

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: P551392

Luminaire Tested: **FCC-X-2-LD4-2HI-50-UNV-80-88-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: P551392
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-80-88-ED1D
Description: FCC CORNER MOUNT LUMINAIRE WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .500 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 5000K, AND 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

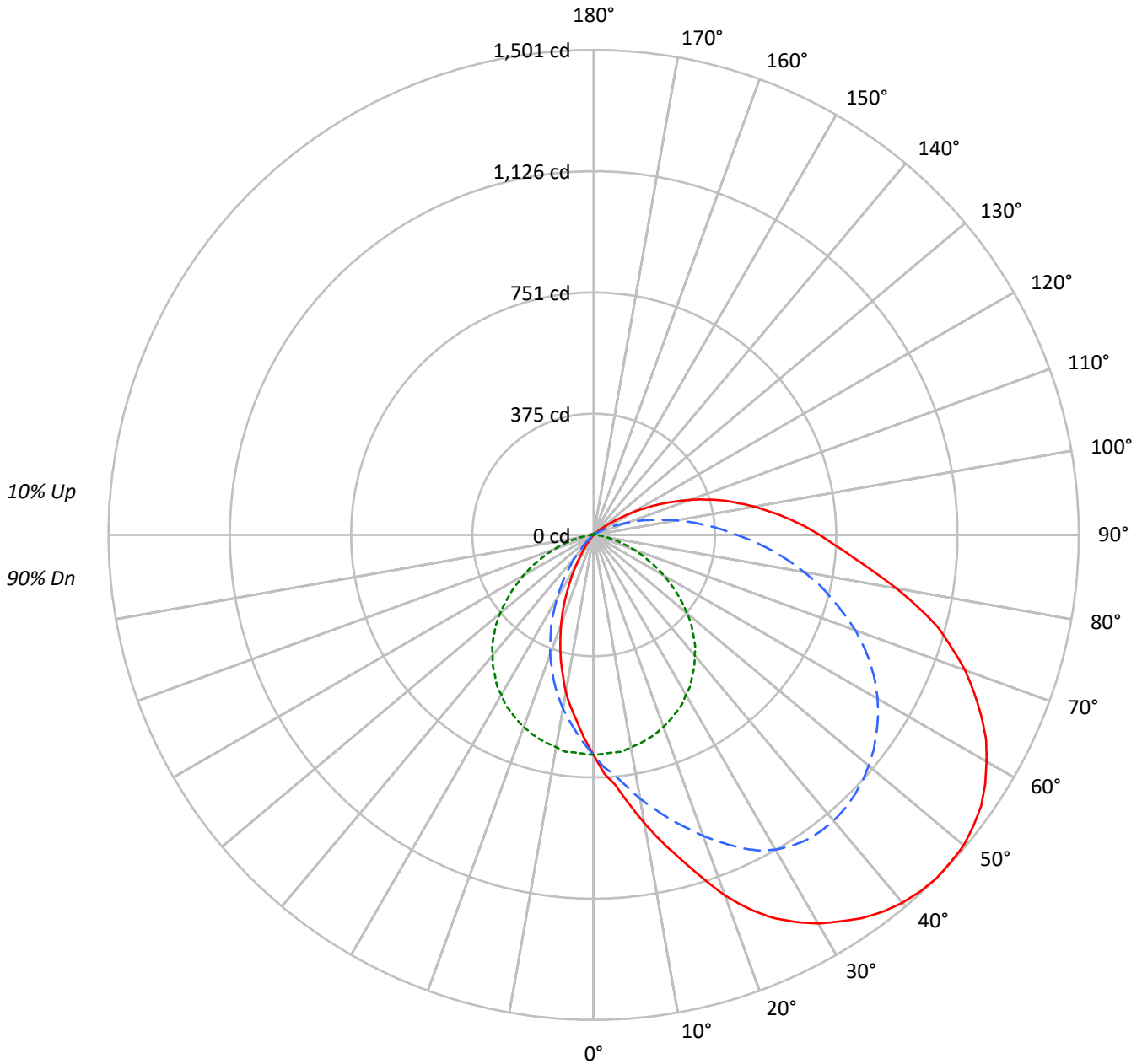
Lumens per Lamp: N/A
Luminaire Lumens: 3366.0 lumens
Efficiency: N/A
Efficacy: 77.7 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

