

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: P550936

Luminaire Tested: **FCC-X-2-LD4-1STD-30-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: P550936
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-30-UNV-80-84-ED1D
Description: FCC CORNER MOUNT LUMINAIRE WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 3000K, AND 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

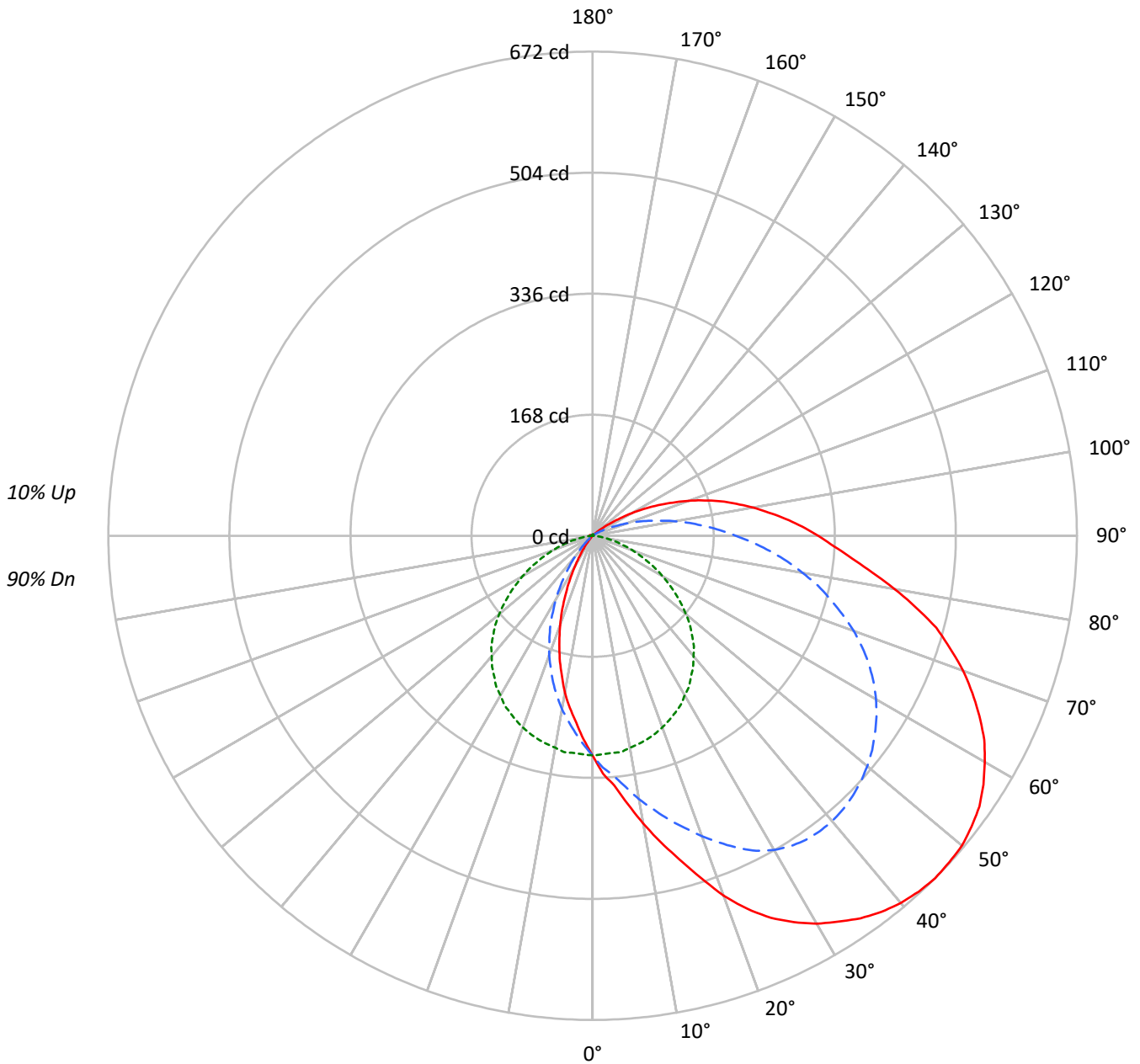
Lumens per Lamp: N/A
Luminaire Lumens: 1507.1 lumens
Efficiency: N/A
Efficacy: 90.2 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

Input Watts (W): 16.7
Input Voltage (V): NR
Input Current (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: P550936

