

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: P551252

Luminaire Tested: **FCC-X-2-LD4-2HI-30-UNV-93-96-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: P551252
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-93-96-ED1D
Description: FCC CORNER MOUNT LUMINAIRE WITH .156 CLEAR TEMPERED GLASS 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

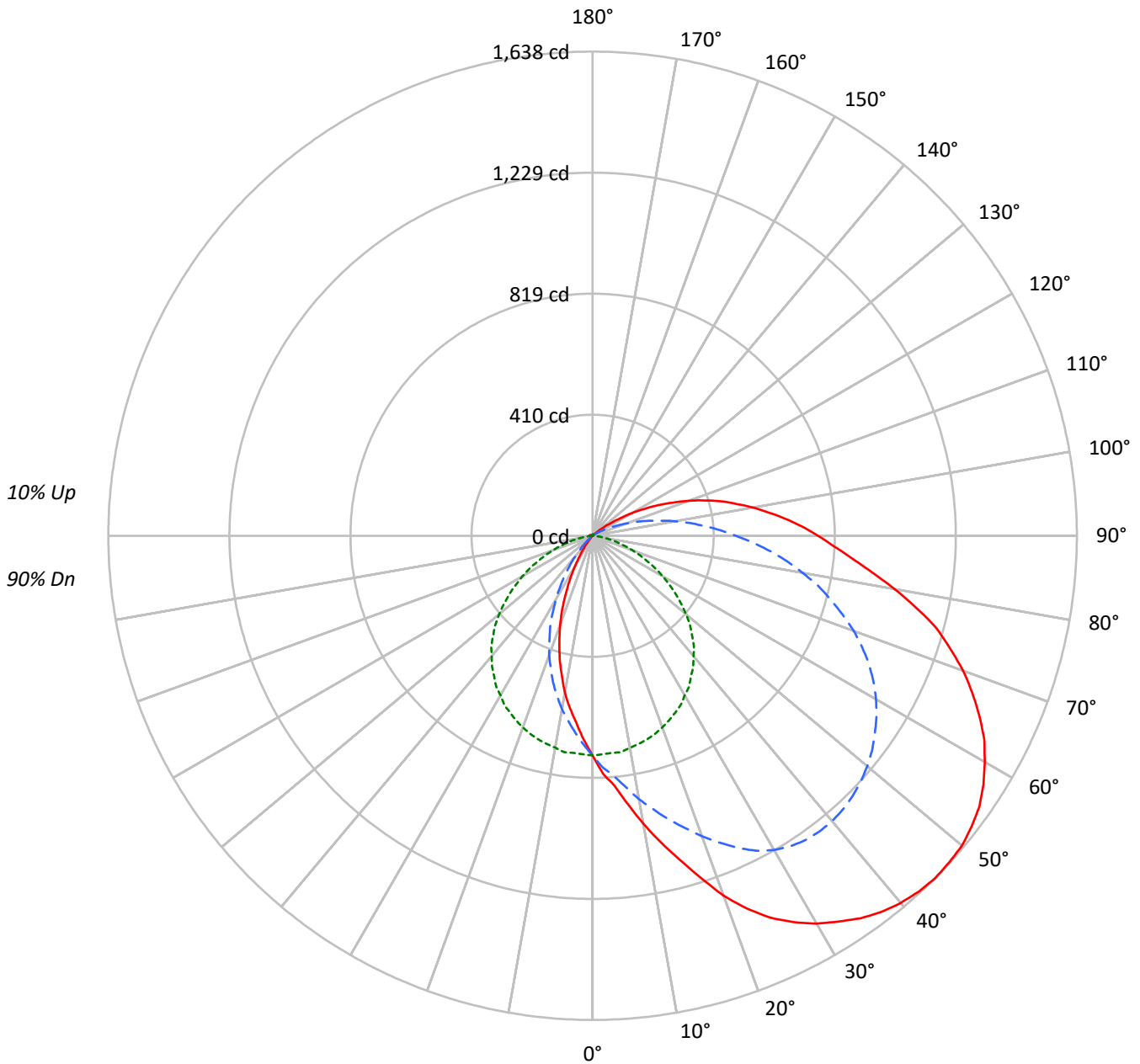
Lumens per Lamp: N/A
Luminaire Lumens: 3672.9 lumens
Efficiency: N/A
Efficacy: 84.8 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

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: P551252

CATALOG NUMBER: FCC-X-2-LD4-2HI-30-UNV-93-96-ED1D

Luminous Intensity Polar Plot





TEST NUMBER: P551252

CATALOG NUMBER: FCC-X-2-LD4-2HI-30-UNV-93-96-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°	7998	7998	7998
5°	8779	7880	6575
10°	9934	7783	5419
15°	11133	7685	4223
20°	12557	7560	3109
25°	13737	7414	2042
30°	14615	7220	1151
35°	15374	7010	507
40°	16048	6753	122
45°	16626	6429	0
50°	17111	6000	0
55°	17481	5455	0
60°	17666	4824	0
65°	17739	4105	0
70°	17680	3348	0
75°	17455	2470	13
80°	16749	1509	76
85°	16189	722	105



