

# FCC Radio Test Report

## FCC ID: 2AEUPBHARG031

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

**Project No.** : 1512192  
**Equipment** : Ring  
**Model Name** : Video Doorbell  
**Applicant** : Bot Home Automation, Inc.  
**Address** : 1523 26th Street Santa Monica California United States 90404

**Date of Receipt** : Dec. 24, 2015  
**Date of Test** : Dec. 24, 2015 ~ Jan. 05, 2016  
**Issued Date** : Jan. 06, 2016  
**Tested by** : BTL Inc.

**Testing Engineer** : Rush Kao  
(Rush Kao)

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### REPORT ISSUED HISTORY

Issued No.	Description	Issued Date
BTL-FCCP-1-1512192	Original Issue.	Jan. 06, 2016

## 1. CERTIFICATION

Equipment : Ring  
Brand Name : N/A  
Model Name : Video Doorbell  
Applicant : Bot Home Automation, Inc.  
Manufacturer : GOLDTEK TECHNOLOGY CO., Ltd.  
Address : 3F, No.10 Jiankang Rd., Zhonghe Dist., New Taipei City 23586, Taiwan  
Factory : GOLDTEK TECHNOLOGY CO., Ltd.  
Address : 3F, No.10 Jiankang Rd., Zhonghe Dist., New Taipei City 23586, Taiwan  
Date of Test : Dec. 24, 2015 ~ Jan. 05, 2016  
Test Sample : Engineering Sample  
Standard(s) : FCC Part15, Subpart C (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-1-1512192) 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			
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:

#### Conducted emission Test:

**C05:** (VCCI RN: C-4742; FCC RN:965108; FCC DN:TW1082)

No. 68-1, Ln. 169, Sec.2, Datong Rd., Xizhi Dist., New Taipei City 221, Taiwan

#### Radiated emission Test (Below 1 GHz):

**CB08:** (FCC RN: 614388; FCC DN: TW1054; IC Assigned Code: 4428C-1)

1F., No. 61, Ln. 77, Sing-ai Rd., Neihu Dist., Taipei City 114, Taiwan (R.O.C.)

#### Radiated emission Test (Above 1 GHz):

**CB08:** (VCCI RN: G-91; FCC RN: 614388; FCC DN: TW1054; IC Assigned Code: 4428C-1)

1F., No. 61, Ln. 77, Sing-ai Rd., Neihu Dist., Taipei City 114, Taiwan (R.O.C.)

## 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  $U_{\text{CISPR}}$  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 emission test:

Test Site	Method	Measurement Frequency Range	U, (dB)
C05	CISPR	150 kHz~30MHz	2.04

### B. Radiated emission test:

Test Site	Method	Measurement Frequency Range	U,(dB)
CB08 (3m)	CISPR	9kHz ~ 150kHz	4.00
		150kHz ~ 30MHz	4.00

Test Site	Method	Measurement Frequency Range	Ant. H / V	U,(dB)
CB08 (3m)	CISPR	30MHz ~ 200MHz	V	3.06
		30MHz ~ 200MHz	H	2.58
		200MHz ~ 1,000MHz	V	3.50
		200MHz ~ 1,000MHz	H	3.10

Test Site	Method	Measurement Frequency Range	Ant. H / V	U,(dB)
CB08 (3m)	CISPR	1GHz ~ 6GHz	V	4.14
		1GHz ~ 6GHz	H	4.14
		6GHz ~ 18GHz	V	5.34
		6GHz ~ 18GHz	H	5.34

Our calculated Measurement Instrumentation Uncertainty is shown in the tables above. These are our  $U_{\text{lab}}$  values in CISPR 16-4-2 terminology.

Since Table 1 of CISPR 16-4-2 has values of measurement instrumentation uncertainty, called  $U_{\text{CISPR}}$ , as follows:

Conducted Disturbance (mains port) – 150 kHz – 30 MHz : 3.6 dB

Radiated Disturbance (electric field strength on an open area test site or alternative test site) – 30 MHz – 1000 MHz : 5.2 dB

It can be seen that our  $U_{\text{lab}}$  values are smaller than  $U_{\text{CISPR}}$ .

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	Ring	
Brand Name	N/A	
Model Name	Video Doorbell	
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 65.0 Mbps
	Output Power (Max.)	802.11b: 15.85dBm 802.11g: 18.41dBm 802.11n(20MHz): 17.82dBm
Power Source	#1 Supplied from USB port. #2 Supplied from Battery. Model:B15169	
Power Rating	#1 DC 5V #2 3.75V 5000mAh 18.75Wh	

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)							
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	Goldtek	N/A	PCB	N/A	3.46
2	Goldtek	N/A	Chip	N/A	0.84

**Only "one" antenna is selected for use at any one time, through the on-board Transmit-Receive / Diversity RF switch.**

### 3.2 DESCRIPTION OF TEST MODES

To investigate the maximum EMI emission characteristics generated from EUT, the test system was pre-scanning tested based on the consideration of following EUT operation mode or test configuration mode which possibly 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:

For Conducted Test	
Final Test Mode	Description
Mode 4	TX Mode

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

Note:

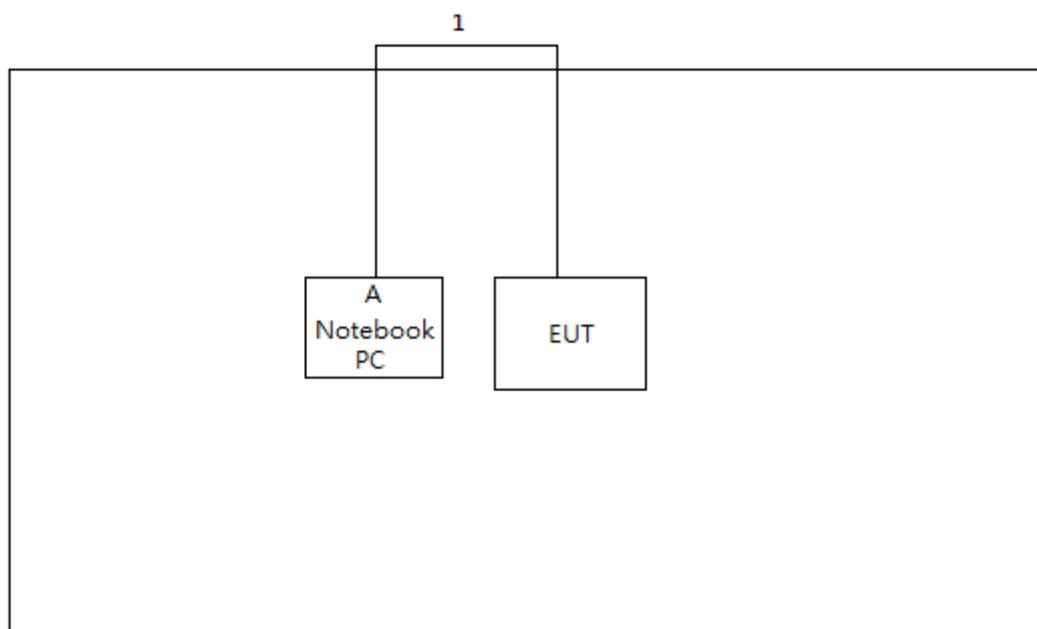
- (1) The measurements are performed at the high, middle, low available channels.
- (2) 802.11b mode: DBPSK (1Mbps)  
802.11g mode: OFDM (6Mbps)  
802.11n HT20 mode : BPSK (6.5Mbps)  
For radiated emission tests, the highest output powers were set for final test.
- (3) For radiated below 1G test, the 802.11b is found to be the worst case and recorded.
- (4) The EUT was programmed to be in continuously transmitting mode and the transmit duty cycle is not less than 98%.
- (5) Both PCB & Chip antennas are evaluated for Radiated while the PCB antenna is evaluated for conducted.

### 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	CC3100/CC3200 Radio Tool v1.1.5686.29375		
Frequency (MHz)	2412	2437	2462
802.11b	0	0	0
802.11g	0	0	0
802.11n (20MHz)	1	1	1

### 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	Series No.
A	Notebook PC	DELL	PP18L	DOC	PF329 A01

Item	Shielded Type	Ferrite Core	Length	Note
1	NO	NO	1M	USB Cable

## 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 (dB $\mu$ V)	
	Quasi-peak	Average
0.15 -0.5	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

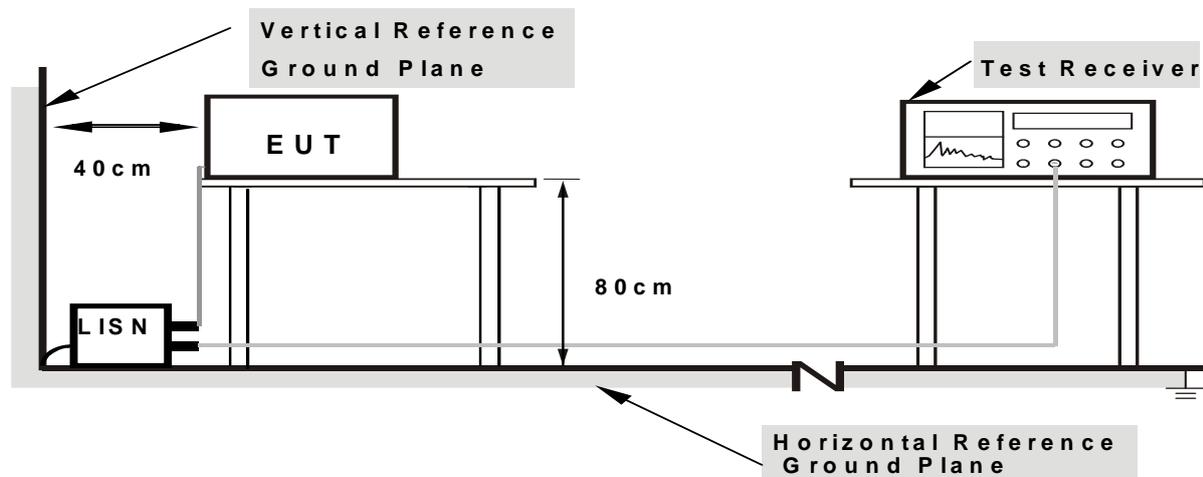
#### 4.1.2 TEST PROCEDURE

- 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

#### 4.1.4 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 cm from other units and other metal planes

#### 4.1.5 EUT OPERATING CONDITIONS

The EUT was placed on the test table and programmed in normal function.

#### 4.1.6 EUT TEST CONDITIONS

Temperature: 25°C    Relative Humidity: 58%    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

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).
- (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 (Emission in restricted band)	1MHz / 3MHz for Peak, 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

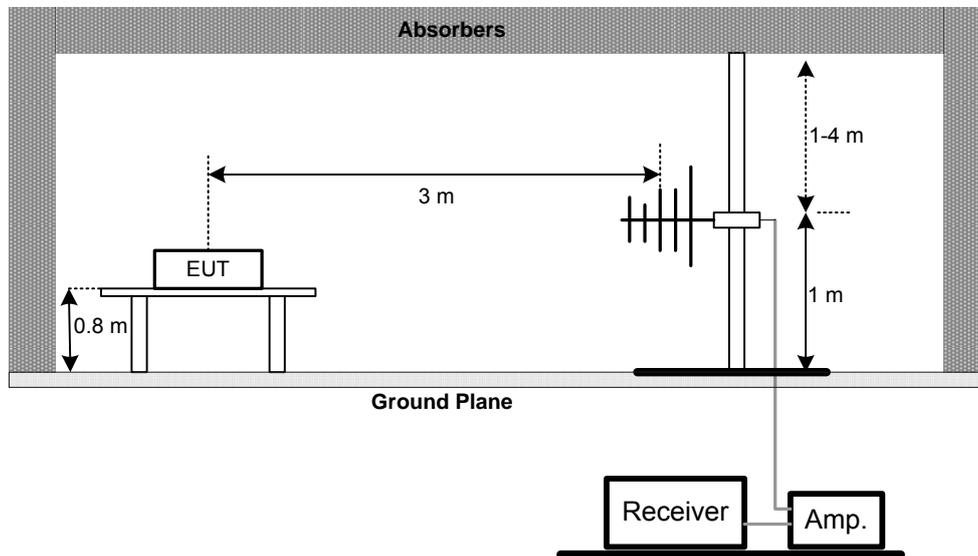
- a. The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1GHz)
- b. The measuring distance 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. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights find the maximum reading (used Bore sight function).
- e. The receiver system was set to peak and average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1GHz.
- f. 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.
- g. 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)
- h. 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)
- i. For the actual test configuration, please refer to the related Item –EUT Test Photos.

#### 4.2.3 DEVIATION FROM TEST STANDARD

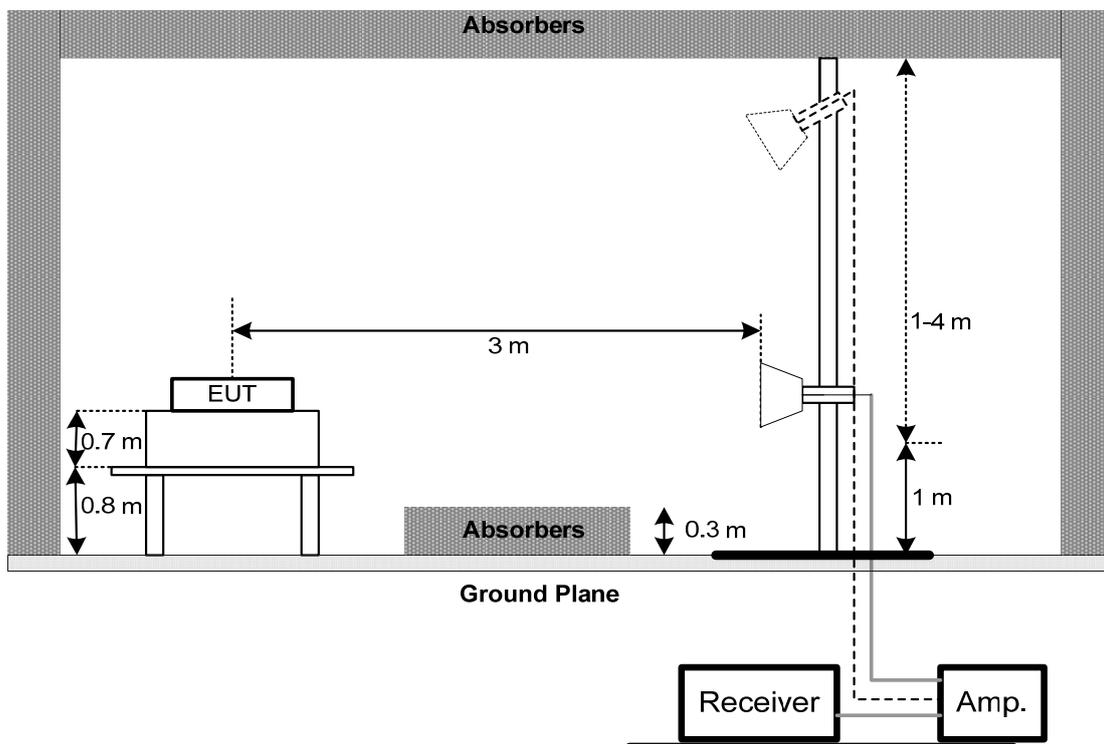
No deviation

#### 4.2.4 TEST SETUP

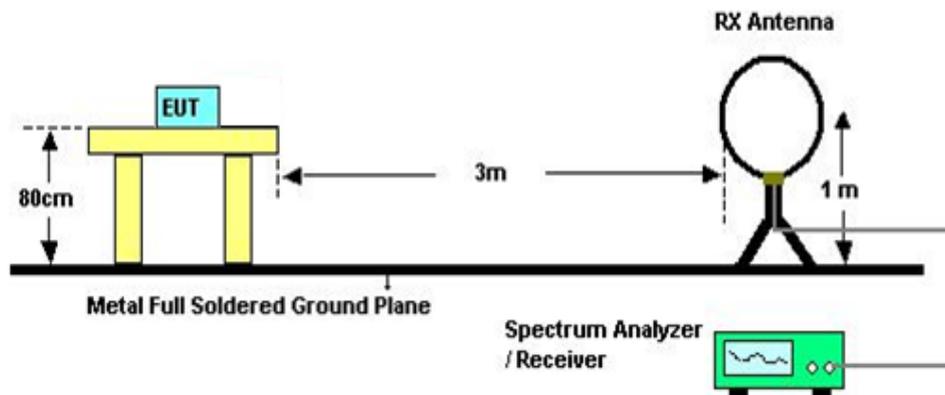
##### (A) Radiated Emission Test Set-Up Frequency Below 1 GHz



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



(C) For Radiated Emissions Below 30MHz



#### 4.2.5 EUT OPERATING CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

#### 4.2.6 EUT TEST CONDITIONS

Temperature: 25°C    Relative Humidity: 65%    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 (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

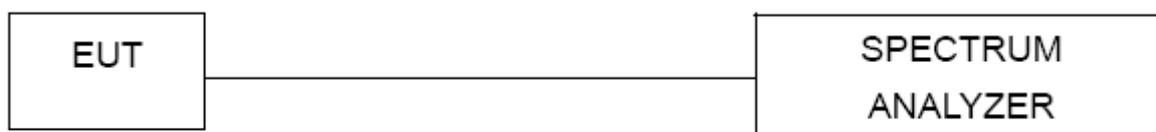
#### 5.1.1 TEST PROCEDURE

- 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



#### 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: 60%    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 (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: 60%    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: 60%    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 was programmed to be in continuously transmitting mode.

#### 8.1.5 EUT TEST CONDITIONS

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

#### 8.1.6 TEST RESULTS

Please refer to the Attachment H.

## 9. MEASUREMENT INSTRUMENTS LIST

Conducted Emission Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	TWO-LINE V-NETWORK	R&S	ENV216	101050	Jun. 01, 2016
2	Test Cable	TIMES	CFD300-NL	C03	Mar. 04, 2016
3	EMI Test Receiver	R&S	ESR3	101854	Dec. 08, 2016
4	Measurement Software	EZ	EZ_EMG (Version NB-03A)	N/A	N/A

Radiated Emission Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	Agilent	N9020A	MY51160196	Jan. 06, 2017
2	Horn Antenna	Schwarzbeck	BBHA 9120	D-325	Apr. 20, 2016
3	Microwave Pre_amplifier	Agilent	8449B	3008A01714	Apr. 13, 2016
4	Microflex Cable	Harbour industries	27478LL142	1m	Apr. 13, 2016
5	Microflex Cable	EMC	S104-SMA	8m	May 14, 2016
6	Microflex Cable	Harbour industries	27478LL142	3m	May 13, 2016
7	Test Cable	LMR	LMR-400	10m	May 13, 2016
8	Test Cable	LMR	LMR-400	3m	May 13, 2016
9	Pre-Amplifier	Anritsu	MH648A	M92649	Jun. 16, 2016
10	Log-Bicon Antenna	Schwarzbeck	VULB9168-352	9168-352	Jul. 30, 2016
11	Loop Antenna	EMCO	6502	00042960	Nov. 05, 2016

6dB Bandwidth Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	Agilent	N9010A	MY54200240	Aug. 26, 2016

Peak Output Power Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Power Meter	Anritsu	ML2487A	6K00004714	May 19, 2016
2	Power Meter Sensor	Anritsu	MA2491A	034138	May 18, 2016

Antenna Conducted Spurious Emission Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	Agilent	N9010A	MY54200240	Aug. 26, 2016

Power Spectral Density Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	Agilent	N9010A	MY54200240	Aug. 26, 2016

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

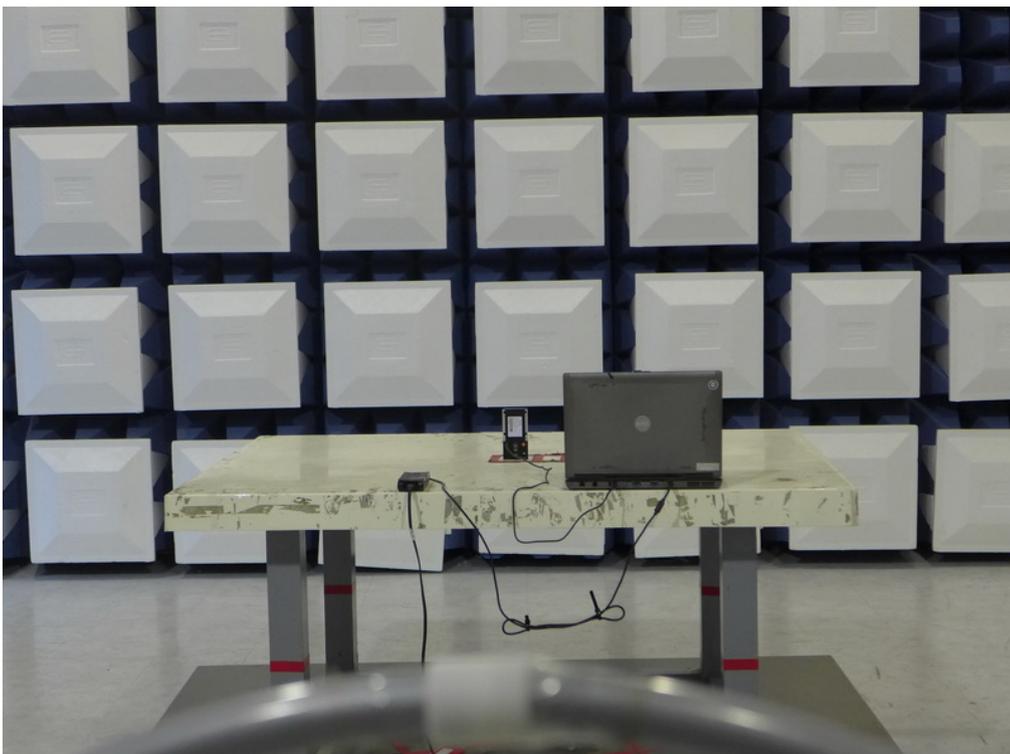
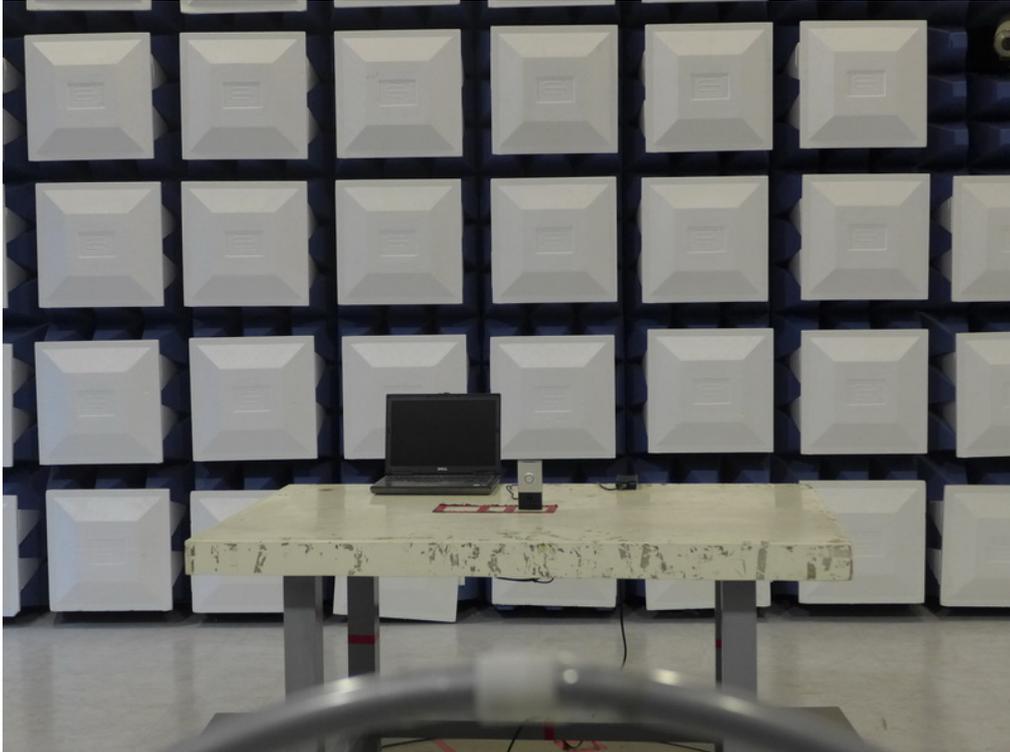
## 10. EUT TEST PHOTO

### Conducted Measurement Photos



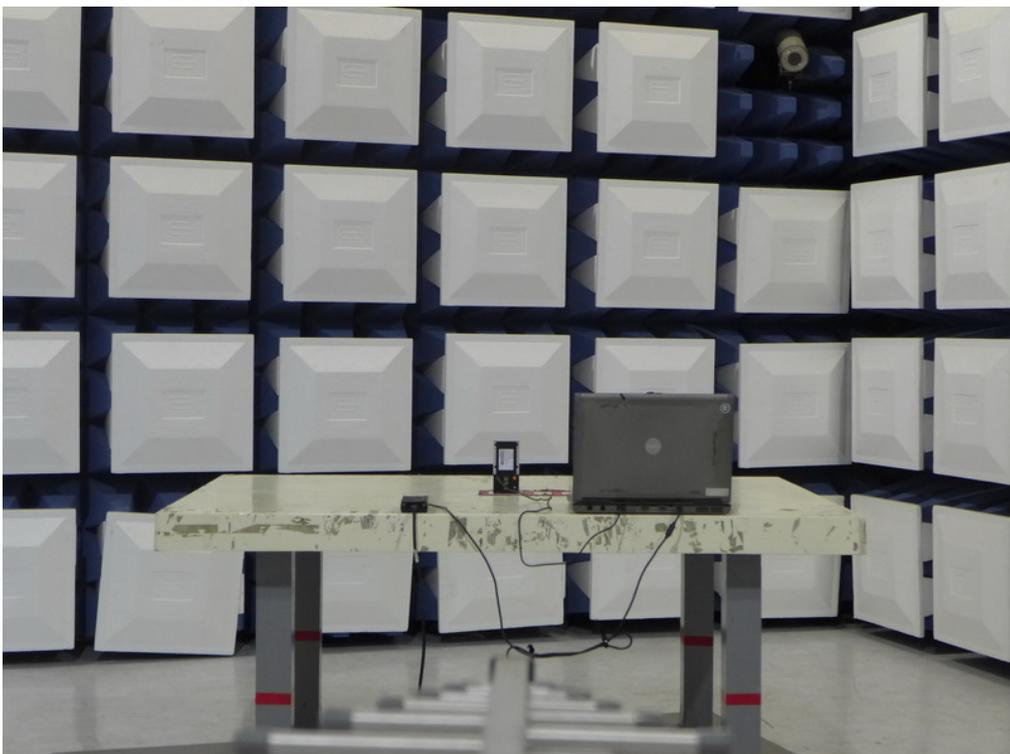
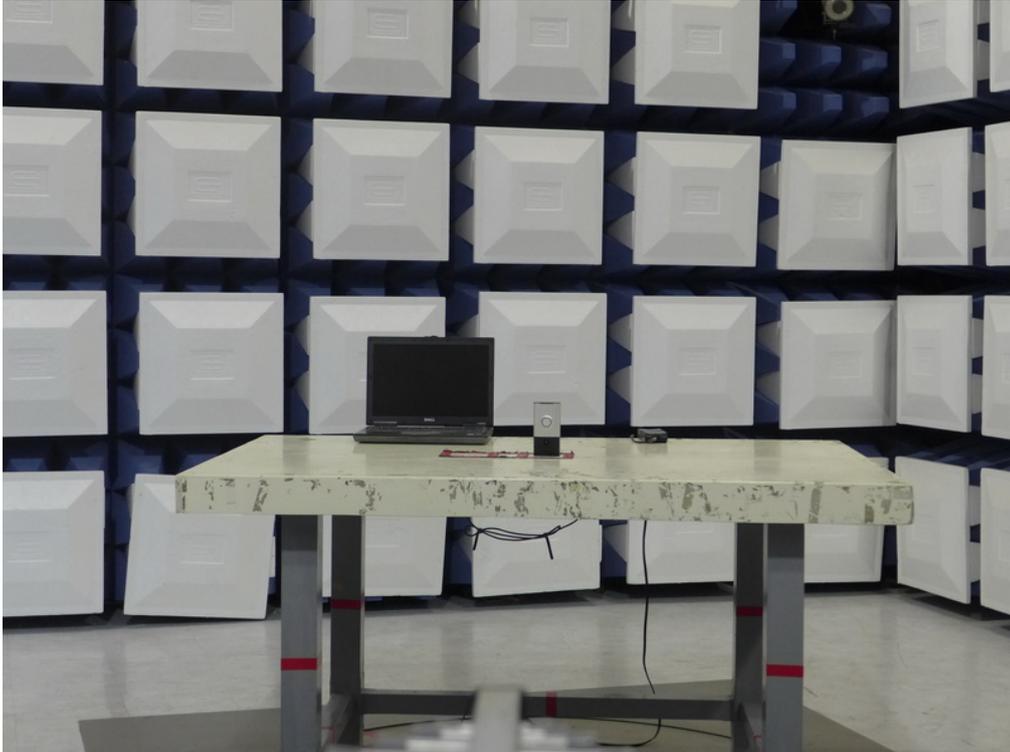
## Radiated Measurement Photos

9KHz to 30MHz



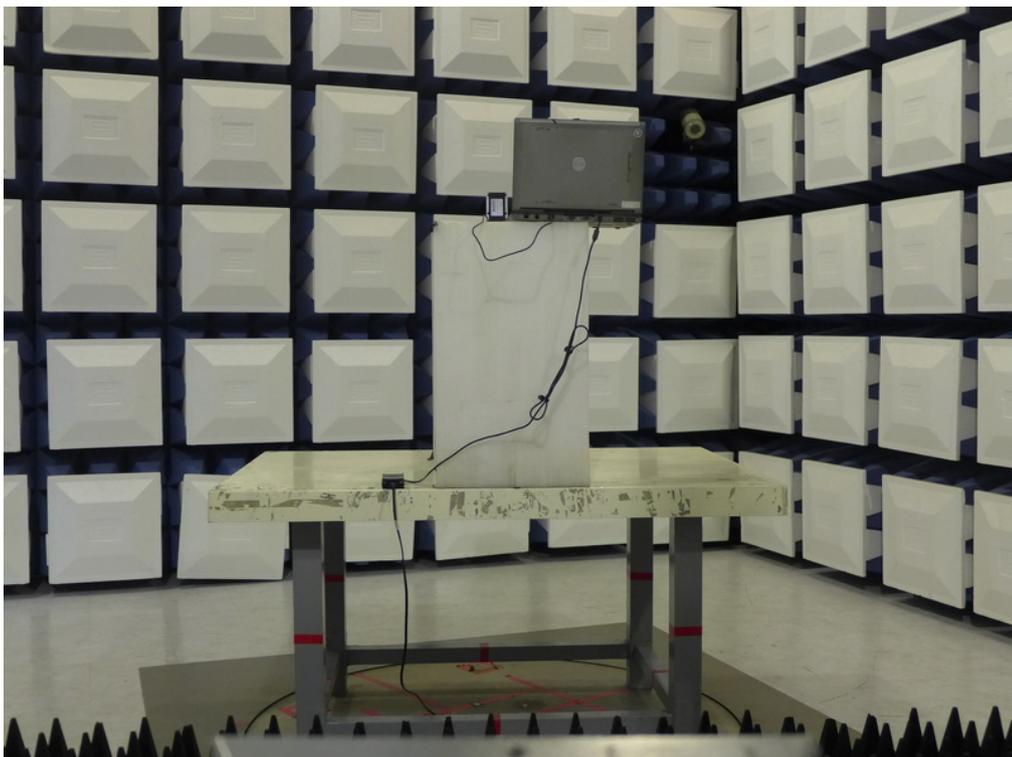
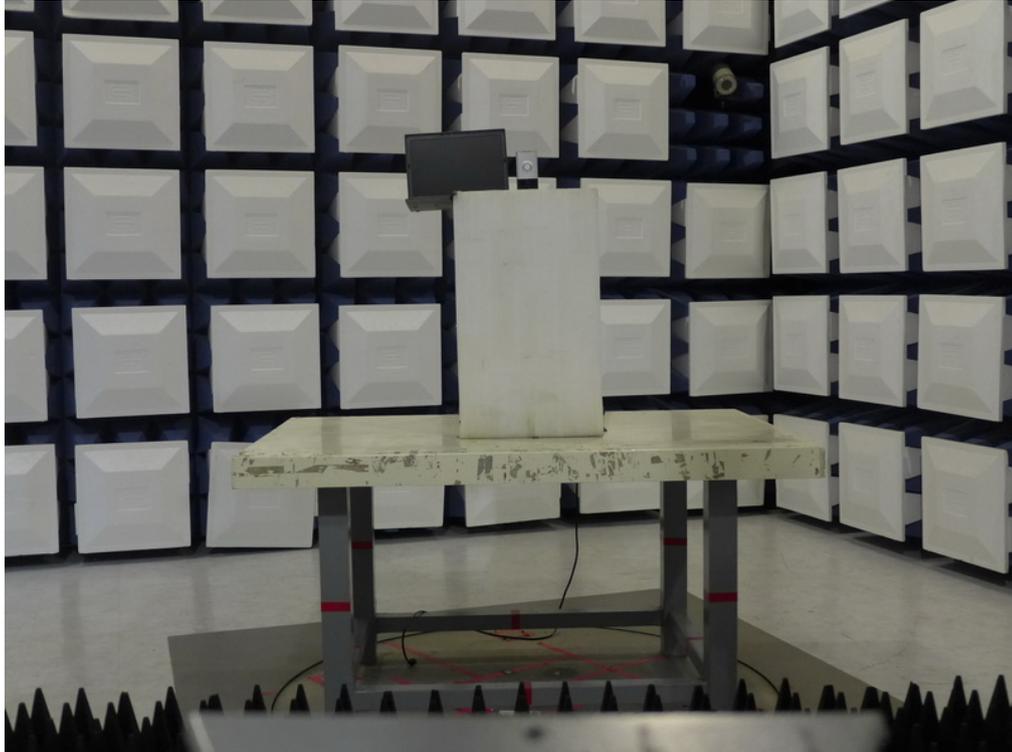
## Radiated Measurement Photos

