

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: P551525

Luminaire Tested: **FCC-X-2-LD4-2LO-35-UNV-80-97-ED1D-90**

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: P551525
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-80-97-ED1D-90
Description: FCC CORNER MOUNT LUMINAIRE WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .375 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES AND 3500K, AND 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

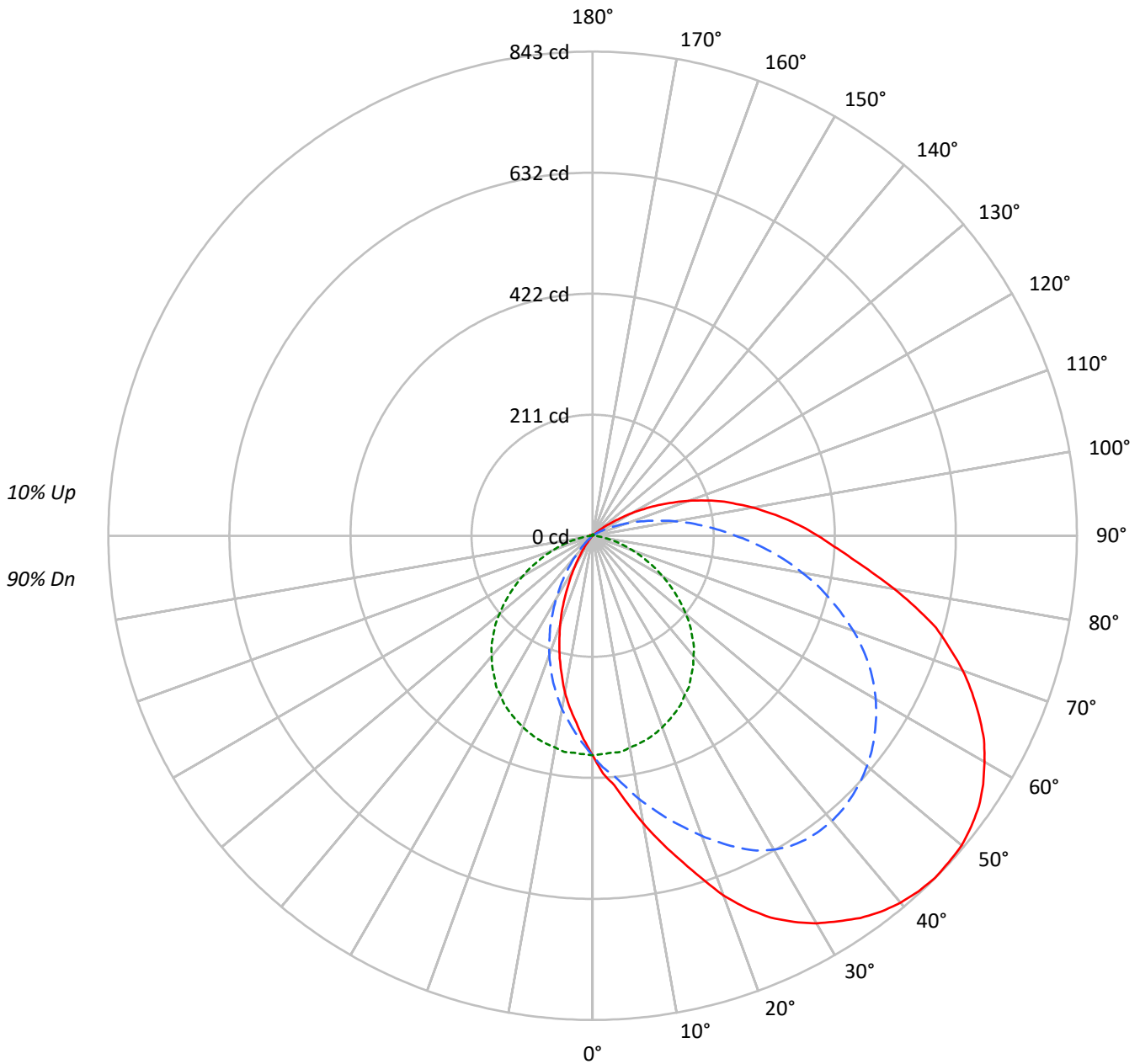
Lumens per Lamp: N/A
Luminaire Lumens: 1889.0 lumens
Efficiency: N/A
Efficacy: 80.4 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

