

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: P551129

Luminaire Tested: **FCC-X-2-LD4-1STD-50-UNV-80-85-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: P551129
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-50-UNV-80-85-ED1D-90
Description: FCC CORNER MOUNT LUMINAIRE WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 5000K, AND 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

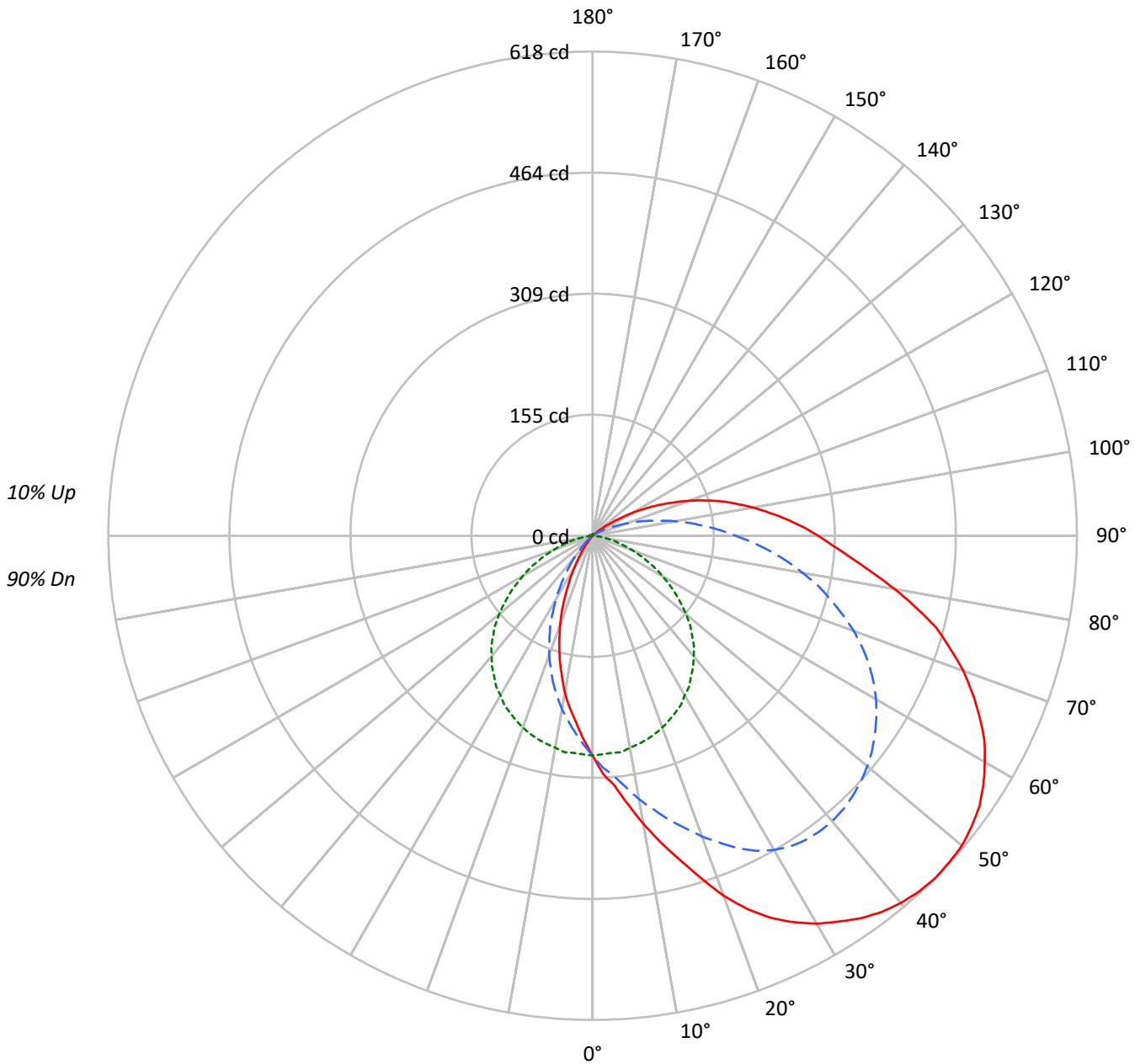
Lumens per Lamp: N/A
Luminaire Lumens: 1386.0 lumens
Efficiency: N/A
Efficacy: 83.0 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

Input Watts (W): 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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CATALOG NUMBER: FCC-X-2-LD4-1STD-50-UNV-80-85-ED1D-90

