FCC Radio Test Report

FCC ID: YDUVMTB533

This report concerns (check one) : ■ **Original Grant** □ **Class II Change**

Issued Date	: Sep. 29, 2010
Project No.	: 1009C186
Equipment	: Cruz Tablet
Model Name	: Cruz Tablet T103; Cruz Tablet T105; Cruz Tablet T104
Applicant	: ADVANCED MULTI TECH PTE.LTD
Address	: No. 10 Anson Road #15-17/18,International Plaza Singapore 079903
Manufacturer	: ADVANCED MULTI TECH PTE.LTD
Address	: No. 10 Anson Road #15-17/18,International Plaza Singapore 079903

Tested by:
Neutron Engineering Inc. EMC Laboratory
Date of Receipt: Sep. 23, 2010
Date of Test:
Sep. 23, 2010 ~ Sep. 28, 2010

Testing Engineer : _____ (Ivan Cao)

Technical Manager : _____ (Leo Hung)

Authorized Signatory : _____ (Steven Lu)

Neutron Engineering Inc.

No.3,Jinshagang 1st Road, ShiXia, Dalang Town, Dong Guan, China.
TEL : (0769) 8318-3000 FAX : (0769) 8319-6000

Declaration

Neutron represents to the client that testing is done in accordance with standard procedures as applicable and that test instruments used has been calibrated with the standards traceable to National Measurement Laboratory (**NML**) of **CHINA**, or National Institute of Standards and Technology (**NIST**) of **U.S.A.**

Neutron's reports apply only to the specific samples tested under conditions. It is manufacture's responsibility to ensure that additional production units of this model are manufactured with the identical electrical and mechanical components. **Neutron** shall have no liability for any declarations, inferences or generalizations drawn by the client or others from **Neutron** issued reports.

Neutron's reports must not be used by the client to claim product endorsement by the authorities or any agency of the Government.

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Neutron's laboratory quality assurance procedures are in compliance with the **ISO Guide 17025** requirements, and accredited by the conformity assessment authorities listed in this test report.

Limitation

For the use of the authority's logo is limited unless the Test Standard(s)/Scope(s)/Item(s) mentioned in this test report is (are) included in the conformity assessment authorities acceptance respective.

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1. CERTIFICATION

Equipment:	Cruz Tablet
Brand Name :	N/A
Model Name :	Cruz Tablet T103; Cruz Tablet T105; Cruz Tablet T104
Applicant:	ADVANCED MULTI TECH PTE.LTD
Date of Test :	Sep. 23, 2010 ~ Sep. 28, 2010
Test Item:	ENGINEERING SAMPLE
Standards:	FCC Part15, Subpart C(15.247) / ANCI C63.4 : 2003

The above equipment has been tested and found compliance with the requirement of the relative standards by Neutron Engineering Inc. EMC Laboratory.
The test data, data evaluation, and equipment configuration contained in our test report (Ref No. NEI-FCCP-1-1009C186) were obtained utilizing the test procedures, test instruments, test sites that has been accredited by the Authority of NVLAP and TAF according to the ISO-17025 quality assessment standard and technical standard(s).

2. 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(d)	Antenna conducted Spurious Emission	PASS	
15.247(a)(2)	6dB Bandwidth	PASS	
15.247(b)(3)	Peak Output Power	PASS	
15.209/15.205	Radiated Spurious Emission	PASS	
15.247(e)	Power Spectral Density	PASS	
15.203	Antenna Requirement	PASS	

NOTE:

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

2.1 TEST FACILITY

The test facilities used to collect the test data in this report is **CB03/DG-C03** at the location of No.3,Jinshagang 1st Road, ShiXia, Dalang Town, Dong Guan, China.523792
Neutron's test firm number is 319330

2.2 MEASUREMENT UNCERTAINTY

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

The reported uncertainty of measurement y ± U，where expended uncertainty U is based on a standard uncertainty multiplied by a coverage factor of k=2，providing a level of confidence of approximately 95 %。

A. Conducted Measurement :

Test Site	Method	Measurement Frequency Range	U，(dB)	NOTE
DG-C03	CISPR	150 KHz ~ 30MHz	1.94	

B. Radiated Measurement :

Test Site	Method	Measurement Frequency Range	Ant. H / V	U，(dB)	NOTE
CB03	CISPR	30MHz ~ 200MHz	V	3.82	
		30MHz ~ 200MHz	H	3.60	
		200MHz ~ 1,000MHz	V	3.86	
		200MHz ~ 1,000MHz	H	3.94	

3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

<table>
<tr><td>Equipment</td><td>Cruz Tablet</td></tr>
<tr><td>Brand Name</td><td>N/A</td></tr>
<tr><td>Model Name</td><td>Cruz Tablet T103; Cruz Tablet T105; Cruz Tablet T104</td></tr>
<tr><td>OEM Brand/Model Name</td><td>N/A</td></tr>
<tr><td>Model Difference</td><td>Difference of marketing purpose.</td></tr>
<tr><td>Product Description</td><td>The EUT is a Cruz Tablet.
<table>
<tr><td>Operation Frequency:</td><td>2412~2462 MHz</td></tr>
<tr><td>Modulation Type:
Bit Rate of Transmitter</td><td>802.11b:CCK(11/5.5Mbps), DQPSK(2Mbps), DBPSK(1Mbps)
802.11g/n:
64QAM(72.2/54/48Mbps), 16QAM(36/24Mbps), QPSK(18/12Mbps), BPSK(9/6Mbps)
802.11n up to 72.2 Mbps</td></tr>
<tr><td>Number of Channel</td><td>11 CH, Please see Note 2. (please see page 9)</td></tr>
<tr><td>Antenna Designation:</td><td rowspan="2">Please see Note 3. (please see page 9)</td></tr>
<tr><td>Antenna Gain(Peak)</td></tr>
<tr><td>Output Power:</td><td>802.11b: 18.59 dBm
802.11g: 23.12 dBm
802.11n(20MHz): 22.04 dBm</td></tr>
</table>
Based on the application, features, or specification exhibited in User's Manual, the EUT is considered as an ITE/Computing Device. More details of EUT technical specification, please refer to the User's Manual.</td></tr>
<tr><td>Power Source</td><td>#1 DC Voltage supplied from AC/DC Adapter.
Brand : DVE /Model :DSA-20PFE-05 FUS 050300
#2 DC Voltage supplied from AC/DC Adapter.
Brand : PHIHONG /Model :PSA15R-050P
#3 DC Voltage supplied from Lithium battery*2 set.(parallel)
#4 DC Voltage supplied from Host system</td></tr>
<tr><td>Power Rating</td><td>#1 I/P AC 100~240V~50/60Hz 0.7A O/P DC 5V 3A
#2 I/P AC100~240V~ 50-60Hz 0.5A 33~48VA
O/P DC 5.0V 3.0A
#3 DC 3.7V 4000mAh
#4 I/P AC 120V/60Hz</td></tr>
<tr><td>Connecting I/O Port(s)</td><td>Please refer to the User's Manual</td></tr>
<tr><td>Products Covered</td><td>N/A</td></tr>
</table>

Note:

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

2. CH 01 – CH 11 for 802.11b, 802.11g, 802.11n(20MHz)

Channel List

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		

3. Table for Filed Antenna

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	INPAQ	WA-C-LA-03-004	CHIP	N/A	2.8

3.2 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	TX B MODE CHANNEL 01//06/11
Mode 2	TX G MODE CHANNEL 01/06/11
Mode 3	TX N-20MHZ MODE CHANNEL 01/06/11
Mode 4	Video Play
Mode 5	Play Music&Photo
Mode 6	USB Read&Write
Mode 7	WIFI Normal Link

The EUT system operated these modes were found to be the worst case during the pre-scanning test as Following:

For Conducted Test	
Final Test Mode	Description
Mode 4	Video Play
Mode 5	Play Music&Photo
Mode 6	USB Read&Write
Mode 7	WIFI Normal Link

For Radiated Test	
Final Test Mode	Description
Mode 1	TX B MODE CHANNEL 01//06/11
Mode 2	TX G MODE CHANNEL 01/06/11
Mode 3	TX N-20MHZ MODE CHANNEL 01/06/11
Mode 4	Video Play
Mode 5	Play Music&Photo
Mode 6	USB Read&Write
Mode 7	WIFI Normal Link

Note:

(1) The measurements are performed at the highest, middle, lowest available channels.

(2) The EUT is considered a portable unit; it was pre-tested on the positioned of each 3 axis. The worst case was found positioned on X-plane. Therefore only the test data of this X-plane was used for radiated emission measurement test.

(3) During the output power test, all data rates have been investigated and the highest output powers were recorded are as follows:
802.11b mode: DBPSK (1Mbps)
802.11g mode: OFDM (6Mbps)
802.11n HT20 mode : MCS0 (6Mbps)
For radiated emission tests, the highest output powers were set for final test.

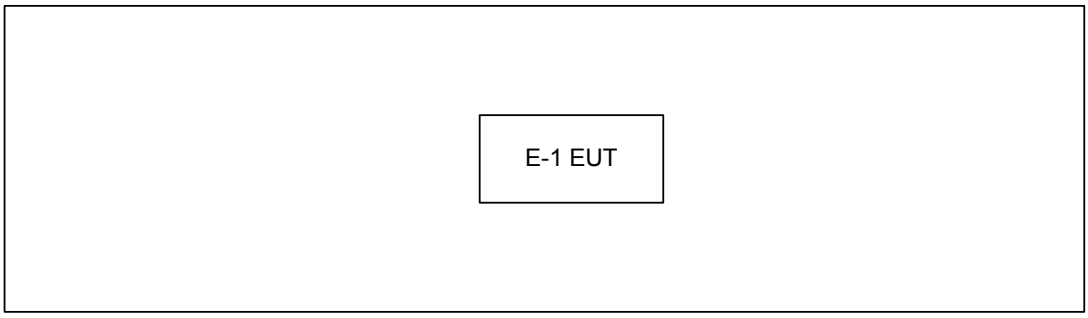
3.3 TABLE OF PARAMETERS OF TEXT SOFTWARE SETTING

During testing channel & power controlling software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product power parameters of WLAN

Test software Version	Test Program: N/A		
Frequency	2412 MHz	2437 MHz	2462 MHz
IEEE 802.11b DSSS	16	16	16
IEEE 802.11g OFDM	14	14	14
IEEE 802.11n (20MHz)	13	13	13

3.4 BLOCK DIGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

Radiation TX/RX Mode:



3.5 DESCRIPTION OF SUPPORT UNITS

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

Item	Equipment	Mfr/Brand	Model/Type No.	FCC ID	Series No.	Note
E-1	Cruz Tablet	N/A	Cruz Tablet T103	YDUVMTB533	N/A	EUT

Item	Shielded Type	Ferrite Core	Length	Note

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.

4. EMC EMISSION TEST

4.1 CONDUCTED EMISSION MEASUREMENT

4.1.1 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.

4.1.2 MEASUREMENT INSTRUMENTS LIST AND SETTING

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	LISN	EMCO	3816/2	00052765	May.26.2011
2	LISN	Rolf Heine	NNB-2-16Z	99044	May.26.2011
3	50Ω Terminator	SHX	TF2-3G-A	08122901	May.26.2011
4	Transient Limiter	Agilent	11947A	3107A03668	May.26.2011
5	Test Cable	N/A	C-06_C03	N/A	Nov.16.2010
6	Test Receiver	R&S	ESCI	100382	May.26.2011

Remark: ” N/A” denotes No Model Name. , Serial No. or No Calibration specified.

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

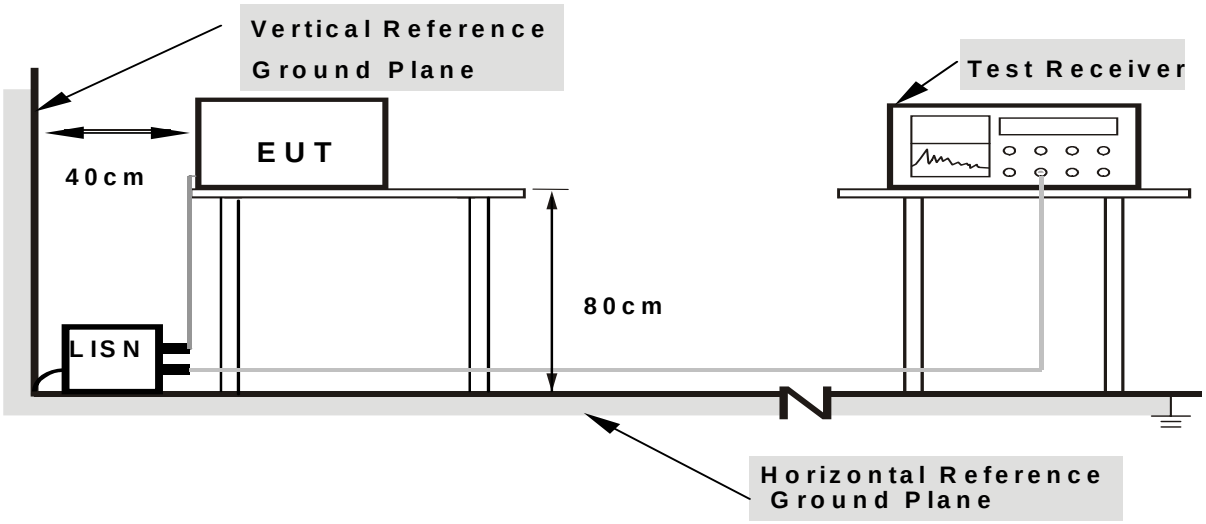
4.1.3 TEST PROCEDURE

a. 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.
b. 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.
c. 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.
d. LISN at least 80 cm from nearest part of EUT chassis.
e. For the actual test configuration, please refer to the related Item –EUT Test Photos.

4.1.4 DEVIATION FROM TEST STANDARD

No deviation

4.1.5 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

4.1.6 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.
The EUT was programmed to be in continuously transmitting/ receiving mode.

4.1.7 TEST RESULTS

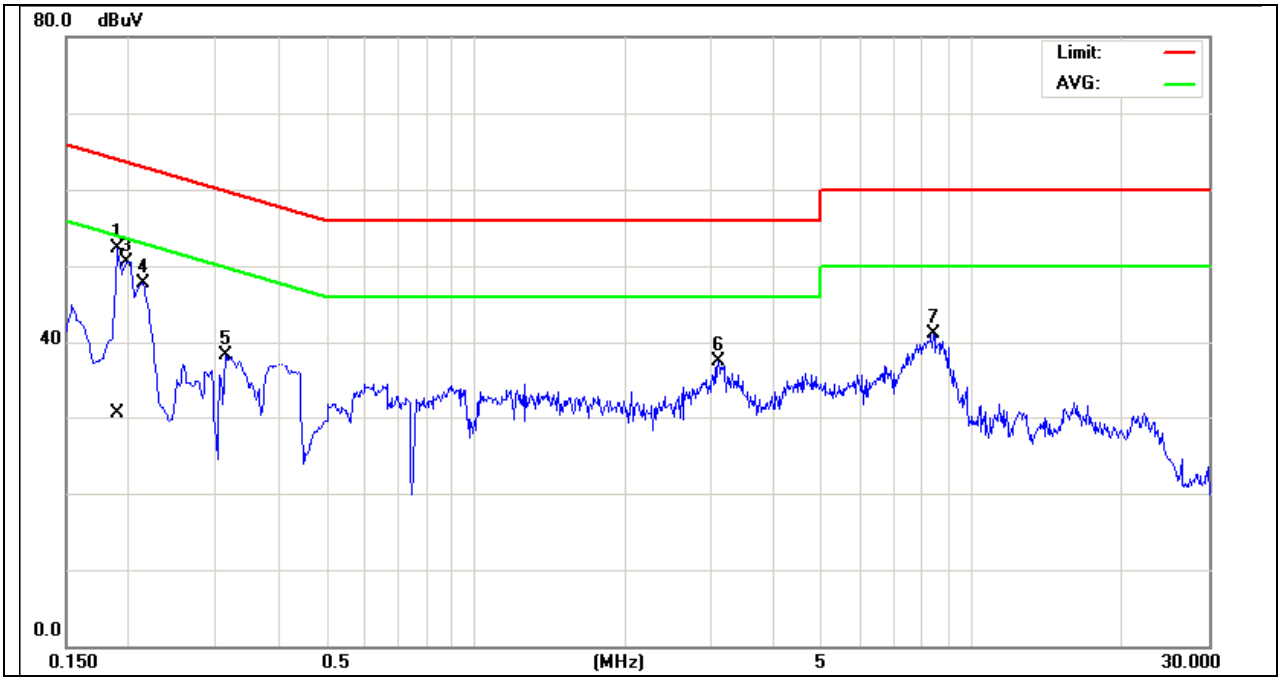
EUT：	Cruz Tablet	Model Name ：	Cruz Tablet T103
Temperature：	23 ℃	Relative Humidity：	54 %
Pressure：	1010hPa	Test Power ：	AC 120V/60Hz
Test Mode ：	Video Play (PHIHONG Adapter)		

Freq. (MHz)	Terminal L/N	Measured(dBuV)		Limits(dBuV)		Margin (dB)	Note
		QP-Mode	AV-Mode	QP-Mode	AV-Mode		
0.19	Line	52.22	30.46	64.04	54.04	-11.82	(QP)
0.20	Line	50.55	*	63.69	53.69	-13.14	(QP)
0.21	Line	47.71	*	63.05	53.05	-15.34	(QP)
0.31	Line	38.23	*	59.86	49.86	-21.63	(QP)
3.10	Line	37.42	*	56.00	46.00	-18.58	(QP)
8.39	Line	41.08	*	60.00	50.00	-18.92	(QP)

Remark

(1) All readings are QP Mode value unless otherwise stated AVG in column of『Note』. If the QP Mode Measured value compliance with the QP Limits and lower than AVG Limits, the EUT shall be deemed to meet both QP & AVG Limits and then only QP Mode was measured, but AVG Mode didn't perform。In this case, a " * " marked in AVG Mode column of Interference Voltage Measured。

(2) Measuring frequency range from 150KHz to 30MHz。



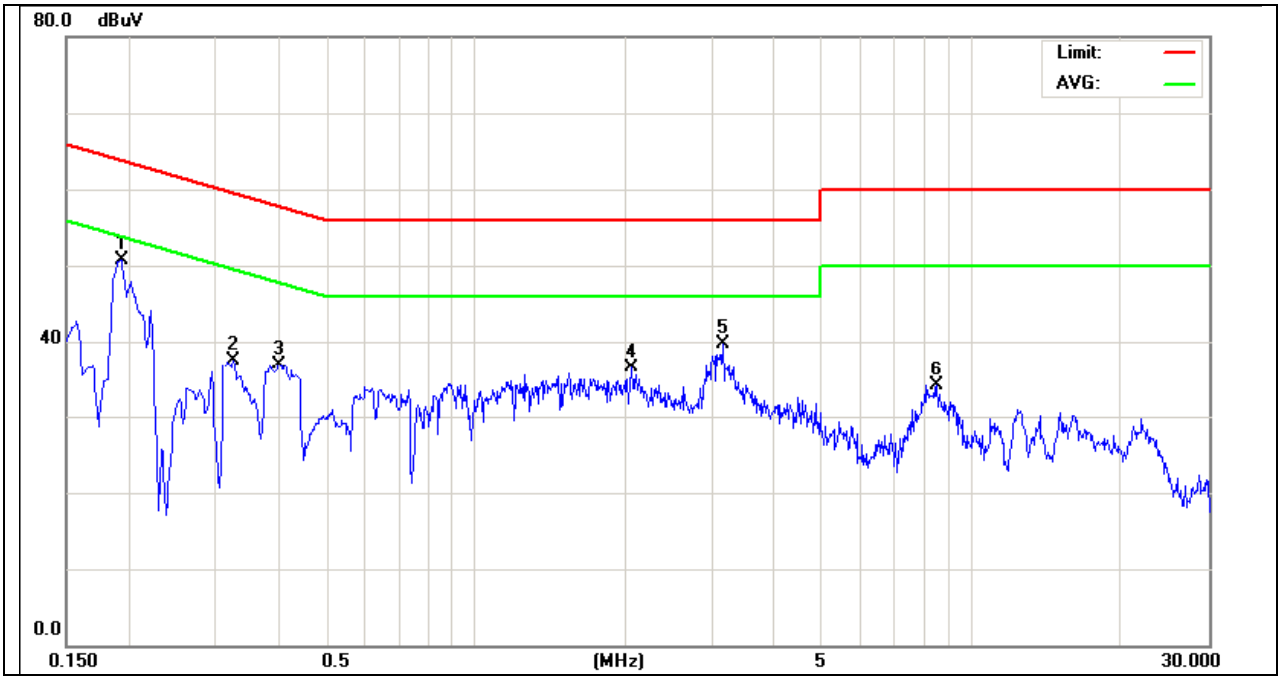
EUT：	Cruz Tablet	Model Name ：	Cruz Tablet T103
Temperature：	23 ℃	Relative Humidity：	54 %
Pressure：	1010hPa	Test Power ：	AC 120V/60Hz
Test Mode ：	Video Play (PHIHONG Adapter)		

Freq. (MHz)	Terminal L/N	Measured(dBuV)		Limits(dBuV)		Margin (dB)	Note
		QP-Mode	AV-Mode	QP-Mode	AV-Mode		
0.19	Neutral	50.78	*	63.86	53.86	-13.08	(QP)
0.33	Neutral	37.59	*	59.55	49.55	-21.96	(QP)
0.40	Neutral	36.82	*	57.81	47.81	-20.99	(QP)
2.06	Neutral	36.59	*	56.00	46.00	-19.41	(QP)
3.16	Neutral	39.77	*	56.00	46.00	-16.23	(QP)
8.53	Neutral	34.18	*	60.00	50.00	-25.82	(QP)

Remark

(1) All readings are QP Mode value unless otherwise stated AVG in column of『Note』. If the QP Mode Measured value compliance with the QP Limits and lower than AVG Limits, the EUT shall be deemed to meet both QP & AVG Limits and then only QP Mode was measured, but AVG Mode didn't perform。In this case, a " * " marked in AVG Mode column of Interference Voltage Measured。

(2) Measuring frequency range from 150KHz to 30MHz。



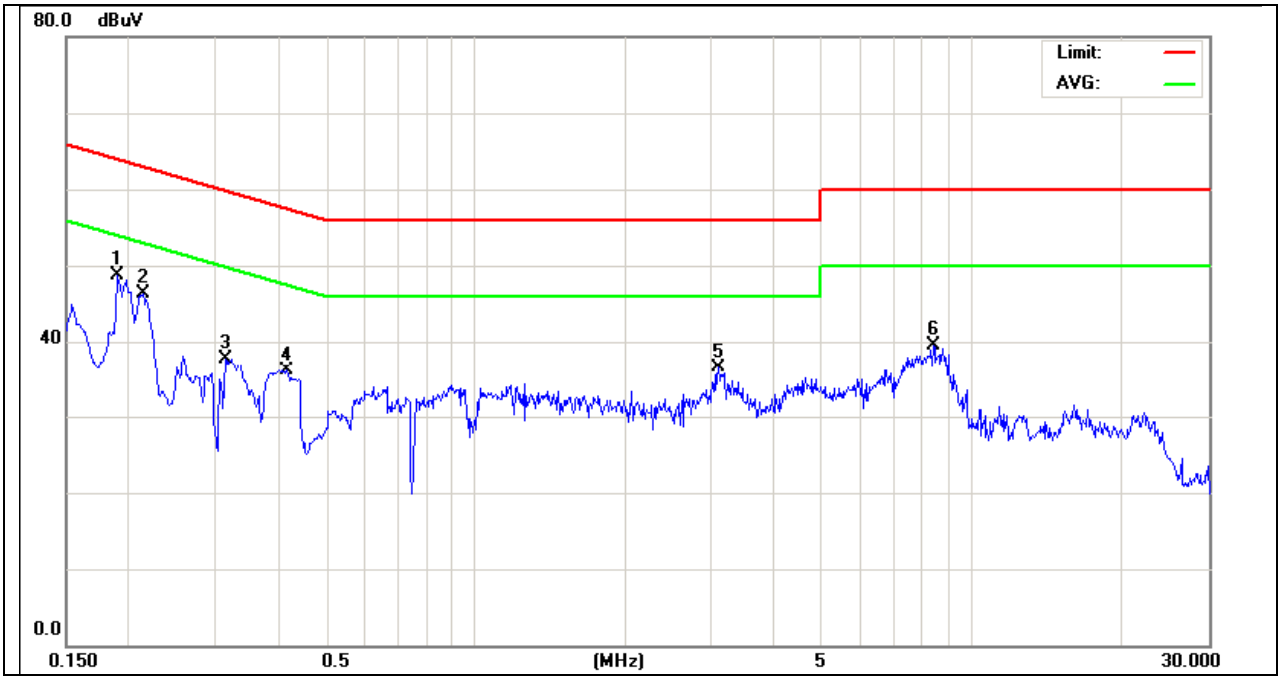
EUT：	Cruz Tablet	Model Name ：	Cruz Tablet T103
Temperature：	23 ℃	Relative Humidity：	54 %
Pressure：	1010hPa	Test Power ：	AC 120V/60Hz
Test Mode ：	Play Music&Photo (PHIHONG Adapter)		

Freq. (MHz)	Terminal L/N	Measured(dBuV)		Limits(dBuV)		Margin (dB)	Note
		QP-Mode	AV-Mode	QP-Mode	AV-Mode		
0.19	Line	48.72	*	64.04	54.04	-15.32	(QP)
0.21	Line	46.21	*	63.05	53.05	-16.84	(QP)
0.31	Line	37.73	*	59.86	49.86	-22.13	(QP)
0.41	Line	36.18	*	57.55	47.55	-21.37	(QP)
3.10	Line	36.42	*	56.00	46.00	-19.58	(QP)
8.39	Line	39.58	*	60.00	50.00	-20.42	(QP)

Remark

(1) All readings are QP Mode value unless otherwise stated AVG in column of『Note』. If the QP Mode Measured value compliance with the QP Limits and lower than AVG Limits, the EUT shall be deemed to meet both QP & AVG Limits and then only QP Mode was measured, but AVG Mode didn't perform。In this case, a " * " marked in AVG Mode column of Interference Voltage Measured。

(2) Measuring frequency range from 150KHz to 30MHz。



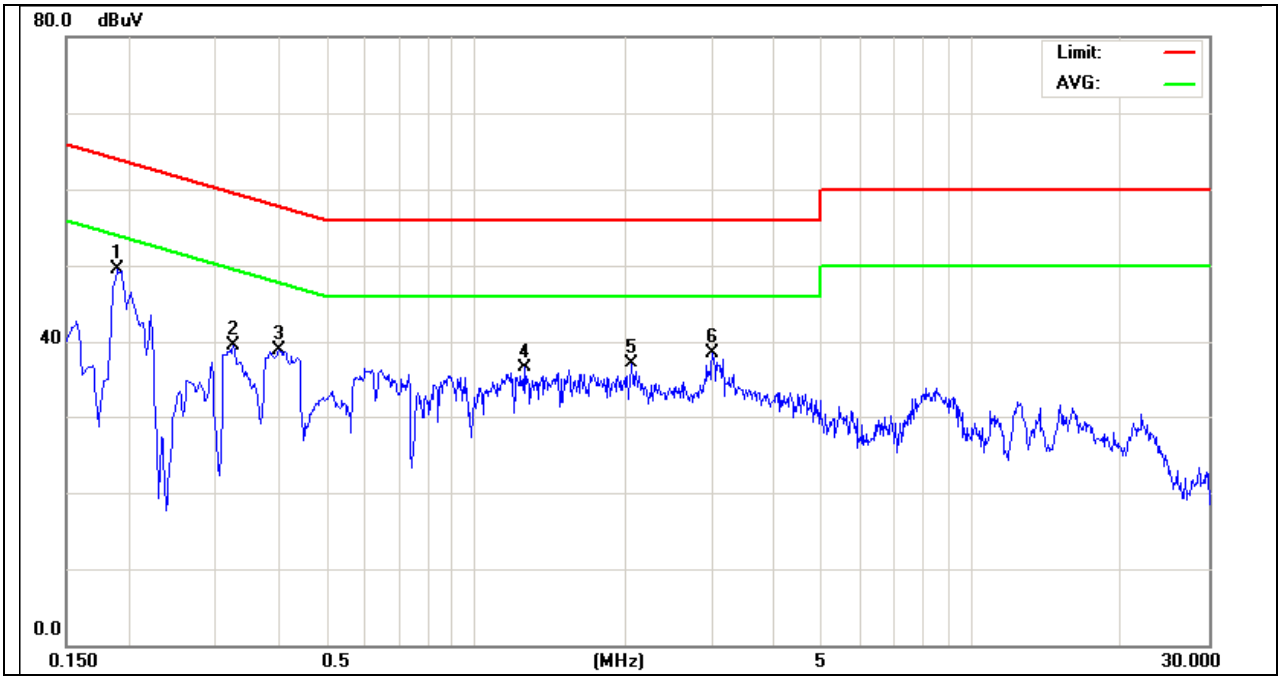
EUT：	Cruz Tablet	Model Name ：	Cruz Tablet T103
Temperature：	23 ℃	Relative Humidity：	54 %
Pressure：	1010hPa	Test Power ：	AC 120V/60Hz
Test Mode ：	Play Music&Photo (PHIHONG Adapter)		

Freq. (MHz)	Terminal L/N	Measured(dBuV)		Limits(dBuV)		Margin (dB)	Note
		QP-Mode	AV-Mode	QP-Mode	AV-Mode		
0.19	Neutral	49.44	*	64.02	54.02	-14.58	(QP)
0.33	Neutral	39.59	*	59.55	49.55	-19.96	(QP)
0.40	Neutral	38.82	*	57.81	47.81	-18.99	(QP)
1.25	Neutral	36.48	*	56.00	46.00	-19.52	(QP)
2.06	Neutral	37.09	*	56.00	46.00	-18.91	(QP)
3.02	Neutral	38.50	*	56.00	46.00	-17.50	(QP)

Remark

(1) All readings are QP Mode value unless otherwise stated AVG in column of『Note』. If the QP Mode Measured value compliance with the QP Limits and lower than AVG Limits, the EUT shall be deemed to meet both QP & AVG Limits and then only QP Mode was measured, but AVG Mode didn't perform。In this case, a " * " marked in AVG Mode column of Interference Voltage Measured。

(2) Measuring frequency range from 150KHz to 30MHz。



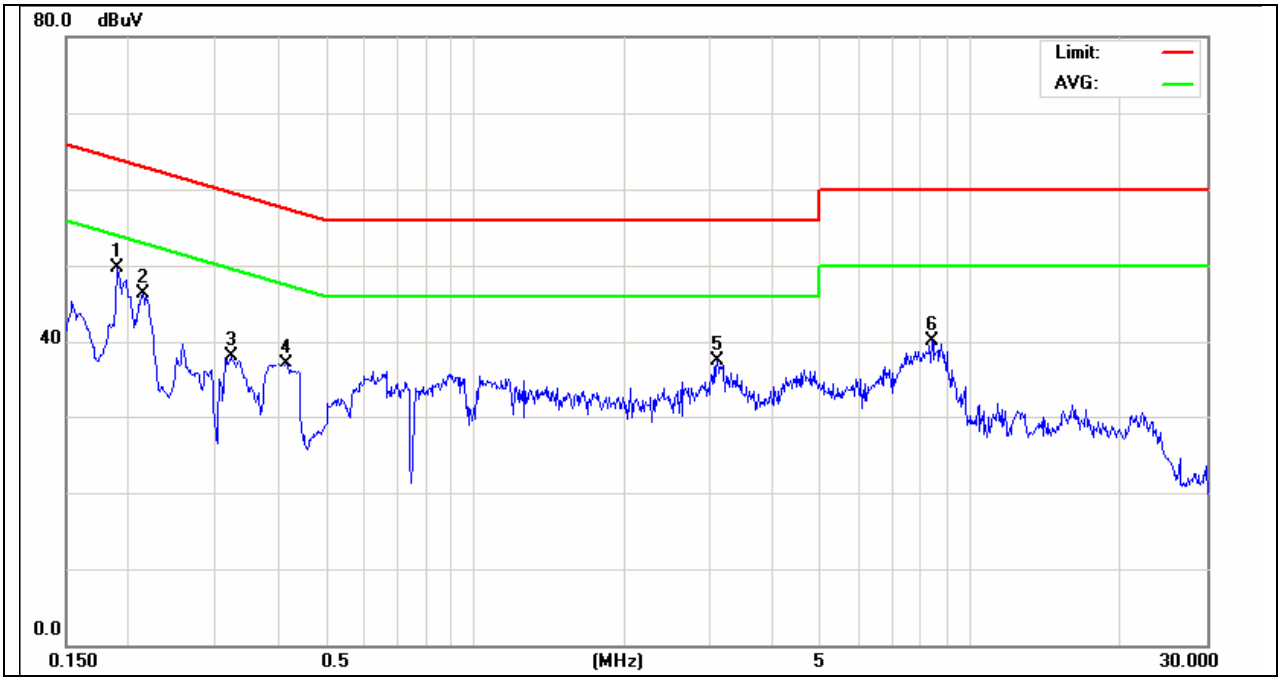
EUT：	Cruz Tablet	Model Name ：	Cruz Tablet T103
Temperature：	23 ℃	Relative Humidity：	54 %
Pressure：	1010hPa	Test Power ：	AC 120V/60Hz
Test Mode ：	USB Read&Write (PHIHONG Adapter)		

Freq. (MHz)	Terminal L/N	Measured(dBuV)		Limits(dBuV)		Margin (dB)	Note
		QP-Mode	AV-Mode	QP-Mode	AV-Mode		
0.19	Line	49.72	*	64.04	54.04	-14.32	(QP)
0.21	Line	46.21	*	63.05	53.05	-16.84	(QP)
0.32	Line	38.19	*	59.66	49.66	-21.47	(QP)
0.41	Line	37.18	*	57.55	47.55	-20.37	(QP)
3.10	Line	37.42	*	56.00	46.00	-18.58	(QP)
8.39	Line	40.08	*	60.00	50.00	-19.92	(QP)

Remark

(1) All readings are QP Mode value unless otherwise stated AVG in column of『Note』. If the QP Mode Measured value compliance with the QP Limits and lower than AVG Limits, the EUT shall be deemed to meet both QP & AVG Limits and then only QP Mode was measured, but AVG Mode didn't perform。In this case, a " * " marked in AVG Mode column of Interference Voltage Measured。

(2) Measuring frequency range from 150KHz to 30MHz。



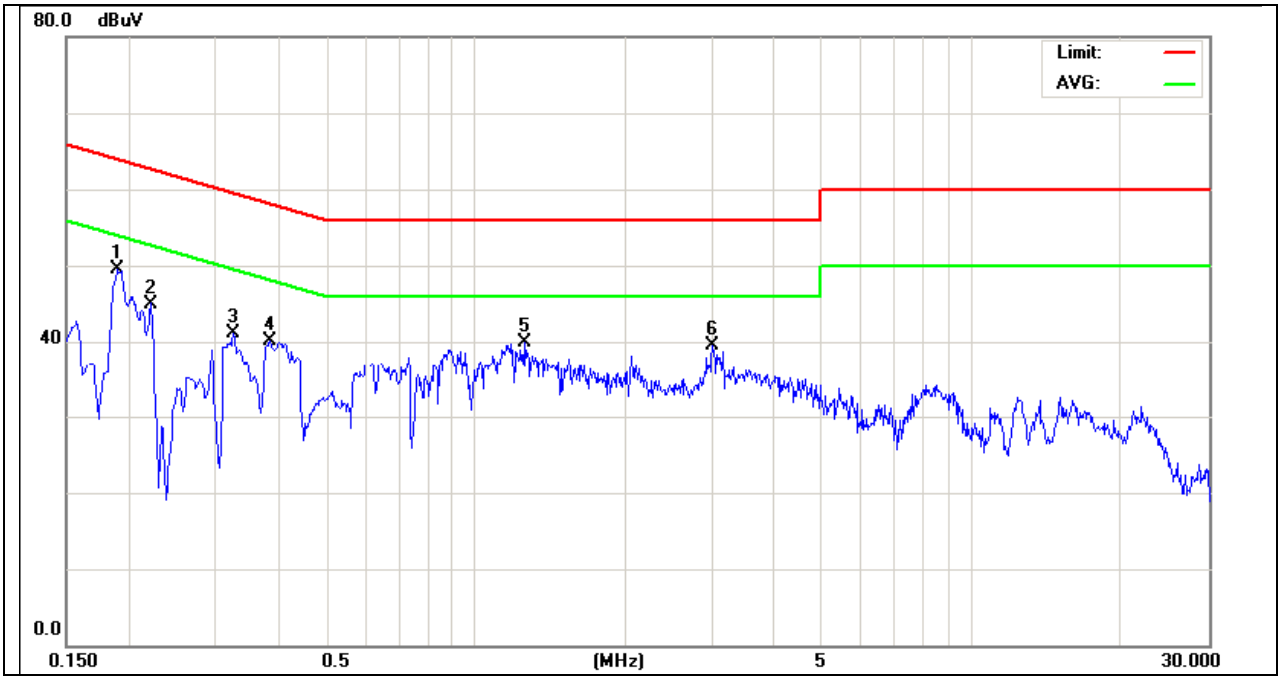
EUT：	Cruz Tablet	Model Name ：	Cruz Tablet T103
Temperature：	23 ℃	Relative Humidity：	54 %
Pressure：	1010hPa	Test Power ：	AC 120V/60Hz
Test Mode ：	USB Read&Write (PHIHONG Adapter)		

Freq. (MHz)	Terminal L/N	Measured(dBuV)		Limits(dBuV)		Margin (dB)	Note
		QP-Mode	AV-Mode	QP-Mode	AV-Mode		
0.19	Neutral	49.44	*	64.02	54.02	-14.58	(QP)
0.22	Neutral	45.00	*	62.74	52.74	-17.74	(QP)
0.33	Neutral	41.09	*	59.55	49.55	-18.46	(QP)
0.39	Neutral	40.12	*	58.15	48.15	-18.03	(QP)
1.25	Neutral	39.98	*	56.00	46.00	-16.02	(QP)
3.02	Neutral	39.50	*	56.00	46.00	-16.50	(QP)

Remark

(1) All readings are QP Mode value unless otherwise stated AVG in column of『Note』. If the QP Mode Measured value compliance with the QP Limits and lower than AVG Limits, the EUT shall be deemed to meet both QP & AVG Limits and then only QP Mode was measured, but AVG Mode didn't perform。In this case, a " * " marked in AVG Mode column of Interference Voltage Measured。

