



Test Report

Applicant: DING LI ACOUSTIC TECHNOLOGICAL CO., LTD.

Address of Applicant: No. 1 Lane 3, Dongfeng Road, Pingshi, Enping City, Guangdong, China.

Equipment Under Test (EUT):

EUT Name: Packaged Microphone

Model No.: UB-102

Trade Mark: NA

Serial No.: Not supplied by client

Standards: FCC PART15 SUBPART C: 2008

Date of Receipt: Nov. 16, 2009

Date of Test: Nov. 16 to 20, 2009

Date of Issue: Dec. 1, 2009

Test Result : **PASS***

* In the configuration tested, the EUT complied with the standards specified above.

Authorized Signature:

Henly Xie / Manager

This report refers to the General Conditions for Inspection and Testing Services, printed overleaf

This report details the results of the testing carried out on one sample. The results contained in this test report do not relate to other samples of the same product. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report.

This report may only be reproduced and distributed in full. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards.

The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government.

All test results in this report can be traceable to National or International Standards.

The test report prepare by:

Guangzhou Huesent Testing Service Co.,Ltd.

Self-ordained 68# courtyard, No.91, Dongguan Zhuang Road, Guangzhou, China.

Tel: 86-20-28263298 Fax: 86-20-28263237

<http://www.hst.org.cn> E-mail: hst@hst.org.cn



2 Test Summary

Test	Test Requirement	Test Method	Class / Severity	Result
Radiated Emission (30MHz to 1GHz)	FCC PART 15, SUBPART C: 2007	ANSI C63.4:2003	Class B	PASS
Occupied Bandwidth	FCC PART 15, SUBPART C: 2007	ANSI C63.4:2003	Class B	PASS

Remark:

♣The EUT has one channel, which is located in the range **902 MHz to 928 MHz**.

Only test result of three samples in 902.1 MHz, 915.0 MHz and 927.9 MHz were recorded in this report.

Fresh battery was used during testing.



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4 General Information

4.1. Client Information

Applicant: DING LI ACOUSTIC TECHNOLOGICAL CO., LTD.
Address of Applicant: No. 1 Lane 3, Dongfeng Road, Pingshi, Enping City,
Guangdong, China.

4.2. General Description of E.U.T.

EUT Name: Packaged Microphone
Item No.: UB-102
Serial No.: Not supplied by client

4.3. Details of E.U.T.

Power Supply: 3Vdc, 2 x AA size Battery
Main Function: Wireless microphone system with an associated receiver for transmitting voice.
Frequency Range: 902 MHz to 928 MHz

4.4. Description of Support Units

Connect the EUT to mains power, and then test the EUT with signal generator.

4.5. Standards Applicable for Testing

The standard used was FCC PART 15, SUBPART C, PART 15.249.
The EUT belongs to unlicensed low power auxiliary devices.

4.6. Test Location

All tests were subcontract to the laboratory following:

CEPREI (headquarters) lab.

No.110, Dongguanzhuang Road, Tianhe District, Guangzhou city, Guangdong Province,
P.R. China

Tel: 86-20-87237178 Fax: 86-20-87236171 Email: emc@ceprei.biz

FCC- Registration No: 258518 on Mar 5, 2008

4.7. Deviation from Standards

None.

4.8. Abnormalities from Standard Conditions

None.



5. Equipments Used during Test

No.	Test item.	Name of Equipment's	Model/Type	Last Calibrated Date
1	CE	EMI receiver	R&S ESCS 30	2009-6-8
2	CE	LISN	R&S ESH3-Z6	2009-6-8
3	CE	Shielded room	Lindgren 3.6*2.5*3	2009-6-8
4	RE	EMI RECEIVER	R&S ESU	2009-6-8
5	RE	Anechoic chamber	Lindgren FACT-4	2009-6-8
6	RE	Antenna	ETS•Lindgren 3142B	2009-6-8
Note: /				

