

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: P551395

Luminaire Tested: **FCC-X-2-LD4-2HI-50-UNV-80-96-ED1D-90**

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: P551395
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-50-UNV-80-96-ED1D-90
Description: FCC CORNER MOUNT LUMINAIRE WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES AND 5000K, AND 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

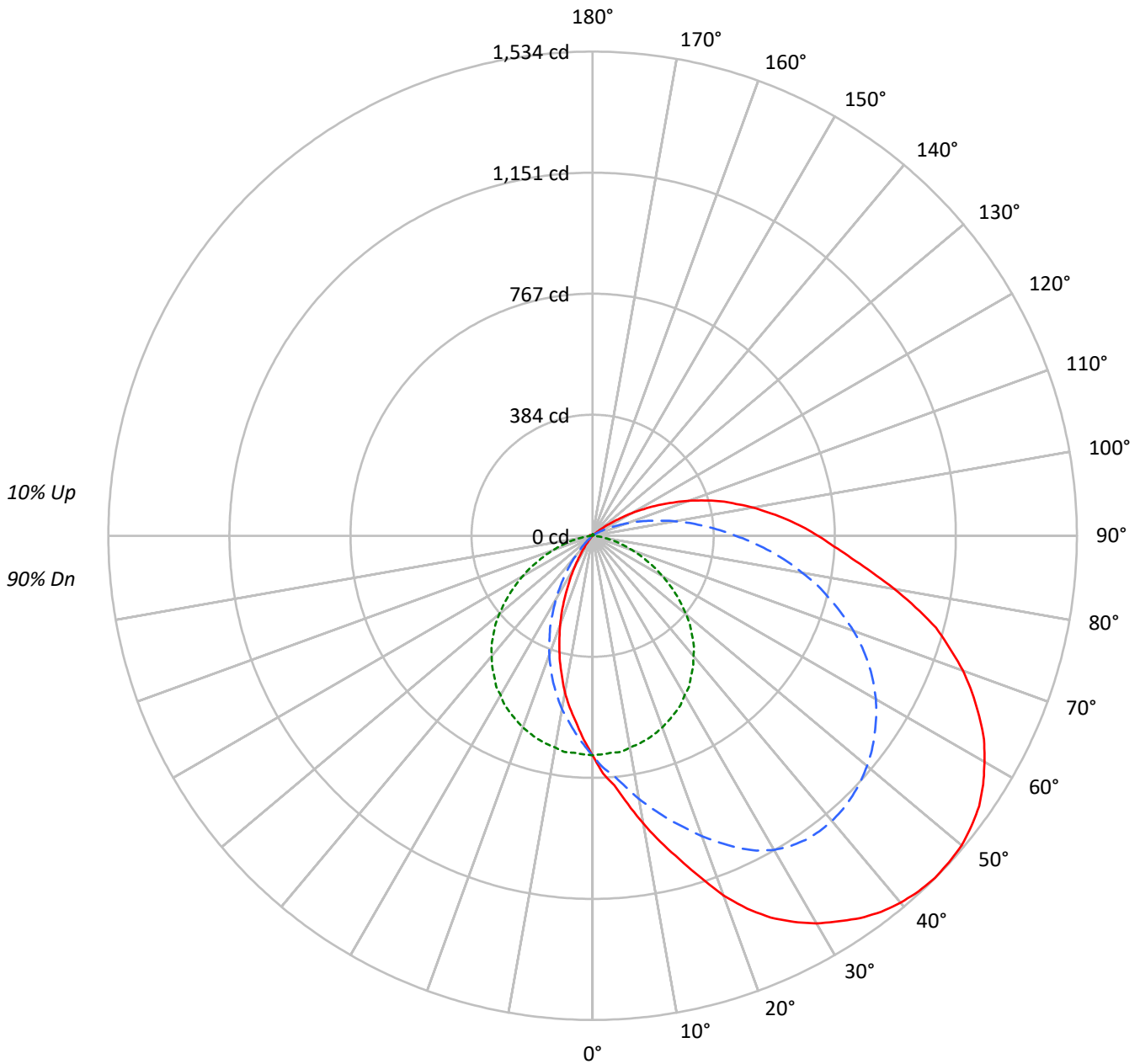
Lumens per Lamp: N/A
Luminaire Lumens: 3438.0 lumens
Efficiency: N/A
Efficacy: 79.4 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

