

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: P550629

Luminaire Tested: **FCC-X-2-LD4-1HI-50-UNV-80-97-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: P550629
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-LD4-1HI-50-UNV-80-97-ED1D-90
Description: FCC CORNER MOUNT LUMINAIRE WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .375 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES AND 5000K, AND 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

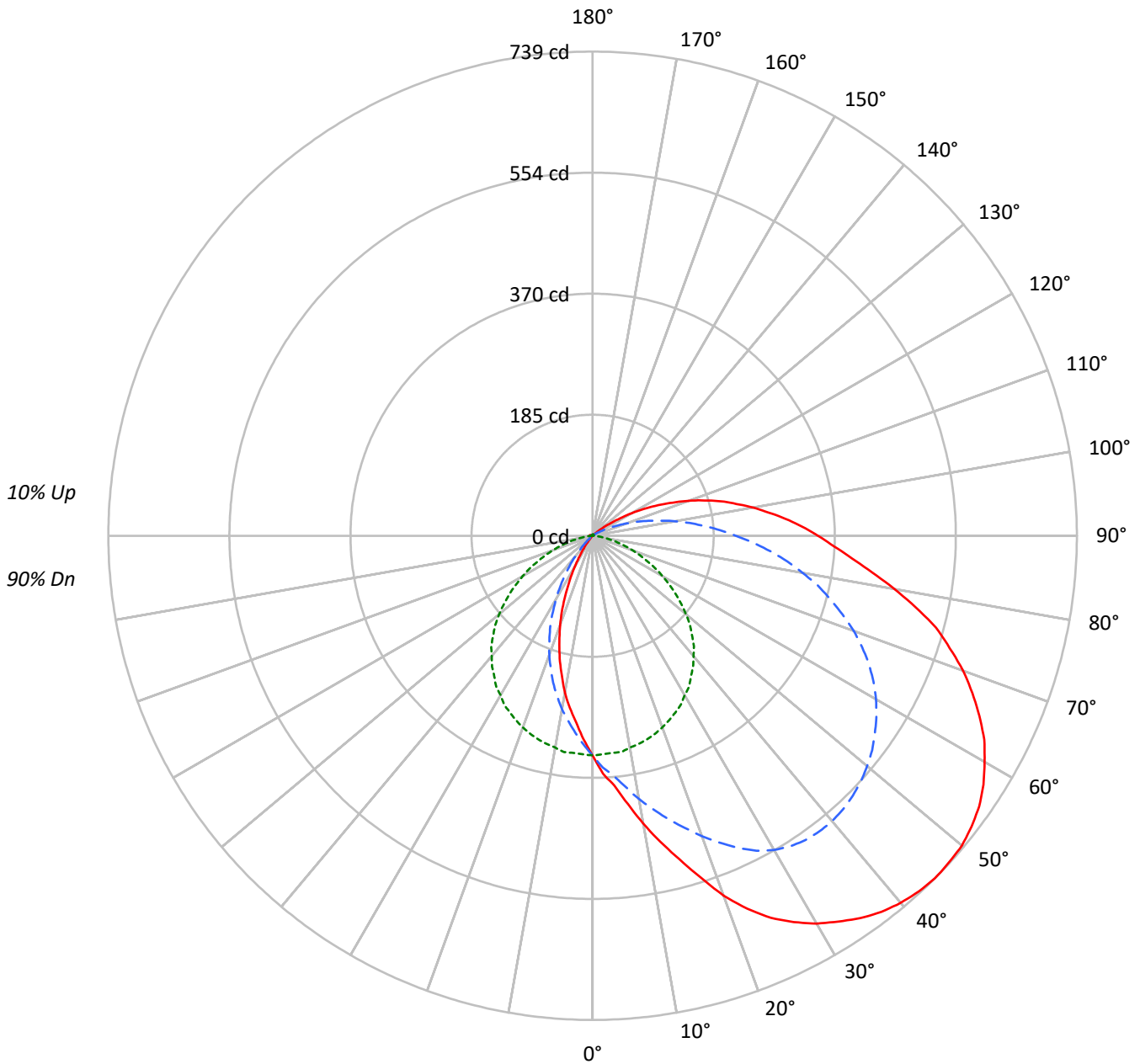
Lumens per Lamp: N/A
Luminaire Lumens: 1657.0 lumens
Efficiency: N/A
Efficacy: 76.4 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

