

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: P551320

Luminaire Tested: **FCC-X-2-LD4-2HI-40-UNV-80-84-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: P551320
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-80-84-ED1D
Description: FCC CORNER MOUNT LUMINAIRE WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 4000K, AND 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

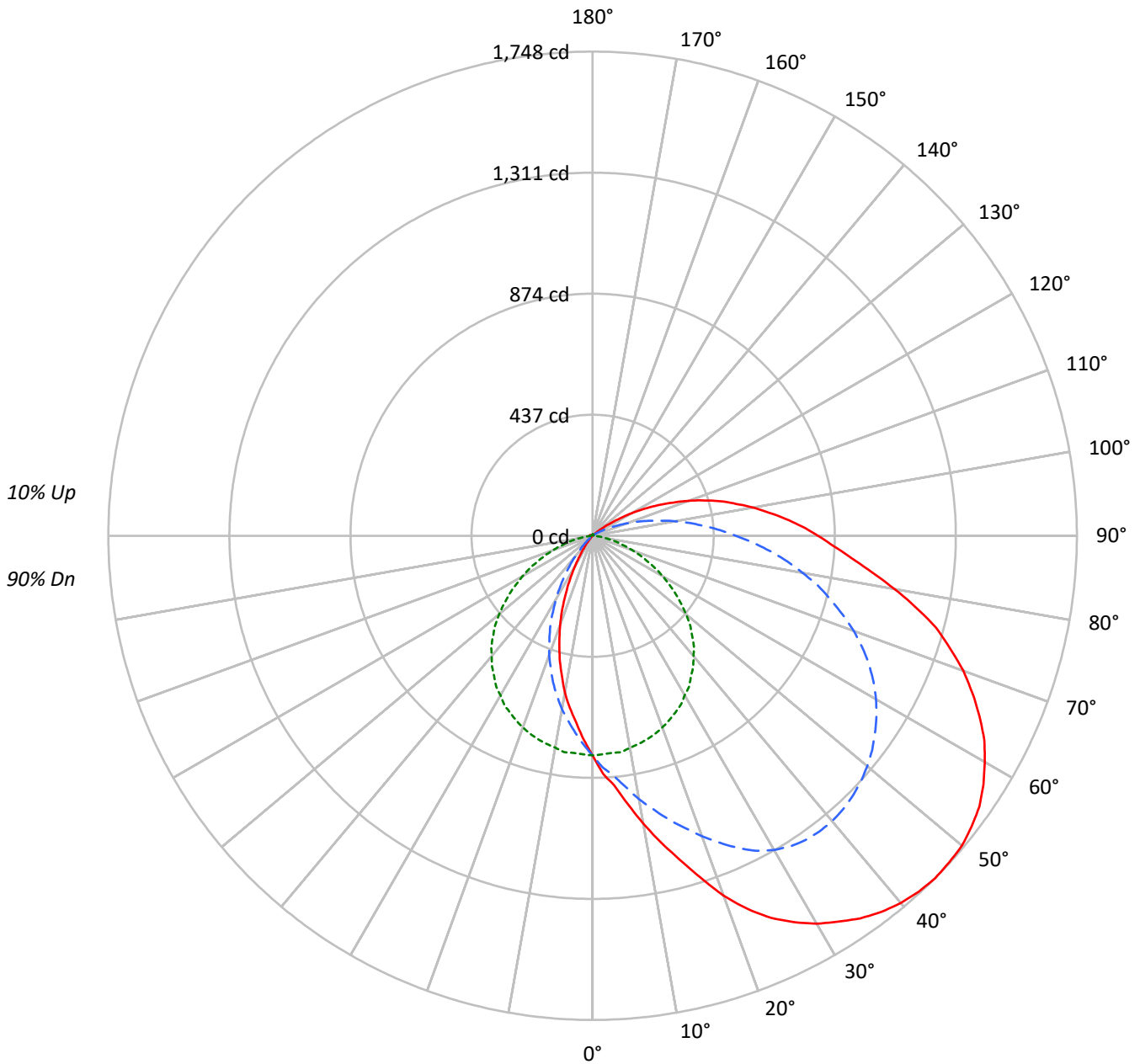
Lumens per Lamp: N/A
Luminaire Lumens: 3919.9 lumens
Efficiency: N/A
Efficacy: 90.5 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

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: P551320

CATALOG NUMBER: FCC-X-2-LD4-2HI-40-UNV-80-84-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°	8535	8535	8535
5°	9369	8411	7017
10°	10602	8307	5784
15°	11882	8201	4507
20°	13401	8068	3318
25°	14661	7912	2180
30°	15598	7704	1228
35°	16408	7482	541
40°	17127	7207	130
45°	17744	6862	0
50°	18262	6404	0
55°	18656	5823	0
60°	18854	5148	0
65°	18933	4383	0
70°	18869	3572	0
75°	18629	2635	15
80°	17875	1611	82
85°	17277	773	112



