

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: P551330

Luminaire Tested: **FCC-X-2-LD4-2HI-40-UNV-80-94-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: P551330  
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-40-UNV-80-94-ED1D  
Description: FCC CORNER MOUNT LUMINAIRE WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES AND 4000K, AND 80 CRI LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

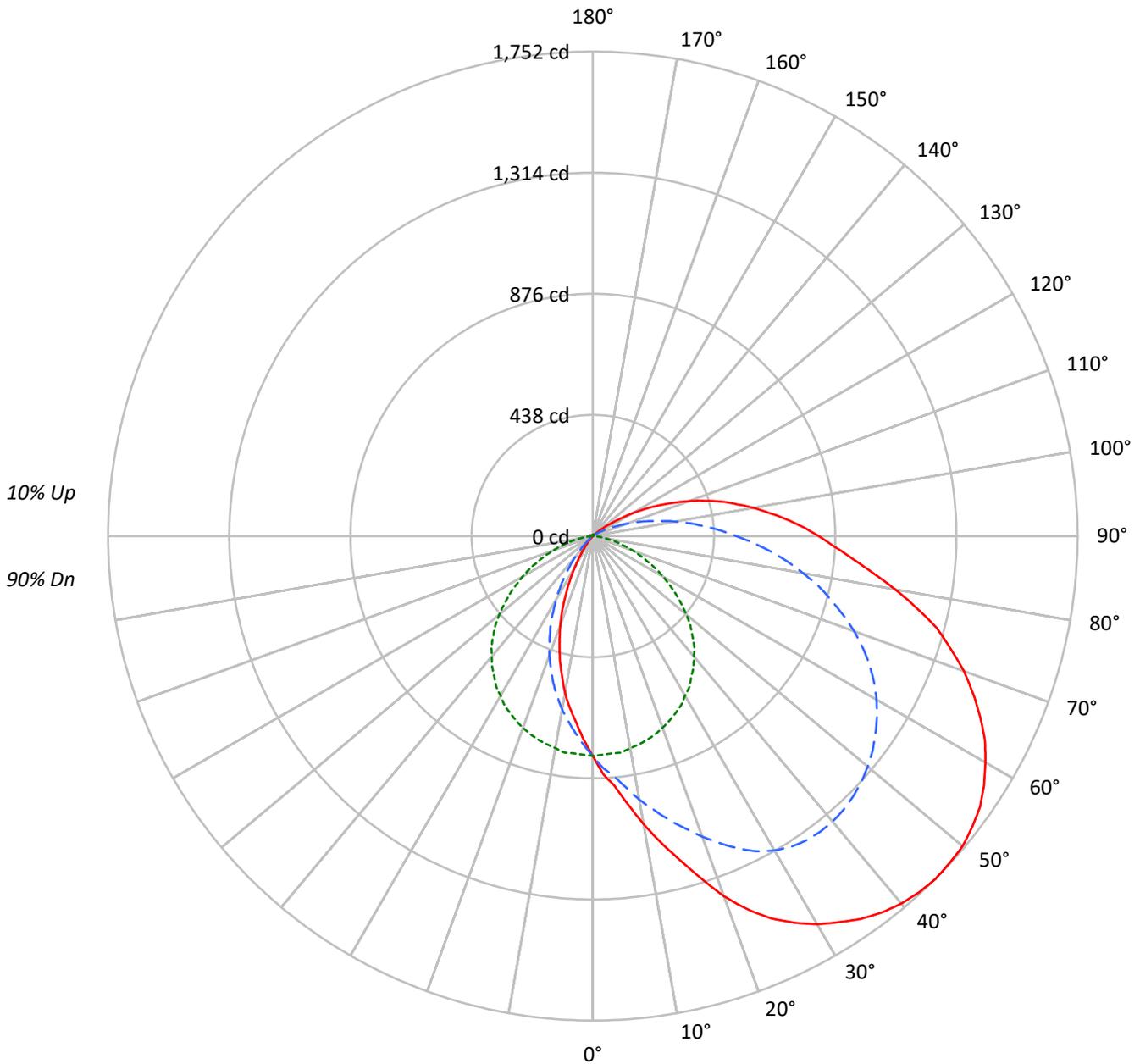
Lumens per Lamp: N/A  
Luminaire Lumens: 3928.9 lumens  
Efficiency: N/A  
Efficacy: 90.7 lumens/watt  
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59  
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')  
CIE Type: Semi-Direct

