

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: P551295

Luminaire Tested: **FCC-X-2-LD4-2HI-35-UNV-82-88-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: P551295
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-LD4-2HI-35-UNV-82-88-ED1D-90
Description: FCC CORNER MOUNT LUMINAIRE WITH .187 CLEAR PC FIXTURE SIDE AND .500 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 3500K, AND 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

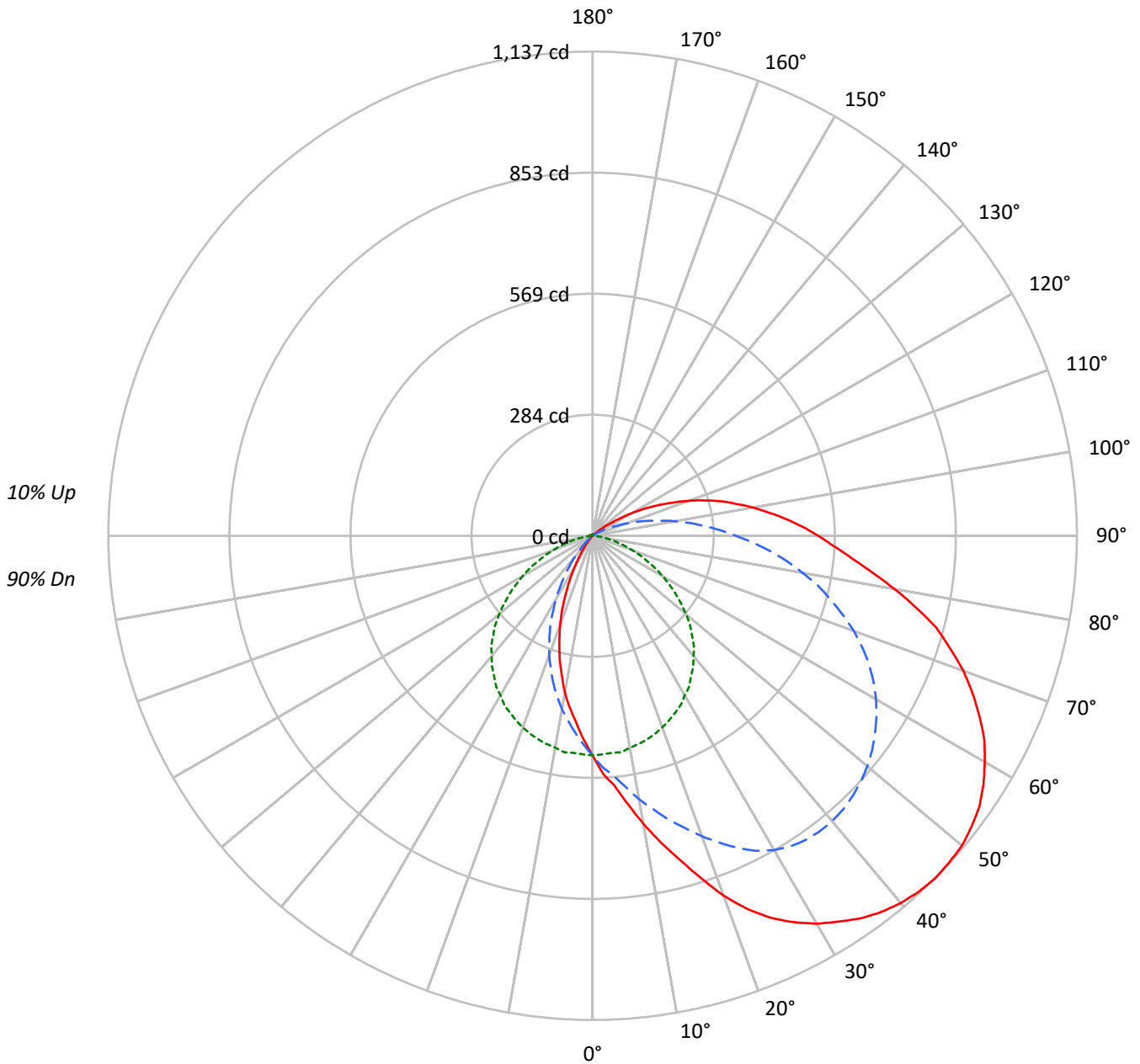
Lumens per Lamp: N/A
Luminaire Lumens: 2550.0 lumens
Efficiency: N/A
Efficacy: 58.9 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

