

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: P550979

Luminaire Tested: **FCC-X-2-LD4-1STD-30-UNV-82-96-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: P550979
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-82-96-ED1D-90
Description: FCC CORNER MOUNT LUMINAIRE WITH .187 CLEAR PC FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES AND 3000K, AND 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

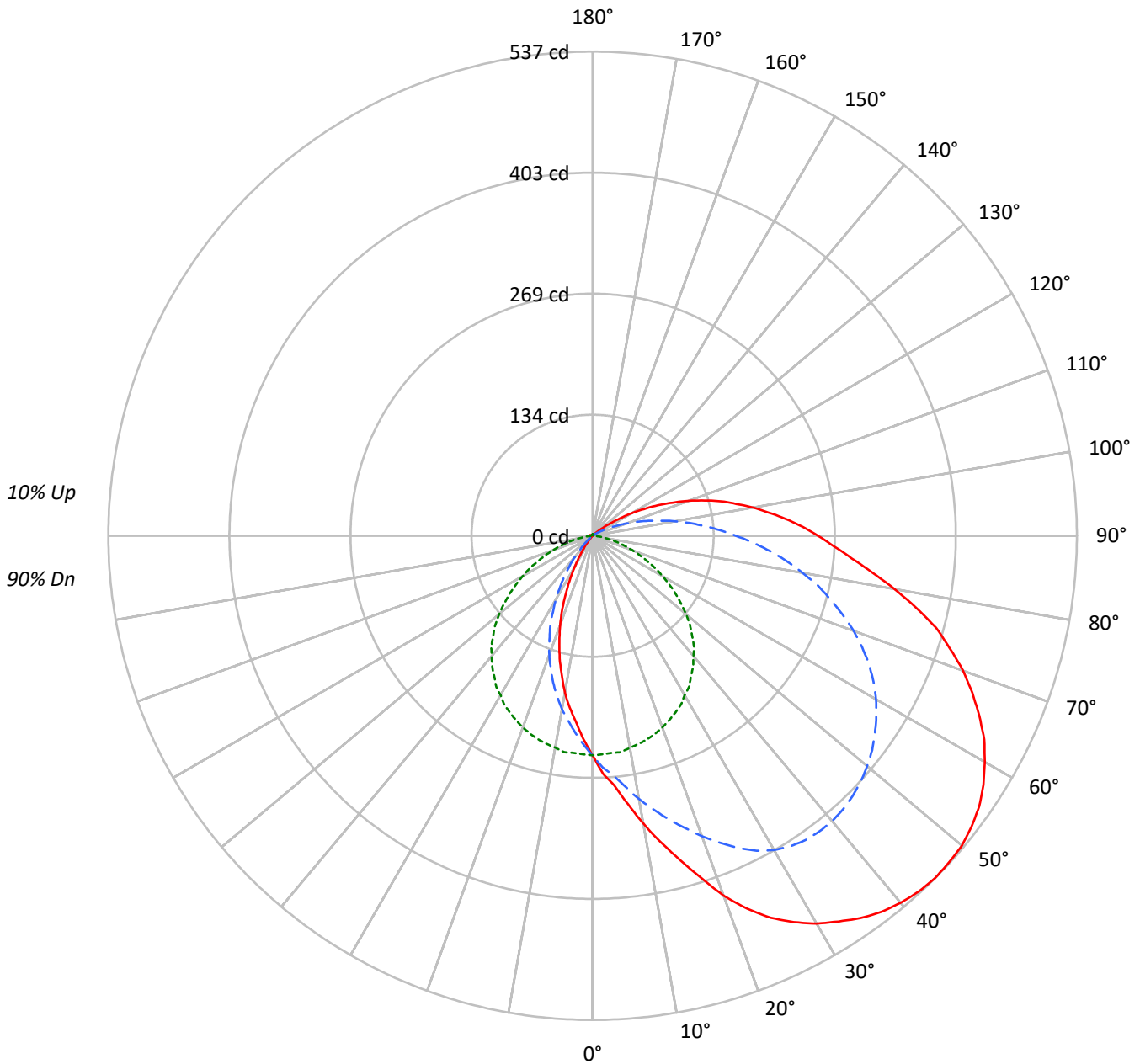
Lumens per Lamp: N/A
Luminaire Lumens: 1203.9 lumens
Efficiency: N/A
Efficacy: 72.1 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

