

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: P551346

Luminaire Tested: **FCC-X-2-LD4-2HI-40-UNV-81-94-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: P551346
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-81-94-ED1D
Description: FCC CORNER MOUNT LUMINAIRE WITH .156 CLEAR PC FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES AND 4000K, AND 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

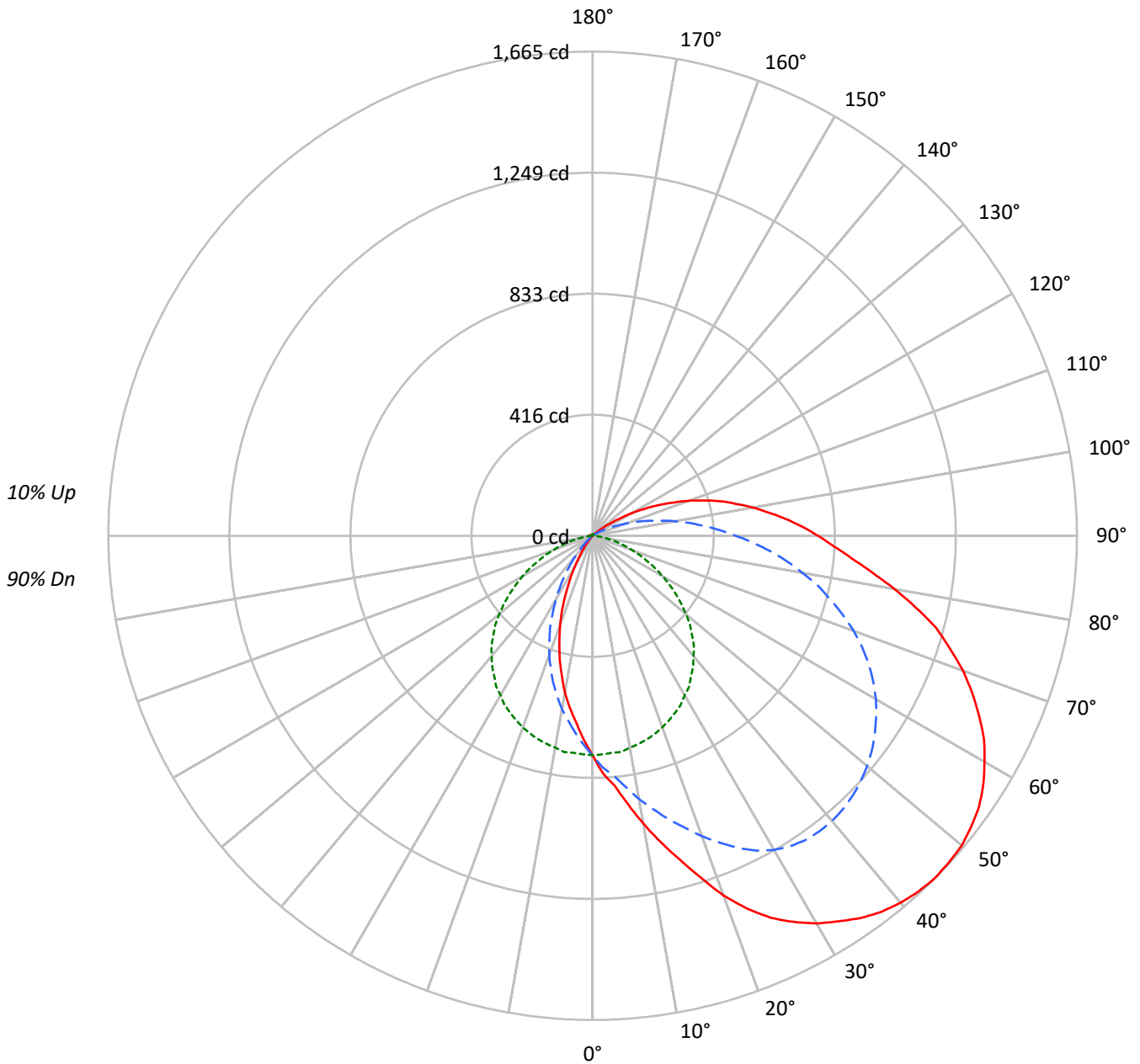
Lumens per Lamp: N/A
Luminaire Lumens: 3732.0 lumens
Efficiency: N/A
Efficacy: 86.2 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