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: P551330

CATALOG NUMBER: FCC-X-2-LD4-2HI-40-UNV-80-94-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	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°	8554	8554	8554
5°	9390	8430	7032
10°	10627	8325	5797
15°	11909	8219	4517
20°	13432	8086	3326
25°	14694	7931	2184
30°	15633	7723	1231
35°	16446	7499	542
40°	17167	7223	131
45°	17785	6876	0
50°	18304	6419	0
55°	18699	5836	0
60°	18898	5160	0
65°	18976	4393	0
70°	18913	3582	0
75°	18673	2640	15
80°	17916	1614	82
85°	17316	773	112



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	76.1	1.9
10°-20°	227.9	5.8
20°-30°	369.1	9.4
30°-40°	474.2	12.1
40°-50°	536.8	13.7
50°-60°	556.1	14.2
60°-70°	524.4	13.3
70°-80°	439.5	11.2
80°-90°	318.6	8.1
90°-100°	209.4	5.3
100°-110°	120.9	3.1
110°-120°	53.3	1.4
120°-130°	14.4	0.4
130°-140°	3.3	0.1
140°-150°	2.2	0.1
150°-160°	1.5	0.0
160°-170°	0.9	0.0
170°-180°	0.3	0.0
0°-30°	673.2	17.1
0°-40°	1147.4	29.2
0°-60°	2240.2	57.0
0°-90°	3522.7	89.7
90°-120°	383.6	9.8
90°-150°	403.5	10.3
90°-180°	406.0	10.3
0°-180°	3928.9	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	795	795	795	795	795	
5°	907	871	789	716	679	91
15°	1212	1063	762	551	460	349
25°	1526	1247	707	362	227	705
35°	1690	1344	621	176	56	1060
45°	1752	1331	508	40	0	1353
55°	1708	1247	366	0	0	1525
65°	1544	1104	219	0	0	1528
75°	1287	890	93	1	1	1350
85°	942	645	15	4	6	804
90°	816	518	4	6	7	447
95°	701	404	2	7	9	550
105°	482	209	2	5	8	508
115°	262	69	3	3	5	263
125°	78	10	4	3	4	78
135°	4	3	5	4	3	7
145°	1	4	4	3	3	1
155°	2	4	4	3	1	1
165°	2	3	4	3	0	1
175°	2	4	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°	794.7	794.7	794.7	794.7	794.7	794.7	794.7	794.7	794.7	794.7	794.7
2.5°	861.6	860.5	857.5	852.4	845.4	833.2	823.1	814.0	801.8	791.7	772.5
5°	907.1	902.1	898.0	892.9	876.7	865.6	847.4	827.1	807.9	788.7	750.2
7.5°	980.0	971.9	965.8	951.7	929.4	904.1	875.7	856.5	843.3	789.7	723.9
10°	1058.0	1050.9	1038.7	1013.4	986.1	949.6	909.1	863.6	823.1	778.5	700.6
12.5°	1134.9	1124.8	1107.6	1075.2	1036.7	991.2	935.5	881.8	824.1	771.5	673.3
15°	1211.9	1200.7	1182.5	1143.0	1092.4	1032.7	964.8	897.0	829.2	762.3	644.9
17.5°	1295.9	1280.7	1253.4	1208.8	1145.0	1071.1	991.2	909.1	827.1	751.2	614.5
20°	1386.0	1364.7	1335.4	1275.6	1200.7	1113.7	1017.5	921.3	826.1	738.0	580.1
22.5°	1460.9	1439.6	1407.3	1345.5	1255.4	1149.1	1039.7	929.4	822.1	722.9	547.7
25°	1525.7	1508.5	1473.1	1402.2	1307.0	1186.5	1061.0	935.5	816.0	706.7	513.3
27.5°	1576.3	1560.1	1520.6	1447.7	1350.6	1220.0	1077.2	938.5	807.9	690.5	477.9
30°	1620.9	1604.7	1557.1	1482.2	1379.9	1246.3	1093.4	939.5	797.8	666.2	439.4
32.5°	1655.3	1640.1	1591.5	1511.5	1400.2	1264.5	1102.5	938.5	784.6	649.0	397.9
35°	1689.7	1674.5	1617.8	1532.8	1415.4	1272.6	1109.6	933.4	768.4	620.6	358.4
37.5°	1716.0	1698.8	1641.1	1547.0	1422.4	1274.6	1108.6	926.4	751.2	597.3	318.9
40°	1734.3	1716.0	1654.3	1555.1	1424.5	1271.6	1100.5	914.2	731.0	568.0	277.4
42.5°	1746.4	1726.2	1660.4	1567.2	1420.4	1263.5	1088.3	899.0	708.7	542.7	237.9
45°	1752.5	1731.2	1661.4	1557.1	1413.3	1248.3	1070.1	879.8	684.4	508.2	198.4
47.5°	1749.4	1726.2	1656.3	1546.0	1400.2	1232.1	1049.9	856.5	655.0	477.9	161.0
50°	1744.4	1720.1	1645.2	1531.8	1381.9	1211.9	1027.6	828.2	624.7	440.4	127.6
52.5°	1728.2	1703.9	1633.0	1511.5	1360.7	1188.6	997.2	798.8	592.3	404.0	97.2
55°	1707.9	1685.7	1611.8	1493.3	1333.3	1160.2	968.9	767.4	560.9	366.5	69.9
57.5°	1676.6	1656.3	1585.4	1463.9	1306.0	1128.8	937.5	733.0	521.4	329.0	48.6
60°	1638.1	1617.8	1549.0	1430.5	1274.6	1093.4	903.1	697.6	486.0	291.6	30.4
62.5°	1597.6	1578.3	1506.5	1389.0	1235.1	1055.9	865.6	662.1	448.5	257.2	18.2
65°	1543.9	1525.7	1460.9	1339.4	1191.6	1015.4	824.1	619.6	410.0	218.7	10.1
67.5°	1487.2	1471.0	1405.2	1293.9	1141.0	970.9	781.6	578.1	369.5	185.3	5.1
70°	1426.5	1406.2	1345.5	1232.1	1089.4	920.3	735.0	535.6	331.1	152.9	0.0
72.5°	1355.6	1340.4	1281.7	1174.4	1029.6	866.6	687.4	489.0	288.5	121.5	1.0
75°	1286.8	1267.5	1213.9	1112.6	970.9	809.9	634.8	445.5	247.0	93.1	1.0
77.5°	1197.7	1191.6	1141.0	1042.8	915.2	755.3	577.1	392.8	207.5	66.8	1.0
80°	1108.6	1102.5	1063.0	972.9	850.4	690.5	523.4	343.2	169.1	44.5	1.0
82.5°	1020.5	1012.4	975.0	900.0	784.6	635.8	467.7	293.6	133.6	27.3	1.0
85°	941.5	931.4	890.9	822.1	716.8	574.0	410.0	245.0	99.2	15.2	2.0
87.5°	873.7	866.6	822.1	751.2	647.9	516.3	359.4	198.4	69.9	7.1	3.0
90°	816.0	800.8	761.3	686.4	583.1	452.5	305.7	158.9	46.6	4.0	4.0
92.5°	759.3	746.1	702.6	625.7	525.4	397.9	254.1	121.5	29.4	2.0	5.1
95°	700.6	686.4	643.9	573.0	466.7	342.2	208.6	89.1	16.2	2.0	5.1
97.5°	642.9	629.7	585.2	514.3	414.1	293.6	165.0	62.8	8.1	2.0	4.0
100°	589.2	574.0	533.5	462.7	361.4	245.0	127.6	40.5	5.1	2.0	4.0
102.5°	532.5	520.4	478.9	410.0	306.8	199.4	95.2	25.3	2.0	2.0	3.0
105°	481.9	466.7	426.2	355.4	261.2	156.9	66.8	15.2	2.0	2.0	3.0



