

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: P551584

Luminaire Tested: **FCC-X-2-LD4-2LO-40-UNV-80-88-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: P551584
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-40-UNV-80-88-ED1D
Description: FCC CORNER MOUNT LUMINAIRE WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .500 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 4000K, AND 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

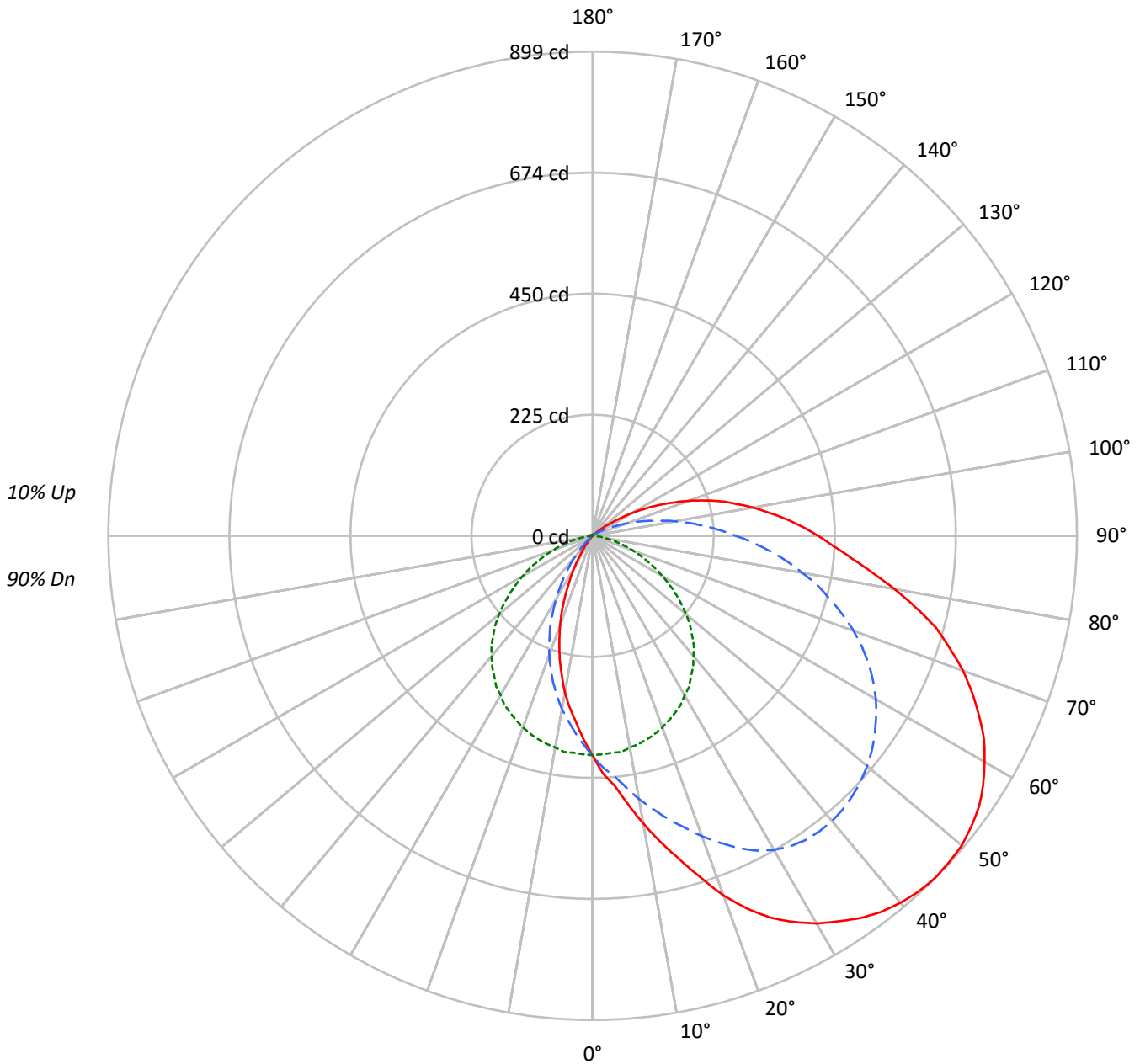
Lumens per Lamp: N/A
Luminaire Lumens: 2015.1 lumens
Efficiency: N/A
Efficacy: 85.7 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

