

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: P551257

Luminaire Tested: **FCC-X-2-LD4-2HI-35-UNV-80-85-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: P551257
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-80-85-ED1D-90
Description: FCC CORNER MOUNT LUMINAIRE WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 3500K, AND 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

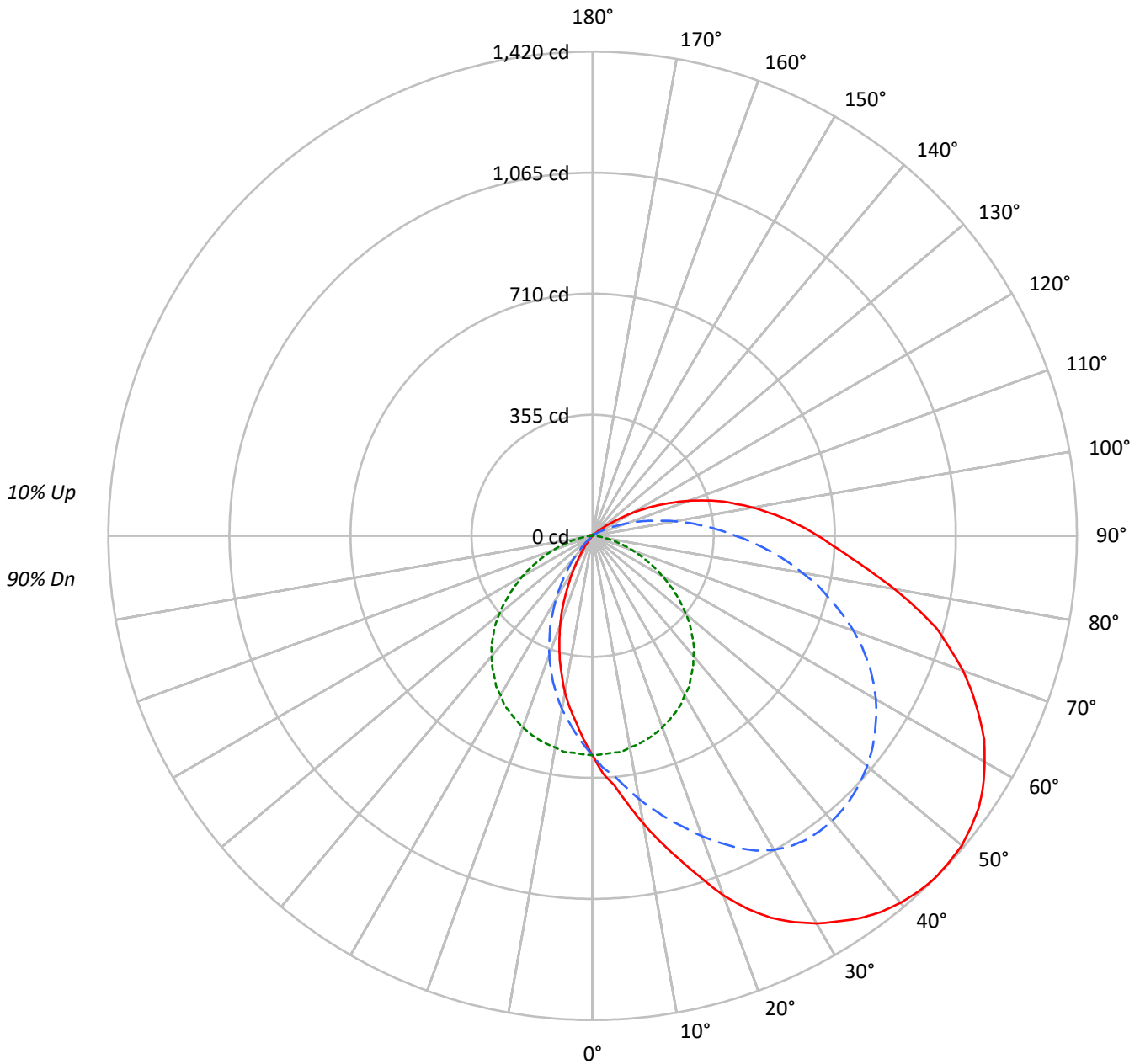
Lumens per Lamp: N/A
Luminaire Lumens: 3183.1 lumens
Efficiency: N/A
Efficacy: 73.5 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

