

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: P550616

Luminaire Tested: **FCC-X-2-LD4-1HI-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: P550616
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-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

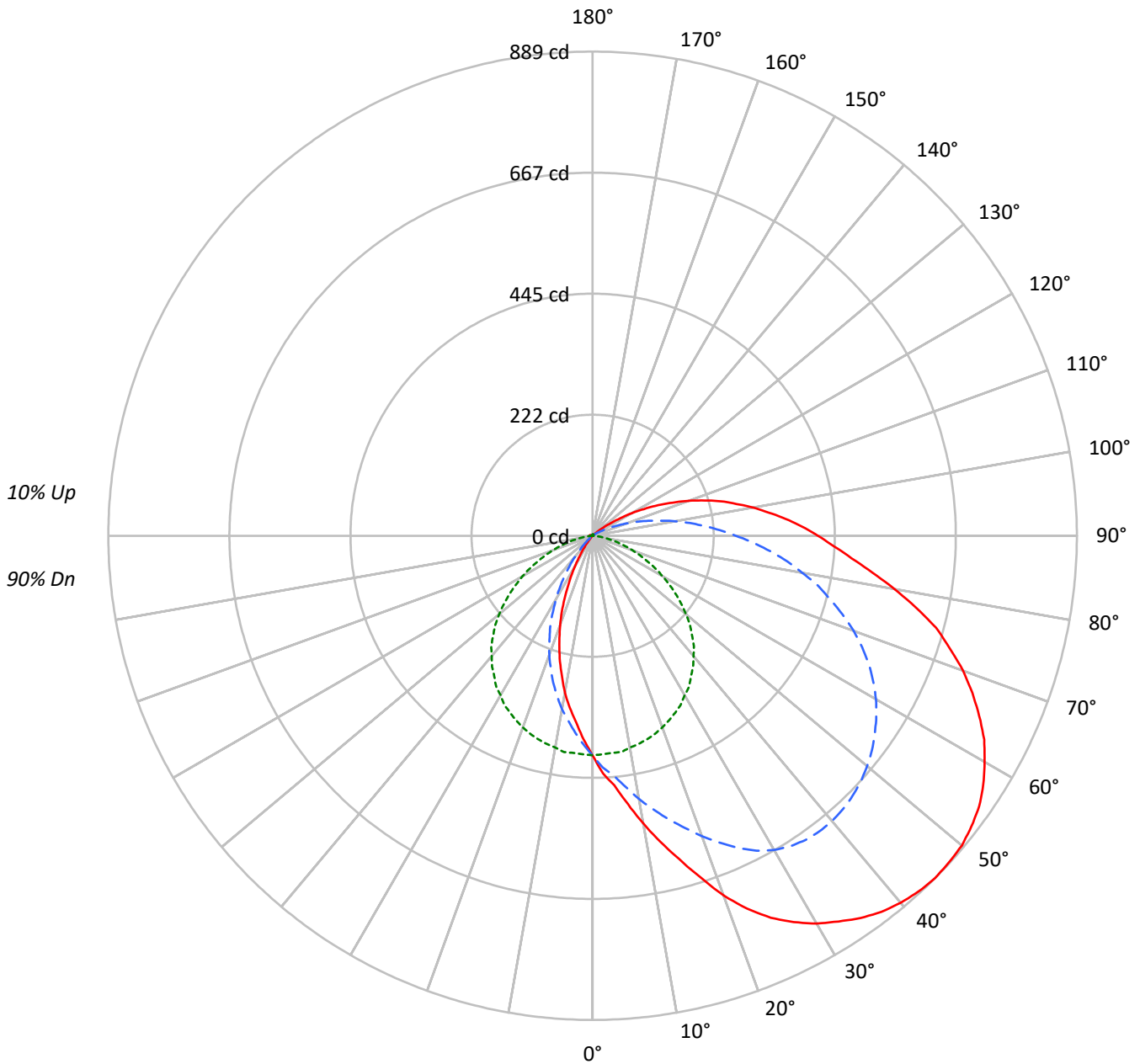
Lumens per Lamp: N/A
Luminaire Lumens: 1993.0 lumens
Efficiency: N/A
Efficacy: 91.8 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

