

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: P551572

Luminaire Tested: **FCC-X-2-LD4-2LO-35-UNV-93-96-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: P551572
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-35-UNV-93-96-ED1D
Description: FCC CORNER MOUNT LUMINAIRE WITH .156 CLEAR TEMPERED GLASS FIXTURE
SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES AND 3500K,
AND 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

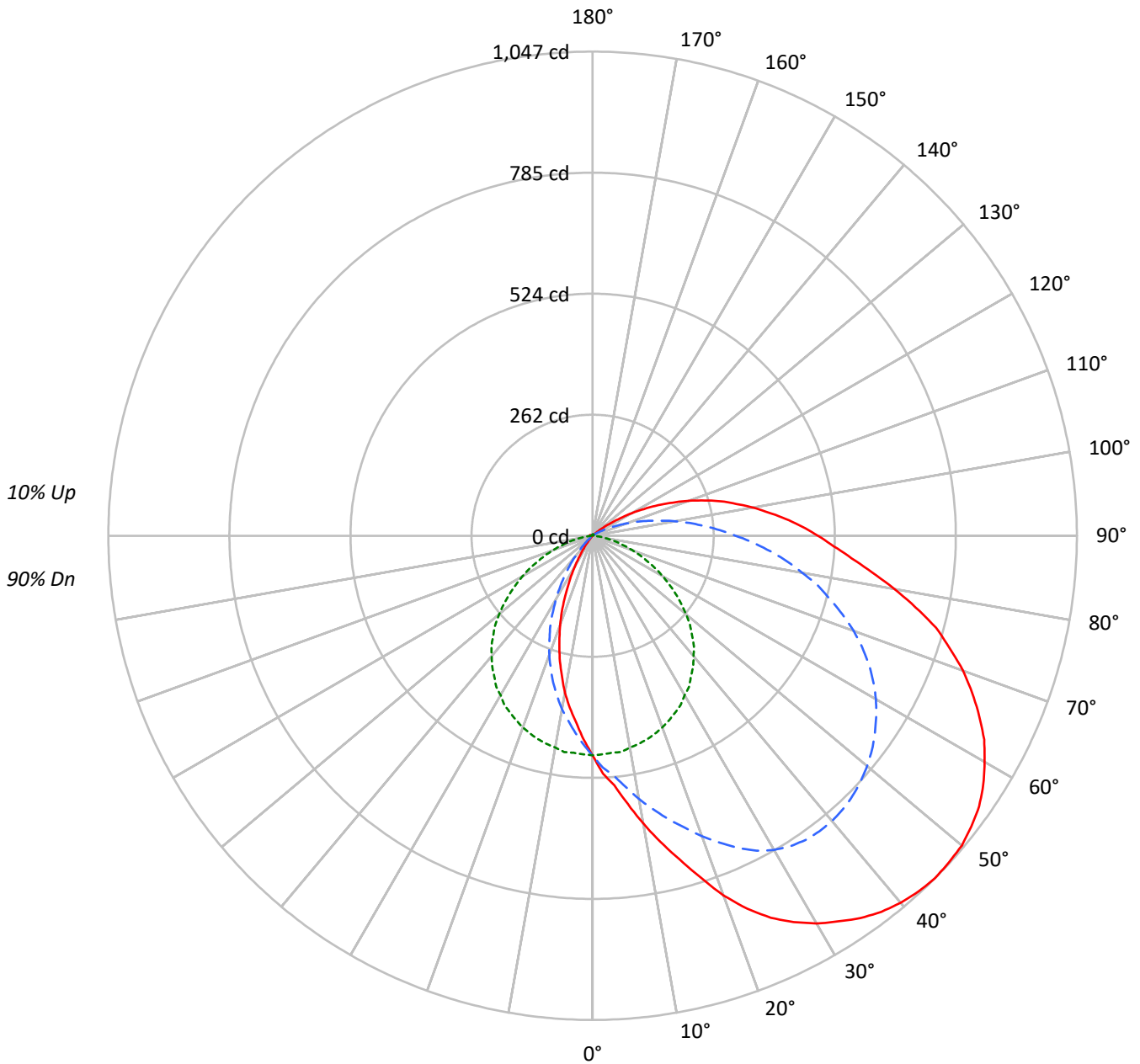
Lumens per Lamp: N/A
Luminaire Lumens: 2346.9 lumens
Efficiency: N/A
Efficacy: 99.9 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

Input Watts (W): 23.5
Input Voltage (V): NR
Input Current (A_{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: P551572

