

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: P550686

Luminaire Tested: **FCC-X-2-LD4-1LO-30-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: P550686  
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-80-87-ED1D  
Description: FCC CORNER MOUNT LUMINAIRE WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .375 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 3000K, AND 80 CRI LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

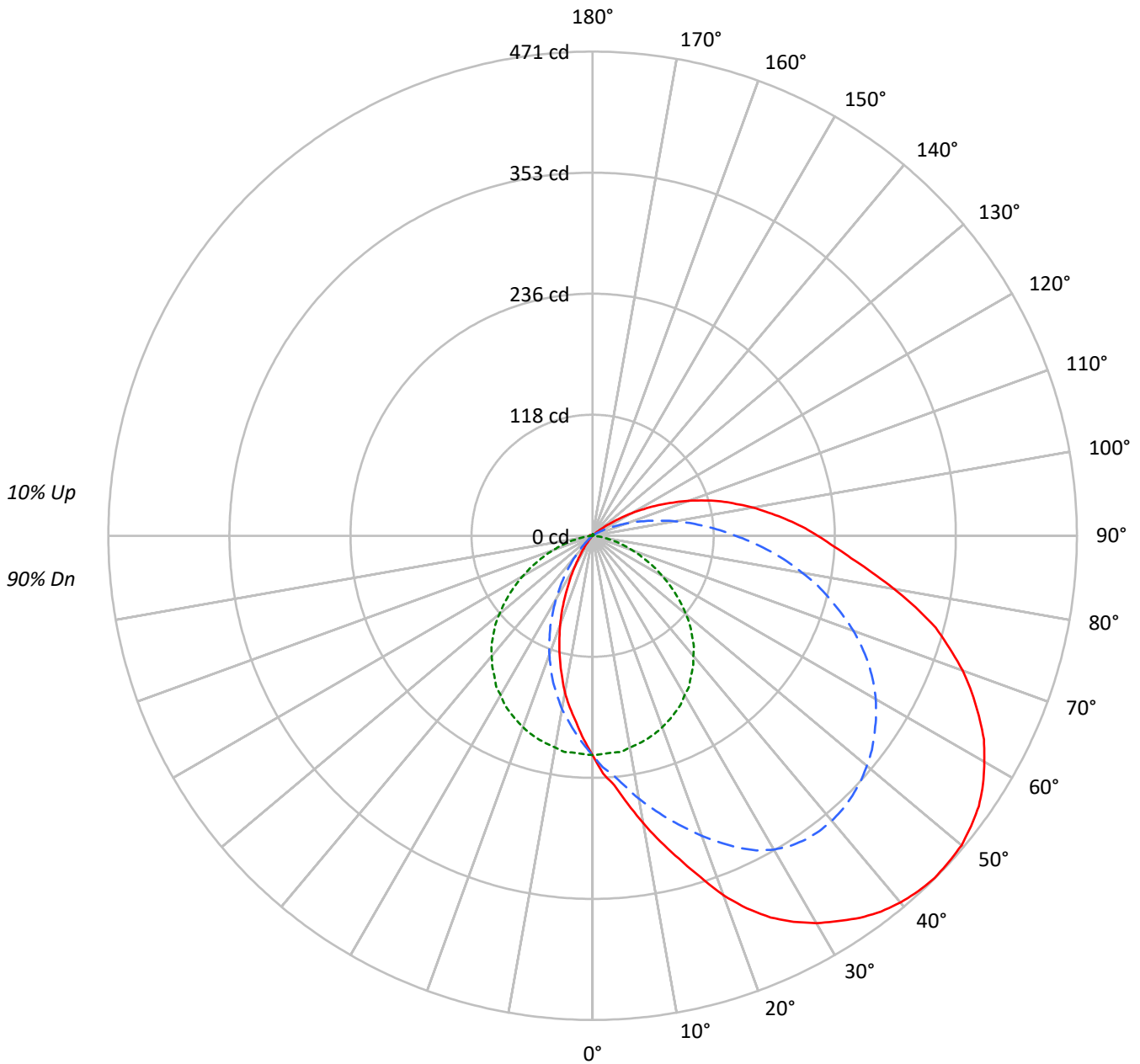
Lumens per Lamp: N/A  
Luminaire Lumens: 1055.0 lumens  
Efficiency: N/A  
Efficacy: 90.2 lumens/watt  
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59  
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')  
CIE Type: Semi-Direct

