

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: P550922

Luminaire Tested: **FCC-X-2-LD4-1LO-50-UNV-93-85-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: P550922
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-50-UNV-93-85-ED1D
Description: FCC CORNER MOUNT LUMINAIRE WITH .156 CLEAR TEMPERED GLASS FIXTURE
SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 5000K, AND 80 CRI
LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

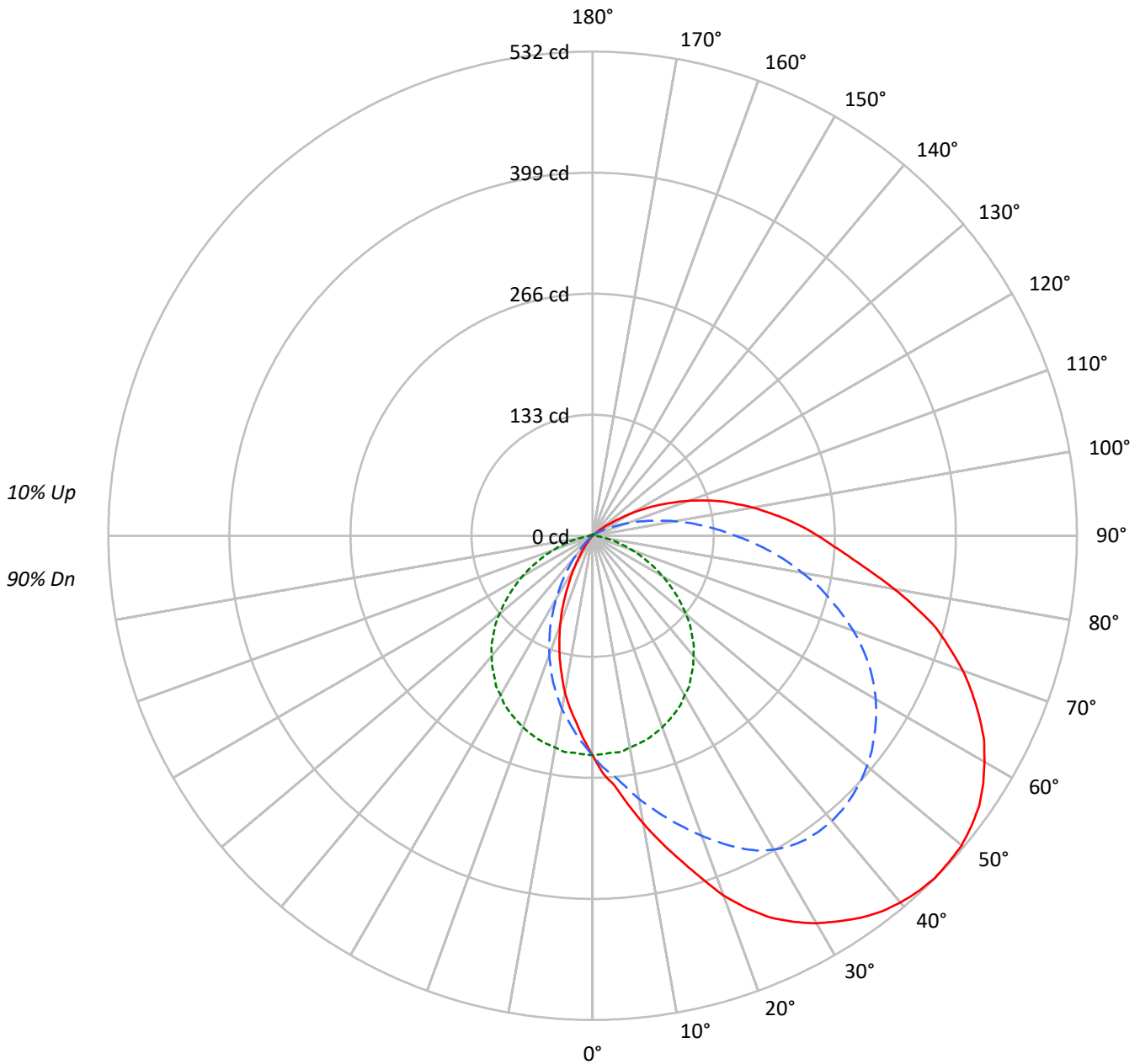
Lumens per Lamp: N/A
Luminaire Lumens: 1191.9 lumens
Efficiency: N/A
Efficacy: 101.9 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

