

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: P550713

Luminaire Tested: **FCC-X-2-LD4-1LO-30-UNV-82-85-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: P550713
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-30-UNV-82-85-ED1D-90
Description: FCC CORNER MOUNT LUMINAIRE WITH .187 CLEAR PC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 3000K, AND 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

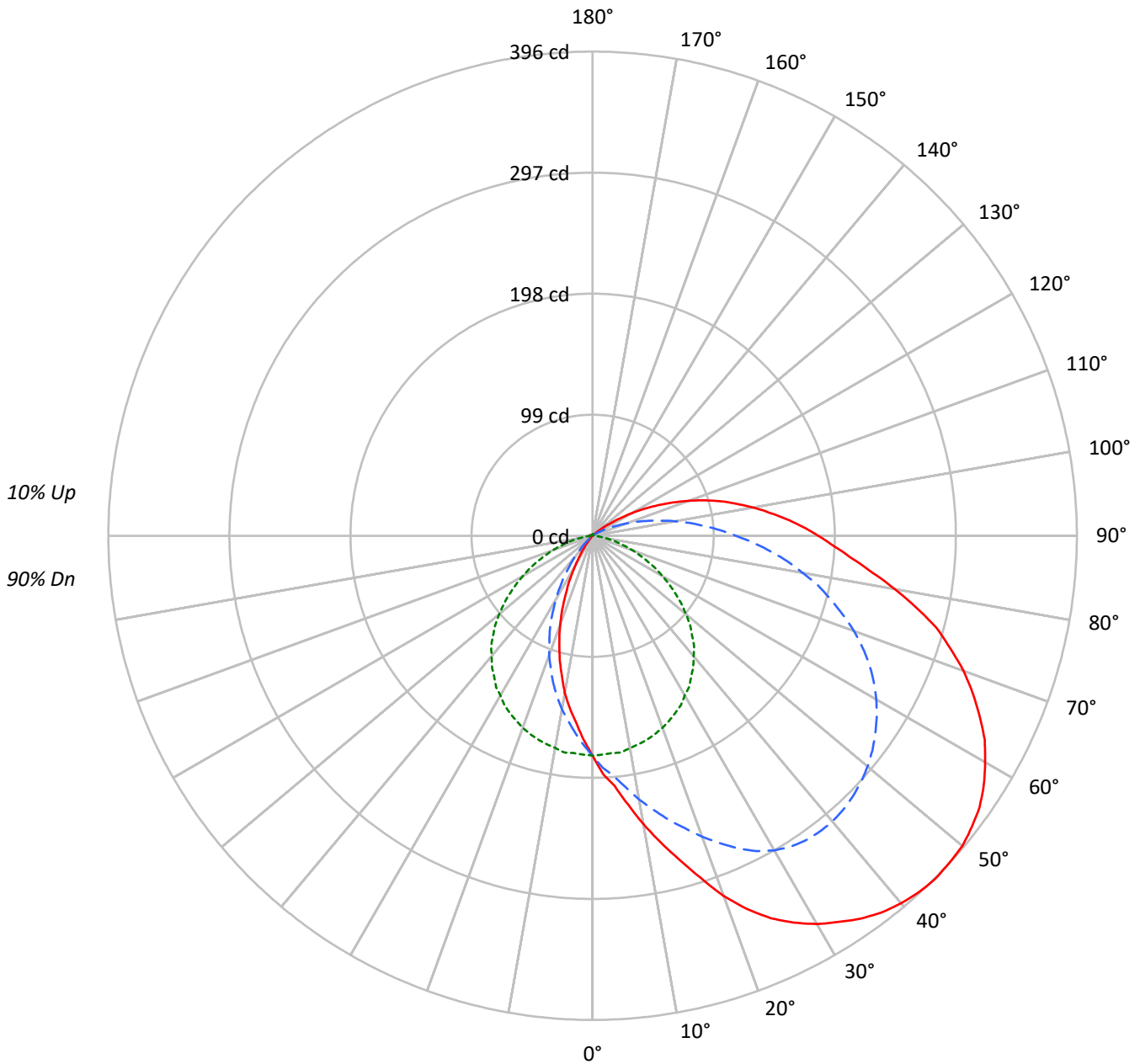
Lumens per Lamp: N/A
Luminaire Lumens: 889.0 lumens
Efficiency: N/A
Efficacy: 76.0 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

