

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: P551508

Luminaire Tested: **FCC-X-2-LD4-2LO-30-UNV-93-96-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: P551508
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-30-UNV-93-96-ED1D
Description: FCC CORNER MOUNT LUMINAIRE WITH .156 CLEAR TEMPERED GLASS FIXTURE
SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES AND 3000K,
AND 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

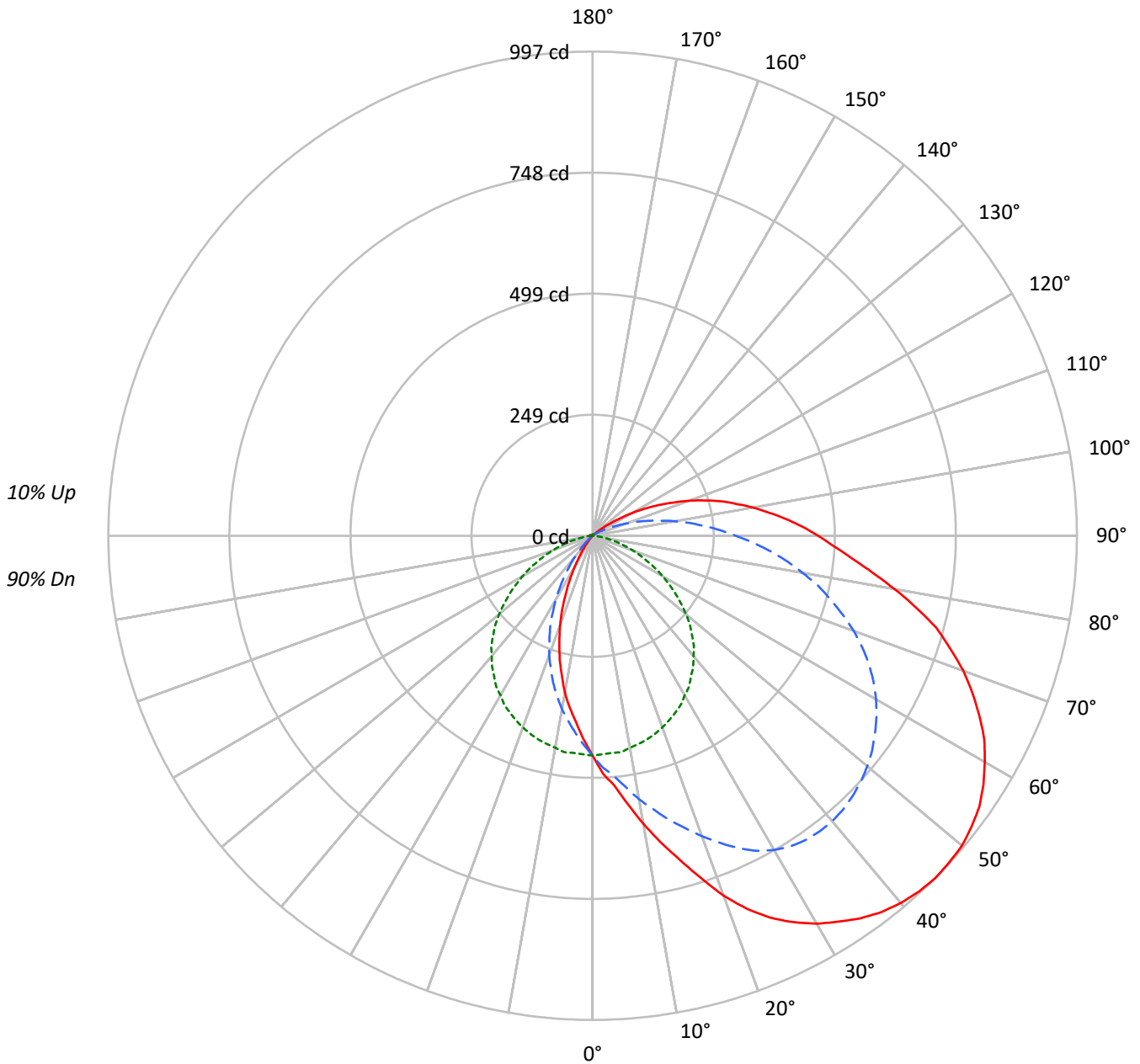
Lumens per Lamp: N/A
Luminaire Lumens: 2236.0 lumens
Efficiency: N/A
Efficacy: 95.1 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