Input Watts (W): 43.3
Input Voltage (V): NR
Input Current (Ain): 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°	5552	5552	5552
5°	6094	5471	4564
10°	6896	5404	3762
15°	7729	5335	2931
20°	8717	5248	2158
25°	9537	5147	1418
30°	10146	5013	799
35°	10674	4867	351
40°	11142	4688	84
45°	11543	4464	0
50°	11879	4165	0
55°	12136	3788	0
60°	12265	3348	0
65°	12315	2850	0
70°	12274	2324	0
75°	12118	1716	10
80°	11628	1048	53
85°	11239	503	72



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.4	1.9
10°-20°	147.9	5.8
20°-30°	239.6	9.4
30°-40°	307.7	12.1
40°-50°	348.4	13.7
50°-60°	360.9	14.2
60°-70°	340.4	13.3
70°-80°	285.3	11.2
80°-90°	206.8	8.1
90°-100°	135.9	5.3
100°-110°	78.5	3.1
110°-120°	34.6	1.4
120°-130°	9.4	0.4
130°-140°	2.1	0.1
140°-150°	1.4	0.1
150°-160°	1.0	0.0
160°-170°	0.6	0.0
170°-180°	0.2	0.0
0°-30°	436.9	17.1
0°-40°	744.6	29.2
0°-60°	1453.9	57.0
0°-90°	2286.3	89.7
90°-120°	249.0	9.8
90°-150°	262.0	10.3
90°-180°	264.0	10.4
0°-180°	2550.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	516	516	516	516	516	
5°	589	565	512	465	441	59
15°	786	690	495	357	298	227
25°	990	809	459	235	147	458
35°	1097	872	403	114	36	688
45°	1137	864	330	26	0	878
55°	1108	809	238	0	0	990
65°	1002	716	142	0	0	991
75°	835	578	60	1	1	876
85°	611	419	10	3	4	522
90°	530	336	3	4	5	290
95°	455	262	1	5	6	357
105°	313	136	1	3	5	330
115°	170	45	2	2	3	170
125°	51	6	3	2	3	51
135°	3	2	3	3	2	5
145°	1	2	3	2	2	1
155°	1	3	3	2	1	0
165°	1	2	3	2	0	0
175°	1	2	3	2	1	0
180°	2	2	2	2	2	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
0°	515.8	515.8	515.8	515.8	515.8	515.8	515.8	515.8	515.8	515.8	515.8
2.5°	559.2	558.5	556.5	553.3	548.7	540.8	534.2	528.3	520.4	513.8	501.3
5°	588.7	585.5	582.8	579.5	569.0	561.8	550.0	536.8	524.3	511.9	486.9
7.5°	636.0	630.8	626.8	617.7	603.2	586.8	568.4	555.9	547.3	512.5	469.8
10°	686.6	682.0	674.2	657.7	640.0	616.3	590.1	560.5	534.2	505.3	454.7
12.5°	736.6	730.0	718.8	697.8	672.8	643.3	607.1	572.3	534.9	500.7	437.0
15°	786.5	779.3	767.5	741.8	709.0	670.2	626.2	582.2	538.1	494.8	418.6
17.5°	841.1	831.2	813.5	784.5	743.2	695.2	643.3	590.1	536.8	487.5	398.8
20°	899.5	885.7	866.7	827.9	779.3	722.8	660.4	597.9	536.2	479.0	376.5
22.5°	948.2	934.4	913.3	873.3	814.8	745.8	674.8	603.2	533.5	469.2	355.5
25°	990.2	979.0	956.0	910.0	848.3	770.1	688.6	607.1	529.6	458.6	333.1
27.5°	1023.1	1012.6	986.9	939.6	876.5	791.8	699.1	609.1	524.3	448.1	310.1
30°	1052.0	1041.5	1010.6	962.0	895.6	808.9	709.6	609.8	517.8	432.4	285.2
32.5°	1074.3	1064.5	1032.9	981.0	908.7	820.7	715.6	609.1	509.2	421.2	258.2
35°	1096.7	1086.8	1050.0	994.8	918.6	825.9	720.2	605.8	498.7	402.8	232.6
37.5°	1113.7	1102.6	1065.1	1004.0	923.2	827.3	719.5	601.2	487.5	387.7	207.0
40°	1125.6	1113.7	1073.7	1009.3	924.5	825.3	714.2	593.3	474.4	368.6	180.0
42.5°	1133.5	1120.3	1077.6	1017.2	921.9	820.0	706.4	583.5	460.0	352.2	154.4
45°	1137.4	1123.6	1078.3	1010.6	917.3	810.2	694.5	571.0	444.2	329.9	128.8
47.5°	1135.4	1120.3	1075.0	1003.4	908.7	799.7	681.4	555.9	425.1	310.1	104.5
50°	1132.1	1116.4	1067.7	994.2	896.9	786.5	666.9	537.5	405.4	285.8	82.8
52.5°	1121.6	1105.9	1059.9	981.0	883.1	771.4	647.2	518.4	384.4	262.2	63.1
55°	1108.5	1094.0	1046.1	969.2	865.4	753.0	628.8	498.1	364.0	237.9	45.3
57.5°	1088.1	1075.0	1029.0	950.1	847.6	732.6	608.5	475.7	338.4	213.5	31.5
60°	1063.1	1050.0	1005.3	928.4	827.3	709.6	586.1	452.7	315.4	189.2	19.7
62.5°	1036.9	1024.4	977.7	901.5	801.6	685.3	561.8	429.7	291.1	166.9	11.8
65°	1002.0	990.2	948.2	869.3	773.4	659.0	534.9	402.1	266.1	141.9	6.6
67.5°	965.2	954.7	912.0	839.7	740.5	630.1	507.3	375.2	239.8	120.2	3.3
70°	925.8	912.7	873.3	799.7	707.0	597.3	477.0	347.6	214.9	99.2	0.0
72.5°	879.8	870.0	831.9	762.2	668.2	562.5	446.2	317.4	187.3	78.8	0.7
75°	835.1	822.7	787.8	722.1	630.1	525.7	412.0	289.1	160.3	60.5	0.7
77.5°	777.3	773.4	740.5	676.8	594.0	490.2	374.5	254.9	134.7	43.4	0.7
80°	719.5	715.6	689.9	631.4	551.9	448.1	339.7	222.7	109.7	28.9	0.7
82.5°	662.3	657.1	632.8	584.1	509.2	412.6	303.6	190.6	86.7	17.7	0.7
85°	611.1	604.5	578.2	533.5	465.2	372.6	266.1	159.0	64.4	9.9	1.3
87.5°	567.1	562.5	533.5	487.5	420.5	335.1	233.3	128.8	45.3	4.6	2.0
90°	529.6	519.7	494.1	445.5	378.5	293.7	198.4	103.2	30.2	2.6	2.6
92.5°	492.8	484.3	456.0	406.1	341.0	258.2	164.9	78.8	19.1	1.3	3.3
95°	454.7	445.5	417.9	371.9	302.9	222.1	135.4	57.8	10.5	1.3	3.3
97.5°	417.2	408.7	379.8	333.8	268.7	190.6	107.1	40.7	5.3	1.3	2.6
100°	382.4	372.6	346.3	300.3	234.6	159.0	82.8	26.3	3.3	1.3	2.6
102.5°	345.6	337.7	310.8	266.1	199.1	129.4	61.8	16.4	1.3	1.3	2.0
105°	312.8	302.9	276.6	230.6	169.5	101.8	43.4	9.9	1.3	1.3	2.0



