

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: P551318

Luminaire Tested: **FCC-X-2-LD4-2HI-35-UNV-93-97-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: P551318  
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-93-97-ED1D  
Description: FCC CORNER MOUNT LUMINAIRE WITH .156 CLEAR TEMPERED GLASS FIXTURE  
SIDE AND .375 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES AND 3500K,  
AND 80 CRI LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

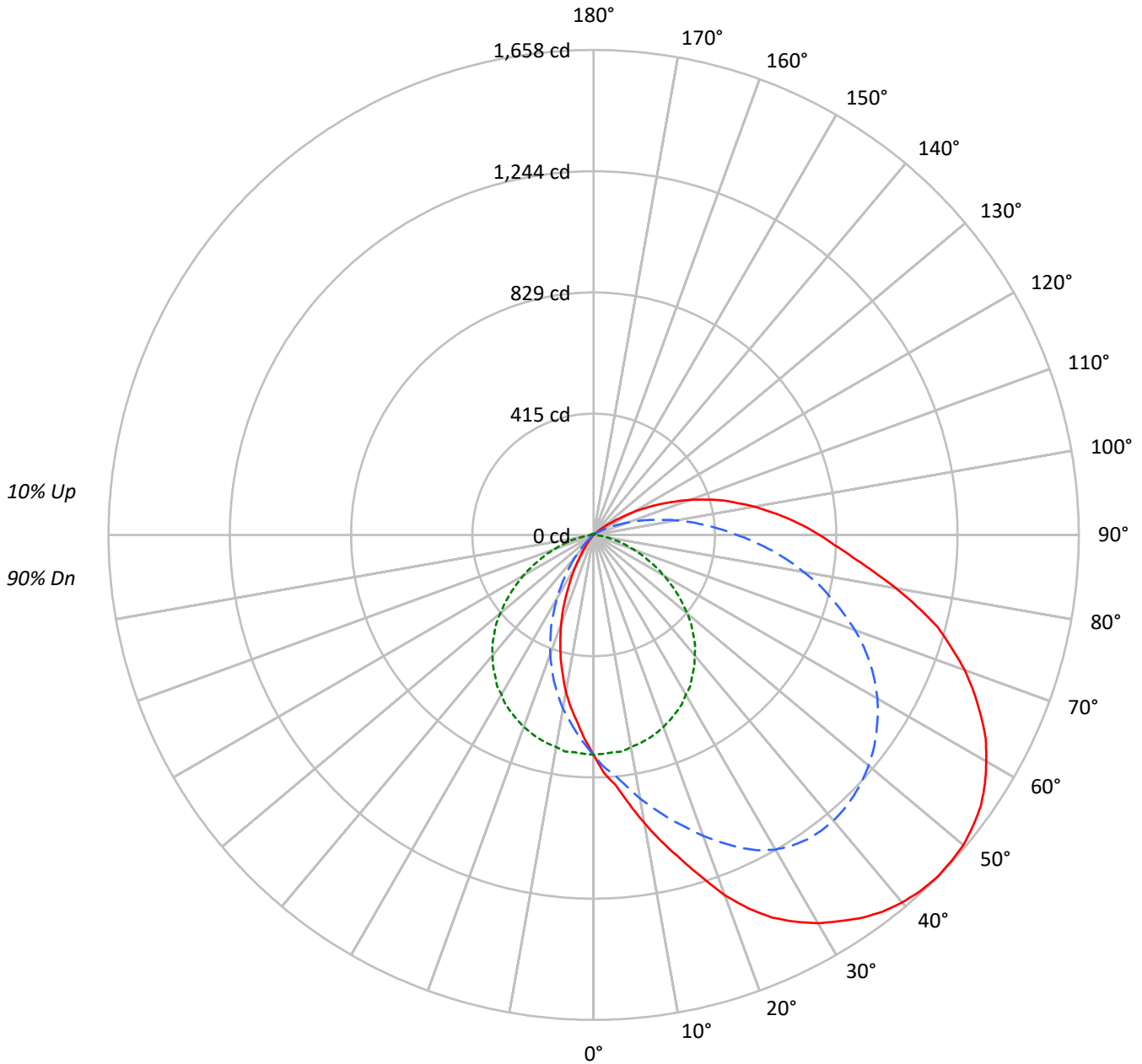
Lumens per Lamp: N/A  
Luminaire Lumens: 3716.0 lumens  
Efficiency: N/A  
Efficacy: 85.8 lumens/watt  
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59  
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')  
CIE Type: Semi-Direct

