

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: P551518

Luminaire Tested: **FCC-X-2-LD4-2LO-35-UNV-80-87-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: P551518  
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-LD4-2LO-35-UNV-80-87-ED1D  
Description: FCC CORNER MOUNT LUMINAIRE WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .375 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 3500K, AND 80 CRI LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

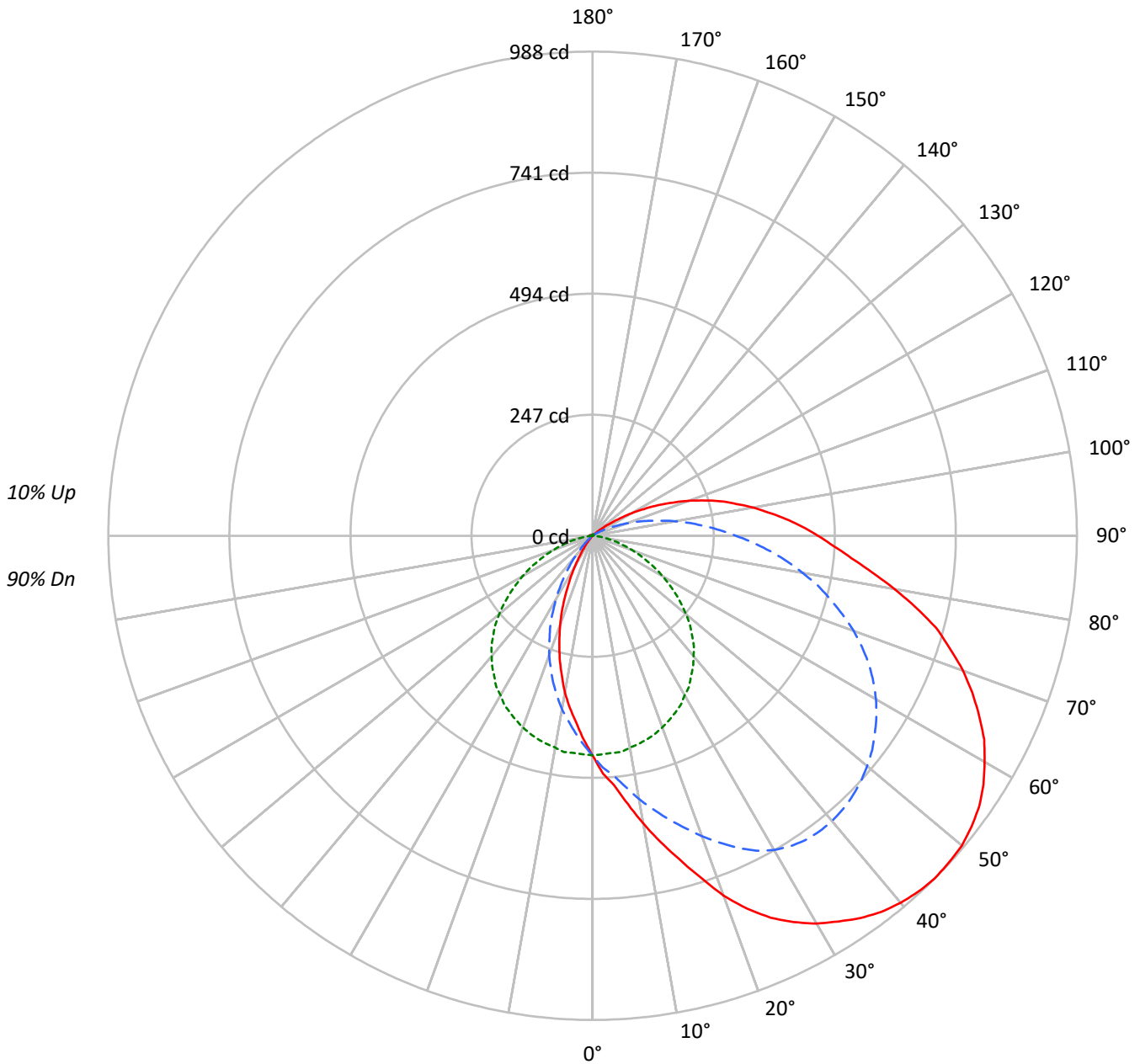
Lumens per Lamp: N/A  
Luminaire Lumens: 2215.0 lumens  
Efficiency: N/A  
Efficacy: 94.3 lumens/watt  
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59  
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')  
CIE Type: Semi-Direct

Input Watts (W): 23.5  
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: P551518