Input Watts (W): 11.7
Input Voltage (V): NR
Input Current (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: P550713

CATALOG NUMBER: FCC-X-2-LD4-1LO-30-UNV-82-85-ED1D-90

Luminous Intensity Polar Plot





TEST NUMBER: P550713

CATALOG NUMBER: FCC-X-2-LD4-1LO-30-UNV-82-85-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°	1935	1935	1935
5°	2125	1907	1591
10°	2405	1884	1312
15°	2695	1860	1022
20°	3039	1830	753
25°	3325	1794	494
30°	3537	1747	279
35°	3721	1696	123
40°	3884	1634	30
45°	4024	1556	0
50°	4142	1452	0
55°	4230	1320	0
60°	4276	1168	0
65°	4293	994	0
70°	4280	811	0
75°	4226	598	3
80°	4053	366	18
85°	3917	173	26



TEST NUMBER: P550713

CATALOG NUMBER: FCC-X-2-LD4-1LO-30-UNV-82-85-ED1D-90

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	17.2	1.9
10°-20°	51.6	5.8
20°-30°	83.5	9.4
30°-40°	107.3	12.1
40°-50°	121.5	13.7
50°-60°	125.8	14.2
60°-70°	118.7	13.3
70°-80°	99.4	11.2
80°-90°	72.1	8.1
90°-100°	47.4	5.3
100°-110°	27.4	3.1
110°-120°	12.1	1.4
120°-130°	3.3	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°	152.3	17.1
0°-40°	259.6	29.2
0°-60°	506.9	57.0
0°-90°	797.1	89.7
90°-120°	86.8	9.8
90°-150°	91.3	10.3
90°-180°	92.0	10.3
0°-180°	889.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	180	180	180	180	180	
5°	205	197	178	162	154	21
15°	274	240	172	125	104	79
25°	345	282	160	82	51	160
35°	382	304	140	40	13	240
45°	396	301	115	9	0	306
55°	386	282	83	0	0	345
65°	349	250	50	0	0	346
75°	291	202	21	0	0	305
85°	213	146	3	1	1	182
90°	185	117	1	1	2	101
95°	158	92	0	2	2	124
105°	109	47	0	1	2	115
115°	59	16	1	1	1	59
125°	18	2	1	1	1	18
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: P550713

