

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: P551198

Luminaire Tested: **FCC-X-2-LD4-2HI-30-UNV-80-87-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: P551198
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-30-UNV-80-87-ED1D
Description: FCC CORNER MOUNT LUMINAIRE WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .375 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 3000K, AND 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

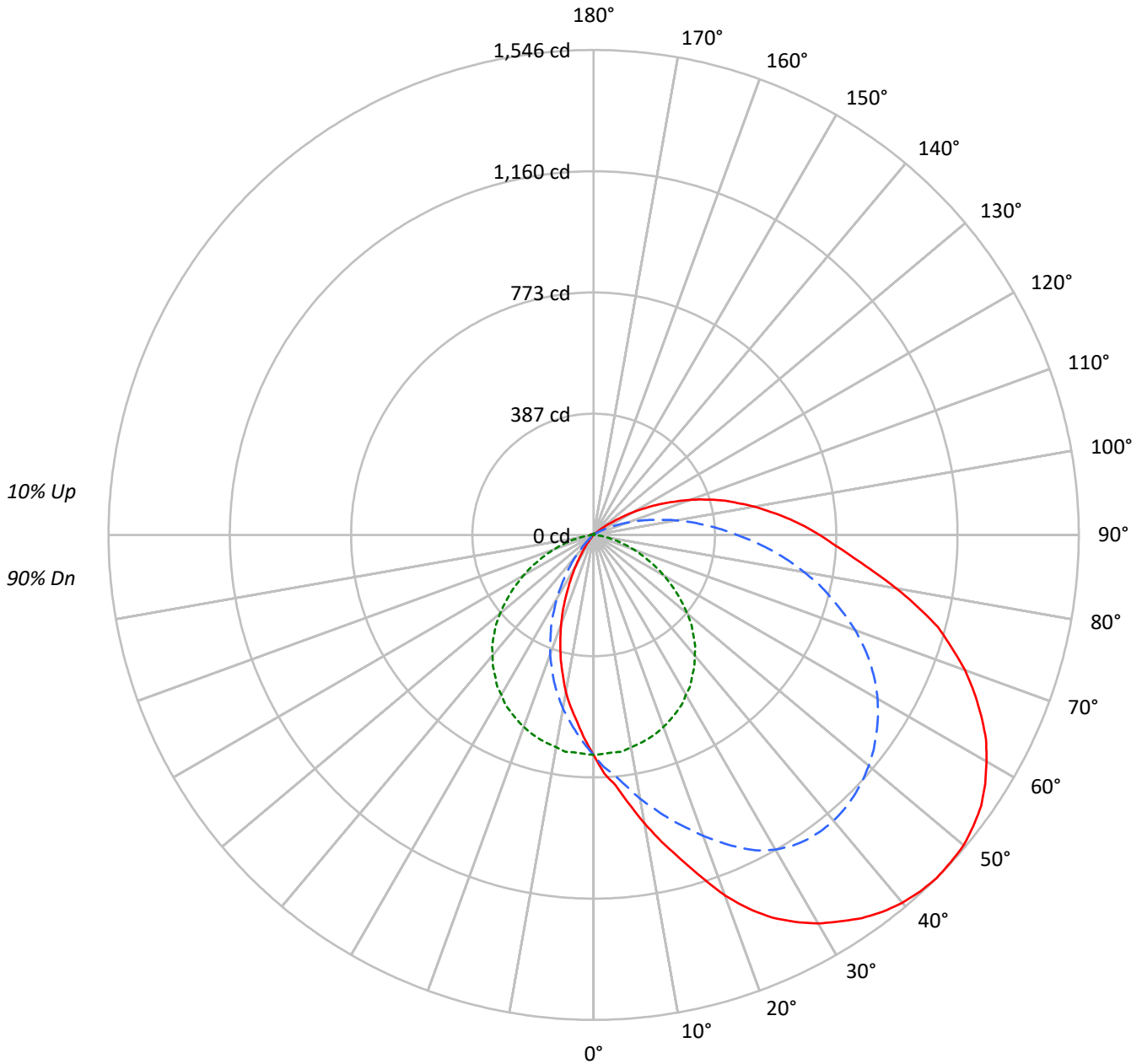
Lumens per Lamp: N/A
Luminaire Lumens: 3467.1 lumens
Efficiency: N/A
Efficacy: 80.1 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

Input Watts (W): 43.3
Input Voltage (V): NR
Input Current (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: P551198

