

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: P551282

Luminaire Tested: **FCC-X-2-LD4-2HI-35-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: P551282  
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-81-94-ED1D  
Description: FCC CORNER MOUNT LUMINAIRE WITH .156 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**

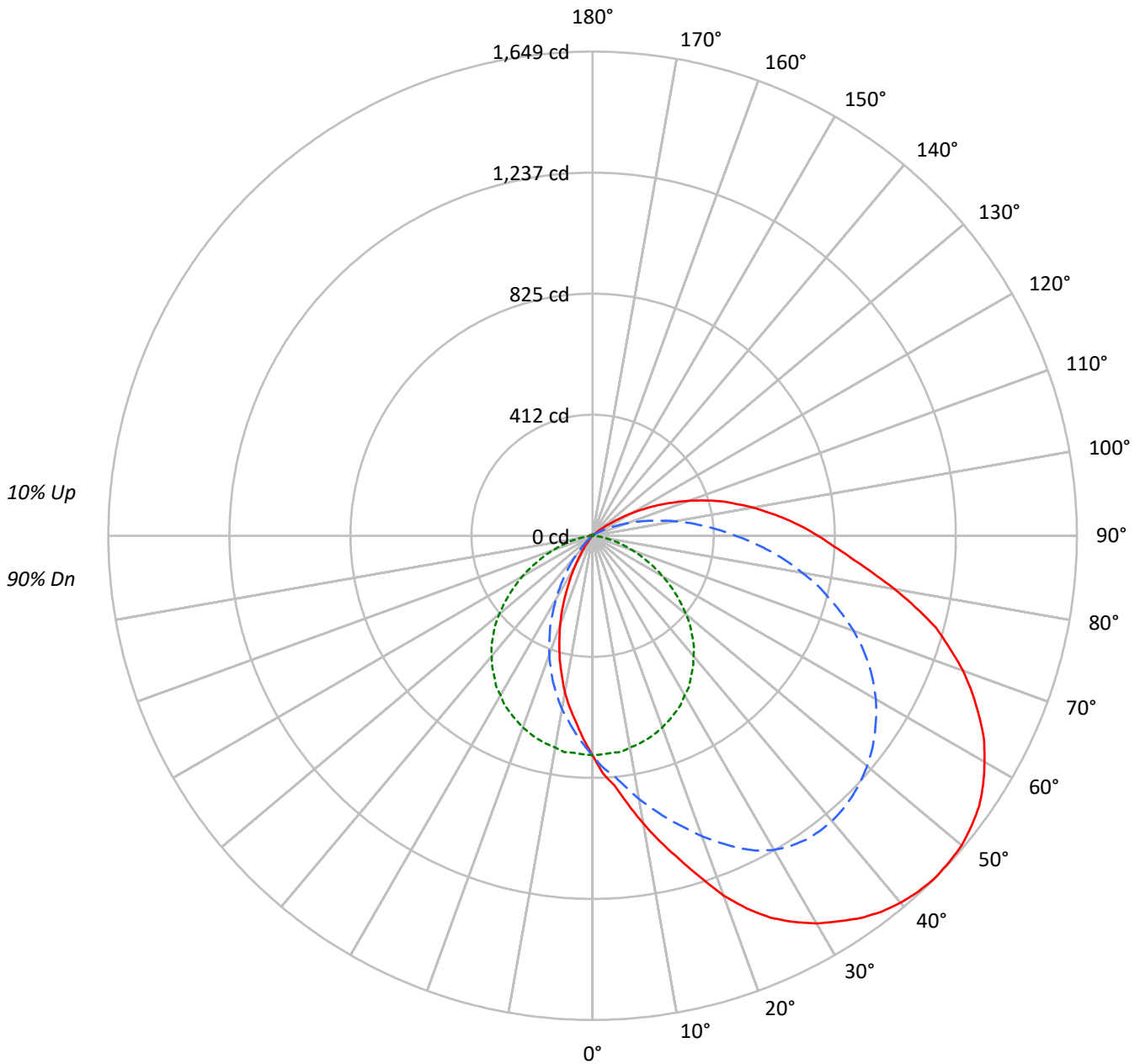
Lumens per Lamp: N/A  
Luminaire Lumens: 3696.1 lumens  
Efficiency: N/A  
Efficacy: 85.4 lumens/watt  
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59  
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')  
CIE Type: Semi-Direct

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: P551282

CATALOG NUMBER: FCC-X-2-LD4-2HI-35-UNV-81-94-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°	8047	8047	8047
5°	8834	7930	6615
10°	9996	7832	5453
15°	11203	7732	4249
20°	12635	7607	3129
25°	13823	7461	2054
30°	14706	7265	1157
35°	15470	7054	510
40°	16148	6795	123
45°	16731	6469	0
50°	17218	6038	0
55°	17591	5490	0
60°	17777	4854	0
65°	17851	4132	0
70°	17791	3369	0
75°	17565	2484	15
80°	16852	1520	78
85°	16290	727	105



