
FCC Test Report

Report No.: AGC10091010SZ02F2B

FCC ID : YTKH-BOXU

PRODUCT DESIGNATION : Wireless Telehealth Hub

BRAND NAME : Boston Life Labs

TEST MODEL : H-Box

CLIENT : Boston Life Labs LLC

DATE OF ISSUE : Nov.06, 2010

STANDARD(S) : FCC Part 15 Rules

Attestation of Global Compliance Co., Ltd.

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VERIFICATION OF COMPLIANCE

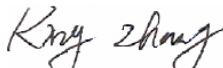
Applicant	Boston Life Labs LLC. Cambridge Innovation Center,One Broadway 14th, Cambridge,MA 02142,USA
Manufacturer	Boston Life Labs LLC.(Shenzhen) 2106C,block C,Tin Lee Central Square,Nanshan District,Shenzhen City.
Product Designation	Wireless Telehealth Hub
Brand Name	Boston Life Labs
Test Model	H-Box
FCC ID	YTKH-BOXU
Report Number	AGC10091010SZ02F2B
Date of Test	Oct.26, 2010 to Oct.29, 2010

WE HEREBY CERTIFY THAT:

The above equipment was tested by Attestation of Global Compliance Co., Ltd. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.4 (2003) and the energy emitted by the sample EUT tested as described in this report is in compliance with radiated emission limits of FCC Rules Part 15.231.

Checked By: 

Forrest Lei Nov.06, 2010

Authorized By 

King Zhang Nov.06, 2010

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1. GENERAL INFORMATION

1.1 PRODUCT DESCRIPTION

The EUT is a **wireless Telehealth Hub** designed as an “Communication Device”. It is designed by way of utilizing the ASK technology to achieve the system operation.

A major technical description of EUT is described as following

Operation Frequency	315MHZ
Rated Output Power	70.25dBuV/m
Modulation	ASK
Number of channels	1
Antenna Designation	Integrated Antenna
Power Supply	DC3V by battery
Transmitter Type of EUT	Manual Activated

1.2 RELATED SUBMITTAL(S) / GRANT (S)

This submittal(s) (test report) is intended for **FCC ID: YTKH-BOXU** filing to comply with Section 15.231 of the FCC Part 15, Subpart C Rules.

1.3 TEST METHODOLOGY

Both conducted and radiated testing were performed according to the procedures in ANSI C63.4 (2003). Radiated testing was performed at an antenna to EUT distance 3 meters.

1.4 TEST FACILITY

All measurement facilities used to collect the measurement data are located at
Attestation of Global Compliance Co., Ltd.

1F., No.2 Building, Huafeng No.1 Technical Industrial Park, Sanwei, Xixiang, Baoan District, Shenzhen
The test site is constructed and calibrated to meet the FCC requirements in documents ANSI C63.4: 2003.
FCC register No.: 259865

1.5 SPECIAL ACCESSORIES

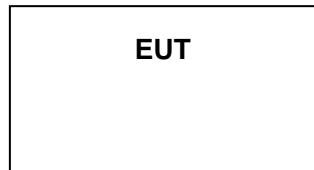
Not available for this EUT intended for grant.

1.6 EQUIPMENT MODIFICATIONS

Not available for this EUT intended for grant.

2. SYSTEM TEST CONFIGURATION

2.1 CONFIGURATION OF TESTED SYSTEM



2.2 EQUIPMENT USED IN TESTED SYSTEM

Item	Equipment	Mfr/Brand	Model/Type No.	FCC ID
1	Wireless Telehealth Hub	Boston Life Labs LLC.	H-Box	YTKH-BOXU

3. SUMMARY OF TEST RESULTS

FCC RULES	DESCRIPTION OF TEST	RESULT
§15.207	Conduction Emission	Not Applicable
§15.231	Radiated Emission	Compliant
§15.231	Transmission Time	Compliant
§15.231	20 dB Bandwidth	Compliant

