

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: P551394

Luminaire Tested: **FCC-X-2-LD4-2HI-50-UNV-80-94-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: P551394  
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-80-94-ED1D  
Description: FCC CORNER MOUNT LUMINAIRE WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES AND 5000K, AND 80 CRI LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

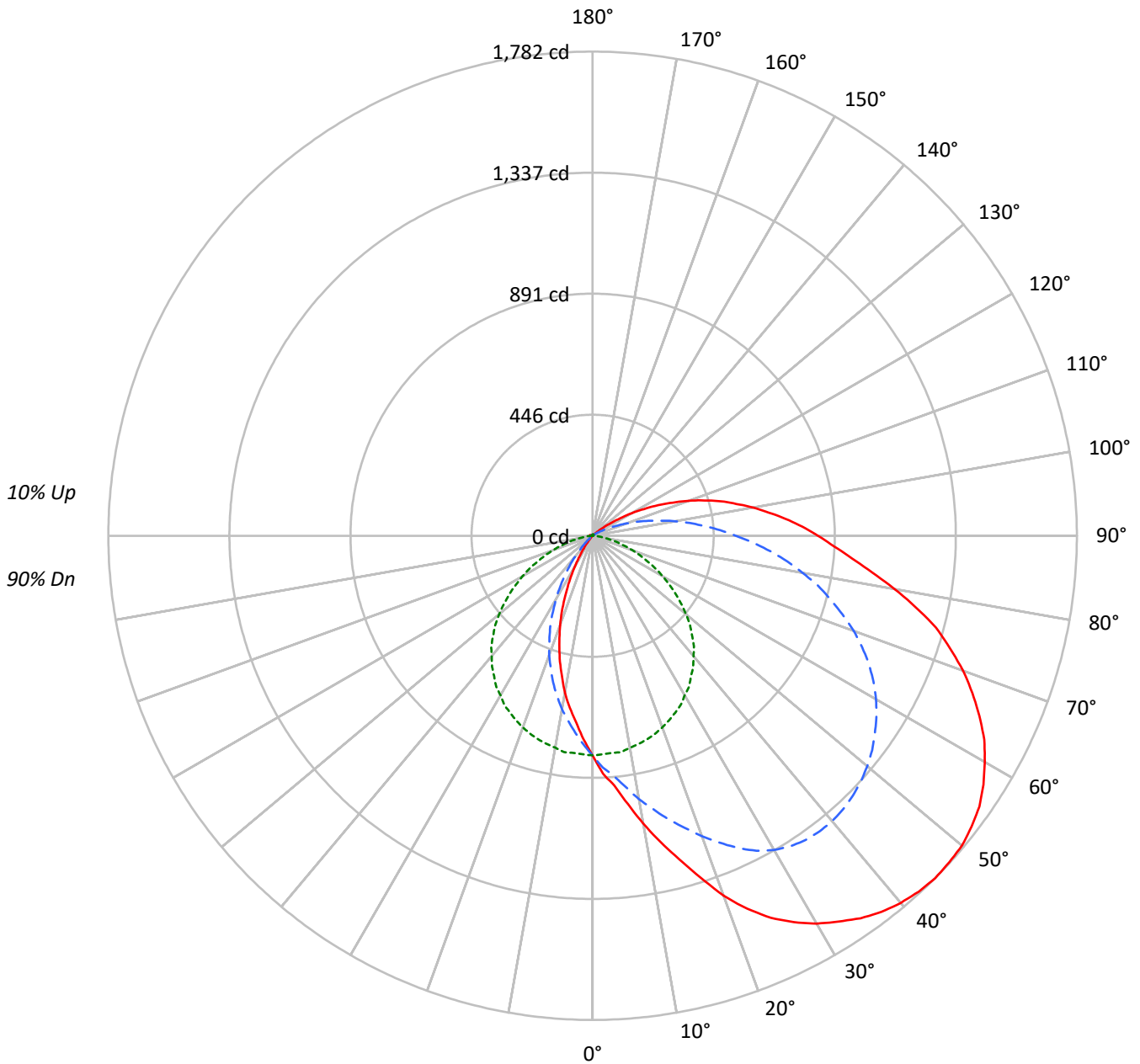
Lumens per Lamp: N/A  
Luminaire Lumens: 3996.0 lumens  
Efficiency: N/A  
Efficacy: 92.3 lumens/watt  
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59  
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')  
CIE Type: Semi-Direct

