

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: P551560

Luminaire Tested: **FCC-X-2-LD4-2LO-35-UNV-93-84-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: P551560
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-93-84-ED1D
Description: FCC CORNER MOUNT LUMINAIRE WITH .156 CLEAR TEMPERED GLASS FIXTURE
SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 3500K, AND 80 CRI
LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

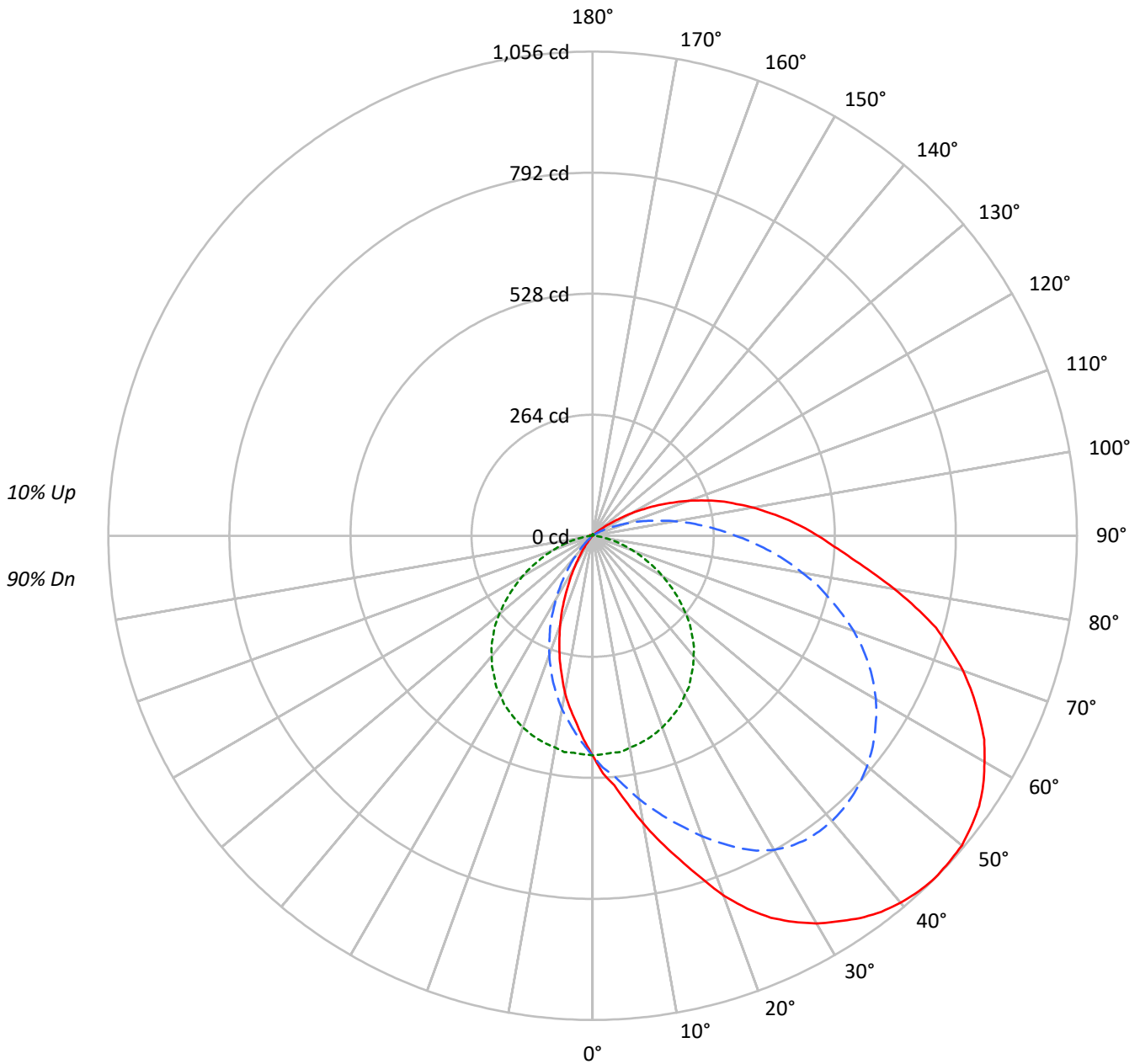
Lumens per Lamp: N/A
Luminaire Lumens: 2366.9 lumens
Efficiency: N/A
Efficacy: 100.7 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

