

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: P551359

Luminaire Tested: **FCC-X-2-LD4-2HI-40-UNV-82-88-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: P551359
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-LD4-2HI-40-UNV-82-88-ED1D-90
Description: FCC CORNER MOUNT LUMINAIRE WITH .187 CLEAR PC FIXTURE SIDE AND .500 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 4000K, AND 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

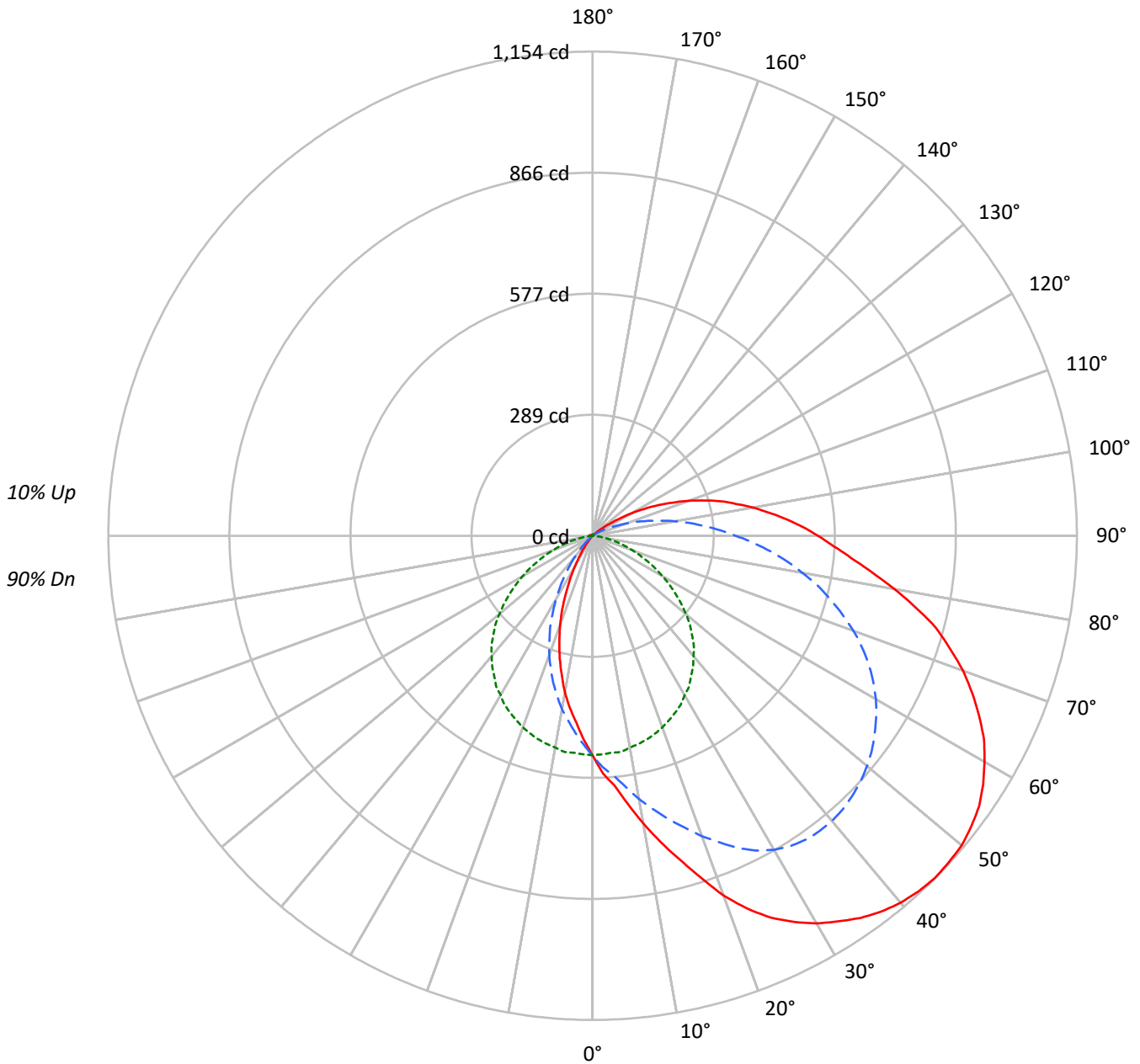
Lumens per Lamp: N/A
Luminaire Lumens: 2586.0 lumens
Efficiency: N/A
Efficacy: 59.7 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