TEST NUMBER: P551320

CATALOG NUMBER: FCC-X-2-LD4-2HI-40-UNV-80-84-ED1D

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.0	1.9
10°-20°	227.4	5.8
20°-30°	368.3	9.4
30°-40°	473.1	12.1
40°-50°	535.5	13.7
50°-60°	554.8	14.2
60°-70°	523.2	13.3
70°-80°	438.5	11.2
80°-90°	317.8	8.1
90°-100°	208.9	5.3
100°-110°	120.6	3.1
110°-120°	53.2	1.4
120°-130°	14.4	0.4
130°-140°	3.3	0.1
140°-150°	2.2	0.1
150°-160°	1.5	0.0
160°-170°	0.9	0.0
170°-180°	0.3	0.0
0°-30°	671.6	17.1
0°-40°	1144.7	29.2
0°-60°	2235.1	57.0
0°-90°	3514.7	89.7
90°-120°	382.8	9.8
90°-150°	402.6	10.3
90°-180°	405.0	10.3
0°-180°	3919.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	793	793	793	793	793	
5°	905	869	787	714	678	91
15°	1209	1060	761	550	459	349
25°	1522	1244	705	362	226	704
35°	1686	1341	619	176	56	1057
45°	1748	1328	507	40	0	1350
55°	1704	1244	366	0	0	1522
65°	1540	1101	218	0	0	1524
75°	1284	888	93	1	1	1347
85°	939	644	15	4	6	802
90°	814	517	4	6	7	446
95°	699	404	2	7	9	548
105°	481	209	2	5	8	507
115°	262	69	3	3	5	262
125°	78	10	4	3	4	78
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°	792.9	792.9	792.9	792.9	792.9	792.9	792.9	792.9	792.9	792.9	792.9
2.5°	859.6	858.6	855.5	850.5	843.4	831.3	821.2	812.1	800.0	789.9	770.7
5°	905.0	900.0	896.0	890.9	874.7	863.6	845.4	825.2	806.1	786.9	748.5
7.5°	977.8	969.7	963.6	949.5	927.3	902.0	873.7	854.5	841.4	787.9	722.2
10°	1055.5	1048.5	1036.4	1011.1	983.8	947.5	907.1	861.6	821.2	776.8	699.0
12.5°	1132.3	1122.2	1105.0	1072.7	1034.3	988.9	933.3	879.8	822.2	769.7	671.7
15°	1209.1	1198.0	1179.8	1140.4	1089.9	1030.3	962.6	894.9	827.3	760.6	643.4
17.5°	1292.9	1277.8	1250.5	1206.0	1142.4	1068.7	988.9	907.1	825.2	749.5	613.1
20°	1382.8	1361.6	1332.3	1272.7	1198.0	1111.1	1015.1	919.2	824.2	736.4	578.8
22.5°	1457.6	1436.4	1404.0	1342.4	1252.5	1146.5	1037.4	927.3	820.2	721.2	546.5
25°	1522.2	1505.0	1469.7	1399.0	1304.0	1183.8	1058.6	933.3	814.1	705.0	512.1
27.5°	1572.7	1556.6	1517.2	1444.4	1347.5	1217.2	1074.7	936.4	806.1	688.9	476.8
30°	1617.2	1601.0	1553.5	1478.8	1376.8	1243.4	1090.9	937.4	796.0	664.6	438.4
32.5°	1651.5	1636.3	1587.9	1508.1	1397.0	1261.6	1100.0	936.4	782.8	647.5	397.0
