

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: P551401

Luminaire Tested: **FCC-X-2-LD4-2HI-50-UNV-81-85-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: P551401
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-50-UNV-81-85-ED1D-90
Description: FCC CORNER MOUNT LUMINAIRE WITH .156 CLEAR PC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 5000K, AND 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

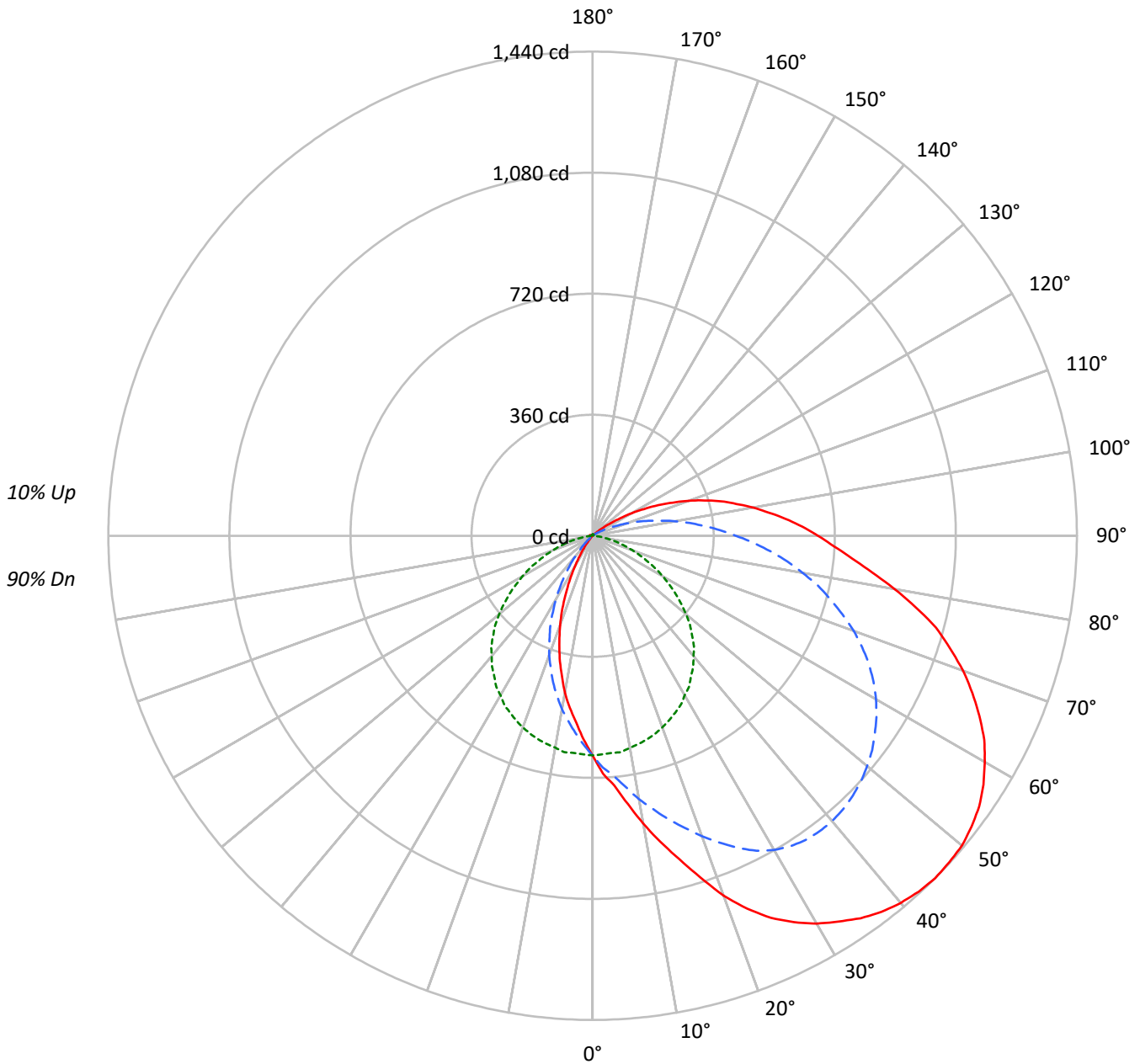
Lumens per Lamp: N/A
Luminaire Lumens: 3229.0 lumens
Efficiency: N/A
Efficacy: 74.6 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

