

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: P550560

Luminaire Tested: **FCC-X-2-LD4-1HI-40-UNV-80-88-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: P550560
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-40-UNV-80-88-ED1D
Description: FCC CORNER MOUNT LUMINAIRE WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .500 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 4000K, AND 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

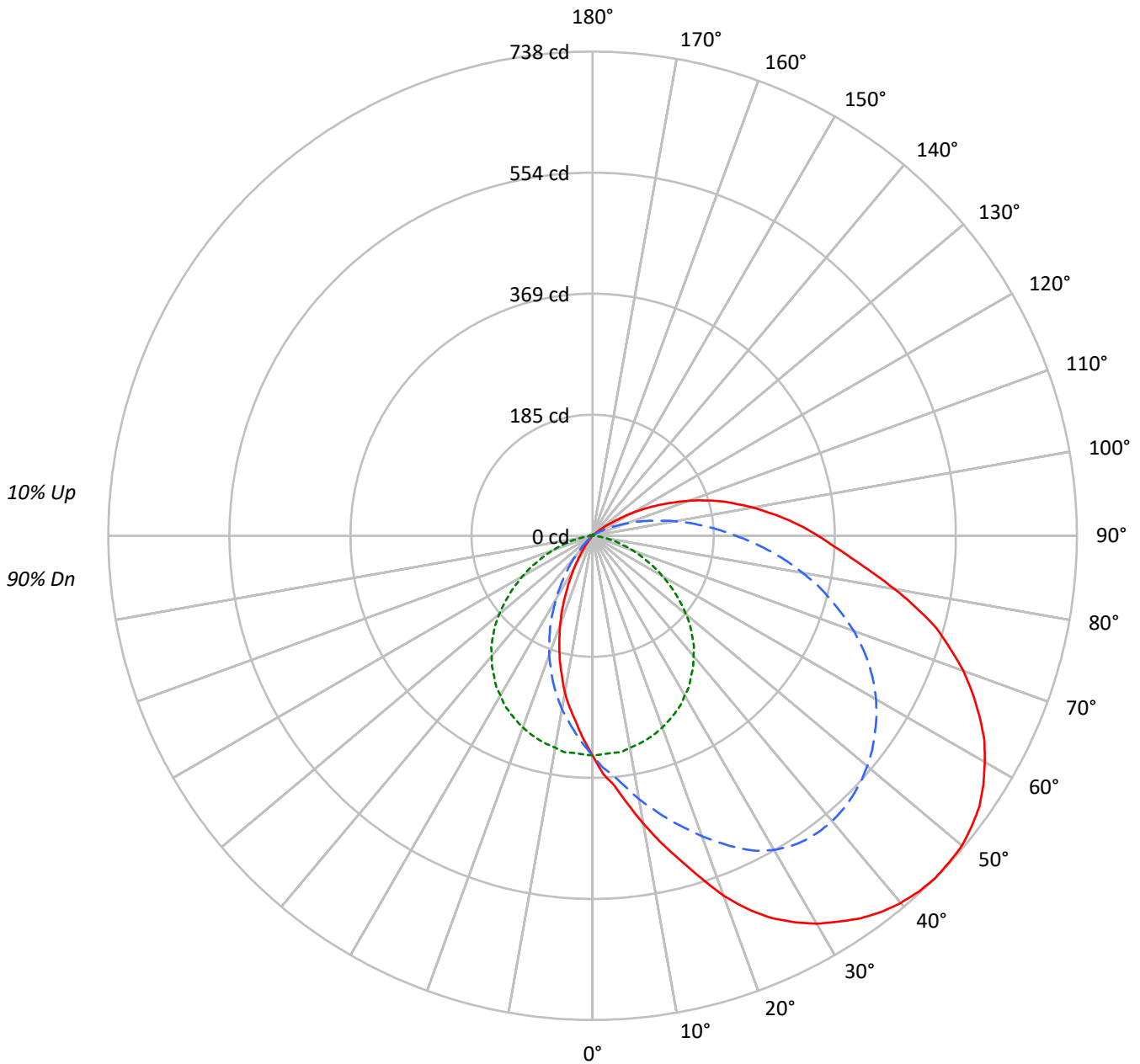
Lumens per Lamp: N/A
Luminaire Lumens: 1655.0 lumens
Efficiency: N/A
Efficacy: 76.3 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

