

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: P551298

Luminaire Tested: **FCC-X-2-LD4-2HI-35-UNV-82-94-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: P551298  
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-82-94-ED1D  
Description: FCC CORNER MOUNT LUMINAIRE WITH .187 CLEAR PC FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES AND 3500K, AND 80 CRI LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

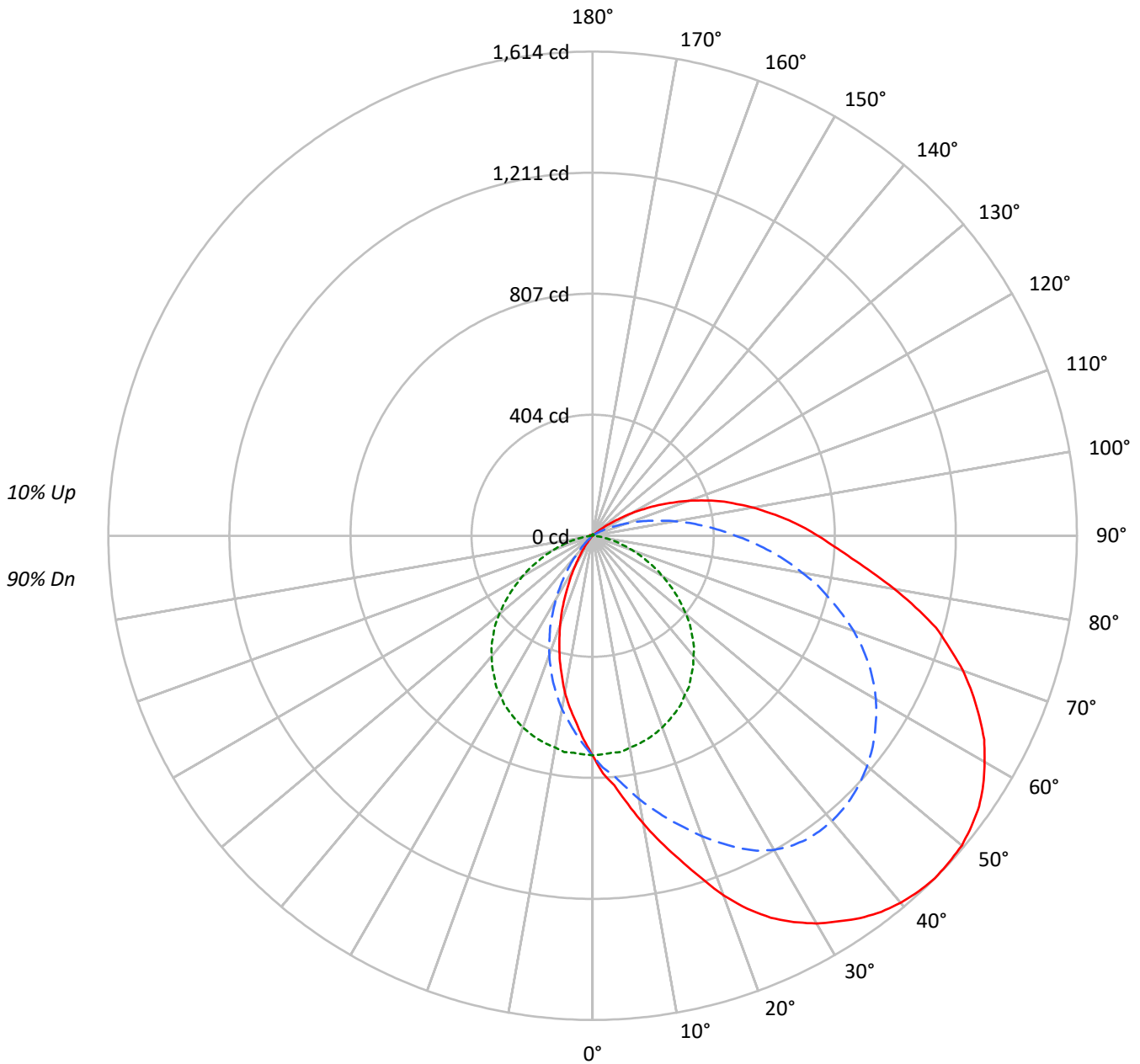
Lumens per Lamp: N/A  
Luminaire Lumens: 3618.0 lumens  
Efficiency: N/A  
Efficacy: 83.6 lumens/watt  
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59  
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')  
CIE Type: Semi-Direct

