

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: P551195

Luminaire Tested: **FCC-X-2-LD4-2HI-30-UNV-80-86-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: P551195
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-LD4-2HI-30-UNV-80-86-ED1D-90
Description: FCC CORNER MOUNT LUMINAIRE WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 3000K, AND 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

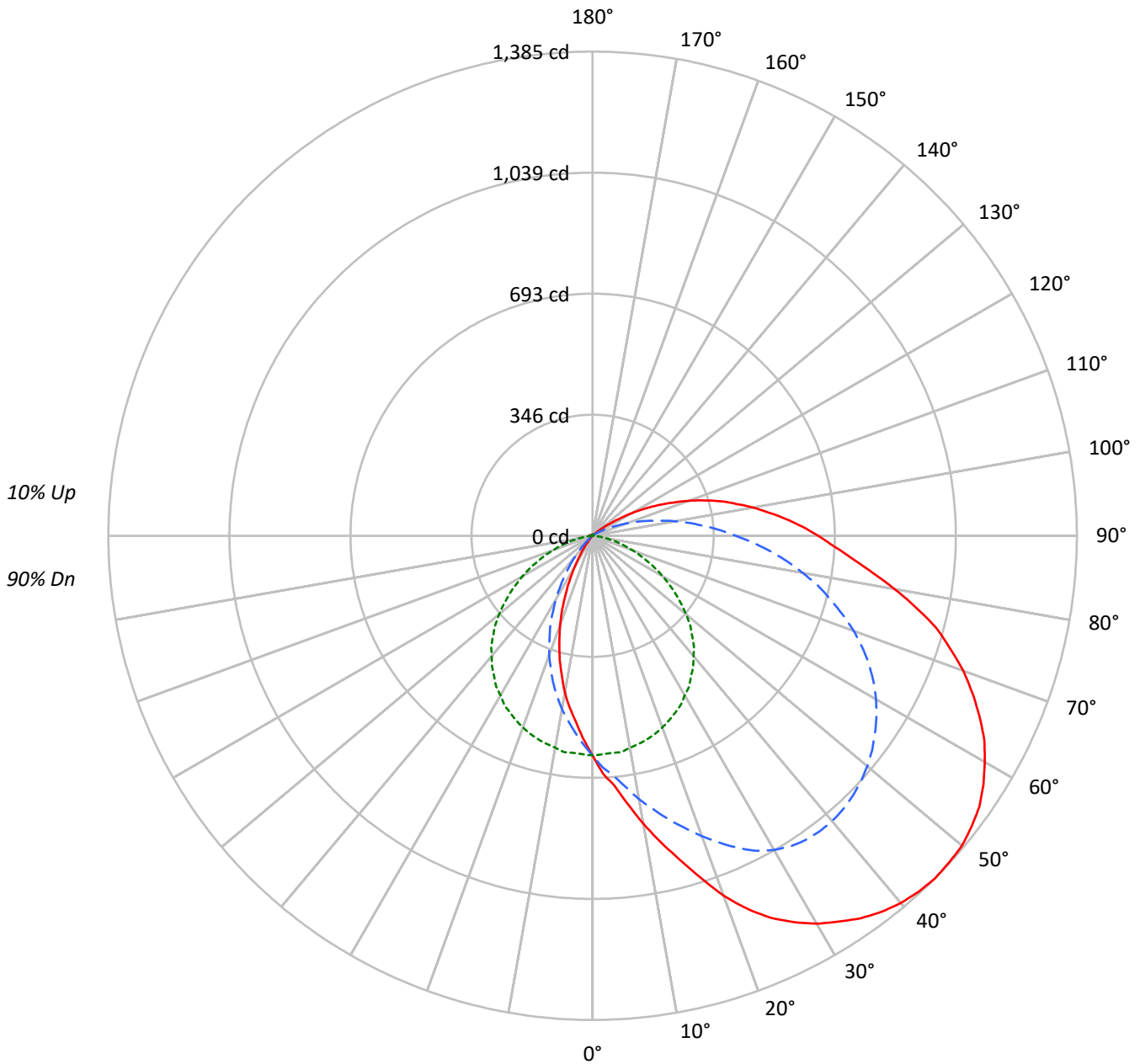
Lumens per Lamp: N/A
Luminaire Lumens: 3106.0 lumens
Efficiency: N/A
Efficacy: 71.7 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