CATALOG NUMBER: FCC-X-2-LD4-2LO-35-UNV-80-87-ED1D

### Luminous Intensity Polar Plot





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**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°	4822	4822	4822
5°	5294	4752	3965
10°	5990	4694	3267
15°	6714	4634	2546
20°	7573	4559	1875
25°	8284	4471	1231
30°	8813	4354	693
35°	9271	4228	306
40°	9678	4072	73
45°	10027	3877	0
50°	10319	3619	0
55°	10542	3290	0
60°	10654	2909	0
65°	10698	2477	0
70°	10662	2019	0
75°	10526	1489	9
80°	10100	910	47
85°	9762	437	63



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	42.9	1.9
10°-20°	128.5	5.8
20°-30°	208.1	9.4
30°-40°	267.3	12.1
40°-50°	302.6	13.7
50°-60°	313.5	14.2
60°-70°	295.7	13.3
70°-80°	247.8	11.2
80°-90°	179.6	8.1
90°-100°	118.0	5.3
100°-110°	68.2	3.1
110°-120°	30.1	1.4
120°-130°	8.1	0.4
130°-140°	1.9	0.1
140°-150°	1.2	0.1
150°-160°	0.9	0.0
160°-170°	0.5	0.0
170°-180°	0.2	0.0
0°-30°	379.5	17.1
0°-40°	646.8	29.2
0°-60°	1262.9	57.0
0°-90°	1986.0	89.7
90°-120°	216.3	9.8
90°-150°	227.5	10.3
90°-180°	229.0	10.3
0°-180°	2215.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	448	448	448	448	448	
5°	511	491	445	404	383	52
15°	683	599	430	310	259	197
25°	860	703	398	204	128	398
35°	953	758	350	99	31	597
45°	988	750	286	23	0	763
55°	963	703	207	0	0	860
65°	870	622	123	0	0	861
75°	725	502	52	1	1	761
85°	531	364	9	2	3	453
90°	460	292	2	3	4	252
95°	395	228	1	4	5	310
105°	272	118	1	3	5	287
115°	148	39	2	2	3	148
125°	44	5	2	2	2	44
135°	2	2	3	2	2	4
145°	1	2	2	2	2	0
155°	1	2	2	2	1	0
165°	1	2	2	2	0	0
175°	1	2	3	2	1	0
180°	2	2	2	2	2	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
0°	448.0	448.0	448.0	448.0	448.0	448.0	448.0	448.0	448.0	448.0	448.0
2.5°	485.7	485.1	483.4	480.6	476.6	469.7	464.0	458.9	452.0	446.3	435.5
5°	511.4	508.5	506.3	503.4	494.3	488.0	477.7	466.3	455.5	444.6	422.9
7.5°	552.5	547.9	544.5	536.5	524.0	509.7	493.7	482.9	475.4	445.2	408.1
10°	596.4	592.4	585.6	571.3	555.9	535.4	512.5	486.9	464.0	438.9	395.0
12.5°	639.8	634.1	624.4	606.1	584.5	558.8	527.4	497.1	464.6	434.9	379.6
15°	683.2	676.9	666.6	644.4	615.8	582.2	543.9	505.7	467.4	429.8	363.6
17.5°	730.6	722.0	706.6	681.5	645.5	603.9	558.8	512.5	466.3	423.5	346.4
20°	781.4	769.4	752.8	719.1	676.9	627.8	573.6	519.4	465.7	416.1	327.0
22.5°	823.6	811.6	793.3	758.5	707.7	647.8	586.2	524.0	463.5	407.5	308.8
25°	860.1	850.4	830.4	790.5	736.8	668.9	598.1	527.4	460.0	398.4	289.4
27.5°	888.7	879.5	857.3	816.2	761.4	687.8	607.3	529.1	455.5	389.3	269.4
30°	913.8	904.6	877.8	835.6	777.9	702.6	616.4	529.7	449.8	375.6	247.7
32.5°	933.2	924.6	897.2	852.1	789.4	712.9	621.6	529.1	442.3	365.9	224.3
35°	952.6	944.0	912.1	864.1	797.9	717.4	625.5	526.2	433.2	349.9	202.0
37.5°	967.4	957.7	925.2	872.1	801.9	718.6	625.0	522.2	423.5	336.7	179.8
40°	977.7	967.4	932.6	876.7	803.0	716.9	620.4	515.4	412.1	320.2	156.4
42.5°	984.5	973.1	936.0	883.5	800.8	712.3	613.6	506.8	399.5	305.9	134.1
45°	988.0	976.0	936.6	877.8	796.8	703.7	603.3	496.0	385.8	286.5	111.9
47.5°	986.3	973.1	933.8	871.5	789.4	694.6	591.9	482.9	369.3	269.4	90.7
50°	983.4	969.7	927.5	863.5	779.1	683.2	579.3	466.9	352.2	248.3	71.9
52.5°	974.3	960.6	920.6	852.1	767.1	670.1	562.2	450.3	333.9	227.7	54.8
55°	962.9	950.3	908.6	841.9	751.7	654.1	546.2	432.6	316.2	206.6	39.4
57.5°	945.2	933.8	893.8	825.3	736.3	636.4	528.5	413.2	293.9	185.5	27.4
60°	923.5	912.1	873.3	806.5	718.6	616.4	509.1	393.2	274.0	164.4	17.1
62.5°	900.6	889.8	849.3	783.1	696.3	595.3	488.0	373.3	252.8	145.0	10.3
65°	870.4	860.1	823.6	755.1	671.8	572.5	464.6	349.3	231.2	123.3	5.7
67.5°	838.4	829.3	792.2	729.4	643.2	547.4	440.6	325.9	208.3	104.4	2.9
70°	804.2	792.8	758.5	694.6	614.1	518.8	414.4	301.9	186.6	86.2	0.0
72.5°	764.2	755.7	722.6	662.1	580.5	488.6	387.5	275.7	162.7	68.5	0.6
75°	725.4	714.6	684.3	627.3	547.4	456.6	357.9	251.1	139.3	52.5	0.6
77.5°	675.2	671.8	643.2	587.9	516.0	425.8	325.3	221.5	117.0	37.7	0.6
80°	625.0	621.6	599.3	548.5	479.4	389.3	295.1	193.5	95.3	25.1	0.6
82.5°	575.3	570.8	549.6	507.4	442.3	358.4	263.7	165.5	75.3	15.4	0.6
85°	530.8	525.1	502.3	463.5	404.1	323.6	231.2	138.1	55.9	8.6	1.1
87.5°	492.6	488.6	463.5	423.5	365.3	291.1	202.6	111.9	39.4	4.0	1.7
90°	460.0	451.5	429.2	387.0	328.8	255.1	172.4	89.6	26.3	2.3	2.3
92.5°	428.1	420.6	396.1	352.7	296.2	224.3	143.3	68.5	16.6	1.1	2.9
95°	395.0	387.0	363.0	323.0	263.1	192.9	117.6	50.2	9.1	1.1	2.9
97.5°	362.4	355.0	329.9	289.9	233.4	165.5	93.0	35.4	4.6	1.1	2.3
100°	332.2	323.6	300.8	260.8	203.8	138.1	71.9	22.8	2.9	1.1	2.3
102.5°	300.2	293.4	270.0	231.2	172.9	112.4	53.7	14.3	1.1	1.1	1.7
105°	271.7	263.1	240.3	200.3	147.3	88.5	37.7	8.6	1.1	1.1	1.7



