

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: P551064

Luminaire Tested: **FCC-X-2-LD4-1STD-40-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: P551064
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-40-UNV-80-84-ED1D
Description: FCC CORNER MOUNT LUMINAIRE WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 4000K, AND 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

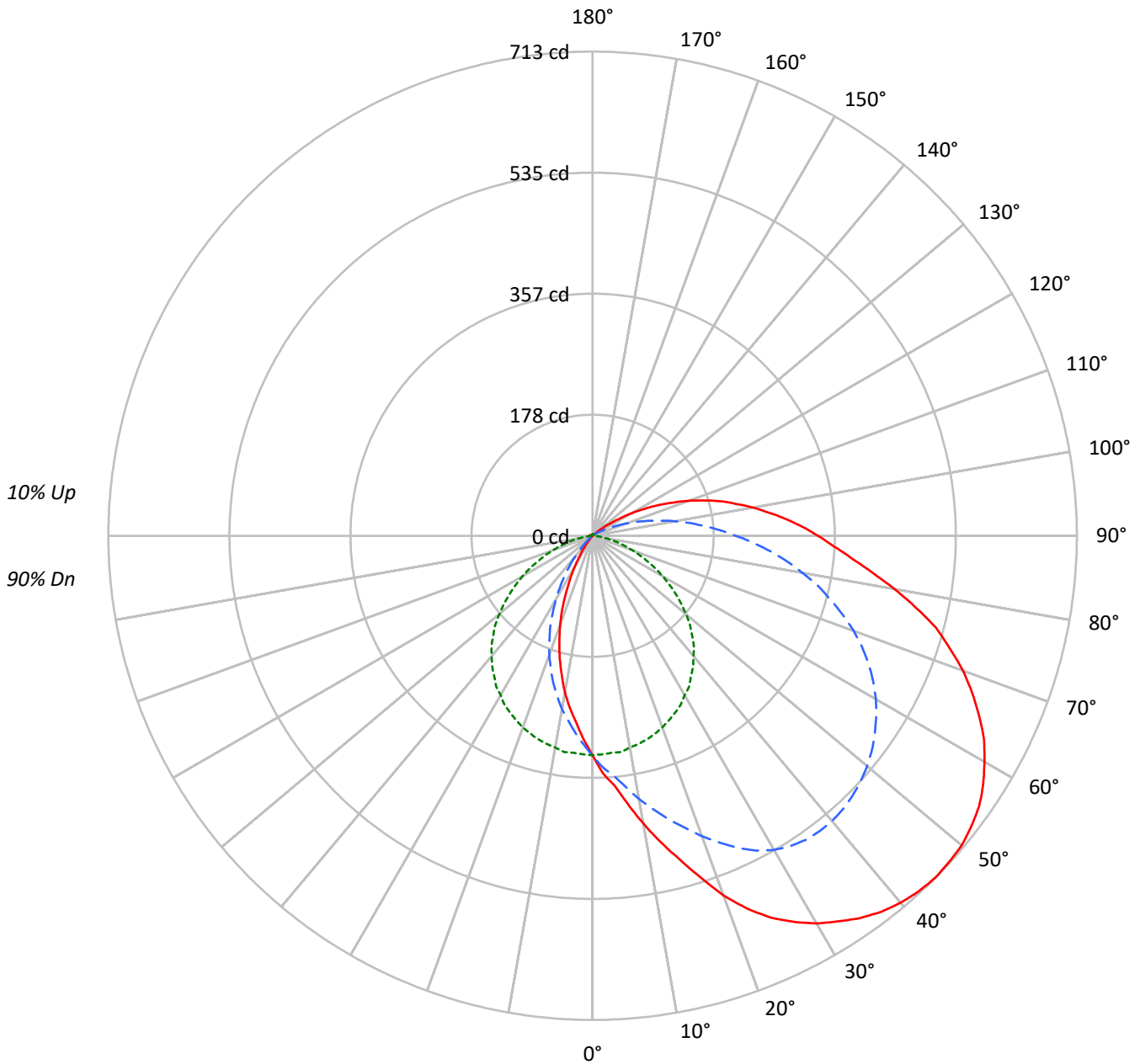
Lumens per Lamp: N/A
Luminaire Lumens: 1597.9 lumens
Efficiency: N/A
Efficacy: 95.7 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

Input Watts (W): 16.7
Input Voltage (V): NR
Input Current (Ain): 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°	3479	3479	3479
5°	3819	3429	2860
10°	4322	3386	2357
15°	4844	3344	1837
20°	5463	3289	1353
25°	5976	3225	888
30°	6358	3140	501
35°	6688	3050	220
40°	6982	2938	53
45°	7234	2797	0
50°	7445	2610	0
55°	7606	2374	0
60°	7686	2099	0
65°	7717	1786	0
70°	7692	1457	0
75°	7595	1075	6
80°	7287	657	34
85°	7042	315	46