CATALOG NUMBER: FCC-X-2-LD4-1STD-30-UNV-80-84-ED1D

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°	3281	3281	3281
5°	3602	3233	2698
10°	4076	3193	2223
15°	4568	3153	1733
20°	5152	3102	1275
25°	5636	3041	838
30°	5996	2962	472
35°	6308	2876	208
40°	6584	2770	49
45°	6822	2637	0
50°	7021	2462	0
55°	7172	2239	0
60°	7249	1978	0
65°	7279	1685	0
70°	7254	1373	0
75°	7163	1012	6
80°	6872	620	31
85°	6641	295	42



TEST NUMBER: P550936

CATALOG NUMBER: FCC-X-2-LD4-1STD-30-UNV-80-84-ED1D

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	29.2	1.9
10°-20°	87.4	5.8
20°-30°	141.6	9.4
30°-40°	181.9	12.1
40°-50°	205.9	13.7
50°-60°	213.3	14.2
60°-70°	201.2	13.3
70°-80°	168.6	11.2
80°-90°	122.2	8.1
90°-100°	80.3	5.3
100°-110°	46.4	3.1
110°-120°	20.5	1.4
120°-130°	5.6	0.4
130°-140°	1.3	0.1
140°-150°	0.9	0.1
150°-160°	0.6	0.0
160°-170°	0.3	0.0
170°-180°	0.1	0.0
0°-30°	258.2	17.1
0°-40°	440.1	29.2
0°-60°	859.2	57.0
0°-90°	1351.2	89.7
90°-120°	147.2	9.8
90°-150°	154.9	10.3
90°-180°	156.0	10.4
0°-180°	1507.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	305	305	305	305	305	
5°	348	334	302	274	261	35
15°	465	408	292	211	176	134
25°	585	478	271	139	87	270
35°	648	516	238	68	21	406
45°	672	510	195	16	0	519
55°	655	478	141	0	0	585
65°	592	423	84	0	0	586
75°	494	342	36	0	0	518
85°	361	248	6	2	2	308
90°	313	199	2	2	3	172
95°	269	155	1	3	4	211
105°	185	80	1	2	3	195
115°	101	27	1	1	2	101
125°	30	4	2	1	2	30
135°	2	1	2	2	1	3
145°	0	1	2	1	1	0
155°	1	2	2	1	0	0
165°	1	1	2	1	0	0
175°	1	1	2	1	0	0
180°	1	1	1	1	1	



