

FCC - TEST REPORT

Report Number : **60.790.16.109.01B** Date of Issue : December 9, 2016

Model : **Z31915-US-RX**

Product Type : **Radio Control Weather Station**

Applicant : Lidl US Trading, LLC

Address : 3500 S. Clark Street, Arlington, Virginia, United States

Production Facility : FUZGOU EMAX ELECTRONIC CO., LTD

Address : BULIDING 12-16, CANGSHAN INDUSTARIAL AREA,
JUYUANZHOU JINSHAN DISTRICT FYZHOU CHINA

Test Result : ☒ **Positive** ☐ **Negative**

Total pages including Appendices : 22

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2 Description of Equipment Under Test

Description of the Equipment Under Test

Product: Radio Control Weather Station

Model no.: Z31915-US-RX

FCC ID: 2AJ9O-Z31915R

Rating: 4.5VDC (3 x 1.5VDC size "AA" batteries)

Frequency: 433.92MHz

3 Summary of Test Standards

Test Standards
FCC Part 15 Subpart B 10-1-15 Edition Federal Communications Commission, PART 15 — Radio Frequency Devices, Subpart B — Unintentional Radiators

4 Details about the Test Laboratory

Site 1

Company name: TÜV SÜD Hong Kong Ltd.
3/F, West Wing, Lakeside 2,
10 Science Park West Avenue,
Science Park, Shatin, Hong Kong

Site 2

Company name: TÜV SÜD Certification and Testing (China) Co., Ltd. Shenzhen Branch
Building 12&13 Zhiheng Wisdomland Business Park,
Nantou Checkpoint Road 2,
Shenzhen 518052, P.R.China
FCC Registration Number: 502708

Emission Tests	
Test Item	Test Site
FCC Part 15 Subpart B	
FCC Title 47 Part 15.109 Radiated Emission 30MHz-1000MHz	Site 2
FCC Title 47 Part 15.107 Conduct Emission 150kHz-30MHz	N/A

4.1 Test Equipment Site List

Radiated emission Test – Site 2

DESCRIPTION	MANUFACTURER	MODEL NO.	SERIAL NO.	CAL. DUE DATE
EMI Test Receiver	Rohde & Schwarz	ESR 26	101269	15-July-17
Trilog Super Broadband Test Antenna	Schwarzbeck	VULB 9163	707	15-July-17
Horn Antenna	Rohde & Schwarz	HF907	102294	15-July-17
Pre-amplifier	Rohde & Schwarz	SCU 18	102230	15-July-17
3m Semi-anechoic chamber	TDK	9X6X6	----	29-May-19

4.2 Measurement System Uncertainty

Measurement System Uncertainty Emissions

System Measurement Uncertainty	
Items	Extended Uncertainty
Uncertainty for Radiated Emission in 3m chamber 30MHz-1000MHz	Horizontal: 4.83dB; Vertical: 4.91dB;
Uncertainty for Radiated Emission in 3m chamber 1000MHz-25000MHz	Horizontal: 4.89dB; Vertical: 4.88dB;

5 Summary of Test Results

Emission Tests				
FCC Part 15 Subpart B				
Test Condition	Pages	Test Result		
		Pass	Fail	N/A
FCC Title 47 Part 15.109 Radiated Emission 30MHz-1000MHz	10-15	☒	☐	☐
FCC Title 47 Part 15.107 Conduct Emission 150kHz-30MHz	N/A	☐	☐	☒

6 General Remarks

Remarks

NIL

SUMMARY:

- All tests according to the regulations cited on page 5 were

■ - Performed

□ - **Not** Performed

- The Equipment Under Test

■ - **Fulfills** the general approval requirements.

□ - **Does not** fulfill the general approval requirements.

