

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: P551552

Luminaire Tested: **FCC-X-2-LD4-2LO-35-UNV-82-88-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: P551552
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-82-88-ED1D
Description: FCC CORNER MOUNT LUMINAIRE WITH .187 CLEAR PC FIXTURE SIDE AND .500 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 3500K, AND 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

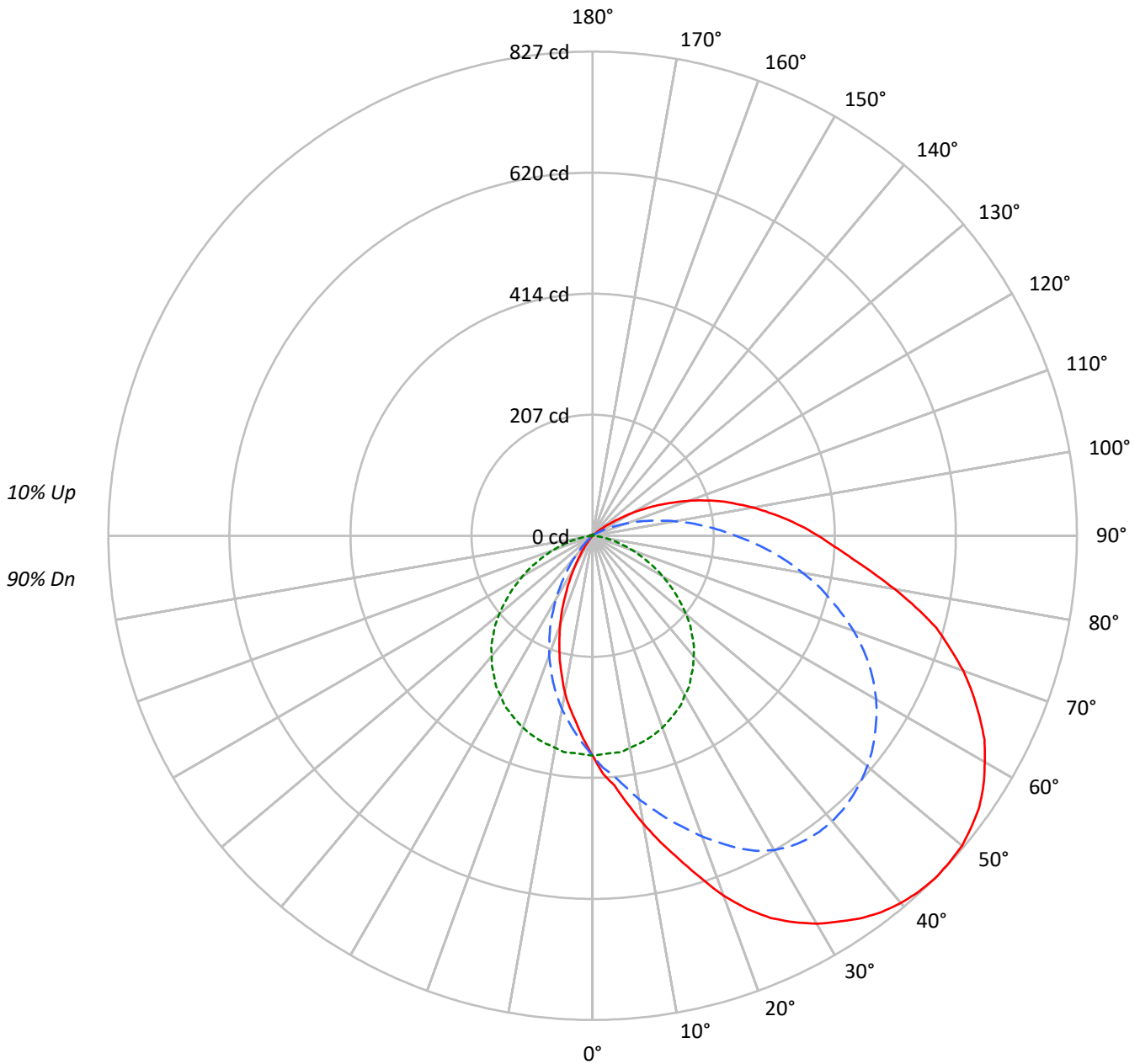
Lumens per Lamp: N/A
Luminaire Lumens: 1855.0 lumens
Efficiency: N/A
Efficacy: 78.9 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

