

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: P550737

Luminaire Tested: **FCC-X-2-LD4-1LO-30-UNV-93-94-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: P550737
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-93-94-ED1D-90
Description: FCC CORNER MOUNT LUMINAIRE WITH .156 CLEAR TEMPERED GLASS 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

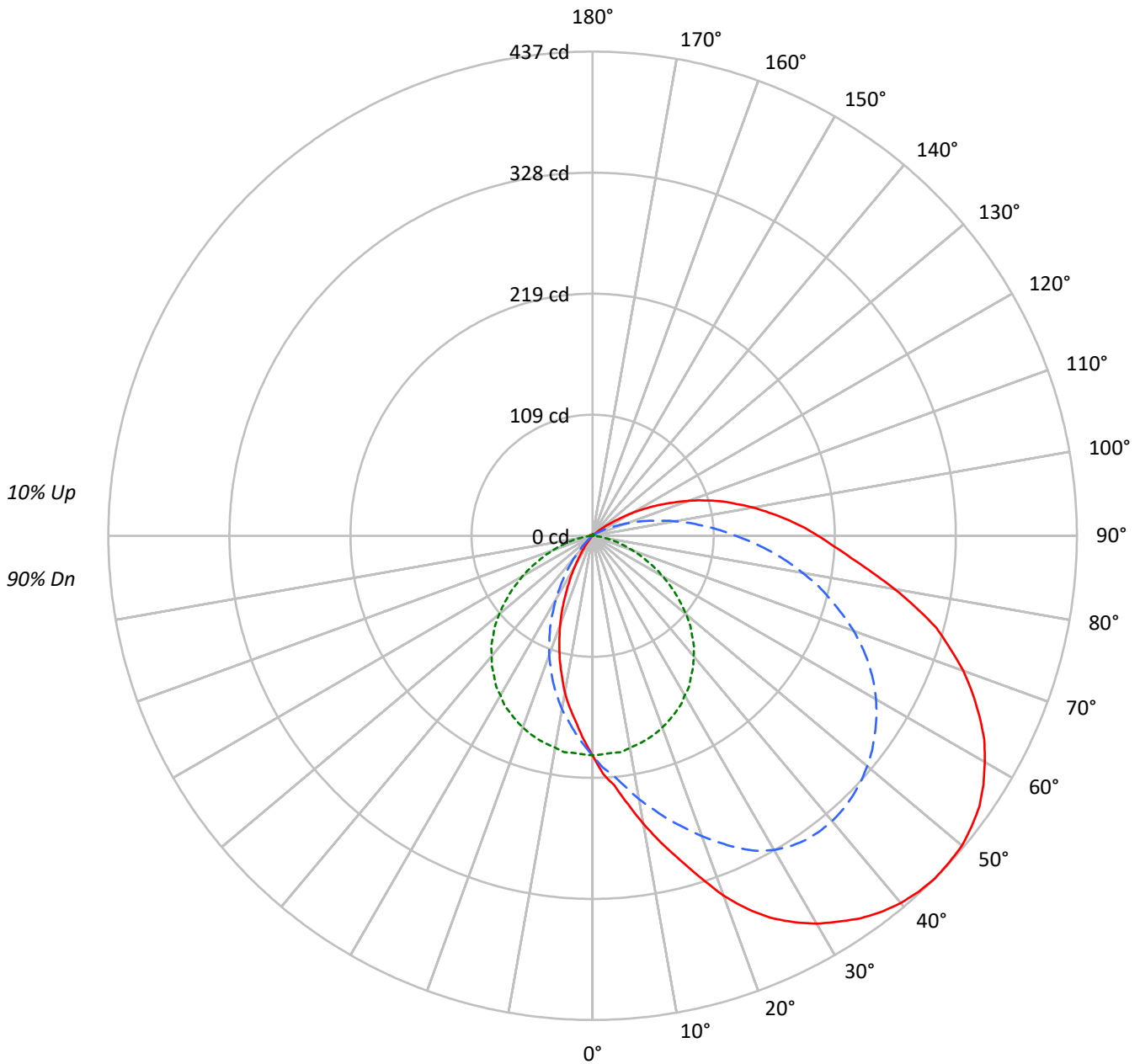
Lumens per Lamp: N/A
Luminaire Lumens: 980.1 lumens
Efficiency: N/A
Efficacy: 83.8 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

