

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: P551506

Luminaire Tested: **FCC-X-2-LD4-2LO-30-UNV-93-94-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: P551506
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-30-UNV-93-94-ED1D
Description: FCC CORNER MOUNT LUMINAIRE WITH .156 CLEAR TEMPERED GLASS FIXTURE
SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES AND 3000K,
AND 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

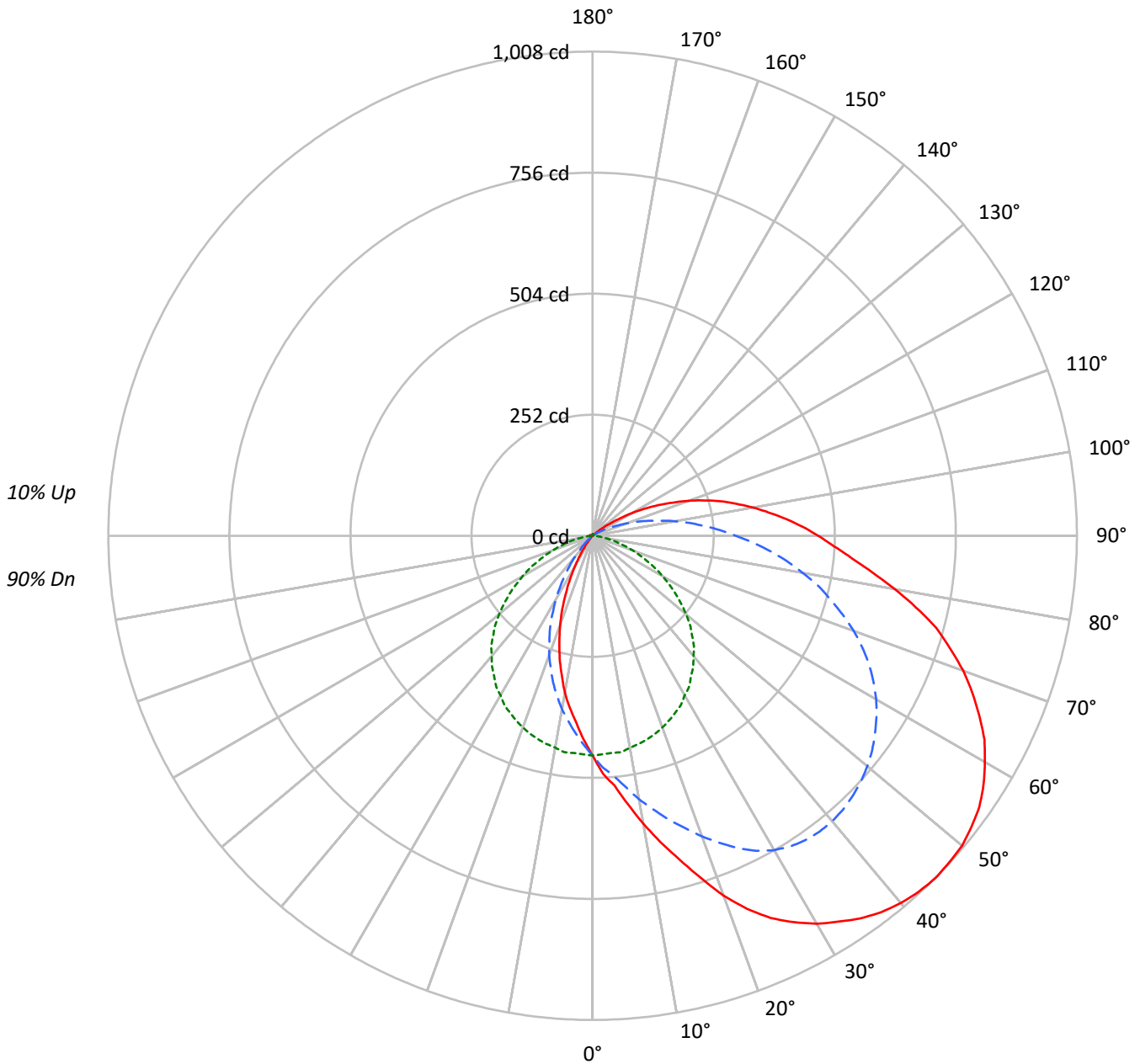
Lumens per Lamp: N/A
Luminaire Lumens: 2260.9 lumens
Efficiency: N/A
Efficacy: 96.2 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

