

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: P550586

Luminaire Tested: **FCC-X-2-LD4-1HI-40-UNV-82-85-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: P550586
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-82-85-ED1D
Description: FCC CORNER MOUNT LUMINAIRE WITH .187 CLEAR PC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 4000K, AND 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

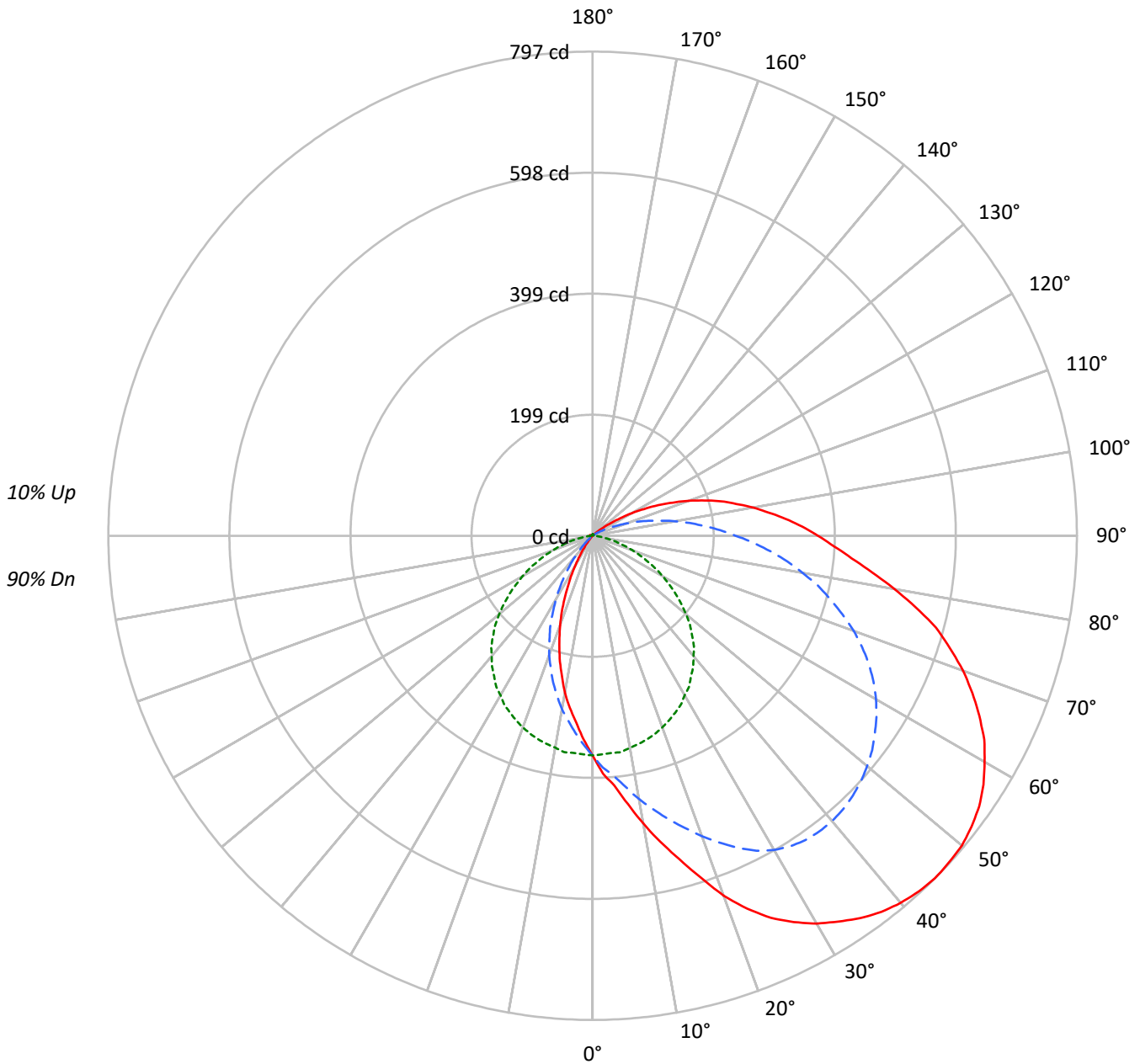
Lumens per Lamp: N/A
Luminaire Lumens: 1787.0 lumens
Efficiency: N/A
Efficacy: 82.3 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