(2) Measuring frequency range from 150KHz to 30MHz。



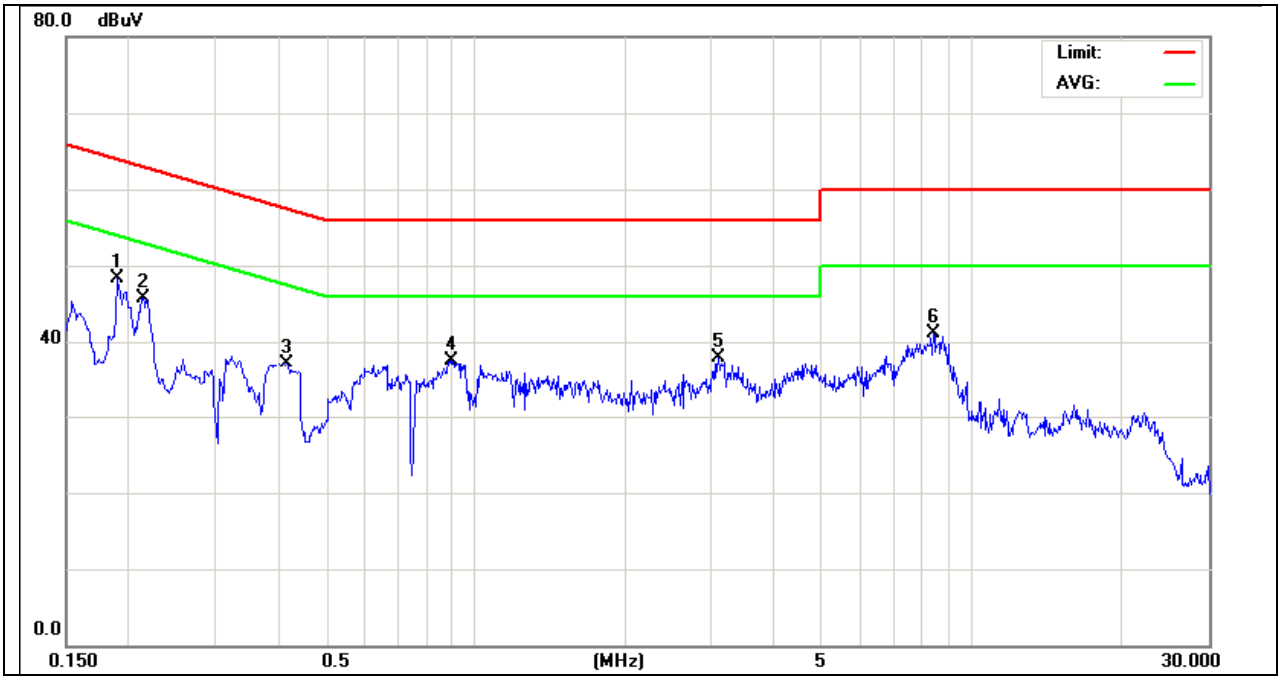
EUT：	Cruz Tablet	Model Name ：	Cruz Tablet T103
Temperature：	23 ℃	Relative Humidity：	54 %
Pressure：	1010hPa	Test Power ：	AC 120V/60Hz
Test Mode ：	WIFI Normal Link (PHIHONG Adapter)		

Freq. (MHz)	Terminal L/N	Measured(dBuV)		Limits(dBuV)		Margin (dB)	Note
		QP-Mode	AV-Mode	QP-Mode	AV-Mode		
0.19	Line	48.22	*	64.04	54.04	-15.82	(QP)
0.21	Line	45.71	*	63.05	53.05	-17.34	(QP)
0.41	Line	37.18	*	57.55	47.55	-20.37	(QP)
0.90	Line	37.57	*	56.00	46.00	-18.43	(QP)
3.10	Line	37.92	*	56.00	46.00	-18.08	(QP)
8.39	Line	41.08	*	60.00	50.00	-18.92	(QP)

Remark

(1) All readings are QP Mode value unless otherwise stated AVG in column of『Note』. If the QP Mode Measured value compliance with the QP Limits and lower than AVG Limits, the EUT shall be deemed to meet both QP & AVG Limits and then only QP Mode was measured, but AVG Mode didn't perform。In this case, a " * " marked in AVG Mode column of Interference Voltage Measured。

(2) Measuring frequency range from 150KHz to 30MHz。



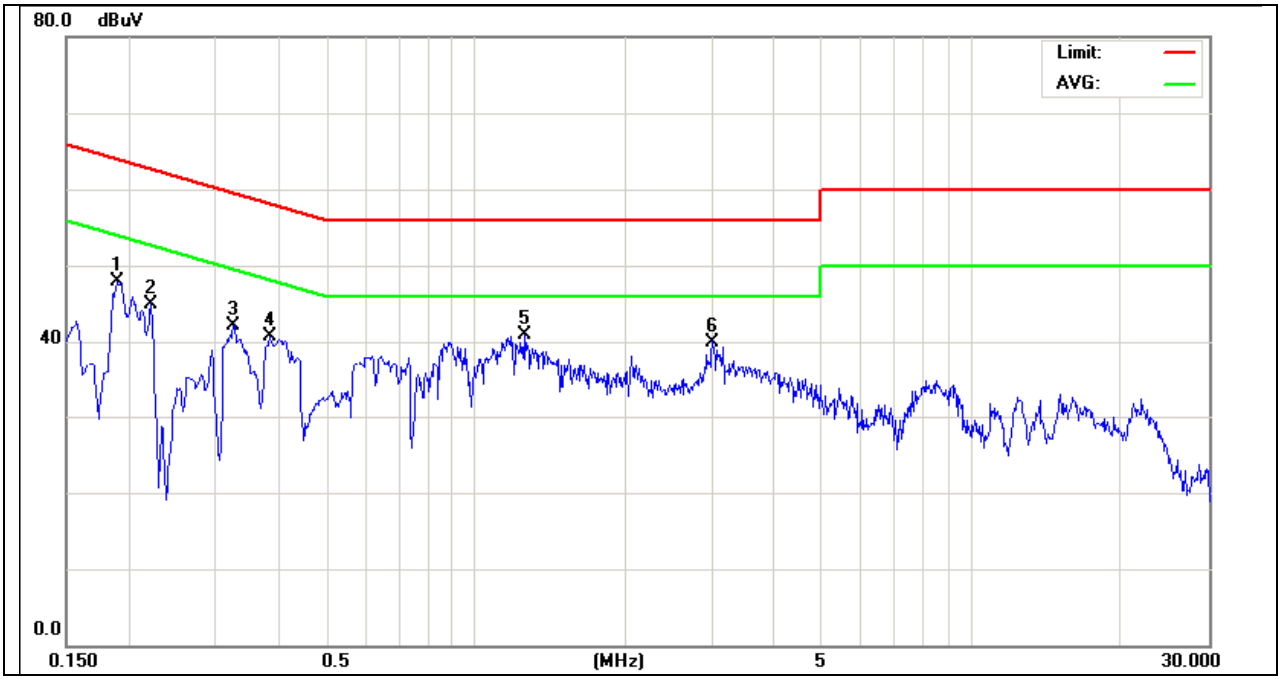
EUT：	Cruz Tablet	Model Name ：	Cruz Tablet T103
Temperature：	23 ℃	Relative Humidity：	54 %
Pressure：	1010hPa	Test Power ：	AC 120V/60Hz
Test Mode ：	WIFI Normal Link (PHIHONG Adapter)		

Freq. (MHz)	Terminal L/N	Measured(dBuV)		Limits(dBuV)		Margin (dB)	Note
		QP-Mode	AV-Mode	QP-Mode	AV-Mode		
0.19	Neutral	47.94	*	64.02	54.02	-16.08	(QP)
0.22	Neutral	45.00	*	62.74	52.74	-17.74	(QP)
0.33	Neutral	42.09	*	59.55	49.55	-17.46	(QP)
0.39	Neutral	40.62	*	58.15	48.15	-17.53	(QP)
1.25	Neutral	40.98	*	56.00	46.00	-15.02	(QP)
3.02	Neutral	40.00	*	56.00	46.00	-16.00	(QP)

Remark

(1) All readings are QP Mode value unless otherwise stated AVG in column of『Note』. If the QP Mode Measured value compliance with the QP Limits and lower than AVG Limits, the EUT shall be deemed to meet both QP & AVG Limits and then only QP Mode was measured, but AVG Mode didn't perform。In this case, a " * " marked in AVG Mode column of Interference Voltage Measured。

(2) Measuring frequency range from 150KHz to 30MHz。



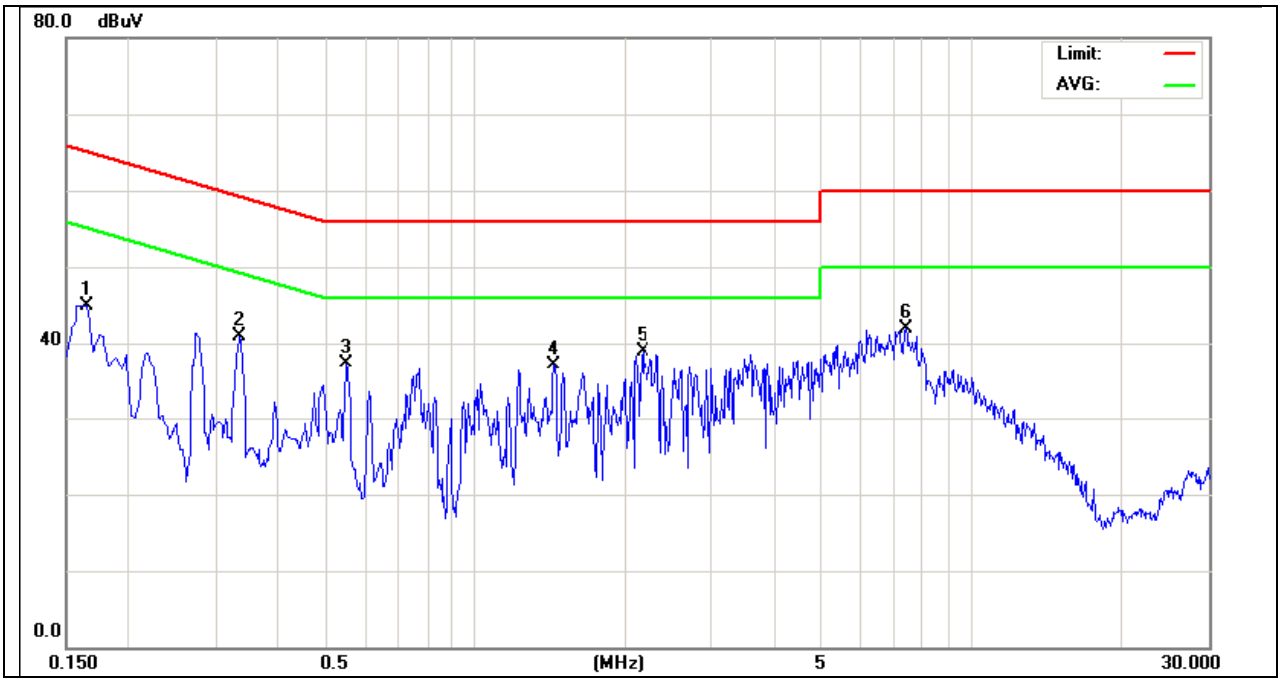
EUT：	Cruz Tablet	Model Name ：	Cruz Tablet T103
Temperature：	23 ℃	Relative Humidity：	54 %
Pressure：	1010hPa	Test Power ：	AC 120V/60Hz
Test Mode ：	Video Play (DVE Adapter)		

Freq. (MHz)	Terminal L/N	Measured(dBuV)		Limits(dBuV)		Margin (dB)	Note
		QP-Mode	AV-Mode	QP-Mode	AV-Mode		
0.17	Line	44.91	*	65.21	55.21	-20.30	(QP)
0.33	Line	40.84	*	59.35	49.35	-18.51	(QP)
0.55	Line	37.21	*	56.00	46.00	-18.79	(QP)
1.44	Line	37.15	*	56.00	46.00	-18.85	(QP)
2.17	Line	38.82	*	56.00	46.00	-17.18	(QP)
7.41	Line	41.89	*	60.00	50.00	-18.11	(QP)

Remark

(1) All readings are QP Mode value unless otherwise stated AVG in column of『Note』. If the QP Mode Measured value compliance with the QP Limits and lower than AVG Limits, the EUT shall be deemed to meet both QP & AVG Limits and then only QP Mode was measured, but AVG Mode didn't perform。In this case, a " * " marked in AVG Mode column of Interference Voltage Measured。

(2) Measuring frequency range from 150KHz to 30MHz。



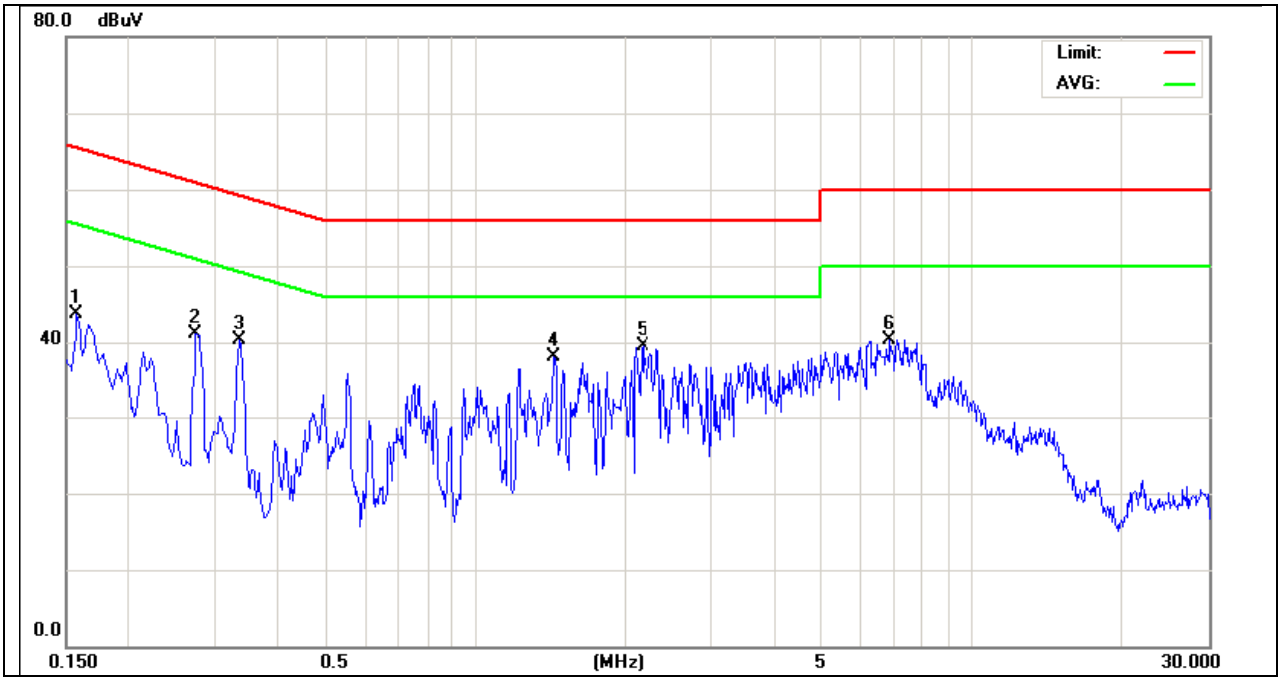
EUT：	Cruz Tablet	Model Name ：	Cruz Tablet T103
Temperature：	23 ℃	Relative Humidity：	54 %
Pressure：	1010hPa	Test Power ：	AC 120V/60Hz
Test Mode ：	Video Play (DVE Adapter)		

Freq. (MHz)	Terminal L/N	Measured(dBuV)		Limits(dBuV)		Margin (dB)	Note
		QP-Mode	AV-Mode	QP-Mode	AV-Mode		
0.16	Neutral	43.63	*	65.57	55.57	-21.94	(QP)
0.27	Neutral	41.07	*	61.00	51.00	-19.93	(QP)
0.33	Neutral	40.22	*	59.35	49.35	-19.13	(QP)
1.44	Neutral	38.04	*	56.00	46.00	-17.96	(QP)
2.18	Neutral	39.55	*	56.00	46.00	-16.45	(QP)
6.86	Neutral	40.25	*	60.00	50.00	-19.75	(QP)

Remark

(1) All readings are QP Mode value unless otherwise stated AVG in column of『Note』. If the QP Mode Measured value compliance with the QP Limits and lower than AVG Limits, the EUT shall be deemed to meet both QP & AVG Limits and then only QP Mode was measured, but AVG Mode didn't perform。In this case, a " * " marked in AVG Mode column of Interference Voltage Measured。

(2) Measuring frequency range from 150KHz to 30MHz。



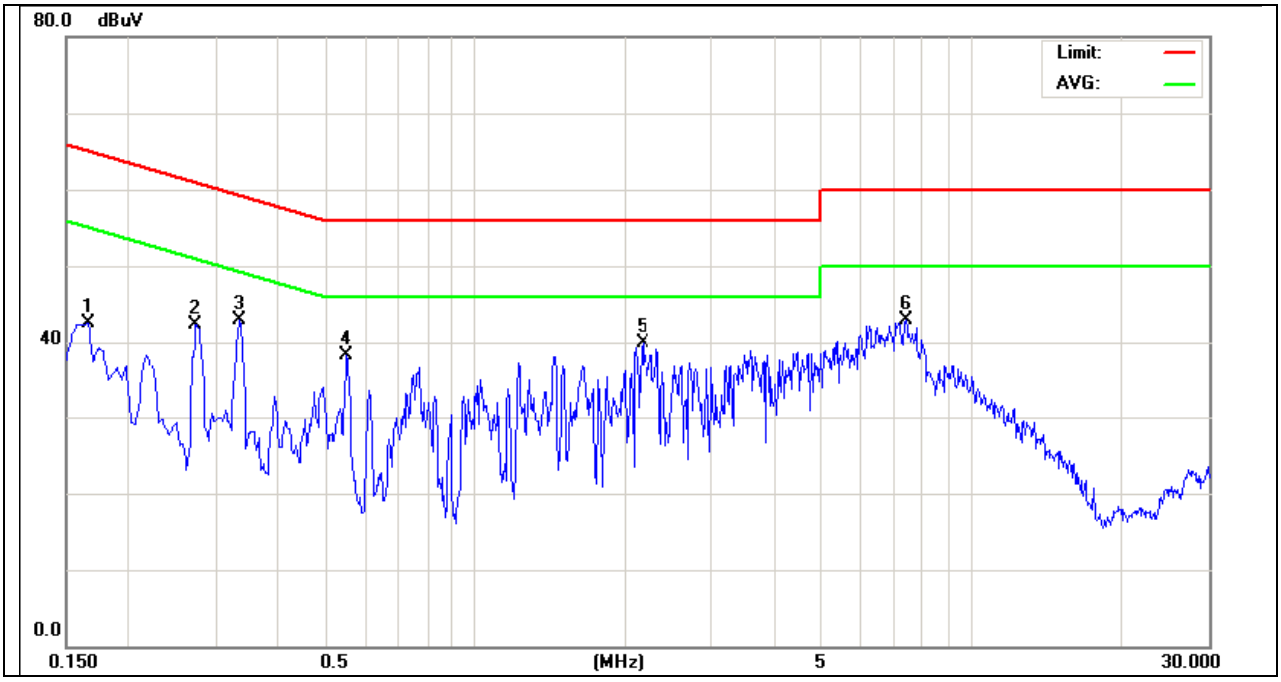
EUT：	Cruz Tablet	Model Name ：	Cruz Tablet T103
Temperature：	23 ℃	Relative Humidity：	54 %
Pressure：	1010hPa	Test Power ：	AC 120V/60Hz
Test Mode ：	Play Music&Photo (DVE Adapter)		

Freq. (MHz)	Terminal L/N	Measured(dBuV)		Limits(dBuV)		Margin (dB)	Note
		QP-Mode	AV-Mode	QP-Mode	AV-Mode		
0.17	Line	42.43	*	65.16	55.16	-22.73	(QP)
0.27	Line	42.28	*	61.00	51.00	-18.72	(QP)
0.33	Line	42.84	*	59.35	49.35	-16.51	(QP)
0.55	Line	38.21	*	56.00	46.00	-17.79	(QP)
2.17	Line	39.82	*	56.00	46.00	-16.18	(QP)
7.41	Line	42.89	*	60.00	50.00	-17.11	(QP)

Remark

(1) All readings are QP Mode value unless otherwise stated AVG in column of『Note』. If the QP Mode Measured value compliance with the QP Limits and lower than AVG Limits, the EUT shall be deemed to meet both QP & AVG Limits and then only QP Mode was measured, but AVG Mode didn't perform。In this case, a " * " marked in AVG Mode column of Interference Voltage Measured。

(2) Measuring frequency range from 150KHz to 30MHz。



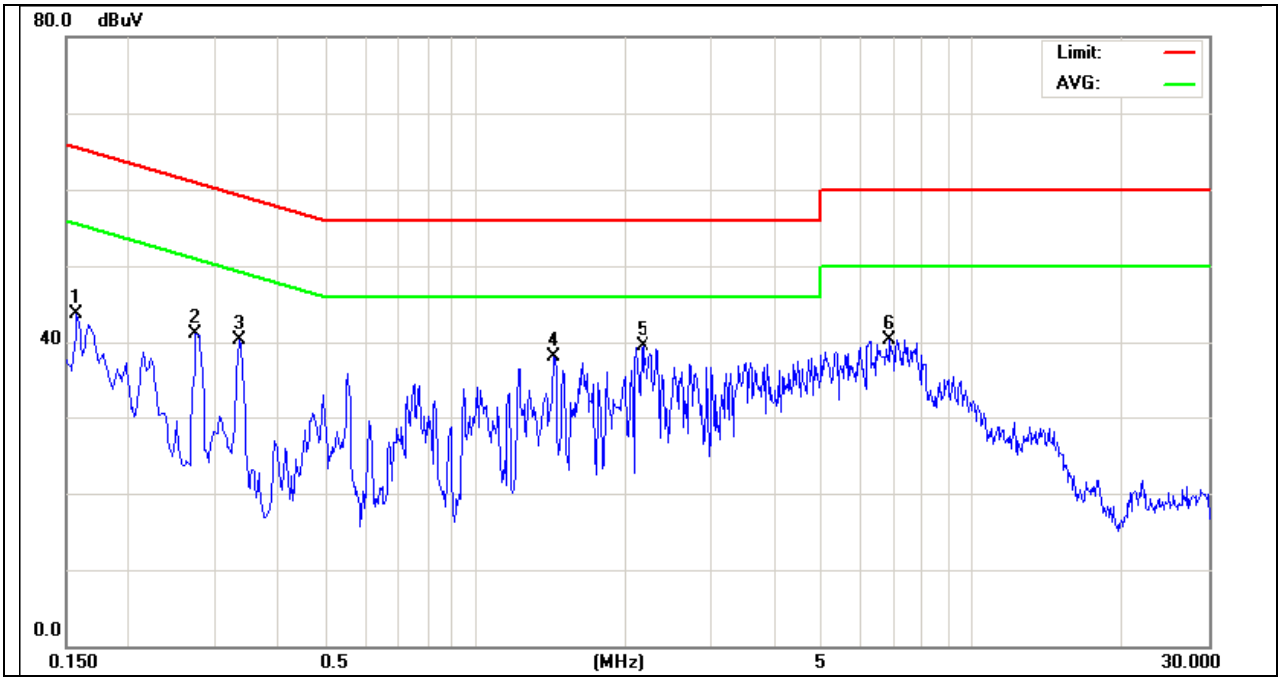
EUT：	Cruz Tablet	Model Name ：	Cruz Tablet T103
Temperature：	23 ℃	Relative Humidity：	54 %
Pressure：	1010hPa	Test Power ：	AC 120V/60Hz
Test Mode ：	Play Music&Photo (DVE Adapter)		

Freq. (MHz)	Terminal L/N	Measured(dBuV)		Limits(dBuV)		Margin (dB)	Note
		QP-Mode	AV-Mode	QP-Mode	AV-Mode		
0.16	Neutral	43.63	*	65.57	55.57	-21.94	(QP)
0.27	Neutral	41.07	*	61.00	51.00	-19.93	(QP)
0.33	Neutral	40.22	*	59.35	49.35	-19.13	(QP)
1.44	Neutral	38.04	*	56.00	46.00	-17.96	(QP)
2.18	Neutral	39.55	*	56.00	46.00	-16.45	(QP)
6.86	Neutral	40.25	*	60.00	50.00	-19.75	(QP)

Remark

(1) All readings are QP Mode value unless otherwise stated AVG in column of『Note』. If the QP Mode Measured value compliance with the QP Limits and lower than AVG Limits, the EUT shall be deemed to meet both QP & AVG Limits and then only QP Mode was measured, but AVG Mode didn't perform。In this case, a " * " marked in AVG Mode column of Interference Voltage Measured。

(2) Measuring frequency range from 150KHz to 30MHz。



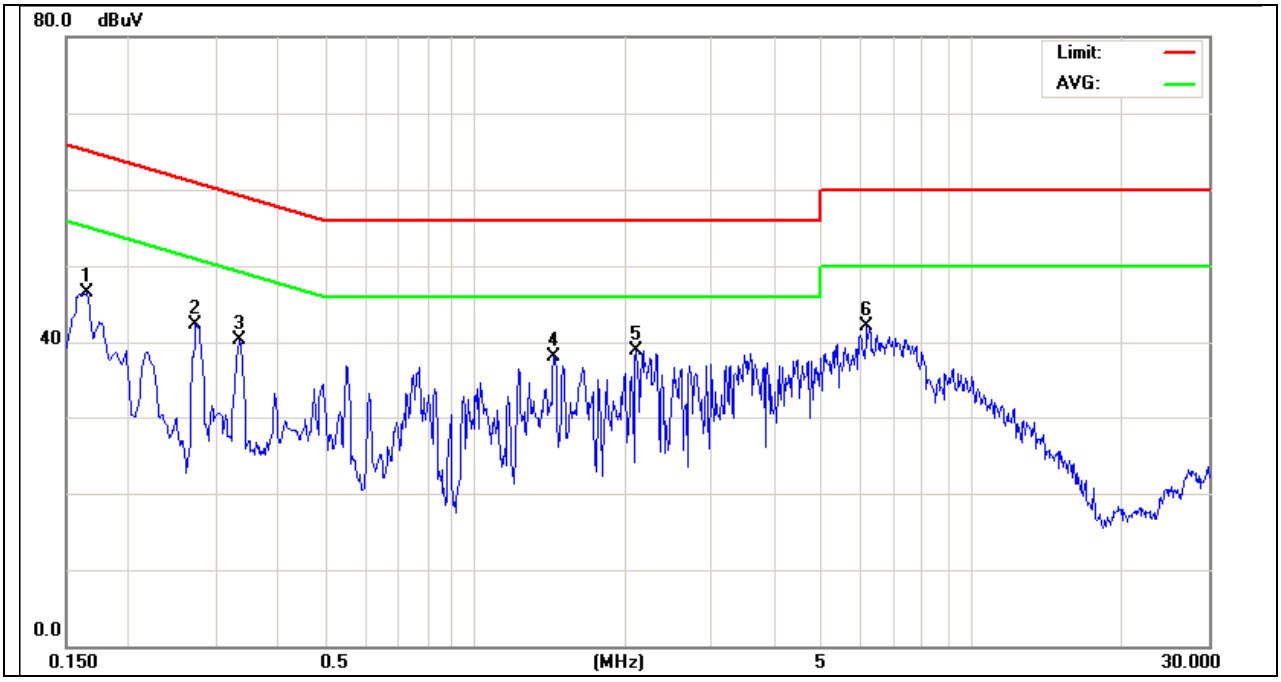
EUT：	Cruz Tablet	Model Name ：	Cruz Tablet T103
Temperature：	23 ℃	Relative Humidity：	54 %
Pressure：	1010hPa	Test Power ：	AC 120V/60Hz
Test Mode ：	USB Read&Write (DVE Adapter)		

Freq. (MHz)	Terminal L/N	Measured(dBuV)		Limits(dBuV)		Margin (dB)	Note
		QP-Mode	AV-Mode	QP-Mode	AV-Mode		
0.17	Line	46.41	*	65.21	55.21	-18.80	(QP)
0.27	Line	42.28	*	61.00	51.00	-18.72	(QP)
0.33	Line	40.34	*	59.35	49.35	-19.01	(QP)
1.44	Line	38.15	*	56.00	46.00	-17.85	(QP)
2.10	Line	38.87	*	56.00	46.00	-17.13	(QP)
6.18	Line	42.17	*	60.00	50.00	-17.83	(QP)

Remark

(1) All readings are QP Mode value unless otherwise stated AVG in column of『Note』. If the QP Mode Measured value compliance with the QP Limits and lower than AVG Limits, the EUT shall be deemed to meet both QP & AVG Limits and then only QP Mode was measured, but AVG Mode didn't perform。In this case, a " * " marked in AVG Mode column of Interference Voltage Measured。

(2) Measuring frequency range from 150KHz to 30MHz。



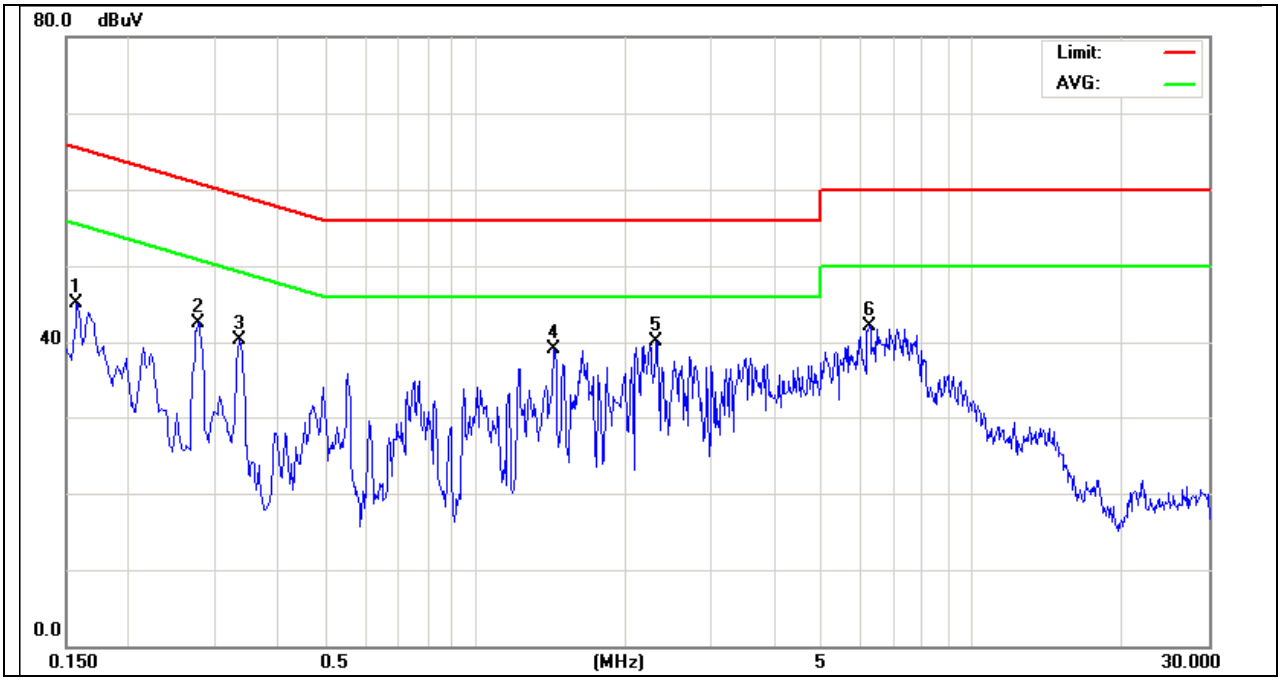
EUT：	Cruz Tablet	Model Name ：	Cruz Tablet T103
Temperature：	23 ℃	Relative Humidity：	54 %
Pressure：	1010hPa	Test Power ：	AC 120V/60Hz
Test Mode ：	USB Read&Write (DVE Adapter)		

Freq. (MHz)	Terminal L/N	Measured(dBuV)		Limits(dBuV)		Margin (dB)	Note
		QP-Mode	AV-Mode	QP-Mode	AV-Mode		
0.16	Neutral	45.13	*	65.57	55.57	-20.44	(QP)
0.28	Neutral	42.50	*	60.94	50.94	-18.44	(QP)
0.33	Neutral	40.22	*	59.35	49.35	-19.13	(QP)
1.44	Neutral	39.04	*	56.00	46.00	-16.96	(QP)
2.33	Neutral	40.09	*	56.00	46.00	-15.91	(QP)
6.24	Neutral	42.17	*	60.00	50.00	-17.83	(QP)

Remark

(1) All readings are QP Mode value unless otherwise stated AVG in column of『Note』. If the QP Mode Measured value compliance with the QP Limits and lower than AVG Limits, the EUT shall be deemed to meet both QP & AVG Limits and then only QP Mode was measured, but AVG Mode didn't perform。In this case, a " * " marked in AVG Mode column of Interference Voltage Measured。

(2) Measuring frequency range from 150KHz to 30MHz。



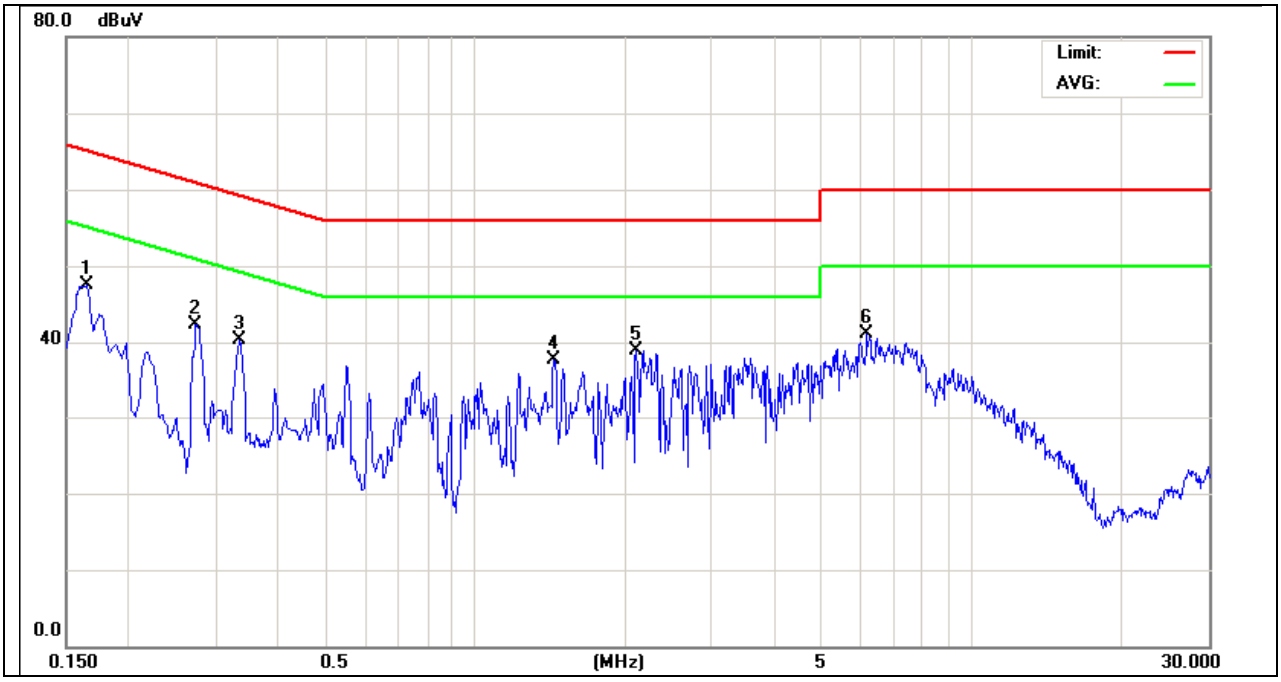
EUT：	Cruz Tablet	Model Name ：	Cruz Tablet T103
Temperature：	23 ℃	Relative Humidity：	54 %
Pressure：	1010hPa	Test Power ：	AC 120V/60Hz
Test Mode ：	WIFI Normal Link (DVE Adapter)		

Freq. (MHz)	Terminal L/N	Measured(dBuV)		Limits(dBuV)		Margin (dB)	Note
		QP-Mode	AV-Mode	QP-Mode	AV-Mode		
0.17	Line	47.41	*	65.21	55.21	-17.80	(QP)
0.27	Line	42.28	*	61.00	51.00	-18.72	(QP)
0.33	Line	40.34	*	59.35	49.35	-19.01	(QP)
1.44	Line	37.65	*	56.00	46.00	-18.35	(QP)
2.10	Line	38.87	*	56.00	46.00	-17.13	(QP)
6.18	Line	41.17	*	60.00	50.00	-18.83	(QP)

Remark

(1) All readings are QP Mode value unless otherwise stated AVG in column of『Note』. If the QP Mode Measured value compliance with the QP Limits and lower than AVG Limits, the EUT shall be deemed to meet both QP & AVG Limits and then only QP Mode was measured, but AVG Mode didn't perform。In this case, a " * " marked in AVG Mode column of Interference Voltage Measured。

(2) Measuring frequency range from 150KHz to 30MHz。



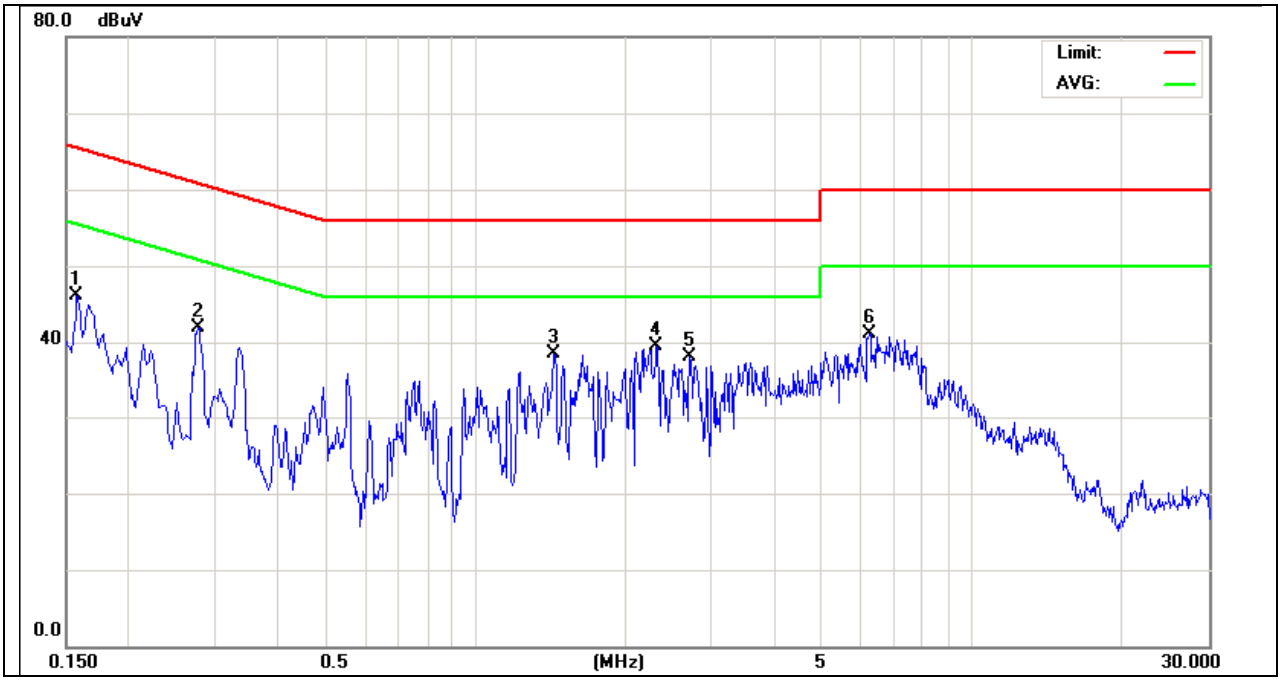
EUT：	Cruz Tablet	Model Name ：	Cruz Tablet T103
Temperature：	23 ℃	Relative Humidity：	54 %
Pressure：	1010hPa	Test Power ：	AC 120V/60Hz
Test Mode ：	WIFI Normal Link (DVE Adapter)		

Freq. (MHz)	Terminal L/N	Measured(dBuV)		Limits(dBuV)		Margin (dB)	Note
		QP-Mode	AV-Mode	QP-Mode	AV-Mode		
0.16	Neutral	46.13	*	65.57	55.57	-19.44	(QP)
0.28	Neutral	42.00	*	60.94	50.94	-18.94	(QP)
1.44	Neutral	38.54	*	56.00	46.00	-17.46	(QP)
2.33	Neutral	39.59	*	56.00	46.00	-16.41	(QP)
2.72	Neutral	38.17	*	56.00	46.00	-17.83	(QP)
6.24	Neutral	41.17	*	60.00	50.00	-18.83	(QP)

Remark

(1) All readings are QP Mode value unless otherwise stated AVG in column of『Note』. If the QP Mode Measured value compliance with the QP Limits and lower than AVG Limits, the EUT shall be deemed to meet both QP & AVG Limits and then only QP Mode was measured, but AVG Mode didn't perform。In this case, a " * " marked in AVG Mode column of Interference Voltage Measured。

(2) Measuring frequency range from 150KHz to 30MHz。



4.2 RADIATED EMISSION MEASUREMENT

4.2.1 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).