6. Test Results

6.1. RADIATION INTERFERENCE

Test Requirement: FCC Part15.249, a)
Test Method: ANSI C63.4
Detector: Peak for pre-scan (The resolution bandwidth was 100KHz and the video bandwidth was 300KHz up to 1.0GHz and 1.0MHz with a video BW of 3.0MHz above 1.0GHz.)
Average detector if maximised peak within 6dB of limit
Test Date: Nov. 16, 2008

6.1.1 E.U.T. Operation

Operating Environment:

Temperature: 25°C

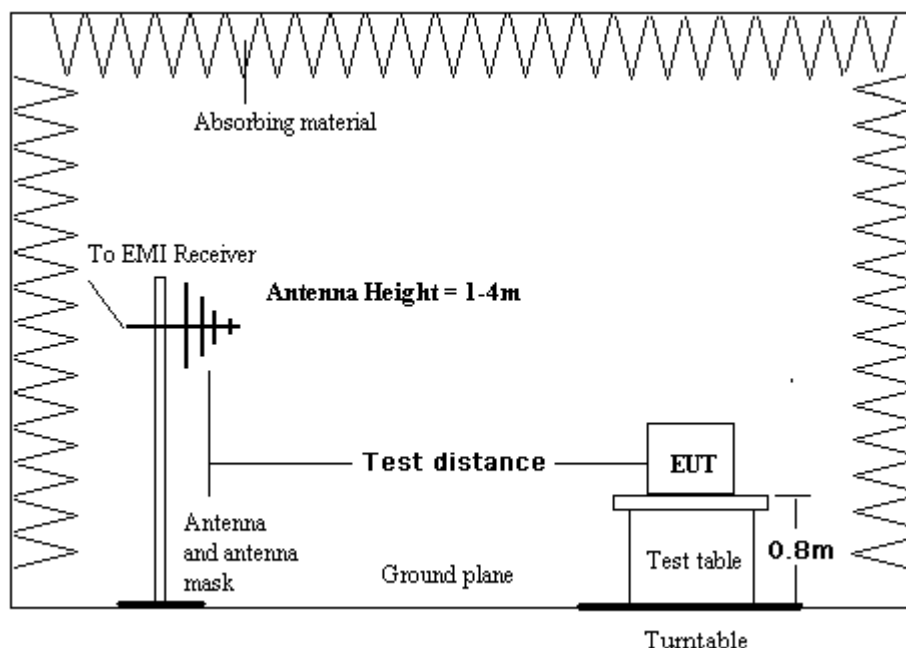
Humidity: 55% RH

Atmospheric Pressure: 1020mBar

EUT Operation:

Test the EUT work normally in on mode during the whole test.

6.1.2 Test Setup



6.1.3 Test Procedure

ANSI STANDARD C63.4-2003 10.1.7 MEASUREMENT PROCEDURES:

An initial pre-scan was performed in the 3m chamber using the spectrum analyser in peak detection mode. Average measurements were conducted based on the peak sweep graph. When an emission was found, the table was rotated to produce the maximum signal strength. At this point, the antenna was raised and lowered from 1m to 4m. The antenna was placed in both the horizontal and vertical polarities.

6.1.4 Measurement Data

Quasi-Peak measurement of carrier

Frequency	Level		Transducer	Limit	Min. Margin
MHz	dBuV/m		dB		dB
	V	H			
902.1 (L)	81.1	76.9	-2.6	94 dBuV/m (50mV/m)	12.9
915.0 (M)	83.8	78.3	-2.6		10.2
927.9 (H)	82.3	76.4	-2.6		11.7

Average & Peak measurement of harmonics and spurious emission at

lowest channel 902.1MHz

Frequency		Level				Transducer	Limit	Min. Margin
MHz		dBuV/m				dB	dBuV/m	dB AVG
		V		H				
		Peak	Avg.	Peak	Avg.		AVG: 54dB 500µV/m	
2 nd	1804.2	49.7	46.3	45.0	41.5	+2.6		7.7
3 rd	2706.3	48.8	45.3	44.5	40.8	+2.8		8.7
4 th	3608.4	52.2	48.8	47.4	44.2	+3.3		5.2
5 th	4510.5	53.1	50.6	49.6	46.2	+4.4		3.4
6 th	5412.6	56.4	52.5	53.1	48.3	+5.3	Peak: 74dB	1.5
7 th	6314.7	55.7	50.2	50.5	46.0	+5.8		3.8
above		<54	<44	<54	<44			NA

