

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: P550768

Luminaire Tested: **FCC-X-2-LD4-1LO-35-UNV-81-88-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: P550768
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-81-88-ED1D
Description: FCC CORNER MOUNT LUMINAIRE WITH .156 CLEAR PC FIXTURE SIDE AND .500 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 3500K, AND 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

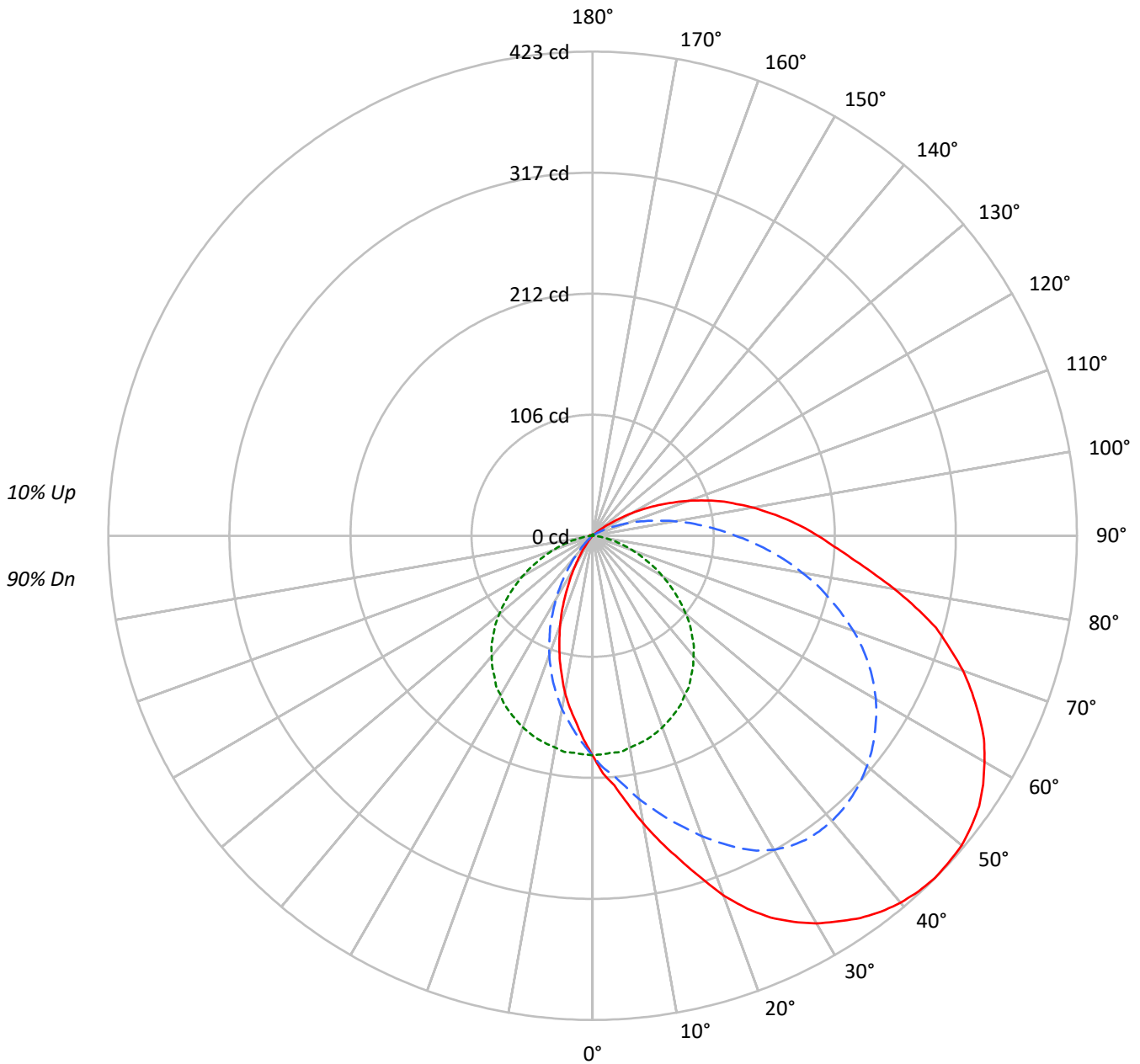
Lumens per Lamp: N/A
Luminaire Lumens: 947.9 lumens
Efficiency: N/A
Efficacy: 81.0 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