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: P551346

CATALOG NUMBER: FCC-X-2-LD4-2HI-40-UNV-81-94-ED1D

Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									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	90																			
1	103	96	91	86	99	93	88	83	87	83	79	81	78	74	76	73	70	67																			
2	92	82	74	67	88	79	72	65	74	67	62	69	64	59	64	60	56	53																			
3	83	71	61	54	79	68	60	53	64	56	50	59	53	48	55	50	46	43																			
4	75	62	52	44	72	60	51	44	56	48	42	52	45	40	49	43	38	36																			
5	69	55	45	38	66	53	44	37	50	42	35	46	39	34	43	38	33	30																			
6	63	49	39	32	61	47	38	32	44	36	31	42	35	29	39	33	28	26																			
7	58	44	35	28	56	43	34	28	40	32	27	38	31	26	36	29	25	23																			
8	54	40	31	25	52	39	30	24	37	29	24	34	28	23	32	26	22	20																			
9	51	36	28	22	49	35	27	22	33	26	21	32	25	20	30	24	20	18																			
10	47	33	25	20	45	33	25	19	31	24	19	29	23	18	28	22	18	16																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	8126	8126	8126
5°	8919	8006	6680
10°	10094	7908	5505
15°	11312	7808	4290
20°	12758	7680	3159
25°	13957	7533	2075
30°	14849	7336	1169
35°	15621	7123	515
40°	16306	6861	124
45°	16893	6531	0
50°	17386	6097	0
55°	17762	5543	0
60°	17950	4902	0
65°	18024	4172	0
70°	17965	3401	0
75°	17737	2510	15
80°	17017	1534	78
85°	16448	732	107



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	72.3	1.9
10°-20°	216.5	5.8
20°-30°	350.6	9.4
30°-40°	450.4	12.1
40°-50°	509.8	13.7
50°-60°	528.2	14.2
60°-70°	498.1	13.3
70°-80°	417.5	11.2
80°-90°	302.6	8.1
90°-100°	198.9	5.3
100°-110°	114.9	3.1
110°-120°	50.7	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°	639.4	17.1
0°-40°	1089.8	29.2
0°-60°	2127.9	57.0
0°-90°	3346.1	89.7
90°-120°	364.4	9.8
90°-150°	383.3	10.3
90°-180°	386.0	10.3
0°-180°	3732.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	755	755	755	755	755	
5°	862	828	749	680	645	87
15°	1151	1009	724	523	437	332
25°	1449	1184	671	344	215	670
35°	1605	1277	590	167	53	1007
45°	1665	1264	483	38	0	1285
55°	1622	1184	348	0	0	1449
65°	1466	1048	208	0	0	1451
75°	1222	846	88	1	1	1282
85°	894	613	14	4	6	764
90°	775	492	4	6	7	425
95°	666	384	2	7	9	522
105°	458	199	2	5	8	483
115°	249	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	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
0°	754.9	754.9	754.9	754.9	754.9	754.9	754.9	754.9	754.9	754.9	754.9
2.5°	818.4	817.4	814.5	809.7	803.0	791.4	781.8	773.2	761.6	752.0	733.7
5°	861.6	856.8	853.0	848.2	832.8	822.2	804.9	785.7	767.4	749.1	712.6
7.5°	930.9	923.2	917.4	903.9	882.8	858.8	831.8	813.6	801.1	750.1	687.6
10°	1004.9	998.2	986.7	962.6	936.6	902.0	863.6	820.3	781.8	739.5	665.5
12.5°	1078.0	1068.4	1052.0	1021.3	984.7	941.5	888.6	837.6	782.8	732.8	639.5
15°	1151.1	1140.5	1123.2	1085.7	1037.6	980.9	916.5	852.0	787.6	724.1	612.6
17.5°	1230.9	1216.5	1190.5	1148.2	1087.6	1017.4	941.5	863.6	785.7	713.5	583.7
20°	1316.5	1296.3	1268.4	1211.7	1140.5	1057.8	966.5	875.1	784.7	701.0	551.0
22.5°	1387.7	1367.5	1336.7	1278.0	1192.4	1091.5	987.6	882.8	780.9	686.6	520.3
25°	1449.2	1432.9	1399.2	1331.9	1241.5	1127.1	1007.8	888.6	775.1	671.2	487.6
27.5°	1497.3	1481.9	1444.4	1375.2	1282.8	1158.8	1023.2	891.4	767.4	655.8	453.9
30°	1539.6	1524.2	1479.0	1407.9	1310.7	1183.8	1038.6	892.4	757.8	632.8	417.4
32.5°	1572.3	1557.9	1511.7	1435.7	1330.0	1201.1	1047.2	891.4	745.3	616.4	377.9
35°	1605.0	1590.6	1536.7	1455.9	1344.4	1208.8	1054.0	886.6	729.9	589.5	340.4
