

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: P550685

Luminaire Tested: **FCC-X-2-LD4-1LO-30-UNV-80-87-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: P550685
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-80-87-ED1D-90
Description: FCC CORNER MOUNT LUMINAIRE WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .375 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 3000K, AND 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

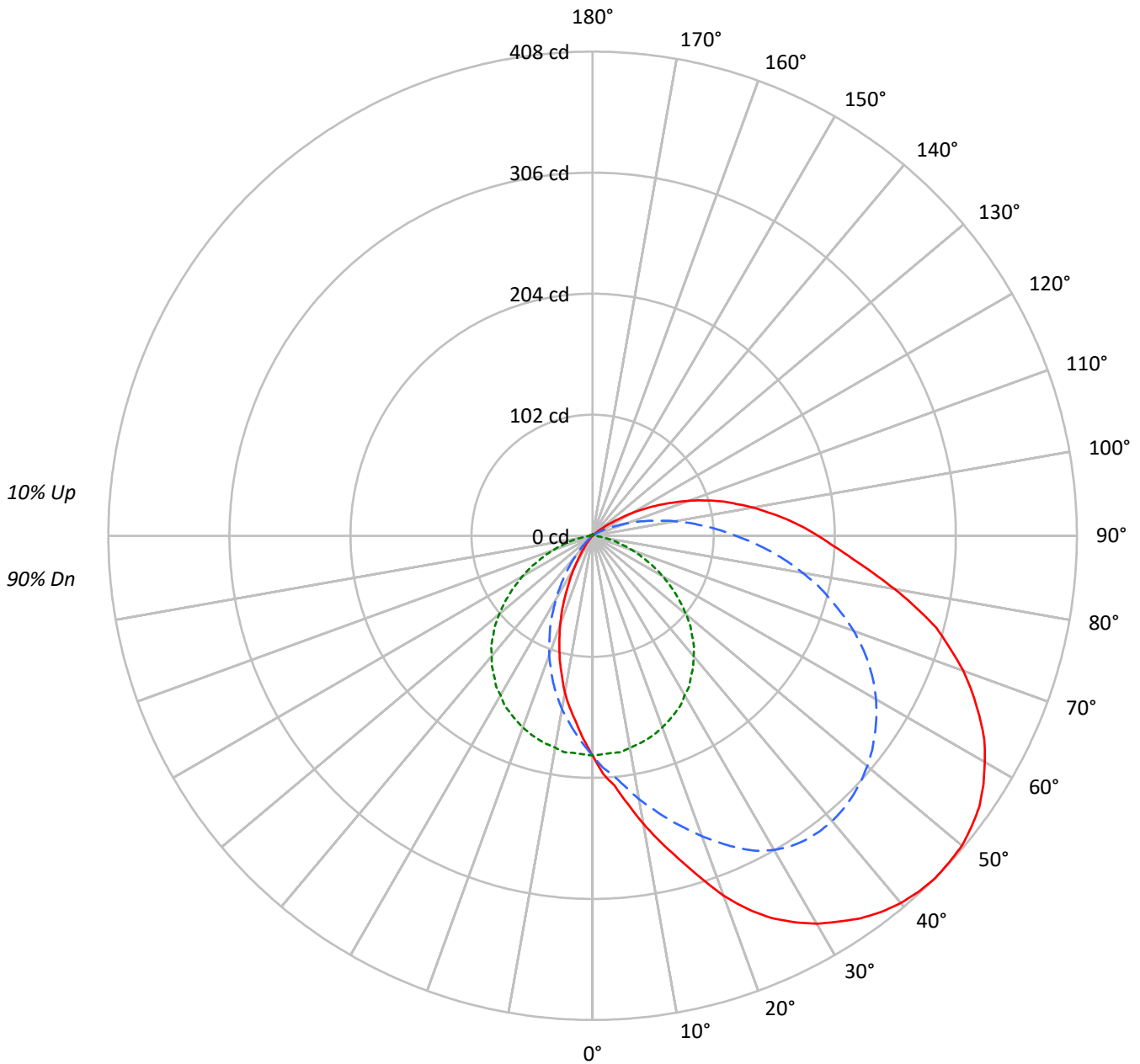
Lumens per Lamp: N/A
Luminaire Lumens: 914.9 lumens
Efficiency: N/A
Efficacy: 78.2 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

Input Watts (W): 11.7
Input Voltage (V): NR
Input Current (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

