

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: P551283

Luminaire Tested: **FCC-X-2-LD4-2HI-35-UNV-81-96-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: P551283
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-81-96-ED1D-90
Description: FCC CORNER MOUNT LUMINAIRE WITH .156 CLEAR PC FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES AND 3500K, AND 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

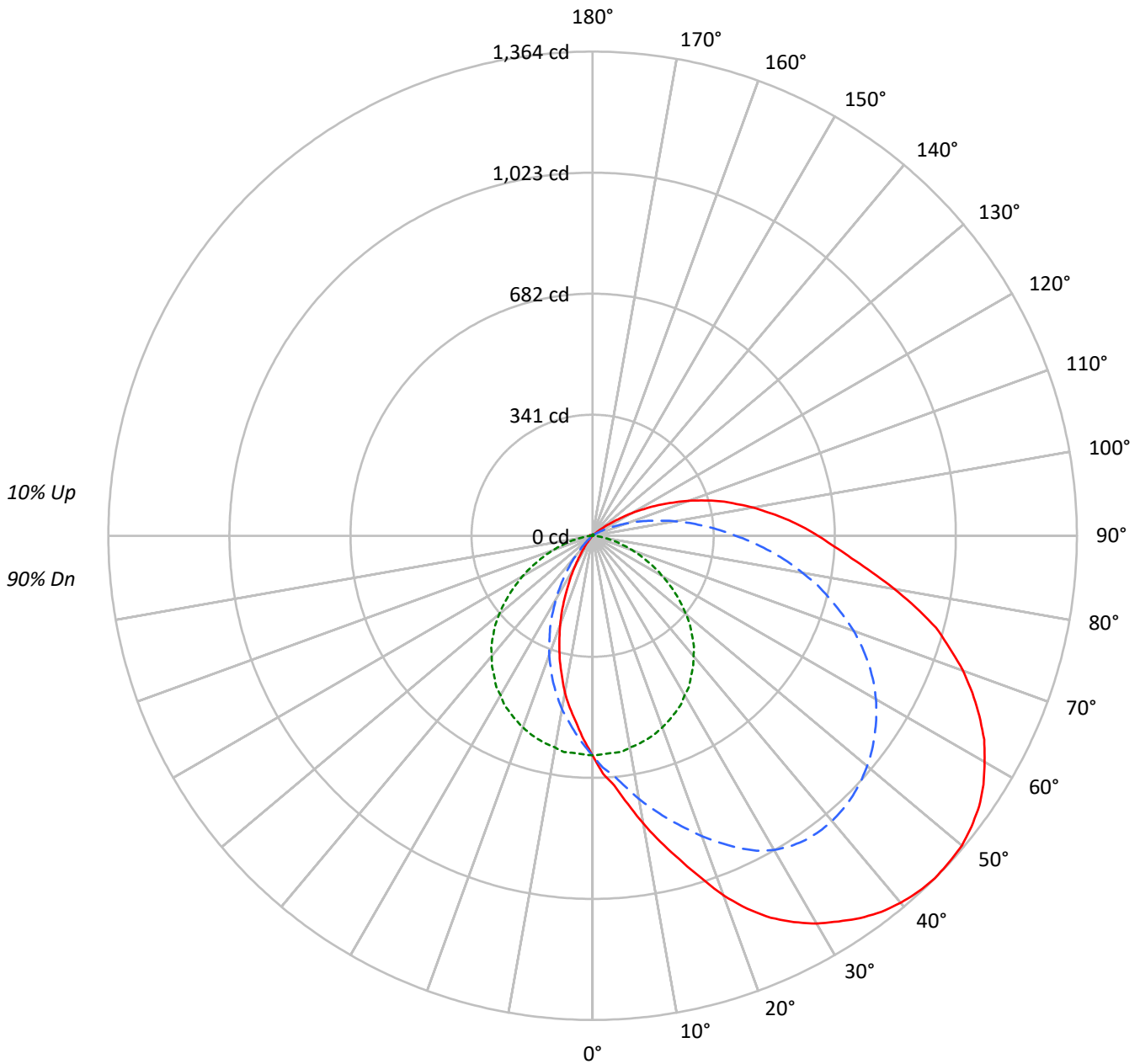
Lumens per Lamp: N/A
Luminaire Lumens: 3058.1 lumens
Efficiency: N/A
Efficacy: 70.6 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

