

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: P551546

Luminaire Tested: **FCC-X-2-LD4-2LO-35-UNV-82-85-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: P551546
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-82-85-ED1D
Description: FCC CORNER MOUNT LUMINAIRE WITH .187 CLEAR PC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 3500K, AND 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

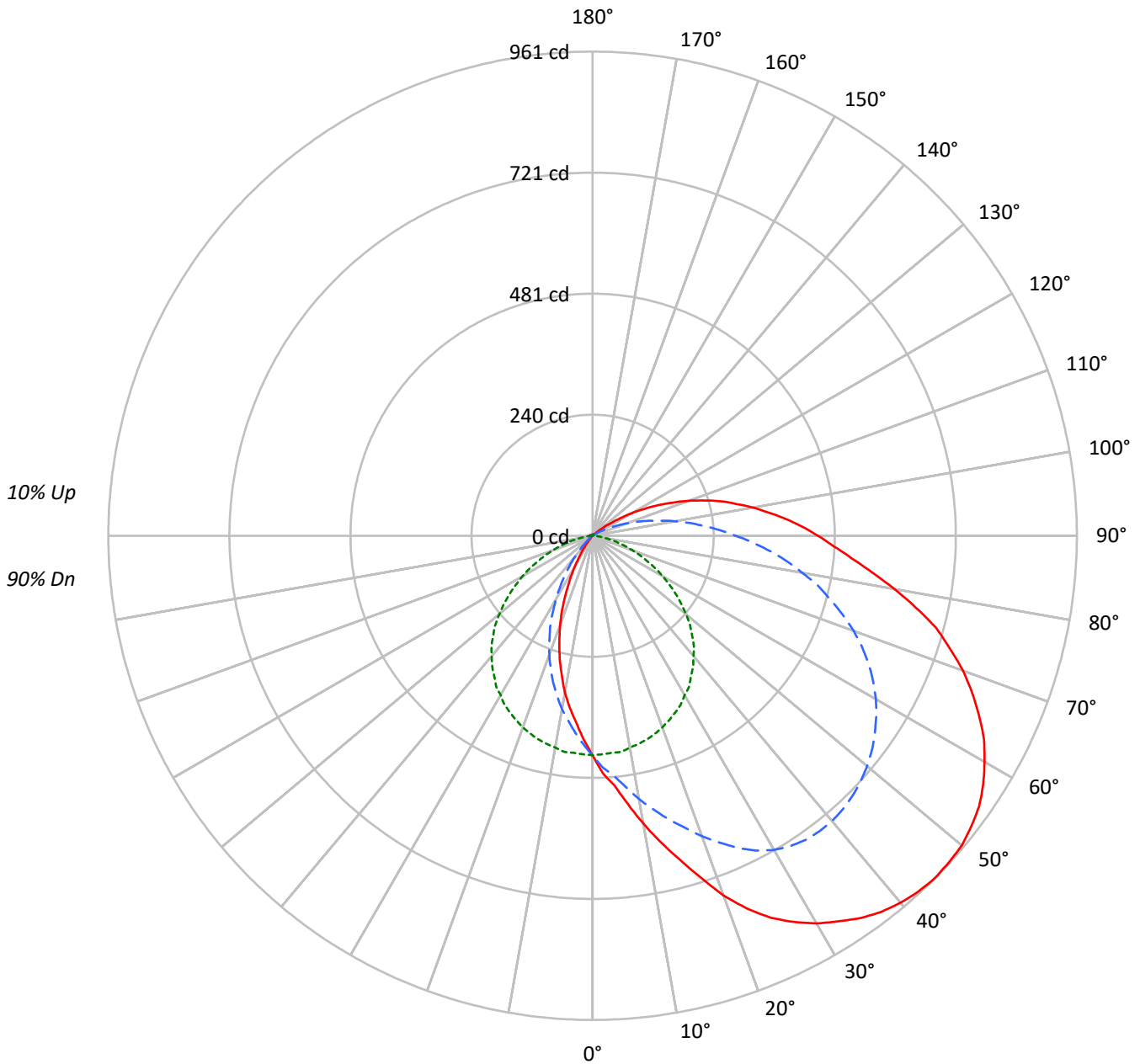
Lumens per Lamp: N/A
Luminaire Lumens: 2154.1 lumens
Efficiency: N/A
Efficacy: 91.7 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

