

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: P550871

Luminaire Tested: **FCC-X-2-LD4-1LO-50-UNV-80-84-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: P550871
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-80-84-ED1D-90
Description: FCC CORNER MOUNT LUMINAIRE WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 5000K, AND 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

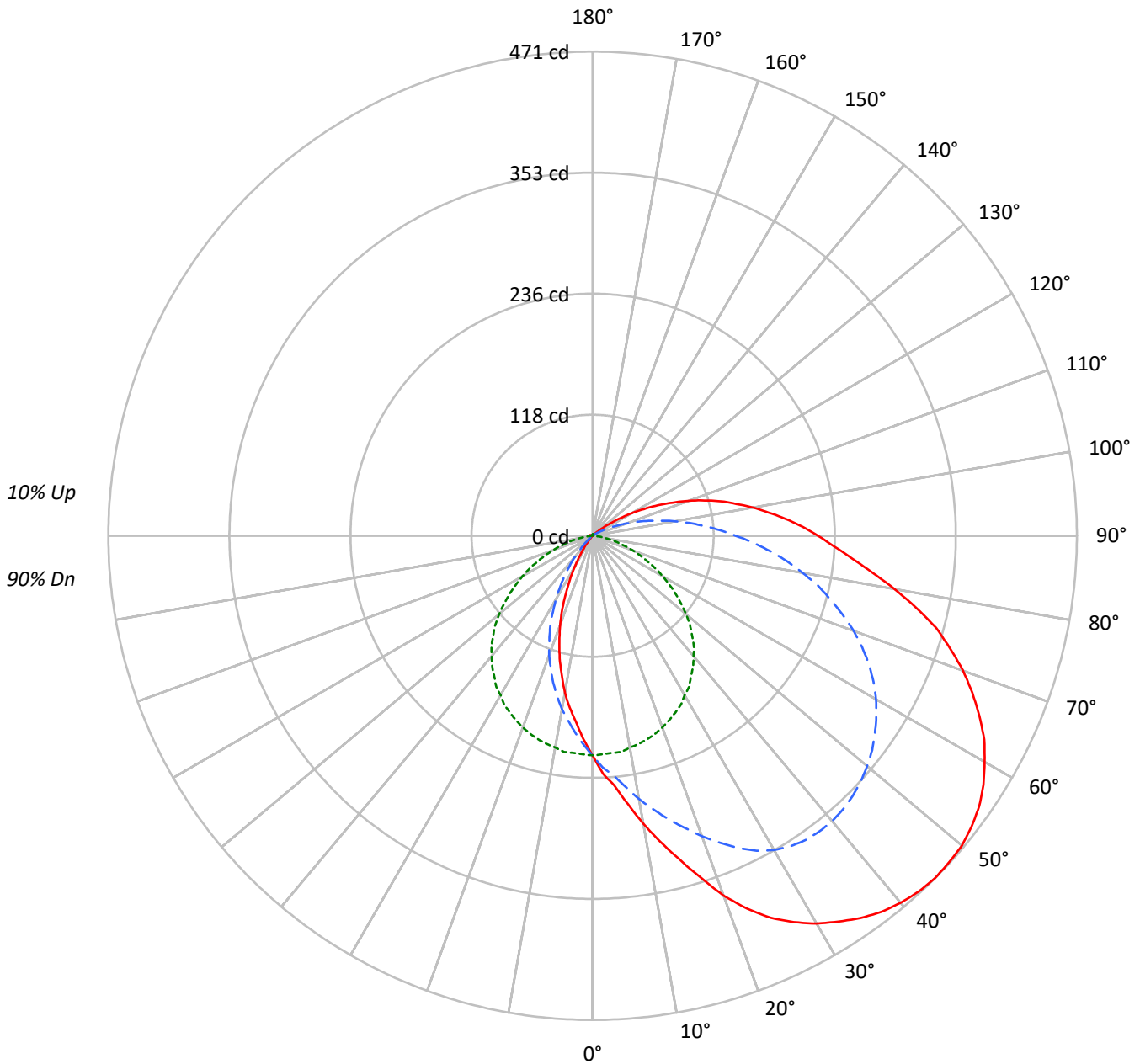
Lumens per Lamp: N/A
Luminaire Lumens: 1056.0 lumens
Efficiency: N/A
Efficacy: 90.3 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

