

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: P551645

Luminaire Tested: **FCC-X-2-LD4-2LO-50-UNV-80-87-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: P551645
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-50-UNV-80-87-ED1D-90
Description: FCC CORNER MOUNT LUMINAIRE WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .375 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 5000K, AND 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

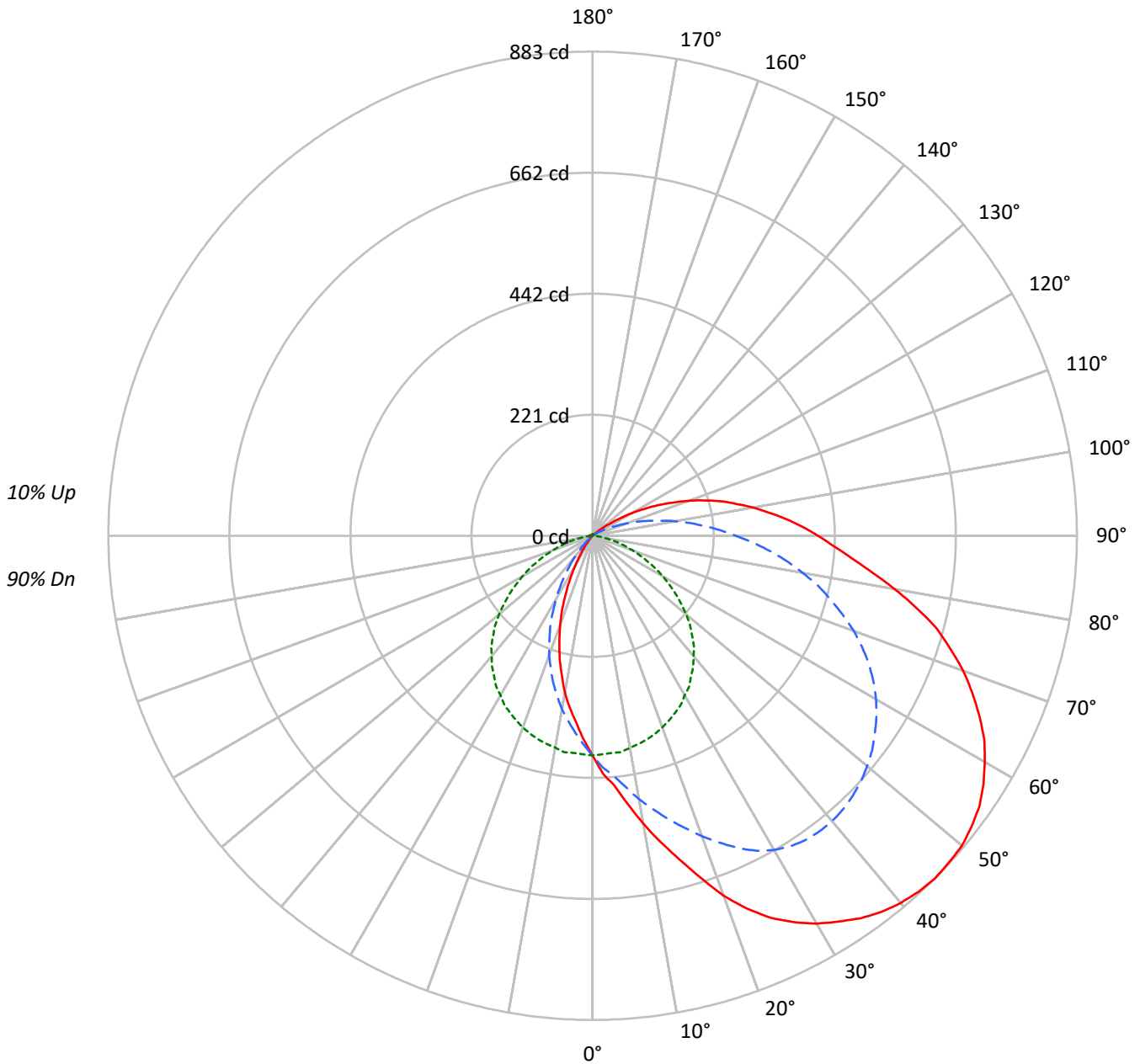
Lumens per Lamp: N/A
Luminaire Lumens: 1979.9 lumens
Efficiency: N/A
Efficacy: 84.3 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

