

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: P551550

Luminaire Tested: **FCC-X-2-LD4-2LO-35-UNV-82-87-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: P551550
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-82-87-ED1D
Description: FCC CORNER MOUNT LUMINAIRE WITH .187 CLEAR PC 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

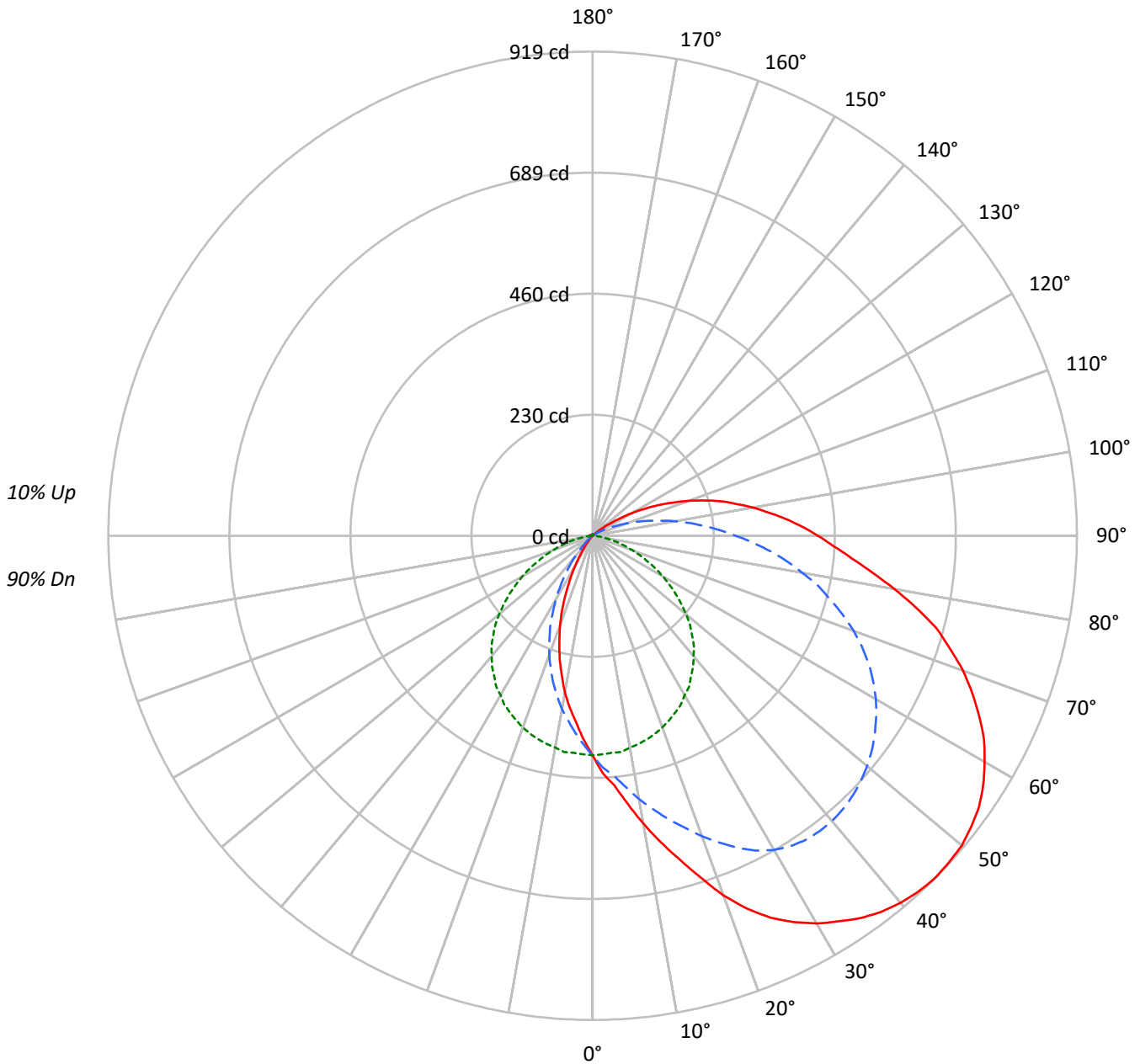
Lumens per Lamp: N/A
Luminaire Lumens: 2060.0 lumens
Efficiency: N/A
Efficacy: 87.7 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

