

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: P550424

Luminaire Tested: **FCC-X-2-LD4-1HI-30-UNV-80-84-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: P550424
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-30-UNV-80-84-ED1D
Description: FCC CORNER MOUNT LUMINAIRE WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 3000K, AND 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

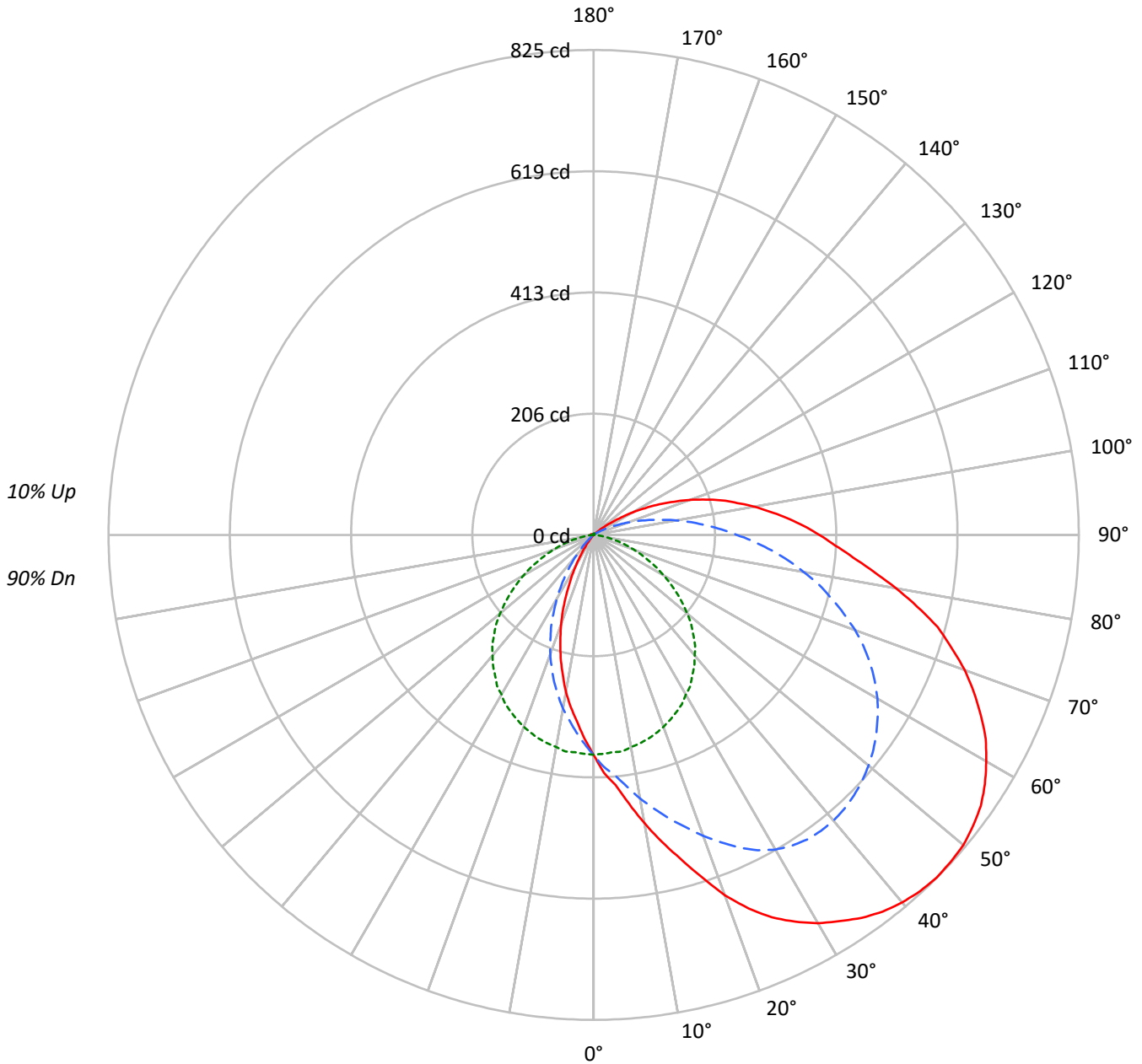
Lumens per Lamp: N/A
Luminaire Lumens: 1849.0 lumens
Efficiency: N/A
Efficacy: 85.2 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

