

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: P551461

Luminaire Tested: **FCC-X-2-LD4-2LO-30-UNV-80-97-ED1D-90**

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: P551461
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-30-UNV-80-97-ED1D-90
Description: FCC CORNER MOUNT LUMINAIRE WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .375 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES AND 3000K, AND 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

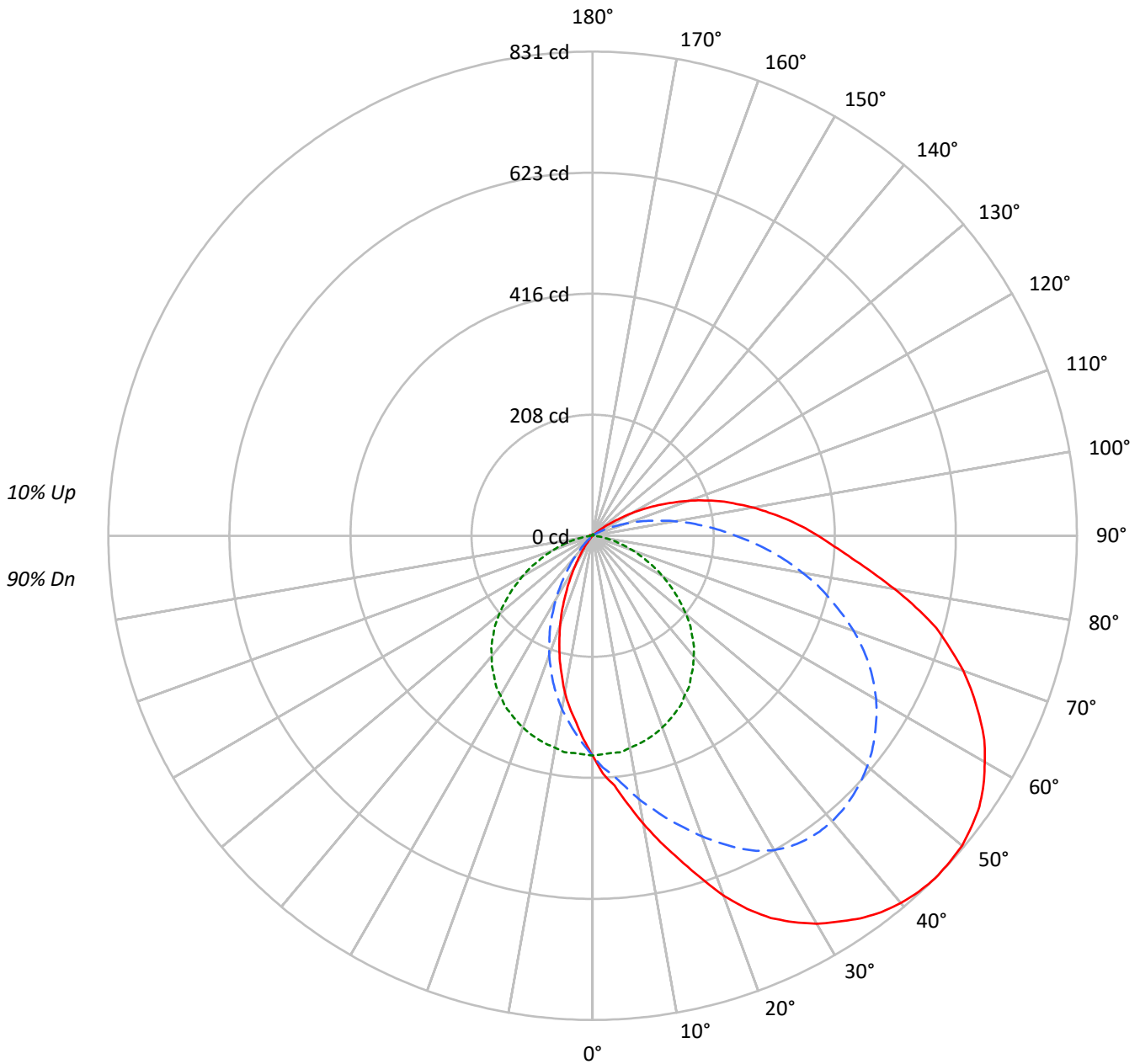
Lumens per Lamp: N/A
Luminaire Lumens: 1863.9 lumens
Efficiency: N/A
Efficacy: 79.3 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