Input Watts (W): 43.3  
Input Voltage (V): NR  
Input Current (A<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: P551318

CATALOG NUMBER: FCC-X-2-LD4-2HI-35-UNV-93-97-ED1D

### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

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

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	8091	8091	8091
5°	8881	7972	6651
10°	10050	7874	5482
15°	11264	7774	4272
20°	12704	7647	3146
25°	13898	7501	2066
30°	14786	7304	1163
35°	15554	7093	513
40°	16235	6832	123
45°	16821	6504	0
50°	17312	6070	0
55°	17685	5519	0
60°	17874	4881	0
65°	17947	4154	0
70°	17888	3387	0
75°	17660	2498	15
80°	16945	1527	78
85°	16378	732	105



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	72.0	1.9
10°-20°	215.6	5.8
20°-30°	349.1	9.4
30°-40°	448.5	12.1
40°-50°	507.6	13.7
50°-60°	525.9	14.2
60°-70°	496.0	13.3
70°-80°	415.7	11.2
80°-90°	301.3	8.1
90°-100°	198.0	5.3
100°-110°	114.4	3.1
110°-120°	50.5	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°	636.7	17.1
0°-40°	1085.1	29.2
0°-60°	2118.7	57.0
0°-90°	3331.7	89.7
90°-120°	362.9	9.8
90°-150°	381.7	10.3
90°-180°	384.0	10.3
0°-180°	3716.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	752	752	752	752	752	
5°	858	824	746	677	642	87
15°	1146	1005	721	521	435	330
25°	1443	1179	668	343	214	667
35°	1598	1271	587	167	53	1002
45°	1658	1259	481	38	0	1280
55°	1615	1179	347	0	0	1442
65°	1460	1044	207	0	0	1445
75°	1217	842	88	1	1	1276
85°	890	610	14	4	6	760
90°	772	490	4	6	7	423
95°	663	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°	751.7	751.7	751.7	751.7	751.7	751.7	751.7	751.7	751.7	751.7	751.7
2.5°	814.9	813.9	811.0	806.2	799.5	788.0	778.5	769.9	758.4	748.8	730.6
5°	857.9	853.2	849.3	844.5	829.2	818.7	801.4	782.3	764.1	745.9	709.5
7.5°	926.9	919.2	913.5	900.1	879.0	855.1	828.3	810.1	797.6	746.9	684.6
10°	1000.6	993.9	982.4	958.5	932.6	898.2	859.9	816.8	778.5	736.3	662.6
12.5°	1073.4	1063.8	1047.5	1016.9	980.5	937.4	884.8	834.0	779.4	729.6	636.8
15°	1146.2	1135.6	1118.4	1081.0	1033.2	976.7	912.5	848.4	784.2	721.0	609.9
17.5°	1225.6	1211.3	1185.4	1143.3	1083.0	1013.1	937.4	859.9	782.3	710.5	581.2
20°	1310.9	1290.7	1263.0	1206.5	1135.6	1053.3	962.3	871.3	781.3	698.0	548.7
22.5°	1381.7	1361.6	1331.0	1272.6	1187.3	1086.8	983.4	879.0	777.5	683.7	518.0
25°	1443.0	1426.7	1393.2	1326.2	1236.2	1122.2	1003.5	884.8	771.8	668.4	485.5
27.5°	1490.9	1475.5	1438.2	1369.3	1277.3	1153.8	1018.8	887.6	764.1	653.0	452.0
30°	1533.0	1517.7	1472.7	1401.8	1305.1	1178.7	1034.1	888.6	754.5	630.1	415.6
32.5°	1565.6	1551.2	1505.2	1429.6	1324.3	1195.9	1042.7	887.6	742.1	613.8	376.3
35°	1598.1	1583.7	1530.1	1449.7	1338.6	1203.6	1049.4	882.8	726.8	587.0	339.0
37.5°	1623.0	1606.7	1552.1	1463.1	1345.3	1205.5	1048.5	876.1	710.5	564.9	301.6
40°	1640.2	1623.0	1564.6	1470.8	1347.2	1202.7	1040.8	864.6	691.3	537.2	262.4
42.5°	1651.7	1632.6	1570.3	1482.2	1343.4	1195.0	1029.3	850.3	670.3	513.2	225.0
