

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: P551338

Luminaire Tested: **FCC-X-2-LD4-2HI-40-UNV-81-85-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: P551338
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-40-UNV-81-85-ED1D
Description: FCC CORNER MOUNT LUMINAIRE WITH .156 CLEAR PC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 4000K, AND 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

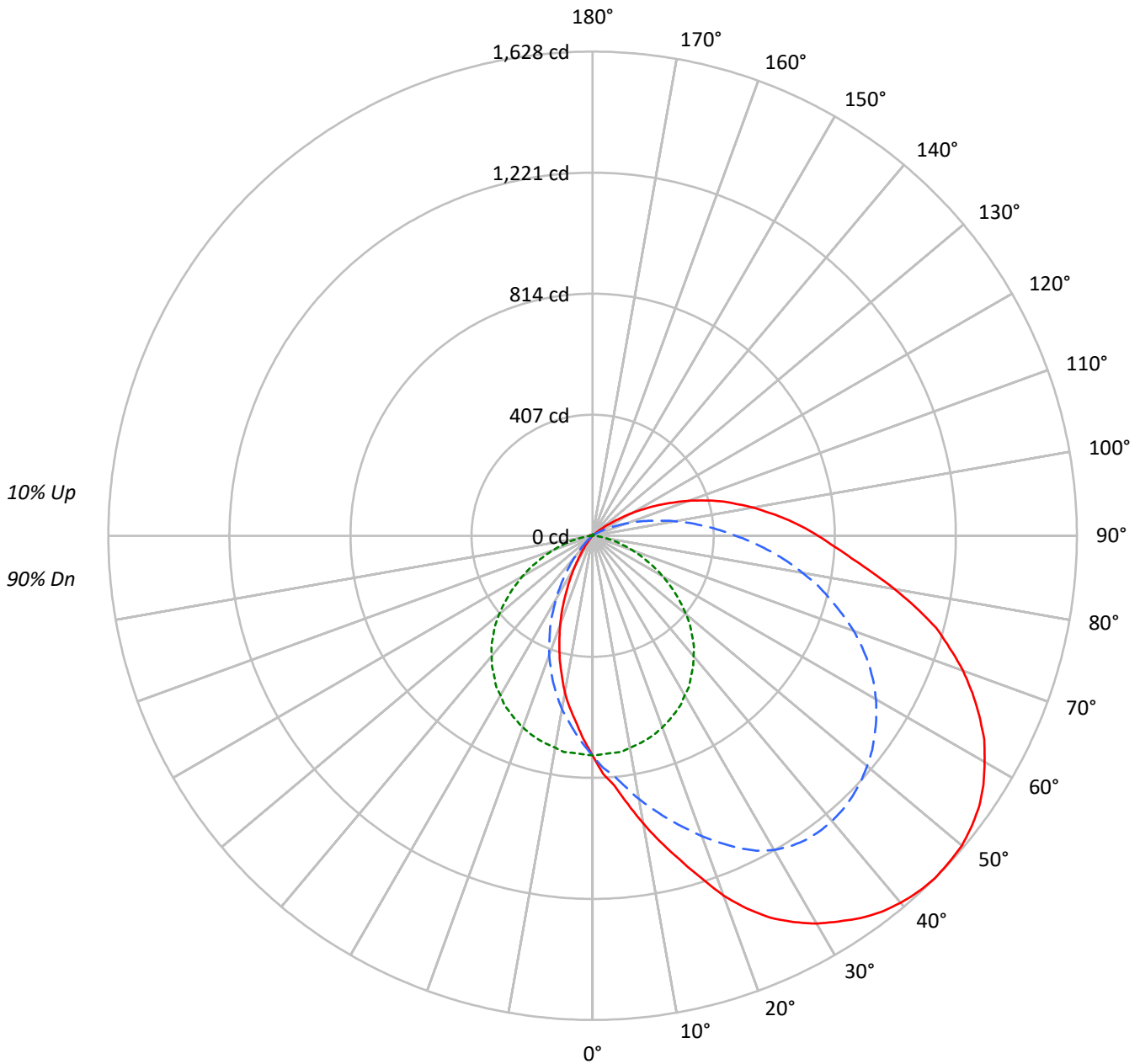
Lumens per Lamp: N/A
Luminaire Lumens: 3650.0 lumens
Efficiency: N/A
Efficacy: 84.3 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

Input Watts (W): 43.3
Input Voltage (V): NR
Input Current (A_{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: P551338

