

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: P550972

Luminaire Tested: **FCC-X-2-LD4-1STD-30-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: P550972
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-LD4-1STD-30-UNV-82-86-ED1D
Description: FCC CORNER MOUNT LUMINAIRE WITH .187 CLEAR PC FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 3000K, AND 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

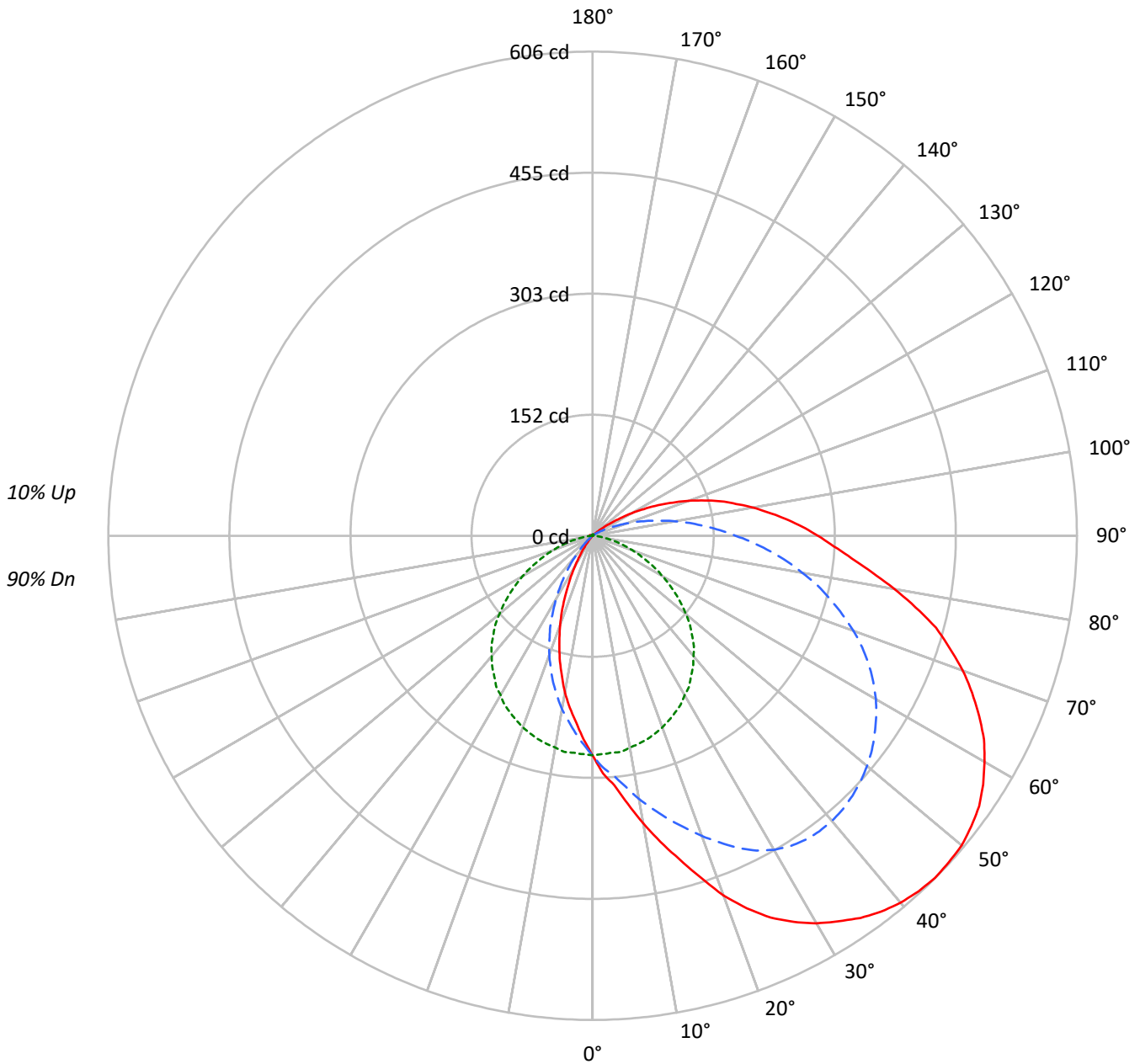
Lumens per Lamp: N/A
Luminaire Lumens: 1357.8 lumens
Efficiency: N/A
Efficacy: 81.3 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

Input Watts (W): 16.7
Input Voltage (V): NR
Input Current (Ain): 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: P550972

