

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: P551646

Luminaire Tested: **FCC-X-2-LD4-2LO-50-UNV-80-87-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: P551646
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-50-UNV-80-87-ED1D
Description: FCC CORNER MOUNT LUMINAIRE WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .375 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 5000K, AND 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

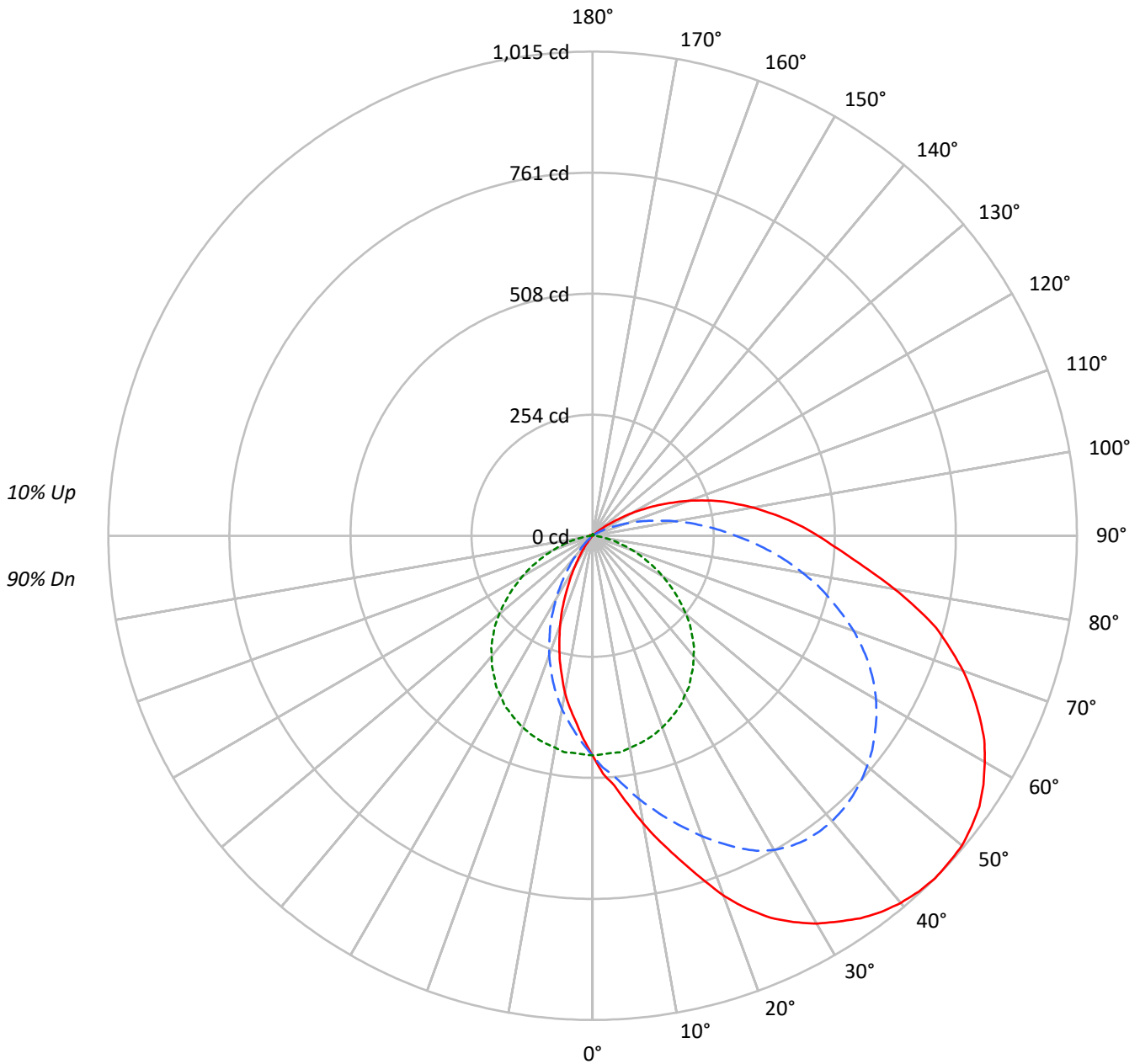
Lumens per Lamp: N/A
Luminaire Lumens: 2276.0 lumens
Efficiency: N/A
Efficacy: 96.9 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

