

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: P551336

Luminaire Tested: **FCC-X-2-LD4-2HI-40-UNV-81-84-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: P551336
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-81-84-ED1D
Description: FCC CORNER MOUNT LUMINAIRE WITH .156 CLEAR PC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 4000K, AND 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

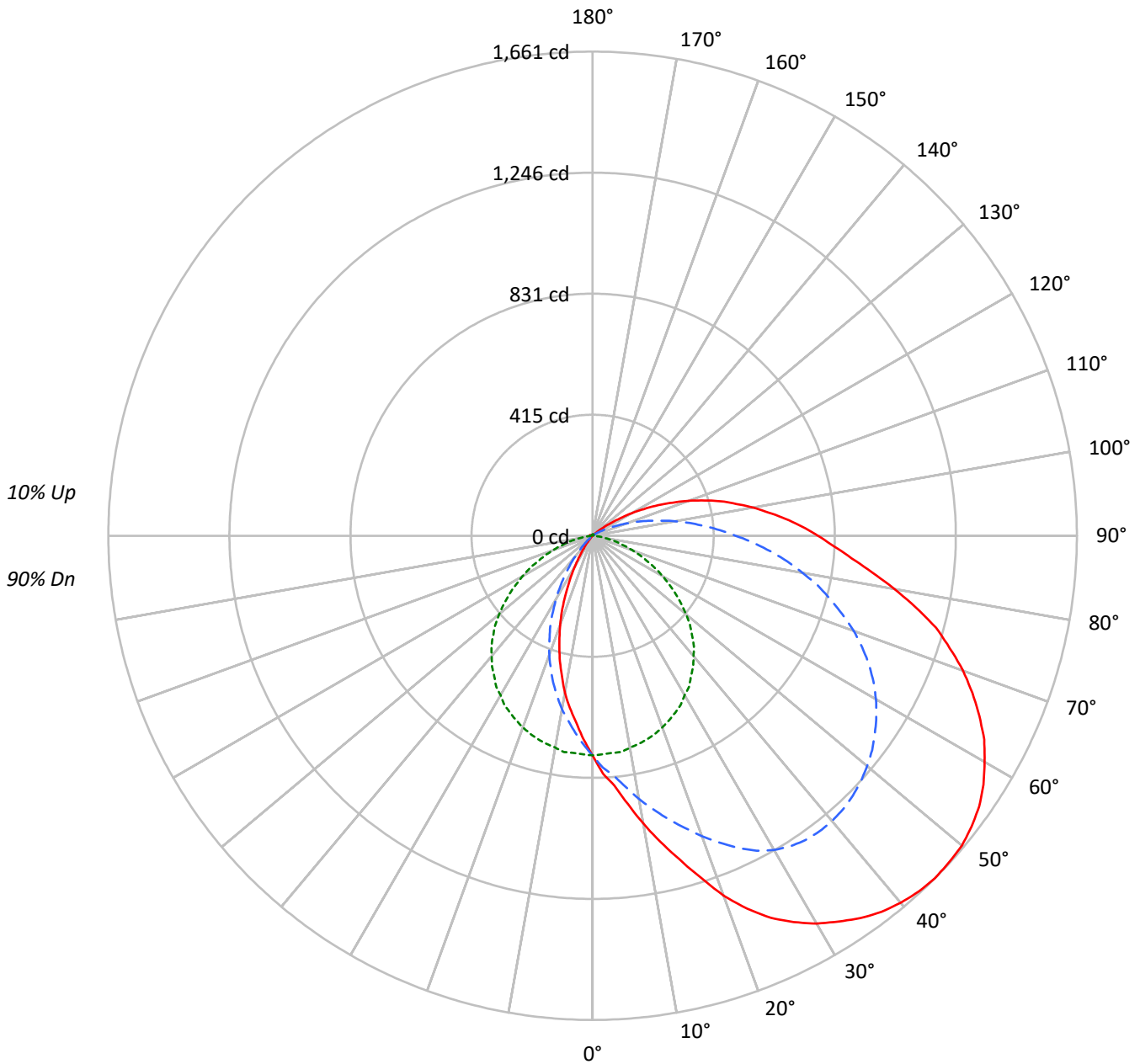
Lumens per Lamp: N/A
Luminaire Lumens: 3724.0 lumens
Efficiency: N/A
Efficacy: 86.0 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

