



Neutron Engineering Inc.

# FCC Radio Test Report

## FCC ID: QISE5730S-6

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

**Project No.** : 1405C290  
**Equipment** : Mobile WiFi  
**Model Name** : E5730s-6  
**Applicant** : Huawei Technologies Co.,Ltd.  
**Address** : Administration Building, Headquarters of  
Huawei Technologies Co., Ltd., Bantian,  
Longgang District, Shenzhen

**Tested by:** Neutron Engineering Inc. EMC Laboratory  
**Date of Receipt:** May 27, 2014  
**Date of Test:** May 27, 2014 ~ Jun. 04, 2014  
**Issued Date:** Jun .05, 2014

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**REPORT ISSUED HISTORY**

Issued No.	Description	Issued Date
NEI-FCCP-1-1405C290	Original Issue.	Jun. 05, 2014



## 1. CERTIFICATION

Equipment : Mobile WiFi  
Brand Name : Huawei  
Model Name : E5730s-6  
Applicant : Huawei Technologies Co.,Ltd.  
Manufacturer : Huawei Technologies Co.,Ltd.  
Address : Administration Building, Headquarters of Huawei Technologies Co., Ltd.,  
Bantian, Longgang District, Shenzhen  
Factory : Huawei Technologies Co.,Ltd.  
Address : Huawei Base, Bantian, Longgang District, Shenzhen 518129, P.R.China  
Date of Test : May 27, 2014 ~ Jun. 04, 2014  
Test Item : ENGINEERING SAMPLE  
Standard(s) : FCC Part15, Subpart C(15.247) / ANSI C63.4-2009

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-1-1405C290) 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).

**Test result included in this report is only for WLAN 2.4G approval part of the product.**



**2. SUMMARY OF TEST RESULTS**

Test procedures according to the technical standard(s):

<b>Applied Standard(s): FCC Part15 (15.247) , Subpart C Canada RSS-210:2010; RSS-GEN Issue 3, Dec 2010</b>					
Standard(s)		Section	Test Item	Judgment	Remark
FCC	IC				
15.207		RSS-GEN 7.2.2	Conducted Emission	PASS	
15.247(d)		RSS-210 Annex 8 (A8.5)	Antenna conducted Spurious Emission	PASS	
15.247(a)(2)		RSS-210 Annex 8 (A8.2(a))	6dB Bandwidth	PASS	
15.247(b)(3)		RSS-210 Annex 8 (A8.4(4))	Peak Output Power	PASS	
15.247(e)		RSS-210 Annex 8 (A8.2(b))	Power Spectral Density	PASS	
15.203		-	Antenna Requirement	PASS	
15.209/15.205		RSS-210 Annex 8 (A8.5)	Transmitter Radiated Emissions	PASS	

**NOTE:**

- (1) "N/A" denotes test is not applicable in this test report.
- (2) The test follows FCC KDB Publication No. 558074 D01 DTS Meas Guidance v03r01 (Measurement Guidelines of DTS)



**2.1 TEST FACILITY**

The test facilities used to collect the test data in this report is **DG-C02/DG-CB03** at the location of No.3,Jinshagang 1st Road, ShiXia, Dalang Town, Dong Guan, China.523792

Neutron's test firm number for FCC: 319330

Neutron's test firm number for IC: 4428B-1

**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  $y \pm U$ , 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)	NOTE
DG-C02	CISPR	150 KHz ~ 30MHz	1.94	

**B. Radiated Measurement :**

Test Site	Method	Measurement Frequency Range	Ant. H / V	U , (dB)	NOTE
DG-CB03	CISPR	9KHz~30MHz	V	3.79	
		9KHz~30MHz	H	3.57	
		30MHz ~ 200MHz	V	3.82	
		30MHz ~ 200MHz	H	3.60	
		200MHz ~ 1,000MHz	V	3.86	
		200MHz ~ 1,000MHz	H	3.94	
		1GHz~18GHz	V	3.12	
		1GHz~18GHz	H	3.68	
		18GHz~40GHz	V	4.15	
		18GHz~40GHz	H	4.14	



**3. GENERAL INFORMATION**

**3.1 GENERAL DESCRIPTION OF EUT**

Equipment	Mobile WiFi	
Brand Name	Huawei	
Model Name	E5730s-6	
Model Difference	N/A	
Product Description	Operation Frequency	2412~2462 MHz
	Modulation Technology	802.11b:DSSS 802.11g:OFDM 802.11n:OFDM
	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 72bps
	Output Power (Max.)	802.11b: 14.02 dBm 802.11g: 10.95 dBm 802.11n(20MHz): 8.95 dBm
Power Source	#1 DC voltage supplied from Adapter. Brand/Model:HUAWEI / HW-050200E3W #2 Supplied from Li-ion Battery Brand/Model: HUAWEI / HCB18650-12	
Power Rating	#1 I/P: AC 100-240V~50/60Hz 0.5A MAX O/P: DC 5V 2A #2 DC 3.7V 5000mAh/ 18.5Wh	
Connecting I/O Port(s)	Please refer to the User's Manual	

**Note:**

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



2. Channel List:

CH 01 – CH 11 for 802.11b, 802.11g, 802.11n(20MHz)							
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.	Manufacturer	Model Name	Antenna Type	Connector	Gain (dBi)
1	Skycross Electronics(ShenZhen) Co.,Ltd. Shanghai Branch	N/A	Integral	N/A	2.46



**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 MODE

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

<b>For Conducted Test</b>	
Final Test Mode	Description
Mode 4	TX MODE

<b>For Radiated Test</b>	
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

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)  
 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.



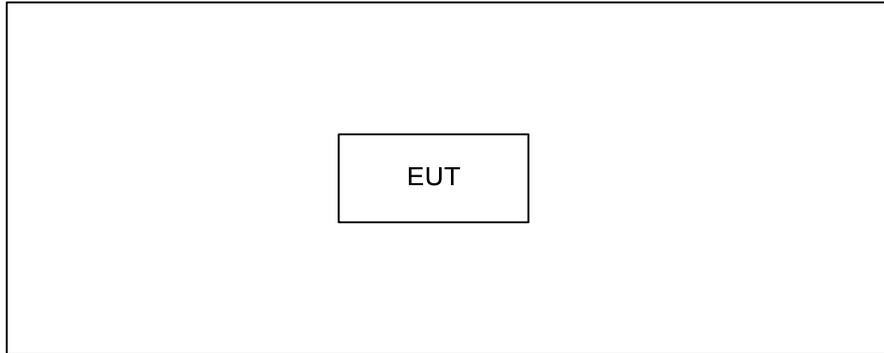
**3.3 TABLE OF PARAMETERS OF TEXT SOFTWARE SETTING**

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	GUI_Demo_01.05.29_8192		
Frequency	2412 MHz	2437 MHz	2462 MHz
IEEE 802.11b DSSS	14	14	14
IEEE 802.11g OFDM	9	9	9
IEEE 802.11n (20MHz)	8	8	8



**3.4 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED**





**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.	Note
-	-	-	-	-	-	

Item	Shielded Type	Ferrite Core	Length	Note
-	-	-	-	



**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.

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

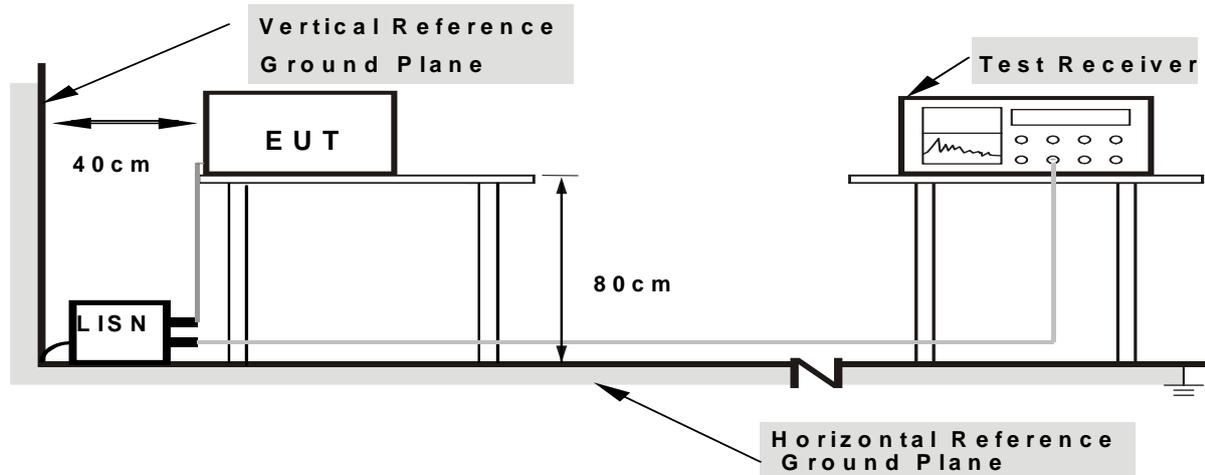
**4.1.2 TEST PROCEDURE**

- 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

#### 4.1.4 TEST SETUP



- Note:**
1. Support units were connected to second LISN.
  2. Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes

#### 4.1.5 EUT OPERATING CONDITIONS

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

#### 4.1.6 EUT TEST CONDITIONS

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

#### 4.1.7 TEST RESULTS

Please refer to the Attachment A.



**4.2 RADIATED EMISSION MEASUREMENT**

**4.2.1 RADIATED EMISSION LIMITS**

20dB 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.

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

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

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

Frequency (MHz)	(dBuV/m) (at 3 meters)	
	PEAK	AVERAGE
Above 1000	74	54

Notes:

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

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

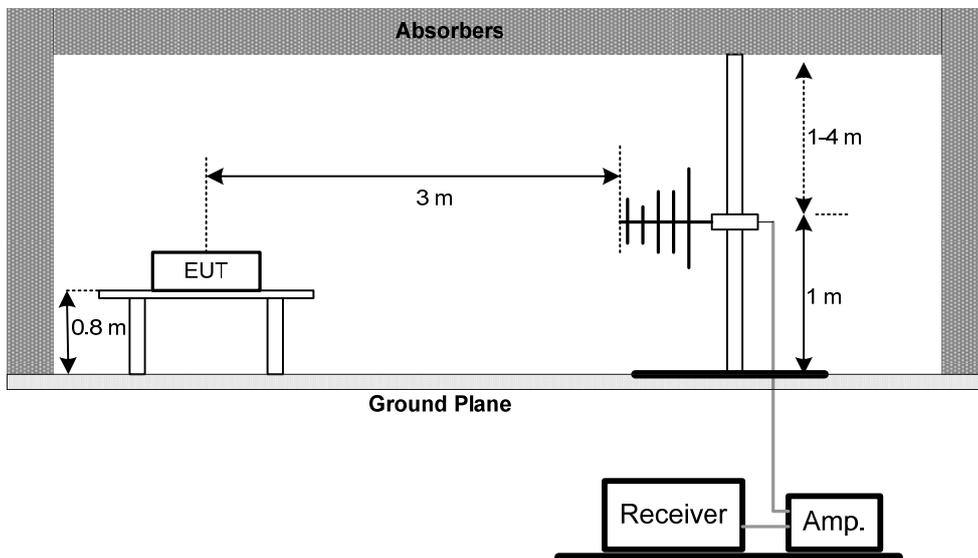
- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1GHz)
- b. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter fully-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; 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.

**4.2.3 DEVIATION FROM TEST STANDARD**

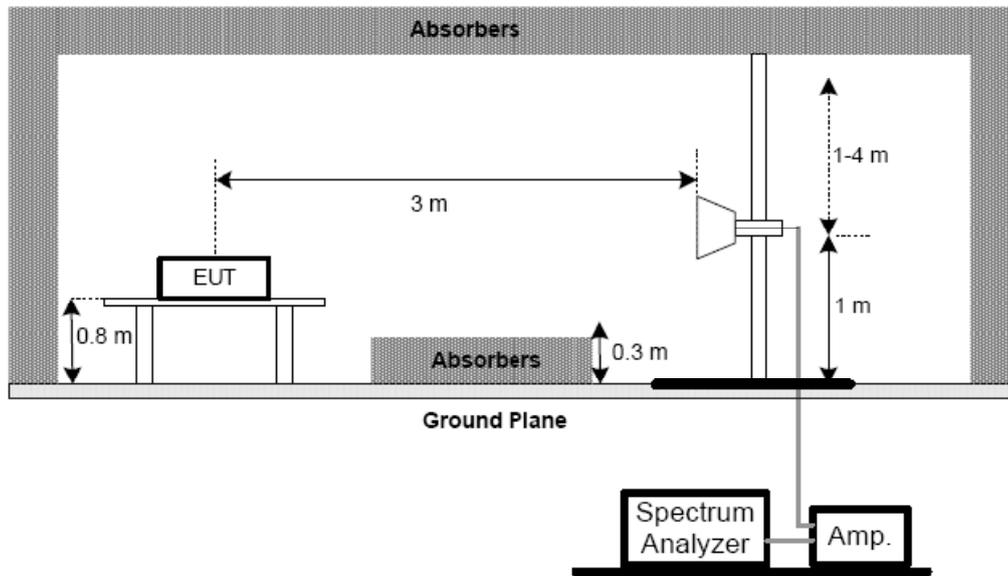
No deviation

**4.2.4 TEST SETUP**

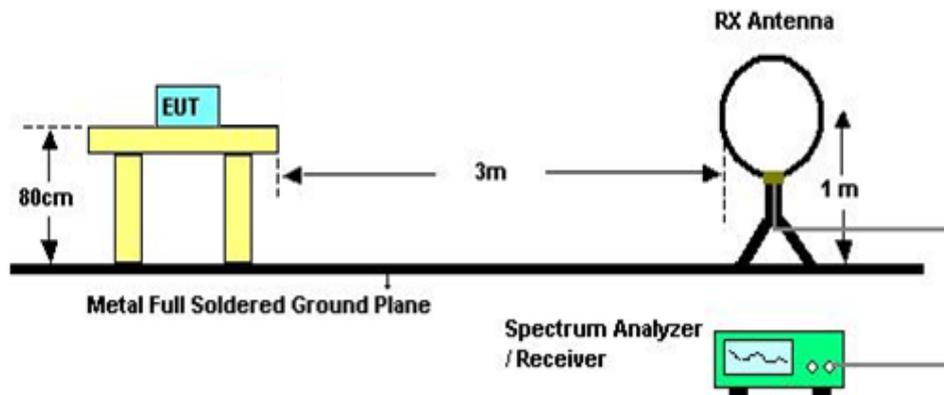
(A) Radiated Emission Test Set-Up Frequency Below 1 GHz



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



(C) For radiated emissions below 30MHz



**4.2.5 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.

**4.2.6 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 =  $40 \log(\text{specific distance} / \text{test distance})$  (dB).
- (3) Limit line = specific limits (dBuV) + distance extrapolation factor.

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

Please refer to the Attachment C.

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.

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

Please refer to the Attachment D.

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) Radiated emissions measured in frequency range above 1000MHz were made with an instrument using Peak detector mode and AV detector mode of the emission.
- (3) A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.
- (4) EUT Orthogonal Axis:  
"X" - denotes Laid on Table; "Y" - denotes Vertical Stand; "Z" - denotes Side Stand
- (5) 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



**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**



**5.1.4 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.

**5.1.5 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 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)	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 9.1.3 of FCC KDB 558074 D01 DTS Meas Guidance v03r01.

**6.1.2 DEVIATION FROM STANDARD**

No deviation.

**6.1.3 TEST SETUP**



**6.1.4 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. Transmit output power was measured while the host equipment supply voltage was varied from 85 % to 115 % of the nominal rated supply voltage. No change in transmit output power was observed.

**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 intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted measurement, provided 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.

#### **7.1.2 DEVIATION FROM STANDARD**

No deviation.

#### **7.1.3 TEST SETUP**



#### **7.1.4 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.

#### **7.1.5 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 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

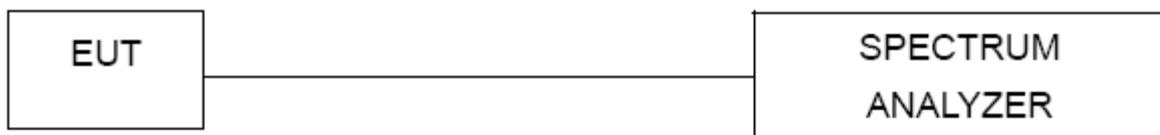
**8.1.1 TEST PROCEDURE**

- 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**



**8.1.4 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.

**8.1.5 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**

<b>Conducted Emission Measurement</b>					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	LISN	EMCO	3816/2	00052765	Mar. 29, 2015
2	LISN	R&S	ENV216	101447	Mar. 29, 2015
3	Test Cable	N/A	C_17	N/A	Mar. 14, 2015
4	EMI TEST RECEIVER	R&S	ESCS30	833364/017	Mar. 29, 2015
5	50Ω Terminator	SHX	TF2-3G-A	08122902	Mar. 29, 2015

<b>Radiated Emission Measurement</b>					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Antenna	Schwarbeck	VULB9160	9160-3232	Mar. 29, 2015
2	Amplifier	HP	8447D	2944A09673	Mar. 29, 2015
3	Receiver	AGILENT	N9038A	MY52130039	Aug. 24, 2014
4	Test Cable	N/A	C-01_CB03	N/A	Jul. 02, 2014
5	Antenna	ETS	3115	00075789	Mar. 29, 2015
6	Amplifier	Agilent	8449B	3008A02274	Mar. 29, 2015
7	Receiver	AGILENT	N9038A	MY52130039	Aug. 24, 2014
8	Test Cable	HUBER+SUHNER	C-48	N/A	Apr. 30, 2015
9	Controller	CT	SC100	N/A	N/A
10	Horn Antenna	EMCO	3115	9605-4803	Mar. 29, 2015
11	Active Loop Antenna	R&S	HFH2-Z2	830749/020	Mar. 29, 2015
12	Broad-Band Horn Antenna	Schwarzbeck	BBHA 9170	9170319	Feb. 22, 2015



<b>6dB Bandwidth Measurement</b>					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP 40	100185	Nov. 11, 2014

<b>Peak Output Power Measurement</b>					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	P-series Power meter	Agilent	N1911A	MY45100473	Mar. 29, 2015
2	Wireband Power sensor	Agilent	N1921A	MY51100041	Mar. 29, 2015

<b>Antenna Conducted Spurious Emission Measurement</b>					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP 40	100185	Nov. 11, 2014

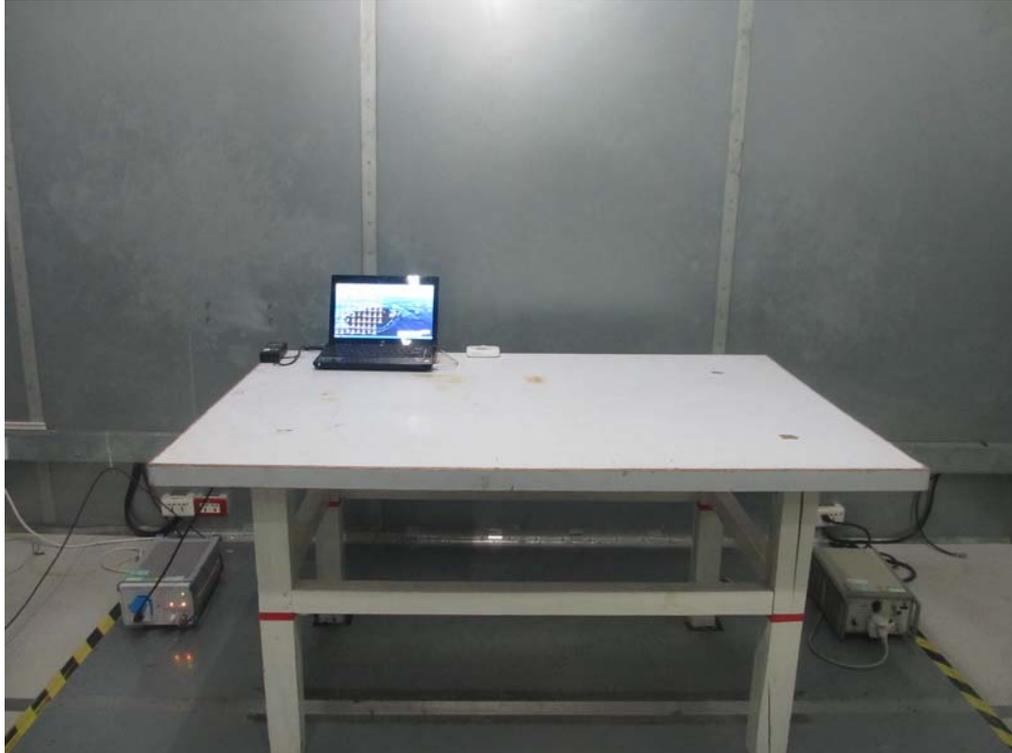
<b>Power Spectral Density Measurement</b>					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP 40	100185	Nov. 11, 2014

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



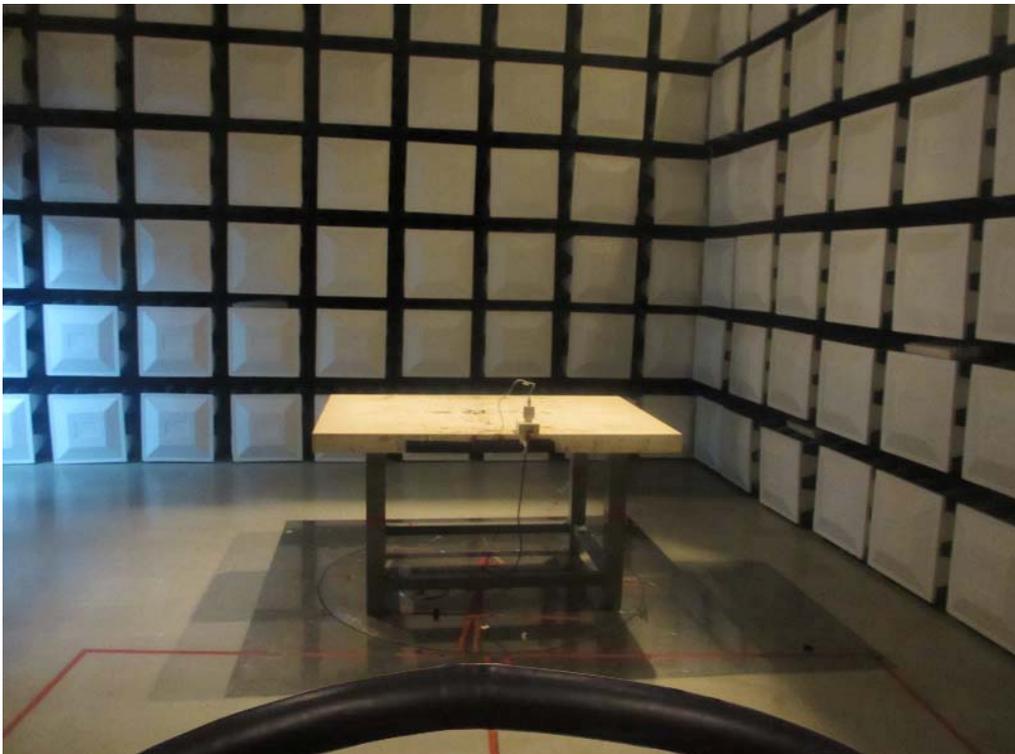
**10. EUT TEST PHOTO**

**Conducted Measurement Photos**



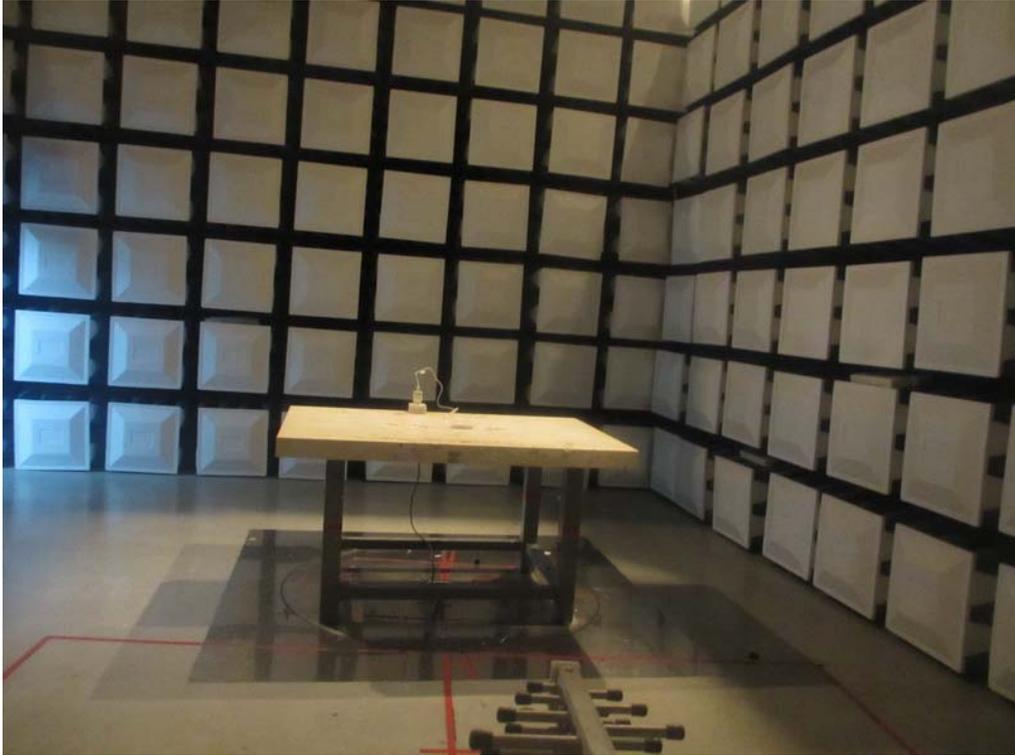


**Radiated Measurement Photos  
9KHz to 30MHz**





**Radiated Measurement Photos  
30MHz to 1000MHz**



**Radiated Measurement Photos  
Above 1000MHz**





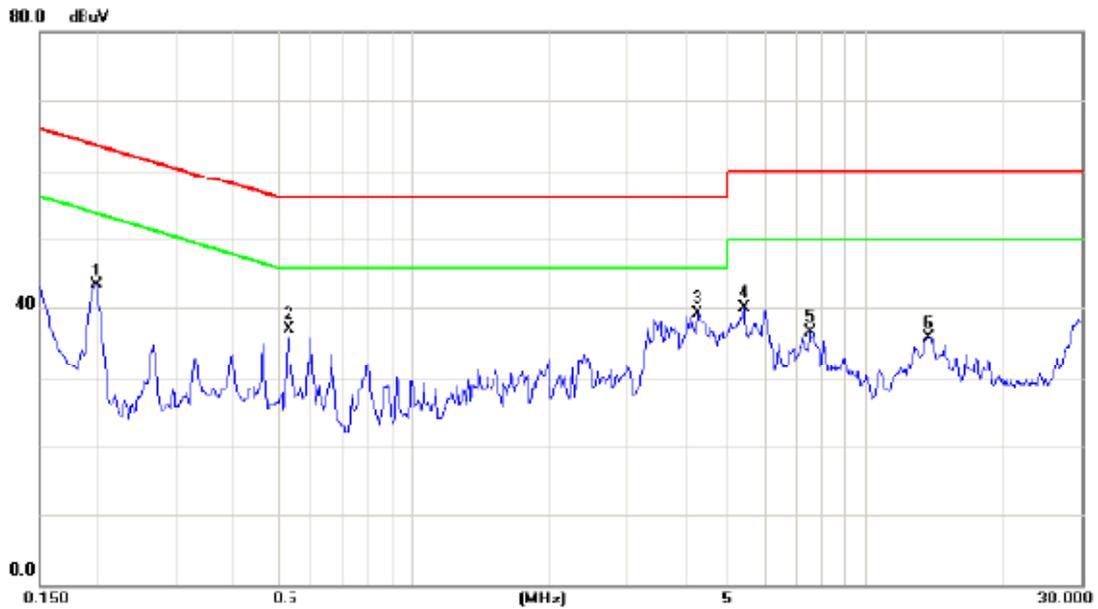
**Neutron Engineering Inc.**

## **ATTACHMENT A - CONDUCTED EMISSION**



Test Mode : TX MODE

**Line**

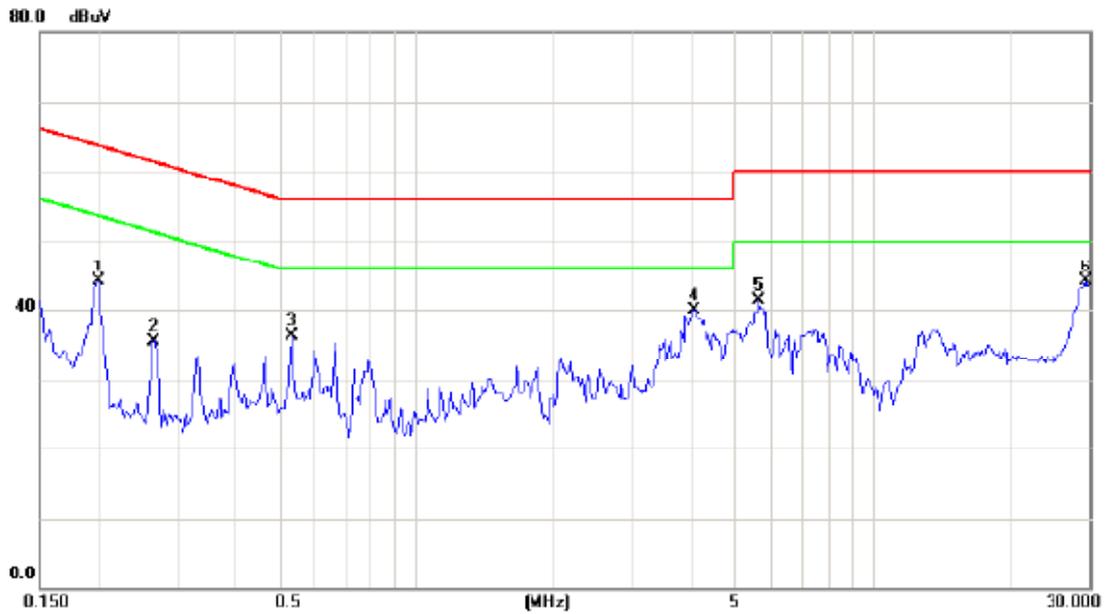


No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV	Limit dBuV	Over dB	Detector	Comment
1	0.2007	33.60	9.65	43.25	63.58	-20.33	peak	
2	0.5328	27.26	9.70	36.96	56.00	-19.04	peak	
3 *	4.2500	29.23	9.90	39.13	56.00	-16.87	peak	
4	5.4023	30.04	9.93	39.97	60.00	-20.03	peak	
5	7.5742	26.53	10.00	36.53	60.00	-23.47	peak	
6	13.8710	25.49	10.28	35.77	60.00	-24.23	peak	



