

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: P551267

Luminaire Tested: **FCC-X-2-LD4-2HI-35-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: P551267  
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-80-96-ED1D-90  
Description: FCC CORNER MOUNT LUMINAIRE WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES AND 3500K, AND 90 CRI LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

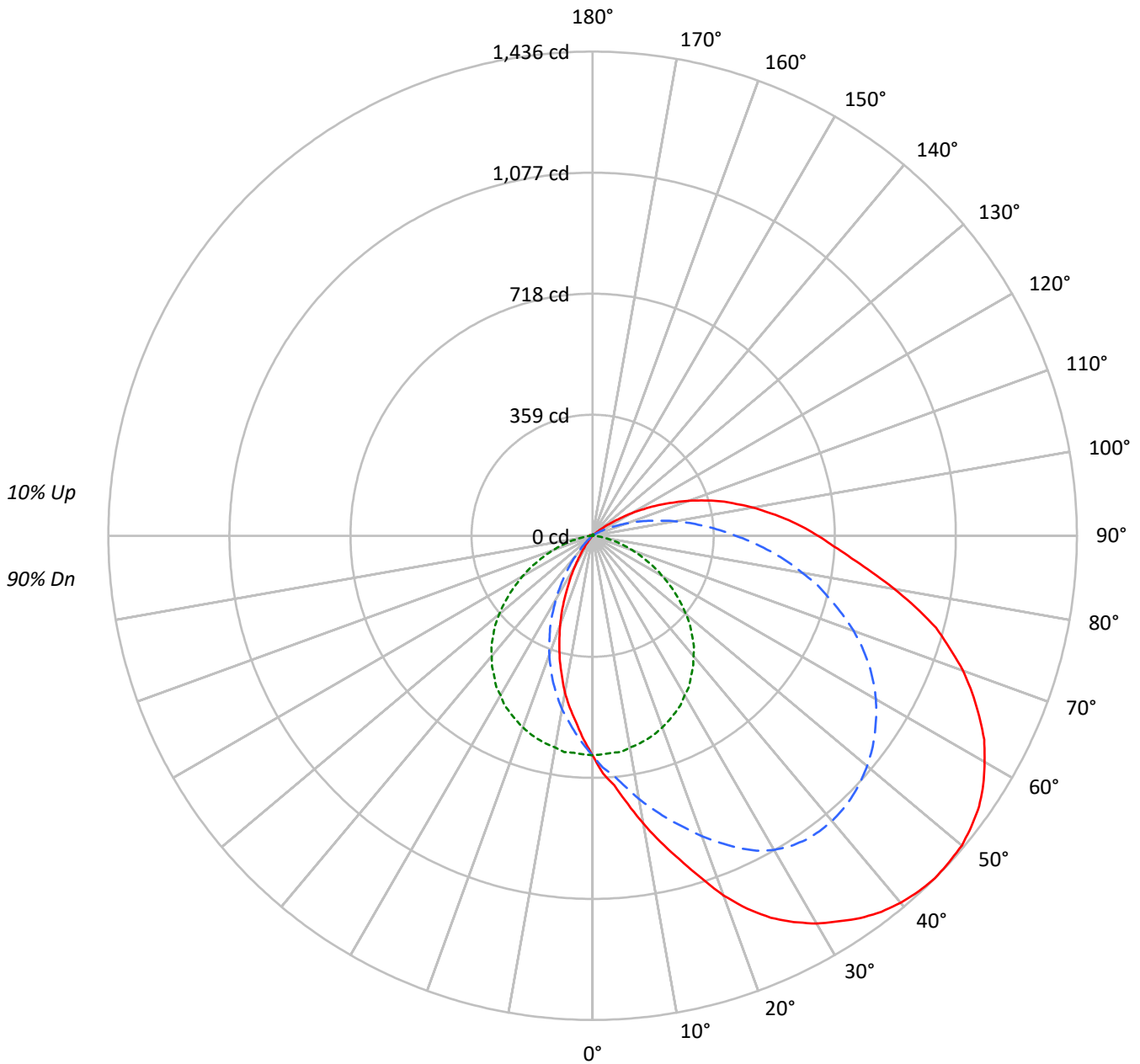
Lumens per Lamp: N/A  
Luminaire Lumens: 3219.0 lumens  
Efficiency: N/A  
Efficacy: 74.3 lumens/watt  
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59  
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')  
CIE Type: Semi-Direct

