

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: P550689

Luminaire Tested: **FCC-X-2-LD4-1LO-30-UNV-80-94-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: P550689
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-80-94-ED1D-90
Description: FCC CORNER MOUNT LUMINAIRE WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES AND 3000K, AND 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

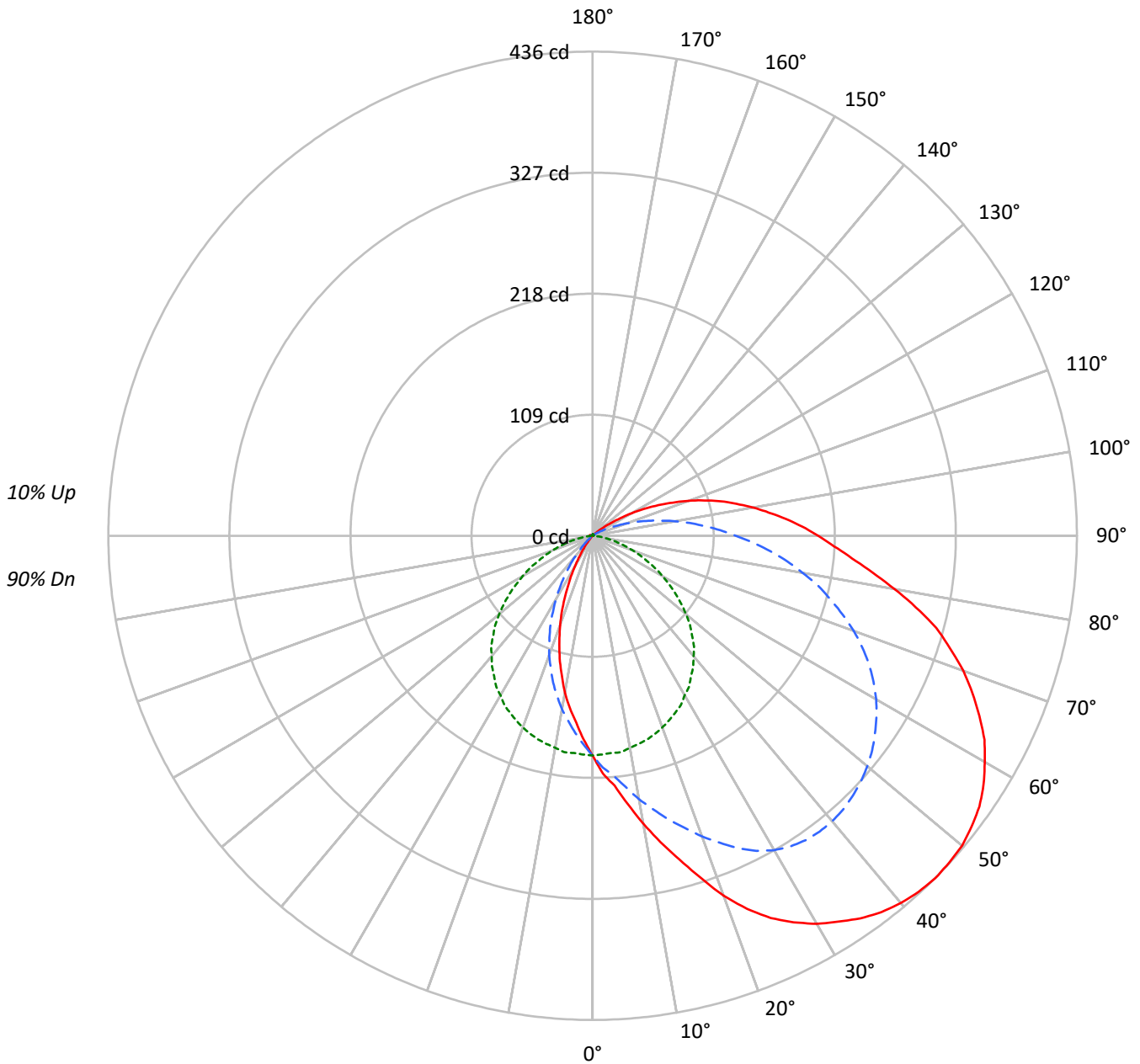
Lumens per Lamp: N/A
Luminaire Lumens: 978.1 lumens
Efficiency: N/A
Efficacy: 83.6 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

