

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: P550740

Luminaire Tested: **FCC-X-2-LD4-1LO-30-UNV-93-96-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: P550740
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-30-UNV-93-96-ED1D
Description: FCC CORNER MOUNT LUMINAIRE WITH .156 CLEAR TEMPERED GLASS FIXTURE
SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES AND 3000K,
AND 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

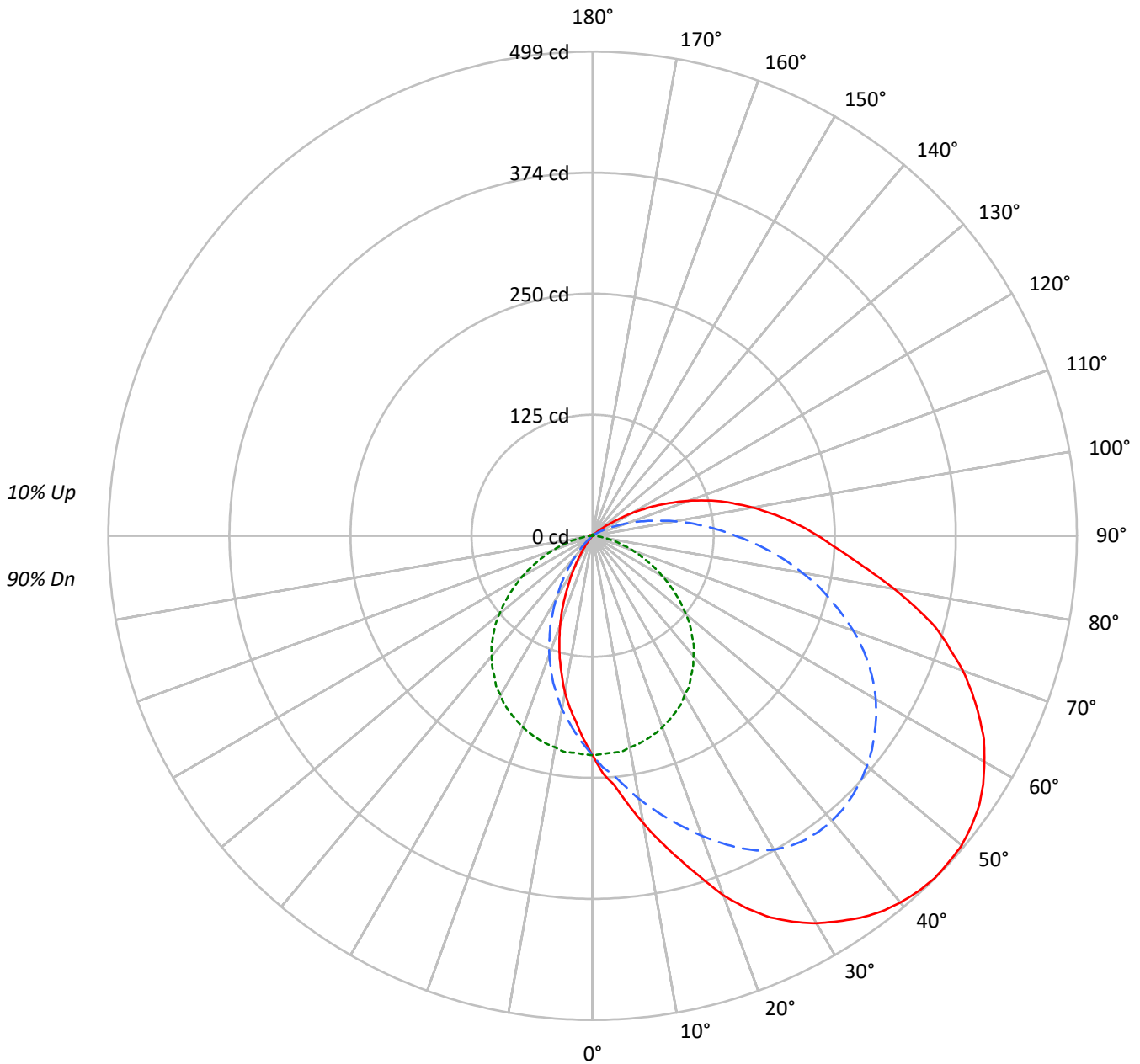
Lumens per Lamp: N/A
Luminaire Lumens: 1118.1 lumens
Efficiency: N/A
Efficacy: 95.6 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

