

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: P551072

Luminaire Tested: **FCC-X-2-LD4-1STD-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: P551072
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-LD4-1STD-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

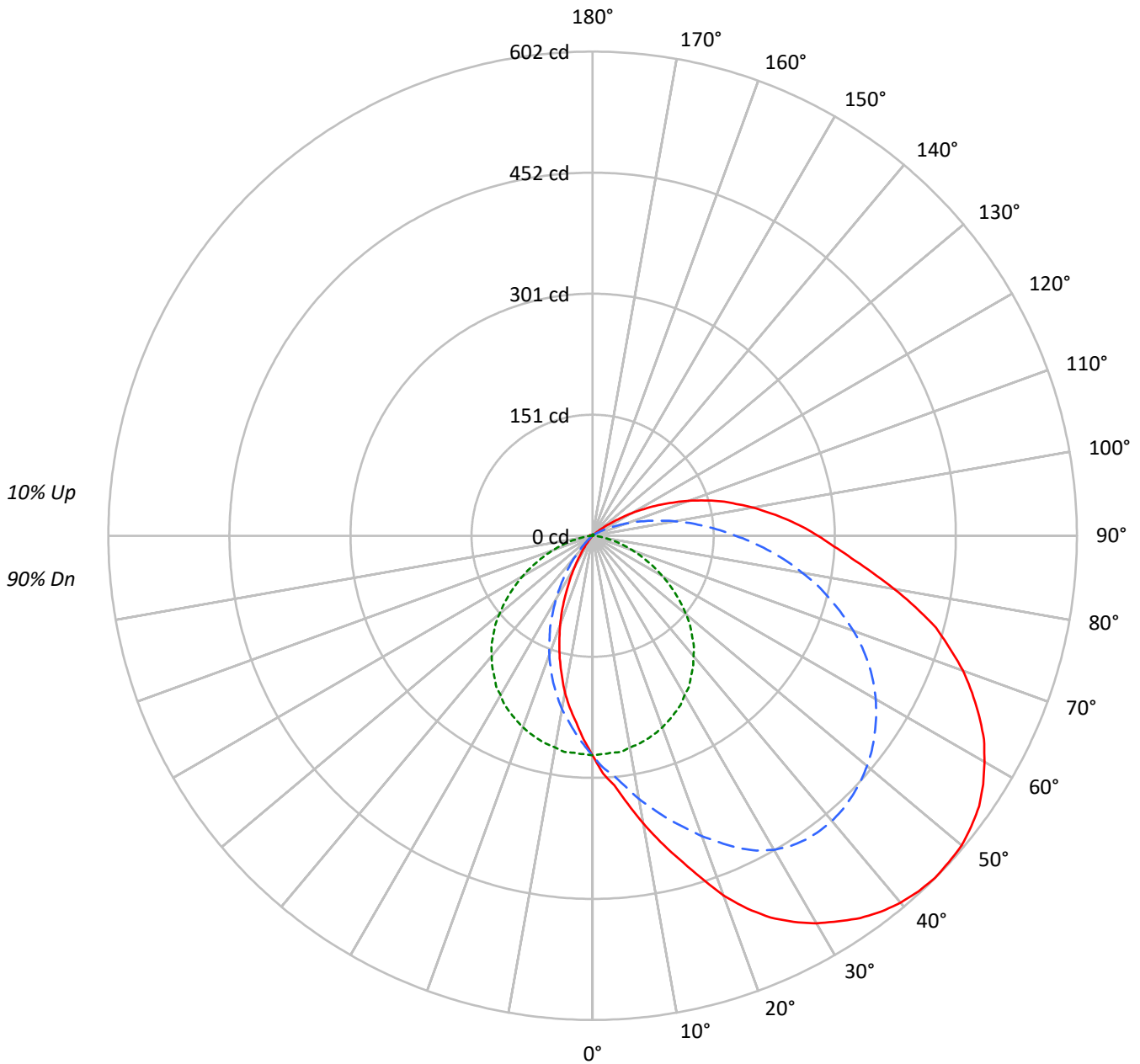
Lumens per Lamp: N/A
Luminaire Lumens: 1348.9 lumens
Efficiency: N/A
Efficacy: 80.8 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

Input Watts (W): 16.7
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: P551072