Input Watts (W): 43.3
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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CATALOG NUMBER: FCC-X-2-LD4-2HI-30-UNV-80-86-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°	6763	6763	6763
5°	7424	6664	5559
10°	8401	6582	4582
15°	9414	6499	3571
20°	10619	6393	2629
25°	11616	6269	1727
30°	12358	6105	972
35°	13001	5928	428
40°	13571	5710	103
45°	14059	5437	0
50°	14470	5073	0
55°	14782	4613	0
60°	14940	4079	0
65°	15001	3473	0
70°	14951	2832	0
75°	14760	2087	12
80°	14163	1277	65
85°	13689	610	88



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.2	1.9
10°-20°	180.2	5.8
20°-30°	291.8	9.4
30°-40°	374.8	12.1
40°-50°	424.3	13.7
50°-60°	439.6	14.2
60°-70°	414.6	13.3
70°-80°	347.4	11.2
80°-90°	251.8	8.1
90°-100°	165.5	5.3
100°-110°	95.6	3.1
110°-120°	42.2	1.4
120°-130°	11.4	0.4
130°-140°	2.6	0.1
140°-150°	1.7	0.1
150°-160°	1.2	0.0
160°-170°	0.7	0.0
170°-180°	0.3	0.0
0°-30°	532.2	17.1
0°-40°	907.0	29.2
0°-60°	1770.9	57.0
0°-90°	2784.8	89.7
90°-120°	303.3	9.8
90°-150°	319.0	10.3
90°-180°	321.0	10.3
0°-180°	3106.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	628	628	628	628	628	
5°	717	689	624	566	537	72
15°	958	840	603	435	363	276
25°	1206	986	559	286	179	557
35°	1336	1062	491	139	44	838
45°	1385	1052	402	32	0	1070
55°	1350	986	290	0	0	1206
65°	1220	872	173	0	0	1208
75°	1017	704	74	1	1	1067
85°	744	510	12	3	5	636
90°	645	409	3	5	6	354
95°	554	320	2	6	7	434
105°	381	165	2	4	6	402
115°	207	55	2	2	4	208
125°	62	8	3	2	3	62
135°	3	2	4	3	2	6
145°	1	3	3	2	2	1
155°	2	3	3	2	1	1
165°	2	2	3	2	0	0
175°	2	3	4	2	1	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°	628.3	628.3	628.3	628.3	628.3	628.3	628.3	628.3	628.3	628.3	628.3
2.5°	681.1	680.3	677.9	673.9	668.3	658.7	650.7	643.5	633.9	625.9	610.7
5°	717.1	713.1	709.9	705.9	693.1	684.3	669.9	653.9	638.7	623.5	593.1
7.5°	774.7	768.3	763.5	752.3	734.7	714.7	692.3	677.1	666.7	624.3	572.2
10°	836.4	830.8	821.2	801.1	779.5	750.7	718.7	682.7	650.7	615.5	553.8
12.5°	897.2	889.2	875.6	850.0	819.6	783.5	739.5	697.1	651.5	609.9	532.2
15°	958.0	949.2	934.8	903.6	863.6	816.3	762.7	709.1	655.5	602.7	509.8
17.5°	1024.4	1012.4	990.8	955.6	905.2	846.8	783.5	718.7	653.9	593.9	485.8
20°	1095.7	1078.9	1055.7	1008.4	949.2	880.4	804.3	728.3	653.1	583.5	458.6
22.5°	1154.9	1138.1	1112.5	1063.7	992.4	908.4	822.0	734.7	649.9	571.4	433.0
25°	1206.1	1192.5	1164.5	1108.5	1033.2	938.0	838.8	739.5	645.1	558.6	405.8
27.5°	1246.1	1233.3	1202.1	1144.5	1067.7	964.4	851.6	741.9	638.7	545.8	377.8
30°	1281.3	1268.5	1230.9	1171.7	1090.9	985.2	864.4	742.7	630.7	526.6	347.3
32.5°	1308.6	1296.6	1258.1	1194.9	1106.9	999.6	871.6	741.9	620.3	513.0	314.5
35°	1335.8	1323.8	1278.9	1211.7	1118.9	1006.0	877.2	737.9	607.5	490.6	283.3
37.5°	1356.6	1343.0	1297.4	1222.9	1124.5	1007.6	876.4	732.3	593.9	472.2	252.1
40°	1371.0	1356.6	1307.8	1229.3	1126.1	1005.2	870.0	722.7	577.8	449.0	219.3
42.5°	1380.6	1364.6	1312.6	1238.9	1122.9	998.8	860.4	710.7	560.2	429.0	188.1
45°	1385.4	1368.6	1313.4	1230.9	1117.3	986.8	846.0	695.5	541.0	401.8	156.9
47.5°	1383.0	1364.6	1309.4	1222.1	1106.9	974.0	830.0	677.1	517.8	377.8	127.3
50°	1379.0	1359.8	1300.6	1210.9	1092.5	958.0	812.3	654.7	493.8	348.1	100.8
52.5°	1366.2	1347.0	1291.0	1194.9	1075.7	939.6	788.3	631.5	468.2	319.3	76.8
55°	1350.2	1332.6	1274.1	1180.5	1054.1	917.2	765.9	606.7	443.4	289.7	55.2
57.5°	1325.4	1309.4	1253.3	1157.3	1032.4	892.4	741.1	579.4	412.2	260.1	38.4
60°	1295.0	1278.9	1224.5	1130.9	1007.6	864.4	713.9	551.4	384.2	230.5	24.0
62.5°	1262.9	1247.7	1190.9	1098.1	976.4	834.8	684.3	523.4	354.6	203.3	14.4
65°	1220.5	1206.1	1154.9	1058.9	942.0	802.7	651.5	489.8	324.1	172.9	8.0
67.5°	1175.7	1162.9	1110.9	1022.8	902.0	767.5	617.9	457.0	292.1	146.5	4.0
70°	1127.7	1111.7	1063.7	974.0	861.2	727.5	581.0	423.4	261.7	120.9	0.0
72.5°	1071.7	1059.7	1013.2	928.4	813.9	685.1	543.4	386.6	228.1	96.0	0.8
75°	1017.2	1002.0	959.6	879.6	767.5	640.3	501.8	352.2	195.3	73.6	0.8
77.5°	946.8	942.0	902.0	824.4	723.5	597.1	456.2	310.5	164.1	52.8	0.8
80°	876.4	871.6	840.4	769.1	672.3	545.8	413.8	271.3	133.7	35.2	0.8
82.5°	806.7	800.3	770.7	711.5	620.3	502.6	369.8	232.1	105.6	21.6	0.8
85°	744.3	736.3	704.3	649.9	566.6	453.8	324.1	193.7	78.4	12.0	1.6
87.5°	690.7	685.1	649.9	593.9	512.2	408.2	284.1	156.9	55.2	5.6	2.4
90°	645.1	633.1	601.9	542.6	461.0	357.8	241.7	125.7	36.8	3.2	3.2
92.5°	600.3	589.9	555.4	494.6	415.4	314.5	200.9	96.0	23.2	1.6	4.0
95°	553.8	542.6	509.0	453.0	369.0	270.5	164.9	70.4	12.8	1.6	4.0
97.5°	508.2	497.8	462.6	406.6	327.3	232.1	130.5	49.6	6.4	1.6	3.2
100°	465.8	453.8	421.8	365.8	285.7	193.7	100.8	32.0	4.0	1.6	3.2
102.5°	421.0	411.4	378.6	324.1	242.5	157.7	75.2	20.0	1.6	1.6	2.4
105°	381.0	369.0	336.9	280.9	206.5	124.1	52.8	12.0	1.6	1.6	2.4