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: P551552

CATALOG NUMBER: FCC-X-2-LD4-2LO-35-UNV-82-88-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°	4039	4039	4039
5°	4434	3980	3320
10°	5017	3931	2737
15°	5623	3881	2132
20°	6342	3818	1570
25°	6937	3744	1031
30°	7381	3646	581
35°	7765	3540	256
40°	8105	3411	61
45°	8397	3247	0
50°	8642	3030	0
55°	8829	2755	0
60°	8923	2437	0
65°	8959	2073	0
70°	8929	1691	0
75°	8815	1248	7
80°	8459	762	39
85°	8175	366	53



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	35.9	1.9
10°-20°	107.6	5.8
20°-30°	174.3	9.4
30°-40°	223.9	12.1
40°-50°	253.4	13.7
50°-60°	262.5	14.2
60°-70°	247.6	13.3
70°-80°	207.5	11.2
80°-90°	150.4	8.1
90°-100°	98.9	5.3
100°-110°	57.1	3.1
110°-120°	25.2	1.4
120°-130°	6.8	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°	317.8	17.1
0°-40°	541.7	29.2
0°-60°	1057.7	57.0
0°-90°	1663.2	89.7
90°-120°	181.1	9.8
90°-150°	190.5	10.3
90°-180°	192.0	10.4
0°-180°	1855.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	375	375	375	375	375	
5°	428	411	372	338	321	43
15°	572	502	360	260	217	165
25°	720	589	334	171	107	333
35°	798	634	293	83	26	500
45°	827	628	240	19	0	639
55°	806	589	173	0	0	720
65°	729	521	103	0	0	721
75°	608	420	44	0	0	637
85°	444	305	7	2	3	380
90°	385	244	2	3	3	211
95°	331	191	1	3	4	260
105°	228	99	1	2	4	240
115°	124	33	1	1	2	124
125°	37	4	2	1	2	37
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°	375.2	375.2	375.2	375.2	375.2	375.2	375.2	375.2	375.2	375.2	375.2
2.5°	406.8	406.3	404.9	402.5	399.1	393.4	388.6	384.3	378.6	373.8	364.7
5°	428.3	425.9	424.0	421.6	413.9	408.7	400.1	390.5	381.4	372.4	354.2
7.5°	462.7	458.9	456.0	449.3	438.8	426.8	413.5	404.4	398.2	372.8	341.8
10°	499.5	496.2	490.4	478.5	465.6	448.4	429.2	407.7	388.6	367.6	330.8
12.5°	535.8	531.0	522.9	507.6	489.5	468.0	441.7	416.3	389.1	364.2	317.9
15°	572.2	566.9	558.3	539.7	515.8	487.5	455.5	423.5	391.5	359.9	304.5
17.5°	611.8	604.7	591.8	570.7	540.6	505.7	468.0	429.2	390.5	354.7	290.1
20°	654.4	644.3	630.5	602.3	566.9	525.8	480.4	435.0	390.0	348.5	273.9
22.5°	689.7	679.7	664.4	635.2	592.7	542.5	490.9	438.8	388.1	341.3	258.6
25°	720.3	712.2	695.5	662.0	617.1	560.2	500.9	441.7	385.3	333.6	242.3
