

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: P550462

Luminaire Tested: **FCC-X-2-LD4-1HI-30-UNV-82-87-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: P550462
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-30-UNV-82-87-ED1D
Description: FCC CORNER MOUNT LUMINAIRE WITH .187 CLEAR PC FIXTURE SIDE AND .375 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 3000K, AND 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

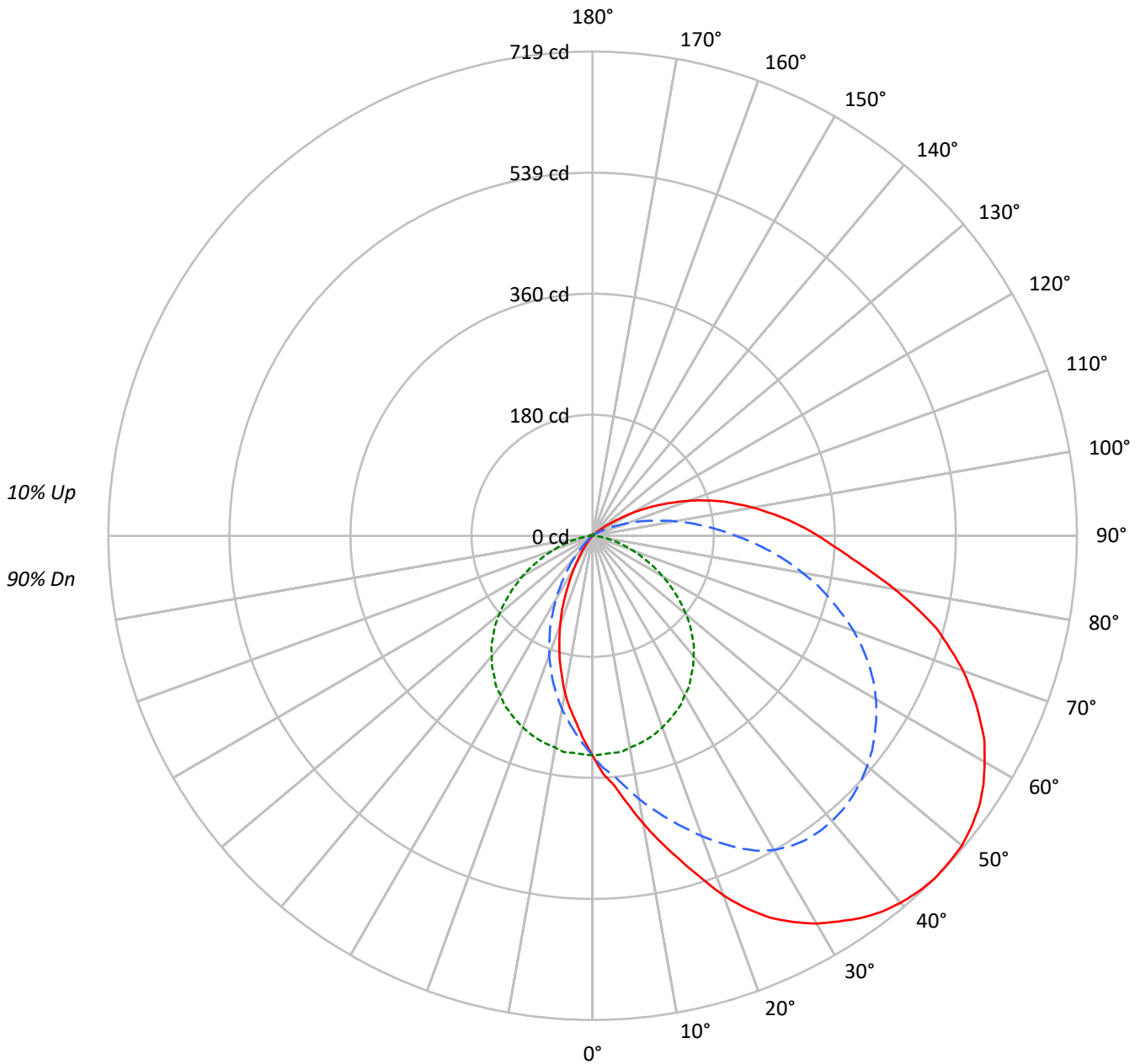
Lumens per Lamp: N/A
Luminaire Lumens: 1612.0 lumens
Efficiency: N/A
Efficacy: 74.3 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

