

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: P550935

Luminaire Tested: **FCC-X-2-LD4-1STD-30-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: P550935
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-80-84-ED1D-90
Description: FCC CORNER MOUNT LUMINAIRE WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 3000K, AND 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

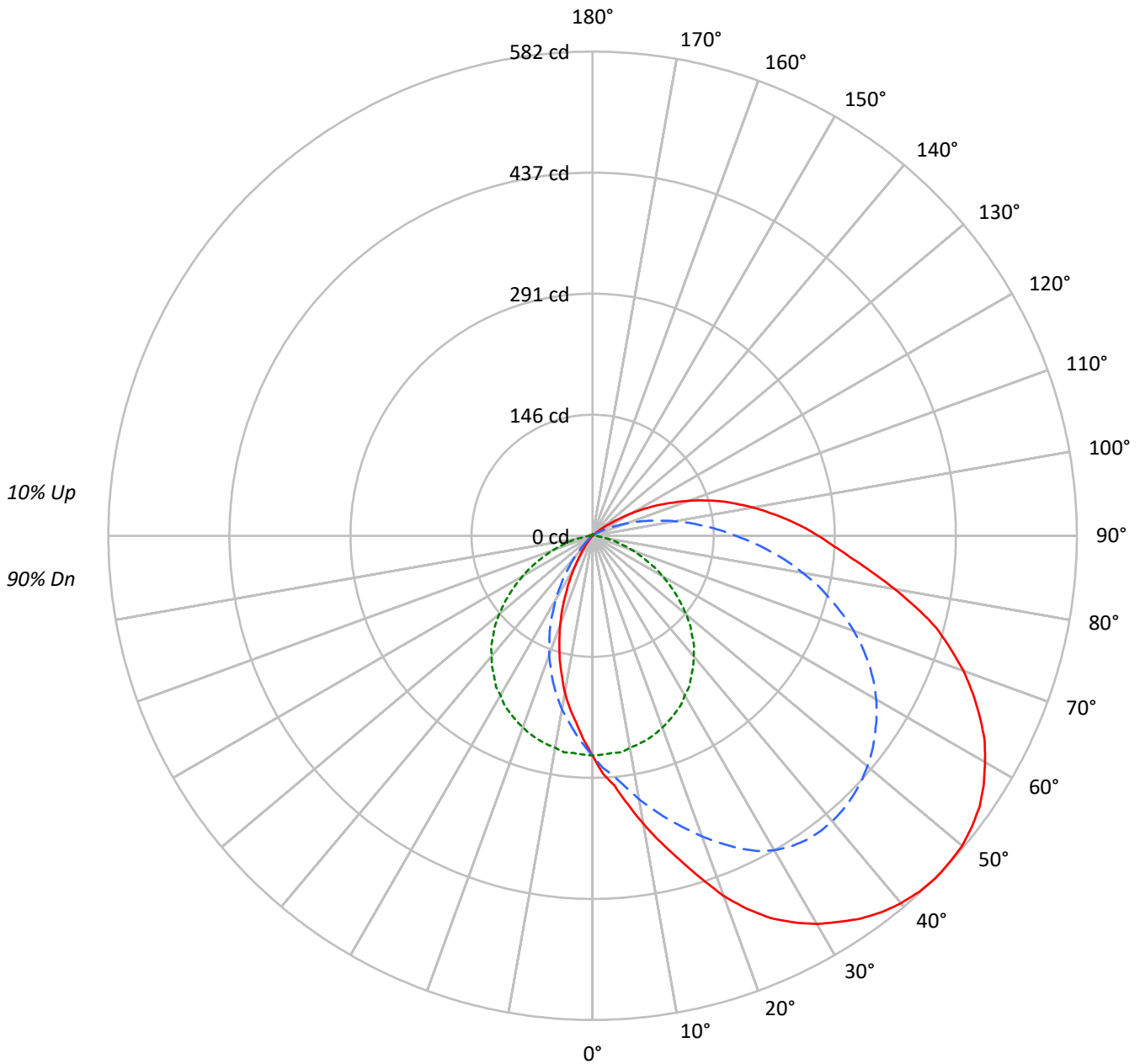
Lumens per Lamp: N/A
Luminaire Lumens: 1305.9 lumens
Efficiency: N/A
Efficacy: 78.2 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

