

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: P550558

Luminaire Tested: **FCC-X-2-LD4-1HI-40-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: P550558
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-80-87-ED1D
Description: FCC CORNER MOUNT LUMINAIRE WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .375 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 4000K, AND 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

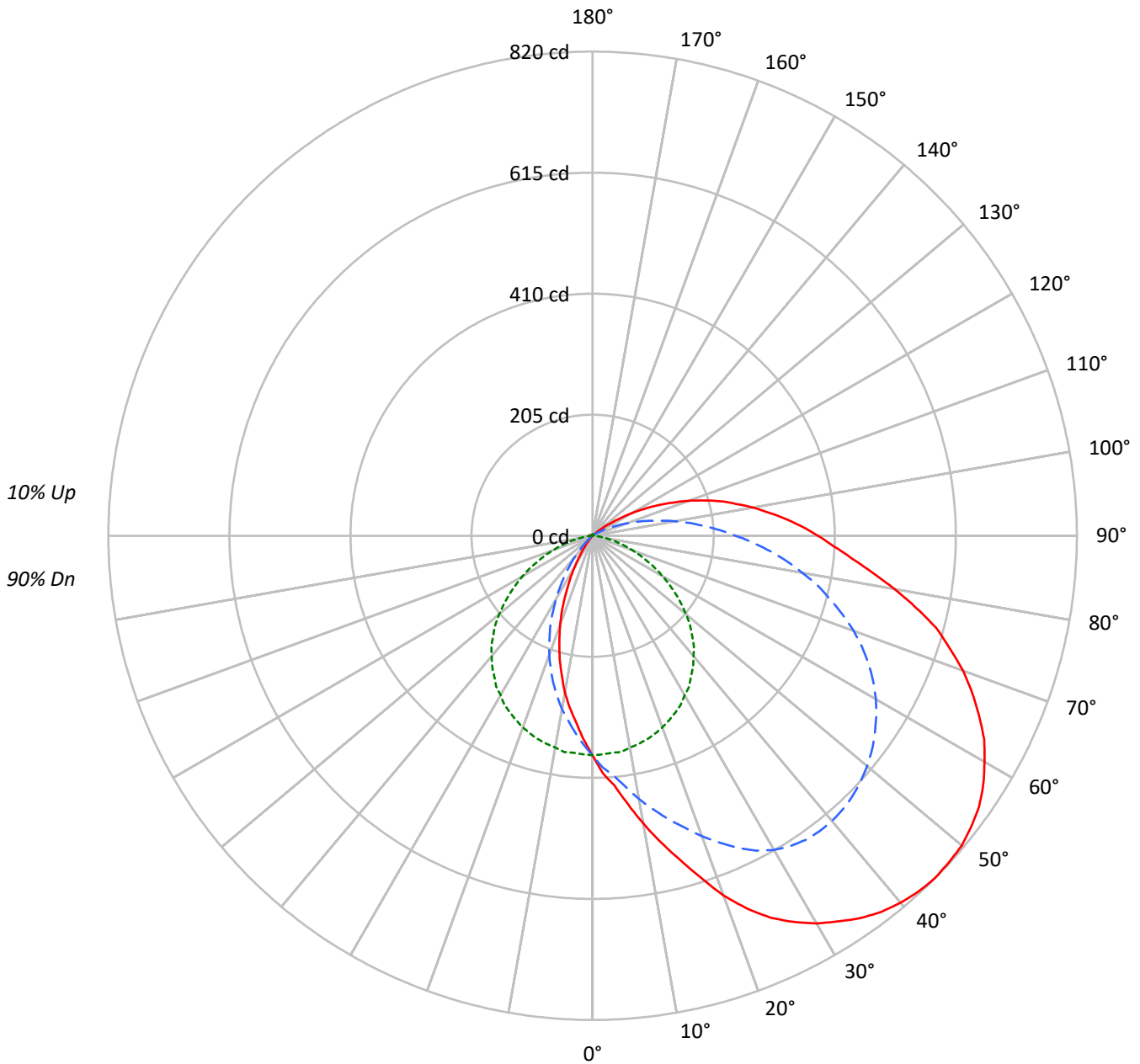
Lumens per Lamp: N/A
Luminaire Lumens: 1838.0 lumens
Efficiency: N/A
Efficacy: 84.7 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

Input Watts (W): 21.7
Input Voltage (V): NR
Input Current (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: P550558