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	248.1	238.5	210.5	163.3	104.8	48.8	14.4	2.4	2.4	2.4	2.4
115°	207.3	192.9	168.1	126.5	77.6	32.0	7.2	2.4	2.4	2.4	2.4
117.5°	165.7	153.7	136.1	96.0	51.2	20.8	4.0	2.4	2.4	2.4	2.4
120°	129.7	118.5	98.4	66.4	34.4	12.0	1.6	2.4	2.4	2.4	2.4
122.5°	92.8	84.0	66.4	43.2	20.8	5.6	2.4	2.4	3.2	3.2	2.4
125°	61.6	56.8	44.0	26.4	12.8	2.4	2.4	2.4	3.2	3.2	2.4
127.5°	40.0	36.0	25.6	15.2	5.6	2.4	2.4	3.2	3.2	3.2	2.4
130°	22.4	20.0	15.2	8.8	2.4	2.4	2.4	3.2	3.2	3.2	2.4
132.5°	12.8	12.0	8.0	1.6	2.4	2.4	2.4	3.2	3.2	3.2	3.2
135°	3.2	1.6	1.6	1.6	2.4	2.4	3.2	3.2	4.0	4.0	3.2
137.5°	0.8	0.8	1.6	1.6	2.4	2.4	3.2	4.0	4.0	4.0	3.2
140°	0.8	0.8	1.6	2.4	2.4	2.4	3.2	4.0	4.0	4.0	3.2
142.5°	0.8	1.6	1.6	2.4	2.4	3.2	3.2	4.0	4.0	3.2	3.2
145°	0.8	1.6	1.6	2.4	2.4	3.2	3.2	4.0	3.2	3.2	3.2
147.5°	1.6	1.6	1.6	2.4	2.4	3.2	3.2	4.0	4.0	3.2	3.2
150°	0.8	1.6	1.6	2.4	3.2	3.2	3.2	4.0	3.2	3.2	3.2
152.5°	0.8	1.6	1.6	2.4	3.2	3.2	3.2	4.0	3.2	3.2	3.2
155°	1.6	1.6	1.6	2.4	3.2	3.2	3.2	4.0	3.2	3.2	4.0
157.5°	1.6	1.6	1.6	2.4	3.2	3.2	3.2	4.0	3.2	3.2	4.0
160°	1.6	1.6	1.6	2.4	2.4	3.2	3.2	3.2	3.2	3.2	3.2
162.5°	1.6	1.6	1.6	2.4	2.4	3.2	3.2	3.2	3.2	3.2	3.2
165°	1.6	1.6	1.6	1.6	2.4	2.4	3.2	3.2	3.2	3.2	3.2
167.5°	1.6	1.6	1.6	2.4	2.4	2.4	3.2	3.2	3.2	3.2	3.2
170°	1.6	1.6	1.6	2.4	2.4	2.4	3.2	4.0	4.0	4.0	4.0
172.5°	1.6	1.6	1.6	2.4	2.4	3.2	3.2	4.0	4.0	4.0	4.0
175°	1.6	1.6	1.6	2.4	2.4	3.2	3.2	4.0	4.0	4.0	4.0
177.5°	0.8	1.6	1.6	2.4	2.4	3.2	3.2	4.0	4.0	4.0	3.2
180°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	628.3	628.3	628.3
2.5°	597.9	586.7	583.5
5°	565.8	547.4	537.0
7.5°	533.8	509.0	497.0
10°	504.2	469.0	456.2
12.5°	469.0	428.2	408.2
15°	435.4	382.6	363.4
17.5°	397.8	338.5	316.1
20°	362.6	294.5	271.3
22.5°	322.5	251.3	225.7
25°	286.5	208.1	179.3
27.5°	246.5	164.1	139.3
30°	208.9	125.7	100.8
32.5°	172.9	92.0	69.6
35°	139.3	62.4	44.0
37.5°	107.2	38.4	22.4
40°	77.6	20.0	10.4
42.5°	52.0	9.6	5.6
45°	32.0	4.8	0.0
47.5°	18.4	0.0	0.0
50°	9.6	0.0	0.0
52.5°	4.0	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°	0.8	0.8	0.8
77.5°	0.8	1.6	2.4
80°	1.6	3.2	4.0
82.5°	3.2	4.0	4.0
85°	3.2	4.0	4.8
87.5°	4.0	4.8	5.6
90°	4.8	5.6	5.6
92.5°	4.8	6.4	6.4
95°	5.6	6.4	7.2
97.5°	6.4	7.2	7.2
100°	5.6	7.2	8.0
102.5°	4.8	7.2	7.2
105°	4.0	5.6	6.4