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: P551401

CATALOG NUMBER: FCC-X-2-LD4-2HI-50-UNV-81-85-ED1D-90

Luminous Intensity Polar Plot





TEST NUMBER: P551401

CATALOG NUMBER: FCC-X-2-LD4-2HI-50-UNV-81-85-ED1D-90

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°	7030	7030	7030
5°	7718	6928	5780
10°	8734	6842	4764
15°	9787	6755	3712
20°	11039	6646	2734
25°	12076	6518	1795
30°	12848	6347	1011
35°	13516	6162	446
40°	14108	5936	107
45°	14617	5652	0
50°	15043	5275	0
55°	15367	4796	0
60°	15531	4240	0
65°	15596	3609	0
70°	15543	2942	0
75°	15345	2169	12
80°	14724	1328	68
85°	14232	636	92



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.6	1.9
10°-20°	187.3	5.8
20°-30°	303.4	9.4
30°-40°	389.7	12.1
40°-50°	441.1	13.7
50°-60°	457.0	14.2
60°-70°	431.0	13.3
70°-80°	361.2	11.2
80°-90°	261.8	8.1
90°-100°	172.1	5.3
100°-110°	99.4	3.1
110°-120°	43.9	1.4
120°-130°	11.9	0.4
130°-140°	2.7	0.1
140°-150°	1.8	0.1
150°-160°	1.3	0.0
160°-170°	0.7	0.0
170°-180°	0.3	0.0
0°-30°	553.3	17.1
0°-40°	942.9	29.2
0°-60°	1841.1	57.0
0°-90°	2895.1	89.7
90°-120°	315.3	9.8
90°-150°	331.7	10.3
90°-180°	334.0	10.3
0°-180°	3229.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	653	653	653	653	653	
5°	746	716	648	588	558	75
15°	996	873	626	453	378	287
25°	1254	1025	581	298	186	580
35°	1389	1105	510	145	46	871
45°	1440	1094	418	33	0	1112
55°	1404	1025	301	0	0	1253
65°	1269	907	180	0	0	1255
75°	1058	732	76	1	1	1109
85°	774	530	12	3	5	661
90°	671	426	3	5	6	368
95°	576	332	2	6	8	452
105°	396	172	2	4	7	418
115°	216	57	2	2	4	216
125°	64	8	3	2	3	64
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°	653.1	653.1	653.1	653.1	653.1	653.1	653.1	653.1	653.1	653.1	653.1
2.5°	708.1	707.2	704.7	700.6	694.8	684.8	676.4	669.0	659.0	650.7	634.8
5°	745.5	741.3	738.0	733.9	720.5	711.4	696.4	679.8	664.0	648.2	616.5
7.5°	805.4	798.8	793.8	782.1	763.8	743.0	719.7	703.9	693.1	649.0	594.9
10°	869.5	863.7	853.7	832.9	810.4	780.5	747.2	709.7	676.4	639.8	575.8
12.5°	932.7	924.4	910.2	883.6	852.0	814.6	768.8	724.7	677.3	634.0	553.3
15°	995.9	986.8	971.8	939.4	897.8	848.7	792.9	737.2	681.4	626.5	530.0
17.5°	1065.0	1052.5	1030.1	993.5	941.0	880.3	814.6	747.2	679.8	617.4	505.0
20°	1139.1	1121.6	1097.5	1048.4	986.8	915.2	836.2	757.2	678.9	606.6	476.8
22.5°	1200.6	1183.2	1156.5	1105.8	1031.7	944.4	854.5	763.8	675.6	594.1	450.1
25°	1253.9	1239.7	1210.6	1152.4	1074.2	975.1	872.0	768.8	670.6	580.8	421.8
27.5°	1295.5	1282.2	1249.7	1189.8	1109.9	1002.6	885.3	771.3	664.0	567.4	392.7
30°	1332.1	1318.8	1279.7	1218.1	1134.1	1024.2	898.6	772.1	655.6	547.5	361.1
32.5°	1360.4	1347.9	1308.0	1242.2	1150.7	1039.2	906.1	771.3	644.8	533.3	327.0
35°	1388.7	1376.2	1329.6	1259.7	1163.2	1045.9	911.9	767.1	631.5	510.0	294.5
37.5°	1410.3	1396.2	1348.7	1271.4	1169.0	1047.5	911.1	761.3	617.4	490.9	262.1
40°	1425.3	1410.3	1359.5	1278.0	1170.7	1045.0	904.4	751.3	600.7	466.8	228.0
42.5°	1435.3	1418.6	1364.5	1288.0	1167.3	1038.4	894.4	738.8	582.4	446.0	195.5
45°	1440.3	1422.8	1365.4	1279.7	1161.5	1025.9	879.5	723.0	562.5	417.7	163.1
47.5°	1437.8	1418.6	1361.2	1270.5	1150.7	1012.6	862.8	703.9	538.3	392.7	132.3
50°	1433.6	1413.6	1352.1	1258.9	1135.7	995.9	844.5	680.6	513.4	361.9	104.8
52.5°	1420.3	1400.3	1342.1	1242.2	1118.3	976.8	819.6	656.5	486.7	332.0	79.9
55°	1403.6	1385.3	1324.6	1227.3	1095.8	953.5	796.3	630.7	460.9	301.2	57.4
57.5°	1377.9	1361.2	1303.0	1203.1	1073.3	927.7	770.5	602.4	428.5	270.4	39.9
60°	1346.2	1329.6	1273.0	1175.7	1047.5	898.6	742.2	573.3	399.4	239.6	25.0
62.5°	1313.0	1297.1	1238.1	1141.6	1015.1	867.8	711.4	544.2	368.6	211.3	15.0
65°	1268.9	1253.9	1200.6	1100.8	979.3	834.5	677.3	509.2	337.0	179.7	8.3
67.5°	1222.3	1208.9	1154.9	1063.3	937.7	797.9	642.3	475.1	303.7	152.3	4.2
70°	1172.3	1155.7	1105.8	1012.6	895.3	756.3	604.1	440.1	272.1	125.6	0.0
72.5°	1114.1	1101.6	1053.4	965.2	846.2	712.2	565.0	401.9	237.1	99.8	0.8
75°	1057.5	1041.7	997.6	914.4	797.9	665.6	521.7	366.1	203.0	76.5	0.8
77.5°	984.3	979.3	937.7	857.0	752.2	620.7	474.3	322.8	170.6	54.9	0.8
80°	911.1	906.1	873.6	799.6	698.9	567.4	430.2	282.1	139.0	36.6	0.8
82.5°	838.7	832.0	801.3	739.7	644.8	522.5	384.4	241.3	109.8	22.5	0.8
85°	773.8	765.5	732.2	675.6	589.1	471.8	337.0	201.4	81.5	12.5	1.7
87.5°	718.0	712.2	675.6	617.4	532.5	424.3	295.4	163.1	57.4	5.8	2.5
90°	670.6	658.1	625.7	564.1	479.3	371.9	251.3	130.6	38.3	3.3	3.3
92.5°	624.0	613.2	577.4	514.2	431.8	327.0	208.8	99.8	24.1	1.7	4.2
95°	575.8	564.1	529.2	470.9	383.6	281.2	171.4	73.2	13.3	1.7	4.2
97.5°	528.3	517.5	480.9	422.7	340.3	241.3	135.6	51.6	6.7	1.7	3.3
100°	484.2	471.8	438.5	380.2	297.0	201.4	104.8	33.3	4.2	1.7	3.3
102.5°	437.7	427.7	393.6	337.0	252.1	163.9	78.2	20.8	1.7	1.7	2.5
105°	396.0	383.6	350.3	292.0	214.7	129.0	54.9	12.5	1.7	1.7	2.5