Input Watts (W): 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

TEST NUMBER: P550424

CATALOG NUMBER: FCC-X-2-LD4-1HI-30-UNV-80-84-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°	4026	4026	4026
5°	4419	3966	3310
10°	5001	3918	2728
15°	5604	3869	2126
20°	6321	3805	1565
25°	6915	3733	1028
30°	7357	3634	579
35°	7740	3529	255
40°	8078	3399	61
45°	8369	3237	0
50°	8614	3021	0
55°	8800	2747	0
60°	8894	2428	0
65°	8930	2067	0
70°	8900	1684	0
75°	8788	1242	7
80°	8431	762	39
85°	8149	361	53



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	35.8	1.9
10°-20°	107.3	5.8
20°-30°	173.7	9.4
30°-40°	223.1	12.1
40°-50°	252.6	13.7
50°-60°	261.7	14.2
60°-70°	246.8	13.3
70°-80°	206.8	11.2
80°-90°	149.9	8.1
90°-100°	98.5	5.3
100°-110°	56.9	3.1
110°-120°	25.1	1.4
120°-130°	6.8	0.4
130°-140°	1.6	0.1
140°-150°	1.0	0.1
150°-160°	0.7	0.0
160°-170°	0.4	0.0
170°-180°	0.2	0.0
0°-30°	316.8	17.1
0°-40°	539.9	29.2
0°-60°	1054.2	57.0
0°-90°	1657.8	89.7
90°-120°	180.5	9.8
90°-150°	189.9	10.3
90°-180°	191.0	10.3
0°-180°	1849.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	374	374	374	374	374	
5°	427	410	371	337	320	43
15°	570	500	359	259	216	164
25°	718	587	333	171	107	332
35°	795	632	292	83	26	499
45°	825	626	239	19	0	637
55°	804	587	172	0	0	718
65°	727	519	103	0	0	719
75°	606	419	44	0	0	635
85°	443	304	7	2	3	378
90°	384	244	2	3	3	211
95°	330	190	1	3	4	259
105°	227	98	1	2	4	239
115°	123	33	1	1	2	124
125°	37	4	2	1	2	37
135°	2	1	2	2	1	3
145°	0	2	2	1	1	0
155°	1	2	2	1	0	0
165°	1	1	2	1	0	0
175°	1	2	2	1	0	0
180°	1	1	1	1	1	