TEST NUMBER: P550936

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
0°	304.8	304.8	304.8	304.8	304.8	304.8	304.8	304.8	304.8	304.8	304.8
2.5°	330.5	330.1	328.9	327.0	324.2	319.6	315.7	312.2	307.5	303.7	296.3
5°	347.9	346.0	344.4	342.5	336.3	332.0	325.0	317.3	309.9	302.5	287.7
7.5°	375.9	372.8	370.5	365.0	356.5	346.8	335.9	328.5	323.5	302.9	277.6
10°	405.8	403.1	398.4	388.7	378.2	364.2	348.7	331.2	315.7	298.6	268.7
12.5°	435.3	431.4	424.8	412.4	397.6	380.2	358.8	338.2	316.1	295.9	258.2
15°	464.8	460.5	453.6	438.4	419.0	396.1	370.1	344.1	318.0	292.4	247.4
17.5°	497.0	491.2	480.7	463.7	439.2	410.8	380.2	348.7	317.3	288.1	235.7
20°	531.6	523.5	512.2	489.3	460.5	427.2	390.3	353.4	316.9	283.1	222.5
22.5°	560.3	552.2	539.8	516.1	481.5	440.7	398.8	356.5	315.3	277.3	210.1
25°	585.2	578.6	565.0	537.8	501.3	455.1	407.0	358.8	313.0	271.0	196.9
27.5°	604.6	598.4	583.3	555.3	518.0	467.9	413.2	360.0	309.9	264.8	183.3
30°	621.7	615.5	597.2	568.5	529.3	478.0	419.4	360.4	306.0	255.5	168.5
32.5°	634.9	629.1	610.4	579.8	537.0	485.0	422.9	360.0	300.9	248.9	152.6
35°	648.1	642.3	620.5	587.9	542.9	488.1	425.6	358.0	294.7	238.0	137.5
37.5°	658.2	651.6	629.5	593.4	545.6	488.9	425.2	355.3	288.1	229.1	122.3
40°	665.2	658.2	634.5	596.5	546.4	487.7	422.1	350.7	280.4	217.8	106.4
42.5°	669.8	662.1	636.8	601.1	544.8	484.6	417.4	344.8	271.8	208.1	91.3
45°	672.2	664.0	637.2	597.2	542.1	478.8	410.5	337.4	262.5	194.9	76.1
47.5°	671.0	662.1	635.3	593.0	537.0	472.6	402.7	328.5	251.2	183.3	61.7
50°	669.1	659.8	631.0	587.5	530.1	464.8	394.1	317.6	239.6	168.9	48.9
52.5°	662.9	653.5	626.4	579.8	521.9	455.9	382.5	306.4	227.2	154.9	37.3
55°	655.1	646.6	618.2	572.8	511.4	445.0	371.6	294.3	215.1	140.6	26.8
57.5°	643.1	635.3	608.1	561.5	500.9	433.0	359.6	281.1	200.0	126.2	18.6
60°	628.3	620.5	594.1	548.7	488.9	419.4	346.4	267.6	186.4	111.8	11.6
62.5°	612.8	605.4	577.8	532.8	473.7	405.0	332.0	254.0	172.0	98.6	7.0
65°	592.2	585.2	560.3	513.7	457.1	389.5	316.1	237.7	157.3	83.9	3.9
67.5°	570.4	564.2	539.0	496.3	437.6	372.4	299.8	221.7	141.7	71.1	1.9
70°	547.1	539.4	516.1	472.6	417.8	353.0	281.9	205.4	127.0	58.6	0.0
72.5°	520.0	514.1	491.6	450.4	394.9	332.4	263.7	187.6	110.7	46.6	0.4
75°	493.6	486.2	465.6	426.8	372.4	310.7	243.5	170.9	94.7	35.7	0.4
77.5°	459.4	457.1	437.6	400.0	351.0	289.7	221.3	150.7	79.6	25.6	0.4
80°	425.2	422.9	407.7	373.2	326.2	264.8	200.8	131.6	64.8	17.1	0.4
82.5°	391.4	388.3	374.0	345.2	300.9	243.9	179.4	112.6	51.3	10.5	0.4
85°	361.1	357.3	341.7	315.3	274.9	220.2	157.3	94.0	38.1	5.8	0.8
87.5°	335.1	332.4	315.3	288.1	248.5	198.0	137.9	76.1	26.8	2.7	1.2
90°	313.0	307.2	292.0	263.3	223.7	173.6	117.3	61.0	17.9	1.6	1.6
92.5°	291.2	286.2	269.5	240.0	201.5	152.6	97.5	46.6	11.3	0.8	1.9
95°	268.7	263.3	247.0	219.8	179.0	131.3	80.0	34.2	6.2	0.8	1.9
97.5°	246.6	241.5	224.4	197.3	158.8	112.6	63.3	24.1	3.1	0.8	1.6
100°	226.0	220.2	204.6	177.5	138.6	94.0	48.9	15.5	1.9	0.8	1.6
102.5°	204.3	199.6	183.7	157.3	117.7	76.5	36.5	9.7	0.8	0.8	1.2
105°	184.8	179.0	163.5	136.3	100.2	60.2	25.6	5.8	0.8	0.8	1.2



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CATALOG NUMBER: FCC-X-2-LD4-1STD-30-UNV-80-84-ED1D