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: P550768

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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°	2065	2065	2065
5°	2266	2034	1697
10°	2564	2008	1398
15°	2873	1983	1090
20°	3241	1951	802
25°	3545	1913	527
30°	3772	1863	297
35°	3968	1809	130
40°	4141	1742	32
45°	4291	1659	0
50°	4417	1549	0
55°	4512	1408	0
60°	4559	1246	0
65°	4578	1061	0
70°	4563	864	0
75°	4506	638	3
80°	4323	388	19
85°	4179	188	28



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	18.4	1.9
10°-20°	55.0	5.8
20°-30°	89.1	9.4
30°-40°	114.4	12.1
40°-50°	129.5	13.7
50°-60°	134.2	14.2
60°-70°	126.5	13.3
70°-80°	106.0	11.2
80°-90°	76.9	8.1
90°-100°	50.5	5.3
100°-110°	29.2	3.1
110°-120°	12.9	1.4
120°-130°	3.5	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°	162.4	17.1
0°-40°	276.8	29.2
0°-60°	540.5	57.0
0°-90°	849.9	89.7
90°-120°	92.6	9.8
90°-150°	97.4	10.3
90°-180°	98.0	10.3
0°-180°	947.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	192	192	192	192	192	
5°	219	210	190	173	164	22
15°	292	256	184	133	111	84
25°	368	301	170	88	55	170
35°	408	324	150	42	13	256
45°	423	321	123	10	0	326
55°	412	301	88	0	0	368
65°	372	266	53	0	0	369
75°	310	215	22	0	0	326
85°	227	156	4	1	2	194
90°	197	125	1	2	2	108
95°	169	98	0	2	2	133
105°	116	50	0	1	2	123
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°	191.8	191.8	191.8	191.8	191.8	191.8	191.8	191.8	191.8	191.8	191.8
2.5°	207.9	207.6	206.9	205.7	204.0	201.0	198.6	196.4	193.5	191.0	186.4
5°	218.9	217.7	216.7	215.5	211.5	208.9	204.5	199.6	194.9	190.3	181.0
7.5°	236.5	234.5	233.0	229.6	224.2	218.1	211.3	206.7	203.5	190.5	174.7
10°	255.3	253.6	250.6	244.5	237.9	229.1	219.4	208.4	198.6	187.8	169.0
12.5°	273.8	271.4	267.2	259.4	250.1	239.1	225.7	212.8	198.8	186.1	162.4
15°	292.4	289.7	285.3	275.8	263.6	249.2	232.8	216.4	200.1	183.9	155.6
17.5°	312.7	309.0	302.4	291.7	276.3	258.4	239.1	219.4	199.6	181.3	148.3
20°	334.4	329.3	322.2	307.8	289.7	268.7	245.5	222.3	199.3	178.1	140.0
22.5°	352.5	347.4	339.5	324.6	302.9	277.3	250.9	224.2	198.4	174.4	132.2
25°	368.1	364.0	355.4	338.3	315.4	286.3	256.0	225.7	196.9	170.5	123.8
27.5°	380.3	376.4	366.9	349.3	325.9	294.4	259.9	226.4	194.9	166.6	115.3
30°	391.1	387.2	375.7	357.6	332.9	300.7	263.8	226.7	192.5	160.7	106.0
32.5°	399.4	395.7	384.0	364.7	337.8	305.1	266.0	226.4	189.3	156.6	96.0
35°	407.7	404.0	390.4	369.8	341.5	307.1	267.7	225.2	185.4	149.7	86.5
37.5°	414.0	409.9	396.0	373.3	343.2	307.5	267.5	223.5	181.3	144.1	76.9
40°	418.4	414.0	399.1	375.2	343.7	306.8	265.5	220.6	176.4	137.0	66.9
42.5°	421.4	416.5	400.6	378.1	342.7	304.9	262.6	216.9	171.0	130.9	57.4
45°	422.8	417.7	400.9	375.7	341.0	301.2	258.2	212.3	165.1	122.6	47.9
47.5°	422.1	416.5	399.6	373.0	337.8	297.3	253.3	206.7	158.0	115.3	38.8
