

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: P550939

Luminaire Tested: **FCC-X-2-LD4-1STD-30-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: P550939
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-80-86-ED1D-90
Description: FCC CORNER MOUNT LUMINAIRE WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 3000K, AND 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

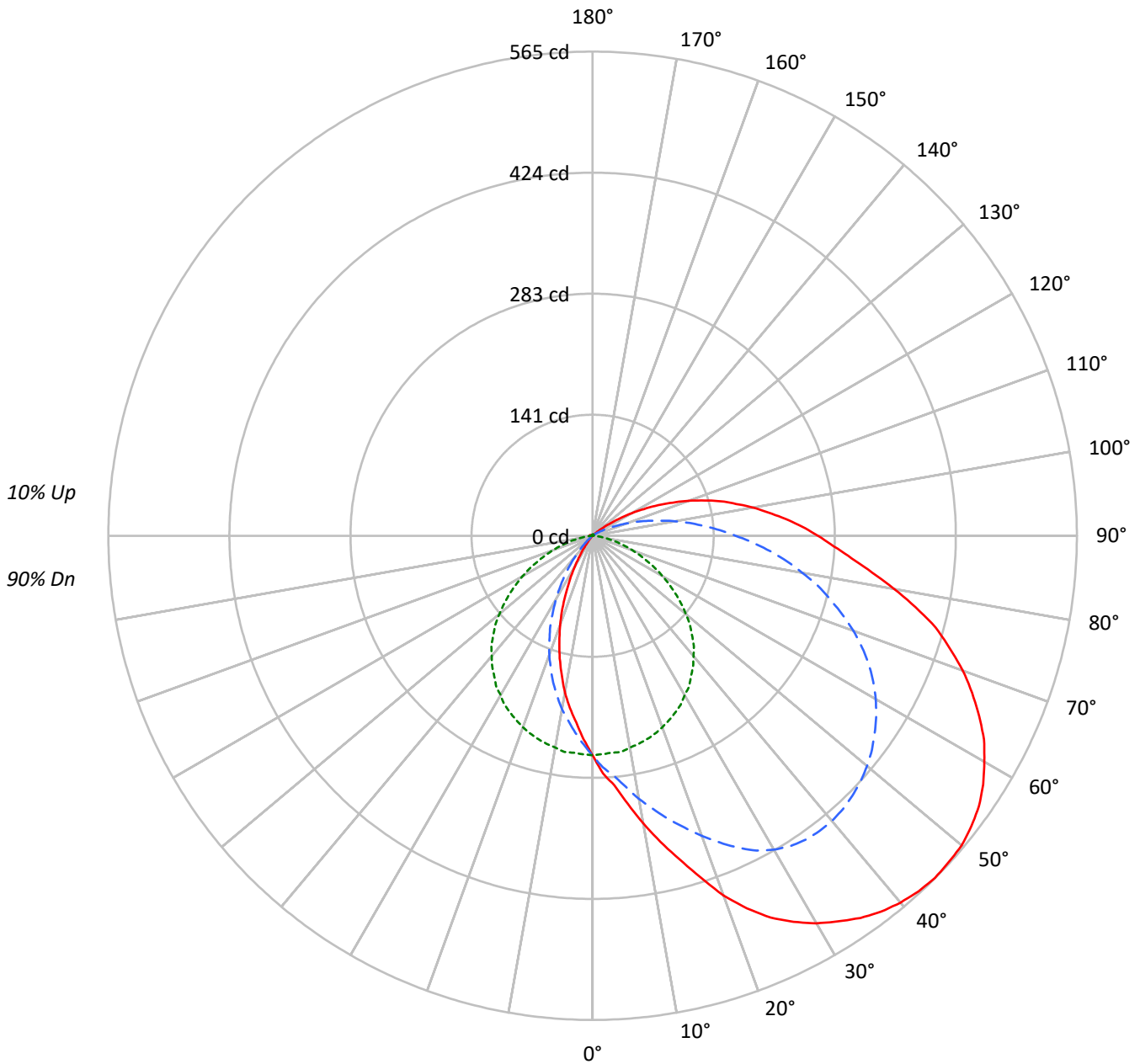
Lumens per Lamp: N/A
Luminaire Lumens: 1266.0 lumens
Efficiency: N/A
Efficacy: 75.8 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

