

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: P551204

Luminaire Tested: **FCC-X-2-LD4-2HI-30-UNV-80-96-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: P551204
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-80-96-ED1D
Description: FCC CORNER MOUNT LUMINAIRE WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES AND 3000K, AND 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

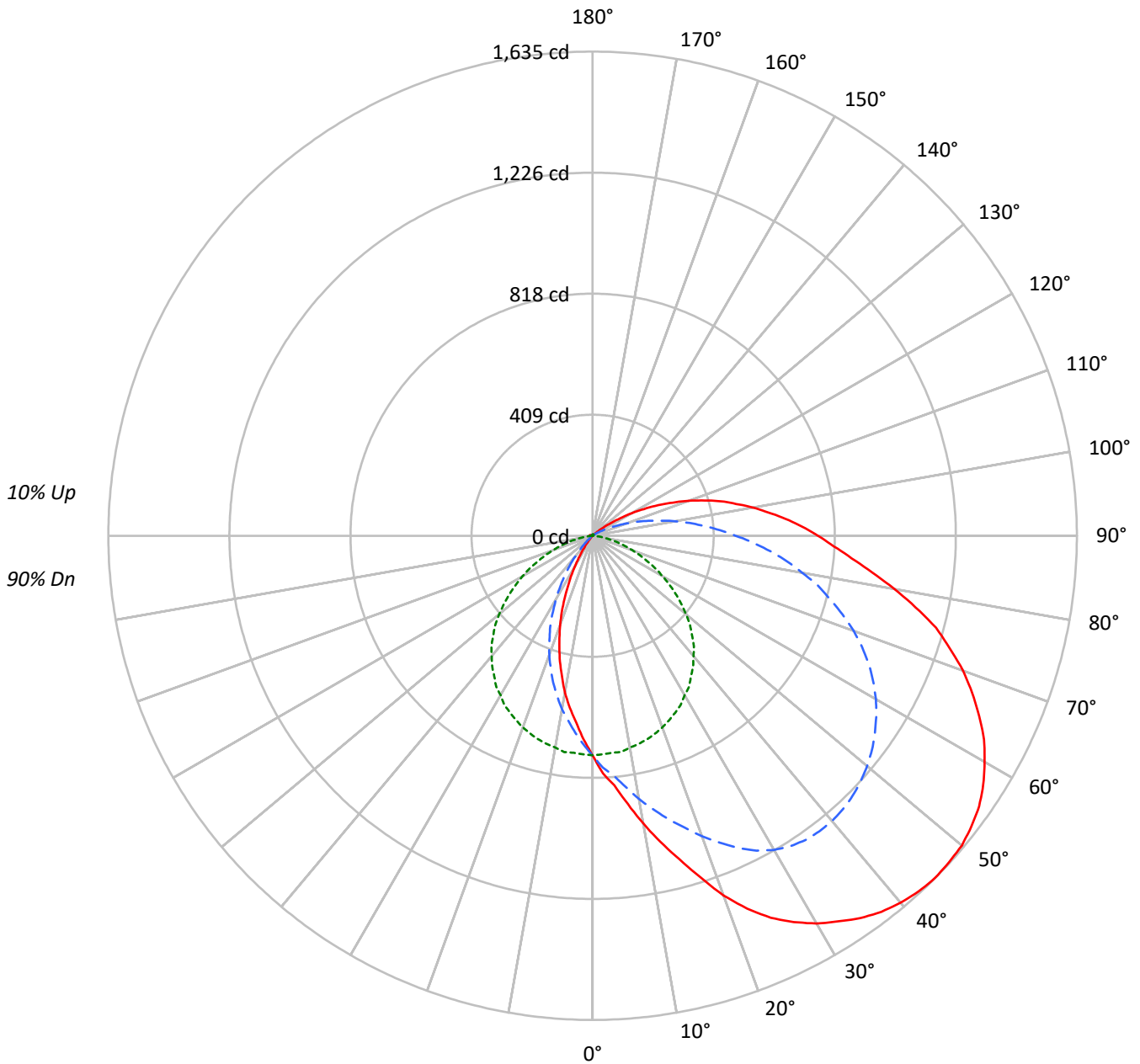
Lumens per Lamp: N/A
Luminaire Lumens: 3664.9 lumens
Efficiency: N/A
Efficacy: 84.6 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