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

TEST NUMBER: P550922

CATALOG NUMBER: FCC-X-2-LD4-1LO-50-UNV-93-85-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°	2595	2595	2595
5°	2849	2558	2134
10°	3224	2526	1759
15°	3613	2494	1370
20°	4075	2453	1009
25°	4458	2406	663
30°	4742	2343	373
35°	4989	2275	164
40°	5208	2191	40
45°	5396	2086	0
50°	5553	1947	0
55°	5673	1771	0
60°	5734	1566	0
65°	5757	1332	0
70°	5738	1087	0
75°	5665	803	4
80°	5435	490	24
85°	5253	234	33



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	23.1	1.9
10°-20°	69.2	5.8
20°-30°	112.0	9.4
30°-40°	143.9	12.1
40°-50°	162.8	13.7
50°-60°	168.7	14.2
60°-70°	159.1	13.3
70°-80°	133.3	11.2
80°-90°	96.6	8.1
90°-100°	63.5	5.3
100°-110°	36.7	3.1
110°-120°	16.2	1.4
120°-130°	4.4	0.4
130°-140°	1.0	0.1
140°-150°	0.6	0.1
150°-160°	0.5	0.0
160°-170°	0.3	0.0
170°-180°	0.1	0.0
0°-30°	204.2	17.1
0°-40°	348.1	29.2
0°-60°	679.6	57.0
0°-90°	1068.7	89.7
90°-120°	116.4	9.8
90°-150°	122.4	10.3
90°-180°	123.0	10.3
0°-180°	1191.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	241	241	241	241	241	
5°	275	264	239	217	206	28
15°	368	322	231	167	139	106
25°	463	378	214	110	69	214
35°	513	408	188	53	17	321
45°	532	404	154	12	0	410
55°	518	378	111	0	0	463
65°	468	335	66	0	0	463
75°	390	270	28	0	0	409
85°	286	196	5	1	2	244
90°	248	157	1	2	2	136
95°	212	123	1	2	3	167
105°	146	63	1	2	2	154
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°	241.1	241.1	241.1	241.1	241.1	241.1	241.1	241.1	241.1	241.1	241.1
2.5°	261.4	261.1	260.2	258.6	256.5	252.8	249.7	246.9	243.3	240.2	234.4
5°	275.2	273.7	272.4	270.9	266.0	262.6	257.1	250.9	245.1	239.3	227.6
7.5°	297.3	294.9	293.0	288.7	282.0	274.3	265.7	259.8	255.9	239.6	219.6
10°	321.0	318.8	315.1	307.5	299.2	288.1	275.8	262.0	249.7	236.2	212.5
12.5°	344.3	341.2	336.0	326.2	314.5	300.7	283.8	267.5	250.0	234.0	204.3
15°	367.7	364.3	358.8	346.8	331.4	313.3	292.7	272.1	251.6	231.3	195.7
17.5°	393.2	388.5	380.3	366.7	347.4	325.0	300.7	275.8	250.9	227.9	186.4
20°	420.5	414.0	405.1	387.0	364.3	337.9	308.7	279.5	250.6	223.9	176.0
22.5°	443.2	436.8	426.9	408.2	380.9	348.6	315.4	282.0	249.4	219.3	166.2
25°	462.9	457.7	446.9	425.4	396.5	360.0	321.9	283.8	247.6	214.4	155.7
