

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: P550782

Luminaire Tested: **FCC-X-2-LD4-1LO-35-UNV-82-87-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: P550782
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-82-87-ED1D
Description: FCC CORNER MOUNT LUMINAIRE WITH .187 CLEAR PC 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

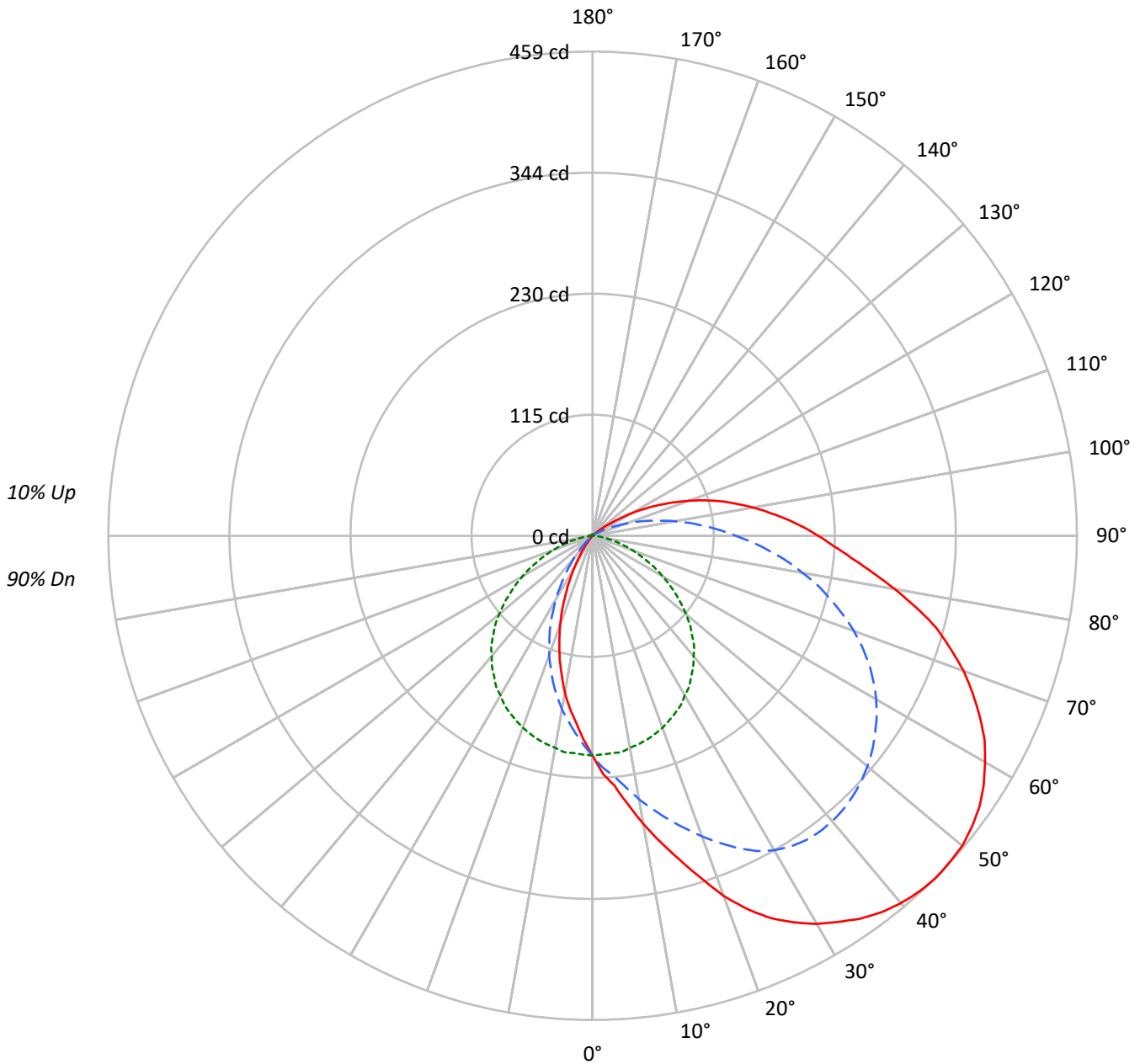
Lumens per Lamp: N/A
Luminaire Lumens: 1030.0 lumens
Efficiency: N/A
Efficacy: 88.0 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

