

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: P550759

Luminaire Tested: **FCC-X-2-LD4-1LO-35-UNV-81-84-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: P550759
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-81-84-ED1D-90
Description: FCC CORNER MOUNT LUMINAIRE WITH .156 CLEAR PC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 3500K, AND 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

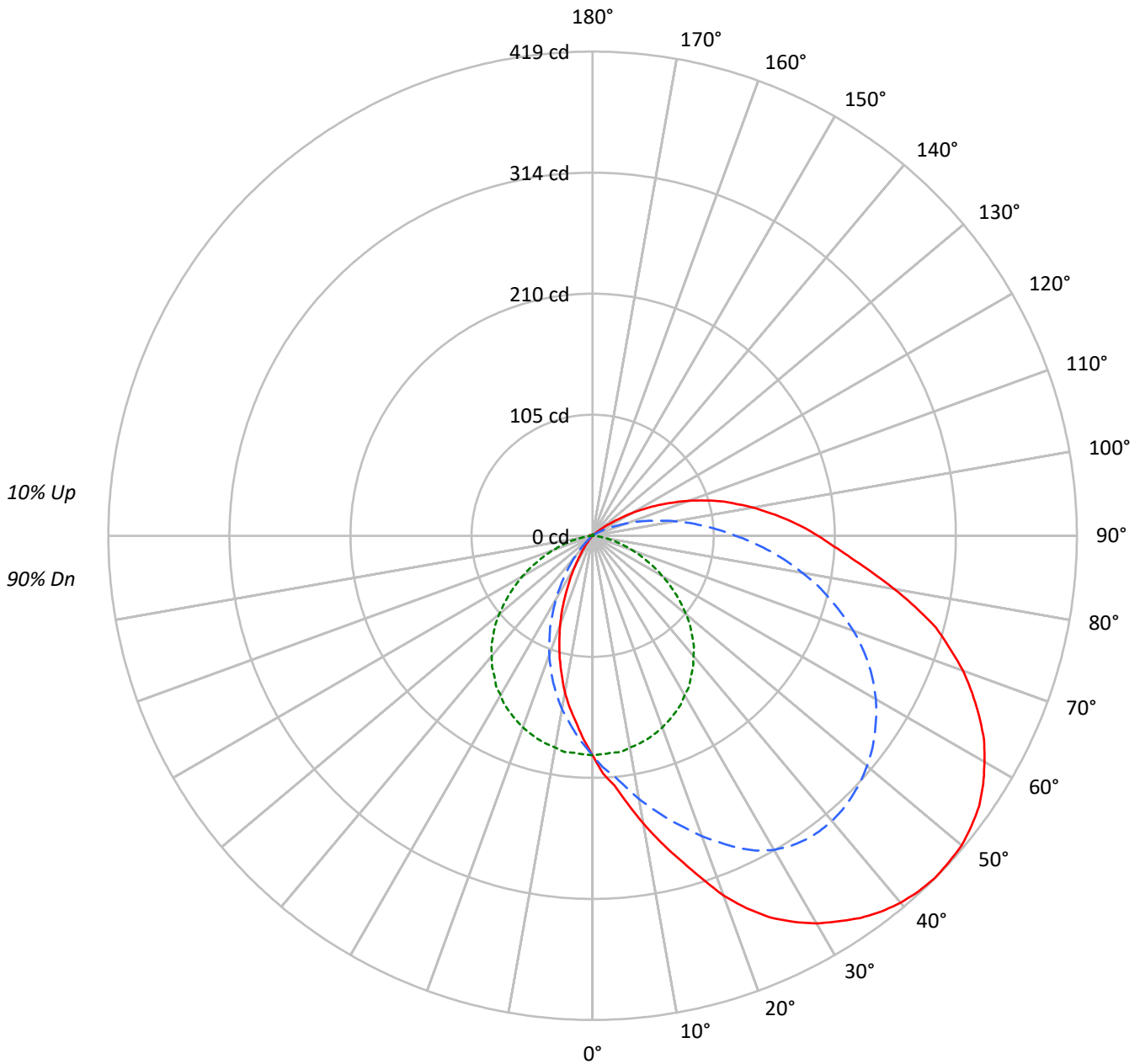
Lumens per Lamp: N/A
Luminaire Lumens: 939.0 lumens
Efficiency: N/A
Efficacy: 80.3 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