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: P551394

CATALOG NUMBER: FCC-X-2-LD4-2HI-50-UNV-80-94-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	76	73	70	67
2	92	82	74	67	88	79	72	65	74	67	62	69	64	59	64	60	56	64	60	56	53
3	83	71	61	54	79	68	60	53	64	56	50	59	53	48	55	50	46	55	50	46	43
4	75	62	52	44	72	60	51	44	56	48	42	52	45	40	49	43	38	49	43	38	36
5	69	55	45	38	66	53	44	37	50	42	35	46	39	34	43	38	33	43	38	33	30
6	63	49	39	32	61	47	38	32	44	36	31	42	35	29	39	33	28	39	33	28	26
7	58	44	35	28	56	43	34	28	40	32	27	38	31	26	36	29	25	36	29	25	23
8	54	40	31	25	52	39	30	24	37	29	24	34	28	23	32	26	22	32	26	22	20
9	51	36	28	22	49	35	27	22	33	26	21	32	25	20	30	24	20	30	24	20	18
10	47	33	25	20	45	33	25	19	31	24	19	29	23	18	28	22	18	28	22	18	16

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

	0°	90°	180°
0°	8700	8700	8700
5°	9551	8573	7152
10°	10808	8468	5895
15°	12112	8360	4594
20°	13661	8224	3383
25°	14945	8066	2221
30°	15900	7854	1251
35°	16726	7627	551
40°	17459	7346	133
45°	18088	6994	0
50°	18616	6528	0
55°	19018	5935	0
60°	19220	5247	0
65°	19300	4467	0
70°	19235	3643	0
75°	18990	2686	15
80°	18221	1643	82
85°	17612	783	114



