

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: P551297

Luminaire Tested: **FCC-X-2-LD4-2HI-35-UNV-82-94-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: P551297
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-82-94-ED1D-90
Description: FCC CORNER MOUNT LUMINAIRE WITH .187 CLEAR PC FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES AND 3500K, AND 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

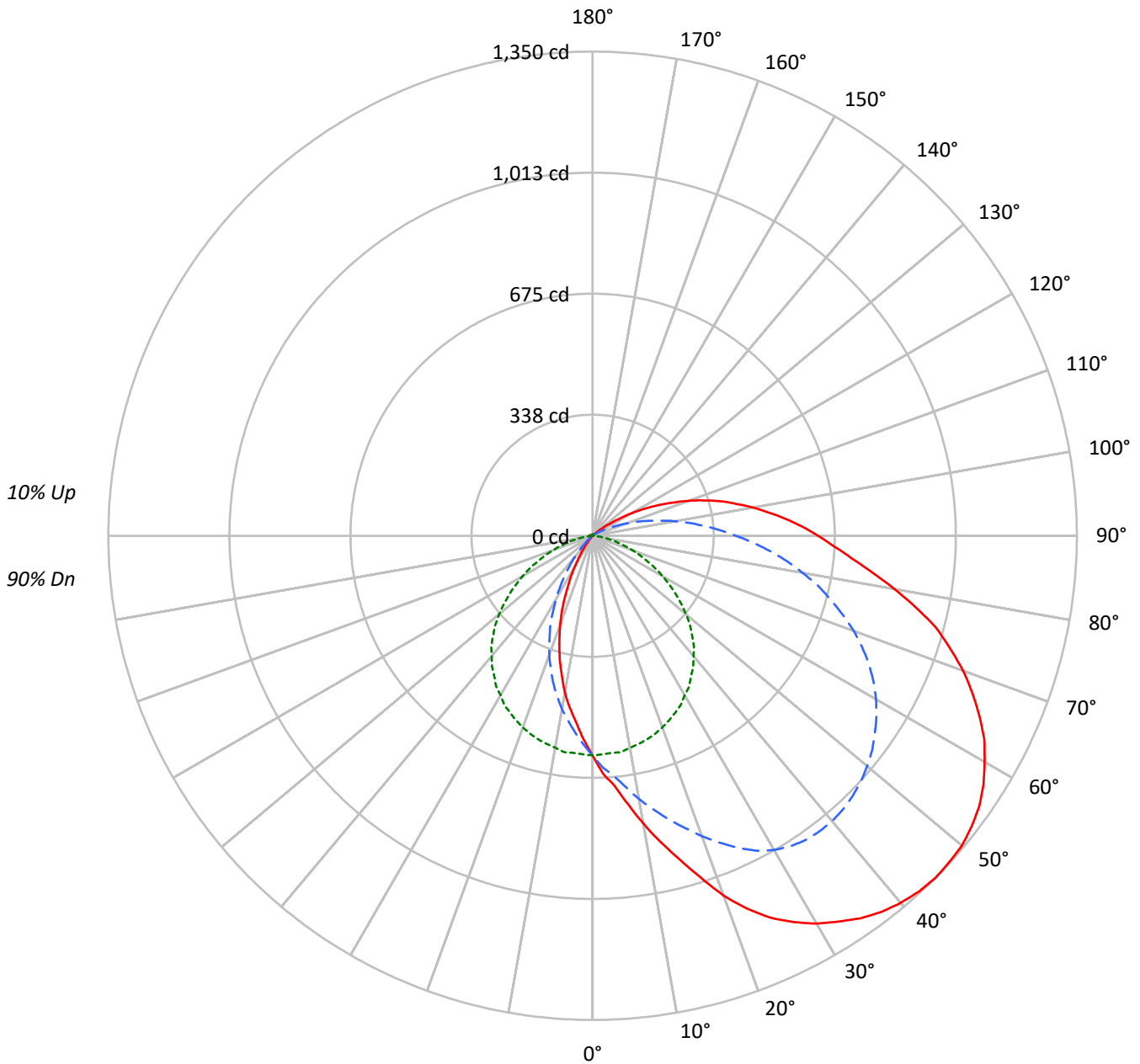
Lumens per Lamp: N/A
Luminaire Lumens: 3026.9 lumens
Efficiency: N/A
Efficacy: 69.9 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

Input Watts (W): 43.3
Input Voltage (V): NR
Input Current (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

