

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: P550962

Luminaire Tested: **FCC-X-2-LD4-1STD-30-UNV-81-94-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: P550962
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-81-94-ED1D
Description: FCC CORNER MOUNT LUMINAIRE WITH .156 CLEAR PC FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES AND 3000K, AND 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

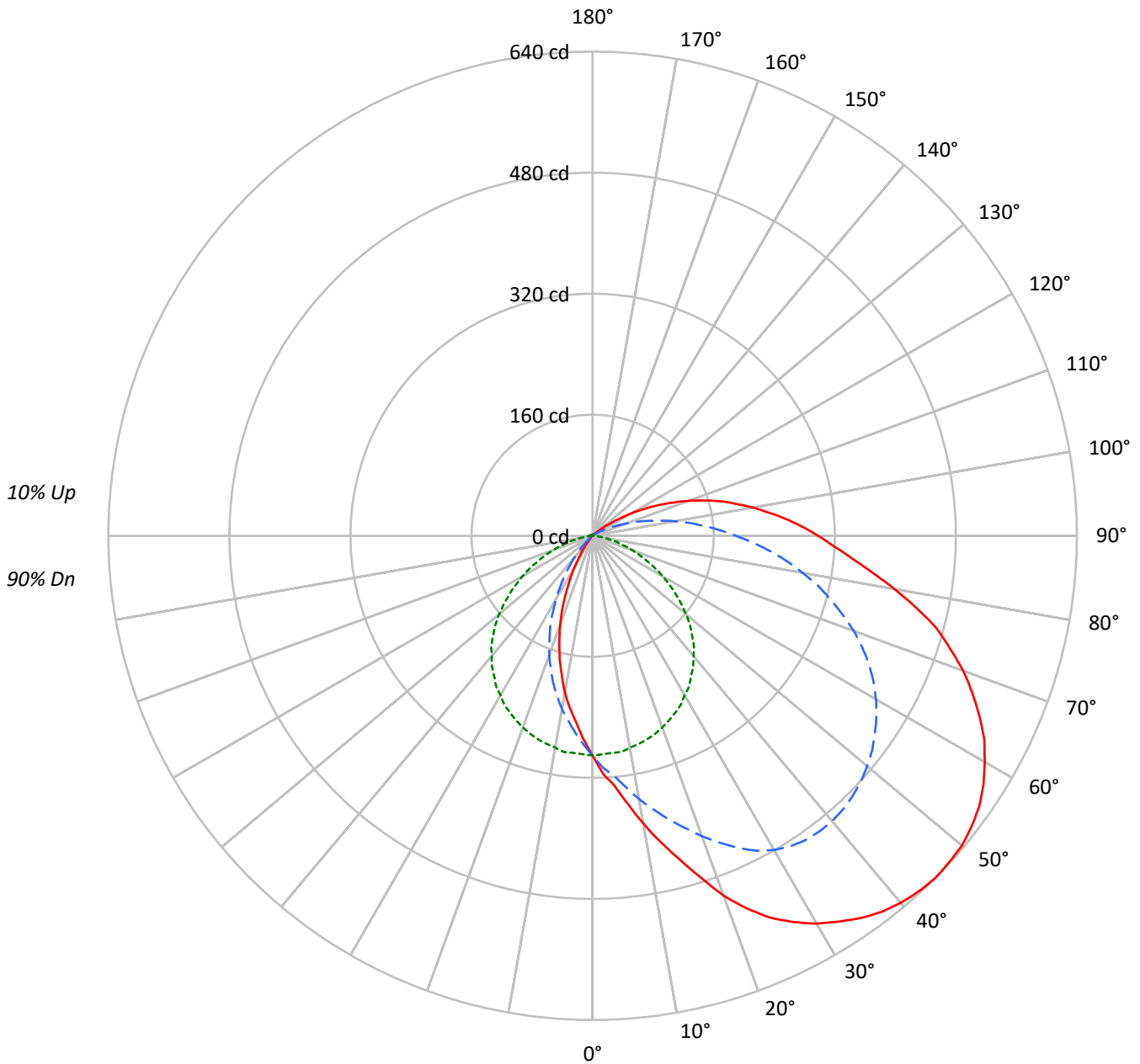
Lumens per Lamp: N/A
Luminaire Lumens: 1435.0 lumens
Efficiency: N/A
Efficacy: 85.9 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

