

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: P551654

Luminaire Tested: **FCC-X-2-LD4-2LO-50-UNV-80-97-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: P551654
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-LD4-2LO-50-UNV-80-97-ED1D
Description: FCC CORNER MOUNT LUMINAIRE WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .375 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES AND 5000K, AND 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

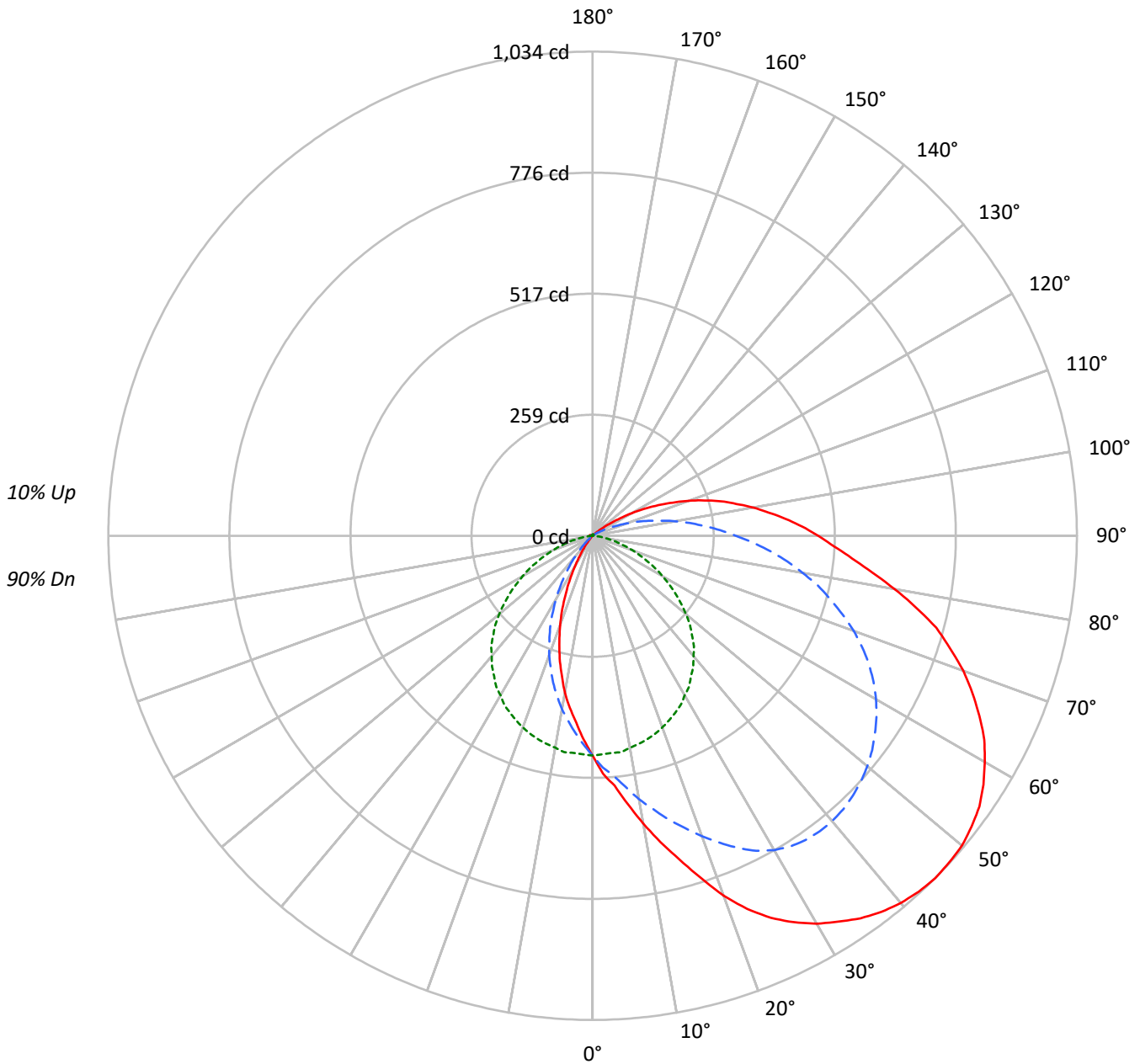
Lumens per Lamp: N/A
Luminaire Lumens: 2319.0 lumens
Efficiency: N/A
Efficacy: 98.7 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

Input Watts (W): 23.5
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-LD4-2LO-50-UNV-80-97-ED1D

