

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: P551194

Luminaire Tested: **FCC-X-2-LD4-2HI-30-UNV-80-85-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: P551194
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-80-85-ED1D
Description: FCC CORNER MOUNT LUMINAIRE WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 3000K, AND 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

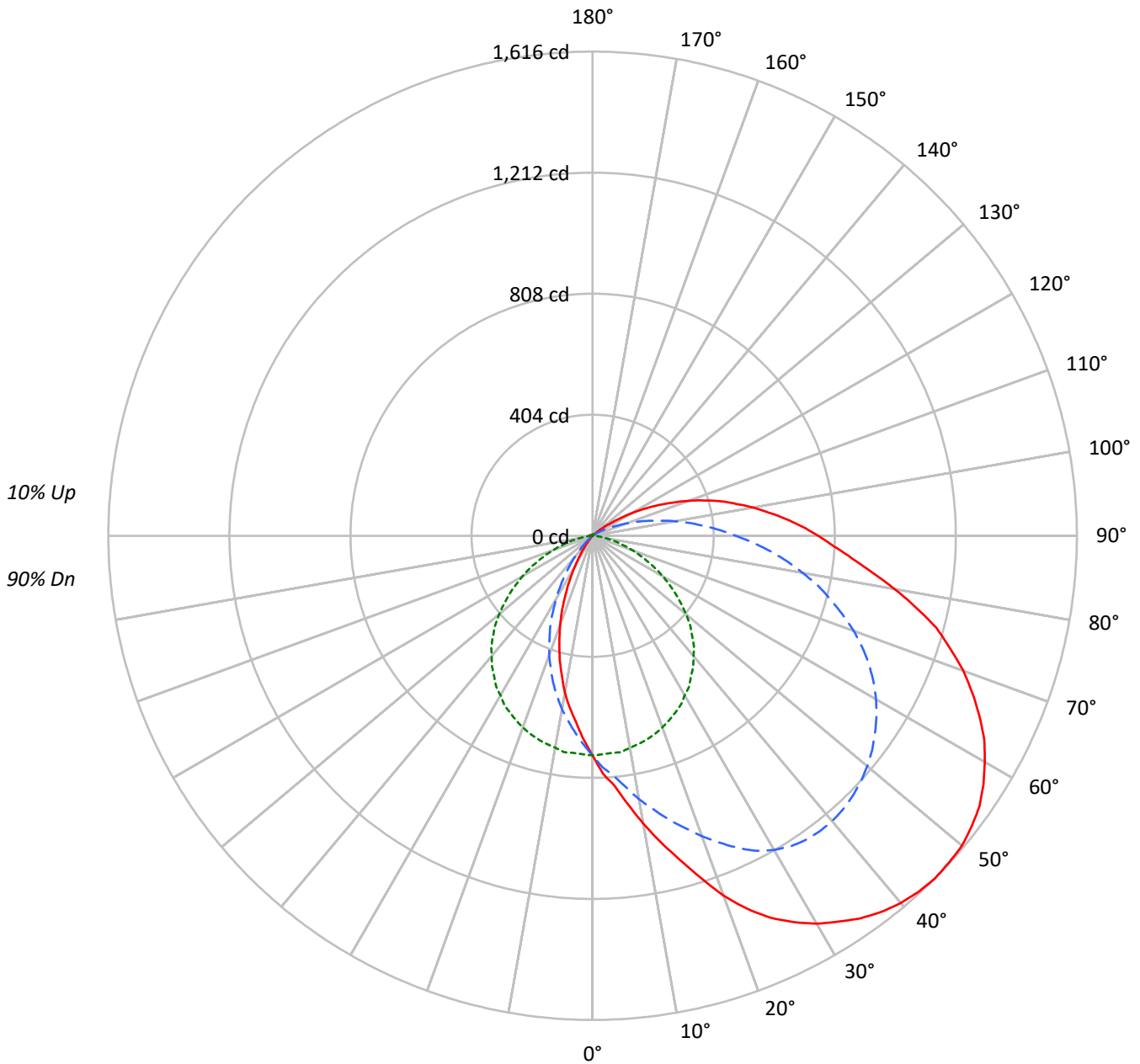
Lumens per Lamp: N/A
Luminaire Lumens: 3624.0 lumens
Efficiency: N/A
Efficacy: 83.7 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