Input Watts (W): 23.5
Input Voltage (V): NR
Input Current (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

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Luminous Intensity Polar Plot





TEST NUMBER: P551546

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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°	4690	4690	4690
5°	5148	4622	3855
10°	5826	4564	3178
15°	6529	4506	2476
20°	7363	4433	1824
25°	8055	4348	1197
30°	8570	4234	674
35°	9016	4111	297
40°	9411	3960	71
45°	9751	3770	0
50°	10035	3518	0
55°	10251	3199	0
60°	10360	2830	0
65°	10403	2408	0
70°	10368	1963	0
75°	10236	1449	9
80°	9823	885	45
85°	9494	422	61



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	41.7	1.9
10°-20°	125.0	5.8
20°-30°	202.4	9.4
30°-40°	259.9	12.1
40°-50°	294.3	13.7
50°-60°	304.9	14.2
60°-70°	287.5	13.3
70°-80°	241.0	11.2
80°-90°	174.7	8.1
90°-100°	114.8	5.3
100°-110°	66.3	3.1
110°-120°	29.3	1.4
120°-130°	7.9	0.4
130°-140°	1.8	0.1
140°-150°	1.2	0.1
150°-160°	0.8	0.0
160°-170°	0.5	0.0
170°-180°	0.2	0.0
0°-30°	369.1	17.1
0°-40°	629.0	29.2
0°-60°	1228.1	57.0
0°-90°	1931.3	89.7
90°-120°	210.3	9.8
90°-150°	221.3	10.3
90°-180°	223.0	10.4
0°-180°	2154.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	436	436	436	436	436	
5°	497	478	432	392	372	50
15°	664	582	418	302	252	192
25°	836	684	387	199	124	387
35°	926	737	340	97	30	581
45°	961	730	279	22	0	742
55°	936	684	201	0	0	836
65°	846	605	120	0	0	837
75°	705	488	51	1	1	740
85°	516	354	8	2	3	441
90°	447	284	2	3	4	245
95°	384	222	1	4	5	301
105°	264	115	1	3	4	279
115°	144	38	2	2	3	144
125°	43	5	2	2	2	43
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°	435.7	435.7	435.7	435.7	435.7	435.7	435.7	435.7	435.7	435.7	435.7
2.5°	472.3	471.8	470.1	467.3	463.5	456.8	451.2	446.2	439.6	434.0	423.5
5°	497.3	494.5	492.3	489.5	480.7	474.6	464.6	453.5	442.9	432.4	411.3
7.5°	537.3	532.8	529.5	521.7	509.5	495.6	480.1	469.6	462.3	432.9	396.9
10°	580.0	576.1	569.5	555.6	540.6	520.6	498.4	473.4	451.2	426.8	384.1
12.5°	622.2	616.6	607.2	589.4	568.4	543.4	512.9	483.4	451.8	422.9	369.1
15°	664.4	658.3	648.3	626.6	598.9	566.1	528.9	491.8	454.6	417.9	353.6
17.5°	710.4	702.1	687.1	662.7	627.7	587.2	543.4	498.4	453.5	411.8	336.9
20°	759.8	748.2	732.1	699.3	658.3	610.5	557.8	505.1	452.9	404.6	318.0