Input Watts (W): 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: P550560

CATALOG NUMBER: FCC-X-2-LD4-1HI-40-UNV-80-88-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°	3604	3604	3604
5°	3956	3551	2963
10°	4476	3507	2442
15°	5017	3462	1903
20°	5658	3406	1401
25°	6190	3341	920
30°	6586	3253	518
35°	6928	3158	229
40°	7231	3042	54
45°	7491	2897	0
50°	7710	2704	0
55°	7876	2459	0
60°	7960	2173	0
65°	7993	1850	0
70°	7967	1509	0
75°	7865	1112	6
80°	7547	682	34
85°	7294	325	48



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	32.1	1.9
10°-20°	96.0	5.8
20°-30°	155.5	9.4
30°-40°	199.7	12.1
40°-50°	226.1	13.7
50°-60°	234.2	14.2
60°-70°	220.9	13.3
70°-80°	185.1	11.2
80°-90°	134.2	8.1
90°-100°	88.2	5.3
100°-110°	50.9	3.1
110°-120°	22.5	1.4
120°-130°	6.1	0.4
130°-140°	1.4	0.1
140°-150°	0.9	0.1
150°-160°	0.6	0.0
160°-170°	0.4	0.0
170°-180°	0.1	0.0
0°-30°	283.6	17.1
0°-40°	483.3	29.2
0°-60°	943.6	57.0
0°-90°	1483.8	89.7
90°-120°	161.6	9.8
90°-150°	170.0	10.3
90°-180°	171.0	10.3
0°-180°	1655.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	335	335	335	335	335	
5°	382	367	332	302	286	39
15°	510	448	321	232	194	147
25°	643	525	298	153	96	297
35°	712	566	261	74	24	446
45°	738	561	214	17	0	570
55°	719	525	154	0	0	642
65°	650	465	92	0	0	643
75°	542	375	39	0	0	568
85°	397	272	6	2	3	339
90°	344	218	2	3	3	188
95°	295	170	1	3	4	232
105°	203	88	1	2	3	214
115°	110	29	1	1	2	111
125°	33	4	2	1	2	33
135°	2	1	2	2	1	3
145°	0	2	2	1	1	0
155°	1	2	2	1	0	0
165°	1	1	2	1	0	0
175°	1	2	2	1	0	0
180°	1	1	1	1	1	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
0°	334.8	334.8	334.8	334.8	334.8	334.8	334.8	334.8	334.8	334.8	334.8
2.5°	362.9	362.5	361.2	359.1	356.1	351.0	346.7	342.9	337.8	333.5	325.4
5°	382.1	380.0	378.3	376.1	369.3	364.6	356.9	348.4	340.3	332.2	316.0
7.5°	412.8	409.4	406.8	400.9	391.5	380.8	368.9	360.8	355.2	332.6	304.9
10°	445.6	442.7	437.5	426.9	415.4	400.0	383.0	363.8	346.7	327.9	295.1
12.5°	478.1	473.8	466.5	452.9	436.7	417.5	394.0	371.4	347.1	325.0	283.6
15°	510.5	505.8	498.1	481.5	460.1	435.0	406.4	377.8	349.3	321.1	271.7
17.5°	545.9	539.5	528.0	509.2	482.3	451.2	417.5	383.0	348.4	316.4	258.9
20°	583.8	574.9	562.5	537.3	505.8	469.1	428.6	388.1	348.0	310.9	244.4
22.5°	615.4	606.4	592.8	566.8	528.8	484.0	438.0	391.5	346.3	304.5	230.7
