

Report No.: T120618W01-D

FCC 47 CFR PART 15 SUBPART B & IC ICES-003 TEST REPORT

for

Tablet PC

MODEL: Smart Tab II⁷

Test Report Number: T120618W01-D

Issued for

Lenovo (Shanghai) Electronics Technology Co., Ltd.

No. 68 Building, 199 Fenju Road, Wai Gao Qiao FTZ, Shanghai, China

Issued By:

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Revision History

		Issue		Effect	
Re	₽V.	Date	Revisions	Page	Revised By
00	0	July 3, 2012	Initial Issue	ALL	Angel Cheng

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APPENDIX 1 - PHOTOGRAPHS OF EUT

TEST RESULT CERTIFICATION

Product:	Tablet PC
Model:	Smart Tab II ⁷
Brand:	Vodafone
Applicant:	Lenovo (Shanghai) Electronics Technology Co., Ltd. No. 68 Building, 199 Fenju Road, Wai Gao Qiao FTZ , Shanghai , China
Manufacturer:	Lenovo (Singapore) Pte Ltd. 151, Lorong Chuan, #02-01, New Tech Park, 556741, Singapore
Tested:	June 28 ~ 29, 2012
Test Voltage:	120VAC, 60Hz

EMISSION						
Standard	ltem	Result	Remarks			
FCC 47 CFR Part 15 Subpart B (July 8, 2011),	Conducted (Power Port)	PASS	Meet Class B limit			
ICES-003 Issue 4: 2004 ANSI C63.4-2009	Radiated	PASS	Meet Class B limit			

- Note: 1. The statements of test result on the above are decided by the request of test standard only; the measurement uncertainties are not factored into this compliance determination.
 - 2. The information of measurement uncertainty is available upon the customer's request.

Deviation from Applicable Standard	
None	

The above equipment has been tested by Compliance Certification Services Inc., and found compliance with the requirements set forth in the technical standards mentioned above. The results of testing in this report apply only to the product/system, which was tested. Other similar equipment will not necessarily produce the same results due to production tolerance and measurement uncertainties.

Approved by:	Reviewed by:
Jason Lin	Gina Lo
Jason Lin Section Manager	Gina Lo Section Manager

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2 EUT DESCRIPTION

Product	Tablet PC		
Brand Name	Vodafone		
Model	Smart Tab II ⁷		
Applicant	Lenovo (Shanghai) Electronics Technology Co., Ltd.		
Identify Number	T120618W01		
Received Date June 18, 2012			
EUT Power Rating	VDC from Power adapter 1) HuntKey / Model: HKA00905015-3C I/P: 100~240Vac 50/60Hz, 0.25A O/P: 5.0Vdc 1.5A 2) HuntKey / Model: HKA00905015-4C I/P:100~240Vac 50/60Hz, 0.25A O/P:5.0Vdc 1.5A 3). HuntKey / Model: HKA00905015-LC I/P: 100~240Vac 50/60Hz, 0.25A O/P: 5.0Vdc 1.5A 4) HuntKey / Model: HKA00905015-9C I/P: 100~240Vac 50/60Hz, 0.25A O/P: 5.0Vdc 1.5A		

I/O PORT

I/O PORT TYPES		Q'TY	TESTED WITH	
1.	Audio Port	1	1	
2.	SIM Card Slot	1	1	
3.	SD Slot	1	1	
4.	Mirco USB Port	1	1	

Note: Client consigns only one model sample to test (Model Number: Smart Tab II^7).

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3 TEST METHODOLOGY

3.1. DECISION OF FINAL TEST MODE

1. The following test mode(s) were scanned during the preliminary test:

Pre-Test Mode
Mode1: EUT+Earphone+Adapter+Camera(Front)
Mode2: EUT+Earphone+Adapter+Camera(Rear)
Mode3: EUT+Earphone+Adapter+Ebook
Mode4: EUT+Earphone+Adapter+FM
Mode5: EUT+Earphone+Adapter+Idle
Mode6: EUT+Earphone+Adapter+MP3
Mode7: EUT+Earphone+Adapter+Photo
Mode8: EUT+Earphone+Adapter+REC
Mode9: EUT+Earphone +NB

After the preliminary scan, the following test mode was found to produce the highest emission level.