30MHz to 1000MHz



## Radiated Measurement Photos

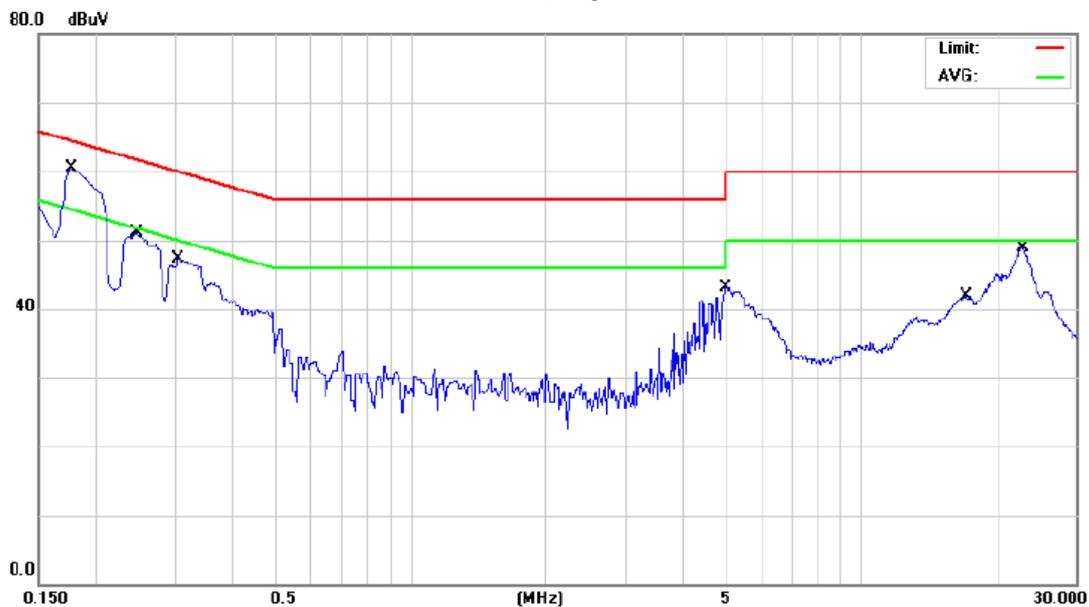
Above 1000MHz



## ATTACHMENT A - CONDUCTED EMISSION

Test Mode : TX Mode

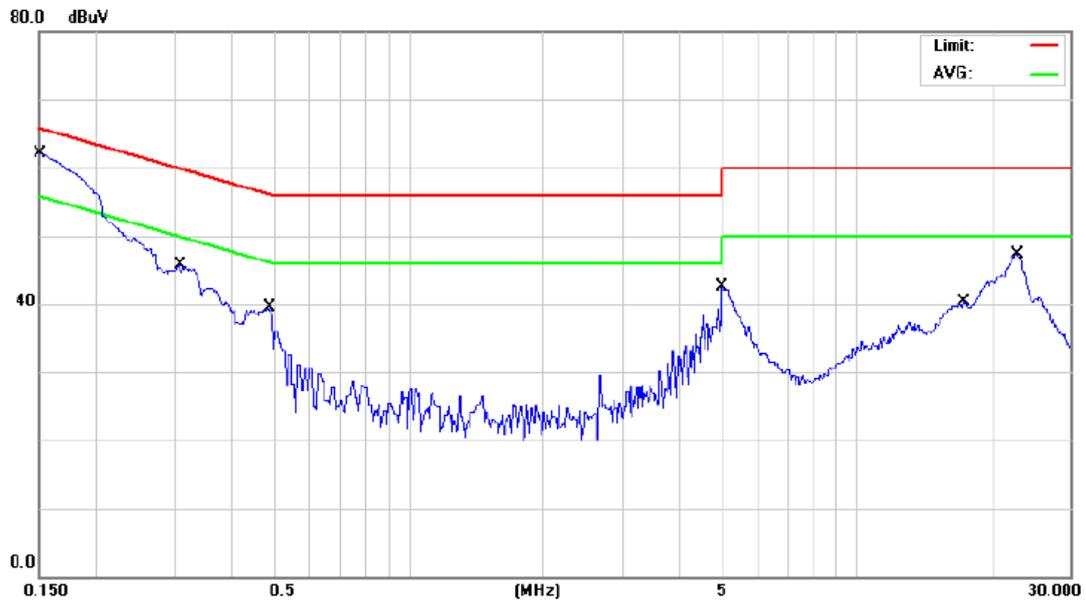
### Line



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1	*	0.1766	47.70	9.66	57.36	64.64	-7.28	QP	
2		0.1766	32.10	9.66	41.76	54.64	-12.88	AVG	
3		0.2459	37.60	9.66	47.26	61.89	-14.63	QP	
4		0.2459	22.40	9.66	32.06	51.89	-19.83	AVG	
5		0.3047	33.20	9.66	42.86	60.11	-17.25	QP	
6		0.3047	16.90	9.66	26.56	50.11	-23.55	AVG	
7		5.0000	25.80	9.89	35.69	56.00	-20.31	QP	
8		5.0000	13.50	9.89	23.39	46.00	-22.61	AVG	
9		17.0500	24.20	9.85	34.05	60.00	-25.95	QP	
10		17.0500	16.60	9.85	26.45	50.00	-23.55	AVG	
11		22.8000	31.50	9.90	41.40	60.00	-18.60	QP	
12		22.8000	23.00	9.90	32.90	50.00	-17.10	AVG	

Test Mode : TX Mode

### Neutral



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1	*	0.1507	44.80	9.66	54.46	65.96	-11.50	QP	
2		0.1507	20.00	9.66	29.66	55.96	-26.30	AVG	
3		0.3068	30.80	9.67	40.47	60.05	-19.58	QP	
4		0.3068	12.50	9.67	22.17	50.05	-27.88	AVG	
5		0.4881	23.50	9.68	33.18	56.20	-23.02	QP	
6		0.4881	13.30	9.68	22.98	46.20	-23.22	AVG	
7		5.0000	25.20	9.88	35.08	56.00	-20.92	QP	
8		5.0000	13.20	9.88	23.08	46.00	-22.92	AVG	
9		17.2500	23.10	9.87	32.97	60.00	-27.03	QP	
10		17.2500	15.80	9.87	25.67	50.00	-24.33	AVG	
11		22.8000	29.90	9.93	39.83	60.00	-20.17	QP	
12		22.8000	21.00	9.93	30.93	50.00	-19.07	AVG	

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

### For PCB Antenna

<b>Test Mode:</b>	<b>TX B MODE CHANNEL 01</b>
-------------------	-----------------------------

Frequency (MHz)	Ant 0°/90°	Read level dBuV/m	Factor (dB)	Measured(FS) (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Note
0.015	0°	32.240	22.275	54.515	104.082	-49.567	AVG
0.015	0°	43.200	22.275	65.475	124.082	-58.607	PK
0.026	0°	28.990	22.013	51.003	99.473	-48.471	AVG
0.026	0°	33.250	22.013	55.263	119.473	-64.211	PK
0.037	0°	24.870	21.735	46.605	96.335	-49.730	AVG
0.037	0°	32.650	21.735	54.385	116.335	-61.950	PK
0.060	0°	24.680	21.240	45.920	92.041	-46.121	AVG
0.060	0°	34.920	21.240	56.160	112.041	-55.881	PK
1.265	0°	33.580	20.335	53.915	65.562	-11.647	QP
1.135	0°	38.540	20.465	59.005	66.502	-7.498	QP

Frequency (MHz)	Ant 0°/90°	Read level dBuV/m	Factor (dB)	Measured(FS) (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Note
0.013	90°	33.650	22.320	55.970	105.193	-49.223	AVG
0.013	90°	48.840	22.320	71.160	125.193	-54.033	PK
0.026	90°	27.160	22.008	49.168	99.406	-50.238	AVG
0.026	90°	42.480	22.008	64.488	119.406	-54.918	PK
0.035	90°	26.130	21.788	47.918	96.848	-48.930	AVG
0.035	90°	35.930	21.788	57.718	116.848	-59.130	PK
0.063	90°	22.850	21.189	44.039	91.590	-47.551	AVG
0.063	90°	38.160	21.189	59.349	111.590	-52.241	PK
1.251	90°	34.420	20.349	54.769	65.659	-10.890	QP
1.650	90°	36.340	19.950	56.290	63.255	-6.965	QP

### For Chip Antenna

Test Mode:	TX B MODE CHANNEL 01
------------	----------------------

Frequency (MHz)	Ant 0°/90°	Read level dBuV/m	Factor (dB)	Measured(FS) (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Note
0.0150	0°	32.4800	22.2750	54.7550	104.0824	-49.3274	AVG
0.0150	0°	43.5600	22.2750	65.8350	124.0824	-58.2474	PK
0.0255	0°	29.2500	22.0125	51.2625	99.4734	-48.2109	AVG
0.0255	0°	33.1500	22.0125	55.1625	119.4734	-64.3109	PK
0.0366	0°	24.4800	21.7350	46.2150	96.3346	-50.1196	AVG
0.0366	0°	32.5500	21.7350	54.2850	116.3346	-62.0496	PK
0.0600	0°	24.5700	21.2400	45.8100	92.0412	-46.2312	AVG
0.0600	0°	34.8500	21.2400	56.0900	112.0412	-55.9512	PK
1.2650	0°	33.2400	20.3350	53.5750	65.5624	-11.9874	QP
1.1353	0°	37.9500	20.4648	58.4148	66.5024	-8.0876	QP

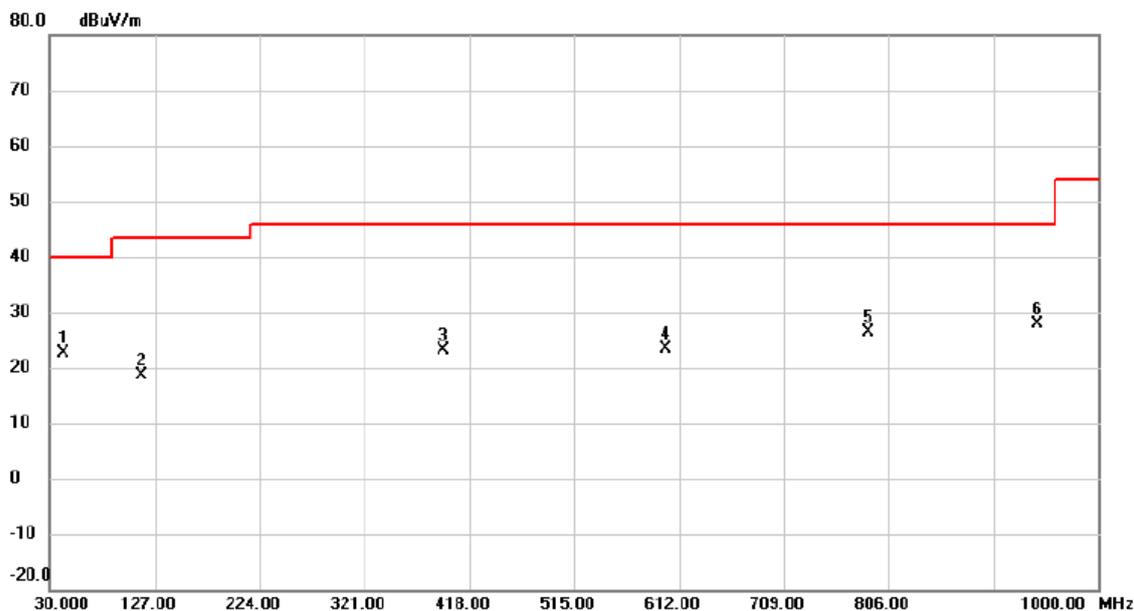
Frequency (MHz)	Ant 0°/90°	Read level dBuV/m	Factor (dB)	Measured(FS) (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Note
0.013	90°	33.510	22.320	55.830	105.193	-49.363	AVG
0.013	90°	48.620	22.320	70.940	125.193	-54.253	PK
0.026	90°	27.280	22.008	49.288	99.406	-50.118	AVG
0.026	90°	42.580	22.008	64.588	119.406	-54.818	PK
0.035	90°	26.240	21.788	48.028	96.848	-48.820	AVG
0.035	90°	35.860	21.788	57.648	116.848	-59.200	PK
0.063	90°	22.760	21.189	43.949	91.590	-47.641	AVG
0.063	90°	38.260	21.189	59.449	111.590	-52.141	PK
1.251	90°	34.250	20.349	54.599	65.659	-11.060	QP
1.650	90°	36.240	19.950	56.190	63.255	-7.065	QP

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

### For PCB Antenna

Test Mode: TX MODE 2437MHz

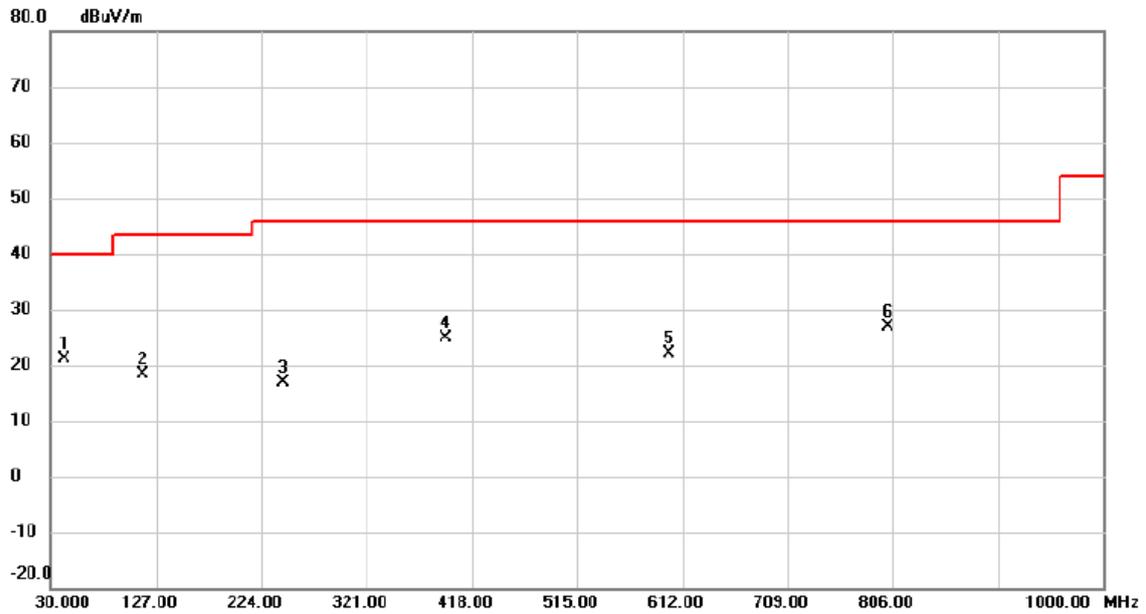
#### Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	42.1250	36.90	-14.29	22.61	40.00	-17.39	peak	
2		114.8750	35.90	-17.15	18.75	43.50	-24.75	peak	
3		393.7500	34.36	-11.31	23.05	46.00	-22.95	peak	
4		599.8750	30.43	-7.13	23.30	46.00	-22.70	peak	
5		786.6000	30.44	-4.15	26.29	46.00	-19.71	peak	
6		944.2250	29.94	-1.94	28.00	46.00	-18.00	peak	

Test Mode: TX MODE 2437MHz

### Horizontal

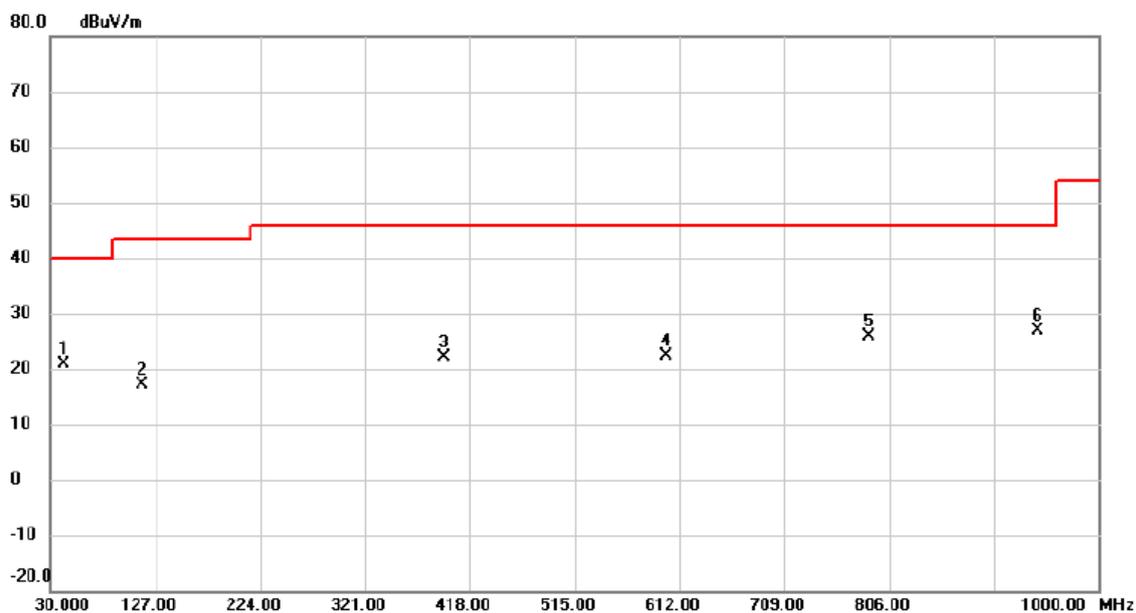


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	42.1250	35.45	-14.29	21.16	40.00	-18.84	peak	
2		114.8750	35.54	-17.15	18.39	43.50	-25.11	peak	
3		243.4000	32.05	-15.21	16.84	46.00	-29.16	peak	
4		393.7500	36.09	-11.31	24.78	46.00	-21.22	peak	
5		599.8750	29.17	-7.13	22.04	46.00	-23.96	peak	
6		801.1500	30.64	-3.88	26.76	46.00	-19.24	peak	

### For Chip Antenna

Test Mode: TX MODE 2437MHz

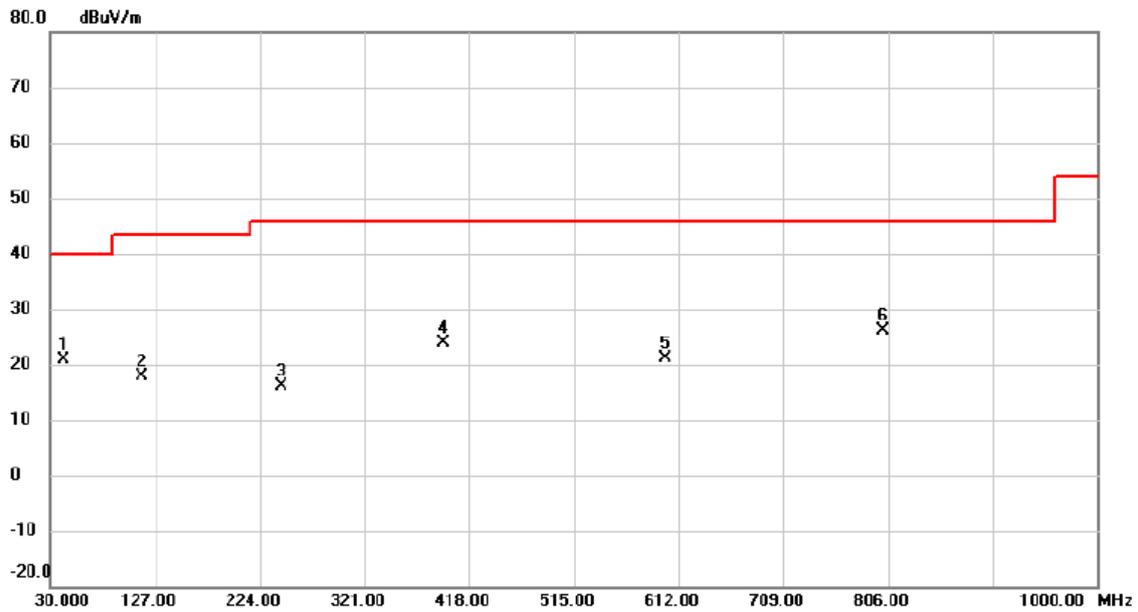
#### Vertical



No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	42.1250	35.20	-14.29	20.91	40.00	-19.09	peak	
2	114.8750	34.20	-17.15	17.05	43.50	-26.45	peak	
3	393.7500	33.56	-11.31	22.25	46.00	-23.75	peak	
4	599.8750	29.53	-7.13	22.40	46.00	-23.60	peak	
5	786.6000	30.04	-4.15	25.89	46.00	-20.11	peak	
6 *	944.2250	28.94	-1.94	27.00	46.00	-19.00	peak	

Test Mode: TX MODE 2437MHz

### Horizontal



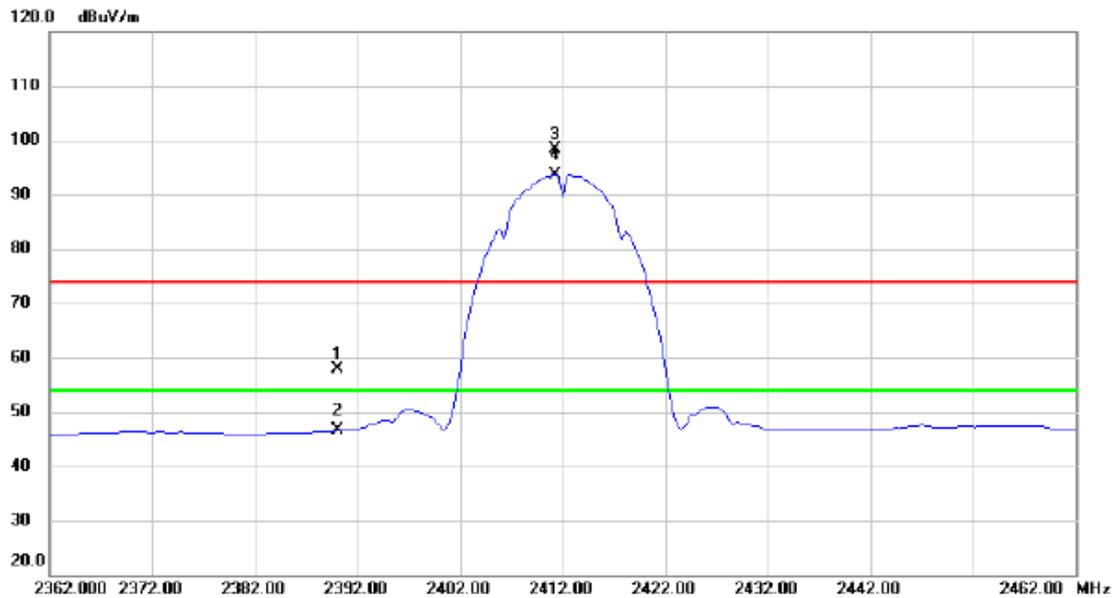
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	42.1250	35.25	-14.29	20.96	40.00	-19.04	peak	
2		114.8750	35.04	-17.15	17.89	43.50	-25.61	peak	
3		243.4000	31.45	-15.21	16.24	46.00	-29.76	peak	
4		393.7500	35.19	-11.31	23.88	46.00	-22.12	peak	
5		599.8750	28.37	-7.13	21.24	46.00	-24.76	peak	
6		801.1500	30.04	-3.88	26.16	46.00	-19.84	peak	

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

### For PCB Antenna

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

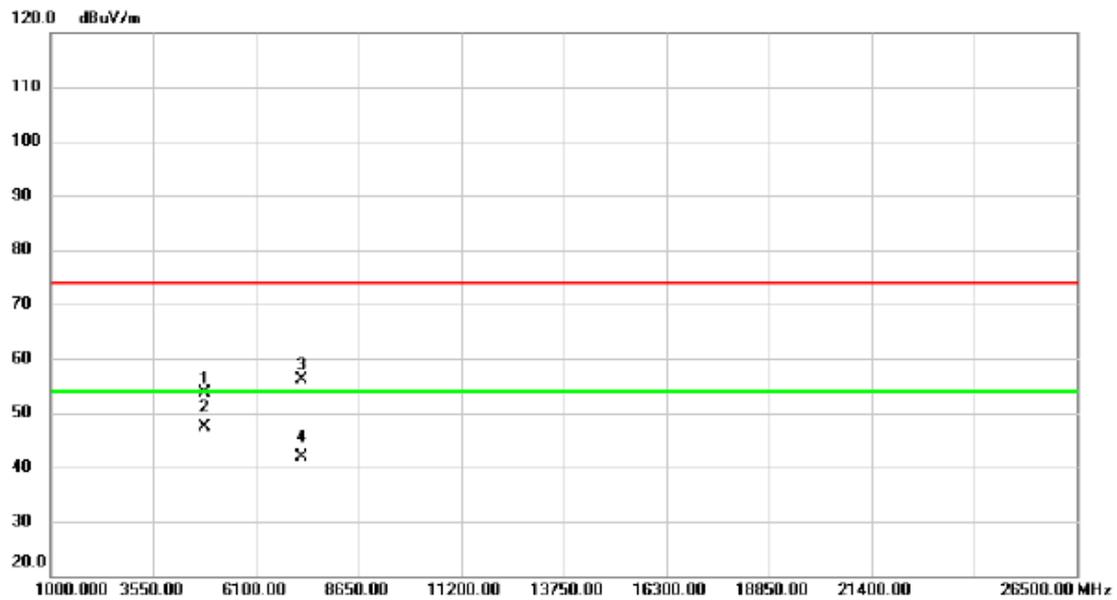
#### Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		2390.000	25.97	31.96	57.93	74.00	-16.07	peak	
2		2390.000	14.55	31.96	46.51	54.00	-7.49	AVG	
3	X	2411.250	66.46	32.03	98.49	74.00	24.49	peak	NO LIMIT
4	*	2411.250	61.65	32.03	93.68	54.00	39.68	AVG	NO LIMIT

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

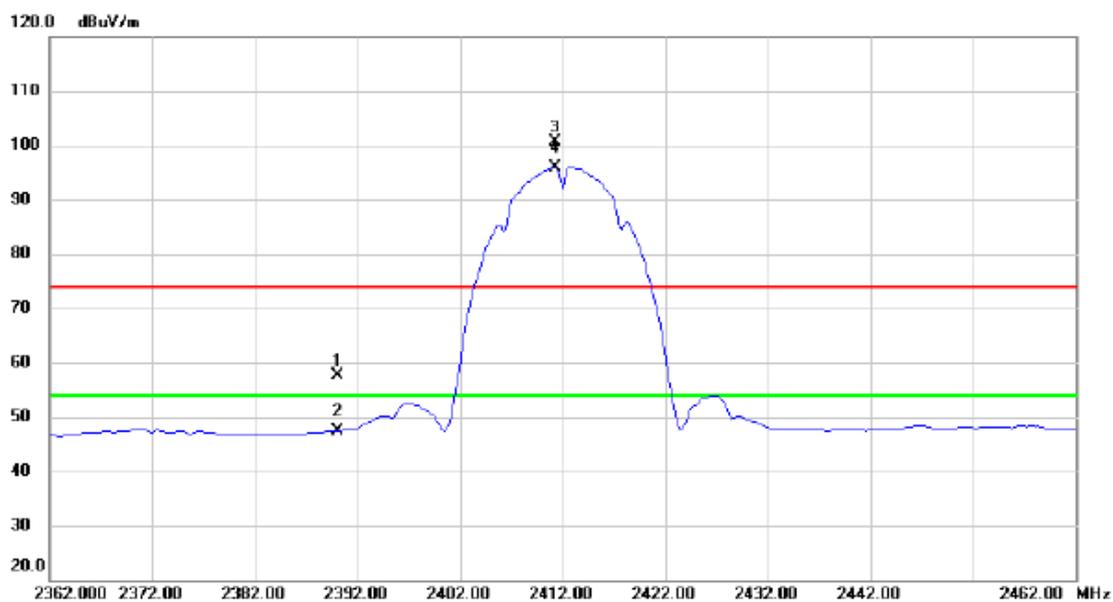
### Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		4824.075	47.80	5.79	53.59	74.00	-20.41	peak	
2	*	4824.075	41.69	5.79	47.48	54.00	-6.52	AVG	
3		7233.050	42.15	13.87	56.02	74.00	-17.98	peak	
4		7233.050	28.05	13.87	41.92	54.00	-12.08	AVG	

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

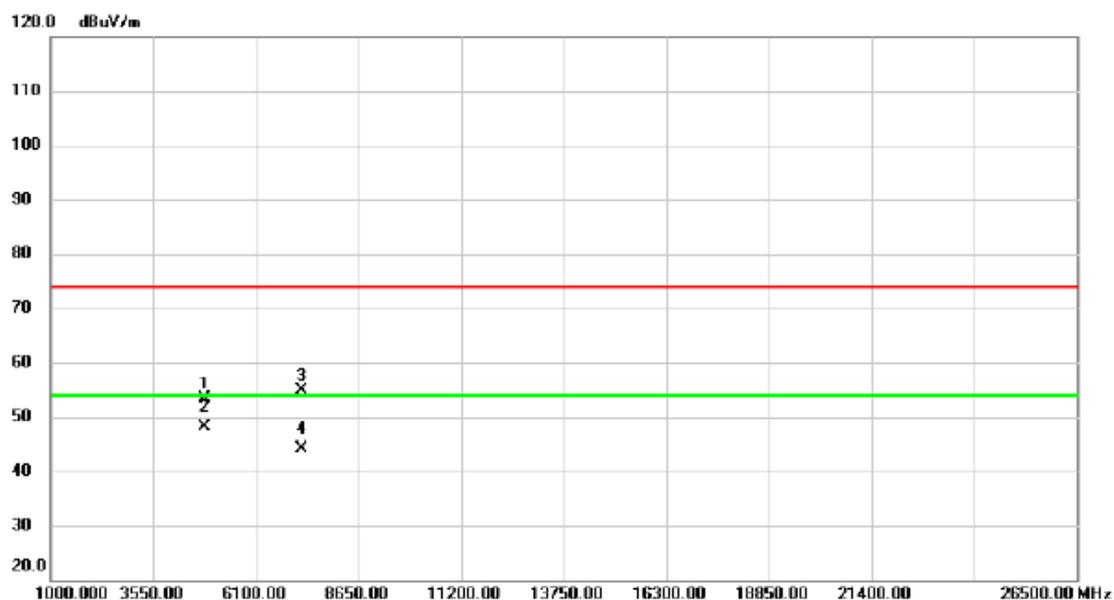
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		2390.000	25.60	31.96	57.56	74.00	-16.44	peak	
2		2390.000	15.48	31.96	47.44	54.00	-6.56	AVG	
3	X	2411.250	68.72	32.03	100.75	74.00	26.75	peak	NO LIMIT
4	*	2411.250	63.89	32.03	95.92	54.00	41.92	AVG	NO LIMIT

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

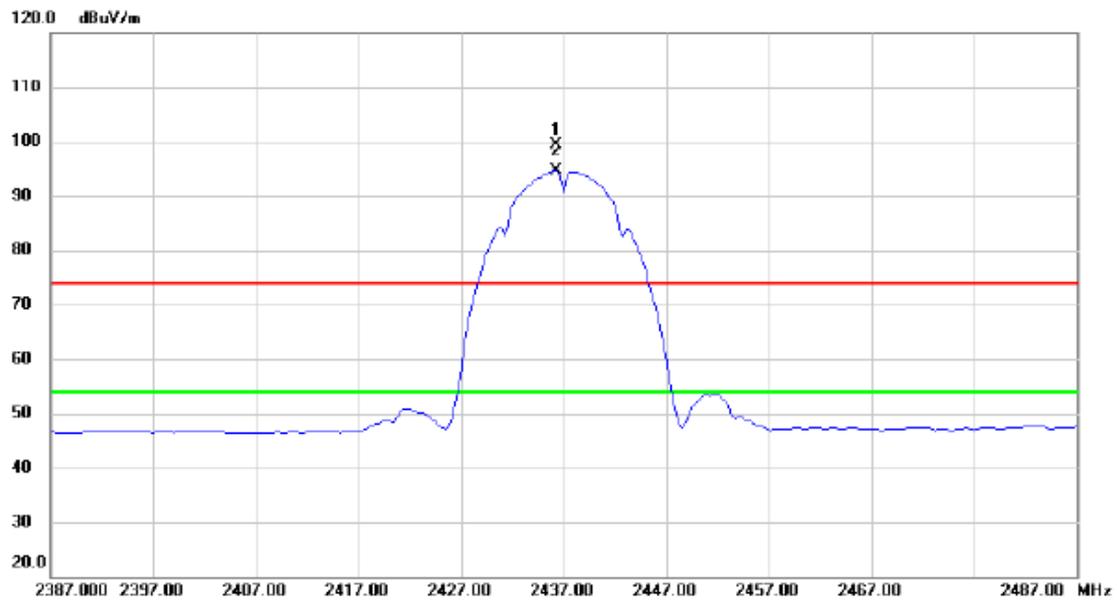
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		4823.800	47.51	5.79	53.30	74.00	-20.70	peak	
2	*	4823.800	42.22	5.79	48.01	54.00	-5.99	AVG	
3		7227.700	41.06	13.86	54.92	74.00	-19.08	peak	
4		7227.700	30.19	13.86	44.05	54.00	-9.95	AVG	