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°	2044	2044	2044
5°	2244	2015	1681
10°	2539	1990	1385
15°	2846	1965	1079
20°	3210	1933	795
25°	3512	1895	522
30°	3736	1846	294
35°	3930	1792	129
40°	4103	1726	31
45°	4250	1644	0
50°	4375	1535	0
55°	4469	1395	0
60°	4517	1233	0
65°	4535	1050	0
70°	4520	855	0
75°	4462	632	3
80°	4281	384	19
85°	4138	183	28



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	18.2	1.9
10°-20°	54.5	5.8
20°-30°	88.2	9.4
30°-40°	113.3	12.1
40°-50°	128.3	13.7
50°-60°	132.9	14.2
60°-70°	125.3	13.3
70°-80°	105.0	11.2
80°-90°	76.1	8.1
90°-100°	50.0	5.3
100°-110°	28.9	3.1
110°-120°	12.7	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°	160.9	17.1
0°-40°	274.2	29.2
0°-60°	535.4	57.0
0°-90°	841.9	89.7
90°-120°	91.7	9.8
90°-150°	96.5	10.3
90°-180°	97.0	10.3
0°-180°	939.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	190	190	190	190	190	
5°	217	208	188	171	162	22
15°	290	254	182	132	110	84
25°	365	298	169	87	54	169
35°	404	321	148	42	13	253
45°	419	318	122	10	0	323
55°	408	298	88	0	0	365
65°	369	264	52	0	0	365
75°	308	213	22	0	0	323
85°	225	154	4	1	2	192
90°	195	124	1	2	2	107
95°	167	97	0	2	2	131
105°	115	50	0	1	2	122
115°	63	17	1	1	1	63
125°	19	2	1	1	1	19
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°	189.9	189.9	189.9	189.9	189.9	189.9	189.9	189.9	189.9	189.9	189.9
2.5°	205.9	205.7	204.9	203.7	202.0	199.1	196.7	194.5	191.6	189.2	184.6
5°	216.8	215.6	214.6	213.4	209.5	206.9	202.5	197.7	193.1	188.5	179.3
7.5°	234.2	232.3	230.8	227.4	222.1	216.1	209.3	204.7	201.6	188.7	173.0
10°	252.8	251.2	248.2	242.2	235.7	227.0	217.3	206.4	196.7	186.1	167.4
12.5°	271.2	268.8	264.7	257.0	247.8	236.9	223.6	210.7	197.0	184.4	160.9
15°	289.6	287.0	282.6	273.2	261.1	246.8	230.6	214.4	198.2	182.2	154.1
17.5°	309.7	306.1	299.5	288.9	273.7	256.0	236.9	217.3	197.7	179.5	146.9
20°	331.2	326.2	319.1	304.9	287.0	266.2	243.2	220.2	197.4	176.4	138.6
22.5°	349.1	344.1	336.3	321.6	300.0	274.6	248.5	222.1	196.5	172.8	130.9
25°	364.6	360.5	352.0	335.1	312.4	283.6	253.6	223.6	195.0	168.9	122.7
27.5°	376.7	372.9	363.4	346.0	322.8	291.6	257.4	224.3	193.1	165.0	114.2
30°	387.4	383.5	372.1	354.2	329.8	297.9	261.3	224.5	190.7	159.2	105.0
32.5°	395.6	392.0	380.4	361.2	334.6	302.2	263.5	224.3	187.5	155.1	95.1
