

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: P550428

Luminaire Tested: **FCC-X-2-LD4-1HI-30-UNV-80-86-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: P550428
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-30-UNV-80-86-ED1D
Description: FCC CORNER MOUNT LUMINAIRE WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 3000K, AND 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

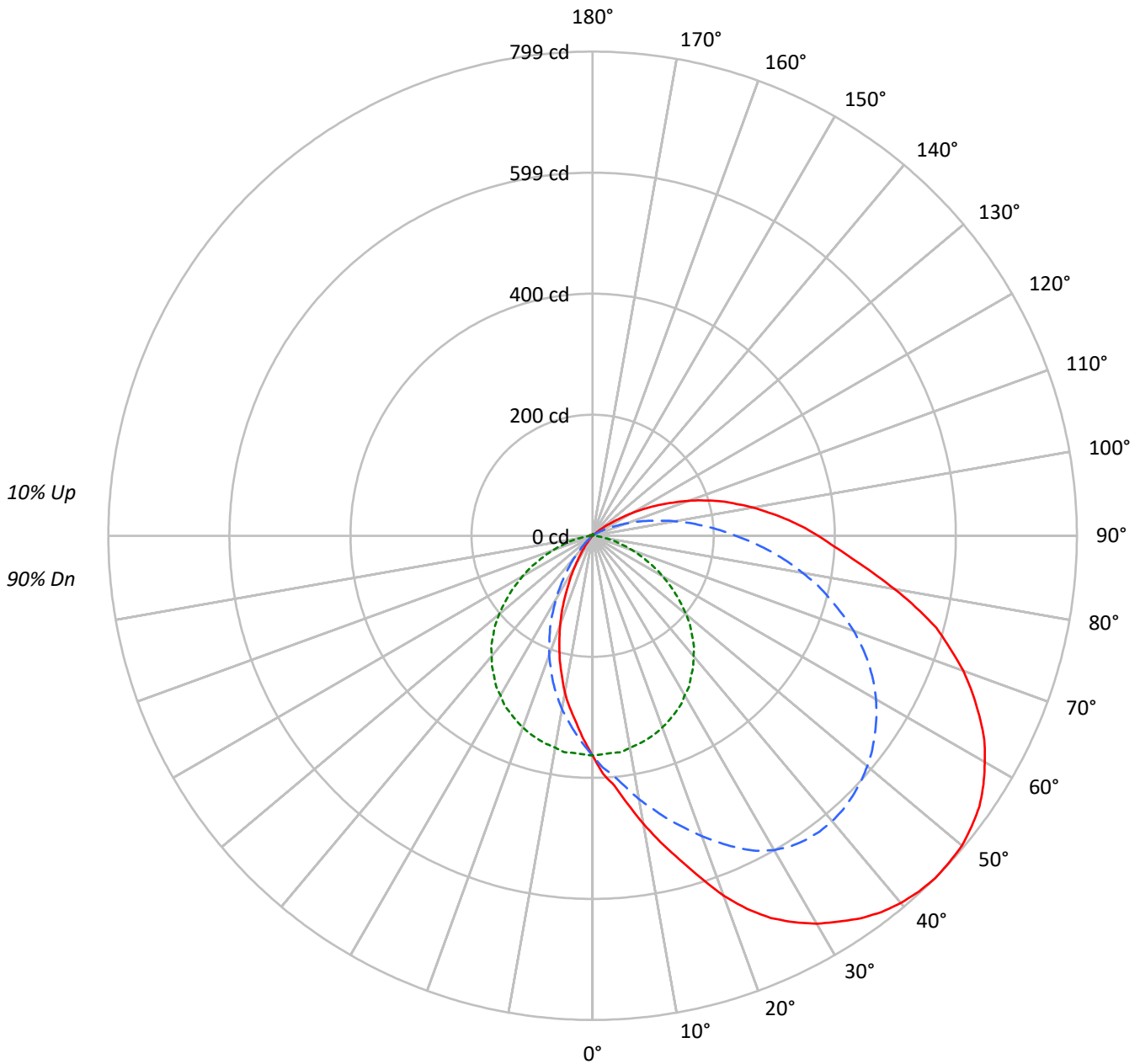
Lumens per Lamp: N/A
Luminaire Lumens: 1792.0 lumens
Efficiency: N/A
Efficacy: 82.6 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

