

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: P551527

Luminaire Tested: **FCC-X-2-LD4-2LO-35-UNV-81-84-ED1D-90**

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: P551527
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-81-84-ED1D-90
Description: FCC CORNER MOUNT LUMINAIRE WITH .156 CLEAR PC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 3500K, AND 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

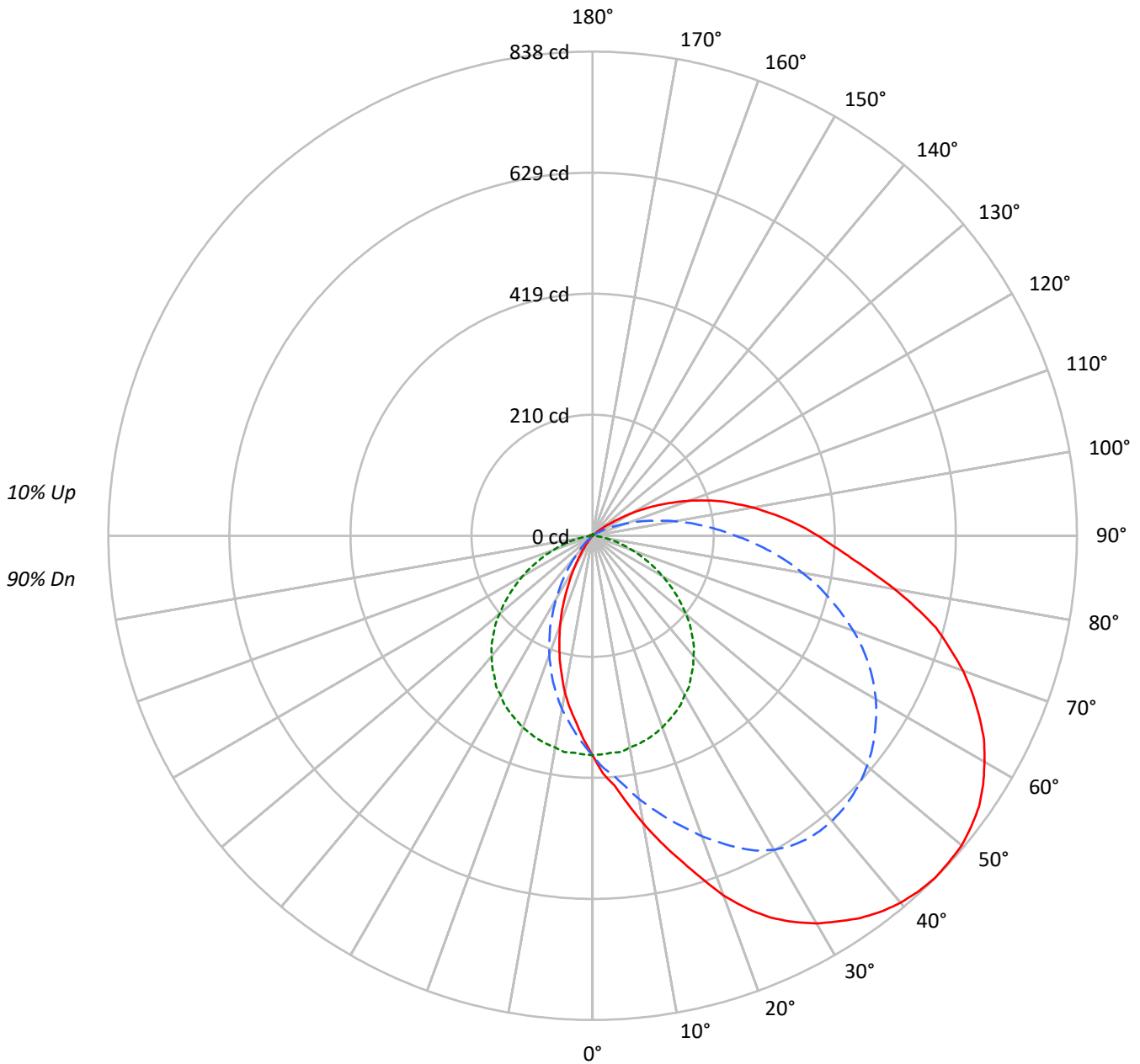
Lumens per Lamp: N/A
Luminaire Lumens: 1878.1 lumens
Efficiency: N/A
Efficacy: 79.9 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