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

TEST NUMBER: P551194

CATALOG NUMBER: FCC-X-2-LD4-2HI-30-UNV-80-85-ED1D

Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20				20
RC	80				70				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	93	93	93	90
1	103	96	91	86	99	93	88	83	87	83	79	81	78	74	76	73	70	76	73	70	67
2	92	82	74	67	88	79	72	65	74	67	62	69	64	59	64	60	56	64	60	56	53
3	83	71	61	54	79	68	60	53	64	56	50	59	53	48	55	50	46	55	50	46	43
4	75	62	52	44	72	60	51	44	56	48	42	52	45	40	49	43	38	49	43	38	36
5	69	55	45	38	66	53	44	37	50	42	35	46	39	34	43	38	33	43	38	33	30
6	63	49	39	32	61	47	38	32	44	36	31	42	35	29	39	33	28	39	33	28	26
7	58	44	35	28	56	43	34	28	40	32	27	38	31	26	36	29	25	36	29	25	23
8	54	40	31	25	52	39	30	24	37	29	24	34	28	23	32	26	22	32	26	22	20
9	51	36	28	22	49	35	27	22	33	26	21	32	25	20	30	24	20	30	24	20	18
10	47	33	25	20	45	33	25	19	31	24	19	29	23	18	28	22	18	28	22	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	7890	7890	7890
5°	8662	7775	6487
10°	9801	7680	5347
15°	10985	7582	4167
20°	12389	7459	3068
25°	13554	7315	2015
30°	14419	7124	1135
35°	15169	6916	500
40°	15834	6663	120
45°	16404	6343	0
50°	16883	5920	0
55°	17248	5382	0
60°	17431	4759	0
65°	17503	4051	0
70°	17445	3303	0
75°	17223	2436	13
80°	16524	1491	76
85°	15973	712	103