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: P551204

CATALOG NUMBER: FCC-X-2-LD4-2HI-30-UNV-80-96-ED1D

Luminous Intensity Polar Plot





TEST NUMBER: P551204

CATALOG NUMBER: FCC-X-2-LD4-2HI-30-UNV-80-96-ED1D

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°	7979	7979	7979
5°	8760	7863	6560
10°	9913	7766	5407
15°	11108	7667	4214
20°	12530	7543	3102
25°	13707	7398	2037
30°	14583	7204	1148
35°	15341	6995	505
40°	16013	6738	122
45°	16589	6415	0
50°	17074	5987	0
55°	17443	5444	0
60°	17628	4813	0
65°	17701	4097	0
70°	17641	3341	0
75°	17417	2464	13
80°	16712	1509	76
85°	16154	722	105



TEST NUMBER: P551204

CATALOG NUMBER: FCC-X-2-LD4-2HI-30-UNV-80-96-ED1D

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.0	1.9
10°-20°	212.6	5.8
20°-30°	344.3	9.4
30°-40°	442.3	12.1
40°-50°	500.7	13.7
50°-60°	518.7	14.2
60°-70°	489.2	13.3
70°-80°	409.9	11.2
80°-90°	297.2	8.1
90°-100°	195.3	5.3
100°-110°	112.8	3.1
110°-120°	49.8	1.4
120°-130°	13.5	0.4
130°-140°	3.1	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°	627.9	17.1
0°-40°	1070.2	29.2
0°-60°	2089.7	57.0
0°-90°	3286.0	89.7
90°-120°	357.9	9.8
90°-150°	376.4	10.3
90°-180°	379.0	10.3
0°-180°	3664.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	741	741	741	741	741	
5°	846	813	736	668	634	85
15°	1130	991	711	514	429	326
25°	1423	1163	659	338	212	658
35°	1576	1254	579	164	52	989
45°	1635	1241	474	38	0	1262
55°	1593	1163	342	0	0	1423
65°	1440	1029	204	0	0	1425
75°	1200	831	87	1	1	1259
85°	878	602	14	4	6	750
90°	761	483	4	6	7	417
95°	654	377	2	7	8	513
105°	450	195	2	5	8	474
115°	245	65	3	3	5	245
125°	73	9	4	3	4	73
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	



