

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: P551383

Luminaire Tested: **FCC-X-2-LD4-2HI-50-UNV-80-84-ED1D-90**

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: P551383
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-80-84-ED1D-90
Description: FCC CORNER MOUNT LUMINAIRE WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 5000K, AND 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

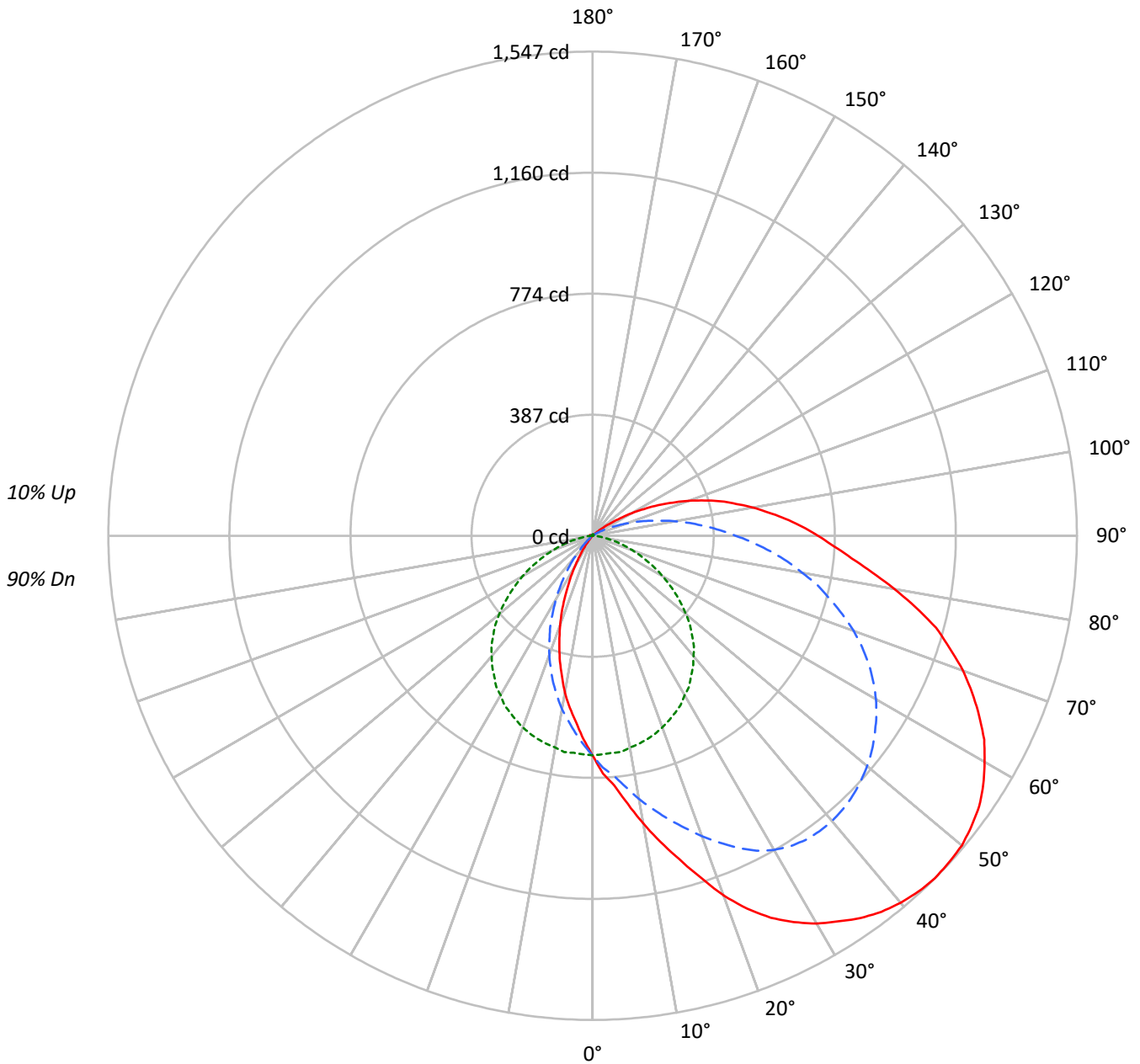
Lumens per Lamp: N/A
Luminaire Lumens: 3468.1 lumens
Efficiency: N/A
Efficacy: 80.1 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

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: P551383

CATALOG NUMBER: FCC-X-2-LD4-2HI-50-UNV-80-84-ED1D-90

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°	7551	7551	7551
5°	8289	7440	6207
10°	9379	7349	5117
15°	10512	7256	3987
20°	11856	7138	2935
25°	12970	6999	1928
30°	13799	6816	1086
35°	14516	6619	478
40°	15152	6375	115
45°	15698	6070	0
50°	16156	5665	0
55°	16505	5151	0
60°	16681	4555	0
65°	16750	3876	0
70°	16693	3160	0
75°	16481	2331	13
80°	15813	1426	73
85°	15286	681	99