25°	642.7	635.4	620.5	590.6	550.6	499.8	446.9	394.0	343.7	297.7	216.2
27.5°	664.0	657.2	640.5	609.8	568.9	513.9	453.7	395.3	340.3	290.8	201.3
30°	682.8	675.9	655.9	624.3	581.3	525.0	460.6	395.7	336.0	280.6	185.1
32.5°	697.3	690.9	670.4	636.7	589.8	532.6	464.4	395.3	330.5	273.4	167.6
35°	711.8	705.4	681.5	645.7	596.2	536.1	467.4	393.2	323.7	261.4	151.0
37.5°	722.8	715.6	691.3	651.6	599.2	536.9	467.0	390.2	316.4	251.6	134.3
40°	730.5	722.8	696.8	655.0	600.0	535.6	463.6	385.1	307.9	239.2	116.8
42.5°	735.6	727.1	699.4	660.2	598.3	532.2	458.4	378.7	298.5	228.6	100.2
45°	738.2	729.2	699.8	655.9	595.3	525.8	450.8	370.6	288.3	214.1	83.6
47.5°	736.9	727.1	697.7	651.2	589.8	519.0	442.2	360.8	275.9	201.3	67.8
50°	734.8	724.5	693.0	645.2	582.1	510.5	432.9	348.8	263.1	185.5	53.7
52.5°	728.0	717.7	687.9	636.7	573.2	500.7	420.1	336.5	249.5	170.2	40.9
55°	719.4	710.0	678.9	629.0	561.6	488.7	408.1	323.3	236.3	154.4	29.4
57.5°	706.2	697.7	667.8	616.7	550.1	475.5	394.9	308.8	219.6	138.6	20.5
60°	690.0	681.5	652.5	602.6	536.9	460.6	380.4	293.8	204.7	122.8	12.8
62.5°	672.9	664.8	634.6	585.1	520.3	444.8	364.6	278.9	188.9	108.3	7.7
65°	650.3	642.7	615.4	564.2	501.9	427.7	347.1	261.0	172.7	92.1	4.3
67.5°	626.5	619.6	591.9	545.0	480.6	409.0	329.2	243.5	155.7	78.0	2.1
70°	600.9	592.3	566.8	519.0	458.9	387.6	309.6	225.6	139.5	64.4	0.0
72.5°	571.0	564.6	539.9	494.7	433.7	365.0	289.6	206.0	121.5	51.2	0.4
75°	542.0	533.9	511.3	468.7	409.0	341.2	267.4	187.6	104.1	39.2	0.4
77.5°	504.5	501.9	480.6	439.2	385.5	318.1	243.1	165.5	87.4	28.1	0.4
80°	467.0	464.4	447.8	409.8	358.2	290.8	220.5	144.6	71.2	18.8	0.4
82.5°	429.9	426.5	410.7	379.1	330.5	267.8	197.0	123.7	56.3	11.5	0.4
85°	396.6	392.3	375.3	346.3	301.9	241.8	172.7	103.2	41.8	6.4	0.9
87.5°	368.0	365.0	346.3	316.4	272.9	217.5	151.4	83.6	29.4	3.0	1.3
90°	343.7	337.3	320.7	289.1	245.6	190.6	128.8	67.0	19.6	1.7	1.7
92.5°	319.8	314.3	296.0	263.5	221.3	167.6	107.0	51.2	12.4	0.9	2.1
95°	295.1	289.1	271.2	241.4	196.6	144.1	87.8	37.5	6.8	0.9	2.1
97.5°	270.8	265.3	246.5	216.6	174.4	123.7	69.5	26.4	3.4	0.9	1.7
100°	248.2	241.8	224.7	194.9	152.2	103.2	53.7	17.1	2.1	0.9	1.7
102.5°	224.3	219.2	201.7	172.7	129.2	84.0	40.1	10.7	0.9	0.9	1.3
105°	203.0	196.6	179.5	149.7	110.0	66.1	28.1	6.4	0.9	0.9	1.3



