

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: P551242

Luminaire Tested: **FCC-X-2-LD4-2HI-30-UNV-93-85-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: P551242
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-93-85-ED1D
Description: FCC CORNER MOUNT LUMINAIRE WITH .156 CLEAR TEMPERED GLASS 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

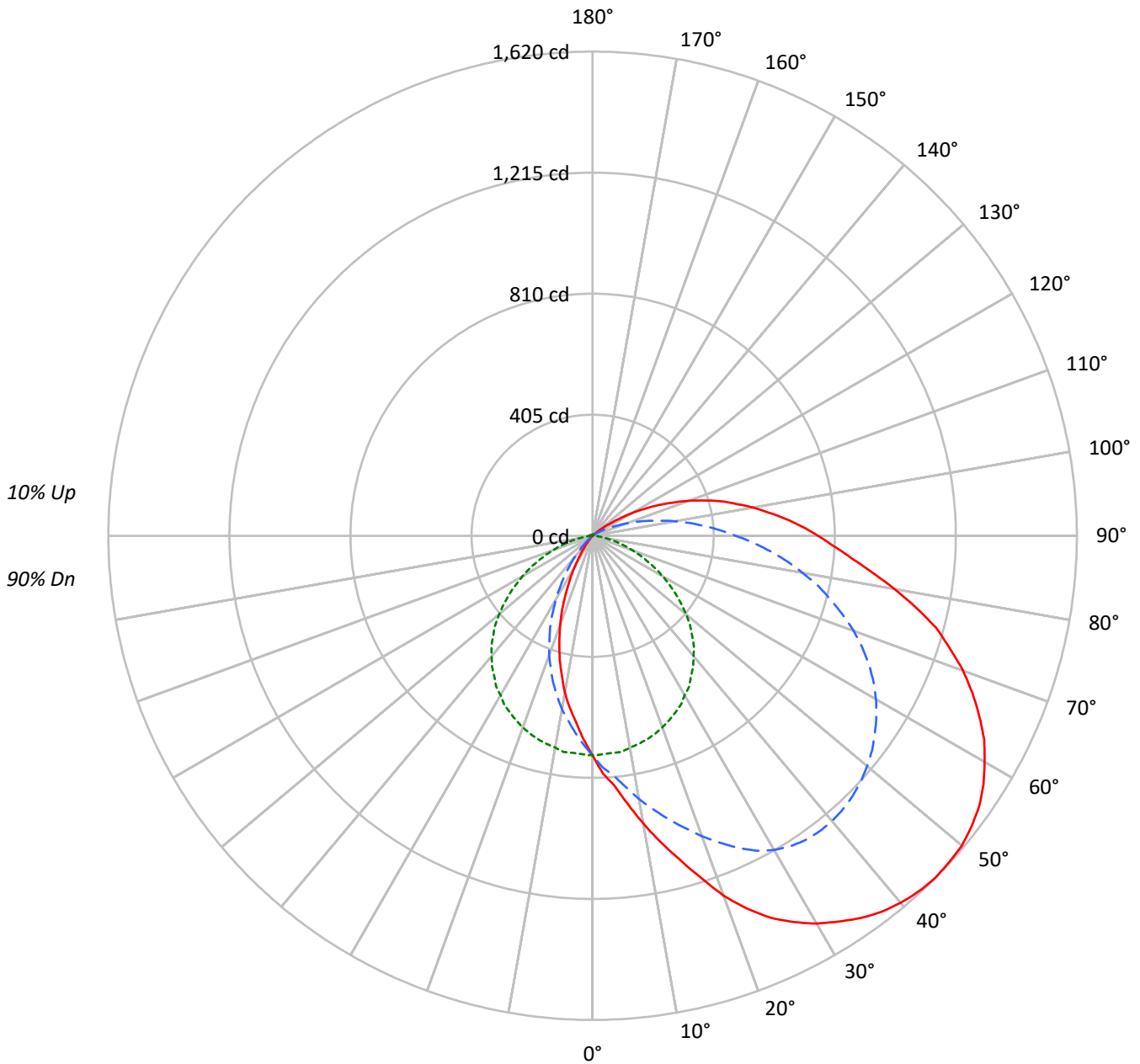
Lumens per Lamp: N/A
Luminaire Lumens: 3631.9 lumens
Efficiency: N/A
Efficacy: 83.9 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

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: P551242

CATALOG NUMBER: FCC-X-2-LD4-2HI-30-UNV-93-85-ED1D

Luminous Intensity Polar Plot





TEST NUMBER: P551242

CATALOG NUMBER: FCC-X-2-LD4-2HI-30-UNV-93-85-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°	7908	7908	7908
5°	8680	7793	6501
10°	9823	7697	5359
15°	11008	7598	4176
20°	12416	7475	3075
25°	13584	7331	2019
30°	14451	7139	1137
35°	15203	6932	501
40°	15869	6677	121
45°	16440	6357	0
50°	16920	5933	0
55°	17285	5395	0
60°	17470	4769	0
65°	17541	4061	0
70°	17484	3310	0
75°	17261	2442	13
80°	16562	1494	76
85°	16008	712	103