Input Watts (W): 23.5
Input Voltage (V): NR
Input Current (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-LD4-2LO-40-UNV-80-88-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°	4387	4387	4387
5°	4816	4323	3607
10°	5450	4270	2973
15°	6108	4216	2316
20°	6888	4147	1706
25°	7536	4067	1120
30°	8018	3960	631
35°	8434	3846	278
40°	8804	3705	66
45°	9121	3526	0
50°	9387	3292	0
55°	9590	2994	0
60°	9692	2646	0
65°	9732	2254	0
70°	9700	1837	0
75°	9576	1356	7
80°	9187	827	42
85°	8881	397	57



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.0	1.9
10°-20°	116.9	5.8
20°-30°	189.3	9.4
30°-40°	243.2	12.1
40°-50°	275.3	13.7
50°-60°	285.2	14.2
60°-70°	269.0	13.3
70°-80°	225.4	11.2
80°-90°	163.4	8.1
90°-100°	107.4	5.3
100°-110°	62.0	3.1
110°-120°	27.4	1.4
120°-130°	7.4	0.4
130°-140°	1.7	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°	345.2	17.1
0°-40°	588.4	29.2
0°-60°	1148.9	57.0
0°-90°	1806.6	89.7
90°-120°	196.8	9.8
90°-150°	207.1	10.3
90°-180°	208.0	10.3
0°-180°	2015.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	408	408	408	408	408	
5°	465	447	404	367	348	47
15°	622	545	391	282	236	179
25°	782	639	362	186	116	362
35°	867	689	318	90	29	543
45°	899	682	261	21	0	694
55°	876	639	188	0	0	782
65°	792	566	112	0	0	783
75°	660	457	48	0	0	692
85°	483	331	8	2	3	412
90°	418	266	2	3	4	229
95°	359	207	1	4	5	282
105°	247	107	1	3	4	261
115°	134	36	2	2	3	135
125°	40	5	2	2	2	40
135°	2	2	3	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	3	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°	407.6	407.6	407.6	407.6	407.6	407.6	407.6	407.6	407.6	407.6	407.6
2.5°	441.9	441.3	439.8	437.2	433.5	427.3	422.1	417.5	411.2	406.0	396.2
5°	465.2	462.6	460.5	458.0	449.6	443.9	434.6	424.2	414.3	404.5	384.7
7.5°	502.6	498.4	495.3	488.1	476.6	463.7	449.1	439.3	432.5	405.0	371.2
10°	542.6	538.9	532.7	519.7	505.7	487.0	466.3	442.9	422.1	399.3	359.3
12.5°	582.0	576.9	568.0	551.4	531.7	508.3	479.8	452.2	422.6	395.6	345.3
15°	621.5	615.8	606.4	586.2	560.2	529.6	494.8	460.0	425.2	391.0	330.7
17.5°	664.6	656.8	642.8	619.9	587.2	549.3	508.3	466.3	424.2	385.3	315.2
20°	710.8	699.9	684.8	654.2	615.8	571.1	521.8	472.5	423.7	378.5	297.5
22.5°	749.2	738.3	721.7	690.0	643.8	589.3	533.2	476.6	421.6	370.7	280.9
25°	782.5	773.6	755.5	719.1	670.3	608.5	544.1	479.8	418.5	362.4	263.2
27.5°	808.4	800.1	779.9	742.5	692.6	625.7	552.4	481.3	414.3	354.1	245.1
30°	831.3	823.0	798.6	760.1	707.7	639.2	560.8	481.8	409.1	341.6	225.3
32.5°	848.9	841.1	816.2	775.2	718.1	648.5	565.4	481.3	402.4	332.8	204.1
35°	866.6	858.8	829.7	786.1	725.9	652.7	569.1	478.7	394.1	318.3	183.8
37.5°	880.1	871.2	841.7	793.4	729.5	653.7	568.5	475.1	385.3	306.3	163.6
40°	889.4	880.1	848.4	797.5	730.5	652.1	564.4	468.9	374.9	291.3	142.3
42.5°	895.7	885.3	851.5	803.7	728.5	648.0	558.2	461.1	363.5	278.3	122.0
45°	898.8	887.9	852.0	798.6	724.8	640.2	548.8	451.2	351.0	260.6	101.8
47.5°	897.2	885.3	849.4	792.8	718.1	631.9	538.4	439.3	335.9	245.1	82.6
50°	894.6	882.2	843.7	785.6	708.7	621.5	527.0	424.7	320.4	225.9	65.4
52.5°	886.3	873.8	837.5	775.2	697.8	609.6	511.4	409.7	303.7	207.2	49.8
55°	875.9	864.5	826.6	765.8	683.8	595.0	496.9	393.6	287.6	188.0	35.8
57.5°	859.8	849.4	813.1	750.8	669.8	578.9	480.8	375.9	267.4	168.7	24.9
60°	840.1	829.7	794.4	733.7	653.7	560.8	463.1	357.7	249.2	149.5	15.6
62.5°	819.3	809.5	772.6	712.4	633.4	541.5	443.9	339.6	230.0	131.9	9.3
65°	791.8	782.5	749.2	686.9	611.1	520.8	422.6	317.8	210.3	112.2	5.2
67.5°	762.7	754.4	720.7	663.6	585.2	497.9	400.8	296.5	189.5	95.0	2.6
70°	731.6	721.2	690.0	631.9	558.7	472.0	377.0	274.7	169.8	78.4	0.0
72.5°	695.2	687.4	657.3	602.3	528.0	444.5	352.5	250.8	148.0	62.3	0.5
75°	659.9	650.1	622.5	570.6	497.9	415.4	325.5	228.5	126.7	47.8	0.5
77.5°	614.2	611.1	585.2	534.8	469.4	387.3	296.0	201.5	106.4	34.3	0.5
80°	568.5	565.4	545.2	499.0	436.1	354.1	268.4	176.0	86.7	22.8	0.5
82.5°	523.4	519.2	500.0	461.6	402.4	326.1	239.9	150.6	68.5	14.0	0.5
85°	482.9	477.7	456.9	421.6	367.6	294.4	210.3	125.7	50.9	7.8	1.0
87.5°	448.1	444.5	421.6	385.3	332.3	264.8	184.3	101.8	35.8	3.6	1.6
90°	418.5	410.7	390.5	352.0	299.1	232.1	156.8	81.5	23.9	2.1	2.1
92.5°	389.4	382.7	360.3	320.9	269.5	204.1	130.3	62.3	15.1	1.0	2.6
95°	359.3	352.0	330.2	293.9	239.4	175.5	107.0	45.7	8.3	1.0	2.6
97.5°	329.7	323.0	300.1	263.8	212.4	150.6	84.6	32.2	4.2	1.0	2.1
100°	302.2	294.4	273.6	237.3	185.4	125.7	65.4	20.8	2.6	1.0	2.1
102.5°	273.1	266.9	245.6	210.3	157.3	102.3	48.8	13.0	1.0	1.0	1.6
105°	247.1	239.4	218.6	182.2	134.0	80.5	34.3	7.8	1.0	1.0	1.6