Average and Peak measurement at middle channel 915.0MHz

2 nd 1830.0	49.9	47.5	45.7	43.1	+2.6	AVG: 54dB 500μV/m	6.5
3 rd 2745.0	48.0	44.7	43.0	40.1	+2.8		9.3
4 th 3660.0	50.8	48.1	46.8	43.2	+3.3		5.9
5 th 4575.0	54.7	51.5	51.5	47.7	+4.4		2.5
6 th 5490.0	58.0	52.2	53.5	47.9	+5.3	Peak: 74dB	1.8
7 th 6405.0	55	50.6	51.5	46.3	+5.8		3.4
above	<54	<44	<54	<44			NA

Average and Peak measurement at highest channel 927.9MHz

2 nd 1855.8	50.3	46.8	44.3	41.5	+2.6	AVG: 54dB 500μV/m	7.2
3 rd 2783.7	49.7	46.5	44.0	40.8	+2.8		7.5
4 th 3711.6	53.0	49.6	47.5	44.2	+3.3		4.4
5 th 4639.5	54.0	50.9	49.0	46.2	+4.4		3.1
6 th 5567.4	58.2	51.9	54.5	48.3	+5.3	Peak: 74dB	2.1
7 th 6495.3	55.0	49.8	51.5	46.0	+5.8		4.2
above	<54	<44	<54	<44			NA

Note: The transducer factor = antenna factor + cable loss - preamplifier.

The Level = Read level + transducer factor.

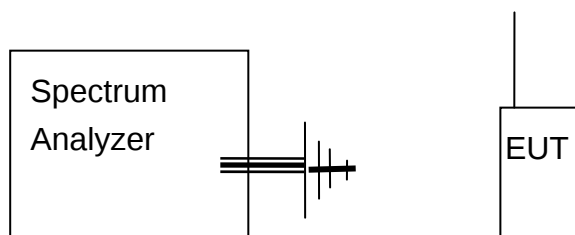
6.2. Occupied Bandwidth

Test Requirement: FCC Part15.215
Test Method: ANSI C63.4
Detector: Peak for scan (The resolution bandwidth was 1kHz and the video bandwidth was 1kHz, span was 500kHz)
maximised peak hold
Test Date: Nov. 18, 2008

6.2.1 E.U.T. Operation

Operating Environment:
Temperature: 25°C Humidity:55% RH Atmospheric Pressure: 1020mBar
EUT Operation:
Test the EUT work normally in on mode during the whole test.

