



FCC RADIO TEST REPORT-WIFI

FCC ID:O86T1500

Product : 10.1 Inch Full Ruggedized Tablet

Trade Name : N/A

Model Name : xTablet T1500

Serial Model : N/A

Report No. : NTEK-2015NT1211614F4

Prepared for

MobileDemand, LC.

1501 Boyson Square Drive Suite 101 Hiawatha, Iowa52233, United States.

Prepared by

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TEST RESULT CERTIFICATION

Applicant's name MobileDemand, LC.

Address..... 1501 Boyson Square Drive Suite 101 Hiawatha, Iowa52233, United States.

Manufacture's Name... Emdoor Information Co.,Ltd.

Address..... 3A 1/F Jinfulai Tower,No.49-1,Dabao Road,Baoan 28 District,Shenzhen, China.

Product description

Product name..... 10.1 Inch Full Ruggedized Tablet

Model and/or type xTablet T1500
reference

Serial Model N/A

Standards FCC Part15.247 01 Oct. 2015

Test procedure ANSI C63.10-2013 and KDB 558074 D01 DTS Meas Guidance v03r04

This device described above has been tested by NTEK, and the test results show that the equipment under test (EUT) is in compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report.

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Date of Test

Date (s) of performance of tests..... 11 Dec. 2015 ~15 Jan. 2016

Date of Issue 15 Jan. 2016

Test Result..... **Pass**

Testing Engineer :

Susan

(Susan Su)

Technical Manager :

Brown Lu

(Brown Lu)

Authorized Signatory :

Sam. Chen

(Sam Chen)

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1. SUMMARY OF TEST RESULTS

Test procedures according to the technical standards:

FCC Part15 (15.247) , Subpart C			
Standard Section	Test Item	Judgment	Remark
15.207	Conducted Emission	PASS	
15.247 (a)(2)	6dB Bandwidth	PASS	
15.247 (b)	Peak Output Power	PASS	
15.247 (c)	Radiated Spurious Emission	PASS	
15.247 (d)	Power Spectral Density	PASS	
15.205	Band Edge Emission	PASS	
15.203	Antenna Requirement	PASS	

NOTE:

(1) "N/A" denotes test is not applicable in this Test Report

1.1 TEST FACILITY

NTEK Testing Technology Co., Ltd

Add.:1/F, Building E, Fenda Science Park, Sanwei Community, Xixiang Street, Bao'an District, Shenzhen P.R. China.

FCC Registration No.:238937; IC Registration No.:9270A-1

CNAS Registration No.:L5516

1.2 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement $y \pm U$, where expanded uncertainty U is based on a standard uncertainty multiplied by a coverage factor of $k=2$, providing a level of confidence of approximately **95 %**.

No.	Item	Uncertainty
1	Conducted Emission Test	$\pm 1.38\text{dB}$
2	RF power,conducted	$\pm 0.16\text{dB}$
3	Spurious emissions,conducted	$\pm 0.21\text{dB}$
4	All emissions,radiated(<1G)	$\pm 4.68\text{dB}$
5	All emissions,radiated(>1G)	$\pm 4.89\text{dB}$
6	Temperature	$\pm 0.5^{\circ}\text{C}$
7	Humidity	$\pm 2\%$

2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

Equipment	10.1 Inch Full Ruggedized Tablet	
Trade Name	N/A	
Model Name	xTablet T1500	
Serial Model	N/A	
Model Difference	N/A	
Product Description	Operation Frequency:	802.11b/g/n(20MHz): 2412~2462MHz 802.11n(40MHz):2422~2452MHz
	Modulation Type:	IEEE 802.11b : DSSS (CCK, QPSK, DBPSK) IEEE 802.11g/n (HT20/HT40) : OFDM (64QAM, 16QAM, QPSK, BPSK)
	Bit Rate of Transmitter	802.11b:11/5.5/2/1 Mbps 802.11g:54/48/36/24/18/12/9/6Mbps 802.11n(20MHz/40MHz):150/144.44/130/117/115.56/104/86.67/78/52/6.5Mbps
	Number Of Channel	802.11b/g/n20MHz:11CH 802.11n40MHz:7CH
	Antenna Designation:	Please see Note 3.
	Antenna Gain (dBi)	1.0 dbi
Channel List	Please refer to the Note 2.	
Ratings	DC 3.7V	
Adapter	Model:AW018WR-0500300UH Input: AC100-240V~, 50/60Hz,0.5A Output: 5V---, 3A	
Battery	DC 3.7V,10000mAh	
Connecting I/O Port(s)	Please refer to the User's Manual	

Note:

1. For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.

2.

Channel List for 802.11b/g/n(20 MHz)							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
01	2412	04	2427	07	2442	10	2457
02	2417	05	2432	08	2447	11	2462
03	2422	06	2437	09	2452		

Channel List for 802.11n(40MHz)							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
03	2422	06	2437	09	2452		
04	2427	07	2442				
05	2432	08	2447				

3.

Table for Filed Antenna

Ant	Brand	Model Name	Antenna Type	Connector	Gain (dBi)	NOTE
A	N/A	N/A	FPCB Antenna	N/A	1.0	Wifi Antenna

2.2 DESCRIPTION OF TEST MODES

To investigate the maximum EMI emission characteristics generates from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned above was evaluated respectively.

Pretest Mode	Description
Mode 1	802.11b CH1/ CH6/ CH11
Mode 2	802.11g CH1/ CH6/ CH11
Mode 3	802.11n20 CH1/ CH6/ CH11
Mode 4	802.11n40 CH3/ CH6/ CH9
Mode 5	Link Mode

For Conducted Emission	
Final Test Mode	Description
Mode 5	Link Mode

Pretest Mode	Description
Mode 1	802.11b CH1/ CH6/ CH11
Mode 2	802.11g CH1/ CH6/ CH11
Mode 3	802.11n20 CH1/ CH6/ CH11
Mode 4	802.11n40 CH3/ CH6/ CH9
Mode 5	Link Mode

Note:

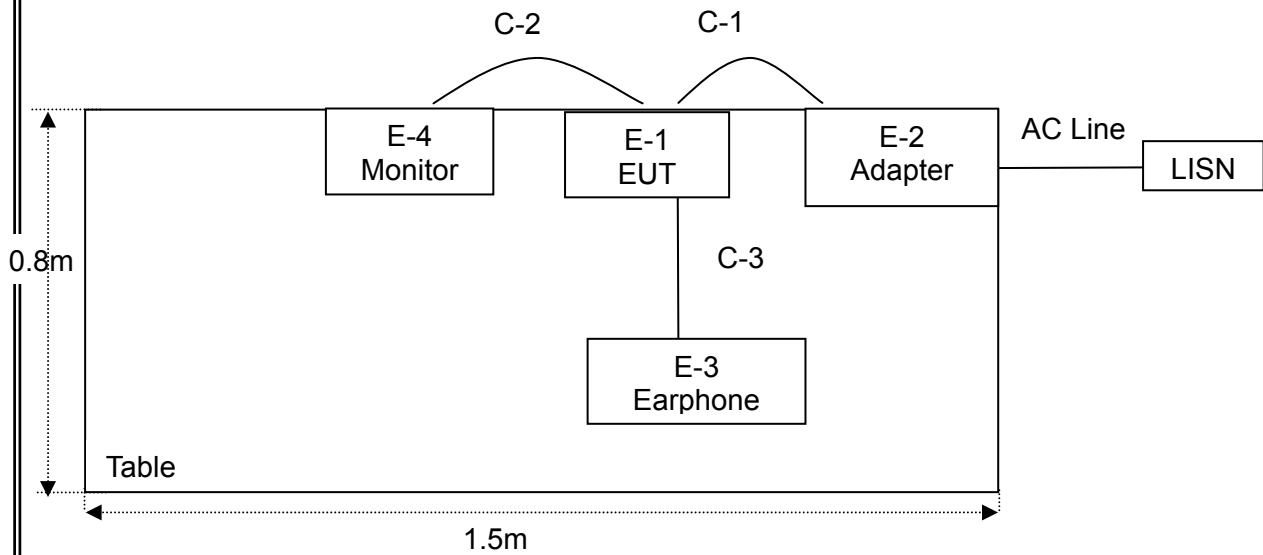
- (1) The measurements are performed at the highest, middle, lowest available channels.
- (2) EUT configured to transmit continuously:
- (3) The measurements are performed at all Bit Rate of Transmitter, the worst data was reported

Mode	Data Rate
IEEE 802.11b	1 Mbps
IEEE 802.11g	6 Mbps
IEEE 802.11n20	MCS 7
IEEE 802.11n40	MCS 7

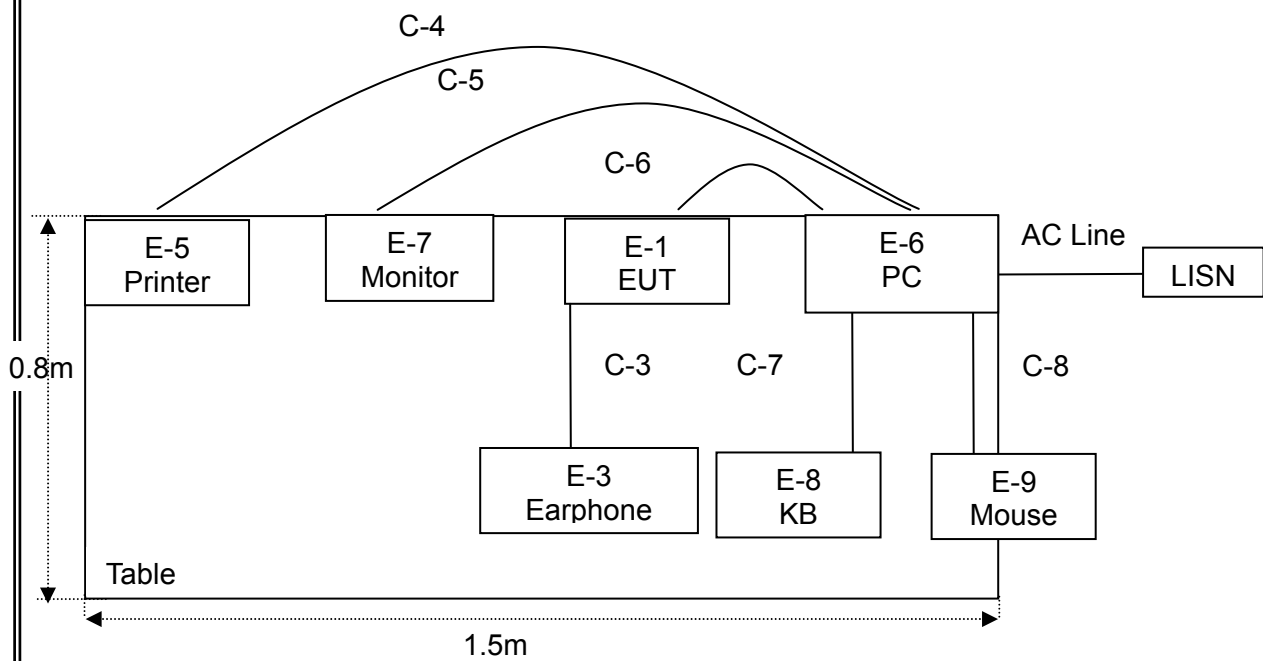
Operated Mode for Worst Duty Cycle	
Test Signal Duty Cycle (x)	Average correction factor (dB)
100% - IEEE 802.11b	0
100% - IEEE 802.11g	0
100% - IEEE 802.11n (HT20)	0
100% - IEEE 802.11n (HT40)	0

2.3 BLOCK DIGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

Conducted Emission Test 1



Conducted Emission Test 2



Radiated Spurious Emission Test

E-1 EUT

2.4 DESCRIPTION OF SUPPORT UNITS(CONDUCTED MODE)

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.

Item	Equipment	Brand	Model/Type No.	Series No.	Note
E-1	10.1 Inch Full Ruggedized Tablet	N/A	xTablet T1500	N/A	EUT
E-2	ADAPTER	N/A	AW018WR-0500300UH	N/A	
E-3	Earphone	N/A	2688	N/A	
E-4	Monitor	SONY	KDL-24EX520	N/A	
E-5	Printer	Canon	L11121E	LBP2900	
E-6	Personal computer	DELL	FT4Y23X	34413561645	
E-7	Monitor	DELL	IN2020MB	cn-0y6mhx-74261-11f-67es	
E-8	Keyboard	DELL	SK-8185	OY526KUS	
E-9	Mouse	DELL	MS111-P	cn-011d3v-71581-11e-1th7	

Item	Cable Type	Shielded Type	Ferrite Core	Length	Note
C-1	Power line	NO	YES	1.2m	
C-2	HDMI	NO	NO	1.0m	
C-3	Earphone	NO	NO	1.0m	
C-4	USB Cable	NO	NO	1.0m	
C-5	HDMI	NO	NO	1.0m	
C-6	USB Cable	NO	NO	1.0m	
C-7	USB Cable	NO	NO	1.0m	
C-8	USB Cable	NO	NO	1.0m	

Note:

- (1) The support equipment was authorized by Declaration of Confirmation.
- (2) For detachable type I/O cable should be specified the length in cm in 『Length』 column.

2.5 EQUIPMENTS LIST FOR ALL TEST ITEMS

Radiation Test equipment

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until	Calibration period
1	Spectrum Analyzer	Agilent	E4407B	MY45108040	2015.07.06	2016.07.05	1 year
2	Test Receiver	R&S	ESPI	101318	2015.06.06	2016.06.05	1 year
3	Bilog Antenna	TESEQ	CBL6111D	31216	2015.07.06	2016.07.05	1 year
4	50Ω Coaxial Switch	Anritsu	MP59B	6200264416	2015.06.06	2016.06.05	1 year
5	Spectrum Analyzer	ADVANTEST	R3132	150900201	2015.06.06	2016.06.05	1 year
6	Horn Antenna	EM	EM-AH-10180	2011071402	2015.07.06	2016.07.05	1 year
7	Horn Ant	Schwarzbeck	BBHA 9170	9170-181	2015.07.06	2016.07.05	1 year
8	Amplifier	EM	EM-30180	060538	2015.12.22	2016.12.21	1 year
9	Loop Antenna	ARA	PLA-1030/B	1029	2015.06.06	2016.06.05	1 year
10	Power Meter	R&S	NRVS	100696	2015.07.06	2016.07.05	1 year
11	Power Sensor	R&S	URV5-Z4	0395.1619.05	2015.07.06	2016.07.05	1 year

Conduction Test equipment

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until	Calibration period
1	Test Receiver	R&S	ESCI	101160	2015.06.06	2016.06.05	1 year
2	LISN	R&S	ENV216	101313	2015.08.24	2016.08.23	1 year
3	LISN	EMCO	3816/2	00042990	2015.08.24	2016.08.23	1 year
4	50Ω Coaxial Switch	Anritsu	MP59B	6200264417	2015.06.06	2016.06.05	1 year
5	Passive Voltage Probe	R&S	ESH2-Z3	100196	2015.06.06	2016.06.05	1 year
6	Absorbing clamp	R&S	MOS-21	100423	2015.06.06	2016.06.05	1 year

1	Attenuation	MCE	24-10-34	BN9258	2015.07.06	2016.07.05	1 year
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3. EMC EMISSION TEST

3.1 CONDUCTED EMISSION MEASUREMENT

3.1.1 POWER LINE CONDUCTED EMISSION Limits (Frequency Range 150KHz-30MHz)

FREQUENCY (MHz)	Class A (dBuV)		Class B (dBuV)		Standard
	Quasi-peak	Average	Quasi-peak	Average	
0.15 -0.5	79.00	66.00	66 - 56 *	56 - 46 *	CISPR
0.50 -5.0	73.00	60.00	56.00	46.00	CISPR
5.0 -30.0	73.00	60.00	60.00	50.00	CISPR

0.15 -0.5	79.00	66.00	66 - 56 *	56 - 46 *	FCC
0.50 -5.0	73.00	60.00	56.00	46.00	FCC
5.0 -30.0	73.00	60.00	60.00	50.00	FCC

Note:

- (1) The tighter limit applies at the band edges.
- (2) The limit of " * " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.

The following table is the setting of the receiver

Receiver Parameters	Setting
Attenuation	10 dB
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 kHz

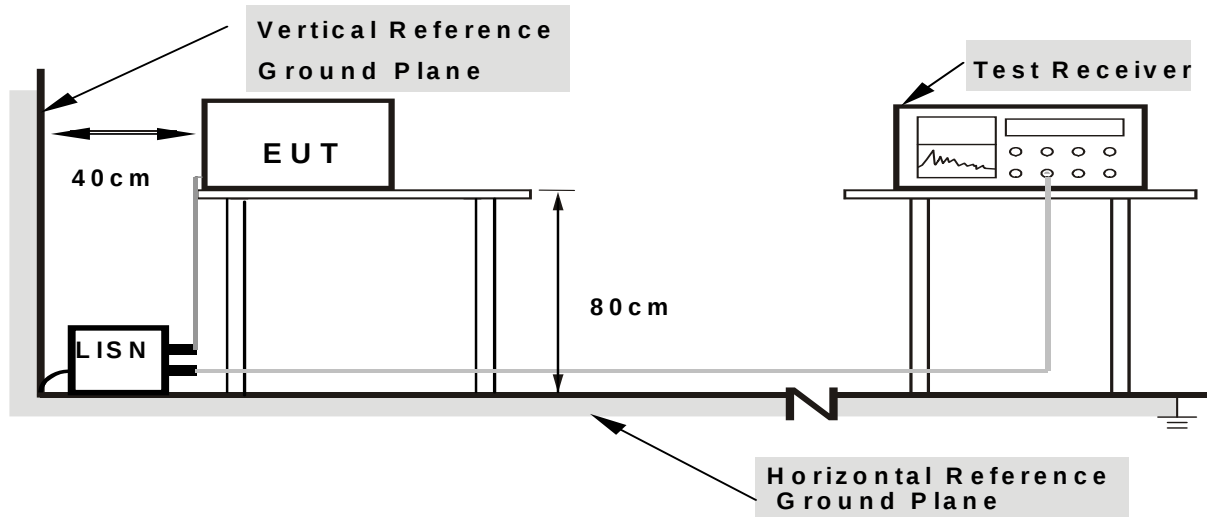
3.1.2 TEST PROCEDURE

- The EUT was placed 0.8 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
- Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.
- I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
- LISN at least 80 cm from nearest part of EUT chassis.
- For the actual test configuration, please refer to the related Item –EUT Test Photos.

3.1.3 DEVIATION FROM TEST STANDARD

No deviation

3.1.4 TEST SETUP



Note: 1.Support units were connected to second LISN.

2.Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes

3.1.5 EUT OPERATING CONDITIONS

The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.

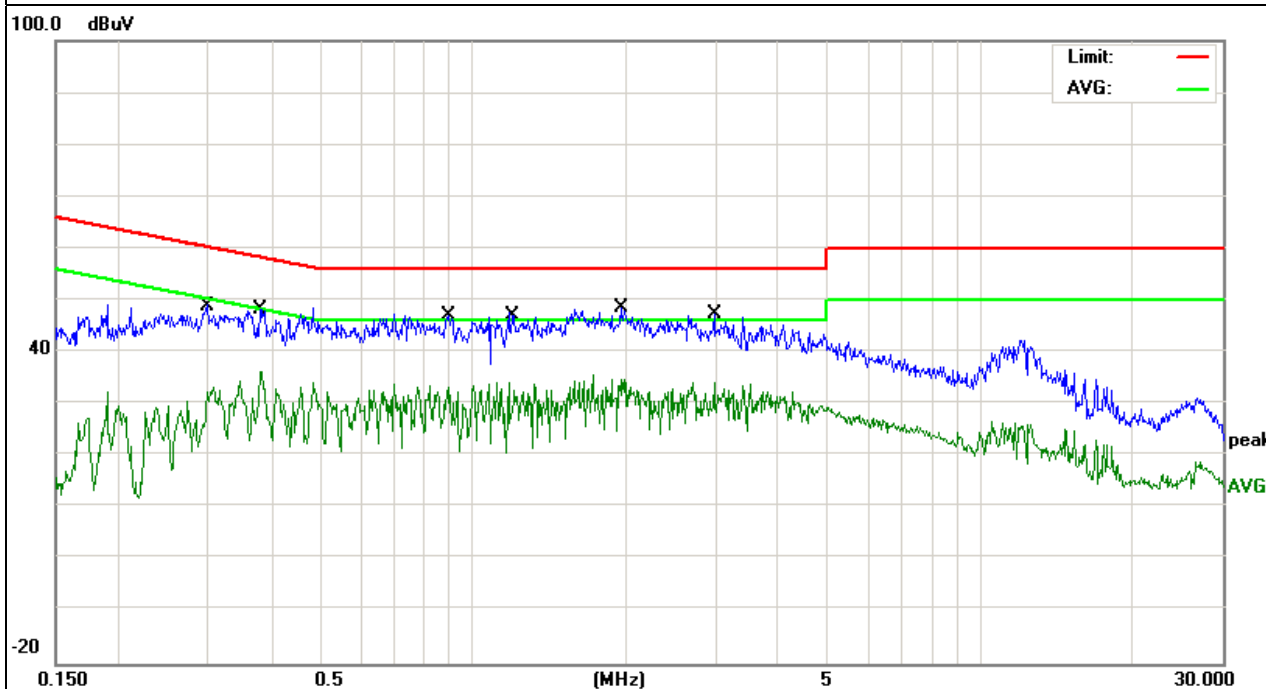
3.1.6 TEST RESULTS

EUT :	10.1 Inch Full Ruggedized Tablet	Model Name :	xTablet T1500
Temperature :	26 °C	Relative Humidity :	54%
Pressure :	1010hPa	Phase :	L
Test Voltage :	DC 5.0V form Adapter AC 120V/60Hz	Test Mode :	Mode 5

Frequency (MHz)	Reading Level (dBμV)	Correct Factor (dB)	Measure-ment (dBμV)	Limits (dBμV)	Margin (dB)	Remark
0.2987	39.43	9.57	49.00	60.28	-11.28	QP
0.2987	22.65	9.57	32.22	50.28	-18.06	AVG
0.3790	39.15	9.25	48.40	58.30	-9.90	QP
0.3790	26.88	9.25	36.13	48.30	-12.17	AVG
0.8900	37.44	9.56	47.00	56.00	-9.00	QP
0.8900	23.71	9.56	33.27	46.00	-12.73	AVG
1.1935	37.54	9.56	47.10	56.00	-8.90	QP
1.1935	23.18	9.56	32.74	46.00	-13.26	AVG
1.9495	39.13	9.57	48.70	56.00	-7.30	QP
1.9495	22.29	9.57	31.86	46.00	-14.14	AVG
2.9860	37.75	9.62	47.37	56.00	-8.63	QP
2.9860	19.95	9.62	29.57	46.00	-16.43	AVG

Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.

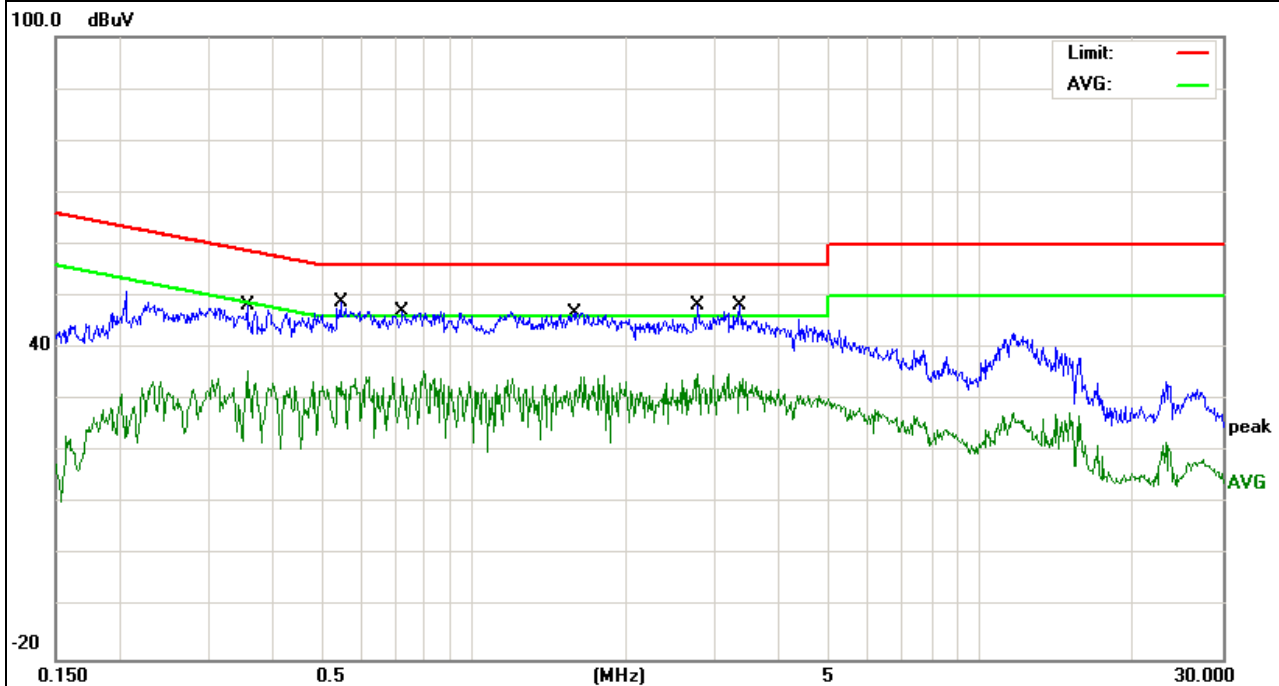


EUT :	10.1 Inch Full Ruggedized Tablet	Model Name :	xTablet T1500
Temperature :	26 °C	Relative Humidity :	54%
Pressure :	1010hPa	Phase :	N
Test Voltage :	DC 5.0V form Adapter AC 120V/60Hz	Test Mode :	Mode 5

Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Margin	Remark
(MHz)	(dBμV)	(dB)	(dBμV)	(dBμV)	(dB)	
0.3578	38.96	9.44	48.40	58.78	-10.38	QP
0.3578	21.06	9.44	30.50	48.78	-18.28	AVG
0.5463	39.45	9.45	48.90	56.00	-7.10	QP
0.5463	21.42	9.45	30.87	46.00	-15.13	AVG
0.7258	37.57	9.43	47.00	56.00	-9.00	QP
0.7258	24.74	9.43	34.17	46.00	-11.83	AVG
1.5900	37.25	9.45	46.70	56.00	-9.30	QP
1.5900	22.62	9.45	32.07	46.00	-13.93	AVG
2.7780	38.74	9.46	48.20	56.00	-7.80	QP
2.7780	25.74	9.46	35.20	46.00	-10.80	AVG
3.3460	38.83	9.47	48.30	56.00	-7.70	QP
3.3460	22.35	9.47	31.82	46.00	-14.18	AVG

Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.

