

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: P551466

Luminaire Tested: **FCC-X-2-LD4-2LO-30-UNV-81-85-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: P551466
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-30-UNV-81-85-ED1D
Description: FCC CORNER MOUNT LUMINAIRE WITH .156 CLEAR PC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 3000K, AND 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

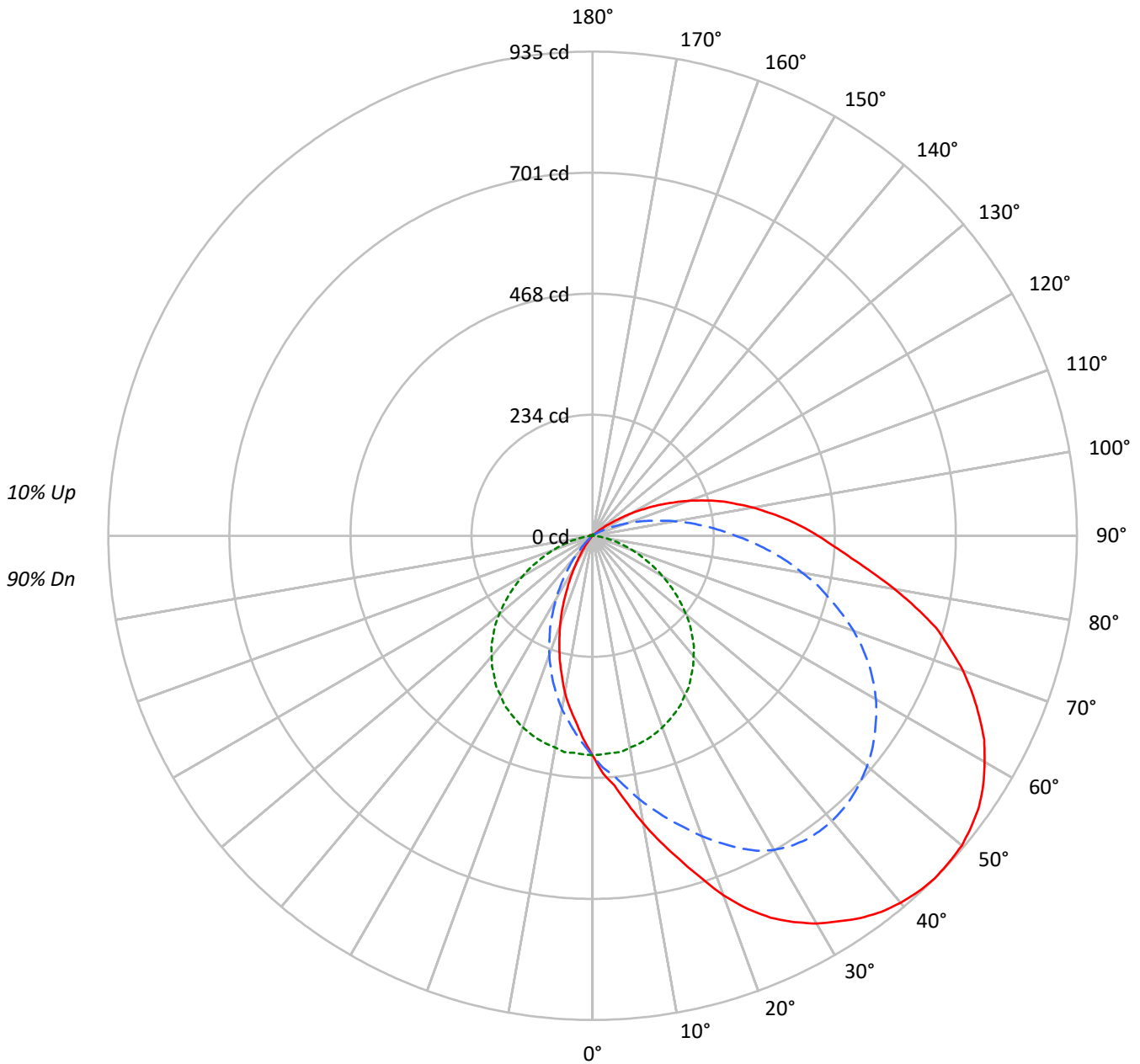
Lumens per Lamp: N/A
Luminaire Lumens: 2096.0 lumens
Efficiency: N/A
Efficacy: 89.2 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

