

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: P550947

Luminaire Tested: **FCC-X-2-LD4-1STD-30-UNV-80-96-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: P550947
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-LD4-1STD-30-UNV-80-96-ED1D-90
Description: FCC CORNER MOUNT LUMINAIRE WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES AND 3000K, AND 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

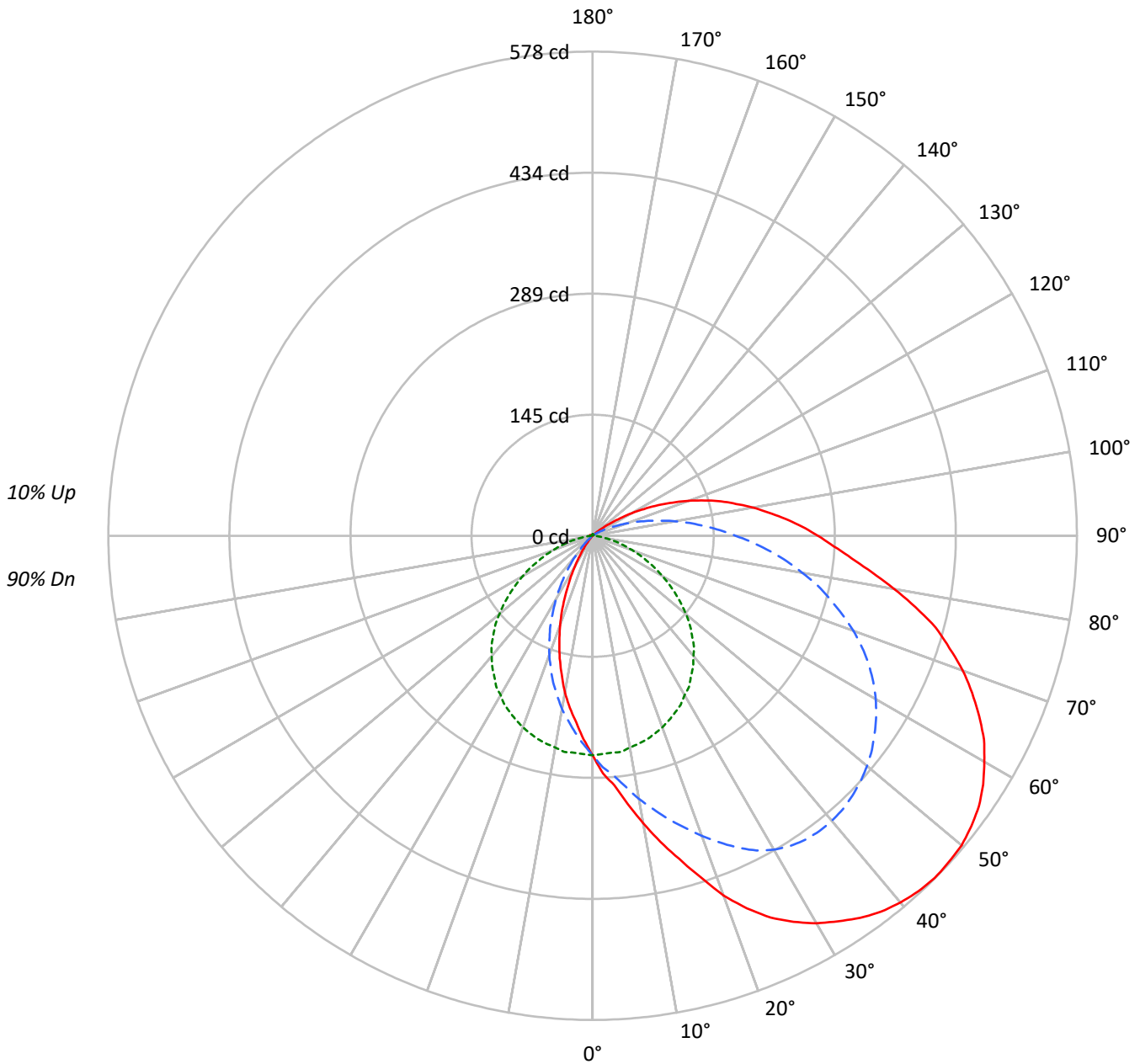
Lumens per Lamp: N/A
Luminaire Lumens: 1295.0 lumens
Efficiency: N/A
Efficacy: 77.5 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

