

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: P550579

Luminaire Tested: **FCC-X-2-LD4-1HI-40-UNV-81-96-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: P550579
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-40-UNV-81-96-ED1D-90
Description: FCC CORNER MOUNT LUMINAIRE WITH .156 CLEAR PC FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES AND 4000K, AND 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

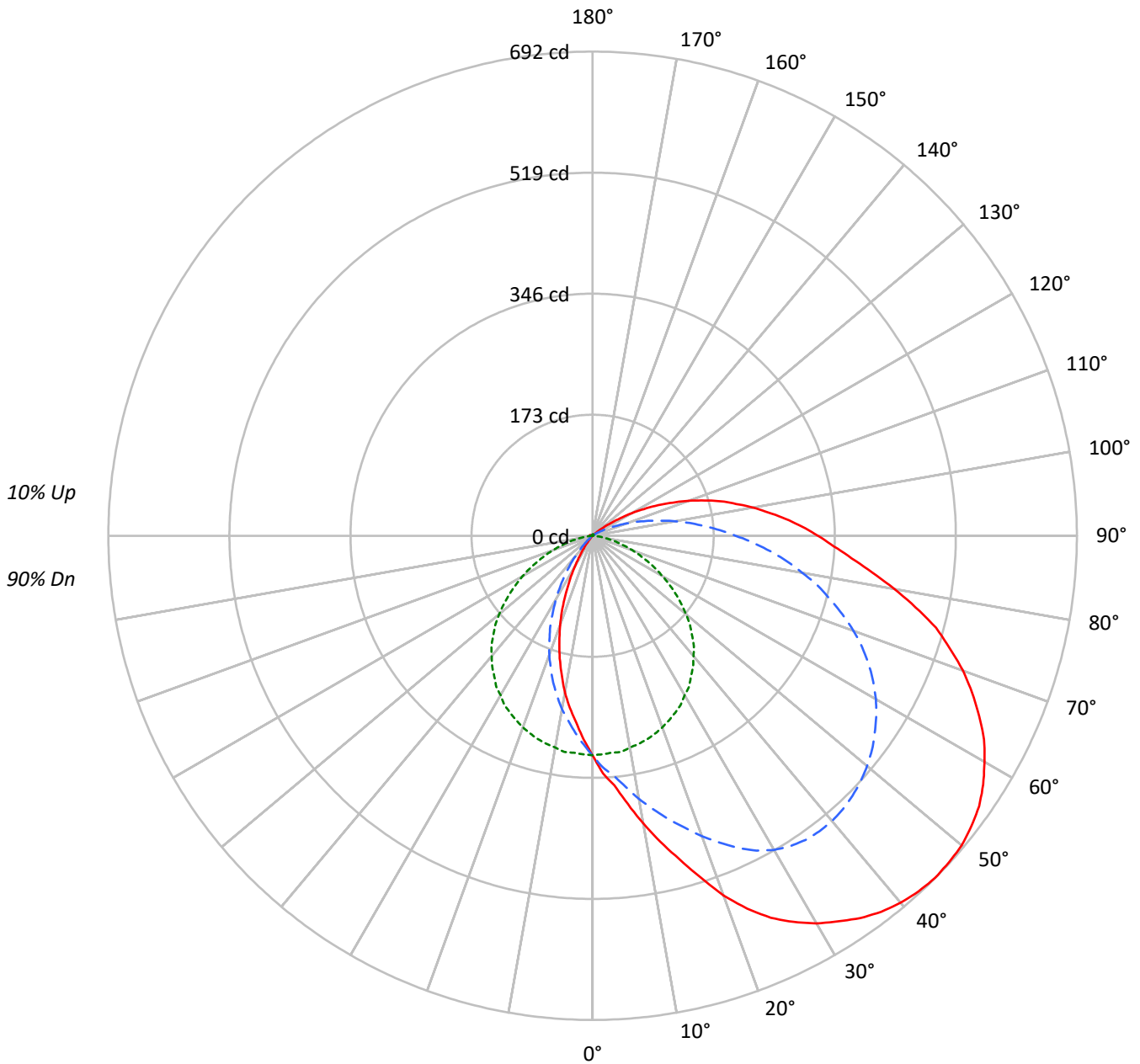
Lumens per Lamp: N/A
Luminaire Lumens: 1551.0 lumens
Efficiency: N/A
Efficacy: 71.5 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

