

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: P550496

Luminaire Tested: **FCC-X-2-LD4-1HI-35-UNV-80-88-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: P550496
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-80-88-ED1D
Description: FCC CORNER MOUNT LUMINAIRE WITH .125 PRISMATIC ACRYLIC 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

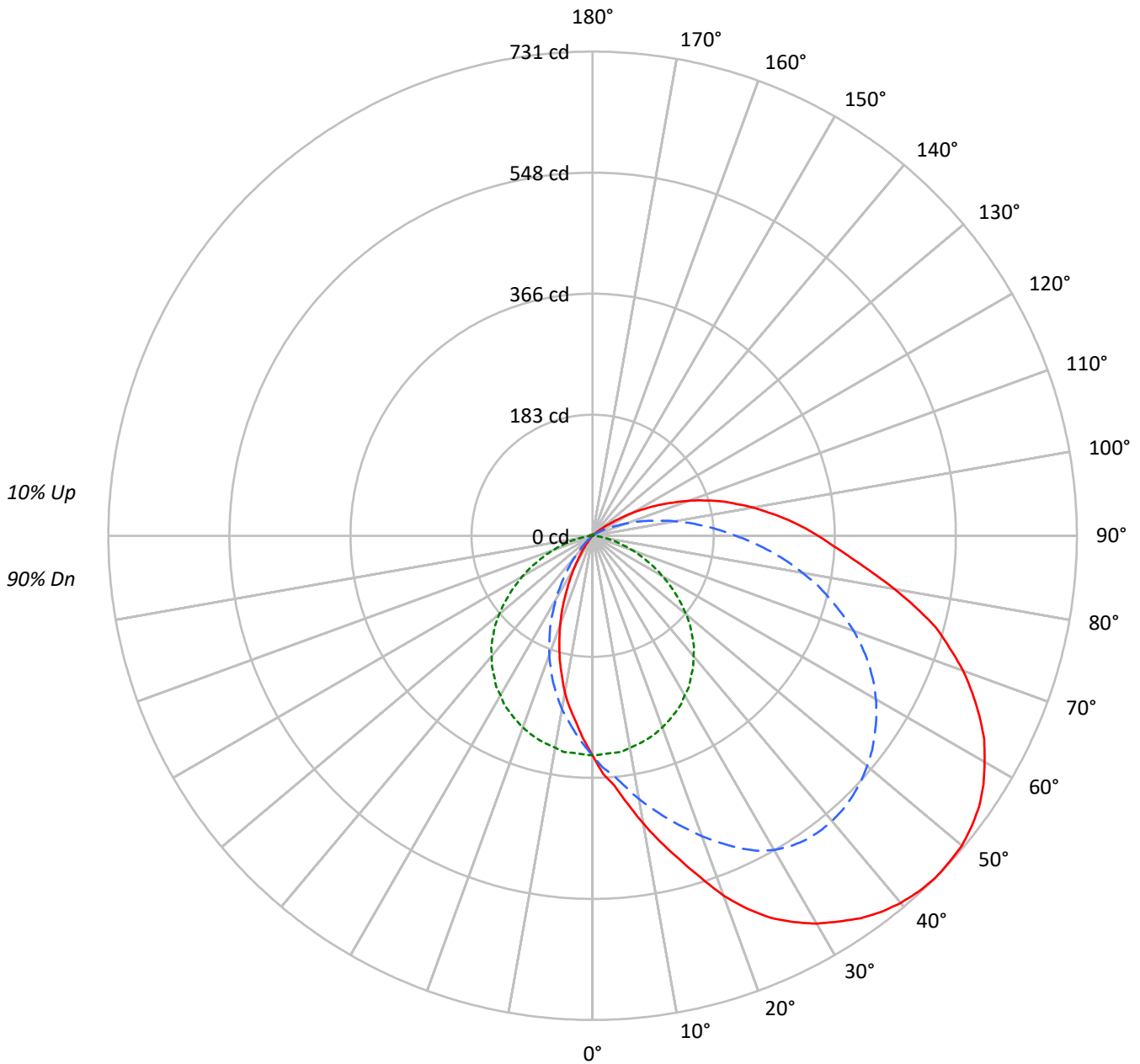
Lumens per Lamp: N/A
Luminaire Lumens: 1639.0 lumens
Efficiency: N/A
Efficacy: 75.5 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