TEST NUMBER: P551242

CATALOG NUMBER: FCC-X-2-LD4-2HI-30-UNV-93-85-ED1D

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.4	1.9
10°-20°	210.7	5.8
20°-30°	341.2	9.4
30°-40°	438.3	12.1
40°-50°	496.2	13.7
50°-60°	514.0	14.2
60°-70°	484.8	13.3
70°-80°	406.3	11.2
80°-90°	294.5	8.1
90°-100°	193.6	5.3
100°-110°	111.8	3.1
110°-120°	49.3	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°	622.3	17.1
0°-40°	1060.6	29.2
0°-60°	2070.8	57.0
0°-90°	3256.4	89.7
90°-120°	354.7	9.8
90°-150°	373.0	10.3
90°-180°	376.0	10.4
0°-180°	3631.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	735	735	735	735	735	
5°	838	805	729	662	628	85
15°	1120	982	705	509	425	323
25°	1410	1153	653	335	210	652
35°	1562	1242	574	163	52	980
45°	1620	1230	470	37	0	1251
55°	1579	1153	339	0	0	1410
65°	1427	1020	202	0	0	1412
75°	1190	823	86	1	1	1248
85°	870	597	14	4	6	743
90°	754	479	4	6	7	414
95°	648	374	2	7	8	508
105°	446	193	2	5	8	470
115°	242	64	3	3	5	243
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	



TEST NUMBER: P551242

CATALOG NUMBER: FCC-X-2-LD4-2HI-30-UNV-93-85-ED1D

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
0°	734.7	734.7	734.7	734.7	734.7	734.7	734.7	734.7	734.7	734.7	734.7
2.5°	796.4	795.5	792.7	788.0	781.5	770.2	760.9	752.4	741.2	731.9	714.1
5°	838.5	833.9	830.1	825.4	810.5	800.2	783.3	764.6	746.8	729.1	693.5
7.5°	905.9	898.4	892.8	879.7	859.1	835.7	809.5	791.8	779.6	730.0	669.2
10°	978.0	971.4	960.2	936.8	911.5	877.9	840.4	798.3	760.9	719.7	647.6
12.5°	1049.1	1039.8	1023.9	993.9	958.3	916.2	864.8	815.2	761.8	713.1	622.4
15°	1120.2	1110.0	1093.1	1056.6	1009.8	954.6	891.9	829.2	766.5	704.7	596.2
17.5°	1197.9	1183.9	1158.6	1117.4	1058.5	990.2	916.2	840.4	764.6	694.4	568.1
20°	1281.2	1261.6	1234.4	1179.2	1110.0	1029.5	940.6	851.7	763.7	682.3	536.3
22.5°	1350.5	1330.8	1300.9	1243.8	1160.5	1062.2	961.1	859.1	759.9	668.2	506.3
25°	1410.4	1394.5	1361.7	1296.2	1208.2	1096.9	980.8	864.8	754.3	653.2	474.5
27.5°	1457.2	1442.2	1405.7	1338.3	1248.5	1127.7	995.8	867.6	746.8	638.3	441.7
30°	1498.3	1483.4	1439.4	1370.1	1275.6	1152.1	1010.8	868.5	737.5	615.8	406.2
32.5°	1530.2	1516.1	1471.2	1397.3	1294.3	1168.9	1019.2	867.6	725.3	599.9	367.8
35°	1562.0	1547.9	1495.5	1416.9	1308.4	1176.4	1025.7	862.9	710.3	573.7	331.3
37.5°	1586.3	1570.4	1517.1	1430.0	1314.9	1178.3	1024.8	856.3	694.4	552.2	294.8
40°	1603.2	1586.3	1529.2	1437.5	1316.8	1175.5	1017.3	845.1	675.7	525.0	256.4
42.5°	1614.4	1595.7	1534.8	1448.7	1313.0	1168.0	1006.1	831.1	655.1	501.6	219.9
45°	1620.0	1600.4	1535.8	1439.4	1306.5	1153.9	989.2	813.3	632.7	469.8	183.4
47.5°	1617.2	1595.7	1531.1	1429.1	1294.3	1139.0	970.5	791.8	605.5	441.7	148.8
50°	1612.5	1590.1	1520.8	1416.0	1277.5	1120.2	949.9	765.6	577.4	407.1	117.9
52.5°	1597.5	1575.1	1509.6	1397.3	1257.8	1098.7	921.8	738.4	547.5	373.4	89.8
55°	1578.8	1558.2	1489.9	1380.4	1232.6	1072.5	895.6	709.4	518.5	338.8	64.6
57.5°	1549.8	1531.1	1465.6	1353.3	1207.3	1043.5	866.6	677.6	482.0	304.2	44.9
60°	1514.3	1495.5	1431.9	1322.4	1178.3	1010.8	834.8	644.8	449.2	269.5	28.1
62.5°	1476.8	1459.0	1392.6	1284.0	1141.8	976.1	800.2	612.1	414.6	237.7	16.8
65°	1427.2	1410.4	1350.5	1238.2	1101.5	938.7	761.8	572.8	379.0	202.2	9.4
67.5°	1374.8	1359.8	1299.0	1196.1	1054.7	897.5	722.5	534.4	341.6	171.3	4.7
70°	1318.7	1299.9	1243.8	1139.0	1007.0	850.7	679.4	495.1	306.0	141.3	0.0
72.5°	1253.1	1239.1	1184.8	1085.6	951.8	801.1	635.5	452.0	266.7	112.3	0.9
75°	1189.5	1171.7	1122.1	1028.5	897.5	748.7	586.8	411.8	228.4	86.1	0.9
77.5°	1107.1	1101.5	1054.7	964.0	846.0	698.2	533.5	363.1	191.9	61.8	0.9
80°	1024.8	1019.2	982.7	899.4	786.1	638.3	483.9	317.3	156.3	41.2	0.9
82.5°	943.4	935.9	901.3	832.0	725.3	587.7	432.4	271.4	123.5	25.3	0.9
85°	870.4	861.0	823.6	759.9	662.6	530.6	379.0	226.5	91.7	14.0	1.9
87.5°	807.7	801.1	759.9	694.4	599.0	477.3	332.2	183.4	64.6	6.6	2.8
90°	754.3	740.3	703.8	634.5	539.1	418.3	282.6	146.9	43.1	3.7	3.7
92.5°	701.9	689.7	649.5	578.4	485.7	367.8	234.9	112.3	27.1	1.9	4.7
95°	647.6	634.5	595.2	529.7	431.4	316.3	192.8	82.4	15.0	1.9	4.7
97.5°	594.3	582.1	540.9	475.4	382.8	271.4	152.5	58.0	7.5	1.9	3.7
100°	544.7	530.6	493.2	427.7	334.1	226.5	117.9	37.4	4.7	1.9	3.7
102.5°	492.3	481.0	442.7	379.0	283.6	184.4	88.0	23.4	1.9	1.9	2.8
105°	445.5	431.4	394.0	328.5	241.5	145.1	61.8	14.0	1.9	1.9	2.8