CATALOG NUMBER: FCC-X-2-LD4-2LO-35-UNV-93-96-ED1D

Luminous Intensity Polar Plot





TEST NUMBER: P551572

CATALOG NUMBER: FCC-X-2-LD4-2LO-35-UNV-93-96-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°	5110	5110	5110
5°	5610	5035	4201
10°	6348	4974	3462
15°	7114	4910	2699
20°	8023	4831	1987
25°	8778	4737	1305
30°	9338	4613	735
35°	9824	4479	324
40°	10255	4315	78
45°	10624	4108	0
50°	10934	3835	0
55°	11170	3486	0
60°	11289	3083	0
65°	11336	2623	0
70°	11297	2139	0
75°	11155	1577	9
80°	10702	965	48
85°	10344	463	66



TEST NUMBER: P551572

CATALOG NUMBER: FCC-X-2-LD4-2LO-35-UNV-93-96-ED1D

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.5	1.9
10°-20°	136.2	5.8
20°-30°	220.5	9.4
30°-40°	283.2	12.1
40°-50°	320.6	13.7
50°-60°	332.2	14.2
60°-70°	313.3	13.3
70°-80°	262.5	11.2
80°-90°	190.3	8.1
90°-100°	125.1	5.3
100°-110°	72.2	3.1
110°-120°	31.9	1.4
120°-130°	8.6	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°	402.1	17.1
0°-40°	685.4	29.2
0°-60°	1338.2	57.0
0°-90°	2104.3	89.7
90°-120°	229.1	9.8
90°-150°	241.0	10.3
90°-180°	243.0	10.4
0°-180°	2346.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	475	475	475	475	475	
5°	542	520	471	428	406	55
15°	724	635	455	329	275	209
25°	911	745	422	216	136	421
35°	1009	803	371	105	33	633
45°	1047	795	304	24	0	808
55°	1020	745	219	0	0	911
65°	922	659	131	0	0	912
75°	769	532	56	1	1	806
85°	562	386	9	2	4	480
90°	487	309	2	4	4	267
95°	418	242	1	4	5	328
105°	288	125	1	3	5	304
115°	157	41	2	2	3	157
125°	47	6	2	2	2	47
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	



