

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: P551250

Luminaire Tested: **FCC-X-2-LD4-2HI-30-UNV-93-94-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: P551250
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-93-94-ED1D
Description: FCC CORNER MOUNT LUMINAIRE WITH .156 CLEAR TEMPERED GLASS FIXTURE
SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES AND 3000K,
AND 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

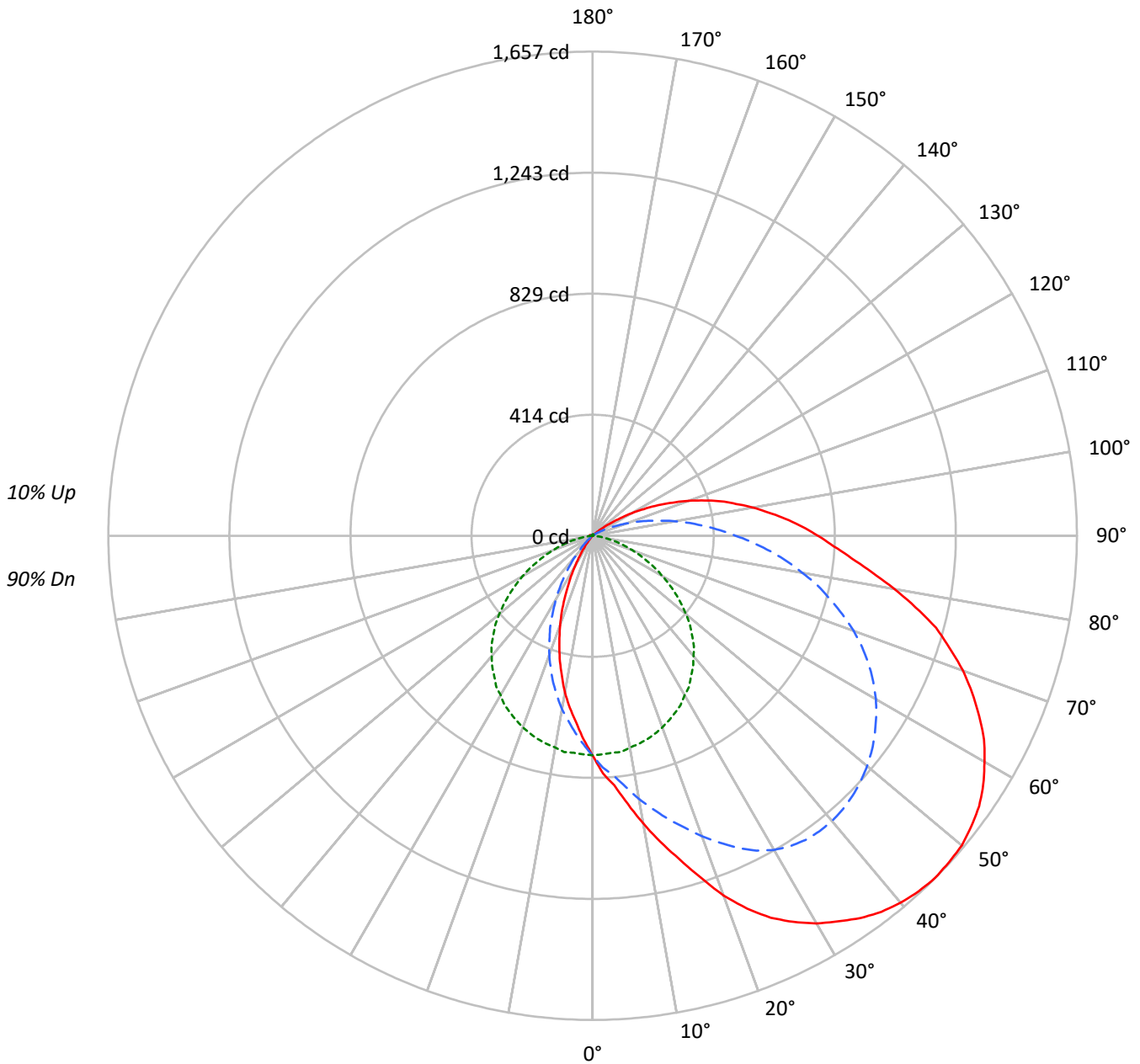
Lumens per Lamp: N/A
Luminaire Lumens: 3714.0 lumens
Efficiency: N/A
Efficacy: 85.8 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

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: P551250

CATALOG NUMBER: FCC-X-2-LD4-2HI-30-UNV-93-94-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°	8087	8087	8087
5°	8877	7968	6648
10°	10045	7870	5479
15°	11257	7770	4270
20°	12696	7644	3144
25°	13890	7497	2065
30°	14778	7300	1163
35°	15546	7088	512
40°	16227	6828	123
45°	16812	6500	0
50°	17302	6067	0
55°	17676	5516	0
60°	17863	4877	0
65°	17937	4152	0
70°	17877	3385	0
75°	17651	2496	15
80°	16935	1527	78
85°	16369	732	105