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.2	1.9
10°-20°	210.2	5.8
20°-30°	340.5	9.4
30°-40°	437.4	12.1
40°-50°	495.1	13.7
50°-60°	512.9	14.2
60°-70°	483.7	13.3
70°-80°	405.4	11.2
80°-90°	293.8	8.1
90°-100°	193.1	5.3
100°-110°	111.5	3.1
110°-120°	49.2	1.4
120°-130°	13.3	0.4
130°-140°	3.0	0.1
140°-150°	2.0	0.1
150°-160°	1.4	0.0
160°-170°	0.8	0.0
170°-180°	0.3	0.0
0°-30°	620.9	17.1
0°-40°	1058.3	29.2
0°-60°	2066.3	57.0
0°-90°	3249.2	89.7
90°-120°	353.9	9.8
90°-150°	372.2	10.3
90°-180°	375.0	10.3
0°-180°	3624.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	733	733	733	733	733	
5°	837	804	727	660	627	84
15°	1118	980	703	508	424	322
25°	1407	1150	652	334	209	650
35°	1558	1240	572	162	51	977
45°	1616	1228	469	37	0	1248
55°	1575	1150	338	0	0	1407
65°	1424	1018	202	0	0	1409
75°	1187	821	86	1	1	1245
85°	868	595	14	4	6	742
90°	753	478	4	6	6	413
95°	646	373	2	6	8	507
105°	444	193	2	5	8	469
115°	242	64	3	3	5	242
125°	72	9	4	3	4	72
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°	733.0	733.0	733.0	733.0	733.0	733.0	733.0	733.0	733.0	733.0	733.0
2.5°	794.7	793.7	790.9	786.3	779.7	768.5	759.2	750.8	739.6	730.2	712.5
5°	836.7	832.0	828.3	823.6	808.7	798.4	781.6	762.9	745.2	727.4	692.0
7.5°	903.9	896.5	890.9	877.8	857.2	833.9	807.8	790.0	777.9	728.4	667.7
10°	975.8	969.3	958.1	934.8	909.5	875.9	838.6	796.5	759.2	718.1	646.2
12.5°	1046.8	1037.5	1021.6	991.7	956.2	914.2	862.8	813.4	760.1	711.6	621.0
15°	1117.8	1107.5	1090.7	1054.3	1007.6	952.5	889.9	827.4	764.8	703.2	594.8
17.5°	1195.3	1181.3	1156.1	1115.0	1056.1	988.0	914.2	838.6	762.9	692.9	566.8
20°	1278.4	1258.8	1231.7	1176.6	1107.5	1027.2	938.5	849.8	762.0	680.8	535.1
22.5°	1347.5	1327.9	1298.0	1241.0	1157.9	1059.9	959.0	857.2	758.3	666.7	505.2
25°	1407.3	1391.4	1358.7	1293.3	1205.6	1094.4	978.6	862.8	752.7	651.8	473.4
27.5°	1454.0	1439.0	1402.6	1335.4	1245.7	1125.3	993.6	865.7	745.2	636.9	440.8
30°	1495.0	1480.1	1436.2	1367.1	1272.8	1149.5	1008.5	866.6	735.8	614.5	405.3
32.5°	1526.8	1512.8	1468.0	1394.2	1291.5	1166.3	1016.9	865.7	723.7	598.6	367.0
35°	1558.5	1544.5	1492.2	1413.8	1305.5	1173.8	1023.5	861.0	708.8	572.4	330.6
37.5°	1582.8	1566.9	1513.7	1426.9	1312.0	1175.7	1022.5	854.4	692.9	551.0	294.2
40°	1599.6	1582.8	1525.9	1434.3	1313.9	1172.9	1015.1	843.2	674.2	523.9	255.9
42.5°	1610.8	1592.2	1531.5	1445.6	1310.1	1165.4	1003.9	829.2	653.7	500.5	219.4
45°	1616.4	1596.8	1532.4	1436.2	1303.6	1151.4	987.0	811.5	631.3	468.8	183.0
47.5°	1613.6	1592.2	1527.7	1425.9	1291.5	1136.5	968.4	790.0	604.2	440.8	148.5
50°	1609.0	1586.6	1517.5	1412.9	1274.7	1117.8	947.8	763.9	576.2	406.2	117.7
52.5°	1594.0	1571.6	1506.3	1394.2	1255.1	1096.3	919.8	736.8	546.3	372.6	89.6
55°	1575.4	1554.8	1486.6	1377.4	1229.8	1070.2	893.7	707.8	517.3	338.0	64.4
57.5°	1546.4	1527.7	1462.4	1350.3	1204.6	1041.2	864.7	676.1	480.9	303.5	44.8
60°	1510.9	1492.2	1428.7	1319.5	1175.7	1008.5	833.0	643.4	448.2	268.9	28.0
62.5°	1473.6	1455.8	1389.5	1281.2	1139.3	974.0	798.4	610.7	413.7	237.2	16.8
65°	1424.1	1407.3	1347.5	1235.4	1099.1	936.6	760.1	571.5	378.2	201.7	9.3
67.5°	1371.8	1356.8	1296.1	1193.4	1052.4	895.5	720.9	533.2	340.8	170.9	4.7
70°	1315.8	1297.1	1241.0	1136.5	1004.8	848.8	678.0	494.0	305.4	141.0	0.0
72.5°	1250.4	1236.4	1182.2	1083.2	949.7	799.3	634.1	451.0	266.1	112.1	0.9
75°	1186.9	1169.1	1119.6	1026.3	895.5	747.1	585.5	410.9	227.9	85.9	0.9
77.5°	1104.7	1099.1	1052.4	961.8	844.2	696.6	532.3	362.3	191.4	61.6	0.9
80°	1022.5	1016.9	980.5	897.4	784.4	636.9	482.8	316.6	155.9	41.1	0.9
82.5°	941.3	933.8	899.3	830.2	723.7	586.4	431.4	270.8	123.3	25.2	0.9
85°	868.5	859.1	821.8	758.3	661.1	529.5	378.2	226.0	91.5	14.0	1.9
87.5°	805.9	799.3	758.3	692.9	597.6	476.2	331.5	183.0	64.4	6.5	2.8
90°	752.7	738.7	702.2	633.1	537.9	417.4	282.0	146.6	43.0	3.7	3.7
92.5°	700.4	688.2	648.1	577.1	484.7	367.0	234.4	112.1	27.1	1.9	4.7
95°	646.2	633.1	593.9	528.5	430.5	315.6	192.4	82.2	14.9	1.9	4.7
97.5°	593.0	580.8	539.7	474.4	381.9	270.8	152.2	57.9	7.5	1.9	3.7
100°	543.5	529.5	492.1	426.8	333.4	226.0	117.7	37.4	4.7	1.9	3.7
102.5°	491.2	480.0	441.7	378.2	282.9	184.0	87.8	23.3	1.9	1.9	2.8
105°	444.5	430.5	393.1	327.8	240.9	144.7	61.6	14.0	1.9	1.9	2.8