6.2.2 Test Setup



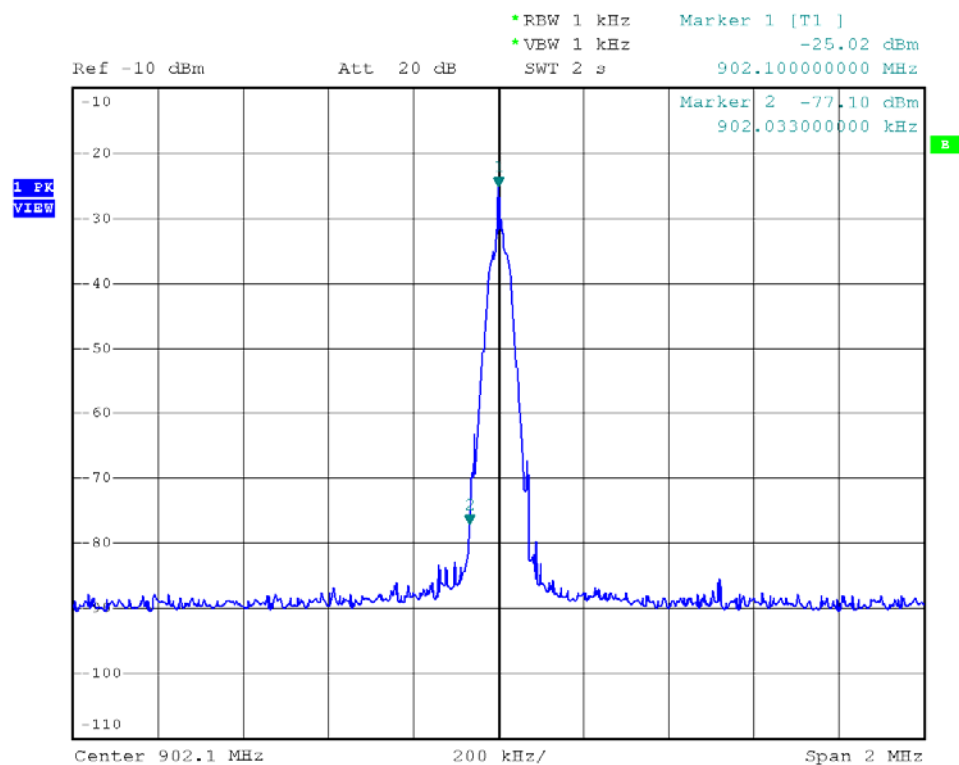
6.2.3 Test Procedure

ANSI STANDARD C63.4-2003 10.1.7 MEASUREMENT PROCEDURES:

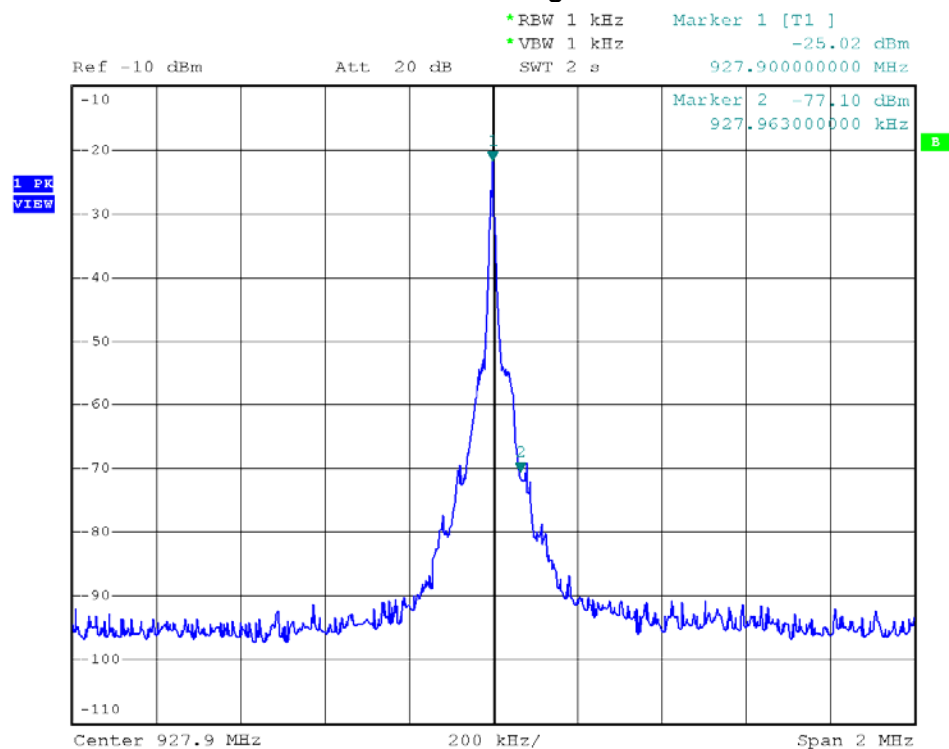
An initial pre-scan was performed in the 3m chamber using the spectrum analyser in peak detection mode. Average measurements were conducted based on the peak sweep graph. When an emission was found, the table was rotated to produce the maximum signal strength. At this point, the antenna was raised and lowered from 1m to 4m. The antenna was placed in both the horizontal and vertical polarities.