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: P551508

CATALOG NUMBER: FCC-X-2-LD4-2LO-30-UNV-93-96-ED1D

Luminous Intensity Polar Plot





TEST NUMBER: P551508

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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°	4869	4869	4869
5°	5344	4797	4002
10°	6048	4739	3299
15°	6778	4679	2571
20°	7644	4602	1893
25°	8363	4514	1243
30°	8896	4395	700
35°	9359	4268	309
40°	9770	4110	74
45°	10121	3913	0
50°	10416	3652	0
55°	10642	3322	0
60°	10755	2936	0
65°	10800	2501	0
70°	10763	2038	0
75°	10626	1503	9
80°	10196	921	47
85°	9854	437	64



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	43.3	1.9
10°-20°	129.7	5.8
20°-30°	210.1	9.4
30°-40°	269.9	12.1
40°-50°	305.5	13.7
50°-60°	316.5	14.2
60°-70°	298.5	13.3
70°-80°	250.1	11.2
80°-90°	181.3	8.1
90°-100°	119.2	5.3
100°-110°	68.8	3.1
110°-120°	30.4	1.4
120°-130°	8.2	0.4
130°-140°	1.9	0.1
140°-150°	1.2	0.1
150°-160°	0.9	0.0
160°-170°	0.5	0.0
170°-180°	0.2	0.0
0°-30°	383.1	17.1
0°-40°	653.0	29.2
0°-60°	1274.9	57.0
0°-90°	2004.8	89.7
90°-120°	218.3	9.8
90°-150°	229.7	10.3
90°-180°	231.0	10.3
0°-180°	2236.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	452	452	452	452	452	
5°	516	496	449	407	387	52
15°	690	605	434	313	262	199
25°	868	710	402	206	129	401
35°	962	765	353	100	32	603
45°	997	757	289	23	0	770
55°	972	710	209	0	0	868
65°	879	628	124	0	0	869
75°	732	507	53	1	1	768
85°	536	367	9	2	4	458
90°	464	295	2	4	4	255
95°	399	230	1	4	5	313
105°	274	119	1	3	5	289
115°	149	39	2	2	3	149
125°	44	5	2	2	2	44
135°	2	2	3	2	2	4
145°	1	2	2	2	2	0
155°	1	2	2	2	1	0
165°	1	2	2	2	0	0
175°	1	2	3	2	1	0
180°	2	2	2	2	2	



