

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: P551324

Luminaire Tested: **FCC-X-2-LD4-2HI-40-UNV-80-86-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: P551324
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-40-UNV-80-86-ED1D
Description: FCC CORNER MOUNT LUMINAIRE WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 4000K, AND 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

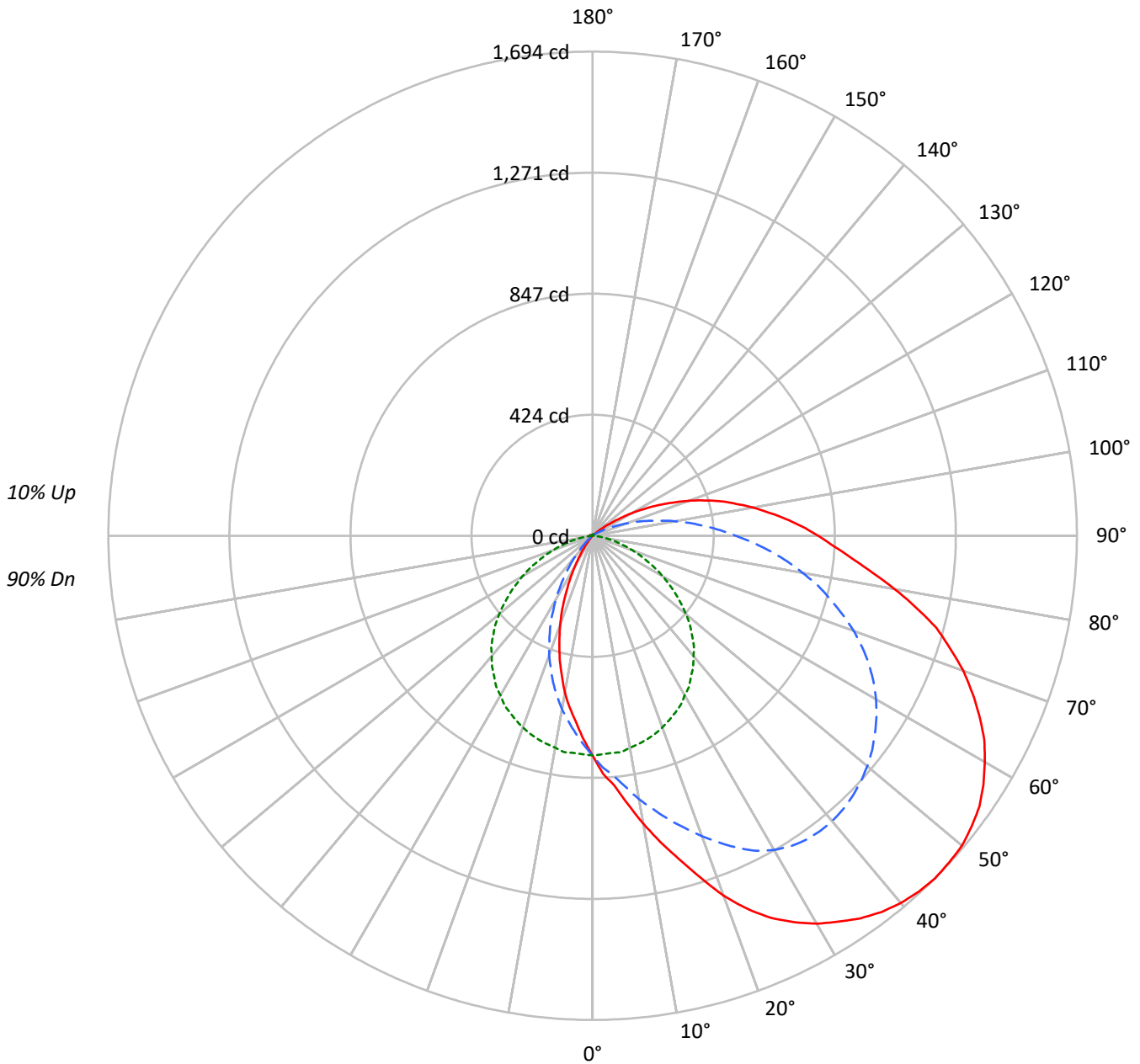
Lumens per Lamp: N/A
Luminaire Lumens: 3799.0 lumens
Efficiency: N/A
Efficacy: 87.7 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