22.5°	800.9	789.3	771.5	737.6	688.2	630.0	570.0	509.5	450.7	396.3	300.3
25°	836.4	827.0	807.6	768.7	716.6	650.5	581.7	512.9	447.4	387.4	281.4
27.5°	864.2	855.3	833.7	793.7	740.4	668.8	590.6	514.5	442.9	378.5	262.0
30°	888.6	879.7	853.6	812.6	756.5	683.2	599.4	515.1	437.4	365.2	240.9
32.5°	907.5	899.2	872.5	828.7	767.6	693.2	604.4	514.5	430.2	355.8	218.1
35°	926.4	918.0	886.9	840.3	775.9	697.7	608.3	511.7	421.3	340.2	196.5
37.5°	940.8	931.3	899.7	848.1	779.8	698.8	607.8	507.9	411.8	327.5	174.8
40°	950.8	940.8	906.9	852.5	780.9	697.1	603.3	501.2	400.7	311.4	152.1
42.5°	957.4	946.3	910.3	859.2	778.7	692.7	596.7	492.9	388.5	297.5	130.4
45°	960.8	949.1	910.8	853.6	774.8	684.4	586.7	482.3	375.2	278.6	108.8
47.5°	959.1	946.3	908.0	847.5	767.6	675.5	575.6	469.6	359.1	262.0	88.3
50°	956.3	943.0	901.9	839.8	757.6	664.4	563.4	454.0	342.5	241.4	69.9
52.5°	947.4	934.1	895.3	828.7	746.0	651.6	546.7	437.9	324.7	221.5	53.3
55°	936.3	924.1	883.6	818.7	731.0	636.1	531.2	420.7	307.5	200.9	38.3
57.5°	919.1	908.0	869.2	802.6	716.0	618.9	514.0	401.8	285.8	180.4	26.6
60°	898.0	886.9	849.2	784.3	698.8	599.4	495.1	382.4	266.4	159.9	16.7
62.5°	875.8	865.3	825.9	761.5	677.1	578.9	474.6	363.0	245.9	141.0	10.0
65°	846.4	836.4	800.9	734.3	653.3	556.7	451.8	339.7	224.8	119.9	5.6
67.5°	815.3	806.5	770.4	709.3	625.5	532.3	428.5	316.9	202.6	101.6	2.8
70°	782.0	770.9	737.6	675.5	597.2	504.5	403.0	293.6	181.5	83.8	0.0
72.5°	743.2	734.9	702.7	643.8	564.5	475.1	376.9	268.1	158.2	66.6	0.6
75°	705.4	694.9	665.5	610.0	532.3	444.0	348.0	244.2	135.4	51.1	0.6
77.5°	656.6	653.3	625.5	571.7	501.8	414.1	316.4	215.4	113.8	36.6	0.6
80°	607.8	604.4	582.8	533.4	466.2	378.5	287.0	188.2	92.7	24.4	0.6
82.5°	559.5	555.0	534.5	493.4	430.2	348.6	256.4	161.0	73.3	15.0	0.6
85°	516.2	510.6	488.4	450.7	393.0	314.7	224.8	134.3	54.4	8.3	1.1
87.5°	479.0	475.1	450.7	411.8	355.2	283.1	197.0	108.8	38.3	3.9	1.7
90°	447.4	439.0	417.4	376.3	319.7	248.1	167.6	87.1	25.5	2.2	2.2
92.5°	416.3	409.1	385.2	343.0	288.1	218.1	139.3	66.6	16.1	1.1	2.8
95°	384.1	376.3	353.0	314.1	255.9	187.6	114.3	48.8	8.9	1.1	2.8
97.5°	352.4	345.2	320.8	282.0	227.0	161.0	90.5	34.4	4.4	1.1	2.2
100°	323.0	314.7	292.5	253.7	198.1	134.3	69.9	22.2	2.8	1.1	2.2
102.5°	291.9	285.3	262.5	224.8	168.2	109.3	52.2	13.9	1.1	1.1	1.7
105°	264.2	255.9	233.7	194.8	143.2	86.0	36.6	8.3	1.1	1.1	1.7



