

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: P550530

Luminaire Tested: **FCC-X-2-LD4-1HI-35-UNV-82-94-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: P550530  
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-LD4-1HI-35-UNV-82-94-ED1D  
Description: FCC CORNER MOUNT LUMINAIRE WITH .187 CLEAR PC 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**

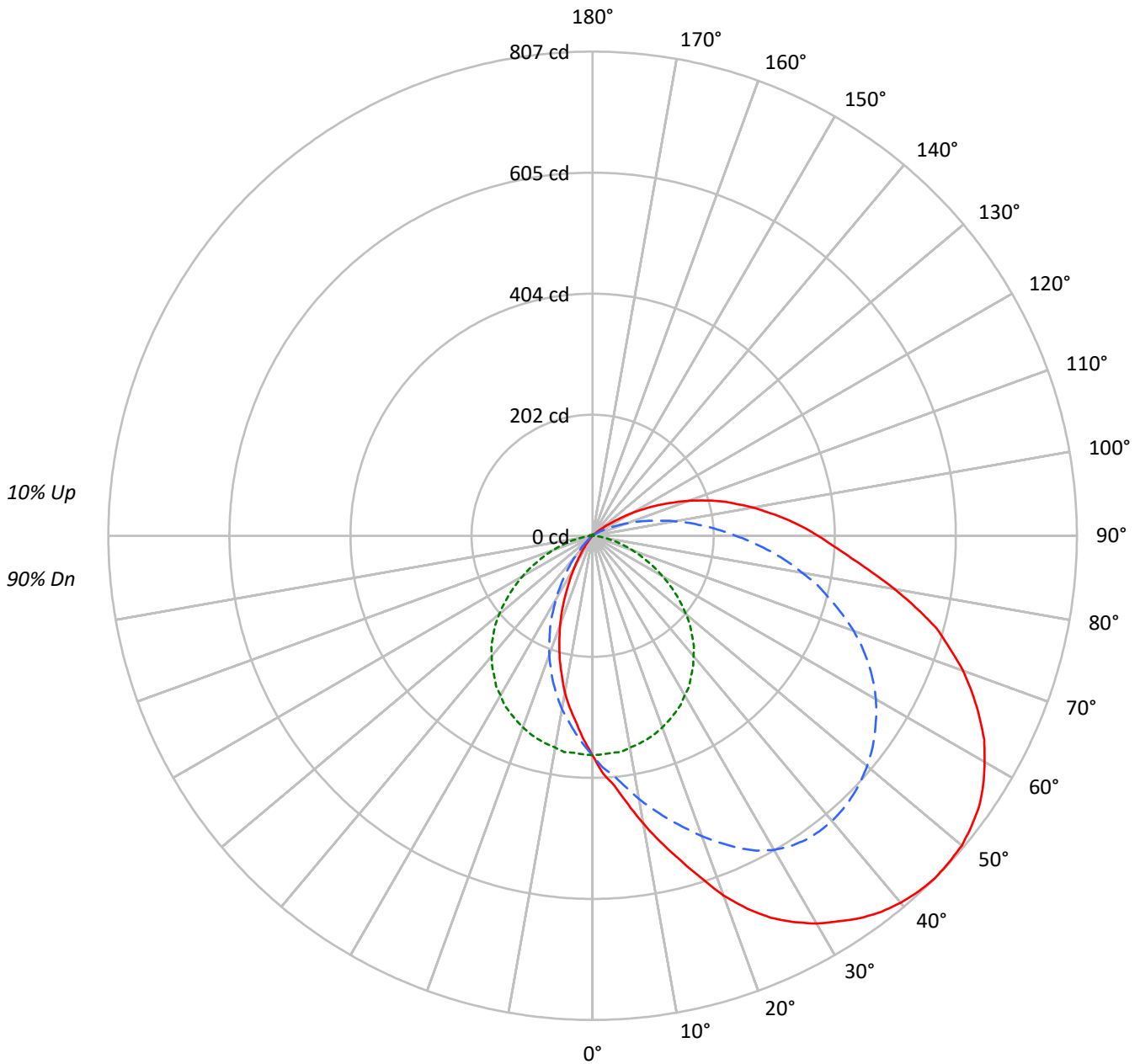
Lumens per Lamp: N/A  
Luminaire Lumens: 1809.0 lumens  
Efficiency: N/A  
Efficacy: 83.4 lumens/watt  
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59  
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')  
CIE Type: Semi-Direct