Input Watts (W): 16.7
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				20				20
RC	80				70				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	93	93	93	90
1	103	96	91	86	99	93	88	83	87	83	79	81	78	74	76	73	70	76	73	70	67
2	92	82	74	67	88	79	72	65	74	67	62	69	64	59	64	60	56	64	60	56	53
3	83	71	61	54	79	68	60	53	64	56	50	59	53	48	55	50	46	55	50	46	43
4	75	62	52	44	72	60	51	44	56	48	42	52	45	40	49	43	38	49	43	38	36
5	69	55	45	38	66	53	44	37	50	42	35	46	39	34	43	38	33	43	38	33	30
6	63	49	39	32	61	47	38	32	44	36	31	42	35	29	39	33	28	39	33	28	26
7	58	44	35	28	56	43	34	28	40	32	27	38	31	26	36	29	25	36	29	25	23
8	54	40	31	25	52	39	30	24	37	29	24	34	28	23	32	26	22	32	26	22	20
9	51	36	28	22	49	35	27	22	33	26	21	32	25	20	30	24	20	30	24	20	18
10	47	33	25	20	45	33	25	19	31	24	19	29	23	18	28	22	18	28	22	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	2819	2819	2819
5°	3095	2778	2318
10°	3502	2744	1910
15°	3925	2710	1489
20°	4427	2666	1096
25°	4843	2614	719
30°	5152	2546	405
35°	5420	2472	179
40°	5658	2381	43
45°	5862	2266	0
50°	6032	2116	0
55°	6163	1924	0
60°	6229	1701	0
65°	6255	1448	0
70°	6234	1181	0
75°	6154	871	4
80°	5905	533	27
85°	5707	254	37



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	25.1	1.9
10°-20°	75.1	5.8
20°-30°	121.7	9.4
30°-40°	156.3	12.1
40°-50°	176.9	13.7
50°-60°	183.3	14.2
60°-70°	172.9	13.3
70°-80°	144.9	11.2
80°-90°	105.0	8.1
90°-100°	69.0	5.3
100°-110°	39.9	3.1
110°-120°	17.6	1.4
120°-130°	4.8	0.4
130°-140°	1.1	0.1
140°-150°	0.7	0.1
150°-160°	0.5	0.0
160°-170°	0.3	0.0
170°-180°	0.1	0.0
0°-30°	221.9	17.1
0°-40°	378.2	29.2
0°-60°	738.4	57.0
0°-90°	1161.1	89.7
90°-120°	126.5	9.8
90°-150°	133.0	10.3
90°-180°	134.0	10.3
0°-180°	1295.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	262	262	262	262	262	
5°	299	287	260	236	224	30
15°	399	350	251	182	152	115
25°	503	411	233	120	75	232
35°	557	443	205	58	18	349
45°	578	439	168	13	0	446
55°	563	411	121	0	0	503
65°	509	364	72	0	0	503
75°	424	294	31	0	0	445
85°	310	213	5	1	2	265
90°	269	171	1	2	2	147
95°	231	133	1	2	3	181
105°	159	69	1	2	3	168
115°	86	23	1	1	2	87
125°	26	3	1	1	1	26
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°	261.9	261.9	261.9	261.9	261.9	261.9	261.9	261.9	261.9	261.9	261.9
2.5°	284.0	283.6	282.6	281.0	278.6	274.6	271.3	268.3	264.3	260.9	254.6
5°	299.0	297.3	296.0	294.3	289.0	285.3	279.3	272.6	266.3	259.9	247.3
7.5°	323.0	320.3	318.3	313.7	306.3	298.0	288.6	282.3	278.0	260.3	238.6
10°	348.7	346.4	342.4	334.0	325.0	313.0	299.7	284.6	271.3	256.6	230.9
12.5°	374.1	370.7	365.1	354.4	341.7	326.7	308.3	290.6	271.6	254.3	221.9