Input Watts (W): 16.7
Input Voltage (V): NR
Input Current (Ain): 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°	2757	2757	2757
5°	3026	2716	2266
10°	3424	2683	1867
15°	3837	2648	1455
20°	4328	2605	1072
25°	4735	2555	704
30°	5038	2489	396
35°	5300	2417	174
40°	5531	2327	42
45°	5731	2216	0
50°	5898	2068	0
55°	6025	1881	0
60°	6089	1663	0
65°	6115	1416	0
70°	6093	1155	0
75°	6016	851	4
80°	5773	522	26
85°	5580	249	37



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	24.5	1.9
10°-20°	73.4	5.8
20°-30°	118.9	9.4
30°-40°	152.8	12.1
40°-50°	173.0	13.7
50°-60°	179.2	14.2
60°-70°	169.0	13.3
70°-80°	141.6	11.2
80°-90°	102.7	8.1
90°-100°	67.5	5.3
100°-110°	39.0	3.1
110°-120°	17.2	1.4
120°-130°	4.7	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°	216.9	17.1
0°-40°	369.7	29.2
0°-60°	721.8	57.0
0°-90°	1135.1	89.7
90°-120°	123.6	9.8
90°-150°	130.1	10.3
90°-180°	131.0	10.3
0°-180°	1266.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	256	256	256	256	256	
5°	292	281	254	231	219	29
15°	390	342	246	178	148	113
25°	492	402	228	117	73	227
35°	544	433	200	57	18	341
45°	565	429	164	13	0	436
55°	550	402	118	0	0	491
65°	498	356	70	0	0	492
75°	415	287	30	0	0	435
85°	303	208	5	1	2	259
90°	263	167	1	2	2	144
95°	226	130	1	2	3	177
105°	155	67	1	2	3	164
115°	84	22	1	1	2	85
125°	25	3	1	1	1	25
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°	256.1	256.1	256.1	256.1	256.1	256.1	256.1	256.1	256.1	256.1	256.1
2.5°	277.6	277.3	276.3	274.7	272.4	268.5	265.2	262.3	258.4	255.1	248.9
5°	292.3	290.7	289.4	287.7	282.5	278.9	273.0	266.5	260.3	254.1	241.7
7.5°	315.8	313.2	311.2	306.6	299.5	291.3	282.2	276.0	271.7	254.5	233.2
10°	340.9	338.6	334.7	326.5	317.7	306.0	292.9	278.3	265.2	250.9	225.7
12.5°	365.7	362.4	356.9	346.4	334.0	319.4	301.4	284.1	265.5	248.6	216.9
15°	390.5	386.9	381.0	368.3	352.0	332.7	310.9	289.0	267.2	245.6	207.8
17.5°	417.6	412.7	403.9	389.5	369.0	345.1	319.4	292.9	266.5	242.1	198.0
20°	446.6	439.7	430.3	411.0	386.9	358.8	327.8	296.9	266.2	237.8	186.9
22.5°	470.7	463.9	453.4	433.5	404.5	370.3	335.0	299.5	264.9	232.9	176.5
25°	491.6	486.1	474.6	451.8	421.1	382.3	341.9	301.4	262.9	227.7	165.4