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: P550689

CATALOG NUMBER: FCC-X-2-LD4-1LO-30-UNV-80-94-ED1D-90

Luminous Intensity Polar Plot





TEST NUMBER: P550689

CATALOG NUMBER: FCC-X-2-LD4-1LO-30-UNV-80-94-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°	2129	2129	2129
5°	2338	2098	1751
10°	2645	2073	1442
15°	2965	2047	1124
20°	3343	2013	828
25°	3658	1974	543
30°	3892	1922	307
35°	4094	1867	135
40°	4273	1798	33
45°	4427	1712	0
50°	4556	1597	0
55°	4654	1452	0
60°	4704	1285	0
65°	4723	1093	0
70°	4708	893	0
75°	4648	658	4
80°	4459	403	21
85°	4311	193	28



TEST NUMBER: P550689

CATALOG NUMBER: FCC-X-2-LD4-1LO-30-UNV-80-94-ED1D-90

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	18.9	1.9
10°-20°	56.7	5.8
20°-30°	91.9	9.4
30°-40°	118.0	12.1
40°-50°	133.6	13.7
50°-60°	138.4	14.2
60°-70°	130.5	13.3
70°-80°	109.4	11.2
80°-90°	79.3	8.1
90°-100°	52.1	5.3
100°-110°	30.1	3.1
110°-120°	13.3	1.4
120°-130°	3.6	0.4
130°-140°	0.8	0.1
140°-150°	0.6	0.1
150°-160°	0.4	0.0
160°-170°	0.2	0.0
170°-180°	0.1	0.0
0°-30°	167.6	17.1
0°-40°	285.6	29.2
0°-60°	557.6	57.0
0°-90°	876.9	89.7
90°-120°	95.5	9.8
90°-150°	100.5	10.3
90°-180°	101.0	10.3
0°-180°	978.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	198	198	198	198	198	
5°	226	217	196	178	169	23
15°	302	264	190	137	114	87
25°	380	310	176	90	56	176
35°	421	335	154	44	14	264
45°	436	331	126	10	0	337
55°	425	310	91	0	0	380
65°	384	275	54	0	0	380
75°	320	222	23	0	0	336
85°	234	161	4	1	2	200
90°	203	129	1	2	2	111
95°	174	101	0	2	2	137
105°	120	52	0	1	2	127
115°	65	17	1	1	1	65
125°	19	2	1	1	1	19
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: P550689