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: P550782

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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°	2242	2242	2242
5°	2462	2210	1844
10°	2786	2183	1520
15°	3122	2155	1184
20°	3521	2120	872
25°	3852	2080	573
30°	4098	2024	322
35°	4312	1966	142
40°	4500	1894	35
45°	4662	1802	0
50°	4798	1683	0
55°	4902	1530	0
60°	4954	1352	0
65°	4974	1151	0
70°	4959	939	0
75°	4895	692	4
80°	4696	424	21
85°	4539	203	29



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	20.0	1.9
10°-20°	59.8	5.8
20°-30°	96.8	9.4
30°-40°	124.3	12.1
40°-50°	140.7	13.7
50°-60°	145.8	14.2
60°-70°	137.5	13.3
70°-80°	115.2	11.2
80°-90°	83.5	8.1
90°-100°	54.9	5.3
100°-110°	31.7	3.1
110°-120°	14.0	1.4
120°-130°	3.8	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°	176.5	17.1
0°-40°	300.8	29.2
0°-60°	587.3	57.0
0°-90°	923.5	89.7
90°-120°	100.6	9.8
90°-150°	105.8	10.3
90°-180°	107.0	10.4
0°-180°	1030.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	208	208	208	208	208	
5°	238	228	207	188	178	24
15°	318	279	200	144	120	92
25°	400	327	185	95	60	185
35°	443	352	163	46	15	278
45°	459	349	133	11	0	355
55°	448	327	96	0	0	400
65°	405	289	57	0	0	400
75°	337	233	24	0	0	354
85°	247	169	4	1	2	211
90°	214	136	1	2	2	117
95°	184	106	0	2	2	144
105°	126	55	0	1	2	133
115°	69	18	1	1	1	69
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°	208.3	208.3	208.3	208.3	208.3	208.3	208.3	208.3	208.3	208.3	208.3
2.5°	225.9	225.6	224.8	223.5	221.6	218.4	215.8	213.4	210.2	207.5	202.5
5°	237.8	236.5	235.4	234.1	229.8	226.9	222.1	216.8	211.8	206.8	196.7
7.5°	256.9	254.8	253.2	249.5	243.6	237.0	229.6	224.5	221.1	207.0	189.8
10°	277.4	275.5	272.3	265.7	258.5	249.0	238.3	226.4	215.8	204.1	183.7
12.5°	297.5	294.9	290.4	281.9	271.8	259.8	245.2	231.2	216.0	202.2	176.5
15°	317.7	314.8	310.0	299.6	286.4	270.7	252.9	235.2	217.4	199.9	169.1
17.5°	339.7	335.7	328.6	316.9	300.2	280.8	259.8	238.3	216.8	196.9	161.1
20°	363.3	357.8	350.1	334.4	314.8	291.9	266.7	241.5	216.6	193.5	152.1
22.5°	383.0	377.4	368.9	352.7	329.1	301.2	272.6	243.6	215.5	189.5	143.6
25°	400.0	395.5	386.2	367.6	342.6	311.1	278.1	245.2	213.9	185.3	134.6
27.5°	413.2	409.0	398.6	379.5	354.1	319.8	282.4	246.0	211.8	181.0	125.3
30°	424.9	420.7	408.2	388.6	361.7	326.7	286.6	246.3	209.1	174.6	115.2