27.5°	507.9	502.7	490.0	466.5	435.2	393.1	347.1	302.4	260.3	222.5	154.0
30°	522.3	517.1	501.7	477.6	444.6	401.6	352.3	302.7	257.1	214.7	141.6
32.5°	533.4	528.5	512.8	487.0	451.2	407.4	355.3	302.4	252.8	209.1	128.2
35°	544.5	539.6	521.3	493.9	456.1	410.1	357.5	300.8	247.6	200.0	115.5
37.5°	552.9	547.4	528.8	498.5	458.3	410.7	357.2	298.5	242.1	192.5	102.8
40°	558.8	552.9	533.0	501.1	459.0	409.7	354.6	294.6	235.5	183.0	89.4
42.5°	562.7	556.2	535.0	505.0	457.7	407.1	350.7	289.7	228.4	174.9	76.7
45°	564.7	557.8	535.3	501.7	455.4	402.2	344.8	283.5	220.5	163.8	63.9
47.5°	563.7	556.2	533.7	498.1	451.2	397.0	338.3	276.0	211.1	154.0	51.9
50°	562.1	554.2	530.1	493.6	445.3	390.5	331.1	266.8	201.3	141.9	41.1
52.5°	556.9	549.0	526.2	487.0	438.4	383.0	321.3	257.4	190.8	130.2	31.3
55°	550.3	543.2	519.3	481.2	429.6	373.8	312.2	247.3	180.7	118.1	22.5
57.5°	540.2	533.7	510.9	471.7	420.8	363.7	302.1	236.2	168.0	106.0	15.7
60°	527.8	521.3	499.1	460.9	410.7	352.3	291.0	224.8	156.6	94.0	9.8
62.5°	514.8	508.6	485.4	447.6	398.0	340.2	278.9	213.3	144.5	82.9	5.9
65°	497.5	491.6	470.7	431.6	384.0	327.2	265.5	199.6	132.1	70.5	3.3
67.5°	479.2	474.0	452.8	416.9	367.6	312.8	251.8	186.3	119.1	59.7	1.6
70°	459.6	453.1	433.5	397.0	351.0	296.5	236.8	172.6	106.7	49.3	0.0
72.5°	436.8	431.9	413.0	378.4	331.8	279.2	221.5	157.6	93.0	39.1	0.3
75°	414.6	408.4	391.1	358.5	312.8	261.0	204.5	143.5	79.6	30.0	0.3
77.5°	385.9	384.0	367.6	336.0	294.9	243.4	185.9	126.6	66.9	21.5	0.3
80°	357.2	355.3	342.5	313.5	274.0	222.5	168.7	110.6	54.5	14.4	0.3
82.5°	328.8	326.2	314.1	290.0	252.8	204.9	150.7	94.6	43.1	8.8	0.3
85°	303.4	300.1	287.1	264.9	231.0	185.0	132.1	78.9	32.0	4.9	0.7
87.5°	281.5	279.2	264.9	242.1	208.8	166.4	115.8	63.9	22.5	2.3	1.0
90°	262.9	258.0	245.3	221.2	187.9	145.8	98.5	51.2	15.0	1.3	1.3
92.5°	244.7	240.4	226.4	201.6	169.3	128.2	81.9	39.1	9.5	0.7	1.6
95°	225.7	221.2	207.5	184.6	150.4	110.3	67.2	28.7	5.2	0.7	1.6
97.5°	207.1	202.9	188.6	165.7	133.4	94.6	53.2	20.2	2.6	0.7	1.3
100°	189.9	185.0	171.9	149.1	116.5	78.9	41.1	13.0	1.6	0.7	1.3
102.5°	171.6	167.7	154.3	132.1	98.8	64.3	30.7	8.2	0.7	0.7	1.0
105°	155.3	150.4	137.3	114.5	84.2	50.6	21.5	4.9	0.7	0.7	1.0