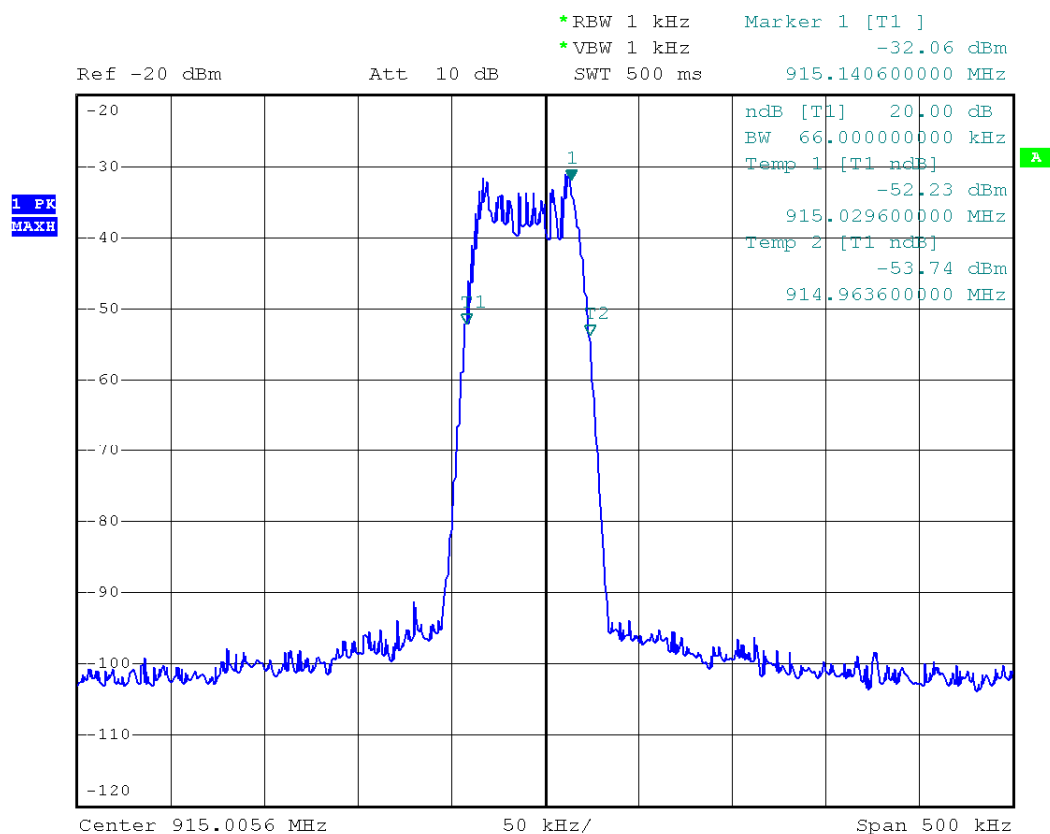
6.2.4 Measurement Data

Maximum Peak hold measurement for lowest channel 902.1M



Maximum Peak hold measurement for highest channel 927.9M





The 20 Bandwidth is 66kHz.