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	172.1	165.4	146.0	113.2	72.7	33.9	10.0	1.7	1.7	1.7	1.7
115°	143.8	133.8	116.6	87.7	53.8	22.2	5.0	1.7	1.7	1.7	1.7
117.5°	114.9	106.6	94.4	66.6	35.5	14.4	2.8	1.7	1.7	1.7	1.7
120°	89.9	82.1	68.3	46.1	23.9	8.3	1.1	1.7	1.7	1.7	1.7
122.5°	64.4	58.3	46.1	30.0	14.4	3.9	1.7	1.7	2.2	2.2	1.7
125°	42.7	39.4	30.5	18.3	8.9	1.7	1.7	1.7	2.2	2.2	1.7
127.5°	27.8	25.0	17.8	10.5	3.9	1.7	1.7	2.2	2.2	2.2	1.7
130°	15.5	13.9	10.5	6.1	1.7	1.7	1.7	2.2	2.2	2.2	1.7
132.5°	8.9	8.3	5.6	1.1	1.7	1.7	1.7	2.2	2.2	2.2	2.2
135°	2.2	1.1	1.1	1.1	1.7	1.7	2.2	2.2	2.8	2.8	2.2
137.5°	0.6	0.6	1.1	1.1	1.7	1.7	2.2	2.8	2.8	2.8	2.2
140°	0.6	0.6	1.1	1.7	1.7	1.7	2.2	2.8	2.8	2.8	2.2
142.5°	0.6	1.1	1.1	1.7	1.7	2.2	2.2	2.8	2.8	2.2	2.2
145°	0.6	1.1	1.1	1.7	1.7	2.2	2.2	2.8	2.2	2.2	2.2
147.5°	1.1	1.1	1.1	1.7	1.7	2.2	2.2	2.8	2.8	2.2	2.2
150°	0.6	1.1	1.1	1.7	2.2	2.2	2.2	2.8	2.2	2.2	2.2
152.5°	0.6	1.1	1.1	1.7	2.2	2.2	2.2	2.8	2.2	2.2	2.2
155°	1.1	1.1	1.1	1.7	2.2	2.2	2.2	2.8	2.2	2.2	2.8
157.5°	1.1	1.1	1.1	1.7	2.2	2.2	2.2	2.8	2.2	2.2	2.8
160°	1.1	1.1	1.1	1.7	1.7	2.2	2.2	2.2	2.2	2.2	2.2
162.5°	1.1	1.1	1.1	1.7	1.7	2.2	2.2	2.2	2.2	2.2	2.2
165°	1.1	1.1	1.1	1.1	1.7	1.7	2.2	2.2	2.2	2.2	2.2
167.5°	1.1	1.1	1.1	1.7	1.7	1.7	2.2	2.2	2.2	2.2	2.2
170°	1.1	1.1	1.1	1.7	1.7	1.7	2.2	2.8	2.8	2.8	2.8
172.5°	1.1	1.1	1.1	1.7	1.7	2.2	2.2	2.8	2.8	2.8	2.8
175°	1.1	1.1	1.1	1.7	1.7	2.2	2.2	2.8	2.8	2.8	2.8
177.5°	0.6	1.1	1.1	1.7	1.7	2.2	2.2	2.8	2.8	2.8	2.2
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°	435.7	435.7	435.7
2.5°	414.6	406.8	404.6
5°	392.4	379.6	372.4
7.5°	370.2	353.0	344.7
10°	349.7	325.3	316.4
12.5°	325.3	296.9	283.1
15°	301.9	265.3	252.0
17.5°	275.9	234.8	219.2
20°	251.4	204.3	188.2
22.5°	223.7	174.3	156.5
25°	198.7	144.3	124.3
27.5°	171.0	113.8	96.6
30°	144.9	87.1	69.9
32.5°	119.9	63.8	48.3
35°	96.6	43.3	30.5
37.5°	74.4	26.6	15.5
40°	53.8	13.9	7.2
42.5°	36.1	6.7	3.9
45°	22.2	3.3	0.0
47.5°	12.8	0.0	0.0
50°	6.7	0.0	0.0
52.5°	2.8	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	2.2	2.8
82.5°	2.2	2.8	2.8
85°	2.2	2.8	3.3
87.5°	2.8	3.3	3.9
90°	3.3	3.9	3.9
92.5°	3.3	4.4	4.4
95°	3.9	4.4	5.0
97.5°	4.4	5.0	5.0
100°	3.9	5.0	5.6
102.5°	3.3	5.0	5.0
105°	2.8	3.9	4.4



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	2.2	2.8	2.8
115°	1.7	2.2	2.8
117.5°	1.7	2.2	2.2
120°	1.7	1.7	2.2
122.5°	1.7	1.7	2.2
125°	1.7	1.7	2.2
127.5°	2.2	1.7	1.7
130°	1.7	1.7	1.7
132.5°	2.2	1.7	1.7
135°	2.2	1.7	1.7
137.5°	2.2	1.7	1.7
140°	2.2	1.7	1.7
142.5°	2.2	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°	2.2	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°	233.1	226.5	204.3	167.6	117.1	65.5	24.4	4.4	1.1	1.7	1.7
110°	203.1	197.6	174.8	139.3	94.4	48.8	16.1	2.8	1.7	1.7	1.7





107.5°	2.2	3.3	3.9
110°	2.2	2.8	3.3



(END OF REPORT)