

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: P550914

Luminaire Tested: **FCC-X-2-LD4-1LO-50-UNV-82-94-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: P550914
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-50-UNV-82-94-ED1D
Description: FCC CORNER MOUNT LUMINAIRE WITH .187 CLEAR PC FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES AND 5000K, AND 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

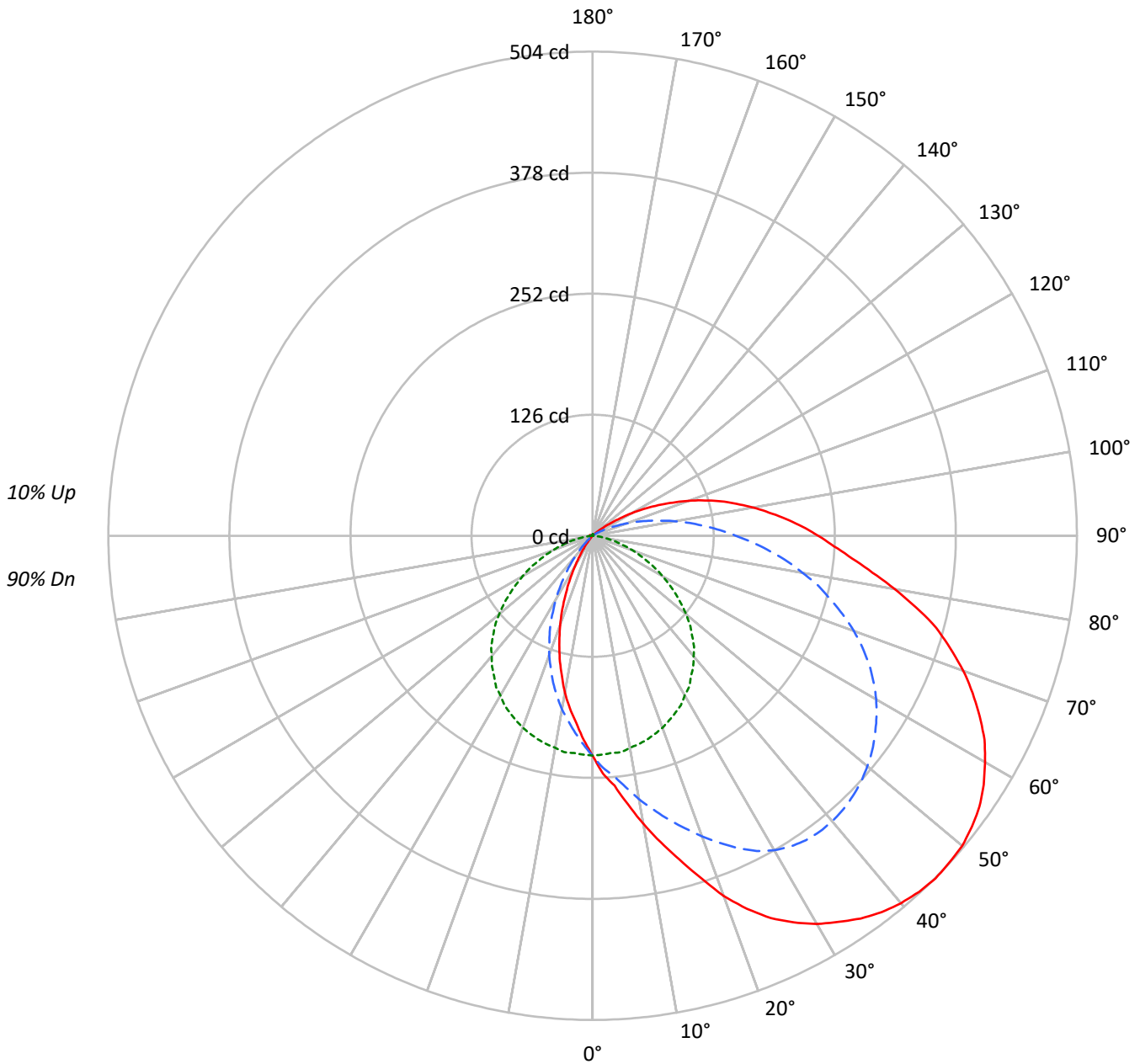
Lumens per Lamp: N/A
Luminaire Lumens: 1131.1 lumens
Efficiency: N/A
Efficacy: 96.7 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

