

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: P551300

Luminaire Tested: **FCC-X-2-LD4-2HI-35-UNV-82-96-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: P551300  
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-82-96-ED1D  
Description: FCC CORNER MOUNT LUMINAIRE WITH .187 CLEAR PC FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES AND 3500K, AND 80 CRI LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

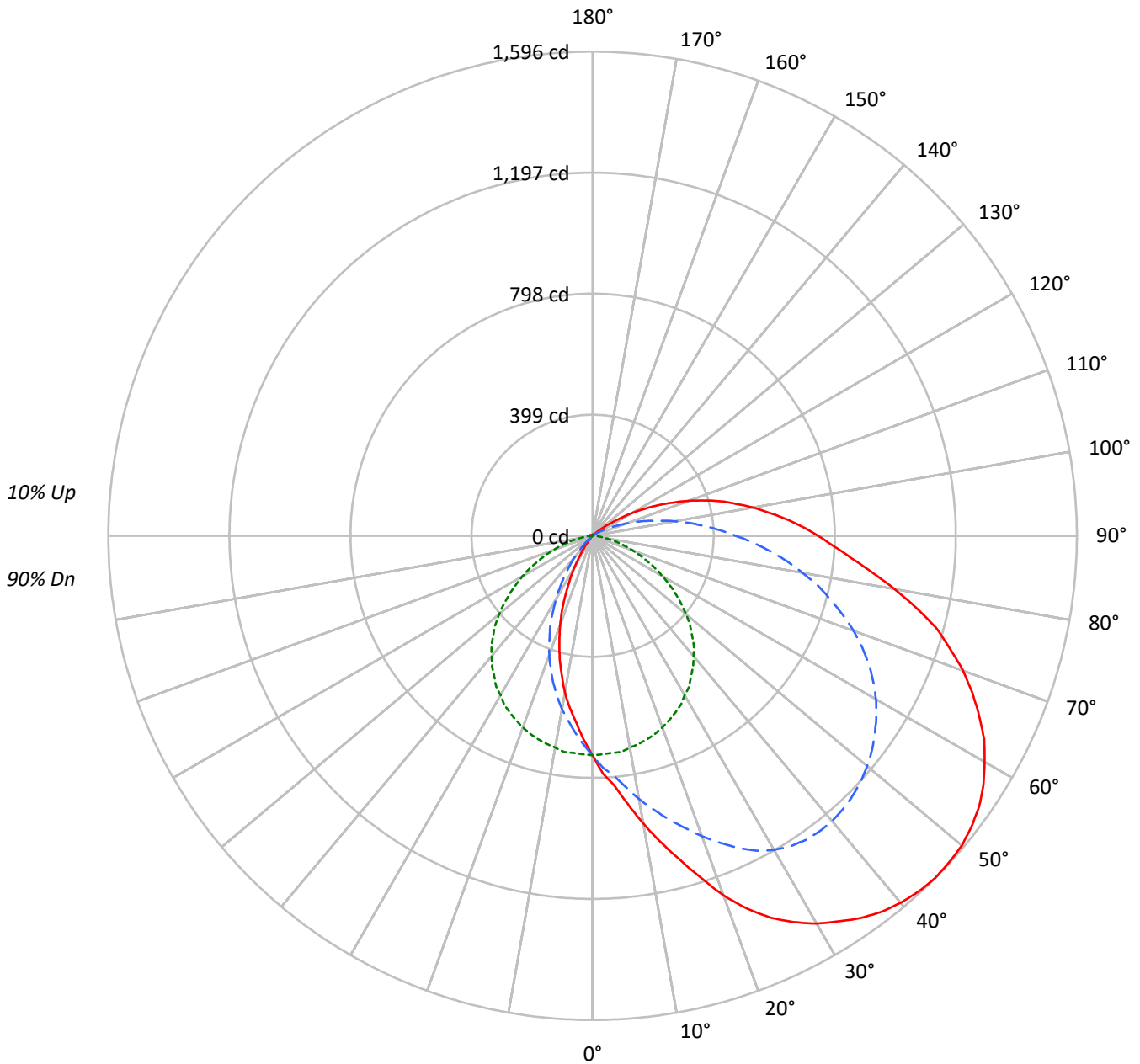
Lumens per Lamp: N/A  
Luminaire Lumens: 3578.0 lumens  
Efficiency: N/A  
Efficacy: 82.6 lumens/watt  
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59  
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')  
CIE Type: Semi-Direct

