

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: P550532

Luminaire Tested: **FCC-X-2-LD4-1HI-35-UNV-82-96-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: P550532
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-82-96-ED1D
Description: FCC CORNER MOUNT LUMINAIRE WITH .187 CLEAR PC FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES AND 3500K, AND 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

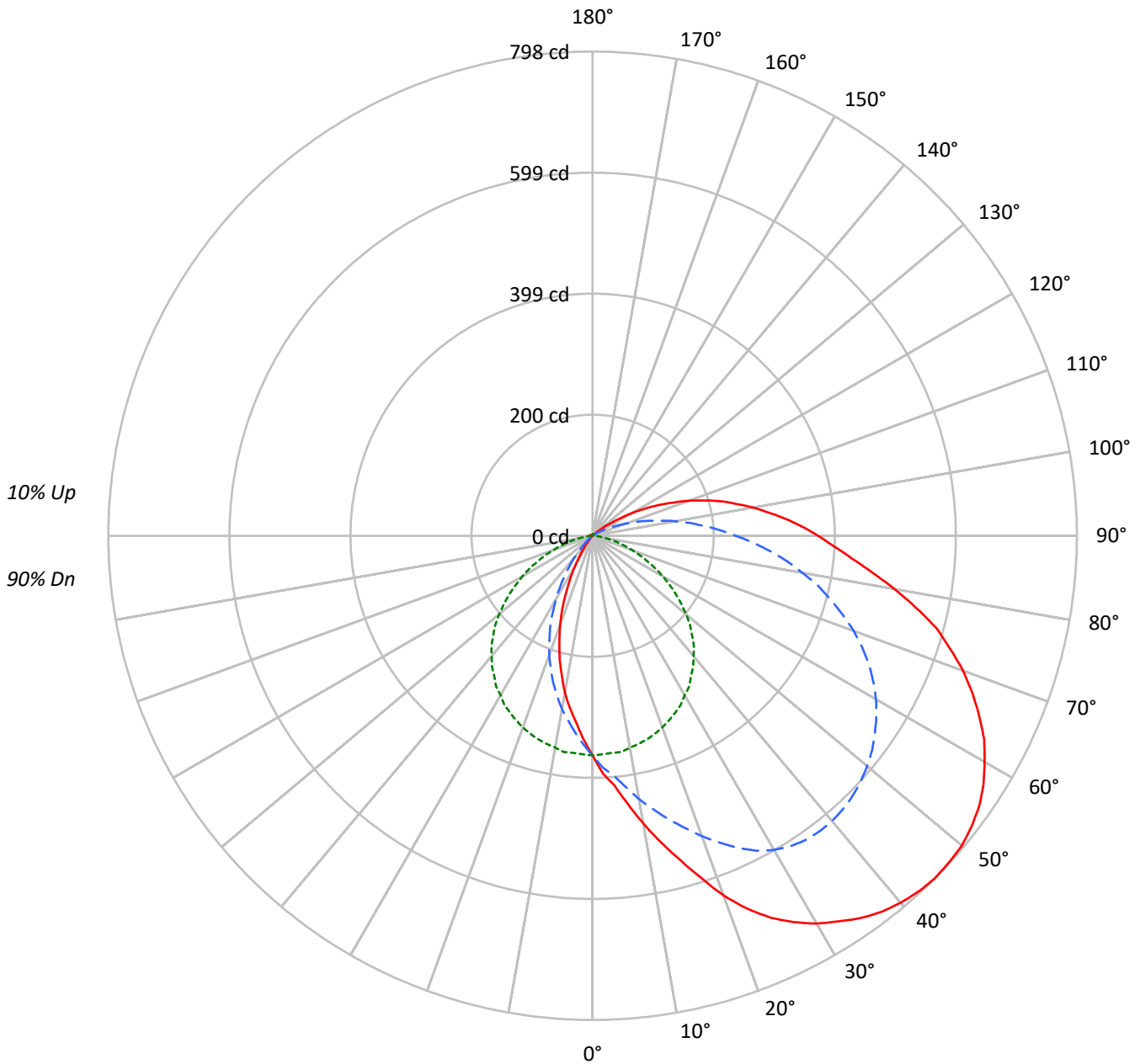
Lumens per Lamp: N/A
Luminaire Lumens: 1789.0 lumens
Efficiency: N/A
Efficacy: 82.4 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

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: P550532

CATALOG NUMBER: FCC-X-2-LD4-1HI-35-UNV-82-96-ED1D

Luminous Intensity Polar Plot





TEST NUMBER: P550532

CATALOG NUMBER: FCC-X-2-LD4-1HI-35-UNV-82-96-ED1D

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°	3895	3895	3895
5°	4275	3838	3202
10°	4838	3791	2640
15°	5423	3743	2057
20°	6116	3682	1515
25°	6691	3611	995
30°	7118	3516	560
35°	7488	3415	247
40°	7817	3289	59
45°	8098	3131	0
50°	8335	2922	0
55°	8515	2658	0
60°	8605	2350	0
65°	8640	2001	0
70°	8611	1630	0
75°	8502	1202	7
80°	8158	736	37
85°	7885	351	51