27.5°	478.2	473.3	461.3	439.2	409.7	370.1	326.8	284.7	245.1	209.5	145.0
30°	491.7	486.8	472.4	449.7	418.6	378.1	331.7	285.0	242.0	202.1	133.3
32.5°	502.2	497.6	482.8	458.6	424.8	383.6	334.5	284.7	238.0	196.9	120.7
35°	512.6	508.0	490.8	465.0	429.4	386.1	336.6	283.2	233.1	188.3	108.7
37.5°	520.6	515.4	497.9	469.3	431.5	386.7	336.3	281.0	227.9	181.2	96.8
40°	526.1	520.6	501.9	471.8	432.2	385.8	333.9	277.4	221.8	172.3	84.2
42.5°	529.8	523.7	503.7	475.5	430.9	383.3	330.2	272.7	215.0	164.6	72.2
45°	531.7	525.2	504.0	472.4	428.8	378.7	324.7	266.9	207.6	154.2	60.2
47.5°	530.8	523.7	502.5	469.0	424.8	373.8	318.5	259.8	198.7	145.0	48.8
50°	529.2	521.8	499.1	464.7	419.3	367.7	311.8	251.2	189.5	133.6	38.7
52.5°	524.3	516.9	495.4	458.6	412.8	360.6	302.5	242.3	179.7	122.6	29.5
55°	518.2	511.4	489.0	453.0	404.5	352.0	293.9	232.8	170.2	111.2	21.2
57.5°	508.6	502.5	481.0	444.1	396.2	342.5	284.4	222.4	158.2	99.8	14.7
60°	497.0	490.8	469.9	434.0	386.7	331.7	274.0	211.6	147.4	88.5	9.2
62.5°	484.7	478.8	457.0	421.4	374.7	320.4	262.6	200.9	136.1	78.0	5.5
65°	468.4	462.9	443.2	406.4	361.5	308.1	250.0	188.0	124.4	66.3	3.1
67.5°	451.2	446.3	426.3	392.5	346.2	294.6	237.1	175.4	112.1	56.2	1.5
70°	432.8	426.6	408.2	373.8	330.5	279.2	223.0	162.5	100.4	46.4	0.0
72.5°	411.3	406.7	388.9	356.3	312.4	262.9	208.6	148.4	87.5	36.9	0.3
75°	390.4	384.6	368.3	337.6	294.6	245.7	192.6	135.1	74.9	28.3	0.3
77.5°	363.4	361.5	346.2	316.4	277.7	229.1	175.1	119.2	63.0	20.3	0.3
80°	336.3	334.5	322.5	295.2	258.0	209.5	158.8	104.1	51.3	13.5	0.3
82.5°	309.6	307.2	295.8	273.1	238.0	192.9	141.9	89.1	40.5	8.3	0.3
85°	285.6	282.6	270.3	249.4	217.5	174.2	124.4	74.3	30.1	4.6	0.6
87.5°	265.1	262.9	249.4	227.9	196.6	156.6	109.0	60.2	21.2	2.2	0.9
90°	247.6	243.0	231.0	208.2	176.9	137.3	92.8	48.2	14.1	1.2	1.2
92.5°	230.4	226.4	213.2	189.8	159.4	120.7	77.1	36.9	8.9	0.6	1.5
95°	212.5	208.2	195.3	173.8	141.6	103.8	63.3	27.0	4.9	0.6	1.5
97.5°	195.0	191.0	177.5	156.0	125.6	89.1	50.1	19.0	2.5	0.6	1.2
100°	178.8	174.2	161.9	140.4	109.7	74.3	38.7	12.3	1.5	0.6	1.2
102.5°	161.6	157.9	145.3	124.4	93.1	60.5	28.9	7.7	0.6	0.6	0.9
105°	146.2	141.6	129.3	107.8	79.2	47.6	20.3	4.6	0.6	0.6	0.9



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CATALOG NUMBER: FCC-X-2-LD4-1LO-50-UNV-93-85-ED1D

