

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: P550657

Luminaire Tested: **FCC-X-2-LD4-1HI-50-UNV-82-94-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: P550657
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-50-UNV-82-94-ED1D-90
Description: FCC CORNER MOUNT LUMINAIRE WITH .187 CLEAR PC FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES AND 5000K, AND 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

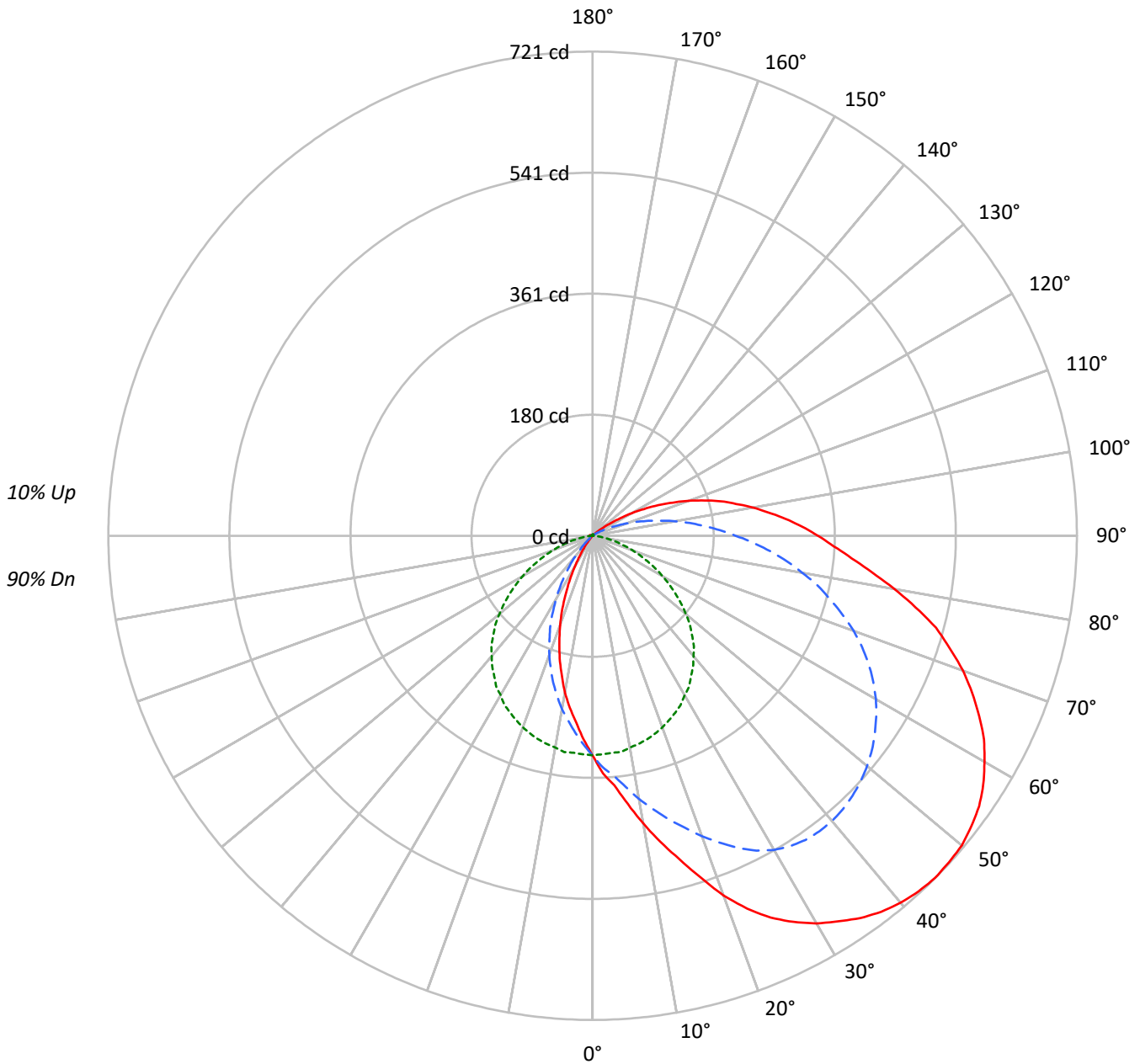
Lumens per Lamp: N/A
Luminaire Lumens: 1615.9 lumens
Efficiency: N/A
Efficacy: 74.5 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

