

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: P551519

Luminaire Tested: **FCC-X-2-LD4-2LO-35-UNV-80-88-ED1D-90**

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: P551519
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-35-UNV-80-88-ED1D-90
Description: FCC CORNER MOUNT LUMINAIRE WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .500 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 3500K, AND 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

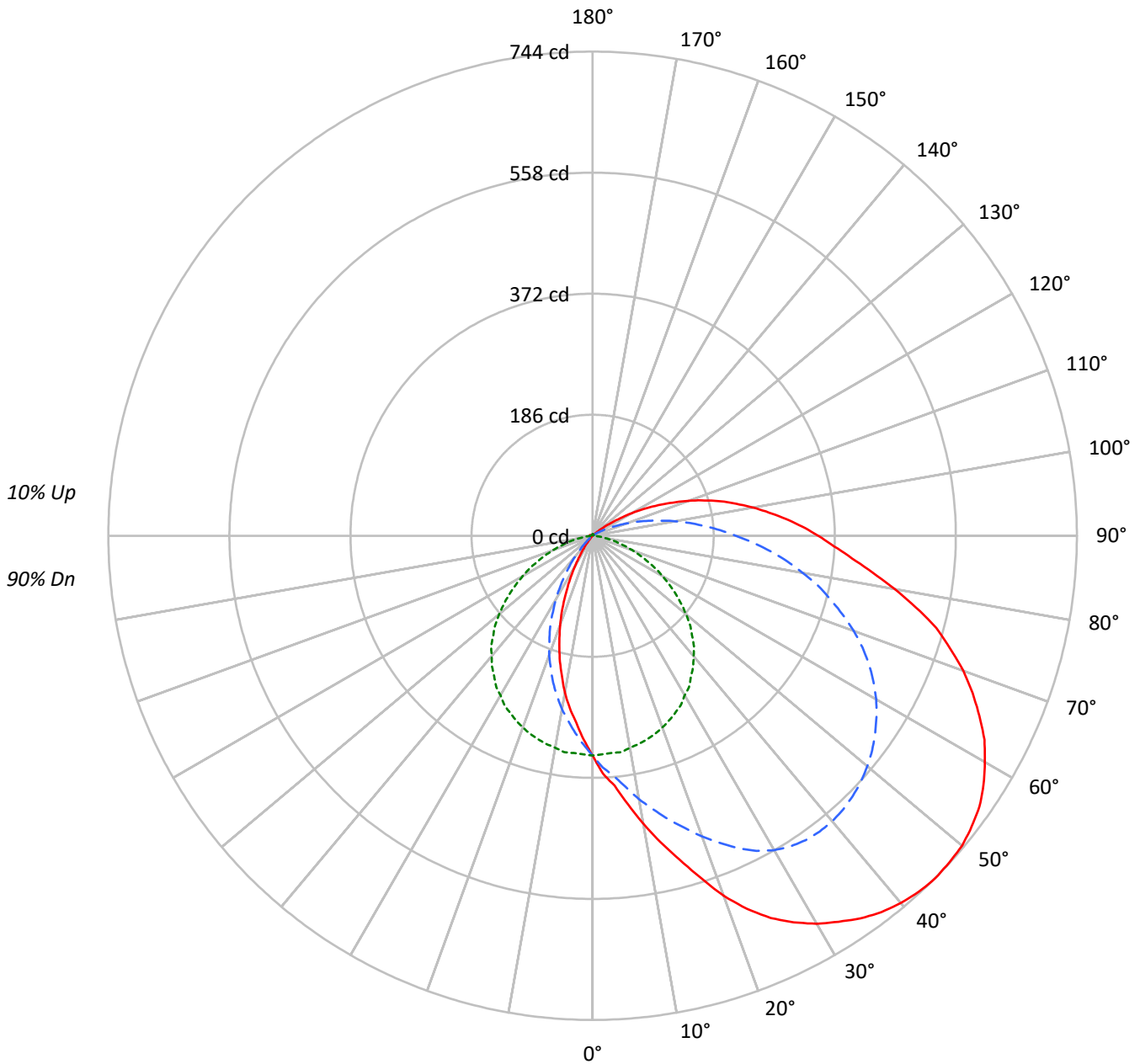
Lumens per Lamp: N/A
Luminaire Lumens: 1669.0 lumens
Efficiency: N/A
Efficacy: 71.0 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