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

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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°	4113	4113	4113
5°	4515	4053	3381
10°	5110	4003	2786
15°	5725	3952	2172
20°	6458	3887	1599
25°	7064	3813	1050
30°	7516	3713	591
35°	7907	3605	261
40°	8253	3473	62
45°	8551	3306	0
50°	8801	3085	0
55°	8990	2806	0
60°	9086	2481	0
65°	9123	2111	0
70°	9092	1722	0
75°	8978	1270	7
80°	8614	776	39
85°	8326	371	53



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	36.6	1.9
10°-20°	109.6	5.8
20°-30°	177.5	9.4
30°-40°	228.0	12.1
40°-50°	258.1	13.7
50°-60°	267.4	14.2
60°-70°	252.1	13.3
70°-80°	211.3	11.2
80°-90°	153.2	8.1
90°-100°	100.7	5.3
100°-110°	58.1	3.1
110°-120°	25.7	1.4
120°-130°	7.0	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°	323.7	17.1
0°-40°	551.6	29.2
0°-60°	1077.0	57.0
0°-90°	1693.6	89.7
90°-120°	184.5	9.8
90°-150°	194.1	10.3
90°-180°	195.0	10.3
0°-180°	1889.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	382	382	382	382	382	
5°	436	419	379	344	327	44
15°	583	511	366	265	221	168
25°	734	599	340	174	109	339
35°	812	646	298	85	27	509
45°	843	640	244	20	0	650
55°	821	599	176	0	0	733
65°	742	531	105	0	0	734
75°	619	428	45	0	0	649
85°	453	310	7	2	3	387
90°	392	249	2	3	3	215
95°	337	194	1	3	4	264
105°	232	100	1	2	4	244
115°	126	33	2	2	2	126
125°	38	5	2	2	2	37
135°	2	2	2	2	2	3
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°	382.1	382.1	382.1	382.1	382.1	382.1	382.1	382.1	382.1	382.1	382.1
2.5°	414.2	413.7	412.3	409.8	406.4	400.6	395.7	391.3	385.5	380.6	371.4
5°	436.1	433.7	431.7	429.3	421.5	416.2	407.4	397.7	388.4	379.2	360.7
7.5°	471.2	467.3	464.4	457.5	446.8	434.7	421.0	411.8	405.5	379.7	348.0
10°	508.7	505.2	499.4	487.2	474.1	456.6	437.1	415.2	395.7	374.3	336.8
12.5°	545.6	540.8	532.5	516.9	498.4	476.5	449.8	424.0	396.2	370.9	323.7
15°	582.6	577.3	568.5	549.5	525.2	496.5	463.9	431.3	398.6	366.5	310.1
17.5°	623.0	615.7	602.6	581.2	550.5	515.0	476.5	437.1	397.7	361.2	295.5
20°	666.4	656.1	642.0	613.3	577.3	535.4	489.2	442.9	397.2	354.8	278.9
22.5°	702.4	692.2	676.6	646.9	603.6	552.5	499.9	446.8	395.2	347.5	263.3
25°	733.5	725.3	708.2	674.1	628.4	570.5	510.1	449.8	392.3	339.8	246.8
