EN 301 489-1 V1.9.2

EN 301 489-17 V2.1.1

Measurement and Test Report

For

YAMAY ELECTRONICS CO., LTD.

Bldg 1, Fu Yuan No. 2 Industrial Zone, Gongye Rd, Fuyong Town, Bao An, Shenzhen, China

Report Concerns: Original Report	**Equipment Type:** TABLET PCs
Model:	Y-B07
Report No.:	STR12048001E-2
Test Date:	2012-04-03 to 2012-04-18
Issue Date:	2012-04-20
Tested By:	Galy He / Engineer
Reviewed By:	Lahm Peng / EMC Manager
Approved & Authorized By:	Jandy so / PSQ Manager
Prepared By:	**SEM.Test Compliance Service Co., Ltd** 3/F, Jinbao Commerce Building, Xin'an Fanshen Road, Bao'an District, Shenzhen, P.R.C.（518101） Tel.: +86-755-33663308 Fax.: +86-755-33663309 Website: www.semtest.com.cn

Note: This test report is limited to the above client company and the product model only. It may not be duplicated without prior permitted by SEM.Test Compliance Service Co., Ltd.

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1. GENERAL INFORMATION

1.1 Product Description for Equipment Under Test (EUT)

Client Information

Applicant:	YAMAY ELECTRONICS CO., LTD.
Address of applicant:	Bldg 1, Fu Yuan No. 2 Industrial Zone, Gongye Rd, Fuyong Town, BaoAn, Shenzhen, China
Manufacturer:	YAMAY ELECTRONICS CO., LTD.
Address of manufacturer:	Bldg 1, Fu Yuan No. 2 Industrial Zone, Gongye Rd, Fuyong Town, BaoAn, Shenzhen, China

General Description of E.U.T

Items	Description
EUT Description:	TABLET PCs
Trade Name:	/
Model No.:	Y-B07
Add Model:	Y-728, Y-738, Y-1020, Y-1330, Y-1401, Y-1402, Y-A07A, Y-A07B, Y-A07C, Y-A07D, Y-A08B, Y-A08C, Y-A10B, Y-A10C, Y-B07A, Y-B07B, Y-B07C, Y-B07D, Y-B07E, Y-B07F, Y-B07G, Y-B08A, Y-B08B, Y-B08C, Y-B08D, Y-971, Y-972, Y-973, Y-975, Y-B10A, Y-B10B, Y-B10C, Y-B10D, Y-M07X, Y-M08X, Y-M10, Y-N07D, Y-N07E, Y-Q07, Y-Q08, Y-R07, Y-R07A, Y-R07B, Y-R07C, Y-R07D, Y-R08, Y-R10, Y-S07, Y-S08, Y-S10, Y-T08, Y-V07A, Y-V07B, Y-V07C, Y-V08B, Y-V08C, Y-V08D, Y-V10B, Y-V10C, Y-V10D, Y-W07A, Y-W07B, Y-W07C, Y-W07D, Y-W08, Y-W10, Y-1028, Y-1038
Rated Voltage:	AC 230V Adapter DC 9V
RF Output Power	< 20 dBm
Frequency range:	2412-2472MHz
Number of channels:	13
Channel Separation:	5MHz
Type of Antenna:	Integral Antenna
Size:	20.2x13.5x1.2 cm
For more information refer to the circuit diagram form and the user's manual.	

Note: The test data gathered are from a production sample, provided by the manufacturer. Test is carried out with Y-B07 since the others models listed in this report are only with different appearances from model Y-B07without electronic construction changed, declared by the manufacture.

1.2 Test Standards

The following report is prepared on behalf of the YAMAY ELECTRONICS CO., LTD. in accordance with ETSI

EN 301 489-1 V1.9.2, Electromagnetic compatibility and Radio spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 1: Common technical requirements and ETSI EN 301 489-17 V2.1.1, Electromagnetic compatibility and Radio spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 17: Specific conditions for 2,4 GHz wideband transmission systems and 5 GHz high performance RLAN equipment.

The objective of the manufacturer is to determine compliance with ETSI EN 301 489-1 V1.9.2, Electromagnetic compatibility and Radio spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 1: Common technical requirements and ETSI EN 301 489-17 V2.1.1,

Electromagnetic compatibility and Radio spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 17: Specific conditions for 2,4 GHz wideband transmission systems and 5 GHz high performance RLAN equipment.

Maintenance of compliance is the responsibility of the manufacturer. Any modification of the product maybe which result in lowering the emission/immunity should be checked to ensure compliance has been maintained.

1.3 Related Submittal(s)/Grant(s)

No Related Submittal(s).

1.4 Test Methodology

All measurements contained in this report were conducted with ETSI EN 301 489-1 V1.9.2, Electromagnetic compatibility and Radio spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 1: Common technical requirements and ETSI EN 301 489-17 V2.1.1, Electromagnetic compatibility and Radio spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 17: Specific conditions for 2,4 GHz wideband transmission systems and 5 GHz high performance RLAN equipment.

The equipment under test (EUT) was configured to measure its highest possible emission/immunity level. The test modes were adapted accordingly in reference to the Operating Instructions.

1.5 Test Facility

- **FCC – Registration No.: 994117**
  SEM.Test Compliance Services Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files and the Registration is 994117.

- **Industry Canada (IC) Registration No.: 7673A**
  The 3m Semi-anechoic chamber of SEM.Test Compliance Services Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 7673A.

1.6 EUT Exercise Software

The EUT exercise program used during the testing was designed to exercise the system components. The test software, provided by the customer, is started while the Power is on.

1.7 Accessories Equipment List and Details

Description	Manufacturer	Model	Serial Number
Mouse	Dell	Moc5uo	XGDZ01107
Earphone	/	/	/
TF Card	KingSton	2G	/

1.8 EUT Cable List and Details

Cable Description	Length (M)	Shielded/ Unshielded	With Core/Without Core
USB Cable	0.2	Unshielded	With Core
Adaptor Cable	1.4	Unshielded	Without Core

1.9 Performance Criteria

According Clause 6.1 of EN 301 489-17,
The performance criteria are:
-performance criteria A for immunity tests with phenomena of a continuous nature;
-performance criteria B for immunity tests with phenomena of a transient nature;
-performance criteria C for immunity tests with power interruptions exceeding a certain time.

Table 1: Performance criteria

Criteria	During test	After test
A	Shall operate as intended May show degradation of performance (note 1) Shall be no loss of function Shall be no unintentional transmissions	Shall operate as intended Shall be no degradation of performance (note 2) Shall be no loss of function Shall be no loss of stored data or user programmable functions
B	May show loss of function (one or more) May show degradation of performance (note 1) No unintentional transmissions	Functions shall be self-recoverable Shall operate as intended after recovering Shall be no degradation of performance (note 2) Shall be no loss of stored data or user programmable functions
C	May be loss of function (one or more)	Functions shall be recoverable by the operator Shall operate as intended after recovering Shall be no degradation of performance (note 2)

NOTE 1: Degradation of performance during the test is understood as a degradation to a level not below a minimum performance level specified by the manufacturer for the use of the apparatus as intended. In some cases the specified minimum performance level may be replaced by a permissible degradation of performance.
If the minimum performance level or the permissible performance degradation is not specified by the manufacturer then either of these may be derived from the product description and documentation (including leaflets and advertising) and what the user may reasonably expect from the apparatus if used as intended.