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CATALOG NUMBER: FCC-X-2-LD4-2LO-35-UNV-80-87-ED1D

**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	176.9	170.1	150.1	116.4	74.8	34.8	10.3	1.7	1.7	1.7	1.7
115°	147.8	137.6	119.9	90.2	55.4	22.8	5.1	1.7	1.7	1.7	1.7
117.5°	118.1	109.6	97.0	68.5	36.5	14.8	2.9	1.7	1.7	1.7	1.7
120°	92.5	84.5	70.2	47.4	24.5	8.6	1.1	1.7	1.7	1.7	1.7
122.5°	66.2	59.9	47.4	30.8	14.8	4.0	1.7	1.7	2.3	2.3	1.7
125°	43.9	40.5	31.4	18.8	9.1	1.7	1.7	1.7	2.3	2.3	1.7
127.5°	28.5	25.7	18.3	10.8	4.0	1.7	1.7	2.3	2.3	2.3	1.7
130°	16.0	14.3	10.8	6.3	1.7	1.7	1.7	2.3	2.3	2.3	1.7
132.5°	9.1	8.6	5.7	1.1	1.7	1.7	1.7	2.3	2.3	2.3	2.3
135°	2.3	1.1	1.1	1.1	1.7	1.7	2.3	2.3	2.9	2.9	2.3
137.5°	0.6	0.6	1.1	1.1	1.7	1.7	2.3	2.9	2.9	2.9	2.3
140°	0.6	0.6	1.1	1.7	1.7	1.7	2.3	2.9	2.9	2.9	2.3
142.5°	0.6	1.1	1.1	1.7	1.7	2.3	2.3	2.9	2.9	2.3	2.3
145°	0.6	1.1	1.1	1.7	1.7	2.3	2.3	2.9	2.3	2.3	2.3
147.5°	1.1	1.1	1.1	1.7	1.7	2.3	2.3	2.9	2.9	2.3	2.3
150°	0.6	1.1	1.1	1.7	2.3	2.3	2.3	2.9	2.3	2.3	2.3
152.5°	0.6	1.1	1.1	1.7	2.3	2.3	2.3	2.9	2.3	2.3	2.3
155°	1.1	1.1	1.1	1.7	2.3	2.3	2.3	2.9	2.3	2.3	2.9
157.5°	1.1	1.1	1.1	1.7	2.3	2.3	2.3	2.9	2.3	2.3	2.9
160°	1.1	1.1	1.1	1.7	1.7	2.3	2.3	2.3	2.3	2.3	2.3
162.5°	1.1	1.1	1.1	1.7	1.7	2.3	2.3	2.3	2.3	2.3	2.3
165°	1.1	1.1	1.1	1.1	1.7	1.7	2.3	2.3	2.3	2.3	2.3
167.5°	1.1	1.1	1.1	1.7	1.7	1.7	2.3	2.3	2.3	2.3	2.3
170°	1.1	1.1	1.1	1.7	1.7	1.7	2.3	2.9	2.9	2.9	2.9
172.5°	1.1	1.1	1.1	1.7	1.7	2.3	2.3	2.9	2.9	2.9	2.9
175°	1.1	1.1	1.1	1.7	1.7	2.3	2.3	2.9	2.9	2.9	2.9
177.5°	0.6	1.1	1.1	1.7	1.7	2.3	2.3	2.9	2.9	2.9	2.3
180°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7



