

FCC Radio Test Report	
FCC ID: V7TW311MI2	
This report concerns (check one): ⊠Original Grant ⊡Class I Change ⊡Class II Cha	ıge
Project No.: 1511C015Equipment: 150M Mini Wireless USB AdapterModel Name: W311MIApplicant: SHENZHEN TENDA TECHNOLOGY CO.,LTDAddress: 6-8 Floor, Tower E3, No. 1001, Zhongshanyuan Road, Nanshan District, Shenzhen, China. 518052	
Date of Receipt : Nov. 03, 2015   Date of Test : Nov. 03, 2015 ~ Nov. 18, 2015   Issued Date : Nov. 19, 2015   Tested by : BTL Inc.	
Testing Engineer : <u>Shawn Xioo</u> (Shawn Xiao)	
Technical Manager : David Mao	
(David Mao) Authorized Signatory :	
<b>BTL INC.</b> No.3, Jinshagang 1st Road, Shixia, Dalang Town, Dongguan, Guangdong, China. TEL: +86-769-8318-3000 FAX: +86-769-8319-6000	

#### Declaration

**BTL** 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 **R.O.C**, or National Institute of Standards and Technology (**NIST**) of **U.S.A**.

**BTL**'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. **BTL** shall have no liability for any declarations, inferences or generalizations drawn by the client or others from **BTL** issued reports.

**BTL**'s report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government.

This report is the confidential property of the client. As a mutual protection to the clients, the public and **BTL-self**, extracts from the test report shall not be reproduced except in full with **BTL**'s authorized written approval.

**BTL**'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.

# ЗĨL

Table of Contents	Page
1. CERTIFICATION	6
2 . SUMMARY OF TEST RESULTS	7
2.1 TEST FACILITY	8
2.2 MEASUREMENT UNCERTAINTY	8
3 . GENERAL INFORMATION	9
3.1 GENERAL DESCRIPTION OF EUT	9
3.2 DESCRIPTION OF TEST MODES	10
3.3 TABLE OF PARAMETERS OF TEXT SOFTWARE SETTING	11
3.4 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM	TESTED 12
3.5 DESCRIPTION OF SUPPORT UNITS	12
4 . EMC EMISSION TEST	13
4.1 CONDUCTED EMISSION MEASUREMENT	13
4.1.1 POWER LINE CONDUCTED EMISSION LIMITS	13
4.1.2 TEST PROCEDURE 4.1.3 DEVIATION FROM TEST STANDARD	13 13
4.1.4 TEST SETUP	14
4.1.5 EUT OPERATING CONDITIONS	14
4.1.6 EUT TEST CONDITIONS 4.1.7 TEST RESULTS	14 14
4.1.7 TEST RESULTS 4.2 RADIATED EMISSION MEASUREMENT	14
4.2.1 RADIATED EMISSION MEASOREMENT	15
4.2.2 TEST PROCEDURE	16
4.2.3 DEVIATION FROM TEST STANDARD	16
4.2.4 TEST SETUP 4.2.5 EUT OPERATING CONDITIONS	17 18
4.2.6 EUT TEST CONDITIONS	18
4.2.7 TEST RESULTS (9KHZ TO 30MHZ)	19
4.2.8 TEST RESULTS (BETWEEN 30MHZ TO 1000 MHZ) 4.2.9 TEST RESULTS (ABOVE 1000 MHZ)	19 19
	-
5. BANDWIDTH TEST	20
5.1 APPLIED PROCEDURES 5.1.1 TEST PROCEDURE	20 20
5.1.2 DEVIATION FROM STANDARD	20
5.1.3 TEST SETUP	20
5.1.4 EUT OPERATION CONDITIONS	20
5.1.5 EUT TEST CONDITIONS 5.1.6 TEST RESULTS	20 20
6. MAXIMUM PEAK CONDUCTED OUTPUT POWER TEST	20

# ЗĪL

Table of Contents	Page
6.1 APPLIED PROCEDURES / LIMIT	21
6.1.1 TEST PROCEDURE	21
6.1.2 DEVIATION FROM STANDARD	21
6.1.3 TEST SETUP	21
6.1.4 EUT OPERATION CONDITIONS 6.1.5 EUT TEST CONDITIONS	21 21
6.1.6 TEST RESULTS	21
7 . ANTENNA CONDUCTED SPURIOUS EMISSION	22
7.1 APPLIED PROCEDURES / LIMIT	22
7.1.1 TEST PROCEDURE	22
7.1.2 DEVIATION FROM STANDARD	22
7.1.3 TEST SETUP 7.1.4 EUT OPERATION CONDITIONS	22 22
7.1.5 EUT TEST CONDITIONS	22
7.1.6 TEST RESULTS	22
8 . POWER SPECTRAL DENSITY TEST	23
8.1 APPLIED PROCEDURES / LIMIT	23
8.1.1 TEST PROCEDURE	23
8.1.2 DEVIATION FROM STANDARD 8.1.3 TEST SETUP	23 23
8.1.4 EUT OPERATION CONDITIONS	23
8.1.5 EUT TEST CONDITIONS	23
8.1.6 TEST RESULTS	23
9 . MEASUREMENT INSTRUMENTS LIST	24
10 . EUT TEST PHOTO	26
ATTACHMENT A - CONDUCTED EMISSION	30
ATTACHMENT B - RADIATED EMISSION (9KHZ TO 30MHZ)	33
ATTACHMENT C - RADIATED EMISSION (30MHZ TO 1000MHZ)	35
ATTACHMENT D - RADIATED EMISSION (ABOVE 1000MHZ)	42
ATTACHMENT E - BANDWIDTH	91
ATTACHMENT F – MAXIMUM PEAK CONDUCTED OUTPUT POWER	100
ATTACHMENT G - ANTENNA CONDUCTED SPURIOUS EMISSION	102
ATTACHMENT H - POWER SPECTRAL DENSITY	115

# 

	REPORT ISSUED HISTORY	
Issued No.	Description	Issued Date
BTL-FCCP-1-1511C015	Original Issue.	Nov. 19, 2015

# **1. CERTIFICATION**

Equipment : Brand Name : Model Name :	
	SHENZHEN TENDA TECHNOLOGY CO., LTD
Manufacturer :	SHENZHEN TENDA TECHNOLOGY CO., LTD
Address :	6-8 Floor, Tower E3, No. 1001, Zhongshanyuan Road, Nanshan District,
	Shenzhen, China. 518052
Date of Test :	Nov. 03, 2015 ~ Nov. 18, 2015
Test Sample :	Engineering Sample
Standard(s) :	FCC Part15, Subpart C: 2014 (15.247) / ANSI C63.10-2013

The above equipment has been tested and found compliance with the requirement of the relative standards by BTL Inc.

The test data, data evaluation, and equipment configuration contained in our test report (Ref No. BTL-FCCP-1-1511C015) were obtained utilizing the test procedures, test instruments, test sites that has been accredited by the Authority of TAF according to the ISO-17025 quality assessment standard and technical standard(s).

# 2. SUMMARY OF TEST RESULTS

Test procedures according to the technical standard(s):

Applied Standard(s): FCC Part15 (15.247) , Subpart C: 2014				
Standard(s) 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		
15.247(e)	Power Spectral Density	PASS		
15.203	Antenna Requirement	PASS		
15.209/15.205	Transmitter Radiated Emissions	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 at the location of No.3, Jinshagang 1st Road, Shixia, Dalang Town, Dongguan, Guangdong, China. BTL's test firm number for FCC: 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 BTL measurement uncertainty is less than the CISPR 16-4-2  $U_{cisor}$  requirement.

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

#### A. Conducted Measurement:

Test Site	Method	Measurement Frequency Range	U,(dB)
DG-C02	CISPR	150 kHz ~ 30MHz	2.32

#### B. Radiated Measurement:

Test Site	Method	Measurement Frequency Range	Ant. H / V	U,(dB)	
		9KHz ~ 30MHz	V	3.79	
		9KHz ~ 30MHz	Н	3.57	
		30MHz ~ 200MHz	V	3.82	
	CISPR	30MHz ~ 200MHz	Н	3.78	
DG-CB03		CISPR	200MHz ~ 1,000MHz	V	4.10
(3m)			200MHz ~ 1,000MHz	Н	4.06
		1GHz ~ 18GHz	V	3.12	
			1GHz ~ 18GHz	Н	3.68
		18GHz ~ 40GHz	V	4.15	
		18GHz ~ 40GHz	Н	4.14	

Note: Unless specifically mentioned, the uncertainty of measurement has not been taken into account to declare the compliance or non-compliance to the specification.

# **3. GENERAL INFORMATION**

# 3.1 GENERAL DESCRIPTION OF EUT

Equipment	150M Mini Wireless USB Adapter			
Brand Name	Tenda	Tenda		
Model Name	W311MI			
Model Difference	NA			
	Operation Frequency	2412~2462 MHz		
	Modulation Technology	802.11b:DSSS 802.11g:OFDM 802.11n:OFDM		
Product Description	Bit Rate of Transmitter	802.11b: 11/5.5/2/1 Mbps 802.11g: 54/48/36/24/18/12/9/6 Mbps 802.11n up to 150 Mbps		
	AVG Output Power (Max.) 802.11b: 9.61dBm 802.11g: 9.57dBm 802.11n(20MHz): 9.54dBm 802.11n(40MHz): 9.71dBm			
Power Source	Supplied from host system.			
Power Rating	EUT I/P: DC 5V			

#### Note:

- 1. For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.
  - 2. Channel List:

	CH01 – CH11 for 802.11b, 802.11g, 802.11n(20MHz) CH03 – CH11 for 802.11n(40MHz)						
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

An	t.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)	Note
1		N/A	N/A	Internal	N/A	1.0	TX/RX

#### **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	TX N-40MHZ MODE CHANNEL 03/06/09
Mode 5	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 5	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	TX N-40MHZ MODE CHANNEL 03/06/09	

Note:

(1) The measurements are performed at the high, middle, low available channels.

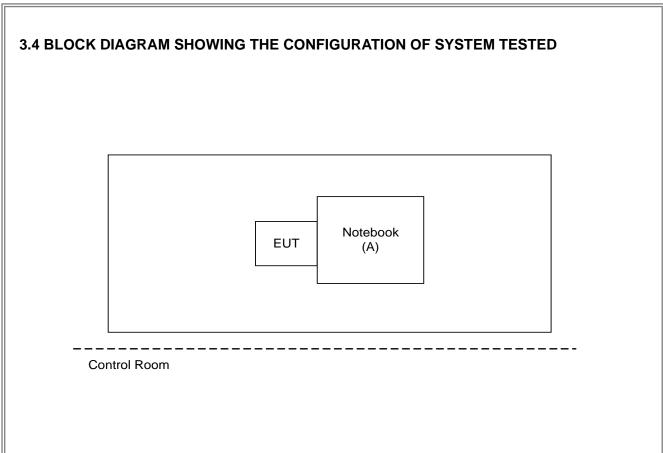
- (2) 802.11b mode: DBPSK (1Mbps)
  - 802.11g mode: OFDM (6Mbps)
  - 802.11n HT20 mode : BPSK (6.5Mbps)
  - 802.11n HT40 mode : BPSK (13.5Mbps)
  - For radiated emission tests, the highest output powers were set for final test.
- (3) For radiated below 1G test, the 802.11b is found to be the worst case and recorded.
- (4) The EUT was programmed to be in continuously transmitting mode and the transmit duty cycle is not less than 98%.

#### 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	MT7601USB		
Frequency (MHz)	2412	2437	2462
802.11b	0C	0C	0C
802.11g	0C	0C	0C
802.11n (20MHz)	0F	0F	0F
Frequency (MHz)	2422	2437	2452
802.11n (40MHz)	10	10	11





#### **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/IC	Series No.
А	Notebook	Lenevo	G410AT	DOC	N/A

Item	Shielded Type	Ferrite Core	Length	Note
-	-	-	-	-

Note:

(1) For detachable type I/O cable should be specified the length in m 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 of Emission (MHz)	Conducted Limit (dBµV)		
Frequency of Emission (MHz)	Quasi-peak	Average	
0.15 -0.50	66 to 56*	56 to 46*	
0.50 -5.0	56	46	
5.0 -30.0	60	50	

Note:

- (1) The limit of " \* " decreases with the logarithm of the frequency
- (2) The test result calculated as following:
  - Measurement Value = Reading Level + Correct Factor
  - Correct Factor = Insertion Loss + Cable Loss + Attenuator Factor(if use)
  - Margin Level = Measurement Value Limit Value

#### 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

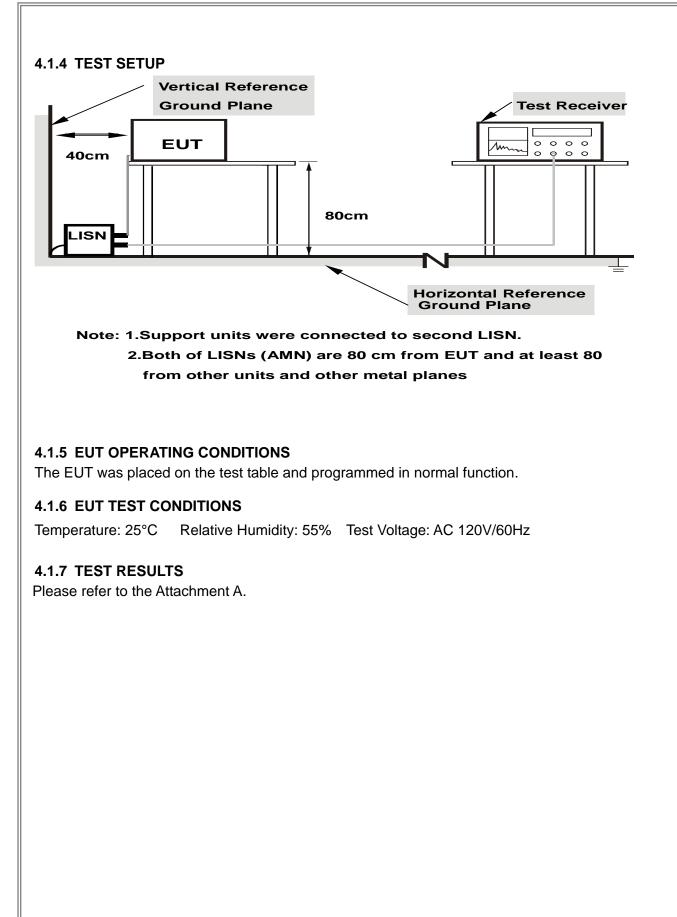
#### 4.1.2 TEST PROCEDURE

- 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.

#### 4.1.3 DEVIATION FROM TEST STANDARD

No deviation





#### 4.2 RADIATED EMISSION MEASUREMENT

#### 4.2.1 RADIATED EMISSION LIMITS

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.

LIMITS OF RADIATED EMISSION MEASUREMENT (9KHz-1000MHz)

Frequency	Field Strength	Measurement Distance
(MHz)	(microvolts/meter)	(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
960~1000	500	3

#### LIMITS OF RADIATED EMISSION MEASUREMENT (Above 1000MHz)

	(dBuV/m) (at 3 meters)	
Frequency (MHz)	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).

 (4) The test result calculated as following: Measurement Value = Reading Level + Correct Factor Correct Factor = Antenna Factor + Cable Loss - Amplifier Gain(if use) Margin Level = Measurement Value - Limit Value

Spectrum Parameter	Setting
Attenuation	Auto
Start Frequency	1000 MHz
Stop Frequency	10th carrier harmonic
RBW / VBW	1MHz / 3MHz for Peak,
(Emission in restricted band)	1MHz / 1/T for Average

Receiver Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	9KHz~90KHz for PK/AVG detector
Start ~ Stop Frequency	90KHz~110KHz for QP detector
Start ~ Stop Frequency	110KHz~490KHz for PK/AVG detector
Start ~ Stop Frequency	490KHz~30MHz for QP detector
Start ~ Stop Frequency	30MHz~1000MHz for QP detector

#### 4.2.2 TEST PROCEDURE

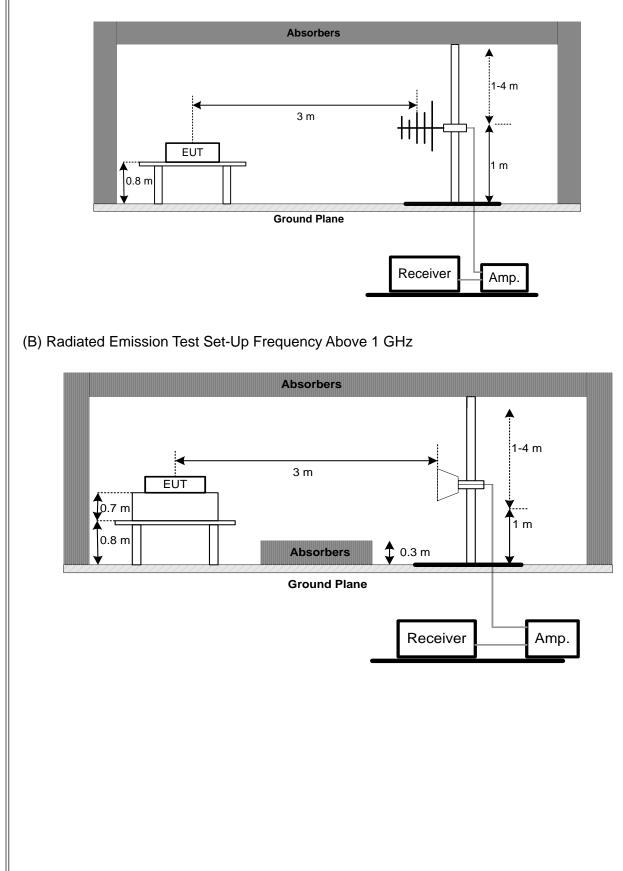
- a. The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1GHz)
- b. The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 1.5 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(above 1GHz)
- c. The height of the equipment or of the substitution antenna shall be 0.8 m or 1.5m, 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 radiated emission data is a receiver peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- e. 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. (below 1GHz)
- f. All readings are Peak Mode value unless otherwise stated AVG in column of Note. If the Peak Mode Measured value compliance with the Peak Limits and lower than AVG Limits, the EUT shall be deemed to meet both Peak & AVG Limits and then only Peak Mode was measured, but AVG Mode didn't perform. (above 1GHz)
- g. For the actual test configuration, please refer to the related Item -EUT Test Photos.

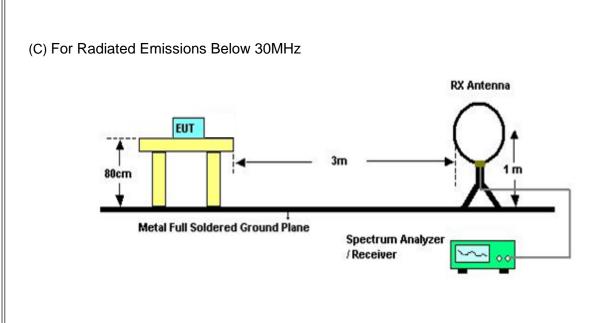
#### 4.2.3 DEVIATION FROM TEST STANDARD

No deviation

## 4.2.4 TEST SETUP

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





### 4.2.5 EUT OPERATING CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

#### **4.2.6 EUT TEST CONDITIONS**

Temperature: 25°C Relative Humidity: 55% Test Voltage: AC 120V/60Hz



#### 4.2.7 TEST RESULTS (9KHZ TO 30MHZ)

Please refer to the Attachment B

Remark:

- (1) The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.
- (2) Distance extrapolation factor = 40 log (specific distance / test distance) (dB).
- (3) Limit line = specific limits (dBuV) + distance extrapolation factor.

#### 4.2.8 TEST RESULTS (30MHZ TO 1000 MHZ)

Please refer to the Attachment C.

#### 4.2.9 TEST RESULTS (ABOVE 1000 MHZ)

Please refer to the Attachment D.

Remark:

(1) No limit: This is fundamental signal, the judgment is not applicable. For fundamental signal judgment was referred to Peak output test.

# 5. BANDWIDTH TEST

#### 5.1 APPLIED PROCEDURES

FCC Part15 (15.247), Subpart C				
Section   Test Item   Frequency Range (MHz)   Result				
15.247(a)(2) Bandwidth 2400-2483.5 PASS				

#### 5.1.1 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=300KHz, Sweep time = 2.5 ms.

#### 5.1.2 DEVIATION FROM STANDARD

No deviation.

#### 5.1.3 TEST SETUP

EUT	SPECTRUM
	ANALYZER

#### 5.1.4 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

#### 5.1.5 EUT TEST CONDITIONS

Temperature: 25°C Relative Humidity: 55% Test Voltage: AC 120V/60Hz

#### 5.1.6 TEST RESULTS

Please refer to the Attachment E.

## 6. MAXIMUM PEAK CONDUCTED OUTPUT POWER TEST

#### 6.1 APPLIED PROCEDURES / LIMIT

	FCC Part15	5 (15.247) , Subpart (	C	
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247(b)(3)	Maximum Output Power	1 Watt or 30dBm	2400-2483.5	PASS

#### 6.1.1 TEST PROCEDURE

- a. The EUT was directly connected to the power meter and antenna output port as show in the block diagram below,
- b. The maximum peak conducted output power was performed in accordance with method 9.1.2 of FCC KDB 558074 D01 DTS Meas Guidance v03r03.

#### 6.1.2 DEVIATION FROM STANDARD

No deviation.

#### 6.1.3 TEST SETUP



#### 6.1.4 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

#### 6.1.5 EUT TEST CONDITIONS

Temperature: 25°C Relative Humidity: 55% Test Voltage: AC 120V/60Hz

#### 6.1.6 TEST RESULTS

Please refer to the Attachment F.

# 7. ANTENNA CONDUCTED SPURIOUS EMISSION

#### 7.1 APPLIED PROCEDURES / LIMIT

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated device is operating, the RF power that is produced shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided that the transmitter demonstrates compliance with the peak conducted power limits.

#### 7.1.1 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=300KHz, Sweep time = Auto.
- c. Offset=antenna gain+cable loss

#### 7.1.2 DEVIATION FROM STANDARD

No deviation.

### 7.1.3 TEST SETUP



#### 7.1.4 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

#### 7.1.5 EUT TEST CONDITIONS

Temperature: 25°C Relative Humidity: 55% Test Voltage: AC 120V/60Hz

#### 7.1.6 TEST RESULTS

Please refer to the Attachment G.

# 8. POWER SPECTRAL DENSITY TEST

#### 8.1 APPLIED PROCEDURES / LIMIT

	FCC Part	15 (15.247) , Subpar	t 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 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=10KHz, Sweep time = Auto.

#### 8.1.2 DEVIATION FROM STANDARD

No deviation.

#### 8.1.3 TEST SETUP

EUT	SPECTRUM
	ANALYZER

#### 8.1.4 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

#### 8.1.5 EUT TEST CONDITIONS

Temperature: 25°C Relative Humidity: 55% Test Voltage: AC 120V/60Hz

# 8.1.6 TEST RESULTS

Please refer to the Attachment H.