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

TEST NUMBER: P551283

CATALOG NUMBER: FCC-X-2-LD4-2HI-35-UNV-81-96-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°	6659	6659	6659
5°	7309	6560	5473
10°	8271	6481	4511
15°	9269	6397	3515
20°	10454	6293	2588
25°	11437	6172	1700
30°	12167	6011	958
35°	12800	5836	421
40°	13361	5622	101
45°	13842	5353	0
50°	14246	4996	0
55°	14554	4541	0
60°	14708	4015	0
65°	14770	3419	0
70°	14721	2788	0
75°	14533	2056	12
80°	13944	1259	63
85°	13478	600	86



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.2	1.9
10°-20°	177.4	5.8
20°-30°	287.3	9.4
30°-40°	369.0	12.1
40°-50°	417.8	13.7
50°-60°	432.8	14.2
60°-70°	408.2	13.3
70°-80°	342.1	11.2
80°-90°	247.9	8.1
90°-100°	163.0	5.3
100°-110°	94.1	3.1
110°-120°	41.5	1.4
120°-130°	11.3	0.4
130°-140°	2.6	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
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0°-30°	523.9	17.1
0°-40°	893.0	29.2
0°-60°	1743.6	57.0
0°-90°	2741.8	89.7
90°-120°	298.6	9.8
90°-150°	314.2	10.3
90°-180°	316.0	10.3
0°-180°	3058.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	619	619	619	619	619	
5°	706	678	614	557	529	71
15°	943	827	593	429	358	272
25°	1188	970	550	282	176	549
35°	1315	1046	483	137	43	825
45°	1364	1036	396	32	0	1053
55°	1329	970	285	0	0	1187
65°	1202	859	170	0	0	1189
75°	1002	693	72	1	1	1050
85°	733	502	12	3	5	626
90°	635	403	3	5	6	348
95°	545	315	2	6	7	428
105°	375	163	2	4	6	396
115°	204	54	2	2	4	204
125°	61	8	3	2	3	61
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°	618.6	618.6	618.6	618.6	618.6	618.6	618.6	618.6	618.6	618.6	618.6
2.5°	670.6	669.8	667.4	663.5	658.0	648.5	640.6	633.5	624.1	616.2	601.2
5°	706.0	702.1	698.9	695.0	682.4	673.7	659.5	643.8	628.8	613.8	583.9
7.5°	762.8	756.5	751.7	740.7	723.4	703.7	681.6	666.6	656.4	614.6	563.4
10°	823.4	817.9	808.5	788.8	767.5	739.1	707.6	672.1	640.6	606.0	545.3
12.5°	883.3	875.4	862.0	836.8	806.9	771.4	728.1	686.3	641.4	600.4	524.0
15°	943.2	934.5	920.4	889.6	850.2	803.7	750.9	698.1	645.4	593.3	501.9
17.5°	1008.6	996.8	975.5	940.8	891.2	833.7	771.4	707.6	643.8	584.7	478.3
20°	1078.7	1062.2	1039.3	992.8	934.5	866.8	791.9	717.1	643.0	574.4	451.5
22.5°	1137.0	1120.5	1095.3	1047.2	977.1	894.4	809.2	723.4	639.8	562.6	426.3
25°	1187.5	1174.1	1146.5	1091.3	1017.3	923.5	825.8	728.1	635.1	550.0	399.5
27.5°	1226.9	1214.3	1183.5	1126.8	1051.2	949.5	838.4	730.5	628.8	537.4	371.9
30°	1261.5	1248.9	1211.9	1153.6	1074.0	970.0	851.0	731.2	620.9	518.5	342.0
32.5°	1288.3	1276.5	1238.7	1176.4	1089.8	984.2	858.1	730.5	610.7	505.1	309.7
35°	1315.1	1303.3	1259.2	1193.0	1101.6	990.5	863.6	726.5	598.1	483.0	278.9
37.5°	1335.6	1322.2	1277.3	1204.0	1107.1	992.1	862.8	721.0	584.7	464.9	248.2
40°	1349.8	1335.6	1287.6	1210.3	1108.7	989.7	856.5	711.5	568.9	442.1	215.9
42.5°	1359.3	1343.5	1292.3	1219.8	1105.5	983.4	847.1	699.7	551.6	422.4	185.2
45°	1364.0	1347.4	1293.1	1211.9	1100.0	971.6	832.9	684.7	532.7	395.6	154.4
47.5°	1361.6	1343.5	1289.1	1203.2	1089.8	959.0	817.1	666.6	509.8	371.9	125.3
50°	1357.7	1338.8	1280.5	1192.2	1075.6	943.2	799.8	644.6	486.2	342.8	99.3
52.5°	1345.1	1326.2	1271.0	1176.4	1059.0	925.1	776.2	621.7	461.0	314.4	75.6
55°	1329.3	1312.0	1254.5	1162.3	1037.8	903.0	754.1	597.3	436.5	285.2	54.4
57.5°	1304.9	1289.1	1234.0	1139.4	1016.5	878.6	729.7	570.5	405.8	256.1	37.8
60°	1274.9	1259.2	1205.6	1113.4	992.1	851.0	702.9	542.9	378.2	226.9	23.6
62.5°	1243.4	1228.5	1172.5	1081.1	961.3	821.9	673.7	515.3	349.1	200.1	14.2
65°	1201.7	1187.5	1137.0	1042.5	927.4	790.3	641.4	482.2	319.1	170.2	7.9
67.5°	1157.5	1144.9	1093.7	1007.0	888.0	755.7	608.3	449.9	287.6	144.2	3.9
70°	1110.3	1094.5	1047.2	959.0	847.9	716.3	572.1	416.8	257.7	119.0	0.0
72.5°	1055.1	1043.3	997.6	914.1	801.4	674.5	535.0	380.6	224.6	94.6	0.8
75°	1001.5	986.5	944.8	866.0	755.7	630.4	494.1	346.7	192.3	72.5	0.8
77.5°	932.2	927.4	888.0	811.6	712.3	587.8	449.1	305.7	161.5	52.0	0.8
80°	862.8	858.1	827.4	757.2	661.9	537.4	407.4	267.1	131.6	34.7	0.8
82.5°	794.3	788.0	758.8	700.5	610.7	494.8	364.0	228.5	104.0	21.3	0.8
85°	732.8	724.9	693.4	639.8	557.9	446.8	319.1	190.7	77.2	11.8	1.6
87.5°	680.0	674.5	639.8	584.7	504.3	401.9	279.7	154.4	54.4	5.5	2.4
90°	635.1	623.3	592.6	534.2	453.9	352.2	238.0	123.7	36.2	3.2	3.2
92.5°	591.0	580.7	546.9	487.0	409.0	309.7	197.8	94.6	22.9	1.6	3.9
95°	545.3	534.2	501.2	446.0	363.3	266.3	162.3	69.3	12.6	1.6	3.9
97.5°	500.4	490.1	455.4	400.3	322.3	228.5	128.4	48.9	6.3	1.6	3.2
100°	458.6	446.8	415.3	360.1	281.3	190.7	99.3	31.5	3.9	1.6	3.2
102.5°	414.5	405.0	372.7	319.1	238.8	155.2	74.1	19.7	1.6	1.6	2.4
105°	375.1	363.3	331.7	276.6	203.3	122.1	52.0	11.8	1.6	1.6	2.4