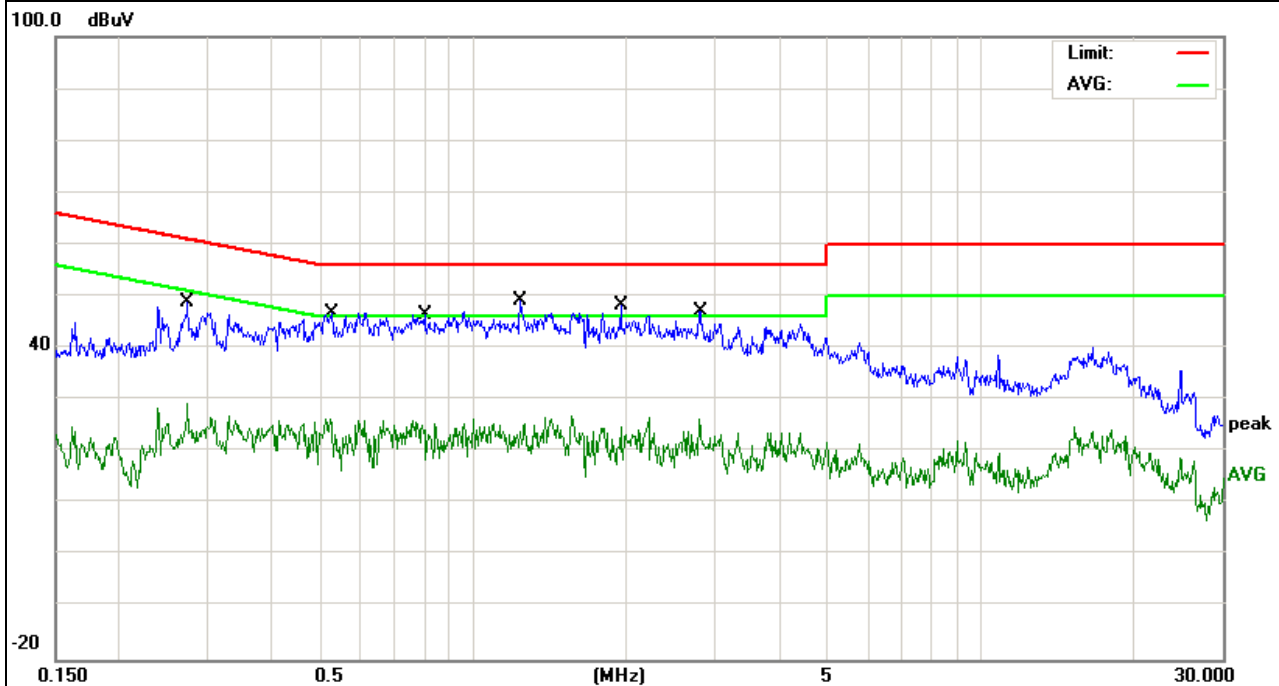


EUT :	10.1 Inch Full Ruggedized Tablet	Model Name :	xTablet T1500
Temperature :	26 °C	Relative Humidity :	54%
Pressure :	1010hPa	Phase :	L
Test Voltage :	DC 5.0V form Adapter AC 240V/60Hz	Test Mode :	Mode 5

Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Margin	Remark
(MHz)	(dBμV)	(dB)	(dBμV)	(dBμV)	(dB)	
0.2740	39.36	9.54	48.90	60.99	-12.09	QP
0.2740	19.77	9.54	29.31	50.99	-21.68	AVG
0.5262	37.15	9.55	46.70	56.00	-9.30	QP
0.5262	9.46	9.55	19.01	46.00	-26.99	AVG
0.8020	36.93	9.57	46.50	56.00	-9.50	QP
0.8020	9.07	9.57	18.64	46.00	-27.36	AVG
1.2419	39.64	9.56	49.20	56.00	-6.80	QP
1.2419	14.26	9.56	23.82	46.00	-22.18	AVG
1.9536	38.63	9.57	48.20	56.00	-7.80	QP
1.9536	12.00	9.57	21.57	46.00	-24.43	AVG
2.8060	37.59	9.61	47.20	56.00	-8.80	QP
2.8060	16.72	9.61	26.33	46.00	-19.67	AVG

Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.

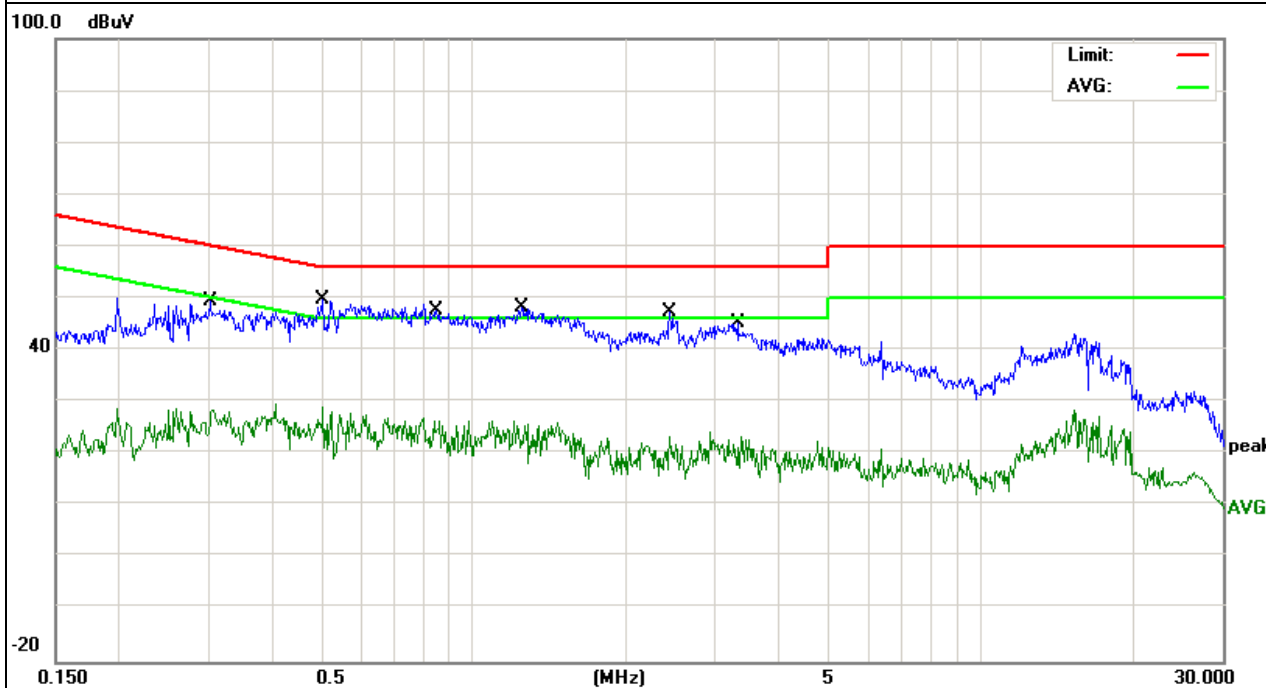


EUT :	10.1 Inch Full Ruggedized Tablet	Model Name :	xTablet T1500
Temperature :	26 °C	Relative Humidity :	54%
Pressure :	1010hPa	Phase :	N
Test Voltage :	DC 5.0V form Adapter AC 240V/60Hz	Test Mode :	Mode 5

Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Margin	Remark
(MHz)	(dBμV)	(dB)	(dBμV)	(dBμV)	(dB)	
0.3019	40.06	9.44	49.50	60.19	-10.69	QP
0.3019	18.44	9.44	27.88	50.19	-22.31	AVG
0.5060	40.24	9.46	49.70	56.00	-6.30	QP
0.5060	11.94	9.46	21.40	46.00	-24.60	AVG
0.8457	38.17	9.43	47.60	56.00	-8.40	QP
0.8457	14.95	9.43	24.38	46.00	-21.62	AVG
1.2459	38.86	9.44	48.30	56.00	-7.70	QP
1.2459	12.75	9.44	22.19	46.00	-23.81	AVG
2.4420	37.84	9.46	47.30	56.00	-8.70	QP
2.4420	9.34	9.46	18.80	46.00	-27.20	AVG
3.3140	35.93	9.47	45.40	56.00	-10.60	QP
3.3140	9.02	9.47	18.49	46.00	-27.51	AVG

Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.

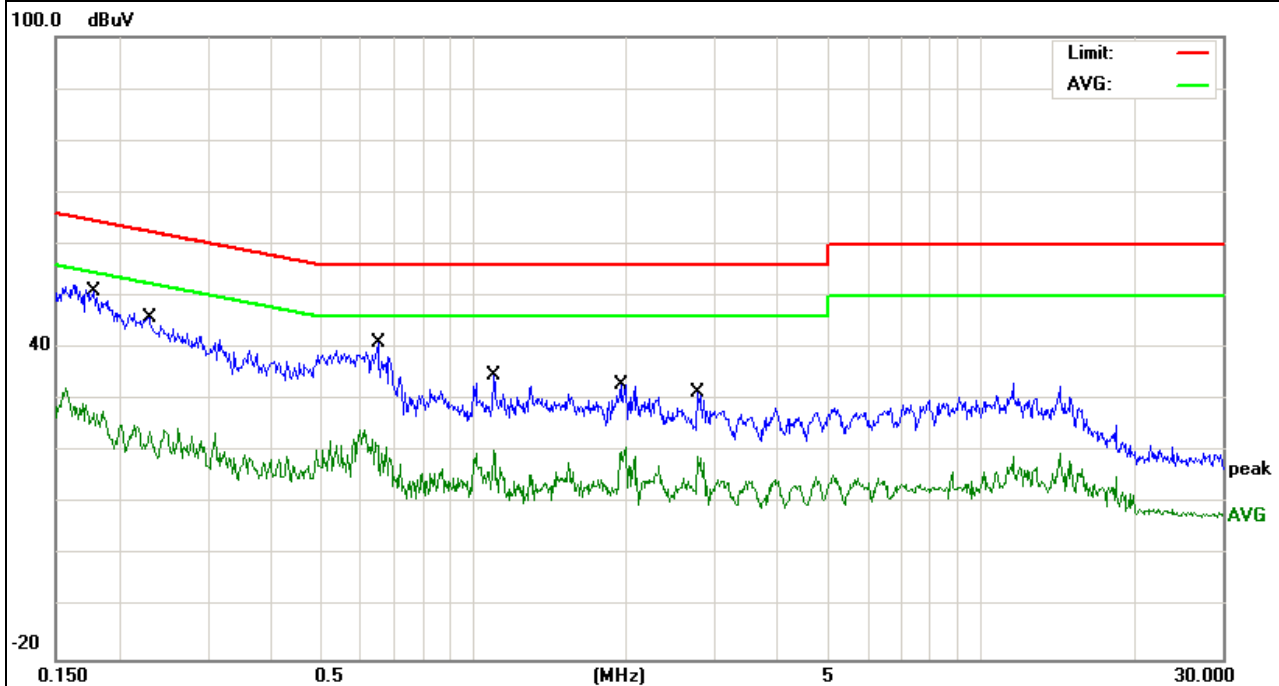


EUT :	10.1 Inch Full Ruggedized Tablet	Model Name :	xTablet T1500
Temperature :	26 °C	Relative Humidity :	54%
Pressure :	1010hPa	Phase :	L
Test Voltage :	DC 5.0V form PC AC 120V/60Hz	Test Mode :	Mode 5

Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Margin	Remark
(MHz)	(dBμV)	(dB)	(dBμV)	(dBμV)	(dB)	
0.1785	41.64	9.46	51.10	64.55	-13.45	QP
0.1785	17.19	9.46	26.65	54.55	-27.90	AVG
0.2300	36.44	9.45	45.89	62.45	-16.56	QP
0.2300	14.17	9.45	23.62	52.45	-28.83	AVG
0.6500	31.66	9.44	41.10	56.00	-14.90	QP
0.6500	11.95	9.44	21.39	46.00	-24.61	AVG
1.0980	25.36	9.44	34.80	56.00	-21.20	QP
1.0980	10.86	9.44	20.30	46.00	-25.70	AVG
1.9536	23.54	9.46	33.00	56.00	-23.00	QP
1.9536	9.40	9.46	18.86	46.00	-27.14	AVG
2.7740	21.94	9.46	31.40	56.00	-24.60	QP
2.7740	9.81	9.46	19.27	46.00	-26.73	AVG

Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.

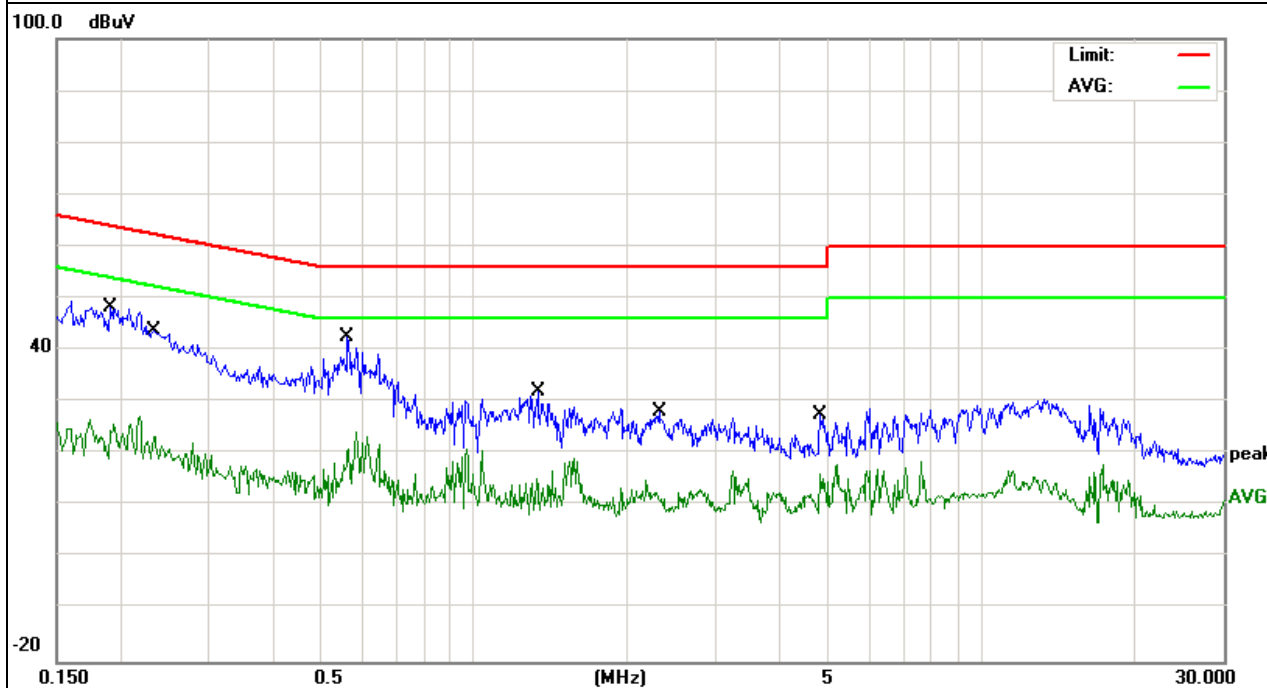


EUT :	10.1 Inch Full Ruggedized Tablet	Model Name :	xTablet T1500
Temperature :	26 °C	Relative Humidity :	54%
Pressure :	1010hPa	Phase :	N
Test Voltage :	DC 5.0V form PC AC 120V/60Hz	Test Mode :	Mode 5

Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Margin	Remark
(MHz)	(dBμV)	(dB)	(dBμV)	(dBμV)	(dB)	
0.1912	38.74	9.46	48.20	63.98	-15.78	QP
0.1912	15.01	9.46	24.47	53.98	-29.51	AVG
0.2340	34.34	9.45	43.79	62.30	-18.51	QP
0.2340	13.97	9.45	23.42	52.30	-28.88	AVG
0.5620	33.15	9.45	42.60	56.00	-13.40	QP
0.5620	11.22	9.45	20.67	46.00	-25.33	AVG
1.3340	22.50	9.45	31.95	56.00	-24.05	QP
1.3340	5.79	9.45	15.24	46.00	-30.76	AVG
2.3140	18.74	9.46	28.20	56.00	-27.80	QP
2.3140	2.25	9.46	11.71	46.00	-34.29	AVG
4.8178	18.11	9.49	27.60	56.00	-28.40	QP
4.8178	3.95	9.49	13.44	46.00	-32.56	AVG

Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.

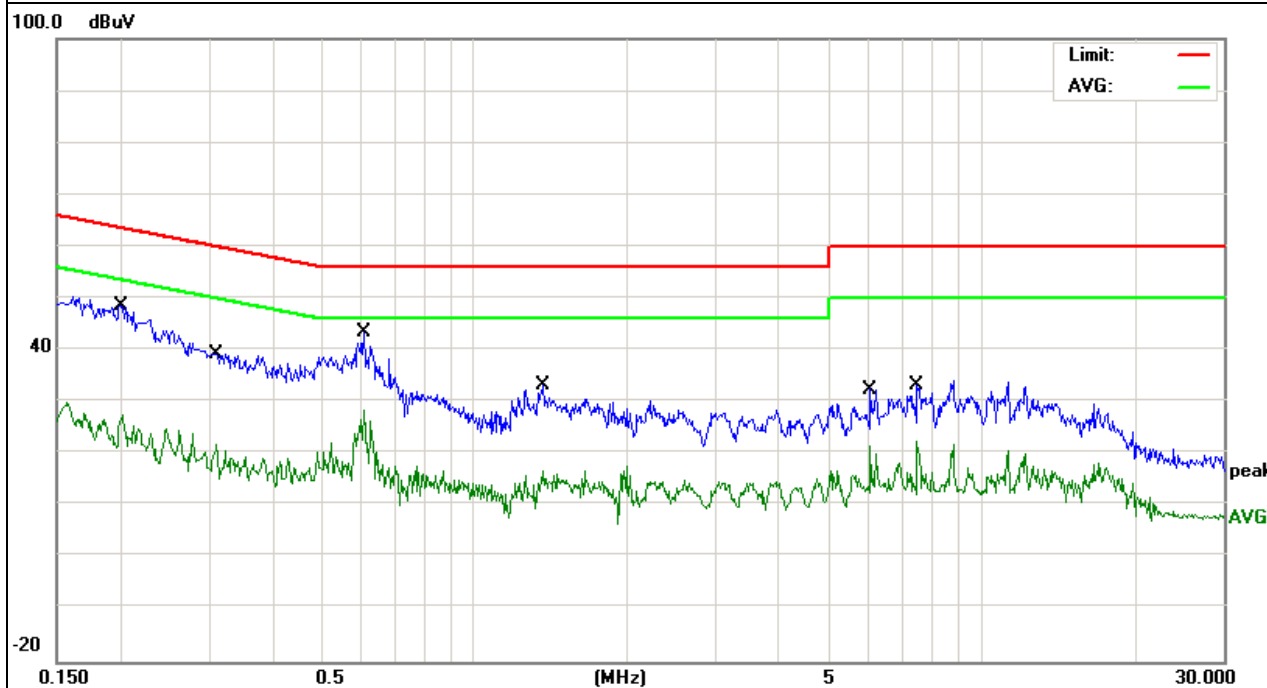


EUT :	10.1 Inch Full Ruggedized Tablet	Model Name :	xTablet T1500
Temperature :	26 °C	Relative Humidity :	54%
Pressure :	1010hPa	Phase :	L
Test Voltage :	DC 5.0V form PC AC 240V/60Hz	Test Mode :	Mode 5

Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Margin	Remark
(MHz)	(dBμV)	(dB)	(dBμV)	(dBμV)	(dB)	
0.1995	39.04	9.46	48.50	63.63	-15.13	QP
0.1995	16.49	9.46	25.95	53.63	-27.68	AVG
0.3099	29.95	9.44	39.39	59.97	-20.58	QP
0.3099	12.48	9.44	21.92	49.97	-28.05	AVG
0.6058	33.96	9.44	43.40	56.00	-12.60	QP
0.6058	19.16	9.44	28.60	46.00	-17.40	AVG
1.3700	23.92	9.45	33.37	56.00	-22.63	QP
1.3700	7.42	9.45	16.87	46.00	-29.13	AVG
6.0377	23.00	9.50	32.50	60.00	-27.50	QP
6.0377	12.20	9.50	21.70	50.00	-28.30	AVG
7.4778	23.87	9.53	33.40	60.00	-26.60	QP
7.4778	11.21	9.53	20.74	50.00	-29.26	AVG

Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.

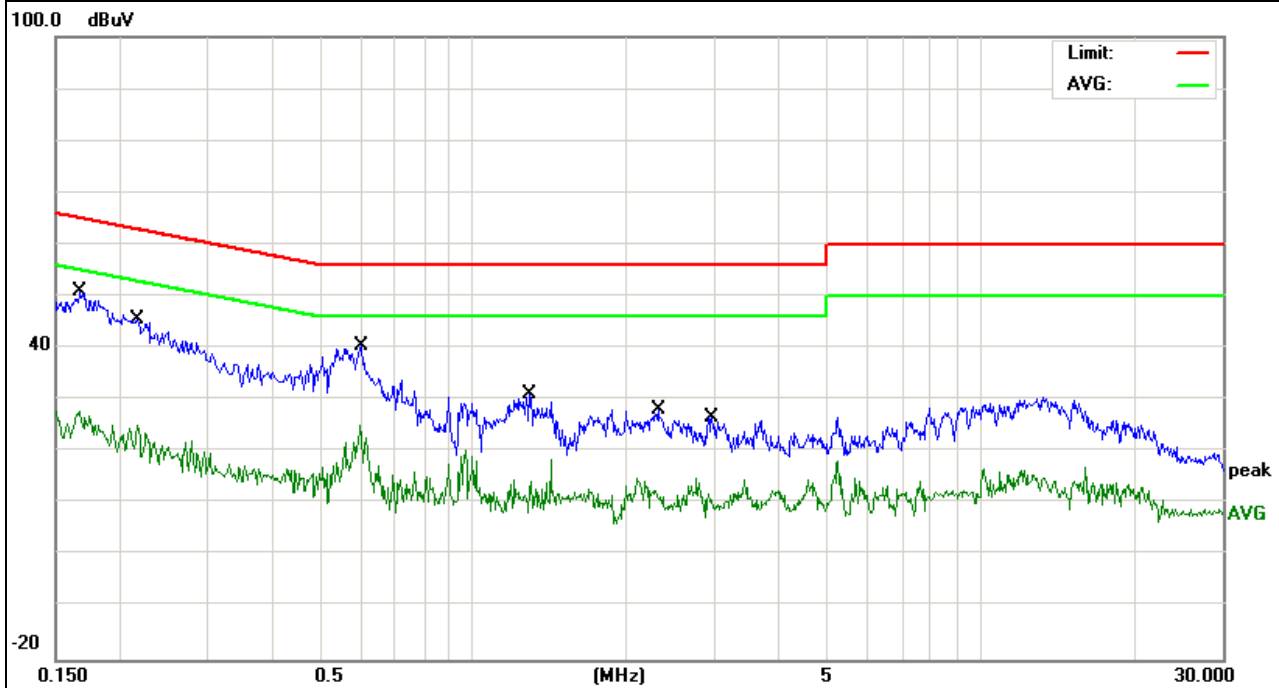


EUT :	10.1 Inch Full Ruggedized Tablet	Model Name :	xTablet T1500
Temperature :	26 °C	Relative Humidity :	54%
Pressure :	1010hPa	Phase :	N
Test Voltage :	DC 5.0V form PC AC 240V/60Hz	Test Mode :	Mode 5

Frequency	Reading Level	Correct Factor	Measure-ment	Limits	Margin	Remark
(MHz)	(dBμV)	(dB)	(dBμV)	(dBμV)	(dB)	
0.1675	41.54	9.46	51.00	65.08	-14.08	QP
0.1675	17.69	9.46	27.15	55.08	-27.93	AVG
0.2179	35.95	9.46	45.41	62.89	-17.48	QP
0.2179	15.70	9.46	25.16	52.89	-27.73	AVG
0.6018	31.16	9.44	40.60	56.00	-15.40	QP
0.6018	15.68	9.44	25.12	46.00	-20.88	AVG
1.2940	21.57	9.45	31.02	56.00	-24.98	QP
1.2940	-1.10	9.45	8.35	46.00	-37.65	AVG
2.3140	18.74	9.46	28.20	56.00	-27.80	QP
2.3140	2.25	9.46	11.71	46.00	-34.29	AVG
2.9580	17.15	9.47	26.62	56.00	-29.38	QP
2.9580	1.06	9.47	10.53	46.00	-35.47	AVG

Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.



