

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: P550619

Luminaire Tested: **FCC-X-2-LD4-1HI-50-UNV-80-86-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: P550619
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-LD4-1HI-50-UNV-80-86-ED1D-90
Description: FCC CORNER MOUNT LUMINAIRE WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 5000K, AND 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

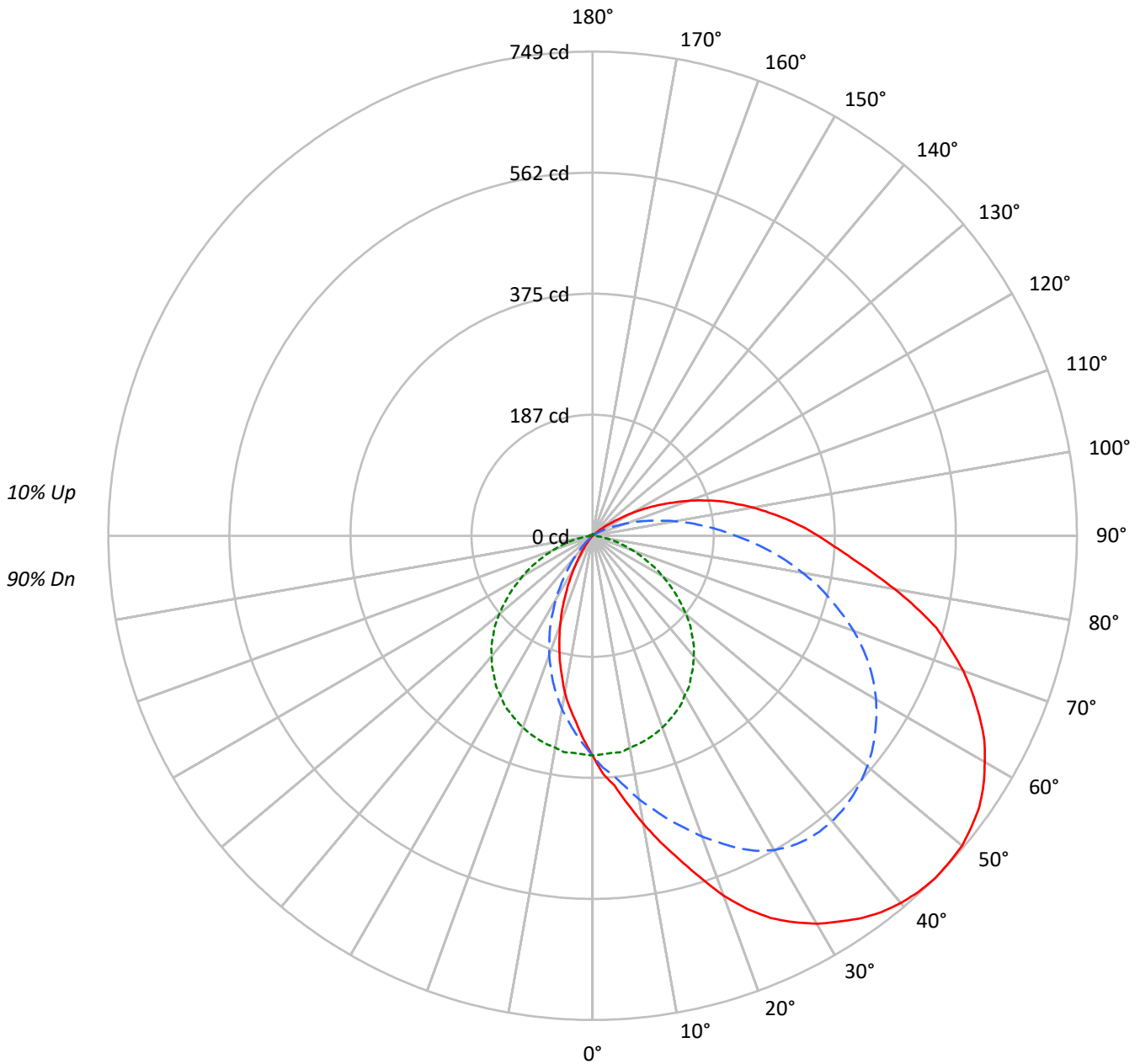
Lumens per Lamp: N/A
Luminaire Lumens: 1680.0 lumens
Efficiency: N/A
Efficacy: 77.4 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

