

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: P551514

Luminaire Tested: **FCC-X-2-LD4-2LO-35-UNV-80-85-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: P551514
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-35-UNV-80-85-ED1D
Description: FCC CORNER MOUNT LUMINAIRE WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 3500K, AND 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

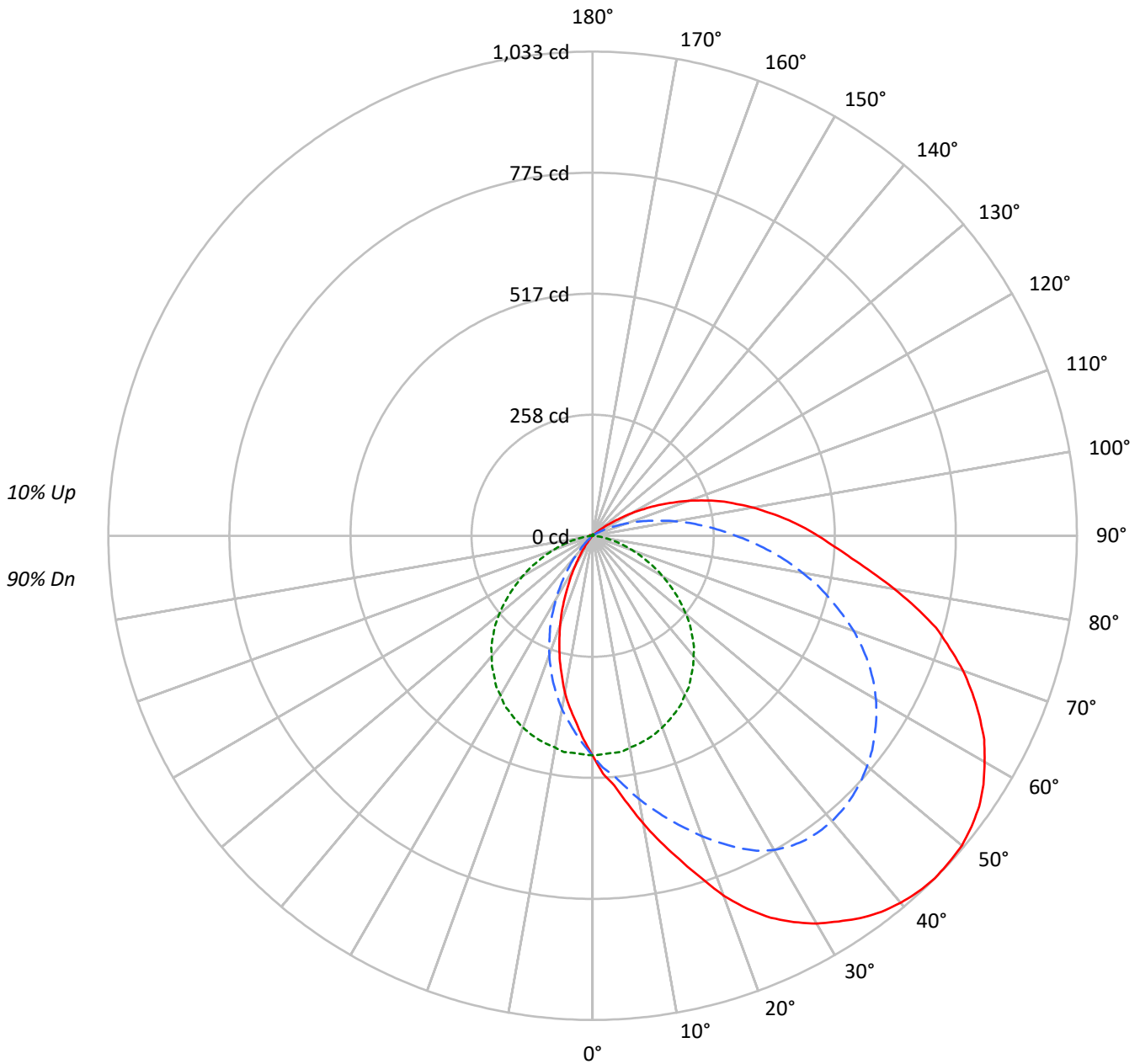
Lumens per Lamp: N/A
Luminaire Lumens: 2316.1 lumens
Efficiency: N/A
Efficacy: 98.6 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

Input Watts (W): 23.5
Input Voltage (V): NR
Input Current (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

