

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: P551292

Luminaire Tested: **FCC-X-2-LD4-2HI-35-UNV-82-86-ED1D**

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: P551292  
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-82-86-ED1D  
Description: FCC CORNER MOUNT LUMINAIRE WITH .187 CLEAR PC FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 3500K, AND 80 CRI LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

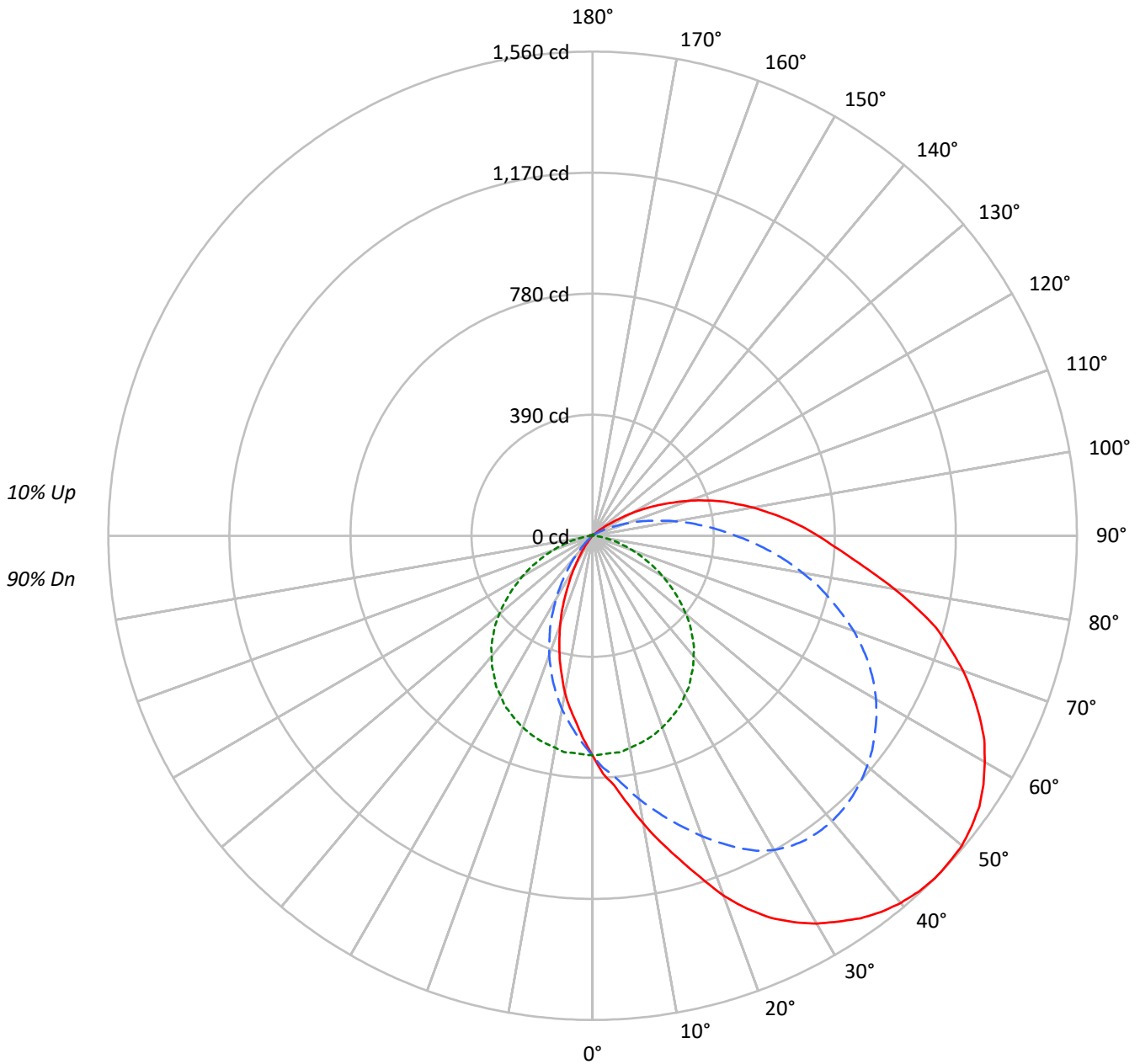
Lumens per Lamp: N/A  
Luminaire Lumens: 3498.0 lumens  
Efficiency: N/A  
Efficacy: 80.8 lumens/watt  
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59  
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')  
CIE Type: Semi-Direct

