

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: P551652

Luminaire Tested: **FCC-X-2-LD4-2LO-50-UNV-80-96-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: P551652  
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-80-96-ED1D  
Description: FCC CORNER MOUNT LUMINAIRE WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES AND 5000K, AND 80 CRI LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

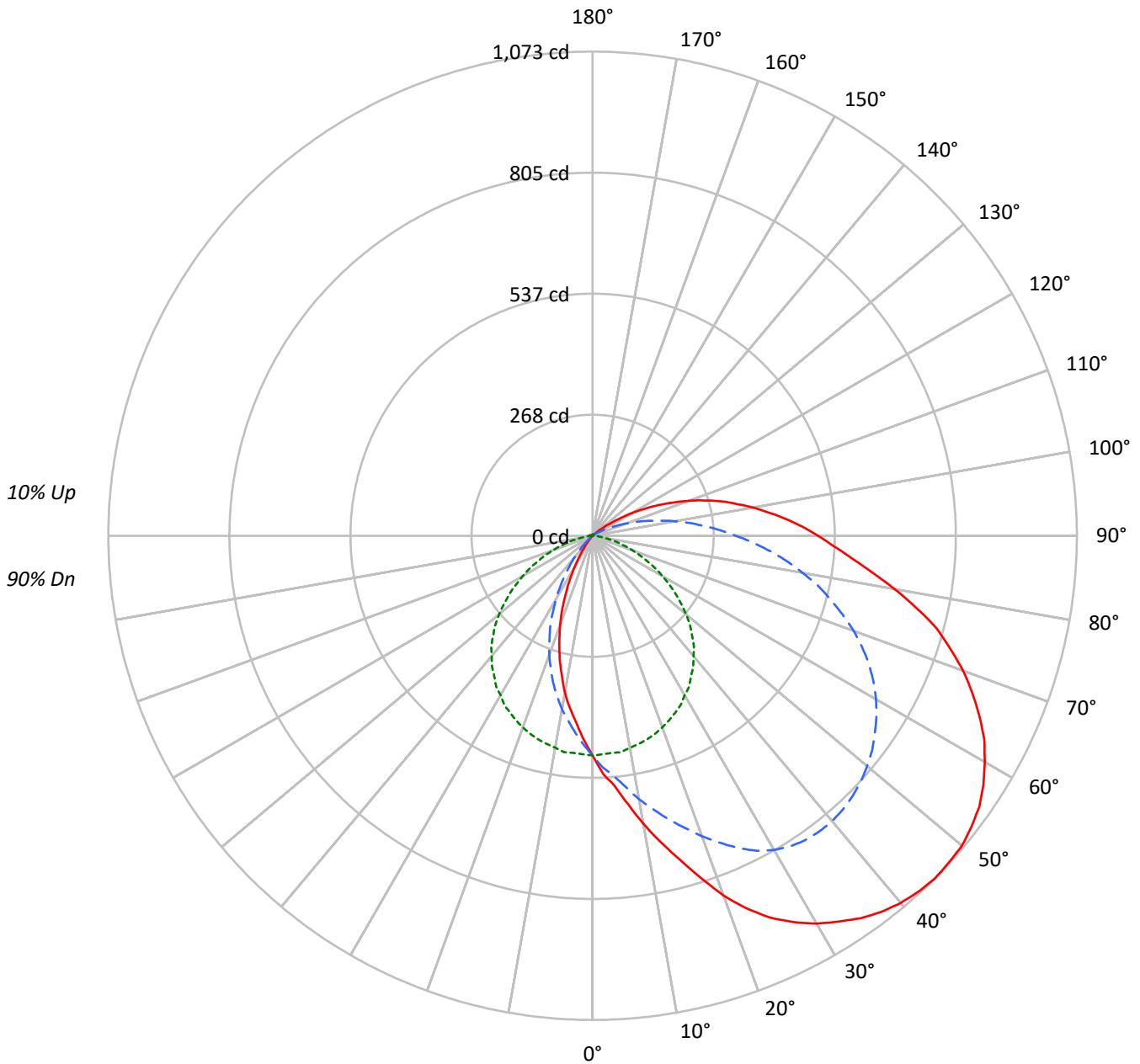
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2406.1 lumens  
Efficiency: N/A  
Efficacy: 102.4 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<sub>in</sub>): 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: P551652  
CATALOG NUMBER: FCC-X-2-LD4-2LO-50-UNV-80-96-ED1D

