

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: P550760

Luminaire Tested: **FCC-X-2-LD4-1LO-35-UNV-81-84-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: P550760
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-81-84-ED1D
Description: FCC CORNER MOUNT LUMINAIRE WITH .156 CLEAR PC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 3500K, AND 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

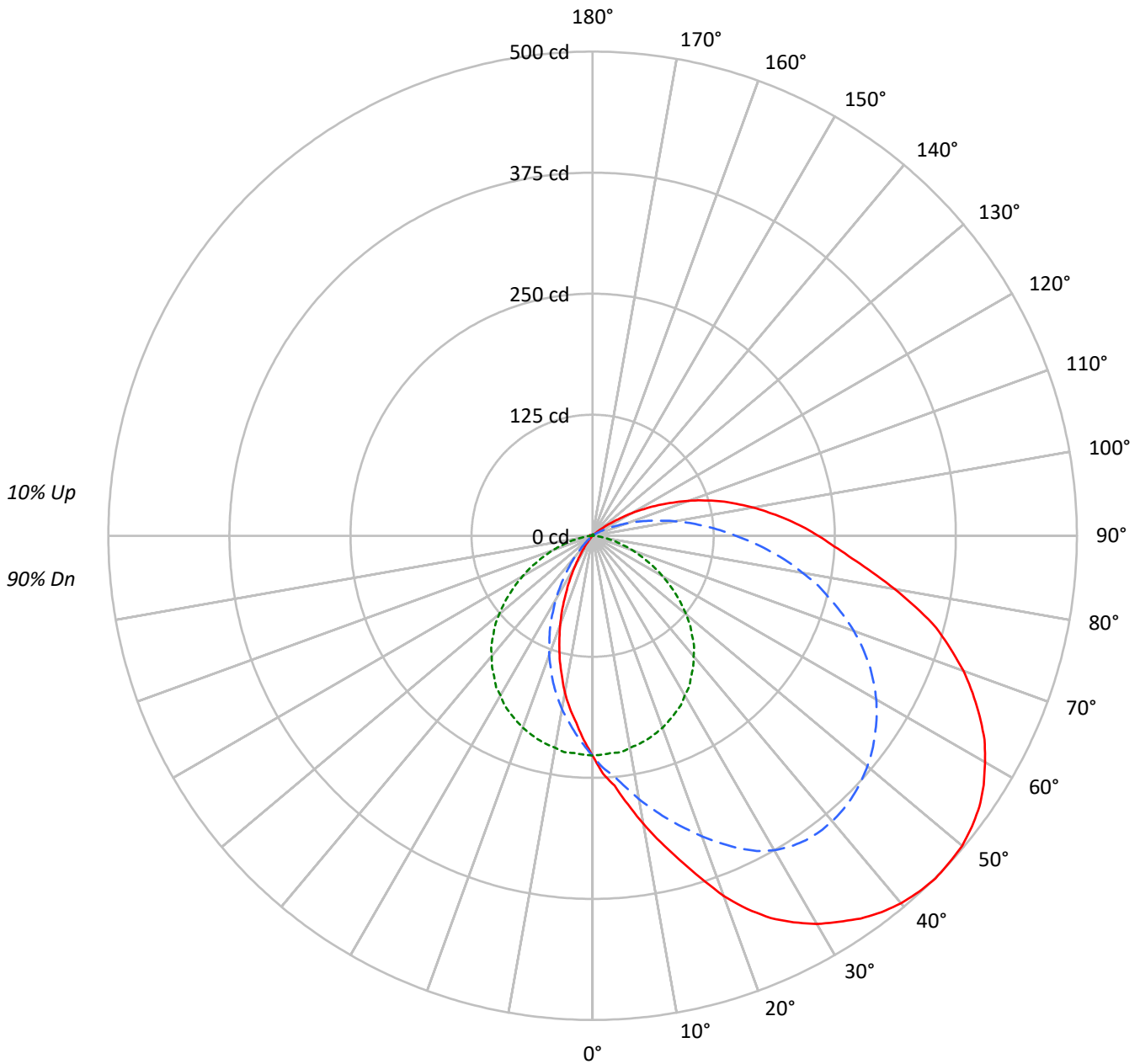
Lumens per Lamp: N/A
Luminaire Lumens: 1122.1 lumens
Efficiency: N/A
Efficacy: 95.9 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

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

TEST NUMBER: P550760

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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°	2443	2443	2443
5°	2681	2407	2008
10°	3034	2377	1655
15°	3401	2347	1290
20°	3836	2310	950
25°	4196	2265	624
30°	4465	2205	351
35°	4696	2141	155
40°	4903	2063	38
45°	5079	1963	0
50°	5227	1833	0
55°	5340	1667	0
60°	5397	1474	0
65°	5419	1253	0
70°	5401	1024	0
75°	5333	754	4
80°	5117	461	23
85°	4946	219	31



