

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: P551640

Luminaire Tested: **FCC-X-2-LD4-2LO-50-UNV-80-84-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: P551640
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-80-84-ED1D
Description: FCC CORNER MOUNT LUMINAIRE WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 5000K, AND 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

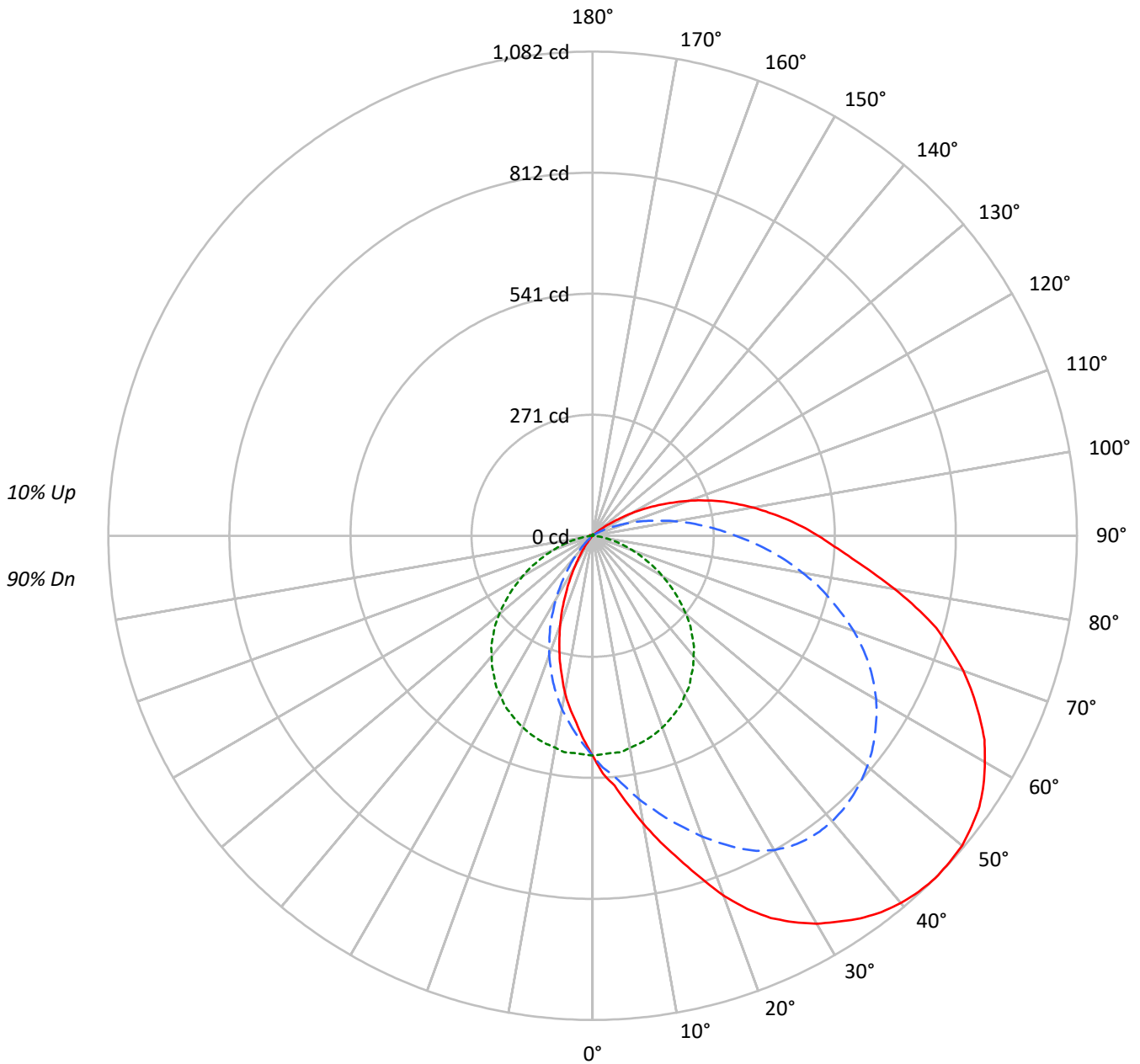
Lumens per Lamp: N/A
Luminaire Lumens: 2427.1 lumens
Efficiency: N/A
Efficacy: 103.3 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