Final Test Mode			
Emission	Conducted Emission	Mode 2	
EIIIISSIUII	Radiated Emission	Mode 2	

Then, the above highest emission mode of the configuration of the EUT and cable was chosen for all final test items.

3.2. EUT SYSTEM OPERATION

- 1. Setup the EUT as shown on 4.2
- 2. Turn on the power of all equipment.
- 3. EUT link GSM through CMU200.
- 4. EUT link Notebook through Wireless Router, and link BT module through BT Earphone.
- 5. Play music.
- 6. Repeat the above procedure (3) to (5).

Note: Test program is self-repeating throughout the test.

4 SETUP OF EQUIPMENT UNDER TEST

4.1. DESCRIPTION OF SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

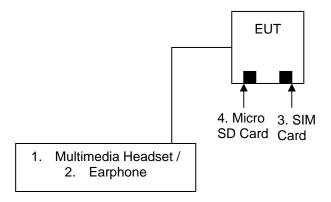
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No.	Device Type	Brand	Model	Series No.	FCC ID	Data Cable	Power Cord
1	Multimedia Headset	Labtec	Axis-301	N/A	FCC DoC	Unshielded, 1.8m x 2	N/A
2	Earphone	Logitech	NA	NA	NA	Unshielded, 1.8m	N/A
3	SIM Card	N/A	N/A	N/A	N/A	N/A	N/A
4	Micro SD Card	Transcend.	N/A	N/A	N/A	N/A	N/A
5	Wireless Pre-N Router (MIMO) (Remote)	BELKIN	F5D8230-4	N/A	SA3-AGN0901 AP0100	N/A	AC I/P: Unshielded, 1.8m DC O/P: Unshielded, 1.8m with a core
6	Universal Radio Communication Tester (Remote)	R&S	CMU200	101245	N/A	N/A	Unshielded, 1.8m
7	BT Headset (Remote)	N/A	N/A	N/A	N/A	N/A	N/A
8	Notebook PC (Remote)	Lenovo	TP00013A	LR-9XH2K	FCC DoC	N/A	AC I/P: Unshielded, 1.8m DC O/P: Unshielded, 1.8m

Note: Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.

4.2. CONFIGURATION OF SYSTEM UNDER TEST

- 7. BT Headset (Remote)
- 6. Universal Radio Communication Tester (Remote)
- 5. Wireless Pre-N Router (MIMO) (Remote)



8. Notebook PC (Remote)

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5 FACILITIES AND ACCREDITATIONS

5.1. FACILITIES

All measurement facilities used to collect the measurement data are located at:
No.11, Wu-Gong 6th Rd., Wugu Industrial Park, New Taipei City 248, Taiwan (R.O.C.)
No.139, Wugong Rd., Wugu Industrial Park, New Taipei City 248, Taiwan (R.O.C.)
☐ No.81-1, Lane 210, Bade 2nd Rd., Lujhu Township, Taoyuan County 33841, TAIWAN, R.O.C
☐ No.163-1, Jhongsheng Rd., Sindian City, Taipei County 23151, Taiwan.
The sites are constructed in conformance with the requirements of ANSI C63.4 and CISPR 22. All receiving equipment conforms to CISPR 16-1-1, CISPR 16-1-2, CISPR 16-1-3, CISPR 16-1-4, CISPR 16-1-5.

5.2. ACCREDITATIONS

Our laboratories are accredited and approved by the following approval agencies according to ISO/IEC 17025.

Taiwan TAF (TAF 1309) **USA** A2LA (0824.01)

The measuring facility of laboratories has been authorized or registered by the following approval agencies.

