

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: P550524

Luminaire Tested: **FCC-X-2-LD4-1HI-35-UNV-82-86-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: P550524
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-82-86-ED1D
Description: FCC CORNER MOUNT LUMINAIRE WITH .187 CLEAR PC FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 3500K, AND 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

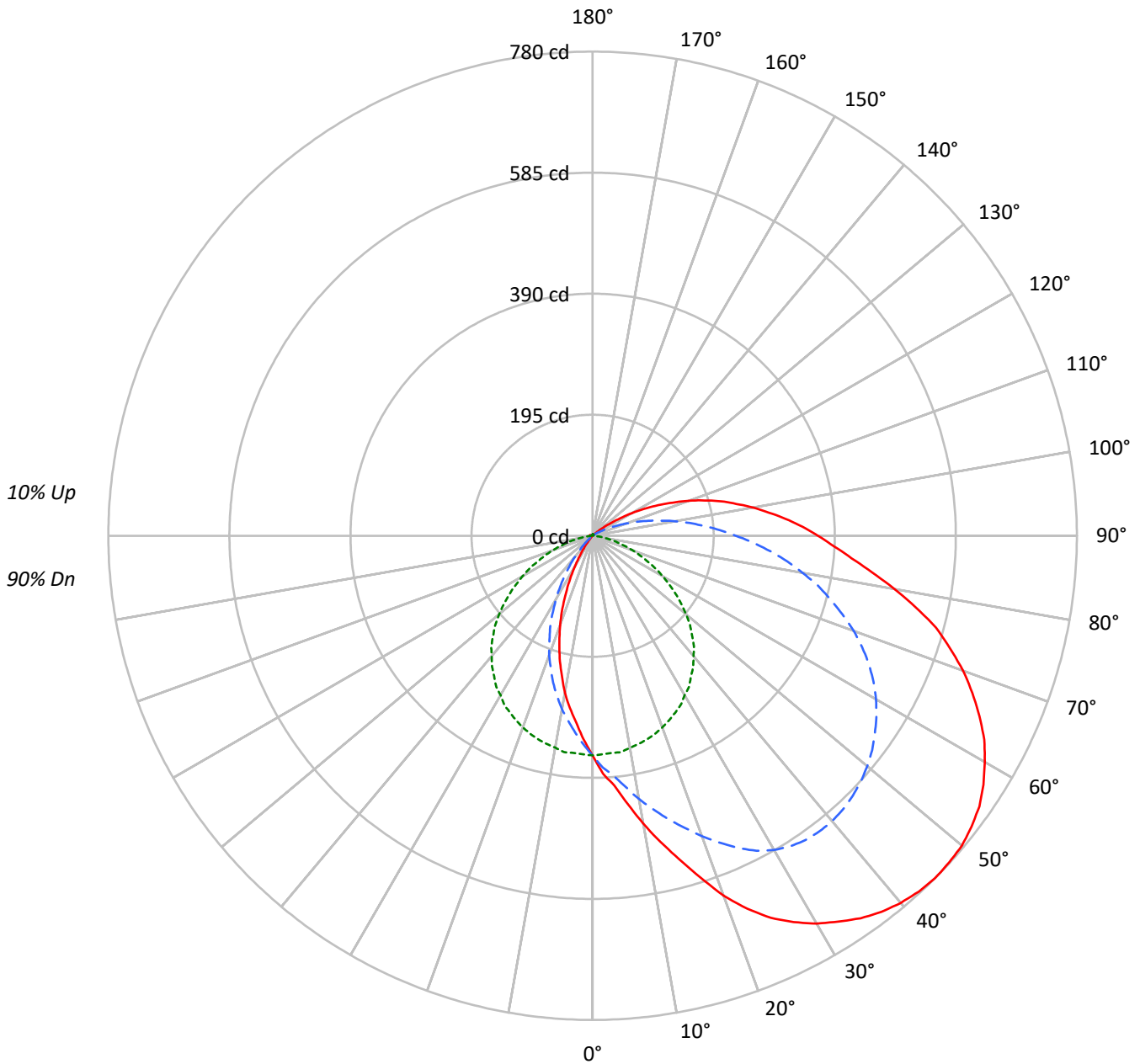
Lumens per Lamp: N/A
Luminaire Lumens: 1749.1 lumens
Efficiency: N/A
Efficacy: 80.6 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