Input Watts (W): 43.3
Input Voltage (V): NR
Input Current (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-LD4-2HI-40-UNV-80-86-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°	8271	8271	8271
5°	9080	8151	6800
10°	10275	8051	5605
15°	11515	7948	4367
20°	12987	7818	3216
25°	14208	7668	2112
30°	15115	7467	1189
35°	15901	7251	524
40°	16599	6984	126
45°	17196	6649	0
50°	17699	6206	0
55°	18080	5643	0
60°	18273	4989	0
65°	18348	4246	0
70°	18287	3462	0
75°	18054	2555	15
80°	17323	1563	79
85°	16744	747	109



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.6	1.9
10°-20°	220.4	5.8
20°-30°	356.9	9.4
30°-40°	458.5	12.1
40°-50°	519.0	13.7
50°-60°	537.7	14.2
60°-70°	507.1	13.3
70°-80°	425.0	11.2
80°-90°	308.0	8.1
90°-100°	202.5	5.3
100°-110°	116.9	3.1
110°-120°	51.6	1.4
120°-130°	14.0	0.4
130°-140°	3.2	0.1
140°-150°	2.1	0.1
150°-160°	1.5	0.0
160°-170°	0.8	0.0
170°-180°	0.3	0.0
0°-30°	650.9	17.1
0°-40°	1109.4	29.2
0°-60°	2166.1	57.0
0°-90°	3406.1	89.7
90°-120°	371.0	9.8
90°-150°	390.2	10.3
90°-180°	393.0	10.3
0°-180°	3799.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	768	768	768	768	768	
5°	877	842	763	692	657	88
15°	1172	1027	737	532	444	338
25°	1475	1206	683	350	219	682
35°	1634	1300	600	170	54	1025
45°	1694	1287	491	39	0	1308
55°	1651	1206	354	0	0	1475
65°	1493	1067	211	0	0	1477
75°	1244	861	90	1	1	1305
85°	910	624	15	4	6	777
90°	789	501	4	6	7	433
95°	677	391	2	7	9	531
105°	466	202	2	5	8	492
115°	254	67	3	3	5	254
125°	75	9	4	3	4	75
135°	4	3	5	4	3	7
145°	1	3	4	3	3	1
155°	2	4	4	3	1	1
165°	2	3	4	3	0	1
175°	2	3	5	3	1	0
180°	3	3	3	3	3	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
0°	768.4	768.4	768.4	768.4	768.4	768.4	768.4	768.4	768.4	768.4	768.4
2.5°	833.1	832.1	829.1	824.2	817.4	805.6	795.9	787.0	775.3	765.5	746.9
5°	877.1	872.2	868.3	863.4	847.7	837.0	819.3	799.8	781.2	762.6	725.4
7.5°	947.6	939.8	933.9	920.2	898.6	874.2	846.8	828.2	815.4	763.6	699.9
10°	1023.0	1016.1	1004.4	979.9	953.5	918.2	879.1	835.0	795.9	752.8	677.4
12.5°	1097.4	1087.6	1070.9	1039.6	1002.4	958.4	904.5	852.6	796.8	745.9	651.0
15°	1171.8	1161.0	1143.4	1105.2	1056.2	998.5	932.9	867.3	801.7	737.1	623.6
17.5°	1253.0	1238.3	1211.9	1168.8	1107.2	1035.7	958.4	879.1	799.8	726.4	594.2
20°	1340.1	1319.6	1291.2	1233.4	1161.0	1076.8	983.8	890.8	798.8	713.6	560.9
22.5°	1412.6	1392.0	1360.7	1301.0	1213.9	1111.1	1005.3	898.6	794.9	698.9	529.6
25°	1475.2	1458.6	1424.3	1355.8	1263.8	1147.3	1025.9	904.5	789.0	683.3	496.3
27.5°	1524.2	1508.5	1470.3	1399.8	1305.9	1179.6	1041.6	907.5	781.2	667.6	462.0
30°	1567.2	1551.6	1505.6	1433.1	1334.3	1205.0	1057.2	908.4	771.4	644.1	424.8
32.5°	1600.5	1585.8	1538.9	1461.5	1353.8	1222.7	1066.0	907.5	758.7	627.5	384.7
35°	1633.8	1619.1	1564.3	1482.1	1368.5	1230.5	1072.9	902.6	743.0	600.1	346.5
37.5°	1659.3	1642.6	1586.8	1495.8	1375.4	1232.5	1071.9	895.7	726.4	577.6	308.4
40°	1676.9	1659.3	1599.5	1503.6	1377.3	1229.5	1064.1	884.0	706.8	549.2	268.2
42.5°	1688.6	1669.0	1605.4	1515.4	1373.4	1221.7	1052.3	869.3	685.2	524.7	230.0
45°	1694.5	1673.9	1606.4	1505.6	1366.6	1207.0	1034.7	850.7	661.7	491.4	191.9
47.5°	1691.6	1669.0	1601.5	1494.8	1353.8	1191.3	1015.1	828.2	633.4	462.0	155.6
50°	1686.7	1663.2	1590.7	1481.1	1336.2	1171.8	993.6	800.8	604.0	425.8	123.3
52.5°	1671.0	1647.5	1579.0	1461.5	1315.7	1149.2	964.2	772.4	572.7	390.6	94.0
55°	1651.4	1629.9	1558.4	1443.9	1289.2	1121.8	936.8	742.0	542.3	354.4	67.5
57.5°	1621.1	1601.5	1533.0	1415.5	1262.8	1091.5	906.5	708.7	504.1	318.1	47.0
60°	1583.9	1564.3	1497.7	1383.2	1232.5	1057.2	873.2	674.5	469.9	281.9	29.4
62.5°	1544.7	1526.1	1456.6	1343.1	1194.3	1021.0	837.0	640.2	433.7	248.6	17.6
65°	1492.8	1475.2	1412.6	1295.1	1152.2	981.8	796.8	599.1	396.5	211.4	9.8
67.5°	1438.0	1422.4	1358.7	1251.1	1103.2	938.8	755.7	559.0	357.3	179.1	4.9
70°	1379.3	1359.7	1301.0	1191.3	1053.3	889.8	710.7	517.8	320.1	147.8	0.0
72.5°	1310.8	1296.1	1239.3	1135.5	995.6	837.9	664.7	472.8	279.0	117.5	1.0
75°	1244.2	1225.6	1173.7	1075.8	938.8	783.1	613.8	430.7	238.9	90.1	1.0
77.5°	1158.1	1152.2	1103.2	1008.3	884.9	730.3	558.0	379.8	200.7	64.6	1.0
80°	1071.9	1066.0	1027.9	940.7	822.3	667.6	506.1	331.9	163.5	43.1	1.0
82.5°	986.7	978.9	942.7	870.3	758.7	614.8	452.3	283.9	129.2	26.4	1.0
85°	910.4	900.6	861.4	794.9	693.1	555.0	396.5	236.9	95.9	14.7	2.0
87.5°	844.8	837.9	794.9	726.4	626.5	499.2	347.5	191.9	67.5	6.9	2.9
90°	789.0	774.3	736.1	663.7	563.9	437.6	295.6	153.7	45.0	3.9	3.9
92.5°	734.2	721.5	679.4	605.0	508.1	384.7	245.7	117.5	28.4	2.0	4.9
95°	677.4	663.7	622.6	554.1	451.3	330.9	201.7	86.1	15.7	2.0	4.9
97.5°	621.6	608.9	565.8	497.3	400.4	283.9	159.6	60.7	7.8	2.0	3.9
100°	569.7	555.0	515.9	447.4	349.5	236.9	123.3	39.2	4.9	2.0	3.9
102.5°	514.9	503.2	463.0	396.5	296.6	192.8	92.0	24.5	2.0	2.0	2.9
105°	466.0	451.3	412.1	343.6	252.6	151.7	64.6	14.7	2.0	2.0	2.9