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

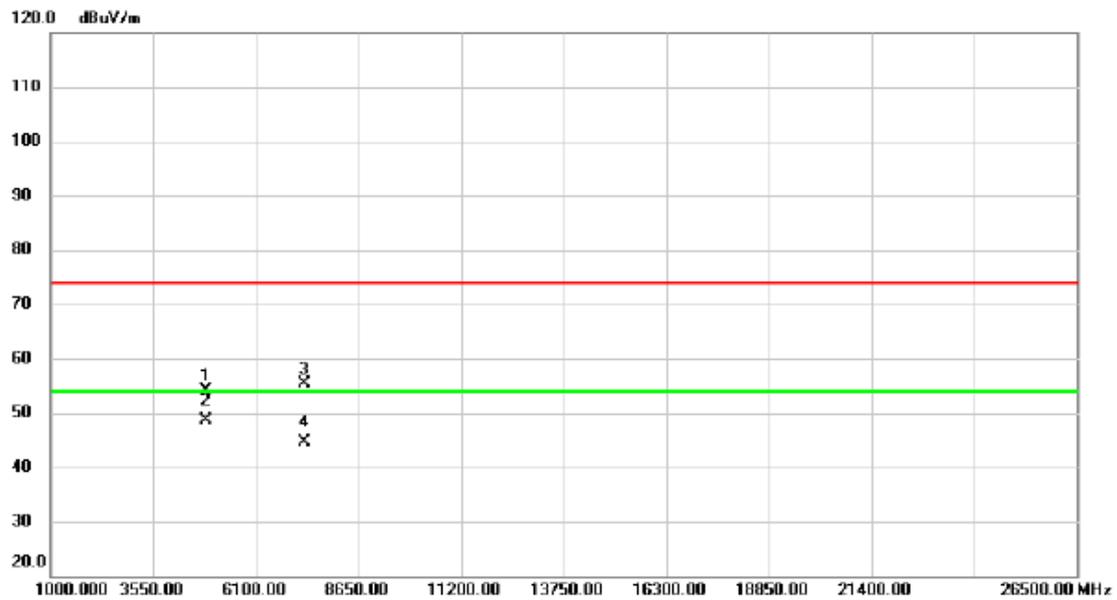
### Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1	X	2436.250	67.38	32.12	99.50	74.00	25.50	peak	NO LIMIT
2	*	2436.250	62.48	32.12	94.60	54.00	40.60	AVG	NO LIMIT

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

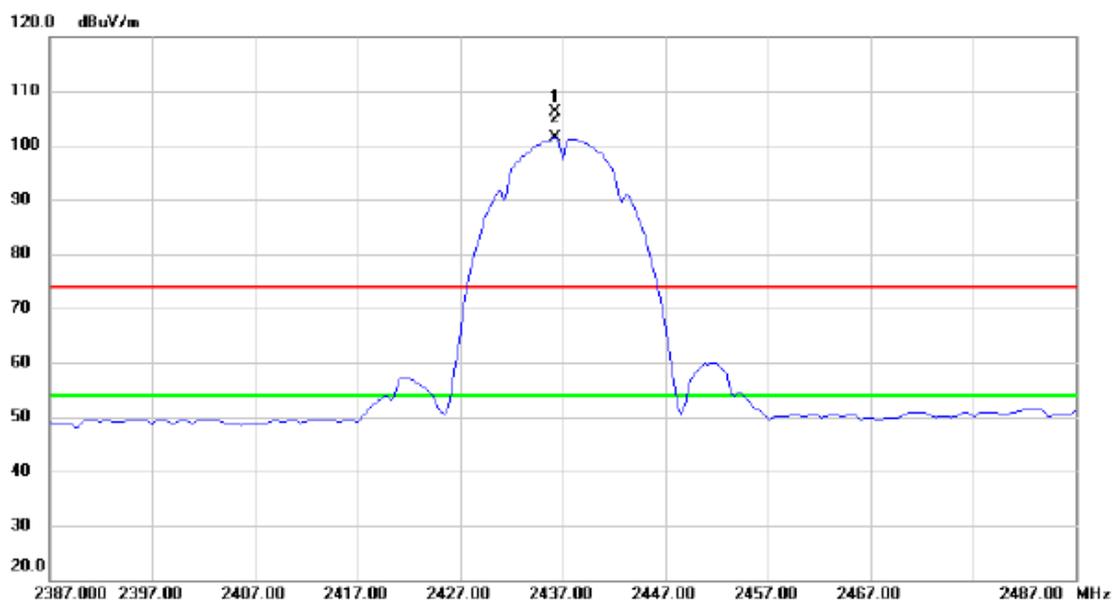
### Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		4874.000	48.27	5.84	54.11	74.00	-19.89	peak	
2	*	4874.000	42.79	5.84	48.63	54.00	-5.37	AVG	
3		7306.650	41.40	14.05	55.45	74.00	-18.55	peak	
4		7306.650	30.60	14.05	44.65	54.00	-9.35	AVG	

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

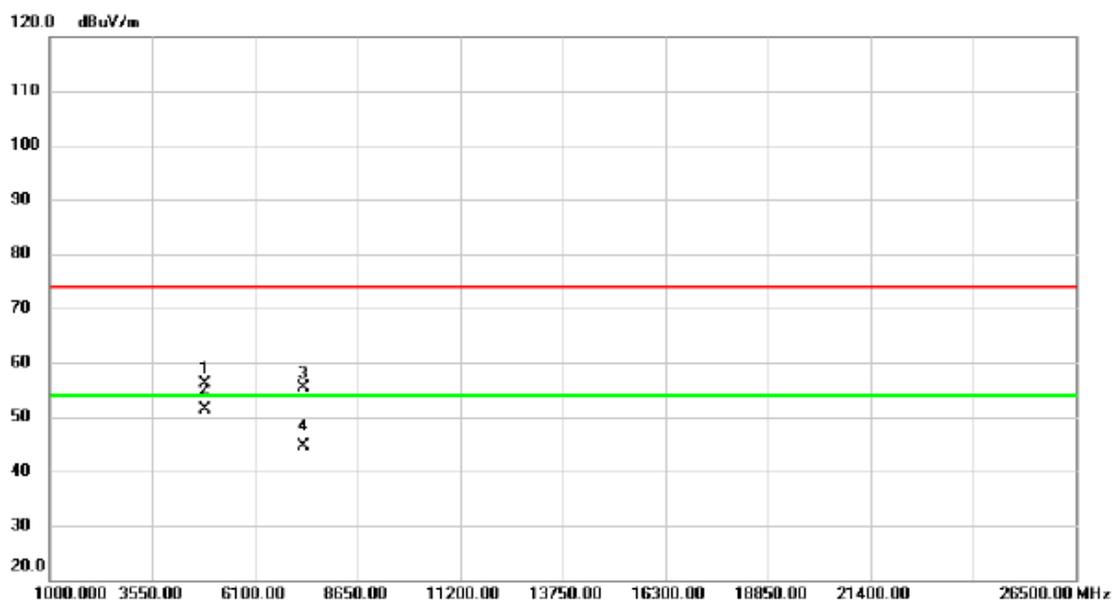
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	X	2436.250	74.12	32.12	106.24	74.00	32.24	peak	NO LIMIT
2	*	2436.250	69.31	32.12	101.43	54.00	47.43	AVG	NO LIMIT

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

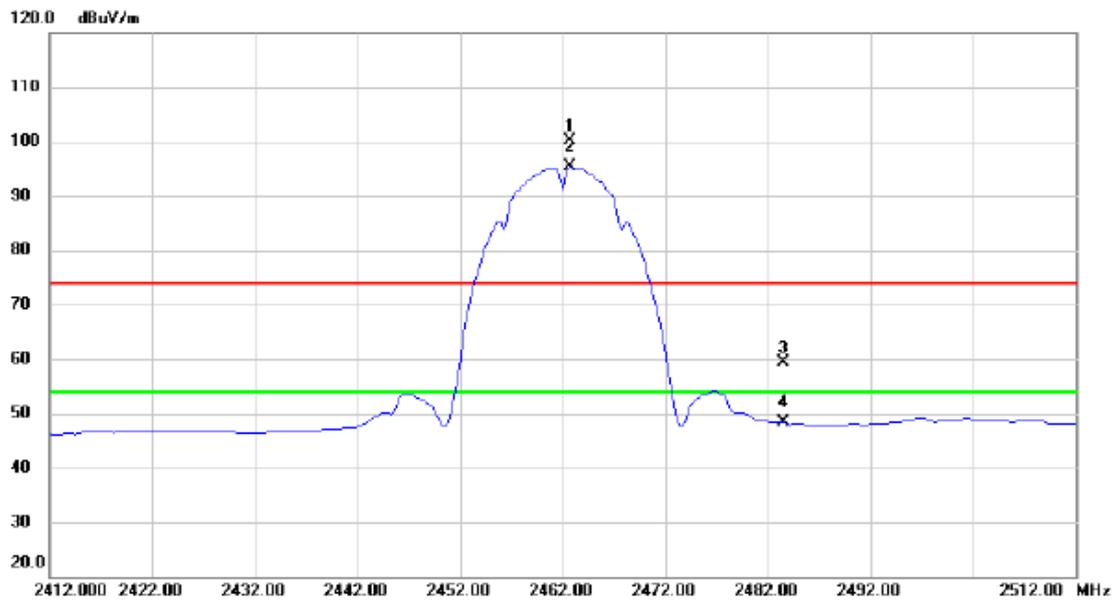
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		4873.950	50.33	5.84	56.17	74.00	-17.83	peak	
2	*	4873.950	45.57	5.84	51.41	54.00	-2.59	AVG	
3		7302.150	41.31	14.05	55.36	74.00	-18.64	peak	
4		7302.150	30.61	14.05	44.66	54.00	-9.34	AVG	

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

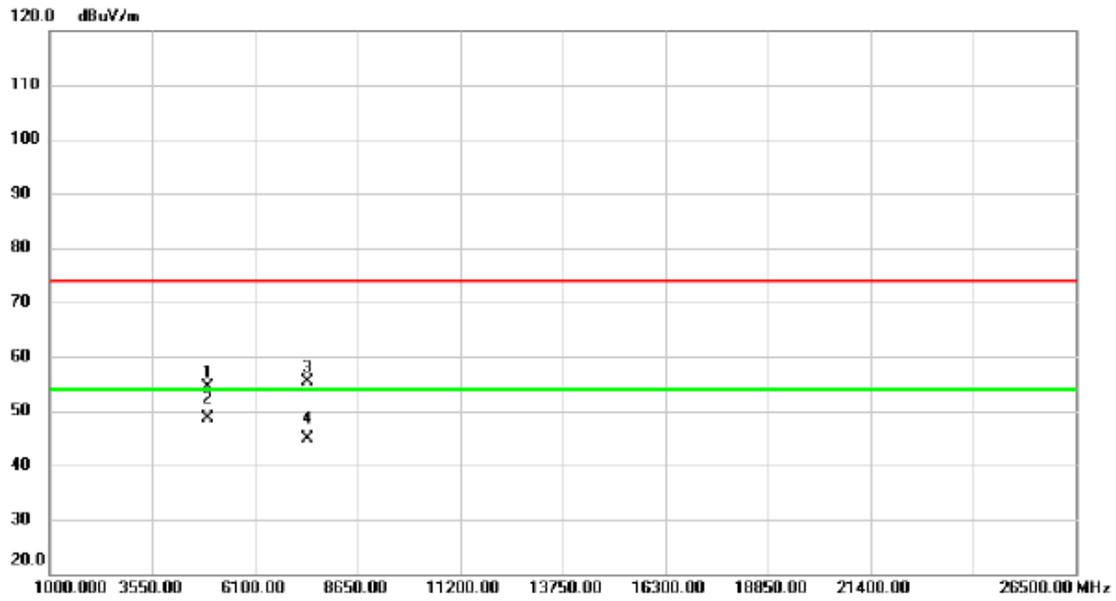
### Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	X	2462.750	67.84	32.23	100.07	74.00	26.07	peak	NO LIMIT
2	*	2462.750	63.05	32.23	95.28	54.00	41.28	AVG	NO LIMIT
3		2483.500	27.10	32.30	59.40	74.00	-14.60	peak	
4		2483.500	15.97	32.30	48.27	54.00	-5.73	AVG	

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

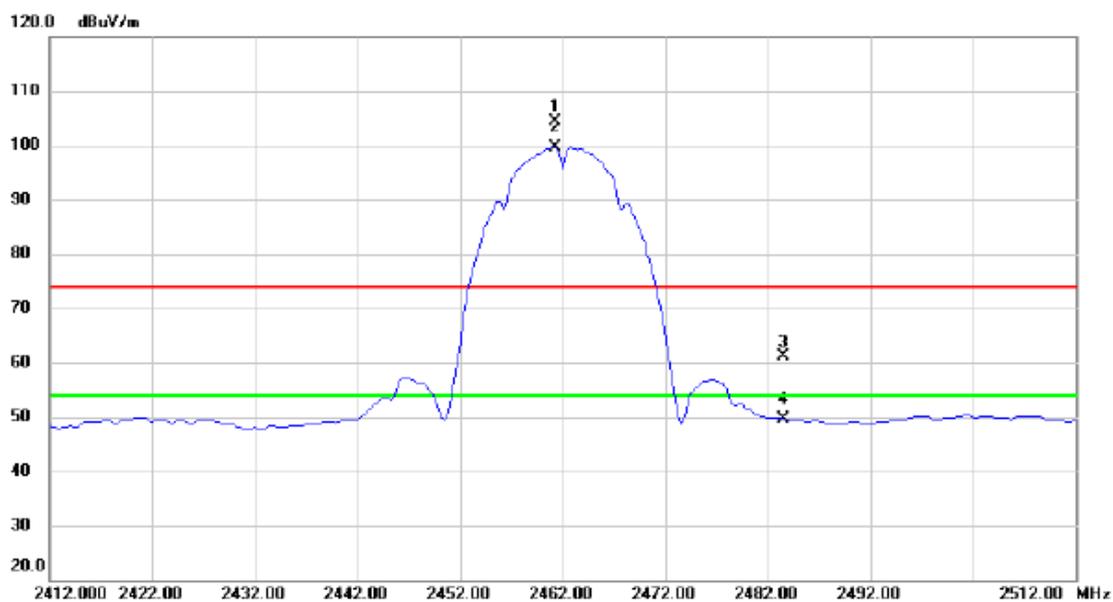
### Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		4924.000	48.39	5.90	54.29	74.00	-19.71	peak	
2	*	4924.000	42.84	5.90	48.74	54.00	-5.26	AVG	
3		7393.650	41.03	14.25	55.28	74.00	-18.72	peak	
4		7393.650	30.56	14.25	44.81	54.00	-9.19	AVG	

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

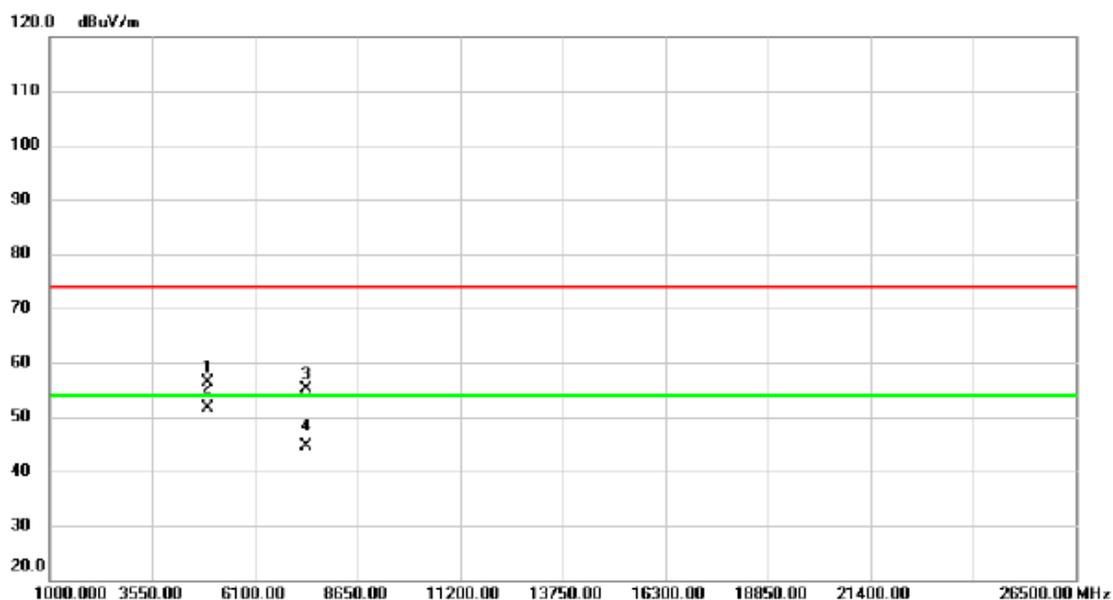
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	X	2461.250	72.27	32.22	104.49	74.00	30.49	peak	NO LIMIT
2	*	2461.250	67.47	32.22	99.69	54.00	45.69	AVG	NO LIMIT
3		2483.500	28.76	32.30	61.06	74.00	-12.94	peak	
4		2483.500	17.35	32.30	49.65	54.00	-4.35	AVG	

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

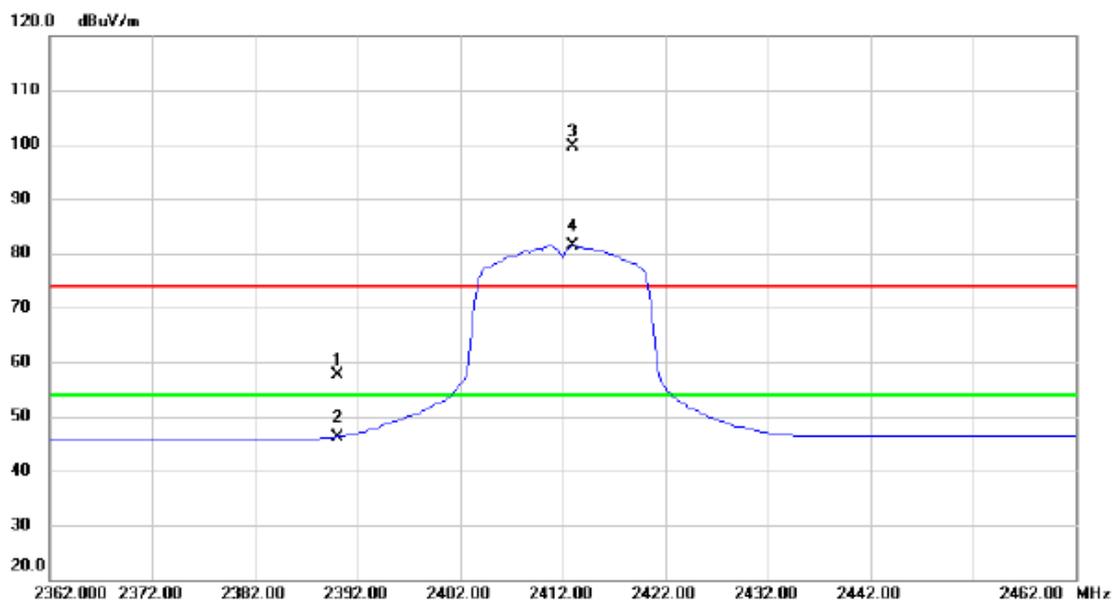
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		4924.000	50.38	5.90	56.28	74.00	-17.72	peak	
2	*	4924.000	45.65	5.90	51.55	54.00	-2.45	AVG	
3		7382.600	40.90	14.22	55.12	74.00	-18.88	peak	
4		7382.600	30.44	14.22	44.66	54.00	-9.34	AVG	

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

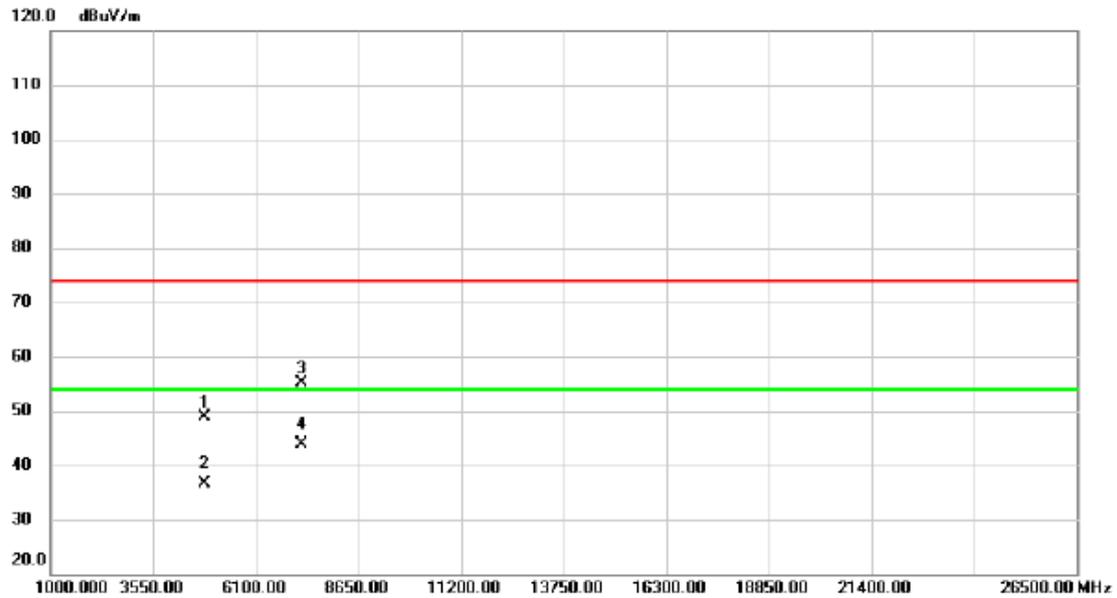
### Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		2390.000	25.65	31.96	57.61	74.00	-16.39	peak	
2		2390.000	14.29	31.96	46.25	54.00	-7.75	AVG	
3	X	2413.000	67.64	32.04	99.68	74.00	25.68	peak	NO LIMIT
4	*	2413.000	49.39	32.04	81.43	54.00	27.43	AVG	NO LIMIT

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

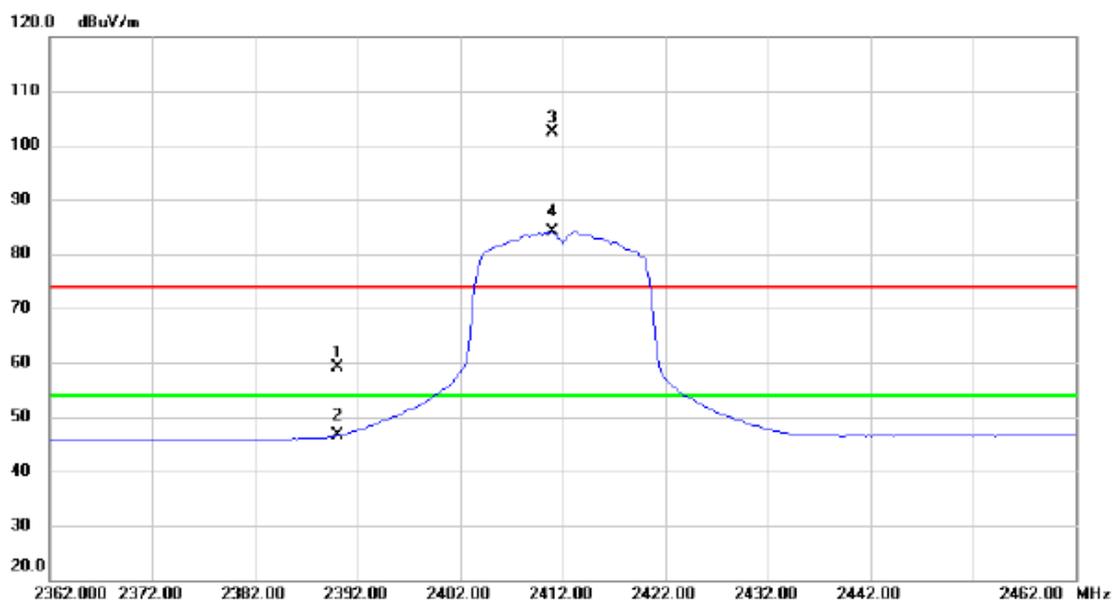
### Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		4825.900	43.17	5.80	48.97	74.00	-25.03	peak	
2		4825.900	30.73	5.80	36.53	54.00	-17.47	AVG	
3		7233.400	41.38	13.87	55.25	74.00	-18.75	peak	
4	*	7233.400	30.01	13.87	43.88	54.00	-10.12	AVG	

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	Margin dB	Detector	Comment
1		2390.000	27.15	31.96	59.11	74.00	-14.89	peak	
2		2390.000	14.60	31.96	46.56	54.00	-7.44	AVG	
3	X	2411.000	70.25	32.03	102.28	74.00	28.28	peak	NO LIMIT
4	*	2411.000	52.07	32.03	84.10	54.00	30.10	AVG	NO LIMIT

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

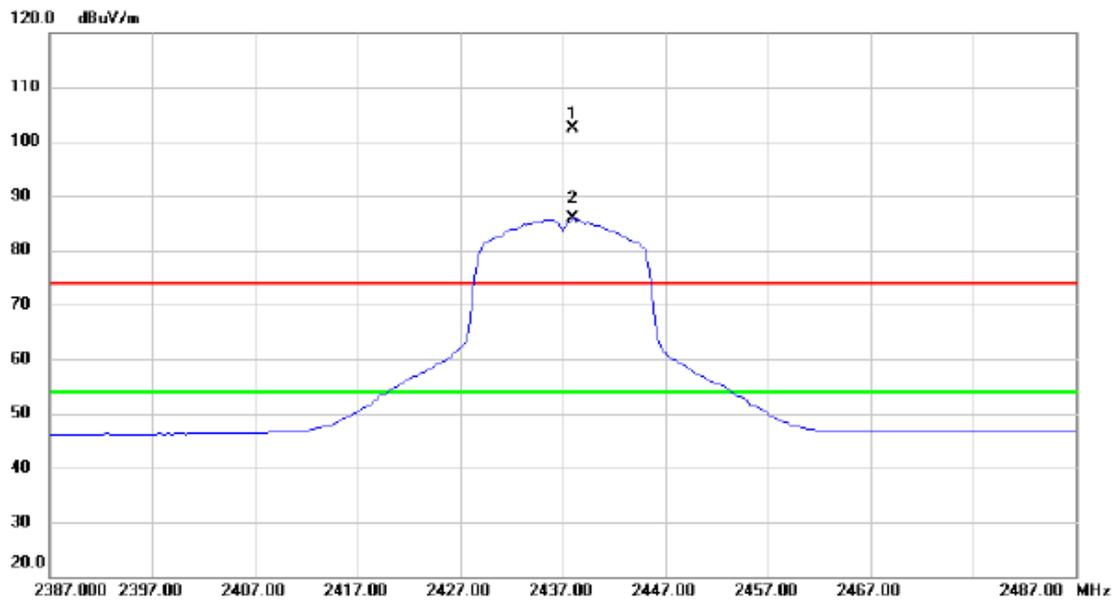
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		4825.725	42.67	5.80	48.47	74.00	-25.53	peak	
2		4825.725	30.74	5.80	36.54	54.00	-17.46	AVG	
3		7226.550	41.45	13.86	55.31	74.00	-18.69	peak	
4	*	7226.550	30.36	13.86	44.22	54.00	-9.78	AVG	

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

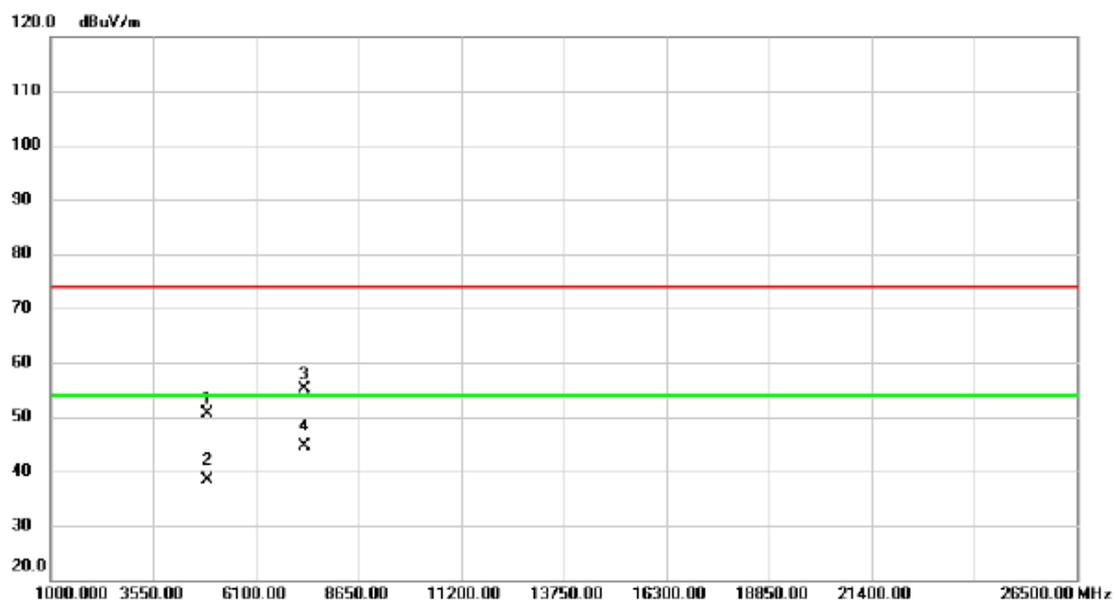
**Vertical**



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	X	2438.000	70.15	32.14	102.29	74.00	28.29	peak	NO LIMIT
2	*	2438.000	53.66	32.14	85.80	54.00	31.80	AVG	NO LIMIT

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

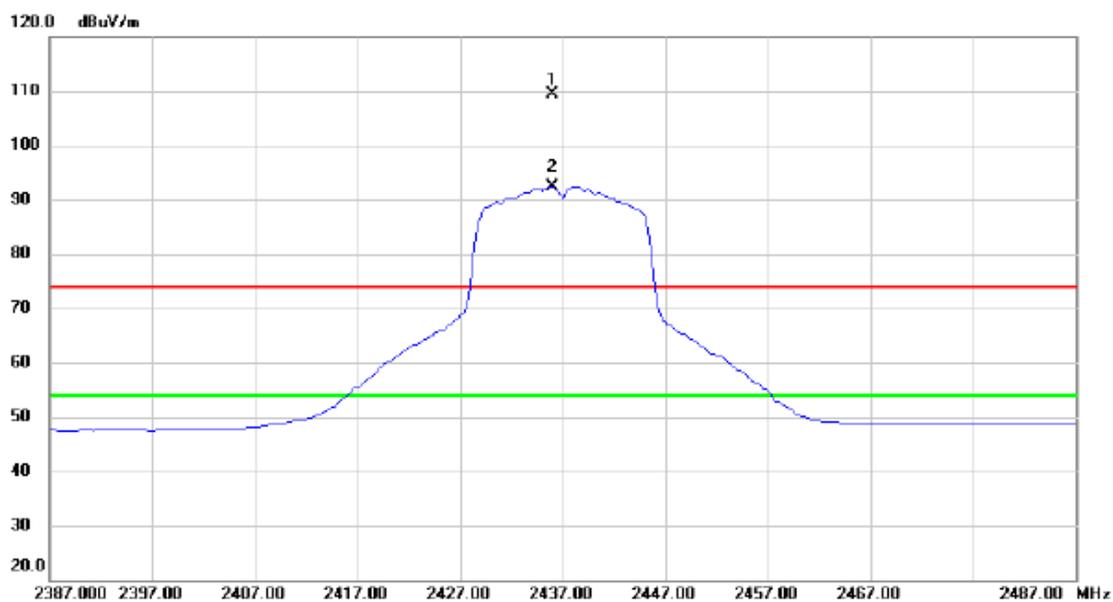
### Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		4876.100	44.78	5.85	50.63	74.00	-23.37	peak	
2		4876.100	32.52	5.85	38.37	54.00	-15.63	AVG	
3		7301.650	41.06	14.04	55.10	74.00	-18.90	peak	
4	*	7301.650	30.64	14.04	44.68	54.00	-9.32	AVG	

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

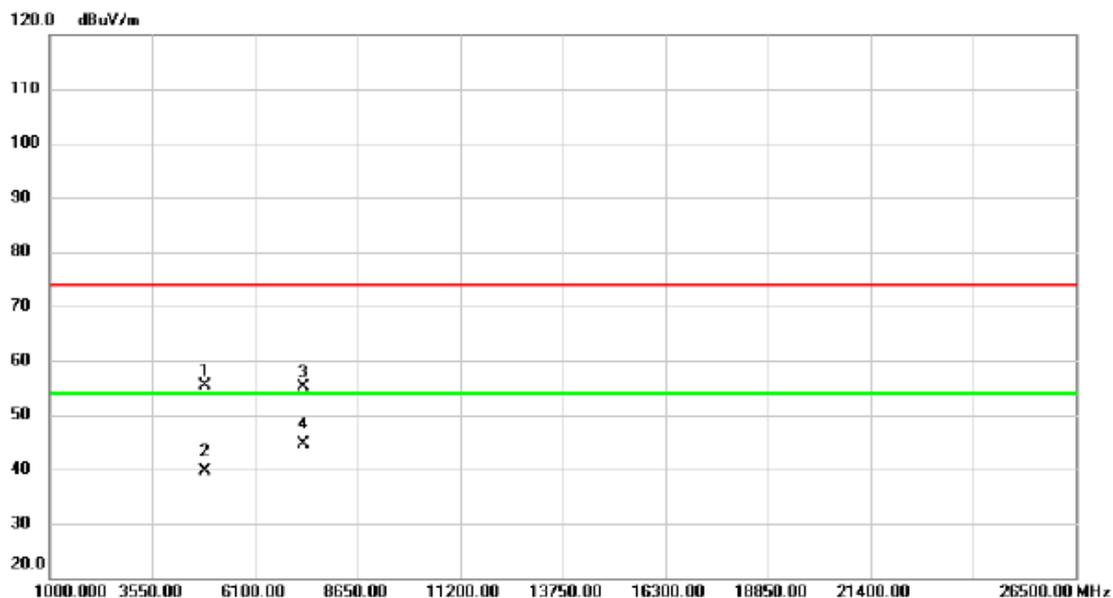
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	X	2436.000	77.27	32.12	109.39	74.00	35.39	peak	NO LIMIT
2	*	2436.000	60.26	32.12	92.38	54.00	38.38	AVG	NO LIMIT