TEST NUMBER: P551242

CATALOG NUMBER: FCC-X-2-LD4-2HI-30-UNV-93-85-ED1D

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	290.1	278.9	246.1	190.9	122.6	57.1	16.8	2.8	2.8	2.8	2.8
115°	242.4	225.5	196.5	147.9	90.8	37.4	8.4	2.8	2.8	2.8	2.8
117.5°	193.7	179.7	159.1	112.3	59.9	24.3	4.7	2.8	2.8	2.8	2.8
120°	151.6	138.5	115.1	77.7	40.2	14.0	1.9	2.8	2.8	2.8	2.8
122.5°	108.6	98.3	77.7	50.5	24.3	6.6	2.8	2.8	3.7	3.7	2.8
125°	72.1	66.4	51.5	30.9	15.0	2.8	2.8	2.8	3.7	3.7	2.8
127.5°	46.8	42.1	29.9	17.8	6.6	2.8	2.8	3.7	3.7	3.7	2.8
130°	26.2	23.4	17.8	10.3	2.8	2.8	2.8	3.7	3.7	3.7	2.8
132.5°	15.0	14.0	9.4	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: P551242

CATALOG NUMBER: FCC-X-2-LD4-2HI-30-UNV-93-85-ED1D

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	734.7	734.7	734.7
2.5°	699.1	686.0	682.3
5°	661.7	640.1	628.0
7.5°	624.2	595.2	581.2
10°	589.6	548.4	533.5
12.5°	548.4	500.7	477.3
15°	509.1	447.4	424.9
17.5°	465.1	395.9	369.7
20°	424.0	344.4	317.3
22.5°	377.2	293.9	263.9
25°	335.0	243.3	209.6
27.5°	288.3	191.9	162.8
30°	244.3	146.9	117.9
32.5°	202.2	107.6	81.4
35°	162.8	73.0	51.5
37.5°	125.4	44.9	26.2
40°	90.8	23.4	12.2
42.5°	60.8	11.2	6.6
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	6.6
90°	5.6	6.6	6.6
92.5°	5.6	7.5	7.5
95°	6.6	7.5	8.4
97.5°	7.5	8.4	8.4
100°	6.6	8.4	9.4
102.5°	5.6	8.4	8.4
105°	4.7	6.6	7.5



TEST NUMBER: P551242

CATALOG NUMBER: FCC-X-2-LD4-2HI-30-UNV-93-85-ED1D

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°	393.1	381.8	344.4	282.6	197.5	110.4	41.2	7.5	1.9	2.8	2.8
110°	342.5	333.2	294.8	234.9	159.1	82.4	27.1	4.7	2.8	2.8	2.8





107.5°	3.7	5.6	6.6
110°	3.7	4.7	5.6



(END OF REPORT)