4. DESCRIPTION OF TEST MODES

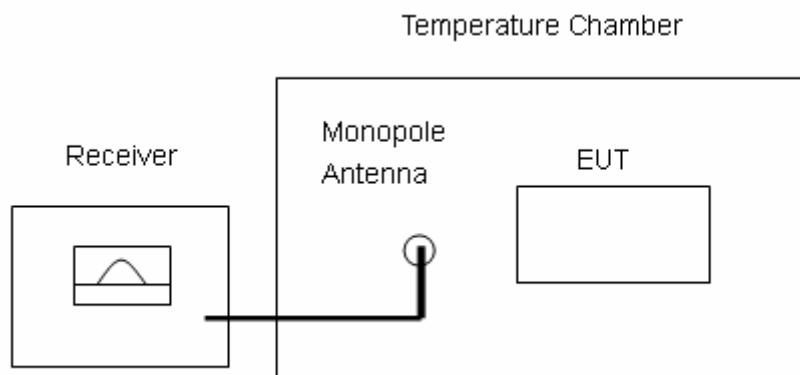
1. The EUT has been set to operate manual activated mode for transmission time item.
2. The EUT stays in continuous transmitting mode for other test item.

5 TRANSMISSION TIME

5.1 MEASUREMENT PROCEDURE

- 1 The EUT was placed on a turn table which is 0.8m above ground plane.
- 2 Connect EUT RF output port to the Spectrum Analyzer through an RF attenuator or Monopole Antenna
- 3 Set SPA Centre Frequency = Operation Frequency, RBW= 100KHz
VBW= 100KHz.Span=0Hz
- 5 Set SPA Trace 1 Max hold, then View.

