

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: P551226

Luminaire Tested: **FCC-X-2-LD4-2HI-30-UNV-82-85-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: P551226  
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-30-UNV-82-85-ED1D  
Description: FCC CORNER MOUNT LUMINAIRE WITH .187 CLEAR PC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 3000K, AND 80 CRI LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

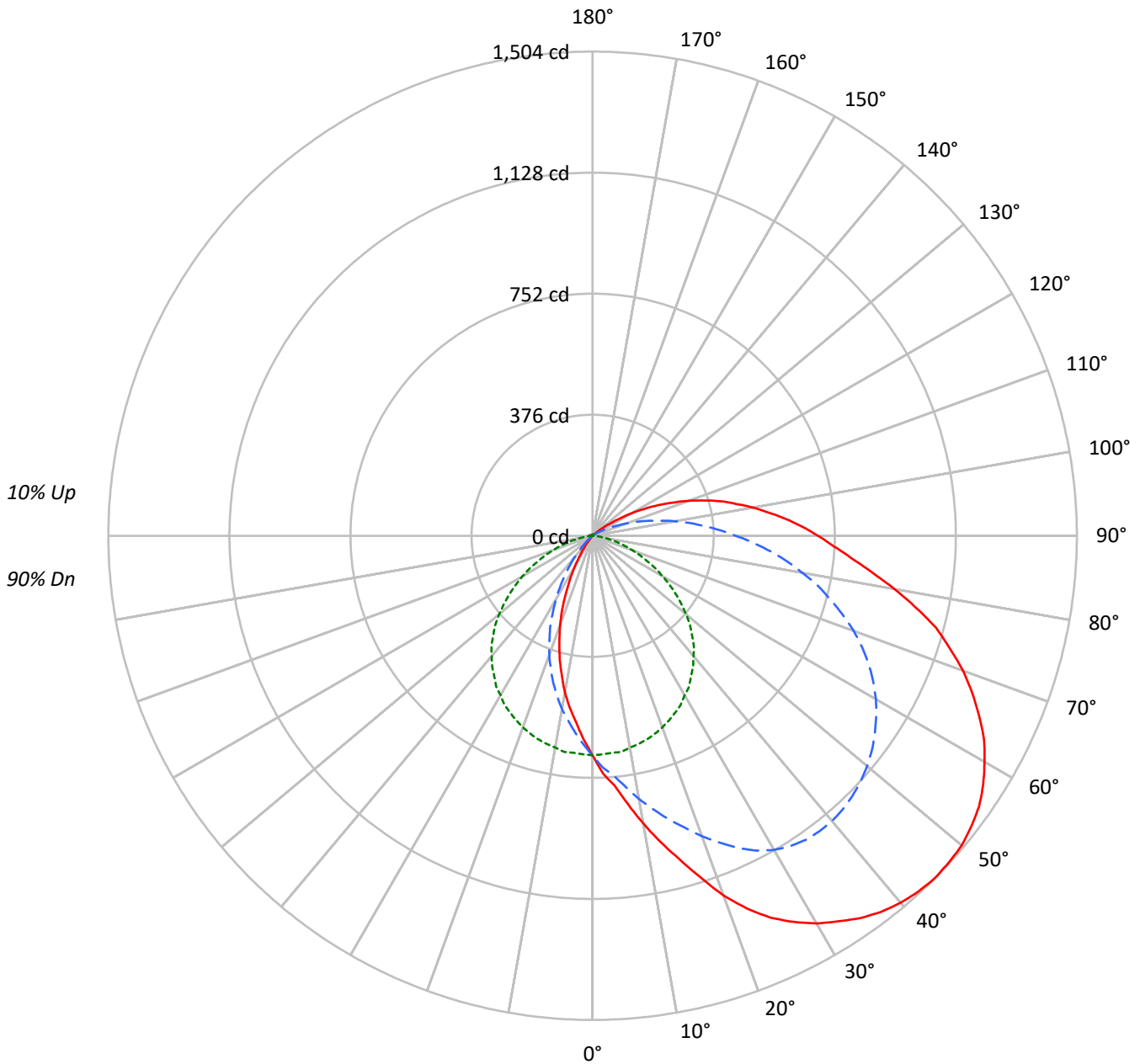
Lumens per Lamp: N/A  
Luminaire Lumens: 3371.0 lumens  
Efficiency: N/A  
Efficacy: 77.9 lumens/watt  
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59  
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')  
CIE Type: Semi-Direct

