

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: P551524

Luminaire Tested: **FCC-X-2-LD4-2LO-35-UNV-80-96-ED1D**

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: P551524
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-LD4-2LO-35-UNV-80-96-ED1D
Description: FCC CORNER MOUNT LUMINAIRE WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES AND 3500K, AND 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

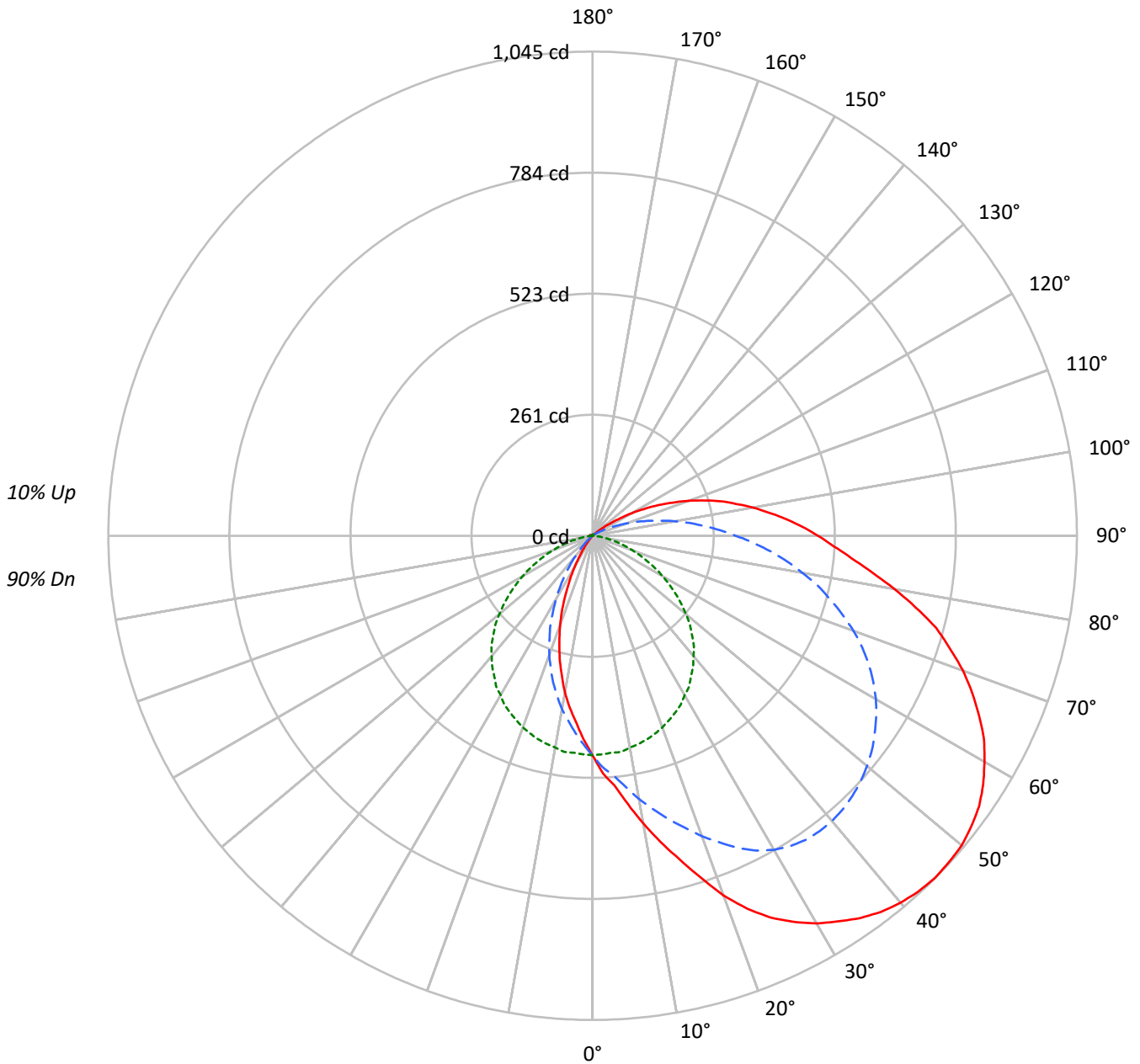
Lumens per Lamp: N/A
Luminaire Lumens: 2341.9 lumens
Efficiency: N/A
Efficacy: 99.7 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

Input Watts (W): 23.5
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-LD4-2LO-35-UNV-80-96-ED1D

Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20				20
RC	80				70				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	93	93	93	90
1	103	96	91	86	99	93	88	83	87	83	79	81	78	74	76	73	70	76	73	70	67
2	92	82	74	67	88	79	72	65	74	67	62	69	64	59	64	60	56	64	60	56	53
3	83	71	61	54	79	68	60	53	64	56	50	59	53	48	55	50	46	55	50	46	43
4	75	62	52	44	72	60	51	44	56	48	42	52	45	40	49	43	38	49	43	38	36
5	69	55	45	38	66	53	44	37	50	42	35	46	39	34	43	38	33	43	38	33	30
6	63	49	39	32	61	47	38	32	44	36	31	42	35	29	39	33	28	39	33	28	26
7	58	44	35	28	56	43	34	28	40	32	27	38	31	26	36	29	25	36	29	25	23
8	54	40	31	25	52	39	30	24	37	29	24	34	28	23	32	26	22	32	26	22	20
9	51	36	28	22	49	35	27	22	33	26	21	32	25	20	30	24	20	30	24	20	18
10	47	33	25	20	45	33	25	19	31	24	19	29	23	18	28	22	18	28	22	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	5099	5099	5099
5°	5597	5024	4192
10°	6334	4963	3455
15°	7099	4900	2693
20°	8007	4820	1983
25°	8759	4727	1302
30°	9319	4603	733
35°	9803	4469	323
40°	10233	4306	77
45°	10601	4099	0
50°	10911	3826	0
55°	11147	3479	0
60°	11264	3076	0
65°	11311	2619	0
70°	11273	2134	0
75°	11130	1574	9
80°	10679	965	48
85°	10322	463	66