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: P550657

CATALOG NUMBER: FCC-X-2-LD4-1HI-50-UNV-82-94-ED1D-90

Luminous Intensity Polar Plot





TEST NUMBER: P550657

CATALOG NUMBER: FCC-X-2-LD4-1HI-50-UNV-82-94-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°	3519	3519	3519
5°	3862	3467	2892
10°	4370	3424	2385
15°	4898	3381	1857
20°	5525	3326	1368
25°	6044	3262	899
30°	6430	3176	506
35°	6764	3085	223
40°	7061	2971	53
45°	7315	2828	0
50°	7529	2639	0
55°	7691	2400	0
60°	7772	2122	0
65°	7805	1806	0
70°	7779	1474	0
75°	7681	1086	6
80°	7369	664	34
85°	7123	315	46



TEST NUMBER: P550657

CATALOG NUMBER: FCC-X-2-LD4-1HI-50-UNV-82-94-ED1D-90

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	31.3	1.9
10°-20°	93.8	5.8
20°-30°	151.8	9.4
30°-40°	195.0	12.1
40°-50°	220.8	13.7
50°-60°	228.7	14.2
60°-70°	215.7	13.3
70°-80°	180.8	11.2
80°-90°	131.0	8.1
90°-100°	86.1	5.3
100°-110°	49.7	3.1
110°-120°	21.9	1.4
120°-130°	5.9	0.4
130°-140°	1.4	0.1
140°-150°	0.9	0.1
150°-160°	0.6	0.0
160°-170°	0.4	0.0
170°-180°	0.1	0.0
0°-30°	276.9	17.1
0°-40°	471.9	29.2
0°-60°	921.4	57.0
0°-90°	1448.9	89.7
90°-120°	157.8	9.8
90°-150°	165.9	10.3
90°-180°	167.0	10.3
0°-180°	1615.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	327	327	327	327	327	
5°	373	358	324	294	279	38
15°	498	437	314	226	189	144
25°	628	513	291	149	93	290
35°	695	553	255	72	23	436
45°	721	547	209	17	0	556
55°	702	513	151	0	0	627
65°	635	454	90	0	0	628
75°	529	366	38	0	0	555
85°	387	265	6	2	2	331
90°	336	213	2	2	3	184
95°	288	166	1	3	4	226
105°	198	86	1	2	3	209
115°	108	29	1	1	2	108
125°	32	4	2	1	2	32
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: P550657