Input Watts (W): 43.3
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

TEST NUMBER: P551359

CATALOG NUMBER: FCC-X-2-LD4-2HI-40-UNV-82-88-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°	5631	5631	5631
5°	6181	5548	4628
10°	6994	5480	3815
15°	7838	5411	2973
20°	8840	5323	2189
25°	9672	5220	1438
30°	10289	5083	810
35°	10824	4936	356
40°	11299	4754	86
45°	11706	4526	0
50°	12047	4225	0
55°	12307	3841	0
60°	12439	3396	0
65°	12490	2890	0
70°	12448	2357	0
75°	12289	1738	10
80°	11793	1063	53
85°	11397	508	74



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.1	1.9
10°-20°	150.0	5.8
20°-30°	242.9	9.4
30°-40°	312.1	12.1
40°-50°	353.3	13.7
50°-60°	366.0	14.2
60°-70°	345.2	13.3
70°-80°	289.3	11.2
80°-90°	209.7	8.1
90°-100°	137.8	5.3
100°-110°	79.6	3.1
110°-120°	35.1	1.4
120°-130°	9.5	0.4
130°-140°	2.2	0.1
140°-150°	1.4	0.1
150°-160°	1.0	0.0
160°-170°	0.6	0.0
170°-180°	0.2	0.0
0°-30°	443.1	17.1
0°-40°	755.2	29.2
0°-60°	1474.5	57.0
0°-90°	2318.6	89.7
90°-120°	252.5	9.8
90°-150°	265.7	10.3
90°-180°	267.0	10.3
0°-180°	2586.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	523	523	523	523	523	
5°	597	573	519	471	447	60
15°	798	699	502	362	302	230
25°	1004	821	465	239	149	464
35°	1112	885	408	116	37	697
45°	1154	876	334	27	0	891
55°	1124	821	241	0	0	1004
65°	1016	726	144	0	0	1005
75°	847	586	61	1	1	888
85°	620	425	10	3	4	529
90°	537	341	3	4	5	295
95°	461	266	1	5	6	362
105°	317	138	1	3	5	335
115°	173	46	2	2	3	173
125°	51	6	3	2	3	51
135°	3	2	3	3	2	5
145°	1	2	3	2	2	1
155°	1	3	3	2	1	0
165°	1	2	3	2	0	0
175°	1	2	3	2	1	0
180°	2	2	2	2	2	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
0°	523.1	523.1	523.1	523.1	523.1	523.1	523.1	523.1	523.1	523.1	523.1
2.5°	567.1	566.4	564.4	561.1	556.4	548.4	541.7	535.7	527.8	521.1	508.4
5°	597.1	593.7	591.1	587.7	577.1	569.7	557.7	544.4	531.7	519.1	493.8
7.5°	645.0	639.7	635.7	626.4	611.7	595.1	576.4	563.7	555.1	519.8	476.4
10°	696.3	691.7	683.7	667.0	649.0	625.0	598.4	568.4	541.7	512.4	461.1
12.5°	747.0	740.3	729.0	707.7	682.3	652.4	615.7	580.4	542.4	507.8	443.1
15°	797.6	790.3	778.3	752.3	719.0	679.7	635.0	590.4	545.7	501.8	424.5
17.5°	852.9	842.9	824.9	795.6	753.6	705.0	652.4	598.4	544.4	494.4	404.5
20°	912.2	898.2	878.9	839.6	790.3	733.0	669.7	606.4	543.7	485.8	381.8
22.5°	961.5	947.6	926.2	885.6	826.3	756.3	684.3	611.7	541.1	475.8	360.5
25°	1004.2	992.9	969.5	922.9	860.3	781.0	698.3	615.7	537.1	465.1	337.8
27.5°	1037.5	1026.8	1000.9	952.9	888.9	803.0	709.0	617.7	531.7	454.5	314.5
30°	1066.8	1056.2	1024.8	975.5	908.2	820.3	719.7	618.4	525.1	438.5	289.2
32.5°	1089.5	1079.5	1047.5	994.9	921.6	832.3	725.7	617.7	516.4	427.1	261.9
35°	1112.1	1102.1	1064.8	1008.9	931.6	837.6	730.3	614.4	505.8	408.5	235.9
37.5°	1129.5	1118.1	1080.2	1018.2	936.2	838.9	729.7	609.7	494.4	393.1	209.9
40°	1141.5	1129.5	1088.8	1023.5	937.6	836.9	724.3	601.7	481.1	373.8	182.6
42.5°	1149.5	1136.1	1092.8	1031.5	934.9	831.6	716.3	591.7	466.4	357.2	156.6
45°	1153.5	1139.5	1093.5	1024.8	930.2	821.6	704.3	579.1	450.5	334.5	130.6
47.5°	1151.5	1136.1	1090.2	1017.5	921.6	810.9	691.0	563.7	431.1	314.5	105.9
50°	1148.1	1132.1	1082.8	1008.2	909.6	797.6	676.3	545.1	411.1	289.9	84.0
52.5°	1137.5	1121.5	1074.8	994.9	895.6	782.3	656.4	525.8	389.8	265.9	64.0
55°	1124.1	1109.5	1060.8	982.9	877.6	763.6	637.7	505.1	369.2	241.2	46.0
57.5°	1103.5	1090.2	1043.5	963.5	859.6	743.0	617.0	482.4	343.2	216.6	32.0
60°	1078.2	1064.8	1019.5	941.6	838.9	719.7	594.4	459.1	319.8	191.9	20.0
62.5°	1051.5	1038.8	991.5	914.2	812.9	695.0	569.7	435.8	295.2	169.3	12.0
65°	1016.2	1004.2	961.5	881.6	784.3	668.4	542.4	407.8	269.9	143.9	6.7
67.5°	978.9	968.2	924.9	851.6	751.0	639.0	514.4	380.5	243.2	121.9	3.3
70°	938.9	925.6	885.6	810.9	717.0	605.7	483.8	352.5	217.9	100.6	0.0
72.5°	892.2	882.2	843.6	773.0	677.7	570.4	452.5	321.8	189.9	80.0	0.7
75°	846.9	834.3	799.0	732.3	639.0	533.1	417.8	293.2	162.6	61.3	0.7
77.5°	788.3	784.3	751.0	686.3	602.4	497.1	379.8	258.5	136.6	44.0	0.7
80°	729.7	725.7	699.7	640.4	559.7	454.5	344.5	225.9	111.3	29.3	0.7
82.5°	671.7	666.4	641.7	592.4	516.4	418.5	307.9	193.2	88.0	18.0	0.7
85°	619.7	613.0	586.4	541.1	471.8	377.8	269.9	161.3	65.3	10.0	1.3
87.5°	575.1	570.4	541.1	494.4	426.5	339.8	236.6	130.6	46.0	4.7	2.0
90°	537.1	527.1	501.1	451.8	383.8	297.9	201.2	104.6	30.7	2.7	2.7
92.5°	499.8	491.1	462.4	411.8	345.8	261.9	167.3	80.0	19.3	1.3	3.3
95°	461.1	451.8	423.8	377.2	307.2	225.2	137.3	58.6	10.7	1.3	3.3
97.5°	423.1	414.5	385.2	338.5	272.5	193.2	108.6	41.3	5.3	1.3	2.7
100°	387.8	377.8	351.2	304.5	237.9	161.3	84.0	26.7	3.3	1.3	2.7
102.5°	350.5	342.5	315.2	269.9	201.9	131.3	62.6	16.7	1.3	1.3	2.0
105°	317.2	307.2	280.5	233.9	171.9	103.3	44.0	10.0	1.3	1.3	2.0