Sample Received Date: November 3, 2016

Testing Start Date: November 4, 2016

Testing End Date: November 30, 2016

- TÜV SÜD HONG KONG LTD. -

Reviewed by:



TSENG Chi Kit
EMC Project Engineer



Prepared by:



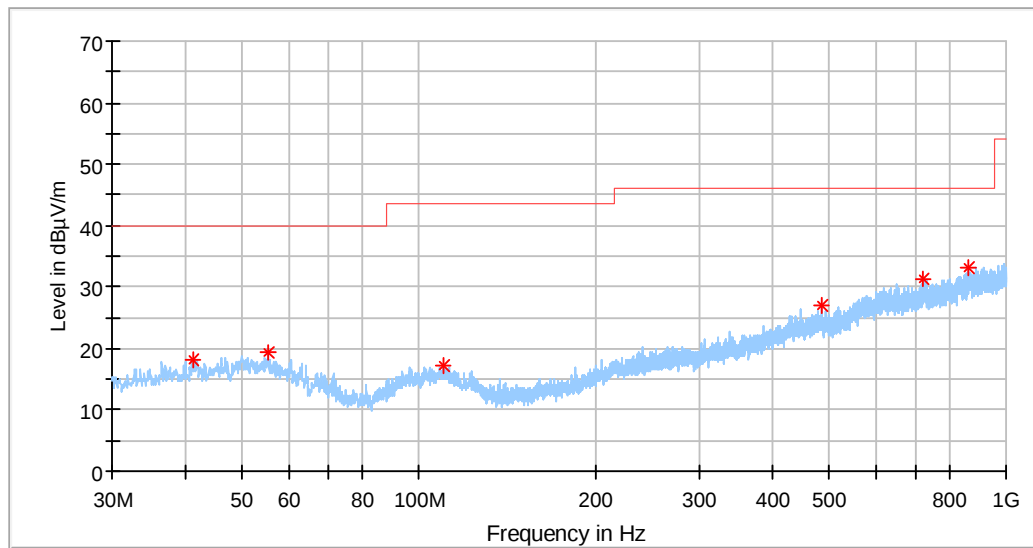
CHAN Kwong Ngai
EMC Test Engineer

7 Emission Test Results

7.1 Radiated Emission

EUT: Z31915-US-RX
 Op Condition: Receive Mode
 Test Specification: Antenna: Horizontal
 Comment: 4.5VDC

Test Result	
☒	Passed
☐	Not Passed

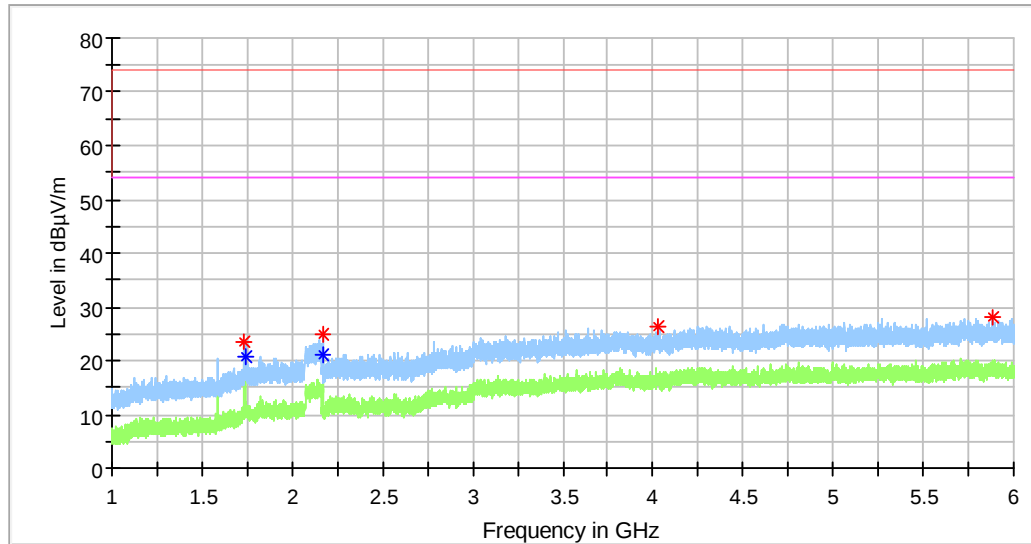


Frequency MHz	QP dBμV/m	Limit dBμV/m	Margin dB
41.094	18.13	40.00	-21.87
55.341	19.20	40.00	-20.80
109.721	17.19	43.50	-26.31
486.081	26.90	46.00	-19.10
722.337	31.34	46.00	-14.66
865.351	33.22	46.00	-12.78