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	72.0	1.9
10°-20°	215.5	5.8
20°-30°	348.9	9.4
30°-40°	448.2	12.1
40°-50°	507.4	13.7
50°-60°	525.7	14.2
60°-70°	495.7	13.3
70°-80°	415.5	11.2
80°-90°	301.1	8.1
90°-100°	197.9	5.3
100°-110°	114.3	3.1
110°-120°	50.4	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°	636.3	17.1
0°-40°	1084.6	29.2
0°-60°	2117.6	57.0
0°-90°	3329.9	89.7
90°-120°	362.7	9.8
90°-150°	381.5	10.3
90°-180°	384.0	10.3
0°-180°	3714.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	751	751	751	751	751	
5°	858	824	746	677	642	86
15°	1146	1004	721	521	434	330
25°	1442	1179	668	343	214	667
35°	1597	1270	587	166	53	1002
45°	1657	1258	480	38	0	1279
55°	1614	1179	346	0	0	1442
65°	1459	1043	207	0	0	1444
75°	1216	842	88	1	1	1276
85°	890	610	14	4	6	760
90°	771	490	4	6	7	423
95°	662	382	2	7	9	520
105°	456	198	2	5	8	481
115°	248	66	3	3	5	248
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	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
0°	751.3	751.3	751.3	751.3	751.3	751.3	751.3	751.3	751.3	751.3	751.3
2.5°	814.4	813.5	810.6	805.8	799.1	787.6	778.0	769.4	758.0	748.4	730.2
5°	857.5	852.7	848.9	844.1	828.8	818.2	801.0	781.9	763.7	745.5	709.1
7.5°	926.4	918.7	913.0	899.6	878.5	854.6	827.8	809.6	797.2	746.5	684.3
10°	1000.1	993.4	981.9	958.0	932.1	897.7	859.4	816.3	778.0	735.9	662.3
12.5°	1072.8	1063.2	1047.0	1016.3	980.0	936.9	884.3	833.6	779.0	729.2	636.4
15°	1145.5	1135.0	1117.8	1080.5	1032.6	976.2	912.0	847.9	783.8	720.6	609.6
17.5°	1225.0	1210.6	1184.8	1142.7	1082.4	1012.5	936.9	859.4	781.9	710.1	580.9
20°	1310.1	1290.0	1262.3	1205.8	1135.0	1052.7	961.8	870.9	780.9	697.7	548.4
22.5°	1381.0	1360.9	1330.2	1271.9	1186.7	1086.2	982.8	878.5	777.1	683.3	517.7
25°	1442.2	1425.9	1392.4	1325.5	1235.5	1121.6	1002.9	884.3	771.4	668.0	485.2
27.5°	1490.1	1474.8	1437.4	1368.5	1276.7	1153.2	1018.3	887.1	763.7	652.7	451.7
30°	1532.2	1516.9	1471.9	1401.1	1304.4	1178.1	1033.6	888.1	754.1	629.7	415.3
32.5°	1564.7	1550.4	1504.4	1428.8	1323.5	1195.3	1042.2	887.1	741.7	613.4	376.1
35°	1597.3	1582.9	1529.3	1448.9	1337.9	1203.0	1048.9	882.4	726.4	586.6	338.8
37.5°	1622.1	1605.9	1551.3	1462.3	1344.6	1204.9	1047.9	875.7	710.1	564.6	301.5
40°	1639.4	1622.1	1563.8	1470.0	1346.5	1202.0	1040.3	864.2	691.0	536.9	262.2
42.5°	1650.8	1631.7	1569.5	1481.5	1342.7	1194.3	1028.8	849.8	669.9	513.0	224.9
45°	1656.6	1636.5	1570.5	1471.9	1336.0	1180.0	1011.6	831.6	646.9	480.4	187.6
47.5°	1653.7	1631.7	1565.7	1461.4	1323.5	1164.7	992.4	809.6	619.2	451.7	152.2
50°	1648.9	1626.0	1555.1	1448.0	1306.3	1145.5	971.4	782.8	590.5	416.3	120.6
52.5°	1633.6	1610.6	1543.7	1428.8	1286.2	1123.5	942.7	755.1	559.9	381.8	91.9
55°	1614.5	1593.4	1523.6	1411.6	1260.4	1096.7	915.9	725.4	530.2	346.4	66.0
57.5°	1584.8	1565.7	1498.7	1383.8	1234.5	1067.1	886.2	692.9	492.9	311.0	45.9
60°	1548.4	1529.3	1464.2	1352.3	1204.9	1033.6	853.7	659.4	459.4	275.6	28.7
62.5°	1510.2	1492.0	1424.0	1313.0	1167.6	998.2	818.2	625.9	424.0	243.1	17.2
65°	1459.4	1442.2	1381.0	1266.1	1126.4	959.9	779.0	585.7	387.6	206.7	9.6
67.5°	1405.8	1390.5	1328.3	1223.1	1078.6	917.8	738.8	546.5	349.3	175.1	4.8
70°	1348.4	1329.3	1271.9	1164.7	1029.7	869.9	694.8	506.3	312.9	144.5	0.0
72.5°	1281.4	1267.1	1211.6	1110.1	973.3	819.2	649.8	462.2	272.7	114.8	1.0
75°	1216.4	1198.2	1147.5	1051.8	917.8	765.6	600.0	421.1	233.5	88.0	1.0
77.5°	1132.1	1126.4	1078.6	985.7	865.1	713.9	545.5	371.3	196.2	63.2	1.0
80°	1047.9	1042.2	1004.9	919.7	803.9	652.7	494.8	324.4	159.8	42.1	1.0
82.5°	964.7	957.0	921.6	850.8	741.7	601.0	442.1	277.5	126.3	25.8	1.0
85°	890.0	880.4	842.2	777.1	677.6	542.6	387.6	231.6	93.8	14.4	1.9
87.5°	825.9	819.2	777.1	710.1	612.5	488.1	339.7	187.6	66.0	6.7	2.9
90°	771.4	757.0	719.7	648.9	551.2	427.8	289.0	150.3	44.0	3.8	3.8
92.5°	717.8	705.3	664.2	591.4	496.7	376.1	240.2	114.8	27.8	1.9	4.8
95°	662.3	648.9	608.7	541.7	441.2	323.5	197.1	84.2	15.3	1.9	4.8
97.5°	607.7	595.3	553.2	486.2	391.4	277.5	156.0	59.3	7.7	1.9	3.8
100°	557.0	542.6	504.3	437.4	341.7	231.6	120.6	38.3	4.8	1.9	3.8
102.5°	503.4	491.9	452.7	387.6	290.0	188.5	90.0	23.9	1.9	1.9	2.9
105°	455.5	441.2	402.9	335.9	246.9	148.3	63.2	14.4	1.9	1.9	2.9



