

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: P550815

Luminaire Tested: **FCC-X-2-LD4-1LO-40-UNV-80-88-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: P550815
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-LD4-1LO-40-UNV-80-88-ED1D-90
Description: FCC CORNER MOUNT LUMINAIRE WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .500 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 4000K, AND 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

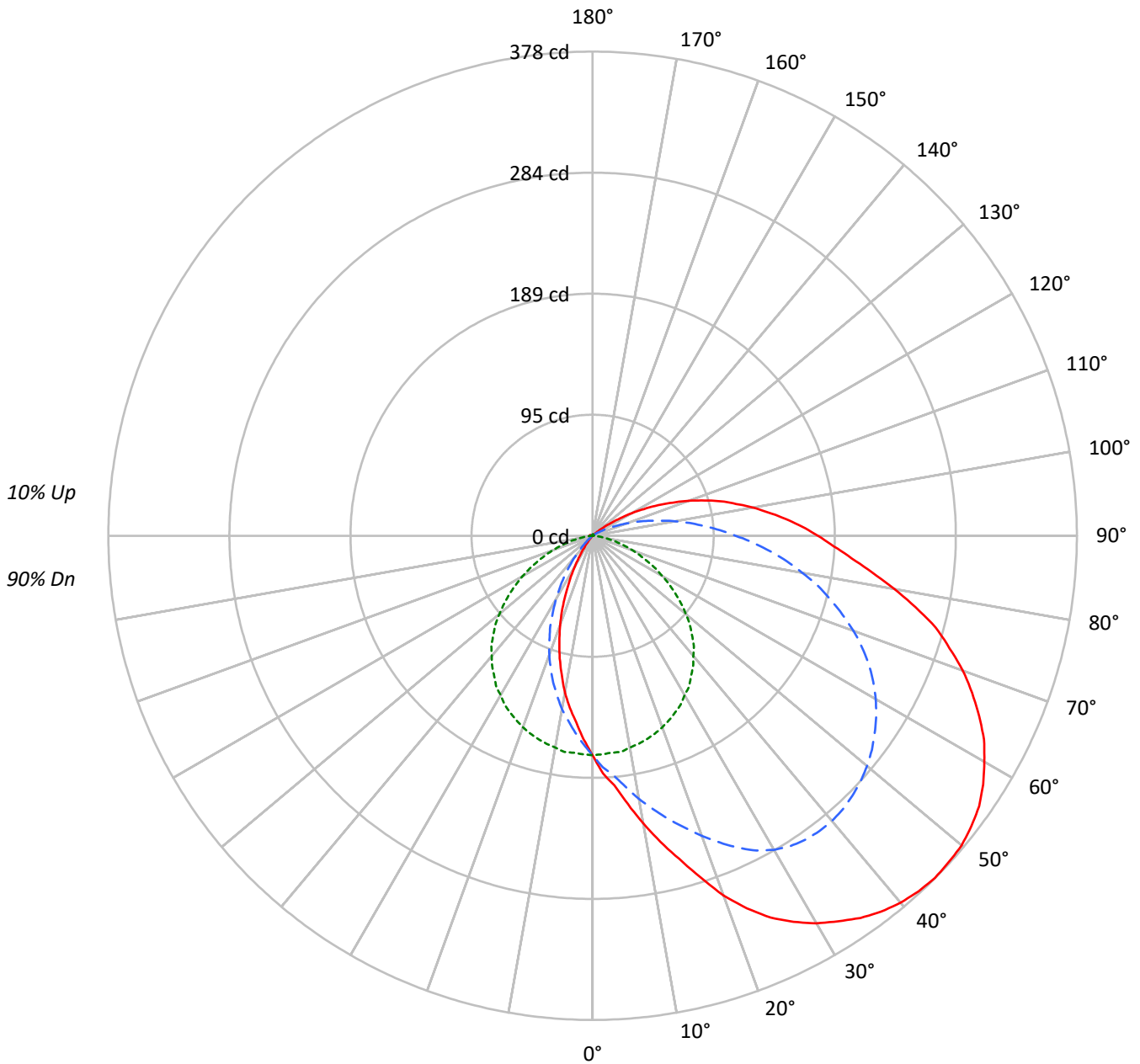
Lumens per Lamp: N/A
Luminaire Lumens: 847.1 lumens
Efficiency: N/A
Efficacy: 72.4 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

