

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: P550515

Luminaire Tested: **FCC-X-2-LD4-1HI-35-UNV-81-96-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: P550515
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-LD4-1HI-35-UNV-81-96-ED1D-90
Description: FCC CORNER MOUNT LUMINAIRE WITH .156 CLEAR PC FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES AND 3500K, AND 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

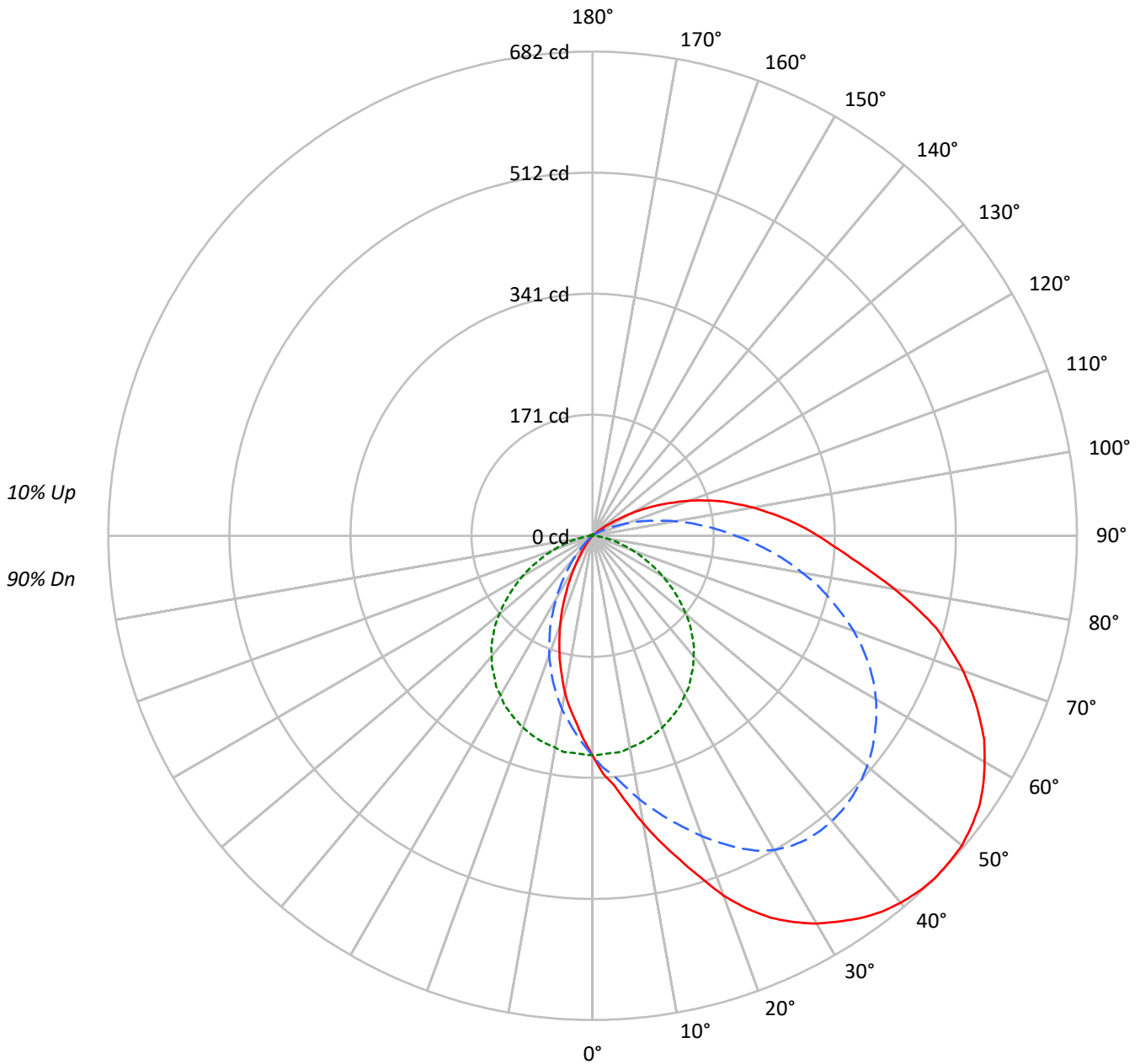
Lumens per Lamp: N/A
Luminaire Lumens: 1529.1 lumens
Efficiency: N/A
Efficacy: 70.5 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

Input Watts (W): 21.7
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: P550515