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	303.5	291.7	257.5	199.7	128.2	59.7	17.6	2.9	2.9	2.9	2.9
115°	253.5	235.9	205.6	154.7	95.0	39.2	8.8	2.9	2.9	2.9	2.9
117.5°	202.6	188.0	166.4	117.5	62.7	25.5	4.9	2.9	2.9	2.9	2.9
120°	158.6	144.9	120.4	81.2	42.1	14.7	2.0	2.9	2.9	2.9	2.9
122.5°	113.6	102.8	81.2	52.9	25.5	6.9	2.9	2.9	3.9	3.9	2.9
125°	75.4	69.5	53.8	32.3	15.7	2.9	2.9	2.9	3.9	3.9	2.9
127.5°	48.9	44.1	31.3	18.6	6.9	2.9	2.9	3.9	3.9	3.9	2.9
130°	27.4	24.5	18.6	10.8	2.9	2.9	2.9	3.9	3.9	3.9	2.9
132.5°	15.7	14.7	9.8	2.0	2.9	2.9	2.9	3.9	3.9	3.9	3.9
135°	3.9	2.0	2.0	2.0	2.9	2.9	3.9	3.9	4.9	4.9	3.9
137.5°	1.0	1.0	2.0	2.0	2.9	2.9	3.9	4.9	4.9	4.9	3.9
140°	1.0	1.0	2.0	2.9	2.9	2.9	3.9	4.9	4.9	4.9	3.9
142.5°	1.0	2.0	2.0	2.9	2.9	3.9	3.9	4.9	4.9	3.9	3.9
145°	1.0	2.0	2.0	2.9	2.9	3.9	3.9	4.9	3.9	3.9	3.9
147.5°	2.0	2.0	2.0	2.9	2.9	3.9	3.9	4.9	4.9	3.9	3.9
150°	1.0	2.0	2.0	2.9	3.9	3.9	3.9	4.9	3.9	3.9	3.9
152.5°	1.0	2.0	2.0	2.9	3.9	3.9	3.9	4.9	3.9	3.9	3.9
155°	2.0	2.0	2.0	2.9	3.9	3.9	3.9	4.9	3.9	3.9	4.9
157.5°	2.0	2.0	2.0	2.9	3.9	3.9	3.9	4.9	3.9	3.9	4.9
160°	2.0	2.0	2.0	2.9	2.9	3.9	3.9	3.9	3.9	3.9	3.9
162.5°	2.0	2.0	2.0	2.9	2.9	3.9	3.9	3.9	3.9	3.9	3.9
165°	2.0	2.0	2.0	2.0	2.9	2.9	3.9	3.9	3.9	3.9	3.9
167.5°	2.0	2.0	2.0	2.9	2.9	2.9	3.9	3.9	3.9	3.9	3.9
170°	2.0	2.0	2.0	2.9	2.9	2.9	3.9	4.9	4.9	4.9	4.9
172.5°	2.0	2.0	2.0	2.9	2.9	3.9	3.9	4.9	4.9	4.9	4.9
175°	2.0	2.0	2.0	2.9	2.9	3.9	3.9	4.9	4.9	4.9	4.9
177.5°	1.0	2.0	2.0	2.9	2.9	3.9	3.9	4.9	4.9	4.9	3.9
180°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	768.4	768.4	768.4
2.5°	731.2	717.5	713.6
5°	692.1	669.6	656.9
7.5°	652.9	622.6	607.9
10°	616.7	573.6	558.0
12.5°	573.6	523.7	499.2
15°	532.5	467.9	444.4
17.5°	486.5	414.1	386.7
20°	443.4	360.2	331.9
22.5°	394.5	307.4	276.1
25°	350.5	254.5	219.3
27.5°	301.5	200.7	170.3
30°	255.5	153.7	123.3
32.5°	211.4	112.6	85.2
35°	170.3	76.4	53.8
37.5°	131.2	47.0	27.4
40°	95.0	24.5	12.7
42.5°	63.6	11.7	6.9
45°	39.2	5.9	0.0
47.5°	22.5	0.0	0.0
50°	11.7	0.0	0.0
52.5°	4.9	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°	1.0	1.0	1.0
77.5°	1.0	2.0	2.9
80°	2.0	3.9	4.9
82.5°	3.9	4.9	4.9
85°	3.9	4.9	5.9
87.5°	4.9	5.9	6.9
90°	5.9	6.9	6.9
92.5°	5.9	7.8	7.8
95°	6.9	7.8	8.8
97.5°	7.8	8.8	8.8
100°	6.9	8.8	9.8
102.5°	5.9	8.8	8.8
105°	4.9	6.9	7.8