Radiated Emission

EUT: Z31915-US-RX
 Op Condition: Receive Mode
 Test Specification: Antenna: Horizontal
 Comment: 4.5VDC

Test Result
☒ Passed
☐ Not Passed

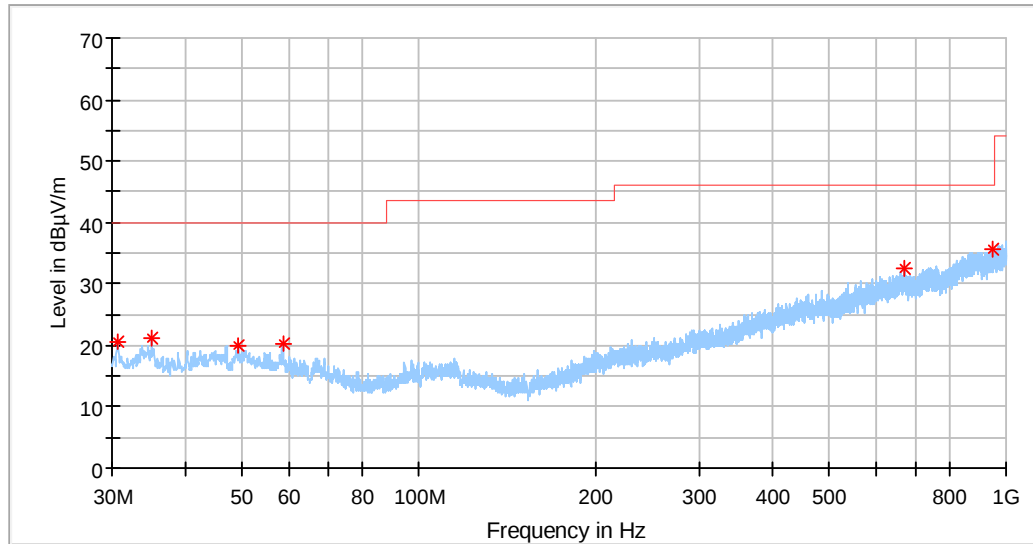


Frequency MHz	Peak dBμV/m	Average dBμV/m	Limit dBμV/m	Margin dB
1735.833	23.44	---	74.00	-50.56
1736.041	---	20.73	54.00	-33.27
2169.791	25.07	---	74.00	-48.93
2170.208	---	20.99	54.00	-33.01
4031.250	26.40	---	74.00	-47.60
5887.916	28.04	---	74.00	-45.96

Radiated Emission

EUT: Z31915-US-RX
 Op Condition: Receive Mode
 Test Specification: Antenna: Vertical
 Comment: 4.5VDC