Input Watts (W): 21.7
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	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°	3608	3608	3608
5°	3961	3555	2966
10°	4482	3511	2445
15°	5023	3467	1904
20°	5664	3411	1402
25°	6197	3344	921
30°	6593	3256	519
35°	6936	3162	229
40°	7240	3046	55
45°	7501	2900	0
50°	7720	2706	0
55°	7886	2462	0
60°	7970	2177	0
65°	8003	1852	0
70°	7976	1511	0
75°	7875	1115	6
80°	7555	682	34
85°	7303	325	48



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	32.1	1.9
10°-20°	96.1	5.8
20°-30°	155.7	9.4
30°-40°	200.0	12.1
40°-50°	226.4	13.7
50°-60°	234.5	14.2
60°-70°	221.2	13.3
70°-80°	185.3	11.2
80°-90°	134.4	8.1
90°-100°	88.3	5.3
100°-110°	51.0	3.1
110°-120°	22.5	1.4
120°-130°	6.1	0.4
130°-140°	1.4	0.1
140°-150°	0.9	0.1
150°-160°	0.6	0.0
160°-170°	0.4	0.0
170°-180°	0.1	0.0
0°-30°	283.9	17.1
0°-40°	483.9	29.2
0°-60°	944.8	57.0
0°-90°	1485.6	89.7
90°-120°	161.8	9.8
90°-150°	170.2	10.3
90°-180°	171.0	10.3
0°-180°	1657.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	335	335	335	335	335	
5°	383	367	333	302	286	39
15°	511	448	322	232	194	147
25°	643	526	298	153	96	297
35°	713	567	262	74	24	447
45°	739	561	214	17	0	571
55°	720	526	155	0	0	643
65°	651	465	92	0	0	644
75°	543	376	39	0	0	569
85°	397	272	6	2	3	339
90°	344	218	2	3	3	189
95°	296	171	1	3	4	232
105°	203	88	1	2	3	214
115°	111	29	1	1	2	111
125°	33	4	2	1	2	33
135°	2	1	2	2	1	3
145°	0	2	2	1	1	0
155°	1	2	2	1	0	0
165°	1	1	2	1	0	0
175°	1	2	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°	335.2	335.2	335.2	335.2	335.2	335.2	335.2	335.2	335.2	335.2	335.2
2.5°	363.4	362.9	361.6	359.5	356.5	351.4	347.1	343.3	338.2	333.9	325.8
5°	382.6	380.4	378.7	376.6	369.8	365.1	357.4	348.8	340.7	332.6	316.4
7.5°	413.3	409.9	407.3	401.4	392.0	381.3	369.3	361.2	355.7	333.0	305.3
10°	446.2	443.2	438.1	427.4	415.9	400.5	383.4	364.2	347.1	328.3	295.5
12.5°	478.6	474.4	467.1	453.4	437.2	418.0	394.5	371.9	347.6	325.4	283.9
15°	511.1	506.4	498.7	482.0	460.7	435.5	406.9	378.3	349.7	321.5	272.0
17.5°	546.5	540.1	528.6	509.8	482.9	451.7	418.0	383.4	348.8	316.8	259.2
20°	584.5	575.6	563.2	538.0	506.4	469.7	429.1	388.5	348.4	311.3	244.7
22.5°	616.1	607.2	593.5	567.4	529.4	484.6	438.5	392.0	346.7	304.9	231.0
25°	643.4	636.2	621.2	591.4	551.2	500.4	447.5	394.5	344.1	298.0	216.5
27.5°	664.8	658.0	641.3	610.6	569.6	514.5	454.3	395.8	340.7	291.2	201.5
30°	683.6	676.7	656.7	625.1	582.0	525.6	461.1	396.2	336.5	280.9	185.3
32.5°	698.1	691.7	671.2	637.5	590.5	533.3	465.0	395.8	330.9	273.7	167.8
35°	712.6	706.2	682.3	646.4	596.9	536.7	468.0	393.7	324.1	261.7	151.1
37.5°	723.7	716.5	692.1	652.4	599.9	537.6	467.5	390.7	316.8	251.9	134.5
40°	731.4	723.7	697.7	655.8	600.7	536.3	464.1	385.6	308.3	239.5	117.0
42.5°	736.5	728.0	700.2	660.9	599.0	532.9	459.0	379.1	298.9	228.9	100.3
45°	739.1	730.1	700.7	656.7	596.0	526.5	451.3	371.0	288.6	214.3	83.7
47.5°	737.8	728.0	698.5	652.0	590.5	519.6	442.8	361.2	276.2	201.5	67.9
50°	735.7	725.4	693.8	646.0	582.8	511.1	433.4	349.3	263.4	185.7	53.8
52.5°	728.8	718.6	688.7	637.5	573.8	501.3	420.6	336.9	249.8	170.4	41.0
55°	720.3	710.9	679.7	629.8	562.3	489.3	408.6	323.6	236.5	154.6	29.5
57.5°	707.1	698.5	668.6	617.4	550.8	476.1	395.4	309.1	219.9	138.8	20.5
60°	690.8	682.3	653.3	603.3	537.6	461.1	380.9	294.2	204.9	123.0	12.8
62.5°	673.8	665.6	635.3	585.8	520.9	445.3	365.1	279.2	189.1	108.5	7.7
65°	651.1	643.4	616.1	564.9	502.5	428.3	347.6	261.3	172.9	92.2	4.3
67.5°	627.2	620.4	592.6	545.7	481.2	409.5	329.6	243.8	155.8	78.1	2.1
70°	601.6	593.1	567.4	519.6	459.4	388.1	310.0	225.9	139.6	64.5	0.0
72.5°	571.7	565.3	540.5	495.3	434.2	365.5	289.9	206.2	121.7	51.2	0.4
75°	542.7	534.6	511.9	469.2	409.5	341.6	267.7	187.9	104.2	39.3	0.4
77.5°	505.1	502.5	481.2	439.8	386.0	318.5	243.4	165.7	87.5	28.2	0.4
80°	467.5	465.0	448.3	410.3	358.7	291.2	220.7	144.7	71.3	18.8	0.4
82.5°	430.4	427.0	411.2	379.6	330.9	268.1	197.3	123.8	56.4	11.5	0.4
85°	397.1	392.8	375.7	346.7	302.3	242.1	172.9	103.3	41.8	6.4	0.9
87.5°	368.5	365.5	346.7	316.8	273.3	217.8	151.6	83.7	29.5	3.0	1.3
90°	344.1	337.7	321.1	289.5	245.9	190.9	128.9	67.0	19.6	1.7	1.7
92.5°	320.2	314.7	296.3	263.9	221.6	167.8	107.2	51.2	12.4	0.9	2.1
95°	295.5	289.5	271.6	241.7	196.8	144.3	88.0	37.6	6.8	0.9	2.1
97.5°	271.1	265.6	246.8	216.9	174.6	123.8	69.6	26.5	3.4	0.9	1.7
100°	248.5	242.1	225.0	195.1	152.4	103.3	53.8	17.1	2.1	0.9	1.7
102.5°	224.6	219.5	202.0	172.9	129.4	84.1	40.1	10.7	0.9	0.9	1.3
105°	203.2	196.8	179.8	149.9	110.2	66.2	28.2	6.4	0.9	0.9	1.3



