

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: P551056

Luminaire Tested: **FCC-X-2-LD4-1STD-35-UNV-93-88-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: P551056
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-35-UNV-93-88-ED1D
Description: FCC CORNER MOUNT LUMINAIRE WITH .156 CLEAR TEMPERED GLASS 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

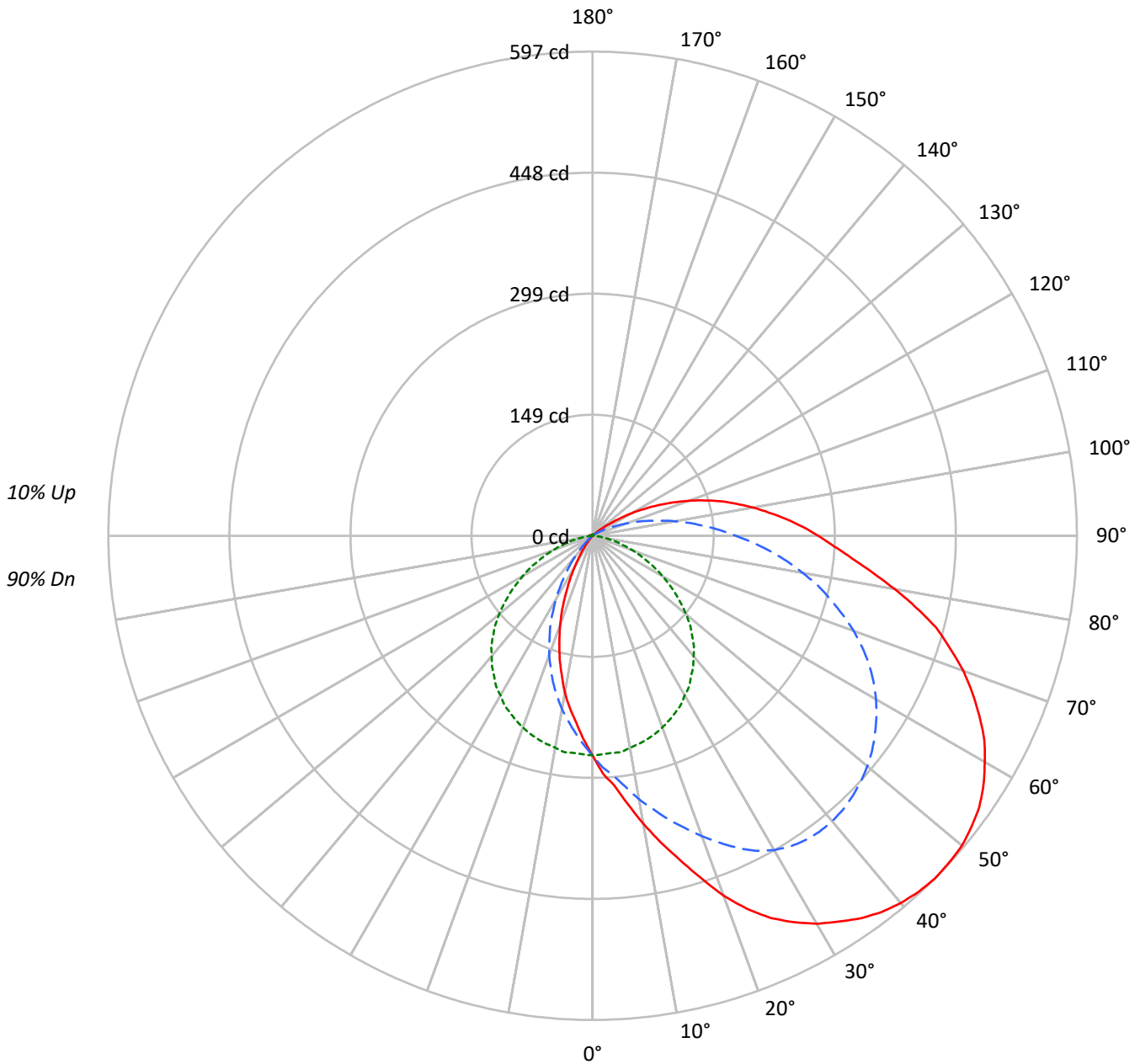
Lumens per Lamp: N/A
Luminaire Lumens: 1338.9 lumens
Efficiency: N/A
Efficacy: 80.2 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