27.5°	757.9	750.1	731.1	696.1	649.3	586.5	517.9	451.2	388.4	332.0	229.7
30°	779.3	771.5	748.6	712.6	663.4	599.2	525.7	451.7	383.6	320.3	211.2
32.5°	795.8	788.5	765.2	726.7	673.2	608.0	530.1	451.2	377.2	312.0	191.3
35°	812.4	805.1	777.8	736.9	680.5	611.8	533.5	448.8	369.4	298.4	172.3
37.5°	825.0	816.8	789.0	743.8	683.9	612.8	533.0	445.4	361.2	287.2	153.3
40°	833.8	825.0	795.4	747.6	684.9	611.4	529.1	439.5	351.4	273.1	133.4
42.5°	839.6	829.9	798.3	753.5	682.9	607.5	523.3	432.2	340.7	260.9	114.4
45°	842.6	832.3	798.8	748.6	679.5	600.2	514.5	423.0	329.0	244.3	95.4
47.5°	841.1	829.9	796.3	743.3	673.2	592.4	504.8	411.8	314.9	229.7	77.4
50°	838.7	827.0	791.0	736.5	664.4	582.6	494.1	398.2	300.3	211.7	61.3
52.5°	830.9	819.2	785.1	726.7	654.2	571.4	479.4	384.0	284.7	194.2	46.7
55°	821.1	810.4	774.9	718.0	641.1	557.8	465.8	369.0	269.7	176.2	33.6
57.5°	806.1	796.3	762.3	703.8	627.9	542.7	450.7	352.4	250.7	158.2	23.4
60°	787.6	777.8	744.7	687.8	612.8	525.7	434.2	335.4	233.6	140.2	14.6
62.5°	768.1	758.8	724.3	667.8	593.8	507.7	416.2	318.3	215.6	123.6	8.8
65°	742.3	733.5	702.4	644.0	572.9	488.2	396.2	297.9	197.1	105.1	4.9
67.5°	715.0	707.2	675.6	622.1	548.6	466.8	375.8	277.9	177.7	89.1	2.4
70°	685.8	676.1	646.9	592.4	523.7	442.5	353.4	257.5	159.2	73.5	0.0
72.5°	651.8	644.5	616.2	564.6	495.0	416.7	330.5	235.1	138.7	58.4	0.5
75°	618.7	609.4	583.6	534.9	466.8	389.4	305.2	214.2	118.8	44.8	0.5
77.5°	575.8	572.9	548.6	501.4	440.0	363.1	277.4	188.9	99.8	32.1	0.5
80°	533.0	530.1	511.1	467.8	408.9	332.0	251.7	165.0	81.3	21.4	0.5
82.5°	490.6	486.8	468.7	432.7	377.2	305.7	224.9	141.2	64.3	13.1	0.5
85°	452.7	447.8	428.3	395.2	344.6	276.0	197.1	117.8	47.7	7.3	1.0
87.5°	420.1	416.7	395.2	361.2	311.5	248.2	172.8	95.4	33.6	3.4	1.5
90°	392.3	385.0	366.0	330.0	280.4	217.6	147.0	76.4	22.4	1.9	1.9
92.5°	365.1	358.7	337.8	300.8	252.6	191.3	122.2	58.4	14.1	1.0	2.4
95°	336.8	330.0	309.6	275.5	224.4	164.5	100.3	42.8	7.8	1.0	2.4
97.5°	309.1	302.8	281.3	247.3	199.1	141.2	79.3	30.2	3.9	1.0	1.9
100°	283.3	276.0	256.5	222.4	173.8	117.8	61.3	19.5	2.4	1.0	1.9
102.5°	256.0	250.2	230.2	197.1	147.5	95.9	45.8	12.2	1.0	1.0	1.5
105°	231.7	224.4	204.9	170.8	125.6	75.4	32.1	7.3	1.0	1.0	1.5