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-80-96-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°	7008	7008	7008
5°	7694	6906	5762
10°	8706	6822	4749
15°	9757	6735	3701
20°	11004	6625	2725
25°	12039	6498	1789
30°	12808	6327	1008
35°	13474	6144	444
40°	14065	5917	107
45°	14571	5634	0
50°	14997	5258	0
55°	15320	4782	0
60°	15483	4228	0
65°	15547	3599	0
70°	15495	2933	0
75°	15297	2164	12
80°	14679	1324	66
85°	14188	631	92



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	62.4	1.9
10°-20°	186.8	5.8
20°-30°	302.4	9.4
30°-40°	388.5	12.1
40°-50°	439.8	13.7
50°-60°	455.6	14.2
60°-70°	429.7	13.3
70°-80°	360.1	11.2
80°-90°	261.0	8.1
90°-100°	171.5	5.3
100°-110°	99.1	3.1
110°-120°	43.7	1.4
120°-130°	11.8	0.4
130°-140°	2.7	0.1
140°-150°	1.8	0.1
150°-160°	1.3	0.0
160°-170°	0.7	0.0
170°-180°	0.3	0.0
0°-30°	551.5	17.1
0°-40°	940.0	29.2
0°-60°	1835.4	57.0
0°-90°	2886.1	89.7
90°-120°	314.3	9.8
90°-150°	330.7	10.3
90°-180°	333.0	10.3
0°-180°	3219.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	651	651	651	651	651	
5°	743	714	646	586	557	75
15°	993	870	625	451	377	286
25°	1250	1021	579	297	186	578
35°	1384	1101	508	144	46	868
45°	1436	1090	416	33	0	1108
55°	1399	1022	300	0	0	1250
65°	1265	904	179	0	0	1251
75°	1054	730	76	1	1	1106
85°	771	529	12	3	5	659
90°	668	424	3	5	6	367
95°	574	331	2	6	8	450
105°	395	171	2	4	7	417
115°	215	57	2	2	4	215
125°	64	8	3	2	3	64
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°	651.1	651.1	651.1	651.1	651.1	651.1	651.1	651.1	651.1	651.1	651.1
2.5°	705.9	705.0	702.6	698.4	692.6	682.6	674.4	666.9	656.9	648.6	632.9
5°	743.2	739.0	735.7	731.6	718.3	709.2	694.3	677.7	661.9	646.1	614.6
7.5°	802.9	796.3	791.3	779.7	761.4	740.7	717.5	701.7	690.9	647.0	593.1
10°	866.8	861.0	851.0	830.3	807.9	778.0	744.9	707.5	674.4	637.9	574.0
12.5°	929.8	921.5	907.4	880.9	849.4	812.0	766.4	722.5	675.2	632.0	551.6
15°	992.9	983.7	968.8	936.5	895.0	846.0	790.5	734.9	679.3	624.6	528.4
17.5°	1061.7	1049.3	1026.9	990.4	938.1	877.6	812.0	744.9	677.7	615.5	503.5
20°	1135.5	1118.1	1094.1	1045.1	983.7	912.4	833.6	754.8	676.8	604.7	475.3
22.5°	1196.9	1179.5	1152.9	1102.4	1028.5	941.4	851.9	761.4	673.5	592.2	448.7
25°	1250.0	1235.9	1206.9	1148.8	1070.8	972.1	869.3	766.4	668.5	579.0	420.5