Input Watts (W): 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: P551640

CATALOG NUMBER: FCC-X-2-LD4-2LO-50-UNV-80-84-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°	5284	5284	5284
5°	5800	5207	4344
10°	6564	5143	3581
15°	7357	5077	2790
20°	8297	4995	2055
25°	9076	4899	1349
30°	9656	4770	760
35°	10159	4633	335
40°	10604	4461	80
45°	10986	4247	0
50°	11306	3964	0
55°	11551	3605	0
60°	11674	3187	0
65°	11722	2714	0
70°	11683	2211	0
75°	11535	1631	9
80°	11067	998	50
85°	10697	478	70



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.0	1.9
10°-20°	140.8	5.8
20°-30°	228.0	9.4
30°-40°	292.9	12.1
40°-50°	331.6	13.7
50°-60°	343.5	14.2
60°-70°	324.0	13.3
70°-80°	271.5	11.2
80°-90°	196.8	8.1
90°-100°	129.3	5.3
100°-110°	74.7	3.1
110°-120°	33.0	1.4
120°-130°	8.9	0.4
130°-140°	2.1	0.1
140°-150°	1.3	0.1
150°-160°	1.0	0.0
160°-170°	0.5	0.0
170°-180°	0.2	0.0
0°-30°	415.8	17.1
0°-40°	708.7	29.2
0°-60°	1383.8	57.0
0°-90°	2176.0	89.7
90°-120°	237.0	9.8
90°-150°	249.4	10.3
90°-180°	251.0	10.3
0°-180°	2427.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	491	491	491	491	491	
5°	560	538	487	442	420	56
15°	749	656	471	340	284	216
25°	942	770	436	224	140	436
35°	1044	830	383	109	34	655
45°	1082	822	314	25	0	836
55°	1055	770	226	0	0	942
65°	954	682	135	0	0	944
75°	795	550	58	1	1	834
85°	582	399	9	2	4	497
90°	504	320	2	4	4	276
95°	433	250	1	4	6	340
105°	298	129	1	3	5	314
115°	162	43	2	2	3	162
125°	48	6	2	2	2	48
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°	490.9	490.9	490.9	490.9	490.9	490.9	490.9	490.9	490.9	490.9	490.9
2.5°	532.2	531.6	529.7	526.6	522.2	514.7	508.4	502.8	495.3	489.0	477.2
5°	560.3	557.2	554.7	551.6	541.6	534.7	523.4	510.9	499.1	487.2	463.4
7.5°	605.4	600.4	596.6	587.9	574.1	558.5	541.0	529.1	520.9	487.8	447.1
10°	653.5	649.1	641.6	626.0	609.1	586.6	561.6	533.4	508.4	480.9	432.8
12.5°	701.1	694.8	684.2	664.2	640.4	612.2	577.9	544.7	509.1	476.5	415.9
15°	748.6	741.7	730.4	706.1	674.8	637.9	596.0	554.1	512.2	470.9	398.4
17.5°	800.5	791.1	774.2	746.7	707.3	661.7	612.2	561.6	510.9	464.0	379.6
20°	856.1	843.0	824.9	788.0	741.7	687.9	628.5	569.1	510.3	455.9	358.3
22.5°	902.4	889.3	869.3	831.1	775.5	709.8	642.3	574.1	507.8	446.5	338.3
25°	942.4	931.8	909.9	866.2	807.4	732.9	655.4	577.9	504.1	436.5	317.1