Input Watts (W): 21.7  
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

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CATALOG NUMBER: FCC-X-2-LD4-1HI-35-UNV-82-94-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	70	70	70	67
2	92	82	74	67	88	79	72	65	74	67	62	69	64	59	64	60	56	56	56	56	53
3	83	71	61	54	79	68	60	53	64	56	50	59	53	48	55	50	46	46	46	46	43
4	75	62	52	44	72	60	51	44	56	48	42	52	45	40	49	43	38	38	38	38	36
5	69	55	45	38	66	53	44	37	50	42	35	46	39	34	43	38	33	33	33	33	30
6	63	49	39	32	61	47	38	32	44	36	31	42	35	29	39	33	28	28	28	28	26
7	58	44	35	28	56	43	34	28	40	32	27	38	31	26	36	29	25	25	25	25	23
8	54	40	31	25	52	39	30	24	37	29	24	34	28	23	32	26	22	22	22	22	20
9	51	36	28	22	49	35	27	22	33	26	21	32	25	20	30	24	20	20	20	20	18
10	47	33	25	20	45	33	25	19	31	24	19	29	23	18	28	22	18	18	18	18	16

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	3939	3939	3939
5°	4324	3881	3238
10°	4893	3834	2669
15°	5483	3785	2079
20°	6184	3723	1531
25°	6766	3652	1005
30°	7198	3555	566
35°	7572	3452	249
40°	7904	3326	60
45°	8189	3166	0
50°	8428	2956	0
55°	8610	2686	0
60°	8701	2375	0
65°	8738	2023	0
70°	8708	1649	0
75°	8598	1217	7
80°	8248	744	37
85°	7973	356	51



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	35.1	1.9
10°-20°	105.0	5.8
20°-30°	170.0	9.4
30°-40°	218.3	12.1
40°-50°	247.1	13.7
50°-60°	256.0	14.2
60°-70°	241.5	13.3
70°-80°	202.4	11.2
80°-90°	146.7	8.1
90°-100°	96.4	5.3
100°-110°	55.7	3.1
110°-120°	24.6	1.4
120°-130°	6.7	0.4
130°-140°	1.5	0.1
140°-150°	1.0	0.1
150°-160°	0.7	0.0
160°-170°	0.4	0.0
170°-180°	0.1	0.0
0°-30°	310.0	17.1
0°-40°	528.3	29.2
0°-60°	1031.4	57.0
0°-90°	1621.9	89.7
90°-120°	176.6	9.8
90°-150°	185.8	10.3
90°-180°	187.0	10.3
0°-180°	1809.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	366	366	366	366	366	
5°	418	401	363	330	313	42
15°	558	489	351	254	212	161
25°	702	574	325	167	104	325
35°	778	619	286	81	26	488
45°	807	613	234	19	0	623
55°	786	574	169	0	0	702
65°	711	508	101	0	0	703
75°	592	410	43	0	0	621
85°	434	297	7	2	3	370
90°	376	238	2	3	3	206
95°	323	186	1	3	4	253
105°	222	96	1	2	4	234
115°	121	32	1	1	2	121
125°	36	4	2	1	2	36
135°	2	1	2	2	1	3
145°	0	2	2	1	1	0
155°	1	2	2	1	0	0
165°	1	1	2	1	0	0
175°	1	2	2	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°	365.9	365.9	365.9	365.9	365.9	365.9	365.9	365.9	365.9	365.9	365.9
2.5°	396.7	396.2	394.8	392.5	389.2	383.6	379.0	374.8	369.2	364.5	355.7
5°	417.7	415.3	413.5	411.1	403.7	398.5	390.2	380.8	372.0	363.1	345.4
7.5°	451.2	447.5	444.7	438.2	427.9	416.3	403.2	394.4	388.3	363.6	333.3
10°	487.1	483.8	478.3	466.6	454.0	437.2	418.6	397.6	379.0	358.5	322.6
12.5°	522.5	517.9	510.0	495.0	477.3	456.3	430.7	406.0	379.4	355.2	310.0
15°	558.0	552.8	544.4	526.3	503.0	475.5	444.2	413.0	381.8	351.0	296.9
17.5°	596.7	589.7	577.1	556.6	527.2	493.2	456.3	418.6	380.8	345.9	282.9
20°	638.1	628.4	614.8	587.3	552.8	512.8	468.5	424.2	380.4	339.8	267.1
22.5°	672.6	662.8	647.9	619.5	578.0	529.1	478.7	427.9	378.5	332.8	252.2
25°	702.5	694.5	678.2	645.6	601.8	546.3	488.5	430.7	375.7	325.4	236.3
27.5°	725.8	718.3	700.1	666.6	621.8	561.7	496.0	432.1	372.0	317.9	220.0
30°	746.3	738.8	716.9	682.4	635.3	573.8	503.4	432.6	367.3	306.7	202.3
32.5°	762.1	755.1	732.8	695.9	644.7	582.2	507.6	432.1	361.3	298.8	183.2
35°	778.0	771.0	744.9	705.7	651.7	585.9	510.9	429.8	353.8	285.7	165.0
37.5°	790.1	782.2	755.6	712.3	654.9	586.9	510.4	426.5	345.9	275.0	146.8
40°	798.5	790.1	761.7	716.0	655.9	585.5	506.7	420.9	336.6	261.5	127.7
42.5°	804.1	794.8	764.5	721.6	654.0	581.7	501.1	413.9	326.3	249.8	109.5
45°	806.9	797.1	764.9	716.9	650.7	574.7	492.7	405.1	315.1	234.0	91.4
47.5°	805.5	794.8	762.6	711.8	644.7	567.3	483.4	394.4	301.6	220.0	74.1
50°	803.2	792.0	757.5	705.3	636.3	558.0	473.1	381.3	287.6	202.8	58.7
52.5°	795.7	784.5	751.9	695.9	626.5	547.2	459.1	367.8	272.7	186.0	44.7
55°	786.4	776.1	742.1	687.6	613.9	534.2	446.1	353.3	258.2	168.7	32.2
57.5°	771.9	762.6	730.0	674.0	601.3	519.7	431.6	337.5	240.1	151.5	22.4
60°	754.2	744.9	713.2	658.7	586.9	503.4	415.8	321.2	223.7	134.2	14.0
62.5°	735.6	726.7	693.6	639.5	568.7	486.2	398.5	304.9	206.5	118.4	8.4
65°	710.9	702.5	672.6	616.7	548.6	467.5	379.4	285.3	188.8	100.7	4.7
67.5°	684.8	677.3	647.0	595.7	525.3	447.0	359.9	266.2	170.1	85.3	2.3
70°	656.8	647.5	619.5	567.3	501.6	423.7	338.4	246.6	152.4	70.4	0.0
72.5°	624.2	617.2	590.1	540.7	474.1	399.0	316.5	225.1	132.8	55.9	0.5
75°	592.5	583.6	558.9	512.3	447.0	372.9	292.3	205.1	113.7	42.9	0.5
77.5°	551.4	548.6	525.3	480.1	421.4	347.7	265.7	180.9	95.6	30.8	0.5
80°	510.4	507.6	489.4	448.0	391.6	317.9	241.0	158.0	77.8	20.5	0.5
82.5°	469.9	466.1	448.9	414.4	361.3	292.7	215.4	135.2	61.5	12.6	0.5
85°	433.5	428.8	410.2	378.5	330.0	264.3	188.8	112.8	45.7	7.0	0.9
87.5°	402.3	399.0	378.5	345.9	298.3	237.7	165.5	91.4	32.2	3.3	1.4
90°	375.7	368.7	350.5	316.0	268.5	208.4	140.8	73.2	21.4	1.9	1.9
92.5°	349.6	343.5	323.5	288.1	241.9	183.2	117.0	55.9	13.5	0.9	2.3
95°	322.6	316.0	296.5	263.8	214.9	157.6	96.0	41.0	7.5	0.9	2.3
97.5°	296.0	289.9	269.4	236.8	190.6	135.2	76.0	28.9	3.7	0.9	1.9
100°	271.3	264.3	245.7	213.0	166.4	112.8	58.7	18.6	2.3	0.9	1.9
102.5°	245.2	239.6	220.5	188.8	141.2	91.8	43.8	11.7	0.9	0.9	1.4
105°	221.9	214.9	196.2	163.6	120.3	72.3	30.8	7.0	0.9	0.9	1.4