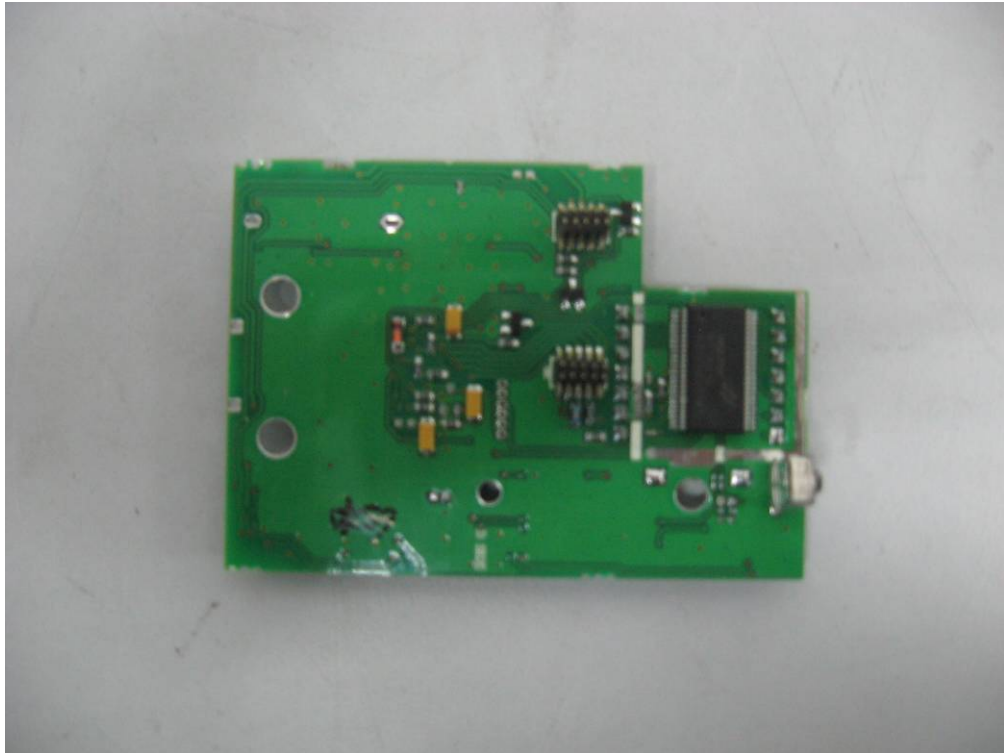
7. Photographs

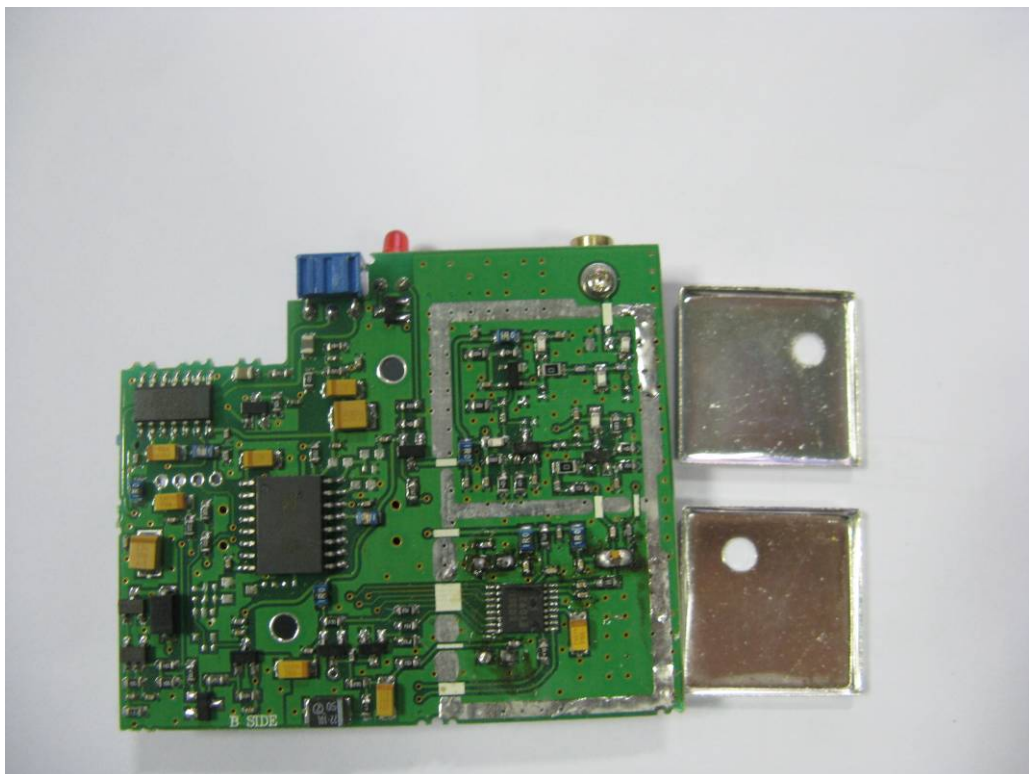
