

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: P550754

Luminaire Tested: **FCC-X-2-LD4-1LO-35-UNV-80-94-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: P550754  
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-35-UNV-80-94-ED1D  
Description: FCC CORNER MOUNT LUMINAIRE WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES AND 3500K, AND 80 CRI LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

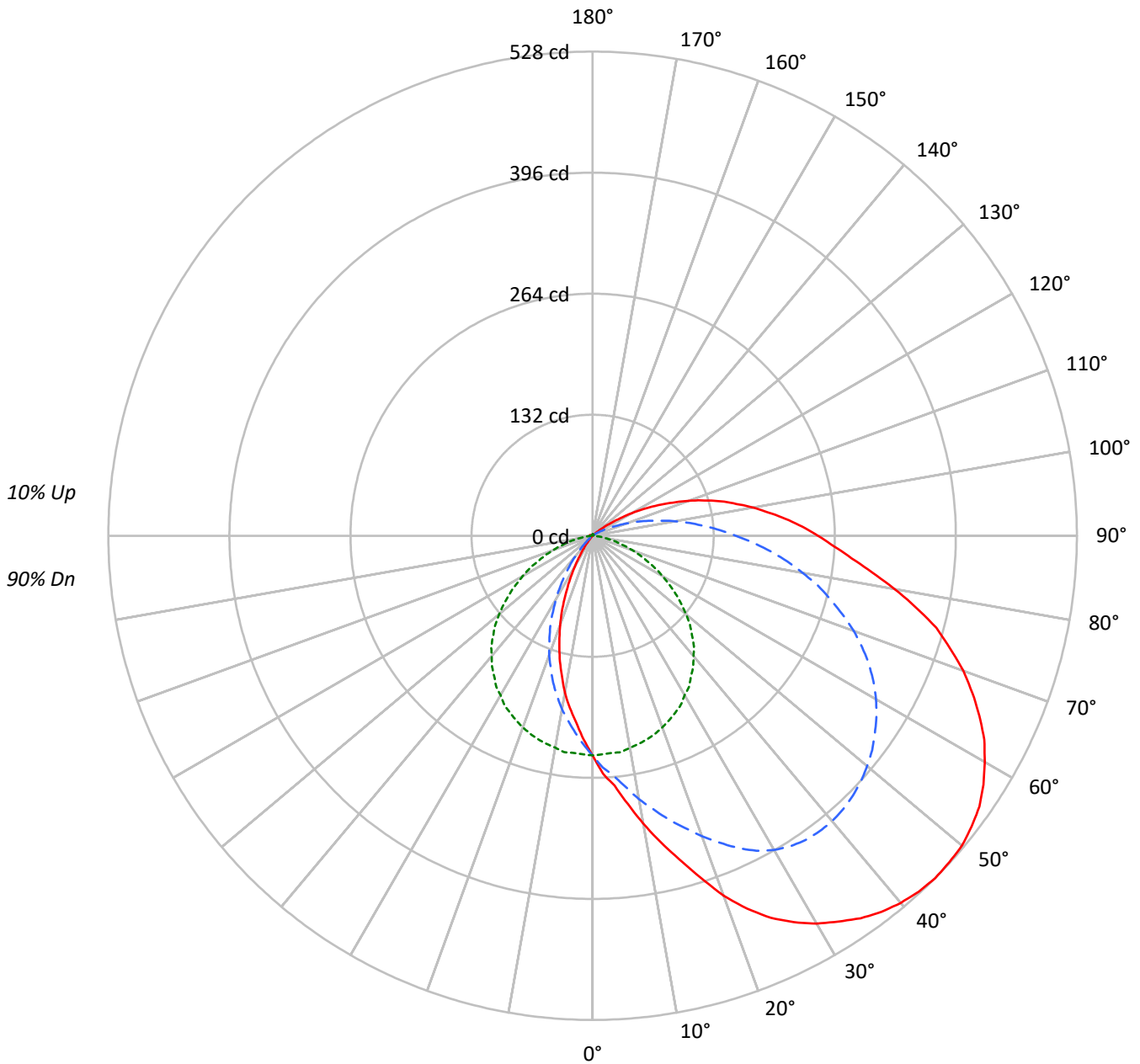
Lumens per Lamp: N/A  
Luminaire Lumens: 1183.9 lumens  
Efficiency: N/A  
Efficacy: 101.2 lumens/watt  
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59  
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')  
CIE Type: Semi-Direct

Input Watts (W): 11.7  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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: P550754