Input Watts (W): 11.7
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: P550815

CATALOG NUMBER: FCC-X-2-LD4-1LO-40-UNV-80-88-ED1D-90

Luminous Intensity Polar Plot





TEST NUMBER: P550815

CATALOG NUMBER: FCC-X-2-LD4-1LO-40-UNV-80-88-ED1D-90

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									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	90																			
1	103	96	91	86	99	93	88	83	87	83	79	81	78	74	76	73	70	67																			
2	92	82	74	67	88	79	72	65	74	67	62	69	64	59	64	60	56	53																			
3	83	71	61	54	79	68	60	53	64	56	50	59	53	48	55	50	46	43																			
4	75	62	52	44	72	60	51	44	56	48	42	52	45	40	49	43	38	36																			
5	69	55	45	38	66	53	44	37	50	42	35	46	39	34	43	38	33	30																			
6	63	49	39	32	61	47	38	32	44	36	31	42	35	29	39	33	28	26																			
7	58	44	35	28	56	43	34	28	40	32	27	38	31	26	36	29	25	23																			
8	54	40	31	25	52	39	30	24	37	29	24	34	28	23	32	26	22	20																			
9	51	36	28	22	49	35	27	22	33	26	21	32	25	20	30	24	20	18																			
10	47	33	25	20	45	33	25	19	31	24	19	29	23	18	28	22	18	16																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	1844	1844	1844
5°	2025	1817	1516
10°	2291	1794	1250
15°	2567	1772	974
20°	2896	1743	717
25°	3168	1709	471
30°	3370	1665	265
35°	3546	1617	117
40°	3701	1557	28
45°	3834	1483	0
50°	3945	1383	0
55°	4031	1258	0
60°	4074	1113	0
65°	4090	946	0
70°	4077	773	0
75°	4025	570	3
80°	3862	348	18
85°	3734	168	24



TEST NUMBER: P550815

CATALOG NUMBER: FCC-X-2-LD4-1LO-40-UNV-80-88-ED1D-90

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	16.4	1.9
10°-20°	49.1	5.8
20°-30°	79.6	9.4
30°-40°	102.2	12.1
40°-50°	115.7	13.7
50°-60°	119.9	14.2
60°-70°	113.1	13.3
70°-80°	94.7	11.2
80°-90°	68.7	8.1
90°-100°	45.1	5.3
100°-110°	26.1	3.1
110°-120°	11.5	1.4
120°-130°	3.1	0.4
130°-140°	0.7	0.1
140°-150°	0.5	0.1
150°-160°	0.3	0.0
160°-170°	0.2	0.0
170°-180°	0.1	0.0
0°-30°	145.1	17.1
0°-40°	247.3	29.2
0°-60°	482.9	57.0
0°-90°	759.4	89.6
90°-120°	82.7	9.8
90°-150°	87.1	10.3
90°-180°	88.0	10.4
0°-180°	847.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	171	171	171	171	171	
5°	196	188	170	154	146	20
15°	261	229	164	119	99	75
25°	329	269	152	78	49	152
35°	364	290	134	38	12	228
45°	378	287	110	9	0	292
55°	368	269	79	0	0	329
65°	333	238	47	0	0	329
75°	277	192	20	0	0	291
85°	203	139	3	1	1	173
90°	176	112	1	1	2	96
95°	151	87	0	2	2	118
105°	104	45	0	1	2	110
115°	56	15	1	1	1	57
125°	17	2	1	1	1	17
135°	1	1	1	1	1	2
145°	0	1	1	1	1	0
155°	0	1	1	1	0	0
165°	0	1	1	1	0	0
175°	0	1	1	1	0	0
180°	1	1	1	1	1	