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	257.9	247.9	218.8	169.7	109.0	50.8	15.0	2.5	2.5	2.5	2.5
115°	215.5	200.5	174.7	131.5	80.7	33.3	7.5	2.5	2.5	2.5	2.5
117.5°	172.2	159.8	141.4	99.8	53.3	21.6	4.2	2.5	2.5	2.5	2.5
120°	134.8	123.1	102.3	69.1	35.8	12.5	1.7	2.5	2.5	2.5	2.5
122.5°	96.5	87.4	69.1	44.9	21.6	5.8	2.5	2.5	3.3	3.3	2.5
125°	64.1	59.1	45.8	27.5	13.3	2.5	2.5	2.5	3.3	3.3	2.5
127.5°	41.6	37.4	26.6	15.8	5.8	2.5	2.5	3.3	3.3	3.3	2.5
130°	23.3	20.8	15.8	9.2	2.5	2.5	2.5	3.3	3.3	3.3	2.5
132.5°	13.3	12.5	8.3	1.7	2.5	2.5	2.5	3.3	3.3	3.3	3.3
135°	3.3	1.7	1.7	1.7	2.5	2.5	3.3	3.3	4.2	4.2	3.3
137.5°	0.8	0.8	1.7	1.7	2.5	2.5	3.3	4.2	4.2	4.2	3.3
140°	0.8	0.8	1.7	2.5	2.5	2.5	3.3	4.2	4.2	4.2	3.3
142.5°	0.8	1.7	1.7	2.5	2.5	3.3	3.3	4.2	4.2	3.3	3.3
145°	0.8	1.7	1.7	2.5	2.5	3.3	3.3	4.2	3.3	3.3	3.3
147.5°	1.7	1.7	1.7	2.5	2.5	3.3	3.3	4.2	4.2	3.3	3.3
150°	0.8	1.7	1.7	2.5	3.3	3.3	3.3	4.2	3.3	3.3	3.3
152.5°	0.8	1.7	1.7	2.5	3.3	3.3	3.3	4.2	3.3	3.3	3.3
155°	1.7	1.7	1.7	2.5	3.3	3.3	3.3	4.2	3.3	3.3	4.2
157.5°	1.7	1.7	1.7	2.5	3.3	3.3	3.3	4.2	3.3	3.3	4.2
160°	1.7	1.7	1.7	2.5	2.5	3.3	3.3	3.3	3.3	3.3	3.3
162.5°	1.7	1.7	1.7	2.5	2.5	3.3	3.3	3.3	3.3	3.3	3.3
165°	1.7	1.7	1.7	1.7	2.5	2.5	3.3	3.3	3.3	3.3	3.3
167.5°	1.7	1.7	1.7	2.5	2.5	2.5	3.3	3.3	3.3	3.3	3.3
170°	1.7	1.7	1.7	2.5	2.5	2.5	3.3	4.2	4.2	4.2	4.2
172.5°	1.7	1.7	1.7	2.5	2.5	3.3	3.3	4.2	4.2	4.2	4.2
175°	1.7	1.7	1.7	2.5	2.5	3.3	3.3	4.2	4.2	4.2	4.2
177.5°	0.8	1.7	1.7	2.5	2.5	3.3	3.3	4.2	4.2	4.2	3.3
180°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	653.1	653.1	653.1
2.5°	621.5	609.9	606.6
5°	588.3	569.1	558.3
7.5°	555.0	529.2	516.7
10°	524.2	487.6	474.3
12.5°	487.6	445.1	424.3
15°	452.6	397.7	377.7
17.5°	413.5	352.0	328.7
20°	376.9	306.2	282.1
22.5°	335.3	261.3	234.6
25°	297.9	216.3	186.4
27.5°	256.3	170.6	144.8
30°	217.2	130.6	104.8
32.5°	179.7	95.7	72.4
35°	144.8	64.9	45.8
37.5°	111.5	39.9	23.3
40°	80.7	20.8	10.8
42.5°	54.1	10.0	5.8
45°	33.3	5.0	0.0
47.5°	19.1	0.0	0.0
50°	10.0	0.0	0.0
52.5°	4.2	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°	0.8	0.8	0.8
77.5°	0.8	1.7	2.5
80°	1.7	3.3	4.2
82.5°	3.3	4.2	4.2
85°	3.3	4.2	5.0
87.5°	4.2	5.0	5.8
90°	5.0	5.8	5.8
92.5°	5.0	6.7	6.7
95°	5.8	6.7	7.5
97.5°	6.7	7.5	7.5
100°	5.8	7.5	8.3
102.5°	5.0	7.5	7.5
105°	4.2	5.8	6.7



