

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: P551574

Luminaire Tested: **FCC-X-2-LD4-2LO-35-UNV-93-97-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: P551574
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-93-97-ED1D
Description: FCC CORNER MOUNT LUMINAIRE WITH .156 CLEAR TEMPERED GLASS FIXTURE
SIDE AND .375 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES AND 3500K,
AND 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

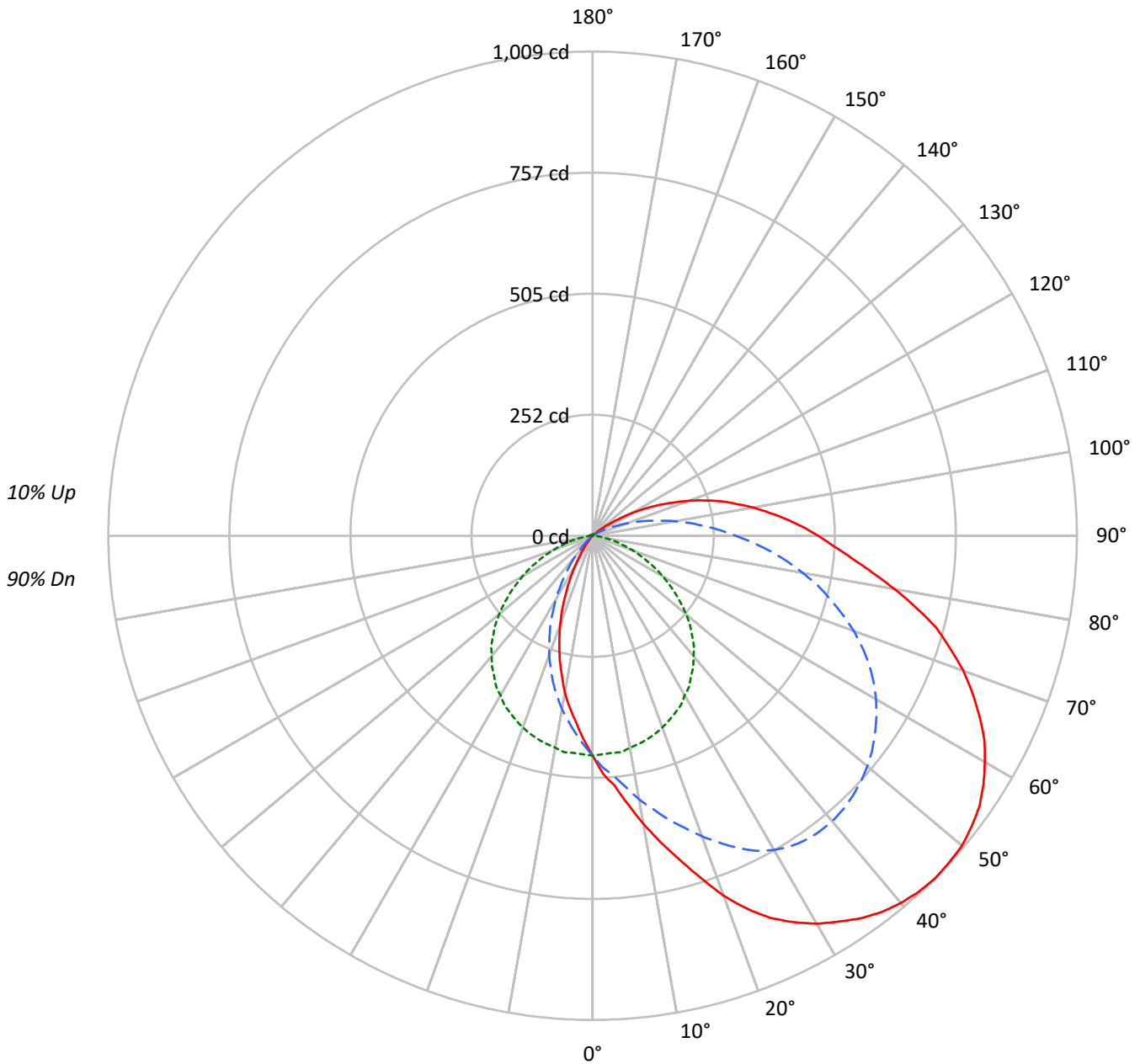
Lumens per Lamp: N/A
Luminaire Lumens: 2262.9 lumens
Efficiency: N/A
Efficacy: 96.3 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