CATALOG NUMBER: FCC-X-2-LD4-1STD-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°	2937	2937	2937
5°	3225	2894	2414
10°	3648	2859	1990
15°	4089	2822	1551
20°	4612	2776	1142
25°	5045	2723	750
30°	5367	2651	422
35°	5647	2575	186
40°	5894	2480	45
45°	6106	2361	0
50°	6284	2204	0
55°	6420	2003	0
60°	6488	1771	0
65°	6515	1508	0
70°	6494	1230	0
75°	6411	907	4
80°	6151	555	27
85°	5946	264	39



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	26.1	1.9
10°-20°	78.3	5.8
20°-30°	126.7	9.4
30°-40°	162.8	12.1
40°-50°	184.3	13.7
50°-60°	190.9	14.2
60°-70°	180.1	13.3
70°-80°	150.9	11.2
80°-90°	109.4	8.1
90°-100°	71.9	5.3
100°-110°	41.5	3.1
110°-120°	18.3	1.4
120°-130°	4.9	0.4
130°-140°	1.1	0.1
140°-150°	0.7	0.1
150°-160°	0.5	0.0
160°-170°	0.3	0.0
170°-180°	0.1	0.0
0°-30°	231.1	17.1
0°-40°	393.9	29.2
0°-60°	769.2	57.0
0°-90°	1209.5	89.7
90°-120°	131.7	9.8
90°-150°	138.5	10.3
90°-180°	139.0	10.3
0°-180°	1348.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	273	273	273	273	273	
5°	312	299	271	246	233	31
15°	416	365	262	189	158	120
25°	524	428	243	124	78	242
35°	580	461	213	60	19	364
45°	602	457	174	14	0	465
55°	586	428	126	0	0	524
65°	530	379	75	0	0	524
75°	442	306	32	0	0	463
85°	323	222	5	1	2	276
90°	280	178	1	2	2	154
95°	240	139	1	2	3	189
105°	166	72	1	2	3	175
115°	90	24	1	1	2	90
125°	27	3	1	1	1	27
135°	1	1	2	1	1	2
145°	0	1	1	1	1	0
155°	1	1	1	1	0	0
165°	1	1	1	1	0	0
175°	1	1	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°	272.9	272.9	272.9	272.9	272.9	272.9	272.9	272.9	272.9	272.9	272.9
2.5°	295.8	295.5	294.4	292.7	290.3	286.1	282.6	279.5	275.3	271.8	265.2
5°	311.5	309.7	308.3	306.6	301.0	297.2	290.9	284.0	277.4	270.8	257.6
7.5°	336.5	333.7	331.6	326.7	319.1	310.4	300.7	294.1	289.6	271.1	248.5
10°	363.2	360.8	356.6	348.0	338.6	326.1	312.1	296.5	282.6	267.3	240.5
12.5°	389.7	386.2	380.3	369.2	355.9	340.3	321.2	302.8	283.0	264.9	231.2
15°	416.1	412.3	406.0	392.4	375.1	354.6	331.3	308.0	284.7	261.7	221.4
17.5°	444.9	439.7	430.3	415.0	393.1	367.8	340.3	312.1	284.0	257.9	211.0
20°	475.9	468.6	458.5	438.0	412.3	382.4	349.3	316.3	283.6	253.4	199.2
22.5°	501.6	494.3	483.2	462.0	431.0	394.5	357.0	319.1	282.3	248.2	188.1
25°	523.8	517.9	505.8	481.4	448.8	407.4	364.3	321.2	280.2	242.6	176.2
27.5°	541.2	535.7	522.1	497.1	463.7	418.9	369.9	322.2	277.4	237.1	164.1
30°	556.5	551.0	534.6	508.9	473.8	427.9	375.4	322.6	273.9	228.7	150.9
32.5°	568.3	563.1	546.4	519.0	480.7	434.2	378.5	322.2	269.4	222.8	136.6
35°	580.2	574.9	555.5	526.3	486.0	436.9	381.0	320.5	263.8	213.1	123.1
37.5°	589.2	583.3	563.5	531.1	488.4	437.6	380.6	318.1	257.9	205.1	109.5
40°	595.4	589.2	568.0	533.9	489.1	436.6	377.8	313.9	251.0	195.0	95.2
42.5°	599.6	592.7	570.1	538.1	487.7	433.8	373.7	308.7	243.3	186.3	81.7
45°	601.7	594.4	570.4	534.6	485.3	428.6	367.4	302.1	235.0	174.5	68.1
47.5°	600.7	592.7	568.7	530.8	480.7	423.0	360.5	294.1	224.9	164.1	55.3
50°	598.9	590.6	564.9	525.9	474.5	416.1	352.8	284.3	214.5	151.2	43.8
52.5°	593.4	585.0	560.7	519.0	467.2	408.1	342.4	274.3	203.3	138.7	33.4
55°	586.4	578.8	553.4	512.7	457.8	398.4	332.7	263.5	192.6	125.8	24.0
57.5°	575.6	568.7	544.4	502.6	448.4	387.6	321.9	251.7	179.0	113.0	16.7
60°	562.4	555.5	531.8	491.2	437.6	375.4	310.1	239.5	166.9	100.1	10.4
62.5°	548.5	541.9	517.2	476.9	424.1	362.6	297.2	227.3	154.0	88.3	6.3
65°	530.1	523.8	501.6	459.9	409.1	348.6	283.0	212.7	140.8	75.1	3.5
67.5°	510.6	505.1	482.5	444.2	391.8	333.4	268.4	198.5	126.9	63.6	1.7
70°	489.8	482.8	462.0	423.0	374.0	316.0	252.4	183.9	113.7	52.5	0.0
72.5°	465.4	460.2	440.1	403.2	353.5	297.6	236.0	167.9	99.1	41.7	0.3
75°	441.8	435.2	416.8	382.0	333.4	278.1	217.9	152.9	84.8	32.0	0.3
77.5°	411.2	409.1	391.8	358.0	314.2	259.3	198.1	134.9	71.3	22.9	0.3
80°	380.6	378.5	365.0	334.0	292.0	237.1	179.7	117.8	58.1	15.3	0.3
82.5°	350.4	347.6	334.7	309.0	269.4	218.3	160.6	100.8	45.9	9.4	0.3
85°	323.3	319.8	305.9	282.3	246.1	197.1	140.8	84.1	34.1	5.2	0.7
87.5°	300.0	297.6	282.3	257.9	222.5	177.3	123.4	68.1	24.0	2.4	1.0
90°	280.2	275.0	261.4	235.7	200.2	155.4	105.0	54.6	16.0	1.4	1.4
92.5°	260.7	256.2	241.2	214.8	180.4	136.6	87.2	41.7	10.1	0.7	1.7
95°	240.5	235.7	221.1	196.7	160.2	117.5	71.6	30.6	5.6	0.7	1.7
97.5°	220.7	216.2	200.9	176.6	142.2	100.8	56.7	21.6	2.8	0.7	1.4
100°	202.3	197.1	183.2	158.9	124.1	84.1	43.8	13.9	1.7	0.7	1.4
102.5°	182.8	178.7	164.4	140.8	105.3	68.5	32.7	8.7	0.7	0.7	1.0
105°	165.5	160.2	146.3	122.0	89.7	53.9	22.9	5.2	0.7	0.7	1.0