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

TEST NUMBER: P550740

CATALOG NUMBER: FCC-X-2-LD4-1LO-30-UNV-93-96-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°	2434	2434	2434
5°	2672	2398	2001
10°	3023	2369	1649
15°	3388	2339	1285
20°	3822	2301	947
25°	4181	2257	621
30°	4448	2198	350
35°	4680	2134	154
40°	4885	2055	37
45°	5061	1957	0
50°	5209	1826	0
55°	5321	1661	0
60°	5377	1469	0
65°	5399	1249	0
70°	5382	1019	0
75°	5314	752	4
80°	5099	461	23
85°	4927	219	31



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	21.7	1.9
10°-20°	64.9	5.8
20°-30°	105.0	9.4
30°-40°	134.9	12.1
40°-50°	152.7	13.7
50°-60°	158.2	14.2
60°-70°	149.2	13.3
70°-80°	125.1	11.2
80°-90°	90.6	8.1
90°-100°	59.6	5.3
100°-110°	34.4	3.1
110°-120°	15.2	1.4
120°-130°	4.1	0.4
130°-140°	1.0	0.1
140°-150°	0.6	0.1
150°-160°	0.4	0.0
160°-170°	0.3	0.0
170°-180°	0.1	0.0
0°-30°	191.6	17.1
0°-40°	326.5	29.2
0°-60°	637.4	57.0
0°-90°	1002.4	89.6
90°-120°	109.2	9.8
90°-150°	114.9	10.3
90°-180°	116.0	10.4
0°-180°	1118.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	226	226	226	226	226	
5°	258	248	224	204	193	26
15°	345	302	217	157	131	99
25°	434	355	201	103	64	201
35°	481	382	177	50	16	302
45°	499	379	145	12	0	385
55°	486	355	104	0	0	434
65°	439	314	62	0	0	435
75°	366	253	26	0	0	384
85°	268	184	4	1	2	229
90°	232	147	1	2	2	127
95°	199	115	1	2	3	156
105°	137	60	1	1	2	145
115°	75	20	1	1	1	75
125°	22	3	1	1	1	22
135°	1	1	1	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	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°	226.1	226.1	226.1	226.1	226.1	226.1	226.1	226.1	226.1	226.1	226.1
2.5°	245.2	244.9	244.0	242.6	240.5	237.1	234.2	231.6	228.2	225.3	219.8
5°	258.1	256.7	255.5	254.1	249.5	246.3	241.1	235.4	229.9	224.4	213.5
7.5°	278.9	276.6	274.8	270.8	264.5	257.3	249.2	243.7	240.0	224.7	206.0
10°	301.0	299.0	295.6	288.4	280.6	270.2	258.7	245.7	234.2	221.5	199.4
12.5°	322.9	320.1	315.2	305.9	295.0	282.0	266.2	250.9	234.5	219.5	191.6
15°	344.8	341.7	336.5	325.2	310.8	293.8	274.5	255.2	235.9	216.9	183.5
17.5°	368.7	364.4	356.6	344.0	325.8	304.8	282.0	258.7	235.4	213.8	174.9
20°	394.4	388.3	380.0	363.0	341.7	316.9	289.5	262.2	235.1	210.0	165.1
22.5°	415.7	409.7	400.4	382.9	357.2	327.0	295.9	264.5	233.9	205.7	155.9
25°	434.1	429.2	419.2	399.0	371.9	337.6	301.9	266.2	232.2	201.1	146.1