37.5°	1630.0	1613.6	1558.8	1469.4	1351.1	1210.7	1053.0	879.9	713.5	567.4	302.9
40°	1647.3	1630.0	1571.3	1477.1	1353.0	1207.8	1045.3	868.4	694.3	539.5	263.5
42.5°	1658.8	1639.6	1577.1	1488.6	1349.2	1200.1	1033.8	853.9	673.2	515.4	226.0
45°	1664.6	1644.4	1578.1	1479.0	1342.5	1185.7	1016.5	835.7	650.1	482.7	188.5
47.5°	1661.7	1639.6	1573.3	1468.4	1330.0	1170.3	997.2	813.6	622.2	453.9	152.9
50°	1656.9	1633.8	1562.7	1455.0	1312.7	1151.1	976.1	786.6	593.3	418.3	121.2
52.5°	1641.5	1618.5	1551.1	1435.7	1292.5	1129.0	947.2	758.7	562.6	383.7	92.3
55°	1622.3	1601.1	1530.9	1418.4	1266.5	1102.0	920.3	728.9	532.8	348.1	66.4
57.5°	1592.5	1573.3	1505.9	1390.5	1240.5	1072.2	890.5	696.2	495.2	312.5	46.2
60°	1555.9	1536.7	1471.3	1358.8	1210.7	1038.6	857.8	662.6	461.6	277.0	28.8
62.5°	1517.5	1499.2	1430.9	1319.4	1173.2	1003.0	822.2	628.9	426.0	244.3	17.3
65°	1466.5	1449.2	1387.7	1272.3	1131.9	964.5	782.8	588.5	389.5	207.7	9.6
67.5°	1412.7	1397.3	1334.8	1229.0	1083.8	922.2	742.4	549.1	351.0	176.0	4.8
70°	1355.0	1335.7	1278.0	1170.3	1034.7	874.1	698.2	508.7	314.5	145.2	0.0
72.5°	1287.6	1273.2	1217.4	1115.5	978.0	823.2	653.0	464.5	274.1	115.4	1.0
75°	1222.3	1204.0	1153.0	1056.9	922.2	769.3	603.0	423.1	234.6	88.5	1.0
77.5°	1137.6	1131.9	1083.8	990.5	869.3	717.4	548.1	373.1	197.1	63.5	1.0
80°	1053.0	1047.2	1009.7	924.1	807.8	655.8	497.2	326.0	160.6	42.3	1.0
82.5°	969.3	961.6	926.1	854.9	745.3	603.9	444.3	278.9	126.9	26.0	1.0
85°	894.3	884.7	846.3	780.9	680.8	545.3	389.5	232.7	94.2	14.4	1.9
87.5°	829.9	823.2	780.9	713.5	615.5	490.4	341.4	188.5	66.4	6.7	2.9
90°	775.1	760.7	723.2	652.0	553.9	429.9	290.4	151.0	44.2	3.8	3.8
92.5°	721.2	708.7	667.4	594.3	499.1	377.9	241.4	115.4	27.9	1.9	4.8
95°	665.5	652.0	611.6	544.3	443.3	325.0	198.1	84.6	15.4	1.9	4.8
97.5°	610.6	598.1	555.8	488.5	393.3	278.9	156.7	59.6	7.7	1.9	3.8
100°	559.7	545.3	506.8	439.5	343.3	232.7	121.2	38.5	4.8	1.9	3.8
102.5°	505.8	494.3	454.9	389.5	291.4	189.4	90.4	24.0	1.9	1.9	2.9
105°	457.7	443.3	404.9	337.5	248.1	149.1	63.5	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°	298.1	286.6	252.9	196.2	126.0	58.7	17.3	2.9	2.9	2.9	2.9
115°	249.1	231.8	201.9	151.9	93.3	38.5	8.7	2.9	2.9	2.9	2.9
117.5°	199.1	184.6	163.5	115.4	61.5	25.0	4.8	2.9	2.9	2.9	2.9
120°	155.8	142.3	118.3	79.8	41.4	14.4	1.9	2.9	2.9	2.9	2.9
122.5°	111.6	101.0	79.8	51.9	25.0	6.7	2.9	2.9	3.8	3.8	2.9
125°	74.0	68.3	52.9	31.7	15.4	2.9	2.9	2.9	3.8	3.8	2.9
127.5°	48.1	43.3	30.8	18.3	6.7	2.9	2.9	3.8	3.8	3.8	2.9
130°	26.9	24.0	18.3	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: P551346

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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	754.9	754.9	754.9
2.5°	718.4	704.9	701.0
5°	679.9	657.8	645.3
7.5°	641.4	611.6	597.2
10°	605.8	563.5	548.1
12.5°	563.5	514.5	490.4
15°	523.1	459.7	436.6
17.5°	477.9	406.8	379.9
20°	435.6	353.9	326.0
22.5°	387.5	302.0	271.2
25°	344.3	250.0	215.4
27.5°	296.2	197.1	167.3
30°	251.0	151.0	121.2
32.5°	207.7	110.6	83.7
35°	167.3	75.0	52.9
37.5°	128.9	46.2	26.9
40°	93.3	24.0	12.5
42.5°	62.5	11.5	6.7
45°	38.5	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	8.7
97.5°	7.7	8.7	8.7
100°	6.7	8.7	9.6
102.5°	5.8	8.7	8.7
105°	4.8	6.7	7.7



TEST NUMBER: P551346

CATALOG NUMBER: FCC-X-2-LD4-2HI-40-UNV-81-94-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°	403.9	392.4	353.9	290.4	202.9	113.5	42.3	7.7	1.9	2.9	2.9
110°	352.0	342.3	302.9	241.4	163.5	84.6	27.9	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)