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°	2299	2299	2299
5°	2524	2266	1890
10°	2857	2237	1558
15°	3201	2209	1214
20°	3610	2174	894
25°	3950	2131	587
30°	4201	2075	331
35°	4420	2015	146
40°	4614	1942	35
45°	4780	1848	0
50°	4919	1726	0
55°	5025	1568	0
60°	5080	1387	0
65°	5101	1181	0
70°	5083	963	0
75°	5018	709	4
80°	4816	435	23
85°	4655	208	29



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	20.5	1.9
10°-20°	61.3	5.8
20°-30°	99.2	9.4
30°-40°	127.4	12.1
40°-50°	144.3	13.7
50°-60°	149.5	14.2
60°-70°	141.0	13.3
70°-80°	118.1	11.2
80°-90°	85.6	8.1
90°-100°	56.3	5.3
100°-110°	32.5	3.1
110°-120°	14.3	1.4
120°-130°	3.9	0.4
130°-140°	0.9	0.1
140°-150°	0.6	0.1
150°-160°	0.4	0.0
160°-170°	0.2	0.0
170°-180°	0.1	0.0
0°-30°	180.9	17.1
0°-40°	308.4	29.2
0°-60°	602.1	57.0
0°-90°	946.8	89.7
90°-120°	103.1	9.8
90°-150°	108.5	10.3
90°-180°	109.0	10.3
0°-180°	1056.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	214	214	214	214	214	
5°	244	234	212	192	183	25
15°	326	286	205	148	124	94
25°	410	335	190	97	61	190
35°	454	361	167	47	15	285
45°	471	358	137	11	0	364
55°	459	335	98	0	0	410
65°	415	297	59	0	0	411
75°	346	239	25	0	0	363
85°	253	174	4	1	2	216
90°	219	139	1	2	2	120
95°	188	109	0	2	2	148
105°	130	56	0	1	2	137
115°	70	19	1	1	1	71
125°	21	3	1	1	1	21
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°	213.6	213.6	213.6	213.6	213.6	213.6	213.6	213.6	213.6	213.6	213.6
2.5°	231.6	231.3	230.5	229.1	227.2	223.9	221.2	218.8	215.5	212.8	207.6
5°	243.8	242.4	241.4	240.0	235.6	232.7	227.8	222.3	217.1	212.0	201.6
7.5°	263.4	261.2	259.6	255.8	249.8	243.0	235.4	230.2	226.7	212.2	194.6
10°	284.4	282.4	279.2	272.4	265.0	255.2	244.4	232.1	221.2	209.2	188.3
12.5°	305.0	302.3	297.7	289.0	278.6	266.4	251.4	237.0	221.5	207.3	181.0
15°	325.7	322.7	317.8	307.2	293.6	277.5	259.3	241.1	222.9	204.9	173.3
17.5°	348.3	344.2	336.9	324.9	307.8	287.9	266.4	244.4	222.3	201.9	165.2
20°	372.5	366.8	358.9	342.9	322.7	299.3	273.5	247.6	222.0	198.4	155.9
22.5°	392.6	386.9	378.2	361.6	337.4	308.8	279.5	249.8	221.0	194.3	147.2
25°	410.1	405.4	395.9	376.9	351.3	318.9	285.2	251.4	219.3	189.9	138.0
27.5°	423.7	419.3	408.7	389.1	363.0	327.9	289.5	252.2	217.1	185.6	128.4
30°	435.6	431.3	418.5	398.4	370.9	335.0	293.9	252.5	214.4	179.0	118.1
32.5°	444.9	440.8	427.8	406.3	376.3	339.9	296.3	252.2	210.9	174.4	106.9
35°	454.1	450.1	434.8	412.0	380.4	342.0	298.2	250.9	206.5	166.8	96.3
37.5°	461.2	456.6	441.1	415.8	382.3	342.6	298.0	249.0	201.9	160.5	85.7
40°	466.1	461.2	444.6	418.0	382.9	341.8	295.8	245.7	196.5	152.7	74.6
42.5°	469.4	463.9	446.3	421.2	381.8	339.6	292.5	241.6	190.5	145.8	63.9
45°	471.0	465.3	446.5	418.5	379.9	335.5	287.6	236.5	183.9	136.6	53.3
47.5°	470.2	463.9	445.2	415.5	376.3	331.2	282.2	230.2	176.1	128.4	43.3
50°	468.8	462.3	442.2	411.7	371.4	325.7	276.2	222.6	167.9	118.4	34.3
52.5°	464.5	458.0	438.9	406.3	365.7	319.5	268.0	214.7	159.2	108.6	26.1
55°	459.0	453.1	433.2	401.4	358.4	311.8	260.4	206.3	150.7	98.5	18.8
57.5°	450.6	445.2	426.1	393.5	351.0	303.4	252.0	197.0	140.1	88.4	13.1
60°	440.3	434.8	416.3	384.5	342.6	293.9	242.7	187.5	130.6	78.4	8.2
62.5°	429.4	424.2	404.9	373.3	332.0	283.8	232.7	178.0	120.5	69.1	4.9
65°	415.0	410.1	392.6	360.0	320.3	272.9	221.5	166.5	110.2	58.8	2.7
67.5°	399.7	395.4	377.7	347.8	306.7	260.9	210.1	155.4	99.3	49.8	1.4
70°	383.4	378.0	361.6	331.2	292.8	247.3	197.5	143.9	89.0	41.1	0.0
72.5°	364.4	360.3	344.5	315.6	276.7	232.9	184.8	131.4	77.6	32.7	0.3
75°	345.8	340.7	326.3	299.0	260.9	217.7	170.6	119.7	66.4	25.0	0.3
77.5°	321.9	320.3	306.7	280.3	246.0	203.0	155.1	105.6	55.8	18.0	0.3
80°	298.0	296.3	285.7	261.5	228.6	185.6	140.7	92.2	45.4	12.0	0.3
82.5°	274.3	272.1	262.0	241.9	210.9	170.9	125.7	78.9	35.9	7.3	0.3
85°	253.1	250.3	239.5	221.0	192.7	154.3	110.2	65.8	26.7	4.1	0.5
87.5°	234.8	232.9	221.0	201.9	174.1	138.8	96.6	53.3	18.8	1.9	0.8
90°	219.3	215.2	204.6	184.5	156.7	121.6	82.2	42.7	12.5	1.1	1.1
92.5°	204.1	200.5	188.8	168.2	141.2	106.9	68.3	32.7	7.9	0.5	1.4
95°	188.3	184.5	173.1	154.0	125.4	92.0	56.1	23.9	4.4	0.5	1.4
97.5°	172.8	169.3	157.3	138.2	111.3	78.9	44.4	16.9	2.2	0.5	1.1
100°	158.4	154.3	143.4	124.4	97.1	65.8	34.3	10.9	1.4	0.5	1.1
102.5°	143.1	139.9	128.7	110.2	82.4	53.6	25.6	6.8	0.5	0.5	0.8
105°	129.5	125.4	114.6	95.5	70.2	42.2	18.0	4.1	0.5	0.5	0.8