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

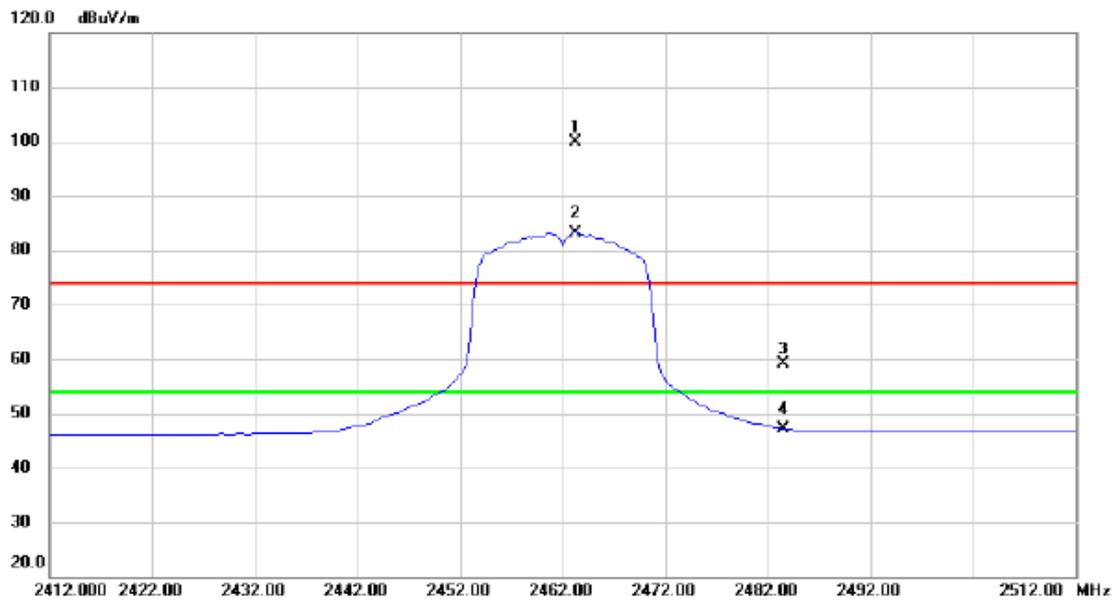
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		4870.850	49.46	5.84	55.30	74.00	-18.70	peak	
2		4870.850	33.79	5.84	39.63	54.00	-14.37	AVG	
3		7302.850	41.14	14.05	55.19	74.00	-18.81	peak	
4	*	7302.850	30.61	14.05	44.66	54.00	-9.34	AVG	

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

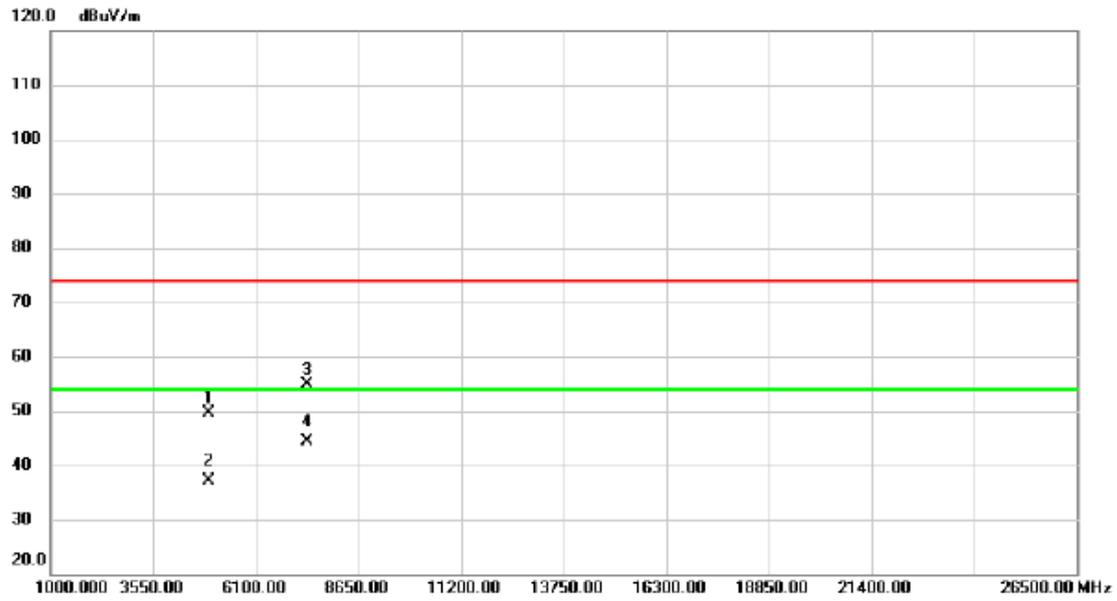
### Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	X	2463.250	67.70	32.24	99.94	74.00	25.94	peak	NO LIMIT
2	*	2463.250	51.01	32.24	83.25	54.00	29.25	AVG	NO LIMIT
3		2483.500	26.79	32.30	59.09	74.00	-14.91	peak	
4		2483.500	14.88	32.30	47.18	54.00	-6.82	AVG	

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

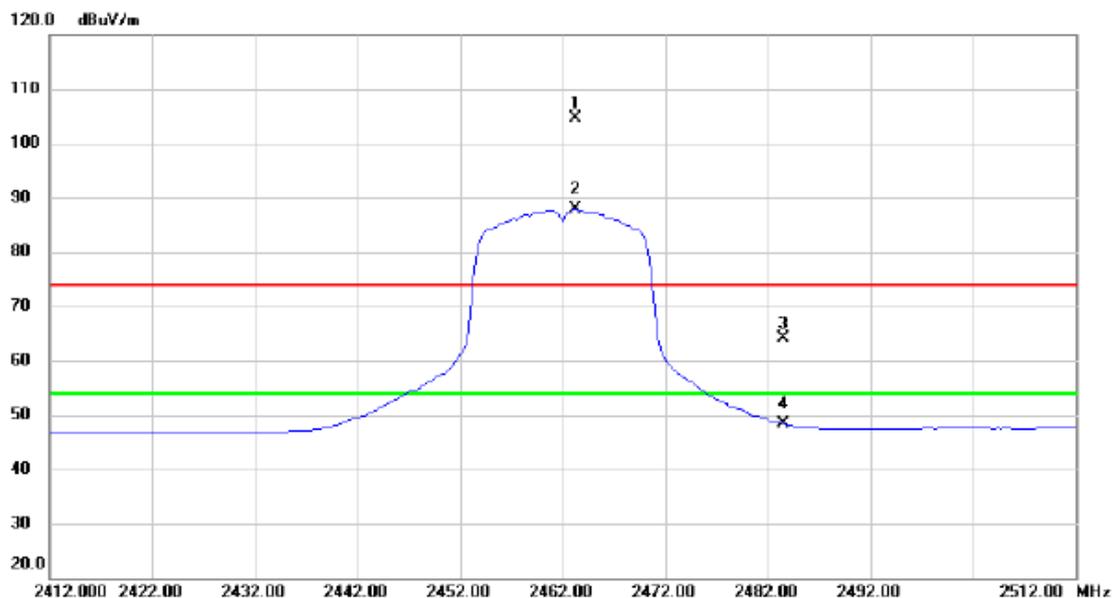
### Vertical



No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4921.750	43.83	5.90	49.73	74.00	-24.27	peak	
2	4921.750	31.26	5.90	37.16	54.00	-16.84	AVG	
3	7371.125	40.66	14.20	54.86	74.00	-19.14	peak	
4 *	7371.125	30.20	14.20	44.40	54.00	-9.60	AVG	

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

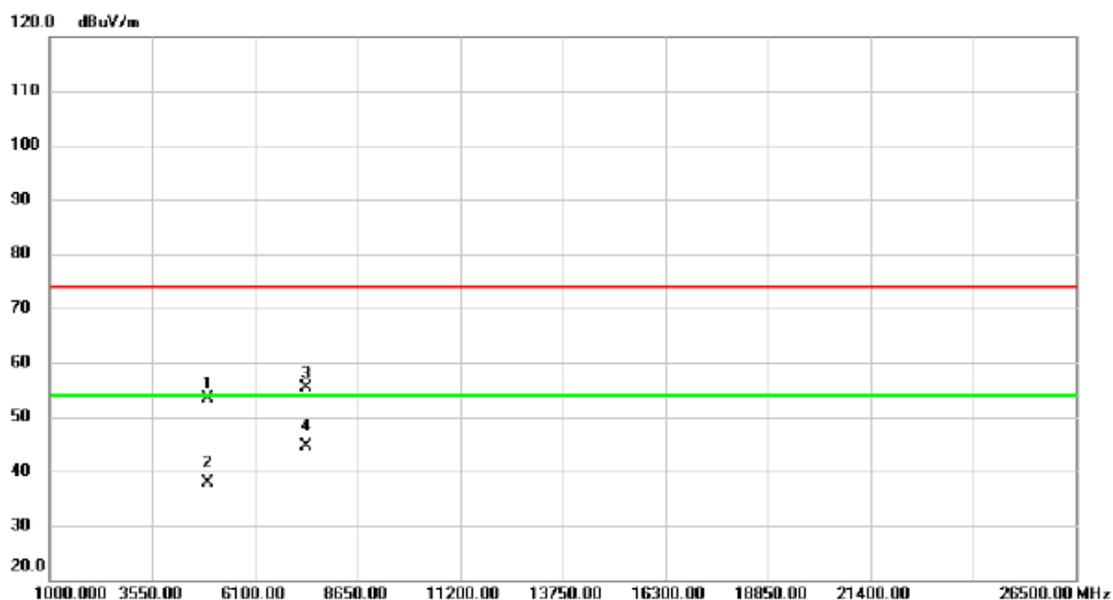
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	X	2463.250	72.43	32.24	104.67	74.00	30.67	peak	NO LIMIT
2	*	2463.250	55.60	32.24	87.84	54.00	33.84	AVG	NO LIMIT
3		2483.500	31.78	32.30	64.08	74.00	-9.92	peak	
4		2483.500	16.11	32.30	48.41	54.00	-5.59	AVG	

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

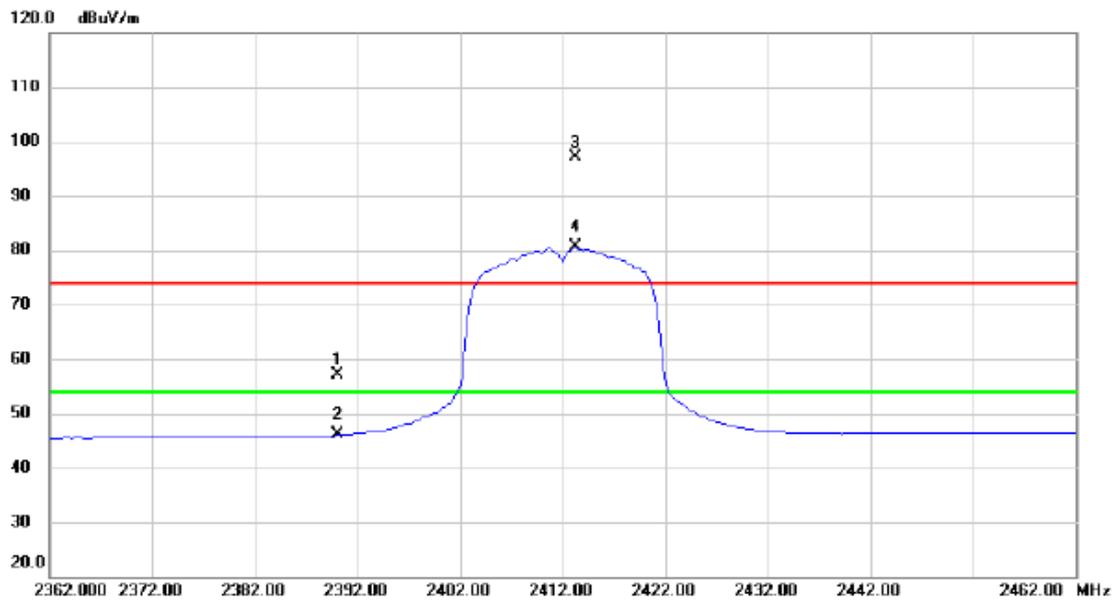
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		4927.050	47.36	5.91	53.27	74.00	-20.73	peak	
2		4927.050	31.93	5.91	37.84	54.00	-16.16	AVG	
3		7383.100	41.17	14.23	55.40	74.00	-18.60	peak	
4	*	7383.100	30.28	14.23	44.51	54.00	-9.49	AVG	

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

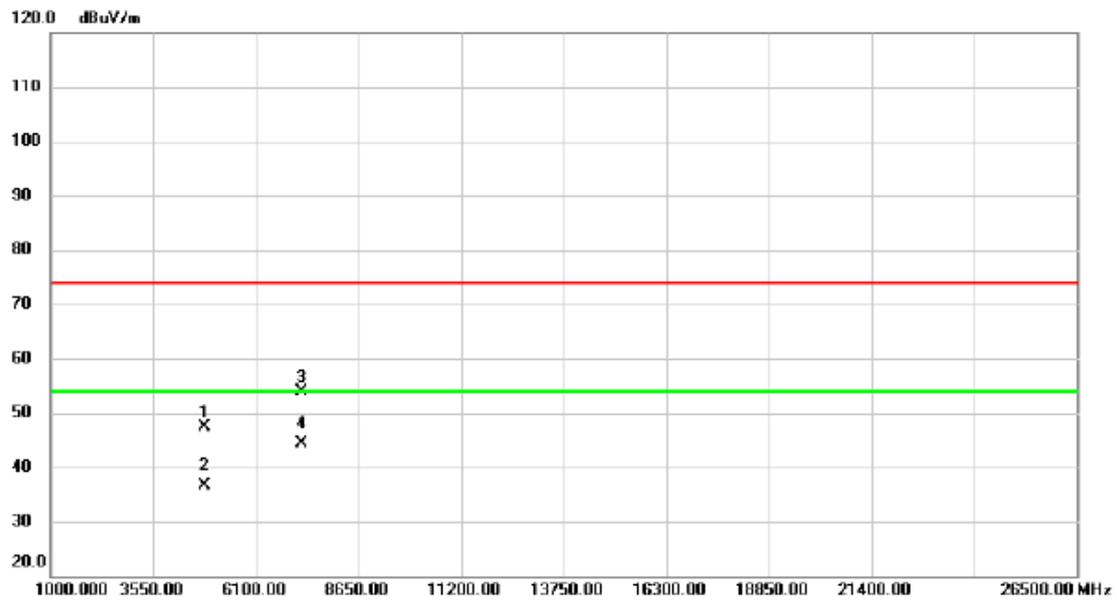
### Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		2390.000	25.17	31.96	57.13	74.00	-16.87	peak	
2		2390.000	14.07	31.96	46.03	54.00	-7.97	AVG	
3	X	2413.250	65.06	32.05	97.11	74.00	23.11	peak	NO LIMIT
4	*	2413.250	48.51	32.05	80.56	54.00	26.56	AVG	NO LIMIT

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

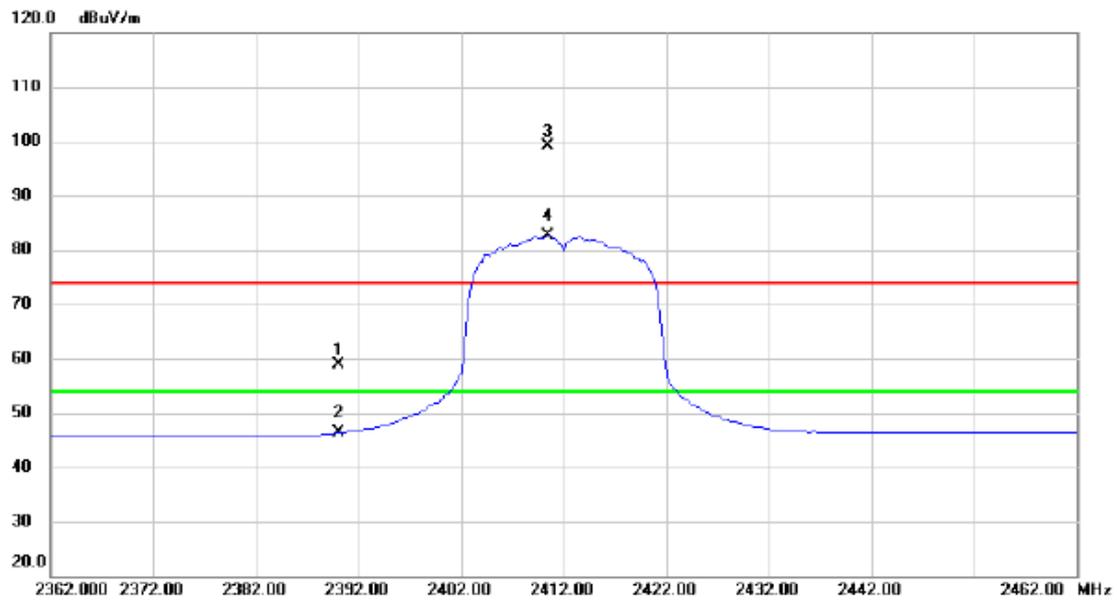
### Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		4824.950	41.55	5.79	47.34	74.00	-26.66	peak	
2		4824.950	30.73	5.79	36.52	54.00	-17.48	AVG	
3		7226.500	39.98	13.86	53.84	74.00	-20.16	peak	
4	*	7226.500	30.46	13.86	44.32	54.00	-9.68	AVG	

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

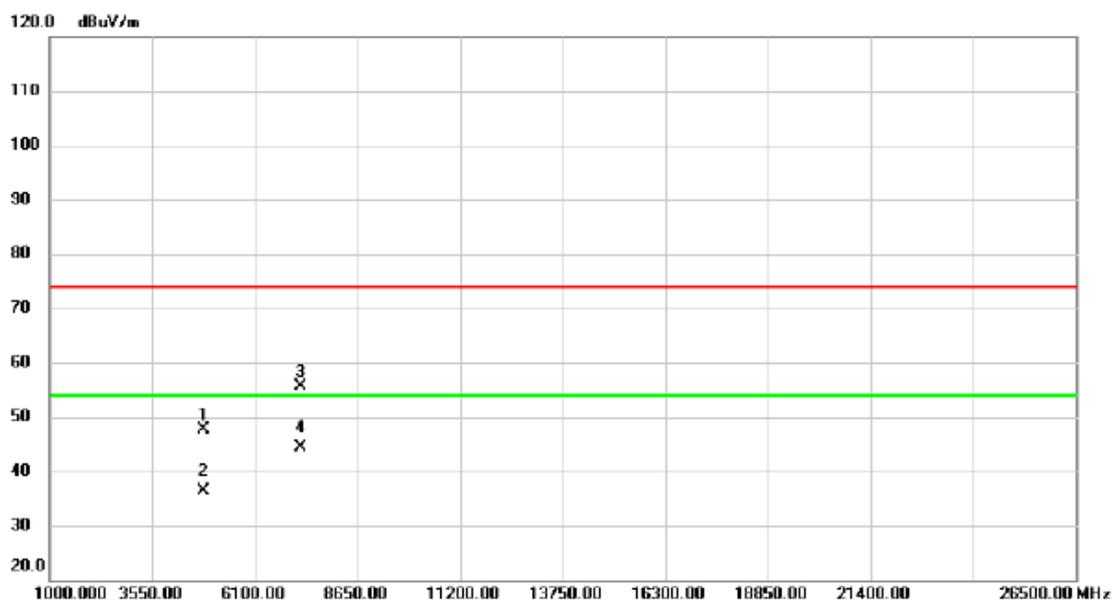
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		2390.000	26.97	31.96	58.93	74.00	-15.07	peak	
2		2390.000	14.34	31.96	46.30	54.00	-7.70	AVG	
3	X	2410.500	67.00	32.03	99.03	74.00	25.03	peak	NO LIMIT
4	*	2410.500	50.62	32.03	82.65	54.00	28.65	AVG	NO LIMIT

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

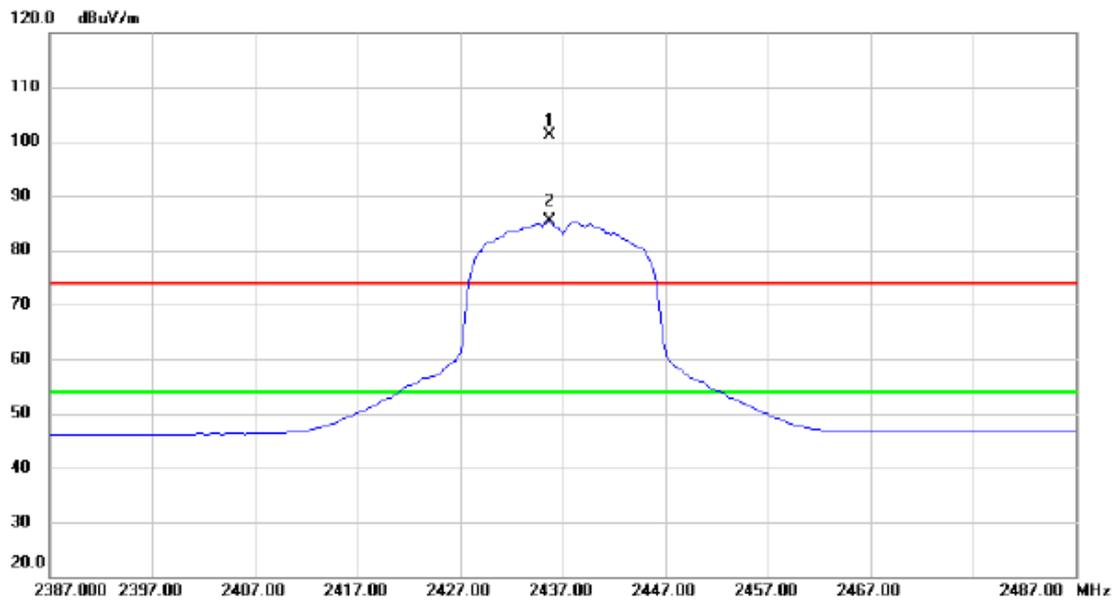
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		4814.100	41.80	5.79	47.59	74.00	-26.41	peak	
2		4814.100	30.49	5.79	36.28	54.00	-17.72	AVG	
3		7228.100	41.68	13.86	55.54	74.00	-18.46	peak	
4	*	7228.100	30.44	13.86	44.30	54.00	-9.70	AVG	

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

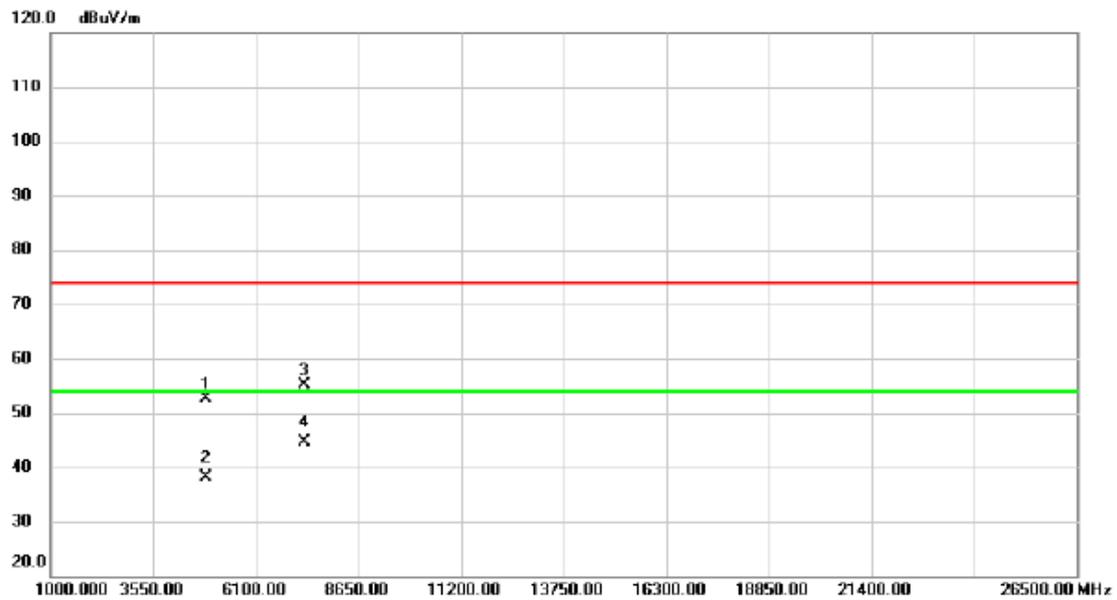
### Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	X	2435.750	69.08	32.12	101.20	74.00	27.20	peak	NO LIMIT
2	*	2435.750	53.17	32.12	85.29	54.00	31.29	AVG	NO LIMIT

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

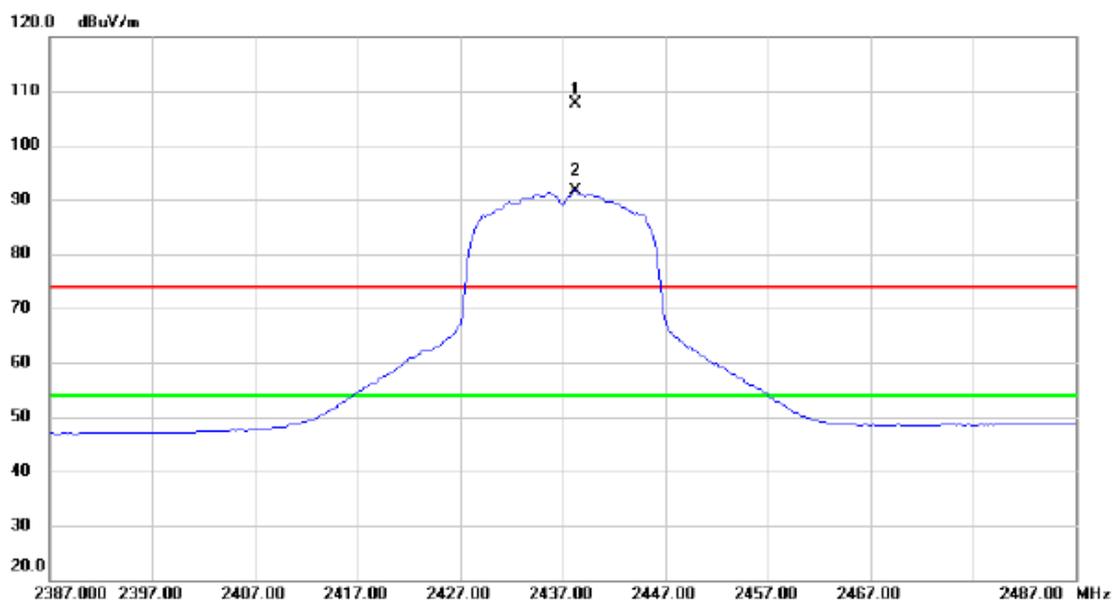
### Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		4872.250	46.79	5.84	52.63	74.00	-21.37	peak	
2		4872.250	32.24	5.84	38.08	54.00	-15.92	AVG	
3		7303.800	41.10	14.04	55.14	74.00	-18.86	peak	
4	*	7303.800	30.60	14.04	44.64	54.00	-9.36	AVG	

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

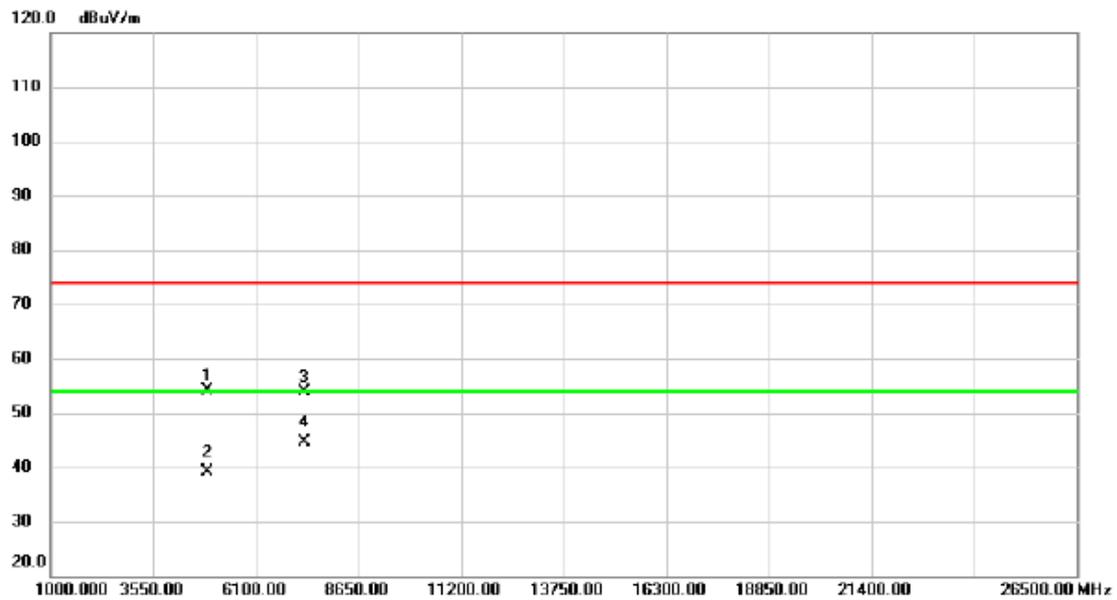
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	X	2438.250	75.42	32.14	107.56	74.00	33.56	peak	NO LIMIT
2	*	2438.250	59.39	32.14	91.53	54.00	37.53	AVG	NO LIMIT

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

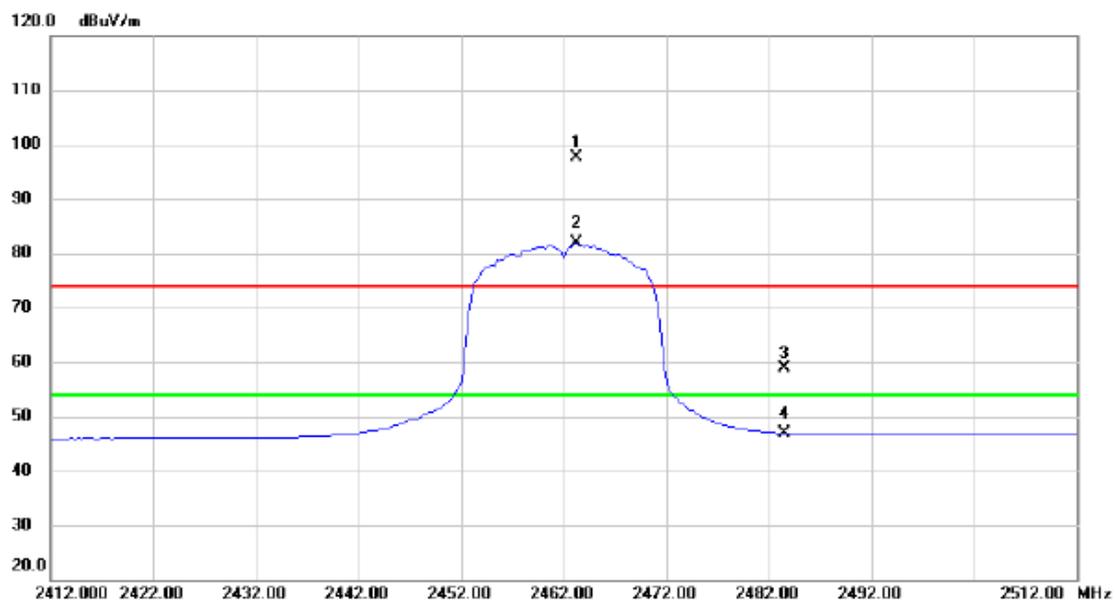
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		4876.500	48.16	5.85	54.01	74.00	-19.99	peak	
2		4876.500	33.34	5.85	39.19	54.00	-14.81	AVG	
3		7303.350	39.85	14.05	53.90	74.00	-20.10	peak	
4	*	7303.350	30.53	14.05	44.58	54.00	-9.42	AVG	

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

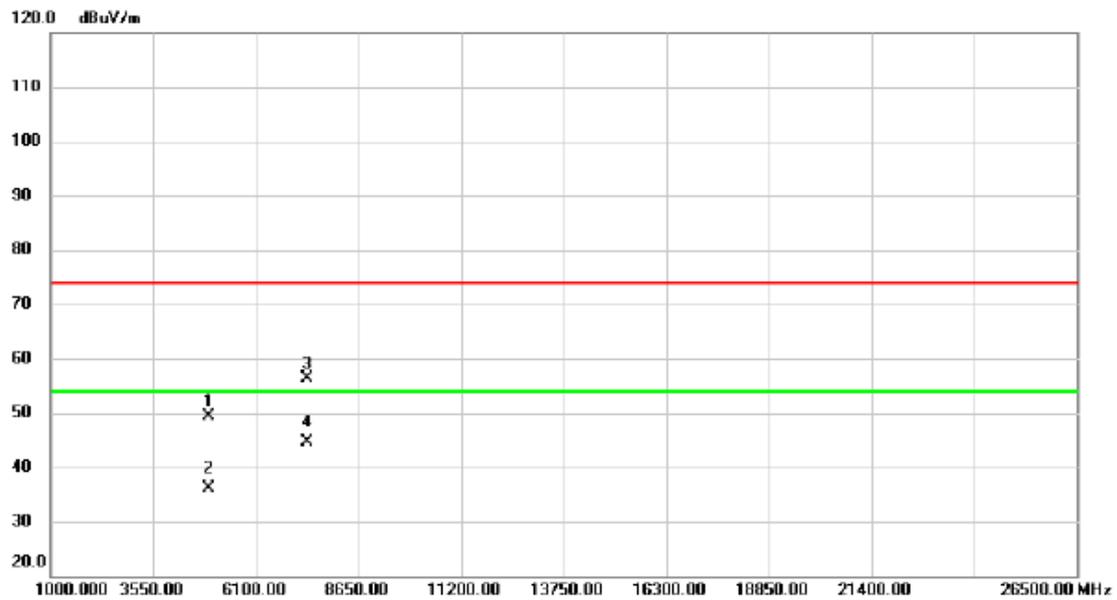
### Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	X	2463.250	65.42	32.24	97.66	74.00	23.66	peak	NO LIMIT
2	*	2463.250	49.52	32.24	81.76	54.00	27.76	AVG	NO LIMIT
3		2483.500	26.55	32.30	58.85	74.00	-15.15	peak	
4		2483.500	14.55	32.30	46.85	54.00	-7.15	AVG	