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	77.4	1.9
10°-20°	231.8	5.8
20°-30°	375.4	9.4
30°-40°	482.2	12.1
40°-50°	545.9	13.7
50°-60°	565.6	14.2
60°-70°	533.4	13.3
70°-80°	447.0	11.2
80°-90°	324.0	8.1
90°-100°	213.0	5.3
100°-110°	123.0	3.1
110°-120°	54.3	1.4
120°-130°	14.7	0.4
130°-140°	3.4	0.1
140°-150°	2.2	0.1
150°-160°	1.6	0.0
160°-170°	0.9	0.0
170°-180°	0.3	0.0
0°-30°	684.7	17.1
0°-40°	1166.9	29.2
0°-60°	2278.4	57.0
0°-90°	3582.7	89.7
90°-120°	390.2	9.8
90°-150°	410.5	10.3
90°-180°	413.0	10.3
0°-180°	3996.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	808	808	808	808	808	
5°	923	886	802	728	691	93
15°	1232	1081	775	560	468	355
25°	1552	1268	719	369	231	717
35°	1718	1367	631	179	57	1078
45°	1782	1354	517	41	0	1376
55°	1737	1268	373	0	0	1551
65°	1570	1122	222	0	0	1554
75°	1309	906	95	1	1	1373
85°	958	656	15	4	6	818
90°	830	527	4	6	7	455
95°	712	411	2	7	9	559
105°	490	213	2	5	8	517
115°	267	71	3	3	5	267
125°	79	10	4	3	4	79
135°	4	3	5	4	3	7
145°	1	4	4	3	3	1
155°	2	4	4	3	1	1
165°	2	3	4	3	0	1
175°	2	4	5	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°	808.3	808.3	808.3	808.3	808.3	808.3	808.3	808.3	808.3	808.3	808.3
2.5°	876.3	875.2	872.1	867.0	859.8	847.4	837.1	827.9	815.5	805.2	785.6
5°	922.6	917.4	913.3	908.2	891.7	880.4	861.8	841.2	821.7	802.1	763.0
7.5°	996.7	988.5	982.3	967.9	945.2	919.5	890.7	871.1	857.7	803.1	736.2
10°	1076.0	1068.8	1056.4	1030.7	1002.9	965.8	924.6	878.3	837.1	791.8	712.5
12.5°	1154.3	1144.0	1126.5	1093.5	1054.4	1008.1	951.4	896.8	838.2	784.6	684.7
15°	1232.5	1221.2	1202.7	1162.5	1111.0	1050.3	981.3	912.3	843.3	775.3	655.9
17.5°	1318.0	1302.5	1274.7	1229.4	1164.6	1089.4	1008.1	924.6	841.2	764.0	625.0
20°	1409.6	1388.0	1358.1	1297.4	1221.2	1132.6	1034.8	937.0	840.2	750.6	590.0
22.5°	1485.8	1464.2	1431.2	1368.4	1276.8	1168.7	1057.5	945.2	836.1	735.2	557.1
25°	1551.7	1534.2	1498.2	1426.1	1329.3	1206.8	1079.1	951.4	829.9	718.7	522.0
27.5°	1603.2	1586.7	1546.6	1472.4	1373.6	1240.8	1095.6	954.5	821.7	702.2	486.0
30°	1648.5	1632.0	1583.6	1507.4	1403.4	1267.5	1112.0	955.5	811.4	677.5	446.9
32.5°	1683.5	1668.1	1618.6	1537.3	1424.0	1286.1	1121.3	954.5	798.0	660.0	404.7
35°	1718.5	1703.1	1645.4	1558.9	1439.5	1294.3	1128.5	949.4	781.5	631.2	364.5
37.5°	1745.3	1727.8	1669.1	1573.3	1446.7	1296.4	1127.5	942.2	764.0	607.5	324.3
40°	1763.8	1745.3	1682.5	1581.6	1448.8	1293.3	1119.3	929.8	743.4	577.6	282.1
42.5°	1776.2	1755.6	1688.7	1593.9	1444.6	1285.0	1106.9	914.4	720.8	551.9	242.0
45°	1782.4	1760.7	1689.7	1583.6	1437.4	1269.6	1088.4	894.8	696.1	516.9	201.8
47.5°	1779.3	1755.6	1684.5	1572.3	1424.0	1253.1	1067.8	871.1	666.2	486.0	163.7
50°	1774.1	1749.4	1673.2	1557.9	1405.5	1232.5	1045.1	842.3	635.3	447.9	129.7
52.5°	1757.7	1732.9	1660.9	1537.3	1383.9	1208.8	1014.2	812.4	602.4	410.8	98.8
55°	1737.1	1714.4	1639.2	1518.8	1356.1	1180.0	985.4	780.5	570.4	372.7	71.0
57.5°	1705.1	1684.5	1612.5	1488.9	1328.3	1148.1	953.5	745.5	530.3	334.6	49.4
60°	1666.0	1645.4	1575.4	1454.9	1296.4	1112.0	918.5	709.4	494.2	296.5	30.9
62.5°	1624.8	1605.3	1532.2	1412.7	1256.2	1074.0	880.4	673.4	456.1	261.5	18.5
65°	1570.3	1551.7	1485.8	1362.3	1211.9	1032.8	838.2	630.2	417.0	222.4	10.3
67.5°	1512.6	1496.1	1429.2	1315.9	1160.4	987.5	794.9	587.9	375.8	188.4	5.1
70°	1450.8	1430.2	1368.4	1253.1	1107.9	936.0	747.5	544.7	336.7	155.5	0.0
72.5°	1378.7	1363.3	1303.6	1194.4	1047.2	881.4	699.1	497.3	293.5	123.6	1.0
75°	1308.7	1289.2	1234.6	1131.6	987.5	823.7	645.6	453.1	251.2	94.7	1.0
77.5°	1218.1	1211.9	1160.4	1060.6	930.8	768.1	586.9	399.5	211.1	68.0	1.0
80°	1127.5	1121.3	1081.2	989.5	864.9	702.2	532.3	349.1	172.0	45.3	1.0
82.5°	1037.9	1029.7	991.6	915.4	798.0	646.6	475.7	298.6	135.9	27.8	1.0
85°	957.6	947.3	906.1	836.1	729.0	583.8	417.0	249.2	100.9	15.4	2.1
87.5°	888.6	881.4	836.1	764.0	659.0	525.1	365.5	201.8	71.0	7.2	3.1
90°	829.9	814.5	774.3	698.1	593.1	460.3	311.0	161.7	47.4	4.1	4.1
92.5°	772.3	758.9	714.6	636.3	534.4	404.7	258.4	123.6	29.9	2.1	5.1
95°	712.5	698.1	654.9	582.8	474.7	348.0	212.1	90.6	16.5	2.1	5.1
97.5°	653.8	640.5	595.2	523.1	421.1	298.6	167.8	63.8	8.2	2.1	4.1
100°	599.3	583.8	542.6	470.6	367.6	249.2	129.7	41.2	5.1	2.1	4.1
102.5°	541.6	529.3	487.0	417.0	312.0	202.8	96.8	25.7	2.1	2.1	3.1
105°	490.1	474.7	433.5	361.4	265.7	159.6	68.0	15.4	2.1	2.1	3.1