Input Watts (W): 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: P551466

CATALOG NUMBER: FCC-X-2-LD4-2LO-30-UNV-81-85-ED1D

Luminous Intensity Polar Plot





TEST NUMBER: P551466

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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	4564	4564	4564
5°	5009	4497	3752
10°	5669	4441	3093
15°	6353	4385	2410
20°	7166	4313	1774
25°	7839	4231	1165
30°	8340	4120	657
35°	8773	4001	289
40°	9158	3853	69
45°	9488	3668	0
50°	9765	3424	0
55°	9975	3113	0
60°	10082	2752	0
65°	10123	2344	0
70°	10090	1912	0
75°	9962	1409	7
80°	9557	863	44
85°	9238	412	59



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	40.6	1.9
10°-20°	121.6	5.8
20°-30°	196.9	9.4
30°-40°	253.0	12.1
40°-50°	286.3	13.7
50°-60°	296.6	14.2
60°-70°	279.8	13.3
70°-80°	234.5	11.2
80°-90°	169.9	8.1
90°-100°	111.7	5.3
100°-110°	64.5	3.1
110°-120°	28.5	1.4
120°-130°	7.7	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°	359.1	17.1
0°-40°	612.1	29.2
0°-60°	1195.1	57.0
0°-90°	1879.2	89.7
90°-120°	204.7	9.8
90°-150°	215.3	10.3
90°-180°	217.0	10.4
0°-180°	2096.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	424	424	424	424	424	
5°	484	465	421	382	362	49
15°	646	567	407	294	245	186
25°	814	665	377	193	121	376
35°	901	717	331	94	30	565
45°	935	710	271	22	0	722
55°	911	665	196	0	0	814
65°	824	589	117	0	0	815
75°	686	475	50	0	0	720
85°	502	344	8	2	3	429
90°	435	276	2	3	4	239
95°	374	216	1	4	5	293
105°	257	112	1	3	4	271
115°	140	37	2	2	3	140
125°	42	5	2	2	2	42
135°	2	2	3	2	2	4
145°	0	2	2	2	2	0
155°	1	2	2	2	0	0
165°	1	2	2	2	0	0
175°	1	2	3	2	0	0
180°	2	2	2	2	2	



