

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: P550739

Luminaire Tested: **FCC-X-2-LD4-1LO-30-UNV-93-96-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: P550739
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-30-UNV-93-96-ED1D-90
Description: FCC CORNER MOUNT LUMINAIRE WITH .156 CLEAR TEMPERED GLASS FIXTURE
SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES AND 3000K,
AND 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

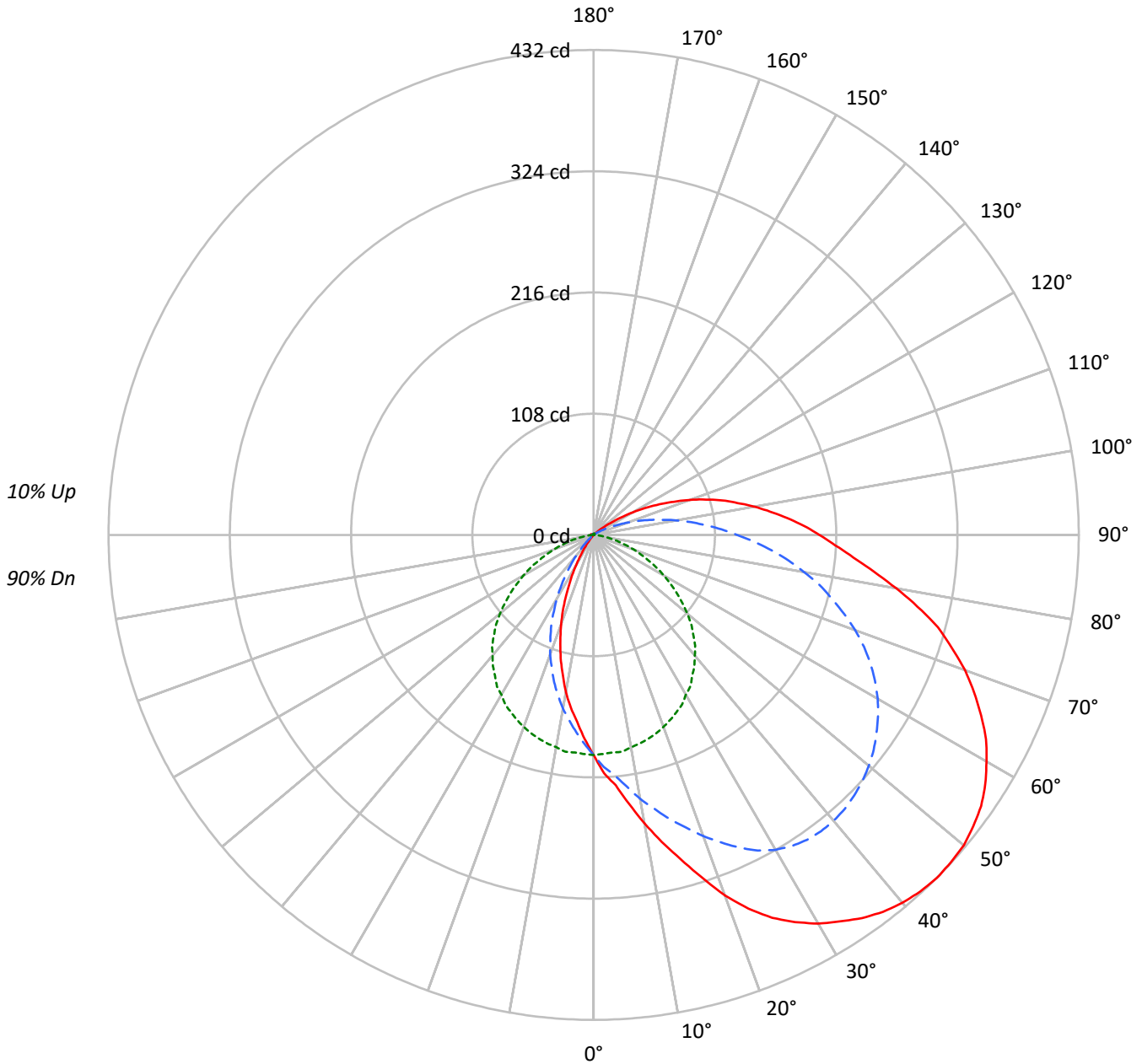
Lumens per Lamp: N/A
Luminaire Lumens: 968.8 lumens
Efficiency: N/A
Efficacy: 82.8 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

