

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: P550750

Luminaire Tested: **FCC-X-2-LD4-1LO-35-UNV-80-87-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: P550750
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-80-87-ED1D
Description: FCC CORNER MOUNT LUMINAIRE WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .375 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 3500K, AND 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

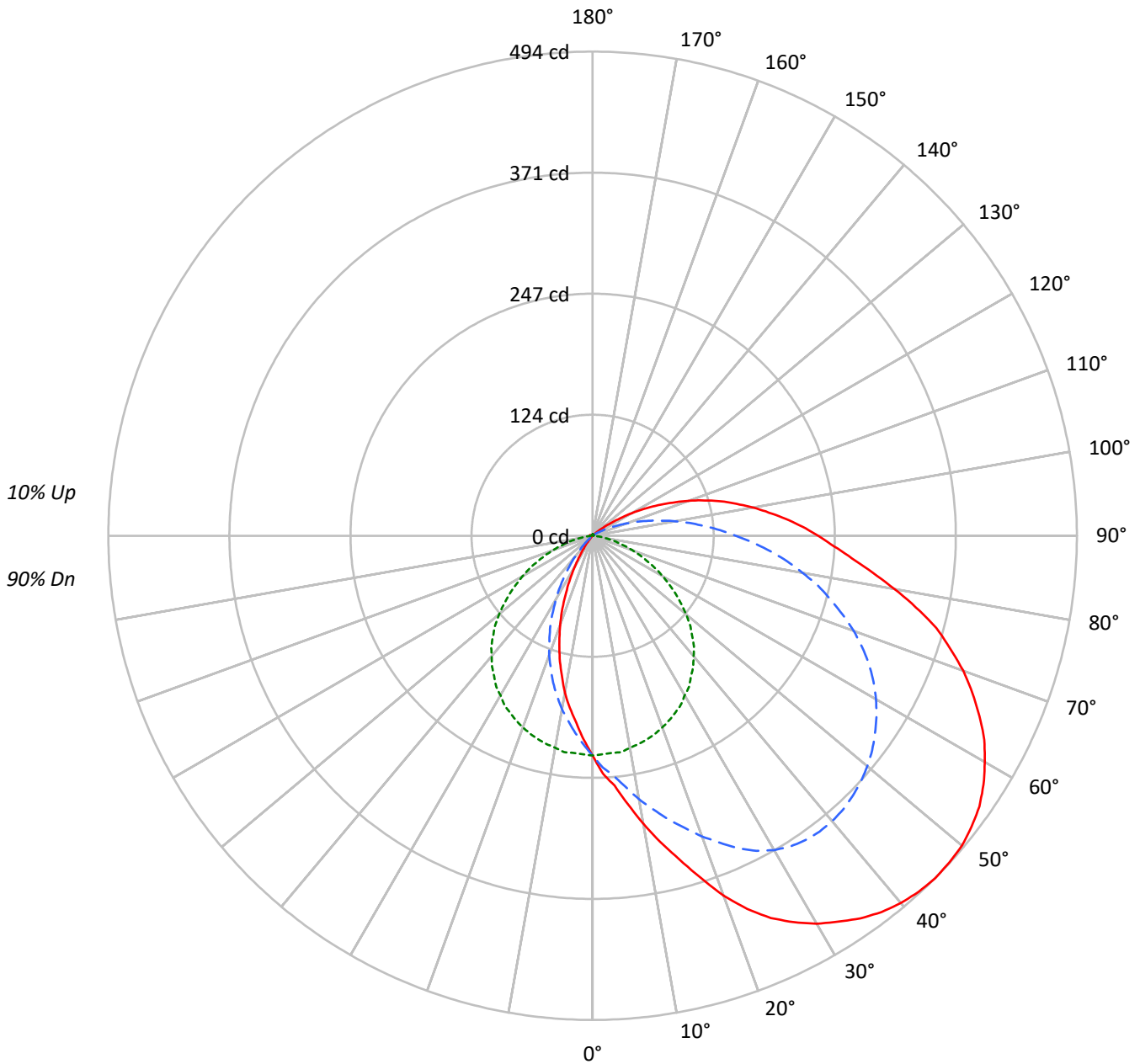
Lumens per Lamp: N/A
Luminaire Lumens: 1108.0 lumens
Efficiency: N/A
Efficacy: 94.7 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