TEST NUMBER: P551572

CATALOG NUMBER: FCC-X-2-LD4-2LO-35-UNV-93-96-ED1D

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
0°	474.7	474.7	474.7	474.7	474.7	474.7	474.7	474.7	474.7	474.7	474.7
2.5°	514.7	514.1	512.2	509.2	505.0	497.7	491.7	486.2	479.0	472.9	461.4
5°	541.9	538.8	536.4	533.4	523.7	517.1	506.2	494.1	482.6	471.1	448.1
7.5°	585.4	580.6	576.9	568.5	555.2	540.1	523.1	511.6	503.8	471.7	432.4
10°	632.0	627.7	620.5	605.4	589.0	567.3	543.1	515.9	491.7	465.1	418.5
12.5°	677.9	671.9	661.6	642.3	619.3	592.1	558.8	526.8	492.3	460.8	402.2
15°	723.9	717.3	706.4	682.8	652.5	616.9	576.3	535.8	495.3	455.4	385.2
17.5°	774.1	765.0	748.7	722.1	684.0	639.8	592.1	543.1	494.1	448.7	367.1
20°	827.9	815.2	797.7	762.0	717.3	665.2	607.8	550.3	493.5	440.9	346.5
22.5°	872.7	860.0	840.6	803.7	749.9	686.4	621.1	555.2	491.1	431.8	327.2
25°	911.4	901.1	879.9	837.6	780.8	708.8	633.8	558.8	487.4	422.1	306.6
27.5°	941.6	931.9	908.4	864.8	806.8	728.7	643.5	560.6	482.6	412.5	285.4
30°	968.2	958.6	930.1	885.4	824.3	744.5	653.1	561.2	476.6	397.9	262.5
32.5°	988.8	979.7	950.7	902.9	836.4	755.4	658.6	560.6	468.7	387.7	237.7
35°	1009.4	1000.3	966.4	915.6	845.5	760.2	662.8	557.6	459.0	370.7	214.1
37.5°	1025.1	1014.8	980.3	924.1	849.7	761.4	662.2	553.4	448.7	356.8	190.5
40°	1036.0	1025.1	988.2	928.9	850.9	759.6	657.4	546.1	436.6	339.3	165.7
42.5°	1043.2	1031.1	991.8	936.2	848.5	754.7	650.1	537.0	423.3	324.2	142.1
45°	1046.9	1034.2	992.4	930.1	844.3	745.7	639.2	525.5	408.8	303.6	118.5
47.5°	1045.0	1031.1	989.4	923.5	836.4	736.0	627.1	511.6	391.3	285.4	96.2
50°	1042.0	1027.5	982.7	915.0	825.5	723.9	613.8	494.7	373.1	263.1	76.2
52.5°	1032.3	1017.8	975.5	902.9	812.8	710.0	595.7	477.2	353.8	241.3	58.1
55°	1020.2	1006.9	962.8	892.0	796.5	693.1	578.8	458.4	335.0	218.9	41.7
57.5°	1001.5	989.4	947.1	874.5	780.1	674.3	560.0	437.9	311.5	196.5	29.0
60°	978.5	966.4	925.3	854.5	761.4	653.1	539.5	416.7	290.3	174.2	18.1
62.5°	954.3	942.8	899.9	829.7	737.8	630.8	517.1	395.5	267.9	153.6	10.9
65°	922.3	911.4	872.7	800.1	711.8	606.6	492.3	370.1	244.9	130.6	6.0
67.5°	888.4	878.7	839.4	772.9	681.6	580.0	466.9	345.3	220.7	110.7	3.0
70°	852.1	840.0	803.7	736.0	650.7	549.7	439.1	319.9	197.8	91.3	0.0
72.5°	809.8	800.7	765.6	701.5	615.0	517.7	410.6	292.1	172.4	72.6	0.6
75°	768.7	757.2	725.1	664.6	580.0	483.8	379.2	266.1	147.6	55.6	0.6
77.5°	715.4	711.8	681.6	622.9	546.7	451.2	344.7	234.6	124.0	39.9	0.6
80°	662.2	658.6	635.0	581.2	508.0	412.5	312.7	205.0	101.0	26.6	0.6
82.5°	609.6	604.8	582.4	537.6	468.7	379.8	279.4	175.4	79.8	16.3	0.6
85°	562.4	556.4	532.2	491.1	428.2	342.9	244.9	146.4	59.3	9.1	1.2
87.5°	521.9	517.7	491.1	448.7	387.1	308.4	214.7	118.5	41.7	4.2	1.8
90°	487.4	478.4	454.8	410.0	348.3	270.3	182.6	94.9	27.8	2.4	2.4
92.5°	453.6	445.7	419.7	373.7	313.9	237.7	151.8	72.6	17.5	1.2	3.0
95°	418.5	410.0	384.6	342.3	278.8	204.4	124.6	53.2	9.7	1.2	3.0
97.5°	384.0	376.2	349.6	307.2	247.3	175.4	98.6	37.5	4.8	1.2	2.4
100°	352.0	342.9	318.7	276.4	215.9	146.4	76.2	24.2	3.0	1.2	2.4
102.5°	318.1	310.9	286.1	244.9	183.2	119.1	56.8	15.1	1.2	1.2	1.8
105°	287.9	278.8	254.6	212.3	156.0	93.7	39.9	9.1	1.2	1.2	1.8



TEST NUMBER: P551572

CATALOG NUMBER: FCC-X-2-LD4-2LO-35-UNV-93-96-ED1D

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	187.5	180.2	159.1	123.4	79.2	36.9	10.9	1.8	1.8	1.8	1.8
115°	156.6	145.7	127.0	95.6	58.7	24.2	5.4	1.8	1.8	1.8	1.8
117.5°	125.2	116.1	102.8	72.6	38.7	15.7	3.0	1.8	1.8	1.8	1.8
120°	98.0	89.5	74.4	50.2	26.0	9.1	1.2	1.8	1.8	1.8	1.8
122.5°	70.2	63.5	50.2	32.7	15.7	4.2	1.8	1.8	2.4	2.4	1.8
125°	46.6	42.9	33.3	20.0	9.7	1.8	1.8	1.8	2.4	2.4	1.8
127.5°	30.2	27.2	19.4	11.5	4.2	1.8	1.8	2.4	2.4	2.4	1.8
130°	16.9	15.1	11.5	6.7	1.8	1.8	1.8	2.4	2.4	2.4	1.8
132.5°	9.7	9.1	6.0	1.2	1.8	1.8	1.8	2.4	2.4	2.4	2.4
135°	2.4	1.2	1.2	1.2	1.8	1.8	2.4	2.4	3.0	3.0	2.4
137.5°	0.6	0.6	1.2	1.2	1.8	1.8	2.4	3.0	3.0	3.0	2.4
140°	0.6	0.6	1.2	1.8	1.8	1.8	2.4	3.0	3.0	3.0	2.4
142.5°	0.6	1.2	1.2	1.8	1.8	2.4	2.4	3.0	3.0	2.4	2.4
145°	0.6	1.2	1.2	1.8	1.8	2.4	2.4	3.0	2.4	2.4	2.4
147.5°	1.2	1.2	1.2	1.8	1.8	2.4	2.4	3.0	3.0	2.4	2.4
150°	0.6	1.2	1.2	1.8	2.4	2.4	2.4	3.0	2.4	2.4	2.4
152.5°	0.6	1.2	1.2	1.8	2.4	2.4	2.4	3.0	2.4	2.4	2.4
155°	1.2	1.2	1.2	1.8	2.4	2.4	2.4	3.0	2.4	2.4	3.0
157.5°	1.2	1.2	1.2	1.8	2.4	2.4	2.4	3.0	2.4	2.4	3.0
160°	1.2	1.2	1.2	1.8	1.8	2.4	2.4	2.4	2.4	2.4	2.4
162.5°	1.2	1.2	1.2	1.8	1.8	2.4	2.4	2.4	2.4	2.4	2.4
165°	1.2	1.2	1.2	1.2	1.8	1.8	2.4	2.4	2.4	2.4	2.4
167.5°	1.2	1.2	1.2	1.8	1.8	1.8	2.4	2.4	2.4	2.4	2.4
170°	1.2	1.2	1.2	1.8	1.8	1.8	2.4	3.0	3.0	3.0	3.0
172.5°	1.2	1.2	1.2	1.8	1.8	2.4	2.4	3.0	3.0	3.0	3.0
175°	1.2	1.2	1.2	1.8	1.8	2.4	2.4	3.0	3.0	3.0	3.0
177.5°	0.6	1.2	1.2	1.8	1.8	2.4	2.4	3.0	3.0	3.0	2.4
180°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8