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

TEST NUMBER: P551560

CATALOG NUMBER: FCC-X-2-LD4-2LO-35-UNV-93-84-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°	5154	5154	5154
5°	5657	5078	4237
10°	6402	5016	3492
15°	7175	4952	2721
20°	8092	4871	2004
25°	8852	4777	1316
30°	9418	4652	741
35°	9908	4518	326
40°	10342	4352	78
45°	10715	4143	0
50°	11027	3867	0
55°	11265	3516	0
60°	11386	3109	0
65°	11432	2645	0
70°	11394	2158	0
75°	11249	1591	9
80°	10794	972	48
85°	10432	463	68



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.9	1.9
10°-20°	137.3	5.8
20°-30°	222.4	9.4
30°-40°	285.7	12.1
40°-50°	323.4	13.7
50°-60°	335.0	14.2
60°-70°	315.9	13.3
70°-80°	264.8	11.2
80°-90°	191.9	8.1
90°-100°	126.1	5.3
100°-110°	72.8	3.1
110°-120°	32.1	1.4
120°-130°	8.7	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°	405.6	17.1
0°-40°	691.2	29.2
0°-60°	1349.6	57.0
0°-90°	2122.2	89.7
90°-120°	231.1	9.8
90°-150°	243.0	10.3
90°-180°	245.0	10.4
0°-180°	2366.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	479	479	479	479	479	
5°	546	525	475	431	409	55
15°	730	640	459	332	277	211
25°	919	751	426	218	137	425
35°	1018	810	374	106	34	638
45°	1056	802	306	24	0	815
55°	1029	751	221	0	0	919
65°	930	665	132	0	0	920
75°	775	536	56	1	1	813
85°	567	389	9	2	4	484
90°	492	312	2	4	4	270
95°	422	244	1	4	6	331
105°	290	126	1	3	5	306
115°	158	42	2	2	3	158
125°	47	6	2	2	2	47
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°	478.8	478.8	478.8	478.8	478.8	478.8	478.8	478.8	478.8	478.8	478.8
2.5°	519.0	518.4	516.6	513.6	509.3	502.0	495.9	490.4	483.1	477.0	465.4
5°	546.5	543.4	541.0	537.9	528.2	521.5	510.5	498.3	486.7	475.1	452.0
7.5°	590.4	585.5	581.9	573.3	559.9	544.7	527.6	516.0	508.1	475.7	436.1
10°	637.4	633.1	625.8	610.5	594.1	572.1	547.7	520.3	495.9	469.0	422.1
12.5°	683.7	677.6	667.3	647.7	624.6	597.1	563.6	531.2	496.5	464.8	405.6
15°	730.1	723.4	712.4	688.6	658.1	622.1	581.3	540.4	499.5	459.3	388.5
17.5°	780.7	771.5	755.1	728.2	689.8	645.3	597.1	547.7	498.3	452.6	370.2
20°	835.0	822.2	804.5	768.5	723.4	670.9	613.0	555.0	497.7	444.6	349.5
22.5°	880.1	867.3	847.8	810.6	756.3	692.3	626.4	559.9	495.3	435.5	330.0
25°	919.1	908.8	887.4	844.7	787.4	714.8	639.2	563.6	491.6	425.7	309.2
27.5°	949.6	939.9	916.1	872.2	813.6	735.0	649.0	565.4	486.7	416.0	287.9
30°	976.5	966.7	938.1	892.9	831.3	750.8	658.7	566.0	480.6	401.3	264.7
32.5°	997.2	988.1	958.8	910.6	843.5	761.8	664.2	565.4	472.7	391.0	239.7
35°	1018.0	1008.8	974.7	923.4	852.7	766.7	668.5	562.3	462.9	373.9	215.9
37.5°	1033.8	1023.4	988.7	932.0	856.9	767.9	667.9	558.1	452.6	359.9	192.1
40°	1044.8	1033.8	996.6	936.8	858.2	766.1	663.0	550.8	440.4	342.2	167.1
42.5°	1052.1	1039.9	1000.3	944.2	855.7	761.2	655.7	541.6	426.9	326.9	143.3
45°	1055.8	1043.0	1000.9	938.1	851.4	752.0	644.7	530.0	412.3	306.2	119.5
47.5°	1053.9	1039.9	997.8	931.3	843.5	742.3	632.5	516.0	394.6	287.9	97.0
50°	1050.9	1036.3	991.1	922.8	832.5	730.1	619.1	498.9	376.3	265.3	76.8