35°	1685.8	1670.7	1614.1	1529.3	1412.1	1269.7	1107.1	931.3	766.7	619.2	357.6
37.5°	1712.1	1694.9	1637.4	1543.4	1419.2	1271.7	1106.1	924.2	749.5	596.0	318.2
40°	1730.3	1712.1	1650.5	1551.5	1421.2	1268.7	1098.0	912.1	729.3	566.7	276.8
42.5°	1742.4	1722.2	1656.6	1563.6	1417.2	1260.6	1085.8	897.0	707.1	541.4	237.4
45°	1748.5	1727.3	1657.6	1553.5	1410.1	1245.4	1067.7	877.8	682.8	507.1	198.0
47.5°	1745.4	1722.2	1652.5	1542.4	1397.0	1229.3	1047.5	854.5	653.5	476.8	160.6
50°	1740.4	1716.1	1641.4	1528.3	1378.8	1209.1	1025.2	826.3	623.2	439.4	127.3
52.5°	1724.2	1700.0	1629.3	1508.1	1357.6	1185.8	994.9	797.0	590.9	403.0	97.0
55°	1704.0	1681.8	1608.1	1489.9	1330.3	1157.6	966.7	765.6	559.6	365.7	69.7
57.5°	1672.7	1652.5	1581.8	1460.6	1303.0	1126.3	935.3	731.3	520.2	328.3	48.5
60°	1634.3	1614.1	1545.4	1427.3	1271.7	1090.9	901.0	696.0	484.8	290.9	30.3
62.5°	1593.9	1574.7	1503.0	1385.8	1232.3	1053.5	863.6	660.6	447.5	256.6	18.2
65°	1540.4	1522.2	1457.6	1336.4	1188.9	1013.1	822.2	618.2	409.1	218.2	10.1
67.5°	1483.8	1467.7	1402.0	1290.9	1138.4	968.7	779.8	576.8	368.7	184.8	5.1
70°	1423.2	1403.0	1342.4	1229.3	1086.9	918.2	733.3	534.3	330.3	152.5	0.0
72.5°	1352.5	1337.4	1278.8	1171.7	1027.3	864.6	685.9	487.9	287.9	121.2	1.0
75°	1283.8	1264.6	1211.1	1110.1	968.7	808.1	633.3	444.4	246.5	92.9	1.0
77.5°	1194.9	1188.9	1138.4	1040.4	913.1	753.5	575.8	391.9	207.1	66.7	1.0
80°	1106.1	1100.0	1060.6	970.7	848.5	688.9	522.2	342.4	168.7	44.4	1.0
82.5°	1018.2	1010.1	972.7	898.0	782.8	634.3	466.7	292.9	133.3	27.3	1.0
85°	939.4	929.3	888.9	820.2	715.1	572.7	409.1	244.4	99.0	15.2	2.0
87.5°	871.7	864.6	820.2	749.5	646.5	515.1	358.6	198.0	69.7	7.1	3.0
90°	814.1	799.0	759.6	684.8	581.8	451.5	305.0	158.6	46.5	4.0	4.0
92.5°	757.6	744.4	701.0	624.2	524.2	397.0	253.5	121.2	29.3	2.0	5.1
95°	699.0	684.8	642.4	571.7	465.7	341.4	208.1	88.9	16.2	2.0	5.1
97.5°	641.4	628.3	583.8	513.1	413.1	292.9	164.6	62.6	8.1	2.0	4.0
100°	587.9	572.7	532.3	461.6	360.6	244.4	127.3	40.4	5.1	2.0	4.0
102.5°	531.3	519.2	477.8	409.1	306.1	199.0	94.9	25.3	2.0	2.0	3.0
105°	480.8	465.7	425.2	354.5	260.6	156.6	66.7	15.2	2.0	2.0	3.0