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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CATALOG NUMBER: FCC-X-2-LD4-1LO-50-UNV-82-94-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°	2463	2463	2463
5°	2703	2426	2025
10°	3059	2397	1668
15°	3428	2366	1300
20°	3867	2328	957
25°	4230	2283	629
30°	4500	2223	354
35°	4734	2158	156
40°	4941	2079	38
45°	5120	1980	0
50°	5269	1848	0
55°	5382	1680	0
60°	5440	1485	0
65°	5462	1263	0
70°	5444	1031	0
75°	5375	760	4
80°	5157	464	24
85°	4984	224	31



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	21.9	1.9
10°-20°	65.6	5.8
20°-30°	106.3	9.4
30°-40°	136.5	12.1
40°-50°	154.5	13.7
50°-60°	160.1	14.2
60°-70°	151.0	13.3
70°-80°	126.5	11.2
80°-90°	91.7	8.1
90°-100°	60.3	5.3
100°-110°	34.8	3.1
110°-120°	15.4	1.4
120°-130°	4.2	0.4
130°-140°	1.0	0.1
140°-150°	0.6	0.1
150°-160°	0.5	0.0
160°-170°	0.3	0.0
170°-180°	0.1	0.0
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0°-30°	193.8	17.1
0°-40°	330.3	29.2
0°-60°	644.9	57.0
0°-90°	1014.0	89.7
90°-120°	110.5	9.8
90°-150°	116.3	10.3
90°-180°	117.0	10.3
0°-180°	1131.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	229	229	229	229	229	
5°	261	251	227	206	196	26
15°	349	306	219	158	132	101
25°	439	359	203	104	65	203
35°	486	387	179	51	16	305
45°	504	383	146	12	0	389
55°	492	359	106	0	0	439
65°	444	318	63	0	0	440
75°	370	256	27	0	0	388
85°	271	186	4	1	2	231
90°	235	149	1	2	2	129
95°	202	116	1	2	3	158
105°	139	60	1	2	2	146
115°	76	20	1	1	2	76
125°	22	3	1	1	1	22
135°	1	1	2	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	2	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°	228.8	228.8	228.8	228.8	228.8	228.8	228.8	228.8	228.8	228.8	228.8
2.5°	248.0	247.7	246.8	245.4	243.3	239.8	236.9	234.3	230.8	227.9	222.4
5°	261.1	259.7	258.5	257.0	252.4	249.2	243.9	238.1	232.6	227.0	216.0
7.5°	282.1	279.8	278.0	273.9	267.5	260.2	252.1	246.6	242.8	227.3	208.4
10°	304.5	302.5	299.0	291.7	283.9	273.4	261.7	248.6	236.9	224.1	201.7
12.5°	326.7	323.8	318.8	309.5	298.4	285.3	269.3	253.8	237.2	222.1	193.8
15°	348.8	345.6	340.4	329.0	314.5	297.3	277.7	258.2	238.7	219.4	185.6
17.5°	373.0	368.7	360.8	348.0	329.6	308.3	285.3	261.7	238.1	216.2	176.9
20°	399.0	392.9	384.4	367.2	345.6	320.6	292.9	265.2	237.8	212.5	167.0