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

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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20				20
RC	80				70				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	93	93	93	90
1	103	96	91	86	99	93	88	83	87	83	79	81	78	74	76	73	70	76	73	70	67
2	92	82	74	67	88	79	72	65	74	67	62	69	64	59	64	60	56	64	60	56	53
3	83	71	61	54	79	68	60	53	64	56	50	59	53	48	55	50	46	55	50	46	43
4	75	62	52	44	72	60	51	44	56	48	42	52	45	40	49	43	38	49	43	38	36
5	69	55	45	38	66	53	44	37	50	42	35	46	39	34	43	38	33	43	38	33	30
6	63	49	39	32	61	47	38	32	44	36	31	42	35	29	39	33	28	39	33	28	26
7	58	44	35	28	56	43	34	28	40	32	27	38	31	26	36	29	25	36	29	25	23
8	54	40	31	25	52	39	30	24	37	29	24	34	28	23	32	26	22	32	26	22	20
9	51	36	28	22	49	35	27	22	33	26	21	32	25	20	30	24	20	30	24	20	18
10	47	33	25	20	45	33	25	19	31	24	19	29	23	18	28	22	18	28	22	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	3634	3634	3634
5°	3989	3581	2988
10°	4514	3537	2462
15°	5059	3491	1918
20°	5706	3435	1413
25°	6242	3369	927
30°	6640	3281	523
35°	6986	3185	231
40°	7292	3069	55
45°	7554	2921	0
50°	7775	2727	0
55°	7943	2479	0
60°	8027	2193	0
65°	8060	1866	0
70°	8034	1520	0
75°	7932	1123	6
80°	7610	686	36
85°	7357	331	48