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°	3018	3018	3018
5°	3313	2973	2480
10°	3749	2937	2045
15°	4201	2899	1593
20°	4738	2853	1174
25°	5183	2798	770
30°	5515	2724	434
35°	5802	2645	191
40°	6056	2549	46
45°	6274	2426	0
50°	6457	2265	0
55°	6596	2059	0
60°	6667	1821	0
65°	6694	1549	0
70°	6672	1263	0
75°	6586	933	6
80°	6320	569	29
85°	6108	275	39



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	26.9	1.9
10°-20°	80.4	5.8
20°-30°	130.2	9.4
30°-40°	167.3	12.1
40°-50°	189.3	13.7
50°-60°	196.2	14.2
60°-70°	185.0	13.3
70°-80°	155.0	11.2
80°-90°	112.4	8.1
90°-100°	73.9	5.3
100°-110°	42.7	3.1
110°-120°	18.8	1.4
120°-130°	5.1	0.4
130°-140°	1.2	0.1
140°-150°	0.8	0.1
150°-160°	0.5	0.0
160°-170°	0.3	0.0
170°-180°	0.1	0.0
0°-30°	237.5	17.1
0°-40°	404.7	29.2
0°-60°	790.3	57.0
0°-90°	1242.7	89.7
90°-120°	135.4	9.8
90°-150°	142.4	10.3
90°-180°	143.0	10.3
0°-180°	1386.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	280	280	280	280	280	
5°	320	307	278	252	240	32
15°	428	375	269	194	162	123
25°	538	440	249	128	80	249
35°	596	474	219	62	20	374
45°	618	470	179	14	0	477
55°	602	440	129	0	0	538
65°	545	389	77	0	0	539
75°	454	314	33	0	0	476
85°	332	228	5	1	2	284
90°	288	183	1	2	2	158
95°	247	143	1	2	3	194
105°	170	74	1	2	3	179
115°	92	24	1	1	2	93
125°	28	3	1	1	1	27
135°	1	1	2	1	1	3
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°	280.4	280.4	280.4	280.4	280.4	280.4	280.4	280.4	280.4	280.4	280.4
2.5°	303.9	303.6	302.5	300.7	298.2	293.9	290.4	287.1	282.9	279.3	272.5
5°	320.0	318.2	316.8	315.0	309.3	305.4	298.9	291.8	285.0	278.2	264.6
7.5°	345.7	342.9	340.7	335.7	327.9	318.9	308.9	302.1	297.5	278.6	255.4
10°	373.2	370.7	366.4	357.5	347.9	335.0	320.7	304.6	290.4	274.6	247.1
12.5°	400.4	396.8	390.7	379.3	365.7	349.6	330.0	311.1	290.7	272.1	237.5
15°	427.5	423.6	417.1	403.2	385.4	364.3	340.4	316.4	292.5	268.9	227.5
17.5°	457.1	451.8	442.1	426.4	403.9	377.9	349.6	320.7	291.8	265.0	216.8
20°	488.9	481.4	471.1	450.0	423.6	392.9	358.9	325.0	291.4	260.4	204.6
22.5°	515.4	507.9	496.4	474.6	442.9	405.4	366.8	327.9	290.0	255.0	193.2
25°	538.2	532.1	519.6	494.6	461.1	418.6	374.3	330.0	287.9	249.3	181.1
27.5°	556.1	550.4	536.4	510.7	476.4	430.4	380.0	331.1	285.0	243.6	168.6
30°	571.8	566.1	549.3	522.9	486.8	439.6	385.7	331.4	281.4	235.0	155.0
32.5°	583.9	578.6	561.4	533.2	493.9	446.1	388.9	331.1	276.8	228.9	140.4
35°	596.1	590.7	570.7	540.7	499.3	448.9	391.4	329.3	271.1	218.9	126.4
37.5°	605.4	599.3	578.9	545.7	501.8	449.6	391.1	326.8	265.0	210.7	112.5
40°	611.8	605.4	583.6	548.6	502.5	448.6	388.2	322.5	257.9	200.4	97.9
42.5°	616.1	608.9	585.7	552.9	501.1	445.7	383.9	317.1	250.0	191.4	83.9
45°	618.2	610.7	586.1	549.3	498.6	440.4	377.5	310.4	241.4	179.3	70.0
47.5°	617.1	608.9	584.3	545.4	493.9	434.6	370.4	302.1	231.1	168.6	56.8
50°	615.4	606.8	580.4	540.4	487.5	427.5	362.5	292.1	220.4	155.4	45.0
52.5°	609.6	601.1	576.1	533.2	480.0	419.3	351.8	281.8	208.9	142.5	34.3
55°	602.5	594.6	568.6	526.8	470.4	409.3	341.8	270.7	197.9	129.3	24.6
57.5°	591.4	584.3	559.3	516.4	460.7	398.2	330.7	258.6	183.9	116.1	17.1
60°	577.9	570.7	546.4	504.6	449.6	385.7	318.6	246.1	171.4	102.9	10.7
62.5°	563.6	556.8	531.4	490.0	435.7	372.5	305.4	233.6	158.2	90.7	6.4
65°	544.6	538.2	515.4	472.5	420.4	358.2	290.7	218.6	144.6	77.1	3.6
67.5°	524.6	518.9	495.7	456.4	402.5	342.5	275.7	203.9	130.4	65.4	1.8
70°	503.2	496.1	474.6	434.6	384.3	324.6	259.3	188.9	116.8	53.9	0.0
72.5°	478.2	472.9	452.1	414.3	363.2	305.7	242.5	172.5	101.8	42.9	0.4
75°	453.9	447.1	428.2	392.5	342.5	285.7	223.9	157.1	87.1	32.9	0.4
77.5°	422.5	420.4	402.5	367.9	322.9	266.4	203.6	138.6	73.2	23.6	0.4
80°	391.1	388.9	375.0	343.2	300.0	243.6	184.6	121.1	59.6	15.7	0.4
82.5°	360.0	357.1	343.9	317.5	276.8	224.3	165.0	103.6	47.1	9.6	0.4
85°	332.1	328.6	314.3	290.0	252.9	202.5	144.6	86.4	35.0	5.4	0.7
87.5°	308.2	305.7	290.0	265.0	228.6	182.1	126.8	70.0	24.6	2.5	1.1
90°	287.9	282.5	268.6	242.1	205.7	159.6	107.9	56.1	16.4	1.4	1.4
92.5°	267.9	263.2	247.9	220.7	185.4	140.4	89.6	42.9	10.4	0.7	1.8
95°	247.1	242.1	227.1	202.1	164.6	120.7	73.6	31.4	5.7	0.7	1.8
97.5°	226.8	222.1	206.4	181.4	146.1	103.6	58.2	22.1	2.9	0.7	1.4
100°	207.9	202.5	188.2	163.2	127.5	86.4	45.0	14.3	1.8	0.7	1.4
102.5°	187.9	183.6	168.9	144.6	108.2	70.4	33.6	8.9	0.7	0.7	1.1
105°	170.0	164.6	150.4	125.4	92.1	55.4	23.6	5.4	0.7	0.7	1.1