NOTE 2: No degradation of performance after the test is understood as no degradation below a minimum performance level specified by the manufacturer for the use of the apparatus as intended. In some cases the specified minimum performance level may be replaced by a permissible degradation of performance. After the test no change of actual operating data or user retrievable data is allowed.
If the minimum performance level or the permissible performance degradation is not specified by the manufacturer then either of these may be derived from the product description and documentation (including leaflets and advertising) and what the user may reasonably expect from the apparatus if used as intended.

2. SUMMARY OF TEST RESULTS

EN 301 489 V1.9.2	DESCRIPTION OF TEST	RESULT
§7.1 Emission	Conduction Emissions	Compliant
§7.1 Emission	Radiated Emissions	Compliant
§7.2 Immunity	Electrostatic Discharge	Compliant
§7.2 Immunity	Electromagnetic Field (80 MHz -1000 MHz and 1400 MHz –2700 MHz)	Compliant
§7.2 Immunity	Electrical Fast Transient/Burst	Compliant
§7.2 Immunity	Surge Immunity Test	Compliant
§7.2 Immunity	Immunity to Conducted Disturbances	Compliant
§7.2 Immunity	Voltage Dips/Interruptions Immunity	Compliant
§7.1 Emission	EN61000-3-2 Harmonic Current Emissions	Compliant
§7.1 Emission	EN61000-3-3 Voltage Fluctuation and Flicker	Compliant

3. CONDUCTED EMISSIONS

3.1 Measurement Uncertainty

Base on NIS 81, The Treatment of Uncertainty in EMC Measurements, the best estimate of the uncertainty of any conducted emissions measurement is ± 2.88 dB.

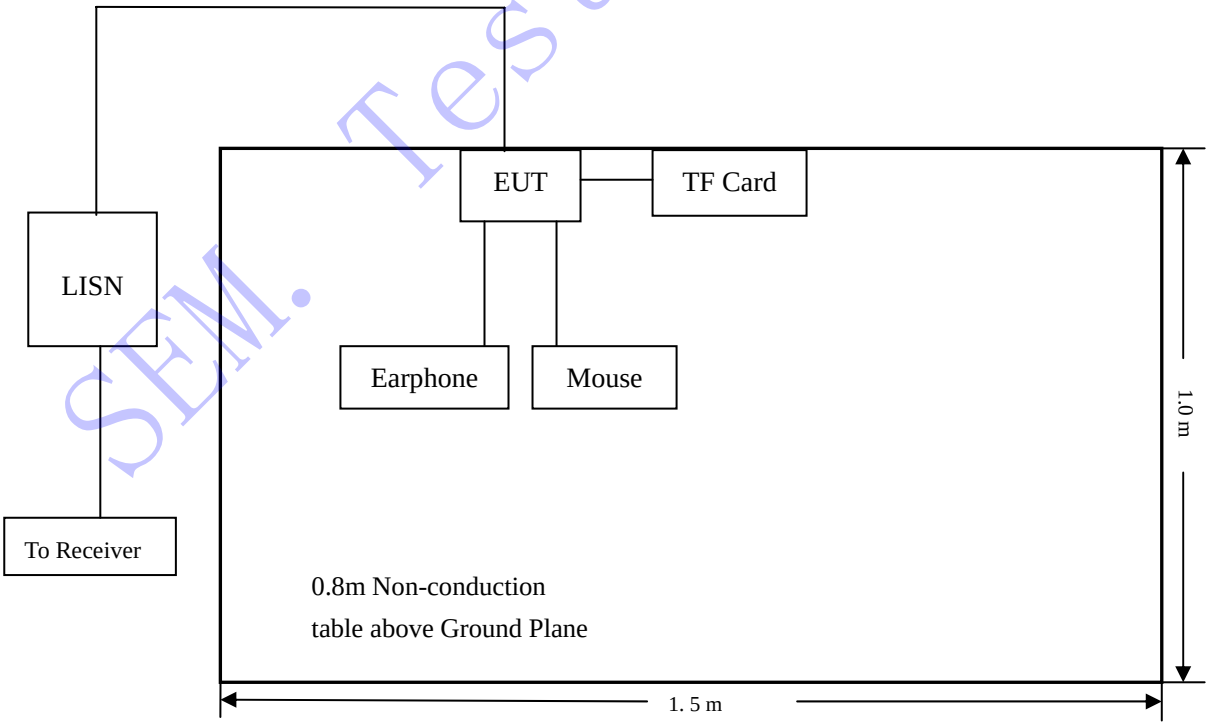
3.2 Test Equipment List and Details

Description	Manufacturer	Model	Serial Number	Cal. Date	Due. Date
EMI Test Receiver	Rohde & Schwarz	ESPI	101611	2012-03-28	2013-03-27
L.I.S.N	Schwarz beck	NSLK8126	8126-224	2012-03-28	2013-03-27
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100911	2012-03-28	2013-03-27
AMN	EMCO	3825/2	11967C	2012-03-28	2013-03-27
Power Divider	Weinschel	1506A	PM204	2012-03-28	2013-03-27
Current Probe	FCC	F-33-4	091684	2012-03-28	2013-03-27

3.3 Test Procedure

Test is conducting under the description of EN 55022 Information technology equipment - Radio disturbance characteristics - Limits and methods of measurement §9

3.4 Basic Test Setup Block Diagram



3.5 Environmental Conditions

Temperature:	26° C
Relative Humidity:	52%
ATM Pressure:	1012 mbar

3.6 Summary of Test Results/Plots

According to the data in section 3.7, the EUT complied with the EN301489 Conducted margin for a Class B device, with the *worst* margin reading of:

