

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: P551586

Luminaire Tested: **FCC-X-2-LD4-2LO-40-UNV-80-94-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: P551586
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-40-UNV-80-94-ED1D
Description: FCC CORNER MOUNT LUMINAIRE WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES AND 4000K, AND 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

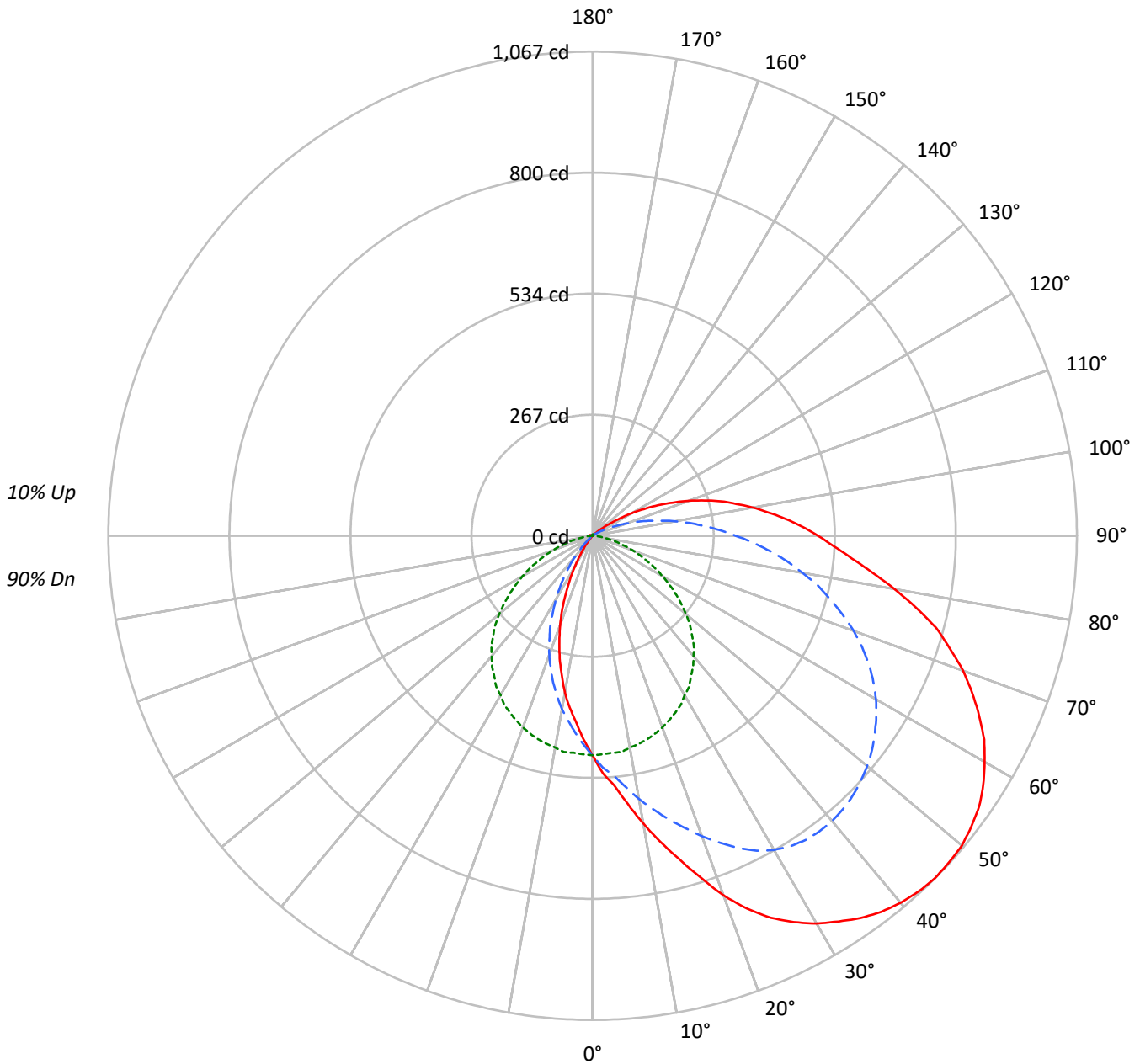
Lumens per Lamp: N/A
Luminaire Lumens: 2391.9 lumens
Efficiency: N/A
Efficacy: 101.8 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