Input Watts (W): 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: P550586

CATALOG NUMBER: FCC-X-2-LD4-1HI-40-UNV-82-85-ED1D

Luminous Intensity Polar Plot





TEST NUMBER: P550586

CATALOG NUMBER: FCC-X-2-LD4-1HI-40-UNV-82-85-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°	3891	3891	3891
5°	4271	3834	3199
10°	4833	3787	2637
15°	5417	3738	2055
20°	6109	3678	1513
25°	6683	3607	993
30°	7110	3513	559
35°	7480	3411	246
40°	7808	3285	59
45°	8089	3128	0
50°	8325	2919	0
55°	8505	2654	0
60°	8595	2347	0
65°	8631	1998	0
70°	8602	1628	0
75°	8493	1202	7
80°	8148	736	37
85°	7875	351	51



TEST NUMBER: P550586

CATALOG NUMBER: FCC-X-2-LD4-1HI-40-UNV-82-85-ED1D

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	34.6	1.9
10°-20°	103.7	5.8
20°-30°	167.9	9.4
30°-40°	215.7	12.1
40°-50°	244.1	13.7
50°-60°	252.9	14.2
60°-70°	238.5	13.3
70°-80°	199.9	11.2
80°-90°	144.9	8.1
90°-100°	95.2	5.3
100°-110°	55.0	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°	306.2	17.1
0°-40°	521.8	29.2
0°-60°	1018.9	57.0
0°-90°	1602.2	89.7
90°-120°	174.5	9.8
90°-150°	183.5	10.3
90°-180°	185.0	10.4
0°-180°	1787.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	362	362	362	362	362	
5°	413	396	359	326	309	42
15°	551	483	347	250	209	159
25°	694	567	321	165	103	321
35°	768	611	282	80	25	482
45°	797	605	231	18	0	615
55°	777	567	167	0	0	694
65°	702	502	100	0	0	695
75°	585	405	42	0	0	614
85°	428	294	7	2	3	366
90°	371	236	2	3	3	203
95°	319	184	1	3	4	250
105°	219	95	1	2	4	231
115°	119	32	1	1	2	119
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: P550586

CATALOG NUMBER: FCC-X-2-LD4-1HI-40-UNV-82-85-ED1D

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
0°	361.5	361.5	361.5	361.5	361.5	361.5	361.5	361.5	361.5	361.5	361.5
2.5°	391.9	391.4	390.0	387.7	384.5	379.0	374.4	370.2	364.7	360.1	351.3
5°	412.6	410.3	408.4	406.1	398.8	393.7	385.4	376.2	367.5	358.7	341.2
7.5°	445.7	442.0	439.3	432.8	422.7	411.2	398.3	389.6	383.6	359.2	329.2
10°	481.2	478.0	472.4	460.9	448.5	431.9	413.5	392.8	374.4	354.1	318.6
12.5°	516.2	511.6	503.8	489.0	471.5	450.8	425.5	401.1	374.8	350.9	306.2
15°	551.2	546.1	537.8	519.9	496.8	469.7	438.8	408.0	377.1	346.7	293.3
17.5°	589.4	582.5	570.1	549.8	520.8	487.2	450.8	413.5	376.2	341.7	279.5
20°	630.4	620.7	607.4	580.2	546.1	506.5	462.8	419.0	375.7	335.7	263.8
22.5°	664.5	654.8	640.1	612.0	571.0	522.6	472.9	422.7	373.9	328.8	249.1
25°	693.9	686.1	670.0	637.7	594.5	539.7	482.6	425.5	371.1	321.4	233.5
27.5°	716.9	709.6	691.6	658.5	614.3	554.9	489.9	426.9	367.5	314.0	217.3
30°	737.2	729.8	708.2	674.1	627.6	566.8	497.3	427.3	362.8	303.0	199.8
32.5°	752.9	746.0	723.9	687.5	636.8	575.1	501.4	426.9	356.9	295.2	181.0
35°	768.5	761.6	735.8	697.1	643.7	578.8	504.7	424.6	349.5	282.3	163.0
37.5°	780.5	772.7	746.4	703.6	647.0	579.7	504.2	421.3	341.7	271.7	145.0
40°	788.8	780.5	752.4	707.3	647.9	578.3	500.5	415.8	332.5	258.3	126.2
42.5°	794.3	785.1	755.2	712.8	646.0	574.7	495.0	408.9	322.3	246.8	108.2
45°	797.1	787.4	755.6	708.2	642.8	567.8	486.7	400.1	311.3	231.2	90.3
47.5°	795.7	785.1	753.3	703.1	636.8	560.4	477.5	389.6	297.9	217.3	73.2
50°	793.4	782.3	748.3	696.7	628.5	551.2	467.4	376.7	284.1	200.3	58.0
52.5°	786.0	775.0	742.7	687.5	618.9	540.6	453.6	363.3	269.4	183.7	44.2
55°	776.8	766.7	733.1	679.2	606.4	527.7	440.7	349.0	255.1	166.7	31.8
57.5°	762.5	753.3	721.1	665.8	594.0	513.4	426.4	333.4	237.1	149.7	22.1
60°	745.0	735.8	704.5	650.6	579.7	497.3	410.7	317.3	221.0	132.6	13.8
62.5°	726.6	717.9	685.2	631.8	561.8	480.3	393.7	301.1	204.0	117.0	8.3
65°	702.2	693.9	664.5	609.2	542.0	461.8	374.8	281.8	186.5	99.5	4.6
67.5°	676.4	669.1	639.1	588.5	518.9	441.6	355.5	262.9	168.1	84.3	2.3
70°	648.8	639.6	612.0	560.4	495.5	418.6	334.3	243.6	150.6	69.5	0.0
72.5°	616.6	609.7	583.0	534.1	468.3	394.2	312.7	222.4	131.2	55.3	0.5
75°	585.3	576.5	552.1	506.1	441.6	368.4	288.7	202.6	112.4	42.4	0.5
77.5°	544.7	542.0	518.9	474.3	416.3	343.5	262.5	178.7	94.4	30.4	0.5
80°	504.2	501.4	483.5	442.5	386.8	314.0	238.1	156.1	76.9	20.3	0.5
82.5°	464.2	460.5	443.4	409.4	356.9	289.2	212.7	133.5	60.8	12.4	0.5
85°	428.2	423.6	405.2	373.9	326.0	261.1	186.5	111.4	45.1	6.9	0.9
87.5°	397.4	394.2	373.9	341.7	294.7	234.8	163.5	90.3	31.8	3.2	1.4
90°	371.1	364.2	346.3	312.2	265.2	205.8	139.1	72.3	21.2	1.8	1.8
92.5°	345.4	339.4	319.6	284.6	239.0	181.0	115.6	55.3	13.4	0.9	2.3
95°	318.6	312.2	292.9	260.6	212.3	155.6	94.9	40.5	7.4	0.9	2.3
97.5°	292.4	286.4	266.2	233.9	188.3	133.5	75.1	28.5	3.7	0.9	1.8
100°	268.0	261.1	242.7	210.4	164.4	111.4	58.0	18.4	2.3	0.9	1.8
102.5°	242.2	236.7	217.8	186.5	139.5	90.7	43.3	11.5	0.9	0.9	1.4
105°	219.2	212.3	193.9	161.6	118.8	71.4	30.4	6.9	0.9	0.9	1.4



