

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: P551274

Luminaire Tested: **FCC-X-2-LD4-2HI-35-UNV-81-85-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: P551274  
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-35-UNV-81-85-ED1D  
Description: FCC CORNER MOUNT LUMINAIRE WITH .156 CLEAR PC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 3500K, AND 80 CRI LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

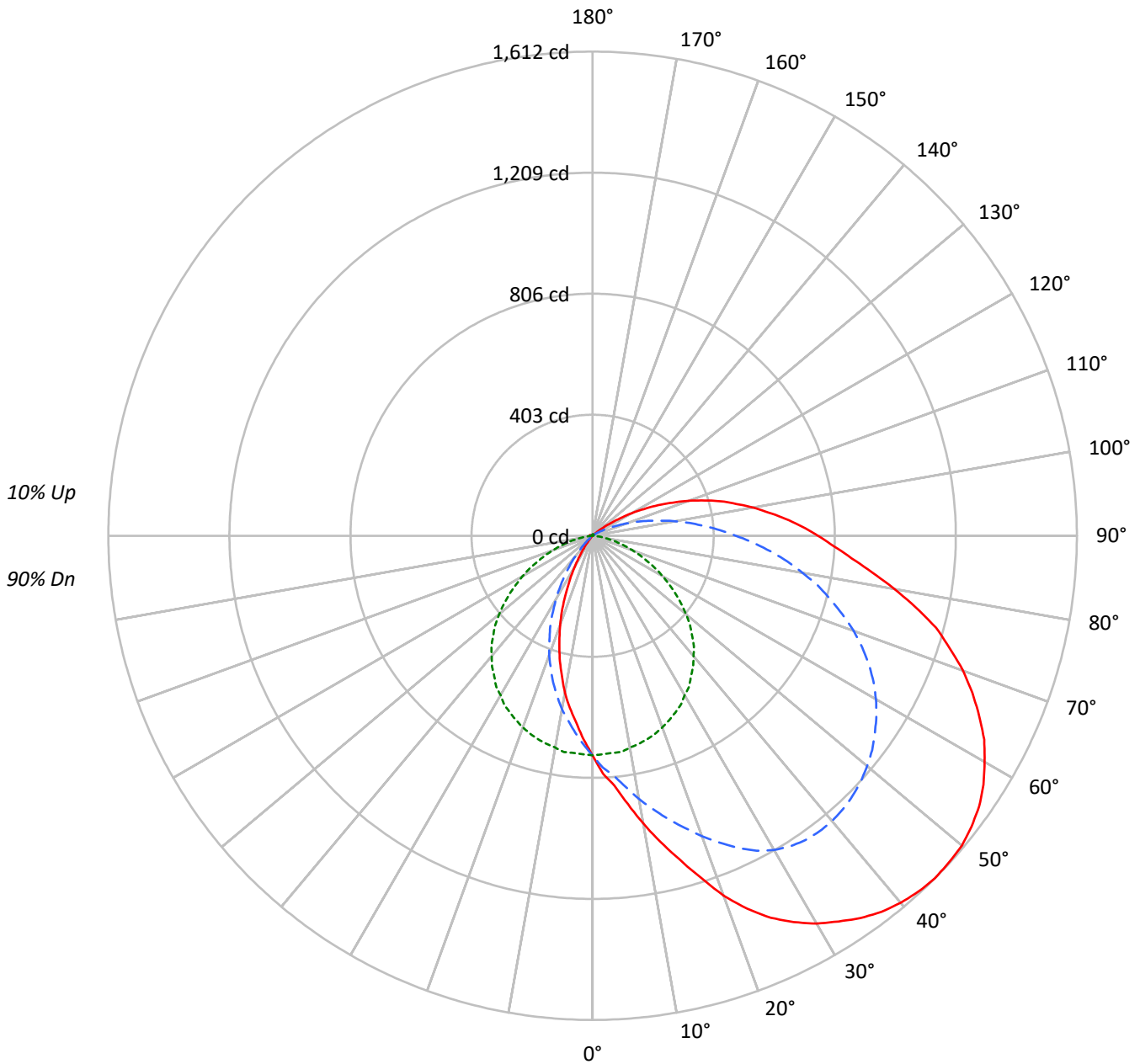
Lumens per Lamp: N/A  
Luminaire Lumens: 3614.0 lumens  
Efficiency: N/A  
Efficacy: 83.5 lumens/watt  
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59  
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')  
CIE Type: Semi-Direct

Input Watts (W): 43.3  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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: P551274

CATALOG NUMBER: FCC-X-2-LD4-2HI-35-UNV-81-85-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°	7868	7868	7868
5°	8638	7753	6469
10°	9774	7658	5332
15°	10954	7561	4155
20°	12355	7438	3059
25°	13516	7295	2009
30°	14380	7104	1131
35°	15127	6898	498
40°	15790	6644	120
45°	16359	6326	0
50°	16836	5904	0
55°	17200	5368	0
60°	17384	4746	0
65°	17454	4039	0
70°	17396	3294	0
75°	17175	2430	13
80°	16479	1487	76
85°	15929	712	103