# 9. MEASUREMENT INSTRUMENTS LIST

		Conducted Emis	sion Measure	ment	
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	LISN	EMCO	699837	0052765	Mar. 28, 2016
2	LISN	R&S	ENV216	101447	Mar. 28, 2016
3	Test Cable	emci	RG223(9KHz -30MHz)	C_17	Mar. 13, 2016
4	EMI Test Receiver	R&S	ESCS30	826547/022	Mar. 28, 2016
5	50Ω Terminator	SHX	TF2-3G-A	08122901	Mar. 28, 2016
6	Measurement Software	Farad	EZ-EMC Ver.NB-03A1 -01	N/A	N/A

		Radiated Emis	ssion Measurem	ent	
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Antenna	Schwarbeck	VULB9160	9160-3232	Mar. 28, 2016
2	Amplifier	HP	8447D	2944A09673	Nov. 09, 2016
3	Receiver	AGILENT	N9038A	MY5213003 9	Oct. 11, 2016
4	Test Cable	emci	LMR-400(30MH z-1GHz)	C-01	Jun. 28, 2016
5	Controller	СТ	SC100	N/A	N/A
6	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A
7	Antenna	ETS	3115	00075789	Mar. 28, 2016
8	Amplifier	Agilent	8449B	3008A02274	Nov. 01, 2016
9	Test Cable	emci	EMC104-SM-S M-10000(1GHz - 26.5GHz)	C-68	Jun. 28, 2016
10	Broad-Band Horn Antenna	Schwarzbeck	BBHA 9170	9170319	Mar. 28, 2016
11	Microwave Preamplifier With Adaptor	EMC INSTRUMENT	EMC2654045	980039 & HA01	Mar. 28, 2016
12	Active Loop Antenna	R&S	HFH2-Z2	830749/020	Sep. 07, 2016

		6dB Bandwidt	th Measureme	ent	
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP 40	100185	Oct. 11, 2016

	Peak Output Power Measurement				
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Power Meter	ANRITSU	ML2495A	1128009	Mar. 28, 2016
2	Pulse Power Sensor	ANRITSU	MA 2411B	1027500	Mar. 28, 2016

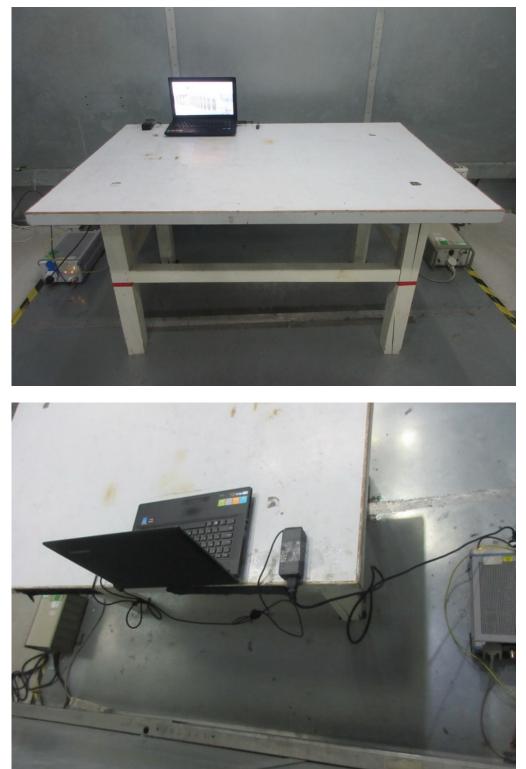
	Anter	nna Conducted Spuri	ous Emissior	Measurement	
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP 40	100185	Oct. 11, 2016

Power Spectral Density Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP 40	100185	Oct. 11, 2016

Remark: "N/A" denotes no model name, serial no. or calibration specified. All calibration period of equipment list is one year.

# **10. EUT TEST PHOTO**

**Conducted Measurement Photos** 



# **Radiated Measurement Photos**

9KHz to 30MHz





# **Radiated Measurement Photos**

30MHz to 1000MHz





# **Radiated Measurement Photos**

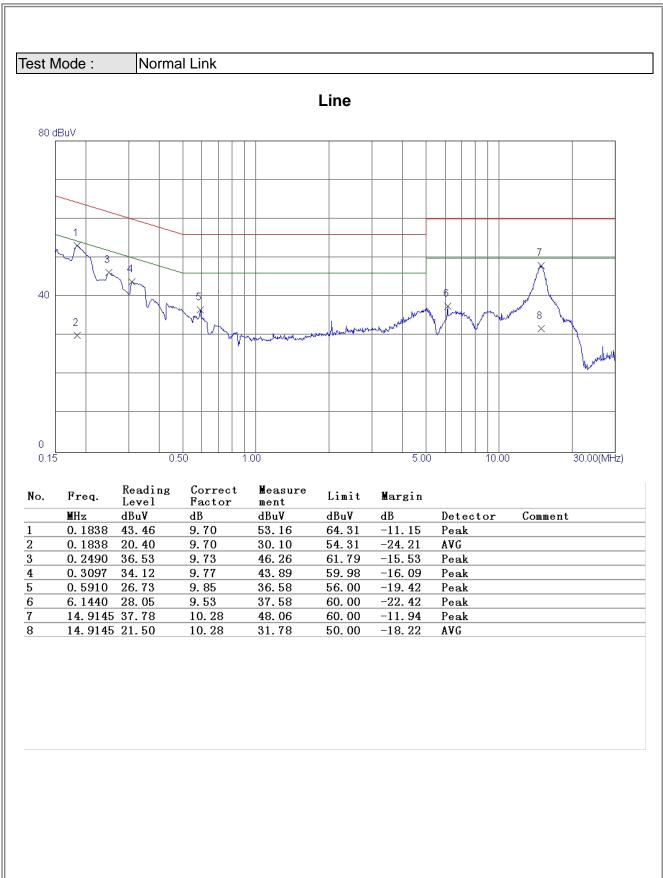
Above 1000MHz



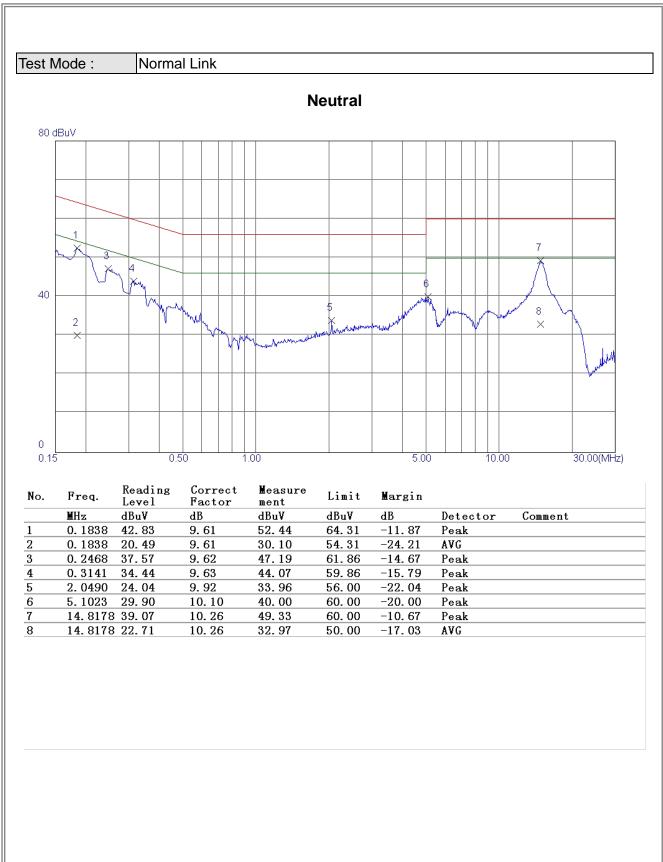


# **ATTACHMENT A - CONDUCTED EMISSION**









# ATTACHMENT B - RADIATED EMISSION (9KHZ TO 30MHZ)

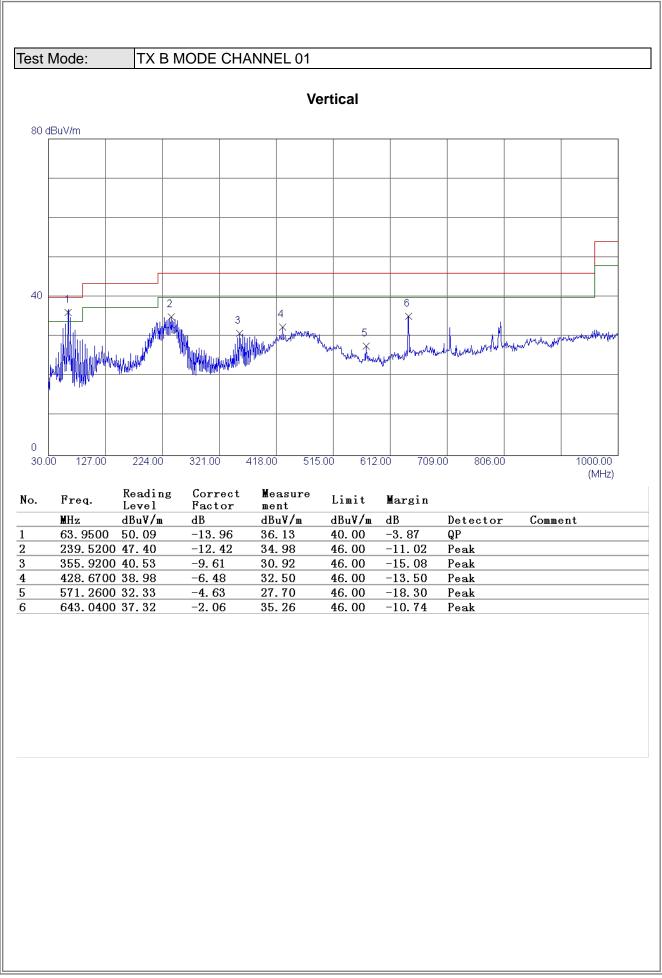
Test Mode:
------------

#### TX B MODE CHANNEL 01

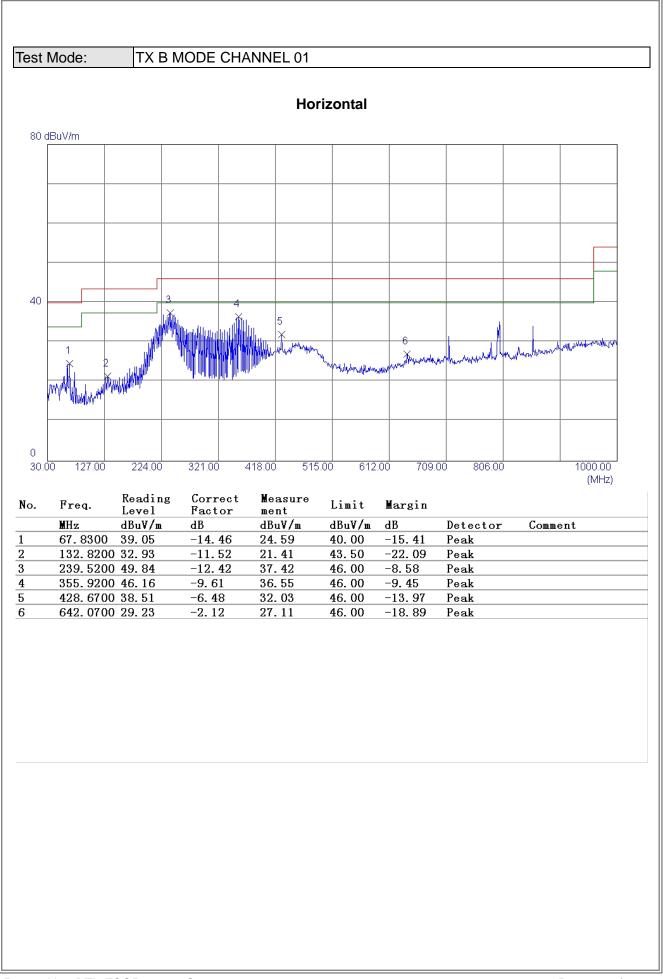
	1						
Frequency	Ant	Read level	Factor	Measured(FS)	Limit	Margin	Note
(MHz)	0°/90°	dBuV/m	(dB)	(dBuV/m)	(dBuV/m)	(dB)	Note
0.0121	0°	13.79	24.8003	38.5903	125.9485	-87.3582	AVG
0.0121	0°	14.56	24.8003	39.3603	145.9485	-106.5882	PEAK
0.0293	0°	6.92	23.7110	30.6310	118.2669	-87.6359	AVG
0.0293	0°	8.37	23.7110	32.0810	138.2669	-106.1859	PEAK
0.0377	0°	3.36	23.1790	26.5390	116.0774	-89.5384	AVG
0.0377	0°	5.71	23.1790	28.8890	136.0774	-107.1884	PEAK
0.0621	0°	1.55	22.1580	23.7080	111.7424	-88.0344	AVG
0.0621	0°	2.91	22.1580	25.0680	131.7424	-106.6744	PEAK
0.5134	0°	19.57	19.8429	39.4129	73.3951	-33.9822	QP
1.9545	0°	23.46	19.5045	42.9646	69.5400	-26.5754	QP
					I I		
Frequency	Ant	Read level	Factor	Measured(FS)	Limit	Margin	Noto
Frequency (MHz)	Ant 0°/90°	Read level dBuV/m	Factor (dB)	Measured(FS) (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Note
						•	Note
(MHz)	0°/90°	dBuV/m	(dB)	(dBuV/m)	(dBuV/m)	(dB)	
(MHz) 0.0137	0°/90° 90°	dBuV/m 13.47	(dB) 24.3000	(dBuV/m) 37.7700	(dBuV/m) 124.8698	(dB) -87.0998	AVG
(MHz) 0.0137 0.0137	0°/90° 90° 90°	dBuV/m 13.47 14.92	(dB) 24.3000 24.3000	(dBuV/m) 37.7700 39.2200	(dBuV/m) 124.8698 144.8698	(dB) -87.0998 -105.6498	AVG PEAK
(MHz) 0.0137 0.0137 0.0295	0°/90° 90° 90°	dBuV/m 13.47 14.92 7.46	(dB) 24.3000 24.3000 23.6983	(dBuV/m) 37.7700 39.2200 31.1583	(dBuV/m) 124.8698 144.8698 118.2078	(dB) -87.0998 -105.6498 -87.0495	AVG PEAK AVG
(MHz) 0.0137 0.0137 0.0295 0.0295	0°/90° 90° 90° 90°	dBuV/m 13.47 14.92 7.46 9.03	(dB) 24.3000 24.3000 23.6983 23.6983	(dBuV/m) 37.7700 39.2200 31.1583 32.7283	(dBuV/m) 124.8698 144.8698 118.2078 138.2078	(dB) -87.0998 -105.6498 -87.0495 -105.4795	AVG PEAK AVG PEAK
(MHz) 0.0137 0.0137 0.0295 0.0295 0.0295	0°/90° 90° 90° 90° 90°	dBuV/m 13.47 14.92 7.46 9.03 5.47	(dB) 24.3000 24.3000 23.6983 23.6983 22.7357	(dBuV/m) 37.7700 39.2200 31.1583 32.7283 28.2057	(dBuV/m) 124.8698 144.8698 118.2078 138.2078 114.5981	(dB) -87.0998 -105.6498 -87.0495 -105.4795 -86.3924	AVG PEAK AVG PEAK AVG
(MHz) 0.0137 0.0295 0.0295 0.0295 0.0447 0.0447	0°/90° 90° 90° 90° 90° 90°	dBuV/m 13.47 14.92 7.46 9.03 5.47 6.89	(dB) 24.3000 24.3000 23.6983 23.6983 22.7357 22.7357	(dBuV/m) 37.7700 39.2200 31.1583 32.7283 28.2057 29.6257	(dBuV/m) 124.8698 144.8698 118.2078 138.2078 114.5981 134.5981	(dB) -87.0998 -105.6498 -87.0495 -105.4795 -86.3924 -104.9724	AVG PEAK AVG PEAK AVG PEAK
(MHz) 0.0137 0.0137 0.0295 0.0295 0.0295 0.0447 0.0447 0.0447	0°/90° 90° 90° 90° 90° 90° 90°	dBuV/m 13.47 14.92 7.46 9.03 5.47 6.89 1.72	(dB) 24.3000 23.6983 23.6983 22.7357 22.7357 22.2160	(dBuV/m) 37.7700 39.2200 31.1583 32.7283 28.2057 29.6257 23.9360	(dBuV/m) 124.8698 144.8698 118.2078 138.2078 114.5981 134.5981 112.1578	(dB) -87.0998 -105.6498 -87.0495 -105.4795 -86.3924 -104.9724 -88.2218	AVG PEAK AVG PEAK AVG PEAK AVG