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: P550616

CATALOG NUMBER: FCC-X-2-LD4-1HI-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°	4339	4339	4339
5°	4763	4276	3567
10°	5391	4223	2940
15°	6041	4170	2292
20°	6813	4102	1687
25°	7454	4023	1108
30°	7930	3917	624
35°	8342	3804	274
40°	8708	3664	66
45°	9022	3488	0
50°	9284	3256	0
55°	9486	2960	0
60°	9586	2617	0
65°	9626	2227	0
70°	9594	1816	0
75°	9471	1339	7
80°	9087	820	42
85°	8784	392	57



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.6	1.9
10°-20°	115.6	5.8
20°-30°	187.2	9.4
30°-40°	240.5	12.1
40°-50°	272.3	13.7
50°-60°	282.1	14.2
60°-70°	266.0	13.3
70°-80°	222.9	11.2
80°-90°	161.6	8.1
90°-100°	106.2	5.3
100°-110°	61.3	3.1
110°-120°	27.1	1.4
120°-130°	7.3	0.4
130°-140°	1.7	0.1
140°-150°	1.1	0.1
150°-160°	0.8	0.0
160°-170°	0.4	0.0
170°-180°	0.2	0.0
0°-30°	341.5	17.1
0°-40°	582.0	29.2
0°-60°	1136.4	57.0
0°-90°	1786.9	89.7
90°-120°	194.6	9.8
90°-150°	204.7	10.3
90°-180°	206.0	10.3
0°-180°	1993.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	403	403	403	403	403	
5°	460	442	400	363	345	46
15°	615	539	387	279	233	177
25°	774	632	358	184	115	358
35°	857	682	315	89	28	538
45°	889	675	258	20	0	686
55°	866	632	186	0	0	774
65°	783	560	111	0	0	775
75°	653	452	47	0	0	685
85°	478	327	8	2	3	408
90°	414	263	2	3	4	227
95°	355	205	1	4	5	279
105°	244	106	1	3	4	258
115°	133	35	2	2	3	133
125°	40	5	2	2	2	40
135°	2	2	3	2	2	4
145°	0	2	2	2	2	0
155°	1	2	2	2	0	0
165°	1	2	2	2	0	0
175°	1	2	3	2	0	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°	403.1	403.1	403.1	403.1	403.1	403.1	403.1	403.1	403.1	403.1	403.1
2.5°	437.0	436.5	435.0	432.4	428.8	422.7	417.5	412.9	406.7	401.6	391.8
5°	460.1	457.6	455.5	453.0	444.7	439.1	429.8	419.6	409.8	400.1	380.5
7.5°	497.1	493.0	489.9	482.7	471.4	458.6	444.2	434.5	427.8	400.6	367.2
10°	536.7	533.1	526.9	514.1	500.2	481.7	461.2	438.1	417.5	394.9	355.4
12.5°	575.7	570.6	561.8	545.4	525.9	502.8	474.5	447.3	418.0	391.3	341.5
15°	614.7	609.1	599.8	579.8	554.1	523.8	489.4	455.0	420.6	386.7	327.1
17.5°	657.3	649.6	635.8	613.2	580.8	543.3	502.8	461.2	419.6	381.1	311.7
20°	703.0	692.3	677.4	647.1	609.1	564.9	516.1	467.3	419.1	374.4	294.3
22.5°	741.1	730.3	713.8	682.5	636.8	582.9	527.4	471.4	417.0	366.7	277.8
25°	773.9	765.2	747.2	711.3	663.0	601.9	538.2	474.5	413.9	358.5	260.4
27.5°	799.6	791.4	771.4	734.4	685.1	618.8	546.4	476.1	409.8	350.2	242.4
30°	822.2	814.0	789.8	751.8	700.0	632.2	554.6	476.6	404.7	337.9	222.9
32.5°	839.7	831.9	807.3	766.7	710.2	641.4	559.3	476.1	398.0	329.2	201.8
35°	857.1	849.4	820.7	777.5	717.9	645.5	562.8	473.5	389.8	314.8	181.8
37.5°	870.5	861.7	832.5	784.7	721.5	646.6	562.3	469.9	381.1	303.0	161.8
40°	879.7	870.5	839.1	788.8	722.6	645.0	558.2	463.7	370.8	288.1	140.7
42.5°	885.9	875.6	842.2	795.0	720.5	640.9	552.1	456.0	359.5	275.3	120.7
45°	889.0	878.2	842.7	789.8	716.9	633.2	542.8	446.3	347.2	257.8	100.7
47.5°	887.4	875.6	840.2	784.2	710.2	625.0	532.6	434.5	332.3	242.4	81.7
50°	884.8	872.5	834.5	777.0	701.0	614.7	521.3	420.1	316.9	223.4	64.7
52.5°	876.6	864.3	828.4	766.7	690.2	602.9	505.8	405.2	300.4	204.9	49.3
55°	866.4	855.1	817.6	757.5	676.3	588.5	491.5	389.3	284.5	185.9	35.4
57.5°	850.4	840.2	804.2	742.6	662.5	572.6	475.5	371.8	264.5	166.9	24.7
60°	830.9	820.7	785.7	725.6	646.6	554.6	458.1	353.8	246.5	147.9	15.4
62.5°	810.4	800.6	764.2	704.6	626.5	535.6	439.1	335.9	227.5	130.4	9.2
65°	783.2	773.9	741.1	679.4	604.4	515.1	418.0	314.3	208.0	110.9	5.1
67.5°	754.4	746.2	712.8	656.3	578.8	492.5	396.5	293.2	187.4	94.0	2.6
70°	723.6	713.3	682.5	625.0	552.6	466.8	372.8	271.7	167.9	77.5	0.0
72.5°	687.6	679.9	650.2	595.7	522.3	439.6	348.7	248.0	146.4	61.6	0.5
75°	652.7	643.0	615.7	564.4	492.5	410.8	322.0	226.0	125.3	47.2	0.5
77.5°	607.5	604.4	578.8	529.0	464.2	383.1	292.7	199.3	105.3	33.9	0.5
80°	562.3	559.3	539.2	493.5	431.4	350.2	265.5	174.1	85.8	22.6	0.5
82.5°	517.7	513.5	494.5	456.5	398.0	322.5	237.3	148.9	67.8	13.9	0.5
85°	477.6	472.5	451.9	417.0	363.6	291.2	208.0	124.3	50.3	7.7	1.0
87.5°	443.2	439.6	417.0	381.1	328.7	261.9	182.3	100.7	35.4	3.6	1.5
90°	413.9	406.2	386.2	348.2	295.8	229.6	155.1	80.6	23.6	2.1	2.1
92.5°	385.2	378.5	356.4	317.4	266.5	201.8	128.9	61.6	14.9	1.0	2.6
95°	355.4	348.2	326.6	290.7	236.7	173.6	105.8	45.2	8.2	1.0	2.6
97.5°	326.1	319.4	296.8	260.9	210.0	148.9	83.7	31.8	4.1	1.0	2.1
100°	298.9	291.2	270.6	234.7	183.3	124.3	64.7	20.5	2.6	1.0	2.1
102.5°	270.1	264.0	242.9	208.0	155.6	101.2	48.3	12.8	1.0	1.0	1.5
105°	244.4	236.7	216.2	180.3	132.5	79.6	33.9	7.7	1.0	1.0	1.5