TEST NUMBER: P550815

CATALOG NUMBER: FCC-X-2-LD4-1LO-40-UNV-80-88-ED1D-90

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
0°	171.3	171.3	171.3	171.3	171.3	171.3	171.3	171.3	171.3	171.3	171.3
2.5°	185.7	185.5	184.9	183.8	182.2	179.6	177.4	175.5	172.9	170.7	166.5
5°	195.6	194.5	193.6	192.5	189.0	186.6	182.7	178.3	174.2	170.0	161.7
7.5°	211.3	209.5	208.2	205.2	200.4	194.9	188.8	184.6	181.8	170.2	156.1
10°	228.1	226.5	223.9	218.5	212.6	204.7	196.0	186.2	177.4	167.8	151.0
12.5°	244.7	242.5	238.8	231.8	223.5	213.7	201.7	190.1	177.7	166.3	145.1
15°	261.2	258.8	254.9	246.4	235.5	222.6	208.0	193.4	178.7	164.3	139.0
17.5°	279.4	276.1	270.2	260.6	246.8	230.9	213.7	196.0	178.3	161.9	132.5
20°	298.8	294.2	287.9	275.0	258.8	240.1	219.3	198.6	178.1	159.1	125.1
22.5°	314.9	310.4	303.4	290.1	270.6	247.7	224.1	200.4	177.2	155.8	118.1
25°	328.9	325.2	317.6	302.3	281.8	255.8	228.7	201.7	175.9	152.3	110.7
27.5°	339.8	336.3	327.8	312.1	291.1	263.0	232.2	202.3	174.2	148.8	103.0
30°	349.4	345.9	335.7	319.5	297.5	268.7	235.7	202.5	172.0	143.6	94.7
32.5°	356.8	353.6	343.1	325.9	301.8	272.6	237.7	202.3	169.1	139.9	85.8
35°	364.3	361.0	348.8	330.4	305.1	274.3	239.2	201.2	165.7	133.8	77.3
37.5°	369.9	366.2	353.8	333.5	306.6	274.8	239.0	199.7	161.9	128.8	68.7
40°	373.9	369.9	356.6	335.2	307.1	274.1	237.2	197.1	157.6	122.4	59.8
42.5°	376.5	372.1	357.9	337.9	306.2	272.4	234.6	193.8	152.8	117.0	51.3
45°	377.8	373.2	358.2	335.7	304.7	269.1	230.7	189.7	147.5	109.6	42.8
47.5°	377.1	372.1	357.1	333.3	301.8	265.6	226.3	184.6	141.2	103.0	34.7
50°	376.0	370.8	354.7	330.2	297.9	261.2	221.5	178.5	134.7	94.9	27.5
52.5°	372.6	367.3	352.0	325.9	293.3	256.2	215.0	172.2	127.7	87.1	21.0
55°	368.2	363.4	347.5	321.9	287.4	250.1	208.9	165.4	120.9	79.0	15.1
57.5°	361.4	357.1	341.8	315.6	281.5	243.4	202.1	158.0	112.4	70.9	10.5
60°	353.1	348.8	333.9	308.4	274.8	235.7	194.7	150.4	104.8	62.9	6.5
62.5°	344.4	340.3	324.8	299.4	266.3	227.6	186.6	142.7	96.7	55.4	3.9
65°	332.8	328.9	314.9	288.7	256.9	218.9	177.7	133.6	88.4	47.1	2.2
67.5°	320.6	317.1	302.9	278.9	246.0	209.3	168.5	124.6	79.7	39.9	1.1
70°	307.5	303.2	290.1	265.6	234.8	198.4	158.5	115.5	71.4	33.0	0.0
72.5°	292.2	289.0	276.3	253.2	222.0	186.8	148.2	105.4	62.2	26.2	0.2
75°	277.4	273.3	261.7	239.9	209.3	174.6	136.8	96.0	53.3	20.1	0.2
77.5°	258.2	256.9	246.0	224.8	197.3	162.8	124.4	84.7	44.7	14.4	0.2
80°	239.0	237.7	229.2	209.7	183.3	148.8	112.8	74.0	36.4	9.6	0.2
82.5°	220.0	218.3	210.2	194.0	169.1	137.1	100.8	63.3	28.8	5.9	0.2
85°	203.0	200.8	192.1	177.2	154.5	123.7	88.4	52.8	21.4	3.3	0.4
87.5°	188.4	186.8	177.2	161.9	139.7	111.3	77.5	42.8	15.1	1.5	0.7
90°	175.9	172.6	164.1	148.0	125.7	97.6	65.9	34.3	10.0	0.9	0.9
92.5°	163.7	160.9	151.5	134.9	113.3	85.8	54.8	26.2	6.3	0.4	1.1
95°	151.0	148.0	138.8	123.5	100.6	73.8	45.0	19.2	3.5	0.4	1.1
97.5°	138.6	135.8	126.1	110.9	89.3	63.3	35.6	13.5	1.7	0.4	0.9
100°	127.0	123.7	115.0	99.7	77.9	52.8	27.5	8.7	1.1	0.4	0.9
102.5°	114.8	112.2	103.2	88.4	66.1	43.0	20.5	5.5	0.4	0.4	0.7
105°	103.9	100.6	91.9	76.6	56.3	33.8	14.4	3.3	0.4	0.4	0.7