CATALOG NUMBER: FCC-X-2-LD4-1LO-30-UNV-82-85-ED1D-90

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
0°	179.8	179.8	179.8	179.8	179.8	179.8	179.8	179.8	179.8	179.8	179.8
2.5°	194.9	194.7	194.0	192.9	191.3	188.5	186.2	184.2	181.4	179.1	174.8
5°	205.3	204.1	203.2	202.0	198.4	195.9	191.7	187.2	182.8	178.4	169.7
7.5°	221.7	219.9	218.5	215.3	210.3	204.6	198.1	193.8	190.8	178.7	163.8
10°	239.4	237.8	235.0	229.3	223.1	214.9	205.7	195.4	186.2	176.2	158.5
12.5°	256.8	254.5	250.6	243.3	234.6	224.3	211.7	199.5	186.5	174.6	152.3
15°	274.2	271.7	267.6	258.6	247.2	233.7	218.3	203.0	187.6	172.5	145.9
17.5°	293.2	289.8	283.6	273.5	259.1	242.4	224.3	205.7	187.2	170.0	139.0
20°	313.6	308.8	302.1	288.6	271.7	252.0	230.2	208.5	186.9	167.0	131.3
22.5°	330.6	325.7	318.4	304.4	284.1	260.0	235.3	210.3	186.0	163.6	123.9
25°	345.2	341.3	333.3	317.3	295.7	268.5	240.1	211.7	184.6	159.9	116.1
27.5°	356.7	353.0	344.1	327.6	305.6	276.0	243.7	212.4	182.8	156.2	108.1
30°	366.7	363.1	352.3	335.4	312.2	282.0	247.4	212.6	180.5	150.7	99.4
32.5°	374.5	371.1	360.1	342.0	316.8	286.1	249.5	212.4	177.5	146.8	90.0
35°	382.3	378.9	366.1	346.8	320.2	287.9	251.1	211.2	173.9	140.4	81.1
37.5°	388.3	384.4	371.3	350.0	321.8	288.4	250.8	209.6	170.0	135.2	72.2
40°	392.4	388.3	374.3	351.9	322.3	287.7	249.0	206.9	165.4	128.5	62.8
42.5°	395.2	390.6	375.7	354.6	321.4	285.9	246.3	203.4	160.4	122.8	53.8
45°	396.5	391.7	375.9	352.3	319.8	282.4	242.1	199.1	154.9	115.0	44.9
47.5°	395.8	390.6	374.8	349.8	316.8	278.8	237.6	193.8	148.2	108.1	36.4
50°	394.7	389.2	372.2	346.6	312.7	274.2	232.5	187.4	141.3	99.6	28.9
52.5°	391.0	385.5	369.5	342.0	307.9	268.9	225.6	180.7	134.0	91.4	22.0
55°	386.4	381.4	364.7	337.9	301.7	262.5	219.2	173.6	126.9	82.9	15.8
57.5°	379.3	374.8	358.7	331.2	295.5	255.4	212.1	165.8	118.0	74.4	11.0
60°	370.6	366.1	350.5	323.7	288.4	247.4	204.3	157.8	110.0	66.0	6.9
62.5°	361.5	357.1	340.9	314.3	279.5	238.9	195.9	149.8	101.5	58.2	4.1
65°	349.3	345.2	330.6	303.1	269.6	229.8	186.5	140.2	92.8	49.5	2.3
67.5°	336.5	332.8	318.0	292.8	258.2	219.7	176.8	130.8	83.6	41.9	1.1
70°	322.8	318.2	304.4	278.8	246.5	208.2	166.3	121.2	74.9	34.6	0.0
72.5°	306.7	303.3	290.0	265.7	233.0	196.1	155.5	110.6	65.3	27.5	0.2
75°	291.2	286.8	274.7	251.8	219.7	183.3	143.6	100.8	55.9	21.1	0.2
77.5°	271.0	269.6	258.2	235.9	207.1	170.9	130.6	88.9	47.0	15.1	0.2
80°	250.8	249.5	240.5	220.1	192.4	156.2	118.4	77.7	38.3	10.1	0.2
82.5°	230.9	229.1	220.6	203.6	177.5	143.9	105.8	66.4	30.2	6.2	0.2
85°	213.0	210.7	201.6	186.0	162.2	129.9	92.8	55.4	22.4	3.4	0.5
87.5°	197.7	196.1	186.0	170.0	146.6	116.8	81.3	44.9	15.8	1.6	0.7
90°	184.6	181.2	172.3	155.3	131.9	102.4	69.2	36.0	10.5	0.9	0.9
92.5°	171.8	168.8	159.0	141.6	118.9	90.0	57.5	27.5	6.6	0.5	1.1
95°	158.5	155.3	145.7	129.7	105.6	77.4	47.2	20.2	3.7	0.5	1.1
97.5°	145.5	142.5	132.4	116.4	93.7	66.4	37.3	14.2	1.8	0.5	0.9
100°	133.3	129.9	120.7	104.7	81.8	55.4	28.9	9.2	1.1	0.5	0.9
102.5°	120.5	117.7	108.4	92.8	69.4	45.1	21.5	5.7	0.5	0.5	0.7
105°	109.0	105.6	96.4	80.4	59.1	35.5	15.1	3.4	0.5	0.5	0.7



