

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: P550486

Luminaire Tested: **FCC-X-2-LD4-1HI-30-UNV-93-97-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: P550486
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-93-97-ED1D
Description: FCC CORNER MOUNT LUMINAIRE WITH .156 CLEAR TEMPERED GLASS FIXTURE
SIDE AND .375 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES AND 3000K,
AND 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

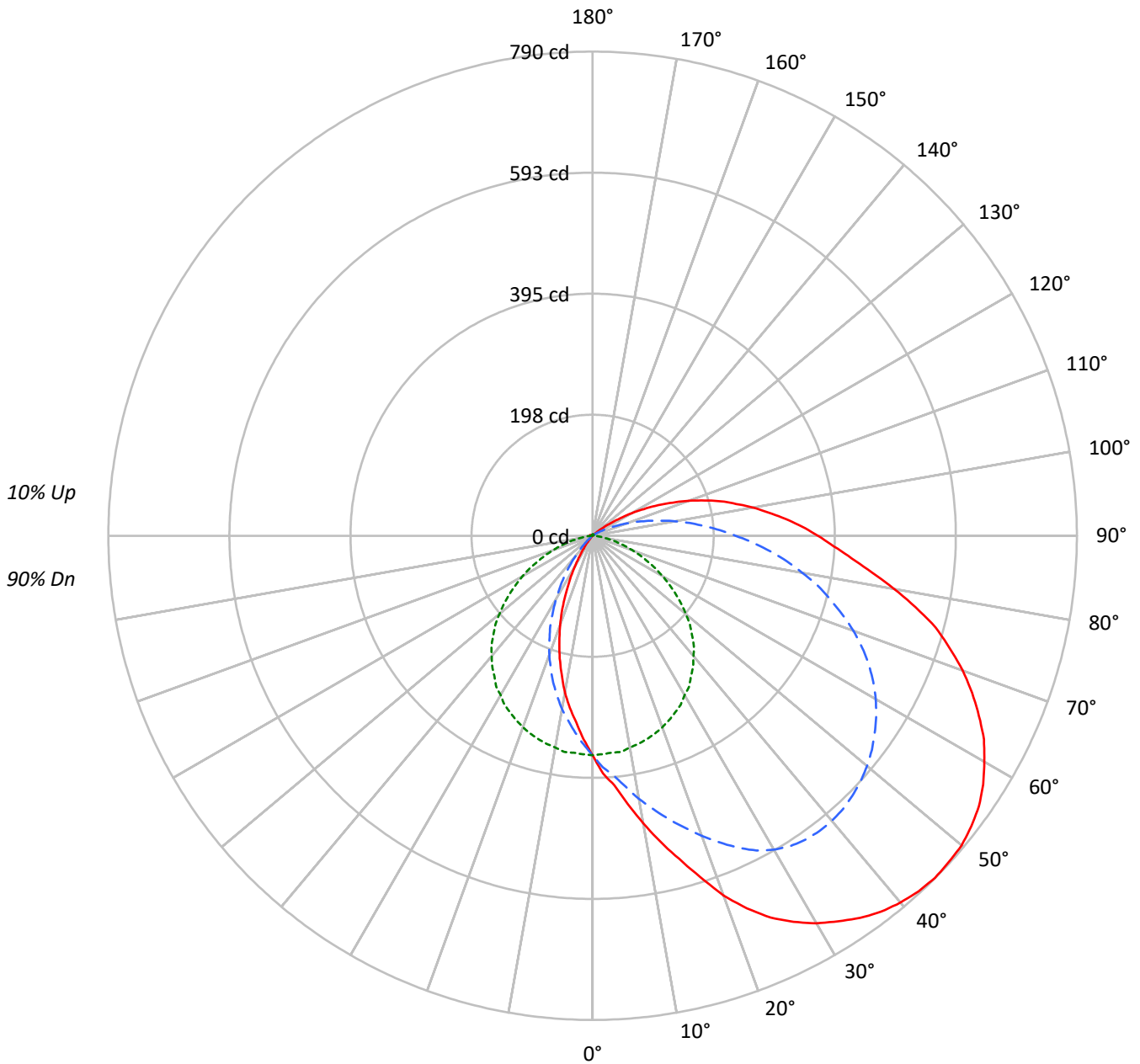
Lumens per Lamp: N/A
Luminaire Lumens: 1770.0 lumens
Efficiency: N/A
Efficacy: 81.6 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

Input Watts (W): 21.7
Input Voltage (V): NR
Input Current (A_{in}): 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: P550486