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

TEST NUMBER: P551550

CATALOG NUMBER: FCC-X-2-LD4-2LO-35-UNV-82-87-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°	4485	4485	4485
5°	4923	4420	3687
10°	5572	4365	3039
15°	6244	4310	2368
20°	7043	4240	1743
25°	7704	4158	1145
30°	8196	4049	645
35°	8622	3932	284
40°	9001	3787	68
45°	9324	3606	0
50°	9597	3365	0
55°	9804	3061	0
60°	9909	2706	0
65°	9949	2304	0
70°	9916	1879	0
75°	9790	1384	7
80°	9393	849	44
85°	9080	407	59



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.9	1.9
10°-20°	119.5	5.8
20°-30°	193.5	9.4
30°-40°	248.6	12.1
40°-50°	281.4	13.7
50°-60°	291.6	14.2
60°-70°	275.0	13.3
70°-80°	230.4	11.2
80°-90°	167.0	8.1
90°-100°	109.8	5.3
100°-110°	63.4	3.1
110°-120°	28.0	1.4
120°-130°	7.6	0.4
130°-140°	1.7	0.1
140°-150°	1.1	0.1
150°-160°	0.8	0.0
160°-170°	0.5	0.0
170°-180°	0.2	0.0
0°-30°	353.0	17.1
0°-40°	601.6	29.2
0°-60°	1174.5	57.0
0°-90°	1847.0	89.7
90°-120°	201.2	9.8
90°-150°	211.6	10.3
90°-180°	213.0	10.3
0°-180°	2060.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	417	417	417	417	417	
5°	476	457	414	375	356	48
15°	635	557	400	289	241	183
25°	800	654	370	190	119	370
35°	886	705	325	92	29	556
45°	919	698	266	21	0	709
55°	896	654	192	0	0	800
65°	810	579	115	0	0	801
75°	675	467	49	0	0	708
85°	494	338	8	2	3	422
90°	428	272	2	3	4	235
95°	367	212	1	4	5	288
105°	253	110	1	3	4	267
115°	138	36	2	2	3	138
125°	41	5	2	2	2	41
135°	2	2	3	2	2	4
145°	0	2	2	2	2	0
155°	1	2	2	2	0	0
165°	1	2	2	2	0	0
175°	1	2	3	2	0	0
180°	2	2	2	2	2	