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.4	1.9
10°-20°	135.9	5.8
20°-30°	220.0	9.4
30°-40°	282.6	12.1
40°-50°	319.9	13.7
50°-60°	331.5	14.2
60°-70°	312.6	13.3
70°-80°	262.0	11.2
80°-90°	189.9	8.1
90°-100°	124.8	5.3
100°-110°	72.1	3.1
110°-120°	31.8	1.4
120°-130°	8.6	0.4
130°-140°	2.0	0.1
140°-150°	1.3	0.1
150°-160°	0.9	0.0
160°-170°	0.5	0.0
170°-180°	0.2	0.0
0°-30°	401.3	17.1
0°-40°	683.9	29.2
0°-60°	1335.3	57.0
0°-90°	2099.8	89.7
90°-120°	228.7	9.8
90°-150°	240.5	10.3
90°-180°	242.0	10.3
0°-180°	2341.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	474	474	474	474	474	
5°	541	519	470	427	405	55
15°	722	633	454	328	274	208
25°	909	743	421	216	135	420
35°	1007	801	370	105	33	632
45°	1045	793	303	24	0	806
55°	1018	743	218	0	0	909
65°	920	658	130	0	0	911
75°	767	531	56	1	1	804
85°	561	385	9	2	4	479
90°	486	309	2	4	4	267
95°	418	241	1	4	5	328
105°	287	125	1	3	5	303
115°	156	41	2	2	3	157
125°	46	6	2	2	2	46
135°	2	2	3	2	2	4
145°	1	2	2	2	2	0
155°	1	2	2	2	1	0
165°	1	2	2	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°	473.7	473.7	473.7	473.7	473.7	473.7	473.7	473.7	473.7	473.7	473.7
2.5°	513.6	513.0	511.1	508.1	503.9	496.7	490.6	485.2	478.0	471.9	460.5
5°	540.7	537.7	535.3	532.3	522.6	516.0	505.1	493.0	481.6	470.1	447.2
7.5°	584.2	579.3	575.7	567.3	554.0	538.9	522.0	510.5	502.7	470.7	431.5
10°	630.6	626.4	619.2	604.1	587.8	566.1	541.9	514.8	490.6	464.1	417.6
12.5°	676.5	670.5	660.2	640.9	618.0	590.8	557.6	525.6	491.2	459.9	401.3
15°	722.4	715.7	704.9	681.3	651.2	615.5	575.1	534.7	494.2	454.4	384.4
17.5°	772.5	763.4	747.1	720.6	682.5	638.5	590.8	541.9	493.0	447.8	366.3
20°	826.2	813.5	796.0	760.4	715.7	663.8	606.5	549.2	492.4	439.9	345.8
22.5°	870.8	858.1	838.8	802.0	748.3	684.9	619.8	554.0	490.0	430.9	326.5
25°	909.4	899.2	878.1	835.8	779.1	707.3	632.4	557.6	486.4	421.2	306.0
27.5°	939.6	930.0	906.4	863.0	805.0	727.2	642.1	559.4	481.6	411.6	284.8
30°	966.2	956.5	928.1	883.5	822.5	742.9	651.8	560.0	475.5	397.1	261.9
32.5°	986.7	977.6	948.7	901.0	834.6	753.7	657.2	559.4	467.7	386.8	237.2
35°	1007.2	998.2	964.4	913.7	843.7	758.6	661.4	556.4	458.0	369.9	213.6
37.5°	1022.9	1012.6	978.2	922.1	847.9	759.8	660.8	552.2	447.8	356.1	190.1
40°	1033.8	1022.9	986.1	926.9	849.1	758.0	656.0	544.9	435.7	338.6	165.4
42.5°	1041.0	1028.9	989.7	934.2	846.7	753.1	648.7	535.9	422.4	323.5	141.8
45°	1044.6	1031.9	990.3	928.1	842.5	744.1	637.9	524.4	408.0	302.9	118.3
47.5°	1042.8	1028.9	987.3	921.5	834.6	734.4	625.8	510.5	390.5	284.8	96.0
50°	1039.8	1025.3	980.7	913.1	823.7	722.4	612.5	493.6	372.3	262.5	76.0
52.5°	1030.1	1015.7	973.4	901.0	811.1	708.5	594.4	476.1	353.0	240.8	57.9
55°	1018.1	1004.8	960.7	890.1	794.8	691.6	577.5	457.4	334.3	218.5	41.6
57.5°	999.4	987.3	945.0	872.6	778.5	672.9	558.8	436.9	310.8	196.1	29.0
60°	976.4	964.4	923.3	852.7	759.8	651.8	538.3	415.8	289.7	173.8	18.1
62.5°	952.3	940.8	898.0	828.0	736.2	629.4	516.0	394.7	267.3	153.3	10.9
65°	920.3	909.4	870.8	798.4	710.3	605.3	491.2	369.3	244.4	130.4	6.0
67.5°	886.5	876.9	837.6	771.2	680.1	578.7	465.9	344.6	220.3	110.4	3.0
70°	850.3	838.2	802.0	734.4	649.3	548.6	438.1	319.2	197.3	91.1	0.0
72.5°	808.1	799.0	764.0	700.0	613.7	516.6	409.8	291.5	172.0	72.4	0.6
75°	767.0	755.6	723.6	663.2	578.7	482.8	378.4	265.5	147.2	55.5	0.6
77.5°	713.9	710.3	680.1	621.6	545.5	450.2	344.0	234.1	123.7	39.8	0.6
80°	660.8	657.2	633.7	579.9	506.9	411.6	312.0	204.6	100.8	26.6	0.6
82.5°	608.3	603.5	581.1	536.5	467.7	379.0	278.8	175.0	79.7	16.3	0.6
85°	561.2	555.2	531.1	490.0	427.3	342.2	244.4	146.0	59.1	9.1	1.2
87.5°	520.8	516.6	490.0	447.8	386.2	307.8	214.2	118.3	41.6	4.2	1.8
90°	486.4	477.4	453.8	409.2	347.6	269.8	182.3	94.7	27.8	2.4	2.4
92.5°	452.6	444.8	418.8	372.9	313.2	237.2	151.5	72.4	17.5	1.2	3.0
95°	417.6	409.2	383.8	341.6	278.2	204.0	124.3	53.1	9.7	1.2	3.0
97.5°	383.2	375.4	348.8	306.6	246.8	175.0	98.4	37.4	4.8	1.2	2.4
100°	351.2	342.2	318.0	275.8	215.4	146.0	76.0	24.1	3.0	1.2	2.4
102.5°	317.4	310.2	285.4	244.4	182.9	118.9	56.7	15.1	1.2	1.2	1.8
105°	287.3	278.2	254.1	211.8	155.7	93.5	39.8	9.1	1.2	1.2	1.8