CATALOG NUMBER: FCC-X-2-LD4-1HI-40-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°	4002	4002	4002
5°	4393	3943	3290
10°	4971	3895	2712
15°	5571	3845	2113
20°	6284	3783	1556
25°	6874	3710	1022
30°	7313	3612	576
35°	7694	3508	253
40°	8031	3379	61
45°	8320	3218	0
50°	8562	3002	0
55°	8748	2729	0
60°	8841	2414	0
65°	8878	2055	0
70°	8847	1675	0
75°	8736	1236	7
80°	8381	754	39
85°	8102	361	51



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	35.6	1.9
10°-20°	106.6	5.8
20°-30°	172.7	9.4
30°-40°	221.8	12.1
40°-50°	251.1	13.7
50°-60°	260.1	14.2
60°-70°	245.3	13.3
70°-80°	205.6	11.2
80°-90°	149.0	8.1
90°-100°	97.9	5.3
100°-110°	56.6	3.1
110°-120°	25.0	1.4
120°-130°	6.7	0.4
130°-140°	1.5	0.1
140°-150°	1.0	0.1
150°-160°	0.7	0.0
160°-170°	0.4	0.0
170°-180°	0.1	0.0
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0°-30°	314.9	17.1
0°-40°	536.7	29.2
0°-60°	1048.0	57.0
0°-90°	1647.9	89.7
90°-120°	179.5	9.8
90°-150°	188.8	10.3
90°-180°	190.0	10.3
0°-180°	1838.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	372	372	372	372	372	
5°	424	408	369	335	318	43
15°	567	497	357	258	215	163
25°	714	583	331	170	106	330
35°	790	629	290	82	26	496
45°	820	623	238	19	0	633
55°	799	583	171	0	0	713
65°	722	516	102	0	0	715
75°	602	417	44	0	0	631
85°	440	302	7	2	3	376
90°	382	242	2	3	3	209
95°	328	189	1	3	4	257
105°	225	98	1	2	4	238
115°	123	32	1	1	2	123
125°	36	4	2	1	2	36
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°	371.8	371.8	371.8	371.8	371.8	371.8	371.8	371.8	371.8	371.8	371.8
2.5°	403.0	402.6	401.1	398.8	395.5	389.8	385.0	380.8	375.1	370.4	361.4
5°	424.4	422.0	420.1	417.7	410.1	404.9	396.4	386.9	377.9	368.9	350.9
7.5°	458.5	454.7	451.8	445.2	434.8	422.9	409.7	400.7	394.5	369.4	338.6
10°	494.9	491.6	485.9	474.1	461.3	444.2	425.3	404.0	385.0	364.2	327.7
12.5°	530.9	526.2	518.1	503.0	485.0	463.7	437.6	412.5	385.5	360.9	315.0
15°	566.9	561.7	553.2	534.7	511.0	483.1	451.3	419.6	387.9	356.6	301.7
17.5°	606.2	599.1	586.3	565.5	535.7	501.1	463.7	425.3	386.9	351.4	287.5
20°	648.4	638.4	624.7	596.7	561.7	521.0	476.0	431.0	386.5	345.3	271.4
22.5°	683.4	673.5	658.3	629.4	587.3	537.5	486.4	434.8	384.6	338.2	256.2
25°	713.7	705.7	689.1	655.9	611.4	555.1	496.3	437.6	381.7	330.6	240.1
