

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: P550548

Luminaire Tested: **FCC-X-2-LD4-1HI-35-UNV-93-96-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: P550548
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-LD4-1HI-35-UNV-93-96-ED1D
Description: FCC CORNER MOUNT LUMINAIRE WITH .156 CLEAR TEMPERED GLASS 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

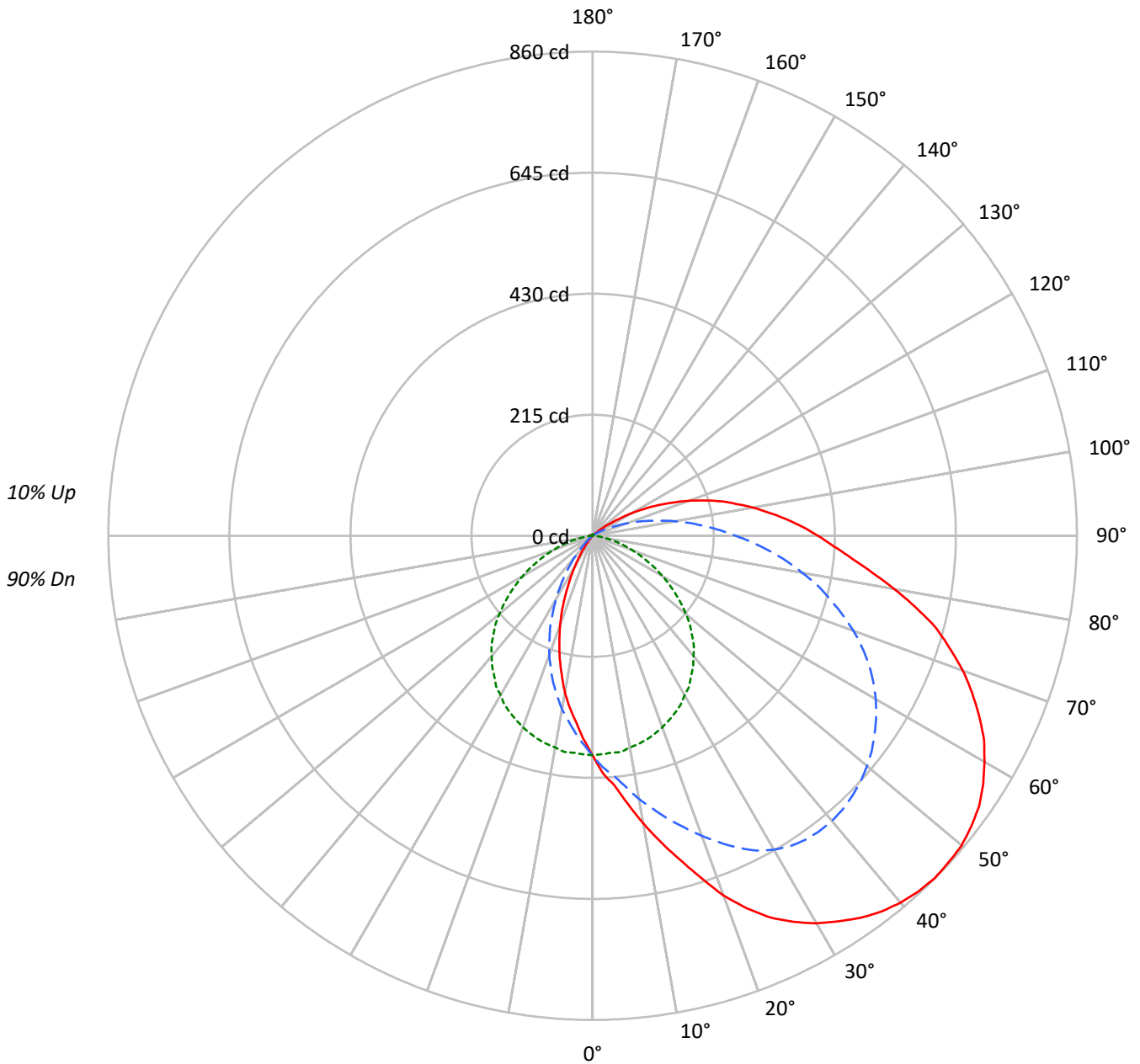
Lumens per Lamp: N/A
Luminaire Lumens: 1927.1 lumens
Efficiency: N/A
Efficacy: 88.8 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

Input Watts (W): 21.7
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: P550548