TEST NUMBER: P550713

CATALOG NUMBER: FCC-X-2-LD4-1LO-30-UNV-82-85-ED1D-90

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	71.0	68.3	60.2	46.7	30.0	14.0	4.1	0.7	0.7	0.7	0.7
115°	59.3	55.2	48.1	36.2	22.2	9.2	2.1	0.7	0.7	0.7	0.7
117.5°	47.4	44.0	38.9	27.5	14.7	6.0	1.1	0.7	0.7	0.7	0.7
120°	37.1	33.9	28.2	19.0	9.9	3.4	0.5	0.7	0.7	0.7	0.7
122.5°	26.6	24.1	19.0	12.4	6.0	1.6	0.7	0.7	0.9	0.9	0.7
125°	17.6	16.3	12.6	7.6	3.7	0.7	0.7	0.7	0.9	0.9	0.7
127.5°	11.5	10.3	7.3	4.4	1.6	0.7	0.7	0.9	0.9	0.9	0.7
130°	6.4	5.7	4.4	2.5	0.7	0.7	0.7	0.9	0.9	0.9	0.7
132.5°	3.7	3.4	2.3	0.5	0.7	0.7	0.7	0.9	0.9	0.9	0.9
135°	0.9	0.5	0.5	0.5	0.7	0.7	0.9	0.9	1.1	1.1	0.9
137.5°	0.2	0.2	0.5	0.5	0.7	0.7	0.9	1.1	1.1	1.1	0.9
140°	0.2	0.2	0.5	0.7	0.7	0.7	0.9	1.1	1.1	1.1	0.9
142.5°	0.2	0.5	0.5	0.7	0.7	0.9	0.9	1.1	1.1	0.9	0.9
145°	0.2	0.5	0.5	0.7	0.7	0.9	0.9	1.1	0.9	0.9	0.9
147.5°	0.5	0.5	0.5	0.7	0.7	0.9	0.9	1.1	1.1	0.9	0.9
150°	0.2	0.5	0.5	0.7	0.9	0.9	0.9	1.1	0.9	0.9	0.9
152.5°	0.2	0.5	0.5	0.7	0.9	0.9	0.9	1.1	0.9	0.9	0.9
155°	0.5	0.5	0.5	0.7	0.9	0.9	0.9	1.1	0.9	0.9	1.1
157.5°	0.5	0.5	0.5	0.7	0.9	0.9	0.9	1.1	0.9	0.9	1.1
160°	0.5	0.5	0.5	0.7	0.7	0.9	0.9	0.9	0.9	0.9	0.9
162.5°	0.5	0.5	0.5	0.7	0.7	0.9	0.9	0.9	0.9	0.9	0.9
165°	0.5	0.5	0.5	0.5	0.7	0.7	0.9	0.9	0.9	0.9	0.9
167.5°	0.5	0.5	0.5	0.7	0.7	0.7	0.9	0.9	0.9	0.9	0.9
170°	0.5	0.5	0.5	0.7	0.7	0.7	0.9	1.1	1.1	1.1	1.1
172.5°	0.5	0.5	0.5	0.7	0.7	0.9	0.9	1.1	1.1	1.1	1.1
175°	0.5	0.5	0.5	0.7	0.7	0.9	0.9	1.1	1.1	1.1	1.1
177.5°	0.2	0.5	0.5	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: P550713

CATALOG NUMBER: FCC-X-2-LD4-1LO-30-UNV-82-85-ED1D-90

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	179.8	179.8	179.8
2.5°	171.1	167.9	167.0
5°	162.0	156.7	153.7
7.5°	152.8	145.7	142.3
10°	144.3	134.2	130.6
12.5°	134.2	122.6	116.8
15°	124.6	109.5	104.0
17.5°	113.8	96.9	90.5
20°	103.8	84.3	77.7
22.5°	92.3	71.9	64.6
25°	82.0	59.6	51.3
27.5°	70.6	47.0	39.9
30°	59.8	36.0	28.9
32.5°	49.5	26.3	19.9
35°	39.9	17.9	12.6
37.5°	30.7	11.0	6.4
40°	22.2	5.7	3.0
42.5°	14.9	2.7	1.6
45°	9.2	1.4	0.0
47.5°	5.3	0.0	0.0
50°	2.7	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	0.5	0.7
80°	0.5	0.9	1.1
82.5°	0.9	1.1	1.1
85°	0.9	1.1	1.4
87.5°	1.1	1.4	1.6
90°	1.4	1.6	1.6
92.5°	1.4	1.8	1.8
95°	1.6	1.8	2.1
97.5°	1.8	2.1	2.1
100°	1.6	2.1	2.3
102.5°	1.4	2.1	2.1
105°	1.1	1.6	1.8



TEST NUMBER: P550713

CATALOG NUMBER: FCC-X-2-LD4-1LO-30-UNV-82-85-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	0.5
152.5°	0.7	0.5	0.5
155°	0.7	0.5	0.2
157.5°	0.9	0.5	0.2
160°	0.7	0.5	0.2
162.5°	0.7	0.5	0.2
165°	0.7	0.5	0.0
167.5°	0.7	0.5	0.2
170°	0.7	0.5	0.2
172.5°	0.7	0.5	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°	96.2	93.5	84.3	69.2	48.3	27.0	10.1	1.8	0.5	0.7	0.7
110°	83.8	81.6	72.2	57.5	38.9	20.2	6.6	1.1	0.7	0.7	0.7





107.5°	0.9	1.4	1.6
110°	0.9	1.1	1.4



(END OF REPORT)