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	289.5	278.3	245.6	190.5	122.3	57.0	16.8	2.8	2.8	2.8	2.8
115°	241.9	225.1	196.1	147.5	90.6	37.4	8.4	2.8	2.8	2.8	2.8
117.5°	193.3	179.3	158.7	112.1	59.8	24.3	4.7	2.8	2.8	2.8	2.8
120°	151.3	138.2	114.9	77.5	40.2	14.0	1.9	2.8	2.8	2.8	2.8
122.5°	108.3	98.1	77.5	50.4	24.3	6.5	2.8	2.8	3.7	3.7	2.8
125°	71.9	66.3	51.4	30.8	14.9	2.8	2.8	2.8	3.7	3.7	2.8
127.5°	46.7	42.0	29.9	17.7	6.5	2.8	2.8	3.7	3.7	3.7	2.8
130°	26.1	23.3	17.7	10.3	2.8	2.8	2.8	3.7	3.7	3.7	2.8
132.5°	14.9	14.0	9.3	1.9	2.8	2.8	2.8	3.7	3.7	3.7	3.7
135°	3.7	1.9	1.9	1.9	2.8	2.8	3.7	3.7	4.7	4.7	3.7
137.5°	0.9	0.9	1.9	1.9	2.8	2.8	3.7	4.7	4.7	4.7	3.7
140°	0.9	0.9	1.9	2.8	2.8	2.8	3.7	4.7	4.7	4.7	3.7
142.5°	0.9	1.9	1.9	2.8	2.8	3.7	3.7	4.7	4.7	3.7	3.7
145°	0.9	1.9	1.9	2.8	2.8	3.7	3.7	4.7	3.7	3.7	3.7
147.5°	1.9	1.9	1.9	2.8	2.8	3.7	3.7	4.7	4.7	3.7	3.7
150°	0.9	1.9	1.9	2.8	3.7	3.7	3.7	4.7	3.7	3.7	3.7
152.5°	0.9	1.9	1.9	2.8	3.7	3.7	3.7	4.7	3.7	3.7	3.7
155°	1.9	1.9	1.9	2.8	3.7	3.7	3.7	4.7	3.7	3.7	4.7
157.5°	1.9	1.9	1.9	2.8	3.7	3.7	3.7	4.7	3.7	3.7	4.7
160°	1.9	1.9	1.9	2.8	2.8	3.7	3.7	3.7	3.7	3.7	3.7
162.5°	1.9	1.9	1.9	2.8	2.8	3.7	3.7	3.7	3.7	3.7	3.7
165°	1.9	1.9	1.9	1.9	2.8	2.8	3.7	3.7	3.7	3.7	3.7
167.5°	1.9	1.9	1.9	2.8	2.8	2.8	3.7	3.7	3.7	3.7	3.7
170°	1.9	1.9	1.9	2.8	2.8	2.8	3.7	4.7	4.7	4.7	4.7
172.5°	1.9	1.9	1.9	2.8	2.8	3.7	3.7	4.7	4.7	4.7	4.7
175°	1.9	1.9	1.9	2.8	2.8	3.7	3.7	4.7	4.7	4.7	4.7
177.5°	0.9	1.9	1.9	2.8	2.8	3.7	3.7	4.7	4.7	4.7	3.7
180°	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8