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

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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	3568	3568	3568
5°	3917	3516	2934
10°	4433	3473	2418
15°	4968	3429	1884
20°	5603	3373	1388
25°	6130	3308	911
30°	6522	3222	513
35°	6861	3128	226
40°	7162	3013	54
45°	7419	2869	0
50°	7636	2677	0
55°	7801	2435	0
60°	7883	2152	0
65°	7916	1832	0
70°	7890	1495	0
75°	7789	1103	6
80°	7474	675	34
85°	7224	320	46



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	31.8	1.9
10°-20°	95.1	5.8
20°-30°	154.0	9.4
30°-40°	197.8	12.1
40°-50°	223.9	13.7
50°-60°	232.0	14.2
60°-70°	218.8	13.3
70°-80°	183.3	11.2
80°-90°	132.9	8.1
90°-100°	87.3	5.3
100°-110°	50.4	3.1
110°-120°	22.3	1.4
120°-130°	6.0	0.4
130°-140°	1.4	0.1
140°-150°	0.9	0.1
150°-160°	0.6	0.0
160°-170°	0.4	0.0
170°-180°	0.1	0.0
0°-30°	280.8	17.1
0°-40°	478.6	29.2
0°-60°	934.5	57.0
0°-90°	1469.5	89.7
90°-120°	160.1	9.8
90°-150°	168.4	10.3
90°-180°	170.0	10.4
0°-180°	1639.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	332	332	332	332	332	
5°	378	363	329	299	283	38
15°	506	443	318	230	192	146
25°	636	520	295	151	95	294
35°	705	561	259	74	23	442
45°	731	555	212	17	0	564
55°	712	520	153	0	0	636
65°	644	460	91	0	0	637
75°	537	371	39	0	0	563
85°	393	269	6	2	2	335
90°	340	216	2	2	3	187
95°	292	169	1	3	4	229
105°	201	87	1	2	3	212
115°	109	29	1	1	2	110
125°	32	4	2	1	2	32
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°	331.5	331.5	331.5	331.5	331.5	331.5	331.5	331.5	331.5	331.5	331.5
2.5°	359.4	359.0	357.7	355.6	352.6	347.6	343.4	339.6	334.5	330.3	322.2
5°	378.4	376.3	374.6	372.5	365.7	361.1	353.5	345.0	337.0	329.0	312.9
7.5°	408.8	405.4	402.9	397.0	387.7	377.1	365.3	357.3	351.8	329.4	302.0
10°	441.3	438.4	433.3	422.8	411.4	396.1	379.3	360.2	343.4	324.8	292.3
12.5°	473.4	469.2	462.0	448.5	432.5	413.5	390.2	367.9	343.8	321.8	280.9
15°	505.5	500.9	493.3	476.8	455.7	430.8	402.5	374.2	345.9	318.0	269.0
17.5°	540.6	534.2	522.8	504.3	477.7	446.8	413.5	379.3	345.0	313.4	256.4
20°	578.2	569.3	557.1	532.1	500.9	464.6	424.4	384.3	344.6	307.9	242.0
22.5°	609.4	600.6	587.0	561.3	523.7	479.3	433.7	387.7	342.9	301.5	228.5
25°	636.5	629.3	614.5	584.9	545.2	495.0	442.6	390.2	340.4	294.8	214.1