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-40-UNV-80-94-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°	5208	5208	5208
5°	5718	5131	4282
10°	6470	5069	3529
15°	7250	5004	2750
20°	8177	4923	2024
25°	8946	4828	1330
30°	9518	4702	749
35°	10012	4565	330
40°	10451	4398	79
45°	10827	4187	0
50°	11144	3907	0
55°	11384	3553	0
60°	11506	3141	0
65°	11553	2673	0
70°	11515	2181	0
75°	11368	1608	9
80°	10907	983	50
85°	10542	468	68



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	46.3	1.9
10°-20°	138.8	5.8
20°-30°	224.7	9.4
30°-40°	288.7	12.1
40°-50°	326.8	13.7
50°-60°	338.5	14.2
60°-70°	319.3	13.3
70°-80°	267.6	11.2
80°-90°	193.9	8.1
90°-100°	127.5	5.3
100°-110°	73.6	3.1
110°-120°	32.5	1.4
120°-130°	8.8	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°	409.8	17.1
0°-40°	698.5	29.2
0°-60°	1363.8	57.0
0°-90°	2144.6	89.7
90°-120°	233.5	9.8
90°-150°	245.6	10.3
90°-180°	247.0	10.3
0°-180°	2391.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	484	484	484	484	484	
5°	552	530	480	436	414	56
15°	738	647	464	335	280	213
25°	929	759	430	221	138	429
35°	1029	818	378	107	34	645
45°	1067	810	309	25	0	824
55°	1040	759	223	0	0	929
65°	940	672	133	0	0	930
75°	783	542	57	1	1	822
85°	573	393	9	2	4	490
90°	497	315	2	4	4	272
95°	426	246	1	4	6	335
105°	293	127	1	3	5	310
115°	160	42	2	2	3	160
125°	48	6	2	2	2	47
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°	483.8	483.8	483.8	483.8	483.8	483.8	483.8	483.8	483.8	483.8	483.8
2.5°	524.5	523.9	522.1	519.0	514.7	507.3	501.1	495.6	488.2	482.0	470.3
5°	552.3	549.2	546.7	543.6	533.8	527.0	515.9	503.6	491.9	480.1	456.7
7.5°	596.6	591.7	588.0	579.4	565.8	550.4	533.2	521.4	513.4	480.8	440.7
10°	644.1	639.8	632.4	617.0	600.3	578.1	553.5	525.8	501.1	474.0	426.5
12.5°	690.9	684.8	674.3	654.6	631.2	603.4	569.5	536.9	501.7	469.7	409.9
15°	737.8	731.0	719.9	695.9	665.1	628.7	587.4	546.1	504.8	464.1	392.6
17.5°	788.9	779.7	763.1	735.9	697.1	652.1	603.4	553.5	503.6	457.3	374.1
20°	843.8	830.9	813.0	776.6	731.0	678.0	619.4	560.9	503.0	449.3	353.2
22.5°	889.4	876.5	856.7	819.1	764.3	699.6	633.0	565.8	500.5	440.1	333.5
25°	928.9	918.4	896.8	853.7	795.7	722.4	645.9	569.5	496.8	430.2	312.5
27.5°	959.7	949.8	925.8	881.4	822.2	742.7	655.8	571.4	491.9	420.4	290.9
30°	986.8	976.9	948.0	902.4	840.1	758.7	665.7	572.0	485.7	405.6	267.5
32.5°	1007.8	998.5	968.9	920.2	852.4	769.8	671.2	571.4	477.7	395.1	242.2
35°	1028.7	1019.5	984.9	933.2	861.7	774.8	675.5	568.3	467.8	377.8	218.2