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	21.7	1.9
10°-20°	65.1	5.8
20°-30°	105.4	9.4
30°-40°	135.4	12.1
40°-50°	153.3	13.7
50°-60°	158.8	14.2
60°-70°	149.8	13.3
70°-80°	125.5	11.2
80°-90°	91.0	8.1
90°-100°	59.8	5.3
100°-110°	34.5	3.1
110°-120°	15.3	1.4
120°-130°	4.1	0.4
130°-140°	1.0	0.1
140°-150°	0.6	0.1
150°-160°	0.4	0.0
160°-170°	0.3	0.0
170°-180°	0.1	0.0
0°-30°	192.2	17.1
0°-40°	327.6	29.2
0°-60°	639.7	57.0
0°-90°	1006.0	89.7
90°-120°	109.6	9.8
90°-150°	115.3	10.3
90°-180°	116.0	10.3
0°-180°	1122.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	227	227	227	227	227	
5°	259	249	225	204	194	26
15°	346	303	218	157	131	100
25°	436	356	202	104	65	201
35°	482	384	177	50	16	303
45°	500	380	145	12	0	386
55°	488	356	105	0	0	436
65°	441	315	62	0	0	436
75°	368	254	27	0	0	385
85°	269	184	4	1	2	230
90°	233	148	1	2	2	128
95°	200	116	1	2	3	157
105°	138	60	1	1	2	145
115°	75	20	1	1	1	75
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°	227.0	227.0	227.0	227.0	227.0	227.0	227.0	227.0	227.0	227.0	227.0
2.5°	246.0	245.7	244.9	243.4	241.4	237.9	235.0	232.4	229.0	226.1	220.6
5°	259.0	257.6	256.4	255.0	250.4	247.2	242.0	236.2	230.7	225.2	214.2
7.5°	279.9	277.5	275.8	271.8	265.4	258.2	250.1	244.6	240.8	225.5	206.7
10°	302.1	300.1	296.6	289.4	281.6	271.2	259.6	246.6	235.0	222.3	200.1
12.5°	324.1	321.2	316.3	307.0	296.1	283.0	267.1	251.8	235.3	220.3	192.3
15°	346.1	342.9	337.7	326.4	312.0	294.9	275.5	256.2	236.8	217.7	184.2
17.5°	370.1	365.7	357.9	345.2	327.0	305.9	283.0	259.6	236.2	214.5	175.5
20°	395.8	389.7	381.3	364.3	342.9	318.0	290.6	263.1	235.9	210.8	165.7
22.5°	417.2	411.1	401.9	384.2	358.5	328.1	296.9	265.4	234.8	206.4	156.4
25°	435.7	430.8	420.7	400.4	373.2	338.8	303.0	267.1	233.0	201.8	146.6
27.5°	450.1	445.5	434.2	413.4	385.7	348.4	307.6	268.0	230.7	197.2	136.5
30°	462.9	458.2	444.7	423.3	394.1	355.9	312.2	268.3	227.8	190.2	125.5
32.5°	472.7	468.4	454.5	431.6	399.8	361.1	314.8	268.0	224.1	185.3	113.6
35°	482.5	478.2	462.0	437.7	404.2	363.4	316.9	266.6	219.4	177.2	102.3
37.5°	490.0	485.1	468.7	441.8	406.2	364.0	316.6	264.5	214.5	170.6	91.1
40°	495.3	490.0	472.4	444.1	406.8	363.1	314.3	261.1	208.7	162.2	79.2
42.5°	498.7	492.9	474.1	447.5	405.6	360.8	310.8	256.7	202.4	155.0	67.9
45°	500.5	494.4	474.4	444.7	403.6	356.5	305.6	251.2	195.4	145.1	56.7
47.5°	499.6	492.9	473.0	441.5	399.8	351.9	299.8	244.6	187.1	136.5	46.0
50°	498.1	491.2	469.8	437.4	394.6	346.1	293.4	236.5	178.4	125.8	36.4
52.5°	493.5	486.6	466.3	431.6	388.6	339.4	284.8	228.1	169.1	115.4	27.8
55°	487.7	481.4	460.3	426.4	380.8	331.3	276.7	219.1	160.2	104.7	19.9
57.5°	478.8	473.0	452.8	418.1	373.0	322.4	267.7	209.3	148.9	94.0	13.9
60°	467.8	462.0	442.3	408.5	364.0	312.2	257.9	199.2	138.8	83.3	8.7
62.5°	456.2	450.7	430.2	396.7	352.7	301.5	247.2	189.1	128.1	73.4	5.2
65°	440.9	435.7	417.2	382.5	340.3	290.0	235.3	176.9	117.1	62.4	2.9
67.5°	424.7	420.1	401.3	369.5	325.8	277.3	223.2	165.1	105.5	52.9	1.4
70°	407.4	401.6	384.2	351.9	311.1	262.8	209.9	152.9	94.5	43.7	0.0