-3.12 dBμV at **0.178 MHz** in the **Neutral**, **Peak** detector, 0.15-30MHz

3.7 Conducted Emissions Test Data

Plot of Conducted Emissions Test Data

Conducted Disturbance

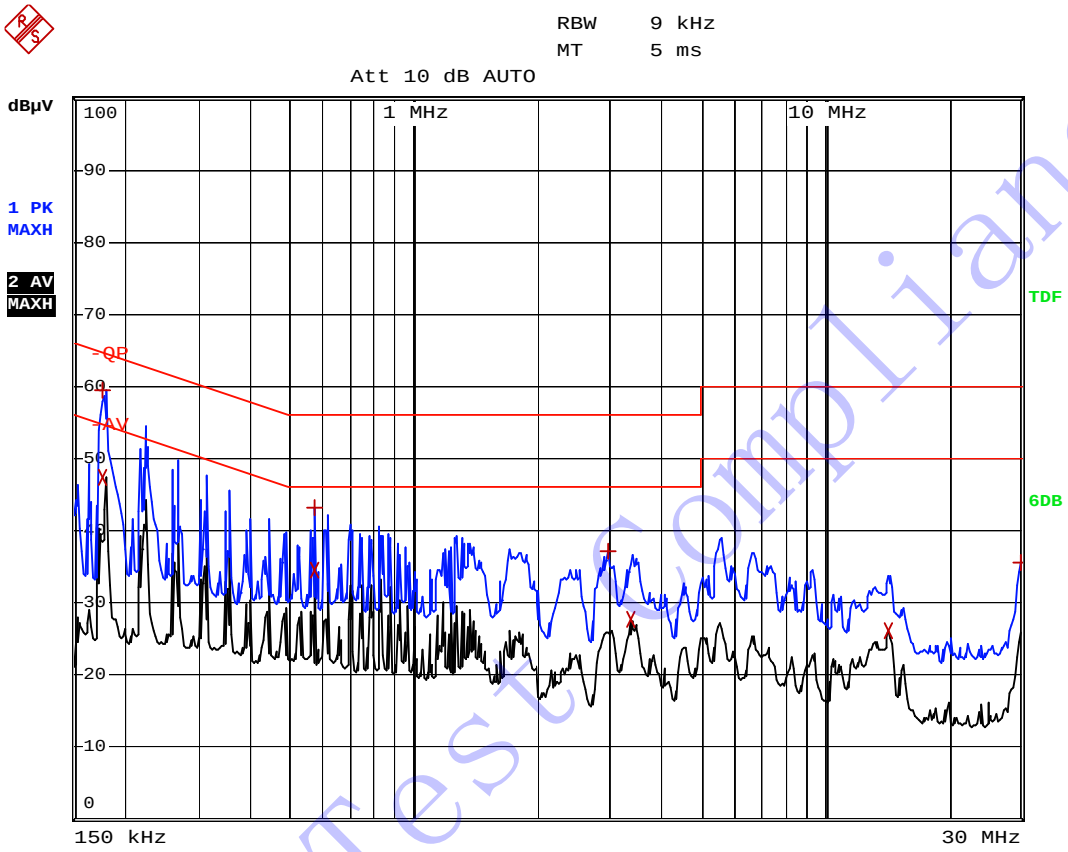
EUT: TABLET PCs

M/N: Y-B07

Operating Condition: Operating

Test Specification: N

Comment: AC 230V/50Hz; Adaptor DC 9V



EDIT PEAK LIST (Prescan Results)

Trace1: -QP
Trace2: -AV
Trace3: ---

TRACE		FREQUENCY	LEVEL dBµV	DELTA LIMIT dB
1	Max Peak	178 kHz	59.45	-5.12
2	Average	178 kHz	47.35	-7.22
1	Max Peak	574 kHz	43.20	-12.79
2	Average	574 kHz	34.49	-11.50
1	Max Peak	2.966 MHz	37.05	-18.94
2	Average	3.39 MHz	27.63	-18.36
2	Average	14.254 MHz	26.09	-23.90
1	Max Peak	29.93 MHz	35.49	-24.50

Plot of Conducted Emissions Test Data

Conducted Disturbance

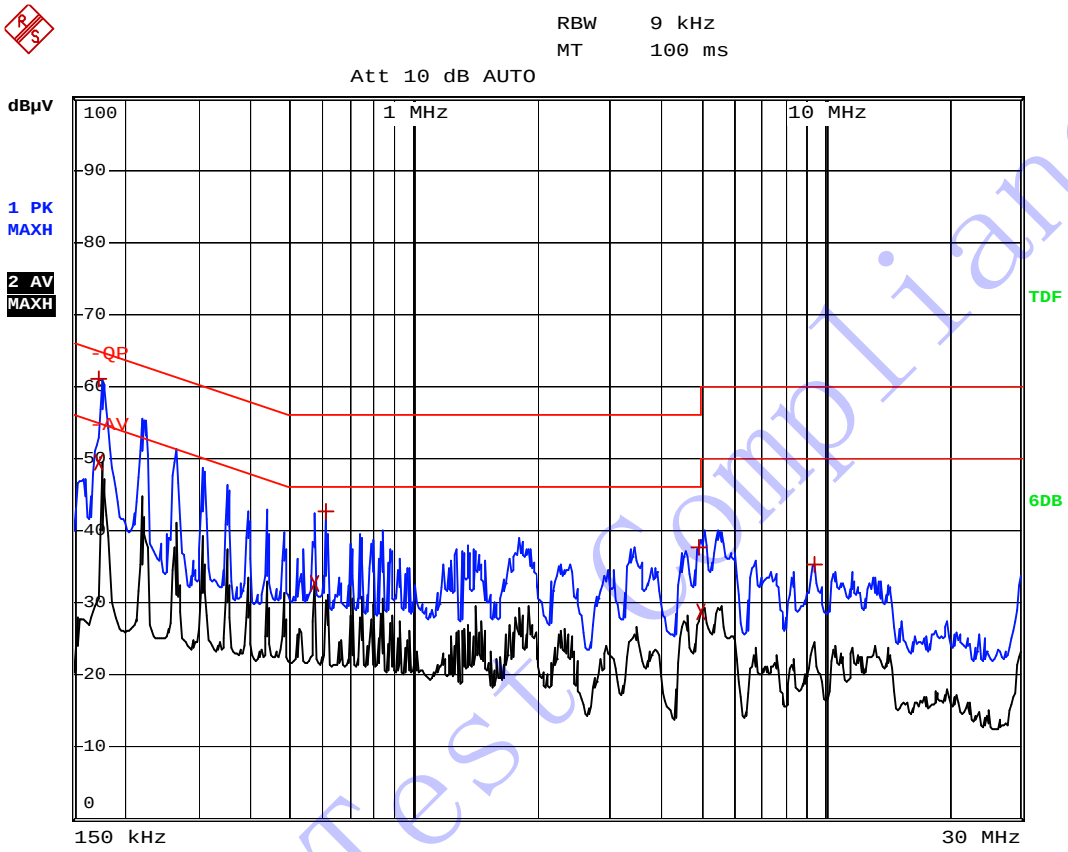
EUT: TABLET PCs

M/N: Y-B07

Operating Condition: Operating

Test Specification: L

Comment: AC 230V/50Hz; Adaptor DC 9V



EDIT PEAK LIST (Prescan Results)

Trace1: -QP
Trace2: -AV
Trace3: ---

TRACE		FREQUENCY	LEVEL dBµV	DELTA LIMIT dB
1	Max Peak	174 kHz	60.92	-3.84
2	Average	174 kHz	49.35	-5.41
2	Average	570 kHz	32.73	-13.26
1	Max Peak	610 kHz	42.55	-13.44
1	Max Peak	4.954 MHz	37.77	-18.22
2	Average	4.99 MHz	28.86	-17.13
1	Max Peak	9.438 MHz	35.28	-24.72

4. RADIATED EMISSION

4.1 Measurement Uncertainty

Base on NIS 81, The Treatment of Uncertainty in EMC Measurements, the best estimate of the uncertainty of any radiation emissions measurement is ± 5.10 dB.

