

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: P551379

Luminaire Tested: **FCC-X-2-LD4-2HI-40-UNV-93-96-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: P551379
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-40-UNV-93-96-ED1D-90
Description: FCC CORNER MOUNT LUMINAIRE WITH .156 CLEAR TEMPERED GLASS FIXTURE
SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES AND 4000K,
AND 90 CRI LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

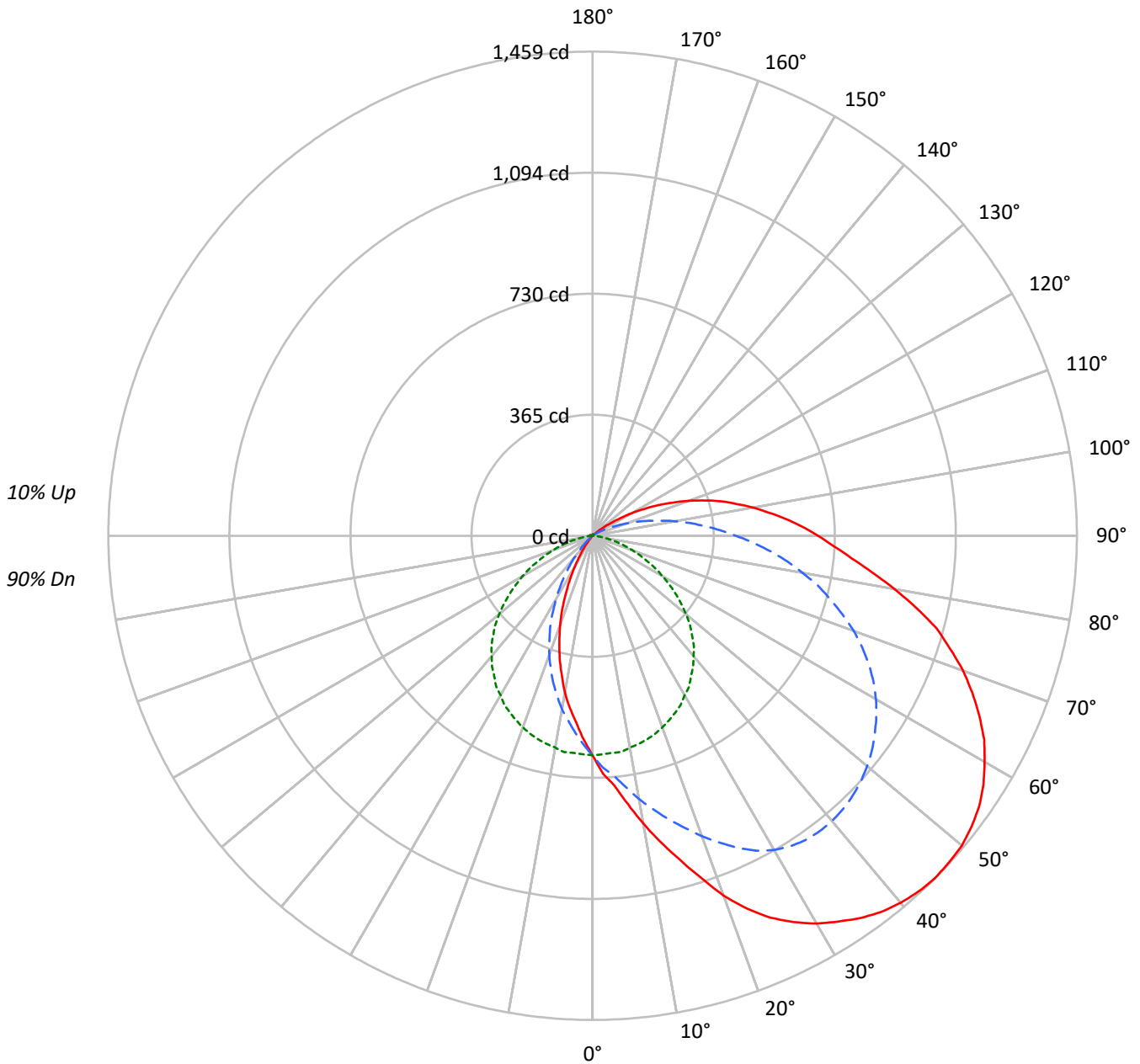
Lumens per Lamp: N/A
Luminaire Lumens: 3271.0 lumens
Efficiency: N/A
Efficacy: 75.5 lumens/watt
Spacing Criteria (0/90/45): 1.66 / 1.25 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 0.5' x H: 0.25')
CIE Type: Semi-Direct

Input Watts (W): 43.3
Input Voltage (V): NR
Input Current (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