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: P551392

CATALOG NUMBER: FCC-X-2-LD4-2HI-50-UNV-80-88-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°	7329	7329	7329
5°	8045	7222	6025
10°	9104	7133	4966
15°	10202	7042	3870
20°	11507	6928	2849
25°	12589	6794	1871
30°	13393	6616	1054
35°	14089	6424	464
40°	14707	6188	112
45°	15237	5891	0
50°	15681	5499	0
55°	16020	5000	0
60°	16191	4421	0
65°	16257	3762	0
70°	16203	3069	0
75°	15997	2263	13
80°	15348	1386	69
85°	14835	661	96



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.2	1.9
10°-20°	195.3	5.8
20°-30°	316.2	9.4
30°-40°	406.2	12.1
40°-50°	459.8	13.7
50°-60°	476.4	14.2
60°-70°	449.3	13.3
70°-80°	376.5	11.2
80°-90°	272.9	8.1
90°-100°	179.4	5.3
100°-110°	103.6	3.1
110°-120°	45.7	1.4
120°-130°	12.4	0.4
130°-140°	2.8	0.1
140°-150°	1.9	0.1
150°-160°	1.3	0.0
160°-170°	0.7	0.0
170°-180°	0.3	0.0
0°-30°	576.7	17.1
0°-40°	982.9	29.2
0°-60°	1919.2	57.0
0°-90°	3017.9	89.7
90°-120°	328.7	9.8
90°-150°	345.8	10.3
90°-180°	348.0	10.3
0°-180°	3366.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	681	681	681	681	681	
5°	777	746	676	613	582	78
15°	1038	910	653	472	394	299
25°	1307	1068	605	310	194	604
35°	1448	1151	532	151	48	908
45°	1501	1140	435	35	0	1159
55°	1463	1068	314	0	0	1307
65°	1323	945	187	0	0	1309
75°	1102	763	80	1	1	1156
85°	807	553	13	4	5	689
90°	699	444	4	5	6	383
95°	600	346	2	6	8	471
105°	413	179	2	4	7	436
115°	225	59	3	3	4	225
125°	67	8	4	3	4	67
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	0
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°	680.9	680.9	680.9	680.9	680.9	680.9	680.9	680.9	680.9	680.9	680.9
2.5°	738.1	737.2	734.6	730.3	724.2	713.8	705.1	697.3	686.9	678.3	661.8
5°	777.1	772.8	769.3	765.0	751.1	741.6	726.0	708.6	692.1	675.7	642.7
7.5°	839.6	832.6	827.4	815.3	796.2	774.5	750.2	733.8	722.5	676.5	620.1
10°	906.4	900.3	889.9	868.2	844.8	813.6	778.9	739.8	705.1	667.0	600.2
12.5°	972.3	963.6	948.9	921.1	888.2	849.1	801.4	755.5	706.0	660.9	576.8
15°	1038.2	1028.7	1013.1	979.2	935.9	884.7	826.6	768.5	710.4	653.1	552.5
17.5°	1110.2	1097.2	1073.8	1035.6	981.0	917.6	849.1	778.9	708.6	643.6	526.5
20°	1187.4	1169.2	1144.0	1092.8	1028.7	954.1	871.7	789.3	707.7	632.3	497.0
22.5°	1251.6	1233.4	1205.6	1152.7	1075.5	984.4	890.8	796.2	704.3	619.3	469.2
25°	1307.1	1292.3	1262.0	1201.3	1119.7	1016.5	909.0	801.4	699.1	605.4	439.7
27.5°	1350.4	1336.6	1302.7	1240.3	1157.0	1045.1	922.8	804.0	692.1	591.5	409.4
30°	1388.6	1374.7	1334.0	1269.8	1182.2	1067.7	936.7	804.9	683.5	570.7	376.4
32.5°	1418.1	1405.1	1363.5	1294.9	1199.5	1083.3	944.5	804.0	672.2	556.0	340.9
35°	1447.6	1434.6	1386.0	1313.2	1212.5	1090.2	950.6	799.7	658.3	531.7	307.0
37.5°	1470.1	1455.4	1406.0	1325.3	1218.6	1092.0	949.7	793.6	643.6	511.7	273.2
40°	1485.8	1470.1	1417.2	1332.2	1220.3	1089.4	942.8	783.2	626.2	486.6	237.7
42.5°	1496.2	1478.8	1422.4	1342.6	1216.9	1082.4	932.4	770.2	607.1	464.9	203.8
45°	1501.4	1483.1	1423.3	1334.0	1210.8	1069.4	916.8	753.7	586.3	435.4	170.0
47.5°	1498.8	1478.8	1419.0	1324.4	1199.5	1055.6	899.4	733.8	561.2	409.4	137.9
50°	1494.4	1473.6	1409.4	1312.3	1183.9	1038.2	880.3	709.5	535.1	377.3	109.3
52.5°	1480.5	1459.7	1399.0	1294.9	1165.7	1018.3	854.3	684.3	507.4	346.1	83.3
55°	1463.2	1444.1	1380.8	1279.3	1142.3	994.0	830.0	657.4	480.5	314.0	59.8
57.5°	1436.3	1419.0	1358.3	1254.2	1118.9	967.1	803.2	628.0	446.7	281.9	41.6
60°	1403.4	1386.0	1327.0	1225.5	1092.0	936.7	773.7	597.6	416.3	249.8	26.0
62.5°	1368.7	1352.2	1290.6	1190.0	1058.2	904.6	741.6	567.2	384.2	220.3	15.6
65°	1322.7	1307.1	1251.6	1147.5	1020.9	869.9	706.0	530.8	351.3	187.3	8.7
67.5°	1274.1	1260.2	1203.9	1108.5	977.5	831.8	669.6	495.3	316.6	158.7	4.3
70°	1222.1	1204.7	1152.7	1055.6	933.3	788.4	629.7	458.8	283.6	131.0	0.0
72.5°	1161.4	1148.4	1098.1	1006.1	882.1	742.4	588.9	418.9	247.2	104.1	0.9
75°	1102.4	1085.9	1039.9	953.2	831.8	693.9	543.8	381.6	211.6	79.8	0.9
77.5°	1026.1	1020.9	977.5	893.4	784.1	647.0	494.4	336.5	177.8	57.2	0.9
80°	949.7	944.5	910.7	833.5	728.6	591.5	448.4	294.0	144.8	38.2	0.9
82.5°	874.3	867.3	835.2	771.1	672.2	544.7	400.7	251.5	114.5	23.4	0.9
85°	806.6	798.0	763.3	704.3	614.1	491.8	351.3	209.9	85.0	13.0	1.7
87.5°	748.5	742.4	704.3	643.6	555.1	442.3	307.9	170.0	59.8	6.1	2.6
90°	699.1	686.1	652.2	588.1	499.6	387.7	261.9	136.2	39.9	3.5	3.5
92.5°	650.5	639.2	601.9	536.0	450.1	340.9	217.7	104.1	25.2	1.7	4.3
95°	600.2	588.1	551.6	490.9	399.8	293.2	178.7	76.3	13.9	1.7	4.3
97.5°	550.8	539.5	501.3	440.6	354.7	251.5	141.4	53.8	6.9	1.7	3.5
100°	504.8	491.8	457.1	396.4	309.6	209.9	109.3	34.7	4.3	1.7	3.5
102.5°	456.2	445.8	410.3	351.3	262.8	170.9	81.5	21.7	1.7	1.7	2.6
105°	412.9	399.8	365.1	304.4	223.8	134.4	57.2	13.0	1.7	1.7	2.6