TEST NUMBER: P551297

CATALOG NUMBER: FCC-X-2-LD4-2HI-35-UNV-82-94-ED1D-90

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°	6591	6591	6591
5°	7235	6494	5418
10°	8187	6414	4466
15°	9175	6333	3480
20°	10348	6230	2562
25°	11320	6110	1683
30°	12045	5949	948
35°	12670	5777	418
40°	13225	5565	100
45°	13702	5299	0
50°	14102	4945	0
55°	14406	4497	0
60°	14559	3975	0
65°	14620	3384	0
70°	14571	2760	0
75°	14386	2036	12
80°	13803	1244	63
85°	13341	595	86



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.6	1.9
10°-20°	175.6	5.8
20°-30°	284.4	9.4
30°-40°	365.3	12.1
40°-50°	413.5	13.7
50°-60°	428.4	14.2
60°-70°	404.0	13.3
70°-80°	338.6	11.2
80°-90°	245.4	8.1
90°-100°	161.3	5.3
100°-110°	93.2	3.1
110°-120°	41.1	1.4
120°-130°	11.1	0.4
130°-140°	2.5	0.1
140°-150°	1.7	0.1
150°-160°	1.2	0.0
160°-170°	0.7	0.0
170°-180°	0.2	0.0
0°-30°	518.6	17.1
0°-40°	883.9	29.2
0°-60°	1725.9	57.0
0°-90°	2714.0	89.7
90°-120°	295.6	9.8
90°-150°	310.9	10.3
90°-180°	313.0	10.3
0°-180°	3026.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	612	612	612	612	612	
5°	699	671	608	552	523	70
15°	934	819	587	424	354	269
25°	1175	961	544	279	175	543
35°	1302	1035	478	136	43	816
45°	1350	1025	392	31	0	1042
55°	1316	961	282	0	0	1175
65°	1190	850	168	0	0	1177
75°	991	686	72	1	1	1040
85°	725	497	12	3	5	619
90°	629	399	3	5	6	345
95°	540	312	2	6	7	423
105°	371	161	2	4	6	392
115°	202	53	2	2	4	202
125°	60	7	3	2	3	60
135°	3	2	4	3	2	6
145°	1	3	3	2	2	1
155°	2	3	3	2	1	1
165°	2	2	3	2	0	0
175°	2	3	4	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°	612.3	612.3	612.3	612.3	612.3	612.3	612.3	612.3	612.3	612.3	612.3
2.5°	663.8	663.0	660.6	656.7	651.3	641.9	634.1	627.1	617.7	609.9	595.1
5°	698.9	695.0	691.8	687.9	675.5	666.9	652.8	637.2	622.4	607.6	578.0
7.5°	755.0	748.8	744.1	733.2	716.0	696.5	674.7	659.9	649.7	608.4	557.7
10°	815.1	809.6	800.3	780.8	759.7	731.6	700.4	665.3	634.1	599.8	539.8
12.5°	874.4	866.6	853.3	828.3	798.7	763.6	720.7	679.4	634.9	594.3	518.7
15°	933.6	925.1	911.0	880.6	841.6	795.6	743.3	691.1	638.8	587.3	496.9
17.5°	998.4	986.7	965.6	931.3	882.2	825.2	763.6	700.4	637.2	578.7	473.5
20°	1067.8	1051.4	1028.8	982.8	925.1	858.0	783.9	709.8	636.5	568.6	446.9
22.5°	1125.5	1109.1	1084.2	1036.6	967.2	885.3	801.0	716.0	633.3	556.9	422.0
25°	1175.4	1162.2	1134.9	1080.3	1007.0	914.1	817.4	720.7	628.7	544.4	395.5