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CATALOG NUMBER: FCC-X-2-LD4-1HI-40-UNV-80-88-ED1D

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	132.2	127.1	112.2	87.0	55.9	26.0	7.7	1.3	1.3	1.3	1.3
115°	110.5	102.8	89.6	67.4	41.4	17.1	3.8	1.3	1.3	1.3	1.3
117.5°	88.3	81.9	72.5	51.2	27.3	11.1	2.1	1.3	1.3	1.3	1.3
120°	69.1	63.1	52.5	35.4	18.3	6.4	0.9	1.3	1.3	1.3	1.3
122.5°	49.5	44.8	35.4	23.0	11.1	3.0	1.3	1.3	1.7	1.7	1.3
125°	32.8	30.3	23.5	14.1	6.8	1.3	1.3	1.3	1.7	1.7	1.3
127.5°	21.3	19.2	13.6	8.1	3.0	1.3	1.3	1.7	1.7	1.7	1.3
130°	11.9	10.7	8.1	4.7	1.3	1.3	1.3	1.7	1.7	1.7	1.3
132.5°	6.8	6.4	4.3	0.9	1.3	1.3	1.3	1.7	1.7	1.7	1.7
135°	1.7	0.9	0.9	0.9	1.3	1.3	1.7	1.7	2.1	2.1	1.7
137.5°	0.4	0.4	0.9	0.9	1.3	1.3	1.7	2.1	2.1	2.1	1.7
140°	0.4	0.4	0.9	1.3	1.3	1.3	1.7	2.1	2.1	2.1	1.7
142.5°	0.4	0.9	0.9	1.3	1.3	1.7	1.7	2.1	2.1	1.7	1.7
145°	0.4	0.9	0.9	1.3	1.3	1.7	1.7	2.1	1.7	1.7	1.7
147.5°	0.9	0.9	0.9	1.3	1.3	1.7	1.7	2.1	2.1	1.7	1.7
150°	0.4	0.9	0.9	1.3	1.7	1.7	1.7	2.1	1.7	1.7	1.7
152.5°	0.4	0.9	0.9	1.3	1.7	1.7	1.7	2.1	1.7	1.7	1.7
155°	0.9	0.9	0.9	1.3	1.7	1.7	1.7	2.1	1.7	1.7	2.1
157.5°	0.9	0.9	0.9	1.3	1.7	1.7	1.7	2.1	1.7	1.7	2.1
160°	0.9	0.9	0.9	1.3	1.3	1.7	1.7	1.7	1.7	1.7	1.7
162.5°	0.9	0.9	0.9	1.3	1.3	1.7	1.7	1.7	1.7	1.7	1.7
165°	0.9	0.9	0.9	0.9	1.3	1.3	1.7	1.7	1.7	1.7	1.7
167.5°	0.9	0.9	0.9	1.3	1.3	1.3	1.7	1.7	1.7	1.7	1.7
170°	0.9	0.9	0.9	1.3	1.3	1.3	1.7	2.1	2.1	2.1	2.1
172.5°	0.9	0.9	0.9	1.3	1.3	1.7	1.7	2.1	2.1	2.1	2.1
175°	0.9	0.9	0.9	1.3	1.3	1.7	1.7	2.1	2.1	2.1	2.1
177.5°	0.4	0.9	0.9	1.3	1.3	1.7	1.7	2.1	2.1	2.1	1.7
180°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	334.8	334.8	334.8
2.5°	318.6	312.6	310.9
5°	301.5	291.7	286.2
7.5°	284.4	271.2	264.8
10°	268.7	249.9	243.1
12.5°	249.9	228.2	217.5
15°	232.0	203.8	193.6
17.5°	211.9	180.4	168.4
20°	193.2	156.9	144.6
22.5°	171.9	133.9	120.3
25°	152.7	110.9	95.5
27.5°	131.3	87.4	74.2
30°	111.3	67.0	53.7
32.5°	92.1	49.0	37.1
35°	74.2	33.3	23.5
37.5°	57.1	20.5	11.9
40°	41.4	10.7	5.5
42.5°	27.7	5.1	3.0
45°	17.1	2.6	0.0
47.5°	9.8	0.0	0.0
50°	5.1	0.0	0.0
52.5°	2.1	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°	0.4	0.4	0.4
77.5°	0.4	0.9	1.3
80°	0.9	1.7	2.1
82.5°	1.7	2.1	2.1
85°	1.7	2.1	2.6
87.5°	2.1	2.6	3.0
90°	2.6	3.0	3.0
92.5°	2.6	3.4	3.4
95°	3.0	3.4	3.8
97.5°	3.4	3.8	3.8
100°	3.0	3.8	4.3
102.5°	2.6	3.8	3.8
105°	2.1	3.0	3.4



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	1.7	2.1	2.1
115°	1.3	1.7	2.1
117.5°	1.3	1.7	1.7
120°	1.3	1.3	1.7
122.5°	1.3	1.3	1.7
125°	1.3	1.3	1.7
127.5°	1.7	1.3	1.3
130°	1.3	1.3	1.3
132.5°	1.7	1.3	1.3
135°	1.7	1.3	1.3
137.5°	1.7	1.3	1.3
140°	1.7	1.3	1.3
142.5°	1.7	1.3	1.3
145°	1.3	1.3	1.3
147.5°	1.3	1.3	1.3
150°	1.3	1.3	0.9
152.5°	1.3	0.9	0.9
155°	1.3	0.9	0.4
157.5°	1.7	0.9	0.4
160°	1.3	0.9	0.4
162.5°	1.3	0.9	0.4
165°	1.3	0.9	0.0
167.5°	1.3	0.9	0.4
170°	1.3	0.9	0.4
172.5°	1.3	0.9	0.4
175°	1.3	0.4	0.4
177.5°	1.3	0.4	0.4
180°	1.3	1.3	1.3



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	179.1	174.0	156.9	128.8	90.0	50.3	18.8	3.4	0.9	1.3	1.3
110°	156.1	151.8	134.3	107.0	72.5	37.5	12.4	2.1	1.3	1.3	1.3





107.5°	1.7	2.6	3.0
110°	1.7	2.1	2.6



(END OF REPORT)