

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: P551542

Luminaire Tested: **FCC-X-2-LD4-2LO-35-UNV-81-97-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: P551542
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-81-97-ED1D
Description: FCC CORNER MOUNT LUMINAIRE WITH .156 CLEAR PC 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

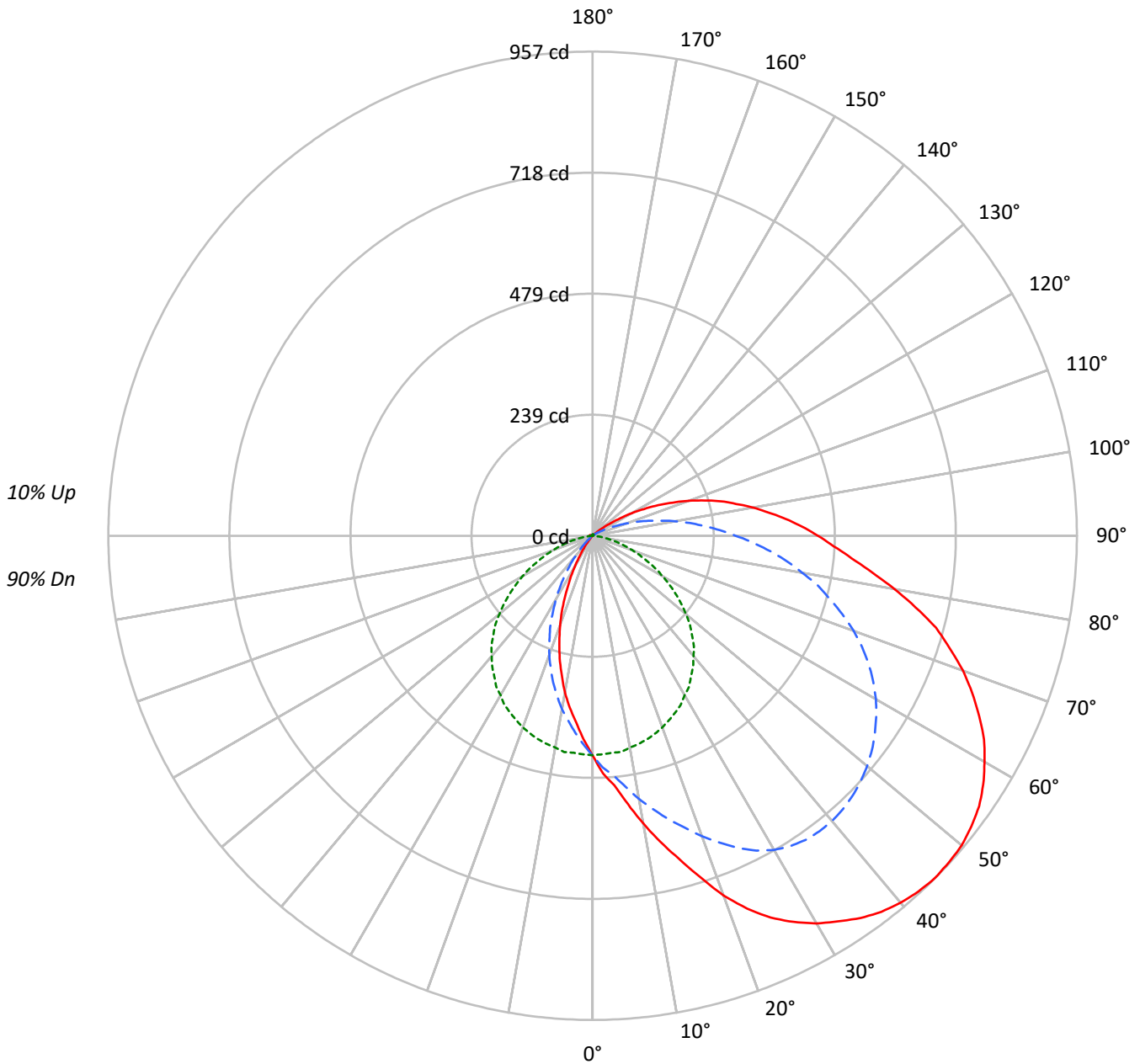
Lumens per Lamp: N/A
Luminaire Lumens: 2145.1 lumens
Efficiency: N/A
Efficacy: 91.3 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

Input Watts (W): 23.5
Input Voltage (V): NR
Input Current (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