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	144.5	138.9	122.6	95.1	61.1	28.4	8.4	1.4	1.4	1.4	1.4
115°	120.7	112.3	97.9	73.6	45.2	18.6	4.2	1.4	1.4	1.4	1.4
117.5°	96.5	89.5	79.2	55.9	29.8	12.1	2.3	1.4	1.4	1.4	1.4
120°	75.5	69.0	57.3	38.7	20.0	7.0	0.9	1.4	1.4	1.4	1.4
122.5°	54.1	48.9	38.7	25.2	12.1	3.3	1.4	1.4	1.9	1.9	1.4
125°	35.9	33.1	25.6	15.4	7.5	1.4	1.4	1.4	1.9	1.9	1.4
127.5°	23.3	21.0	14.9	8.9	3.3	1.4	1.4	1.9	1.9	1.9	1.4
130°	13.1	11.7	8.9	5.1	1.4	1.4	1.4	1.9	1.9	1.9	1.4
132.5°	7.5	7.0	4.7	0.9	1.4	1.4	1.4	1.9	1.9	1.9	1.9
135°	1.9	0.9	0.9	0.9	1.4	1.4	1.9	1.9	2.3	2.3	1.9
137.5°	0.5	0.5	0.9	0.9	1.4	1.4	1.9	2.3	2.3	2.3	1.9
140°	0.5	0.5	0.9	1.4	1.4	1.4	1.9	2.3	2.3	2.3	1.9
142.5°	0.5	0.9	0.9	1.4	1.4	1.9	1.9	2.3	2.3	1.9	1.9
145°	0.5	0.9	0.9	1.4	1.4	1.9	1.9	2.3	1.9	1.9	1.9
147.5°	0.9	0.9	0.9	1.4	1.4	1.9	1.9	2.3	2.3	1.9	1.9
150°	0.5	0.9	0.9	1.4	1.9	1.9	1.9	2.3	1.9	1.9	1.9
152.5°	0.5	0.9	0.9	1.4	1.9	1.9	1.9	2.3	1.9	1.9	1.9
155°	0.9	0.9	0.9	1.4	1.9	1.9	1.9	2.3	1.9	1.9	2.3
157.5°	0.9	0.9	0.9	1.4	1.9	1.9	1.9	2.3	1.9	1.9	2.3
160°	0.9	0.9	0.9	1.4	1.4	1.9	1.9	1.9	1.9	1.9	1.9
162.5°	0.9	0.9	0.9	1.4	1.4	1.9	1.9	1.9	1.9	1.9	1.9
165°	0.9	0.9	0.9	0.9	1.4	1.4	1.9	1.9	1.9	1.9	1.9
167.5°	0.9	0.9	0.9	1.4	1.4	1.4	1.9	1.9	1.9	1.9	1.9
170°	0.9	0.9	0.9	1.4	1.4	1.4	1.9	2.3	2.3	2.3	2.3
172.5°	0.9	0.9	0.9	1.4	1.4	1.9	1.9	2.3	2.3	2.3	2.3
175°	0.9	0.9	0.9	1.4	1.4	1.9	1.9	2.3	2.3	2.3	2.3
177.5°	0.5	0.9	0.9	1.4	1.4	1.9	1.9	2.3	2.3	2.3	1.9
180°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4