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	70.0	1.9
10°-20°	209.7	5.8
20°-30°	339.5	9.4
30°-40°	436.1	12.1
40°-50°	493.7	13.7
50°-60°	511.5	14.2
60°-70°	482.4	13.3
70°-80°	404.3	11.2
80°-90°	293.0	8.1
90°-100°	192.6	5.3
100°-110°	111.2	3.1
110°-120°	49.1	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°	619.2	17.1
0°-40°	1055.4	29.2
0°-60°	2060.6	57.0
0°-90°	3240.3	89.7
90°-120°	352.9	9.8
90°-150°	371.2	10.3
90°-180°	374.0	10.3
0°-180°	3614.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	731	731	731	731	731	
5°	834	801	725	658	625	84
15°	1115	977	701	507	423	321
25°	1403	1147	650	333	209	649
35°	1554	1236	571	162	51	975
45°	1612	1224	468	37	0	1245
55°	1571	1147	337	0	0	1403
65°	1420	1015	201	0	0	1405
75°	1184	819	86	1	1	1241
85°	866	594	14	4	6	740
90°	751	476	4	6	6	412
95°	644	372	2	6	8	506
105°	443	192	2	5	7	468
115°	241	64	3	3	5	242
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	



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**CANDELA DISTRIBUTION (FULL):**

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
0°	731.0	731.0	731.0	731.0	731.0	731.0	731.0	731.0	731.0	731.0	731.0
2.5°	792.5	791.6	788.8	784.1	777.6	766.4	757.1	748.7	737.5	728.2	710.5
5°	834.4	829.7	826.0	821.4	806.5	796.2	779.5	760.8	743.1	725.4	690.1
7.5°	901.4	894.0	888.4	875.4	854.9	831.6	805.5	787.8	775.7	726.4	665.8
10°	973.1	966.6	955.5	932.2	907.0	873.5	836.3	794.3	757.1	716.1	644.4
12.5°	1043.9	1034.6	1018.8	989.0	953.6	911.7	860.5	811.1	758.0	709.6	619.3
15°	1114.7	1104.5	1087.7	1051.4	1004.8	949.9	887.5	825.1	762.7	701.2	593.2
17.5°	1192.0	1178.0	1152.9	1111.9	1053.2	985.3	911.7	836.3	760.8	691.0	565.3
20°	1274.9	1255.3	1228.3	1173.4	1104.5	1024.4	935.9	847.4	759.9	678.9	533.6
22.5°	1343.8	1324.2	1294.4	1237.6	1154.7	1057.0	956.4	854.9	756.2	664.9	503.8
25°	1403.4	1387.6	1355.0	1289.8	1202.2	1091.4	975.9	860.5	750.6	650.0	472.1
27.5°	1449.9	1435.0	1398.7	1331.7	1242.3	1122.1	990.8	863.3	743.1	635.1	439.5
30°	1490.9	1476.0	1432.3	1363.3	1269.3	1146.4	1005.7	864.2	733.8	612.8	404.2
32.5°	1522.6	1508.6	1463.9	1390.3	1287.9	1163.1	1014.1	863.3	721.7	596.9	366.0
35°	1554.2	1540.3	1488.1	1409.9	1301.9	1170.6	1020.6	858.6	706.8	570.9	329.7
37.5°	1578.5	1562.6	1509.5	1422.9	1308.4	1172.4	1019.7	852.1	691.0	549.4	293.3
40°	1595.2	1578.5	1521.7	1430.4	1310.3	1169.6	1012.3	840.9	672.4	522.4	255.2
42.5°	1606.4	1587.8	1527.2	1441.6	1306.5	1162.2	1001.1	826.9	651.9	499.1	218.8
45°	1612.0	1592.4	1528.2	1432.3	1300.0	1148.2	984.3	809.2	629.5	467.5	182.5
47.5°	1609.2	1587.8	1523.5	1422.0	1287.9	1133.3	965.7	787.8	602.5	439.5	148.1
50°	1604.5	1582.2	1513.3	1409.0	1271.1	1114.7	945.2	761.8	574.6	405.1	117.3
52.5°	1589.6	1567.3	1502.1	1390.3	1251.6	1093.3	917.3	734.8	544.8	371.6	89.4
55°	1571.0	1550.5	1482.5	1373.6	1226.4	1067.2	891.2	705.9	515.9	337.1	64.3
57.5°	1542.1	1523.5	1458.3	1346.6	1201.3	1038.3	862.3	674.2	479.6	302.7	44.7
60°	1506.8	1488.1	1424.8	1315.8	1172.4	1005.7	830.7	641.6	447.0	268.2	27.9
62.5°	1469.5	1451.8	1385.7	1277.7	1136.1	971.3	796.2	609.0	412.5	236.5	16.8
65°	1420.1	1403.4	1343.8	1232.0	1096.1	934.0	758.0	569.9	377.2	201.1	9.3
67.5°	1368.0	1353.1	1292.6	1190.1	1049.5	893.1	718.9	531.7	339.9	170.4	4.7
70°	1312.1	1293.5	1237.6	1133.3	1002.0	846.5	676.1	492.6	304.5	140.6	0.0
72.5°	1246.9	1233.0	1179.0	1080.2	947.1	797.1	632.3	449.8	265.4	111.7	0.9
75°	1183.6	1165.9	1116.6	1023.4	893.1	745.0	583.9	409.7	227.2	85.7	0.9
77.5°	1101.7	1096.1	1049.5	959.2	841.8	694.7	530.8	361.3	190.9	61.5	0.9
80°	1019.7	1014.1	977.8	894.9	782.2	635.1	481.5	315.7	155.5	41.0	0.9
82.5°	938.7	931.2	896.8	827.9	721.7	584.8	430.2	270.1	122.9	25.1	0.9
85°	866.1	856.7	819.5	756.2	659.3	528.0	377.2	225.4	91.3	14.0	1.9
87.5°	803.7	797.1	756.2	691.0	596.0	474.9	330.6	182.5	64.3	6.5	2.8
90°	750.6	736.6	700.3	631.4	536.4	416.3	281.2	146.2	42.8	3.7	3.7
92.5°	698.4	686.3	646.3	575.5	483.3	366.0	233.7	111.7	27.0	1.9	4.7
95°	644.4	631.4	592.3	527.1	429.3	314.8	191.8	81.9	14.9	1.9	4.7
97.5°	591.3	579.2	538.3	473.1	380.9	270.1	151.8	57.7	7.4	1.9	3.7
100°	542.0	528.0	490.8	425.6	332.5	225.4	117.3	37.2	4.7	1.9	3.7
102.5°	489.8	478.7	440.5	377.2	282.2	183.5	87.5	23.3	1.9	1.9	2.8
105°	443.3	429.3	392.1	326.9	240.3	144.3	61.5	14.0	1.9	1.9	2.8