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

TEST NUMBER: P551336

CATALOG NUMBER: FCC-X-2-LD4-2HI-40-UNV-81-84-ED1D

Luminous Intensity Polar Plot





TEST NUMBER: P551336

CATALOG NUMBER: FCC-X-2-LD4-2HI-40-UNV-81-84-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°	8108	8108	8108
5°	8901	7989	6666
10°	10073	7891	5494
15°	11287	7791	4282
20°	12731	7664	3153
25°	13928	7517	2070
30°	14817	7319	1166
35°	15588	7107	514
40°	16271	6846	124
45°	16856	6518	0
50°	17349	6083	0
55°	17723	5532	0
60°	17912	4891	0
65°	17986	4164	0
70°	17926	3394	0
75°	17697	2504	15
80°	16980	1531	78
85°	16413	732	107



TEST NUMBER: P551336

CATALOG NUMBER: FCC-X-2-LD4-2HI-40-UNV-81-84-ED1D

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	72.2	1.9
10°-20°	216.0	5.8
20°-30°	349.9	9.4
30°-40°	449.4	12.1
40°-50°	508.7	13.7
50°-60°	527.1	14.2
60°-70°	497.1	13.3
70°-80°	416.6	11.2
80°-90°	301.9	8.1
90°-100°	198.5	5.3
100°-110°	114.6	3.1
110°-120°	50.6	1.4
120°-130°	13.7	0.4
130°-140°	3.1	0.1
140°-150°	2.1	0.1
150°-160°	1.4	0.0
160°-170°	0.8	0.0
170°-180°	0.3	0.0
0°-30°	638.1	17.1
0°-40°	1087.5	29.2
0°-60°	2123.3	57.0
0°-90°	3338.9	89.7
90°-120°	363.6	9.8
90°-150°	382.5	10.3
90°-180°	385.0	10.3
0°-180°	3724.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	753	753	753	753	753	
5°	860	826	748	678	644	87
15°	1149	1007	723	522	436	331
25°	1446	1182	670	344	215	668
35°	1602	1274	588	167	53	1004
45°	1661	1261	482	38	0	1282
55°	1619	1182	347	0	0	1446
65°	1463	1046	207	0	0	1448
75°	1220	844	88	1	1	1279
85°	892	612	14	4	6	762
90°	773	491	4	6	7	424
95°	664	383	2	7	9	521
105°	457	198	2	5	8	482
115°	248	66	3	3	5	249
125°	74	9	4	3	4	74
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: P551336