Test Mode : TX MODE

**Neutral**



No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV	Limit dBuV	Over dB	Detector	Comment
1	0.2007	34.30	9.71	44.01	63.58	-19.57	peak	
2	0.2632	25.77	9.72	35.49	61.33	-25.84	peak	
3	0.5328	26.48	9.74	36.22	56.00	-19.78	peak	
4	4.0312	30.04	9.92	39.96	56.00	-16.04	peak	
5	5.6445	31.38	9.97	41.35	60.00	-18.65	peak	
6 *	29.4648	33.39	10.65	44.04	60.00	-15.96	peak	



**Neutron Engineering Inc.**

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



Test Mode: TX Mode 2412MHz

Freq. (MHz)	Ant. 0°/90°	Reading(RA) (dBuV)	Corr.Factor(CF) (dB)	Measured(FS) (dBuV/m)	Limits(QP) (dBuV/m)	Over (dB)	Note
0.0094	0°	68.35	24.30	92.65	128.12	-35.47	AV
0.0094	0°	72.35	24.30	96.65	148.12	-51.47	PK
0.0137	0°	70.35	24.30	94.65	124.87	-30.22	AV
0.0137	0°	79.35	24.30	103.65	144.87	-41.22	PK
0.0245	0°	56.36	24.02	80.38	119.82	-39.45	AV
0.0245	0°	60.12	24.02	84.14	139.82	-55.69	PK
0.0328	0°	61.36	23.49	84.85	117.29	-32.44	AV
0.0328	0°	65.38	23.49	88.87	137.29	-48.42	PK
0.5680	0°	18.72	20.02	38.74	72.52	-33.78	QP
1.7536	0°	18.95	19.52	38.47	69.54	-31.07	QP

Freq. (MHz)	Ant. 0°/90°	Reading(RA) (dBuV)	Corr.Factor(CF) (dB)	Measured(FS) (dBuV/m)	Limits(QP) (dBuV/m)	Margin (dB)	Note
0.0094	90°	76.35	24.30	100.65	128.18	-27.53	AVG
0.0094	90°	82.36	24.30	106.66	148.18	-41.52	PK
0.0237	90°	56.38	24.07	80.45	120.11	-39.66	AVG
0.0237	90°	59.35	24.07	83.42	140.11	-56.69	PK
0.0318	90°	57.35	23.55	80.90	117.56	-36.65	AVG
0.0318	90°	58.35	23.55	81.90	137.56	-55.65	PK
0.0429	90°	59.35	22.85	82.20	114.96	-32.76	AVG
0.0429	90°	63.35	22.85	86.20	134.96	-48.76	PK
0.4912	90°	17.45	19.82	37.27	73.78	-36.51	QP
1.7156	90°	18.63	19.53	38.16	69.54	-31.38	QP

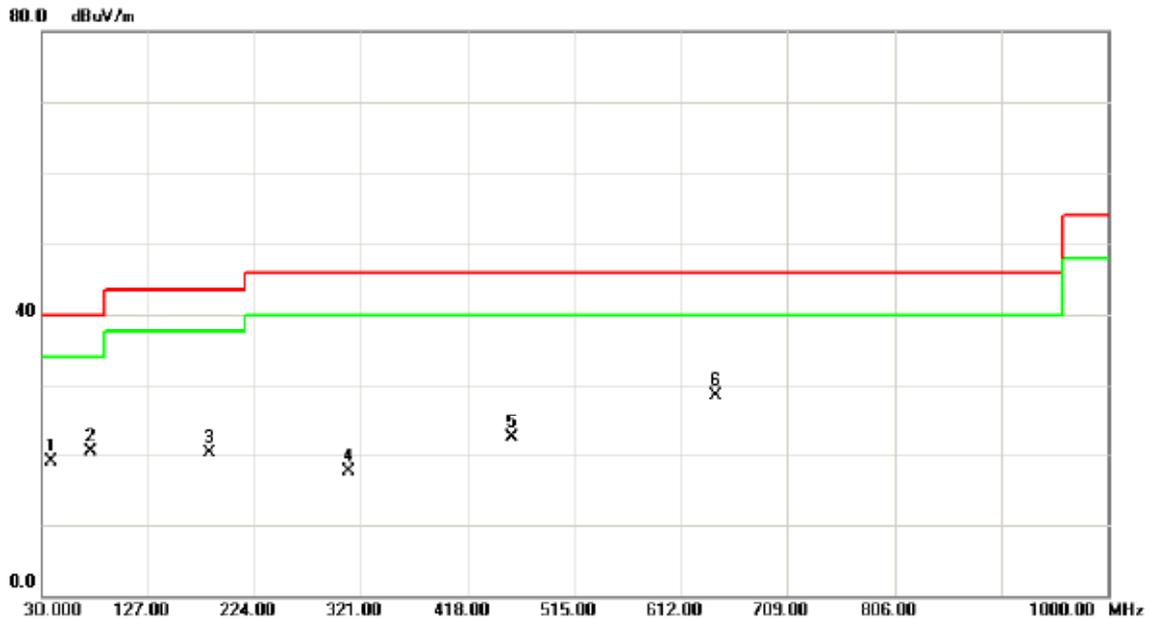


**ATTACHMENT C - RADIATED EMISSION (30MHZ TO 1000MHZ)**



Test Mode: TX B MODE CHANNEL 01

Vertical

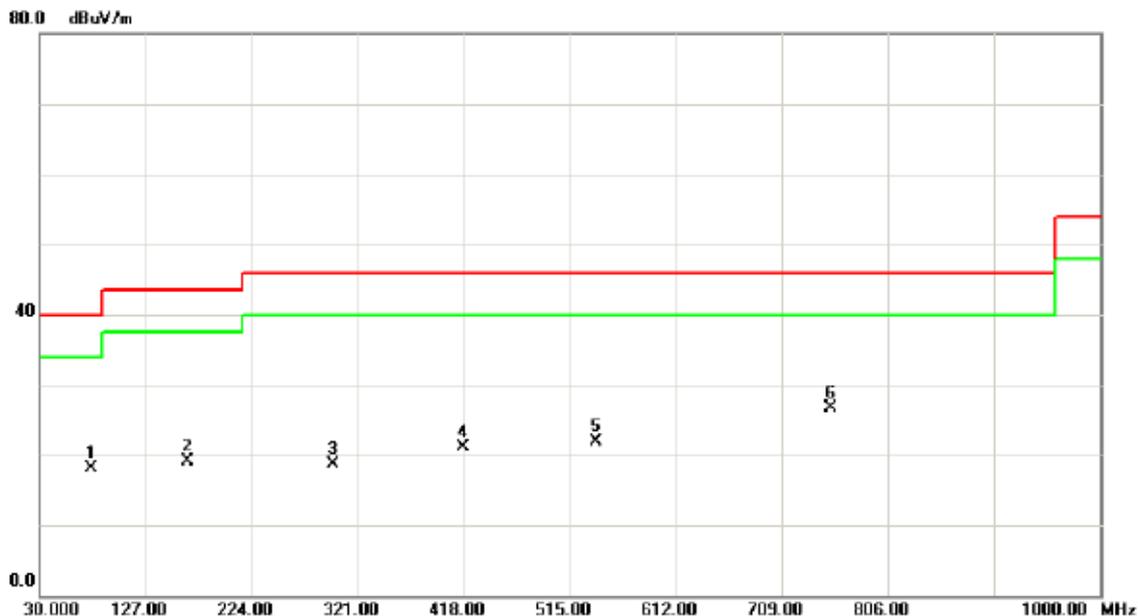


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		37.7600	34.05	-14.88	19.17	40.00	-20.83	peak	
2		74.6200	37.13	-16.72	20.41	40.00	-19.59	peak	
3		183.2600	33.69	-13.33	20.36	43.50	-23.14	peak	
4		309.3600	29.07	-11.29	17.78	46.00	-28.22	peak	
5		456.8000	31.56	-9.10	22.46	46.00	-23.54	peak	
6	*	643.0400	34.42	-5.92	28.50	46.00	-17.50	peak	



Test Mode: TX B MODE CHANNEL 01

**Horizontal**

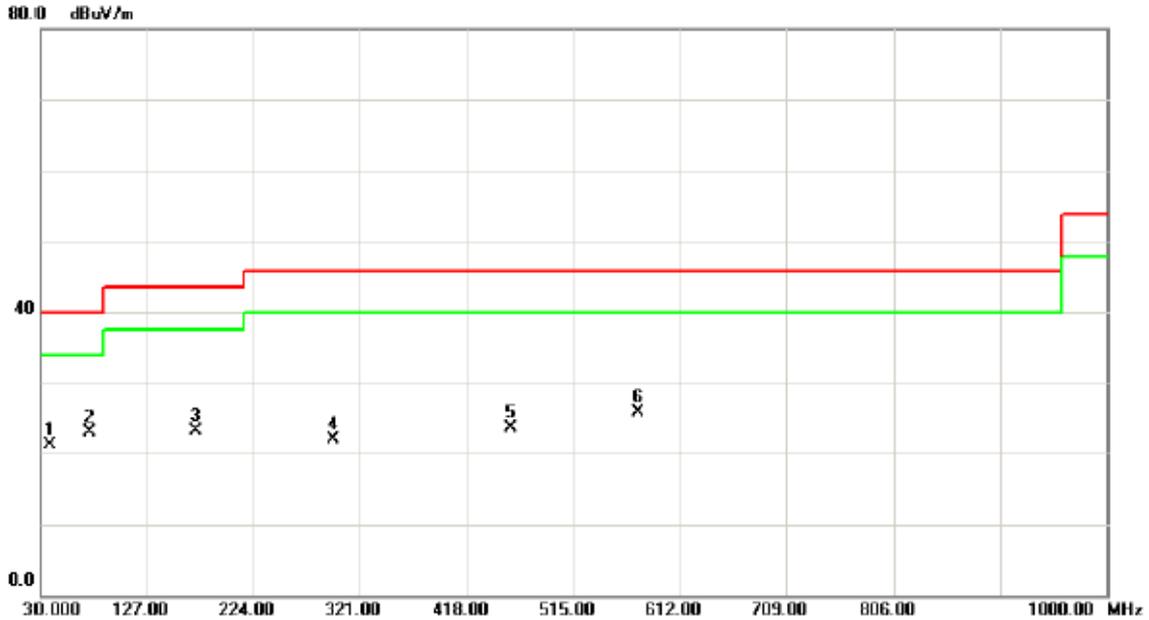


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		76.5600	35.15	-16.99	18.16	40.00	-21.84	peak	
2		164.8300	32.25	-13.21	19.04	43.50	-24.46	peak	
3		297.7200	30.04	-11.37	18.67	46.00	-27.33	peak	
4		417.0300	30.64	-9.56	21.08	46.00	-24.92	peak	
5		539.2500	30.09	-8.23	21.86	46.00	-24.14	peak	
6	*	753.6200	31.45	-4.77	26.68	46.00	-19.32	peak	



Test Mode: TX B MODE CHANNEL 06

**Vertical**

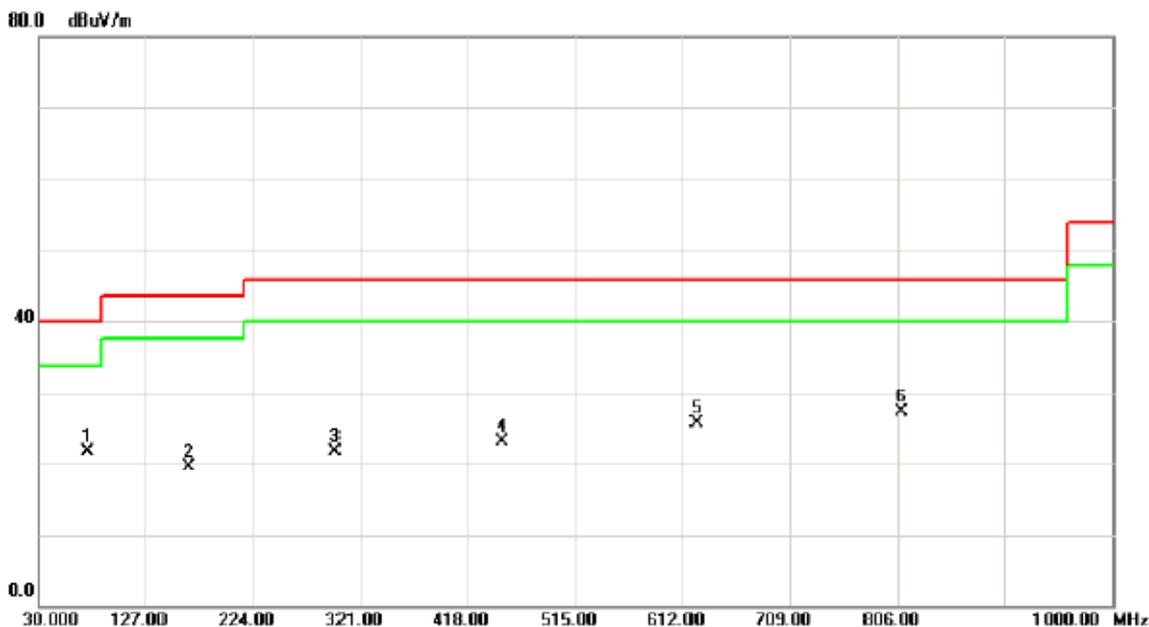


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		37.7600	36.05	-14.88	21.17	40.00	-18.83	peak	
2	*	74.6200	39.63	-16.72	22.91	40.00	-17.09	peak	
3		171.6200	35.82	-12.74	23.08	43.50	-20.42	peak	
4		296.7500	33.42	-11.43	21.99	46.00	-24.01	peak	
5		456.8000	32.56	-9.10	23.46	46.00	-22.54	peak	
6		573.2000	33.50	-7.86	25.64	46.00	-20.36	peak	



Test Mode: TX B MODE CHANNEL 06

**Horizontal**

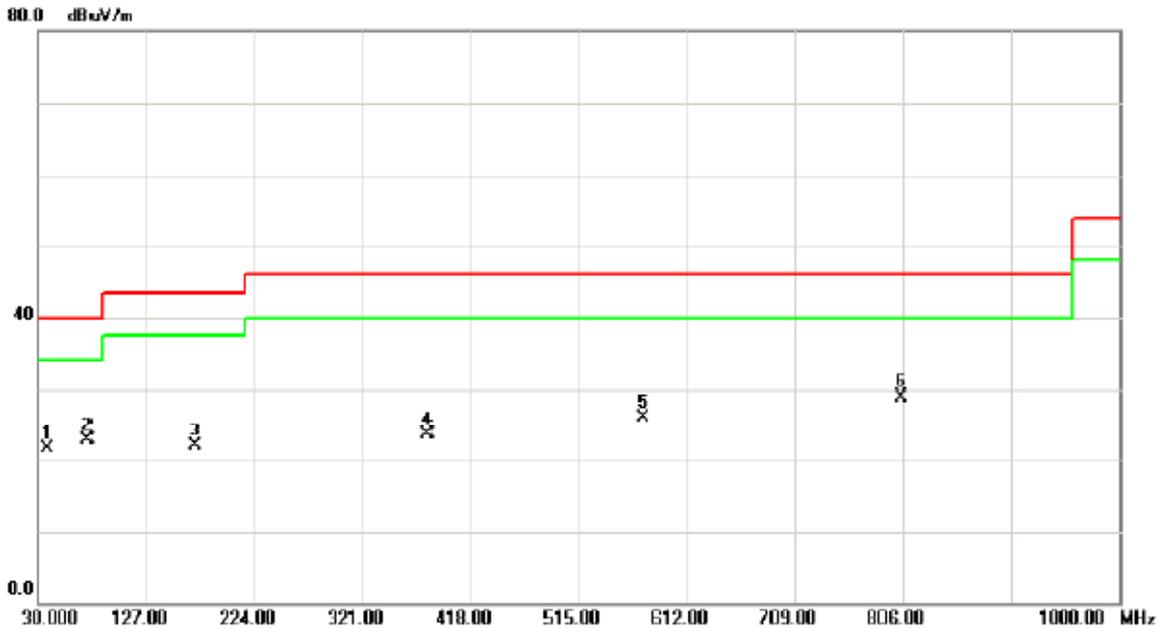


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	74.6200	38.37	-16.72	21.65	40.00	-18.35	peak	
2		164.8300	32.75	-13.21	19.54	43.50	-23.96	peak	
3		297.7200	33.04	-11.37	21.67	46.00	-24.33	peak	
4		450.0100	31.93	-8.91	23.02	46.00	-22.98	peak	
5		623.6400	32.51	-6.90	25.61	46.00	-20.39	peak	
6		808.9100	30.44	-3.21	27.23	46.00	-18.77	peak	



Test Mode: TX B MODE CHANNEL 11

**Vertical**

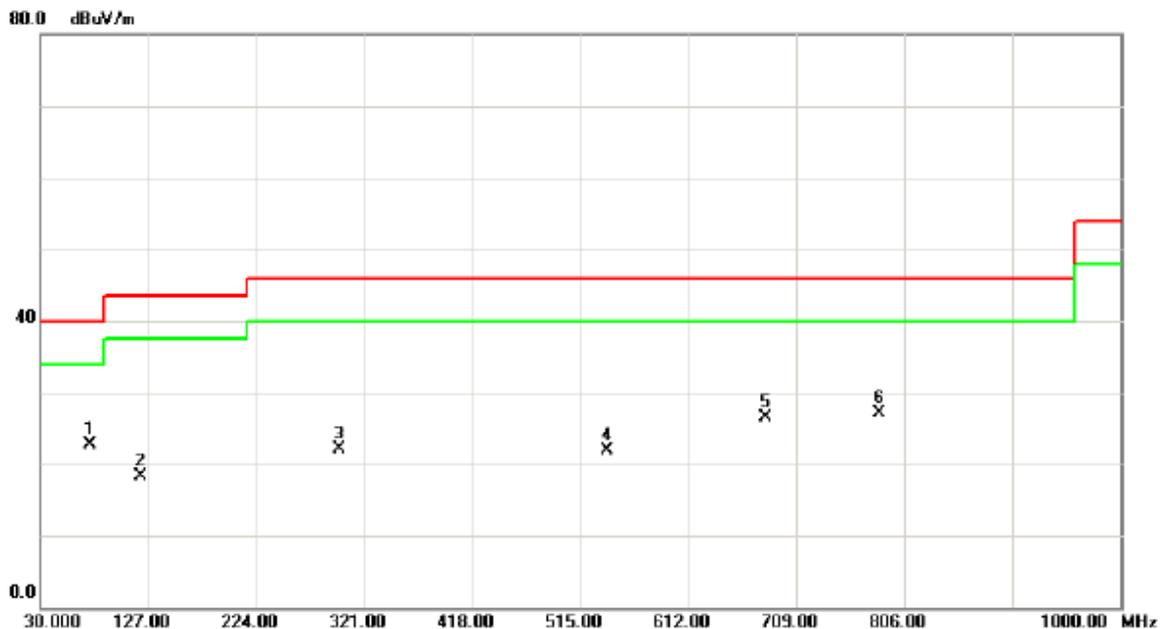


No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	37.7600	36.55	-14.88	21.67	40.00	-18.33	peak	
2 *	74.6200	39.63	-16.72	22.91	40.00	-17.09	peak	
3	171.6200	34.82	-12.74	22.08	43.50	-21.42	peak	
4	379.2000	34.18	-10.54	23.64	46.00	-22.36	peak	
5	573.2000	34.00	-7.86	26.14	46.00	-19.86	peak	
6	804.0600	32.01	-3.15	28.86	46.00	-17.14	peak	



Test Mode: TX B MODE CHANNEL 11

**Horizontal**



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	74.6200	39.37	-16.72	22.65	40.00	-17.35	peak	
2		120.2100	32.16	-13.88	18.28	43.50	-25.22	peak	
3		297.7200	33.54	-11.37	22.17	46.00	-23.83	peak	
4		539.2500	30.09	-8.23	21.86	46.00	-24.14	peak	
5		680.8700	31.69	-5.10	26.59	46.00	-19.41	peak	
6		783.6900	30.78	-3.69	27.09	46.00	-18.91	peak	

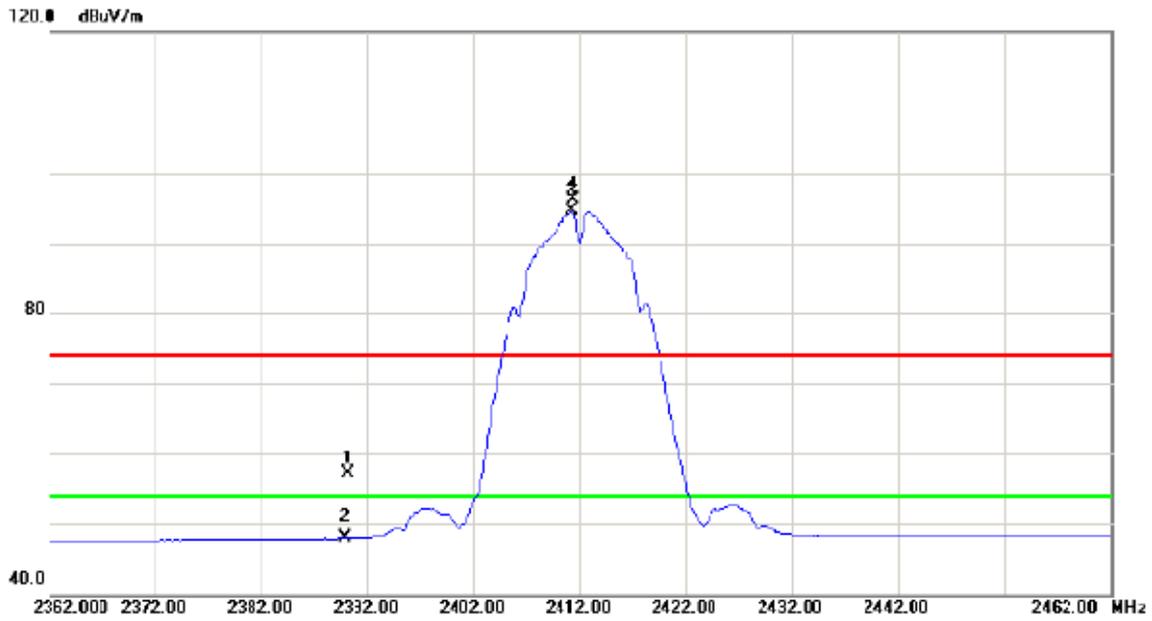


**ATTACHMENT D - RADIATED EMISSION (ABOVE 1000MHZ)**



Orthogonal Axis :	X
Test Mode :	TX B MODE 2412MHz

**Vertical**

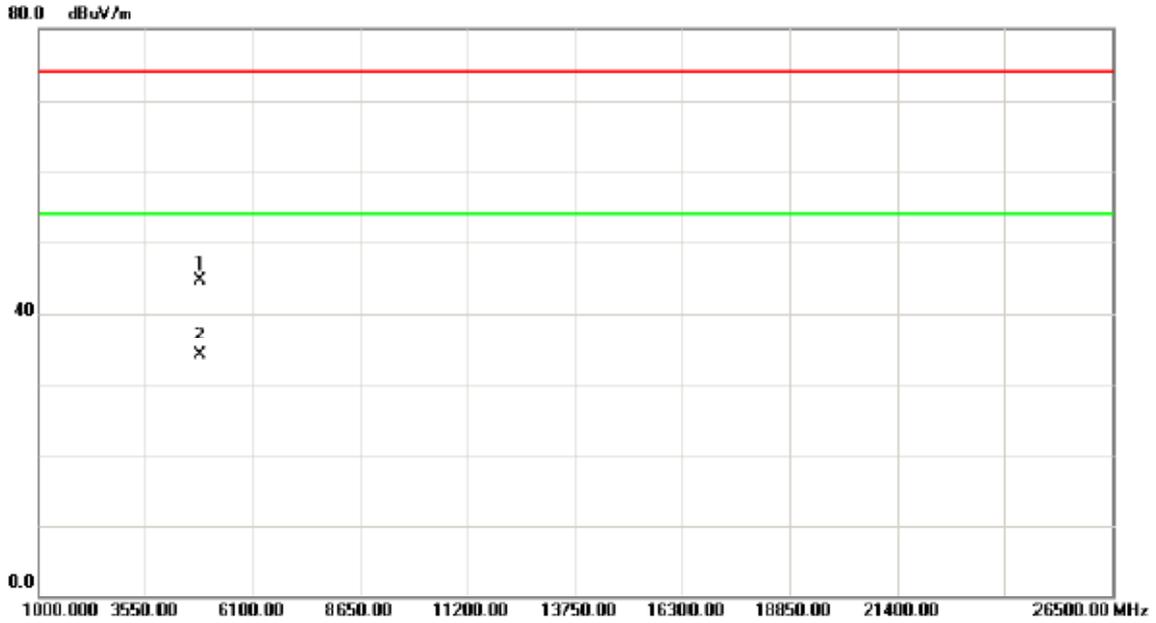


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		2390.000	22.99	34.09	57.08	74.00	-16.92	peak	
2		2390.000	13.94	34.09	48.03	54.00	-5.97	AVG	
3	*	2411.210	60.26	34.16	94.42	54.00	40.42	AVG	Fundamental frequency, no limit
4	X	2411.340	62.11	34.16	96.27	74.00	22.27	peak	Fundamental frequency, no limit