27.5°	973.7	963.7	939.3	894.3	834.3	753.6	665.4	579.7	499.1	426.5	295.2
30°	1001.2	991.2	961.8	915.6	852.4	769.8	675.4	580.4	492.8	411.5	271.4
32.5°	1022.5	1013.1	983.1	933.7	864.9	781.1	681.0	579.7	484.7	400.9	245.8
35°	1043.8	1034.4	999.4	946.8	874.3	786.1	685.4	576.6	474.7	383.4	221.4
37.5°	1060.0	1049.4	1013.7	955.6	878.7	787.4	684.8	572.2	464.0	369.0	197.0
40°	1071.3	1060.0	1021.9	960.6	879.9	785.5	679.8	564.7	451.5	350.8	171.4
42.5°	1078.8	1066.3	1025.6	968.1	877.4	780.5	672.3	555.3	437.8	335.2	147.0
45°	1082.5	1069.4	1026.2	961.8	873.0	771.1	661.0	543.5	422.8	313.9	122.6
47.5°	1080.7	1066.3	1023.1	955.0	864.9	761.1	648.5	529.1	404.6	295.2	99.4
50°	1077.5	1062.5	1016.2	946.2	853.6	748.6	634.8	511.6	385.9	272.0	78.8
52.5°	1067.5	1052.5	1008.7	933.7	840.5	734.2	616.0	493.4	365.8	249.5	60.0
55°	1055.0	1041.3	995.6	922.4	823.6	716.7	598.5	474.0	346.5	226.4	43.2
57.5°	1035.6	1023.1	979.3	904.3	806.7	697.3	579.1	452.8	322.1	203.2	30.0
60°	1011.9	999.4	956.8	883.7	787.4	675.4	557.8	430.9	300.2	180.1	18.8
62.5°	986.9	975.0	930.6	858.0	763.0	652.3	534.7	409.0	277.0	158.8	11.3
65°	953.7	942.4	902.4	827.4	736.1	627.3	509.1	382.7	253.3	135.1	6.3
67.5°	918.7	908.7	868.0	799.2	704.8	599.7	482.8	357.1	228.3	114.4	3.1
70°	881.2	868.7	831.1	761.1	672.9	568.5	454.0	330.8	204.5	94.4	0.0
72.5°	837.4	828.0	791.7	725.4	636.0	535.3	424.6	302.1	178.2	75.0	0.6
75°	794.9	783.0	749.8	687.3	599.7	500.3	392.1	275.2	152.6	57.5	0.6
77.5°	739.8	736.1	704.8	644.1	565.3	466.5	356.5	242.6	128.2	41.3	0.6
80°	684.8	681.0	656.6	601.0	525.3	426.5	323.3	212.0	104.4	27.5	0.6
82.5°	630.4	625.4	602.2	556.0	484.7	392.7	288.9	181.4	82.6	16.9	0.6
85°	581.6	575.4	550.3	507.8	442.8	354.6	253.3	151.3	61.3	9.4	1.3
87.5°	539.7	535.3	507.8	464.0	400.2	318.9	222.0	122.6	43.2	4.4	1.9
90°	504.1	494.7	470.3	424.0	360.2	279.5	188.9	98.2	28.8	2.5	2.5
92.5°	469.0	460.9	434.0	386.5	324.6	245.8	157.0	75.0	18.1	1.3	3.1
95°	432.8	424.0	397.7	354.0	288.3	211.4	128.8	55.0	10.0	1.3	3.1
97.5°	397.1	389.0	361.5	317.7	255.8	181.4	101.9	38.8	5.0	1.3	2.5
100°	364.0	354.6	329.6	285.8	223.3	151.3	78.8	25.0	3.1	1.3	2.5
102.5°	329.0	321.4	295.8	253.3	189.5	123.2	58.8	15.6	1.3	1.3	1.9
105°	297.7	288.3	263.3	219.5	161.3	96.9	41.3	9.4	1.3	1.3	1.9



