

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: P551255

Luminaire Tested: **FCC-X-2-LD4-2HI-35-UNV-80-84-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: P551255  
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-80-84-ED1D-90  
Description: FCC CORNER MOUNT LUMINAIRE WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES AND 3500K, AND 90 CRI LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

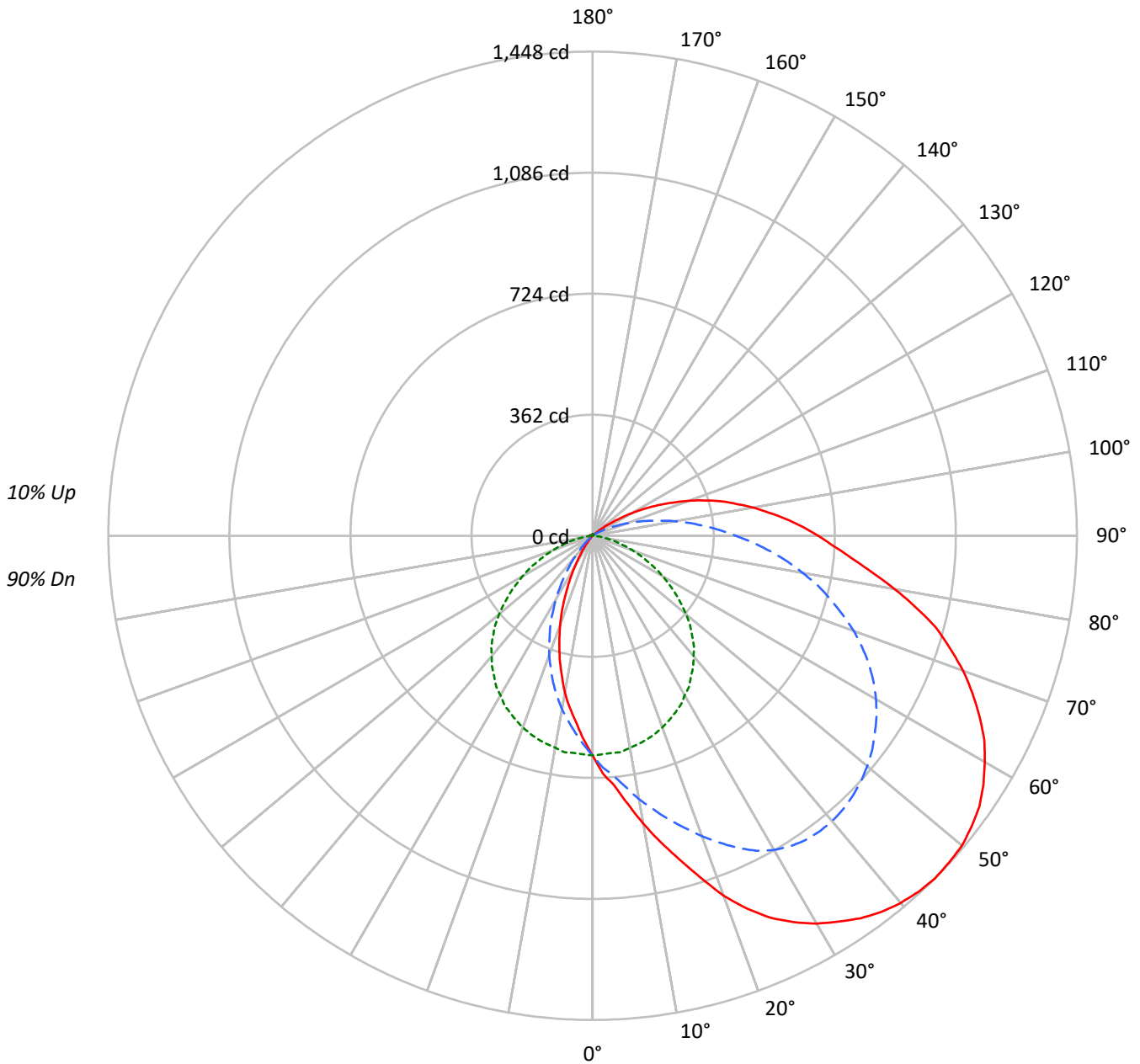
Lumens per Lamp: N/A  
Luminaire Lumens: 3246.9 lumens  
Efficiency: N/A  
Efficacy: 75.0 lumens/watt  
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59  
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')  
CIE Type: Semi-Direct