CATALOG NUMBER: FCC-X-2-LD4-1STD-30-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°	2957	2957	2957
5°	3245	2914	2431
10°	3673	2878	2004
15°	4117	2841	1562
20°	4642	2795	1149
25°	5078	2741	755
30°	5403	2670	425
35°	5684	2592	187
40°	5933	2496	45
45°	6147	2377	0
50°	6326	2218	0
55°	6463	2018	0
60°	6532	1784	0
65°	6558	1518	0
70°	6536	1237	0
75°	6454	913	4
80°	6193	559	27
85°	5985	264	39



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	26.3	1.9
10°-20°	78.8	5.8
20°-30°	127.6	9.4
30°-40°	163.9	12.1
40°-50°	185.5	13.7
50°-60°	192.2	14.2
60°-70°	181.3	13.3
70°-80°	151.9	11.2
80°-90°	110.1	8.1
90°-100°	72.4	5.3
100°-110°	41.8	3.1
110°-120°	18.4	1.4
120°-130°	5.0	0.4
130°-140°	1.1	0.1
140°-150°	0.7	0.1
150°-160°	0.5	0.0
160°-170°	0.3	0.0
170°-180°	0.1	0.0
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0°-30°	232.7	17.1
0°-40°	396.6	29.2
0°-60°	774.3	57.0
0°-90°	1217.5	89.7
90°-120°	132.5	9.8
90°-150°	139.4	10.3
90°-180°	140.0	10.3
0°-180°	1357.8	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	275	275	275	275	275	
5°	314	301	273	247	235	32
15°	419	367	264	190	159	121
25°	527	431	244	125	78	244
35°	584	465	214	61	19	366
45°	606	460	176	14	0	468
55°	590	431	127	0	0	527
65°	534	381	76	0	0	528
75°	445	308	32	0	0	466
85°	325	223	5	1	2	278
90°	282	179	1	2	2	155
95°	242	140	1	2	3	190
105°	167	72	1	2	3	176
115°	91	24	1	1	2	91
125°	27	3	1	1	1	27
135°	1	1	2	1	1	2
145°	0	1	1	1	1	0
155°	1	1	1	1	0	0
165°	1	1	1	1	0	0
175°	1	1	2	1	0	0
180°	1	1	1	1	1	