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	206.6	198.6	175.3	135.9	87.3	40.6	12.0	2.0	2.0	2.0	2.0
115°	172.6	160.6	139.9	105.3	64.6	26.7	6.0	2.0	2.0	2.0	2.0
117.5°	137.9	127.9	113.3	80.0	42.6	17.3	3.3	2.0	2.0	2.0	2.0
120°	107.9	98.6	82.0	55.3	28.7	10.0	1.3	2.0	2.0	2.0	2.0
122.5°	77.3	70.0	55.3	36.0	17.3	4.7	2.0	2.0	2.7	2.7	2.0
125°	51.3	47.3	36.6	22.0	10.7	2.0	2.0	2.0	2.7	2.7	2.0
127.5°	33.3	30.0	21.3	12.7	4.7	2.0	2.0	2.7	2.7	2.7	2.0
130°	18.7	16.7	12.7	7.3	2.0	2.0	2.0	2.7	2.7	2.7	2.0
132.5°	10.7	10.0	6.7	1.3	2.0	2.0	2.0	2.7	2.7	2.7	2.7
135°	2.7	1.3	1.3	1.3	2.0	2.0	2.7	2.7	3.3	3.3	2.7
137.5°	0.7	0.7	1.3	1.3	2.0	2.0	2.7	3.3	3.3	3.3	2.7
140°	0.7	0.7	1.3	2.0	2.0	2.0	2.7	3.3	3.3	3.3	2.7
142.5°	0.7	1.3	1.3	2.0	2.0	2.7	2.7	3.3	3.3	2.7	2.7
145°	0.7	1.3	1.3	2.0	2.0	2.7	2.7	3.3	2.7	2.7	2.7
147.5°	1.3	1.3	1.3	2.0	2.0	2.7	2.7	3.3	3.3	2.7	2.7
150°	0.7	1.3	1.3	2.0	2.7	2.7	2.7	3.3	2.7	2.7	2.7
152.5°	0.7	1.3	1.3	2.0	2.7	2.7	2.7	3.3	2.7	2.7	2.7
155°	1.3	1.3	1.3	2.0	2.7	2.7	2.7	3.3	2.7	2.7	3.3
157.5°	1.3	1.3	1.3	2.0	2.7	2.7	2.7	3.3	2.7	2.7	3.3
160°	1.3	1.3	1.3	2.0	2.0	2.7	2.7	2.7	2.7	2.7	2.7
162.5°	1.3	1.3	1.3	2.0	2.0	2.7	2.7	2.7	2.7	2.7	2.7
165°	1.3	1.3	1.3	1.3	2.0	2.0	2.7	2.7	2.7	2.7	2.7
167.5°	1.3	1.3	1.3	2.0	2.0	2.0	2.7	2.7	2.7	2.7	2.7
170°	1.3	1.3	1.3	2.0	2.0	2.0	2.7	3.3	3.3	3.3	3.3
172.5°	1.3	1.3	1.3	2.0	2.0	2.7	2.7	3.3	3.3	3.3	3.3
175°	1.3	1.3	1.3	2.0	2.0	2.7	2.7	3.3	3.3	3.3	3.3
177.5°	0.7	1.3	1.3	2.0	2.0	2.7	2.7	3.3	3.3	3.3	2.7
180°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	523.1	523.1	523.1
2.5°	497.8	488.4	485.8
5°	471.1	455.8	447.1
7.5°	444.5	423.8	413.8
10°	419.8	390.5	379.8
12.5°	390.5	356.5	339.8
15°	362.5	318.5	302.5
17.5°	331.2	281.9	263.2
20°	301.9	245.2	225.9
22.5°	268.5	209.2	187.9
25°	238.6	173.3	149.3
27.5°	205.2	136.6	115.9
30°	173.9	104.6	84.0
32.5°	143.9	76.6	58.0
35°	115.9	52.0	36.6
37.5°	89.3	32.0	18.7
40°	64.6	16.7	8.7
42.5°	43.3	8.0	4.7
45°	26.7	4.0	0.0
47.5°	15.3	0.0	0.0
50°	8.0	0.0	0.0
52.5°	3.3	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°	0.7	0.7	0.7
77.5°	0.7	1.3	2.0
80°	1.3	2.7	3.3
82.5°	2.7	3.3	3.3
85°	2.7	3.3	4.0
87.5°	3.3	4.0	4.7
90°	4.0	4.7	4.7
92.5°	4.0	5.3	5.3
95°	4.7	5.3	6.0
97.5°	5.3	6.0	6.0
100°	4.7	6.0	6.7
102.5°	4.0	6.0	6.0
105°	3.3	4.7	5.3