TEST NUMBER: P551129

CATALOG NUMBER: FCC-X-2-LD4-1STD-50-UNV-80-85-ED1D-90

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	110.7	106.4	93.9	72.9	46.8	21.8	6.4	1.1	1.1	1.1	1.1
115°	92.5	86.1	75.0	56.4	34.6	14.3	3.2	1.1	1.1	1.1	1.1
117.5°	73.9	68.6	60.7	42.9	22.9	9.3	1.8	1.1	1.1	1.1	1.1
120°	57.9	52.9	43.9	29.6	15.4	5.4	0.7	1.1	1.1	1.1	1.1
122.5°	41.4	37.5	29.6	19.3	9.3	2.5	1.1	1.1	1.4	1.4	1.1
125°	27.5	25.4	19.6	11.8	5.7	1.1	1.1	1.1	1.4	1.4	1.1
127.5°	17.9	16.1	11.4	6.8	2.5	1.1	1.1	1.4	1.4	1.4	1.1
130°	10.0	8.9	6.8	3.9	1.1	1.1	1.1	1.4	1.4	1.4	1.1
132.5°	5.7	5.4	3.6	0.7	1.1	1.1	1.1	1.4	1.4	1.4	1.4
135°	1.4	0.7	0.7	0.7	1.1	1.1	1.4	1.4	1.8	1.8	1.4
137.5°	0.4	0.4	0.7	0.7	1.1	1.1	1.4	1.8	1.8	1.8	1.4
140°	0.4	0.4	0.7	1.1	1.1	1.1	1.4	1.8	1.8	1.8	1.4
142.5°	0.4	0.7	0.7	1.1	1.1	1.4	1.4	1.8	1.8	1.4	1.4
145°	0.4	0.7	0.7	1.1	1.1	1.4	1.4	1.8	1.4	1.4	1.4
147.5°	0.7	0.7	0.7	1.1	1.1	1.4	1.4	1.8	1.8	1.4	1.4
150°	0.4	0.7	0.7	1.1	1.4	1.4	1.4	1.8	1.4	1.4	1.4
152.5°	0.4	0.7	0.7	1.1	1.4	1.4	1.4	1.8	1.4	1.4	1.4
155°	0.7	0.7	0.7	1.1	1.4	1.4	1.4	1.8	1.4	1.4	1.8
157.5°	0.7	0.7	0.7	1.1	1.4	1.4	1.4	1.8	1.4	1.4	1.8
160°	0.7	0.7	0.7	1.1	1.1	1.4	1.4	1.4	1.4	1.4	1.4
162.5°	0.7	0.7	0.7	1.1	1.1	1.4	1.4	1.4	1.4	1.4	1.4
165°	0.7	0.7	0.7	0.7	1.1	1.1	1.4	1.4	1.4	1.4	1.4
167.5°	0.7	0.7	0.7	1.1	1.1	1.1	1.4	1.4	1.4	1.4	1.4
170°	0.7	0.7	0.7	1.1	1.1	1.1	1.4	1.8	1.8	1.8	1.8
172.5°	0.7	0.7	0.7	1.1	1.1	1.4	1.4	1.8	1.8	1.8	1.8
175°	0.7	0.7	0.7	1.1	1.1	1.4	1.4	1.8	1.8	1.8	1.8
177.5°	0.4	0.7	0.7	1.1	1.1	1.4	1.4	1.8	1.8	1.8	1.4
180°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1



