

FCC Test Report

(TR-1209-062-01)

Applicant : Iriver Limited

Address : 902-5, Bangbase-Dong, Seocho-Gu, Seoul, Korea 137-842

Manufacturer : Iriver china Co., Ltd.

Address : SSL Sci.& Tech. North Industry Park Dongguan china

Product Name : Tablet

Trademark : iriver, DST, RCA

Model(s) : MIT800, DMT580D, DDA800R
(note: All models of EUT are identical and the different names are for marketing purpose only.)

Standard(s) : FCC Part 15 Subpart C

Test Result : Pass

Date of Test : Oct 10, 2012 to Dec 07, 2012

Report issued Dated : Dec 10, 2012

The report shall not be reproduced except in full, without the written approval of the TDK EMC Center.

The results in this report apply only to the sample(s) tested. The production units are required to conform to the initial sample as received when the units are placed in the market.

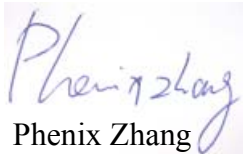

Responsible Engineer	:		Approved by	:	
		Phenix Zhang	Technical manager		CHAN king-chui
Date	:	2012.12.10	Date	:	2012.12.10

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1. Description of the Test Site

1.1 Test Site Location:

Laboratory : TDK South China EMC Center
SAE Technologies Development (Dongguan) Co.,
Ltd. Changan Branch
Address : Zhenan Hi-tech Industrial Park, Dongguan City,
Guangdong Province, China
Phone no. : (86)-769-8564-4678
Fax no. : (86)-769-8564-4499
Email : emc@cn.tdk.com

1.2 Site Registration

VCCI (November, 2011) : Reg. No. R-3733, C-4184
FCC site registration (August, 2011) : Reg. No. 732901
IC registration (January, 2011) : Reg. No. 7993
CNAS (August, 2010) : Reg. No. L4677

1.3 Test Scope

EMC and RF testing according to national / international standards

2. Description of the Tested Samples

2.1 Customer Information

Customer : Iriver Limited
Address : 902-5, Bangbase-Dong, Seocho-Gu, Seoul, Korea 137-842
Phone no. : None
Fax no. : None

2.2 Identification of EUT

Trademark : RCA
Model(s) No. : DMT580D
Serial No. : None

2.3 Spec of EUT

Description of Antenna : FPC type antenna, 1dBi gain
Power Supply : 5V DC, 2.5A
Description of adaptor : Model: DNS-050250E
Input: AC 100-240V, 50/60Hz, 0.35A MAX
Output: DC 5V 2.5A
Operation Frequency : 2412 MHz ~ 2462 MHz
Number of Channels : 11
Modulation : DSSS(BPSK / QPSK / CCK) for IEEE 802.11b ;
OFDM(BPSK/QPSK/16QAM/64QAM) for IEEE 802.11g/n
Data Rate : IEEE 802.11b: 11Mbps Max.
IEEE 802.11g: 54Mbps Max.
IEEE 802.11n20: 65Mbps Max.

2.4 Test Standards List

FCC Part 15 (2011)
RADIO FREQUENCY DEVICES
FCC KDB558074 D01 v01
Guidance for Performing Compliance Measurements on Digital Transmission Systems
(DTS) Operating Under §15.247

3. Test Specifications

3.1 Standard(s) Used

FCC Rules	Description Of Test	Result
15.203/15.247(b)	Antenna Requirement	Pass
15.207	Conducted Emission	Pass
15.247(b)(3)	Maximum Peak Output Power	Pass
15.247(d)	Band Edges Emission	Pass
15.247(a)(2)	6 dB Bandwidth	Pass
15.247(e)	Power Spectral Density	Pass
15.247(d)	Spurious Radiated Emission	Pass

3.2 Test Mode

The EUT has been tested under operating condition.

Software used to control the EUT for staying in continuous transmitting and receiving mode is programmed.

IEEE 802.11b: Channel 1(2412MHz), Channel 6(2437MHz) and Channel 11(2462MHz) with 11Mbps data rate (worst case) are chosen for the final testing.

IEEE 802.11g: Channel 1(2412MHz), Channel 6(2437MHz) and Channel 11(2462MHz) with 54Mbps data rate (worst case) are chosen for the final testing.

IEEE 802.11n20: Channel 1(2412MHz), Channel 6(2437MHz) and Channel 11(2462MHz) with 65Mbps data rate (worst case) are chosen for the final testing.

This EUT is portable device. In the pretest, we have made prescan for X/Y/Z directions. The worst case has chosen for the final test which is the X direction (horizontal).

3.3 Deviations from the Test Specification

N/A

4. Test Result

4.1 Antenna Requirement

4.1.1 Standard Applicable

Section 15.203:

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this Section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna James or electrical connector is prohibited.

Section 15.247(b):

If transmitting antennas of directional gain greater than 6 dBi are used, the peak output power from the intentional radiator shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

4.1.2 Antenna Connected Construction

The antenna connector is designed with permanent attachment and no consideration of replacement.

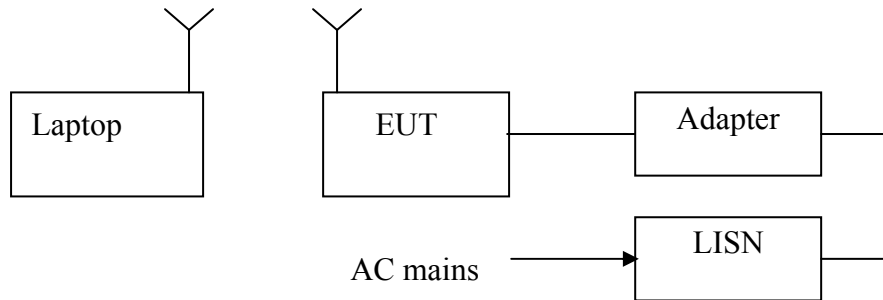
Transmitter antenna of directional gain is 2dBi.

4.2 Conducted Emission (mains)

4.2.1 Test Summary

Test Room	:	Shielded Room
Power Source	:	AC 120V / 60Hz
Standards:	:	FCC Part15 C : 2011
EUT Type	:	Table Top
EUT configuration	:	EUT's highest possible emission level

4.2.2 Block diagram of test setup



4.2.3 Measurement method

The EUT along with its peripherals were placed on a 1.0m (W) x 1.5m(L) and 0.8m in height wooden table and the EUT was adjusted to maintain a 0.4m space from a vertical reference plane. The EUT was connected to power mains through a Artificial Mains Network(AMN), which provided 50 ohm coupling impedance for measuring instrument and the chassis ground was bounded to the horizontal ground plane of shielded room.

The excess power cable between the EUT and the AMN was bundled. All connecting cables of EUT and peripherals were moved to find the maximum emission.

4.2.4. Result

PASS

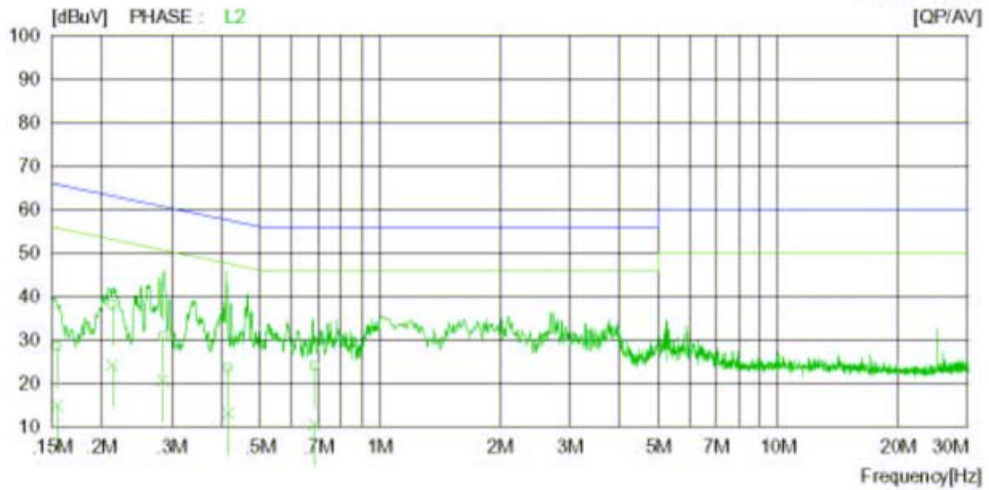
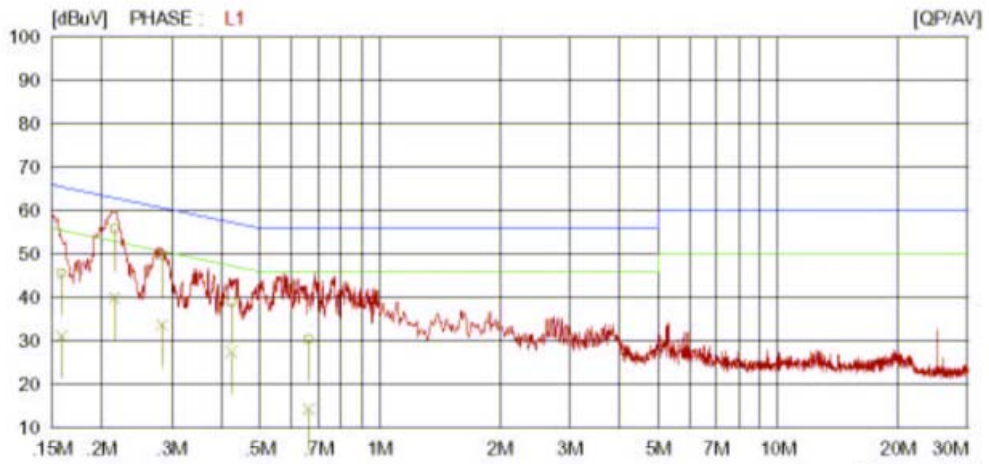
Conducted Emission

TDK South China EMC Centre
Date : 2012-10-10 14:51:07

Trade Name	DMT580D	Document No.	
Model Name	Tablet	Power Supply	AC 120V/60Hz
Product Name	Normal	Temp/Humi	25deg / 52%RH
Test condition		Operator	JiaLiang Cao

Memo

LIMIT : FCC Part 15 B QP
FCC Part 15 B AV



TDK South China EMC Centre Tel:0769-8564-4678 Fax:0769-8564-4499

Conducted Emission

TDK South China EMC Centre
Date: 2012-10-10 14:51:07

Trade Name :
Model Name : DMT580D
Product Name : Tablet
Test condition : Normal

Document No. :
Power Supply : AC 120V/60Hz
Temp/Humi : 25deg / 52%RH
Operator : JiaLiang Cao

Memo :

LIMIT : FCC Part 15 B QP
FCC Part 15 B AV

NO	FREQ [MHz]	READING		C.FACTOR [dB]	RESULT		LIMIT		MARGIN		PHASE
		QP [dBuV]	AV [dBuV]		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	
1	0.15900	35.7	21.1	10.0	45.7	31.1	65.5	55.5	19.8	24.4	L1
2	0.21600	45.8	30.0	10.0	55.8	40.0	63.0	53.0	7.2	13.0	L1
3	0.28400	39.8	23.8	9.9	49.7	33.7	60.7	50.7	11.0	17.0	L1
4	0.42500	29.1	17.5	9.9	39.0	27.4	57.3	47.3	18.4	19.9	L1
5	0.66300	20.4	4.5	9.9	30.3	14.4	56.0	46.0	25.7	31.6	L1
6	0.15500	18.5	4.8	10.0	28.5	14.8	65.7	55.7	37.3	40.9	L2
7	0.21300	28.0	14.1	10.0	38.0	24.1	63.1	53.1	25.1	29.0	L2
8	0.28600	20.9	10.7	9.9	30.8	20.6	60.6	50.6	29.8	30.0	L2
9	0.41600	13.7	3.2	9.9	23.6	13.1	57.5	47.5	33.9	34.4	L2
10	0.68600	14.0	0.4	9.9	23.9	10.3	56.0	46.0	32.1	35.7	L2

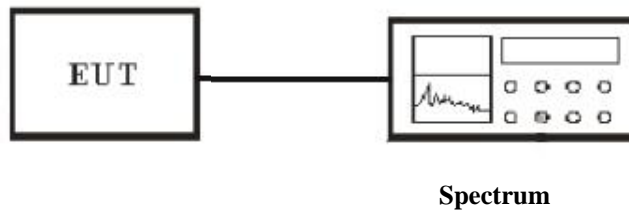
TDK South China EMC Centre Tell:0769-8564-4678 Fax:0769-8564-4499

4.3 Maximum Peak Output Power

4.3.1 Applicable Standard

According to Section 15.247(b)(3), for systems using digital modulation in 2400-2483.5MHz: 1 Watt.

4.3.2 Block diagram of test setup



Connection method: The shield cable was connected with EUT and Spectrum which have $50\Omega Z_C$. There have a combiner inserted between the spectrum and EUT. The connector of EUT side is original by manufacturer. The connector of Spectrum side is N type.

4.3.3 Measurement method

1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
2. Position the EUT as shown in above figure without connection to measurement instrument. Turn on the EUT and connect its antenna terminal to measurement instrument via a low loss cable. Then set it to any one measured frequency within its operating range and make sure the instrument is operated in its linear range.
3. According to KDB558074 requirement, set spectrum analyzer as:
Measurement mode: Channel Power
Center Frequency = 2412MHz, 2437MHz or 2462MHz;
RBW=1MHz, VBW=3MHz,
Channel Power Span = 48MHz
Integ. Bandwidth = 30MHz ,
Sweep = auto
Detector function = peak
4. Hold on 30s, find out the max value on the screen of Spectrum.
5. Repeat above procedures until all frequencies measured were complete.

4.3.4. Result

Temperature (): 22~23	EUT: Tablet
Humidity (%RH): 50~54	M/N: DMT580D
Barometric Pressure (mbar): 950~1000	Operation Condition: Tx Mode
Test date: Nov 12, 2012	Test engineer: Phenix

802.11b mode:

Channel No.	Frequency (MHz)	Output Power (dBm)	Limits (dBm)	Margin (dB)
LOW (CH 1)	2412	9.94	30	20.06
MID (CH 6)	2437	10.42	30	19.58
HIG (CH 11)	2462	10.86	30	19.14

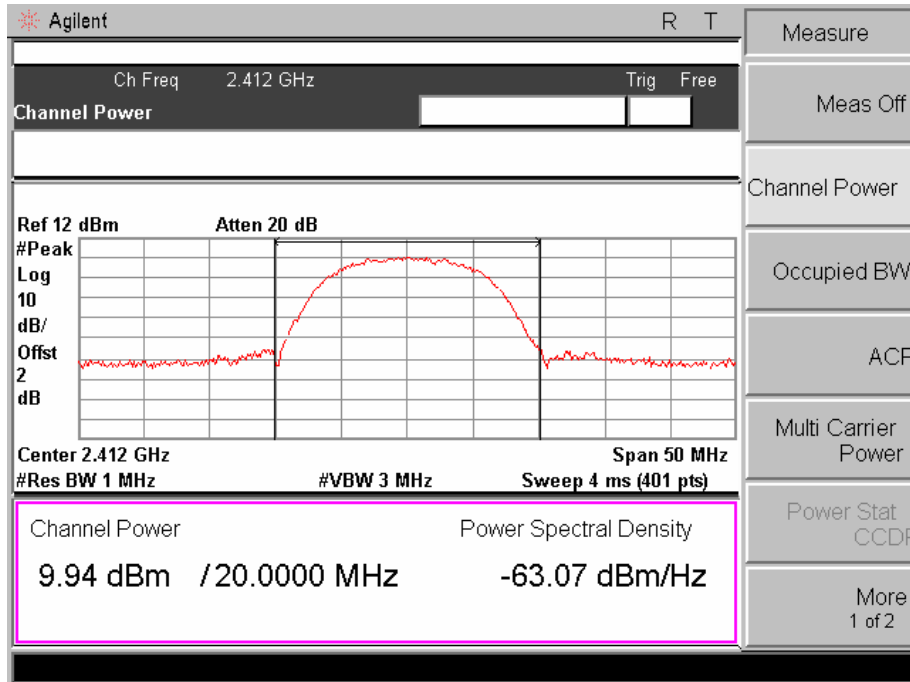
802.11g mode:

Channel No.	Frequency (MHz)	Output Power (dBm)	Limits (dBm)	Margin (dB)
LOW (CH 1)	2412	10.61	30	19.39
MID (CH 6)	2437	10.63	30	19.37
HIG (CH 11)	2462	11.42	30	18.58

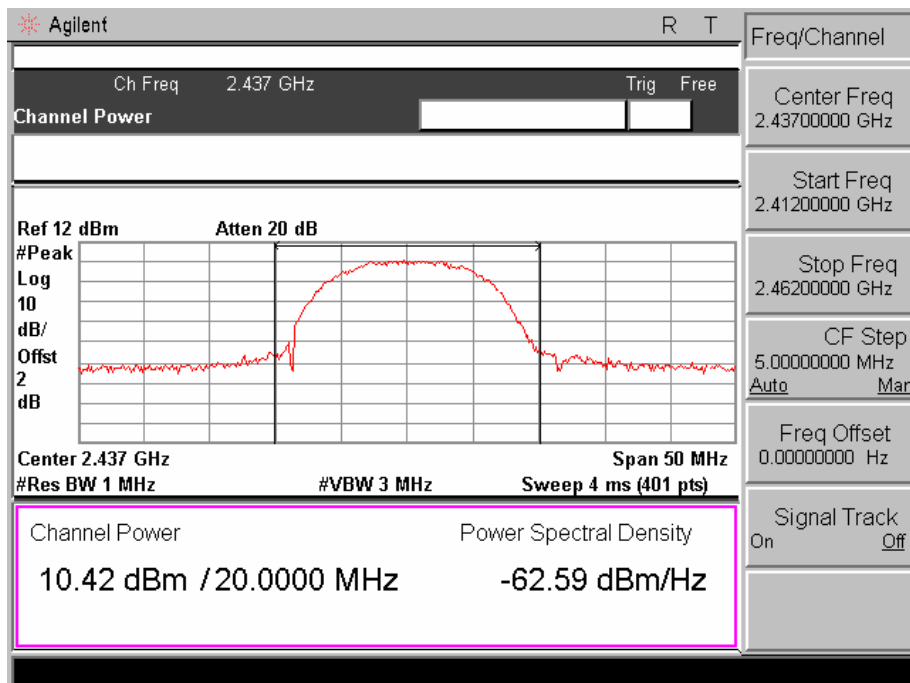
802.11n20 mode:

Channel No.	Frequency (MHz)	Output Power (dBm)	Limits (dBm)	Margin (dB)
LOW (CH 1)	2412	10.78	30	19.22
MID (CH 6)	2437	11.58	30	18.42
HIG (CH 11)	2462	11.95	30	18.05

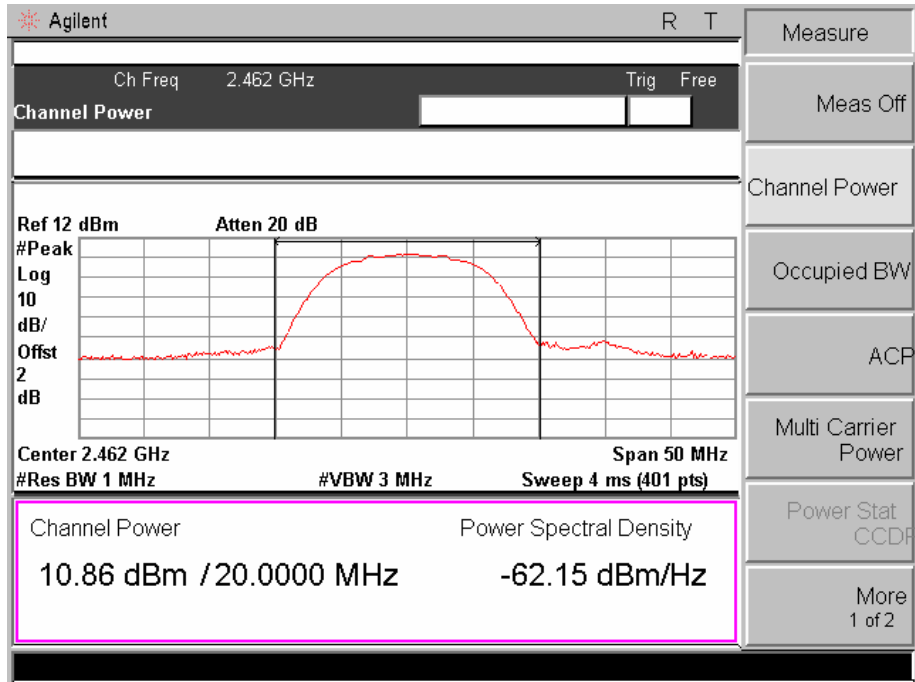
**802.11b mode Plot:
Channel LOW :**



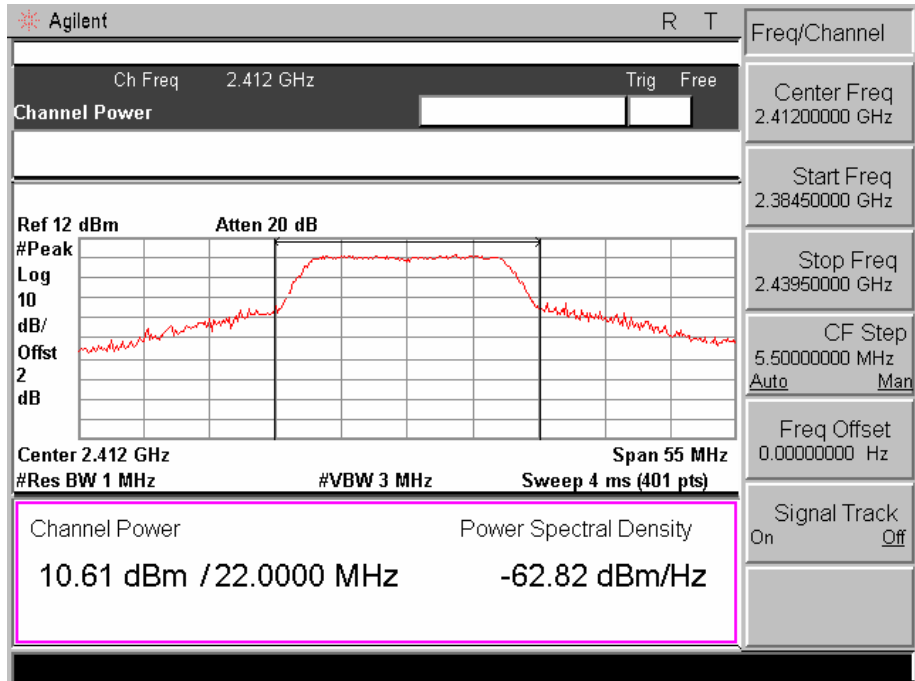
Channel MID :



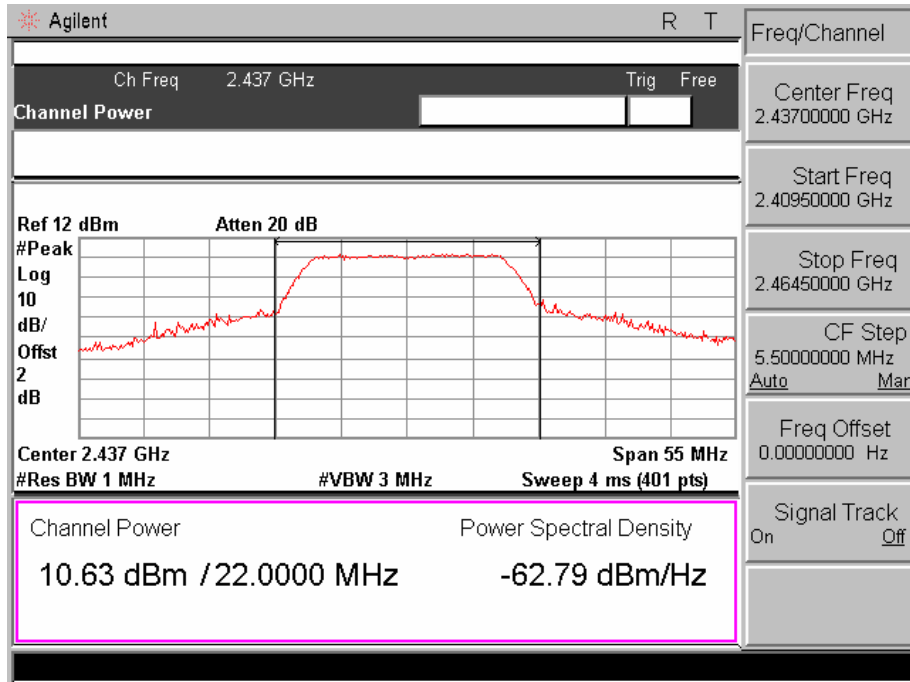
Channel HIG :



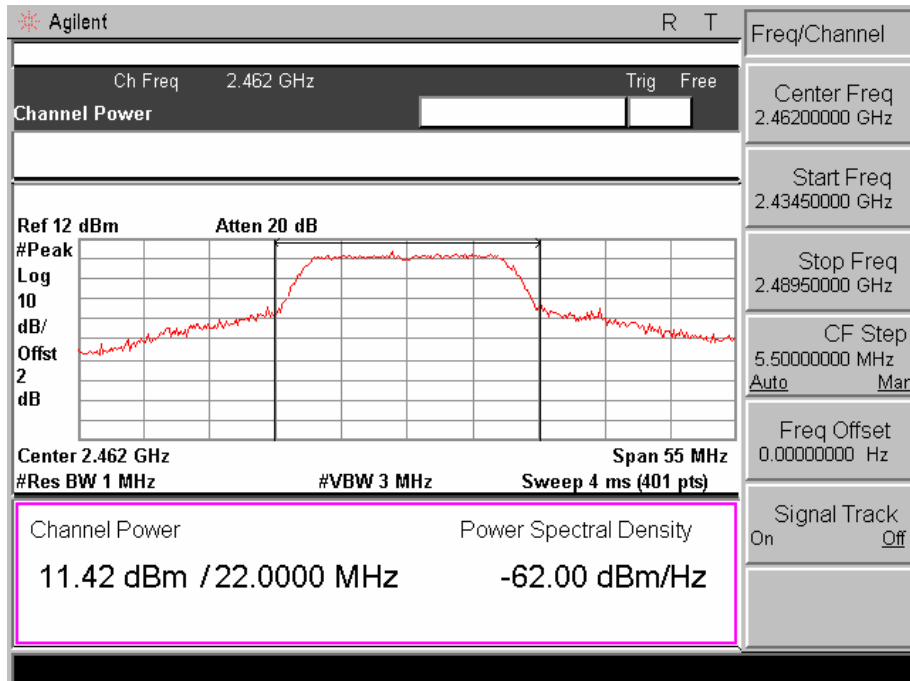
**802.11g mode Plot:
Channel LOW :**



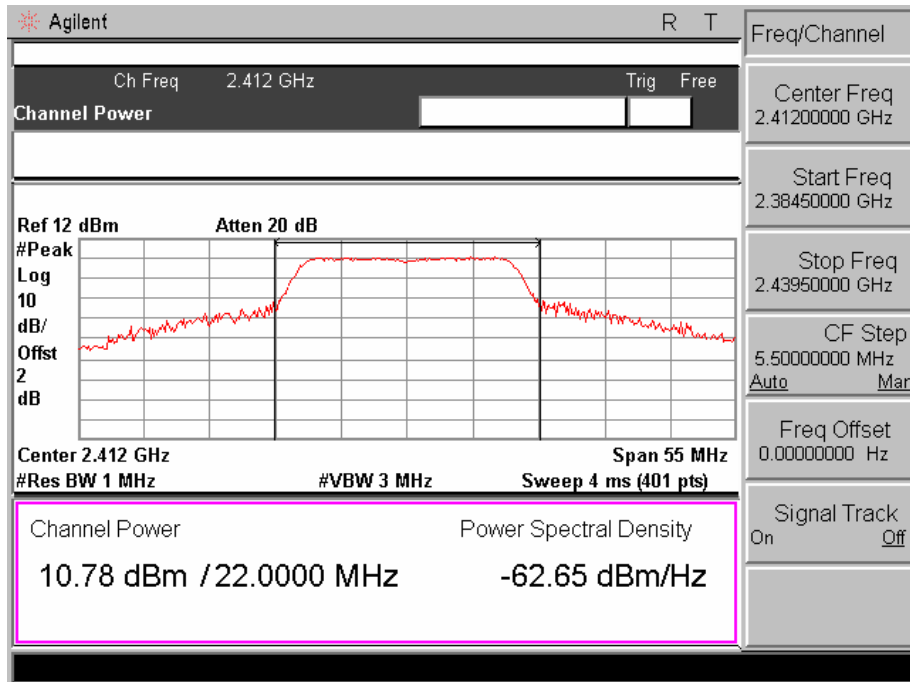
Channel MID :



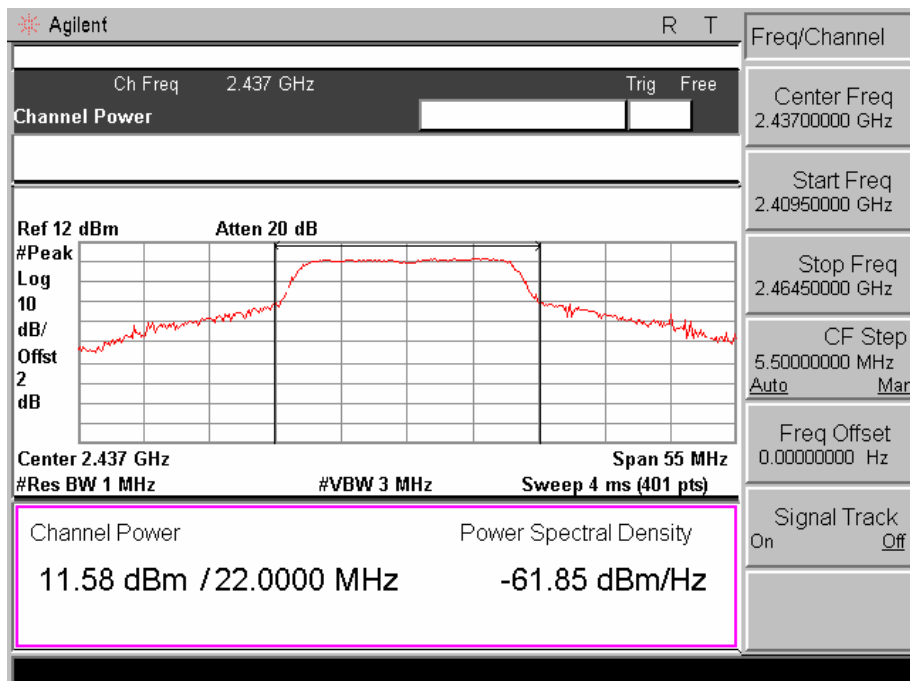
Channel HIG :



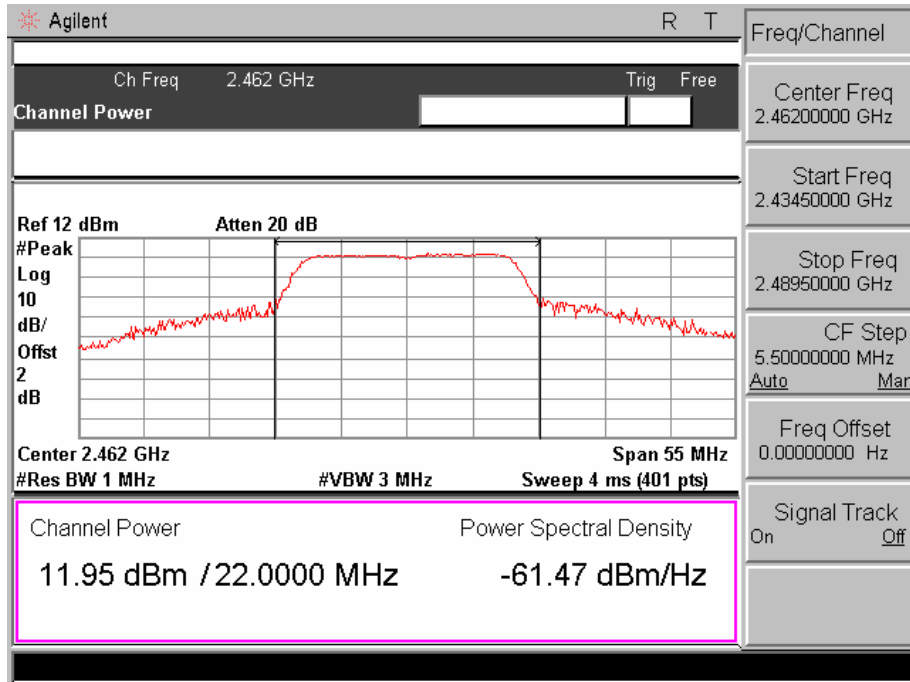
**802.11n20 mode Plot:
Channel LOW :**



Channel MID :



Channel HIG :

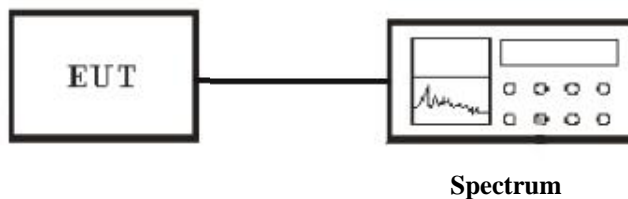


4.4 Band Edges Emission

4.4.1 Applicable Standard

Section 15.247(d): In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. In addition, radiated emissions that fall in the restricted bands, as defined in Section 15.205, must also comply with the radiated emission limits specified in Section 15.209.