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: P551395

CATALOG NUMBER: FCC-X-2-LD4-2HI-50-UNV-80-96-ED1D-90

Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									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	90																			
1	103	96	91	86	99	93	88	83	87	83	79	81	78	74	76	73	70	67																			
2	92	82	74	67	88	79	72	65	74	67	62	69	64	59	64	60	56	53																			
3	83	71	61	54	79	68	60	53	64	56	50	59	53	48	55	50	46	43																			
4	75	62	52	44	72	60	51	44	56	48	42	52	45	40	49	43	38	36																			
5	69	55	45	38	66	53	44	37	50	42	35	46	39	34	43	38	33	30																			
6	63	49	39	32	61	47	38	32	44	36	31	42	35	29	39	33	28	26																			
7	58	44	35	28	56	43	34	28	40	32	27	38	31	26	36	29	25	23																			
8	54	40	31	25	52	39	30	24	37	29	24	34	28	23	32	26	22	20																			
9	51	36	28	22	49	35	27	22	33	26	21	32	25	20	30	24	20	18																			
10	47	33	25	20	45	33	25	19	31	24	19	29	23	18	28	22	18	16																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	7485	7485	7485
5°	8218	7376	6153
10°	9299	7286	5072
15°	10421	7193	3952
20°	11753	7076	2910
25°	12858	6940	1911
30°	13679	6757	1076
35°	14391	6562	474
40°	15021	6321	114
45°	15562	6017	0
50°	16017	5617	0
55°	16362	5107	0
60°	16537	4514	0
65°	16605	3844	0
70°	16549	3134	0
75°	16339	2311	13
80°	15678	1415	71
85°	15153	676	97