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

TEST NUMBER: P551574

CATALOG NUMBER: FCC-X-2-LD4-2LO-35-UNV-93-97-ED1D

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°	4928	4928	4928
5°	5409	4856	4051
10°	6121	4795	3339
15°	6859	4735	2601
20°	7736	4658	1916
25°	8464	4568	1258
30°	9004	4448	709
35°	9472	4320	312
40°	9888	4160	75
45°	10244	3961	0
50°	10542	3698	0
55°	10770	3361	0
60°	10885	2971	0
65°	10930	2531	0
70°	10893	2064	0
75°	10754	1520	9
80°	10319	932	47
85°	9974	442	64



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	43.8	1.9
10°-20°	131.3	5.8
20°-30°	212.6	9.4
30°-40°	273.1	12.1
40°-50°	309.2	13.7
50°-60°	320.3	14.2
60°-70°	302.1	13.3
70°-80°	253.1	11.2
80°-90°	183.5	8.1
90°-100°	120.6	5.3
100°-110°	69.6	3.1
110°-120°	30.7	1.4
120°-130°	8.3	0.4
130°-140°	1.9	0.1
140°-150°	1.2	0.1
150°-160°	0.9	0.0
160°-170°	0.5	0.0
170°-180°	0.2	0.0
0°-30°	387.7	17.1
0°-40°	660.8	29.2
0°-60°	1290.3	57.0
0°-90°	2029.0	89.7
90°-120°	220.9	9.8
90°-150°	232.4	10.3
90°-180°	234.0	10.3
0°-180°	2262.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	458	458	458	458	458	
5°	522	502	454	412	391	53
15°	698	612	439	317	265	201
25°	879	718	407	209	131	406
35°	973	774	358	102	32	610
45°	1009	766	293	23	0	779
55°	984	718	211	0	0	878
65°	889	636	126	0	0	880
75°	741	513	54	1	1	777
85°	542	372	9	2	4	463
90°	470	298	2	4	4	258
95°	404	233	1	4	5	317
105°	278	120	1	3	5	293
115°	151	40	2	2	3	151
125°	45	6	2	2	2	45
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°	457.8	457.8	457.8	457.8	457.8	457.8	457.8	457.8	457.8	457.8	457.8
2.5°	496.2	495.7	493.9	491.0	486.9	479.9	474.1	468.8	461.8	456.0	444.9
5°	522.5	519.6	517.2	514.3	505.0	498.6	488.1	476.4	465.3	454.3	432.1
7.5°	564.5	559.8	556.3	548.1	535.3	520.7	504.4	493.3	485.7	454.8	416.9
10°	609.4	605.3	598.3	583.7	568.0	547.0	523.6	497.4	474.1	448.4	403.5
12.5°	653.7	647.8	637.9	619.3	597.1	570.9	538.8	507.9	474.7	444.3	387.8
15°	698.0	691.6	681.1	658.3	629.2	594.8	555.7	516.6	477.6	439.1	371.4
17.5°	746.4	737.6	721.9	696.2	659.5	616.9	570.9	523.6	476.4	432.7	354.0
20°	798.3	786.0	769.1	734.7	691.6	641.4	586.0	530.6	475.8	425.1	334.1
22.5°	841.4	829.2	810.5	775.0	723.1	661.8	598.9	535.3	473.5	416.3	315.5