35°	403.8	400.2	386.6	366.3	338.3	304.1	265.2	223.1	183.6	148.3	85.7
37.5°	410.1	406.0	392.2	369.7	340.0	304.6	264.9	221.4	179.5	142.8	76.2
40°	414.5	410.1	395.4	371.6	340.4	303.9	263.0	218.5	174.7	135.7	66.3
42.5°	417.4	412.5	396.8	374.6	339.5	302.0	260.1	214.9	169.4	129.7	56.9
45°	418.8	413.7	397.1	372.1	337.8	298.3	255.7	210.3	163.6	121.5	47.4
47.5°	418.1	412.5	395.8	369.5	334.6	294.5	250.9	204.7	156.5	114.2	38.5
50°	416.9	411.1	393.2	366.1	330.3	289.6	245.6	197.9	149.3	105.3	30.5
52.5°	413.0	407.2	390.3	361.2	325.2	284.1	238.3	190.9	141.5	96.5	23.2
55°	408.2	402.9	385.2	356.9	318.7	277.3	231.6	183.4	134.0	87.6	16.7
57.5°	400.7	395.8	378.9	349.9	312.1	269.8	224.1	175.2	124.6	78.6	11.6
60°	391.5	386.6	370.2	341.9	304.6	261.3	215.8	166.7	116.1	69.7	7.3
62.5°	381.8	377.2	360.0	332.0	295.2	252.4	206.9	158.2	107.2	61.5	4.4
65°	369.0	364.6	349.1	320.1	284.8	242.7	197.0	148.1	98.0	52.3	2.4
67.5°	355.4	351.6	335.8	309.2	272.7	232.0	186.8	138.2	88.3	44.3	1.2
70°	340.9	336.1	321.6	294.5	260.3	219.9	175.7	128.0	79.1	36.5	0.0
72.5°	324.0	320.4	306.3	280.7	246.1	207.1	164.3	116.9	69.0	29.0	0.2
75°	307.5	302.9	290.1	265.9	232.0	193.6	151.7	106.5	59.0	22.3	0.2
77.5°	286.2	284.8	272.7	249.2	218.7	180.5	137.9	93.9	49.6	16.0	0.2
80°	264.9	263.5	254.1	232.5	203.2	165.0	125.1	82.0	40.4	10.6	0.2
82.5°	243.9	242.0	233.0	215.1	187.5	151.9	111.8	70.2	31.9	6.5	0.2
85°	225.0	222.6	212.9	196.5	171.3	137.2	98.0	58.6	23.7	3.6	0.5
87.5°	208.8	207.1	196.5	179.5	154.9	123.4	85.9	47.4	16.7	1.7	0.7
90°	195.0	191.4	182.0	164.0	139.4	108.2	73.1	38.0	11.1	1.0	1.0
92.5°	181.5	178.3	167.9	149.5	125.6	95.1	60.7	29.0	7.0	0.5	1.2
95°	167.4	164.0	153.9	136.9	111.5	81.8	49.8	21.3	3.9	0.5	1.2
97.5°	153.6	150.5	139.9	122.9	99.0	70.2	39.4	15.0	1.9	0.5	1.0
100°	140.8	137.2	127.5	110.6	86.4	58.6	30.5	9.7	1.2	0.5	1.0
102.5°	127.3	124.4	114.4	98.0	73.3	47.7	22.7	6.0	0.5	0.5	0.7
105°	115.2	111.5	101.9	84.9	62.4	37.5	16.0	3.6	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°	75.0	72.1	63.6	49.4	31.7	14.8	4.4	0.7	0.7	0.7	0.7
115°	62.7	58.3	50.8	38.2	23.5	9.7	2.2	0.7	0.7	0.7	0.7
117.5°	50.1	46.5	41.1	29.0	15.5	6.3	1.2	0.7	0.7	0.7	0.7
120°	39.2	35.8	29.8	20.1	10.4	3.6	0.5	0.7	0.7	0.7	0.7
122.5°	28.1	25.4	20.1	13.1	6.3	1.7	0.7	0.7	1.0	1.0	0.7
125°	18.6	17.2	13.3	8.0	3.9	0.7	0.7	0.7	1.0	1.0	0.7
127.5°	12.1	10.9	7.7	4.6	1.7	0.7	0.7	1.0	1.0	1.0	0.7