Orthogonal Axis :	X
Test Mode :	TX B MODE 2412MHz

**Vertical**

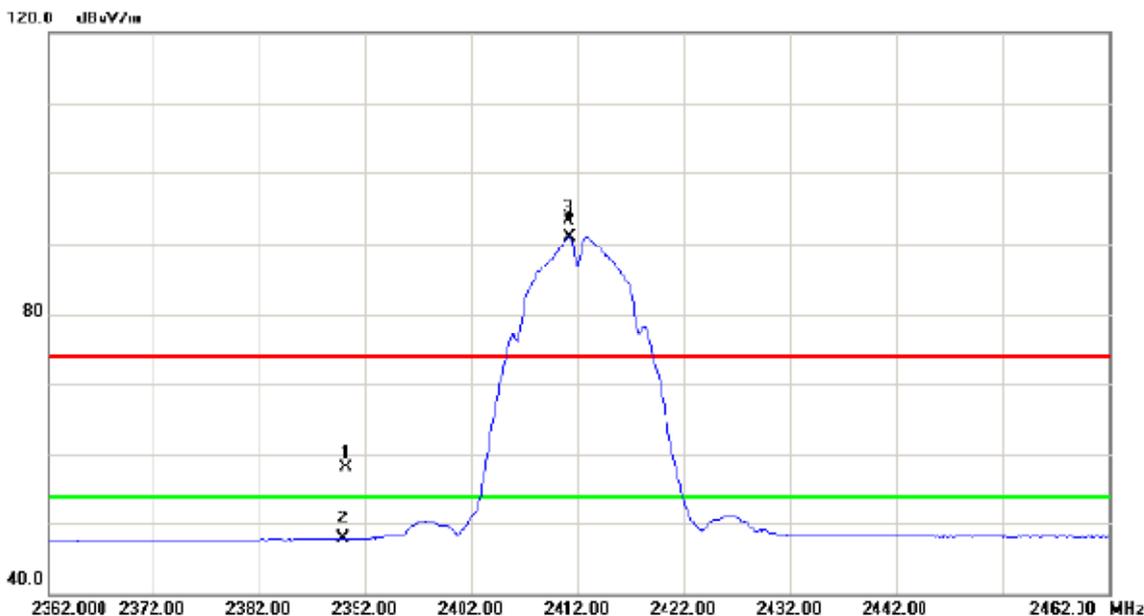


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		4823.960	38.22	6.43	44.65	74.00	-29.35	peak	
2	*	4823.960	27.66	6.43	34.09	54.00	-19.91	AVG	



Orthogonal Axis :	X
Test Mode :	TX B MODE 2412MHz

**Horizontal**

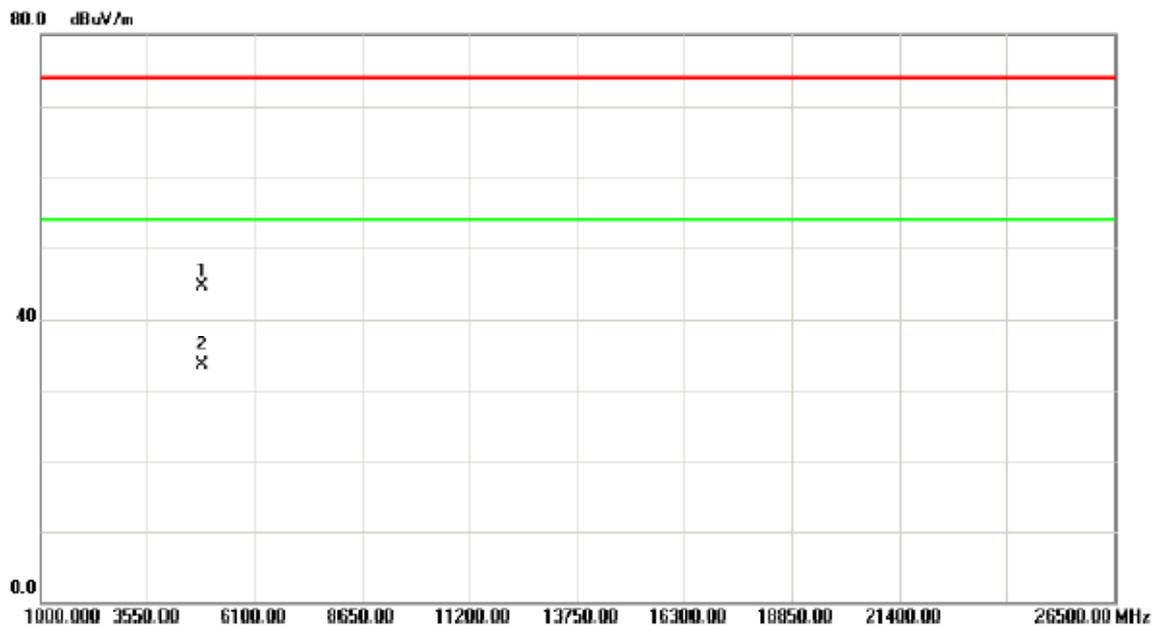


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		2390.000	23.98	34.09	58.07	74.00	-15.93	peak	
2		2390.000	13.78	34.09	47.87	54.00	-6.13	AVG	
3	X	2411.120	58.92	34.16	93.08	74.00	19.08	peak	Fundamental frequency, no limit
4	*	2411.240	56.81	34.16	90.97	54.00	36.97	AVG	Fundamental frequency, no limit



Orthogonal Axis :	X
Test Mode :	TX B MODE 2412MHz

**Horizontal**

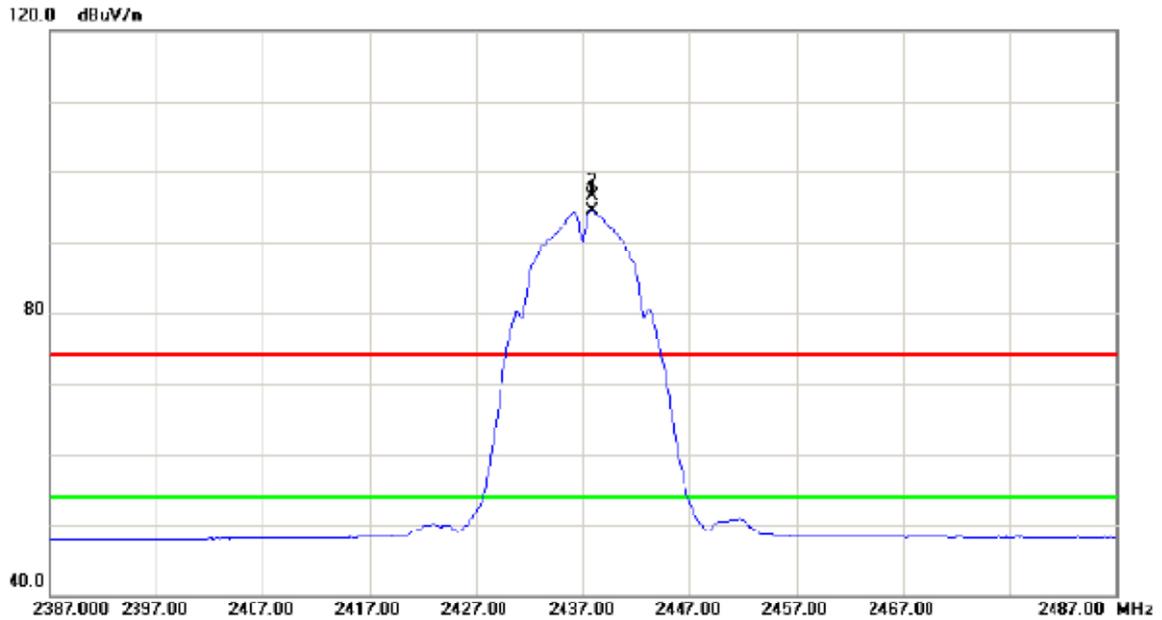


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		4823.990	38.23	6.43	44.66	74.00	-29.34	peak	
2	*	4823.990	27.11	6.43	33.54	54.00	-20.46	AVG	



Orthogonal Axis :	X
Test Mode :	TX B MODE 2437MHz

**Vertical**

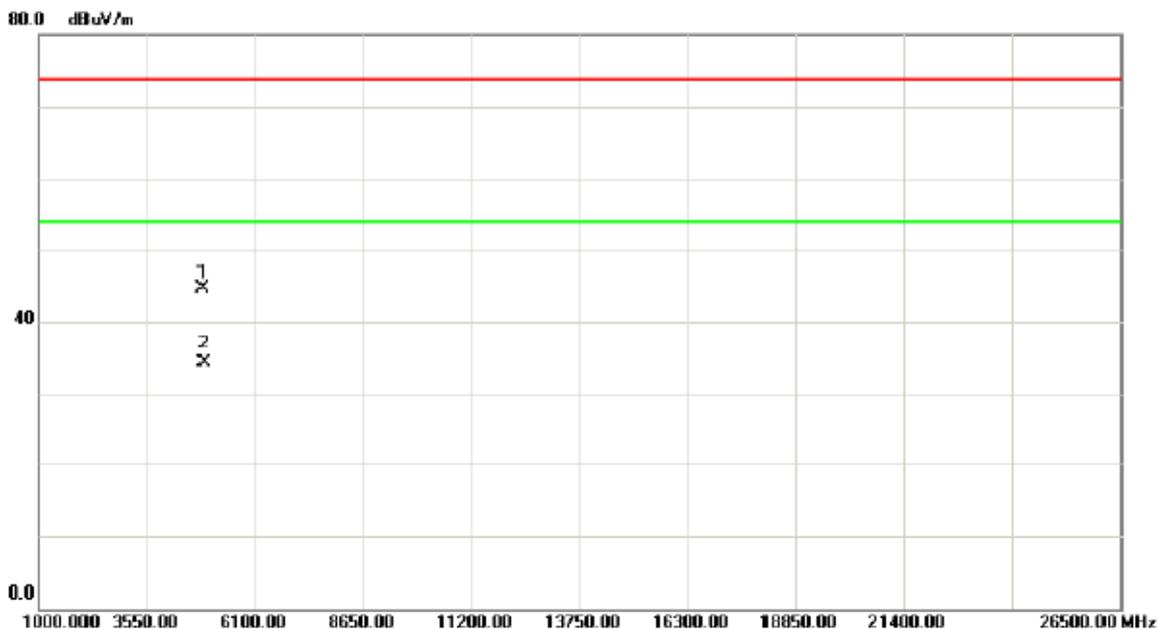


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1	*	2437.700	60.31	34.23	94.54	54.00	40.54	AVG	Fundamental frequency, no limit
2	X	2437.800	62.20	34.23	96.43	74.00	22.43	peak	Fundamental frequency, no limit



Orthogonal Axis :	X
Test Mode :	TX B MODE 2437MHz

**Vertical**

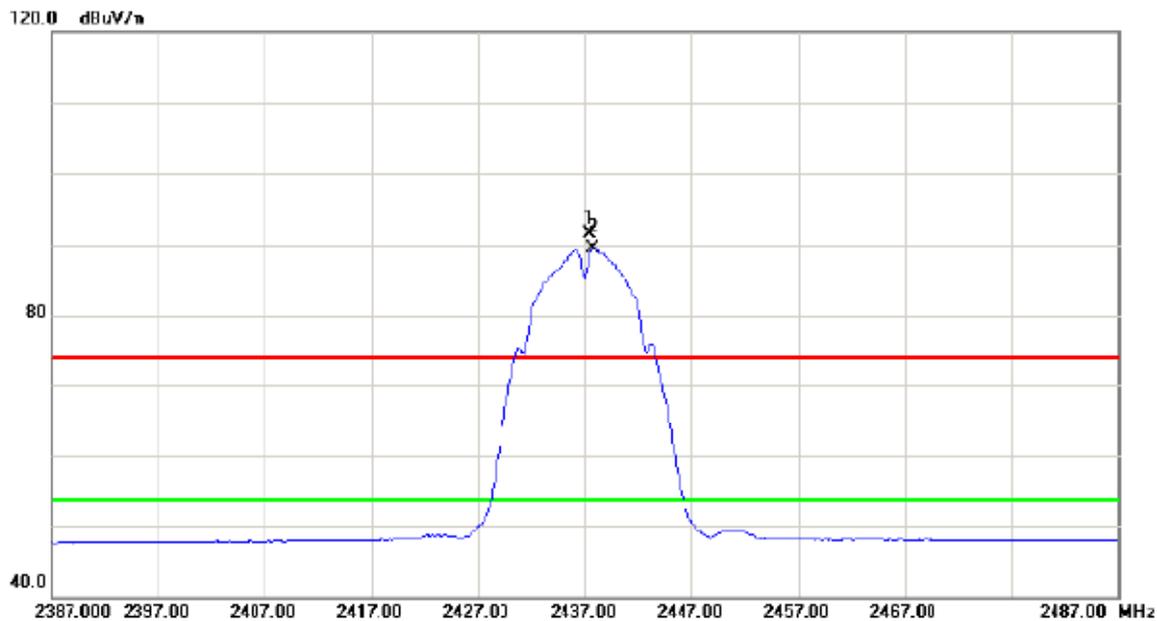


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		4874.140	38.08	6.58	44.66	74.00	-29.34	peak	
2	*	4874.230	27.47	6.58	34.05	54.00	-19.95	AVG	



Orthogonal Axis :	X
Test Mode :	TX B MODE 2437MHz

**Horizontal**

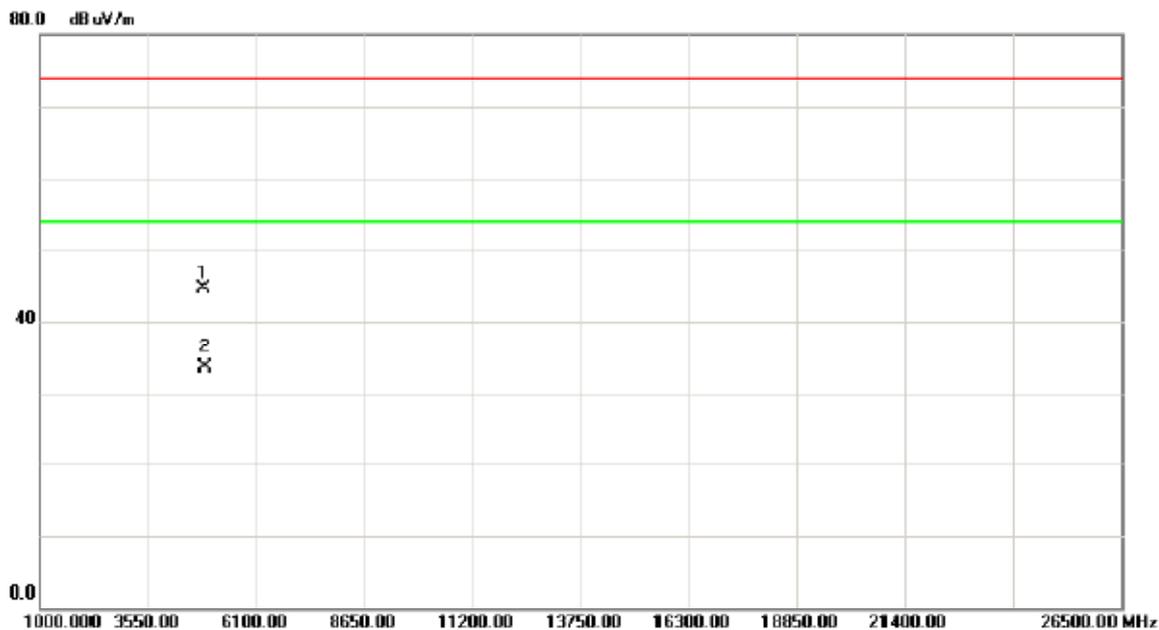


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment cBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	X	2437.400	57.37	34.23	91.60	74.00	17.60	peak	Fundamental frequency, no limit
2	*	2437.600	55.29	34.23	89.52	54.00	35.52	AVG	Fundamental frequency, no limit



Orthogonal Axis :	X
Test Mode :	TX B MODE 2437MHz

**Horizontal**

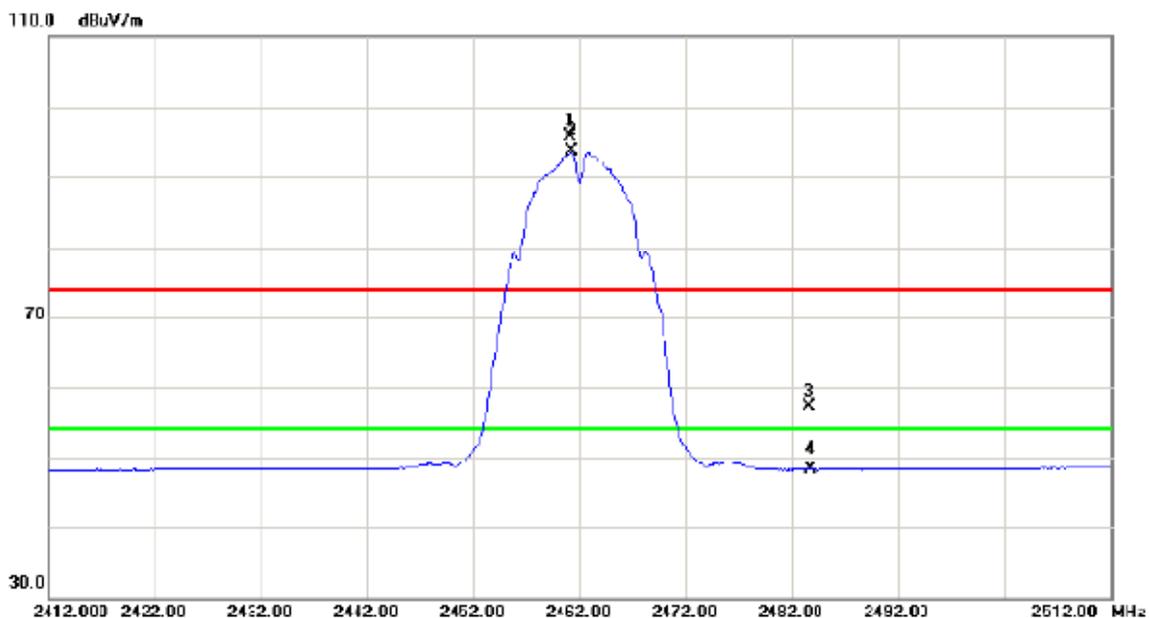


No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	4874.000	38.13	6.58	44.71	74.00	-29.29	peak	
2 *	4874.000	26.94	6.58	33.52	54.00	-20.48	AVG	



Orthogonal Axis :	X
Test Mode :	TX B MODE 2462MHz

**Vertical**

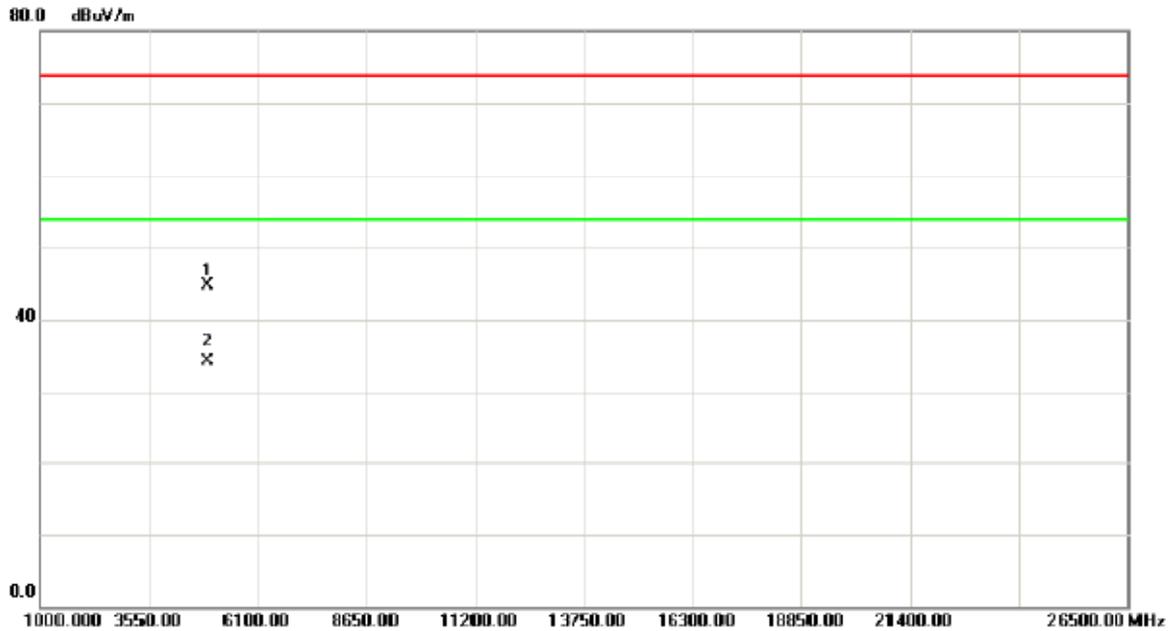


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	X	2461.180	61.36	34.31	95.67	74.00	21.67	peak	Fundamental frequency, no limit
2	*	2461.230	59.32	34.31	93.63	54.00	39.63	AVG	Fundamental frequency, no limit
3		2483.500	22.89	34.37	57.26	74.00	-16.74	peak	
4		2483.500	13.89	34.37	48.26	54.00	-5.74	AVG	



Orthogonal Axis :	X
Test Mode :	TX B MODE 2462MHz

**Vertical**

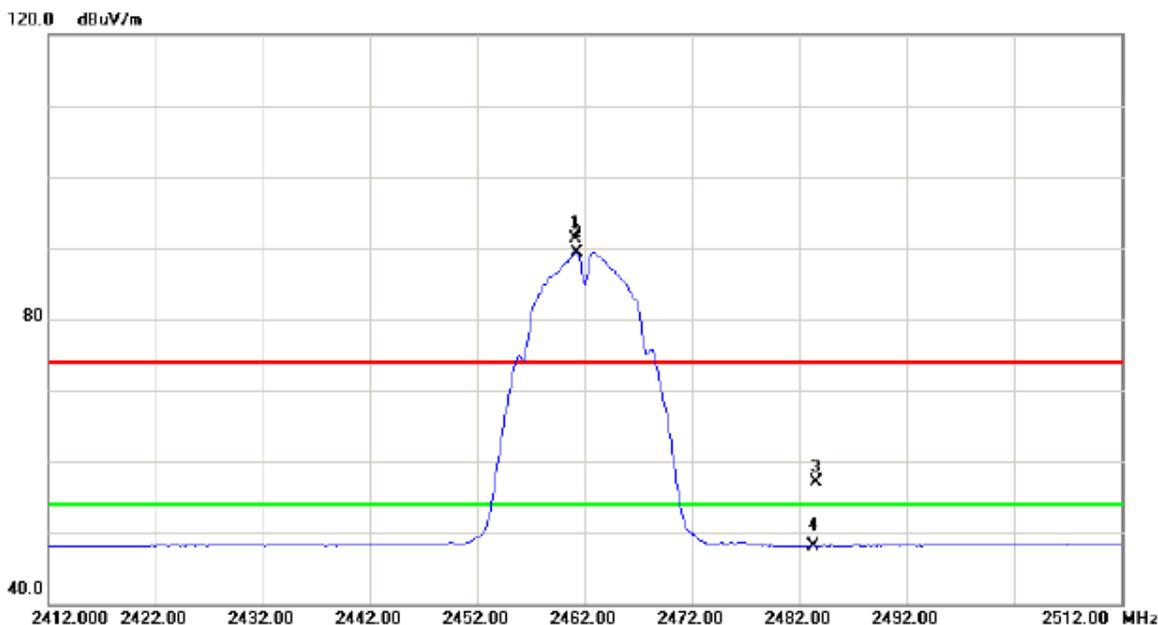


No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	4924.000	37.87	6.72	44.59	74.00	-29.41	peak	
2 *	4924.170	27.35	6.72	34.07	54.00	-19.93	AVG	



Orthogonal Axis :	X
Test Mode :	TX B MODE 2462MHz

**Horizontal**

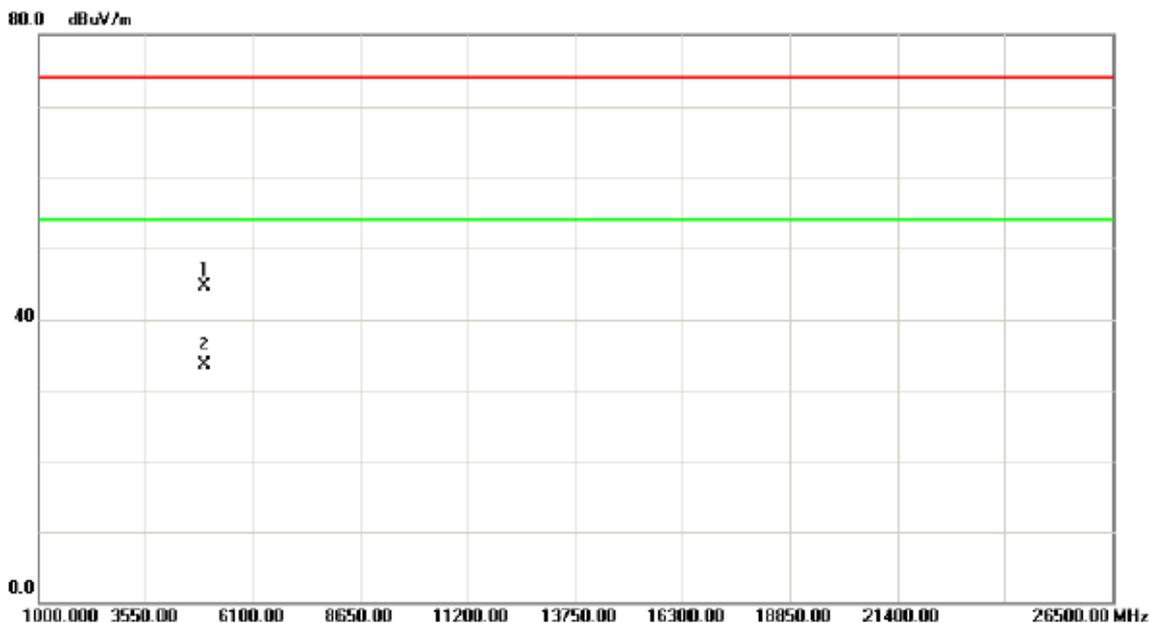


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	X	2461.130	57.00	34.31	91.31	74.00	17.31	peak	Fundamental frequency, no limit
2	*	2461.250	55.01	34.31	89.32	54.00	35.32	AVG	Fundamental frequency, no limit
3		2483.500	22.74	34.37	57.11	74.00	-16.89	peak	
4		2483.500	13.79	34.37	48.16	54.00	-5.84	AVG	