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-82-96-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°	7790	7790	7790
5°	8552	7676	6404
10°	9678	7582	5278
15°	10845	7485	4114
20°	12232	7364	3028
25°	13381	7222	1989
30°	14237	7033	1121
35°	14977	6829	493
40°	15633	6577	119
45°	16196	6262	0
50°	16668	5846	0
55°	17029	5315	0
60°	17209	4698	0
65°	17281	3999	0
70°	17224	3261	0
75°	17004	2405	13
80°	16316	1473	74
85°	15769	702	101



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	69.3	1.9
10°-20°	207.6	5.8
20°-30°	336.1	9.4
30°-40°	431.8	12.1
40°-50°	488.8	13.7
50°-60°	506.4	14.2
60°-70°	477.6	13.3
70°-80°	400.2	11.2
80°-90°	290.1	8.1
90°-100°	190.7	5.3
100°-110°	110.1	3.1
110°-120°	48.6	1.4
120°-130°	13.2	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°	613.0	17.1
0°-40°	1044.8	29.2
0°-60°	2040.1	57.0
0°-90°	3208.0	89.7
90°-120°	349.4	9.8
90°-150°	367.6	10.3
90°-180°	370.0	10.3
0°-180°	3578.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	724	724	724	724	724	
5°	826	793	718	652	619	83
15°	1104	968	694	502	419	318
25°	1389	1135	644	330	206	642
35°	1539	1224	565	160	51	965
45°	1596	1212	463	37	0	1232
55°	1555	1135	334	0	0	1389
65°	1406	1005	199	0	0	1391
75°	1172	811	85	1	1	1229
85°	857	588	14	4	6	732
90°	743	472	4	6	6	407
95°	638	368	2	6	8	501
105°	439	190	2	5	7	463
115°	239	63	3	3	5	239
125°	71	9	4	3	4	71
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°	723.7	723.7	723.7	723.7	723.7	723.7	723.7	723.7	723.7	723.7	723.7
2.5°	784.6	783.7	780.9	776.3	769.8	758.8	749.6	741.3	730.2	721.0	703.5
5°	826.1	821.5	817.8	813.2	798.4	788.3	771.7	753.2	735.7	718.2	683.2
7.5°	892.5	885.1	879.6	866.6	846.4	823.3	797.5	780.0	768.0	719.1	659.2
10°	963.5	957.0	945.9	922.9	898.0	864.8	827.9	786.4	749.6	709.0	638.0
12.5°	1033.5	1024.3	1008.6	979.1	944.1	902.6	851.9	803.0	750.5	702.5	613.1
15°	1103.6	1093.5	1076.9	1040.9	994.8	940.4	878.6	816.9	755.1	694.2	587.3
17.5°	1180.1	1166.3	1141.4	1100.8	1042.7	975.4	902.6	827.9	753.2	684.1	559.6
20°	1262.2	1242.8	1216.1	1161.7	1093.5	1014.2	926.6	839.0	752.3	672.1	528.3
22.5°	1330.4	1311.0	1281.5	1225.3	1143.2	1046.4	946.9	846.4	748.6	658.3	498.8
25°	1389.4	1373.7	1341.5	1276.9	1190.3	1080.5	966.2	851.9	743.1	643.5	467.4
27.5°	1435.5	1420.7	1384.8	1318.4	1229.9	1111.0	981.0	854.7	735.7	628.8	435.2