72.5°	387.1	382.8	366.0	335.4	294.0	247.5	196.3	139.6	82.4	34.7	0.3
75°	367.5	362.0	346.6	317.7	277.3	231.3	181.3	127.2	70.5	26.6	0.3
77.5°	342.0	340.3	325.8	297.8	261.4	215.7	164.8	112.2	59.3	19.1	0.3
80°	316.6	314.8	303.6	277.8	242.9	197.2	149.5	98.0	48.3	12.7	0.3
82.5°	291.4	289.1	278.4	257.0	224.1	181.6	133.6	83.8	38.2	7.8	0.3
85°	268.9	266.0	254.4	234.8	204.7	163.9	117.1	70.0	28.3	4.3	0.6
87.5°	249.5	247.5	234.8	214.5	185.0	147.4	102.6	56.7	19.9	2.0	0.9
90°	233.0	228.7	217.4	196.0	166.5	129.2	87.3	45.4	13.3	1.2	1.2
92.5°	216.8	213.1	200.6	178.7	150.0	113.6	72.6	34.7	8.4	0.6	1.4
95°	200.1	196.0	183.9	163.6	133.3	97.7	59.6	25.4	4.6	0.6	1.4
97.5°	183.6	179.8	167.1	146.9	118.2	83.8	47.1	17.9	2.3	0.6	1.2
100°	168.3	163.9	152.4	132.1	103.2	70.0	36.4	11.6	1.4	0.6	1.2
102.5°	152.1	148.6	136.8	117.1	87.6	57.0	27.2	7.2	0.6	0.6	0.9
105°	137.6	133.3	121.7	101.5	74.6	44.8	19.1	4.3	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°	89.6	86.2	76.0	59.0	37.9	17.6	5.2	0.9	0.9	0.9	0.9
115°	74.9	69.7	60.7	45.7	28.0	11.6	2.6	0.9	0.9	0.9	0.9
117.5°	59.8	55.5	49.1	34.7	18.5	7.5	1.4	0.9	0.9	0.9	0.9
120°	46.8	42.8	35.6	24.0	12.4	4.3	0.6	0.9	0.9	0.9	0.9
122.5°	33.5	30.4	24.0	15.6	7.5	2.0	0.9	0.9	1.2	1.2	0.9
125°	22.3	20.5	15.9	9.5	4.6	0.9	0.9	0.9	1.2	1.2	0.9
127.5°	14.5	13.0	9.3	5.5	2.0	0.9	0.9	1.2	1.2	1.2	0.9
130°	8.1	7.2	5.5	3.2	0.9	0.9	0.9	1.2	1.2	1.2	0.9
132.5°	4.6	4.3	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	1.4	1.4	1.2
137.5°	0.3	0.3	0.6	0.6	0.9	0.9	1.2	1.4	1.4	1.4	1.2
140°	0.3	0.3	0.6	0.9	0.9	0.9	1.2	1.4	1.4	1.4	1.2
142.5°	0.3	0.6	0.6	0.9	0.9	1.2	1.2	1.4	1.4	1.2	1.2
145°	0.3	0.6	0.6	0.9	0.9	1.2	1.2	1.4	1.2	1.2	1.2
147.5°	0.6	0.6	0.6	0.9	0.9	1.2	1.2	1.4	1.4	1.2	1.2
150°	0.3	0.6	0.6	0.9	1.2	1.2	1.2	1.4	1.2	1.2	1.2
152.5°	0.3	0.6	0.6	0.9	1.2	1.2	1.2	1.4	1.2	1.2	1.2
155°	0.6	0.6	0.6	0.9	1.2	1.2	1.2	1.4	1.2	1.2	1.4
157.5°	0.6	0.6	0.6	0.9	1.2	1.2	1.2	1.4	1.2	1.2	1.4
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	1.4	1.4	1.4	1.4
172.5°	0.6	0.6	0.6	0.9	0.9	1.2	1.2	1.4	1.4	1.4	1.4
175°	0.6	0.6	0.6	0.9	0.9	1.2	1.2	1.4	1.4	1.4	1.4
177.5°	0.3	0.6	0.6	0.9	0.9	1.2	1.2	1.4	1.4	1.4	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°	227.0	227.0	227.0
2.5°	216.0	211.9	210.8
5°	204.4	197.8	194.0
7.5°	192.8	183.9	179.5
10°	182.1	169.4	164.8
12.5°	169.4	154.7	147.4
15°	157.3	138.2	131.3
17.5°	143.7	122.3	114.2
20°	131.0	106.4	98.0
22.5°	116.5	90.8	81.5
25°	103.5	75.2	64.8
27.5°	89.0	59.3	50.3
30°	75.5	45.4	36.4
32.5°	62.4	33.2	25.2
35°	50.3	22.6	15.9
37.5°	38.7	13.9	8.1
40°	28.0	7.2	3.8
42.5°	18.8	3.5	2.0
45°	11.6	1.7	0.0
47.5°	6.6	0.0	0.0
50°	3.5	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	1.2	1.4
82.5°	1.2	1.4	1.4
85°	1.2	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°	1.2	1.4	1.4
115°	0.9	1.2	1.4
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°	121.4	118.0	106.4	87.3	61.0	34.1	12.7	2.3	0.6	0.9	0.9
110°	105.8	102.9	91.1	72.6	49.1	25.4	8.4	1.4	0.9	0.9	0.9





107.5°	1.2	1.7	2.0
110°	1.2	1.4	1.7



(END OF REPORT)