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.6	1.9
10°-20°	199.5	5.8
20°-30°	323.0	9.4
30°-40°	414.9	12.1
40°-50°	469.7	13.7
50°-60°	486.6	14.2
60°-70°	458.9	13.3
70°-80°	384.6	11.2
80°-90°	278.8	8.1
90°-100°	183.2	5.3
100°-110°	105.8	3.1
110°-120°	46.7	1.4
120°-130°	12.7	0.4
130°-140°	2.9	0.1
140°-150°	1.9	0.1
150°-160°	1.3	0.0
160°-170°	0.8	0.0
170°-180°	0.3	0.0
0°-30°	589.1	17.1
0°-40°	1004.0	29.2
0°-60°	1960.2	57.0
0°-90°	3082.4	89.7
90°-120°	335.7	9.8
90°-150°	353.2	10.3
90°-180°	356.0	10.4
0°-180°	3438.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	695	695	695	695	695	
5°	794	762	690	626	594	80
15°	1060	930	667	482	402	306
25°	1335	1091	618	317	198	617
35°	1479	1176	543	154	49	927
45°	1534	1164	445	35	0	1184
55°	1494	1091	321	0	0	1335
65°	1351	966	191	0	0	1337
75°	1126	779	82	1	1	1181
85°	824	565	13	4	5	704
90°	714	453	4	5	6	391
95°	613	354	2	6	8	481
105°	422	183	2	4	7	445
115°	229	61	3	3	4	230
125°	68	8	4	3	4	68
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	1
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°	695.4	695.4	695.4	695.4	695.4	695.4	695.4	695.4	695.4	695.4	695.4
2.5°	753.9	753.0	750.4	745.9	739.7	729.1	720.2	712.3	701.6	692.8	675.9
5°	793.8	789.3	785.8	781.4	767.2	757.4	741.5	723.8	706.9	690.1	656.4
7.5°	857.5	850.5	845.1	832.7	813.2	791.1	766.3	749.5	737.9	691.0	633.4
10°	925.8	919.6	908.9	886.8	862.9	831.0	795.5	755.7	720.2	681.3	613.0
12.5°	993.1	984.2	969.2	940.8	907.2	867.3	818.6	771.6	721.1	675.0	589.1
15°	1060.4	1050.7	1034.7	1000.2	955.9	903.6	844.3	784.9	725.5	667.1	564.3
17.5°	1133.9	1120.7	1096.7	1057.8	1001.9	937.3	867.3	795.5	723.8	657.3	537.7
20°	1212.8	1194.2	1168.5	1116.2	1050.7	974.5	890.3	806.2	722.9	645.8	507.6
22.5°	1278.3	1259.7	1231.4	1177.3	1098.5	1005.5	909.8	813.2	719.3	632.5	479.3
25°	1335.0	1320.0	1289.0	1227.0	1143.7	1038.3	928.4	818.6	714.0	618.4	449.1
27.5°	1379.3	1365.2	1330.6	1266.8	1181.8	1067.5	942.6	821.2	706.9	604.2	418.1
30°	1418.3	1404.1	1362.5	1296.9	1207.5	1090.5	956.8	822.1	698.1	582.9	384.5
32.5°	1448.4	1435.1	1392.6	1322.6	1225.2	1106.5	964.7	821.2	686.6	567.9	348.2
35°	1478.6	1465.3	1415.7	1341.2	1238.5	1113.6	970.9	816.8	672.4	543.1	313.6
37.5°	1501.6	1486.5	1436.0	1353.6	1244.7	1115.3	970.1	810.6	657.3	522.7	279.1
40°	1517.5	1501.6	1447.5	1360.7	1246.4	1112.7	963.0	800.0	639.6	497.0	242.7
42.5°	1528.2	1510.4	1452.9	1371.4	1242.9	1105.6	952.3	786.7	620.1	474.8	208.2
45°	1533.5	1514.9	1453.7	1362.5	1236.7	1092.3	936.4	769.8	598.9	444.7	173.6
47.5°	1530.8	1510.4	1449.3	1352.8	1225.2	1078.1	918.7	749.5	573.2	418.1	140.9
50°	1526.4	1505.1	1439.6	1340.4	1209.2	1060.4	899.2	724.7	546.6	385.4	111.6
52.5°	1512.2	1491.0	1428.9	1322.6	1190.6	1040.0	872.6	699.0	518.2	353.5	85.0
55°	1494.5	1475.0	1410.3	1306.7	1166.7	1015.2	847.8	671.5	490.8	320.7	61.1
57.5°	1467.0	1449.3	1387.3	1281.0	1142.8	987.8	820.3	641.4	456.2	287.9	42.5
60°	1433.4	1415.7	1355.4	1251.8	1115.3	956.8	790.2	610.4	425.2	255.1	26.6
62.5°	1397.9	1381.1	1318.2	1215.4	1080.8	924.0	757.4	579.4	392.4	225.0	15.9
65°	1351.0	1335.0	1278.3	1172.0	1042.7	888.5	721.1	542.2	358.8	191.4	8.9
67.5°	1301.4	1287.2	1229.6	1132.2	998.4	849.6	683.9	505.8	323.4	162.1	4.4
70°	1248.2	1230.5	1177.3	1078.1	953.2	805.3	643.2	468.6	289.7	133.8	0.0
72.5°	1186.2	1172.9	1121.5	1027.6	901.0	758.3	601.5	427.9	252.5	106.3	0.9
75°	1126.0	1109.1	1062.2	973.6	849.6	708.7	555.5	389.8	216.2	81.5	0.9
77.5°	1048.0	1042.7	998.4	912.5	800.8	660.9	505.0	343.7	181.6	58.5	0.9
80°	970.1	964.7	930.2	851.3	744.1	604.2	458.0	300.3	147.9	39.0	0.9
82.5°	893.0	885.9	853.1	787.6	686.6	556.3	409.3	256.9	116.9	23.9	0.9
85°	823.9	815.0	779.6	719.3	627.2	502.3	358.8	214.4	86.8	13.3	1.8
87.5°	764.5	758.3	719.3	657.3	567.0	451.8	314.5	173.6	61.1	6.2	2.7
90°	714.0	700.7	666.2	600.6	510.3	396.0	267.5	139.1	40.8	3.5	3.5
92.5°	664.4	652.9	614.8	547.5	459.8	348.2	222.4	106.3	25.7	1.8	4.4
95°	613.0	600.6	563.4	501.4	408.4	299.4	182.5	78.0	14.2	1.8	4.4
97.5°	562.5	551.0	512.0	450.0	362.3	256.9	144.4	54.9	7.1	1.8	3.5
100°	515.6	502.3	466.9	404.9	316.3	214.4	111.6	35.4	4.4	1.8	3.5
102.5°	466.0	455.3	419.0	358.8	268.4	174.5	83.3	22.1	1.8	1.8	2.7
105°	421.7	408.4	373.0	310.9	228.6	137.3	58.5	13.3	1.8	1.8	2.7