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	32.3	1.9
10°-20°	96.8	5.8
20°-30°	156.8	9.4
30°-40°	201.4	12.1
40°-50°	228.0	13.7
50°-60°	236.2	14.2
60°-70°	222.8	13.3
70°-80°	186.7	11.2
80°-90°	135.3	8.1
90°-100°	88.9	5.3
100°-110°	51.4	3.1
110°-120°	22.7	1.4
120°-130°	6.1	0.4
130°-140°	1.4	0.1
140°-150°	0.9	0.1
150°-160°	0.7	0.0
160°-170°	0.4	0.0
170°-180°	0.1	0.0
0°-30°	286.0	17.1
0°-40°	487.4	29.2
0°-60°	951.6	57.0
0°-90°	1496.4	89.7
90°-120°	163.0	9.8
90°-150°	171.5	10.3
90°-180°	173.0	10.4
0°-180°	1669.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	338	338	338	338	338	
5°	385	370	335	304	289	39
15°	515	451	324	234	195	148
25°	648	530	300	154	96	300
35°	718	571	264	75	24	450
45°	744	565	216	17	0	575
55°	726	530	156	0	0	648
65°	656	469	93	0	0	649
75°	547	378	40	0	0	573
85°	400	274	6	2	3	342
90°	347	220	2	3	3	190
95°	298	172	1	3	4	233
105°	205	89	1	2	3	216
115°	111	29	1	1	2	112
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°	337.6	337.6	337.6	337.6	337.6	337.6	337.6	337.6	337.6	337.6	337.6
2.5°	366.0	365.6	364.3	362.1	359.1	353.9	349.6	345.8	340.6	336.3	328.1
5°	385.3	383.2	381.5	379.3	372.4	367.7	360.0	351.4	343.2	335.0	318.7
7.5°	416.3	412.9	410.3	404.3	394.8	384.0	372.0	363.8	358.2	335.4	307.5
10°	449.4	446.4	441.2	430.5	418.9	403.4	386.2	366.8	349.6	330.7	297.6
12.5°	482.1	477.8	470.5	456.7	440.4	421.0	397.4	374.6	350.1	327.7	286.0
15°	514.8	510.1	502.3	485.5	464.0	438.7	409.8	381.0	352.2	323.8	273.9
17.5°	550.5	544.0	532.4	513.5	486.4	455.0	421.0	386.2	351.4	319.1	261.0
20°	588.8	579.7	567.3	541.9	510.1	473.1	432.2	391.4	350.9	313.5	246.4
22.5°	620.6	611.5	597.8	571.6	533.3	488.1	441.7	394.8	349.2	307.1	232.7
25°	648.1	640.8	625.7	595.6	555.2	504.0	450.7	397.4	346.6	300.2	218.0
27.5°	669.6	662.7	646.0	615.0	573.7	518.2	457.6	398.7	343.2	293.3	203.0
30°	688.5	681.6	661.4	629.6	586.2	529.4	464.5	399.1	338.9	283.0	186.6
32.5°	703.2	696.7	676.1	642.1	594.8	537.1	468.3	398.7	333.3	275.7	169.0
35°	717.8	711.3	687.2	651.1	601.2	540.6	471.3	396.5	326.4	263.6	152.2
37.5°	729.0	721.6	697.1	657.1	604.2	541.4	470.9	393.5	319.1	253.7	135.5
40°	736.7	729.0	702.7	660.6	605.1	540.2	467.5	388.3	310.5	241.3	117.8
42.5°	741.9	733.3	705.3	665.7	603.4	536.7	462.3	381.9	301.0	230.5	101.1
45°	744.4	735.4	705.7	661.4	600.4	530.3	454.6	373.7	290.7	215.9	84.3
47.5°	743.1	733.3	703.6	656.7	594.8	523.4	446.0	363.8	278.3	203.0	68.4
50°	741.0	730.7	698.9	650.7	587.0	514.8	436.5	351.8	265.3	187.1	54.2
52.5°	734.1	723.8	693.7	642.1	578.0	504.9	423.6	339.3	251.6	171.6	41.3
55°	725.5	716.1	684.7	634.3	566.4	492.9	411.6	326.0	238.3	155.7	29.7
57.5°	712.2	703.6	673.5	621.9	554.8	479.5	398.2	311.4	221.5	139.8	20.6
60°	695.8	687.2	658.0	607.7	541.4	464.5	383.6	296.3	206.4	123.9	12.9
62.5°	678.6	670.5	639.9	590.0	524.7	448.6	367.7	281.3	190.5	109.2	7.7
65°	655.8	648.1	620.6	569.0	506.2	431.4	350.1	263.2	174.2	92.9	4.3
67.5°	631.8	624.9	596.9	549.6	484.7	412.4	332.0	245.6	157.0	78.7	2.2
70°	606.0	597.4	571.6	523.4	462.7	390.9	312.2	227.5	140.6	64.9	0.0
72.5°	575.9	569.4	544.5	498.9	437.4	368.1	292.0	207.7	122.6	51.6	0.4
75°	546.6	538.4	515.6	472.6	412.4	344.0	269.6	189.2	104.9	39.6	0.4
77.5°	508.8	506.2	484.7	443.0	388.8	320.8	245.1	166.9	88.2	28.4	0.4
80°	470.9	468.3	451.6	413.3	361.3	293.3	222.3	145.8	71.8	18.9	0.4
82.5°	433.5	430.1	414.1	382.3	333.3	270.1	198.7	124.7	56.8	11.6	0.4
85°	400.0	395.7	378.5	349.2	304.5	243.8	174.2	104.1	42.1	6.5	0.9
87.5°	371.1	368.1	349.2	319.1	275.2	219.3	152.7	84.3	29.7	3.0	1.3
90°	346.6	340.2	323.4	291.6	247.7	192.2	129.9	67.5	19.8	1.7	1.7
92.5°	322.5	317.0	298.5	265.8	223.2	169.0	107.9	51.6	12.5	0.9	2.2
95°	297.6	291.6	273.5	243.4	198.3	145.4	88.6	37.8	6.9	0.9	2.2
97.5°	273.1	267.5	248.6	218.5	175.9	124.7	70.1	26.7	3.4	0.9	1.7
100°	250.3	243.8	226.6	196.5	153.5	104.1	54.2	17.2	2.2	0.9	1.7
102.5°	226.2	221.1	203.4	174.2	130.3	84.7	40.4	10.8	0.9	0.9	1.3
105°	204.7	198.3	181.1	151.0	111.0	66.7	28.4	6.5	0.9	0.9	1.3