Input Watts (W): 43.3  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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: P551292

CATALOG NUMBER: FCC-X-2-LD4-2HI-35-UNV-82-86-ED1D

### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20				20
RC	80				70				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	93	93	93	90
1	103	96	91	86	99	93	88	83	87	83	79	81	78	74	76	73	70	70	70	70	67
2	92	82	74	67	88	79	72	65	74	67	62	69	64	59	64	60	56	56	56	56	53
3	83	71	61	54	79	68	60	53	64	56	50	59	53	48	55	50	46	46	46	46	43
4	75	62	52	44	72	60	51	44	56	48	42	52	45	40	49	43	38	38	38	38	36
5	69	55	45	38	66	53	44	37	50	42	35	46	39	34	43	38	33	33	33	33	30
6	63	49	39	32	61	47	38	32	44	36	31	42	35	29	39	33	28	28	28	28	26
7	58	44	35	28	56	43	34	28	40	32	27	38	31	26	36	29	25	25	25	25	23
8	54	40	31	25	52	39	30	24	37	29	24	34	28	23	32	26	22	22	22	22	20
9	51	36	28	22	49	35	27	22	33	26	21	32	25	20	30	24	20	20	20	20	18
10	47	33	25	20	45	33	25	19	31	24	19	29	23	18	28	22	18	18	18	18	16

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	7617	7617	7617
5°	8360	7505	6261
10°	9461	7412	5161
15°	10602	7318	4021
20°	11959	7199	2962
25°	13082	7060	1945
30°	13919	6876	1096
35°	14642	6676	483
40°	15283	6431	116
45°	15833	6123	0
50°	16296	5715	0
55°	16648	5196	0
60°	16825	4594	0
65°	16895	3911	0
70°	16838	3188	0
75°	16624	2351	13
80°	15951	1440	73
85°	15418	686	99