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: P550737

CATALOG NUMBER: FCC-X-2-LD4-1LO-30-UNV-93-94-ED1D-90

Luminous Intensity Polar Plot





TEST NUMBER: P550737

CATALOG NUMBER: FCC-X-2-LD4-1LO-30-UNV-93-94-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°	2133	2133	2133
5°	2343	2102	1754
10°	2651	2077	1445
15°	2971	2050	1126
20°	3350	2017	830
25°	3666	1979	545
30°	3899	1927	307
35°	4102	1870	135
40°	4282	1802	33
45°	4436	1716	0
50°	4566	1600	0
55°	4664	1455	0
60°	4714	1287	0
65°	4733	1095	0
70°	4717	893	0
75°	4658	658	4
80°	4468	403	21
85°	4318	193	28



TEST NUMBER: P550737

CATALOG NUMBER: FCC-X-2-LD4-1LO-30-UNV-93-94-ED1D-90

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	19.0	1.9
10°-20°	56.9	5.8
20°-30°	92.1	9.4
30°-40°	118.3	12.1
40°-50°	133.9	13.7
50°-60°	138.7	14.2
60°-70°	130.8	13.3
70°-80°	109.6	11.2
80°-90°	79.5	8.1
90°-100°	52.2	5.3
100°-110°	30.2	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°	167.9	17.1
0°-40°	286.2	29.2
0°-60°	558.8	57.0
0°-90°	878.7	89.7
90°-120°	95.7	9.8
90°-150°	100.7	10.3
90°-180°	101.0	10.3
0°-180°	980.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	198	198	198	198	198	
5°	226	217	197	178	169	23
15°	302	265	190	137	115	87
25°	381	311	176	90	57	176
35°	422	335	155	44	14	264
45°	437	332	127	10	0	337
55°	426	311	91	0	0	380
65°	385	275	54	0	0	381
75°	321	222	23	0	0	337
85°	235	161	4	1	2	201
90°	204	129	1	2	2	112
95°	175	101	0	2	2	137
105°	120	52	0	1	2	127
115°	65	17	1	1	1	66
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: P550737