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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°	1992	1992	1992
5°	2187	1963	1638
10°	2475	1939	1350
15°	2773	1914	1051
20°	3128	1883	774
25°	3422	1847	509
30°	3641	1798	286
35°	3830	1746	127
40°	3998	1683	31
45°	4142	1602	0
50°	4262	1495	0
55°	4355	1360	0
60°	4401	1202	0
65°	4420	1022	0
70°	4404	834	0
75°	4349	615	3
80°	4173	377	19
85°	4033	178	26



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	17.7	1.9
10°-20°	53.1	5.8
20°-30°	86.0	9.4
30°-40°	110.4	12.1
40°-50°	125.0	13.7
50°-60°	129.5	14.2
60°-70°	122.1	13.3
70°-80°	102.3	11.2
80°-90°	74.2	8.1
90°-100°	48.8	5.3
100°-110°	28.2	3.1
110°-120°	12.4	1.4
120°-130°	3.4	0.4
130°-140°	0.8	0.1
140°-150°	0.5	0.1
150°-160°	0.4	0.0
160°-170°	0.2	0.0
170°-180°	0.1	0.0
0°-30°	156.8	17.1
0°-40°	267.2	29.2
0°-60°	521.7	57.0
0°-90°	820.4	89.7
90°-120°	89.4	9.8
90°-150°	94.0	10.3
90°-180°	95.0	10.4
0°-180°	914.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	185	185	185	185	185	
5°	211	203	184	167	158	21
15°	282	247	178	128	107	81
25°	355	290	165	84	53	164
35°	394	313	144	41	13	247
45°	408	310	118	9	0	315
55°	398	290	85	0	0	355
65°	360	257	51	0	0	356
75°	300	207	22	0	0	314
85°	219	150	4	1	1	187
90°	190	121	1	1	2	104
95°	163	94	0	2	2	128
105°	112	49	0	1	2	118
115°	61	16	1	1	1	61
125°	18	2	1	1	1	18
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°	185.1	185.1	185.1	185.1	185.1	185.1	185.1	185.1	185.1	185.1	185.1
2.5°	200.6	200.4	199.7	198.5	196.9	194.0	191.7	189.6	186.7	184.4	179.9
5°	211.3	210.1	209.1	208.0	204.2	201.6	197.3	192.6	188.1	183.7	174.7
7.5°	228.2	226.3	224.9	221.6	216.4	210.5	203.9	199.5	196.4	183.9	168.6
10°	246.4	244.7	241.9	236.0	229.6	221.2	211.7	201.1	191.7	181.3	163.2
12.5°	264.3	261.9	257.9	250.4	241.4	230.8	217.9	205.4	191.9	179.7	156.8
15°	282.2	279.6	275.4	266.2	254.4	240.5	224.7	208.9	193.1	177.5	150.2
17.5°	301.8	298.3	291.9	281.5	266.7	249.4	230.8	211.7	192.6	174.9	143.1
20°	322.8	317.8	311.0	297.1	279.6	259.4	237.0	214.6	192.4	171.9	135.1
22.5°	340.2	335.3	327.7	313.3	292.4	267.6	242.1	216.4	191.4	168.3	127.6
25°	355.3	351.3	343.1	326.5	304.4	276.3	247.1	217.9	190.0	164.6	119.5
27.5°	367.1	363.3	354.1	337.2	314.5	284.1	250.9	218.6	188.1	160.8	111.3
30°	377.5	373.7	362.6	345.2	321.4	290.2	254.6	218.8	185.8	155.1	102.3
32.5°	385.5	382.0	370.6	352.0	326.1	294.5	256.8	218.6	182.7	151.1	92.7
35°	393.5	390.0	376.8	357.0	329.6	296.4	258.4	217.4	179.0	144.5	83.5
37.5°	399.6	395.6	382.2	360.3	331.3	296.8	258.2	215.7	174.9	139.1	74.3
40°	403.9	399.6	385.3	362.1	331.7	296.1	256.3	212.9	170.2	132.3	64.6
42.5°	406.7	402.0	386.7	365.0	330.8	294.2	253.5	209.4	165.0	126.4	55.4
45°	408.1	403.2	386.9	362.6	329.1	290.7	249.2	204.9	159.4	118.4	46.2
47.5°	407.4	402.0	385.7	360.0	326.1	286.9	244.5	199.5	152.5	111.3	37.5
50°	406.2	400.6	383.1	356.7	321.8	282.2	239.3	192.9	145.5	102.6	29.7
52.5°	402.5	396.8	380.3	352.0	316.9	276.8	232.2	186.0	137.9	94.1	22.6
55°	397.8	392.6	375.4	347.8	310.5	270.2	225.6	178.7	130.6	85.4	16.3
57.5°	390.4	385.7	369.2	340.9	304.1	262.9	218.3	170.7	121.4	76.6	11.3
60°	381.5	376.8	360.7	333.1	296.8	254.6	210.3	162.4	113.2	67.9	7.1
62.5°	372.1	367.6	350.8	323.5	287.6	245.9	201.6	154.2	104.4	59.9	4.2
65°	359.6	355.3	340.2	311.9	277.5	236.5	191.9	144.3	95.5	50.9	2.4
67.5°	346.4	342.6	327.3	301.3	265.7	226.1	182.0	134.6	86.1	43.1	1.2
70°	332.2	327.5	313.3	286.9	253.7	214.3	171.2	124.7	77.1	35.6	0.0
72.5°	315.7	312.2	298.5	273.5	239.8	201.8	160.1	113.9	67.2	28.3	0.2
75°	299.7	295.2	282.7	259.1	226.1	188.6	147.8	103.7	57.5	21.7	0.2
77.5°	278.9	277.5	265.7	242.8	213.1	175.9	134.4	91.5	48.3	15.6	0.2
80°	258.2	256.8	247.6	226.6	198.1	160.8	121.9	79.9	39.4	10.4	0.2
82.5°	237.7	235.8	227.1	209.6	182.7	148.1	108.9	68.4	31.1	6.4	0.2
85°	219.3	216.9	207.5	191.4	166.9	133.7	95.5	57.1	23.1	3.5	0.5
87.5°	203.5	201.8	191.4	174.9	150.9	120.2	83.7	46.2	16.3	1.7	0.7
90°	190.0	186.5	177.3	159.9	135.8	105.4	71.2	37.0	10.8	0.9	0.9
92.5°	176.8	173.8	163.6	145.7	122.4	92.7	59.2	28.3	6.8	0.5	1.2
95°	163.2	159.9	150.0	133.4	108.7	79.7	48.6	20.7	3.8	0.5	1.2
97.5°	149.7	146.7	136.3	119.8	96.4	68.4	38.4	14.6	1.9	0.5	0.9
100°	137.2	133.7	124.3	107.7	84.2	57.1	29.7	9.4	1.2	0.5	0.9
102.5°	124.0	121.2	111.5	95.5	71.4	46.4	22.2	5.9	0.5	0.5	0.7
105°	112.2	108.7	99.3	82.8	60.8	36.5	15.6	3.5	0.5	0.5	0.7