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	132.4	127.2	112.3	87.1	55.9	26.0	7.7	1.3	1.3	1.3	1.3
115°	110.6	102.9	89.7	67.5	41.4	17.1	3.8	1.3	1.3	1.3	1.3
117.5°	88.4	82.0	72.6	51.2	27.3	11.1	2.1	1.3	1.3	1.3	1.3
120°	69.2	63.2	52.5	35.4	18.4	6.4	0.9	1.3	1.3	1.3	1.3
122.5°	49.5	44.8	35.4	23.1	11.1	3.0	1.3	1.3	1.7	1.7	1.3
125°	32.9	30.3	23.5	14.1	6.8	1.3	1.3	1.3	1.7	1.7	1.3
127.5°	21.3	19.2	13.7	8.1	3.0	1.3	1.3	1.7	1.7	1.7	1.3
130°	12.0	10.7	8.1	4.7	1.3	1.3	1.3	1.7	1.7	1.7	1.3
132.5°	6.8	6.4	4.3	0.9	1.3	1.3	1.3	1.7	1.7	1.7	1.7
135°	1.7	0.9	0.9	0.9	1.3	1.3	1.7	1.7	2.1	2.1	1.7
137.5°	0.4	0.4	0.9	0.9	1.3	1.3	1.7	2.1	2.1	2.1	1.7
140°	0.4	0.4	0.9	1.3	1.3	1.3	1.7	2.1	2.1	2.1	1.7
142.5°	0.4	0.9	0.9	1.3	1.3	1.7	1.7	2.1	2.1	1.7	1.7
145°	0.4	0.9	0.9	1.3	1.3	1.7	1.7	2.1	1.7	1.7	1.7
147.5°	0.9	0.9	0.9	1.3	1.3	1.7	1.7	2.1	2.1	1.7	1.7
150°	0.4	0.9	0.9	1.3	1.7	1.7	1.7	2.1	1.7	1.7	1.7
152.5°	0.4	0.9	0.9	1.3	1.7	1.7	1.7	2.1	1.7	1.7	1.7
155°	0.9	0.9	0.9	1.3	1.7	1.7	1.7	2.1	1.7	1.7	2.1
157.5°	0.9	0.9	0.9	1.3	1.7	1.7	1.7	2.1	1.7	1.7	2.1
160°	0.9	0.9	0.9	1.3	1.3	1.7	1.7	1.7	1.7	1.7	1.7
162.5°	0.9	0.9	0.9	1.3	1.3	1.7	1.7	1.7	1.7	1.7	1.7
165°	0.9	0.9	0.9	0.9	1.3	1.3	1.7	1.7	1.7	1.7	1.7
167.5°	0.9	0.9	0.9	1.3	1.3	1.3	1.7	1.7	1.7	1.7	1.7
170°	0.9	0.9	0.9	1.3	1.3	1.3	1.7	2.1	2.1	2.1	2.1
172.5°	0.9	0.9	0.9	1.3	1.3	1.7	1.7	2.1	2.1	2.1	2.1
175°	0.9	0.9	0.9	1.3	1.3	1.7	1.7	2.1	2.1	2.1	2.1
177.5°	0.4	0.9	0.9	1.3	1.3	1.7	1.7	2.1	2.1	2.1	1.7
180°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	335.2	335.2	335.2
2.5°	318.9	313.0	311.3
5°	301.9	292.0	286.5
7.5°	284.8	271.6	265.1
10°	269.0	250.2	243.4
12.5°	250.2	228.4	217.8
15°	232.3	204.1	193.8
17.5°	212.2	180.6	168.7
20°	193.4	157.1	144.7
22.5°	172.1	134.1	120.4
25°	152.9	111.0	95.6
27.5°	131.5	87.5	74.3
30°	111.4	67.0	53.8
32.5°	92.2	49.1	37.1
35°	74.3	33.3	23.5
37.5°	57.2	20.5	12.0
40°	41.4	10.7	5.6
42.5°	27.8	5.1	3.0
45°	17.1	2.6	0.0
47.5°	9.8	0.0	0.0
50°	5.1	0.0	0.0
52.5°	2.1	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°	0.4	0.4	0.4
77.5°	0.4	0.9	1.3
80°	0.9	1.7	2.1
82.5°	1.7	2.1	2.1
85°	1.7	2.1	2.6
87.5°	2.1	2.6	3.0
90°	2.6	3.0	3.0
92.5°	2.6	3.4	3.4
95°	3.0	3.4	3.8
97.5°	3.4	3.8	3.8
100°	3.0	3.8	4.3
102.5°	2.6	3.8	3.8
105°	2.1	3.0	3.4