TEST NUMBER: P551514

CATALOG NUMBER: FCC-X-2-LD4-2LO-35-UNV-80-85-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°	5043	5043	5043
5°	5535	4969	4145
10°	6264	4908	3417
15°	7019	4846	2662
20°	7918	4767	1961
25°	8661	4675	1288
30°	9215	4552	725
35°	9694	4420	319
40°	10119	4258	77
45°	10483	4054	0
50°	10789	3784	0
55°	11023	3440	0
60°	11140	3042	0
65°	11186	2589	0
70°	11149	2111	0
75°	11007	1557	9
80°	10561	954	48
85°	10208	458	66



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.9	1.9
10°-20°	134.4	5.8
20°-30°	217.6	9.4
30°-40°	279.5	12.1
40°-50°	316.4	13.7
50°-60°	327.8	14.2
60°-70°	309.1	13.3
70°-80°	259.1	11.2
80°-90°	187.8	8.1
90°-100°	123.4	5.3
100°-110°	71.3	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°	396.8	17.1
0°-40°	676.3	29.2
0°-60°	1320.5	57.0
0°-90°	2076.5	89.7
90°-120°	226.2	9.8
90°-150°	238.0	10.3
90°-180°	240.0	10.4
0°-180°	2316.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	468	468	468	468	468	
5°	535	514	465	422	400	54
15°	714	626	449	325	271	206
25°	899	735	417	214	134	416
35°	996	792	366	104	33	625
45°	1033	784	300	24	0	798
55°	1007	735	216	0	0	899
65°	910	650	129	0	0	900
75°	758	525	55	1	1	796
85°	555	380	9	2	4	474
90°	481	305	2	4	4	264
95°	413	238	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°	468.5	468.5	468.5	468.5	468.5	468.5	468.5	468.5	468.5	468.5	468.5
2.5°	507.9	507.3	505.5	502.5	498.3	491.1	485.2	479.8	472.6	466.7	455.3
5°	534.7	531.7	529.3	526.4	516.8	510.2	499.5	487.6	476.2	464.9	442.2
7.5°	577.7	572.9	569.3	561.0	547.8	532.9	516.2	504.9	497.1	465.5	426.7
10°	623.6	619.5	612.3	597.4	581.3	559.8	535.9	509.1	485.2	458.9	413.0
12.5°	669.0	663.0	652.9	633.8	611.1	584.2	551.4	519.8	485.8	454.7	396.9
15°	714.3	707.8	697.0	673.8	643.9	608.7	568.7	528.7	488.8	449.4	380.1
17.5°	763.9	754.9	738.8	712.6	675.0	631.4	584.2	535.9	487.6	442.8	362.2
20°	817.0	804.5	787.2	751.9	707.8	656.5	599.8	543.1	487.0	435.1	342.0
22.5°	861.2	848.6	829.5	793.1	740.0	677.3	612.9	547.8	484.6	426.1	322.9
25°	899.3	889.2	868.3	826.5	770.4	699.4	625.4	551.4	481.0	416.6	302.6
27.5°	929.2	919.6	896.4	853.4	796.1	719.1	635.0	553.2	476.2	407.0	281.7
30°	955.4	945.9	917.8	873.7	813.4	734.6	644.5	553.8	470.3	392.7	259.0
32.5°	975.7	966.8	938.1	891.0	825.3	745.4	649.9	553.2	462.5	382.5	234.5
35°	996.0	987.1	953.7	903.5	834.3	750.2	654.1	550.2	453.0	365.8	211.3
37.5°	1011.5	1001.4	967.4	911.9	838.5	751.3	653.5	546.1	442.8	352.1	188.0
40°	1022.3	1011.5	975.1	916.7	839.7	749.6	648.7	538.9	430.9	334.8	163.5
42.5°	1029.4	1017.5	978.7	923.8	837.3	744.8	641.5	529.9	417.7	319.9	140.2
45°	1033.0	1020.5	979.3	917.8	833.1	735.8	630.8	518.6	403.4	299.6	117.0
47.5°	1031.2	1017.5	976.3	911.3	825.3	726.3	618.9	504.9	386.1	281.7	94.9