# ATTACHMENT C - RADIATED EMISSION (30MHZ TO 1000MHZ)

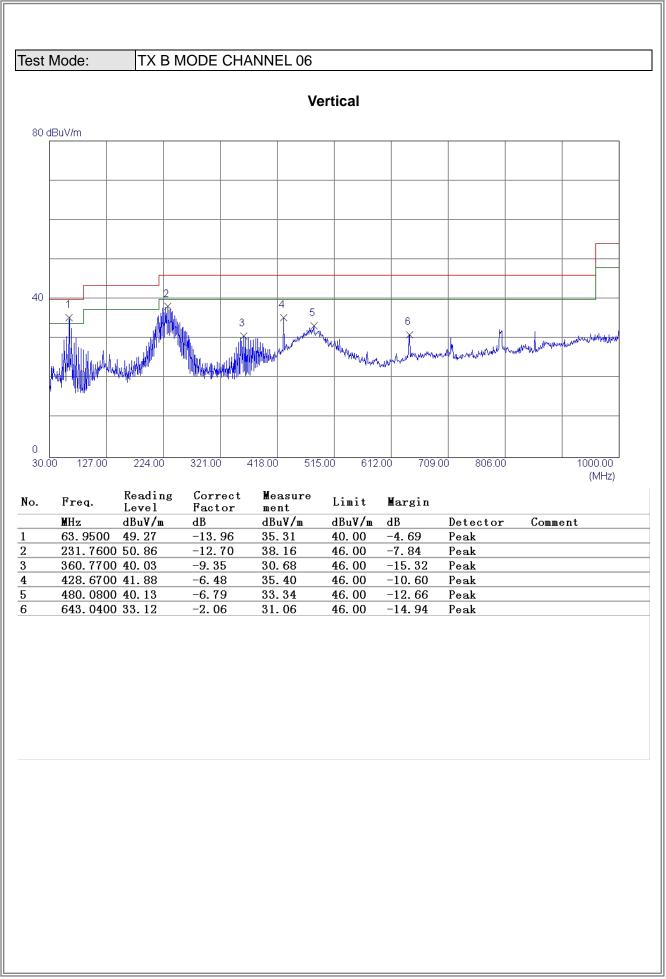




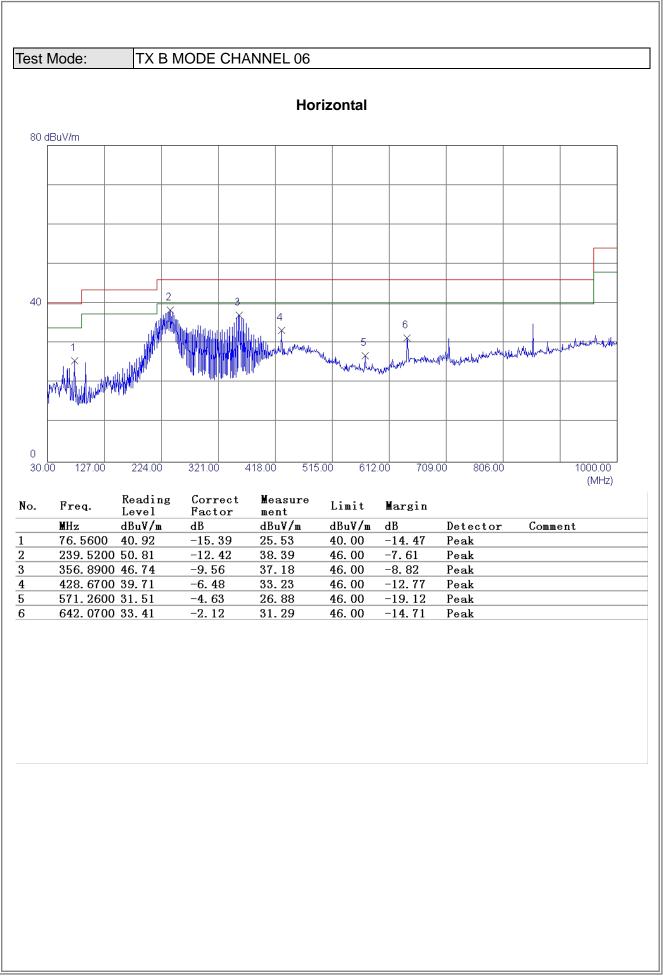




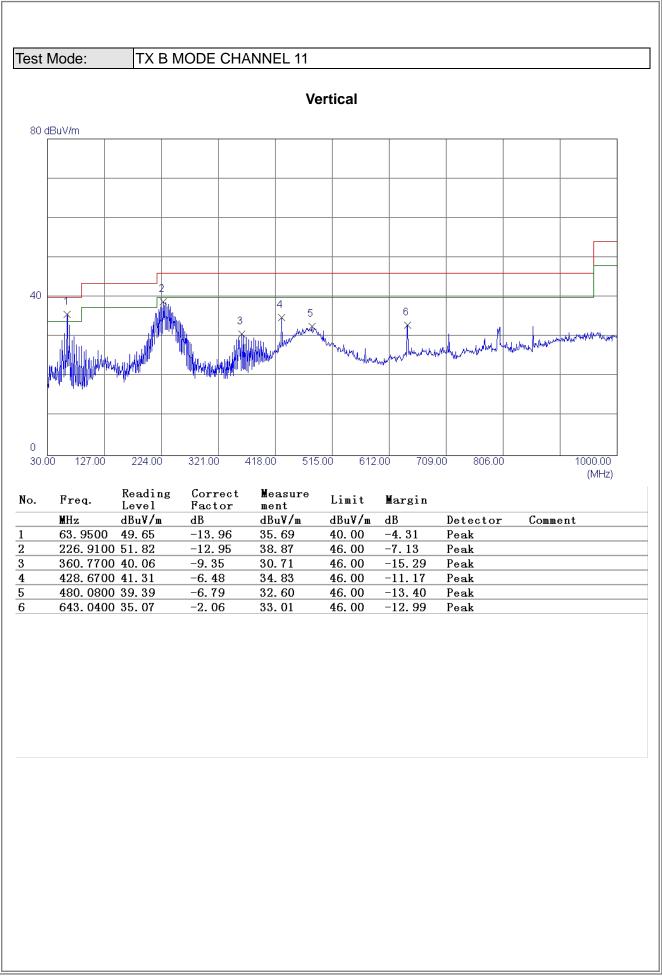




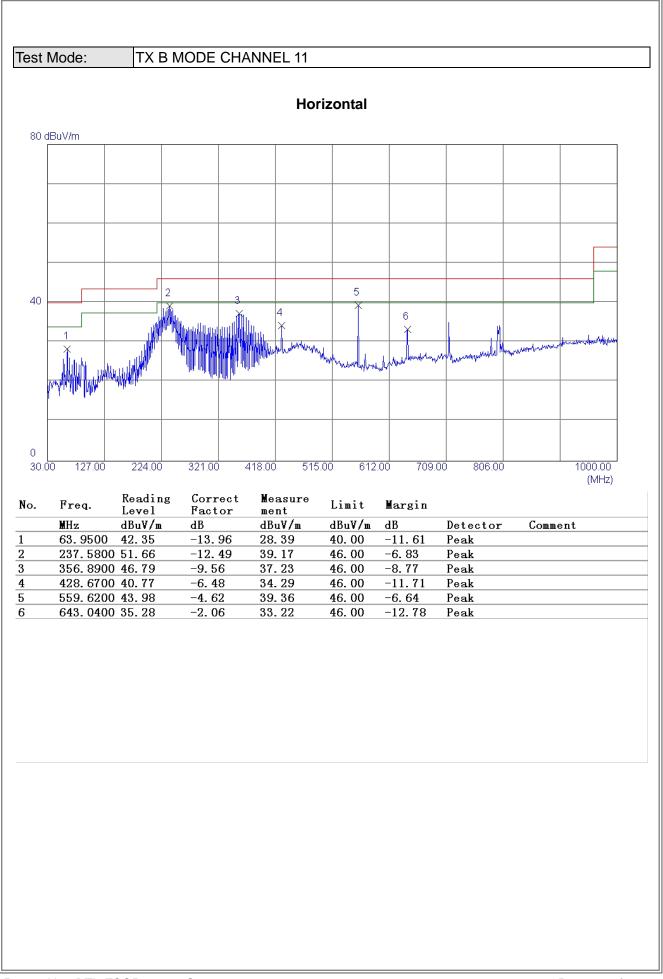






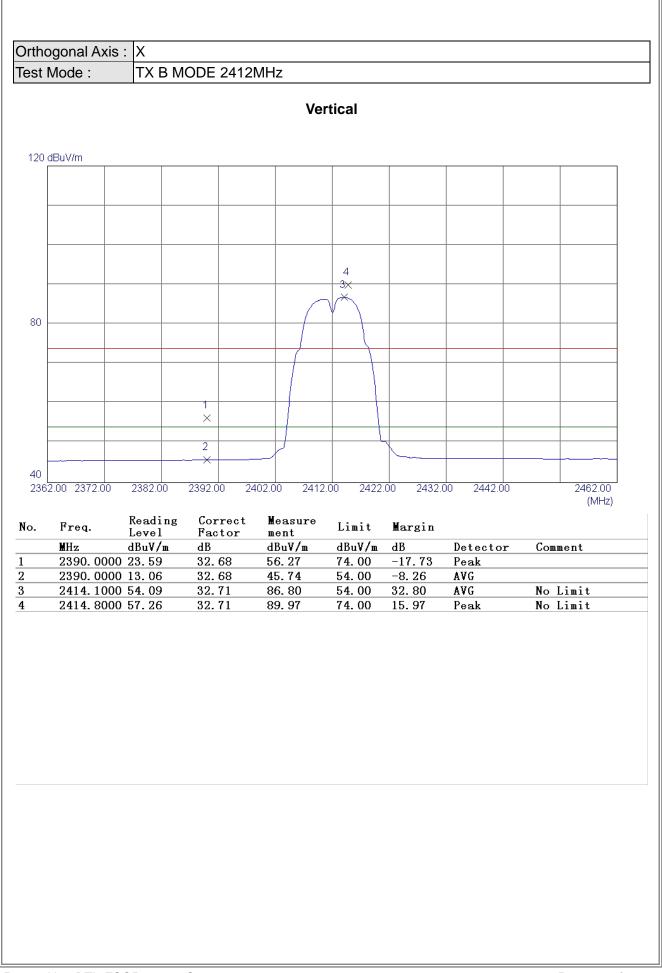






## ATTACHMENT D - RADIATED EMISSION (ABOVE 1000MHZ)

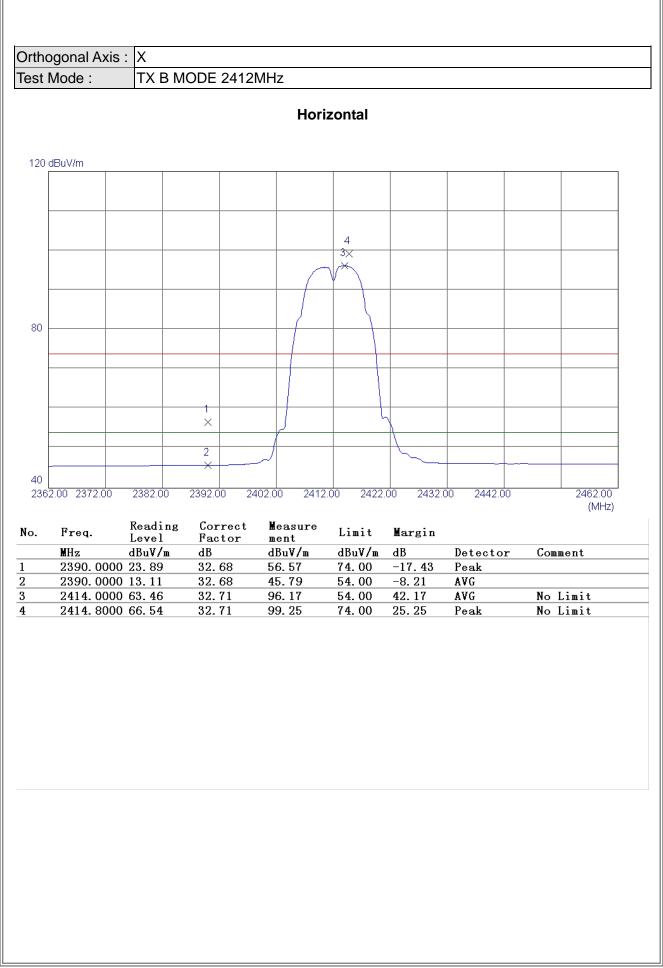




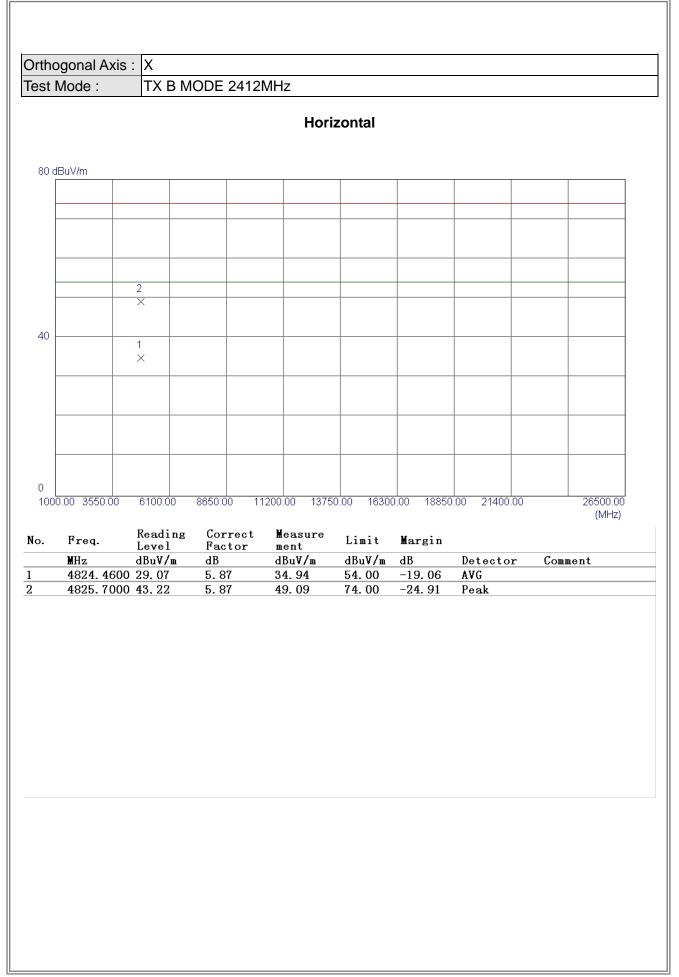


	Node :		ODE 2412						
				Ve	rtical				
80 de	BuV/m								
									]
-									
		2							
		×							
40 -		1 ×							
_									
_									_
0									_
	0.00 3550.00	6100.00	8650.00 1	1200.00 1375	0.00 1630	0.00 18850	0.00 21400.00	26500.00 (MHz)	
1000			Correct	Measure			0.00 21400.00	26500.00 (MHz)	
1000	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector		
0 1000 <b>D</b> .	Freq.	Reading Level dBuV/m ) 29.12	Correct Factor	Measure ment	Limit	Margin		(MHz)	
1000	Freq. MHz 4823.9200	Reading Level dBuV/m ) 29.12	Correct Factor dB 5.87	Measure ment dBuV/m 34.99	Limit dBuV/m 54.00	Margin dB -19.01	Detector AVG	(MHz)	
1000	Freq. MHz 4823.9200	Reading Level dBuV/m ) 29.12	Correct Factor dB 5.87	Measure ment dBuV/m 34.99	Limit dBuV/m 54.00	Margin dB -19.01	Detector AVG	(MHz)	
1000	Freq. MHz 4823.9200	Reading Level dBuV/m ) 29.12	Correct Factor dB 5.87	Measure ment dBuV/m 34.99	Limit dBuV/m 54.00	Margin dB -19.01	Detector AVG	(MHz)	
1000	Freq. MHz 4823.9200	Reading Level dBuV/m ) 29.12	Correct Factor dB 5.87	Measure ment dBuV/m 34.99	Limit dBuV/m 54.00	Margin dB -19.01	Detector AVG	(MHz)	
1000	Freq. MHz 4823.9200	Reading Level dBuV/m ) 29.12	Correct Factor dB 5.87	Measure ment dBuV/m 34.99	Limit dBuV/m 54.00	Margin dB -19.01	Detector AVG	(MHz)	
1000	Freq. MHz 4823.9200	Reading Level dBuV/m ) 29.12	Correct Factor dB 5.87	Measure ment dBuV/m 34.99	Limit dBuV/m 54.00	Margin dB -19.01	Detector AVG	(MHz)	
1000	Freq. MHz 4823.9200	Reading Level dBuV/m ) 29.12	Correct Factor dB 5.87	Measure ment dBuV/m 34.99	Limit dBuV/m 54.00	Margin dB -19.01	Detector AVG	(MHz)	

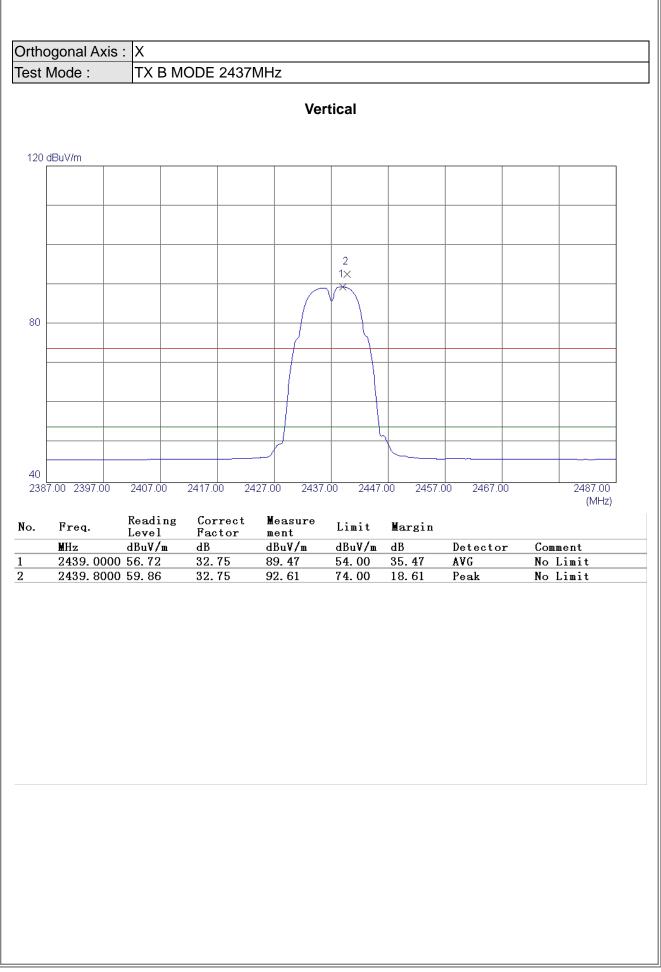








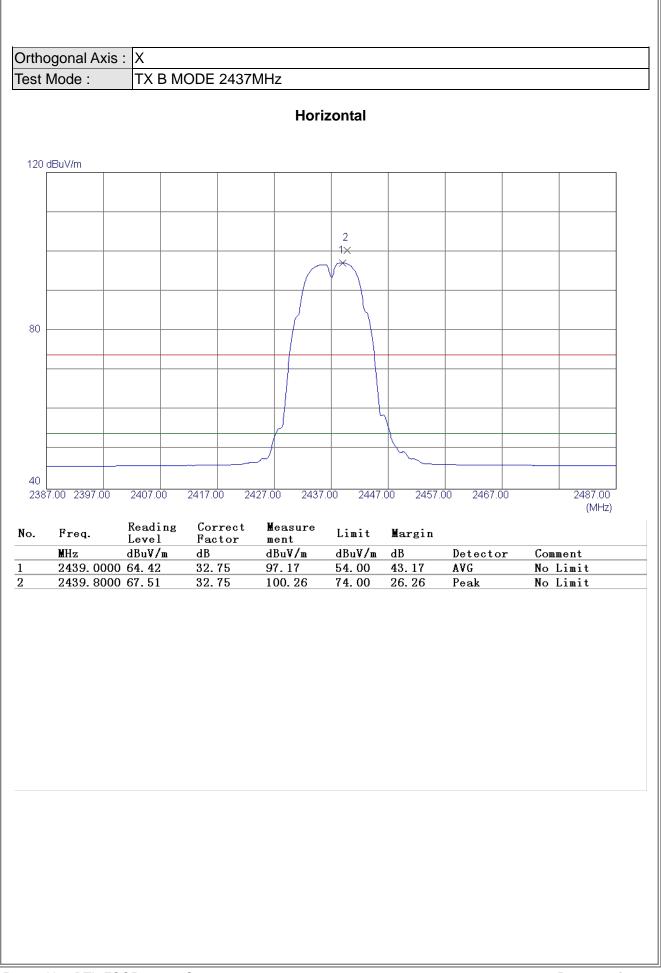




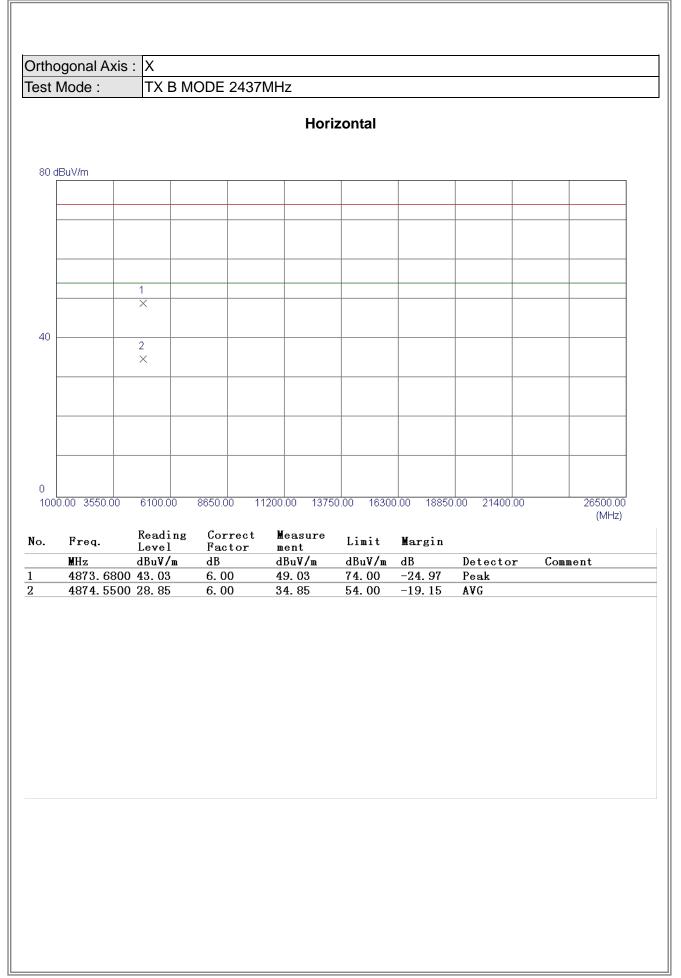


	Mode :		/IODE 24371					
				Vei	rtical			
۰۱ A	BuV/m							
io ui								
-								
		1						
		×						
10 -		2 ×						
-								
000	0.00 3550.00	6100.00	8650.00 11	200.00 1375	0.00 1630	0.00 18850	.00 21400.00	26500.00 (MHz)
-	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz 4874.2300	dBuV/m	dB 6. 00	dBuV/m 47.15	dBuV/m 74.00	dB -26. 85	Detector Peak	Comment
	4875.0400		6. 01	34.74	54.00	-19.26	AVG	