CATALOG NUMBER: FCC-X-2-LD4-1HI-30-UNV-93-97-ED1D

Luminous Intensity Polar Plot





TEST NUMBER: P550486

CATALOG NUMBER: FCC-X-2-LD4-1HI-30-UNV-93-97-ED1D

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°	3853	3853	3853
5°	4231	3797	3168
10°	4787	3750	2612
15°	5365	3703	2035
20°	6051	3643	1498
25°	6619	3572	984
30°	7043	3479	555
35°	7409	3378	244
40°	7734	3254	58
45°	8012	3099	0
50°	8245	2892	0
55°	8424	2629	0
60°	8513	2325	0
65°	8548	1978	0
70°	8520	1614	0
75°	8412	1191	7
80°	8071	729	37
85°	7802	346	50



TEST NUMBER: P550486

CATALOG NUMBER: FCC-X-2-LD4-1HI-30-UNV-93-97-ED1D

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	34.3	1.9
10°-20°	102.7	5.8
20°-30°	166.3	9.4
30°-40°	213.6	12.1
40°-50°	241.8	13.7
50°-60°	250.5	14.2
60°-70°	236.3	13.3
70°-80°	198.0	11.2
80°-90°	143.5	8.1
90°-100°	94.3	5.3
100°-110°	54.5	3.1
110°-120°	24.0	1.4
120°-130°	6.5	0.4
130°-140°	1.5	0.1
140°-150°	1.0	0.1
150°-160°	0.7	0.0
160°-170°	0.4	0.0
170°-180°	0.1	0.0
0°-30°	303.3	17.1
0°-40°	516.9	29.2
0°-60°	1009.2	57.0
0°-90°	1587.0	89.7
90°-120°	172.8	9.8
90°-150°	181.8	10.3
90°-180°	183.0	10.3
0°-180°	1770.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	358	358	358	358	358	
5°	409	392	355	322	306	41
15°	546	479	343	248	207	157
25°	687	562	318	163	102	318
35°	761	605	280	79	25	477
45°	790	600	229	18	0	610
55°	769	562	165	0	0	687
65°	696	497	98	0	0	688
75°	580	401	42	0	0	608
85°	424	291	7	2	3	362
90°	368	233	2	3	3	202
95°	316	182	1	3	4	248
105°	217	94	1	2	4	229
115°	118	31	1	1	2	118
125°	35	4	2	1	2	35
135°	2	1	2	2	1	3
145°	0	2	2	1	1	0
155°	1	2	2	1	0	0
165°	1	1	2	1	0	0
175°	1	2	2	1	0	0
180°	1	1	1	1	1	