45°	1657.5	1637.4	1571.3	1472.7	1336.7	1180.6	1012.1	832.1	647.3	480.7	187.7
47.5°	1654.6	1632.6	1566.5	1462.1	1324.3	1165.3	993.0	810.1	619.5	452.0	152.2
50°	1649.8	1626.8	1556.0	1448.7	1307.0	1146.2	971.9	783.3	590.8	416.5	120.6
52.5°	1634.5	1611.5	1544.5	1429.6	1286.9	1124.1	943.2	755.5	560.2	382.1	91.9
55°	1615.3	1594.3	1524.4	1412.4	1261.1	1097.3	916.4	725.8	530.5	346.6	66.1
57.5°	1585.7	1566.5	1499.5	1384.6	1235.2	1067.6	886.7	693.2	493.1	311.2	46.0
60°	1549.3	1530.1	1465.0	1353.0	1205.5	1034.1	854.1	659.7	459.6	275.8	28.7
62.5°	1511.0	1492.8	1424.8	1313.7	1168.2	998.7	818.7	626.2	424.2	243.2	17.2
65°	1460.2	1443.0	1381.7	1266.8	1127.0	960.4	779.4	586.0	387.8	206.8	9.6
67.5°	1406.6	1391.3	1329.0	1223.7	1079.1	918.3	739.2	546.7	349.5	175.2	4.8
70°	1349.2	1330.0	1272.6	1165.3	1030.3	870.4	695.2	506.5	313.1	144.6	0.0
72.5°	1282.1	1267.8	1212.2	1110.7	973.8	819.6	650.2	462.5	272.9	114.9	1.0
75°	1217.0	1198.8	1148.1	1052.3	918.3	766.0	600.4	421.3	233.6	88.1	1.0
77.5°	1132.8	1127.0	1079.1	986.3	865.6	714.3	545.8	371.5	196.3	63.2	1.0
80°	1048.5	1042.7	1005.4	920.2	804.3	653.0	495.0	324.6	159.9	42.1	1.0
82.5°	965.2	957.5	922.1	851.2	742.1	601.3	442.4	277.7	126.4	25.9	1.0
85°	890.5	880.9	842.6	777.5	677.9	542.9	387.8	231.7	93.8	14.4	1.9
87.5°	826.3	819.6	777.5	710.5	612.8	488.3	339.9	187.7	66.1	6.7	2.9
90°	771.8	757.4	720.1	649.2	551.5	428.0	289.2	150.3	44.0	3.8	3.8
92.5°	718.1	705.7	664.5	591.8	497.0	376.3	240.3	114.9	27.8	1.9	4.8
95°	662.6	649.2	609.0	542.0	441.4	323.6	197.3	84.3	15.3	1.9	4.8
97.5°	608.0	595.6	553.4	486.4	391.6	277.7	156.1	59.4	7.7	1.9	3.8
100°	557.3	542.9	504.6	437.6	341.8	231.7	120.6	38.3	4.8	1.9	3.8
102.5°	503.7	492.2	452.9	387.8	290.1	188.6	90.0	23.9	1.9	1.9	2.9
105°	455.8	441.4	403.1	336.1	247.0	148.4	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°	296.8	285.3	251.8	195.3	125.4	58.4	17.2	2.9	2.9	2.9	2.9
115°	248.0	230.8	201.1	151.3	92.9	38.3	8.6	2.9	2.9	2.9	2.9
117.5°	198.2	183.8	162.8	114.9	61.3	24.9	4.8	2.9	2.9	2.9	2.9
120°	155.1	141.7	117.8	79.5	41.2	14.4	1.9	2.9	2.9	2.9	2.9
122.5°	111.1	100.5	79.5	51.7	24.9	6.7	2.9	2.9	3.8	3.8	2.9
125°	73.7	68.0	52.7	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°	751.7	751.7	751.7
2.5°	715.3	701.9	698.0
5°	677.0	654.9	642.5
7.5°	638.7	609.0	594.6
10°	603.2	561.1	545.8
12.5°	561.1	512.3	488.3
15°	520.9	457.7	434.7
17.5°	475.9	405.0	378.2
20°	433.8	352.4	324.6
22.5°	385.9	300.7	270.0
25°	342.8	249.0	214.5
27.5°	294.9	196.3	166.6
30°	249.9	150.3	120.6
32.5°	206.8	110.1	83.3
35°	166.6	74.7	52.7
37.5°	128.3	46.0	26.8
40°	92.9	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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CATALOG NUMBER: FCC-X-2-LD4-2HI-35-UNV-93-97-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°	402.2	390.7	352.4	289.2	202.0	113.0	42.1	7.7	1.9	2.9	2.9
110°	350.5	340.9	301.6	240.3	162.8	84.3	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)