25°	878.8	868.9	848.4	807.6	752.8	683.4	611.1	538.8	470.0	407.0	295.6
27.5°	907.9	898.6	875.8	833.9	777.9	702.7	620.4	540.6	465.3	397.7	275.2
30°	933.6	924.2	896.8	853.7	794.8	717.8	629.8	541.1	459.5	383.7	253.1
32.5°	953.4	944.7	916.7	870.6	806.5	728.3	635.0	540.6	451.9	373.8	229.2
35°	973.2	964.5	931.8	882.8	815.2	733.0	639.1	537.6	442.6	357.5	206.4
37.5°	988.4	978.5	945.2	891.0	819.3	734.2	638.5	533.6	432.7	344.0	183.7
40°	998.9	988.4	952.8	895.7	820.5	732.4	633.9	526.6	421.0	327.1	159.8
42.5°	1005.9	994.2	956.3	902.7	818.1	727.7	626.9	517.8	408.2	312.6	137.0
45°	1009.4	997.1	956.9	896.8	814.0	719.0	616.4	506.7	394.2	292.7	114.3
47.5°	1007.6	994.2	954.0	890.4	806.5	709.7	604.7	493.3	377.3	275.2	92.7
50°	1004.7	990.7	947.6	882.3	796.0	698.0	591.9	477.0	359.8	253.7	73.5
52.5°	995.4	981.4	940.6	870.6	783.7	684.6	574.4	460.1	341.1	232.7	56.0
55°	983.7	970.9	928.3	860.1	768.0	668.3	558.0	442.0	323.0	211.1	40.2
57.5°	965.6	954.0	913.2	843.2	752.2	650.2	540.0	422.2	300.3	189.5	28.0
60°	943.5	931.8	892.2	824.0	734.2	629.8	520.1	401.8	279.9	167.9	17.5
62.5°	920.2	909.1	867.7	800.0	711.4	608.2	498.6	381.4	258.3	148.1	10.5
65°	889.3	878.8	841.4	771.5	686.3	584.9	474.7	356.9	236.2	126.0	5.8
67.5°	856.6	847.3	809.4	745.2	657.2	559.2	450.2	333.0	212.8	106.7	2.9
70°	821.6	810.0	775.0	709.7	627.4	530.1	423.3	308.5	190.7	88.1	0.0
72.5°	780.8	772.1	738.2	676.4	593.0	499.2	395.9	281.6	166.2	70.0	0.6
75°	741.1	730.1	699.2	640.9	559.2	466.5	365.6	256.6	142.3	53.6	0.6
77.5°	689.8	686.3	657.2	600.6	527.1	435.0	332.4	226.3	119.5	38.5	0.6
80°	638.5	635.0	612.3	560.4	489.8	397.7	301.5	197.7	97.4	25.7	0.6
82.5°	587.8	583.1	561.5	518.4	451.9	366.2	269.4	169.1	77.0	15.7	0.6
85°	542.3	536.5	513.1	473.5	412.9	330.6	236.2	141.1	57.1	8.7	1.2
87.5°	503.2	499.2	473.5	432.7	373.2	297.4	207.0	114.3	40.2	4.1	1.7
90°	470.0	461.2	438.5	395.4	335.9	260.7	176.1	91.6	26.8	2.3	2.3
92.5°	437.3	429.8	404.7	360.4	302.6	229.2	146.4	70.0	16.9	1.2	2.9
95°	403.5	395.4	370.9	330.0	268.8	197.1	120.1	51.3	9.3	1.2	2.9
97.5°	370.3	362.7	337.0	296.2	238.5	169.1	95.0	36.2	4.7	1.2	2.3
100°	339.4	330.6	307.3	266.5	208.2	141.1	73.5	23.3	2.9	1.2	2.3
102.5°	306.7	299.7	275.8	236.2	176.7	114.9	54.8	14.6	1.2	1.2	1.7
105°	277.6	268.8	245.5	204.7	150.4	90.4	38.5	8.7	1.2	1.2	1.7



