

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: P551000

Luminaire Tested: **FCC-X-2-LD4-1STD-35-UNV-80-84-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: P551000
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-80-84-ED1D
Description: FCC CORNER MOUNT LUMINAIRE WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 3500K, AND 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

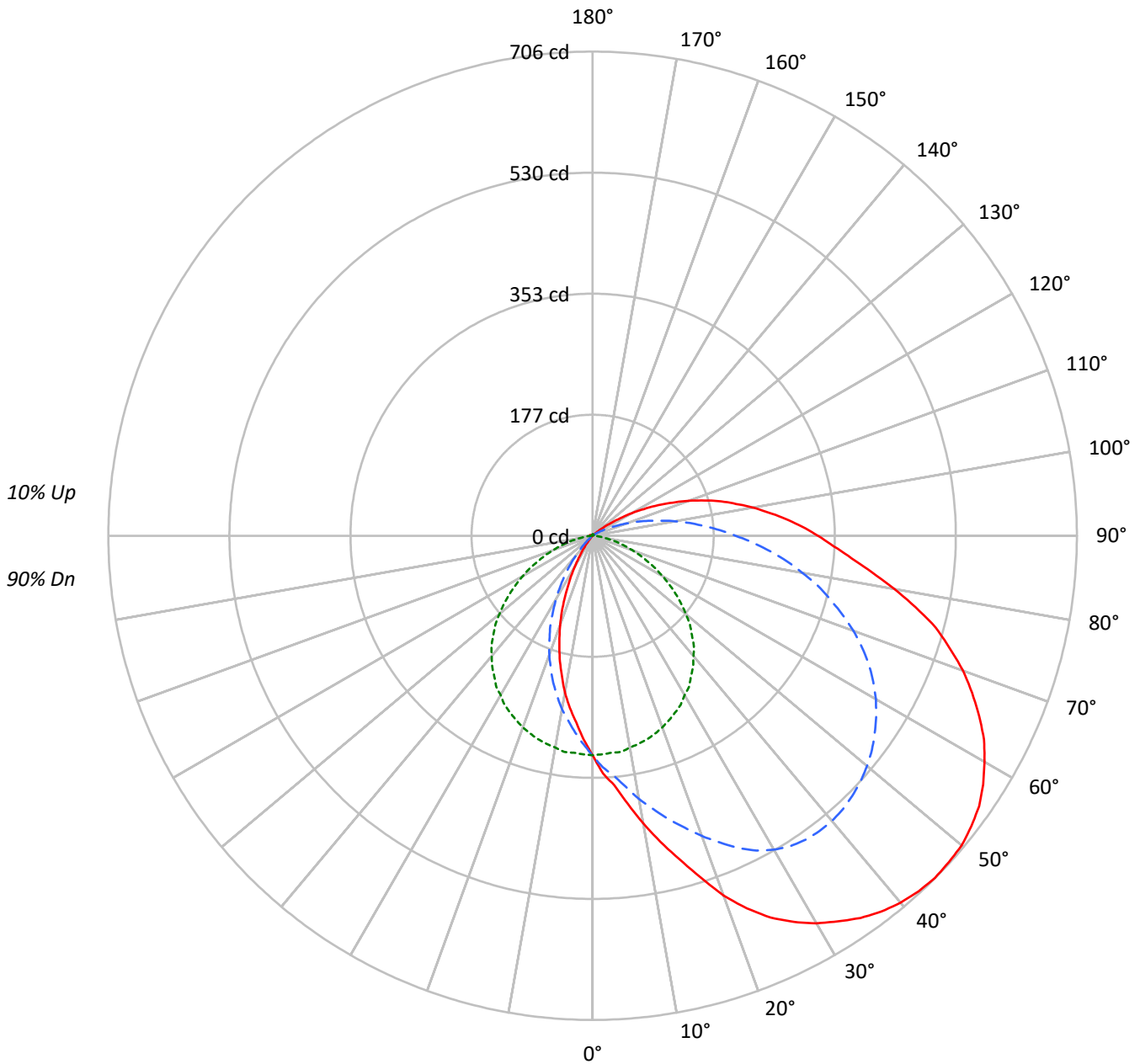
Lumens per Lamp: N/A
Luminaire Lumens: 1581.9 lumens
Efficiency: N/A
Efficacy: 94.7 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

Input Watts (W): 16.7
Input Voltage (V): NR
Input Current (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

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CATALOG NUMBER: FCC-X-2-LD4-1STD-35-UNV-80-84-ED1D

Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20				
RC	80				70				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	93	93	93	90
1	103	96	91	86	99	93	88	83	87	83	79	81	78	74	76	73	70	70	70	70	67
2	92	82	74	67	88	79	72	65	74	67	62	69	64	59	64	60	56	56	56	56	53
3	83	71	61	54	79	68	60	53	64	56	50	59	53	48	55	50	46	46	46	46	43
4	75	62	52	44	72	60	51	44	56	48	42	52	45	40	49	43	38	38	38	38	36
5	69	55	45	38	66	53	44	37	50	42	35	46	39	34	43	38	33	33	33	33	30
6	63	49	39	32	61	47	38	32	44	36	31	42	35	29	39	33	28	28	28	28	26
7	58	44	35	28	56	43	34	28	40	32	27	38	31	26	36	29	25	25	25	25	23
8	54	40	31	25	52	39	30	24	37	29	24	34	28	23	32	26	22	22	22	22	20
9	51	36	28	22	49	35	27	22	33	26	21	32	25	20	30	24	20	20	20	20	18
10	47	33	25	20	45	33	25	19	31	24	19	29	23	18	28	22	18	18	18	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	3444	3444	3444
5°	3781	3395	2831
10°	4279	3353	2334
15°	4795	3310	1819
20°	5409	3256	1339
25°	5916	3193	879
30°	6294	3109	496
35°	6622	3019	218
40°	6912	2908	52
45°	7161	2768	0
50°	7370	2584	0
55°	7529	2350	0
60°	7610	2078	0
65°	7641	1770	0
70°	7616	1443	0
75°	7518	1063	6
80°	7214	649	32
85°	6972	310	44