TEST NUMBER: P551252

CATALOG NUMBER: FCC-X-2-LD4-2HI-30-UNV-93-96-ED1D

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.2	1.9
10°-20°	213.1	5.8
20°-30°	345.1	9.4
30°-40°	443.3	12.1
40°-50°	501.8	13.7
50°-60°	519.8	14.2
60°-70°	490.3	13.3
70°-80°	410.8	11.2
80°-90°	297.8	8.1
90°-100°	195.7	5.3
100°-110°	113.0	3.1
110°-120°	49.9	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°	629.3	17.1
0°-40°	1072.6	29.2
0°-60°	2094.2	57.0
0°-90°	3293.1	89.7
90°-120°	358.6	9.8
90°-150°	377.2	10.3
90°-180°	380.0	10.3
0°-180°	3672.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	743	743	743	743	743	
5°	848	814	737	669	635	86
15°	1133	993	713	515	430	327
25°	1426	1166	661	339	212	659
35°	1580	1256	580	165	52	991
45°	1638	1244	475	38	0	1265
55°	1597	1166	343	0	0	1426
65°	1443	1032	204	0	0	1428
75°	1203	832	87	1	1	1262
85°	880	603	14	4	6	752
90°	763	484	4	6	7	418
95°	655	378	2	7	8	514
105°	450	195	2	5	8	475
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: P551252

CATALOG NUMBER: FCC-X-2-LD4-2HI-30-UNV-93-96-ED1D

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
0°	743.0	743.0	743.0	743.0	743.0	743.0	743.0	743.0	743.0	743.0	743.0
2.5°	805.4	804.5	801.6	796.9	790.3	778.9	769.5	760.9	749.6	740.1	722.1
5°	848.0	843.3	839.5	834.8	819.6	809.2	792.2	773.2	755.3	737.3	701.3
7.5°	916.2	908.6	902.9	889.7	868.8	845.2	818.7	800.7	788.4	738.2	676.7
10°	989.0	982.4	971.1	947.4	921.8	887.8	849.9	807.3	769.5	727.8	654.9
12.5°	1061.0	1051.5	1035.4	1005.1	969.2	926.6	874.5	824.4	770.4	721.2	629.4
15°	1132.9	1122.5	1105.4	1068.5	1021.2	965.4	902.0	838.6	775.1	712.7	602.9
17.5°	1211.5	1197.3	1171.7	1130.1	1070.4	1001.3	926.6	849.9	773.2	702.3	574.5
20°	1295.7	1275.8	1248.4	1192.5	1122.5	1041.1	951.2	861.3	772.3	690.0	542.3
22.5°	1365.7	1345.8	1315.6	1257.8	1173.6	1074.2	972.0	868.8	768.5	675.8	512.0
25°	1426.3	1410.2	1377.1	1310.8	1221.9	1109.2	991.9	874.5	762.8	660.6	479.8
27.5°	1473.6	1458.5	1421.6	1353.4	1262.6	1140.5	1007.0	877.4	755.3	645.5	446.7
30°	1515.3	1500.1	1455.6	1385.6	1290.0	1165.1	1022.2	878.3	745.8	622.8	410.8
32.5°	1547.4	1533.2	1487.8	1413.0	1308.9	1182.1	1030.7	877.4	733.5	606.7	372.0
35°	1579.6	1565.4	1512.4	1432.9	1323.1	1189.7	1037.3	872.6	718.4	580.2	335.0
37.5°	1604.2	1588.1	1534.2	1446.2	1329.8	1191.6	1036.4	866.0	702.3	558.4	298.1
40°	1621.3	1604.2	1546.5	1453.7	1331.6	1188.7	1028.8	854.6	683.3	531.0	259.3
42.5°	1632.6	1613.7	1552.2	1465.1	1327.9	1181.2	1017.4	840.4	662.5	507.3	222.4
45°	1638.3	1618.4	1553.1	1455.6	1321.2	1167.0	1000.4	822.5	639.8	475.1	185.5
47.5°	1635.5	1613.7	1548.4	1445.2	1308.9	1151.8	981.5	800.7	612.4	446.7	150.5
50°	1630.7	1608.0	1538.0	1432.0	1291.9	1132.9	960.6	774.2	584.0	411.7	119.3
52.5°	1615.6	1592.9	1526.6	1413.0	1272.0	1111.1	932.2	746.7	553.7	377.6	90.9
55°	1596.7	1575.8	1506.7	1396.0	1246.5	1084.6	905.7	717.4	524.3	342.6	65.3
57.5°	1567.3	1548.4	1482.1	1368.6	1220.9	1055.3	876.4	685.2	487.4	307.6	45.4
60°	1531.3	1512.4	1448.1	1337.3	1191.6	1022.2	844.2	652.1	454.3	272.6	28.4
62.5°	1493.5	1475.5	1408.3	1298.5	1154.7	987.1	809.2	619.0	419.3	240.4	17.0
65°	1443.3	1426.3	1365.7	1252.1	1114.0	949.3	770.4	579.2	383.3	204.4	9.5
67.5°	1390.3	1375.2	1313.7	1209.6	1066.6	907.6	730.7	540.4	345.5	173.2	4.7
70°	1333.5	1314.6	1257.8	1151.8	1018.4	860.3	687.1	500.7	309.5	142.9	0.0
72.5°	1267.3	1253.1	1198.2	1097.9	962.5	810.2	642.6	457.1	269.7	113.6	0.9
75°	1202.9	1184.9	1134.8	1040.1	907.6	757.2	593.4	416.4	230.9	87.1	0.9
77.5°	1119.6	1114.0	1066.6	974.8	855.6	706.0	539.5	367.2	194.0	62.5	0.9
80°	1036.4	1030.7	993.8	909.5	795.0	645.5	489.3	320.8	158.1	41.6	0.9
82.5°	954.0	946.4	911.4	841.4	733.5	594.4	437.3	274.5	124.9	25.6	0.9
85°	880.2	870.7	832.9	768.5	670.1	536.6	383.3	229.0	92.8	14.2	1.9
87.5°	816.8	810.2	768.5	702.3	605.7	482.7	336.0	185.5	65.3	6.6	2.8
90°	762.8	748.6	711.7	641.7	545.2	423.1	285.8	148.6	43.5	3.8	3.8
92.5°	709.8	697.5	656.8	584.9	491.2	372.0	237.6	113.6	27.4	1.9	4.7
95°	654.9	641.7	601.9	535.7	436.3	319.9	195.0	83.3	15.1	1.9	4.7
97.5°	601.0	588.7	547.0	480.8	387.1	274.5	154.3	58.7	7.6	1.9	3.8
100°	550.8	536.6	498.8	432.5	337.9	229.0	119.3	37.9	4.7	1.9	3.8
102.5°	497.8	486.5	447.7	383.3	286.8	186.4	89.0	23.7	1.9	1.9	2.8
105°	450.5	436.3	398.5	332.2	244.2	146.7	62.5	14.2	1.9	1.9	2.8