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°	2844	2844	2844
5°	3121	2802	2338
10°	3533	2768	1927
15°	3958	2732	1502
20°	4465	2688	1106
25°	4884	2636	726
30°	5197	2567	409
35°	5467	2493	180
40°	5706	2401	44
45°	5911	2285	0
50°	6084	2134	0
55°	6215	1940	0
60°	6282	1715	0
65°	6308	1460	0
70°	6287	1190	0
75°	6206	879	4
80°	5955	537	27
85°	5757	254	37



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	25.3	1.9
10°-20°	75.8	5.8
20°-30°	122.7	9.4
30°-40°	157.6	12.1
40°-50°	178.4	13.7
50°-60°	184.8	14.2
60°-70°	174.3	13.3
70°-80°	146.1	11.2
80°-90°	105.9	8.1
90°-100°	69.6	5.3
100°-110°	40.2	3.1
110°-120°	17.7	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°	223.8	17.1
0°-40°	381.4	29.2
0°-60°	744.6	57.0
0°-90°	1170.9	89.7
90°-120°	127.5	9.8
90°-150°	134.1	10.3
90°-180°	135.0	10.3
0°-180°	1305.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	264	264	264	264	264	
5°	302	290	262	238	226	30
15°	403	353	253	183	153	116
25°	507	414	235	120	75	234
35°	562	447	206	59	18	352
45°	582	442	169	14	0	450
55°	568	414	122	0	0	507
65°	513	367	73	0	0	508
75°	428	296	31	0	0	449
85°	313	215	5	1	2	267
90°	271	172	1	2	2	149
95°	233	134	1	2	3	183
105°	160	70	1	2	3	169
115°	87	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°	264.2	264.2	264.2	264.2	264.2	264.2	264.2	264.2	264.2	264.2	264.2
2.5°	286.4	286.0	285.0	283.4	281.0	277.0	273.6	270.6	266.5	263.2	256.8
5°	301.5	299.8	298.5	296.8	291.4	287.7	281.7	274.9	268.5	262.2	249.4
7.5°	325.8	323.1	321.0	316.3	308.9	300.5	291.1	284.7	280.3	262.5	240.6
10°	351.7	349.3	345.3	336.9	327.8	315.7	302.2	287.1	273.6	258.8	232.9
12.5°	377.2	373.9	368.2	357.4	344.6	329.5	310.9	293.1	273.9	256.4	223.8
15°	402.8	399.1	393.1	379.9	363.1	343.3	320.7	298.2	275.6	253.4	214.4
17.5°	430.8	425.7	416.6	401.8	380.6	356.0	329.5	302.2	274.9	249.7	204.3
20°	460.7	453.6	443.9	424.0	399.1	370.2	338.2	306.2	274.6	245.3	192.8
22.5°	485.6	478.5	467.8	447.2	417.3	382.0	345.6	308.9	273.3	240.3	182.1
25°	507.1	501.4	489.6	466.1	434.5	394.4	352.7	310.9	271.2	234.9	170.6
27.5°	524.0	518.6	505.5	481.2	448.9	405.5	358.1	312.0	268.5	229.5	158.8
30°	538.8	533.4	517.6	492.7	458.7	414.3	363.4	312.3	265.2	221.4	146.1
32.5°	550.2	545.2	529.0	502.4	465.4	420.3	366.5	312.0	260.8	215.7	132.3
35°	561.7	556.6	537.8	509.5	470.5	423.0	368.8	310.3	255.4	206.3	119.1
37.5°	570.4	564.7	545.5	514.2	472.8	423.7	368.5	307.9	249.7	198.5	106.0
40°	576.5	570.4	549.9	516.9	473.5	422.7	365.8	303.9	243.0	188.8	92.2
42.5°	580.5	573.8	551.9	520.9	472.1	420.0	361.8	298.8	235.6	180.4	79.1
45°	582.5	575.5	552.2	517.6	469.8	414.9	355.7	292.4	227.5	168.9	66.0
47.5°	581.5	573.8	550.6	513.9	465.4	409.6	349.0	284.7	217.7	158.8	53.5
50°	579.8	571.8	546.9	509.2	459.4	402.8	341.6	275.3	207.6	146.4	42.4
