7	0.7	0.7	1.0	1.0	1.0	0.7
132.5°	3.9	3.7	2.4	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°	192.2	192.2	192.2
2.5°	182.9	179.4	178.5
5°	173.1	167.4	164.3
7.5°	163.3	155.7	152.0
10°	154.2	143.4	139.5
12.5°	143.4	131.0	124.8
15°	133.2	117.0	111.1
17.5°	121.7	103.5	96.7
20°	110.9	90.1	83.0
22.5°	98.7	76.9	69.0
25°	87.6	63.6	54.8
27.5°	75.4	50.2	42.6
30°	63.9	38.4	30.8
32.5°	52.9	28.2	21.3
35°	42.6	19.1	13.5
37.5°	32.8	11.8	6.9
40°	23.7	6.1	3.2
42.5°	15.9	2.9	1.7
45°	9.8	1.5	0.0
47.5°	5.6	0.0	0.0
50°	2.9	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	2.4
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°	102.8	99.9	90.1	73.9	51.7	28.9	10.8	2.0	0.5	0.7	0.7
110°	89.6	87.1	77.1	61.4	41.6	21.5	7.1	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)