TEST NUMBER: P551508

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
0°	452.3	452.3	452.3	452.3	452.3	452.3	452.3	452.3	452.3	452.3	452.3
2.5°	490.3	489.7	488.0	485.1	481.1	474.2	468.4	463.2	456.3	450.6	439.6
5°	516.2	513.4	511.1	508.2	499.0	492.6	482.2	470.7	459.8	448.8	426.9
7.5°	557.7	553.1	549.7	541.6	528.9	514.5	498.4	487.4	479.9	449.4	412.0
10°	602.1	598.1	591.1	576.7	561.2	540.4	517.4	491.5	468.4	443.1	398.7
12.5°	645.9	640.1	630.3	611.9	590.0	564.1	532.4	501.8	469.0	439.0	383.1
15°	689.7	683.3	673.0	650.5	621.7	587.7	549.1	510.5	471.9	433.9	367.0
17.5°	737.5	728.8	713.3	687.9	651.6	609.6	564.1	517.4	470.7	427.5	349.7
20°	788.8	776.7	760.0	726.0	683.3	633.8	579.0	524.3	470.2	420.0	330.1
22.5°	831.4	819.3	800.9	765.7	714.4	653.9	591.7	528.9	467.8	411.4	311.7
25°	868.3	858.5	838.3	798.0	743.8	675.3	603.8	532.4	464.4	402.2	292.1
27.5°	897.1	887.9	865.4	823.9	768.6	694.3	613.0	534.1	459.8	392.9	271.9
30°	922.4	913.2	886.1	843.5	785.3	709.3	622.3	534.7	454.0	379.1	250.1
32.5°	942.0	933.4	905.7	860.2	796.8	719.6	627.4	534.1	446.5	369.3	226.4
35°	961.6	953.0	920.7	872.3	805.5	724.2	631.5	531.2	437.3	353.2	204.0
37.5°	976.6	966.8	934.0	880.4	809.5	725.4	630.9	527.2	427.5	339.9	181.5
40°	987.0	976.6	941.5	885.0	810.7	723.7	626.3	520.3	416.0	323.2	157.9
42.5°	993.9	982.4	944.9	891.9	808.4	719.1	619.4	511.6	403.3	308.8	135.4
45°	997.3	985.2	945.5	886.1	804.3	710.4	609.0	500.7	389.5	289.2	112.9
47.5°	995.6	982.4	942.6	879.8	796.8	701.2	597.5	487.4	372.8	271.9	91.6
50°	992.7	978.9	936.3	871.7	786.5	689.7	584.8	471.3	355.5	250.6	72.6
52.5°	983.5	969.7	929.4	860.2	774.4	676.4	567.5	454.6	337.1	229.9	55.3
55°	972.0	959.3	917.3	849.8	758.8	660.3	551.4	436.7	319.2	208.6	39.8
57.5°	954.1	942.6	902.3	833.1	743.3	642.4	533.5	417.1	296.7	187.3	27.7
60°	932.2	920.7	881.5	814.1	725.4	622.3	513.9	397.0	276.6	165.9	17.3
62.5°	909.2	898.2	857.3	790.5	702.9	600.9	492.6	376.8	255.2	146.3	10.4
65°	878.7	868.3	831.4	762.3	678.1	577.9	469.0	352.6	233.3	124.5	5.8
67.5°	846.4	837.2	799.7	736.3	649.3	552.5	444.8	329.0	210.3	105.4	2.9
70°	811.8	800.3	765.7	701.2	620.0	523.7	418.3	304.8	188.4	87.0	0.0
72.5°	771.5	762.8	729.4	668.4	586.0	493.2	391.2	278.3	164.2	69.1	0.6
75°	732.3	721.4	690.8	633.2	552.5	460.9	361.3	253.5	140.6	53.0	0.6
77.5°	681.6	678.1	649.3	593.4	520.9	429.8	328.4	223.6	118.1	38.0	0.6
80°	630.9	627.4	605.0	553.7	484.0	392.9	297.9	195.3	96.2	25.4	0.6
82.5°	580.8	576.2	554.8	512.2	446.5	361.8	266.2	167.1	76.1	15.6	0.6
85°	535.8	530.1	507.0	467.8	407.9	326.7	233.3	139.4	56.5	8.6	1.2
87.5°	497.2	493.2	467.8	427.5	368.7	293.8	204.5	112.9	39.8	4.0	1.7
90°	464.4	455.7	433.3	390.6	331.9	257.5	174.0	90.5	26.5	2.3	2.3
92.5°	432.1	424.6	399.9	356.1	299.0	226.4	144.6	69.1	16.7	1.2	2.9
95°	398.7	390.6	366.4	326.1	265.6	194.7	118.7	50.7	9.2	1.2	2.9
97.5°	365.9	358.4	333.0	292.7	235.7	167.1	93.9	35.7	4.6	1.2	2.3
100°	335.3	326.7	303.6	263.3	205.7	139.4	72.6	23.0	2.9	1.2	2.3
102.5°	303.1	296.1	272.5	233.3	174.6	113.5	54.2	14.4	1.2	1.2	1.7
105°	274.3	265.6	242.6	202.2	148.7	89.3	38.0	8.6	1.2	1.2	1.7



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CATALOG NUMBER: FCC-X-2-LD4-2LO-30-UNV-93-96-ED1D