3.2 RADIATED EMISSION MEASUREMENT

3.2.1 RADIATED EMISSION LIMITS (Frequency Range 9kHz-1000MHz)

20dBc in any 100 kHz bandwidth outside the operating frequency band. In case the emission fall within the restricted band specified on 15.205(a), then the 15.209(a) limit in the table below has to be followed.

Frequencies (MHz)	Field Strength (micorvolts/meter)	Measurement Distance (meters)
0.009~0.490	2400/F(KHz)	300
0.490~1.705	24000/F(KHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
Above 960	500	3

LIMITS OF RADIATED EMISSION MEASUREMENT (Above 1000MHz)

FREQUENCY (MHz)	dBuV/m@at 3M	
	PEAK	AVERAGE
Above 1000	74	54

Notes:

- (1) The limit for radiated test was performed according to FCC PART 15C.
- (2) The tighter limit applies at the band edges.
- (3) Emission level (dBuV/m)=20log Emission level (uV/m).

Spectrum Parameter	Setting
Attenuation	Auto
Start Frequency	1000 MHz
Stop Frequency	10th carrier harmonic
RB / VB (emission in restricted band)	1 MHz / 1 MHz for Peak, 1 MHz / 10Hz for Average

Receiver Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	9kHz~150kHz / RB 200Hz for QP
Start ~ Stop Frequency	150kHz~30MHz / RB 9kHz for QP
Start ~ Stop Frequency	30MHz~1000MHz / RB 120kHz for QP

3.2.2 TEST PROCEDURE

- a. The measuring distance of at 3 m shall be used for measurements at frequency up to 1GHz. For frequencies above 1GHz, any suitable measuring distance may be used.
- b. The EUT was placed on the top of a rotating table 0.8 m for below 1GHz and 1.5m for above 1GHz the ground at a 3 meter. The table was rotated 360 degrees to determine the position of the highest radiation.
- c. The height of the equipment or of the substitution antenna shall be 0.8 m for below 1GHz and 1.5m for above 1GHz; the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- e. If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed.
- f. For the actual test configuration, please refer to the related Item –EUT Test Photos.

Note:

Both horizontal and vertical antenna polarities were tested and performed pretest to three orthogonal axis. The worst case emissions were reported

During the radiated emission test, the Spectrum Analyzer was set with the following configurations:

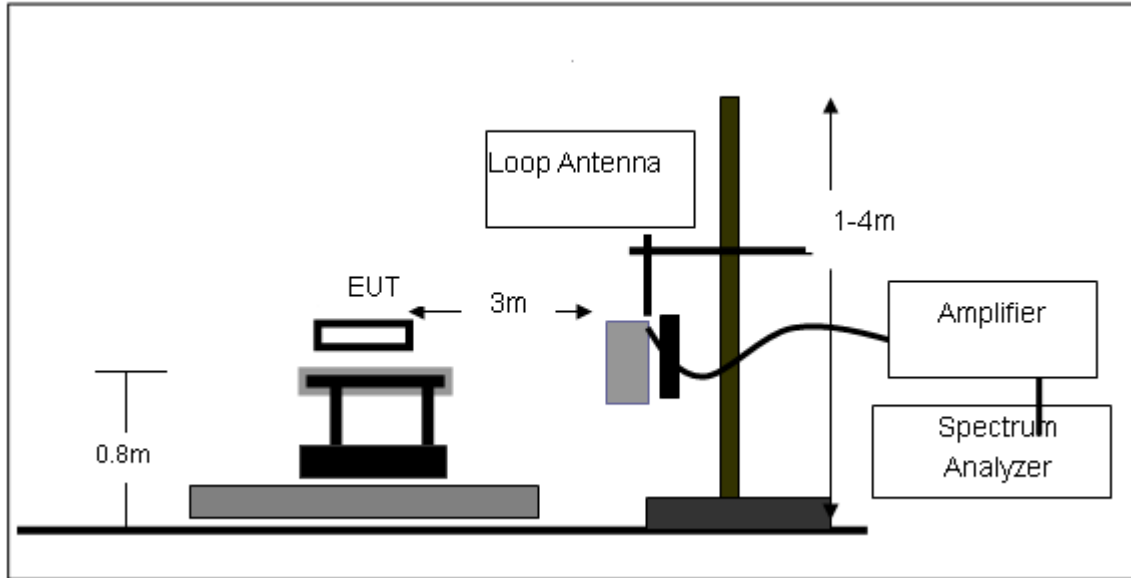
Frequency Band (MHz)	Function	Resolution bandwidth	Video Bandwidth
30 to 1000	Peak	100 kHz	100 kHz
Above 1000	Peak	1 MHz	1 MHz
	Average	1 MHz	10 Hz

3.2.3 DEVIATION FROM TEST STANDARD

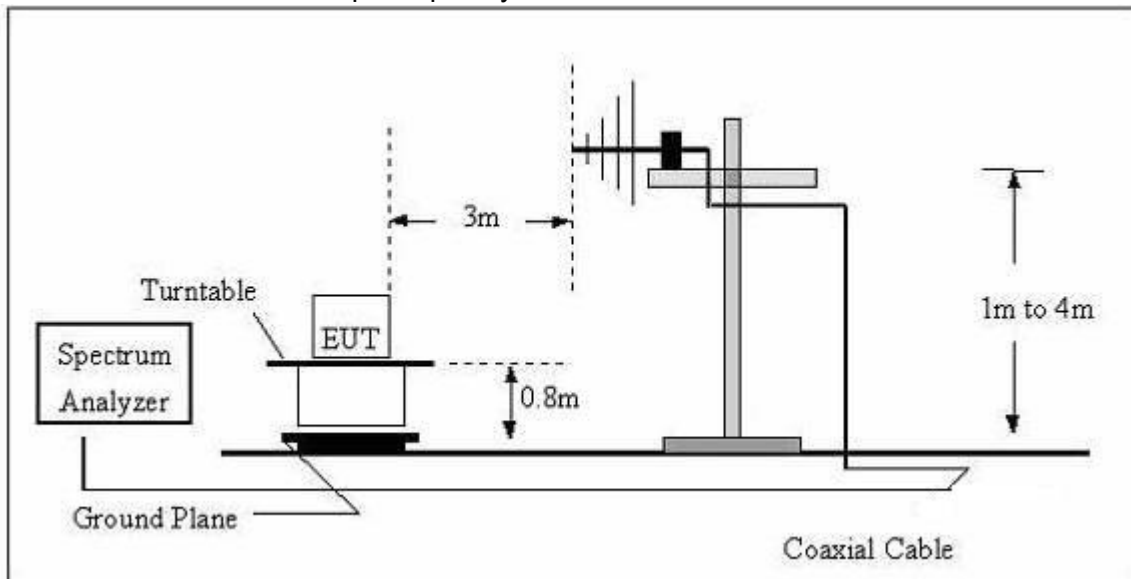
No deviation

3.2.4 TEST SETUP

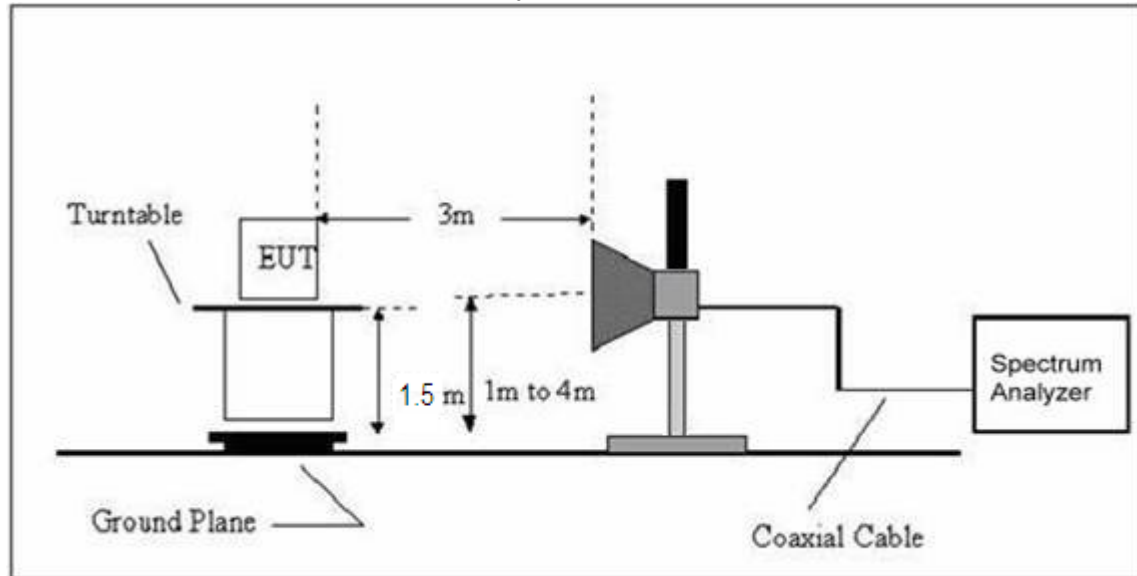
(A) Radiated Emission Test-Up Frequency Below 30MHz



(B) Radiated Emission Test-Up Frequency 30MHz~1GHz



(C) Radiated Emission Test-Up Frequency Above 1GHz

**3.2.5 EUT OPERATING CONDITIONS**

The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

3.2.6 TEST RESULTS (BETWEEN 9KHZ – 30 MHZ)

EUT:	10.1 Inch Full Ruggedized Tablet	Model Name. :	xTablet T1500
Temperature:	20 °C	Relative Humidity:	48%
Pressure:	1010 hPa	Test Voltage :	DC 3.7V
Test Mode :	TX	Polarization :	--

Freq.	Reading	Limit	Margin	State
(MHz)	(dBuV/m)	(dBuV/m)	(dB)	P/F
--	--	--	--	N/A
--	--	--	--	N/A

NOTE:

The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

Distance extrapolation factor = $40 \log (\text{specific distance/test distance})(\text{dB})$;

Limit line = specific limits(dBuv) + distance extrapolation factor.

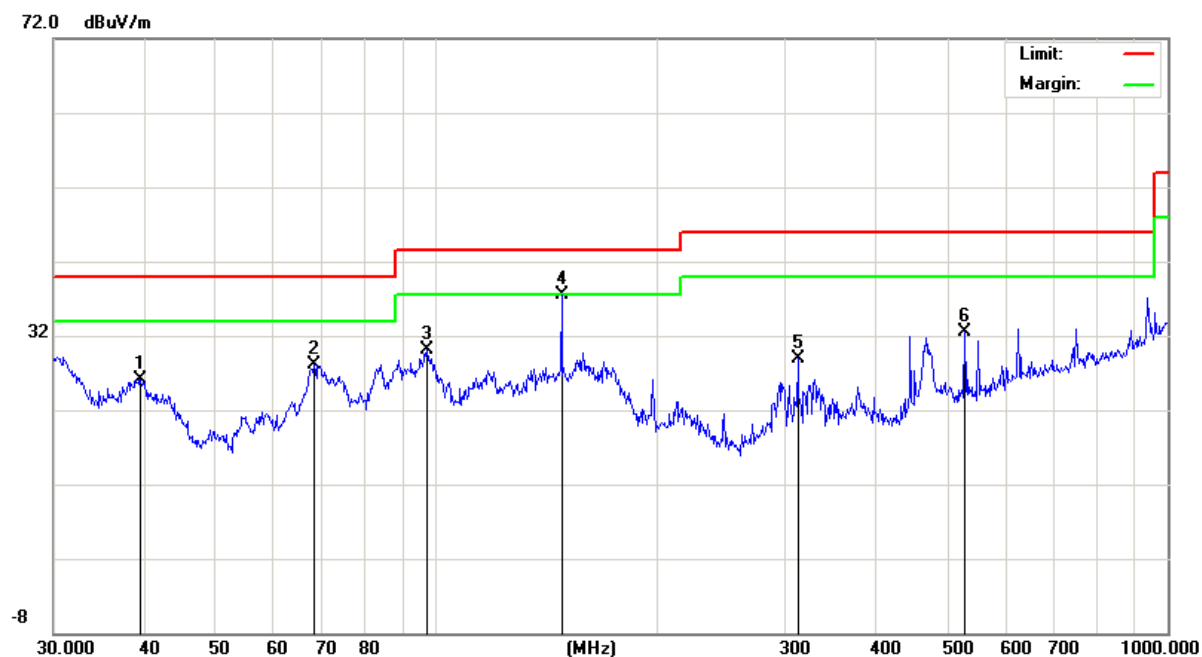
3.2.7 TEST RESULTS (BETWEEN 30MHZ – 1GHZ)

EUT :	10.1 Inch Full Ruggedized Tablet	Model Name :	xTablet T1500
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 3.7V
Test Mode :	TX -802.11B (High CH)		

Polar (H/V)	Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Remark
	(MHz)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
V	39.4371	11.25	14.88	26.13	40.00	-13.87	QP
V	68.1514	20.05	8.13	28.18	40.00	-11.82	QP
V	97.1148	19.71	10.32	30.03	43.50	-13.47	QP
V	148.4410	25.85	11.57	37.42	43.50	-6.08	QP
V	312.1794	15.95	13.05	29.00	46.00	-17.00	QP
V	528.2458	14.92	17.58	32.50	46.00	-13.50	QP

Remark:

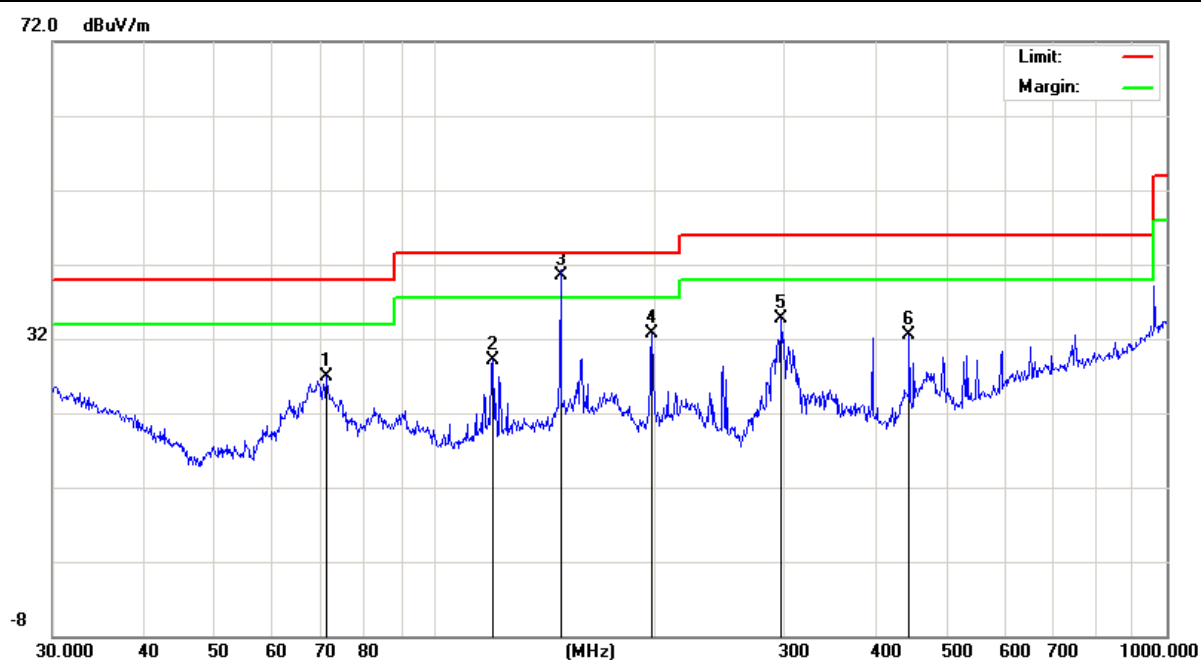
Absolute Level= ReadingLevel+ Factor, Margin= Absolute Level - Limit



Polar (H/V)	Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Remark
	(MHz)	(dBuV)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
H	71.0802	17.56	9.31	26.87	40.00	-13.13	QP
H	119.8555	18.54	10.50	29.04	43.50	-14.46	QP
H	148.4410	28.93	11.57	40.50	43.50	-3.00	QP
H	197.8925	21.30	11.45	32.75	43.50	-10.75	QP
H	297.2241	22.28	12.51	34.79	46.00	-11.21	QP
H	444.8514	16.60	15.87	32.47	46.00	-13.53	QP

Remark:

Absolute Level= ReadingLevel+ Factor, Margin= Absolute Level - Limit



3.2.8 TEST RESULTS (ABOVE 1000 MHZ)

EUT :	10.1 Inch Full Ruggedized Tablet	Model Name :	xTablet T1500
Temperature :	20 °C	Relative Humidity :	48%
Pressure :	1010 hPa	Test Voltage :	DC 3.7V
Test Mode :	TX		

The Testing have been conformed to 10*2462MHz=24620MHz, and the worst result was report as below:

Polar (H/V)	Frequency (MHz)	Meter Reading (dBuV)	Factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Detector Type
Low Channel (2412 MHz)-Above 1G							
Vertical	4824.027	49.72	10.44	60.16	74.00	-13.84	Pk
Vertical	4824.027	34.24	10.44	44.68	54.00	-9.32	Av
Vertical	7236.238	45.72	12.39	58.11	74.00	-15.89	Pk
Vertical	7236.238	30.15	12.39	42.54	54.00	-11.46	Av
Horizontal	4824.413	52.26	10.42	62.68	74.00	-11.32	Pk
Horizontal	4824.413	32.57	10.44	43.01	54.00	-10.99	Av
Horizontal	7236.268	47.42	12.39	59.81	74.00	-14.19	Pk
Horizontal	7236.268	30.61	12.39	43.00	54.00	-11.00	Av
Mid Channel (2437 MHz)-Above 1G							
Vertical	4874.209	50.68	10.40	61.08	74.00	-12.92	Pk
Vertical	4874.209	32.72	10.40	43.12	54.00	-10.88	Av
Vertical	7311.168	44.67	12.75	57.42	74.00	-16.58	Pk
Vertical	7311.168	29.75	12.75	42.50	54.00	-11.50	Av
Horizontal	4874.416	51.78	10.40	62.18	74.00	-11.82	Pk
Horizontal	4874.416	33.54	10.40	43.94	54.00	-10.06	Av
Horizontal	7311.382	47.85	12.75	60.60	74.00	-13.40	Pk
Horizontal	7311.382	29.59	12.75	42.34	54.00	-11.66	Av
High Channel (2462 MHz)- Above 1G							
Vertical	4924.328	50.78	10.39	61.17	74.00	-12.83	Pk
Vertical	4924.328	32.45	10.39	42.84	54.00	-11.16	Av
Vertical	7386.251	44.67	12.68	57.35	74.00	-16.65	Pk
Vertical	7386.251	30.95	12.68	43.63	54.00	-10.37	Av
Horizontal	4924.514	49.95	10.39	60.34	74.00	-13.66	Pk
Horizontal	4924.514	34.37	10.39	44.76	54.00	-9.24	Av
Horizontal	7386.278	47.32	12.68	60.00	74.00	-14.00	Pk
Horizontal	7386.278	29.58	12.68	42.26	54.00	-11.74	Av

Radiated band edge:

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type	Comment
802.11b							
2390	58.67	-13.06	45.61	74	-28.39	peak	Vertical
2390	58.4	-13.06	45.34	74	-28.66	peak	Horizontal
2483.5	59.59	-12.78	46.81	74	-27.19	peak	Vertical
2483.5	59.61	-12.78	46.83	74	-27.17	peak	Horizontal
802.11g							
2390	58.25	-13.06	45.19	74	-28.81	peak	Vertical
2390	57.48	-13.06	44.42	74	-29.58	peak	Horizontal
2483.5	58.97	-12.78	46.19	74	-27.81	peak	Vertical
2483.5	59.36	-12.78	46.58	74	-27.42	peak	Horizontal
802.11n20							
2390	61.18	-13.06	48.12	74	-25.88	peak	Vertical
2390	60.96	-13.06	47.9	74	-26.10	peak	Horizontal
2483.5	61.1	-12.78	48.32	74	-25.68	peak	Vertical
2483.5	61.24	-12.78	48.46	74	-25.54	peak	Horizontal
802.11n20							
2390	61.94	-13.06	48.88	74	-25.12	peak	Vertical
2390	63.09	-13.06	50.03	74	-23.97	peak	Horizontal
2483.5	61.59	-12.78	48.81	74	-25.19	peak	Vertical
2483.5	61.56	-12.78	48.78	74	-25.22	peak	Horizontal

4. POWER SPECTRAL DENSITY TEST

4.1 APPLIED PROCEDURES / LIMIT

FCC Part15 (15.247) , Subpart C				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247	Power Spectral Density	8 dBm (in any 3KHz)	2400-2483.5	PASS

4.1.1 TEST PROCEDURE

1. Set analyzer center frequency to DTS channel center frequency.
2. Set the span to 1.5 times the DTS channel bandwidth.
3. 3 kHz $\leq$ Set the RBW $\leq$ 100 kHz.
4. Set the VBW $\geq$ 3 x RBW.
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 amplitude level within the RBW.
10. If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

4.1.2 DEVIATION FROM STANDARD

No deviation.