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

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CATALOG NUMBER: FCC-X-2-LD4-2HI-35-UNV-80-85-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°	6930	6930	6930
5°	7608	6829	5697
10°	8609	6745	4696
15°	9648	6659	3660
20°	10881	6551	2694
25°	11904	6425	1769
30°	12665	6256	996
35°	13323	6075	439
40°	13907	5851	106
45°	14408	5571	0
50°	14829	5200	0
55°	15149	4728	0
60°	15310	4180	0
65°	15373	3559	0
70°	15321	2900	0
75°	15128	2141	12
80°	14514	1309	66
85°	14029	625	90



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	61.7	1.9
10°-20°	184.7	5.8
20°-30°	299.0	9.4
30°-40°	384.1	12.1
40°-50°	434.8	13.7
50°-60°	450.5	14.2
60°-70°	424.9	13.3
70°-80°	356.0	11.2
80°-90°	258.1	8.1
90°-100°	169.6	5.3
100°-110°	98.0	3.1
110°-120°	43.2	1.4
120°-130°	11.7	0.4
130°-140°	2.7	0.1
140°-150°	1.8	0.1
150°-160°	1.2	0.0
160°-170°	0.7	0.0
170°-180°	0.3	0.0
0°-30°	545.4	17.1
0°-40°	929.5	29.2
0°-60°	1814.8	57.0
0°-90°	2853.8	89.7
90°-120°	310.8	9.8
90°-150°	327.0	10.3
90°-180°	329.0	10.3
0°-180°	3183.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	644	644	644	644	644	
5°	735	706	639	580	550	74
15°	982	861	618	446	372	283
25°	1236	1010	572	294	184	571
35°	1369	1089	503	143	45	859
45°	1420	1078	412	33	0	1096
55°	1384	1010	297	0	0	1236
65°	1251	894	177	0	0	1238
75°	1042	721	76	1	1	1093
85°	763	523	12	3	5	651
90°	661	420	3	5	6	362
95°	568	328	2	6	7	445
105°	390	169	2	4	7	412
115°	212	56	2	2	4	213
125°	63	8	3	2	3	63
135°	3	2	4	3	2	6
145°	1	3	3	2	2	1
155°	2	3	3	2	1	1
165°	2	2	3	2	0	0
175°	2	3	4	2	1	0
180°	2	2	2	2	2	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
0°	643.8	643.8	643.8	643.8	643.8	643.8	643.8	643.8	643.8	643.8	643.8
2.5°	698.0	697.2	694.7	690.6	684.9	675.0	666.8	659.4	649.6	641.4	625.8
5°	734.9	730.8	727.5	723.4	710.3	701.3	686.5	670.1	654.5	638.9	607.8
7.5°	793.9	787.4	782.5	771.0	752.9	732.4	709.5	693.9	683.2	639.7	586.4
10°	857.1	851.4	841.5	821.0	798.9	769.3	736.5	699.6	666.8	630.7	567.6
12.5°	919.4	911.2	897.3	871.0	839.9	803.0	757.9	714.4	667.6	625.0	545.4
15°	981.8	972.7	958.0	926.0	885.0	836.6	781.6	726.7	671.7	617.6	522.5
17.5°	1049.8	1037.5	1015.4	979.3	927.6	867.8	803.0	736.5	670.1	608.6	497.9
20°	1122.8	1105.6	1081.8	1033.4	972.7	902.2	824.3	746.4	669.3	597.9	470.0
22.5°	1183.5	1166.3	1140.1	1090.0	1017.0	930.9	842.3	752.9	666.0	585.6	443.7
25°	1236.0	1222.1	1193.4	1136.0	1058.9	961.3	859.6	757.9	661.1	572.5	415.8
27.5°	1277.0	1263.9	1231.9	1172.9	1094.1	988.3	872.7	760.3	654.5	559.4	387.1
30°	1313.1	1300.0	1261.4	1200.7	1117.9	1009.6	885.8	761.1	646.3	539.7	356.0
32.5°	1341.0	1328.7	1289.3	1224.5	1134.3	1024.4	893.2	760.3	635.6	525.7	322.3
35°	1368.9	1356.6	1310.7	1241.8	1146.6	1031.0	898.9	756.2	622.5	502.8	290.3
37.5°	1390.2	1376.3	1329.5	1253.2	1152.4	1032.6	898.1	750.5	608.6	483.9	258.4
40°	1405.0	1390.2	1340.2	1259.8	1154.0	1030.2	891.5	740.6	592.2	460.1	224.7
42.5°	1414.8	1398.4	1345.1	1269.6	1150.7	1023.6	881.7	728.3	574.1	439.6	192.7
45°	1419.7	1402.5	1345.9	1261.4	1145.0	1011.3	866.9	712.7	554.4	411.7	160.8
47.5°	1417.3	1398.4	1341.8	1252.4	1134.3	998.2	850.5	693.9	530.7	387.1	130.4
50°	1413.2	1393.5	1332.8	1240.9	1119.6	981.8	832.5	670.9	506.1	356.8	103.3
52.5°	1400.1	1380.4	1323.0	1224.5	1102.3	962.9	807.9	647.1	479.8	327.3	78.7
55°	1383.7	1365.6	1305.7	1209.8	1080.2	939.9	784.9	621.7	454.4	296.9	56.6
57.5°	1358.2	1341.8	1284.4	1186.0	1058.0	914.5	759.5	593.8	422.4	266.6	39.4
60°	1327.1	1310.7	1254.9	1158.9	1032.6	885.8	731.6	565.1	393.7	236.2	24.6
62.5°	1294.3	1278.7	1220.4	1125.3	1000.6	855.5	701.3	536.4	363.3	208.3	14.8
65°	1250.8	1236.0	1183.5	1085.1	965.4	822.6	667.6	502.0	332.2	177.2	8.2
67.5°	1204.9	1191.7	1138.4	1048.2	924.3	786.6	633.2	468.3	299.4	150.1	4.1
70°	1155.6	1139.2	1090.0	998.2	882.5	745.5	595.5	433.9	268.2	123.8	0.0
72.5°	1098.2	1085.9	1038.4	951.4	834.1	702.1	556.9	396.1	233.8	98.4	0.8
75°	1042.5	1026.9	983.4	901.4	786.6	656.1	514.3	360.9	200.1	75.5	0.8
77.5°	970.3	965.4	924.3	844.8	741.4	611.9	467.5	318.2	168.1	54.1	0.8
80°	898.1	893.2	861.2	788.2	689.0	559.4	424.0	278.0	137.0	36.1	0.8
82.5°	826.7	820.2	789.8	729.1	635.6	515.1	378.9	237.9	108.3	22.1	0.8
85°	762.8	754.6	721.8	666.0	580.7	465.0	332.2	198.5	80.4	12.3	1.6
87.5°	707.8	702.1	666.0	608.6	524.9	418.3	291.2	160.8	56.6	5.7	2.5
90°	661.1	648.8	616.8	556.1	472.4	366.6	247.7	128.8	37.7	3.3	3.3
92.5°	615.1	604.5	569.2	506.9	425.7	322.3	205.9	98.4	23.8	1.6	4.1
95°	567.6	556.1	521.6	464.2	378.1	277.2	169.0	72.2	13.1	1.6	4.1
97.5°	520.8	510.2	474.1	416.7	335.5	237.9	133.7	50.9	6.6	1.6	3.3
100°	477.3	465.0	432.2	374.8	292.8	198.5	103.3	32.8	4.1	1.6	3.3
102.5°	431.4	421.6	387.9	332.2	248.5	161.6	77.1	20.5	1.6	1.6	2.5
105°	390.4	378.1	345.3	287.9	211.6	127.1	54.1	12.3	1.6	1.6	2.5