Test Result
☒ Passed
☐ Not Passed

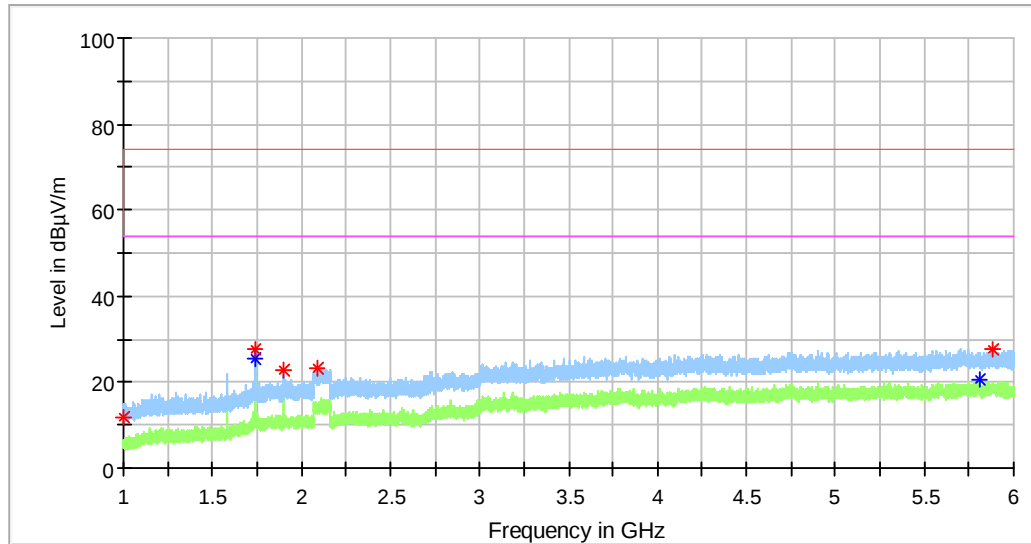


Frequency MHz	QP dBµV/m	Limit dBµV/m	Margin dB
30.666	20.53	40.00	-19.47
35.031	21.31	40.00	-18.69
49.278	19.86	40.00	-20.14
58.615	20.32	40.00	-19.68
671.412	32.47	46.00	-13.53
948.953	35.63	46.00	-10.37

Radiated Emission

EUT: Z31915-US-RX
 Op Condition: Receive Mode
 Test Specification: Antenna: Vertical
 Comment: 4.5VDC

Test Result
☒ Passed
☐ Not Passed

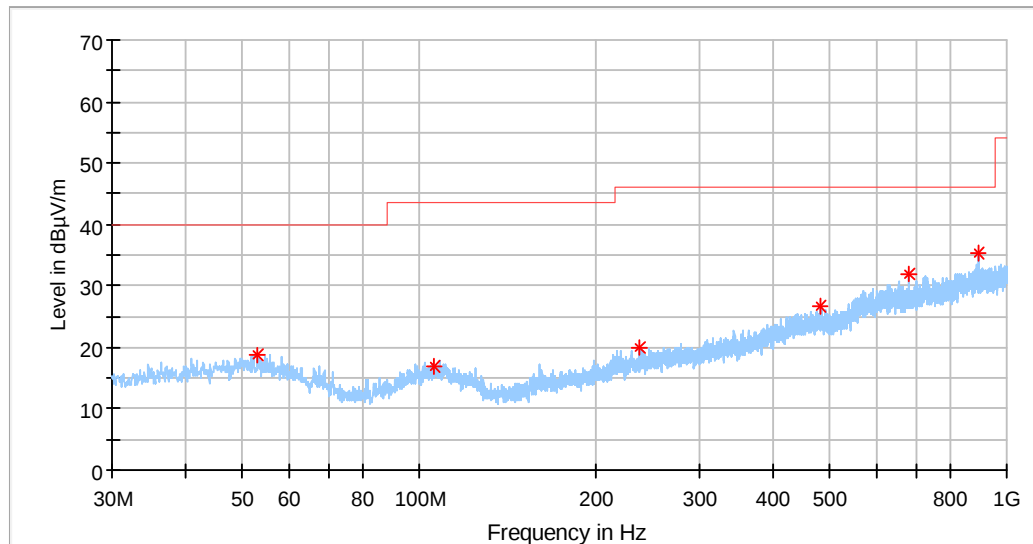


Frequency MHz	Peak dBμV/m	Average dBμV/m	Limit dBμV/m	Margin dB
1000.000	11.68	---	54.00	-42.32
1736.041	---	25.56	54.00	-28.44
1736.250	27.77	---	74.00	-46.23
1901.250	23.02	---	74.00	-50.98
2093.958	23.43	---	74.00	-50.57
5812.500	---	20.52	54.00	-33.48
5888.125	27.80	---	74.00	-46.20