Canada	Industry Canada (3M Semi Anechoic Chamber: IC 2324G-1 / IC 2324G-2 / 2324J-1 / 2324J-2 to perform)
Norway	Nemko
Japan	VCCI 966 Chamber C: Radiated emissions: 30 MHz -1000 MHz: R-3282 / Above 1GHz: G-146 10M Chamber: Radiated emissions: 30 MHz -1000 MHz: R-3283 / Above 1GHz: G-147 Conducted Emission A: C-3612 / T-1745 Conducted Emission B: C-3700 / T-1839
USA	FCC (3M Semi Anechoic Chamber (FCC MRA: TW1039) to perform FCC Part 15 measurements)

Copies of granted accreditation certificates are available for downloading from our web site, http:///www.ccsrf.com

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5.3. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

Measurement	Frequency	Uncertainty	
Conducted emissions	9kHz~30MHz	±1.2159	
	30~200MHz	±3.9163	
Radiated emissions	200~1000MHz	±3.9030	
	Above 1GHz	±2.5208	

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

Consistent with industry standard (e.g. CISPR 22:2008, clause 11, Measurement Uncertainty) determining compliance with the limits shall be base on the results of the compliance measurement. Consequently the measure emissions being less than the maximum allowed emission result in this be a compliant test or passing test.

The acceptable measurement uncertainty value without requiring revision of the compliance statement is base on conducted and radiated emissions being less than U_{CISPR} which is 3.6dB and 5.2dB respectively. CCS values (called U_{Lab} in CISPR 16-4-2) is less than U_{CISPR} as shown in the table above. Therefore, MU need not be considered for compliance.

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6 CONDUCTED EMISSION MEASUREMENT

6.1. LIMITS OF CONDUCTED EMISSION MEASUREMENT

FREQUENCY (MHz)	Class A	A (dBuV)	Class B (dBuV)	
FREQUENCY (MHZ)	Quasi-peak	Average	Quasi-peak	Average
0.15 - 0.5	79	66	66 - 56	56 - 46
0.50 - 5.0	73	60	56	46
5.0 - 30.0	73	60	60	50

NOTE:

- (1) The lower limit shall apply at the transition frequencies.
- (2) The limit decreases in line with the logarithm of the frequency in the range 0.15 to 0.50 MHz.
- (3) All emanations from a class A/B digital device or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified above.

6.2. TEST INSTRUMENTS

Conducted Emission Room # A								
Name of Equipment	Manufacturer Model Serial Number Calibration Due							
EMI Test Receiver	R&S	ESCI	101203	07/26/2012				
LISN	R&S	ESH3-Z5	848773/014	12/07/2012				
LISN	SCHWARZBECK	NSLK 8127	8127-541	12/14/2012				
Coaxial Cable	Commate CFD300-NL NA 12/07/2012							
Test S/W	CCS-3A1-CE-五股							

Note:

 The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

(please refer to measurement standard or CCS SOP PA-031)

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Procedure of Preliminary Test

6.3. TEST PROCEDURES

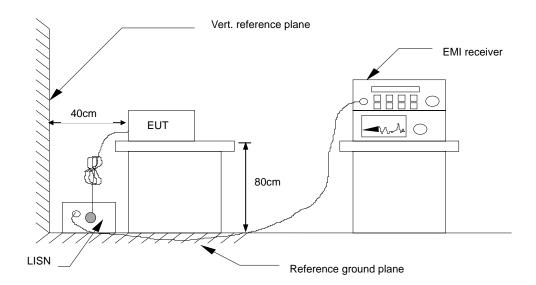
- The EUT and support equipment, if needed, were set up as per the test configuration to simulate typical usage per the user's manual. When the EUT is a tabletop system, a wooden table with a height of 0.8 meters is used and is placed on the ground plane as per ANSI C63.4 (see Test Facility for the dimensions of the ground plane used). When the EUT is a floor standing equipment, it is placed on the ground plane, which has a 12 mm non-conductive covering to insulate the EUT from the ground plane.
- All I/O cables were positioned to simulate typical actual usage as per ANSI C63.4.
- The test equipment EUT installed by AC 120VAC/60Hz main power, through a Line Impedance Stabilization Network (LISN), which was supplied power source and was grounded to the ground plane.
- All support equipment power by from a second LISN.
- The test program of the EUT was started. Emissions were measured on each current carrying line of the EUT using an EMI Test Receiver connected to the LISN powering the EUT.
- The Receiver scanned from 150kHz to 30MHz for emissions in each of the test modes.
- During the above scans, the emissions were maximized by cable manipulation.
- The test mode(s) described in Item 3.1 were scanned during the preliminary test.
- After the preliminary scan, we found the test mode described in Item 3.1 producing the highest emission level.
- The worst configuration of EUT and cable of the above highest emission level were recorded for reference of the final test.