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: P550962

CATALOG NUMBER: FCC-X-2-LD4-1STD-30-UNV-81-94-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°	3125	3125	3125
5°	3430	3078	2568
10°	3881	3040	2117
15°	4349	3002	1650
20°	4906	2954	1215
25°	5366	2897	797
30°	5710	2820	449
35°	6006	2739	198
40°	6270	2638	48
45°	6496	2511	0
50°	6685	2344	0
55°	6830	2132	0
60°	6902	1885	0
65°	6931	1605	0
70°	6908	1307	0
75°	6820	964	6
80°	6543	591	29
85°	6325	280	40



TEST NUMBER: P550962

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	27.8	1.9
10°-20°	83.3	5.8
20°-30°	134.8	9.4
30°-40°	173.2	12.1
40°-50°	196.0	13.7
50°-60°	203.1	14.2
60°-70°	191.5	13.3
70°-80°	160.5	11.2
80°-90°	116.4	8.1
90°-100°	76.5	5.3
100°-110°	44.2	3.1
110°-120°	19.5	1.4
120°-130°	5.3	0.4
130°-140°	1.2	0.1
140°-150°	0.8	0.1
150°-160°	0.6	0.0
160°-170°	0.3	0.0
170°-180°	0.1	0.0
0°-30°	245.9	17.1
0°-40°	419.0	29.2
0°-60°	818.2	57.0
0°-90°	1286.6	89.7
90°-120°	140.1	9.8
90°-150°	147.4	10.3
90°-180°	148.0	10.3
0°-180°	1435.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	290	290	290	290	290	
5°	331	318	288	261	248	33
15°	443	388	278	201	168	128
25°	557	455	258	132	83	258
35°	617	491	227	64	20	387
45°	640	486	186	15	0	494
55°	624	455	134	0	0	557
65°	564	403	80	0	0	558
75°	470	325	34	0	0	493
85°	344	236	6	2	2	294
90°	298	189	2	2	3	163
95°	256	148	1	3	3	201
105°	176	76	1	2	3	186
115°	96	25	1	1	2	96
125°	28	4	2	1	2	28
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: P550962