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: P551226

CATALOG NUMBER: FCC-X-2-LD4-2HI-30-UNV-82-85-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°	7340	7340	7340
5°	8057	7233	6033
10°	9117	7144	4973
15°	10217	7053	3876
20°	11525	6937	2854
25°	12607	6804	1874
30°	13413	6626	1055
35°	14110	6434	465
40°	14729	6197	112
45°	15259	5901	0
50°	15704	5508	0
55°	16044	5006	0
60°	16214	4428	0
65°	16282	3768	0
70°	16227	3074	0
75°	16020	2266	13
80°	15371	1386	69
85°	14857	661	96



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	65.3	1.9
10°-20°	195.6	5.8
20°-30°	316.7	9.4
30°-40°	406.8	12.1
40°-50°	460.5	13.7
50°-60°	477.1	14.2
60°-70°	450.0	13.3
70°-80°	377.1	11.2
80°-90°	273.3	8.1
90°-100°	179.6	5.3
100°-110°	103.7	3.1
110°-120°	45.8	1.4
120°-130°	12.4	0.4
130°-140°	2.8	0.1
140°-150°	1.9	0.1
150°-160°	1.3	0.0
160°-170°	0.7	0.0
170°-180°	0.3	0.0
0°-30°	577.6	17.1
0°-40°	984.4	29.2
0°-60°	1922.0	57.0
0°-90°	3022.4	89.7
90°-120°	329.1	9.8
90°-150°	346.3	10.3
90°-180°	349.0	10.4
0°-180°	3371.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	682	682	682	682	682	
5°	778	747	677	614	583	78
15°	1040	912	654	472	394	300
25°	1309	1070	606	311	195	605
35°	1450	1153	532	151	48	909
45°	1504	1142	436	35	0	1161
55°	1465	1070	314	0	0	1309
65°	1325	947	188	0	0	1311
75°	1104	764	80	1	1	1158
85°	808	554	13	4	5	690
90°	700	444	4	5	6	384
95°	601	347	2	6	8	472
105°	414	179	2	4	7	436
115°	225	60	3	3	4	225
125°	67	8	4	3	4	67
135°	4	3	4	4	3	6
145°	1	3	4	3	3	1
155°	2	4	4	3	1	1
165°	2	3	4	3	0	0
175°	2	3	4	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°	681.9	681.9	681.9	681.9	681.9	681.9	681.9	681.9	681.9	681.9	681.9
2.5°	739.2	738.3	735.7	731.4	725.3	714.9	706.2	698.4	688.0	679.3	662.8
5°	778.3	773.9	770.5	766.1	752.2	742.7	727.0	709.7	693.2	676.7	643.7
7.5°	840.8	833.9	828.7	816.5	797.4	775.7	751.4	734.9	723.6	677.5	621.1
10°	907.7	901.6	891.2	869.5	846.0	814.8	780.0	740.9	706.2	668.0	601.1
12.5°	973.7	965.0	950.3	922.5	889.5	850.4	802.6	756.6	707.1	661.9	577.6
15°	1039.7	1030.2	1014.6	980.7	937.2	886.0	827.8	769.6	711.4	654.1	553.3
17.5°	1111.8	1098.8	1075.4	1037.1	982.4	919.0	850.4	780.0	709.7	644.5	527.3
20°	1189.2	1170.9	1145.7	1094.5	1030.2	955.5	873.0	790.5	708.8	633.2	497.7
22.5°	1253.4	1235.2	1207.4	1154.4	1077.1	985.9	892.1	797.4	705.3	620.2	469.9
25°	1309.0	1294.3	1263.9	1203.0	1121.4	1018.0	910.3	802.6	700.1	606.3	440.4
27.5°	1352.5	1338.6	1304.7	1242.1	1158.7	1046.7	924.2	805.2	693.2	592.4	410.0
30°	1390.7	1376.8	1335.9	1271.7	1183.9	1069.3	938.1	806.1	684.5	571.6	377.0
32.5°	1420.2	1407.2	1365.5	1296.9	1201.3	1084.9	945.9	805.2	673.2	556.8	341.4
35°	1449.7	1436.7	1388.1	1315.1	1214.3	1091.9	952.0	800.9	659.3	532.5	307.5
37.5°	1472.3	1457.6	1408.0	1327.3	1220.4	1093.6	951.1	794.8	644.5	512.5	273.6
40°	1488.0	1472.3	1419.3	1334.2	1222.2	1091.0	944.2	784.4	627.1	487.3	238.0
42.5°	1498.4	1481.0	1424.5	1344.6	1218.7	1084.0	933.8	771.3	608.0	465.6	204.1
45°	1503.6	1485.4	1425.4	1335.9	1212.6	1071.0	918.1	754.8	587.2	436.1	170.3
47.5°	1501.0	1481.0	1421.1	1326.4	1201.3	1057.1	900.8	734.9	562.0	410.0	138.1
50°	1496.6	1475.8	1411.5	1314.2	1185.7	1039.7	881.7	710.5	535.9	377.9	109.4
52.5°	1482.7	1461.9	1401.1	1296.9	1167.4	1019.8	855.6	685.3	508.1	346.6	83.4
55°	1465.4	1446.3	1382.9	1281.2	1144.0	995.4	831.3	658.4	481.2	314.4	59.9
57.5°	1438.4	1421.1	1360.3	1256.0	1120.5	968.5	804.3	628.9	447.3	282.3	41.7
60°	1405.4	1388.1	1329.0	1227.4	1093.6	938.1	774.8	598.5	416.9	250.2	26.1
62.5°	1370.7	1354.2	1292.5	1191.8	1059.7	906.0	742.7	568.1	384.8	220.6	15.6
65°	1324.7	1309.0	1253.4	1149.2	1022.4	871.2	707.1	531.6	351.8	187.6	8.7
67.5°	1276.0	1262.1	1205.7	1110.1	978.9	833.0	670.6	496.0	317.0	159.0	4.3
70°	1223.9	1206.5	1154.4	1057.1	934.6	789.6	630.6	459.5	284.0	131.2	0.0
72.5°	1163.1	1150.1	1099.7	1007.6	883.4	743.5	589.8	419.5	247.6	104.2	0.9
75°	1104.0	1087.5	1041.5	954.6	833.0	694.9	544.6	382.2	211.9	79.9	0.9
77.5°	1027.6	1022.4	978.9	894.7	785.2	648.0	495.1	337.0	178.1	57.3	0.9
80°	951.1	945.9	912.1	834.8	729.6	592.4	449.1	294.5	145.1	38.2	0.9
82.5°	875.6	868.6	836.5	772.2	673.2	545.5	401.3	251.9	114.7	23.5	0.9
85°	807.8	799.1	764.4	705.3	615.0	492.5	351.8	210.2	85.1	13.0	1.7
87.5°	749.6	743.5	705.3	644.5	555.9	443.0	308.4	170.3	59.9	6.1	2.6
90°	700.1	687.1	653.2	588.9	500.3	388.3	262.3	136.4	40.0	3.5	3.5
92.5°	651.5	640.2	602.8	536.8	450.8	341.4	218.0	104.2	25.2	1.7	4.3
95°	601.1	588.9	552.4	491.6	400.4	293.6	178.9	76.4	13.9	1.7	4.3
97.5°	551.6	540.3	502.1	441.3	355.3	251.9	141.6	53.9	6.9	1.7	3.5
100°	505.5	492.5	457.8	397.0	310.1	210.2	109.4	34.7	4.3	1.7	3.5
102.5°	456.9	446.5	410.9	351.8	263.2	171.1	81.7	21.7	1.7	1.7	2.6
105°	413.5	400.4	365.7	304.9	224.1	134.6	57.3	13.0	1.7	1.7	2.6