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	67.8	1.9
10°-20°	202.9	5.8
20°-30°	328.6	9.4
30°-40°	422.2	12.1
40°-50°	477.9	13.7
50°-60°	495.1	14.2
60°-70°	466.9	13.3
70°-80°	391.3	11.2
80°-90°	283.6	8.1
90°-100°	186.4	5.3
100°-110°	107.7	3.1
110°-120°	47.5	1.4
120°-130°	12.9	0.4
130°-140°	2.9	0.1
140°-150°	1.9	0.1
150°-160°	1.4	0.0
160°-170°	0.8	0.0
170°-180°	0.3	0.0
0°-30°	599.3	17.1
0°-40°	1021.5	29.2
0°-60°	1994.4	57.0
0°-90°	3136.3	89.7
90°-120°	341.6	9.8
90°-150°	359.3	10.3
90°-180°	362.0	10.3
0°-180°	3498.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	708	708	708	708	708	
5°	808	776	702	637	605	81
15°	1079	946	679	490	409	311
25°	1358	1110	629	323	202	628
35°	1504	1197	552	157	50	943
45°	1560	1185	452	36	0	1205
55°	1521	1110	326	0	0	1358
65°	1375	982	195	0	0	1360
75°	1146	793	83	1	1	1202
85°	838	575	14	4	5	716
90°	726	461	4	5	6	398
95°	624	360	2	6	8	489
105°	429	186	2	4	7	453
115°	234	62	3	3	4	234
125°	69	9	4	3	4	69
135°	4	3	4	4	3	6
145°	1	3	4	3	3	1
155°	2	4	4	3	1	1
165°	2	3	4	3	0	1
175°	2	3	4	3	1	0
180°	3	3	3	3	3	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
0°	707.6	707.6	707.6	707.6	707.6	707.6	707.6	707.6	707.6	707.6	707.6
2.5°	767.1	766.1	763.4	758.9	752.6	741.8	732.8	724.7	713.9	704.9	687.7
5°	807.6	803.1	799.5	795.0	780.6	770.7	754.4	736.4	719.3	702.2	667.9
7.5°	872.5	865.3	859.9	847.3	827.4	804.9	779.7	762.5	750.8	703.1	644.5
10°	941.9	935.6	924.8	902.3	877.9	845.5	809.4	768.9	732.8	693.1	623.7
12.5°	1010.4	1001.4	986.1	957.2	923.0	882.4	832.8	785.1	733.7	686.8	599.4
15°	1078.9	1069.0	1052.8	1017.6	972.6	919.4	859.0	798.6	738.2	678.7	574.2
17.5°	1153.7	1140.2	1115.9	1076.2	1019.4	953.6	882.4	809.4	736.4	668.8	547.1
20°	1234.0	1215.0	1188.9	1135.7	1069.0	991.5	905.9	820.2	735.5	657.1	516.5
22.5°	1300.7	1281.7	1252.9	1197.9	1117.7	1023.0	925.7	827.4	731.9	643.6	487.6
25°	1358.3	1343.0	1311.5	1248.4	1163.6	1056.4	944.6	832.8	726.5	629.1	457.0
27.5°	1403.4	1389.0	1353.8	1288.9	1202.4	1086.1	959.0	835.6	719.3	614.7	425.4
30°	1443.1	1428.6	1386.3	1319.6	1228.5	1109.6	973.5	836.5	710.3	593.1	391.2
32.5°	1473.7	1460.2	1416.9	1345.7	1246.6	1125.8	981.6	835.6	698.5	577.8	354.2
35°	1504.4	1490.8	1440.4	1364.6	1260.1	1133.0	987.9	831.0	684.1	552.5	319.1
37.5°	1527.8	1512.5	1461.1	1377.3	1266.4	1134.8	987.0	824.7	668.8	531.8	283.9
40°	1544.0	1527.8	1472.8	1384.5	1268.2	1132.1	979.8	813.9	650.8	505.7	247.0
42.5°	1554.8	1536.8	1478.2	1395.3	1264.6	1124.9	969.0	800.4	630.9	483.1	211.8
45°	1560.2	1541.3	1479.1	1386.3	1258.3	1111.4	952.7	783.3	609.3	452.5	176.7
47.5°	1557.5	1536.8	1474.6	1376.4	1246.6	1096.9	934.7	762.5	583.2	425.4	143.3
50°	1553.0	1531.4	1464.7	1363.7	1230.3	1078.9	914.9	737.3	556.1	392.1	113.6
52.5°	1538.6	1517.0	1453.9	1345.7	1211.4	1058.2	887.8	711.2	527.3	359.6	86.5
55°	1520.6	1500.8	1435.0	1329.5	1187.1	1032.9	862.6	683.2	499.3	326.3	62.2
57.5°	1492.6	1474.6	1411.5	1303.4	1162.7	1005.0	834.7	652.6	464.2	292.9	43.3
60°	1458.4	1440.4	1379.1	1273.6	1134.8	973.5	804.0	621.0	432.6	259.6	27.0
62.5°	1422.3	1405.2	1341.2	1236.7	1099.6	940.1	770.7	589.5	399.3	228.9	16.2
65°	1374.6	1358.3	1300.7	1192.5	1060.9	904.1	733.7	551.6	365.0	194.7	9.0
67.5°	1324.1	1309.7	1251.1	1151.9	1015.8	864.4	695.8	514.7	329.0	164.9	4.5
70°	1270.0	1252.0	1197.9	1096.9	969.9	819.3	654.4	476.8	294.7	136.1	0.0
72.5°	1206.9	1193.4	1141.1	1045.6	916.7	771.6	612.0	435.4	256.9	108.2	0.9
75°	1145.6	1128.5	1080.7	990.6	864.4	721.1	565.1	396.6	219.9	82.9	0.9
77.5°	1066.3	1060.9	1015.8	928.4	814.8	672.4	513.8	349.7	184.8	59.5	0.9
80°	987.0	981.6	946.4	866.2	757.1	614.7	466.0	305.6	150.5	39.7	0.9
82.5°	908.6	901.4	868.0	801.3	698.5	566.0	416.4	261.4	119.0	24.3	0.9
85°	838.3	829.2	793.2	731.9	638.2	511.1	365.0	218.1	88.3	13.5	1.8
87.5°	777.9	771.6	731.9	668.8	576.9	459.7	320.0	176.7	62.2	6.3	2.7
90°	726.5	713.0	677.8	611.1	519.2	402.9	272.2	141.5	41.5	3.6	3.6
92.5°	676.0	664.3	625.5	557.0	467.8	354.2	226.2	108.2	26.1	1.8	4.5
95°	623.7	611.1	573.3	510.2	415.5	304.7	185.7	79.3	14.4	1.8	4.5
97.5°	572.4	560.6	521.0	457.9	368.7	261.4	146.9	55.9	7.2	1.8	3.6
100°	524.6	511.1	475.0	411.9	321.8	218.1	113.6	36.1	4.5	1.8	3.6
102.5°	474.1	463.3	426.3	365.0	273.1	177.6	84.7	22.5	1.8	1.8	2.7
105°	429.0	415.5	379.5	316.4	232.5	139.7	59.5	13.5	1.8	1.8	2.7