TEST NUMBER: P551204

CATALOG NUMBER: FCC-X-2-LD4-2HI-30-UNV-80-96-ED1D

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
0°	741.3	741.3	741.3	741.3	741.3	741.3	741.3	741.3	741.3	741.3	741.3
2.5°	803.7	802.7	799.9	795.2	788.6	777.2	767.8	759.3	748.0	738.5	720.6
5°	846.2	841.4	837.7	832.9	817.8	807.4	790.4	771.6	753.6	735.7	699.8
7.5°	914.2	906.6	900.9	887.7	866.9	843.3	816.9	798.9	786.7	736.6	675.2
10°	986.9	980.3	968.9	945.3	919.8	885.8	848.1	805.6	767.8	726.2	653.5
12.5°	1058.7	1049.2	1033.2	1002.9	967.0	924.6	872.6	822.6	768.7	719.6	628.0
15°	1130.4	1120.0	1103.0	1066.2	1019.0	963.3	900.0	836.7	773.5	711.1	601.6
17.5°	1208.8	1194.6	1169.1	1127.6	1068.1	999.2	924.6	848.1	771.6	700.7	573.2
20°	1292.9	1273.0	1245.6	1189.9	1120.0	1038.8	949.1	859.4	770.6	688.5	541.1
22.5°	1362.7	1342.9	1312.7	1255.1	1171.0	1071.9	969.9	866.9	766.8	674.3	510.9
25°	1423.2	1407.1	1374.1	1308.0	1219.2	1106.8	989.7	872.6	761.2	659.2	478.8
27.5°	1470.4	1455.3	1418.5	1350.5	1259.8	1138.0	1004.8	875.4	753.6	644.1	445.7
30°	1512.0	1496.8	1452.5	1382.6	1287.2	1162.5	1019.9	876.4	744.2	621.4	409.9
32.5°	1544.1	1529.9	1484.6	1410.0	1306.1	1179.5	1028.4	875.4	731.9	605.4	371.1
35°	1576.2	1562.0	1509.1	1429.8	1320.2	1187.1	1035.0	870.7	716.8	578.9	334.3
37.5°	1600.7	1584.7	1530.8	1443.0	1326.9	1189.0	1034.1	864.1	700.7	557.2	297.5
40°	1617.7	1600.7	1543.1	1450.6	1328.7	1186.1	1026.5	852.8	681.8	529.8	258.8
42.5°	1629.1	1610.2	1548.8	1461.9	1325.0	1178.6	1015.2	838.6	661.1	506.2	221.9
45°	1634.7	1614.9	1549.7	1452.5	1318.4	1164.4	998.2	820.7	638.4	474.1	185.1
47.5°	1631.9	1610.2	1545.0	1442.1	1306.1	1149.3	979.3	798.9	611.0	445.7	150.2
50°	1627.2	1604.5	1534.6	1428.9	1289.1	1130.4	958.5	772.5	582.7	410.8	119.0
52.5°	1612.1	1589.4	1523.3	1410.0	1269.3	1108.7	930.2	745.1	552.5	376.8	90.7
55°	1593.2	1572.4	1503.5	1393.0	1243.8	1082.3	903.8	715.8	523.2	341.9	65.2
57.5°	1563.9	1545.0	1478.9	1365.6	1218.3	1053.0	874.5	683.7	486.4	306.9	45.3
60°	1528.0	1509.1	1444.9	1334.4	1189.0	1019.9	842.4	650.7	453.3	272.0	28.3
62.5°	1490.2	1472.3	1405.2	1295.7	1152.1	985.0	807.4	617.6	418.4	239.9	17.0
65°	1440.2	1423.2	1362.7	1249.4	1111.5	947.2	768.7	578.0	382.5	204.0	9.4
67.5°	1387.3	1372.2	1310.8	1206.9	1064.3	905.7	729.1	539.2	344.7	172.8	4.7
70°	1330.6	1311.7	1255.1	1149.3	1016.2	858.4	685.6	499.6	308.8	142.6	0.0
72.5°	1264.5	1250.4	1195.6	1095.5	960.4	808.4	641.2	456.1	269.1	113.3	0.9
75°	1200.3	1182.4	1132.3	1037.9	905.7	755.5	592.1	415.5	230.4	86.9	0.9
77.5°	1117.2	1111.5	1064.3	972.7	853.7	704.5	538.3	366.4	193.6	62.3	0.9
80°	1034.1	1028.4	991.6	907.6	793.3	644.1	488.2	320.1	157.7	41.6	0.9
82.5°	951.9	944.4	909.4	839.6	731.9	593.1	436.3	273.9	124.7	25.5	0.9
85°	878.3	868.8	831.1	766.8	668.6	535.5	382.5	228.5	92.5	14.2	1.9
87.5°	815.0	808.4	766.8	700.7	604.4	481.6	335.3	185.1	65.2	6.6	2.8
90°	761.2	747.0	710.2	640.3	544.0	422.1	285.2	148.3	43.4	3.8	3.8
92.5°	708.3	696.0	655.4	583.6	490.1	371.1	237.0	113.3	27.4	1.9	4.7
95°	653.5	640.3	600.6	534.5	435.4	319.2	194.5	83.1	15.1	1.9	4.7
97.5°	599.7	587.4	545.9	479.7	386.3	273.9	153.9	58.6	7.6	1.9	3.8
100°	549.6	535.5	497.7	431.6	337.1	228.5	119.0	37.8	4.7	1.9	3.8
102.5°	496.7	485.4	446.7	382.5	286.1	186.0	88.8	23.6	1.9	1.9	2.8
105°	449.5	435.4	397.6	331.5	243.7	146.4	62.3	14.2	1.9	1.9	2.8