52.5°	1041.1	1026.5	983.8	910.6	819.7	716.0	600.8	481.2	356.8	243.4	58.6
55°	1028.9	1015.5	971.0	899.6	803.3	699.0	583.7	462.3	337.9	220.8	42.1
57.5°	1010.0	997.8	955.1	881.9	786.8	680.1	564.8	441.6	314.1	198.2	29.3
60°	986.9	974.7	933.2	861.8	767.9	658.7	544.0	420.2	292.8	175.7	18.3
62.5°	962.5	950.9	907.6	836.8	744.1	636.1	521.5	398.9	270.2	154.9	11.0
65°	930.1	919.1	880.1	806.9	717.9	611.7	496.5	373.3	247.0	131.7	6.1
67.5°	896.0	886.2	846.6	779.5	687.4	584.9	470.9	348.3	222.6	111.6	3.0
70°	859.4	847.2	810.6	742.3	656.3	554.4	442.8	322.6	199.4	92.1	0.0
72.5°	816.7	807.5	772.2	707.5	620.3	522.1	414.1	294.6	173.8	73.2	0.6
75°	775.2	763.6	731.3	670.3	584.9	487.9	382.4	268.4	148.8	56.1	0.6
77.5°	721.5	717.9	687.4	628.2	551.4	455.0	347.7	236.6	125.0	40.3	0.6
80°	667.9	664.2	640.4	586.1	512.3	416.0	315.3	206.8	101.9	26.8	0.6
82.5°	614.8	609.9	587.4	542.2	472.7	383.0	281.8	176.9	80.5	16.5	0.6
85°	567.2	561.1	536.7	495.3	431.8	345.8	247.0	147.6	59.8	9.1	1.2
87.5°	526.4	522.1	495.3	452.6	390.3	311.1	216.5	119.5	42.1	4.3	1.8
90°	491.6	482.4	458.7	413.5	351.3	272.6	184.2	95.8	28.1	2.4	2.4
92.5°	457.4	449.5	423.3	376.9	316.5	239.7	153.1	73.2	17.7	1.2	3.0
95°	422.1	413.5	387.9	345.2	281.2	206.2	125.6	53.7	9.8	1.2	3.0
97.5°	387.3	379.4	352.5	309.8	249.5	176.9	99.4	37.8	4.9	1.2	2.4
100°	355.0	345.8	321.4	278.7	217.7	147.6	76.8	24.4	3.0	1.2	2.4
102.5°	320.8	313.5	288.5	247.0	184.8	120.2	57.3	15.2	1.2	1.2	1.8
105°	290.3	281.2	256.8	214.1	157.4	94.5	40.3	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°	189.1	181.8	160.4	124.4	79.9	37.2	11.0	1.8	1.8	1.8	1.8
115°	158.0	147.0	128.1	96.4	59.2	24.4	5.5	1.8	1.8	1.8	1.8
117.5°	126.3	117.1	103.7	73.2	39.0	15.9	3.0	1.8	1.8	1.8	1.8
120°	98.8	90.3	75.0	50.6	26.2	9.1	1.2	1.8	1.8	1.8	1.8
122.5°	70.8	64.0	50.6	32.9	15.9	4.3	1.8	1.8	2.4	2.4	1.8
125°	47.0	43.3	33.5	20.1	9.8	1.8	1.8	1.8	2.4	2.4	1.8
127.5°	30.5	27.4	19.5	11.6	4.3	1.8	1.8	2.4	2.4	2.4	1.8
130°	17.1	15.2	11.6	6.7	1.8	1.8	1.8	2.4	2.4	2.4	1.8
132.5°	9.8	9.1	6.1	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°	478.8	478.8	478.8
2.5°	455.6	447.1	444.6
5°	431.2	417.2	409.3
7.5°	406.8	387.9	378.8
10°	384.2	357.4	347.7
12.5°	357.4	326.3	311.1
15°	331.8	291.5	276.9
17.5°	303.1	258.0	240.9
20°	276.3	224.5	206.8
22.5°	245.8	191.5	172.0
25°	218.4	158.6	136.6
27.5°	187.9	125.0	106.1
30°	159.2	95.8	76.8
32.5°	131.7	70.1	53.1
35°	106.1	47.6	33.5
37.5°	81.7	29.3	17.1
40°	59.2	15.2	7.9
42.5°	39.6	7.3	4.3
45°	24.4	3.7	0.0
47.5°	14.0	0.0	0.0
50°	7.3	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	3.7
87.5°	3.0	3.7	4.3
90°	3.7	4.3	4.3
92.5°	3.7	4.9	4.9
95°	4.3	4.9	5.5
97.5°	4.9	5.5	5.5
100°	4.3	5.5	6.1
102.5°	3.7	5.5	5.5
105°	3.0	4.3	4.9



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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°	256.2	248.8	224.5	184.2	128.7	72.0	26.8	4.9	1.2	1.8	1.8
110°	223.2	217.1	192.1	153.1	103.7	53.7	17.7	3.0	1.8	1.8	1.8





107.5°	2.4	3.7	4.3
110°	2.4	3.0	3.7



(END OF REPORT)