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

TEST NUMBER: P551461

CATALOG NUMBER: FCC-X-2-LD4-2LO-30-UNV-80-97-ED1D-90

Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	4058	4058	4058
5°	4456	4000	3337
10°	5041	3950	2750
15°	5650	3900	2143
20°	6372	3836	1578
25°	6971	3763	1036
30°	7417	3663	584
35°	7802	3557	257
40°	8144	3427	61
45°	8437	3262	0
50°	8684	3045	0
55°	8871	2769	0
60°	8965	2447	0
65°	9003	2083	0
70°	8973	1698	0
75°	8859	1253	7
80°	8499	765	39
85°	8216	366	53



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	36.1	1.9
10°-20°	108.1	5.8
20°-30°	175.1	9.4
30°-40°	225.0	12.1
40°-50°	254.6	13.7
50°-60°	263.8	14.2
60°-70°	248.8	13.3
70°-80°	208.5	11.2
80°-90°	151.1	8.1
90°-100°	99.3	5.3
100°-110°	57.4	3.1
110°-120°	25.3	1.4
120°-130°	6.8	0.4
130°-140°	1.6	0.1
140°-150°	1.0	0.1
150°-160°	0.7	0.0
160°-170°	0.4	0.0
170°-180°	0.2	0.0
0°-30°	319.4	17.1
0°-40°	544.3	29.2
0°-60°	1062.8	57.0
0°-90°	1671.2	89.7
90°-120°	182.0	9.8
90°-150°	191.4	10.3
90°-180°	193.0	10.4
0°-180°	1863.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	377	377	377	377	377	
5°	430	413	374	340	322	43
15°	575	504	362	261	218	166
25°	724	592	335	172	108	335
35°	802	638	294	84	26	503
45°	831	631	241	19	0	642
55°	810	592	174	0	0	724
65°	732	524	104	0	0	725
75°	610	422	44	0	0	640
85°	447	306	7	2	3	381
90°	387	246	2	3	3	212
95°	332	192	1	3	4	261
105°	229	99	1	2	4	241
115°	124	33	1	1	2	125
125°	37	5	2	1	2	37
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°	377.0	377.0	377.0	377.0	377.0	377.0	377.0	377.0	377.0	377.0	377.0
2.5°	408.7	408.3	406.8	404.4	401.1	395.3	390.5	386.2	380.4	375.6	366.5
5°	430.4	428.0	426.0	423.6	415.9	410.7	402.0	392.4	383.3	374.2	355.9
7.5°	464.9	461.1	458.2	451.5	440.9	428.9	415.5	406.3	400.1	374.6	343.4
10°	501.9	498.6	492.8	480.8	467.8	450.5	431.3	409.7	390.5	369.4	332.4
12.5°	538.4	533.6	525.5	510.1	491.8	470.2	443.8	418.3	391.0	366.0	319.4
15°	574.9	569.6	561.0	542.3	518.3	489.9	457.7	425.6	393.4	361.7	306.0
17.5°	614.8	607.6	594.6	573.5	543.2	508.2	470.2	431.3	392.4	356.4	291.5
20°	657.5	647.5	633.5	605.2	569.6	528.3	482.7	437.1	391.9	350.1	275.2
22.5°	693.1	683.0	667.6	638.3	595.6	545.2	493.3	440.9	390.0	342.9	259.8
25°	723.8	715.7	698.8	665.2	620.1	562.9	503.4	443.8	387.1	335.3	243.5
27.5°	747.8	740.2	721.4	686.8	640.7	578.8	511.0	445.2	383.3	327.6	226.7
30°	769.0	761.3	738.7	703.2	654.7	591.3	518.7	445.7	378.5	316.0	208.5
32.5°	785.3	778.1	755.0	717.1	664.3	599.9	523.1	445.2	372.2	307.9	188.8
35°	801.6	794.4	767.5	727.2	671.5	603.7	526.4	442.8	364.6	294.4	170.0
37.5°	814.1	806.0	778.6	733.9	674.8	604.7	525.9	439.5	356.4	283.4	151.3
40°	822.8	814.1	784.8	737.8	675.8	603.3	522.1	433.7	346.8	269.5	131.6
42.5°	828.5	818.9	787.7	743.5	673.9	599.4	516.3	426.5	336.2	257.4	112.9
45°	831.4	821.3	788.2	738.7	670.5	592.2	507.7	417.4	324.7	241.1	94.1
47.5°	830.0	818.9	785.8	733.4	664.3	584.5	498.1	406.3	310.8	226.7	76.4
50°	827.6	816.0	780.5	726.7	655.6	574.9	487.5	392.9	296.4	208.9	60.5
52.5°	819.9	808.4	774.7	717.1	645.5	563.9	473.1	379.0	281.0	191.6	46.1
55°	810.3	799.7	764.7	708.5	632.6	550.4	459.7	364.1	266.1	173.9	33.1
57.5°	795.4	785.8	752.2	694.5	619.6	535.5	444.8	347.7	247.4	156.1	23.1
60°	777.1	767.5	734.9	678.7	604.7	518.7	428.4	330.9	230.5	138.3	14.4
62.5°	757.9	748.8	714.7	659.0	586.0	501.0	410.7	314.1	212.8	122.0	8.6
65°	732.5	723.8	693.1	635.4	565.3	481.7	391.0	293.9	194.5	103.7	4.8
67.5°	705.6	697.9	666.7	613.8	541.3	460.6	370.8	274.3	175.3	87.9	2.4
70°	676.8	667.1	638.3	584.5	516.8	436.6	348.7	254.1	157.1	72.5	0.0
72.5°	643.1	635.9	608.1	557.2	488.5	411.1	326.1	232.0	136.9	57.6	0.5
75°	610.5	601.3	575.9	527.9	460.6	384.2	301.2	211.3	117.2	44.2	0.5
77.5°	568.2	565.3	541.3	494.7	434.2	358.3	273.8	186.4	98.5	31.7	0.5
80°	525.9	523.1	504.3	461.6	403.5	327.6	248.3	162.8	80.2	21.1	0.5
82.5°	484.2	480.3	462.5	427.0	372.2	301.6	221.9	139.3	63.4	13.0	0.5
85°	446.7	441.9	422.7	390.0	340.1	272.3	194.5	116.2	47.1	7.2	1.0
87.5°	414.5	411.1	390.0	356.4	307.4	245.0	170.5	94.1	33.1	3.4	1.4
90°	387.1	379.9	361.2	325.6	276.7	214.7	145.1	75.4	22.1	1.9	1.9
92.5°	360.2	354.0	333.3	296.8	249.3	188.8	120.6	57.6	13.9	1.0	2.4
95°	332.4	325.6	305.5	271.9	221.4	162.3	98.9	42.3	7.7	1.0	2.4
97.5°	305.0	298.8	277.6	244.0	196.4	139.3	78.3	29.8	3.8	1.0	1.9
100°	279.5	272.3	253.1	219.5	171.5	116.2	60.5	19.2	2.4	1.0	1.9
102.5°	252.6	246.9	227.2	194.5	145.5	94.6	45.1	12.0	1.0	1.0	1.4
105°	228.6	221.4	202.2	168.6	123.9	74.4	31.7	7.2	1.0	1.0	1.4