5.2 TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION)

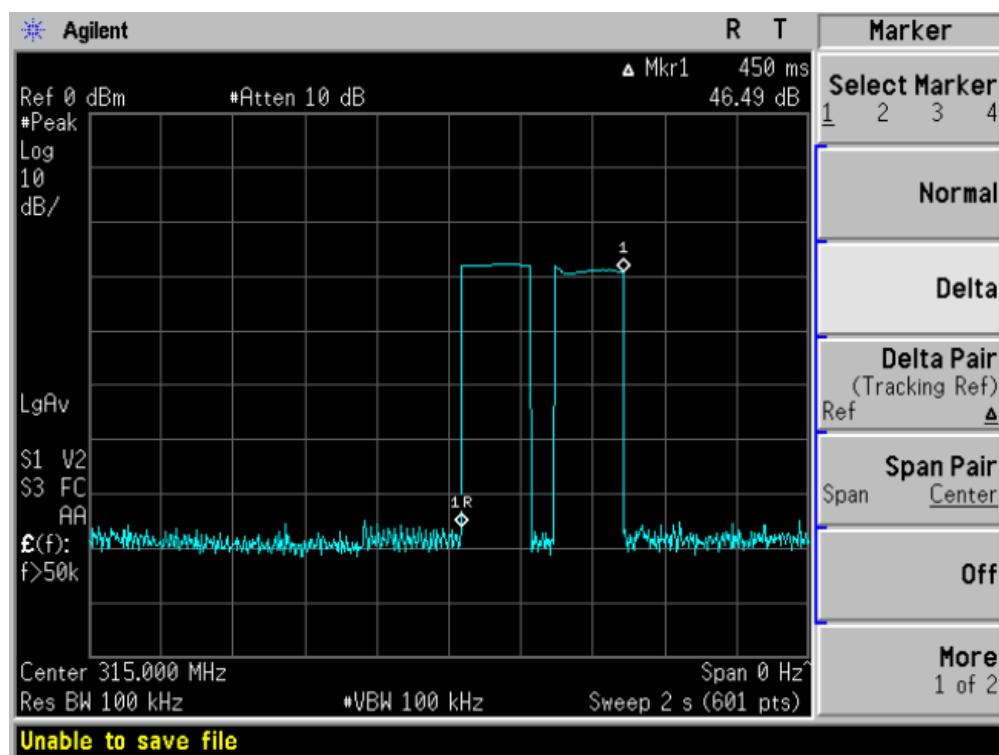


5.3 MEASUREMENT EQUIPMENT USED

Description	Manufacturer	Model	SERIAL NUMBER	Cal. Date	Cal. Due
Spectrum Analyzer	Agilent	E4440A	N/A	06/29/2010	06/28/2011
Amplifier	EM	EM30180	0607030	06/29/2010	06/28/2011
Horn Antenna	EM	EM-AH-10180	N/A	06/29/2010	06/28/2011
EMI Test Receiver	Rohde & Schwarz	ESCI	N/A	06/29/2010	06/28/2011
Amplifier	EM	EM30180	N/A	06/29/2010	06/28/2011
Biological Antenna	A.H. Systems Inc.	SAS-521-4	N/A	06/29/2010	06/28/2011
Loop Antenna	Daze	ZN30900N	SEL0097	06/29/2010	06/28/2011
Isolation Transformer	LETEAC	LTBK	--	06/08/2010	06/07/2011

5.4 LIMITS AND MEASUREMENT RESULT

Frequency (MHZ)	Transmission Time(s)	Limit (s)	Test Result
315	0.450	5	Pass



Note: EUT automatically stops transmitting as shown in the plot although the button is still being pressed.

6 20 DB BANDWIDTH

6.1 MEASUREMENT PROCEDURE

1. The EUT was placed on a turn table which is 0.8m above ground plane.
2. Connect EUT RF output port to the Spectrum Analyzer through an RF attenuator or Monopole Antenna
3. Set the EUT Work on the operation frequency .
3. Set SPA Centre Frequency = Operation Frequency, RBW= 10 KHz, VBW= 10 KHz.
4. Below carrier frequency Amplitude 20dB, Set SPA Trace 1 Max hold, then View.

6.2 TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION)

The Same as described in Section 5.2

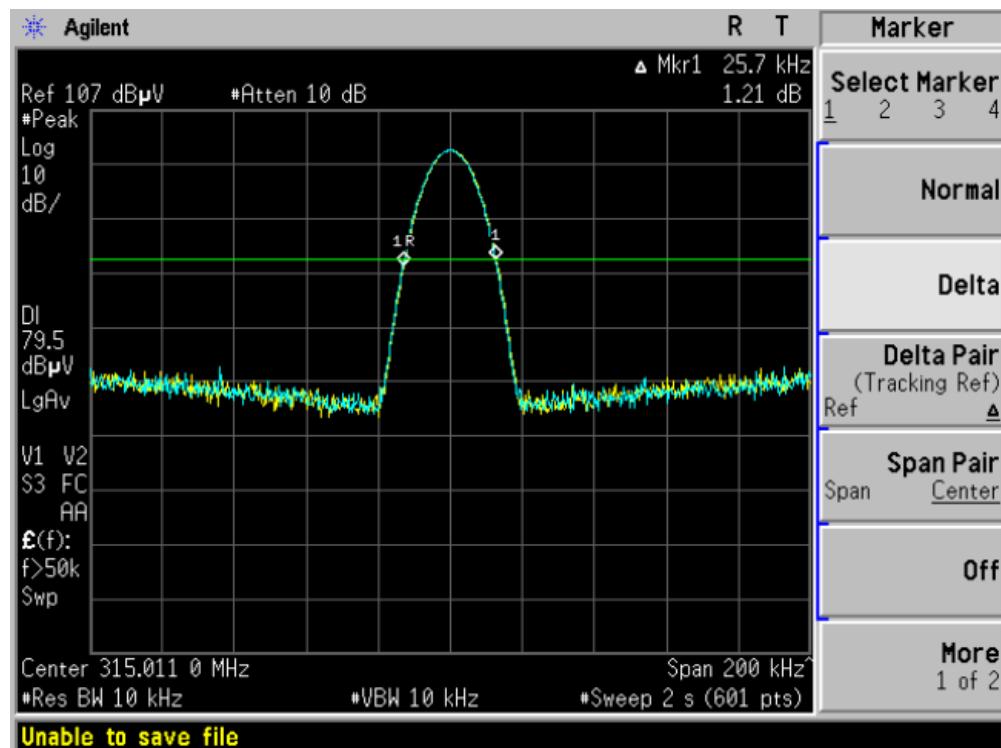
6.3 MEASUREMENT EQUIPMENT USED

The same as described in Section 5.3

6.4 LIMITS AND MEASUREMENT RESULTS

LIMITS AND MEASUREMENT RESULT			
Applicable Limits (MHZ)	Measurement Result		
	Operation Frequency(MHZ)	Bandwidth (MHZ)	Result
0.7875	315	0.0257	PASS