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	288.7	277.5	244.9	190.0	122.0	56.8	16.8	2.8	2.8	2.8	2.8
115°	241.2	224.4	195.6	147.1	90.3	37.2	8.4	2.8	2.8	2.8	2.8
117.5°	192.8	178.8	158.3	111.7	59.6	24.2	4.7	2.8	2.8	2.8	2.8
120°	150.9	137.8	114.5	77.3	40.0	14.0	1.9	2.8	2.8	2.8	2.8
122.5°	108.0	97.8	77.3	50.3	24.2	6.5	2.8	2.8	3.7	3.7	2.8
125°	71.7	66.1	51.2	30.7	14.9	2.8	2.8	2.8	3.7	3.7	2.8
127.5°	46.6	41.9	29.8	17.7	6.5	2.8	2.8	3.7	3.7	3.7	2.8
130°	26.1	23.3	17.7	10.2	2.8	2.8	2.8	3.7	3.7	3.7	2.8
132.5°	14.9	14.0	9.3	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



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**CANDELA DISTRIBUTION (continued):**

	135°	157.5°	180°
0°	731.0	731.0	731.0
2.5°	695.6	682.6	678.9
5°	658.4	637.0	624.9
7.5°	621.1	592.3	578.3
10°	586.7	545.7	530.8
12.5°	545.7	498.2	474.9
15°	506.6	445.1	422.8
17.5°	462.8	393.9	367.8
20°	421.9	342.7	315.7
22.5°	375.3	292.4	262.6
25°	333.4	242.1	208.6
27.5°	286.8	190.9	162.0
30°	243.1	146.2	117.3
32.5°	201.1	107.1	81.0
35°	162.0	72.6	51.2
37.5°	124.8	44.7	26.1
40°	90.3	23.3	12.1
42.5°	60.5	11.2	6.5
45°	37.2	5.6	0.0
47.5°	21.4	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	6.5
90°	5.6	6.5	6.5
92.5°	5.6	7.4	7.4
95°	6.5	7.4	8.4
97.5°	7.4	8.4	8.4
100°	6.5	8.4	9.3
102.5°	5.6	8.4	8.4
105°	4.7	6.5	7.4





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**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°	391.1	379.9	342.7	281.2	196.5	109.9	41.0	7.4	1.9	2.8	2.8
110°	340.8	331.5	293.3	233.7	158.3	81.9	27.0	4.7	2.8	2.8	2.8







107.5°	3.7	5.6	6.5
110°	3.7	4.7	5.6



(END OF REPORT)