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

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CATALOG NUMBER: FCC-X-2-LD4-2HI-35-UNV-82-94-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°	7877	7877	7877
5°	8647	7762	6476
10°	9785	7667	5338
15°	10966	7569	4160
20°	12369	7446	3062
25°	13531	7302	2011
30°	14396	7111	1133
35°	15144	6905	499
40°	15808	6651	120
45°	16377	6333	0
50°	16855	5910	0
55°	17218	5374	0
60°	17402	4751	0
65°	17474	4045	0
70°	17416	3298	0
75°	17194	2433	13
80°	16497	1487	76
85°	15946	712	103



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	70.1	1.9
10°-20°	209.9	5.8
20°-30°	339.9	9.4
30°-40°	436.6	12.1
40°-50°	494.3	13.7
50°-60°	512.1	14.2
60°-70°	482.9	13.3
70°-80°	404.7	11.2
80°-90°	293.4	8.1
90°-100°	192.8	5.3
100°-110°	111.4	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°	619.9	17.1
0°-40°	1056.5	29.2
0°-60°	2062.9	57.0
0°-90°	3243.8	89.7
90°-120°	353.3	9.8
90°-150°	371.7	10.3
90°-180°	374.0	10.3
0°-180°	3618.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	732	732	732	732	732	
5°	835	802	726	659	626	84
15°	1116	978	702	507	423	322
25°	1405	1148	651	334	209	649
35°	1556	1238	572	162	51	976
45°	1614	1226	468	37	0	1246
55°	1573	1148	338	0	0	1404
65°	1422	1016	201	0	0	1407
75°	1185	820	86	1	1	1243
85°	867	594	14	4	6	740
90°	751	477	4	6	6	412
95°	645	372	2	6	8	506
105°	444	192	2	5	8	468
115°	242	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°	731.8	731.8	731.8	731.8	731.8	731.8	731.8	731.8	731.8	731.8	731.8
2.5°	793.4	792.4	789.6	785.0	778.4	767.3	757.9	749.5	738.4	729.0	711.3
5°	835.3	830.7	826.9	822.3	807.3	797.1	780.3	761.7	744.0	726.2	690.8
7.5°	902.4	895.0	889.4	876.3	855.8	832.5	806.4	788.7	776.6	727.2	666.6
10°	974.2	967.7	956.5	933.2	908.0	874.5	837.2	795.2	757.9	716.9	645.1
12.5°	1045.1	1035.8	1019.9	990.1	954.6	912.7	861.4	812.0	758.9	710.4	620.0
15°	1115.9	1105.7	1088.9	1052.5	1005.9	950.9	888.5	826.0	763.5	702.0	593.9
17.5°	1193.3	1179.3	1154.2	1113.1	1054.4	986.3	912.7	837.2	761.7	691.7	565.9
20°	1276.3	1256.7	1229.7	1174.7	1105.7	1025.5	936.9	848.4	760.7	679.6	534.2
22.5°	1345.3	1325.7	1295.9	1239.0	1156.0	1058.1	957.4	855.8	757.0	665.6	504.4
25°	1404.9	1389.1	1356.5	1291.2	1203.6	1092.6	977.0	861.4	751.4	650.7	472.7
27.5°	1451.5	1436.6	1400.3	1333.2	1243.7	1123.4	991.9	864.2	744.0	635.8	440.0
30°	1492.6	1477.7	1433.8	1364.8	1270.7	1147.6	1006.9	865.1	734.6	613.4	404.6
32.5°	1524.3	1510.3	1465.5	1391.9	1289.3	1164.4	1015.2	864.2	722.5	597.6	366.4
35°	1556.0	1542.0	1489.8	1411.5	1303.3	1171.9	1021.8	859.6	707.6	571.5	330.0
37.5°	1580.2	1564.4	1511.2	1424.5	1309.8	1173.7	1020.8	853.0	691.7	550.0	293.7
40°	1597.0	1580.2	1523.3	1432.0	1311.7	1170.9	1013.4	841.8	673.1	523.0	255.4
42.5°	1608.2	1589.5	1528.9	1443.2	1308.0	1163.5	1002.2	827.9	652.6	499.7	219.1
45°	1613.8	1594.2	1529.9	1433.8	1301.5	1149.5	985.4	810.1	630.2	468.0	182.7
47.5°	1611.0	1589.5	1525.2	1423.6	1289.3	1134.6	966.8	788.7	603.2	440.0	148.2