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	1.7	2.1	2.1
115°	1.3	1.7	2.1
117.5°	1.3	1.7	1.7
120°	1.3	1.3	1.7
122.5°	1.3	1.3	1.7
125°	1.3	1.3	1.7
127.5°	1.7	1.3	1.3
130°	1.3	1.3	1.3
132.5°	1.7	1.3	1.3
135°	1.7	1.3	1.3
137.5°	1.7	1.3	1.3
140°	1.7	1.3	1.3
142.5°	1.7	1.3	1.3
145°	1.3	1.3	1.3
147.5°	1.3	1.3	1.3
150°	1.3	1.3	0.9
152.5°	1.3	0.9	0.9
155°	1.3	0.9	0.4
157.5°	1.7	0.9	0.4
160°	1.3	0.9	0.4
162.5°	1.3	0.9	0.4
165°	1.3	0.9	0.0
167.5°	1.3	0.9	0.4
170°	1.3	0.9	0.4
172.5°	1.3	0.9	0.4
175°	1.3	0.4	0.4
177.5°	1.3	0.4	0.4
180°	1.3	1.3	1.3



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	179.3	174.2	157.1	128.9	90.1	50.4	18.8	3.4	0.9	1.3	1.3
110°	156.3	152.0	134.5	107.2	72.6	37.6	12.4	2.1	1.3	1.3	1.3





107.5°	1.7	2.6	3.0
110°	1.7	2.1	2.6



(END OF REPORT)