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	84.4	81.1	71.6	55.5	35.6	16.6	4.9	0.8	0.8	0.8	0.8
115°	70.5	65.6	57.1	43.0	26.4	10.9	2.4	0.8	0.8	0.8	0.8
117.5°	56.3	52.2	46.3	32.7	17.4	7.1	1.4	0.8	0.8	0.8	0.8
120°	44.1	40.3	33.5	22.6	11.7	4.1	0.5	0.8	0.8	0.8	0.8
122.5°	31.6	28.6	22.6	14.7	7.1	1.9	0.8	0.8	1.1	1.1	0.8
125°	21.0	19.3	15.0	9.0	4.4	0.8	0.8	0.8	1.1	1.1	0.8
127.5°	13.6	12.2	8.7	5.2	1.9	0.8	0.8	1.1	1.1	1.1	0.8
130°	7.6	6.8	5.2	3.0	0.8	0.8	0.8	1.1	1.1	1.1	0.8
132.5°	4.4	4.1	2.7	0.5	0.8	0.8	0.8	1.1	1.1	1.1	1.1
135°	1.1	0.5	0.5	0.5	0.8	0.8	1.1	1.1	1.4	1.4	1.1
137.5°	0.3	0.3	0.5	0.5	0.8	0.8	1.1	1.4	1.4	1.4	1.1
140°	0.3	0.3	0.5	0.8	0.8	0.8	1.1	1.4	1.4	1.4	1.1
142.5°	0.3	0.5	0.5	0.8	0.8	1.1	1.1	1.4	1.4	1.1	1.1
145°	0.3	0.5	0.5	0.8	0.8	1.1	1.1	1.4	1.1	1.1	1.1
147.5°	0.5	0.5	0.5	0.8	0.8	1.1	1.1	1.4	1.4	1.1	1.1
150°	0.3	0.5	0.5	0.8	1.1	1.1	1.1	1.4	1.1	1.1	1.1
152.5°	0.3	0.5	0.5	0.8	1.1	1.1	1.1	1.4	1.1	1.1	1.1
155°	0.5	0.5	0.5	0.8	1.1	1.1	1.1	1.4	1.1	1.1	1.4
157.5°	0.5	0.5	0.5	0.8	1.1	1.1	1.1	1.4	1.1	1.1	1.4
160°	0.5	0.5	0.5	0.8	0.8	1.1	1.1	1.1	1.1	1.1	1.1
162.5°	0.5	0.5	0.5	0.8	0.8	1.1	1.1	1.1	1.1	1.1	1.1
165°	0.5	0.5	0.5	0.5	0.8	0.8	1.1	1.1	1.1	1.1	1.1
167.5°	0.5	0.5	0.5	0.8	0.8	0.8	1.1	1.1	1.1	1.1	1.1
170°	0.5	0.5	0.5	0.8	0.8	0.8	1.1	1.4	1.4	1.4	1.4
172.5°	0.5	0.5	0.5	0.8	0.8	1.1	1.1	1.4	1.4	1.4	1.4
175°	0.5	0.5	0.5	0.8	0.8	1.1	1.1	1.4	1.4	1.4	1.4
177.5°	0.3	0.5	0.5	0.8	0.8	1.1	1.1	1.4	1.4	1.4	1.1
180°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	213.6	213.6	213.6
2.5°	203.3	199.5	198.4
5°	192.4	186.1	182.6
7.5°	181.5	173.1	169.0
10°	171.4	159.5	155.1
12.5°	159.5	145.6	138.8
15°	148.0	130.1	123.5
17.5°	135.2	115.1	107.5
20°	123.3	100.1	92.2
22.5°	109.7	85.4	76.7
25°	97.4	70.7	61.0
27.5°	83.8	55.8	47.3
30°	71.0	42.7	34.3
32.5°	58.8	31.3	23.7
35°	47.3	21.2	15.0
37.5°	36.5	13.1	7.6
40°	26.4	6.8	3.5
42.5°	17.7	3.3	1.9
45°	10.9	1.6	0.0
47.5°	6.3	0.0	0.0
50°	3.3	0.0	0.0
52.5°	1.4	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	0.5	0.8
80°	0.5	1.1	1.4
82.5°	1.1	1.4	1.4
85°	1.1	1.4	1.6
87.5°	1.4	1.6	1.9
90°	1.6	1.9	1.9
92.5°	1.6	2.2	2.2
95°	1.9	2.2	2.4
97.5°	2.2	2.4	2.4
100°	1.9	2.4	2.7
102.5°	1.6	2.4	2.4
105°	1.4	1.9	2.2