Orthogonal Axis :	X
Test Mode :	TX B MODE 2462MHz

**Horizontal**

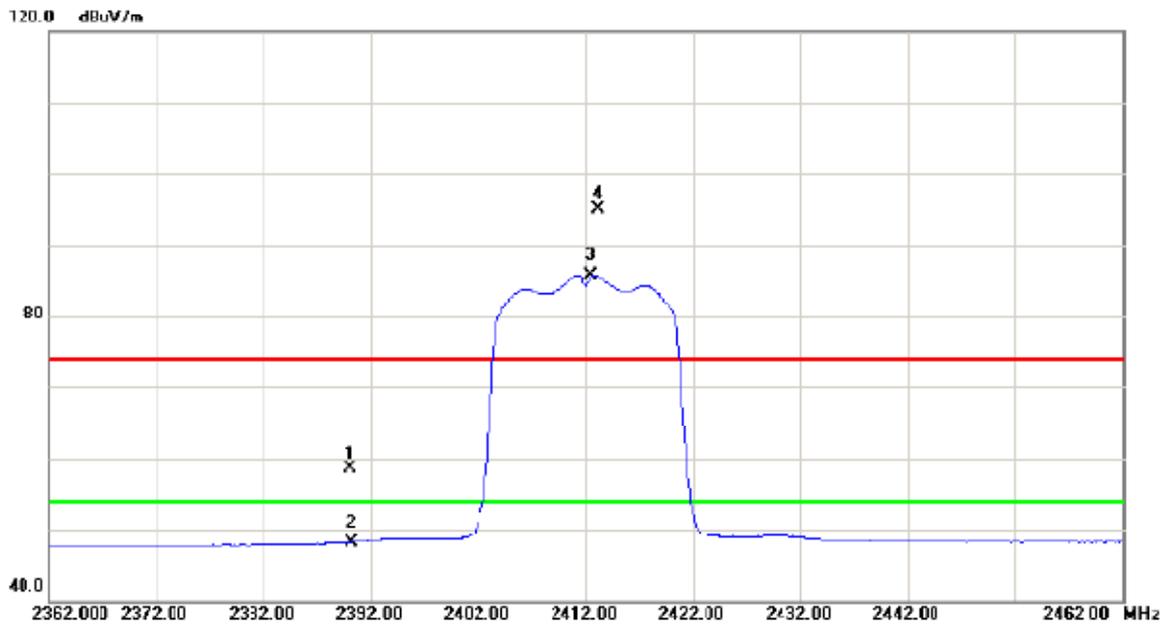


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		4924.120	37.90	6.72	44.62	74.00	-29.38	peak	
2	*	4924.120	26.74	6.72	33.46	54.00	-20.54	AVG	



Orthogonal Axis :	X
Test Mode :	TX G MODE 2412MHz

**Vertical**

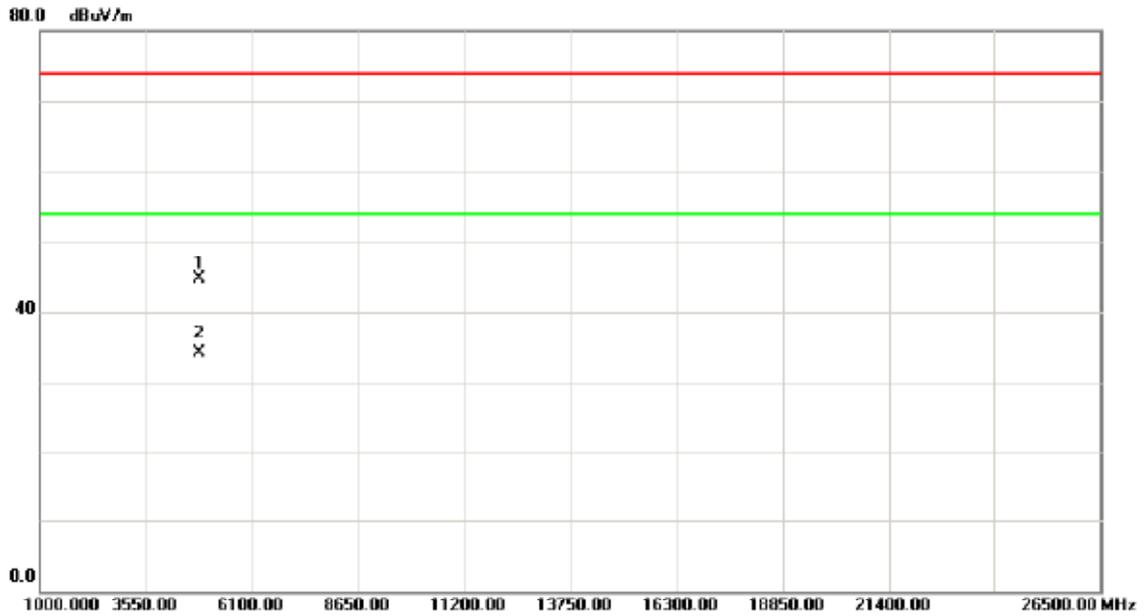


No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	2390.000	24.50	34.09	58.59	74.00	-15.41	peak	
2	2390.000	14.09	34.09	48.18	54.00	-5.82	AVG	
3 *	2412.130	51.64	34.16	85.80	54.00	31.80	AVG	Fundamental frequency, no limit
4 X	2413.180	60.88	34.16	95.04	74.00	21.04	peak	Fundamental frequency, no limit



Orthogonal Axis :	X
Test Mode :	TX G MODE 2412MHz

**Vertical**

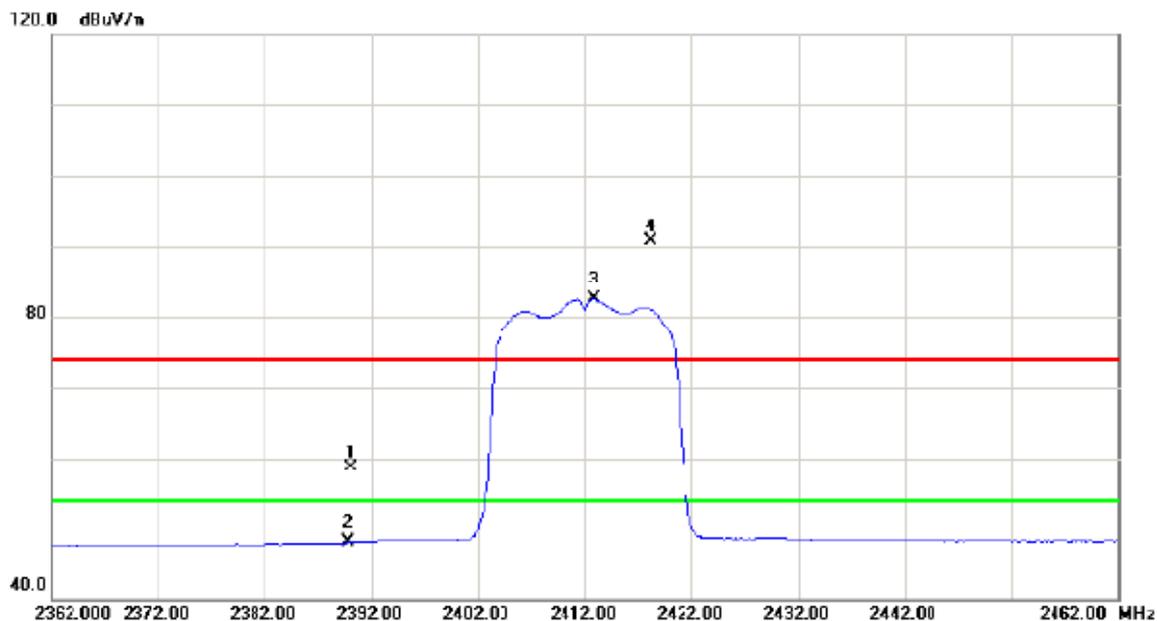


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		4824.000	38.18	6.43	44.61	74.00	-29.39	peak	
2	*	4824.000	27.63	6.43	34.06	54.00	-19.94	AVG	



Orthogonal Axis :	X
Test Mode :	TX G MODE 2412MHz

**Horizontal**



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment cBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		2390.000	24.53	34.09	58.62	74.00	-15.38	peak	
2		2390.000	13.94	34.09	48.03	54.00	-5.97	AVG	
3	^	2412.750	48.28	34.16	82.44	54.00	28.44	AVG	Fundamental frequency, no limit
4	X	2418.160	56.43	34.18	90.61	74.00	16.61	peak	Fundamental frequency, no limit



Orthogonal Axis :	X
Test Mode :	TX G MODE 2412MHz

**Horizontal**

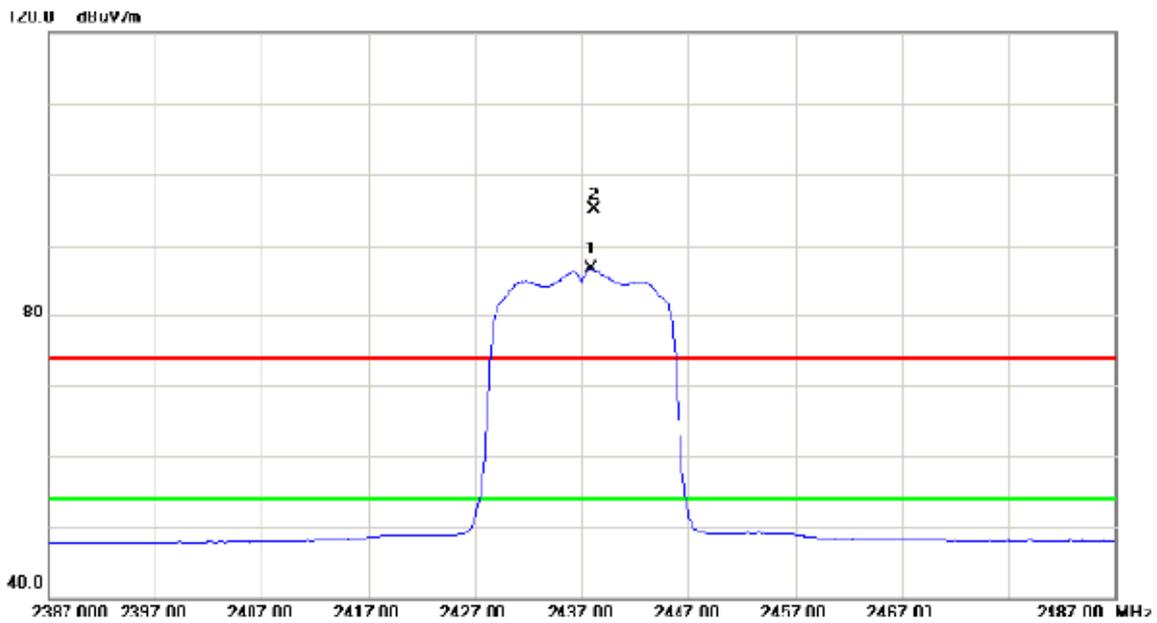


No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	4823.870	38.21	6.43	44.64	74.00	-29.36	peak	
2 *	4823.870	27.07	6.43	33.50	54.00	-20.50	AVG	



Orthogonal Axis :	X
Test Mode :	TX G MODE 2437MHz

**Vertical**

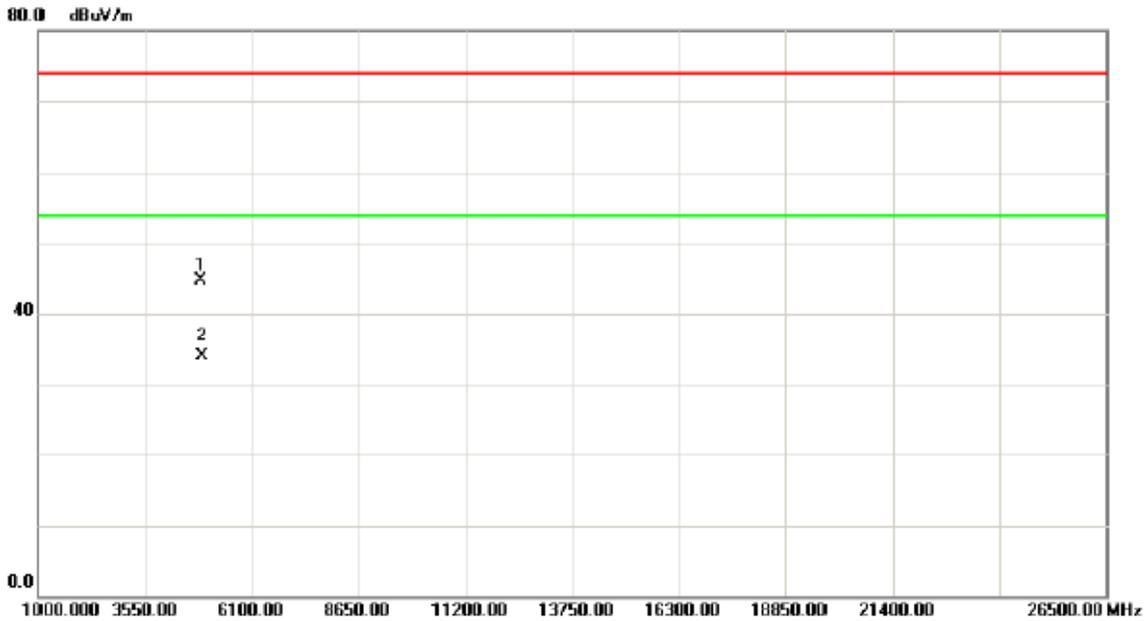


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	2437.860	52.22	34.23	86.45	54.00	32.45	AVG	Fundamental frequency, no limit
2	X	2430.130	60.59	34.23	94.02	74.00	20.02	peak	Fundamental frequency, no limit



Orthogonal Axis :	X
Test Mode :	TX G MODE 2437MHz

Vertical

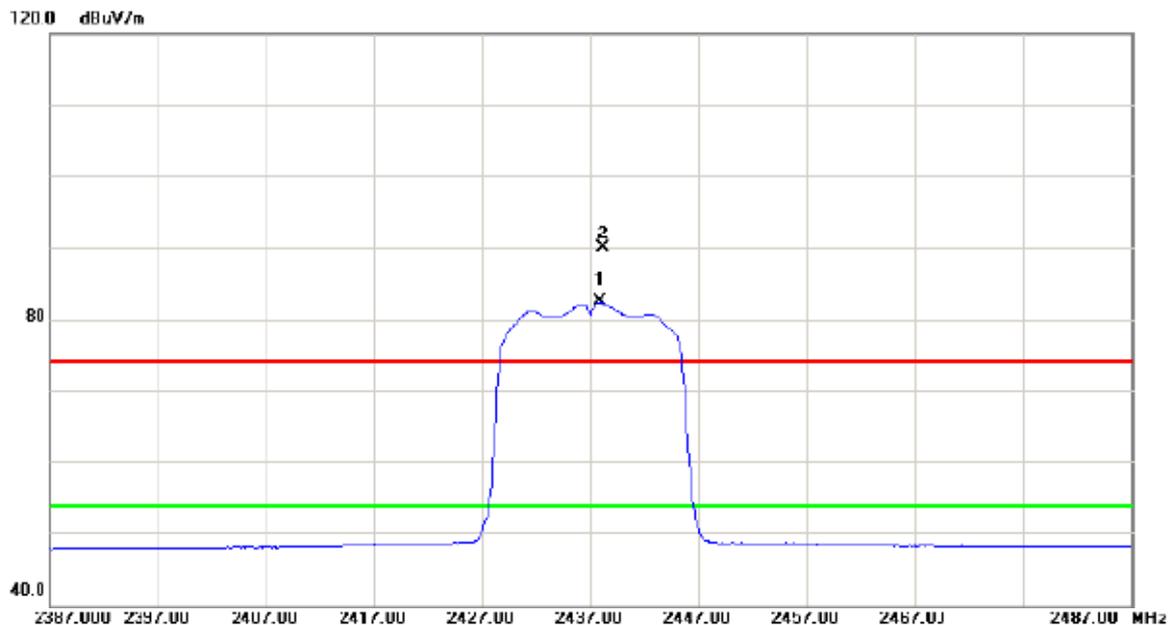


No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	4874.660	38.05	6.58	44.63	74.00	-29.37	peak	
2 *	4874.660	27.36	6.58	33.94	54.00	-20.06	AVG	



Orthogonal Axis :	X
Test Mode :	TX G MODE 2437MHz

**Horizontal**

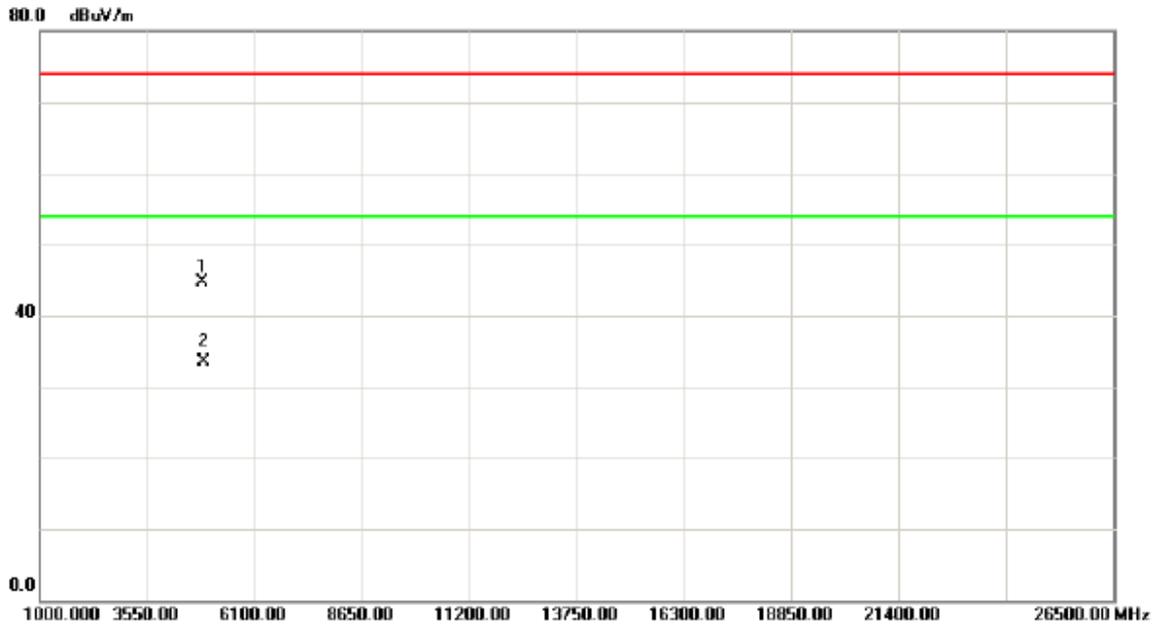


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	2437.930	48.18	34.23	82.41	54.00	28.41	AVG	Fundamental frequency, no limit
2	X	2438.150	55.58	34.23	89.81	74.00	15.81	peak	Fundamental frequency, no limit



Orthogonal Axis :	X
Test Mode :	TX G MODE 2437MHz

**Horizontal**

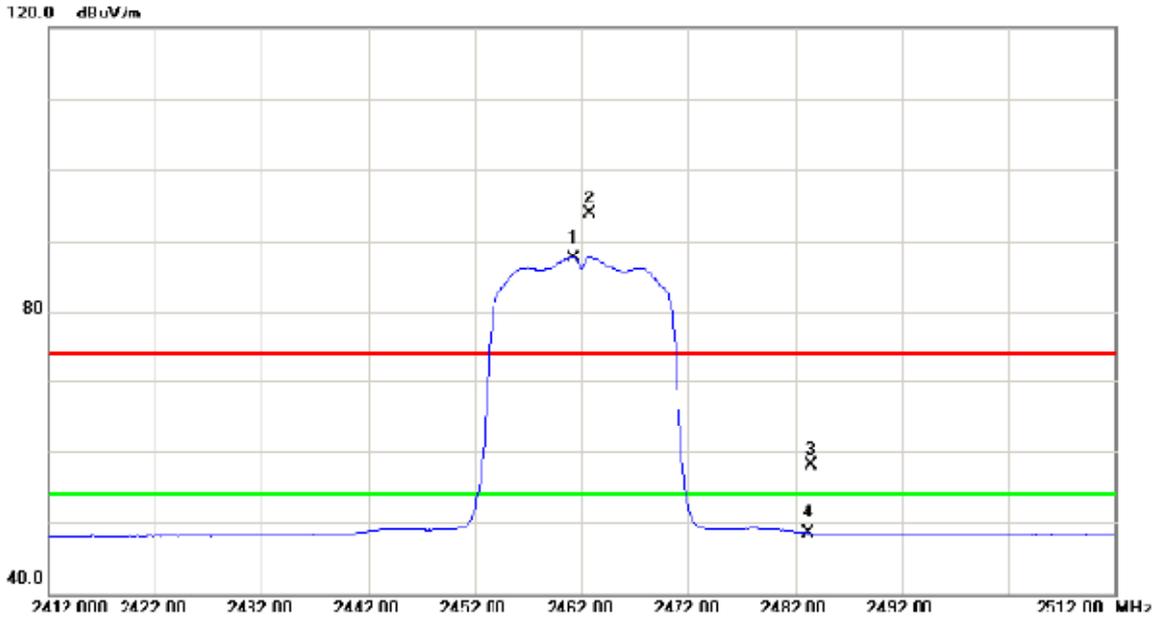


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		4874.350	38.03	6.58	44.61	74.00	-29.39	peak	
2	*	4874.350	26.85	6.58	33.43	54.00	-20.57	AVG	



Orthogonal Axis :	X
Test Mode :	TX G MODE 2462MHz

**Vertical**

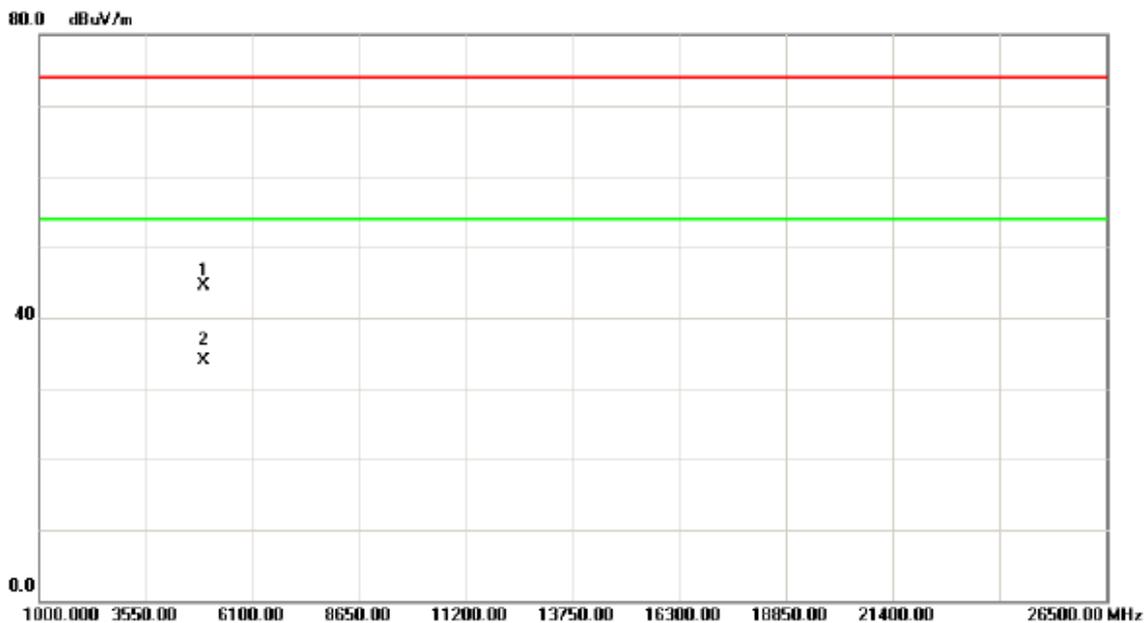


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1	*	2461.240	53.22	34.31	87.53	54.00	33.53	AVG	Fundamental frequency, no limit
2	X	2462.760	59.38	34.31	93.69	74.00	19.69	peak	Fundamental frequency, no limit
3		2483.500	23.67	34.37	58.04	74.00	-15.96	peak	
4		2483.500	14.17	34.37	48.54	54.00	-5.46	AVG	



Orthogonal Axis :	X
Test Mode :	TX G MODE 2462MHz

Vertical

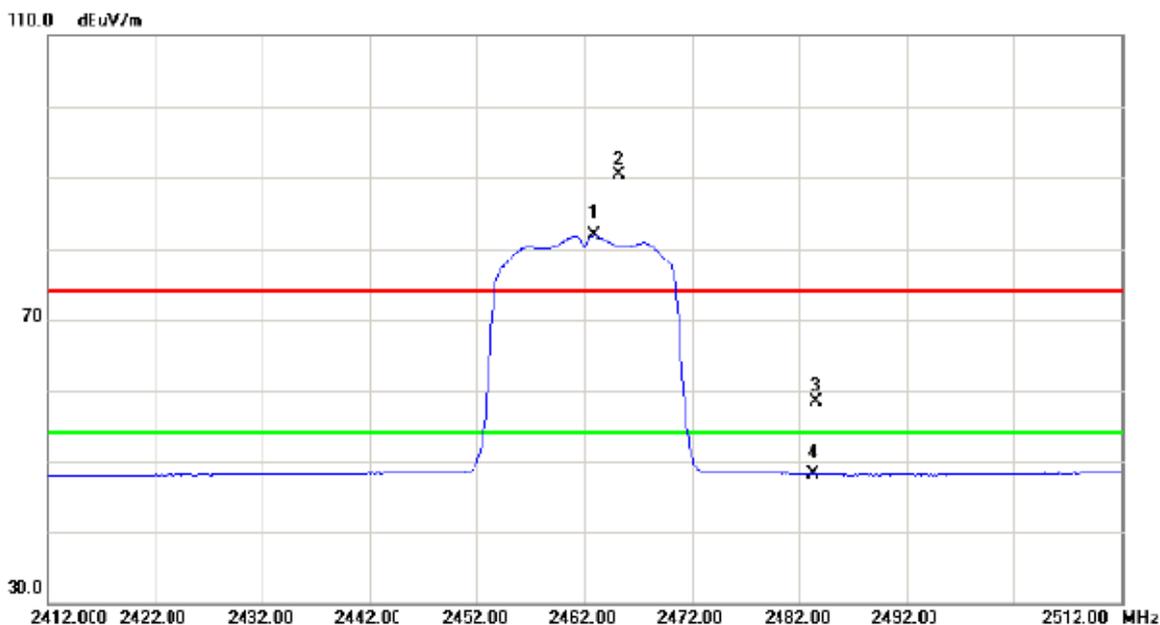


No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	4924.000	37.87	6.72	44.59	74.00	-29.41	peak	
2 *	4924.000	27.24	6.72	33.96	54.00	-20.04	AVG	



