

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: P550556

Luminaire Tested: **FCC-X-2-LD4-1HI-40-UNV-80-86-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: P550556
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-40-UNV-80-86-ED1D
Description: FCC CORNER MOUNT LUMINAIRE WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 4000K, AND 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

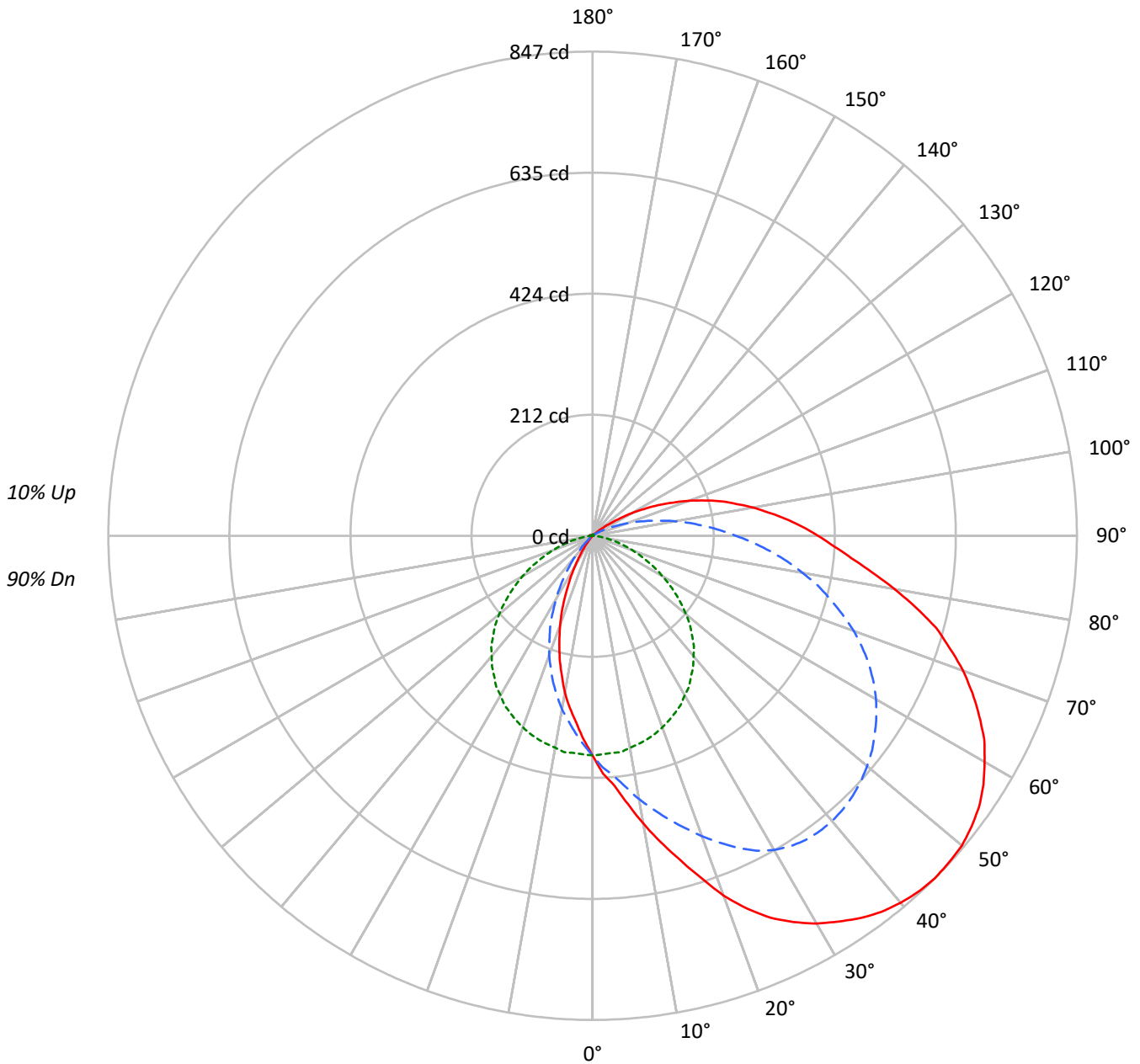
Lumens per Lamp: N/A
Luminaire Lumens: 1899.1 lumens
Efficiency: N/A
Efficacy: 87.5 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