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	71.6	1.9
10°-20°	214.4	5.8
20°-30°	347.2	9.4
30°-40°	446.0	12.1
40°-50°	504.9	13.7
50°-60°	523.1	14.2
60°-70°	493.3	13.3
70°-80°	413.4	11.2
80°-90°	299.7	8.1
90°-100°	197.0	5.3
100°-110°	113.8	3.1
110°-120°	50.2	1.4
120°-130°	13.6	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°	633.3	17.1
0°-40°	1079.3	29.2
0°-60°	2107.3	57.0
0°-90°	3313.8	89.7
90°-120°	360.9	9.8
90°-150°	379.7	10.3
90°-180°	382.0	10.3
0°-180°	3696.1	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	748	748	748	748	748	
5°	853	820	742	673	639	86
15°	1140	1000	717	518	432	329
25°	1435	1173	665	341	213	663
35°	1590	1264	584	166	52	997
45°	1649	1252	478	38	0	1273
55°	1607	1173	345	0	0	1435
65°	1452	1038	206	0	0	1437
75°	1210	838	88	1	1	1270
85°	886	607	14	4	6	756
90°	768	487	4	6	7	421
95°	659	380	2	7	9	517
105°	453	197	2	5	8	478
115°	247	65	3	3	5	247
125°	73	9	4	3	4	73
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°	747.6	747.6	747.6	747.6	747.6	747.6	747.6	747.6	747.6	747.6	747.6
2.5°	810.5	809.5	806.7	801.9	795.2	783.8	774.3	765.7	754.3	744.8	726.7
5°	853.3	848.6	844.8	840.0	824.8	814.3	797.1	778.1	760.0	741.9	705.7
7.5°	921.9	914.3	908.6	895.2	874.3	850.5	823.8	805.7	793.3	742.9	680.9
10°	995.2	988.6	977.1	953.3	927.6	893.3	855.2	812.4	774.3	732.4	659.0
12.5°	1067.6	1058.1	1041.9	1011.4	975.2	932.4	880.0	829.5	775.2	725.7	633.3
15°	1140.0	1129.5	1112.4	1075.2	1027.6	971.4	907.6	843.8	780.0	717.1	606.7
17.5°	1219.0	1204.8	1179.0	1137.1	1077.1	1007.6	932.4	855.2	778.1	706.7	578.1
20°	1303.8	1283.8	1256.2	1200.0	1129.5	1047.6	957.1	866.7	777.1	694.3	545.7
22.5°	1374.3	1354.3	1323.8	1265.7	1180.9	1080.9	978.1	874.3	773.3	680.0	515.2
25°	1435.2	1419.0	1385.7	1319.0	1229.5	1116.2	998.1	880.0	767.6	664.8	482.9
27.5°	1482.8	1467.6	1430.5	1361.9	1270.5	1147.6	1013.3	882.8	760.0	649.5	449.5
30°	1524.7	1509.5	1464.7	1394.3	1298.1	1172.4	1028.6	883.8	750.5	626.7	413.3
32.5°	1557.1	1542.8	1497.1	1421.9	1317.1	1189.5	1037.1	882.8	738.1	610.5	374.3
35°	1589.5	1575.2	1521.9	1441.9	1331.4	1197.1	1043.8	878.1	722.9	583.8	337.1
37.5°	1614.3	1598.1	1543.8	1455.2	1338.1	1199.0	1042.8	871.4	706.7	561.9	300.0
40°	1631.4	1614.3	1556.2	1462.8	1340.0	1196.2	1035.2	860.0	687.6	534.3	260.9
42.5°	1642.8	1623.8	1561.9	1474.3	1336.2	1188.6	1023.8	845.7	666.7	510.5	223.8
45°	1648.6	1628.6	1562.8	1464.7	1329.5	1174.3	1006.7	827.6	643.8	478.1	186.7
47.5°	1645.7	1623.8	1558.1	1454.3	1317.1	1159.0	987.6	805.7	616.2	449.5	151.4
50°	1640.9	1618.1	1547.6	1440.9	1300.0	1140.0	966.7	779.0	587.6	414.3	120.0
52.5°	1625.7	1602.8	1536.2	1421.9	1280.0	1118.1	938.1	751.4	557.1	380.0	91.4
55°	1606.7	1585.7	1516.2	1404.7	1254.3	1091.4	911.4	721.9	527.6	344.8	65.7
57.5°	1577.1	1558.1	1491.4	1377.1	1228.6	1061.9	881.9	689.5	490.5	309.5	45.7