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	268.9	258.5	228.1	176.9	113.6	52.9	15.6	2.6	2.6	2.6	2.6
115°	224.6	209.0	182.1	137.0	84.1	34.7	7.8	2.6	2.6	2.6	2.6
117.5°	179.5	166.5	147.4	104.1	55.5	22.6	4.3	2.6	2.6	2.6	2.6
120°	140.5	128.4	106.7	72.0	37.3	13.0	1.7	2.6	2.6	2.6	2.6
122.5°	100.6	91.1	72.0	46.8	22.6	6.1	2.6	2.6	3.5	3.5	2.6
125°	66.8	61.6	47.7	28.6	13.9	2.6	2.6	2.6	3.5	3.5	2.6
127.5°	43.4	39.0	27.8	16.5	6.1	2.6	2.6	3.5	3.5	3.5	2.6
130°	24.3	21.7	16.5	9.5	2.6	2.6	2.6	3.5	3.5	3.5	2.6
132.5°	13.9	13.0	8.7	1.7	2.6	2.6	2.6	3.5	3.5	3.5	3.5
135°	3.5	1.7	1.7	1.7	2.6	2.6	3.5	3.5	4.3	4.3	3.5
137.5°	0.9	0.9	1.7	1.7	2.6	2.6	3.5	4.3	4.3	4.3	3.5
140°	0.9	0.9	1.7	2.6	2.6	2.6	3.5	4.3	4.3	4.3	3.5
142.5°	0.9	1.7	1.7	2.6	2.6	3.5	3.5	4.3	4.3	3.5	3.5
145°	0.9	1.7	1.7	2.6	2.6	3.5	3.5	4.3	3.5	3.5	3.5
147.5°	1.7	1.7	1.7	2.6	2.6	3.5	3.5	4.3	4.3	3.5	3.5
150°	0.9	1.7	1.7	2.6	3.5	3.5	3.5	4.3	3.5	3.5	3.5
152.5°	0.9	1.7	1.7	2.6	3.5	3.5	3.5	4.3	3.5	3.5	3.5
155°	1.7	1.7	1.7	2.6	3.5	3.5	3.5	4.3	3.5	3.5	4.3
157.5°	1.7	1.7	1.7	2.6	3.5	3.5	3.5	4.3	3.5	3.5	4.3
160°	1.7	1.7	1.7	2.6	2.6	3.5	3.5	3.5	3.5	3.5	3.5
162.5°	1.7	1.7	1.7	2.6	2.6	3.5	3.5	3.5	3.5	3.5	3.5
165°	1.7	1.7	1.7	1.7	2.6	2.6	3.5	3.5	3.5	3.5	3.5
167.5°	1.7	1.7	1.7	2.6	2.6	2.6	3.5	3.5	3.5	3.5	3.5
170°	1.7	1.7	1.7	2.6	2.6	2.6	3.5	4.3	4.3	4.3	4.3
172.5°	1.7	1.7	1.7	2.6	2.6	3.5	3.5	4.3	4.3	4.3	4.3
175°	1.7	1.7	1.7	2.6	2.6	3.5	3.5	4.3	4.3	4.3	4.3
177.5°	0.9	1.7	1.7	2.6	2.6	3.5	3.5	4.3	4.3	4.3	3.5
180°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6