CATALOG NUMBER: FCC-X-2-LD4-1LO-35-UNV-80-94-ED1D

### Luminous Intensity Polar Plot





TEST NUMBER: P550754

CATALOG NUMBER: FCC-X-2-LD4-1LO-35-UNV-80-94-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°	2578	2578	2578
5°	2830	2541	2119
10°	3202	2509	1747
15°	3589	2477	1361
20°	4048	2437	1002
25°	4428	2390	658
30°	4711	2327	370
35°	4956	2259	164
40°	5173	2177	40
45°	5359	2073	0
50°	5516	1934	0
55°	5635	1758	0
60°	5695	1556	0
65°	5719	1324	0
70°	5700	1080	0
75°	5627	797	4
80°	5399	486	24
85°	5218	234	33



TEST NUMBER: P550754

CATALOG NUMBER: FCC-X-2-LD4-1LO-35-UNV-80-94-ED1D

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	22.9	1.9
10°-20°	68.7	5.8
20°-30°	111.2	9.4
30°-40°	142.9	12.1
40°-50°	161.7	13.7
50°-60°	167.6	14.2
60°-70°	158.0	13.3
70°-80°	132.4	11.2
80°-90°	96.0	8.1
90°-100°	63.1	5.3
100°-110°	36.4	3.1
110°-120°	16.1	1.4
120°-130°	4.3	0.4
130°-140°	1.0	0.1
140°-150°	0.6	0.1
150°-160°	0.5	0.0
160°-170°	0.3	0.0
170°-180°	0.1	0.0
0°-30°	202.9	17.1
0°-40°	345.7	29.2
0°-60°	675.1	57.0
0°-90°	1061.5	89.7
90°-120°	115.6	9.8
90°-150°	121.5	10.3
90°-180°	122.0	10.3
0°-180°	1183.9	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	240	240	240	240	240	
5°	273	263	238	216	205	28
15°	365	320	230	166	138	105
25°	460	376	213	109	68	212
35°	509	405	187	53	17	319
45°	528	401	153	12	0	408
55°	515	376	110	0	0	460
65°	465	333	66	0	0	460
75°	388	268	28	0	0	407
85°	284	194	5	1	2	242
90°	246	156	1	2	2	135
95°	211	122	1	2	3	166
105°	145	63	1	2	2	153
115°	79	21	1	1	2	79
125°	24	3	1	1	1	23
135°	1	1	2	1	1	2
145°	0	1	1	1	1	0
155°	1	1	1	1	0	0
165°	1	1	1	1	0	0
175°	1	1	2	1	0	0
180°	1	1	1	1	1	