Input Watts (W): 21.7
Input Voltage (V): NR
Input Current (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

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CATALOG NUMBER: FCC-X-2-LD4-1HI-40-UNV-80-86-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°	4134	4134	4134
5°	4538	4074	3399
10°	5136	4024	2801
15°	5756	3973	2184
20°	6492	3908	1608
25°	7102	3834	1056
30°	7556	3733	595
35°	7949	3625	262
40°	8297	3491	63
45°	8596	3323	0
50°	8847	3103	0
55°	9038	2820	0
60°	9134	2493	0
65°	9171	2123	0
70°	9142	1731	0
75°	9024	1276	7
80°	8659	780	39
85°	8370	371	53



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	36.8	1.9
10°-20°	110.2	5.8
20°-30°	178.4	9.4
30°-40°	229.2	12.1
40°-50°	259.4	13.7
50°-60°	268.8	14.2
60°-70°	253.5	13.3
70°-80°	212.4	11.2
80°-90°	154.0	8.1
90°-100°	101.2	5.3
100°-110°	58.4	3.1
110°-120°	25.8	1.4
120°-130°	7.0	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°	325.4	17.1
0°-40°	554.6	29.2
0°-60°	1082.8	57.0
0°-90°	1702.6	89.7
90°-120°	185.4	9.8
90°-150°	195.1	10.3
90°-180°	196.0	10.3
0°-180°	1899.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	384	384	384	384	384	
5°	438	421	381	346	328	44
15°	586	514	368	266	222	169
25°	737	603	342	175	110	341
35°	817	650	300	85	27	512
45°	847	643	246	20	0	654
55°	826	603	177	0	0	737
65°	746	533	106	0	0	738
75°	622	430	45	0	0	652
85°	455	312	7	2	3	389
90°	394	250	2	3	3	216
95°	339	196	1	3	4	266
105°	233	101	1	2	4	246
115°	127	34	2	2	2	127
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°	384.1	384.1	384.1	384.1	384.1	384.1	384.1	384.1	384.1	384.1	384.1
2.5°	416.4	415.9	414.5	412.0	408.6	402.7	397.8	393.4	387.5	382.7	373.4
5°	438.4	436.0	434.0	431.6	423.8	418.4	409.6	399.8	390.5	381.2	362.6
7.5°	473.7	469.8	466.8	460.0	449.2	437.0	423.3	414.0	407.6	381.7	349.9
10°	511.3	507.9	502.1	489.8	476.6	459.0	439.4	417.4	397.8	376.3	338.6
12.5°	548.5	543.6	535.3	519.7	501.1	479.1	452.1	426.2	398.3	372.9	325.4
15°	585.7	580.3	571.5	552.5	528.0	499.1	466.3	433.5	400.8	368.5	311.7
17.5°	626.3	619.0	605.8	584.3	553.4	517.7	479.1	439.4	399.8	363.1	297.0
20°	669.9	659.6	645.4	616.6	580.3	538.3	491.8	445.3	399.3	356.7	280.4
22.5°	706.1	695.8	680.2	650.3	606.8	555.4	502.5	449.2	397.3	349.4	264.7
25°	737.4	729.1	712.0	677.7	631.7	573.5	512.8	452.1	394.4	341.6	248.1