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	31.0	1.9
10°-20°	92.7	5.8
20°-30°	150.1	9.4
30°-40°	192.8	12.1
40°-50°	218.3	13.7
50°-60°	226.2	14.2
60°-70°	213.3	13.3
70°-80°	178.7	11.2
80°-90°	129.6	8.1
90°-100°	85.2	5.3
100°-110°	49.2	3.1
110°-120°	21.7	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°	273.8	17.1
0°-40°	466.6	29.2
0°-60°	911.1	57.0
0°-90°	1432.7	89.7
90°-120°	156.0	9.8
90°-150°	164.1	10.3
90°-180°	165.0	10.3
0°-180°	1597.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	323	323	323	323	323	
5°	369	354	321	291	276	37
15°	493	432	310	224	187	142
25°	620	507	287	147	92	287
35°	687	547	252	72	23	431
45°	713	541	207	16	0	550
55°	695	507	149	0	0	620
65°	628	449	89	0	0	621
75°	523	362	38	0	0	549
85°	383	262	6	2	2	327
90°	332	211	2	2	3	182
95°	285	164	1	3	4	224
105°	196	85	1	2	3	207
115°	107	28	1	1	2	107
125°	32	4	2	1	2	32
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°	323.2	323.2	323.2	323.2	323.2	323.2	323.2	323.2	323.2	323.2	323.2
2.5°	350.4	350.0	348.8	346.7	343.8	338.9	334.8	331.1	326.1	322.0	314.2
5°	368.9	366.9	365.2	363.2	356.6	352.1	344.6	336.4	328.6	320.8	305.1
7.5°	398.6	395.3	392.8	387.1	378.0	367.7	356.2	348.4	343.0	321.2	294.4
10°	430.3	427.4	422.5	412.2	401.1	386.2	369.8	351.2	334.8	316.6	284.9
12.5°	461.6	457.5	450.5	437.3	421.6	403.1	380.5	358.6	335.2	313.8	273.8
15°	492.9	488.4	480.9	464.9	444.3	420.0	392.4	364.8	337.2	310.1	262.3
17.5°	527.1	520.9	509.8	491.6	465.7	435.6	403.1	369.8	336.4	305.5	249.9
20°	563.7	555.1	543.1	518.8	488.4	452.9	413.8	374.7	336.0	300.2	235.9
22.5°	594.2	585.5	572.4	547.2	510.6	467.4	422.9	378.0	334.4	294.0	222.8
25°	620.5	613.5	599.1	570.3	531.6	482.6	431.5	380.5	331.9	287.4	208.8
27.5°	641.1	634.5	618.5	588.8	549.3	496.2	438.1	381.7	328.6	280.8	194.4
30°	659.2	652.7	633.3	602.8	561.2	506.9	444.7	382.1	324.5	270.9	178.7
32.5°	673.2	667.1	647.3	614.8	569.5	514.3	448.4	381.7	319.1	263.9	161.8
35°	687.2	681.1	658.0	623.4	575.7	517.6	451.3	379.6	312.5	252.4	145.8
37.5°	697.9	690.9	667.5	629.2	578.5	518.4	450.9	376.8	305.5	242.9	129.7
40°	705.4	697.9	672.8	632.5	579.4	517.2	447.6	371.8	297.3	231.0	112.8
42.5°	710.3	702.1	675.3	637.4	577.7	513.9	442.6	365.6	288.2	220.7	96.8
45°	712.8	704.1	675.7	633.3	574.8	507.7	435.2	357.8	278.4	206.7	80.7
47.5°	711.5	702.1	673.7	628.8	569.5	501.1	427.0	348.4	266.4	194.4	65.5
50°	709.5	699.6	669.1	623.0	562.1	492.9	417.9	336.8	254.1	179.1	51.9
52.5°	702.9	693.0	664.2	614.8	553.4	483.4	405.6	324.9	240.9	164.3	39.5
55°	694.7	685.6	655.5	607.4	542.3	471.9	394.1	312.1	228.1	149.1	28.4
57.5°	681.9	673.7	644.8	595.4	531.2	459.1	381.3	298.1	212.1	133.8	19.8
60°	666.2	658.0	630.0	581.8	518.4	444.7	367.3	283.7	197.6	118.6	12.4
62.5°	649.8	641.9	612.7	564.9	502.4	429.5	352.1	269.3	182.4	104.6	7.4
65°	627.9	620.5	594.2	544.8	484.6	413.0	335.2	252.0	166.8	88.9	4.1
67.5°	604.9	598.3	571.5	526.2	464.1	394.9	317.9	235.1	150.3	75.4	2.1
70°	580.2	571.9	547.2	501.1	443.1	374.3	298.9	217.8	134.6	62.2	0.0
72.5°	551.4	545.2	521.3	477.6	418.8	352.5	279.6	198.9	117.4	49.4	0.4
75°	523.4	515.5	493.7	452.5	394.9	329.4	258.2	181.2	100.5	37.9	0.4