TEST NUMBER: P551072

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

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	107.8	103.6	91.4	70.9	45.5	21.2	6.3	1.0	1.0	1.0	1.0
115°	90.0	83.8	73.0	54.9	33.7	13.9	3.1	1.0	1.0	1.0	1.0
117.5°	72.0	66.7	59.1	41.7	22.2	9.0	1.7	1.0	1.0	1.0	1.0
120°	56.3	51.4	42.8	28.9	14.9	5.2	0.7	1.0	1.0	1.0	1.0
122.5°	40.3	36.5	28.9	18.8	9.0	2.4	1.0	1.0	1.4	1.4	1.0
125°	26.8	24.7	19.1	11.5	5.6	1.0	1.0	1.0	1.4	1.4	1.0
127.5°	17.4	15.6	11.1	6.6	2.4	1.0	1.0	1.4	1.4	1.4	1.0
130°	9.7	8.7	6.6	3.8	1.0	1.0	1.0	1.4	1.4	1.4	1.0
132.5°	5.6	5.2	3.5	0.7	1.0	1.0	1.0	1.4	1.4	1.4	1.4
135°	1.4	0.7	0.7	0.7	1.0	1.0	1.4	1.4	1.7	1.7	1.4
137.5°	0.3	0.3	0.7	0.7	1.0	1.0	1.4	1.7	1.7	1.7	1.4
140°	0.3	0.3	0.7	1.0	1.0	1.0	1.4	1.7	1.7	1.7	1.4
142.5°	0.3	0.7	0.7	1.0	1.0	1.4	1.4	1.7	1.7	1.4	1.4
145°	0.3	0.7	0.7	1.0	1.0	1.4	1.4	1.7	1.4	1.4	1.4
147.5°	0.7	0.7	0.7	1.0	1.0	1.4	1.4	1.7	1.7	1.4	1.4
150°	0.3	0.7	0.7	1.0	1.4	1.4	1.4	1.7	1.4	1.4	1.4
152.5°	0.3	0.7	0.7	1.0	1.4	1.4	1.4	1.7	1.4	1.4	1.4
155°	0.7	0.7	0.7	1.0	1.4	1.4	1.4	1.7	1.4	1.4	1.7
157.5°	0.7	0.7	0.7	1.0	1.4	1.4	1.4	1.7	1.4	1.4	1.7
160°	0.7	0.7	0.7	1.0	1.0	1.4	1.4	1.4	1.4	1.4	1.4
162.5°	0.7	0.7	0.7	1.0	1.0	1.4	1.4	1.4	1.4	1.4	1.4
165°	0.7	0.7	0.7	0.7	1.0	1.0	1.4	1.4	1.4	1.4	1.4
167.5°	0.7	0.7	0.7	1.0	1.0	1.0	1.4	1.4	1.4	1.4	1.4
170°	0.7	0.7	0.7	1.0	1.0	1.0	1.4	1.7	1.7	1.7	1.7
172.5°	0.7	0.7	0.7	1.0	1.0	1.4	1.4	1.7	1.7	1.7	1.7
175°	0.7	0.7	0.7	1.0	1.0	1.4	1.4	1.7	1.7	1.7	1.7
177.5°	0.3	0.7	0.7	1.0	1.0	1.4	1.4	1.7	1.7	1.7	1.4
180°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0