50°	420.9	415.0	397.0	369.6	333.4	292.4	247.9	199.8	150.7	106.3	30.8
52.5°	417.0	411.1	394.0	364.7	328.3	286.8	240.6	192.7	142.9	97.5	23.5
55°	412.1	406.7	388.9	360.3	321.7	279.9	233.8	185.2	135.3	88.4	16.9
57.5°	404.5	399.6	382.5	353.2	315.1	272.4	226.2	176.9	125.8	79.4	11.7
60°	395.2	390.4	373.7	345.2	307.5	263.8	217.9	168.3	117.3	70.4	7.3
62.5°	385.5	380.8	363.5	335.1	298.0	254.8	208.9	159.8	108.2	62.0	4.4
65°	372.5	368.1	352.5	323.2	287.5	245.0	198.8	149.5	98.9	52.8	2.4
67.5°	358.8	354.9	339.1	312.2	275.3	234.3	188.6	139.5	89.2	44.7	1.2
70°	344.2	339.3	324.6	297.3	262.8	222.0	177.3	129.2	79.9	36.9	0.0
72.5°	327.1	323.4	309.3	283.4	248.4	209.1	165.9	118.0	69.6	29.3	0.2
75°	310.5	305.8	292.9	268.5	234.3	195.4	153.2	107.5	59.6	22.5	0.2
77.5°	289.0	287.5	275.3	251.6	220.8	182.2	139.2	94.8	50.1	16.1	0.2
80°	267.5	266.0	256.5	234.8	205.2	166.6	126.3	82.8	40.8	10.7	0.2
82.5°	246.2	244.3	235.2	217.2	189.3	153.4	112.9	70.8	32.2	6.6	0.2
85°	227.2	224.7	215.0	198.4	172.9	138.5	98.9	59.1	23.9	3.7	0.5
87.5°	210.8	209.1	198.4	181.3	156.3	124.6	86.7	47.9	16.9	1.7	0.7
90°	196.9	193.2	183.7	165.6	140.7	109.2	73.8	38.4	11.2	1.0	1.0
92.5°	183.2	180.0	169.5	151.0	126.8	96.0	61.3	29.3	7.1	0.5	1.2
95°	169.0	165.6	155.4	138.3	112.6	82.6	50.3	21.5	3.9	0.5	1.2
97.5°	155.1	151.9	141.2	124.1	99.9	70.8	39.8	15.1	2.0	0.5	1.0
100°	142.2	138.5	128.7	111.6	87.2	59.1	30.8	9.8	1.2	0.5	1.0
102.5°	128.5	125.6	115.5	98.9	74.0	48.1	23.0	6.1	0.5	0.5	0.7
105°	116.3	112.6	102.8	85.7	63.0	37.9	16.1	3.7	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°	75.7	72.8	64.2	49.8	32.0	14.9	4.4	0.7	0.7	0.7	0.7
115°	63.3	58.9	51.3	38.6	23.7	9.8	2.2	0.7	0.7	0.7	0.7
117.5°	50.6	46.9	41.5	29.3	15.6	6.4	1.2	0.7	0.7	0.7	0.7
120°	39.6	36.2	30.0	20.3	10.5	3.7	0.5	0.7	0.7	0.7	0.7
122.5°	28.3	25.6	20.3	13.2	6.4	1.7	0.7	0.7	1.0	1.0	0.7
125°	18.8	17.3	13.4	8.1	3.9	0.7	0.7	0.7	1.0	1.0	0.7
127.5°	12.2	11.0	7.8	4.6	1.7	0.7	0.7	1.0	1.0	1.0	0.7
130°	6.8	6.1	4.6	2.7	0.7	0.7	0.7	1.0	1.0	1.0	0.7
132.5°	3.9	3.7	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°	191.8	191.8	191.8
2.5°	182.5	179.1	178.1
5°	172.7	167.1	163.9
7.5°	162.9	155.4	151.7
10°	153.9	143.1	139.2
12.5°	143.1	130.7	124.6
15°	132.9	116.8	110.9
17.5°	121.4	103.3	96.5
20°	110.7	89.9	82.8
22.5°	98.4	76.7	68.9
25°	87.5	63.5	54.7
27.5°	75.2	50.1	42.5
30°	63.8	38.4	30.8
32.5°	52.8	28.1	21.3
35°	42.5	19.1	13.4
37.5°	32.7	11.7	6.8
40°	23.7	6.1	3.2
42.5°	15.9	2.9	1.7
45°	9.8	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	2.0	2.0
95°	1.7	2.0	2.2
97.5°	2.0	2.2	2.2
100°	1.7	2.2	2.4
102.5°	1.5	2.2	2.2
105°	1.2	1.7	2.0



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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°	102.6	99.7	89.9	73.8	51.5	28.8	10.7	2.0	0.5	0.7	0.7
110°	89.4	87.0	76.9	61.3	41.5	21.5	7.1	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)