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CATALOG NUMBER: FCC-X-2-LD4-2LO-35-UNV-80-97-ED1D-90

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	150.9	145.1	128.0	99.3	63.8	29.7	8.8	1.5	1.5	1.5	1.5
115°	126.1	117.3	102.2	76.9	47.2	19.5	4.4	1.5	1.5	1.5	1.5
117.5°	100.8	93.5	82.7	58.4	31.2	12.7	2.4	1.5	1.5	1.5	1.5
120°	78.9	72.0	59.9	40.4	20.9	7.3	1.0	1.5	1.5	1.5	1.5
122.5°	56.5	51.1	40.4	26.3	12.7	3.4	1.5	1.5	1.9	1.9	1.5
125°	37.5	34.6	26.8	16.1	7.8	1.5	1.5	1.5	1.9	1.9	1.5
127.5°	24.3	21.9	15.6	9.2	3.4	1.5	1.5	1.9	1.9	1.9	1.5
130°	13.6	12.2	9.2	5.4	1.5	1.5	1.5	1.9	1.9	1.9	1.5
132.5°	7.8	7.3	4.9	1.0	1.5	1.5	1.5	1.9	1.9	1.9	1.9
135°	1.9	1.0	1.0	1.0	1.5	1.5	1.9	1.9	2.4	2.4	1.9
137.5°	0.5	0.5	1.0	1.0	1.5	1.5	1.9	2.4	2.4	2.4	1.9
140°	0.5	0.5	1.0	1.5	1.5	1.5	1.9	2.4	2.4	2.4	1.9
142.5°	0.5	1.0	1.0	1.5	1.5	1.9	1.9	2.4	2.4	1.9	1.9
145°	0.5	1.0	1.0	1.5	1.5	1.9	1.9	2.4	1.9	1.9	1.9
147.5°	1.0	1.0	1.0	1.5	1.5	1.9	1.9	2.4	2.4	1.9	1.9
150°	0.5	1.0	1.0	1.5	1.9	1.9	1.9	2.4	1.9	1.9	1.9
152.5°	0.5	1.0	1.0	1.5	1.9	1.9	1.9	2.4	1.9	1.9	1.9
155°	1.0	1.0	1.0	1.5	1.9	1.9	1.9	2.4	1.9	1.9	2.4
157.5°	1.0	1.0	1.0	1.5	1.9	1.9	1.9	2.4	1.9	1.9	2.4
160°	1.0	1.0	1.0	1.5	1.5	1.9	1.9	1.9	1.9	1.9	1.9
162.5°	1.0	1.0	1.0	1.5	1.5	1.9	1.9	1.9	1.9	1.9	1.9
165°	1.0	1.0	1.0	1.0	1.5	1.5	1.9	1.9	1.9	1.9	1.9
167.5°	1.0	1.0	1.0	1.5	1.5	1.5	1.9	1.9	1.9	1.9	1.9
170°	1.0	1.0	1.0	1.5	1.5	1.5	1.9	2.4	2.4	2.4	2.4
172.5°	1.0	1.0	1.0	1.5	1.5	1.9	1.9	2.4	2.4	2.4	2.4
175°	1.0	1.0	1.0	1.5	1.5	1.9	1.9	2.4	2.4	2.4	2.4
177.5°	0.5	1.0	1.0	1.5	1.5	1.9	1.9	2.4	2.4	2.4	1.9
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°	382.1	382.1	382.1
2.5°	363.6	356.8	354.8
5°	344.1	332.9	326.6
7.5°	324.7	309.6	302.3
10°	306.7	285.2	277.4
12.5°	285.2	260.4	248.2
15°	264.8	232.7	221.0
17.5°	241.9	205.9	192.3
20°	220.5	179.1	165.0
22.5°	196.2	152.8	137.3
25°	174.3	126.6	109.0
27.5°	149.9	99.8	84.7
30°	127.0	76.4	61.3
32.5°	105.1	56.0	42.3
35°	84.7	38.0	26.8
37.5°	65.2	23.4	13.6
40°	47.2	12.2	6.3
42.5°	31.6	5.8	3.4
45°	19.5	2.9	0.0
47.5°	11.2	0.0	0.0
50°	5.8	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	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	3.4
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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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	1.9	2.4	2.4
115°	1.5	1.9	2.4
117.5°	1.5	1.9	1.9
120°	1.5	1.5	1.9
122.5°	1.5	1.5	1.9
125°	1.5	1.5	1.9
127.5°	1.9	1.5	1.5
130°	1.5	1.5	1.5
132.5°	1.9	1.5	1.5
135°	1.9	1.5	1.5
137.5°	1.9	1.5	1.5
140°	1.9	1.5	1.5
142.5°	1.9	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°	1.9	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°	204.4	198.6	179.1	147.0	102.7	57.4	21.4	3.9	1.0	1.5	1.5
110°	178.2	173.3	153.3	122.2	82.7	42.8	14.1	2.4	1.5	1.5	1.5





107.5°	1.9	2.9	3.4
110°	1.9	2.4	2.9



(END OF REPORT)