CATALOG NUMBER: FCC-X-2-LD4-2HI-40-UNV-81-85-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°	7947	7947	7947
5°	8724	7831	6533
10°	9872	7735	5385
15°	11063	7636	4196
20°	12478	7512	3090
25°	13651	7368	2029
30°	14523	7175	1143
35°	15278	6966	503
40°	15947	6710	121
45°	16521	6388	0
50°	17004	5962	0
55°	17372	5422	0
60°	17557	4794	0
65°	17629	4081	0
70°	17570	3327	0
75°	17346	2453	13
80°	16644	1502	76
85°	16087	717	103



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.7	1.9
10°-20°	211.8	5.8
20°-30°	342.9	9.4
30°-40°	440.5	12.1
40°-50°	498.6	13.7
50°-60°	516.6	14.2
60°-70°	487.2	13.3
70°-80°	408.3	11.2
80°-90°	296.0	8.1
90°-100°	194.5	5.3
100°-110°	112.3	3.1
110°-120°	49.6	1.4
120°-130°	13.4	0.4
130°-140°	3.1	0.1
140°-150°	2.0	0.1
150°-160°	1.4	0.0
160°-170°	0.8	0.0
170°-180°	0.3	0.0
0°-30°	625.4	17.1
0°-40°	1065.9	29.2
0°-60°	2081.1	57.0
0°-90°	3272.5	89.7
90°-120°	356.4	9.8
90°-150°	374.9	10.3
90°-180°	377.0	10.3
0°-180°	3650.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	738	738	738	738	738	
5°	843	809	733	665	631	85
15°	1126	987	708	512	427	325
25°	1417	1158	656	337	211	655
35°	1570	1248	576	164	52	984
45°	1628	1236	472	38	0	1257
55°	1587	1158	340	0	0	1417
65°	1434	1025	203	0	0	1419
75°	1195	827	86	1	1	1254
85°	875	600	14	4	6	747
90°	758	481	4	6	7	416
95°	651	376	2	7	8	511
105°	448	194	2	5	8	472
115°	244	64	3	3	5	244
125°	72	9	4	3	4	72
135°	4	3	5	4	3	7
145°	1	3	4	3	3	1
155°	2	4	4	3	1	1
165°	2	3	4	3	0	1
175°	2	3	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°	738.3	738.3	738.3	738.3	738.3	738.3	738.3	738.3	738.3	738.3	738.3
2.5°	800.4	799.4	796.6	791.9	785.3	774.0	764.6	756.2	744.9	735.5	717.6
5°	842.7	838.0	834.2	829.5	814.5	804.1	787.2	768.4	750.5	732.7	696.9
7.5°	910.4	902.9	897.3	884.1	863.4	839.9	813.5	795.7	783.5	733.6	672.5
10°	982.8	976.3	965.0	941.5	916.1	882.2	844.6	802.3	764.6	723.3	650.8
12.5°	1054.3	1044.9	1028.9	998.8	963.1	920.8	869.0	819.2	765.6	716.7	625.4
15°	1125.8	1115.5	1098.5	1061.8	1014.8	959.3	896.3	833.3	770.3	708.2	599.1
17.5°	1203.9	1189.8	1164.4	1123.0	1063.7	995.1	920.8	844.6	768.4	697.9	570.9
20°	1287.6	1267.8	1240.5	1185.1	1115.5	1034.6	945.2	855.9	767.5	685.6	538.9
22.5°	1357.2	1337.4	1307.3	1249.9	1166.2	1067.5	965.9	863.4	763.7	671.5	508.8
25°	1417.4	1401.4	1368.5	1302.6	1214.2	1102.3	985.7	869.0	758.1	656.5	476.8
27.5°	1464.4	1449.3	1412.7	1344.9	1254.7	1133.3	1000.7	871.9	750.5	641.4	443.9
30°	1505.8	1490.7	1446.5	1376.9	1281.9	1157.8	1015.8	872.8	741.1	618.9	408.2
32.5°	1537.7	1523.6	1478.5	1404.2	1300.7	1174.7	1024.2	871.9	728.9	602.9	369.6
35°	1569.7	1555.6	1502.9	1423.9	1314.8	1182.2	1030.8	867.2	713.9	576.5	332.9
37.5°	1594.2	1578.2	1524.6	1437.1	1321.4	1184.1	1029.9	860.6	697.9	554.9	296.3
40°	1611.1	1594.2	1536.8	1444.6	1323.3	1181.3	1022.3	849.3	679.1	527.6	257.7
42.5°	1622.4	1603.6	1542.5	1455.9	1319.5	1173.8	1011.1	835.2	658.4	504.1	221.0
45°	1628.0	1608.3	1543.4	1446.5	1313.0	1159.7	994.1	817.3	635.8	472.1	184.3
47.5°	1625.2	1603.6	1538.7	1436.2	1300.7	1144.6	975.3	795.7	608.5	443.9	149.5
50°	1620.5	1597.9	1528.3	1423.0	1283.8	1125.8	954.6	769.3	580.3	409.1	118.5
52.5°	1605.5	1582.9	1517.1	1404.2	1264.1	1104.2	926.4	742.1	550.2	375.3	90.3
55°	1586.7	1566.0	1497.3	1387.3	1238.7	1077.8	900.1	712.9	521.0	340.5	64.9
57.5°	1557.5	1538.7	1472.9	1360.0	1213.3	1048.7	870.9	680.9	484.4	305.7	45.1
60°	1521.8	1502.9	1439.0	1329.0	1184.1	1015.8	838.9	648.0	451.4	270.9	28.2
62.5°	1484.1	1466.3	1399.5	1290.4	1147.4	981.0	804.1	615.1	416.6	238.9	16.9
65°	1434.3	1417.4	1357.2	1244.3	1107.0	943.3	765.6	575.6	380.9	203.2	9.4
67.5°	1381.6	1366.6	1305.4	1202.0	1060.0	902.0	726.1	537.0	343.3	172.1	4.7
70°	1325.2	1306.4	1249.9	1144.6	1012.0	854.9	682.8	497.5	307.5	142.0	0.0
72.5°	1259.4	1245.2	1190.7	1091.0	956.5	805.1	638.6	454.3	268.0	112.9	0.9
75°	1195.4	1177.5	1127.7	1033.6	902.0	752.4	589.7	413.8	229.5	86.5	0.9
77.5°	1112.6	1107.0	1060.0	968.7	850.2	701.6	536.1	364.9	192.8	62.1	0.9
80°	1029.9	1024.2	987.5	903.8	790.0	641.4	486.2	318.8	157.1	41.4	0.9
82.5°	948.0	940.5	905.7	836.1	728.9	590.6	434.5	272.8	124.1	25.4	0.9
85°	874.7	865.3	827.7	763.7	665.9	533.3	380.9	227.6	92.2	14.1	1.9
87.5°	811.7	805.1	763.7	697.9	601.9	479.7	333.9	184.3	64.9	6.6	2.8
90°	758.1	744.0	707.3	637.7	541.7	420.4	284.0	147.7	43.3	3.8	3.8
92.5°	705.4	693.2	652.7	581.2	488.1	369.6	236.1	112.9	27.3	1.9	4.7
95°	650.8	637.7	598.2	532.3	433.6	317.9	193.7	82.8	15.0	1.9	4.7
97.5°	597.2	585.0	543.6	477.8	384.7	272.8	153.3	58.3	7.5	1.9	3.8
100°	547.4	533.3	495.7	429.8	335.8	227.6	118.5	37.6	4.7	1.9	3.8
102.5°	494.7	483.4	444.9	380.9	285.0	185.3	88.4	23.5	1.9	1.9	2.8
105°	447.7	433.6	396.0	330.1	242.7	145.8	62.1	14.1	1.9	1.9	2.8