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.2	1.9
10°-20°	201.2	5.8
20°-30°	325.8	9.4
30°-40°	418.5	12.1
40°-50°	473.8	13.7
50°-60°	490.8	14.2
60°-70°	462.9	13.3
70°-80°	387.9	11.2
80°-90°	281.2	8.1
90°-100°	184.8	5.3
100°-110°	106.7	3.1
110°-120°	47.1	1.4
120°-130°	12.8	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°	594.2	17.1
0°-40°	1012.7	29.2
0°-60°	1977.3	57.0
0°-90°	3109.4	89.7
90°-120°	338.7	9.8
90°-150°	356.3	10.3
90°-180°	359.0	10.4
0°-180°	3468.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	702	702	702	702	702	
5°	801	769	696	632	600	81
15°	1070	938	673	486	406	308
25°	1347	1100	624	320	200	622
35°	1492	1186	548	156	49	935
45°	1547	1175	449	36	0	1194
55°	1508	1100	324	0	0	1346
65°	1363	974	193	0	0	1348
75°	1136	786	82	1	1	1191
85°	831	570	13	4	5	710
90°	720	457	4	5	6	395
95°	618	357	2	6	8	485
105°	425	185	2	4	7	449
115°	231	61	3	3	4	232
125°	69	8	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°	701.5	701.5	701.5	701.5	701.5	701.5	701.5	701.5	701.5	701.5	701.5
2.5°	760.5	759.6	756.9	752.4	746.2	735.5	726.5	718.5	707.7	698.8	681.8
5°	800.7	796.2	792.6	788.2	773.9	764.0	748.0	730.1	713.1	696.1	662.2
7.5°	865.0	857.9	852.5	840.0	820.3	798.0	773.0	756.0	744.4	697.0	638.9
10°	933.8	927.6	916.9	894.5	870.4	838.2	802.5	762.3	726.5	687.2	618.4
12.5°	1001.8	992.8	977.6	949.0	915.1	874.9	825.7	778.3	727.4	680.9	594.3
15°	1069.7	1059.8	1043.8	1008.9	964.2	911.5	851.6	791.7	731.9	672.9	569.2
17.5°	1143.8	1130.4	1106.3	1067.0	1010.7	945.5	874.9	802.5	730.1	663.1	542.4
20°	1223.4	1204.6	1178.7	1126.0	1059.8	983.0	898.1	813.2	729.2	651.5	512.0
22.5°	1289.5	1270.7	1242.1	1187.6	1108.1	1014.3	917.7	820.3	725.6	638.0	483.4
25°	1346.7	1331.5	1300.2	1237.7	1153.7	1047.3	936.5	825.7	720.3	623.7	453.1
27.5°	1391.4	1377.1	1342.2	1277.9	1192.1	1076.8	950.8	828.4	713.1	609.5	421.8
30°	1430.7	1416.4	1374.4	1308.3	1218.0	1100.0	965.1	829.3	704.2	588.0	387.8
32.5°	1461.1	1447.7	1404.8	1334.2	1235.9	1116.1	973.2	828.4	692.6	572.8	351.2
35°	1491.5	1478.1	1428.0	1352.9	1249.3	1123.3	979.4	823.9	678.3	547.8	316.3
37.5°	1514.7	1499.5	1448.6	1365.5	1255.5	1125.1	978.5	817.7	663.1	527.2	281.5
40°	1530.8	1514.7	1460.2	1372.6	1257.3	1122.4	971.4	806.9	645.2	501.3	244.9
42.5°	1541.5	1523.6	1465.5	1383.3	1253.8	1115.2	960.6	793.5	625.5	479.0	210.0
45°	1546.9	1528.1	1466.4	1374.4	1247.5	1101.8	944.6	776.6	604.1	448.6	175.1
47.5°	1544.2	1523.6	1462.0	1364.6	1235.9	1087.5	926.7	756.0	578.2	421.8	142.1
50°	1539.7	1518.3	1452.1	1352.0	1219.8	1069.7	907.0	731.0	551.4	388.7	112.6
52.5°	1525.4	1504.0	1441.4	1334.2	1201.0	1049.1	880.2	705.1	522.8	356.6	85.8
55°	1507.5	1487.9	1422.6	1318.1	1176.9	1024.1	855.2	677.4	495.1	323.5	61.7
57.5°	1479.8	1462.0	1399.4	1292.2	1152.8	996.4	827.5	647.0	460.2	290.4	42.9
60°	1445.9	1428.0	1367.2	1262.7	1125.1	965.1	797.1	615.7	428.9	257.4	26.8