TEST PLOT OF BANDWIDTH

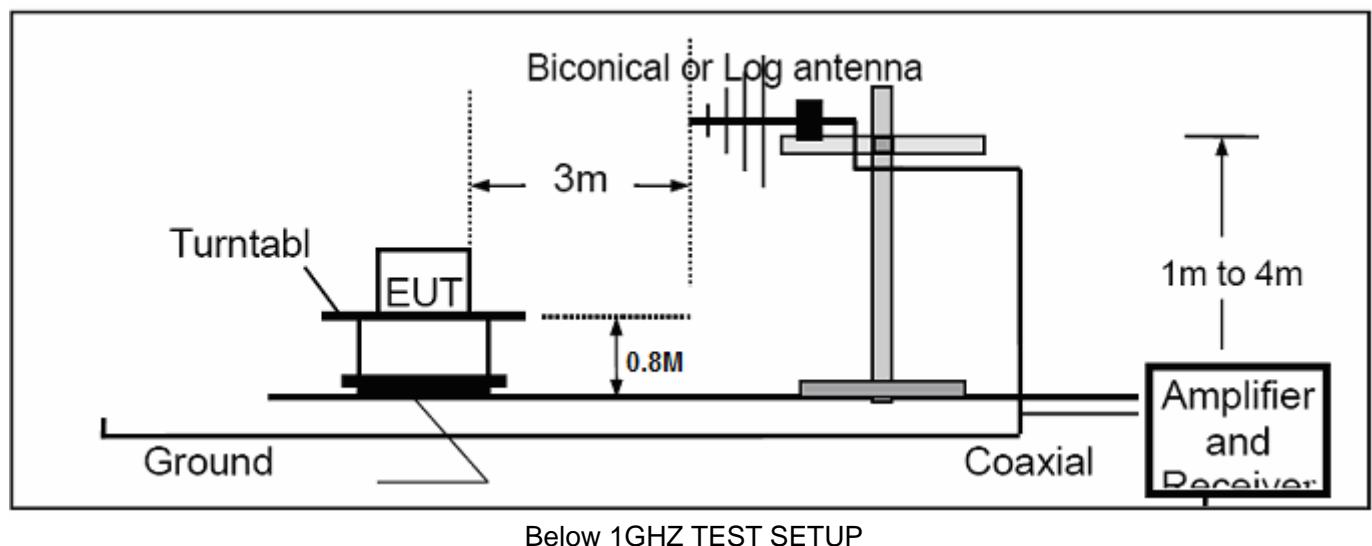
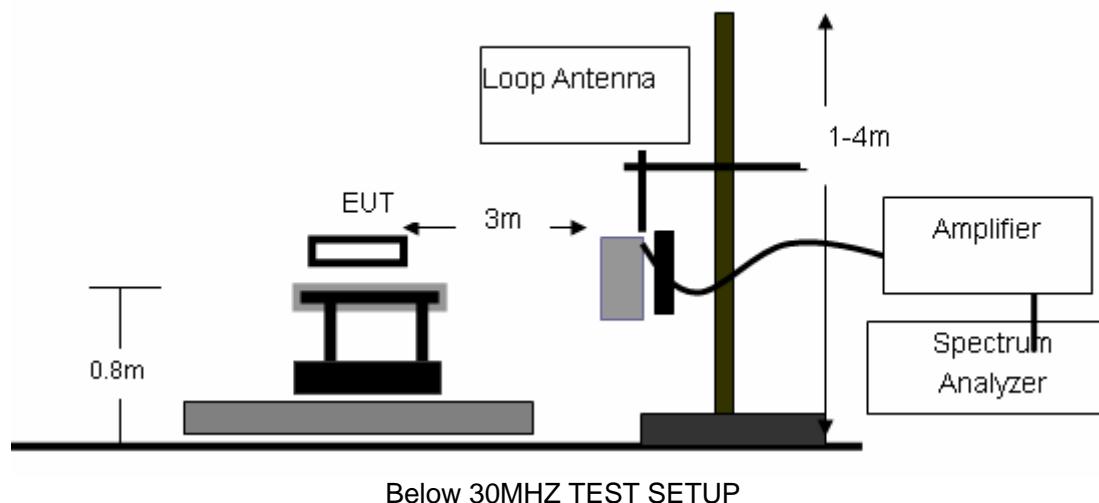