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: P550428

CATALOG NUMBER: FCC-X-2-LD4-1HI-30-UNV-80-86-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°	3902	3902	3902
5°	4283	3845	3207
10°	4846	3798	2644
15°	5431	3749	2060
20°	6126	3688	1517
25°	6702	3617	996
30°	7130	3522	561
35°	7501	3421	247
40°	7830	3294	59
45°	8112	3137	0
50°	8348	2928	0
55°	8529	2662	0
60°	8619	2354	0
65°	8655	2003	0
70°	8626	1633	0
75°	8516	1205	7
80°	8171	736	37
85°	7897	351	51



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	34.7	1.9
10°-20°	104.0	5.8
20°-30°	168.4	9.4
30°-40°	216.3	12.1
40°-50°	244.8	13.7
50°-60°	253.6	14.2
60°-70°	239.2	13.3
70°-80°	200.5	11.2
80°-90°	145.3	8.1
90°-100°	95.5	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°	307.0	17.1
0°-40°	523.3	29.2
0°-60°	1021.7	57.0
0°-90°	1606.7	89.7
90°-120°	175.0	9.8
90°-150°	184.1	10.3
90°-180°	185.0	10.3
0°-180°	1792.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	362	362	362	362	362	
5°	414	397	360	326	310	42
15°	553	485	348	251	210	159
25°	696	569	322	165	103	322
35°	771	613	283	80	25	483
45°	799	607	232	18	0	617
55°	779	569	167	0	0	696
65°	704	503	100	0	0	697
75°	587	406	42	0	0	616
85°	429	294	7	2	3	367
90°	372	236	2	3	3	204
95°	320	184	1	3	4	251
105°	220	95	1	2	4	232
115°	120	32	1	1	2	120
125°	36	4	2	1	2	36
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	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
0°	362.5	362.5	362.5	362.5	362.5	362.5	362.5	362.5	362.5	362.5	362.5
2.5°	393.0	392.5	391.1	388.8	385.6	380.0	375.4	371.3	365.7	361.1	352.3
5°	413.7	411.4	409.6	407.3	399.9	394.8	386.5	377.3	368.5	359.7	342.2
7.5°	447.0	443.3	440.5	434.1	423.9	412.3	399.4	390.6	384.6	360.2	330.2
10°	482.5	479.3	473.8	462.2	449.8	433.1	414.7	393.9	375.4	355.1	319.5
12.5°	517.6	513.0	505.2	490.4	472.8	452.1	426.7	402.2	375.9	351.9	307.1
15°	552.7	547.6	539.3	521.3	498.2	471.0	440.1	409.1	378.2	347.7	294.1
17.5°	591.0	584.1	571.7	551.3	522.2	488.5	452.1	414.7	377.3	342.6	280.3
20°	632.1	622.4	609.1	581.8	547.6	507.9	464.1	420.2	376.8	336.6	264.6
22.5°	666.3	656.6	641.8	613.7	572.6	524.1	474.2	423.9	374.9	329.7	249.8
25°	695.9	688.0	671.9	639.5	596.1	541.2	483.9	426.7	372.2	322.3	234.1
27.5°	719.0	711.6	693.6	660.3	616.0	556.4	491.3	428.0	368.5	314.9	217.9
30°	739.3	731.9	710.2	676.0	629.4	568.4	498.7	428.5	363.9	303.8	200.4
32.5°	755.0	748.0	725.9	689.4	638.6	576.7	502.9	428.0	357.9	296.0	181.5
35°	770.7	763.7	737.9	699.1	645.5	580.4	506.1	425.7	350.5	283.1	163.5
37.5°	782.7	774.8	748.5	705.6	648.8	581.4	505.6	422.5	342.6	272.4	145.5
40°	791.0	782.7	754.5	709.3	649.7	580.0	501.9	417.0	333.4	259.0	126.5
42.5°	796.5	787.3	757.3	714.8	647.8	576.3	496.4	410.0	323.2	247.5	108.5
45°	799.3	789.6	757.7	710.2	644.6	569.3	488.1	401.3	312.1	231.8	90.5
47.5°	797.9	787.3	755.4	705.1	638.6	562.0	478.8	390.6	298.8	217.9	73.4
50°	795.6	784.5	750.4	698.6	630.3	552.7	468.7	377.7	284.9	200.9	58.2
52.5°	788.2	777.1	744.8	689.4	620.6	542.1	454.8	364.3	270.1	184.2	44.3
55°	779.0	768.8	735.1	681.1	608.1	529.2	441.9	350.0	255.8	167.2	31.9
57.5°	764.7	755.4	723.1	667.7	595.7	514.9	427.6	334.3	237.8	150.1	22.2
60°	747.1	737.9	706.5	652.5	581.4	498.7	411.9	318.1	221.6	133.0	13.9
62.5°	728.7	719.9	687.1	633.5	563.3	481.6	394.8	302.0	204.6	117.3	8.3
65°	704.2	695.9	666.3	610.9	543.5	463.1	375.9	282.6	187.0	99.7	4.6
67.5°	678.3	670.9	640.9	590.1	520.4	442.8	356.5	263.7	168.5	84.5	2.3
70°	650.6	641.4	613.7	562.0	496.8	419.7	335.2	244.3	151.0	69.7	0.0
72.5°	618.3	611.4	584.6	535.6	469.6	395.3	313.5	223.0	131.6	55.4	0.5
75°	586.9	578.1	553.6	507.5	442.8	369.4	289.5	203.2	112.7	42.5	0.5
77.5°	546.3	543.5	520.4	475.6	417.4	344.5	263.2	179.2	94.7	30.5	0.5
80°	505.6	502.9	484.8	443.7	387.9	314.9	238.7	156.5	77.1	20.3	0.5
82.5°	465.5	461.8	444.7	410.5	357.9	290.0	213.3	133.9	61.0	12.5	0.5
85°	429.4	424.8	406.3	374.9	326.9	261.8	187.0	111.7	45.3	6.9	0.9
87.5°	398.5	395.3	374.9	342.6	295.5	235.5	163.9	90.5	31.9	3.2	1.4
90°	372.2	365.2	347.2	313.1	266.0	206.4	139.5	72.5	21.2	1.8	1.8
92.5°	346.3	340.3	320.5	285.4	239.7	181.5	115.9	55.4	13.4	0.9	2.3
95°	319.5	313.1	293.7	261.4	212.9	156.1	95.1	40.6	7.4	0.9	2.3
97.5°	293.2	287.2	266.9	234.6	188.9	133.9	75.3	28.6	3.7	0.9	1.8
100°	268.7	261.8	243.3	211.0	164.8	111.7	58.2	18.5	2.3	0.9	1.8
102.5°	242.9	237.3	218.4	187.0	139.9	91.0	43.4	11.5	0.9	0.9	1.4
105°	219.8	212.9	194.4	162.1	119.1	71.6	30.5	6.9	0.9	0.9	1.4