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**CANDELA DISTRIBUTION (continued):**

	135°	157.5°	180°
0°	365.9	365.9	365.9
2.5°	348.2	341.7	339.8
5°	329.6	318.8	312.8
7.5°	310.9	296.5	289.5
10°	293.7	273.2	265.7
12.5°	273.2	249.4	237.7
15°	253.6	222.8	211.6
17.5°	231.7	197.2	184.1
20°	211.2	171.5	158.0
22.5°	187.9	146.4	131.5
25°	166.9	121.2	104.4
27.5°	143.6	95.6	81.1
30°	121.7	73.2	58.7
32.5°	100.7	53.6	40.6
35°	81.1	36.4	25.6
37.5°	62.5	22.4	13.1
40°	45.2	11.7	6.1
42.5°	30.3	5.6	3.3
45°	18.6	2.8	0.0
47.5°	10.7	0.0	0.0
50°	5.6	0.0	0.0
52.5°	2.3	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°	0.5	0.5	0.5
77.5°	0.5	0.9	1.4
80°	0.9	1.9	2.3
82.5°	1.9	2.3	2.3
85°	1.9	2.3	2.8
87.5°	2.3	2.8	3.3
90°	2.8	3.3	3.3
92.5°	2.8	3.7	3.7
95°	3.3	3.7	4.2
97.5°	3.7	4.2	4.2
100°	3.3	4.2	4.7
102.5°	2.8	4.2	4.2
105°	2.3	3.3	3.7





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**CANDELA DISTRIBUTION (continued):**

	135°	157.5°	180°
112.5°	1.9	2.3	2.3
115°	1.4	1.9	2.3
117.5°	1.4	1.9	1.9
120°	1.4	1.4	1.9
122.5°	1.4	1.4	1.9
125°	1.4	1.4	1.9
127.5°	1.9	1.4	1.4
130°	1.4	1.4	1.4
132.5°	1.9	1.4	1.4
135°	1.9	1.4	1.4
137.5°	1.9	1.4	1.4
140°	1.9	1.4	1.4
142.5°	1.9	1.4	1.4
145°	1.4	1.4	1.4
147.5°	1.4	1.4	1.4
150°	1.4	1.4	0.9
152.5°	1.4	0.9	0.9
155°	1.4	0.9	0.5
157.5°	1.9	0.9	0.5
160°	1.4	0.9	0.5
162.5°	1.4	0.9	0.5
165°	1.4	0.9	0.0
167.5°	1.4	0.9	0.5
170°	1.4	0.9	0.5
172.5°	1.4	0.9	0.5
175°	1.4	0.5	0.5
177.5°	1.4	0.5	0.5
180°	1.4	1.4	1.4



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	195.8	190.2	171.5	140.8	98.4	55.0	20.5	3.7	0.9	1.4	1.4
110°	170.6	165.9	146.8	117.0	79.2	41.0	13.5	2.3	1.4	1.4	1.4







107.5°	1.9	2.8	3.3
110°	1.9	2.3	2.8



(END OF REPORT)