27.5°	448.5	443.9	432.7	412.0	384.3	347.1	306.5	267.1	229.9	196.5	136.0
30°	461.2	456.6	443.1	421.8	392.7	354.6	311.1	267.3	227.0	189.6	125.0
32.5°	471.0	466.7	452.9	430.1	398.4	359.8	313.7	267.1	223.3	184.7	113.2
35°	480.8	476.5	460.4	436.2	402.7	362.1	315.7	265.6	218.7	176.6	102.0
37.5°	488.3	483.4	467.0	440.2	404.8	362.7	315.5	263.6	213.8	170.0	90.7
40°	493.5	488.3	470.7	442.5	405.3	361.8	313.1	260.1	208.0	161.6	78.9
42.5°	496.9	491.2	472.5	446.0	404.2	359.5	309.7	255.8	201.7	154.4	67.7
45°	498.7	492.6	472.7	443.1	402.2	355.2	304.5	250.3	194.7	144.6	56.5
47.5°	497.8	491.2	471.3	439.9	398.4	350.6	298.7	243.7	186.4	136.0	45.8
50°	496.4	489.5	468.1	435.9	393.2	344.8	292.4	235.7	177.7	125.3	36.3
52.5°	491.8	484.8	464.7	430.1	387.2	338.2	283.8	227.3	168.5	114.9	27.7
55°	486.0	479.7	458.6	424.9	379.4	330.1	275.7	218.4	159.6	104.3	19.9
57.5°	477.1	471.3	451.1	416.6	371.6	321.2	266.8	208.6	148.4	93.6	13.8
60°	466.1	460.4	440.8	407.1	362.7	311.1	257.0	198.5	138.3	83.0	8.6
62.5°	454.6	449.1	428.7	395.2	351.5	300.5	246.3	188.4	127.6	73.2	5.2
65°	439.3	434.1	415.7	381.1	339.1	288.9	234.5	176.3	116.7	62.2	2.9
67.5°	423.2	418.6	399.9	368.2	324.7	276.3	222.4	164.5	105.2	52.7	1.4
70°	405.9	400.1	382.9	350.6	310.0	261.9	209.1	152.4	94.2	43.5	0.0
72.5°	385.7	381.4	364.7	334.2	293.0	246.6	195.6	139.1	82.1	34.6	0.3
75°	366.2	360.7	345.4	316.6	276.3	230.5	180.6	126.8	70.3	26.5	0.3
77.5°	340.8	339.1	324.7	296.7	260.4	214.9	164.2	111.8	59.1	19.0	0.3
80°	315.5	313.7	302.5	276.8	242.0	196.5	148.9	97.7	48.1	12.7	0.3
82.5°	290.4	288.1	277.4	256.1	223.3	180.9	133.1	83.5	38.0	7.8	0.3
85°	267.9	265.0	253.5	233.9	204.0	163.3	116.7	69.7	28.2	4.3	0.6
87.5°	248.6	246.6	233.9	213.8	184.4	146.9	102.3	56.5	19.9	2.0	0.9
90°	232.2	227.9	216.6	195.3	165.9	128.8	87.0	45.2	13.3	1.2	1.2
92.5°	216.1	212.3	199.9	178.0	149.5	113.2	72.3	34.6	8.4	0.6	1.4
95°	199.4	195.3	183.2	163.1	132.8	97.4	59.3	25.4	4.6	0.6	1.4
97.5°	182.9	179.2	166.5	146.3	117.8	83.5	47.0	17.9	2.3	0.6	1.2
100°	167.7	163.3	151.8	131.7	102.8	69.7	36.3	11.5	1.4	0.6	1.2
102.5°	151.5	148.1	136.3	116.7	87.3	56.8	27.1	7.2	0.6	0.6	0.9
105°	137.1	132.8	121.3	101.1	74.3	44.7	19.0	4.3	0.6	0.6	0.9



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CATALOG NUMBER: FCC-X-2-LD4-1LO-30-UNV-93-96-ED1D