### 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°	5239	5239	5239
5°	5751	5162	4307
10°	6508	5099	3550
15°	7293	5033	2766
20°	8225	4952	2037
25°	8998	4856	1338
30°	9573	4729	753
35°	10071	4591	332
40°	10512	4423	80
45°	10891	4211	0
50°	11209	3931	0
55°	11451	3573	0
60°	11572	3161	0
65°	11621	2689	0
70°	11581	2193	0
75°	11435	1616	9
80°	10972	990	50
85°	10605	473	68



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	46.6	1.9
10°-20°	139.6	5.8
20°-30°	226.0	9.4
30°-40°	290.4	12.1
40°-50°	328.7	13.7
50°-60°	340.5	14.2
60°-70°	321.2	13.3
70°-80°	269.1	11.2
80°-90°	195.1	8.1
90°-100°	128.2	5.3
100°-110°	74.1	3.1
110°-120°	32.7	1.4
120°-130°	8.9	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°	412.2	17.1
0°-40°	702.6	29.2
0°-60°	1371.8	57.0
0°-90°	2157.2	89.7
90°-120°	235.0	9.8
90°-150°	247.2	10.3
90°-180°	249.0	10.3
0°-180°	2406.1	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	487	487	487	487	487	
5°	556	534	483	438	416	56
15°	742	651	467	337	282	214
25°	934	764	433	222	139	432
35°	1035	823	380	108	34	649
45°	1073	815	311	25	0	829
55°	1046	764	224	0	0	934
65°	946	676	134	0	0	935
75°	788	545	57	1	1	826
85°	577	395	9	2	4	492
90°	500	317	2	4	4	274
95°	429	248	1	4	6	337
105°	295	128	1	3	5	311
115°	161	42	2	2	3	161
125°	48	6	2	2	2	48
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°	486.7	486.7	486.7	486.7	486.7	486.7	486.7	486.7	486.7	486.7	486.7
2.5°	527.6	527.0	525.1	522.0	517.7	510.2	504.0	498.5	491.0	484.8	473.0
5°	555.5	552.4	549.9	546.8	536.9	530.1	518.9	506.5	494.7	483.0	459.4
7.5°	600.1	595.2	591.5	582.8	569.1	553.6	536.3	524.5	516.4	483.6	443.3
10°	647.9	643.5	636.1	620.6	603.9	581.5	556.7	528.8	504.0	476.8	429.0
12.5°	695.0	688.8	678.2	658.4	634.8	607.0	572.9	540.0	504.7	472.4	412.3
15°	742.1	735.3	724.1	699.9	668.9	632.4	590.8	549.3	507.8	466.8	394.9
17.5°	793.6	784.3	767.5	740.2	701.2	655.9	607.0	556.7	506.5	460.0	376.3
20°	848.7	835.7	817.7	781.2	735.3	682.0	623.1	564.2	505.9	452.0	355.2
22.5°	894.6	881.6	861.8	823.9	768.8	703.7	636.7	569.1	503.4	442.7	335.4
25°	934.3	923.8	902.1	858.7	800.4	726.6	649.7	572.9	499.7	432.7	314.3
27.5°	965.3	955.4	931.2	886.6	827.0	747.1	659.6	574.7	494.7	422.8	292.6
30°	992.6	982.7	953.5	907.6	845.0	763.2	669.6	575.3	488.5	407.9	269.1
32.5°	1013.7	1004.4	974.6	925.6	857.4	774.3	675.1	574.7	480.5	397.4	243.6
35°	1034.7	1025.4	990.7	938.6	866.7	779.3	679.5	571.6	470.6	380.0	219.5
37.5°	1050.8	1040.3	1005.0	947.3	871.1	780.5	678.9	567.3	460.0	365.8	195.3
40°	1062.0	1050.8	1013.0	952.3	872.3	778.7	673.9	559.8	447.6	347.8	169.9
42.5°	1069.4	1057.0	1016.7	959.7	869.8	773.7	666.5	550.5	434.0	332.3	145.7
45°	1073.2	1060.1	1017.4	953.5	865.5	764.4	655.3	538.8	419.1	311.2	121.5
47.5°	1071.3	1057.0	1014.3	946.7	857.4	754.5	642.9	524.5	401.1	292.6	98.6
50°	1068.2	1053.3	1007.5	938.0	846.3	742.1	629.3	507.1	382.5	269.7	78.1
52.5°	1058.3	1043.4	1000.0	925.6	833.2	727.8	610.7	489.2	362.7	247.4	59.5
55°	1045.9	1032.2	987.0	914.5	816.5	710.5	593.3	469.9	343.5	224.4	42.8
57.5°	1026.7	1014.3	970.9	896.5	799.8	691.3	574.1	448.9	319.3	201.5	29.8
60°	1003.1	990.7	948.6	876.0	780.5	669.6	553.0	427.2	297.6	178.6	18.6
62.5°	978.3	966.5	922.5	850.6	756.4	646.6	530.1	405.5	274.6	157.5	11.2
65°	945.5	934.3	894.6	820.2	729.7	621.8	504.7	379.4	251.1	133.9	6.2
67.5°	910.7	900.8	860.5	792.3	698.7	594.6	478.6	354.0	226.3	113.5	3.1
70°	873.5	861.1	823.9	754.5	667.1	563.6	450.1	328.0	202.7	93.6	0.0
72.5°	830.1	820.8	784.9	719.2	630.5	530.7	421.0	299.4	176.7	74.4	0.6
75°	788.0	776.2	743.3	681.3	594.6	496.0	388.7	272.8	151.3	57.0	0.6
77.5°	733.4	729.7	698.7	638.6	560.5	462.5	353.4	240.5	127.1	40.9	0.6
80°	678.9	675.1	651.0	595.8	520.8	422.8	320.5	210.2	103.5	27.3	0.6
82.5°	624.9	620.0	597.0	551.2	480.5	389.3	286.4	179.8	81.8	16.7	0.6
85°	576.6	570.4	545.6	503.4	438.9	351.5	251.1	150.0	60.8	9.3	1.2
87.5°	535.0	530.7	503.4	460.0	396.8	316.2	220.1	121.5	42.8	4.3	1.9
90°	499.7	490.4	466.2	420.3	357.1	277.1	187.2	97.3	28.5	2.5	2.5
92.5°	465.0	456.9	430.3	383.1	321.8	243.6	155.6	74.4	18.0	1.2	3.1
95°	429.0	420.3	394.3	350.9	285.8	209.5	127.7	54.6	9.9	1.2	3.1
97.5°	393.7	385.6	358.3	314.9	253.6	179.8	101.1	38.4	5.0	1.2	2.5
100°	360.8	351.5	326.7	283.3	221.3	150.0	78.1	24.8	3.1	1.2	2.5
102.5°	326.1	318.7	293.2	251.1	187.9	122.1	58.3	15.5	1.2	1.2	1.9
105°	295.1	285.8	261.0	217.6	160.0	96.1	40.9	9.3	1.2	1.2	1.9