Input Watts (W): 21.7
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°	3658	3658	3658
5°	4016	3604	3007
10°	4544	3560	2479
15°	5092	3515	1931
20°	5743	3458	1423
25°	6283	3391	934
30°	6685	3302	526
35°	7032	3207	232
40°	7341	3089	55
45°	7604	2940	0
50°	7827	2744	0
55°	7996	2495	0
60°	8080	2207	0
65°	8114	1878	0
70°	8088	1532	0
75°	7984	1129	6
80°	7660	689	36
85°	7405	331	48



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	32.6	1.9
10°-20°	97.5	5.8
20°-30°	157.8	9.4
30°-40°	202.7	12.1
40°-50°	229.5	13.7
50°-60°	237.8	14.2
60°-70°	224.2	13.3
70°-80°	187.9	11.2
80°-90°	136.2	8.1
90°-100°	89.5	5.3
100°-110°	51.7	3.1
110°-120°	22.8	1.4
120°-130°	6.2	0.4
130°-140°	1.4	0.1
140°-150°	0.9	0.1
150°-160°	0.7	0.0
160°-170°	0.4	0.0
170°-180°	0.1	0.0
0°-30°	287.8	17.1
0°-40°	490.6	29.2
0°-60°	957.9	57.0
0°-90°	1506.3	89.7
90°-120°	164.1	9.8
90°-150°	172.6	10.3
90°-180°	174.0	10.4
0°-180°	1680.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	340	340	340	340	340	
5°	388	372	337	306	290	39
15°	518	454	326	236	196	149
25°	652	533	302	155	97	302
35°	722	575	265	75	24	453
45°	749	569	217	17	0	579
55°	730	533	157	0	0	652
65°	660	472	94	0	0	653
75°	550	381	40	0	0	577
85°	403	276	6	2	3	344
90°	349	221	2	3	3	191
95°	300	173	1	3	4	235
105°	206	89	1	2	4	217
115°	112	30	1	1	2	112
125°	33	4	2	1	2	33
135°	2	1	2	2	1	3
145°	0	2	2	1	1	0
155°	1	2	2	1	0	0
165°	1	1	2	1	0	0
175°	1	2	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°	339.8	339.8	339.8	339.8	339.8	339.8	339.8	339.8	339.8	339.8	339.8
2.5°	368.4	368.0	366.7	364.5	361.5	356.3	351.9	348.0	342.9	338.5	330.3
5°	387.9	385.7	384.0	381.8	374.9	370.1	362.3	353.7	345.5	337.2	320.8
7.5°	419.0	415.6	413.0	406.9	397.4	386.6	374.5	366.2	360.6	337.7	309.5
10°	452.4	449.3	444.2	433.3	421.6	406.1	388.7	369.3	351.9	332.9	299.6
12.5°	485.3	480.9	473.6	459.7	443.3	423.8	400.0	377.1	352.4	329.9	287.9
15°	518.2	513.4	505.6	488.7	467.1	441.6	412.6	383.5	354.5	326.0	275.8
17.5°	554.1	547.6	535.9	516.9	489.6	458.0	423.8	388.7	353.7	321.2	262.8
20°	592.6	583.5	571.0	545.4	513.4	476.2	435.1	393.9	353.2	315.6	248.0
22.5°	624.7	615.6	601.7	575.3	536.8	491.3	444.6	397.4	351.5	309.1	234.2
25°	652.4	645.0	629.9	599.6	558.9	507.4	453.7	400.0	348.9	302.2	219.5