Orthogonal Axis :	X
Test Mode :	TX G MODE 2462MHz

**Horizontal**

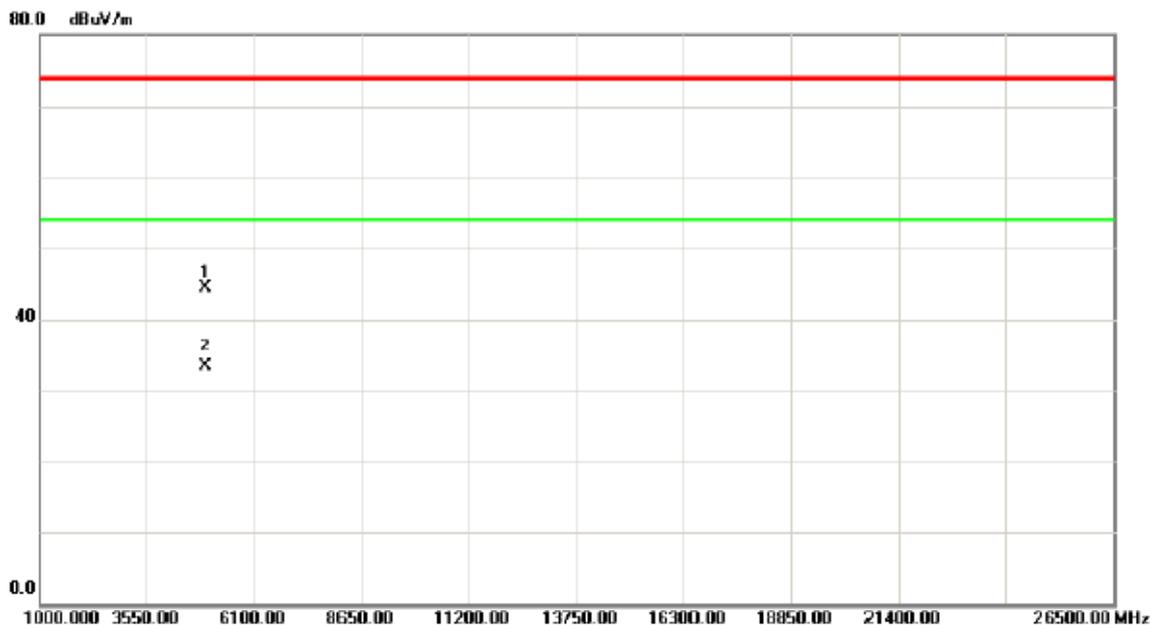


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	2462.870	47.51	34.31	81.82	54.00	27.82	AVG	Fundamental frequency, no limit
2	X	2465.130	56.01	34.31	90.32	74.00	16.32	peak	Fundamental frequency, no limit
3		2483.500	24.09	34.37	58.46	74.00	-15.54	peak	
4		2483.500	13.91	34.37	48.28	54.00	-5.72	AVG	



Orthogonal Axis :	X
Test Mode :	TX G MODE 2462MHz

**Horizontal**

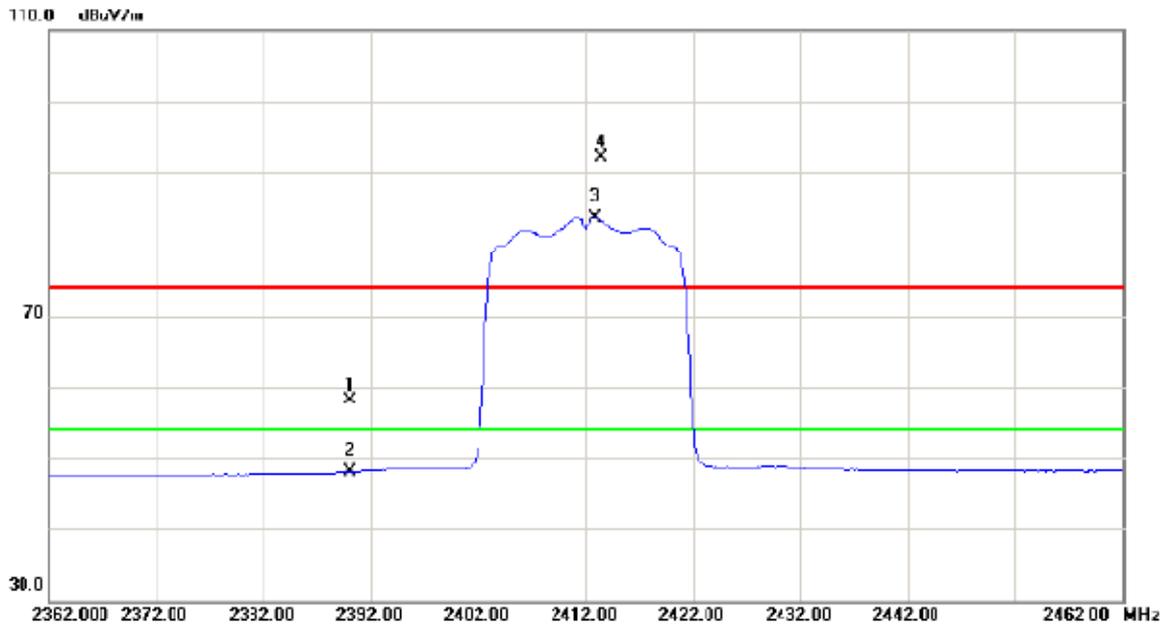


No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	4924.640	37.86	6.72	44.58	74.00	-29.42	peak	
2 *	4924.640	26.57	6.72	33.29	54.00	-20.71	AVG	



Orthogonal Axis :	X
Test Mode :	TX N-20M MODE 2412MHz

**Vertical**

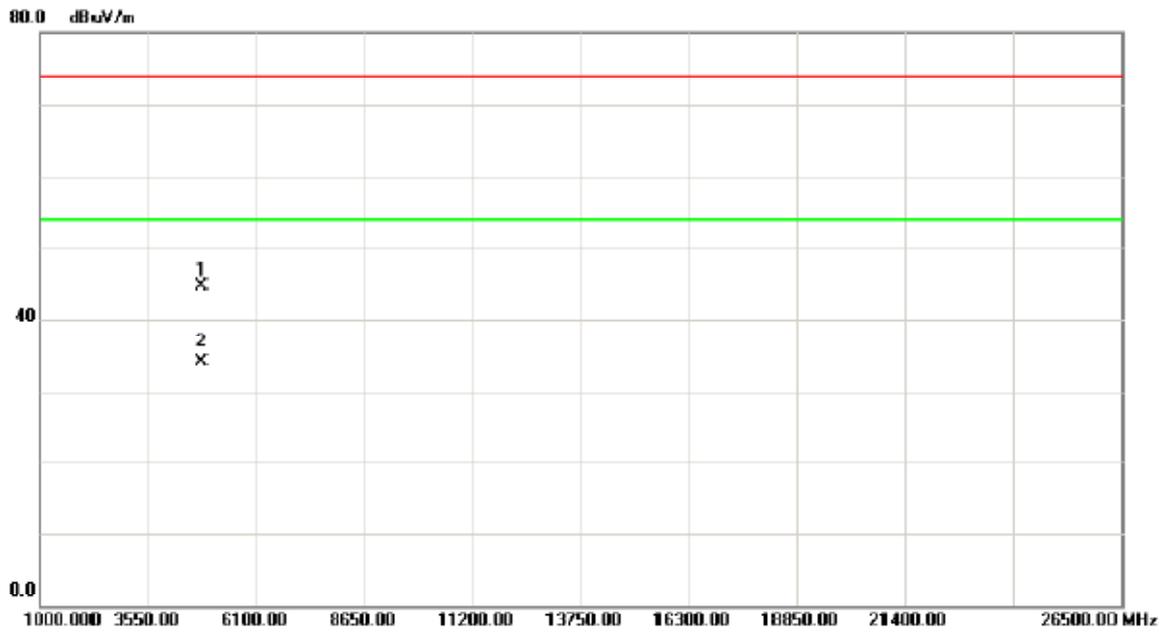


No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	2390.000	23.97	34.09	58.06	74.00	-15.94	peak	
2	2390.000	14.03	34.09	48.12	54.00	-5.88	AVG	
3 *	2412.740	49.54	34.16	83.70	54.00	29.70	AVG	Fundamental frequency, no limit
4 X	2413.350	58.05	34.16	92.21	74.00	18.21	peak	Fundamental frequency, no limit



Orthogonal Axis :	X
Test Mode :	TX N-20M MODE 2412MHZ

**Vertical**

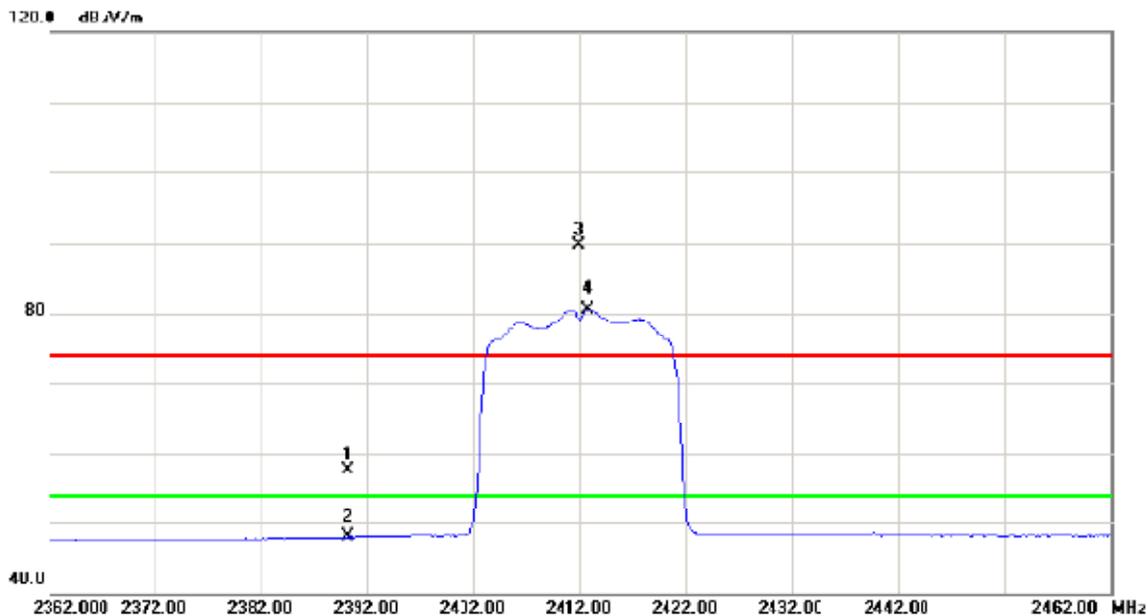


No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	4823.540	38.26	6.43	44.69	74.00	-29.31	peak	
2 *	4823.540	27.52	6.43	33.95	54.00	-20.05	AVG	



Orthogonal Axis :	X
Test Mode :	TX N-20M MODE 2412MHZ

**Horizontal**

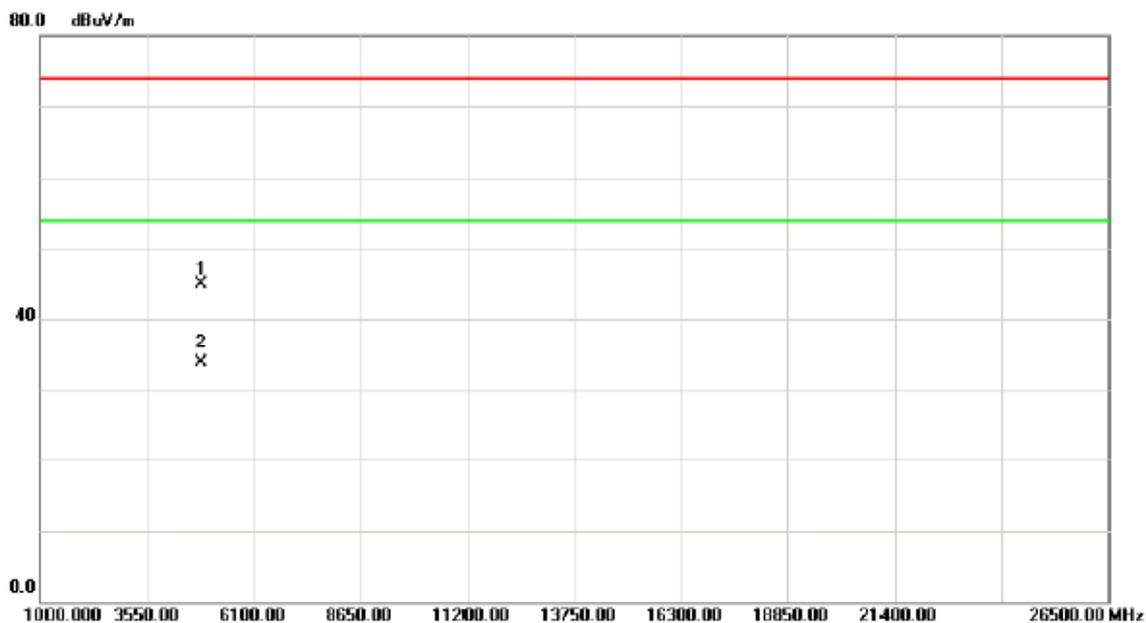


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		2390.000	23.62	34.09	57.71	74.00	-16.29	peak	
2		2390.000	13.93	34.09	48.02	54.00	-5.98	AVG	
3	X	2411.920	55.56	34.16	89.72	74.00	15.72	peak	Fundamental frequency, no limit
4	*	2412.740	46.36	34.16	80.52	54.00	26.52	AVG	Fundamental frequency, no limit



Orthogonal Axis :	X
Test Mode :	TX N-20M MODE 2412MHz

**Horizontal**

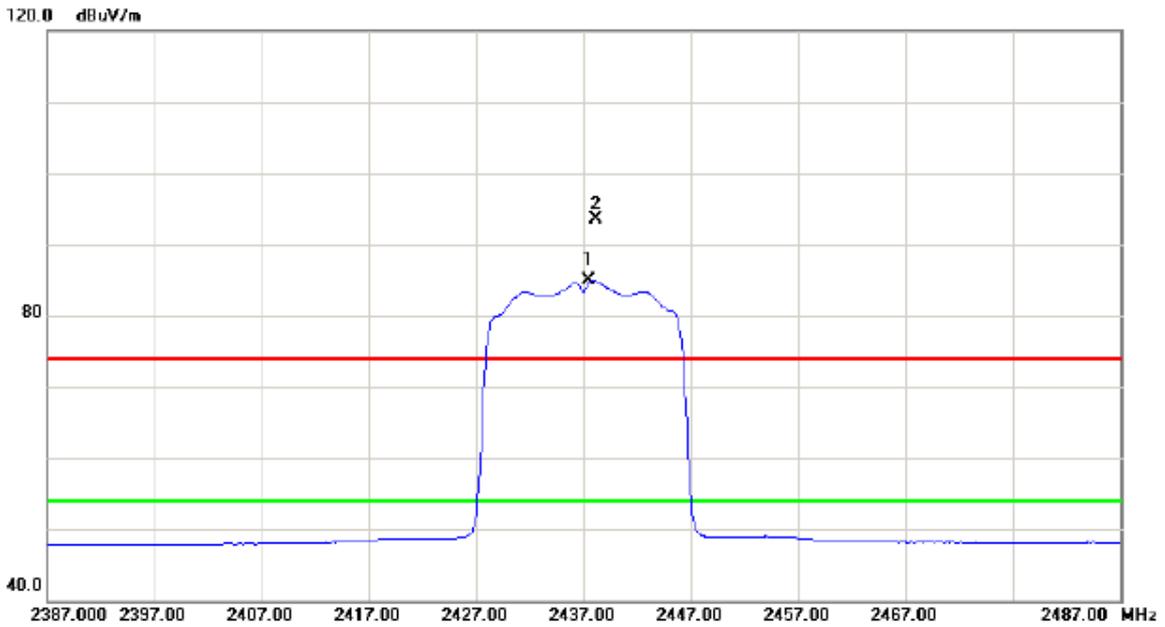


No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	4824.000	38.38	6.43	44.81	74.00	-29.19	peak	
2 *	4824.000	27.35	6.43	33.78	54.00	-20.22	AVG	



Orthogonal Axis :	X
Test Mode :	TX N-20M MODE 2437MHz

**Vertical**

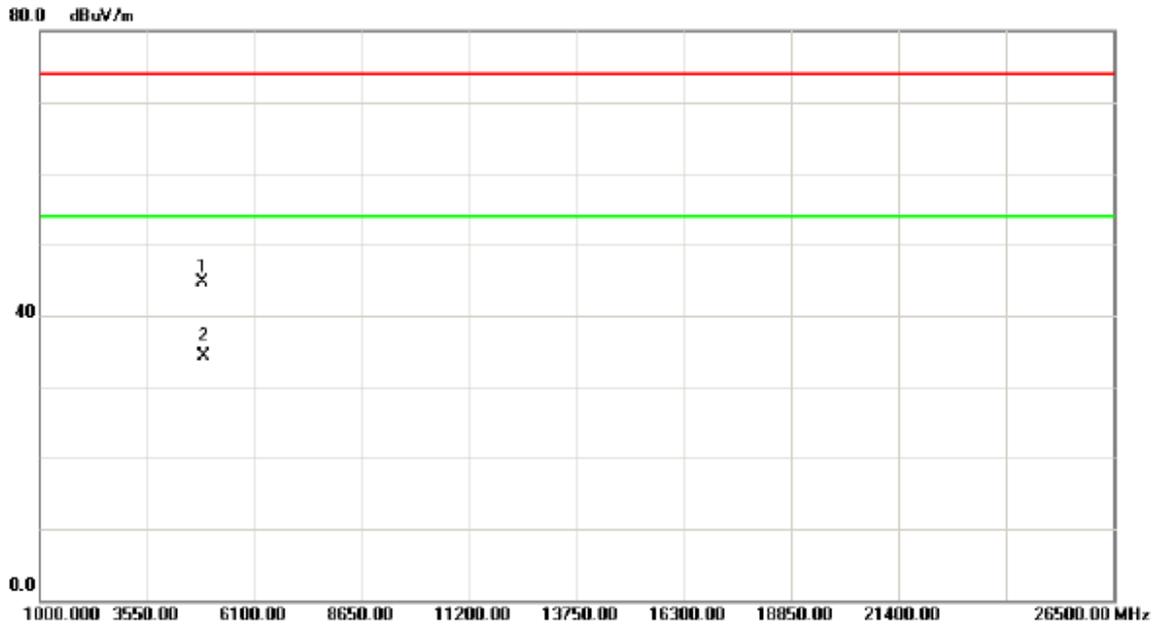


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1	*	2437.130	50.64	34.23	84.87	54.00	30.87	AVG	Fundamental frequency, no limit
2	X	2438.160	59.25	34.23	93.48	74.00	19.48	peak	Fundamental frequency, no limit



Orthogonal Axis :	X
Test Mode :	TX N-20M MODE 2437MHz

**Vertical**

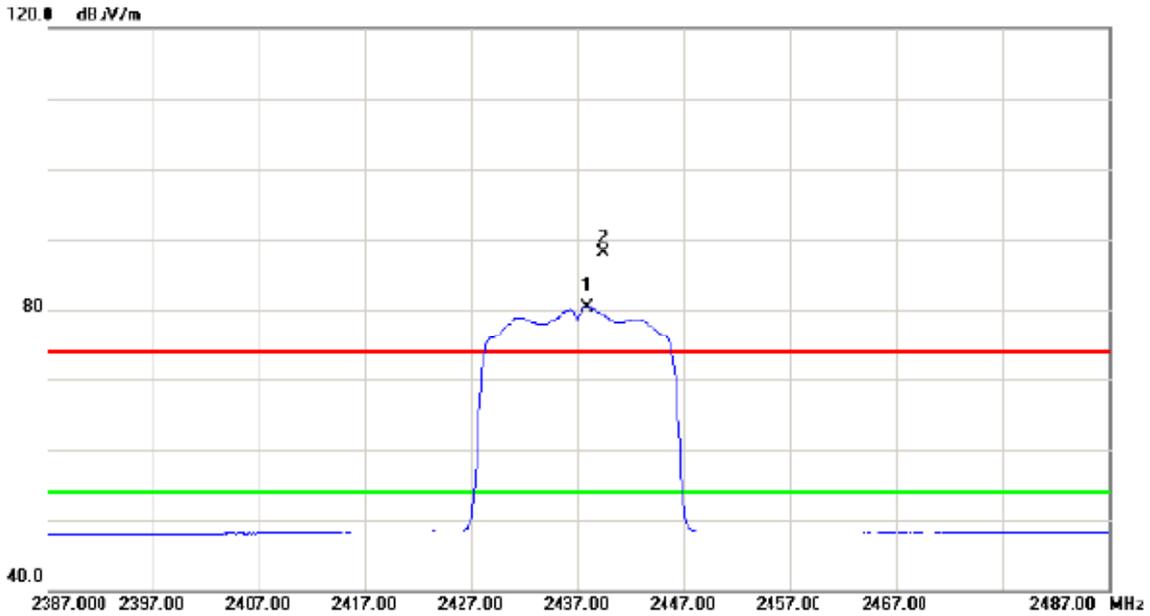


No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	4873.560	38.11	6.58	44.69	74.00	-29.31	peak	
2 *	4873.560	27.63	6.58	34.21	54.00	-19.79	AVG	



Orthogonal Axis :	X
Test Mode :	TX N-20M MODE 2437MHz

**Horizontal**

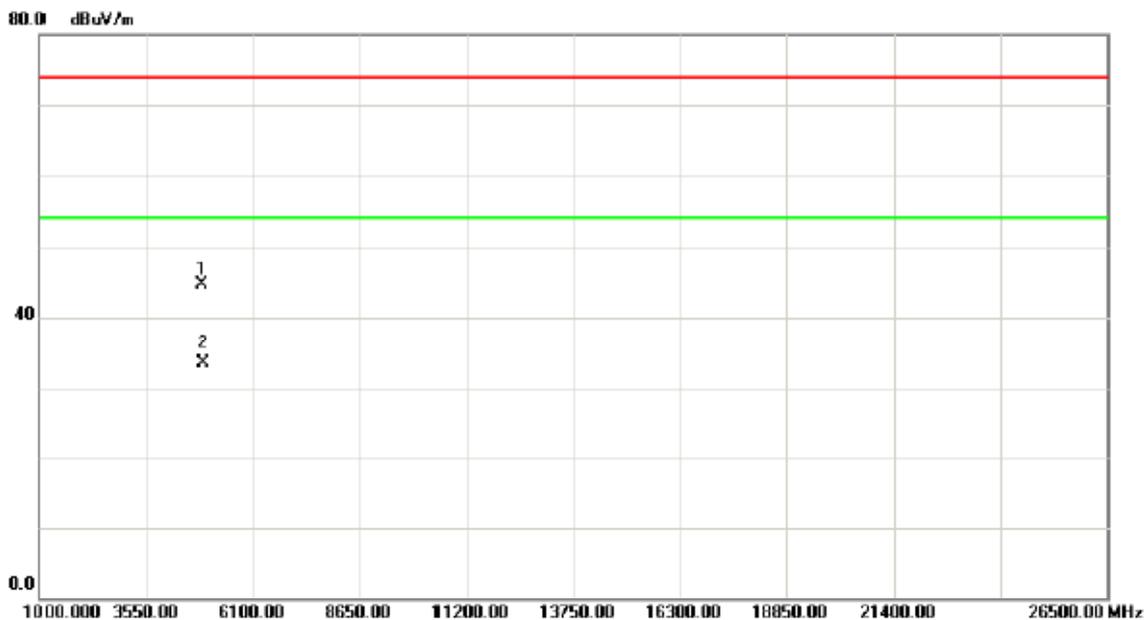


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	2437.730	46.11	34.23	80.34	54.00	26.34	AVG	Fundamental frequency, no limit
2	X	2439.380	53.94	34.24	88.18	74.00	14.18	peak	Fundamental frequency, no limit



Orthogonal Axis :	X
Test Mode :	TX N-20M MODE 2437MHz

Horizontal

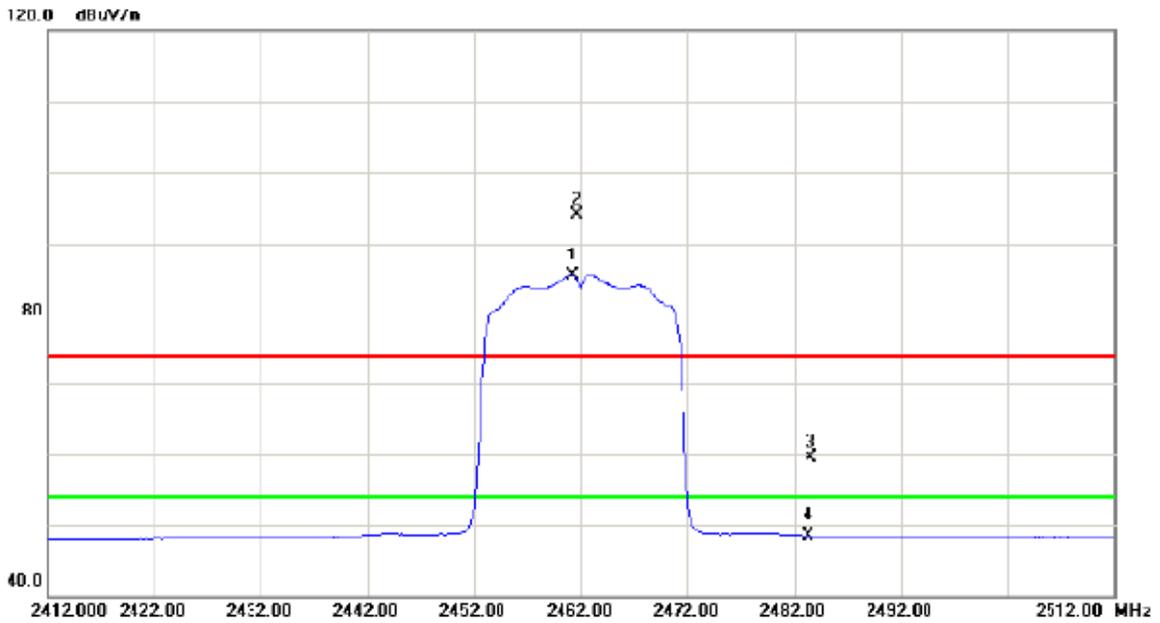


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		4874.000	38.15	6.58	44.73	74.00	-29.27	peak	
2	*	4874.000	26.99	6.58	33.57	54.00	-20.43	AVG	



Orthogonal Axis :	X
Test Mode :	TX N-20M MODE 2462MHz

**Vertical**

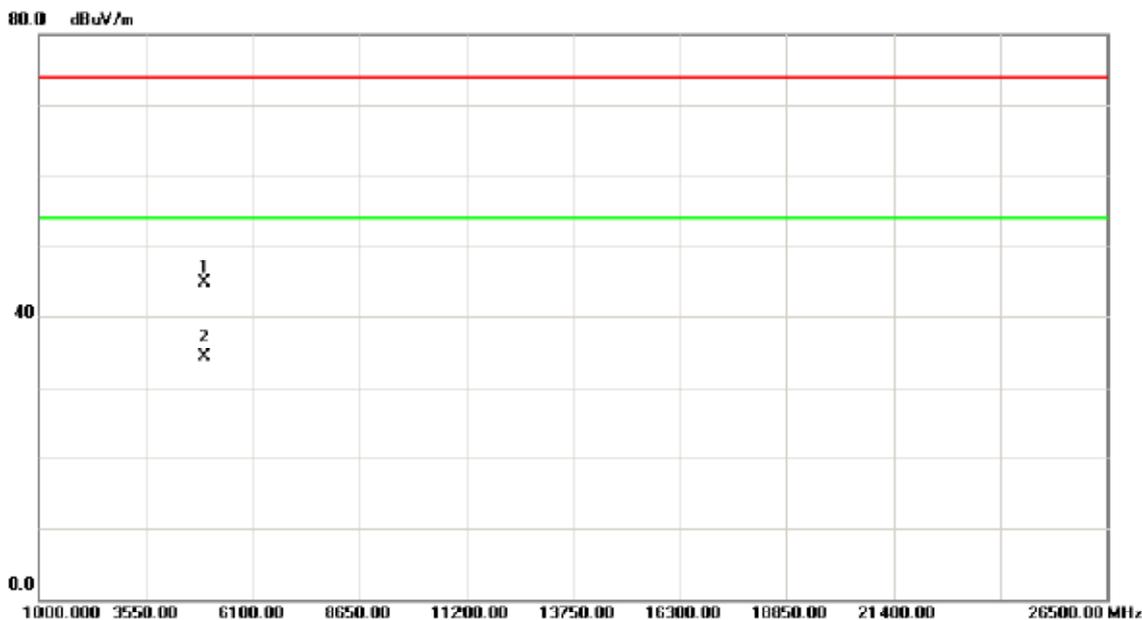


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	2461.130	51.04	34.31	85.35	54.00	31.35	AVG	Fundamental frequency, no limit
2	X	2461.620	59.51	34.31	93.02	74.00	19.02	peak	Fundamental frequency, no limit
3		2483.500	25.09	34.37	59.46	74.00	-14.54	peak	
4		2483.500	14.19	34.37	48.56	54.00	-5.44	AVG	



