

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: P551313

Luminaire Tested: **FCC-X-2-LD4-2HI-35-UNV-93-94-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: P551313
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-93-94-ED1D-90
Description: FCC CORNER MOUNT LUMINAIRE WITH .156 CLEAR TEMPERED GLASS FIXTURE
SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES AND 3500K,
AND 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

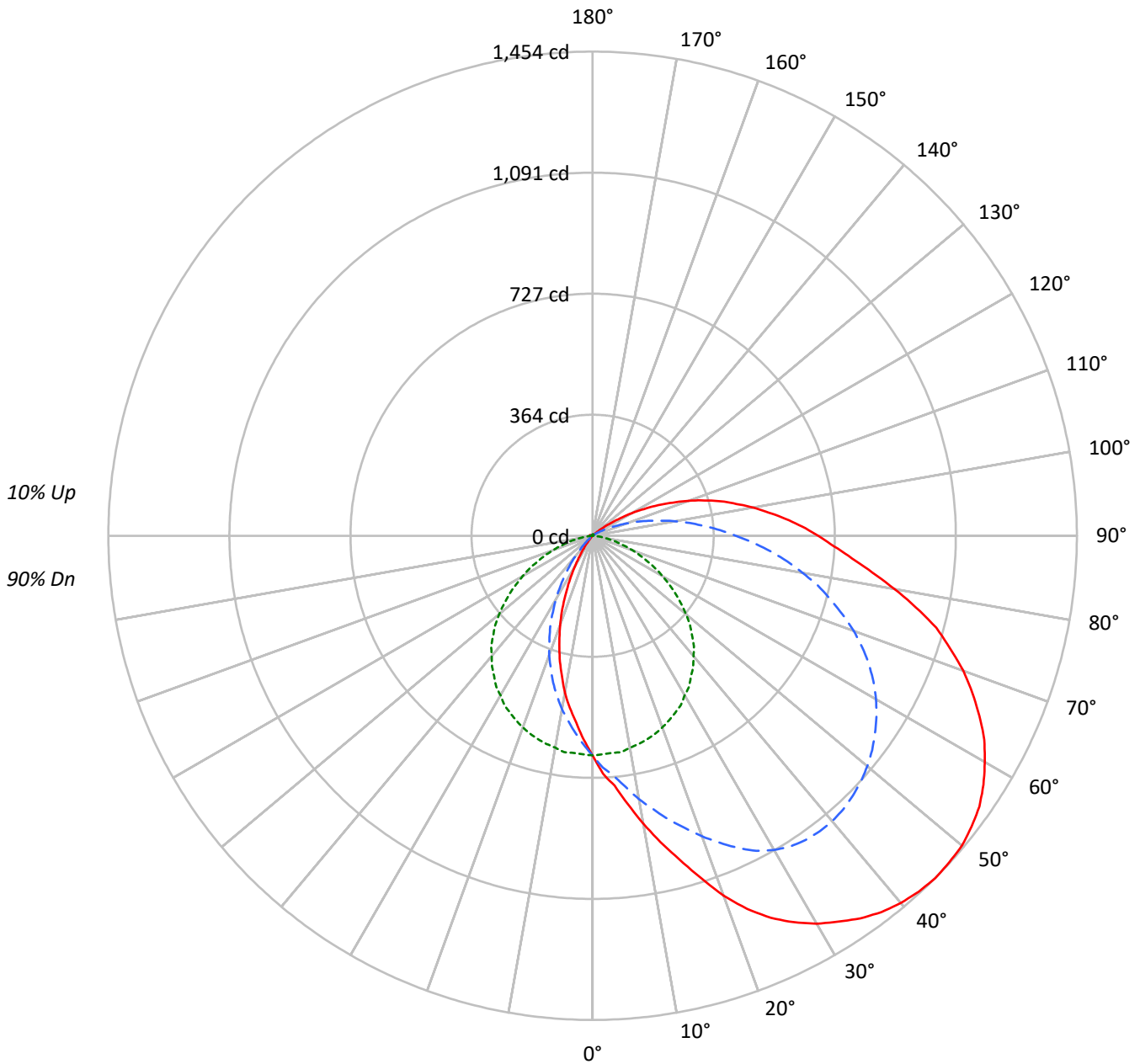
Lumens per Lamp: N/A
Luminaire Lumens: 3261.0 lumens
Efficiency: N/A
Efficacy: 75.3 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