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	3.3	4.2	4.2
115°	2.5	3.3	4.2
117.5°	2.5	3.3	3.3
120°	2.5	2.5	3.3
122.5°	2.5	2.5	3.3
125°	2.5	2.5	3.3
127.5°	3.3	2.5	2.5
130°	2.5	2.5	2.5
132.5°	3.3	2.5	2.5
135°	3.3	2.5	2.5
137.5°	3.3	2.5	2.5
140°	3.3	2.5	2.5
142.5°	3.3	2.5	2.5
145°	2.5	2.5	2.5
147.5°	2.5	2.5	2.5
150°	2.5	2.5	1.7
152.5°	2.5	1.7	1.7
155°	2.5	1.7	0.8
157.5°	3.3	1.7	0.8
160°	2.5	1.7	0.8
162.5°	2.5	1.7	0.8
165°	2.5	1.7	0.0
167.5°	2.5	1.7	0.8
170°	2.5	1.7	0.8
172.5°	2.5	1.7	0.8
175°	2.5	0.8	0.8
177.5°	2.5	0.8	0.8
180°	2.5	2.5	2.5



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	349.5	339.5	306.2	251.3	175.6	98.2	36.6	6.7	1.7	2.5	2.5
110°	304.5	296.2	262.1	208.8	141.4	73.2	24.1	4.2	2.5	2.5	2.5





107.5°	3.3	5.0	5.8
110°	3.3	4.2	5.0



(END OF REPORT)