TEST NUMBER: P550815

CATALOG NUMBER: FCC-X-2-LD4-1LO-40-UNV-80-88-ED1D-90

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	67.7	65.0	57.4	44.5	28.6	13.3	3.9	0.7	0.7	0.7	0.7
115°	56.5	52.6	45.8	34.5	21.2	8.7	2.0	0.7	0.7	0.7	0.7
117.5°	45.2	41.9	37.1	26.2	14.0	5.7	1.1	0.7	0.7	0.7	0.7
120°	35.4	32.3	26.8	18.1	9.4	3.3	0.4	0.7	0.7	0.7	0.7
122.5°	25.3	22.9	18.1	11.8	5.7	1.5	0.7	0.7	0.9	0.9	0.7
125°	16.8	15.5	12.0	7.2	3.5	0.7	0.7	0.7	0.9	0.9	0.7
127.5°	10.9	9.8	7.0	4.1	1.5	0.7	0.7	0.9	0.9	0.9	0.7
130°	6.1	5.5	4.1	2.4	0.7	0.7	0.7	0.9	0.9	0.9	0.7
132.5°	3.5	3.3	2.2	0.4	0.7	0.7	0.7	0.9	0.9	0.9	0.9
135°	0.9	0.4	0.4	0.4	0.7	0.7	0.9	0.9	1.1	1.1	0.9
137.5°	0.2	0.2	0.4	0.4	0.7	0.7	0.9	1.1	1.1	1.1	0.9
140°	0.2	0.2	0.4	0.7	0.7	0.7	0.9	1.1	1.1	1.1	0.9
142.5°	0.2	0.4	0.4	0.7	0.7	0.9	0.9	1.1	1.1	0.9	0.9
145°	0.2	0.4	0.4	0.7	0.7	0.9	0.9	1.1	0.9	0.9	0.9
147.5°	0.4	0.4	0.4	0.7	0.7	0.9	0.9	1.1	1.1	0.9	0.9
150°	0.2	0.4	0.4	0.7	0.9	0.9	0.9	1.1	0.9	0.9	0.9
152.5°	0.2	0.4	0.4	0.7	0.9	0.9	0.9	1.1	0.9	0.9	0.9
155°	0.4	0.4	0.4	0.7	0.9	0.9	0.9	1.1	0.9	0.9	1.1
157.5°	0.4	0.4	0.4	0.7	0.9	0.9	0.9	1.1	0.9	0.9	1.1
160°	0.4	0.4	0.4	0.7	0.7	0.9	0.9	0.9	0.9	0.9	0.9
162.5°	0.4	0.4	0.4	0.7	0.7	0.9	0.9	0.9	0.9	0.9	0.9
165°	0.4	0.4	0.4	0.4	0.7	0.7	0.9	0.9	0.9	0.9	0.9
167.5°	0.4	0.4	0.4	0.7	0.7	0.7	0.9	0.9	0.9	0.9	0.9
170°	0.4	0.4	0.4	0.7	0.7	0.7	0.9	1.1	1.1	1.1	1.1
172.5°	0.4	0.4	0.4	0.7	0.7	0.9	0.9	1.1	1.1	1.1	1.1
175°	0.4	0.4	0.4	0.7	0.7	0.9	0.9	1.1	1.1	1.1	1.1
177.5°	0.2	0.4	0.4	0.7	0.7	0.9	0.9	1.1	1.1	1.1	0.9
180°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7