TEST NUMBER: P551466

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
0°	424.0	424.0	424.0	424.0	424.0	424.0	424.0	424.0	424.0	424.0	424.0
2.5°	459.6	459.1	457.5	454.8	451.0	444.5	439.1	434.2	427.8	422.4	412.1
5°	483.9	481.2	479.1	476.4	467.7	461.8	452.1	441.3	431.0	420.7	400.2
7.5°	522.8	518.5	515.2	507.7	495.8	482.3	467.2	456.9	449.9	421.3	386.2
10°	564.4	560.6	554.1	540.6	526.0	506.6	485.0	460.7	439.1	415.3	373.7
12.5°	605.4	600.0	590.9	573.6	553.1	528.7	499.0	470.4	439.6	411.5	359.2
15°	646.5	640.5	630.8	609.8	582.8	550.9	514.7	478.5	442.3	406.7	344.0
17.5°	691.3	683.2	668.6	644.9	610.8	571.4	528.7	485.0	441.3	400.7	327.8
20°	739.4	728.0	712.4	680.5	640.5	594.1	542.8	491.5	440.7	393.7	309.5
22.5°	779.3	768.0	750.7	717.8	669.7	613.0	554.7	495.8	438.6	385.6	292.2
25°	813.9	804.7	785.8	748.0	697.3	633.0	566.0	499.0	435.3	377.0	273.8
27.5°	840.9	832.3	811.2	772.3	720.5	650.8	574.7	500.7	431.0	368.3	254.9
30°	864.7	856.0	830.7	790.7	736.1	664.9	583.3	501.2	425.6	355.4	234.4
32.5°	883.0	874.9	849.0	806.4	746.9	674.6	588.2	500.7	418.6	346.2	212.3
35°	901.4	893.3	863.1	817.7	755.0	678.9	591.9	498.0	409.9	331.1	191.2
37.5°	915.5	906.3	875.5	825.3	758.8	680.0	591.4	494.2	400.7	318.7	170.1
40°	925.2	915.5	882.5	829.6	759.9	678.4	587.1	487.7	389.9	303.0	148.0
42.5°	931.7	920.9	885.7	836.1	757.7	674.0	580.6	479.6	378.1	289.5	126.9
45°	934.9	923.6	886.3	830.7	754.0	665.9	570.9	469.3	365.1	271.1	105.9
47.5°	933.3	920.9	883.6	824.7	746.9	657.3	560.1	456.9	349.4	254.9	85.9
50°	930.6	917.6	877.6	817.2	737.2	646.5	548.2	441.8	333.2	234.9	68.1
52.5°	921.9	909.0	871.2	806.4	725.9	634.1	532.0	426.1	316.0	215.5	51.8
55°	911.1	899.2	859.8	796.6	711.3	618.9	516.9	409.4	299.2	195.5	37.3
57.5°	894.4	883.6	845.8	781.0	696.7	602.2	500.1	391.0	278.1	175.5	25.9
60°	873.9	863.1	826.3	763.1	680.0	583.3	481.8	372.1	259.2	155.5	16.2
62.5°	852.3	842.0	803.7	741.0	658.9	563.3	461.8	353.2	239.3	137.2	9.7
65°	823.6	813.9	779.3	714.5	635.7	541.7	439.6	330.5	218.7	116.7	5.4
67.5°	793.4	784.8	749.6	690.2	608.7	517.9	416.9	308.4	197.1	98.8	2.7
70°	761.0	750.2	717.8	657.3	581.1	490.9	392.1	285.7	176.6	81.6	0.0
72.5°	723.2	715.1	683.8	626.5	549.3	462.3	366.7	260.9	153.9	64.8	0.5
75°	686.5	676.2	647.6	593.6	517.9	432.1	338.6	237.6	131.8	49.7	0.5
77.5°	638.9	635.7	608.7	556.3	488.2	402.9	307.9	209.6	110.7	35.6	0.5
80°	591.4	588.2	567.1	519.0	453.7	368.3	279.2	183.1	90.2	23.8	0.5
82.5°	544.4	540.1	520.1	480.1	418.6	339.2	249.5	156.6	71.3	14.6	0.5
85°	502.3	496.9	475.3	438.6	382.4	306.2	218.7	130.7	52.9	8.1	1.1
87.5°	466.1	462.3	438.6	400.7	345.7	275.4	191.7	105.9	37.3	3.8	1.6
90°	435.3	427.2	406.1	366.2	311.1	241.4	163.1	84.8	24.8	2.2	2.2
92.5°	405.1	398.0	374.8	333.8	280.3	212.3	135.6	64.8	15.7	1.1	2.7
95°	373.7	366.2	343.5	305.7	249.0	182.6	111.3	47.5	8.6	1.1	2.7
97.5°	343.0	335.9	312.2	274.4	220.9	156.6	88.0	33.5	4.3	1.1	2.2
100°	314.3	306.2	284.6	246.8	192.8	130.7	68.1	21.6	2.7	1.1	2.2
102.5°	284.1	277.6	255.5	218.7	163.6	106.4	50.8	13.5	1.1	1.1	1.6
105°	257.1	249.0	227.4	189.6	139.3	83.7	35.6	8.1	1.1	1.1	1.6



TEST NUMBER: P551466

CATALOG NUMBER: FCC-X-2-LD4-2LO-30-UNV-81-85-ED1D

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	167.4	160.9	142.0	110.2	70.8	32.9	9.7	1.6	1.6	1.6	1.6
115°	139.9	130.2	113.4	85.3	52.4	21.6	4.9	1.6	1.6	1.6	1.6
117.5°	111.8	103.7	91.8	64.8	34.6	14.0	2.7	1.6	1.6	1.6	1.6
120°	87.5	79.9	66.4	44.8	23.2	8.1	1.1	1.6	1.6	1.6	1.6
122.5°	62.7	56.7	44.8	29.2	14.0	3.8	1.6	1.6	2.2	2.2	1.6
125°	41.6	38.3	29.7	17.8	8.6	1.6	1.6	1.6	2.2	2.2	1.6
127.5°	27.0	24.3	17.3	10.3	3.8	1.6	1.6	2.2	2.2	2.2	1.6
130°	15.1	13.5	10.3	5.9	1.6	1.6	1.6	2.2	2.2	2.2	1.6
132.5°	8.6	8.1	5.4	1.1	1.6	1.6	1.6	2.2	2.2	2.2	2.2
135°	2.2	1.1	1.1	1.1	1.6	1.6	2.2	2.2	2.7	2.7	2.2
137.5°	0.5	0.5	1.1	1.1	1.6	1.6	2.2	2.7	2.7	2.7	2.2
140°	0.5	0.5	1.1	1.6	1.6	1.6	2.2	2.7	2.7	2.7	2.2
142.5°	0.5	1.1	1.1	1.6	1.6	2.2	2.2	2.7	2.7	2.2	2.2
145°	0.5	1.1	1.1	1.6	1.6	2.2	2.2	2.7	2.2	2.2	2.2
147.5°	1.1	1.1	1.1	1.6	1.6	2.2	2.2	2.7	2.7	2.2	2.2
150°	0.5	1.1	1.1	1.6	2.2	2.2	2.2	2.7	2.2	2.2	2.2
152.5°	0.5	1.1	1.1	1.6	2.2	2.2	2.2	2.7	2.2	2.2	2.2
155°	1.1	1.1	1.1	1.6	2.2	2.2	2.2	2.7	2.2	2.2	2.7
157.5°	1.1	1.1	1.1	1.6	2.2	2.2	2.2	2.7	2.2	2.2	2.7
160°	1.1	1.1	1.1	1.6	1.6	2.2	2.2	2.2	2.2	2.2	2.2
162.5°	1.1	1.1	1.1	1.6	1.6	2.2	2.2	2.2	2.2	2.2	2.2
165°	1.1	1.1	1.1	1.1	1.6	1.6	2.2	2.2	2.2	2.2	2.2
167.5°	1.1	1.1	1.1	1.6	1.6	1.6	2.2	2.2	2.2	2.2	2.2
170°	1.1	1.1	1.1	1.6	1.6	1.6	2.2	2.7	2.7	2.7	2.7
172.5°	1.1	1.1	1.1	1.6	1.6	2.2	2.2	2.7	2.7	2.7	2.7
175°	1.1	1.1	1.1	1.6	1.6	2.2	2.2	2.7	2.7	2.7	2.7
177.5°	0.5	1.1	1.1	1.6	1.6	2.2	2.2	2.7	2.7	2.7	2.2
180°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6