Orthogonal Axis :	X
Test Mode :	TX N-20M MODE 2462MHz

**Vertical**

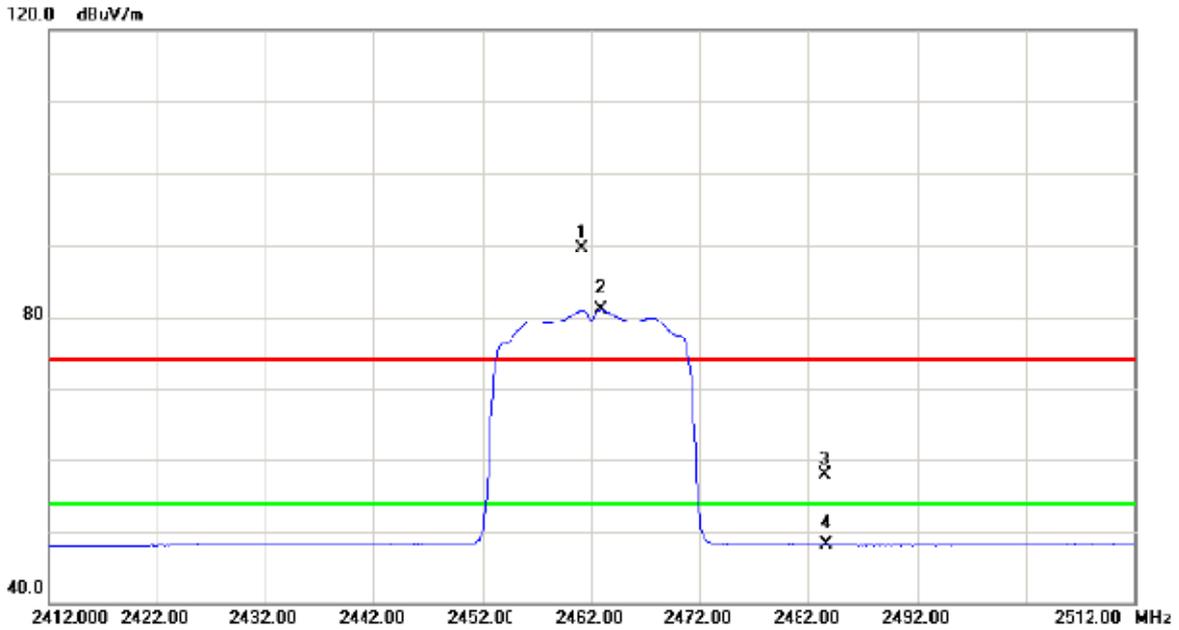


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		4924.320	37.92	6.72	44.64	74.00	-29.36	peak	
2	*	4924.320	27.32	6.72	34.04	54.00	-19.96	AVG	



Orthogonal Axis :	X
Test Mode :	TX N-20M MODE 2462MHz

**Horizontal**

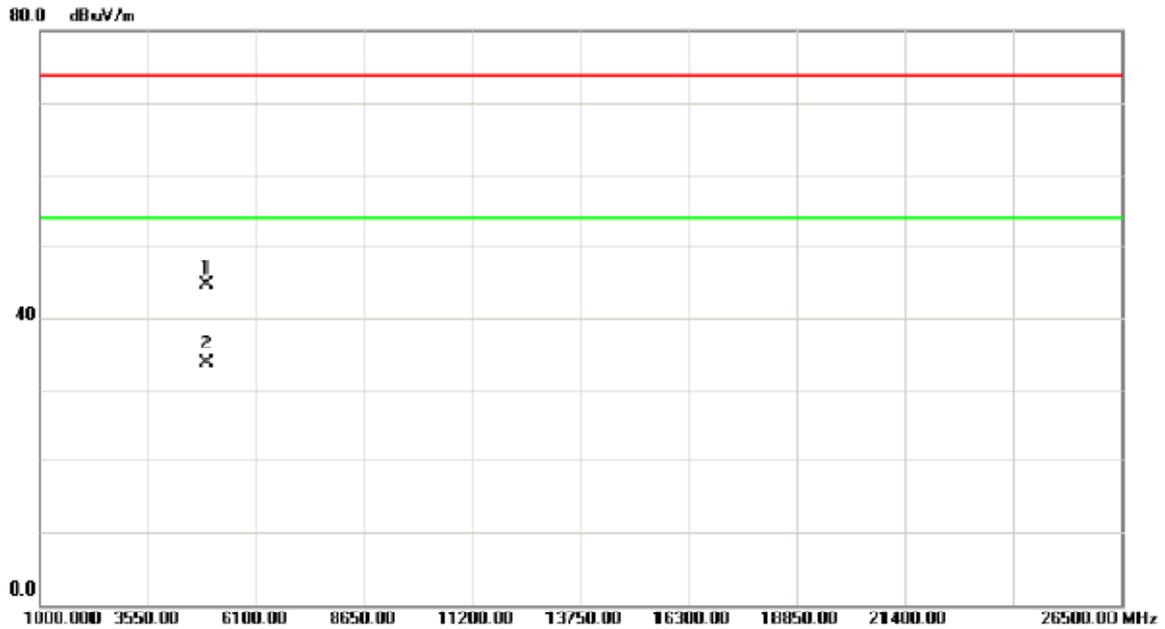


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1	X	2461.120	55.17	34.31	89.48	74.00	15.48	peak	Fundamental frequency, no limit
2	*	2462.750	46.70	34.31	81.01	54.00	27.01	AVG	Fundamental frequency, no limit
3		2483.500	23.61	34.37	57.98	74.00	-16.02	peak	
4		2483.500	13.94	34.37	48.31	54.00	-5.69	AVG	



Orthogonal Axis :	X
Test Mode :	TX N-20M MODE 2462MHz

**Horizontal**



No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	4924.000	37.98	6.72	44.70	74.00	-29.30	peak	
2 *	4924.000	26.86	6.72	33.58	54.00	-20.42	AVG	

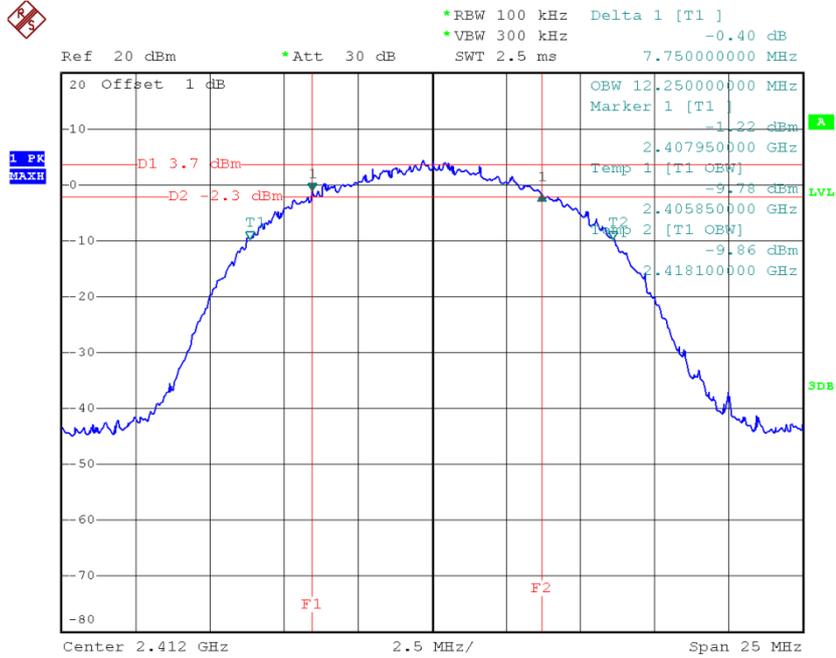


## **ATTACHMENT E - BANDWIDTH**



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

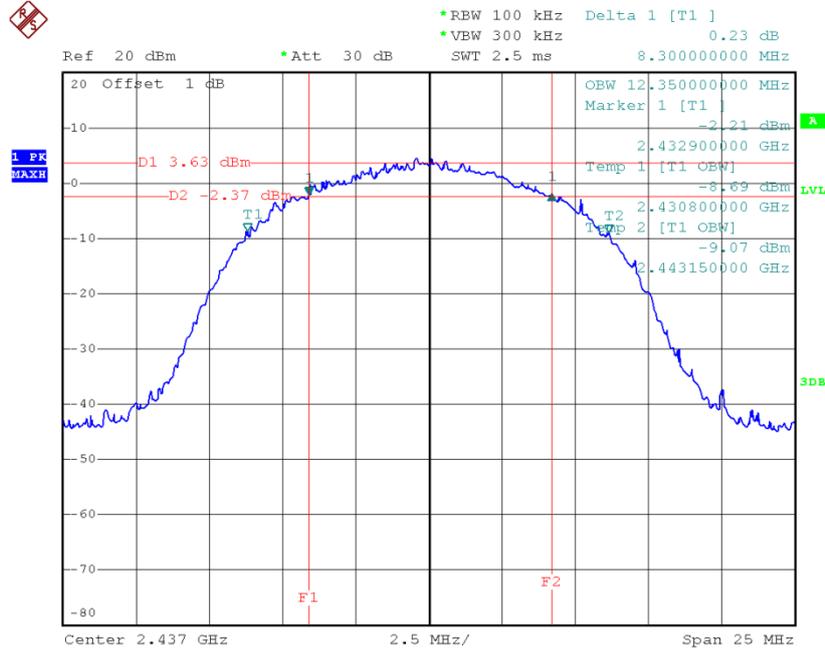
TX CH 01



Date: 30.MAR.2014 14:55:41

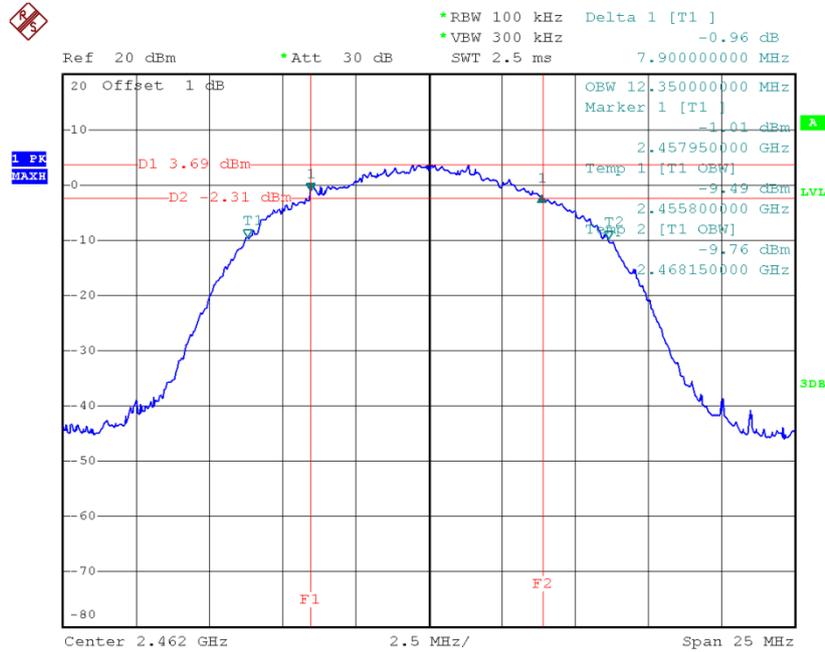


### TX CH 06



Date: 30.MAR.2014 15:04:02

### TX CH 11

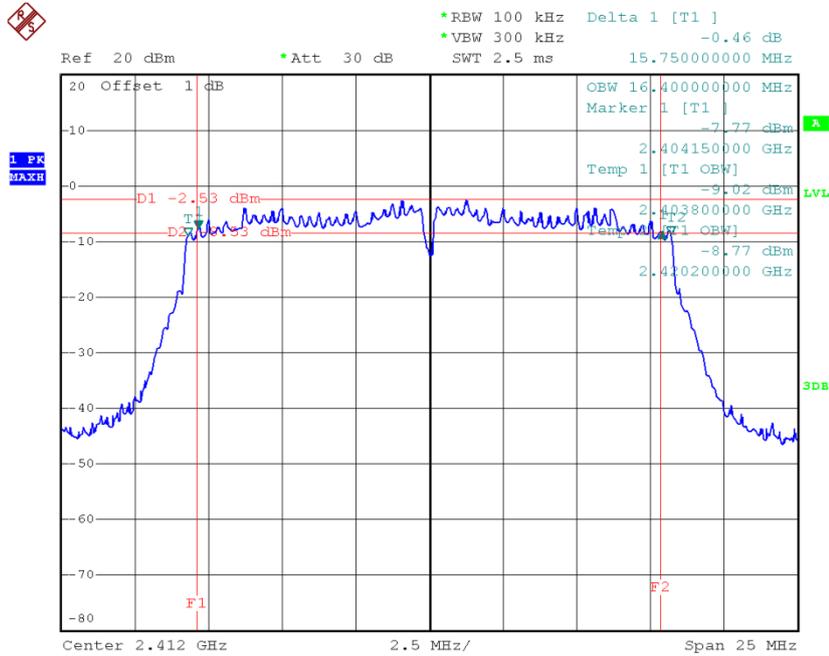


Date: 30.MAR.2014 15:09:03



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

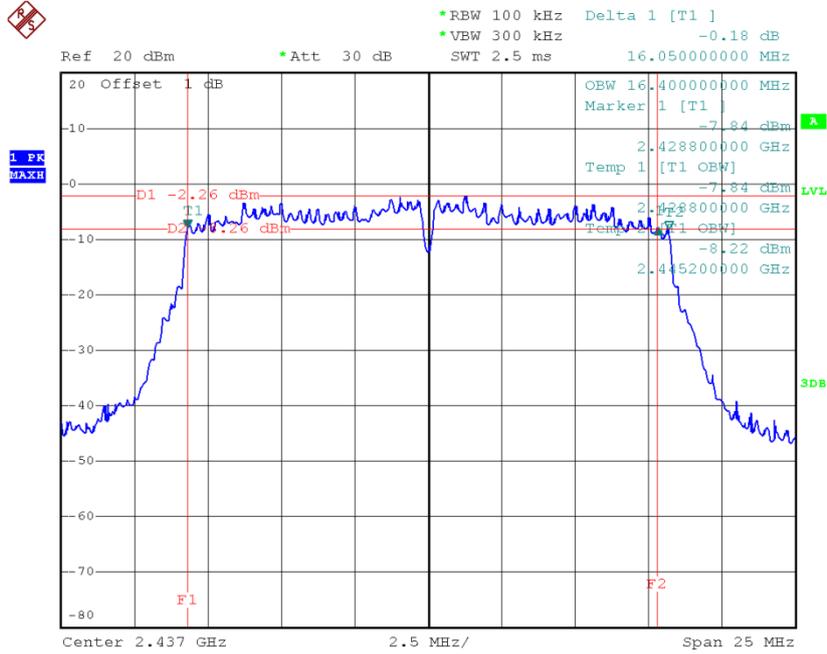
TX CH 01



Date: 30.MAR.2014 15:16:48

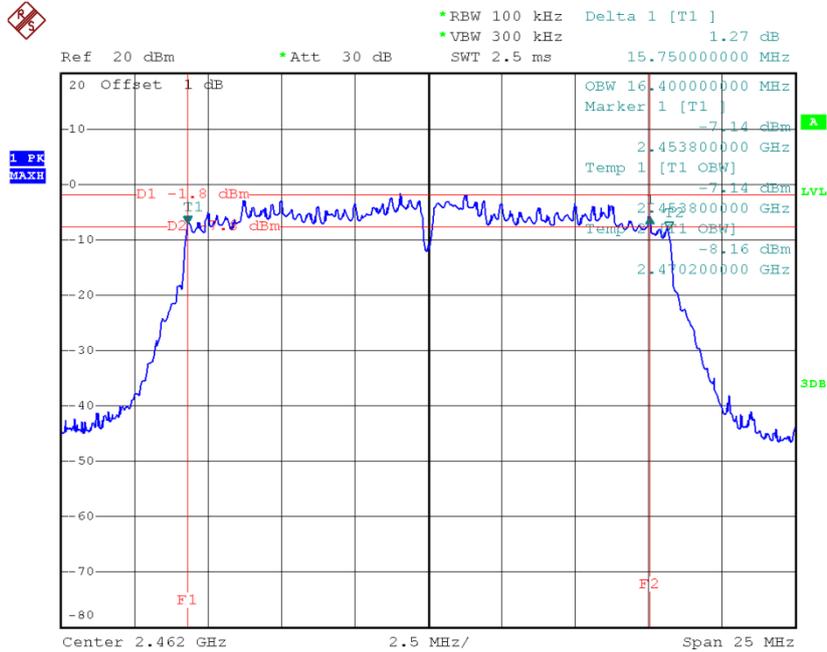


### TX CH 06



Date: 30.MAR.2014 15:21:30

### TX CH 11

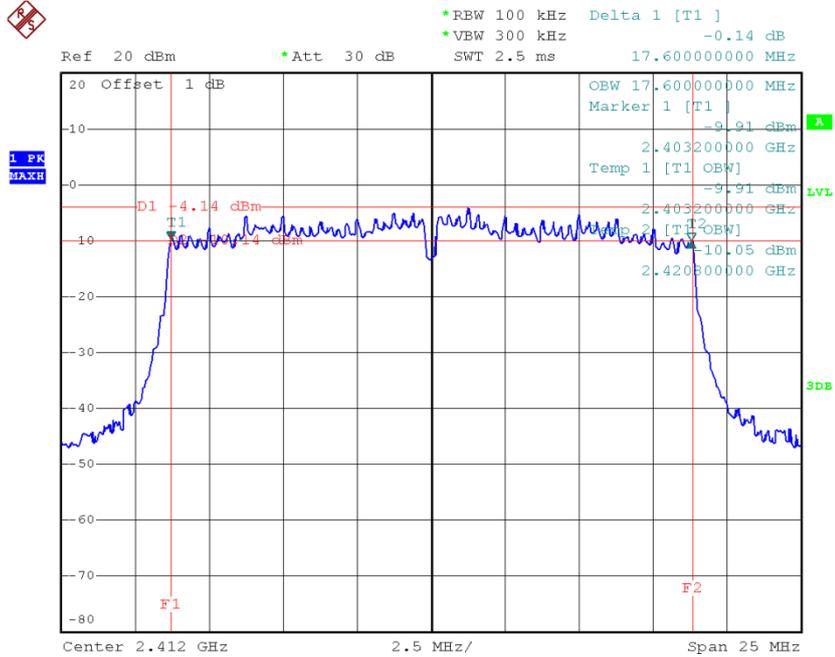


Date: 30.MAR.2014 15:25:03



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

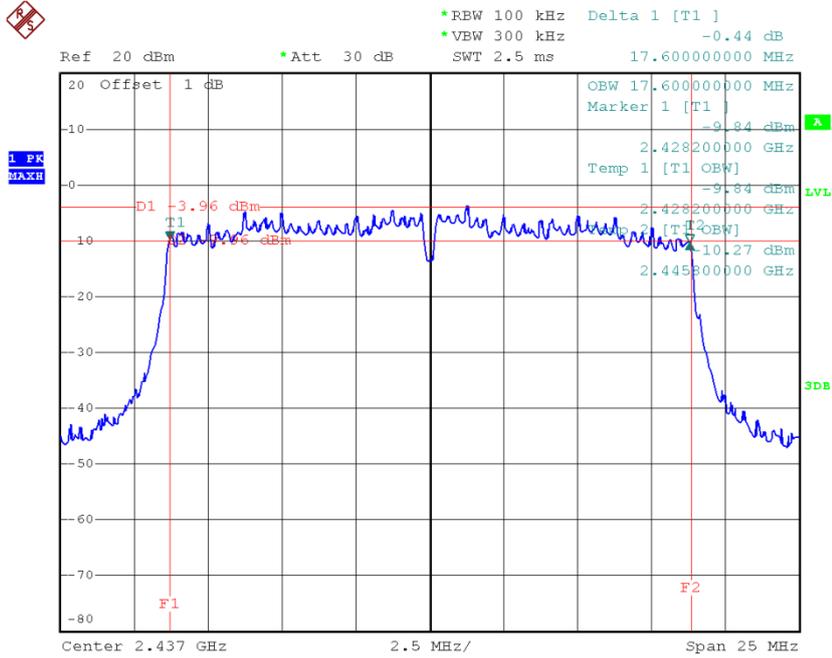
TX CH 01



Date: 30.MAR.2014 15:30:22

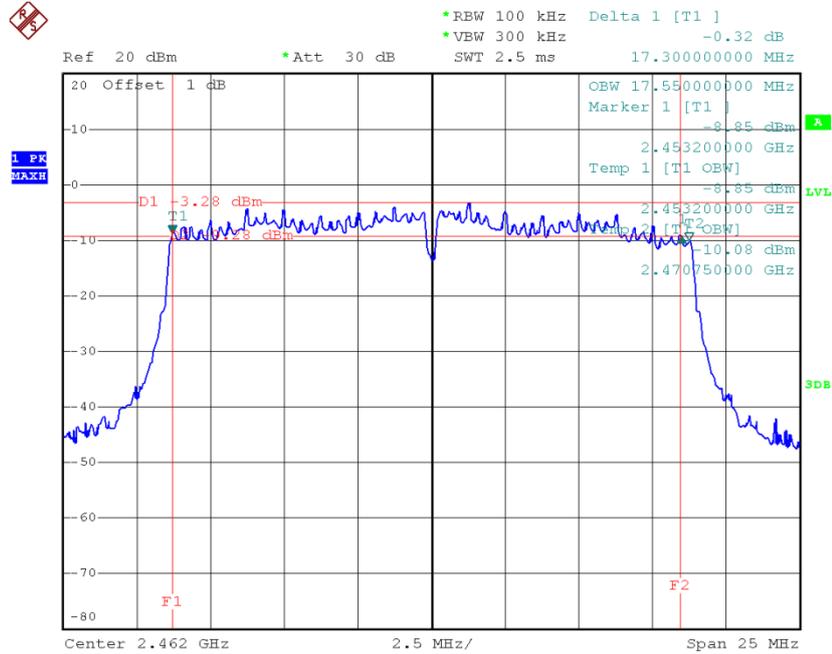


### TX CH 06



Date: 30.MAR.2014 15:35:15

### TX CH 11



Date: 30.MAR.2014 15:39:08



## **ATTACHMENT F - MAXIMUM OUTPUT POWER**



<b>Test Mode : TX B Mode</b>				
Test Channel	Frequency (MHz)	Output Power (dBm)	Limit (dBm)	Limit (Watt)
CH01	2412	13.96	30	1
CH06	2437	14.02	30	1
CH11	2462	13.99	30	1

<b>Test Mode : TX G Mode</b>				
Test Channel	Frequency (MHz)	Output Power (dBm)	Limit (dBm)	Limit (Watt)
CH01	2412	10.54	30	1
CH06	2437	10.69	30	1
CH11	2462	10.95	30	1

<b>Test Mode : TX N-20M Mode</b>				
Test Channel	Frequency (MHz)	Output Power (dBm)	Limit (dBm)	Limit (Watt)
CH01	2412	8.78	30	1
CH06	2437	8.95	30	1
CH11	2462	8.92	30	1



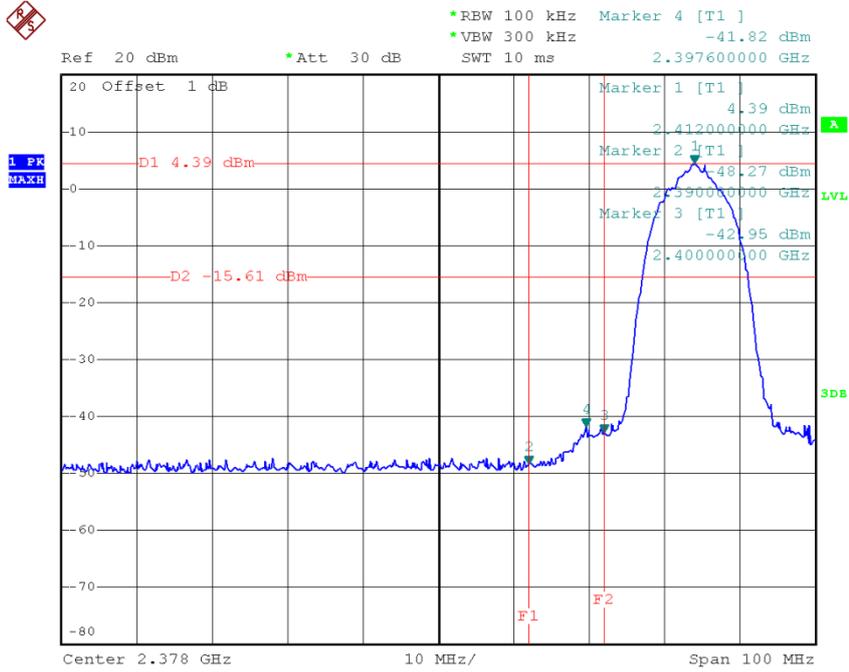
**ATTACHMENT G - ANTENNA CONDUCTED SPURIOUS  
EMISSION**



Test Mode :	TX B Mode
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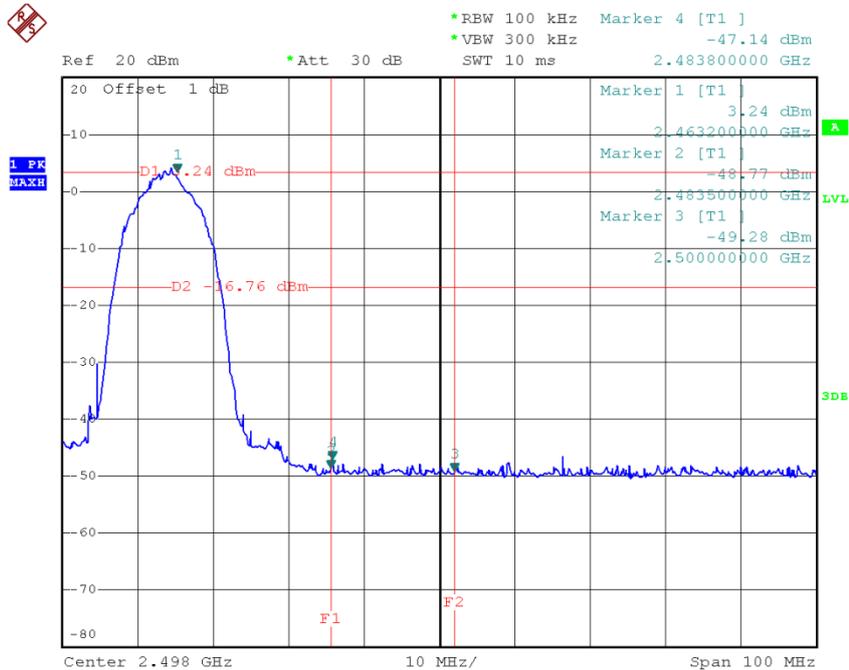