Radiated Emission

EUT: Z31915-US-RX
 Op Condition: Clock Mode
 Test Specification: Antenna: Horizontal
 Comment: 4.5VDC

Test Result
☒ Passed
☐ Not Passed

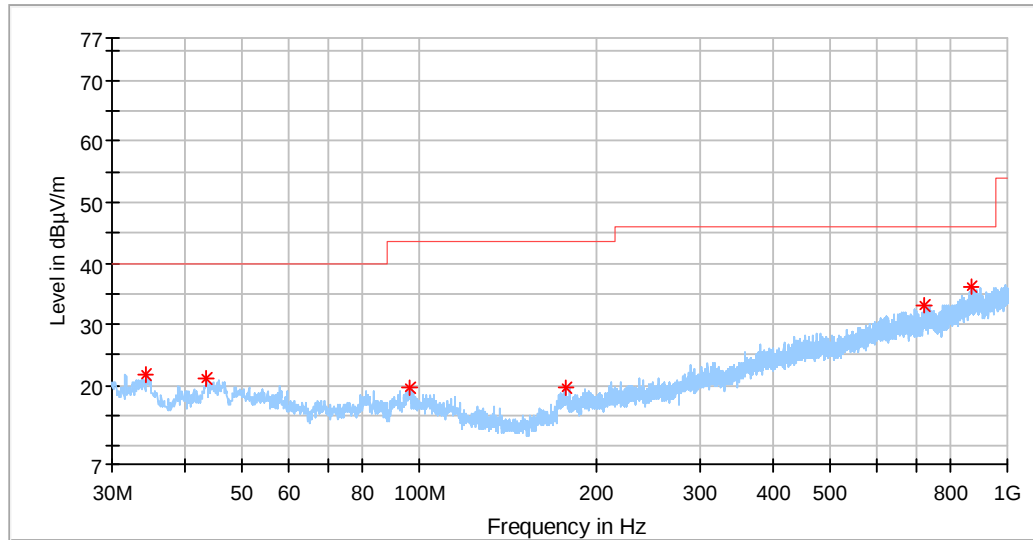


Frequency MHz	QP dBμV/m	Limit dBμV/m	Margin dB
52.916	18.83	40.00	-21.17
106.326	16.93	43.50	-26.57
236.913	19.82	46.00	-26.18
480.868	26.79	46.00	-19.21
681.536	31.87	46.00	-14.13
896.876	35.32	46.00	-10.68

Radiated Emission

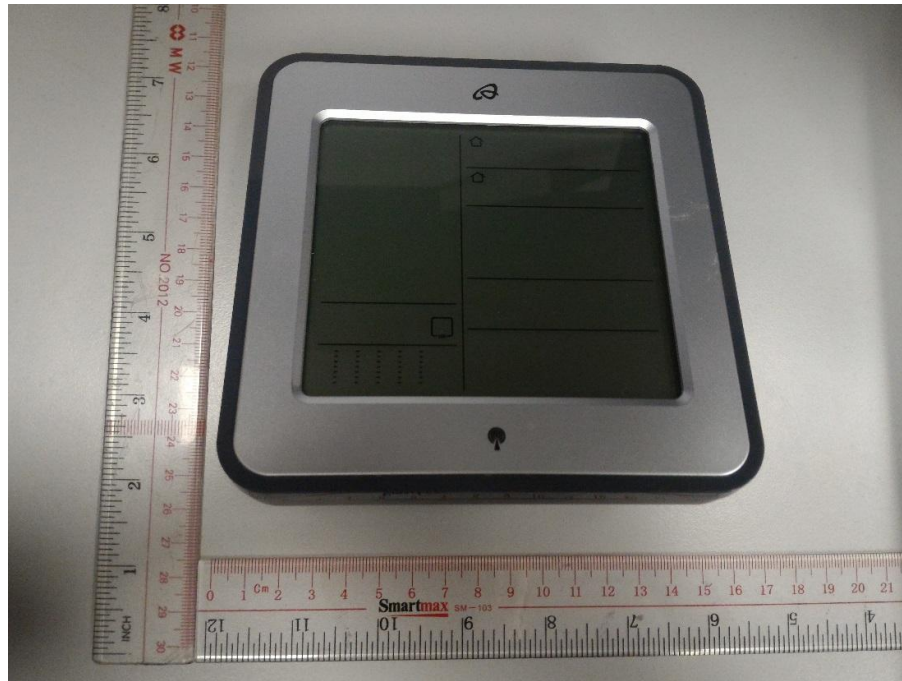
EUT: Z31915-US-RX
 Op Condition: Clock mode
 Test Specification: Antenna: Vertical
 Comment: 4.5VDC