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	187.1	179.8	158.7	123.1	79.1	36.8	10.9	1.8	1.8	1.8	1.8
115°	156.3	145.4	126.7	95.3	58.5	24.1	5.4	1.8	1.8	1.8	1.8
117.5°	124.9	115.9	102.6	72.4	38.6	15.7	3.0	1.8	1.8	1.8	1.8
120°	97.8	89.3	74.2	50.1	25.9	9.1	1.2	1.8	1.8	1.8	1.8
122.5°	70.0	63.4	50.1	32.6	15.7	4.2	1.8	1.8	2.4	2.4	1.8
125°	46.5	42.8	33.2	19.9	9.7	1.8	1.8	1.8	2.4	2.4	1.8
127.5°	30.2	27.2	19.3	11.5	4.2	1.8	1.8	2.4	2.4	2.4	1.8
130°	16.9	15.1	11.5	6.6	1.8	1.8	1.8	2.4	2.4	2.4	1.8
132.5°	9.7	9.1	6.0	1.2	1.8	1.8	1.8	2.4	2.4	2.4	2.4
135°	2.4	1.2	1.2	1.2	1.8	1.8	2.4	2.4	3.0	3.0	2.4
137.5°	0.6	0.6	1.2	1.2	1.8	1.8	2.4	3.0	3.0	3.0	2.4
140°	0.6	0.6	1.2	1.8	1.8	1.8	2.4	3.0	3.0	3.0	2.4
142.5°	0.6	1.2	1.2	1.8	1.8	2.4	2.4	3.0	3.0	2.4	2.4
145°	0.6	1.2	1.2	1.8	1.8	2.4	2.4	3.0	2.4	2.4	2.4
147.5°	1.2	1.2	1.2	1.8	1.8	2.4	2.4	3.0	3.0	2.4	2.4
150°	0.6	1.2	1.2	1.8	2.4	2.4	2.4	3.0	2.4	2.4	2.4
152.5°	0.6	1.2	1.2	1.8	2.4	2.4	2.4	3.0	2.4	2.4	2.4
155°	1.2	1.2	1.2	1.8	2.4	2.4	2.4	3.0	2.4	2.4	3.0
157.5°	1.2	1.2	1.2	1.8	2.4	2.4	2.4	3.0	2.4	2.4	3.0
160°	1.2	1.2	1.2	1.8	1.8	2.4	2.4	2.4	2.4	2.4	2.4
162.5°	1.2	1.2	1.2	1.8	1.8	2.4	2.4	2.4	2.4	2.4	2.4
165°	1.2	1.2	1.2	1.2	1.8	1.8	2.4	2.4	2.4	2.4	2.4
167.5°	1.2	1.2	1.2	1.8	1.8	1.8	2.4	2.4	2.4	2.4	2.4
170°	1.2	1.2	1.2	1.8	1.8	1.8	2.4	3.0	3.0	3.0	3.0
172.5°	1.2	1.2	1.2	1.8	1.8	2.4	2.4	3.0	3.0	3.0	3.0
175°	1.2	1.2	1.2	1.8	1.8	2.4	2.4	3.0	3.0	3.0	3.0
177.5°	0.6	1.2	1.2	1.8	1.8	2.4	2.4	3.0	3.0	3.0	2.4
180°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	473.7	473.7	473.7
2.5°	450.8	442.3	439.9
5°	426.7	412.8	404.9
7.5°	402.5	383.8	374.8
10°	380.2	353.6	344.0
12.5°	353.6	322.9	307.8
15°	328.3	288.5	274.0
17.5°	299.9	255.3	238.4
20°	273.4	222.1	204.6
22.5°	243.2	189.5	170.2
25°	216.0	156.9	135.2
27.5°	185.9	123.7	105.0
30°	157.5	94.7	76.0
32.5°	130.4	69.4	52.5
35°	105.0	47.1	33.2
37.5°	80.9	29.0	16.9
40°	58.5	15.1	7.8
42.5°	39.2	7.2	4.2
45°	24.1	3.6	0.0
47.5°	13.9	0.0	0.0
50°	7.2	0.0	0.0
52.5°	3.0	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°	0.6	0.6	0.6
77.5°	0.6	1.2	1.8
80°	1.2	2.4	3.0
82.5°	2.4	3.0	3.0
85°	2.4	3.0	3.6
87.5°	3.0	3.6	4.2
90°	3.6	4.2	4.2
92.5°	3.6	4.8	4.8
95°	4.2	4.8	5.4
97.5°	4.8	5.4	5.4
100°	4.2	5.4	6.0
102.5°	3.6	5.4	5.4
105°	3.0	4.2	4.8



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	2.4	3.0	3.0
115°	1.8	2.4	3.0
117.5°	1.8	2.4	2.4
120°	1.8	1.8	2.4
122.5°	1.8	1.8	2.4
125°	1.8	1.8	2.4
127.5°	2.4	1.8	1.8
130°	1.8	1.8	1.8
132.5°	2.4	1.8	1.8
135°	2.4	1.8	1.8
137.5°	2.4	1.8	1.8
140°	2.4	1.8	1.8
142.5°	2.4	1.8	1.8
145°	1.8	1.8	1.8
147.5°	1.8	1.8	1.8
150°	1.8	1.8	1.2
152.5°	1.8	1.2	1.2
155°	1.8	1.2	0.6
157.5°	2.4	1.2	0.6
160°	1.8	1.2	0.6
162.5°	1.8	1.2	0.6
165°	1.8	1.2	0.0
167.5°	1.8	1.2	0.6
170°	1.8	1.2	0.6
172.5°	1.8	1.2	0.6
175°	1.8	0.6	0.6
177.5°	1.8	0.6	0.6
180°	1.8	1.8	1.8



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	253.5	246.2	222.1	182.3	127.3	71.2	26.6	4.8	1.2	1.8	1.8
110°	220.9	214.8	190.1	151.5	102.6	53.1	17.5	3.0	1.8	1.8	1.8





107.5°	2.4	3.6	4.2
110°	2.4	3.0	3.6



(END OF REPORT)