

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: P550753

Luminaire Tested: **FCC-X-2-LD4-1LO-35-UNV-80-94-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: P550753
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-35-UNV-80-94-ED1D-90
Description: FCC CORNER MOUNT LUMINAIRE WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES AND 3500K, AND 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

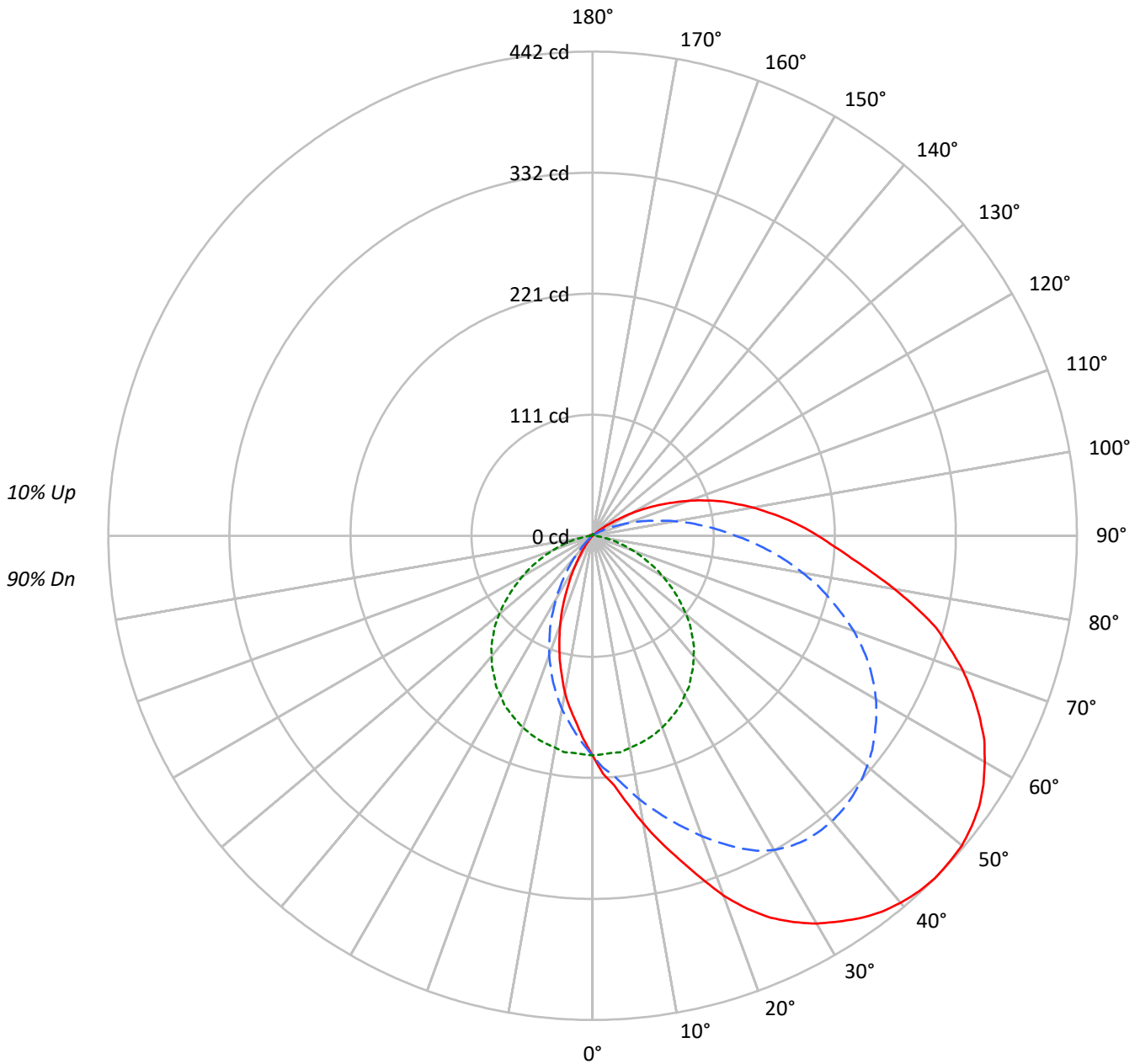
Lumens per Lamp: N/A
Luminaire Lumens: 991.1 lumens
Efficiency: N/A
Efficacy: 84.7 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