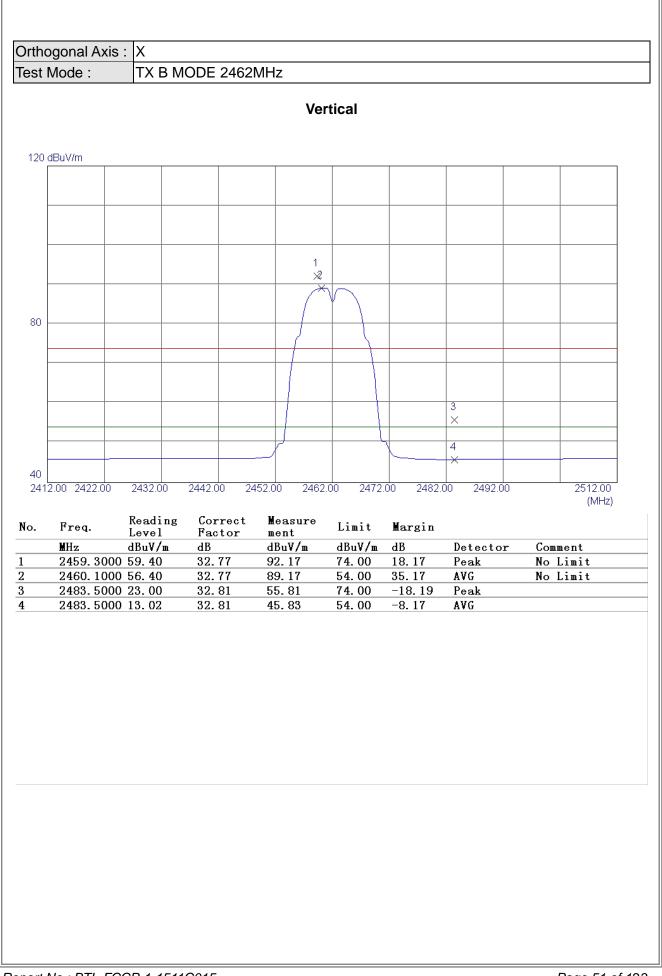




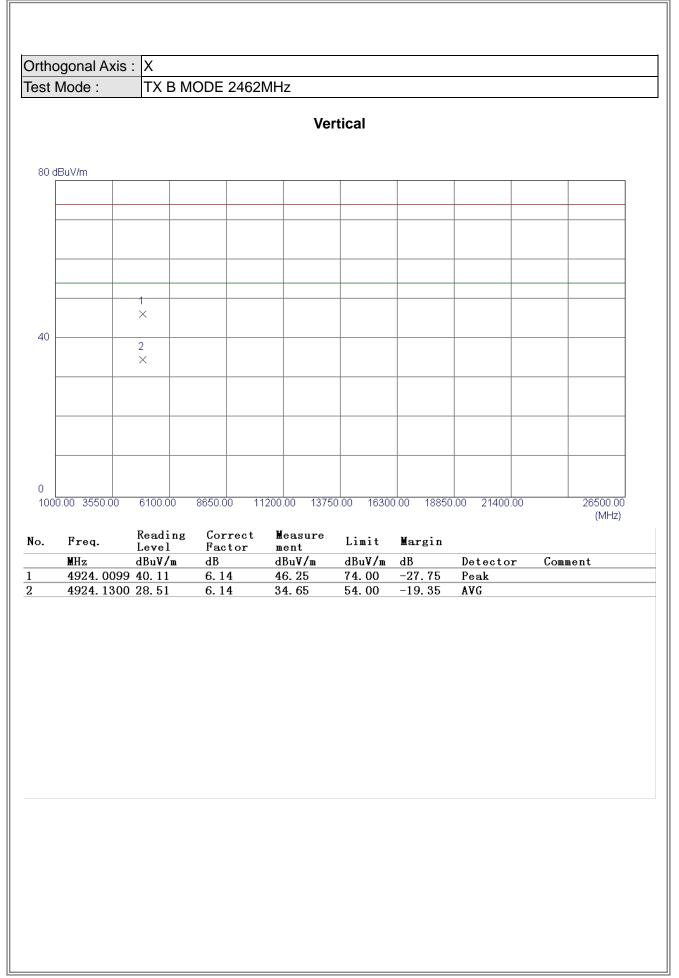




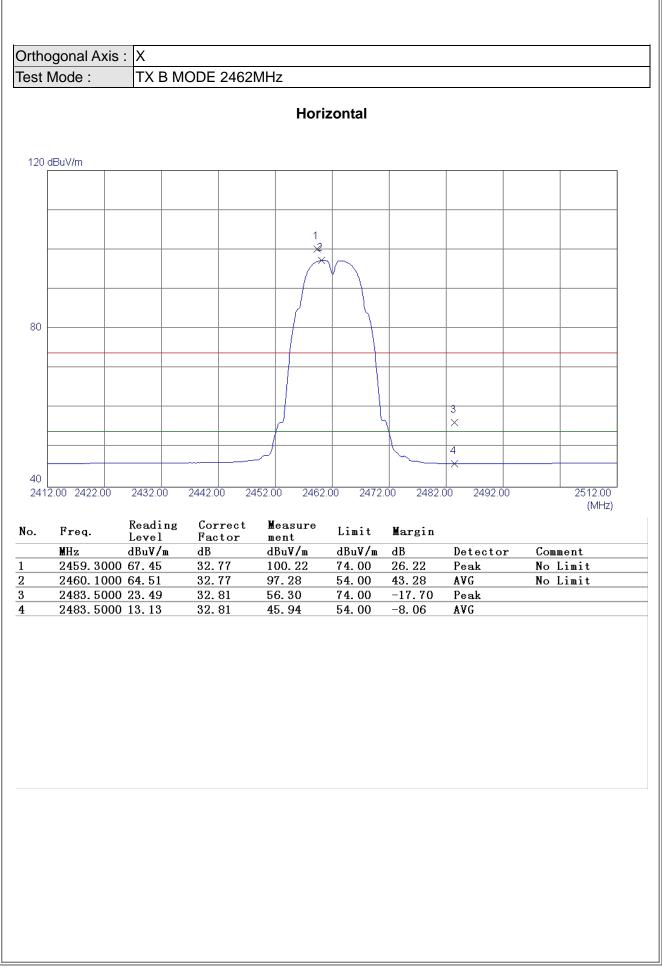




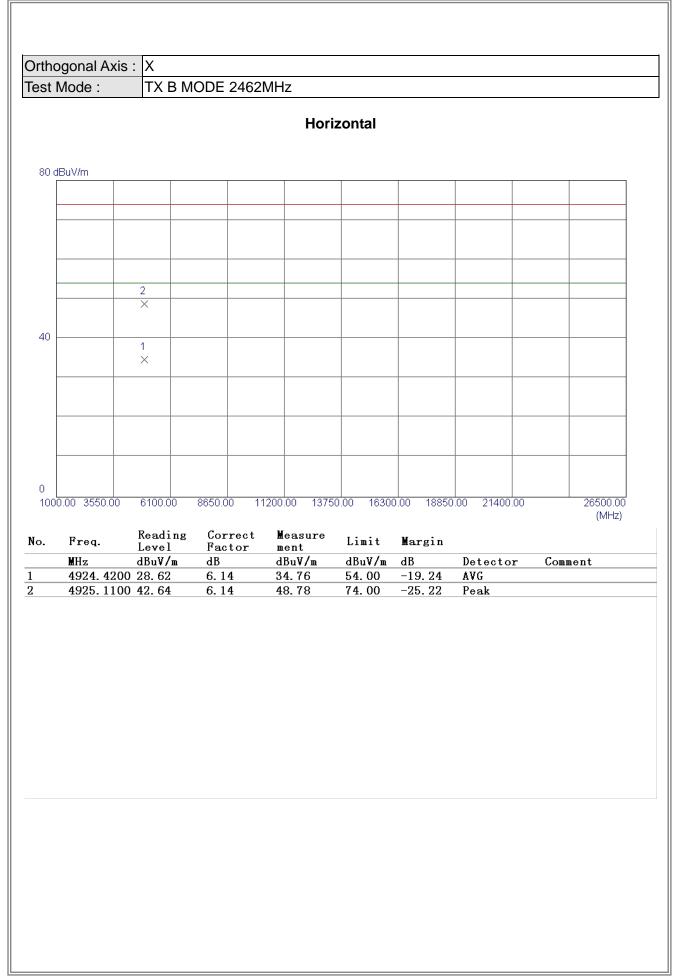




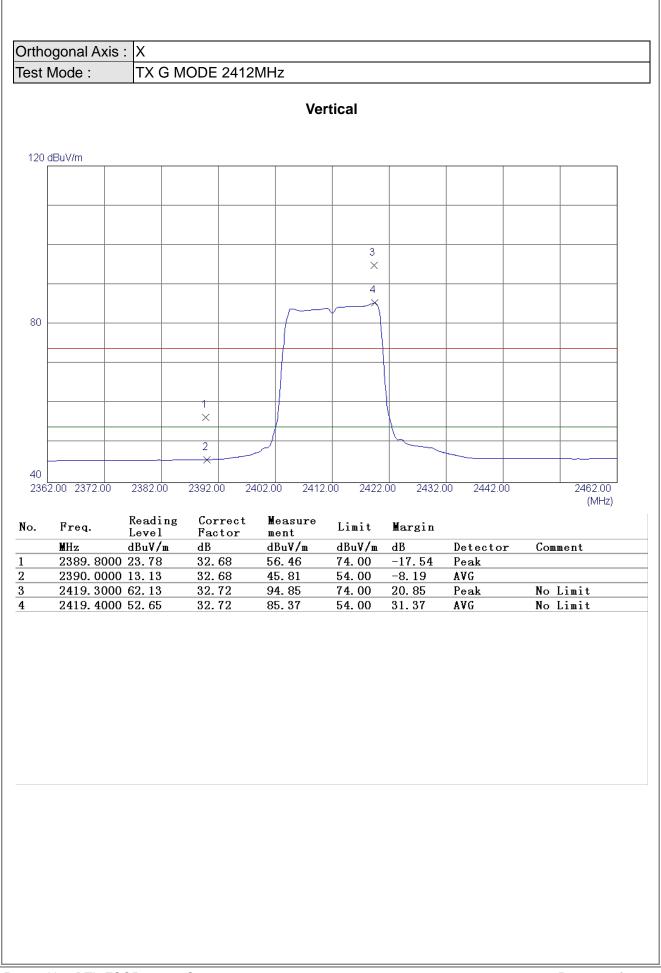








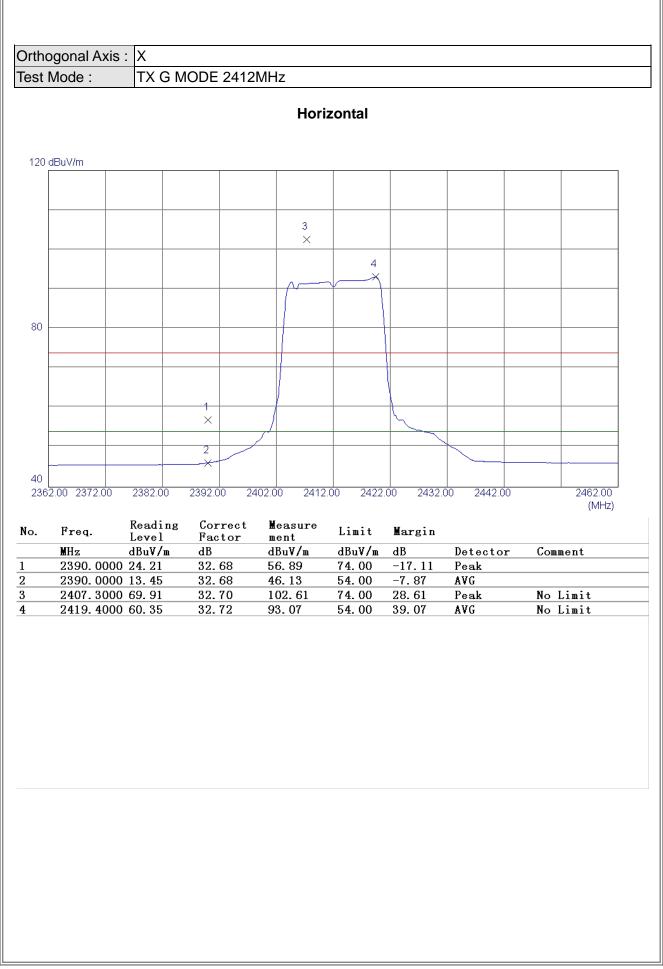




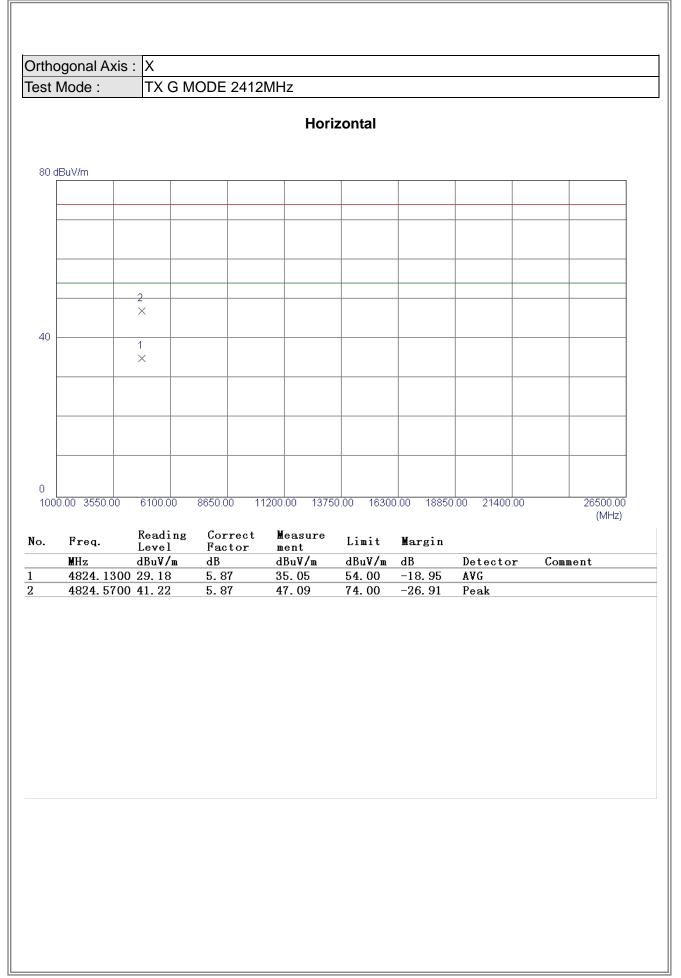


CBU/m   00000 0000 0000 0000 0000 0000 0000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 00000 000000 00000 000000	st Mo				E 2412M	11 12					
Image: Contract of the contract on the contract on the contract on the contract on the						Ver	rtical				
Image: Contract of the contract on the contract on the contract on the contract on the	30 dBuV	'/m									
× × Image: Contract ment Measure ment Limit Margin   MHz dBuV/m dB dBuV/m dB Detector Conment											
× × Image: Contract ment Measure ment Limit Margin   MHz dBuV/m dB dBuV/m dB Detector Conment											
× × Image: Contract ment Measure ment Limit Margin   MHz dBuV/m dB dBuV/m dB Detector Conment											
× × Image: Contract ment Measure ment Limit Margin   MHz dBuV/m dB dBuV/m dB Detector Conment											
2 2 1											
2 ×   <	40										
Freq. Reading Level Correct Factor Measure ment Limit Margin   MHz dBuV/m dB dBuV/m dB Detector Comment   4822.9200 42.07 5.87 47.94 74.00 -26.06 Peak											
Freq. Reading Level Correct Factor Measure ment Limit Margin   MHz dBuV/m dB dBuV/m dB Detector Comment   4822.9200 42.07 5.87 47.94 74.00 -26.06 Peak											
Freq. Reading Level Correct Factor Measure ment Limit Margin   MHz dBuV/m dB dBuV/m dB Detector Comment   4822.9200 42.07 5.87 47.94 74.00 -26.06 Peak											
Freq. Reading Level Correct Factor Measure ment Limit Margin   MHz dBuV/m dB dBuV/m dB Detector Comment   4822.9200 42.07 5.87 47.94 74.00 -26.06 Peak											
Freq. Reading Level Correct Factor Measure ment Limit Margin   MHz dBuV/m dB dBuV/m dB Detector Comment   4822.9200 42.07 5.87 47.94 74.00 -26.06 Peak											
Freq. Reading Level Correct Factor Measure ment Limit Margin   MHz dBuV/m dB dBuV/m dB Detector Comment   4822.9200 42.07 5.87 47.94 74.00 -26.06 Peak											
MHz   dBuV/m   dB   dBuV/m   dBuV/m   dB   Detector   Comment     4822.9200   42.07   5.87   47.94   74.00   -26.06   Peak											
MHz   dBuV/m   dB   dBuV/m   dBuV/m   dB   Detector   Comment     4822.9200   42.07   5.87   47.94   74.00   -26.06   Peak		3550.00			00 1120	00.00 13750	0.00 16300	0.00 18850	.00 21400.0	00	
	1000.00		Readin Level	ng Co Fa	rrect ctor	Measure ment	Limit	Margin	.00 21400.0		(MHz)
	. F	req. Hz	Readin Level dBuV/m	ng Co Fa 1 dB	rrect ctor	Measure ment dBuV/m	Limit dBu <b>V/m</b>	Margin dB	Detector		(MHz)
	F	req. Hz	Readin Level dBuV/m	ng Co Fa 1 dB 5.3	rrect ctor 87	Measure ment dBuV/m 47.94	Limit dBuV/m 74.00	Margin dB -26.06	Detector Peak		(MHz)
	000.00 F Mi 4:	req. Hz 822.9200	Readin Level dBuV/m 42.07	ng Co Fa 1 dB 5.3	rrect ctor 87	Measure ment dBuV/m 47.94	Limit dBuV/m 74.00	Margin dB -26.06	Detector Peak		(MHz)
	000.00 F M	req. Hz 822.9200	Readin Level dBuV/m 42.07	ng Co Fa 1 dB 5.3	rrect ctor 87	Measure ment dBuV/m 47.94	Limit dBuV/m 74.00	Margin dB -26.06	Detector Peak		(MHz)
	1000.00 - F <u>M</u> 1 4:	req. Hz 822.9200	Readin Level dBuV/m 42.07	ng Co Fa 1 dB 5.3	rrect ctor 87	Measure ment dBuV/m 47.94	Limit dBuV/m 74.00	Margin dB -26.06	Detector Peak		(MHz)
	1000.00 . F <u>M</u> 1 4:	req. Hz 822.9200	Readin Level dBuV/m 42.07	ng Co Fa 1 dB 5.3	rrect ctor 87	Measure ment dBuV/m 47.94	Limit dBuV/m 74.00	Margin dB -26.06	Detector Peak		(MHz)
	1000.00 . F <u>M</u> 1 4:	req. Hz 822.9200	Readin Level dBuV/m 42.07	ng Co Fa 1 dB 5.3	rrect ctor 87	Measure ment dBuV/m 47.94	Limit dBuV/m 74.00	Margin dB -26.06	Detector Peak		(MHz)
	1000.00 . F <u>M</u> 1 4:	req. Hz 822.9200	Readin Level dBuV/m 42.07	ng Co Fa 1 dB 5.3	rrect ctor 87	Measure ment dBuV/m 47.94	Limit dBuV/m 74.00	Margin dB -26.06	Detector Peak		(MHz)
	1000.00 . F <u>M</u> 1 4:	req. Hz 822.9200	Readin Level dBuV/m 42.07	ng Co Fa 1 dB 5.3	rrect ctor 87	Measure ment dBuV/m 47.94	Limit dBuV/m 74.00	Margin dB -26.06	Detector Peak		(MHz)

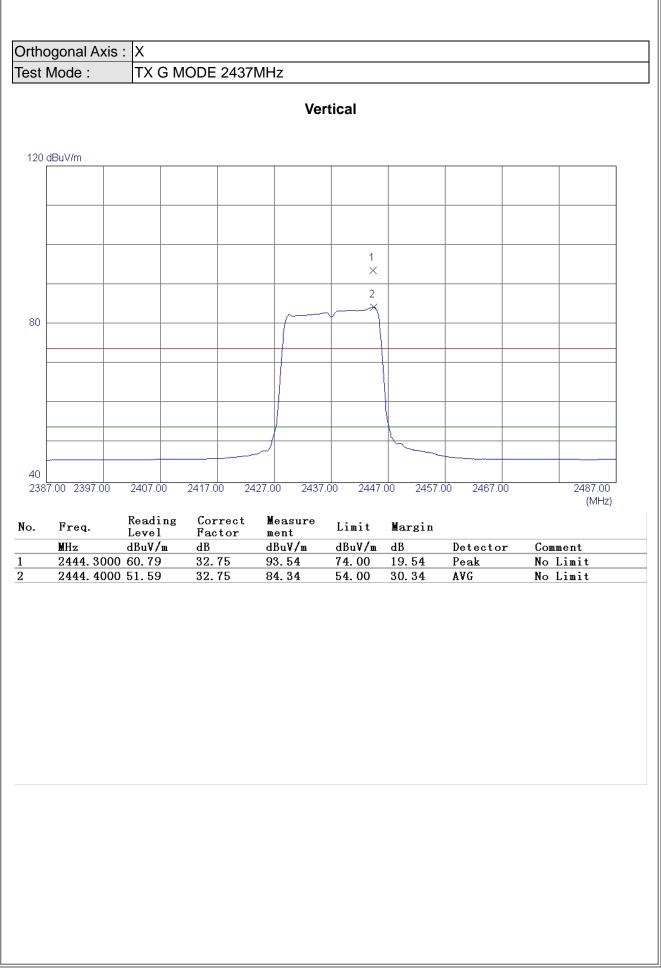








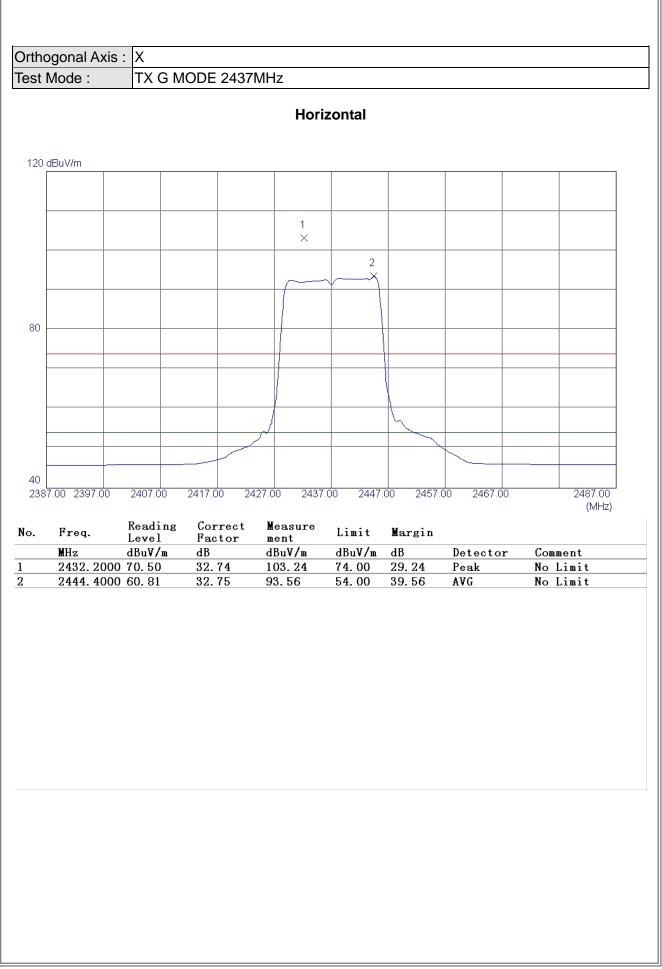






511	Mode :	1.7.01	MODE 2437						
				Ve	rtical				
20 45	Dui) (Inc								
50 GE	BuV/m								
									_
		1							
		×							
40 -		2 ×							
									-
-									
	0.00 3550.00	6100.00	8650.00 1	1200.00 1375	0.00 1630	0.00 18850	0.00 21400.00		
1000				Measure			0.00 21400.00	0 26500.0 (MHz	
1000	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector		
1000	Freq.	Reading Level dBuV/m 41.79	Correct Factor	Measure ment	Limit	Margin		(MHz	
1000	Freq. MHz 4873.8700	Reading Level dBuV/m 41.79	Correct Factor dB 6.00	Measure ment dBuV/m 47.79	Limit dBuV/m 74.00	Margin dB -26.21	Detector Peak	(MHz	
1000	Freq. MHz 4873.8700	Reading Level dBuV/m 41.79	Correct Factor dB 6.00	Measure ment dBuV/m 47.79	Limit dBuV/m 74.00	Margin dB -26.21	Detector Peak	(MHz	
1000	Freq. MHz 4873.8700	Reading Level dBuV/m 41.79	Correct Factor dB 6.00	Measure ment dBuV/m 47.79	Limit dBuV/m 74.00	Margin dB -26.21	Detector Peak	(MHz	
0 110000	Freq. MHz 4873.8700	Reading Level dBuV/m 41.79	Correct Factor dB 6.00	Measure ment dBuV/m 47.79	Limit dBuV/m 74.00	Margin dB -26.21	Detector Peak	(MHz	
1000	Freq. MHz 4873.8700	Reading Level dBuV/m 41.79	Correct Factor dB 6.00	Measure ment dBuV/m 47.79	Limit dBuV/m 74.00	Margin dB -26.21	Detector Peak	(MHz	
1000	Freq. MHz 4873.8700	Reading Level dBuV/m 41.79	Correct Factor dB 6.00	Measure ment dBuV/m 47.79	Limit dBuV/m 74.00	Margin dB -26.21	Detector Peak	(MHz	
1000	Freq. MHz 4873.8700	Reading Level dBuV/m 41.79	Correct Factor dB 6.00	Measure ment dBuV/m 47.79	Limit dBuV/m 74.00	Margin dB -26.21	Detector Peak	(MHz	

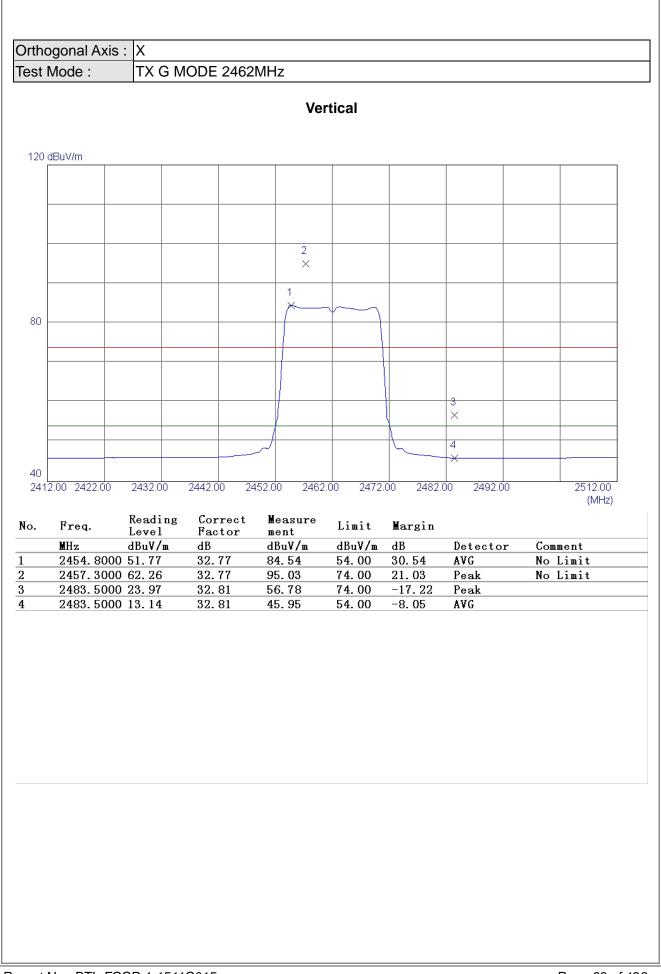




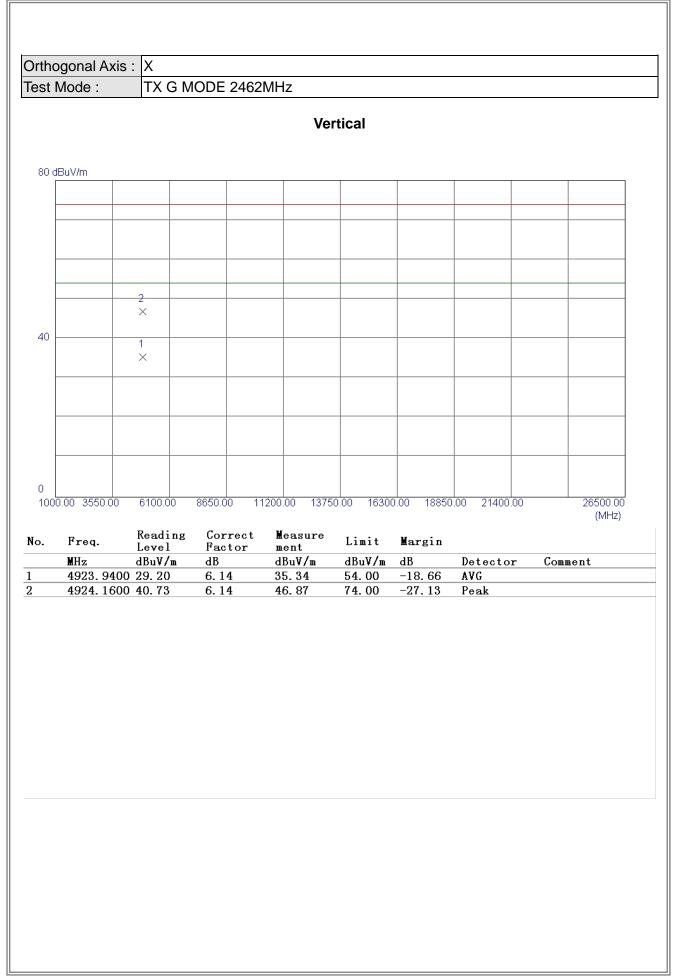


	Mode :	-	MODE 2437					
				Hori	zontal			
اہ nx	BuV/m							
- Cu	Duvin							
		1						
		×						
io -		2 ×						
-								
+								
000	0.00 3550.00	6100.00	8650.00 11	1200.00 1375	0.00 1630	0.00 18850	.00 21400.00	26500.00 (MHz)
	Freq.	Reading Level	Correct Factor	Measure ment	Limit	Margin		
	MHz 4872.6700	dBuV/m	dB 6. 00	dBuV/m 47.51	dBuV/m 74.00	dB -26. 49	Detector Peak	Comment
	4012.0100		6.00	35.38	54.00	-18. 62	AVG	
	4873.6400	23.00						
	4873. 6400	23.00						
	4873.6400	23.00						
	4873.6400	23.00						
	4873.6400	23.30						
	4873.6400	23.30						
	4873.6400	23.00						
	4873. 6400	23.00						
	4873. 6400	23.00						