TEST NUMBER: P551129

CATALOG NUMBER: FCC-X-2-LD4-1STD-50-UNV-80-85-ED1D-90

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	280.4	280.4	280.4
2.5°	266.8	261.8	260.4
5°	252.5	244.3	239.6
7.5°	238.2	227.1	221.8
10°	225.0	209.3	203.6
12.5°	209.3	191.1	182.1
15°	194.3	170.7	162.1
17.5°	177.5	151.1	141.1
20°	161.8	131.4	121.1
22.5°	143.9	112.1	100.7
25°	127.9	92.9	80.0
27.5°	110.0	73.2	62.1
30°	93.2	56.1	45.0
32.5°	77.1	41.1	31.1
35°	62.1	27.9	19.6
37.5°	47.9	17.1	10.0
40°	34.6	8.9	4.6
42.5°	23.2	4.3	2.5
45°	14.3	2.1	0.0
47.5°	8.2	0.0	0.0
50°	4.3	0.0	0.0
52.5°	1.8	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	0.7	1.1
80°	0.7	1.4	1.8
82.5°	1.4	1.8	1.8
85°	1.4	1.8	2.1
87.5°	1.8	2.1	2.5
90°	2.1	2.5	2.5
92.5°	2.1	2.9	2.9
95°	2.5	2.9	3.2
97.5°	2.9	3.2	3.2
100°	2.5	3.2	3.6
102.5°	2.1	3.2	3.2
105°	1.8	2.5	2.9



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	1.4	1.8	1.8
115°	1.1	1.4	1.8
117.5°	1.1	1.4	1.4
120°	1.1	1.1	1.4
122.5°	1.1	1.1	1.4
125°	1.1	1.1	1.4
127.5°	1.4	1.1	1.1
130°	1.1	1.1	1.1
132.5°	1.4	1.1	1.1
135°	1.4	1.1	1.1
137.5°	1.4	1.1	1.1
140°	1.4	1.1	1.1
142.5°	1.4	1.1	1.1
145°	1.1	1.1	1.1
147.5°	1.1	1.1	1.1
150°	1.1	1.1	0.7
152.5°	1.1	0.7	0.7
155°	1.1	0.7	0.4
157.5°	1.4	0.7	0.4
160°	1.1	0.7	0.4
162.5°	1.1	0.7	0.4
165°	1.1	0.7	0.0
167.5°	1.1	0.7	0.4
170°	1.1	0.7	0.4
172.5°	1.1	0.7	0.4
175°	1.1	0.4	0.4
177.5°	1.1	0.4	0.4
180°	1.1	1.1	1.1



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	150.0	145.7	131.4	107.9	75.4	42.1	15.7	2.9	0.7	1.1	1.1
110°	130.7	127.1	112.5	89.6	60.7	31.4	10.4	1.8	1.1	1.1	1.1





107.5°	1.4	2.1	2.5
110°	1.4	1.8	2.1



(END OF REPORT)