

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: P550796

Luminaire Tested: **FCC-X-2-LD4-1LO-35-UNV-93-86-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: P550796
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-93-86-ED1D
Description: FCC CORNER MOUNT LUMINAIRE WITH .156 CLEAR TEMPERED GLASS FIXTURE
SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 3500K, AND 80 CRI
LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

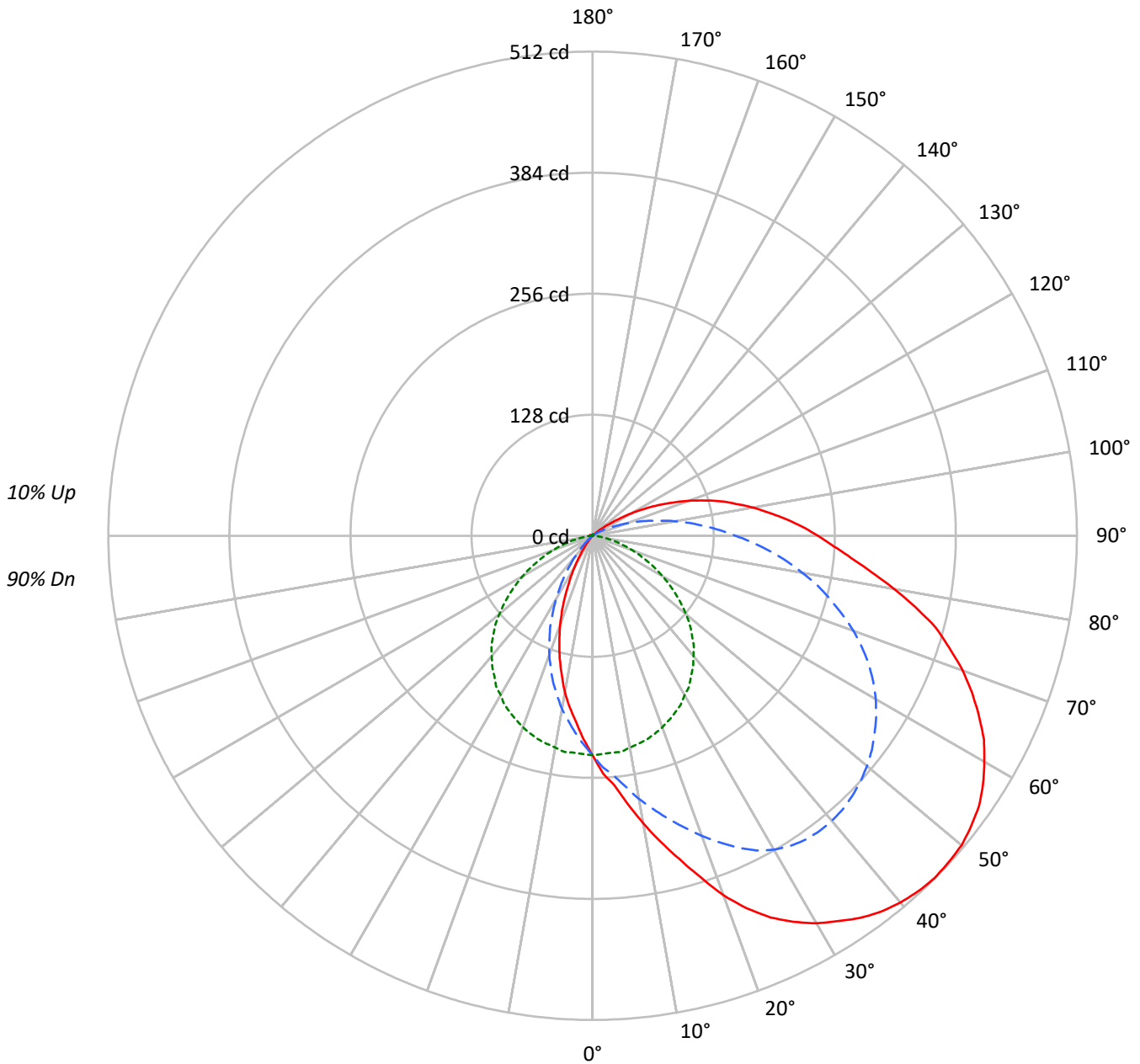
Lumens per Lamp: N/A
Luminaire Lumens: 1147.1 lumens
Efficiency: N/A
Efficacy: 98.0 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