62.5°	1410.1	1393.2	1329.7	1226.0	1090.2	932.0	764.0	584.4	395.9	227.0	16.1
65°	1362.8	1346.7	1289.5	1182.3	1051.8	896.3	727.4	546.9	361.9	193.0	8.9
67.5°	1312.7	1298.4	1240.3	1142.0	1007.1	857.0	689.9	510.3	326.2	163.5	4.5
70°	1259.1	1241.2	1187.6	1087.5	961.5	812.3	648.8	472.7	292.2	134.9	0.0
72.5°	1196.6	1183.2	1131.3	1036.6	908.8	764.9	606.8	431.6	254.7	107.2	0.9
75°	1135.8	1118.8	1071.5	982.1	857.0	714.9	560.3	393.2	218.0	82.2	0.9
77.5°	1057.2	1051.8	1007.1	920.4	807.8	666.6	509.4	346.7	183.2	59.0	0.9
80°	978.5	973.2	938.3	858.8	750.6	609.5	462.0	302.9	149.2	39.3	0.9
82.5°	900.8	893.6	860.6	794.4	692.6	561.2	412.9	259.2	118.0	24.1	0.9
85°	831.1	822.1	786.4	725.6	632.7	506.7	361.9	216.3	87.6	13.4	1.8
87.5°	771.2	764.9	725.6	663.1	571.9	455.7	317.2	175.1	61.7	6.3	2.7
90°	720.3	706.9	672.0	605.9	514.7	399.4	269.9	140.3	41.1	3.6	3.6
92.5°	670.2	658.6	620.2	552.3	463.8	351.2	224.3	107.2	25.9	1.8	4.5
95°	618.4	605.9	568.3	505.8	412.0	302.0	184.1	78.6	14.3	1.8	4.5
97.5°	567.4	555.8	516.5	454.0	365.5	259.2	145.7	55.4	7.1	1.8	3.6
100°	520.1	506.7	470.9	408.4	319.0	216.3	112.6	35.7	4.5	1.8	3.6
102.5°	470.0	459.3	422.7	361.9	270.8	176.0	84.0	22.3	1.8	1.8	2.7
105°	425.4	412.0	376.2	313.7	230.6	138.5	59.0	13.4	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°	277.0	266.3	235.0	182.3	117.1	54.5	16.1	2.7	2.7	2.7	2.7
115°	231.4	215.4	187.7	141.2	86.7	35.7	8.0	2.7	2.7	2.7	2.7
117.5°	185.0	171.6	151.9	107.2	57.2	23.2	4.5	2.7	2.7	2.7	2.7
120°	144.8	132.3	109.9	74.2	38.4	13.4	1.8	2.7	2.7	2.7	2.7
122.5°	103.7	93.8	74.2	48.3	23.2	6.3	2.7	2.7	3.6	3.6	2.7
125°	68.8	63.4	49.1	29.5	14.3	2.7	2.7	2.7	3.6	3.6	2.7
127.5°	44.7	40.2	28.6	17.0	6.3	2.7	2.7	3.6	3.6	3.6	2.7
130°	25.0	22.3	17.0	9.8	2.7	2.7	2.7	3.6	3.6	3.6	2.7
132.5°	14.3	13.4	8.9	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



TEST NUMBER: P551383

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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	701.5	701.5	701.5
2.5°	667.5	655.0	651.5
5°	631.8	611.2	599.6
7.5°	596.0	568.3	554.9
10°	563.0	523.7	509.4
12.5°	523.7	478.1	455.7
15°	486.1	427.2	405.7
17.5°	444.1	378.0	353.0
20°	404.8	328.9	302.9
22.5°	360.1	280.6	252.0
25°	319.9	232.3	200.2
27.5°	275.2	183.2	155.5
30°	233.2	140.3	112.6
32.5°	193.0	102.8	77.7
35°	155.5	69.7	49.1
37.5°	119.7	42.9	25.0
40°	86.7	22.3	11.6
42.5°	58.1	10.7	6.3
45°	35.7	5.4	0.0
47.5°	20.6	0.0	0.0
50°	10.7	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	7.1	7.1
95°	6.3	7.1	8.0
97.5°	7.1	8.0	8.0
100°	6.3	8.0	8.9
102.5°	5.4	8.0	8.0
105°	4.5	6.3	7.1



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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°	375.3	364.6	328.9	269.9	188.6	105.4	39.3	7.1	1.8	2.7	2.7
110°	327.1	318.1	281.5	224.3	151.9	78.6	25.9	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)