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	244.3	234.8	207.2	160.7	103.2	48.1	14.2	2.4	2.4	2.4	2.4
115°	204.1	189.9	165.5	124.5	76.4	31.5	7.1	2.4	2.4	2.4	2.4
117.5°	163.1	151.3	134.0	94.6	50.4	20.5	3.9	2.4	2.4	2.4	2.4
120°	127.7	116.6	96.9	65.4	33.9	11.8	1.6	2.4	2.4	2.4	2.4
122.5°	91.4	82.7	65.4	42.6	20.5	5.5	2.4	2.4	3.2	3.2	2.4
125°	60.7	55.9	43.3	26.0	12.6	2.4	2.4	2.4	3.2	3.2	2.4
127.5°	39.4	35.5	25.2	15.0	5.5	2.4	2.4	3.2	3.2	3.2	2.4
130°	22.1	19.7	15.0	8.7	2.4	2.4	2.4	3.2	3.2	3.2	2.4
132.5°	12.6	11.8	7.9	1.6	2.4	2.4	2.4	3.2	3.2	3.2	3.2
135°	3.2	1.6	1.6	1.6	2.4	2.4	3.2	3.2	3.9	3.9	3.2
137.5°	0.8	0.8	1.6	1.6	2.4	2.4	3.2	3.9	3.9	3.9	3.2
140°	0.8	0.8	1.6	2.4	2.4	2.4	3.2	3.9	3.9	3.9	3.2
142.5°	0.8	1.6	1.6	2.4	2.4	3.2	3.2	3.9	3.9	3.2	3.2
145°	0.8	1.6	1.6	2.4	2.4	3.2	3.2	3.9	3.2	3.2	3.2
147.5°	1.6	1.6	1.6	2.4	2.4	3.2	3.2	3.9	3.9	3.2	3.2
150°	0.8	1.6	1.6	2.4	3.2	3.2	3.2	3.9	3.2	3.2	3.2
152.5°	0.8	1.6	1.6	2.4	3.2	3.2	3.2	3.9	3.2	3.2	3.2
155°	1.6	1.6	1.6	2.4	3.2	3.2	3.2	3.9	3.2	3.2	3.9
157.5°	1.6	1.6	1.6	2.4	3.2	3.2	3.2	3.9	3.2	3.2	3.9
160°	1.6	1.6	1.6	2.4	2.4	3.2	3.2	3.2	3.2	3.2	3.2
162.5°	1.6	1.6	1.6	2.4	2.4	3.2	3.2	3.2	3.2	3.2	3.2
165°	1.6	1.6	1.6	1.6	2.4	2.4	3.2	3.2	3.2	3.2	3.2
167.5°	1.6	1.6	1.6	2.4	2.4	2.4	3.2	3.2	3.2	3.2	3.2
170°	1.6	1.6	1.6	2.4	2.4	2.4	3.2	3.9	3.9	3.9	3.9
172.5°	1.6	1.6	1.6	2.4	2.4	3.2	3.2	3.9	3.9	3.9	3.9
175°	1.6	1.6	1.6	2.4	2.4	3.2	3.2	3.9	3.9	3.9	3.9
177.5°	0.8	1.6	1.6	2.4	2.4	3.2	3.2	3.9	3.9	3.9	3.2
180°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	618.6	618.6	618.6
2.5°	588.6	577.6	574.4
5°	557.1	539.0	528.7
7.5°	525.6	501.2	489.3
10°	496.4	461.8	449.1
12.5°	461.8	421.6	401.9
15°	428.7	376.7	357.7
17.5°	391.6	333.3	311.2
20°	357.0	290.0	267.1
22.5°	317.6	247.4	222.2
25°	282.1	204.9	176.5
27.5°	242.7	161.5	137.1
30°	205.7	123.7	99.3
32.5°	170.2	90.6	68.6
35°	137.1	61.5	43.3
37.5°	105.6	37.8	22.1
40°	76.4	19.7	10.2
42.5°	51.2	9.5	5.5
45°	31.5	4.7	0.0
47.5°	18.1	0.0	0.0
50°	9.5	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	2.4
80°	1.6	3.2	3.9
82.5°	3.2	3.9	3.9
85°	3.2	3.9	4.7
87.5°	3.9	4.7	5.5
90°	4.7	5.5	5.5
92.5°	4.7	6.3	6.3
95°	5.5	6.3	7.1
97.5°	6.3	7.1	7.1
100°	5.5	7.1	7.9
102.5°	4.7	7.1	7.1
105°	3.9	5.5	6.3