CATALOG NUMBER: FCC-X-2-LD4-2HI-30-UNV-80-87-ED1D

Luminous Intensity Polar Plot





TEST NUMBER: P551198

CATALOG NUMBER: FCC-X-2-LD4-2HI-30-UNV-80-87-ED1D

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°	7549	7549	7549
5°	8287	7438	6205
10°	9377	7347	5115
15°	10509	7253	3986
20°	11852	7136	2935
25°	12966	6998	1927
30°	13795	6814	1086
35°	14512	6617	478
40°	15148	6374	115
45°	15693	6069	0
50°	16152	5664	0
55°	16500	5150	0
60°	16676	4553	0
65°	16745	3876	0
70°	16689	3160	0
75°	16477	2331	13
80°	15808	1426	73
85°	15280	681	99



TEST NUMBER: P551198

CATALOG NUMBER: FCC-X-2-LD4-2HI-30-UNV-80-87-ED1D

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.2	1.9
10°-20°	201.1	5.8
20°-30°	325.7	9.4
30°-40°	418.4	12.1
40°-50°	473.6	13.7
50°-60°	490.7	14.2
60°-70°	462.8	13.3
70°-80°	387.8	11.2
80°-90°	281.1	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°	594.0	17.1
0°-40°	1012.4	29.2
0°-60°	1976.8	57.0
0°-90°	3108.5	89.7
90°-120°	338.6	9.8
90°-150°	356.2	10.3
90°-180°	359.0	10.4
0°-180°	3467.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	701	701	701	701	701	
5°	800	769	696	632	599	81
15°	1069	938	673	486	406	308
25°	1346	1100	624	320	200	622
35°	1491	1186	548	155	49	935
45°	1546	1174	448	36	0	1194
55°	1507	1100	323	0	0	1346
65°	1362	974	193	0	0	1348
75°	1136	786	82	1	1	1191
85°	831	570	13	4	5	709
90°	720	457	4	5	6	395
95°	618	357	2	6	8	485
105°	425	184	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	