27.5°	1214.4	1202.0	1171.5	1115.4	1040.5	939.9	829.9	723.0	622.4	532.0	368.2
30°	1248.8	1236.3	1199.6	1141.9	1063.1	960.2	842.4	723.8	614.6	513.2	338.5
32.5°	1275.3	1263.6	1226.1	1164.5	1078.7	974.2	849.4	723.0	604.5	500.0	306.5
35°	1301.8	1290.1	1246.4	1180.9	1090.4	980.4	854.9	719.1	592.0	478.1	276.1
37.5°	1322.1	1308.8	1264.4	1191.8	1095.9	982.0	854.1	713.7	578.7	460.2	245.7
40°	1336.1	1322.1	1274.5	1198.1	1097.4	979.7	847.8	704.3	563.2	437.6	213.7
42.5°	1345.5	1329.9	1279.2	1207.4	1094.3	973.4	838.5	692.6	546.0	418.1	183.3
45°	1350.2	1333.8	1280.0	1199.6	1088.9	961.7	824.4	677.8	527.3	391.6	152.9
47.5°	1347.8	1329.9	1276.1	1191.0	1078.7	949.2	808.8	659.9	504.7	368.2	124.0
50°	1343.9	1325.2	1267.5	1180.1	1064.7	933.6	791.7	638.0	481.3	339.3	98.3
52.5°	1331.4	1312.7	1258.1	1164.5	1048.3	915.7	768.3	615.4	456.3	311.2	74.9
55°	1315.8	1298.7	1241.7	1150.5	1027.2	893.9	746.4	591.2	432.1	282.4	53.8
57.5°	1291.7	1276.1	1221.5	1127.9	1006.2	869.7	722.3	564.7	401.7	253.5	37.4
60°	1262.0	1246.4	1193.4	1102.1	982.0	842.4	695.7	537.4	374.4	224.6	23.4
62.5°	1230.8	1216.0	1160.6	1070.1	951.6	813.5	666.9	510.1	345.5	198.1	14.0
65°	1189.5	1175.4	1125.5	1031.9	918.0	782.3	634.9	477.4	315.9	168.5	7.8
67.5°	1145.8	1133.3	1082.6	996.8	879.0	748.0	602.1	445.4	284.7	142.7	3.9
70°	1099.0	1083.4	1036.6	949.2	839.3	709.0	566.3	412.6	255.1	117.8	0.0
72.5°	1044.4	1032.7	987.5	904.8	793.2	667.7	529.6	376.7	222.3	93.6	0.8
75°	991.4	976.5	935.2	857.2	748.0	624.0	489.1	343.2	190.3	71.8	0.8
77.5°	922.7	918.0	879.0	803.4	705.1	581.9	444.6	302.6	159.9	51.5	0.8
80°	854.1	849.4	819.0	749.6	655.2	532.0	403.3	264.4	130.3	34.3	0.8
82.5°	786.2	780.0	751.1	693.4	604.5	489.8	360.4	226.2	103.0	21.1	0.8
85°	725.4	717.6	686.4	633.3	552.2	442.3	315.9	188.8	76.4	11.7	1.6
87.5°	673.1	667.7	633.3	578.7	499.2	397.8	276.9	152.9	53.8	5.5	2.3
90°	628.7	617.0	586.5	528.8	449.3	348.7	235.6	122.5	35.9	3.1	3.1
92.5°	585.0	574.9	541.3	482.0	404.8	306.5	195.8	93.6	22.6	1.6	3.9
95°	539.8	528.8	496.1	441.5	359.6	263.6	160.7	68.6	12.5	1.6	3.9
97.5°	495.3	485.2	450.8	396.2	319.0	226.2	127.1	48.4	6.2	1.6	3.1
100°	454.0	442.3	411.1	356.5	278.5	188.8	98.3	31.2	3.9	1.6	3.1
102.5°	410.3	400.9	368.9	315.9	236.3	153.7	73.3	19.5	1.6	1.6	2.3
105°	371.3	359.6	328.4	273.8	201.2	120.9	51.5	11.7	1.6	1.6	2.3



