

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: P551131

Luminaire Tested: **FCC-X-2-LD4-1STD-50-UNV-80-86-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: P551131
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-LD4-1STD-50-UNV-80-86-ED1D-90
Description: FCC CORNER MOUNT LUMINAIRE WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 5000K, AND 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

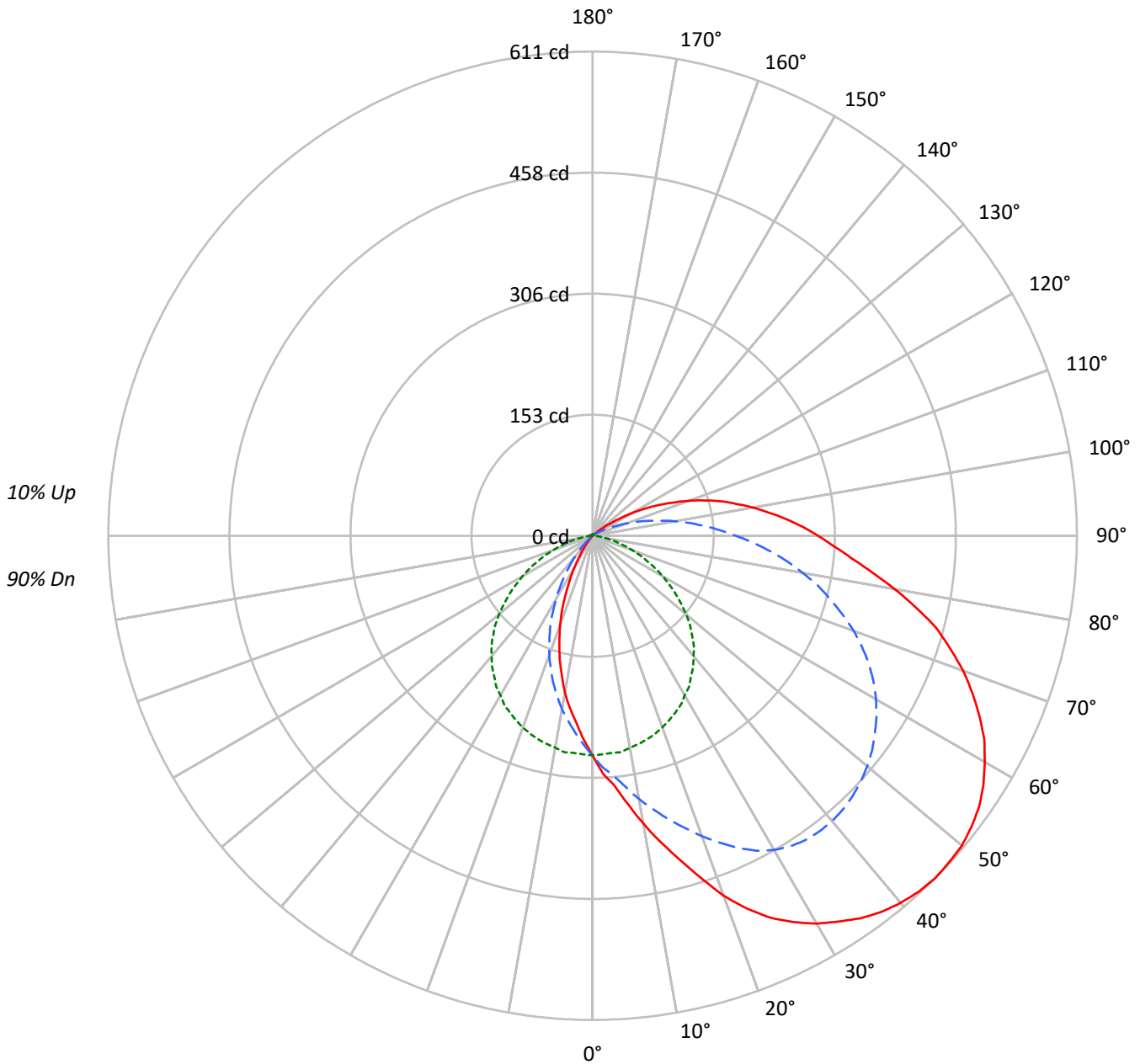
Lumens per Lamp: N/A
Luminaire Lumens: 1370.1 lumens
Efficiency: N/A
Efficacy: 82.0 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