CATALOG NUMBER: FCC-X-2-LD4-1LO-30-UNV-80-94-ED1D-90

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
0°	197.8	197.8	197.8	197.8	197.8	197.8	197.8	197.8	197.8	197.8	197.8
2.5°	214.5	214.2	213.5	212.2	210.4	207.4	204.9	202.6	199.6	197.1	192.3
5°	225.8	224.5	223.5	222.3	218.2	215.5	210.9	205.9	201.1	196.3	186.7
7.5°	243.9	241.9	240.4	236.9	231.3	225.0	218.0	213.2	209.9	196.6	180.2
10°	263.3	261.6	258.6	252.3	245.5	236.4	226.3	215.0	204.9	193.8	174.4
12.5°	282.5	280.0	275.7	267.6	258.1	246.7	232.9	219.5	205.1	192.0	167.6
15°	301.7	298.9	294.3	284.5	271.9	257.0	240.2	223.3	206.4	189.8	160.5
17.5°	322.6	318.8	312.0	300.9	285.0	266.6	246.7	226.3	205.9	187.0	153.0
20°	345.0	339.7	332.4	317.5	298.9	277.2	253.3	229.3	205.6	183.7	144.4
22.5°	363.6	358.4	350.3	334.9	312.5	286.0	258.8	231.3	204.6	179.9	136.3
25°	379.8	375.5	366.7	349.0	325.3	295.4	264.1	232.9	203.1	175.9	127.8
27.5°	392.4	388.3	378.5	360.4	336.2	303.7	268.1	233.6	201.1	171.9	118.9
30°	403.5	399.4	387.6	368.9	343.5	310.2	272.2	233.9	198.6	165.8	109.4
32.5°	412.0	408.3	396.2	376.2	348.5	314.8	274.4	233.6	195.3	161.5	99.0
35°	420.6	416.8	402.7	381.5	352.3	316.8	276.2	232.4	191.3	154.5	89.2
37.5°	427.2	422.9	408.5	385.1	354.1	317.3	275.9	230.6	187.0	148.7	79.4
40°	431.7	427.2	411.8	387.1	354.6	316.5	273.9	227.6	181.9	141.4	69.1
42.5°	434.7	429.7	413.3	390.1	353.6	314.5	270.9	223.8	176.4	135.1	59.2
45°	436.2	430.9	413.5	387.6	351.8	310.7	266.4	219.0	170.4	126.5	49.4
47.5°	435.5	429.7	412.3	384.8	348.5	306.7	261.3	213.2	163.0	118.9	40.1
50°	434.2	428.2	409.5	381.3	344.0	301.7	255.8	206.1	155.5	109.6	31.8
52.5°	430.2	424.1	406.5	376.2	338.7	295.9	248.2	198.8	147.4	100.6	24.2
55°	425.1	419.6	401.2	371.7	331.9	288.8	241.2	191.0	139.6	91.2	17.4
57.5°	417.3	412.3	394.6	364.4	325.1	281.0	233.4	182.5	129.8	81.9	12.1
60°	407.7	402.7	385.6	356.1	317.3	272.2	224.8	173.6	121.0	72.6	7.6
62.5°	397.7	392.9	375.0	345.8	307.4	262.8	215.5	164.8	111.6	64.0	4.5
65°	384.3	379.8	363.6	333.4	296.6	252.8	205.1	154.2	102.1	54.4	2.5
67.5°	370.2	366.2	349.8	322.1	284.0	241.7	194.5	143.9	92.0	46.1	1.3
70°	355.1	350.0	334.9	306.7	271.2	229.1	183.0	133.3	82.4	38.1	0.0
72.5°	337.4	333.7	319.0	292.3	256.3	215.7	171.1	121.7	71.8	30.2	0.3
75°	320.3	315.5	302.2	277.0	241.7	201.6	158.0	110.9	61.5	23.2	0.3
77.5°	298.1	296.6	284.0	259.6	227.8	188.0	143.6	97.8	51.7	16.6	0.3
80°	275.9	274.4	264.6	242.2	211.7	171.9	130.3	85.4	42.1	11.1	0.3
82.5°	254.0	252.0	242.7	224.0	195.3	158.3	116.4	73.1	33.3	6.8	0.3
85°	234.4	231.8	221.8	204.6	178.4	142.9	102.1	61.0	24.7	3.8	0.5
87.5°	217.5	215.7	204.6	187.0	161.3	128.5	89.5	49.4	17.4	1.8	0.8
90°	203.1	199.3	189.5	170.9	145.2	112.6	76.1	39.6	11.6	1.0	1.0
92.5°	189.0	185.7	174.9	155.7	130.8	99.0	63.3	30.2	7.3	0.5	1.3
95°	174.4	170.9	160.3	142.6	116.2	85.2	51.9	22.2	4.0	0.5	1.3
97.5°	160.0	156.7	145.7	128.0	103.1	73.1	41.1	15.6	2.0	0.5	1.0
100°	146.7	142.9	132.8	115.2	90.0	61.0	31.8	10.1	1.3	0.5	1.0
102.5°	132.6	129.5	119.2	102.1	76.4	49.6	23.7	6.3	0.5	0.5	0.8
105°	120.0	116.2	106.1	88.5	65.0	39.1	16.6	3.8	0.5	0.5	0.8



TEST NUMBER: P550689

CATALOG NUMBER: FCC-X-2-LD4-1LO-30-UNV-80-94-ED1D-90

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	78.1	75.1	66.3	51.4	33.0	15.4	4.5	0.8	0.8	0.8	0.8
115°	65.3	60.7	52.9	39.8	24.4	10.1	2.3	0.8	0.8	0.8	0.8
117.5°	52.2	48.4	42.8	30.2	16.1	6.6	1.3	0.8	0.8	0.8	0.8
120°	40.8	37.3	31.0	20.9	10.8	3.8	0.5	0.8	0.8	0.8	0.8
122.5°	29.2	26.5	20.9	13.6	6.6	1.8	0.8	0.8	1.0	1.0	0.8
125°	19.4	17.9	13.9	8.3	4.0	0.8	0.8	0.8	1.0	1.0	0.8
127.5°	12.6	11.3	8.1	4.8	1.8	0.8	0.8	1.0	1.0	1.0	0.8
130°	7.1	6.3	4.8	2.8	0.8	0.8	0.8	1.0	1.0	1.0	0.8
132.5°	4.0	3.8	2.5	0.5	0.8	0.8	0.8	1.0	1.0	1.0	1.0
135°	1.0	0.5	0.5	0.5	0.8	0.8	1.0	1.0	1.3	1.3	1.0
137.5°	0.3	0.3	0.5	0.5	0.8	0.8	1.0	1.3	1.3	1.3	1.0
140°	0.3	0.3	0.5	0.8	0.8	0.8	1.0	1.3	1.3	1.3	1.0
142.5°	0.3	0.5	0.5	0.8	0.8	1.0	1.0	1.3	1.3	1.0	1.0
145°	0.3	0.5	0.5	0.8	0.8	1.0	1.0	1.3	1.0	1.0	1.0
147.5°	0.5	0.5	0.5	0.8	0.8	1.0	1.0	1.3	1.3	1.0	1.0
150°	0.3	0.5	0.5	0.8	1.0	1.0	1.0	1.3	1.0	1.0	1.0
152.5°	0.3	0.5	0.5	0.8	1.0	1.0	1.0	1.3	1.0	1.0	1.0
155°	0.5	0.5	0.5	0.8	1.0	1.0	1.0	1.3	1.0	1.0	1.3
157.5°	0.5	0.5	0.5	0.8	1.0	1.0	1.0	1.3	1.0	1.0	1.3
160°	0.5	0.5	0.5	0.8	0.8	1.0	1.0	1.0	1.0	1.0	1.0
162.5°	0.5	0.5	0.5	0.8	0.8	1.0	1.0	1.0	1.0	1.0	1.0
165°	0.5	0.5	0.5	0.5	0.8	0.8	1.0	1.0	1.0	1.0	1.0
167.5°	0.5	0.5	0.5	0.8	0.8	0.8	1.0	1.0	1.0	1.0	1.0
170°	0.5	0.5	0.5	0.8	0.8	0.8	1.0	1.3	1.3	1.3	1.3
172.5°	0.5	0.5	0.5	0.8	0.8	1.0	1.0	1.3	1.3	1.3	1.3
175°	0.5	0.5	0.5	0.8	0.8	1.0	1.0	1.3	1.3	1.3	1.3
177.5°	0.3	0.5	0.5	0.8	0.8	1.0	1.0	1.3	1.3	1.3	1.0
180°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8