27.5°	761.9	754.1	735.0	699.7	652.8	589.6	520.6	453.6	390.5	333.7	231.0
30°	783.4	775.6	752.6	716.4	667.0	602.4	528.5	454.1	385.6	322.0	212.4
32.5°	800.1	792.7	769.2	730.6	676.7	611.2	532.9	453.6	379.2	313.7	192.3
35°	816.7	809.3	781.9	740.8	684.1	615.1	536.3	451.2	371.4	300.0	173.2
37.5°	829.4	821.1	793.2	747.7	687.5	616.1	535.8	447.7	363.1	288.7	154.1
40°	838.2	829.4	799.6	751.6	688.5	614.6	531.9	441.9	353.3	274.5	134.1
42.5°	844.1	834.3	802.5	757.5	686.5	610.7	526.0	434.5	342.5	262.3	115.0
45°	847.0	836.8	803.0	752.6	683.1	603.3	517.2	425.2	330.8	245.6	95.9
47.5°	845.6	834.3	800.5	747.2	676.7	595.5	507.4	414.0	316.6	231.0	77.8
50°	843.1	831.4	795.2	740.4	667.9	585.7	496.7	400.3	301.9	212.9	61.7
52.5°	835.3	823.5	789.3	730.6	657.7	574.5	482.0	386.1	286.3	195.2	47.0
55°	825.5	814.7	779.0	721.8	644.4	560.8	468.3	370.9	271.1	177.1	33.8
57.5°	810.3	800.5	766.3	707.6	631.2	545.6	453.1	354.3	252.0	159.0	23.5
60°	791.7	781.9	748.7	691.4	616.1	528.5	436.5	337.1	234.9	140.9	14.7
62.5°	772.2	762.9	728.1	671.4	597.0	510.4	418.4	320.0	216.8	124.3	8.8
65°	746.2	737.4	706.1	647.4	575.9	490.8	398.3	299.5	198.2	105.7	4.9
67.5°	718.8	711.0	679.2	625.4	551.5	469.3	377.8	279.4	178.6	89.5	2.4
70°	689.5	679.7	650.3	595.5	526.5	444.8	355.3	258.9	160.0	73.9	0.0
72.5°	655.2	647.9	619.5	567.6	497.6	418.9	332.3	236.3	139.5	58.7	0.5
75°	621.9	612.6	586.7	537.8	469.3	391.5	306.8	215.3	119.4	45.0	0.5
77.5°	578.9	575.9	551.5	504.0	442.4	365.0	278.9	189.9	100.3	32.3	0.5
80°	535.8	532.9	513.8	470.2	411.0	333.7	253.0	165.9	81.7	21.5	0.5
82.5°	493.2	489.3	471.2	435.0	379.2	307.3	226.1	141.9	64.6	13.2	0.5
85°	455.1	450.2	430.6	397.3	346.4	277.4	198.2	118.4	48.0	7.3	1.0
87.5°	422.3	418.9	397.3	363.1	313.2	249.6	173.7	95.9	33.8	3.4	1.5
90°	394.4	387.1	368.0	331.8	281.9	218.7	147.8	76.8	22.5	2.0	2.0
92.5°	367.0	360.6	339.6	302.4	254.0	192.3	122.8	58.7	14.2	1.0	2.4
95°	338.6	331.8	311.2	277.0	225.6	165.4	100.8	43.1	7.8	1.0	2.4
97.5°	310.7	304.4	282.8	248.6	200.1	141.9	79.8	30.3	3.9	1.0	2.0
100°	284.8	277.4	257.9	223.6	174.7	118.4	61.7	19.6	2.4	1.0	2.0
102.5°	257.4	251.5	231.5	198.2	148.3	96.4	46.0	12.2	1.0	1.0	1.5
105°	232.9	225.6	206.0	171.8	126.2	75.8	32.3	7.3	1.0	1.0	1.5



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CATALOG NUMBER: FCC-X-2-LD4-1HI-40-UNV-80-86-ED1D