4.4.2 Block diagram of test setup



Connection method: The shield cable was connected with EUT and Spectrum which have $50\Omega Z_C$. There have a combiner inserted between the spectrum and EUT. The connector of EUT side is original by manufacturer. The connector of Spectrum side is N type.

4.4.3 Measurement method

1. The transmitter is set to the lowest channel.
2. The transmitter output was connected to the spectrum analyzer via a cable and cable loss is used as the offset of the spectrum analyzer.
3. Set both RBW and VBW of spectrum analyzer to 100KHz with convenient frequency span including 20MHz bandwidth from lower band edge. Then detector set to peak and max hold this trace.
4. The lowest band edges emission was measured and recorded.
5. The transmitter set to the highest channel and repeated 2~4.

4.4.4. Result

Conducted:

Temperature (): 22~23	EUT: Tablet
Humidity (%RH): 50~54	M/N: DMT580D
Barometric Pressure (mbar): 950~1000	Operation Condition: Tx Mode
Test date: Nov 12, 2012	Test engineer: Phenix

802.11b mode:

Frequency (MHz)	Read Delta (dB)	Limits (dB)	Margin (dB)
2400	51.85	-20	31.85
2396.5	50.69	-20	30.69
2483.5	52.80	-20	32.80

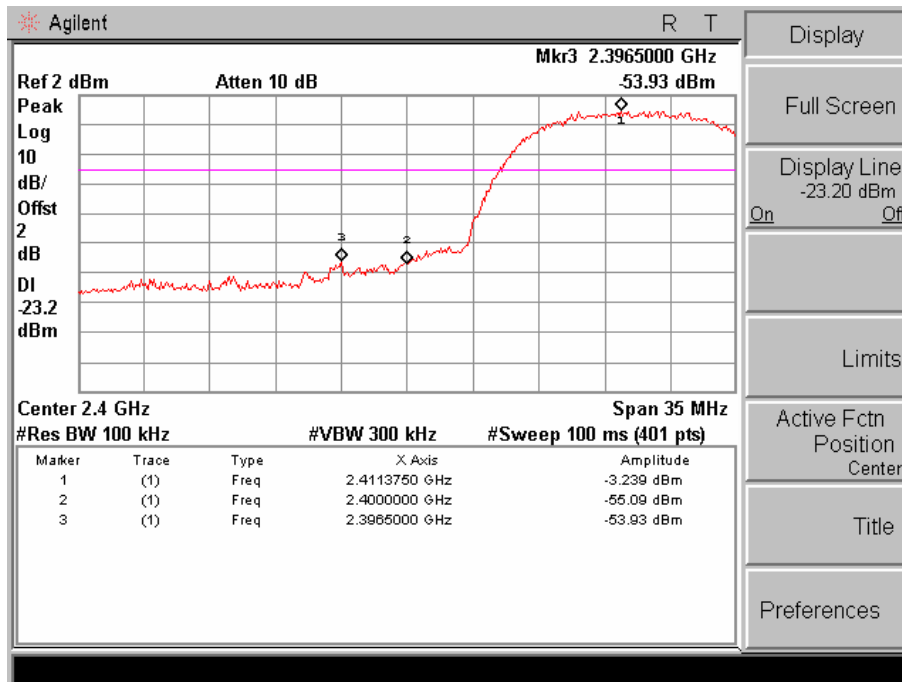
802.11g mode:

Frequency (MHz)	Read Delta (dB)	Limits (dB)	Margin (dB)
2399.7	34.08	-20	14.08
2483.64	40.55	-20	20.55

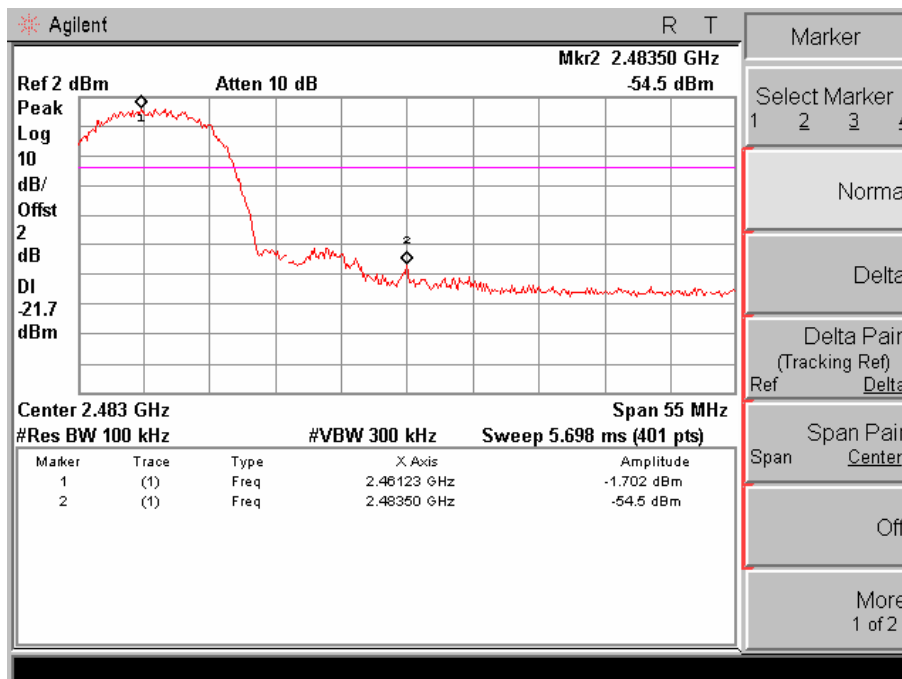
802.11n20 mode:

Frequency (MHz)	Read Delta (dB)	Limits (dB)	Margin (dB)
2399.5	32.77	-20	12.77
2483.5	40.11	-20	20.11

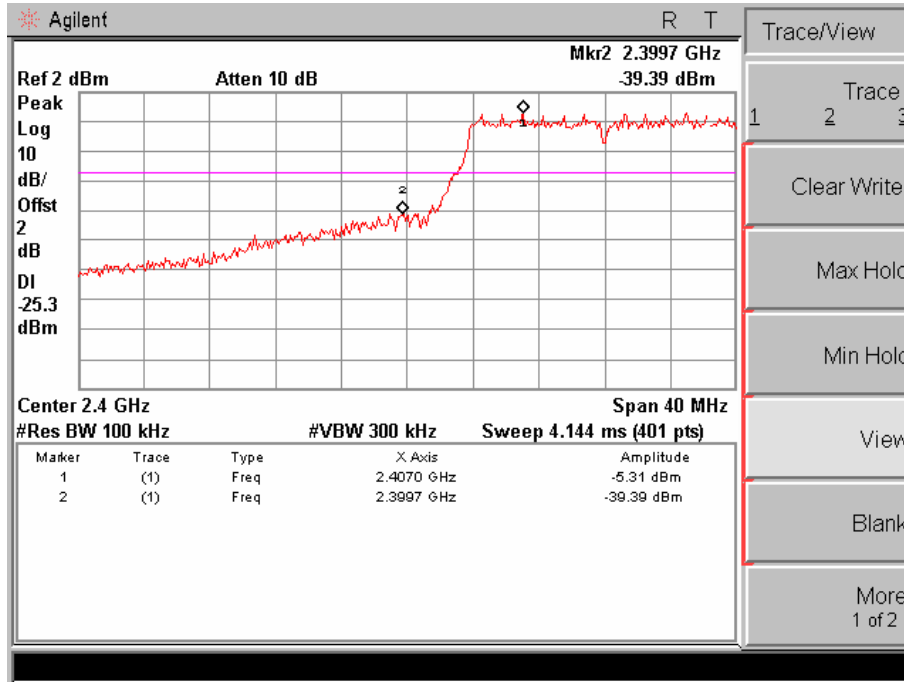
**802.11b mode Plot:
Channel LOW :**



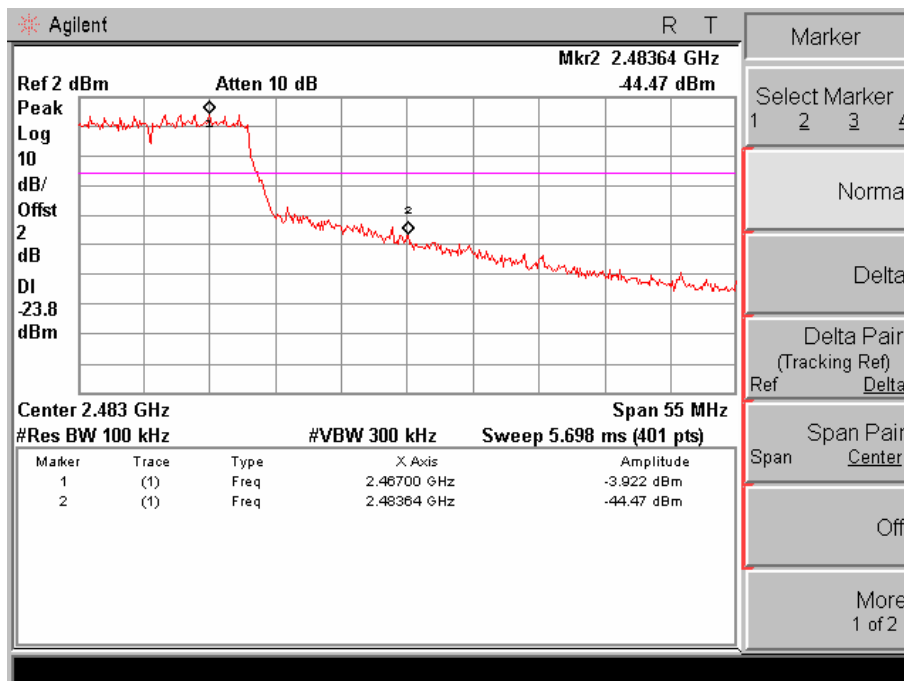
Channel HIG :



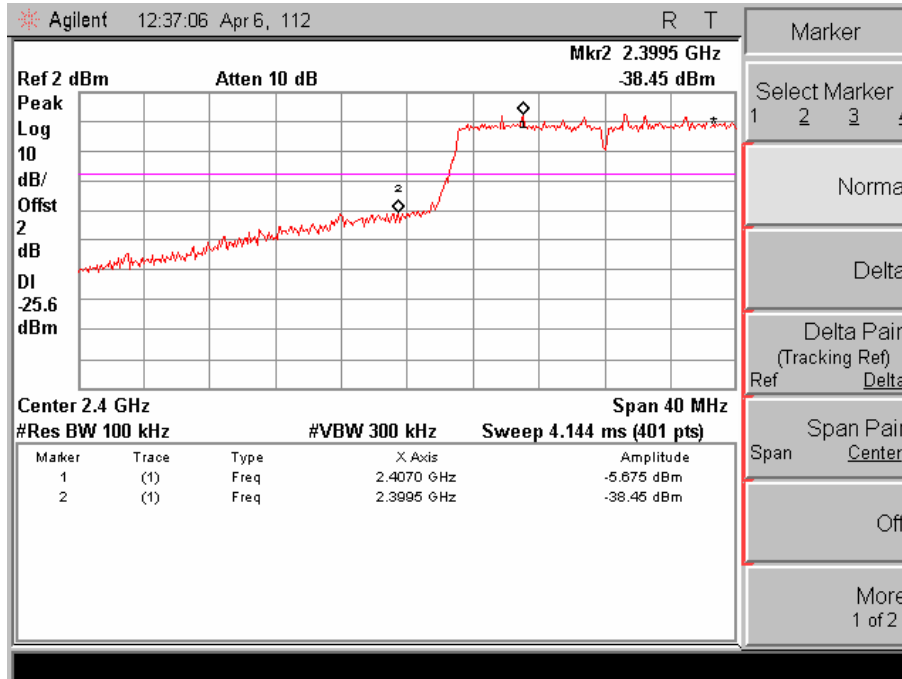
**802.11g mode Plot:
Channel LOW :**



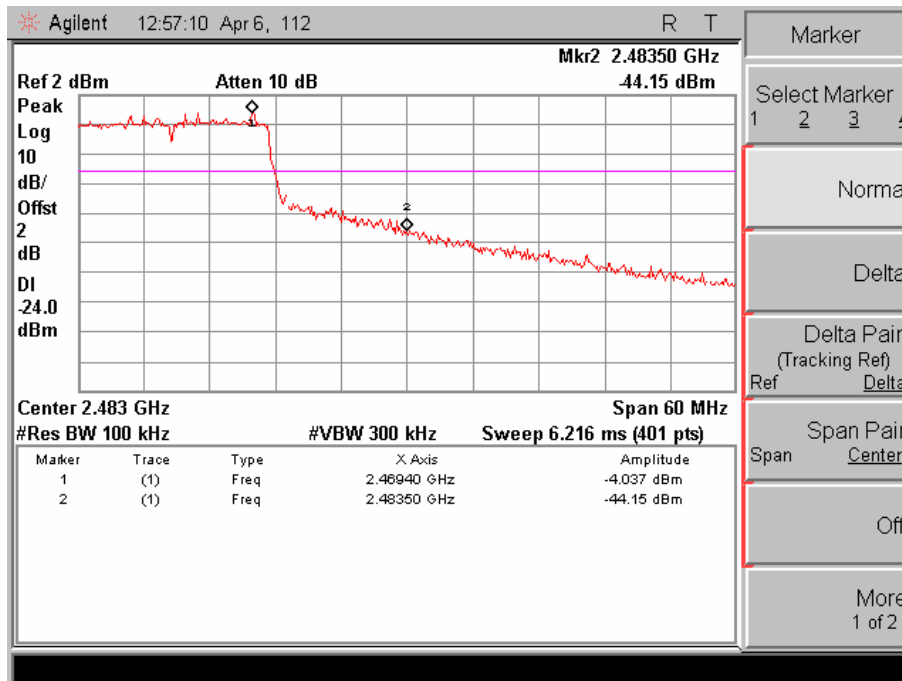
Channel HIG :



**802.11n20 mode Plot:
Channel LOW :**



Channel HIG :



Radiated:
802.11b mode:

2012/11/16 15:26:51

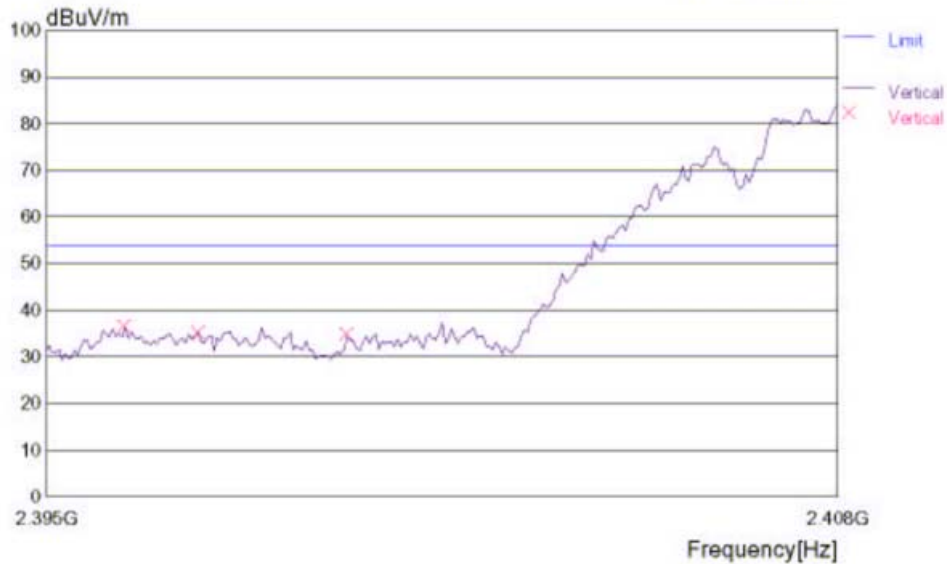
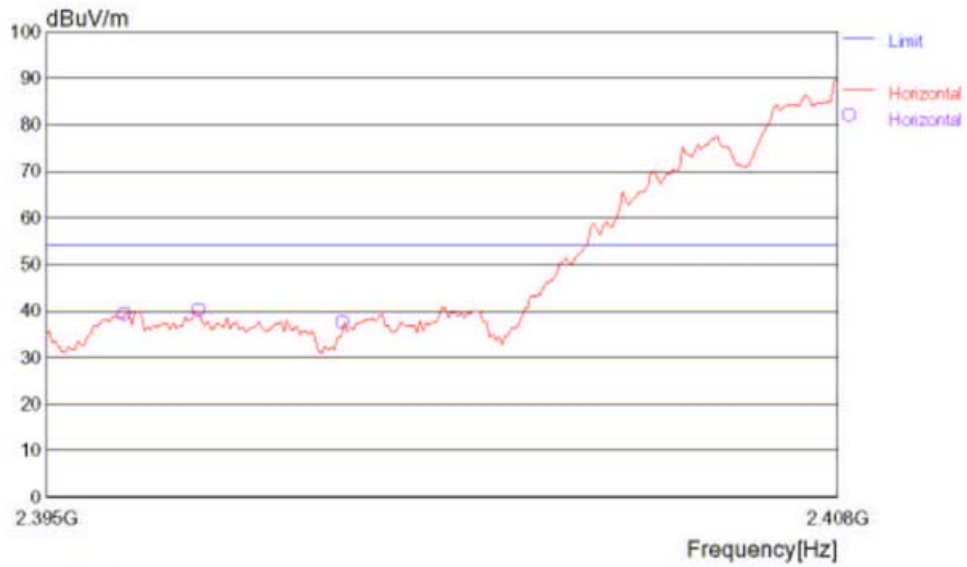
RADIATED EMISSION

Date : 2012/11/16 15:24:56

Trade Name :	Document No. :
Model Name : DMT580D	Power Supply : AC 120V/60Hz
Product Name : Tablet	Temp/Humi : 27/55RH%
Test Condition :	Operator : Ely zhang

Memo : 802.11b CH-L

LIMIT : FCC Part15 C transmitter spurious above1G(average)



2012/11/16 15:28:51

RADIATED EMISSION

Date : 2012/11/16 15:24:56

Trade Name	: DMT580D	Document No.	:
Model Name	: Tablet	Power Supply	: AC 120V/60Hz
Product Name	:	Temp/Humi	: 27/55RH%
Test Condition	:	Operator	: Eliy zhang

Memo : 802.11b CH-L

LIMIT : FCC Part15 C transmitter spurious above1G(average)

Frequency [MHz]	Meter (PK) [dBuV]	Ant. Type	Detector	Antenna Factor [dB/m]	Total Loss [dB]	Level (PK) [dBuV/m]	Angle [degree]	Height [m]	Pola.	Limit [dBuV/m]	Margin [dB]
2396.300	41.6	HRN	PK	31.4	-34.0	39.0	92	2.00	Hori.	54.0	15.0
2396.300	38.9	HRN	PK	31.4	-34.0	36.3	64	2.00	Vert.	54.0	17.7
2397.496	42.5	HRN	PK	31.4	-34.0	39.9	224	2.00	Hori.	54.0	14.1
2397.496	37.7	HRN	PK	31.4	-34.0	35.1	218	2.00	Vert.	54.0	18.9
2399.888	40.1	HRN	PK	31.4	-34.0	37.5	183	2.00	Hori.	54.0	16.5
2399.940	37.1	HRN	PK	31.4	-34.0	34.5	189	2.00	Vert.	54.0	19.5

2012/11/16 15:32:18

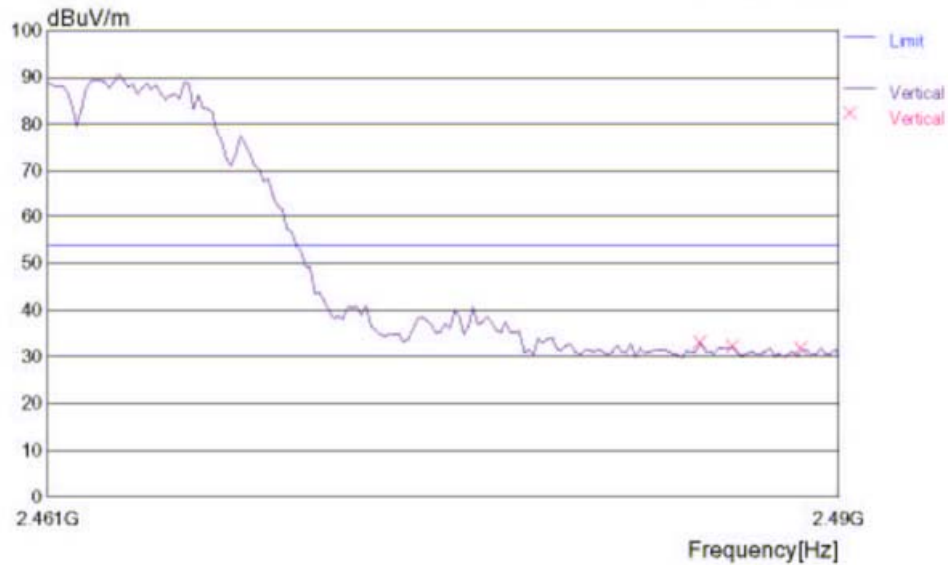
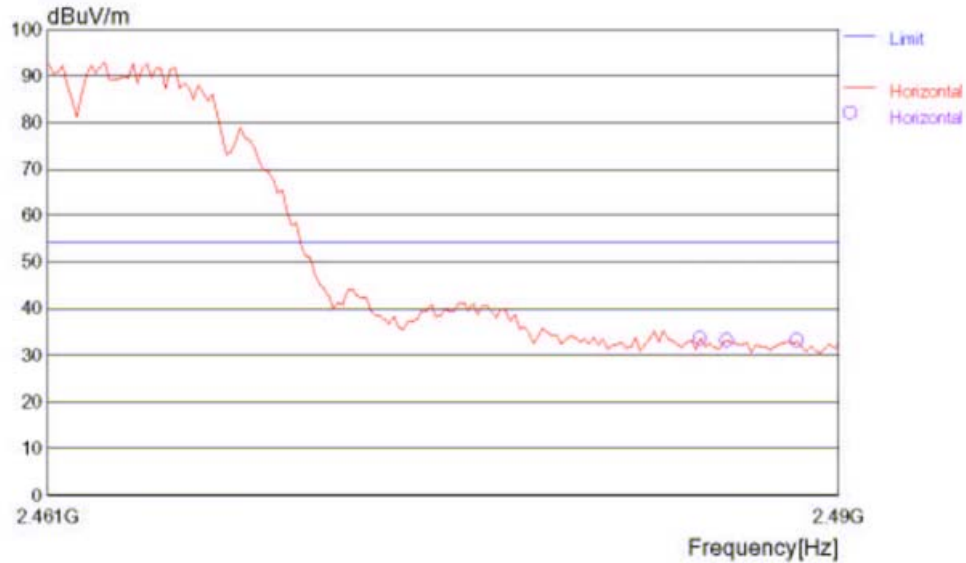
RADIATED EMISSION

Date : 2012/11/16 15:30:43

Trade Name	:		Document No.	:	
Model Name	:	DMT580D	Power Supply	:	AC 120V/60Hz
Product Name	:	Tablet	Temp/Humi	:	27/55RH%
Test Condition	:		Operator	:	Eliy zhang

Memo : 802.11b CH-H

LIMIT : FCC Part15 C transmitter spurious above1G(average)



2012/11/16 15:32:18

RADIATED EMISSION

Date : 2012/11/16 15:30:43

Trade Name	:	Document No.	:
Model Name	:	Power Supply	:
Product Name	:	Temp/Humi	:
Test Condition	:	Operator	:

Memo : 802.11b CH-H

LIMIT : FCC Part15 C transmitter spurious above1G(average)

Frequency [MHz]	Meter (PK) [dBuV]	Ant. Type	Detector	Antenna Factor [dB/m]	Total Loss [dB]	Level (PK) [dBuV/m]	Angle [degree]	Height [m]	Pola.	Limit [dBuV/m]	Margin [dB]
2484.922	36.1	HRN	PK	31.2	-33.8	33.5	180	2.01	Hori.	54.0	20.5
2484.922	35.6	HRN	PK	31.2	-33.8	33.0	188	2.00	Vert.	54.0	21.0
2485.945	35.7	HRN	PK	31.2	-33.8	33.1	217	2.01	Hori.	54.0	20.9
2486.115	34.6	HRN	PK	31.2	-33.8	32.0	196	2.00	Vert.	54.0	22.0
2488.501	35.5	HRN	PK	31.2	-33.8	32.9	205	2.01	Hori.	54.0	21.1
2488.671	34.0	HRN	PK	31.2	-33.8	31.4	176	2.00	Vert.	54.0	22.6

802.11g mode:

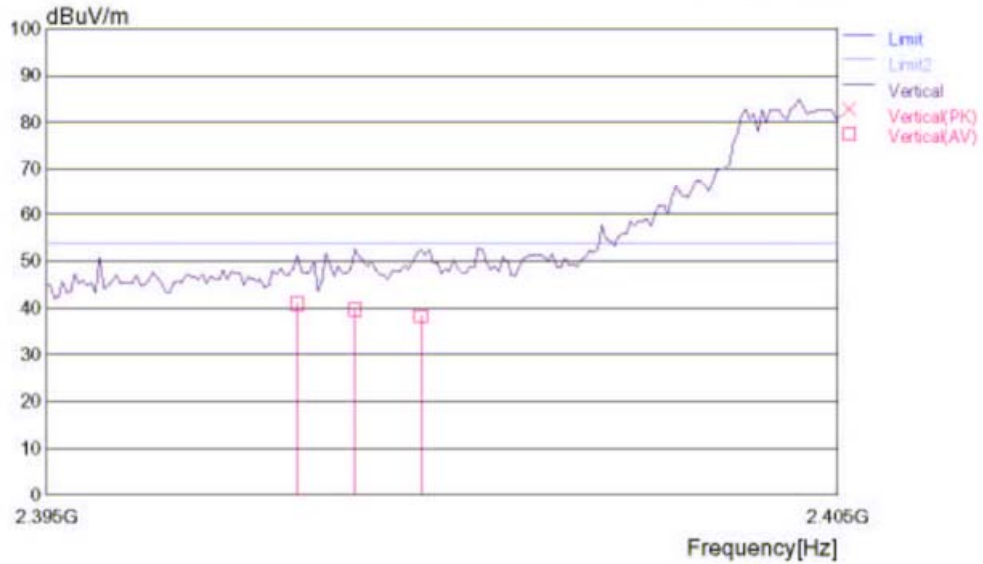
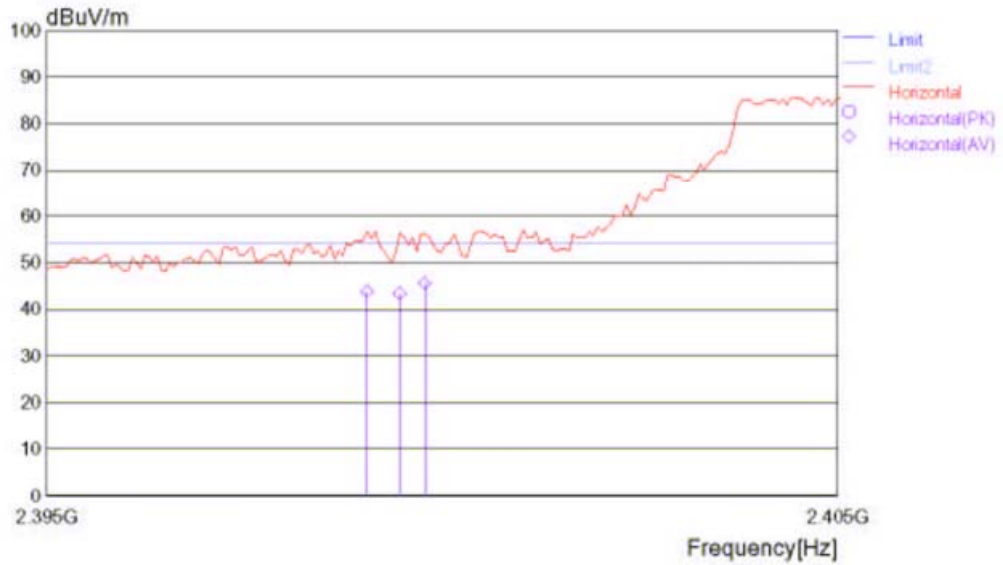
2012/11/16 15:17:34

RADIATED EMISSION

Date : 2012/11/16 15:07:33

Trade Name : ..	Document No. : ..
Model Name : .. DMT580D	Power Supply : .. AC 120V/60Hz
Product Name : .. Tablet	Temp/Humi : .. 27/55RH%
Test Condition : ..	Operator : .. Ely zhang
Memo : .. 802.11g CH-L	

LIMIT : FCC Part15 C transmitter spurious above1G(average)



2012/11/16 15:17:34

RADIATED EMISSION

Date : 2012/11/16 15:07:33

Trade Name	: DMT580D	Document No.	:
Model Name	: Tablet	Power Supply	: AC 120V/60Hz
Product Name	:	Temp/Humi	: 27/55RH%
Test Condition	:	Operator	: Ely zhang

Memo : 802.11g CH-L

 LIMIT :
 FCC Part15 C transmitter spurious above1G(average)

Frequency [MHz]	Meter Reading (PK) (AV) [dBuV]		Ant. Type	Antenna Factor [dB/m]	Total Loss [dB]	Level (PK) (AV) [dBuV/m]		Angle [degree]	Height [cm]	Pola.	Limit (PK) (AV) [dBuV/m]		Margin (PK) (AV) [dB]	
2399.056	59.3	46.0	HRN	31.4	-34.0	56.7	43.4	96	2.00	Hori	---	54.0	---	10.6
2399.472	59.0	45.8	HRN	31.4	-34.0	56.4	43.2	101	2.00	Hori	---	54.0	---	10.8
2399.784	58.7	47.9	HRN	31.4	-34.0	56.1	45.3	224	2.00	Hori	---	54.0	---	8.7
2398.172	53.8	43.2	HRN	31.4	-34.0	51.2	40.6	165	2.00	Vert	---	54.0	---	13.4
2398.900	55.2	42.1	HRN	31.4	-34.0	52.6	39.5	170	2.00	Vert	---	54.0	---	14.5
2399.732	55.1	40.8	HRN	31.4	-34.0	52.5	38.2	186	2.00	Vert	---	54.0	---	15.8

2012/11/16 15:35:43

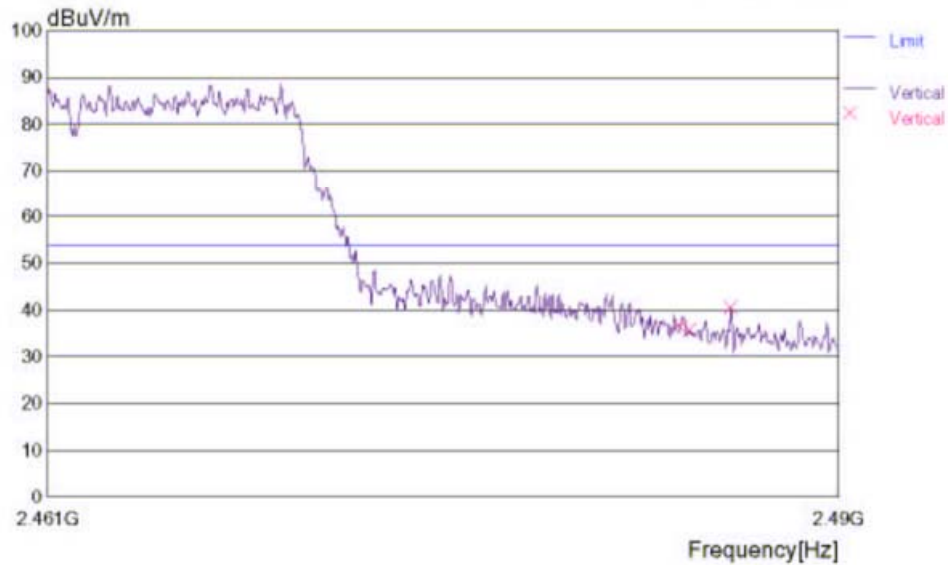
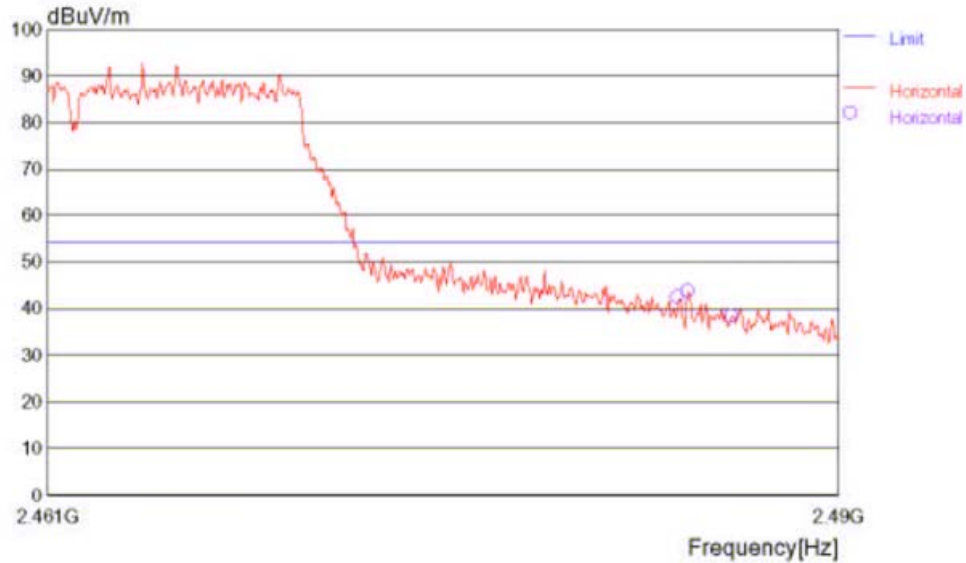
RADIATED EMISSION

Date : 2012/11/16 15:35:09

Trade Name	:		Document No.	:	
Model Name	:	DMT580D	Power Supply	:	AC 120V/60Hz
Product Name	:	Tablet	Temp/Humi	:	27/55RH%
Test Condition	:		Operator	:	Eliy zhang

Memo : 802.11g CH-H

LIMIT : FCC Part15 C transmitter spurious above1G(average)



2012/11/16 15:35:43

RADIATED EMISSION

Date : 2012/11/16 15:35:09

Trade Name	:	DMT580D	Document No.	:	AC 120V/60Hz
Model Name	:	Tablet	Power Supply	:	27/55RH%
Product Name	:		Temp/Humi	:	
Test Condition	:		Operator	:	Eliy zhang

Memo : 802.11g CH-H

LIMIT : FCC Part15 C transmitter spurious above1G(average)

Frequency [MHz]	Meter (PK) [dBuV]	Ant. Type	Detector	Antenna Factor [dB/m]	Total Loss [dB]	Level (PK) [dBuV/m]	Angle [degree]	Height [m]	Pola.	Limit [dBuV/m]	Margin [dB]
2484.126	44.7	HRN	PK	31.2	-33.8	42.1	238	2.00	Hori.	54.0	11.9
2484.184	39.2	HRN	PK	31.2	-33.8	36.6	176	2.00	Vert.	54.0	17.4
2484.475	46.2	HRN	PK	31.2	-33.8	43.6	234	2.00	Hori.	54.0	10.4
2484.533	38.2	HRN	PK	31.2	-33.8	35.6	192	2.00	Vert.	54.0	18.4
2486.043	43.1	HRN	PK	31.2	-33.8	40.5	176	2.00	Vert.	54.0	13.5
2486.102	40.8	HRN	PK	31.2	-33.8	38.2	218	2.00	Hori.	54.0	15.8

802.11n20 mode:

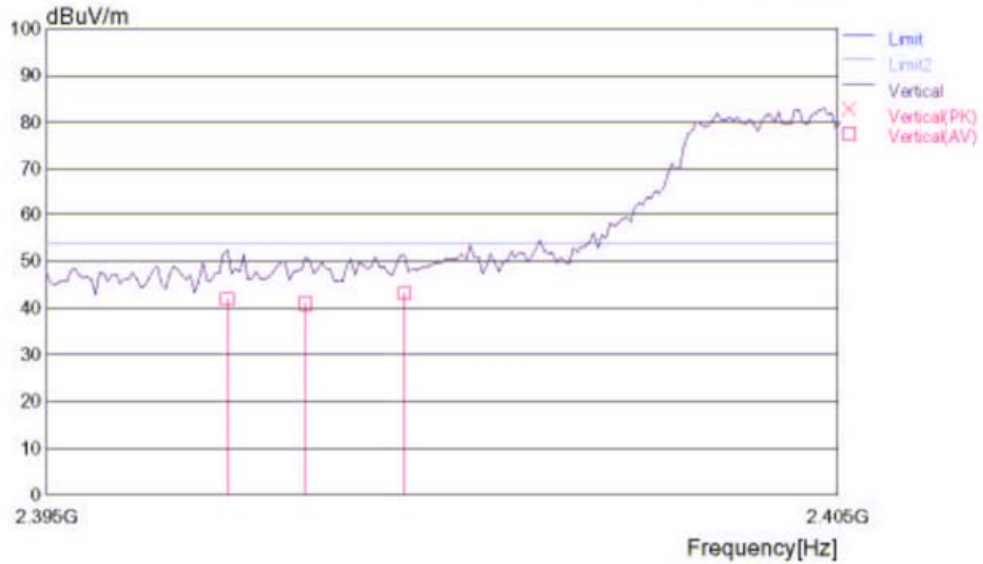
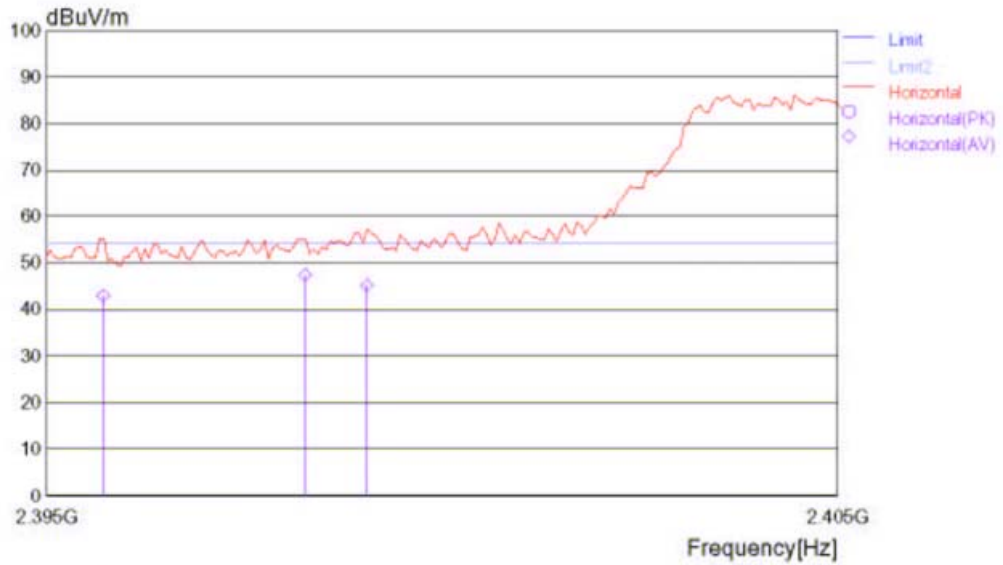
2012/11/16 15:21:39

RADIATED EMISSION

Date : 2012/11/16 15:20:11

Trade Name : ..	Document No. : ..
Model Name : .. DMT580D	Power Supply : .. AC 120V/60Hz
Product Name : .. Tablet	Temp/Humi : .. 27/55RH%
Test Condition : ..	Operator : .. Ely zhang
Memo : .. 802.11n CH-L	

LIMIT : FCC Part15 C transmitter spurious above1G(average)



2012/11/16 15:21:39

RADIATED EMISSION

Date : 2012/11/16 15:20:11

Trade Name	: DMT580D	Document No.	:
Model Name	: Tablet	Power Supply	: AC 120V/60Hz
Product Name	: Tablet	Temp/Humi	: 27/55RH%
Test Condition	:	Operator	: Ely zhang

Memo : 802.11n CH-L

 LIMIT :
 FCC Part15 C transmitter spurious above1G(average)

Frequency [MHz]	Meter Reading		Ant. Type	Antenna Factor [dB/m]	Total Loss [dB]	Level		Angle [degree]	Height [cm]	Pola.	Limit		Margin	
	(PK) [dBuV]	(AV) [dBuV]				(PK) [dBuV/m]	(AV) [dBuV/m]				(PK) [dBuV/m]	(AV) [dBuV/m]	(PK) [dB]	(AV) [dB]
2395.728	57.8	45.3	HRN	31.4	-34.0	55.2	42.7	345	2.00	Hori	---	54.0	---	11.3
2398.276	57.6	49.8	HRN	31.4	-34.0	55.0	47.2	349	2.00	Hori	---	54.0	---	6.8
2399.056	59.7	47.5	HRN	31.4	-34.0	57.1	44.9	345	2.00	Hori	---	54.0	---	9.1
2397.288	55.0	44.3	HRN	31.4	-34.0	52.4	41.7	169	2.00	Vert	---	54.0	---	12.3
2398.276	53.3	43.5	HRN	31.4	-34.0	50.7	40.9	227	2.00	Vert	---	54.0	---	13.1
2399.524	53.9	45.6	HRN	31.4	-34.0	51.3	43.0	62	2.00	Vert	---	54.0	---	11.0

2012/11/16 15:38:53

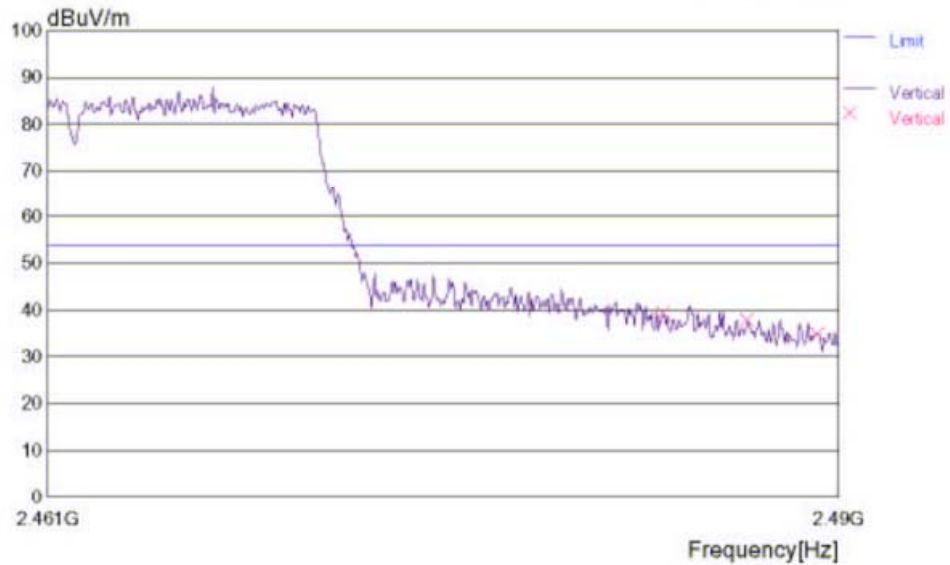
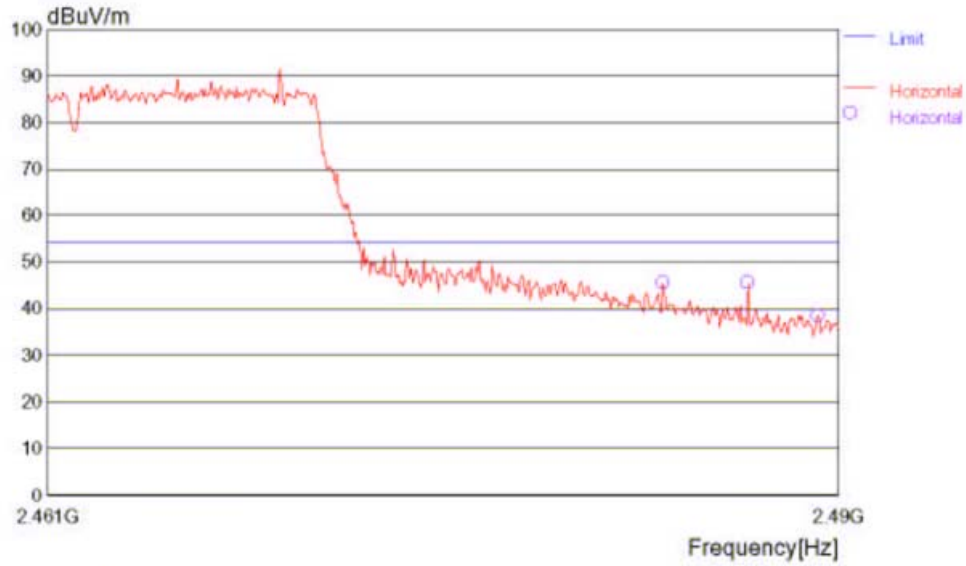
RADIATED EMISSION

Date : 2012/11/16 15:38:15

Trade Name :	Document No. :
Model Name : DMT580D	Power Supply : AC 120V/60Hz
Product Name : Tablet	Temp/Humi : 27/55RH%
Test Condition :	Operator : Ely zhang

Memo : 802.11n CH-H

LIMIT : FCC Part15 C transmitter spurious above1G(average)



2012/11/16 15:38:53

RADIATED EMISSION

Date : 2012/11/16 15:38:15

Trade Name	:	Document No.	:
Model Name	:	Power Supply	:
Product Name	:	Temp/Humi	:
Test Condition	:	Operator	:

Memo : 802.11n CH-H

LIMIT : FCC Part15 C transmitter spurious above1G(average)

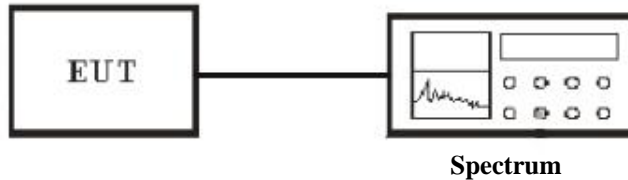
Frequency [MHz]	Meter (PK) [dBuV]	Ant. Type	Detector	Antenna Factor [dB/m]	Total Loss [dB]	Level (PK) [dBuV/m]	Angle [degree]	Height [m]	Pola.	Limit [dBuV/m]	Margin [dB]
2483.545	48.1	HRN	PK	31.2	-33.8	45.5	232	2.00	Hori.	54.0	8.5
2483.603	41.5	HRN	PK	31.2	-33.8	38.9	178	2.00	Vert.	54.0	15.1
2486.683	48.0	HRN	PK	31.2	-33.8	45.4	179	2.00	Hori.	54.0	8.6
2486.683	40.3	HRN	PK	31.2	-33.8	37.7	182	2.00	Vert.	54.0	16.3
2489.239	41.1	HRN	PK	31.2	-33.8	38.5	212	2.00	Hori.	54.0	15.5
2489.297	37.4	HRN	PK	31.2	-33.8	34.8	169	2.00	Vert.	54.0	19.2

4.5 6dB BANDWIDTH

4.5.1 Applicable Standard

According to section 15.247(a)(2), for digital modulation technique, the minimum 6dB bandwidth shall be at least 500kHz.

4.5.2 Block diagram of test setup



Connection method: The shield cable was connected with EUT and Spectrum which have $50\Omega Z_C$. There have a combiner inserted between the spectrum and EUT. The connector of EUT side is original by manufacturer. The connector of Spectrum side is N type.

4.5.3 Measurement method

1. The transmitter output was connected to the spectrum analyzer through a shielded cable.
2. Set the spectrum analyzer as RBW=100 kHz, VBW=300 kHz, Span=40MHz, Sweep=auto.
3. Set Detector to Peak, Trace to Max Hold and Sweep Time is auto.
4. Mark the peak frequency and -6dB(upper and lower) frequency.
5. Repeat above 1-4 points for the middle and highest channel of the EUT.

4.5.4. Result

Temperature (): 22~23	EUT: Tablet
Humidity (%RH): 50~54	M/N: DMT580D
Barometric Pressure (mbar): 950~1000	Operation Condition: Tx Mode
Test date: Nov 12, 2012	Test engineer: Phenix

802.11b mode:

Channel No.	Frequency (MHz)	6dB Bandwidth (MHz)	Limits (MHz)
LOW (CH 1)	2412	10.200	> 0.5
MID (CH 6)	2437	9.825	> 0.5
HIG (CH 11)	2462	10.125	> 0.5

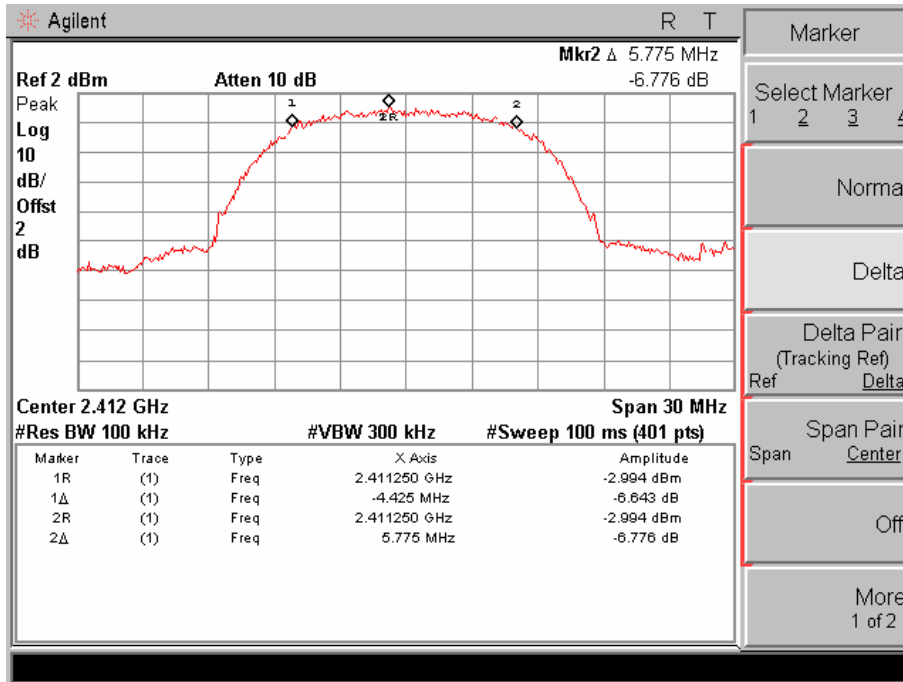
802.11g mode:

Channel No.	Frequency (MHz)	6dB Bandwidth (MHz)	Limits (MHz)
LOW (CH 1)	2412	16.575	> 0.5
MID (CH 6)	2437	16.575	> 0.5
HIG (CH 11)	2462	16.575	> 0.5

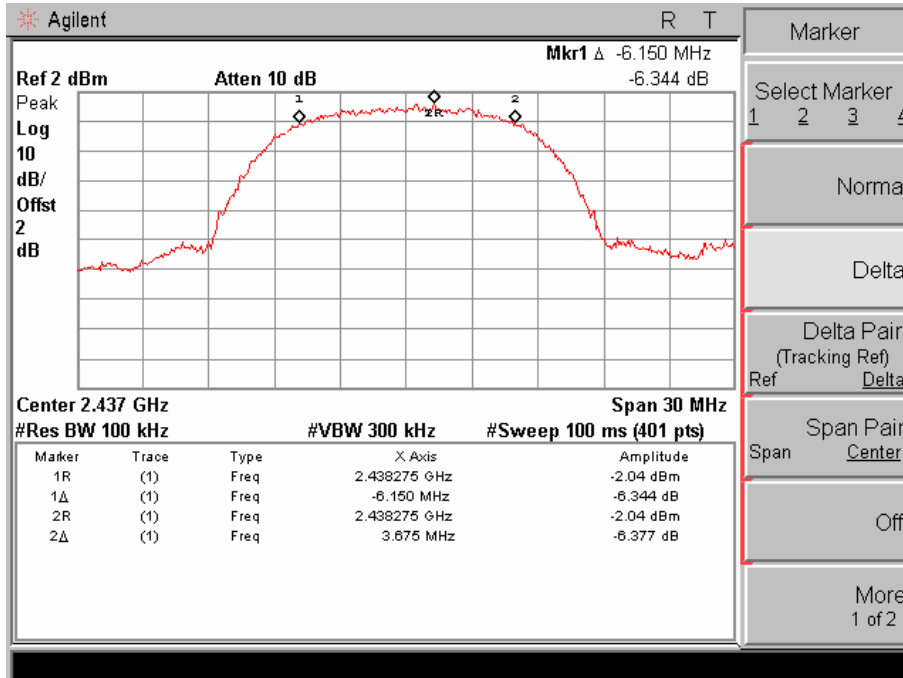
802.11n20 mode:

Channel No.	Frequency (MHz)	6dB Bandwidth (MHz)	Limits (MHz)
LOW (CH 1)	2412	17.700	> 0.5
MID (CH 6)	2437	17.700	> 0.5
HIG (CH 11)	2462	17.700	> 0.5

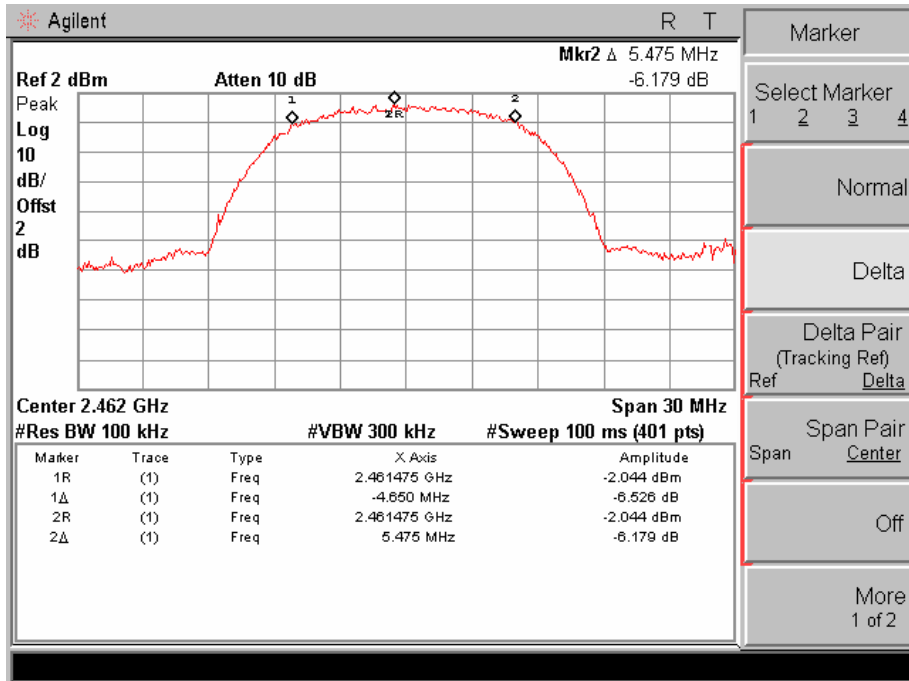
**802.11b mode Plot:
Channel LOW :**



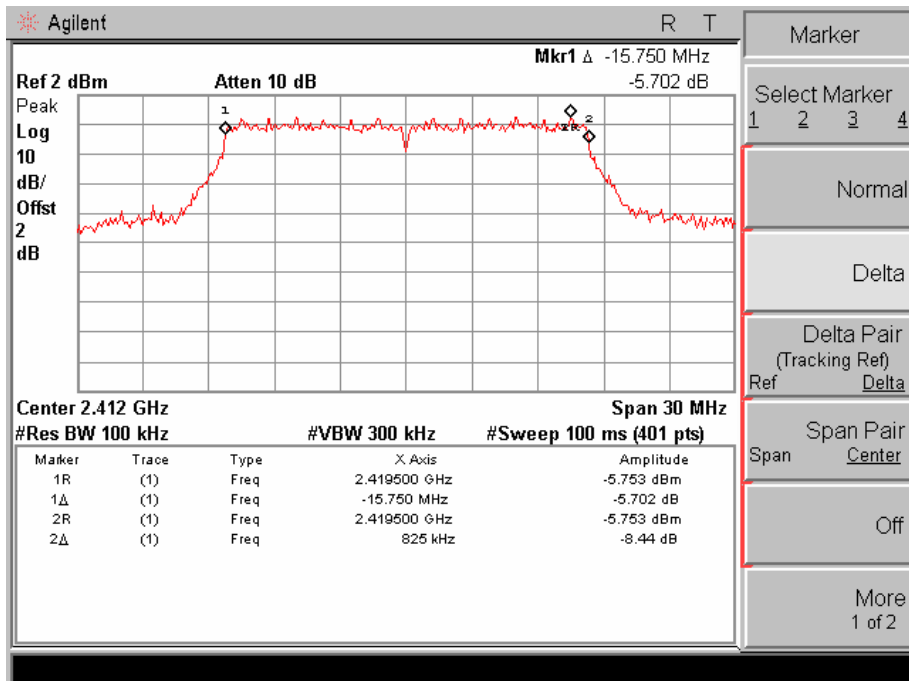
Channel MID :