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	203.7	195.8	172.8	134.0	86.1	40.1	11.8	2.0	2.0	2.0	2.0
115°	170.2	158.4	138.0	103.8	63.7	26.3	5.9	2.0	2.0	2.0	2.0
117.5°	136.0	126.2	111.7	78.8	42.1	17.1	3.3	2.0	2.0	2.0	2.0
120°	106.4	97.2	80.8	54.5	28.3	9.9	1.3	2.0	2.0	2.0	2.0
122.5°	76.2	69.0	54.5	35.5	17.1	4.6	2.0	2.0	2.6	2.6	2.0
125°	50.6	46.7	36.1	21.7	10.5	2.0	2.0	2.0	2.6	2.6	2.0
127.5°	32.9	29.6	21.0	12.5	4.6	2.0	2.0	2.6	2.6	2.6	2.0
130°	18.4	16.4	12.5	7.2	2.0	2.0	2.0	2.6	2.6	2.6	2.0
132.5°	10.5	9.9	6.6	1.3	2.0	2.0	2.0	2.6	2.6	2.6	2.6
135°	2.6	1.3	1.3	1.3	2.0	2.0	2.6	2.6	3.3	3.3	2.6
137.5°	0.7	0.7	1.3	1.3	2.0	2.0	2.6	3.3	3.3	3.3	2.6
140°	0.7	0.7	1.3	2.0	2.0	2.0	2.6	3.3	3.3	3.3	2.6
142.5°	0.7	1.3	1.3	2.0	2.0	2.6	2.6	3.3	3.3	2.6	2.6
145°	0.7	1.3	1.3	2.0	2.0	2.6	2.6	3.3	2.6	2.6	2.6
147.5°	1.3	1.3	1.3	2.0	2.0	2.6	2.6	3.3	3.3	2.6	2.6
150°	0.7	1.3	1.3	2.0	2.6	2.6	2.6	3.3	2.6	2.6	2.6
152.5°	0.7	1.3	1.3	2.0	2.6	2.6	2.6	3.3	2.6	2.6	2.6
155°	1.3	1.3	1.3	2.0	2.6	2.6	2.6	3.3	2.6	2.6	3.3
157.5°	1.3	1.3	1.3	2.0	2.6	2.6	2.6	3.3	2.6	2.6	3.3
160°	1.3	1.3	1.3	2.0	2.0	2.6	2.6	2.6	2.6	2.6	2.6
162.5°	1.3	1.3	1.3	2.0	2.0	2.6	2.6	2.6	2.6	2.6	2.6
165°	1.3	1.3	1.3	1.3	2.0	2.0	2.6	2.6	2.6	2.6	2.6
167.5°	1.3	1.3	1.3	2.0	2.0	2.0	2.6	2.6	2.6	2.6	2.6
170°	1.3	1.3	1.3	2.0	2.0	2.0	2.6	3.3	3.3	3.3	3.3
172.5°	1.3	1.3	1.3	2.0	2.0	2.6	2.6	3.3	3.3	3.3	3.3
175°	1.3	1.3	1.3	2.0	2.0	2.6	2.6	3.3	3.3	3.3	3.3
177.5°	0.7	1.3	1.3	2.0	2.0	2.6	2.6	3.3	3.3	3.3	2.6
180°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	515.8	515.8	515.8
2.5°	490.8	481.6	479.0
5°	464.6	449.4	440.9
7.5°	438.3	417.9	408.0
10°	414.0	385.0	374.5
12.5°	385.0	351.5	335.1
15°	357.4	314.1	298.3
17.5°	326.6	277.9	259.5
20°	297.7	241.8	222.7
22.5°	264.8	206.3	185.3
25°	235.2	170.8	147.2
27.5°	202.4	134.7	114.3
30°	171.5	103.2	82.8
32.5°	141.9	75.6	57.2
35°	114.3	51.3	36.1
37.5°	88.0	31.5	18.4
40°	63.7	16.4	8.5
42.5°	42.7	7.9	4.6
45°	26.3	3.9	0.0
47.5°	15.1	0.0	0.0
50°	7.9	0.0	0.0
52.5°	3.3	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°	0.7	0.7	0.7
77.5°	0.7	1.3	2.0
80°	1.3	2.6	3.3
82.5°	2.6	3.3	3.3
85°	2.6	3.3	3.9
87.5°	3.3	3.9	4.6
90°	3.9	4.6	4.6
92.5°	3.9	5.3	5.3
95°	4.6	5.3	5.9
97.5°	5.3	5.9	5.9
100°	4.6	5.9	6.6
102.5°	3.9	5.9	5.9
105°	3.3	4.6	5.3