52.5°	574.4	566.4	542.8	502.4	452.3	395.1	331.5	265.5	196.9	134.3	32.3
55°	567.7	560.3	535.7	496.4	443.2	385.7	322.1	255.1	186.4	121.8	23.2
57.5°	557.3	550.6	527.0	486.6	434.1	375.2	311.6	243.6	173.3	109.4	16.2
60°	544.5	537.8	514.9	475.5	423.7	363.4	300.2	231.9	161.5	96.9	10.1
62.5°	531.0	524.6	500.7	461.7	410.6	351.0	287.7	220.1	149.1	85.5	6.1
65°	513.2	507.1	485.6	445.2	396.1	337.5	273.9	206.0	136.3	72.7	3.4
67.5°	494.4	489.0	467.1	430.1	379.3	322.7	259.8	192.2	122.8	61.6	1.7
70°	474.2	467.4	447.2	409.6	362.1	305.9	244.3	178.0	110.0	50.8	0.0
72.5°	450.6	445.6	426.0	390.4	342.2	288.1	228.5	162.5	95.9	40.4	0.3
75°	427.7	421.3	403.5	369.8	322.7	269.2	211.0	148.1	82.1	31.0	0.3
77.5°	398.1	396.1	379.3	346.6	304.2	251.0	191.8	130.6	69.0	22.2	0.3
80°	368.5	366.5	353.4	323.4	282.7	229.5	174.0	114.1	56.2	14.8	0.3
82.5°	339.2	336.5	324.1	299.2	260.8	211.3	155.5	97.6	44.4	9.1	0.3
85°	313.0	309.6	296.1	273.3	238.3	190.8	136.3	81.4	33.0	5.0	0.7
87.5°	290.4	288.1	273.3	249.7	215.4	171.6	119.5	66.0	23.2	2.4	1.0
90°	271.2	266.2	253.1	228.2	193.8	150.4	101.6	52.8	15.5	1.3	1.3
92.5°	252.4	248.0	233.5	208.0	174.7	132.3	84.5	40.4	9.8	0.7	1.7
95°	232.9	228.2	214.0	190.5	155.1	113.7	69.3	29.6	5.4	0.7	1.7
97.5°	213.7	209.3	194.5	171.0	137.6	97.6	54.9	20.9	2.7	0.7	1.3
100°	195.9	190.8	177.3	153.8	120.1	81.4	42.4	13.5	1.7	0.7	1.3
102.5°	177.0	173.0	159.2	136.3	102.0	66.3	31.6	8.4	0.7	0.7	1.0
105°	160.2	155.1	141.7	118.1	86.8	52.2	22.2	5.0	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°	104.3	100.3	88.5	68.7	44.1	20.5	6.1	1.0	1.0	1.0	1.0
115°	87.2	81.1	70.7	53.2	32.6	13.5	3.0	1.0	1.0	1.0	1.0
117.5°	69.7	64.6	57.2	40.4	21.5	8.7	1.7	1.0	1.0	1.0	1.0
120°	54.5	49.8	41.4	27.9	14.5	5.0	0.7	1.0	1.0	1.0	1.0
122.5°	39.0	35.3	27.9	18.2	8.7	2.4	1.0	1.0	1.3	1.3	1.0
125°	25.9	23.9	18.5	11.1	5.4	1.0	1.0	1.0	1.3	1.3	1.0
127.5°	16.8	15.1	10.8	6.4	2.4	1.0	1.0	1.3	1.3	1.3	1.0
130°	9.4	8.4	6.4	3.7	1.0	1.0	1.0	1.3	1.3	1.3	1.0
132.5°	5.4	5.0	3.4	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°	264.2	264.2	264.2
2.5°	251.4	246.7	245.3
5°	237.9	230.2	225.8
7.5°	224.5	214.0	209.0
10°	212.0	197.2	191.8
12.5°	197.2	180.0	171.6
15°	183.1	160.9	152.8
17.5°	167.3	142.4	132.9
20°	152.4	123.8	114.1
22.5°	135.6	105.7	94.9
25°	120.5	87.5	75.4
27.5°	103.6	69.0	58.6
30°	87.8	52.8	42.4
32.5°	72.7	38.7	29.3
35°	58.6	26.2	18.5
37.5°	45.1	16.2	9.4
40°	32.6	8.4	4.4
42.5°	21.9	4.0	2.4
45°	13.5	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	2.4
90°	2.0	2.4	2.4
92.5°	2.0	2.7	2.7
95°	2.4	2.7	3.0
97.5°	2.7	3.0	3.0
100°	2.4	3.0	3.4
102.5°	2.0	3.0	3.0
105°	1.7	2.4	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°	141.3	137.3	123.8	101.6	71.0	39.7	14.8	2.7	0.7	1.0	1.0
110°	123.2	119.8	106.0	84.5	57.2	29.6	9.8	1.7	1.0	1.0	1.0





107.5°	1.3	2.0	2.4
110°	1.3	1.7	2.0



(END OF REPORT)