27.5°	1291.5	1278.2	1245.8	1186.1	1106.5	999.5	882.5	768.9	661.9	565.7	391.5
30°	1328.0	1314.7	1275.7	1214.3	1130.6	1021.1	895.8	769.7	653.6	545.8	360.0
32.5°	1356.2	1343.7	1303.9	1238.4	1147.1	1036.0	903.3	768.9	642.8	531.7	326.0
35°	1384.4	1371.9	1325.5	1255.8	1159.6	1042.6	909.1	764.8	629.6	508.5	293.6
37.5°	1405.9	1391.8	1344.6	1267.4	1165.4	1044.3	908.3	759.0	615.5	489.4	261.3
40°	1420.9	1405.9	1355.3	1274.1	1167.1	1041.8	901.6	749.0	598.9	465.3	227.3
42.5°	1430.8	1414.2	1360.3	1284.0	1163.7	1035.2	891.7	736.6	580.6	444.6	194.9
45°	1435.8	1418.4	1361.1	1275.7	1157.9	1022.7	876.7	720.8	560.7	416.4	162.6
47.5°	1433.3	1414.2	1357.0	1266.6	1147.1	1009.5	860.2	701.7	536.7	391.5	131.9
50°	1429.2	1409.3	1347.9	1255.0	1132.2	992.9	841.9	678.5	511.8	360.8	104.5
52.5°	1415.9	1396.0	1337.9	1238.4	1114.8	973.8	817.0	654.4	485.2	331.0	79.6
55°	1399.3	1381.1	1320.5	1223.5	1092.4	950.6	793.8	628.7	459.5	300.3	57.2
57.5°	1373.6	1357.0	1298.9	1199.4	1070.0	924.8	768.1	600.5	427.2	269.6	39.8
60°	1342.1	1325.5	1269.1	1172.0	1044.3	895.8	739.9	571.5	398.1	238.9	24.9
62.5°	1308.9	1293.1	1234.2	1138.0	1011.9	865.1	709.2	542.5	367.5	210.7	14.9
65°	1264.9	1250.0	1196.9	1097.4	976.3	831.9	675.2	507.6	335.9	179.2	8.3
67.5°	1218.5	1205.2	1151.3	1060.1	934.8	795.5	640.3	473.6	302.8	151.8	4.1
70°	1168.7	1152.1	1102.4	1009.5	892.5	754.0	602.2	438.8	271.2	125.2	0.0
72.5°	1110.6	1098.2	1050.1	962.2	843.6	710.0	563.2	400.6	236.4	99.5	0.8
75°	1054.2	1038.5	994.5	911.6	795.5	663.6	520.1	365.0	202.4	76.3	0.8
77.5°	981.3	976.3	934.8	854.3	749.8	618.8	472.8	321.8	170.0	54.7	0.8
80°	908.3	903.3	870.9	797.1	696.7	565.7	428.8	281.2	138.5	36.5	0.8
82.5°	836.1	829.5	798.8	737.4	642.8	520.9	383.2	240.5	109.5	22.4	0.8
85°	771.4	763.1	729.9	673.5	587.3	470.3	335.9	200.7	81.3	12.4	1.7
87.5°	715.8	710.0	673.5	615.5	530.9	423.0	294.5	162.6	57.2	5.8	2.5
90°	668.5	656.1	623.8	562.4	477.8	370.8	250.5	130.2	38.2	3.3	3.3
92.5°	622.1	611.3	575.6	512.6	430.5	326.0	208.2	99.5	24.1	1.7	4.1
95°	574.0	562.4	527.5	469.5	382.4	280.4	170.9	73.0	13.3	1.7	4.1
97.5°	526.7	515.9	479.4	421.4	339.2	240.5	135.2	51.4	6.6	1.7	3.3
100°	482.7	470.3	437.1	379.1	296.1	200.7	104.5	33.2	4.1	1.7	3.3
102.5°	436.3	426.3	392.3	335.9	251.3	163.4	78.0	20.7	1.7	1.7	2.5
105°	394.8	382.4	349.2	291.1	214.0	128.6	54.7	12.4	1.7	1.7	2.5