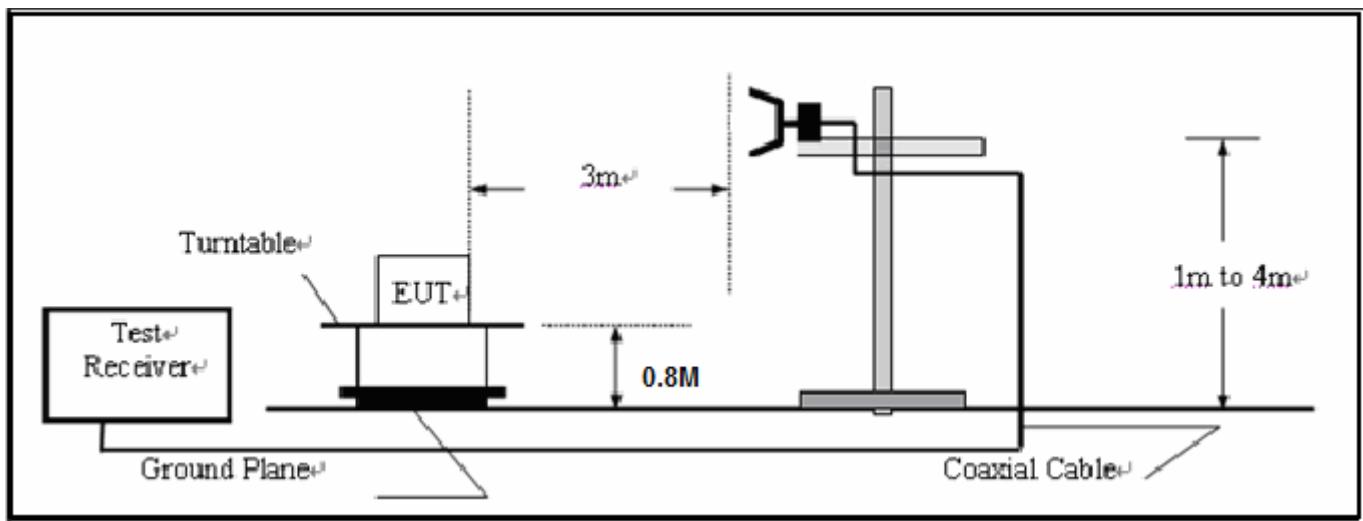
7 RADIATED EMISSION

7.1 MEASUREMENT PROCEDURE

1. The EUT was placed on a turn table which is 0.8m above ground plane.
2. Set the EUT Work on the operation frequency.
3. Set SPA Centre Frequency = Operation Frequency, RBW= 100 KHz, VBW= 100 KHz for Below 1GHZ, RBW=1MHZ, VBW=1MHZ for Above 1GHZ.
4. The Analyzer / Receiver quickly scanned . The EUT test program was started. Emissions were scanned and measured rotating the EUT to 360 degrees and positioning the antenna 1 to 4 meters above the ground plane, in both the vertical and the horizontal polarization, to maximize the emission reading level