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
0°	290.3	290.3	290.3	290.3	290.3	290.3	290.3	290.3	290.3	290.3	290.3
2.5°	314.7	314.3	313.2	311.3	308.8	304.3	300.6	297.3	292.9	289.2	282.1
5°	331.3	329.5	328.0	326.1	320.2	316.1	309.5	302.1	295.1	288.0	274.0
7.5°	357.9	355.0	352.8	347.6	339.4	330.2	319.8	312.8	308.0	288.4	264.4
10°	386.4	383.8	379.4	370.1	360.2	346.8	332.0	315.4	300.6	284.3	255.9
12.5°	414.5	410.8	404.5	392.7	378.6	362.0	341.7	322.1	301.0	281.8	245.9
15°	442.6	438.5	431.9	417.5	399.0	377.2	352.4	327.6	302.8	278.4	235.5
17.5°	473.3	467.8	457.8	441.5	418.2	391.2	362.0	332.0	302.1	274.4	224.4
20°	506.2	498.4	487.7	465.9	438.5	406.7	371.6	336.5	301.7	269.6	211.9
22.5°	533.6	525.8	514.0	491.4	458.5	419.7	379.7	339.4	300.2	264.0	200.0
25°	557.2	551.0	538.0	512.1	477.4	433.4	387.5	341.7	298.0	258.1	187.5
27.5°	575.7	569.8	555.4	528.8	493.3	445.6	393.4	342.8	295.1	252.2	174.5
30°	592.0	586.1	568.7	541.3	504.0	455.2	399.3	343.1	291.4	243.3	160.5
32.5°	604.6	599.0	581.3	552.1	511.4	461.8	402.7	342.8	286.6	237.0	145.3
35°	617.1	611.6	590.9	559.8	516.9	464.8	405.3	340.9	280.7	226.7	130.9
37.5°	626.8	620.5	599.4	565.0	519.5	465.5	404.9	338.3	274.4	218.2	116.5
40°	633.4	626.8	604.2	568.0	520.3	464.4	401.9	333.9	267.0	207.4	101.3
42.5°	637.8	630.5	606.4	572.4	518.8	461.5	397.5	328.4	258.8	198.2	86.9
45°	640.1	632.3	606.8	568.7	516.2	455.9	390.8	321.3	250.0	185.6	72.5
47.5°	639.0	630.5	604.9	564.6	511.4	450.0	383.4	312.8	239.2	174.5	58.8
50°	637.1	628.2	600.9	559.5	504.7	442.6	375.3	302.5	228.1	160.8	46.6
52.5°	631.2	622.3	596.4	552.1	497.0	434.1	364.2	291.7	216.3	147.5	35.5
55°	623.8	615.7	588.7	545.4	487.0	423.8	353.9	280.3	204.9	133.9	25.5
57.5°	612.3	604.9	579.1	534.7	477.0	412.3	342.4	267.7	190.4	120.2	17.7
60°	598.3	590.9	565.7	522.5	465.5	399.3	329.8	254.8	177.5	106.5	11.1
62.5°	583.5	576.5	550.2	507.3	451.1	385.7	316.1	241.8	163.8	93.9	6.7
65°	563.9	557.2	533.6	489.2	435.2	370.9	301.0	226.3	149.8	79.9	3.7
67.5°	543.2	537.3	513.2	472.6	416.7	354.6	285.5	211.1	135.0	67.7	1.8
70°	521.0	513.6	491.4	450.0	397.9	336.1	268.4	195.6	120.9	55.8	0.0
72.5°	495.1	489.6	468.1	428.9	376.1	316.5	251.1	178.6	105.4	44.4	0.4
75°	470.0	462.9	443.3	406.4	354.6	295.8	231.8	162.7	90.2	34.0	0.4
77.5°	437.4	435.2	416.7	380.9	334.3	275.8	210.8	143.5	75.8	24.4	0.4
80°	404.9	402.7	388.3	355.3	310.6	252.2	191.2	125.4	61.8	16.3	0.4
82.5°	372.7	369.8	356.1	328.7	286.6	232.2	170.8	107.2	48.8	10.0	0.4
85°	343.9	340.2	325.4	300.2	261.8	209.7	149.8	89.5	36.2	5.5	0.7
87.5°	319.1	316.5	300.2	274.4	236.7	188.6	131.3	72.5	25.5	2.6	1.1
90°	298.0	292.5	278.1	250.7	213.0	165.3	111.7	58.1	17.0	1.5	1.5
92.5°	277.3	272.5	256.6	228.5	191.9	145.3	92.8	44.4	10.7	0.7	1.8
95°	255.9	250.7	235.2	209.3	170.5	125.0	76.2	32.5	5.9	0.7	1.8
97.5°	234.8	230.0	213.7	187.8	151.2	107.2	60.3	22.9	3.0	0.7	1.5
100°	215.2	209.7	194.9	169.0	132.0	89.5	46.6	14.8	1.8	0.7	1.5
102.5°	194.5	190.1	174.9	149.8	112.0	72.8	34.8	9.2	0.7	0.7	1.1
105°	176.0	170.5	155.7	129.8	95.4	57.3	24.4	5.5	0.7	0.7	1.1



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CATALOG NUMBER: FCC-X-2-LD4-1STD-30-UNV-81-94-ED1D