TEST NUMBER: P551550

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
0°	416.7	416.7	416.7	416.7	416.7	416.7	416.7	416.7	416.7	416.7	416.7
2.5°	451.7	451.2	449.6	446.9	443.2	436.9	431.6	426.8	420.4	415.1	405.0
5°	475.6	473.0	470.8	468.2	459.7	453.8	444.3	433.7	423.6	413.5	393.3
7.5°	513.8	509.6	506.4	499.0	487.3	474.0	459.2	449.1	442.2	414.0	379.5
10°	554.7	551.0	544.6	531.3	517.0	497.9	476.7	452.8	431.6	408.2	367.3
12.5°	595.0	589.7	580.7	563.7	543.6	519.7	490.5	462.3	432.1	404.5	353.0
15°	635.4	629.5	620.0	599.3	572.7	541.4	505.9	470.3	434.7	399.7	338.1
17.5°	679.4	671.5	657.1	633.8	600.3	561.6	519.7	476.7	433.7	393.9	322.2
20°	726.7	715.5	700.1	668.8	629.5	583.9	533.5	483.0	433.1	387.0	304.2
22.5°	766.0	754.8	737.8	705.5	658.2	602.5	545.1	487.3	431.0	379.0	287.2
25°	799.9	790.9	772.3	735.2	685.3	622.1	556.3	490.5	427.8	370.5	269.1
27.5°	826.5	818.0	797.3	759.1	708.1	639.6	564.8	492.1	423.6	362.0	250.5
30°	849.8	841.3	816.4	777.1	723.5	653.4	573.3	492.6	418.3	349.3	230.4
32.5°	867.9	859.9	834.4	792.5	734.1	663.0	578.1	492.1	411.4	340.3	208.6
35°	885.9	878.0	848.2	803.7	742.1	667.2	581.8	489.4	402.9	325.4	187.9
37.5°	899.7	890.7	860.4	811.1	745.8	668.3	581.2	485.7	393.9	313.2	167.2
40°	909.3	899.7	867.3	815.3	746.9	666.7	577.0	479.3	383.2	297.8	145.4
42.5°	915.7	905.0	870.5	821.7	744.7	662.5	570.6	471.4	371.6	284.5	124.7
45°	918.8	907.7	871.1	816.4	741.0	654.5	561.1	461.3	358.8	266.5	104.0
47.5°	917.2	905.0	868.4	810.6	734.1	646.0	550.5	449.1	343.4	250.5	84.4
50°	914.6	901.9	862.6	803.1	724.6	635.4	538.8	434.2	327.5	230.9	66.9
52.5°	906.1	893.4	856.2	792.5	713.4	623.2	522.9	418.8	310.5	211.8	51.0
55°	895.5	883.8	845.1	782.9	699.1	608.3	508.0	402.4	294.1	192.2	36.6
57.5°	879.0	868.4	831.3	767.6	684.7	591.9	491.5	384.3	273.4	172.5	25.5
60°	858.9	848.2	812.1	750.0	668.3	573.3	473.5	365.7	254.8	152.9	15.9
62.5°	837.6	827.5	789.9	728.3	647.6	553.6	453.8	347.2	235.2	134.8	9.6
65°	809.5	799.9	766.0	702.3	624.8	532.4	432.1	324.9	215.0	114.7	5.3
67.5°	779.8	771.3	736.8	678.4	598.2	509.1	409.8	303.1	193.7	97.1	2.7
70°	747.9	737.3	705.5	646.0	571.2	482.5	385.4	280.8	173.6	80.2	0.0
72.5°	710.8	702.8	672.0	615.7	539.8	454.4	360.4	256.4	151.3	63.7	0.5
75°	674.7	664.6	636.4	583.4	509.1	424.7	332.8	233.6	129.5	48.8	0.5
77.5°	628.0	624.8	598.2	546.7	479.9	396.0	302.6	206.0	108.8	35.0	0.5
80°	581.2	578.1	557.4	510.1	445.9	362.0	274.4	179.9	88.6	23.4	0.5
82.5°	535.1	530.8	511.2	471.9	411.4	333.4	245.2	153.9	70.1	14.3	0.5
85°	493.7	488.3	467.1	431.0	375.8	301.0	215.0	128.5	52.0	8.0	1.1
87.5°	458.1	454.4	431.0	393.9	339.7	270.7	188.4	104.0	36.6	3.7	1.6
90°	427.8	419.9	399.2	359.9	305.7	237.3	160.3	83.3	24.4	2.1	2.1
92.5°	398.1	391.2	368.4	328.0	275.5	208.6	133.2	63.7	15.4	1.1	2.7
95°	367.3	359.9	337.6	300.4	244.7	179.4	109.3	46.7	8.5	1.1	2.7
97.5°	337.1	330.2	306.8	269.7	217.1	153.9	86.5	32.9	4.2	1.1	2.1
100°	308.9	301.0	279.7	242.6	189.5	128.5	66.9	21.2	2.7	1.1	2.1
102.5°	279.2	272.8	251.1	215.0	160.8	104.6	49.9	13.3	1.1	1.1	1.6
105°	252.7	244.7	223.5	186.3	136.9	82.3	35.0	8.0	1.1	1.1	1.6