Input Watts (W): 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: P550462

CATALOG NUMBER: FCC-X-2-LD4-1HI-30-UNV-82-87-ED1D

Luminous Intensity Polar Plot





TEST NUMBER: P550462

CATALOG NUMBER: FCC-X-2-LD4-1HI-30-UNV-82-87-ED1D

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°	3510	3510	3510
5°	3853	3459	2885
10°	4360	3416	2379
15°	4886	3373	1853
20°	5510	3318	1365
25°	6029	3253	896
30°	6414	3168	504
35°	6748	3076	222
40°	7043	2963	53
45°	7297	2821	0
50°	7510	2634	0
55°	7672	2395	0
60°	7754	2116	0
65°	7785	1802	0
70°	7760	1469	0
75°	7660	1083	6
80°	7350	664	34
85°	7105	315	46



TEST NUMBER: P550462

CATALOG NUMBER: FCC-X-2-LD4-1HI-30-UNV-82-87-ED1D

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	31.2	1.9
10°-20°	93.5	5.8
20°-30°	151.4	9.4
30°-40°	194.5	12.1
40°-50°	220.2	13.7
50°-60°	228.2	14.2
60°-70°	215.2	13.3
70°-80°	180.3	11.2
80°-90°	130.7	8.1
90°-100°	85.9	5.3
100°-110°	49.6	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°	276.2	17.1
0°-40°	470.7	29.2
0°-60°	919.1	57.0
0°-90°	1445.3	89.7
90°-120°	157.4	9.8
90°-150°	165.5	10.3
90°-180°	167.0	10.4
0°-180°	1612.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	326	326	326	326	326	
5°	372	357	324	294	279	38
15°	497	436	313	226	189	143
25°	626	512	290	149	93	289
35°	693	551	255	72	23	435
45°	719	546	208	17	0	555
55°	701	512	150	0	0	626
65°	633	453	90	0	0	627
75°	528	365	38	0	0	554
85°	386	265	6	2	2	330
90°	335	212	2	2	3	184
95°	287	166	1	3	4	225
105°	198	86	1	2	3	209
115°	108	28	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: P550462

CATALOG NUMBER: FCC-X-2-LD4-1HI-30-UNV-82-87-ED1D

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
0°	326.1	326.1	326.1	326.1	326.1	326.1	326.1	326.1	326.1	326.1	326.1
2.5°	353.5	353.1	351.8	349.7	346.8	341.9	337.7	334.0	329.0	324.8	316.9
5°	372.2	370.1	368.4	366.4	359.7	355.1	347.7	339.4	331.5	323.6	307.8
7.5°	402.1	398.8	396.3	390.5	381.3	370.9	359.3	351.4	346.0	324.0	297.0
10°	434.1	431.2	426.2	415.8	404.6	389.6	373.0	354.3	337.7	319.4	287.4
12.5°	465.6	461.5	454.4	441.1	425.3	406.7	383.8	361.8	338.1	316.5	276.2
15°	497.2	492.6	485.2	469.0	448.2	423.7	395.9	368.0	340.2	312.8	264.6
17.5°	531.7	525.4	514.2	496.0	469.8	439.5	406.7	373.0	339.4	308.2	252.1
20°	568.6	559.9	547.9	523.4	492.6	456.9	417.5	378.0	338.9	302.8	238.0
22.5°	599.4	590.7	577.4	552.0	515.1	471.4	426.6	381.3	337.3	296.6	224.7
25°	626.0	618.9	604.4	575.3	536.2	486.8	435.3	383.8	334.8	289.9	210.6
27.5°	646.7	640.1	623.9	594.0	554.1	500.5	442.0	385.1	331.5	283.3	196.1
30°	665.0	658.4	638.8	608.1	566.2	511.3	448.6	385.5	327.3	273.3	180.3
32.5°	679.1	672.9	653.0	620.2	574.5	518.8	452.3	385.1	321.9	266.3	163.2
35°	693.3	687.0	663.8	628.9	580.7	522.1	455.3	383.0	315.3	254.6	147.0
37.5°	704.1	697.0	673.3	634.7	583.6	523.0	454.8	380.1	308.2	245.1	130.8
40°	711.5	704.1	678.7	638.0	584.4	521.7	451.5	375.1	299.9	233.0	113.8
42.5°	716.5	708.2	681.2	643.0	582.8	518.4	446.5	368.9	290.8	222.6	97.6
45°	719.0	710.3	681.6	638.8	579.9	512.2	439.1	361.0	280.8	208.5	81.4
47.5°	717.8	708.2	679.6	634.3	574.5	505.5	430.7	351.4	268.7	196.1	66.0
50°	715.7	705.7	675.0	628.5	567.0	497.2	421.6	339.8	256.3	180.7	52.3
52.5°	709.0	699.1	670.0	620.2	558.3	487.6	409.1	327.7	243.0	165.7	39.9
55°	700.7	691.6	661.3	612.7	547.0	476.0	397.5	314.9	230.1	150.4	28.7
57.5°	687.9	679.6	650.5	600.6	535.8	463.1	384.6	300.7	213.9	135.0	19.9
60°	672.1	663.8	635.5	586.9	523.0	448.6	370.5	286.2	199.4	119.6	12.5
62.5°	655.5	647.6	618.1	569.9	506.8	433.2	355.1	271.7	184.0	105.5	7.5
65°	633.4	626.0	599.4	549.5	488.9	416.6	338.1	254.2	168.2	89.7	4.2
67.5°	610.2	603.5	576.5	530.8	468.1	398.3	320.7	237.2	151.6	76.0	2.1
70°	585.3	577.0	552.0	505.5	446.9	377.6	301.6	219.7	135.8	62.7	0.0
72.5°	556.2	550.0	525.9	481.8	422.4	355.6	282.0	200.6	118.4	49.8	0.4
75°	527.9	520.0	498.0	456.5	398.3	332.3	260.4	182.8	101.4	38.2	0.4
77.5°	491.4	488.9	468.1	427.8	375.5	309.9	236.8	161.2	85.2	27.4	0.4
80°	454.8	452.3	436.1	399.2	348.9	283.3	214.7	140.8	69.4	18.3	0.4
82.5°	418.7	415.4	400.0	369.3	321.9	260.9	191.9	120.5	54.8	11.2	0.4
85°	386.3	382.1	365.5	337.3	294.1	235.5	168.2	100.5	40.7	6.2	0.8
87.5°	358.5	355.6	337.3	308.2	265.8	211.8	147.5	81.4	28.7	2.9	1.2
90°	334.8	328.6	312.4	281.6	239.3	185.7	125.4	65.2	19.1	1.7	1.7
92.5°	311.5	306.1	288.3	256.7	215.6	163.2	104.3	49.8	12.0	0.8	2.1
95°	287.4	281.6	264.2	235.1	191.5	140.4	85.6	36.6	6.6	0.8	2.1
97.5°	263.8	258.4	240.1	211.0	169.9	120.5	67.7	25.8	3.3	0.8	1.7
100°	241.7	235.5	218.9	189.8	148.3	100.5	52.3	16.6	2.1	0.8	1.7
102.5°	218.5	213.5	196.5	168.2	125.9	81.8	39.0	10.4	0.8	0.8	1.2
105°	197.7	191.5	174.9	145.8	107.2	64.4	27.4	6.2	0.8	0.8	1.2