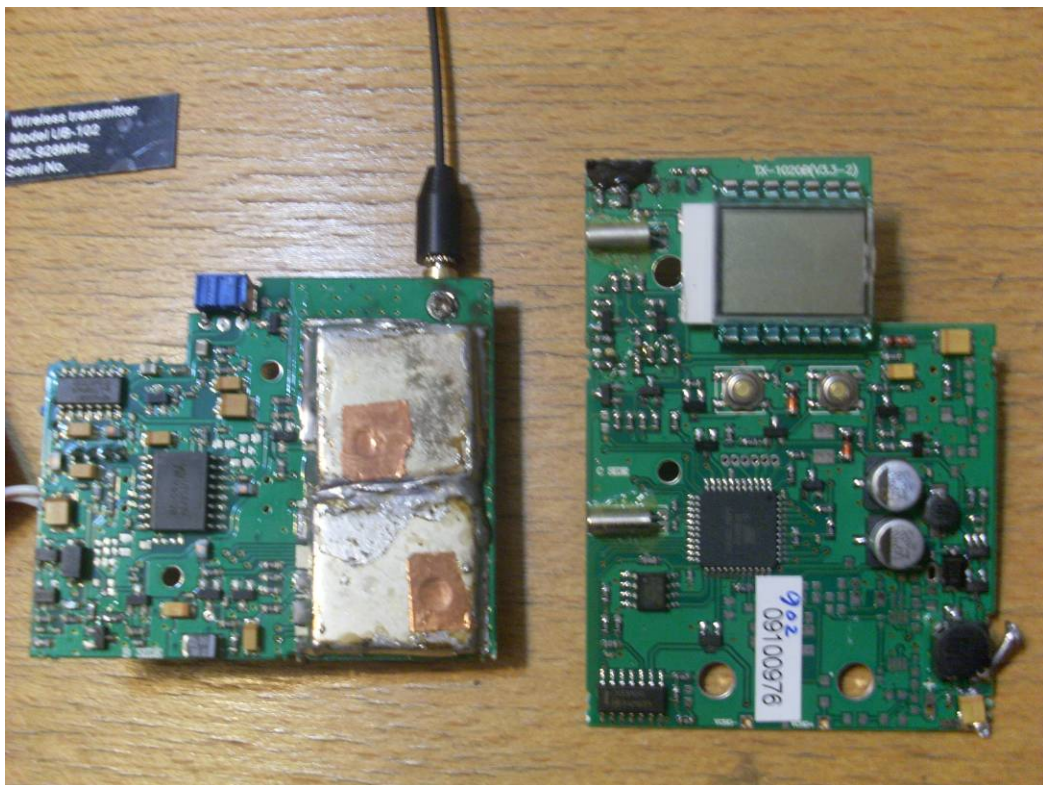
7.1. Radiated Emission Test Setup