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

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CATALOG NUMBER: FCC-X-2-LD4-1LO-30-UNV-80-87-ED1D

### Luminous Intensity Polar Plot





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**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°	2297	2297	2297
5°	2522	2264	1888
10°	2854	2236	1557
15°	3198	2207	1213
20°	3607	2172	894
25°	3946	2130	587
30°	4197	2074	331
35°	4416	2013	146
40°	4610	1939	35
45°	4776	1847	0
50°	4915	1724	0
55°	5021	1567	0
60°	5075	1386	0
65°	5096	1179	0
70°	5078	960	0
75°	5014	709	4
80°	4811	435	23
85°	4649	208	29



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	20.4	1.9
10°-20°	61.2	5.8
20°-30°	99.1	9.4
30°-40°	127.3	12.1
40°-50°	144.1	13.7
50°-60°	149.3	14.2
60°-70°	140.8	13.3
70°-80°	118.0	11.2
80°-90°	85.5	8.1
90°-100°	56.2	5.3
100°-110°	32.5	3.1
110°-120°	14.3	1.4
120°-130°	3.9	0.4
130°-140°	0.9	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°	180.8	17.1
0°-40°	308.1	29.2
0°-60°	601.5	57.0
0°-90°	945.9	89.7
90°-120°	103.0	9.8
90°-150°	108.4	10.3
90°-180°	109.0	10.3
0°-180°	1055.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	213	213	213	213	213	
5°	244	234	212	192	182	25
15°	325	285	205	148	123	94
25°	410	335	190	97	61	189
35°	454	361	167	47	15	285
45°	471	357	136	11	0	363
55°	459	335	98	0	0	410
65°	415	296	59	0	0	410
75°	346	239	25	0	0	362
85°	253	173	4	1	2	216
90°	219	139	1	2	2	120
95°	188	109	0	2	2	148
105°	129	56	0	1	2	137
115°	70	19	1	1	1	71
125°	21	3	1	1	1	21
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	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
0°	213.4	213.4	213.4	213.4	213.4	213.4	213.4	213.4	213.4	213.4	213.4
2.5°	231.3	231.1	230.3	228.9	227.0	223.7	221.0	218.6	215.3	212.6	207.4
5°	243.6	242.2	241.1	239.8	235.4	232.4	227.5	222.1	216.9	211.8	201.4
7.5°	263.1	261.0	259.3	255.5	249.6	242.8	235.1	230.0	226.4	212.0	194.4
10°	284.1	282.2	278.9	272.1	264.8	255.0	244.1	231.9	221.0	209.1	188.1
12.5°	304.7	302.0	297.4	288.7	278.4	266.1	251.2	236.8	221.3	207.1	180.8
15°	325.4	322.4	317.5	306.9	293.3	277.3	259.1	240.9	222.6	204.7	173.2
17.5°	348.0	343.9	336.5	324.6	307.5	287.6	266.1	244.1	222.1	201.7	165.0
20°	372.2	366.5	358.6	342.5	322.4	299.0	273.2	247.4	221.8	198.2	155.8
22.5°	392.3	386.6	377.9	361.3	337.1	308.5	279.2	249.6	220.7	194.1	147.1
25°	409.7	405.1	395.5	376.5	351.0	318.6	284.9	251.2	219.1	189.8	137.8
27.5°	423.3	418.9	408.3	388.7	362.6	327.6	289.2	252.0	216.9	185.4	128.3
30°	435.2	430.9	418.1	398.0	370.5	334.6	293.6	252.3	214.2	178.9	118.0
32.5°	444.5	440.4	427.3	405.9	376.0	339.5	296.0	252.0	210.7	174.3	106.8
35°	453.7	449.6	434.4	411.6	380.0	341.7	297.9	250.6	206.3	166.6	96.2
37.5°	460.8	456.2	440.7	415.4	381.9	342.3	297.7	248.7	201.7	160.4	85.6
40°	465.7	460.8	444.2	417.6	382.5	341.4	295.5	245.5	196.3	152.5	74.5
42.5°	468.9	463.5	445.8	420.8	381.4	339.3	292.2	241.4	190.3	145.7	63.9
45°	470.6	464.9	446.1	418.1	379.5	335.2	287.3	236.2	183.8	136.5	53.3
47.5°	469.8	463.5	444.7	415.1	376.0	330.8	281.9	230.0	175.9	128.3	43.2
50°	468.4	461.9	441.8	411.3	371.1	325.4	275.9	222.4	167.7	118.3	34.3
52.5°	464.0	457.5	438.5	405.9	365.4	319.2	267.8	214.5	159.0	108.5	26.1
55°	458.6	452.6	432.8	401.0	358.0	311.5	260.2	206.1	150.6	98.4	18.8
57.5°	450.2	444.7	425.7	393.1	350.7	303.1	251.7	196.8	140.0	88.4	13.0
60°	439.9	434.4	415.9	384.1	342.3	293.6	242.5	187.3	130.5	78.3	8.2
62.5°	429.0	423.8	404.5	373.0	331.7	283.5	232.4	177.8	120.4	69.0	4.9
65°	414.6	409.7	392.3	359.7	320.0	272.7	221.3	166.4	110.1	58.7	2.7
67.5°	399.3	395.0	377.3	347.4	306.4	260.7	209.9	155.2	99.2	49.7	1.4
70°	383.0	377.6	361.3	330.8	292.5	247.1	197.4	143.8	88.9	41.0	0.0
72.5°	364.0	359.9	344.2	315.3	276.5	232.7	184.6	131.3	77.5	32.6	0.3
75°	345.5	340.4	325.9	298.8	260.7	217.5	170.4	119.6	66.3	25.0	0.3
77.5°	321.6	320.0	306.4	280.0	245.8	202.8	155.0	105.5	55.7	17.9	0.3
80°	297.7	296.0	285.4	261.2	228.4	185.4	140.5	92.2	45.4	12.0	0.3
82.5°	274.0	271.8	261.8	241.7	210.7	170.7	125.6	78.8	35.9	7.3	0.3
85°	252.8	250.1	239.2	220.7	192.5	154.1	110.1	65.8	26.6	4.1	0.5
87.5°	234.6	232.7	220.7	201.7	174.0	138.6	96.5	53.3	18.8	1.9	0.8
90°	219.1	215.0	204.4	184.3	156.6	121.5	82.1	42.7	12.5	1.1	1.1
92.5°	203.9	200.4	188.7	168.0	141.1	106.8	68.2	32.6	7.9	0.5	1.4
95°	188.1	184.3	172.9	153.9	125.3	91.9	56.0	23.9	4.3	0.5	1.4
97.5°	172.6	169.1	157.1	138.1	111.2	78.8	44.3	16.9	2.2	0.5	1.1
100°	158.2	154.1	143.3	124.2	97.0	65.8	34.3	10.9	1.4	0.5	1.1
102.5°	143.0	139.7	128.6	110.1	82.4	53.6	25.6	6.8	0.5	0.5	0.8
105°	129.4	125.3	114.4	95.4	70.1	42.1	17.9	4.1	0.5	0.5	0.8