60°	1540.9	1521.9	1457.1	1345.7	1199.0	1028.6	849.5	656.2	457.1	274.3	28.6
62.5°	1502.8	1484.7	1417.1	1306.7	1161.9	993.3	814.3	622.9	421.9	241.9	17.1
65°	1452.4	1435.2	1374.3	1260.0	1120.9	955.2	775.2	582.9	385.7	205.7	9.5
67.5°	1399.0	1383.8	1321.9	1217.1	1073.3	913.3	735.2	543.8	347.6	174.3	4.8
70°	1341.9	1322.8	1265.7	1159.0	1024.8	865.7	691.4	503.8	311.4	143.8	0.0
72.5°	1275.2	1260.9	1205.7	1104.8	968.6	815.2	646.7	460.0	271.4	114.3	1.0
75°	1210.5	1192.4	1141.9	1046.7	913.3	761.9	597.1	419.0	232.4	87.6	1.0
77.5°	1126.7	1120.9	1073.3	980.9	860.9	710.5	542.9	369.5	195.2	62.9	1.0
80°	1042.8	1037.1	1000.0	915.2	800.0	649.5	492.4	322.9	159.0	41.9	1.0
82.5°	960.0	952.4	917.1	846.7	738.1	598.1	440.0	276.2	125.7	25.7	1.0
85°	885.7	876.2	838.1	773.3	674.3	540.0	385.7	230.5	93.3	14.3	1.9
87.5°	821.9	815.2	773.3	706.7	609.5	485.7	338.1	186.7	65.7	6.7	2.9
90°	767.6	753.3	716.2	645.7	548.6	425.7	287.6	149.5	43.8	3.8	3.8
92.5°	714.3	701.9	660.9	588.6	494.3	374.3	239.0	114.3	27.6	1.9	4.8
95°	659.0	645.7	605.7	539.0	439.0	321.9	196.2	83.8	15.2	1.9	4.8
97.5°	604.8	592.4	550.5	483.8	389.5	276.2	155.2	59.0	7.6	1.9	3.8
100°	554.3	540.0	501.9	435.2	340.0	230.5	120.0	38.1	4.8	1.9	3.8
102.5°	500.9	489.5	450.5	385.7	288.6	187.6	89.5	23.8	1.9	1.9	2.9
105°	453.3	439.0	400.9	334.3	245.7	147.6	62.9	14.3	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°	295.2	283.8	250.5	194.3	124.8	58.1	17.1	2.9	2.9	2.9	2.9
115°	246.7	229.5	200.0	150.5	92.4	38.1	8.6	2.9	2.9	2.9	2.9
117.5°	197.1	182.9	161.9	114.3	61.0	24.8	4.8	2.9	2.9	2.9	2.9
120°	154.3	141.0	117.1	79.0	41.0	14.3	1.9	2.9	2.9	2.9	2.9
122.5°	110.5	100.0	79.0	51.4	24.8	6.7	2.9	2.9	3.8	3.8	2.9
125°	73.3	67.6	52.4	31.4	15.2	2.9	2.9	2.9	3.8	3.8	2.9
127.5°	47.6	42.9	30.5	18.1	6.7	2.9	2.9	3.8	3.8	3.8	2.9
130°	26.7	23.8	18.1	10.5	2.9	2.9	2.9	3.8	3.8	3.8	2.9
132.5°	15.2	14.3	9.5	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°	747.6	747.6	747.6
2.5°	711.4	698.1	694.3
5°	673.3	651.4	639.0
7.5°	635.2	605.7	591.4
10°	600.0	558.1	542.9
12.5°	558.1	509.5	485.7
15°	518.1	455.2	432.4
17.5°	473.3	402.9	376.2
20°	431.4	350.5	322.9
22.5°	383.8	299.0	268.6
25°	340.9	247.6	213.3
27.5°	293.3	195.2	165.7
30°	248.6	149.5	120.0
32.5°	205.7	109.5	82.9
35°	165.7	74.3	52.4
37.5°	127.6	45.7	26.7
40°	92.4	23.8	12.4
42.5°	61.9	11.4	6.7
45°	38.1	5.7	0.0
47.5°	21.9	0.0	0.0
50°	11.4	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	7.6	7.6
95°	6.7	7.6	8.6
97.5°	7.6	8.6	8.6
100°	6.7	8.6	9.5
102.5°	5.7	8.6	8.6
105°	4.8	6.7	7.6





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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°	400.0	388.6	350.5	287.6	201.0	112.4	41.9	7.6	1.9	2.9	2.9
110°	348.6	339.0	300.0	239.0	161.9	83.8	27.6	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)