TEST NUMBER: P551542

CATALOG NUMBER: FCC-X-2-LD4-2LO-35-UNV-81-97-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°	4670	4670	4670
5°	5126	4602	3840
10°	5802	4545	3164
15°	6502	4488	2466
20°	7333	4414	1816
25°	8022	4330	1192
30°	8535	4216	671
35°	8979	4094	296
40°	9372	3944	71
45°	9710	3755	0
50°	9993	3504	0
55°	10208	3186	0
60°	10317	2817	0
65°	10360	2398	0
70°	10326	1956	0
75°	10194	1441	9
80°	9780	881	45
85°	9453	422	61



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	41.6	1.9
10°-20°	124.4	5.8
20°-30°	201.5	9.4
30°-40°	258.9	12.1
40°-50°	293.0	13.7
50°-60°	303.6	14.2
60°-70°	286.3	13.3
70°-80°	240.0	11.2
80°-90°	173.9	8.1
90°-100°	114.3	5.3
100°-110°	66.0	3.1
110°-120°	29.2	1.4
120°-130°	7.9	0.4
130°-140°	1.8	0.1
140°-150°	1.2	0.1
150°-160°	0.8	0.0
160°-170°	0.5	0.0
170°-180°	0.2	0.0
0°-30°	367.5	17.1
0°-40°	626.4	29.2
0°-60°	1223.0	57.0
0°-90°	1923.2	89.7
90°-120°	209.5	9.8
90°-150°	220.4	10.3
90°-180°	222.0	10.3
0°-180°	2145.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	434	434	434	434	434	
5°	495	476	431	391	371	50
15°	662	580	416	301	251	191
25°	833	681	386	198	124	385
35°	922	734	339	96	30	579
45°	957	727	278	22	0	739
55°	932	681	200	0	0	833
65°	843	602	119	0	0	834
75°	702	486	51	1	1	737
85°	514	352	8	2	3	439
90°	446	283	2	3	4	244
95°	382	221	1	4	5	300
105°	263	114	1	3	4	278
115°	143	38	2	2	3	143
125°	43	5	2	2	2	43
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°	433.9	433.9	433.9	433.9	433.9	433.9	433.9	433.9	433.9	433.9	433.9
2.5°	470.4	469.8	468.2	465.4	461.5	454.9	449.4	444.4	437.8	432.2	421.7
5°	495.2	492.5	490.3	487.5	478.7	472.6	462.6	451.6	441.1	430.6	409.6
7.5°	535.0	530.6	527.3	519.6	507.4	493.6	478.1	467.6	460.4	431.1	395.2
10°	577.6	573.7	567.1	553.3	538.3	518.4	496.3	471.5	449.4	425.0	382.5
12.5°	619.6	614.1	604.7	587.0	566.0	541.1	510.7	481.4	449.9	421.2	367.6
15°	661.6	655.5	645.6	624.0	596.4	563.8	526.7	489.7	452.7	416.2	352.1
17.5°	707.5	699.2	684.3	659.9	625.1	584.8	541.1	496.3	451.6	410.1	335.5
20°	756.7	745.1	729.0	696.4	655.5	608.0	555.5	503.0	451.0	402.9	316.7
22.5°	797.6	786.0	768.3	734.6	685.4	627.3	567.6	507.4	448.8	394.6	299.0
25°	832.9	823.5	804.2	765.5	713.6	647.8	579.2	510.7	445.5	385.8	280.2