CATALOG NUMBER: FCC-X-2-LD4-1HI-35-UNV-81-96-ED1D-90

Luminous Intensity Polar Plot





TEST NUMBER: P550515

CATALOG NUMBER: FCC-X-2-LD4-1HI-35-UNV-81-96-ED1D-90

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°	3329	3329	3329
5°	3654	3280	2737
10°	4135	3240	2256
15°	4634	3199	1758
20°	5227	3147	1295
25°	5718	3086	850
30°	6084	3005	478
35°	6400	2918	211
40°	6680	2811	50
45°	6921	2676	0
50°	7123	2498	0
55°	7277	2271	0
60°	7355	2009	0
65°	7384	1709	0
70°	7360	1394	0
75°	7267	1027	6
80°	6972	628	32
85°	6739	300	44



TEST NUMBER: P550515

CATALOG NUMBER: FCC-X-2-LD4-1HI-35-UNV-81-96-ED1D-90

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	29.6	1.9
10°-20°	88.7	5.8
20°-30°	143.6	9.4
30°-40°	184.5	12.1
40°-50°	208.9	13.7
50°-60°	216.4	14.2
60°-70°	204.1	13.3
70°-80°	171.0	11.2
80°-90°	124.0	8.1
90°-100°	81.5	5.3
100°-110°	47.1	3.1
110°-120°	20.8	1.4
120°-130°	5.6	0.4
130°-140°	1.3	0.1
140°-150°	0.9	0.1
150°-160°	0.6	0.0
160°-170°	0.3	0.0
170°-180°	0.1	0.0
0°-30°	262.0	17.1
0°-40°	446.5	29.2
0°-60°	871.8	57.0
0°-90°	1370.9	89.7
90°-120°	149.3	9.8
90°-150°	157.1	10.3
90°-180°	158.0	10.3
0°-180°	1529.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	309	309	309	309	309	
5°	353	339	307	278	264	36
15°	472	414	297	214	179	136
25°	594	485	275	141	88	274
35°	658	523	242	69	22	412
45°	682	518	198	16	0	527
55°	665	485	143	0	0	594
65°	601	429	85	0	0	594
75°	501	346	36	0	0	525
85°	366	251	6	2	2	313
90°	318	202	2	2	3	174
95°	273	157	1	3	4	214
105°	188	81	1	2	3	198
115°	102	27	1	1	2	102
125°	30	4	2	1	2	30
135°	2	1	2	2	1	3
145°	0	1	2	1	1	0
155°	1	2	2	1	0	0
165°	1	1	2	1	0	0
175°	1	1	2	1	0	0
180°	1	1	1	1	1	