27.5°	657.6	650.8	634.3	603.9	563.4	508.9	449.4	391.5	337.0	288.0	199.3
30°	676.2	669.4	649.5	618.3	575.6	519.9	456.1	391.9	332.8	277.9	183.3
32.5°	690.5	684.2	663.9	630.5	584.1	527.5	459.9	391.5	327.3	270.7	166.0
35°	704.9	698.5	674.9	639.4	590.4	530.9	462.9	389.4	320.5	258.9	149.5
37.5°	715.9	708.7	684.6	645.3	593.4	531.7	462.5	386.4	313.4	249.2	133.0
40°	723.5	715.9	690.1	648.7	594.2	530.4	459.1	381.4	304.9	236.9	115.7
42.5°	728.5	720.1	692.6	653.8	592.5	527.1	454.0	375.0	295.6	226.4	99.2
45°	731.1	722.2	693.0	649.5	589.6	520.7	446.4	367.0	285.5	212.0	82.8
47.5°	729.8	720.1	690.9	644.9	584.1	514.0	438.0	357.3	273.2	199.3	67.2
50°	727.7	717.5	686.3	639.0	576.5	505.5	428.7	345.5	260.6	183.7	53.2
52.5°	720.9	710.8	681.2	630.5	567.6	495.8	416.0	333.2	247.1	168.5	40.5
55°	712.5	703.2	672.4	622.9	556.2	484.0	404.2	320.1	234.0	152.9	29.1
57.5°	699.4	690.9	661.4	610.7	544.8	470.9	391.1	305.8	217.5	137.3	20.3
60°	683.3	674.9	646.2	596.8	531.7	456.1	376.7	291.0	202.7	121.6	12.7
62.5°	666.4	658.4	628.4	579.4	515.2	440.5	361.1	276.2	187.1	107.3	7.6
65°	644.1	636.5	609.4	558.7	497.1	423.6	343.8	258.5	171.0	91.2	4.2
67.5°	620.4	613.6	586.2	539.7	476.0	405.0	326.0	241.2	154.2	77.3	2.1
70°	595.1	586.6	561.3	514.0	454.4	383.9	306.6	223.4	138.1	63.8	0.0
72.5°	565.5	559.2	534.7	489.9	429.5	361.5	286.8	204.0	120.4	50.7	0.4
75°	536.8	528.8	506.4	464.1	405.0	337.9	264.8	185.8	103.0	38.9	0.4
77.5°	499.6	497.1	476.0	435.0	381.8	315.1	240.7	163.9	86.6	27.9	0.4
80°	462.5	459.9	443.4	405.9	354.8	288.0	218.3	143.2	70.5	18.6	0.4
82.5°	425.7	422.3	406.7	375.5	327.3	265.2	195.1	122.5	55.7	11.4	0.4
85°	392.8	388.5	371.7	342.9	299.0	239.5	171.0	102.2	41.4	6.3	0.8
87.5°	364.5	361.5	342.9	313.4	270.3	215.4	149.9	82.8	29.1	3.0	1.3
90°	340.4	334.1	317.6	286.3	243.3	188.8	127.5	66.3	19.4	1.7	1.7
92.5°	316.7	311.3	293.1	261.0	219.2	166.0	106.0	50.7	12.2	0.8	2.1
95°	292.3	286.3	268.6	239.0	194.7	142.7	87.0	37.2	6.8	0.8	2.1
97.5°	268.2	262.7	244.1	214.5	172.7	122.5	68.8	26.2	3.4	0.8	1.7
100°	245.8	239.5	222.6	193.0	150.8	102.2	53.2	16.9	2.1	0.8	1.7
102.5°	222.1	217.1	199.8	171.0	128.0	83.2	39.7	10.6	0.8	0.8	1.3
105°	201.0	194.7	177.8	148.2	109.0	65.5	27.9	6.3	0.8	0.8	1.3