TEST NUMBER: P551320

CATALOG NUMBER: FCC-X-2-LD4-2HI-40-UNV-80-84-ED1D

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	313.1	301.0	265.7	206.1	132.3	61.6	18.2	3.0	3.0	3.0	3.0
115°	261.6	243.4	212.1	159.6	98.0	40.4	9.1	3.0	3.0	3.0	3.0
117.5°	209.1	193.9	171.7	121.2	64.6	26.3	5.1	3.0	3.0	3.0	3.0
120°	163.6	149.5	124.2	83.8	43.4	15.2	2.0	3.0	3.0	3.0	3.0
122.5°	117.2	106.1	83.8	54.5	26.3	7.1	3.0	3.0	4.0	4.0	3.0
125°	77.8	71.7	55.6	33.3	16.2	3.0	3.0	3.0	4.0	4.0	3.0
127.5°	50.5	45.5	32.3	19.2	7.1	3.0	3.0	4.0	4.0	4.0	3.0
130°	28.3	25.3	19.2	11.1	3.0	3.0	3.0	4.0	4.0	4.0	3.0
132.5°	16.2	15.2	10.1	2.0	3.0	3.0	3.0	4.0	4.0	4.0	4.0
135°	4.0	2.0	2.0	2.0	3.0	3.0	4.0	4.0	5.1	5.1	4.0
137.5°	1.0	1.0	2.0	2.0	3.0	3.0	4.0	5.1	5.1	5.1	4.0
140°	1.0	1.0	2.0	3.0	3.0	3.0	4.0	5.1	5.1	5.1	4.0
142.5°	1.0	2.0	2.0	3.0	3.0	4.0	4.0	5.1	5.1	4.0	4.0
145°	1.0	2.0	2.0	3.0	3.0	4.0	4.0	5.1	4.0	4.0	4.0
147.5°	2.0	2.0	2.0	3.0	3.0	4.0	4.0	5.1	5.1	4.0	4.0
150°	1.0	2.0	2.0	3.0	4.0	4.0	4.0	5.1	4.0	4.0	4.0
152.5°	1.0	2.0	2.0	3.0	4.0	4.0	4.0	5.1	4.0	4.0	4.0
155°	2.0	2.0	2.0	3.0	4.0	4.0	4.0	5.1	4.0	4.0	5.1
157.5°	2.0	2.0	2.0	3.0	4.0	4.0	4.0	5.1	4.0	4.0	5.1
160°	2.0	2.0	2.0	3.0	3.0	4.0	4.0	4.0	4.0	4.0	4.0
162.5°	2.0	2.0	2.0	3.0	3.0	4.0	4.0	4.0	4.0	4.0	4.0
165°	2.0	2.0	2.0	2.0	3.0	3.0	4.0	4.0	4.0	4.0	4.0
167.5°	2.0	2.0	2.0	3.0	3.0	3.0	4.0	4.0	4.0	4.0	4.0
170°	2.0	2.0	2.0	3.0	3.0	3.0	4.0	5.1	5.1	5.1	5.1
172.5°	2.0	2.0	2.0	3.0	3.0	4.0	4.0	5.1	5.1	5.1	5.1
175°	2.0	2.0	2.0	3.0	3.0	4.0	4.0	5.1	5.1	5.1	5.1
177.5°	1.0	2.0	2.0	3.0	3.0	4.0	4.0	5.1	5.1	5.1	4.0
180°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0



TEST NUMBER: P551320

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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	792.9	792.9	792.9
2.5°	754.5	740.4	736.4
5°	714.1	690.9	677.8
7.5°	673.7	642.4	627.3
10°	636.4	591.9	575.8
12.5°	591.9	540.4	515.1
15°	549.5	482.8	458.6
17.5°	502.0	427.3	399.0
20°	457.6	371.7	342.4
22.5°	407.1	317.2	284.8
25°	361.6	262.6	226.3
27.5°	311.1	207.1	175.8
30°	263.6	158.6	127.3
32.5°	218.2	116.2	87.9
35°	175.8	78.8	55.6
37.5°	135.4	48.5	28.3
40°	98.0	25.3	13.1
42.5°	65.7	12.1	7.1
45°	40.4	6.1	0.0
47.5°	23.2	0.0	0.0
50°	12.1	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	2.0	3.0
80°	2.0	4.0	5.1
82.5°	4.0	5.1	5.1
85°	4.0	5.1	6.1
87.5°	5.1	6.1	7.1
90°	6.1	7.1	7.1
92.5°	6.1	8.1	8.1
95°	7.1	8.1	9.1
97.5°	8.1	9.1	9.1
100°	7.1	9.1	10.1
102.5°	6.1	9.1	9.1
105°	5.1	7.1	8.1



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CATALOG NUMBER: FCC-X-2-LD4-2HI-40-UNV-80-84-ED1D

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	4.0	5.1	5.1
115°	3.0	4.0	5.1
117.5°	3.0	4.0	4.0
120°	3.0	3.0	4.0
122.5°	3.0	3.0	4.0
125°	3.0	3.0	4.0
127.5°	4.0	3.0	3.0
130°	3.0	3.0	3.0
132.5°	4.0	3.0	3.0
135°	4.0	3.0	3.0
137.5°	4.0	3.0	3.0
140°	4.0	3.0	3.0
142.5°	4.0	3.0	3.0
145°	3.0	3.0	3.0
147.5°	3.0	3.0	3.0
150°	3.0	3.0	2.0
152.5°	3.0	2.0	2.0
155°	3.0	2.0	1.0
157.5°	4.0	2.0	1.0
160°	3.0	2.0	1.0
162.5°	3.0	2.0	1.0
165°	3.0	2.0	0.0
167.5°	3.0	2.0	1.0
170°	3.0	2.0	1.0
172.5°	3.0	2.0	1.0
175°	3.0	1.0	1.0
177.5°	3.0	1.0	1.0
180°	3.0	3.0	3.0



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	424.2	412.1	371.7	305.0	213.1	119.2	44.4	8.1	2.0	3.0	3.0
110°	369.7	359.6	318.2	253.5	171.7	88.9	29.3	5.1	3.0	3.0	3.0





107.5°	4.0	6.1	7.1
110°	4.0	5.1	6.1



(END OF REPORT)