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°	2158	2158	2158
5°	2369	2126	1773
10°	2680	2100	1462
15°	3004	2073	1139
20°	3388	2040	839
25°	3706	2000	551
30°	3943	1948	311
35°	4148	1891	136
40°	4330	1822	33
45°	4486	1735	0
50°	4617	1619	0
55°	4717	1471	0
60°	4767	1301	0
65°	4786	1109	0
70°	4770	904	0
75°	4710	666	4
80°	4519	406	21
85°	4368	193	28



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	19.2	1.9
10°-20°	57.5	5.8
20°-30°	93.1	9.4
30°-40°	119.6	12.1
40°-50°	135.4	13.7
50°-60°	140.3	14.2
60°-70°	132.3	13.3
70°-80°	110.9	11.2
80°-90°	80.4	8.1
90°-100°	52.8	5.3
100°-110°	30.5	3.1
110°-120°	13.5	1.4
120°-130°	3.7	0.4
130°-140°	0.8	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°	169.8	17.1
0°-40°	289.4	29.2
0°-60°	565.0	57.0
0°-90°	888.6	89.7
90°-120°	96.8	9.8
90°-150°	101.8	10.3
90°-180°	103.0	10.4
0°-180°	991.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	200	200	200	200	200	
5°	229	220	199	180	171	23
15°	306	268	192	139	116	88
25°	385	314	178	91	57	178
35°	426	339	156	44	14	267
45°	442	336	128	10	0	341
55°	431	314	92	0	0	385
65°	389	278	55	0	0	385
75°	325	225	24	0	0	340
85°	238	163	4	1	2	203
90°	206	131	1	2	2	113
95°	177	102	0	2	2	139
105°	122	53	0	1	2	128
115°	66	18	1	1	1	66
125°	20	2	1	1	1	20
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°	200.5	200.5	200.5	200.5	200.5	200.5	200.5	200.5	200.5	200.5	200.5
2.5°	217.3	217.1	216.3	215.0	213.2	210.2	207.6	205.3	202.2	199.7	194.8
5°	228.8	227.5	226.5	225.2	221.1	218.3	213.7	208.6	203.8	198.9	189.2
7.5°	247.2	245.1	243.6	240.0	234.4	228.0	220.9	216.0	212.7	199.2	182.6
10°	266.8	265.1	262.0	255.6	248.7	239.5	229.3	217.8	207.6	196.4	176.7
12.5°	286.3	283.7	279.4	271.2	261.5	250.0	236.0	222.4	207.9	194.6	169.8
15°	305.7	302.9	298.3	288.3	275.5	260.5	243.4	226.2	209.1	192.3	162.7
17.5°	326.9	323.0	316.1	304.9	288.8	270.2	250.0	229.3	208.6	189.5	155.0
20°	349.6	344.2	336.8	321.8	302.9	280.9	256.6	232.4	208.4	186.2	146.3
22.5°	368.5	363.1	354.9	339.4	316.6	289.8	262.3	234.4	207.4	182.3	138.1
25°	384.8	380.5	371.5	353.7	329.7	299.3	267.6	236.0	205.8	178.2	129.5