FREQUENCY RANGE OF RADIATED MEASUREMENT (For unintentional radiators)

Highest frequency generated or Upper frequency of measurement used in the device or on which the device operates or tunes (MHz)	Range (MHz)
Below 1.705	30
1.705 – 108	1000
108 – 500	2000
500 – 1000	5000
Above 1000	5th harmonic of the highest frequency or 40 GHz, whichever is lower

4.2.2 MEASUREMENT INSTRUMENTS LIST ANS SETTING

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Horn Antenna	ETS	3115	00075789	May.12.2011
2	Amplifier	Agilent	8449B	3008A02274	May.26.2011
3	Spectrum	Agilent	E4408B	US39240143	Nov.16.2010
4	Test Cable	HUBER+SUHNER	CB03 High Fre	N/A	May.03.2011
5	Bi-log Antenna	Schwarbeck	VULB9160	9160-3232	May.26.2011
6	Amplifier	HP	8447D	2944A09673	May.26.2011
7	Test Receiver	R&S	ESCI	100895	May.26.2011
8	Test Cable	N/A	C-01_CB03	N/A	Jul.05.2011

Remark: ” N/A” denotes No Model Name / Serial No. and No Calibration specified.

Spectrum Parameter	Setting
Attenuation	Auto
Start Frequency	1000 MHz
Stop Frequency	10th carrier harmonic
RB / VB (Emission in restricted band)	1MHz / 1MHz 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

4.2.3 TEST PROCEDURE

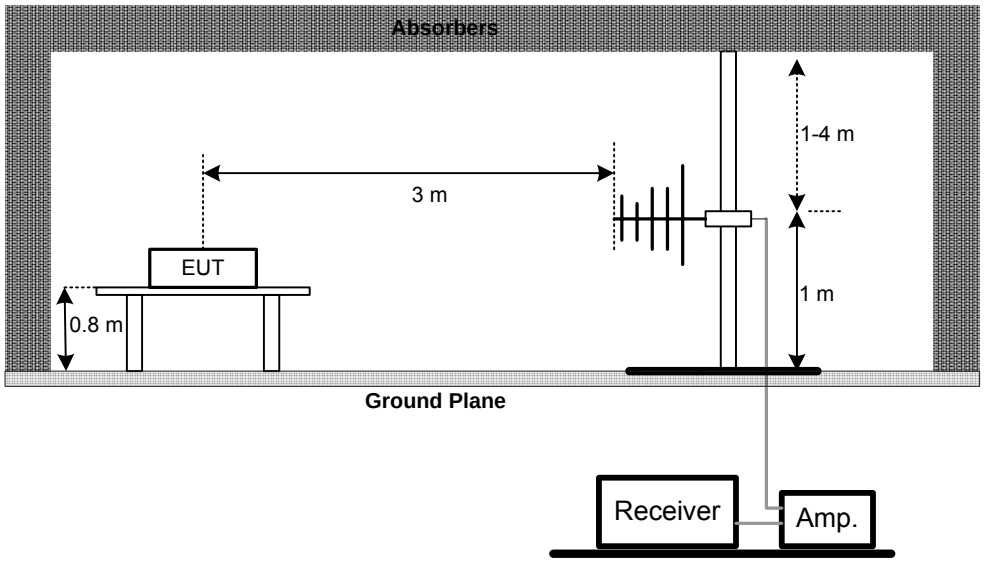
a. The measuring distance of at 3 m shall be used for measurements at frequency up to 1GHz. For frequencies above 1GHz, any suitable measuring distance may be used.
b. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 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; 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.

4.2.4 DEVIATION FROM TEST STANDARD

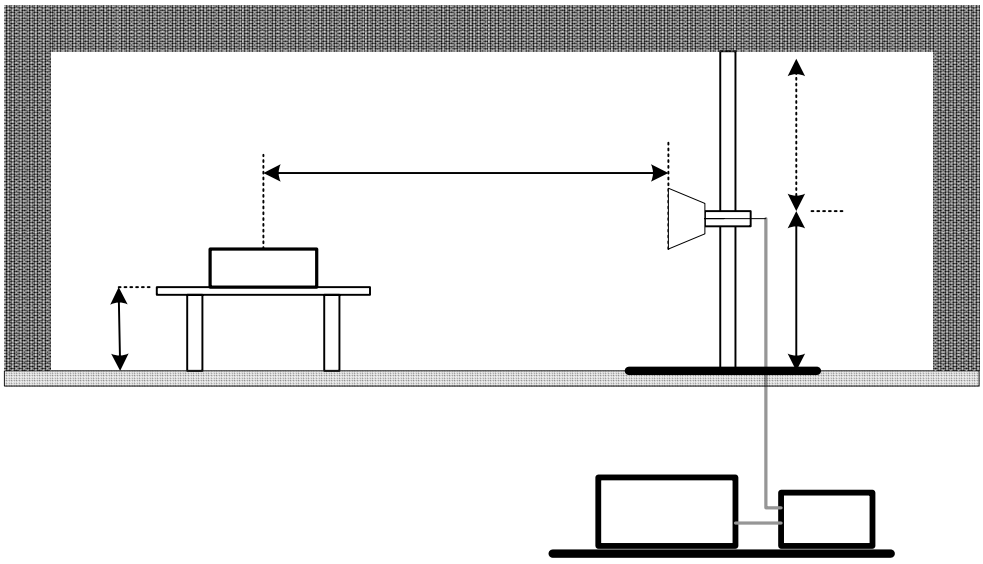
No deviation

4.2.5 TEST SETUP

(A) Radiated Emission Test Set-Up Frequency Below 1 GHz



(B) Radiated Emission Test Set-Up Frequency Above 1 GHz



4.2.6 EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of 4.1.6 Unless otherwise a special operating condition is specified in the follows during the testing.

4.2.7 TEST RESULTS (BETWEEN 30 – 1000 MHZ)

EUT：	Cruz Tablet	Model Name ：	Cruz Tablet T103
Temperature：	26 ℃	Relative Humidity：	57 %
Pressure：	1010 hPa	Test Voltage ：	DC 3.7V
Test Mode ：	TX B MODE 2412MHz		

Freq. (MHz)	Ant. H/V	Reading(RA) (dBuV)	Corr.Factor(CF) (dB)	Measured(FS) (dBuV/m)	Limits(QP) (dBuV/m)	Margin (dB)	Note
78.05	V	44.96	-16.36	28.60	40.00	- 11.40	
110.36	V	38.97	-13.09	25.88	43.50	- 17.62	
145.69	V	39.75	-12.26	27.49	43.50	- 16.01	
205.66	V	41.83	-11.72	30.11	43.50	- 13.39	
354.69	V	37.06	-8.14	28.92	46.00	- 17.08	
458.06	V	36.22	-6.31	29.91	46.00	- 16.09	

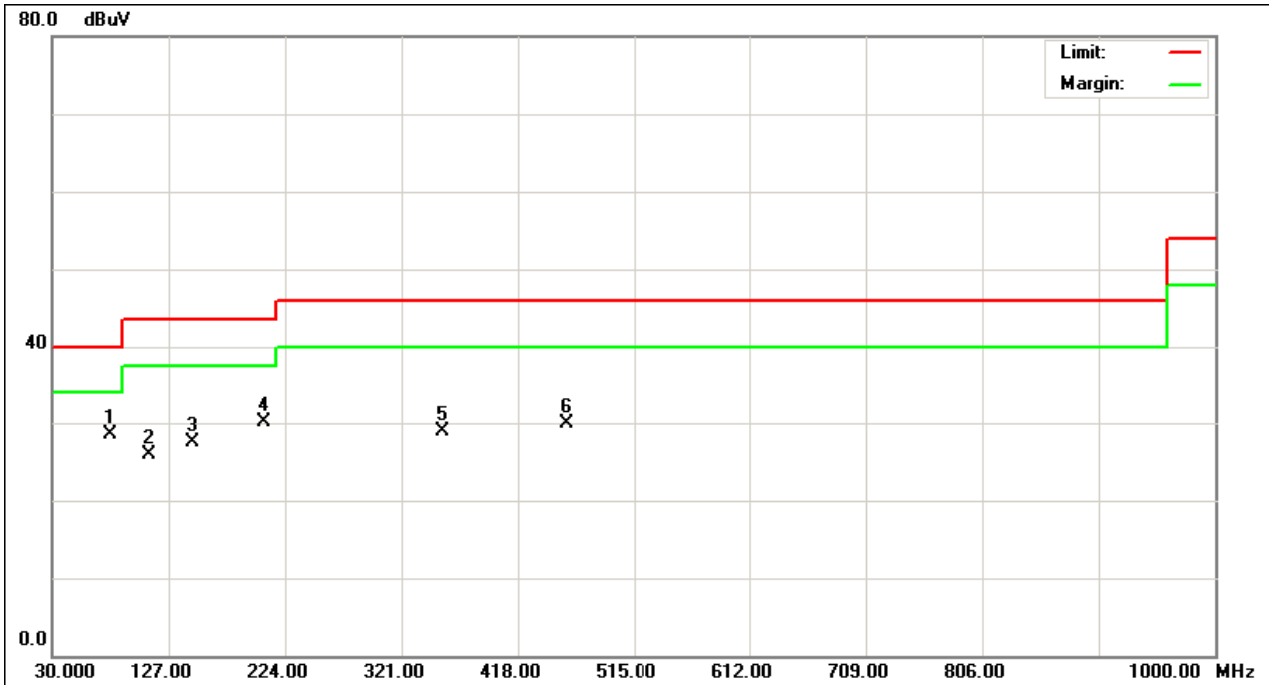
Remark：

(1) Reading in which marked as QP or Peak means measurements by using are Quasi-Peak Mode or Peak Mode with Detector BW=120KHz；SPA setting in RBW=120KHz, VBW =120KHz, Swp. Time = 0.3 sec./MHz。

(2) All readings are Peak unless otherwise stated QP in column of 『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform。

(3) Measuring frequency range from 30MHz to 1000MHz。

(4) If the peak scan value lower limit more than 20dB, then this signal data does not show in table。



EUT：	Cruz Tablet	Model Name ：	Cruz Tablet T103
Temperature：	26 ℃	Relative Humidity：	57 %
Pressure：	1010 hPa	Test Voltage ：	DC 3.7V
Test Mode ：	TX B MODE 2412MHz		

Freq. (MHz)	Ant. H/V	Reading(RA) (dBuV)	Corr.Factor(CF) (dB)	Measured(FS) (dBuV/m)	Limits(QP) (dBuV/m)	Margin (dB)	Note
56.69	H	44.18	-15.21	28.97	40.00	- 11.03	
123.32	H	39.03	-12.48	26.55	43.50	- 16.95	
187.79	H	39.88	-11.87	28.01	43.50	- 15.49	
245.51	H	37.07	-11.04	26.03	46.00	- 19.97	
323.88	H	37.27	-8.67	28.60	46.00	- 17.40	
427.74	H	32.76	-6.97	25.79	46.00	- 20.21	

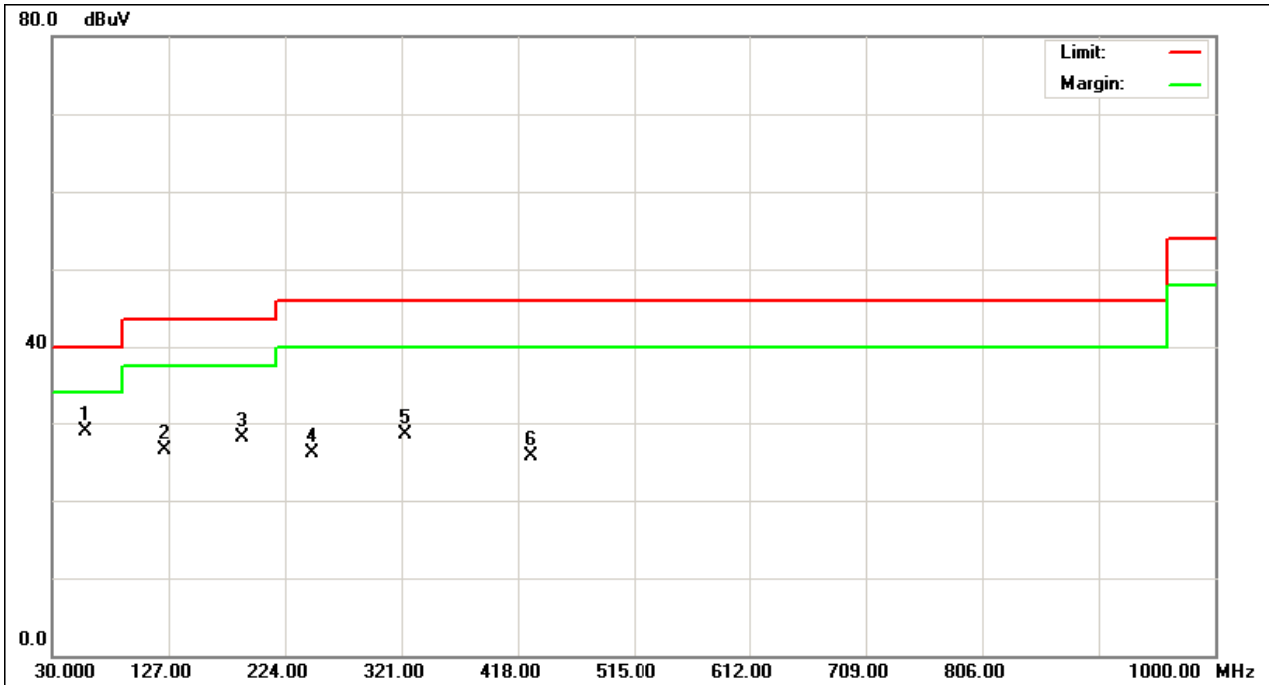
Remark：

(1) Reading in which marked as QP or Peak means measurements by using are Quasi-Peak Mode or Peak Mode with Detector BW=120KHz；SPA setting in RBW=120KHz, VBW =120KHz, Swp. Time = 0.3 sec./MHz。

(2) All readings are Peak unless otherwise stated QP in column of『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform。

(3) Measuring frequency range from 30MHz to 1000MHz。

(4) If the peak scan value lower limit more than 20dB, then this signal data does not show in table。



4.2.8 TEST RESULTS (ABOVE 1000 MHZ)

EUT：	Cruz Tablet	Model Name ：	Cruz Tablet T103
Temperature：	25 ℃	Relative Humidity：	51 %
Pressure：	1010 hPa	Test Voltage ：	DC 3.7V
Test Mode ：	TX B MODE 2412MHz		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Limit		Note
		Peak	AV		Peak	AV	Peak	AV	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2390.00	V	21.92	11.09	31.38	53.30	42.47	74.00	54.00	X/E
2413.50	**V**	**70.02**	**65.39**	**31.37**	**101.39**	**96.76**			**X/F**
4822.87	V	45.29	35.43	5.67	50.96	41.10	74.00	54.00	X/H

Remark：

(1) All readings are Peak unless otherwise stated QP in column of『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform。

(2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency。"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)

(3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission 。

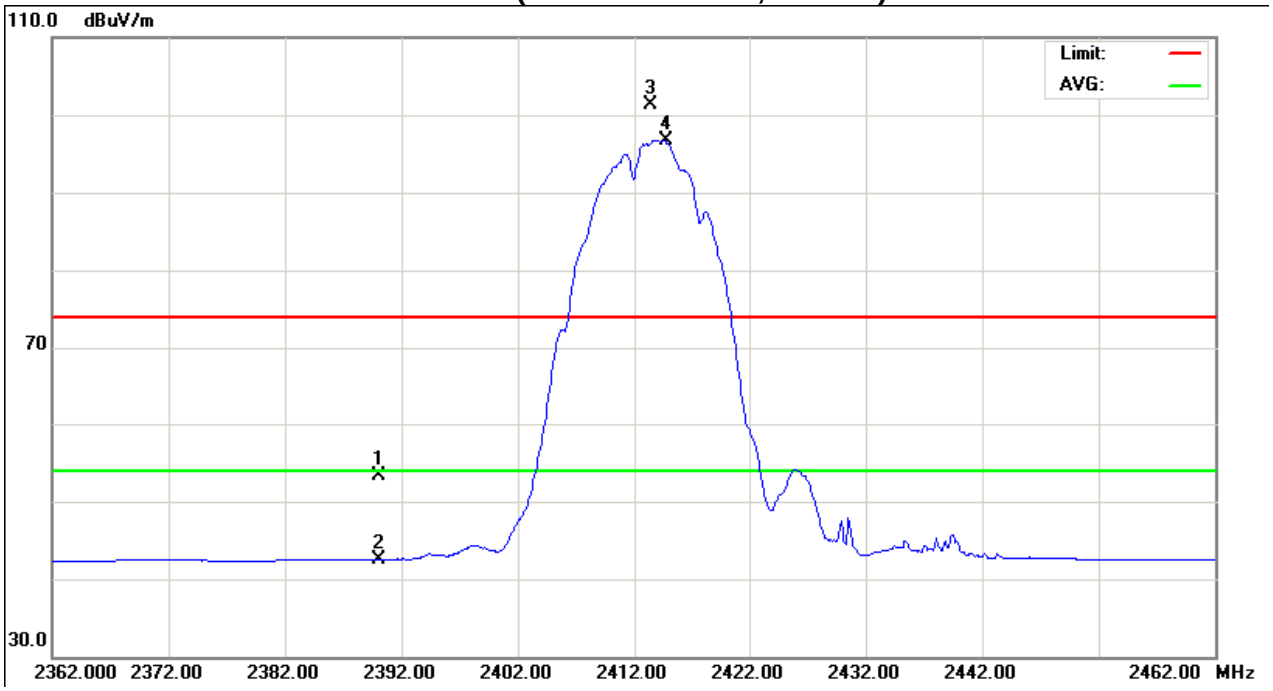
(4) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

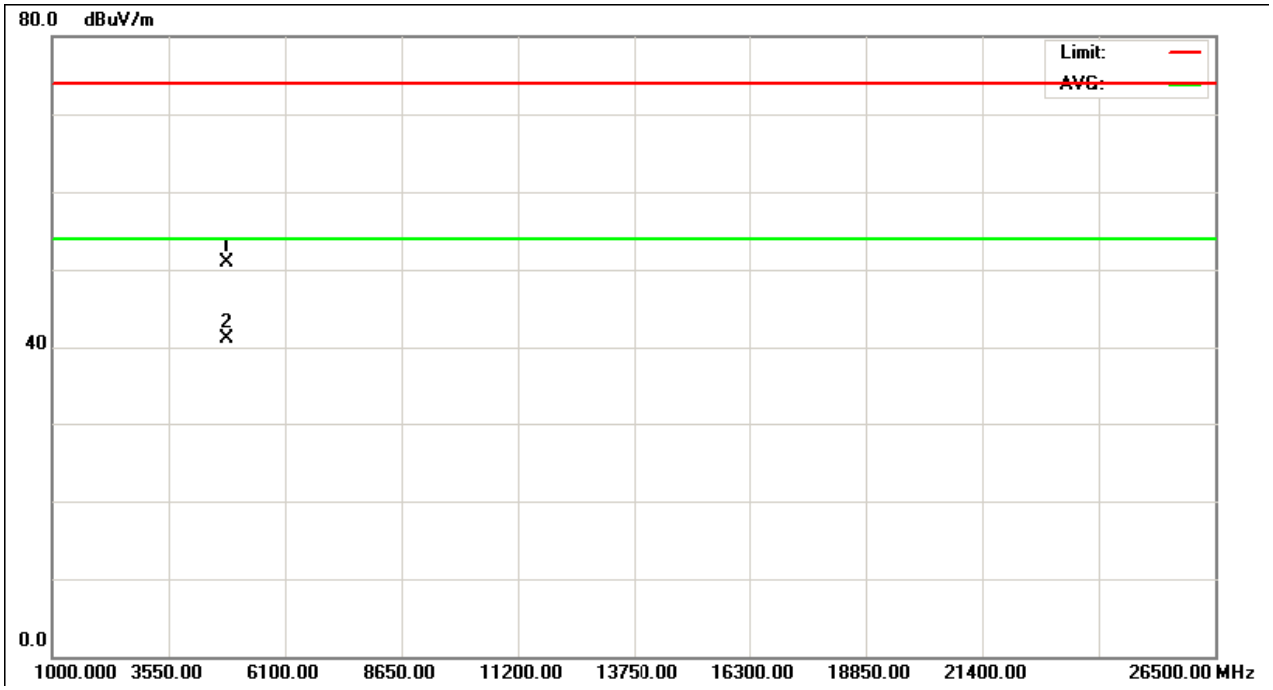
(5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

(6) EUT Orthogonal Axis：
"X" - denotes Laid on Table；"Y" - denotes Vertical Stand；"Z" - denotes Side Stand

(7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna

TX CH01 (Above 1000 MHz, Vertical)





EUT：	Cruz Tablet	Model Name ：	Cruz Tablet T103
Temperature：	23 ℃	Relative Humidity：	56 %
Pressure：	1010 hPa	Test Voltage ：	DC 3.7V
Test Mode ：	TX B MODE 2412MHz		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Limit		Note
		Peak	AV		Peak	AV	Peak	AV	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2390.00	H	22.44	11.18	31.38	53.82	42.56	74.00	54.00	X/E
2413.50	**H**	**72.11**	**67.45**	**31.37**	**103.48**	**98.82**			**X/F**
4825.61	H	47.93	38.02	5.67	53.60	43.69	74.00	54.00	X/H

Remark：

(1) All readings are Peak unless otherwise stated QP in column of『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform。

(2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency。"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)

(3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission 。

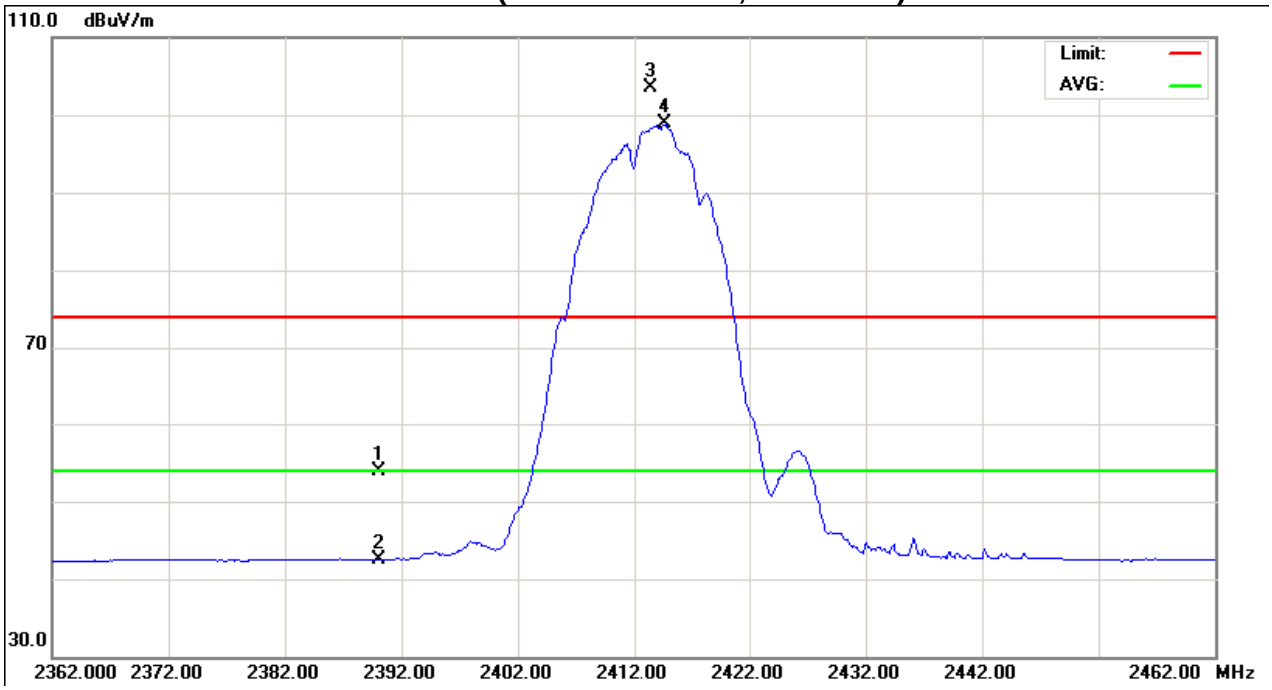
(4) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

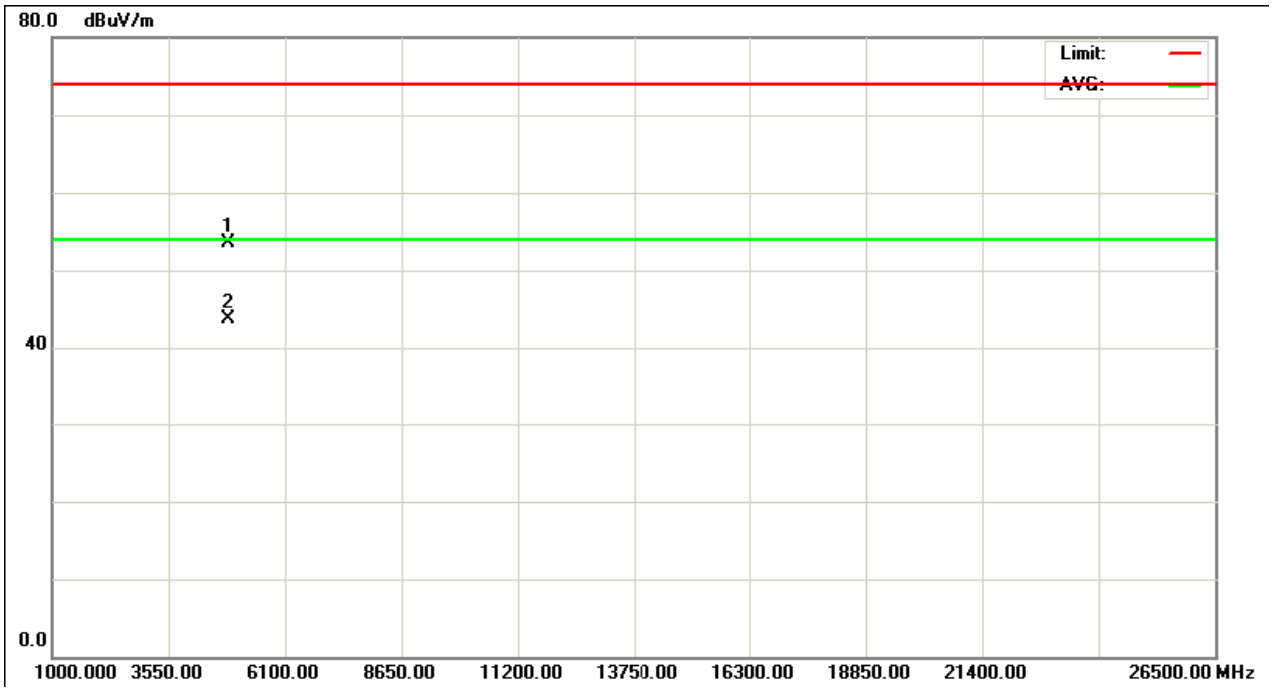
(5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

(6) EUT Orthogonal Axis：
"X" - denotes Laid on Table；"Y" - denotes Vertical Stand；"Z" - denotes Side Stand

(7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna

TX CH01 (Above 1000 MHz, Horizontal)





EUT：	Cruz Tablet	Model Name ：	Cruz Tablet T103
Temperature：	23 ℃	Relative Humidity：	56 %
Pressure：	1010 hPa	Test Voltage ：	DC 3.7V
Test Mode ：	TX B MODE 2437MHz		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Limit		Note
		Peak	AV		Peak	AV	Peak	AV	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2438.50	**V**	**69.07**	**64.27**	**31.35**	**100.42**	**95.62**			**X/F**
4873.26	V	45.35	36.54	5.80	51.15	42.34	74.00	54.00	X/H

Remark：

(1) All readings are Peak unless otherwise stated QP in column of『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform。

(2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency。"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)

(3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission 。

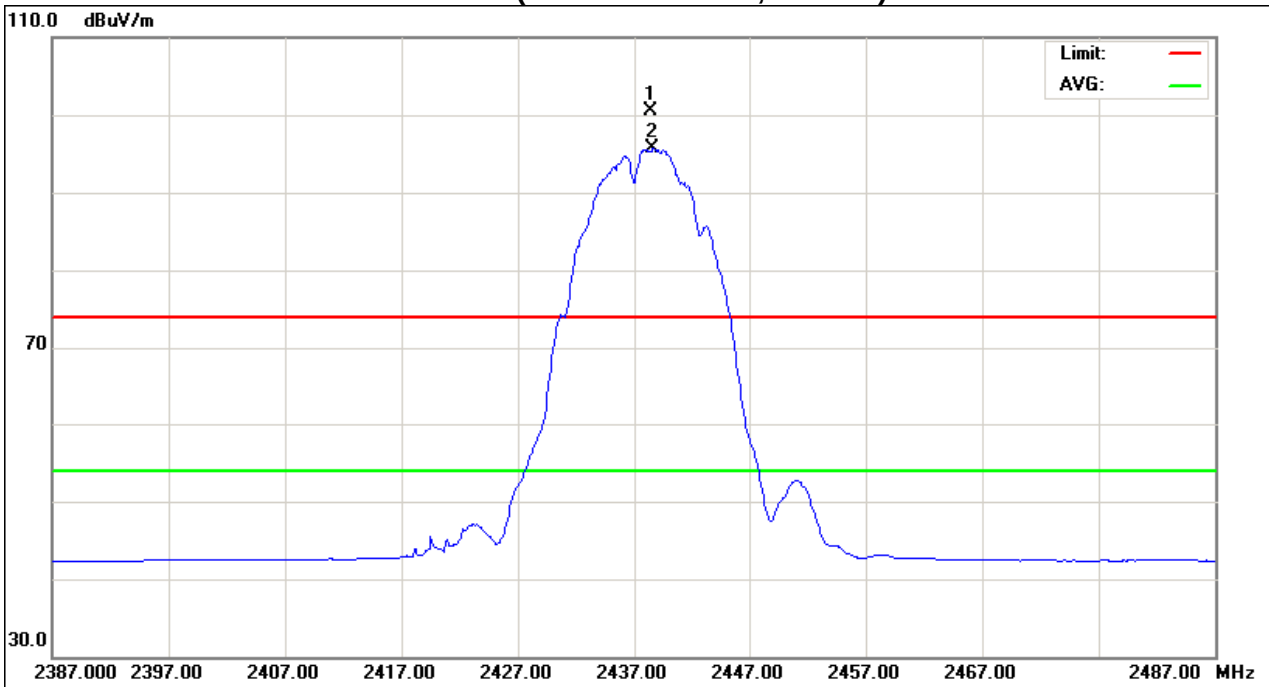
(4) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

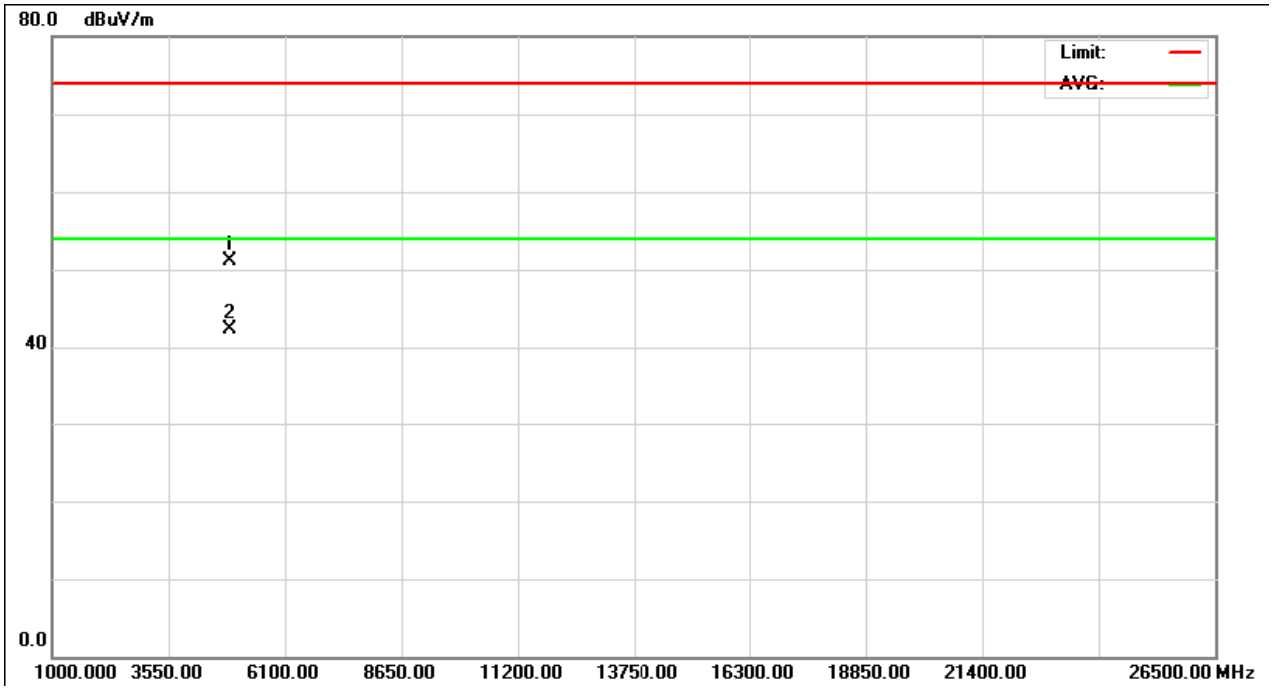
(5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

(6) EUT Orthogonal Axis：
"X" - denotes Laid on Table；"Y" - denotes Vertical Stand；"Z" - denotes Side Stand

(7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna

TX CH06 (Above 1000 MHz, Vertical)





EUT：	Cruz Tablet	Model Name ：	Cruz Tablet T103
Temperature：	23 ℃	Relative Humidity：	56 %
Pressure：	1010 hPa	Test Voltage ：	DC 3.7V
Test Mode ：	TX B MODE 2437MHz		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Limit		Note
		Peak	AV		Peak	AV	Peak	AV	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2438.50	**H**	**71.30**	**66.61**	**31.35**	**102.65**	**97.96**			**X/F**
4875.87	H	47.96	37.05	5.80	53.76	42.85	74.00	54.00	X/H

Remark：

(1) All readings are Peak unless otherwise stated QP in column of『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform。

(2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency。"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)

(3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission 。

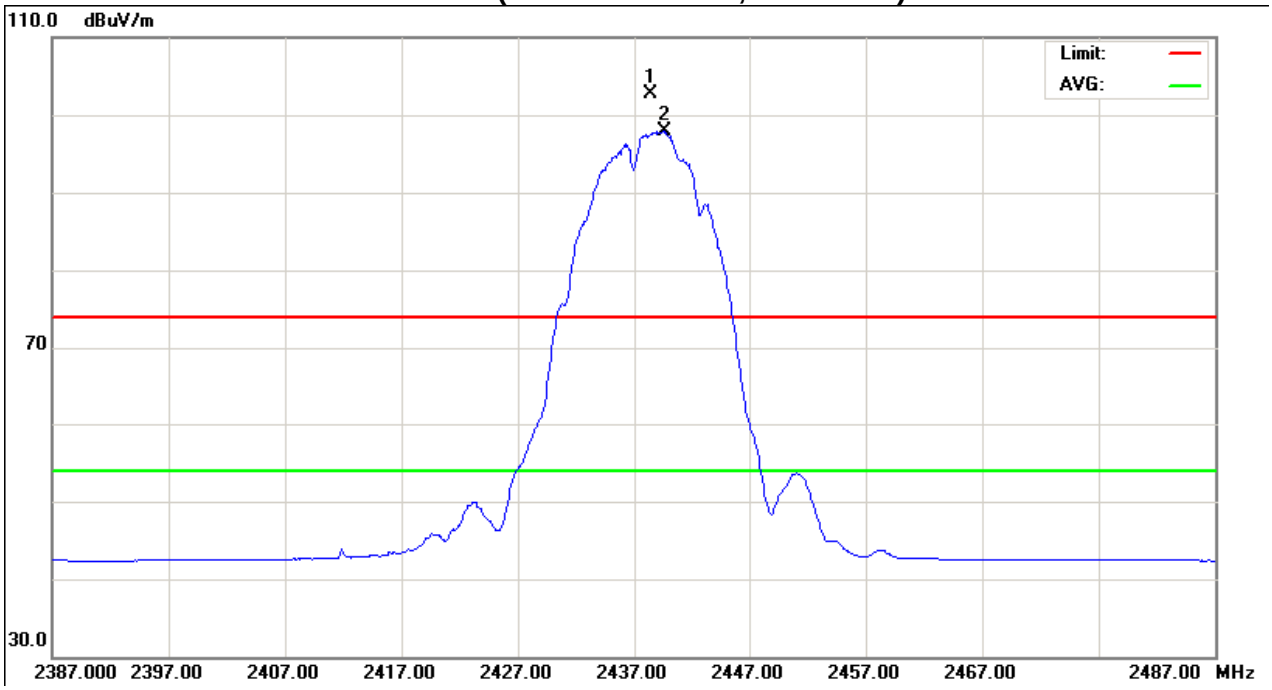
(4) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