30°	1476.1	1461.3	1418.0	1349.8	1256.6	1134.9	995.7	855.6	726.5	606.7	400.1
32.5°	1507.4	1493.6	1449.3	1376.5	1275.1	1151.5	1004.0	854.7	714.5	591.0	362.3
35°	1538.8	1524.9	1473.3	1395.9	1288.9	1158.9	1010.5	850.1	699.8	565.2	326.4
37.5°	1562.7	1547.1	1494.5	1408.8	1295.4	1160.8	1009.6	843.6	684.1	544.0	290.4
40°	1579.3	1562.7	1506.5	1416.1	1297.2	1158.0	1002.2	832.5	665.7	517.2	252.6
42.5°	1590.4	1572.0	1512.0	1427.2	1293.5	1150.6	991.1	818.7	645.4	494.2	216.7
45°	1595.9	1576.6	1512.9	1418.0	1287.1	1136.8	974.5	801.2	623.2	462.8	180.7
47.5°	1593.2	1572.0	1508.3	1407.8	1275.1	1122.0	956.1	780.0	596.5	435.2	146.6
50°	1588.5	1566.4	1498.2	1394.9	1258.5	1103.6	935.8	754.2	568.9	401.1	116.2
52.5°	1573.8	1551.7	1487.1	1376.5	1239.1	1082.4	908.1	727.4	539.4	367.9	88.5
55°	1555.4	1535.1	1467.8	1359.9	1214.2	1056.6	882.3	698.9	510.8	333.8	63.6
57.5°	1526.8	1508.3	1443.8	1333.2	1189.3	1028.0	853.7	667.5	474.8	299.6	44.3
60°	1491.7	1473.3	1410.6	1302.7	1160.8	995.7	822.4	635.2	442.5	265.5	27.7
62.5°	1454.9	1437.3	1371.9	1264.9	1124.8	961.6	788.3	603.0	408.4	234.2	16.6
65°	1406.0	1389.4	1330.4	1219.8	1085.2	924.7	750.5	564.2	373.4	199.1	9.2
67.5°	1354.4	1339.6	1279.7	1178.3	1039.1	884.2	711.8	526.4	336.5	168.7	4.6
70°	1299.1	1280.6	1225.3	1122.0	992.0	838.1	669.3	487.7	301.5	139.2	0.0
72.5°	1234.5	1220.7	1167.2	1069.5	937.6	789.2	626.0	445.3	262.8	110.6	0.9
75°	1171.8	1154.3	1105.4	1013.2	884.2	737.6	578.1	405.7	225.0	84.8	0.9
77.5°	1090.7	1085.2	1039.1	949.6	833.5	687.8	525.5	357.7	189.0	60.8	0.9
80°	1009.6	1004.0	968.1	886.0	774.5	628.8	476.7	312.5	154.0	40.6	0.9
82.5°	929.3	922.0	887.9	819.6	714.5	579.0	425.9	267.4	121.7	24.9	0.9
85°	857.4	848.2	811.3	748.6	652.8	522.8	373.4	223.1	90.4	13.8	1.8
87.5°	795.7	789.2	748.6	684.1	590.1	470.2	327.3	180.7	63.6	6.5	2.8
90°	743.1	729.3	693.3	625.1	531.1	412.1	278.4	144.7	42.4	3.7	3.7
92.5°	691.5	679.5	639.8	569.8	478.5	362.3	231.4	110.6	26.7	1.8	4.6
95°	638.0	625.1	586.4	521.8	425.0	311.6	189.9	81.1	14.8	1.8	4.6
97.5°	585.4	573.5	532.9	468.4	377.1	267.4	150.3	57.2	7.4	1.8	3.7
100°	536.6	522.8	485.9	421.3	329.1	223.1	116.2	36.9	4.6	1.8	3.7
102.5°	485.0	473.9	436.1	373.4	279.4	181.6	86.7	23.0	1.8	1.8	2.8
105°	438.9	425.0	388.1	323.6	237.9	142.9	60.8	13.8	1.8	1.8	2.8