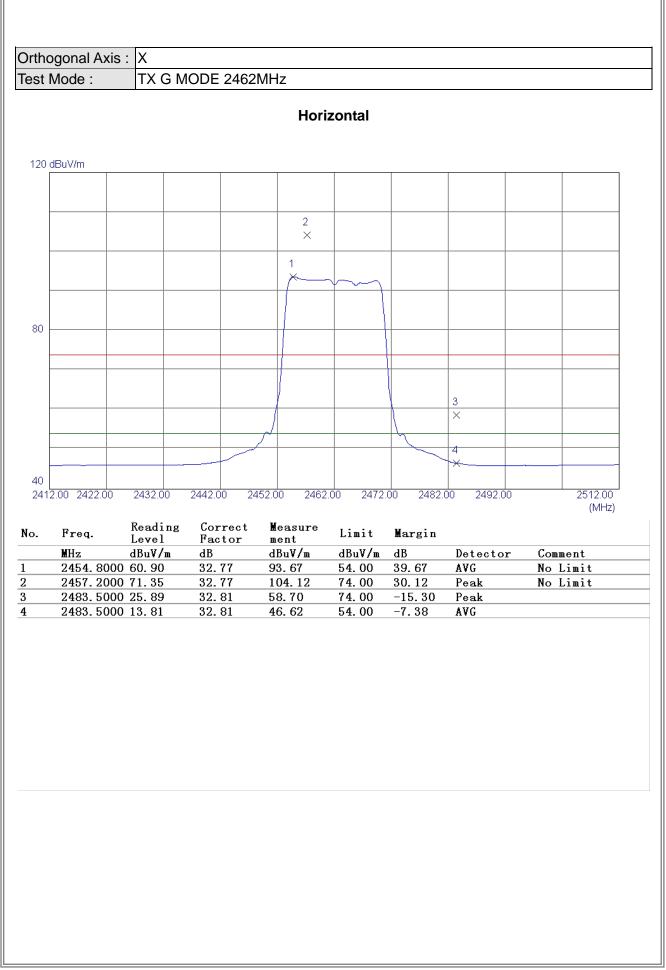




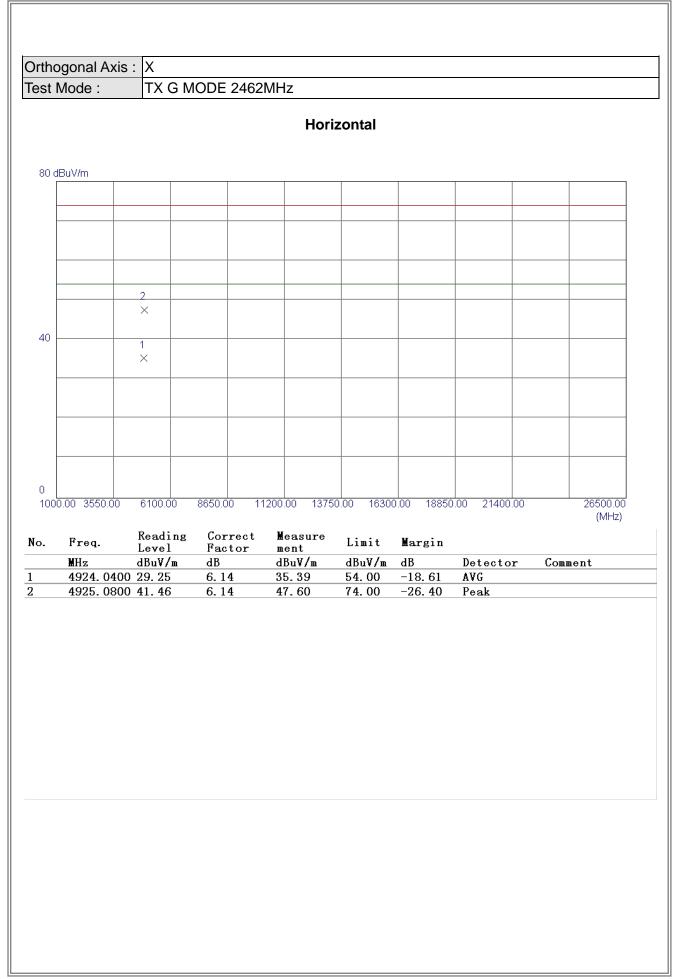




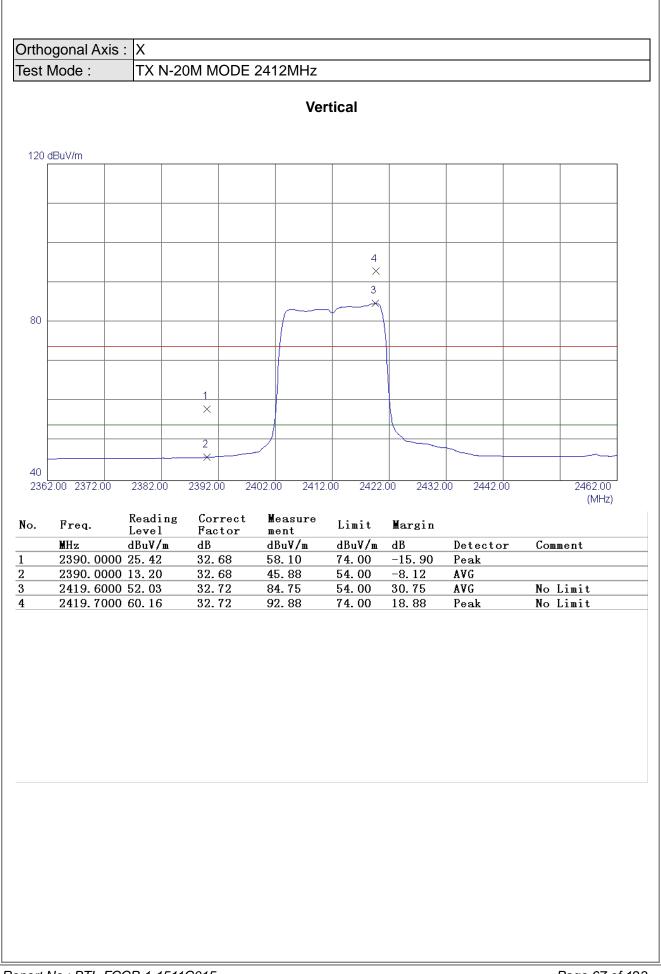




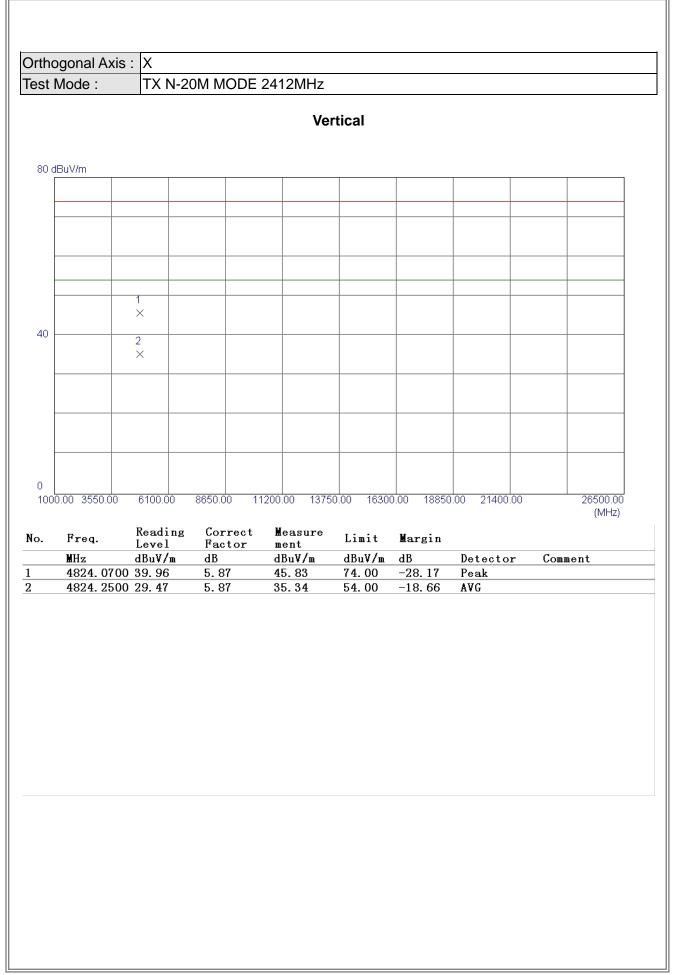




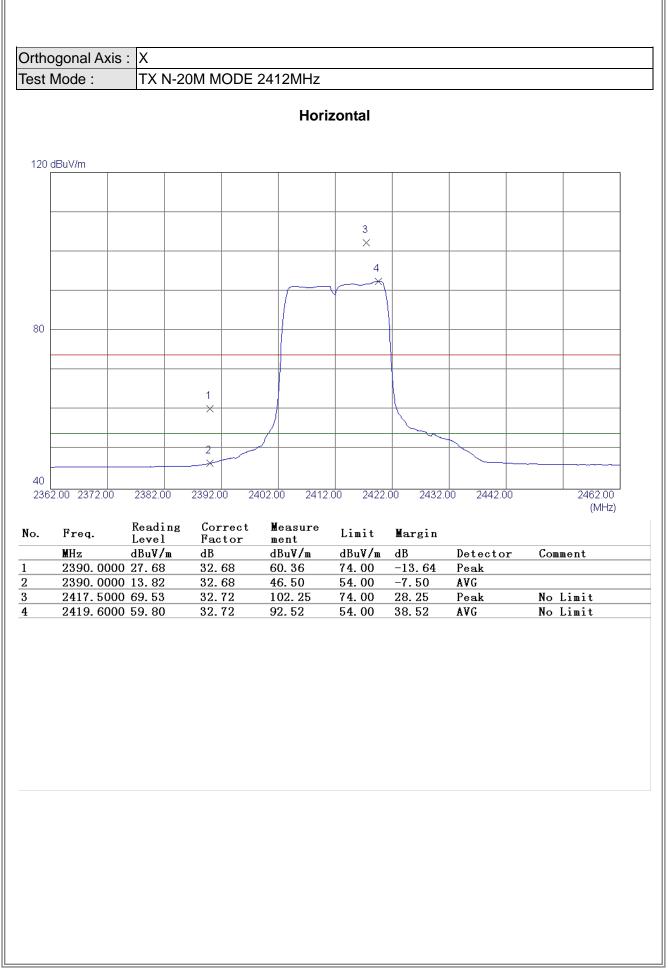




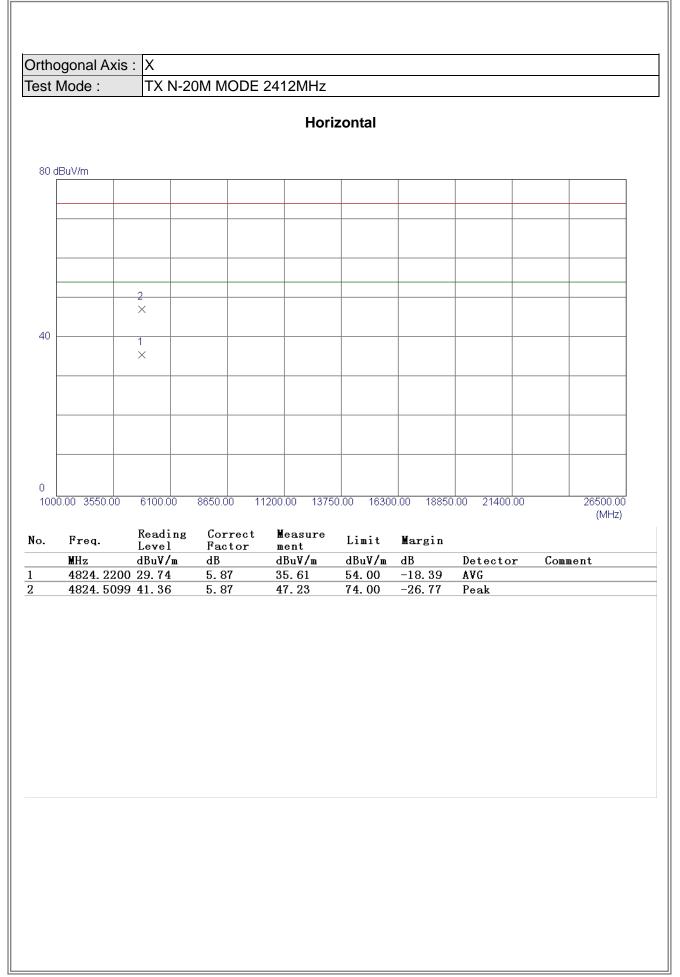




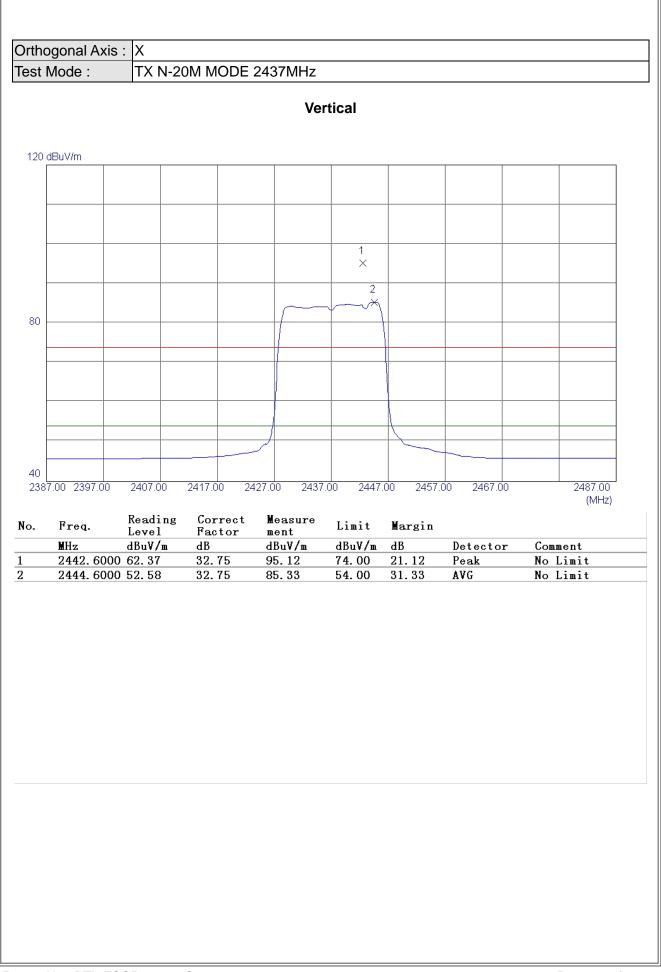




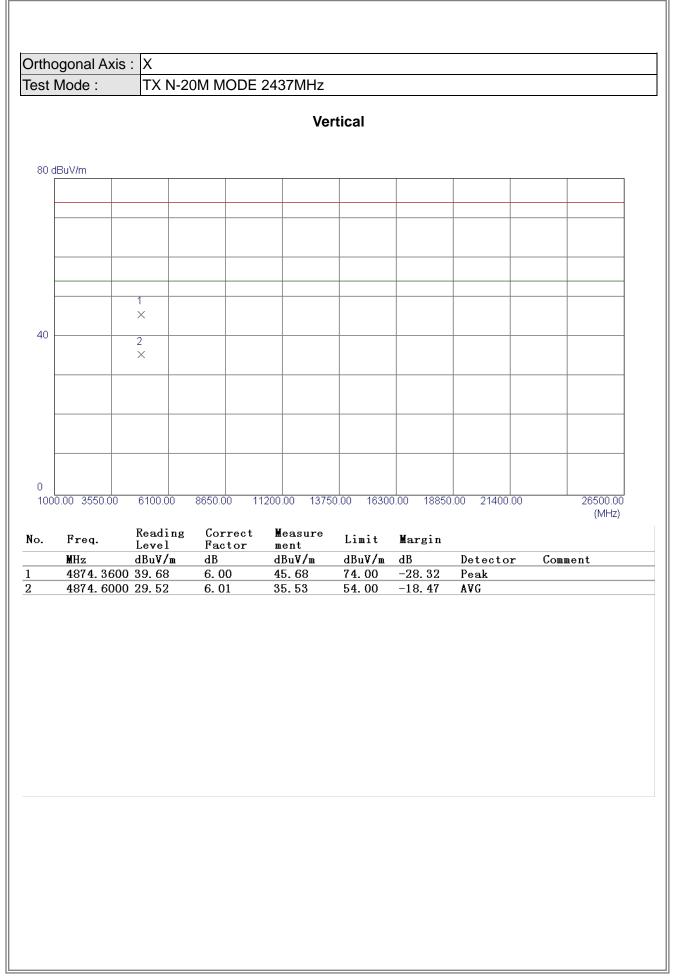




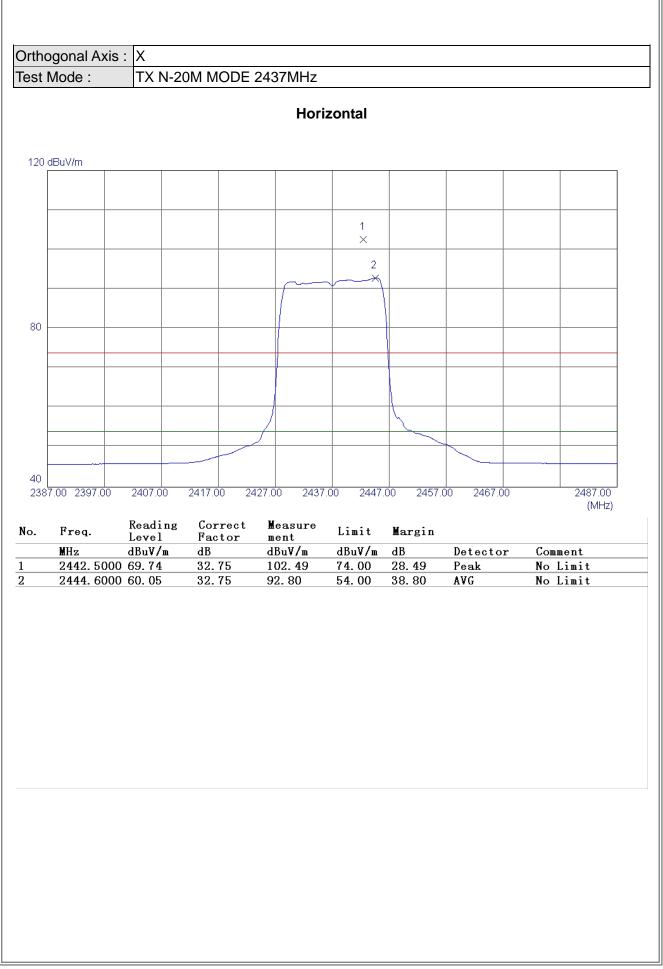




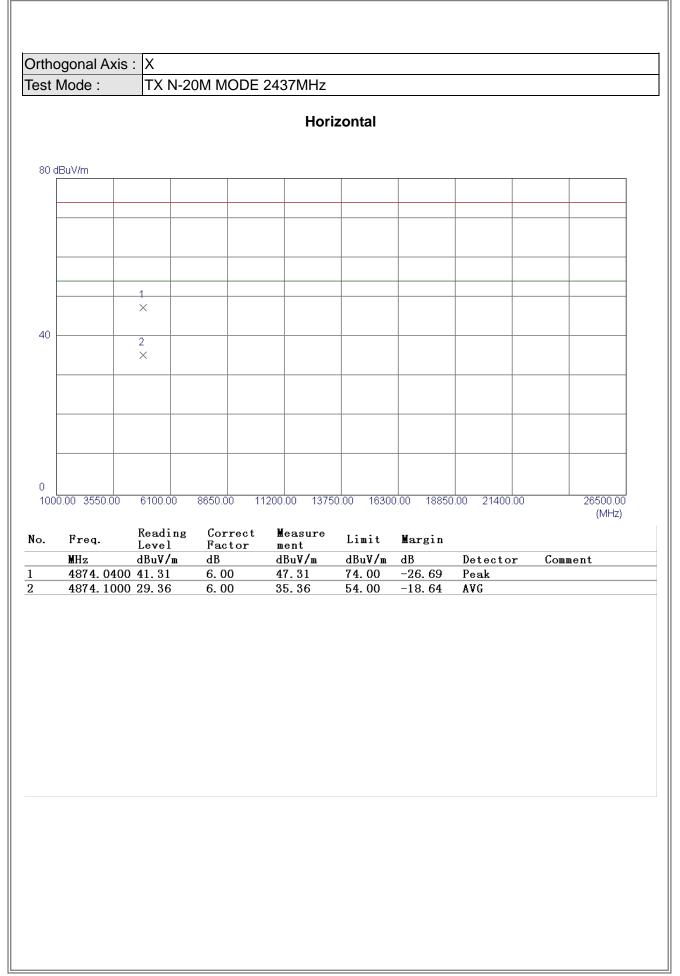




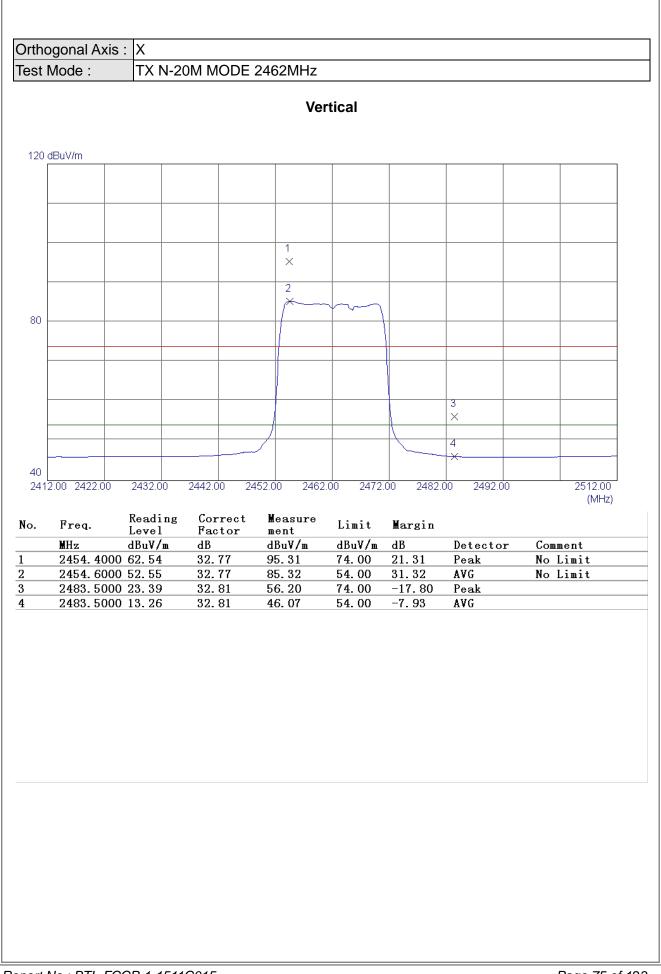




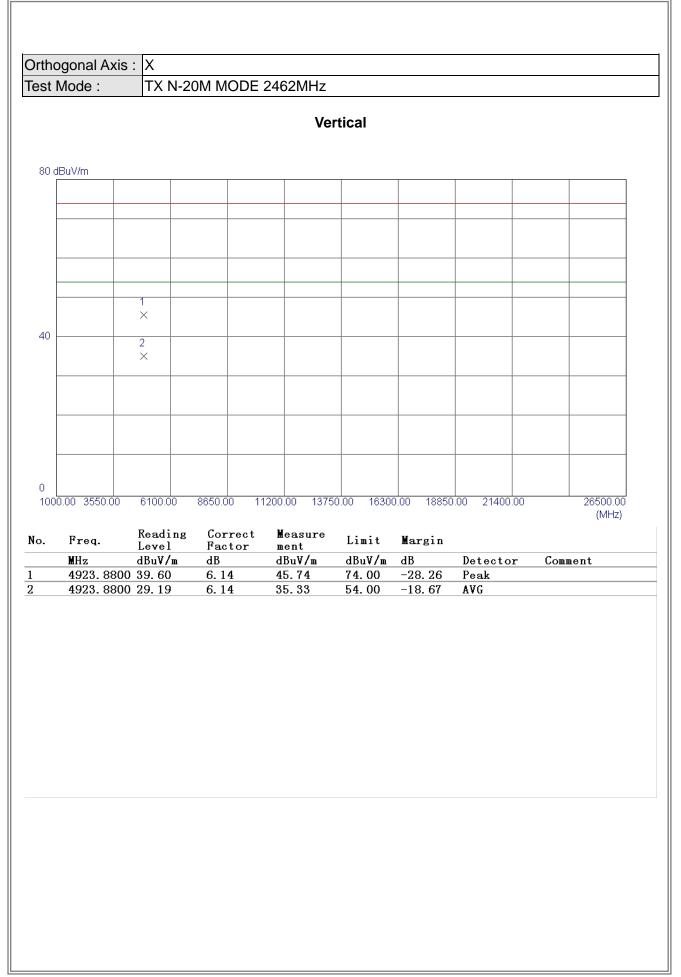




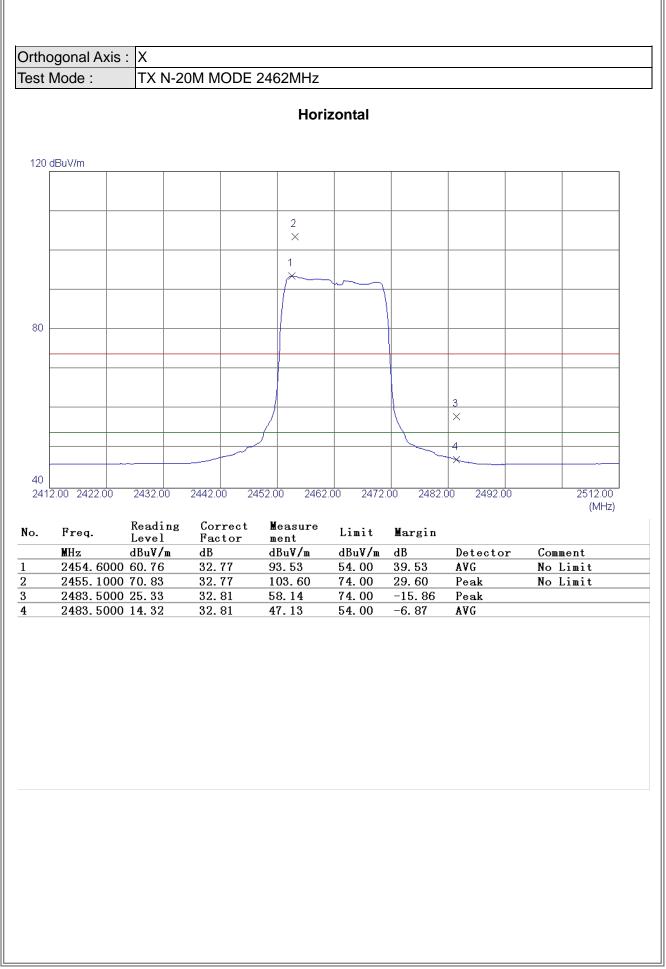




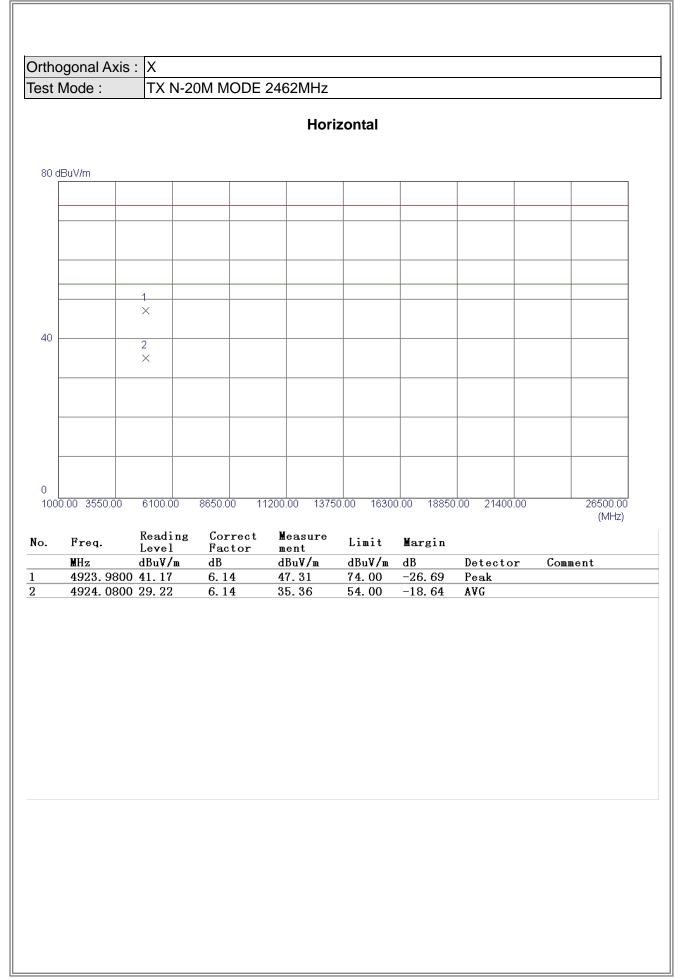




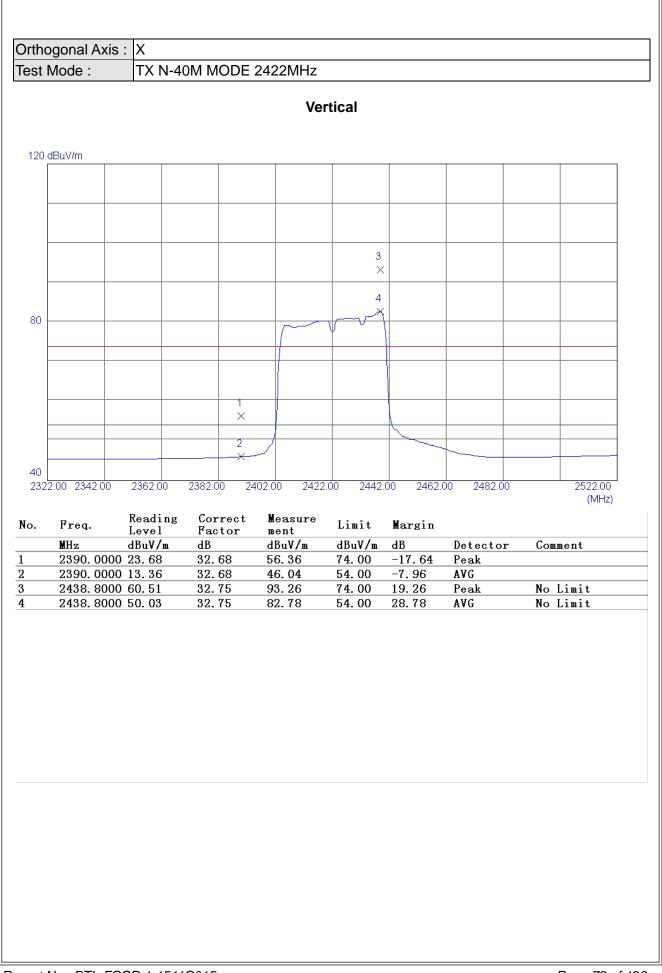




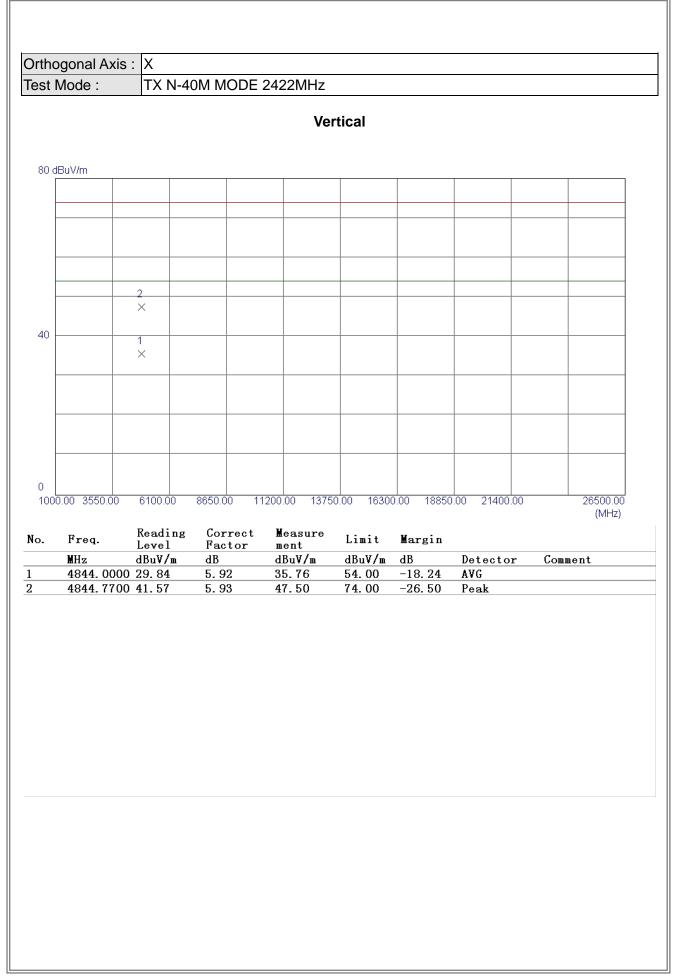




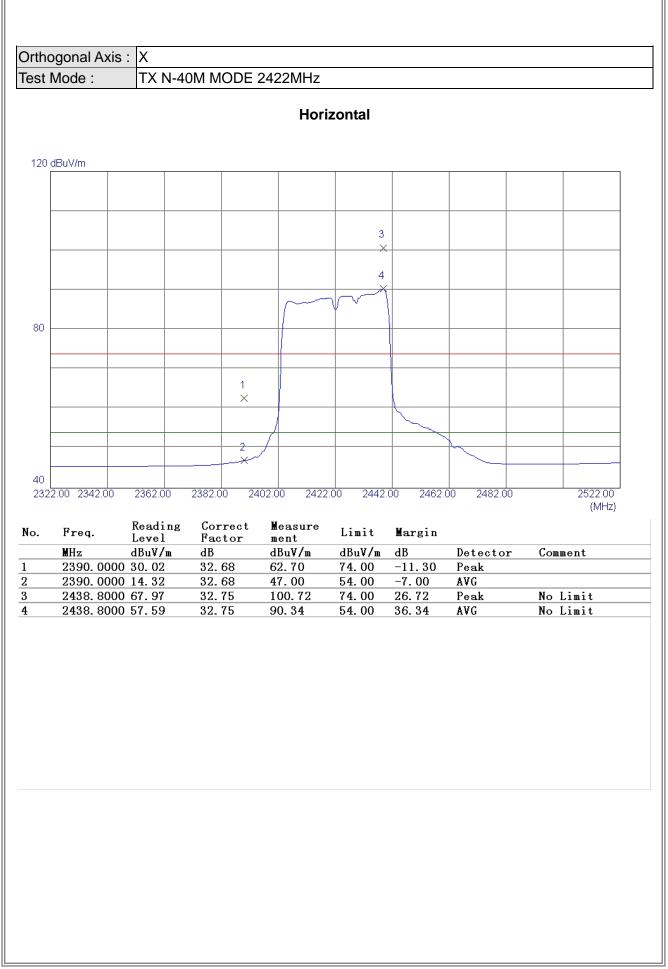




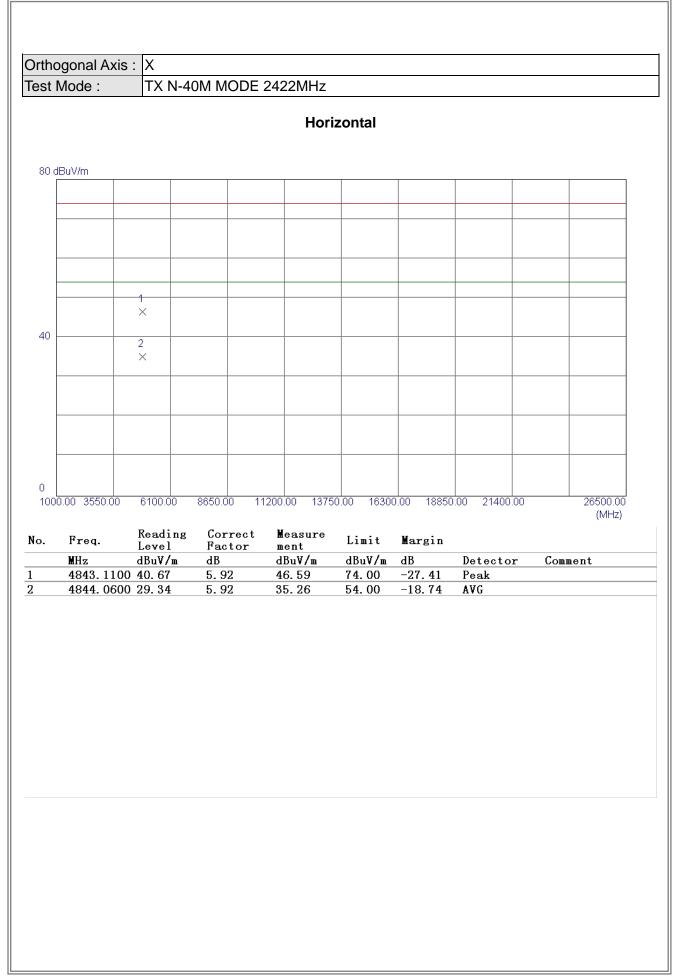




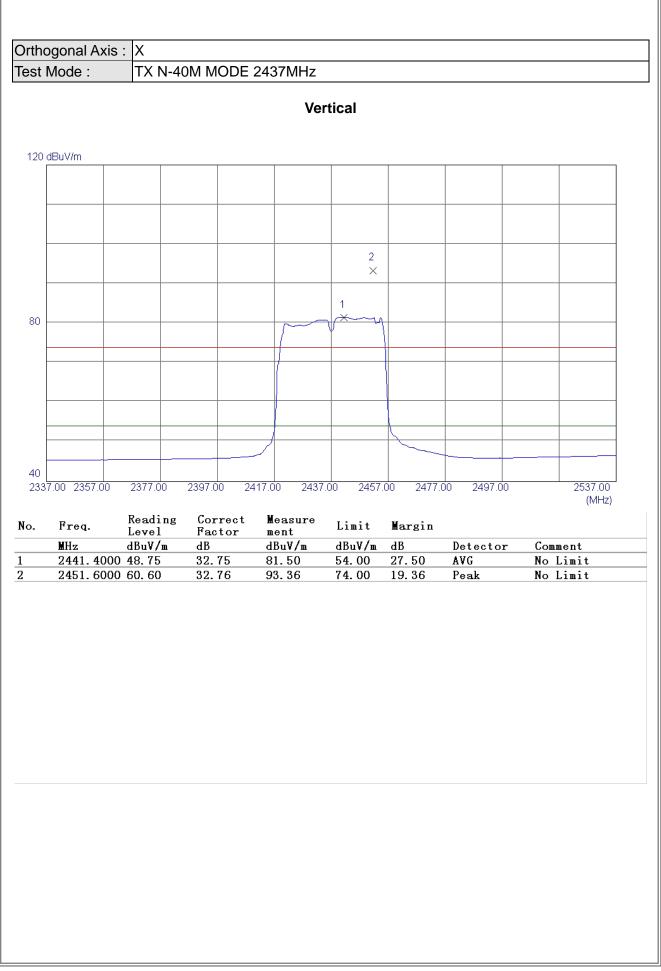




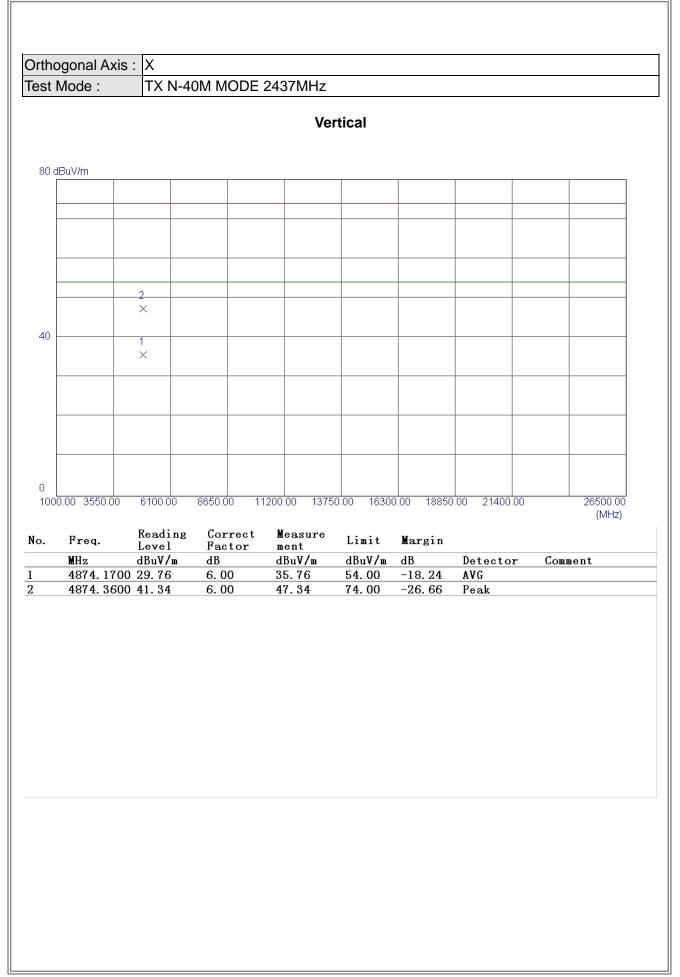




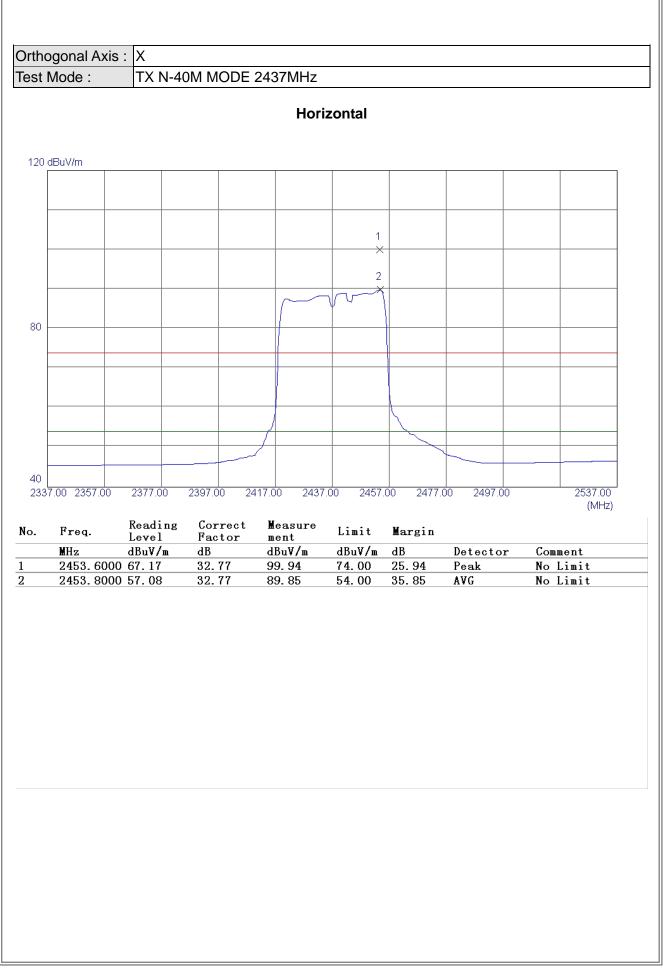




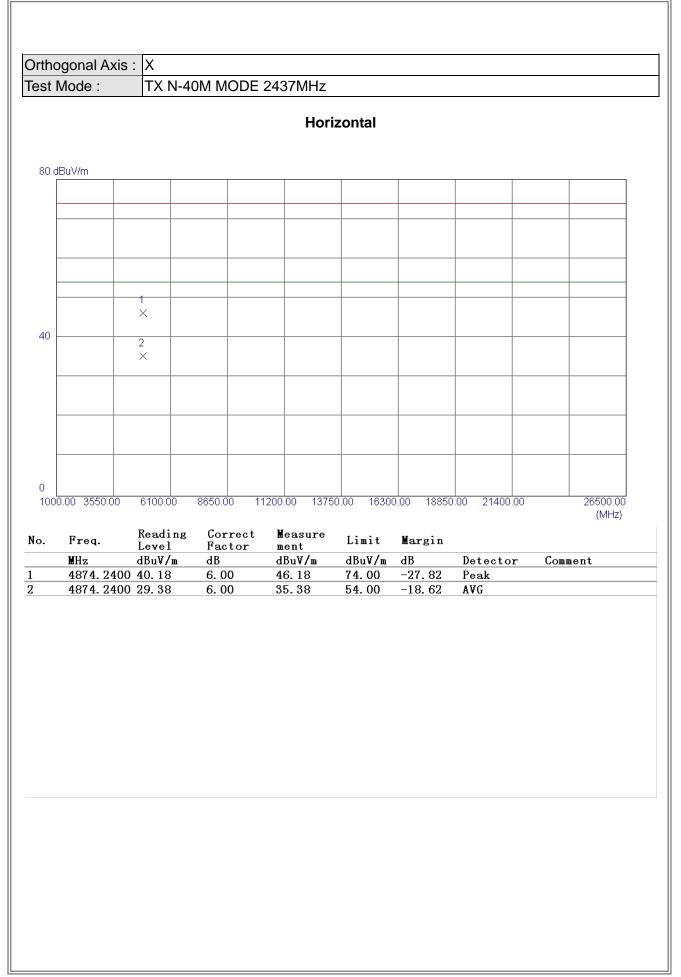




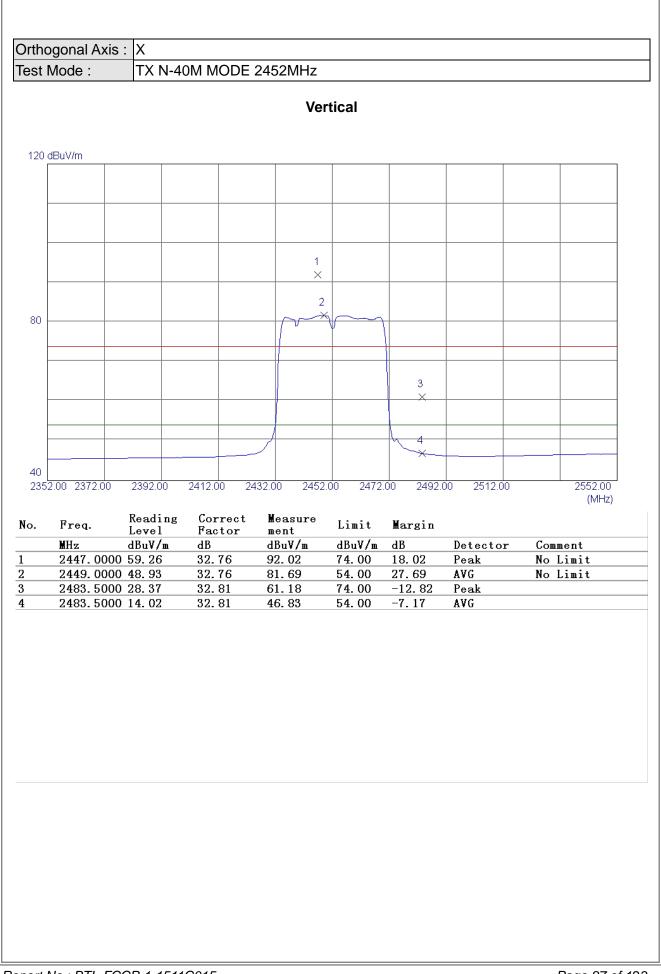




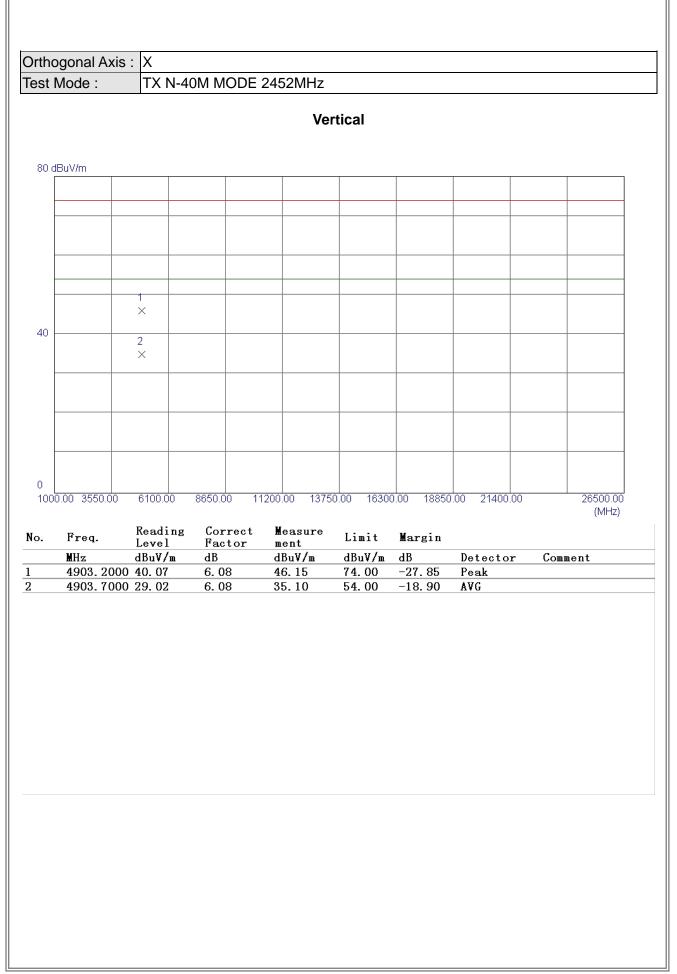




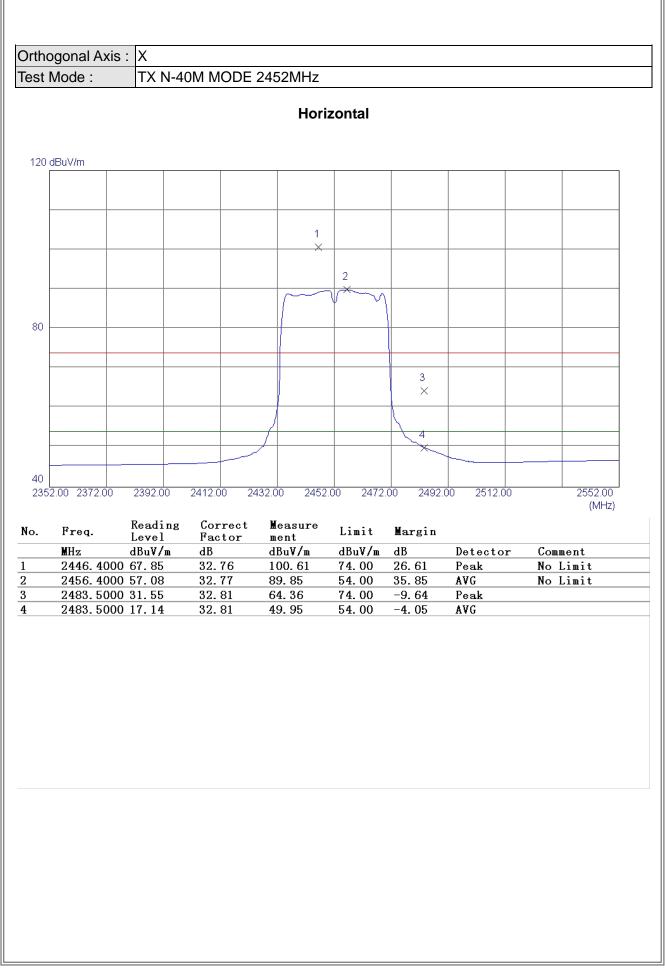




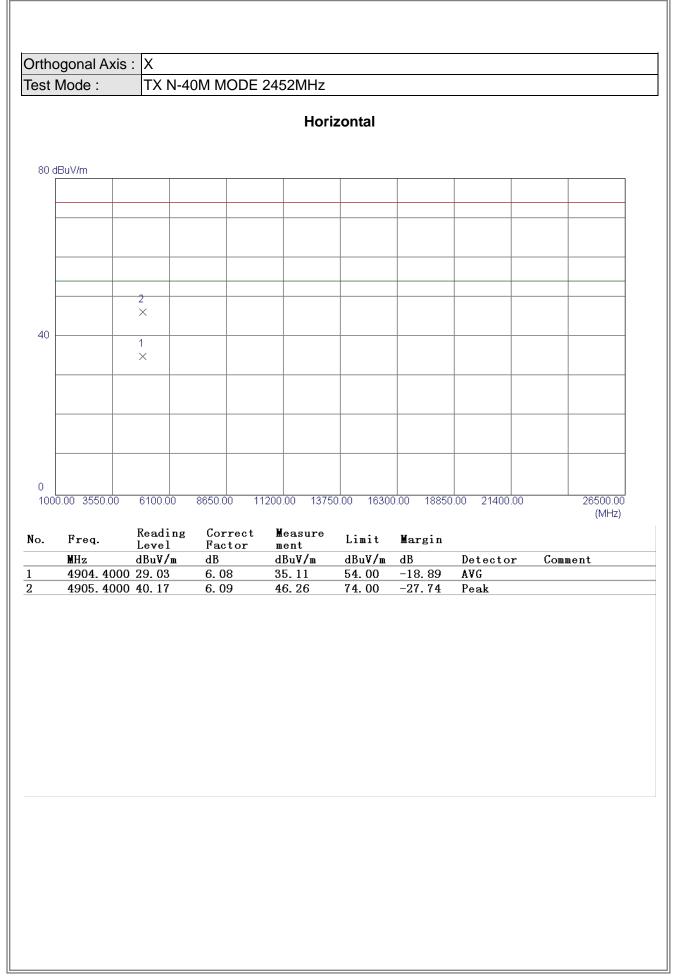








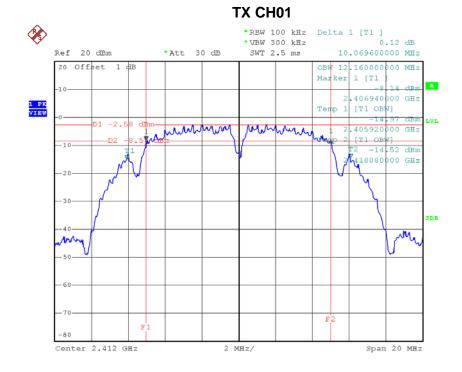




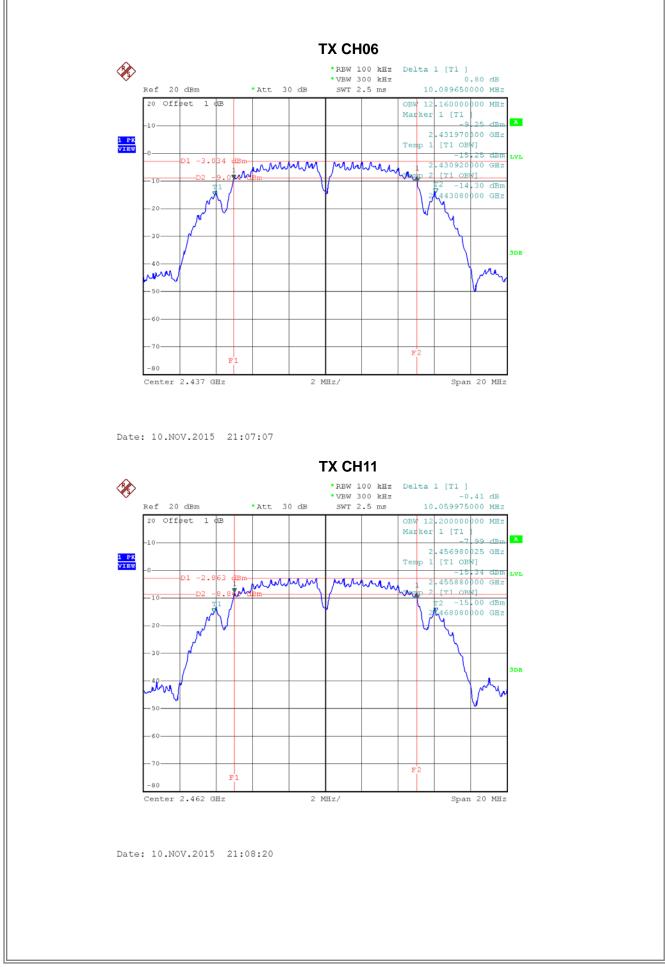