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	89.3	85.8	75.8	58.8	37.7	17.6	5.2	0.9	0.9	0.9	0.9
115°	74.6	69.4	60.5	45.5	27.9	11.5	2.6	0.9	0.9	0.9	0.9
117.5°	59.6	55.3	49.0	34.6	18.4	7.5	1.4	0.9	0.9	0.9	0.9
120°	46.7	42.6	35.4	23.9	12.4	4.3	0.6	0.9	0.9	0.9	0.9
122.5°	33.4	30.2	23.9	15.6	7.5	2.0	0.9	0.9	1.2	1.2	0.9
125°	22.2	20.5	15.8	9.5	4.6	0.9	0.9	0.9	1.2	1.2	0.9
127.5°	14.4	13.0	9.2	5.5	2.0	0.9	0.9	1.2	1.2	1.2	0.9
130°	8.1	7.2	5.5	3.2	0.9	0.9	0.9	1.2	1.2	1.2	0.9
132.5°	4.6	4.3	2.9	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	1.4	1.4	1.2
137.5°	0.3	0.3	0.6	0.6	0.9	0.9	1.2	1.4	1.4	1.4	1.2
140°	0.3	0.3	0.6	0.9	0.9	0.9	1.2	1.4	1.4	1.4	1.2
142.5°	0.3	0.6	0.6	0.9	0.9	1.2	1.2	1.4	1.4	1.2	1.2
145°	0.3	0.6	0.6	0.9	0.9	1.2	1.2	1.4	1.2	1.2	1.2
147.5°	0.6	0.6	0.6	0.9	0.9	1.2	1.2	1.4	1.4	1.2	1.2
150°	0.3	0.6	0.6	0.9	1.2	1.2	1.2	1.4	1.2	1.2	1.2
152.5°	0.3	0.6	0.6	0.9	1.2	1.2	1.2	1.4	1.2	1.2	1.2
155°	0.6	0.6	0.6	0.9	1.2	1.2	1.2	1.4	1.2	1.2	1.4
157.5°	0.6	0.6	0.6	0.9	1.2	1.2	1.2	1.4	1.2	1.2	1.4
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	1.4	1.4	1.4	1.4
172.5°	0.6	0.6	0.6	0.9	0.9	1.2	1.2	1.4	1.4	1.4	1.4
175°	0.6	0.6	0.6	0.9	0.9	1.2	1.2	1.4	1.4	1.4	1.4
177.5°	0.3	0.6	0.6	0.9	0.9	1.2	1.2	1.4	1.4	1.4	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°	226.1	226.1	226.1
2.5°	215.2	211.2	210.0
5°	203.7	197.0	193.3
7.5°	192.2	183.2	178.9
10°	181.5	168.8	164.2
12.5°	168.8	154.1	146.9
15°	156.7	137.7	130.8
17.5°	143.2	121.9	113.8
20°	130.5	106.0	97.7
22.5°	116.1	90.5	81.2
25°	103.1	74.9	64.5
27.5°	88.7	59.1	50.1
30°	75.2	45.2	36.3
32.5°	62.2	33.1	25.1
35°	50.1	22.5	15.8
37.5°	38.6	13.8	8.1
40°	27.9	7.2	3.7
42.5°	18.7	3.5	2.0
45°	11.5	1.7	0.0
47.5°	6.6	0.0	0.0
50°	3.5	0.0	0.0
52.5°	1.4	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	1.4
82.5°	1.2	1.4	1.4
85°	1.2	1.4	1.7
87.5°	1.4	1.7	2.0
90°	1.7	2.0	2.0
92.5°	1.7	2.3	2.3
95°	2.0	2.3	2.6
97.5°	2.3	2.6	2.6
100°	2.0	2.6	2.9
102.5°	1.7	2.6	2.6
105°	1.4	2.0	2.3



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	1.2	1.4	1.4
115°	0.9	1.2	1.4
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°	121.0	117.5	106.0	87.0	60.8	34.0	12.7	2.3	0.6	0.9	0.9
110°	105.4	102.6	90.7	72.3	49.0	25.4	8.4	1.4	0.9	0.9	0.9





107.5°	1.2	1.7	2.0
110°	1.2	1.4	1.7



(END OF REPORT)