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: P551506

CATALOG NUMBER: FCC-X-2-LD4-2LO-30-UNV-93-94-ED1D

Luminous Intensity Polar Plot





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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°	4922	4922	4922
5°	5404	4851	4047
10°	6115	4791	3336
15°	6853	4730	2599
20°	7730	4653	1914
25°	8456	4564	1257
30°	8997	4445	708
35°	9464	4315	311
40°	9879	4156	75
45°	10235	3958	0
50°	10533	3693	0
55°	10761	3358	0
60°	10876	2969	0
65°	10920	2527	0
70°	10884	2062	0
75°	10745	1520	9
80°	10311	929	47
85°	9965	442	64



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	43.8	1.9
10°-20°	131.2	5.8
20°-30°	212.4	9.4
30°-40°	272.9	12.1
40°-50°	308.9	13.7
50°-60°	320.0	14.2
60°-70°	301.8	13.3
70°-80°	252.9	11.2
80°-90°	183.3	8.1
90°-100°	120.5	5.3
100°-110°	69.6	3.1
110°-120°	30.7	1.4
120°-130°	8.3	0.4
130°-140°	1.9	0.1
140°-150°	1.2	0.1
150°-160°	0.9	0.0
160°-170°	0.5	0.0
170°-180°	0.2	0.0
0°-30°	387.4	17.1
0°-40°	660.3	29.2
0°-60°	1289.1	57.0
0°-90°	2027.2	89.7
90°-120°	220.8	9.8
90°-150°	232.2	10.3
90°-180°	234.0	10.3
0°-180°	2260.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	457	457	457	457	457	
5°	522	501	454	412	391	53
15°	697	611	439	317	264	201
25°	878	717	407	209	130	406
35°	972	773	357	101	32	610
45°	1008	766	292	23	0	779
55°	983	718	211	0	0	878
65°	888	635	126	0	0	879
75°	740	512	54	1	1	777
85°	542	371	9	2	4	463
90°	470	298	2	4	4	257
95°	403	233	1	4	5	316
105°	277	120	1	3	5	293
115°	151	40	2	2	3	151
125°	45	6	2	2	2	45
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: P551506