TEST NUMBER: P551466

CATALOG NUMBER: FCC-X-2-LD4-2LO-30-UNV-81-85-ED1D

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	424.0	424.0	424.0
2.5°	403.4	395.9	393.7
5°	381.8	369.4	362.4
7.5°	360.2	343.5	335.4
10°	340.3	316.5	307.9
12.5°	316.5	288.9	275.4
15°	293.8	258.2	245.2
17.5°	268.4	228.5	213.3
20°	244.7	198.8	183.1
22.5°	217.7	169.6	152.3
25°	193.4	140.4	121.0
27.5°	166.3	110.7	94.0
30°	141.0	84.8	68.1
32.5°	116.7	62.1	47.0
35°	94.0	42.1	29.7
37.5°	72.4	25.9	15.1
40°	52.4	13.5	7.0
42.5°	35.1	6.5	3.8
45°	21.6	3.2	0.0
47.5°	12.4	0.0	0.0
50°	6.5	0.0	0.0
52.5°	2.7	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°	0.5	0.5	0.5
77.5°	0.5	1.1	1.6
80°	1.1	2.2	2.7
82.5°	2.2	2.7	2.7
85°	2.2	2.7	3.2
87.5°	2.7	3.2	3.8
90°	3.2	3.8	3.8
92.5°	3.2	4.3	4.3
95°	3.8	4.3	4.9
97.5°	4.3	4.9	4.9
100°	3.8	4.9	5.4
102.5°	3.2	4.9	4.9
105°	2.7	3.8	4.3



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CATALOG NUMBER: FCC-X-2-LD4-2LO-30-UNV-81-85-ED1D

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	2.2	2.7	2.7
115°	1.6	2.2	2.7
117.5°	1.6	2.2	2.2
120°	1.6	1.6	2.2
122.5°	1.6	1.6	2.2
125°	1.6	1.6	2.2
127.5°	2.2	1.6	1.6
130°	1.6	1.6	1.6
132.5°	2.2	1.6	1.6
135°	2.2	1.6	1.6
137.5°	2.2	1.6	1.6
140°	2.2	1.6	1.6
142.5°	2.2	1.6	1.6
145°	1.6	1.6	1.6
147.5°	1.6	1.6	1.6
150°	1.6	1.6	1.1
152.5°	1.6	1.1	1.1
155°	1.6	1.1	0.5
157.5°	2.2	1.1	0.5
160°	1.6	1.1	0.5
162.5°	1.6	1.1	0.5
165°	1.6	1.1	0.0
167.5°	1.6	1.1	0.5
170°	1.6	1.1	0.5
172.5°	1.6	1.1	0.5
175°	1.6	0.5	0.5
177.5°	1.6	0.5	0.5
180°	1.6	1.6	1.6



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	226.8	220.4	198.8	163.1	114.0	63.7	23.8	4.3	1.1	1.6	1.6
110°	197.7	192.3	170.1	135.6	91.8	47.5	15.7	2.7	1.6	1.6	1.6





107.5°	2.2	3.2	3.8
110°	2.2	2.7	3.2



(END OF REPORT)