CATALOG NUMBER: FCC-X-2-LD4-1HI-50-UNV-82-94-ED1D-90

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
0°	326.9	326.9	326.9	326.9	326.9	326.9	326.9	326.9	326.9	326.9	326.9
2.5°	354.4	353.9	352.7	350.6	347.7	342.7	338.5	334.8	329.8	325.6	317.7
5°	373.1	371.0	369.4	367.3	360.6	356.0	348.5	340.2	332.3	324.4	308.6
7.5°	403.1	399.7	397.3	391.4	382.3	371.8	360.2	352.3	346.9	324.8	297.7
10°	435.1	432.2	427.2	416.8	405.6	390.6	373.9	355.2	338.5	320.2	288.2
12.5°	466.8	462.6	455.5	442.2	426.4	407.7	384.8	362.7	339.0	317.3	276.9
15°	498.4	493.9	486.4	470.1	449.3	424.7	396.8	368.9	341.0	313.6	265.3
17.5°	533.0	526.8	515.5	497.2	471.0	440.6	407.7	373.9	340.2	309.0	252.8
20°	570.1	561.3	549.2	524.7	493.9	458.0	418.5	378.9	339.8	303.6	238.6
22.5°	600.9	592.1	578.8	553.4	516.3	472.6	427.6	382.3	338.1	297.3	225.3
25°	627.5	620.4	605.9	576.7	537.6	488.0	436.4	384.8	335.6	290.7	211.1
27.5°	648.3	641.7	625.4	595.5	555.5	501.8	443.1	386.0	332.3	284.0	196.5
30°	666.7	660.0	640.4	609.6	567.6	512.6	449.7	386.4	328.1	274.0	180.7
32.5°	680.8	674.6	654.6	621.7	575.9	520.1	453.5	386.0	322.7	266.9	163.6
35°	695.0	688.7	665.4	630.4	582.1	523.4	456.4	383.9	316.1	255.3	147.4
37.5°	705.8	698.7	675.0	636.3	585.0	524.3	456.0	381.0	309.0	245.7	131.2
40°	713.3	705.8	680.4	639.6	585.9	523.0	452.6	376.0	300.6	233.6	114.1
42.5°	718.3	710.0	682.9	644.6	584.2	519.7	447.6	369.8	291.5	223.2	97.9
45°	720.8	712.1	683.3	640.4	581.3	513.4	440.1	361.9	281.5	209.0	81.6
47.5°	719.5	710.0	681.2	635.9	575.9	506.8	431.8	352.3	269.4	196.5	66.2
50°	717.5	707.5	676.7	630.0	568.4	498.4	422.7	340.6	256.9	181.1	52.5
52.5°	710.8	700.8	671.7	621.7	559.6	488.9	410.2	328.5	243.6	166.1	40.0
55°	702.5	693.3	662.9	614.2	548.4	477.2	398.5	315.6	230.7	150.7	28.7
57.5°	689.6	681.2	652.1	602.1	537.2	464.3	385.6	301.5	214.4	135.3	20.0
60°	673.7	665.4	637.1	588.4	524.3	449.7	371.4	286.9	199.9	119.9	12.5
62.5°	657.1	649.2	619.6	571.3	508.0	434.3	356.0	272.3	184.5	105.8	7.5
65°	635.0	627.5	600.9	550.9	490.1	417.7	339.0	254.8	168.6	89.9	4.2
67.5°	611.7	605.0	578.0	532.2	469.3	399.3	321.5	237.8	152.0	76.2	2.1
70°	586.7	578.4	553.4	506.8	448.1	378.5	302.3	220.3	136.2	62.9	0.0
72.5°	557.6	551.3	527.2	483.0	423.5	356.4	282.7	201.1	118.7	50.0	0.4
75°	529.3	521.3	499.3	457.6	399.3	333.1	261.1	183.2	101.6	38.3	0.4
77.5°	492.6	490.1	469.3	428.9	376.4	310.6	237.4	161.6	85.4	27.5	0.4
80°	456.0	453.5	437.2	400.2	349.8	284.0	215.3	141.2	69.5	18.3	0.4
82.5°	419.7	416.4	401.0	370.2	322.7	261.5	192.4	120.8	55.0	11.2	0.4
85°	387.3	383.1	366.4	338.1	294.8	236.1	168.6	100.8	40.8	6.2	0.8
87.5°	359.4	356.4	338.1	309.0	266.5	212.4	147.8	81.6	28.7	2.9	1.2
90°	335.6	329.4	313.1	282.3	239.8	186.1	125.8	65.4	19.2	1.7	1.7
92.5°	312.3	306.9	289.0	257.3	216.1	163.6	104.5	50.0	12.1	0.8	2.1
95°	288.2	282.3	264.8	235.7	192.0	140.7	85.8	36.6	6.7	0.8	2.1
97.5°	264.4	259.0	240.7	211.5	170.3	120.8	67.9	25.8	3.3	0.8	1.7
100°	242.3	236.1	219.4	190.3	148.7	100.8	52.5	16.7	2.1	0.8	1.7
102.5°	219.0	214.0	197.0	168.6	126.2	82.0	39.1	10.4	0.8	0.8	1.2
105°	198.2	192.0	175.3	146.2	107.4	64.5	27.5	6.2	0.8	0.8	1.2