27.5°	674.0	667.1	650.2	619.0	577.5	521.6	460.6	401.3	345.5	295.2	204.3
30°	693.1	686.1	665.8	633.8	590.0	532.9	467.5	401.7	341.1	284.8	187.9
32.5°	707.8	701.3	680.5	646.3	598.7	540.7	471.4	401.3	335.5	277.5	170.1
35°	722.5	716.0	691.8	655.4	605.2	544.2	474.5	399.1	328.6	265.4	153.2
37.5°	733.8	726.4	701.7	661.5	608.2	545.0	474.0	396.1	321.2	255.4	136.4
40°	741.6	733.8	707.4	664.9	609.1	543.7	470.6	390.9	312.6	242.9	118.6
42.5°	746.7	738.1	710.0	670.1	607.4	540.3	465.4	384.4	303.0	232.0	101.7
45°	749.3	740.3	710.4	665.8	604.3	533.8	457.6	376.2	292.6	217.3	84.8
47.5°	748.0	738.1	708.2	661.0	598.7	526.8	448.9	366.2	280.1	204.3	68.8
50°	745.9	735.5	703.5	655.0	590.9	518.2	439.4	354.1	267.1	188.3	54.5
52.5°	739.0	728.6	698.3	646.3	581.8	508.2	426.4	341.6	253.2	172.7	41.6
55°	730.3	720.8	689.2	638.5	570.1	496.1	414.3	328.1	239.8	156.7	29.9
57.5°	716.9	708.2	677.9	626.0	558.4	482.7	400.9	313.4	222.9	140.7	20.8
60°	700.4	691.8	662.3	611.7	545.0	467.5	386.1	298.3	207.8	124.7	13.0
62.5°	683.1	674.9	644.1	593.9	528.1	451.5	370.1	283.1	191.8	110.0	7.8
65°	660.2	652.4	624.7	572.7	509.5	434.2	352.4	264.9	175.3	93.5	4.3
67.5°	635.9	629.0	600.9	553.2	487.9	415.1	334.2	247.2	158.0	79.2	2.2
70°	610.0	601.3	575.3	526.8	465.8	393.5	314.3	229.0	141.6	65.4	0.0
72.5°	579.6	573.2	548.0	502.2	440.3	370.6	293.9	209.1	123.4	51.9	0.4
75°	550.2	542.0	519.0	475.8	415.1	346.3	271.4	190.5	105.6	39.8	0.4
77.5°	512.1	509.5	487.9	445.9	391.3	322.9	246.8	168.0	88.7	28.6	0.4
80°	474.0	471.4	454.5	416.0	363.6	295.2	223.8	146.8	72.3	19.0	0.4
82.5°	436.4	432.9	416.9	384.8	335.5	271.9	200.0	125.5	57.1	11.7	0.4
85°	402.6	398.3	380.9	351.5	306.5	245.5	175.3	104.8	42.4	6.5	0.9
87.5°	373.6	370.6	351.5	321.2	277.1	220.8	153.7	84.8	29.9	3.0	1.3
90°	348.9	342.4	325.5	293.5	249.3	193.5	130.7	68.0	19.9	1.7	1.7
92.5°	324.7	319.0	300.4	267.5	224.7	170.1	108.7	51.9	12.6	0.9	2.2
95°	299.6	293.5	275.3	245.0	199.6	146.3	89.2	38.1	6.9	0.9	2.2
97.5°	274.9	269.3	250.2	219.9	177.1	125.5	70.6	26.8	3.5	0.9	1.7
100°	251.9	245.5	228.1	197.8	154.5	104.8	54.5	17.3	2.2	0.9	1.7
102.5°	227.7	222.5	204.8	175.3	131.2	85.3	40.7	10.8	0.9	0.9	1.3
105°	206.1	199.6	182.2	151.9	111.7	67.1	28.6	6.5	0.9	0.9	1.3