**TX B mode CH01**



Date: 30.MAR.2014 14:59:52

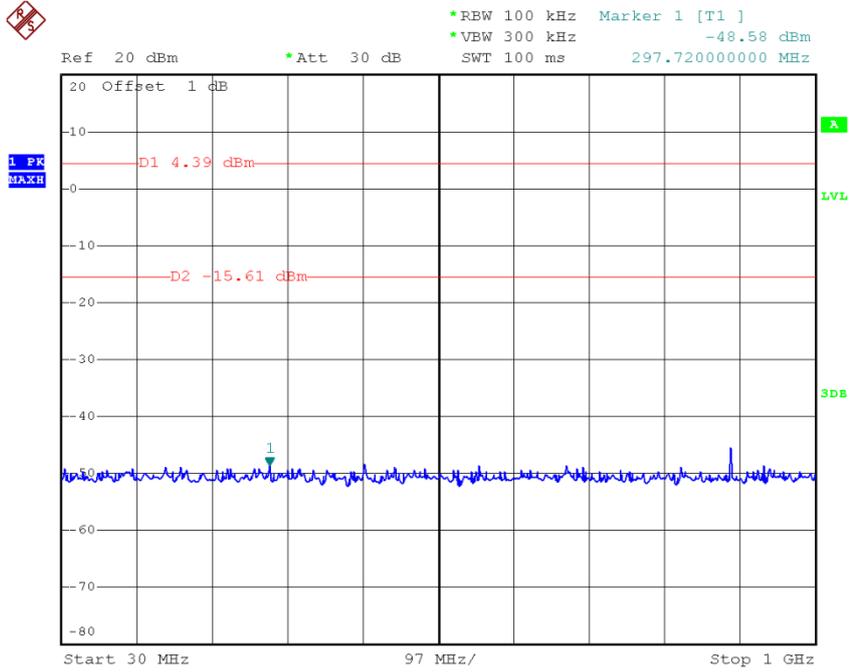
**TX B mode CH11**



Date: 30.MAR.2014 15:10:58

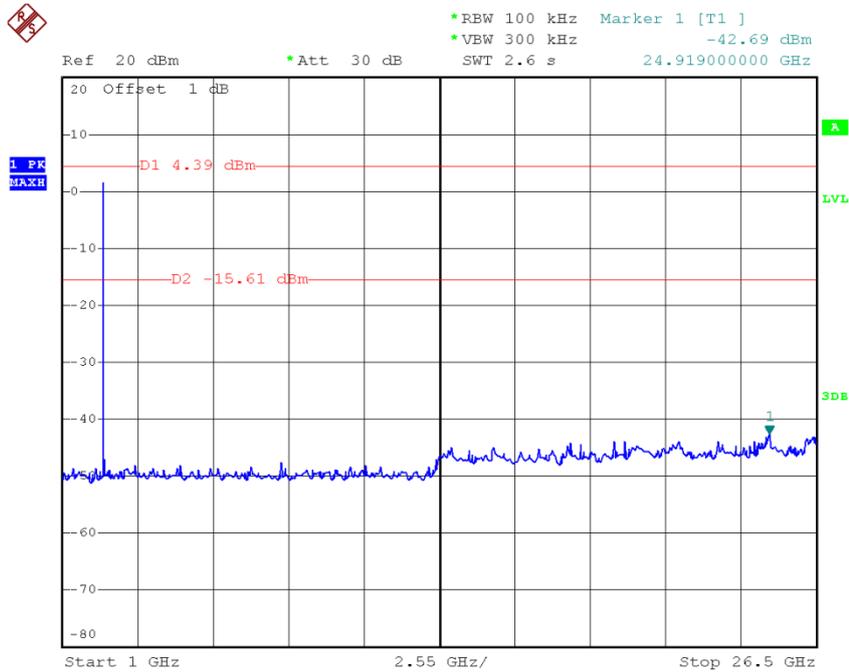


### TX B mode CH01 (30MHz to 1000MHz)



Date: 30.MAR.2014 15:00:19

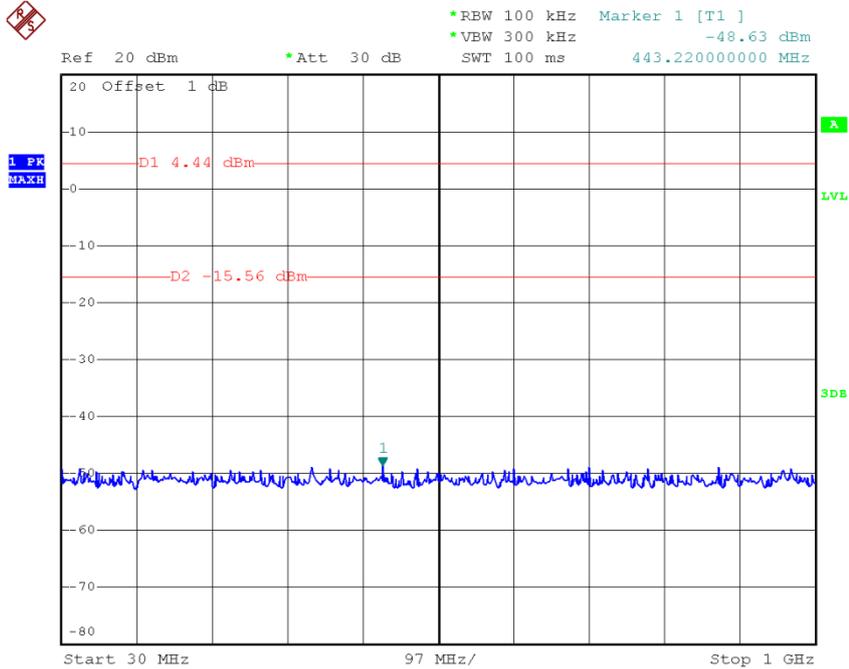
### TX B mode CH01 (1000MHz to 10<sup>th</sup> Harmonic)



Date: 30.MAR.2014 15:00:42

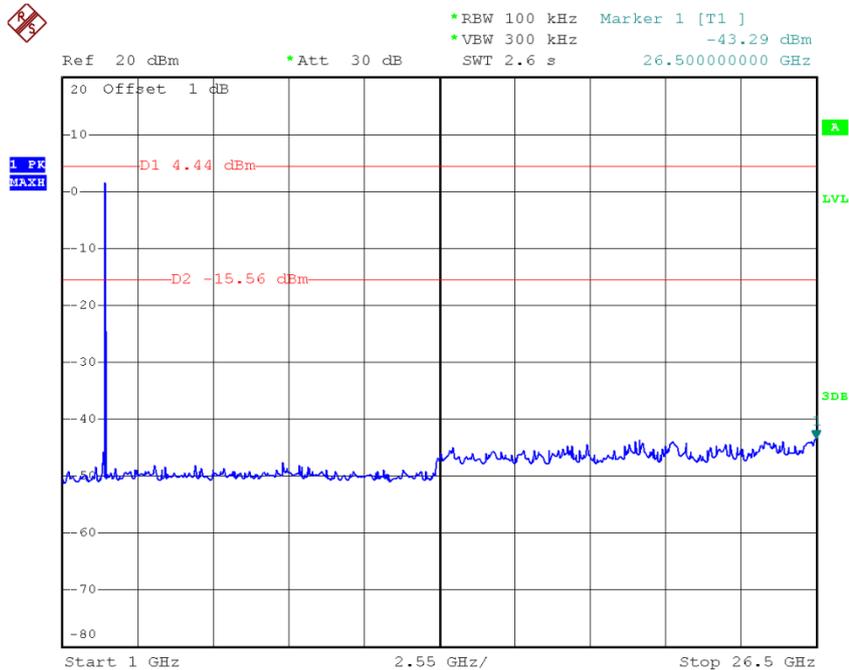


### TX B mode CH06 (30MHz to 1000MHz)



Date: 30.MAR.2014 15:04:54

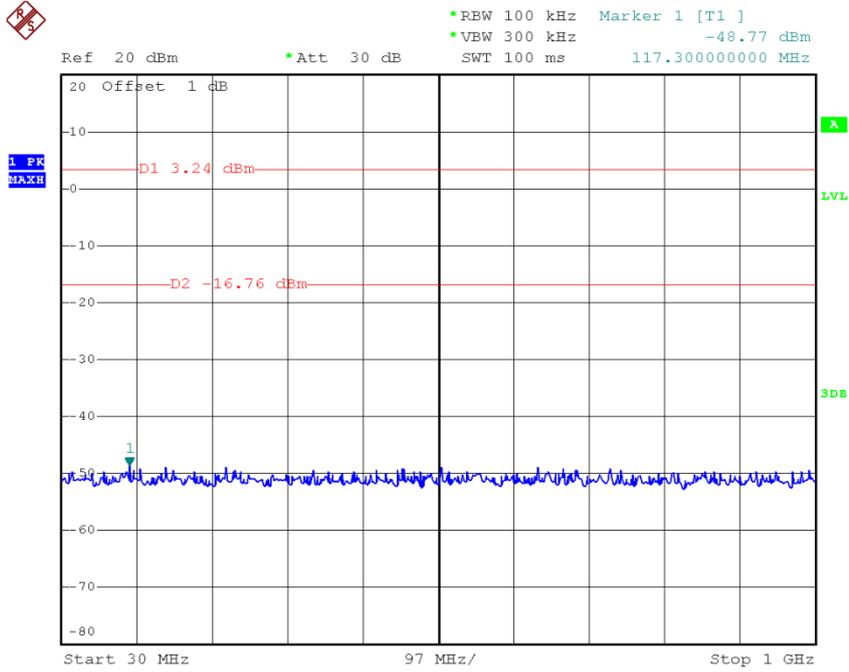
### TX B mode CH06 (1000MHz to 10<sup>th</sup> Harmonic)



Date: 30.MAR.2014 15:05:13

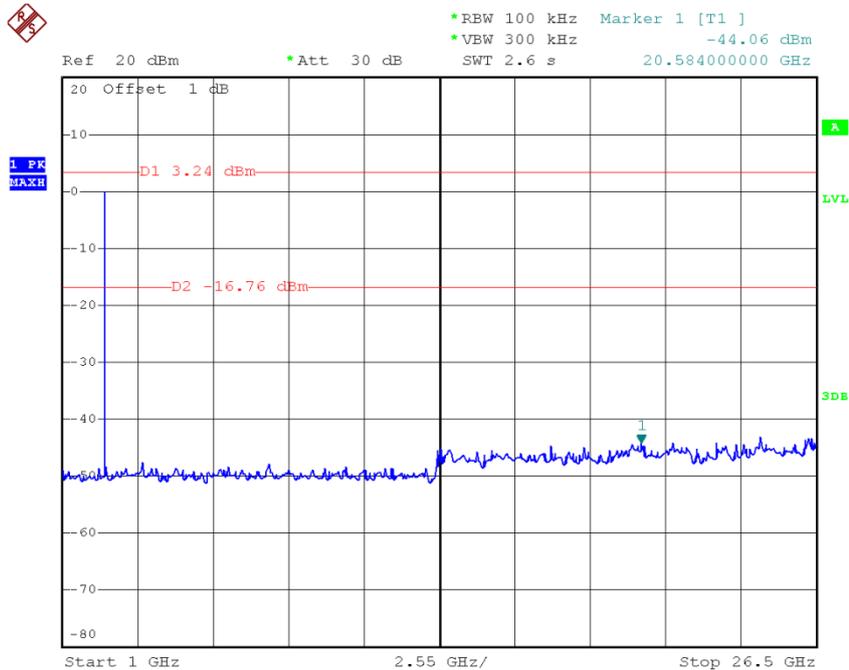


### TX B mode CH11 (30MHz to 1000MHz)



Date: 30.MAR.2014 15:11:26

### TX B mode CH11 (1000MHz to 10<sup>th</sup> Harmonic)



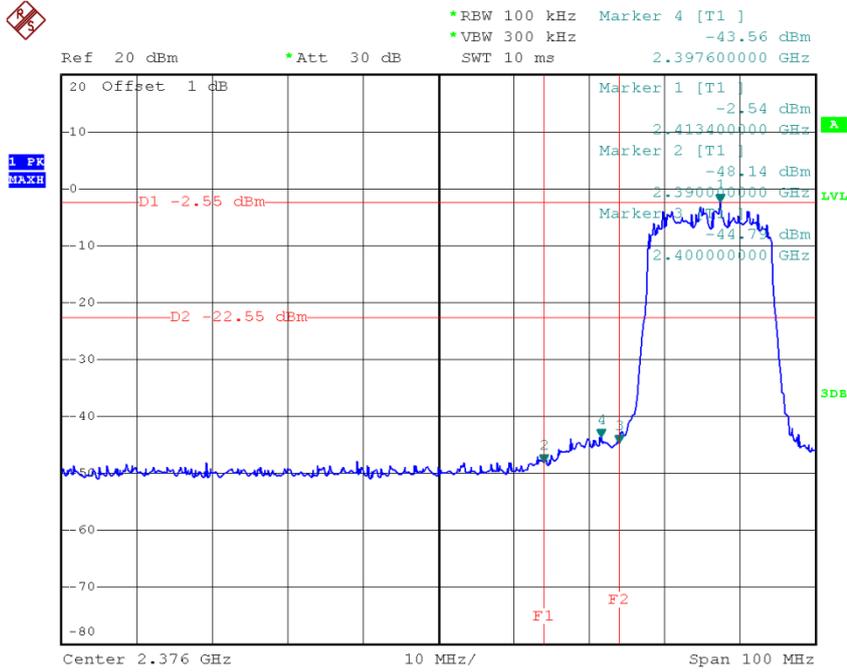
Date: 30.MAR.2014 15:11:44



Test Mode :	TX G Mode
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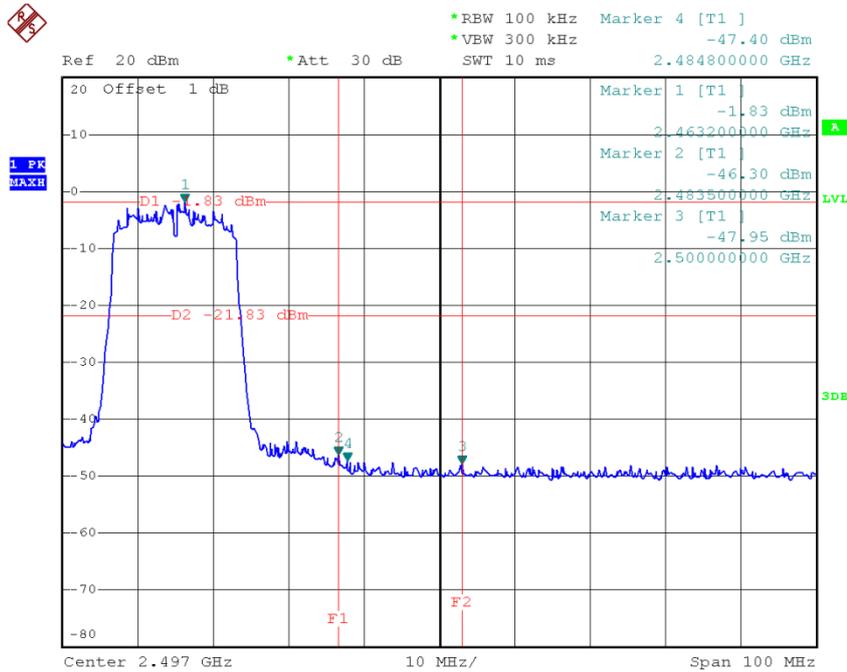


TX G mode CH01



Date: 30.MAR.2014 15:18:12

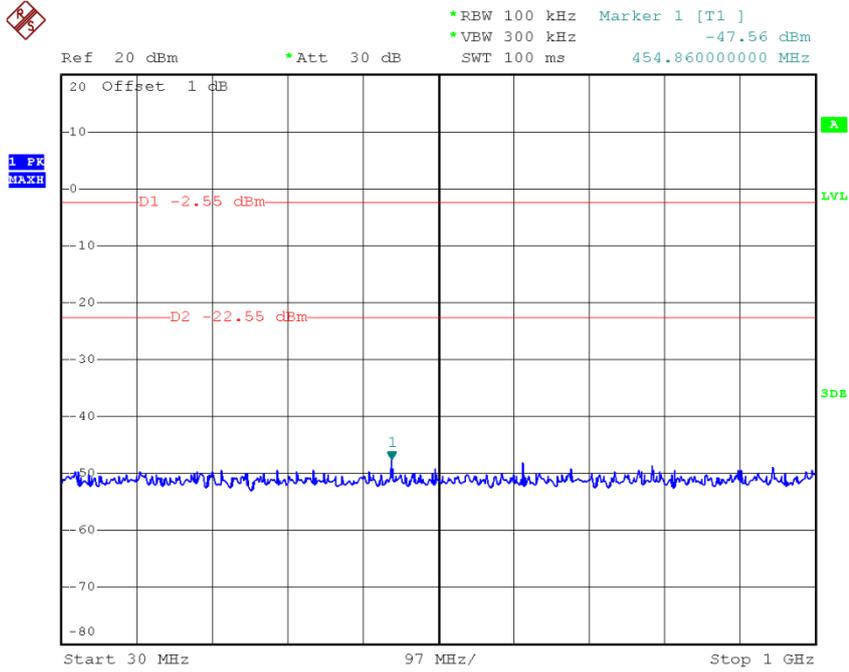
TX G mode CH11



Date: 30.MAR.2014 15:26:28

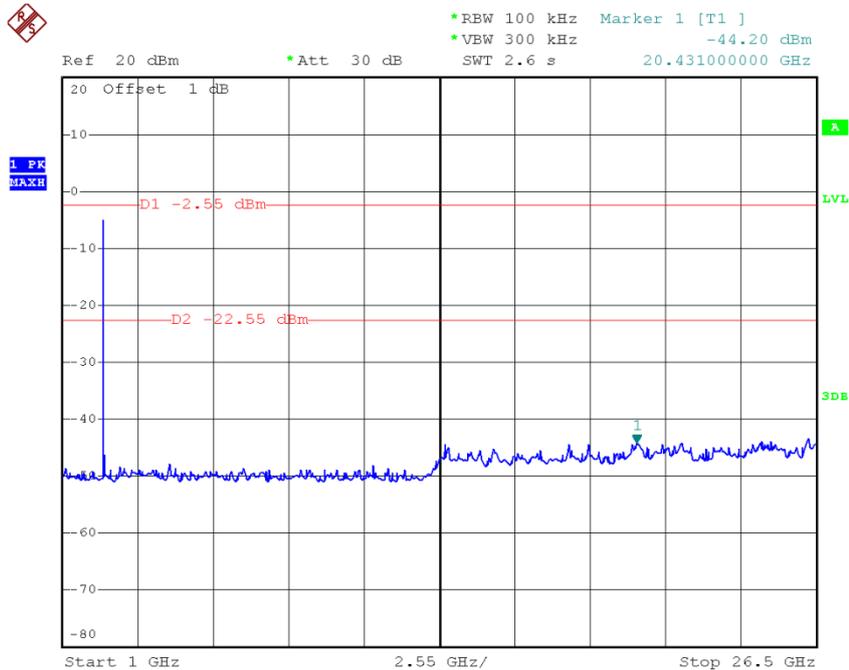


### TX G mode CH01 (30MHz to 1000MHz)



Date: 30.MAR.2014 15:18:32

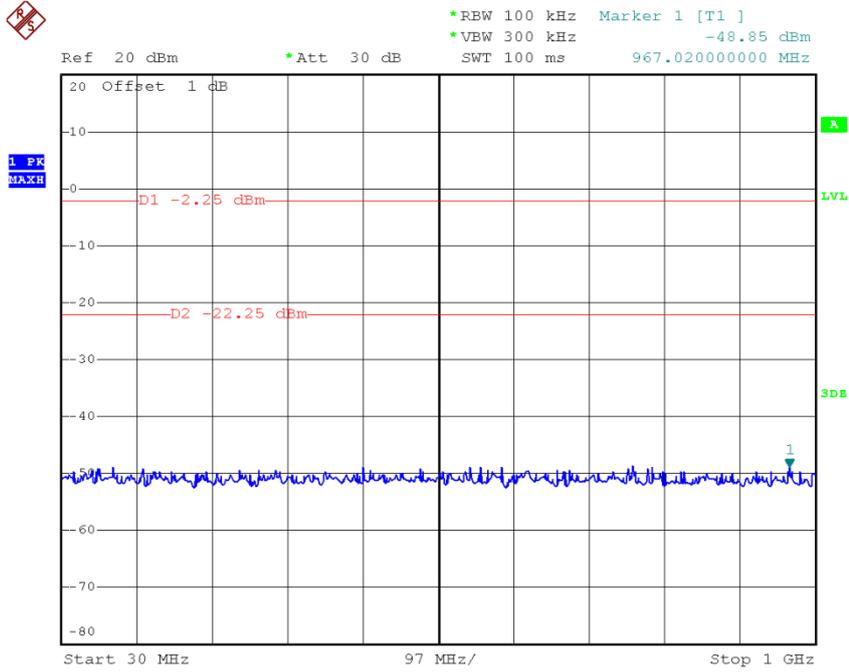
### TX G mode CH01 (1000MHz to 10<sup>th</sup> Harmonic)



Date: 30.MAR.2014 15:18:48

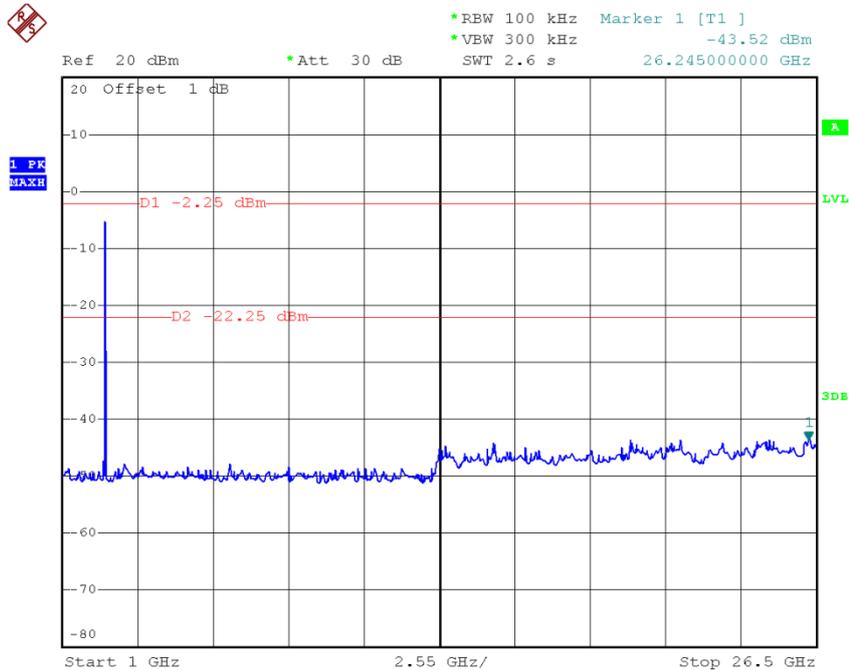


### TX G mode CH06 (30MHz to 1000MHz)



Date: 30.MAR.2014 15:22:23

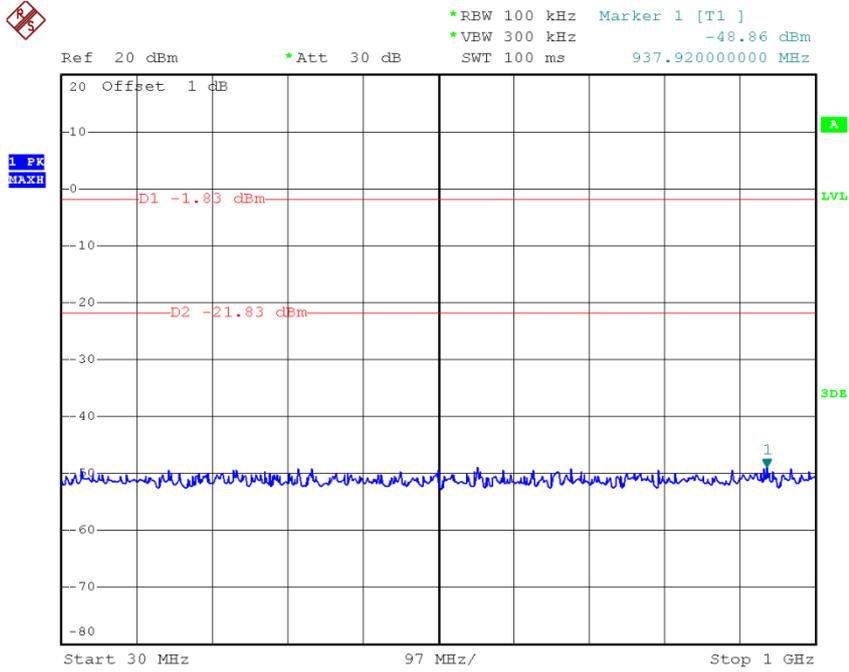
### TX G mode CH06 (1000MHz to 10<sup>th</sup> Harmonic)