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

TEST NUMBER: P551527

CATALOG NUMBER: FCC-X-2-LD4-2LO-35-UNV-81-84-ED1D-90

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°	4089	4089	4089
5°	4489	4029	3361
10°	5079	3979	2770
15°	5692	3929	2159
20°	6420	3865	1589
25°	7024	3791	1044
30°	7473	3691	588
35°	7861	3584	259
40°	8205	3453	62
45°	8501	3287	0
50°	8749	3068	0
55°	8938	2790	0
60°	9033	2467	0
65°	9071	2099	0
70°	9039	1712	0
75°	8926	1262	7
80°	8564	773	39
85°	8276	371	53



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	36.4	1.9
10°-20°	109.0	5.8
20°-30°	176.4	9.4
30°-40°	226.6	12.1
40°-50°	256.6	13.7
50°-60°	265.8	14.2
60°-70°	250.7	13.3
70°-80°	210.1	11.2
80°-90°	152.3	8.1
90°-100°	100.1	5.3
100°-110°	57.8	3.1
110°-120°	25.5	1.4
120°-130°	6.9	0.4
130°-140°	1.6	0.1
140°-150°	1.0	0.1
150°-160°	0.7	0.0
160°-170°	0.4	0.0
170°-180°	0.2	0.0
0°-30°	321.8	17.1
0°-40°	548.4	29.2
0°-60°	1070.8	57.0
0°-90°	1683.8	89.7
90°-120°	183.4	9.8
90°-150°	193.0	10.3
90°-180°	194.0	10.3
0°-180°	1878.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	380	380	380	380	380	
5°	434	416	377	342	325	44
15°	579	508	364	263	220	167
25°	729	596	338	173	108	337
35°	808	642	297	84	27	507
45°	838	636	243	19	0	647
55°	816	596	175	0	0	729
65°	738	528	104	0	0	730
75°	615	426	44	0	0	645
85°	450	308	7	2	3	384
90°	390	248	2	3	3	214
95°	335	193	1	3	4	263
105°	230	100	1	2	4	243
115°	125	33	2	2	2	126
125°	37	5	2	2	2	37
135°	2	2	2	2	2	3
145°	0	2	2	2	2	0
155°	1	2	2	2	0	0
165°	1	2	2	2	0	0
175°	1	2	2	2	0	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°	379.9	379.9	379.9	379.9	379.9	379.9	379.9	379.9	379.9	379.9	379.9
2.5°	411.8	411.3	409.9	407.5	404.1	398.3	393.4	389.1	383.3	378.4	369.2
5°	433.6	431.2	429.2	426.8	419.1	413.7	405.0	395.4	386.2	377.0	358.6
7.5°	468.4	464.6	461.7	454.9	444.2	432.1	418.6	409.4	403.1	377.5	346.0
10°	505.7	502.3	496.5	484.4	471.3	453.9	434.6	412.8	393.4	372.1	334.9
12.5°	542.5	537.6	529.4	513.9	495.5	473.8	447.1	421.5	393.9	368.7	321.8
15°	579.2	573.9	565.2	546.3	522.1	493.6	461.2	428.7	396.3	364.4	308.3
17.5°	619.4	612.2	599.1	577.8	547.3	512.0	473.8	434.6	395.4	359.1	293.7
20°	662.5	652.3	638.3	609.7	573.9	532.3	486.3	440.4	394.9	352.8	277.3
22.5°	698.3	688.1	672.6	643.1	600.1	549.2	497.0	444.2	392.9	345.5	261.8
25°	729.3	721.0	704.1	670.2	624.7	567.1	507.1	447.1	390.0	337.8	245.3
27.5°	753.5	745.7	726.8	692.0	645.5	583.1	514.9	448.6	386.2	330.0	228.4
30°	774.8	767.0	744.3	708.5	659.6	595.7	522.6	449.1	381.3	318.4	210.0
32.5°	791.2	783.9	760.7	722.5	669.3	604.4	527.0	448.6	375.0	310.2	190.2
35°	807.7	800.4	773.3	732.6	676.5	608.3	530.4	446.2	367.3	296.6	171.3
37.5°	820.2	812.0	784.4	739.4	679.9	609.3	529.9	442.8	359.1	285.5	152.4
40°	828.9	820.2	790.7	743.3	680.9	607.8	526.0	437.0	349.4	271.5	132.6
42.5°	834.8	825.1	793.6	749.1	678.9	603.9	520.2	429.7	338.7	259.4	113.7
45°	837.7	827.5	794.1	744.3	675.5	596.7	511.5	420.5	327.1	242.9	94.8
47.5°	836.2	825.1	791.7	738.9	669.3	588.9	501.8	409.4	313.1	228.4	76.9
50°	833.8	822.2	786.4	732.2	660.5	579.2	491.2	395.8	298.6	210.5	61.0
52.5°	826.0	814.4	780.6	722.5	650.4	568.1	476.7	381.8	283.1	193.1	46.5
55°	816.4	805.7	770.4	713.8	637.3	554.6	463.1	366.8	268.1	175.2	33.4
57.5°	801.4	791.7	757.8	699.7	624.3	539.6	448.1	350.4	249.2	157.3	23.2
60°	783.0	773.3	740.4	683.8	609.3	522.6	431.7	333.4	232.3	139.4	14.5
62.5°	763.6	754.4	720.1	663.9	590.4	504.7	413.7	316.5	214.4	122.9	8.7
65°	738.0	729.3	698.3	640.2	569.6	485.4	393.9	296.2	196.0	104.5	4.8
67.5°	710.9	703.1	671.7	618.4	545.4	464.1	373.6	276.3	176.6	88.6	2.4
70°	681.8	672.2	643.1	588.9	520.7	439.9	351.3	256.0	158.2	73.1	0.0
72.5°	648.0	640.7	612.6	561.3	492.1	414.2	328.6	233.7	137.9	58.1	0.5
75°	615.1	605.9	580.2	531.8	464.1	387.1	303.4	212.9	118.1	44.5	0.5
77.5°	572.5	569.6	545.4	498.4	437.5	361.0	275.8	187.8	99.2	31.9	0.5
80°	529.9	527.0	508.1	465.0	406.5	330.0	250.2	164.0	80.8	21.3	0.5
82.5°	487.8	483.9	466.0	430.2	375.0	303.9	223.6	140.3	63.9	13.1	0.5
85°	450.0	445.2	425.8	392.9	342.6	274.4	196.0	117.1	47.4	7.3	1.0
87.5°	417.6	414.2	392.9	359.1	309.7	246.8	171.8	94.8	33.4	3.4	1.5
90°	390.0	382.8	363.9	328.1	278.7	216.3	146.1	76.0	22.3	1.9	1.9
92.5°	362.9	356.6	335.8	299.1	251.2	190.2	121.5	58.1	14.0	1.0	2.4
95°	334.9	328.1	307.8	273.9	223.1	163.6	99.7	42.6	7.7	1.0	2.4
97.5°	307.3	301.0	279.7	245.8	197.9	140.3	78.9	30.0	3.9	1.0	1.9
100°	281.6	274.4	255.0	221.1	172.8	117.1	61.0	19.4	2.4	1.0	1.9
102.5°	254.5	248.7	228.9	196.0	146.6	95.3	45.5	12.1	1.0	1.0	1.5
105°	230.3	223.1	203.7	169.9	124.9	75.0	31.9	7.3	1.0	1.0	1.5