TEST NUMBER: P550424

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
0°	374.0	374.0	374.0	374.0	374.0	374.0	374.0	374.0	374.0	374.0	374.0
2.5°	405.5	405.0	403.5	401.2	397.8	392.1	387.3	383.1	377.3	372.6	363.5
5°	426.9	424.5	422.6	420.2	412.6	407.4	398.8	389.3	380.2	371.1	353.0
7.5°	461.2	457.4	454.5	447.9	437.4	425.5	412.1	403.1	396.9	371.6	340.7
10°	497.9	494.5	488.8	476.9	464.1	446.9	427.8	406.4	387.3	366.4	329.7
12.5°	534.1	529.3	521.2	506.0	487.9	466.4	440.2	415.0	387.8	363.1	316.8
15°	570.3	565.1	556.5	537.9	514.1	486.0	454.1	422.1	390.2	358.8	303.5
17.5°	609.8	602.7	589.8	568.9	538.9	504.1	466.4	427.8	389.3	353.5	289.2
20°	652.3	642.2	628.4	600.3	565.1	524.1	478.8	433.6	388.8	347.3	273.0
22.5°	687.5	677.5	662.3	633.2	590.8	540.8	489.3	437.4	386.9	340.2	257.8
25°	718.0	709.9	693.2	659.9	615.1	558.4	499.3	440.2	384.0	332.6	241.6
27.5°	741.8	734.2	715.6	681.3	635.6	574.1	506.9	441.7	380.2	324.9	224.9
30°	762.8	755.2	732.8	697.5	649.4	586.5	514.6	442.1	375.4	313.5	206.8
32.5°	779.0	771.8	749.0	711.3	658.9	595.1	518.8	441.7	369.2	305.4	187.2
35°	795.2	788.0	761.4	721.3	666.1	598.9	522.2	439.3	361.6	292.1	168.7
37.5°	807.6	799.5	772.3	728.0	669.4	599.8	521.7	435.9	353.5	281.1	150.1
40°	816.1	807.6	778.5	731.8	670.4	598.4	517.9	430.2	344.0	267.3	130.5
42.5°	821.9	812.3	781.4	737.5	668.5	594.6	512.2	423.1	333.5	255.4	112.0
45°	824.7	814.7	781.8	732.8	665.1	587.5	503.6	414.0	322.1	239.2	93.4
47.5°	823.3	812.3	779.5	727.5	658.9	579.8	494.1	403.1	308.3	224.9	75.8
50°	820.9	809.5	774.2	720.9	650.3	570.3	483.6	389.7	294.0	207.3	60.0
52.5°	813.3	801.9	768.5	711.3	640.3	559.3	469.3	375.9	278.7	190.1	45.7
55°	803.8	793.3	758.5	702.8	627.5	546.0	456.0	361.1	263.9	172.5	32.9
57.5°	789.0	779.5	746.1	688.9	614.6	531.2	441.2	344.9	245.4	154.8	22.9
60°	770.9	761.4	729.0	673.2	599.8	514.6	425.0	328.3	228.7	137.2	14.3
62.5°	751.8	742.8	708.9	653.7	581.3	496.9	407.4	311.6	211.1	121.0	8.6
65°	726.6	718.0	687.5	630.3	560.8	477.9	387.8	291.6	193.0	102.9	4.8
67.5°	699.9	692.3	661.3	608.9	537.0	456.9	367.8	272.0	173.9	87.2	2.4
70°	671.3	661.8	633.2	579.8	512.7	433.1	345.9	252.0	155.8	71.9	0.0
72.5°	638.0	630.8	603.2	552.7	484.5	407.8	323.5	230.1	135.8	57.2	0.5
75°	605.6	596.5	571.3	523.6	456.9	381.2	298.7	209.6	116.3	43.8	0.5
77.5°	563.6	560.8	537.0	490.7	430.7	355.4	271.6	184.9	97.7	31.4	0.5
80°	521.7	518.8	500.3	457.9	400.2	324.9	246.3	161.5	79.6	21.0	0.5
82.5°	480.3	476.4	458.8	423.6	369.2	299.2	220.1	138.2	62.9	12.9	0.5
85°	443.1	438.3	419.3	386.9	337.3	270.1	193.0	115.3	46.7	7.1	1.0
87.5°	411.2	407.8	386.9	353.5	304.9	243.0	169.1	93.4	32.9	3.3	1.4
90°	384.0	376.9	358.3	323.0	274.4	213.0	143.9	74.8	21.9	1.9	1.9
92.5°	357.3	351.1	330.7	294.4	247.3	187.2	119.6	57.2	13.8	1.0	2.4
95°	329.7	323.0	303.0	269.7	219.6	161.0	98.1	41.9	7.6	1.0	2.4
97.5°	302.5	296.3	275.4	242.0	194.9	138.2	77.7	29.5	3.8	1.0	1.9
100°	277.3	270.1	251.1	217.7	170.1	115.3	60.0	19.1	2.4	1.0	1.9
102.5°	250.6	244.9	225.4	193.0	144.4	93.9	44.8	11.9	1.0	1.0	1.4
105°	226.8	219.6	200.6	167.2	122.9	73.8	31.4	7.1	1.0	1.0	1.4