Date: 30.MAR.2014 15:22:40

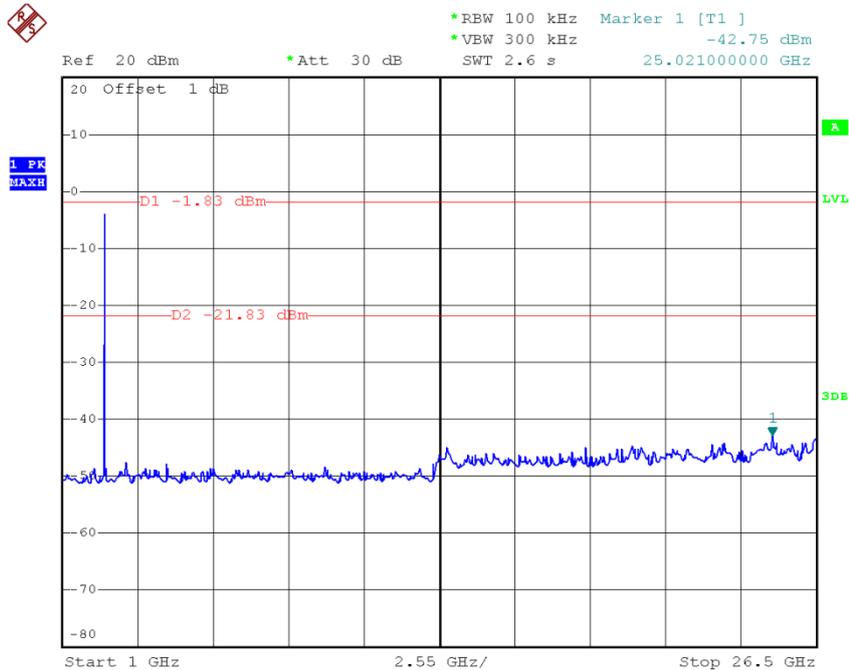


### TX G mode CH11 (30MHz to 1000MHz)



Date: 30.MAR.2014 15:26:48

### TX G mode CH11 (1000MHz to 10<sup>th</sup> Harmonic)



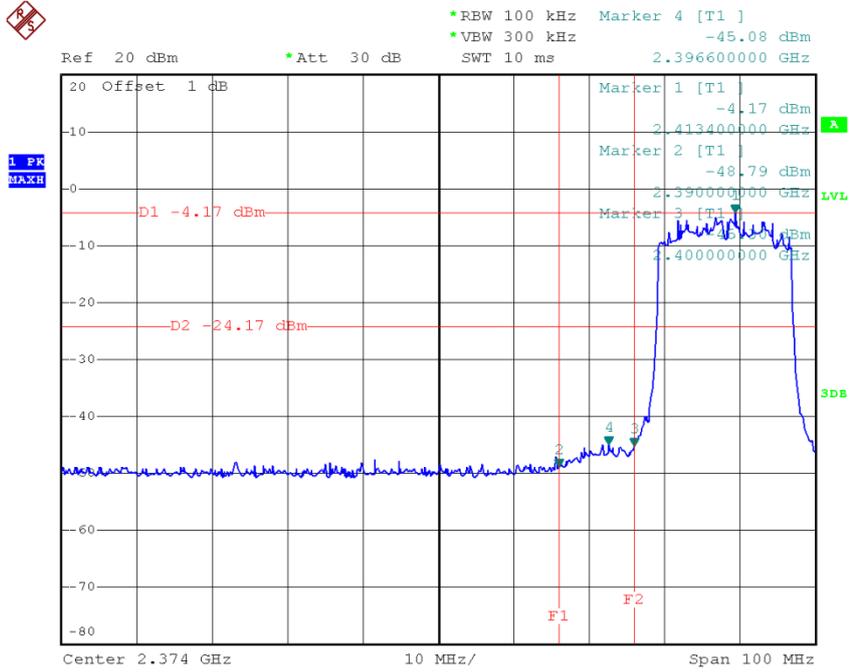
Date: 30.MAR.2014 15:27:03



<b>Test Mode :</b>	<b>TX N-20M Mode</b>
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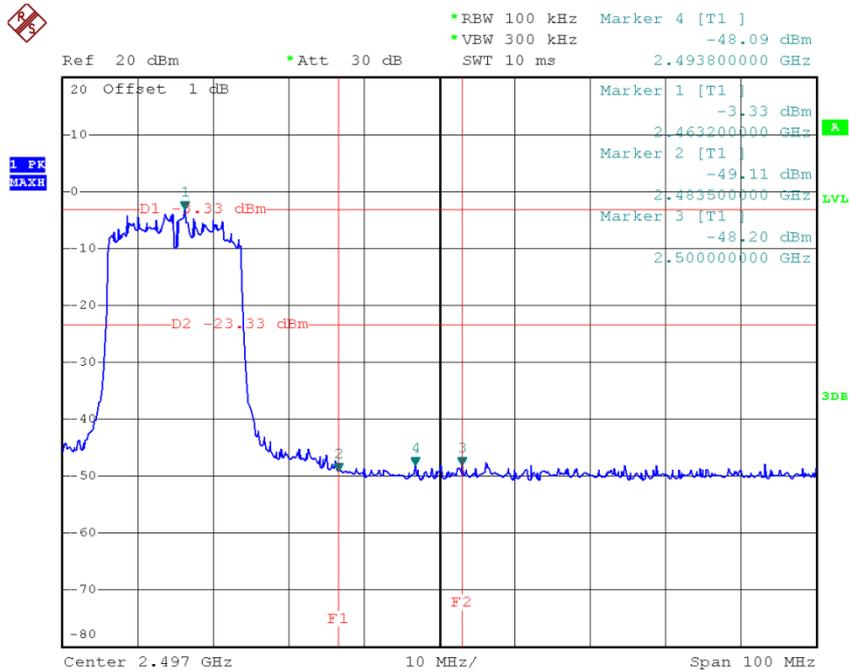


### TX HT20 mode CH01



Date: 30.MAR.2014 15:31:40

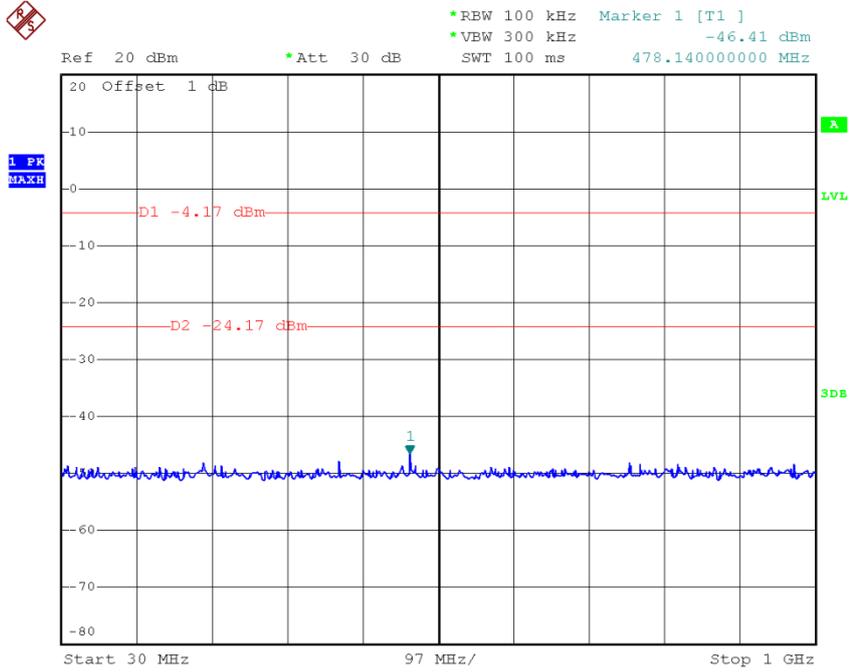
### TX HT20 mode CH11



Date: 30.MAR.2014 15:40:39

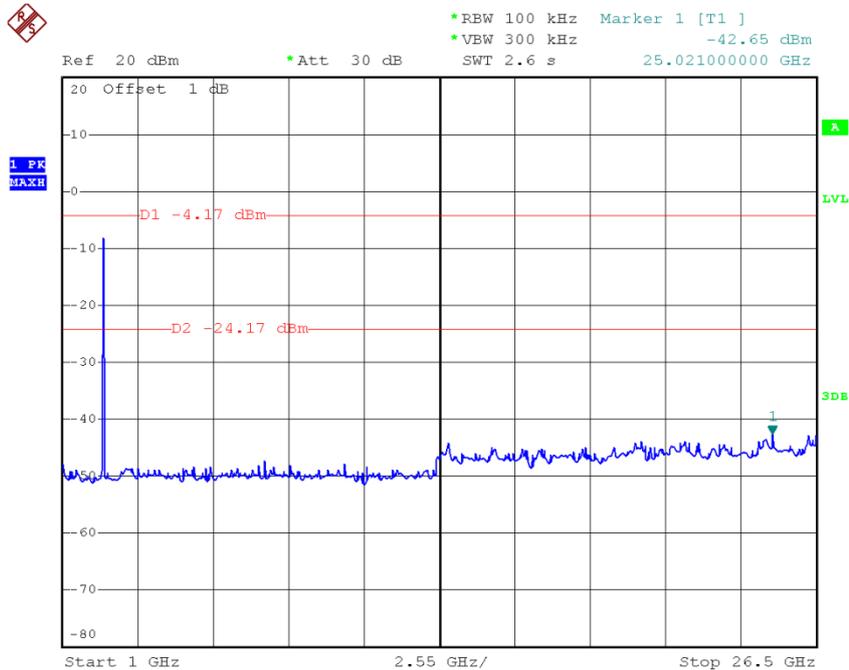


### TX HT20 mode CH01 (30MHz to 1000MHz)



Date: 30.MAR.2014 15:32:16

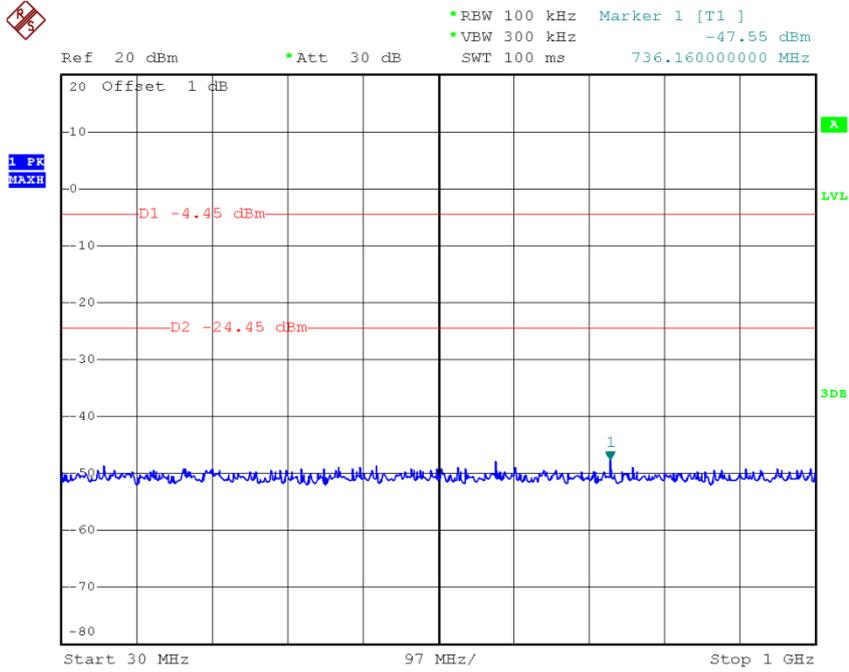
### TX HT20 mode CH01 (1000MHz to 10<sup>th</sup> Harmonic)



Date: 30.MAR.2014 15:32:37

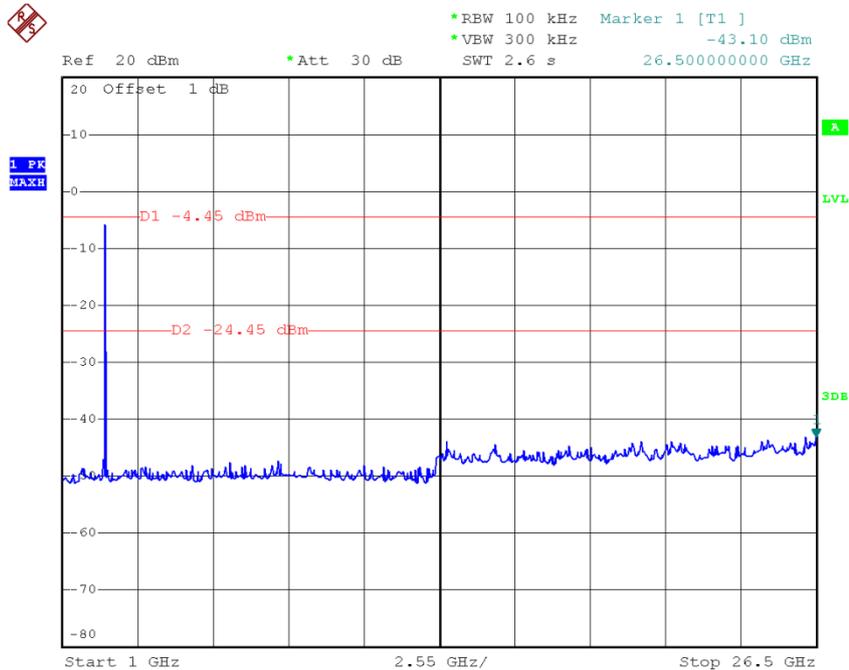


### TX HT20 mode CH06 (30MHz to 1000MHz)



Date: 30.MAR.2014 15:35:53

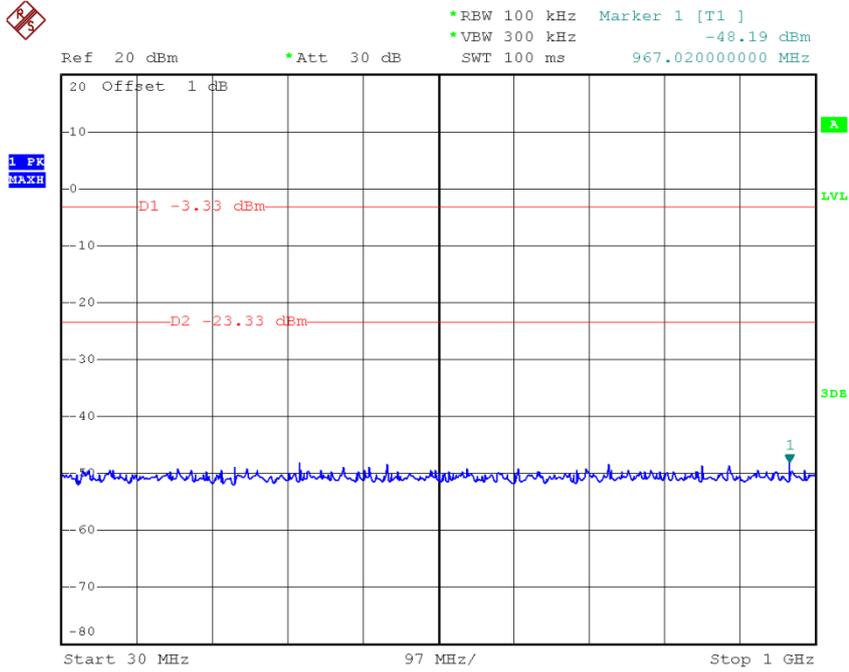
### TX HT20 mode CH06 (1000MHz to 10<sup>th</sup> Harmonic)



Date: 30.MAR.2014 15:36:12

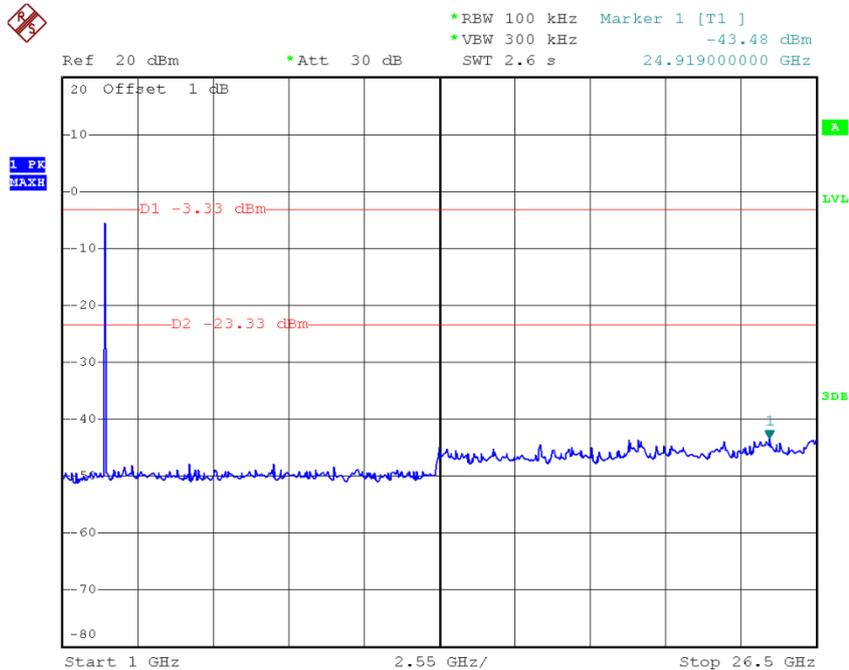


### TX HT20 mode CH11 (30MHz to 1000MHz)



Date: 30.MAR.2014 15:40:57

### TX HT20 mode CH11 (1000MHz to 10<sup>th</sup> Harmonic)



Date: 30.MAR.2014 15:41:18

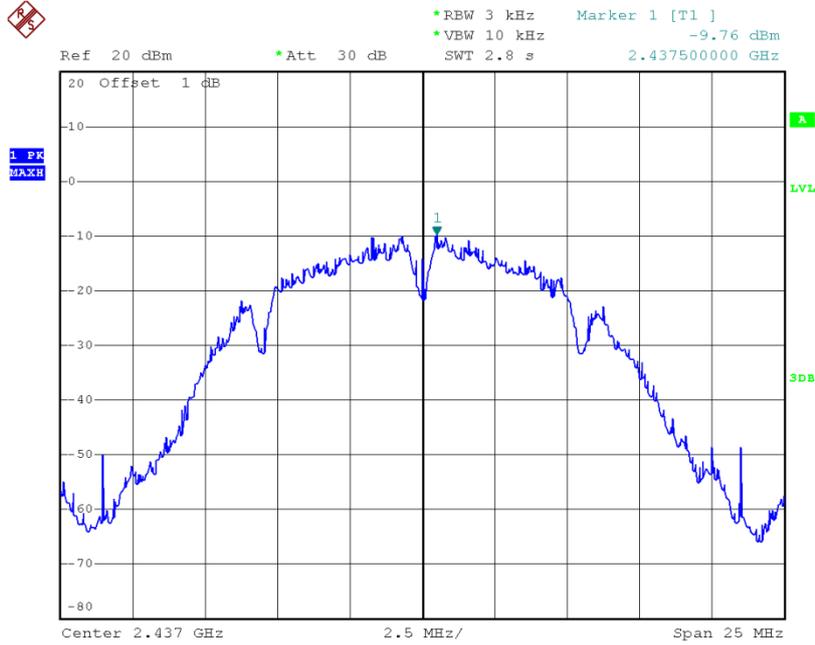


## ATTACHMENT H - POWER SPECTRAL DENSITY



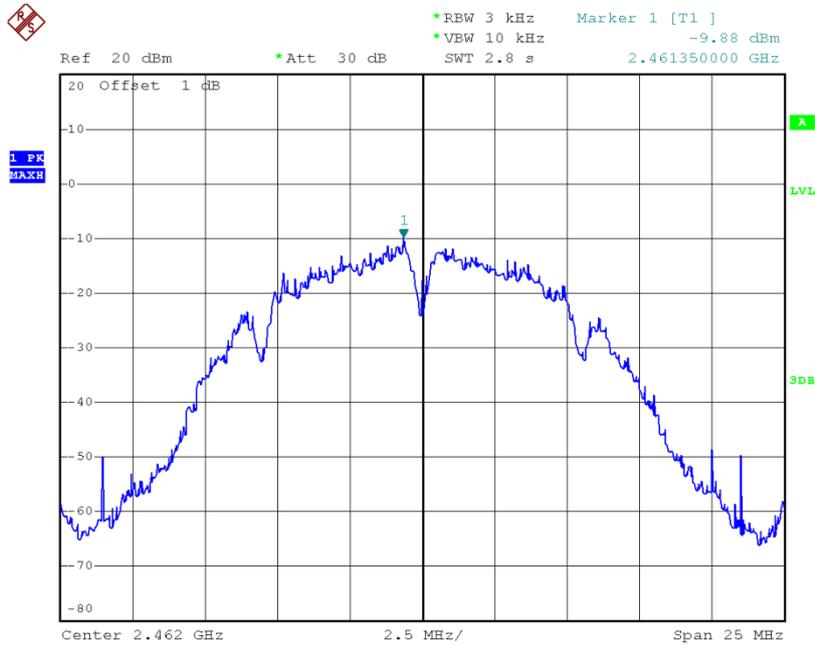


### TX CH06



Date: 28.MAY.2014 15:33:09

### TX CH11

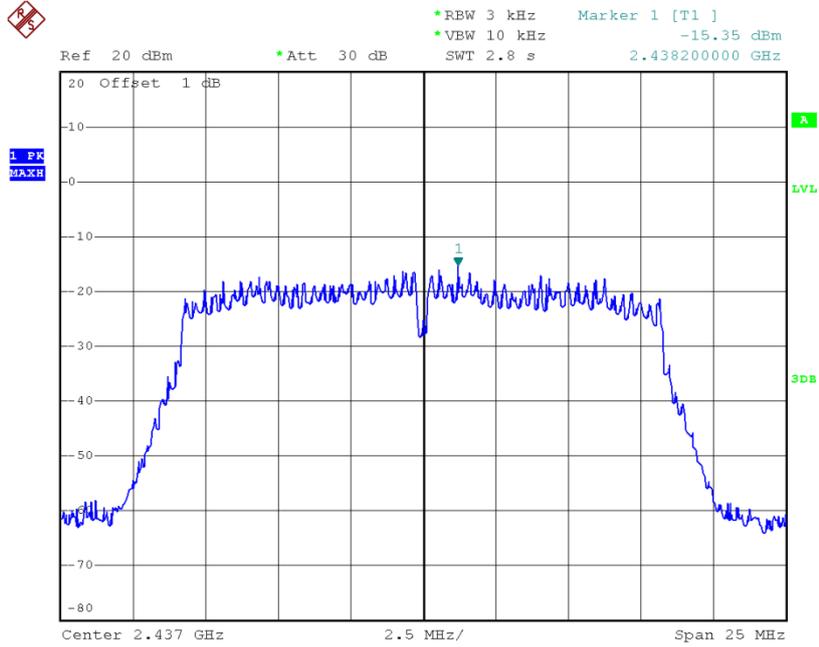


Date: 28.MAY.2014 15:34:22



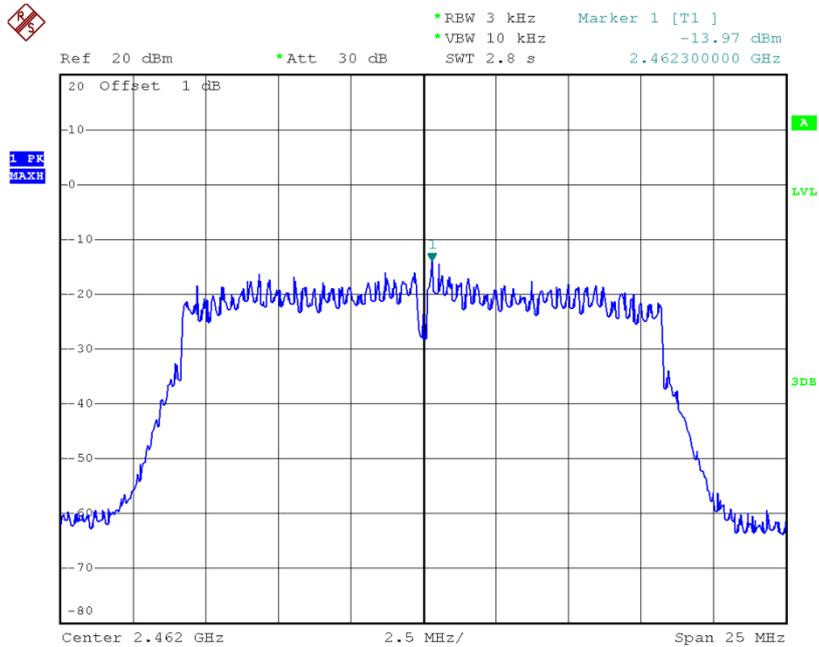


### TX CH06



Date: 28.MAY.2014 15:37:44

### TX CH11

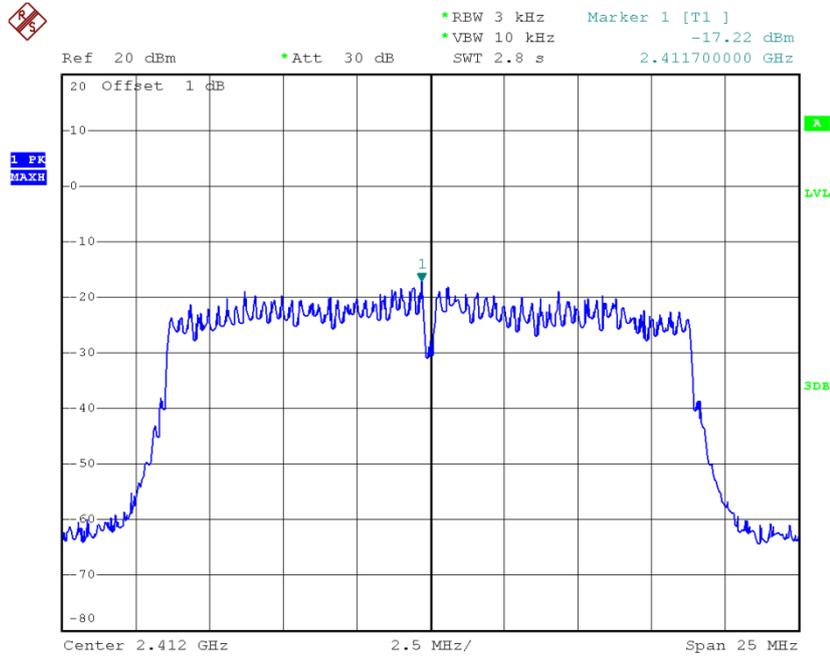


Date: 28.MAY.2014 15:39:29



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

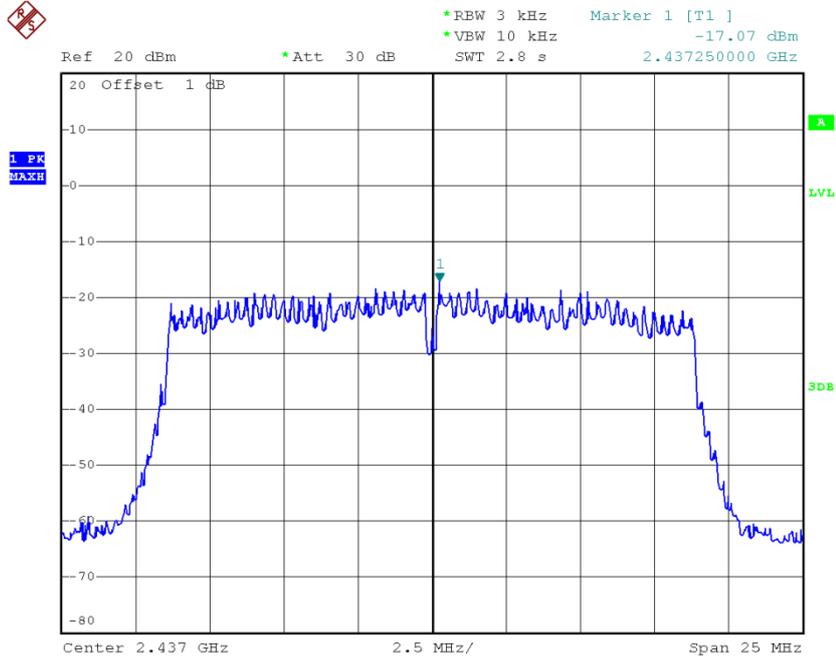
TX CH01



Date: 28.MAY.2014 15:41:27

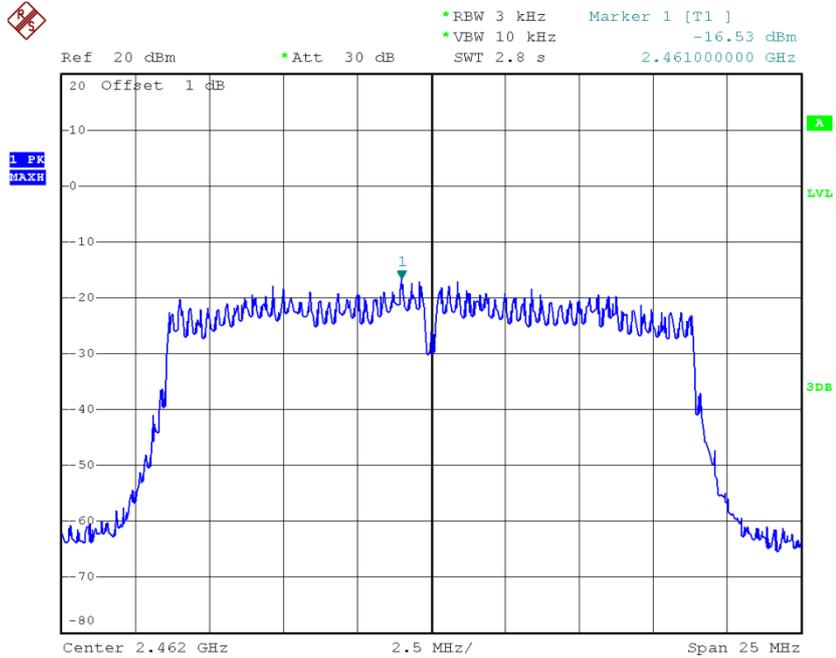


### TX CH06



Date: 28.MAY.2014 15:43:58

### TX CH11



Date: 28.MAY.2014 15:42:40