TEST NUMBER: P550515

CATALOG NUMBER: FCC-X-2-LD4-1HI-35-UNV-81-96-ED1D-90

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
0°	309.3	309.3	309.3	309.3	309.3	309.3	309.3	309.3	309.3	309.3	309.3
2.5°	335.3	334.9	333.7	331.7	329.0	324.3	320.3	316.8	312.0	308.1	300.6
5°	353.0	351.0	349.5	347.5	341.2	336.9	329.8	321.9	314.4	306.9	291.9
7.5°	381.4	378.2	375.9	370.3	361.7	351.8	340.8	333.3	328.2	307.3	281.7
10°	411.7	409.0	404.2	394.4	383.7	369.6	353.8	336.1	320.3	303.0	272.6
12.5°	441.7	437.7	431.0	418.4	403.4	385.7	364.0	343.2	320.7	300.2	262.0
15°	471.6	467.3	460.2	444.8	425.1	401.9	375.5	349.1	322.7	296.7	251.0
17.5°	504.3	498.4	487.8	470.4	445.6	416.8	385.7	353.8	321.9	292.3	239.2
20°	539.4	531.1	519.7	496.4	467.3	433.4	396.0	358.5	321.5	287.2	225.8
22.5°	568.5	560.2	547.6	523.6	488.5	447.2	404.6	361.7	319.9	281.3	213.1
25°	593.7	587.0	573.3	545.7	508.6	461.8	412.9	364.0	317.6	275.0	199.8
27.5°	613.4	607.1	591.8	563.4	525.6	474.8	419.2	365.2	314.4	268.7	186.0
30°	630.8	624.5	606.0	576.8	537.0	485.0	425.5	365.6	310.5	259.2	171.0
32.5°	644.2	638.3	619.3	588.2	544.9	492.1	429.1	365.2	305.3	252.5	154.8
35°	657.6	651.7	629.6	596.5	550.8	495.2	431.8	363.3	299.0	241.5	139.5
37.5°	667.8	661.1	638.7	602.0	553.6	496.0	431.4	360.5	292.3	232.5	124.1
40°	674.9	667.8	643.8	605.2	554.3	494.8	428.3	355.8	284.5	221.0	108.0
42.5°	679.6	671.7	646.1	609.9	552.8	491.7	423.5	349.9	275.8	211.2	92.6
45°	682.0	673.7	646.5	606.0	550.0	485.8	416.4	342.4	266.3	197.8	77.2
47.5°	680.8	671.7	644.6	601.6	544.9	479.5	408.6	333.3	254.9	186.0	62.6
50°	678.8	669.4	640.2	596.1	537.8	471.6	399.9	322.3	243.1	171.4	49.6
52.5°	672.5	663.1	635.5	588.2	529.5	462.5	388.1	310.9	230.5	157.2	37.8
55°	664.7	656.0	627.2	581.1	518.9	451.5	377.0	298.6	218.3	142.6	27.2
57.5°	652.4	644.6	617.0	569.7	508.2	439.3	364.8	285.2	202.9	128.0	18.9
60°	637.5	629.6	602.8	556.7	496.0	425.5	351.4	271.5	189.1	113.5	11.8
62.5°	621.7	614.2	586.3	540.6	480.7	410.9	336.9	257.7	174.5	100.1	7.1
65°	600.8	593.7	568.5	521.2	463.7	395.2	320.7	241.1	159.6	85.1	3.9
67.5°	578.8	572.5	546.9	503.5	444.0	377.8	304.2	225.0	143.8	72.1	2.0
70°	555.1	547.2	523.6	479.5	423.9	358.1	286.0	208.4	128.8	59.5	0.0
72.5°	527.5	521.6	498.8	457.0	400.7	337.3	267.5	190.3	112.3	47.3	0.4
75°	500.8	493.3	472.4	433.0	377.8	315.2	247.0	173.4	96.1	36.2	0.4
77.5°	466.1	463.7	444.0	405.8	356.2	293.9	224.6	152.9	80.8	26.0	0.4
80°	431.4	429.1	413.7	378.6	330.9	268.7	203.7	133.6	65.8	17.3	0.4
82.5°	397.1	394.0	379.4	350.3	305.3	247.4	182.0	114.3	52.0	10.6	0.4
85°	366.4	362.5	346.7	319.9	278.9	223.4	159.6	95.3	38.6	5.9	0.8
87.5°	340.0	337.3	319.9	292.3	252.2	200.9	139.9	77.2	27.2	2.8	1.2
90°	317.6	311.6	296.3	267.1	226.9	176.1	119.0	61.9	18.1	1.6	1.6
92.5°	295.5	290.4	273.4	243.5	204.5	154.8	98.9	47.3	11.4	0.8	2.0
95°	272.6	267.1	250.6	223.0	181.6	133.2	81.2	34.7	6.3	0.8	2.0
97.5°	250.2	245.1	227.7	200.1	161.1	114.3	64.2	24.4	3.2	0.8	1.6
100°	229.3	223.4	207.6	180.1	140.7	95.3	49.6	15.8	2.0	0.8	1.6
102.5°	207.2	202.5	186.4	159.6	119.4	77.6	37.0	9.8	0.8	0.8	1.2
105°	187.5	181.6	165.9	138.3	101.6	61.1	26.0	5.9	0.8	0.8	1.2



TEST NUMBER: P550515

CATALOG NUMBER: FCC-X-2-LD4-1HI-35-UNV-81-96-ED1D-90

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	122.1	117.4	103.6	80.4	51.6	24.0	7.1	1.2	1.2	1.2	1.2
115°	102.0	95.0	82.7	62.2	38.2	15.8	3.5	1.2	1.2	1.2	1.2
117.5°	81.6	75.6	67.0	47.3	25.2	10.2	2.0	1.2	1.2	1.2	1.2
120°	63.8	58.3	48.5	32.7	16.9	5.9	0.8	1.2	1.2	1.2	1.2
122.5°	45.7	41.4	32.7	21.3	10.2	2.8	1.2	1.2	1.6	1.6	1.2
125°	30.3	28.0	21.7	13.0	6.3	1.2	1.2	1.2	1.6	1.6	1.2
127.5°	19.7	17.7	12.6	7.5	2.8	1.2	1.2	1.6	1.6	1.6	1.2
130°	11.0	9.8	7.5	4.3	1.2	1.2	1.2	1.6	1.6	1.6	1.2
132.5°	6.3	5.9	3.9	0.8	1.2	1.2	1.2	1.6	1.6	1.6	1.6
135°	1.6	0.8	0.8	0.8	1.2	1.2	1.6	1.6	2.0	2.0	1.6
137.5°	0.4	0.4	0.8	0.8	1.2	1.2	1.6	2.0	2.0	2.0	1.6
140°	0.4	0.4	0.8	1.2	1.2	1.2	1.6	2.0	2.0	2.0	1.6
142.5°	0.4	0.8	0.8	1.2	1.2	1.6	1.6	2.0	2.0	1.6	1.6
145°	0.4	0.8	0.8	1.2	1.2	1.6	1.6	2.0	1.6	1.6	1.6
147.5°	0.8	0.8	0.8	1.2	1.2	1.6	1.6	2.0	2.0	1.6	1.6
150°	0.4	0.8	0.8	1.2	1.6	1.6	1.6	2.0	1.6	1.6	1.6
152.5°	0.4	0.8	0.8	1.2	1.6	1.6	1.6	2.0	1.6	1.6	1.6
155°	0.8	0.8	0.8	1.2	1.6	1.6	1.6	2.0	1.6	1.6	2.0
157.5°	0.8	0.8	0.8	1.2	1.6	1.6	1.6	2.0	1.6	1.6	2.0
160°	0.8	0.8	0.8	1.2	1.2	1.6	1.6	1.6	1.6	1.6	1.6
162.5°	0.8	0.8	0.8	1.2	1.2	1.6	1.6	1.6	1.6	1.6	1.6
165°	0.8	0.8	0.8	0.8	1.2	1.2	1.6	1.6	1.6	1.6	1.6
167.5°	0.8	0.8	0.8	1.2	1.2	1.2	1.6	1.6	1.6	1.6	1.6
170°	0.8	0.8	0.8	1.2	1.2	1.2	1.6	2.0	2.0	2.0	2.0
172.5°	0.8	0.8	0.8	1.2	1.2	1.6	1.6	2.0	2.0	2.0	2.0
175°	0.8	0.8	0.8	1.2	1.2	1.6	1.6	2.0	2.0	2.0	2.0
177.5°	0.4	0.8	0.8	1.2	1.2	1.6	1.6	2.0	2.0	2.0	1.6
180°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2