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

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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°	2621	2621	2621
5°	2878	2583	2155
10°	3256	2552	1776
15°	3650	2519	1385
20°	4116	2478	1020
25°	4503	2430	669
30°	4791	2366	377
35°	5040	2298	166
40°	5260	2213	40
45°	5450	2107	0
50°	5609	1968	0
55°	5730	1788	0
60°	5791	1580	0
65°	5815	1346	0
70°	5795	1096	0
75°	5722	808	4
80°	5490	497	26
85°	5306	239	35



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	23.3	1.9
10°-20°	69.9	5.8
20°-30°	113.1	9.4
30°-40°	145.3	12.1
40°-50°	164.5	13.7
50°-60°	170.4	14.2
60°-70°	160.7	13.3
70°-80°	134.7	11.2
80°-90°	97.6	8.1
90°-100°	64.2	5.3
100°-110°	37.1	3.1
110°-120°	16.3	1.4
120°-130°	4.4	0.4
130°-140°	1.0	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°	206.3	17.1
0°-40°	351.6	29.2
0°-60°	686.5	57.0
0°-90°	1079.5	89.7
90°-120°	117.6	9.8
90°-150°	123.6	10.3
90°-180°	124.0	10.3
0°-180°	1203.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	244	244	244	244	244	
5°	278	267	242	219	208	28
15°	371	326	234	169	141	107
25°	468	382	216	111	70	216
35°	518	412	190	54	17	325
45°	537	408	156	12	0	415
55°	523	382	112	0	0	467
65°	473	338	67	0	0	468
75°	394	273	28	0	0	414
85°	288	198	5	1	2	246
90°	250	159	1	2	2	137
95°	215	124	1	2	3	168
105°	148	64	1	2	2	156
115°	80	21	1	1	2	80
125°	24	3	1	1	1	24
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°	243.5	243.5	243.5	243.5	243.5	243.5	243.5	243.5	243.5	243.5	243.5
2.5°	264.0	263.7	262.8	261.2	259.1	255.3	252.2	249.4	245.7	242.6	236.7
5°	278.0	276.4	275.2	273.6	268.7	265.3	259.7	253.5	247.6	241.7	229.9
7.5°	300.3	297.8	296.0	291.6	284.8	277.0	268.4	262.5	258.4	242.0	221.8
10°	324.2	322.0	318.3	310.6	302.2	291.0	278.6	264.6	252.2	238.6	214.7
12.5°	347.8	344.7	339.4	329.5	317.7	303.7	286.7	270.2	252.5	236.4	206.3
15°	371.4	367.9	362.4	350.3	334.8	316.4	295.7	274.9	254.1	233.6	197.6
17.5°	397.1	392.5	384.1	370.4	350.9	328.2	303.7	278.6	253.5	230.2	188.3
20°	424.7	418.2	409.2	390.9	367.9	341.3	311.8	282.3	253.2	226.2	177.8
22.5°	447.7	441.2	431.2	412.3	384.7	352.1	318.6	284.8	251.9	221.5	167.8
25°	467.5	462.3	451.4	429.7	400.5	363.6	325.1	286.7	250.1	216.5	157.3
27.5°	483.0	478.1	466.0	443.6	413.9	373.8	330.1	287.6	247.6	211.6	146.4
30°	496.7	491.7	477.2	454.2	422.9	381.9	335.1	287.9	244.5	204.1	134.6
32.5°	507.2	502.6	487.7	463.2	429.1	387.5	337.9	287.6	240.4	198.9	121.9
35°	517.8	513.1	495.8	469.7	433.7	390.0	340.0	286.0	235.5	190.2	109.8
37.5°	525.9	520.6	502.9	474.1	435.9	390.6	339.7	283.9	230.2	183.0	97.7
40°	531.4	525.9	506.9	476.5	436.5	389.7	337.2	280.1	224.0	174.0	85.0
42.5°	535.2	529.0	508.8	480.3	435.3	387.2	333.5	275.5	217.2	166.3	72.9
45°	537.0	530.5	509.1	477.2	433.1	382.5	327.9	269.6	209.7	155.7	60.8
47.5°	536.1	529.0	507.6	473.7	429.1	377.6	321.7	262.5	200.7	146.4	49.3
50°	534.5	527.1	504.1	469.4	423.5	371.4	314.9	253.8	191.4	135.0	39.1
52.5°	529.6	522.1	500.4	463.2	417.0	364.2	305.6	244.8	181.5	123.8	29.8
55°	523.4	516.6	493.9	457.6	408.6	355.5	296.9	235.2	171.9	112.3	21.4
57.5°	513.8	507.6	485.8	448.6	400.2	345.9	287.3	224.6	159.8	100.8	14.9
60°	502.0	495.8	474.7	438.4	390.6	335.1	276.7	213.8	148.9	89.3	9.3
62.5°	489.6	483.7	461.6	425.7	378.5	323.6	265.3	202.9	137.4	78.8	5.6
65°	473.1	467.5	447.7	410.5	365.2	311.2	252.5	189.9	125.6	67.0	3.1
67.5°	455.7	450.8	430.6	396.5	349.6	297.5	239.5	177.1	113.2	56.8	1.6
70°	437.1	430.9	412.3	377.6	333.8	282.0	225.2	164.1	101.4	46.8	0.0
72.5°	415.4	410.8	392.8	359.9	315.5	265.6	210.7	149.8	88.4	37.2	0.3
75°	394.3	388.4	372.0	341.0	297.5	248.2	194.5	136.5	75.7	28.5	0.3
77.5°	367.0	365.2	349.6	319.5	280.5	231.4	176.8	120.4	63.6	20.5	0.3
80°	339.7	337.9	325.8	298.1	260.6	211.6	160.4	105.2	51.8	13.7	0.3
82.5°	312.7	310.2	298.8	275.8	240.4	194.8	143.3	90.0	41.0	8.4	0.3
85°	288.5	285.4	273.0	251.9	219.7	175.9	125.6	75.1	30.4	4.7	0.6
87.5°	267.7	265.6	251.9	230.2	198.6	158.2	110.1	60.8	21.4	2.2	0.9
90°	250.1	245.4	233.3	210.3	178.7	138.7	93.7	48.7	14.3	1.2	1.2
92.5°	232.7	228.6	215.3	191.7	161.0	121.9	77.9	37.2	9.0	0.6	1.6
95°	214.7	210.3	197.3	175.6	143.0	104.9	63.9	27.3	5.0	0.6	1.6
97.5°	197.0	193.0	179.3	157.6	126.9	90.0	50.6	19.2	2.5	0.6	1.2
100°	180.6	175.9	163.5	141.8	110.8	75.1	39.1	12.4	1.6	0.6	1.2
102.5°	163.2	159.5	146.7	125.6	94.0	61.1	29.2	7.8	0.6	0.6	0.9
105°	147.7	143.0	130.6	108.9	80.0	48.1	20.5	4.7	0.6	0.6	0.9