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	192.2	184.8	163.1	126.5	81.2	37.8	11.2	1.9	1.9	1.9	1.9
115°	160.6	149.4	130.2	98.0	60.1	24.8	5.6	1.9	1.9	1.9	1.9
117.5°	128.3	119.0	105.4	74.4	39.7	16.1	3.1	1.9	1.9	1.9	1.9
120°	100.4	91.8	76.3	51.5	26.7	9.3	1.2	1.9	1.9	1.9	1.9
122.5°	71.9	65.1	51.5	33.5	16.1	4.3	1.9	1.9	2.5	2.5	1.9
125°	47.7	44.0	34.1	20.5	9.9	1.9	1.9	1.9	2.5	2.5	1.9
127.5°	31.0	27.9	19.8	11.8	4.3	1.9	1.9	2.5	2.5	2.5	1.9
130°	17.4	15.5	11.8	6.8	1.9	1.9	1.9	2.5	2.5	2.5	1.9
132.5°	9.9	9.3	6.2	1.2	1.9	1.9	1.9	2.5	2.5	2.5	2.5
135°	2.5	1.2	1.2	1.2	1.9	1.9	2.5	2.5	3.1	3.1	2.5
137.5°	0.6	0.6	1.2	1.2	1.9	1.9	2.5	3.1	3.1	3.1	2.5
140°	0.6	0.6	1.2	1.9	1.9	1.9	2.5	3.1	3.1	3.1	2.5
142.5°	0.6	1.2	1.2	1.9	1.9	2.5	2.5	3.1	3.1	2.5	2.5
145°	0.6	1.2	1.2	1.9	1.9	2.5	2.5	3.1	2.5	2.5	2.5
147.5°	1.2	1.2	1.2	1.9	1.9	2.5	2.5	3.1	3.1	2.5	2.5
150°	0.6	1.2	1.2	1.9	2.5	2.5	2.5	3.1	2.5	2.5	2.5
152.5°	0.6	1.2	1.2	1.9	2.5	2.5	2.5	3.1	2.5	2.5	2.5
155°	1.2	1.2	1.2	1.9	2.5	2.5	2.5	3.1	2.5	2.5	3.1
157.5°	1.2	1.2	1.2	1.9	2.5	2.5	2.5	3.1	2.5	2.5	3.1
160°	1.2	1.2	1.2	1.9	1.9	2.5	2.5	2.5	2.5	2.5	2.5
162.5°	1.2	1.2	1.2	1.9	1.9	2.5	2.5	2.5	2.5	2.5	2.5
165°	1.2	1.2	1.2	1.2	1.9	1.9	2.5	2.5	2.5	2.5	2.5
167.5°	1.2	1.2	1.2	1.9	1.9	1.9	2.5	2.5	2.5	2.5	2.5
170°	1.2	1.2	1.2	1.9	1.9	1.9	2.5	3.1	3.1	3.1	3.1
172.5°	1.2	1.2	1.2	1.9	1.9	2.5	2.5	3.1	3.1	3.1	3.1
175°	1.2	1.2	1.2	1.9	1.9	2.5	2.5	3.1	3.1	3.1	3.1
177.5°	0.6	1.2	1.2	1.9	1.9	2.5	2.5	3.1	3.1	3.1	2.5
180°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9