CATALOG NUMBER: FCC-X-2-LD4-1HI-35-UNV-93-96-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°	4196	4196	4196
5°	4606	4134	3449
10°	5212	4083	2843
15°	5841	4032	2215
20°	6588	3966	1631
25°	7207	3890	1071
30°	7668	3787	604
35°	8066	3678	266
40°	8420	3543	64
45°	8722	3373	0
50°	8977	3148	0
55°	9171	2861	0
60°	9269	2531	0
65°	9307	2155	0
70°	9275	1757	0
75°	9158	1296	7
80°	8787	791	40
85°	8493	376	55



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	37.3	1.9
10°-20°	111.8	5.8
20°-30°	181.0	9.4
30°-40°	232.6	12.1
40°-50°	263.3	13.7
50°-60°	272.7	14.2
60°-70°	257.2	13.3
70°-80°	215.6	11.2
80°-90°	156.3	8.1
90°-100°	102.7	5.3
100°-110°	59.3	3.1
110°-120°	26.2	1.4
120°-130°	7.1	0.4
130°-140°	1.6	0.1
140°-150°	1.1	0.1
150°-160°	0.8	0.0
160°-170°	0.4	0.0
170°-180°	0.2	0.0
0°-30°	330.2	17.1
0°-40°	562.7	29.2
0°-60°	1098.7	57.0
0°-90°	1727.7	89.7
90°-120°	188.2	9.8
90°-150°	198.0	10.3
90°-180°	199.0	10.3
0°-180°	1927.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	390	390	390	390	390	
5°	445	427	387	351	333	45
15°	594	521	374	270	225	171
25°	748	611	347	178	111	346
35°	829	659	304	86	27	520
45°	860	653	249	20	0	664
55°	838	611	180	0	0	748
65°	757	541	107	0	0	749
75°	631	437	46	0	0	662
85°	462	317	7	2	3	394
90°	400	254	2	3	4	219
95°	344	198	1	4	4	270
105°	236	103	1	2	4	249
115°	129	34	2	2	2	129
125°	38	5	2	2	2	38
135°	2	2	2	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	2	2	0	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°	389.8	389.8	389.8	389.8	389.8	389.8	389.8	389.8	389.8	389.8	389.8
2.5°	422.6	422.1	420.6	418.1	414.6	408.7	403.7	399.2	393.3	388.3	378.9
5°	444.9	442.4	440.4	438.0	430.0	424.5	415.6	405.7	396.2	386.8	367.9
7.5°	480.7	476.7	473.7	466.7	455.8	443.4	429.5	420.1	413.6	387.3	355.0
10°	518.9	515.4	509.5	497.0	483.6	465.8	445.9	423.6	403.7	381.8	343.6
12.5°	556.6	551.7	543.2	527.3	508.5	486.1	458.8	432.5	404.2	378.4	330.2
15°	594.4	588.9	580.0	560.6	535.8	506.5	473.2	439.9	406.7	373.9	316.3
17.5°	635.6	628.1	614.7	592.9	561.6	525.3	486.1	445.9	405.7	368.4	301.4
20°	679.8	669.3	654.9	625.6	588.9	546.2	499.0	451.9	405.2	362.0	284.5
22.5°	716.5	706.1	690.2	659.9	615.7	563.6	509.9	455.8	403.2	354.5	268.6
25°	748.3	739.8	722.5	687.7	641.0	581.9	520.4	458.8	400.2	346.6	251.7