Input Watts (W): 16.7
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°	2983	2983	2983
5°	3274	2939	2452
10°	3705	2903	2021
15°	4153	2866	1575
20°	4684	2819	1160
25°	5124	2765	762
30°	5451	2693	429
35°	5735	2615	189
40°	5986	2518	46
45°	6202	2398	0
50°	6382	2239	0
55°	6520	2035	0
60°	6590	1800	0
65°	6617	1533	0
70°	6595	1249	0
75°	6511	922	6
80°	6248	562	29
85°	6038	270	39



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	26.5	1.9
10°-20°	79.5	5.8
20°-30°	128.7	9.4
30°-40°	165.3	12.1
40°-50°	187.2	13.7
50°-60°	193.9	14.2
60°-70°	182.9	13.3
70°-80°	153.3	11.2
80°-90°	111.1	8.1
90°-100°	73.0	5.3
100°-110°	42.2	3.1
110°-120°	18.6	1.4
120°-130°	5.1	0.4
130°-140°	1.2	0.1
140°-150°	0.8	0.1
150°-160°	0.5	0.0
160°-170°	0.3	0.0
170°-180°	0.1	0.0
0°-30°	234.7	17.1
0°-40°	400.1	29.2
0°-60°	781.1	57.0
0°-90°	1228.3	89.7
90°-120°	133.8	9.8
90°-150°	140.8	10.3
90°-180°	142.0	10.4
0°-180°	1370.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	277	277	277	277	277	
5°	316	304	275	250	237	32
15°	423	370	266	192	160	122
25°	532	435	246	126	79	246
35°	589	469	216	61	19	370
45°	611	464	177	14	0	472
55°	596	435	128	0	0	532
65°	538	385	76	0	0	533
75°	449	310	32	0	0	471
85°	328	225	5	1	2	280
90°	284	181	1	2	2	156
95°	244	141	1	2	3	192
105°	168	73	1	2	3	177
115°	91	24	1	1	2	92
125°	27	3	1	1	1	27
135°	1	1	2	1	1	3
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°	277.1	277.1	277.1	277.1	277.1	277.1	277.1	277.1	277.1	277.1	277.1
2.5°	300.4	300.1	299.0	297.2	294.8	290.5	287.0	283.8	279.6	276.1	269.4
5°	316.3	314.5	313.1	311.4	305.7	301.8	295.5	288.4	281.7	275.0	261.6
7.5°	341.7	338.9	336.8	331.8	324.1	315.2	305.4	298.7	294.1	275.4	252.4
10°	368.9	366.4	362.2	353.4	343.8	331.1	317.0	301.1	287.0	271.5	244.3
12.5°	395.7	392.2	386.2	374.9	361.5	345.6	326.2	307.5	287.4	269.0	234.8
15°	422.6	418.7	412.3	398.6	380.9	360.1	336.4	312.8	289.1	265.8	224.9
17.5°	451.9	446.6	437.0	421.5	399.3	373.5	345.6	317.0	288.4	261.9	214.3
20°	483.3	475.9	465.6	444.8	418.7	388.3	354.8	321.2	288.1	257.3	202.3
22.5°	509.4	502.0	490.7	469.2	437.7	400.7	362.5	324.1	286.6	252.1	191.0
25°	532.0	526.0	513.6	488.9	455.7	413.7	370.0	326.2	284.5	246.4	179.0