Procedure of Final Test

- EUT and support equipment were set up on the test bench as per the configuration with highest emission level in the preliminary test.
- A scan was taken on both power lines, Line 1 and Line 2, recording at least the six highest emissions. Emission frequency and amplitude were recorded into a computer in which correction factors were used to calculate the emission level and compare reading to the applicable limit.
- The test data of the worst-case condition(s) was recorded.

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6.4. TEST SETUP



 For the actual test configuration, please refer to the related item – Photographs of the Test Configuration.

6.5. DATA SAMPLE:

Frequency (MHz)	QuasiPeak reading (dBuV)	Average reading (dBuV)	Correctrion factor (dB)	QuasiPeak result (dBuV)	Average result (dBuV)	QuasiPeak. limit (dBuV)	Average limit (dBuV)	QuasiPeak margin (dB)	Average margin (dB)	Remark
X.XX	43.95	33.00	10.00	53.95	43.00	56.00	46.00	-2.05	-3.00	Pass

Frequency (MHz) = Emission frequency in MHz

Reading (dBuV) = Uncorrected Analyzer/Receiver reading + Insertion loss of LISN, if it > 0.5

dB

Correction Factor (dB) = LISN Factor + Cable Loss

Result (dBuV) = Raw reading converted to dBuV and CF added

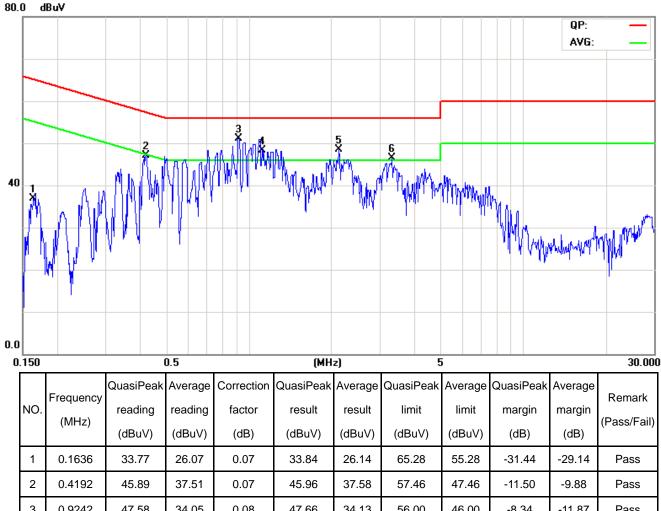
Limit (dBuV) = Limit stated in standard Margin (dB) = Result (dBuV) – Limit (dBuV)

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6.6. TEST RESULTS

CCS Conduction Test

Model No.	Smart Tab II ⁷	Test Date	2012/6/29
Environmental Conditions	26°C, 60% RH	Test Mode	Mode 2
Tested by	David Shu	Line	L1



3 0.9242 47.58 34.05 0.08 47.66 34.13 56.00 46.00 -8.34 -11.87 **Pass** 4 1.1234 48.87 37.78 0.08 48.95 37.86 56.00 46.00 -7.05 -8.14 **Pass** 5 2.1269 43.75 31.48 0.08 43.83 31.56 56.00 46.00 -12.17 -14.44 **Pass** 6 -15.00 3.3116 40.89 29.33 0.11 41.00 29.44 56.00 46.00 -16.56 **Pass**

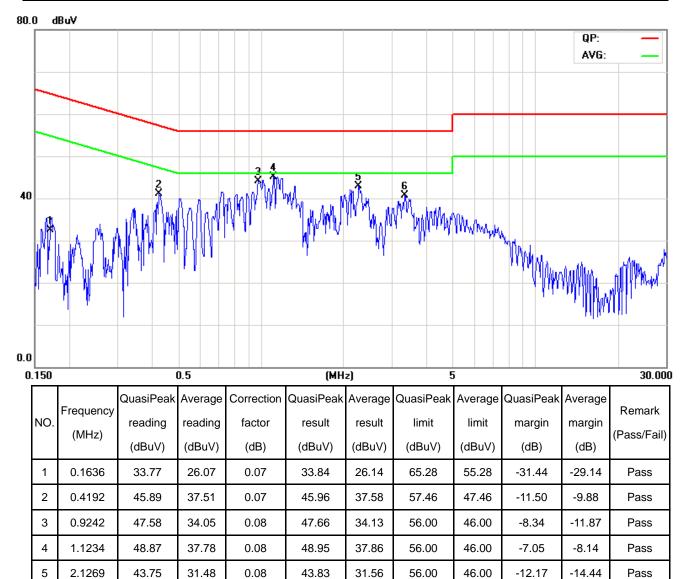
REMARKS: L1 = Line One (Live Line)