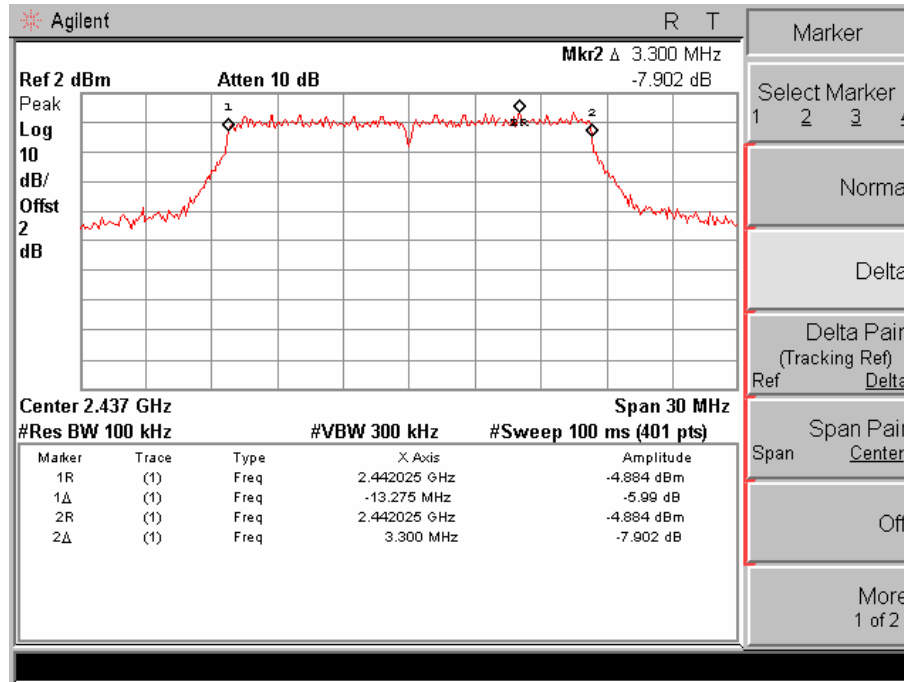
Channel HIG :



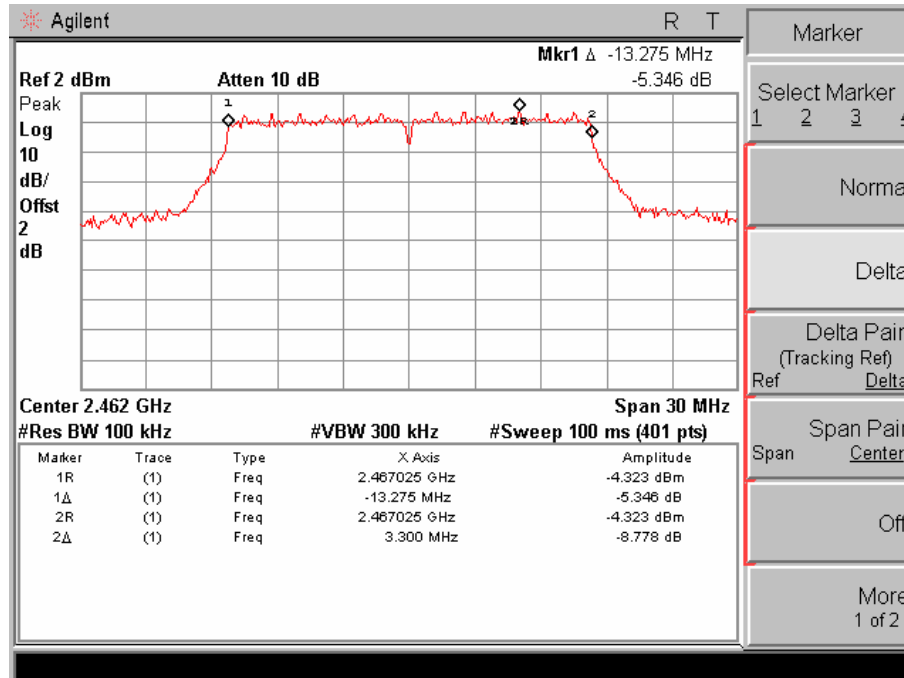
**802.11g mode Plot:
Channel LOW :**



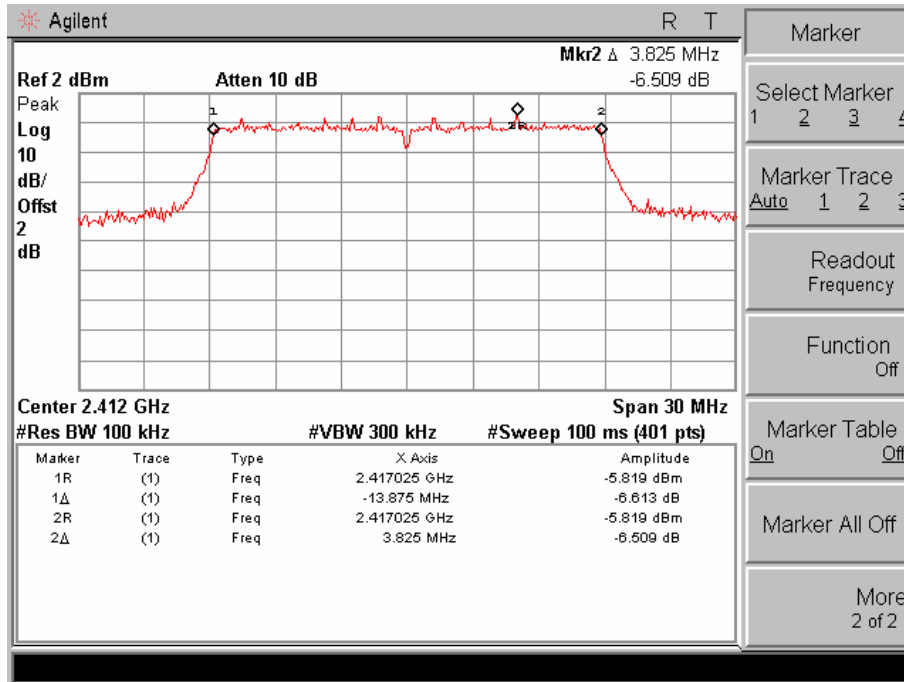
Channel MID :



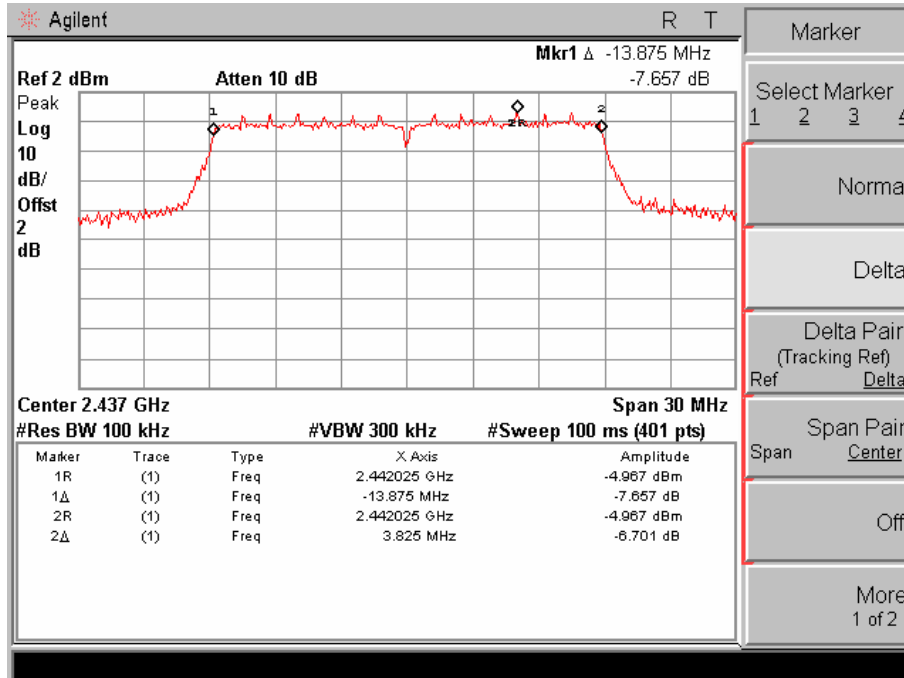
Channel HIG :



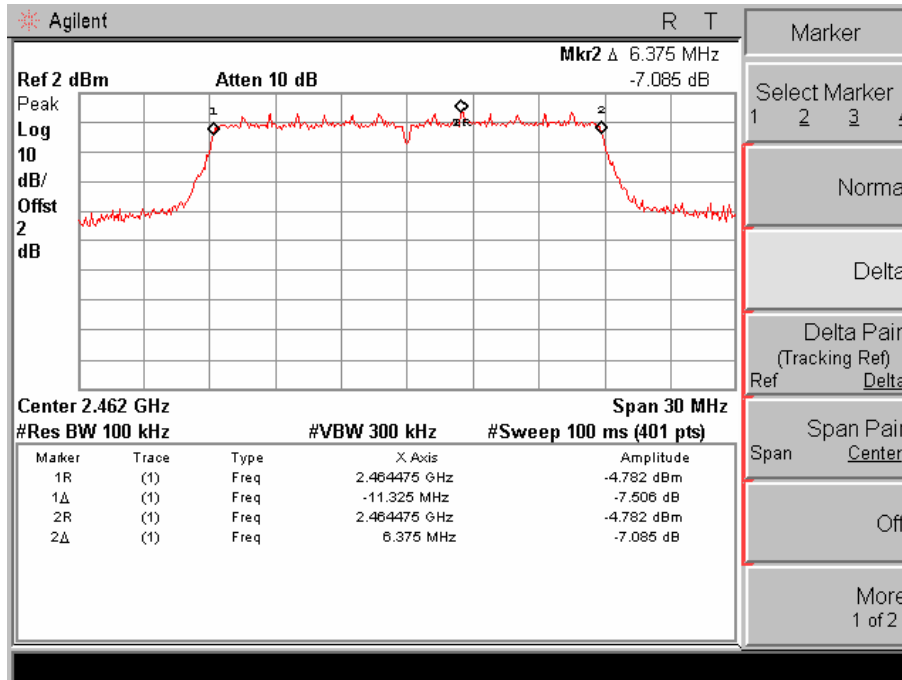
**802.11n20 mode Plot:
Channel LOW :**



Channel MID :



Channel HIG :

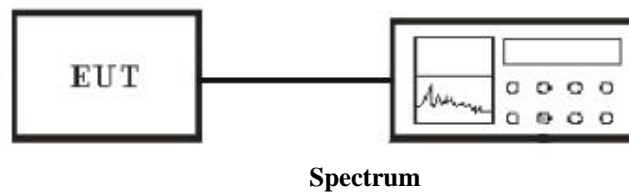


4.6 Power Spectral Density

4.6.1 Applicable Standard

According to section 15.247(e) For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission. This power spectral density shall be determined in accordance with the provisions of paragraph (b) of this section. The same method of determining the conducted output power shall be used to determine the power spectral density.

4.6.2 Block diagram of test setup



Connection method: The shield cable was connected with EUT and Spectrum which have $50\Omega Z_C$. There have a combiner inserted between the spectrum and EUT. The connector of EUT side is original by manufacturer. The connector of Spectrum side is N type.

4.6.3 Measurement method

According to the KDB 558074, the measurement procedure as below:

1. The transmitter output connected to the spectrum analyzer by a shielded cable.
2. Set the RBW = 100 kHz.
3. Set the VBW = 300 kHz.
4. Set the span to 5-30 % greater than the EBW
5. Detector = peak.
6. Sweep time = auto couple
7. Trace mode = max hold
8. Allow trace to fully stabilize
9. Use the peak marker function to determine the maximum power level
10. Scale the observed power level to an equivalent value in 3 kHz.

4.6.4. Result

Temperature (): 22~23	EUT: Tablet
Humidity (%RH): 50~54	M/N: DMT580D
Barometric Pressure (mbar): 950~1000	Operation Condition: Tx Mode
Test date: Nov 12, 2012	Test engineer: Phenix

802.11b mode:

Channel No.	Frequency (MHz)	Power Spectral Density (dBm)	bandwidth correction factor (BWCF)	Result (dBm)	Limits (dBm)	Margin (dB)
LOW (CH 1)	2412	-2.758	-15.2	-17.958	8	25.958
MID (CH 6)	2437	-2.849	-15.2	-18.049	8	26.049
HIG (CH 11)	2462	-1.944	-15.2	-17.144	8	25.144

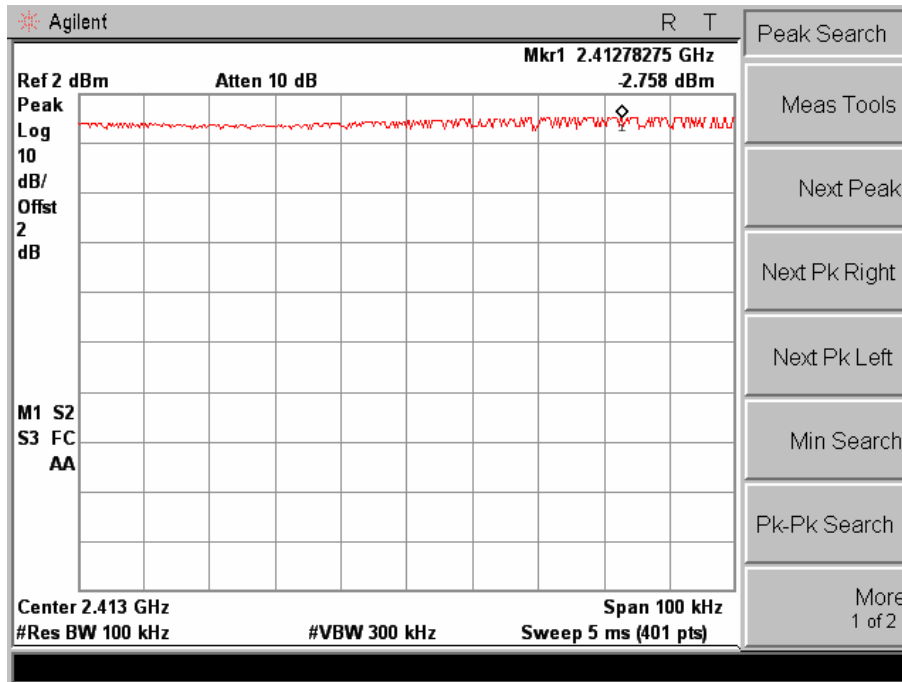
802.11g mode:

Channel No.	Frequency (MHz)	Power Spectral Density (dBm)	bandwidth correction factor (BWCF)	Result (dBm)	Limits (dBm)	Margin (dB)
LOW (CH 1)	2412	-4.934	-15.2	-20.134	8	28.134
MID (CH 6)	2437	-4.699	-15.2	-19.899	8	27.899
HIG (CH 11)	2462	-4.609	-15.2	-19.809	8	27.809

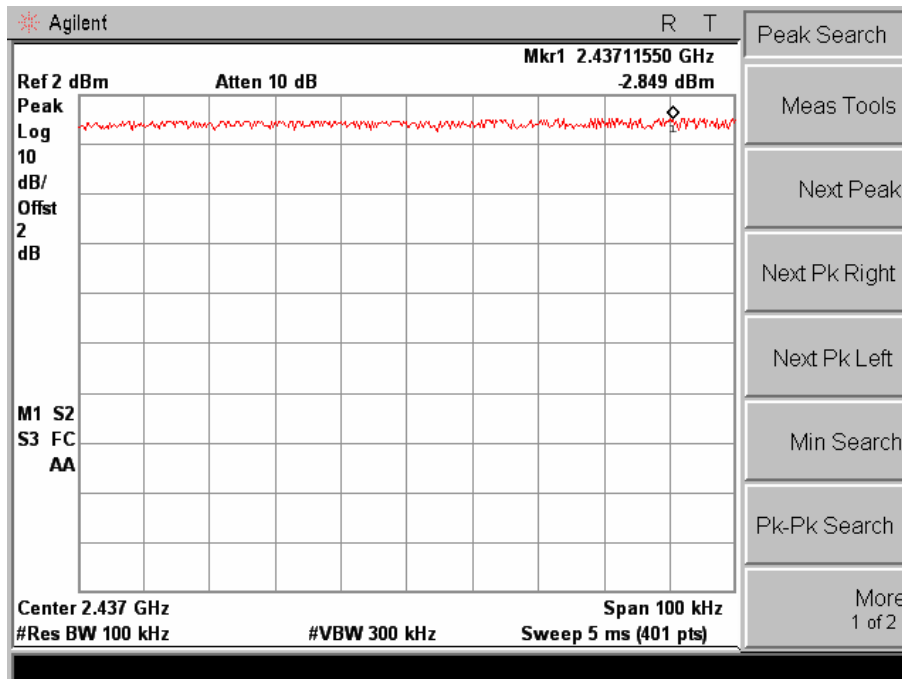
802.11n20 mode:

Channel No.	Frequency (MHz)	Power Spectral Density (dBm)	bandwidth correction factor (BWCF)	Result (dBm)	Limits (dBm)	Margin (dB)
LOW (CH 1)	2412	-5.148	-15.2	-20.348	8	28.348
MID (CH 6)	2437	-4.512	-15.2	-19.712	8	27.712
HIG (CH 11)	2462	-4.544	-15.2	-19.744	8	27.744

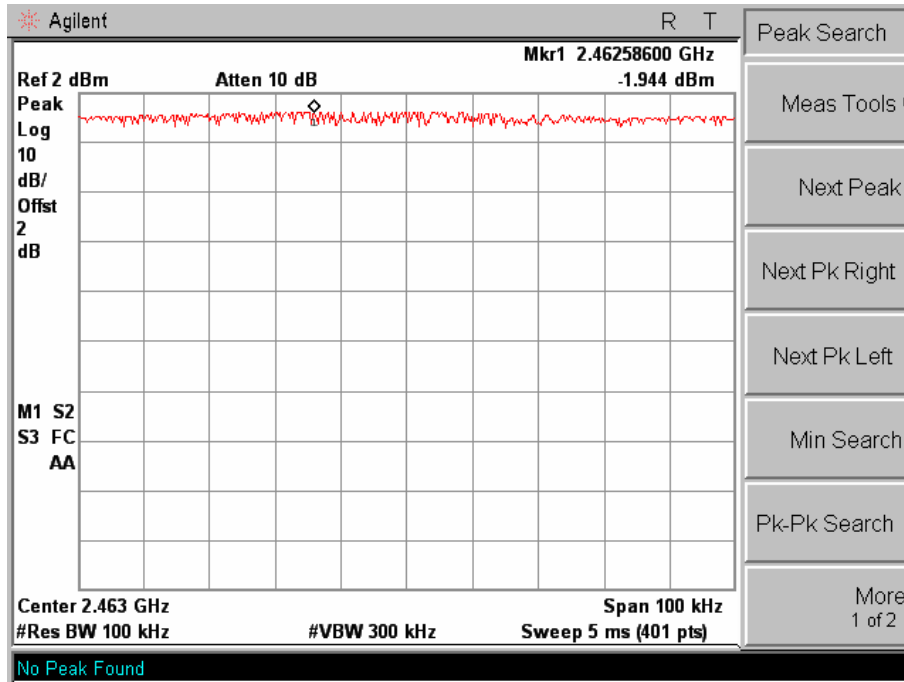
**802.11b mode Plot:
Channel LOW :**



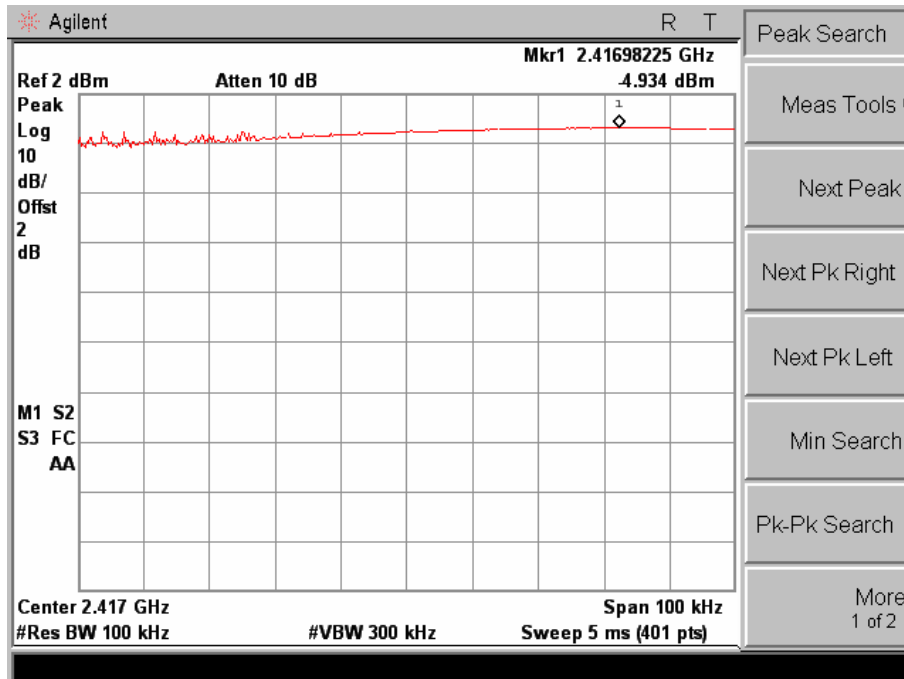
Channel MID :



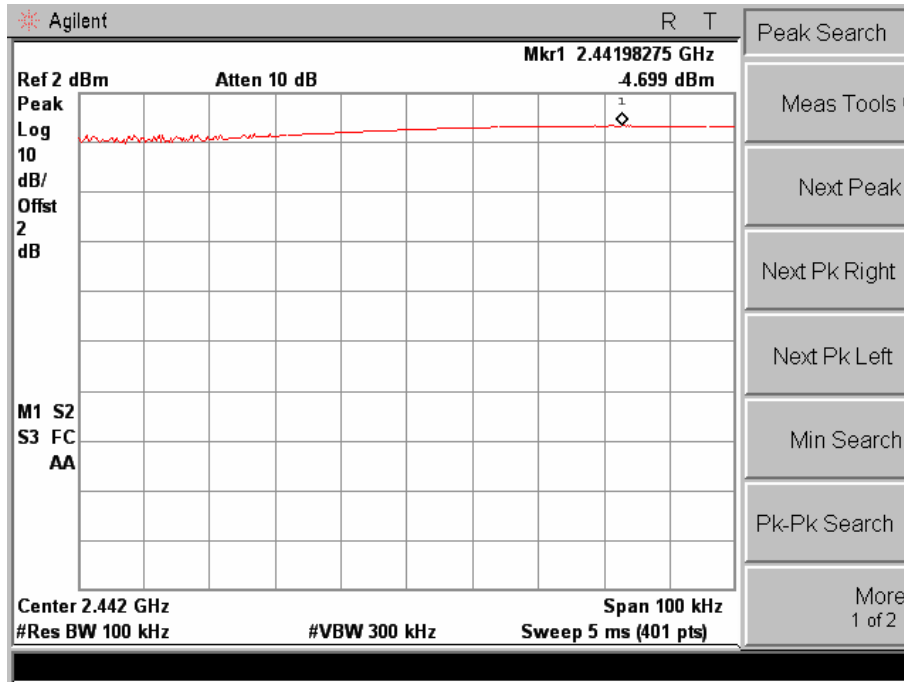
Channel HIG :



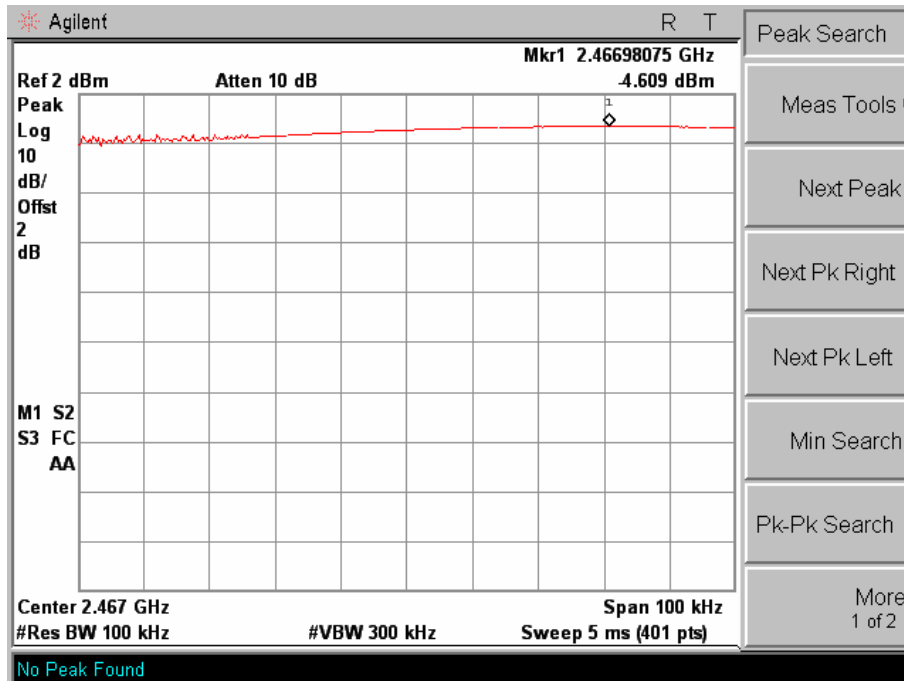
**802.11g mode Plot:
Channel LOW :**



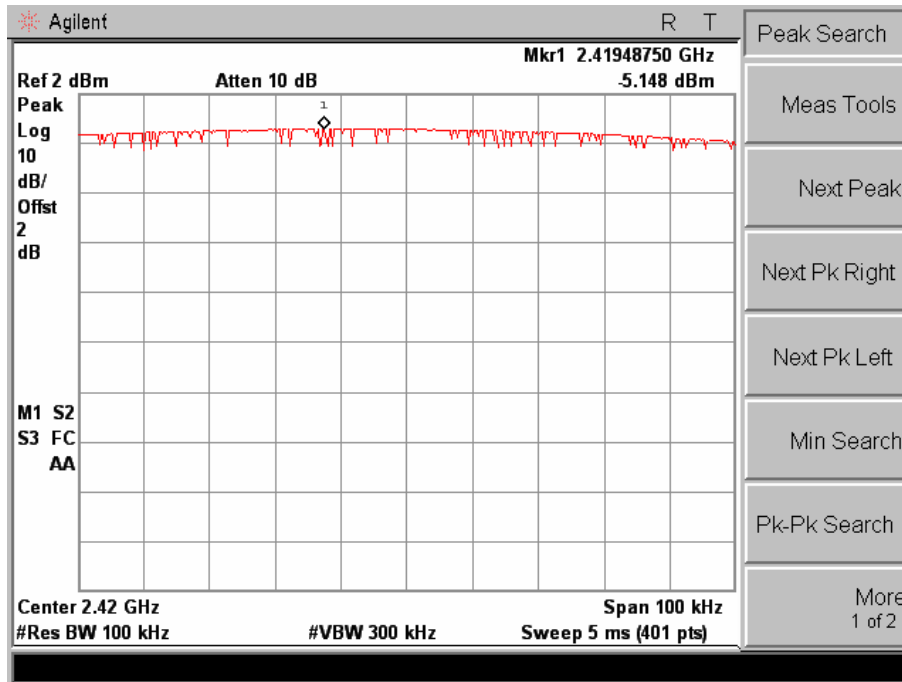
Channel MID :



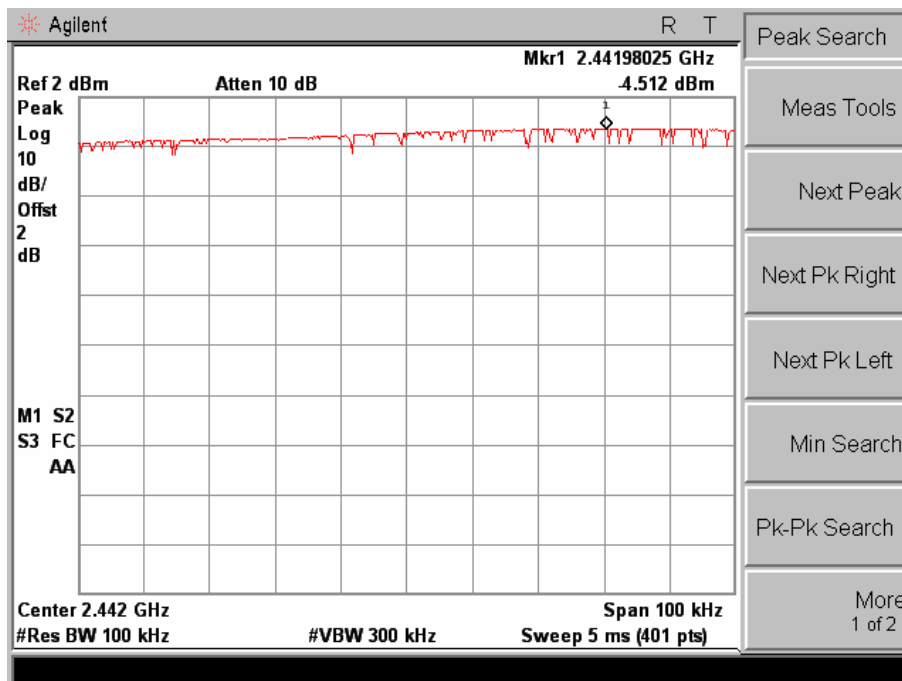
Channel HIG :



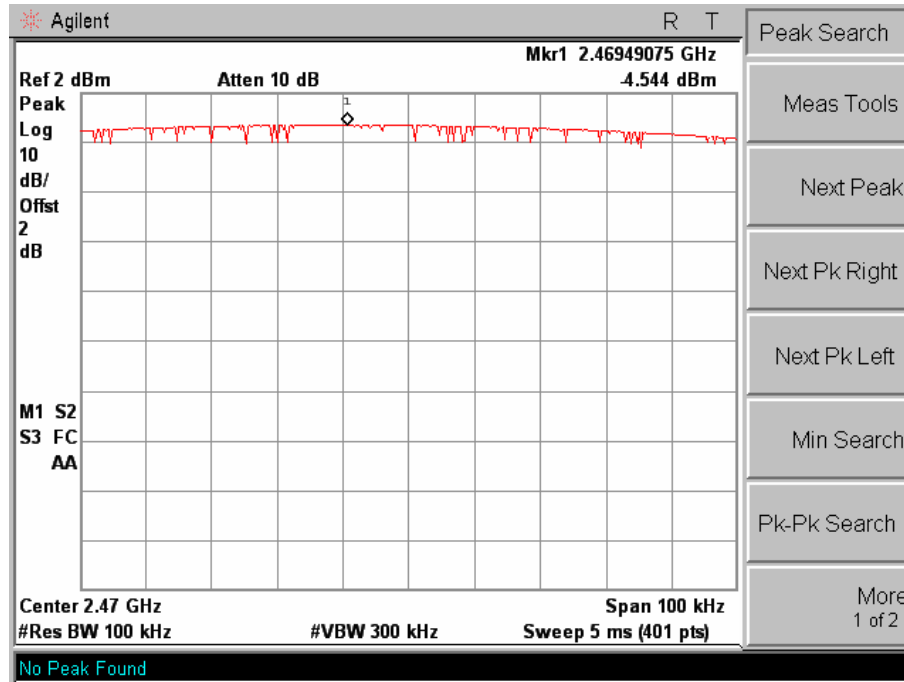
**802.11n20 mode Plot:
Channel LOW :**



Channel MID :



Channel HIG :



4.7 Spurious Radiated Emission

4.7.1 Applicable Standard

Section 15.247(d): In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. In addition, radiated emissions that fall in the restricted bands, as defined in Section 15.205, must also comply with the radiated emission limits specified in Section 15.209.