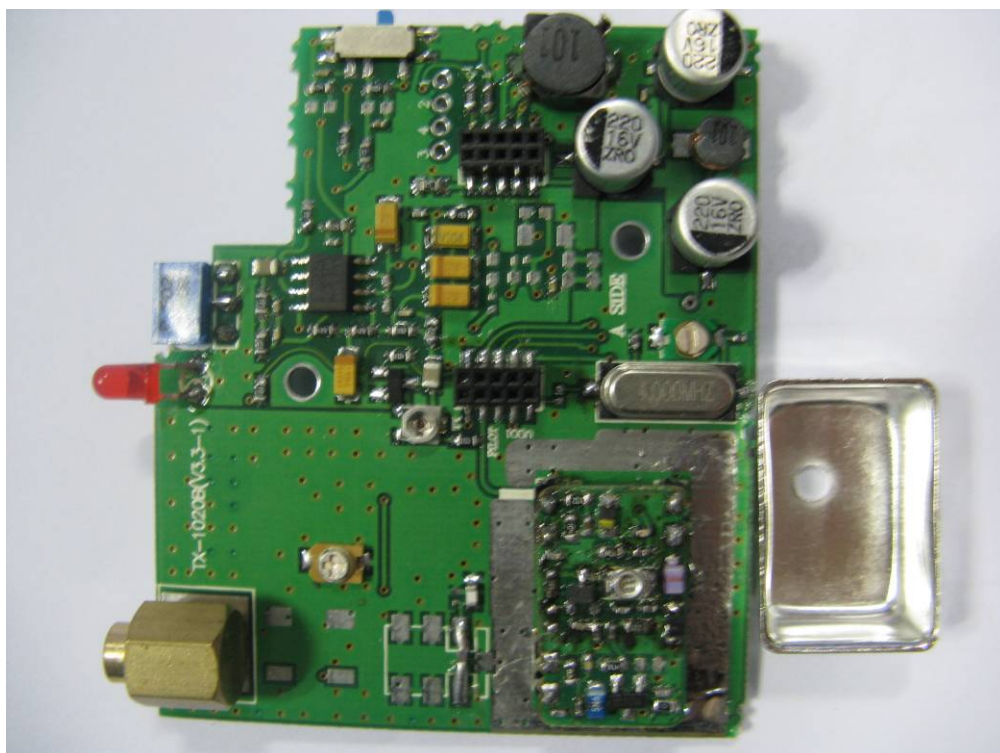
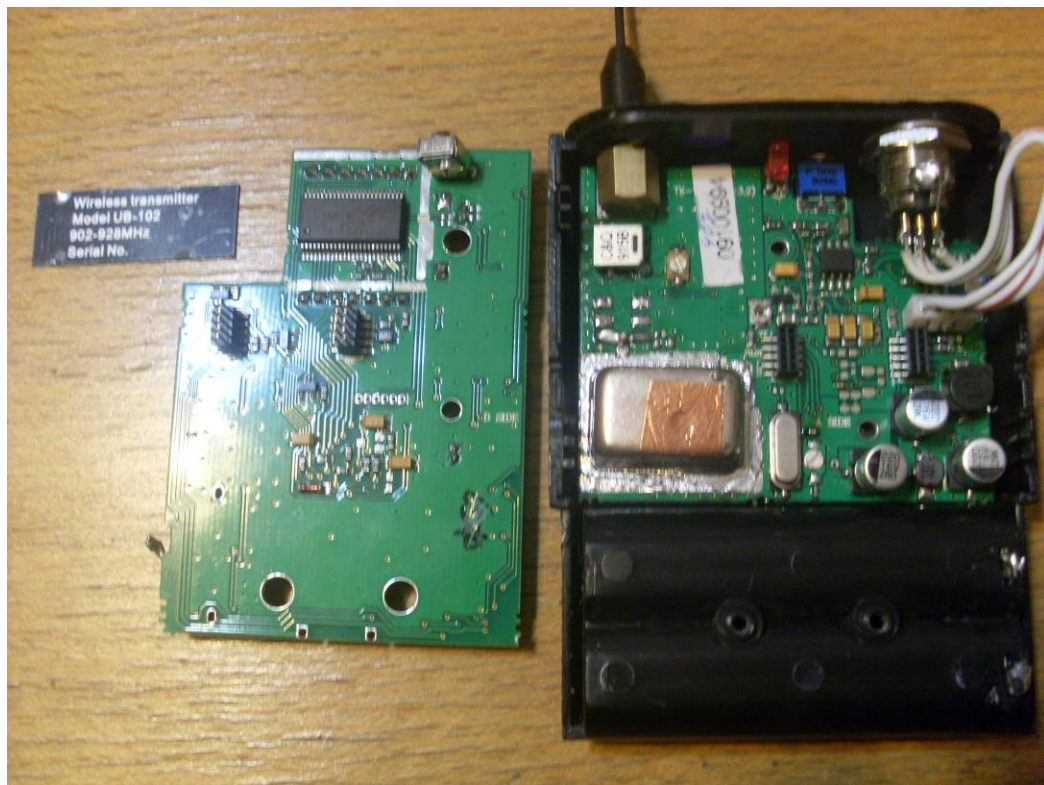


7.2. EUT Constructional Details









End of Report