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

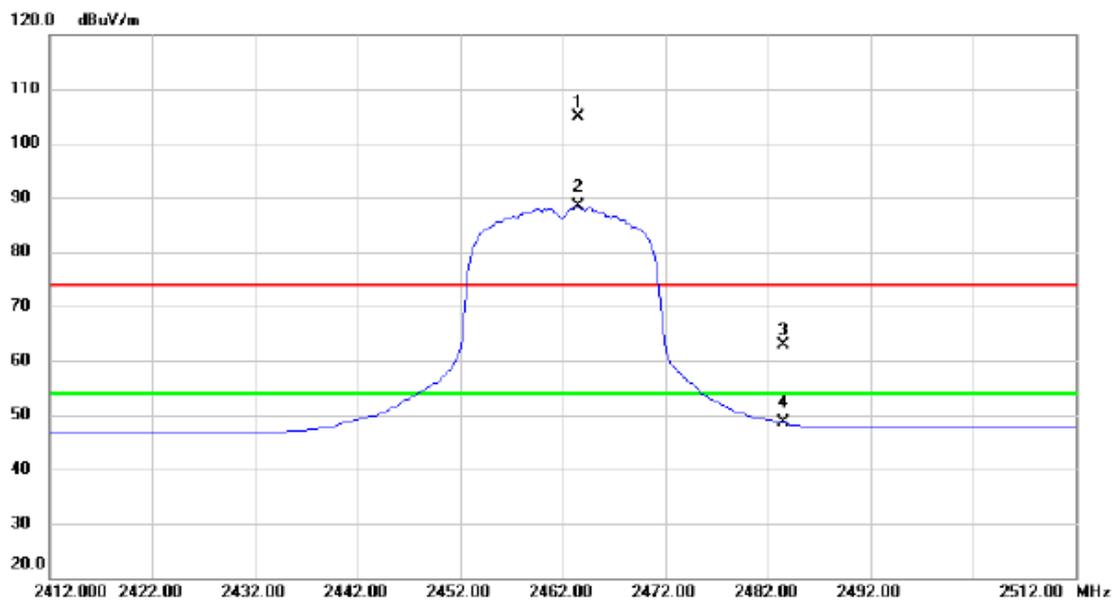
### Vertical



No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4921.900	43.39	5.90	49.29	74.00	-24.71	peak	
2	4921.900	30.17	5.90	36.07	54.00	-17.93	AVG	
3	7391.350	42.01	14.25	56.26	74.00	-17.74	peak	
4 *	7391.350	30.45	14.25	44.70	54.00	-9.30	AVG	

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

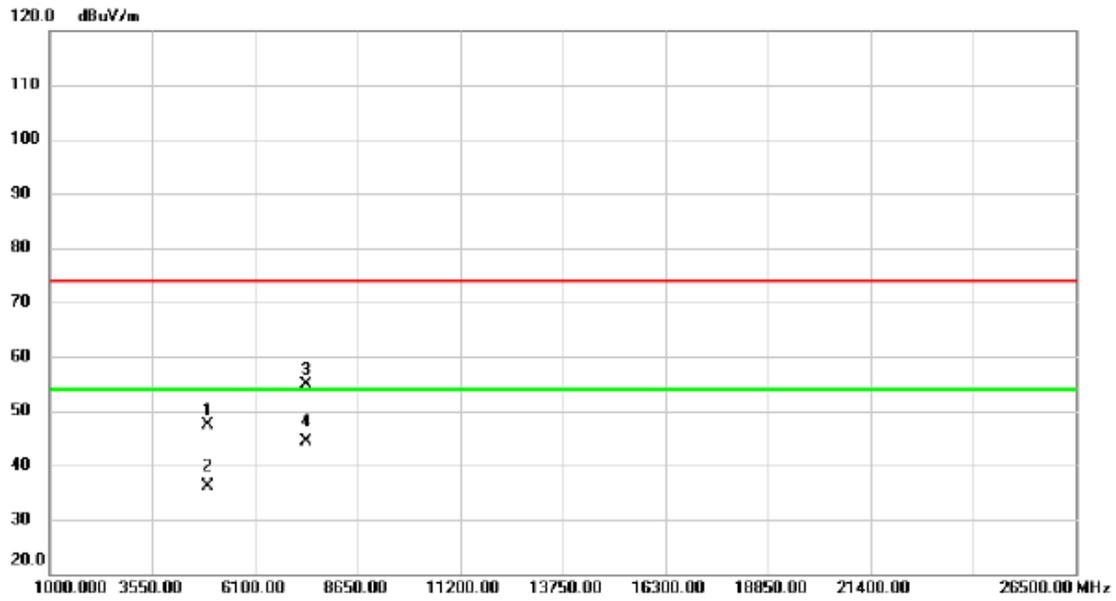
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	X	2463.500	72.71	32.24	104.95	74.00	30.95	peak	NO LIMIT
2	*	2463.500	56.17	32.24	88.41	54.00	34.41	AVG	NO LIMIT
3		2483.500	30.49	32.30	62.79	74.00	-11.21	peak	
4		2483.500	16.21	32.30	48.51	54.00	-5.49	AVG	

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

### Horizontal

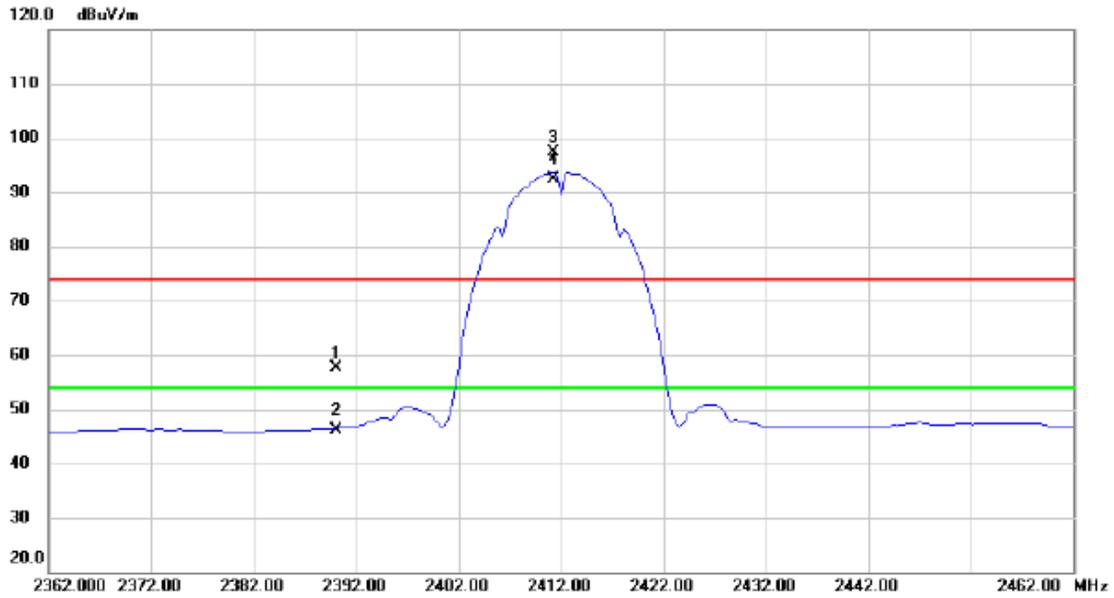


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		4921.250	41.42	5.90	47.32	74.00	-26.68	peak	
2		4921.250	30.16	5.90	36.06	54.00	-17.94	AVG	
3		7377.300	40.77	14.21	54.98	74.00	-19.02	peak	
4	*	7377.300	30.21	14.21	44.42	54.00	-9.58	AVG	

### For Chip Antenna

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

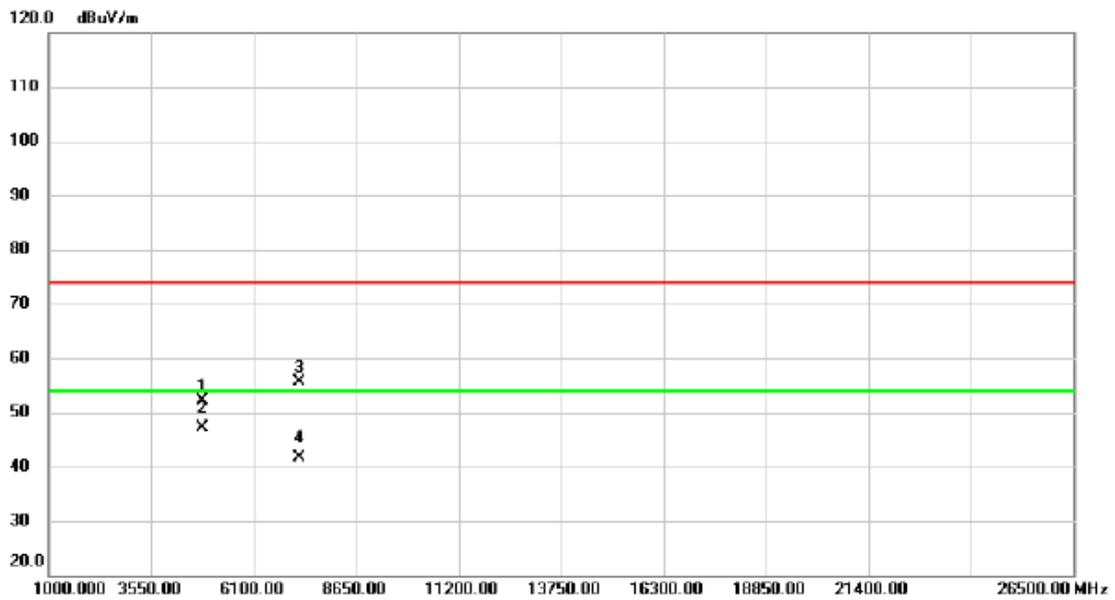
#### Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		2390.000	25.64	31.96	57.60	74.00	-16.40	peak	
2		2390.000	14.26	31.96	46.22	54.00	-7.78	AVG	
3	X	2411.250	65.26	32.03	97.29	74.00	23.29	peak	NO LIMIT
4	*	2411.250	60.25	32.03	92.28	54.00	38.28	AVG	NO LIMIT

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

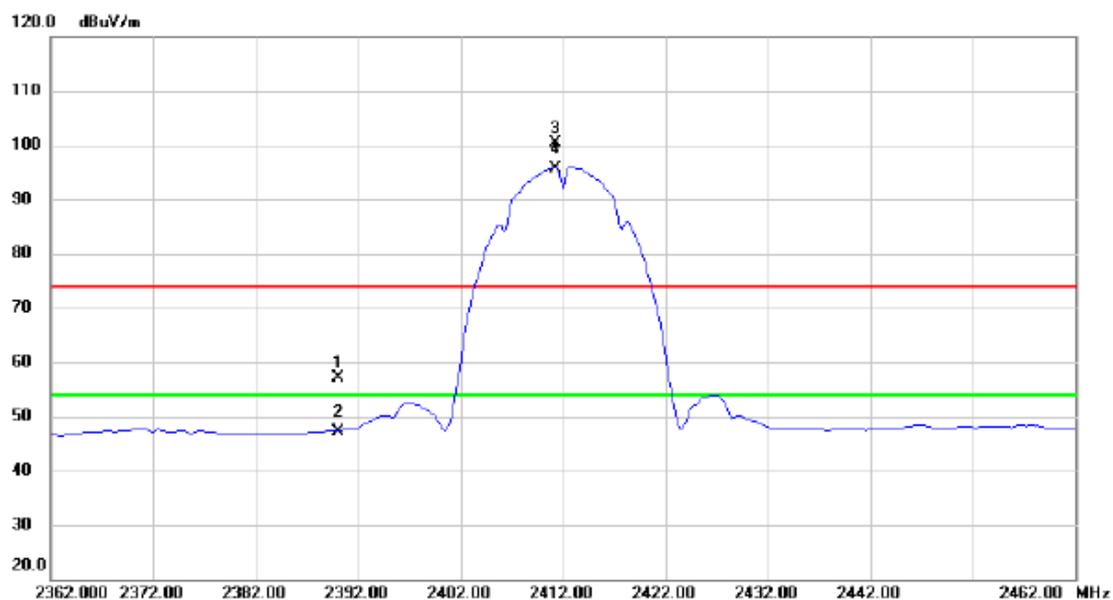
### Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		4824.075	46.33	5.79	52.12	74.00	-21.88	peak	
2	*	4824.075	41.25	5.79	47.04	54.00	-6.96	AVG	
3		7233.050	41.85	13.87	55.72	74.00	-18.28	peak	
4		7233.050	27.86	13.87	41.73	54.00	-12.27	AVG	

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

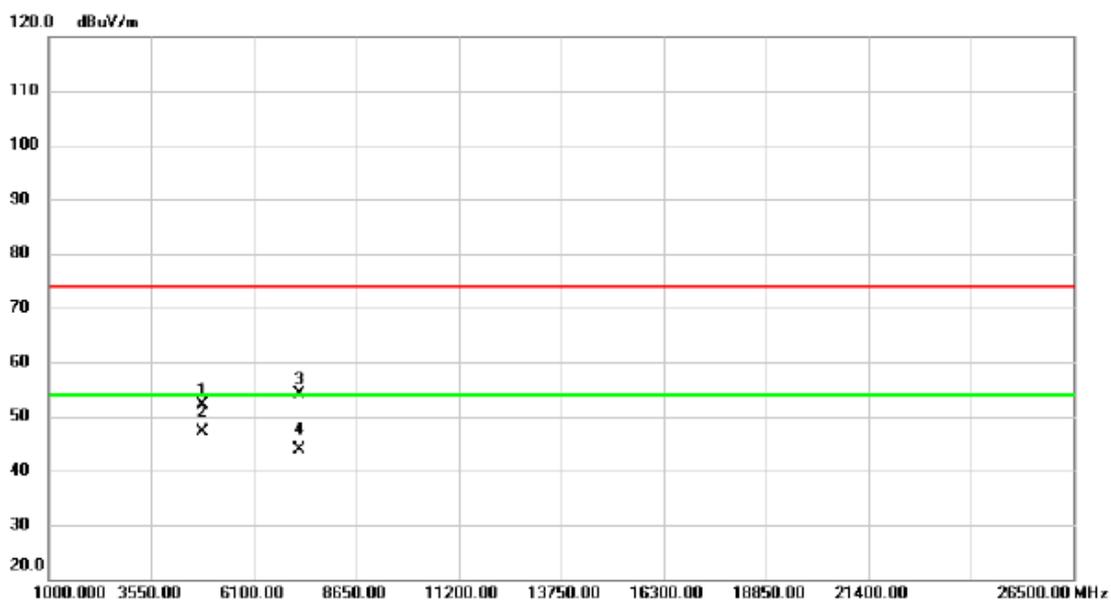
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		2390.000	25.12	31.96	57.08	74.00	-16.92	peak	
2		2390.000	15.13	31.96	47.09	54.00	-6.91	AVG	
3	X	2411.250	68.32	32.03	100.35	74.00	26.35	peak	NO LIMIT
4	*	2411.250	63.72	32.03	95.75	54.00	41.75	AVG	NO LIMIT

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

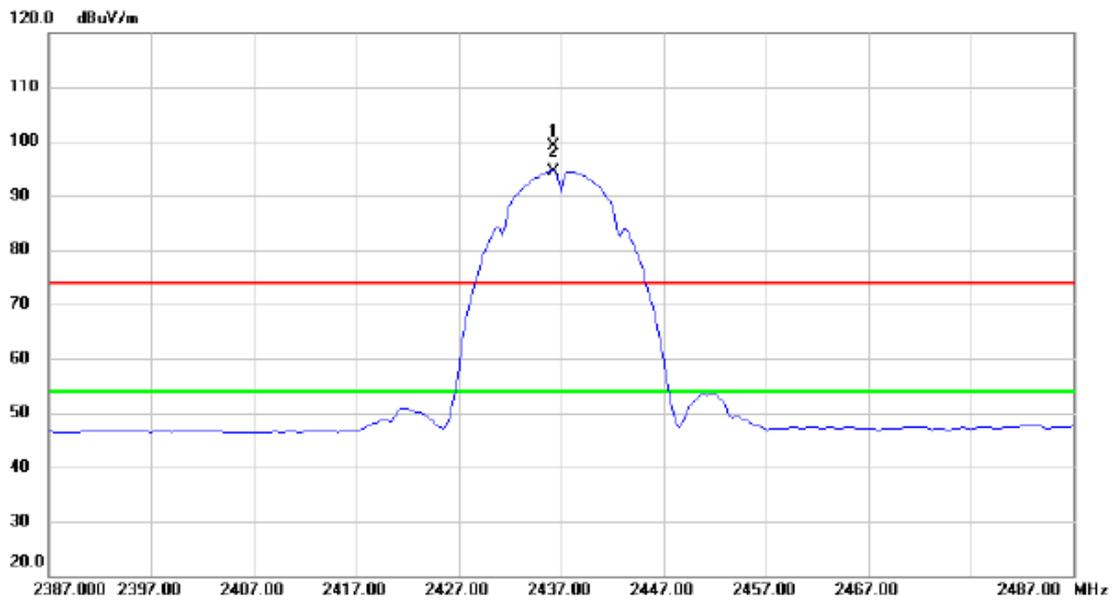
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		4824.000	46.23	5.79	52.02	74.00	-21.98	peak	
2	*	4824.000	41.25	5.79	47.04	54.00	-6.96	AVG	
3		7226.900	40.36	13.86	54.22	74.00	-19.78	peak	
4		7226.900	30.04	13.86	43.90	54.00	-10.10	AVG	

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

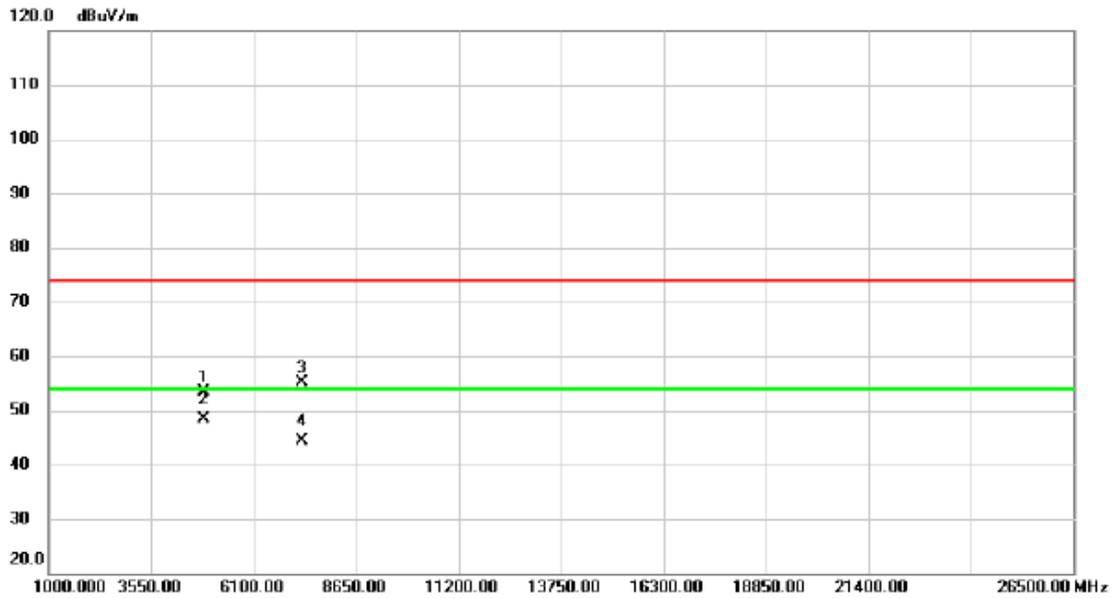
### Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1	X	2436.250	67.05	32.12	99.17	74.00	25.17	peak	NO LIMIT
2	*	2436.250	62.14	32.12	94.26	54.00	40.26	AVG	NO LIMIT

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

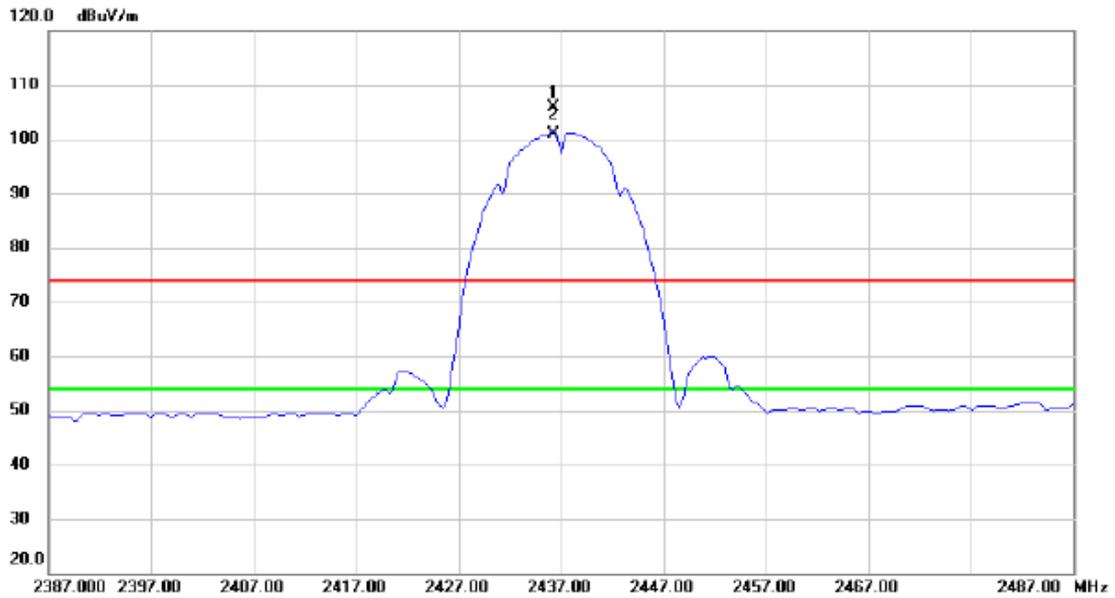
### Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		4874.000	47.56	5.84	53.40	74.00	-20.60	peak	
2	*	4874.000	42.52	5.84	48.36	54.00	-5.64	AVG	
3		7311.000	40.95	14.06	55.01	74.00	-18.99	peak	
4		7311.000	30.24	14.06	44.30	54.00	-9.70	AVG	

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

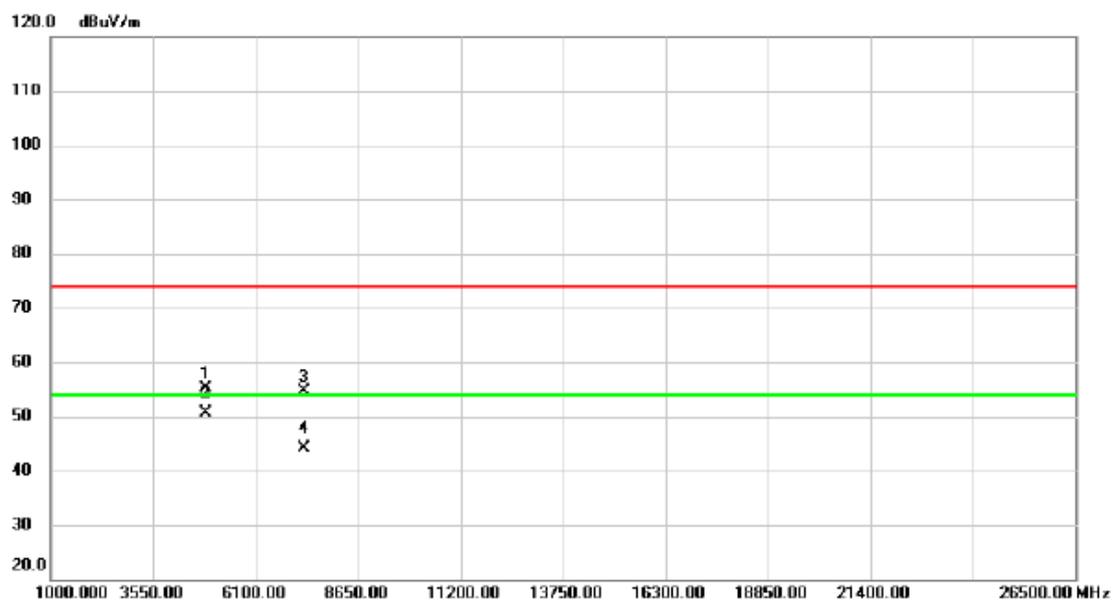
### Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1	X	2436.250	73.68	32.12	105.80	74.00	31.80	peak	NO LIMIT
2	*	2436.250	68.86	32.12	100.98	54.00	46.98	AVG	NO LIMIT

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

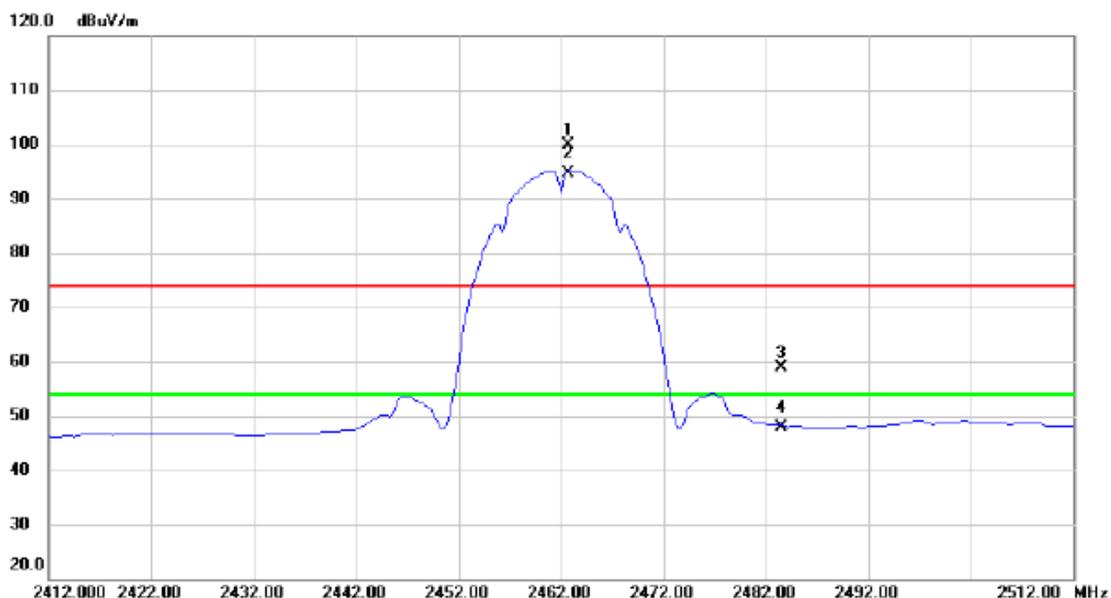
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		4874.000	49.35	5.84	55.19	74.00	-18.81	peak	
2	*	4874.000	44.86	5.84	50.70	54.00	-3.30	AVG	
3		7311.000	40.68	14.06	54.74	74.00	-19.26	peak	
4		7311.000	30.15	14.06	44.21	54.00	-9.79	AVG	

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

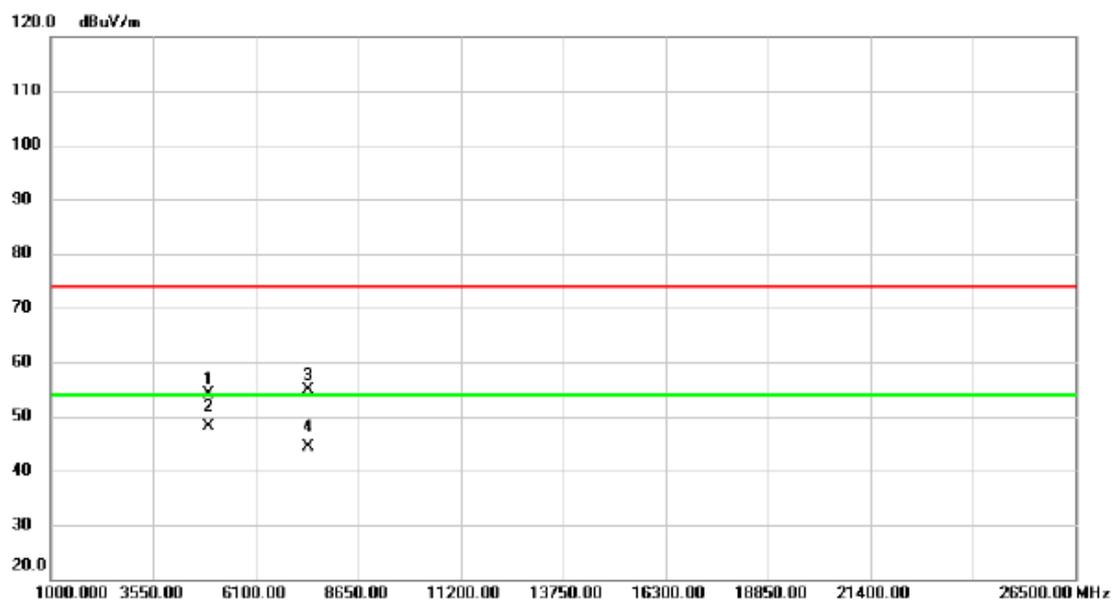
### Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	X	2462.750	67.66	32.23	99.89	74.00	25.89	peak	NO LIMIT
2	*	2462.750	62.31	32.23	94.54	54.00	40.54	AVG	NO LIMIT
3		2483.500	26.56	32.30	58.86	74.00	-15.14	peak	
4		2483.500	15.48	32.30	47.78	54.00	-6.22	AVG	

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

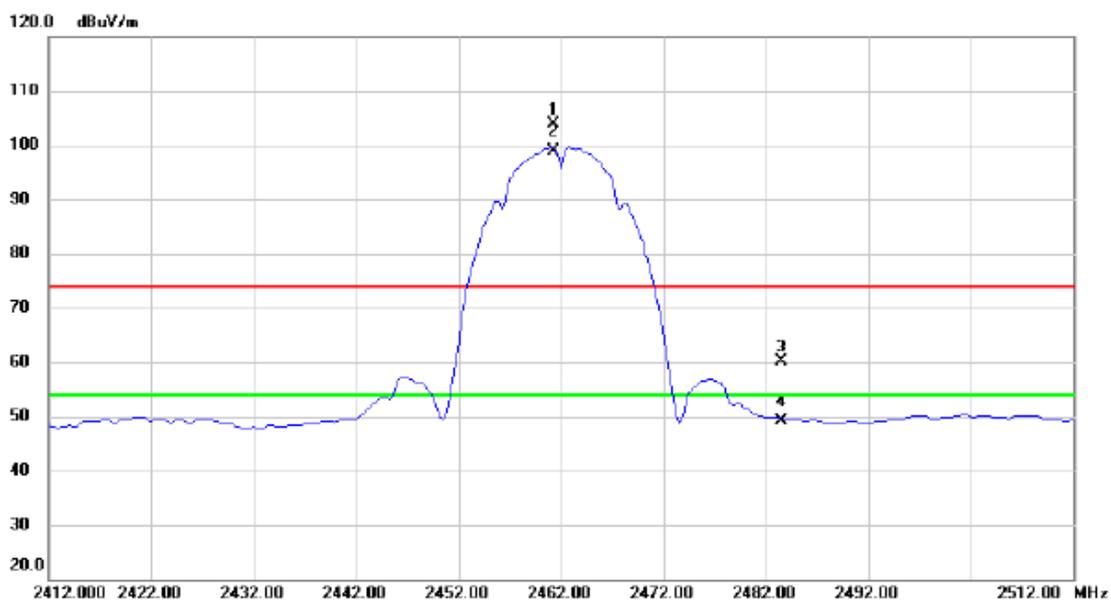
### Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		4924.000	48.15	5.90	54.05	74.00	-19.95	peak	
2	*	4924.000	42.17	5.90	48.07	54.00	-5.93	AVG	
3		7394.000	40.58	14.25	54.83	74.00	-19.17	peak	
4		7394.000	30.18	14.25	44.43	54.00	-9.57	AVG	

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

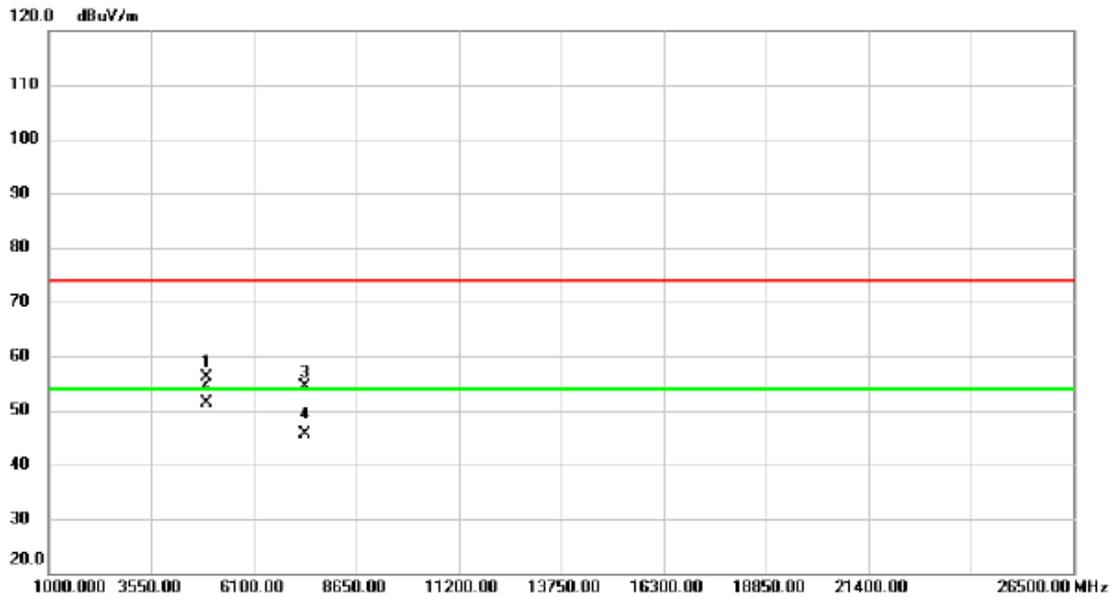
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	X	2461.250	71.69	32.22	103.91	74.00	29.91	peak	NO LIMIT
2	*	2461.250	66.58	32.22	98.80	54.00	44.80	AVG	NO LIMIT
3		2483.500	27.95	32.30	60.25	74.00	-13.75	peak	
4		2483.500	16.95	32.30	49.25	54.00	-4.75	AVG	