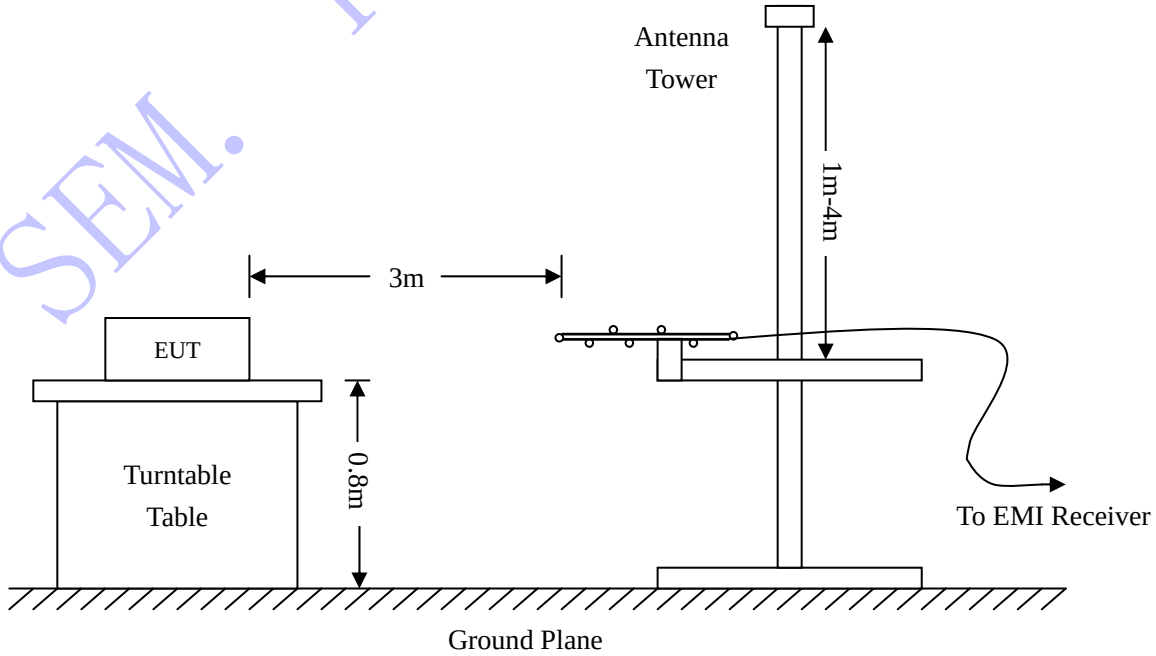
4.2 Test Equipment List and Details

Description	Manufacturer	Model	Serial Number	Cal. Date	Due. Date
Spectrum Analyzer	R&S	FSP	836079/035	2012-03-28	2013-03-27
EMI Test Receiver	R&S	ESVB	825471/005	2012-03-28	2013-03-27
Positioning Controller	C&C	CC-C-1F	N/A	2012-03-28	2013-03-27
RF Switch	EM	EMSW18	SW060023	2012-03-28	2013-03-27
Pre-amplifier	Agilent	8447F	3113A06717	2012-03-28	2013-03-27
Pre-amplifier	Compliance Direction	PAP-0118	24002	2012-03-28	2013-03-27
Trilog Broadband Antenna	SCHWARZBECK	VULB9163	9163-333	2012-03-25	2013-02-24
Horn Antenna	ETS	3117	00086197	2012-03-25	2013-02-24

4.3 Test Procedure

Test is conducting under the description of ETSI EN 301 489-1 V1.9.2, Electromagnetic compatibility and Radio spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 1: Common technical requirements, Section 8.2.2, The test method shall be in accordance with EN 55022 [7].

4.4 Test System Setup



4.5 Corrected Amplitude & Margin Calculation

The Corrected Amplitude is calculated adding the Antenna Factor and the Cable Factor, and subtracting the Amplifier Gain from the Amplitude reading. The basic equation is as follows:

Corr. Ampl. = Indicated Reading + Antenna Factor + Cable Factor - Amplifier Gain

The "**Margin**" column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of -6dBμV means the emission is 6dBμV below the maximum limit for Class B. The equation for margin calculation is as follows:

Margin = Corr. Ampl. – EN301489 Limit

4.6 Environmental Conditions

Temperature:	17° C
Relative Humidity:	52%
ATM Pressure:	1012 mbar

4.7 Summary of Test Results/Plots

According to the data, the EUT complied with the EN 301 489 standards, and had the worst margin of:

-2.20 dBμV at **30.4237 MHz** in the **Vertical** polarization, **30 MHz to 6 GHz, 3Meters**

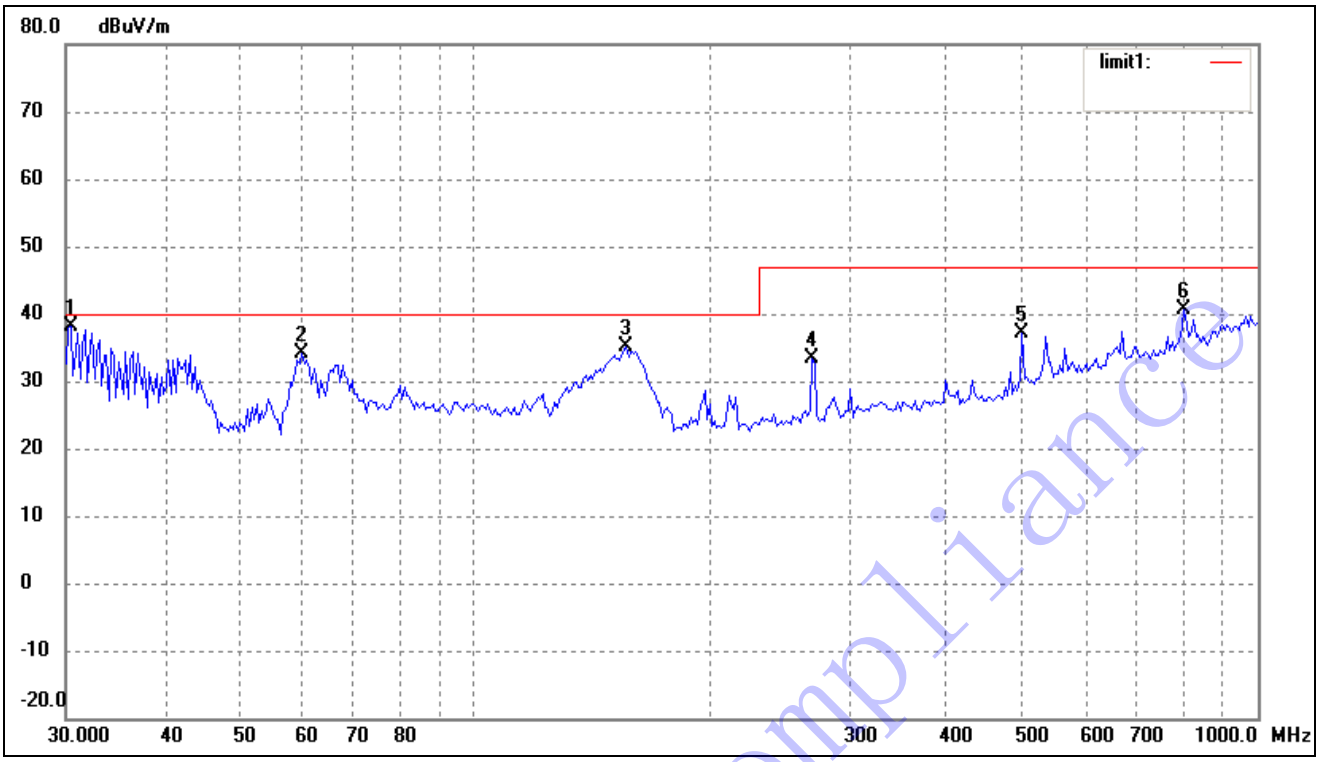
Plot of Radiation Emission Test Data

Test Mode: Operating

Horizontal:

No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	(°)	(cm)	
1	35.4993	24.83	6.90	31.73	40.00	-8.27	360	100	peak
2	159.2251	32.42	4.51	36.93	40.00	-3.07	360	100	peak
3	240.8304	29.85	8.45	38.30	47.00	-8.70	360	100	peak
4	269.4284	30.38	9.22	39.60	47.00	-7.40	360	100	peak

Vertical:



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	(°)	(cm)	
1	30.4237	31.03	6.77	37.80	40.00	-2.20	332	150	QP
2	60.0691	26.63	7.50	34.13	40.00	-5.87	360	100	peak
3	155.9101	30.67	4.35	35.02	40.00	-4.98	360	100	peak
4	269.4284	24.10	9.22	33.32	47.00	-13.68	360	100	peak
5	499.4247	22.88	14.36	37.24	47.00	-9.76	360	100	peak
6	804.6028	21.60	19.10	40.70	47.00	-6.30	360	100	peak

Note: The EUT was tested in frequency rang 30MHz to 6GHz, .Emissions attenuated closely to the noise base are not reported.

5. Electrostatic Discharge Immunity (ESD)

5.1 Test Equipment List and Details

Description	Manufacturer	Model	Serial Number	Cal. Date	Due. Date
ESD Generator	TESQ AG	NSG 437	161	2012-03-28	2013-03-27

5.2 Test Procedure

Test is conducting under the description of IEC 61000-4-2.

Test Performance

Performance Criterion B for TT, TR

Environmental Conditions

Temperature:	18 °C
Relative Humidity:	45%
ATM Pressure:	1019 mbar

5.3 EN61000-4-2: Electrostatic Discharge Immunity Test Data

Test Mode: TT

Table 1: Electrostatic Discharge Immunity (Air Discharge)

EN 61000-4-2	Test Levels (kV)									
Test Points	-2	+2	-4	+4	-6	+6	-8	+8	-15	+15
Slots	A	A	B	B	B	B	B	B		
I/O Port	A	A	B	B	B	B	B	B		
Button	A	A	B	B	B	B	B	B		

Table 2: Electrostatic Discharge Immunity (Direct Contact)

EN 61000-4-2	Test Levels (kV)									
Test Points	-2	+2	-4	+4	-6	+6	-8	+8	-15	+15
Screw	A	A	A	A						
/	/	/	/	/						

Table 3: Electrostatic Discharge Immunity (Indirect Contact HCP)

EN 61000-4-2	Test Levels (kV)									
Test Points	-2	+2	-4	+4	-6	+6	-8	+8	-15	+15
Front Side	A	A	A	A						
Top Side	A	A	A	A						
Back Side	A	A	A	A						
Left Side	A	A	A	A						
Right Side	A	A	A	A						

Table 4: Electrostatic Discharge Immunity (Indirect Contact VCP)

EN 61000-4-2	Test Levels (kV)									
Test Points	-2	+2	-4	+4	-6	+6	-8	+8	-15	+15
Front Side	A	A	A	A						
Top Side	A	A	A	A						
Back Side	A	A	A	A						
Left Side	A	A	A	A						
Right Side	A	A	A	A						

Test Mode: TR

Table 1: Electrostatic Discharge Immunity (Air Discharge)

EN 61000-4-2	Test Levels (kV)									
Test Points	-2	+2	-4	+4	-6	+6	-8	+8	-15	+15
Slots	A	A	B	B	B	B	B	B		
I/O Port	A	A	B	B	B	B	B	B		
Button	A	A	B	B	B	B	B	B		

Table 2: Electrostatic Discharge Immunity (Direct Contact)

EN 61000-4-2	Test Levels (kV)									
Test Points	-2	+2	-4	+4	-6	+6	-8	+8	-15	+15
Screw	A	A	A	A						
/	/	/	/	/						

Table 3: Electrostatic Discharge Immunity (Indirect Contact HCP)

EN 61000-4-2	Test Levels (kV)									
Test Points	-2	+2	-4	+4	-6	+6	-8	+8	-15	+15
Front Side	A	A	A	A						
Top Side	A	A	A	A						
Back Side	A	A	A	A						
Left Side	A	A	A	A						
Right Side	A	A	A	A						

Table 4: Electrostatic Discharge Immunity (Indirect Contact VCP)

EN 61000-4-2	Test Levels (kV)									
Test Points	-2	+2	-4	+4	-6	+6	-8	+8	-15	+15
Front Side	A	A	A	A						
Top Side	A	A	A	A						
Back Side	A	A	A	A						
Left Side	A	A	A	A						
Right Side	A	A	A	A						

Test Result: Pass

6. Radiated RF-Electromagnetic Field Immunity

6.1 Test Equipment List and Details

Description	Manufacturer	Model	Serial Number	Cal. Date	Due. Date
Signal Generator	Rohde & Schwarz	SMT03	100059	2012-03-28	2013-03-27
Voltage Probe	Rohde & Schwarz	URV5-Z2	100013	2012-03-28	2013-03-27
Power Amplifier	AR	150W1000	300999	2012-03-28	2013-03-27
Power Amplifier	AR	25S1G4AM1	305993	2012-03-28	2013-03-27
Trilog Antenna	SCHWARZBECK	VULB9163	9163-333	2012-03-28	2013-03-27
Anechoic chamber	Albatross Projects	MCDC	----	2012-03-28	2013-03-27

6.2 Test Procedure

Test is conducting under the description of IEC 61000-4-3.

Test Performance

Performance Criterion A for CT, CR

Environmental Conditions

Temperature:	21 °C
Relative Humidity:	48%
ATM Pressure:	1010 mbar

6.3 EN61000-4-3: Continuous Radiated Disturbances Test Data

Frequency step: 1% of fundamental

Dwell time: 1 second

Test Mode: CT

Frequency Range (MHz)	Front (3 V/m)		Rear (3 V/m)		Left Side (3 V/m)		Right Side (3 V/m)	
80-1000	VERT	HORI	VERT	HORI	VERT	HORI	VERT	HORI
	A	A	A	A	A	A	A	A
1400-2700	A	A	A	A	A	A	A	A

Test Mode: CR

Frequency Range (MHz)	Front (3 V/m)		Rear (3 V/m)		Left Side (3 V/m)		Right Side (3 V/m)	
80-1000	VERT	HORI	VERT	HORI	VERT	HORI	VERT	HORI
	A	A	A	A	A	A	A	A
1400-2700	A	A	A	A	A	A	A	A

Test Result: Pass

7. Electrical Fast Transients

7.1 Test Equipment List and Details

Description	Manufacturer	Model	Serial Number	Cal. Date	Due. Date
Transient 2000	EMC PARTNER	TRA2000	863	2012-03-28	2013-03-27
Couple Clamp	EMC PARTNER	CN-EFT1000	513	2012-03-28	2013-03-27

7.2 Test Procedure

Test is conducting under the description of IEC 61000-4-4.