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	159.2	153.0	135.1	104.8	67.3	31.3	9.2	1.5	1.5	1.5	1.5
115°	133.0	123.8	107.8	81.1	49.8	20.5	4.6	1.5	1.5	1.5	1.5
117.5°	106.3	98.6	87.3	61.6	32.9	13.4	2.6	1.5	1.5	1.5	1.5
120°	83.2	76.0	63.2	42.6	22.1	7.7	1.0	1.5	1.5	1.5	1.5
122.5°	59.6	53.9	42.6	27.7	13.4	3.6	1.5	1.5	2.1	2.1	1.5
125°	39.5	36.5	28.2	16.9	8.2	1.5	1.5	1.5	2.1	2.1	1.5
127.5°	25.7	23.1	16.4	9.8	3.6	1.5	1.5	2.1	2.1	2.1	1.5
130°	14.4	12.8	9.8	5.6	1.5	1.5	1.5	2.1	2.1	2.1	1.5
132.5°	8.2	7.7	5.1	1.0	1.5	1.5	1.5	2.1	2.1	2.1	2.1
135°	2.1	1.0	1.0	1.0	1.5	1.5	2.1	2.1	2.6	2.6	2.1
137.5°	0.5	0.5	1.0	1.0	1.5	1.5	2.1	2.6	2.6	2.6	2.1
140°	0.5	0.5	1.0	1.5	1.5	1.5	2.1	2.6	2.6	2.6	2.1
142.5°	0.5	1.0	1.0	1.5	1.5	2.1	2.1	2.6	2.6	2.1	2.1
145°	0.5	1.0	1.0	1.5	1.5	2.1	2.1	2.6	2.1	2.1	2.1
147.5°	1.0	1.0	1.0	1.5	1.5	2.1	2.1	2.6	2.6	2.1	2.1
150°	0.5	1.0	1.0	1.5	2.1	2.1	2.1	2.6	2.1	2.1	2.1
152.5°	0.5	1.0	1.0	1.5	2.1	2.1	2.1	2.6	2.1	2.1	2.1
155°	1.0	1.0	1.0	1.5	2.1	2.1	2.1	2.6	2.1	2.1	2.6
157.5°	1.0	1.0	1.0	1.5	2.1	2.1	2.1	2.6	2.1	2.1	2.6
160°	1.0	1.0	1.0	1.5	1.5	2.1	2.1	2.1	2.1	2.1	2.1
162.5°	1.0	1.0	1.0	1.5	1.5	2.1	2.1	2.1	2.1	2.1	2.1
165°	1.0	1.0	1.0	1.0	1.5	1.5	2.1	2.1	2.1	2.1	2.1
167.5°	1.0	1.0	1.0	1.5	1.5	1.5	2.1	2.1	2.1	2.1	2.1
170°	1.0	1.0	1.0	1.5	1.5	1.5	2.1	2.6	2.6	2.6	2.6
172.5°	1.0	1.0	1.0	1.5	1.5	2.1	2.1	2.6	2.6	2.6	2.6
175°	1.0	1.0	1.0	1.5	1.5	2.1	2.1	2.6	2.6	2.6	2.6
177.5°	0.5	1.0	1.0	1.5	1.5	2.1	2.1	2.6	2.6	2.6	2.1
180°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	403.1	403.1	403.1
2.5°	383.6	376.4	374.4
5°	363.1	351.3	344.6
7.5°	342.5	326.6	318.9
10°	323.5	300.9	292.7
12.5°	300.9	274.7	261.9
15°	279.4	245.5	233.2
17.5°	255.2	217.2	202.9
20°	232.6	189.0	174.1
22.5°	207.0	161.3	144.8
25°	183.9	133.5	115.0
27.5°	158.2	105.3	89.4
30°	134.0	80.6	64.7
32.5°	110.9	59.1	44.7
35°	89.4	40.1	28.2
37.5°	68.8	24.7	14.4
40°	49.8	12.8	6.7
42.5°	33.4	6.2	3.6
45°	20.5	3.1	0.0
47.5°	11.8	0.0	0.0
50°	6.2	0.0	0.0
52.5°	2.6	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	1.0	1.5
80°	1.0	2.1	2.6
82.5°	2.1	2.6	2.6
85°	2.1	2.6	3.1
87.5°	2.6	3.1	3.6
90°	3.1	3.6	3.6
92.5°	3.1	4.1	4.1
95°	3.6	4.1	4.6
97.5°	4.1	4.6	4.6
100°	3.6	4.6	5.1
102.5°	3.1	4.6	4.6
105°	2.6	3.6	4.1