130°	6.8	6.0	4.6	2.7	0.7	0.7	0.7	1.0	1.0	1.0	0.7
132.5°	3.9	3.6	2.4	0.5	0.7	0.7	0.7	1.0	1.0	1.0	1.0
135°	1.0	0.5	0.5	0.5	0.7	0.7	1.0	1.0	1.2	1.2	1.0
137.5°	0.2	0.2	0.5	0.5	0.7	0.7	1.0	1.2	1.2	1.2	1.0
140°	0.2	0.2	0.5	0.7	0.7	0.7	1.0	1.2	1.2	1.2	1.0
142.5°	0.2	0.5	0.5	0.7	0.7	1.0	1.0	1.2	1.2	1.0	1.0
145°	0.2	0.5	0.5	0.7	0.7	1.0	1.0	1.2	1.0	1.0	1.0
147.5°	0.5	0.5	0.5	0.7	0.7	1.0	1.0	1.2	1.2	1.0	1.0
150°	0.2	0.5	0.5	0.7	1.0	1.0	1.0	1.2	1.0	1.0	1.0
152.5°	0.2	0.5	0.5	0.7	1.0	1.0	1.0	1.2	1.0	1.0	1.0
155°	0.5	0.5	0.5	0.7	1.0	1.0	1.0	1.2	1.0	1.0	1.2
157.5°	0.5	0.5	0.5	0.7	1.0	1.0	1.0	1.2	1.0	1.0	1.2
160°	0.5	0.5	0.5	0.7	0.7	1.0	1.0	1.0	1.0	1.0	1.0
162.5°	0.5	0.5	0.5	0.7	0.7	1.0	1.0	1.0	1.0	1.0	1.0
165°	0.5	0.5	0.5	0.5	0.7	0.7	1.0	1.0	1.0	1.0	1.0
167.5°	0.5	0.5	0.5	0.7	0.7	0.7	1.0	1.0	1.0	1.0	1.0
170°	0.5	0.5	0.5	0.7	0.7	0.7	1.0	1.2	1.2	1.2	1.2
172.5°	0.5	0.5	0.5	0.7	0.7	1.0	1.0	1.2	1.2	1.2	1.2
175°	0.5	0.5	0.5	0.7	0.7	1.0	1.0	1.2	1.2	1.2	1.2
177.5°	0.2	0.5	0.5	0.7	0.7	1.0	1.0	1.2	1.2	1.2	1.0
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°	189.9	189.9	189.9
2.5°	180.7	177.4	176.4
5°	171.1	165.5	162.4
7.5°	161.4	153.9	150.3
10°	152.4	141.8	137.9
12.5°	141.8	129.4	123.4
15°	131.6	115.7	109.8
17.5°	120.3	102.3	95.6
20°	109.6	89.0	82.0
22.5°	97.5	76.0	68.2
25°	86.6	62.9	54.2
27.5°	74.5	49.6	42.1
30°	63.2	38.0	30.5
32.5°	52.3	27.8	21.1
35°	42.1	18.9	13.3
37.5°	32.4	11.6	6.8
40°	23.5	6.0	3.1
42.5°	15.7	2.9	1.7
45°	9.7	1.5	0.0
47.5°	5.6	0.0	0.0
50°	2.9	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	1.0	1.2
82.5°	1.0	1.2	1.2
85°	1.0	1.2	1.5
87.5°	1.2	1.5	1.7
90°	1.5	1.7	1.7
92.5°	1.5	1.9	1.9
95°	1.7	1.9	2.2
97.5°	1.9	2.2	2.2
100°	1.7	2.2	2.4
102.5°	1.5	2.2	2.2
105°	1.2	1.7	1.9



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	1.0	1.2	1.2
115°	0.7	1.0	1.2
117.5°	0.7	1.0	1.0
120°	0.7	0.7	1.0
122.5°	0.7	0.7	1.0
125°	0.7	0.7	1.0
127.5°	1.0	0.7	0.7
130°	0.7	0.7	0.7
132.5°	1.0	0.7	0.7
135°	1.0	0.7	0.7
137.5°	1.0	0.7	0.7
140°	1.0	0.7	0.7
142.5°	1.0	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°	1.0	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°	101.6	98.7	89.0	73.1	51.1	28.6	10.6	1.9	0.5	0.7	0.7
110°	88.6	86.1	76.2	60.7	41.1	21.3	7.0	1.2	0.7	0.7	0.7





107.5°	1.0	1.5	1.7
110°	1.0	1.2	1.5



(END OF REPORT)