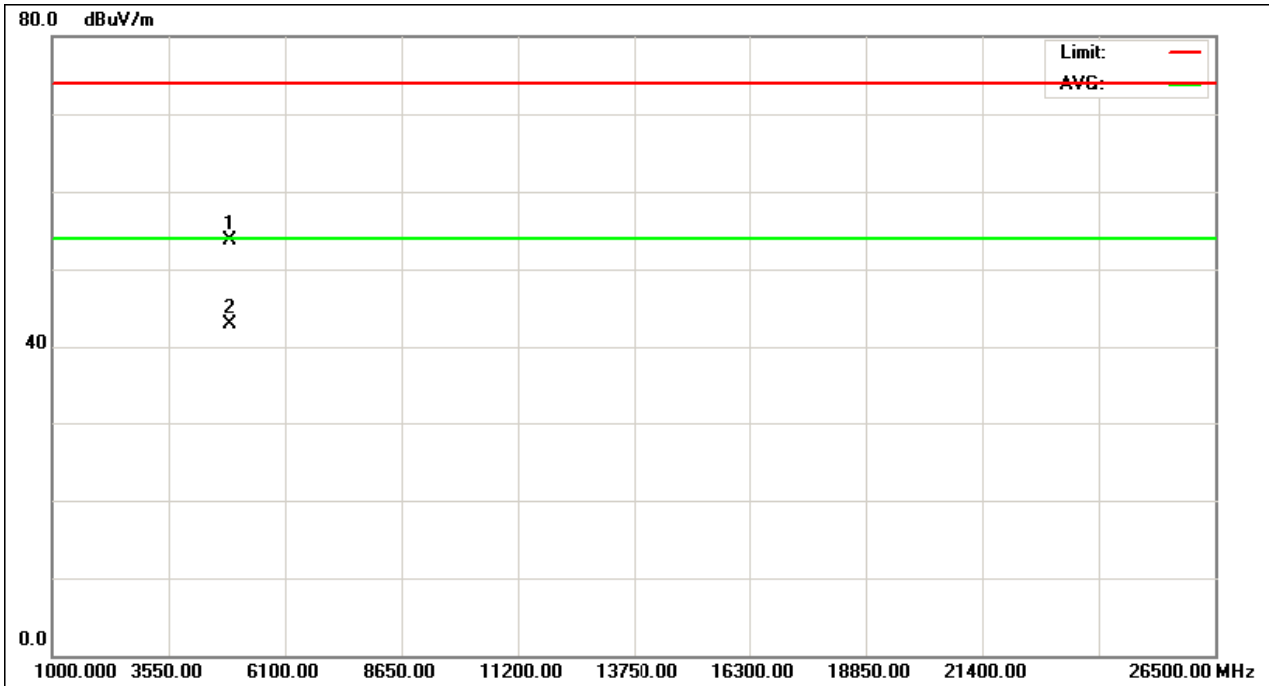
(5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

(6) EUT Orthogonal Axis：
"X" - denotes Laid on Table；"Y" - denotes Vertical Stand；"Z" - denotes Side Stand

(7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna

TX CH06 (Above 1000 MHz, Horizontal)





EUT：	Cruz Tablet	Model Name ：	Cruz Tablet T103
Temperature：	23 ℃	Relative Humidity：	56 %
Pressure：	1010 hPa	Test Voltage ：	DC 3.7V
Test Mode ：	TX B MODE 2462MHz		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Limit		Note
		Peak	AV		Peak	AV	Peak	AV	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2463.40	**V**	**70.99**	**66.46**	**31.34**	**102.23**	**97.80**			**X/F**
2483.50	V	22.41	13.42	31.33	53.74	44.75	74.00	54.00	X/E
4923.83	V	45.98	36.54	5.93	51.91	42.47	74.00	54.00	X/H

Remark：

(1) All readings are Peak unless otherwise stated QP in column of『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform。

(2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency。"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)

(3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission 。

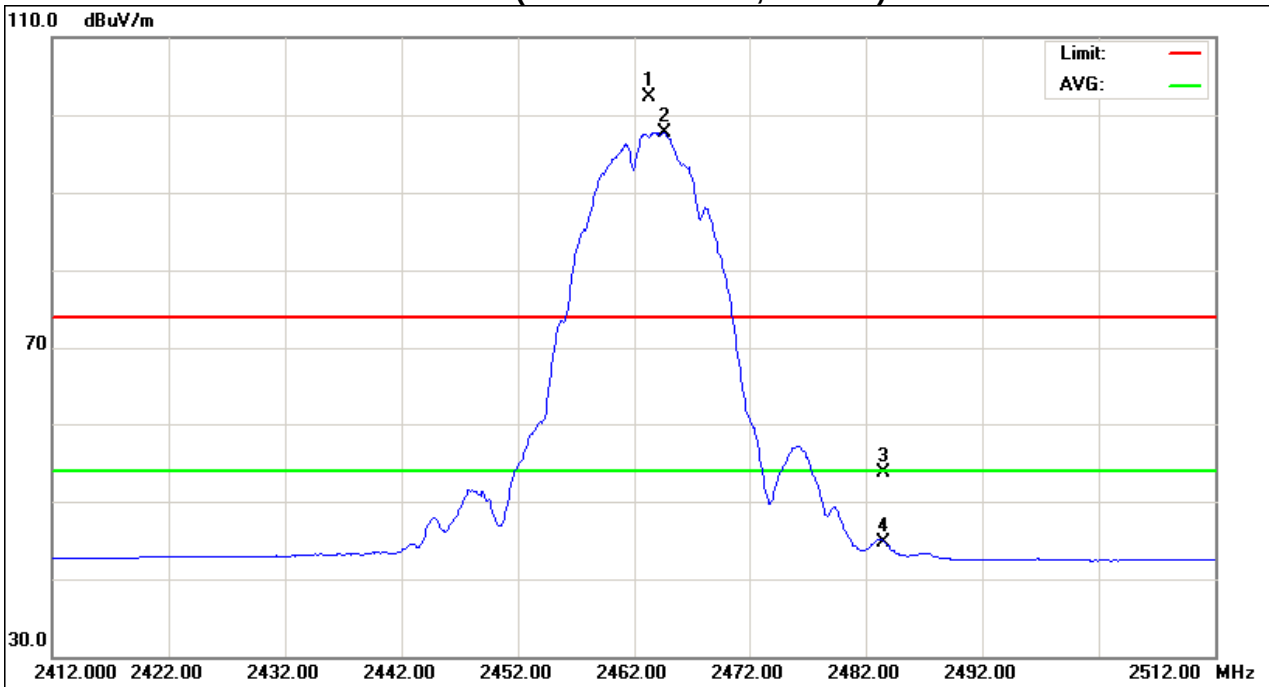
(4) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

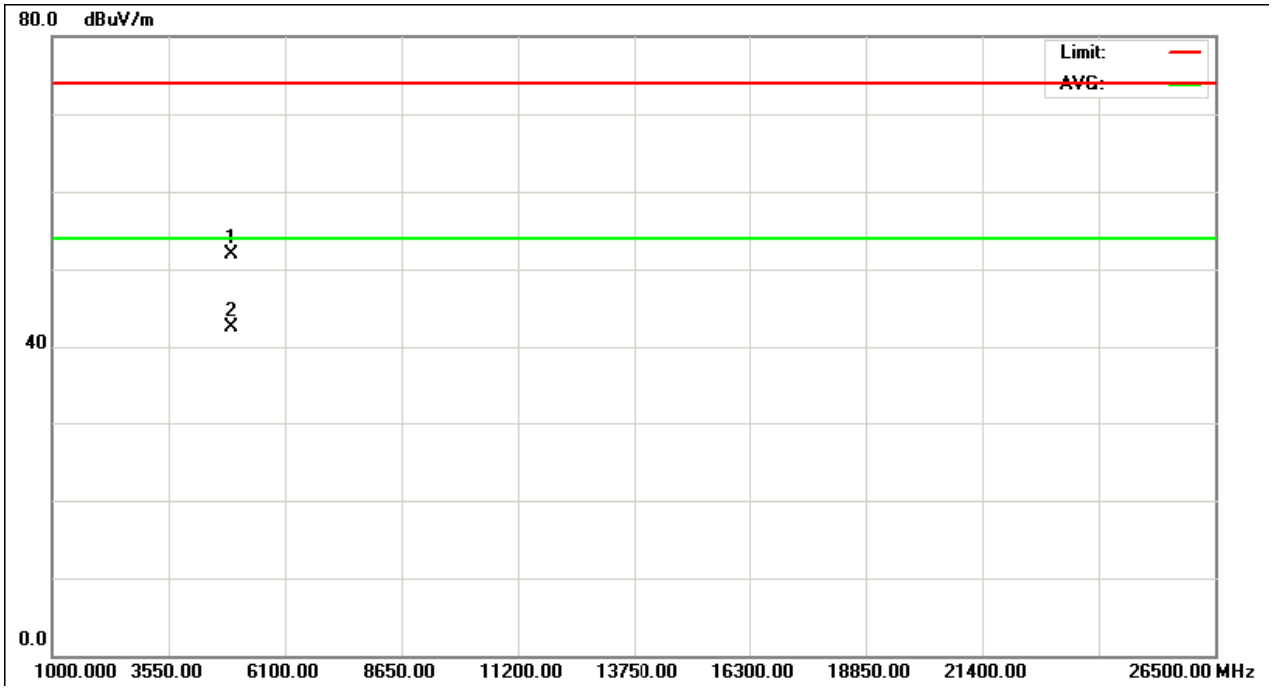
(5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

(6) EUT Orthogonal Axis：
"X" - denotes Laid on Table；"Y" - denotes Vertical Stand；"Z" - denotes Side Stand

(7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna

TX CH11 (Above 1000 MHz, Vertical)





EUT：	Cruz Tablet	Model Name ：	Cruz Tablet T103
Temperature：	20 ℃	Relative Humidity：	54 %
Pressure：	1010 hPa	Test Voltage ：	DC 3.7V
Test Mode ：	TX B MODE 2462MHz		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Limit		Note
		Peak	AV		Peak	AV	Peak	AV	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2463.50	**H**	**72.31**	**67.73**	**31.34**	**103.65**	**99.07**			**X/F**
2483.50	H	23.50	14.32	31.33	54.83	45.65	74.00	54.00	X/E
4925.08	H	47.65	38.04	5.93	53.58	43.97	74.00	54.00	X/H

Remark：

(1) All readings are Peak unless otherwise stated QP in column of『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform。

(2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency。"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)

(3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission 。

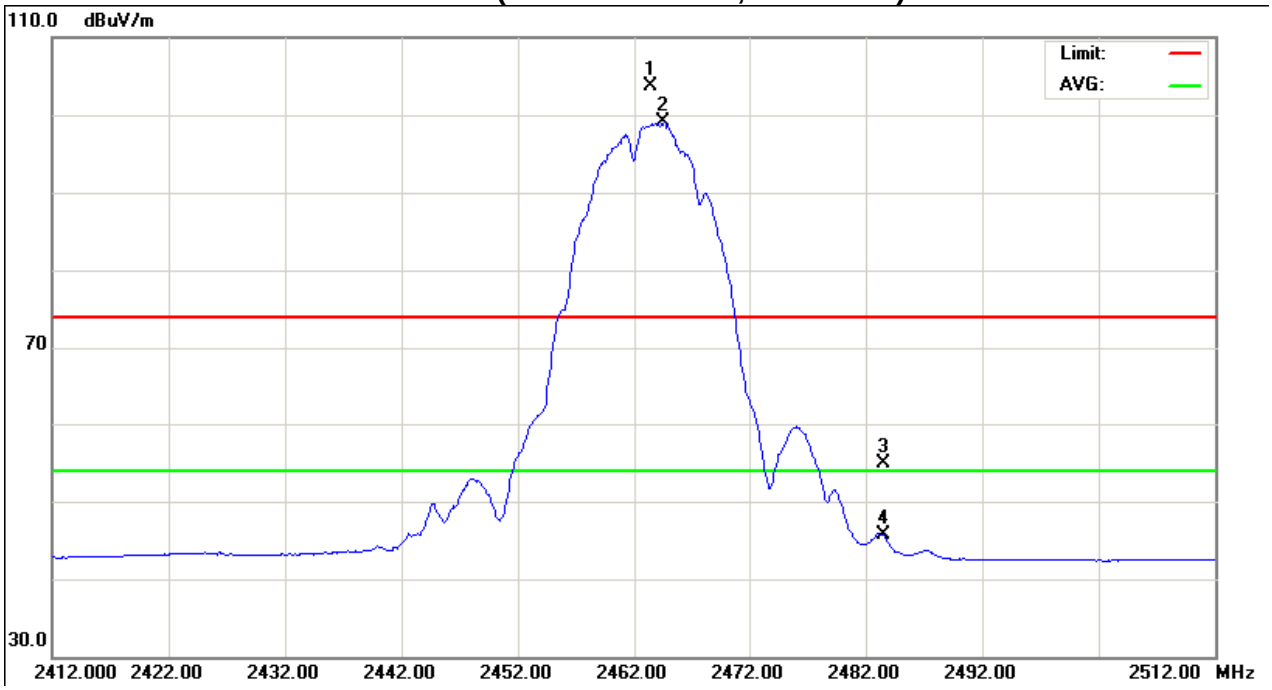
(4) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

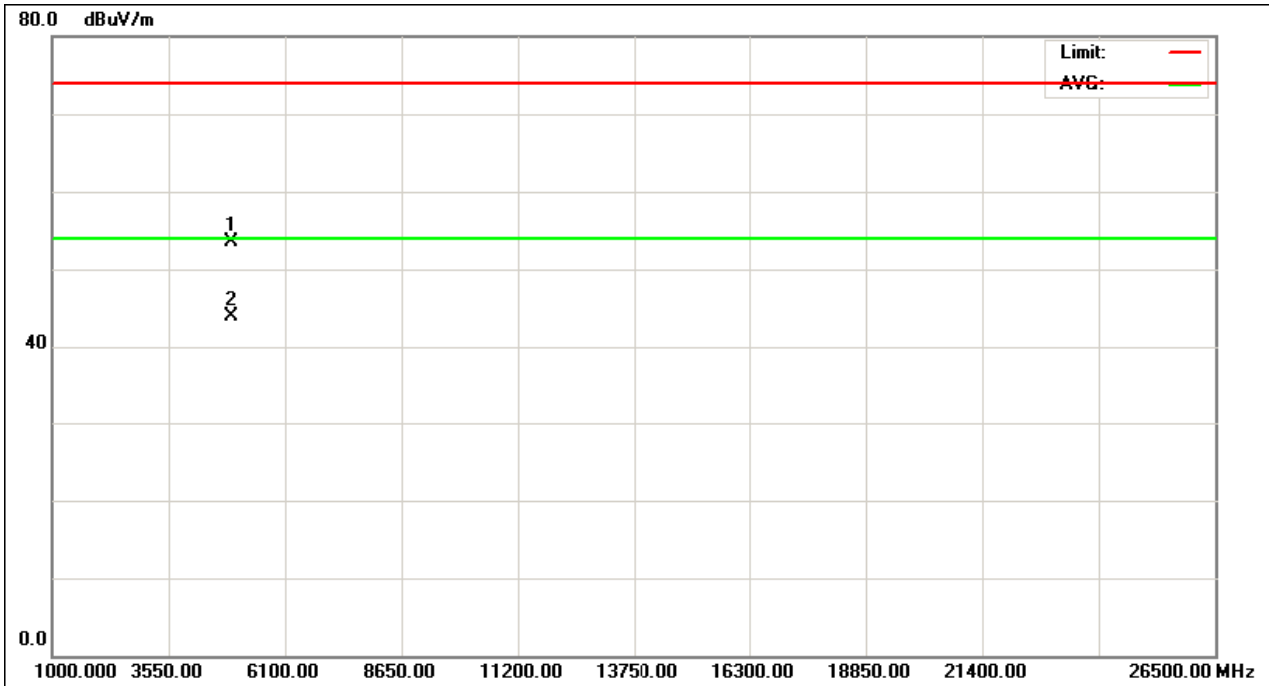
(5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

(6) EUT Orthogonal Axis：
"X" - denotes Laid on Table；"Y" - denotes Vertical Stand；"Z" - denotes Side Stand

(7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna

TX CH11 (Above 1000 MHz, Horizontal)





EUT：	Cruz Tablet	Model Name ：	Cruz Tablet T103
Temperature：	23 ℃	Relative Humidity：	56 %
Pressure：	1010 hPa	Test Voltage ：	DC 3.7V
Test Mode ：	TX G MODE 2412MHz		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Limit		Note
		Peak	AV		Peak	AV	Peak	AV	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2390.00	V	24.66	12.53	31.38	56.04	43.91	74.00	54.00	X/E
2410.80	**V**	**69.21**	**53.41**	**31.37**	**100.58**	**84.78**			**X/F**
4823.72	V	41.14	29.94	5.68	46.82	35.62	74.00	54.00	X/H

Remark：

(1) All readings are Peak unless otherwise stated QP in column of『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform。

(2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency。"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)

(3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission 。

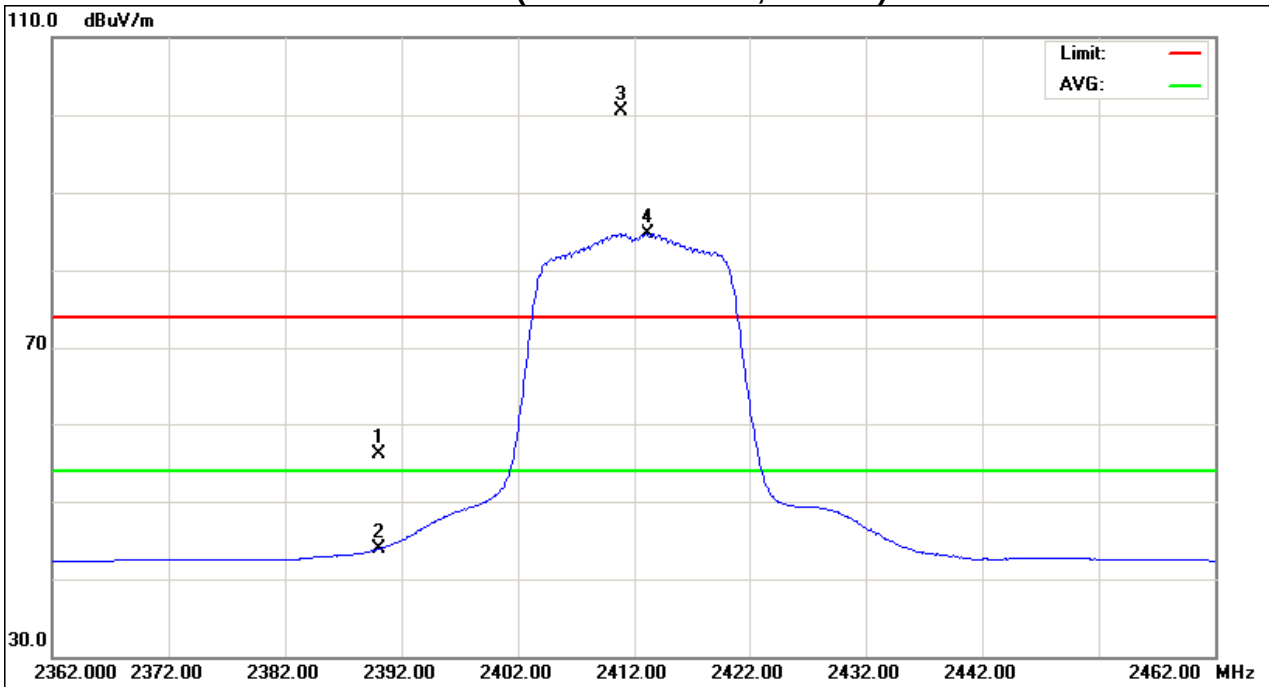
(4) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

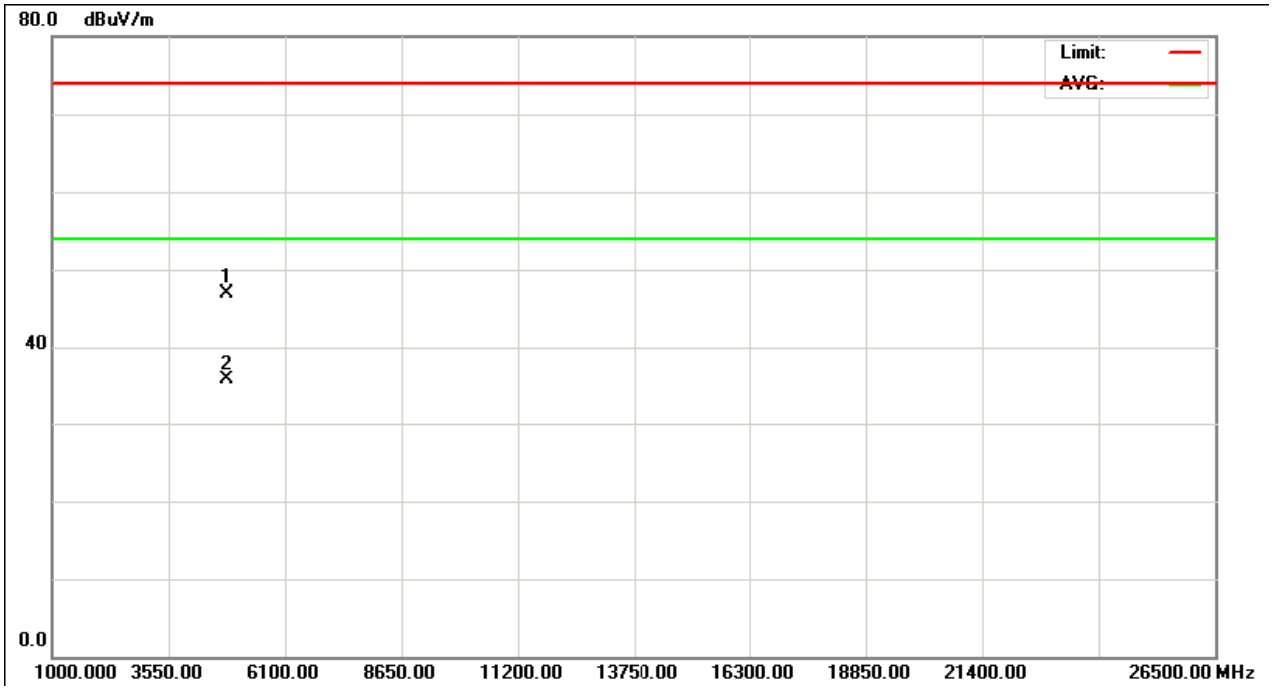
(5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

(6) EUT Orthogonal Axis：
"X" - denotes Laid on Table；"Y" - denotes Vertical Stand；"Z" - denotes Side Stand

(7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna

TX CH01 (Above 1000 MHz, Vertical)





EUT：	Cruz Tablet	Model Name ：	Cruz Tablet T103
Temperature：	23 ℃	Relative Humidity：	56 %
Pressure：	1010 hPa	Test Voltage ：	DC 3.7V
Test Mode ：	TX G MODE 2412MHz		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Limit		Note
		Peak	AV		Peak	AV	Peak	AV	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2390.00	H	26.77	12.68	31.38	58.15	44.06	74.00	54.00	X/E
2411.60	**H**	**70.18**	**54.98**	**31.37**	**101.55**	**86.35**			**X/F**
4824.68	H	42.89	30.43	5.67	48.56	36.10	74.00	54.00	X/H

Remark：

(1) All readings are Peak unless otherwise stated QP in column of『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform。

(2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency。"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)

(3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission 。

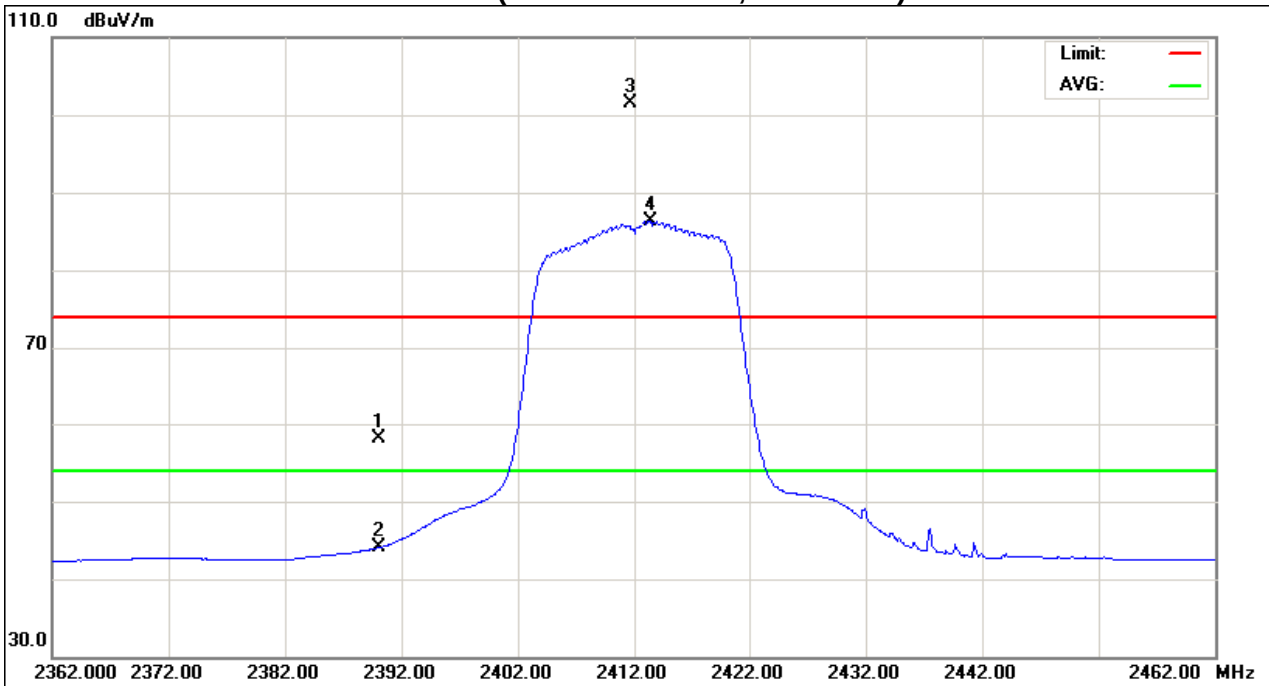
(4) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

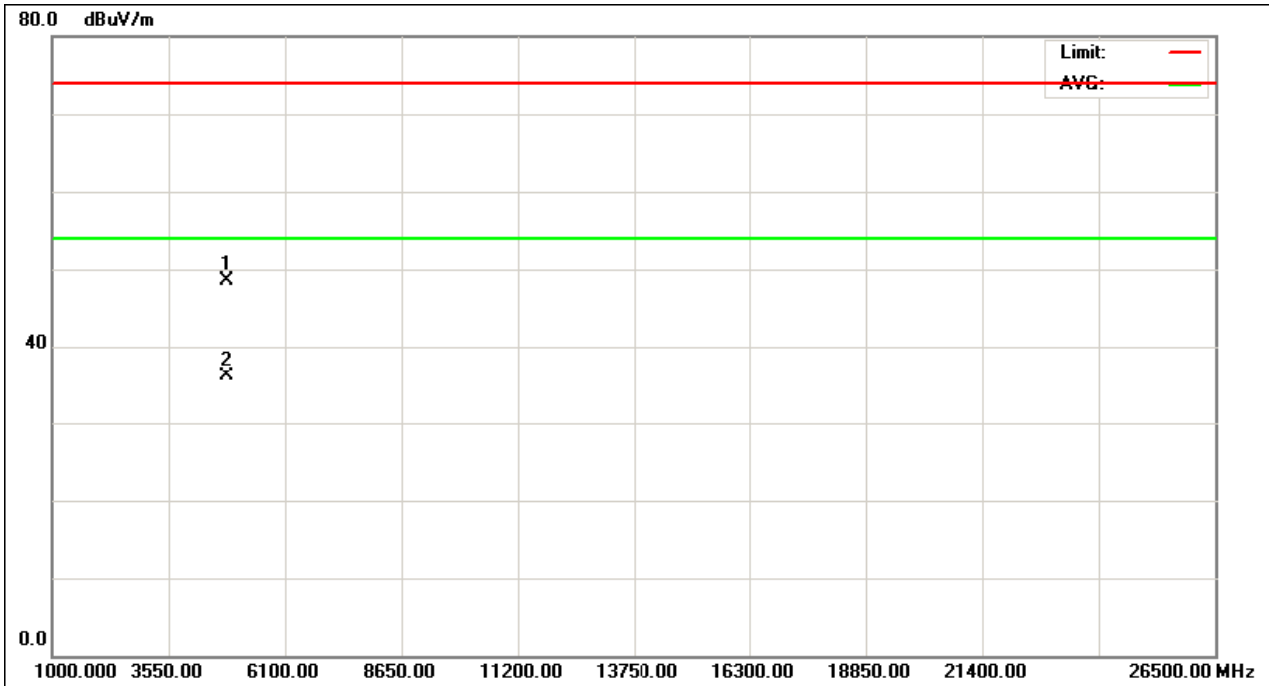
(5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

(6) EUT Orthogonal Axis：
"X" - denotes Laid on Table；"Y" - denotes Vertical Stand；"Z" - denotes Side Stand

(7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna

TX CH01 (Above 1000 MHz, Horizontal)





EUT：	Cruz Tablet	Model Name ：	Cruz Tablet T103
Temperature：	23 ℃	Relative Humidity：	56 %
Pressure：	1010 hPa	Test Voltage ：	DC 3.7V
Test Mode ：	TX G MODE 2437MHz		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Limit		Note
		Peak	AV		Peak	AV	Peak	AV	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2435.50	**V**	**68.18**	**54.18**	**31.36**	**99.54**	**85.54**			**X/F**
4875.23	V	41.87	29.52	5.80	47.67	35.32	74.00	54.00	X/H

Remark：

(1) All readings are Peak unless otherwise stated QP in column of『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform。

(2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency。"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)

(3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission 。

(4) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

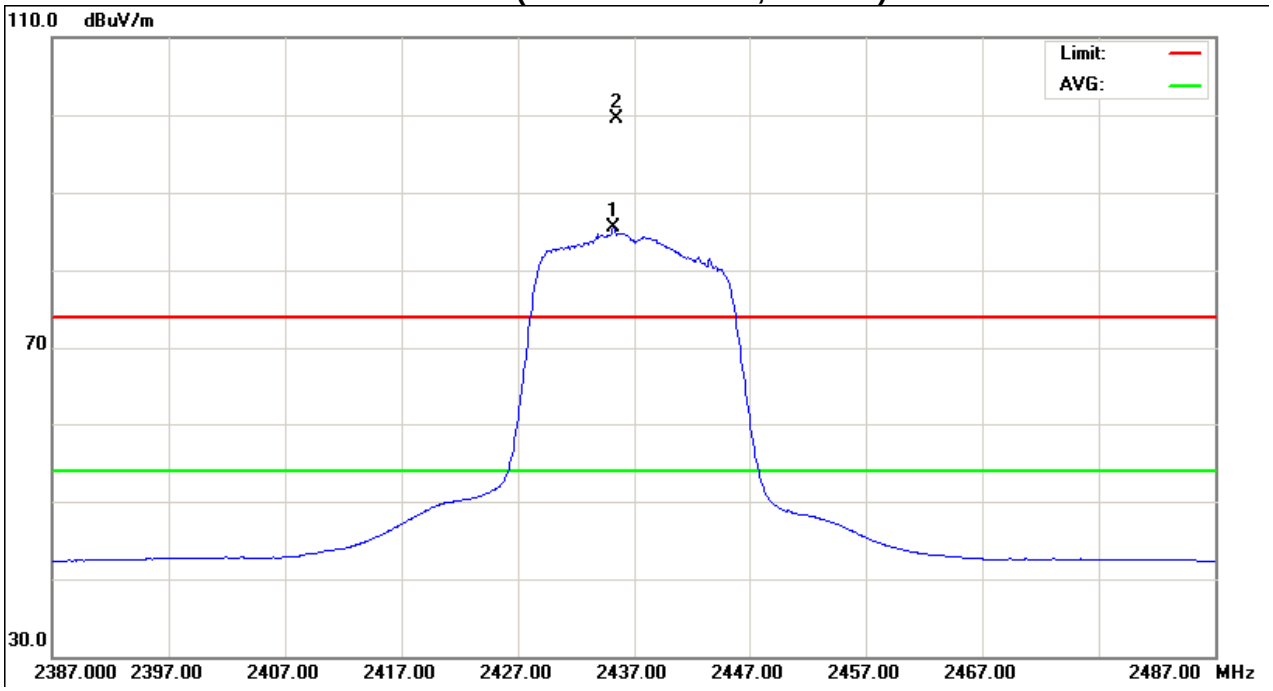
(5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

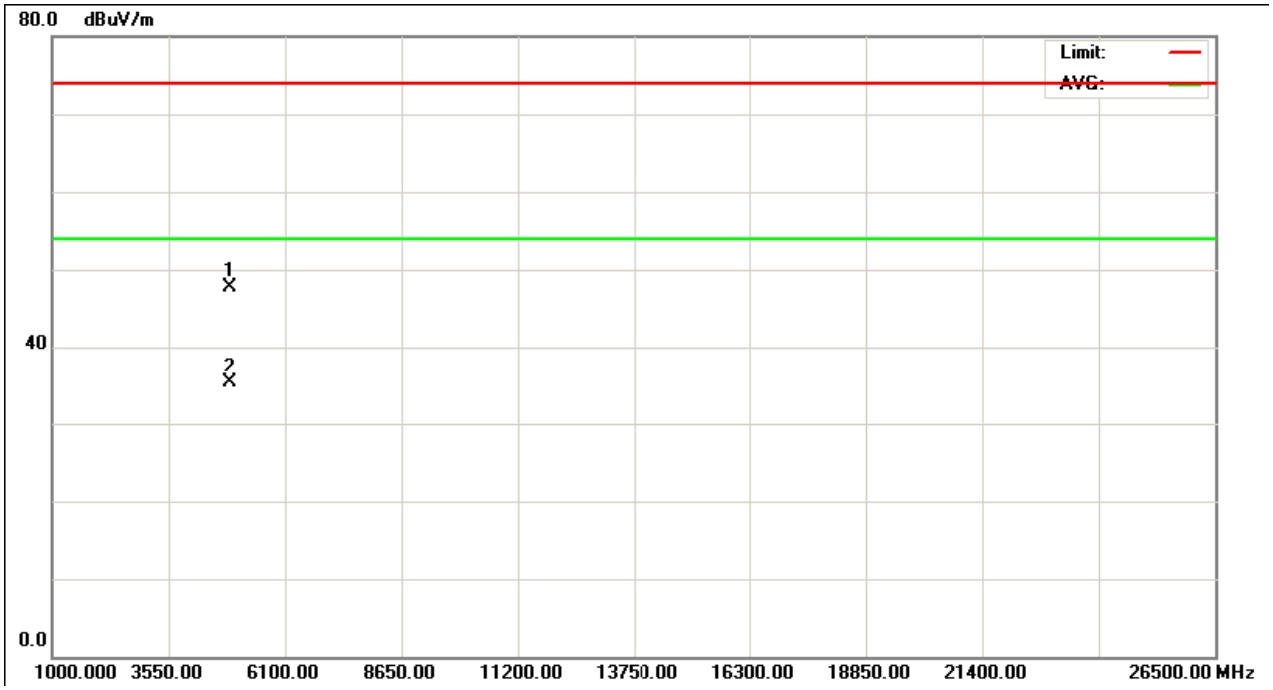
(6) EUT Orthogonal Axis：

"X" - denotes Laid on Table；"Y" - denotes Vertical Stand；"Z" - denotes Side Stand

(7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna

TX CH06 (Above 1000 MHz, Vertical)





EUT：	Cruz Tablet	Model Name ：	Cruz Tablet T103
Temperature：	23 ℃	Relative Humidity：	56 %
Pressure：	1010 hPa	Test Voltage ：	DC 3.7V
Test Mode ：	TX G MODE 2437MHz		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Limit		Note
		Peak	AV		Peak	AV	Peak	AV	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2438.70	**V**	**71.17**	**54.60**	**31.35**	**102.52**	**85.95**			**X/F**
4873.87	V	43.29	31.01	5.80	49.09	36.81	74.00	54.00	X/H

Remark：

(1) All readings are Peak unless otherwise stated QP in column of『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform。

(2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency。"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)