TEST NUMBER: P550462

CATALOG NUMBER: FCC-X-2-LD4-1HI-30-UNV-82-87-ED1D

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	128.8	123.8	109.2	84.7	54.4	25.3	7.5	1.2	1.2	1.2	1.2
115°	107.6	100.1	87.2	65.6	40.3	16.6	3.7	1.2	1.2	1.2	1.2
117.5°	86.0	79.8	70.6	49.8	26.6	10.8	2.1	1.2	1.2	1.2	1.2
120°	67.3	61.5	51.1	34.5	17.9	6.2	0.8	1.2	1.2	1.2	1.2
122.5°	48.2	43.6	34.5	22.4	10.8	2.9	1.2	1.2	1.7	1.7	1.2
125°	32.0	29.5	22.8	13.7	6.6	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°	11.6	10.4	7.9	4.6	1.2	1.2	1.2	1.7	1.7	1.7	1.2
132.5°	6.6	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: P550462

CATALOG NUMBER: FCC-X-2-LD4-1HI-30-UNV-82-87-ED1D

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	326.1	326.1	326.1
2.5°	310.3	304.5	302.8
5°	293.7	284.1	278.7
7.5°	277.1	264.2	257.9
10°	261.7	243.4	236.8
12.5°	243.4	222.2	211.8
15°	226.0	198.5	188.6
17.5°	206.4	175.7	164.1
20°	188.2	152.9	140.8
22.5°	167.4	130.4	117.1
25°	148.7	108.0	93.0
27.5°	127.9	85.2	72.3
30°	108.4	65.2	52.3
32.5°	89.7	47.8	36.1
35°	72.3	32.4	22.8
37.5°	55.7	19.9	11.6
40°	40.3	10.4	5.4
42.5°	27.0	5.0	2.9
45°	16.6	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: P550462

CATALOG NUMBER: FCC-X-2-LD4-1HI-30-UNV-82-87-ED1D

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°	174.5	169.5	152.9	125.4	87.6	49.0	18.3	3.3	0.8	1.2	1.2
110°	152.0	147.9	130.8	104.3	70.6	36.6	12.0	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)