27.5°	737.4	729.8	711.4	677.3	631.8	570.7	503.9	439.0	377.9	323.0	223.5
30°	758.2	750.7	728.4	693.4	645.5	583.0	511.5	439.5	373.2	311.6	205.5
32.5°	774.4	767.2	744.5	707.1	655.0	591.5	515.8	439.0	367.0	303.6	186.1
35°	790.5	783.3	756.8	717.0	662.1	595.3	519.1	436.7	359.5	290.3	167.7
37.5°	802.8	794.7	767.7	723.7	665.4	596.3	518.6	433.4	351.4	279.4	149.2
40°	811.3	802.8	773.9	727.5	666.4	594.9	514.8	427.7	341.9	265.7	129.8
42.5°	817.0	807.5	776.7	733.1	664.5	591.1	509.1	420.6	331.5	253.9	111.3
45°	819.8	809.9	777.2	728.4	661.2	584.0	500.6	411.6	320.2	237.8	92.8
47.5°	818.4	807.5	774.8	723.2	655.0	576.4	491.1	400.7	306.4	223.5	75.3
50°	816.0	804.7	769.6	716.6	646.5	566.9	480.7	387.4	292.2	206.0	59.7
52.5°	808.5	797.1	763.9	707.1	636.5	556.0	466.5	373.7	277.1	189.0	45.5
55°	799.0	788.6	754.0	698.6	623.7	542.8	453.2	359.0	262.4	171.4	32.7
57.5°	784.3	774.8	741.7	684.8	611.0	528.1	438.6	342.9	243.9	153.9	22.7
60°	766.3	756.8	724.6	669.2	596.3	511.5	422.5	326.3	227.3	136.4	14.2
62.5°	747.4	738.4	704.7	649.8	577.8	494.0	404.9	309.7	209.8	120.3	8.5
65°	722.3	713.7	683.4	626.6	557.4	475.0	385.5	289.8	191.8	102.3	4.7
67.5°	695.7	688.2	657.4	605.3	533.8	454.2	365.6	270.4	172.9	86.7	2.4
70°	667.3	657.8	629.4	576.4	509.6	430.5	343.8	250.5	154.9	71.5	0.0
72.5°	634.2	627.1	599.6	549.4	481.7	405.4	321.6	228.8	135.0	56.8	0.5
75°	602.0	593.0	567.9	520.5	454.2	378.9	297.0	208.4	115.6	43.6	0.5
77.5°	560.3	557.4	533.8	487.8	428.1	353.3	270.0	183.8	97.1	31.3	0.5
80°	518.6	515.8	497.3	455.1	397.8	323.0	244.9	160.6	79.1	20.8	0.5
82.5°	477.4	473.6	456.1	421.0	367.0	297.4	218.8	137.3	62.5	12.8	0.5
85°	440.5	435.7	416.8	384.6	335.3	268.5	191.8	114.6	46.4	7.1	0.9
87.5°	408.7	405.4	384.6	351.4	303.1	241.5	168.1	92.8	32.7	3.3	1.4
90°	381.7	374.6	356.2	321.1	272.8	211.7	143.0	74.4	21.8	1.9	1.9
92.5°	355.2	349.1	328.7	292.7	245.8	186.1	118.9	56.8	13.7	0.9	2.4
95°	327.7	321.1	301.2	268.1	218.3	160.1	97.6	41.7	7.6	0.9	2.4
97.5°	300.7	294.6	273.7	240.6	193.7	137.3	77.2	29.4	3.8	0.9	1.9
100°	275.6	268.5	249.6	216.4	169.1	114.6	59.7	18.9	2.4	0.9	1.9
102.5°	249.1	243.4	224.0	191.8	143.5	93.3	44.5	11.8	0.9	0.9	1.4
105°	225.4	218.3	199.4	166.2	122.2	73.4	31.3	7.1	0.9	0.9	1.4