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: P550796

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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°	2497	2497	2497
5°	2741	2460	2053
10°	3103	2431	1692
15°	3477	2400	1319
20°	3921	2361	971
25°	4290	2315	638
30°	4564	2255	359
35°	4801	2189	159
40°	5012	2109	38
45°	5192	2008	0
50°	5343	1874	0
55°	5459	1704	0
60°	5517	1506	0
65°	5539	1281	0
70°	5521	1045	0
75°	5452	771	4
80°	5230	472	24
85°	5056	224	33



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	22.2	1.9
10°-20°	66.5	5.8
20°-30°	107.8	9.4
30°-40°	138.4	12.1
40°-50°	156.7	13.7
50°-60°	162.3	14.2
60°-70°	153.1	13.3
70°-80°	128.3	11.2
80°-90°	93.0	8.1
90°-100°	61.1	5.3
100°-110°	35.3	3.1
110°-120°	15.6	1.4
120°-130°	4.2	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°	196.5	17.1
0°-40°	335.0	29.2
0°-60°	654.0	57.0
0°-90°	1028.4	89.7
90°-120°	112.0	9.8
90°-150°	117.9	10.3
90°-180°	119.0	10.4
0°-180°	1147.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	232	232	232	232	232	
5°	265	254	230	209	198	27
15°	354	310	223	161	134	102
25°	445	364	206	106	66	206
35°	493	392	181	51	16	309
45°	512	388	148	12	0	395
55°	499	364	107	0	0	445
65°	451	322	64	0	0	446
75°	376	260	27	0	0	394
85°	275	188	4	1	2	235
90°	238	151	1	2	2	131
95°	204	118	1	2	3	160
105°	141	61	1	2	2	148
115°	76	20	1	1	2	77
125°	23	3	1	1	1	23
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°	232.0	232.0	232.0	232.0	232.0	232.0	232.0	232.0	232.0	232.0	232.0
2.5°	251.5	251.2	250.3	248.9	246.8	243.2	240.3	237.6	234.1	231.1	225.5
5°	264.8	263.3	262.2	260.7	256.0	252.7	247.4	241.5	235.9	230.2	219.0
7.5°	286.1	283.7	282.0	277.8	271.3	263.9	255.7	250.0	246.2	230.5	211.3
10°	308.9	306.8	303.2	295.9	287.9	277.2	265.4	252.1	240.3	227.3	204.5
12.5°	331.3	328.4	323.3	313.9	302.6	289.3	273.1	257.4	240.6	225.2	196.5
15°	353.8	350.5	345.2	333.7	318.9	301.5	281.7	261.9	242.1	222.6	188.3
17.5°	378.3	373.9	365.9	352.9	334.3	312.7	289.3	265.4	241.5	219.3	179.4
20°	404.6	398.4	389.8	372.4	350.5	325.1	297.0	269.0	241.2	215.5	169.4
22.5°	426.5	420.3	410.8	392.8	366.5	335.5	303.5	271.3	240.0	211.0	159.9
25°	445.4	440.4	430.0	409.3	381.6	346.4	309.7	273.1	238.2	206.3	149.8
27.5°	460.2	455.5	443.9	422.6	394.3	356.1	314.5	274.0	235.9	201.6	139.5
30°	473.2	468.5	454.6	432.7	402.8	363.8	319.2	274.3	232.9	194.5	128.3
32.5°	483.2	478.8	464.6	441.3	408.8	369.1	321.9	274.0	229.1	189.5	116.2
35°	493.3	488.8	472.3	447.5	413.2	371.5	323.9	272.5	224.3	181.2	104.6
37.5°	501.0	495.9	479.1	451.6	415.3	372.1	323.6	270.4	219.3	174.4	93.1
40°	506.3	501.0	482.9	454.0	415.8	371.2	321.3	266.9	213.4	165.8	81.0
42.5°	509.8	503.9	484.7	457.5	414.7	368.9	317.7	262.5	206.9	158.4	69.5
45°	511.6	505.4	485.0	454.6	412.6	364.4	312.4	256.8	199.8	148.4	57.9
47.5°	510.7	503.9	483.5	451.3	408.8	359.7	306.5	250.0	191.2	139.5	47.0
50°	509.2	502.1	480.3	447.2	403.4	353.8	300.0	241.8	182.4	128.6	37.2