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	291.6	280.3	247.4	191.9	123.2	57.4	16.9	2.8	2.8	2.8	2.8
115°	243.6	226.7	197.5	148.6	91.2	37.6	8.5	2.8	2.8	2.8	2.8
117.5°	194.7	180.6	159.9	112.9	60.2	24.5	4.7	2.8	2.8	2.8	2.8
120°	152.4	139.2	115.7	78.1	40.4	14.1	1.9	2.8	2.8	2.8	2.8
122.5°	109.1	98.8	78.1	50.8	24.5	6.6	2.8	2.8	3.8	3.8	2.8
125°	72.4	66.8	51.7	31.0	15.0	2.8	2.8	2.8	3.8	3.8	2.8
127.5°	47.0	42.3	30.1	17.9	6.6	2.8	2.8	3.8	3.8	3.8	2.8
130°	26.3	23.5	17.9	10.3	2.8	2.8	2.8	3.8	3.8	3.8	2.8
132.5°	15.0	14.1	9.4	1.9	2.8	2.8	2.8	3.8	3.8	3.8	3.8
135°	3.8	1.9	1.9	1.9	2.8	2.8	3.8	3.8	4.7	4.7	3.8
137.5°	0.9	0.9	1.9	1.9	2.8	2.8	3.8	4.7	4.7	4.7	3.8
140°	0.9	0.9	1.9	2.8	2.8	2.8	3.8	4.7	4.7	4.7	3.8
142.5°	0.9	1.9	1.9	2.8	2.8	3.8	3.8	4.7	4.7	3.8	3.8
145°	0.9	1.9	1.9	2.8	2.8	3.8	3.8	4.7	3.8	3.8	3.8
147.5°	1.9	1.9	1.9	2.8	2.8	3.8	3.8	4.7	4.7	3.8	3.8
150°	0.9	1.9	1.9	2.8	3.8	3.8	3.8	4.7	3.8	3.8	3.8
152.5°	0.9	1.9	1.9	2.8	3.8	3.8	3.8	4.7	3.8	3.8	3.8
155°	1.9	1.9	1.9	2.8	3.8	3.8	3.8	4.7	3.8	3.8	4.7
157.5°	1.9	1.9	1.9	2.8	3.8	3.8	3.8	4.7	3.8	3.8	4.7
160°	1.9	1.9	1.9	2.8	2.8	3.8	3.8	3.8	3.8	3.8	3.8
162.5°	1.9	1.9	1.9	2.8	2.8	3.8	3.8	3.8	3.8	3.8	3.8
165°	1.9	1.9	1.9	1.9	2.8	2.8	3.8	3.8	3.8	3.8	3.8
167.5°	1.9	1.9	1.9	2.8	2.8	2.8	3.8	3.8	3.8	3.8	3.8
170°	1.9	1.9	1.9	2.8	2.8	2.8	3.8	4.7	4.7	4.7	4.7
172.5°	1.9	1.9	1.9	2.8	2.8	3.8	3.8	4.7	4.7	4.7	4.7
175°	1.9	1.9	1.9	2.8	2.8	3.8	3.8	4.7	4.7	4.7	4.7
177.5°	0.9	1.9	1.9	2.8	2.8	3.8	3.8	4.7	4.7	4.7	3.8
180°	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	738.3	738.3	738.3
2.5°	702.6	689.4	685.6
5°	664.9	643.3	631.1
7.5°	627.3	598.2	584.1
10°	592.5	551.1	536.1
12.5°	551.1	503.2	479.7
15°	511.6	449.6	427.0
17.5°	467.4	397.8	371.5
20°	426.1	346.1	318.8
22.5°	379.0	295.3	265.2
25°	336.7	244.5	210.7
27.5°	289.7	192.8	163.7
30°	245.5	147.7	118.5
32.5°	203.2	108.2	81.8
35°	163.7	73.4	51.7
37.5°	126.0	45.1	26.3
40°	91.2	23.5	12.2
42.5°	61.1	11.3	6.6
45°	37.6	5.6	0.0
47.5°	21.6	0.0	0.0
50°	11.3	0.0	0.0
52.5°	4.7	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	1.9	2.8
80°	1.9	3.8	4.7
82.5°	3.8	4.7	4.7
85°	3.8	4.7	5.6
87.5°	4.7	5.6	6.6
90°	5.6	6.6	6.6
92.5°	5.6	7.5	7.5
95°	6.6	7.5	8.5
97.5°	7.5	8.5	8.5
100°	6.6	8.5	9.4
102.5°	5.6	8.5	8.5
105°	4.7	6.6	7.5