TEST NUMBER: P550586

CATALOG NUMBER: FCC-X-2-LD4-1HI-40-UNV-82-85-ED1D

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	142.7	137.2	121.1	93.9	60.3	28.1	8.3	1.4	1.4	1.4	1.4
115°	119.3	111.0	96.7	72.8	44.7	18.4	4.1	1.4	1.4	1.4	1.4
117.5°	95.3	88.4	78.3	55.3	29.5	12.0	2.3	1.4	1.4	1.4	1.4
120°	74.6	68.1	56.6	38.2	19.8	6.9	0.9	1.4	1.4	1.4	1.4
122.5°	53.4	48.3	38.2	24.9	12.0	3.2	1.4	1.4	1.8	1.8	1.4
125°	35.5	32.7	25.3	15.2	7.4	1.4	1.4	1.4	1.8	1.8	1.4
127.5°	23.0	20.7	14.7	8.7	3.2	1.4	1.4	1.8	1.8	1.8	1.4
130°	12.9	11.5	8.7	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: P550586

CATALOG NUMBER: FCC-X-2-LD4-1HI-40-UNV-82-85-ED1D

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	361.5	361.5	361.5
2.5°	344.0	337.5	335.7
5°	325.6	315.0	309.0
7.5°	307.1	292.9	286.0
10°	290.1	269.8	262.5
12.5°	269.8	246.4	234.8
15°	250.5	220.1	209.1
17.5°	228.9	194.8	181.9
20°	208.6	169.5	156.1
22.5°	185.6	144.6	129.9
25°	164.8	119.7	103.1
27.5°	141.8	94.4	80.1
30°	120.2	72.3	58.0
32.5°	99.5	53.0	40.1
35°	80.1	35.9	25.3
37.5°	61.7	22.1	12.9
40°	44.7	11.5	6.0
42.5°	29.9	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: P550586

CATALOG NUMBER: FCC-X-2-LD4-1HI-40-UNV-82-85-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°	193.4	187.9	169.5	139.1	97.2	54.3	20.3	3.7	0.9	1.4	1.4
110°	168.5	163.9	145.0	115.6	78.3	40.5	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)