27.5°	773.1	765.2	745.8	710.1	662.4	598.3	528.3	460.3	396.2	338.6	234.4
30°	795.0	787.0	763.7	726.9	676.8	611.2	536.3	460.8	391.3	326.7	215.5
32.5°	811.8	804.4	780.6	741.3	686.7	620.2	540.7	460.3	384.8	318.3	195.1
35°	828.7	821.3	793.5	751.8	694.2	624.2	544.2	457.8	376.9	304.4	175.8
37.5°	841.6	833.2	804.9	758.7	697.6	625.1	543.7	454.3	368.4	293.0	156.4
40°	850.6	841.6	811.4	762.7	698.6	623.7	539.7	448.4	358.5	278.6	136.1
42.5°	856.5	846.6	814.3	768.6	696.6	619.7	533.8	440.9	347.6	266.1	116.7
45°	859.5	849.1	814.8	763.7	693.2	612.2	524.8	431.5	335.7	249.3	97.3
47.5°	858.0	846.6	812.3	758.2	686.7	604.3	514.9	420.1	321.3	234.4	79.0
50°	855.5	843.6	806.9	751.3	677.8	594.4	504.0	406.2	306.4	216.0	62.6
52.5°	847.6	835.7	800.9	741.3	667.4	582.9	489.1	391.8	290.5	198.1	47.7
55°	837.7	826.7	790.5	732.4	653.9	569.0	475.2	376.4	275.1	179.7	34.3
57.5°	822.3	812.3	777.6	718.0	640.5	553.6	459.8	359.5	255.7	161.4	23.8
60°	803.4	793.5	759.7	701.6	625.1	536.3	442.9	342.1	238.3	143.0	14.9
62.5°	783.5	774.1	738.9	681.3	605.8	517.9	424.5	324.7	220.0	126.1	8.9
65°	757.2	748.3	716.5	656.9	584.4	498.0	404.2	303.9	201.1	107.3	5.0
67.5°	729.4	721.5	689.2	634.6	559.6	476.2	383.3	283.5	181.2	90.9	2.5
70°	699.6	689.7	659.9	604.3	534.3	451.4	360.5	262.7	162.4	75.0	0.0
72.5°	664.9	657.4	628.6	576.0	505.0	425.0	337.2	239.8	141.5	59.6	0.5
75°	631.1	621.7	595.4	545.7	476.2	397.2	311.3	218.5	121.2	45.7	0.5
77.5°	587.4	584.4	559.6	511.4	448.9	370.4	283.0	192.7	101.8	32.8	0.5
80°	543.7	540.7	521.4	477.2	417.1	338.6	256.7	168.3	82.9	21.8	0.5
82.5°	500.5	496.5	478.2	441.4	384.8	311.8	229.4	144.0	65.5	13.4	0.5
85°	461.8	456.8	437.0	403.2	351.6	281.5	201.1	120.2	48.7	7.4	1.0
87.5°	428.5	425.0	403.2	368.4	317.8	253.2	176.3	97.3	34.3	3.5	1.5
90°	400.2	392.8	373.4	336.7	286.0	222.0	150.0	78.0	22.8	2.0	2.0
92.5°	372.4	366.0	344.6	306.9	257.7	195.1	124.6	59.6	14.4	1.0	2.5
95°	343.6	336.7	315.8	281.0	228.9	167.8	102.3	43.7	7.9	1.0	2.5
97.5°	315.3	308.8	287.0	252.2	203.1	144.0	80.9	30.8	4.0	1.0	2.0
100°	289.0	281.5	261.7	226.9	177.3	120.2	62.6	19.9	2.5	1.0	2.0
102.5°	261.2	255.2	234.9	201.1	150.5	97.8	46.7	12.4	1.0	1.0	1.5
105°	236.4	228.9	209.0	174.3	128.1	77.0	32.8	7.4	1.0	1.0	1.5