TEST NUMBER: P551395

CATALOG NUMBER: FCC-X-2-LD4-2HI-50-UNV-80-96-ED1D-90

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	274.6	264.0	233.0	180.7	116.1	54.0	15.9	2.7	2.7	2.7	2.7
115°	229.4	213.5	186.0	140.0	85.9	35.4	8.0	2.7	2.7	2.7	2.7
117.5°	183.4	170.1	150.6	106.3	56.7	23.0	4.4	2.7	2.7	2.7	2.7
120°	143.5	131.1	109.0	73.5	38.1	13.3	1.8	2.7	2.7	2.7	2.7
122.5°	102.8	93.0	73.5	47.8	23.0	6.2	2.7	2.7	3.5	3.5	2.7
125°	68.2	62.9	48.7	29.2	14.2	2.7	2.7	2.7	3.5	3.5	2.7
127.5°	44.3	39.9	28.3	16.8	6.2	2.7	2.7	3.5	3.5	3.5	2.7
130°	24.8	22.1	16.8	9.7	2.7	2.7	2.7	3.5	3.5	3.5	2.7
132.5°	14.2	13.3	8.9	1.8	2.7	2.7	2.7	3.5	3.5	3.5	3.5
135°	3.5	1.8	1.8	1.8	2.7	2.7	3.5	3.5	4.4	4.4	3.5
137.5°	0.9	0.9	1.8	1.8	2.7	2.7	3.5	4.4	4.4	4.4	3.5
140°	0.9	0.9	1.8	2.7	2.7	2.7	3.5	4.4	4.4	4.4	3.5
142.5°	0.9	1.8	1.8	2.7	2.7	3.5	3.5	4.4	4.4	3.5	3.5
145°	0.9	1.8	1.8	2.7	2.7	3.5	3.5	4.4	3.5	3.5	3.5
147.5°	1.8	1.8	1.8	2.7	2.7	3.5	3.5	4.4	4.4	3.5	3.5
150°	0.9	1.8	1.8	2.7	3.5	3.5	3.5	4.4	3.5	3.5	3.5
152.5°	0.9	1.8	1.8	2.7	3.5	3.5	3.5	4.4	3.5	3.5	3.5
155°	1.8	1.8	1.8	2.7	3.5	3.5	3.5	4.4	3.5	3.5	4.4
157.5°	1.8	1.8	1.8	2.7	3.5	3.5	3.5	4.4	3.5	3.5	4.4
160°	1.8	1.8	1.8	2.7	2.7	3.5	3.5	3.5	3.5	3.5	3.5
162.5°	1.8	1.8	1.8	2.7	2.7	3.5	3.5	3.5	3.5	3.5	3.5
165°	1.8	1.8	1.8	1.8	2.7	2.7	3.5	3.5	3.5	3.5	3.5
167.5°	1.8	1.8	1.8	2.7	2.7	2.7	3.5	3.5	3.5	3.5	3.5
170°	1.8	1.8	1.8	2.7	2.7	2.7	3.5	4.4	4.4	4.4	4.4
172.5°	1.8	1.8	1.8	2.7	2.7	3.5	3.5	4.4	4.4	4.4	4.4
175°	1.8	1.8	1.8	2.7	2.7	3.5	3.5	4.4	4.4	4.4	4.4
177.5°	0.9	1.8	1.8	2.7	2.7	3.5	3.5	4.4	4.4	4.4	3.5
180°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7