Test Result
☒ Passed
☐ Not Passed

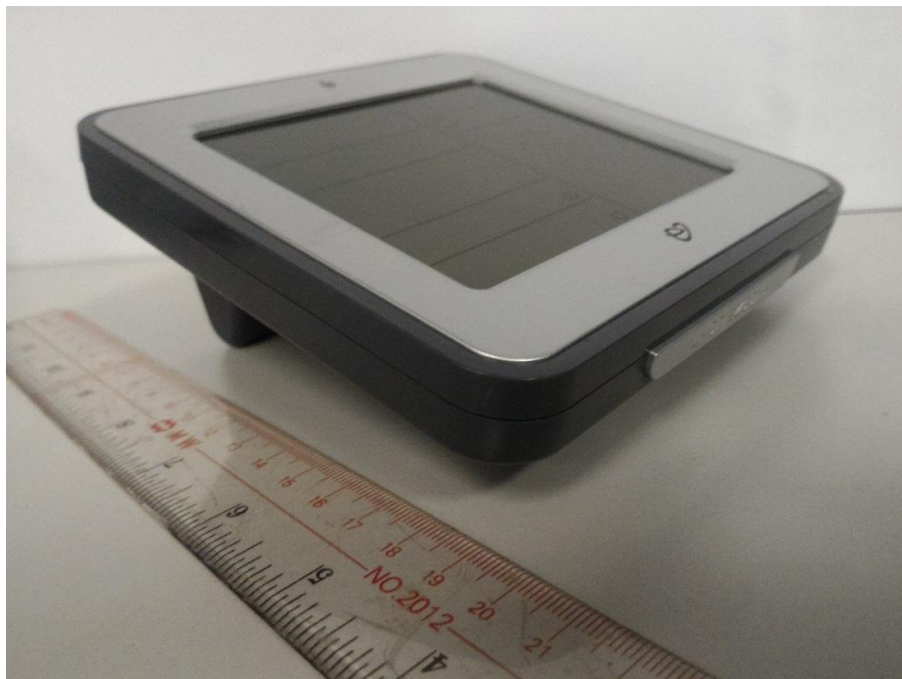


Frequency MHz	QP dBμV/m	Limit dBμV/m	Margin dB
34.365	21.78	40.00	-18.22
43.458	21.04	40.00	-18.96
96.263	19.69	43.50	-23.81
177.925	19.58	43.50	-23.92
721.913	33.19	46.00	-12.81
868.625	36.26	46.00	-9.74