4.7.2 Block diagram of test setup

Radiated Measurement Setup:

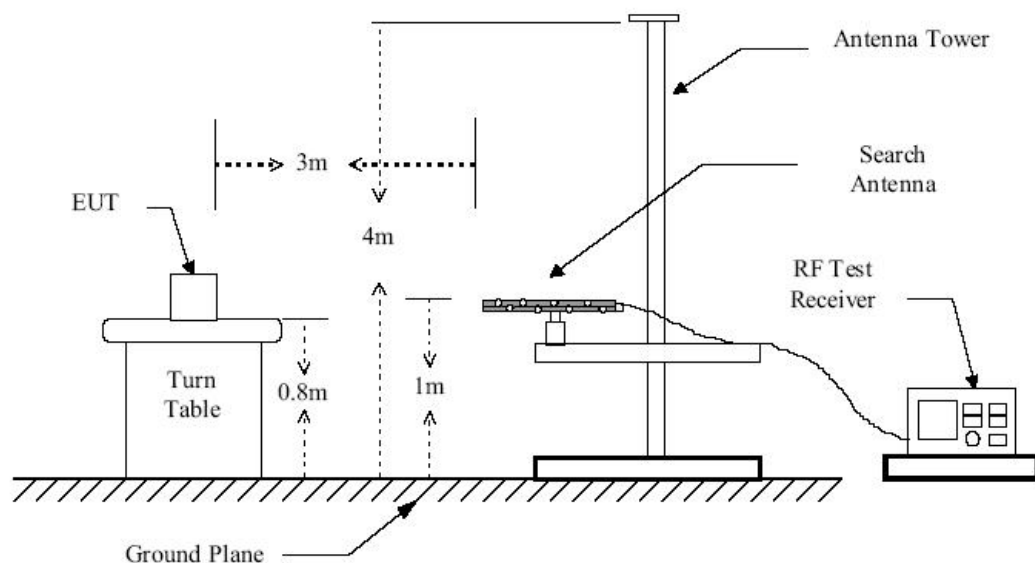


Figure 1 : Frequencies measured below 1 GHz configuration

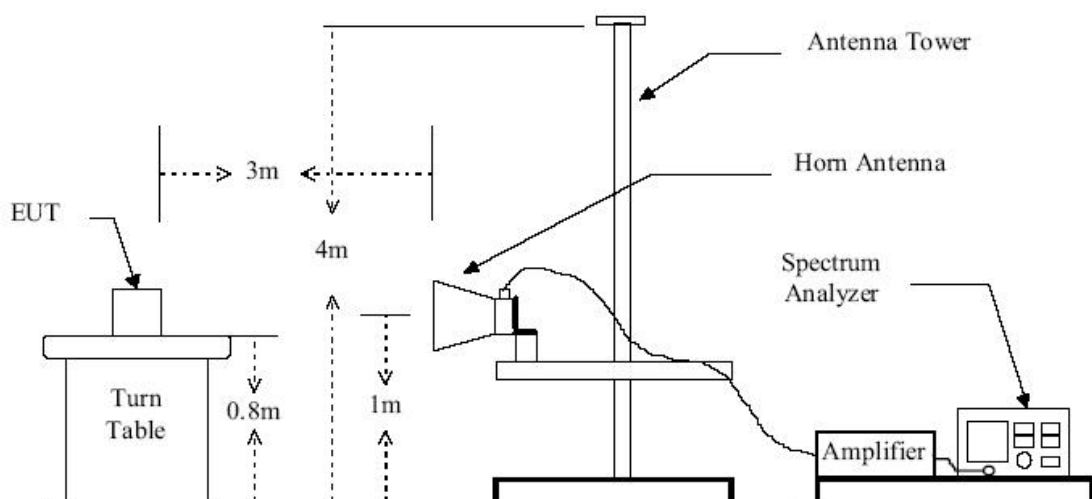
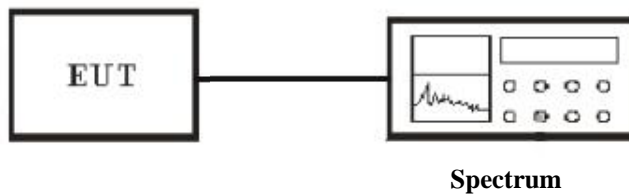


Figure 2 : Frequencies measured above 1 GHz configuration

Conducted Measurement Setup:



Connection method: The shield cable was connected with EUT and Spectrum which have $50\Omega Z_C$. There have a combiner inserted between the spectrum and EUT. The connector of EUT side is original by manufacturer. The connector of Spectrum side is N type.

4.7.3 Measurement method

Radiated Measurement

1. Configure the EUT according to ANSI C63.4 (2003).
2. The EUT was placed on the top of the turntable 0.8 meter above ground.
3. The phase center of the receiving antenna mounted on the top of a height-variable antenna tower was placed 3 meters far away from the turntable.
4. Power on the EUT and all the supporting units.
5. The turntable was rotated by 360 degrees to determine the position of the highest radiation.
6. The height of the broadband receiving antenna was varied between one meter and four meters above ground to find the maximum emission field strength of both horizontal and vertical polarization.
7. For each suspected emission, the antenna tower was scanned (from 1 M to 4 M) and then the turntable was rotated (from 0 degree to 360 degrees) to find the maximum reading.
8. Set the test-receiver system to Peak or CISPR quasi-peak Detect Function with specified bandwidth under Maximum Hold Mode.

Conducted Measurement

1. For emission above 1GHz, conducted measurement method is used.
2. The transmitter is set to the lowest channel.
3. The transmitter output was connected to the spectrum analyzer via a cable and cable loss is used as the offset of the spectrum analyzer.
4. Set RBW to 100 KHz and VBW to 300 KHz, Then detector set to peak and max hold this trace.
5. The lowest band edges emission was measured and recorded.
6. The transmitter set to the highest channel and repeated 2~4.

4.7.4. Result

PASS

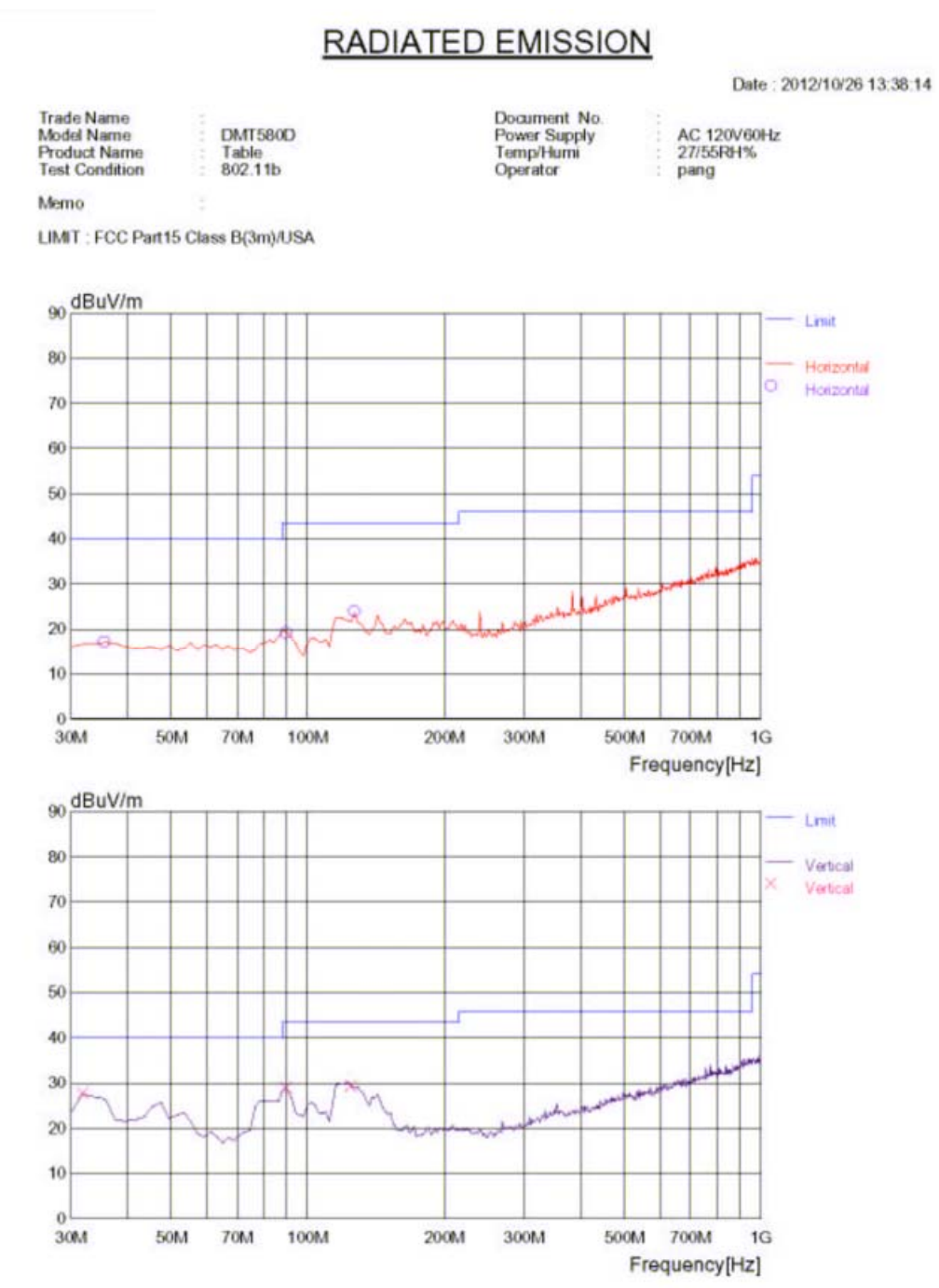
Radiated:

Below 30MHz:

No further spurious emissions found between lowest internal used or generated frequency and 30 MHz.

30M- 1GHz:

802.11b mode:



2012/10/26 13:39:13

RADIATED EMISSION

Date : 2012/10/26 13:38:14

Trade Name : Model Name : DMT580D Product Name : Table Test Condition : 802.11b	Document No. : Power Supply : AC 120V/60Hz Temp/Humi : 27/55RH% Operator : pang
--	--

Memo :

LIMIT : FCC Part15 Class B(3m)/USA

No.	FREQ [MHz]	READING PEAK [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]	COMMENT
--- Horizontal ---											
1	35.832	30.4	11.3	6.9	31.6	17.0	40	23.0	200	345	
2	90.261	34.6	8.7	7.4	31.6	19.1	43.5	24.4	200	107	
3	127.194	36.4	11.2	7.7	31.6	29.7	43.5	19.8	200	111	
--- Vertical ---											
4	31.944	40.7	11.7	6.7	31.6	27.5	40	12.5	100	160	
5	90.261	44.1	8.7	7.4	31.6	28.6	43.5	14.9	100	347	
6	125.251	42.0	11.2	7.7	31.6	29.3	43.5	14.2	100	214	

802.11g mode:

2012/10/26 13:42:31

RADIATED EMISSION

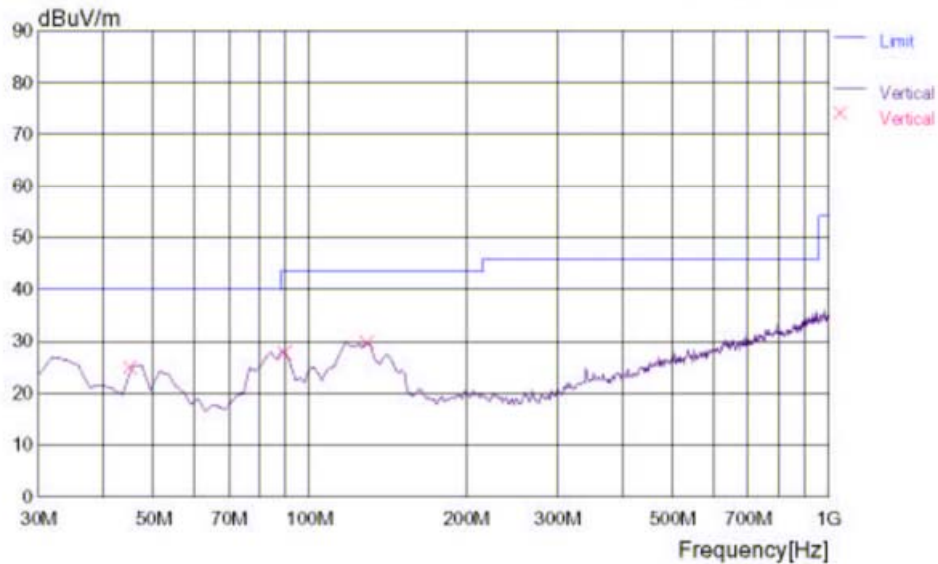
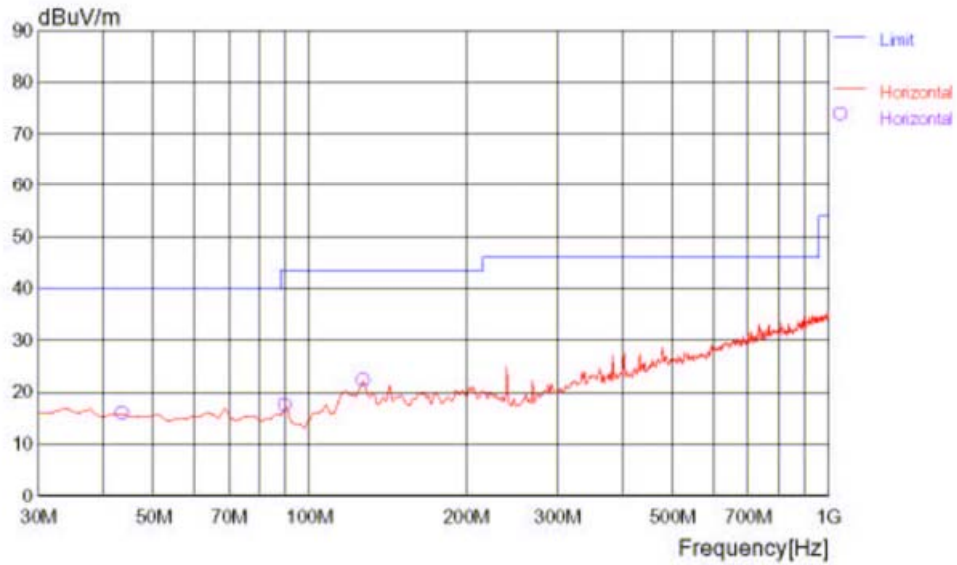
Date : 2012/10/26 13:42:28

Trade Name :
 Model Name : DMT580D
 Product Name : Table
 Test Condition : 802.11g

Document No. :
 Power Supply : AC 120V/60Hz
 Temp/Humi : 27/55RH%
 Operator : pang

Memo :

LIMIT : FCC Part15 Class B(3m)/USA



2012/10/26 13:42:31

RADIATED EMISSION

Date : 2012/10/26 13:42:26

Trade Name : Model Name : DMT580D Product Name : Table Test Condition : 802.11g	Document No. : Power Supply : AC 120V/60Hz Temp/Humi : 27/55RH% Operator : pang
--	--

Memo :

LIMIT : FCC Part15 Class B(3m)/USA

No.	FREQ [MHz]	READING PEAK [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]	COMMENT
--- Horizontal ---											
1	43.607	29.3	11.2	6.9	31.6	15.8	40	24.2	100	245	
2	90.261	32.8	8.7	7.4	31.6	17.3	43.5	26.2	100	168	
3	127.194	34.9	11.2	7.7	31.6	22.2	43.5	21.3	100	119	
--- Vertical ---											
4	45.551	38.6	11.1	6.9	31.6	25.0	40	15.0	100	152	
5	90.261	43.1	8.7	7.4	31.6	27.6	43.5	15.9	100	126	
6	129.138	42.1	11.3	7.7	31.6	29.5	43.5	14.0	100	225	

802.11n20 mode:

2012/10/26 13:43:15

RADIATED EMISSION

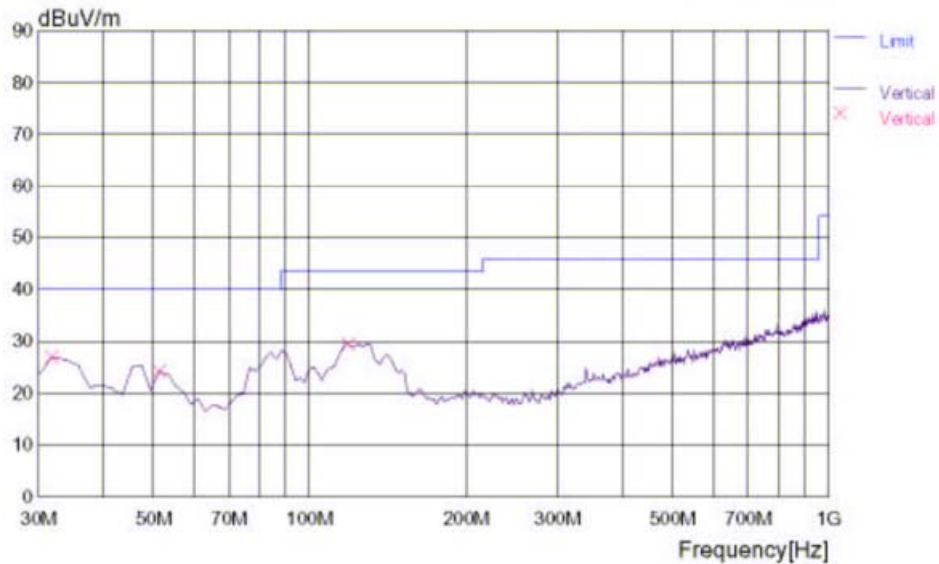
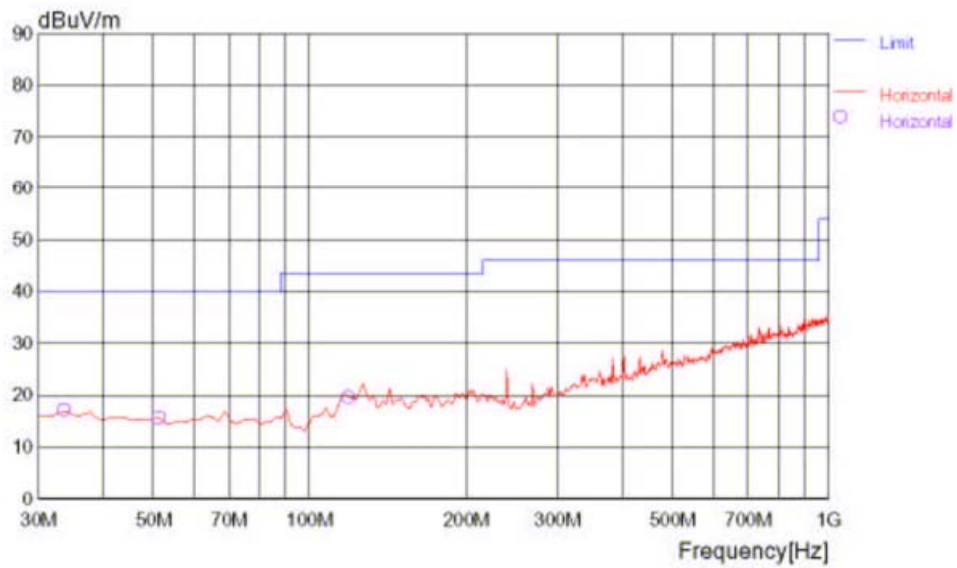
Date : 2012/10/26 13:43:03

Trade Name :
Model Name : DMT580D
Product Name : Table
Test Condition : 802.11n

Document No. :
Power Supply : AC 120V/60Hz
Temp/Humi : 27/55RH%
Operator : pang

Memo :

LIMIT : FCC Part15 Class B(3m)/USA



2012/10/26 13:43:15

RADIATED EMISSION

Date : 2012/10/26 13:43:03

Trade Name : Model Name : DMT580D Product Name : Table Test Condition : 802.11n	Document No. : Power Supply : AC 120V/60Hz Temp/Humi : 27/55RH% Operator : pang
--	--

Memo :

LIMIT : FCC Part15 Class B(3m)/USA

No.	FREQ [MHz]	READING PEAK [dBuV]	ANT FACTOR [dB]	LOSS [dB]	GAIN [dB]	RESULT [dBuV/m]	LIMIT [dBuV/m]	MARGIN [dB]	ANTENNA [cm]	TABLE [DEG]	COMMENT
--- Horizontal ---											
1	33.888	30.3	11.4	6.8	31.6	16.9	40	23.1	100	0	
2	51.383	29.3	10.9	6.9	31.6	15.5	40	24.5	100	172	
3	119.419	33.0	10.6	7.6	31.6	19.8	43.5	23.9	100	123	
--- Vertical ---											
4	31.944	40.1	11.7	6.7	31.6	26.9	40	13.1	100	183	
5	51.383	37.8	10.9	6.9	31.6	24.0	40	16.0	100	80	
6	119.419	42.6	10.6	7.6	31.6	29.2	43.5	14.3	100	156	

Above 1GHz:
802.11b mode Channel Low:

2012/11/16 11:55:01

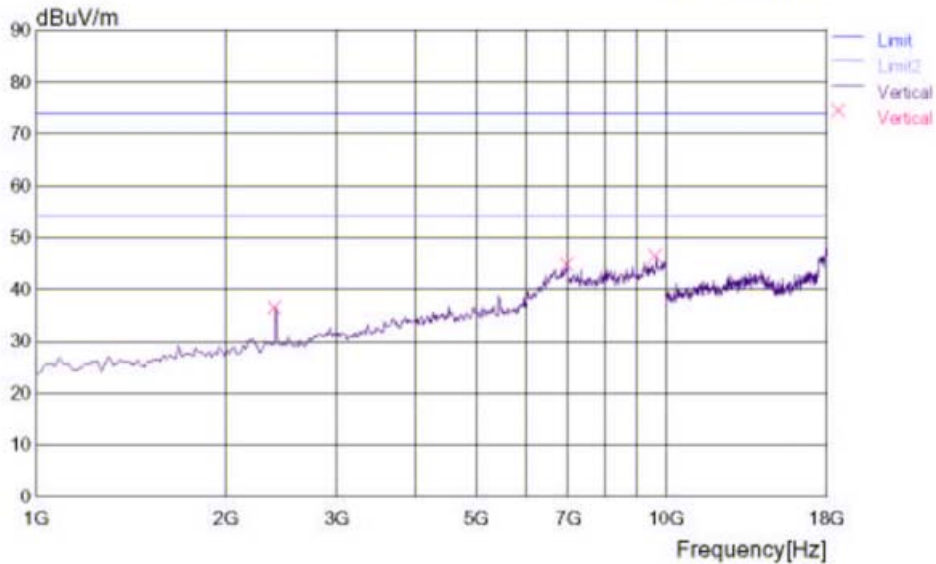
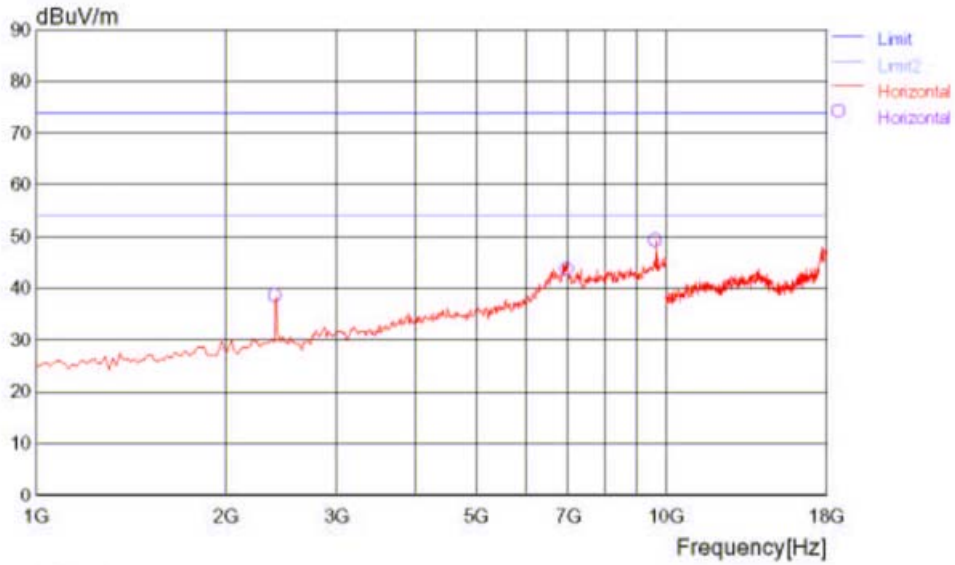
RADIATED EMISSION

Date : 2012/11/16 11:54:54

Trade Name : :	Document No. : :
Model Name : DMT580D	Power Supply : AC 120V/60Hz
Product Name : Tablet	Temp/Humi : 27/55RH%
Test Condition : :	Operator : Ely zhang

Memo : 802.11b CH-L (2412MHz)

LIMIT : FCC Part15 C transmitter spurious above1G(peak)
FCC Part15 C transmitter spurious above1G(average)



No further spurious emissions found between 18GHz and 25GHz.