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

TEST NUMBER: P551645

CATALOG NUMBER: FCC-X-2-LD4-2LO-50-UNV-80-87-ED1D-90

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°	4311	4311	4311
5°	4732	4247	3544
10°	5356	4195	2921
15°	6001	4143	2276
20°	6769	4075	1677
25°	7405	3996	1101
30°	7878	3892	620
35°	8287	3779	273
40°	8651	3640	65
45°	8963	3465	0
50°	9224	3234	0
55°	9423	2941	0
60°	9524	2600	0
65°	9563	2213	0
70°	9531	1804	0
75°	9410	1330	7
80°	9029	813	42
85°	8727	392	57



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.4	1.9
10°-20°	114.9	5.8
20°-30°	186.0	9.4
30°-40°	239.0	12.1
40°-50°	270.5	13.7
50°-60°	280.2	14.2
60°-70°	264.3	13.3
70°-80°	221.5	11.2
80°-90°	160.6	8.1
90°-100°	105.5	5.3
100°-110°	60.9	3.1
110°-120°	26.9	1.4
120°-130°	7.3	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°	339.3	17.1
0°-40°	578.2	29.2
0°-60°	1128.9	57.0
0°-90°	1775.3	89.7
90°-120°	193.3	9.8
90°-150°	203.3	10.3
90°-180°	205.0	10.4
0°-180°	1979.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	400	400	400	400	400	
5°	457	439	397	361	342	46
15°	611	535	384	278	232	176
25°	769	628	356	183	114	355
35°	852	677	313	89	28	534
45°	883	671	256	20	0	682
55°	861	628	185	0	0	769
65°	778	556	110	0	0	770
75°	648	449	47	0	0	680
85°	474	325	8	2	3	405
90°	411	261	2	3	4	225
95°	353	204	1	4	5	277
105°	243	105	1	3	4	256
115°	132	35	2	2	3	132
125°	39	5	2	2	2	39
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°	400.5	400.5	400.5	400.5	400.5	400.5	400.5	400.5	400.5	400.5	400.5
2.5°	434.2	433.7	432.1	429.6	426.0	419.9	414.8	410.2	404.1	399.0	389.3
5°	457.1	454.6	452.5	450.0	441.8	436.2	427.0	416.8	407.1	397.4	378.1
7.5°	493.9	489.8	486.7	479.6	468.4	455.6	441.3	431.6	425.0	398.0	364.8
10°	533.2	529.6	523.5	510.7	496.9	478.6	458.2	435.2	414.8	392.3	353.1
12.5°	571.9	566.8	558.2	541.8	522.4	499.5	471.4	444.4	415.3	388.8	339.3
15°	610.7	605.1	595.9	576.0	550.5	520.4	486.2	452.0	417.9	384.2	325.0
17.5°	653.1	645.4	631.6	609.2	577.0	539.8	499.5	458.2	416.8	378.6	309.7
20°	698.5	687.7	673.0	642.9	605.1	561.2	512.8	464.3	416.3	371.9	292.3
22.5°	736.2	725.5	709.2	678.1	632.6	579.1	524.0	468.4	414.3	364.3	276.0
25°	768.9	760.2	742.3	706.6	658.7	598.0	534.7	471.4	411.2	356.1	258.7
27.5°	794.4	786.2	766.3	729.6	680.6	614.8	542.9	473.0	407.1	348.0	240.8