TEST NUMBER: P551252

CATALOG NUMBER: FCC-X-2-LD4-2HI-30-UNV-93-96-ED1D

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	293.4	282.0	248.9	193.1	124.0	57.7	17.0	2.8	2.8	2.8	2.8
115°	245.1	228.1	198.8	149.5	91.8	37.9	8.5	2.8	2.8	2.8	2.8
117.5°	195.9	181.7	160.9	113.6	60.6	24.6	4.7	2.8	2.8	2.8	2.8
120°	153.3	140.1	116.4	78.6	40.7	14.2	1.9	2.8	2.8	2.8	2.8
122.5°	109.8	99.4	78.6	51.1	24.6	6.6	2.8	2.8	3.8	3.8	2.8
125°	72.9	67.2	52.1	31.2	15.1	2.8	2.8	2.8	3.8	3.8	2.8
127.5°	47.3	42.6	30.3	18.0	6.6	2.8	2.8	3.8	3.8	3.8	2.8
130°	26.5	23.7	18.0	10.4	2.8	2.8	2.8	3.8	3.8	3.8	2.8
132.5°	15.1	14.2	9.5	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: P551252

CATALOG NUMBER: FCC-X-2-LD4-2HI-30-UNV-93-96-ED1D

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	743.0	743.0	743.0
2.5°	707.0	693.7	690.0
5°	669.1	647.4	635.1
7.5°	631.3	601.9	587.7
10°	596.3	554.6	539.5
12.5°	554.6	506.3	482.7
15°	514.9	452.4	429.7
17.5°	470.4	400.3	373.8
20°	428.7	348.3	320.8
22.5°	381.4	297.2	266.9
25°	338.8	246.1	212.0
27.5°	291.5	194.0	164.7
30°	247.0	148.6	119.3
32.5°	204.4	108.8	82.3
35°	164.7	73.8	52.1
37.5°	126.8	45.4	26.5
40°	91.8	23.7	12.3
42.5°	61.5	11.4	6.6
45°	37.9	5.7	0.0
47.5°	21.8	0.0	0.0
50°	11.4	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	9.5
102.5°	5.7	8.5	8.5
105°	4.7	6.6	7.6



TEST NUMBER: P551252

CATALOG NUMBER: FCC-X-2-LD4-2HI-30-UNV-93-96-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°	397.5	386.1	348.3	285.8	199.7	111.7	41.6	7.6	1.9	2.8	2.8
110°	346.4	336.9	298.1	237.6	160.9	83.3	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)