77.5°	487.1	484.6	464.1	424.1	372.2	307.2	234.7	159.8	84.4	27.2	0.4
80°	450.9	448.4	432.4	395.7	345.9	280.8	212.9	139.6	68.8	18.1	0.4
82.5°	415.1	411.8	396.5	366.1	319.1	258.6	190.2	119.4	54.4	11.1	0.4
85°	382.9	378.8	362.4	334.4	291.5	233.5	166.8	99.6	40.4	6.2	0.8
87.5°	355.4	352.5	334.4	305.5	263.5	210.0	146.2	80.7	28.4	2.9	1.2
90°	331.9	325.7	309.6	279.2	237.2	184.1	124.4	64.6	18.9	1.6	1.6
92.5°	308.8	303.5	285.8	254.5	213.7	161.8	103.4	49.4	11.9	0.8	2.1
95°	284.9	279.2	261.9	233.1	189.8	139.2	84.8	36.2	6.6	0.8	2.1
97.5°	261.5	256.1	238.0	209.2	168.4	119.4	67.1	25.5	3.3	0.8	1.6
100°	239.6	233.5	217.0	188.2	147.0	99.6	51.9	16.5	2.1	0.8	1.6
102.5°	216.6	211.6	194.8	166.8	124.8	81.1	38.7	10.3	0.8	0.8	1.2
105°	196.0	189.8	173.4	144.5	106.2	63.8	27.2	6.2	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°	127.6	122.7	108.3	84.0	53.9	25.1	7.4	1.2	1.2	1.2	1.2
115°	106.6	99.2	86.5	65.1	39.9	16.5	3.7	1.2	1.2	1.2	1.2
117.5°	85.2	79.1	70.0	49.4	26.4	10.7	2.1	1.2	1.2	1.2	1.2
120°	66.7	60.9	50.6	34.2	17.7	6.2	0.8	1.2	1.2	1.2	1.2
122.5°	47.8	43.2	34.2	22.2	10.7	2.9	1.2	1.2	1.6	1.6	1.2
125°	31.7	29.2	22.6	13.6	6.6	1.2	1.2	1.2	1.6	1.6	1.2
127.5°	20.6	18.5	13.2	7.8	2.9	1.2	1.2	1.6	1.6	1.6	1.2
130°	11.5	10.3	7.8	4.5	1.2	1.2	1.2	1.6	1.6	1.6	1.2
132.5°	6.6	6.2	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	2.1	2.1	1.6
137.5°	0.4	0.4	0.8	0.8	1.2	1.2	1.6	2.1	2.1	2.1	1.6
140°	0.4	0.4	0.8	1.2	1.2	1.2	1.6	2.1	2.1	2.1	1.6
142.5°	0.4	0.8	0.8	1.2	1.2	1.6	1.6	2.1	2.1	1.6	1.6
145°	0.4	0.8	0.8	1.2	1.2	1.6	1.6	2.1	1.6	1.6	1.6
147.5°	0.8	0.8	0.8	1.2	1.2	1.6	1.6	2.1	2.1	1.6	1.6
150°	0.4	0.8	0.8	1.2	1.6	1.6	1.6	2.1	1.6	1.6	1.6
152.5°	0.4	0.8	0.8	1.2	1.6	1.6	1.6	2.1	1.6	1.6	1.6
155°	0.8	0.8	0.8	1.2	1.6	1.6	1.6	2.1	1.6	1.6	2.1
157.5°	0.8	0.8	0.8	1.2	1.6	1.6	1.6	2.1	1.6	1.6	2.1
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	2.1	2.1	2.1	2.1
172.5°	0.8	0.8	0.8	1.2	1.2	1.6	1.6	2.1	2.1	2.1	2.1
175°	0.8	0.8	0.8	1.2	1.2	1.6	1.6	2.1	2.1	2.1	2.1
177.5°	0.4	0.8	0.8	1.2	1.2	1.6	1.6	2.1	2.1	2.1	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°	323.2	323.2	323.2
2.5°	307.6	301.8	300.2
5°	291.1	281.6	276.3
7.5°	274.6	261.9	255.7
10°	259.4	241.3	234.7
12.5°	241.3	220.3	210.0
15°	224.0	196.8	186.9
17.5°	204.6	174.2	162.6
20°	186.5	151.5	139.6
22.5°	165.9	129.3	116.1
25°	147.4	107.1	92.2
27.5°	126.8	84.4	71.6
30°	107.5	64.6	51.9
32.5°	88.9	47.4	35.8
35°	71.6	32.1	22.6
37.5°	55.2	19.8	11.5
40°	39.9	10.3	5.4
42.5°	26.8	4.9	2.9
45°	16.5	2.5	0.0
47.5°	9.5	0.0	0.0
50°	4.9	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	1.2
80°	0.8	1.6	2.1
82.5°	1.6	2.1	2.1
85°	1.6	2.1	2.5
87.5°	2.1	2.5	2.9
90°	2.5	2.9	2.9
92.5°	2.5	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°	2.5	3.7	3.7
105°	2.1	2.9	3.3



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	1.6	2.1	2.1
115°	1.2	1.6	2.1
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°	172.9	168.0	151.5	124.4	86.9	48.6	18.1	3.3	0.8	1.2	1.2
110°	150.7	146.6	129.7	103.4	70.0	36.2	11.9	2.1	1.2	1.2	1.2





107.5°	1.6	2.5	2.9
110°	1.6	2.1	2.5



(END OF REPORT)