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	285.8	274.7	242.5	188.1	120.8	56.2	16.6	2.8	2.8	2.8	2.8
115°	238.8	222.2	193.6	145.7	89.4	36.9	8.3	2.8	2.8	2.8	2.8
117.5°	190.8	177.0	156.7	110.6	59.0	24.0	4.6	2.8	2.8	2.8	2.8
120°	149.4	136.5	113.4	76.5	39.6	13.8	1.8	2.8	2.8	2.8	2.8
122.5°	106.9	96.8	76.5	49.8	24.0	6.5	2.8	2.8	3.7	3.7	2.8
125°	71.0	65.5	50.7	30.4	14.8	2.8	2.8	2.8	3.7	3.7	2.8
127.5°	46.1	41.5	29.5	17.5	6.5	2.8	2.8	3.7	3.7	3.7	2.8
130°	25.8	23.0	17.5	10.1	2.8	2.8	2.8	3.7	3.7	3.7	2.8
132.5°	14.8	13.8	9.2	1.8	2.8	2.8	2.8	3.7	3.7	3.7	3.7
135°	3.7	1.8	1.8	1.8	2.8	2.8	3.7	3.7	4.6	4.6	3.7
137.5°	0.9	0.9	1.8	1.8	2.8	2.8	3.7	4.6	4.6	4.6	3.7
140°	0.9	0.9	1.8	2.8	2.8	2.8	3.7	4.6	4.6	4.6	3.7
142.5°	0.9	1.8	1.8	2.8	2.8	3.7	3.7	4.6	4.6	3.7	3.7
145°	0.9	1.8	1.8	2.8	2.8	3.7	3.7	4.6	3.7	3.7	3.7
147.5°	1.8	1.8	1.8	2.8	2.8	3.7	3.7	4.6	4.6	3.7	3.7
150°	0.9	1.8	1.8	2.8	3.7	3.7	3.7	4.6	3.7	3.7	3.7
152.5°	0.9	1.8	1.8	2.8	3.7	3.7	3.7	4.6	3.7	3.7	3.7
155°	1.8	1.8	1.8	2.8	3.7	3.7	3.7	4.6	3.7	3.7	4.6
157.5°	1.8	1.8	1.8	2.8	3.7	3.7	3.7	4.6	3.7	3.7	4.6
160°	1.8	1.8	1.8	2.8	2.8	3.7	3.7	3.7	3.7	3.7	3.7
162.5°	1.8	1.8	1.8	2.8	2.8	3.7	3.7	3.7	3.7	3.7	3.7
165°	1.8	1.8	1.8	1.8	2.8	2.8	3.7	3.7	3.7	3.7	3.7
167.5°	1.8	1.8	1.8	2.8	2.8	2.8	3.7	3.7	3.7	3.7	3.7
170°	1.8	1.8	1.8	2.8	2.8	2.8	3.7	4.6	4.6	4.6	4.6
172.5°	1.8	1.8	1.8	2.8	2.8	3.7	3.7	4.6	4.6	4.6	4.6
175°	1.8	1.8	1.8	2.8	2.8	3.7	3.7	4.6	4.6	4.6	4.6
177.5°	0.9	1.8	1.8	2.8	2.8	3.7	3.7	4.6	4.6	4.6	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°	723.7	723.7	723.7
2.5°	688.7	675.8	672.1
5°	651.8	630.6	618.6
7.5°	615.0	586.4	572.5
10°	580.8	540.3	525.5
12.5°	540.3	493.3	470.2
15°	501.5	440.7	418.6
17.5°	458.2	390.0	364.2
20°	417.7	339.3	312.5
22.5°	371.6	289.5	260.0
25°	330.1	239.7	206.5
27.5°	284.0	189.0	160.4
30°	240.6	144.7	116.2
32.5°	199.1	106.0	80.2
35°	160.4	71.9	50.7
37.5°	123.5	44.3	25.8
40°	89.4	23.0	12.0
42.5°	59.9	11.1	6.5
45°	36.9	5.5	0.0
47.5°	21.2	0.0	0.0
50°	11.1	0.0	0.0
52.5°	4.6	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	1.8	2.8
80°	1.8	3.7	4.6
82.5°	3.7	4.6	4.6
85°	3.7	4.6	5.5
87.5°	4.6	5.5	6.5
90°	5.5	6.5	6.5
92.5°	5.5	7.4	7.4
95°	6.5	7.4	8.3
97.5°	7.4	8.3	8.3
100°	6.5	8.3	9.2
102.5°	5.5	8.3	8.3
105°	4.6	6.5	7.4





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**CANDELA DISTRIBUTION (continued):**

	135°	157.5°	180°
112.5°	3.7	4.6	4.6
115°	2.8	3.7	4.6
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	1.8
152.5°	2.8	1.8	1.8
155°	2.8	1.8	0.9
157.5°	3.7	1.8	0.9
160°	2.8	1.8	0.9
162.5°	2.8	1.8	0.9
165°	2.8	1.8	0.0
167.5°	2.8	1.8	0.9
170°	2.8	1.8	0.9
172.5°	2.8	1.8	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°	387.2	376.2	339.3	278.4	194.5	108.8	40.6	7.4	1.8	2.8	2.8
110°	337.4	328.2	290.4	231.4	156.7	81.1	26.7	4.6	2.8	2.8	2.8







107.5°	3.7	5.5	6.5
110°	3.7	4.6	5.5



(END OF REPORT)