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	114.6	110.2	97.2	75.4	48.4	22.6	6.7	1.1	1.1	1.1	1.1
115°	95.8	89.1	77.7	58.4	35.9	14.8	3.3	1.1	1.1	1.1	1.1
117.5°	76.5	71.0	62.9	44.4	23.7	9.6	1.8	1.1	1.1	1.1	1.1
120°	59.9	54.7	45.5	30.7	15.9	5.5	0.7	1.1	1.1	1.1	1.1
122.5°	42.9	38.8	30.7	20.0	9.6	2.6	1.1	1.1	1.5	1.5	1.1
125°	28.5	26.3	20.3	12.2	5.9	1.1	1.1	1.1	1.5	1.5	1.1
127.5°	18.5	16.6	11.8	7.0	2.6	1.1	1.1	1.5	1.5	1.5	1.1
130°	10.4	9.2	7.0	4.1	1.1	1.1	1.1	1.5	1.5	1.5	1.1
132.5°	5.9	5.5	3.7	0.7	1.1	1.1	1.1	1.5	1.5	1.5	1.5
135°	1.5	0.7	0.7	0.7	1.1	1.1	1.5	1.5	1.8	1.8	1.5
137.5°	0.4	0.4	0.7	0.7	1.1	1.1	1.5	1.8	1.8	1.8	1.5
140°	0.4	0.4	0.7	1.1	1.1	1.1	1.5	1.8	1.8	1.8	1.5
142.5°	0.4	0.7	0.7	1.1	1.1	1.5	1.5	1.8	1.8	1.5	1.5
145°	0.4	0.7	0.7	1.1	1.1	1.5	1.5	1.8	1.5	1.5	1.5
147.5°	0.7	0.7	0.7	1.1	1.1	1.5	1.5	1.8	1.8	1.5	1.5
150°	0.4	0.7	0.7	1.1	1.5	1.5	1.5	1.8	1.5	1.5	1.5
152.5°	0.4	0.7	0.7	1.1	1.5	1.5	1.5	1.8	1.5	1.5	1.5
155°	0.7	0.7	0.7	1.1	1.5	1.5	1.5	1.8	1.5	1.5	1.8
157.5°	0.7	0.7	0.7	1.1	1.5	1.5	1.5	1.8	1.5	1.5	1.8
160°	0.7	0.7	0.7	1.1	1.1	1.5	1.5	1.5	1.5	1.5	1.5
162.5°	0.7	0.7	0.7	1.1	1.1	1.5	1.5	1.5	1.5	1.5	1.5
165°	0.7	0.7	0.7	0.7	1.1	1.1	1.5	1.5	1.5	1.5	1.5
167.5°	0.7	0.7	0.7	1.1	1.1	1.1	1.5	1.5	1.5	1.5	1.5
170°	0.7	0.7	0.7	1.1	1.1	1.1	1.5	1.8	1.8	1.8	1.8
172.5°	0.7	0.7	0.7	1.1	1.1	1.5	1.5	1.8	1.8	1.8	1.8
175°	0.7	0.7	0.7	1.1	1.1	1.5	1.5	1.8	1.8	1.8	1.8
177.5°	0.4	0.7	0.7	1.1	1.1	1.5	1.5	1.8	1.8	1.8	1.5
180°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	290.3	290.3	290.3
2.5°	276.2	271.0	269.6
5°	261.4	252.9	248.1
7.5°	246.6	235.2	229.6
10°	233.0	216.7	210.8
12.5°	216.7	197.8	188.6
15°	201.2	176.7	167.9
17.5°	183.8	156.4	146.1
20°	167.5	136.1	125.4
22.5°	149.0	116.1	104.3
25°	132.4	96.1	82.8
27.5°	113.9	75.8	64.3
30°	96.5	58.1	46.6
32.5°	79.9	42.5	32.2
35°	64.3	28.8	20.3
37.5°	49.5	17.7	10.4
40°	35.9	9.2	4.8
42.5°	24.0	4.4	2.6
45°	14.8	2.2	0.0
47.5°	8.5	0.0	0.0
50°	4.4	0.0	0.0
52.5°	1.8	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	0.7	1.1
80°	0.7	1.5	1.8
82.5°	1.5	1.8	1.8
85°	1.5	1.8	2.2
87.5°	1.8	2.2	2.6
90°	2.2	2.6	2.6
92.5°	2.2	3.0	3.0
95°	2.6	3.0	3.3
97.5°	3.0	3.3	3.3
100°	2.6	3.3	3.7
102.5°	2.2	3.3	3.3
105°	1.8	2.6	3.0



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	1.5	1.8	1.8
115°	1.1	1.5	1.8
117.5°	1.1	1.5	1.5
120°	1.1	1.1	1.5
122.5°	1.1	1.1	1.5
125°	1.1	1.1	1.5
127.5°	1.5	1.1	1.1
130°	1.1	1.1	1.1
132.5°	1.5	1.1	1.1
135°	1.5	1.1	1.1
137.5°	1.5	1.1	1.1
140°	1.5	1.1	1.1
142.5°	1.5	1.1	1.1
145°	1.1	1.1	1.1
147.5°	1.1	1.1	1.1
150°	1.1	1.1	0.7
152.5°	1.1	0.7	0.7
155°	1.1	0.7	0.4
157.5°	1.5	0.7	0.4
160°	1.1	0.7	0.4
162.5°	1.1	0.7	0.4
165°	1.1	0.7	0.0
167.5°	1.1	0.7	0.4
170°	1.1	0.7	0.4
172.5°	1.1	0.7	0.4
175°	1.1	0.4	0.4
177.5°	1.1	0.4	0.4
180°	1.1	1.1	1.1



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	155.3	150.9	136.1	111.7	78.0	43.6	16.3	3.0	0.7	1.1	1.1
110°	135.3	131.6	116.5	92.8	62.9	32.5	10.7	1.8	1.1	1.1	1.1





107.5°	1.5	2.2	2.6
110°	1.5	1.8	2.2



(END OF REPORT)