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	279.4	268.6	237.1	183.9	118.1	55.0	16.2	2.7	2.7	2.7	2.7
115°	233.5	217.2	189.3	142.4	87.4	36.1	8.1	2.7	2.7	2.7	2.7
117.5°	186.6	173.1	153.2	108.2	57.7	23.4	4.5	2.7	2.7	2.7	2.7
120°	146.0	133.4	110.9	74.8	38.8	13.5	1.8	2.7	2.7	2.7	2.7
122.5°	104.6	94.6	74.8	48.7	23.4	6.3	2.7	2.7	3.6	3.6	2.7
125°	69.4	64.0	49.6	29.7	14.4	2.7	2.7	2.7	3.6	3.6	2.7
127.5°	45.1	40.6	28.8	17.1	6.3	2.7	2.7	3.6	3.6	3.6	2.7
130°	25.2	22.5	17.1	9.9	2.7	2.7	2.7	3.6	3.6	3.6	2.7
132.5°	14.4	13.5	9.0	1.8	2.7	2.7	2.7	3.6	3.6	3.6	3.6
135°	3.6	1.8	1.8	1.8	2.7	2.7	3.6	3.6	4.5	4.5	3.6
137.5°	0.9	0.9	1.8	1.8	2.7	2.7	3.6	4.5	4.5	4.5	3.6
140°	0.9	0.9	1.8	2.7	2.7	2.7	3.6	4.5	4.5	4.5	3.6
142.5°	0.9	1.8	1.8	2.7	2.7	3.6	3.6	4.5	4.5	3.6	3.6
145°	0.9	1.8	1.8	2.7	2.7	3.6	3.6	4.5	3.6	3.6	3.6
147.5°	1.8	1.8	1.8	2.7	2.7	3.6	3.6	4.5	4.5	3.6	3.6
150°	0.9	1.8	1.8	2.7	3.6	3.6	3.6	4.5	3.6	3.6	3.6
152.5°	0.9	1.8	1.8	2.7	3.6	3.6	3.6	4.5	3.6	3.6	3.6
155°	1.8	1.8	1.8	2.7	3.6	3.6	3.6	4.5	3.6	3.6	4.5
157.5°	1.8	1.8	1.8	2.7	3.6	3.6	3.6	4.5	3.6	3.6	4.5
160°	1.8	1.8	1.8	2.7	2.7	3.6	3.6	3.6	3.6	3.6	3.6
162.5°	1.8	1.8	1.8	2.7	2.7	3.6	3.6	3.6	3.6	3.6	3.6
165°	1.8	1.8	1.8	1.8	2.7	2.7	3.6	3.6	3.6	3.6	3.6
167.5°	1.8	1.8	1.8	2.7	2.7	2.7	3.6	3.6	3.6	3.6	3.6
170°	1.8	1.8	1.8	2.7	2.7	2.7	3.6	4.5	4.5	4.5	4.5
172.5°	1.8	1.8	1.8	2.7	2.7	3.6	3.6	4.5	4.5	4.5	4.5
175°	1.8	1.8	1.8	2.7	2.7	3.6	3.6	4.5	4.5	4.5	4.5
177.5°	0.9	1.8	1.8	2.7	2.7	3.6	3.6	4.5	4.5	4.5	3.6
180°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7