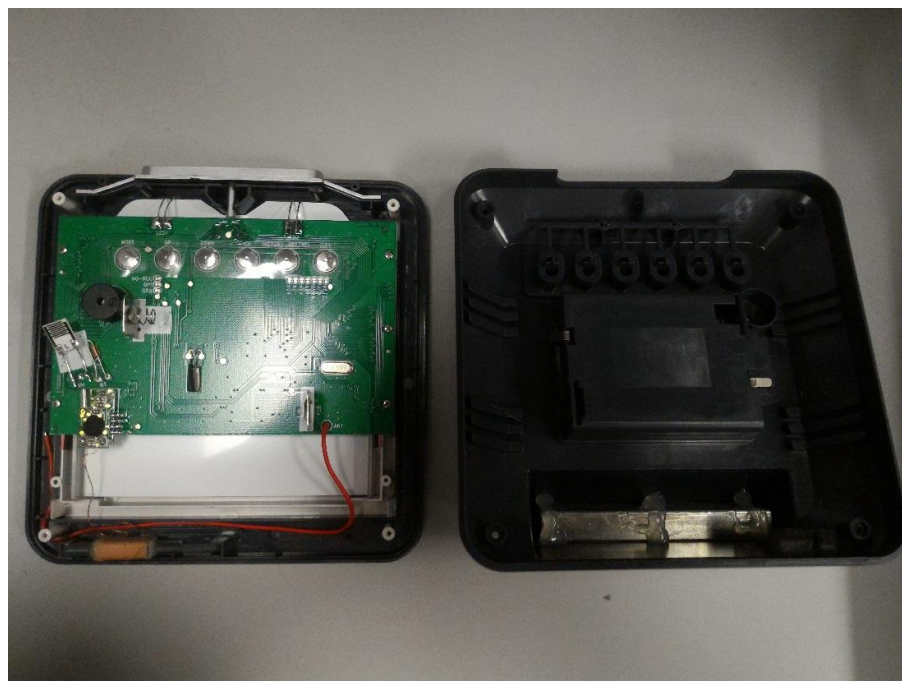
8 Appendix A - Photographs of EUT



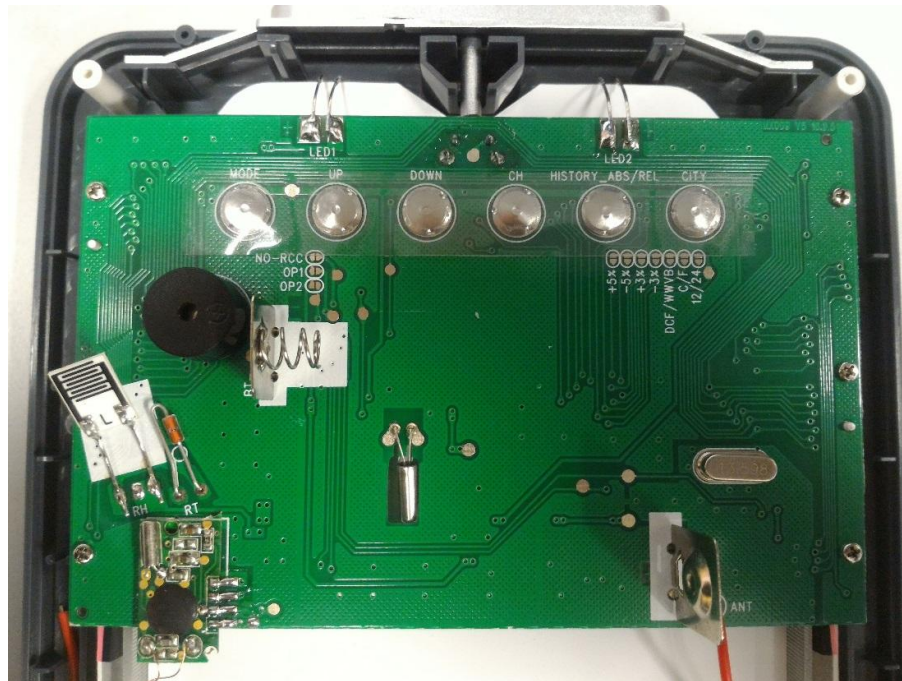
Appendix A



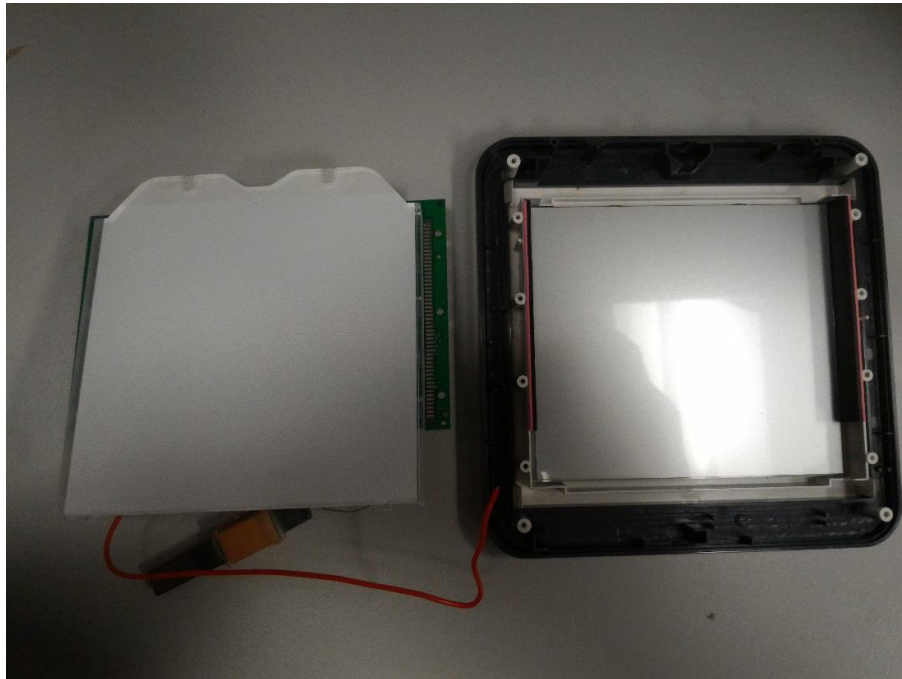