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	3.2	3.9	3.9
115°	2.4	3.2	3.9
117.5°	2.4	3.2	3.2
120°	2.4	2.4	3.2
122.5°	2.4	2.4	3.2
125°	2.4	2.4	3.2
127.5°	3.2	2.4	2.4
130°	2.4	2.4	2.4
132.5°	3.2	2.4	2.4
135°	3.2	2.4	2.4
137.5°	3.2	2.4	2.4
140°	3.2	2.4	2.4
142.5°	3.2	2.4	2.4
145°	2.4	2.4	2.4
147.5°	2.4	2.4	2.4
150°	2.4	2.4	1.6
152.5°	2.4	1.6	1.6
155°	2.4	1.6	0.8
157.5°	3.2	1.6	0.8
160°	2.4	1.6	0.8
162.5°	2.4	1.6	0.8
165°	2.4	1.6	0.0
167.5°	2.4	1.6	0.8
170°	2.4	1.6	0.8
172.5°	2.4	1.6	0.8
175°	2.4	0.8	0.8
177.5°	2.4	0.8	0.8
180°	2.4	2.4	2.4



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	330.9	321.5	290.0	238.0	166.3	93.0	34.7	6.3	1.6	2.4	2.4
110°	288.4	280.5	248.2	197.8	134.0	69.3	22.9	3.9	2.4	2.4	2.4





107.5°	3.2	4.7	5.5
110°	3.2	3.9	4.7



(END OF REPORT)