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

TEST NUMBER: P550750

CATALOG NUMBER: FCC-X-2-LD4-1LO-35-UNV-80-87-ED1D

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°	2412	2412	2412
5°	2648	2377	1983
10°	2997	2348	1634
15°	3359	2318	1274
20°	3788	2280	938
25°	4144	2237	616
30°	4409	2178	347
35°	4638	2114	153
40°	4841	2037	37
45°	5015	1939	0
50°	5162	1810	0
55°	5273	1647	0
60°	5329	1455	0
65°	5351	1239	0
70°	5334	1010	0
75°	5266	746	4
80°	5052	457	23
85°	4883	219	31



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	21.5	1.9
10°-20°	64.3	5.8
20°-30°	104.1	9.4
30°-40°	133.7	12.1
40°-50°	151.4	13.7
50°-60°	156.8	14.2
60°-70°	147.9	13.3
70°-80°	123.9	11.2
80°-90°	89.8	8.1
90°-100°	59.0	5.3
100°-110°	34.1	3.1
110°-120°	15.1	1.4
120°-130°	4.1	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°	189.8	17.1
0°-40°	323.6	29.2
0°-60°	631.7	57.0
0°-90°	993.4	89.7
90°-120°	108.2	9.8
90°-150°	113.8	10.3
90°-180°	115.0	10.4
0°-180°	1108.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	224	224	224	224	224	
5°	256	246	222	202	192	26
15°	342	300	215	155	130	99
25°	430	352	199	102	64	199
35°	476	379	175	50	16	299
45°	494	375	143	11	0	382
55°	482	352	103	0	0	430
65°	435	311	62	0	0	431
75°	363	251	26	0	0	381
85°	266	182	4	1	2	227
90°	230	146	1	2	2	126
95°	198	114	1	2	3	155
105°	136	59	1	1	2	143
115°	74	20	1	1	1	74
125°	22	3	1	1	1	22
135°	1	1	1	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	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°	224.1	224.1	224.1	224.1	224.1	224.1	224.1	224.1	224.1	224.1	224.1
2.5°	243.0	242.7	241.8	240.4	238.4	235.0	232.1	229.5	226.1	223.3	217.8
5°	255.8	254.4	253.2	251.8	247.2	244.1	239.0	233.3	227.8	222.4	211.6
7.5°	276.4	274.1	272.4	268.4	262.1	255.0	247.0	241.5	237.8	222.7	204.1
10°	298.4	296.4	292.9	285.8	278.1	267.8	256.4	243.5	232.1	219.6	197.6
12.5°	320.1	317.2	312.3	303.2	292.4	279.5	263.8	248.7	232.4	217.6	189.9
15°	341.8	338.6	333.5	322.3	308.1	291.2	272.1	253.0	233.8	215.0	181.9
17.5°	365.4	361.2	353.5	340.9	322.9	302.1	279.5	256.4	233.3	211.8	173.3
20°	390.9	384.9	376.6	359.7	338.6	314.1	286.9	259.8	233.0	208.1	163.6
22.5°	412.0	406.0	396.9	379.4	354.0	324.0	293.2	262.1	231.8	203.9	154.5