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	2.1	2.6	2.6
115°	1.5	2.1	2.6
117.5°	1.5	2.1	2.1
120°	1.5	1.5	2.1
122.5°	1.5	1.5	2.1
125°	1.5	1.5	2.1
127.5°	2.1	1.5	1.5
130°	1.5	1.5	1.5
132.5°	2.1	1.5	1.5
135°	2.1	1.5	1.5
137.5°	2.1	1.5	1.5
140°	2.1	1.5	1.5
142.5°	2.1	1.5	1.5
145°	1.5	1.5	1.5
147.5°	1.5	1.5	1.5
150°	1.5	1.5	1.0
152.5°	1.5	1.0	1.0
155°	1.5	1.0	0.5
157.5°	2.1	1.0	0.5
160°	1.5	1.0	0.5
162.5°	1.5	1.0	0.5
165°	1.5	1.0	0.0
167.5°	1.5	1.0	0.5
170°	1.5	1.0	0.5
172.5°	1.5	1.0	0.5
175°	1.5	0.5	0.5
177.5°	1.5	0.5	0.5
180°	1.5	1.5	1.5



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	215.7	209.5	189.0	155.1	108.4	60.6	22.6	4.1	1.0	1.5	1.5
110°	188.0	182.8	161.8	128.9	87.3	45.2	14.9	2.6	1.5	1.5	1.5





107.5°	2.1	3.1	3.6
110°	2.1	2.6	3.1



(END OF REPORT)