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	2.6	3.3	3.3
115°	2.0	2.6	3.3
117.5°	2.0	2.6	2.6
120°	2.0	2.0	2.6
122.5°	2.0	2.0	2.6
125°	2.0	2.0	2.6
127.5°	2.6	2.0	2.0
130°	2.0	2.0	2.0
132.5°	2.6	2.0	2.0
135°	2.6	2.0	2.0
137.5°	2.6	2.0	2.0
140°	2.6	2.0	2.0
142.5°	2.6	2.0	2.0
145°	2.0	2.0	2.0
147.5°	2.0	2.0	2.0
150°	2.0	2.0	1.3
152.5°	2.0	1.3	1.3
155°	2.0	1.3	0.7
157.5°	2.6	1.3	0.7
160°	2.0	1.3	0.7
162.5°	2.0	1.3	0.7
165°	2.0	1.3	0.0
167.5°	2.0	1.3	0.7
170°	2.0	1.3	0.7
172.5°	2.0	1.3	0.7
175°	2.0	0.7	0.7
177.5°	2.0	0.7	0.7
180°	2.0	2.0	2.0



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	276.0	268.1	241.8	198.4	138.6	77.5	28.9	5.3	1.3	2.0	2.0
110°	240.5	233.9	207.0	164.9	111.7	57.8	19.1	3.3	2.0	2.0	2.0





107.5°	2.6	3.9	4.6
110°	2.6	3.3	3.9



(END OF REPORT)