TEST NUMBER: P550532

CATALOG NUMBER: FCC-X-2-LD4-1HI-35-UNV-82-96-ED1D

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	34.7	1.9
10°-20°	103.8	5.8
20°-30°	168.1	9.4
30°-40°	215.9	12.1
40°-50°	244.4	13.7
50°-60°	253.2	14.2
60°-70°	238.8	13.3
70°-80°	200.1	11.2
80°-90°	145.1	8.1
90°-100°	95.3	5.3
100°-110°	55.1	3.1
110°-120°	24.3	1.4
120°-130°	6.6	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°	306.5	17.1
0°-40°	522.4	29.2
0°-60°	1020.0	57.0
0°-90°	1604.0	89.7
90°-120°	174.7	9.8
90°-150°	183.7	10.3
90°-180°	185.0	10.3
0°-180°	1789.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	362	362	362	362	362	
5°	413	397	359	326	309	42
15°	552	484	347	251	209	159
25°	695	568	322	165	103	321
35°	769	612	283	80	25	483
45°	798	606	231	18	0	616
55°	778	568	167	0	0	694
65°	703	502	100	0	0	696
75°	586	405	42	0	0	615
85°	429	294	7	2	3	366
90°	372	236	2	3	3	204
95°	319	184	1	3	4	250
105°	219	95	1	2	4	232
115°	119	32	1	1	2	120
125°	36	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	



TEST NUMBER: P550532

CATALOG NUMBER: FCC-X-2-LD4-1HI-35-UNV-82-96-ED1D

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
0°	361.9	361.9	361.9	361.9	361.9	361.9	361.9	361.9	361.9	361.9	361.9
2.5°	392.3	391.8	390.5	388.1	384.9	379.4	374.8	370.6	365.1	360.5	351.7
5°	413.0	410.7	408.9	406.6	399.2	394.1	385.8	376.6	367.9	359.1	341.6
7.5°	446.2	442.5	439.8	433.3	423.2	411.7	398.8	390.0	384.0	359.6	329.6
10°	481.7	478.5	473.0	461.4	449.0	432.4	414.0	393.2	374.8	354.5	319.0
12.5°	516.8	512.2	504.3	489.6	472.0	451.3	425.9	401.5	375.2	351.3	306.6
15°	551.8	546.7	538.4	520.4	497.4	470.2	439.3	408.4	377.5	347.1	293.6
17.5°	590.1	583.1	570.7	550.4	521.4	487.7	451.3	414.0	376.6	342.0	279.8
20°	631.1	621.4	608.0	580.8	546.7	507.1	463.3	419.5	376.2	336.1	264.1
22.5°	665.2	655.5	640.8	612.6	571.6	523.2	473.4	423.2	374.3	329.1	249.4
25°	694.7	686.9	670.7	638.5	595.1	540.3	483.1	425.9	371.6	321.8	233.7
27.5°	717.8	710.4	692.4	659.2	615.0	555.5	490.5	427.3	367.9	314.4	217.6
30°	738.0	730.7	709.0	674.9	628.3	567.5	497.9	427.8	363.3	303.3	200.1
32.5°	753.7	746.8	724.7	688.2	637.5	575.8	502.0	427.3	357.3	295.5	181.2
35°	769.4	762.5	736.7	697.9	644.5	579.5	505.2	425.0	349.9	282.6	163.2
37.5°	781.4	773.5	747.3	704.4	647.7	580.4	504.8	421.8	342.0	272.0	145.2
40°	789.7	781.4	753.2	708.1	648.6	579.0	501.1	416.3	332.8	258.6	126.3
42.5°	795.2	786.0	756.0	713.6	646.8	575.3	495.6	409.4	322.7	247.1	108.3
45°	798.0	788.3	756.5	709.0	643.5	568.4	487.3	400.6	311.6	231.4	90.4
47.5°	796.6	786.0	754.2	703.9	637.5	561.0	478.0	390.0	298.3	217.6	73.3
50°	794.3	783.2	749.1	697.5	629.2	551.8	467.9	377.1	284.4	200.5	58.1
52.5°	786.9	775.8	743.6	688.2	619.6	541.2	454.1	363.7	269.7	183.9	44.3
55°	777.7	767.5	733.9	680.0	607.1	528.3	441.2	349.4	255.4	166.9	31.8
57.5°	763.4	754.2	721.9	666.6	594.7	514.0	426.9	333.8	237.4	149.8	22.1
60°	745.9	736.7	705.3	651.4	580.4	497.9	411.2	317.6	221.3	132.8	13.8
62.5°	727.4	718.7	685.9	632.5	562.4	480.8	394.1	301.5	204.2	117.1	8.3
65°	703.0	694.7	665.2	609.9	542.6	462.4	375.2	282.1	186.7	99.6	4.6
67.5°	677.2	669.8	639.8	589.1	519.5	442.1	355.9	263.2	168.3	84.4	2.3
70°	649.5	640.3	612.6	561.0	496.0	419.0	334.7	243.9	150.7	69.6	0.0
72.5°	617.3	610.3	583.6	534.7	468.8	394.6	313.0	222.7	131.4	55.3	0.5
75°	585.9	577.2	552.7	506.6	442.1	368.8	289.0	202.8	112.5	42.4	0.5
77.5°	545.3	542.6	519.5	474.8	416.7	343.9	262.8	178.9	94.5	30.4	0.5
80°	504.8	502.0	484.0	443.0	387.2	314.4	238.3	156.3	77.0	20.3	0.5
82.5°	464.7	461.0	443.9	409.8	357.3	289.5	213.0	133.7	60.8	12.4	0.5
85°	428.7	424.1	405.7	374.3	326.4	261.4	186.7	111.6	45.2	6.9	0.9
87.5°	397.8	394.6	374.3	342.0	295.0	235.1	163.6	90.4	31.8	3.2	1.4
90°	371.6	364.6	346.7	312.5	265.5	206.1	139.2	72.4	21.2	1.8	1.8
92.5°	345.7	339.7	319.9	284.9	239.3	181.2	115.7	55.3	13.4	0.9	2.3
95°	319.0	312.5	293.2	260.9	212.5	155.8	95.0	40.6	7.4	0.9	2.3
97.5°	292.7	286.7	266.4	234.2	188.5	133.7	75.1	28.6	3.7	0.9	1.8
100°	268.3	261.4	242.9	210.7	164.6	111.6	58.1	18.4	2.3	0.9	1.8
102.5°	242.5	236.9	218.0	186.7	139.7	90.8	43.3	11.5	0.9	0.9	1.4
105°	219.4	212.5	194.1	161.8	118.9	71.5	30.4	6.9	0.9	0.9	1.4