TEST NUMBER: P550754

CATALOG NUMBER: FCC-X-2-LD4-1LO-35-UNV-80-94-ED1D

**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
0°	239.5	239.5	239.5	239.5	239.5	239.5	239.5	239.5	239.5	239.5	239.5
2.5°	259.6	259.3	258.4	256.9	254.7	251.1	248.0	245.3	241.6	238.6	232.8
5°	273.4	271.8	270.6	269.1	264.2	260.9	255.4	249.3	243.5	237.7	226.1
7.5°	295.3	292.9	291.1	286.8	280.1	272.4	263.9	258.1	254.1	238.0	218.1
10°	318.8	316.7	313.0	305.4	297.2	286.2	274.0	260.2	248.0	234.6	211.1
12.5°	342.0	339.0	333.8	324.0	312.4	298.7	281.9	265.7	248.3	232.5	202.9
15°	365.2	361.8	356.3	344.4	329.2	311.2	290.7	270.3	249.9	229.7	194.3
17.5°	390.5	385.9	377.7	364.3	345.1	322.8	298.7	274.0	249.3	226.4	185.2
20°	417.7	411.3	402.4	384.4	361.8	335.6	306.6	277.6	249.0	222.4	174.8
22.5°	440.2	433.8	424.1	405.5	378.3	346.3	313.3	280.1	247.7	217.8	165.1
25°	459.8	454.6	443.9	422.5	393.9	357.6	319.7	281.9	245.9	213.0	154.7
27.5°	475.0	470.1	458.2	436.3	407.0	367.6	324.6	282.8	243.5	208.1	144.0
30°	488.4	483.6	469.2	446.7	415.8	375.6	329.5	283.1	240.4	200.7	132.4
32.5°	498.8	494.2	479.6	455.5	421.9	381.1	332.2	282.8	236.4	195.6	119.9
35°	509.2	504.6	487.5	461.9	426.5	383.5	334.4	281.3	231.6	187.0	108.0
37.5°	517.1	511.9	494.5	466.2	428.6	384.1	334.1	279.2	226.4	180.0	96.1
40°	522.6	517.1	498.5	468.6	429.3	383.2	331.6	275.5	220.3	171.2	83.6
42.5°	526.3	520.2	500.3	472.3	428.0	380.8	328.0	270.9	213.6	163.5	71.7
45°	528.1	521.7	500.7	469.2	425.9	376.2	322.5	265.1	206.2	153.2	59.8
47.5°	527.2	520.2	499.1	465.9	421.9	371.3	316.4	258.1	197.4	144.0	48.5
50°	525.7	518.3	495.8	461.6	416.4	365.2	309.7	249.6	188.2	132.7	38.4
52.5°	520.8	513.5	492.1	455.5	410.0	358.2	300.5	240.7	178.5	121.7	29.3
55°	514.7	508.0	485.7	450.0	401.8	349.6	292.0	231.3	169.0	110.4	21.1
57.5°	505.2	499.1	477.8	441.2	393.6	340.2	282.5	220.9	157.1	99.2	14.6
60°	493.6	487.5	466.8	431.1	384.1	329.5	272.1	210.2	146.4	87.9	9.2
62.5°	481.4	475.6	454.0	418.6	372.2	318.2	260.9	199.5	135.2	77.5	5.5
65°	465.3	459.8	440.2	403.6	359.1	306.0	248.3	186.7	123.6	65.9	3.1
67.5°	448.2	443.3	423.5	389.9	343.8	292.6	235.5	174.2	111.4	55.8	1.5
70°	429.9	423.8	405.5	371.3	328.3	277.3	221.5	161.4	99.8	46.1	0.0
72.5°	408.5	403.9	386.2	353.9	310.3	261.2	207.2	147.4	87.0	36.6	0.3
75°	387.8	382.0	365.8	335.3	292.6	244.1	191.3	134.2	74.4	28.1	0.3
77.5°	360.9	359.1	343.8	314.2	275.8	227.6	173.9	118.4	62.5	20.1	0.3
80°	334.1	332.2	320.3	293.2	256.3	208.1	157.7	103.4	50.9	13.4	0.3
82.5°	307.5	305.1	293.8	271.2	236.4	191.6	141.0	88.5	40.3	8.2	0.3
85°	283.7	280.7	268.5	247.7	216.0	173.0	123.6	73.8	29.9	4.6	0.6
87.5°	263.3	261.2	247.7	226.4	195.3	155.6	108.3	59.8	21.1	2.1	0.9
90°	245.9	241.3	229.4	206.9	175.7	136.4	92.1	47.9	14.0	1.2	1.2
92.5°	228.8	224.9	211.7	188.5	158.3	119.9	76.6	36.6	8.8	0.6	1.5
95°	211.1	206.9	194.0	172.7	140.6	103.1	62.8	26.8	4.9	0.6	1.5
97.5°	193.7	189.8	176.3	155.0	124.8	88.5	49.7	18.9	2.4	0.6	1.2
100°	177.6	173.0	160.8	139.4	108.9	73.8	38.4	12.2	1.5	0.6	1.2
102.5°	160.5	156.8	144.3	123.6	92.4	60.1	28.7	7.6	0.6	0.6	0.9
105°	145.2	140.6	128.4	107.1	78.7	47.3	20.1	4.6	0.6	0.6	0.9



TEST NUMBER: P550754

CATALOG NUMBER: FCC-X-2-LD4-1LO-35-UNV-80-94-ED1D

**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	94.6	90.9	80.2	62.2	40.0	18.6	5.5	0.9	0.9	0.9	0.9
115°	79.0	73.5	64.1	48.2	29.6	12.2	2.7	0.9	0.9	0.9	0.9
117.5°	63.2	58.6	51.9	36.6	19.5	7.9	1.5	0.9	0.9	0.9	0.9
120°	49.4	45.2	37.5	25.3	13.1	4.6	0.6	0.9	0.9	0.9	0.9
122.5°	35.4	32.0	25.3	16.5	7.9	2.1	0.9	0.9	1.2	1.2	0.9
125°	23.5	21.7	16.8	10.1	4.9	0.9	0.9	0.9	1.2	1.2	0.9
127.5°	15.3	13.7	9.8	5.8	2.1	0.9	0.9	1.2	1.2	1.2	0.9
130°	8.5	7.6	5.8	3.4	0.9	0.9	0.9	1.2	1.2	1.2	0.9
132.5°	4.9	4.6	3.1	0.6	0.9	0.9	0.9	1.2	1.2	1.2	1.2
135°	1.2	0.6	0.6	0.6	0.9	0.9	1.2	1.2	1.5	1.5	1.2
137.5°	0.3	0.3	0.6	0.6	0.9	0.9	1.2	1.5	1.5	1.5	1.2
140°	0.3	0.3	0.6	0.9	0.9	0.9	1.2	1.5	1.5	1.5	1.2
142.5°	0.3	0.6	0.6	0.9	0.9	1.2	1.2	1.5	1.5	1.2	1.2
145°	0.3	0.6	0.6	0.9	0.9	1.2	1.2	1.5	1.2	1.2	1.2
147.5°	0.6	0.6	0.6	0.9	0.9	1.2	1.2	1.5	1.5	1.2	1.2
150°	0.3	0.6	0.6	0.9	1.2	1.2	1.2	1.5	1.2	1.2	1.2
152.5°	0.3	0.6	0.6	0.9	1.2	1.2	1.2	1.5	1.2	1.2	1.2
155°	0.6	0.6	0.6	0.9	1.2	1.2	1.2	1.5	1.2	1.2	1.5
157.5°	0.6	0.6	0.6	0.9	1.2	1.2	1.2	1.5	1.2	1.2	1.5
160°	0.6	0.6	0.6	0.9	0.9	1.2	1.2	1.2	1.2	1.2	1.2
162.5°	0.6	0.6	0.6	0.9	0.9	1.2	1.2	1.2	1.2	1.2	1.2
165°	0.6	0.6	0.6	0.6	0.9	0.9	1.2	1.2	1.2	1.2	1.2
167.5°	0.6	0.6	0.6	0.9	0.9	0.9	1.2	1.2	1.2	1.2	1.2
170°	0.6	0.6	0.6	0.9	0.9	0.9	1.2	1.5	1.5	1.5	1.5
172.5°	0.6	0.6	0.6	0.9	0.9	1.2	1.2	1.5	1.5	1.5	1.5
175°	0.6	0.6	0.6	0.9	0.9	1.2	1.2	1.5	1.5	1.5	1.5
177.5°	0.3	0.6	0.6	0.9	0.9	1.2	1.2	1.5	1.5	1.5	1.2
180°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9