15°	399.4	395.8	389.8	376.7	360.1	340.4	318.0	295.7	273.3	251.3	212.6
17.5°	427.1	422.1	413.1	398.4	377.4	353.0	326.7	299.7	272.6	247.6	202.6
20°	456.8	449.8	440.1	420.5	395.8	367.1	335.4	303.7	272.3	243.3	191.2
22.5°	481.5	474.5	463.8	443.5	413.8	378.7	342.7	306.3	271.0	238.3	180.5
25°	502.9	497.2	485.5	462.2	430.8	391.1	349.7	308.3	269.0	232.9	169.2
27.5°	519.6	514.2	501.2	477.2	445.1	402.1	355.0	309.3	266.3	227.6	157.5
30°	534.2	528.9	513.2	488.5	454.8	410.8	360.4	309.7	262.9	219.6	144.8
32.5°	545.6	540.6	524.6	498.2	461.5	416.8	363.4	309.3	258.6	213.9	131.1
35°	556.9	551.9	533.2	505.2	466.5	419.4	365.7	307.7	253.3	204.6	118.1
37.5°	565.6	559.9	540.9	509.9	468.8	420.1	365.4	305.3	247.6	196.9	105.1
40°	571.6	565.6	545.3	512.5	469.5	419.1	362.7	301.3	240.9	187.2	91.4
42.5°	575.6	568.9	547.3	516.6	468.2	416.4	358.7	296.3	233.6	178.9	78.4
45°	577.6	570.6	547.6	513.2	465.8	411.4	352.7	290.0	225.6	167.5	65.4
47.5°	576.6	568.9	545.9	509.5	461.5	406.1	346.0	282.3	215.9	157.5	53.1
50°	574.9	566.9	542.2	504.9	455.5	399.4	338.7	273.0	205.9	145.2	42.0
52.5°	569.6	561.6	538.2	498.2	448.5	391.8	328.7	263.3	195.2	133.1	32.0
55°	562.9	555.6	531.2	492.2	439.5	382.4	319.3	252.9	184.9	120.8	23.0
57.5°	552.6	545.9	522.6	482.5	430.5	372.1	309.0	241.6	171.9	108.4	16.0
60°	539.9	533.2	510.5	471.5	420.1	360.4	297.7	229.9	160.2	96.1	10.0
62.5°	526.6	520.2	496.5	457.8	407.1	348.0	285.3	218.2	147.8	84.8	6.0
65°	508.9	502.9	481.5	441.5	392.8	334.7	271.6	204.2	135.1	72.1	3.3
67.5°	490.2	484.9	463.2	426.5	376.1	320.0	257.6	190.5	121.8	61.1	1.7
70°	470.2	463.5	443.5	406.1	359.1	303.3	242.3	176.5	109.1	50.4	0.0
72.5°	446.8	441.8	422.5	387.1	339.4	285.6	226.6	161.2	95.1	40.0	0.3
75°	424.1	417.8	400.1	366.7	320.0	267.0	209.2	146.8	81.4	30.7	0.3
77.5°	394.8	392.8	376.1	343.7	301.7	248.9	190.2	129.5	68.4	22.0	0.3
80°	365.4	363.4	350.4	320.7	280.3	227.6	172.5	113.1	55.7	14.7	0.3
82.5°	336.4	333.7	321.3	296.7	258.6	209.6	154.2	96.8	44.0	9.0	0.3
85°	310.3	307.0	293.6	271.0	236.3	189.2	135.1	80.8	32.7	5.0	0.7
87.5°	288.0	285.6	271.0	247.6	213.6	170.2	118.5	65.4	23.0	2.3	1.0
90°	269.0	263.9	250.9	226.2	192.2	149.2	100.8	52.4	15.3	1.3	1.3
92.5°	250.3	245.9	231.6	206.2	173.2	131.1	83.8	40.0	9.7	0.7	1.7
95°	230.9	226.2	212.2	188.9	153.8	112.8	68.7	29.4	5.3	0.7	1.7
97.5°	211.9	207.6	192.9	169.5	136.5	96.8	54.4	20.7	2.7	0.7	1.3
100°	194.2	189.2	175.9	152.5	119.1	80.8	42.0	13.3	1.7	0.7	1.3
102.5°	175.5	171.5	157.8	135.1	101.1	65.7	31.4	8.3	0.7	0.7	1.0
105°	158.8	153.8	140.5	117.1	86.1	51.7	22.0	5.0	0.7	0.7	1.0



