

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: P550801

Luminaire Tested: **FCC-X-2-LD4-1LO-35-UNV-93-94-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: P550801
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-LD4-1LO-35-UNV-93-94-ED1D-90
Description: FCC CORNER MOUNT LUMINAIRE WITH .156 CLEAR TEMPERED GLASS FIXTURE
SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES AND 3500K,
AND 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

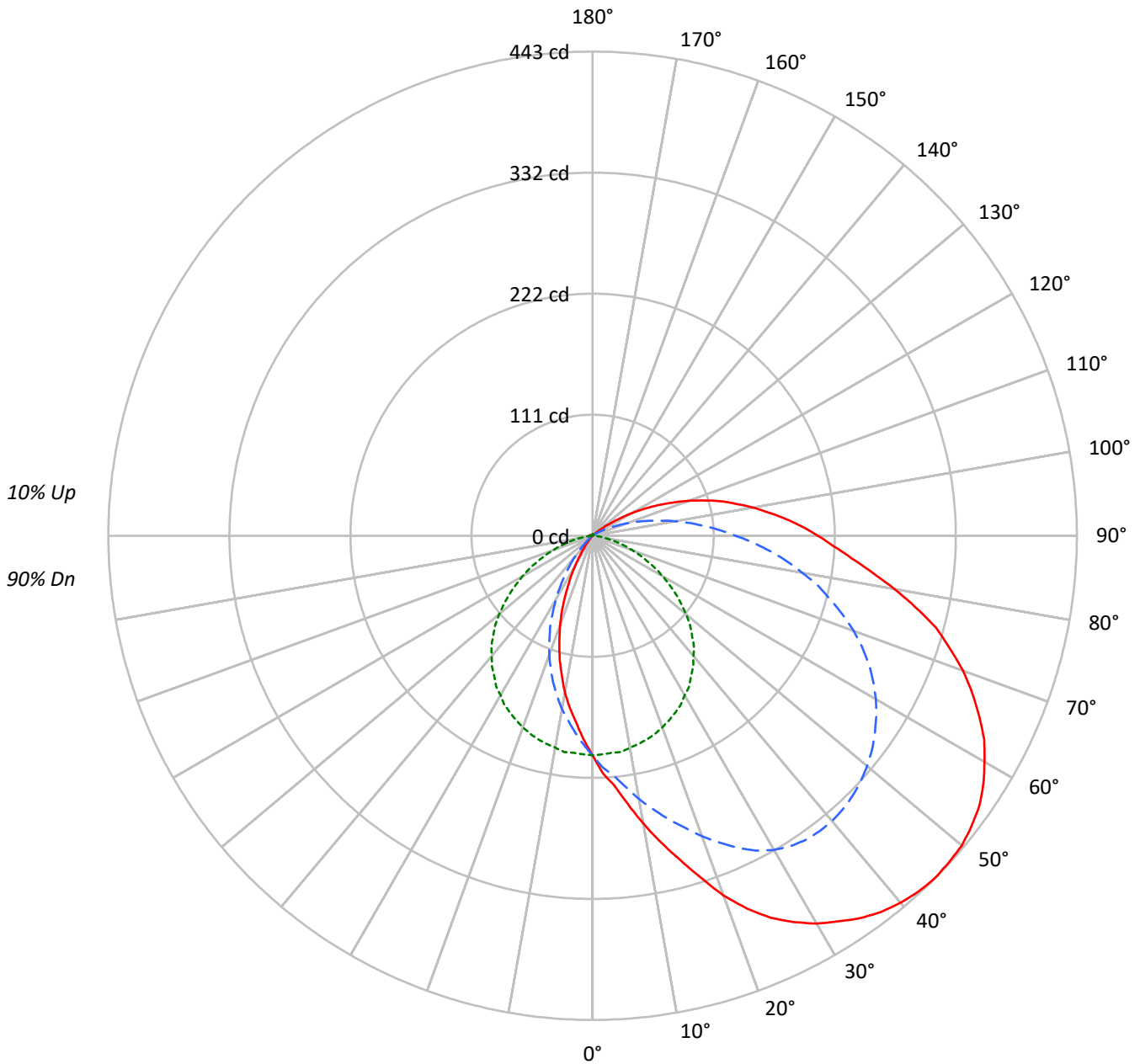
Lumens per Lamp: N/A
Luminaire Lumens: 993.0 lumens
Efficiency: N/A
Efficacy: 84.9 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