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	313.8	301.7	266.3	206.5	132.6	61.8	18.2	3.0	3.0	3.0	3.0
115°	262.2	244.0	212.6	160.0	98.2	40.5	9.1	3.0	3.0	3.0	3.0
117.5°	209.6	194.4	172.1	121.5	64.8	26.3	5.1	3.0	3.0	3.0	3.0
120°	164.0	149.8	124.5	84.0	43.5	15.2	2.0	3.0	3.0	3.0	3.0
122.5°	117.4	106.3	84.0	54.7	26.3	7.1	3.0	3.0	4.0	4.0	3.0
125°	78.0	71.9	55.7	33.4	16.2	3.0	3.0	3.0	4.0	4.0	3.0
127.5°	50.6	45.6	32.4	19.2	7.1	3.0	3.0	4.0	4.0	4.0	3.0
130°	28.3	25.3	19.2	11.1	3.0	3.0	3.0	4.0	4.0	4.0	3.0
132.5°	16.2	15.2	10.1	2.0	3.0	3.0	3.0	4.0	4.0	4.0	4.0
135°	4.0	2.0	2.0	2.0	3.0	3.0	4.0	4.0	5.1	5.1	4.0
137.5°	1.0	1.0	2.0	2.0	3.0	3.0	4.0	5.1	5.1	5.1	4.0
140°	1.0	1.0	2.0	3.0	3.0	3.0	4.0	5.1	5.1	5.1	4.0
142.5°	1.0	2.0	2.0	3.0	3.0	4.0	4.0	5.1	5.1	4.0	4.0
145°	1.0	2.0	2.0	3.0	3.0	4.0	4.0	5.1	4.0	4.0	4.0
147.5°	2.0	2.0	2.0	3.0	3.0	4.0	4.0	5.1	5.1	4.0	4.0
150°	1.0	2.0	2.0	3.0	4.0	4.0	4.0	5.1	4.0	4.0	4.0
152.5°	1.0	2.0	2.0	3.0	4.0	4.0	4.0	5.1	4.0	4.0	4.0
155°	2.0	2.0	2.0	3.0	4.0	4.0	4.0	5.1	4.0	4.0	5.1
157.5°	2.0	2.0	2.0	3.0	4.0	4.0	4.0	5.1	4.0	4.0	5.1
160°	2.0	2.0	2.0	3.0	3.0	4.0	4.0	4.0	4.0	4.0	4.0
162.5°	2.0	2.0	2.0	3.0	3.0	4.0	4.0	4.0	4.0	4.0	4.0
165°	2.0	2.0	2.0	2.0	3.0	3.0	4.0	4.0	4.0	4.0	4.0
167.5°	2.0	2.0	2.0	3.0	3.0	3.0	4.0	4.0	4.0	4.0	4.0
170°	2.0	2.0	2.0	3.0	3.0	3.0	4.0	5.1	5.1	5.1	5.1
172.5°	2.0	2.0	2.0	3.0	3.0	4.0	4.0	5.1	5.1	5.1	5.1
175°	2.0	2.0	2.0	3.0	3.0	4.0	4.0	5.1	5.1	5.1	5.1
177.5°	1.0	2.0	2.0	3.0	3.0	4.0	4.0	5.1	5.1	5.1	4.0
180°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0