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CATALOG NUMBER: FCC-X-2-LD4-1HI-40-UNV-80-87-ED1D

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	146.8	141.1	124.6	96.6	62.0	28.9	8.5	1.4	1.4	1.4	1.4
115°	122.7	114.1	99.5	74.8	45.9	18.9	4.3	1.4	1.4	1.4	1.4
117.5°	98.0	90.9	80.5	56.8	30.3	12.3	2.4	1.4	1.4	1.4	1.4
120°	76.7	70.1	58.3	39.3	20.4	7.1	0.9	1.4	1.4	1.4	1.4
122.5°	54.9	49.7	39.3	25.6	12.3	3.3	1.4	1.4	1.9	1.9	1.4
125°	36.5	33.6	26.0	15.6	7.6	1.4	1.4	1.4	1.9	1.9	1.4
127.5°	23.7	21.3	15.2	9.0	3.3	1.4	1.4	1.9	1.9	1.9	1.4
130°	13.3	11.8	9.0	5.2	1.4	1.4	1.4	1.9	1.9	1.9	1.4
132.5°	7.6	7.1	4.7	0.9	1.4	1.4	1.4	1.9	1.9	1.9	1.9
135°	1.9	0.9	0.9	0.9	1.4	1.4	1.9	1.9	2.4	2.4	1.9
137.5°	0.5	0.5	0.9	0.9	1.4	1.4	1.9	2.4	2.4	2.4	1.9
140°	0.5	0.5	0.9	1.4	1.4	1.4	1.9	2.4	2.4	2.4	1.9
142.5°	0.5	0.9	0.9	1.4	1.4	1.9	1.9	2.4	2.4	1.9	1.9
145°	0.5	0.9	0.9	1.4	1.4	1.9	1.9	2.4	1.9	1.9	1.9
147.5°	0.9	0.9	0.9	1.4	1.4	1.9	1.9	2.4	2.4	1.9	1.9
150°	0.5	0.9	0.9	1.4	1.9	1.9	1.9	2.4	1.9	1.9	1.9
152.5°	0.5	0.9	0.9	1.4	1.9	1.9	1.9	2.4	1.9	1.9	1.9
155°	0.9	0.9	0.9	1.4	1.9	1.9	1.9	2.4	1.9	1.9	2.4
157.5°	0.9	0.9	0.9	1.4	1.9	1.9	1.9	2.4	1.9	1.9	2.4
160°	0.9	0.9	0.9	1.4	1.4	1.9	1.9	1.9	1.9	1.9	1.9
162.5°	0.9	0.9	0.9	1.4	1.4	1.9	1.9	1.9	1.9	1.9	1.9
165°	0.9	0.9	0.9	0.9	1.4	1.4	1.9	1.9	1.9	1.9	1.9
167.5°	0.9	0.9	0.9	1.4	1.4	1.4	1.9	1.9	1.9	1.9	1.9
170°	0.9	0.9	0.9	1.4	1.4	1.4	1.9	2.4	2.4	2.4	2.4
172.5°	0.9	0.9	0.9	1.4	1.4	1.9	1.9	2.4	2.4	2.4	2.4
175°	0.9	0.9	0.9	1.4	1.4	1.9	1.9	2.4	2.4	2.4	2.4
177.5°	0.5	0.9	0.9	1.4	1.4	1.9	1.9	2.4	2.4	2.4	1.9
180°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	371.8	371.8	371.8
2.5°	353.8	347.2	345.3
5°	334.8	323.9	317.8
7.5°	315.9	301.2	294.1
10°	298.4	277.5	270.0
12.5°	277.5	253.4	241.5
15°	257.6	226.4	215.0
17.5°	235.4	200.3	187.1
20°	214.5	174.3	160.6
22.5°	190.9	148.7	133.6
25°	169.6	123.1	106.1
27.5°	145.9	97.1	82.4
30°	123.6	74.4	59.7
32.5°	102.3	54.5	41.2
35°	82.4	36.9	26.0
37.5°	63.5	22.7	13.3
40°	45.9	11.8	6.2
42.5°	30.8	5.7	3.3
45°	18.9	2.8	0.0
47.5°	10.9	0.0	0.0
50°	5.7	0.0	0.0
52.5°	2.4	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	0.9	1.4
80°	0.9	1.9	2.4
82.5°	1.9	2.4	2.4
85°	1.9	2.4	2.8
87.5°	2.4	2.8	3.3
90°	2.8	3.3	3.3
92.5°	2.8	3.8	3.8
95°	3.3	3.8	4.3
97.5°	3.8	4.3	4.3
100°	3.3	4.3	4.7
102.5°	2.8	4.3	4.3
105°	2.4	3.3	3.8



TEST NUMBER: P550558

CATALOG NUMBER: FCC-X-2-LD4-1HI-40-UNV-80-87-ED1D

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	1.9	2.4	2.4
115°	1.4	1.9	2.4
117.5°	1.4	1.9	1.9
120°	1.4	1.4	1.9
122.5°	1.4	1.4	1.9
125°	1.4	1.4	1.9
127.5°	1.9	1.4	1.4
130°	1.4	1.4	1.4
132.5°	1.9	1.4	1.4
135°	1.9	1.4	1.4
137.5°	1.9	1.4	1.4
140°	1.9	1.4	1.4
142.5°	1.9	1.4	1.4
145°	1.4	1.4	1.4
147.5°	1.4	1.4	1.4
150°	1.4	1.4	0.9
152.5°	1.4	0.9	0.9
155°	1.4	0.9	0.5
157.5°	1.9	0.9	0.5
160°	1.4	0.9	0.5
162.5°	1.4	0.9	0.5
165°	1.4	0.9	0.0
167.5°	1.4	0.9	0.5
170°	1.4	0.9	0.5
172.5°	1.4	0.9	0.5
175°	1.4	0.5	0.5
177.5°	1.4	0.5	0.5
180°	1.4	1.4	1.4



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	198.9	193.2	174.3	143.0	99.9	55.9	20.8	3.8	0.9	1.4	1.4
110°	173.3	168.6	149.2	118.9	80.5	41.7	13.7	2.4	1.4	1.4	1.4





107.5°	1.9	2.8	3.3
110°	1.9	2.4	2.8



(END OF REPORT)