50°	1028.2	1013.9	969.8	902.9	814.6	714.3	605.7	488.2	368.2	259.6	75.2
52.5°	1018.7	1004.4	962.6	891.0	802.1	700.6	587.8	470.9	349.1	238.1	57.3
55°	1006.8	993.6	950.1	880.2	786.0	683.9	571.1	452.4	330.6	216.0	41.2
57.5°	988.3	976.3	934.6	862.9	769.8	665.4	552.6	432.1	307.3	194.0	28.6
60°	965.6	953.7	913.1	843.2	751.3	644.5	532.3	411.2	286.5	171.9	17.9
62.5°	941.7	930.4	888.0	818.8	728.1	622.4	510.2	390.3	264.4	151.6	10.7
65°	910.1	899.3	861.2	789.5	702.4	598.6	485.8	365.2	241.7	128.9	6.0
67.5°	876.7	867.1	828.3	762.7	672.6	572.3	460.7	340.8	217.8	109.2	3.0
70°	840.9	828.9	793.1	726.3	642.1	542.5	433.3	315.7	195.1	90.1	0.0
72.5°	799.1	790.1	755.5	692.3	606.9	510.8	405.2	288.2	170.1	71.6	0.6
75°	758.5	747.2	715.5	655.9	572.3	477.4	374.2	262.6	145.6	54.9	0.6
77.5°	706.0	702.4	672.6	614.7	539.5	445.2	340.2	231.6	122.3	39.4	0.6
80°	653.5	649.9	626.6	573.5	501.3	407.0	308.5	202.3	99.7	26.3	0.6
82.5°	601.6	596.8	574.7	530.5	462.5	374.8	275.7	173.1	78.8	16.1	0.6
85°	555.0	549.0	525.2	484.6	422.5	338.4	241.7	144.4	58.5	9.0	1.2
87.5°	515.0	510.8	484.6	442.8	381.9	304.4	211.9	117.0	41.2	4.2	1.8
90°	481.0	472.1	448.8	404.6	343.7	266.8	180.2	93.7	27.5	2.4	2.4
92.5°	447.6	439.8	414.2	368.8	309.7	234.5	149.8	71.6	17.3	1.2	3.0
95°	413.0	404.6	379.6	337.8	275.1	201.7	122.9	52.5	9.5	1.2	3.0
97.5°	379.0	371.2	344.9	303.2	244.1	173.1	97.3	37.0	4.8	1.2	2.4
100°	347.3	338.4	314.5	272.7	213.0	144.4	75.2	23.9	3.0	1.2	2.4
102.5°	313.9	306.7	282.3	241.7	180.8	117.6	56.1	14.9	1.2	1.2	1.8
105°	284.1	275.1	251.2	209.5	154.0	92.5	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°	185.0	177.8	157.0	121.7	78.2	36.4	10.7	1.8	1.8	1.8	1.8
115°	154.6	143.8	125.3	94.3	57.9	23.9	5.4	1.8	1.8	1.8	1.8
117.5°	123.5	114.6	101.5	71.6	38.2	15.5	3.0	1.8	1.8	1.8	1.8
120°	96.7	88.3	73.4	49.5	25.7	9.0	1.2	1.8	1.8	1.8	1.8
122.5°	69.2	62.7	49.5	32.2	15.5	4.2	1.8	1.8	2.4	2.4	1.8
125°	46.0	42.4	32.8	19.7	9.5	1.8	1.8	1.8	2.4	2.4	1.8
127.5°	29.8	26.9	19.1	11.3	4.2	1.8	1.8	2.4	2.4	2.4	1.8
130°	16.7	14.9	11.3	6.6	1.8	1.8	1.8	2.4	2.4	2.4	1.8
132.5°	9.5	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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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	468.5	468.5	468.5
2.5°	445.8	437.4	435.1
5°	421.9	408.2	400.4
7.5°	398.1	379.6	370.6
10°	376.0	349.7	340.2
12.5°	349.7	319.3	304.4
15°	324.6	285.3	270.9
17.5°	296.6	252.4	235.7
20°	270.3	219.6	202.3
22.5°	240.5	187.4	168.3
25°	213.6	155.2	133.7
27.5°	183.8	122.3	103.8
30°	155.8	93.7	75.2
32.5°	128.9	68.6	51.9
35°	103.8	46.5	32.8
37.5°	80.0	28.6	16.7
40°	57.9	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°	250.6	243.5	219.6	180.2	125.9	70.4	26.3	4.8	1.2	1.8	1.8
110°	218.4	212.5	188.0	149.8	101.5	52.5	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)