TEST NUMBER: P551198

CATALOG NUMBER: FCC-X-2-LD4-2HI-30-UNV-80-87-ED1D

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
0°	701.3	701.3	701.3	701.3	701.3	701.3	701.3	701.3	701.3	701.3	701.3
2.5°	760.3	759.4	756.7	752.2	746.0	735.2	726.3	718.3	707.5	698.6	681.6
5°	800.5	796.0	792.4	787.9	773.7	763.8	747.7	729.9	712.9	695.9	662.0
7.5°	864.8	857.6	852.3	839.8	820.1	797.8	772.8	755.8	744.2	696.8	638.8
10°	933.6	927.3	916.6	894.3	870.1	838.0	802.2	762.0	726.3	687.0	618.2
12.5°	1001.5	992.5	977.3	948.8	914.8	874.6	825.5	778.1	727.2	680.7	594.1
15°	1069.4	1059.5	1043.4	1008.6	963.9	911.2	851.4	791.5	731.7	672.7	569.1
17.5°	1143.5	1130.1	1106.0	1066.7	1010.4	945.2	874.6	802.2	729.9	662.9	542.3
20°	1223.0	1204.3	1178.3	1125.6	1059.5	982.7	897.8	813.0	729.0	651.3	511.9
22.5°	1289.1	1270.4	1241.8	1187.3	1107.8	1014.0	917.5	820.1	725.4	637.9	483.3
25°	1346.3	1331.1	1299.8	1237.3	1153.3	1047.0	936.2	825.5	720.1	623.6	452.9
27.5°	1391.0	1376.7	1341.8	1277.5	1191.7	1076.5	950.5	828.1	712.9	609.3	421.7
30°	1430.3	1416.0	1374.0	1307.9	1217.7	1099.7	964.8	829.0	704.0	587.8	387.7
32.5°	1460.7	1447.2	1404.4	1333.8	1235.5	1115.8	972.9	828.1	692.4	572.6	351.1
35°	1491.0	1477.6	1427.6	1352.6	1248.9	1123.0	979.1	823.7	678.1	547.6	316.3
37.5°	1514.3	1499.1	1448.1	1365.1	1255.2	1124.7	978.2	817.4	662.9	527.1	281.4
40°	1530.3	1514.3	1459.8	1372.2	1257.0	1122.1	971.1	806.7	645.0	501.2	244.8
42.5°	1541.1	1523.2	1465.1	1382.9	1253.4	1114.9	960.4	793.3	625.4	478.8	209.9
45°	1546.4	1527.7	1466.0	1374.0	1247.1	1101.5	944.3	776.3	603.9	448.5	175.1
47.5°	1543.7	1523.2	1461.5	1364.2	1235.5	1087.2	926.4	755.8	578.0	421.7	142.0
50°	1539.3	1517.8	1451.7	1351.7	1219.4	1069.4	906.8	730.8	551.2	388.6	112.6
52.5°	1525.0	1503.5	1441.0	1333.8	1200.7	1048.8	880.0	704.9	522.6	356.5	85.8
55°	1507.1	1487.5	1422.2	1317.7	1176.6	1023.8	854.9	677.2	494.9	323.4	61.6
57.5°	1479.4	1461.5	1399.0	1291.8	1152.4	996.1	827.3	646.8	460.1	290.3	42.9
60°	1445.5	1427.6	1366.8	1262.3	1124.7	964.8	796.9	615.5	428.8	257.3	26.8
62.5°	1409.7	1392.8	1329.3	1225.7	1089.9	931.8	763.8	584.3	395.8	226.9	16.1
65°	1362.4	1346.3	1289.1	1181.9	1051.5	896.0	727.2	546.7	361.8	193.0	8.9
67.5°	1312.4	1298.1	1240.0	1141.7	1006.8	856.7	689.7	510.1	326.1	163.5	4.5
70°	1258.8	1240.9	1187.3	1087.2	961.3	812.1	648.6	472.6	292.1	134.9	0.0
72.5°	1196.2	1182.8	1131.0	1036.3	908.6	764.7	606.6	431.5	254.6	107.2	0.9
75°	1135.5	1118.5	1071.1	981.8	856.7	714.7	560.1	393.1	218.0	82.2	0.9
77.5°	1056.8	1051.5	1006.8	920.2	807.6	666.4	509.2	346.6	183.1	59.0	0.9
80°	978.2	972.9	938.0	858.5	750.4	609.3	461.9	302.9	149.2	39.3	0.9
82.5°	900.5	893.4	860.3	794.2	692.4	561.0	412.7	259.1	117.9	24.1	0.9
85°	830.8	821.9	786.2	725.4	632.5	506.5	361.8	216.2	87.5	13.4	1.8
87.5°	771.0	764.7	725.4	662.9	571.8	455.6	317.1	175.1	61.6	6.3	2.7
90°	720.1	706.7	671.8	605.7	514.6	399.3	269.8	140.3	41.1	3.6	3.6
92.5°	670.0	658.4	620.0	552.1	463.7	351.1	224.2	107.2	25.9	1.8	4.5
95°	618.2	605.7	568.2	505.6	411.8	302.0	184.0	78.6	14.3	1.8	4.5
97.5°	567.3	555.7	516.4	453.8	365.4	259.1	145.6	55.4	7.1	1.8	3.6
100°	519.9	506.5	470.8	408.3	318.9	216.2	112.6	35.7	4.5	1.8	3.6
102.5°	469.9	459.2	422.6	361.8	270.7	176.0	84.0	22.3	1.8	1.8	2.7
105°	425.2	411.8	376.1	313.6	230.5	138.5	59.0	13.4	1.8	1.8	2.7



TEST NUMBER: P551198

CATALOG NUMBER: FCC-X-2-LD4-2HI-30-UNV-80-87-ED1D

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	276.9	266.2	235.0	182.2	117.0	54.5	16.1	2.7	2.7	2.7	2.7
115°	231.4	215.3	187.6	141.2	86.7	35.7	8.0	2.7	2.7	2.7	2.7
117.5°	184.9	171.5	151.9	107.2	57.2	23.2	4.5	2.7	2.7	2.7	2.7
120°	144.7	132.2	109.9	74.1	38.4	13.4	1.8	2.7	2.7	2.7	2.7
122.5°	103.6	93.8	74.1	48.2	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: P551198

CATALOG NUMBER: FCC-X-2-LD4-2HI-30-UNV-80-87-ED1D

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	701.3	701.3	701.3
2.5°	667.3	654.8	651.3
5°	631.6	611.1	599.4
7.5°	595.9	568.2	554.8
10°	562.8	523.5	509.2
12.5°	523.5	477.9	455.6
15°	486.0	427.0	405.6
17.5°	444.0	377.9	352.9
20°	404.7	328.8	302.9
22.5°	360.0	280.5	251.9
25°	319.8	232.3	200.1
27.5°	275.2	183.1	155.4
30°	233.2	140.3	112.6
32.5°	193.0	102.7	77.7
35°	155.4	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°	20.5	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



TEST NUMBER: P551198

CATALOG NUMBER: FCC-X-2-LD4-2HI-30-UNV-80-87-ED1D

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°	375.2	364.5	328.8	269.8	188.5	105.4	39.3	7.1	1.8	2.7	2.7
110°	327.0	318.0	281.4	224.2	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)