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

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	272.9	272.9	272.9
2.5°	259.7	254.8	253.4
5°	245.8	237.8	233.2
7.5°	231.9	221.1	215.9
10°	219.0	203.7	198.1
12.5°	203.7	186.0	177.3
15°	189.1	166.2	157.8
17.5°	172.8	147.0	137.3
20°	157.5	127.9	117.8
22.5°	140.1	109.1	98.0
25°	124.4	90.4	77.9
27.5°	107.1	71.3	60.5
30°	90.7	54.6	43.8
32.5°	75.1	40.0	30.2
35°	60.5	27.1	19.1
37.5°	46.6	16.7	9.7
40°	33.7	8.7	4.5
42.5°	22.6	4.2	2.4
45°	13.9	2.1	0.0
47.5°	8.0	0.0	0.0
50°	4.2	0.0	0.0
52.5°	1.7	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°	0.3	0.3	0.3
77.5°	0.3	0.7	1.0
80°	0.7	1.4	1.7
82.5°	1.4	1.7	1.7
85°	1.4	1.7	2.1
87.5°	1.7	2.1	2.4
90°	2.1	2.4	2.4
92.5°	2.1	2.8	2.8
95°	2.4	2.8	3.1
97.5°	2.8	3.1	3.1
100°	2.4	3.1	3.5
102.5°	2.1	3.1	3.1
105°	1.7	2.4	2.8



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

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	1.4	1.7	1.7
115°	1.0	1.4	1.7
117.5°	1.0	1.4	1.4
120°	1.0	1.0	1.4
122.5°	1.0	1.0	1.4
125°	1.0	1.0	1.4
127.5°	1.4	1.0	1.0
130°	1.0	1.0	1.0
132.5°	1.4	1.0	1.0
135°	1.4	1.0	1.0
137.5°	1.4	1.0	1.0
140°	1.4	1.0	1.0
142.5°	1.4	1.0	1.0
145°	1.0	1.0	1.0
147.5°	1.0	1.0	1.0
150°	1.0	1.0	0.7
152.5°	1.0	0.7	0.7
155°	1.0	0.7	0.3
157.5°	1.4	0.7	0.3
160°	1.0	0.7	0.3
162.5°	1.0	0.7	0.3
165°	1.0	0.7	0.0
167.5°	1.0	0.7	0.3
170°	1.0	0.7	0.3
172.5°	1.0	0.7	0.3
175°	1.0	0.3	0.3
177.5°	1.0	0.3	0.3
180°	1.0	1.0	1.0



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	146.0	141.8	127.9	105.0	73.3	41.0	15.3	2.8	0.7	1.0	1.0
110°	127.2	123.7	109.5	87.2	59.1	30.6	10.1	1.7	1.0	1.0	1.0





107.5°	1.4	2.1	2.4
110°	1.4	1.7	2.1



(END OF REPORT)