Input Watts (W): 21.7
Input Voltage (V): NR
Input Current (A_{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: P550524

CATALOG NUMBER: FCC-X-2-LD4-1HI-35-UNV-82-86-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°	3808	3808	3808
5°	4180	3753	3130
10°	4731	3707	2580
15°	5302	3660	2011
20°	5979	3599	1481
25°	6541	3531	973
30°	6959	3437	548
35°	7321	3338	241
40°	7642	3215	58
45°	7917	3061	0
50°	8148	2857	0
55°	8324	2597	0
60°	8413	2297	0
65°	8447	1954	0
70°	8419	1595	0
75°	8312	1177	7
80°	7975	718	37
85°	7708	346	50



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	33.9	1.9
10°-20°	101.5	5.8
20°-30°	164.3	9.4
30°-40°	211.1	12.1
40°-50°	238.9	13.7
50°-60°	247.5	14.2
60°-70°	233.5	13.3
70°-80°	195.7	11.2
80°-90°	141.8	8.1
90°-100°	93.2	5.3
100°-110°	53.8	3.1
110°-120°	23.8	1.4
120°-130°	6.5	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°	299.7	17.1
0°-40°	510.7	29.2
0°-60°	997.2	57.0
0°-90°	1568.2	89.7
90°-120°	170.8	9.8
90°-150°	179.8	10.3
90°-180°	181.0	10.3
0°-180°	1749.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	354	354	354	354	354	
5°	404	388	351	319	302	41
15°	540	473	339	245	205	156
25°	679	555	315	161	101	314
35°	752	598	276	78	25	472
45°	780	592	226	18	0	602
55°	760	555	163	0	0	679
65°	687	491	97	0	0	680
75°	573	396	42	0	0	601
85°	419	287	7	2	3	358
90°	363	231	2	3	3	199
95°	312	180	1	3	4	245
105°	214	93	1	2	4	226
115°	117	31	1	1	2	117
125°	35	4	2	1	2	35
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°	353.8	353.8	353.8	353.8	353.8	353.8	353.8	353.8	353.8	353.8	353.8
2.5°	383.5	383.1	381.7	379.5	376.3	370.9	366.4	362.3	356.9	352.4	343.9
5°	403.8	401.6	399.7	397.5	390.3	385.3	377.2	368.2	359.6	351.1	334.0
7.5°	436.3	432.6	429.9	423.6	413.7	402.5	389.8	381.3	375.4	351.5	322.2
10°	471.0	467.8	462.4	451.1	439.0	422.7	404.7	384.4	366.4	346.6	311.9
12.5°	505.2	500.7	493.0	478.6	461.5	441.2	416.4	392.5	366.9	343.4	299.7
15°	539.5	534.5	526.4	508.8	486.3	459.7	429.5	399.3	369.1	339.4	287.1
17.5°	576.9	570.1	557.9	538.1	509.7	476.8	441.2	404.7	368.2	334.4	273.6
20°	617.0	607.5	594.4	567.9	534.5	495.7	452.9	410.1	367.8	328.5	258.2
22.5°	650.3	640.9	626.4	598.9	558.8	511.5	462.8	413.7	365.9	321.8	243.8
25°	679.2	671.5	655.7	624.2	581.8	528.2	472.3	416.4	363.2	314.6	228.5