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	2.7	3.3	3.3
115°	2.0	2.7	3.3
117.5°	2.0	2.7	2.7
120°	2.0	2.0	2.7
122.5°	2.0	2.0	2.7
125°	2.0	2.0	2.7
127.5°	2.7	2.0	2.0
130°	2.0	2.0	2.0
132.5°	2.7	2.0	2.0
135°	2.7	2.0	2.0
137.5°	2.7	2.0	2.0
140°	2.7	2.0	2.0
142.5°	2.7	2.0	2.0
145°	2.0	2.0	2.0
147.5°	2.0	2.0	2.0
150°	2.0	2.0	1.3
152.5°	2.0	1.3	1.3
155°	2.0	1.3	0.7
157.5°	2.7	1.3	0.7
160°	2.0	1.3	0.7
162.5°	2.0	1.3	0.7
165°	2.0	1.3	0.0
167.5°	2.0	1.3	0.7
170°	2.0	1.3	0.7
172.5°	2.0	1.3	0.7
175°	2.0	0.7	0.7
177.5°	2.0	0.7	0.7
180°	2.0	2.0	2.0



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	279.9	271.9	245.2	201.2	140.6	78.6	29.3	5.3	1.3	2.0	2.0
110°	243.9	237.2	209.9	167.3	113.3	58.6	19.3	3.3	2.0	2.0	2.0





107.5°	2.7	4.0	4.7
110°	2.7	3.3	4.0



(END OF REPORT)