25°	430.3	425.4	415.4	395.4	368.6	334.6	299.2	263.8	230.1	199.3	144.8
27.5°	444.5	440.0	428.8	408.3	380.9	344.0	303.8	264.7	227.8	194.7	134.8
30°	457.1	452.5	439.1	418.0	389.1	351.5	308.3	264.9	225.0	187.9	123.9
32.5°	466.8	462.5	448.8	426.3	394.9	356.6	310.9	264.7	221.3	183.0	112.2
35°	476.5	472.2	456.2	432.3	399.1	358.9	312.9	263.2	216.7	175.0	101.1
37.5°	483.9	479.1	462.8	436.3	401.1	359.5	312.6	261.2	211.8	168.4	89.9
40°	489.1	483.9	466.5	438.5	401.7	358.6	310.3	257.8	206.1	160.2	78.2
42.5°	492.5	486.8	468.2	442.0	400.6	356.3	306.9	253.5	199.9	153.0	67.1
45°	494.2	488.2	468.5	439.1	398.6	352.0	301.8	248.1	193.0	143.3	56.0
47.5°	493.4	486.8	467.1	436.0	394.9	347.5	296.1	241.5	184.7	134.8	45.4
50°	491.9	485.1	463.9	432.0	389.7	341.8	289.8	233.5	176.2	124.2	36.0
52.5°	487.4	480.5	460.5	426.3	383.7	335.2	281.2	225.3	167.0	113.9	27.4
55°	481.6	475.4	454.5	421.1	376.0	327.2	273.2	216.4	158.2	103.4	19.7
57.5°	472.8	467.1	447.1	412.8	368.3	318.3	264.4	206.7	147.0	92.8	13.7
60°	461.9	456.2	436.8	403.4	359.5	308.3	254.7	196.7	137.0	82.2	8.6
62.5°	450.5	445.1	424.8	391.7	348.3	297.8	244.1	186.7	126.5	72.5	5.1
65°	435.4	430.3	412.0	377.7	336.0	286.4	232.4	174.7	115.6	61.7	2.9
67.5°	419.4	414.8	396.3	364.9	321.8	273.8	220.4	163.0	104.2	52.2	1.4
70°	402.3	396.6	379.4	347.5	307.2	259.5	207.3	151.0	93.4	43.1	0.0
72.5°	382.3	378.0	361.4	331.2	290.4	244.4	193.9	137.9	81.4	34.3	0.3
75°	362.9	357.5	342.3	313.8	273.8	228.4	179.0	125.6	69.7	26.3	0.3
77.5°	337.8	336.0	321.8	294.1	258.1	213.0	162.7	110.8	58.5	18.8	0.3
80°	312.6	310.9	299.8	274.4	239.8	194.7	147.6	96.8	47.7	12.6	0.3
82.5°	287.8	285.5	274.9	253.8	221.3	179.3	131.9	82.8	37.7	7.7	0.3
85°	265.5	262.7	251.2	231.8	202.1	161.9	115.6	69.1	28.0	4.3	0.6
87.5°	246.4	244.4	231.8	211.8	182.7	145.6	101.4	56.0	19.7	2.0	0.9
90°	230.1	225.8	214.7	193.6	164.5	127.6	86.2	44.8	13.1	1.1	1.1
92.5°	214.1	210.4	198.1	176.4	148.2	112.2	71.7	34.3	8.3	0.6	1.4
95°	197.6	193.6	181.6	161.6	131.6	96.5	58.8	25.1	4.6	0.6	1.4
97.5°	181.3	177.6	165.0	145.0	116.8	82.8	46.5	17.7	2.3	0.6	1.1
100°	166.2	161.9	150.5	130.5	101.9	69.1	36.0	11.4	1.4	0.6	1.1
102.5°	150.2	146.7	135.0	115.6	86.5	56.2	26.8	7.1	0.6	0.6	0.9
105°	135.9	131.6	120.2	100.2	73.7	44.3	18.8	4.3	0.6	0.6	0.9