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CATALOG NUMBER: FCC-X-2-LD4-1STD-30-UNV-80-96-ED1D-90

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	103.4	99.4	87.8	68.1	43.7	20.4	6.0	1.0	1.0	1.0	1.0
115°	86.4	80.4	70.1	52.7	32.4	13.3	3.0	1.0	1.0	1.0	1.0
117.5°	69.1	64.1	56.7	40.0	21.4	8.7	1.7	1.0	1.0	1.0	1.0
120°	54.1	49.4	41.0	27.7	14.3	5.0	0.7	1.0	1.0	1.0	1.0
122.5°	38.7	35.0	27.7	18.0	8.7	2.3	1.0	1.0	1.3	1.3	1.0
125°	25.7	23.7	18.4	11.0	5.3	1.0	1.0	1.0	1.3	1.3	1.0
127.5°	16.7	15.0	10.7	6.3	2.3	1.0	1.0	1.3	1.3	1.3	1.0
130°	9.3	8.3	6.3	3.7	1.0	1.0	1.0	1.3	1.3	1.3	1.0
132.5°	5.3	5.0	3.3	0.7	1.0	1.0	1.0	1.3	1.3	1.3	1.3
135°	1.3	0.7	0.7	0.7	1.0	1.0	1.3	1.3	1.7	1.7	1.3
137.5°	0.3	0.3	0.7	0.7	1.0	1.0	1.3	1.7	1.7	1.7	1.3
140°	0.3	0.3	0.7	1.0	1.0	1.0	1.3	1.7	1.7	1.7	1.3
142.5°	0.3	0.7	0.7	1.0	1.0	1.3	1.3	1.7	1.7	1.3	1.3
145°	0.3	0.7	0.7	1.0	1.0	1.3	1.3	1.7	1.3	1.3	1.3
147.5°	0.7	0.7	0.7	1.0	1.0	1.3	1.3	1.7	1.7	1.3	1.3
150°	0.3	0.7	0.7	1.0	1.3	1.3	1.3	1.7	1.3	1.3	1.3
152.5°	0.3	0.7	0.7	1.0	1.3	1.3	1.3	1.7	1.3	1.3	1.3
155°	0.7	0.7	0.7	1.0	1.3	1.3	1.3	1.7	1.3	1.3	1.7
157.5°	0.7	0.7	0.7	1.0	1.3	1.3	1.3	1.7	1.3	1.3	1.7
160°	0.7	0.7	0.7	1.0	1.0	1.3	1.3	1.3	1.3	1.3	1.3
162.5°	0.7	0.7	0.7	1.0	1.0	1.3	1.3	1.3	1.3	1.3	1.3
165°	0.7	0.7	0.7	0.7	1.0	1.0	1.3	1.3	1.3	1.3	1.3
167.5°	0.7	0.7	0.7	1.0	1.0	1.0	1.3	1.3	1.3	1.3	1.3
170°	0.7	0.7	0.7	1.0	1.0	1.0	1.3	1.7	1.7	1.7	1.7
172.5°	0.7	0.7	0.7	1.0	1.0	1.3	1.3	1.7	1.7	1.7	1.7
175°	0.7	0.7	0.7	1.0	1.0	1.3	1.3	1.7	1.7	1.7	1.7
177.5°	0.3	0.7	0.7	1.0	1.0	1.3	1.3	1.7	1.7	1.7	1.3
180°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	261.9	261.9	261.9
2.5°	249.3	244.6	243.3
5°	235.9	228.2	223.9
7.5°	222.6	212.2	207.2
10°	210.2	195.5	190.2
12.5°	195.5	178.5	170.2
15°	181.5	159.5	151.5
17.5°	165.8	141.2	131.8
20°	151.2	122.8	113.1
22.5°	134.5	104.8	94.1
25°	119.5	86.8	74.7
27.5°	102.8	68.4	58.1
30°	87.1	52.4	42.0
32.5°	72.1	38.4	29.0
35°	58.1	26.0	18.4
37.5°	44.7	16.0	9.3
40°	32.4	8.3	4.3
42.5°	21.7	4.0	2.3
45°	13.3	2.0	0.0
47.5°	7.7	0.0	0.0
50°	4.0	0.0	0.0
52.5°	1.7	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	0.7	1.0
80°	0.7	1.3	1.7
82.5°	1.3	1.7	1.7
85°	1.3	1.7	2.0
87.5°	1.7	2.0	2.3
90°	2.0	2.3	2.3
92.5°	2.0	2.7	2.7
95°	2.3	2.7	3.0
97.5°	2.7	3.0	3.0
100°	2.3	3.0	3.3
102.5°	2.0	3.0	3.0
105°	1.7	2.3	2.7



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	1.3	1.7	1.7
115°	1.0	1.3	1.7
117.5°	1.0	1.3	1.3
120°	1.0	1.0	1.3
122.5°	1.0	1.0	1.3
125°	1.0	1.0	1.3
127.5°	1.3	1.0	1.0
130°	1.0	1.0	1.0
132.5°	1.3	1.0	1.0
135°	1.3	1.0	1.0
137.5°	1.3	1.0	1.0
140°	1.3	1.0	1.0
142.5°	1.3	1.0	1.0
145°	1.0	1.0	1.0
147.5°	1.0	1.0	1.0
150°	1.0	1.0	0.7
152.5°	1.0	0.7	0.7
155°	1.0	0.7	0.3
157.5°	1.3	0.7	0.3
160°	1.0	0.7	0.3
162.5°	1.0	0.7	0.3
165°	1.0	0.7	0.0
167.5°	1.0	0.7	0.3
170°	1.0	0.7	0.3
172.5°	1.0	0.7	0.3
175°	1.0	0.3	0.3
177.5°	1.0	0.3	0.3
180°	1.0	1.0	1.0



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	140.2	136.1	122.8	100.8	70.4	39.4	14.7	2.7	0.7	1.0	1.0
110°	122.1	118.8	105.1	83.8	56.7	29.4	9.7	1.7	1.0	1.0	1.0





107.5°	1.3	2.0	2.3
110°	1.3	1.7	2.0



(END OF REPORT)