Test Performance

Performance Criterion B for TT, TR

Environmental Conditions

Temperature:	22 °C
Relative Humidity:	48%
ATM Pressure:	1020 mbar

7.3 EN61000-4-4: Electrical Fast Transients Test Data

Test Mode: TT

EN 61000-4-4 Test Points		Test Levels (kV)							
		+0.5	-0.5	+1.0	-1.0	+2.0	-2.0	+4.0	-4.0
Power Supply Power Line of EUT	L1	A	A	B	B	/	/	/	/
	L2	A	A	B	B	/	/	/	/
	Earth	/	/	/	/	/	/	/	/
	L1+L2	A	A	B	B	/	/	/	/
	L1 + Earth	/	/	/	/	/	/	/	/
	L2 + Earth	/	/	/	/	/	/	/	/
	L1+L2+Earth	/	/	/	/	/	/	/	/
Signal ports		/	/	/	/	/	/	/	/

Test Mode: TR

EN 61000-4-4 Test Points		Test Levels (kV)							
		+0.5	-0.5	+1.0	-1.0	+2.0	-2.0	+4.0	-4.0
Power Supply Power Line of EUT	L1	A	A	B	B	/	/	/	/
	L2	A	A	B	B	/	/	/	/
	Earth	/	/	/	/	/	/	/	/
	L1+L2	A	A	B	B	/	/	/	/
	L1 + Earth	/	/	/	/	/	/	/	/
	L2 + Earth	/	/	/	/	/	/	/	/
	L1+L2+Earth	/	/	/	/	/	/	/	/
Signal ports		/	/	/	/	/	/	/	/

Test Result: Pass

8. Surge

8.1 Test Equipment List and Details

Description	Manufacturer	Model	Serial Number	Cal. Date	Due. Date
Transient 2000	EMC PARTNER	TRA2000	863	2012-03-28	2013-03-27
Couple Clamp	EMC PARTNER	CN-EFT1000	513	2012-03-28	2013-03-27

8.2 Test Procedure

Test is conducting under the description of IEC 61000-4-5.

Test Performance

Performance Criterion B for TT, TR

Environmental Conditions

Temperature:	22 °C
Relative Humidity:	48%
ATM Pressure:	1020 mbar

8.3 EN61000-4-5: Surge Test Data

Test Mode: TT

Level	Voltage	Poll	Path	Pass	Fail
1	0.5kV	±	L-N, L-PE, N-PE	/	/
2	1kV	±	L-N	A	/
3	2kV	±	L-PE, N-PE	/	/
4	4kV	±	L-N, L-PE, N-PE	/	/

Test Mode: TR

Level	Voltage	Poll	Path	Pass	Fail
1	0.5kV	±	L-N, L-PE, N-PE	/	/
2	1kV	±	L-N	A	/
3	2kV	±	L-PE, N-PE	/	/
4	4kV	±	L-N, L-PE, N-PE	/	/

Test Result: Pass

9. Continuous Conducted Disturbances

9.1 Test Equipment List and Details

Description	Manufacturer	Model	Serial Number	Cal. Date	Due. Date
Immunity simulator	EMTEST	MV500	0800-44	2012-03-28	2013-03-27

9.2 Test Procedure

Test is conducting under the description of IEC 61000-4-6.

Test Performance

Performance Criterion A for CT, CR

Environmental Conditions

Temperature:	22 °C
Relative Humidity:	48%
ATM Pressure:	1020 mbar

9.3 EN61000-4-6: Continuous Conducted Disturbances Test Data

Sweep frequency range: 150kHz~80MHz
Frequency step: 1% of fundamental
Dwell time: 1 second
Test Mode: CT

Level	Voltage Level (e.m.f.) U_0	Modulation:	Pass	Fail
1	1	AM 80%, 1kHz sinewave	/	/
2	3	AM 80%, 1kHz sinewave	A	/
3	10	AM 80%, 1kHz sinewave	/	/

Test Mode: CR

Level	Voltage Level (e.m.f.) U_0	Modulation:	Pass	Fail
1	1	AM 80%, 1kHz sinewave	/	/
2	3	AM 80%, 1kHz sinewave	A	/
3	10	AM 80%, 1kHz sinewave	/	/

Test Result: Pass

10. Voltage Dips And Interruptions

10.1 Test Equipment List and Details

Description	Manufacturer	Model	Serial Number	Cal. Date	Due. Date
Transient 2000	EMC PARTNER	TRA2000	863	2012-03-28	2013-03-27
Couple Clamp	EMC PARTNER	CN-EFT1000	513	2012-03-28	2013-03-27

10.2 Test Procedure

Test is conducting under the description of IEC 61000-4-11.

Test Performance

Performance Criterion B/C for TT, TR

Environmental Conditions

Temperature:	22 °C
Relative Humidity:	48%
ATM Pressure:	1020 mbar

10.3 EN61000-4-11: Voltage Dips And Interruptions Test Data

Test Mode: TT

Level	U2	td	Phase Angle	N	Pass	Fail
1	100%	10ms	0/90/180/270	3	A	/
2	100%	20ms	0/90/180/270	3	A	/
3	30%	100ms	0/90/180/270	3	B	/
4	100%	5000ms	0/90/180/270	3	C	/

Test Mode: TR

Level	U2	td	Phase Angle	N	Pass	Fail
1	100%	10ms	0/90/180/270	3	A	/
2	100%	20ms	0/90/180/270	3	A	/
3	30%	100ms	0/90/180/270	3	B	/
4	100%	5000ms	0/90/180/270	3	C	/

Test Result: Pass

11. EN 61000-3-2 HARMONIC CURRENT EMISSIONS

11.1 Test Equipment List and Details

Description	Manufacturer	Model	Serial Number	Cal. Date	Due. Date
Digital Power Analyzer	Em Test AG/Switzerland	DPA 500	V0745103095	2012-03-28	2013-03-27
Source	Em Test AG/Switzerland	ACS 500	V0745103096	2012-03-28	2013-03-27

11.2 Test Procedure

Test is conducting under the description of EN61000-3-2: 2006+A2:2009
See the clause 7 of EN61000-3-2: 2006+A2: 2009, the EUT with a rated power is less than 75W, other than lighting equipment .No limits in the EN 61000-3-2:2006+A2: 2009. In such a case it is required that the decision and justification not to measure.