50°	1606.3	1583.9	1514.9	1410.5	1272.6	1115.9	946.3	762.6	575.2	405.5	117.5
52.5°	1591.4	1569.0	1503.8	1391.9	1253.0	1094.5	918.3	735.6	545.4	372.0	89.5
55°	1572.7	1552.2	1484.2	1375.1	1227.8	1068.4	892.2	706.7	516.5	337.5	64.3
57.5°	1543.8	1525.2	1459.9	1348.1	1202.6	1039.5	863.3	675.0	480.1	303.0	44.7
60°	1508.4	1489.8	1426.4	1317.3	1173.7	1006.9	831.6	642.3	447.5	268.5	28.0
62.5°	1471.1	1453.4	1387.2	1279.1	1137.4	972.4	797.1	609.7	413.0	236.8	16.8
65°	1421.7	1404.9	1345.3	1233.4	1097.3	935.1	758.9	570.6	377.6	201.4	9.3
67.5°	1369.5	1354.6	1294.0	1191.4	1050.7	894.1	719.7	532.3	340.3	170.6	4.7
70°	1313.6	1294.9	1239.0	1134.6	1003.1	847.4	676.8	493.2	304.9	140.8	0.0
72.5°	1248.3	1234.3	1180.3	1081.4	948.1	798.0	633.0	450.3	265.7	111.9	0.9
75°	1184.9	1167.2	1117.8	1024.6	894.1	745.8	584.5	410.2	227.5	85.8	0.9
77.5°	1102.9	1097.3	1050.7	960.2	842.8	695.5	531.4	361.7	191.1	61.5	0.9
80°	1020.8	1015.2	978.9	895.9	783.1	635.8	482.0	316.0	155.7	41.0	0.9
82.5°	939.7	932.3	897.8	828.8	722.5	585.5	430.7	270.4	123.1	25.2	0.9
85°	867.0	857.7	820.4	757.0	660.0	528.6	377.6	225.6	91.4	14.0	1.9
87.5°	804.6	798.0	757.0	691.7	596.7	475.5	331.0	182.7	64.3	6.5	2.8
90°	751.4	737.4	701.1	632.1	537.0	416.7	281.5	146.4	42.9	3.7	3.7
92.5°	699.2	687.1	647.0	576.1	483.8	366.4	234.0	111.9	27.0	1.9	4.7
95°	645.1	632.1	592.9	527.7	429.8	315.1	192.0	82.0	14.9	1.9	4.7
97.5°	592.0	579.9	538.9	473.6	381.3	270.4	152.0	57.8	7.5	1.9	3.7
100°	542.6	528.6	491.3	426.0	332.8	225.6	117.5	37.3	4.7	1.9	3.7
102.5°	490.4	479.2	441.0	377.6	282.5	183.7	87.6	23.3	1.9	1.9	2.8
105°	443.8	429.8	392.5	327.2	240.5	144.5	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°	289.0	277.8	245.2	190.2	122.1	56.9	16.8	2.8	2.8	2.8	2.8
115°	241.5	224.7	195.8	147.3	90.4	37.3	8.4	2.8	2.8	2.8	2.8
117.5°	193.0	179.0	158.5	111.9	59.7	24.2	4.7	2.8	2.8	2.8	2.8
120°	151.0	138.0	114.7	77.4	40.1	14.0	1.9	2.8	2.8	2.8	2.8
122.5°	108.1	97.9	77.4	50.3	24.2	6.5	2.8	2.8	3.7	3.7	2.8
125°	71.8	66.2	51.3	30.8	14.9	2.8	2.8	2.8	3.7	3.7	2.8
127.5°	46.6	42.0	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	10.3	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°	731.8	731.8	731.8
2.5°	696.4	683.4	679.6
5°	659.1	637.7	625.6
7.5°	621.8	592.9	578.9
10°	587.3	546.3	531.4
12.5°	546.3	498.8	475.5
15°	507.2	445.6	423.3
17.5°	463.3	394.4	368.2
20°	422.3	343.1	316.0
22.5°	375.7	292.7	262.9
25°	333.8	242.4	208.8
27.5°	287.1	191.1	162.2
30°	243.3	146.4	117.5
32.5°	201.4	107.2	81.1
35°	162.2	72.7	51.3
37.5°	124.9	44.7	26.1
40°	90.4	23.3	12.1
42.5°	60.6	11.2	6.5
45°	37.3	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	7.5	7.5
95°	6.5	7.5	8.4
97.5°	7.5	8.4	8.4
100°	6.5	8.4	9.3
102.5°	5.6	8.4	8.4
105°	4.7	6.5	7.5





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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°	391.6	380.4	343.1	281.5	196.7	110.0	41.0	7.5	1.9	2.8	2.8
110°	341.2	331.9	293.7	234.0	158.5	82.0	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)