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**CANDELA DISTRIBUTION (continued):**

	135°	157.5°	180°
0°	707.6	707.6	707.6
2.5°	673.3	660.7	657.1
5°	637.3	616.5	604.8
7.5°	601.2	573.3	559.7
10°	567.9	528.2	513.8
12.5°	528.2	482.2	459.7
15°	490.3	430.8	409.2
17.5°	448.0	381.3	356.0
20°	408.3	331.7	305.6
22.5°	363.2	283.0	254.2
25°	322.7	234.4	201.9
27.5°	277.6	184.8	156.8
30°	235.3	141.5	113.6
32.5°	194.7	103.7	78.4
35°	156.8	70.3	49.6
37.5°	120.8	43.3	25.2
40°	87.4	22.5	11.7
42.5°	58.6	10.8	6.3
45°	36.1	5.4	0.0
47.5°	20.7	0.0	0.0
50°	10.8	0.0	0.0
52.5°	4.5	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°	0.9	0.9	0.9
77.5°	0.9	1.8	2.7
80°	1.8	3.6	4.5
82.5°	3.6	4.5	4.5
85°	3.6	4.5	5.4
87.5°	4.5	5.4	6.3
90°	5.4	6.3	6.3
92.5°	5.4	7.2	7.2
95°	6.3	7.2	8.1
97.5°	7.2	8.1	8.1
100°	6.3	8.1	9.0
102.5°	5.4	8.1	8.1
105°	4.5	6.3	7.2





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**CANDELA DISTRIBUTION (continued):**

	135°	157.5°	180°
112.5°	3.6	4.5	4.5
115°	2.7	3.6	4.5
117.5°	2.7	3.6	3.6
120°	2.7	2.7	3.6
122.5°	2.7	2.7	3.6
125°	2.7	2.7	3.6
127.5°	3.6	2.7	2.7
130°	2.7	2.7	2.7
132.5°	3.6	2.7	2.7
135°	3.6	2.7	2.7
137.5°	3.6	2.7	2.7
140°	3.6	2.7	2.7
142.5°	3.6	2.7	2.7
145°	2.7	2.7	2.7
147.5°	2.7	2.7	2.7
150°	2.7	2.7	1.8
152.5°	2.7	1.8	1.8
155°	2.7	1.8	0.9
157.5°	3.6	1.8	0.9
160°	2.7	1.8	0.9
162.5°	2.7	1.8	0.9
165°	2.7	1.8	0.0
167.5°	2.7	1.8	0.9
170°	2.7	1.8	0.9
172.5°	2.7	1.8	0.9
175°	2.7	0.9	0.9
177.5°	2.7	0.9	0.9
180°	2.7	2.7	2.7



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	378.6	367.8	331.7	272.2	190.2	106.4	39.7	7.2	1.8	2.7	2.7
110°	329.9	320.9	283.9	226.2	153.2	79.3	26.1	4.5	2.7	2.7	2.7







107.5°	3.6	5.4	6.3
110°	3.6	4.5	5.4



(END OF REPORT)