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	269.3	258.9	228.4	177.2	113.8	53.0	15.6	2.6	2.6	2.6	2.6
115°	225.0	209.3	182.4	137.2	84.3	34.7	7.8	2.6	2.6	2.6	2.6
117.5°	179.8	166.8	147.7	104.2	55.6	22.6	4.3	2.6	2.6	2.6	2.6
120°	140.7	128.6	106.8	72.1	37.4	13.0	1.7	2.6	2.6	2.6	2.6
122.5°	100.8	91.2	72.1	46.9	22.6	6.1	2.6	2.6	3.5	3.5	2.6
125°	66.9	61.7	47.8	28.7	13.9	2.6	2.6	2.6	3.5	3.5	2.6
127.5°	43.4	39.1	27.8	16.5	6.1	2.6	2.6	3.5	3.5	3.5	2.6
130°	24.3	21.7	16.5	9.6	2.6	2.6	2.6	3.5	3.5	3.5	2.6
132.5°	13.9	13.0	8.7	1.7	2.6	2.6	2.6	3.5	3.5	3.5	3.5
135°	3.5	1.7	1.7	1.7	2.6	2.6	3.5	3.5	4.3	4.3	3.5
137.5°	0.9	0.9	1.7	1.7	2.6	2.6	3.5	4.3	4.3	4.3	3.5
140°	0.9	0.9	1.7	2.6	2.6	2.6	3.5	4.3	4.3	4.3	3.5
142.5°	0.9	1.7	1.7	2.6	2.6	3.5	3.5	4.3	4.3	3.5	3.5
145°	0.9	1.7	1.7	2.6	2.6	3.5	3.5	4.3	3.5	3.5	3.5
147.5°	1.7	1.7	1.7	2.6	2.6	3.5	3.5	4.3	4.3	3.5	3.5
150°	0.9	1.7	1.7	2.6	3.5	3.5	3.5	4.3	3.5	3.5	3.5
152.5°	0.9	1.7	1.7	2.6	3.5	3.5	3.5	4.3	3.5	3.5	3.5
155°	1.7	1.7	1.7	2.6	3.5	3.5	3.5	4.3	3.5	3.5	4.3
157.5°	1.7	1.7	1.7	2.6	3.5	3.5	3.5	4.3	3.5	3.5	4.3
160°	1.7	1.7	1.7	2.6	2.6	3.5	3.5	3.5	3.5	3.5	3.5
162.5°	1.7	1.7	1.7	2.6	2.6	3.5	3.5	3.5	3.5	3.5	3.5
165°	1.7	1.7	1.7	1.7	2.6	2.6	3.5	3.5	3.5	3.5	3.5
167.5°	1.7	1.7	1.7	2.6	2.6	2.6	3.5	3.5	3.5	3.5	3.5
170°	1.7	1.7	1.7	2.6	2.6	2.6	3.5	4.3	4.3	4.3	4.3
172.5°	1.7	1.7	1.7	2.6	2.6	3.5	3.5	4.3	4.3	4.3	4.3
175°	1.7	1.7	1.7	2.6	2.6	3.5	3.5	4.3	4.3	4.3	4.3
177.5°	0.9	1.7	1.7	2.6	2.6	3.5	3.5	4.3	4.3	4.3	3.5
180°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6