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CATALOG NUMBER: FCC-X-2-LD4-1HI-35-UNV-80-88-ED1D

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	130.9	125.9	111.1	86.2	55.3	25.8	7.6	1.3	1.3	1.3	1.3
115°	109.4	101.8	88.7	66.7	41.0	16.9	3.8	1.3	1.3	1.3	1.3
117.5°	87.4	81.1	71.8	50.7	27.0	11.0	2.1	1.3	1.3	1.3	1.3
120°	68.4	62.5	51.9	35.1	18.2	6.3	0.8	1.3	1.3	1.3	1.3
122.5°	49.0	44.3	35.1	22.8	11.0	3.0	1.3	1.3	1.7	1.7	1.3
125°	32.5	30.0	23.2	13.9	6.8	1.3	1.3	1.3	1.7	1.7	1.3
127.5°	21.1	19.0	13.5	8.0	3.0	1.3	1.3	1.7	1.7	1.7	1.3
130°	11.8	10.6	8.0	4.6	1.3	1.3	1.3	1.7	1.7	1.7	1.3
132.5°	6.8	6.3	4.2	0.8	1.3	1.3	1.3	1.7	1.7	1.7	1.7
135°	1.7	0.8	0.8	0.8	1.3	1.3	1.7	1.7	2.1	2.1	1.7
137.5°	0.4	0.4	0.8	0.8	1.3	1.3	1.7	2.1	2.1	2.1	1.7
140°	0.4	0.4	0.8	1.3	1.3	1.3	1.7	2.1	2.1	2.1	1.7
142.5°	0.4	0.8	0.8	1.3	1.3	1.7	1.7	2.1	2.1	1.7	1.7
145°	0.4	0.8	0.8	1.3	1.3	1.7	1.7	2.1	1.7	1.7	1.7
147.5°	0.8	0.8	0.8	1.3	1.3	1.7	1.7	2.1	2.1	1.7	1.7
150°	0.4	0.8	0.8	1.3	1.7	1.7	1.7	2.1	1.7	1.7	1.7
152.5°	0.4	0.8	0.8	1.3	1.7	1.7	1.7	2.1	1.7	1.7	1.7
155°	0.8	0.8	0.8	1.3	1.7	1.7	1.7	2.1	1.7	1.7	2.1
157.5°	0.8	0.8	0.8	1.3	1.7	1.7	1.7	2.1	1.7	1.7	2.1
160°	0.8	0.8	0.8	1.3	1.3	1.7	1.7	1.7	1.7	1.7	1.7
162.5°	0.8	0.8	0.8	1.3	1.3	1.7	1.7	1.7	1.7	1.7	1.7
165°	0.8	0.8	0.8	0.8	1.3	1.3	1.7	1.7	1.7	1.7	1.7
167.5°	0.8	0.8	0.8	1.3	1.3	1.3	1.7	1.7	1.7	1.7	1.7
170°	0.8	0.8	0.8	1.3	1.3	1.3	1.7	2.1	2.1	2.1	2.1
172.5°	0.8	0.8	0.8	1.3	1.3	1.7	1.7	2.1	2.1	2.1	2.1
175°	0.8	0.8	0.8	1.3	1.3	1.7	1.7	2.1	2.1	2.1	2.1
177.5°	0.4	0.8	0.8	1.3	1.3	1.7	1.7	2.1	2.1	2.1	1.7
180°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	331.5	331.5	331.5
2.5°	315.5	309.6	307.9
5°	298.6	288.9	283.4
7.5°	281.7	268.6	262.3
10°	266.1	247.5	240.7
12.5°	247.5	225.9	215.4
15°	229.7	201.9	191.7
17.5°	209.9	178.6	166.8
20°	191.3	155.4	143.2
22.5°	170.2	132.6	119.1
25°	151.2	109.8	94.6
27.5°	130.1	86.6	73.5
30°	110.2	66.3	53.2
32.5°	91.2	48.6	36.7
35°	73.5	32.9	23.2
37.5°	56.6	20.3	11.8
40°	41.0	10.6	5.5
42.5°	27.5	5.1	3.0
45°	16.9	2.5	0.0
47.5°	9.7	0.0	0.0
50°	5.1	0.0	0.0
52.5°	2.1	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	1.3
80°	0.8	1.7	2.1
82.5°	1.7	2.1	2.1
85°	1.7	2.1	2.5
87.5°	2.1	2.5	3.0
90°	2.5	3.0	3.0
92.5°	2.5	3.4	3.4
95°	3.0	3.4	3.8
97.5°	3.4	3.8	3.8
100°	3.0	3.8	4.2
102.5°	2.5	3.8	3.8
105°	2.1	3.0	3.4



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	1.7	2.1	2.1
115°	1.3	1.7	2.1
117.5°	1.3	1.7	1.7
120°	1.3	1.3	1.7
122.5°	1.3	1.3	1.7
125°	1.3	1.3	1.7
127.5°	1.7	1.3	1.3
130°	1.3	1.3	1.3
132.5°	1.7	1.3	1.3
135°	1.7	1.3	1.3
137.5°	1.7	1.3	1.3
140°	1.7	1.3	1.3
142.5°	1.7	1.3	1.3
145°	1.3	1.3	1.3
147.5°	1.3	1.3	1.3
150°	1.3	1.3	0.8
152.5°	1.3	0.8	0.8
155°	1.3	0.8	0.4
157.5°	1.7	0.8	0.4
160°	1.3	0.8	0.4
162.5°	1.3	0.8	0.4
165°	1.3	0.8	0.0
167.5°	1.3	0.8	0.4
170°	1.3	0.8	0.4
172.5°	1.3	0.8	0.4
175°	1.3	0.4	0.4
177.5°	1.3	0.4	0.4
180°	1.3	1.3	1.3



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	177.4	172.3	155.4	127.5	89.1	49.8	18.6	3.4	0.8	1.3	1.3
110°	154.6	150.4	133.0	106.0	71.8	37.2	12.2	2.1	1.3	1.3	1.3





107.5°	1.7	2.5	3.0
110°	1.7	2.1	2.5



(END OF REPORT)