Input Watts (W): 11.7
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									
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°	2162	2162	2162
5°	2374	2130	1777
10°	2686	2105	1464
15°	3010	2078	1142
20°	3395	2043	840
25°	3714	2004	552
30°	3952	1952	311
35°	4157	1895	137
40°	4338	1825	33
45°	4495	1737	0
50°	4626	1622	0
55°	4726	1475	0
60°	4776	1304	0
65°	4796	1111	0
70°	4780	904	0
75°	4719	666	4
80°	4528	410	21
85°	4377	193	28



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	19.2	1.9
10°-20°	57.6	5.8
20°-30°	93.3	9.4
30°-40°	119.8	12.1
40°-50°	135.7	13.7
50°-60°	140.5	14.2
60°-70°	132.5	13.3
70°-80°	111.1	11.2
80°-90°	80.5	8.1
90°-100°	52.9	5.3
100°-110°	30.6	3.1
110°-120°	13.5	1.4
120°-130°	3.7	0.4
130°-140°	0.8	0.1
140°-150°	0.6	0.1
150°-160°	0.4	0.0
160°-170°	0.2	0.0
170°-180°	0.1	0.0
0°-30°	170.1	17.1
0°-40°	290.0	29.2
0°-60°	566.2	57.0
0°-90°	890.3	89.7
90°-120°	97.0	9.8
90°-150°	102.0	10.3
90°-180°	103.0	10.4
0°-180°	993.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	201	201	201	201	201	
5°	229	220	199	181	172	23
15°	306	269	193	139	116	88
25°	386	315	179	92	57	178
35°	427	340	157	44	14	268
45°	443	336	128	10	0	342
55°	432	315	93	0	0	385
65°	390	279	55	0	0	386
75°	325	225	24	0	0	341
85°	238	163	4	1	2	203
90°	206	131	1	2	2	113
95°	177	102	0	2	2	139
105°	122	53	0	1	2	129
115°	66	18	1	1	1	66
125°	20	2	1	1	1	20
135°	1	1	1	1	1	2
145°	0	1	1	1	1	0
155°	0	1	1	1	0	0
165°	0	1	1	1	0	0
175°	0	1	1	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°	200.9	200.9	200.9	200.9	200.9	200.9	200.9	200.9	200.9	200.9	200.9
2.5°	217.7	217.5	216.7	215.4	213.7	210.6	208.0	205.7	202.7	200.1	195.2
5°	229.3	228.0	227.0	225.7	221.6	218.8	214.2	209.0	204.2	199.3	189.6
7.5°	247.7	245.6	244.1	240.5	234.9	228.5	221.3	216.5	213.1	199.6	182.9
10°	267.4	265.6	262.5	256.1	249.2	240.0	229.8	218.3	208.0	196.8	177.1
12.5°	286.8	284.3	279.9	271.7	262.0	250.5	236.4	222.9	208.3	195.0	170.2
15°	306.3	303.5	298.9	288.9	276.1	261.0	243.8	226.7	209.6	192.7	163.0
17.5°	327.5	323.7	316.8	305.5	289.4	270.7	250.5	229.8	209.0	189.9	155.3
20°	350.3	344.9	337.5	322.4	303.5	281.5	257.2	232.8	208.8	186.5	146.6
22.5°	369.2	363.9	355.7	340.1	317.3	290.4	262.8	234.9	207.8	182.7	138.4
25°	385.6	381.3	372.3	354.4	330.3	299.9	268.2	236.4	206.2	178.6	129.7
27.5°	398.4	394.3	384.3	365.9	341.3	308.3	272.2	237.2	204.2	174.5	120.8
30°	409.7	405.6	393.5	374.6	348.8	315.0	276.3	237.4	201.6	168.4	111.0
32.5°	418.4	414.5	402.2	382.0	353.9	319.6	278.6	237.2	198.3	164.0	100.6
35°	427.1	423.2	408.9	387.4	357.7	321.6	280.4	235.9	194.2	156.8	90.6
37.5°	433.7	429.4	414.8	391.0	359.5	322.1	280.2	234.1	189.9	151.0	80.6
40°	438.3	433.7	418.1	393.0	360.0	321.4	278.1	231.1	184.7	143.5	70.1
42.5°	441.4	436.3	419.6	396.1	359.0	319.3	275.1	227.2	179.1	137.1	60.1
45°	442.9	437.5	419.9	393.5	357.2	315.5	270.5	222.4	173.0	128.4	50.2
47.5°	442.1	436.3	418.6	390.7	353.9	311.4	265.3	216.5	165.5	120.8	40.7
50°	440.9	434.7	415.8	387.1	349.3	306.3	259.7	209.3	157.9	111.3	32.2
52.5°	436.8	430.6	412.7	382.0	343.9	300.4	252.0	201.9	149.7	102.1	24.6
55°	431.7	426.0	407.3	377.4	337.0	293.2	244.9	194.0	141.8	92.6	17.7
57.5°	423.7	418.6	400.7	370.0	330.1	285.3	236.9	185.3	131.8	83.2	12.3
60°	414.0	408.9	391.5	361.5	322.1	276.3	228.2	176.3	122.8	73.7	7.7
62.5°	403.8	398.9	380.7	351.1	312.2	266.9	218.8	167.3	113.4	65.0	4.6
65°	390.2	385.6	369.2	338.5	301.2	256.6	208.3	156.6	103.6	55.3	2.6
67.5°	375.9	371.8	355.2	327.0	288.4	245.4	197.5	146.1	93.4	46.8	1.3
70°	360.5	355.4	340.1	311.4	275.3	232.6	185.8	135.4	83.7	38.6	0.0
72.5°	342.6	338.8	323.9	296.8	260.2	219.0	173.7	123.6	72.9	30.7	0.3
75°	325.2	320.4	306.8	281.2	245.4	204.7	160.4	112.6	62.4	23.5	0.3
77.5°	302.7	301.2	288.4	263.5	231.3	190.9	145.8	99.3	52.5	16.9	0.3
80°	280.2	278.6	268.7	245.9	214.9	174.5	132.3	86.7	42.7	11.3	0.3
82.5°	257.9	255.9	246.4	227.5	198.3	160.7	118.2	74.2	33.8	6.9	0.3
85°	238.0	235.4	225.2	207.8	181.2	145.1	103.6	61.9	25.1	3.8	0.5
87.5°	220.8	219.0	207.8	189.9	163.8	130.5	90.8	50.2	17.7	1.8	0.8
90°	206.2	202.4	192.4	173.5	147.4	114.4	77.3	40.2	11.8	1.0	1.0
92.5°	191.9	188.6	177.6	158.1	132.8	100.6	64.2	30.7	7.4	0.5	1.3
95°	177.1	173.5	162.7	144.8	118.0	86.5	52.7	22.5	4.1	0.5	1.3
97.5°	162.5	159.2	147.9	130.0	104.7	74.2	41.7	15.9	2.0	0.5	1.0
100°	148.9	145.1	134.8	116.9	91.3	61.9	32.2	10.2	1.3	0.5	1.0
102.5°	134.6	131.5	121.0	103.6	77.5	50.4	24.1	6.4	0.5	0.5	0.8
105°	121.8	118.0	107.7	89.8	66.0	39.7	16.9	3.8	0.5	0.5	0.8