Input Watts (W): 43.3
Input Voltage (V): NR
Input Current (A_{in}): 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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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°	7100	7100	7100
5°	7794	6996	5837
10°	8820	6911	4811
15°	9884	6822	3749
20°	11148	6712	2761
25°	12196	6582	1813
30°	12975	6409	1021
35°	13649	6224	450
40°	14248	5995	108
45°	14761	5707	0
50°	15192	5327	0
55°	15520	4844	0
60°	15685	4283	0
65°	15749	3646	0
70°	15698	2973	0
75°	15498	2192	12
80°	14870	1342	68
85°	14373	641	92



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.2	1.9
10°-20°	189.2	5.8
20°-30°	306.4	9.4
30°-40°	393.5	12.1
40°-50°	445.5	13.7
50°-60°	461.5	14.2
60°-70°	435.3	13.3
70°-80°	364.8	11.2
80°-90°	264.4	8.1
90°-100°	173.8	5.3
100°-110°	100.4	3.1
110°-120°	44.3	1.4
120°-130°	12.0	0.4
130°-140°	2.8	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°	558.7	17.1
0°-40°	952.3	29.2
0°-60°	1859.3	57.0
0°-90°	2923.8	89.7
90°-120°	318.4	9.8
90°-150°	335.0	10.3
90°-180°	337.0	10.3
0°-180°	3261.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	660	660	660	660	660	
5°	753	723	655	594	564	76
15°	1006	882	633	457	382	290
25°	1266	1035	586	301	188	585
35°	1402	1115	515	146	46	880
45°	1454	1105	422	34	0	1123
55°	1418	1035	304	0	0	1266
65°	1281	916	182	0	0	1268
75°	1068	739	77	1	1	1120
85°	782	536	13	3	5	667
90°	677	430	3	5	6	371
95°	582	336	2	6	8	456
105°	400	174	2	4	7	422
115°	218	58	2	2	4	218
125°	65	8	3	2	3	65
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°	659.6	659.6	659.6	659.6	659.6	659.6	659.6	659.6	659.6	659.6	659.6
2.5°	715.1	714.2	711.7	707.5	701.6	691.6	683.1	675.6	665.5	657.1	641.1
5°	752.9	748.7	745.3	741.1	727.7	718.4	703.3	686.5	670.5	654.6	622.6
7.5°	813.4	806.7	801.6	789.9	771.4	750.4	726.8	710.9	700.0	655.4	600.8
10°	878.1	872.2	862.1	841.1	818.4	788.2	754.6	716.8	683.1	646.2	581.5
12.5°	942.0	933.6	919.3	892.4	860.4	822.6	776.4	731.9	684.0	640.3	558.8
15°	1005.8	996.6	981.5	948.7	906.7	857.1	800.8	744.5	688.2	632.7	535.3
17.5°	1075.6	1063.0	1040.3	1003.3	950.4	889.0	822.6	754.6	686.5	623.5	510.1
20°	1150.3	1132.7	1108.3	1058.8	996.6	924.3	844.5	764.7	685.7	612.6	481.5
22.5°	1212.5	1194.9	1168.0	1116.7	1042.0	953.7	863.0	771.4	682.3	600.0	454.6
25°	1266.3	1252.0	1222.6	1163.8	1084.8	984.8	880.6	776.4	677.3	586.5	426.0
27.5°	1308.3	1294.9	1262.1	1201.6	1120.9	1012.5	894.1	778.9	670.5	573.1	396.6
30°	1345.3	1331.8	1292.4	1230.2	1145.3	1034.4	907.5	779.8	662.1	552.9	364.7