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	1.1	1.4	1.4
115°	0.8	1.1	1.4
117.5°	0.8	1.1	1.1
120°	0.8	0.8	1.1
122.5°	0.8	0.8	1.1
125°	0.8	0.8	1.1
127.5°	1.1	0.8	0.8
130°	0.8	0.8	0.8
132.5°	1.1	0.8	0.8
135°	1.1	0.8	0.8
137.5°	1.1	0.8	0.8
140°	1.1	0.8	0.8
142.5°	1.1	0.8	0.8
145°	0.8	0.8	0.8
147.5°	0.8	0.8	0.8
150°	0.8	0.8	0.5
152.5°	0.8	0.5	0.5
155°	0.8	0.5	0.3
157.5°	1.1	0.5	0.3
160°	0.8	0.5	0.3
162.5°	0.8	0.5	0.3
165°	0.8	0.5	0.0
167.5°	0.8	0.5	0.3
170°	0.8	0.5	0.3
172.5°	0.8	0.5	0.3
175°	0.8	0.3	0.3
177.5°	0.8	0.3	0.3
180°	0.8	0.8	0.8



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	114.3	111.0	100.1	82.2	57.4	32.1	12.0	2.2	0.5	0.8	0.8
110°	99.6	96.9	85.7	68.3	46.3	23.9	7.9	1.4	0.8	0.8	0.8





107.5°	1.1	1.6	1.9
110°	1.1	1.4	1.6



(END OF REPORT)