30°	816.8	808.7	784.7	746.9	695.4	628.1	551.0	473.5	402.0	335.7	221.4
32.5°	834.2	826.5	802.0	761.7	705.6	637.2	555.6	473.0	395.4	327.0	200.5
35°	851.5	843.9	815.3	772.4	713.3	641.3	559.2	470.4	387.2	312.8	180.6
37.5°	864.8	856.1	827.0	779.6	716.8	642.3	558.7	466.8	378.6	301.0	160.7
40°	874.0	864.8	833.7	783.7	717.9	640.8	554.6	460.7	368.4	286.2	139.8
42.5°	880.1	869.9	836.7	789.8	715.8	636.7	548.5	453.1	357.1	273.5	119.9
45°	883.2	872.4	837.2	784.7	712.2	629.1	539.3	443.4	344.9	256.1	100.0
47.5°	881.6	869.9	834.7	779.1	705.6	620.9	529.1	431.6	330.1	240.8	81.1
50°	879.1	866.8	829.1	771.9	696.4	610.7	517.9	417.3	314.8	221.9	64.3
52.5°	870.9	858.7	823.0	761.7	685.7	599.0	502.5	402.5	298.5	203.6	49.0
55°	860.7	849.5	812.2	752.5	671.9	584.7	488.3	386.7	282.7	184.7	35.2
57.5°	844.9	834.7	799.0	737.7	658.2	568.9	472.4	369.4	262.8	165.8	24.5
60°	825.5	815.3	780.6	720.9	642.3	551.0	455.1	351.5	244.9	146.9	15.3
62.5°	805.1	795.4	759.2	700.0	622.4	532.1	436.2	333.7	226.0	129.6	9.2
65°	778.1	768.9	736.2	675.0	600.5	511.7	415.3	312.2	206.6	110.2	5.1
67.5°	749.5	741.3	708.2	652.0	575.0	489.3	393.9	291.3	186.2	93.4	2.6
70°	718.9	708.7	678.1	620.9	549.0	463.8	370.4	269.9	166.8	77.0	0.0
72.5°	683.2	675.5	645.9	591.8	518.9	436.7	346.4	246.4	145.4	61.2	0.5
75°	648.5	638.8	611.7	560.7	489.3	408.2	319.9	224.5	124.5	46.9	0.5
77.5°	603.6	600.5	575.0	525.5	461.2	380.6	290.8	198.0	104.6	33.7	0.5
80°	558.7	555.6	535.7	490.3	428.6	348.0	263.8	173.0	85.2	22.4	0.5
82.5°	514.3	510.2	491.3	453.6	395.4	320.4	235.7	148.0	67.3	13.8	0.5
85°	474.5	469.4	449.0	414.3	361.2	289.3	206.6	123.5	50.0	7.7	1.0
87.5°	440.3	436.7	414.3	378.6	326.5	260.2	181.1	100.0	35.2	3.6	1.5
90°	411.2	403.6	383.7	345.9	293.9	228.1	154.1	80.1	23.5	2.0	2.0
92.5°	382.6	376.0	354.1	315.3	264.8	200.5	128.1	61.2	14.8	1.0	2.6
95°	353.1	345.9	324.5	288.8	235.2	172.4	105.1	44.9	8.2	1.0	2.6
97.5°	324.0	317.3	294.9	259.2	208.7	148.0	83.2	31.6	4.1	1.0	2.0
100°	296.9	289.3	268.9	233.2	182.1	123.5	64.3	20.4	2.6	1.0	2.0
102.5°	268.4	262.2	241.3	206.6	154.6	100.5	48.0	12.8	1.0	1.0	1.5
105°	242.9	235.2	214.8	179.1	131.6	79.1	33.7	7.7	1.0	1.0	1.5



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CATALOG NUMBER: FCC-X-2-LD4-2LO-50-UNV-80-87-ED1D-90