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: P551056

CATALOG NUMBER: FCC-X-2-LD4-1STD-35-UNV-93-88-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°	2915	2915	2915
5°	3200	2873	2397
10°	3622	2837	1976
15°	4059	2801	1539
20°	4577	2755	1134
25°	5008	2702	744
30°	5328	2631	420
35°	5605	2556	185
40°	5850	2462	45
45°	6061	2344	0
50°	6238	2188	0
55°	6373	1989	0
60°	6441	1759	0
65°	6467	1496	0
70°	6445	1221	0
75°	6363	899	4
80°	6106	551	27
85°	5902	264	39



TEST NUMBER: P551056

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	25.9	1.9
10°-20°	77.7	5.8
20°-30°	125.8	9.4
30°-40°	161.6	12.1
40°-50°	182.9	13.7
50°-60°	189.5	14.2
60°-70°	178.7	13.3
70°-80°	149.8	11.2
80°-90°	108.6	8.1
90°-100°	71.4	5.3
100°-110°	41.2	3.1
110°-120°	18.2	1.4
120°-130°	4.9	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
0°-30°	229.4	17.1
0°-40°	391.0	29.2
0°-60°	763.5	57.0
0°-90°	1200.5	89.7
90°-120°	130.7	9.8
90°-150°	137.5	10.3
90°-180°	138.0	10.3
0°-180°	1338.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	271	271	271	271	271	
5°	309	297	269	244	232	31
15°	413	362	260	188	157	119
25°	520	425	241	124	77	240
35°	576	458	212	60	19	361
45°	597	454	173	14	0	461
55°	582	425	125	0	0	520
65°	526	376	74	0	0	521
75°	438	303	32	0	0	460
85°	321	220	5	1	2	274
90°	278	176	1	2	2	152
95°	239	138	1	2	3	187
105°	164	71	1	2	3	173
115°	89	24	1	1	2	90
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: P551056

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
0°	270.8	270.8	270.8	270.8	270.8	270.8	270.8	270.8	270.8	270.8	270.8
2.5°	293.6	293.3	292.2	290.5	288.1	284.0	280.5	277.4	273.3	269.8	263.3
5°	309.1	307.4	306.0	304.3	298.8	295.0	288.8	281.9	275.3	268.8	255.7
7.5°	334.0	331.2	329.2	324.3	316.7	308.1	298.4	291.9	287.4	269.1	246.7
10°	360.6	358.1	354.0	345.4	336.1	323.6	309.8	294.3	280.5	265.3	238.8
12.5°	386.8	383.3	377.5	366.4	353.3	337.8	318.8	300.5	280.9	262.9	229.4
15°	413.0	409.2	403.0	389.5	372.3	351.9	328.8	305.7	282.6	259.8	219.8
17.5°	441.6	436.5	427.1	412.0	390.2	365.0	337.8	309.8	281.9	256.0	209.4
20°	472.3	465.1	455.1	434.7	409.2	379.5	346.8	314.0	281.5	251.5	197.7
22.5°	497.9	490.6	479.6	458.5	427.8	391.6	354.3	316.7	280.2	246.4	186.7
25°	520.0	514.1	502.0	477.9	445.4	404.4	361.6	318.8	278.1	240.8	174.9
27.5°	537.2	531.7	518.2	493.4	460.3	415.8	367.1	319.8	275.3	235.3	162.9
30°	552.4	546.9	530.7	505.1	470.3	424.7	372.6	320.2	271.9	227.0	149.7
32.5°	564.1	558.9	542.4	515.1	477.2	430.9	375.7	319.8	267.4	221.2	135.6
35°	575.9	570.7	551.4	522.4	482.4	433.7	378.2	318.1	261.9	211.5	122.1
37.5°	584.8	579.0	559.3	527.2	484.8	434.4	377.8	315.7	256.0	203.6	108.7
40°	591.0	584.8	563.8	530.0	485.5	433.4	375.0	311.6	249.1	193.6	94.5
42.5°	595.2	588.3	565.8	534.1	484.1	430.6	370.9	306.4	241.5	184.9	81.1
45°	597.2	590.0	566.2	530.7	481.7	425.4	364.7	299.8	233.2	173.2	67.6
47.5°	596.2	588.3	564.5	526.9	477.2	419.9	357.8	291.9	223.2	162.9	54.9
50°	594.5	586.2	560.7	522.0	471.0	413.0	350.2	282.2	212.9	150.1	43.5
52.5°	589.0	580.7	556.5	515.1	463.7	405.1	339.9	272.2	201.8	137.7	33.1
55°	582.1	574.5	549.3	508.9	454.4	395.4	330.2	261.5	191.1	124.9	23.8
57.5°	571.4	564.5	540.3	498.9	445.1	384.7	319.5	249.8	177.7	112.1	16.6
60°	558.3	551.4	527.9	487.5	434.4	372.6	307.8	237.7	165.6	99.4	10.4
62.5°	544.5	537.9	513.4	473.4	420.9	359.9	295.0	225.6	152.8	87.6	6.2
65°	526.2	520.0	497.9	456.5	406.1	346.1	280.9	211.2	139.7	74.5	3.5
67.5°	506.8	501.3	478.9	440.9	388.8	330.9	266.4	197.0	125.9	63.1	1.7
70°	486.1	479.2	458.5	419.9	371.3	313.6	250.5	182.5	112.8	52.1	0.0
72.5°	462.0	456.8	436.8	400.2	350.9	295.3	234.3	166.6	98.3	41.4	0.3
75°	438.5	432.0	413.7	379.2	330.9	276.0	216.3	151.8	84.2	31.7	0.3
77.5°	408.2	406.1	388.8	355.4	311.9	257.4	196.7	133.9	70.7	22.8	0.3
80°	377.8	375.7	362.3	331.6	289.8	235.3	178.4	117.0	57.6	15.2	0.3
82.5°	347.8	345.0	332.3	306.7	267.4	216.7	159.4	100.1	45.5	9.3	0.3
85°	320.9	317.4	303.6	280.2	244.3	195.6	139.7	83.5	33.8	5.2	0.7
87.5°	297.8	295.3	280.2	256.0	220.8	176.0	122.5	67.6	23.8	2.4	1.0
90°	278.1	272.9	259.5	233.9	198.7	154.2	104.2	54.2	15.9	1.4	1.4
92.5°	258.8	254.3	239.4	213.2	179.1	135.6	86.6	41.4	10.0	0.7	1.7
95°	238.8	233.9	219.4	195.3	159.1	116.6	71.1	30.4	5.5	0.7	1.7
97.5°	219.1	214.6	199.4	175.3	141.1	100.1	56.2	21.4	2.8	0.7	1.4
100°	200.8	195.6	181.8	157.7	123.2	83.5	43.5	13.8	1.7	0.7	1.4
102.5°	181.5	177.3	163.2	139.7	104.5	68.0	32.4	8.6	0.7	0.7	1.0
105°	164.2	159.1	145.3	121.1	89.0	53.5	22.8	5.2	0.7	0.7	1.0