(3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission 。

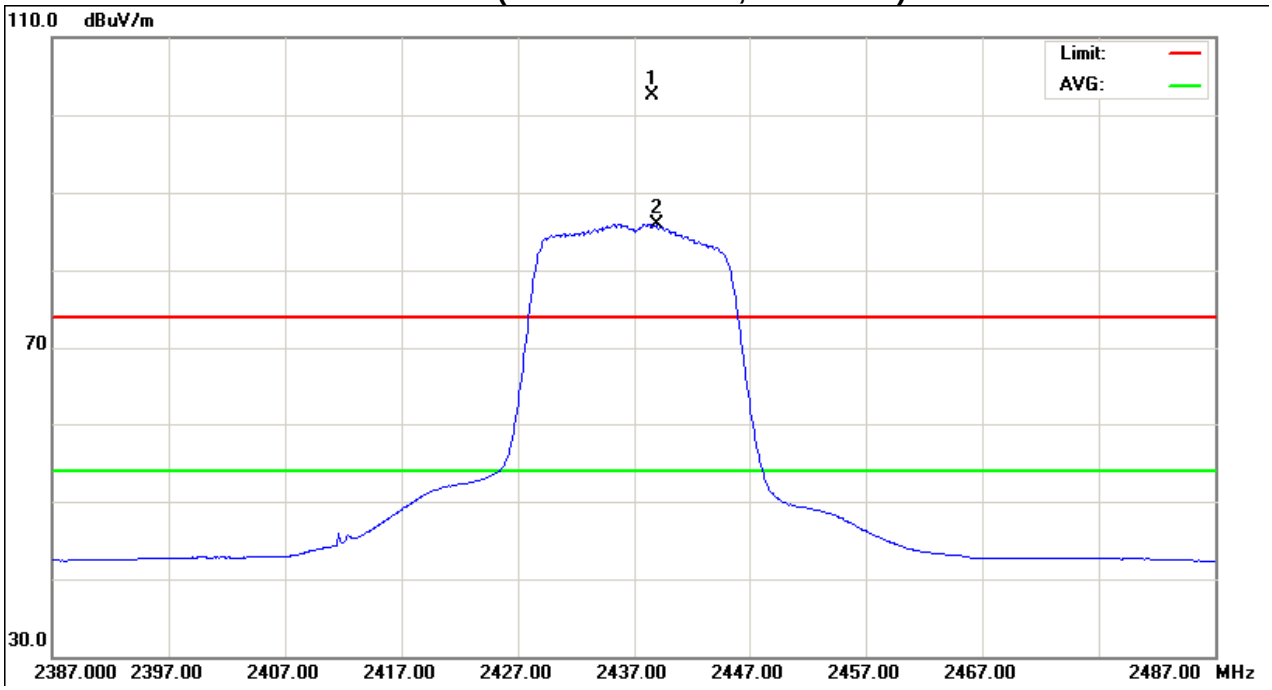
(4) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

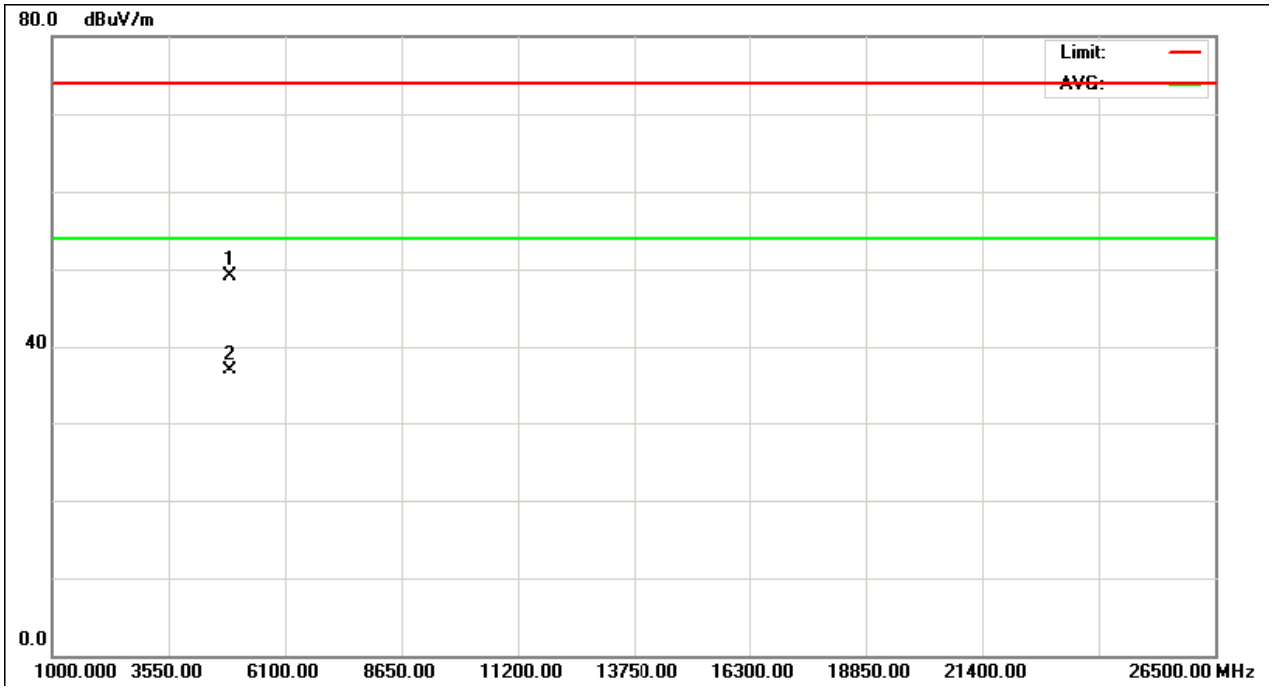
(5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

(6) EUT Orthogonal Axis：
"X" - denotes Laid on Table；"Y" - denotes Vertical Stand；"Z" - denotes Side Stand

(7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna

TX CH06 (Above 1000 MHz, Horizontal)





EUT：	Cruz Tablet	Model Name ：	Cruz Tablet T103
Temperature：	23 ℃	Relative Humidity：	56 %
Pressure：	1010 hPa	Test Voltage ：	DC 3.7V
Test Mode ：	TX G MODE 2462MHz		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Limit		Note
		Peak	AV		Peak	AV	Peak	AV	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2463.00	**V**	**69.34**	**54.07**	**31.34**	**100.68**	**85.41**			**X/F**
2483.50	V	28.82	15.03	31.33	60.15	46.36	74.00	54.00	X/E
4924.65	V	40.98	28.97	5.93	46.91	34.90	74.00	54.00	X/H

Remark：

(1) All readings are Peak unless otherwise stated QP in column of『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform。

(2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency。"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)

(3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission 。

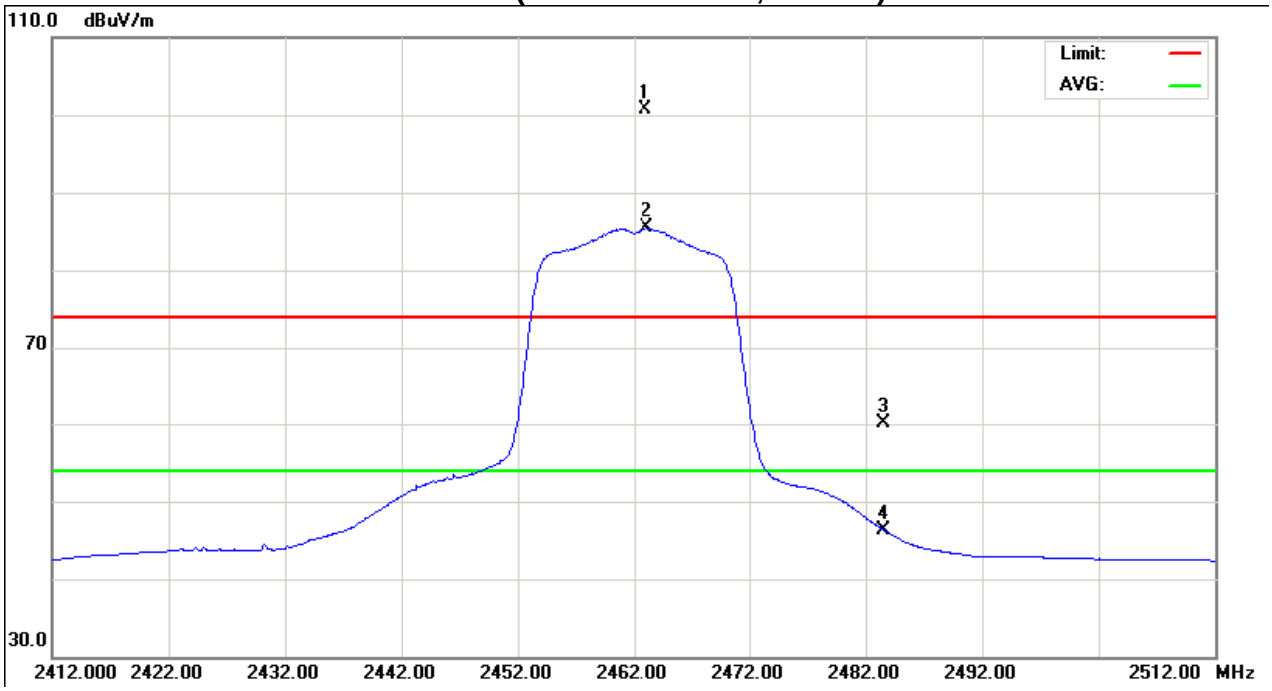
(4) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

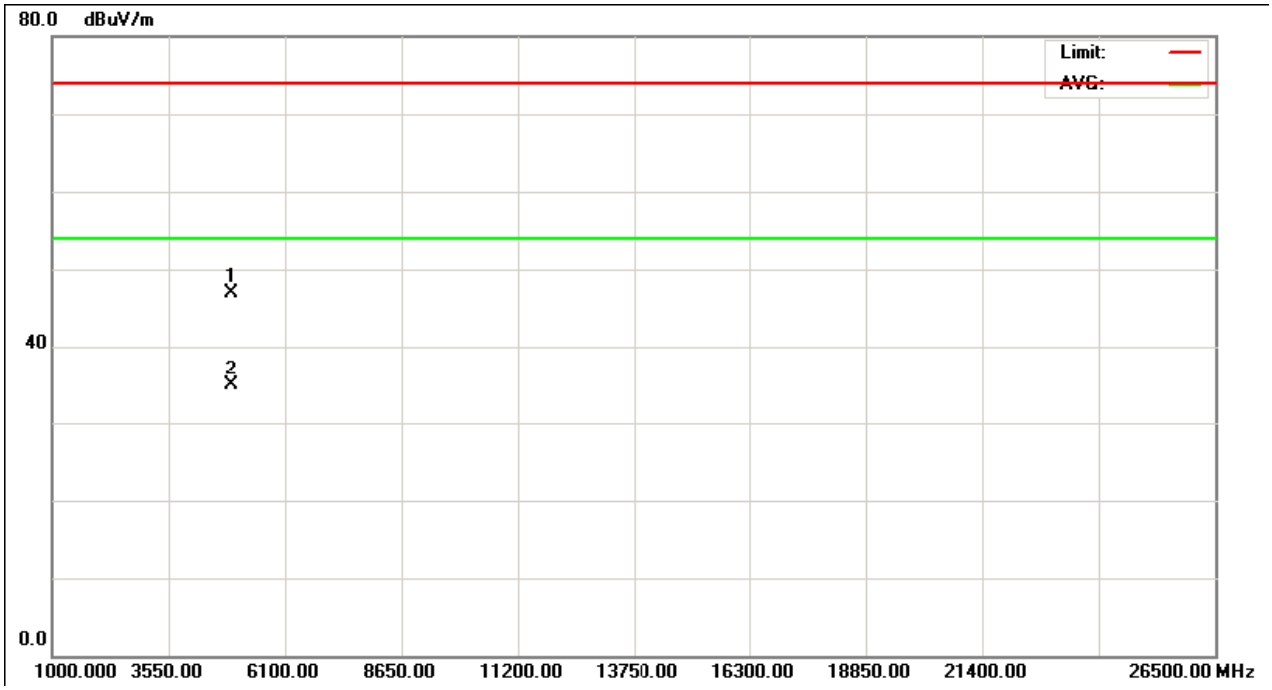
(5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

(6) EUT Orthogonal Axis：
"X" - denotes Laid on Table；"Y" - denotes Vertical Stand；"Z" - denotes Side Stand

(7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna

TX CH11 (Above 1000 MHz, Vertical)





EUT：	Cruz Tablet	Model Name ：	Cruz Tablet T103
Temperature：	23 ℃	Relative Humidity：	56 %
Pressure：	1010 hPa	Test Voltage ：	DC 3.7V
Test Mode ：	TX G MODE 2462MHz		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Limit		Note
		Peak	AV		Peak	AV	Peak	AV	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2460.20	**V**	**68.46**	**55.12**	**31.34**	**99.80**	**86.46**			**X/F**
2483.50	V	25.99	14.99	31.33	57.32	46.36	74.00	54.00	X/E
4922.68	V	43.05	31.18	5.92	48.97	37.10	74.00	54.00	X/H

Remark：

(1) All readings are Peak unless otherwise stated QP in column of『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform。

(2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency。"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)

(3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission 。

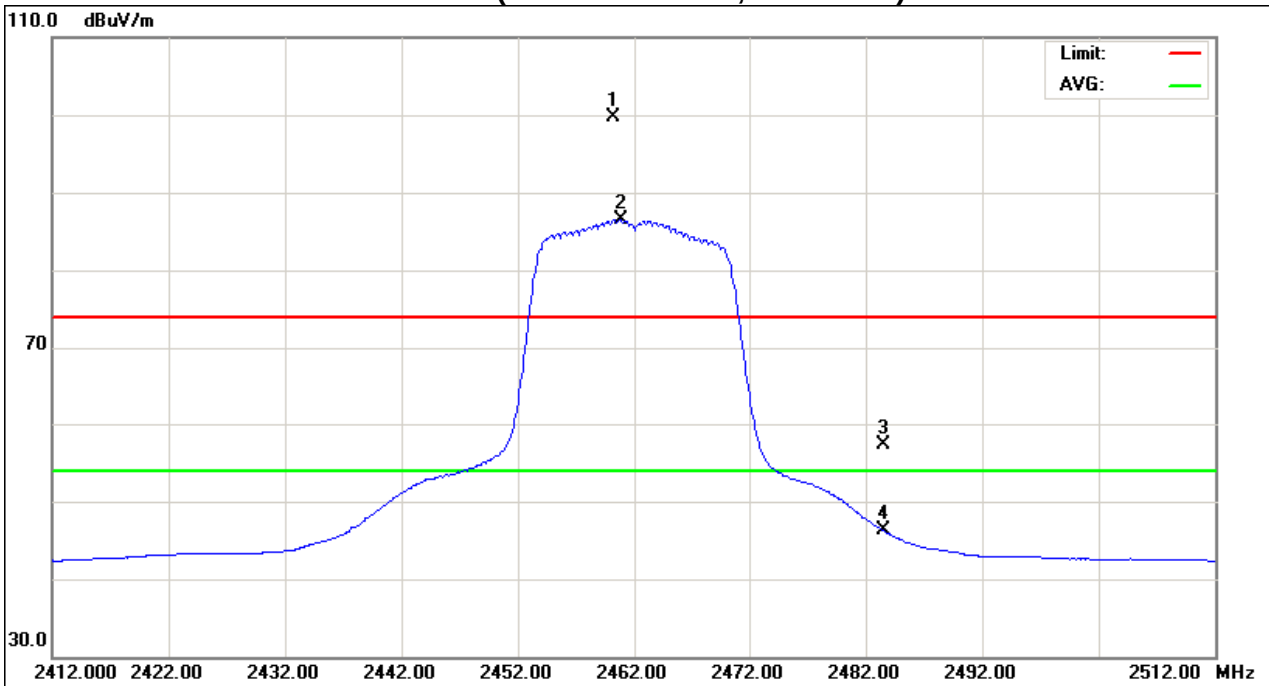
(4) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

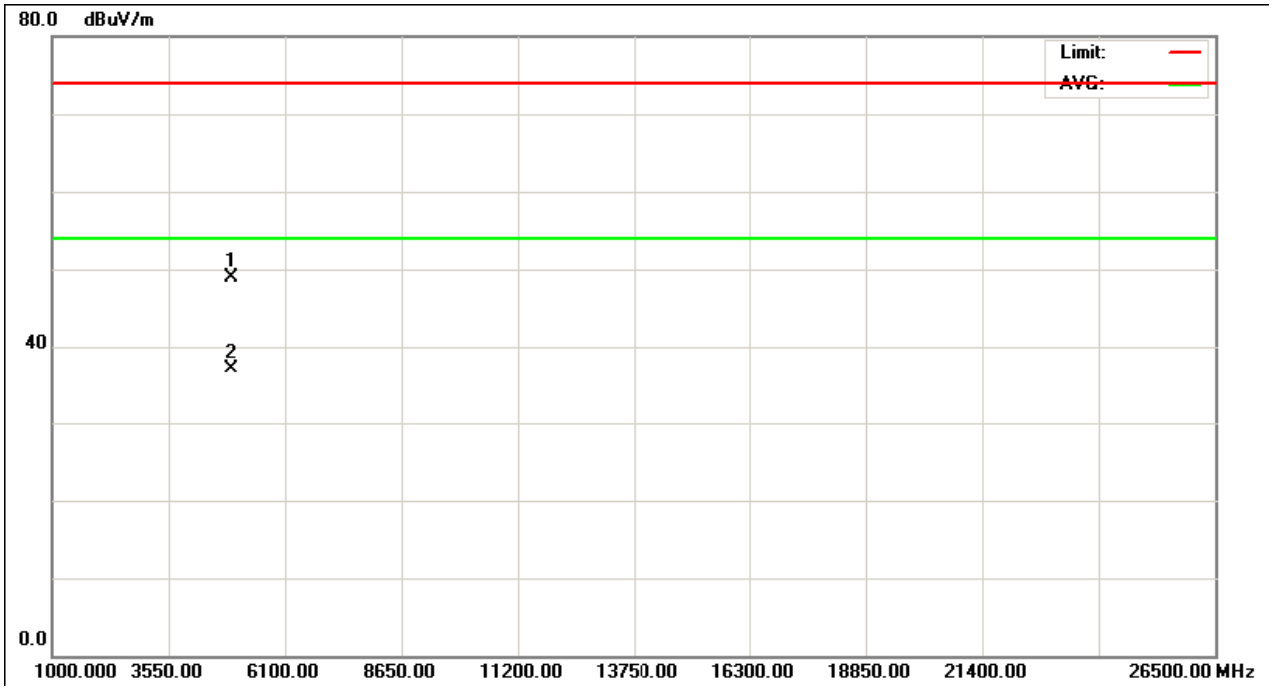
(5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

(6) EUT Orthogonal Axis：
"X" - denotes Laid on Table；"Y" - denotes Vertical Stand；"Z" - denotes Side Stand

(7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna

TX CH11 (Above 1000 MHz, Horizontal)





EUT：	Cruz Tablet	Model Name ：	Cruz Tablet T103
Temperature：	23 ℃	Relative Humidity：	56 %
Pressure：	1010 hPa	Test Voltage ：	DC 3.7V
Test Mode ：	TX N-20M MODE 2412MHz		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Limit		Note
		Peak	AV		Peak	AV	Peak	AV	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2390.00	V	24.04	12.36	31.38	55.42	43.74	74.00	54.00	X/E
2414.30	**V**	**67.83**	**51.49**	**31.37**	**99.20**	**82.86**			**X/F**
4822.83	V	43.17	29.65	5.67	48.84	35.32	74.00	54.00	X/H

Remark：

(1) All readings are Peak unless otherwise stated QP in column of『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform。

(2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency。"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)

(3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission 。

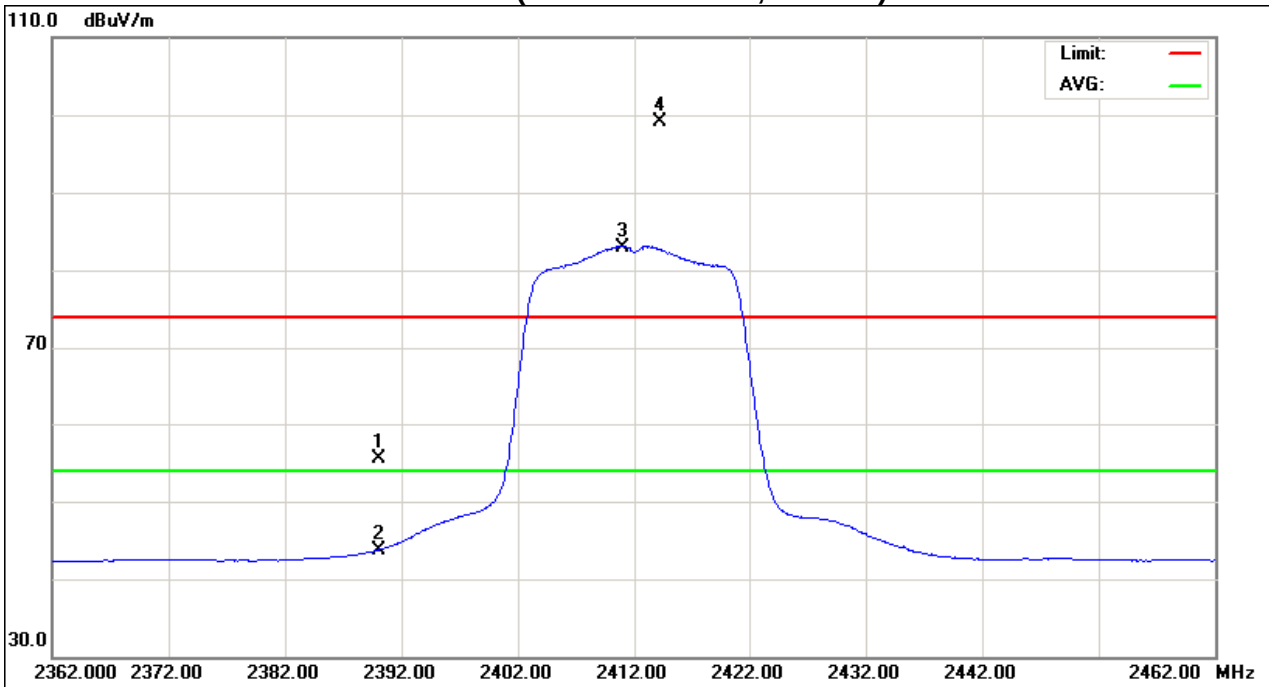
(4) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

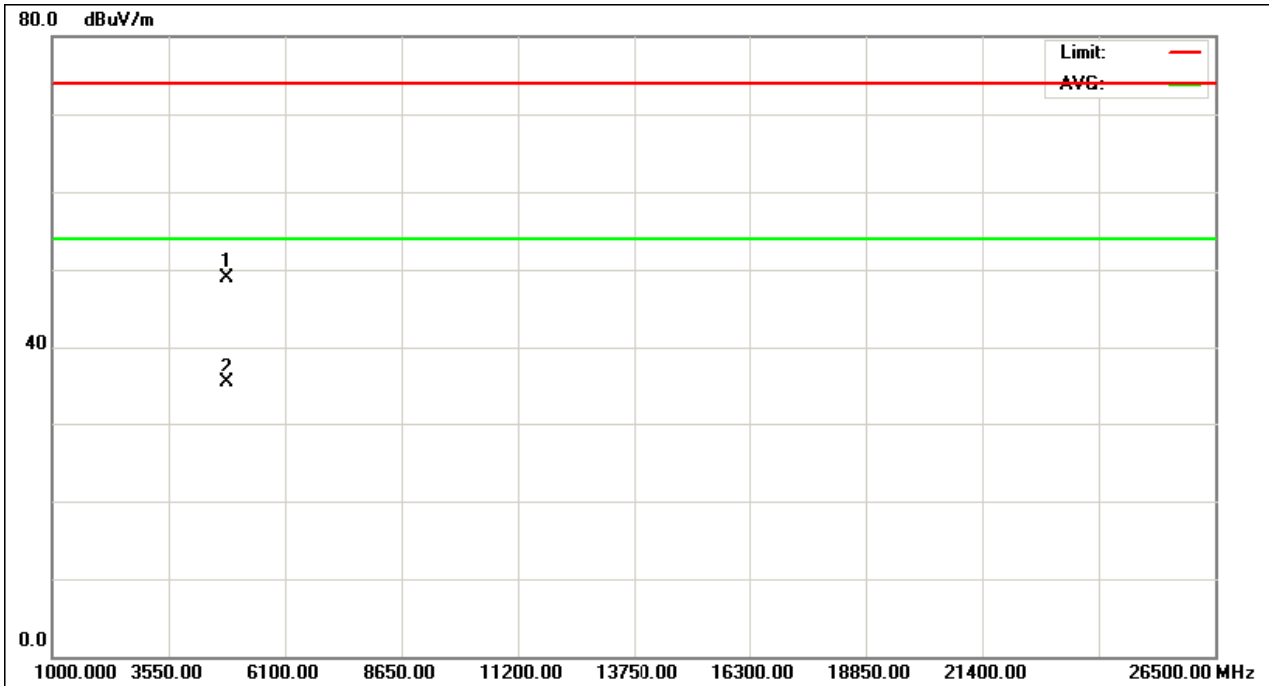
(5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

(6) EUT Orthogonal Axis：
"X" - denotes Laid on Table；"Y" - denotes Vertical Stand；"Z" - denotes Side Stand

(7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna

TX CH01 (Above 1000 MHz, Vertical)





EUT：	Cruz Tablet	Model Name ：	Cruz Tablet T103
Temperature：	23 ℃	Relative Humidity：	56 %
Pressure：	1010 hPa	Test Voltage ：	DC 3.7V
Test Mode ：	TX N-20M MODE 2412MHz		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Limit		Note
		Peak	AV		Peak	AV	Peak	AV	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2390.00	H	22.63	12.43	31.38	54.01	43.81	74.00	54.00	X/E
2411.50	**H**	**68.78**	**53.36**	**31.37**	**100.15**	**84.73**			**X/F**
4824.67	H	46.87	32.36	5.67	52.54	38.03	74.00	54.00	X/H

Remark：

(1) All readings are Peak unless otherwise stated QP in column of『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform。

(2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency。"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)

(3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission 。

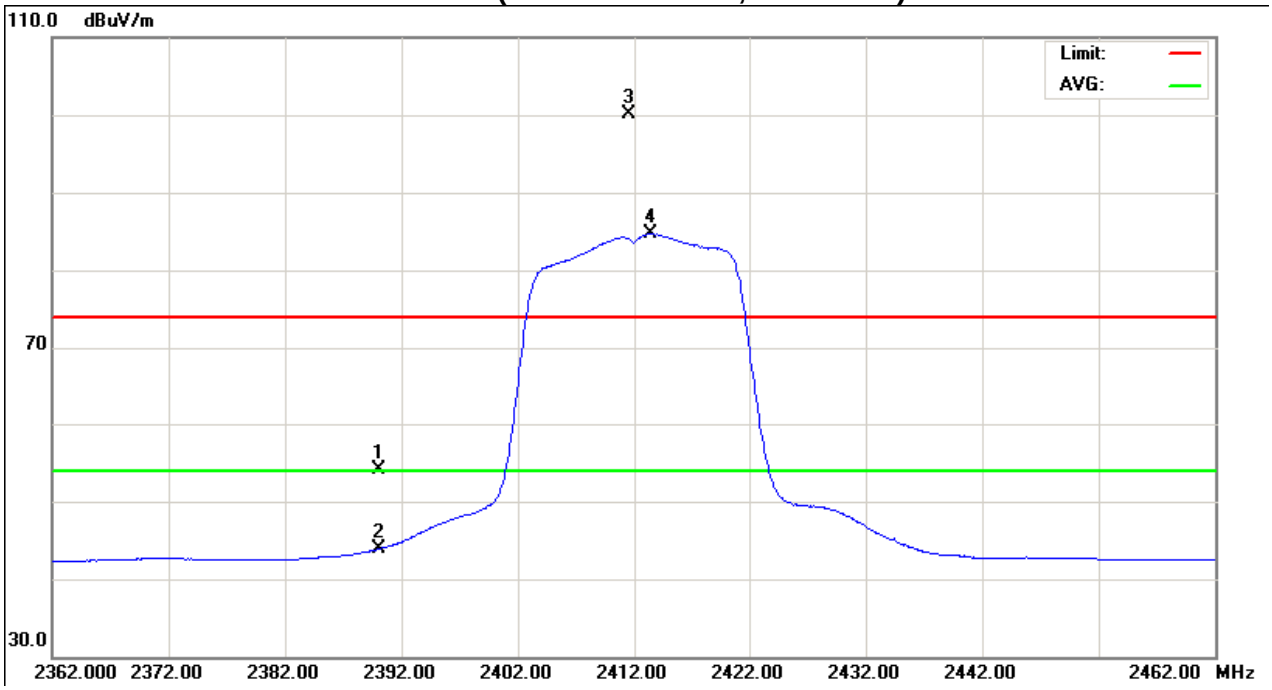
(4) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

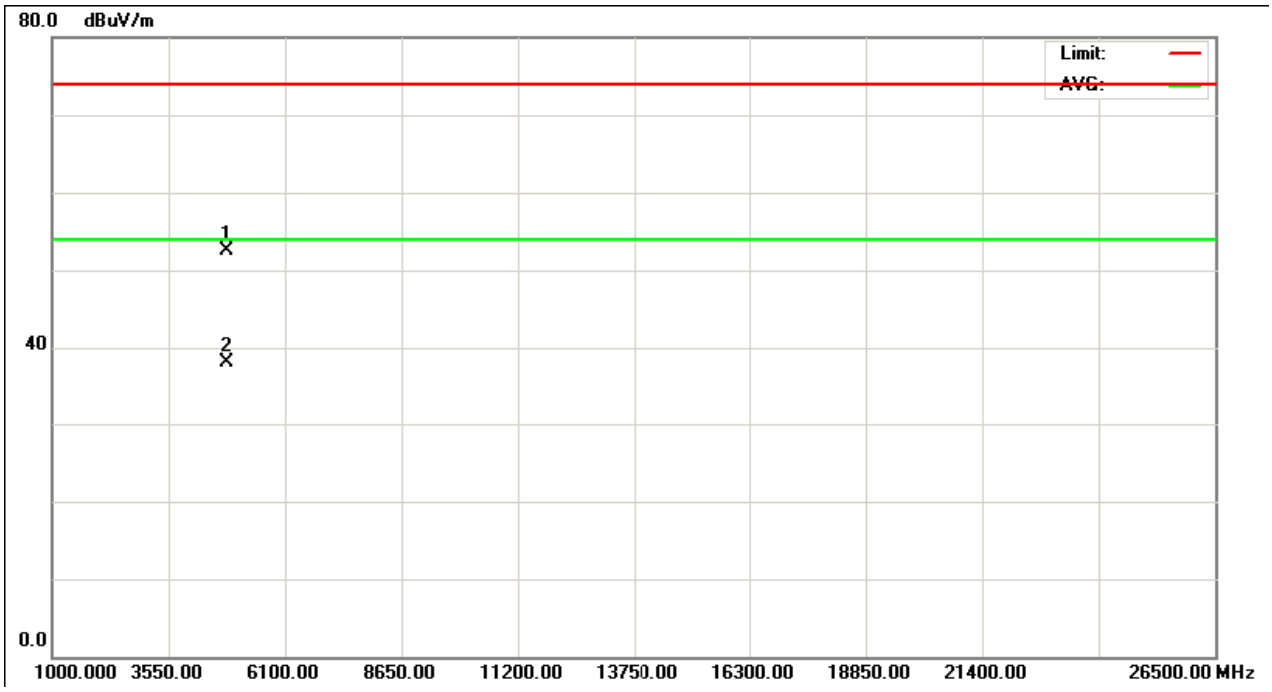
(5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

(6) EUT Orthogonal Axis：
"X" - denotes Laid on Table；"Y" - denotes Vertical Stand；"Z" - denotes Side Stand

(7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna

TX CH01 (Above 1000 MHz, Horizontal)





EUT：	Cruz Tablet	Model Name ：	Cruz Tablet T103
Temperature：	23 ℃	Relative Humidity：	56 %
Pressure：	1010 hPa	Test Voltage ：	DC 3.7V
Test Mode ：	TX N-20M MODE 2437MHz		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Limit		Note
		Peak	AV		Peak	AV	Peak	AV	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2437.50	**V**	**67.39**	**52.11**	**31.36**	**98.75**	**83.47**			**X/F**
4873.31	V	44.21	30.14	5.80	50.01	35.94	74.00	54.00	X/H

Remark：

(1) All readings are Peak unless otherwise stated QP in column of『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform。

(2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency。"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)

(3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission 。

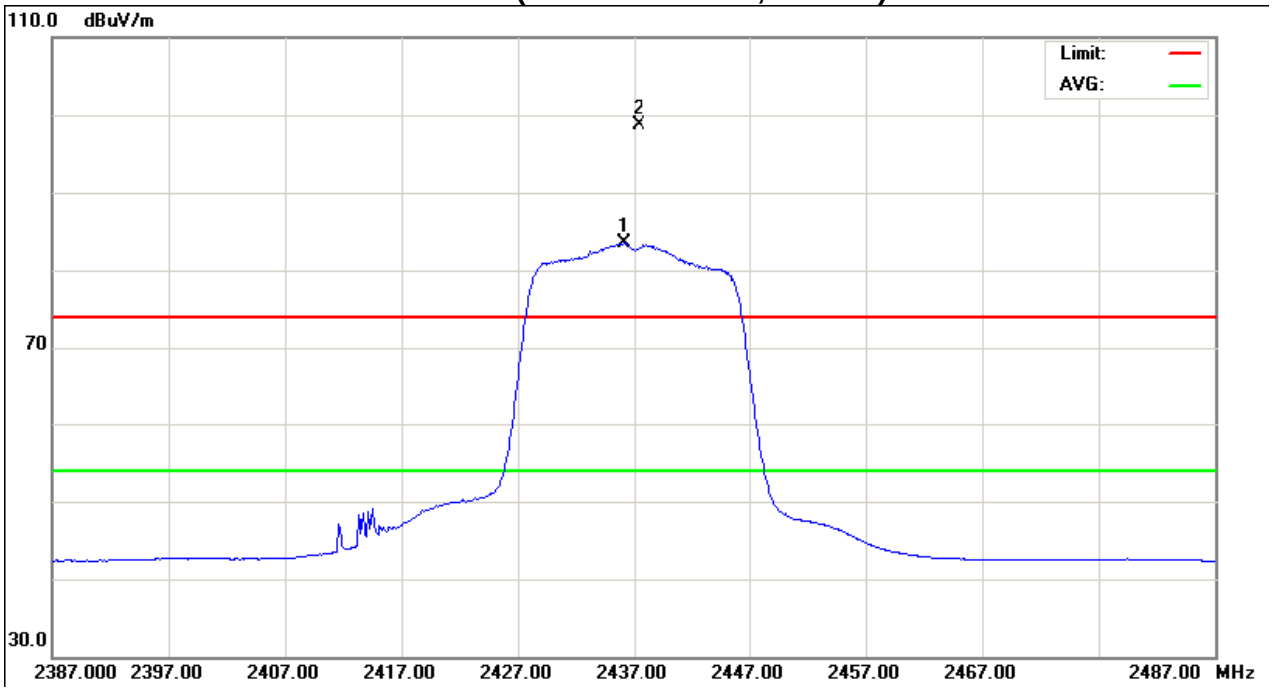
(4) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

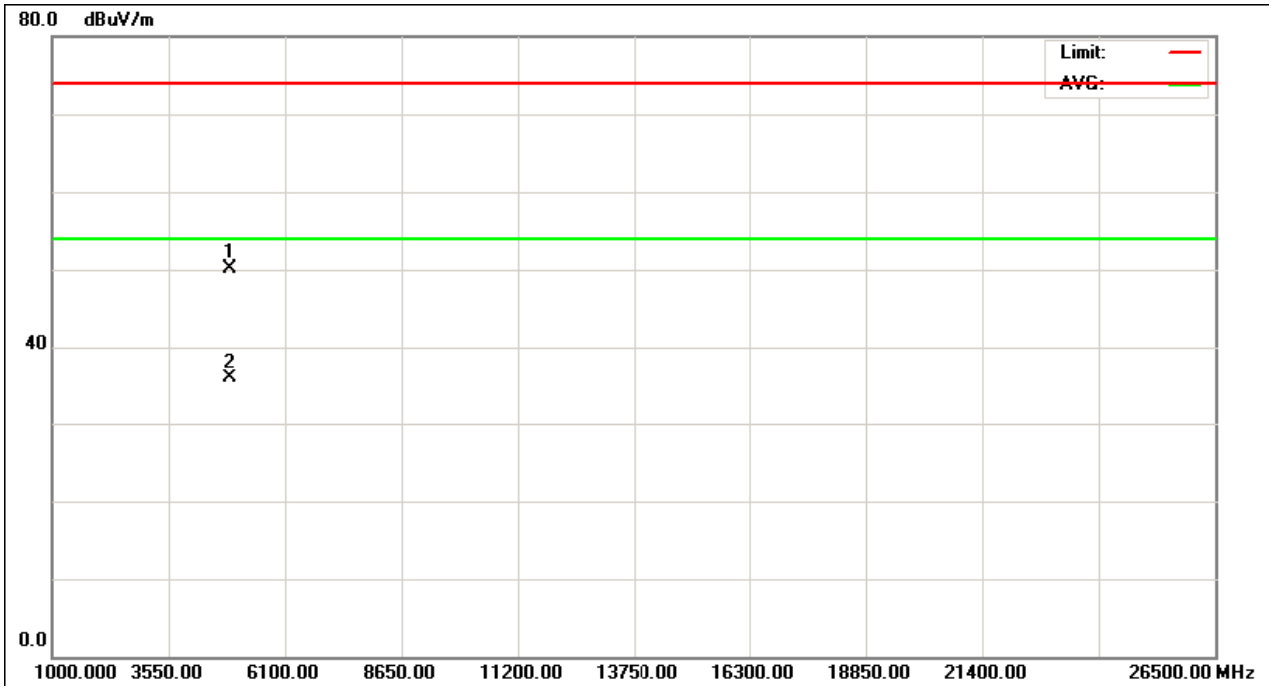
(5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

(6) EUT Orthogonal Axis：
"X" - denotes Laid on Table；"Y" - denotes Vertical Stand；"Z" - denotes Side Stand

(7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna

TX CH06 (Above 1000 MHz, Vertical)





EUT：	Cruz Tablet	Model Name ：	Cruz Tablet T103
Temperature：	23 ℃	Relative Humidity：	56 %
Pressure：	1010 hPa	Test Voltage ：	DC 3.7V
Test Mode ：	TX N-20M MODE 2437MHz		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Limit		Note
		Peak	AV		Peak	AV	Peak	AV	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2438.80	**H**	**66.38**	**51.90**	**31.35**	**97.73**	**83.25**			**X/F**
4872.19	H	47.28	33.46	5.79	53.07	39.25	74.00	54.00	X/H

Remark：

(1) All readings are Peak unless otherwise stated QP in column of『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform。

(2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency。"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)