CATALOG NUMBER: FCC-X-2-LD4-2HI-40-UNV-81-84-ED1D

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
0°	753.3	753.3	753.3	753.3	753.3	753.3	753.3	753.3	753.3	753.3	753.3
2.5°	816.6	815.6	812.8	808.0	801.3	789.7	780.1	771.5	760.0	750.4	732.2
5°	859.8	855.0	851.2	846.4	831.0	820.4	803.2	784.0	765.8	747.5	711.1
7.5°	928.9	921.2	915.4	902.0	880.9	856.9	830.0	811.8	799.3	748.5	686.1
10°	1002.8	996.1	984.5	960.5	934.6	900.1	861.7	818.5	780.1	737.9	664.0
12.5°	1075.7	1066.1	1049.8	1019.1	982.6	939.4	886.7	835.8	781.1	731.2	638.1
15°	1148.6	1138.1	1120.8	1083.4	1035.4	978.8	914.5	850.2	785.9	722.6	611.3
17.5°	1228.3	1213.9	1188.0	1145.7	1085.3	1015.2	939.4	861.7	784.0	712.0	582.5
20°	1313.7	1293.5	1265.7	1209.1	1138.1	1055.5	964.4	873.2	783.0	699.5	549.8
22.5°	1384.7	1364.5	1333.8	1275.3	1189.9	1089.1	985.5	880.9	779.2	685.1	519.1
25°	1446.1	1429.8	1396.2	1329.0	1238.8	1124.6	1005.6	886.7	773.4	669.8	486.5
27.5°	1494.1	1478.7	1441.3	1372.2	1280.1	1156.3	1021.0	889.5	765.8	654.4	452.9
30°	1536.3	1520.9	1475.8	1404.8	1307.9	1181.3	1036.4	890.5	756.2	631.4	416.5
32.5°	1568.9	1554.5	1508.5	1432.7	1327.1	1198.5	1045.0	889.5	743.7	615.1	377.1
35°	1601.6	1587.2	1533.4	1452.8	1341.5	1206.2	1051.7	884.7	728.3	588.2	339.7
37.5°	1626.5	1610.2	1555.5	1466.2	1348.2	1208.1	1050.7	878.0	712.0	566.2	302.3
40°	1643.8	1626.5	1568.0	1473.9	1350.1	1205.2	1043.1	866.5	692.8	538.3	262.9
42.5°	1655.3	1636.1	1573.7	1485.4	1346.3	1197.6	1031.6	852.1	671.7	514.3	225.5
45°	1661.0	1640.9	1574.7	1475.8	1339.6	1183.2	1014.3	833.9	648.7	481.7	188.1
47.5°	1658.2	1636.1	1569.9	1465.3	1327.1	1167.8	995.1	811.8	620.9	452.9	152.6
50°	1653.4	1630.3	1559.3	1451.9	1309.8	1148.6	974.0	784.9	592.1	417.4	120.9
52.5°	1638.0	1615.0	1547.8	1432.7	1289.7	1126.6	945.2	757.1	561.4	382.9	92.1
55°	1618.8	1597.7	1527.7	1415.4	1263.8	1099.7	918.3	727.4	531.6	347.4	66.2
57.5°	1589.1	1569.9	1502.7	1387.6	1237.9	1069.9	888.6	694.7	494.2	311.9	46.1
60°	1552.6	1533.4	1468.2	1355.9	1208.1	1036.4	856.0	661.2	460.6	276.4	28.8
62.5°	1514.2	1496.0	1427.9	1316.6	1170.7	1000.8	820.4	627.6	425.1	243.7	17.3
65°	1463.4	1446.1	1384.7	1269.5	1129.4	962.5	781.1	587.3	388.6	207.3	9.6
67.5°	1409.6	1394.3	1331.9	1226.4	1081.5	920.2	740.8	547.9	350.2	175.6	4.8
70°	1352.1	1332.9	1275.3	1167.8	1032.5	872.3	696.7	507.6	313.8	144.9	0.0
72.5°	1284.9	1270.5	1214.8	1113.1	975.9	821.4	651.6	463.5	273.5	115.2	1.0
75°	1219.6	1201.4	1150.5	1054.6	920.2	767.7	601.7	422.2	234.1	88.3	1.0
77.5°	1135.2	1129.4	1081.5	988.4	867.5	715.9	547.0	372.3	196.7	63.3	1.0
80°	1050.7	1045.0	1007.6	922.2	806.1	654.4	496.1	325.3	160.3	42.2	1.0
82.5°	967.3	959.6	924.1	853.1	743.7	602.6	443.3	278.3	126.7	25.9	1.0
85°	892.4	882.8	844.4	779.2	679.4	544.1	388.6	232.2	94.0	14.4	1.9
87.5°	828.1	821.4	779.2	712.0	614.1	489.4	340.7	188.1	66.2	6.7	2.9
90°	773.4	759.0	721.6	650.6	552.7	428.9	289.8	150.7	44.1	3.8	3.8
92.5°	719.7	707.2	666.0	593.0	498.0	377.1	240.9	115.2	27.8	1.9	4.8
95°	664.0	650.6	610.3	543.1	442.4	324.3	197.7	84.4	15.4	1.9	4.8
97.5°	609.3	596.9	554.6	487.5	392.5	278.3	156.4	59.5	7.7	1.9	3.8
100°	558.5	544.1	505.7	438.5	342.6	232.2	120.9	38.4	4.8	1.9	3.8
102.5°	504.7	493.2	453.9	388.6	290.8	189.0	90.2	24.0	1.9	1.9	2.9
105°	456.8	442.4	404.0	336.8	247.6	148.7	63.3	14.4	1.9	1.9	2.9