TEST NUMBER: P551379

CATALOG NUMBER: FCC-X-2-LD4-2HI-40-UNV-93-96-ED1D-90

Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	7121	7121	7121
5°	7818	7018	5855
10°	8847	6932	4825
15°	9915	6844	3761
20°	11183	6732	2769
25°	12233	6602	1818
30°	13015	6429	1024
35°	13691	6243	452
40°	14291	6013	109
45°	14806	5725	0
50°	15238	5343	0
55°	15567	4858	0
60°	15733	4295	0
65°	15799	3658	0
70°	15745	2982	0
75°	15546	2198	12
80°	14915	1346	68
85°	14417	641	94



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.4	1.9
10°-20°	189.8	5.8
20°-30°	307.3	9.4
30°-40°	394.8	12.1
40°-50°	446.9	13.7
50°-60°	462.9	14.2
60°-70°	436.6	13.3
70°-80°	365.9	11.2
80°-90°	265.2	8.1
90°-100°	174.3	5.3
100°-110°	100.7	3.1
110°-120°	44.4	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°	560.4	17.1
0°-40°	955.2	29.2
0°-60°	1865.0	57.0
0°-90°	2932.7	89.7
90°-120°	319.4	9.8
90°-150°	336.0	10.3
90°-180°	338.0	10.3
0°-180°	3271.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	662	662	662	662	662	
5°	755	725	657	596	566	76
15°	1009	885	635	458	383	291
25°	1270	1038	588	302	189	587
35°	1407	1119	517	147	46	882
45°	1459	1108	423	34	0	1126
55°	1422	1038	305	0	0	1270
65°	1285	919	182	0	0	1272
75°	1071	741	78	1	1	1124
85°	784	537	13	3	5	669
90°	679	431	3	5	6	372
95°	583	337	2	6	8	458
105°	401	174	2	4	7	423
115°	218	58	2	2	4	219
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°	661.6	661.6	661.6	661.6	661.6	661.6	661.6	661.6	661.6	661.6	661.6
2.5°	717.3	716.4	713.9	709.7	703.8	693.7	685.2	677.7	667.5	659.1	643.1
5°	755.2	751.0	747.6	743.4	729.9	720.6	705.5	688.6	672.6	656.6	624.6
7.5°	815.9	809.1	804.1	792.3	773.7	752.7	729.1	713.1	702.1	657.4	602.6
10°	880.8	874.9	864.8	843.7	820.9	790.6	756.9	719.0	685.2	648.2	583.3
12.5°	944.8	936.4	922.1	895.1	863.1	825.2	778.8	734.1	686.1	642.3	560.5
15°	1008.9	999.6	984.5	951.6	909.4	859.7	803.2	746.8	690.3	634.7	536.9
17.5°	1078.9	1066.2	1043.5	1006.4	953.3	891.7	825.2	756.9	688.6	625.4	511.6
20°	1153.9	1136.2	1111.7	1062.0	999.6	927.1	847.1	767.0	687.8	614.4	483.0
22.5°	1216.2	1198.5	1171.6	1120.2	1045.1	956.6	865.6	773.7	684.4	601.8	456.0
25°	1270.2	1255.9	1226.4	1167.4	1088.1	987.8	883.3	778.8	679.3	588.3	427.3
27.5°	1312.3	1298.8	1266.0	1205.3	1124.4	1015.6	896.8	781.3	672.6	574.8	397.8
30°	1349.4	1335.9	1296.3	1233.9	1148.8	1037.6	910.3	782.2	664.2	554.6	365.8
32.5°	1378.1	1365.4	1325.0	1258.4	1165.7	1052.7	917.9	781.3	653.2	540.3	331.2
35°	1406.7	1394.1	1346.9	1276.1	1178.3	1059.5	923.8	777.1	639.7	516.7	298.4
37.5°	1428.6	1414.3	1366.3	1287.9	1184.2	1061.2	922.9	771.2	625.4	497.3	265.5
40°	1443.8	1428.6	1377.2	1294.6	1185.9	1058.6	916.2	761.1	608.5	472.8	230.9
42.5°	1453.9	1437.1	1382.3	1304.7	1182.5	1051.9	906.1	748.5	590.0	451.8	198.1
45°	1459.0	1441.3	1383.1	1296.3	1176.6	1039.2	890.9	732.4	569.8	423.1	165.2
47.5°	1456.5	1437.1	1378.9	1287.0	1165.7	1025.8	874.0	713.1	545.3	397.8	134.0
50°	1452.2	1432.0	1369.6	1275.2	1150.5	1008.9	855.5	689.5	520.0	366.6	106.2