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	75	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°	2110	2110	2110
5°	2316	2079	1734
10°	2621	2053	1429
15°	2937	2027	1114
20°	3312	1994	820
25°	3624	1956	538
30°	3856	1905	304
35°	4056	1850	133
40°	4234	1782	32
45°	4386	1695	0
50°	4514	1583	0
55°	4611	1439	0
60°	4661	1272	0
65°	4680	1083	0
70°	4664	883	0
75°	4606	652	3
80°	4418	399	19
85°	4271	188	28



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	18.8	1.9
10°-20°	56.2	5.8
20°-30°	91.0	9.4
30°-40°	116.9	12.1
40°-50°	132.4	13.7
50°-60°	137.1	14.2
60°-70°	129.3	13.4
70°-80°	108.4	11.2
80°-90°	78.6	8.1
90°-100°	51.6	5.3
100°-110°	29.8	3.1
110°-120°	13.1	1.4
120°-130°	3.5	0.4
130°-140°	0.8	0.1
140°-150°	0.5	0.1
150°-160°	0.4	0.0
160°-170°	0.2	0.0
170°-180°	0.1	0.0
0°-30°	166.0	17.1
0°-40°	283.0	29.2
0°-60°	552.5	57.0
0°-90°	868.8	89.7
90°-120°	94.6	9.8
90°-150°	99.4	10.3
90°-180°	100.0	10.3
0°-180°	968.8	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	196	196	196	196	196	
5°	224	215	194	176	168	23
15°	299	262	188	136	113	86
25°	376	307	174	89	56	174
35°	417	332	153	43	14	261
45°	432	328	125	10	0	334
55°	421	307	90	0	0	376
65°	381	272	54	0	0	377
75°	317	220	23	0	0	333
85°	232	159	4	1	2	198
90°	201	128	1	2	2	110
95°	173	100	0	2	2	136
105°	119	52	0	1	2	125
115°	65	17	1	1	1	65
125°	19	2	1	1	1	19
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°	196.0	196.0	196.0	196.0	196.0	196.0	196.0	196.0	196.0	196.0	196.0
2.5°	212.5	212.2	211.5	210.2	208.5	205.5	203.0	200.7	197.8	195.3	190.5
5°	223.7	222.5	221.5	220.2	216.2	213.5	209.0	204.0	199.3	194.5	185.0
7.5°	241.7	239.7	238.2	234.7	229.2	223.0	216.0	211.2	208.0	194.8	178.5
10°	260.9	259.2	256.2	249.9	243.2	234.2	224.2	213.0	203.0	192.0	172.8
12.5°	279.9	277.4	273.2	265.2	255.7	244.4	230.7	217.5	203.2	190.3	166.0
15°	298.9	296.1	291.6	281.9	269.4	254.7	238.0	221.2	204.5	188.0	159.1
17.5°	319.6	315.9	309.1	298.1	282.4	264.2	244.4	224.2	204.0	185.3	151.6
20°	341.8	336.6	329.3	314.6	296.1	274.7	250.9	227.2	203.7	182.0	143.1
22.5°	360.3	355.1	347.1	331.8	309.6	283.4	256.4	229.2	202.7	178.3	135.1
25°	376.3	372.0	363.3	345.8	322.3	292.6	261.7	230.7	201.2	174.3	126.6
27.5°	388.8	384.8	375.0	357.1	333.1	300.9	265.7	231.5	199.3	170.3	117.9
30°	399.8	395.8	384.0	365.5	340.3	307.4	269.7	231.7	196.8	164.3	108.4
32.5°	408.2	404.5	392.5	372.8	345.3	311.9	271.9	231.5	193.5	160.1	98.1
35°	416.7	413.0	399.0	378.0	349.1	313.9	273.7	230.2	189.5	153.1	88.4
37.5°	423.2	419.0	404.7	381.5	350.8	314.4	273.4	228.5	185.3	147.3	78.7
40°	427.7	423.2	408.0	383.5	351.3	313.6	271.4	225.5	180.3	140.1	68.4
42.5°	430.7	425.7	409.5	386.5	350.3	311.6	268.4	221.7	174.8	133.8	58.7
45°	432.2	427.0	409.7	384.0	348.6	307.9	263.9	217.0	168.8	125.3	48.9
47.5°	431.5	425.7	408.5	381.3	345.3	303.9	258.9	211.2	161.5	117.9	39.7
50°	430.2	424.2	405.7	377.8	340.8	298.9	253.4	204.2	154.1	108.6	31.5
52.5°	426.2	420.2	402.7	372.8	335.6	293.1	245.9	197.0	146.1	99.6	24.0
55°	421.2	415.7	397.5	368.3	328.8	286.1	239.0	189.3	138.3	90.4	17.2
57.5°	413.5	408.5	391.0	361.0	322.1	278.4	231.2	180.8	128.6	81.1	12.0
60°	404.0	399.0	382.0	352.8	314.4	269.7	222.7	172.0	119.9	71.9	7.5
62.5°	394.0	389.3	371.5	342.6	304.6	260.4	213.5	163.3	110.6	63.4	4.5
65°	380.8	376.3	360.3	330.3	293.9	250.4	203.2	152.8	101.1	53.9	2.5
67.5°	366.8	362.8	346.6	319.1	281.4	239.5	192.8	142.6	91.1	45.7	1.2
70°	351.8	346.8	331.8	303.9	268.7	227.0	181.3	132.1	81.6	37.7	0.0
72.5°	334.3	330.6	316.1	289.6	253.9	213.7	169.5	120.6	71.2	30.0	0.2
75°	317.4	312.6	299.4	274.4	239.5	199.8	156.6	109.9	60.9	23.0	0.2
77.5°	295.4	293.9	281.4	257.2	225.7	186.3	142.3	96.9	51.2	16.5	0.2
80°	273.4	271.9	262.2	240.0	209.7	170.3	129.1	84.6	41.7	11.0	0.2
82.5°	251.7	249.7	240.4	222.0	193.5	156.8	115.4	72.4	33.0	6.7	0.2
85°	232.2	229.7	219.7	202.7	176.8	141.6	101.1	60.4	24.5	3.7	0.5
87.5°	215.5	213.7	202.7	185.3	159.8	127.3	88.6	48.9	17.2	1.7	0.7
90°	201.2	197.5	187.8	169.3	143.8	111.6	75.4	39.2	11.5	1.0	1.0
92.5°	187.3	184.0	173.3	154.3	129.6	98.1	62.7	30.0	7.2	0.5	1.2
95°	172.8	169.3	158.8	141.3	115.1	84.4	51.4	22.0	4.0	0.5	1.2
97.5°	158.6	155.3	144.3	126.8	102.1	72.4	40.7	15.5	2.0	0.5	1.0
100°	145.3	141.6	131.6	114.1	89.1	60.4	31.5	10.0	1.2	0.5	1.0
102.5°	131.3	128.3	118.1	101.1	75.7	49.2	23.5	6.2	0.5	0.5	0.7
105°	118.9	115.1	105.1	87.6	64.4	38.7	16.5	3.7	0.5	0.5	0.7