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

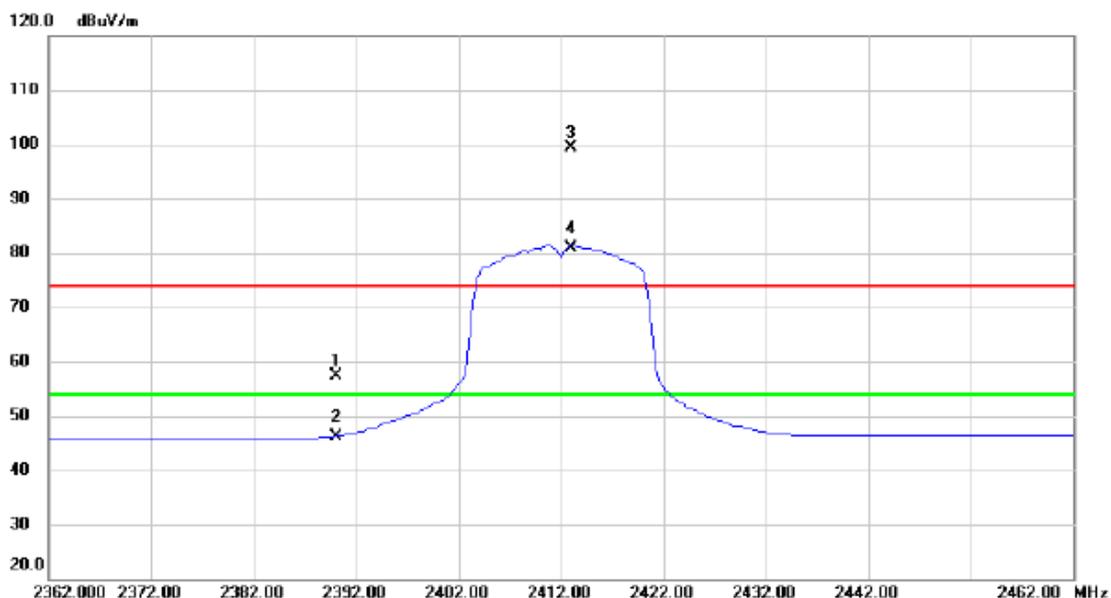
### Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		4924.000	50.14	5.90	56.04	74.00	-17.96	peak	
2	*	4924.000	45.38	5.90	51.28	54.00	-2.72	AVG	
3		7386.000	40.21	14.23	54.44	74.00	-19.56	peak	
4		7386.000	31.37	14.23	45.60	54.00	-8.40	AVG	

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

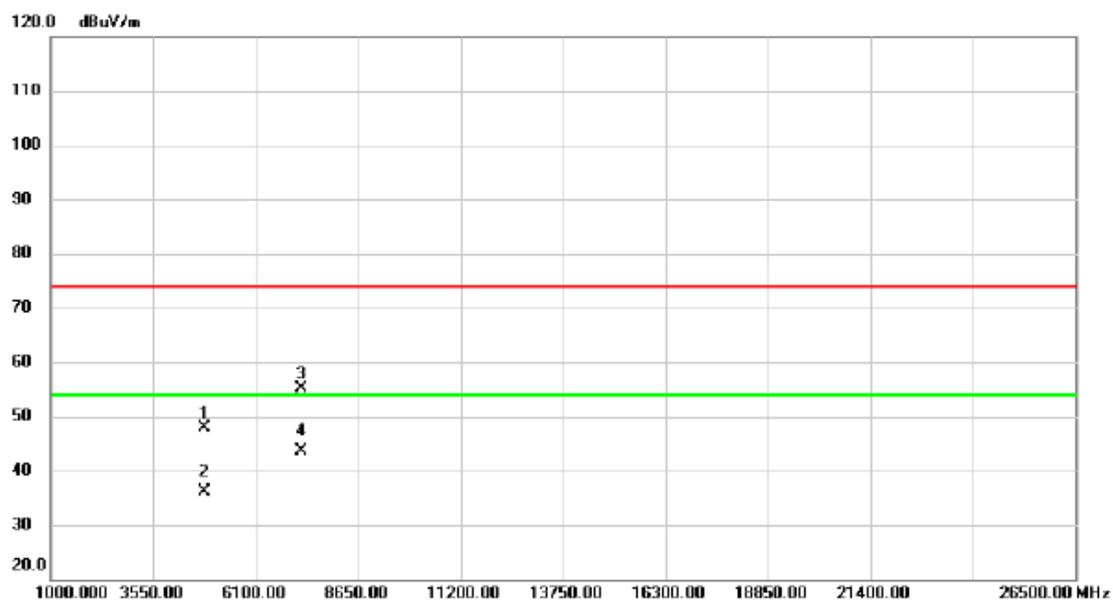
### Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		2390.000	25.34	31.96	57.30	74.00	-16.70	peak	
2		2390.000	14.25	31.96	46.21	54.00	-7.79	AVG	
3	X	2413.000	67.24	32.04	99.28	74.00	25.28	peak	NO LIMIT
4	*	2413.000	48.93	32.04	80.97	54.00	26.97	AVG	NO LIMIT

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

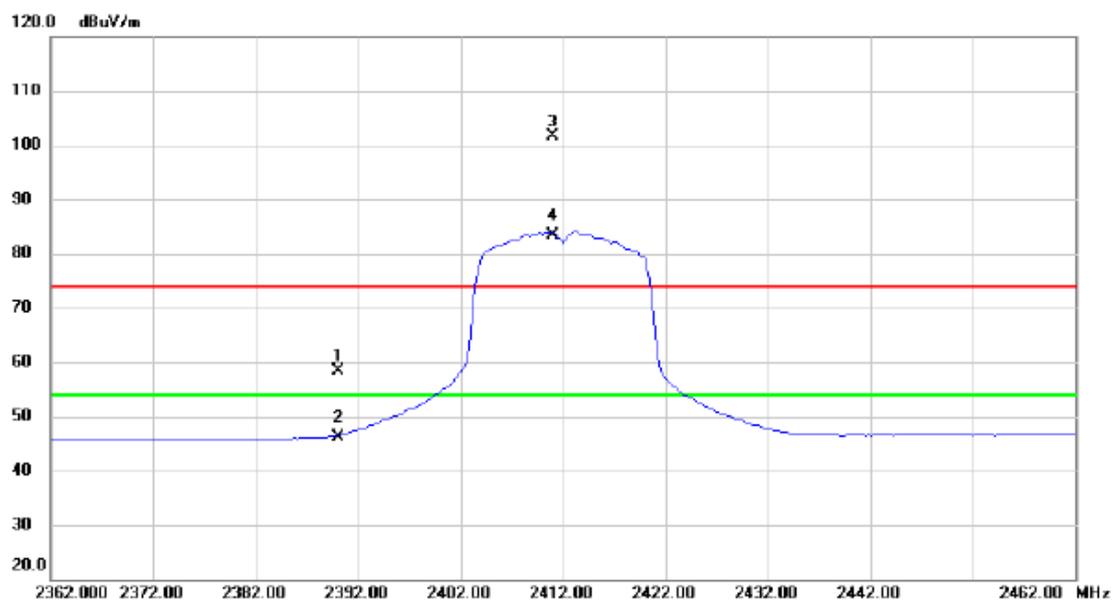
### Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		4824.000	42.15	5.79	47.94	74.00	-26.06	peak	
2		4824.000	30.24	5.79	36.03	54.00	-17.97	AVG	
3		7236.000	41.18	13.87	55.05	74.00	-18.95	peak	
4	*	7236.000	29.64	13.87	43.51	54.00	-10.49	AVG	

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

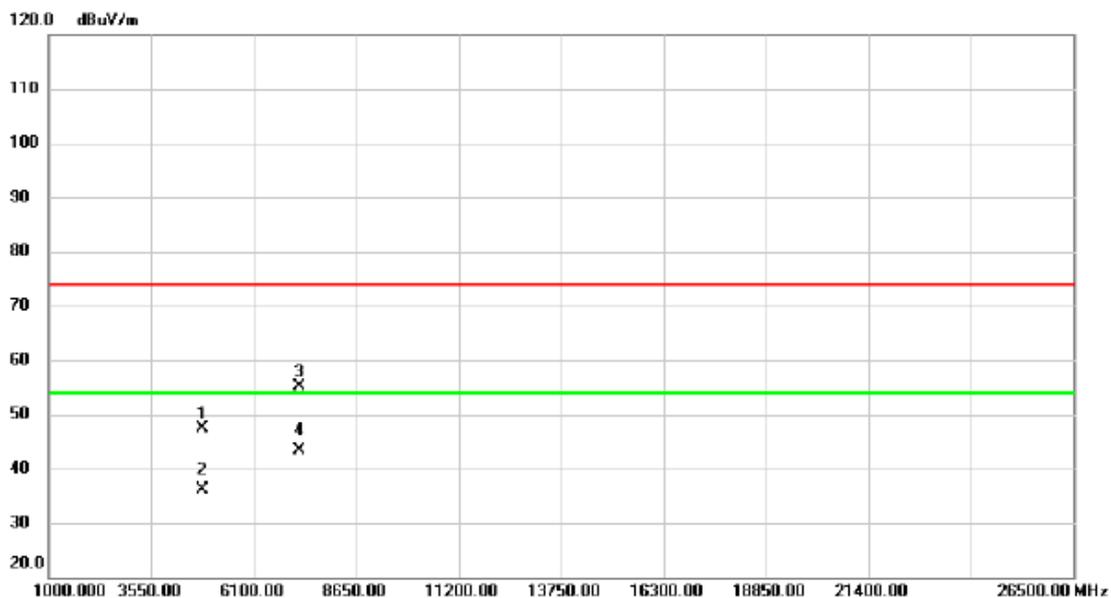
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		2390.000	26.54	31.96	58.50	74.00	-15.50	peak	
2		2390.000	14.28	31.96	46.24	54.00	-7.76	AVG	
3	X	2411.000	69.64	32.03	101.67	74.00	27.67	peak	NO LIMIT
4	*	2411.000	51.38	32.03	83.41	54.00	29.41	AVG	NO LIMIT

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

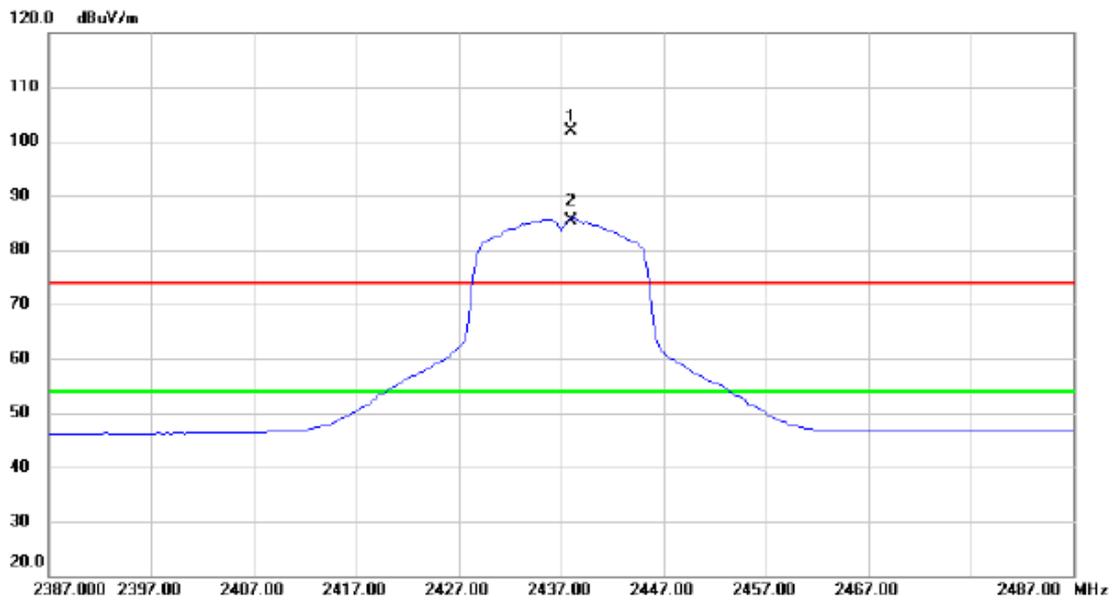
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		4825.000	41.68	5.80	47.48	74.00	-26.52	peak	
2		4825.000	30.38	5.80	36.18	54.00	-17.82	AVG	
3		7226.000	41.28	13.86	55.14	74.00	-18.86	peak	
4	*	7226.000	29.58	13.86	43.44	54.00	-10.56	AVG	

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

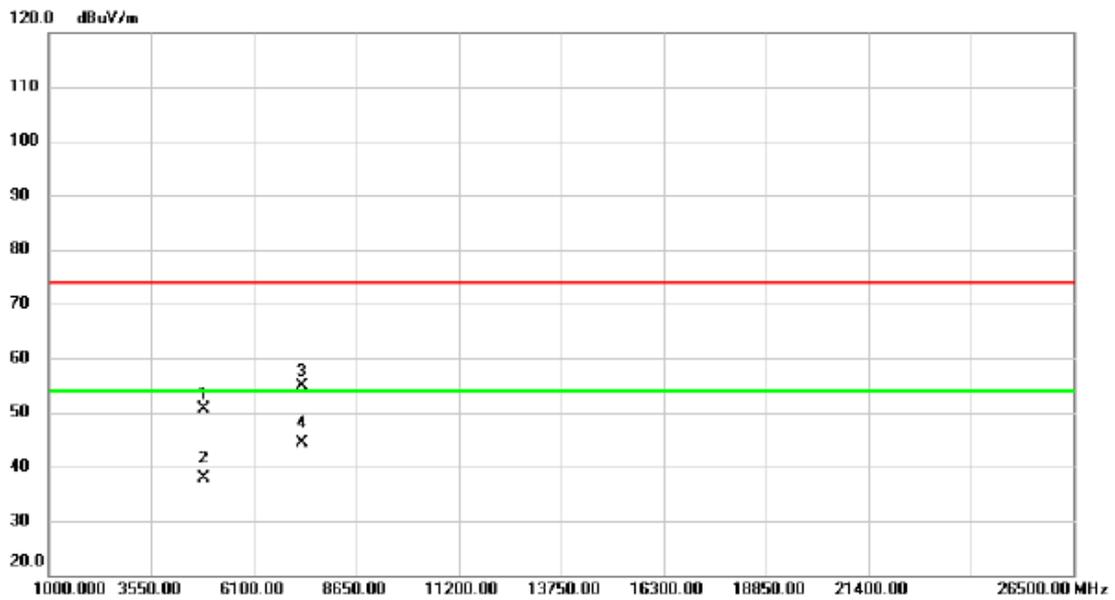
### Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1	X	2438.000	69.76	32.14	101.90	74.00	27.90	peak	NO LIMIT
2	*	2438.000	53.15	32.14	85.29	54.00	31.29	AVG	NO LIMIT

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

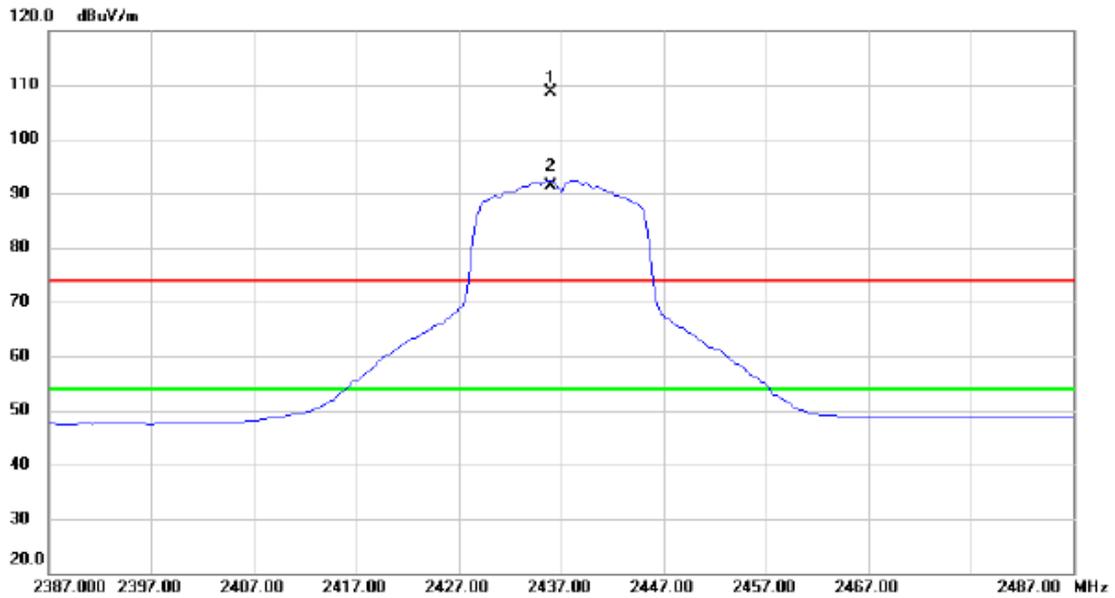
### Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		4874.000	44.68	5.84	50.52	74.00	-23.48	peak	
2		4874.000	32.15	5.84	37.99	54.00	-16.01	AVG	
3		7311.000	40.85	14.06	54.91	74.00	-19.09	peak	
4	*	7311.000	30.38	14.06	44.44	54.00	-9.56	AVG	

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

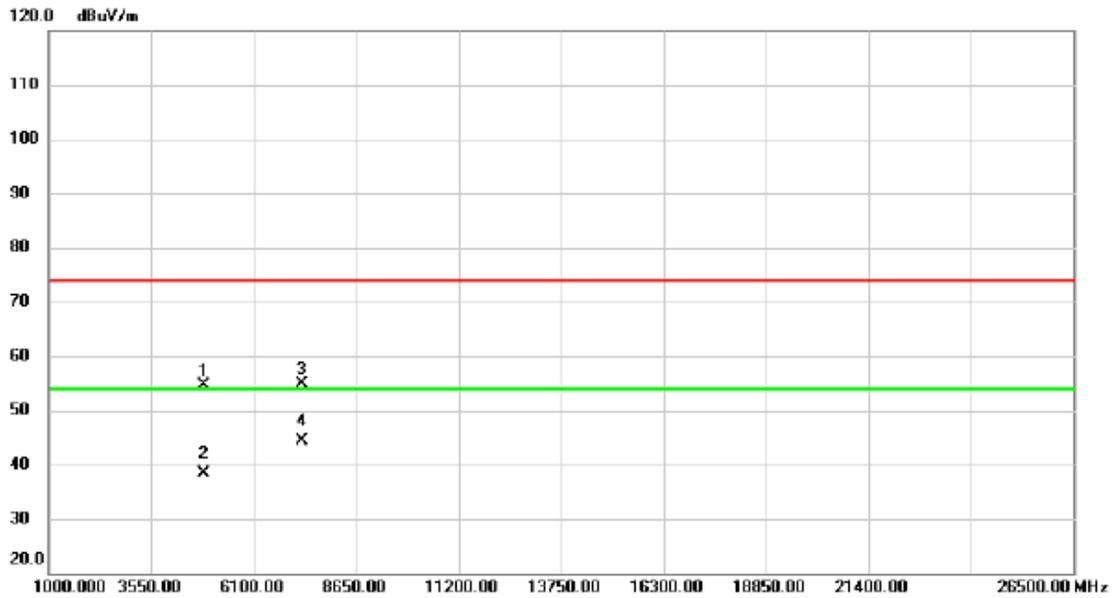
### Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1	X	2436.000	76.48	32.12	108.60	74.00	34.60	peak	NO LIMIT
2	*	2436.000	59.35	32.12	91.47	54.00	37.47	AVG	NO LIMIT

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

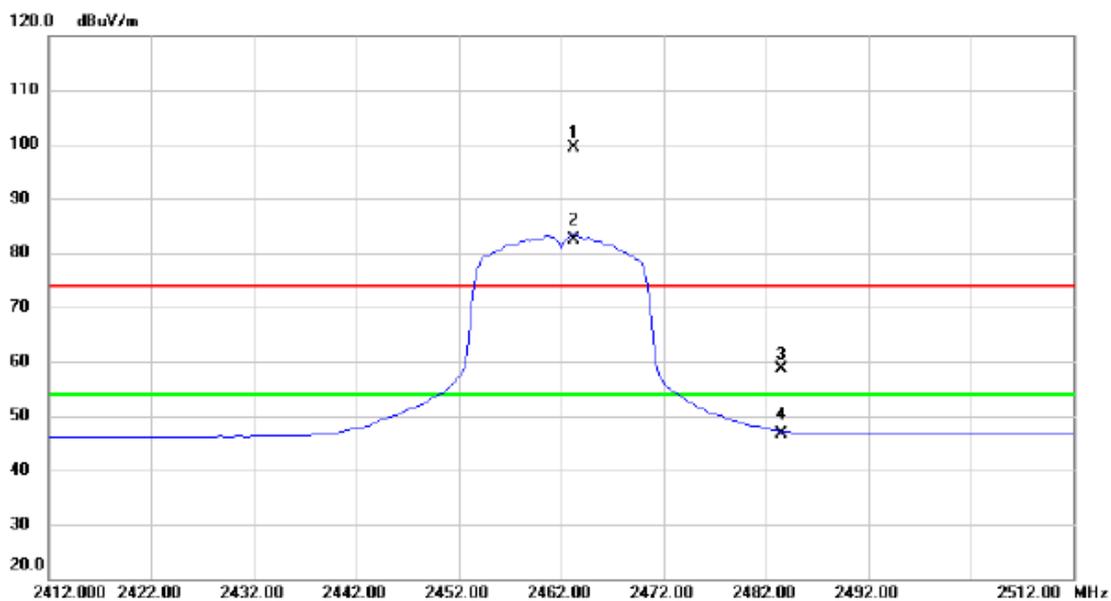
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		4872.000	48.68	5.84	54.52	74.00	-19.48	peak	
2		4872.000	32.58	5.84	38.42	54.00	-15.58	AVG	
3		7318.000	40.85	14.08	54.93	74.00	-19.07	peak	
4	*	7318.000	30.28	14.08	44.36	54.00	-9.64	AVG	

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

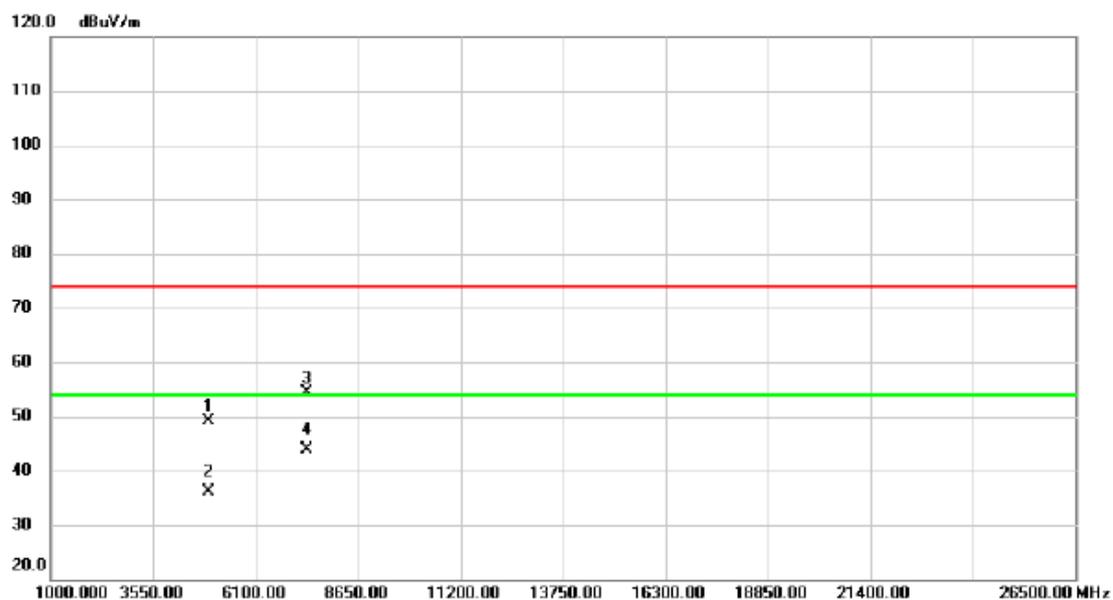
### Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	X	2463.250	67.24	32.24	99.48	74.00	25.48	peak	NO LIMIT
2	*	2463.250	50.24	32.24	82.48	54.00	28.48	AVG	NO LIMIT
3		2483.500	26.34	32.30	58.64	74.00	-15.36	peak	
4		2483.500	14.24	32.30	46.54	54.00	-7.46	AVG	

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

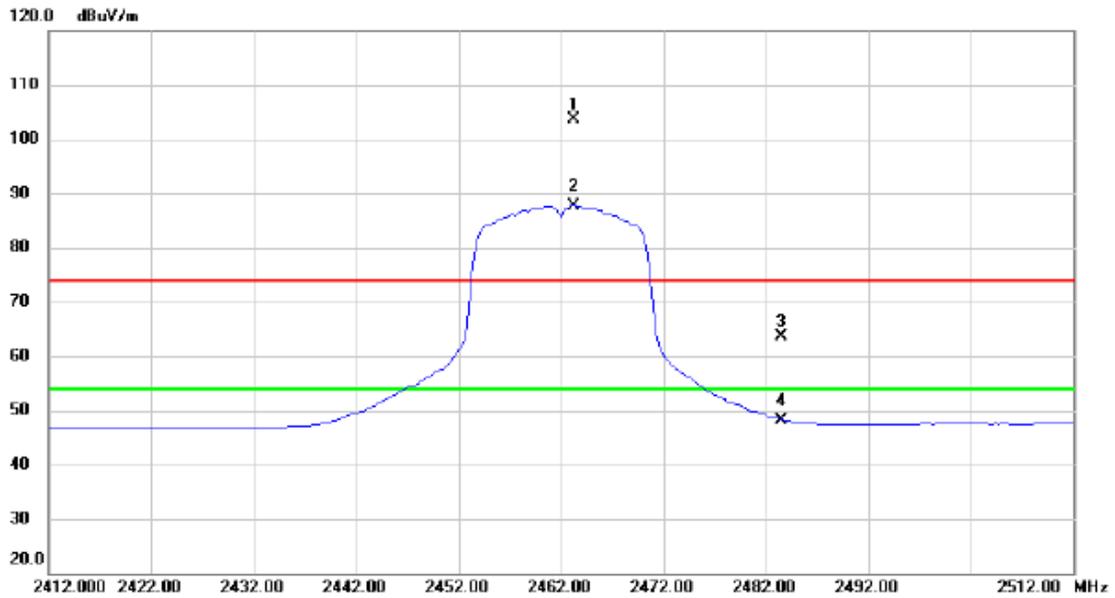
### Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		4924.000	43.26	5.90	49.16	74.00	-24.84	peak	
2		4924.000	30.35	5.90	36.25	54.00	-17.75	AVG	
3		7371.125	40.26	14.20	54.46	74.00	-19.54	peak	
4	*	7371.125	29.68	14.20	43.88	54.00	-10.12	AVG	

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

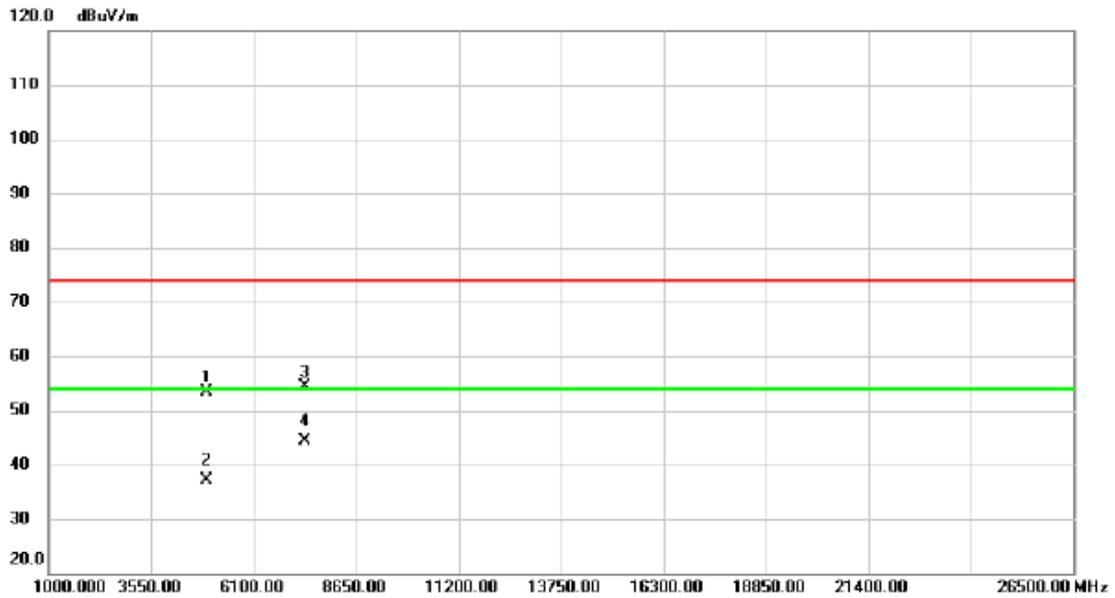
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	X	2463.250	71.44	32.24	103.68	74.00	29.68	peak	NO LIMIT
2	*	2463.250	55.28	32.24	87.52	54.00	33.52	AVG	NO LIMIT
3		2483.500	31.34	32.30	63.64	74.00	-10.36	peak	
4		2483.500	15.76	32.30	48.06	54.00	-5.94	AVG	

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

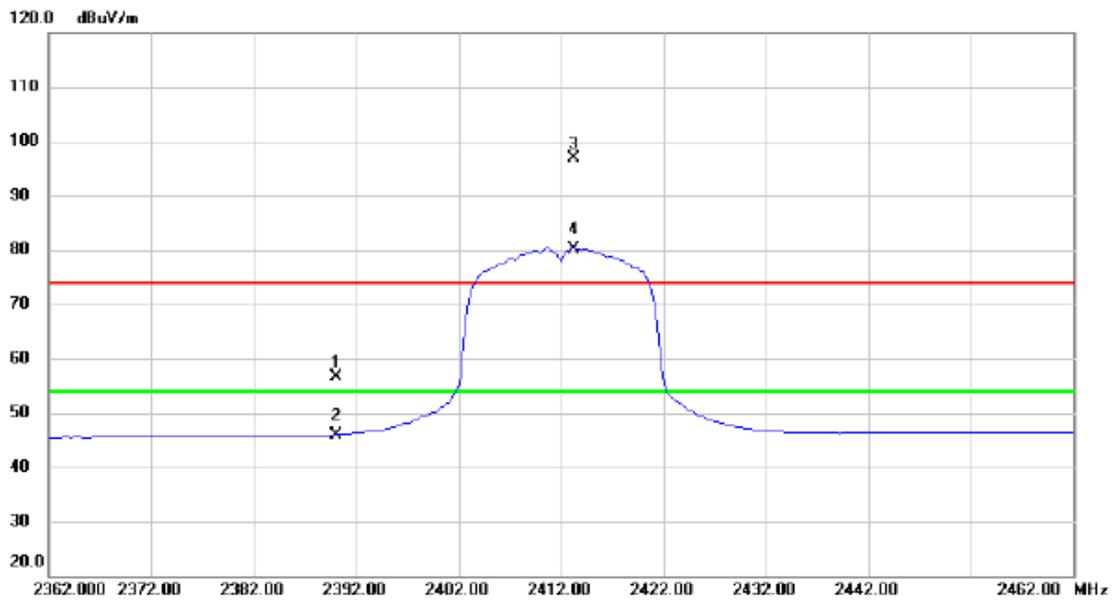
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		4924.000	47.58	5.90	53.48	74.00	-20.52	peak	
2		4924.000	31.15	5.90	37.05	54.00	-16.95	AVG	
3		7384.000	40.25	14.23	54.48	74.00	-19.52	peak	
4	*	7384.000	30.05	14.23	44.28	54.00	-9.72	AVG	

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

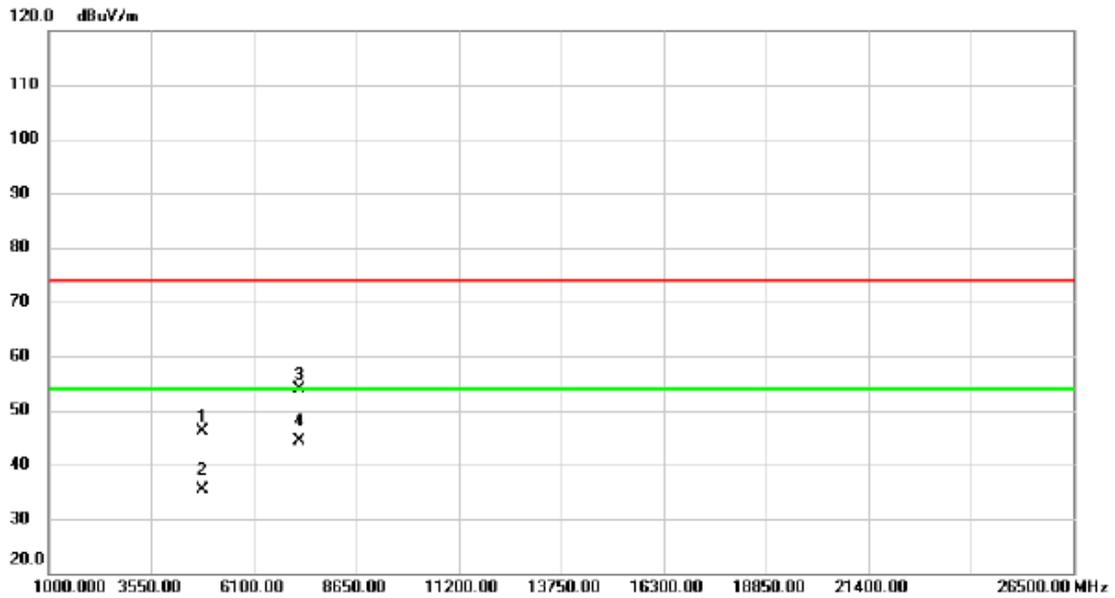
### Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		2390.000	24.68	31.96	56.64	74.00	-17.36	peak	
2		2390.000	13.82	31.96	45.78	54.00	-8.22	AVG	
3	X	2413.250	64.84	32.05	96.89	74.00	22.89	peak	NO LIMIT
4	*	2413.250	48.03	32.05	80.08	54.00	26.08	AVG	NO LIMIT