Input Watts (W): 43.3  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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-80-84-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°	7070	7070	7070
5°	7761	6967	5812
10°	8782	6881	4790
15°	9842	6793	3733
20°	11100	6682	2748
25°	12144	6554	1805
30°	12919	6382	1017
35°	13591	6197	448
40°	14186	5970	108
45°	14698	5683	0
50°	15127	5305	0
55°	15454	4823	0
60°	15617	4265	0
65°	15682	3629	0
70°	15630	2959	0
75°	15431	2184	12
80°	14806	1335	68
85°	14311	641	92



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	62.9	1.9
10°-20°	188.4	5.8
20°-30°	305.0	9.4
30°-40°	391.9	12.1
40°-50°	443.6	13.7
50°-60°	459.6	14.2
60°-70°	433.4	13.3
70°-80°	363.2	11.2
80°-90°	263.3	8.1
90°-100°	173.0	5.3
100°-110°	99.9	3.1
110°-120°	44.1	1.4
120°-130°	11.9	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°	556.3	17.1
0°-40°	948.2	29.2
0°-60°	1851.3	57.0
0°-90°	2911.2	89.7
90°-120°	317.1	9.8
90°-150°	333.5	10.3
90°-180°	336.0	10.3
0°-180°	3246.9	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	657	657	657	657	657	
5°	750	720	652	592	561	76
15°	1002	878	630	455	380	289
25°	1261	1030	584	300	187	583
35°	1396	1111	513	146	46	876
45°	1448	1100	420	34	0	1118
55°	1412	1030	303	0	0	1260
65°	1276	912	181	0	0	1262
75°	1063	736	77	1	1	1115
85°	778	533	13	3	5	664
90°	674	428	3	5	6	370
95°	579	334	2	6	8	454
105°	398	173	2	4	7	420
115°	217	57	2	2	4	217
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°	656.8	656.8	656.8	656.8	656.8	656.8	656.8	656.8	656.8	656.8	656.8
2.5°	712.0	711.2	708.7	704.5	698.6	688.6	680.2	672.7	662.6	654.3	638.4
5°	749.7	745.5	742.1	737.9	724.6	715.4	700.3	683.6	667.7	651.8	620.0
7.5°	809.9	803.2	798.2	786.5	768.1	747.2	723.7	707.8	697.0	652.6	598.2
10°	874.3	868.5	858.4	837.5	814.9	784.8	751.3	713.7	680.2	643.4	579.0
12.5°	937.9	929.5	915.3	888.5	856.8	819.1	773.1	728.7	681.1	637.5	556.4
15°	1001.5	992.3	977.2	944.6	902.8	853.4	797.4	741.3	685.2	630.0	533.0
17.5°	1070.9	1058.4	1035.8	999.0	946.3	885.2	819.1	751.3	683.6	620.8	507.9
20°	1145.4	1127.8	1103.6	1054.2	992.3	920.3	840.9	761.4	682.7	609.9	479.4
22.5°	1207.3	1189.8	1163.0	1111.9	1037.5	949.6	859.3	768.1	679.4	597.4	452.6
25°	1260.9	1246.6	1217.4	1158.8	1080.1	980.6	876.8	773.1	674.4	584.0	424.2
27.5°	1302.7	1289.3	1256.7	1196.4	1116.1	1008.2	890.2	775.6	667.7	570.6	394.9