(3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission 。

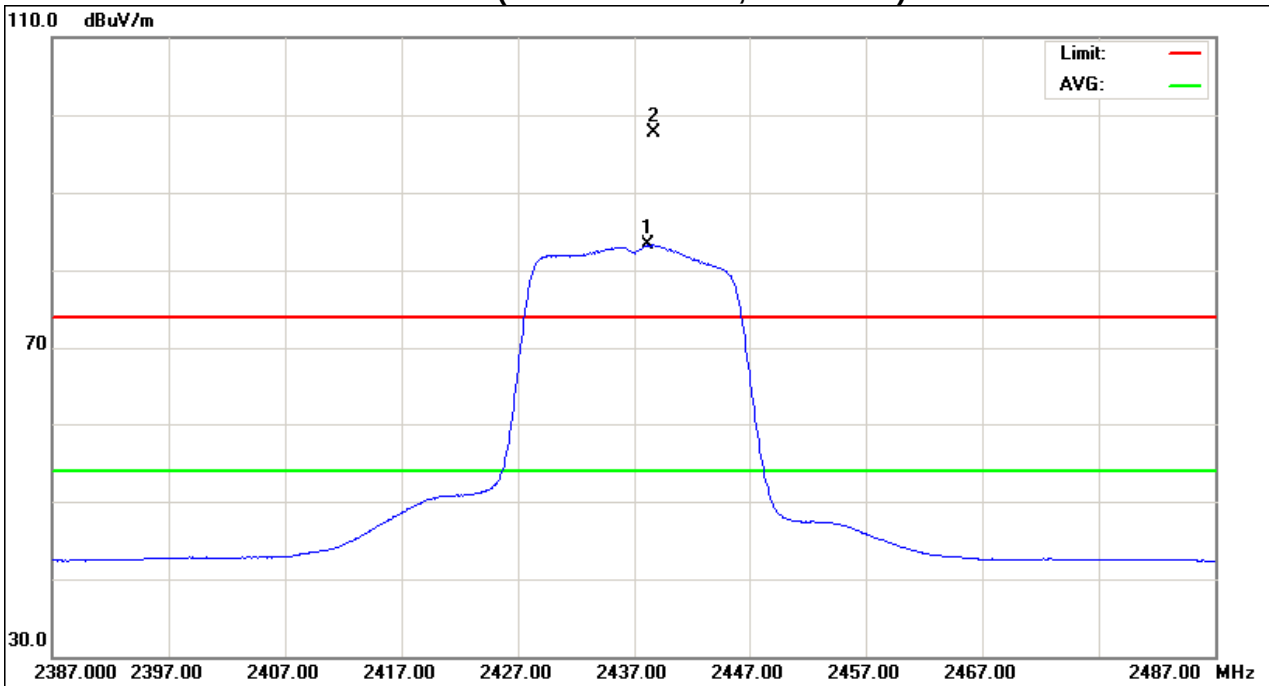
(4) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

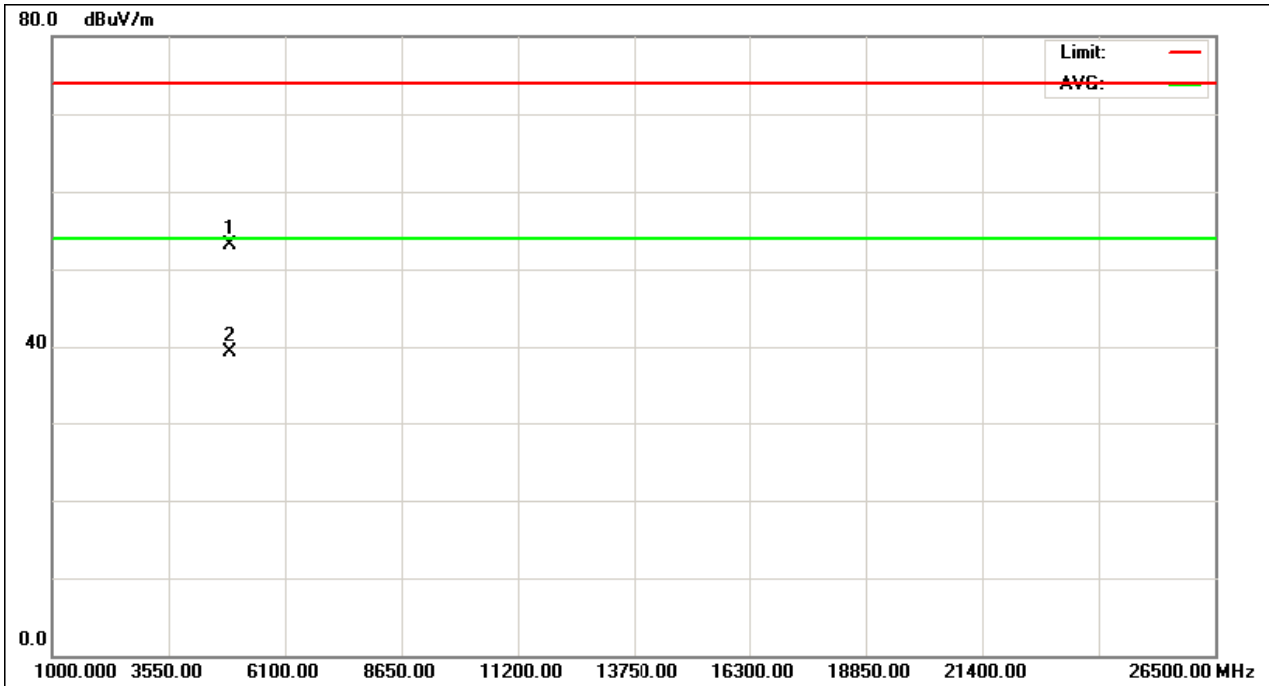
(5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

(6) EUT Orthogonal Axis：
"X" - denotes Laid on Table；"Y" - denotes Vertical Stand；"Z" - denotes Side Stand

(7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna

TX CH06 (Above 1000 MHz, Horizontal)





EUT：	Cruz Tablet	Model Name ：	Cruz Tablet T103
Temperature：	23 ℃	Relative Humidity：	56 %
Pressure：	1010 hPa	Test Voltage ：	DC 3.7V
Test Mode ：	TX N-20M MODE 2462MHz		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Limit		Note
		Peak	AV		Peak	AV	Peak	AV	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2460.90	**V**	**67.99**	**53.25**	**31.34**	**99.33**	**84.59**			**X/F**
2483.50	V	27.74	15.52	31.33	59.07	46.85	74.00	54.00	X/E
4922.08	V	44.56	32.29	5.92	50.48	38.21	74.00	54.00	X/H

Remark：

(1) All readings are Peak unless otherwise stated QP in column of『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform。

(2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency。"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)

(3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission 。

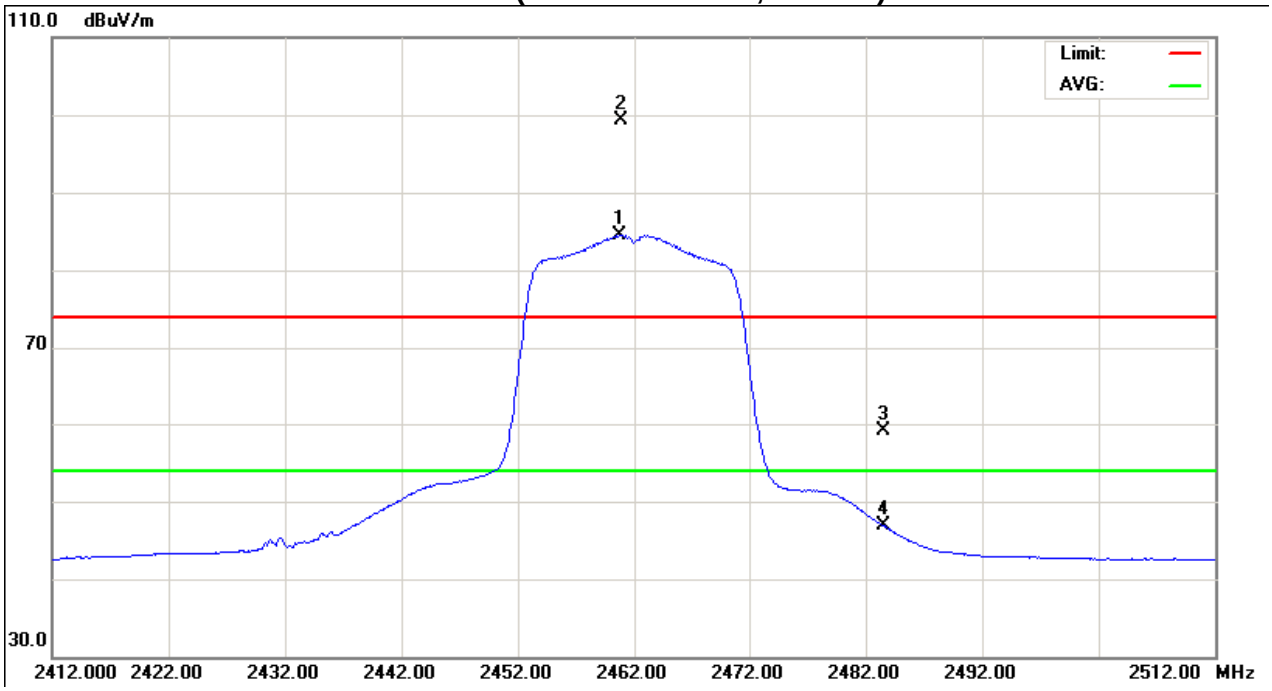
(4) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

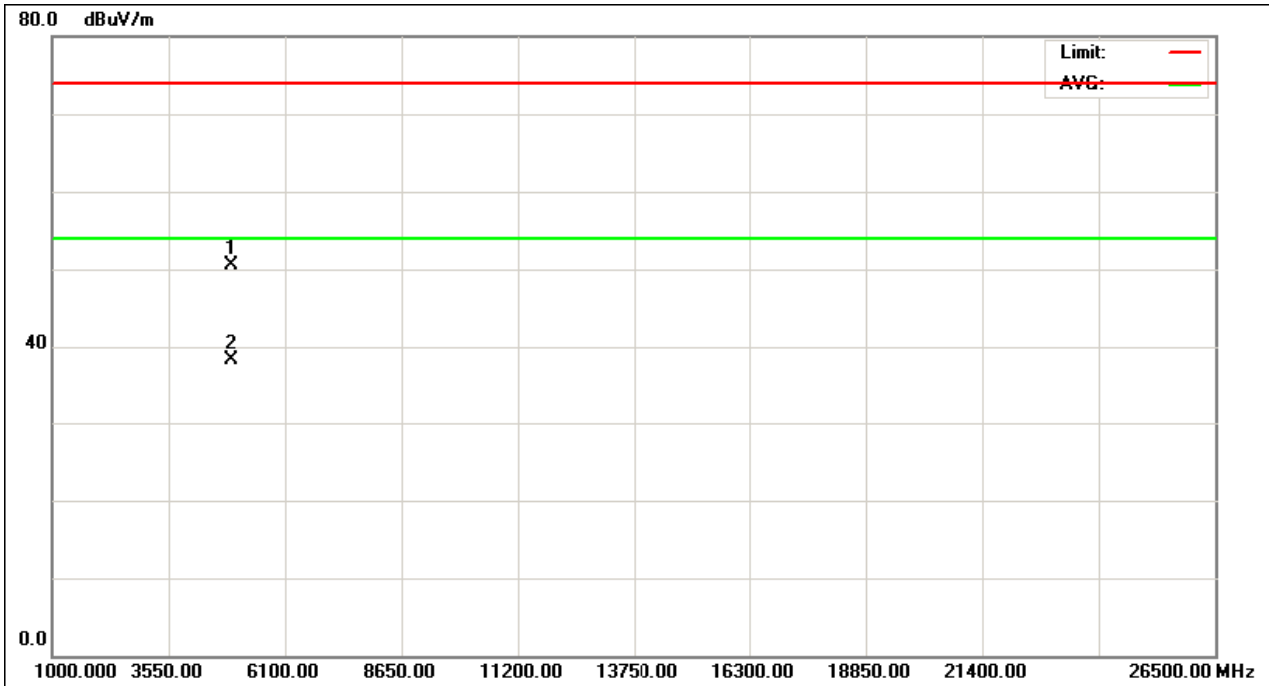
(5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

(6) EUT Orthogonal Axis：
"X" - denotes Laid on Table；"Y" - denotes Vertical Stand；"Z" - denotes Side Stand

(7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna

TX CH11 (Above 1000 MHz, Vertical)





EUT：	Cruz Tablet	Model Name ：	Cruz Tablet T103
Temperature：	23 ℃	Relative Humidity：	56 %
Pressure：	1010 hPa	Test Voltage ：	DC 3.7V
Test Mode ：	TX N-20M MODE 2462MHz		

Freq.	Ant.Pol.	Reading		Ant./CF	Act.		Limit		Note
		Peak	AV		Peak	AV	Peak	AV	
(MHz)	H/V	(dBuV)	(dBuV)	CF(dB)	(dBuV/m)	(dBuV/m)	(dBuV/m)	(dBuV/m)	
2461.50	**H**	**69.18**	**53.82**	**31.34**	**100.52**	**85.16**			**X/F**
2483.50	H	25.46	14.54	31.33	56.79	45.87	74.00	54.00	X/E
4923.65	H	49.25	35.54	5.93	55.18	41.47	74.00	54.00	X/H

Remark：

(1) All readings are Peak unless otherwise stated QP in column of『Note』. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform。

(2) Measuring frequency range from 30MHz to 1000MHz or the 10th harmonic of highest fundamental frequency。"F" denotes fundamental frequency; "H" denotes spurious frequency. "E" denotes band edge frequency. (This judgment method includes the Band Edge Requirement.)

(3) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission 。

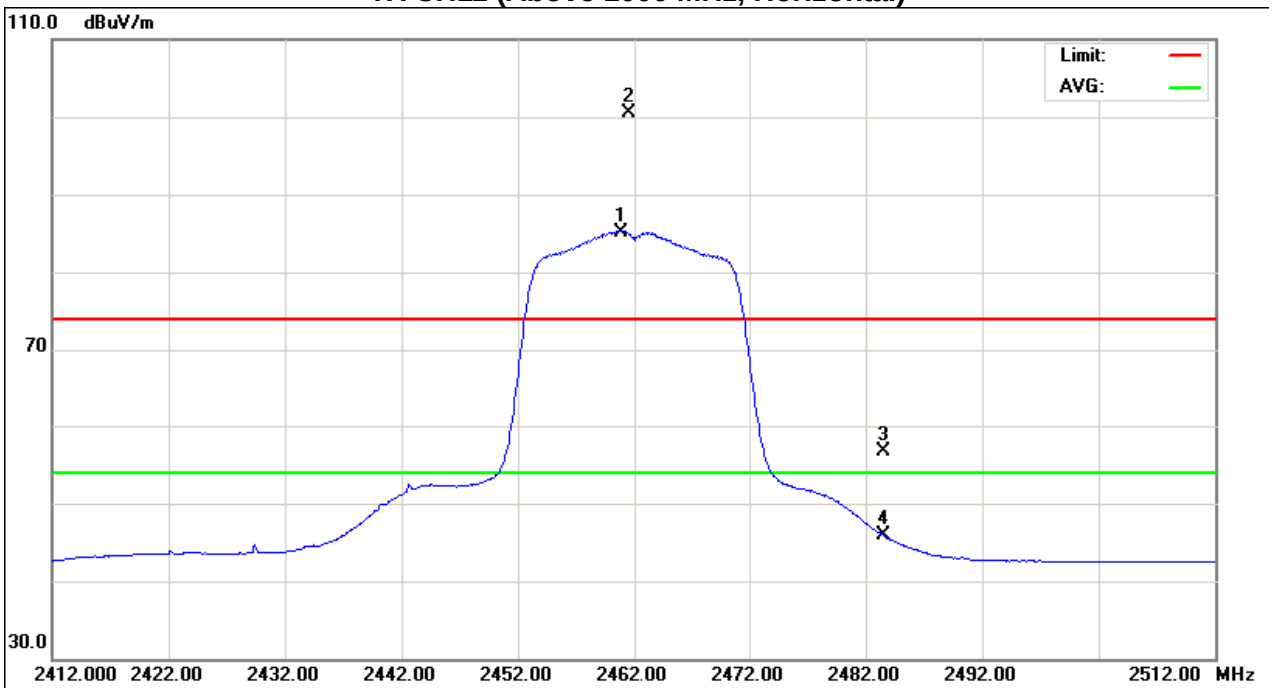
(4) Data of measurement within this frequency range shown " * " in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

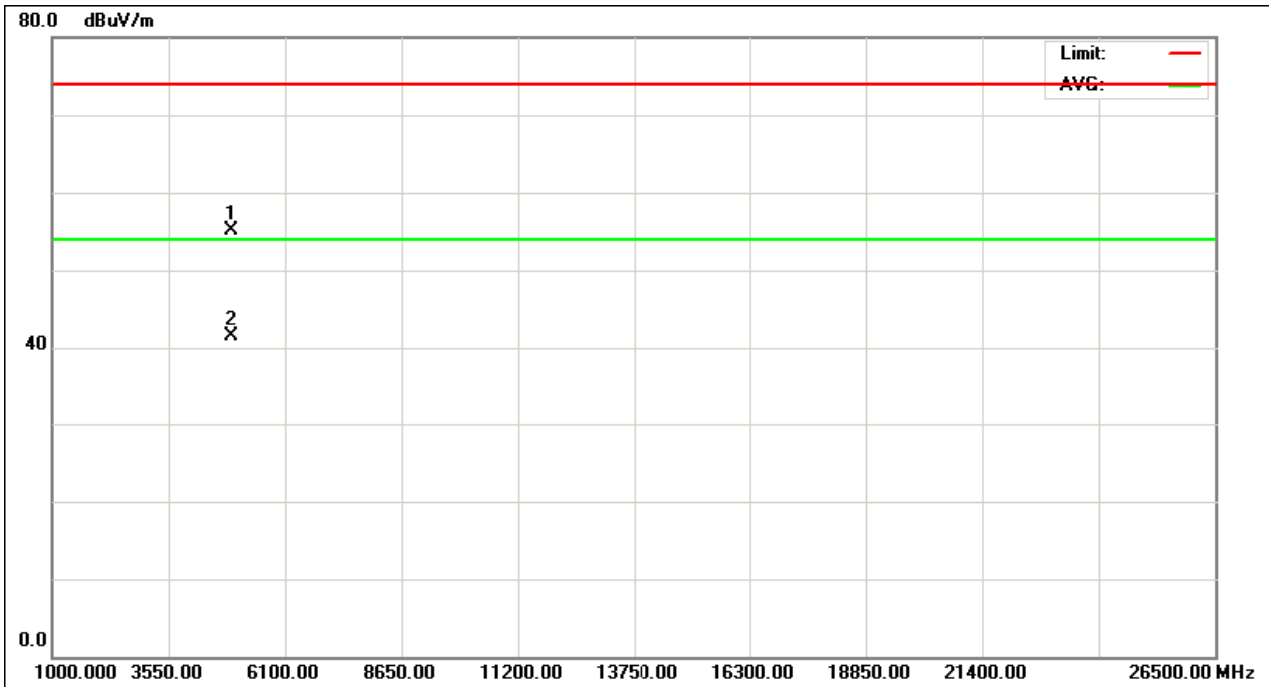
(5) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

(6) EUT Orthogonal Axis：
"X" - denotes Laid on Table；"Y" - denotes Vertical Stand；"Z" - denotes Side Stand

(7) During the measurements above 1 GHz it is taken care of that the EUT is always within the 3 dB cone of radiation BW of the used antenna

TX CH11 (Above 1000 MHz, Horizontal)





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	>= 500KHz (6dB bandwidth)	2400-2483.5	PASS

5.1.1 MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP_40	100129	Jan. 05, 2011

Remark: ” N/A” denotes No Model Name. , Serial No. or No Calibration specified.

5.1.2 TEST PROCEDURE

a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,
b. Spectrum Setting : RBW= 100KHz, VBW=100KHz, Sweep time = 20 ms.

5.1.3 DEVIATION FROM STANDARD

No deviation.

5.1.4 TEST SETUP

5.1.5 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 4.1.6 Unless otherwise a special operating condition is specified in the follows during the testing.

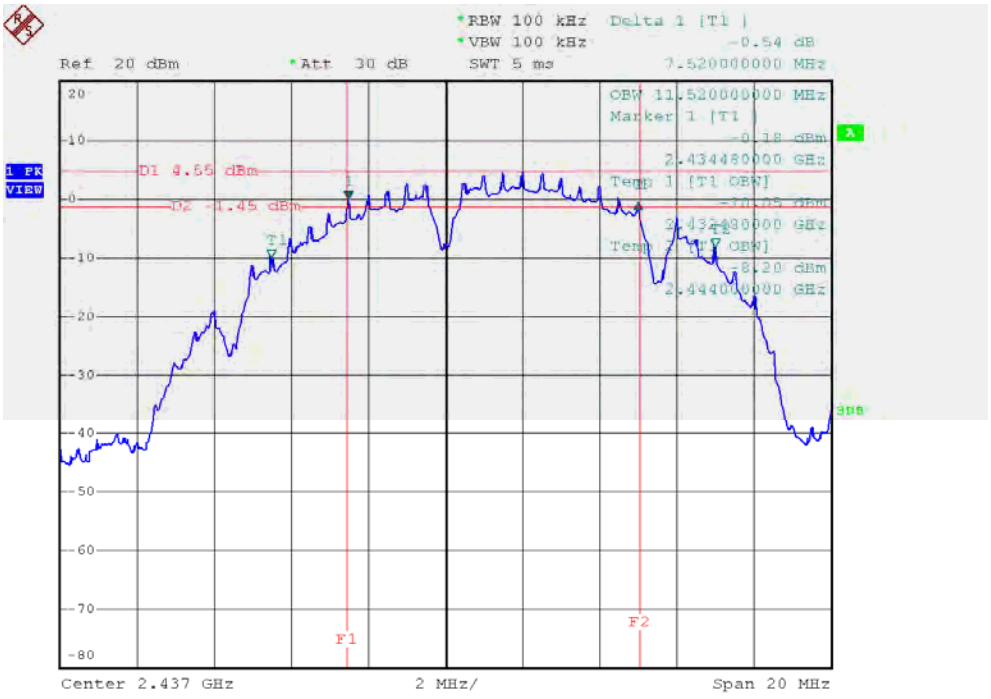
5.1.6 TEST RESULTS

EUT：	Cruz Tablet	Model Name. ：	Cruz Tablet T103
Temperature：	24 ℃	Relative Humidity：	60 %
Pressure：	1016 hPa	Test Voltage ：	AC 120V/60Hz
Test Mode ：	TX B MODE /CH01, CH06, CH11		

Test Channel	Frequency (MHz)	Bandwidth (MHz)	99% Occupied BW (MHz)	LIMIT (MHz)
CH01	2412	7.04	11.52	>=500KHz
CH06	2437	7.52	11.52	>=500KHz
CH11	2462	7.08	11.56	>=500KHz

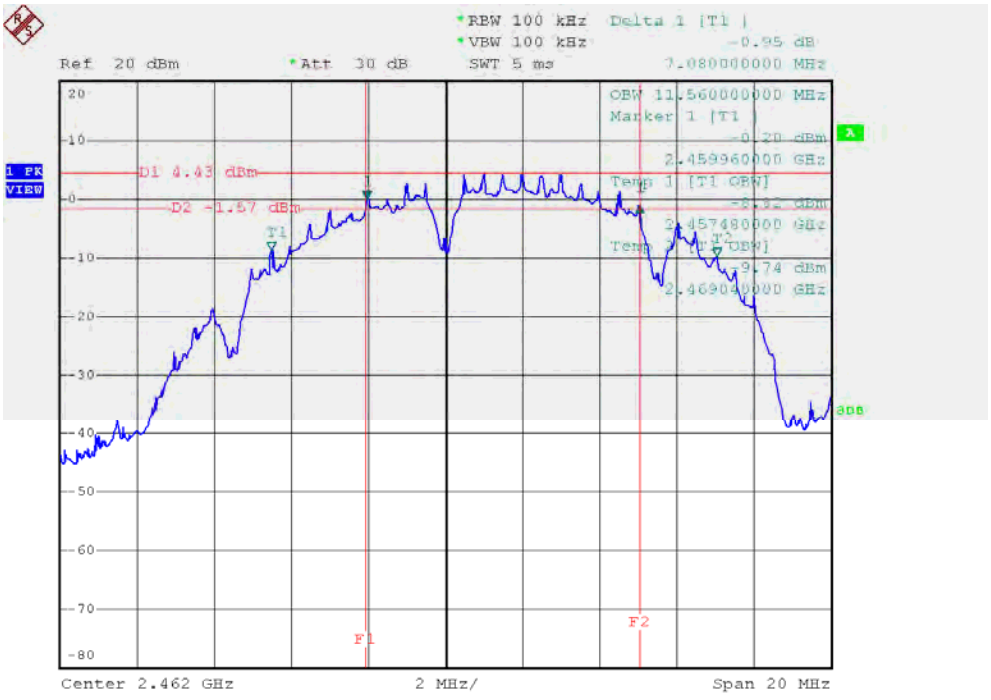
TX CH 01

TX CH 06



Date: 29.SEP.2010 00:42:59

TX CH 11

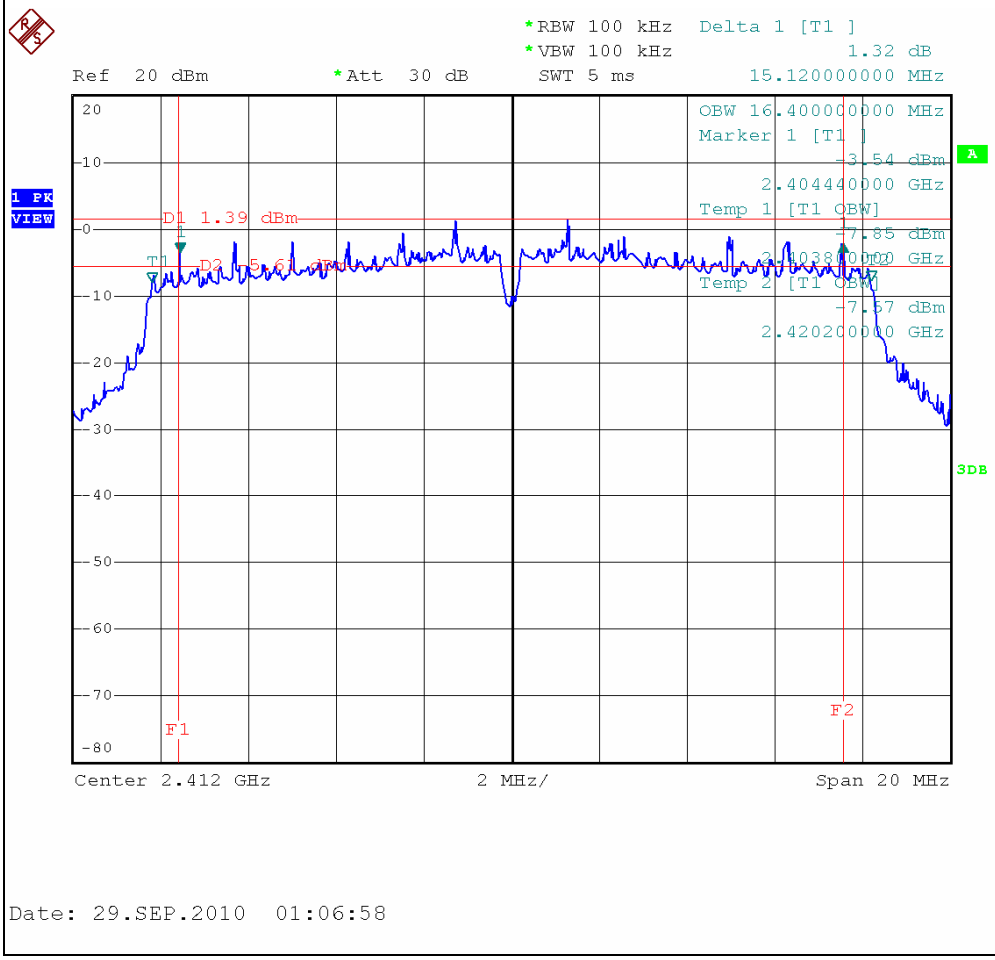


Date: 29.SEP.2010 00:44:16

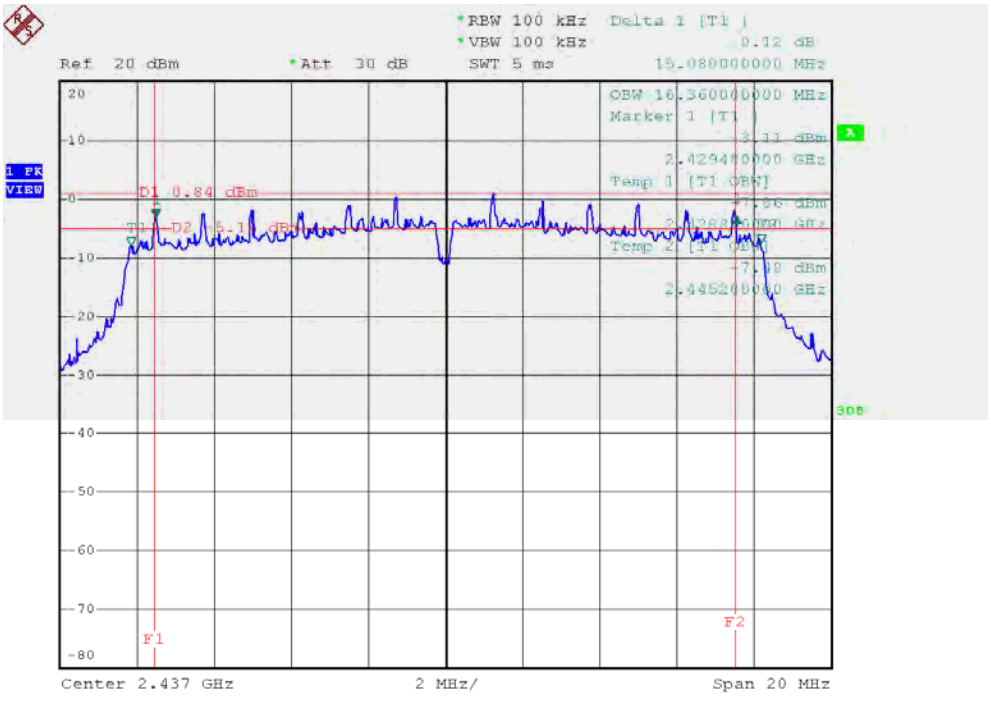
EUT：	Cruz Tablet	Model Name. ：	Cruz Tablet T103
Temperature：	24 ℃	Relative Humidity：	60 %
Pressure：	1016 hPa	Test Voltage ：	AC 120V/60Hz
Test Mode ：	TX G MODE /CH01, CH06, CH11		

Test Channel	Frequency (MHz)	Bandwidth (MHz)	99% Occupied BW (MHz)	LIMIT (MHz)
CH01	2412	15.12	16.40	>=500KHz
CH06	2437	15.08	16.36	>=500KHz
CH11	2462	14.80	16.40	>=500KHz

TX CH 01

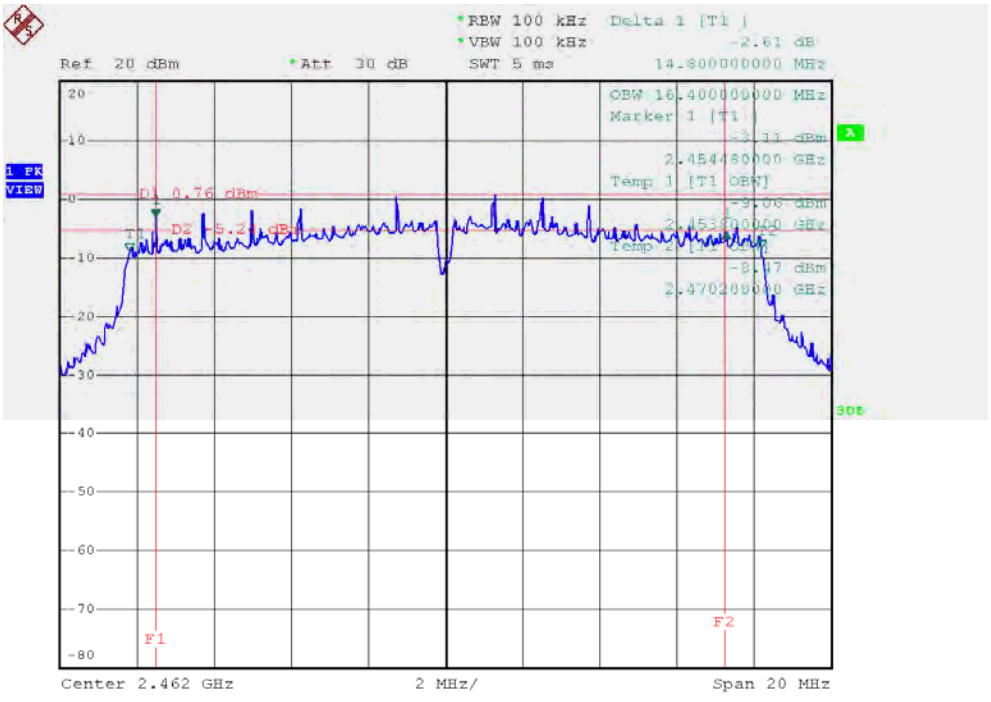


TX CH 06



Date: 29.SEP.2010 01:08:08

TX CH 11

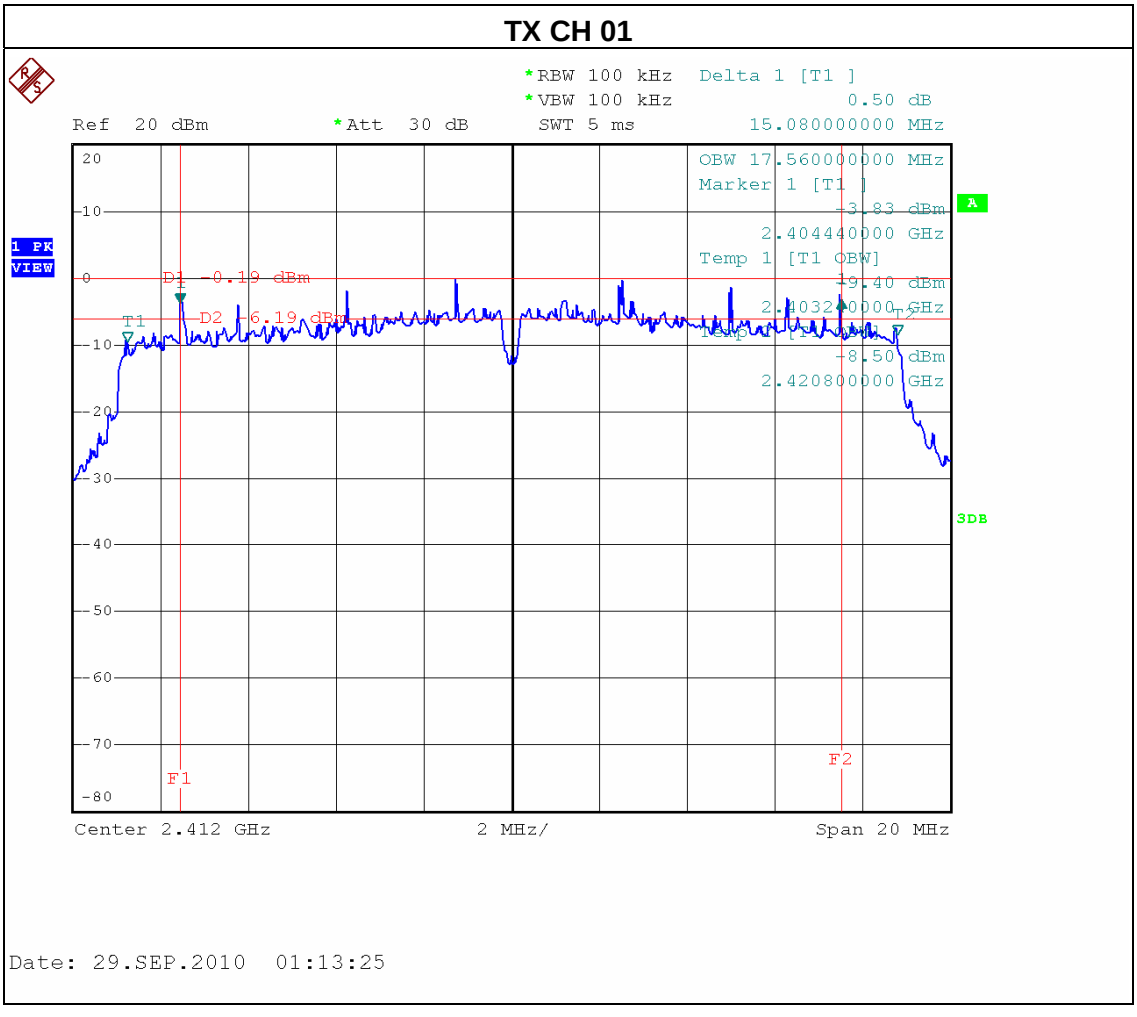


Date: 29.SEP.2010 01:09:43

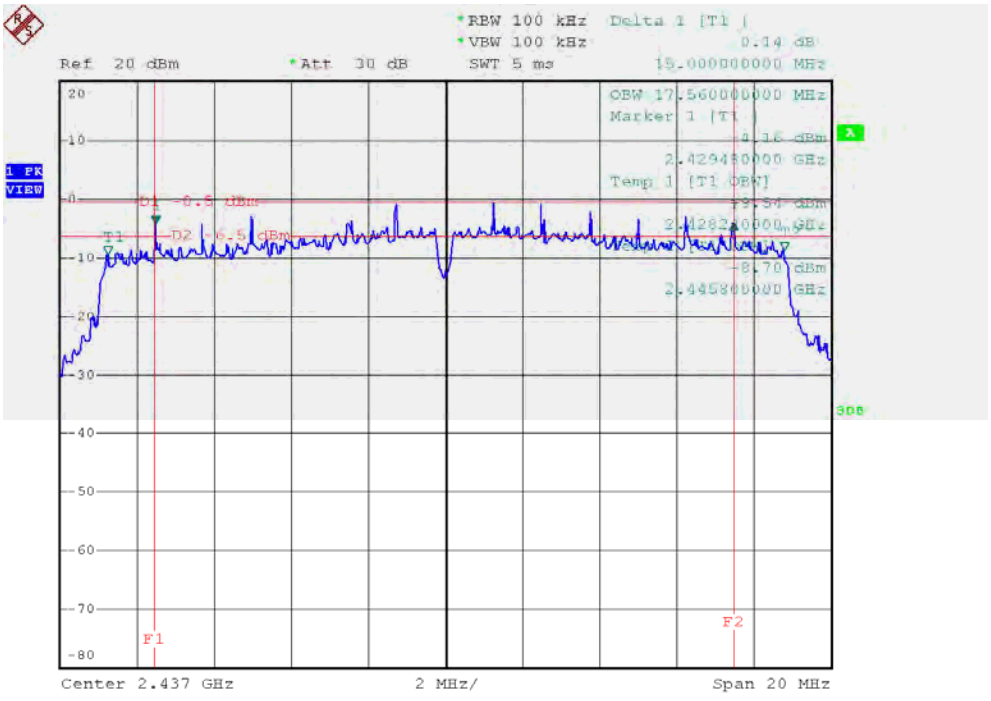
EUT：	Cruz Tablet	Model Name. ：	Cruz Tablet T103
Temperature：	24 ℃	Relative Humidity：	60 %
Pressure：	1016 hPa	Test Voltage ：	AC 120V/60Hz
Test Mode ：	TX N MODE -20MHz/ CH01, CH06, CH11		

Test Channel	Frequency (MHz)	Bandwidth (MHz)	99% Occupied BW (MHz)	LIMIT (MHz)
CH01	2412	15.08	17.56	>=500KHz
CH06	2437	15.00	17.56	>=500KHz
CH11	2462	15.12	17.56	>=500KHz

TX CH 01

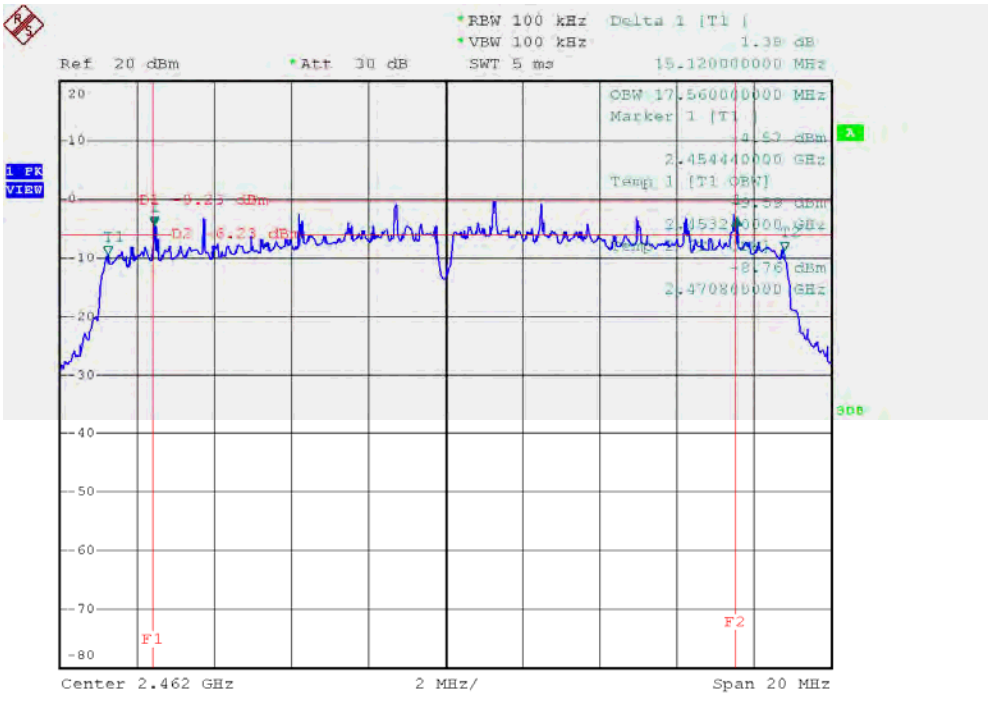


TX CH 06



Date: 29.SEP.2010 01:12:07

TX CH 11



Date: 29.SEP.2010 01:11:19

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 MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Power Meter	Anritsu	ML2487A	6K00004714	Feb. 10, 2011
2	Power Meter Sensor	Anritsu	MA2491A	34138	Feb. 10, 2011

Remark: ” N/A” denotes No Model Name. , Serial No. or No Calibration specified.