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	73.1	70.3	62.0	48.1	30.9	14.4	4.2	0.7	0.7	0.7	0.7
115°	61.1	56.8	49.5	37.3	22.9	9.4	2.1	0.7	0.7	0.7	0.7
117.5°	48.8	45.3	40.1	28.3	15.1	6.1	1.2	0.7	0.7	0.7	0.7
120°	38.2	34.9	29.0	19.6	10.1	3.5	0.5	0.7	0.7	0.7	0.7
122.5°	27.3	24.8	19.6	12.7	6.1	1.7	0.7	0.7	0.9	0.9	0.7
125°	18.2	16.7	13.0	7.8	3.8	0.7	0.7	0.7	0.9	0.9	0.7
127.5°	11.8	10.6	7.5	4.5	1.7	0.7	0.7	0.9	0.9	0.9	0.7
130°	6.6	5.9	4.5	2.6	0.7	0.7	0.7	0.9	0.9	0.9	0.7
132.5°	3.8	3.5	2.4	0.5	0.7	0.7	0.7	0.9	0.9	0.9	0.9
135°	0.9	0.5	0.5	0.5	0.7	0.7	0.9	0.9	1.2	1.2	0.9
137.5°	0.2	0.2	0.5	0.5	0.7	0.7	0.9	1.2	1.2	1.2	0.9
140°	0.2	0.2	0.5	0.7	0.7	0.7	0.9	1.2	1.2	1.2	0.9
142.5°	0.2	0.5	0.5	0.7	0.7	0.9	0.9	1.2	1.2	0.9	0.9
145°	0.2	0.5	0.5	0.7	0.7	0.9	0.9	1.2	0.9	0.9	0.9
147.5°	0.5	0.5	0.5	0.7	0.7	0.9	0.9	1.2	1.2	0.9	0.9
150°	0.2	0.5	0.5	0.7	0.9	0.9	0.9	1.2	0.9	0.9	0.9
152.5°	0.2	0.5	0.5	0.7	0.9	0.9	0.9	1.2	0.9	0.9	0.9
155°	0.5	0.5	0.5	0.7	0.9	0.9	0.9	1.2	0.9	0.9	1.2
157.5°	0.5	0.5	0.5	0.7	0.9	0.9	0.9	1.2	0.9	0.9	1.2
160°	0.5	0.5	0.5	0.7	0.7	0.9	0.9	0.9	0.9	0.9	0.9
162.5°	0.5	0.5	0.5	0.7	0.7	0.9	0.9	0.9	0.9	0.9	0.9
165°	0.5	0.5	0.5	0.5	0.7	0.7	0.9	0.9	0.9	0.9	0.9
167.5°	0.5	0.5	0.5	0.7	0.7	0.7	0.9	0.9	0.9	0.9	0.9
170°	0.5	0.5	0.5	0.7	0.7	0.7	0.9	1.2	1.2	1.2	1.2
172.5°	0.5	0.5	0.5	0.7	0.7	0.9	0.9	1.2	1.2	1.2	1.2
175°	0.5	0.5	0.5	0.7	0.7	0.9	0.9	1.2	1.2	1.2	1.2
177.5°	0.2	0.5	0.5	0.7	0.7	0.9	0.9	1.2	1.2	1.2	0.9
180°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	185.1	185.1	185.1
2.5°	176.1	172.8	171.9
5°	166.7	161.3	158.2
7.5°	157.3	150.0	146.4
10°	148.5	138.2	134.4
12.5°	138.2	126.1	120.2
15°	128.3	112.7	107.0
17.5°	117.2	99.7	93.1
20°	106.8	86.8	79.9
22.5°	95.0	74.0	66.5
25°	84.4	61.3	52.8
27.5°	72.6	48.3	41.0
30°	61.5	37.0	29.7
32.5°	50.9	27.1	20.5
35°	41.0	18.4	13.0
37.5°	31.6	11.3	6.6
40°	22.9	5.9	3.1
42.5°	15.3	2.8	1.7
45°	9.4	1.4	0.0
47.5°	5.4	0.0	0.0
50°	2.8	0.0	0.0
52.5°	1.2	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°	0.2	0.2	0.2
77.5°	0.2	0.5	0.7
80°	0.5	0.9	1.2
82.5°	0.9	1.2	1.2
85°	0.9	1.2	1.4
87.5°	1.2	1.4	1.7
90°	1.4	1.7	1.7
92.5°	1.4	1.9	1.9
95°	1.7	1.9	2.1
97.5°	1.9	2.1	2.1
100°	1.7	2.1	2.4
102.5°	1.4	2.1	2.1
105°	1.2	1.7	1.9