## ATTACHMENT E - BANDWIDTH

#### Test Mode : TX B Mode\_CH01/06/11

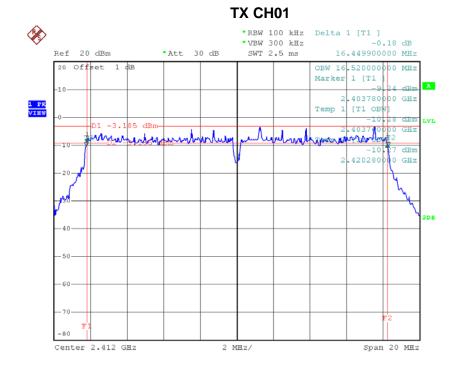
Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2412	10.07	12.16	500	Complies
2437	10.09	12.16	500	Complies
2462	10.06	12.20	500	Complies



Date: 10.NOV.2015 21:05:51

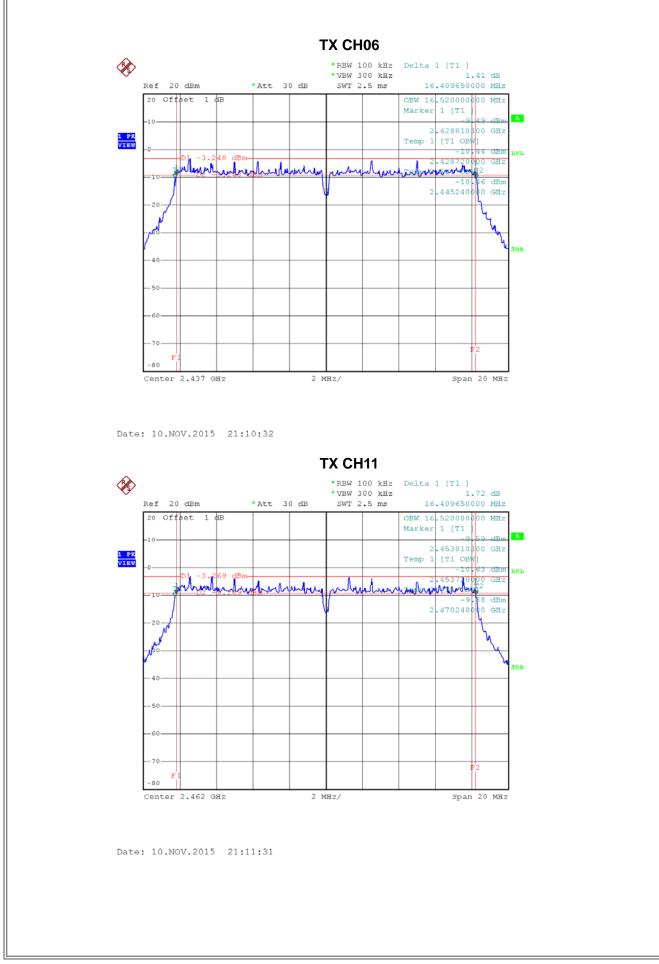


	Test Mode: TX G Mode_CH01/06/11							
Frequenc (MHz)	<sup>;y</sup> 6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result				
2412	16.45	16.52	500	Complies				
2437	16.41	16.52	500	Complies				
2462	16.41	16.52	500	Complies				

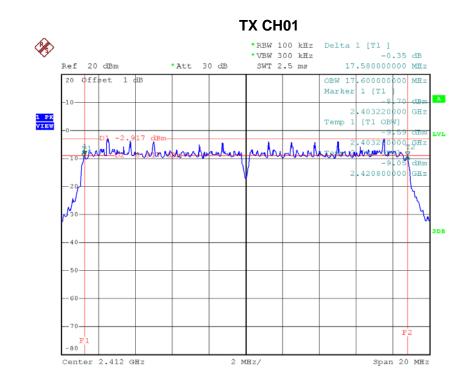


Date: 10.NOV.2015 21:09:32

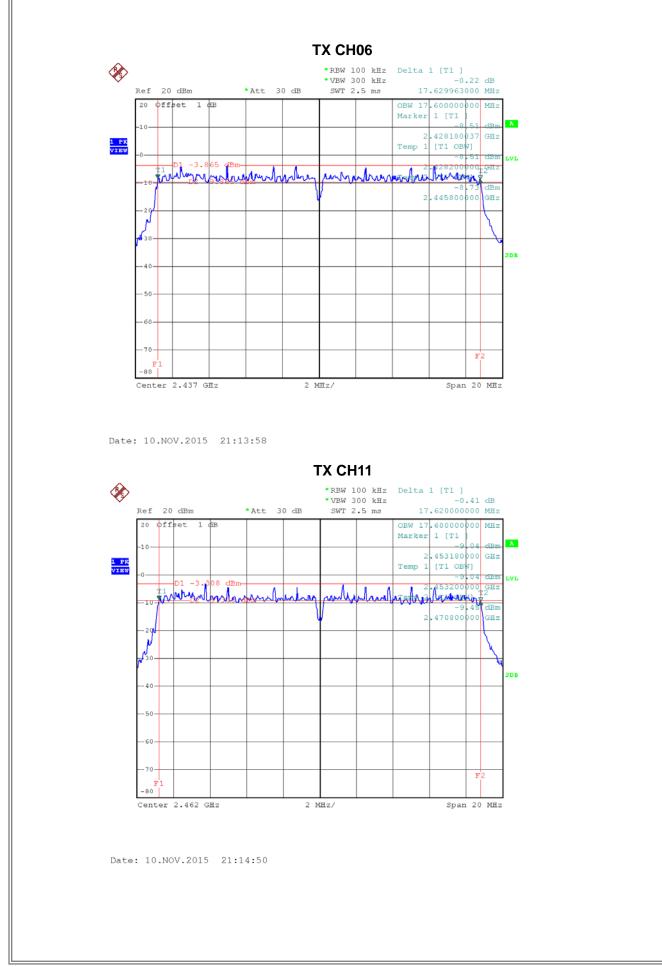
#### Report No.: BTL-FCCP-1-1511C015



Test Mode : TX N-20MHz Mode_CH01/06/11							
Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result			
2412	17.58	17.60	500	Complies			
2437	17.63	17.60	500	Complies			
2462	17.62	17.60	500	Complies			

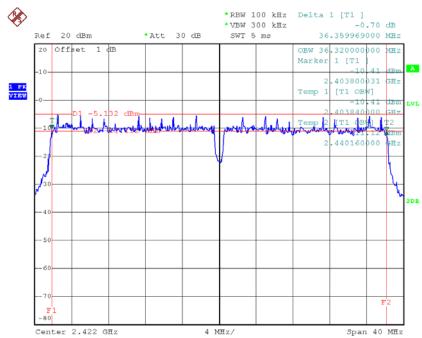


Date: 10.NOV.2015 21:12:46

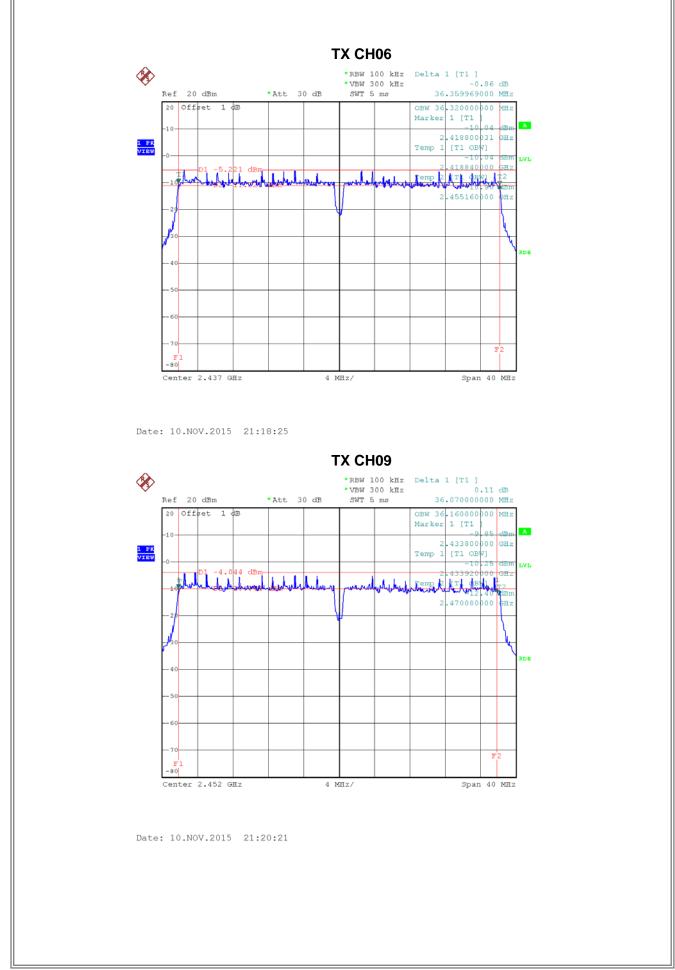


Test Mode : TX N-40MHz Mode_CH03/06/09							
Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result			
2422	36.36	36.32	500	Complies			
2437	36.36	36.32	500	Complies			
2452	36.07	36.16	500	Complies			





Date: 10.NOV.2015 21:16:04