4.1.3 TEST SETUP



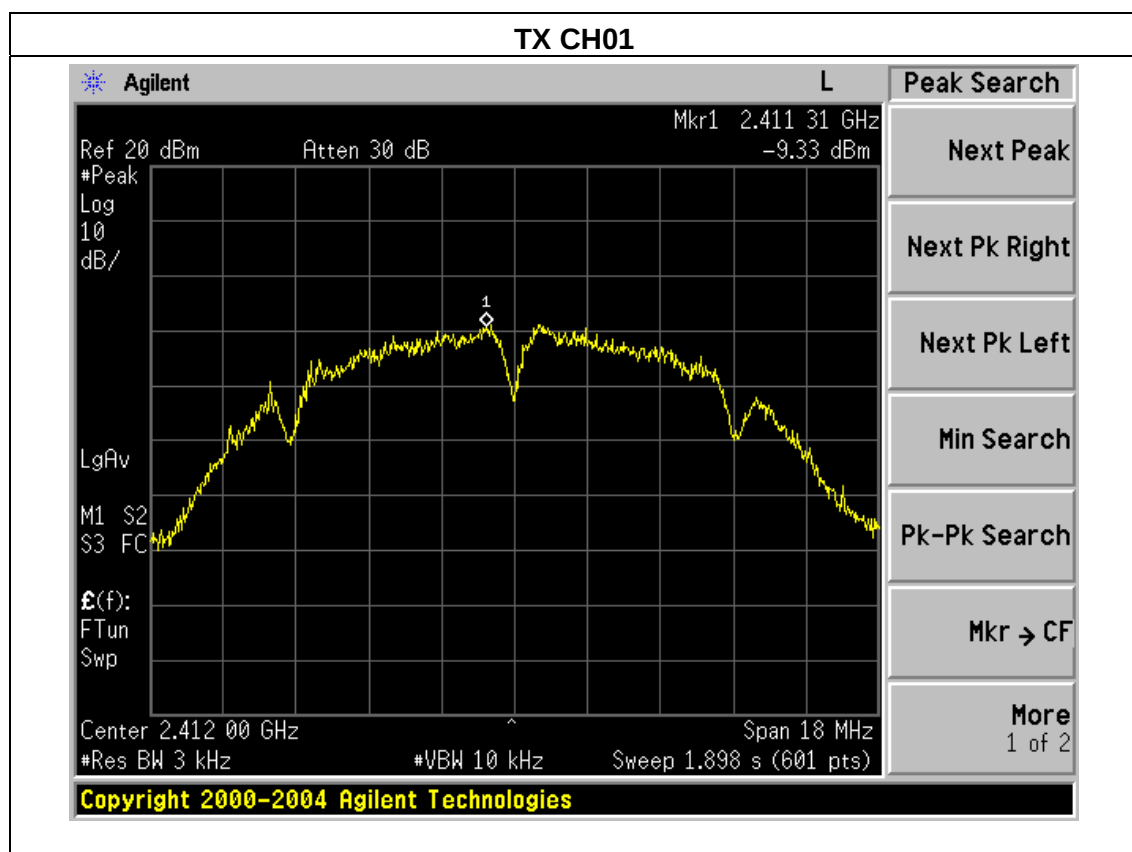
4.1.4 EUT OPERATION CONDITIONS

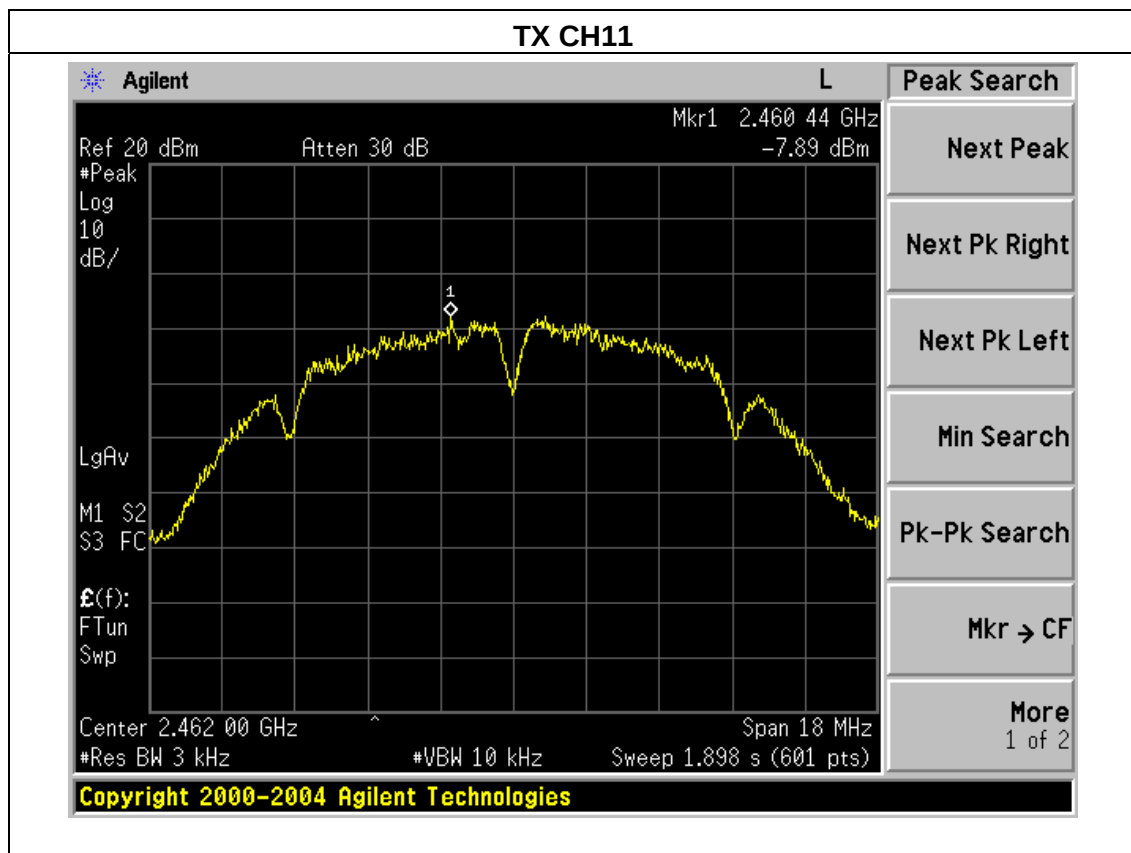
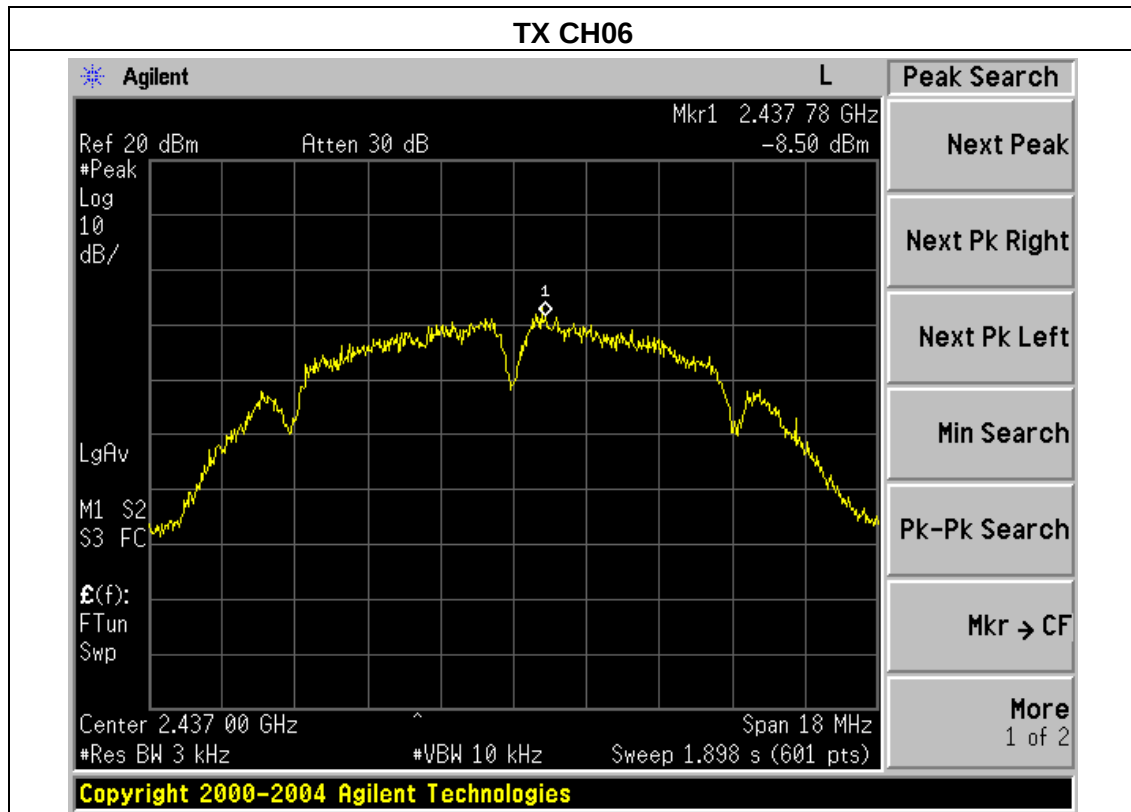
The EUT tested system was configured as the statements of 2.1 Unless otherwise a special operating condition is specified in the follows during the testing.

4.1.5 TEST RESULTS

EUT :	10.1 Inch Full Ruggedized Tablet	Model Name :	xTablet T1500
Temperature :	25 °C	Relative Humidity :	56%
Pressure :	1015 hPa	Test Voltage :	DC 3.7V
Test Mode :	TX b Mode /CH01, CH06, CH11		

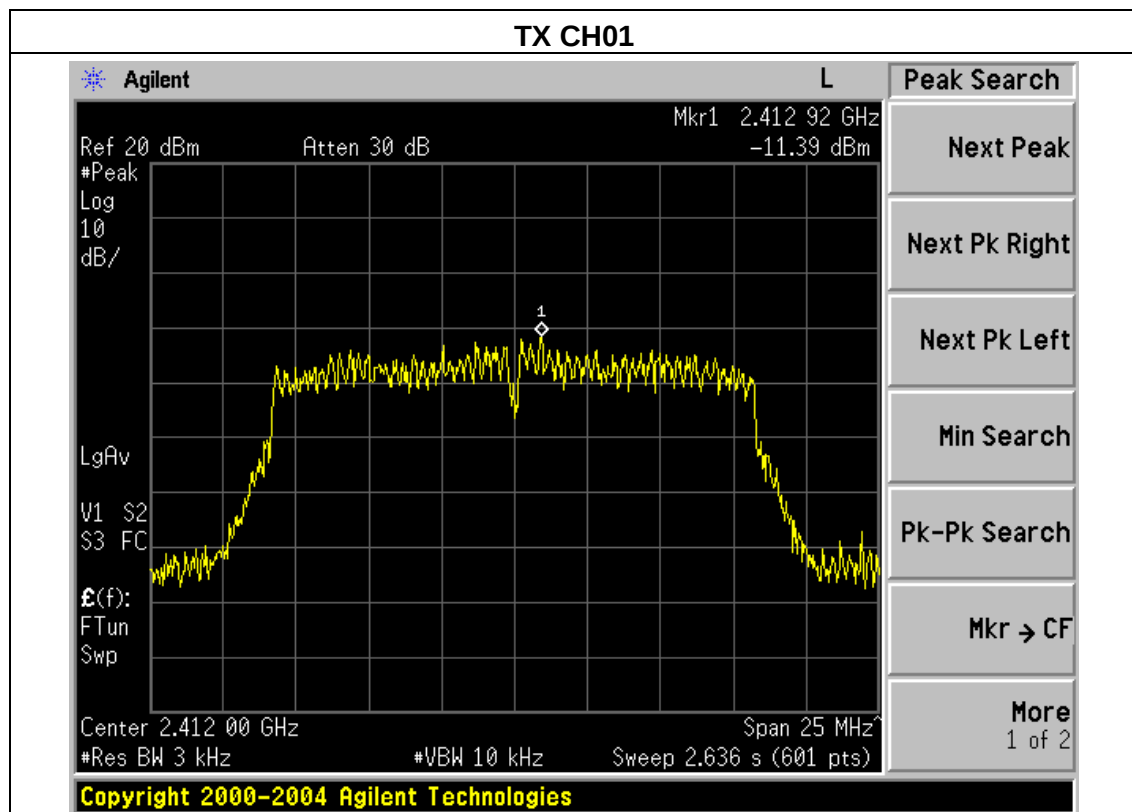
Frequency	Power Density (dBm/3KHz)	Limit (dBm/3KHz)	Result
2412 MHz	-9.33	8	PASS
2437 MHz	-8.50	8	PASS
2462 MHz	-7.89	8	PASS

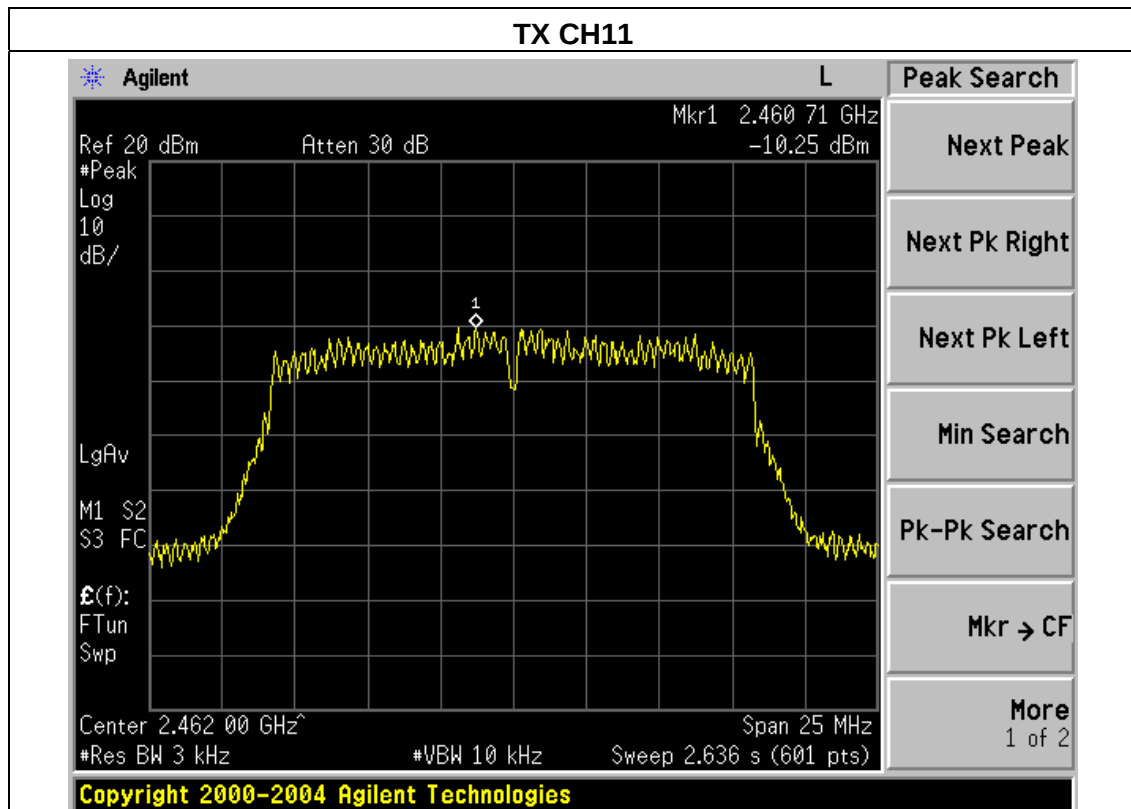
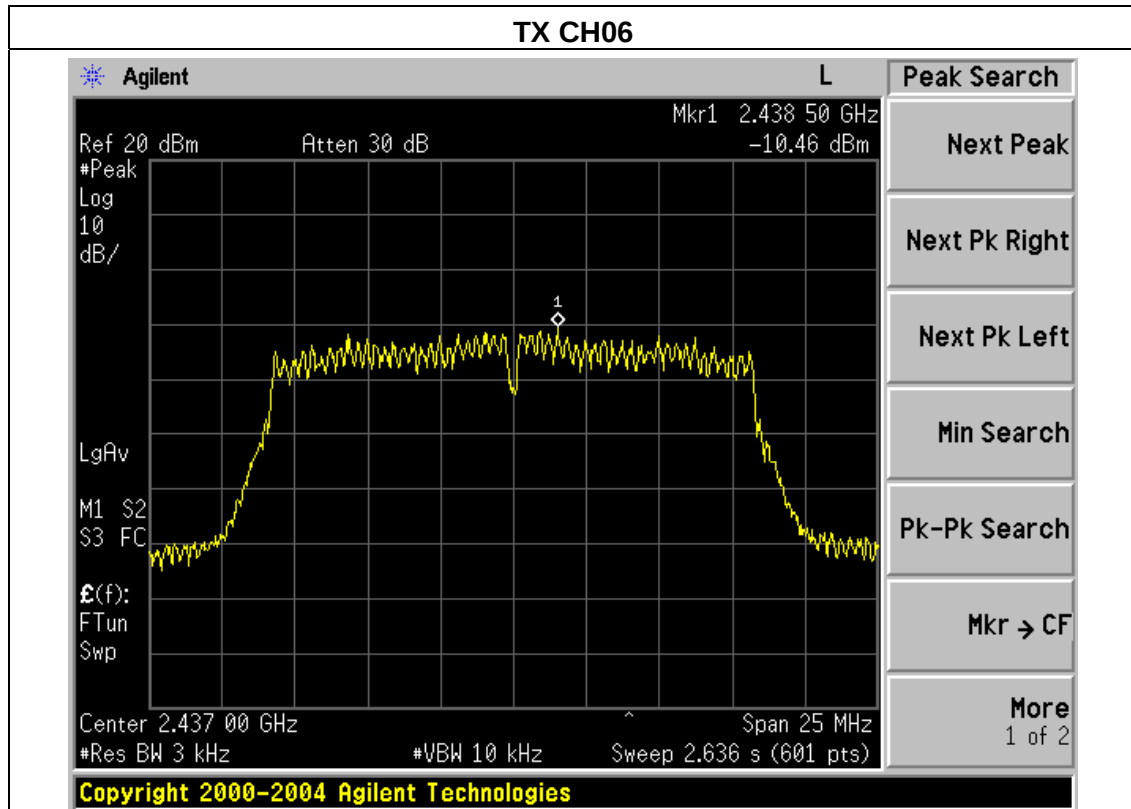




EUT :	10.1 Inch Full Ruggedized Tablet	Model Name :	xTablet T1500
Temperature :	25 °C	Relative Humidity :	56%
Pressure :	1015 hPa	Test Voltage :	DC 3.7V
Test Mode :	TX g Mode /CH01, CH06, CH11		

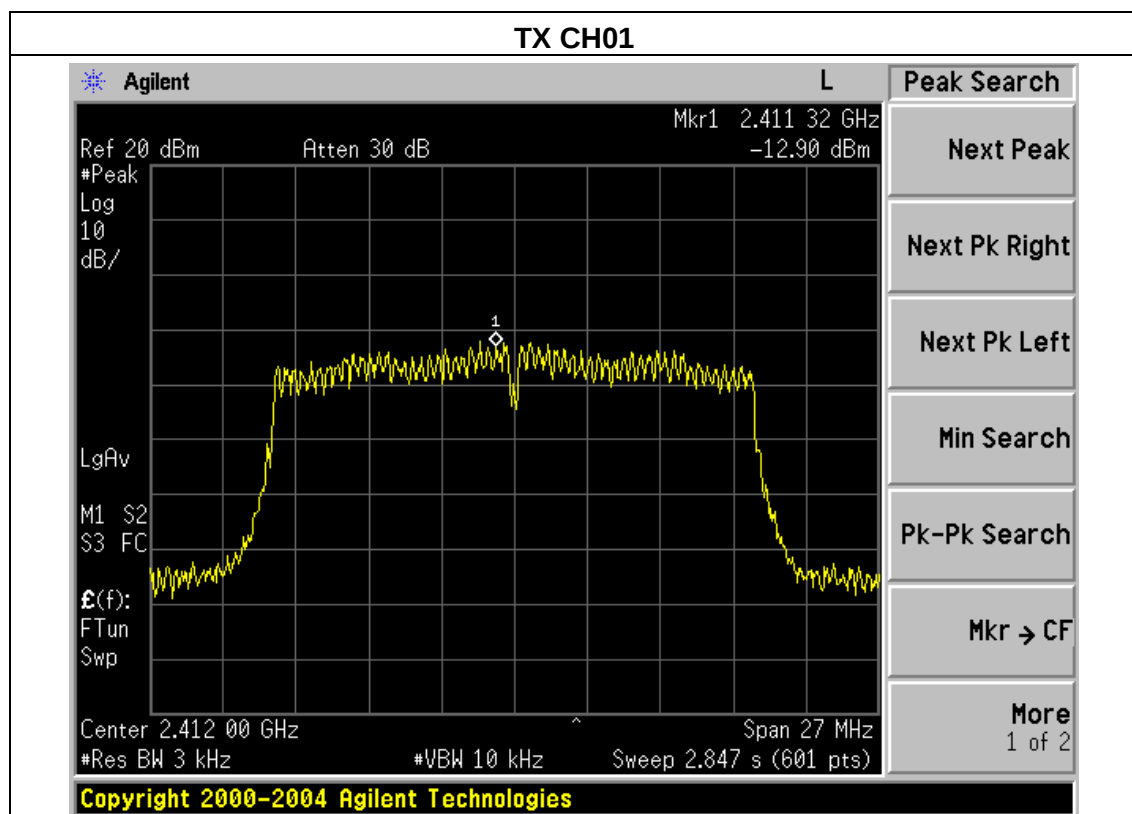
Frequency	Power Density (dBm/3KHz)	Limit (dBm/3KHz)	Result
2412 MHz	-11.39	8	PASS
2437 MHz	-10.46	8	PASS
2462 MHz	-10.25	8	PASS

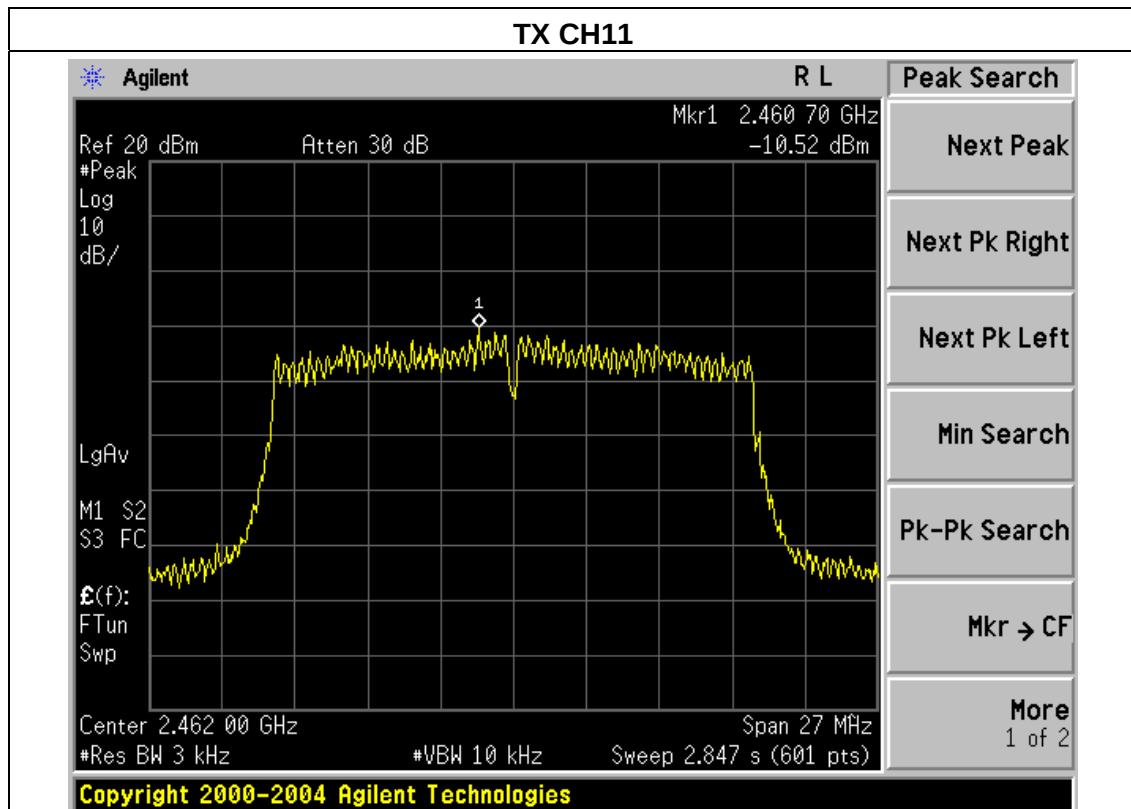
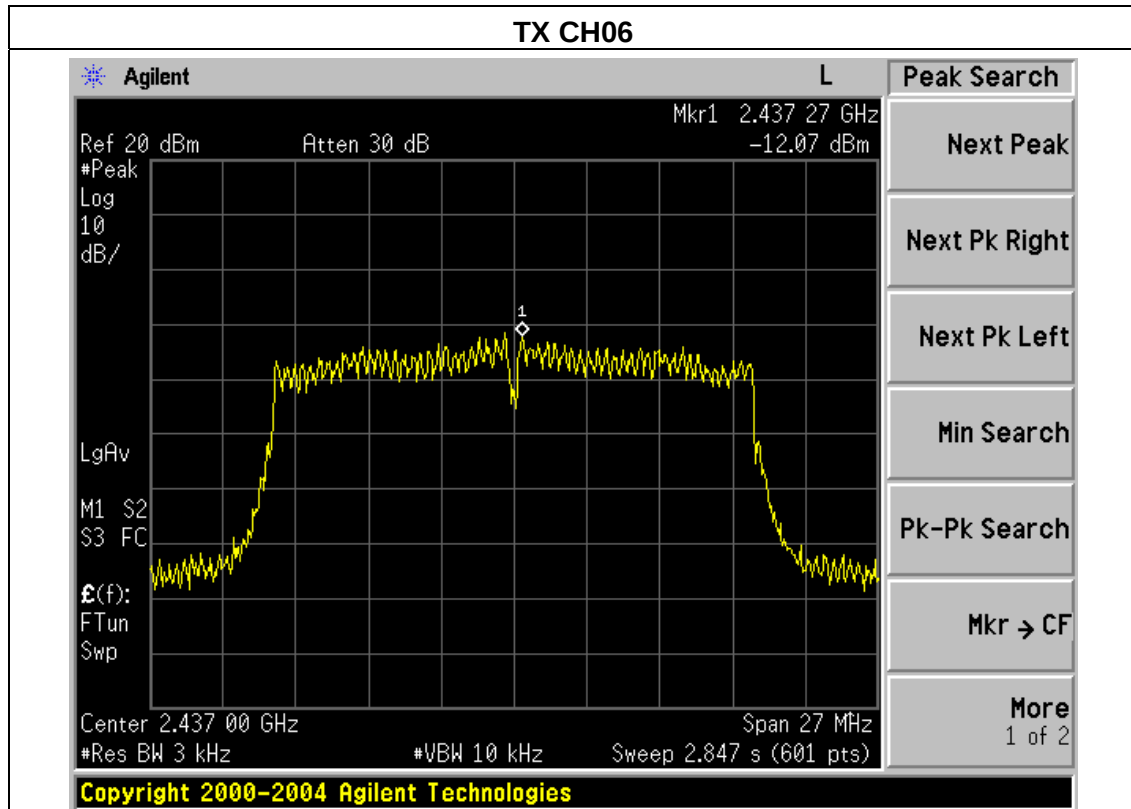




EUT :	10.1 Inch Full Ruggedized Tablet	Model Name :	xTablet T1500
Temperature :	25 °C	Relative Humidity :	56%
Pressure :	1015 hPa	Test Voltage :	DC 3.7V
Test Mode :	TX n Mode (20MHz)/CH01, CH06, CH11		