TEST NUMBER: P550689

CATALOG NUMBER: FCC-X-2-LD4-1LO-30-UNV-80-94-ED1D-90

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	197.8	197.8	197.8
2.5°	188.2	184.7	183.7
5°	178.2	172.4	169.1
7.5°	168.1	160.3	156.5
10°	158.8	147.7	143.6
12.5°	147.7	134.8	128.5
15°	137.1	120.5	114.4
17.5°	125.2	106.6	99.5
20°	114.2	92.7	85.4
22.5°	101.6	79.1	71.1
25°	90.2	65.5	56.4
27.5°	77.6	51.7	43.8
30°	65.8	39.6	31.8
32.5°	54.4	29.0	21.9
35°	43.8	19.7	13.9
37.5°	33.8	12.1	7.1
40°	24.4	6.3	3.3
42.5°	16.4	3.0	1.8
45°	10.1	1.5	0.0
47.5°	5.8	0.0	0.0
50°	3.0	0.0	0.0
52.5°	1.3	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°	0.3	0.3	0.3
77.5°	0.3	0.5	0.8
80°	0.5	1.0	1.3
82.5°	1.0	1.3	1.3
85°	1.0	1.3	1.5
87.5°	1.3	1.5	1.8
90°	1.5	1.8	1.8
92.5°	1.5	2.0	2.0
95°	1.8	2.0	2.3
97.5°	2.0	2.3	2.3
100°	1.8	2.3	2.5
102.5°	1.5	2.3	2.3
105°	1.3	1.8	2.0



TEST NUMBER: P550689

CATALOG NUMBER: FCC-X-2-LD4-1LO-30-UNV-80-94-ED1D-90

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	1.0	1.3	1.3
115°	0.8	1.0	1.3
117.5°	0.8	1.0	1.0
120°	0.8	0.8	1.0
122.5°	0.8	0.8	1.0
125°	0.8	0.8	1.0
127.5°	1.0	0.8	0.8
130°	0.8	0.8	0.8
132.5°	1.0	0.8	0.8
135°	1.0	0.8	0.8
137.5°	1.0	0.8	0.8
140°	1.0	0.8	0.8
142.5°	1.0	0.8	0.8
145°	0.8	0.8	0.8
147.5°	0.8	0.8	0.8
150°	0.8	0.8	0.5
152.5°	0.8	0.5	0.5
155°	0.8	0.5	0.3
157.5°	1.0	0.5	0.3
160°	0.8	0.5	0.3
162.5°	0.8	0.5	0.3
165°	0.8	0.5	0.0
167.5°	0.8	0.5	0.3
170°	0.8	0.5	0.3
172.5°	0.8	0.5	0.3
175°	0.8	0.3	0.3
177.5°	0.8	0.3	0.3
180°	0.8	0.8	0.8



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	105.8	102.8	92.7	76.1	53.2	29.7	11.1	2.0	0.5	0.8	0.8
110°	92.2	89.7	79.4	63.3	42.8	22.2	7.3	1.3	0.8	0.8	0.8





107.5°	1.0	1.5	1.8
110°	1.0	1.3	1.5



(END OF REPORT)