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: P550579

CATALOG NUMBER: FCC-X-2-LD4-1HI-40-UNV-81-96-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°	3377	3377	3377
5°	3707	3327	2776
10°	4195	3286	2288
15°	4701	3244	1783
20°	5302	3192	1313
25°	5801	3131	862
30°	6171	3049	486
35°	6492	2960	214
40°	6776	2851	51
45°	7021	2714	0
50°	7226	2535	0
55°	7381	2304	0
60°	7460	2037	0
65°	7491	1733	0
70°	7466	1413	0
75°	7372	1044	6
80°	7072	638	32
85°	6836	305	44



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	30.1	1.9
10°-20°	90.0	5.8
20°-30°	145.7	9.4
30°-40°	187.2	12.1
40°-50°	211.9	13.7
50°-60°	219.5	14.2
60°-70°	207.0	13.3
70°-80°	173.5	11.2
80°-90°	125.8	8.1
90°-100°	82.7	5.3
100°-110°	47.7	3.1
110°-120°	21.1	1.4
120°-130°	5.7	0.4
130°-140°	1.3	0.1
140°-150°	0.9	0.1
150°-160°	0.6	0.0
160°-170°	0.3	0.0
170°-180°	0.1	0.0
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0°-30°	265.7	17.1
0°-40°	452.9	29.2
0°-60°	884.3	57.0
0°-90°	1390.6	89.7
90°-120°	151.5	9.8
90°-150°	159.3	10.3
90°-180°	160.0	10.3
0°-180°	1551.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	314	314	314	314	314	
5°	358	344	311	283	268	36
15°	478	419	301	217	181	138
25°	602	492	279	143	90	278
35°	667	531	245	70	22	418
45°	692	525	201	16	0	534
55°	674	492	145	0	0	602
65°	610	436	86	0	0	603
75°	508	352	37	0	0	533
85°	372	255	6	2	2	317
90°	322	204	2	2	3	177
95°	277	160	1	3	4	217
105°	190	82	1	2	3	201
115°	104	27	1	1	2	104
125°	31	4	2	1	2	31
135°	2	1	2	2	1	3
145°	0	1	2	1	1	0
155°	1	2	2	1	0	0
165°	1	1	2	1	0	0
175°	1	1	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°	313.7	313.7	313.7	313.7	313.7	313.7	313.7	313.7	313.7	313.7	313.7
2.5°	340.1	339.7	338.5	336.5	333.7	328.9	324.9	321.3	316.5	312.5	304.9
5°	358.1	356.1	354.5	352.5	346.1	341.7	334.5	326.5	318.9	311.3	296.1
7.5°	386.9	383.7	381.3	375.7	366.9	356.9	345.7	338.1	332.9	311.7	285.8
10°	417.6	414.8	410.0	400.1	389.3	374.9	358.9	340.9	324.9	307.3	276.6
12.5°	448.0	444.0	437.2	424.4	409.2	391.3	369.3	348.1	325.3	304.5	265.8
15°	478.4	474.0	466.8	451.2	431.2	407.6	380.9	354.1	327.3	300.9	254.6
17.5°	511.6	505.6	494.8	477.2	452.0	422.8	391.3	358.9	326.5	296.5	242.6
20°	547.1	538.7	527.1	503.6	474.0	439.6	401.7	363.7	326.1	291.3	229.0
22.5°	576.7	568.3	555.5	531.1	495.6	453.6	410.4	366.9	324.5	285.4	216.2
25°	602.3	595.5	581.5	553.5	516.0	468.4	418.8	369.3	322.1	279.0	202.6
27.5°	622.3	615.9	600.3	571.5	533.1	481.6	425.2	370.5	318.9	272.6	188.6
30°	639.8	633.5	614.7	585.1	544.7	492.0	431.6	370.9	314.9	263.0	173.5
32.5°	653.4	647.4	628.3	596.7	552.7	499.2	435.2	370.5	309.7	256.2	157.1
35°	667.0	661.0	638.7	605.1	558.7	502.4	438.0	368.5	303.3	245.0	141.5
37.5°	677.4	670.6	647.8	610.7	561.5	503.2	437.6	365.7	296.5	235.8	125.9
40°	684.6	677.4	653.0	613.9	562.3	502.0	434.4	360.9	288.6	224.2	109.5
42.5°	689.4	681.4	655.4	618.7	560.7	498.8	429.6	354.9	279.8	214.2	93.9
45°	691.8	683.4	655.8	614.7	557.9	492.8	422.4	347.3	270.2	200.6	78.3
47.5°	690.6	681.4	653.8	610.3	552.7	486.4	414.4	338.1	258.6	188.6	63.5
50°	688.6	679.0	649.4	604.7	545.5	478.4	405.7	326.9	246.6	173.9	50.4
52.5°	682.2	672.6	644.6	596.7	537.1	469.2	393.7	315.3	233.8	159.5	38.4
55°	674.2	665.4	636.3	589.5	526.3	458.0	382.5	302.9	221.4	144.7	27.6
57.5°	661.8	653.8	625.9	577.9	515.6	445.6	370.1	289.4	205.8	129.9	19.2
60°	646.6	638.7	611.5	564.7	503.2	431.6	356.5	275.4	191.8	115.1	12.0
62.5°	630.7	623.1	594.7	548.3	487.6	416.8	341.7	261.4	177.0	101.5	7.2
65°	609.5	602.3	576.7	528.7	470.4	400.9	325.3	244.6	161.9	86.3	4.0
67.5°	587.1	580.7	554.7	510.8	450.4	383.3	308.5	228.2	145.9	73.1	2.0
70°	563.1	555.1	531.1	486.4	430.0	363.3	290.2	211.4	130.7	60.3	0.0
72.5°	535.1	529.1	506.0	463.6	406.5	342.1	271.4	193.0	113.9	48.0	0.4
75°	508.0	500.4	479.2	439.2	383.3	319.7	250.6	175.8	97.5	36.8	0.4
77.5°	472.8	470.4	450.4	411.6	361.3	298.1	227.8	155.1	81.9	26.4	0.4
80°	437.6	435.2	419.6	384.1	335.7	272.6	206.6	135.5	66.7	17.6	0.4
82.5°	402.9	399.7	384.9	355.3	309.7	251.0	184.6	115.9	52.8	10.8	0.4
85°	371.7	367.7	351.7	324.5	283.0	226.6	161.9	96.7	39.2	6.0	0.8
87.5°	344.9	342.1	324.5	296.5	255.8	203.8	141.9	78.3	27.6	2.8	1.2
90°	322.1	316.1	300.5	271.0	230.2	178.6	120.7	62.7	18.4	1.6	1.6
92.5°	299.7	294.5	277.4	247.0	207.4	157.1	100.3	48.0	11.6	0.8	2.0
95°	276.6	271.0	254.2	226.2	184.2	135.1	82.3	35.2	6.4	0.8	2.0
97.5°	253.8	248.6	231.0	203.0	163.5	115.9	65.1	24.8	3.2	0.8	1.6
100°	232.6	226.6	210.6	182.6	142.7	96.7	50.4	16.0	2.0	0.8	1.6
102.5°	210.2	205.4	189.0	161.9	121.1	78.7	37.6	10.0	0.8	0.8	1.2
105°	190.2	184.2	168.3	140.3	103.1	61.9	26.4	6.0	0.8	0.8	1.2