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	148.9	143.1	126.3	98.0	62.9	29.3	8.6	1.4	1.4	1.4	1.4
115°	124.4	115.8	100.9	75.9	46.6	19.2	4.3	1.4	1.4	1.4	1.4
117.5°	99.4	92.2	81.7	57.6	30.7	12.5	2.4	1.4	1.4	1.4	1.4
120°	77.8	71.1	59.1	39.9	20.7	7.2	1.0	1.4	1.4	1.4	1.4
122.5°	55.7	50.4	39.9	25.9	12.5	3.4	1.4	1.4	1.9	1.9	1.4
125°	37.0	34.1	26.4	15.9	7.7	1.4	1.4	1.4	1.9	1.9	1.4
127.5°	24.0	21.6	15.4	9.1	3.4	1.4	1.4	1.9	1.9	1.9	1.4
130°	13.4	12.0	9.1	5.3	1.4	1.4	1.4	1.9	1.9	1.9	1.4
132.5°	7.7	7.2	4.8	1.0	1.4	1.4	1.4	1.9	1.9	1.9	1.9
135°	1.9	1.0	1.0	1.0	1.4	1.4	1.9	1.9	2.4	2.4	1.9
137.5°	0.5	0.5	1.0	1.0	1.4	1.4	1.9	2.4	2.4	2.4	1.9
140°	0.5	0.5	1.0	1.4	1.4	1.4	1.9	2.4	2.4	2.4	1.9
142.5°	0.5	1.0	1.0	1.4	1.4	1.9	1.9	2.4	2.4	1.9	1.9
145°	0.5	1.0	1.0	1.4	1.4	1.9	1.9	2.4	1.9	1.9	1.9
147.5°	1.0	1.0	1.0	1.4	1.4	1.9	1.9	2.4	2.4	1.9	1.9
150°	0.5	1.0	1.0	1.4	1.9	1.9	1.9	2.4	1.9	1.9	1.9
152.5°	0.5	1.0	1.0	1.4	1.9	1.9	1.9	2.4	1.9	1.9	1.9
155°	1.0	1.0	1.0	1.4	1.9	1.9	1.9	2.4	1.9	1.9	2.4
157.5°	1.0	1.0	1.0	1.4	1.9	1.9	1.9	2.4	1.9	1.9	2.4
160°	1.0	1.0	1.0	1.4	1.4	1.9	1.9	1.9	1.9	1.9	1.9
162.5°	1.0	1.0	1.0	1.4	1.4	1.9	1.9	1.9	1.9	1.9	1.9
165°	1.0	1.0	1.0	1.0	1.4	1.4	1.9	1.9	1.9	1.9	1.9
167.5°	1.0	1.0	1.0	1.4	1.4	1.4	1.9	1.9	1.9	1.9	1.9
170°	1.0	1.0	1.0	1.4	1.4	1.4	1.9	2.4	2.4	2.4	2.4
172.5°	1.0	1.0	1.0	1.4	1.4	1.9	1.9	2.4	2.4	2.4	2.4
175°	1.0	1.0	1.0	1.4	1.4	1.9	1.9	2.4	2.4	2.4	2.4
177.5°	0.5	1.0	1.0	1.4	1.4	1.9	1.9	2.4	2.4	2.4	1.9
180°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	377.0	377.0	377.0
2.5°	358.8	352.1	350.1
5°	339.6	328.5	322.3
7.5°	320.4	305.5	298.3
10°	302.6	281.5	273.8
12.5°	281.5	257.0	245.0
15°	261.3	229.6	218.1
17.5°	238.7	203.2	189.7
20°	217.6	176.8	162.8
22.5°	193.6	150.8	135.4
25°	172.0	124.9	107.6
27.5°	147.9	98.5	83.6
30°	125.4	75.4	60.5
32.5°	103.7	55.2	41.8
35°	83.6	37.5	26.4
37.5°	64.4	23.1	13.4
40°	46.6	12.0	6.2
42.5°	31.2	5.8	3.4
45°	19.2	2.9	0.0
47.5°	11.0	0.0	0.0
50°	5.8	0.0	0.0
52.5°	2.4	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°	0.5	0.5	0.5
77.5°	0.5	1.0	1.4
80°	1.0	1.9	2.4
82.5°	1.9	2.4	2.4
85°	1.9	2.4	2.9
87.5°	2.4	2.9	3.4
90°	2.9	3.4	3.4
92.5°	2.9	3.8	3.8
95°	3.4	3.8	4.3
97.5°	3.8	4.3	4.3
100°	3.4	4.3	4.8
102.5°	2.9	4.3	4.3
105°	2.4	3.4	3.8