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

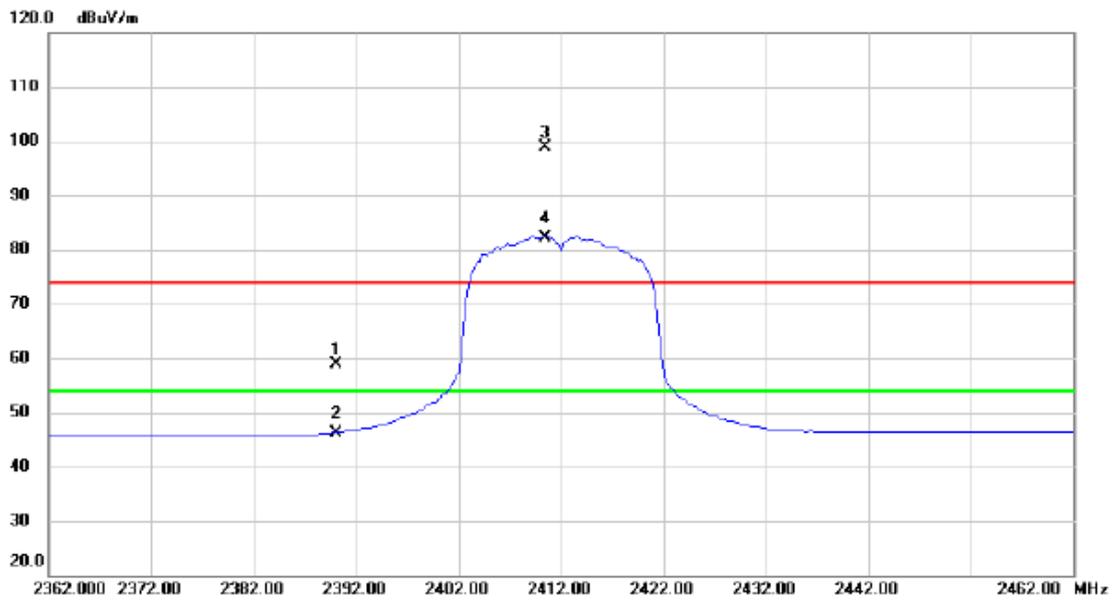
### Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		4824.000	40.25	5.79	46.04	74.00	-27.96	peak	
2		4824.000	29.48	5.79	35.27	54.00	-18.73	AVG	
3		7236.000	39.97	13.87	53.84	74.00	-20.16	peak	
4	*	7236.000	30.45	13.87	44.32	54.00	-9.68	AVG	

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

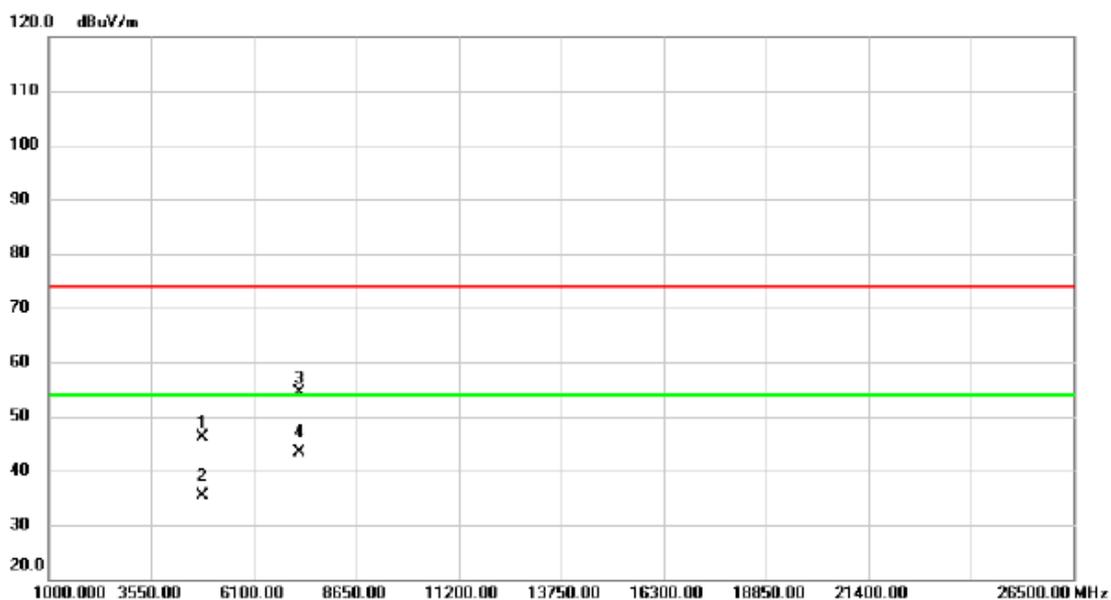
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		2390.000	26.85	31.96	58.81	74.00	-15.19	peak	
2		2390.000	14.24	31.96	46.20	54.00	-7.80	AVG	
3	X	2410.500	66.83	32.03	98.86	74.00	24.86	peak	NO LIMIT
4	*	2410.500	50.18	32.03	82.21	54.00	28.21	AVG	NO LIMIT

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

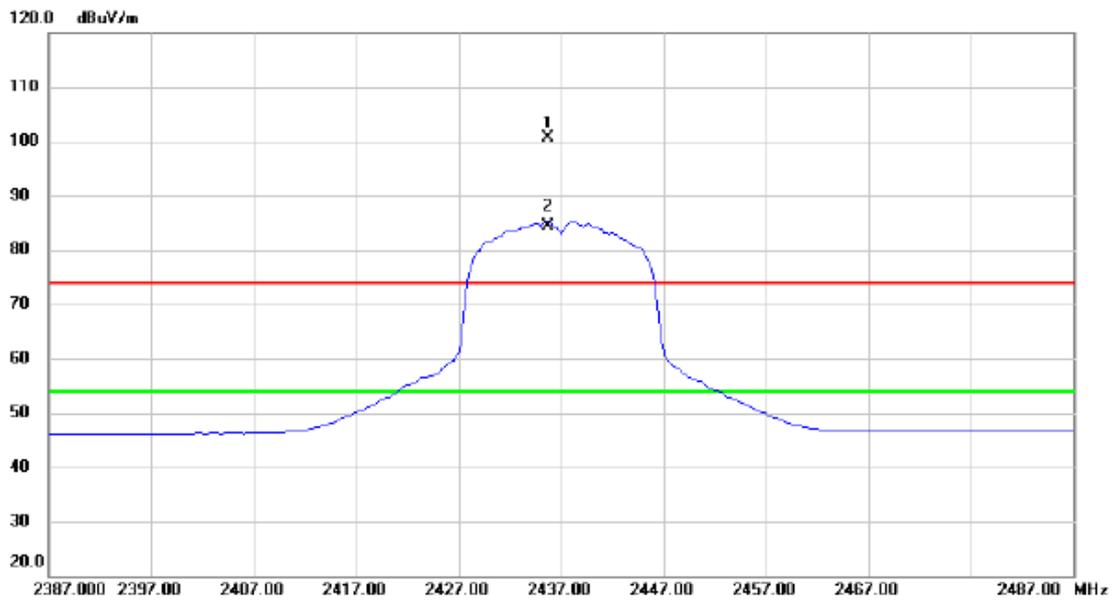
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		4824.000	40.25	5.79	46.04	74.00	-27.96	peak	
2		4824.000	29.48	5.79	35.27	54.00	-18.73	AVG	
3		7236.000	40.58	13.87	54.45	74.00	-19.55	peak	
4	*	7236.000	29.54	13.87	43.41	54.00	-10.59	AVG	

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

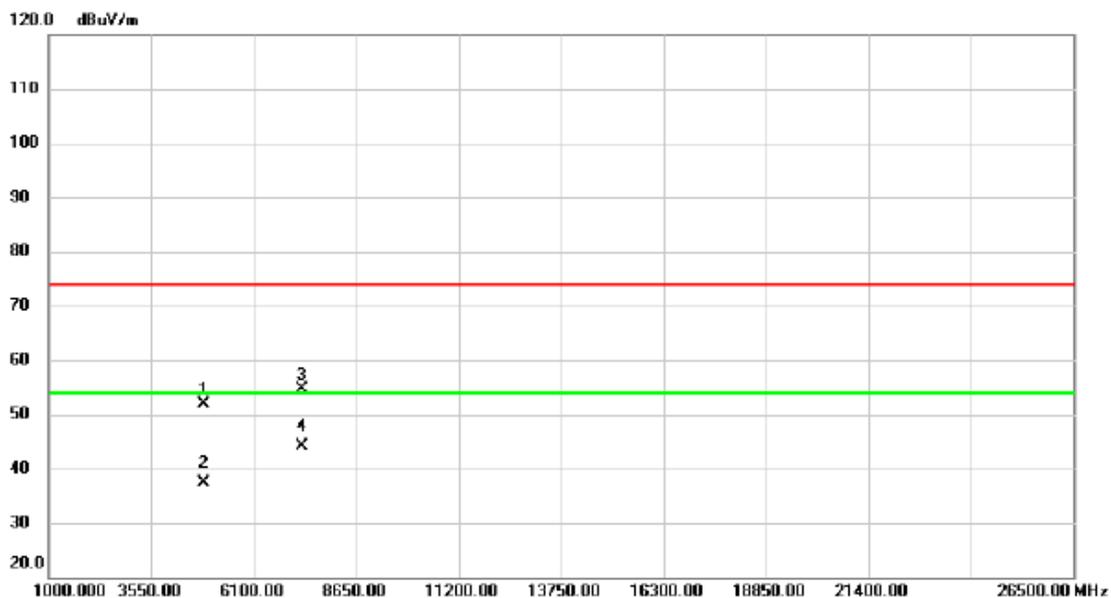
### Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1	X	2435.750	68.56	32.12	100.68	74.00	26.68	peak	NO LIMIT
2	*	2435.750	52.38	32.12	84.50	54.00	30.50	AVG	NO LIMIT

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

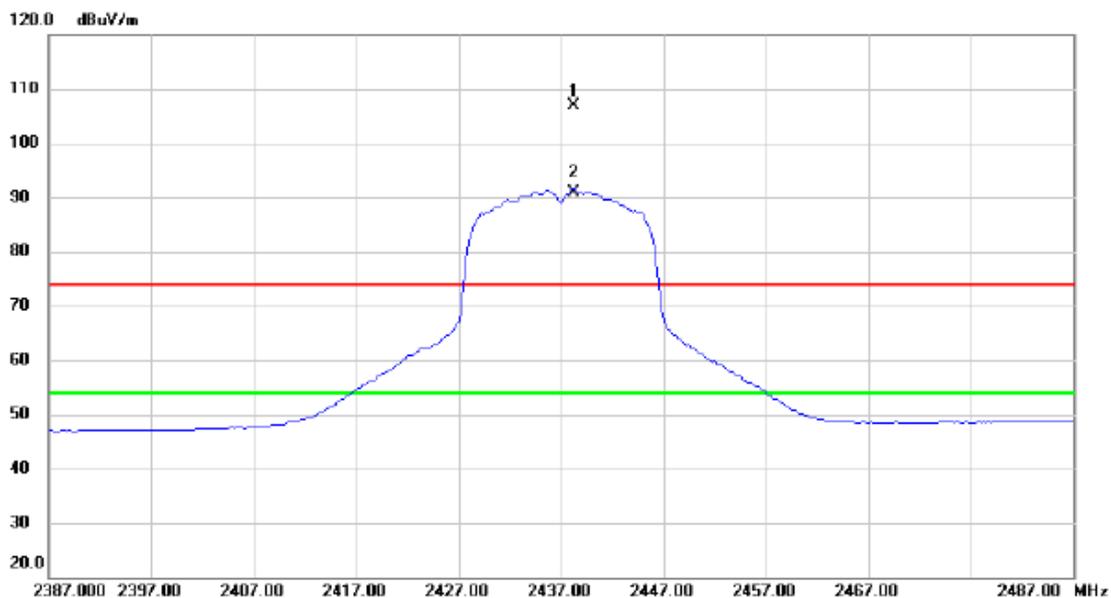
### Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		4874.000	46.13	5.84	51.97	74.00	-22.03	peak	
2		4874.000	31.48	5.84	37.32	54.00	-16.68	AVG	
3		7311.000	40.55	14.06	54.61	74.00	-19.39	peak	
4	*	7311.000	30.14	14.06	44.20	54.00	-9.80	AVG	

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

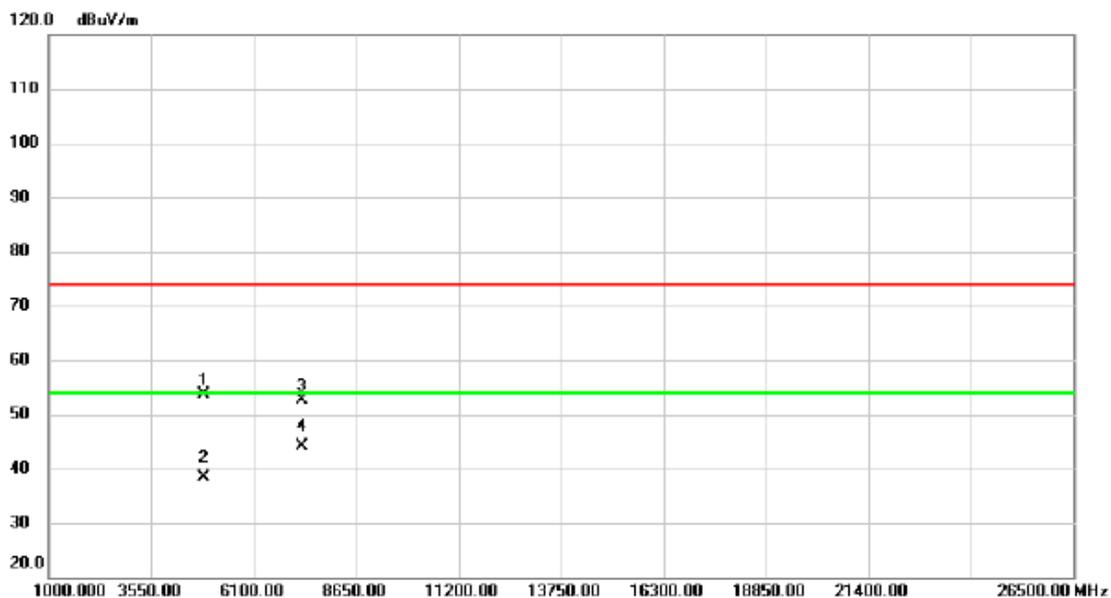
### Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	X	2438.250	74.86	32.14	107.00	74.00	33.00	peak	NO LIMIT
2	*	2438.250	58.67	32.14	90.81	54.00	36.81	AVG	NO LIMIT

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

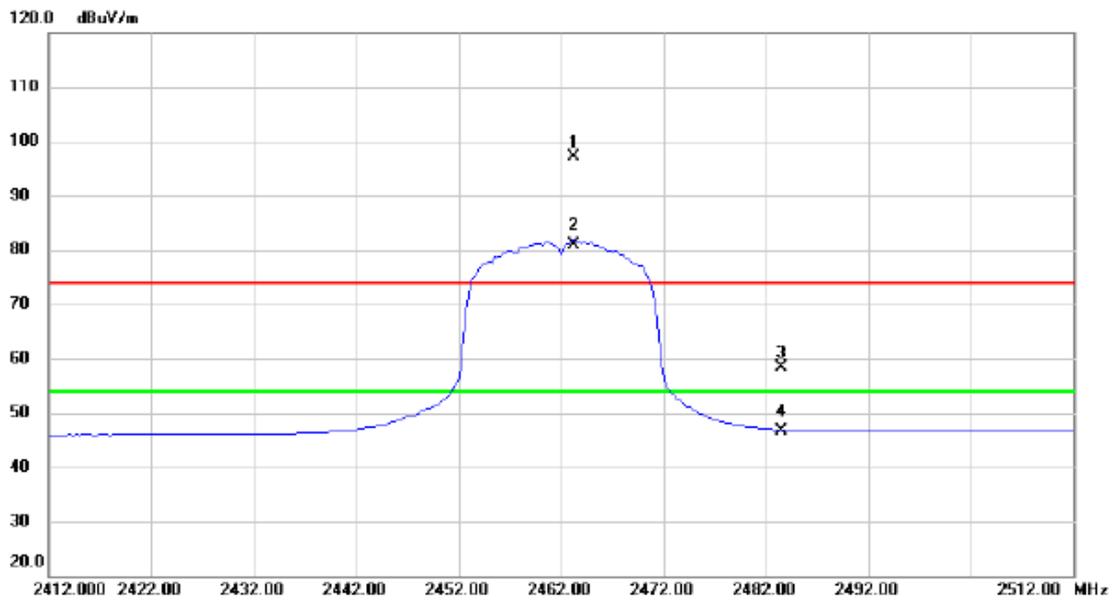
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		4874.000	47.68	5.84	53.52	74.00	-20.48	peak	
2		4874.000	32.48	5.84	38.32	54.00	-15.68	AVG	
3		7311.000	38.48	14.06	52.54	74.00	-21.46	peak	
4	*	7311.000	30.15	14.06	44.21	54.00	-9.79	AVG	

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

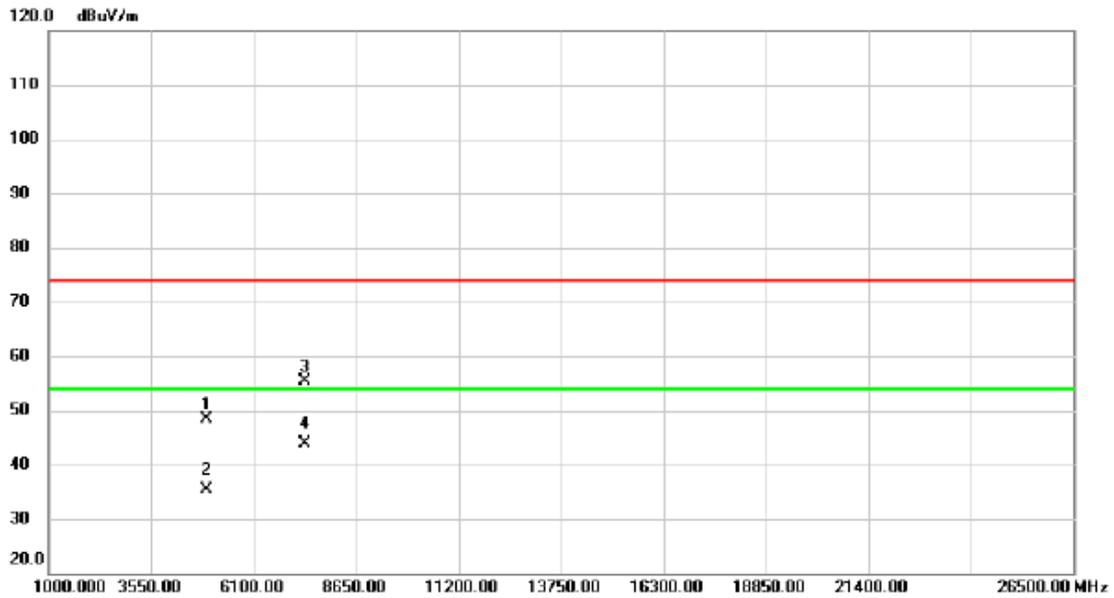
### Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1	X	2463.250	64.86	32.24	97.10	74.00	23.10	peak	NO LIMIT
2	*	2463.250	48.68	32.24	80.92	54.00	26.92	AVG	NO LIMIT
3		2483.500	26.13	32.30	58.43	74.00	-15.57	peak	
4		2483.500	14.21	32.30	46.51	54.00	-7.49	AVG	

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

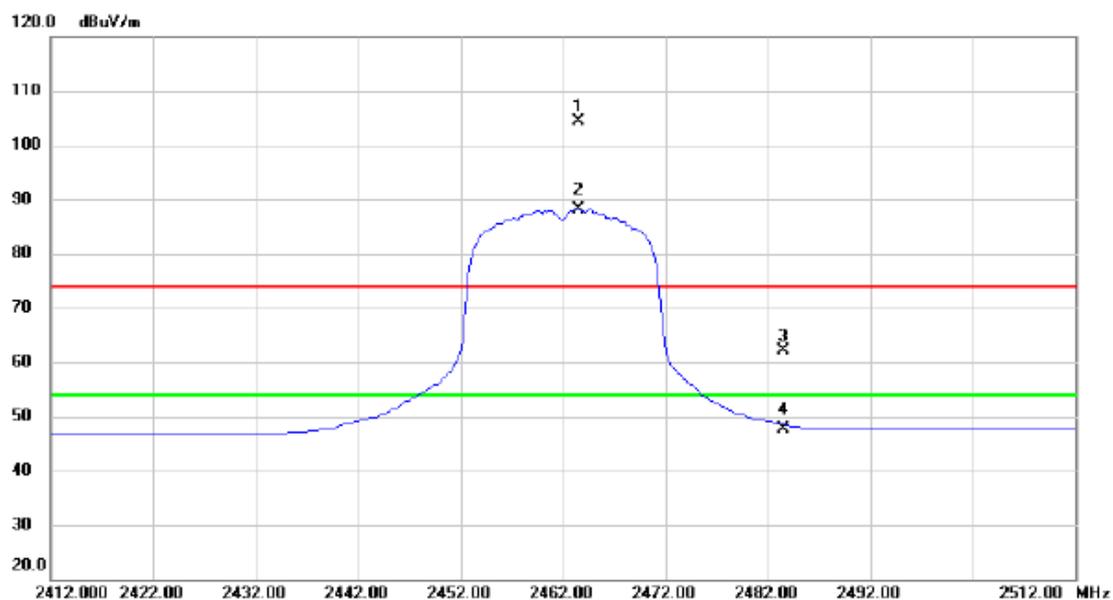
### Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		4924.000	42.48	5.90	48.38	74.00	-25.62	peak	
2		4924.000	29.43	5.90	35.33	54.00	-18.67	AVG	
3		7386.000	41.25	14.23	55.48	74.00	-18.52	peak	
4	*	7386.000	29.58	14.23	43.81	54.00	-10.19	AVG	

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

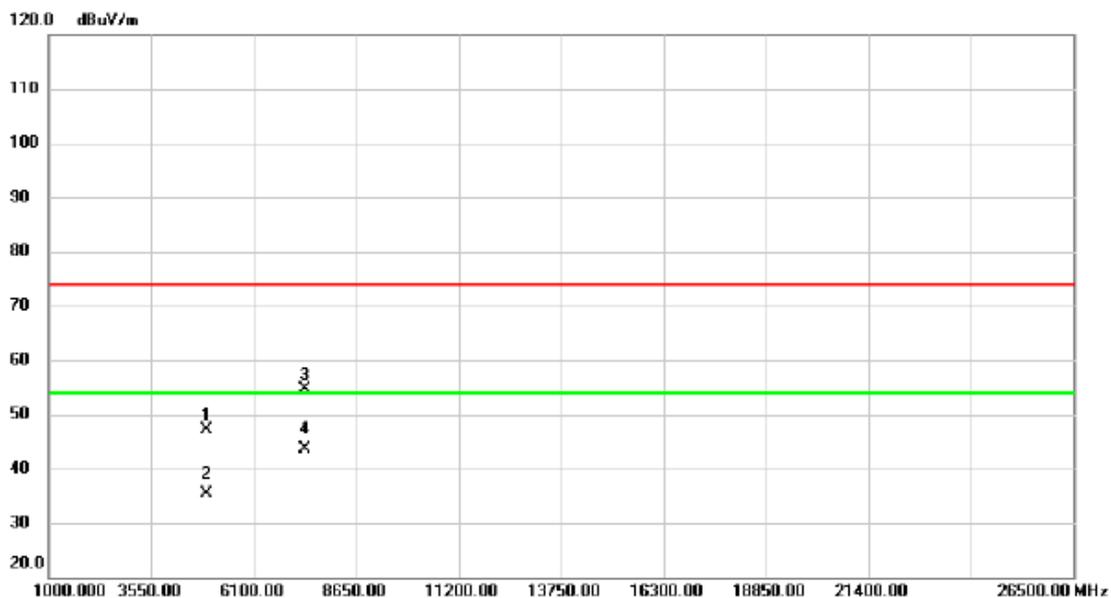
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	X	2463.500	72.15	32.24	104.39	74.00	30.39	peak	NO LIMIT
2	*	2463.500	55.85	32.24	88.09	54.00	34.09	AVG	NO LIMIT
3		2483.500	29.86	32.30	62.16	74.00	-11.84	peak	
4		2483.500	15.35	32.30	47.65	54.00	-6.35	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	Margin dB	Detector	Comment
1		4924.000	41.24	5.90	47.14	74.00	-26.86	peak	
2		4924.000	29.58	5.90	35.48	54.00	-18.52	AVG	
3		7386.000	40.48	14.23	54.71	74.00	-19.29	peak	
4	*	7386.000	29.38	14.23	43.61	54.00	-10.39	AVG	

## ATTACHMENT E - BANDWIDTH

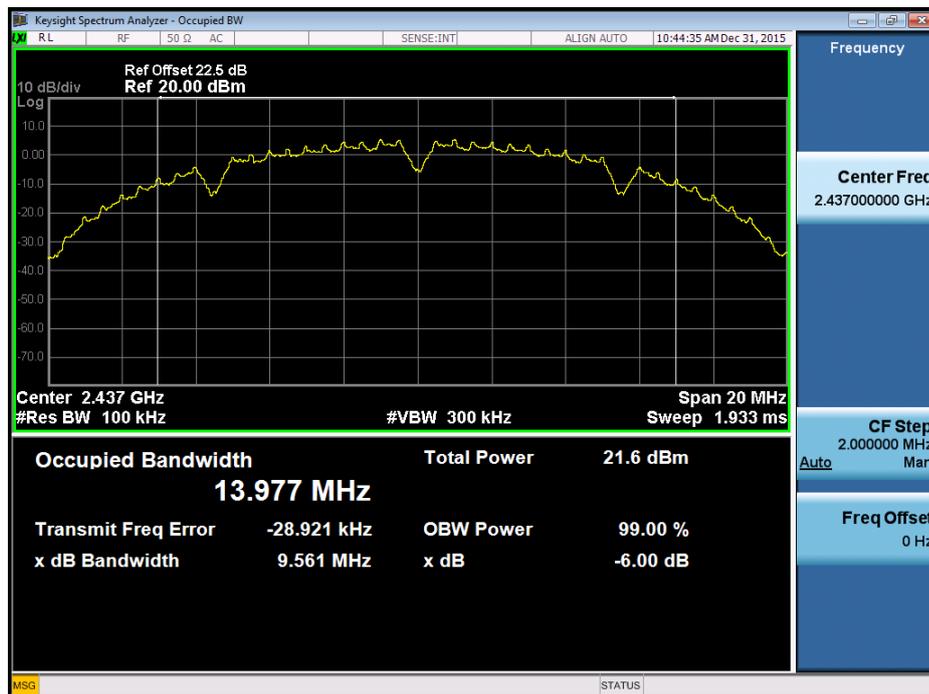
**Test Mode : TX B Mode\_CH01/06/11**

Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2412	9.56	13.96	500	Complies
2437	9.56	13.98	500	Complies
2462	9.10	13.97	500	Complies

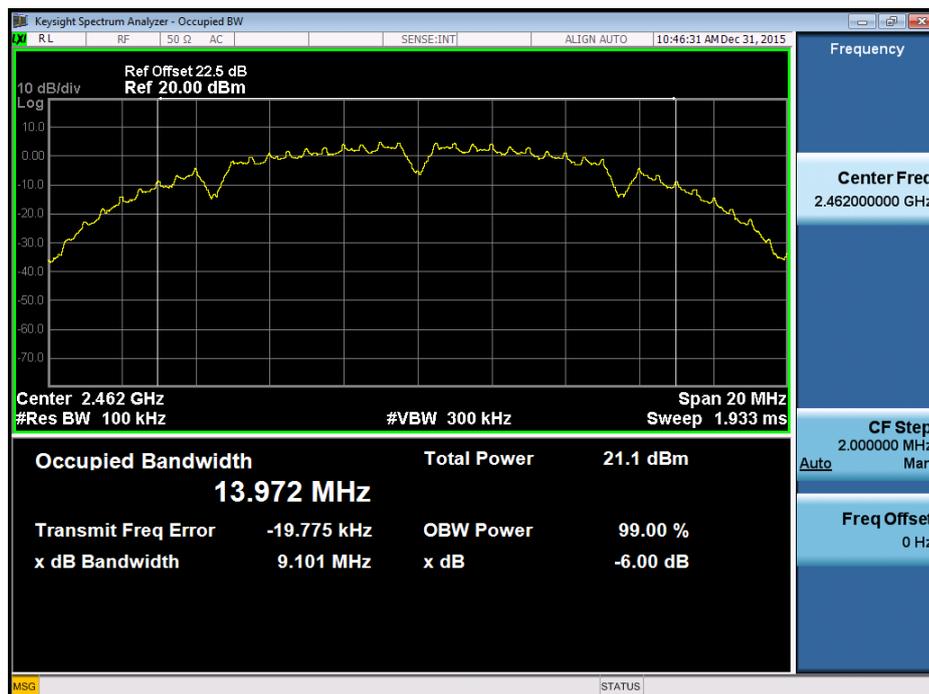
**TX CH01**



### TX CH06



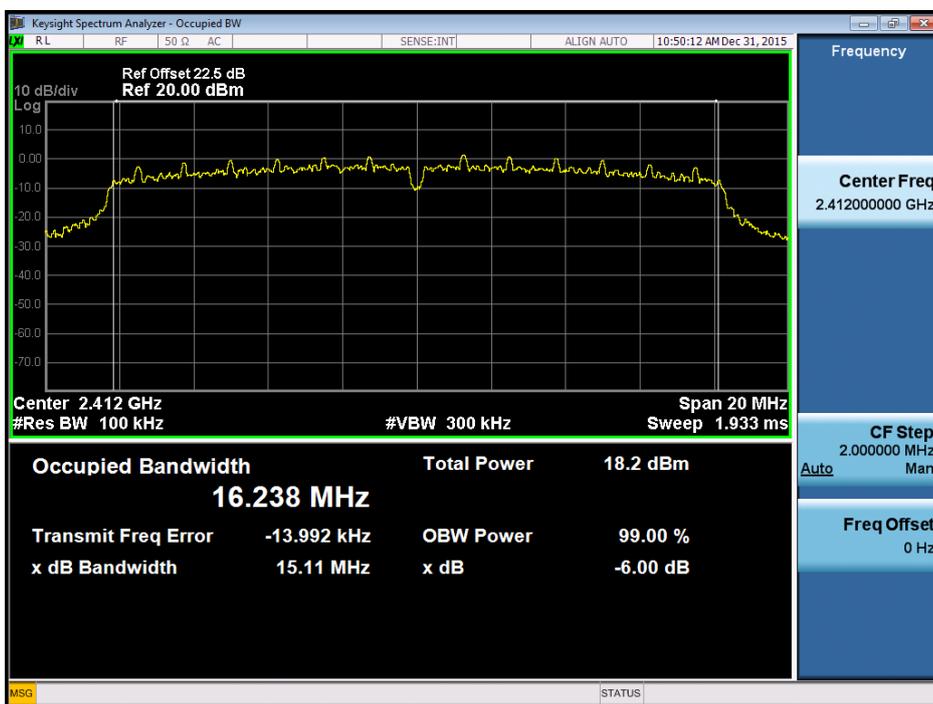
### TX CH11



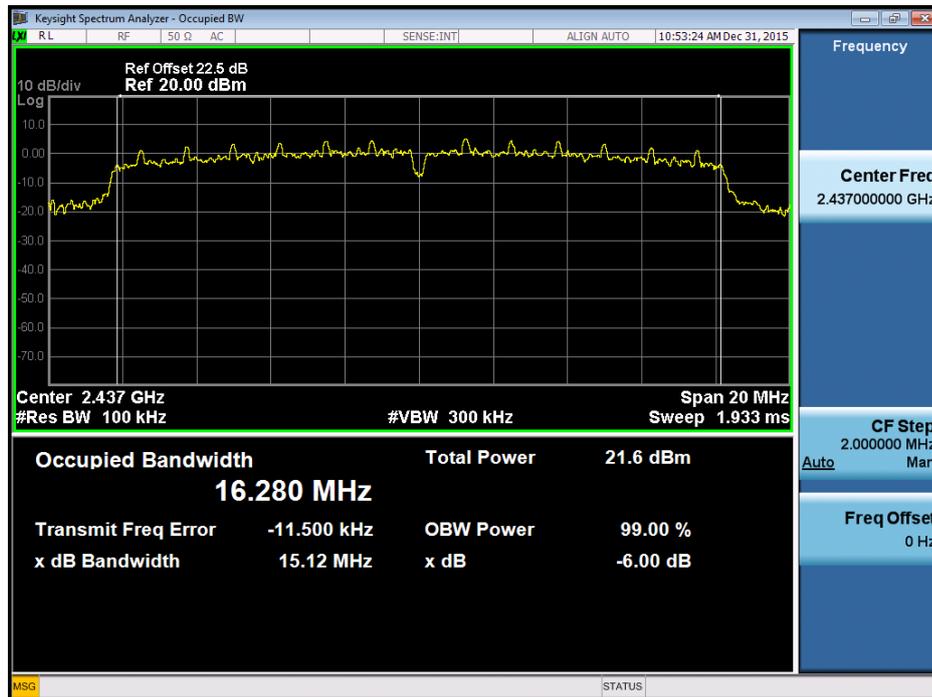
**Test Mode: TX G Mode\_CH01/06/11**

Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2412	15.11	16.24	500	Complies
2437	15.12	16.28	500	Complies
2462	15.12	16.23	500	Complies