TEST NUMBER: P550486

CATALOG NUMBER: FCC-X-2-LD4-1HI-30-UNV-93-97-ED1D

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
0°	358.0	358.0	358.0	358.0	358.0	358.0	358.0	358.0	358.0	358.0	358.0
2.5°	388.1	387.7	386.3	384.0	380.8	375.4	370.8	366.7	361.2	356.7	348.0
5°	408.7	406.4	404.5	402.3	395.0	390.0	381.7	372.6	364.0	355.3	338.0
7.5°	441.5	437.8	435.1	428.7	418.7	407.3	394.5	385.8	379.9	355.7	326.1
10°	476.6	473.4	467.9	456.5	444.2	427.8	409.6	389.0	370.8	350.7	315.6
12.5°	511.3	506.7	499.0	484.4	467.0	446.5	421.4	397.3	371.3	347.5	303.3
15°	545.9	540.9	532.7	514.9	492.1	465.2	434.7	404.1	373.5	343.4	290.5
17.5°	583.8	577.0	564.6	544.6	515.8	482.5	446.5	409.6	372.6	338.4	276.8
20°	624.4	614.8	601.6	574.7	540.9	501.7	458.4	415.0	372.2	332.5	261.3
22.5°	658.1	648.6	634.0	606.1	565.5	517.7	468.4	418.7	370.3	325.6	246.7
25°	687.3	679.6	663.6	631.7	588.8	534.5	478.0	421.4	367.6	318.3	231.2
27.5°	710.1	702.8	685.0	652.2	608.4	549.6	485.3	422.8	364.0	311.1	215.3
30°	730.2	722.9	701.5	667.7	621.6	561.4	492.6	423.2	359.4	300.1	197.9
32.5°	745.7	738.9	717.0	680.9	630.8	569.7	496.7	422.8	353.5	292.4	179.2
35°	761.2	754.4	728.8	690.5	637.6	573.3	499.9	420.5	346.2	279.6	161.5
37.5°	773.1	765.3	739.3	696.9	640.8	574.2	499.4	417.3	338.4	269.1	143.7
40°	781.3	773.1	745.2	700.6	641.7	572.8	495.8	411.8	329.3	255.9	125.0
42.5°	786.8	777.6	748.0	706.0	639.9	569.2	490.3	405.0	319.3	244.5	107.2
45°	789.5	779.9	748.4	701.5	636.7	562.4	482.1	396.3	308.3	229.0	89.4
47.5°	788.1	777.6	746.2	696.4	630.8	555.1	473.0	385.8	295.1	215.3	72.5
50°	785.8	774.9	741.1	690.1	622.6	545.9	462.9	373.1	281.4	198.4	57.5
52.5°	778.5	767.6	735.7	680.9	613.0	535.4	449.2	359.9	266.8	182.0	43.8
55°	769.4	759.4	726.1	672.7	600.7	522.7	436.5	345.7	252.7	165.1	31.5
57.5°	755.3	746.2	714.2	659.5	588.4	508.5	422.3	330.2	234.9	148.2	21.9
60°	737.9	728.8	697.8	644.5	574.2	492.6	406.8	314.2	218.9	131.4	13.7
62.5°	719.7	711.0	678.7	625.8	556.4	475.7	390.0	298.3	202.0	115.8	8.2
65°	695.5	687.3	658.1	603.4	536.8	457.5	371.3	279.1	184.7	98.5	4.6
67.5°	670.0	662.7	633.0	582.9	514.0	437.4	352.1	260.4	166.5	83.5	2.3
70°	642.6	633.5	606.1	555.1	490.7	414.6	331.1	241.3	149.1	68.9	0.0
72.5°	610.7	603.9	577.4	529.1	463.8	390.4	309.7	220.3	130.0	54.7	0.5
75°	579.7	571.0	546.8	501.2	437.4	364.9	286.0	200.7	111.3	42.0	0.5
77.5°	539.6	536.8	514.0	469.8	412.3	340.2	260.0	177.0	93.5	30.1	0.5
80°	499.4	496.7	478.9	438.3	383.1	311.1	235.8	154.6	76.2	20.1	0.5
82.5°	459.7	456.1	439.2	405.5	353.5	286.4	210.7	132.3	60.2	12.3	0.5
85°	424.2	419.6	401.4	370.3	322.9	258.6	184.7	110.4	44.7	6.8	0.9
87.5°	393.6	390.4	370.3	338.4	291.9	232.6	161.9	89.4	31.5	3.2	1.4
90°	367.6	360.8	343.0	309.2	262.7	203.9	137.7	71.6	21.0	1.8	1.8
92.5°	342.1	336.1	316.5	281.9	236.7	179.2	114.5	54.7	13.2	0.9	2.3
95°	315.6	309.2	290.1	258.1	210.3	154.2	94.0	40.1	7.3	0.9	2.3
97.5°	289.6	283.7	263.6	231.7	186.5	132.3	74.3	28.3	3.6	0.9	1.8
100°	265.4	258.6	240.4	208.4	162.8	110.4	57.5	18.2	2.3	0.9	1.8
102.5°	239.9	234.4	215.7	184.7	138.2	89.8	42.9	11.4	0.9	0.9	1.4
105°	217.1	210.3	192.0	160.1	117.7	70.7	30.1	6.8	0.9	0.9	1.4



TEST NUMBER: P550486

CATALOG NUMBER: FCC-X-2-LD4-1HI-30-UNV-93-97-ED1D

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	141.4	135.9	120.0	93.0	59.7	27.8	8.2	1.4	1.4	1.4	1.4
115°	118.1	109.9	95.8	72.1	44.2	18.2	4.1	1.4	1.4	1.4	1.4
117.5°	94.4	87.6	77.5	54.7	29.2	11.9	2.3	1.4	1.4	1.4	1.4
120°	73.9	67.5	56.1	37.9	19.6	6.8	0.9	1.4	1.4	1.4	1.4
122.5°	52.9	47.9	37.9	24.6	11.9	3.2	1.4	1.4	1.8	1.8	1.4
125°	35.1	32.4	25.1	15.1	7.3	1.4	1.4	1.4	1.8	1.8	1.4
127.5°	22.8	20.5	14.6	8.7	3.2	1.4	1.4	1.8	1.8	1.8	1.4
130°	12.8	11.4	8.7	5.0	1.4	1.4	1.4	1.8	1.8	1.8	1.4
132.5°	7.3	6.8	4.6	0.9	1.4	1.4	1.4	1.8	1.8	1.8	1.8
135°	1.8	0.9	0.9	0.9	1.4	1.4	1.8	1.8	2.3	2.3	1.8
137.5°	0.5	0.5	0.9	0.9	1.4	1.4	1.8	2.3	2.3	2.3	1.8
140°	0.5	0.5	0.9	1.4	1.4	1.4	1.8	2.3	2.3	2.3	1.8
142.5°	0.5	0.9	0.9	1.4	1.4	1.8	1.8	2.3	2.3	1.8	1.8
145°	0.5	0.9	0.9	1.4	1.4	1.8	1.8	2.3	1.8	1.8	1.8
147.5°	0.9	0.9	0.9	1.4	1.4	1.8	1.8	2.3	2.3	1.8	1.8
150°	0.5	0.9	0.9	1.4	1.8	1.8	1.8	2.3	1.8	1.8	1.8
152.5°	0.5	0.9	0.9	1.4	1.8	1.8	1.8	2.3	1.8	1.8	1.8
155°	0.9	0.9	0.9	1.4	1.8	1.8	1.8	2.3	1.8	1.8	2.3
157.5°	0.9	0.9	0.9	1.4	1.8	1.8	1.8	2.3	1.8	1.8	2.3
160°	0.9	0.9	0.9	1.4	1.4	1.8	1.8	1.8	1.8	1.8	1.8
162.5°	0.9	0.9	0.9	1.4	1.4	1.8	1.8	1.8	1.8	1.8	1.8
165°	0.9	0.9	0.9	0.9	1.4	1.4	1.8	1.8	1.8	1.8	1.8
167.5°	0.9	0.9	0.9	1.4	1.4	1.4	1.8	1.8	1.8	1.8	1.8
170°	0.9	0.9	0.9	1.4	1.4	1.4	1.8	2.3	2.3	2.3	2.3
172.5°	0.9	0.9	0.9	1.4	1.4	1.8	1.8	2.3	2.3	2.3	2.3
175°	0.9	0.9	0.9	1.4	1.4	1.8	1.8	2.3	2.3	2.3	2.3
177.5°	0.5	0.9	0.9	1.4	1.4	1.8	1.8	2.3	2.3	2.3	1.8
180°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4