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	123.9	119.1	105.1	81.5	52.4	24.4	7.2	1.2	1.2	1.2	1.2
115°	103.5	96.3	83.9	63.1	38.8	16.0	3.6	1.2	1.2	1.2	1.2
117.5°	82.7	76.7	67.9	48.0	25.6	10.4	2.0	1.2	1.2	1.2	1.2
120°	64.7	59.1	49.2	33.2	17.2	6.0	0.8	1.2	1.2	1.2	1.2
122.5°	46.4	42.0	33.2	21.6	10.4	2.8	1.2	1.2	1.6	1.6	1.2
125°	30.8	28.4	22.0	13.2	6.4	1.2	1.2	1.2	1.6	1.6	1.2
127.5°	20.0	18.0	12.8	7.6	2.8	1.2	1.2	1.6	1.6	1.6	1.2
130°	11.2	10.0	7.6	4.4	1.2	1.2	1.2	1.6	1.6	1.6	1.2
132.5°	6.4	6.0	4.0	0.8	1.2	1.2	1.2	1.6	1.6	1.6	1.6
135°	1.6	0.8	0.8	0.8	1.2	1.2	1.6	1.6	2.0	2.0	1.6
137.5°	0.4	0.4	0.8	0.8	1.2	1.2	1.6	2.0	2.0	2.0	1.6
140°	0.4	0.4	0.8	1.2	1.2	1.2	1.6	2.0	2.0	2.0	1.6
142.5°	0.4	0.8	0.8	1.2	1.2	1.6	1.6	2.0	2.0	1.6	1.6
145°	0.4	0.8	0.8	1.2	1.2	1.6	1.6	2.0	1.6	1.6	1.6
147.5°	0.8	0.8	0.8	1.2	1.2	1.6	1.6	2.0	2.0	1.6	1.6
150°	0.4	0.8	0.8	1.2	1.6	1.6	1.6	2.0	1.6	1.6	1.6
152.5°	0.4	0.8	0.8	1.2	1.6	1.6	1.6	2.0	1.6	1.6	1.6
155°	0.8	0.8	0.8	1.2	1.6	1.6	1.6	2.0	1.6	1.6	2.0
157.5°	0.8	0.8	0.8	1.2	1.6	1.6	1.6	2.0	1.6	1.6	2.0
160°	0.8	0.8	0.8	1.2	1.2	1.6	1.6	1.6	1.6	1.6	1.6
162.5°	0.8	0.8	0.8	1.2	1.2	1.6	1.6	1.6	1.6	1.6	1.6
165°	0.8	0.8	0.8	0.8	1.2	1.2	1.6	1.6	1.6	1.6	1.6
167.5°	0.8	0.8	0.8	1.2	1.2	1.2	1.6	1.6	1.6	1.6	1.6
170°	0.8	0.8	0.8	1.2	1.2	1.2	1.6	2.0	2.0	2.0	2.0
172.5°	0.8	0.8	0.8	1.2	1.2	1.6	1.6	2.0	2.0	2.0	2.0
175°	0.8	0.8	0.8	1.2	1.2	1.6	1.6	2.0	2.0	2.0	2.0
177.5°	0.4	0.8	0.8	1.2	1.2	1.6	1.6	2.0	2.0	2.0	1.6
180°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	313.7	313.7	313.7
2.5°	298.5	292.9	291.3
5°	282.6	273.4	268.2
7.5°	266.6	254.2	248.2
10°	251.8	234.2	227.8
12.5°	234.2	213.8	203.8
15°	217.4	191.0	181.4
17.5°	198.6	169.1	157.9
20°	181.0	147.1	135.5
22.5°	161.1	125.5	112.7
25°	143.1	103.9	89.5
27.5°	123.1	81.9	69.5
30°	104.3	62.7	50.4
32.5°	86.3	46.0	34.8
35°	69.5	31.2	22.0
37.5°	53.6	19.2	11.2
40°	38.8	10.0	5.2
42.5°	26.0	4.8	2.8
45°	16.0	2.4	0.0
47.5°	9.2	0.0	0.0
50°	4.8	0.0	0.0
52.5°	2.0	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°	0.4	0.4	0.4
77.5°	0.4	0.8	1.2
80°	0.8	1.6	2.0
82.5°	1.6	2.0	2.0
85°	1.6	2.0	2.4
87.5°	2.0	2.4	2.8
90°	2.4	2.8	2.8
92.5°	2.4	3.2	3.2
95°	2.8	3.2	3.6
97.5°	3.2	3.6	3.6
100°	2.8	3.6	4.0
102.5°	2.4	3.6	3.6
105°	2.0	2.8	3.2