TEST NUMBER: P550532

CATALOG NUMBER: FCC-X-2-LD4-1HI-35-UNV-82-96-ED1D

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	142.9	137.4	121.2	94.0	60.4	28.1	8.3	1.4	1.4	1.4	1.4
115°	119.4	111.1	96.8	72.8	44.7	18.4	4.1	1.4	1.4	1.4	1.4
117.5°	95.4	88.5	78.4	55.3	29.5	12.0	2.3	1.4	1.4	1.4	1.4
120°	74.7	68.2	56.7	38.3	19.8	6.9	0.9	1.4	1.4	1.4	1.4
122.5°	53.5	48.4	38.3	24.9	12.0	3.2	1.4	1.4	1.8	1.8	1.4
125°	35.5	32.7	25.4	15.2	7.4	1.4	1.4	1.4	1.8	1.8	1.4
127.5°	23.0	20.7	14.8	8.8	3.2	1.4	1.4	1.8	1.8	1.8	1.4
130°	12.9	11.5	8.8	5.1	1.4	1.4	1.4	1.8	1.8	1.8	1.4
132.5°	7.4	6.9	4.6	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



TEST NUMBER: P550532

CATALOG NUMBER: FCC-X-2-LD4-1HI-35-UNV-82-96-ED1D

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	361.9	361.9	361.9
2.5°	344.4	337.9	336.1
5°	325.9	315.3	309.3
7.5°	307.5	293.2	286.3
10°	290.4	270.1	262.8
12.5°	270.1	246.6	235.1
15°	250.8	220.3	209.3
17.5°	229.1	195.0	182.1
20°	208.8	169.6	156.3
22.5°	185.8	144.7	130.0
25°	165.0	119.9	103.3
27.5°	142.0	94.5	80.2
30°	120.3	72.4	58.1
32.5°	99.6	53.0	40.1
35°	80.2	36.0	25.4
37.5°	61.8	22.1	12.9
40°	44.7	11.5	6.0
42.5°	30.0	5.5	3.2
45°	18.4	2.8	0.0
47.5°	10.6	0.0	0.0
50°	5.5	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	2.8
87.5°	2.3	2.8	3.2
90°	2.8	3.2	3.2
92.5°	2.8	3.7	3.7
95°	3.2	3.7	4.1
97.5°	3.7	4.1	4.1
100°	3.2	4.1	4.6
102.5°	2.8	4.1	4.1
105°	2.3	3.2	3.7



TEST NUMBER: P550532

CATALOG NUMBER: FCC-X-2-LD4-1HI-35-UNV-82-96-ED1D

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°	193.6	188.1	169.6	139.2	97.3	54.4	20.3	3.7	0.9	1.4	1.4
110°	168.7	164.1	145.2	115.7	78.4	40.6	13.4	2.3	1.4	1.4	1.4





107.5°	1.8	2.8	3.2
110°	1.8	2.3	2.8



(END OF REPORT)