Test Result: Compliant

12. EN 61000-3-3 VOLTAGE FLUCTUATION AND FLICKER

12.1 Test Equipment List and Details

Description	Manufacturer	Model	Serial Number	Cal. Date	Due. Date
Digital Power Analyzer	Em Test AG/Switzerland	DPA 500	V0745103095	2012-03-28	2013-03-27
Source	Em Test AG/Switzerland	ACS 500	V0745103096	2012-03-28	2013-03-27

12.2 Test Procedure

Test is conducting under the description of EN61000-3-3: 2008

12.3 Test Standards

EN61000-3-3: 2008
Limit: Clause 5

Environmental Conditions

Temperature:	22 °C
Relative Humidity:	48%
ATM Pressure:	1022 mbar

12.4 EN 61000-3-3: Voltage Fluctuation and Flicker Test Data

Flicker Test Summary per EN/IEC61000-3-3 (Run time)

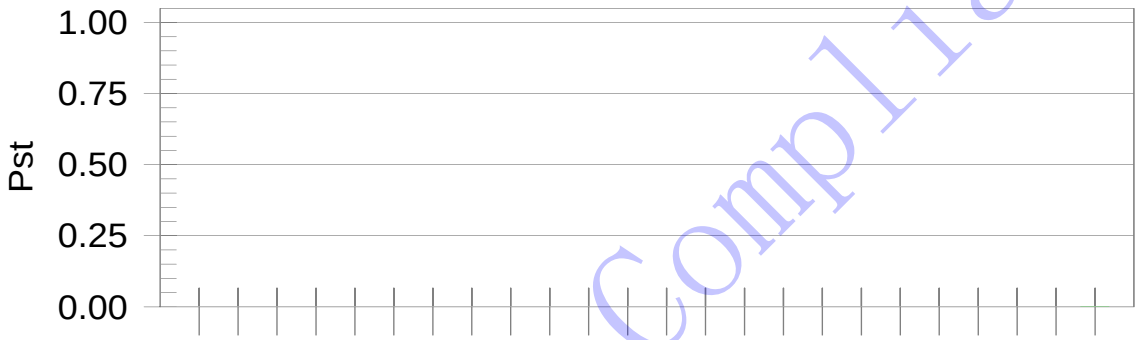
EUT: TABLET PCs
Test category: All parameters (European limits)
Test date: 2012-04-17

Test duration (min): 10
Comment: Normal operating

Tested by: Galy
Test Margin: 100
Start time: 13:24:03 PM
End time: 13:34:23 PM
Data file name: H-000437.cts_data

Test Result: Pass Status: Test Completed

Pst_i and limit line European Limits



Time is too short for Plt plot

Parameter values recorded during the test:

Vrms at the end of test (Volt):	229.87			
Highest dt (%):	0.00	Test limit (%):	3.30	Pass
Time(mS) > dt:	0.0	Test limit (mS):	500.0	Pass
Highest dc (%):	0.00	Test limit (%):	3.30	Pass
Highest dmax (%):	0.00	Test limit (%):	4.00	Pass
Highest Pst (10 min. period):	0.001	Test limit:	1.000	Pass

EXHIBIT 1- PRODUCT LABELING

Proposed CE Label Format

Specifications: Text is Black or white in color. Labels are printed in indelible ink on permanent adhesive backing or silk-screened onto the EUT or shall be affixed at a conspicuous location on the EUT.