37.5°	1044.7	1034.3	999.1	941.8	866.0	776.0	674.9	564.0	457.3	363.7	194.2
40°	1055.8	1044.7	1007.1	946.7	867.2	774.2	670.0	556.6	445.0	345.8	168.9
42.5°	1063.2	1050.9	1010.8	954.1	864.8	769.2	662.6	547.3	431.5	330.4	144.8
45°	1066.9	1054.0	1011.5	948.0	860.4	760.0	651.5	535.6	416.7	309.4	120.8
47.5°	1065.1	1050.9	1008.4	941.2	852.4	750.1	639.2	521.4	398.8	290.9	98.0
50°	1062.0	1047.2	1001.6	932.6	841.3	737.8	625.6	504.2	380.3	268.1	77.7
52.5°	1052.1	1037.3	994.2	920.2	828.4	723.6	607.1	486.3	360.6	245.9	59.2
55°	1039.8	1026.2	981.2	909.1	811.7	706.4	589.9	467.2	341.5	223.1	42.5
57.5°	1020.7	1008.4	965.2	891.3	795.1	687.2	570.8	446.2	317.4	200.3	29.6
60°	997.3	984.9	943.0	870.9	776.0	665.7	549.8	424.7	295.9	177.5	18.5
62.5°	972.6	960.9	917.1	845.6	752.0	642.9	527.0	403.1	273.0	156.6	11.1
65°	940.0	928.9	889.4	815.4	725.5	618.2	501.7	377.2	249.6	133.1	6.2
67.5°	905.4	895.6	855.5	787.7	694.6	591.1	475.8	351.9	225.0	112.8	3.1
70°	868.5	856.1	819.1	750.1	663.2	560.3	447.5	326.1	201.6	93.1	0.0
72.5°	825.3	816.1	780.3	715.0	626.8	527.6	418.5	297.7	175.7	74.0	0.6
75°	783.4	771.7	739.0	677.4	591.1	493.1	386.5	271.2	150.4	56.7	0.6
77.5°	729.2	725.5	694.6	634.9	557.2	459.8	351.3	239.1	126.4	40.7	0.6
80°	674.9	671.2	647.2	592.3	517.7	420.4	318.7	208.9	102.9	27.1	0.6
82.5°	621.3	616.4	593.6	547.9	477.7	387.1	284.8	178.7	81.4	16.6	0.6
85°	573.2	567.1	542.4	500.5	436.4	349.5	249.6	149.2	60.4	9.2	1.2
87.5°	531.9	527.6	500.5	457.3	394.5	314.3	218.8	120.8	42.5	4.3	1.8
90°	496.8	487.5	463.5	417.9	355.0	275.5	186.1	96.8	28.4	2.5	2.5
92.5°	462.3	454.3	427.8	380.9	319.9	242.2	154.7	74.0	17.9	1.2	3.1
95°	426.5	417.9	392.0	348.9	284.1	208.3	127.0	54.2	9.9	1.2	3.1
97.5°	391.4	383.4	356.3	313.1	252.1	178.7	100.5	38.2	4.9	1.2	2.5
100°	358.7	349.5	324.8	281.7	220.0	149.2	77.7	24.7	3.1	1.2	2.5
102.5°	324.2	316.8	291.5	249.6	186.8	121.4	57.9	15.4	1.2	1.2	1.8
105°	293.4	284.1	259.5	216.3	159.0	95.5	40.7	9.2	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°	191.1	183.7	162.1	125.7	80.7	37.6	11.1	1.8	1.8	1.8	1.8
115°	159.6	148.5	129.4	97.4	59.8	24.7	5.5	1.8	1.8	1.8	1.8
117.5°	127.6	118.3	104.8	74.0	39.4	16.0	3.1	1.8	1.8	1.8	1.8
120°	99.9	91.2	75.8	51.2	26.5	9.2	1.2	1.8	1.8	1.8	1.8
122.5°	71.5	64.7	51.2	33.3	16.0	4.3	1.8	1.8	2.5	2.5	1.8
125°	47.5	43.8	33.9	20.3	9.9	1.8	1.8	1.8	2.5	2.5	1.8
127.5°	30.8	27.7	19.7	11.7	4.3	1.8	1.8	2.5	2.5	2.5	1.8
130°	17.3	15.4	11.7	6.8	1.8	1.8	1.8	2.5	2.5	2.5	1.8