TEST NUMBER: P551574

CATALOG NUMBER: FCC-X-2-LD4-2LO-35-UNV-93-97-ED1D

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	180.8	173.8	153.4	119.0	76.4	35.6	10.5	1.7	1.7	1.7	1.7
115°	151.0	140.5	122.5	92.1	56.6	23.3	5.2	1.7	1.7	1.7	1.7
117.5°	120.7	112.0	99.1	70.0	37.3	15.2	2.9	1.7	1.7	1.7	1.7
120°	94.5	86.3	71.7	48.4	25.1	8.7	1.2	1.7	1.7	1.7	1.7
122.5°	67.6	61.2	48.4	31.5	15.2	4.1	1.7	1.7	2.3	2.3	1.7
125°	44.9	41.4	32.1	19.2	9.3	1.7	1.7	1.7	2.3	2.3	1.7
127.5°	29.2	26.2	18.7	11.1	4.1	1.7	1.7	2.3	2.3	2.3	1.7
130°	16.3	14.6	11.1	6.4	1.7	1.7	1.7	2.3	2.3	2.3	1.7
132.5°	9.3	8.7	5.8	1.2	1.7	1.7	1.7	2.3	2.3	2.3	2.3
135°	2.3	1.2	1.2	1.2	1.7	1.7	2.3	2.3	2.9	2.9	2.3
137.5°	0.6	0.6	1.2	1.2	1.7	1.7	2.3	2.9	2.9	2.9	2.3
140°	0.6	0.6	1.2	1.7	1.7	1.7	2.3	2.9	2.9	2.9	2.3
142.5°	0.6	1.2	1.2	1.7	1.7	2.3	2.3	2.9	2.9	2.3	2.3
145°	0.6	1.2	1.2	1.7	1.7	2.3	2.3	2.9	2.3	2.3	2.3
147.5°	1.2	1.2	1.2	1.7	1.7	2.3	2.3	2.9	2.9	2.3	2.3
150°	0.6	1.2	1.2	1.7	2.3	2.3	2.3	2.9	2.3	2.3	2.3
152.5°	0.6	1.2	1.2	1.7	2.3	2.3	2.3	2.9	2.3	2.3	2.3
155°	1.2	1.2	1.2	1.7	2.3	2.3	2.3	2.9	2.3	2.3	2.9
157.5°	1.2	1.2	1.2	1.7	2.3	2.3	2.3	2.9	2.3	2.3	2.9
160°	1.2	1.2	1.2	1.7	1.7	2.3	2.3	2.3	2.3	2.3	2.3
162.5°	1.2	1.2	1.2	1.7	1.7	2.3	2.3	2.3	2.3	2.3	2.3
165°	1.2	1.2	1.2	1.2	1.7	1.7	2.3	2.3	2.3	2.3	2.3
167.5°	1.2	1.2	1.2	1.7	1.7	1.7	2.3	2.3	2.3	2.3	2.3
170°	1.2	1.2	1.2	1.7	1.7	1.7	2.3	2.9	2.9	2.9	2.9
172.5°	1.2	1.2	1.2	1.7	1.7	2.3	2.3	2.9	2.9	2.9	2.9
175°	1.2	1.2	1.2	1.7	1.7	2.3	2.3	2.9	2.9	2.9	2.9
177.5°	0.6	1.2	1.2	1.7	1.7	2.3	2.3	2.9	2.9	2.9	2.3
180°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	457.8	457.8	457.8
2.5°	435.6	427.4	425.1
5°	412.3	398.9	391.3
7.5°	388.9	370.9	362.1
10°	367.4	341.7	332.4
12.5°	341.7	312.0	297.4
15°	317.2	278.7	264.7
17.5°	289.8	246.7	230.3
20°	264.2	214.6	197.7
22.5°	235.0	183.1	164.4
25°	208.8	151.6	130.6
27.5°	179.6	119.5	101.5
30°	152.2	91.6	73.5
32.5°	126.0	67.1	50.7
35°	101.5	45.5	32.1
37.5°	78.1	28.0	16.3
40°	56.6	14.6	7.6
42.5°	37.9	7.0	4.1
45°	23.3	3.5	0.0
47.5°	13.4	0.0	0.0
50°	7.0	0.0	0.0
52.5°	2.9	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	1.7
80°	1.2	2.3	2.9
82.5°	2.3	2.9	2.9
85°	2.3	2.9	3.5
87.5°	2.9	3.5	4.1
90°	3.5	4.1	4.1
92.5°	3.5	4.7	4.7
95°	4.1	4.7	5.2
97.5°	4.7	5.2	5.2
100°	4.1	5.2	5.8
102.5°	3.5	5.2	5.2
105°	2.9	4.1	4.7



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CATALOG NUMBER: FCC-X-2-LD4-2LO-35-UNV-93-97-ED1D

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	2.3	2.9	2.9
115°	1.7	2.3	2.9
117.5°	1.7	2.3	2.3
120°	1.7	1.7	2.3
122.5°	1.7	1.7	2.3
125°	1.7	1.7	2.3
127.5°	2.3	1.7	1.7
130°	1.7	1.7	1.7
132.5°	2.3	1.7	1.7
135°	2.3	1.7	1.7
137.5°	2.3	1.7	1.7
140°	2.3	1.7	1.7
142.5°	2.3	1.7	1.7
145°	1.7	1.7	1.7
147.5°	1.7	1.7	1.7
150°	1.7	1.7	1.2
152.5°	1.7	1.2	1.2
155°	1.7	1.2	0.6
157.5°	2.3	1.2	0.6
160°	1.7	1.2	0.6
162.5°	1.7	1.2	0.6
165°	1.7	1.2	0.0
167.5°	1.7	1.2	0.6
170°	1.7	1.2	0.6
172.5°	1.7	1.2	0.6
175°	1.7	0.6	0.6
177.5°	1.7	0.6	0.6
180°	1.7	1.7	1.7



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	244.9	237.9	214.6	176.1	123.0	68.8	25.7	4.7	1.2	1.7	1.7
110°	213.4	207.6	183.7	146.4	99.1	51.3	16.9	2.9	1.7	1.7	1.7





107.5°	2.3	3.5	4.1
110°	2.3	2.9	3.5



(END OF REPORT)