32.5°	1373.9	1361.3	1320.9	1254.5	1162.1	1049.5	915.1	778.9	651.2	538.6	330.2
35°	1402.4	1389.8	1342.8	1272.2	1174.7	1056.2	920.9	774.7	637.8	515.1	297.5
37.5°	1424.3	1410.0	1362.1	1284.0	1180.6	1057.9	920.1	768.9	623.5	495.8	264.7
40°	1439.4	1424.3	1373.0	1290.7	1182.3	1055.4	913.4	758.8	606.7	471.4	230.2
42.5°	1449.5	1432.7	1378.1	1300.8	1178.9	1048.7	903.3	746.2	588.2	450.4	197.5
45°	1454.5	1436.9	1378.9	1292.4	1173.0	1036.1	888.2	730.2	568.0	421.8	164.7
47.5°	1452.0	1432.7	1374.7	1283.1	1162.1	1022.6	871.4	710.9	543.7	396.6	133.6
50°	1447.8	1427.6	1365.5	1271.3	1147.0	1005.8	852.9	687.4	518.5	365.5	105.9
52.5°	1434.4	1414.2	1355.4	1254.5	1129.3	986.5	827.7	663.0	491.6	335.3	80.7
55°	1417.6	1399.1	1337.7	1239.4	1106.7	963.0	804.2	636.9	465.5	304.2	58.0
57.5°	1391.5	1374.7	1315.9	1215.0	1084.0	936.9	778.1	608.4	432.7	273.1	40.3
60°	1359.6	1342.8	1285.6	1187.3	1057.9	907.5	749.5	579.0	403.3	242.0	25.2
62.5°	1326.0	1310.0	1250.3	1152.9	1025.1	876.4	718.4	549.5	372.2	213.4	15.1
65°	1281.4	1266.3	1212.5	1111.7	989.0	842.8	684.0	514.3	340.3	181.5	8.4
67.5°	1234.4	1220.9	1166.3	1073.9	947.0	805.8	648.7	479.8	306.7	153.8	4.2
70°	1184.0	1167.2	1116.7	1022.6	904.1	763.8	610.0	444.5	274.8	126.9	0.0
72.5°	1125.1	1112.5	1063.8	974.7	854.6	719.3	570.6	405.9	239.5	100.8	0.8
75°	1068.0	1052.0	1007.5	923.5	805.8	672.2	526.9	369.7	205.0	77.3	0.8
77.5°	994.1	989.0	947.0	865.5	759.6	626.9	479.0	326.0	172.3	55.5	0.8
80°	920.1	915.1	882.3	807.5	705.8	573.1	434.4	284.9	140.3	37.0	0.8
82.5°	847.0	840.3	809.2	747.0	651.2	527.7	388.2	243.7	110.9	22.7	0.8
85°	781.5	773.1	739.4	682.3	594.9	476.4	340.3	203.3	82.3	12.6	1.7
87.5°	725.2	719.3	682.3	623.5	537.8	428.5	298.3	164.7	58.0	5.9	2.5
90°	677.3	664.7	631.9	569.7	484.0	375.6	253.8	131.9	38.7	3.4	3.4
92.5°	630.2	619.3	583.2	519.3	436.1	330.2	210.9	100.8	24.4	1.7	4.2
95°	581.5	569.7	534.4	475.6	387.4	284.0	173.1	73.9	13.4	1.7	4.2
97.5°	533.6	522.7	485.7	426.9	343.7	243.7	137.0	52.1	6.7	1.7	3.4
100°	489.0	476.4	442.8	384.0	300.0	203.3	105.9	33.6	4.2	1.7	3.4
102.5°	442.0	431.9	397.5	340.3	254.6	165.5	79.0	21.0	1.7	1.7	2.5
105°	400.0	387.4	353.8	294.9	216.8	130.2	55.5	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°	260.5	250.4	221.0	171.4	110.1	51.3	15.1	2.5	2.5	2.5	2.5
115°	217.6	202.5	176.5	132.8	81.5	33.6	7.6	2.5	2.5	2.5	2.5
117.5°	173.9	161.3	142.8	100.8	53.8	21.8	4.2	2.5	2.5	2.5	2.5
120°	136.1	124.4	103.4	69.7	36.1	12.6	1.7	2.5	2.5	2.5	2.5