27.5°	397.6	393.5	383.5	365.2	340.6	307.7	271.7	236.7	203.8	174.2	120.5
30°	408.8	404.7	392.7	373.8	348.1	314.3	275.8	237.0	201.2	168.0	110.8
32.5°	417.5	413.7	401.4	381.2	353.2	318.9	278.1	236.7	197.9	163.7	100.4
35°	426.2	422.4	408.1	386.6	357.0	321.0	279.9	235.4	193.8	156.5	90.4
37.5°	432.8	428.5	413.9	390.2	358.8	321.5	279.6	233.7	189.5	150.7	80.4
40°	437.4	432.8	417.3	392.2	359.3	320.7	277.6	230.6	184.4	143.3	70.0
42.5°	440.5	435.4	418.8	395.3	358.3	318.7	274.5	226.8	178.8	136.9	60.0
45°	442.0	436.7	419.0	392.7	356.5	314.9	269.9	221.9	172.6	128.2	50.1
47.5°	441.3	435.4	417.8	389.9	353.2	310.8	264.8	216.0	165.2	120.5	40.6
50°	440.0	433.9	415.0	386.4	348.6	305.7	259.2	208.9	157.6	111.1	32.2
52.5°	435.9	429.8	411.9	381.2	343.2	299.8	251.5	201.5	149.4	101.9	24.5
55°	430.8	425.2	406.5	376.7	336.3	292.6	244.4	193.6	141.5	92.4	17.6
57.5°	422.9	417.8	399.9	369.2	329.4	284.7	236.5	184.9	131.5	83.0	12.3
60°	413.2	408.1	390.7	360.8	321.5	275.8	227.8	175.9	122.6	73.5	7.7
62.5°	403.0	398.1	380.0	350.4	311.5	266.3	218.3	167.0	113.1	64.9	4.6
65°	389.4	384.8	368.5	337.8	300.6	256.1	207.9	156.3	103.4	55.2	2.6
67.5°	375.1	371.0	354.4	326.3	287.8	244.9	197.1	145.8	93.2	46.7	1.3
70°	359.8	354.7	339.4	310.8	274.8	232.1	185.4	135.1	83.5	38.6	0.0
72.5°	341.9	338.1	323.3	296.2	259.7	218.6	173.4	123.3	72.8	30.6	0.3
75°	324.6	319.7	306.2	280.6	244.9	204.3	160.1	112.4	62.3	23.5	0.3
77.5°	302.1	300.6	287.8	263.0	230.8	190.5	145.6	99.1	52.3	16.9	0.3
80°	279.6	278.1	268.1	245.4	214.5	174.2	132.0	86.6	42.6	11.2	0.3
82.5°	257.4	255.4	245.9	227.0	197.9	160.4	118.0	74.1	33.7	6.9	0.3
85°	237.5	234.9	224.7	207.4	180.8	144.8	103.4	61.8	25.0	3.8	0.5
87.5°	220.4	218.6	207.4	189.5	163.4	130.2	90.7	50.1	17.6	1.8	0.8
90°	205.8	202.0	192.0	173.1	147.1	114.1	77.1	40.1	11.7	1.0	1.0
92.5°	191.5	188.2	177.2	157.8	132.5	100.4	64.1	30.6	7.4	0.5	1.3
95°	176.7	173.1	162.4	144.5	117.7	86.3	52.6	22.5	4.1	0.5	1.3
97.5°	162.2	158.8	147.6	129.7	104.4	74.1	41.6	15.8	2.0	0.5	1.0
100°	148.6	144.8	134.6	116.7	91.2	61.8	32.2	10.2	1.3	0.5	1.0
102.5°	134.3	131.3	120.8	103.4	77.4	50.3	24.0	6.4	0.5	0.5	0.8
105°	121.6	117.7	107.5	89.6	65.9	39.6	16.9	3.8	0.5	0.5	0.8