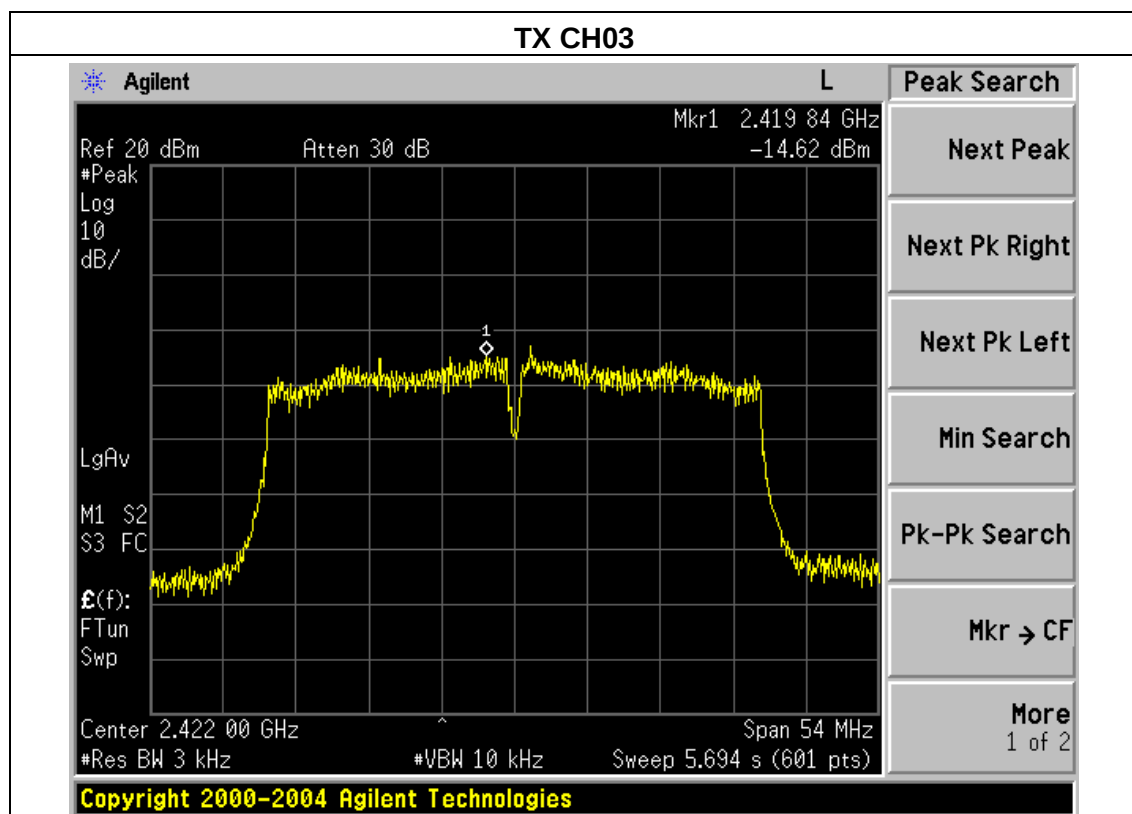
Frequency	Power Density (dBm/3KHz)	Limit (dBm/3KHz)	Result
2412 MHz	-12.90	8	PASS
2437 MHz	-12.07	8	PASS
2462 MHz	-10.52	8	PASS

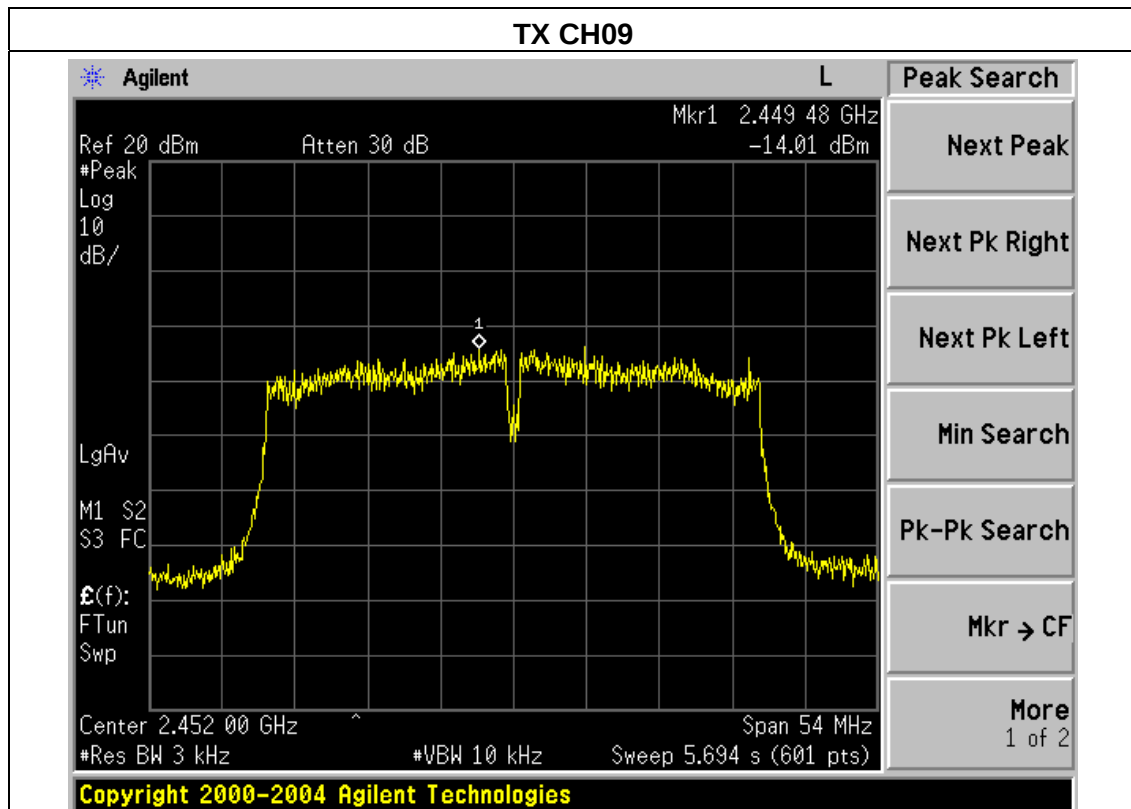
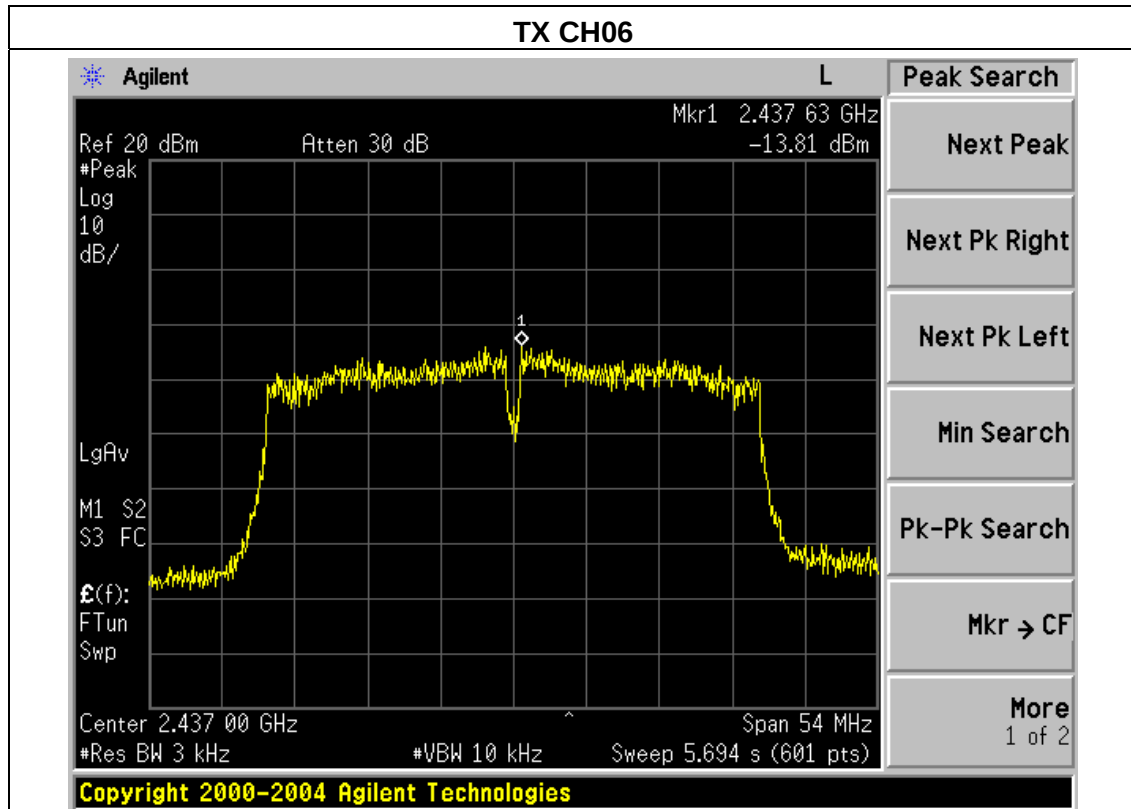




EUT :	10.1 Inch Full Ruggedized Tablet	Model Name :	xTablet T1500
Temperature :	25 °C	Relative Humidity :	56%
Pressure :	1015 hPa	Test Voltage :	DC 3.7V
Test Mode :	TX n Mode (40MHz)/CH03, CH06, CH09		

Frequency	Power Density (dBm/3KHz)	Limit (dBm/3KHz)	Result
2422 MHz	-14.62	8	PASS
2437 MHz	-13.81	8	PASS
2452 MHz	-14.01	8	PASS





5. BANDWIDTH TEST

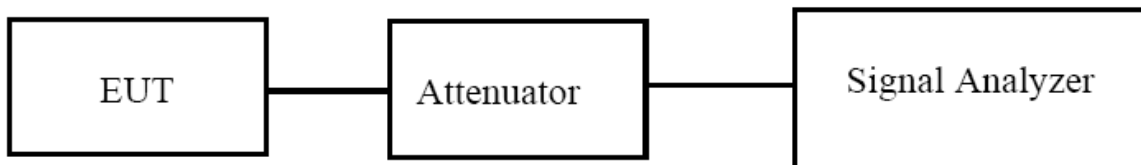
5.1 APPLIED PROCEDURES / LIMIT

FCC Part15 (15.247) , Subpart C				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247(a)(2)	Bandwidth	$\geq 500\text{KHz}$ (6dB bandwidth)	2400-2483.5	PASS

5.1.1 TEST PROCEDURE

1. Set RBW = 100 kHz.
2. Set the video bandwidth (VBW) $\geq 3 \times$ RBW.
3. Detector = Peak.
4. Trace mode = max hold.
5. Sweep = auto couple.
6. Allow the trace to stabilize.
7. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

TEST SETUP



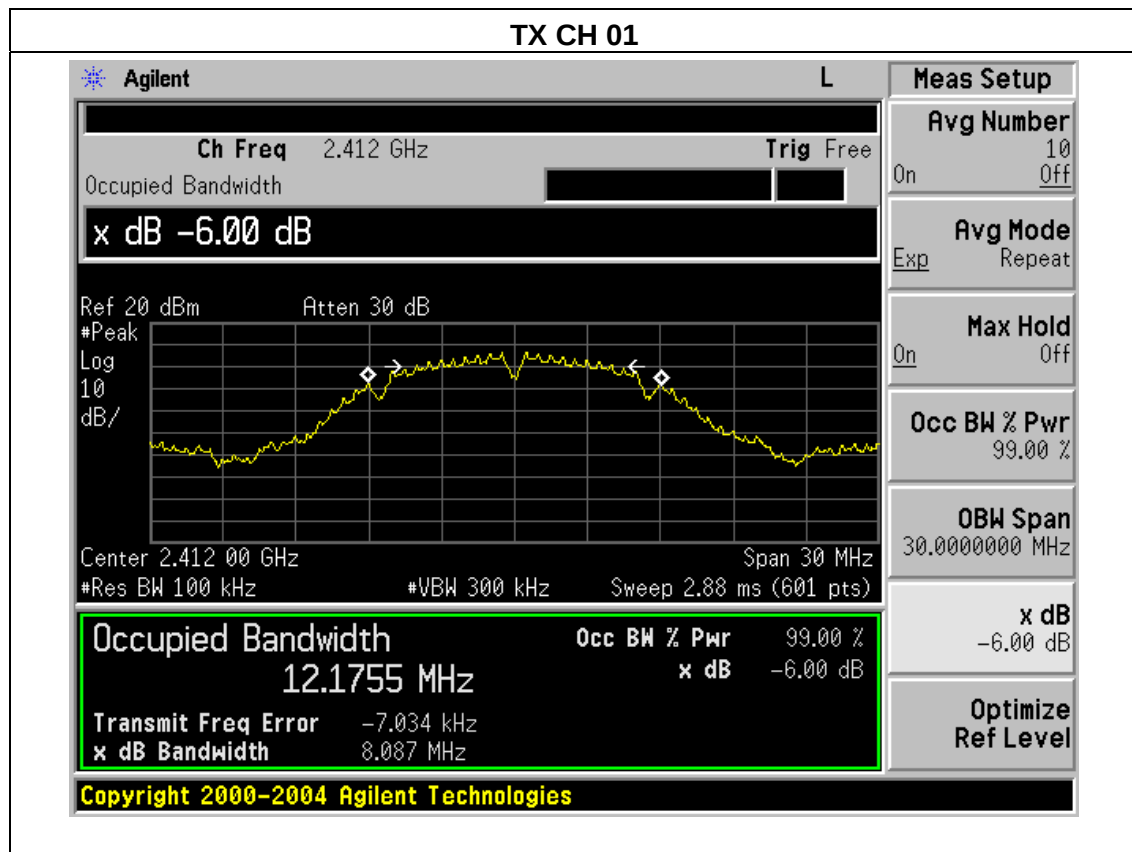
5.1.2 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

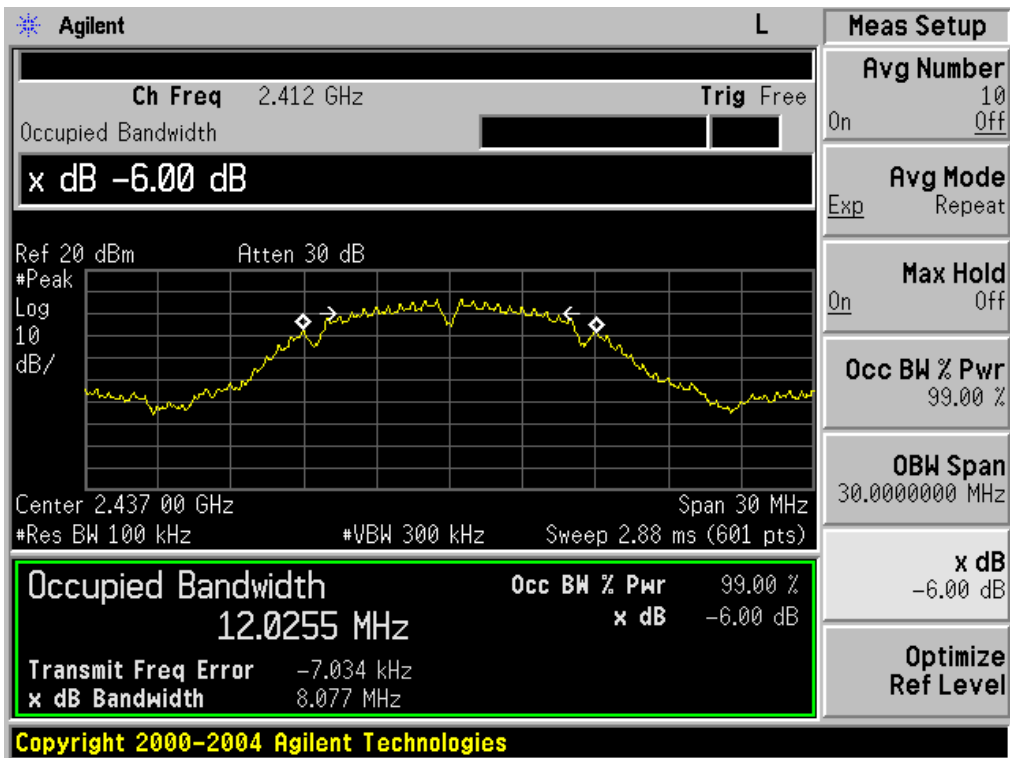
5.1.3 TEST RESULTS

EUT :	10.1 Inch Full Ruggedized Tablet	Model Name :	xTablet T1500
Temperature :	25 °C	Relative Humidity :	56%
Pressure :	1012 hPa	Test Voltage :	DC 3.7V
Test Mode :	TX b Mode /CH01, CH06, CH11		

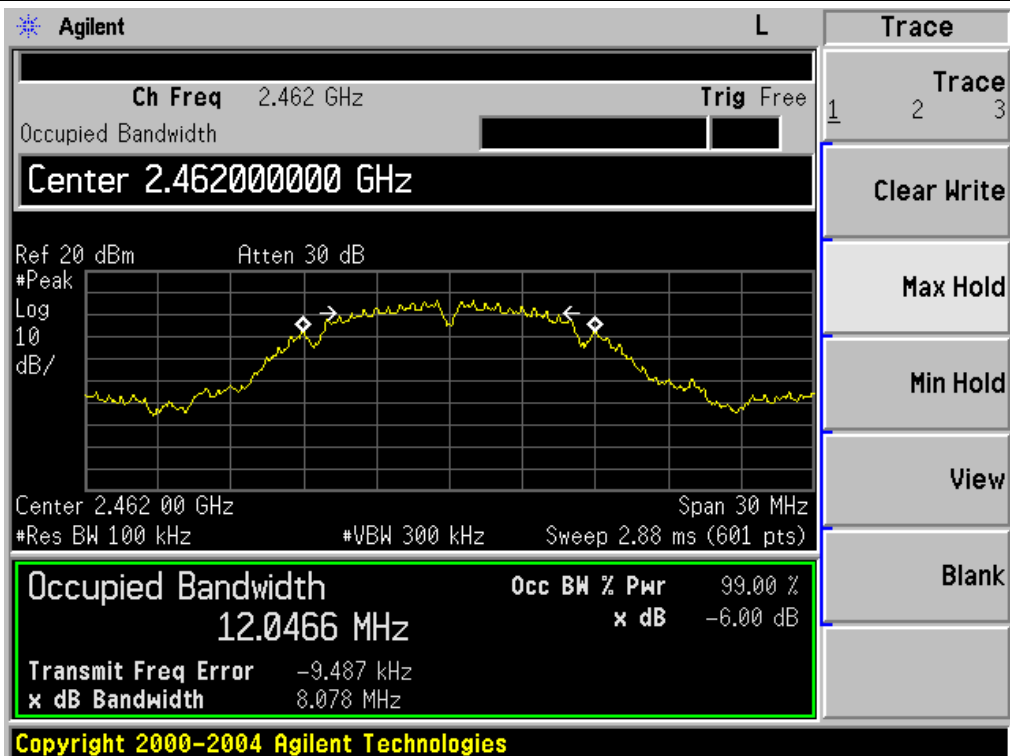
Channel	Frequency (MHz)	6dB bandwidth (MHz)	Limit (kHz)	Result
Low	2412	8.087	500	Pass
Middle	2437	8.077	500	Pass
High	2462	8.078	500	Pass



TX CH 06

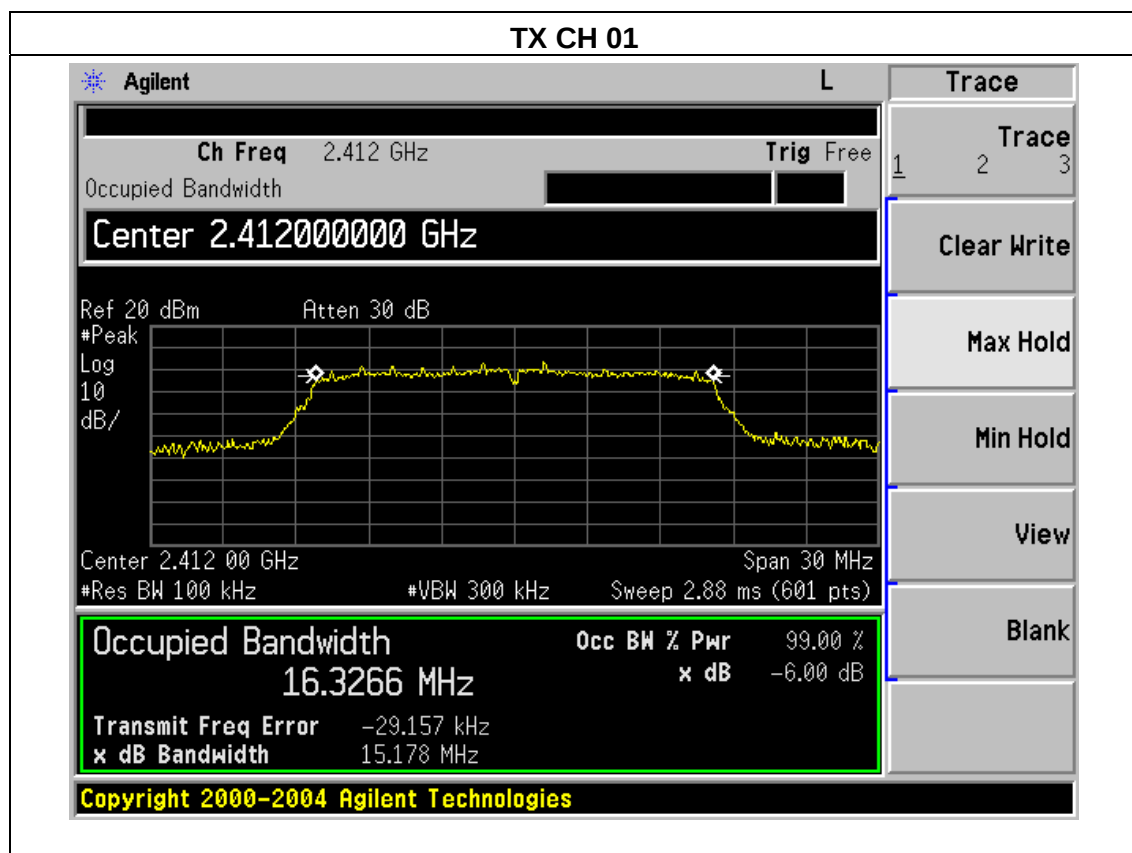


TX CH 11

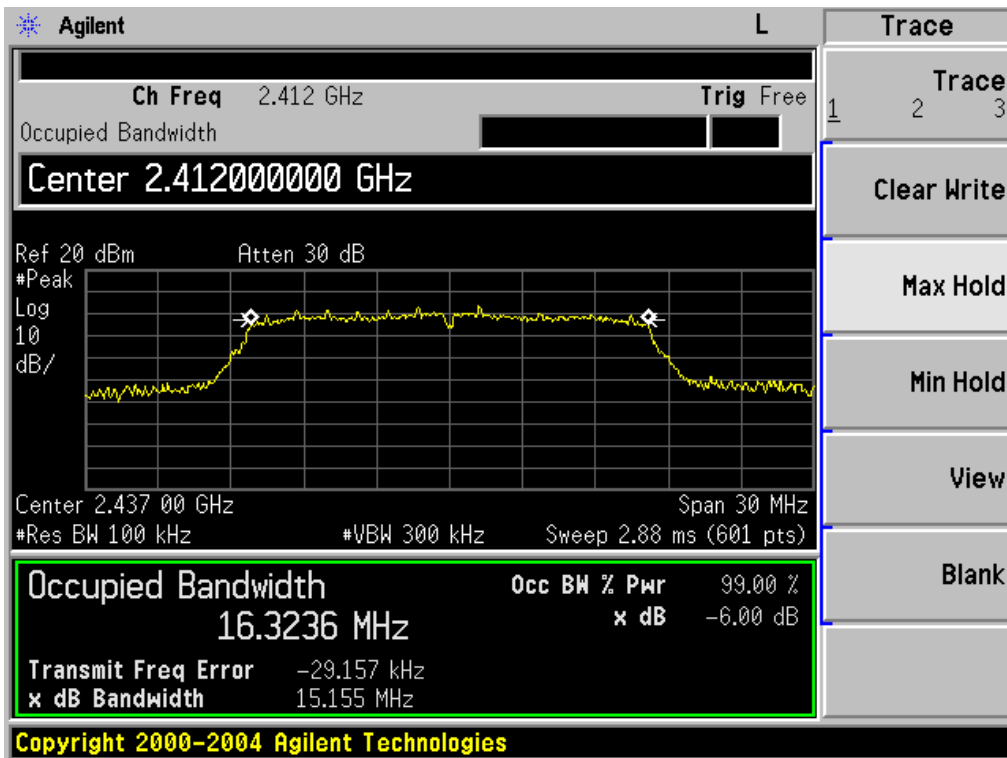


EUT :	10.1 Inch Full Ruggedized Tablet	Model Name :	xTablet T1500
Temperature :	25 °C	Relative Humidity :	60%
Pressure :	1012 hPa	Test Voltage :	DC 3.7V
Test Mode :	TX g Mode /CH01, CH06, CH11		

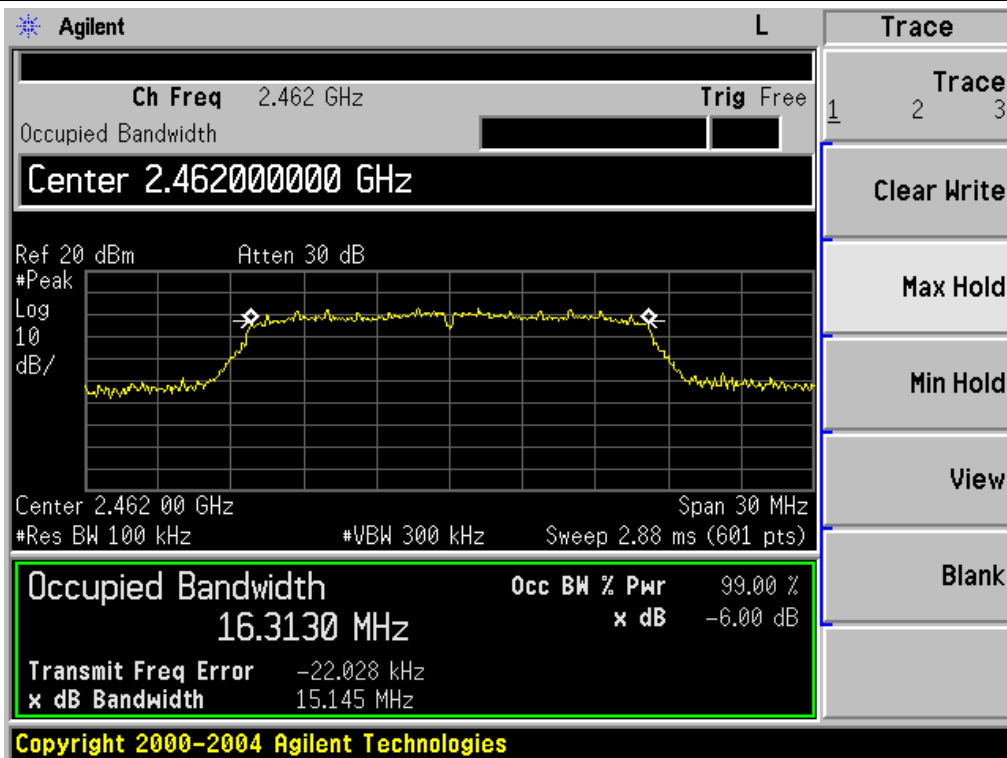
Channel	Frequency (MHz)	6dB bandwidth (MHz)	Limit (kHz)	Result
Low	2412	15.178	500	Pass
Middle	2437	15.155	500	Pass
High	2462	15.145	500	Pass