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	254.3	244.4	215.7	167.3	107.4	50.0	14.8	2.5	2.5	2.5	2.5
115°	212.4	197.7	172.2	129.6	79.6	32.8	7.4	2.5	2.5	2.5	2.5
117.5°	169.8	157.5	139.4	98.4	52.5	21.3	4.1	2.5	2.5	2.5	2.5
120°	132.9	121.4	100.9	68.1	35.3	12.3	1.6	2.5	2.5	2.5	2.5
122.5°	95.1	86.1	68.1	44.3	21.3	5.7	2.5	2.5	3.3	3.3	2.5
125°	63.2	58.2	45.1	27.1	13.1	2.5	2.5	2.5	3.3	3.3	2.5
127.5°	41.0	36.9	26.2	15.6	5.7	2.5	2.5	3.3	3.3	3.3	2.5
130°	23.0	20.5	15.6	9.0	2.5	2.5	2.5	3.3	3.3	3.3	2.5
132.5°	13.1	12.3	8.2	1.6	2.5	2.5	2.5	3.3	3.3	3.3	3.3
135°	3.3	1.6	1.6	1.6	2.5	2.5	3.3	3.3	4.1	4.1	3.3
137.5°	0.8	0.8	1.6	1.6	2.5	2.5	3.3	4.1	4.1	4.1	3.3
140°	0.8	0.8	1.6	2.5	2.5	2.5	3.3	4.1	4.1	4.1	3.3
142.5°	0.8	1.6	1.6	2.5	2.5	3.3	3.3	4.1	4.1	3.3	3.3
145°	0.8	1.6	1.6	2.5	2.5	3.3	3.3	4.1	3.3	3.3	3.3
147.5°	1.6	1.6	1.6	2.5	2.5	3.3	3.3	4.1	4.1	3.3	3.3
150°	0.8	1.6	1.6	2.5	3.3	3.3	3.3	4.1	3.3	3.3	3.3
152.5°	0.8	1.6	1.6	2.5	3.3	3.3	3.3	4.1	3.3	3.3	3.3
155°	1.6	1.6	1.6	2.5	3.3	3.3	3.3	4.1	3.3	3.3	4.1
157.5°	1.6	1.6	1.6	2.5	3.3	3.3	3.3	4.1	3.3	3.3	4.1
160°	1.6	1.6	1.6	2.5	2.5	3.3	3.3	3.3	3.3	3.3	3.3
162.5°	1.6	1.6	1.6	2.5	2.5	3.3	3.3	3.3	3.3	3.3	3.3
165°	1.6	1.6	1.6	1.6	2.5	2.5	3.3	3.3	3.3	3.3	3.3
167.5°	1.6	1.6	1.6	2.5	2.5	2.5	3.3	3.3	3.3	3.3	3.3
170°	1.6	1.6	1.6	2.5	2.5	2.5	3.3	4.1	4.1	4.1	4.1
172.5°	1.6	1.6	1.6	2.5	2.5	3.3	3.3	4.1	4.1	4.1	4.1
175°	1.6	1.6	1.6	2.5	2.5	3.3	3.3	4.1	4.1	4.1	4.1
177.5°	0.8	1.6	1.6	2.5	2.5	3.3	3.3	4.1	4.1	4.1	3.3
180°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	643.8	643.8	643.8
2.5°	612.7	601.2	597.9
5°	579.9	561.0	550.3
7.5°	547.1	521.6	509.3
10°	516.7	480.6	467.5
12.5°	480.6	438.8	418.3
15°	446.2	392.0	372.4
17.5°	407.6	346.9	324.0
20°	371.5	301.8	278.0
22.5°	330.5	257.5	231.3
25°	293.6	213.2	183.7
27.5°	252.6	168.1	142.7
30°	214.1	128.8	103.3
32.5°	177.2	94.3	71.4
35°	142.7	64.0	45.1
37.5°	109.9	39.4	23.0
40°	79.6	20.5	10.7
42.5°	53.3	9.8	5.7
45°	32.8	4.9	0.0
47.5°	18.9	0.0	0.0
50°	9.8	0.0	0.0
52.5°	4.1	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°	0.8	0.8	0.8
77.5°	0.8	1.6	2.5
80°	1.6	3.3	4.1
82.5°	3.3	4.1	4.1
85°	3.3	4.1	4.9
87.5°	4.1	4.9	5.7
90°	4.9	5.7	5.7
92.5°	4.9	6.6	6.6
95°	5.7	6.6	7.4
97.5°	6.6	7.4	7.4
100°	5.7	7.4	8.2
102.5°	4.9	7.4	7.4
105°	4.1	5.7	6.6