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	133.3	128.2	113.1	87.7	56.3	26.2	7.7	1.3	1.3	1.3	1.3
115°	111.4	103.6	90.3	67.9	41.7	17.2	3.9	1.3	1.3	1.3	1.3
117.5°	89.0	82.6	73.1	51.6	27.5	11.2	2.2	1.3	1.3	1.3	1.3
120°	69.7	63.6	52.9	35.7	18.5	6.5	0.9	1.3	1.3	1.3	1.3
122.5°	49.9	45.2	35.7	23.2	11.2	3.0	1.3	1.3	1.7	1.7	1.3
125°	33.1	30.5	23.7	14.2	6.9	1.3	1.3	1.3	1.7	1.7	1.3
127.5°	21.5	19.4	13.8	8.2	3.0	1.3	1.3	1.7	1.7	1.7	1.3
130°	12.0	10.8	8.2	4.7	1.3	1.3	1.3	1.7	1.7	1.7	1.3
132.5°	6.9	6.5	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	2.2	2.2	1.7
137.5°	0.4	0.4	0.9	0.9	1.3	1.3	1.7	2.2	2.2	2.2	1.7
140°	0.4	0.4	0.9	1.3	1.3	1.3	1.7	2.2	2.2	2.2	1.7
142.5°	0.4	0.9	0.9	1.3	1.3	1.7	1.7	2.2	2.2	1.7	1.7
145°	0.4	0.9	0.9	1.3	1.3	1.7	1.7	2.2	1.7	1.7	1.7
147.5°	0.9	0.9	0.9	1.3	1.3	1.7	1.7	2.2	2.2	1.7	1.7
150°	0.4	0.9	0.9	1.3	1.7	1.7	1.7	2.2	1.7	1.7	1.7
152.5°	0.4	0.9	0.9	1.3	1.7	1.7	1.7	2.2	1.7	1.7	1.7
155°	0.9	0.9	0.9	1.3	1.7	1.7	1.7	2.2	1.7	1.7	2.2
157.5°	0.9	0.9	0.9	1.3	1.7	1.7	1.7	2.2	1.7	1.7	2.2
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	2.2	2.2	2.2	2.2
172.5°	0.9	0.9	0.9	1.3	1.3	1.7	1.7	2.2	2.2	2.2	2.2
175°	0.9	0.9	0.9	1.3	1.3	1.7	1.7	2.2	2.2	2.2	2.2
177.5°	0.4	0.9	0.9	1.3	1.3	1.7	1.7	2.2	2.2	2.2	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°	337.6	337.6	337.6
2.5°	321.3	315.2	313.5
5°	304.1	294.2	288.6
7.5°	286.9	273.5	267.1
10°	270.9	252.0	245.1
12.5°	252.0	230.1	219.3
15°	234.0	205.6	195.2
17.5°	213.7	181.9	169.9
20°	194.8	158.3	145.8
22.5°	173.3	135.0	121.3
25°	154.0	111.8	96.3
27.5°	132.5	88.2	74.8
30°	112.2	67.5	54.2
32.5°	92.9	49.5	37.4
35°	74.8	33.5	23.7
37.5°	57.6	20.6	12.0
40°	41.7	10.8	5.6
42.5°	28.0	5.2	3.0
45°	17.2	2.6	0.0
47.5°	9.9	0.0	0.0
50°	5.2	0.0	0.0
52.5°	2.2	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	2.2
82.5°	1.7	2.2	2.2
85°	1.7	2.2	2.6
87.5°	2.2	2.6	3.0
90°	2.6	3.0	3.0
92.5°	2.6	3.4	3.4
95°	3.0	3.4	3.9
97.5°	3.4	3.9	3.9
100°	3.0	3.9	4.3
102.5°	2.6	3.9	3.9
105°	2.2	3.0	3.4



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	1.7	2.2	2.2
115°	1.3	1.7	2.2
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°	180.6	175.5	158.3	129.9	90.7	50.7	18.9	3.4	0.9	1.3	1.3
110°	157.4	153.1	135.5	107.9	73.1	37.8	12.5	2.2	1.3	1.3	1.3





107.5°	1.7	2.6	3.0
110°	1.7	2.2	2.6



(END OF REPORT)