TEST NUMBER: P551204

CATALOG NUMBER: FCC-X-2-LD4-2HI-30-UNV-80-96-ED1D

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	292.8	281.4	248.4	192.7	123.7	57.6	17.0	2.8	2.8	2.8	2.8
115°	244.6	227.6	198.3	149.2	91.6	37.8	8.5	2.8	2.8	2.8	2.8
117.5°	195.5	181.3	160.5	113.3	60.4	24.6	4.7	2.8	2.8	2.8	2.8
120°	153.0	139.8	116.2	78.4	40.6	14.2	1.9	2.8	2.8	2.8	2.8
122.5°	109.5	99.2	78.4	51.0	24.6	6.6	2.8	2.8	3.8	3.8	2.8
125°	72.7	67.1	51.9	31.2	15.1	2.8	2.8	2.8	3.8	3.8	2.8
127.5°	47.2	42.5	30.2	17.9	6.6	2.8	2.8	3.8	3.8	3.8	2.8
130°	26.4	23.6	17.9	10.4	2.8	2.8	2.8	3.8	3.8	3.8	2.8
132.5°	15.1	14.2	9.4	1.9	2.8	2.8	2.8	3.8	3.8	3.8	3.8
135°	3.8	1.9	1.9	1.9	2.8	2.8	3.8	3.8	4.7	4.7	3.8
137.5°	0.9	0.9	1.9	1.9	2.8	2.8	3.8	4.7	4.7	4.7	3.8
140°	0.9	0.9	1.9	2.8	2.8	2.8	3.8	4.7	4.7	4.7	3.8
142.5°	0.9	1.9	1.9	2.8	2.8	3.8	3.8	4.7	4.7	3.8	3.8
145°	0.9	1.9	1.9	2.8	2.8	3.8	3.8	4.7	3.8	3.8	3.8
147.5°	1.9	1.9	1.9	2.8	2.8	3.8	3.8	4.7	4.7	3.8	3.8
150°	0.9	1.9	1.9	2.8	3.8	3.8	3.8	4.7	3.8	3.8	3.8
152.5°	0.9	1.9	1.9	2.8	3.8	3.8	3.8	4.7	3.8	3.8	3.8
155°	1.9	1.9	1.9	2.8	3.8	3.8	3.8	4.7	3.8	3.8	4.7
157.5°	1.9	1.9	1.9	2.8	3.8	3.8	3.8	4.7	3.8	3.8	4.7
160°	1.9	1.9	1.9	2.8	2.8	3.8	3.8	3.8	3.8	3.8	3.8
162.5°	1.9	1.9	1.9	2.8	2.8	3.8	3.8	3.8	3.8	3.8	3.8
165°	1.9	1.9	1.9	1.9	2.8	2.8	3.8	3.8	3.8	3.8	3.8
167.5°	1.9	1.9	1.9	2.8	2.8	2.8	3.8	3.8	3.8	3.8	3.8
170°	1.9	1.9	1.9	2.8	2.8	2.8	3.8	4.7	4.7	4.7	4.7
172.5°	1.9	1.9	1.9	2.8	2.8	3.8	3.8	4.7	4.7	4.7	4.7
175°	1.9	1.9	1.9	2.8	2.8	3.8	3.8	4.7	4.7	4.7	4.7
177.5°	0.9	1.9	1.9	2.8	2.8	3.8	3.8	4.7	4.7	4.7	3.8
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: P551204

CATALOG NUMBER: FCC-X-2-LD4-2HI-30-UNV-80-96-ED1D

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	741.3	741.3	741.3
2.5°	705.5	692.2	688.5
5°	667.7	646.0	633.7
7.5°	629.9	600.6	586.5
10°	595.0	553.4	538.3
12.5°	553.4	505.2	481.6
15°	513.7	451.4	428.8
17.5°	469.4	399.5	373.0
20°	427.8	347.5	320.1
22.5°	380.6	296.5	266.3
25°	338.1	245.5	211.5
27.5°	290.9	193.6	164.3
30°	246.5	148.3	119.0
32.5°	204.0	108.6	82.2
35°	164.3	73.7	51.9
37.5°	126.5	45.3	26.4
40°	91.6	23.6	12.3
42.5°	61.4	11.3	6.6
45°	37.8	5.7	0.0
47.5°	21.7	0.0	0.0
50°	11.3	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	3.8	4.7
82.5°	3.8	4.7	4.7
85°	3.8	4.7	5.7
87.5°	4.7	5.7	6.6
90°	5.7	6.6	6.6
92.5°	5.7	7.6	7.6
95°	6.6	7.6	8.5
97.5°	7.6	8.5	8.5
100°	6.6	8.5	9.4
102.5°	5.7	8.5	8.5
105°	4.7	6.6	7.6



TEST NUMBER: P551204

CATALOG NUMBER: FCC-X-2-LD4-2HI-30-UNV-80-96-ED1D

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	3.8	4.7	4.7
115°	2.8	3.8	4.7
117.5°	2.8	3.8	3.8
120°	2.8	2.8	3.8
122.5°	2.8	2.8	3.8
125°	2.8	2.8	3.8
127.5°	3.8	2.8	2.8
130°	2.8	2.8	2.8
132.5°	3.8	2.8	2.8
135°	3.8	2.8	2.8
137.5°	3.8	2.8	2.8
140°	3.8	2.8	2.8
142.5°	3.8	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°	3.8	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°	396.6	385.3	347.5	285.2	199.3	111.4	41.6	7.6	1.9	2.8	2.8
110°	345.6	336.2	297.5	237.0	160.5	83.1	27.4	4.7	2.8	2.8	2.8





107.5°	3.8	5.7	6.6
110°	3.8	4.7	5.7



(END OF REPORT)