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	84.3	81.0	71.5	55.5	35.6	16.6	4.9	0.8	0.8	0.8	0.8
115°	70.4	65.5	57.1	43.0	26.4	10.9	2.4	0.8	0.8	0.8	0.8
117.5°	56.3	52.2	46.2	32.6	17.4	7.1	1.4	0.8	0.8	0.8	0.8
120°	44.0	40.2	33.4	22.6	11.7	4.1	0.5	0.8	0.8	0.8	0.8
122.5°	31.5	28.5	22.6	14.7	7.1	1.9	0.8	0.8	1.1	1.1	0.8
125°	20.9	19.3	15.0	9.0	4.3	0.8	0.8	0.8	1.1	1.1	0.8
127.5°	13.6	12.2	8.7	5.2	1.9	0.8	0.8	1.1	1.1	1.1	0.8
130°	7.6	6.8	5.2	3.0	0.8	0.8	0.8	1.1	1.1	1.1	0.8
132.5°	4.3	4.1	2.7	0.5	0.8	0.8	0.8	1.1	1.1	1.1	1.1
135°	1.1	0.5	0.5	0.5	0.8	0.8	1.1	1.1	1.4	1.4	1.1
137.5°	0.3	0.3	0.5	0.5	0.8	0.8	1.1	1.4	1.4	1.4	1.1
140°	0.3	0.3	0.5	0.8	0.8	0.8	1.1	1.4	1.4	1.4	1.1
142.5°	0.3	0.5	0.5	0.8	0.8	1.1	1.1	1.4	1.4	1.1	1.1
145°	0.3	0.5	0.5	0.8	0.8	1.1	1.1	1.4	1.1	1.1	1.1
147.5°	0.5	0.5	0.5	0.8	0.8	1.1	1.1	1.4	1.4	1.1	1.1
150°	0.3	0.5	0.5	0.8	1.1	1.1	1.1	1.4	1.1	1.1	1.1
152.5°	0.3	0.5	0.5	0.8	1.1	1.1	1.1	1.4	1.1	1.1	1.1
155°	0.5	0.5	0.5	0.8	1.1	1.1	1.1	1.4	1.1	1.1	1.4
157.5°	0.5	0.5	0.5	0.8	1.1	1.1	1.1	1.4	1.1	1.1	1.4
160°	0.5	0.5	0.5	0.8	0.8	1.1	1.1	1.1	1.1	1.1	1.1
162.5°	0.5	0.5	0.5	0.8	0.8	1.1	1.1	1.1	1.1	1.1	1.1
165°	0.5	0.5	0.5	0.5	0.8	0.8	1.1	1.1	1.1	1.1	1.1
167.5°	0.5	0.5	0.5	0.8	0.8	0.8	1.1	1.1	1.1	1.1	1.1
170°	0.5	0.5	0.5	0.8	0.8	0.8	1.1	1.4	1.4	1.4	1.4
172.5°	0.5	0.5	0.5	0.8	0.8	1.1	1.1	1.4	1.4	1.4	1.4
175°	0.5	0.5	0.5	0.8	0.8	1.1	1.1	1.4	1.4	1.4	1.4
177.5°	0.3	0.5	0.5	0.8	0.8	1.1	1.1	1.4	1.4	1.4	1.1
180°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8