2012/11/16 11:55:01

RADIATED EMISSION

Date : 2012/11/16 11:54:54

Trade Name	: DMT580D	Document No.	:
Model Name	: Tablet	Power Supply	: AC 120V/60Hz
Product Name	:	Temp/Humi	: 27/55RH%
Test Condition	:	Operator	: Eliy zhang

Memo : 802.11b CH-L (2412MHz)

 LIMIT : FCC Part15 C transmitter spurious above1G(peak)
 FCC Part15 C transmitter spurious above1G(average)

Frequency [MHz]	Meter (PK) [dBuV]	Ant. Type	Detector	Antenna Factor [dB/m]	Total Loss [dB]	Level (PK) [dBuV/m]	Angle [degree]	Height [m]	Pola.	Limit [dBuV/m]	Margin [dB]
2406.818	40.8	HRN	PK	31.4	-33.9	38.3	168	2.00	Hori.	74.0	35.7
2406.818	38.9	HRN	PK	31.4	-33.9	36.4	183	2.00	Vert.	74.0	37.6
6987.996	32.1	HRN	PK	41.0	-29.6	43.5	275	2.00	Hori.	74.0	30.5
6987.996	33.2	HRN	PK	41.0	-29.6	44.6	273	2.00	Vert.	74.0	29.4
9657.343	35.1	HRN	PK	42.3	-28.1	49.3	316	2.00	Hori.	74.0	24.7
9657.343	32.0	HRN	PK	42.3	-28.1	46.2	34	2.00	Vert.	74.0	27.8

802.11b mode Channel Mid:

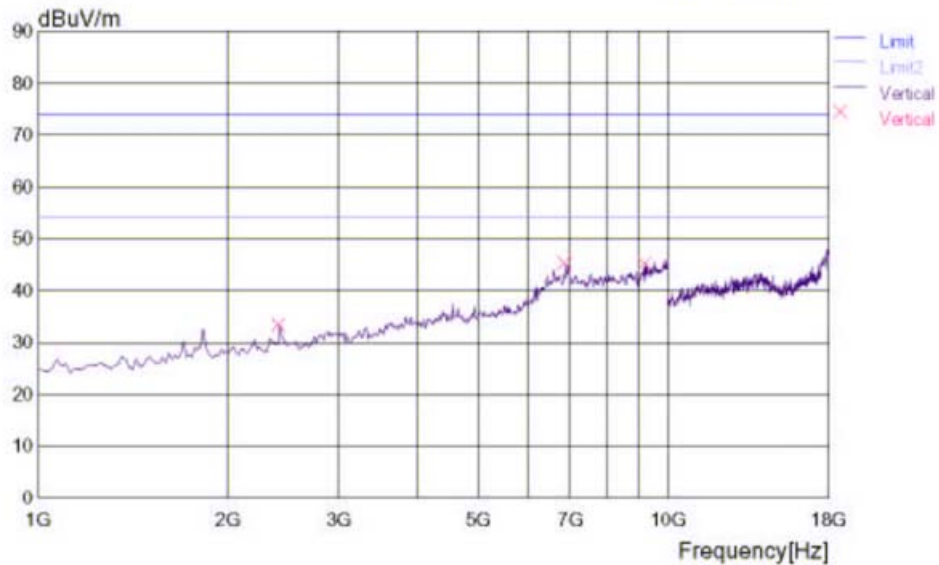
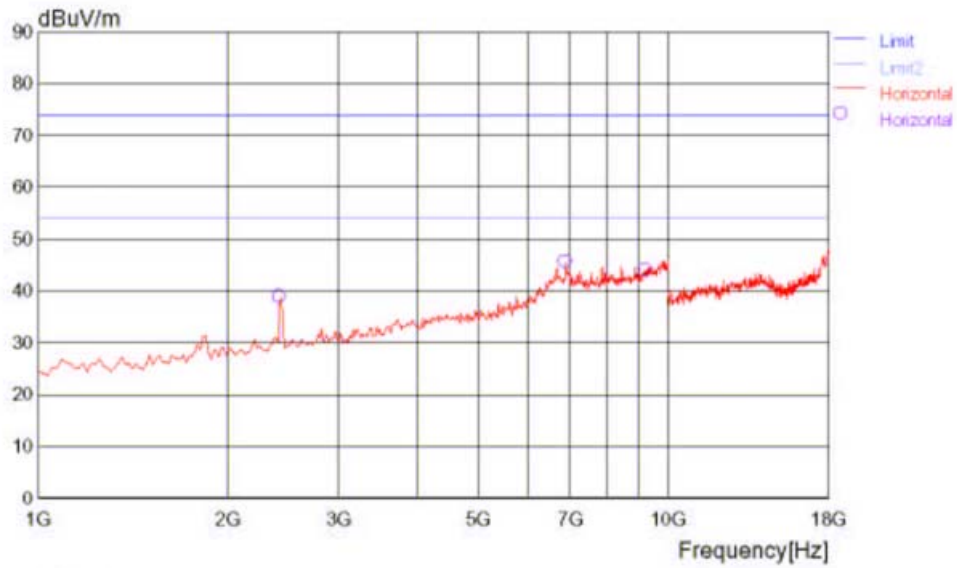
2012/11/16 13:21:19

RADIATED EMISSION

Date : 2012/11/16 11:58:23

Trade Name	:		Document No.	:	
Model Name	:	DMT580D	Power Supply	:	AC 120V/60Hz
Product Name	:	Tablet	Temp/Humi	:	27/55RH%
Test Condition	:		Operator	:	Eliy zhang
Memo	:	802.11b CH-M (2437MHz)			

LIMIT : FCC Part15 C transmitter spurious above1G(peak)
FCC Part15 C transmitter spurious above1G(average)



No further spurious emissions found between 18GHz and 25GHz.

2012/11/16 13:21:19

RADIATED EMISSION

Date : 2012/11/16 11:58:23

Trade Name :	Document No. :
Model Name : DMT580D	Power Supply : AC 120V/60Hz
Product Name : Tablet	Temp/Humi : 27/55RH%
Test Condition :	Operator : Eliy zhang

Memo : 802.11b CH-M (2437MHz)

 LIMIT : FCC Part15 C transmitter spurious above1G(peak)
 FCC Part15 C transmitter spurious above1G(average)

Frequency [MHz]	Meter (PK) [dBuV]	Ant. Type	Detector	Antenna Factor [dB/m]	Total Loss [dB]	Level (PK) [dBuV/m]	Angle [degree]	Height [m]	Pola.	Limit [dBuV/m]	Margin [dB]
2424.854	41.2	HRN	PK	31.4	-33.9	38.7	174	2.00	Hori.	74.0	35.3
2424.854	35.7	HRN	PK	31.4	-33.9	33.2	178	2.00	Vert.	74.0	40.8
6897.815	34.6	HRN	PK	40.6	-29.8	45.4	101	2.00	Hori.	74.0	28.6
6897.815	34.2	HRN	PK	40.6	-29.8	45.0	211	2.00	Vert.	74.0	29.0
9224.476	30.3	HRN	PK	42.1	-28.5	43.9	26	2.00	Hori.	74.0	30.1
9242.512	31.6	HRN	PK	42.1	-28.5	45.2	63	2.00	Vert.	74.0	28.8

802.11b mode Channel High:

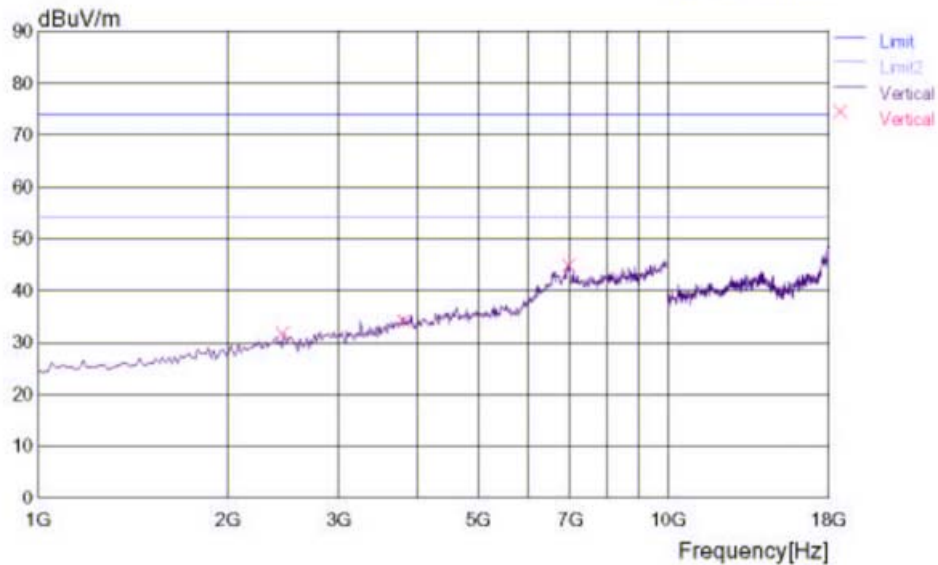
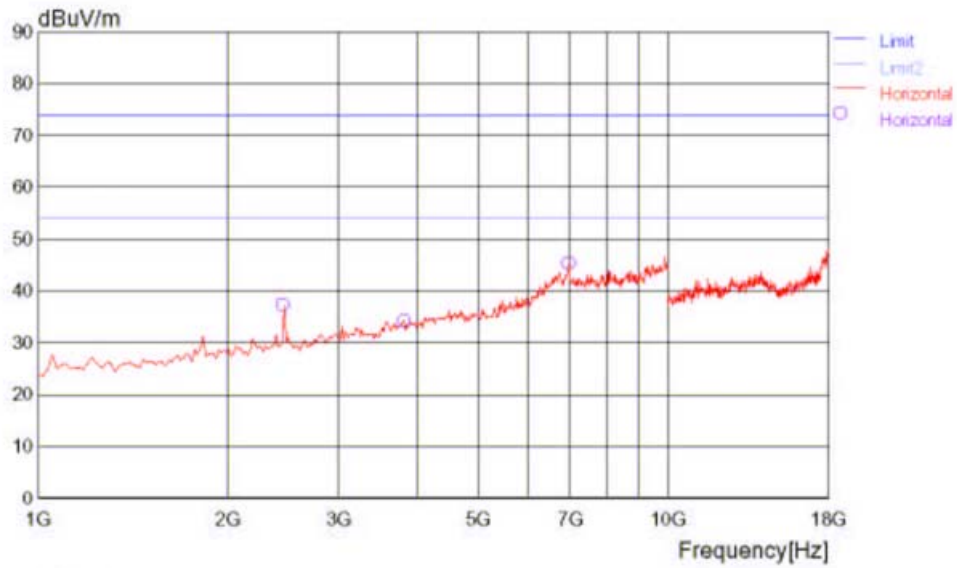
2012/11/16 13:26:53

RADIATED EMISSION

Date : 2012/11/16 13:26:47

Trade Name :	Document No. :
Model Name : DMT580D	Power Supply : AC 120V/60Hz
Product Name : Tablet	Temp/Humi : 27/55RH%
Test Condition :	Operator : Ely zhang
Memo : 802.11b CH-H (2462MHz)	

LIMIT : FCC Part15 C transmitter spurious above1G(peak)
 FCC Part15 C transmitter spurious above1G(average)



No further spurious emissions found between 18GHz and 25GHz.

2012/11/16 13:26:53

RADIATED EMISSION

Date : 2012/11/16 13:26:47

Trade Name	: DMT580D	Document No.	:
Model Name	: Tablet	Power Supply	: AC 120V/60Hz
Product Name	:	Temp/Humi	: 27/55RH%
Test Condition	:	Operator	: Eliy zhang

Memo : 802.11b CH-H (2462MHz)

 LIMIT : FCC Part15 C transmitter spurious above1G(peak)
 FCC Part15 C transmitter spurious above1G(average)

Frequency [MHz]	Meter (PK) [dBuV]	Ant. Type	Detector	Antenna Factor [dB/m]	Total Loss [dB]	Level (PK) [dBuV/m]	Angle [degree]	Height [m]	Pola.	Limit [dBuV/m]	Margin [dB]
2460.927	39.6	HRN	PK	31.3	-33.8	37.1	184	2.00	Hori.	74.0	36.9
2460.927	34.2	HRN	PK	31.3	-33.8	31.7	174	2.00	Vert.	74.0	42.3
3813.636	31.0	HRN	PK	35.2	-32.0	34.2	106	2.00	Hori.	74.0	39.8
3831.673	30.9	HRN	PK	35.2	-32.0	34.1	84	2.00	Vert.	74.0	39.9
6987.996	33.6	HRN	PK	41.0	-29.6	45.0	180	2.00	Hori.	74.0	29.0
6987.996	33.3	HRN	PK	41.0	-29.6	44.7	358	2.00	Vert.	74.0	29.3

802.11g mode Channel Low:

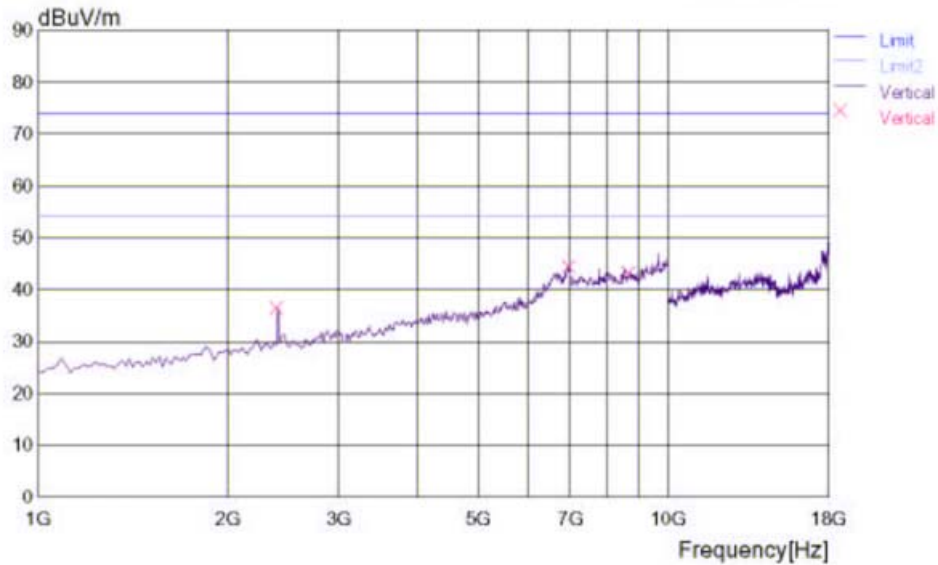
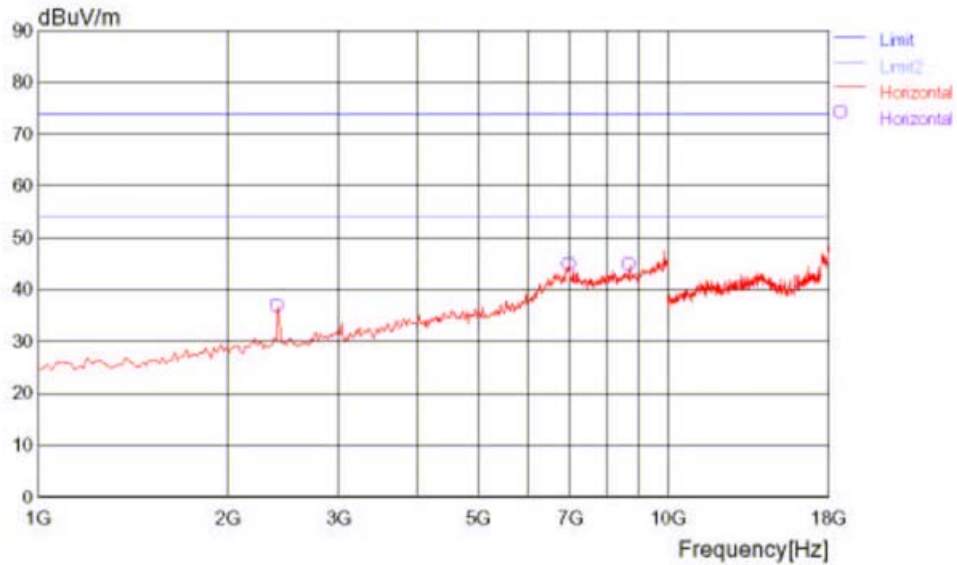
2012/11/16 11:40:55

RADIATED EMISSION

Date : 2012/11/16 11:40:47

Trade Name :	Document No. :
Model Name : DMT580D	Power Supply : AC 120V/60Hz
Product Name : Tablet	Temp/Humi : 27/55RH%
Test Condition :	Operator : Eily zhang
Memo : 802.11g CH-L (2412MHz)	

LIMIT : FCC Part15 C transmitter spurious above1G(peak)
 FCC Part15 C transmitter spurious above1G(average)



No further spurious emissions found between 18GHz and 25GHz.

2012/11/16 11:40:55

RADIATED EMISSION

Date : 2012/11/16 11:40:47

Trade Name	Document No.
Model Name	Power Supply
Product Name	Temp/Humi
Test Condition	Operator

Memo : 802.11g CH-L (2412MHz)

 LIMIT : FCC Part15 C transmitter spurious above1G(peak)
 FCC Part15 C transmitter spurious above1G(average)

Frequency [MHz]	Meter (PK) [dBuV]	Ant. Type	Detector	Antenna Factor [dB/m]	Total Loss [dB]	Level (PK) [dBuV/m]	Angle [degree]	Height [m]	Pola.	Limit [dBuV/m]	Margin [dB]
2406.818	39.2	HRN	PK	31.4	-33.9	36.7	178	2.00	Hori.	74.0	37.3
2406.818	38.8	HRN	PK	31.4	-33.9	36.3	179	2.00	Vert.	74.0	37.7
6987.996	33.5	HRN	PK	41.0	-29.6	44.9	355	2.00	Hori.	74.0	29.1
6987.996	32.7	HRN	PK	41.0	-29.6	44.1	26	2.00	Vert.	74.0	29.9
8701.428	31.5	HRN	PK	41.6	-28.5	44.6	92	2.00	Hori.	74.0	29.4
8719.464	29.9	HRN	PK	41.6	-28.6	42.9	359	2.00	Vert.	74.0	31.1

802.11g mode Channel Mid:

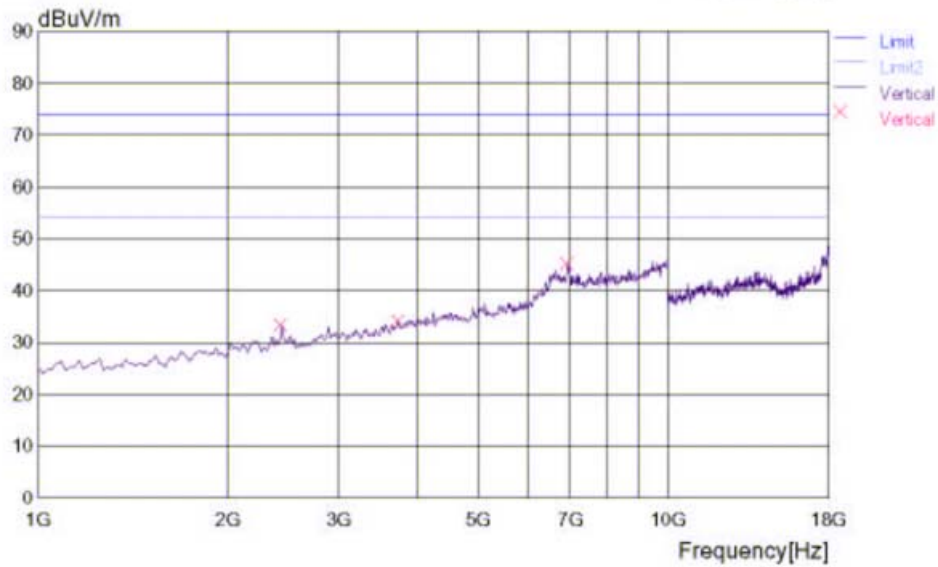
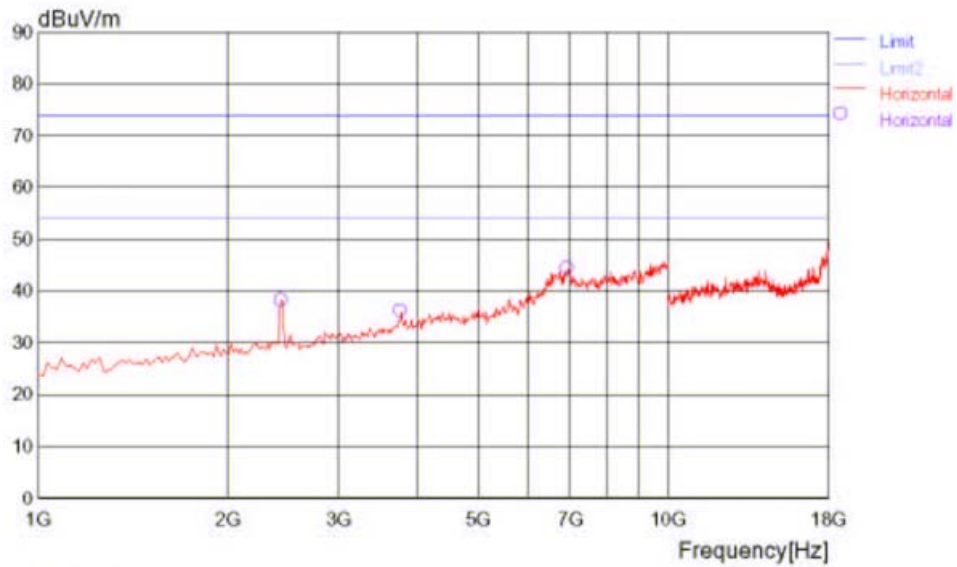
2012/11/16 11:45:18

RADIATED EMISSION

Date : 2012/11/16 11:45:10

Trade Name :	Document No. :
Model Name : DMT580D	Power Supply : AC 120V/60Hz
Product Name : Tablet	Temp/Humi : 27/55RH%
Test Condition :	Operator : Ely zhang
Memo : 802.11g CH-M (2437MHz)	

LIMIT : FCC Part15 C transmitter spurious above1G(peak)
 FCC Part15 C transmitter spurious above1G(average)



No further spurious emissions found between 18GHz and 25GHz.

2012/11/16 11:45:18

RADIATED EMISSION

Date : 2012/11/16 11:45:10

Trade Name	Document No.
Model Name	Power Supply
Product Name	Temp/Humi
Test Condition	Operator

Memo : 802.11g CH-M (2437MHz)

 LIMIT : FCC Part15 C transmitter spurious above1G(peak)
 FCC Part15 C transmitter spurious above1G(average)

Frequency [MHz]	Meter (PK) [dBuV]	Ant. Type	Detector	Antenna Factor [dB/m]	Total Loss [dB]	Level (PK) [dBuV/m]	Angle [degree]	Height [m]	Pola.	Limit [dBuV/m]	Margin [dB]
2442.890	40.7	HRN	PK	31.3	-33.8	38.2	179	2.00	Hori.	74.0	35.8
2442.890	35.7	HRN	PK	31.3	-33.8	33.2	203	2.00	Vert.	74.0	40.8
3741.492	31.0	HRN	PK	35.0	-32.1	33.9	113	2.00	Vert.	74.0	40.1
3777.564	33.0	HRN	PK	35.1	-32.1	36.0	191	2.00	Hori.	74.0	38.0
6933.887	33.8	HRN	PK	40.8	-29.7	44.9	359	2.00	Vert.	74.0	29.1
6951.923	33.1	HRN	PK	40.9	-29.7	44.3	356	2.00	Hori.	74.0	29.7

802.11g mode Channel High:

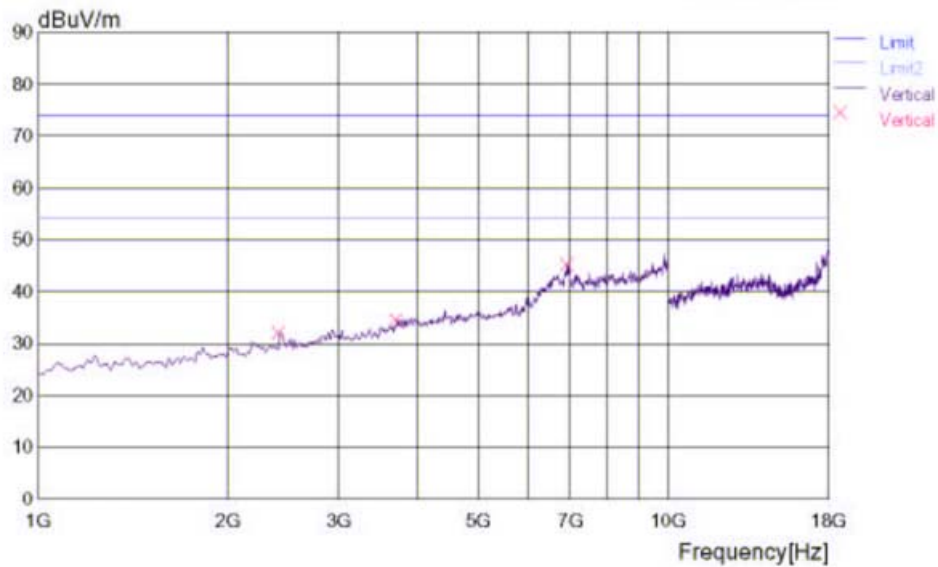
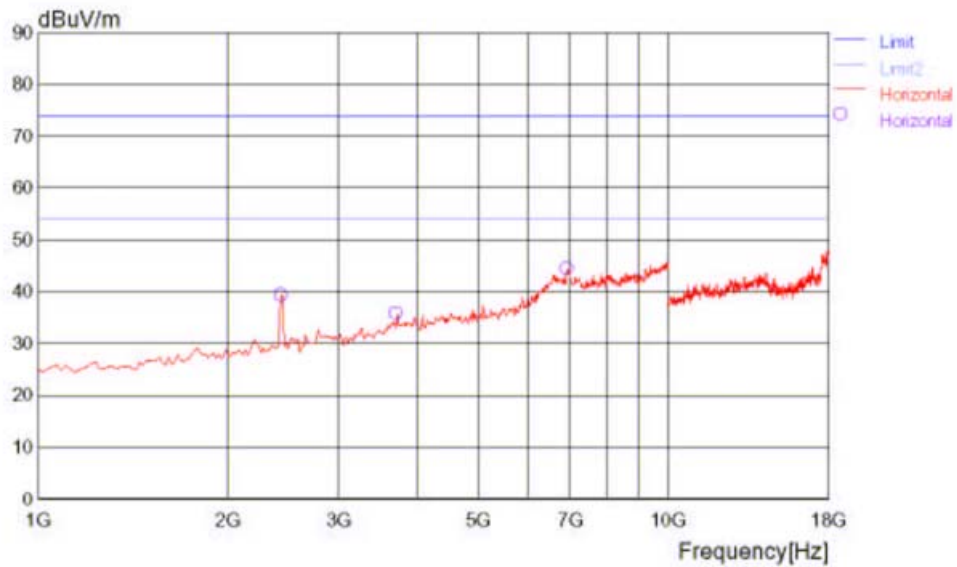
2012/11/16 11:50:36

RADIATED EMISSION

Date : 2012/11/16 11:50:31

Trade Name :	Document No. :
Model Name : DMT580D	Power Supply : AC 120V/60Hz
Product Name : Tablet	Temp/Humi : 27/55RH%
Test Condition :	Operator : Eily zhang
Memo : 802.11g CH-H (2462MHz)	

LIMIT : FCC Part15 C transmitter spurious above1G(peak)
 FCC Part15 C transmitter spurious above1G(average)



No further spurious emissions found between 18GHz and 25GHz.

2012/11/16 11:50:36

RADIATED EMISSION

Date : 2012/11/16 11:50:31

Trade Name	:	DMT580D	Document No.	:	
Model Name	:	Tablet	Power Supply	:	AC 120V/60Hz
Product Name	:		Temp/Humi	:	27/55RH%
Test Condition	:		Operator	:	Eliy zhang

Memo : 802.11g CH-H (2462MHz)

 LIMIT : FCC Part15 C transmitter spurious above1G(peak)
 FCC Part15 C transmitter spurious above1G(average)

Frequency [MHz]	Meter (PK) [dBuV]	Ant. Type	Detector	Antenna Factor [dB/m]	Total Loss [dB]	Level (PK) [dBuV/m]	Angle [degree]	Height [m]	Pola.	Limit [dBuV/m]	Margin [dB]
2424.854	34.6	HRN	PK	31.4	-33.9	32.1	191	2.00	Vert.	74.0	41.9
2442.890	41.9	HRN	PK	31.3	-33.8	39.4	166	2.00	Hori.	74.0	34.6
3723.456	32.9	HRN	PK	34.9	-32.1	35.7	80	2.00	Hori.	74.0	38.3
3723.456	31.6	HRN	PK	34.9	-32.1	34.4	356	2.00	Vert.	74.0	39.6
6915.851	34.0	HRN	PK	40.7	-29.8	44.9	358	2.00	Vert.	74.0	29.1
6933.887	33.1	HRN	PK	40.8	-29.7	44.2	351	2.00	Hori.	74.0	29.8

802.11n20 mode, Channel Low:

2012/11/16 11:20:11

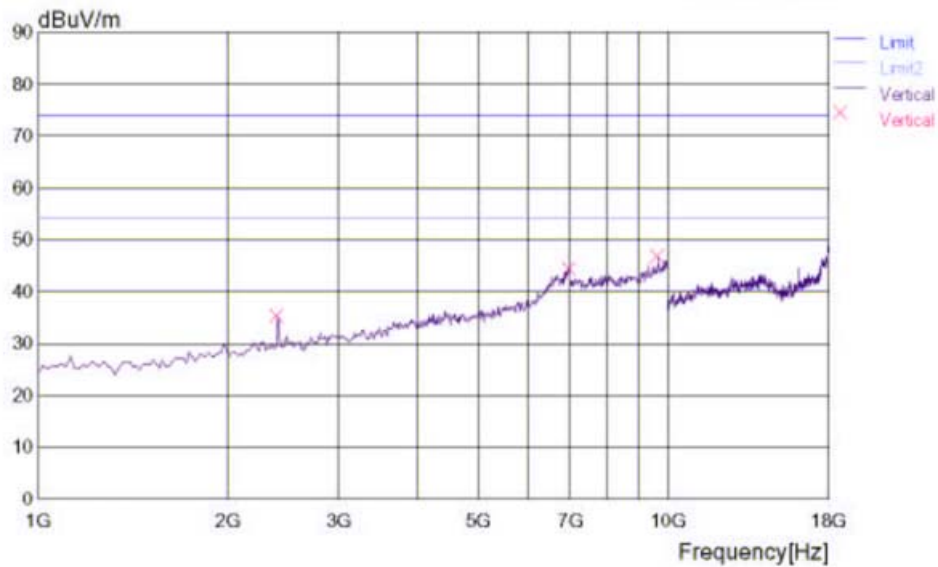
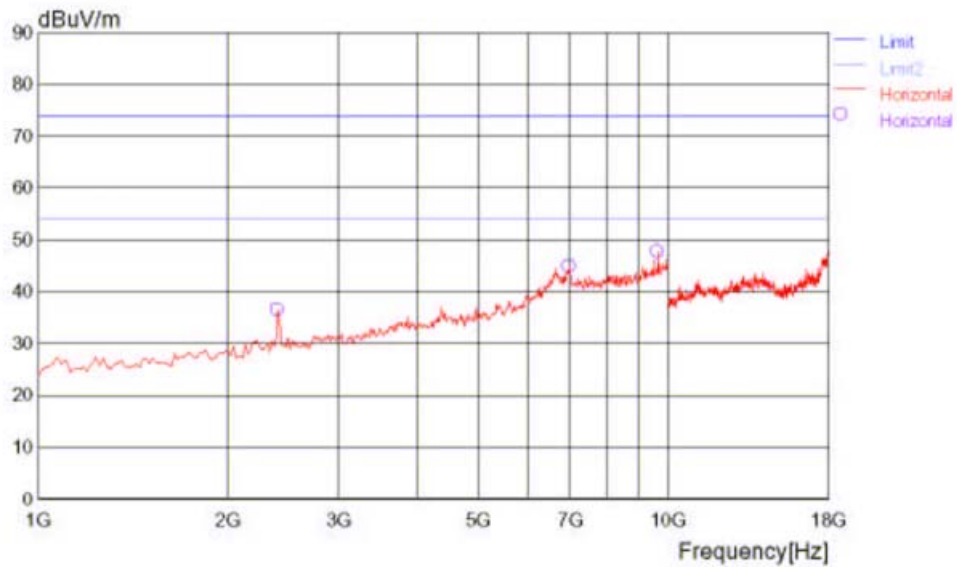
RADIATED EMISSION

Date : 2012/11/16 11:20:05

Trade Name :	Document No. :
Model Name : DMT580D	Power Supply : AC 120V/60Hz
Product Name : Tablet	Temp/Humi : 27/55RH%
Test Condition :	Operator : Eily zhang

Memo : 802.11n CH-L (2412MHz) 20M

LIMIT : FCC Part15 C transmitter spurious above1G(peak)
 FCC Part15 C transmitter spurious above1G(average)



No further spurious emissions found between 18GHz and 25GHz.