Input Watts (W): 23.5
Input Voltage (V): NR
Input Current (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: P551646

CATALOG NUMBER: FCC-X-2-LD4-2LO-50-UNV-80-87-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°	4956	4956	4956
5°	5440	4883	4074
10°	6156	4823	3358
15°	6899	4762	2617
20°	7781	4684	1927
25°	8512	4595	1266
30°	9056	4474	713
35°	9526	4344	314
40°	9944	4184	75
45°	10303	3984	0
50°	10603	3718	0
55°	10832	3381	0
60°	10947	2989	0
65°	10993	2545	0
70°	10955	2076	0
75°	10816	1531	9
80°	10378	936	47
85°	10031	447	64



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.1	1.9
10°-20°	132.0	5.8
20°-30°	213.8	9.4
30°-40°	274.7	12.1
40°-50°	310.9	13.7
50°-60°	322.1	14.2
60°-70°	303.8	13.3
70°-80°	254.6	11.2
80°-90°	184.5	8.1
90°-100°	121.3	5.3
100°-110°	70.1	3.1
110°-120°	30.9	1.4
120°-130°	8.4	0.4
130°-140°	1.9	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°	390.0	17.1
0°-40°	664.6	29.2
0°-60°	1297.7	57.0
0°-90°	2040.6	89.7
90°-120°	222.3	9.8
90°-150°	233.8	10.3
90°-180°	235.0	10.3
0°-180°	2276.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	460	460	460	460	460	
5°	526	505	457	415	394	53
15°	702	616	442	319	266	202
25°	884	722	409	210	131	408
35°	979	779	360	102	32	614
45°	1015	771	294	24	0	784
55°	989	722	212	0	0	883
65°	894	639	127	0	0	885
75°	745	516	54	1	1	782
85°	545	374	9	2	4	466
90°	473	300	2	4	4	259
95°	406	234	1	4	5	318
105°	279	121	1	3	5	295
115°	152	40	2	2	3	152
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	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
0°	460.4	460.4	460.4	460.4	460.4	460.4	460.4	460.4	460.4	460.4	460.4
2.5°	499.1	498.5	496.7	493.8	489.7	482.7	476.8	471.5	464.5	458.6	447.5
5°	525.5	522.5	520.2	517.3	507.9	501.4	490.9	479.1	468.0	456.9	434.6
7.5°	567.7	563.0	559.5	551.3	538.4	523.7	507.3	496.2	488.5	457.4	419.3
10°	612.9	608.8	601.7	587.1	571.2	550.1	526.7	500.3	476.8	451.0	405.8
12.5°	657.4	651.6	641.6	622.8	600.5	574.2	541.9	510.8	477.4	446.9	390.0
15°	702.0	695.6	685.0	662.1	632.8	598.2	558.9	519.6	480.3	441.6	373.6
17.5°	750.7	741.9	726.1	700.2	663.3	620.5	574.2	526.7	479.1	435.2	356.0
20°	802.9	790.6	773.6	739.0	695.6	645.1	589.4	533.7	478.6	427.5	336.0
22.5°	846.3	834.0	815.2	779.4	727.2	665.6	602.3	538.4	476.2	418.7	317.3