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	3.3	4.1	4.1
115°	2.5	3.3	4.1
117.5°	2.5	3.3	3.3
120°	2.5	2.5	3.3
122.5°	2.5	2.5	3.3
125°	2.5	2.5	3.3
127.5°	3.3	2.5	2.5
130°	2.5	2.5	2.5
132.5°	3.3	2.5	2.5
135°	3.3	2.5	2.5
137.5°	3.3	2.5	2.5
140°	3.3	2.5	2.5
142.5°	3.3	2.5	2.5
145°	2.5	2.5	2.5
147.5°	2.5	2.5	2.5
150°	2.5	2.5	1.6
152.5°	2.5	1.6	1.6
155°	2.5	1.6	0.8
157.5°	3.3	1.6	0.8
160°	2.5	1.6	0.8
162.5°	2.5	1.6	0.8
165°	2.5	1.6	0.0
167.5°	2.5	1.6	0.8
170°	2.5	1.6	0.8
172.5°	2.5	1.6	0.8
175°	2.5	0.8	0.8
177.5°	2.5	0.8	0.8
180°	2.5	2.5	2.5



Report Generated By 670246072 / DESKTOP-MV3F9LC





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







107.5°	344.5	334.6	301.8	247.7	173.1	96.8	36.1	6.6	1.6	2.5	2.5
110°	300.2	292.0	258.4	205.9	139.4	72.2	23.8	4.1	2.5	2.5	2.5





107.5°	3.3	4.9	5.7
110°	3.3	4.1	4.9



(END OF REPORT)