2012/11/16 11:20:11

RADIATED EMISSION

Date : 2012/11/16 11:20:05

Trade Name	: DMT580D	Document No.	:
Model Name	: Tablet	Power Supply	: AC 120V/60Hz
Product Name	:	Temp/Humi	: 27/55RH%
Test Condition	:	Operator	: Eliy zhang

Memo : 802.11n CH-L (2412MHz) 20M

 LIMIT : FCC Part15 C transmitter spurious above1G(peak)
 FCC Part15 C transmitter spurious above1G(average)

Frequency [MHz]	Meter (PK) [dBuV]	Ant. Type	Detector	Antenna Factor [dB/m]	Total Loss [dB]	Level (PK) [dBuV/m]	Angle [degree]	Height [m]	Pola.	Limit [dBuV/m]	Margin [dB]
2406.818	38.9	HRN	PK	31.4	-33.9	36.4	183	2.00	Hori.	74.0	37.6
2406.818	37.5	HRN	PK	31.4	-33.9	35.0	187	2.00	Vert.	74.0	39.0
6969.959	33.1	HRN	PK	40.9	-29.7	44.3	203	2.00	Vert.	74.0	29.7
6987.996	33.3	HRN	PK	41.0	-29.6	44.7	133	2.00	Hori.	74.0	29.3
9657.343	32.4	HRN	PK	42.3	-28.1	46.6	18	2.00	Vert.	74.0	27.4
9657.343	33.5	HRN	PK	42.3	-28.1	47.7	290	2.00	Hori.	74.0	26.3

802.11n20 mode, Channel Mid:

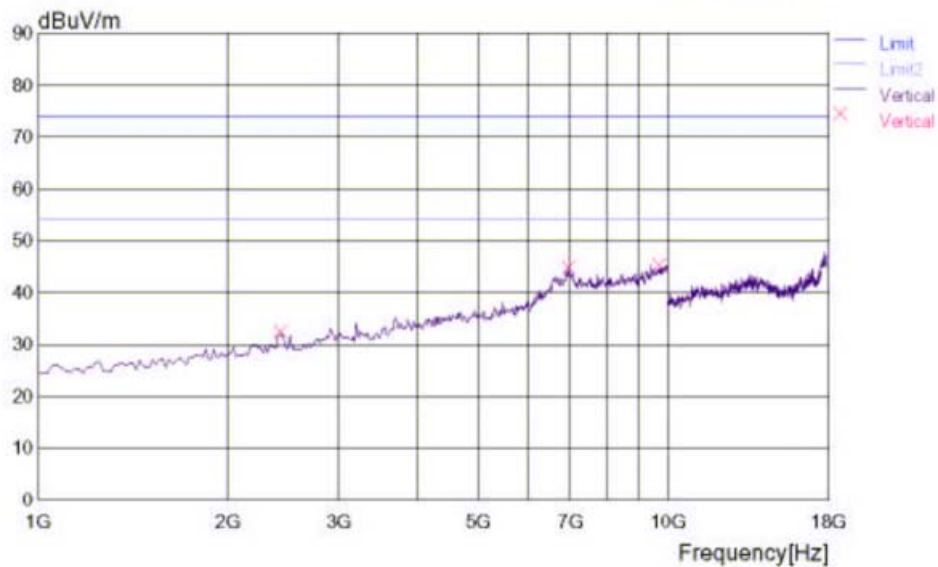
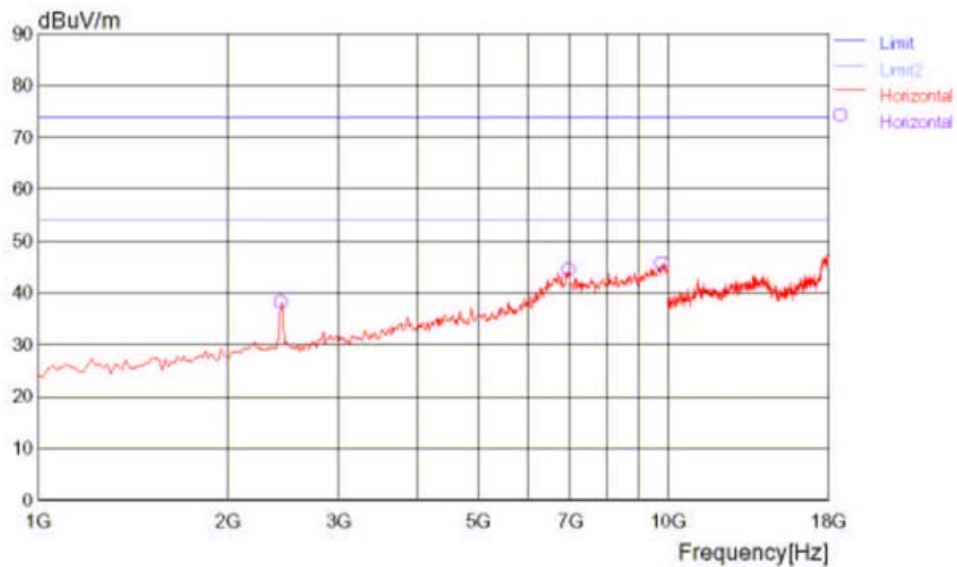
2012/11/16 11:29:30

RADIATED EMISSION

Date : 2012/11/16 11:29:22

Trade Name	:		Document No.	:	
Model Name	:	DMT580D	Power Supply	:	AC 120V/60Hz
Product Name	:	Tablet	Temp/Humi	:	27/55RH%
Test Condition	:		Operator	:	Eliy zhang

Memo : 802.11n CH-M (2437MHz) 20M

LIMIT : FCC Part15 C transmitter spurious above1G(peak)
FCC Part15 C transmitter spurious above1G(average)

No further spurious emissions found between 18GHz and 25GHz.

2012/11/16 11:29:30

RADIATED EMISSION

Date : 2012/11/16 11:29:22

Trade Name :	Document No. :
Model Name : DMT580D	Power Supply : AC 120V/60Hz
Product Name : Tablet	Temp/Humi : 27/55RH%
Test Condition :	Operator : Eliy zhang

Memo : 802.11n CH-M (2437MHz) 20M

 LIMIT : FCC Part15 C transmitter spurious above1G(peak)
 FCC Part15 C transmitter spurious above1G(average)

Frequency [MHz]	Meter (PK) [dBuV]	Ant. Type	Detector	Antenna Factor [dB/m]	Total Loss [dB]	Level (PK) [dBuV/m]	Angle [degree]	Height [m]	Pola.	Limit [dBuV/m]	Margin [dB]
2442.890	40.6	HRN	PK	31.3	-33.8	38.1	174	2.00	Hori.	74.0	35.9
2442.890	34.8	HRN	PK	31.3	-33.8	32.3	174	2.00	Vert.	74.0	41.7
6987.996	32.9	HRN	PK	41.0	-29.6	44.3	170	2.00	Hori.	74.0	29.7
6987.996	33.2	HRN	PK	41.0	-29.6	44.6	50	2.00	Vert.	74.0	29.4
9765.560	30.6	HRN	PK	42.4	-28.0	45.0	281	2.00	Vert.	74.0	29.0
9801.632	30.9	HRN	PK	42.5	-28.0	45.4	335	2.00	Hori.	74.0	28.6

802.11n20 mode, Channel High:

2012/11/16 11:35:30

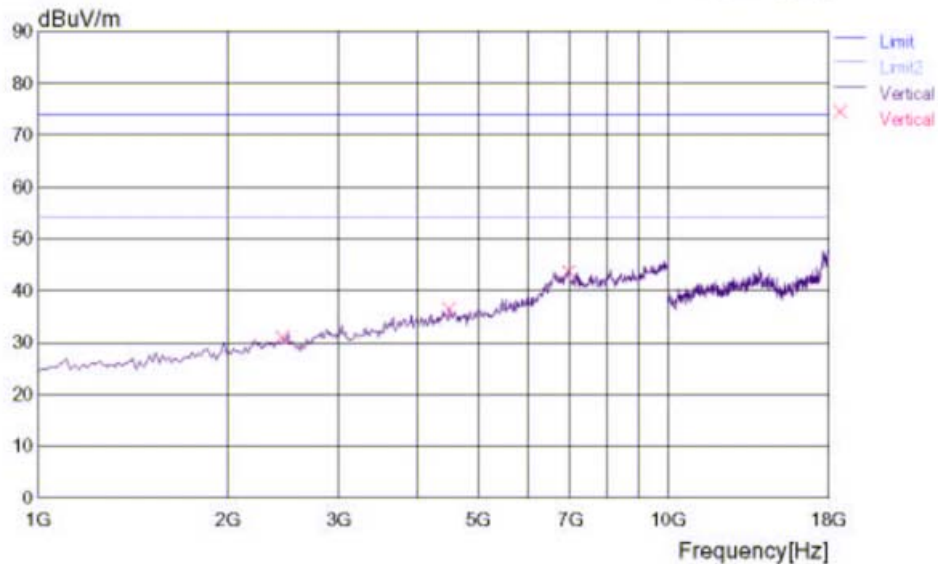
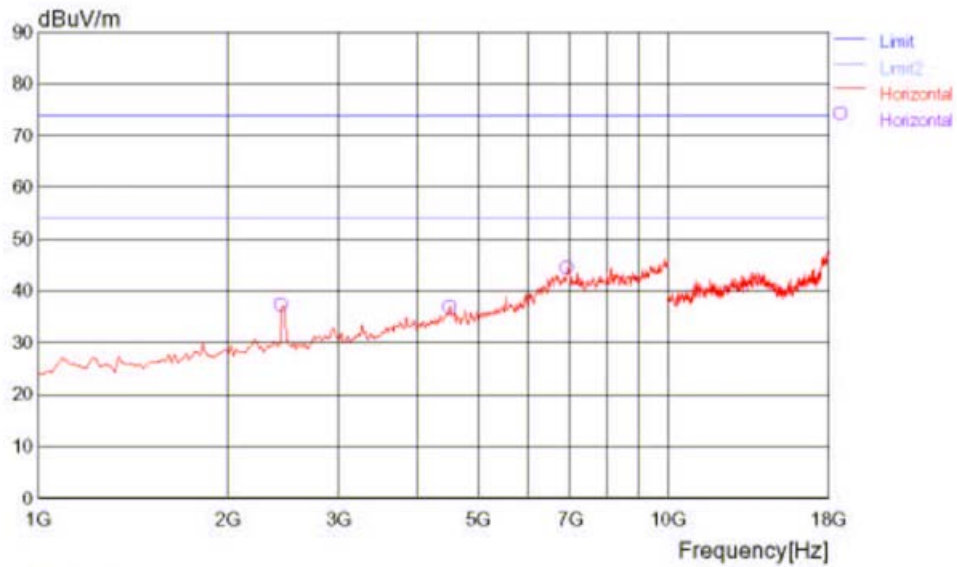
RADIATED EMISSION

Date : 2012/11/16 11:35:21

Trade Name :	Document No. :
Model Name : DMT580D	Power Supply : AC 120V/60Hz
Product Name : Tablet	Temp/Humi : 27/55RH%
Test Condition :	Operator : Ely zhang

Memo : 802.11n CH-H (2462MHz) 20M

LIMIT : FCC Part15 C transmitter spurious above1G(peak)
 FCC Part15 C transmitter spurious above1G(average)



No further spurious emissions found between 18GHz and 25GHz.

2012/11/16 11:35:30

RADIATED EMISSION

Date : 2012/11/16 11:35:21

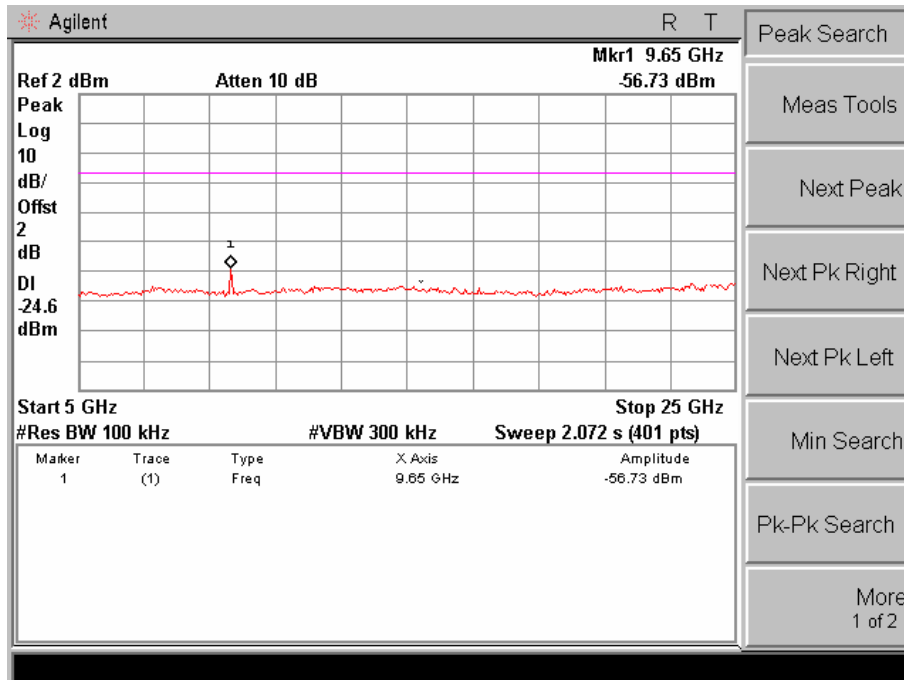
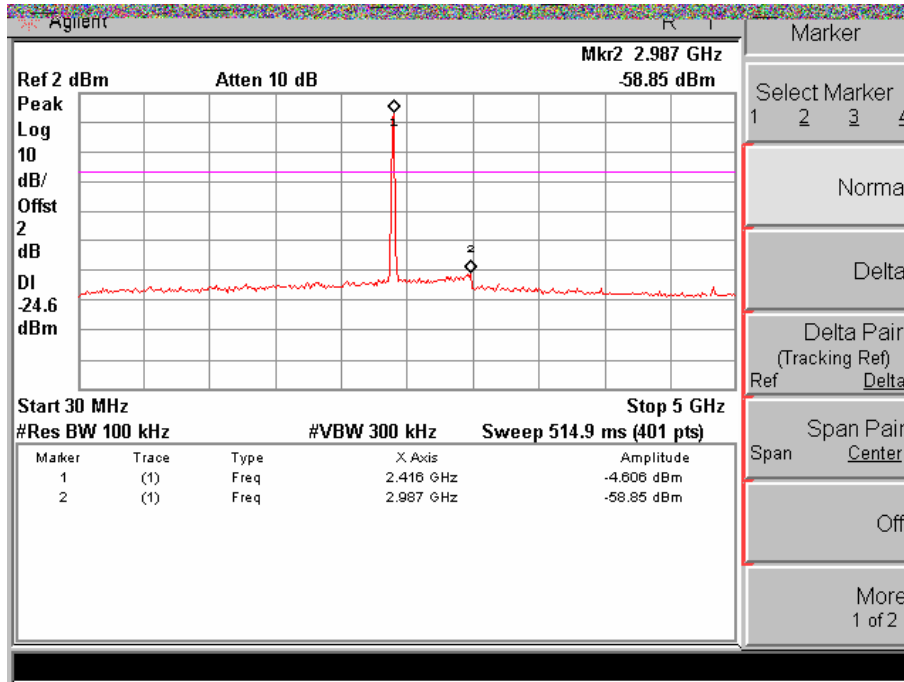
Trade Name	:	Document No.	:
Model Name	:	Power Supply	:
Product Name	:	Temp/Humi	:
Test Condition	:	Operator	:

Memo : 802.11n CH-H (2462MHz) 20M

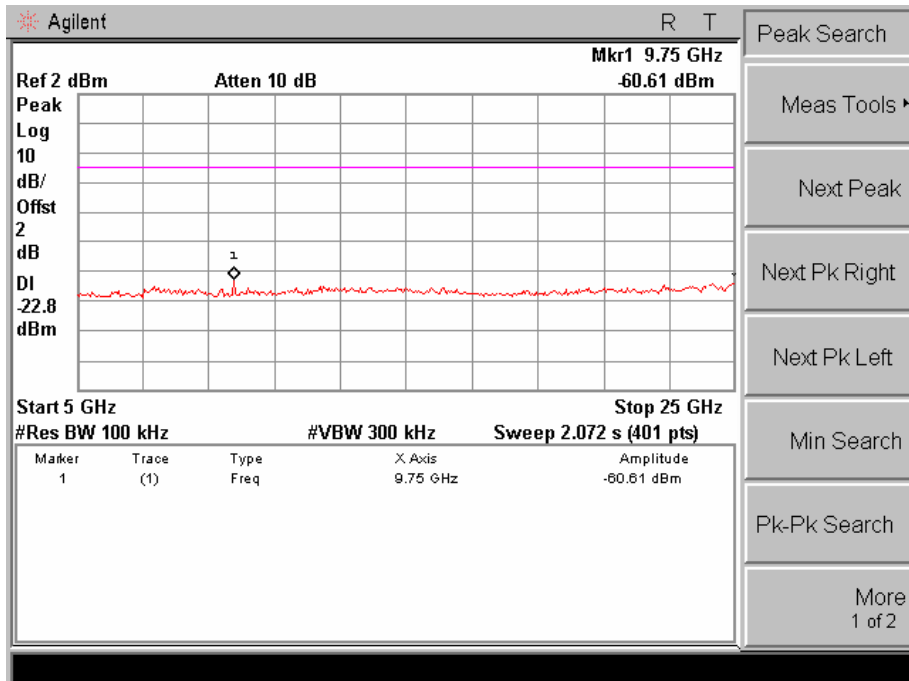
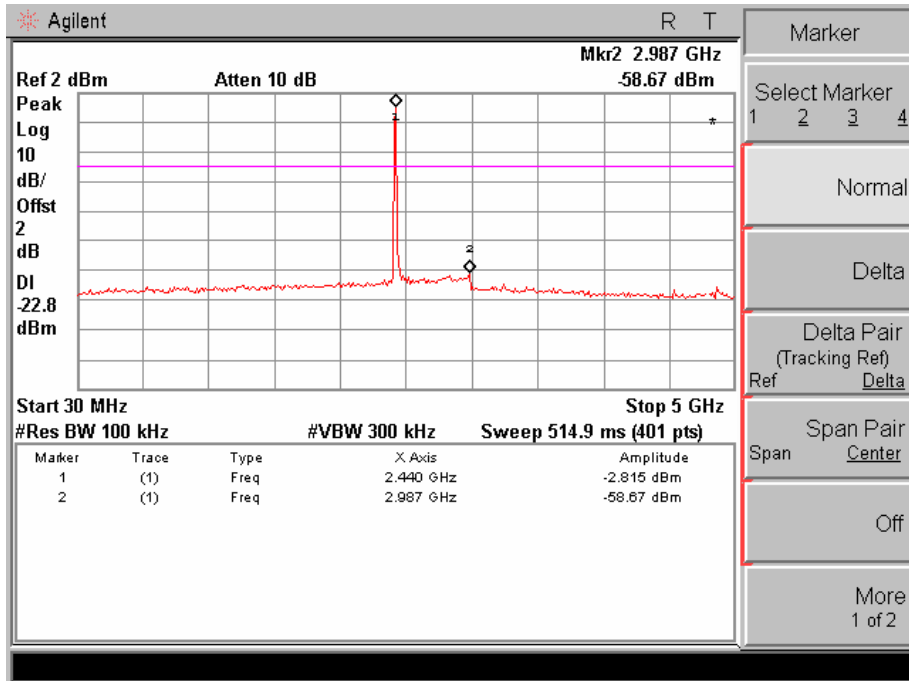
 LIMIT : FCC Part15 C transmitter spurious above1G(peak)
 FCC Part15 C transmitter spurious above1G(average)

Frequency [MHz]	Meter (PK) [dBuV]	Ant. Type	Detector	Antenna Factor [dB/m]	Total Loss [dB]	Level (PK) [dBuV/m]	Angle [degree]	Height [m]	Pola.	Limit [dBuV/m]	Margin [dB]
2442.890	39.6	HRN	PK	31.3	-33.8	37.1	166	2.00	Hori.	74.0	36.9
2460.927	33.4	HRN	PK	31.3	-33.8	30.9	168	2.00	Vert.	74.0	43.1
4499.009	31.2	HRN	PK	36.6	-31.4	36.4	102	2.00	Vert.	74.0	37.6
4517.045	31.8	HRN	PK	36.6	-31.4	37.0	216	2.00	Hori.	74.0	37.0
6951.923	33.2	HRN	PK	40.9	-29.7	44.4	290	2.00	Hori.	74.0	29.6
6969.959	32.3	HRN	PK	40.9	-29.7	43.5	201	2.00	Vert.	74.0	30.5

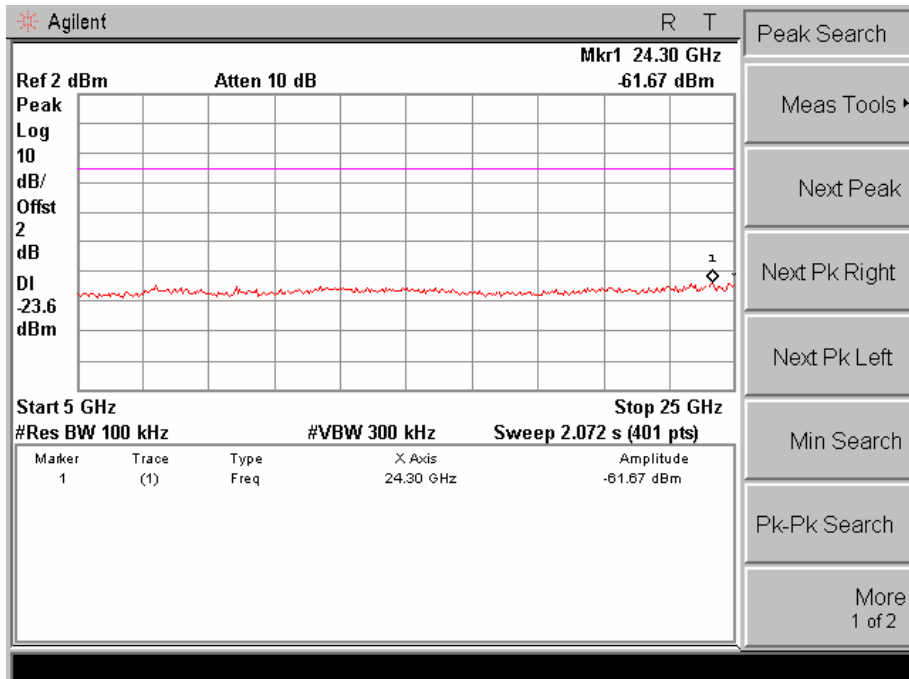
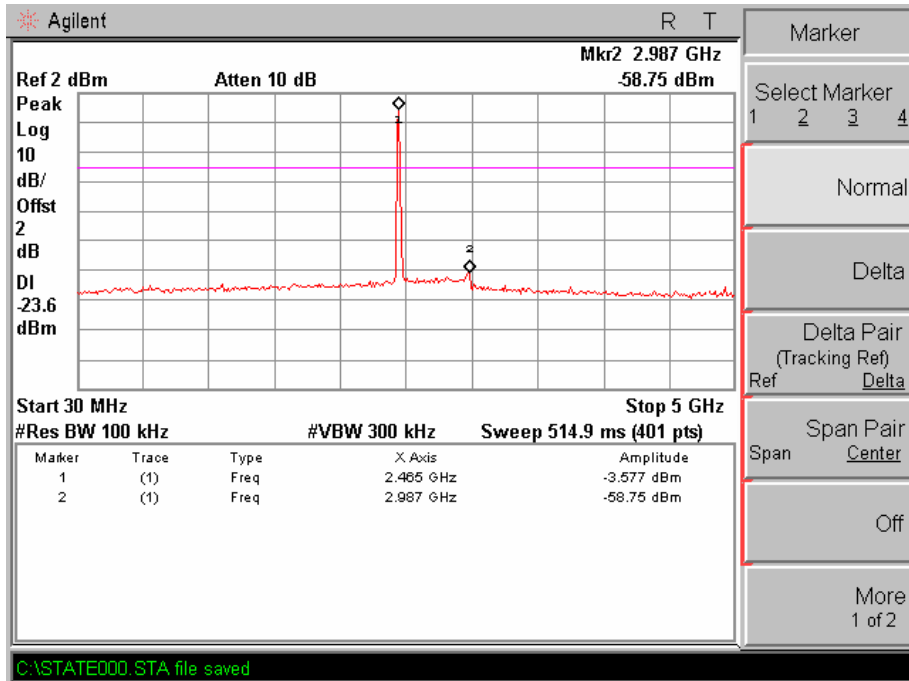
**Conducted:
802.11b mode Channel LOW :**



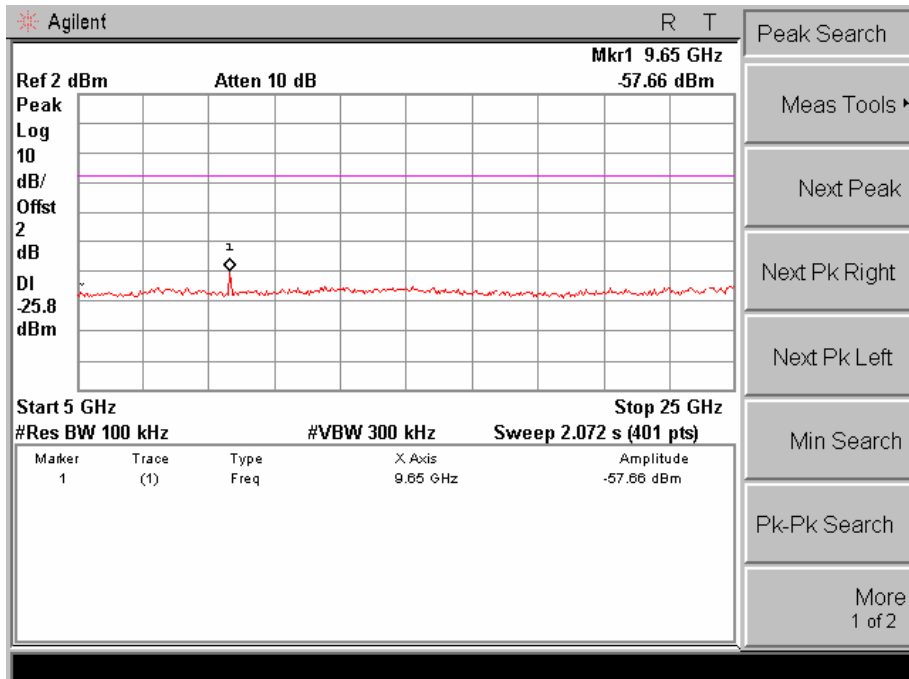
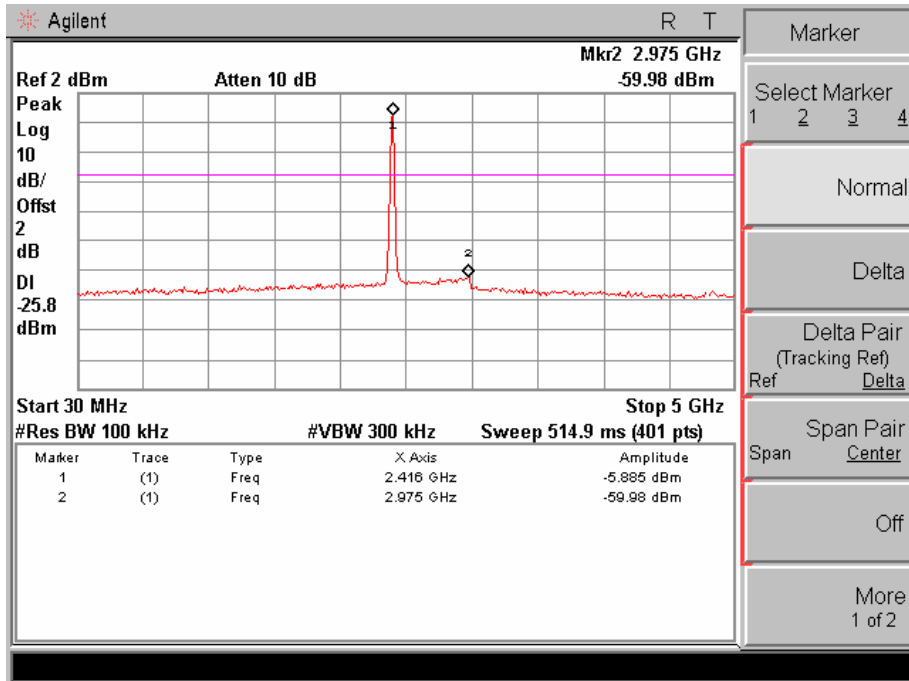
Channel MID :