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	79.3	76.3	67.3	52.2	33.5	15.6	4.6	0.8	0.8	0.8	0.8
115°	66.3	61.7	53.7	40.4	24.8	10.2	2.3	0.8	0.8	0.8	0.8
117.5°	53.0	49.1	43.5	30.7	16.4	6.7	1.3	0.8	0.8	0.8	0.8
120°	41.5	37.9	31.5	21.2	11.0	3.8	0.5	0.8	0.8	0.8	0.8
122.5°	29.7	26.9	21.2	13.8	6.7	1.8	0.8	0.8	1.0	1.0	0.8
125°	19.7	18.2	14.1	8.4	4.1	0.8	0.8	0.8	1.0	1.0	0.8
127.5°	12.8	11.5	8.2	4.9	1.8	0.8	0.8	1.0	1.0	1.0	0.8
130°	7.2	6.4	4.9	2.8	0.8	0.8	0.8	1.0	1.0	1.0	0.8
132.5°	4.1	3.8	2.6	0.5	0.8	0.8	0.8	1.0	1.0	1.0	1.0
135°	1.0	0.5	0.5	0.5	0.8	0.8	1.0	1.0	1.3	1.3	1.0
137.5°	0.3	0.3	0.5	0.5	0.8	0.8	1.0	1.3	1.3	1.3	1.0
140°	0.3	0.3	0.5	0.8	0.8	0.8	1.0	1.3	1.3	1.3	1.0
142.5°	0.3	0.5	0.5	0.8	0.8	1.0	1.0	1.3	1.3	1.0	1.0
145°	0.3	0.5	0.5	0.8	0.8	1.0	1.0	1.3	1.0	1.0	1.0
147.5°	0.5	0.5	0.5	0.8	0.8	1.0	1.0	1.3	1.3	1.0	1.0
150°	0.3	0.5	0.5	0.8	1.0	1.0	1.0	1.3	1.0	1.0	1.0
152.5°	0.3	0.5	0.5	0.8	1.0	1.0	1.0	1.3	1.0	1.0	1.0
155°	0.5	0.5	0.5	0.8	1.0	1.0	1.0	1.3	1.0	1.0	1.3
157.5°	0.5	0.5	0.5	0.8	1.0	1.0	1.0	1.3	1.0	1.0	1.3
160°	0.5	0.5	0.5	0.8	0.8	1.0	1.0	1.0	1.0	1.0	1.0
162.5°	0.5	0.5	0.5	0.8	0.8	1.0	1.0	1.0	1.0	1.0	1.0
165°	0.5	0.5	0.5	0.5	0.8	0.8	1.0	1.0	1.0	1.0	1.0
167.5°	0.5	0.5	0.5	0.8	0.8	0.8	1.0	1.0	1.0	1.0	1.0
170°	0.5	0.5	0.5	0.8	0.8	0.8	1.0	1.3	1.3	1.3	1.3
172.5°	0.5	0.5	0.5	0.8	0.8	1.0	1.0	1.3	1.3	1.3	1.3
175°	0.5	0.5	0.5	0.8	0.8	1.0	1.0	1.3	1.3	1.3	1.3
177.5°	0.3	0.5	0.5	0.8	0.8	1.0	1.0	1.3	1.3	1.3	1.0
180°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	200.9	200.9	200.9
2.5°	191.1	187.6	186.5
5°	180.9	175.0	171.7
7.5°	170.7	162.7	158.9
10°	161.2	149.9	145.8
12.5°	149.9	136.9	130.5
15°	139.2	122.3	116.2
17.5°	127.2	108.2	101.1
20°	115.9	94.2	86.7
22.5°	103.1	80.3	72.2
25°	91.6	66.5	57.3
27.5°	78.8	52.5	44.5
30°	66.8	40.2	32.2
32.5°	55.3	29.4	22.3
35°	44.5	20.0	14.1
37.5°	34.3	12.3	7.2
40°	24.8	6.4	3.3
42.5°	16.6	3.1	1.8
45°	10.2	1.5	0.0
47.5°	5.9	0.0	0.0
50°	3.1	0.0	0.0
52.5°	1.3	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	0.5	0.8
80°	0.5	1.0	1.3
82.5°	1.0	1.3	1.3
85°	1.0	1.3	1.5
87.5°	1.3	1.5	1.8
90°	1.5	1.8	1.8
92.5°	1.5	2.0	2.0
95°	1.8	2.0	2.3
97.5°	2.0	2.3	2.3
100°	1.8	2.3	2.6
102.5°	1.5	2.3	2.3
105°	1.3	1.8	2.0