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CATALOG NUMBER: FCC-X-2-LD4-2LO-35-UNV-81-84-ED1D-90

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	150.0	144.2	127.3	98.7	63.4	29.5	8.7	1.5	1.5	1.5	1.5
115°	125.3	116.6	101.6	76.5	46.9	19.4	4.4	1.5	1.5	1.5	1.5
117.5°	100.2	92.9	82.3	58.1	31.0	12.6	2.4	1.5	1.5	1.5	1.5
120°	78.4	71.6	59.5	40.2	20.8	7.3	1.0	1.5	1.5	1.5	1.5
122.5°	56.1	50.8	40.2	26.1	12.6	3.4	1.5	1.5	1.9	1.9	1.5
125°	37.3	34.4	26.6	16.0	7.7	1.5	1.5	1.5	1.9	1.9	1.5
127.5°	24.2	21.8	15.5	9.2	3.4	1.5	1.5	1.9	1.9	1.9	1.5
130°	13.5	12.1	9.2	5.3	1.5	1.5	1.5	1.9	1.9	1.9	1.5
132.5°	7.7	7.3	4.8	1.0	1.5	1.5	1.5	1.9	1.9	1.9	1.9
135°	1.9	1.0	1.0	1.0	1.5	1.5	1.9	1.9	2.4	2.4	1.9
137.5°	0.5	0.5	1.0	1.0	1.5	1.5	1.9	2.4	2.4	2.4	1.9
140°	0.5	0.5	1.0	1.5	1.5	1.5	1.9	2.4	2.4	2.4	1.9
142.5°	0.5	1.0	1.0	1.5	1.5	1.9	1.9	2.4	2.4	1.9	1.9
145°	0.5	1.0	1.0	1.5	1.5	1.9	1.9	2.4	1.9	1.9	1.9
147.5°	1.0	1.0	1.0	1.5	1.5	1.9	1.9	2.4	2.4	1.9	1.9
150°	0.5	1.0	1.0	1.5	1.9	1.9	1.9	2.4	1.9	1.9	1.9
152.5°	0.5	1.0	1.0	1.5	1.9	1.9	1.9	2.4	1.9	1.9	1.9
155°	1.0	1.0	1.0	1.5	1.9	1.9	1.9	2.4	1.9	1.9	2.4
157.5°	1.0	1.0	1.0	1.5	1.9	1.9	1.9	2.4	1.9	1.9	2.4
160°	1.0	1.0	1.0	1.5	1.5	1.9	1.9	1.9	1.9	1.9	1.9
162.5°	1.0	1.0	1.0	1.5	1.5	1.9	1.9	1.9	1.9	1.9	1.9
165°	1.0	1.0	1.0	1.0	1.5	1.5	1.9	1.9	1.9	1.9	1.9
167.5°	1.0	1.0	1.0	1.5	1.5	1.5	1.9	1.9	1.9	1.9	1.9
170°	1.0	1.0	1.0	1.5	1.5	1.5	1.9	2.4	2.4	2.4	2.4
172.5°	1.0	1.0	1.0	1.5	1.5	1.9	1.9	2.4	2.4	2.4	2.4
175°	1.0	1.0	1.0	1.5	1.5	1.9	1.9	2.4	2.4	2.4	2.4
177.5°	0.5	1.0	1.0	1.5	1.5	1.9	1.9	2.4	2.4	2.4	1.9
180°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5