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CATALOG NUMBER: FCC-X-2-LD4-1HI-30-UNV-80-86-ED1D

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	143.1	137.6	121.4	94.2	60.5	28.2	8.3	1.4	1.4	1.4	1.4
115°	119.6	111.3	97.0	73.0	44.8	18.5	4.2	1.4	1.4	1.4	1.4
117.5°	95.6	88.7	78.5	55.4	29.6	12.0	2.3	1.4	1.4	1.4	1.4
120°	74.8	68.3	56.8	38.3	19.9	6.9	0.9	1.4	1.4	1.4	1.4
122.5°	53.6	48.5	38.3	24.9	12.0	3.2	1.4	1.4	1.8	1.8	1.4
125°	35.6	32.8	25.4	15.2	7.4	1.4	1.4	1.4	1.8	1.8	1.4
127.5°	23.1	20.8	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



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	362.5	362.5	362.5
2.5°	344.9	338.5	336.6
5°	326.5	315.8	309.8
7.5°	308.0	293.7	286.8
10°	290.9	270.6	263.2
12.5°	270.6	247.0	235.5
15°	251.2	220.7	209.6
17.5°	229.5	195.3	182.4
20°	209.2	169.9	156.5
22.5°	186.1	145.0	130.2
25°	165.3	120.1	103.4
27.5°	142.2	94.7	80.3
30°	120.5	72.5	58.2
32.5°	99.7	53.1	40.2
35°	80.3	36.0	25.4
37.5°	61.9	22.2	12.9
40°	44.8	11.5	6.0
42.5°	30.0	5.5	3.2
45°	18.5	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	4.2
97.5°	3.7	4.2	4.2
100°	3.2	4.2	4.6
102.5°	2.8	4.2	4.2
105°	2.3	3.2	3.7



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CATALOG NUMBER: FCC-X-2-LD4-1HI-30-UNV-80-86-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°	193.9	188.4	169.9	139.5	97.4	54.5	20.3	3.7	0.9	1.4	1.4
110°	169.0	164.4	145.5	115.9	78.5	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)