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CATALOG NUMBER: FCC-X-2-LD4-1HI-40-UNV-81-96-ED1D-90

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	1.6	2.0	2.0
115°	1.2	1.6	2.0
117.5°	1.2	1.6	1.6
120°	1.2	1.2	1.6
122.5°	1.2	1.2	1.6
125°	1.2	1.2	1.6
127.5°	1.6	1.2	1.2
130°	1.2	1.2	1.2
132.5°	1.6	1.2	1.2
135°	1.6	1.2	1.2
137.5°	1.6	1.2	1.2
140°	1.6	1.2	1.2
142.5°	1.6	1.2	1.2
145°	1.2	1.2	1.2
147.5°	1.2	1.2	1.2
150°	1.2	1.2	0.8
152.5°	1.2	0.8	0.8
155°	1.2	0.8	0.4
157.5°	1.6	0.8	0.4
160°	1.2	0.8	0.4
162.5°	1.2	0.8	0.4
165°	1.2	0.8	0.0
167.5°	1.2	0.8	0.4
170°	1.2	0.8	0.4
172.5°	1.2	0.8	0.4
175°	1.2	0.4	0.4
177.5°	1.2	0.4	0.4
180°	1.2	1.2	1.2



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	167.9	163.1	147.1	120.7	84.3	47.2	17.6	3.2	0.8	1.2	1.2
110°	146.3	142.3	125.9	100.3	67.9	35.2	11.6	2.0	1.2	1.2	1.2





107.5°	1.6	2.4	2.8
110°	1.6	2.0	2.4



(END OF REPORT)