TEST NUMBER: P551572

CATALOG NUMBER: FCC-X-2-LD4-2LO-35-UNV-93-96-ED1D

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	474.7	474.7	474.7
2.5°	451.8	443.3	440.9
5°	427.6	413.7	405.8
7.5°	403.4	384.6	375.6
10°	381.0	354.4	344.7
12.5°	354.4	323.6	308.4
15°	329.0	289.1	274.6
17.5°	300.6	255.8	238.9
20°	274.0	222.6	205.0
22.5°	243.7	189.9	170.5
25°	216.5	157.2	135.5
27.5°	186.3	124.0	105.2
30°	157.8	94.9	76.2
32.5°	130.6	69.5	52.6
35°	105.2	47.2	33.3
37.5°	81.0	29.0	16.9
40°	58.7	15.1	7.9
42.5°	39.3	7.3	4.2
45°	24.2	3.6	0.0
47.5°	13.9	0.0	0.0
50°	7.3	0.0	0.0
52.5°	3.0	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°	0.6	0.6	0.6
77.5°	0.6	1.2	1.8
80°	1.2	2.4	3.0
82.5°	2.4	3.0	3.0
85°	2.4	3.0	3.6
87.5°	3.0	3.6	4.2
90°	3.6	4.2	4.2
92.5°	3.6	4.8	4.8
95°	4.2	4.8	5.4
97.5°	4.8	5.4	5.4
100°	4.2	5.4	6.0
102.5°	3.6	5.4	5.4
105°	3.0	4.2	4.8



TEST NUMBER: P551572

CATALOG NUMBER: FCC-X-2-LD4-2LO-35-UNV-93-96-ED1D

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	2.4	3.0	3.0
115°	1.8	2.4	3.0
117.5°	1.8	2.4	2.4
120°	1.8	1.8	2.4
122.5°	1.8	1.8	2.4
125°	1.8	1.8	2.4
127.5°	2.4	1.8	1.8
130°	1.8	1.8	1.8
132.5°	2.4	1.8	1.8
135°	2.4	1.8	1.8
137.5°	2.4	1.8	1.8
140°	2.4	1.8	1.8
142.5°	2.4	1.8	1.8
145°	1.8	1.8	1.8
147.5°	1.8	1.8	1.8
150°	1.8	1.8	1.2
152.5°	1.8	1.2	1.2
155°	1.8	1.2	0.6
157.5°	2.4	1.2	0.6
160°	1.8	1.2	0.6
162.5°	1.8	1.2	0.6
165°	1.8	1.2	0.0
167.5°	1.8	1.2	0.6
170°	1.8	1.2	0.6
172.5°	1.8	1.2	0.6
175°	1.8	0.6	0.6
177.5°	1.8	0.6	0.6
180°	1.8	1.8	1.8



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	254.0	246.7	222.6	182.6	127.6	71.4	26.6	4.8	1.2	1.8	1.8
110°	221.3	215.3	190.5	151.8	102.8	53.2	17.5	3.0	1.8	1.8	1.8





107.5°	2.4	3.6	4.2
110°	2.4	3.0	3.6



(END OF REPORT)