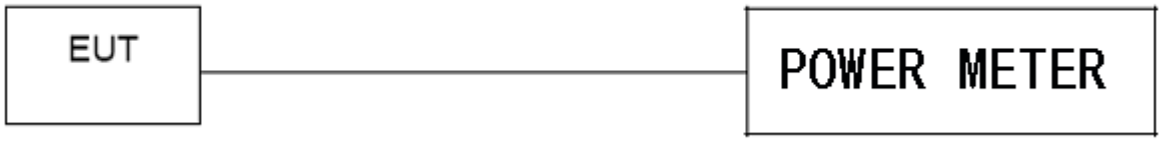
6.1.2 TEST PROCEDURE

a. The EUT was directly connected to the power metter and antenna output port as show in the block diagram below,

6.1.3 DEVIATION FROM STANDARD

No deviation.

6.1.4 TEST SETUP



6.1.5 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 4.1.6 Unless otherwise a special operating condition is specified in the follows during the testing.

6.1.6 TEST RESULTS

EUT：	Cruz Tablet	Model Name ：	Cruz Tablet T103
Temperature：	24 ℃	Relative Humidity：	60 %
Pressure：	1016 hPa	Test Voltage ：	AC 120V/60Hz
Test Mode ：	TX B MODE /CH01, CH06, CH11		

Peak Output Power

Test Channel	Frequency (MHz)	Peak Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH01	2412 MHz	18.59	30	1
CH06	2437 MHz	17.30	30	1
CH11	2462 MHz	17.10	30	1

Average Output Power limit: None ; for reporting purposes only

Test Channel	Frequency (MHz)	AV Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH01	2412 MHz	15.72	30	1
CH06	2437 MHz	14.43	30	1
CH11	2462 MHz	14.31	30	1

EUT：	Cruz Tablet	Model Name ：	Cruz Tablet T103
Temperature：	24 ℃	Relative Humidity：	60 %
Pressure：	1016 hPa	Test Voltage ：	AC 120V/60Hz
Test Mode ：	TX G MODE /CH01, CH06, CH11		

Peak Output Power

Test Channel	Frequency (MHz)	Peak Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH01	2412 MHz	22.99	30	1
CH06	2437 MHz	23.12	30	1
CH11	2462 MHz	22.28	30	1

Average Output Power limit: None ; for reporting purposes only

Test Channel	Frequency (MHz)	AV Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH01	2412 MHz	11.49	30	1
CH06	2437 MHz	11.72	30	1
CH11	2462 MHz	11.28	30	1

EUT：	Cruz Tablet	Model Name ：	Cruz Tablet T103
Temperature：	24 ℃	Relative Humidity：	60 %
Pressure：	1016 hPa	Test Voltage ：	AC 120V/60Hz
Test Mode ：	TX N-20M MODE /CH01, CH06, CH11		

Peak Output Power

Test Channel	Frequency (MHz)	Peak Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH01	2412 MHz	22.04	30	1
CH06	2437 MHz	21.81	30	1
CH11	2462 MHz	21.69	30	1

Average Output Power limit: None ; for reporting purposes only

Test Channel	Frequency (MHz)	AV Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
CH01	2412 MHz	10.58	30	1
CH06	2437 MHz	10.33	30	1
CH11	2462 MHz	10.24	30	1

7. ANTENNA CONDUCTED SPURIOUS EMISSION

7.1 Applied procedures / limit

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

7.1.1 MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP_40	100129	Jan. 05, 2011

Remark: ” N/A” denotes No Model Name. , Serial No. or No Calibration specified.

The following table is the setting of the spectrum analyzer.

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	100 MHz
RB / VB (emission in restricted band)	1MHz / 1MHz for Peak, 1 MHz / 10Hz for Average
RB / VB (other emission)	100 KHz /100 KHz for Peak

7.1.2 TEST PROCEDURE

a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,
b. Spectrum Setting : RBW= 100KHz, VBW=100KHz, Sweep time = 10 ms.

7.1.3 DEVIATION FROM STANDARD

No deviation.

7.1.4 TEST SETUP

7.1.5 EUT OPERATION CONDITIONS

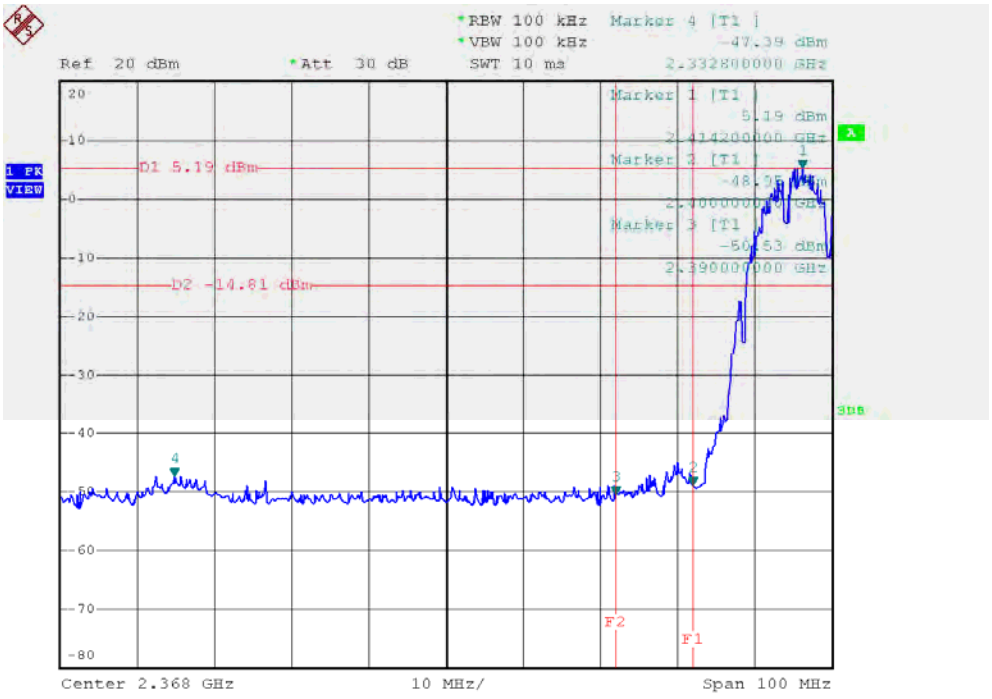
The EUT tested system was configured as the statements of 4.1.6 Unless otherwise a special operating condition is specified in the follows during the testing.

7.1.6 TEST RESULTS

EUT：	Cruz Tablet	Model Name ：	Cruz Tablet T103
Temperature：	24 ℃	Relative Humidity：	60 %
Pressure：	1016 hPa	Test Voltage ：	AC 120V/60Hz
Test Mode ：	TX B MODE /CH01, CH11		

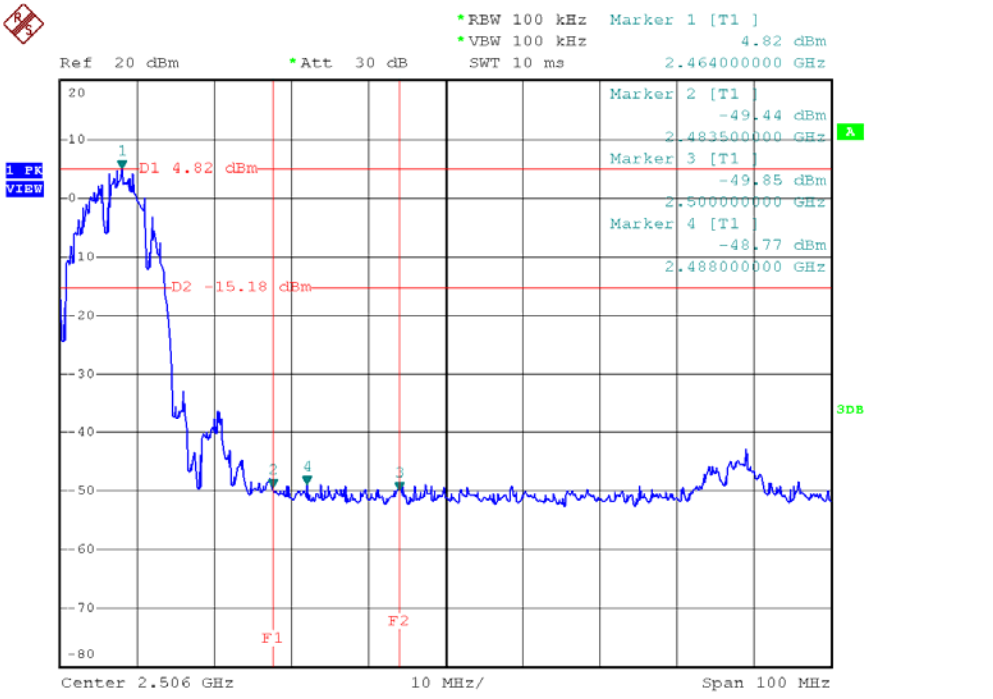
Channel of Worst Data: CH01			
The max. radio frequency power in any 100kHz bandwidth outside the frequency band		The max. radio frequency power in any 100 kHz bandwidth within the frequency band.	
FREQUENCY(MHz)	POWER(dBm)	FREQUENCY(MHz)	POWER(dBm)
2332.80	-47.39	2488.00	-48.77
Result			
In any 100kHz bandwidth outside the frequency band, the radio frequency power is at least 20dB below that in the 100kHz bandwidth within the band that contains the highest lever of the desired power.			

TX B mode CH01



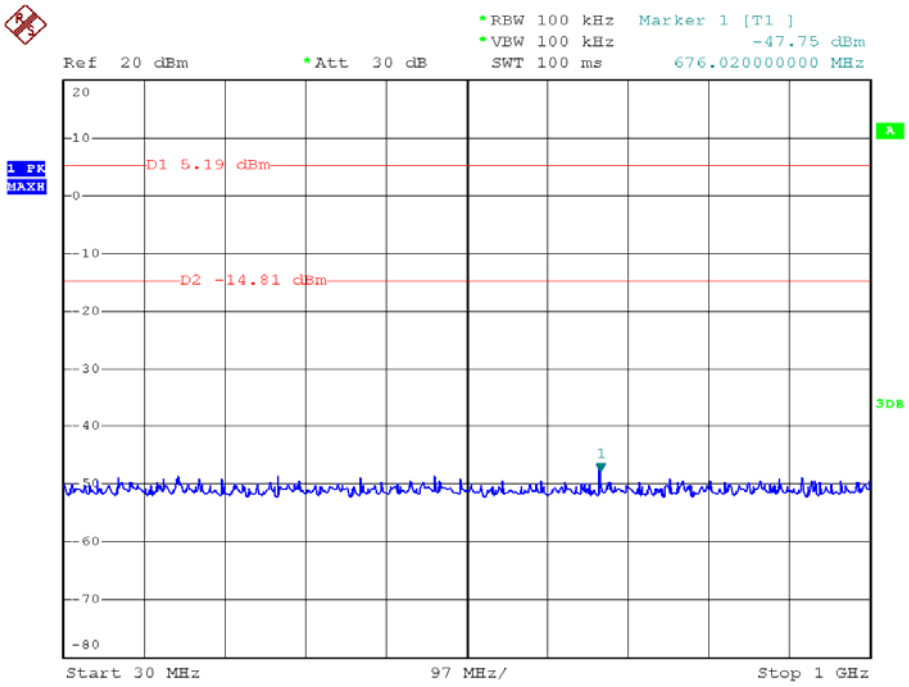
Date: 29.SEP.2010 00:47:52

TX B mode CH11



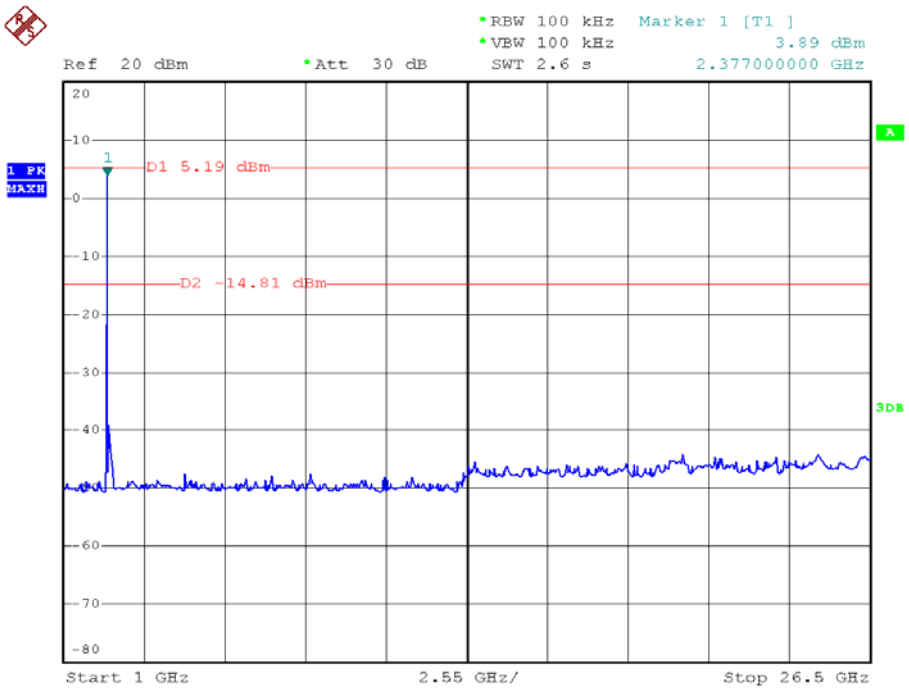
Date: 29.SEP.2010 00:46:15

TX B mode CH01 (30M~1000MHz)



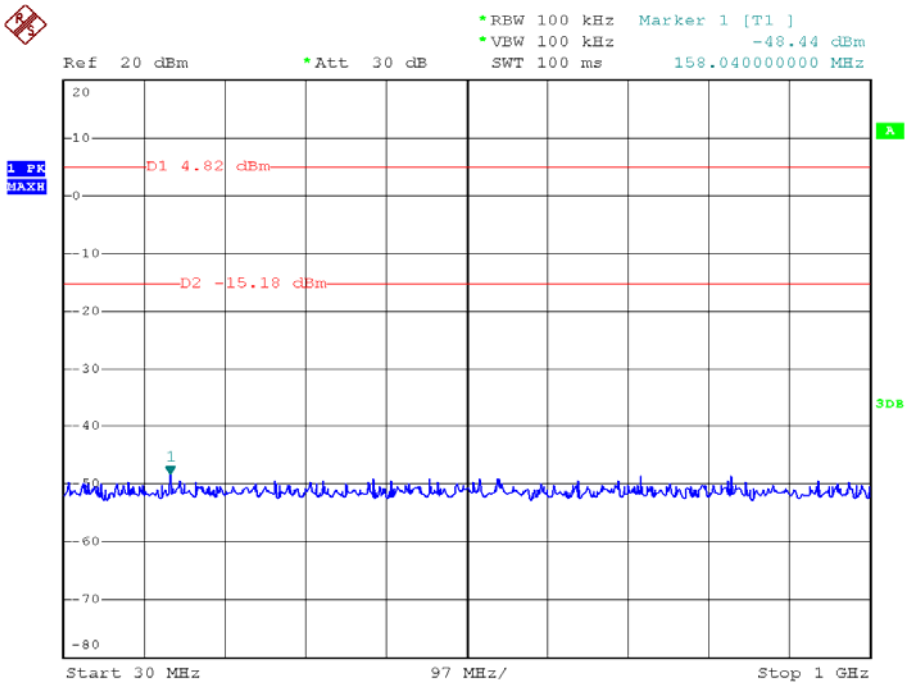
Date: 29.SEP.2010 00:48:21

TX B mode CH01 (1000MHz~10th Harmonic)



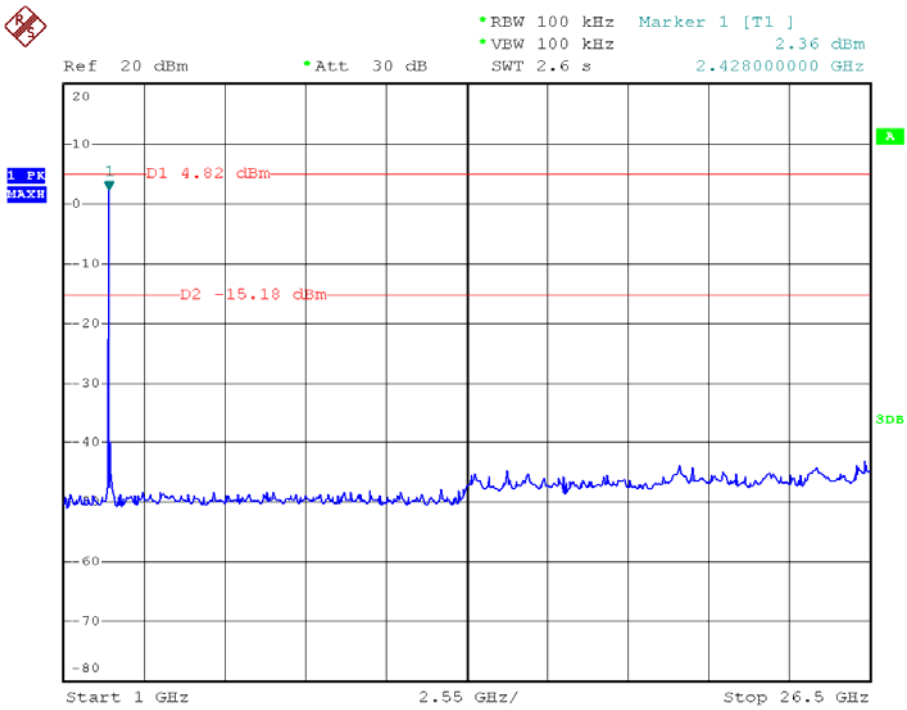
Date: 29.SEP.2010 00:48:55

TX B mode CH11 (30M~1000MHz)



Date: 29.SEP.2010 00:51:45

TX B mode CH11 (1000MHz~10th Harmonic)

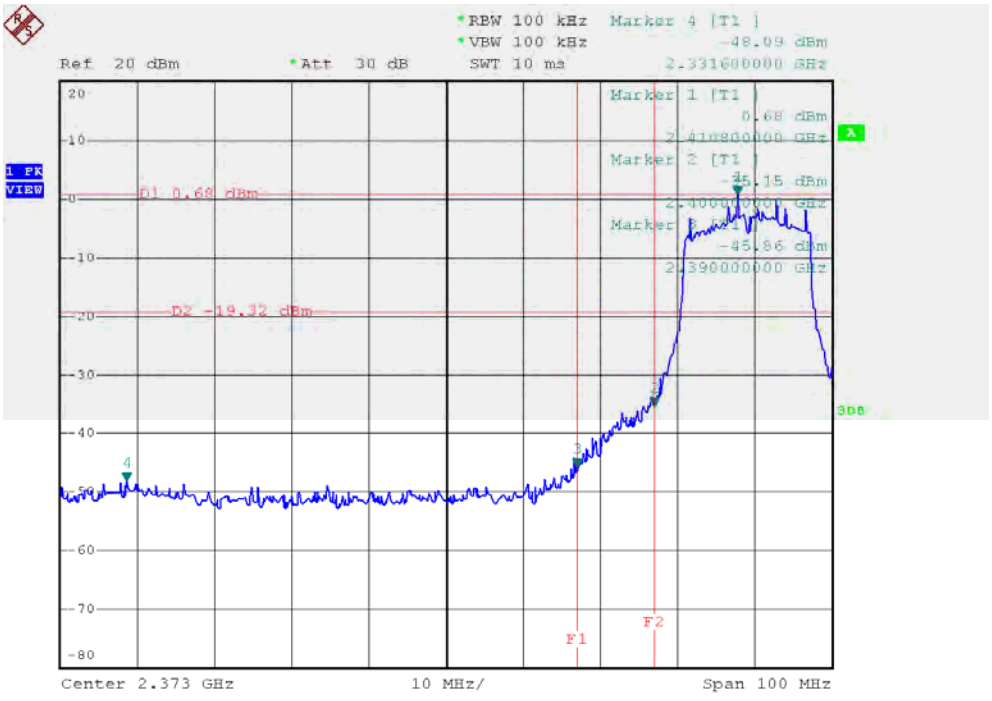


Date: 29.SEP.2010 00:51:33

EUT：	Cruz Tablet	Model Name ：	Cruz Tablet T103
Temperature：	24 ℃	Relative Humidity：	60 %
Pressure：	1016 hPa	Test Voltage ：	AC 120V/60Hz
Test Mode ：	TX G MODE /CH01, CH11		

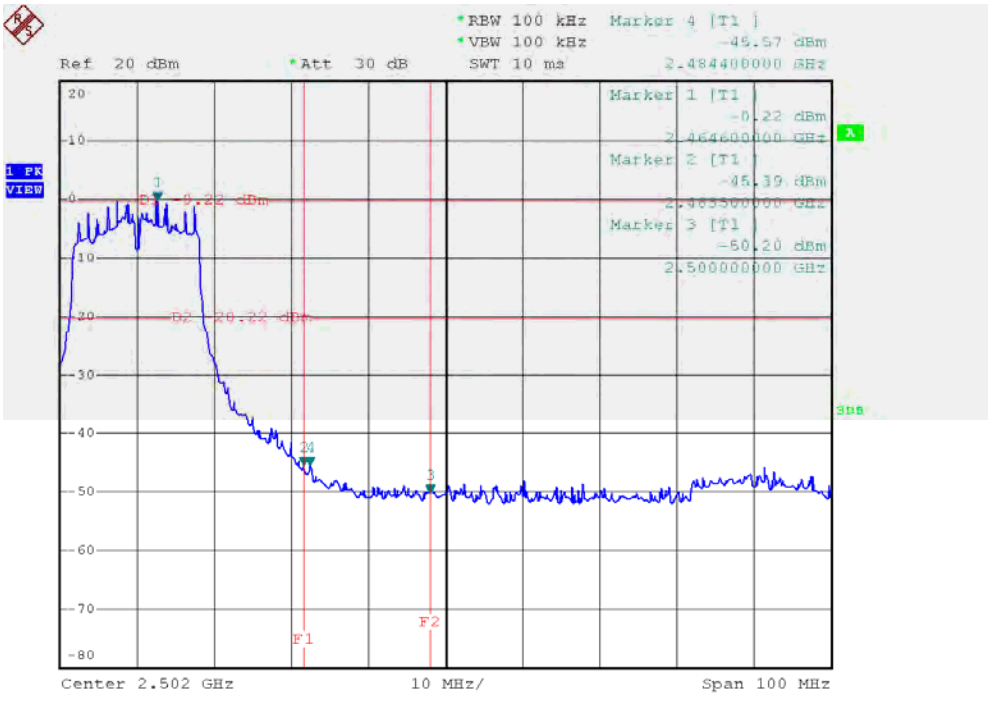
Channel of Worst Data: CH11			
The max. radio frequency power in any 100kHz bandwidth outside the frequency band		The max. radio frequency power in any 100 kHz bandwidth within the frequency band.	
FREQUENCY(MHz)	POWER(dBm)	FREQUENCY(MHz)	POWER(dBm)
2390.00	-45.86	2483.50	-45.39
Result			
In any 100kHz bandwidth outside the frequency band, the radio frequency power is at least 20dB below that in the 100kHz bandwidth within the band that contains the highest lever of the desired power.			

TX G mode CH01



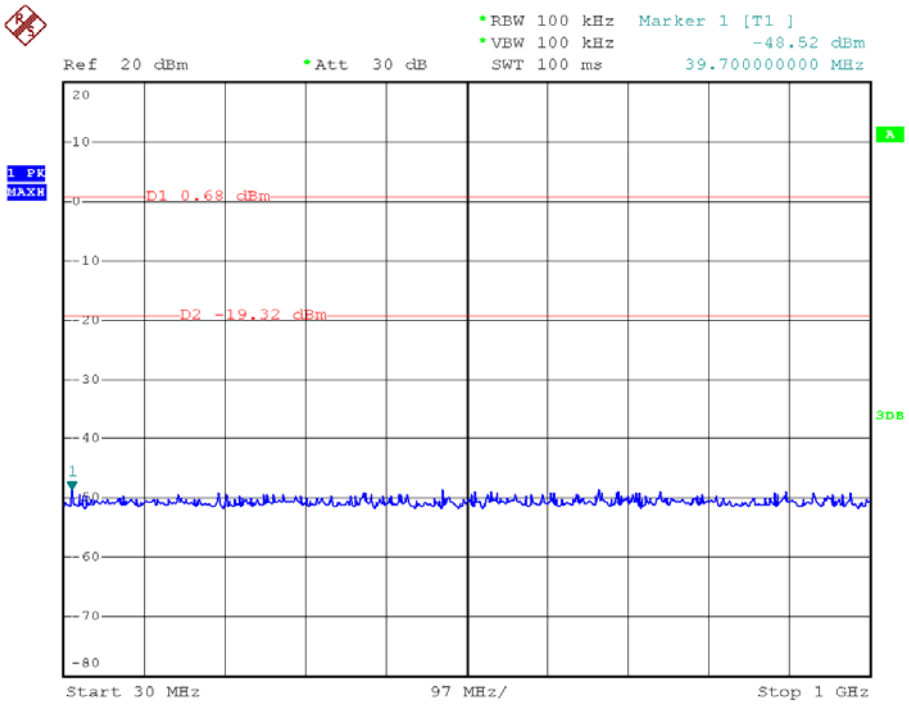
Date: 29.SEP.2010 01:04:01

TX G mode CH11



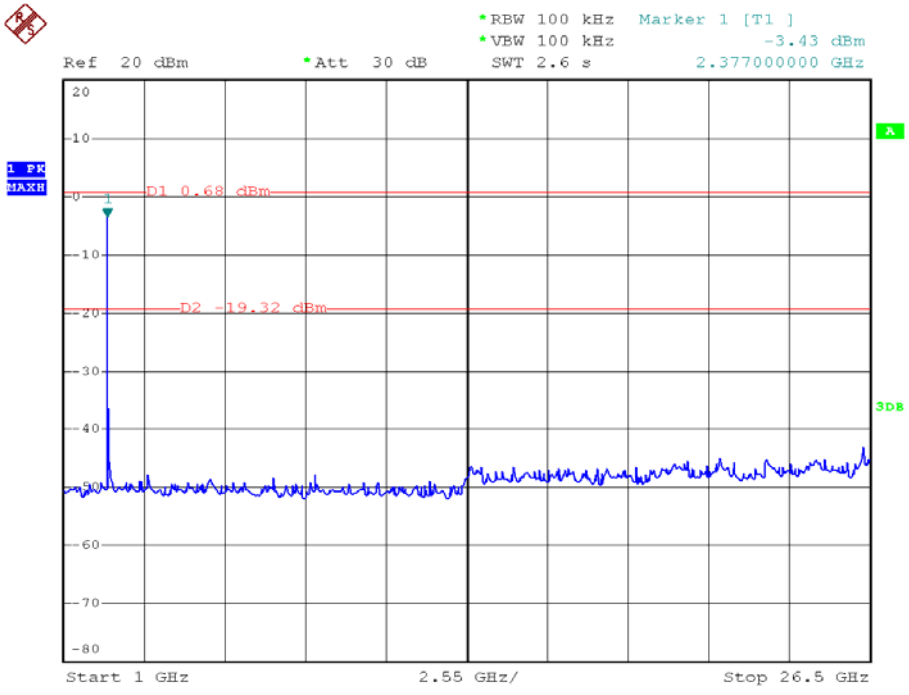
Date: 29.SEP.2010 01:01:45

TX G mode CH01 (30M~1000MHz)



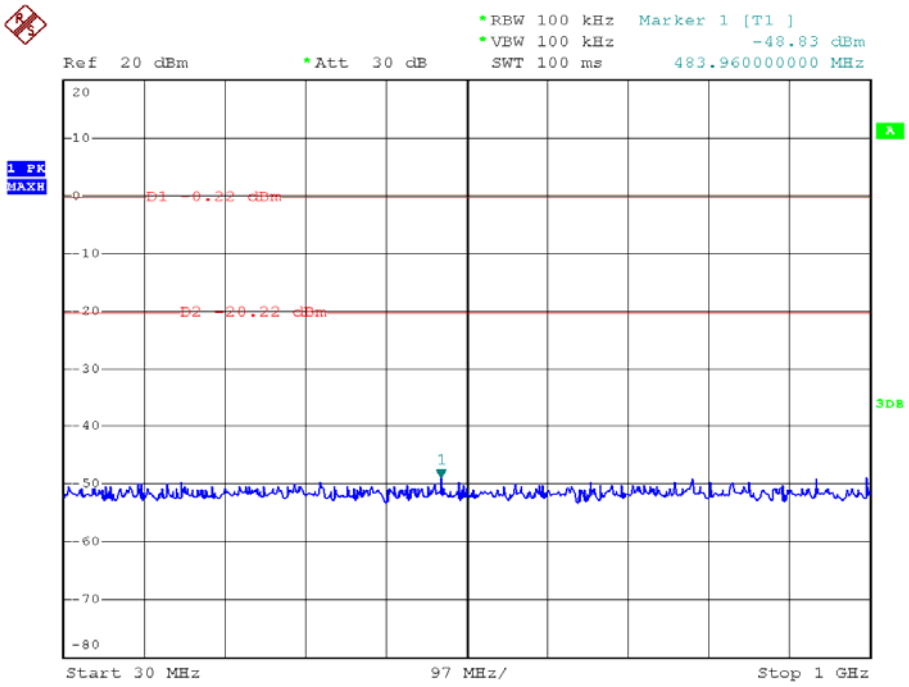
Date: 29.SEP.2010 01:04:56

TX G mode CH01 (1000MHz~10th Harmonic)



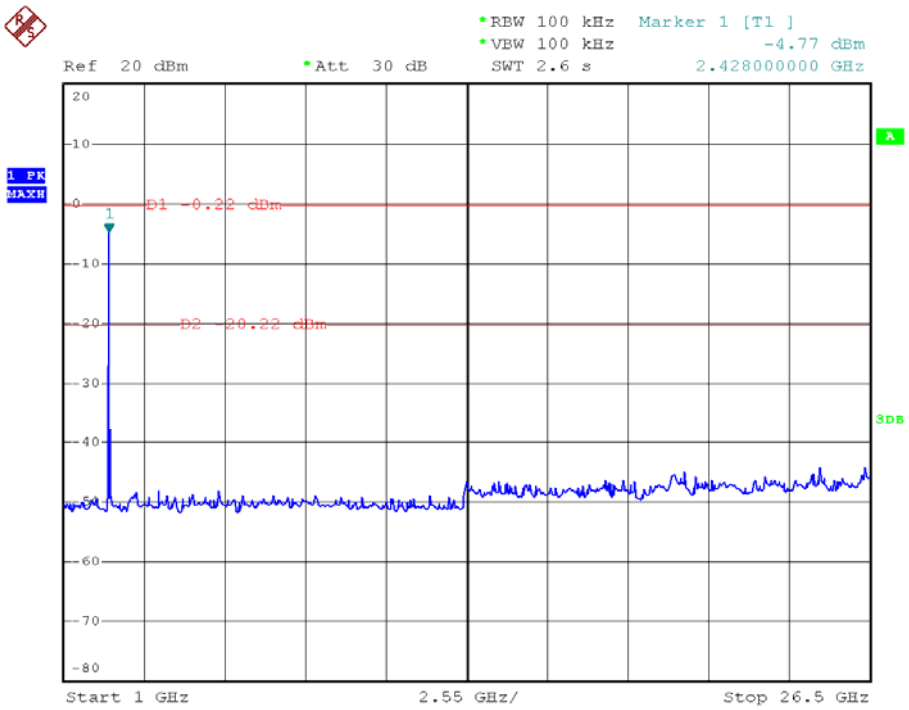
Date: 29.SEP.2010 01:05:10

TX G mode CH11 (30M~1000MHz)



Date: 29.SEP.2010 01:02:09

TX G mode CH11 (1000MHz~10th Harmonic)

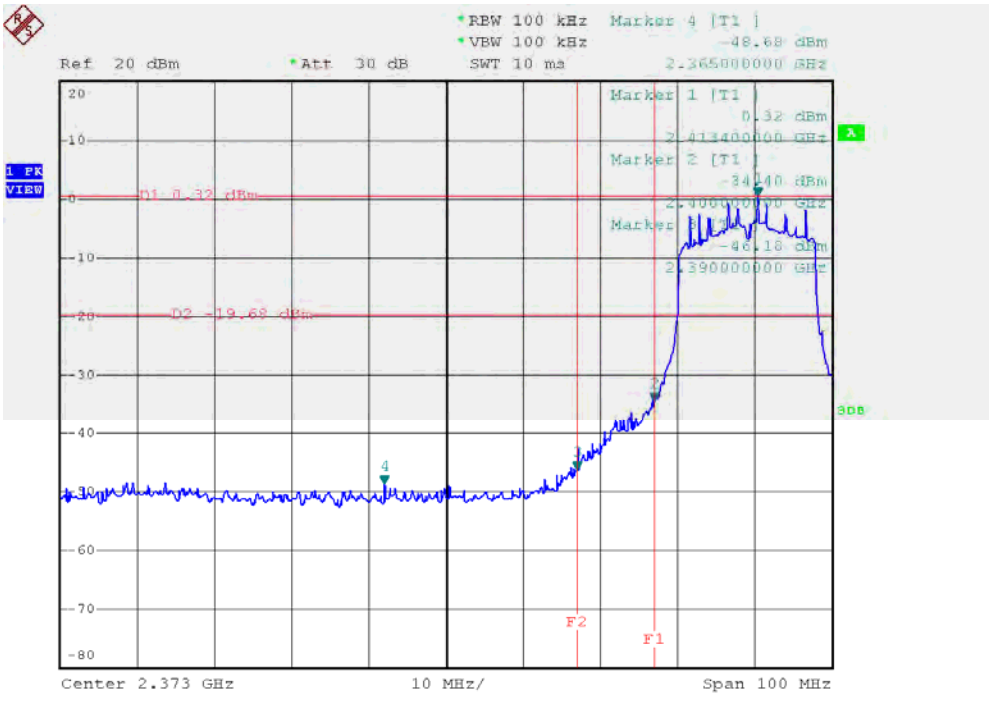


Date: 29.SEP.2010 01:02:30

EUT：	Cruz Tablet	Model Name ：	Cruz Tablet T103
Temperature：	24 ℃	Relative Humidity：	60 %
Pressure：	1016 hPa	Test Voltage ：	AC 120V/60Hz
Test Mode ：	TX N-20M MODE /CH01, CH11		

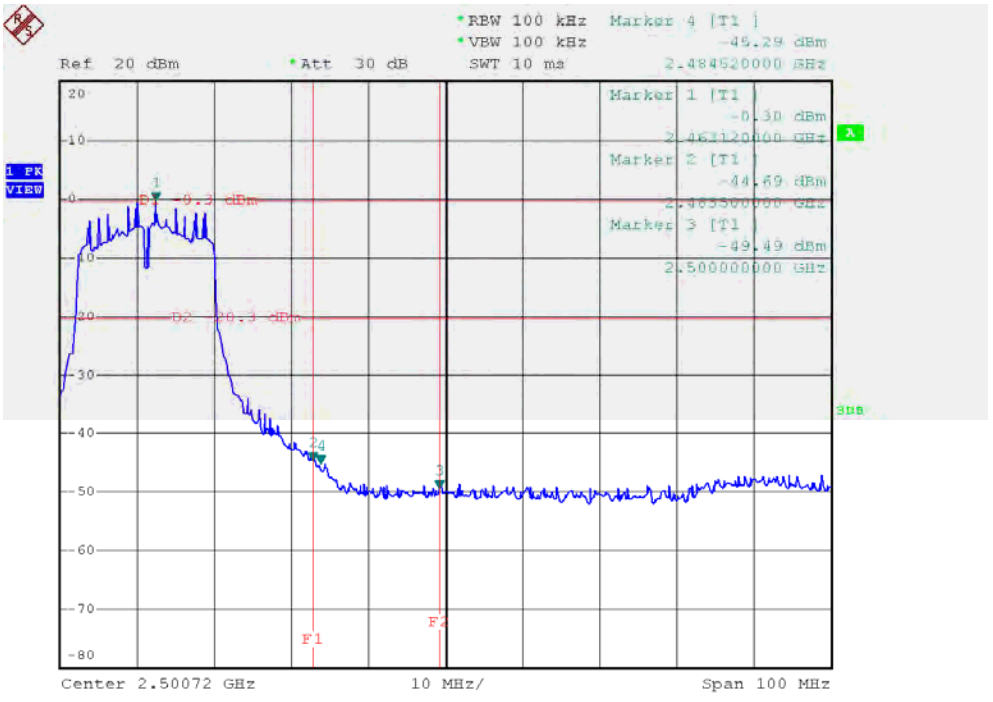
Channel of Worst Data: CH11			
The max. radio frequency power in any 100kHz bandwidth outside the frequency band		The max. radio frequency power in any 100 kHz bandwidth within the frequency band.	
FREQUENCY(MHz)	POWER(dBm)	FREQUENCY(MHz)	POWER(dBm)
2390.00	-46.18	2483.50	-44.69
Result			
In any 100kHz bandwidth outside the frequency band, the radio frequency power is at least 20dB below that in the 100kHz bandwidth within the band that contains the highest lever of the desired power.			