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	30.7	1.9
10°-20°	91.8	5.8
20°-30°	148.6	9.4
30°-40°	190.9	12.1
40°-50°	216.1	13.7
50°-60°	223.9	14.2
60°-70°	211.2	13.3
70°-80°	177.0	11.2
80°-90°	128.3	8.1
90°-100°	84.3	5.3
100°-110°	48.7	3.1
110°-120°	21.5	1.4
120°-130°	5.8	0.4
130°-140°	1.3	0.1
140°-150°	0.9	0.1
150°-160°	0.6	0.0
160°-170°	0.3	0.0
170°-180°	0.1	0.0
0°-30°	271.1	17.1
0°-40°	462.0	29.2
0°-60°	902.0	57.0
0°-90°	1418.4	89.7
90°-120°	154.5	9.8
90°-150°	162.4	10.3
90°-180°	163.0	10.3
0°-180°	1581.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	320	320	320	320	320	
5°	365	351	318	288	274	37
15°	488	428	307	222	185	141
25°	614	502	284	146	91	284
35°	680	541	250	71	22	427
45°	706	536	205	16	0	545
55°	688	502	148	0	0	614
65°	622	444	88	0	0	615
75°	518	358	38	0	0	543
85°	379	260	6	2	2	324
90°	329	208	2	2	3	180
95°	282	163	1	3	4	221
105°	194	84	1	2	3	205
115°	106	28	1	1	2	106
125°	31	4	2	1	2	31
135°	2	1	2	2	1	3
145°	0	1	2	1	1	0
155°	1	2	2	1	0	0
165°	1	1	2	1	0	0
175°	1	1	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°	320.0	320.0	320.0	320.0	320.0	320.0	320.0	320.0	320.0	320.0	320.0
2.5°	346.9	346.5	345.3	343.2	340.4	335.5	331.4	327.7	322.9	318.8	311.0
5°	365.2	363.2	361.6	359.5	353.0	348.5	341.2	333.0	325.3	317.6	302.1
7.5°	394.6	391.3	388.9	383.2	374.2	364.0	352.6	344.9	339.6	318.0	291.5
10°	426.0	423.1	418.2	408.1	397.0	382.4	366.1	347.7	331.4	313.5	282.1
12.5°	457.0	452.9	446.0	432.9	417.4	399.1	376.7	355.1	331.8	310.6	271.1
15°	487.9	483.5	476.1	460.2	439.8	415.8	388.5	361.2	333.9	307.0	259.7
17.5°	521.8	515.7	504.7	486.7	461.0	431.3	399.1	366.1	333.0	302.5	247.4
20°	558.1	549.5	537.7	513.6	483.5	448.4	409.7	371.0	332.6	297.2	233.6
22.5°	588.2	579.7	566.6	541.8	505.5	462.7	418.7	374.2	331.0	291.1	220.5
25°	614.3	607.4	593.1	564.6	526.3	477.8	427.2	376.7	328.6	284.5	206.7
27.5°	634.7	628.2	612.3	582.9	543.8	491.2	433.7	377.9	325.3	278.0	192.4
30°	652.6	646.1	627.0	596.8	555.6	501.8	440.3	378.3	321.2	268.2	176.9
32.5°	666.5	660.4	640.8	608.6	563.8	509.1	443.9	377.9	315.9	261.3	160.2
35°	680.4	674.2	651.4	617.2	569.9	512.4	446.8	375.8	309.4	249.9	144.3
37.5°	691.0	684.0	660.8	622.9	572.7	513.2	446.4	373.0	302.5	240.5	128.4
40°	698.3	691.0	666.1	626.1	573.6	512.0	443.1	368.1	294.3	228.7	111.7
42.5°	703.2	695.0	668.5	631.0	571.9	508.7	438.2	362.0	285.4	218.5	95.8
45°	705.6	697.1	668.9	627.0	569.1	502.6	430.9	354.2	275.6	204.6	79.9
47.5°	704.4	695.0	666.9	622.5	563.8	496.1	422.7	344.9	263.7	192.4	64.8
50°	702.4	692.6	662.4	616.8	556.4	487.9	413.8	333.5	251.5	177.3	51.4
52.5°	695.8	686.1	657.5	608.6	547.9	478.6	401.5	321.6	238.5	162.6	39.1
55°	687.7	678.7	649.0	601.3	536.9	467.2	390.1	309.0	225.8	147.6	28.1
57.5°	675.1	666.9	638.4	589.5	525.9	454.5	377.5	295.1	209.9	132.5	19.6
60°	659.6	651.4	623.7	576.0	513.2	440.3	363.6	280.9	195.7	117.4	12.2
62.5°	643.3	635.5	606.6	559.3	497.3	425.2	348.5	266.6	180.6	103.5	7.3
65°	621.7	614.3	588.2	539.3	479.8	408.9	331.8	249.5	165.1	88.1	4.1
67.5°	598.8	592.3	565.8	521.0	459.4	390.9	314.7	232.8	148.8	74.6	2.0
70°	574.4	566.2	541.8	496.1	438.6	370.5	295.9	215.6	133.3	61.6	0.0
72.5°	545.8	539.7	516.1	472.9	414.6	348.9	276.8	196.9	116.2	48.9	0.4
75°	518.1	510.4	488.8	448.0	390.9	326.1	255.6	179.4	99.5	37.5	0.4
77.5°	482.2	479.8	459.4	419.9	368.5	304.1	232.4	158.2	83.6	26.9	0.4
80°	446.4	443.9	428.0	391.7	342.4	278.0	210.8	138.2	68.1	17.9	0.4
82.5°	410.9	407.6	392.6	362.4	315.9	256.0	188.3	118.2	53.8	11.0	0.4
85°	379.1	375.0	358.7	331.0	288.6	231.1	165.1	98.6	39.9	6.1	0.8
87.5°	351.8	348.9	331.0	302.5	260.9	207.9	144.7	79.9	28.1	2.9	1.2
90°	328.6	322.4	306.5	276.4	234.8	182.2	123.1	64.0	18.8	1.6	1.6
92.5°	305.7	300.4	282.9	251.9	211.6	160.2	102.3	48.9	11.8	0.8	2.0
95°	282.1	276.4	259.3	230.7	187.9	137.8	84.0	35.9	6.5	0.8	2.0
97.5°	258.9	253.6	235.6	207.1	166.7	118.2	66.4	25.3	3.3	0.8	1.6
100°	237.2	231.1	214.8	186.3	145.5	98.6	51.4	16.3	2.0	0.8	1.6
102.5°	214.4	209.5	192.8	165.1	123.5	80.3	38.3	10.2	0.8	0.8	1.2
105°	194.0	187.9	171.6	143.1	105.2	63.2	26.9	6.1	0.8	0.8	1.2