Appendix A



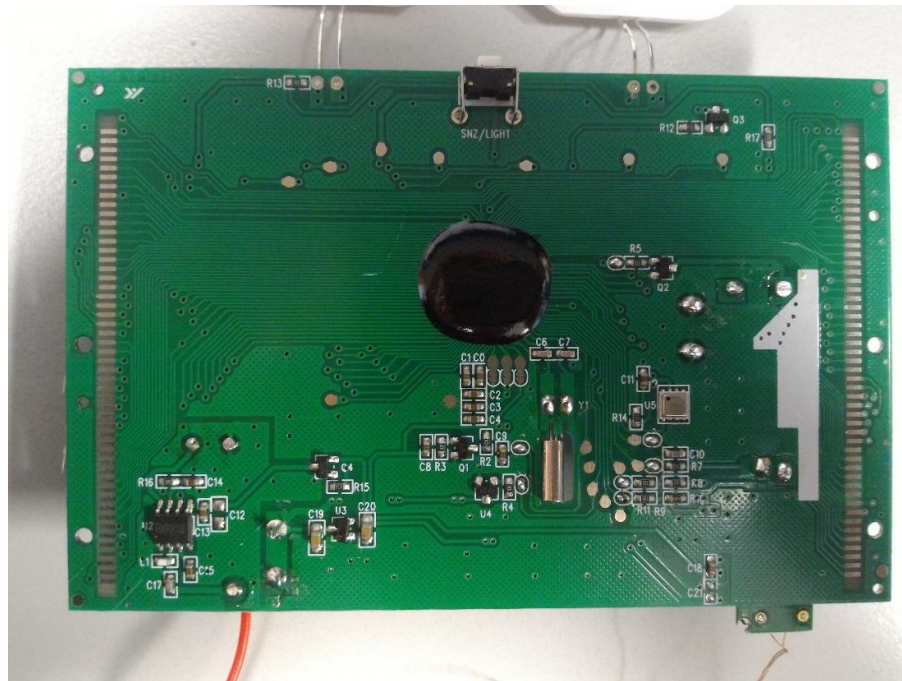
Appendix A



Appendix A



Appendix A



9 Appendix B - Setup Photographs of EUT