TEST NUMBER: P550515

CATALOG NUMBER: FCC-X-2-LD4-1HI-35-UNV-81-96-ED1D-90

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	309.3	309.3	309.3
2.5°	294.3	288.8	287.2
5°	278.5	269.5	264.4
7.5°	262.8	250.6	244.7
10°	248.2	230.9	224.6
12.5°	230.9	210.8	200.9
15°	214.3	188.3	178.9
17.5°	195.8	166.7	155.6
20°	178.5	145.0	133.6
22.5°	158.8	123.7	111.1
25°	141.0	102.4	88.3
27.5°	121.3	80.8	68.6
30°	102.8	61.9	49.6
32.5°	85.1	45.3	34.3
35°	68.6	30.7	21.7
37.5°	52.8	18.9	11.0
40°	38.2	9.8	5.1
42.5°	25.6	4.7	2.8
45°	15.8	2.4	0.0
47.5°	9.1	0.0	0.0
50°	4.7	0.0	0.0
52.5°	2.0	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°	0.4	0.4	0.4
77.5°	0.4	0.8	1.2
80°	0.8	1.6	2.0
82.5°	1.6	2.0	2.0
85°	1.6	2.0	2.4
87.5°	2.0	2.4	2.8
90°	2.4	2.8	2.8
92.5°	2.4	3.2	3.2
95°	2.8	3.2	3.5
97.5°	3.2	3.5	3.5
100°	2.8	3.5	3.9
102.5°	2.4	3.5	3.5
105°	2.0	2.8	3.2



TEST NUMBER: P550515

CATALOG NUMBER: FCC-X-2-LD4-1HI-35-UNV-81-96-ED1D-90

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	1.6	2.0	2.0
115°	1.2	1.6	2.0
117.5°	1.2	1.6	1.6
120°	1.2	1.2	1.6
122.5°	1.2	1.2	1.6
125°	1.2	1.2	1.6
127.5°	1.6	1.2	1.2
130°	1.2	1.2	1.2
132.5°	1.6	1.2	1.2
135°	1.6	1.2	1.2
137.5°	1.6	1.2	1.2
140°	1.6	1.2	1.2
142.5°	1.6	1.2	1.2
145°	1.2	1.2	1.2
147.5°	1.2	1.2	1.2
150°	1.2	1.2	0.8
152.5°	1.2	0.8	0.8
155°	1.2	0.8	0.4
157.5°	1.6	0.8	0.4
160°	1.2	0.8	0.4
162.5°	1.2	0.8	0.4
165°	1.2	0.8	0.0
167.5°	1.2	0.8	0.4
170°	1.2	0.8	0.4
172.5°	1.2	0.8	0.4
175°	1.2	0.4	0.4
177.5°	1.2	0.4	0.4
180°	1.2	1.2	1.2



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	165.5	160.7	145.0	119.0	83.1	46.5	17.3	3.2	0.8	1.2	1.2
110°	144.2	140.3	124.1	98.9	67.0	34.7	11.4	2.0	1.2	1.2	1.2





107.5°	1.6	2.4	2.8
110°	1.6	2.0	2.4



(END OF REPORT)