TEST NUMBER: P551194

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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	733.0	733.0	733.0
2.5°	697.6	684.5	680.8
5°	660.2	638.7	626.6
7.5°	622.9	593.9	579.9
10°	588.3	547.2	532.3
12.5°	547.2	499.6	476.2
15°	508.0	446.4	424.0
17.5°	464.1	395.0	368.9
20°	423.0	343.6	316.6
22.5°	376.3	293.2	263.3
25°	334.3	242.8	209.2
27.5°	287.6	191.4	162.5
30°	243.7	146.6	117.7
32.5°	201.7	107.4	81.2
35°	162.5	72.8	51.4
37.5°	125.1	44.8	26.1
40°	90.6	23.3	12.1
42.5°	60.7	11.2	6.5
45°	37.4	5.6	0.0
47.5°	21.5	0.0	0.0
50°	11.2	0.0	0.0
52.5°	4.7	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°	0.9	0.9	0.9
77.5°	0.9	1.9	2.8
80°	1.9	3.7	4.7
82.5°	3.7	4.7	4.7
85°	3.7	4.7	5.6
87.5°	4.7	5.6	6.5
90°	5.6	6.5	6.5
92.5°	5.6	7.5	7.5
95°	6.5	7.5	8.4
97.5°	7.5	8.4	8.4
100°	6.5	8.4	9.3
102.5°	5.6	8.4	8.4
105°	4.7	6.5	7.5



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	3.7	4.7	4.7
115°	2.8	3.7	4.7
117.5°	2.8	3.7	3.7
120°	2.8	2.8	3.7
122.5°	2.8	2.8	3.7
125°	2.8	2.8	3.7
127.5°	3.7	2.8	2.8
130°	2.8	2.8	2.8
132.5°	3.7	2.8	2.8
135°	3.7	2.8	2.8
137.5°	3.7	2.8	2.8
140°	3.7	2.8	2.8
142.5°	3.7	2.8	2.8
145°	2.8	2.8	2.8
147.5°	2.8	2.8	2.8
150°	2.8	2.8	1.9
152.5°	2.8	1.9	1.9
155°	2.8	1.9	0.9
157.5°	3.7	1.9	0.9
160°	2.8	1.9	0.9
162.5°	2.8	1.9	0.9
165°	2.8	1.9	0.0
167.5°	2.8	1.9	0.9
170°	2.8	1.9	0.9
172.5°	2.8	1.9	0.9
175°	2.8	0.9	0.9
177.5°	2.8	0.9	0.9
180°	2.8	2.8	2.8



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	392.2	381.0	343.6	282.0	197.0	110.2	41.1	7.5	1.9	2.8	2.8
110°	341.8	332.4	294.2	234.4	158.7	82.2	27.1	4.7	2.8	2.8	2.8





107.5°	3.7	5.6	6.5
110°	3.7	4.7	5.6



(END OF REPORT)