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°	5049	5049	5049
5°	5543	4975	4151
10°	6272	4914	3421
15°	7029	4852	2666
20°	7927	4773	1963
25°	8673	4681	1290
30°	9227	4558	726
35°	9707	4426	320
40°	10132	4263	77
45°	10497	4059	0
50°	10804	3788	0
55°	11037	3444	0
60°	11154	3046	0
65°	11201	2593	0
70°	11163	2113	0
75°	11021	1560	9
80°	10574	954	48
85°	10220	458	66



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.9	1.9
10°-20°	134.5	5.8
20°-30°	217.9	9.4
30°-40°	279.9	12.1
40°-50°	316.8	13.7
50°-60°	328.2	14.2
60°-70°	309.5	13.3
70°-80°	259.4	11.2
80°-90°	188.0	8.1
90°-100°	123.6	5.3
100°-110°	71.4	3.1
110°-120°	31.5	1.4
120°-130°	8.5	0.4
130°-140°	2.0	0.1
140°-150°	1.3	0.1
150°-160°	0.9	0.0
160°-170°	0.5	0.0
170°-180°	0.2	0.0
0°-30°	397.3	17.1
0°-40°	677.2	29.2
0°-60°	1322.2	57.0
0°-90°	2079.2	89.7
90°-120°	226.5	9.8
90°-150°	238.3	10.3
90°-180°	240.0	10.3
0°-180°	2319.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	469	469	469	469	469	
5°	535	514	466	422	401	54
15°	715	627	450	325	271	206
25°	900	736	417	214	134	416
35°	997	793	366	104	33	625
45°	1034	786	300	24	0	799
55°	1008	736	216	0	0	900
65°	911	651	129	0	0	902
75°	760	526	55	1	1	797
85°	556	381	9	2	4	475
90°	482	306	2	4	4	264
95°	414	239	1	4	5	324
105°	284	123	1	3	5	300
115°	155	41	2	2	3	155
125°	46	6	2	2	2	46
135°	2	2	3	2	2	4
145°	1	2	2	2	2	0
155°	1	2	2	2	1	0
165°	1	2	2	2	0	0
175°	1	2	3	2	1	0
180°	2	2	2	2	2	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
0°	469.1	469.1	469.1	469.1	469.1	469.1	469.1	469.1	469.1	469.1	469.1
2.5°	508.5	507.9	506.1	503.1	499.0	491.8	485.8	480.4	473.3	467.3	455.9
5°	535.4	532.4	530.0	527.0	517.5	510.9	500.2	488.2	476.8	465.5	442.8
7.5°	578.4	573.6	570.1	561.7	548.6	533.6	516.9	505.5	497.8	466.1	427.2
10°	624.4	620.3	613.1	598.1	582.0	560.5	536.6	509.7	485.8	459.5	413.5
12.5°	669.9	663.9	653.7	634.6	611.9	585.0	552.1	520.5	486.4	455.3	397.4
15°	715.3	708.7	697.9	674.6	644.8	609.5	569.5	529.4	489.4	450.0	380.6
17.5°	764.9	755.9	739.8	713.5	675.8	632.2	585.0	536.6	488.2	443.4	362.7
20°	818.0	805.5	788.2	752.9	708.7	657.3	600.5	543.8	487.6	435.6	342.4
22.5°	862.3	849.7	830.6	794.1	741.0	678.2	613.7	548.6	485.2	426.7	323.3
25°	900.5	890.4	869.4	827.6	771.4	700.3	626.2	552.1	481.6	417.1	303.0
27.5°	930.4	920.8	897.5	854.5	797.1	720.0	635.8	553.9	476.8	407.5	282.0
30°	956.7	947.1	919.0	874.8	814.5	735.6	645.4	554.5	470.9	393.2	259.3
32.5°	977.0	968.0	939.4	892.1	826.4	746.3	650.7	553.9	463.1	383.0	234.8
35°	997.3	988.4	954.9	904.7	835.4	751.1	654.9	550.9	453.5	366.3	211.5
37.5°	1012.8	1002.7	968.6	913.1	839.6	752.3	654.3	546.8	443.4	352.6	188.2
40°	1023.6	1012.8	976.4	917.8	840.8	750.5	649.5	539.6	431.4	335.2	163.7
42.5°	1030.8	1018.8	980.0	925.0	838.4	745.7	642.4	530.6	418.3	320.3	140.4
45°	1034.4	1021.8	980.6	919.0	834.2	736.8	631.6	519.3	403.9	300.0	117.1
47.5°	1032.6	1018.8	977.6	912.5	826.4	727.2	619.7	505.5	386.6	282.0	95.0
50°	1029.6	1015.2	971.0	904.1	815.7	715.3	606.5	488.8	368.7	259.9	75.3
52.5°	1020.0	1005.7	963.9	892.1	803.1	701.5	588.6	471.5	349.6	238.4	57.4
55°	1008.1	994.9	951.3	881.4	787.0	684.8	571.9	452.9	331.0	216.3	41.2
57.5°	989.5	977.6	935.8	864.1	770.8	666.3	553.3	432.6	307.7	194.2	28.7
60°	966.8	954.9	914.3	844.3	752.3	645.4	533.0	411.7	286.8	172.1	17.9
62.5°	942.9	931.6	889.2	819.8	729.0	623.2	510.9	390.8	264.7	151.8	10.8
65°	911.3	900.5	862.3	790.6	703.3	599.3	486.4	365.7	242.0	129.1	6.0
67.5°	877.8	868.2	829.4	763.7	673.4	573.1	461.3	341.2	218.1	109.4	3.0
70°	842.0	830.0	794.1	727.2	643.0	543.2	433.8	316.1	195.4	90.2	0.0
72.5°	800.1	791.2	756.5	693.2	607.7	511.5	405.7	288.6	170.3	71.7	0.6
75°	759.5	748.1	716.5	656.7	573.1	478.0	374.7	262.9	145.8	55.0	0.6
77.5°	706.9	703.3	673.4	615.5	540.2	445.8	340.6	231.9	122.5	39.4	0.6
80°	654.3	650.7	627.4	574.2	501.9	407.5	308.9	202.6	99.8	26.3	0.6
82.5°	602.3	597.6	575.4	531.2	463.1	375.3	276.1	173.3	78.9	16.1	0.6
85°	555.7	549.7	525.8	485.2	423.1	338.8	242.0	144.6	58.6	9.0	1.2
87.5°	515.7	511.5	485.2	443.4	382.4	304.8	212.1	117.1	41.2	4.2	1.8
90°	481.6	472.7	449.4	405.1	344.2	267.1	180.5	93.8	27.5	2.4	2.4
92.5°	448.2	440.4	414.7	369.3	310.1	234.8	150.0	71.7	17.3	1.2	3.0
95°	413.5	405.1	380.0	338.2	275.5	202.0	123.1	52.6	9.6	1.2	3.0
97.5°	379.4	371.7	345.4	303.6	244.4	173.3	97.4	37.0	4.8	1.2	2.4
100°	347.8	338.8	314.9	273.1	213.3	144.6	75.3	23.9	3.0	1.2	2.4
102.5°	314.3	307.1	282.6	242.0	181.1	117.7	56.2	14.9	1.2	1.2	1.8
105°	284.4	275.5	251.6	209.7	154.2	92.6	39.4	9.0	1.2	1.2	1.8