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	120.4	115.7	102.1	79.2	50.9	23.7	7.0	1.2	1.2	1.2	1.2
115°	100.6	93.6	81.5	61.4	37.7	15.5	3.5	1.2	1.2	1.2	1.2
117.5°	80.4	74.6	66.0	46.6	24.9	10.1	1.9	1.2	1.2	1.2	1.2
120°	62.9	57.5	47.8	32.2	16.7	5.8	0.8	1.2	1.2	1.2	1.2
122.5°	45.0	40.8	32.2	21.0	10.1	2.7	1.2	1.2	1.6	1.6	1.2
125°	29.9	27.6	21.4	12.8	6.2	1.2	1.2	1.2	1.6	1.6	1.2
127.5°	19.4	17.5	12.4	7.4	2.7	1.2	1.2	1.6	1.6	1.6	1.2
130°	10.9	9.7	7.4	4.3	1.2	1.2	1.2	1.6	1.6	1.6	1.2
132.5°	6.2	5.8	3.9	0.8	1.2	1.2	1.2	1.6	1.6	1.6	1.6
135°	1.6	0.8	0.8	0.8	1.2	1.2	1.6	1.6	1.9	1.9	1.6
137.5°	0.4	0.4	0.8	0.8	1.2	1.2	1.6	1.9	1.9	1.9	1.6
140°	0.4	0.4	0.8	1.2	1.2	1.2	1.6	1.9	1.9	1.9	1.6
142.5°	0.4	0.8	0.8	1.2	1.2	1.6	1.6	1.9	1.9	1.6	1.6
145°	0.4	0.8	0.8	1.2	1.2	1.6	1.6	1.9	1.6	1.6	1.6
147.5°	0.8	0.8	0.8	1.2	1.2	1.6	1.6	1.9	1.9	1.6	1.6
150°	0.4	0.8	0.8	1.2	1.6	1.6	1.6	1.9	1.6	1.6	1.6
152.5°	0.4	0.8	0.8	1.2	1.6	1.6	1.6	1.9	1.6	1.6	1.6
155°	0.8	0.8	0.8	1.2	1.6	1.6	1.6	1.9	1.6	1.6	1.9
157.5°	0.8	0.8	0.8	1.2	1.6	1.6	1.6	1.9	1.6	1.6	1.9
160°	0.8	0.8	0.8	1.2	1.2	1.6	1.6	1.6	1.6	1.6	1.6
162.5°	0.8	0.8	0.8	1.2	1.2	1.6	1.6	1.6	1.6	1.6	1.6
165°	0.8	0.8	0.8	0.8	1.2	1.2	1.6	1.6	1.6	1.6	1.6
167.5°	0.8	0.8	0.8	1.2	1.2	1.2	1.6	1.6	1.6	1.6	1.6
170°	0.8	0.8	0.8	1.2	1.2	1.2	1.6	1.9	1.9	1.9	1.9
172.5°	0.8	0.8	0.8	1.2	1.2	1.6	1.6	1.9	1.9	1.9	1.9
175°	0.8	0.8	0.8	1.2	1.2	1.6	1.6	1.9	1.9	1.9	1.9
177.5°	0.4	0.8	0.8	1.2	1.2	1.6	1.6	1.9	1.9	1.9	1.6
180°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2



TEST NUMBER: P550936

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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	304.8	304.8	304.8
2.5°	290.1	284.6	283.1
5°	274.5	265.6	260.6
7.5°	259.0	247.0	241.1
10°	244.6	227.6	221.3
12.5°	227.6	207.8	198.0
15°	211.2	185.6	176.3
17.5°	193.0	164.3	153.4
20°	175.9	142.9	131.6
22.5°	156.5	121.9	109.5
25°	139.0	101.0	87.0
27.5°	119.6	79.6	67.6
30°	101.4	61.0	48.9
32.5°	83.9	44.7	33.8
35°	67.6	30.3	21.4
37.5°	52.0	18.6	10.9
40°	37.7	9.7	5.0
42.5°	25.2	4.7	2.7
45°	15.5	2.3	0.0
47.5°	8.9	0.0	0.0
50°	4.7	0.0	0.0
52.5°	1.9	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	0.8	1.2
80°	0.8	1.6	1.9
82.5°	1.6	1.9	1.9
85°	1.6	1.9	2.3
87.5°	1.9	2.3	2.7
90°	2.3	2.7	2.7
92.5°	2.3	3.1	3.1
95°	2.7	3.1	3.5
97.5°	3.1	3.5	3.5
100°	2.7	3.5	3.9
102.5°	2.3	3.5	3.5
105°	1.9	2.7	3.1



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	1.6	1.9	1.9
115°	1.2	1.6	1.9
117.5°	1.2	1.6	1.6
120°	1.2	1.2	1.6
122.5°	1.2	1.2	1.6
125°	1.2	1.2	1.6
127.5°	1.6	1.2	1.2
130°	1.2	1.2	1.2
132.5°	1.6	1.2	1.2
135°	1.6	1.2	1.2
137.5°	1.6	1.2	1.2
140°	1.6	1.2	1.2
142.5°	1.6	1.2	1.2
145°	1.2	1.2	1.2
147.5°	1.2	1.2	1.2
150°	1.2	1.2	0.8
152.5°	1.2	0.8	0.8
155°	1.2	0.8	0.4
157.5°	1.6	0.8	0.4
160°	1.2	0.8	0.4
162.5°	1.2	0.8	0.4
165°	1.2	0.8	0.0
167.5°	1.2	0.8	0.4
170°	1.2	0.8	0.4
172.5°	1.2	0.8	0.4
175°	1.2	0.4	0.4
177.5°	1.2	0.4	0.4
180°	1.2	1.2	1.2



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	163.1	158.4	142.9	117.3	81.9	45.8	17.1	3.1	0.8	1.2	1.2
110°	142.1	138.2	122.3	97.5	66.0	34.2	11.3	1.9	1.2	1.2	1.2





107.5°	1.6	2.3	2.7
110°	1.6	1.9	2.3



(END OF REPORT)