52.5°	1438.8	1418.5	1359.5	1258.4	1132.8	989.5	830.2	665.0	493.1	336.3	80.9
55°	1421.9	1403.4	1341.8	1243.2	1110.0	965.9	806.6	638.9	466.9	305.1	58.2
57.5°	1395.8	1378.9	1319.9	1218.8	1087.3	939.8	780.5	610.2	434.1	273.9	40.5
60°	1363.7	1346.9	1289.6	1191.0	1061.2	910.3	751.8	580.7	404.6	242.7	25.3
62.5°	1330.0	1314.0	1254.2	1156.4	1028.3	879.1	720.6	551.2	373.4	214.1	15.2
65°	1285.4	1270.2	1216.2	1115.1	992.0	845.4	686.1	515.8	341.4	182.1	8.4
67.5°	1238.2	1224.7	1169.9	1077.2	949.9	808.3	650.7	481.3	307.6	154.2	4.2
70°	1187.6	1170.7	1120.2	1025.8	906.9	766.2	611.9	445.9	275.6	127.3	0.0
72.5°	1128.6	1115.9	1067.1	977.7	857.2	721.5	572.3	407.1	240.2	101.1	0.8
75°	1071.3	1055.3	1010.6	926.3	808.3	674.3	528.5	370.9	205.7	77.5	0.8
77.5°	997.1	992.0	949.9	868.1	761.9	628.8	480.4	327.0	172.8	55.6	0.8
80°	922.9	917.9	885.0	810.0	708.0	574.8	435.8	285.7	140.8	37.1	0.8
82.5°	849.6	842.9	811.7	749.3	653.2	529.3	389.4	244.4	111.3	22.8	0.8
85°	783.9	775.4	741.7	684.4	596.7	477.9	341.4	204.0	82.6	12.6	1.7
87.5°	727.4	721.5	684.4	625.4	539.4	429.9	299.2	165.2	58.2	5.9	2.5
90°	679.3	666.7	633.8	571.5	485.5	376.8	254.5	132.3	38.8	3.4	3.4
92.5°	632.1	621.2	584.9	520.9	437.4	331.2	211.6	101.1	24.4	1.7	4.2
95°	583.3	571.5	536.1	477.1	388.6	284.9	173.6	74.2	13.5	1.7	4.2
97.5°	535.2	524.3	487.2	428.2	344.7	244.4	137.4	52.3	6.7	1.7	3.4
100°	490.5	477.9	444.2	385.2	300.9	204.0	106.2	33.7	4.2	1.7	3.4
102.5°	443.3	433.2	398.7	341.4	255.4	166.0	79.2	21.1	1.7	1.7	2.5
105°	401.2	388.6	354.8	295.8	217.5	130.6	55.6	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°	261.3	251.2	221.7	171.9	110.4	51.4	15.2	2.5	2.5	2.5	2.5
115°	218.3	203.1	177.0	133.2	81.8	33.7	7.6	2.5	2.5	2.5	2.5
117.5°	174.5	161.8	143.3	101.1	53.9	21.9	4.2	2.5	2.5	2.5	2.5
120°	136.5	124.7	103.7	70.0	36.2	12.6	1.7	2.5	2.5	2.5	2.5
122.5°	97.8	88.5	70.0	45.5	21.9	5.9	2.5	2.5	3.4	3.4	2.5
125°	64.9	59.8	46.4	27.8	13.5	2.5	2.5	2.5	3.4	3.4	2.5
127.5°	42.1	37.9	27.0	16.0	5.9	2.5	2.5	3.4	3.4	3.4	2.5
130°	23.6	21.1	16.0	9.3	2.5	2.5	2.5	3.4	3.4	3.4	2.5
132.5°	13.5	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°	661.6	661.6	661.6
2.5°	629.6	617.8	614.4
5°	595.9	576.5	565.6
7.5°	562.2	536.1	523.4
10°	531.0	493.9	480.4
12.5°	493.9	450.9	429.9
15°	458.5	402.9	382.7
17.5°	418.9	356.5	332.9
20°	381.8	310.2	285.7
22.5°	339.7	264.7	237.7
25°	301.7	219.1	188.8
27.5°	259.6	172.8	146.7
30°	220.0	132.3	106.2
32.5°	182.1	96.9	73.3
35°	146.7	65.7	46.4
37.5°	112.9	40.5	23.6
40°	81.8	21.1	11.0
42.5°	54.8	10.1	5.9
45°	33.7	5.1	0.0
47.5°	19.4	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	5.1
87.5°	4.2	5.1	5.9
90°	5.1	5.9	5.9
92.5°	5.1	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°	5.1	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°	354.0	343.9	310.2	254.5	177.8	99.5	37.1	6.7	1.7	2.5	2.5
110°	308.5	300.1	265.5	211.6	143.3	74.2	24.4	4.2	2.5	2.5	2.5





107.5°	3.4	5.1	5.9
110°	3.4	4.2	5.1



(END OF REPORT)