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CCS Conduction Test

Model No.	Smart Tab II7	Test Date	2012/6/29
Environmental Conditions	26°C, 60% RH	Test Mode	Mode 2
Tested by	David Shu	Line	L2



REMARKS: L2 = Line Two (Neutral Line)

29.33

0.11

41.00

29.44

56.00

46.00

-15.00

-16.56

Pass

40.89

3.3116



7 RADIATED EMISSION MEASUREMENT

7.1. LIMITS OF RADIATED EMISSION MEASUREMENT

According to FCC Part 15.33 (b), for an unintentional radiator, including a digital device, the spectrum shall be investigated from the lowest radio frequency signal generated or used in the device, without going below the lowest frequency for which a radiated emission limit is specified, up to the frequency shown in the following table:

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	·
Highest frequency generated or used in the device or on which the device operates or tunes (MHz)	Upper frequency of measurement range (MHz)
Below 1.75	30
1.75-108	1000
108-500	2000
500-1000	5000
Above 1000	5 th harmonic of the highest frequency or 40GHz, whichever is lower

Below 1GHz (for digital device)

FREQUENCY (MHz)	dBuV/m (At 10m)		
FREQUENCY (MITZ)	Class A	Class B	
30 ~ 230	40	30	
230 ~ 1000	47	37	

Limit tables for non-digital device:

Class A Radiated Emission limit at 10m (for others)

Frequency (MHZ)	Field Strength Limit (uV/m)Q.P.	Field Strength Limit (dBuV/m)Q.P.
30 - 88	90	39
88 - 216	150	43.5
216 – 960 210		46.4
Above 960	300	49.5

Class B Radiated Emission limit at 3m (for others)

Frequency (MHZ)	Field Strength Limit (uV/m)Q.P.	Field Strength Limit (dBuV/m)Q.P.
30 - 88	100	40
88 - 216	150	43.5
216 – 960	200	46
Above 960	500	54



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Above 1GHz (for all device)

Frequency	Class A (dBuV/m) (At 10m)		Class B (dBuV/m) (At 3m)	
(MHZ)	Average	Peak	Average	Peak
Above 1000	49.5	69.5	54	74

- **NOTE**: (1) The lower limit shall apply at the transition frequencies.
 - (2) Emission level (dBuV/m) = 20 log Emission level (uV/m).
 - (3) The measurement above 1GHz is at close-in distances 3m,and determine the limit L2 corresponding to the close-in distance d2 by applying the following relation: L2 = L1 (d1/d2), where L1 is the specified limit in microvolts per metre (uV/m) at the distance d1 (10m), L2 is the new limit for distance d2 (3m).

So the new Class A limit above 1GHz at 3m is as following table:

Frequency	Class A (dBuV/m) (At 3m)				
(MHZ)	Average	Peak			
Above 1000	60	80			

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7.2. TEST INSTRUMENTS

	Wugu 10M Chamber									
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Due						
Spectrum Analyzer	Agilent	E4446A	MY48250297	10/16/2012						
EMI Test Receiver	R&S	ESCI	100961	09/01/2012						
EMI Test Receiver	R&S	ESCI	100962	09/01/2012						
Pre-Amplifier	MITEQ	1625-3000	1490939	12/19/2012						
Pre-Amplifier	MITEQ	1625-3000	1490940	12/19/2012						
Pre-Amplifier	EMC	EMC012645	980056	10/10/2012						
Pre-Amplifier	MITEQ	AMF-6F-260400-40-8P	985646	05/23/2013						
Bilog Antenna	TESEQ	CBL 6112D	31674	10/06/2012						
Bilog Antenna	TESEQ	CBL6112D	31675	10/06/2012						
Horn Antenna	EMCO	3117	00055167	01/04/2013						
Horn Antenna	EMCO	3116	00026370	10/12/2012						
Coaxial Cable	Huber+Suhner	104PEA	33946/4PEA	12/19/2012						
Coaxial Cable	Huber+Suhner	104PEA	33947/4PEA	12/19/2012						
Coaxial Cable	Huber+Suhner	104PEA	33948/4PEA	12/19/2012						
Coaxial Cable	Huber+Suhner	104PEA	33949/4PEA	12/19/2012						
Coaxial Cable	Huber+Suhner	104	330026/4	12/19/2012						
Coaxial Cable	Huber+Suhner	104	330027/4	12/19/2012						
Coaxial Cable	Huber+Suhner	104	329382/4	10/10/2012						
Coaxial Cable	Huber+Suhner	104	330028/4	10/10/2012						
Turn Table	ccs	CC-T-1F	N/A	N.C.R						
Antenna Tower	ccs	CC-A-1F	N/A	N.C.R						
Controller	ccs	CC-C-1F	N/A	N.C.R						
Antenna Tower	Sunol Sciences	TLT2	031010-5	N.C.R.						
Controller	Sunol Sciences	SC104V	031010-1	N.C.R.						
Site NSA	ccs	N/A	N/A	11/04/2012						
Site VSWR	ccs	N/A	N/A	12/02/2012						
Test S/W		EZ-EMC (CCS-3	BA1RE)							

NOTE: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

^{2.} N.C.R = No Calibration Request.



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7.3. TEST PROCEDURES

(please refer to measurement standard or CCS SOP PA-031)

The basic test procedure was in accordance with ANSI C63.4-2009 and ICES-003: 2004.

Frequency range 30MHz ~ 1GHz

- 1. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 10 meter semi-anechoic chamber room. The table was rotated 360 degrees to determine the position.
- 2. The EUT was set 10 meters away form the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- 3. The height of antenna is varied from one meter to four meter above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- 4. For each suspected emission, the EUT was arranged to its worst case and then the antenna was turned to heights for 1 meter to 4 meters and the turn table was turned form 0 degrees to 360 degrees to find the maximum reading.
- 5. The test-receiver system was set to quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1GHz.

NOTE: The resolution bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection (QP) at frequency below 1GHz.

Frequency range above 1GHz

- 1. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber room. The table was rotated 360 degrees to determine the position.
- 2. The EUT was set 3 meters away form the directional antenna, which was pointed towards the source of the emission within the EUT. This could be done by either pointing the antenna at an angle towards the source of the emission, or by rotating the EUT, in both height and polarization, to maximize the measured emission.
- 3. The height of antenna can be varied from one meter to four meters, the height of adjustment depends on the EUT height and the antenna 3 dB beamwidth both, to detect the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- 4. For each suspected emission, the EUT was arranged to its worst case and then the antenna was turned to heights and the rotatable table was turned form 0 degrees to 360 degrees to find the maximum reading.
- 5. The test-receiver system was set to peak and average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1GHz.

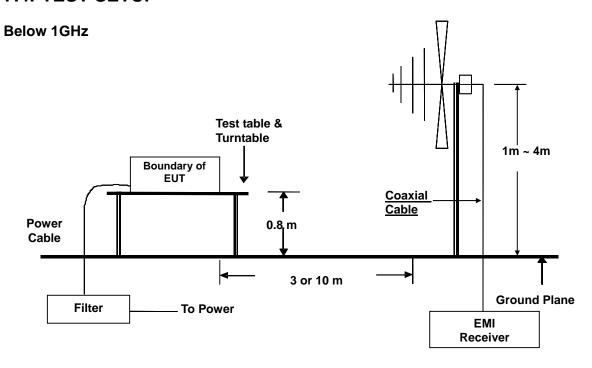
NOTE:

- The resolution bandwidth is 1MHz and video bandwidth of test spectrum analyzer is 1 MHz for peak detection at above 1GHz. The resolution bandwidth is 1MHz and video bandwidth of test spectrum analyzer is 100Hz for average detection at frequency above 1 GHz.
- 2. For measurement of frequency above 1GHz, the EUT was set 3 meters away from the directional antenna.