TEST NUMBER: P551395

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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	695.4	695.4	695.4
2.5°	661.8	649.4	645.8
5°	626.3	605.9	594.4
7.5°	590.9	563.4	550.1
10°	558.1	519.1	505.0
12.5°	519.1	474.0	451.8
15°	481.9	423.5	402.2
17.5°	440.3	374.7	349.9
20°	401.3	326.0	300.3
22.5°	357.0	278.2	249.8
25°	317.1	230.3	198.4
27.5°	272.9	181.6	154.1
30°	231.2	139.1	111.6
32.5°	191.4	101.9	77.1
35°	154.1	69.1	48.7
37.5°	118.7	42.5	24.8
40°	85.9	22.1	11.5
42.5°	57.6	10.6	6.2
45°	35.4	5.3	0.0
47.5°	20.4	0.0	0.0
50°	10.6	0.0	0.0
52.5°	4.4	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	2.7
80°	1.8	3.5	4.4
82.5°	3.5	4.4	4.4
85°	3.5	4.4	5.3
87.5°	4.4	5.3	6.2
90°	5.3	6.2	6.2
92.5°	5.3	7.1	7.1
95°	6.2	7.1	8.0
97.5°	7.1	8.0	8.0
100°	6.2	8.0	8.9
102.5°	5.3	8.0	8.0
105°	4.4	6.2	7.1



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CATALOG NUMBER: FCC-X-2-LD4-2HI-50-UNV-80-96-ED1D-90

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	3.5	4.4	4.4
115°	2.7	3.5	4.4
117.5°	2.7	3.5	3.5
120°	2.7	2.7	3.5
122.5°	2.7	2.7	3.5
125°	2.7	2.7	3.5
127.5°	3.5	2.7	2.7
130°	2.7	2.7	2.7
132.5°	3.5	2.7	2.7
135°	3.5	2.7	2.7
137.5°	3.5	2.7	2.7
140°	3.5	2.7	2.7
142.5°	3.5	2.7	2.7
145°	2.7	2.7	2.7
147.5°	2.7	2.7	2.7
150°	2.7	2.7	1.8
152.5°	2.7	1.8	1.8
155°	2.7	1.8	0.9
157.5°	3.5	1.8	0.9
160°	2.7	1.8	0.9
162.5°	2.7	1.8	0.9
165°	2.7	1.8	0.0
167.5°	2.7	1.8	0.9
170°	2.7	1.8	0.9
172.5°	2.7	1.8	0.9
175°	2.7	0.9	0.9
177.5°	2.7	0.9	0.9
180°	2.7	2.7	2.7



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	372.1	361.4	326.0	267.5	186.9	104.5	39.0	7.1	1.8	2.7	2.7
110°	324.2	315.4	279.1	222.4	150.6	78.0	25.7	4.4	2.7	2.7	2.7





107.5°	3.5	5.3	6.2
110°	3.5	4.4	5.3



(END OF REPORT)