25°	883.8	873.8	853.3	812.3	757.1	687.3	614.6	541.9	472.7	409.4	297.3
27.5°	913.1	903.8	880.9	838.7	782.4	706.7	624.0	543.7	468.0	400.0	276.8
30°	938.9	929.6	902.0	858.6	799.4	721.9	633.4	544.2	462.1	385.9	254.5
32.5°	958.9	950.1	921.9	875.6	811.1	732.5	638.7	543.7	454.5	375.9	230.5
35°	978.8	970.0	937.2	887.9	819.9	737.2	642.8	540.7	445.1	359.5	207.6
37.5°	994.1	984.1	950.7	896.1	824.0	738.4	642.2	536.6	435.2	346.0	184.7
40°	1004.6	994.1	958.3	900.8	825.2	736.6	637.5	529.6	423.4	329.0	160.7
42.5°	1011.7	999.9	961.8	907.9	822.8	731.9	630.5	520.8	410.5	314.3	137.8
45°	1015.2	1002.9	962.4	902.0	818.7	723.1	619.9	509.6	396.5	294.4	114.9
47.5°	1013.4	999.9	959.5	895.5	811.1	713.7	608.2	496.2	379.4	276.8	93.2
50°	1010.5	996.4	953.0	887.3	800.5	702.0	595.3	479.7	361.9	255.1	73.9
52.5°	1001.1	987.0	946.0	875.6	788.2	688.5	577.7	462.7	343.1	234.0	56.3
55°	989.4	976.5	933.7	865.0	772.4	672.1	561.3	444.5	324.9	212.3	40.5
57.5°	971.2	959.5	918.4	848.0	756.5	653.9	543.1	424.6	302.0	190.6	28.2
60°	948.9	937.2	897.3	828.7	738.4	633.4	523.1	404.1	281.5	168.9	17.6
62.5°	925.5	914.3	872.7	804.6	715.5	611.7	501.4	383.6	259.8	149.0	10.6
65°	894.4	883.8	846.3	775.9	690.3	588.2	477.4	358.9	237.5	126.7	5.9
67.5°	861.5	852.1	814.0	749.5	661.0	562.4	452.8	334.9	214.1	107.3	2.9
70°	826.3	814.6	779.4	713.7	631.0	533.1	425.8	310.2	191.8	88.6	0.0
72.5°	785.3	776.5	742.5	680.3	596.4	502.0	398.2	283.3	167.1	70.4	0.6
75°	745.4	734.3	703.2	644.5	562.4	469.2	367.7	258.0	143.1	54.0	0.6
77.5°	693.8	690.3	661.0	604.1	530.2	437.5	334.3	227.6	120.2	38.7	0.6
80°	642.2	638.7	615.8	563.6	492.6	400.0	303.2	198.8	97.9	25.8	0.6
82.5°	591.2	586.5	564.8	521.4	454.5	368.3	270.9	170.1	77.4	15.8	0.6
85°	545.4	539.6	516.1	476.2	415.2	332.5	237.5	141.9	57.5	8.8	1.2
87.5°	506.1	502.0	476.2	435.2	375.3	299.1	208.2	114.9	40.5	4.1	1.8
90°	472.7	463.9	441.0	397.6	337.8	262.2	177.1	92.1	27.0	2.3	2.3
92.5°	439.9	432.2	407.0	362.4	304.4	230.5	147.2	70.4	17.0	1.2	2.9
95°	405.8	397.6	373.0	331.9	270.4	198.2	120.8	51.6	9.4	1.2	2.9
97.5°	372.4	364.8	339.0	297.9	239.9	170.1	95.6	36.4	4.7	1.2	2.3
100°	341.3	332.5	309.1	268.0	209.4	141.9	73.9	23.5	2.9	1.2	2.3
102.5°	308.5	301.4	277.4	237.5	177.7	115.5	55.1	14.7	1.2	1.2	1.8
105°	279.2	270.4	246.9	205.9	151.3	90.9	38.7	8.8	1.2	1.2	1.8