TEST NUMBER: P550754

CATALOG NUMBER: FCC-X-2-LD4-1LO-35-UNV-80-94-ED1D

**CANDELA DISTRIBUTION (continued):**

	135°	157.5°	180°
0°	239.5	239.5	239.5
2.5°	227.9	223.6	222.4
5°	215.7	208.7	204.7
7.5°	203.5	194.0	189.5
10°	192.2	178.8	173.9
12.5°	178.8	163.2	155.6
15°	166.0	145.8	138.5
17.5°	151.6	129.1	120.5
20°	138.2	112.3	103.4
22.5°	123.0	95.8	86.0
25°	109.2	79.3	68.3
27.5°	94.0	62.5	53.1
30°	79.6	47.9	38.4
32.5°	65.9	35.1	26.5
35°	53.1	23.8	16.8
37.5°	40.9	14.6	8.5
40°	29.6	7.6	4.0
42.5°	19.8	3.7	2.1
45°	12.2	1.8	0.0
47.5°	7.0	0.0	0.0
50°	3.7	0.0	0.0
52.5°	1.5	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°	0.3	0.3	0.3
77.5°	0.3	0.6	0.9
80°	0.6	1.2	1.5
82.5°	1.2	1.5	1.5
85°	1.2	1.5	1.8
87.5°	1.5	1.8	2.1
90°	1.8	2.1	2.1
92.5°	1.8	2.4	2.4
95°	2.1	2.4	2.7
97.5°	2.4	2.7	2.7
100°	2.1	2.7	3.1
102.5°	1.8	2.7	2.7
105°	1.5	2.1	2.4





TEST NUMBER: P550754

CATALOG NUMBER: FCC-X-2-LD4-1LO-35-UNV-80-94-ED1D

**CANDELA DISTRIBUTION (continued):**

	135°	157.5°	180°
112.5°	1.2	1.5	1.5
115°	0.9	1.2	1.5
117.5°	0.9	1.2	1.2
120°	0.9	0.9	1.2
122.5°	0.9	0.9	1.2
125°	0.9	0.9	1.2
127.5°	1.2	0.9	0.9
130°	0.9	0.9	0.9
132.5°	1.2	0.9	0.9
135°	1.2	0.9	0.9
137.5°	1.2	0.9	0.9
140°	1.2	0.9	0.9
142.5°	1.2	0.9	0.9
145°	0.9	0.9	0.9
147.5°	0.9	0.9	0.9
150°	0.9	0.9	0.6
152.5°	0.9	0.6	0.6
155°	0.9	0.6	0.3
157.5°	1.2	0.6	0.3
160°	0.9	0.6	0.3
162.5°	0.9	0.6	0.3
165°	0.9	0.6	0.0
167.5°	0.9	0.6	0.3
170°	0.9	0.6	0.3
172.5°	0.9	0.6	0.3
175°	0.9	0.3	0.3
177.5°	0.9	0.3	0.3
180°	0.9	0.9	0.9



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	128.1	124.5	112.3	92.1	64.4	36.0	13.4	2.4	0.6	0.9	0.9
110°	111.7	108.6	96.1	76.6	51.9	26.8	8.8	1.5	0.9	0.9	0.9







107.5°	1.2	1.8	2.1
110°	1.2	1.5	1.8



(END OF REPORT)