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	151.7	145.8	128.7	99.8	64.1	29.8	8.8	1.5	1.5	1.5	1.5
115°	126.7	117.9	102.8	77.3	47.5	19.6	4.4	1.5	1.5	1.5	1.5
117.5°	101.3	94.0	83.2	58.7	31.3	12.7	2.4	1.5	1.5	1.5	1.5
120°	79.3	72.4	60.2	40.6	21.0	7.3	1.0	1.5	1.5	1.5	1.5
122.5°	56.8	51.4	40.6	26.4	12.7	3.4	1.5	1.5	2.0	2.0	1.5
125°	37.7	34.7	26.9	16.1	7.8	1.5	1.5	1.5	2.0	2.0	1.5
127.5°	24.5	22.0	15.7	9.3	3.4	1.5	1.5	2.0	2.0	2.0	1.5
130°	13.7	12.2	9.3	5.4	1.5	1.5	1.5	2.0	2.0	2.0	1.5
132.5°	7.8	7.3	4.9	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	2.4	2.4	2.0
137.5°	0.5	0.5	1.0	1.0	1.5	1.5	2.0	2.4	2.4	2.4	2.0
140°	0.5	0.5	1.0	1.5	1.5	1.5	2.0	2.4	2.4	2.4	2.0
142.5°	0.5	1.0	1.0	1.5	1.5	2.0	2.0	2.4	2.4	2.0	2.0
145°	0.5	1.0	1.0	1.5	1.5	2.0	2.0	2.4	2.0	2.0	2.0
147.5°	1.0	1.0	1.0	1.5	1.5	2.0	2.0	2.4	2.4	2.0	2.0
150°	0.5	1.0	1.0	1.5	2.0	2.0	2.0	2.4	2.0	2.0	2.0
152.5°	0.5	1.0	1.0	1.5	2.0	2.0	2.0	2.4	2.0	2.0	2.0
155°	1.0	1.0	1.0	1.5	2.0	2.0	2.0	2.4	2.0	2.0	2.4
157.5°	1.0	1.0	1.0	1.5	2.0	2.0	2.0	2.4	2.0	2.0	2.4
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	2.4	2.4	2.4	2.4
172.5°	1.0	1.0	1.0	1.5	1.5	2.0	2.0	2.4	2.4	2.4	2.4
175°	1.0	1.0	1.0	1.5	1.5	2.0	2.0	2.4	2.4	2.4	2.4
177.5°	0.5	1.0	1.0	1.5	1.5	2.0	2.0	2.4	2.4	2.4	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°	384.1	384.1	384.1
2.5°	365.5	358.7	356.7
5°	346.0	334.7	328.3
7.5°	326.4	311.2	303.9
10°	308.3	286.7	278.9
12.5°	286.7	261.8	249.6
15°	266.2	233.9	222.2
17.5°	243.2	207.0	193.3
20°	221.7	180.1	165.9
22.5°	197.2	153.6	138.0
25°	175.2	127.2	109.6
27.5°	150.7	100.3	85.1
30°	127.7	76.8	61.7
32.5°	105.7	56.3	42.6
35°	85.1	38.2	26.9
37.5°	65.6	23.5	13.7
40°	47.5	12.2	6.4
42.5°	31.8	5.9	3.4
45°	19.6	2.9	0.0
47.5°	11.3	0.0	0.0
50°	5.9	0.0	0.0
52.5°	2.4	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	2.4
82.5°	2.0	2.4	2.4
85°	2.0	2.4	2.9
87.5°	2.4	2.9	3.4
90°	2.9	3.4	3.4
92.5°	2.9	3.9	3.9
95°	3.4	3.9	4.4
97.5°	3.9	4.4	4.4
100°	3.4	4.4	4.9
102.5°	2.9	4.4	4.4
105°	2.4	3.4	3.9



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CATALOG NUMBER: FCC-X-2-LD4-1HI-40-UNV-80-86-ED1D

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	2.0	2.4	2.4
115°	1.5	2.0	2.4
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°	205.5	199.6	180.1	147.8	103.2	57.7	21.5	3.9	1.0	1.5	1.5
110°	179.1	174.2	154.1	122.8	83.2	43.1	14.2	2.4	1.5	1.5	1.5





107.5°	2.0	2.9	3.4
110°	2.0	2.4	2.9



(END OF REPORT)