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	185.2	178.1	157.2	121.9	78.3	36.5	10.8	1.8	1.8	1.8	1.8
115°	154.8	144.0	125.5	94.4	58.0	23.9	5.4	1.8	1.8	1.8	1.8
117.5°	123.7	114.7	101.6	71.7	38.2	15.5	3.0	1.8	1.8	1.8	1.8
120°	96.8	88.4	73.5	49.6	25.7	9.0	1.2	1.8	1.8	1.8	1.8
122.5°	69.3	62.7	49.6	32.3	15.5	4.2	1.8	1.8	2.4	2.4	1.8
125°	46.0	42.4	32.9	19.7	9.6	1.8	1.8	1.8	2.4	2.4	1.8
127.5°	29.9	26.9	19.1	11.4	4.2	1.8	1.8	2.4	2.4	2.4	1.8
130°	16.7	14.9	11.4	6.6	1.8	1.8	1.8	2.4	2.4	2.4	1.8
132.5°	9.6	9.0	6.0	1.2	1.8	1.8	1.8	2.4	2.4	2.4	2.4
135°	2.4	1.2	1.2	1.2	1.8	1.8	2.4	2.4	3.0	3.0	2.4
137.5°	0.6	0.6	1.2	1.2	1.8	1.8	2.4	3.0	3.0	3.0	2.4
140°	0.6	0.6	1.2	1.8	1.8	1.8	2.4	3.0	3.0	3.0	2.4
142.5°	0.6	1.2	1.2	1.8	1.8	2.4	2.4	3.0	3.0	2.4	2.4
145°	0.6	1.2	1.2	1.8	1.8	2.4	2.4	3.0	2.4	2.4	2.4
147.5°	1.2	1.2	1.2	1.8	1.8	2.4	2.4	3.0	3.0	2.4	2.4
150°	0.6	1.2	1.2	1.8	2.4	2.4	2.4	3.0	2.4	2.4	2.4
152.5°	0.6	1.2	1.2	1.8	2.4	2.4	2.4	3.0	2.4	2.4	2.4
155°	1.2	1.2	1.2	1.8	2.4	2.4	2.4	3.0	2.4	2.4	3.0
157.5°	1.2	1.2	1.2	1.8	2.4	2.4	2.4	3.0	2.4	2.4	3.0
160°	1.2	1.2	1.2	1.8	1.8	2.4	2.4	2.4	2.4	2.4	2.4
162.5°	1.2	1.2	1.2	1.8	1.8	2.4	2.4	2.4	2.4	2.4	2.4
165°	1.2	1.2	1.2	1.2	1.8	1.8	2.4	2.4	2.4	2.4	2.4
167.5°	1.2	1.2	1.2	1.8	1.8	1.8	2.4	2.4	2.4	2.4	2.4
170°	1.2	1.2	1.2	1.8	1.8	1.8	2.4	3.0	3.0	3.0	3.0
172.5°	1.2	1.2	1.2	1.8	1.8	2.4	2.4	3.0	3.0	3.0	3.0
175°	1.2	1.2	1.2	1.8	1.8	2.4	2.4	3.0	3.0	3.0	3.0
177.5°	0.6	1.2	1.2	1.8	1.8	2.4	2.4	3.0	3.0	3.0	2.4
180°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8