7.2 TEST SET-UP (BLOCK DIAGRAM OF CONFIGURATION)





Above 1GHZ TEST SETUP

7.3 MEASUREMENT EQUIPMENT USED

The Same as described in section 5.3

7.4 LIMITS AND MEASUREMENT RESULT

Frequency (Hz)	Field Strength of Fundamental (dB μ V/m at 3-meter)	Field Strength of Spurious Emission (dB μ V/m at 3-meter)	Test Distance (m)
40.66 - 40.70	67.04	47.04	3
70 - 130	61.94	41.94	3
130 - 174	61.94 to 71.48	41.94 to 51.48	3
174 - 260	71.48	51.48	3
260-470	71.48 to 81.94	51.48 to 61.94	3
Above 470	81.94	61.94	3

RADIATED EMISSION TEST RESULT

EUT	Wireless Telehealth Hub	Model Name	H-Box
Temperature	26° C	Relative Humidity	55%
Pressure	960hPa	Test Voltage	DC3V
Test Mode	315MHZ TX		

Freq. (MHZ)	Ant.Pol. H/V	Detector (PK/QP)	Reading (dBuV)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)
<30MHZ	H	Peak	--	--	--	--	>20dB
315	H	Peak	49.65	16.81	66.45	75.62	-9.16
629.46	H	Peak	19.57	23.78	43.5	55.62	-12.27
945.68	H	Peak	14.83	27.73	42.56	55.62	-13.06
>1000	H	Peak	--	--	--	55.62	>20dB
<hr/>							
<30	V	Peak	--	--	--	--	>20dB
315	V	Peak	53.44	16.81	70.25	75.62	-5.37
629.46	V	Peak	21.3	23.78	45.08	55.62	-10.54
945.68	V	Peak	16.58	27.73	44.31	55.62	-11.31
>1000	V	Peak	--	--	--	55.62	>20dB

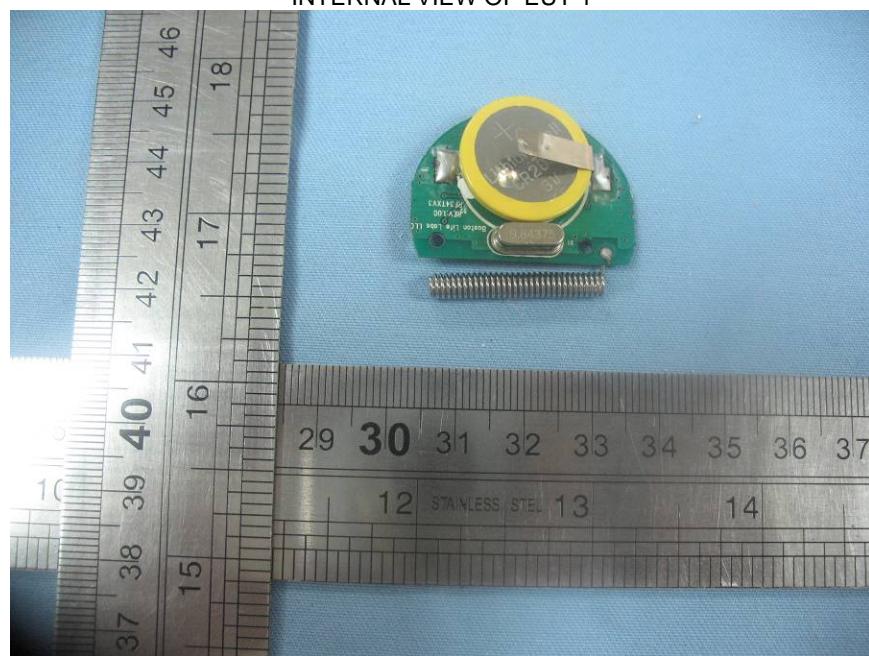
Note: This Handheld EUT was tested in 3 orthogonal positions and the worst-case data was presented.
Note: "--" means the mode at least have 20dB margin.