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**CANDELA DISTRIBUTION (continued):**

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°	112.5°
112.5°	257.1	247.2	218.1	169.2	108.7	50.6	14.9	2.5	2.5	2.5	2.5
115°	214.8	199.9	174.2	131.1	80.5	33.2	7.5	2.5	2.5	2.5	2.5
117.5°	171.7	159.3	141.0	99.5	53.1	21.6	4.1	2.5	2.5	2.5	2.5
120°	134.4	122.8	102.0	68.8	35.7	12.4	1.7	2.5	2.5	2.5	2.5
122.5°	96.2	87.1	68.8	44.8	21.6	5.8	2.5	2.5	3.3	3.3	2.5
125°	63.9	58.9	45.6	27.4	13.3	2.5	2.5	2.5	3.3	3.3	2.5
127.5°	41.5	37.3	26.5	15.8	5.8	2.5	2.5	3.3	3.3	3.3	2.5
130°	23.2	20.7	15.8	9.1	2.5	2.5	2.5	3.3	3.3	3.3	2.5
132.5°	13.3	12.4	8.3	1.7	2.5	2.5	2.5	3.3	3.3	3.3	3.3
135°	3.3	1.7	1.7	1.7	2.5	2.5	3.3	3.3	4.1	4.1	3.3
137.5°	0.8	0.8	1.7	1.7	2.5	2.5	3.3	4.1	4.1	4.1	3.3
140°	0.8	0.8	1.7	2.5	2.5	2.5	3.3	4.1	4.1	4.1	3.3
142.5°	0.8	1.7	1.7	2.5	2.5	3.3	3.3	4.1	4.1	3.3	3.3
145°	0.8	1.7	1.7	2.5	2.5	3.3	3.3	4.1	3.3	3.3	3.3
147.5°	1.7	1.7	1.7	2.5	2.5	3.3	3.3	4.1	4.1	3.3	3.3
150°	0.8	1.7	1.7	2.5	3.3	3.3	3.3	4.1	3.3	3.3	3.3
152.5°	0.8	1.7	1.7	2.5	3.3	3.3	3.3	4.1	3.3	3.3	3.3
155°	1.7	1.7	1.7	2.5	3.3	3.3	3.3	4.1	3.3	3.3	4.1
157.5°	1.7	1.7	1.7	2.5	3.3	3.3	3.3	4.1	3.3	3.3	4.1
160°	1.7	1.7	1.7	2.5	2.5	3.3	3.3	3.3	3.3	3.3	3.3
162.5°	1.7	1.7	1.7	2.5	2.5	3.3	3.3	3.3	3.3	3.3	3.3
165°	1.7	1.7	1.7	1.7	2.5	2.5	3.3	3.3	3.3	3.3	3.3
167.5°	1.7	1.7	1.7	2.5	2.5	2.5	3.3	3.3	3.3	3.3	3.3
170°	1.7	1.7	1.7	2.5	2.5	2.5	3.3	4.1	4.1	4.1	4.1
172.5°	1.7	1.7	1.7	2.5	2.5	3.3	3.3	4.1	4.1	4.1	4.1
175°	1.7	1.7	1.7	2.5	2.5	3.3	3.3	4.1	4.1	4.1	4.1
177.5°	0.8	1.7	1.7	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°	651.1	651.1	651.1
2.5°	619.6	608.0	604.7
5°	586.4	567.4	556.6
7.5°	553.3	527.5	515.1
10°	522.6	486.1	472.8
12.5°	486.1	443.8	423.0
15°	451.2	396.5	376.6
17.5°	412.2	350.9	327.6
20°	375.7	305.2	281.2
22.5°	334.3	260.5	233.9
25°	296.9	215.7	185.8
27.5°	255.5	170.0	144.3
30°	216.5	130.2	104.5
32.5°	179.2	95.4	72.2
35°	144.3	64.7	45.6
37.5°	111.1	39.8	23.2
40°	80.5	20.7	10.8
42.5°	53.9	10.0	5.8
45°	33.2	5.0	0.0
47.5°	19.1	0.0	0.0
50°	10.0	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	1.7	2.5
80°	1.7	3.3	4.1
82.5°	3.3	4.1	4.1
85°	3.3	4.1	5.0
87.5°	4.1	5.0	5.8
90°	5.0	5.8	5.8
92.5°	5.0	6.6	6.6
95°	5.8	6.6	7.5
97.5°	6.6	7.5	7.5
100°	5.8	7.5	8.3
102.5°	5.0	7.5	7.5
105°	4.1	5.8	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	1.7
152.5°	2.5	1.7	1.7
155°	2.5	1.7	0.8
157.5°	3.3	1.7	0.8
160°	2.5	1.7	0.8
162.5°	2.5	1.7	0.8
165°	2.5	1.7	0.0
167.5°	2.5	1.7	0.8
170°	2.5	1.7	0.8
172.5°	2.5	1.7	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°	348.4	338.4	305.2	250.5	175.0	97.9	36.5	6.6	1.7	2.5	2.5
110°	303.6	295.3	261.3	208.2	141.0	73.0	24.1	4.1	2.5	2.5	2.5







107.5°	3.3	5.0	5.8
110°	3.3	4.1	5.0



(END OF REPORT)