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**CANDELA DISTRIBUTION (continued):**

	135°	157.5°	180°
0°	681.9	681.9	681.9
2.5°	648.9	636.7	633.2
5°	614.1	594.1	582.8
7.5°	579.4	552.4	539.4
10°	547.2	509.0	495.1
12.5°	509.0	464.7	443.0
15°	472.5	415.2	394.4
17.5°	431.7	367.4	343.1
20°	393.5	319.7	294.5
22.5°	350.1	272.7	245.0
25°	311.0	225.8	194.6
27.5°	267.5	178.1	151.1
30°	226.7	136.4	109.4
32.5°	187.6	99.9	75.6
35°	151.1	67.8	47.8
37.5°	116.4	41.7	24.3
40°	84.3	21.7	11.3
42.5°	56.5	10.4	6.1
45°	34.7	5.2	0.0
47.5°	20.0	0.0	0.0
50°	10.4	0.0	0.0
52.5°	4.3	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	1.7	2.6
80°	1.7	3.5	4.3
82.5°	3.5	4.3	4.3
85°	3.5	4.3	5.2
87.5°	4.3	5.2	6.1
90°	5.2	6.1	6.1
92.5°	5.2	6.9	6.9
95°	6.1	6.9	7.8
97.5°	6.9	7.8	7.8
100°	6.1	7.8	8.7
102.5°	5.2	7.8	7.8
105°	4.3	6.1	6.9





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**CANDELA DISTRIBUTION (continued):**

	135°	157.5°	180°
112.5°	3.5	4.3	4.3
115°	2.6	3.5	4.3
117.5°	2.6	3.5	3.5
120°	2.6	2.6	3.5
122.5°	2.6	2.6	3.5
125°	2.6	2.6	3.5
127.5°	3.5	2.6	2.6
130°	2.6	2.6	2.6
132.5°	3.5	2.6	2.6
135°	3.5	2.6	2.6
137.5°	3.5	2.6	2.6
140°	3.5	2.6	2.6
142.5°	3.5	2.6	2.6
145°	2.6	2.6	2.6
147.5°	2.6	2.6	2.6
150°	2.6	2.6	1.7
152.5°	2.6	1.7	1.7
155°	2.6	1.7	0.9
157.5°	3.5	1.7	0.9
160°	2.6	1.7	0.9
162.5°	2.6	1.7	0.9
165°	2.6	1.7	0.0
167.5°	2.6	1.7	0.9
170°	2.6	1.7	0.9
172.5°	2.6	1.7	0.9
175°	2.6	0.9	0.9
177.5°	2.6	0.9	0.9
180°	2.6	2.6	2.6



Report Generated By 670246072 / DESKTOP-MV3F9LC





— 0°-180°    - - 45°-225°    - - - - 90°-270°







107.5°	364.8	354.4	319.7	262.3	183.3	102.5	38.2	6.9	1.7	2.6	2.6
110°	317.9	309.2	273.6	218.0	147.7	76.4	25.2	4.3	2.6	2.6	2.6







107.5°	3.5	5.2	6.1
110°	3.5	4.3	5.2



(END OF REPORT)