122.5°	97.5	88.2	69.7	45.4	21.8	5.9	2.5	2.5	3.4	3.4	2.5
125°	64.7	59.7	46.2	27.7	13.4	2.5	2.5	2.5	3.4	3.4	2.5
127.5°	42.0	37.8	26.9	16.0	5.9	2.5	2.5	3.4	3.4	3.4	2.5
130°	23.5	21.0	16.0	9.2	2.5	2.5	2.5	3.4	3.4	3.4	2.5
132.5°	13.4	12.6	8.4	1.7	2.5	2.5	2.5	3.4	3.4	3.4	3.4
135°	3.4	1.7	1.7	1.7	2.5	2.5	3.4	3.4	4.2	4.2	3.4
137.5°	0.8	0.8	1.7	1.7	2.5	2.5	3.4	4.2	4.2	4.2	3.4
140°	0.8	0.8	1.7	2.5	2.5	2.5	3.4	4.2	4.2	4.2	3.4
142.5°	0.8	1.7	1.7	2.5	2.5	3.4	3.4	4.2	4.2	3.4	3.4
145°	0.8	1.7	1.7	2.5	2.5	3.4	3.4	4.2	3.4	3.4	3.4
147.5°	1.7	1.7	1.7	2.5	2.5	3.4	3.4	4.2	4.2	3.4	3.4
150°	0.8	1.7	1.7	2.5	3.4	3.4	3.4	4.2	3.4	3.4	3.4
152.5°	0.8	1.7	1.7	2.5	3.4	3.4	3.4	4.2	3.4	3.4	3.4
155°	1.7	1.7	1.7	2.5	3.4	3.4	3.4	4.2	3.4	3.4	4.2
157.5°	1.7	1.7	1.7	2.5	3.4	3.4	3.4	4.2	3.4	3.4	4.2
160°	1.7	1.7	1.7	2.5	2.5	3.4	3.4	3.4	3.4	3.4	3.4
162.5°	1.7	1.7	1.7	2.5	2.5	3.4	3.4	3.4	3.4	3.4	3.4
165°	1.7	1.7	1.7	1.7	2.5	2.5	3.4	3.4	3.4	3.4	3.4
167.5°	1.7	1.7	1.7	2.5	2.5	2.5	3.4	3.4	3.4	3.4	3.4
170°	1.7	1.7	1.7	2.5	2.5	2.5	3.4	4.2	4.2	4.2	4.2
172.5°	1.7	1.7	1.7	2.5	2.5	3.4	3.4	4.2	4.2	4.2	4.2
175°	1.7	1.7	1.7	2.5	2.5	3.4	3.4	4.2	4.2	4.2	4.2
177.5°	0.8	1.7	1.7	2.5	2.5	3.4	3.4	4.2	4.2	4.2	3.4
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°	659.6	659.6	659.6
2.5°	627.7	615.9	612.6
5°	594.1	574.8	563.8
7.5°	560.5	534.4	521.8
10°	529.4	492.4	479.0
12.5°	492.4	449.6	428.5
15°	457.1	401.7	381.5
17.5°	417.6	355.4	331.9
20°	380.6	309.2	284.9
22.5°	338.6	263.8	237.0
25°	300.8	218.5	188.2
27.5°	258.8	172.3	146.2
30°	219.3	131.9	105.9
32.5°	181.5	96.6	73.1
35°	146.2	65.5	46.2
37.5°	112.6	40.3	23.5
40°	81.5	21.0	10.9
42.5°	54.6	10.1	5.9
45°	33.6	5.0	0.0
47.5°	19.3	0.0	0.0
50°	10.1	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	3.4	4.2
82.5°	3.4	4.2	4.2
85°	3.4	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	7.6
97.5°	6.7	7.6	7.6
100°	5.9	7.6	8.4
102.5°	5.0	7.6	7.6
105°	4.2	5.9	6.7



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
112.5°	3.4	4.2	4.2
115°	2.5	3.4	4.2
117.5°	2.5	3.4	3.4
120°	2.5	2.5	3.4
122.5°	2.5	2.5	3.4
125°	2.5	2.5	3.4
127.5°	3.4	2.5	2.5
130°	2.5	2.5	2.5
132.5°	3.4	2.5	2.5
135°	3.4	2.5	2.5
137.5°	3.4	2.5	2.5
140°	3.4	2.5	2.5
142.5°	3.4	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°	3.4	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°	352.9	342.8	309.2	253.8	177.3	99.2	37.0	6.7	1.7	2.5	2.5
110°	307.5	299.1	264.7	210.9	142.8	73.9	24.4	4.2	2.5	2.5	2.5





107.5°	3.4	5.0	5.9
110°	3.4	4.2	5.0



(END OF REPORT)