TX CH 06

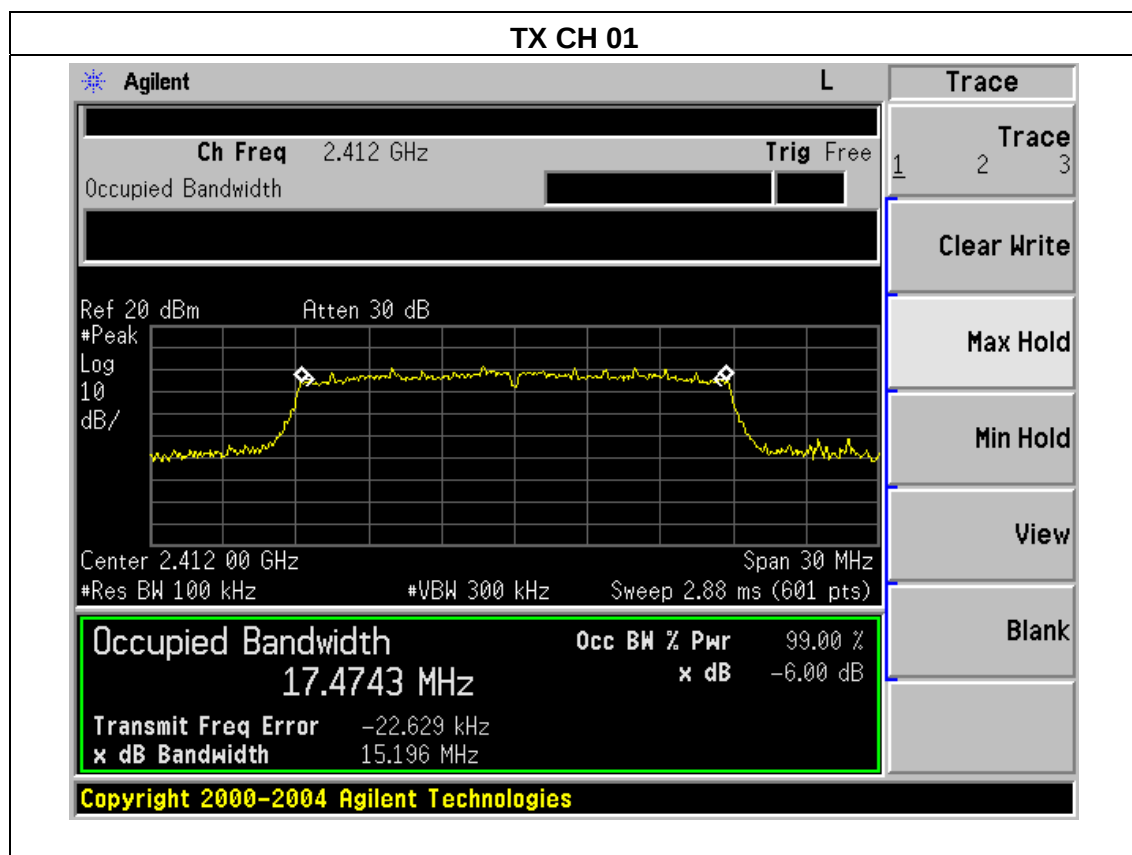


TX CH 11

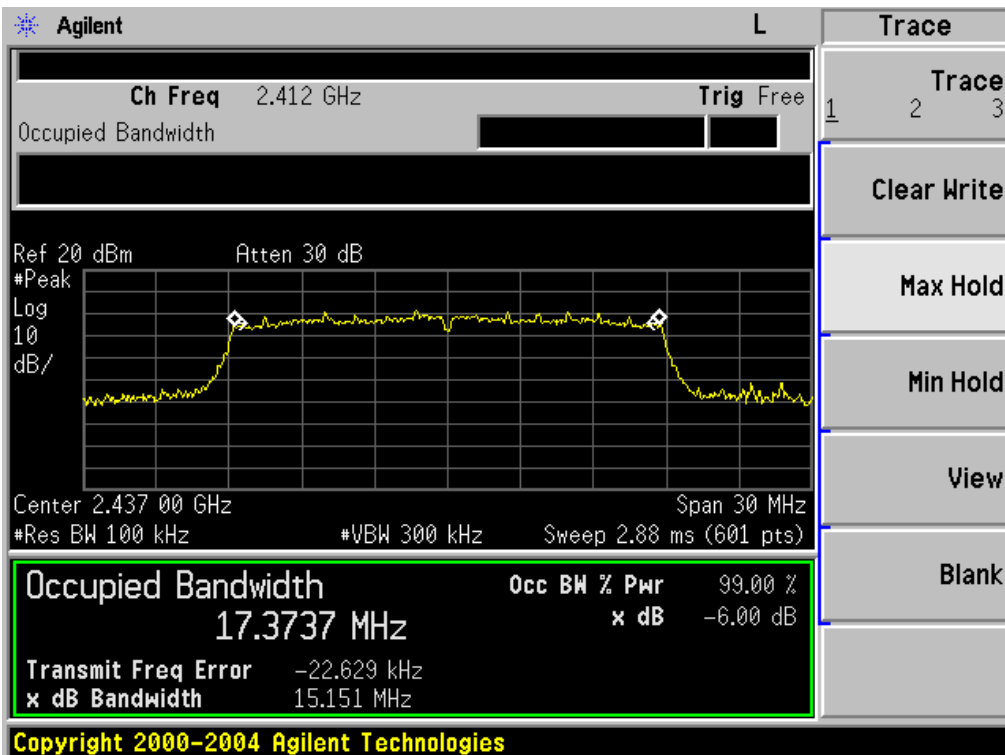


EUT :	10.1 Inch Full Ruggedized Tablet	Model Name :	xTablet T1500
Temperature :	25 °C	Relative Humidity :	56%
Pressure :	1012 hPa	Test Voltage :	DC 3.7V
Test Mode :	TX n Mode(20M) /CH01, CH06, CH11		

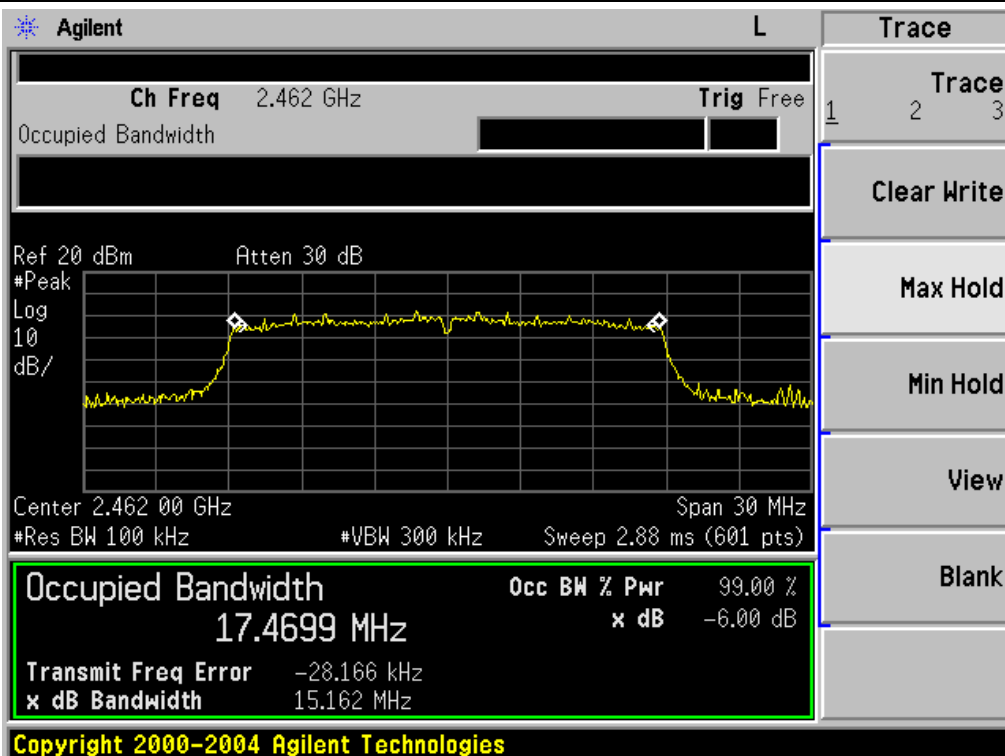
Channel	Frequency (MHz)	6dB bandwidth (MHz)	Limit (kHz)	Result
Low	2412	15.196	500	Pass
Middle	2437	15.151	500	Pass
High	2462	15.162	500	Pass



TX CH 06

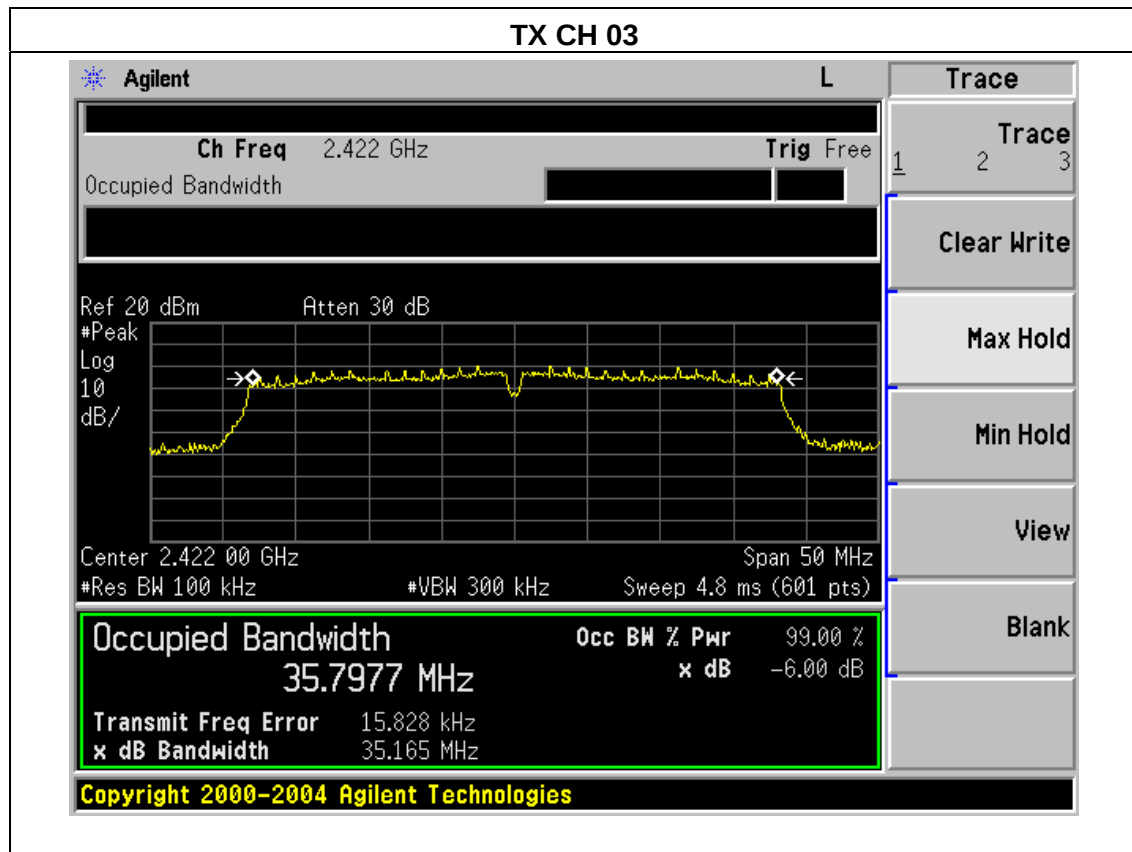


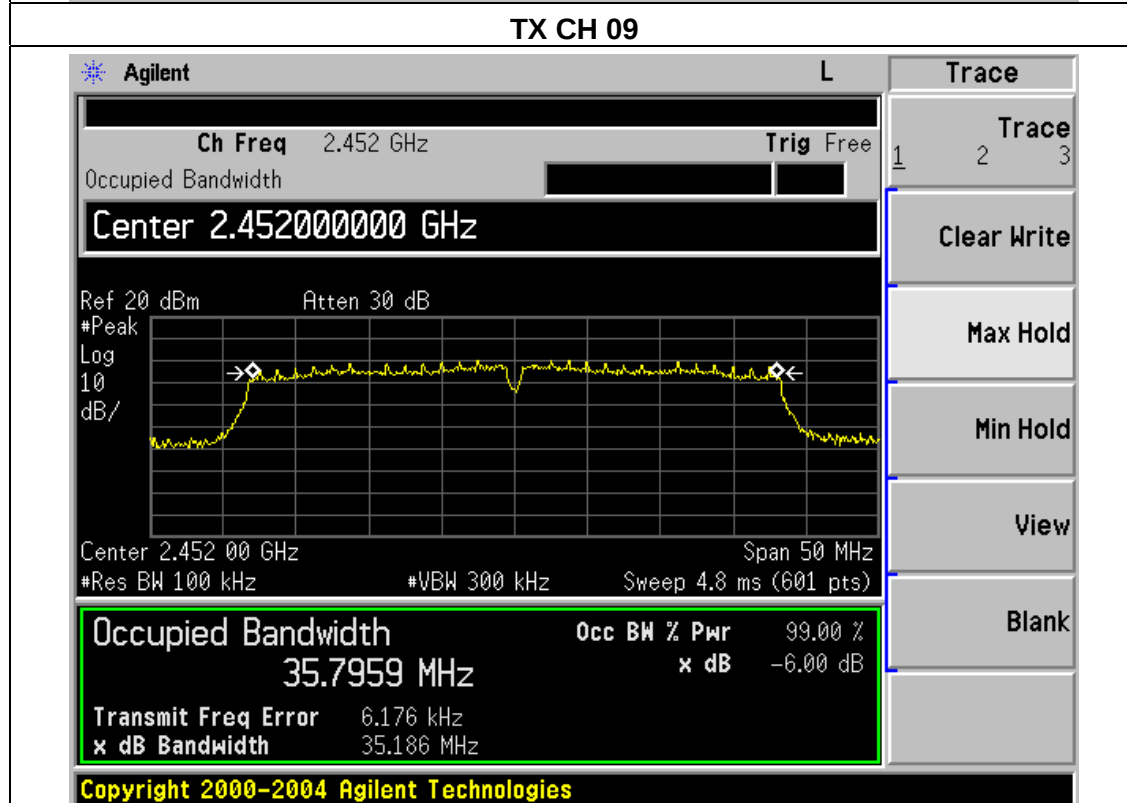
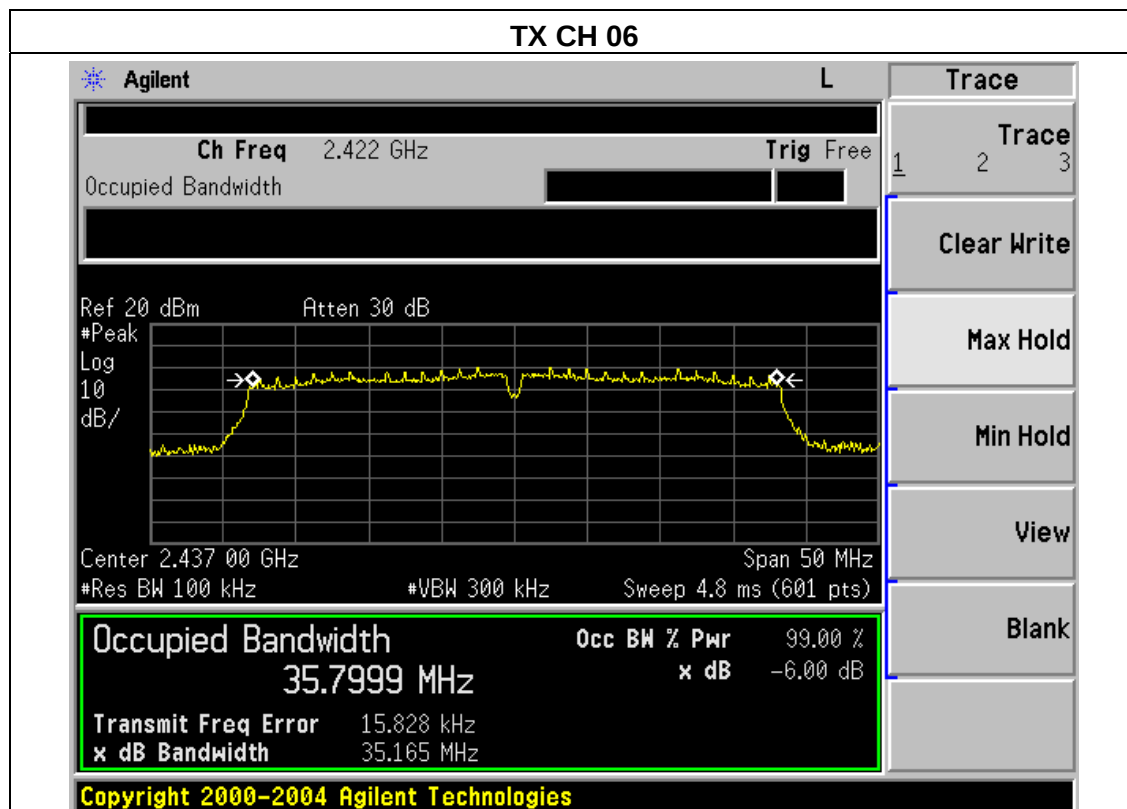
TX CH 11



EUT :	10.1 Inch Full Ruggedized Tablet	Model Name :	xTablet T1500
Temperature :	25 °C	Relative Humidity :	56%
Pressure :	1012 hPa	Test Voltage :	DC 3.7V
Test Mode :	TX n Mode(40M) /CH03, CH06, CH09		

Channel	Frequency (MHz)	6dB bandwidth (MHz)	Limit (kHz)	Result
Low	2422	35.165	500	Pass
Middle	2437	35.165	500	Pass
High	2452	35.186	500	Pass





6. PEAK OUTPUT POWER TEST

6.1 APPLIED PROCEDURES / LIMIT

FCC Part15 (15.247) , Subpart C				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247(b)(3)	Peak Output Power	1 watt or 30dBm	2400-2483.5	PASS

6.1.1 TEST PROCEDURE

20MHz BW

Peak Power (Procedure 9.1.2 in KDB 558074, issued 01/07/2016)

1. Measure the peak power of the transmitter.

Average Power (Procedure 9.2.3.1 in KDB 558074, issued 01/07/2016)

1. Measure the duty cycle.
2. Measure the average power of the transmitter. This measurement is an average over both the on and off periods of the transmitter.
3. Add $10 \log (1/x)$, where x is the duty cycle, to the measured power in order to compute the average power during the actual transmission times.

40MHZ BW

This procedure should only be used when the maximum available RBW of the spectrum/signal analyzer is less than the DTS bandwidth.

Peak Power(Integrated Band Power Method)

1. Set the RBW = maximum available (at least 1 MHz).
2. Set the VBW = 3 x RBW or maximum available setting (must be $\geq$ RBW).
3. Set the span =1.5 x DTS bandwidth.
4. Detector = peak.
5. Sweep time = auto couple.
6. Trace mode = max hold.
7. Allow trace to fully stabilize.
8. Use the spectrum analyzer's band/channel power measurement function with the band limits set equal to the DTS bandwidth edges (for some analyzers, this may require a manual override to ensure use of peak detector). If the spectrum analyzer does not have a band power function, sum the spectrum levels (in linear power units) at intervals equal to the RBW extending across the DTS channel bandwidth.

Average Power(Procedure 9.2.2.4 in KDB 558074, issued 01/07/2016)

Measure the duty cycle

Set span to at least 1.5 times the OBW

RBW = 1-5 % of the OBW, not to exceed 1 MHz.

VBW $\geq 3 \times$ RBW.

Number of points in sweep $\geq 2 \times$ span / RBW. (This gives bin-to-bin spacing $\leq$ RBW/2, so that narrowband signals are not lost between frequency bins.)

Sweep time = auto.

Detector = RMS(i.e., power averaging)

Do not use sweep triggering. Allow the sweep to "free run".

Trace average at least 100 traces in power averaging(RMS) mode.

Compute power by integrating the spectrum across the OBW of the signal using the instrument's band power measurement function with band limits set equal to the OBW band edges.

Add $10 \log(1/x)$, where x is the duty cycle, to the measured power in order to compute the average power during the actual transmission times.

6.1.2 DEVIATION FROM STANDARD

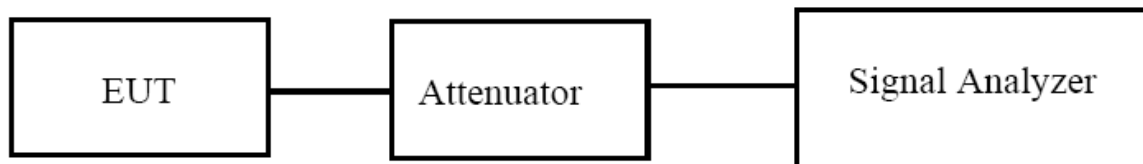
No deviation.