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	101.1	97.2	85.8	66.5	42.7	19.9	5.9	1.0	1.0	1.0	1.0
115°	84.5	78.6	68.5	51.5	31.6	13.0	2.9	1.0	1.0	1.0	1.0
117.5°	67.5	62.6	55.5	39.1	20.9	8.5	1.6	1.0	1.0	1.0	1.0
120°	52.8	48.3	40.1	27.1	14.0	4.9	0.7	1.0	1.0	1.0	1.0
122.5°	37.8	34.3	27.1	17.6	8.5	2.3	1.0	1.0	1.3	1.3	1.0
125°	25.1	23.2	17.9	10.8	5.2	1.0	1.0	1.0	1.3	1.3	1.0
127.5°	16.3	14.7	10.4	6.2	2.3	1.0	1.0	1.3	1.3	1.3	1.0
130°	9.1	8.2	6.2	3.6	1.0	1.0	1.0	1.3	1.3	1.3	1.0
132.5°	5.2	4.9	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	1.6	1.6	1.3
137.5°	0.3	0.3	0.7	0.7	1.0	1.0	1.3	1.6	1.6	1.6	1.3
140°	0.3	0.3	0.7	1.0	1.0	1.0	1.3	1.6	1.6	1.6	1.3
142.5°	0.3	0.7	0.7	1.0	1.0	1.3	1.3	1.6	1.6	1.3	1.3
145°	0.3	0.7	0.7	1.0	1.0	1.3	1.3	1.6	1.3	1.3	1.3
147.5°	0.7	0.7	0.7	1.0	1.0	1.3	1.3	1.6	1.6	1.3	1.3
150°	0.3	0.7	0.7	1.0	1.3	1.3	1.3	1.6	1.3	1.3	1.3
152.5°	0.3	0.7	0.7	1.0	1.3	1.3	1.3	1.6	1.3	1.3	1.3
155°	0.7	0.7	0.7	1.0	1.3	1.3	1.3	1.6	1.3	1.3	1.6
157.5°	0.7	0.7	0.7	1.0	1.3	1.3	1.3	1.6	1.3	1.3	1.6
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	1.6	1.6	1.6	1.6
172.5°	0.7	0.7	0.7	1.0	1.0	1.3	1.3	1.6	1.6	1.6	1.6
175°	0.7	0.7	0.7	1.0	1.0	1.3	1.3	1.6	1.6	1.6	1.6
177.5°	0.3	0.7	0.7	1.0	1.0	1.3	1.3	1.6	1.6	1.6	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°	256.1	256.1	256.1
2.5°	243.7	239.1	237.8
5°	230.6	223.1	218.9
7.5°	217.6	207.5	202.6
10°	205.5	191.2	185.9
12.5°	191.2	174.5	166.4
15°	177.5	155.9	148.1
17.5°	162.1	138.0	128.9
20°	147.8	120.0	110.6
22.5°	131.5	102.4	92.0
25°	116.8	84.8	73.1
27.5°	100.5	66.9	56.8
30°	85.1	51.2	41.1
32.5°	70.5	37.5	28.4
35°	56.8	25.4	17.9
37.5°	43.7	15.7	9.1
40°	31.6	8.2	4.2
42.5°	21.2	3.9	2.3
45°	13.0	2.0	0.0
47.5°	7.5	0.0	0.0
50°	3.9	0.0	0.0
52.5°	1.6	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	1.6
82.5°	1.3	1.6	1.6
85°	1.3	1.6	2.0
87.5°	1.6	2.0	2.3
90°	2.0	2.3	2.3
92.5°	2.0	2.6	2.6
95°	2.3	2.6	2.9
97.5°	2.6	2.9	2.9
100°	2.3	2.9	3.3
102.5°	2.0	2.9	2.9
105°	1.6	2.3	2.6



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	1.3	1.6	1.6
115°	1.0	1.3	1.6
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°	137.0	133.1	120.0	98.5	68.8	38.5	14.4	2.6	0.7	1.0	1.0
110°	119.4	116.1	102.8	81.9	55.5	28.7	9.5	1.6	1.0	1.0	1.0





107.5°	1.3	2.0	2.3
110°	1.3	1.6	2.0



(END OF REPORT)