27.5°	744.2	736.6	717.9	683.5	637.6	576.0	508.6	443.1	381.4	326.0	225.6
30°	765.3	757.6	735.1	699.8	651.5	588.4	516.2	443.6	376.7	314.5	207.4
32.5°	781.5	774.3	751.4	713.6	661.1	597.0	520.5	443.1	370.4	306.4	187.8
35°	797.8	790.6	763.8	723.7	668.2	600.8	523.9	440.7	362.8	293.0	169.2
37.5°	810.2	802.1	774.8	730.4	671.6	601.8	523.4	437.4	354.7	282.0	150.6
40°	818.8	810.2	781.0	734.2	672.5	600.4	519.6	431.6	345.1	268.2	131.0
42.5°	824.5	815.0	783.9	739.9	670.6	596.5	513.8	424.5	334.6	256.2	112.3
45°	827.4	817.4	784.4	735.1	667.3	589.4	505.2	415.4	323.1	240.0	93.7
47.5°	826.0	815.0	782.0	729.9	661.1	581.7	495.7	404.4	309.3	225.6	76.0
50°	823.6	812.1	776.7	723.2	652.5	572.2	485.2	391.0	294.9	207.9	60.2
52.5°	815.9	804.5	771.0	713.6	642.4	561.2	470.8	377.1	279.6	190.7	45.9
55°	806.4	795.9	761.0	705.0	629.5	547.8	457.4	362.3	264.8	173.0	33.0
57.5°	791.6	782.0	748.5	691.2	616.6	533.0	442.6	346.1	246.2	155.3	22.9
60°	773.4	763.8	731.3	675.4	601.8	516.2	426.4	329.3	229.4	137.7	14.3
62.5°	754.3	745.2	711.2	655.8	583.1	498.5	408.7	312.6	211.7	121.4	8.6
65°	728.9	720.3	689.7	632.4	562.6	479.4	389.1	292.5	193.6	103.2	4.8
67.5°	702.2	694.5	663.4	610.9	538.7	458.4	369.0	272.9	174.5	87.5	2.4
70°	673.5	663.9	635.2	581.7	514.3	434.5	347.0	252.9	156.3	72.2	0.0
72.5°	640.0	632.9	605.1	554.5	486.1	409.2	324.6	230.9	136.2	57.4	0.5
75°	607.5	598.4	573.1	525.3	458.4	382.4	299.7	210.3	116.6	44.0	0.5
77.5°	565.5	562.6	538.7	492.3	432.1	356.6	272.5	185.5	98.0	31.5	0.5
80°	523.4	520.5	501.9	459.3	401.5	326.0	247.1	162.0	79.8	21.0	0.5
82.5°	481.8	478.0	460.3	424.9	370.4	300.2	220.8	138.6	63.1	12.9	0.5
85°	444.5	439.8	420.6	388.1	338.4	271.0	193.6	115.7	46.8	7.2	1.0
87.5°	412.5	409.2	388.1	354.7	305.9	243.8	169.7	93.7	33.0	3.3	1.4
90°	385.3	378.1	359.4	324.1	275.3	213.7	144.4	75.0	22.0	1.9	1.9
92.5°	358.5	352.3	331.7	295.4	248.1	187.8	120.0	57.4	13.9	1.0	2.4
95°	330.8	324.1	304.0	270.5	220.4	161.6	98.5	42.1	7.6	1.0	2.4
97.5°	303.5	297.3	276.3	242.8	195.5	138.6	77.9	29.6	3.8	1.0	1.9
100°	278.2	271.0	251.9	218.4	170.6	115.7	60.2	19.1	2.4	1.0	1.9
102.5°	251.4	245.7	226.1	193.6	144.8	94.2	44.9	11.9	1.0	1.0	1.4
105°	227.5	220.4	201.2	167.8	123.3	74.1	31.5	7.2	1.0	1.0	1.4