TEST NUMBER: P551336

CATALOG NUMBER: FCC-X-2-LD4-2HI-40-UNV-81-84-ED1D

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	297.5	286.0	252.4	195.8	125.7	58.5	17.3	2.9	2.9	2.9	2.9
115°	248.5	231.3	201.5	151.6	93.1	38.4	8.6	2.9	2.9	2.9	2.9
117.5°	198.6	184.2	163.1	115.2	61.4	24.9	4.8	2.9	2.9	2.9	2.9
120°	155.5	142.0	118.0	79.6	41.3	14.4	1.9	2.9	2.9	2.9	2.9
122.5°	111.3	100.8	79.6	51.8	24.9	6.7	2.9	2.9	3.8	3.8	2.9
125°	73.9	68.1	52.8	31.7	15.4	2.9	2.9	2.9	3.8	3.8	2.9
127.5°	48.0	43.2	30.7	18.2	6.7	2.9	2.9	3.8	3.8	3.8	2.9
130°	26.9	24.0	18.2	10.6	2.9	2.9	2.9	3.8	3.8	3.8	2.9
132.5°	15.4	14.4	9.6	1.9	2.9	2.9	2.9	3.8	3.8	3.8	3.8
135°	3.8	1.9	1.9	1.9	2.9	2.9	3.8	3.8	4.8	4.8	3.8
137.5°	1.0	1.0	1.9	1.9	2.9	2.9	3.8	4.8	4.8	4.8	3.8
140°	1.0	1.0	1.9	2.9	2.9	2.9	3.8	4.8	4.8	4.8	3.8
142.5°	1.0	1.9	1.9	2.9	2.9	3.8	3.8	4.8	4.8	3.8	3.8
145°	1.0	1.9	1.9	2.9	2.9	3.8	3.8	4.8	3.8	3.8	3.8
147.5°	1.9	1.9	1.9	2.9	2.9	3.8	3.8	4.8	4.8	3.8	3.8
150°	1.0	1.9	1.9	2.9	3.8	3.8	3.8	4.8	3.8	3.8	3.8
152.5°	1.0	1.9	1.9	2.9	3.8	3.8	3.8	4.8	3.8	3.8	3.8
155°	1.9	1.9	1.9	2.9	3.8	3.8	3.8	4.8	3.8	3.8	4.8
157.5°	1.9	1.9	1.9	2.9	3.8	3.8	3.8	4.8	3.8	3.8	4.8
160°	1.9	1.9	1.9	2.9	2.9	3.8	3.8	3.8	3.8	3.8	3.8
162.5°	1.9	1.9	1.9	2.9	2.9	3.8	3.8	3.8	3.8	3.8	3.8
165°	1.9	1.9	1.9	1.9	2.9	2.9	3.8	3.8	3.8	3.8	3.8
167.5°	1.9	1.9	1.9	2.9	2.9	2.9	3.8	3.8	3.8	3.8	3.8
170°	1.9	1.9	1.9	2.9	2.9	2.9	3.8	4.8	4.8	4.8	4.8
172.5°	1.9	1.9	1.9	2.9	2.9	3.8	3.8	4.8	4.8	4.8	4.8
175°	1.9	1.9	1.9	2.9	2.9	3.8	3.8	4.8	4.8	4.8	4.8
177.5°	1.0	1.9	1.9	2.9	2.9	3.8	3.8	4.8	4.8	4.8	3.8
180°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9



TEST NUMBER: P551336

CATALOG NUMBER: FCC-X-2-LD4-2HI-40-UNV-81-84-ED1D

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	753.3	753.3	753.3
2.5°	716.8	703.4	699.5
5°	678.4	656.4	643.9
7.5°	640.0	610.3	595.9
10°	604.5	562.3	547.0
12.5°	562.3	513.4	489.4
15°	522.0	458.7	435.7
17.5°	476.9	405.9	379.0
20°	434.7	353.1	325.3
22.5°	386.7	301.3	270.6
25°	343.5	249.5	214.9
27.5°	295.6	196.7	167.0
30°	250.5	150.7	120.9
32.5°	207.3	110.4	83.5
35°	167.0	74.8	52.8
37.5°	128.6	46.1	26.9
40°	93.1	24.0	12.5
42.5°	62.4	11.5	6.7
45°	38.4	5.8	0.0
47.5°	22.1	0.0	0.0
50°	11.5	0.0	0.0
52.5°	4.8	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	1.9	2.9
80°	1.9	3.8	4.8
82.5°	3.8	4.8	4.8
85°	3.8	4.8	5.8
87.5°	4.8	5.8	6.7
90°	5.8	6.7	6.7
92.5°	5.8	7.7	7.7
95°	6.7	7.7	8.6
97.5°	7.7	8.6	8.6
100°	6.7	8.6	9.6
102.5°	5.8	8.6	8.6
105°	4.8	6.7	7.7



TEST NUMBER: P551336

CATALOG NUMBER: FCC-X-2-LD4-2HI-40-UNV-81-84-ED1D

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	3.8	4.8	4.8
115°	2.9	3.8	4.8
117.5°	2.9	3.8	3.8
120°	2.9	2.9	3.8
122.5°	2.9	2.9	3.8
125°	2.9	2.9	3.8
127.5°	3.8	2.9	2.9
130°	2.9	2.9	2.9
132.5°	3.8	2.9	2.9
135°	3.8	2.9	2.9
137.5°	3.8	2.9	2.9
140°	3.8	2.9	2.9
142.5°	3.8	2.9	2.9
145°	2.9	2.9	2.9
147.5°	2.9	2.9	2.9
150°	2.9	2.9	1.9
152.5°	2.9	1.9	1.9
155°	2.9	1.9	1.0
157.5°	3.8	1.9	1.0
160°	2.9	1.9	1.0
162.5°	2.9	1.9	1.0
165°	2.9	1.9	0.0
167.5°	2.9	1.9	1.0
170°	2.9	1.9	1.0
172.5°	2.9	1.9	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°	403.0	391.5	353.1	289.8	202.5	113.2	42.2	7.7	1.9	2.9	2.9
110°	351.2	341.6	302.3	240.9	163.1	84.4	27.8	4.8	2.9	2.9	2.9





107.5°	3.8	5.8	6.7
110°	3.8	4.8	5.8



(END OF REPORT)