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CATALOG NUMBER: FCC-X-2-LD4-1HI-50-UNV-80-86-ED1D-90

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	134.2	129.0	113.9	88.3	56.7	26.4	7.8	1.3	1.3	1.3	1.3
115°	112.1	104.3	90.9	68.4	42.0	17.3	3.9	1.3	1.3	1.3	1.3
117.5°	89.6	83.1	73.6	51.9	27.7	11.3	2.2	1.3	1.3	1.3	1.3
120°	70.1	64.1	53.2	35.9	18.6	6.5	0.9	1.3	1.3	1.3	1.3
122.5°	50.2	45.5	35.9	23.4	11.3	3.0	1.3	1.3	1.7	1.7	1.3
125°	33.3	30.7	23.8	14.3	6.9	1.3	1.3	1.3	1.7	1.7	1.3
127.5°	21.6	19.5	13.9	8.2	3.0	1.3	1.3	1.7	1.7	1.7	1.3
130°	12.1	10.8	8.2	4.8	1.3	1.3	1.3	1.7	1.7	1.7	1.3
132.5°	6.9	6.5	4.3	0.9	1.3	1.3	1.3	1.7	1.7	1.7	1.7
135°	1.7	0.9	0.9	0.9	1.3	1.3	1.7	1.7	2.2	2.2	1.7
137.5°	0.4	0.4	0.9	0.9	1.3	1.3	1.7	2.2	2.2	2.2	1.7
140°	0.4	0.4	0.9	1.3	1.3	1.3	1.7	2.2	2.2	2.2	1.7
142.5°	0.4	0.9	0.9	1.3	1.3	1.7	1.7	2.2	2.2	1.7	1.7
145°	0.4	0.9	0.9	1.3	1.3	1.7	1.7	2.2	1.7	1.7	1.7
147.5°	0.9	0.9	0.9	1.3	1.3	1.7	1.7	2.2	2.2	1.7	1.7
150°	0.4	0.9	0.9	1.3	1.7	1.7	1.7	2.2	1.7	1.7	1.7
152.5°	0.4	0.9	0.9	1.3	1.7	1.7	1.7	2.2	1.7	1.7	1.7
155°	0.9	0.9	0.9	1.3	1.7	1.7	1.7	2.2	1.7	1.7	2.2
157.5°	0.9	0.9	0.9	1.3	1.7	1.7	1.7	2.2	1.7	1.7	2.2
160°	0.9	0.9	0.9	1.3	1.3	1.7	1.7	1.7	1.7	1.7	1.7
162.5°	0.9	0.9	0.9	1.3	1.3	1.7	1.7	1.7	1.7	1.7	1.7
165°	0.9	0.9	0.9	0.9	1.3	1.3	1.7	1.7	1.7	1.7	1.7
167.5°	0.9	0.9	0.9	1.3	1.3	1.3	1.7	1.7	1.7	1.7	1.7
170°	0.9	0.9	0.9	1.3	1.3	1.3	1.7	2.2	2.2	2.2	2.2
172.5°	0.9	0.9	0.9	1.3	1.3	1.7	1.7	2.2	2.2	2.2	2.2
175°	0.9	0.9	0.9	1.3	1.3	1.7	1.7	2.2	2.2	2.2	2.2
177.5°	0.4	0.9	0.9	1.3	1.3	1.7	1.7	2.2	2.2	2.2	1.7
180°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	339.8	339.8	339.8
2.5°	323.4	317.3	315.6
5°	306.1	296.1	290.5
7.5°	288.7	275.3	268.8
10°	272.7	253.7	246.8
12.5°	253.7	231.6	220.8
15°	235.5	206.9	196.5
17.5°	215.1	183.1	171.0
20°	196.1	159.3	146.8
22.5°	174.5	135.9	122.1
25°	155.0	112.6	97.0
27.5°	133.3	88.7	75.3
30°	113.0	68.0	54.5
32.5°	93.5	49.8	37.7
35°	75.3	33.8	23.8
37.5°	58.0	20.8	12.1
40°	42.0	10.8	5.6
42.5°	28.1	5.2	3.0
45°	17.3	2.6	0.0
47.5°	10.0	0.0	0.0
50°	5.2	0.0	0.0
52.5°	2.2	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°	0.4	0.4	0.4
77.5°	0.4	0.9	1.3
80°	0.9	1.7	2.2
82.5°	1.7	2.2	2.2
85°	1.7	2.2	2.6
87.5°	2.2	2.6	3.0
90°	2.6	3.0	3.0
92.5°	2.6	3.5	3.5
95°	3.0	3.5	3.9
97.5°	3.5	3.9	3.9
100°	3.0	3.9	4.3
102.5°	2.6	3.9	3.9
105°	2.2	3.0	3.5



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	1.7	2.2	2.2
115°	1.3	1.7	2.2
117.5°	1.3	1.7	1.7
120°	1.3	1.3	1.7
122.5°	1.3	1.3	1.7
125°	1.3	1.3	1.7
127.5°	1.7	1.3	1.3
130°	1.3	1.3	1.3
132.5°	1.7	1.3	1.3
135°	1.7	1.3	1.3
137.5°	1.7	1.3	1.3
140°	1.7	1.3	1.3
142.5°	1.7	1.3	1.3
145°	1.3	1.3	1.3
147.5°	1.3	1.3	1.3
150°	1.3	1.3	0.9
152.5°	1.3	0.9	0.9
155°	1.3	0.9	0.4
157.5°	1.7	0.9	0.4
160°	1.3	0.9	0.4
162.5°	1.3	0.9	0.4
165°	1.3	0.9	0.0
167.5°	1.3	0.9	0.4
170°	1.3	0.9	0.4
172.5°	1.3	0.9	0.4
175°	1.3	0.4	0.4
177.5°	1.3	0.4	0.4
180°	1.3	1.3	1.3



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	181.8	176.6	159.3	130.7	91.3	51.1	19.0	3.5	0.9	1.3	1.3
110°	158.4	154.1	136.4	108.7	73.6	38.1	12.6	2.2	1.3	1.3	1.3





107.5°	1.7	2.6	3.0
110°	1.7	2.2	2.6



(END OF REPORT)