27.5°	701.7	694.5	676.9	644.5	601.2	543.1	479.5	417.8	359.6	307.4	212.7
30°	721.5	714.3	693.1	659.8	614.3	554.8	486.7	418.2	355.1	296.5	195.6
32.5°	736.9	730.1	708.5	672.9	623.3	562.9	490.8	417.8	349.3	288.9	177.1
35°	752.2	745.4	720.2	682.3	630.0	566.5	493.9	415.5	342.1	276.3	159.5
37.5°	763.9	756.2	730.5	688.6	633.2	567.4	493.5	412.4	334.4	265.9	142.0
40°	772.0	763.9	736.4	692.2	634.1	566.0	489.9	407.0	325.4	252.8	123.5
42.5°	777.4	768.4	739.1	697.6	632.3	562.4	484.5	400.2	315.5	241.6	105.9
45°	780.1	770.7	739.6	693.1	629.1	555.7	476.4	391.6	304.7	226.2	88.3
47.5°	778.8	768.4	737.3	688.2	623.3	548.5	467.4	381.3	291.6	212.7	71.7
50°	776.5	765.7	732.3	681.9	615.2	539.5	457.4	368.7	278.1	196.0	56.8
52.5°	769.3	758.5	726.9	672.9	605.7	529.1	443.9	355.6	263.6	179.8	43.3
55°	760.3	750.4	717.5	664.7	593.5	516.5	431.3	341.6	249.7	163.1	31.1
57.5°	746.3	737.3	705.8	651.7	581.4	502.5	417.3	326.3	232.1	146.5	21.6
60°	729.2	720.2	689.5	636.8	567.4	486.7	402.0	310.5	216.3	129.8	13.5
62.5°	711.2	702.6	670.6	618.3	549.8	470.1	385.3	294.7	199.6	114.5	8.1
65°	687.3	679.2	650.3	596.2	530.4	452.0	366.9	275.8	182.5	97.3	4.5
67.5°	662.0	654.8	625.5	576.0	507.9	432.2	347.9	257.3	164.5	82.5	2.3
70°	635.0	626.0	598.9	548.5	484.9	409.7	327.2	238.4	147.4	68.1	0.0
72.5°	603.5	596.7	570.6	522.8	458.3	385.8	306.0	217.7	128.4	54.1	0.5
75°	572.8	564.2	540.4	495.3	432.2	360.5	282.6	198.3	110.0	41.5	0.5
77.5°	533.1	530.4	507.9	464.2	407.4	336.2	256.9	174.9	92.4	29.7	0.5
80°	493.5	490.8	473.2	433.1	378.6	307.4	233.0	152.8	75.3	19.8	0.5
82.5°	454.3	450.7	434.0	400.7	349.3	283.0	208.2	130.7	59.5	12.2	0.5
85°	419.1	414.6	396.6	365.9	319.1	255.5	182.5	109.1	44.2	6.8	0.9
87.5°	388.9	385.8	365.9	334.4	288.4	229.8	160.0	88.3	31.1	3.2	1.4
90°	363.2	356.5	338.9	305.6	259.6	201.5	136.1	70.8	20.7	1.8	1.8
92.5°	338.0	332.1	312.8	278.5	233.9	177.1	113.1	54.1	13.1	0.9	2.3
95°	311.9	305.6	286.6	255.1	207.8	152.3	92.8	39.7	7.2	0.9	2.3
97.5°	286.2	280.3	260.5	228.9	184.3	130.7	73.5	27.9	3.6	0.9	1.8
100°	262.3	255.5	237.5	206.0	160.9	109.1	56.8	18.0	2.3	0.9	1.8
102.5°	237.1	231.6	213.2	182.5	136.6	88.8	42.4	11.3	0.9	0.9	1.4
105°	214.5	207.8	189.7	158.2	116.3	69.9	29.7	6.8	0.9	0.9	1.4