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
0°	457.3	457.3	457.3	457.3	457.3	457.3	457.3	457.3	457.3	457.3	457.3
2.5°	495.8	495.2	493.5	490.6	486.5	479.5	473.7	468.4	461.4	455.6	444.5
5°	522.0	519.1	516.8	513.9	504.5	498.1	487.6	476.0	464.9	453.9	431.7
7.5°	564.0	559.3	555.8	547.6	534.8	520.3	504.0	492.9	485.3	454.4	416.6
10°	608.8	604.7	597.8	583.2	567.5	546.5	523.2	497.0	473.7	448.0	403.2
12.5°	653.1	647.3	637.4	618.7	596.6	570.4	538.3	507.5	474.2	443.9	387.4
15°	697.4	691.0	680.5	657.8	628.6	594.3	555.2	516.2	477.2	438.7	371.1
17.5°	745.7	737.0	721.3	695.6	658.9	616.4	570.4	523.2	476.0	432.3	353.6
20°	797.6	785.4	768.5	734.1	691.0	640.9	585.5	530.2	475.4	424.7	333.8
22.5°	840.7	828.5	809.8	774.3	722.4	661.3	598.3	534.8	473.1	416.0	315.2
25°	878.0	868.1	847.7	806.9	752.1	682.8	610.6	538.3	469.6	406.7	295.4
27.5°	907.1	897.8	875.1	833.1	777.2	702.0	619.9	540.1	464.9	397.3	275.0
30°	932.8	923.4	896.0	852.9	794.1	717.2	629.2	540.7	459.1	383.4	252.9
32.5°	952.6	943.8	915.9	869.8	805.7	727.7	634.5	540.1	451.5	373.5	229.0
35°	972.4	963.6	931.0	882.1	814.5	732.3	638.5	537.2	442.2	357.1	206.2
37.5°	987.5	977.6	944.4	890.2	818.6	733.5	638.0	533.1	432.3	343.7	183.5
40°	998.0	987.5	952.0	894.9	819.7	731.8	633.3	526.1	420.6	326.8	159.6
42.5°	1005.0	993.3	955.5	901.9	817.4	727.1	626.3	517.4	407.8	312.3	136.9
45°	1008.5	996.3	956.1	896.0	813.3	718.4	615.8	506.3	393.8	292.5	114.2
47.5°	1006.7	993.3	953.1	889.6	805.7	709.0	604.2	492.9	376.9	275.0	92.6
50°	1003.8	989.8	946.7	881.5	795.3	697.4	591.3	476.6	359.5	253.4	73.4
52.5°	994.5	980.5	939.7	869.8	783.0	684.0	573.9	459.7	340.8	232.5	55.9
55°	982.9	970.0	927.5	859.3	767.3	667.7	557.6	441.6	322.8	210.9	40.2
57.5°	964.8	953.1	912.4	842.4	751.6	649.6	539.5	421.8	300.0	189.3	28.0
60°	942.7	931.0	891.4	823.2	733.5	629.2	519.7	401.4	279.7	167.8	17.5
62.5°	919.4	908.3	866.9	799.3	710.8	607.7	498.1	381.0	258.1	148.0	10.5
65°	888.5	878.0	840.7	770.8	685.7	584.4	474.2	356.6	236.0	125.8	5.8
67.5°	855.8	846.5	808.7	744.6	656.6	558.7	449.8	332.7	212.7	106.6	2.9
70°	820.9	809.2	774.3	709.0	626.9	529.6	423.0	308.2	190.5	88.0	0.0
72.5°	780.1	771.4	737.6	675.8	592.5	498.7	395.6	281.4	166.0	69.9	0.6
75°	740.5	729.4	698.5	640.3	558.7	466.1	365.3	256.3	142.2	53.6	0.6
77.5°	689.2	685.7	656.6	600.1	526.7	434.6	332.1	226.1	119.4	38.5	0.6
80°	638.0	634.5	611.7	559.9	489.4	397.3	301.2	197.5	97.3	25.6	0.6
82.5°	587.3	582.6	561.0	517.9	451.5	365.9	269.2	169.0	76.9	15.7	0.6
85°	541.8	536.0	512.7	473.1	412.5	330.3	236.0	141.0	57.1	8.7	1.2
87.5°	502.8	498.7	473.1	432.3	372.9	297.1	206.8	114.2	40.2	4.1	1.7
90°	469.6	460.8	438.1	395.0	335.6	260.4	175.9	91.5	26.8	2.3	2.3
92.5°	437.0	429.4	404.3	360.1	302.4	229.0	146.2	69.9	16.9	1.2	2.9
95°	403.2	395.0	370.5	329.8	268.6	196.9	120.0	51.3	9.3	1.2	2.9
97.5°	370.0	362.4	336.7	296.0	238.3	169.0	95.0	36.1	4.7	1.2	2.3
100°	339.1	330.3	307.0	266.3	208.0	141.0	73.4	23.3	2.9	1.2	2.3
102.5°	306.5	299.5	275.6	236.0	176.5	114.8	54.8	14.6	1.2	1.2	1.7
105°	277.3	268.6	245.3	204.5	150.3	90.3	38.5	8.7	1.2	1.2	1.7



TEST NUMBER: P551506

CATALOG NUMBER: FCC-X-2-LD4-2LO-30-UNV-93-94-ED1D

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	180.6	173.6	153.2	118.9	76.3	35.5	10.5	1.7	1.7	1.7	1.7
115°	150.9	140.4	122.3	92.1	56.5	23.3	5.2	1.7	1.7	1.7	1.7
117.5°	120.6	111.9	99.0	69.9	37.3	15.1	2.9	1.7	1.7	1.7	1.7
120°	94.4	86.2	71.7	48.4	25.1	8.7	1.2	1.7	1.7	1.7	1.7
122.5°	67.6	61.2	48.4	31.5	15.1	4.1	1.7	1.7	2.3	2.3	1.7
125°	44.9	41.4	32.0	19.2	9.3	1.7	1.7	1.7	2.3	2.3	1.7
127.5°	29.1	26.2	18.6	11.1	4.1	1.7	1.7	2.3	2.3	2.3	1.7
130°	16.3	14.6	11.1	6.4	1.7	1.7	1.7	2.3	2.3	2.3	1.7
132.5°	9.3	8.7	5.8	1.2	1.7	1.7	1.7	2.3	2.3	2.3	2.3
135°	2.3	1.2	1.2	1.2	1.7	1.7	2.3	2.3	2.9	2.9	2.3
137.5°	0.6	0.6	1.2	1.2	1.7	1.7	2.3	2.9	2.9	2.9	2.3
140°	0.6	0.6	1.2	1.7	1.7	1.7	2.3	2.9	2.9	2.9	2.3
142.5°	0.6	1.2	1.2	1.7	1.7	2.3	2.3	2.9	2.9	2.3	2.3
145°	0.6	1.2	1.2	1.7	1.7	2.3	2.3	2.9	2.3	2.3	2.3
147.5°	1.2	1.2	1.2	1.7	1.7	2.3	2.3	2.9	2.9	2.3	2.3
150°	0.6	1.2	1.2	1.7	2.3	2.3	2.3	2.9	2.3	2.3	2.3
152.5°	0.6	1.2	1.2	1.7	2.3	2.3	2.3	2.9	2.3	2.3	2.3
155°	1.2	1.2	1.2	1.7	2.3	2.3	2.3	2.9	2.3	2.3	2.9
157.5°	1.2	1.2	1.2	1.7	2.3	2.3	2.3	2.9	2.3	2.3	2.9
160°	1.2	1.2	1.2	1.7	1.7	2.3	2.3	2.3	2.3	2.3	2.3
162.5°	1.2	1.2	1.2	1.7	1.7	2.3	2.3	2.3	2.3	2.3	2.3
165°	1.2	1.2	1.2	1.2	1.7	1.7	2.3	2.3	2.3	2.3	2.3
167.5°	1.2	1.2	1.2	1.7	1.7	1.7	2.3	2.3	2.3	2.3	2.3
170°	1.2	1.2	1.2	1.7	1.7	1.7	2.3	2.9	2.9	2.9	2.9
172.5°	1.2	1.2	1.2	1.7	1.7	2.3	2.3	2.9	2.9	2.9	2.9
175°	1.2	1.2	1.2	1.7	1.7	2.3	2.3	2.9	2.9	2.9	2.9
177.5°	0.6	1.2	1.2	1.7	1.7	2.3	2.3	2.9	2.9	2.9	2.3
180°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7