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	3.9	4.9	4.9
115°	2.9	3.9	4.9
117.5°	2.9	3.9	3.9
120°	2.9	2.9	3.9
122.5°	2.9	2.9	3.9
125°	2.9	2.9	3.9
127.5°	3.9	2.9	2.9
130°	2.9	2.9	2.9
132.5°	3.9	2.9	2.9
135°	3.9	2.9	2.9
137.5°	3.9	2.9	2.9
140°	3.9	2.9	2.9
142.5°	3.9	2.9	2.9
145°	2.9	2.9	2.9
147.5°	2.9	2.9	2.9
150°	2.9	2.9	2.0
152.5°	2.9	2.0	2.0
155°	2.9	2.0	1.0
157.5°	3.9	2.0	1.0
160°	2.9	2.0	1.0
162.5°	2.9	2.0	1.0
165°	2.9	2.0	0.0
167.5°	2.9	2.0	1.0
170°	2.9	2.0	1.0
172.5°	2.9	2.0	1.0
175°	2.9	1.0	1.0
177.5°	2.9	1.0	1.0
180°	2.9	2.9	2.9



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	411.1	399.4	360.2	295.6	206.6	115.5	43.1	7.8	2.0	2.9	2.9
110°	358.3	348.5	308.4	245.7	166.4	86.1	28.4	4.9	2.9	2.9	2.9





107.5°	3.9	5.9	6.9
110°	3.9	4.9	5.9



(END OF REPORT)