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	1.9	2.4	2.4
115°	1.4	1.9	2.4
117.5°	1.4	1.9	1.9
120°	1.4	1.4	1.9
122.5°	1.4	1.4	1.9
125°	1.4	1.4	1.9
127.5°	1.9	1.4	1.4
130°	1.4	1.4	1.4
132.5°	1.9	1.4	1.4
135°	1.9	1.4	1.4
137.5°	1.9	1.4	1.4
140°	1.9	1.4	1.4
142.5°	1.9	1.4	1.4
145°	1.4	1.4	1.4
147.5°	1.4	1.4	1.4
150°	1.4	1.4	1.0
152.5°	1.4	1.0	1.0
155°	1.4	1.0	0.5
157.5°	1.9	1.0	0.5
160°	1.4	1.0	0.5
162.5°	1.4	1.0	0.5
165°	1.4	1.0	0.0
167.5°	1.4	1.0	0.5
170°	1.4	1.0	0.5
172.5°	1.4	1.0	0.5
175°	1.4	0.5	0.5
177.5°	1.4	0.5	0.5
180°	1.4	1.4	1.4



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	201.7	196.0	176.8	145.1	101.3	56.7	21.1	3.8	1.0	1.4	1.4
110°	175.8	171.0	151.3	120.6	81.7	42.3	13.9	2.4	1.4	1.4	1.4





107.5°	1.9	2.9	3.4
110°	1.9	2.4	2.9



(END OF REPORT)