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**CANDELA DISTRIBUTION (continued):**

	135°	157.5°	180°
0°	794.7	794.7	794.7
2.5°	756.3	742.1	738.0
5°	715.8	692.5	679.3
7.5°	675.3	643.9	628.7
10°	637.8	593.3	577.1
12.5°	593.3	541.6	516.3
15°	550.8	483.9	459.6
17.5°	503.2	428.2	399.9
20°	458.6	372.6	343.2
22.5°	408.0	317.9	285.5
25°	362.4	263.2	226.8
27.5°	311.8	207.5	176.2
30°	264.2	158.9	127.6
32.5°	218.7	116.4	88.1
35°	176.2	79.0	55.7
37.5°	135.7	48.6	28.3
40°	98.2	25.3	13.2
42.5°	65.8	12.1	7.1
45°	40.5	6.1	0.0
47.5°	23.3	0.0	0.0
50°	12.1	0.0	0.0
52.5°	5.1	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	2.0	3.0
80°	2.0	4.0	5.1
82.5°	4.0	5.1	5.1
85°	4.0	5.1	6.1
87.5°	5.1	6.1	7.1
90°	6.1	7.1	7.1
92.5°	6.1	8.1	8.1
95°	7.1	8.1	9.1
97.5°	8.1	9.1	9.1
100°	7.1	9.1	10.1
102.5°	6.1	9.1	9.1
105°	5.1	7.1	8.1



TEST NUMBER: P551330

CATALOG NUMBER: FCC-X-2-LD4-2HI-40-UNV-80-94-ED1D

**CANDELA DISTRIBUTION (continued):**

	135°	157.5°	180°
112.5°	4.0	5.1	5.1
115°	3.0	4.0	5.1
117.5°	3.0	4.0	4.0
120°	3.0	3.0	4.0
122.5°	3.0	3.0	4.0
125°	3.0	3.0	4.0
127.5°	4.0	3.0	3.0
130°	3.0	3.0	3.0
132.5°	4.0	3.0	3.0
135°	4.0	3.0	3.0
137.5°	4.0	3.0	3.0
140°	4.0	3.0	3.0
142.5°	4.0	3.0	3.0
145°	3.0	3.0	3.0
147.5°	3.0	3.0	3.0
150°	3.0	3.0	2.0
152.5°	3.0	2.0	2.0
155°	3.0	2.0	1.0
157.5°	4.0	2.0	1.0
160°	3.0	2.0	1.0
162.5°	3.0	2.0	1.0
165°	3.0	2.0	0.0
167.5°	3.0	2.0	1.0
170°	3.0	2.0	1.0
172.5°	3.0	2.0	1.0
175°	3.0	1.0	1.0
177.5°	3.0	1.0	1.0
180°	3.0	3.0	3.0



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	425.2	413.1	372.6	305.7	213.6	119.5	44.5	8.1	2.0	3.0	3.0
110°	370.5	360.4	318.9	254.1	172.1	89.1	29.4	5.1	3.0	3.0	3.0





107.5°	4.0	6.1	7.1
110°	4.0	5.1	6.1



(END OF REPORT)