APPENDIX I
PHOTOGRAPHS OF THE EUT

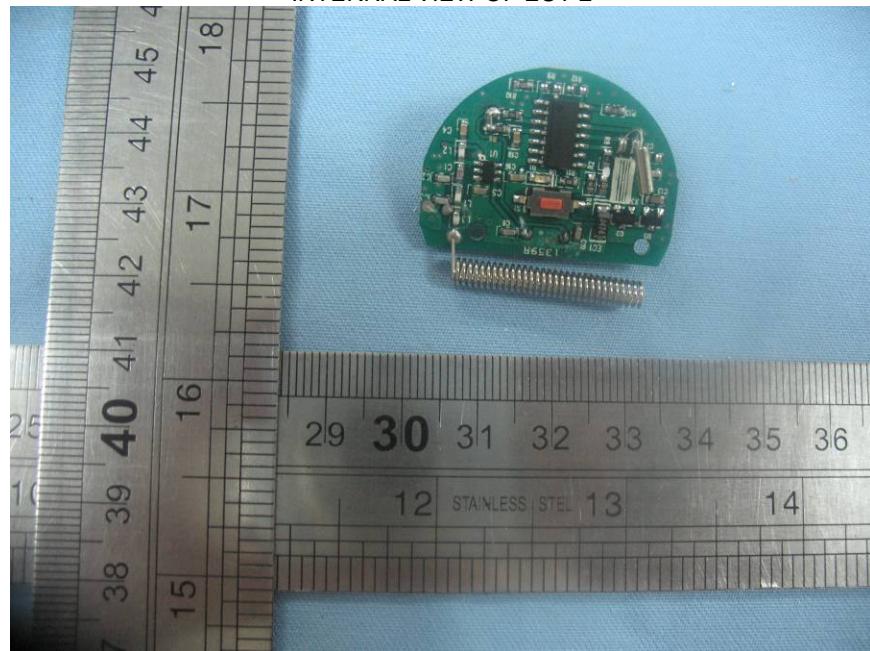
ALL VIEW OF EUT



INTERNAL VIEW OF EUT-1

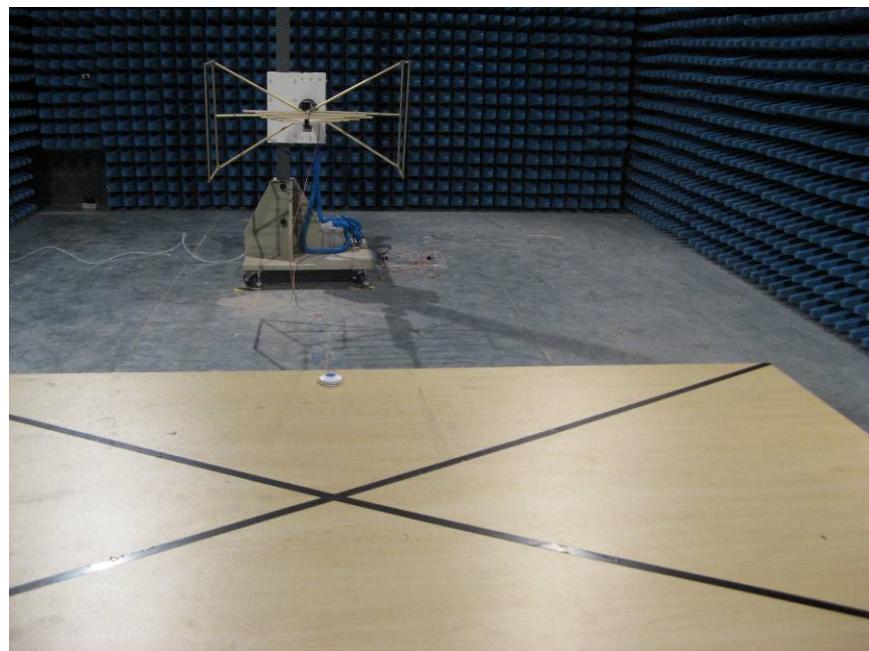


INTERNAL VIEW OF EUT-2



PPENDIX II
PHOTOGRAPHS OF THE TEST SETUP

RADIATED EMISSION TEST SETUP



----END OF REPORT----