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	77.4	74.4	65.7	50.9	32.7	15.2	4.5	0.7	0.7	0.7	0.7
115°	64.7	60.2	52.4	39.5	24.2	10.0	2.2	0.7	0.7	0.7	0.7
117.5°	51.7	47.9	42.4	30.0	16.0	6.5	1.2	0.7	0.7	0.7	0.7
120°	40.4	37.0	30.7	20.7	10.7	3.7	0.5	0.7	0.7	0.7	0.7
122.5°	29.0	26.2	20.7	13.5	6.5	1.7	0.7	0.7	1.0	1.0	0.7
125°	19.2	17.7	13.7	8.2	4.0	0.7	0.7	0.7	1.0	1.0	0.7
127.5°	12.5	11.2	8.0	4.7	1.7	0.7	0.7	1.0	1.0	1.0	0.7
130°	7.0	6.2	4.7	2.7	0.7	0.7	0.7	1.0	1.0	1.0	0.7
132.5°	4.0	3.7	2.5	0.5	0.7	0.7	0.7	1.0	1.0	1.0	1.0
135°	1.0	0.5	0.5	0.5	0.7	0.7	1.0	1.0	1.2	1.2	1.0
137.5°	0.2	0.2	0.5	0.5	0.7	0.7	1.0	1.2	1.2	1.2	1.0
140°	0.2	0.2	0.5	0.7	0.7	0.7	1.0	1.2	1.2	1.2	1.0
142.5°	0.2	0.5	0.5	0.7	0.7	1.0	1.0	1.2	1.2	1.0	1.0
145°	0.2	0.5	0.5	0.7	0.7	1.0	1.0	1.2	1.0	1.0	1.0
147.5°	0.5	0.5	0.5	0.7	0.7	1.0	1.0	1.2	1.2	1.0	1.0
150°	0.2	0.5	0.5	0.7	1.0	1.0	1.0	1.2	1.0	1.0	1.0
152.5°	0.2	0.5	0.5	0.7	1.0	1.0	1.0	1.2	1.0	1.0	1.0
155°	0.5	0.5	0.5	0.7	1.0	1.0	1.0	1.2	1.0	1.0	1.2
157.5°	0.5	0.5	0.5	0.7	1.0	1.0	1.0	1.2	1.0	1.0	1.2
160°	0.5	0.5	0.5	0.7	0.7	1.0	1.0	1.0	1.0	1.0	1.0
162.5°	0.5	0.5	0.5	0.7	0.7	1.0	1.0	1.0	1.0	1.0	1.0
165°	0.5	0.5	0.5	0.5	0.7	0.7	1.0	1.0	1.0	1.0	1.0
167.5°	0.5	0.5	0.5	0.7	0.7	0.7	1.0	1.0	1.0	1.0	1.0
170°	0.5	0.5	0.5	0.7	0.7	0.7	1.0	1.2	1.2	1.2	1.2
172.5°	0.5	0.5	0.5	0.7	0.7	1.0	1.0	1.2	1.2	1.2	1.2
175°	0.5	0.5	0.5	0.7	0.7	1.0	1.0	1.2	1.2	1.2	1.2
177.5°	0.2	0.5	0.5	0.7	0.7	1.0	1.0	1.2	1.2	1.2	1.0
180°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	196.0	196.0	196.0
2.5°	186.5	183.0	182.0
5°	176.5	170.8	167.5
7.5°	166.5	158.8	155.1
10°	157.3	146.3	142.3
12.5°	146.3	133.6	127.3
15°	135.8	119.4	113.4
17.5°	124.1	105.6	98.6
20°	113.1	91.9	84.6
22.5°	100.6	78.4	70.4
25°	89.4	64.9	55.9
27.5°	76.9	51.2	43.4
30°	65.2	39.2	31.5
32.5°	53.9	28.7	21.7
35°	43.4	19.5	13.7
37.5°	33.5	12.0	7.0
40°	24.2	6.2	3.2
42.5°	16.2	3.0	1.7
45°	10.0	1.5	0.0
47.5°	5.7	0.0	0.0
50°	3.0	0.0	0.0
52.5°	1.2	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°	0.2	0.2	0.2
77.5°	0.2	0.5	0.7
80°	0.5	1.0	1.2
82.5°	1.0	1.2	1.2
85°	1.0	1.2	1.5
87.5°	1.2	1.5	1.7
90°	1.5	1.7	1.7
92.5°	1.5	2.0	2.0
95°	1.7	2.0	2.2
97.5°	2.0	2.2	2.2
100°	1.7	2.2	2.5
102.5°	1.5	2.2	2.2
105°	1.2	1.7	2.0