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**CANDELA DISTRIBUTION (continued):**

	135°	157.5°	180°
0°	213.4	213.4	213.4
2.5°	203.1	199.3	198.2
5°	192.2	185.9	182.4
7.5°	181.3	172.9	168.8
10°	171.3	159.3	155.0
12.5°	159.3	145.4	138.6
15°	147.9	129.9	123.4
17.5°	135.1	115.0	107.4
20°	123.1	100.0	92.2
22.5°	109.6	85.4	76.7
25°	97.3	70.7	60.9
27.5°	83.7	55.7	47.3
30°	71.0	42.7	34.3
32.5°	58.7	31.3	23.7
35°	47.3	21.2	15.0
37.5°	36.4	13.0	7.6
40°	26.4	6.8	3.5
42.5°	17.7	3.3	1.9
45°	10.9	1.6	0.0
47.5°	6.3	0.0	0.0
50°	3.3	0.0	0.0
52.5°	1.4	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	1.1	1.4
82.5°	1.1	1.4	1.4
85°	1.1	1.4	1.6
87.5°	1.4	1.6	1.9
90°	1.6	1.9	1.9
92.5°	1.6	2.2	2.2
95°	1.9	2.2	2.4
97.5°	2.2	2.4	2.4
100°	1.9	2.4	2.7
102.5°	1.6	2.4	2.4
105°	1.4	1.9	2.2





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**CANDELA DISTRIBUTION (continued):**

	135°	157.5°	180°
112.5°	1.1	1.4	1.4
115°	0.8	1.1	1.4
117.5°	0.8	1.1	1.1
120°	0.8	0.8	1.1
122.5°	0.8	0.8	1.1
125°	0.8	0.8	1.1
127.5°	1.1	0.8	0.8
130°	0.8	0.8	0.8
132.5°	1.1	0.8	0.8
135°	1.1	0.8	0.8
137.5°	1.1	0.8	0.8
140°	1.1	0.8	0.8
142.5°	1.1	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°	1.1	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°	114.2	110.9	100.0	82.1	57.4	32.1	12.0	2.2	0.5	0.8	0.8
110°	99.5	96.8	85.6	68.2	46.2	23.9	7.9	1.4	0.8	0.8	0.8







107.5°	1.1	1.6	1.9
110°	1.1	1.4	1.6



(END OF REPORT)