TEST NUMBER: P550657

CATALOG NUMBER: FCC-X-2-LD4-1HI-50-UNV-82-94-ED1D-90

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	129.1	124.1	109.5	84.9	54.5	25.4	7.5	1.2	1.2	1.2	1.2
115°	107.8	100.4	87.4	65.8	40.4	16.7	3.7	1.2	1.2	1.2	1.2
117.5°	86.2	79.9	70.8	50.0	26.6	10.8	2.1	1.2	1.2	1.2	1.2
120°	67.5	61.6	51.2	34.6	17.9	6.2	0.8	1.2	1.2	1.2	1.2
122.5°	48.3	43.7	34.6	22.5	10.8	2.9	1.2	1.2	1.7	1.7	1.2
125°	32.1	29.6	22.9	13.7	6.7	1.2	1.2	1.2	1.7	1.7	1.2
127.5°	20.8	18.7	13.3	7.9	2.9	1.2	1.2	1.7	1.7	1.7	1.2
130°	11.7	10.4	7.9	4.6	1.2	1.2	1.2	1.7	1.7	1.7	1.2
132.5°	6.7	6.2	4.2	0.8	1.2	1.2	1.2	1.7	1.7	1.7	1.7
135°	1.7	0.8	0.8	0.8	1.2	1.2	1.7	1.7	2.1	2.1	1.7
137.5°	0.4	0.4	0.8	0.8	1.2	1.2	1.7	2.1	2.1	2.1	1.7
140°	0.4	0.4	0.8	1.2	1.2	1.2	1.7	2.1	2.1	2.1	1.7
142.5°	0.4	0.8	0.8	1.2	1.2	1.7	1.7	2.1	2.1	1.7	1.7
145°	0.4	0.8	0.8	1.2	1.2	1.7	1.7	2.1	1.7	1.7	1.7
147.5°	0.8	0.8	0.8	1.2	1.2	1.7	1.7	2.1	2.1	1.7	1.7
150°	0.4	0.8	0.8	1.2	1.7	1.7	1.7	2.1	1.7	1.7	1.7
152.5°	0.4	0.8	0.8	1.2	1.7	1.7	1.7	2.1	1.7	1.7	1.7
155°	0.8	0.8	0.8	1.2	1.7	1.7	1.7	2.1	1.7	1.7	2.1
157.5°	0.8	0.8	0.8	1.2	1.7	1.7	1.7	2.1	1.7	1.7	2.1
160°	0.8	0.8	0.8	1.2	1.2	1.7	1.7	1.7	1.7	1.7	1.7
162.5°	0.8	0.8	0.8	1.2	1.2	1.7	1.7	1.7	1.7	1.7	1.7
165°	0.8	0.8	0.8	0.8	1.2	1.2	1.7	1.7	1.7	1.7	1.7
167.5°	0.8	0.8	0.8	1.2	1.2	1.2	1.7	1.7	1.7	1.7	1.7
170°	0.8	0.8	0.8	1.2	1.2	1.2	1.7	2.1	2.1	2.1	2.1
172.5°	0.8	0.8	0.8	1.2	1.2	1.7	1.7	2.1	2.1	2.1	2.1
175°	0.8	0.8	0.8	1.2	1.2	1.7	1.7	2.1	2.1	2.1	2.1
177.5°	0.4	0.8	0.8	1.2	1.2	1.7	1.7	2.1	2.1	2.1	1.7
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: P550657

CATALOG NUMBER: FCC-X-2-LD4-1HI-50-UNV-82-94-ED1D-90

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	326.9	326.9	326.9
2.5°	311.1	305.2	303.6
5°	294.4	284.8	279.4
7.5°	277.7	264.8	258.6
10°	262.3	244.0	237.4
12.5°	244.0	222.8	212.4
15°	226.5	199.0	189.0
17.5°	207.0	176.1	164.5
20°	188.6	153.2	141.2
22.5°	167.8	130.8	117.4
25°	149.1	108.3	93.3
27.5°	128.3	85.4	72.5
30°	108.7	65.4	52.5
32.5°	89.9	47.9	36.2
35°	72.5	32.5	22.9
37.5°	55.8	20.0	11.7
40°	40.4	10.4	5.4
42.5°	27.1	5.0	2.9
45°	16.7	2.5	0.0
47.5°	9.6	0.0	0.0
50°	5.0	0.0	0.0
52.5°	2.1	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°	0.4	0.4	0.4
77.5°	0.4	0.8	1.2
80°	0.8	1.7	2.1
82.5°	1.7	2.1	2.1
85°	1.7	2.1	2.5
87.5°	2.1	2.5	2.9
90°	2.5	2.9	2.9
92.5°	2.5	3.3	3.3
95°	2.9	3.3	3.7
97.5°	3.3	3.7	3.7
100°	2.9	3.7	4.2
102.5°	2.5	3.7	3.7
105°	2.1	2.9	3.3



TEST NUMBER: P550657

CATALOG NUMBER: FCC-X-2-LD4-1HI-50-UNV-82-94-ED1D-90

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	1.7	2.1	2.1
115°	1.2	1.7	2.1
117.5°	1.2	1.7	1.7
120°	1.2	1.2	1.7
122.5°	1.2	1.2	1.7
125°	1.2	1.2	1.7
127.5°	1.7	1.2	1.2
130°	1.2	1.2	1.2
132.5°	1.7	1.2	1.2
135°	1.7	1.2	1.2
137.5°	1.7	1.2	1.2
140°	1.7	1.2	1.2
142.5°	1.7	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°	1.7	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°	174.9	169.9	153.2	125.8	87.9	49.1	18.3	3.3	0.8	1.2	1.2
110°	152.4	148.2	131.2	104.5	70.8	36.6	12.1	2.1	1.2	1.2	1.2





107.5°	1.7	2.5	2.9
110°	1.7	2.1	2.5



(END OF REPORT)