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CATALOG NUMBER: FCC-X-2-LD4-2LO-50-UNV-80-84-ED1D

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	193.9	186.4	164.5	127.6	81.9	38.1	11.3	1.9	1.9	1.9	1.9
115°	162.0	150.7	131.3	98.8	60.7	25.0	5.6	1.9	1.9	1.9	1.9
117.5°	129.5	120.1	106.3	75.0	40.0	16.3	3.1	1.9	1.9	1.9	1.9
120°	101.3	92.6	76.9	51.9	26.9	9.4	1.3	1.9	1.9	1.9	1.9
122.5°	72.5	65.7	51.9	33.8	16.3	4.4	1.9	1.9	2.5	2.5	1.9
125°	48.2	44.4	34.4	20.6	10.0	1.9	1.9	1.9	2.5	2.5	1.9
127.5°	31.3	28.1	20.0	11.9	4.4	1.9	1.9	2.5	2.5	2.5	1.9
130°	17.5	15.6	11.9	6.9	1.9	1.9	1.9	2.5	2.5	2.5	1.9
132.5°	10.0	9.4	6.3	1.3	1.9	1.9	1.9	2.5	2.5	2.5	2.5
135°	2.5	1.3	1.3	1.3	1.9	1.9	2.5	2.5	3.1	3.1	2.5
137.5°	0.6	0.6	1.3	1.3	1.9	1.9	2.5	3.1	3.1	3.1	2.5
140°	0.6	0.6	1.3	1.9	1.9	1.9	2.5	3.1	3.1	3.1	2.5
142.5°	0.6	1.3	1.3	1.9	1.9	2.5	2.5	3.1	3.1	2.5	2.5
145°	0.6	1.3	1.3	1.9	1.9	2.5	2.5	3.1	2.5	2.5	2.5
147.5°	1.3	1.3	1.3	1.9	1.9	2.5	2.5	3.1	3.1	2.5	2.5
150°	0.6	1.3	1.3	1.9	2.5	2.5	2.5	3.1	2.5	2.5	2.5
152.5°	0.6	1.3	1.3	1.9	2.5	2.5	2.5	3.1	2.5	2.5	2.5
155°	1.3	1.3	1.3	1.9	2.5	2.5	2.5	3.1	2.5	2.5	3.1
157.5°	1.3	1.3	1.3	1.9	2.5	2.5	2.5	3.1	2.5	2.5	3.1
160°	1.3	1.3	1.3	1.9	1.9	2.5	2.5	2.5	2.5	2.5	2.5
162.5°	1.3	1.3	1.3	1.9	1.9	2.5	2.5	2.5	2.5	2.5	2.5
165°	1.3	1.3	1.3	1.3	1.9	1.9	2.5	2.5	2.5	2.5	2.5
167.5°	1.3	1.3	1.3	1.9	1.9	1.9	2.5	2.5	2.5	2.5	2.5
170°	1.3	1.3	1.3	1.9	1.9	1.9	2.5	3.1	3.1	3.1	3.1
172.5°	1.3	1.3	1.3	1.9	1.9	2.5	2.5	3.1	3.1	3.1	3.1
175°	1.3	1.3	1.3	1.9	1.9	2.5	2.5	3.1	3.1	3.1	3.1
177.5°	0.6	1.3	1.3	1.9	1.9	2.5	2.5	3.1	3.1	3.1	2.5
180°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	490.9	490.9	490.9
2.5°	467.2	458.4	455.9
5°	442.1	427.8	419.6
7.5°	417.1	397.7	388.4
10°	394.0	366.5	356.5
12.5°	366.5	334.6	318.9
15°	340.2	298.9	283.9
17.5°	310.8	264.5	247.0
20°	283.3	230.1	212.0
22.5°	252.0	196.4	176.4
25°	223.9	162.6	140.1
27.5°	192.6	128.2	108.8
30°	163.2	98.2	78.8
32.5°	135.1	71.9	54.4
35°	108.8	48.8	34.4
37.5°	83.8	30.0	17.5
40°	60.7	15.6	8.1
42.5°	40.6	7.5	4.4
45°	25.0	3.8	0.0
47.5°	14.4	0.0	0.0
50°	7.5	0.0	0.0
52.5°	3.1	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°	0.6	0.6	0.6
77.5°	0.6	1.3	1.9
80°	1.3	2.5	3.1
82.5°	2.5	3.1	3.1
85°	2.5	3.1	3.8
87.5°	3.1	3.8	4.4
90°	3.8	4.4	4.4
92.5°	3.8	5.0	5.0
95°	4.4	5.0	5.6
97.5°	5.0	5.6	5.6
100°	4.4	5.6	6.3
102.5°	3.8	5.6	5.6
105°	3.1	4.4	5.0



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	2.5	3.1	3.1
115°	1.9	2.5	3.1
117.5°	1.9	2.5	2.5
120°	1.9	1.9	2.5
122.5°	1.9	1.9	2.5
125°	1.9	1.9	2.5
127.5°	2.5	1.9	1.9
130°	1.9	1.9	1.9
132.5°	2.5	1.9	1.9
135°	2.5	1.9	1.9
137.5°	2.5	1.9	1.9
140°	2.5	1.9	1.9
142.5°	2.5	1.9	1.9
145°	1.9	1.9	1.9
147.5°	1.9	1.9	1.9
150°	1.9	1.9	1.3
152.5°	1.9	1.3	1.3
155°	1.9	1.3	0.6
157.5°	2.5	1.3	0.6
160°	1.9	1.3	0.6
162.5°	1.9	1.3	0.6
165°	1.9	1.3	0.0
167.5°	1.9	1.3	0.6
170°	1.9	1.3	0.6
172.5°	1.9	1.3	0.6
175°	1.9	0.6	0.6
177.5°	1.9	0.6	0.6
180°	1.9	1.9	1.9



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	262.7	255.2	230.1	188.9	132.0	73.8	27.5	5.0	1.3	1.9	1.9
110°	228.9	222.6	197.0	157.0	106.3	55.0	18.1	3.1	1.9	1.9	1.9





107.5°	2.5	3.8	4.4
110°	2.5	3.1	3.8



(END OF REPORT)