30°	1339.5	1326.1	1286.8	1224.9	1140.4	1029.9	903.6	776.4	659.3	550.5	363.1
32.5°	1368.0	1355.4	1315.3	1249.2	1157.1	1045.0	911.1	775.6	648.4	536.3	328.8
35°	1396.4	1383.9	1337.0	1266.7	1169.7	1051.7	917.0	771.4	635.0	512.9	296.2
37.5°	1418.2	1403.9	1356.3	1278.4	1175.5	1053.4	916.2	765.6	620.8	493.6	263.6
40°	1433.2	1418.2	1367.1	1285.1	1177.2	1050.9	909.5	755.5	604.1	469.4	229.2
42.5°	1443.3	1426.5	1372.1	1295.2	1173.9	1044.2	899.4	743.0	585.7	448.5	196.6
45°	1448.3	1430.7	1373.0	1286.8	1168.0	1031.6	884.4	727.1	565.6	420.0	164.0
47.5°	1445.8	1426.5	1368.8	1277.6	1157.1	1018.2	867.6	707.8	541.3	394.9	133.0
50°	1441.6	1421.5	1359.6	1265.9	1142.1	1001.5	849.2	684.4	516.2	364.0	105.4
52.5°	1428.2	1408.1	1349.6	1249.2	1124.5	982.3	824.1	660.1	489.5	333.8	80.3
55°	1411.5	1393.1	1332.0	1234.1	1101.9	958.8	800.7	634.2	463.5	302.9	57.7
57.5°	1385.5	1368.8	1310.2	1209.8	1079.3	932.9	774.8	605.8	430.9	271.9	40.2
60°	1353.7	1337.0	1280.1	1182.2	1053.4	903.6	746.3	576.5	401.6	241.0	25.1
62.5°	1320.3	1304.4	1245.0	1147.9	1020.7	872.7	715.4	547.2	370.6	212.5	15.1
65°	1275.9	1260.9	1207.3	1106.9	984.8	839.2	681.1	512.0	338.9	180.7	8.4
67.5°	1229.1	1215.7	1161.3	1069.3	942.9	802.4	645.9	477.7	305.4	153.1	4.2
70°	1178.9	1162.1	1111.9	1018.2	900.3	760.5	607.4	442.6	273.6	126.3	0.0
72.5°	1120.3	1107.8	1059.2	970.5	850.9	716.2	568.1	404.1	238.5	100.4	0.8
75°	1063.4	1047.5	1003.2	919.5	802.4	669.3	524.6	368.1	204.1	77.0	0.8
77.5°	989.8	984.8	942.9	861.8	756.4	624.2	476.9	324.6	171.5	55.2	0.8
80°	916.2	911.1	878.5	804.0	702.8	570.6	432.6	283.6	139.7	36.8	0.8
82.5°	843.4	836.7	805.7	743.8	648.4	525.4	386.5	242.6	110.4	22.6	0.8
85°	778.1	769.7	736.3	679.4	592.4	474.4	338.9	202.5	82.0	12.6	1.7
87.5°	722.1	716.2	679.4	620.8	535.5	426.7	297.0	164.0	57.7	5.9	2.5
90°	674.4	661.8	629.2	567.3	481.9	374.0	252.7	131.4	38.5	3.3	3.3
92.5°	627.5	616.6	580.7	517.1	434.2	328.8	210.0	100.4	24.3	1.7	4.2
95°	579.0	567.3	532.1	473.6	385.7	282.8	172.4	73.6	13.4	1.7	4.2
97.5°	531.3	520.4	483.6	425.0	342.2	242.6	136.4	51.9	6.7	1.7	3.3
100°	486.9	474.4	440.9	382.4	298.7	202.5	105.4	33.5	4.2	1.7	3.3
102.5°	440.1	430.1	395.7	338.9	253.5	164.8	78.6	20.9	1.7	1.7	2.5
105°	398.3	385.7	352.2	293.7	215.9	129.7	55.2	12.6	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°	259.4	249.3	220.0	170.7	109.6	51.0	15.1	2.5	2.5	2.5	2.5