TEST NUMBER: P551646

CATALOG NUMBER: FCC-X-2-LD4-2LO-50-UNV-80-87-ED1D

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	181.8	174.8	154.2	119.6	76.8	35.8	10.6	1.8	1.8	1.8	1.8
115°	151.9	141.3	123.2	92.7	56.9	23.5	5.3	1.8	1.8	1.8	1.8
117.5°	121.4	112.6	99.7	70.4	37.5	15.2	2.9	1.8	1.8	1.8	1.8
120°	95.0	86.8	72.1	48.7	25.2	8.8	1.2	1.8	1.8	1.8	1.8
122.5°	68.0	61.6	48.7	31.7	15.2	4.1	1.8	1.8	2.3	2.3	1.8
125°	45.2	41.6	32.3	19.4	9.4	1.8	1.8	1.8	2.3	2.3	1.8
127.5°	29.3	26.4	18.8	11.1	4.1	1.8	1.8	2.3	2.3	2.3	1.8
130°	16.4	14.7	11.1	6.5	1.8	1.8	1.8	2.3	2.3	2.3	1.8
132.5°	9.4	8.8	5.9	1.2	1.8	1.8	1.8	2.3	2.3	2.3	2.3
135°	2.3	1.2	1.2	1.2	1.8	1.8	2.3	2.3	2.9	2.9	2.3
137.5°	0.6	0.6	1.2	1.2	1.8	1.8	2.3	2.9	2.9	2.9	2.3
140°	0.6	0.6	1.2	1.8	1.8	1.8	2.3	2.9	2.9	2.9	2.3
142.5°	0.6	1.2	1.2	1.8	1.8	2.3	2.3	2.9	2.9	2.3	2.3
145°	0.6	1.2	1.2	1.8	1.8	2.3	2.3	2.9	2.3	2.3	2.3
147.5°	1.2	1.2	1.2	1.8	1.8	2.3	2.3	2.9	2.9	2.3	2.3
150°	0.6	1.2	1.2	1.8	2.3	2.3	2.3	2.9	2.3	2.3	2.3
152.5°	0.6	1.2	1.2	1.8	2.3	2.3	2.3	2.9	2.3	2.3	2.3
155°	1.2	1.2	1.2	1.8	2.3	2.3	2.3	2.9	2.3	2.3	2.9
157.5°	1.2	1.2	1.2	1.8	2.3	2.3	2.3	2.9	2.3	2.3	2.9
160°	1.2	1.2	1.2	1.8	1.8	2.3	2.3	2.3	2.3	2.3	2.3
162.5°	1.2	1.2	1.2	1.8	1.8	2.3	2.3	2.3	2.3	2.3	2.3
165°	1.2	1.2	1.2	1.2	1.8	1.8	2.3	2.3	2.3	2.3	2.3
167.5°	1.2	1.2	1.2	1.8	1.8	1.8	2.3	2.3	2.3	2.3	2.3
170°	1.2	1.2	1.2	1.8	1.8	1.8	2.3	2.9	2.9	2.9	2.9
172.5°	1.2	1.2	1.2	1.8	1.8	2.3	2.3	2.9	2.9	2.9	2.9
175°	1.2	1.2	1.2	1.8	1.8	2.3	2.3	2.9	2.9	2.9	2.9
177.5°	0.6	1.2	1.2	1.8	1.8	2.3	2.3	2.9	2.9	2.9	2.3
180°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	460.4	460.4	460.4
2.5°	438.1	429.9	427.5
5°	414.6	401.1	393.5
7.5°	391.2	373.0	364.2
10°	369.5	343.7	334.3
12.5°	343.7	313.8	299.1
15°	319.0	280.3	266.3
17.5°	291.5	248.1	231.7
20°	265.7	215.8	198.8
22.5°	236.3	184.2	165.4
25°	210.0	152.5	131.4
27.5°	180.6	120.2	102.0
30°	153.1	92.1	73.9
32.5°	126.7	67.4	51.0
35°	102.0	45.7	32.3
37.5°	78.6	28.2	16.4
40°	56.9	14.7	7.6
42.5°	38.1	7.0	4.1
45°	23.5	3.5	0.0
47.5°	13.5	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	1.8
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	5.3
97.5°	4.7	5.3	5.3
100°	4.1	5.3	5.9
102.5°	3.5	5.3	5.3
105°	2.9	4.1	4.7



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	2.3	2.9	2.9
115°	1.8	2.3	2.9
117.5°	1.8	2.3	2.3
120°	1.8	1.8	2.3
122.5°	1.8	1.8	2.3
125°	1.8	1.8	2.3
127.5°	2.3	1.8	1.8
130°	1.8	1.8	1.8
132.5°	2.3	1.8	1.8
135°	2.3	1.8	1.8
137.5°	2.3	1.8	1.8
140°	2.3	1.8	1.8
142.5°	2.3	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°	2.3	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°	246.3	239.3	215.8	177.1	123.7	69.2	25.8	4.7	1.2	1.8	1.8
110°	214.6	208.8	184.7	147.2	99.7	51.6	17.0	2.9	1.8	1.8	1.8





107.5°	2.3	3.5	4.1
110°	2.3	2.9	3.5



(END OF REPORT)