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**CANDELA DISTRIBUTION (continued):**

	135°	157.5°	180°
0°	448.0	448.0	448.0
2.5°	426.4	418.4	416.1
5°	403.5	390.4	383.0
7.5°	380.7	363.0	354.4
10°	359.6	334.5	325.3
12.5°	334.5	305.4	291.1
15°	310.5	272.8	259.1
17.5°	283.7	241.4	225.4
20°	258.6	210.0	193.5
22.5°	230.0	179.2	161.0
25°	204.3	148.4	127.8
27.5°	175.8	117.0	99.3
30°	149.0	89.6	71.9
32.5°	123.3	65.6	49.7
35°	99.3	44.5	31.4
37.5°	76.5	27.4	16.0
40°	55.4	14.3	7.4
42.5°	37.1	6.8	4.0
45°	22.8	3.4	0.0
47.5°	13.1	0.0	0.0
50°	6.8	0.0	0.0
52.5°	2.9	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°	0.6	0.6	0.6
77.5°	0.6	1.1	1.7
80°	1.1	2.3	2.9
82.5°	2.3	2.9	2.9
85°	2.3	2.9	3.4
87.5°	2.9	3.4	4.0
90°	3.4	4.0	4.0
92.5°	3.4	4.6	4.6
95°	4.0	4.6	5.1
97.5°	4.6	5.1	5.1
100°	4.0	5.1	5.7
102.5°	3.4	5.1	5.1
105°	2.9	4.0	4.6





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**CANDELA DISTRIBUTION (continued):**

	135°	157.5°	180°
112.5°	2.3	2.9	2.9
115°	1.7	2.3	2.9
117.5°	1.7	2.3	2.3
120°	1.7	1.7	2.3
122.5°	1.7	1.7	2.3
125°	1.7	1.7	2.3
127.5°	2.3	1.7	1.7
130°	1.7	1.7	1.7
132.5°	2.3	1.7	1.7
135°	2.3	1.7	1.7
137.5°	2.3	1.7	1.7
140°	2.3	1.7	1.7
142.5°	2.3	1.7	1.7
145°	1.7	1.7	1.7
147.5°	1.7	1.7	1.7
150°	1.7	1.7	1.1
152.5°	1.7	1.1	1.1
155°	1.7	1.1	0.6
157.5°	2.3	1.1	0.6
160°	1.7	1.1	0.6
162.5°	1.7	1.1	0.6
165°	1.7	1.1	0.0
167.5°	1.7	1.1	0.6
170°	1.7	1.1	0.6
172.5°	1.7	1.1	0.6
175°	1.7	0.6	0.6
177.5°	1.7	0.6	0.6
180°	1.7	1.7	1.7



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	239.7	232.9	210.0	172.4	120.4	67.3	25.1	4.6	1.1	1.7	1.7
110°	208.9	203.2	179.8	143.3	97.0	50.2	16.6	2.9	1.7	1.7	1.7







107.5°	2.3	3.4	4.0
110°	2.3	2.9	3.4



(END OF REPORT)