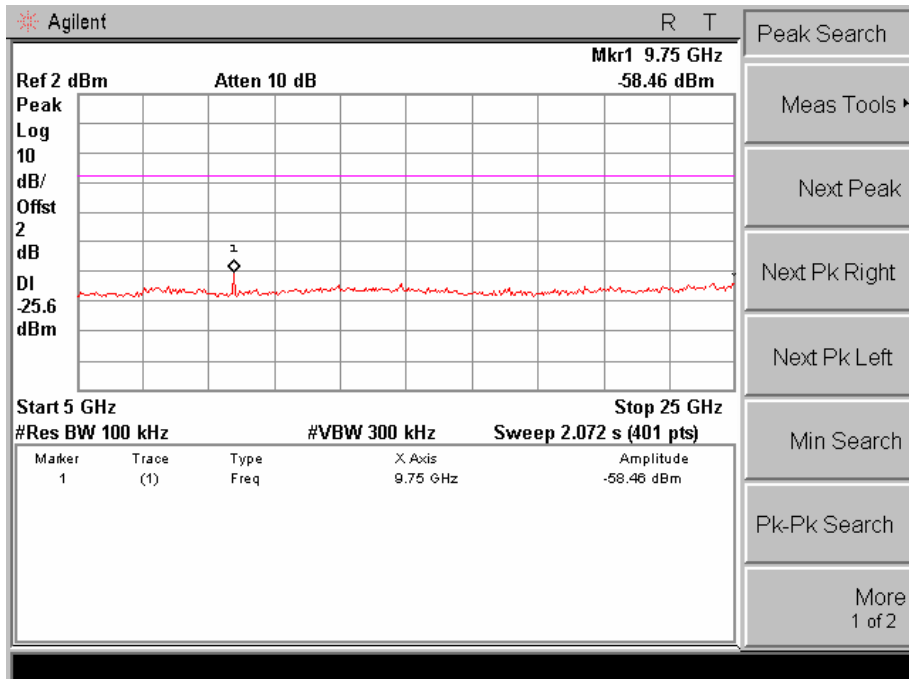
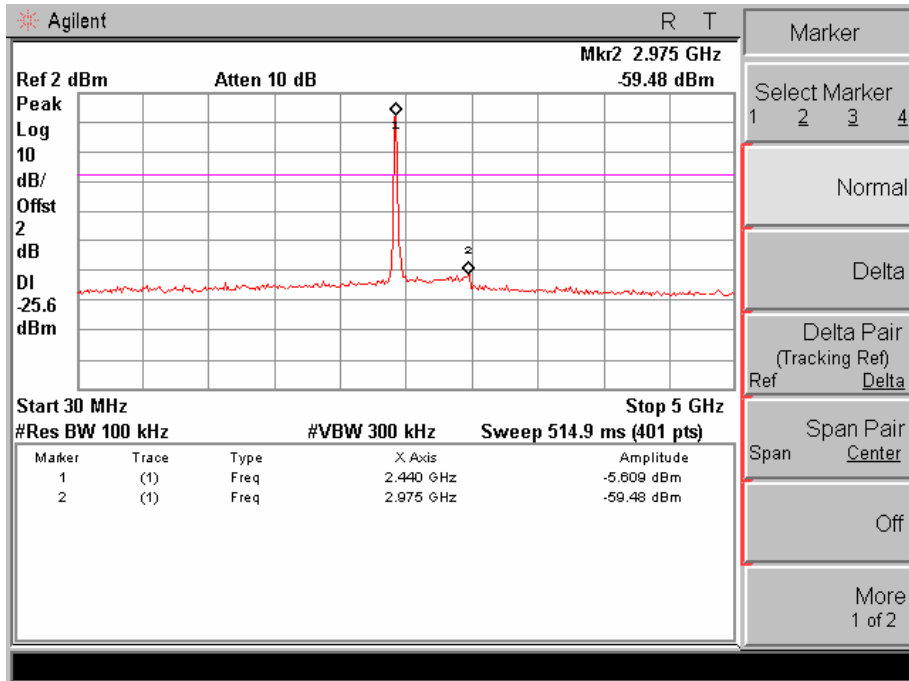
Channel HIG :



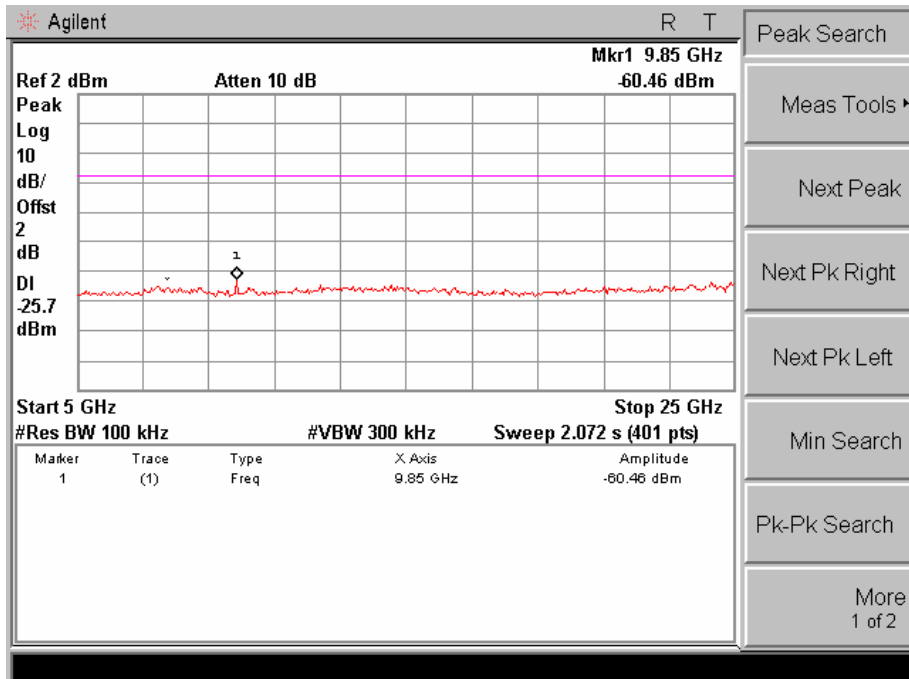
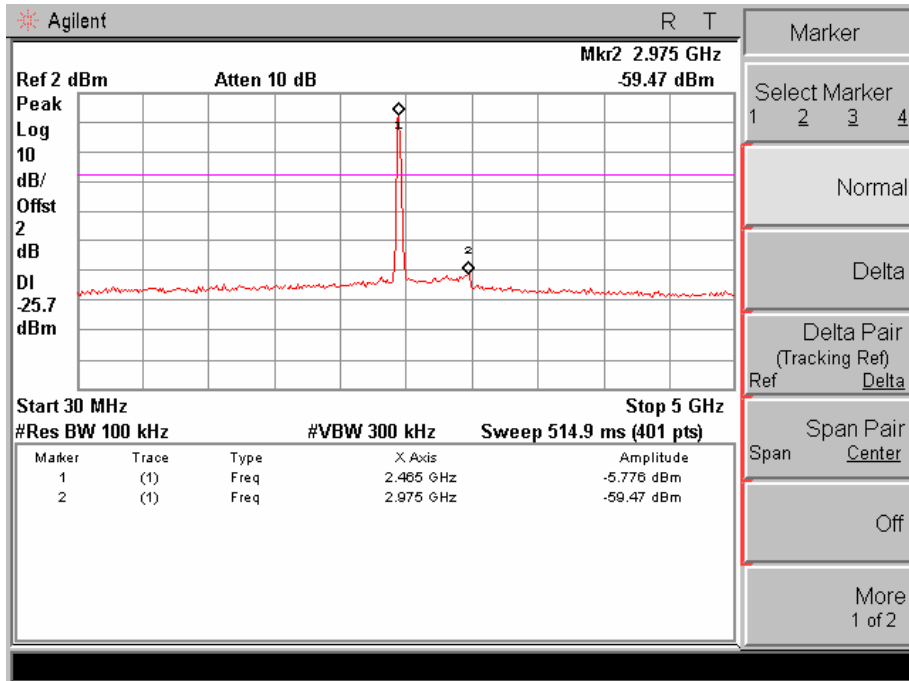
802.11g mode Channel LOW :

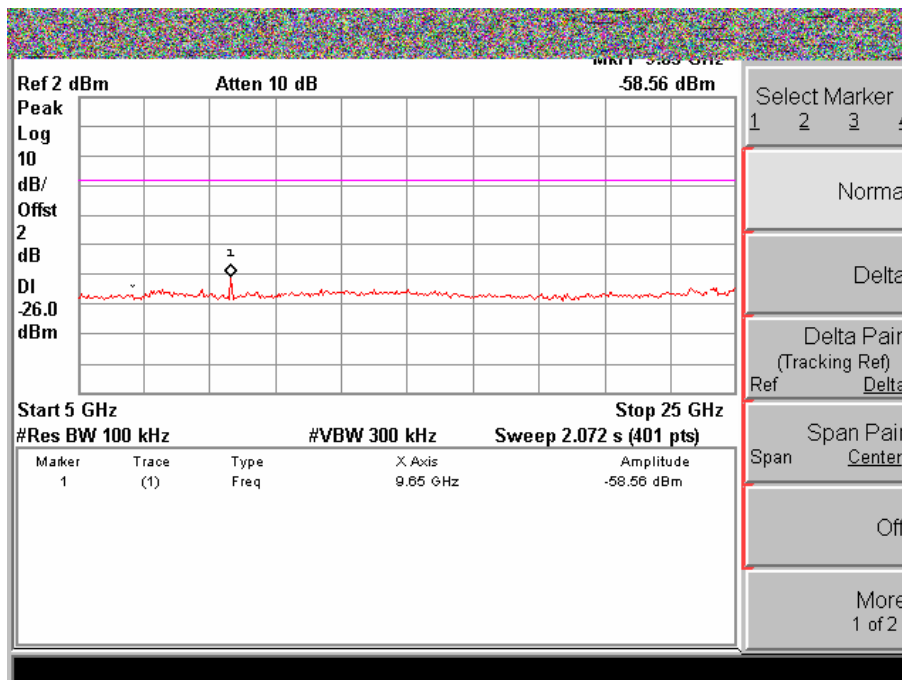
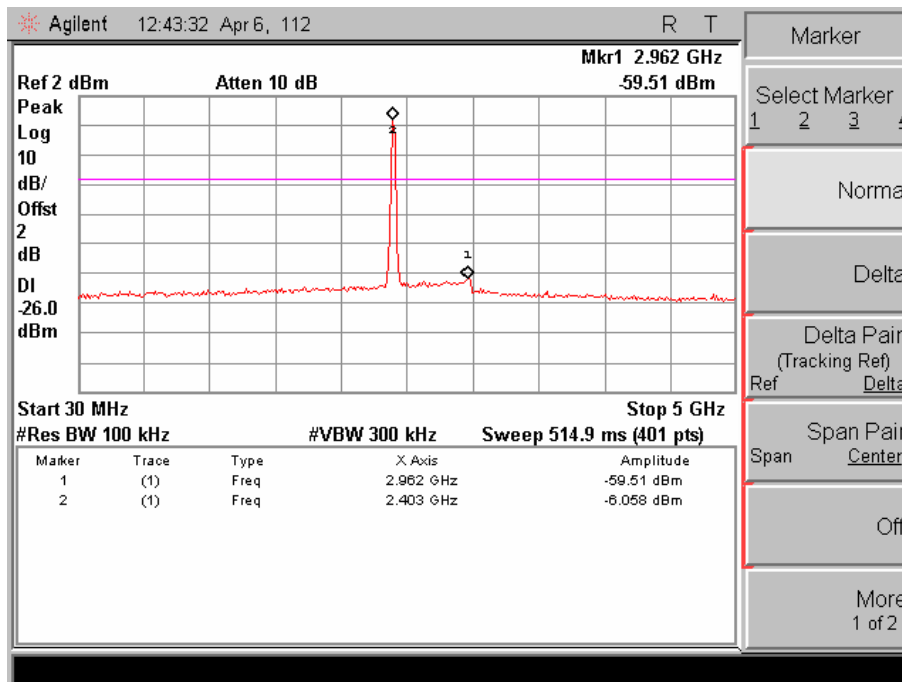


Channel MID :

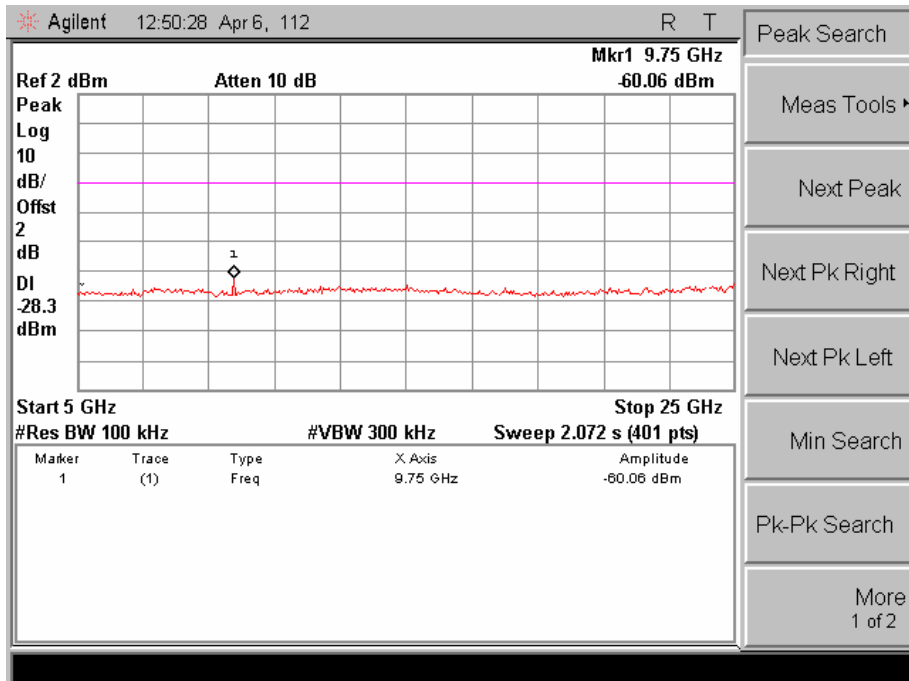
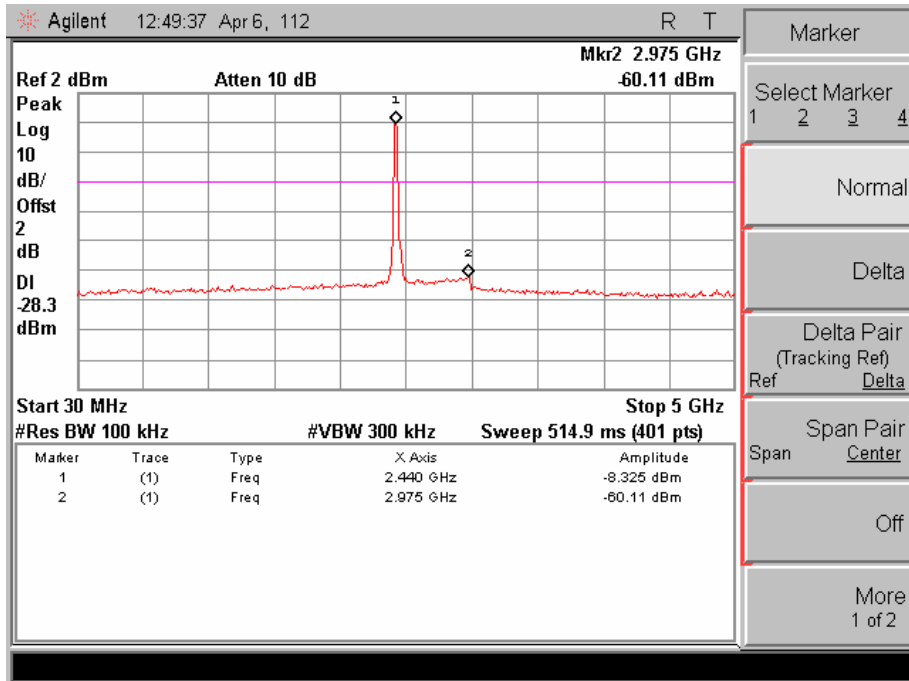


Channel HIG :

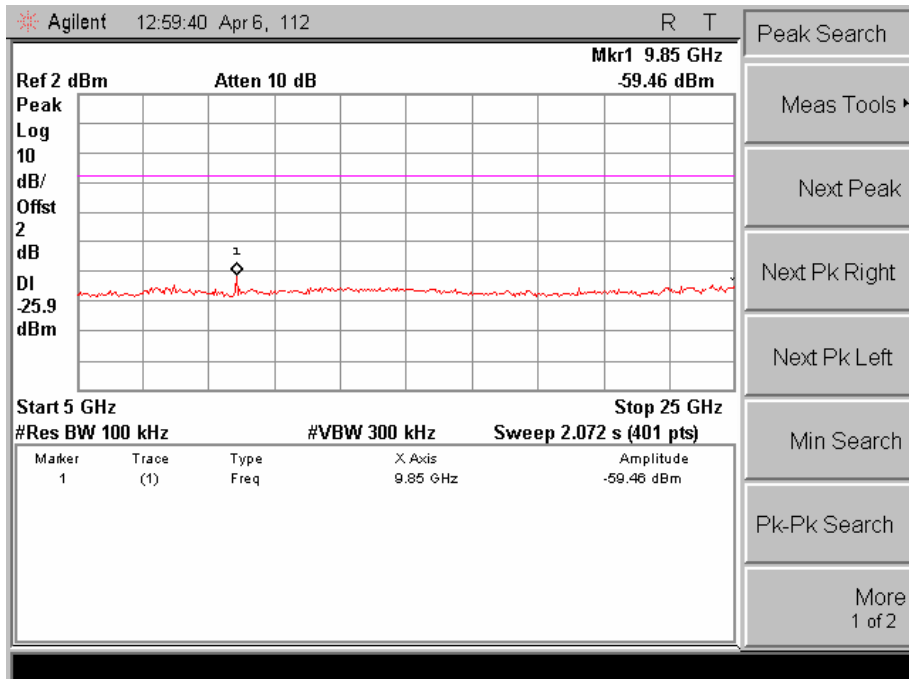
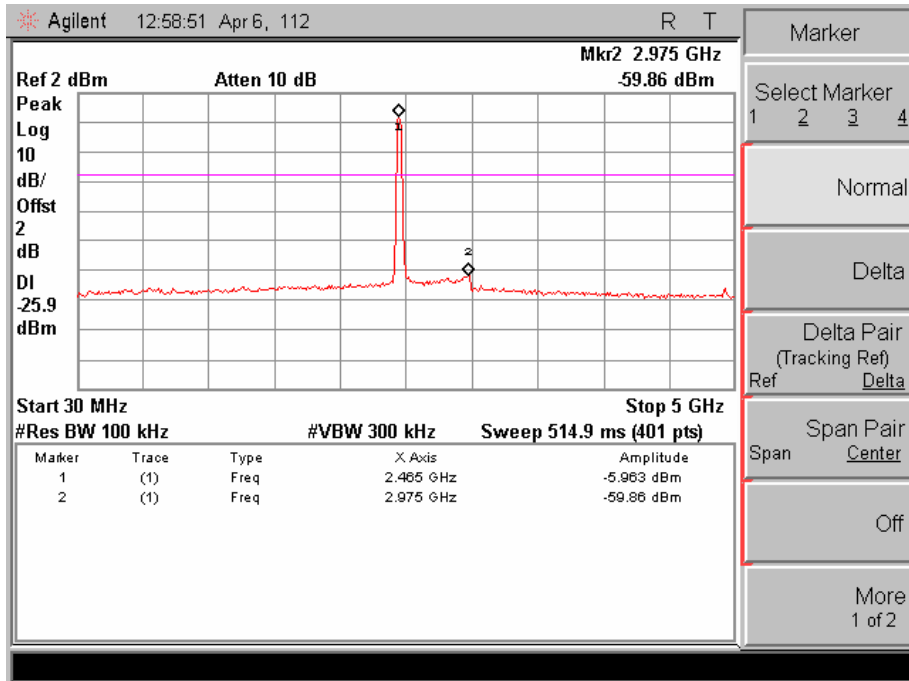


802.11n20 mode, Channel LOW :


Channel MID :



Channel HIG :



5. FCC ID Label

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions : (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Mark Location:

DTV **MDTV** **DOLBY DIGITAL PLUS** **DIGITALSTREAM**
FCC ID : QDMDMT580D | 8GB | 5V \approx 2,5A_{max} | CE0700 



6. Test Setup

6.1 Ancillary and Accessory Equipment Used

No.	Description	Specification	Quantity
1.	Laptop	DELL, M/N:Vostro 1400	1

6.2 Photographs of the Test Configuration

6.2.1 Radiated emission

Below 1GHz:



Above 1GHz:



6.2.2 Conducted emission



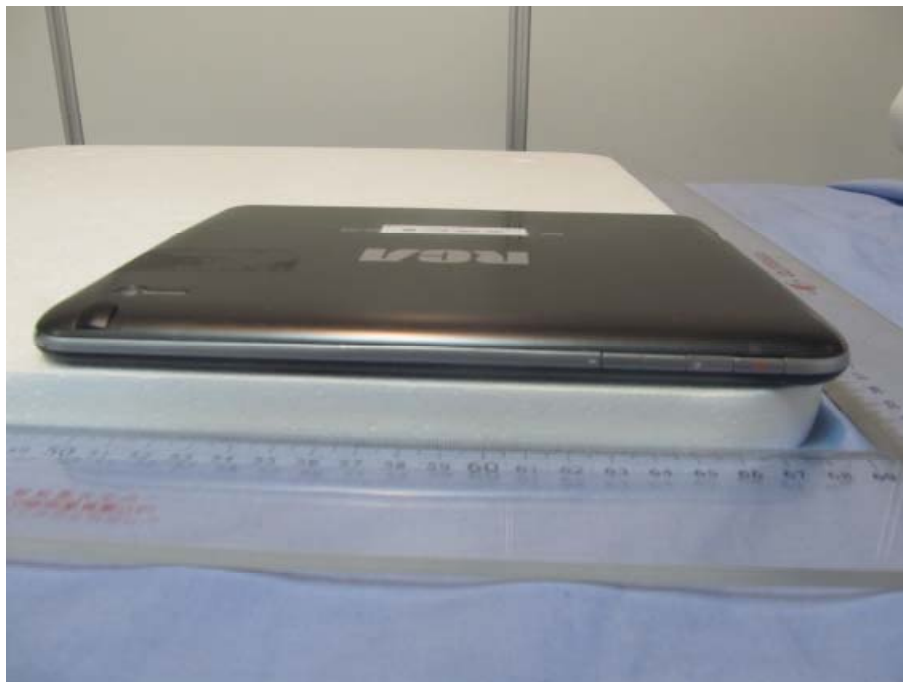
6.3 Photographs of the EUT



Enclosure of EUT



Enclosure of EUT



Side part of EUT



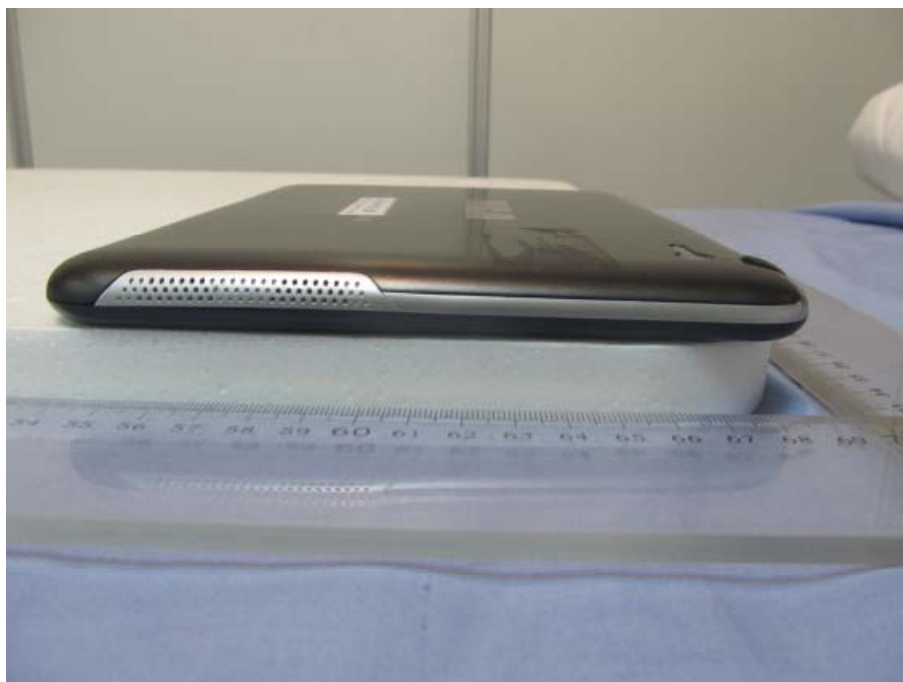
Side part of EUT



Side part of EUT



Side part of EUT



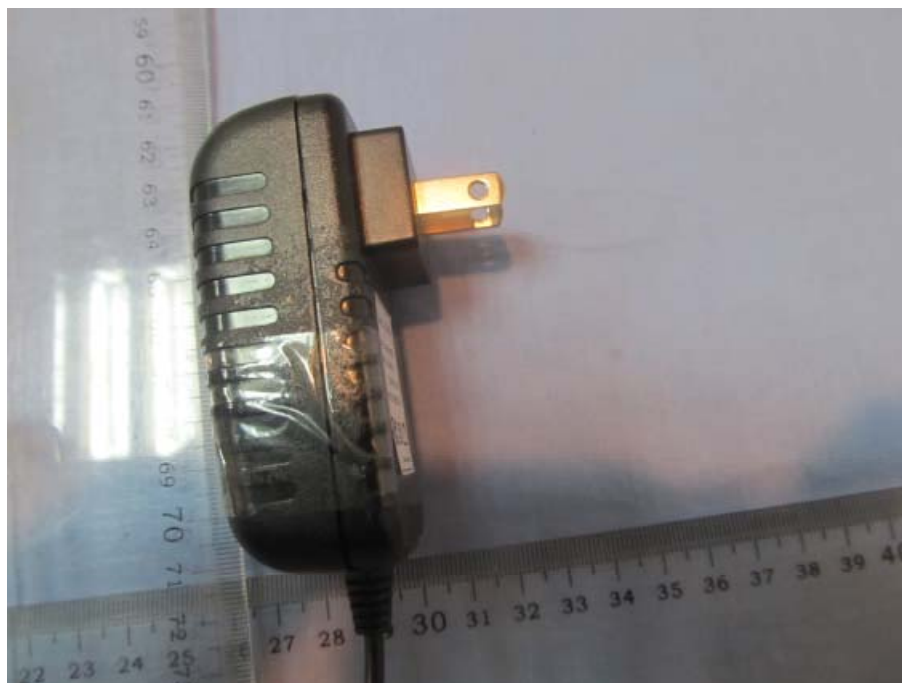
Side part of EUT



Enclosure of adaptor



Enclosure of adaptor



Enclosure of adaptor

7. Equipment List

No.	Equipment	Manufacturer	Model	Serial No.	Last Cal. Date	Cal. Period
1	Precision Biconical Antenna	TDK Co.	PBA-2030	090500	2012-09-18	1Y
2	Precision Log Periodic Antenna	TDK Co.	PLP-3003	061001	2012-09-18	1Y
3	Hybrid Log Periodic Antenna	TDK	HLP-3003C	130174	2012-09-18	1Y
4	Horn antenna	TDK	HRN-0118	130186	2012-04-07	1Y
5	Attenuator 6 dB	Agilent	8491B	MY39260 147	2012-09-18	1Y
6	Preamplifier	TDK Sonoma	310	242803	2012-04-07	1Y
7	Preamplifier	ELENA	EAU-3718 GXA	A070701	2012-04-07	1Y
8	EMI Receiver	Rohde & Schwarz	ESIB26	100234	2012-04-07	1Y
9	EMI Receiver	Rohde & Schwarz	ESCS30	100350	2012-04-07	1Y
10	Spectrum Analyzer	Agilent	E4403B	MY44210 199	2012-04-07	1Y
11	Art. Mains Network	EMCO	3816/2	00044921	2012-04-07	1Y
12	Transient Limiter(10 dB)	Agilent	11947A	3107A037 36	2012-04-07	1Y
13	Personal Computer	HP	DX2000MT	MXD4250 FZM	N/A	
14	Personal Computer	HP	DX2000MT	MXD4130 B2N	N/A	
15	Semi-Anechoic Chamber	TDK Co.	N/A	N/A	2012-04-07	1Y
16	Shielded Room	TDK Co.	N/A	N/A	N/A	
17	Loop Antenna	EMCO	6502	9107-2440	2012-04-07	1Y

8. Test Uncertainty

Test	Range	Confidence Level	Calculated Uncertainty
Radiated emission(3m)	30-1000MHz	95%	4.3dB
Radiated emission(3m)	1-25GHz	95%	5.4dB
Conducted emission	0.15-30MHz	95%	3.3dB
RF power, Spurious(conducted)	30M-25GHz	95%	3.0dB

9. Appendix

9.1 Confirmation of Compliance within the Limits

9.1.1 Method of calculating measurement result

Radiated Emission

$$\text{Reading} + \text{Antenna factor} + \text{Cable loss} - \text{Gain} = \text{Result}$$

$$\text{Example } 45.9 + 11.3 + 6.9 - 31.6 = 32.5$$

Conducted Emission

$$\text{Reading} + \text{C. FACTOR} = \text{Result}$$

$$\text{Example } 30.6 + 10.0 = 40.6$$