# ATTACHMENT F – MAXIMUM PEAK CONDUCTED OUTPUT POWER

Test Mode :TX B Mode_CH01/06/11							
Frequency (MHz)	Conducted Peak Power (dBm)	Conducted AVG Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result	
2412	13.64	9.61	0.02	30.00	1.00	Complies	
2437	13.55	9.52	0.02	30.00	1.00	Complies	
2462	13.31	9.32	0.02	30.00	1.00	Complies	

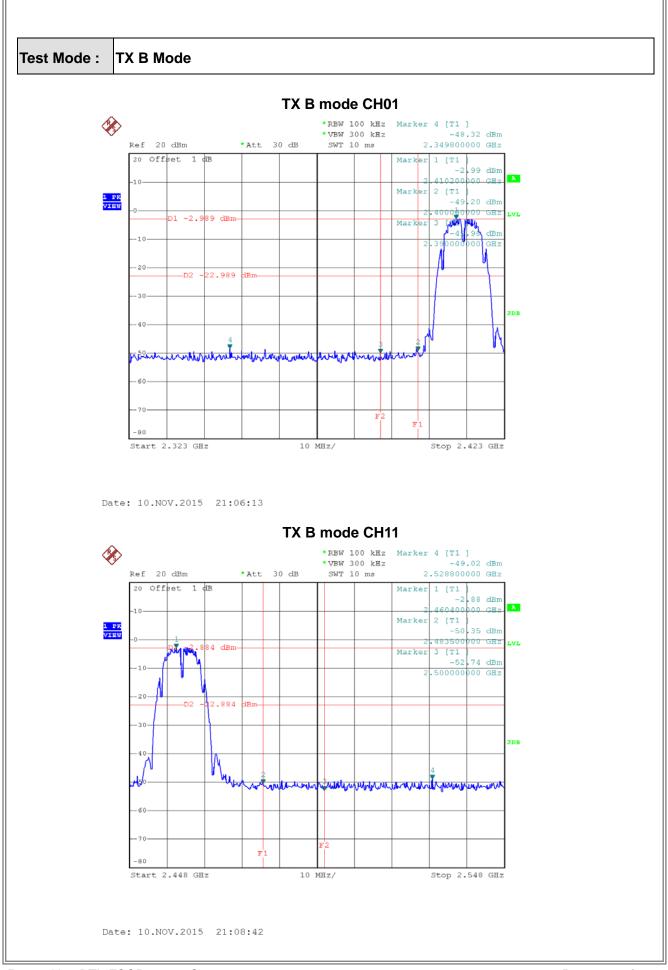
Test Mode :TX G Mode_CH01/06/11							
Frequency (MHz)	Conducted Peak Power (dBm)	Conducted AVG Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result	
2412	19.74	9.57	0.09	30.00	1.00	Complies	
2437	19.65	9.54	0.09	30.00	1.00	Complies	
2462	19.35	9.28	0.09	30.00	1.00	Complies	

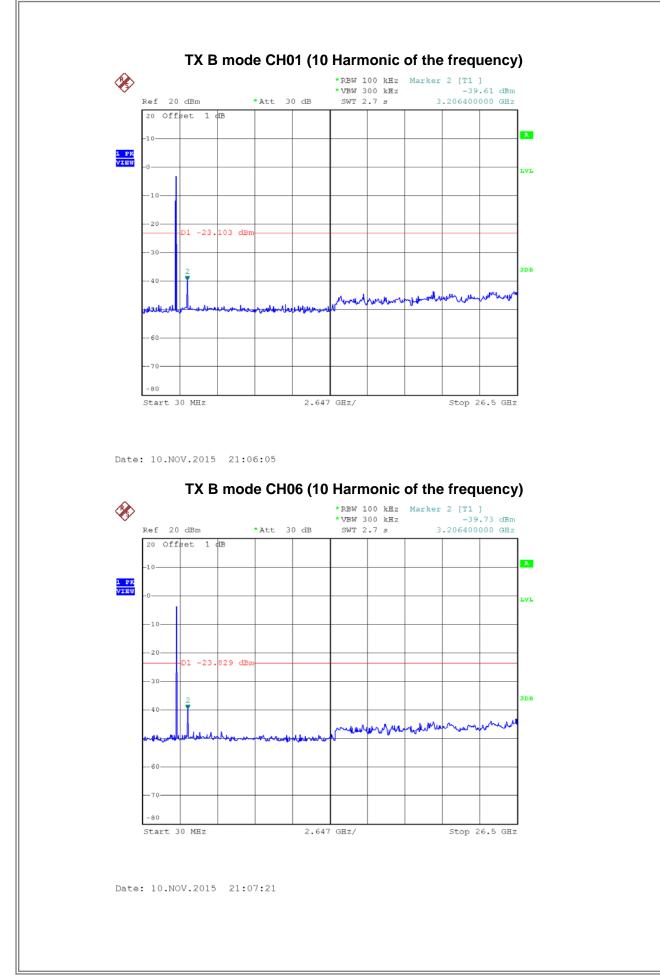
Test Mode :TX N20 Mode_CH01/06/11							
Frequency (MHz)	Conducted Peak Power (dBm)	Conducted AVG Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result	
2412	20.59	9.54	0.11	30.00	1.00	Complies	
2437	20.80	9.49	0.12	30.00	1.00	Complies	
2462	20.44	9.28	0.11	30.00	1.00	Complies	

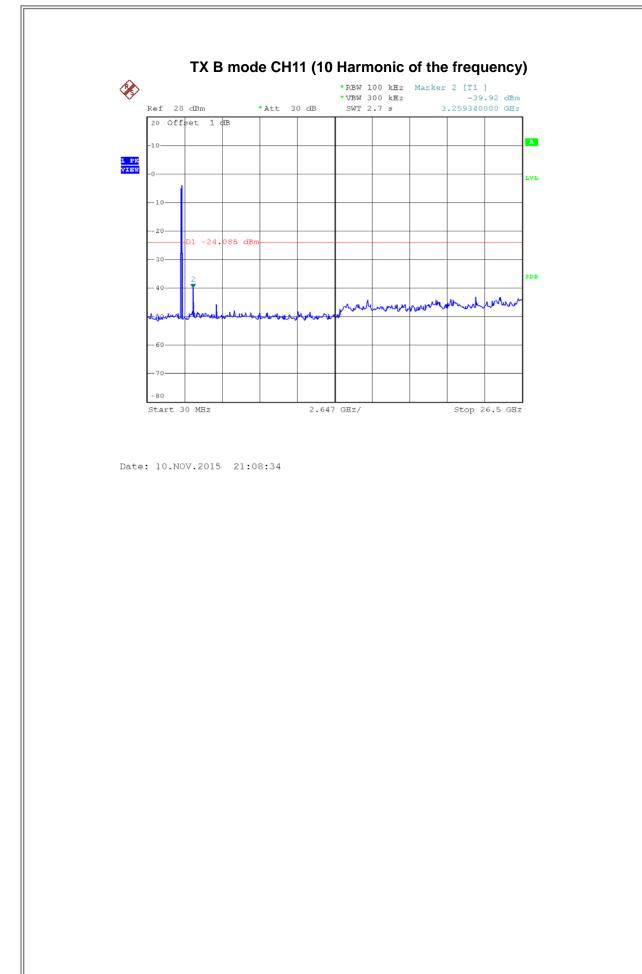
Test Mode :TX N40 Mode_CH03/06/09							
Frequency (MHz)	Conducted Peak Power (dBm)	Conducted AVG Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result	
2422	20.11	9.44	0.10	30.00	1.00	Complies	
2437	20.25	9.42	0.11	30.00	1.00	Complies	
2452	20.55	9.71	0.11	30.00	1.00	Complies	