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	296.7	285.2	251.7	195.2	125.4	58.4	17.2	2.9	2.9	2.9	2.9
115°	247.9	230.6	201.0	151.2	92.8	38.3	8.6	2.9	2.9	2.9	2.9
117.5°	198.1	183.7	162.7	114.8	61.2	24.9	4.8	2.9	2.9	2.9	2.9
120°	155.0	141.6	117.7	79.4	41.2	14.4	1.9	2.9	2.9	2.9	2.9
122.5°	111.0	100.5	79.4	51.7	24.9	6.7	2.9	2.9	3.8	3.8	2.9
125°	73.7	67.9	52.6	31.6	15.3	2.9	2.9	2.9	3.8	3.8	2.9
127.5°	47.9	43.1	30.6	18.2	6.7	2.9	2.9	3.8	3.8	3.8	2.9
130°	26.8	23.9	18.2	10.5	2.9	2.9	2.9	3.8	3.8	3.8	2.9
132.5°	15.3	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



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	751.3	751.3	751.3
2.5°	714.9	701.5	697.7
5°	676.6	654.6	642.2
7.5°	638.3	608.7	594.3
10°	602.9	560.8	545.5
12.5°	560.8	512.0	488.1
15°	520.6	457.5	434.5
17.5°	475.6	404.8	378.0
20°	433.5	352.2	324.4
22.5°	385.7	300.5	269.9
25°	342.6	248.8	214.4
27.5°	294.8	196.2	166.5
30°	249.8	150.3	120.6
32.5°	206.7	110.1	83.3
35°	166.5	74.6	52.6
37.5°	128.2	45.9	26.8
40°	92.8	23.9	12.4
42.5°	62.2	11.5	6.7
45°	38.3	5.7	0.0
47.5°	22.0	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	5.7
87.5°	4.8	5.7	6.7
90°	5.7	6.7	6.7
92.5°	5.7	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°	5.7	8.6	8.6
105°	4.8	6.7	7.7



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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°	401.9	390.5	352.2	289.0	201.9	112.9	42.1	7.7	1.9	2.9	2.9
110°	350.3	340.7	301.5	240.2	162.7	84.2	27.8	4.8	2.9	2.9	2.9





107.5°	3.8	5.7	6.7
110°	3.8	4.8	5.7



(END OF REPORT)