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	96.2	92.5	81.6	63.3	40.6	18.9	5.6	0.9	0.9	0.9	0.9
115°	80.4	74.8	65.2	49.0	30.1	12.4	2.8	0.9	0.9	0.9	0.9
117.5°	64.2	59.6	52.7	37.2	19.9	8.1	1.6	0.9	0.9	0.9	0.9
120°	50.3	45.9	38.2	25.8	13.3	4.7	0.6	0.9	0.9	0.9	0.9
122.5°	36.0	32.6	25.8	16.8	8.1	2.2	0.9	0.9	1.2	1.2	0.9
125°	23.9	22.0	17.1	10.2	5.0	0.9	0.9	0.9	1.2	1.2	0.9
127.5°	15.5	14.0	9.9	5.9	2.2	0.9	0.9	1.2	1.2	1.2	0.9
130°	8.7	7.8	5.9	3.4	0.9	0.9	0.9	1.2	1.2	1.2	0.9
132.5°	5.0	4.7	3.1	0.6	0.9	0.9	0.9	1.2	1.2	1.2	1.2
135°	1.2	0.6	0.6	0.6	0.9	0.9	1.2	1.2	1.6	1.6	1.2
137.5°	0.3	0.3	0.6	0.6	0.9	0.9	1.2	1.6	1.6	1.6	1.2
140°	0.3	0.3	0.6	0.9	0.9	0.9	1.2	1.6	1.6	1.6	1.2
142.5°	0.3	0.6	0.6	0.9	0.9	1.2	1.2	1.6	1.6	1.2	1.2
145°	0.3	0.6	0.6	0.9	0.9	1.2	1.2	1.6	1.2	1.2	1.2
147.5°	0.6	0.6	0.6	0.9	0.9	1.2	1.2	1.6	1.6	1.2	1.2
150°	0.3	0.6	0.6	0.9	1.2	1.2	1.2	1.6	1.2	1.2	1.2
152.5°	0.3	0.6	0.6	0.9	1.2	1.2	1.2	1.6	1.2	1.2	1.2
155°	0.6	0.6	0.6	0.9	1.2	1.2	1.2	1.6	1.2	1.2	1.6
157.5°	0.6	0.6	0.6	0.9	1.2	1.2	1.2	1.6	1.2	1.2	1.6
160°	0.6	0.6	0.6	0.9	0.9	1.2	1.2	1.2	1.2	1.2	1.2
162.5°	0.6	0.6	0.6	0.9	0.9	1.2	1.2	1.2	1.2	1.2	1.2
165°	0.6	0.6	0.6	0.6	0.9	0.9	1.2	1.2	1.2	1.2	1.2
167.5°	0.6	0.6	0.6	0.9	0.9	0.9	1.2	1.2	1.2	1.2	1.2
170°	0.6	0.6	0.6	0.9	0.9	0.9	1.2	1.6	1.6	1.6	1.6
172.5°	0.6	0.6	0.6	0.9	0.9	1.2	1.2	1.6	1.6	1.6	1.6
175°	0.6	0.6	0.6	0.9	0.9	1.2	1.2	1.6	1.6	1.6	1.6
177.5°	0.3	0.6	0.6	0.9	0.9	1.2	1.2	1.6	1.6	1.6	1.2
180°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	243.5	243.5	243.5
2.5°	231.8	227.4	226.2
5°	219.3	212.2	208.2
7.5°	206.9	197.3	192.7
10°	195.5	181.8	176.8
12.5°	181.8	166.0	158.2
15°	168.8	148.3	140.9
17.5°	154.2	131.2	122.5
20°	140.5	114.2	105.2
22.5°	125.0	97.4	87.5
25°	111.1	80.7	69.5
27.5°	95.6	63.6	54.0
30°	81.0	48.7	39.1
32.5°	67.0	35.7	27.0
35°	54.0	24.2	17.1
37.5°	41.6	14.9	8.7
40°	30.1	7.8	4.0
42.5°	20.2	3.7	2.2
45°	12.4	1.9	0.0
47.5°	7.1	0.0	0.0
50°	3.7	0.0	0.0
52.5°	1.6	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	0.6	0.9
80°	0.6	1.2	1.6
82.5°	1.2	1.6	1.6
85°	1.2	1.6	1.9
87.5°	1.6	1.9	2.2
90°	1.9	2.2	2.2
92.5°	1.9	2.5	2.5
95°	2.2	2.5	2.8
97.5°	2.5	2.8	2.8
100°	2.2	2.8	3.1
102.5°	1.9	2.8	2.8
105°	1.6	2.2	2.5