TEST NUMBER: P551506

CATALOG NUMBER: FCC-X-2-LD4-2LO-30-UNV-93-94-ED1D

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	457.3	457.3	457.3
2.5°	435.2	427.1	424.7
5°	411.9	398.5	390.9
7.5°	388.6	370.5	361.8
10°	367.0	341.4	332.1
12.5°	341.4	311.7	297.1
15°	316.9	278.5	264.5
17.5°	289.6	246.4	230.1
20°	263.9	214.4	197.5
22.5°	234.8	182.9	164.3
25°	208.6	151.5	130.5
27.5°	179.4	119.4	101.4
30°	152.1	91.5	73.4
32.5°	125.8	67.0	50.7
35°	101.4	45.4	32.0
37.5°	78.1	28.0	16.3
40°	56.5	14.6	7.6
42.5°	37.9	7.0	4.1
45°	23.3	3.5	0.0
47.5°	13.4	0.0	0.0
50°	7.0	0.0	0.0
52.5°	2.9	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	1.7
80°	1.2	2.3	2.9
82.5°	2.3	2.9	2.9
85°	2.3	2.9	3.5
87.5°	2.9	3.5	4.1
90°	3.5	4.1	4.1
92.5°	3.5	4.7	4.7
95°	4.1	4.7	5.2
97.5°	4.7	5.2	5.2
100°	4.1	5.2	5.8
102.5°	3.5	5.2	5.2
105°	2.9	4.1	4.7



TEST NUMBER: P551506

CATALOG NUMBER: FCC-X-2-LD4-2LO-30-UNV-93-94-ED1D

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	2.3	2.9	2.9
115°	1.7	2.3	2.9
117.5°	1.7	2.3	2.3
120°	1.7	1.7	2.3
122.5°	1.7	1.7	2.3
125°	1.7	1.7	2.3
127.5°	2.3	1.7	1.7
130°	1.7	1.7	1.7
132.5°	2.3	1.7	1.7
135°	2.3	1.7	1.7
137.5°	2.3	1.7	1.7
140°	2.3	1.7	1.7
142.5°	2.3	1.7	1.7
145°	1.7	1.7	1.7
147.5°	1.7	1.7	1.7
150°	1.7	1.7	1.2
152.5°	1.7	1.2	1.2
155°	1.7	1.2	0.6
157.5°	2.3	1.2	0.6
160°	1.7	1.2	0.6
162.5°	1.7	1.2	0.6
165°	1.7	1.2	0.0
167.5°	1.7	1.2	0.6
170°	1.7	1.2	0.6
172.5°	1.7	1.2	0.6
175°	1.7	0.6	0.6
177.5°	1.7	0.6	0.6
180°	1.7	1.7	1.7



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	244.7	237.7	214.4	175.9	122.9	68.7	25.6	4.7	1.2	1.7	1.7
110°	213.2	207.4	183.5	146.2	99.0	51.3	16.9	2.9	1.7	1.7	1.7





107.5°	2.3	3.5	4.1
110°	2.3	2.9	3.5



(END OF REPORT)