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	319.2	306.8	270.8	210.1	134.9	62.8	18.5	3.1	3.1	3.1	3.1
115°	266.7	248.2	216.2	162.7	99.9	41.2	9.3	3.1	3.1	3.1	3.1
117.5°	213.1	197.7	175.0	123.6	65.9	26.8	5.1	3.1	3.1	3.1	3.1
120°	166.8	152.4	126.7	85.5	44.3	15.4	2.1	3.1	3.1	3.1	3.1
122.5°	119.4	108.1	85.5	55.6	26.8	7.2	3.1	3.1	4.1	4.1	3.1
125°	79.3	73.1	56.6	34.0	16.5	3.1	3.1	3.1	4.1	4.1	3.1
127.5°	51.5	46.3	32.9	19.6	7.2	3.1	3.1	4.1	4.1	4.1	3.1
130°	28.8	25.7	19.6	11.3	3.1	3.1	3.1	4.1	4.1	4.1	3.1
132.5°	16.5	15.4	10.3	2.1	3.1	3.1	3.1	4.1	4.1	4.1	4.1
135°	4.1	2.1	2.1	2.1	3.1	3.1	4.1	4.1	5.1	5.1	4.1
137.5°	1.0	1.0	2.1	2.1	3.1	3.1	4.1	5.1	5.1	5.1	4.1
140°	1.0	1.0	2.1	3.1	3.1	3.1	4.1	5.1	5.1	5.1	4.1
142.5°	1.0	2.1	2.1	3.1	3.1	4.1	4.1	5.1	5.1	4.1	4.1
145°	1.0	2.1	2.1	3.1	3.1	4.1	4.1	5.1	4.1	4.1	4.1
147.5°	2.1	2.1	2.1	3.1	3.1	4.1	4.1	5.1	5.1	4.1	4.1
150°	1.0	2.1	2.1	3.1	4.1	4.1	4.1	5.1	4.1	4.1	4.1
152.5°	1.0	2.1	2.1	3.1	4.1	4.1	4.1	5.1	4.1	4.1	4.1
155°	2.1	2.1	2.1	3.1	4.1	4.1	4.1	5.1	4.1	4.1	5.1
157.5°	2.1	2.1	2.1	3.1	4.1	4.1	4.1	5.1	4.1	4.1	5.1
160°	2.1	2.1	2.1	3.1	3.1	4.1	4.1	4.1	4.1	4.1	4.1
162.5°	2.1	2.1	2.1	3.1	3.1	4.1	4.1	4.1	4.1	4.1	4.1
165°	2.1	2.1	2.1	2.1	3.1	3.1	4.1	4.1	4.1	4.1	4.1
167.5°	2.1	2.1	2.1	3.1	3.1	3.1	4.1	4.1	4.1	4.1	4.1
170°	2.1	2.1	2.1	3.1	3.1	3.1	4.1	5.1	5.1	5.1	5.1
172.5°	2.1	2.1	2.1	3.1	3.1	4.1	4.1	5.1	5.1	5.1	5.1
175°	2.1	2.1	2.1	3.1	3.1	4.1	4.1	5.1	5.1	5.1	5.1
177.5°	1.0	2.1	2.1	3.1	3.1	4.1	4.1	5.1	5.1	5.1	4.1
180°	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1