TEST NUMBER: P551550

CATALOG NUMBER: FCC-X-2-LD4-2LO-35-UNV-82-87-ED1D

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	164.6	158.2	139.6	108.3	69.5	32.4	9.6	1.6	1.6	1.6	1.6
115°	137.5	127.9	111.5	83.9	51.5	21.2	4.8	1.6	1.6	1.6	1.6
117.5°	109.9	101.9	90.2	63.7	34.0	13.8	2.7	1.6	1.6	1.6	1.6
120°	86.0	78.6	65.3	44.1	22.8	8.0	1.1	1.6	1.6	1.6	1.6
122.5°	61.6	55.7	44.1	28.7	13.8	3.7	1.6	1.6	2.1	2.1	1.6
125°	40.9	37.7	29.2	17.5	8.5	1.6	1.6	1.6	2.1	2.1	1.6
127.5°	26.5	23.9	17.0	10.1	3.7	1.6	1.6	2.1	2.1	2.1	1.6
130°	14.9	13.3	10.1	5.8	1.6	1.6	1.6	2.1	2.1	2.1	1.6
132.5°	8.5	8.0	5.3	1.1	1.6	1.6	1.6	2.1	2.1	2.1	2.1
135°	2.1	1.1	1.1	1.1	1.6	1.6	2.1	2.1	2.7	2.7	2.1
137.5°	0.5	0.5	1.1	1.1	1.6	1.6	2.1	2.7	2.7	2.7	2.1
140°	0.5	0.5	1.1	1.6	1.6	1.6	2.1	2.7	2.7	2.7	2.1
142.5°	0.5	1.1	1.1	1.6	1.6	2.1	2.1	2.7	2.7	2.1	2.1
145°	0.5	1.1	1.1	1.6	1.6	2.1	2.1	2.7	2.1	2.1	2.1
147.5°	1.1	1.1	1.1	1.6	1.6	2.1	2.1	2.7	2.7	2.1	2.1
150°	0.5	1.1	1.1	1.6	2.1	2.1	2.1	2.7	2.1	2.1	2.1
152.5°	0.5	1.1	1.1	1.6	2.1	2.1	2.1	2.7	2.1	2.1	2.1
155°	1.1	1.1	1.1	1.6	2.1	2.1	2.1	2.7	2.1	2.1	2.7
157.5°	1.1	1.1	1.1	1.6	2.1	2.1	2.1	2.7	2.1	2.1	2.7
160°	1.1	1.1	1.1	1.6	1.6	2.1	2.1	2.1	2.1	2.1	2.1
162.5°	1.1	1.1	1.1	1.6	1.6	2.1	2.1	2.1	2.1	2.1	2.1
165°	1.1	1.1	1.1	1.1	1.6	1.6	2.1	2.1	2.1	2.1	2.1
167.5°	1.1	1.1	1.1	1.6	1.6	1.6	2.1	2.1	2.1	2.1	2.1
170°	1.1	1.1	1.1	1.6	1.6	1.6	2.1	2.7	2.7	2.7	2.7
172.5°	1.1	1.1	1.1	1.6	1.6	2.1	2.1	2.7	2.7	2.7	2.7
175°	1.1	1.1	1.1	1.6	1.6	2.1	2.1	2.7	2.7	2.7	2.7
177.5°	0.5	1.1	1.1	1.6	1.6	2.1	2.1	2.7	2.7	2.7	2.1
180°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	416.7	416.7	416.7
2.5°	396.5	389.1	387.0
5°	375.3	363.1	356.2
7.5°	354.1	337.6	329.6
10°	334.4	311.1	302.6
12.5°	311.1	284.0	270.7
15°	288.8	253.7	241.0
17.5°	263.8	224.5	209.7
20°	240.5	195.3	179.9
22.5°	213.9	166.7	149.7
25°	190.0	138.0	118.9
27.5°	163.5	108.8	92.4
30°	138.5	83.3	66.9
32.5°	114.7	61.0	46.2
35°	92.4	41.4	29.2
37.5°	71.1	25.5	14.9
40°	51.5	13.3	6.9
42.5°	34.5	6.4	3.7
45°	21.2	3.2	0.0
47.5°	12.2	0.0	0.0
50°	6.4	0.0	0.0
52.5°	2.7	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	1.1	1.6
80°	1.1	2.1	2.7
82.5°	2.1	2.7	2.7
85°	2.1	2.7	3.2
87.5°	2.7	3.2	3.7
90°	3.2	3.7	3.7
92.5°	3.2	4.2	4.2
95°	3.7	4.2	4.8
97.5°	4.2	4.8	4.8
100°	3.7	4.8	5.3
102.5°	3.2	4.8	4.8
105°	2.7	3.7	4.2



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CATALOG NUMBER: FCC-X-2-LD4-2LO-35-UNV-82-87-ED1D

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	2.1	2.7	2.7
115°	1.6	2.1	2.7
117.5°	1.6	2.1	2.1
120°	1.6	1.6	2.1
122.5°	1.6	1.6	2.1
125°	1.6	1.6	2.1
127.5°	2.1	1.6	1.6
130°	1.6	1.6	1.6
132.5°	2.1	1.6	1.6
135°	2.1	1.6	1.6
137.5°	2.1	1.6	1.6
140°	2.1	1.6	1.6
142.5°	2.1	1.6	1.6
145°	1.6	1.6	1.6
147.5°	1.6	1.6	1.6
150°	1.6	1.6	1.1
152.5°	1.6	1.1	1.1
155°	1.6	1.1	0.5
157.5°	2.1	1.1	0.5
160°	1.6	1.1	0.5
162.5°	1.6	1.1	0.5
165°	1.6	1.1	0.0
167.5°	1.6	1.1	0.5
170°	1.6	1.1	0.5
172.5°	1.6	1.1	0.5
175°	1.6	0.5	0.5
177.5°	1.6	0.5	0.5
180°	1.6	1.6	1.6



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	222.9	216.6	195.3	160.3	112.0	62.6	23.4	4.2	1.1	1.6	1.6
110°	194.3	189.0	167.2	133.2	90.2	46.7	15.4	2.7	1.6	1.6	1.6





107.5°	2.1	3.2	3.7
110°	2.1	2.7	3.2



(END OF REPORT)