TEST NUMBER: P551392

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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	680.9	680.9	680.9
2.5°	647.9	635.8	632.3
5°	613.2	593.3	582.0
7.5°	578.5	551.6	538.6
10°	546.4	508.3	494.4
12.5°	508.3	464.0	442.3
15°	471.8	414.6	393.8
17.5°	431.1	366.9	342.6
20°	392.9	319.2	294.0
22.5°	349.5	272.3	244.6
25°	310.5	225.5	194.3
27.5°	267.1	177.8	150.9
30°	226.4	136.2	109.3
32.5°	187.3	99.7	75.5
35°	150.9	67.7	47.7
37.5°	116.2	41.6	24.3
40°	84.1	21.7	11.3
42.5°	56.4	10.4	6.1
45°	34.7	5.2	0.0
47.5°	19.9	0.0	0.0
50°	10.4	0.0	0.0
52.5°	4.3	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	1.7	2.6
80°	1.7	3.5	4.3
82.5°	3.5	4.3	4.3
85°	3.5	4.3	5.2
87.5°	4.3	5.2	6.1
90°	5.2	6.1	6.1
92.5°	5.2	6.9	6.9
95°	6.1	6.9	7.8
97.5°	6.9	7.8	7.8
100°	6.1	7.8	8.7
102.5°	5.2	7.8	7.8
105°	4.3	6.1	6.9



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	3.5	4.3	4.3
115°	2.6	3.5	4.3
117.5°	2.6	3.5	3.5
120°	2.6	2.6	3.5
122.5°	2.6	2.6	3.5
125°	2.6	2.6	3.5
127.5°	3.5	2.6	2.6
130°	2.6	2.6	2.6
132.5°	3.5	2.6	2.6
135°	3.5	2.6	2.6
137.5°	3.5	2.6	2.6
140°	3.5	2.6	2.6
142.5°	3.5	2.6	2.6
145°	2.6	2.6	2.6
147.5°	2.6	2.6	2.6
150°	2.6	2.6	1.7
152.5°	2.6	1.7	1.7
155°	2.6	1.7	0.9
157.5°	3.5	1.7	0.9
160°	2.6	1.7	0.9
162.5°	2.6	1.7	0.9
165°	2.6	1.7	0.0
167.5°	2.6	1.7	0.9
170°	2.6	1.7	0.9
172.5°	2.6	1.7	0.9
175°	2.6	0.9	0.9
177.5°	2.6	0.9	0.9
180°	2.6	2.6	2.6



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	364.3	353.9	319.2	261.9	183.0	102.3	38.2	6.9	1.7	2.6	2.6
110°	317.4	308.8	273.2	217.7	147.4	76.3	25.2	4.3	2.6	2.6	2.6





107.5°	3.5	5.2	6.1
110°	3.5	4.3	5.2



(END OF REPORT)