6.1.3 TEST SETUP

For 20MHz BW



For 40MHz BW



6.1.4 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

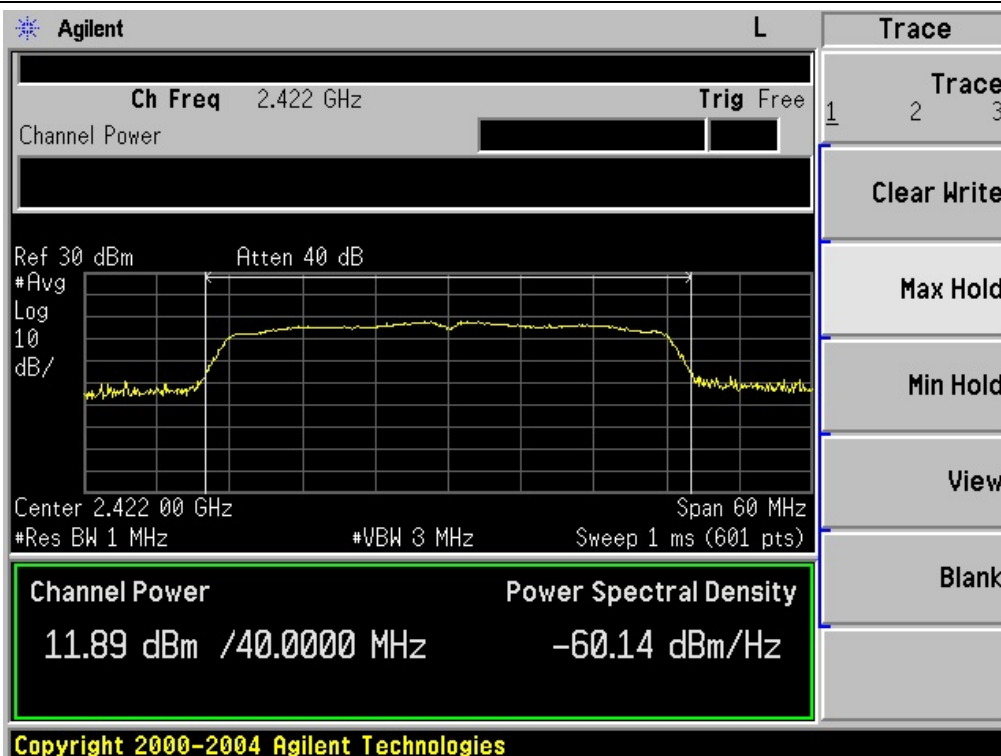
6.1.5 TEST RESULTS

EUT :	10.1 Inch Full Ruggedized Tablet	Model Name :	xTablet T1500
Temperature :	25 °C	Relative Humidity :	60%
Pressure :	1012 hPa	Test Voltage :	DC 3.7V
Test Mode :	TX b/g/n(20M/40M) Mode		

TX 802.11b Mode			
Test Channel	Frequency	Maximum Peak Conducted Output Power (PK)	LIMIT
	(MHz)	(dBm)	dBm
CH01	2412	15.76	30
CH06	2437	16.03	30
CH11	2462	16.24	30
TX 802.11g Mode			
CH01	2412	16.41	30
CH06	2437	16.52	30
CH11	2462	16.55	30
TX 802.11n(20) Mode			
CH01	2412	15.13	30
CH06	2437	15.14	30
CH11	2462	15.30	30
TX 802.11n(40) Mode			
CH03	2422	11.89	30
CH06	2437	11.15	30
CH09	2452	11.94	30

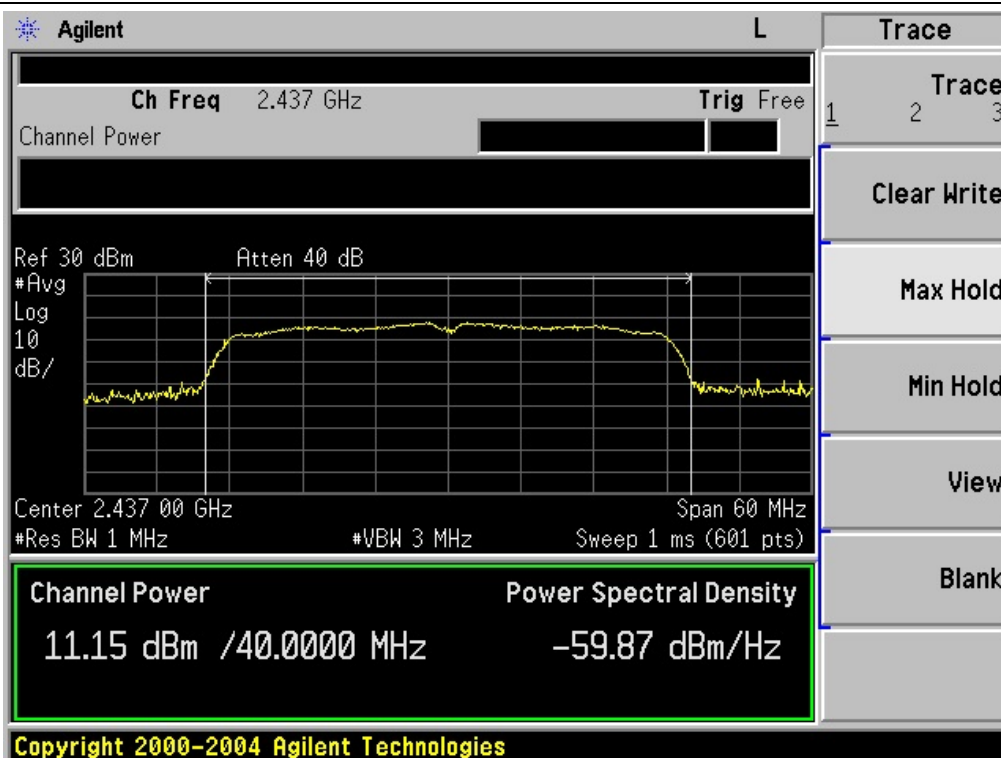
802.11n(40) Mode

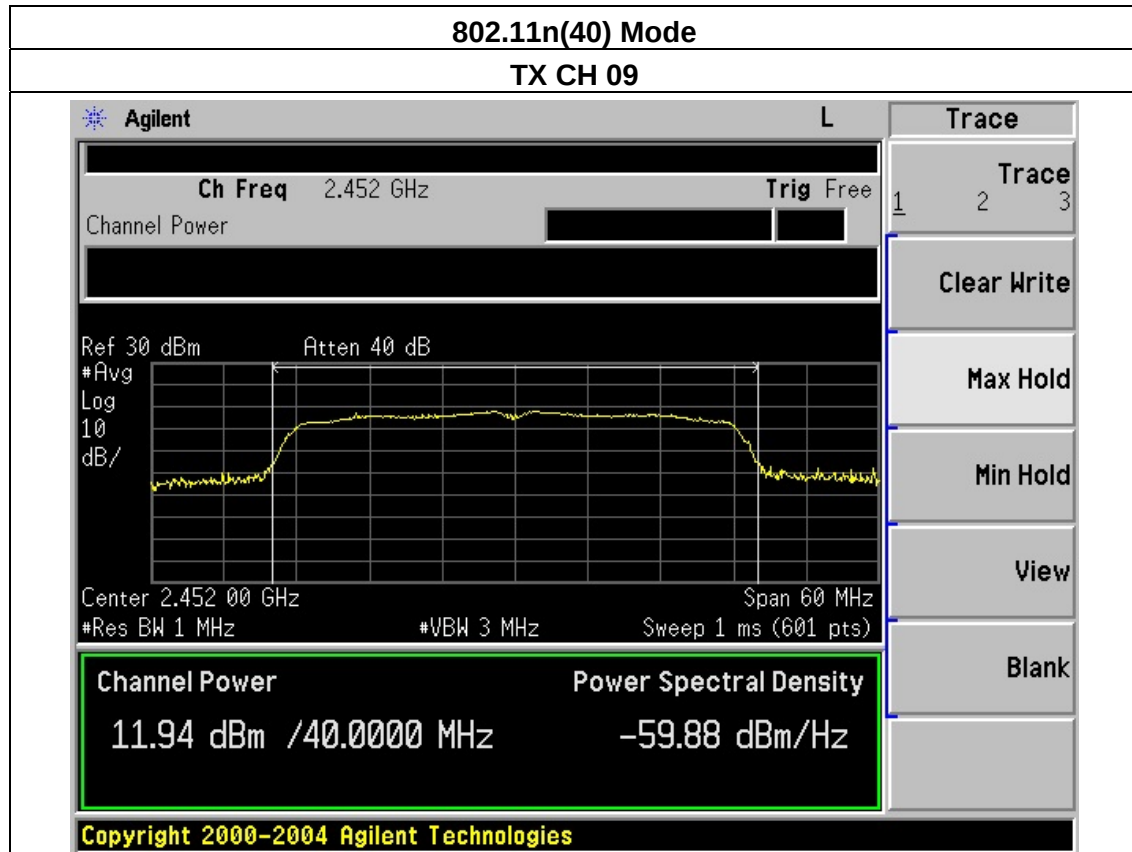
TX CH 03



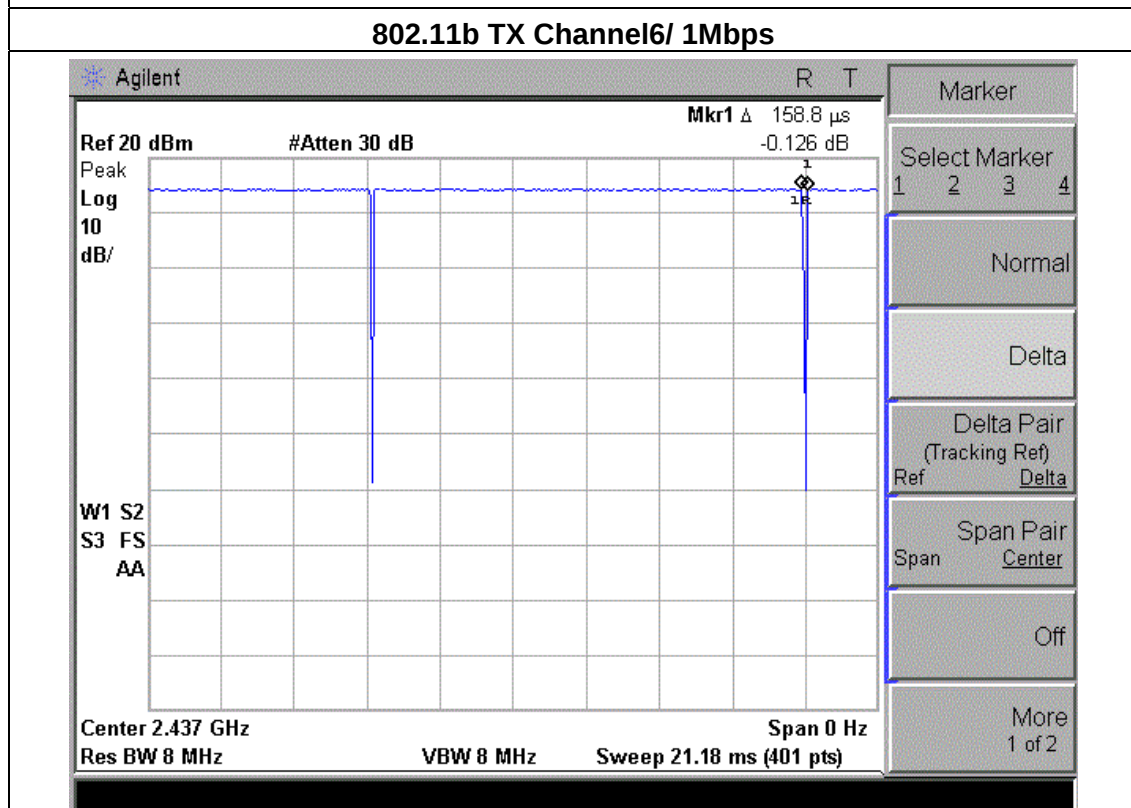
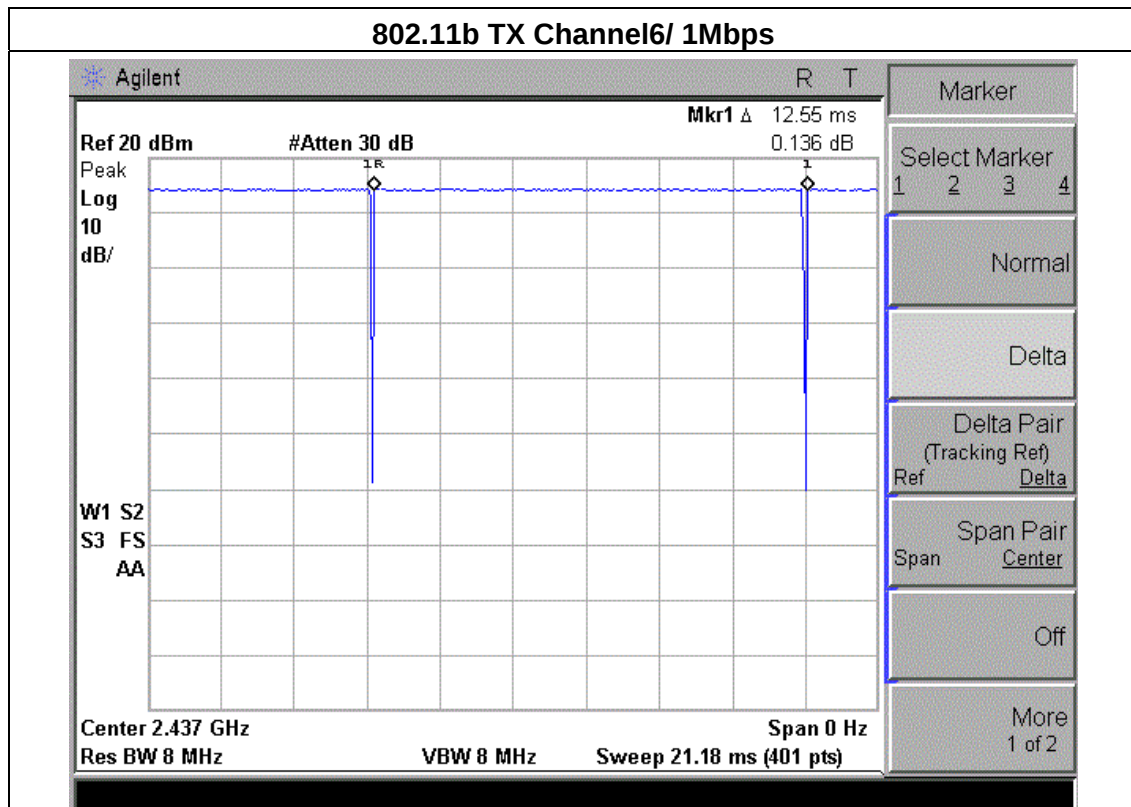
802.11n(40) Mode

TX CH 06

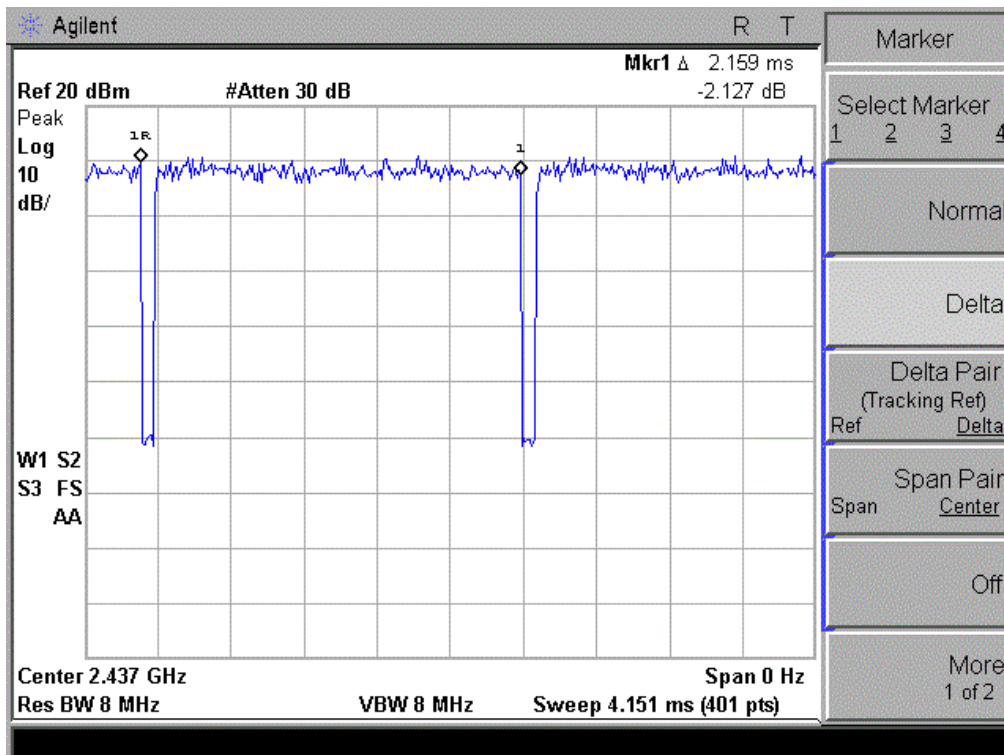




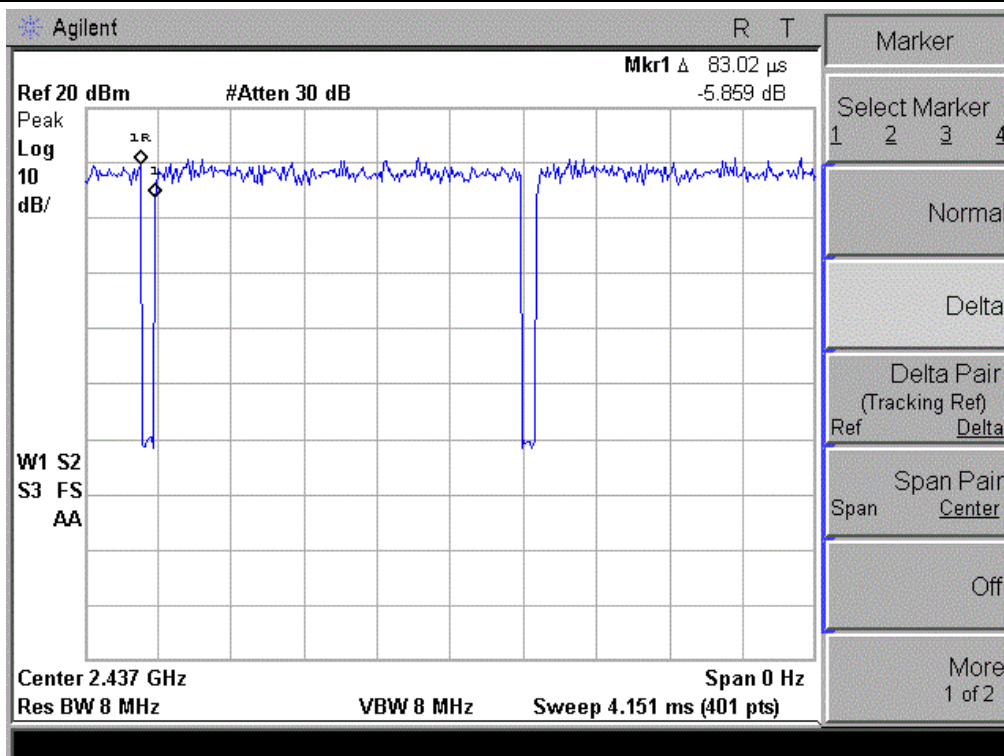
Duty Cycle



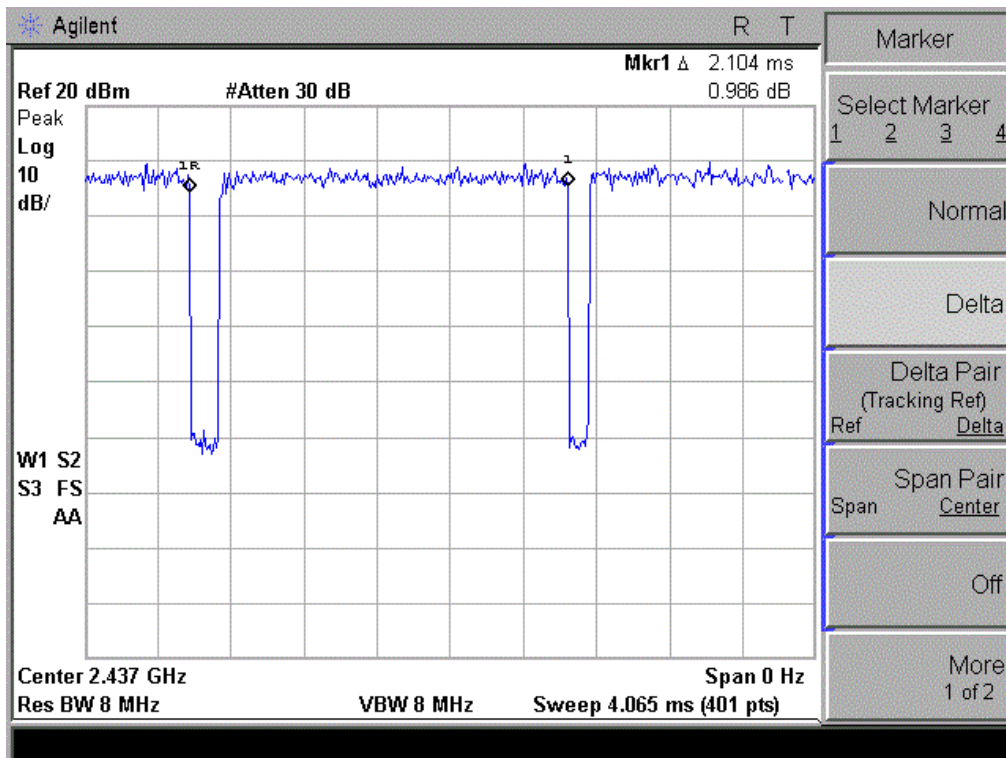
802.11g TX Channel6/ 1Mbps



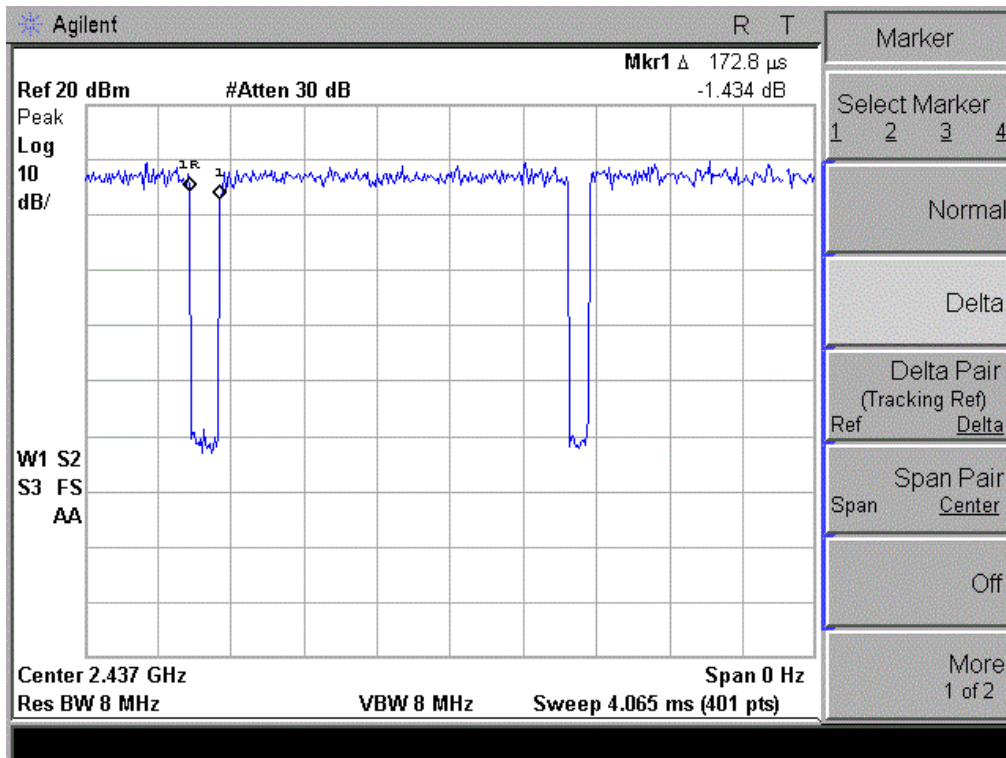
802.11g TX Channel6/ 1Mbps



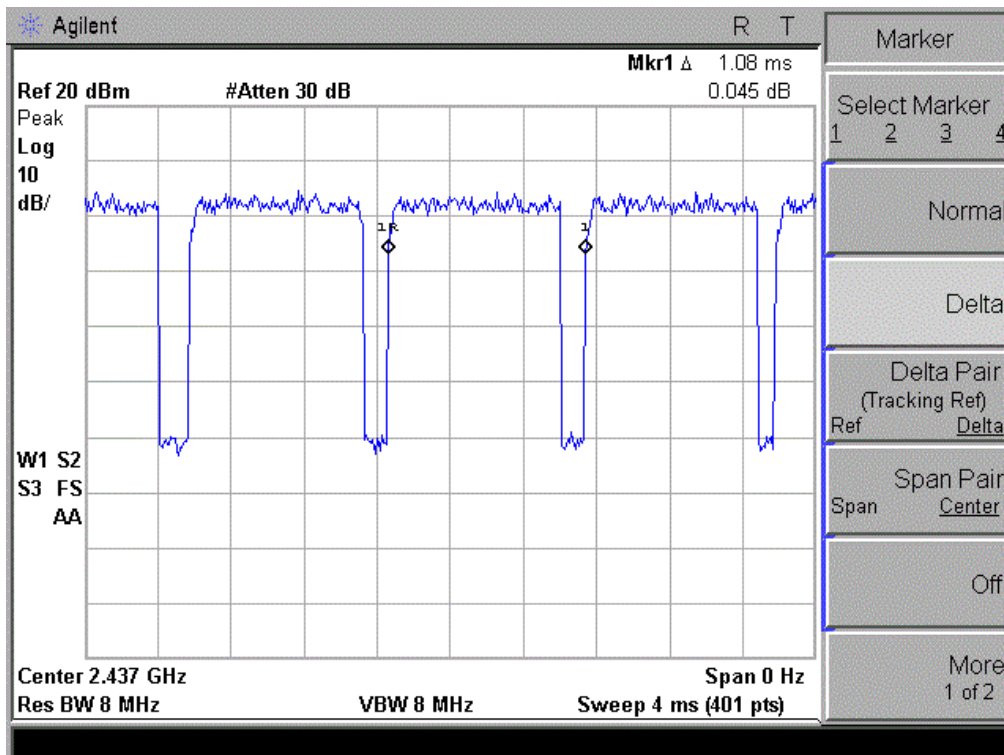
802.11n HT20 TX Channel6/ MCS0



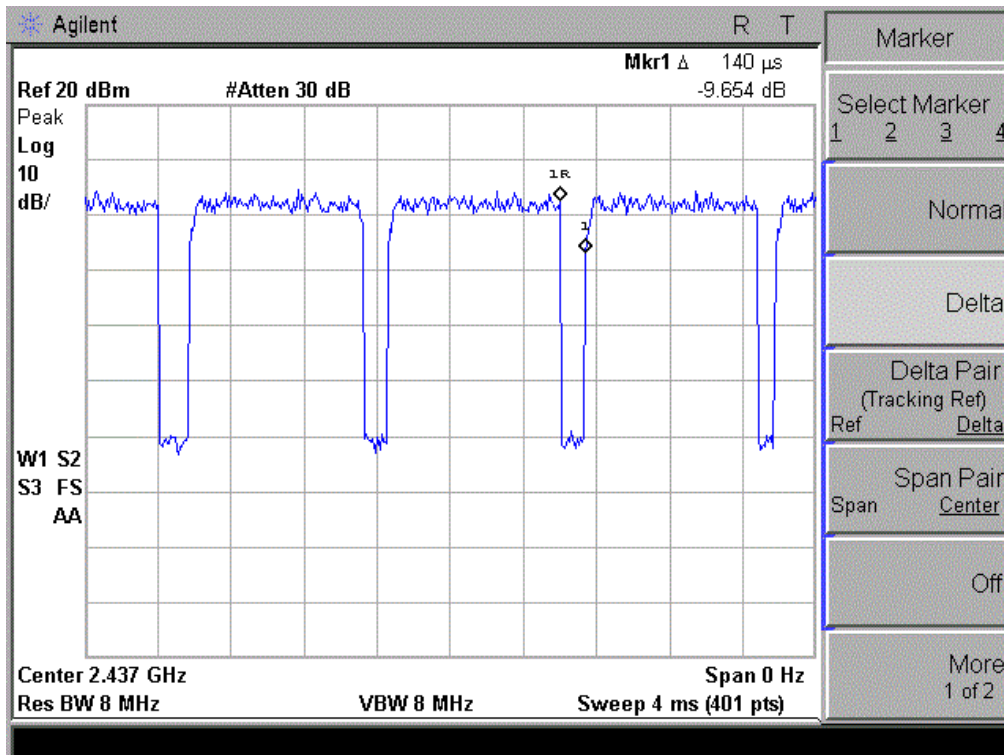
802.11n HT20 TX Channel6/ MCS0



802.11n HT40 TX Channel6/ MCS0



802.11n HT40 TX Channel6/ MCS0



7. 100 KHZ BANDWIDTH OF FREQUENCY BAND EDGE

APPLICABLE STANDARD

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, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).