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CATALOG NUMBER: FCC-X-2-LD4-2HI-40-UNV-81-85-ED1D

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	3.8	4.7	4.7
115°	2.8	3.8	4.7
117.5°	2.8	3.8	3.8
120°	2.8	2.8	3.8
122.5°	2.8	2.8	3.8
125°	2.8	2.8	3.8
127.5°	3.8	2.8	2.8
130°	2.8	2.8	2.8
132.5°	3.8	2.8	2.8
135°	3.8	2.8	2.8
137.5°	3.8	2.8	2.8
140°	3.8	2.8	2.8
142.5°	3.8	2.8	2.8
145°	2.8	2.8	2.8
147.5°	2.8	2.8	2.8
150°	2.8	2.8	1.9
152.5°	2.8	1.9	1.9
155°	2.8	1.9	0.9
157.5°	3.8	1.9	0.9
160°	2.8	1.9	0.9
162.5°	2.8	1.9	0.9
165°	2.8	1.9	0.0
167.5°	2.8	1.9	0.9
170°	2.8	1.9	0.9
172.5°	2.8	1.9	0.9
175°	2.8	0.9	0.9
177.5°	2.8	0.9	0.9
180°	2.8	2.8	2.8



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	395.0	383.7	346.1	284.0	198.4	111.0	41.4	7.5	1.9	2.8	2.8
110°	344.2	334.8	296.3	236.1	159.9	82.8	27.3	4.7	2.8	2.8	2.8





107.5°	3.8	5.6	6.6
110°	3.8	4.7	5.6



(END OF REPORT)