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	3.2	4.0	4.0
115°	2.4	3.2	4.0
117.5°	2.4	3.2	3.2
120°	2.4	2.4	3.2
122.5°	2.4	2.4	3.2
125°	2.4	2.4	3.2
127.5°	3.2	2.4	2.4
130°	2.4	2.4	2.4
132.5°	3.2	2.4	2.4
135°	3.2	2.4	2.4
137.5°	3.2	2.4	2.4
140°	3.2	2.4	2.4
142.5°	3.2	2.4	2.4
145°	2.4	2.4	2.4
147.5°	2.4	2.4	2.4
150°	2.4	2.4	1.6
152.5°	2.4	1.6	1.6
155°	2.4	1.6	0.8
157.5°	3.2	1.6	0.8
160°	2.4	1.6	0.8
162.5°	2.4	1.6	0.8
165°	2.4	1.6	0.0
167.5°	2.4	1.6	0.8
170°	2.4	1.6	0.8
172.5°	2.4	1.6	0.8
175°	2.4	0.8	0.8
177.5°	2.4	0.8	0.8
180°	2.4	2.4	2.4



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	336.1	326.5	294.5	241.7	168.9	94.4	35.2	6.4	1.6	2.4	2.4
110°	292.9	284.9	252.1	200.9	136.1	70.4	23.2	4.0	2.4	2.4	2.4





107.5°	3.2	4.8	5.6
110°	3.2	4.0	4.8



(END OF REPORT)