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	126.4	121.5	107.2	83.2	53.4	24.9	7.3	1.2	1.2	1.2	1.2
115°	105.6	98.2	85.6	64.4	39.5	16.3	3.7	1.2	1.2	1.2	1.2
117.5°	84.4	78.3	69.3	48.9	26.1	10.6	2.0	1.2	1.2	1.2	1.2
120°	66.0	60.3	50.1	33.8	17.5	6.1	0.8	1.2	1.2	1.2	1.2
122.5°	47.3	42.8	33.8	22.0	10.6	2.9	1.2	1.2	1.6	1.6	1.2
125°	31.4	28.9	22.4	13.5	6.5	1.2	1.2	1.2	1.6	1.6	1.2
127.5°	20.4	18.3	13.0	7.7	2.9	1.2	1.2	1.6	1.6	1.6	1.2
130°	11.4	10.2	7.7	4.5	1.2	1.2	1.2	1.6	1.6	1.6	1.2
132.5°	6.5	6.1	4.1	0.8	1.2	1.2	1.2	1.6	1.6	1.6	1.6
135°	1.6	0.8	0.8	0.8	1.2	1.2	1.6	1.6	2.0	2.0	1.6
137.5°	0.4	0.4	0.8	0.8	1.2	1.2	1.6	2.0	2.0	2.0	1.6
140°	0.4	0.4	0.8	1.2	1.2	1.2	1.6	2.0	2.0	2.0	1.6
142.5°	0.4	0.8	0.8	1.2	1.2	1.6	1.6	2.0	2.0	1.6	1.6
145°	0.4	0.8	0.8	1.2	1.2	1.6	1.6	2.0	1.6	1.6	1.6
147.5°	0.8	0.8	0.8	1.2	1.2	1.6	1.6	2.0	2.0	1.6	1.6
150°	0.4	0.8	0.8	1.2	1.6	1.6	1.6	2.0	1.6	1.6	1.6
152.5°	0.4	0.8	0.8	1.2	1.6	1.6	1.6	2.0	1.6	1.6	1.6
155°	0.8	0.8	0.8	1.2	1.6	1.6	1.6	2.0	1.6	1.6	2.0
157.5°	0.8	0.8	0.8	1.2	1.6	1.6	1.6	2.0	1.6	1.6	2.0
160°	0.8	0.8	0.8	1.2	1.2	1.6	1.6	1.6	1.6	1.6	1.6
162.5°	0.8	0.8	0.8	1.2	1.2	1.6	1.6	1.6	1.6	1.6	1.6
165°	0.8	0.8	0.8	0.8	1.2	1.2	1.6	1.6	1.6	1.6	1.6
167.5°	0.8	0.8	0.8	1.2	1.2	1.2	1.6	1.6	1.6	1.6	1.6
170°	0.8	0.8	0.8	1.2	1.2	1.2	1.6	2.0	2.0	2.0	2.0
172.5°	0.8	0.8	0.8	1.2	1.2	1.6	1.6	2.0	2.0	2.0	2.0
175°	0.8	0.8	0.8	1.2	1.2	1.6	1.6	2.0	2.0	2.0	2.0
177.5°	0.4	0.8	0.8	1.2	1.2	1.6	1.6	2.0	2.0	2.0	1.6
180°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	320.0	320.0	320.0
2.5°	304.5	298.8	297.2
5°	288.2	278.8	273.5
7.5°	271.9	259.3	253.1
10°	256.8	238.9	232.4
12.5°	238.9	218.1	207.9
15°	221.8	194.9	185.1
17.5°	202.6	172.4	161.0
20°	184.7	150.0	138.2
22.5°	164.3	128.0	115.0
25°	145.9	106.0	91.3
27.5°	125.6	83.6	70.9
30°	106.4	64.0	51.4
32.5°	88.1	46.9	35.5
35°	70.9	31.8	22.4
37.5°	54.6	19.6	11.4
40°	39.5	10.2	5.3
42.5°	26.5	4.9	2.9
45°	16.3	2.4	0.0
47.5°	9.4	0.0	0.0
50°	4.9	0.0	0.0
52.5°	2.0	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°	0.4	0.4	0.4
77.5°	0.4	0.8	1.2
80°	0.8	1.6	2.0
82.5°	1.6	2.0	2.0
85°	1.6	2.0	2.4
87.5°	2.0	2.4	2.9
90°	2.4	2.9	2.9
92.5°	2.4	3.3	3.3
95°	2.9	3.3	3.7
97.5°	3.3	3.7	3.7
100°	2.9	3.7	4.1
102.5°	2.4	3.7	3.7
105°	2.0	2.9	3.3



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	1.6	2.0	2.0
115°	1.2	1.6	2.0
117.5°	1.2	1.6	1.6
120°	1.2	1.2	1.6
122.5°	1.2	1.2	1.6
125°	1.2	1.2	1.6
127.5°	1.6	1.2	1.2
130°	1.2	1.2	1.2
132.5°	1.6	1.2	1.2
135°	1.6	1.2	1.2
137.5°	1.6	1.2	1.2
140°	1.6	1.2	1.2
142.5°	1.6	1.2	1.2
145°	1.2	1.2	1.2
147.5°	1.2	1.2	1.2
150°	1.2	1.2	0.8
152.5°	1.2	0.8	0.8
155°	1.2	0.8	0.4
157.5°	1.6	0.8	0.4
160°	1.2	0.8	0.4
162.5°	1.2	0.8	0.4
165°	1.2	0.8	0.0
167.5°	1.2	0.8	0.4
170°	1.2	0.8	0.4
172.5°	1.2	0.8	0.4
175°	1.2	0.4	0.4
177.5°	1.2	0.4	0.4
180°	1.2	1.2	1.2



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	171.2	166.3	150.0	123.1	86.0	48.1	17.9	3.3	0.8	1.2	1.2
110°	149.2	145.1	128.4	102.3	69.3	35.9	11.8	2.0	1.2	1.2	1.2





107.5°	1.6	2.4	2.9
110°	1.6	2.0	2.4



(END OF REPORT)