22.5°	420.5	414.4	405.1	387.3	361.4	330.8	299.3	267.5	236.6	208.1	157.7
25°	439.2	434.2	424.0	403.6	376.2	341.6	305.4	269.3	234.9	203.4	147.8
27.5°	453.8	449.1	437.7	416.7	388.8	351.2	310.1	270.2	232.6	198.8	137.6
30°	466.6	461.9	448.2	426.7	397.2	358.8	314.7	270.4	229.6	191.8	126.5
32.5°	476.5	472.1	458.1	435.1	403.1	364.0	317.4	270.2	225.9	186.8	114.5
35°	486.4	482.0	465.7	441.2	407.4	366.3	319.4	268.7	221.2	178.6	103.2
37.5°	494.0	489.0	472.4	445.3	409.5	366.9	319.1	266.7	216.2	171.9	91.8
40°	499.2	494.0	476.2	447.6	410.0	366.0	316.8	263.2	210.4	163.5	79.9
42.5°	502.7	496.9	477.9	451.1	408.9	363.7	313.3	258.8	204.0	156.2	68.5
45°	504.5	498.3	478.2	448.2	406.8	359.3	308.0	253.3	197.0	146.3	57.1
47.5°	503.6	496.9	476.8	445.0	403.1	354.7	302.2	246.6	188.6	137.6	46.3
50°	502.1	495.1	473.6	440.9	397.8	348.8	295.8	238.4	179.8	126.8	36.7
52.5°	497.5	490.5	470.1	435.1	391.7	342.1	287.1	229.9	170.5	116.3	28.0
55°	491.6	485.2	464.0	429.9	383.8	334.0	278.9	220.9	161.5	105.5	20.1
57.5°	482.6	476.8	456.4	421.4	375.9	324.9	269.9	211.0	150.1	94.7	14.0
60°	471.5	465.7	445.9	411.8	366.9	314.7	260.0	200.8	139.9	83.9	8.7
62.5°	459.9	454.3	433.7	399.8	355.5	304.0	249.2	190.6	129.1	74.0	5.2
65°	444.4	439.2	420.5	385.6	343.0	292.3	237.2	178.4	118.0	62.9	2.9
67.5°	428.1	423.5	404.5	372.5	328.4	279.5	225.0	166.4	106.4	53.3	1.5
70°	410.6	404.8	387.3	354.7	313.6	264.9	211.6	154.2	95.3	44.0	0.0
72.5°	390.2	385.9	369.0	338.1	296.4	249.5	197.9	140.8	83.1	35.0	0.3
75°	370.4	364.9	349.4	320.3	279.5	233.1	182.7	128.2	71.1	26.8	0.3
77.5°	344.8	343.0	328.4	300.2	263.5	217.4	166.1	113.1	59.7	19.2	0.3
80°	319.1	317.4	306.0	280.1	244.8	198.8	150.7	98.8	48.7	12.8	0.3
82.5°	293.8	291.4	280.6	259.1	225.9	183.0	134.6	84.5	38.5	7.9	0.3
85°	271.0	268.1	256.5	236.6	206.3	165.2	118.0	70.5	28.6	4.4	0.6
87.5°	251.5	249.5	236.6	216.2	186.5	148.6	103.5	57.1	20.1	2.0	0.9
90°	234.9	230.5	219.2	197.6	167.9	130.3	88.0	45.8	13.4	1.2	1.2
92.5°	218.6	214.8	202.3	180.1	151.3	114.5	73.1	35.0	8.5	0.6	1.5
95°	201.7	197.6	185.4	165.0	134.4	98.5	60.0	25.6	4.7	0.6	1.5
97.5°	185.1	181.3	168.4	148.0	119.2	84.5	47.5	18.1	2.3	0.6	1.2
100°	169.6	165.2	153.6	133.2	104.0	70.5	36.7	11.7	1.5	0.6	1.2
102.5°	153.3	149.8	137.8	118.0	88.3	57.4	27.4	7.3	0.6	0.6	0.9