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	1.0	1.3	1.3
115°	0.8	1.0	1.3
117.5°	0.8	1.0	1.0
120°	0.8	0.8	1.0
122.5°	0.8	0.8	1.0
125°	0.8	0.8	1.0
127.5°	1.0	0.8	0.8
130°	0.8	0.8	0.8
132.5°	1.0	0.8	0.8
135°	1.0	0.8	0.8
137.5°	1.0	0.8	0.8
140°	1.0	0.8	0.8
142.5°	1.0	0.8	0.8
145°	0.8	0.8	0.8
147.5°	0.8	0.8	0.8
150°	0.8	0.8	0.5
152.5°	0.8	0.5	0.5
155°	0.8	0.5	0.3
157.5°	1.0	0.5	0.3
160°	0.8	0.5	0.3
162.5°	0.8	0.5	0.3
165°	0.8	0.5	0.0
167.5°	0.8	0.5	0.3
170°	0.8	0.5	0.3
172.5°	0.8	0.5	0.3
175°	0.8	0.3	0.3
177.5°	0.8	0.3	0.3
180°	0.8	0.8	0.8



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	107.5	104.4	94.2	77.3	54.0	30.2	11.3	2.0	0.5	0.8	0.8
110°	93.6	91.1	80.6	64.2	43.5	22.5	7.4	1.3	0.8	0.8	0.8





107.5°	1.0	1.5	1.8
110°	1.0	1.3	1.5



(END OF REPORT)