Proposed Label Location on EUT

CE Label Location

EXHIBIT 2 - EUT PHOTOGRAPHS

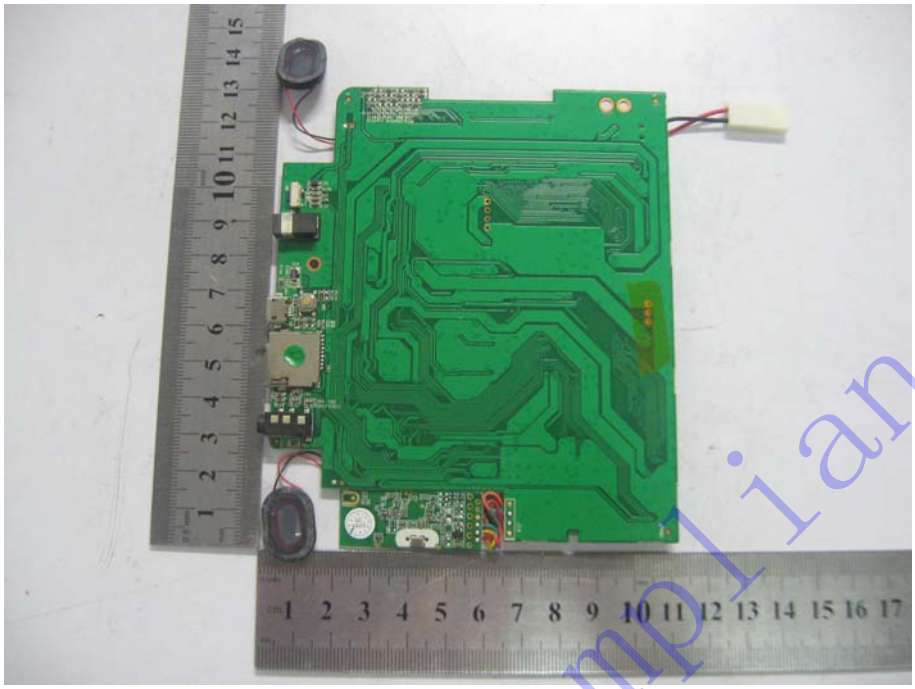
EUT View 1

EUT View 2

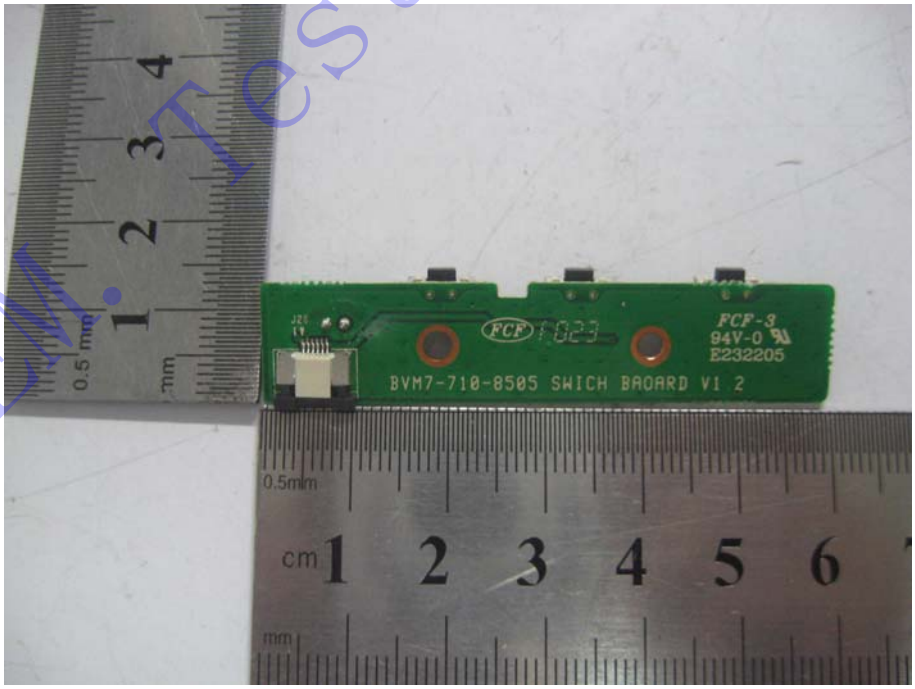
EUT Housing and Board View

Solder Board-Component View 1

Solder Board-Component View 2



Solder Board-Component View 3



Solder Board-Component View 4

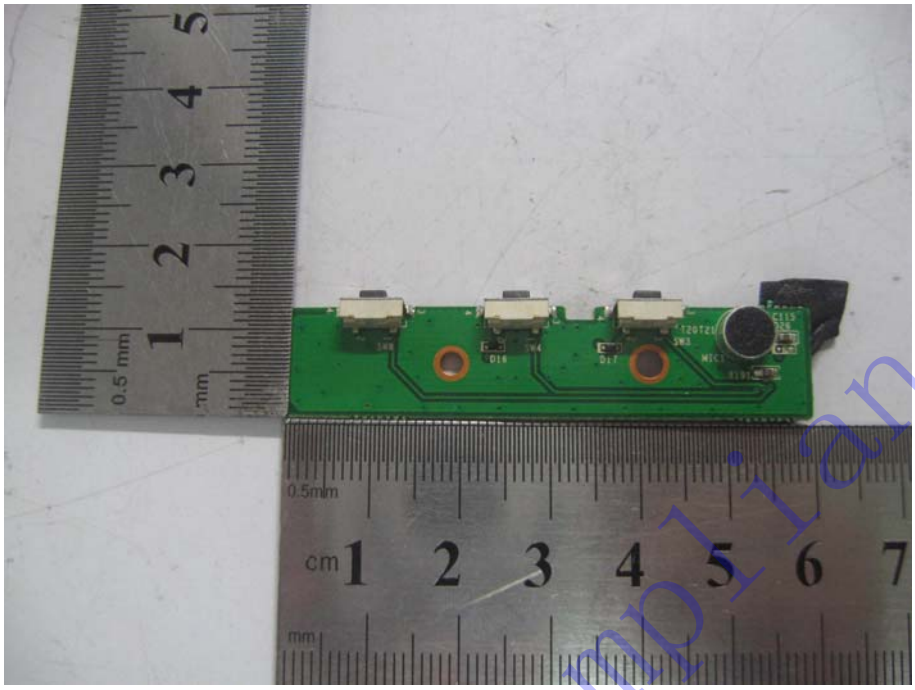
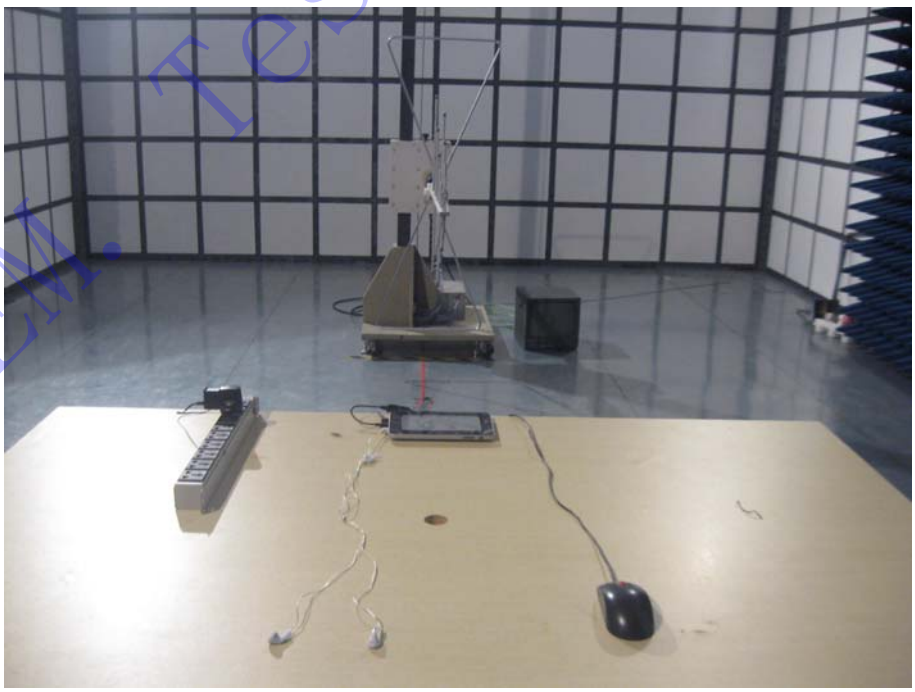


EXHIBIT 3 - TEST SETUP PHOTOGRAPHS

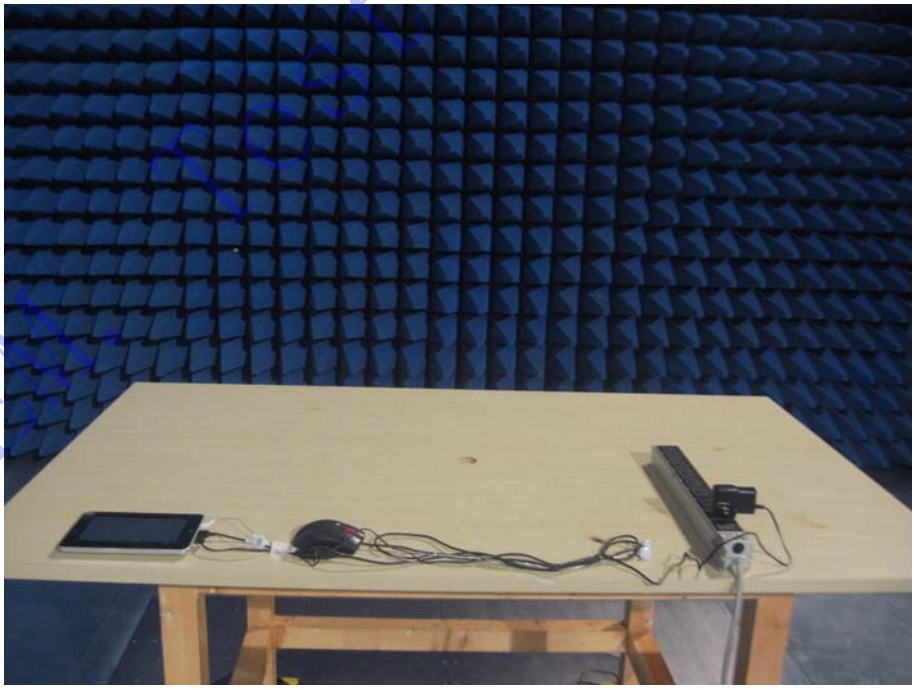
Conducted Emission Test Setup

Radiation Emission Test Setup



IEC 61000-4-2

IEC 61000-4-3



IEC 61000-4-4/5/11

IEC 61000-4-6

******* END OF REPORT *******