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CATALOG NUMBER: FCC-X-2-LD4-1HI-35-UNV-93-96-ED1D

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	153.9	148.0	130.6	101.3	65.0	30.3	8.9	1.5	1.5	1.5	1.5
115°	128.6	119.7	104.3	78.5	48.2	19.9	4.5	1.5	1.5	1.5	1.5
117.5°	102.8	95.3	84.4	59.6	31.8	12.9	2.5	1.5	1.5	1.5	1.5
120°	80.4	73.5	61.1	41.2	21.4	7.4	1.0	1.5	1.5	1.5	1.5
122.5°	57.6	52.1	41.2	26.8	12.9	3.5	1.5	1.5	2.0	2.0	1.5
125°	38.2	35.3	27.3	16.4	7.9	1.5	1.5	1.5	2.0	2.0	1.5
127.5°	24.8	22.3	15.9	9.4	3.5	1.5	1.5	2.0	2.0	2.0	1.5
130°	13.9	12.4	9.4	5.5	1.5	1.5	1.5	2.0	2.0	2.0	1.5
132.5°	7.9	7.4	5.0	1.0	1.5	1.5	1.5	2.0	2.0	2.0	2.0
135°	2.0	1.0	1.0	1.0	1.5	1.5	2.0	2.0	2.5	2.5	2.0
137.5°	0.5	0.5	1.0	1.0	1.5	1.5	2.0	2.5	2.5	2.5	2.0
140°	0.5	0.5	1.0	1.5	1.5	1.5	2.0	2.5	2.5	2.5	2.0
142.5°	0.5	1.0	1.0	1.5	1.5	2.0	2.0	2.5	2.5	2.0	2.0
145°	0.5	1.0	1.0	1.5	1.5	2.0	2.0	2.5	2.0	2.0	2.0
147.5°	1.0	1.0	1.0	1.5	1.5	2.0	2.0	2.5	2.5	2.0	2.0
150°	0.5	1.0	1.0	1.5	2.0	2.0	2.0	2.5	2.0	2.0	2.0
152.5°	0.5	1.0	1.0	1.5	2.0	2.0	2.0	2.5	2.0	2.0	2.0
155°	1.0	1.0	1.0	1.5	2.0	2.0	2.0	2.5	2.0	2.0	2.5
157.5°	1.0	1.0	1.0	1.5	2.0	2.0	2.0	2.5	2.0	2.0	2.5
160°	1.0	1.0	1.0	1.5	1.5	2.0	2.0	2.0	2.0	2.0	2.0
162.5°	1.0	1.0	1.0	1.5	1.5	2.0	2.0	2.0	2.0	2.0	2.0
165°	1.0	1.0	1.0	1.0	1.5	1.5	2.0	2.0	2.0	2.0	2.0
167.5°	1.0	1.0	1.0	1.5	1.5	1.5	2.0	2.0	2.0	2.0	2.0
170°	1.0	1.0	1.0	1.5	1.5	1.5	2.0	2.5	2.5	2.5	2.5
172.5°	1.0	1.0	1.0	1.5	1.5	2.0	2.0	2.5	2.5	2.5	2.5
175°	1.0	1.0	1.0	1.5	1.5	2.0	2.0	2.5	2.5	2.5	2.5
177.5°	0.5	1.0	1.0	1.5	1.5	2.0	2.0	2.5	2.5	2.5	2.0
180°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	389.8	389.8	389.8
2.5°	370.9	364.0	362.0
5°	351.1	339.6	333.2
7.5°	331.2	315.8	308.4
10°	312.8	291.0	283.0
12.5°	291.0	265.7	253.2
15°	270.1	237.3	225.4
17.5°	246.8	210.0	196.1
20°	224.9	182.7	168.3
22.5°	200.1	155.9	140.0
25°	177.8	129.1	111.2
27.5°	152.9	101.8	86.4
30°	129.6	78.0	62.6
32.5°	107.3	57.1	43.2
35°	86.4	38.7	27.3
37.5°	66.5	23.8	13.9
40°	48.2	12.4	6.5
42.5°	32.3	6.0	3.5
45°	19.9	3.0	0.0
47.5°	11.4	0.0	0.0
50°	6.0	0.0	0.0
52.5°	2.5	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	1.0	1.5
80°	1.0	2.0	2.5
82.5°	2.0	2.5	2.5
85°	2.0	2.5	3.0
87.5°	2.5	3.0	3.5
90°	3.0	3.5	3.5
92.5°	3.0	4.0	4.0
95°	3.5	4.0	4.5
97.5°	4.0	4.5	4.5
100°	3.5	4.5	5.0
102.5°	3.0	4.5	4.5
105°	2.5	3.5	4.0



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	2.0	2.5	2.5
115°	1.5	2.0	2.5
117.5°	1.5	2.0	2.0
120°	1.5	1.5	2.0
122.5°	1.5	1.5	2.0
125°	1.5	1.5	2.0
127.5°	2.0	1.5	1.5
130°	1.5	1.5	1.5
132.5°	2.0	1.5	1.5
135°	2.0	1.5	1.5
137.5°	2.0	1.5	1.5
140°	2.0	1.5	1.5
142.5°	2.0	1.5	1.5
145°	1.5	1.5	1.5
147.5°	1.5	1.5	1.5
150°	1.5	1.5	1.0
152.5°	1.5	1.0	1.0
155°	1.5	1.0	0.5
157.5°	2.0	1.0	0.5
160°	1.5	1.0	0.5
162.5°	1.5	1.0	0.5
165°	1.5	1.0	0.0
167.5°	1.5	1.0	0.5
170°	1.5	1.0	0.5
172.5°	1.5	1.0	0.5
175°	1.5	0.5	0.5
177.5°	1.5	0.5	0.5
180°	1.5	1.5	1.5



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	208.5	202.6	182.7	150.0	104.8	58.6	21.8	4.0	1.0	1.5	1.5
110°	181.7	176.8	156.4	124.6	84.4	43.7	14.4	2.5	1.5	1.5	1.5





107.5°	2.0	3.0	3.5
110°	2.0	2.5	3.0



(END OF REPORT)