TEST NUMBER: P550486

CATALOG NUMBER: FCC-X-2-LD4-1HI-30-UNV-93-97-ED1D

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	358.0	358.0	358.0
2.5°	340.7	334.3	332.5
5°	322.5	312.0	306.0
7.5°	304.2	290.1	283.2
10°	287.3	267.3	260.0
12.5°	267.3	244.0	232.6
15°	248.1	218.0	207.1
17.5°	226.7	192.9	180.2
20°	206.6	167.8	154.6
22.5°	183.8	143.2	128.6
25°	163.3	118.6	102.2
27.5°	140.5	93.5	79.4
30°	119.0	71.6	57.5
32.5°	98.5	52.5	39.7
35°	79.4	35.6	25.1
37.5°	61.1	21.9	12.8
40°	44.2	11.4	5.9
42.5°	29.6	5.5	3.2
45°	18.2	2.7	0.0
47.5°	10.5	0.0	0.0
50°	5.5	0.0	0.0
52.5°	2.3	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°	0.5	0.5	0.5
77.5°	0.5	0.9	1.4
80°	0.9	1.8	2.3
82.5°	1.8	2.3	2.3
85°	1.8	2.3	2.7
87.5°	2.3	2.7	3.2
90°	2.7	3.2	3.2
92.5°	2.7	3.6	3.6
95°	3.2	3.6	4.1
97.5°	3.6	4.1	4.1
100°	3.2	4.1	4.6
102.5°	2.7	4.1	4.1
105°	2.3	3.2	3.6



TEST NUMBER: P550486

CATALOG NUMBER: FCC-X-2-LD4-1HI-30-UNV-93-97-ED1D

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	1.8	2.3	2.3
115°	1.4	1.8	2.3
117.5°	1.4	1.8	1.8
120°	1.4	1.4	1.8
122.5°	1.4	1.4	1.8
125°	1.4	1.4	1.8
127.5°	1.8	1.4	1.4
130°	1.4	1.4	1.4
132.5°	1.8	1.4	1.4
135°	1.8	1.4	1.4
137.5°	1.8	1.4	1.4
140°	1.8	1.4	1.4
142.5°	1.8	1.4	1.4
145°	1.4	1.4	1.4
147.5°	1.4	1.4	1.4
150°	1.4	1.4	0.9
152.5°	1.4	0.9	0.9
155°	1.4	0.9	0.5
157.5°	1.8	0.9	0.5
160°	1.4	0.9	0.5
162.5°	1.4	0.9	0.5
165°	1.4	0.9	0.0
167.5°	1.4	0.9	0.5
170°	1.4	0.9	0.5
172.5°	1.4	0.9	0.5
175°	1.4	0.5	0.5
177.5°	1.4	0.5	0.5
180°	1.4	1.4	1.4



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	191.6	186.1	167.8	137.7	96.2	53.8	20.1	3.6	0.9	1.4	1.4
110°	166.9	162.4	143.7	114.5	77.5	40.1	13.2	2.3	1.4	1.4	1.4





107.5°	1.8	2.7	3.2
110°	1.8	2.3	2.7



(END OF REPORT)