TEST NUMBER: P550424

CATALOG NUMBER: FCC-X-2-LD4-1HI-30-UNV-80-84-ED1D

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	147.7	142.0	125.3	97.2	62.4	29.1	8.6	1.4	1.4	1.4	1.4
115°	123.4	114.8	100.1	75.3	46.2	19.1	4.3	1.4	1.4	1.4	1.4
117.5°	98.6	91.5	81.0	57.2	30.5	12.4	2.4	1.4	1.4	1.4	1.4
120°	77.2	70.5	58.6	39.5	20.5	7.1	1.0	1.4	1.4	1.4	1.4
122.5°	55.3	50.0	39.5	25.7	12.4	3.3	1.4	1.4	1.9	1.9	1.4
125°	36.7	33.8	26.2	15.7	7.6	1.4	1.4	1.4	1.9	1.9	1.4
127.5°	23.8	21.4	15.2	9.1	3.3	1.4	1.4	1.9	1.9	1.9	1.4
130°	13.3	11.9	9.1	5.2	1.4	1.4	1.4	1.9	1.9	1.9	1.4
132.5°	7.6	7.1	4.8	1.0	1.4	1.4	1.4	1.9	1.9	1.9	1.9
135°	1.9	1.0	1.0	1.0	1.4	1.4	1.9	1.9	2.4	2.4	1.9
137.5°	0.5	0.5	1.0	1.0	1.4	1.4	1.9	2.4	2.4	2.4	1.9
140°	0.5	0.5	1.0	1.4	1.4	1.4	1.9	2.4	2.4	2.4	1.9
142.5°	0.5	1.0	1.0	1.4	1.4	1.9	1.9	2.4	2.4	1.9	1.9
145°	0.5	1.0	1.0	1.4	1.4	1.9	1.9	2.4	1.9	1.9	1.9
147.5°	1.0	1.0	1.0	1.4	1.4	1.9	1.9	2.4	2.4	1.9	1.9
150°	0.5	1.0	1.0	1.4	1.9	1.9	1.9	2.4	1.9	1.9	1.9
152.5°	0.5	1.0	1.0	1.4	1.9	1.9	1.9	2.4	1.9	1.9	1.9
155°	1.0	1.0	1.0	1.4	1.9	1.9	1.9	2.4	1.9	1.9	2.4
157.5°	1.0	1.0	1.0	1.4	1.9	1.9	1.9	2.4	1.9	1.9	2.4
160°	1.0	1.0	1.0	1.4	1.4	1.9	1.9	1.9	1.9	1.9	1.9
162.5°	1.0	1.0	1.0	1.4	1.4	1.9	1.9	1.9	1.9	1.9	1.9
165°	1.0	1.0	1.0	1.0	1.4	1.4	1.9	1.9	1.9	1.9	1.9
167.5°	1.0	1.0	1.0	1.4	1.4	1.4	1.9	1.9	1.9	1.9	1.9
170°	1.0	1.0	1.0	1.4	1.4	1.4	1.9	2.4	2.4	2.4	2.4
172.5°	1.0	1.0	1.0	1.4	1.4	1.9	1.9	2.4	2.4	2.4	2.4
175°	1.0	1.0	1.0	1.4	1.4	1.9	1.9	2.4	2.4	2.4	2.4
177.5°	0.5	1.0	1.0	1.4	1.4	1.9	1.9	2.4	2.4	2.4	1.9
180°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	374.0	374.0	374.0
2.5°	355.9	349.2	347.3
5°	336.8	325.9	319.7
7.5°	317.8	303.0	295.9
10°	300.2	279.2	271.6
12.5°	279.2	254.9	243.0
15°	259.2	227.7	216.3
17.5°	236.8	201.5	188.2
20°	215.8	175.3	161.5
22.5°	192.0	149.6	134.4
25°	170.6	123.9	106.7
27.5°	146.7	97.7	82.9
30°	124.4	74.8	60.0
32.5°	102.9	54.8	41.5
35°	82.9	37.2	26.2
37.5°	63.8	22.9	13.3
40°	46.2	11.9	6.2
42.5°	31.0	5.7	3.3
45°	19.1	2.9	0.0
47.5°	11.0	0.0	0.0
50°	5.7	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	1.4
80°	1.0	1.9	2.4
82.5°	1.9	2.4	2.4
85°	1.9	2.4	2.9
87.5°	2.4	2.9	3.3
90°	2.9	3.3	3.3
92.5°	2.9	3.8	3.8
95°	3.3	3.8	4.3
97.5°	3.8	4.3	4.3
100°	3.3	4.3	4.8
102.5°	2.9	4.3	4.3
105°	2.4	3.3	3.8



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CATALOG NUMBER: FCC-X-2-LD4-1HI-30-UNV-80-84-ED1D

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	1.9	2.4	2.4
115°	1.4	1.9	2.4
117.5°	1.4	1.9	1.9
120°	1.4	1.4	1.9
122.5°	1.4	1.4	1.9
125°	1.4	1.4	1.9
127.5°	1.9	1.4	1.4
130°	1.4	1.4	1.4
132.5°	1.9	1.4	1.4
135°	1.9	1.4	1.4
137.5°	1.9	1.4	1.4
140°	1.9	1.4	1.4
142.5°	1.9	1.4	1.4
145°	1.4	1.4	1.4
147.5°	1.4	1.4	1.4
150°	1.4	1.4	1.0
152.5°	1.4	1.0	1.0
155°	1.4	1.0	0.5
157.5°	1.9	1.0	0.5
160°	1.4	1.0	0.5
162.5°	1.4	1.0	0.5
165°	1.4	1.0	0.0
167.5°	1.4	1.0	0.5
170°	1.4	1.0	0.5
172.5°	1.4	1.0	0.5
175°	1.4	0.5	0.5
177.5°	1.4	0.5	0.5
180°	1.4	1.4	1.4



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	200.1	194.4	175.3	143.9	100.5	56.2	21.0	3.8	1.0	1.4	1.4
110°	174.4	169.6	150.1	119.6	81.0	41.9	13.8	2.4	1.4	1.4	1.4





107.5°	1.9	2.9	3.3
110°	1.9	2.4	2.9



(END OF REPORT)