27.5°	549.6	544.0	530.2	504.8	470.9	425.4	375.6	327.2	281.7	240.8	166.6
30°	565.2	559.5	542.9	516.8	481.2	434.6	381.3	327.6	278.2	232.3	153.2
32.5°	577.2	571.9	554.9	527.1	488.2	440.9	384.4	327.2	273.6	226.3	138.7
35°	589.2	583.9	564.1	534.5	493.5	443.7	386.9	325.5	267.9	216.4	125.0
37.5°	598.4	592.4	572.2	539.4	496.0	444.4	386.6	323.0	261.9	208.3	111.2
40°	604.7	598.4	576.8	542.2	496.7	443.4	383.7	318.8	254.9	198.0	96.7
42.5°	609.0	601.9	578.9	546.5	495.3	440.6	379.5	313.5	247.1	189.2	83.0
45°	611.1	603.7	579.3	542.9	492.8	435.3	373.1	306.8	238.6	177.2	69.2
47.5°	610.0	601.9	577.5	539.1	488.2	429.6	366.1	298.7	228.4	166.6	56.1
50°	608.2	599.8	573.7	534.1	481.9	422.6	358.3	288.8	217.8	153.6	44.5
52.5°	602.6	594.1	569.4	527.1	474.5	414.4	347.7	278.5	206.5	140.9	33.9
55°	595.5	587.8	562.0	520.7	464.9	404.6	337.8	267.6	195.6	127.8	24.4
57.5°	584.6	577.5	552.8	510.5	455.4	393.6	326.9	255.6	181.8	114.7	16.9
60°	571.2	564.1	540.1	498.8	444.4	381.3	314.9	243.2	169.4	101.7	10.6
62.5°	557.1	550.4	525.3	484.3	430.7	368.2	301.8	230.9	156.4	89.7	6.4
65°	538.4	532.0	509.4	467.0	415.5	354.1	287.4	216.0	143.0	76.3	3.5
67.5°	518.6	512.9	490.0	451.2	397.8	338.5	272.5	201.6	128.9	64.6	1.8
70°	497.4	490.3	469.2	429.6	379.8	320.9	256.3	186.7	115.4	53.3	0.0
72.5°	472.7	467.4	446.9	409.5	359.0	302.2	239.7	170.5	100.6	42.4	0.4
75°	448.7	442.0	423.3	388.0	338.5	282.4	221.3	155.3	86.1	32.5	0.4
77.5°	417.6	415.5	397.8	363.6	319.1	263.4	201.2	137.0	72.4	23.3	0.4
80°	386.6	384.4	370.7	339.2	296.5	240.8	182.5	119.7	59.0	15.5	0.4
82.5°	355.8	353.0	340.0	313.8	273.6	221.7	163.1	102.4	46.6	9.5	0.4
85°	328.3	324.8	310.7	286.6	249.9	200.2	143.0	85.4	34.6	5.3	0.7
87.5°	304.7	302.2	286.6	261.9	225.9	180.0	125.3	69.2	24.4	2.5	1.1
90°	284.5	279.2	265.5	239.3	203.3	157.8	106.6	55.4	16.2	1.4	1.4
92.5°	264.8	260.2	245.0	218.2	183.2	138.7	88.6	42.4	10.2	0.7	1.8
95°	244.3	239.3	224.5	199.8	162.7	119.3	72.7	31.1	5.6	0.7	1.8
97.5°	224.2	219.6	204.0	179.3	144.4	102.4	57.5	21.9	2.8	0.7	1.4
100°	205.5	200.2	186.0	161.3	126.0	85.4	44.5	14.1	1.8	0.7	1.4
102.5°	185.7	181.5	167.0	143.0	107.0	69.5	33.2	8.8	0.7	0.7	1.1
105°	168.0	162.7	148.6	123.9	91.1	54.7	23.3	5.3	0.7	0.7	1.1