TEST NUMBER: P550972

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
0°	274.7	274.7	274.7	274.7	274.7	274.7	274.7	274.7	274.7	274.7	274.7
2.5°	297.8	297.4	296.4	294.6	292.2	288.0	284.5	281.3	277.1	273.6	267.0
5°	313.5	311.8	310.4	308.6	303.0	299.2	292.9	285.9	279.2	272.6	259.3
7.5°	338.7	335.9	333.8	328.9	321.2	312.5	302.7	296.0	291.5	272.9	250.2
10°	365.7	363.2	359.0	350.3	340.8	328.2	314.2	298.5	284.5	269.1	242.1
12.5°	392.3	388.8	382.8	371.6	358.3	342.6	323.3	304.8	284.8	266.6	232.7
15°	418.9	415.0	408.7	395.1	377.6	356.9	333.5	310.0	286.6	263.5	222.9
17.5°	447.9	442.7	433.2	417.8	395.8	370.2	342.6	314.2	285.9	259.6	212.4
20°	479.0	471.7	461.6	440.9	415.0	384.9	351.7	318.4	285.5	255.1	200.5
22.5°	504.9	497.6	486.4	465.0	433.9	397.2	359.4	321.2	284.1	249.8	189.3
25°	527.3	521.4	509.1	484.6	451.8	410.1	366.7	323.3	282.0	244.2	177.4
27.5°	544.8	539.2	525.6	500.4	466.8	421.7	372.3	324.4	279.2	238.6	165.2
30°	560.2	554.6	538.2	512.3	476.9	430.8	377.9	324.7	275.7	230.3	151.9
32.5°	572.1	566.9	550.1	522.4	483.9	437.1	381.1	324.4	271.2	224.3	137.5
35°	584.0	578.8	559.2	529.8	489.2	439.9	383.5	322.6	265.6	214.5	123.9
37.5°	593.1	587.2	567.2	534.7	491.6	440.6	383.2	320.2	259.6	206.5	110.2
40°	599.4	593.1	571.8	537.5	492.3	439.5	380.4	316.0	252.6	196.3	95.9
42.5°	603.6	596.6	573.9	541.7	490.9	436.7	376.2	310.7	244.9	187.6	82.2
45°	605.7	598.4	574.2	538.2	488.5	431.5	369.9	304.1	236.5	175.7	68.6
47.5°	604.7	596.6	572.5	534.3	483.9	425.9	362.9	296.0	226.4	165.2	55.6
50°	602.9	594.5	568.6	529.4	477.6	418.9	355.2	286.2	215.9	152.2	44.1
52.5°	597.3	588.9	564.4	522.4	470.3	410.8	344.7	276.1	204.7	139.6	33.6
55°	590.3	582.6	557.1	516.1	460.9	401.0	334.9	265.2	193.9	126.7	24.1
57.5°	579.5	572.5	548.0	506.0	451.4	390.2	324.0	253.3	180.2	113.7	16.8
60°	566.2	559.2	535.4	494.4	440.6	377.9	312.1	241.1	168.0	100.8	10.5
62.5°	552.2	545.5	520.7	480.1	426.9	365.0	299.2	228.9	155.0	88.9	6.3
65°	533.6	527.3	504.9	463.0	411.9	351.0	284.8	214.2	141.7	75.6	3.5
67.5°	514.0	508.4	485.7	447.2	394.4	335.6	270.1	199.8	127.7	64.0	1.7
70°	493.0	486.0	465.0	425.9	376.5	318.1	254.0	185.1	114.4	52.8	0.0
72.5°	468.5	463.3	443.0	405.9	355.9	299.5	237.6	169.0	99.7	42.0	0.3
75°	444.8	438.1	419.6	384.6	335.6	279.9	219.4	154.0	85.4	32.2	0.3
77.5°	414.0	411.9	394.4	360.4	316.3	261.0	199.5	135.8	71.7	23.1	0.3
80°	383.2	381.1	367.4	336.3	293.9	238.6	180.9	118.6	58.4	15.4	0.3
82.5°	352.7	349.9	337.0	311.1	271.2	219.8	161.7	101.5	46.2	9.4	0.3
85°	325.4	321.9	307.9	284.1	247.7	198.4	141.7	84.7	34.3	5.2	0.7
87.5°	302.0	299.5	284.1	259.6	224.0	178.5	124.2	68.6	24.1	2.4	1.0
90°	282.0	276.8	263.1	237.2	201.6	156.4	105.7	54.9	16.1	1.4	1.4
92.5°	262.4	257.9	242.8	216.3	181.6	137.5	87.8	42.0	10.1	0.7	1.7
95°	242.1	237.2	222.6	198.1	161.3	118.3	72.1	30.8	5.6	0.7	1.7
97.5°	222.2	217.7	202.3	177.8	143.1	101.5	57.0	21.7	2.8	0.7	1.4
100°	203.7	198.4	184.4	159.9	124.9	84.7	44.1	14.0	1.7	0.7	1.4
102.5°	184.1	179.9	165.5	141.7	106.0	68.9	32.9	8.7	0.7	0.7	1.0
105°	166.6	161.3	147.3	122.8	90.3	54.2	23.1	5.2	0.7	0.7	1.0