TEST NUMBER: P550815

CATALOG NUMBER: FCC-X-2-LD4-1LO-40-UNV-80-88-ED1D-90

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	171.3	171.3	171.3
2.5°	163.0	160.0	159.1
5°	154.3	149.3	146.4
7.5°	145.6	138.8	135.5
10°	137.5	127.9	124.4
12.5°	127.9	116.8	111.3
15°	118.7	104.3	99.1
17.5°	108.5	92.3	86.2
20°	98.9	80.3	74.0
22.5°	88.0	68.5	61.5
25°	78.1	56.7	48.9
27.5°	67.2	44.7	38.0
30°	57.0	34.3	27.5
32.5°	47.1	25.1	19.0
35°	38.0	17.0	12.0
37.5°	29.2	10.5	6.1
40°	21.2	5.5	2.8
42.5°	14.2	2.6	1.5
45°	8.7	1.3	0.0
47.5°	5.0	0.0	0.0
50°	2.6	0.0	0.0
52.5°	1.1	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°	0.2	0.2	0.2
77.5°	0.2	0.4	0.7
80°	0.4	0.9	1.1
82.5°	0.9	1.1	1.1
85°	0.9	1.1	1.3
87.5°	1.1	1.3	1.5
90°	1.3	1.5	1.5
92.5°	1.3	1.7	1.7
95°	1.5	1.7	2.0
97.5°	1.7	2.0	2.0
100°	1.5	2.0	2.2
102.5°	1.3	2.0	2.0
105°	1.1	1.5	1.7



TEST NUMBER: P550815

CATALOG NUMBER: FCC-X-2-LD4-1LO-40-UNV-80-88-ED1D-90

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	0.9	1.1	1.1
115°	0.7	0.9	1.1
117.5°	0.7	0.9	0.9
120°	0.7	0.7	0.9
122.5°	0.7	0.7	0.9
125°	0.7	0.7	0.9
127.5°	0.9	0.7	0.7
130°	0.7	0.7	0.7
132.5°	0.9	0.7	0.7
135°	0.9	0.7	0.7
137.5°	0.9	0.7	0.7
140°	0.9	0.7	0.7
142.5°	0.9	0.7	0.7
145°	0.7	0.7	0.7
147.5°	0.7	0.7	0.7
150°	0.7	0.7	0.4
152.5°	0.7	0.4	0.4
155°	0.7	0.4	0.2
157.5°	0.9	0.4	0.2
160°	0.7	0.4	0.2
162.5°	0.7	0.4	0.2
165°	0.7	0.4	0.0
167.5°	0.7	0.4	0.2
170°	0.7	0.4	0.2
172.5°	0.7	0.4	0.2
175°	0.7	0.2	0.2
177.5°	0.7	0.2	0.2
180°	0.7	0.7	0.7



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	91.7	89.0	80.3	65.9	46.1	25.8	9.6	1.7	0.4	0.7	0.7
110°	79.9	77.7	68.7	54.8	37.1	19.2	6.3	1.1	0.7	0.7	0.7





107.5°	0.9	1.3	1.5
110°	0.9	1.1	1.3



(END OF REPORT)