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	161.0	154.7	136.6	105.9	68.0	31.7	9.3	1.6	1.6	1.6	1.6
115°	134.5	125.1	109.0	82.0	50.4	20.8	4.7	1.6	1.6	1.6	1.6
117.5°	107.5	99.7	88.3	62.3	33.2	13.5	2.6	1.6	1.6	1.6	1.6
120°	84.1	76.8	63.9	43.1	22.3	7.8	1.0	1.6	1.6	1.6	1.6
122.5°	60.2	54.5	43.1	28.0	13.5	3.6	1.6	1.6	2.1	2.1	1.6
125°	40.0	36.9	28.6	17.1	8.3	1.6	1.6	1.6	2.1	2.1	1.6
127.5°	26.0	23.4	16.6	9.9	3.6	1.6	1.6	2.1	2.1	2.1	1.6
130°	14.5	13.0	9.9	5.7	1.6	1.6	1.6	2.1	2.1	2.1	1.6
132.5°	8.3	7.8	5.2	1.0	1.6	1.6	1.6	2.1	2.1	2.1	2.1
135°	2.1	1.0	1.0	1.0	1.6	1.6	2.1	2.1	2.6	2.6	2.1
137.5°	0.5	0.5	1.0	1.0	1.6	1.6	2.1	2.6	2.6	2.6	2.1
140°	0.5	0.5	1.0	1.6	1.6	1.6	2.1	2.6	2.6	2.6	2.1
142.5°	0.5	1.0	1.0	1.6	1.6	2.1	2.1	2.6	2.6	2.1	2.1
145°	0.5	1.0	1.0	1.6	1.6	2.1	2.1	2.6	2.1	2.1	2.1
147.5°	1.0	1.0	1.0	1.6	1.6	2.1	2.1	2.6	2.6	2.1	2.1
150°	0.5	1.0	1.0	1.6	2.1	2.1	2.1	2.6	2.1	2.1	2.1
152.5°	0.5	1.0	1.0	1.6	2.1	2.1	2.1	2.6	2.1	2.1	2.1
155°	1.0	1.0	1.0	1.6	2.1	2.1	2.1	2.6	2.1	2.1	2.6
157.5°	1.0	1.0	1.0	1.6	2.1	2.1	2.1	2.6	2.1	2.1	2.6
160°	1.0	1.0	1.0	1.6	1.6	2.1	2.1	2.1	2.1	2.1	2.1
162.5°	1.0	1.0	1.0	1.6	1.6	2.1	2.1	2.1	2.1	2.1	2.1
165°	1.0	1.0	1.0	1.0	1.6	1.6	2.1	2.1	2.1	2.1	2.1
167.5°	1.0	1.0	1.0	1.6	1.6	1.6	2.1	2.1	2.1	2.1	2.1
170°	1.0	1.0	1.0	1.6	1.6	1.6	2.1	2.6	2.6	2.6	2.6
172.5°	1.0	1.0	1.0	1.6	1.6	2.1	2.1	2.6	2.6	2.6	2.6
175°	1.0	1.0	1.0	1.6	1.6	2.1	2.1	2.6	2.6	2.6	2.6
177.5°	0.5	1.0	1.0	1.6	1.6	2.1	2.1	2.6	2.6	2.6	2.1
180°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	407.6	407.6	407.6
2.5°	387.9	380.6	378.5
5°	367.1	355.1	348.4
7.5°	346.3	330.2	322.4
10°	327.1	304.3	296.0
12.5°	304.3	277.8	264.8
15°	282.5	248.2	235.7
17.5°	258.1	219.6	205.1
20°	235.2	191.1	176.0
22.5°	209.2	163.0	146.4
25°	185.9	135.0	116.3
27.5°	159.9	106.4	90.3
30°	135.5	81.5	65.4
32.5°	112.2	59.7	45.2
35°	90.3	40.5	28.6
37.5°	69.6	24.9	14.5
40°	50.4	13.0	6.7
42.5°	33.7	6.2	3.6
45°	20.8	3.1	0.0
47.5°	11.9	0.0	0.0
50°	6.2	0.0	0.0
52.5°	2.6	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	1.6
80°	1.0	2.1	2.6
82.5°	2.1	2.6	2.6
85°	2.1	2.6	3.1
87.5°	2.6	3.1	3.6
90°	3.1	3.6	3.6
92.5°	3.1	4.2	4.2
95°	3.6	4.2	4.7
97.5°	4.2	4.7	4.7
100°	3.6	4.7	5.2
102.5°	3.1	4.7	4.7
105°	2.6	3.6	4.2