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	1.2	1.6	1.6
115°	0.9	1.2	1.6
117.5°	0.9	1.2	1.2
120°	0.9	0.9	1.2
122.5°	0.9	0.9	1.2
125°	0.9	0.9	1.2
127.5°	1.2	0.9	0.9
130°	0.9	0.9	0.9
132.5°	1.2	0.9	0.9
135°	1.2	0.9	0.9
137.5°	1.2	0.9	0.9
140°	1.2	0.9	0.9
142.5°	1.2	0.9	0.9
145°	0.9	0.9	0.9
147.5°	0.9	0.9	0.9
150°	0.9	0.9	0.6
152.5°	0.9	0.6	0.6
155°	0.9	0.6	0.3
157.5°	1.2	0.6	0.3
160°	0.9	0.6	0.3
162.5°	0.9	0.6	0.3
165°	0.9	0.6	0.0
167.5°	0.9	0.6	0.3
170°	0.9	0.6	0.3
172.5°	0.9	0.6	0.3
175°	0.9	0.3	0.3
177.5°	0.9	0.3	0.3
180°	0.9	0.9	0.9



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	130.3	126.6	114.2	93.7	65.5	36.6	13.7	2.5	0.6	0.9	0.9
110°	113.5	110.4	97.7	77.9	52.7	27.3	9.0	1.6	0.9	0.9	0.9





107.5°	1.2	1.9	2.2
110°	1.2	1.6	1.9



(END OF REPORT)