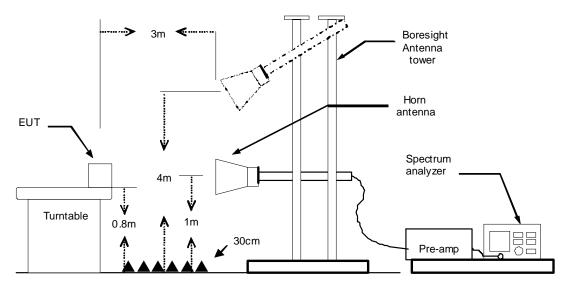


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7.4. TEST SETUP



Above 1GHz



• For the actual test configuration, please refer to the related item – Photographs of the Test Configuration.



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7.5. DATA SAMPLE:

Below 1GHz

Frequency (MHz)	Reading (dBuV)	Correction Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (·)	Remark
xx.xx	16.49	9.86	26.35	30.00	-3.65	116.00	101.00	QP

Above 1GHz

Frequency (MHz)	Reading (dBuV)	Correction Factor(dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Degree (°)	Remark
xx.xx	60.80	-14.59	46.21	74.00	-27.79	200	351	peak
XX.XX	52.05	-13.17	38.88	54.00	-15.12	200	135	AVG

Frequency (MHz) = Emission frequency in MHz

Reading (dBuV) = Uncorrected Analyzer / Receiver reading
Correction Factor (dB/m) = Antenna factor + Cable loss – Amplifier gain
Result (dBuV/m) = Reading (dBuV) + Corr. Factor (dB/m)

Limit (dBuV/m) = Limit stated in standard

Margin (dB) = Result (dBuV/m) – Limit (dBuV/m)

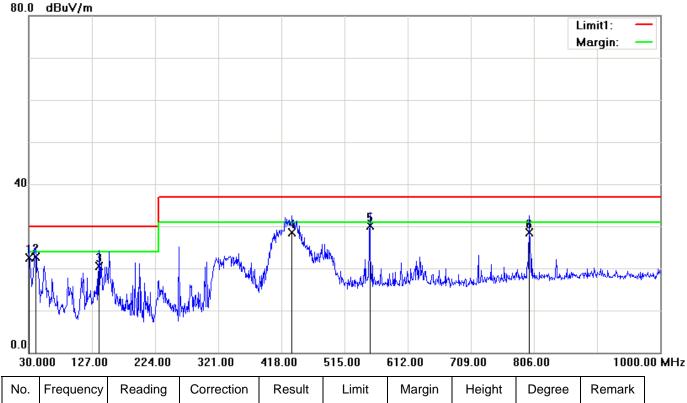
Q.P. = Quasi-Peak

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7.6. TEST RESULTS

Below 1000MHz

Model No.	Smart Tab II ⁷	Test Mode	Mode 2
Environmental Conditions	26°C, 60% RH	Test Date	2012/6/28
Antenna Pole	Vertical	Antenna Distance	10m
Detector Function:	Quasi-peak.	Tested by	Moore Cheng



No.	Frequency	Reading	Correction	Result	Limit	Margin	Height	Degree	Remark
	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	(°)	
1	30.0000	45.82	-23.35	22.47	30.00	-7.53	100	63	QP
2	40.6700	50.27	-27.63	22.64	30.00	-7.36	199	238	QP
3	137.6700	49.12	-28.63	20.49	30.00	-9.51	100	307	QP
4	434.4900	51.40	-22.94	28.46	37.00	-8.54	100	226	QP
5	553.8000	50.20	-20.04	30.16	37.00	-6.84	100	272	QP
6	798.2400	45.68	-17.13	28.55	37.00	-8.45	199	261	QP

REMARKS: 1. The other emission levels were very low against the limit.