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	79.2	76.1	67.2	52.1	33.5	15.6	4.6	0.8	0.8	0.8	0.8
115°	66.1	61.5	53.6	40.3	24.8	10.2	2.3	0.8	0.8	0.8	0.8
117.5°	52.9	49.0	43.4	30.6	16.3	6.6	1.3	0.8	0.8	0.8	0.8
120°	41.4	37.8	31.4	21.2	11.0	3.8	0.5	0.8	0.8	0.8	0.8
122.5°	29.6	26.8	21.2	13.8	6.6	1.8	0.8	0.8	1.0	1.0	0.8
125°	19.7	18.1	14.0	8.4	4.1	0.8	0.8	0.8	1.0	1.0	0.8
127.5°	12.8	11.5	8.2	4.9	1.8	0.8	0.8	1.0	1.0	1.0	0.8
130°	7.2	6.4	4.9	2.8	0.8	0.8	0.8	1.0	1.0	1.0	0.8
132.5°	4.1	3.8	2.6	0.5	0.8	0.8	0.8	1.0	1.0	1.0	1.0
135°	1.0	0.5	0.5	0.5	0.8	0.8	1.0	1.0	1.3	1.3	1.0
137.5°	0.3	0.3	0.5	0.5	0.8	0.8	1.0	1.3	1.3	1.3	1.0
140°	0.3	0.3	0.5	0.8	0.8	0.8	1.0	1.3	1.3	1.3	1.0
142.5°	0.3	0.5	0.5	0.8	0.8	1.0	1.0	1.3	1.3	1.0	1.0
145°	0.3	0.5	0.5	0.8	0.8	1.0	1.0	1.3	1.0	1.0	1.0
147.5°	0.5	0.5	0.5	0.8	0.8	1.0	1.0	1.3	1.3	1.0	1.0
150°	0.3	0.5	0.5	0.8	1.0	1.0	1.0	1.3	1.0	1.0	1.0
152.5°	0.3	0.5	0.5	0.8	1.0	1.0	1.0	1.3	1.0	1.0	1.0
155°	0.5	0.5	0.5	0.8	1.0	1.0	1.0	1.3	1.0	1.0	1.3
157.5°	0.5	0.5	0.5	0.8	1.0	1.0	1.0	1.3	1.0	1.0	1.3
160°	0.5	0.5	0.5	0.8	0.8	1.0	1.0	1.0	1.0	1.0	1.0
162.5°	0.5	0.5	0.5	0.8	0.8	1.0	1.0	1.0	1.0	1.0	1.0
165°	0.5	0.5	0.5	0.5	0.8	0.8	1.0	1.0	1.0	1.0	1.0
167.5°	0.5	0.5	0.5	0.8	0.8	0.8	1.0	1.0	1.0	1.0	1.0
170°	0.5	0.5	0.5	0.8	0.8	0.8	1.0	1.3	1.3	1.3	1.3
172.5°	0.5	0.5	0.5	0.8	0.8	1.0	1.0	1.3	1.3	1.3	1.3
175°	0.5	0.5	0.5	0.8	0.8	1.0	1.0	1.3	1.3	1.3	1.3
177.5°	0.3	0.5	0.5	0.8	0.8	1.0	1.0	1.3	1.3	1.3	1.0
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°	200.5	200.5	200.5
2.5°	190.8	187.2	186.2
5°	180.5	174.7	171.3
7.5°	170.3	162.4	158.6
10°	160.9	149.6	145.6
12.5°	149.6	136.6	130.2
15°	138.9	122.1	115.9
17.5°	126.9	108.0	100.9
20°	115.7	94.0	86.6
22.5°	102.9	80.2	72.0
25°	91.4	66.4	57.2
27.5°	78.7	52.3	44.4
30°	66.6	40.1	32.2
32.5°	55.2	29.4	22.2
35°	44.4	19.9	14.0
37.5°	34.2	12.3	7.2
40°	24.8	6.4	3.3
42.5°	16.6	3.1	1.8
45°	10.2	1.5	0.0
47.5°	5.9	0.0	0.0
50°	3.1	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	1.0	1.3
82.5°	1.0	1.3	1.3
85°	1.0	1.3	1.5
87.5°	1.3	1.5	1.8
90°	1.5	1.8	1.8
92.5°	1.5	2.0	2.0
95°	1.8	2.0	2.3
97.5°	2.0	2.3	2.3
100°	1.8	2.3	2.6
102.5°	1.5	2.3	2.3
105°	1.3	1.8	2.0



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	1.0	1.3	1.3
115°	0.8	1.0	1.3
117.5°	0.8	1.0	1.0
120°	0.8	0.8	1.0
122.5°	0.8	0.8	1.0
125°	0.8	0.8	1.0
127.5°	1.0	0.8	0.8
130°	0.8	0.8	0.8
132.5°	1.0	0.8	0.8
135°	1.0	0.8	0.8
137.5°	1.0	0.8	0.8
140°	1.0	0.8	0.8
142.5°	1.0	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°	1.0	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°	107.3	104.2	94.0	77.1	53.9	30.1	11.2	2.0	0.5	0.8	0.8
110°	93.5	90.9	80.4	64.1	43.4	22.5	7.4	1.3	0.8	0.8	0.8





107.5°	1.0	1.5	1.8
110°	1.0	1.3	1.5



(END OF REPORT)