132.5°	9.9	9.2	6.2	1.2	1.8	1.8	1.8	2.5	2.5	2.5	2.5
135°	2.5	1.2	1.2	1.2	1.8	1.8	2.5	2.5	3.1	3.1	2.5
137.5°	0.6	0.6	1.2	1.2	1.8	1.8	2.5	3.1	3.1	3.1	2.5
140°	0.6	0.6	1.2	1.8	1.8	1.8	2.5	3.1	3.1	3.1	2.5
142.5°	0.6	1.2	1.2	1.8	1.8	2.5	2.5	3.1	3.1	2.5	2.5
145°	0.6	1.2	1.2	1.8	1.8	2.5	2.5	3.1	2.5	2.5	2.5
147.5°	1.2	1.2	1.2	1.8	1.8	2.5	2.5	3.1	3.1	2.5	2.5
150°	0.6	1.2	1.2	1.8	2.5	2.5	2.5	3.1	2.5	2.5	2.5
152.5°	0.6	1.2	1.2	1.8	2.5	2.5	2.5	3.1	2.5	2.5	2.5
155°	1.2	1.2	1.2	1.8	2.5	2.5	2.5	3.1	2.5	2.5	3.1
157.5°	1.2	1.2	1.2	1.8	2.5	2.5	2.5	3.1	2.5	2.5	3.1
160°	1.2	1.2	1.2	1.8	1.8	2.5	2.5	2.5	2.5	2.5	2.5
162.5°	1.2	1.2	1.2	1.8	1.8	2.5	2.5	2.5	2.5	2.5	2.5
165°	1.2	1.2	1.2	1.2	1.8	1.8	2.5	2.5	2.5	2.5	2.5
167.5°	1.2	1.2	1.2	1.8	1.8	1.8	2.5	2.5	2.5	2.5	2.5
170°	1.2	1.2	1.2	1.8	1.8	1.8	2.5	3.1	3.1	3.1	3.1
172.5°	1.2	1.2	1.2	1.8	1.8	2.5	2.5	3.1	3.1	3.1	3.1
175°	1.2	1.2	1.2	1.8	1.8	2.5	2.5	3.1	3.1	3.1	3.1
177.5°	0.6	1.2	1.2	1.8	1.8	2.5	2.5	3.1	3.1	3.1	2.5
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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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	483.8	483.8	483.8
2.5°	460.4	451.8	449.3
5°	435.8	421.6	413.6
7.5°	411.1	392.0	382.8
10°	388.3	361.2	351.3
12.5°	361.2	329.8	314.3
15°	335.3	294.6	279.8
17.5°	306.3	260.7	243.5
20°	279.2	226.8	208.9
22.5°	248.4	193.5	173.8
25°	220.7	160.3	138.1
27.5°	189.8	126.4	107.2
30°	160.9	96.8	77.7
32.5°	133.1	70.9	53.6
35°	107.2	48.1	33.9
37.5°	82.6	29.6	17.3
40°	59.8	15.4	8.0
42.5°	40.1	7.4	4.3
45°	24.7	3.7	0.0
47.5°	14.2	0.0	0.0
50°	7.4	0.0	0.0
52.5°	3.1	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°	0.6	0.6	0.6
77.5°	0.6	1.2	1.8
80°	1.2	2.5	3.1
82.5°	2.5	3.1	3.1
85°	2.5	3.1	3.7
87.5°	3.1	3.7	4.3
90°	3.7	4.3	4.3
92.5°	3.7	4.9	4.9
95°	4.3	4.9	5.5
97.5°	4.9	5.5	5.5
100°	4.3	5.5	6.2
102.5°	3.7	5.5	5.5
105°	3.1	4.3	4.9



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	2.5	3.1	3.1
115°	1.8	2.5	3.1
117.5°	1.8	2.5	2.5
120°	1.8	1.8	2.5
122.5°	1.8	1.8	2.5
125°	1.8	1.8	2.5
127.5°	2.5	1.8	1.8
130°	1.8	1.8	1.8
132.5°	2.5	1.8	1.8
135°	2.5	1.8	1.8
137.5°	2.5	1.8	1.8
140°	2.5	1.8	1.8
142.5°	2.5	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°	2.5	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°	258.9	251.5	226.8	186.1	130.1	72.7	27.1	4.9	1.2	1.8	1.8
110°	225.6	219.4	194.2	154.7	104.8	54.2	17.9	3.1	1.8	1.8	1.8





107.5°	2.5	3.7	4.3
110°	2.5	3.1	3.7



(END OF REPORT)