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	95.2	91.5	80.8	62.7	40.2	18.7	5.5	0.9	0.9	0.9	0.9
115°	79.6	74.0	64.5	48.5	29.8	12.3	2.8	0.9	0.9	0.9	0.9
117.5°	63.6	59.0	52.2	36.9	19.7	8.0	1.5	0.9	0.9	0.9	0.9
120°	49.8	45.5	37.8	25.5	13.2	4.6	0.6	0.9	0.9	0.9	0.9
122.5°	35.6	32.3	25.5	16.6	8.0	2.2	0.9	0.9	1.2	1.2	0.9
125°	23.7	21.8	16.9	10.1	4.9	0.9	0.9	0.9	1.2	1.2	0.9
127.5°	15.4	13.8	9.8	5.8	2.2	0.9	0.9	1.2	1.2	1.2	0.9
130°	8.6	7.7	5.8	3.4	0.9	0.9	0.9	1.2	1.2	1.2	0.9
132.5°	4.9	4.6	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	1.5	1.5	1.2
137.5°	0.3	0.3	0.6	0.6	0.9	0.9	1.2	1.5	1.5	1.5	1.2
140°	0.3	0.3	0.6	0.9	0.9	0.9	1.2	1.5	1.5	1.5	1.2
142.5°	0.3	0.6	0.6	0.9	0.9	1.2	1.2	1.5	1.5	1.2	1.2
145°	0.3	0.6	0.6	0.9	0.9	1.2	1.2	1.5	1.2	1.2	1.2
147.5°	0.6	0.6	0.6	0.9	0.9	1.2	1.2	1.5	1.5	1.2	1.2
150°	0.3	0.6	0.6	0.9	1.2	1.2	1.2	1.5	1.2	1.2	1.2
152.5°	0.3	0.6	0.6	0.9	1.2	1.2	1.2	1.5	1.2	1.2	1.2
155°	0.6	0.6	0.6	0.9	1.2	1.2	1.2	1.5	1.2	1.2	1.5
157.5°	0.6	0.6	0.6	0.9	1.2	1.2	1.2	1.5	1.2	1.2	1.5
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	1.5	1.5	1.5	1.5
172.5°	0.6	0.6	0.6	0.9	0.9	1.2	1.2	1.5	1.5	1.5	1.5
175°	0.6	0.6	0.6	0.9	0.9	1.2	1.2	1.5	1.5	1.5	1.5
177.5°	0.3	0.6	0.6	0.9	0.9	1.2	1.2	1.5	1.5	1.5	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°	241.1	241.1	241.1
2.5°	229.4	225.1	223.9
5°	217.2	210.1	206.1
7.5°	204.9	195.3	190.7
10°	193.5	180.0	175.1
12.5°	180.0	164.3	156.6
15°	167.1	146.8	139.4
17.5°	152.7	129.9	121.3
20°	139.1	113.0	104.1
22.5°	123.8	96.4	86.6
25°	110.0	79.9	68.8
27.5°	94.6	63.0	53.4
30°	80.2	48.2	38.7
32.5°	66.3	35.3	26.7
35°	53.4	24.0	16.9
37.5°	41.2	14.7	8.6
40°	29.8	7.7	4.0
42.5°	20.0	3.7	2.2
45°	12.3	1.8	0.0
47.5°	7.1	0.0	0.0
50°	3.7	0.0	0.0
52.5°	1.5	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	1.5
82.5°	1.2	1.5	1.5
85°	1.2	1.5	1.8
87.5°	1.5	1.8	2.2
90°	1.8	2.2	2.2
92.5°	1.8	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°	1.8	2.8	2.8
105°	1.5	2.2	2.5



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	1.2	1.5	1.5
115°	0.9	1.2	1.5
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°	129.0	125.3	113.0	92.8	64.8	36.2	13.5	2.5	0.6	0.9	0.9
110°	112.4	109.3	96.8	77.1	52.2	27.0	8.9	1.5	0.9	0.9	0.9





107.5°	1.2	1.8	2.2
110°	1.2	1.5	1.8



(END OF REPORT)