TEST NUMBER: P551056

CATALOG NUMBER: FCC-X-2-LD4-1STD-35-UNV-93-88-ED1D

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	107.0	102.8	90.7	70.4	45.2	21.0	6.2	1.0	1.0	1.0	1.0
115°	89.4	83.2	72.5	54.5	33.5	13.8	3.1	1.0	1.0	1.0	1.0
117.5°	71.4	66.2	58.7	41.4	22.1	9.0	1.7	1.0	1.0	1.0	1.0
120°	55.9	51.1	42.4	28.6	14.8	5.2	0.7	1.0	1.0	1.0	1.0
122.5°	40.0	36.2	28.6	18.6	9.0	2.4	1.0	1.0	1.4	1.4	1.0
125°	26.6	24.5	19.0	11.4	5.5	1.0	1.0	1.0	1.4	1.4	1.0
127.5°	17.3	15.5	11.0	6.6	2.4	1.0	1.0	1.4	1.4	1.4	1.0
130°	9.7	8.6	6.6	3.8	1.0	1.0	1.0	1.4	1.4	1.4	1.0
132.5°	5.5	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



TEST NUMBER: P551056

CATALOG NUMBER: FCC-X-2-LD4-1STD-35-UNV-93-88-ED1D

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	270.8	270.8	270.8
2.5°	257.7	252.9	251.5
5°	243.9	236.0	231.5
7.5°	230.1	219.4	214.3
10°	217.4	202.2	196.7
12.5°	202.2	184.6	176.0
15°	187.7	164.9	156.6
17.5°	171.5	145.9	136.3
20°	156.3	127.0	117.0
22.5°	139.0	108.3	97.3
25°	123.5	89.7	77.3
27.5°	106.3	70.7	60.0
30°	90.1	54.2	43.5
32.5°	74.5	39.7	30.0
35°	60.0	26.9	19.0
37.5°	46.2	16.6	9.7
40°	33.5	8.6	4.5
42.5°	22.4	4.1	2.4
45°	13.8	2.1	0.0
47.5°	7.9	0.0	0.0
50°	4.1	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°	144.9	140.8	127.0	104.2	72.8	40.7	15.2	2.8	0.7	1.0	1.0
110°	126.3	122.8	108.7	86.6	58.7	30.4	10.0	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)