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	178.6	171.7	151.5	117.5	75.5	35.1	10.4	1.7	1.7	1.7	1.7
115°	149.2	138.9	121.0	91.0	55.9	23.0	5.2	1.7	1.7	1.7	1.7
117.5°	119.3	110.6	97.9	69.1	36.9	15.0	2.9	1.7	1.7	1.7	1.7
120°	93.3	85.3	70.9	47.8	24.8	8.6	1.2	1.7	1.7	1.7	1.7
122.5°	66.8	60.5	47.8	31.1	15.0	4.0	1.7	1.7	2.3	2.3	1.7
125°	44.4	40.9	31.7	19.0	9.2	1.7	1.7	1.7	2.3	2.3	1.7
127.5°	28.8	25.9	18.4	10.9	4.0	1.7	1.7	2.3	2.3	2.3	1.7
130°	16.1	14.4	10.9	6.3	1.7	1.7	1.7	2.3	2.3	2.3	1.7
132.5°	9.2	8.6	5.8	1.2	1.7	1.7	1.7	2.3	2.3	2.3	2.3
135°	2.3	1.2	1.2	1.2	1.7	1.7	2.3	2.3	2.9	2.9	2.3
137.5°	0.6	0.6	1.2	1.2	1.7	1.7	2.3	2.9	2.9	2.9	2.3
140°	0.6	0.6	1.2	1.7	1.7	1.7	2.3	2.9	2.9	2.9	2.3
142.5°	0.6	1.2	1.2	1.7	1.7	2.3	2.3	2.9	2.9	2.3	2.3
145°	0.6	1.2	1.2	1.7	1.7	2.3	2.3	2.9	2.3	2.3	2.3
147.5°	1.2	1.2	1.2	1.7	1.7	2.3	2.3	2.9	2.9	2.3	2.3
150°	0.6	1.2	1.2	1.7	2.3	2.3	2.3	2.9	2.3	2.3	2.3
152.5°	0.6	1.2	1.2	1.7	2.3	2.3	2.3	2.9	2.3	2.3	2.3
155°	1.2	1.2	1.2	1.7	2.3	2.3	2.3	2.9	2.3	2.3	2.9
157.5°	1.2	1.2	1.2	1.7	2.3	2.3	2.3	2.9	2.3	2.3	2.9
160°	1.2	1.2	1.2	1.7	1.7	2.3	2.3	2.3	2.3	2.3	2.3
162.5°	1.2	1.2	1.2	1.7	1.7	2.3	2.3	2.3	2.3	2.3	2.3
165°	1.2	1.2	1.2	1.2	1.7	1.7	2.3	2.3	2.3	2.3	2.3
167.5°	1.2	1.2	1.2	1.7	1.7	1.7	2.3	2.3	2.3	2.3	2.3
170°	1.2	1.2	1.2	1.7	1.7	1.7	2.3	2.9	2.9	2.9	2.9
172.5°	1.2	1.2	1.2	1.7	1.7	2.3	2.3	2.9	2.9	2.9	2.9
175°	1.2	1.2	1.2	1.7	1.7	2.3	2.3	2.9	2.9	2.9	2.9
177.5°	0.6	1.2	1.2	1.7	1.7	2.3	2.3	2.9	2.9	2.9	2.3
180°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	452.3	452.3	452.3
2.5°	430.4	422.3	420.0
5°	407.3	394.1	386.6
7.5°	384.3	366.4	357.8
10°	363.0	337.6	328.4
12.5°	337.6	308.2	293.8
15°	313.4	275.4	261.6
17.5°	286.4	243.7	227.6
20°	261.0	212.0	195.3
22.5°	232.2	180.9	162.5
25°	206.3	149.8	129.1
27.5°	177.5	118.1	100.3
30°	150.4	90.5	72.6
32.5°	124.5	66.3	50.1
35°	100.3	44.9	31.7
37.5°	77.2	27.7	16.1
40°	55.9	14.4	7.5
42.5°	37.5	6.9	4.0
45°	23.0	3.5	0.0
47.5°	13.3	0.0	0.0
50°	6.9	0.0	0.0
52.5°	2.9	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°	0.6	0.6	0.6
77.5°	0.6	1.2	1.7
80°	1.2	2.3	2.9
82.5°	2.3	2.9	2.9
85°	2.3	2.9	3.5
87.5°	2.9	3.5	4.0
90°	3.5	4.0	4.0
92.5°	3.5	4.6	4.6
95°	4.0	4.6	5.2
97.5°	4.6	5.2	5.2
100°	4.0	5.2	5.8
102.5°	3.5	5.2	5.2
105°	2.9	4.0	4.6



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	2.3	2.9	2.9
115°	1.7	2.3	2.9
117.5°	1.7	2.3	2.3
120°	1.7	1.7	2.3
122.5°	1.7	1.7	2.3
125°	1.7	1.7	2.3
127.5°	2.3	1.7	1.7
130°	1.7	1.7	1.7
132.5°	2.3	1.7	1.7
135°	2.3	1.7	1.7
137.5°	2.3	1.7	1.7
140°	2.3	1.7	1.7
142.5°	2.3	1.7	1.7
145°	1.7	1.7	1.7
147.5°	1.7	1.7	1.7
150°	1.7	1.7	1.2
152.5°	1.7	1.2	1.2
155°	1.7	1.2	0.6
157.5°	2.3	1.2	0.6
160°	1.7	1.2	0.6
162.5°	1.7	1.2	0.6
165°	1.7	1.2	0.0
167.5°	1.7	1.2	0.6
170°	1.7	1.2	0.6
172.5°	1.7	1.2	0.6
175°	1.7	0.6	0.6
177.5°	1.7	0.6	0.6
180°	1.7	1.7	1.7



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	242.0	235.1	212.0	174.0	121.6	68.0	25.4	4.6	1.2	1.7	1.7
110°	210.9	205.1	181.5	144.6	97.9	50.7	16.7	2.9	1.7	1.7	1.7





107.5°	2.3	3.5	4.0
110°	2.3	2.9	3.5



(END OF REPORT)