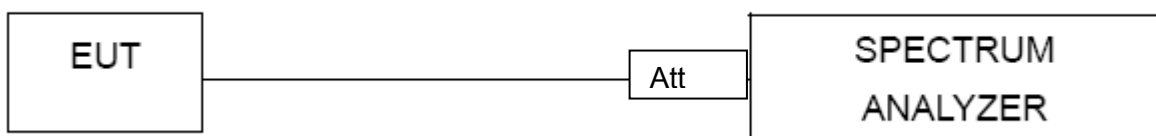
TEST PROCEDURE

- Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
- Position the EUT 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.
- Set RBW to 100 kHz and VBW of spectrum analyzer to 300 kHz with a convenient frequency span including 100 kHz bandwidth from band edge.
- Measure the highest amplitude appearing on spectral display and set it as a reference level. Plot the graph with marking the highest point and edge frequency.
- Repeat above procedures until all measured frequencies were complete.

7.1 DEVIATION FROM STANDARD

No deviation.

7.2 TEST SETUP



7.3 EUT OPERATION CONDITIONS

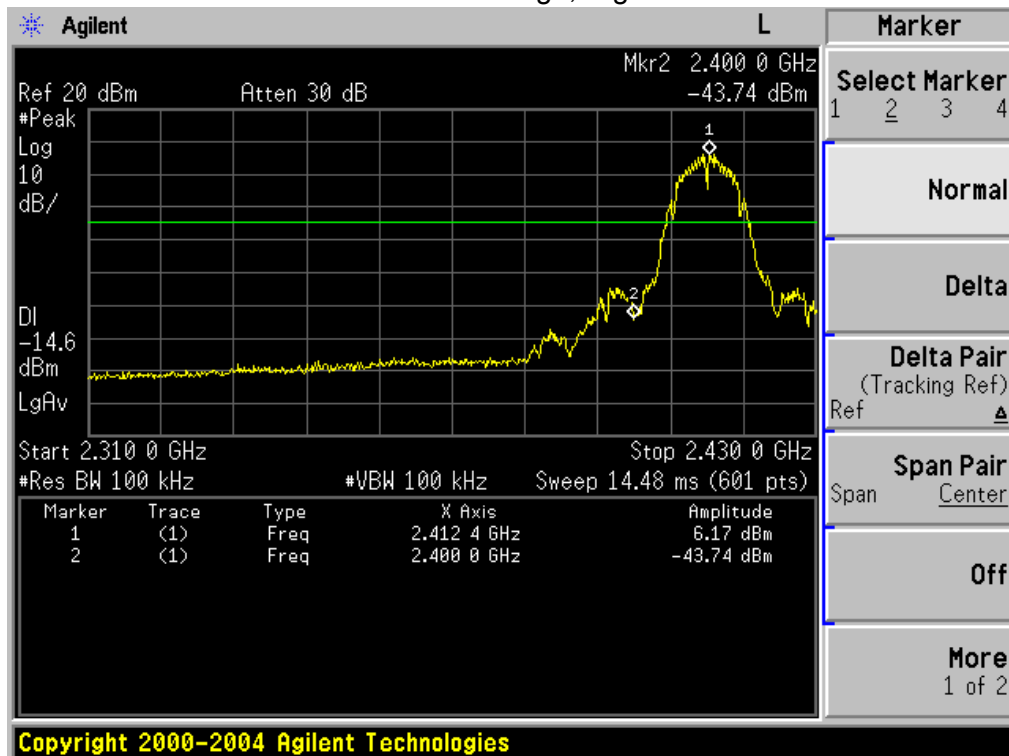
The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

7.4 TEST RESULTS

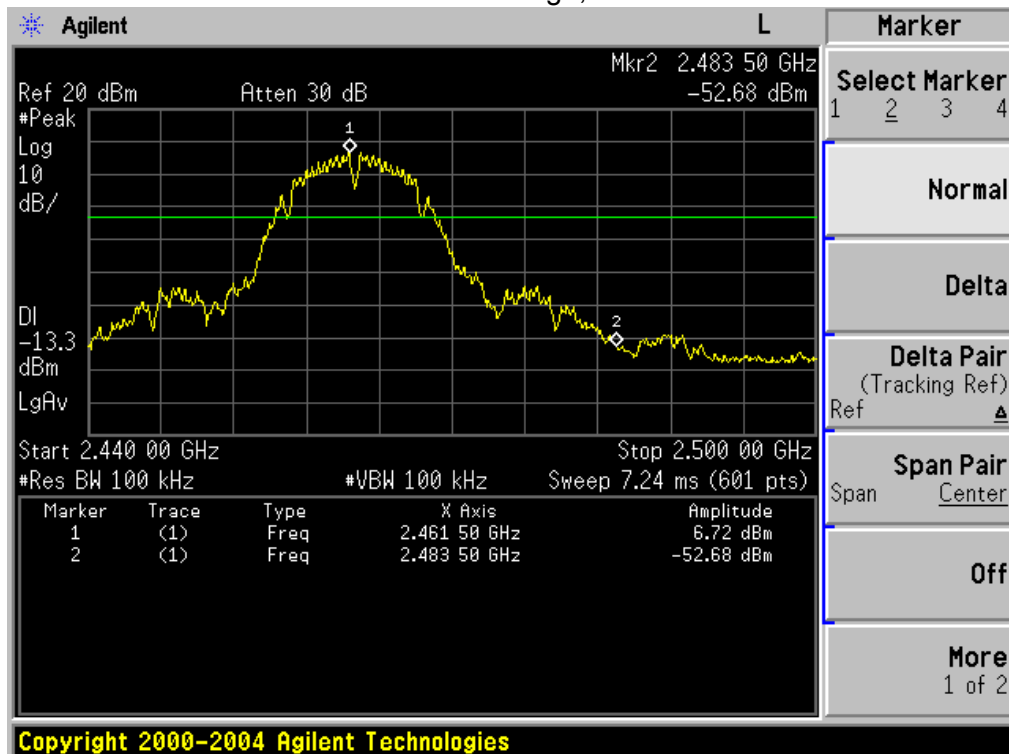
EUT :	10.1 Inch Full Ruggedized Tablet	Model Name :	xTablet T1500
Temperature :	25 °C	Relative Humidity :	56%
Pressure :	1012 hPa	Test Voltage :	DC 3.7V

Frequency Band MHz	Delta Peak to band emission (dBc)	> Limit (dBc)	Result
802.11b mode			
2400	49.91	20	Pass
2483.5	59.40	20	Pass
802.11g mode			
2400	33.30	20	Pass
2483.5	39.97	20	Pass
802.11n-HT20 mode			
2400	38.71	20	Pass
2483.5	45.26	20	Pass
802.11n-HT40 mode			
2400	34.56	20	Pass
2483.5	37.37	20	Pass

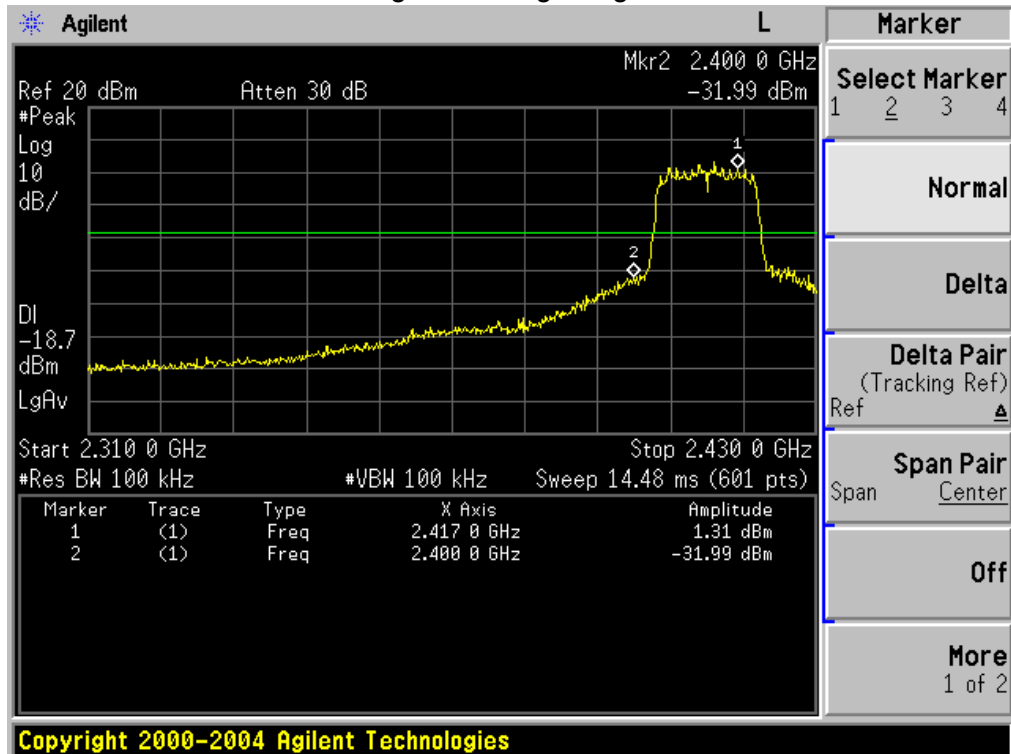
802.11b: Band Edge, Right Side



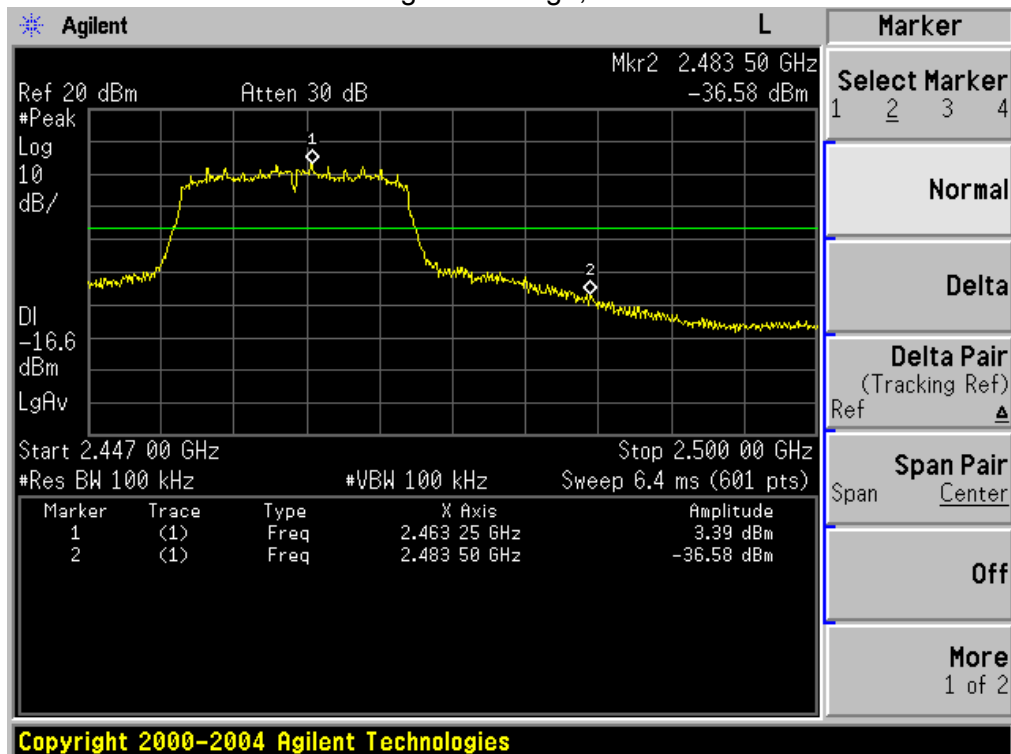
802.11b: Band Edge, Left Side



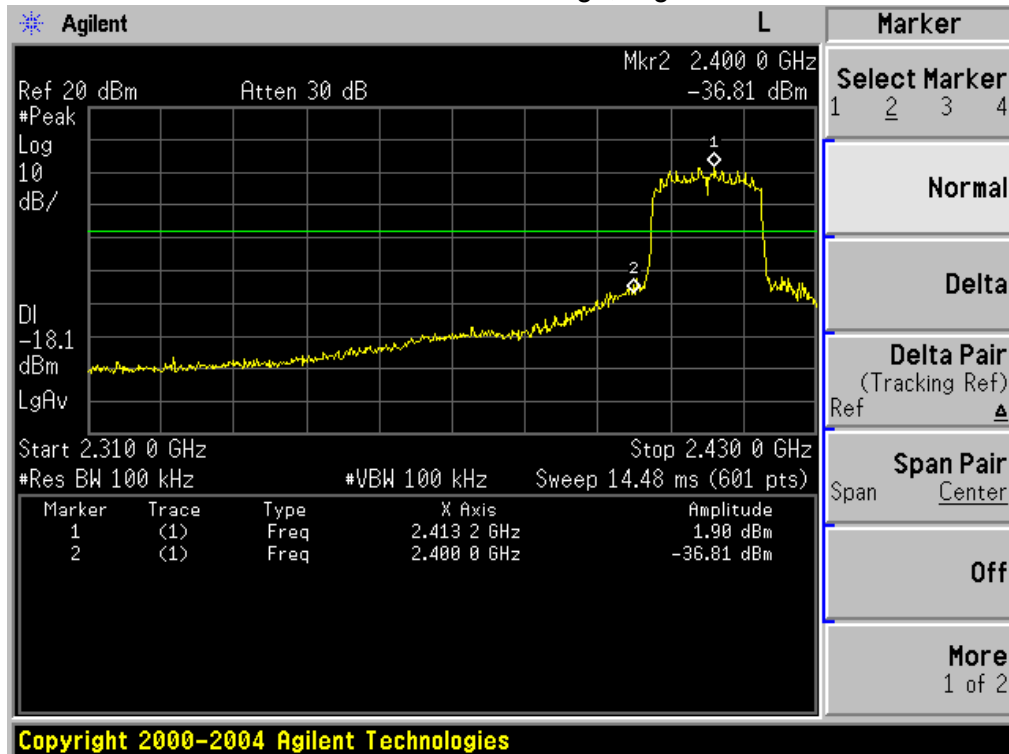
802.11g: Band Edge, Right Side



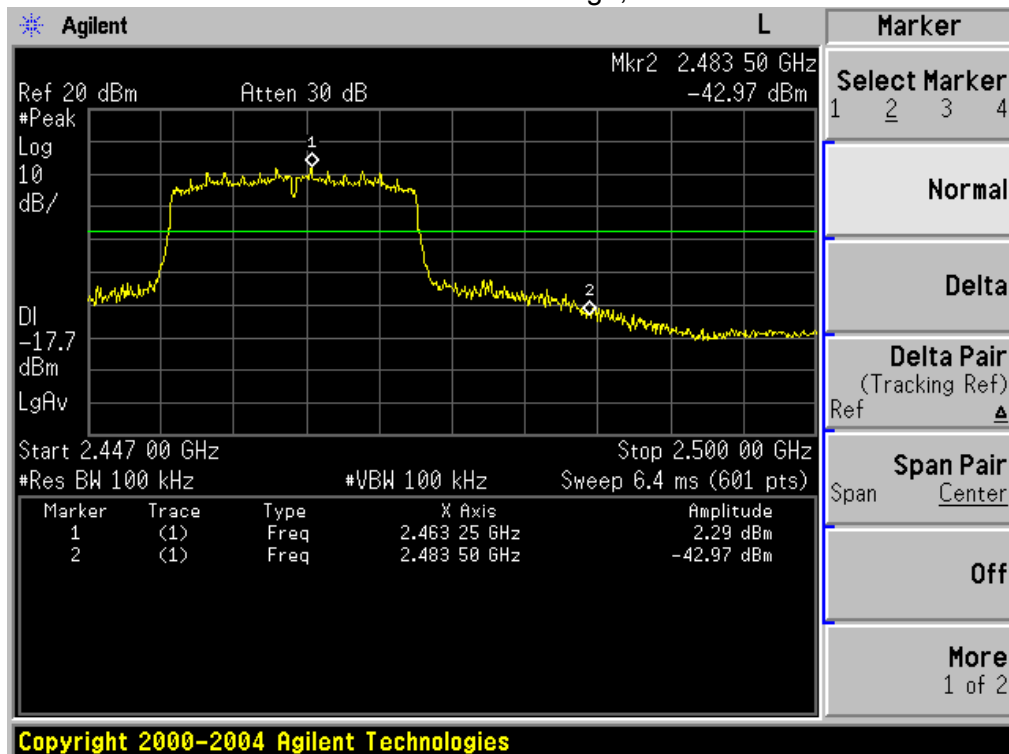
802.11g: Band Edge, Left Side



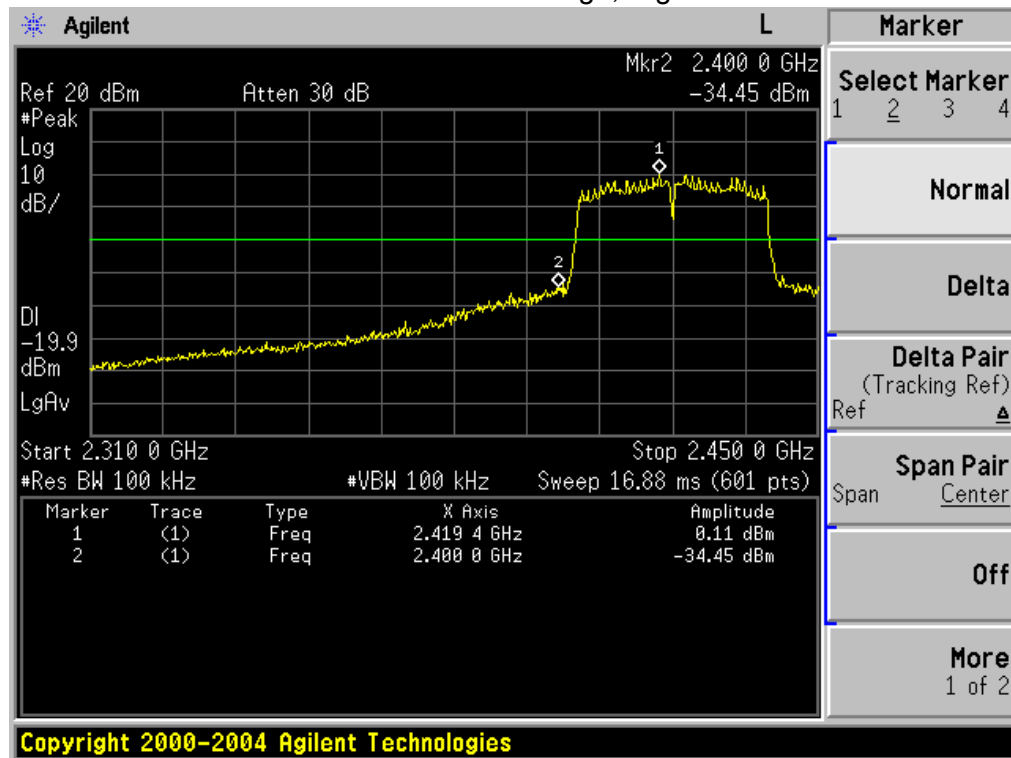
802.11n-HT20: Band Edge, Right Side



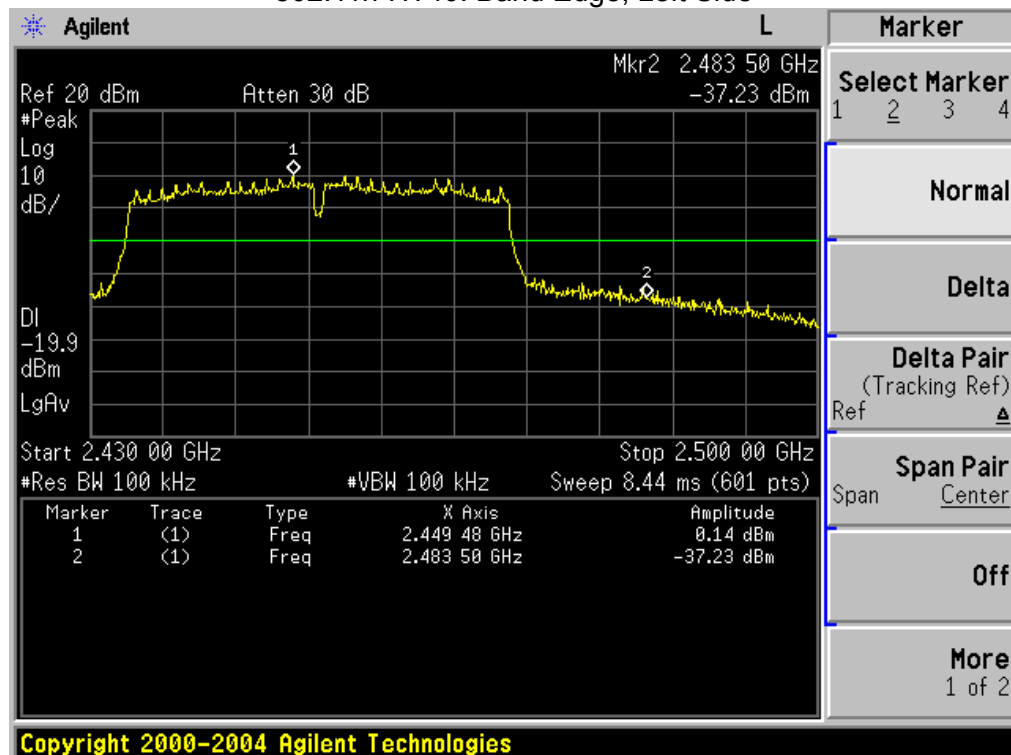
802.11n-HT20: Band Edge, Left Side



802.11n-HT40: Band Edge, Right Side



802.11n-HT40: Band Edge, Left Side



8. ANTENNA REQUIREMENT

8.1 STANDARD REQUIREMENT

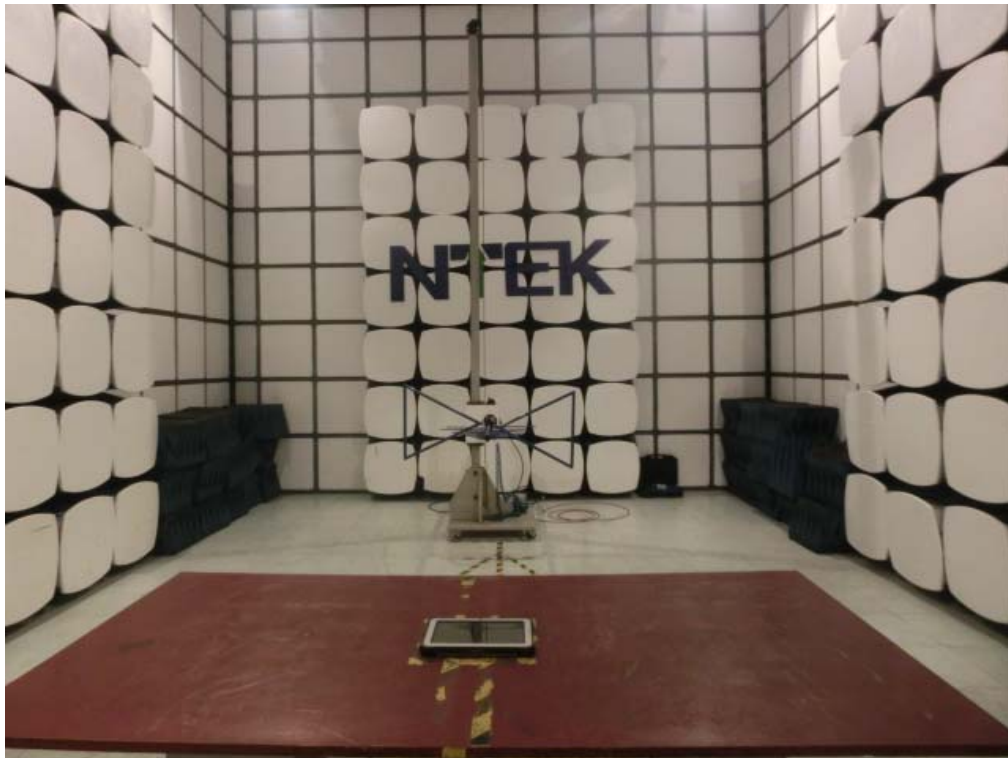
15.203 requirement: For intentional device, according to 15.203: an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

8.2 EUT ANTENNA

The EUT antenna is permanent attached antenna. It comply with the standard requirement.

9. EUT TEST PHOTO

Radiated Measurement Photos



CONDUCTED EMISSION Photos