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CATALOG NUMBER: FCC-X-2-LD4-1STD-50-UNV-80-86-ED1D-90

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	109.4	105.2	92.8	72.0	46.2	21.5	6.4	1.1	1.1	1.1	1.1
115°	91.4	85.1	74.1	55.8	34.2	14.1	3.2	1.1	1.1	1.1	1.1
117.5°	73.1	67.8	60.0	42.4	22.6	9.2	1.8	1.1	1.1	1.1	1.1
120°	57.2	52.2	43.4	29.3	15.2	5.3	0.7	1.1	1.1	1.1	1.1
122.5°	40.9	37.1	29.3	19.1	9.2	2.5	1.1	1.1	1.4	1.4	1.1
125°	27.2	25.1	19.4	11.6	5.6	1.1	1.1	1.1	1.4	1.4	1.1
127.5°	17.7	15.9	11.3	6.7	2.5	1.1	1.1	1.4	1.4	1.4	1.1
130°	9.9	8.8	6.7	3.9	1.1	1.1	1.1	1.4	1.4	1.4	1.1
132.5°	5.6	5.3	3.5	0.7	1.1	1.1	1.1	1.4	1.4	1.4	1.4
135°	1.4	0.7	0.7	0.7	1.1	1.1	1.4	1.4	1.8	1.8	1.4
137.5°	0.4	0.4	0.7	0.7	1.1	1.1	1.4	1.8	1.8	1.8	1.4
140°	0.4	0.4	0.7	1.1	1.1	1.1	1.4	1.8	1.8	1.8	1.4
142.5°	0.4	0.7	0.7	1.1	1.1	1.4	1.4	1.8	1.8	1.4	1.4
145°	0.4	0.7	0.7	1.1	1.1	1.4	1.4	1.8	1.4	1.4	1.4
147.5°	0.7	0.7	0.7	1.1	1.1	1.4	1.4	1.8	1.8	1.4	1.4
150°	0.4	0.7	0.7	1.1	1.4	1.4	1.4	1.8	1.4	1.4	1.4
152.5°	0.4	0.7	0.7	1.1	1.4	1.4	1.4	1.8	1.4	1.4	1.4
155°	0.7	0.7	0.7	1.1	1.4	1.4	1.4	1.8	1.4	1.4	1.8
157.5°	0.7	0.7	0.7	1.1	1.4	1.4	1.4	1.8	1.4	1.4	1.8
160°	0.7	0.7	0.7	1.1	1.1	1.4	1.4	1.4	1.4	1.4	1.4
162.5°	0.7	0.7	0.7	1.1	1.1	1.4	1.4	1.4	1.4	1.4	1.4
165°	0.7	0.7	0.7	0.7	1.1	1.1	1.4	1.4	1.4	1.4	1.4
167.5°	0.7	0.7	0.7	1.1	1.1	1.1	1.4	1.4	1.4	1.4	1.4
170°	0.7	0.7	0.7	1.1	1.1	1.1	1.4	1.8	1.8	1.8	1.8
172.5°	0.7	0.7	0.7	1.1	1.1	1.4	1.4	1.8	1.8	1.8	1.8
175°	0.7	0.7	0.7	1.1	1.1	1.4	1.4	1.8	1.8	1.8	1.8
177.5°	0.4	0.7	0.7	1.1	1.1	1.4	1.4	1.8	1.8	1.8	1.4
180°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	277.1	277.1	277.1
2.5°	263.7	258.8	257.3
5°	249.6	241.5	236.9
7.5°	235.5	224.5	219.2
10°	222.4	206.9	201.2
12.5°	206.9	188.9	180.0
15°	192.0	168.7	160.3
17.5°	175.4	149.3	139.4
20°	159.9	129.9	119.7
22.5°	142.3	110.8	99.6
25°	126.4	91.8	79.1
27.5°	108.7	72.4	61.4
30°	92.1	55.4	44.5
32.5°	76.3	40.6	30.7
35°	61.4	27.5	19.4
37.5°	47.3	16.9	9.9
40°	34.2	8.8	4.6
42.5°	22.9	4.2	2.5
45°	14.1	2.1	0.0
47.5°	8.1	0.0	0.0
50°	4.2	0.0	0.0
52.5°	1.8	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	0.7	1.1
80°	0.7	1.4	1.8
82.5°	1.4	1.8	1.8
85°	1.4	1.8	2.1
87.5°	1.8	2.1	2.5
90°	2.1	2.5	2.5
92.5°	2.1	2.8	2.8
95°	2.5	2.8	3.2
97.5°	2.8	3.2	3.2
100°	2.5	3.2	3.5
102.5°	2.1	3.2	3.2
105°	1.8	2.5	2.8



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	1.4	1.8	1.8
115°	1.1	1.4	1.8
117.5°	1.1	1.4	1.4
120°	1.1	1.1	1.4
122.5°	1.1	1.1	1.4
125°	1.1	1.1	1.4
127.5°	1.4	1.1	1.1
130°	1.1	1.1	1.1
132.5°	1.4	1.1	1.1
135°	1.4	1.1	1.1
137.5°	1.4	1.1	1.1
140°	1.4	1.1	1.1
142.5°	1.4	1.1	1.1
145°	1.1	1.1	1.1
147.5°	1.1	1.1	1.1
150°	1.1	1.1	0.7
152.5°	1.1	0.7	0.7
155°	1.1	0.7	0.4
157.5°	1.4	0.7	0.4
160°	1.1	0.7	0.4
162.5°	1.1	0.7	0.4
165°	1.1	0.7	0.0
167.5°	1.1	0.7	0.4
170°	1.1	0.7	0.4
172.5°	1.1	0.7	0.4
175°	1.1	0.4	0.4
177.5°	1.1	0.4	0.4
180°	1.1	1.1	1.1



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	148.3	144.0	129.9	106.6	74.5	41.7	15.5	2.8	0.7	1.1	1.1
110°	129.2	125.7	111.2	88.6	60.0	31.1	10.2	1.8	1.1	1.1	1.1





107.5°	1.4	2.1	2.5
110°	1.4	1.8	2.1



(END OF REPORT)