27.5°	860.6	851.7	830.2	790.4	737.3	666.0	588.1	512.4	441.1	377.0	260.9
30°	884.9	876.1	850.1	809.2	753.4	680.4	596.9	512.9	435.5	363.7	239.9
32.5°	903.7	895.4	868.9	825.2	764.4	690.3	601.9	512.4	428.4	354.3	217.2
35°	922.5	914.2	883.2	836.8	772.7	694.8	605.8	509.6	419.5	338.8	195.7
37.5°	936.9	927.5	896.0	844.5	776.6	695.9	605.2	505.7	410.1	326.1	174.1
40°	946.8	936.9	903.1	849.0	777.7	694.2	600.8	499.1	399.1	310.1	151.4
42.5°	953.4	942.4	906.5	855.6	775.5	689.8	594.2	490.8	386.9	296.3	129.9
45°	956.8	945.1	907.0	850.1	771.6	681.5	584.2	480.3	373.6	277.5	108.3
47.5°	955.1	942.4	904.2	844.0	764.4	672.7	573.2	467.6	357.6	260.9	87.9
50°	952.3	939.1	898.2	836.3	754.5	661.6	561.0	452.1	341.0	240.4	69.6
52.5°	943.5	930.2	891.5	825.2	742.9	648.9	544.4	436.1	323.3	220.5	53.1
55°	932.4	920.3	879.9	815.3	727.9	633.4	528.9	419.0	306.2	200.1	38.1
57.5°	915.3	904.2	865.6	799.2	713.0	616.3	511.8	400.2	284.6	179.6	26.5
60°	894.3	883.2	845.7	781.0	695.9	596.9	493.0	380.8	265.3	159.2	16.6
62.5°	872.2	861.7	822.4	758.3	674.3	576.5	472.6	361.5	244.9	140.4	9.9
65°	842.9	832.9	797.6	731.2	650.5	554.4	449.9	338.3	223.8	119.4	5.5
67.5°	811.9	803.1	767.2	706.4	622.9	530.1	426.7	315.6	201.7	101.1	2.8
70°	778.8	767.7	734.6	672.7	594.7	502.4	401.3	292.4	180.7	83.5	0.0
72.5°	740.1	731.8	699.7	641.2	562.1	473.1	375.3	267.0	157.5	66.3	0.6
75°	702.5	692.0	662.7	607.4	530.1	442.2	346.6	243.2	134.9	50.8	0.6
77.5°	653.9	650.5	622.9	569.3	499.7	412.3	315.0	214.5	113.3	36.5	0.6
80°	605.2	601.9	580.4	531.2	464.3	377.0	285.8	187.4	92.3	24.3	0.6
82.5°	557.1	552.7	532.3	491.4	428.4	347.1	255.4	160.3	73.0	14.9	0.6
85°	514.0	508.5	486.4	448.8	391.3	313.4	223.8	133.8	54.2	8.3	1.1
87.5°	477.0	473.1	448.8	410.1	353.7	281.9	196.2	108.3	38.1	3.9	1.7
90°	445.5	437.2	415.6	374.7	318.4	247.1	166.9	86.8	25.4	2.2	2.2
92.5°	414.5	407.4	383.6	341.6	286.9	217.2	138.7	66.3	16.0	1.1	2.8
95°	382.5	374.7	351.5	312.8	254.8	186.8	113.9	48.6	8.8	1.1	2.8
97.5°	351.0	343.8	319.5	280.8	226.1	160.3	90.1	34.3	4.4	1.1	2.2
100°	321.7	313.4	291.3	252.6	197.3	133.8	69.6	22.1	2.8	1.1	2.2
102.5°	290.7	284.1	261.4	223.8	167.5	108.9	52.0	13.8	1.1	1.1	1.7
105°	263.1	254.8	232.7	194.0	142.6	85.7	36.5	8.3	1.1	1.1	1.7