TEST NUMBER: P551297

CATALOG NUMBER: FCC-X-2-LD4-2HI-35-UNV-82-94-ED1D-90

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	241.8	232.4	205.1	159.1	102.2	47.6	14.0	2.3	2.3	2.3	2.3
115°	202.0	188.0	163.8	123.2	75.7	31.2	7.0	2.3	2.3	2.3	2.3
117.5°	161.5	149.8	132.6	93.6	49.9	20.3	3.9	2.3	2.3	2.3	2.3
120°	126.4	115.4	95.9	64.7	33.5	11.7	1.6	2.3	2.3	2.3	2.3
122.5°	90.5	81.9	64.7	42.1	20.3	5.5	2.3	2.3	3.1	3.1	2.3
125°	60.1	55.4	42.9	25.7	12.5	2.3	2.3	2.3	3.1	3.1	2.3
127.5°	39.0	35.1	25.0	14.8	5.5	2.3	2.3	3.1	3.1	3.1	2.3
130°	21.8	19.5	14.8	8.6	2.3	2.3	2.3	3.1	3.1	3.1	2.3
132.5°	12.5	11.7	7.8	1.6	2.3	2.3	2.3	3.1	3.1	3.1	3.1
135°	3.1	1.6	1.6	1.6	2.3	2.3	3.1	3.1	3.9	3.9	3.1
137.5°	0.8	0.8	1.6	1.6	2.3	2.3	3.1	3.9	3.9	3.9	3.1
140°	0.8	0.8	1.6	2.3	2.3	2.3	3.1	3.9	3.9	3.9	3.1
142.5°	0.8	1.6	1.6	2.3	2.3	3.1	3.1	3.9	3.9	3.1	3.1
145°	0.8	1.6	1.6	2.3	2.3	3.1	3.1	3.9	3.1	3.1	3.1
147.5°	1.6	1.6	1.6	2.3	2.3	3.1	3.1	3.9	3.9	3.1	3.1
150°	0.8	1.6	1.6	2.3	3.1	3.1	3.1	3.9	3.1	3.1	3.1
152.5°	0.8	1.6	1.6	2.3	3.1	3.1	3.1	3.9	3.1	3.1	3.1
155°	1.6	1.6	1.6	2.3	3.1	3.1	3.1	3.9	3.1	3.1	3.9
157.5°	1.6	1.6	1.6	2.3	3.1	3.1	3.1	3.9	3.1	3.1	3.9
160°	1.6	1.6	1.6	2.3	2.3	3.1	3.1	3.1	3.1	3.1	3.1
162.5°	1.6	1.6	1.6	2.3	2.3	3.1	3.1	3.1	3.1	3.1	3.1
165°	1.6	1.6	1.6	1.6	2.3	2.3	3.1	3.1	3.1	3.1	3.1
167.5°	1.6	1.6	1.6	2.3	2.3	2.3	3.1	3.1	3.1	3.1	3.1
170°	1.6	1.6	1.6	2.3	2.3	2.3	3.1	3.9	3.9	3.9	3.9
172.5°	1.6	1.6	1.6	2.3	2.3	3.1	3.1	3.9	3.9	3.9	3.9
175°	1.6	1.6	1.6	2.3	2.3	3.1	3.1	3.9	3.9	3.9	3.9
177.5°	0.8	1.6	1.6	2.3	2.3	3.1	3.1	3.9	3.9	3.9	3.1
180°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	612.3	612.3	612.3
2.5°	582.6	571.7	568.6
5°	551.5	533.5	523.4
7.5°	520.3	496.1	484.4
10°	491.4	457.1	444.6
12.5°	457.1	417.3	397.8
15°	424.3	372.8	354.1
17.5°	387.7	329.9	308.1
20°	353.3	287.0	264.4
22.5°	314.3	244.9	220.0
25°	279.2	202.8	174.7
27.5°	240.2	159.9	135.7
30°	203.6	122.5	98.3
32.5°	168.5	89.7	67.9
35°	135.7	60.8	42.9
37.5°	104.5	37.4	21.8
40°	75.7	19.5	10.1
42.5°	50.7	9.4	5.5
45°	31.2	4.7	0.0
47.5°	17.9	0.0	0.0
50°	9.4	0.0	0.0
52.5°	3.9	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°	0.8	0.8	0.8
77.5°	0.8	1.6	2.3
80°	1.6	3.1	3.9
82.5°	3.1	3.9	3.9
85°	3.1	3.9	4.7
87.5°	3.9	4.7	5.5
90°	4.7	5.5	5.5
92.5°	4.7	6.2	6.2
95°	5.5	6.2	7.0
97.5°	6.2	7.0	7.0
100°	5.5	7.0	7.8
102.5°	4.7	7.0	7.0
105°	3.9	5.5	6.2



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	3.1	3.9	3.9
115°	2.3	3.1	3.9
117.5°	2.3	3.1	3.1
120°	2.3	2.3	3.1
122.5°	2.3	2.3	3.1
125°	2.3	2.3	3.1
127.5°	3.1	2.3	2.3
130°	2.3	2.3	2.3
132.5°	3.1	2.3	2.3
135°	3.1	2.3	2.3
137.5°	3.1	2.3	2.3
140°	3.1	2.3	2.3
142.5°	3.1	2.3	2.3
145°	2.3	2.3	2.3
147.5°	2.3	2.3	2.3
150°	2.3	2.3	1.6
152.5°	2.3	1.6	1.6
155°	2.3	1.6	0.8
157.5°	3.1	1.6	0.8
160°	2.3	1.6	0.8
162.5°	2.3	1.6	0.8
165°	2.3	1.6	0.0
167.5°	2.3	1.6	0.8
170°	2.3	1.6	0.8
172.5°	2.3	1.6	0.8
175°	2.3	0.8	0.8
177.5°	2.3	0.8	0.8
180°	2.3	2.3	2.3



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	327.6	318.2	287.0	235.6	164.6	92.0	34.3	6.2	1.6	2.3	2.3
110°	285.5	277.7	245.7	195.8	132.6	68.6	22.6	3.9	2.3	2.3	2.3





107.5°	3.1	4.7	5.5
110°	3.1	3.9	4.7



(END OF REPORT)