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CATALOG NUMBER: FCC-X-2-LD4-2LO-40-UNV-80-88-ED1D

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	2.1	2.6	2.6
115°	1.6	2.1	2.6
117.5°	1.6	2.1	2.1
120°	1.6	1.6	2.1
122.5°	1.6	1.6	2.1
125°	1.6	1.6	2.1
127.5°	2.1	1.6	1.6
130°	1.6	1.6	1.6
132.5°	2.1	1.6	1.6
135°	2.1	1.6	1.6
137.5°	2.1	1.6	1.6
140°	2.1	1.6	1.6
142.5°	2.1	1.6	1.6
145°	1.6	1.6	1.6
147.5°	1.6	1.6	1.6
150°	1.6	1.6	1.0
152.5°	1.6	1.0	1.0
155°	1.6	1.0	0.5
157.5°	2.1	1.0	0.5
160°	1.6	1.0	0.5
162.5°	1.6	1.0	0.5
165°	1.6	1.0	0.0
167.5°	1.6	1.0	0.5
170°	1.6	1.0	0.5
172.5°	1.6	1.0	0.5
175°	1.6	0.5	0.5
177.5°	1.6	0.5	0.5
180°	1.6	1.6	1.6



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	218.1	211.8	191.1	156.8	109.6	61.3	22.8	4.2	1.0	1.6	1.6
110°	190.0	184.8	163.6	130.3	88.3	45.7	15.1	2.6	1.6	1.6	1.6





107.5°	2.1	3.1	3.6
110°	2.1	2.6	3.1



(END OF REPORT)