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CATALOG NUMBER: FCC-X-2-LD4-1LO-35-UNV-80-87-ED1D

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	88.5	85.1	75.1	58.2	37.4	17.4	5.1	0.9	0.9	0.9	0.9
115°	73.9	68.8	60.0	45.1	27.7	11.4	2.6	0.9	0.9	0.9	0.9
117.5°	59.1	54.8	48.5	34.3	18.3	7.4	1.4	0.9	0.9	0.9	0.9
120°	46.3	42.3	35.1	23.7	12.3	4.3	0.6	0.9	0.9	0.9	0.9
122.5°	33.1	30.0	23.7	15.4	7.4	2.0	0.9	0.9	1.1	1.1	0.9
125°	22.0	20.3	15.7	9.4	4.6	0.9	0.9	0.9	1.1	1.1	0.9
127.5°	14.3	12.8	9.1	5.4	2.0	0.9	0.9	1.1	1.1	1.1	0.9
130°	8.0	7.1	5.4	3.1	0.9	0.9	0.9	1.1	1.1	1.1	0.9
132.5°	4.6	4.3	2.9	0.6	0.9	0.9	0.9	1.1	1.1	1.1	1.1
135°	1.1	0.6	0.6	0.6	0.9	0.9	1.1	1.1	1.4	1.4	1.1
137.5°	0.3	0.3	0.6	0.6	0.9	0.9	1.1	1.4	1.4	1.4	1.1
140°	0.3	0.3	0.6	0.9	0.9	0.9	1.1	1.4	1.4	1.4	1.1
142.5°	0.3	0.6	0.6	0.9	0.9	1.1	1.1	1.4	1.4	1.1	1.1
145°	0.3	0.6	0.6	0.9	0.9	1.1	1.1	1.4	1.1	1.1	1.1
147.5°	0.6	0.6	0.6	0.9	0.9	1.1	1.1	1.4	1.4	1.1	1.1
150°	0.3	0.6	0.6	0.9	1.1	1.1	1.1	1.4	1.1	1.1	1.1
152.5°	0.3	0.6	0.6	0.9	1.1	1.1	1.1	1.4	1.1	1.1	1.1
155°	0.6	0.6	0.6	0.9	1.1	1.1	1.1	1.4	1.1	1.1	1.4
157.5°	0.6	0.6	0.6	0.9	1.1	1.1	1.1	1.4	1.1	1.1	1.4
160°	0.6	0.6	0.6	0.9	0.9	1.1	1.1	1.1	1.1	1.1	1.1
162.5°	0.6	0.6	0.6	0.9	0.9	1.1	1.1	1.1	1.1	1.1	1.1
165°	0.6	0.6	0.6	0.6	0.9	0.9	1.1	1.1	1.1	1.1	1.1
167.5°	0.6	0.6	0.6	0.9	0.9	0.9	1.1	1.1	1.1	1.1	1.1
170°	0.6	0.6	0.6	0.9	0.9	0.9	1.1	1.4	1.4	1.4	1.4
172.5°	0.6	0.6	0.6	0.9	0.9	1.1	1.1	1.4	1.4	1.4	1.4
175°	0.6	0.6	0.6	0.9	0.9	1.1	1.1	1.4	1.4	1.4	1.4
177.5°	0.3	0.6	0.6	0.9	0.9	1.1	1.1	1.4	1.4	1.4	1.1
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°	224.1	224.1	224.1
2.5°	213.3	209.3	208.1
5°	201.9	195.3	191.6
7.5°	190.4	181.6	177.3
10°	179.9	167.3	162.7
12.5°	167.3	152.7	145.6
15°	155.3	136.5	129.6
17.5°	141.9	120.8	112.8
20°	129.3	105.1	96.8
22.5°	115.1	89.6	80.5
25°	102.2	74.2	64.0
27.5°	87.9	58.5	49.7
30°	74.5	44.8	36.0
32.5°	61.7	32.8	24.8
35°	49.7	22.3	15.7
37.5°	38.3	13.7	8.0
40°	27.7	7.1	3.7
42.5°	18.6	3.4	2.0
45°	11.4	1.7	0.0
47.5°	6.6	0.0	0.0
50°	3.4	0.0	0.0
52.5°	1.4	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	1.1	1.4
82.5°	1.1	1.4	1.4
85°	1.1	1.4	1.7
87.5°	1.4	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°	1.4	2.0	2.3



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	1.1	1.4	1.4
115°	0.9	1.1	1.4
117.5°	0.9	1.1	1.1
120°	0.9	0.9	1.1
122.5°	0.9	0.9	1.1
125°	0.9	0.9	1.1
127.5°	1.1	0.9	0.9
130°	0.9	0.9	0.9
132.5°	1.1	0.9	0.9
135°	1.1	0.9	0.9
137.5°	1.1	0.9	0.9
140°	1.1	0.9	0.9
142.5°	1.1	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°	1.1	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°	119.9	116.5	105.1	86.2	60.2	33.7	12.6	2.3	0.6	0.9	0.9
110°	104.5	101.6	89.9	71.7	48.5	25.1	8.3	1.4	0.9	0.9	0.9





107.5°	1.1	1.7	2.0
110°	1.1	1.4	1.7



(END OF REPORT)