TX HT20 mode CH01



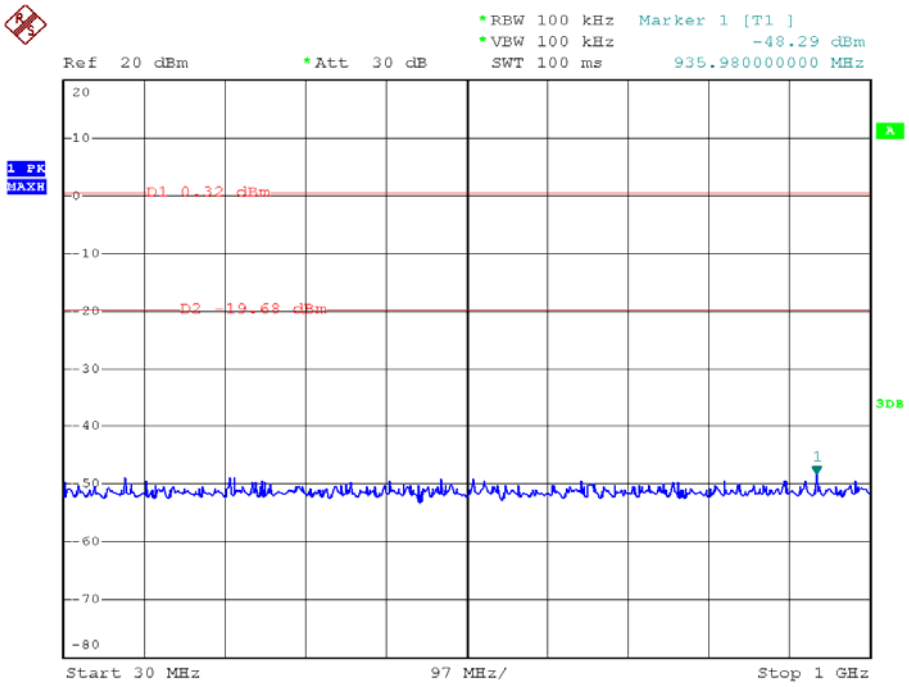
Date: 29.SEP.2010 01:20:21

TX HT20 mode CH11



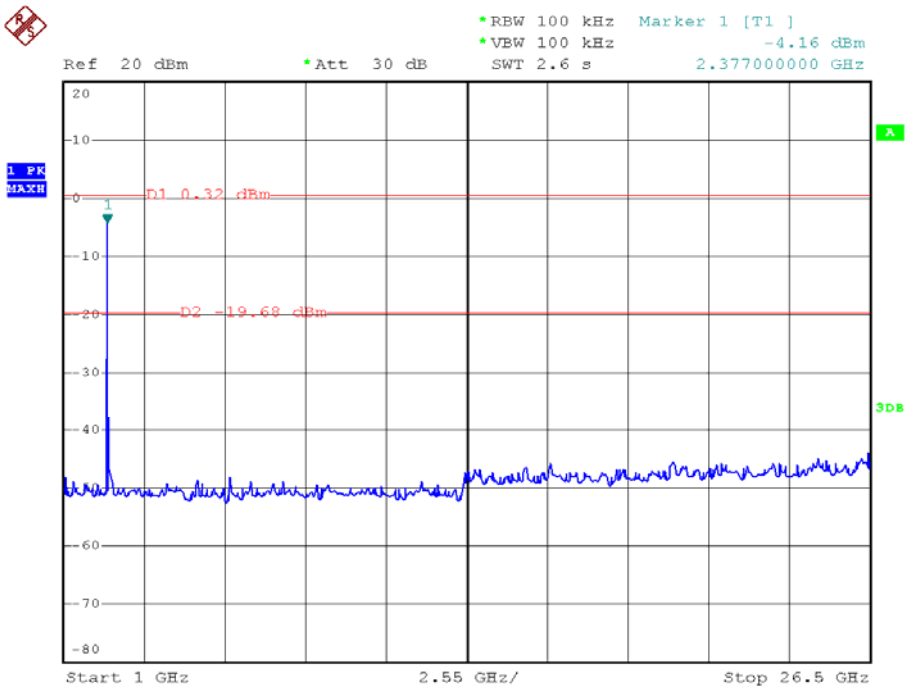
Date: 29.SEP.2010 01:18:30

TX HT20 mode CH01 (30M~1000MHz)



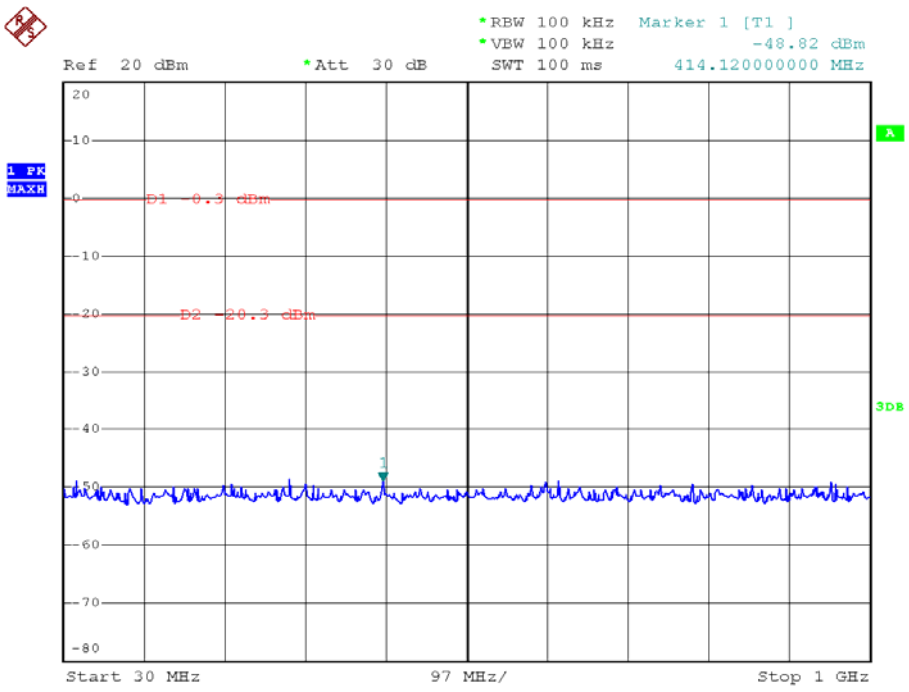
Date: 29.SEP.2010 01:20:36

TX HT20 mode CH01 (1000MHz~10th Harmonic)



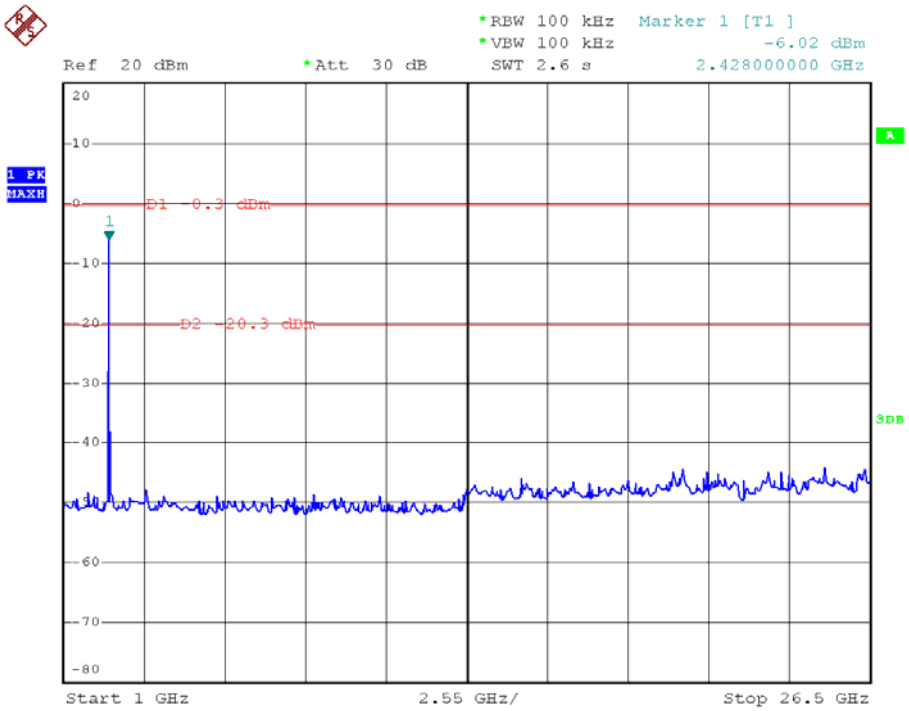
Date: 29.SEP.2010 01:20:47

TX HT20 mode CH11 (30M~1000MHz)



Date: 29.SEP.2010 01:18:44

TX HT20 mode CH11 (1000MHz~10th Harmonic)



Date: 29.SEP.2010 01:18:56

8. POWER SPECTRAL DENSITY TEST

8.1 Applied procedures / limit

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

8.1.1 MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP_40	100129	Jan. 05, 2011

Remark: ” N/A” denotes No Model Name. , Serial No. or No Calibration specified.

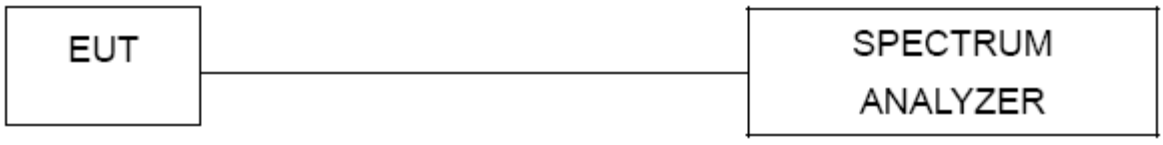
8.1.2 TEST PROCEDURE

a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,
b. Spectrum Setting : RBW=3KHz, VBW=30 KHz, Sweep time = 500s.

8.1.3 DEVIATION FROM STANDARD

No deviation.

8.1.4 TEST SETUP



8.1.5 EUT OPERATION CONDITIONS

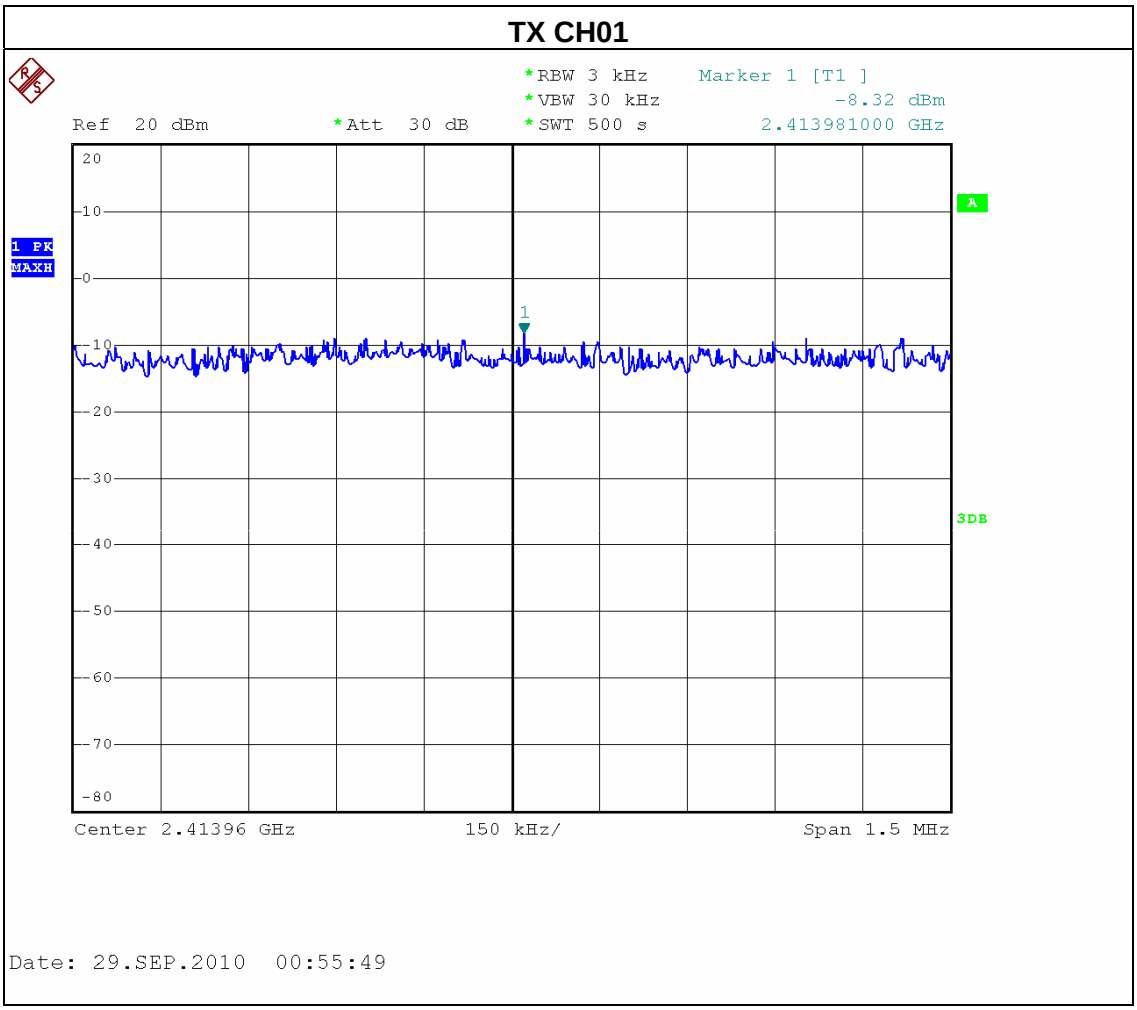
The EUT tested system was configured as the statements of 4.1.6 Unless otherwise a special operating condition is specified in the follows during the testing.

8.1.6 TEST RESULTS

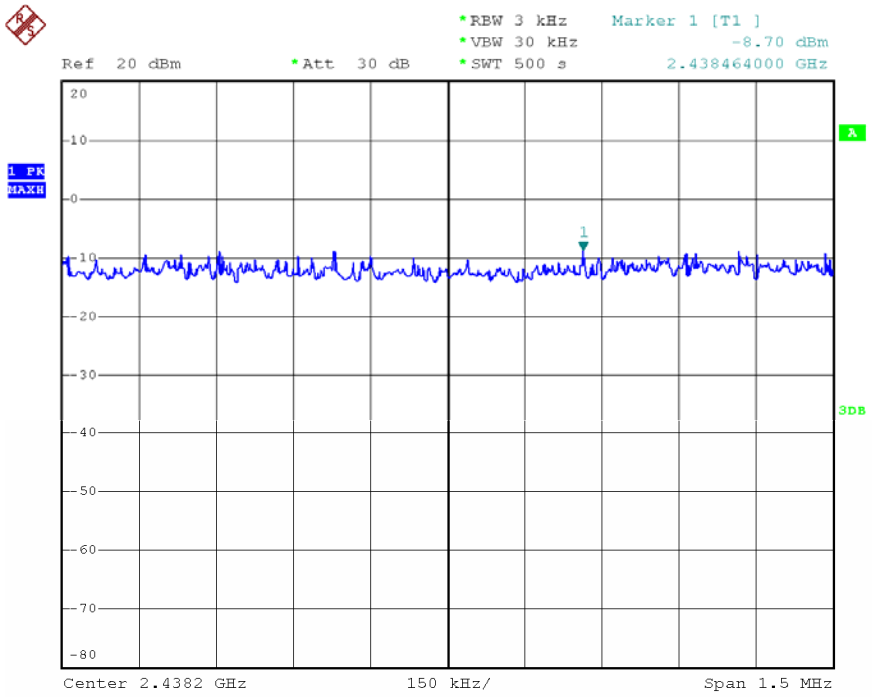
EUT：	Cruz Tablet	Model Name ：	Cruz Tablet T103
Temperature：	24 ℃	Relative Humidity：	60 %
Pressure：	1016 hPa	Test Voltage ：	AC 120V/60Hz
Test Mode ：	TX B MODE /CH01, CH06, CH11		

Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH01	2412 MHz	-8.32	8
CH06	2437 MHz	-8.70	8
CH11	2462 MHz	-8.50	8

TX CH01

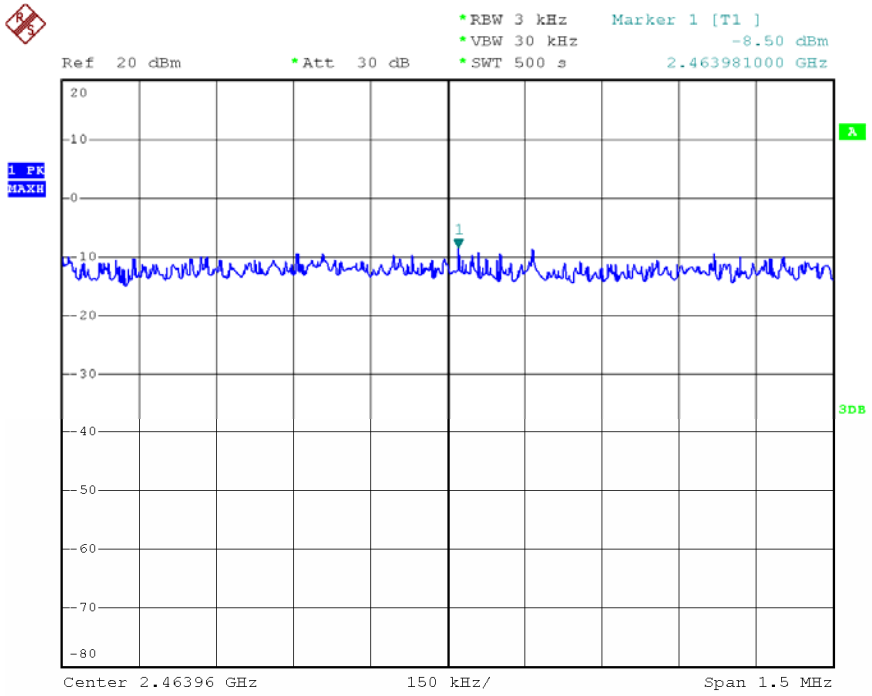


TX CH06



Date: 29.SEP.2010 00:55:05

TX CH11

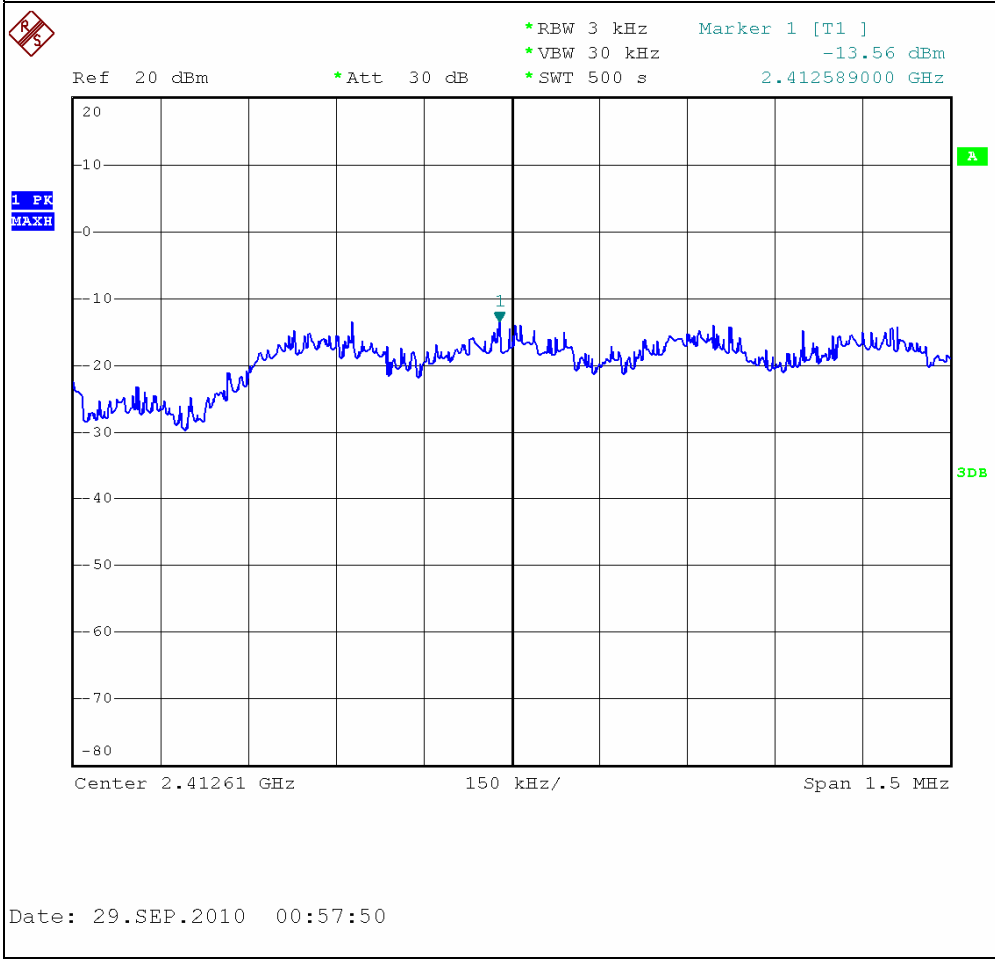


Date: 29.SEP.2010 00:53:22

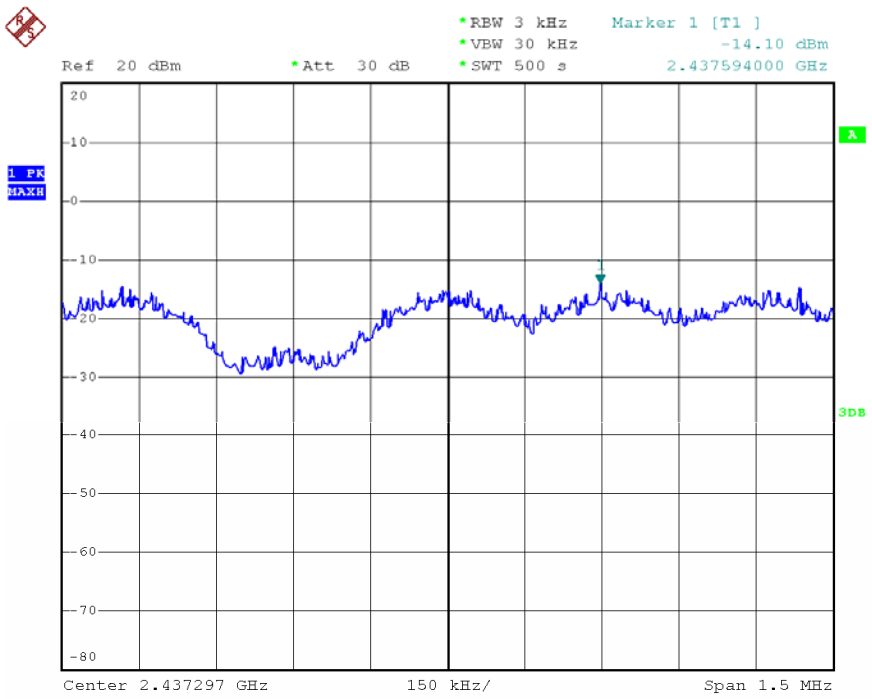
EUT：	Cruz Tablet	Model Name ：	Cruz Tablet T103
Temperature：	24 ℃	Relative Humidity：	60 %
Pressure：	1016 hPa	Test Voltage ：	AC 120V/60Hz
Test Mode ：	TX G MODE /CH01, CH06, CH11		

Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH01	2412 MHz	-13.56	8
CH06	2437 MHz	-14.10	8
CH11	2462 MHz	-13.99	8

TX CH01

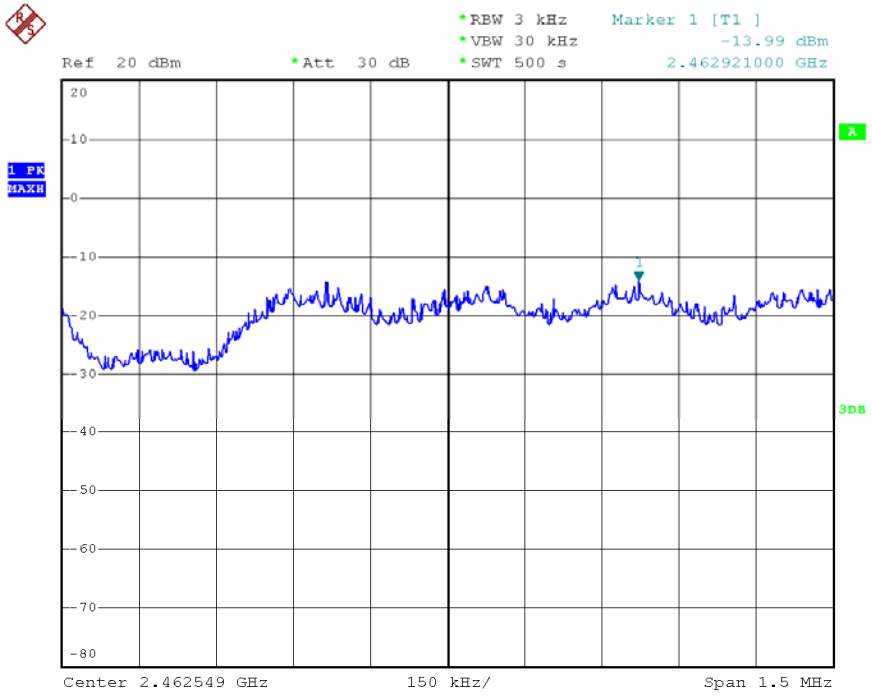


TX CH06



Date: 29.SEP.2010 00:58:40

TX CH11

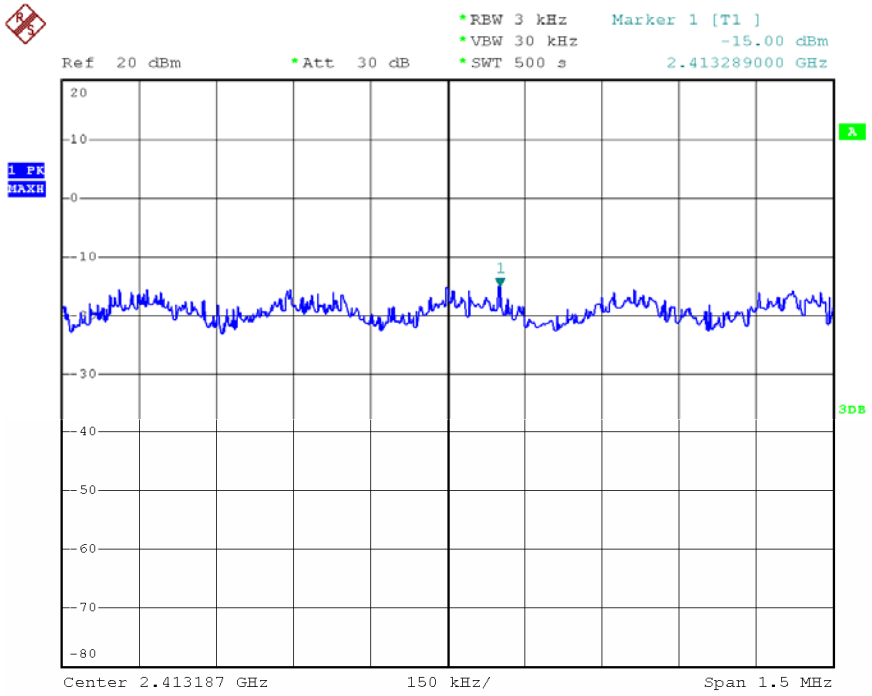


Date: 29.SEP.2010 00:59:13

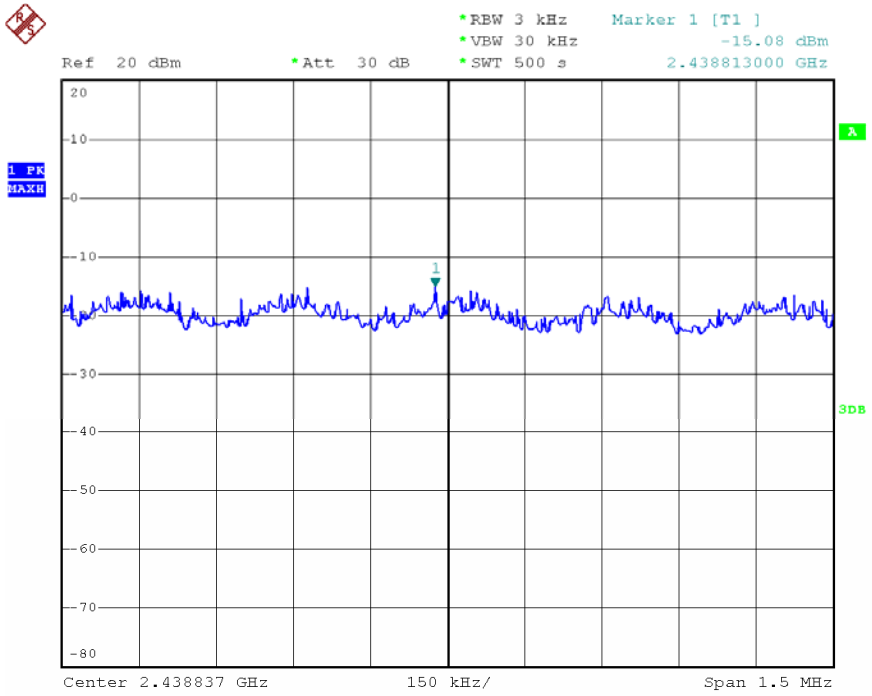
EUT：	Cruz Tablet	Model Name ：	Cruz Tablet T103
Temperature：	24 ℃	Relative Humidity：	60 %
Pressure：	1016 hPa	Test Voltage ：	AC 120V/60Hz
Test Mode ：	TX N MODE-20MHz /CH01, CH06, CH11		

Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH01	2412 MHz	-15.00	8
CH06	2437 MHz	-15.08	8
CH11	2462 MHz	-15.62	8

TX CH01

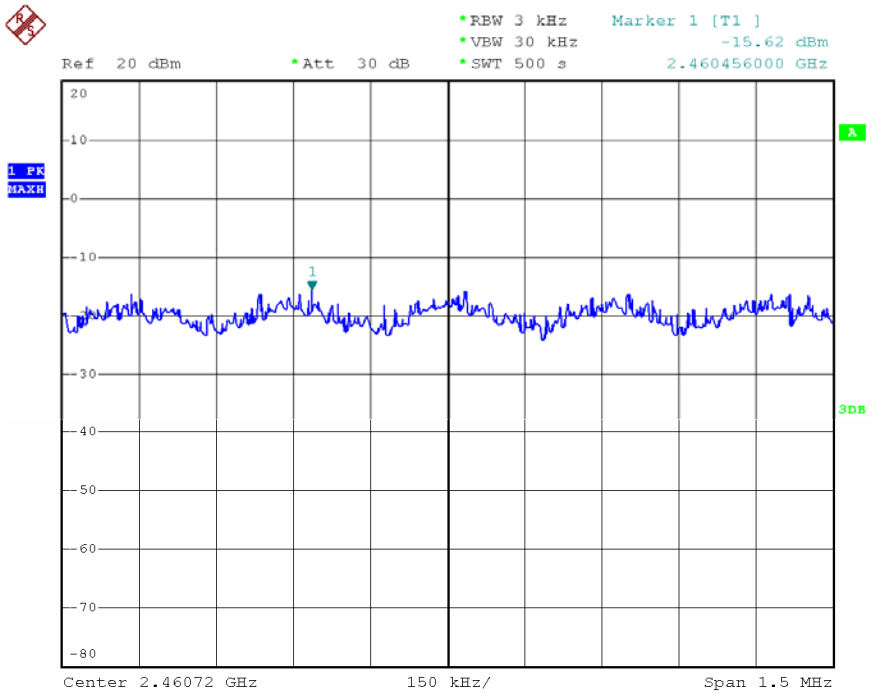


TX CH06



Date: 29.SEP.2010 01:15:55

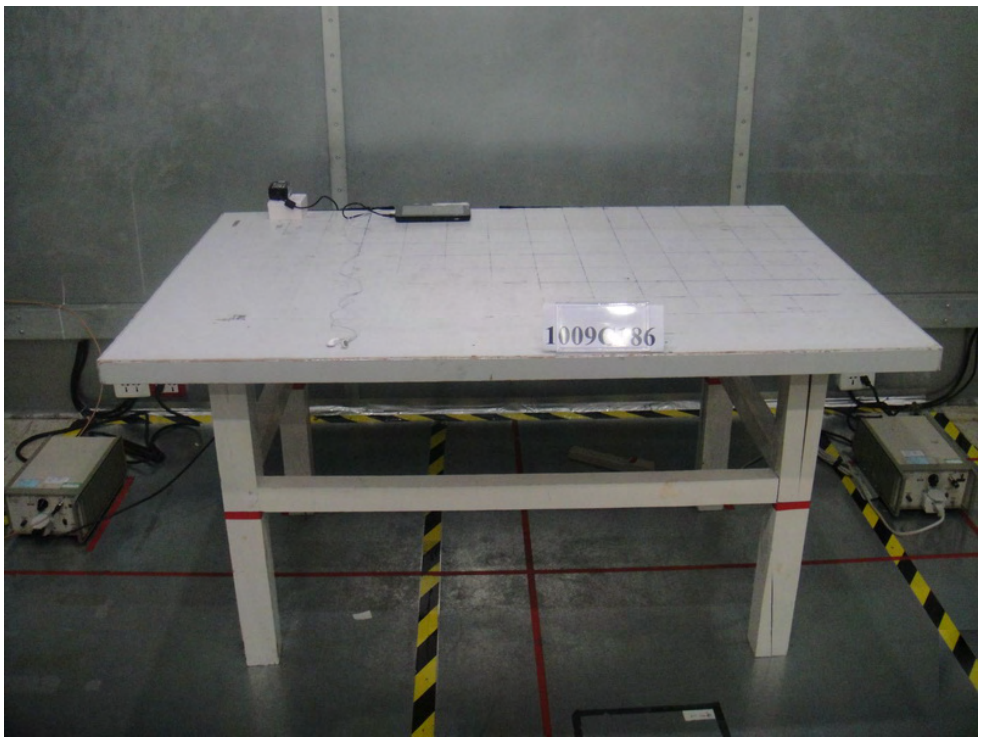
TX CH11



Date: 29.SEP.2010 01:16:25

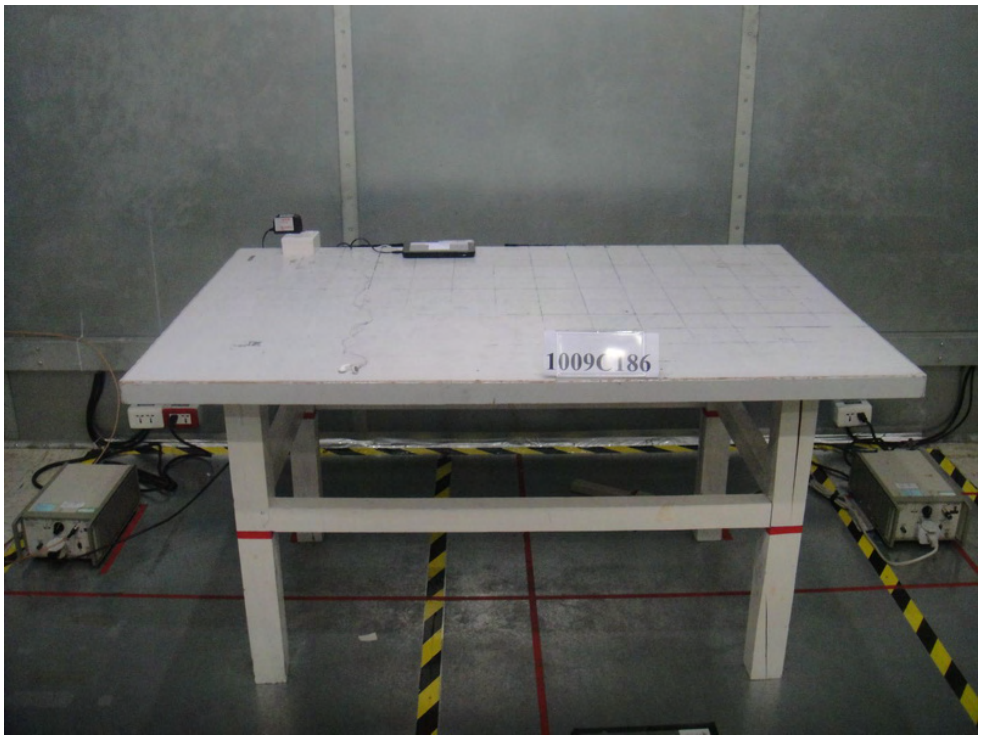
9. EUT TEST PHOTO

Conducted Measurement Photos
Video Play/Play Music & Photo/WIFI Mode (PHIHONG Adapter)



Conducted Measurement Photos
USB Read& Write (PHIHONG Adapter)

Conducted Measurement Photos
Video Play/Play Music & Photo/WIFI Mode (DVE Adapter)



Conducted Measurement Photos
USB Read& Write (DVE Adapter)

Radiated Measurement Photos