32.5°	433.9	430.0	417.2	396.3	367.1	331.5	289.0	246.0	205.7	170.1	104.3
35°	443.0	439.0	424.1	401.8	371.0	333.6	290.9	244.7	201.4	162.7	94.0
37.5°	449.9	445.4	430.2	405.5	372.9	334.1	290.6	242.8	196.9	156.6	83.6
40°	454.6	449.9	433.7	407.7	373.4	333.4	288.5	239.7	191.6	148.9	72.7
42.5°	457.8	452.5	435.3	410.8	372.4	331.2	285.3	235.7	185.8	142.3	62.4
45°	459.4	453.8	435.5	408.2	370.5	327.2	280.5	230.6	179.4	133.2	52.0
47.5°	458.6	452.5	434.2	405.3	367.1	323.0	275.2	224.5	171.7	125.3	42.2
50°	457.3	450.9	431.3	401.6	362.3	317.7	269.4	217.1	163.8	115.5	33.4
52.5°	453.0	446.7	428.1	396.3	356.7	311.6	261.4	209.4	155.3	105.9	25.5
55°	447.7	441.9	422.5	391.5	349.5	304.2	254.0	201.2	147.0	96.1	18.3
57.5°	439.5	434.2	415.6	383.8	342.4	295.9	245.8	192.2	136.7	86.3	12.7
60°	429.4	424.1	406.1	375.0	334.1	286.6	236.7	182.9	127.4	76.4	8.0
62.5°	418.8	413.8	394.9	364.1	323.8	276.8	226.9	173.6	117.6	67.4	4.8
65°	404.7	400.0	383.0	351.1	312.4	266.2	216.0	162.4	107.5	57.3	2.7
67.5°	389.9	385.6	368.4	339.2	299.1	254.5	204.9	151.5	96.9	48.6	1.3
70°	374.0	368.6	352.7	323.0	285.6	241.3	192.7	140.4	86.8	40.1	0.0
72.5°	355.4	351.4	336.0	307.9	269.9	227.2	180.2	128.2	75.6	31.8	0.3
75°	337.3	332.3	318.2	291.7	254.5	212.3	166.4	116.8	64.8	24.4	0.3
77.5°	314.0	312.4	299.1	273.4	239.9	198.0	151.3	103.0	54.4	17.5	0.3
80°	290.6	289.0	278.7	255.1	222.9	181.0	137.2	90.0	44.3	11.7	0.3
82.5°	267.5	265.4	255.6	235.9	205.7	166.7	122.6	77.0	35.0	7.2	0.3
85°	246.8	244.2	233.6	215.5	187.9	150.5	107.5	64.2	26.0	4.0	0.5
87.5°	229.0	227.2	215.5	196.9	169.9	135.4	94.2	52.0	18.3	1.9	0.8
90°	213.9	209.9	199.6	179.9	152.9	118.6	80.2	41.7	12.2	1.1	1.1
92.5°	199.1	195.6	184.2	164.0	137.7	104.3	66.6	31.8	7.7	0.5	1.3
95°	183.7	179.9	168.8	150.2	122.4	89.7	54.7	23.4	4.2	0.5	1.3
97.5°	168.5	165.1	153.4	134.8	108.6	77.0	43.3	16.5	2.1	0.5	1.1
100°	154.5	150.5	139.9	121.3	94.8	64.2	33.4	10.6	1.3	0.5	1.1
102.5°	139.6	136.4	125.5	107.5	80.4	52.3	24.9	6.6	0.5	0.5	0.8
105°	126.3	122.4	111.7	93.2	68.5	41.1	17.5	4.0	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°	82.3	79.1	69.8	54.1	34.8	16.2	4.8	0.8	0.8	0.8	0.8
115°	68.7	64.0	55.7	41.9	25.7	10.6	2.4	0.8	0.8	0.8	0.8
117.5°	54.9	51.0	45.1	31.8	17.0	6.9	1.3	0.8	0.8	0.8	0.8
120°	43.0	39.3	32.6	22.0	11.4	4.0	0.5	0.8	0.8	0.8	0.8
122.5°	30.8	27.9	22.0	14.3	6.9	1.9	0.8	0.8	1.1	1.1	0.8
125°	20.4	18.8	14.6	8.8	4.2	0.8	0.8	0.8	1.1	1.1	0.8