TEST NUMBER: P550972

CATALOG NUMBER: FCC-X-2-LD4-1STD-30-UNV-82-86-ED1D

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	108.5	104.3	92.0	71.4	45.8	21.3	6.3	1.0	1.0	1.0	1.0
115°	90.6	84.3	73.5	55.3	33.9	14.0	3.1	1.0	1.0	1.0	1.0
117.5°	72.4	67.2	59.5	42.0	22.4	9.1	1.7	1.0	1.0	1.0	1.0
120°	56.7	51.8	43.0	29.0	15.0	5.2	0.7	1.0	1.0	1.0	1.0
122.5°	40.6	36.7	29.0	18.9	9.1	2.4	1.0	1.0	1.4	1.4	1.0
125°	26.9	24.8	19.2	11.5	5.6	1.0	1.0	1.0	1.4	1.4	1.0
127.5°	17.5	15.7	11.2	6.6	2.4	1.0	1.0	1.4	1.4	1.4	1.0
130°	9.8	8.7	6.6	3.8	1.0	1.0	1.0	1.4	1.4	1.4	1.0
132.5°	5.6	5.2	3.5	0.7	1.0	1.0	1.0	1.4	1.4	1.4	1.4
135°	1.4	0.7	0.7	0.7	1.0	1.0	1.4	1.4	1.7	1.7	1.4
137.5°	0.3	0.3	0.7	0.7	1.0	1.0	1.4	1.7	1.7	1.7	1.4
140°	0.3	0.3	0.7	1.0	1.0	1.0	1.4	1.7	1.7	1.7	1.4
142.5°	0.3	0.7	0.7	1.0	1.0	1.4	1.4	1.7	1.7	1.4	1.4
145°	0.3	0.7	0.7	1.0	1.0	1.4	1.4	1.7	1.4	1.4	1.4
147.5°	0.7	0.7	0.7	1.0	1.0	1.4	1.4	1.7	1.7	1.4	1.4
150°	0.3	0.7	0.7	1.0	1.4	1.4	1.4	1.7	1.4	1.4	1.4
152.5°	0.3	0.7	0.7	1.0	1.4	1.4	1.4	1.7	1.4	1.4	1.4
155°	0.7	0.7	0.7	1.0	1.4	1.4	1.4	1.7	1.4	1.4	1.7
157.5°	0.7	0.7	0.7	1.0	1.4	1.4	1.4	1.7	1.4	1.4	1.7
160°	0.7	0.7	0.7	1.0	1.0	1.4	1.4	1.4	1.4	1.4	1.4
162.5°	0.7	0.7	0.7	1.0	1.0	1.4	1.4	1.4	1.4	1.4	1.4
165°	0.7	0.7	0.7	0.7	1.0	1.0	1.4	1.4	1.4	1.4	1.4
167.5°	0.7	0.7	0.7	1.0	1.0	1.0	1.4	1.4	1.4	1.4	1.4
170°	0.7	0.7	0.7	1.0	1.0	1.0	1.4	1.7	1.7	1.7	1.7
172.5°	0.7	0.7	0.7	1.0	1.0	1.4	1.4	1.7	1.7	1.7	1.7
175°	0.7	0.7	0.7	1.0	1.0	1.4	1.4	1.7	1.7	1.7	1.7
177.5°	0.3	0.7	0.7	1.0	1.0	1.4	1.4	1.7	1.7	1.7	1.4
180°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	274.7	274.7	274.7
2.5°	261.4	256.5	255.1
5°	247.4	239.3	234.8
7.5°	233.4	222.6	217.3
10°	220.5	205.1	199.5
12.5°	205.1	187.2	178.5
15°	190.4	167.3	158.9
17.5°	173.9	148.0	138.2
20°	158.5	128.8	118.6
22.5°	141.0	109.9	98.7
25°	125.3	91.0	78.4
27.5°	107.8	71.7	60.9
30°	91.3	54.9	44.1
32.5°	75.6	40.2	30.4
35°	60.9	27.3	19.2
37.5°	46.9	16.8	9.8
40°	33.9	8.7	4.5
42.5°	22.7	4.2	2.4
45°	14.0	2.1	0.0
47.5°	8.0	0.0	0.0
50°	4.2	0.0	0.0
52.5°	1.7	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°	0.3	0.3	0.3
77.5°	0.3	0.7	1.0
80°	0.7	1.4	1.7
82.5°	1.4	1.7	1.7
85°	1.4	1.7	2.1
87.5°	1.7	2.1	2.4
90°	2.1	2.4	2.4
92.5°	2.1	2.8	2.8
95°	2.4	2.8	3.1
97.5°	2.8	3.1	3.1
100°	2.4	3.1	3.5
102.5°	2.1	3.1	3.1
105°	1.7	2.4	2.8



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	1.4	1.7	1.7
115°	1.0	1.4	1.7
117.5°	1.0	1.4	1.4
120°	1.0	1.0	1.4
122.5°	1.0	1.0	1.4
125°	1.0	1.0	1.4
127.5°	1.4	1.0	1.0
130°	1.0	1.0	1.0
132.5°	1.4	1.0	1.0
135°	1.4	1.0	1.0
137.5°	1.4	1.0	1.0
140°	1.4	1.0	1.0
142.5°	1.4	1.0	1.0
145°	1.0	1.0	1.0
147.5°	1.0	1.0	1.0
150°	1.0	1.0	0.7
152.5°	1.0	0.7	0.7
155°	1.0	0.7	0.3
157.5°	1.4	0.7	0.3
160°	1.0	0.7	0.3
162.5°	1.0	0.7	0.3
165°	1.0	0.7	0.0
167.5°	1.0	0.7	0.3
170°	1.0	0.7	0.3
172.5°	1.0	0.7	0.3
175°	1.0	0.3	0.3
177.5°	1.0	0.3	0.3
180°	1.0	1.0	1.0



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	147.0	142.8	128.8	105.7	73.8	41.3	15.4	2.8	0.7	1.0	1.0
110°	128.1	124.6	110.2	87.8	59.5	30.8	10.1	1.7	1.0	1.0	1.0





107.5°	1.4	2.1	2.4
110°	1.4	1.7	2.1



(END OF REPORT)