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**CANDELA DISTRIBUTION (continued):**

	135°	157.5°	180°
0°	808.3	808.3	808.3
2.5°	769.2	754.8	750.6
5°	728.0	704.3	690.9
7.5°	686.8	654.9	639.4
10°	648.7	603.4	586.9
12.5°	603.4	550.9	525.1
15°	560.1	492.2	467.5
17.5°	511.7	435.6	406.7
20°	466.4	378.9	349.1
22.5°	415.0	323.3	290.4
25°	368.6	267.7	230.6
27.5°	317.1	211.1	179.2
30°	268.7	161.7	129.7
32.5°	222.4	118.4	89.6
35°	179.2	80.3	56.6
37.5°	138.0	49.4	28.8
40°	99.9	25.7	13.4
42.5°	66.9	12.4	7.2
45°	41.2	6.2	0.0
47.5°	23.7	0.0	0.0
50°	12.4	0.0	0.0
52.5°	5.1	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°	1.0	1.0	1.0
77.5°	1.0	2.1	3.1
80°	2.1	4.1	5.1
82.5°	4.1	5.1	5.1
85°	4.1	5.1	6.2
87.5°	5.1	6.2	7.2
90°	6.2	7.2	7.2
92.5°	6.2	8.2	8.2
95°	7.2	8.2	9.3
97.5°	8.2	9.3	9.3
100°	7.2	9.3	10.3
102.5°	6.2	9.3	9.3
105°	5.1	7.2	8.2





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CATALOG NUMBER: FCC-X-2-LD4-2HI-50-UNV-80-94-ED1D

**CANDELA DISTRIBUTION (continued):**

	135°	157.5°	180°
112.5°	4.1	5.1	5.1
115°	3.1	4.1	5.1
117.5°	3.1	4.1	4.1
120°	3.1	3.1	4.1
122.5°	3.1	3.1	4.1
125°	3.1	3.1	4.1
127.5°	4.1	3.1	3.1
130°	3.1	3.1	3.1
132.5°	4.1	3.1	3.1
135°	4.1	3.1	3.1
137.5°	4.1	3.1	3.1
140°	4.1	3.1	3.1
142.5°	4.1	3.1	3.1
145°	3.1	3.1	3.1
147.5°	3.1	3.1	3.1
150°	3.1	3.1	2.1
152.5°	3.1	2.1	2.1
155°	3.1	2.1	1.0
157.5°	4.1	2.1	1.0
160°	3.1	2.1	1.0
162.5°	3.1	2.1	1.0
165°	3.1	2.1	0.0
167.5°	3.1	2.1	1.0
170°	3.1	2.1	1.0
172.5°	3.1	2.1	1.0
175°	3.1	1.0	1.0
177.5°	3.1	1.0	1.0
180°	3.1	3.1	3.1



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	432.5	420.1	378.9	311.0	217.3	121.5	45.3	8.2	2.1	3.1	3.1
110°	376.9	366.6	324.3	258.4	175.0	90.6	29.9	5.1	3.1	3.1	3.1







107.5°	4.1	6.2	7.2
110°	4.1	5.1	6.2



(END OF REPORT)