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	158.2	152.0	134.2	104.1	66.8	31.1	9.2	1.5	1.5	1.5	1.5
115°	132.1	123.0	107.1	80.6	49.5	20.4	4.6	1.5	1.5	1.5	1.5
117.5°	105.6	98.0	86.7	61.2	32.7	13.3	2.6	1.5	1.5	1.5	1.5
120°	82.7	75.5	62.8	42.3	21.9	7.7	1.0	1.5	1.5	1.5	1.5
122.5°	59.2	53.6	42.3	27.6	13.3	3.6	1.5	1.5	2.0	2.0	1.5
125°	39.3	36.2	28.1	16.8	8.2	1.5	1.5	1.5	2.0	2.0	1.5
127.5°	25.5	23.0	16.3	9.7	3.6	1.5	1.5	2.0	2.0	2.0	1.5
130°	14.3	12.8	9.7	5.6	1.5	1.5	1.5	2.0	2.0	2.0	1.5
132.5°	8.2	7.7	5.1	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	2.6	2.6	2.0
137.5°	0.5	0.5	1.0	1.0	1.5	1.5	2.0	2.6	2.6	2.6	2.0
140°	0.5	0.5	1.0	1.5	1.5	1.5	2.0	2.6	2.6	2.6	2.0
142.5°	0.5	1.0	1.0	1.5	1.5	2.0	2.0	2.6	2.6	2.0	2.0
145°	0.5	1.0	1.0	1.5	1.5	2.0	2.0	2.6	2.0	2.0	2.0
147.5°	1.0	1.0	1.0	1.5	1.5	2.0	2.0	2.6	2.6	2.0	2.0
150°	0.5	1.0	1.0	1.5	2.0	2.0	2.0	2.6	2.0	2.0	2.0
152.5°	0.5	1.0	1.0	1.5	2.0	2.0	2.0	2.6	2.0	2.0	2.0
155°	1.0	1.0	1.0	1.5	2.0	2.0	2.0	2.6	2.0	2.0	2.6
157.5°	1.0	1.0	1.0	1.5	2.0	2.0	2.0	2.6	2.0	2.0	2.6
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	2.6	2.6	2.6	2.6
172.5°	1.0	1.0	1.0	1.5	1.5	2.0	2.0	2.6	2.6	2.6	2.6
175°	1.0	1.0	1.0	1.5	1.5	2.0	2.0	2.6	2.6	2.6	2.6
177.5°	0.5	1.0	1.0	1.5	1.5	2.0	2.0	2.6	2.6	2.6	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



TEST NUMBER: P551645

CATALOG NUMBER: FCC-X-2-LD4-2LO-50-UNV-80-87-ED1D-90

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	400.5	400.5	400.5
2.5°	381.1	374.0	371.9
5°	360.7	349.0	342.3
7.5°	340.3	324.5	316.8
10°	321.4	299.0	290.8
12.5°	299.0	273.0	260.2
15°	277.5	243.9	231.6
17.5°	253.6	215.8	201.5
20°	231.1	187.8	173.0
22.5°	205.6	160.2	143.9
25°	182.7	132.7	114.3
27.5°	157.1	104.6	88.8
30°	133.2	80.1	64.3
32.5°	110.2	58.7	44.4
35°	88.8	39.8	28.1
37.5°	68.4	24.5	14.3
40°	49.5	12.8	6.6
42.5°	33.2	6.1	3.6
45°	20.4	3.1	0.0
47.5°	11.7	0.0	0.0
50°	6.1	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	1.5
80°	1.0	2.0	2.6
82.5°	2.0	2.6	2.6
85°	2.0	2.6	3.1
87.5°	2.6	3.1	3.6
90°	3.1	3.6	3.6
92.5°	3.1	4.1	4.1
95°	3.6	4.1	4.6
97.5°	4.1	4.6	4.6
100°	3.6	4.6	5.1
102.5°	3.1	4.6	4.6
105°	2.6	3.6	4.1



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	2.0	2.6	2.6
115°	1.5	2.0	2.6
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°	214.3	208.2	187.8	154.1	107.7	60.2	22.4	4.1	1.0	1.5	1.5
110°	186.7	181.6	160.7	128.1	86.7	44.9	14.8	2.6	1.5	1.5	1.5





107.5°	2.0	3.1	3.6
110°	2.0	2.6	3.1



(END OF REPORT)