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CATALOG NUMBER: FCC-X-2-LD4-1HI-35-UNV-82-86-ED1D

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	139.7	134.3	118.5	91.9	59.0	27.5	8.1	1.4	1.4	1.4	1.4
115°	116.7	108.6	94.6	71.2	43.7	18.0	4.1	1.4	1.4	1.4	1.4
117.5°	93.3	86.5	76.6	54.1	28.8	11.7	2.3	1.4	1.4	1.4	1.4
120°	73.0	66.7	55.4	37.4	19.4	6.8	0.9	1.4	1.4	1.4	1.4
122.5°	52.3	47.3	37.4	24.3	11.7	3.2	1.4	1.4	1.8	1.8	1.4
125°	34.7	32.0	24.8	14.9	7.2	1.4	1.4	1.4	1.8	1.8	1.4
127.5°	22.5	20.3	14.4	8.6	3.2	1.4	1.4	1.8	1.8	1.8	1.4
130°	12.6	11.3	8.6	5.0	1.4	1.4	1.4	1.8	1.8	1.8	1.4
132.5°	7.2	6.8	4.5	0.9	1.4	1.4	1.4	1.8	1.8	1.8	1.8
135°	1.8	0.9	0.9	0.9	1.4	1.4	1.8	1.8	2.3	2.3	1.8
137.5°	0.5	0.5	0.9	0.9	1.4	1.4	1.8	2.3	2.3	2.3	1.8
140°	0.5	0.5	0.9	1.4	1.4	1.4	1.8	2.3	2.3	2.3	1.8
142.5°	0.5	0.9	0.9	1.4	1.4	1.8	1.8	2.3	2.3	1.8	1.8
145°	0.5	0.9	0.9	1.4	1.4	1.8	1.8	2.3	1.8	1.8	1.8
147.5°	0.9	0.9	0.9	1.4	1.4	1.8	1.8	2.3	2.3	1.8	1.8
150°	0.5	0.9	0.9	1.4	1.8	1.8	1.8	2.3	1.8	1.8	1.8
152.5°	0.5	0.9	0.9	1.4	1.8	1.8	1.8	2.3	1.8	1.8	1.8
155°	0.9	0.9	0.9	1.4	1.8	1.8	1.8	2.3	1.8	1.8	2.3
157.5°	0.9	0.9	0.9	1.4	1.8	1.8	1.8	2.3	1.8	1.8	2.3
160°	0.9	0.9	0.9	1.4	1.4	1.8	1.8	1.8	1.8	1.8	1.8
162.5°	0.9	0.9	0.9	1.4	1.4	1.8	1.8	1.8	1.8	1.8	1.8
165°	0.9	0.9	0.9	0.9	1.4	1.4	1.8	1.8	1.8	1.8	1.8
167.5°	0.9	0.9	0.9	1.4	1.4	1.4	1.8	1.8	1.8	1.8	1.8
170°	0.9	0.9	0.9	1.4	1.4	1.4	1.8	2.3	2.3	2.3	2.3
172.5°	0.9	0.9	0.9	1.4	1.4	1.8	1.8	2.3	2.3	2.3	2.3
175°	0.9	0.9	0.9	1.4	1.4	1.8	1.8	2.3	2.3	2.3	2.3
177.5°	0.5	0.9	0.9	1.4	1.4	1.8	1.8	2.3	2.3	2.3	1.8
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°	353.8	353.8	353.8
2.5°	336.7	330.3	328.5
5°	318.6	308.3	302.4
7.5°	300.6	286.6	279.9
10°	283.9	264.1	256.9
12.5°	264.1	241.1	229.8
15°	245.2	215.4	204.6
17.5°	224.0	190.6	178.0
20°	204.2	165.8	152.8
22.5°	181.6	141.5	127.1
25°	161.3	117.2	101.0
27.5°	138.8	92.4	78.4
30°	117.6	70.8	56.8
32.5°	97.3	51.8	39.2
35°	78.4	35.2	24.8
37.5°	60.4	21.6	12.6
40°	43.7	11.3	5.9
42.5°	29.3	5.4	3.2
45°	18.0	2.7	0.0
47.5°	10.4	0.0	0.0
50°	5.4	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	1.8	2.3
82.5°	1.8	2.3	2.3
85°	1.8	2.3	2.7
87.5°	2.3	2.7	3.2
90°	2.7	3.2	3.2
92.5°	2.7	3.6	3.6
95°	3.2	3.6	4.1
97.5°	3.6	4.1	4.1
100°	3.2	4.1	4.5
102.5°	2.7	4.1	4.1
105°	2.3	3.2	3.6



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	1.8	2.3	2.3
115°	1.4	1.8	2.3
117.5°	1.4	1.8	1.8
120°	1.4	1.4	1.8
122.5°	1.4	1.4	1.8
125°	1.4	1.4	1.8
127.5°	1.8	1.4	1.4
130°	1.4	1.4	1.4
132.5°	1.8	1.4	1.4
135°	1.8	1.4	1.4
137.5°	1.8	1.4	1.4
140°	1.8	1.4	1.4
142.5°	1.8	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°	1.8	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°	189.3	183.9	165.8	136.1	95.1	53.2	19.8	3.6	0.9	1.4	1.4
110°	164.9	160.4	142.0	113.1	76.6	39.7	13.1	2.3	1.4	1.4	1.4





107.5°	1.8	2.7	3.2
110°	1.8	2.3	2.7



(END OF REPORT)