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CATALOG NUMBER: FCC-X-2-LD4-2LO-50-UNV-80-97-ED1D

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	469.1	469.1	469.1
2.5°	446.4	438.0	435.6
5°	422.5	408.7	401.0
7.5°	398.6	380.0	371.1
10°	376.5	350.2	340.6
12.5°	350.2	319.7	304.8
15°	325.1	285.6	271.3
17.5°	297.0	252.8	236.0
20°	270.7	219.9	202.6
22.5°	240.8	187.6	168.5
25°	213.9	155.4	133.9
27.5°	184.0	122.5	104.0
30°	156.0	93.8	75.3
32.5°	129.1	68.7	52.0
35°	104.0	46.6	32.9
37.5°	80.1	28.7	16.7
40°	58.0	14.9	7.8
42.5°	38.8	7.2	4.2
45°	23.9	3.6	0.0
47.5°	13.7	0.0	0.0
50°	7.2	0.0	0.0
52.5°	3.0	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°	0.6	0.6	0.6
77.5°	0.6	1.2	1.8
80°	1.2	2.4	3.0
82.5°	2.4	3.0	3.0
85°	2.4	3.0	3.6
87.5°	3.0	3.6	4.2
90°	3.6	4.2	4.2
92.5°	3.6	4.8	4.8
95°	4.2	4.8	5.4
97.5°	4.8	5.4	5.4
100°	4.2	5.4	6.0
102.5°	3.6	5.4	5.4
105°	3.0	4.2	4.8



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	2.4	3.0	3.0
115°	1.8	2.4	3.0
117.5°	1.8	2.4	2.4
120°	1.8	1.8	2.4
122.5°	1.8	1.8	2.4
125°	1.8	1.8	2.4
127.5°	2.4	1.8	1.8
130°	1.8	1.8	1.8
132.5°	2.4	1.8	1.8
135°	2.4	1.8	1.8
137.5°	2.4	1.8	1.8
140°	2.4	1.8	1.8
142.5°	2.4	1.8	1.8
145°	1.8	1.8	1.8
147.5°	1.8	1.8	1.8
150°	1.8	1.8	1.2
152.5°	1.8	1.2	1.2
155°	1.8	1.2	0.6
157.5°	2.4	1.2	0.6
160°	1.8	1.2	0.6
162.5°	1.8	1.2	0.6
165°	1.8	1.2	0.0
167.5°	1.8	1.2	0.6
170°	1.8	1.2	0.6
172.5°	1.8	1.2	0.6
175°	1.8	0.6	0.6
177.5°	1.8	0.6	0.6
180°	1.8	1.8	1.8



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	251.0	243.8	219.9	180.5	126.1	70.5	26.3	4.8	1.2	1.8	1.8
110°	218.7	212.7	188.2	150.0	101.6	52.6	17.3	3.0	1.8	1.8	1.8





107.5°	2.4	3.6	4.2
110°	2.4	3.0	3.6



(END OF REPORT)