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CATALOG NUMBER: FCC-X-2-LD4-2LO-35-UNV-81-97-ED1D

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	171.3	164.7	145.4	112.8	72.4	33.7	9.9	1.7	1.7	1.7	1.7
115°	143.2	133.2	116.1	87.3	53.6	22.1	5.0	1.7	1.7	1.7	1.7
117.5°	114.4	106.1	94.0	66.3	35.4	14.4	2.8	1.7	1.7	1.7	1.7
120°	89.5	81.8	68.0	45.9	23.8	8.3	1.1	1.7	1.7	1.7	1.7
122.5°	64.1	58.0	45.9	29.8	14.4	3.9	1.7	1.7	2.2	2.2	1.7
125°	42.6	39.2	30.4	18.2	8.8	1.7	1.7	1.7	2.2	2.2	1.7
127.5°	27.6	24.9	17.7	10.5	3.9	1.7	1.7	2.2	2.2	2.2	1.7
130°	15.5	13.8	10.5	6.1	1.7	1.7	1.7	2.2	2.2	2.2	1.7
132.5°	8.8	8.3	5.5	1.1	1.7	1.7	1.7	2.2	2.2	2.2	2.2
135°	2.2	1.1	1.1	1.1	1.7	1.7	2.2	2.2	2.8	2.8	2.2
137.5°	0.6	0.6	1.1	1.1	1.7	1.7	2.2	2.8	2.8	2.8	2.2
140°	0.6	0.6	1.1	1.7	1.7	1.7	2.2	2.8	2.8	2.8	2.2
142.5°	0.6	1.1	1.1	1.7	1.7	2.2	2.2	2.8	2.8	2.2	2.2
145°	0.6	1.1	1.1	1.7	1.7	2.2	2.2	2.8	2.2	2.2	2.2
147.5°	1.1	1.1	1.1	1.7	1.7	2.2	2.2	2.8	2.8	2.2	2.2
150°	0.6	1.1	1.1	1.7	2.2	2.2	2.2	2.8	2.2	2.2	2.2
152.5°	0.6	1.1	1.1	1.7	2.2	2.2	2.2	2.8	2.2	2.2	2.2
155°	1.1	1.1	1.1	1.7	2.2	2.2	2.2	2.8	2.2	2.2	2.8
157.5°	1.1	1.1	1.1	1.7	2.2	2.2	2.2	2.8	2.2	2.2	2.8
160°	1.1	1.1	1.1	1.7	1.7	2.2	2.2	2.2	2.2	2.2	2.2
162.5°	1.1	1.1	1.1	1.7	1.7	2.2	2.2	2.2	2.2	2.2	2.2
165°	1.1	1.1	1.1	1.1	1.7	1.7	2.2	2.2	2.2	2.2	2.2
167.5°	1.1	1.1	1.1	1.7	1.7	1.7	2.2	2.2	2.2	2.2	2.2
170°	1.1	1.1	1.1	1.7	1.7	1.7	2.2	2.8	2.8	2.8	2.8
172.5°	1.1	1.1	1.1	1.7	1.7	2.2	2.2	2.8	2.8	2.8	2.8
175°	1.1	1.1	1.1	1.7	1.7	2.2	2.2	2.8	2.8	2.8	2.8
177.5°	0.6	1.1	1.1	1.7	1.7	2.2	2.2	2.8	2.8	2.8	2.2
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°	433.9	433.9	433.9
2.5°	412.9	405.1	402.9
5°	390.8	378.1	370.9
7.5°	368.7	351.5	343.2
10°	348.2	323.9	315.0
12.5°	323.9	295.7	281.9
15°	300.7	264.2	250.9
17.5°	274.7	233.8	218.3
20°	250.4	203.4	187.4
22.5°	222.7	173.6	155.9
25°	197.9	143.7	123.8
27.5°	170.2	113.3	96.2
30°	144.3	86.8	69.6
32.5°	119.4	63.6	48.1
35°	96.2	43.1	30.4
37.5°	74.1	26.5	15.5
40°	53.6	13.8	7.2
42.5°	35.9	6.6	3.9
45°	22.1	3.3	0.0
47.5°	12.7	0.0	0.0
50°	6.6	0.0	0.0
52.5°	2.8	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	1.1	1.7
80°	1.1	2.2	2.8
82.5°	2.2	2.8	2.8
85°	2.2	2.8	3.3
87.5°	2.8	3.3	3.9
90°	3.3	3.9	3.9
92.5°	3.3	4.4	4.4
95°	3.9	4.4	5.0
97.5°	4.4	5.0	5.0
100°	3.9	5.0	5.5
102.5°	3.3	5.0	5.0
105°	2.8	3.9	4.4



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	2.2	2.8	2.8
115°	1.7	2.2	2.8
117.5°	1.7	2.2	2.2
120°	1.7	1.7	2.2
122.5°	1.7	1.7	2.2
125°	1.7	1.7	2.2
127.5°	2.2	1.7	1.7
130°	1.7	1.7	1.7
132.5°	2.2	1.7	1.7
135°	2.2	1.7	1.7
137.5°	2.2	1.7	1.7
140°	2.2	1.7	1.7
142.5°	2.2	1.7	1.7
145°	1.7	1.7	1.7
147.5°	1.7	1.7	1.7
150°	1.7	1.7	1.1
152.5°	1.7	1.1	1.1
155°	1.7	1.1	0.6
157.5°	2.2	1.1	0.6
160°	1.7	1.1	0.6
162.5°	1.7	1.1	0.6
165°	1.7	1.1	0.0
167.5°	1.7	1.1	0.6
170°	1.7	1.1	0.6
172.5°	1.7	1.1	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°	232.1	225.5	203.4	166.9	116.6	65.2	24.3	4.4	1.1	1.7	1.7
110°	202.3	196.8	174.1	138.7	94.0	48.6	16.0	2.8	1.7	1.7	1.7





107.5°	2.2	3.3	3.9
110°	2.2	2.8	3.3



(END OF REPORT)