2

3

4

5

6

62.0100

438.3700

491.7200

779.8100

850.6200

37.93

37.36

34.24

29.70

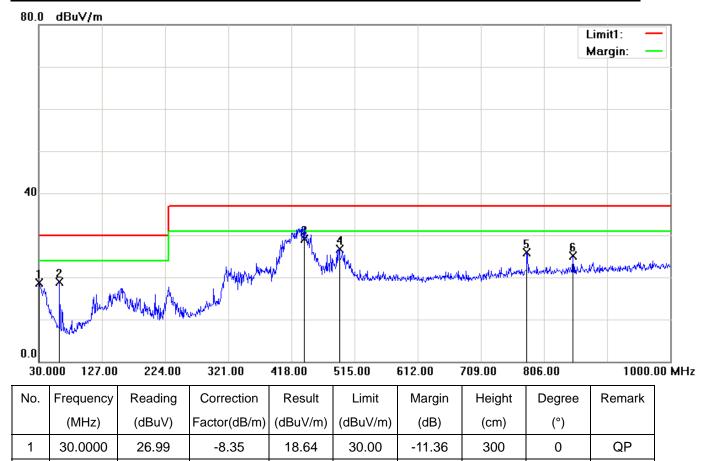
28.19

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Below 1000MHz

Model No.	Smart Tab II ⁷	Test Mode	Mode 2
Environmental Conditions	26°C, 60% RH	Test Date	2012/6/28
Antenna Pole	Horizontal	Antenna Distance	10m
Detector Function:	Quasi-peak.	Tested by	Moore Cheng



30.00

37.00

37.00

37.00

37.00

-11.07

-7.86

-10.26

-11.03

-11.81

261

229

29

359

0

300

200

200

400

299

QΡ

QP

QΡ

QP

QP

REMARKS: 1. The other emission levels were very low against the limit.

-19.00

-8.22

-7.50

-3.73

-3.00

18.93

29.14

26.74

25.97

25.19



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Above 1000MHz

Model No.	Smart Tab II ⁷	Test Mode	Mode 2
Environmental Conditions	26°C, 60% RH	Test Date	2012/6/28
Antenna Pole	Vertical	Antenna Distance	3m
Highest frequency generated or used	2480MHz	Upper frequency	6GHz
Detector Function:	Peak & Average	Tested by	Moore Cheng

No	Frequency	Reading	Correction	Result	Limit	Margin	Height	Degree	Domork
No.	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	(°)	Remark
1	3320.500	62.39	-13.20	49.19	74.00	-24.81	400	288	peak
2	4850.500	63.17	-11.49	51.68	74.00	-22.32	202	180	peak
3	7919.000	56.95	-7.59	49.36	74.00	-24.64	202	0	peak
4	10171.500	56.09	-5.16	50.93	74.00	-23.07	100	109	peak
5	14455.500	56.21	-0.83	55.38	74.00	-18.62	400	340	peak
6	14457.030	42.68	-0.83	41.85	54.00	-12.15	400	310	AVG
7	16087.500	56.25	1.55	57.80	74.00	-16.20	202	0	peak
8	16087.705	42.22	1.55	43.77	54.00	-10.23	199	0	AVG

REMARKS:

- The other emission levels were very low against the limit.
 Margin (dB) = Result (dBuV/m) Limit (dBuV/m)



Model No.	Smart Tab II ⁷	Test Mode	Mode 2
Environmental Conditions	26°C, 60% RH	Test Date	2012/6/28
		Antenna Distance	3m
Highest frequency generated or used	2480MHz	Upper frequency	6GHz
Detector Function:	Peak & Average	Tested by	Moore Cheng

Report No.: T120618W01-D

No	Frequency	Reading	Correction	Result	Limit	Margin	Height	Degree	Domark
No.	(MHz)	(dBuV)	Factor(dB/m)	(dBuV/m)	(dBuV/m)	(dB)	(cm)	(°)	Remark
1	3805.000	58.91	-12.85	46.06	74.00	-27.94	100	186	peak
2	4850.500	60.63	-11.49	49.14	74.00	-24.86	201	300	peak
3	8182.500	55.78	-7.63	48.15	74.00	-25.85	201	237	peak
4	10401.000	55.39	-5.10	50.29	74.00	-23.71	201	104	peak
5	12549.070	43.11	-3.34	39.77	54.00	-14.23	100	56	AVG
6	12551.500	56.08	-3.33	52.75	74.00	-21.25	100	38	peak
7	16104.500	55.18	1.58	56.76	74.00	-17.24	100	165	peak
8	16104.710	42.16	1.58	43.74	54.00	-10.26	100	56	AVG

REMARKS:

- 1. The other emission levels were very low against the limit.
- 2. Margin (dB) = Result (dBuV/m) Limit (dBuV/m)