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	1.0	1.2	1.2
115°	0.7	1.0	1.2
117.5°	0.7	1.0	1.0
120°	0.7	0.7	1.0
122.5°	0.7	0.7	1.0
125°	0.7	0.7	1.0
127.5°	1.0	0.7	0.7
130°	0.7	0.7	0.7
132.5°	1.0	0.7	0.7
135°	1.0	0.7	0.7
137.5°	1.0	0.7	0.7
140°	1.0	0.7	0.7
142.5°	1.0	0.7	0.7
145°	0.7	0.7	0.7
147.5°	0.7	0.7	0.7
150°	0.7	0.7	0.5
152.5°	0.7	0.5	0.5
155°	0.7	0.5	0.2
157.5°	1.0	0.5	0.2
160°	0.7	0.5	0.2
162.5°	0.7	0.5	0.2
165°	0.7	0.5	0.0
167.5°	0.7	0.5	0.2
170°	0.7	0.5	0.2
172.5°	0.7	0.5	0.2
175°	0.7	0.2	0.2
177.5°	0.7	0.2	0.2
180°	0.7	0.7	0.7



Report Generated By 670246072 / DESKTOP-MV3F9LC





— 0°-180° - - 45°-225° - - - - 90°-270°







107.5°	104.9	101.9	91.9	75.4	52.7	29.5	11.0	2.0	0.5	0.7	0.7
110°	91.4	88.9	78.7	62.7	42.4	22.0	7.2	1.2	0.7	0.7	0.7





107.5°	1.0	1.5	1.7
110°	1.0	1.2	1.5



(END OF REPORT)