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	0.9	1.2	1.2
115°	0.7	0.9	1.2
117.5°	0.7	0.9	0.9
120°	0.7	0.7	0.9
122.5°	0.7	0.7	0.9
125°	0.7	0.7	0.9
127.5°	0.9	0.7	0.7
130°	0.7	0.7	0.7
132.5°	0.9	0.7	0.7
135°	0.9	0.7	0.7
137.5°	0.9	0.7	0.7
140°	0.9	0.7	0.7
142.5°	0.9	0.7	0.7
145°	0.7	0.7	0.7
147.5°	0.7	0.7	0.7
150°	0.7	0.7	0.5
152.5°	0.7	0.5	0.5
155°	0.7	0.5	0.2
157.5°	0.9	0.5	0.2
160°	0.7	0.5	0.2
162.5°	0.7	0.5	0.2
165°	0.7	0.5	0.0
167.5°	0.7	0.5	0.2
170°	0.7	0.5	0.2
172.5°	0.7	0.5	0.2
175°	0.7	0.2	0.2
177.5°	0.7	0.2	0.2
180°	0.7	0.7	0.7



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	99.0	96.2	86.8	71.2	49.7	27.8	10.4	1.9	0.5	0.7	0.7
110°	86.3	83.9	74.3	59.2	40.1	20.7	6.8	1.2	0.7	0.7	0.7





107.5°	0.9	1.4	1.7
110°	0.9	1.2	1.4



(END OF REPORT)