### ATTACHMENT G - ANTENNA CONDUCTED SPURIOUS EMISSION

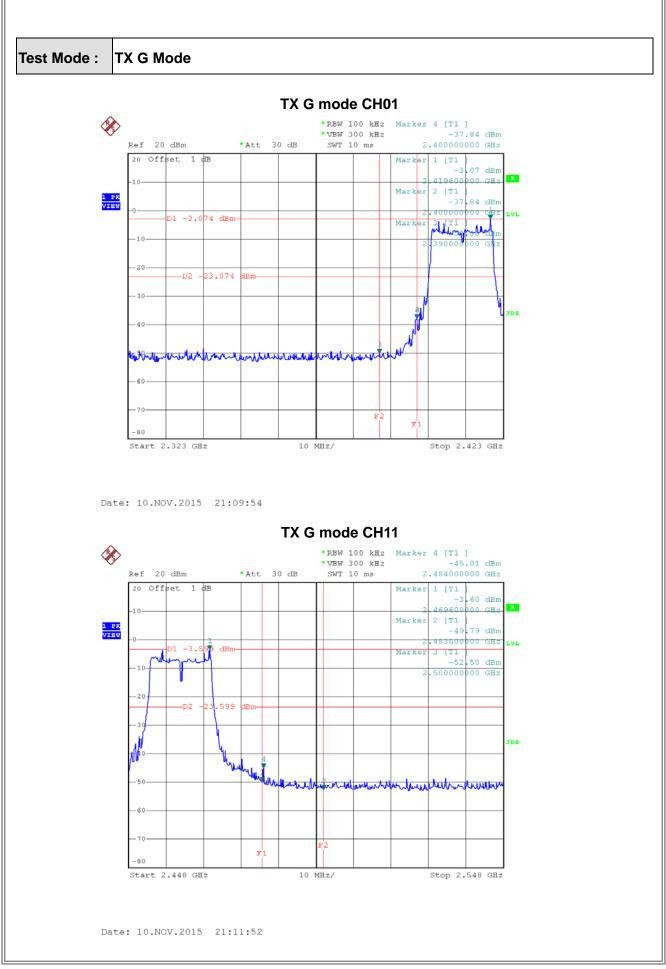


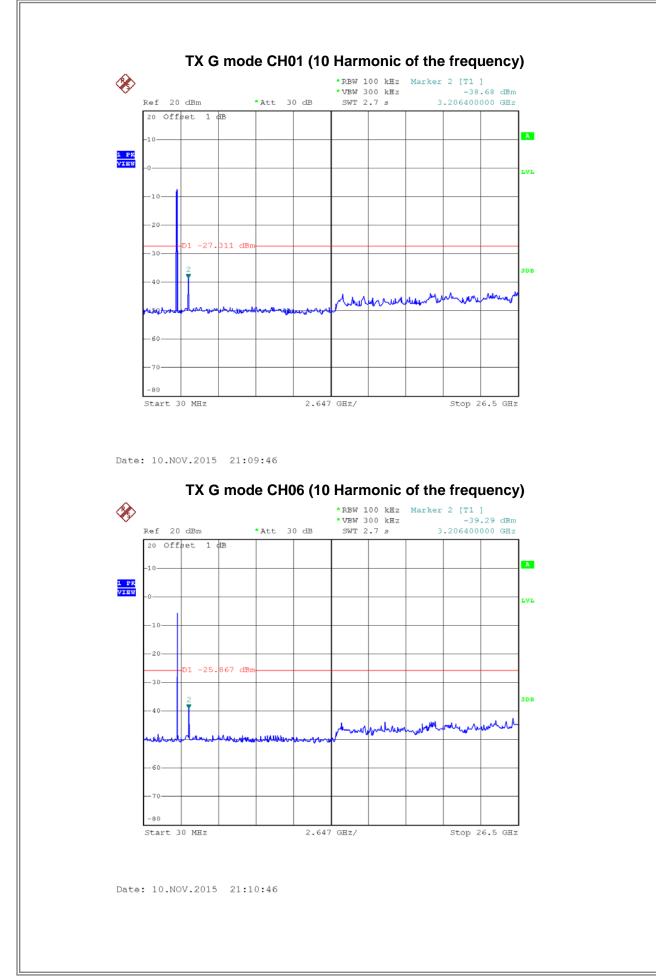


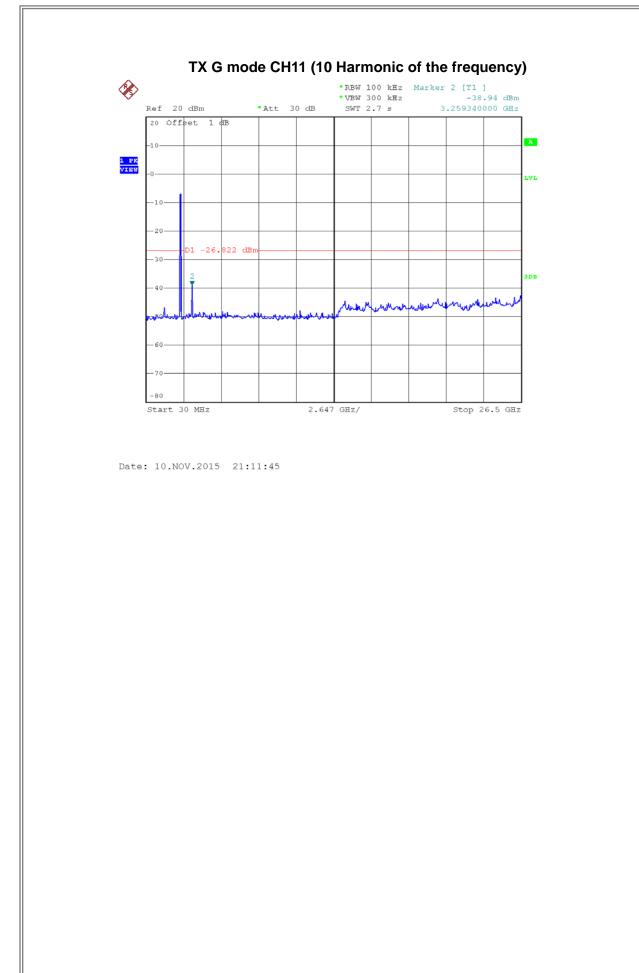




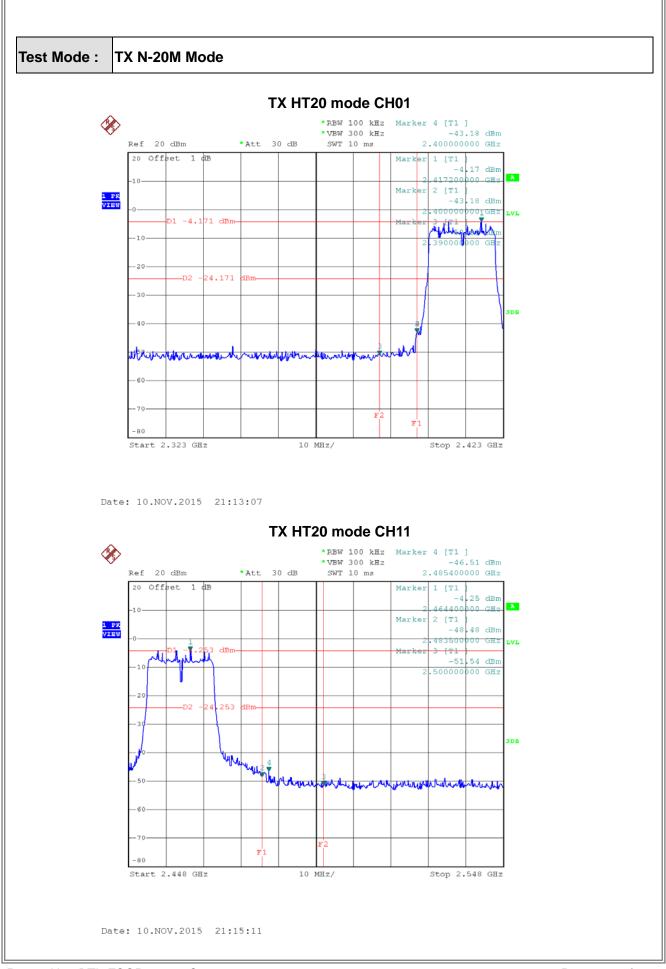


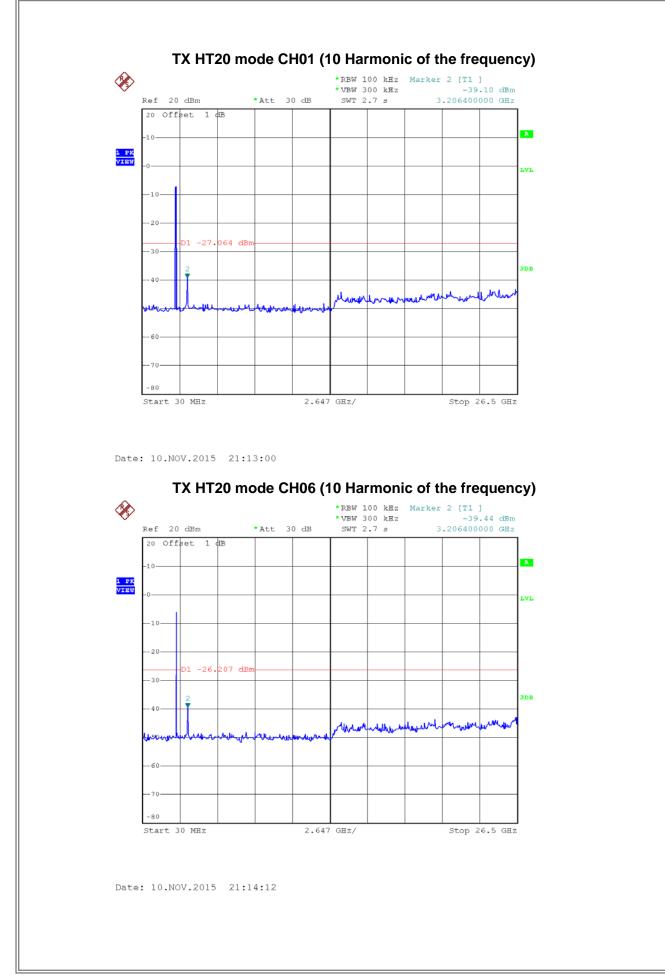


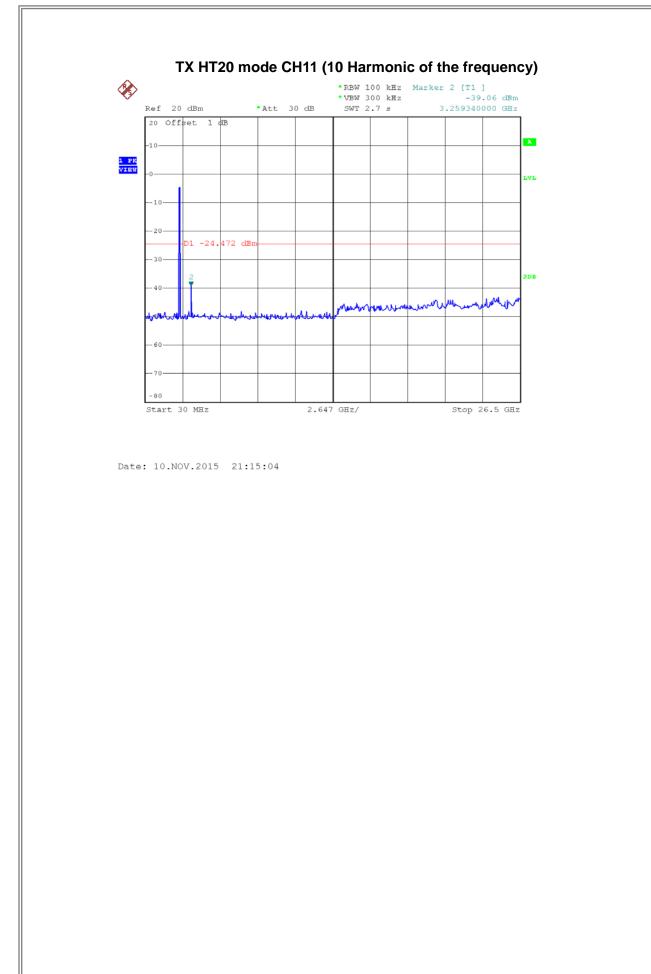




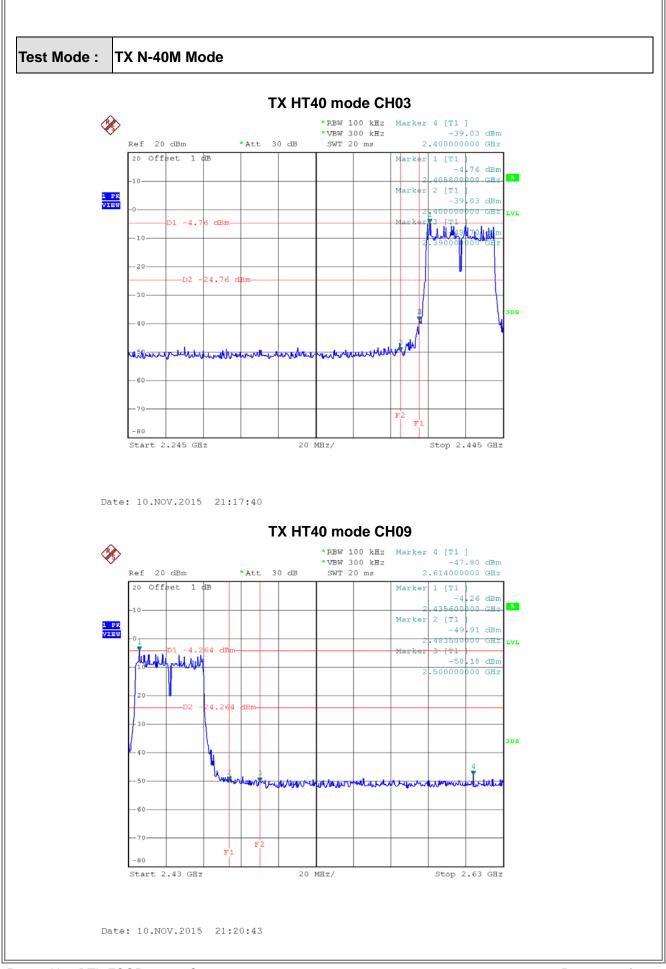


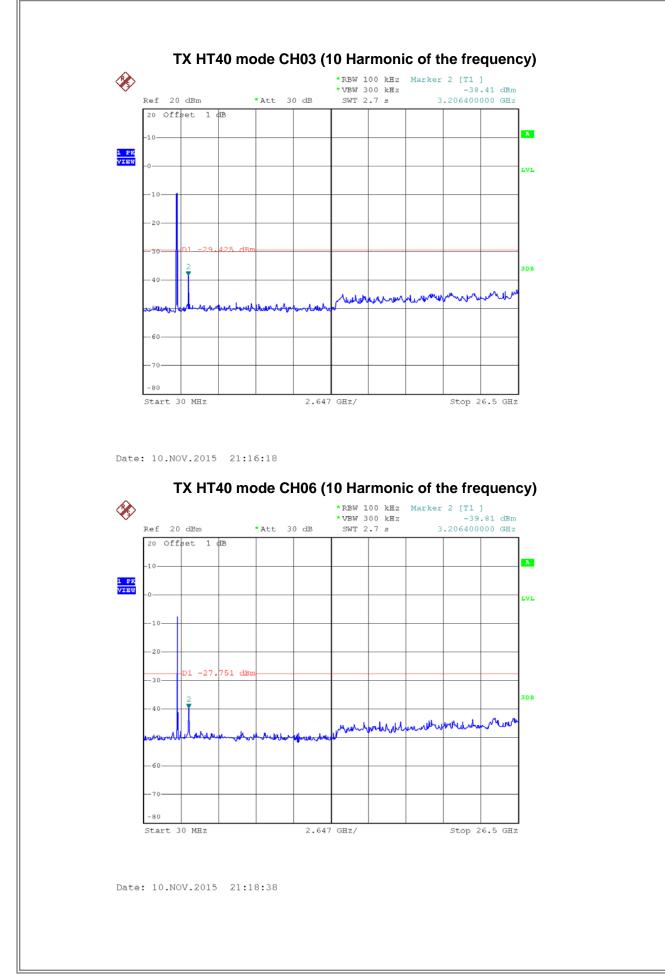


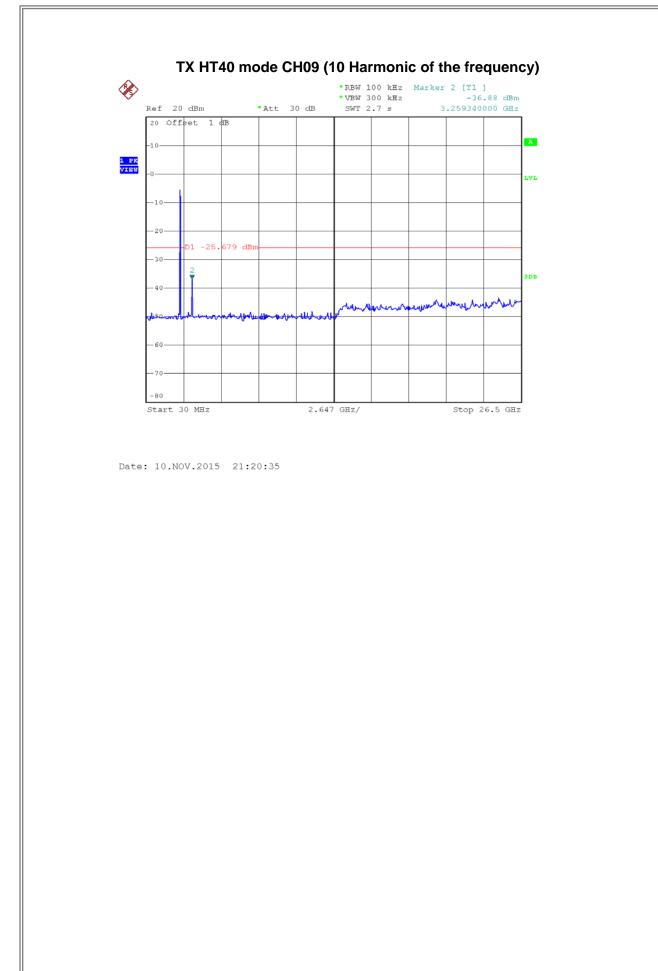








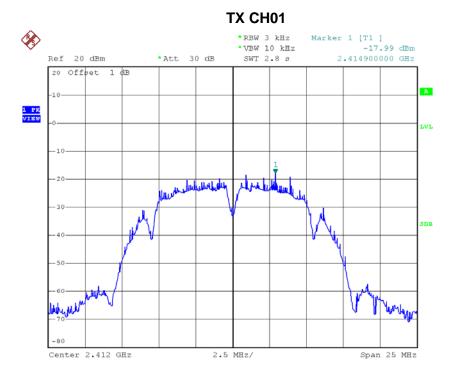




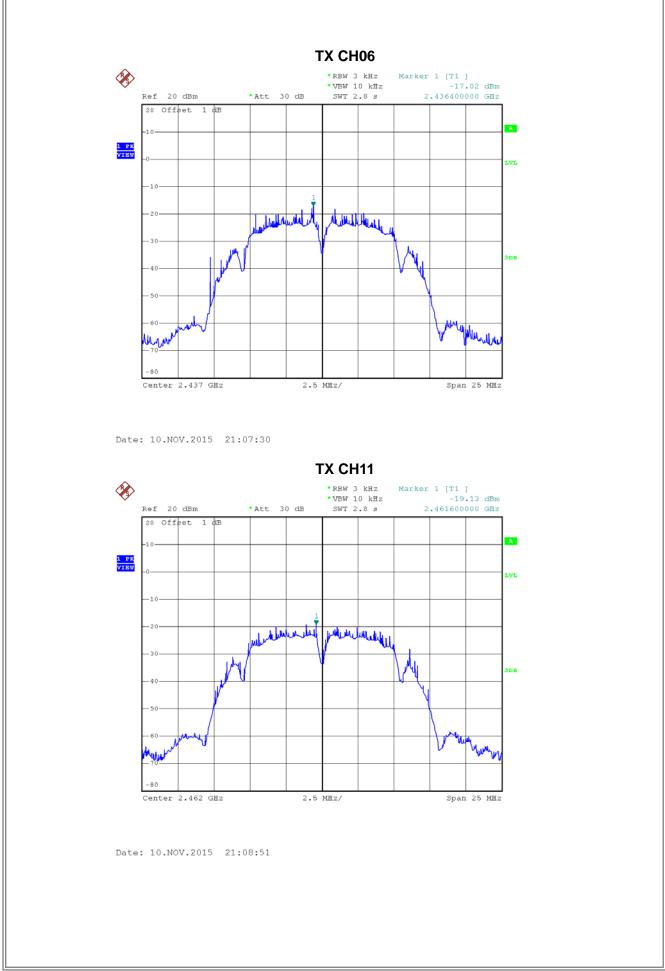
# **ATTACHMENT H - POWER SPECTRAL DENSITY**

# Test Mode :TX B Mode\_CH01/06/11

Frequency (MHz)	Power Density (dBm/3kHz)	Power Density (mW/3kHz)	Max. Limit (dBm/3kHz)	Result
2412	-17.99	0.02	8.00	Complies
2437	-17.02	0.02	8.00	Complies
2462	-19.13	0.01	8.00	Complies

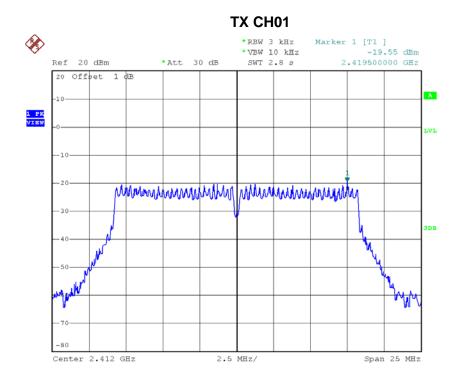


#### Date: 10.NOV.2015 21:06:22

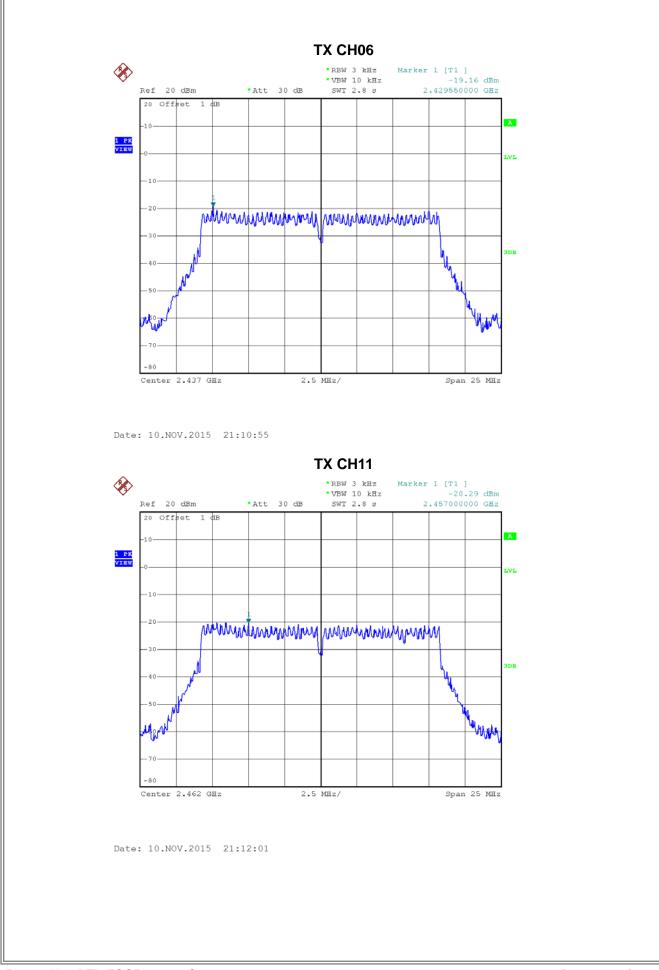


# Test Mode :TX G Mode\_CH01/06/11

Frequency (MHz)	Power Density (dBm/3kHz)	Power Density (mW/3kHz)	Max. Limit (dBm/3kHz)	Result
2412	-19.55	0.01	8.00	Complies
2437	-19.16	0.01	8.00	Complies
2462	-20.29	0.01	8.00	Complies

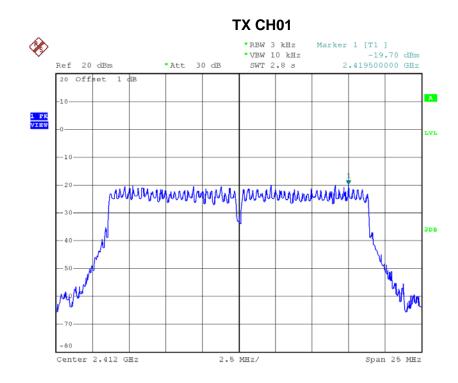


Date: 10.NOV.2015 21:10:03

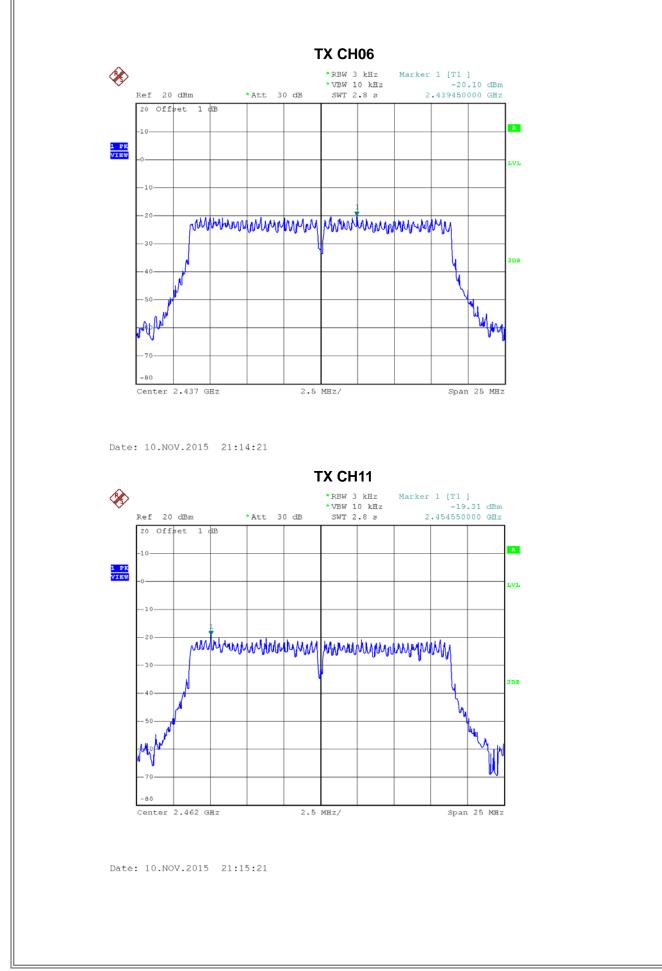


### Test Mode : TX N-20M Mode\_CH01/06/11

Frequency (MHz)	Power Density (dBm/3kHz)	Power Density (mW/3kHz)	Max. Limit (dBm/3kHz)	Result
2412	-19.70	0.01	8.00	Complies
2437	-20.10	0.01	8.00	Complies
2462	-19.31	0.01	8.00	Complies

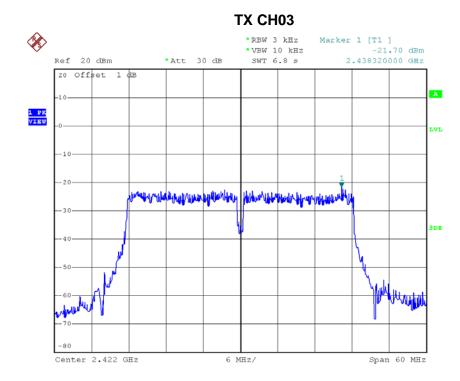


Date: 10.NOV.2015 21:13:17



### Test Mode : TX N-40M Mode\_CH03/06/09

Frequency (MHz)	Power Density (dBm/3kHz)	Power Density (mW/3kHz)	Max. Limit (dBm/3kHz)	Result
2422	-21.70	0.01	8.00	Complies
2437	-22.01	0.01	8.00	Complies
2452	-20.85	0.01	8.00	Complies



Date: 10.NOV.2015 21:17:53