52.5°	504.5	497.4	476.7	441.3	397.2	347.0	291.1	233.2	172.9	117.9	28.4
55°	498.6	492.1	470.5	435.9	389.2	338.7	282.8	224.0	163.7	107.0	20.4
57.5°	489.4	483.5	462.8	427.4	381.3	329.5	273.7	214.0	152.2	96.1	14.2
60°	478.2	472.3	452.2	417.6	372.1	319.2	263.6	203.6	141.9	85.1	8.9
62.5°	466.4	460.8	439.8	405.5	360.6	308.3	252.7	193.3	130.9	75.1	5.3
65°	450.7	445.4	426.5	391.0	347.9	296.4	240.6	180.9	119.7	63.8	3.0
67.5°	434.2	429.4	410.2	377.7	333.1	283.4	228.2	168.8	107.9	54.1	1.5
70°	416.4	410.5	392.8	359.7	318.0	268.7	214.6	156.3	96.6	44.6	0.0
72.5°	395.7	391.3	374.2	342.8	300.6	253.0	200.7	142.8	84.2	35.5	0.3
75°	375.7	370.0	354.4	324.8	283.4	236.4	185.3	130.0	72.1	27.2	0.3
77.5°	349.6	347.9	333.1	304.4	267.2	220.5	168.5	114.7	60.6	19.5	0.3
80°	323.6	321.9	310.3	284.0	248.3	201.6	152.8	100.2	49.4	13.0	0.3
82.5°	297.9	295.6	284.6	262.7	229.1	185.6	136.5	85.7	39.0	8.0	0.3
85°	274.9	271.9	260.1	240.0	209.3	167.6	119.7	71.5	29.0	4.4	0.6
87.5°	255.1	253.0	240.0	219.3	189.2	150.7	104.9	57.9	20.4	2.1	0.9
90°	238.2	233.8	222.3	200.4	170.2	132.1	89.3	46.4	13.6	1.2	1.2
92.5°	221.7	217.8	205.1	182.7	153.4	116.2	74.2	35.5	8.6	0.6	1.5
95°	204.5	200.4	188.0	167.3	136.3	99.9	60.9	26.0	4.7	0.6	1.5
97.5°	187.7	183.8	170.8	150.1	120.9	85.7	48.2	18.3	2.4	0.6	1.2
100°	172.0	167.6	155.8	135.1	105.5	71.5	37.2	11.8	1.5	0.6	1.2
102.5°	155.5	151.9	139.8	119.7	89.6	58.2	27.8	7.4	0.6	0.6	0.9
105°	140.7	136.3	124.4	103.7	76.3	45.8	19.5	4.4	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°	91.6	88.1	77.7	60.3	38.7	18.0	5.3	0.9	0.9	0.9	0.9
115°	76.5	71.2	62.1	46.7	28.7	11.8	2.7	0.9	0.9	0.9	0.9
117.5°	61.2	56.7	50.2	35.5	18.9	7.7	1.5	0.9	0.9	0.9	0.9
120°	47.9	43.7	36.4	24.5	12.7	4.4	0.6	0.9	0.9	0.9	0.9
122.5°	34.3	31.0	24.5	16.0	7.7	2.1	0.9	0.9	1.2	1.2	0.9
125°	22.8	21.0	16.3	9.8	4.7	0.9	0.9	0.9	1.2	1.2	0.9
127.5°	14.8	13.3	9.5	5.6	2.1	0.9	0.9	1.2	1.2	1.2	0.9
130°	8.3	7.4	5.6	3.3	0.9	0.9	0.9	1.2	1.2	1.2	0.9
132.5°	4.7	4.4	3.0	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°	232.0	232.0	232.0
2.5°	220.8	216.6	215.5
5°	209.0	202.2	198.3
7.5°	197.1	188.0	183.5
10°	186.2	173.2	168.5
12.5°	173.2	158.1	150.7
15°	160.8	141.3	134.2
17.5°	146.9	125.0	116.7
20°	133.9	108.8	100.2
22.5°	119.1	92.8	83.3
25°	105.8	76.8	66.2
27.5°	91.0	60.6	51.4
30°	77.1	46.4	37.2
32.5°	63.8	34.0	25.7
35°	51.4	23.1	16.3
37.5°	39.6	14.2	8.3
40°	28.7	7.4	3.8
42.5°	19.2	3.5	2.1
45°	11.8	1.8	0.0
47.5°	6.8	0.0	0.0
50°	3.5	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	2.1
90°	1.8	2.1	2.1
92.5°	1.8	2.4	2.4
95°	2.1	2.4	2.7
97.5°	2.4	2.7	2.7
100°	2.1	2.7	3.0
102.5°	1.8	2.7	2.7
105°	1.5	2.1	2.4



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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°	124.1	120.6	108.8	89.3	62.4	34.9	13.0	2.4	0.6	0.9	0.9
110°	108.2	105.2	93.1	74.2	50.2	26.0	8.6	1.5	0.9	0.9	0.9





107.5°	1.2	1.8	2.1
110°	1.2	1.5	1.8



(END OF REPORT)