115°	216.7	201.6	175.7	132.2	81.2	33.5	7.5	2.5	2.5	2.5	2.5
117.5°	173.2	160.6	142.2	100.4	53.5	21.8	4.2	2.5	2.5	2.5	2.5
120°	135.5	123.8	102.9	69.4	36.0	12.6	1.7	2.5	2.5	2.5	2.5
122.5°	97.1	87.9	69.4	45.2	21.8	5.9	2.5	2.5	3.3	3.3	2.5
125°	64.4	59.4	46.0	27.6	13.4	2.5	2.5	2.5	3.3	3.3	2.5
127.5°	41.8	37.7	26.8	15.9	5.9	2.5	2.5	3.3	3.3	3.3	2.5
130°	23.4	20.9	15.9	9.2	2.5	2.5	2.5	3.3	3.3	3.3	2.5
132.5°	13.4	12.6	8.4	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	4.2	4.2	3.3
137.5°	0.8	0.8	1.7	1.7	2.5	2.5	3.3	4.2	4.2	4.2	3.3
140°	0.8	0.8	1.7	2.5	2.5	2.5	3.3	4.2	4.2	4.2	3.3
142.5°	0.8	1.7	1.7	2.5	2.5	3.3	3.3	4.2	4.2	3.3	3.3
145°	0.8	1.7	1.7	2.5	2.5	3.3	3.3	4.2	3.3	3.3	3.3
147.5°	1.7	1.7	1.7	2.5	2.5	3.3	3.3	4.2	4.2	3.3	3.3
150°	0.8	1.7	1.7	2.5	3.3	3.3	3.3	4.2	3.3	3.3	3.3
152.5°	0.8	1.7	1.7	2.5	3.3	3.3	3.3	4.2	3.3	3.3	3.3
155°	1.7	1.7	1.7	2.5	3.3	3.3	3.3	4.2	3.3	3.3	4.2
157.5°	1.7	1.7	1.7	2.5	3.3	3.3	3.3	4.2	3.3	3.3	4.2
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	4.2	4.2	4.2	4.2
172.5°	1.7	1.7	1.7	2.5	2.5	3.3	3.3	4.2	4.2	4.2	4.2
175°	1.7	1.7	1.7	2.5	2.5	3.3	3.3	4.2	4.2	4.2	4.2
177.5°	0.8	1.7	1.7	2.5	2.5	3.3	3.3	4.2	4.2	4.2	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°	656.8	656.8	656.8
2.5°	625.0	613.3	609.9
5°	591.5	572.3	561.4
7.5°	558.1	532.1	519.6
10°	527.1	490.3	476.9
12.5°	490.3	447.6	426.7
15°	455.2	399.9	379.9
17.5°	415.8	353.9	330.5
20°	379.0	307.9	283.6
22.5°	337.2	262.7	235.9
25°	299.5	217.5	187.4
27.5°	257.7	171.5	145.6
30°	218.4	131.4	105.4
32.5°	180.7	96.2	72.8
35°	145.6	65.3	46.0
37.5°	112.1	40.2	23.4
40°	81.2	20.9	10.9
42.5°	54.4	10.0	5.9
45°	33.5	5.0	0.0
47.5°	19.2	0.0	0.0
50°	10.0	0.0	0.0
52.5°	4.2	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	4.2
82.5°	3.3	4.2	4.2
85°	3.3	4.2	5.0
87.5°	4.2	5.0	5.9
90°	5.0	5.9	5.9
92.5°	5.0	6.7	6.7
95°	5.9	6.7	7.5
97.5°	6.7	7.5	7.5
100°	5.9	7.5	8.4
102.5°	5.0	7.5	7.5
105°	4.2	5.9	6.7





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**CANDELA DISTRIBUTION (continued):**

	135°	157.5°	180°
112.5°	3.3	4.2	4.2
115°	2.5	3.3	4.2
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°	351.4	341.4	307.9	252.7	176.5	98.7	36.8	6.7	1.7	2.5	2.5
110°	306.2	297.9	263.6	210.0	142.2	73.6	24.3	4.2	2.5	2.5	2.5







107.5°	3.3	5.0	5.9
110°	3.3	4.2	5.0



(END OF REPORT)