127.5°	13.3	11.9	8.5	5.0	1.9	0.8	0.8	1.1	1.1	1.1	0.8
130°	7.4	6.6	5.0	2.9	0.8	0.8	0.8	1.1	1.1	1.1	0.8
132.5°	4.2	4.0	2.7	0.5	0.8	0.8	0.8	1.1	1.1	1.1	1.1
135°	1.1	0.5	0.5	0.5	0.8	0.8	1.1	1.1	1.3	1.3	1.1
137.5°	0.3	0.3	0.5	0.5	0.8	0.8	1.1	1.3	1.3	1.3	1.1
140°	0.3	0.3	0.5	0.8	0.8	0.8	1.1	1.3	1.3	1.3	1.1
142.5°	0.3	0.5	0.5	0.8	0.8	1.1	1.1	1.3	1.3	1.1	1.1
145°	0.3	0.5	0.5	0.8	0.8	1.1	1.1	1.3	1.1	1.1	1.1
147.5°	0.5	0.5	0.5	0.8	0.8	1.1	1.1	1.3	1.3	1.1	1.1
150°	0.3	0.5	0.5	0.8	1.1	1.1	1.1	1.3	1.1	1.1	1.1
152.5°	0.3	0.5	0.5	0.8	1.1	1.1	1.1	1.3	1.1	1.1	1.1
155°	0.5	0.5	0.5	0.8	1.1	1.1	1.1	1.3	1.1	1.1	1.3
157.5°	0.5	0.5	0.5	0.8	1.1	1.1	1.1	1.3	1.1	1.1	1.3
160°	0.5	0.5	0.5	0.8	0.8	1.1	1.1	1.1	1.1	1.1	1.1
162.5°	0.5	0.5	0.5	0.8	0.8	1.1	1.1	1.1	1.1	1.1	1.1
165°	0.5	0.5	0.5	0.5	0.8	0.8	1.1	1.1	1.1	1.1	1.1
167.5°	0.5	0.5	0.5	0.8	0.8	0.8	1.1	1.1	1.1	1.1	1.1
170°	0.5	0.5	0.5	0.8	0.8	0.8	1.1	1.3	1.3	1.3	1.3
172.5°	0.5	0.5	0.5	0.8	0.8	1.1	1.1	1.3	1.3	1.3	1.3
175°	0.5	0.5	0.5	0.8	0.8	1.1	1.1	1.3	1.3	1.3	1.3
177.5°	0.3	0.5	0.5	0.8	0.8	1.1	1.1	1.3	1.3	1.3	1.1
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°	208.3	208.3	208.3
2.5°	198.3	194.5	193.5
5°	187.6	181.5	178.1
7.5°	177.0	168.8	164.8
10°	167.2	155.5	151.3
12.5°	155.5	142.0	135.4
15°	144.4	126.9	120.5
17.5°	131.9	112.3	104.8
20°	120.2	97.7	90.0
22.5°	107.0	83.3	74.8
25°	95.0	69.0	59.5
27.5°	81.7	54.4	46.2
30°	69.3	41.7	33.4
32.5°	57.3	30.5	23.1
35°	46.2	20.7	14.6
37.5°	35.6	12.7	7.4
40°	25.7	6.6	3.5
42.5°	17.3	3.2	1.9
45°	10.6	1.6	0.0
47.5°	6.1	0.0	0.0
50°	3.2	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	1.1	1.3
82.5°	1.1	1.3	1.3
85°	1.1	1.3	1.6
87.5°	1.3	1.6	1.9
90°	1.6	1.9	1.9
92.5°	1.6	2.1	2.1
95°	1.9	2.1	2.4
97.5°	2.1	2.4	2.4
100°	1.9	2.4	2.7
102.5°	1.6	2.4	2.4
105°	1.3	1.9	2.1



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	1.1	1.3	1.3
115°	0.8	1.1	1.3
117.5°	0.8	1.1	1.1
120°	0.8	0.8	1.1
122.5°	0.8	0.8	1.1
125°	0.8	0.8	1.1
127.5°	1.1	0.8	0.8
130°	0.8	0.8	0.8
132.5°	1.1	0.8	0.8
135°	1.1	0.8	0.8
137.5°	1.1	0.8	0.8
140°	1.1	0.8	0.8
142.5°	1.1	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°	1.1	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°	111.5	108.3	97.7	80.2	56.0	31.3	11.7	2.1	0.5	0.8	0.8
110°	97.1	94.5	83.6	66.6	45.1	23.4	7.7	1.3	0.8	0.8	0.8





107.5°	1.1	1.6	1.9
110°	1.1	1.3	1.6



(END OF REPORT)