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CATALOG NUMBER: FCC-X-2-LD4-2LO-35-UNV-82-88-ED1D

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	148.2	142.4	125.7	97.5	62.6	29.2	8.6	1.4	1.4	1.4	1.4
115°	123.8	115.2	100.4	75.5	46.4	19.1	4.3	1.4	1.4	1.4	1.4
117.5°	98.9	91.8	81.3	57.4	30.6	12.4	2.4	1.4	1.4	1.4	1.4
120°	77.4	70.7	58.8	39.7	20.6	7.2	1.0	1.4	1.4	1.4	1.4
122.5°	55.4	50.2	39.7	25.8	12.4	3.3	1.4	1.4	1.9	1.9	1.4
125°	36.8	33.9	26.3	15.8	7.6	1.4	1.4	1.4	1.9	1.9	1.4
127.5°	23.9	21.5	15.3	9.1	3.3	1.4	1.4	1.9	1.9	1.9	1.4
130°	13.4	11.9	9.1	5.3	1.4	1.4	1.4	1.9	1.9	1.9	1.4
132.5°	7.6	7.2	4.8	1.0	1.4	1.4	1.4	1.9	1.9	1.9	1.9
135°	1.9	1.0	1.0	1.0	1.4	1.4	1.9	1.9	2.4	2.4	1.9
137.5°	0.5	0.5	1.0	1.0	1.4	1.4	1.9	2.4	2.4	2.4	1.9
140°	0.5	0.5	1.0	1.4	1.4	1.4	1.9	2.4	2.4	2.4	1.9
142.5°	0.5	1.0	1.0	1.4	1.4	1.9	1.9	2.4	2.4	1.9	1.9
145°	0.5	1.0	1.0	1.4	1.4	1.9	1.9	2.4	1.9	1.9	1.9
147.5°	1.0	1.0	1.0	1.4	1.4	1.9	1.9	2.4	2.4	1.9	1.9
150°	0.5	1.0	1.0	1.4	1.9	1.9	1.9	2.4	1.9	1.9	1.9
152.5°	0.5	1.0	1.0	1.4	1.9	1.9	1.9	2.4	1.9	1.9	1.9
155°	1.0	1.0	1.0	1.4	1.9	1.9	1.9	2.4	1.9	1.9	2.4
157.5°	1.0	1.0	1.0	1.4	1.9	1.9	1.9	2.4	1.9	1.9	2.4
160°	1.0	1.0	1.0	1.4	1.4	1.9	1.9	1.9	1.9	1.9	1.9
162.5°	1.0	1.0	1.0	1.4	1.4	1.9	1.9	1.9	1.9	1.9	1.9
165°	1.0	1.0	1.0	1.0	1.4	1.4	1.9	1.9	1.9	1.9	1.9
167.5°	1.0	1.0	1.0	1.4	1.4	1.4	1.9	1.9	1.9	1.9	1.9
170°	1.0	1.0	1.0	1.4	1.4	1.4	1.9	2.4	2.4	2.4	2.4
172.5°	1.0	1.0	1.0	1.4	1.4	1.9	1.9	2.4	2.4	2.4	2.4
175°	1.0	1.0	1.0	1.4	1.4	1.9	1.9	2.4	2.4	2.4	2.4
177.5°	0.5	1.0	1.0	1.4	1.4	1.9	1.9	2.4	2.4	2.4	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°	375.2	375.2	375.2
2.5°	357.1	350.4	348.5
5°	337.9	326.9	320.7
7.5°	318.8	304.0	296.8
10°	301.1	280.1	272.5
12.5°	280.1	255.7	243.8
15°	260.0	228.5	217.0
17.5°	237.6	202.2	188.8
20°	216.5	175.9	162.0
22.5°	192.6	150.1	134.8
25°	171.1	124.3	107.1
27.5°	147.2	98.0	83.2
30°	124.8	75.0	60.2
32.5°	103.2	55.0	41.6
35°	83.2	37.3	26.3
37.5°	64.1	22.9	13.4
40°	46.4	11.9	6.2
42.5°	31.1	5.7	3.3
45°	19.1	2.9	0.0
47.5°	11.0	0.0	0.0
50°	5.7	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	1.4
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	3.3
90°	2.9	3.3	3.3
92.5°	2.9	3.8	3.8
95°	3.3	3.8	4.3
97.5°	3.8	4.3	4.3
100°	3.3	4.3	4.8
102.5°	2.9	4.3	4.3
105°	2.4	3.3	3.8



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CATALOG NUMBER: FCC-X-2-LD4-2LO-35-UNV-82-88-ED1D

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	1.9	2.4	2.4
115°	1.4	1.9	2.4
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	1.0
152.5°	1.4	1.0	1.0
155°	1.4	1.0	0.5
157.5°	1.9	1.0	0.5
160°	1.4	1.0	0.5
162.5°	1.4	1.0	0.5
165°	1.4	1.0	0.0
167.5°	1.4	1.0	0.5
170°	1.4	1.0	0.5
172.5°	1.4	1.0	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°	200.8	195.0	175.9	144.4	100.9	56.4	21.0	3.8	1.0	1.4	1.4
110°	174.9	170.2	150.6	120.0	81.3	42.1	13.9	2.4	1.4	1.4	1.4





107.5°	1.9	2.9	3.3
110°	1.9	2.4	2.9



(END OF REPORT)