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**CANDELA DISTRIBUTION (continued):**

	135°	157.5°	180°
0°	486.7	486.7	486.7
2.5°	463.1	454.4	452.0
5°	438.3	424.1	416.0
7.5°	413.5	394.3	385.0
10°	390.6	363.3	353.4
12.5°	363.3	331.7	316.2
15°	337.3	296.3	281.5
17.5°	308.1	262.2	244.9
20°	280.8	228.1	210.2
22.5°	249.8	194.7	174.8
25°	221.9	161.2	138.9
27.5°	191.0	127.1	107.9
30°	161.8	97.3	78.1
32.5°	133.9	71.3	53.9
35°	107.9	48.4	34.1
37.5°	83.1	29.8	17.4
40°	60.1	15.5	8.1
42.5°	40.3	7.4	4.3
45°	24.8	3.7	0.0
47.5°	14.3	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	1.9
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	5.0	5.0
95°	4.3	5.0	5.6
97.5°	5.0	5.6	5.6
100°	4.3	5.6	6.2
102.5°	3.7	5.6	5.6
105°	3.1	4.3	5.0





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**CANDELA DISTRIBUTION (continued):**

	135°	157.5°	180°
112.5°	2.5	3.1	3.1
115°	1.9	2.5	3.1
117.5°	1.9	2.5	2.5
120°	1.9	1.9	2.5
122.5°	1.9	1.9	2.5
125°	1.9	1.9	2.5
127.5°	2.5	1.9	1.9
130°	1.9	1.9	1.9
132.5°	2.5	1.9	1.9
135°	2.5	1.9	1.9
137.5°	2.5	1.9	1.9
140°	2.5	1.9	1.9
142.5°	2.5	1.9	1.9
145°	1.9	1.9	1.9
147.5°	1.9	1.9	1.9
150°	1.9	1.9	1.2
152.5°	1.9	1.2	1.2
155°	1.9	1.2	0.6
157.5°	2.5	1.2	0.6
160°	1.9	1.2	0.6
162.5°	1.9	1.2	0.6
165°	1.9	1.2	0.0
167.5°	1.9	1.2	0.6
170°	1.9	1.2	0.6
172.5°	1.9	1.2	0.6
175°	1.9	0.6	0.6
177.5°	1.9	0.6	0.6
180°	1.9	1.9	1.9



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	260.4	252.9	228.1	187.2	130.8	73.2	27.3	5.0	1.2	1.9	1.9
110°	226.9	220.7	195.3	155.6	105.4	54.6	18.0	3.1	1.9	1.9	1.9







107.5°	2.5	3.7	4.3
110°	2.5	3.1	3.7



(END OF REPORT)