CATALOG NUMBER: FCC-X-2-LD4-1LO-30-UNV-93-94-ED1D-90

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
0°	198.2	198.2	198.2	198.2	198.2	198.2	198.2	198.2	198.2	198.2	198.2
2.5°	214.9	214.6	213.9	212.6	210.9	207.8	205.3	203.0	200.0	197.5	192.7
5°	226.3	225.0	224.0	222.7	218.7	215.9	211.4	206.3	201.5	196.7	187.1
7.5°	244.4	242.4	240.9	237.4	231.8	225.5	218.4	213.6	210.4	197.0	180.6
10°	263.9	262.1	259.1	252.8	246.0	236.9	226.8	215.4	205.3	194.2	174.7
12.5°	283.1	280.6	276.3	268.2	258.6	247.2	233.3	219.9	205.6	192.4	167.9
15°	302.3	299.5	294.9	285.1	272.5	257.6	240.7	223.7	206.8	190.1	160.9
17.5°	323.2	319.4	312.6	301.5	285.6	267.2	247.2	226.8	206.3	187.4	153.3
20°	345.7	340.4	333.1	318.2	299.5	277.8	253.8	229.8	206.1	184.1	144.7
22.5°	364.4	359.1	351.0	335.6	313.1	286.6	259.3	231.8	205.0	180.3	136.6
25°	380.6	376.3	367.4	349.7	326.0	296.0	264.6	233.3	203.5	176.3	128.0
27.5°	393.2	389.1	379.3	361.1	336.9	304.3	268.7	234.1	201.5	172.2	119.2
30°	404.3	400.2	388.4	369.7	344.2	310.9	272.7	234.3	199.0	166.2	109.6
32.5°	412.9	409.1	397.0	377.0	349.2	315.4	275.0	234.1	195.7	161.9	99.2
35°	421.5	417.7	403.5	382.3	353.0	317.4	276.8	232.8	191.7	154.8	89.4
37.5°	428.0	423.7	409.3	385.9	354.8	317.9	276.5	231.1	187.4	149.0	79.5
40°	432.6	428.0	412.6	387.9	355.3	317.2	274.5	228.0	182.3	141.7	69.2
42.5°	435.6	430.6	414.1	390.9	354.3	315.1	271.5	224.2	176.8	135.4	59.3
45°	437.1	431.8	414.4	388.4	352.5	311.4	266.9	219.4	170.7	126.8	49.5
47.5°	436.4	430.6	413.1	385.6	349.2	307.3	261.9	213.6	163.4	119.2	40.2
50°	435.1	429.0	410.3	382.1	344.7	302.3	256.3	206.6	155.8	109.8	31.8
52.5°	431.1	425.0	407.3	377.0	339.4	296.5	248.7	199.2	147.7	100.8	24.2
55°	426.0	420.5	402.0	372.5	332.6	289.4	241.7	191.4	139.9	91.4	17.4
57.5°	418.2	413.1	395.5	365.1	325.8	281.6	233.8	182.8	130.0	82.1	12.1
60°	408.6	403.5	386.4	356.8	317.9	272.7	225.3	174.0	121.2	72.7	7.6
62.5°	398.5	393.7	375.8	346.5	308.1	263.4	215.9	165.1	111.9	64.1	4.5
65°	385.1	380.6	364.4	334.1	297.2	253.3	205.6	154.5	102.3	54.5	2.5
67.5°	371.0	366.9	350.5	322.7	284.6	242.2	194.9	144.2	92.2	46.2	1.3
70°	355.8	350.8	335.6	307.3	271.7	229.5	183.3	133.6	82.6	38.1	0.0
72.5°	338.1	334.3	319.7	292.9	256.8	216.2	171.5	122.0	72.0	30.3	0.3
75°	321.0	316.2	302.8	277.5	242.2	202.0	158.3	111.1	61.6	23.2	0.3
77.5°	298.7	297.2	284.6	260.1	228.3	188.4	143.9	98.0	51.8	16.7	0.3
80°	276.5	275.0	265.1	242.7	212.1	172.2	130.6	85.6	42.2	11.1	0.3
82.5°	254.5	252.5	243.2	224.5	195.7	158.6	116.7	73.2	33.3	6.8	0.3
85°	234.8	232.3	222.2	205.0	178.8	143.2	102.3	61.1	24.7	3.8	0.5
87.5°	217.9	216.2	205.0	187.4	161.6	128.8	89.6	49.5	17.4	1.8	0.8
90°	203.5	199.7	189.9	171.2	145.5	112.9	76.3	39.6	11.6	1.0	1.0
92.5°	189.4	186.1	175.3	156.1	131.1	99.2	63.4	30.3	7.3	0.5	1.3
95°	174.7	171.2	160.6	142.9	116.4	85.4	52.0	22.2	4.0	0.5	1.3
97.5°	160.4	157.1	146.0	128.3	103.3	73.2	41.2	15.7	2.0	0.5	1.0
100°	147.0	143.2	133.1	115.4	90.2	61.1	31.8	10.1	1.3	0.5	1.0
102.5°	132.8	129.8	119.4	102.3	76.5	49.7	23.7	6.3	0.5	0.5	0.8
105°	120.2	116.4	106.3	88.6	65.2	39.1	16.7	3.8	0.5	0.5	0.8



TEST NUMBER: P550737

CATALOG NUMBER: FCC-X-2-LD4-1LO-30-UNV-93-94-ED1D-90

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	78.3	75.3	66.4	51.5	33.1	15.4	4.5	0.8	0.8	0.8	0.8
115°	65.4	60.9	53.0	39.9	24.5	10.1	2.3	0.8	0.8	0.8	0.8
117.5°	52.3	48.5	42.9	30.3	16.2	6.6	1.3	0.8	0.8	0.8	0.8
120°	40.9	37.4	31.1	21.0	10.9	3.8	0.5	0.8	0.8	0.8	0.8
122.5°	29.3	26.5	21.0	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	11.4	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: P550737

CATALOG NUMBER: FCC-X-2-LD4-1LO-30-UNV-93-94-ED1D-90

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	198.2	198.2	198.2
2.5°	188.6	185.1	184.1
5°	178.5	172.7	169.4
7.5°	168.4	160.6	156.8
10°	159.1	148.0	143.9
12.5°	148.0	135.1	128.8
15°	137.4	120.7	114.6
17.5°	125.5	106.8	99.7
20°	114.4	92.9	85.6
22.5°	101.8	79.3	71.2
25°	90.4	65.7	56.6
27.5°	77.8	51.8	43.9
30°	65.9	39.6	31.8
32.5°	54.5	29.0	22.0
35°	43.9	19.7	13.9
37.5°	33.8	12.1	7.1
40°	24.5	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: P550737

CATALOG NUMBER: FCC-X-2-LD4-1LO-30-UNV-93-94-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°	106.1	103.0	92.9	76.3	53.3	29.8	11.1	2.0	0.5	0.8	0.8
110°	92.4	89.9	79.5	63.4	42.9	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)