TEST NUMBER: P551527

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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	379.9	379.9	379.9
2.5°	361.5	354.7	352.8
5°	342.1	331.0	324.7
7.5°	322.8	307.8	300.5
10°	304.9	283.6	275.8
12.5°	283.6	258.9	246.8
15°	263.3	231.3	219.7
17.5°	240.5	204.7	191.1
20°	219.2	178.1	164.0
22.5°	195.0	151.9	136.5
25°	173.2	125.8	108.4
27.5°	149.0	99.2	84.2
30°	126.3	76.0	61.0
32.5°	104.5	55.7	42.1
35°	84.2	37.7	26.6
37.5°	64.8	23.2	13.5
40°	46.9	12.1	6.3
42.5°	31.5	5.8	3.4
45°	19.4	2.9	0.0
47.5°	11.1	0.0	0.0
50°	5.8	0.0	0.0
52.5°	2.4	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°	0.5	0.5	0.5
77.5°	0.5	1.0	1.5
80°	1.0	1.9	2.4
82.5°	1.9	2.4	2.4
85°	1.9	2.4	2.9
87.5°	2.4	2.9	3.4
90°	2.9	3.4	3.4
92.5°	2.9	3.9	3.9
95°	3.4	3.9	4.4
97.5°	3.9	4.4	4.4
100°	3.4	4.4	4.8
102.5°	2.9	4.4	4.4
105°	2.4	3.4	3.9



TEST NUMBER: P551527

CATALOG NUMBER: FCC-X-2-LD4-2LO-35-UNV-81-84-ED1D-90

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	1.9	2.4	2.4
115°	1.5	1.9	2.4
117.5°	1.5	1.9	1.9
120°	1.5	1.5	1.9
122.5°	1.5	1.5	1.9
125°	1.5	1.5	1.9
127.5°	1.9	1.5	1.5
130°	1.5	1.5	1.5
132.5°	1.9	1.5	1.5
135°	1.9	1.5	1.5
137.5°	1.9	1.5	1.5
140°	1.9	1.5	1.5
142.5°	1.9	1.5	1.5
145°	1.5	1.5	1.5
147.5°	1.5	1.5	1.5
150°	1.5	1.5	1.0
152.5°	1.5	1.0	1.0
155°	1.5	1.0	0.5
157.5°	1.9	1.0	0.5
160°	1.5	1.0	0.5
162.5°	1.5	1.0	0.5
165°	1.5	1.0	0.0
167.5°	1.5	1.0	0.5
170°	1.5	1.0	0.5
172.5°	1.5	1.0	0.5
175°	1.5	0.5	0.5
177.5°	1.5	0.5	0.5
180°	1.5	1.5	1.5



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	203.2	197.4	178.1	146.1	102.1	57.1	21.3	3.9	1.0	1.5	1.5
110°	177.1	172.3	152.4	121.5	82.3	42.6	14.0	2.4	1.5	1.5	1.5





107.5°	1.9	2.9	3.4
110°	1.9	2.4	2.9



(END OF REPORT)