105°	138.7	134.4	122.7	102.3	75.2	45.2	19.2	4.4	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°	90.3	86.8	76.6	59.5	38.2	17.8	5.2	0.9	0.9	0.9	0.9
115°	75.5	70.2	61.2	46.0	28.3	11.7	2.6	0.9	0.9	0.9	0.9
117.5°	60.3	56.0	49.5	35.0	18.7	7.6	1.5	0.9	0.9	0.9	0.9
120°	47.2	43.1	35.8	24.2	12.5	4.4	0.6	0.9	0.9	0.9	0.9
122.5°	33.8	30.6	24.2	15.7	7.6	2.0	0.9	0.9	1.2	1.2	0.9
125°	22.4	20.7	16.0	9.6	4.7	0.9	0.9	0.9	1.2	1.2	0.9
127.5°	14.6	13.1	9.3	5.5	2.0	0.9	0.9	1.2	1.2	1.2	0.9
130°	8.2	7.3	5.5	3.2	0.9	0.9	0.9	1.2	1.2	1.2	0.9
132.5°	4.7	4.4	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	1.5	1.5	1.2
137.5°	0.3	0.3	0.6	0.6	0.9	0.9	1.2	1.5	1.5	1.5	1.2
140°	0.3	0.3	0.6	0.9	0.9	0.9	1.2	1.5	1.5	1.5	1.2
142.5°	0.3	0.6	0.6	0.9	0.9	1.2	1.2	1.5	1.5	1.2	1.2
145°	0.3	0.6	0.6	0.9	0.9	1.2	1.2	1.5	1.2	1.2	1.2
147.5°	0.6	0.6	0.6	0.9	0.9	1.2	1.2	1.5	1.5	1.2	1.2
150°	0.3	0.6	0.6	0.9	1.2	1.2	1.2	1.5	1.2	1.2	1.2
152.5°	0.3	0.6	0.6	0.9	1.2	1.2	1.2	1.5	1.2	1.2	1.2
155°	0.6	0.6	0.6	0.9	1.2	1.2	1.2	1.5	1.2	1.2	1.5
157.5°	0.6	0.6	0.6	0.9	1.2	1.2	1.2	1.5	1.2	1.2	1.5
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	1.5	1.5	1.5	1.5
172.5°	0.6	0.6	0.6	0.9	0.9	1.2	1.2	1.5	1.5	1.5	1.5
175°	0.6	0.6	0.6	0.9	0.9	1.2	1.2	1.5	1.5	1.5	1.5
177.5°	0.3	0.6	0.6	0.9	0.9	1.2	1.2	1.5	1.5	1.5	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°	228.8	228.8	228.8
2.5°	217.7	213.6	212.5
5°	206.0	199.3	195.6
7.5°	194.4	185.4	181.0
10°	183.6	170.8	166.1
12.5°	170.8	155.9	148.6
15°	158.5	139.3	132.3
17.5°	144.8	123.3	115.1
20°	132.0	107.2	98.8
22.5°	117.4	91.5	82.2
25°	104.3	75.8	65.3
27.5°	89.8	59.7	50.7
30°	76.1	45.8	36.7
32.5°	62.9	33.5	25.4
35°	50.7	22.7	16.0
37.5°	39.1	14.0	8.2
40°	28.3	7.3	3.8
42.5°	18.9	3.5	2.0
45°	11.7	1.7	0.0
47.5°	6.7	0.0	0.0
50°	3.5	0.0	0.0
52.5°	1.5	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	1.5
82.5°	1.2	1.5	1.5
85°	1.2	1.5	1.7
87.5°	1.5	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°	1.5	2.0	2.3



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	1.2	1.5	1.5
115°	0.9	1.2	1.5
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°	122.4	118.9	107.2	88.0	61.5	34.4	12.8	2.3	0.6	0.9	0.9
110°	106.7	103.7	91.8	73.1	49.5	25.6	8.5	1.5	0.9	0.9	0.9





107.5°	1.2	1.7	2.0
110°	1.2	1.5	1.7



(END OF REPORT)