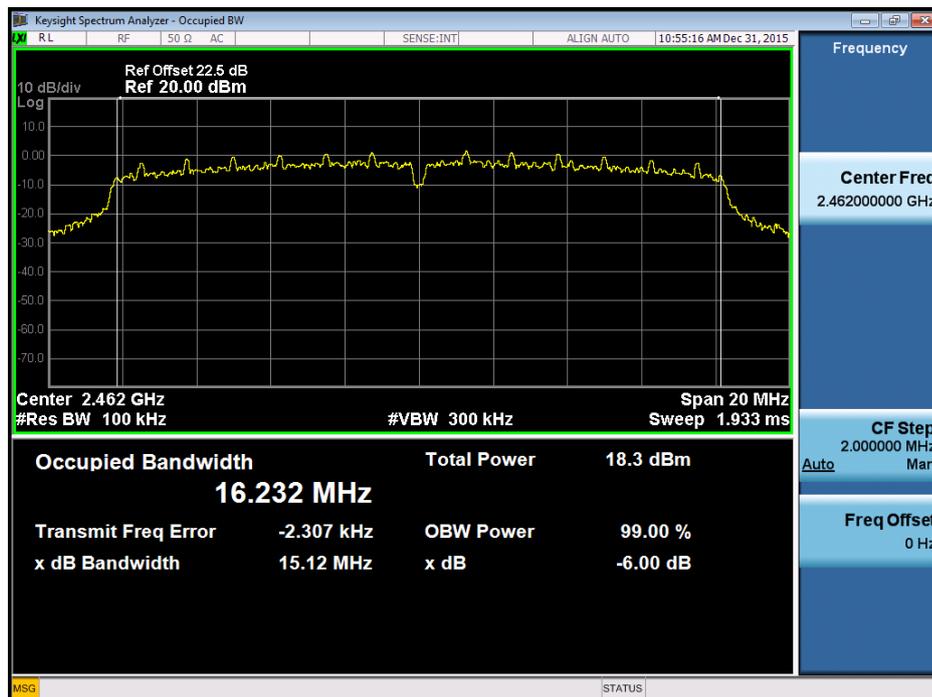
**TX CH01**



### TX CH06



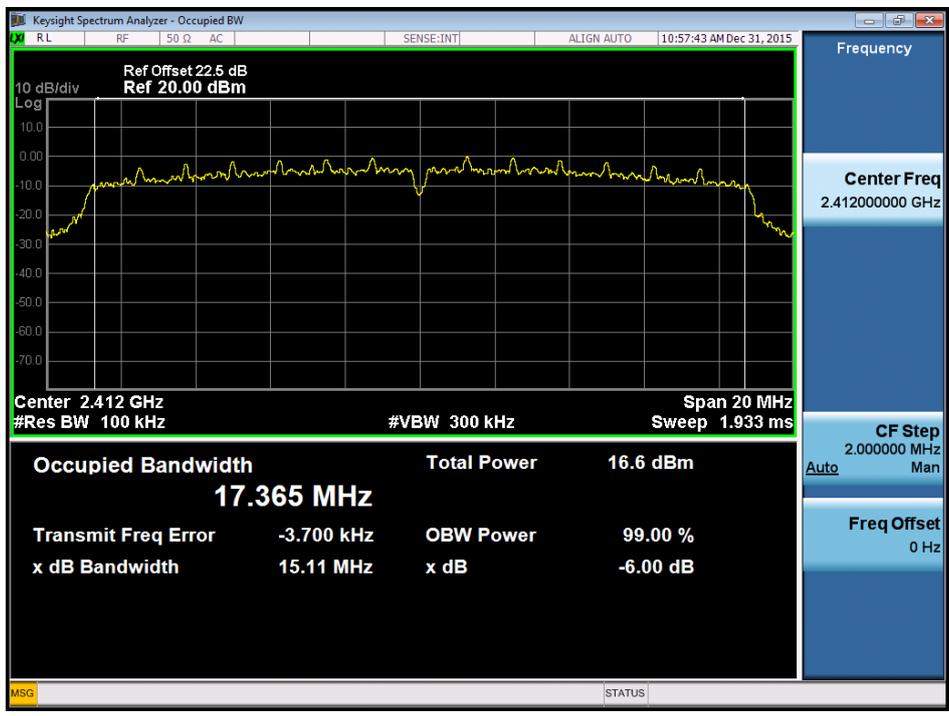
### TX CH11



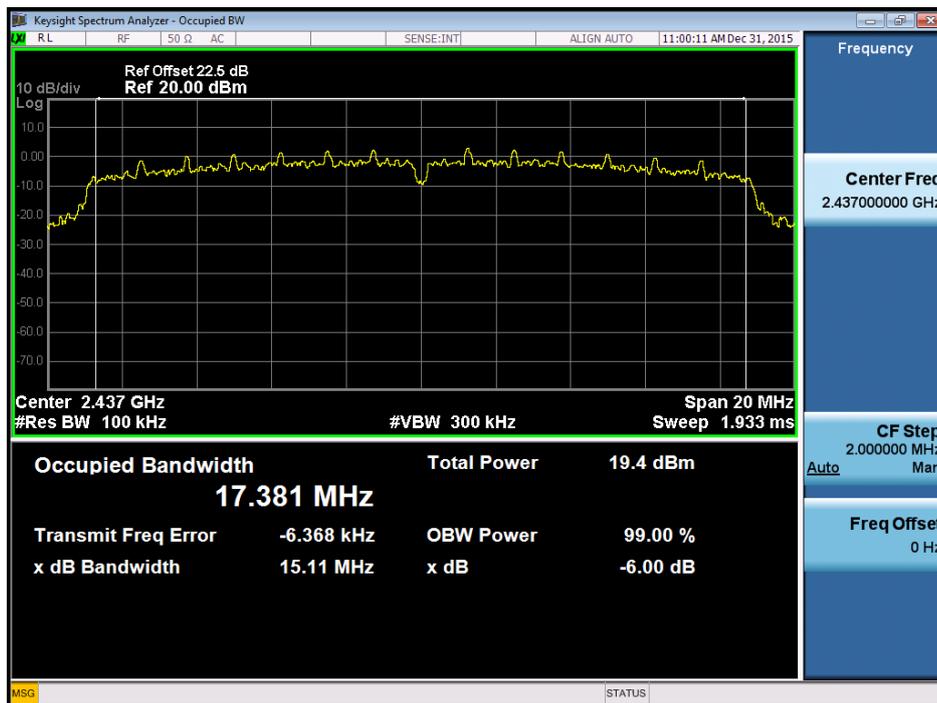
**Test Mode : TX N-20MHz Mode\_CH01/06/11**

Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2412	15.11	17.37	500	Complies
2437	15.11	17.38	500	Complies
2462	15.12	17.37	500	Complies

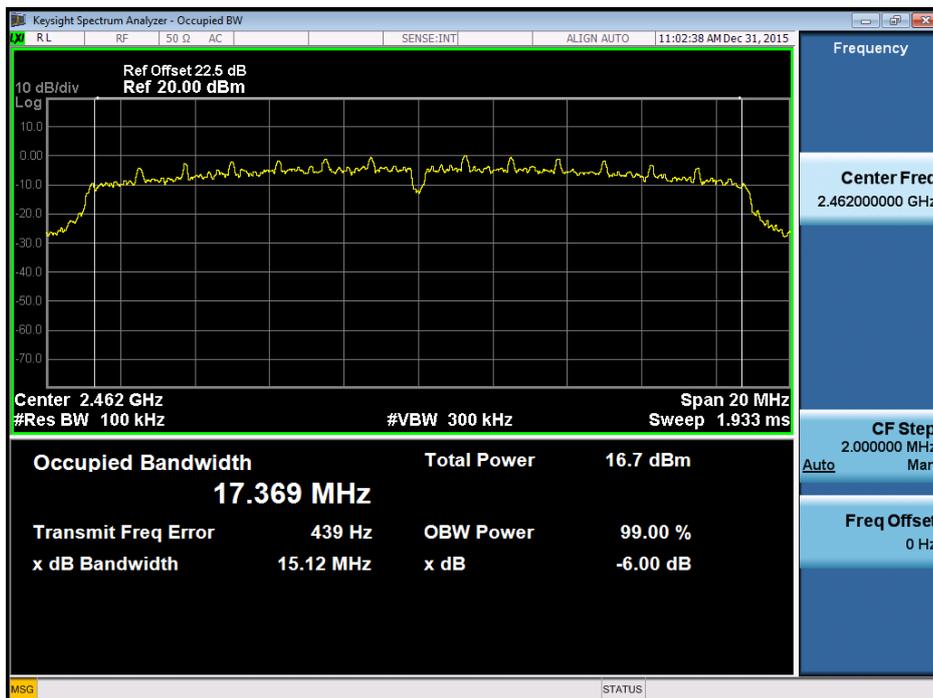
**TX CH01**



### TX CH06



### TX CH11



## **ATTACHMENT F – MAXIMUM PEAK CONDUCTED OUTPUT POWER**

Test Mode :TX B Mode_CH01/06/11					
Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2412	14.73	0.0297	30.00	1.00	Complies
2437	15.85	0.0385	30.00	1.00	Complies
2462	15.35	0.0343	30.00	1.00	Complies

Test Mode :TX G Mode_CH01/06/11					
Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2412	17.82	0.0605	30.00	1.00	Complies
2437	18.41	0.0693	30.00	1.00	Complies
2462	17.89	0.0615	30.00	1.00	Complies

Test Mode :TX N20 Mode_CH01/06/11					
Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2412	17.57	0.0571	30.00	1.00	Complies
2437	17.82	0.0605	30.00	1.00	Complies
2462	17.62	0.0578	30.00	1.00	Complies

**ATTACHMENT G - ANTENNA CONDUCTED SPURIOUS  
EMISSION**

Test Mode : TX B Mode

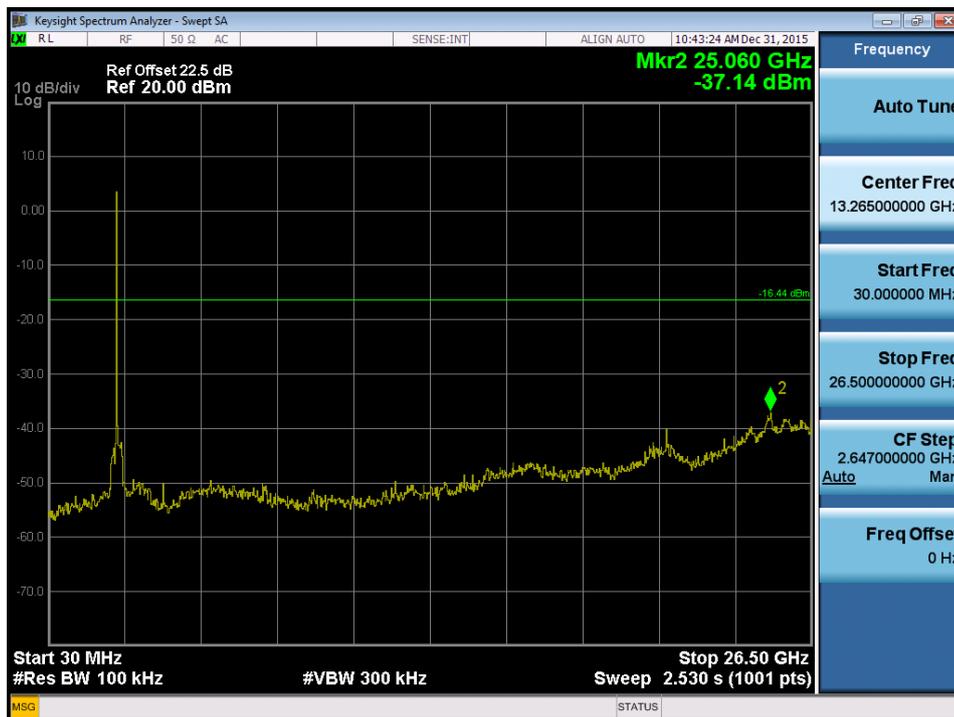
### TX B mode CH01



### TX B mode CH11



### TX B mode CH01 (10 Harmonic of the frequency)



### TX B mode CH06 (10 Harmonic of the frequency)

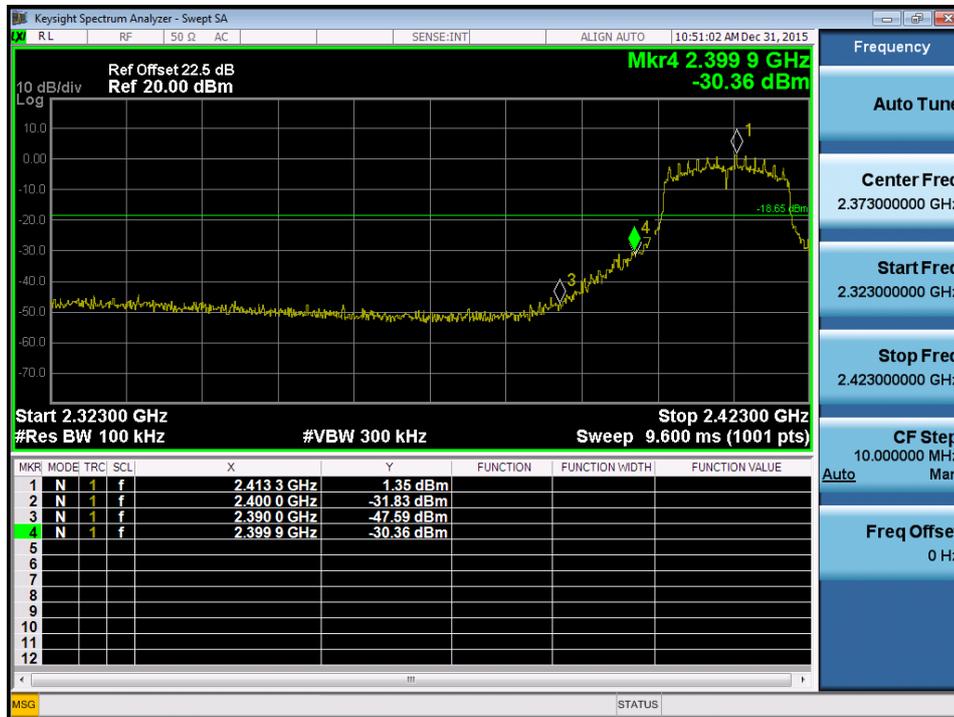


### TX B mode CH11 (10 Harmonic of the frequency)

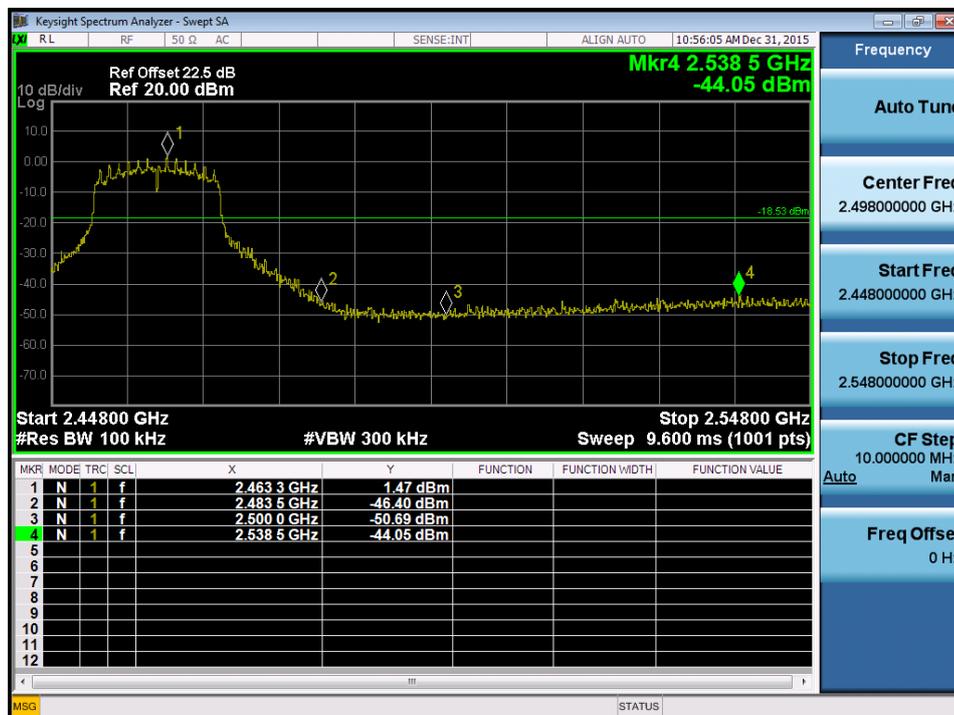


Test Mode : TX G Mode

### TX G mode CH01



### TX G mode CH11



### TX G mode CH01 (10 Harmonic of the frequency)



### TX G mode CH06 (10 Harmonic of the frequency)



### TX G mode CH11 (10 Harmonic of the frequency)

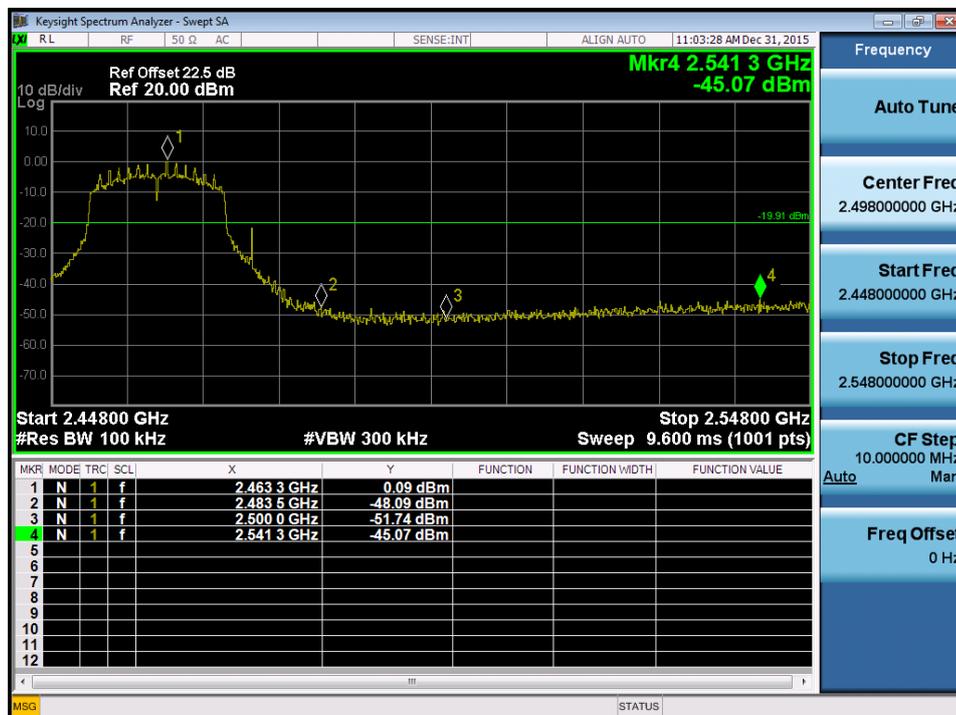


Test Mode : TX N-20M Mode

### TX HT20 mode CH01



### TX HT20 mode CH11



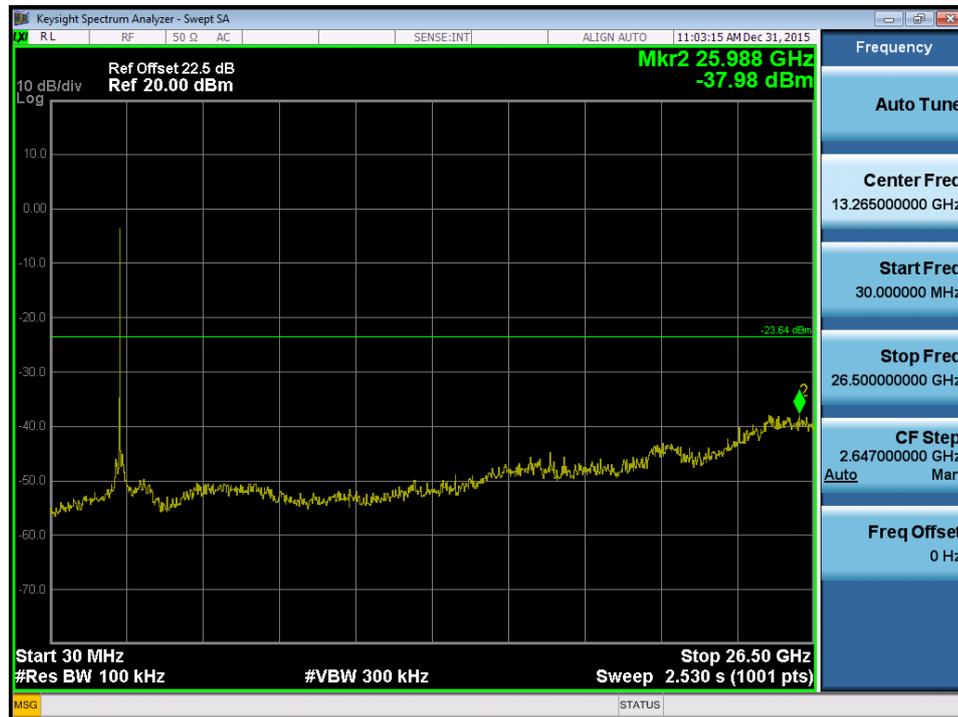
### TX HT20 mode CH01 (10 Harmonic of the frequency)



### TX HT20 mode CH06 (10 Harmonic of the frequency)



### TX HT20 mode CH11 (10 Harmonic of the frequency)



## ATTACHMENT H - POWER SPECTRAL DENSITY

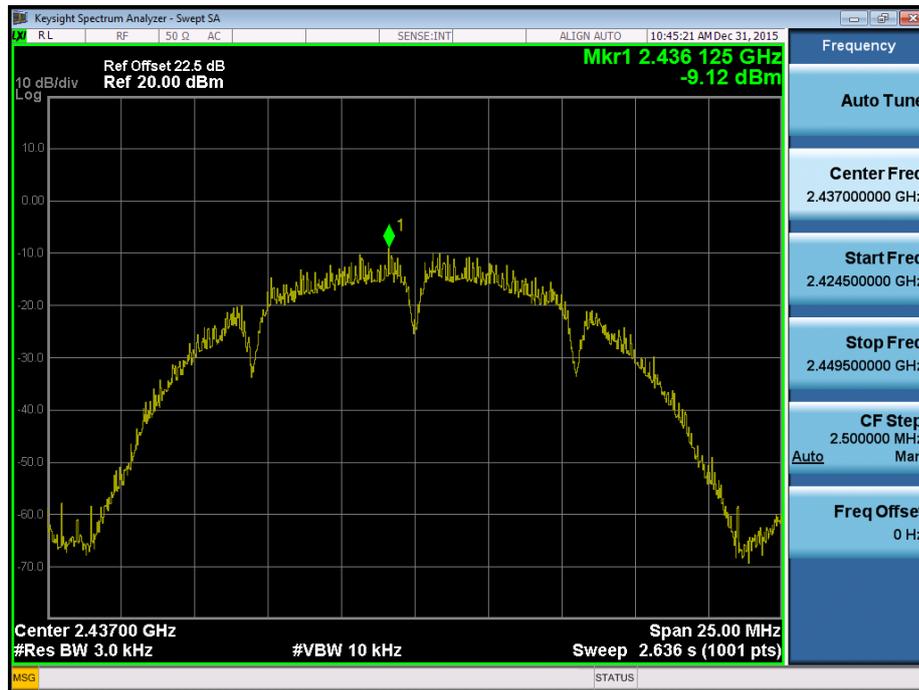
**Test Mode :TX B Mode\_CH01/06/11**

Frequency (MHz)	Power Density (dBm/3kHz)	Power Density (mW/3kHz)	Max. Limit (dBm/3kHz)	Result
2412	-11.22	0.08	8.00	Complies
2437	-9.12	0.12	8.00	Complies
2462	-10.52	0.09	8.00	Complies

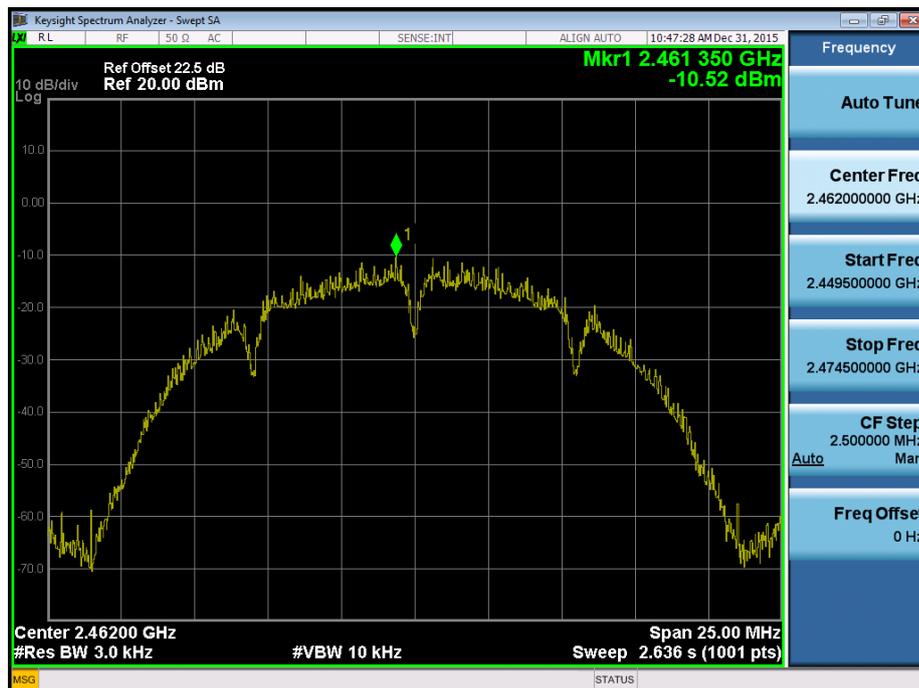
**TX CH01**



### TX CH06



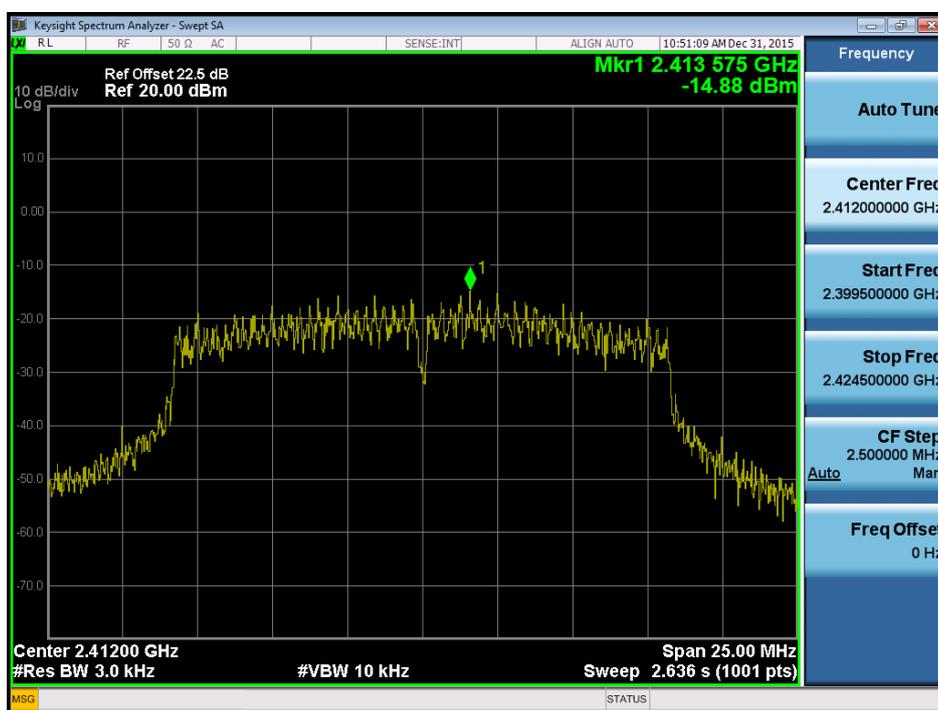
### TX CH11



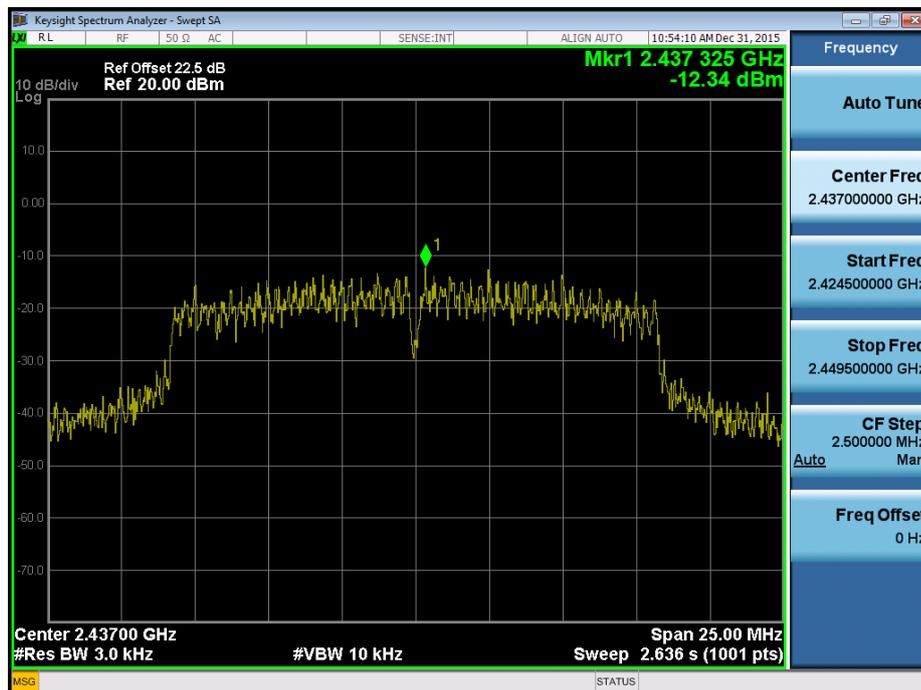
**Test Mode :TX G Mode\_CH01/06/11**

Frequency (MHz)	Power Density (dBm/3kHz)	Power Density (mW/3kHz)	Max. Limit (dBm/3kHz)	Result
2412	-14.88	0.03	8.00	Complies
2437	-12.34	0.06	8.00	Complies
2462	-14.76	0.03	8.00	Complies

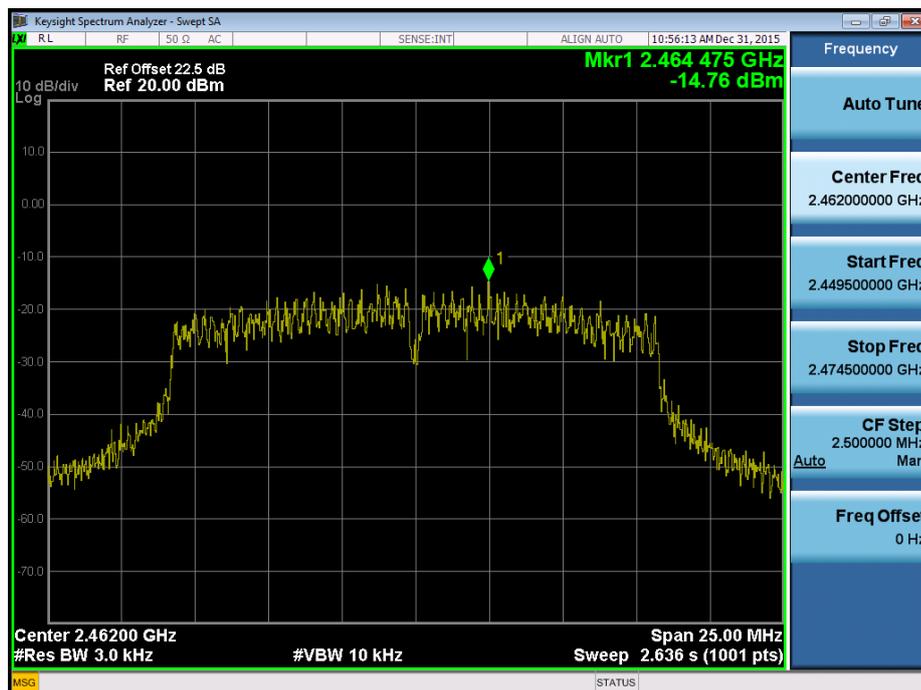
**TX CH01**



### TX CH06



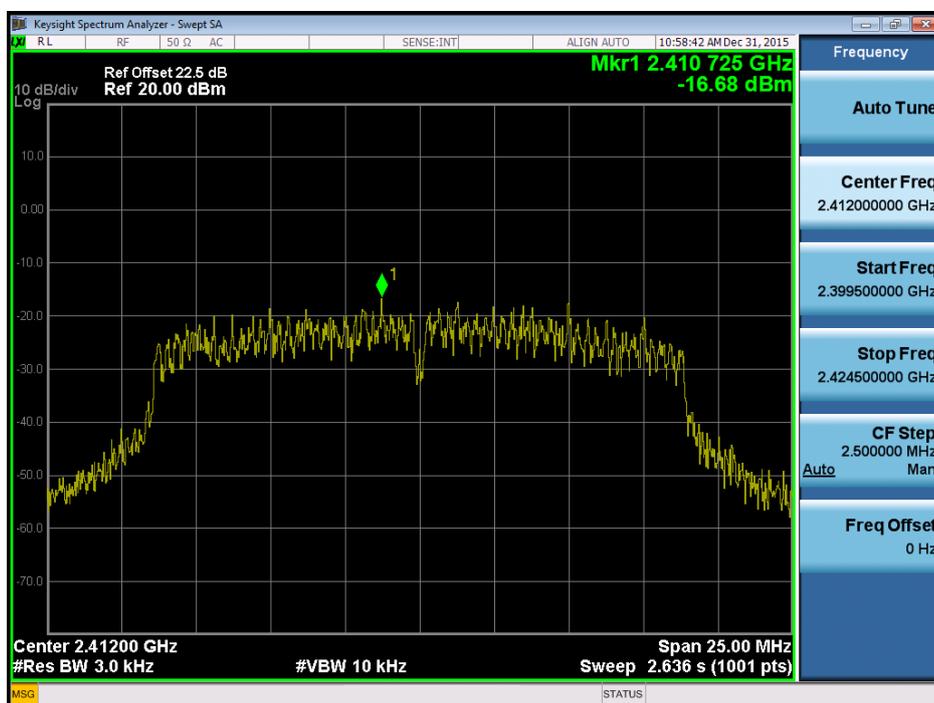
### TX CH11



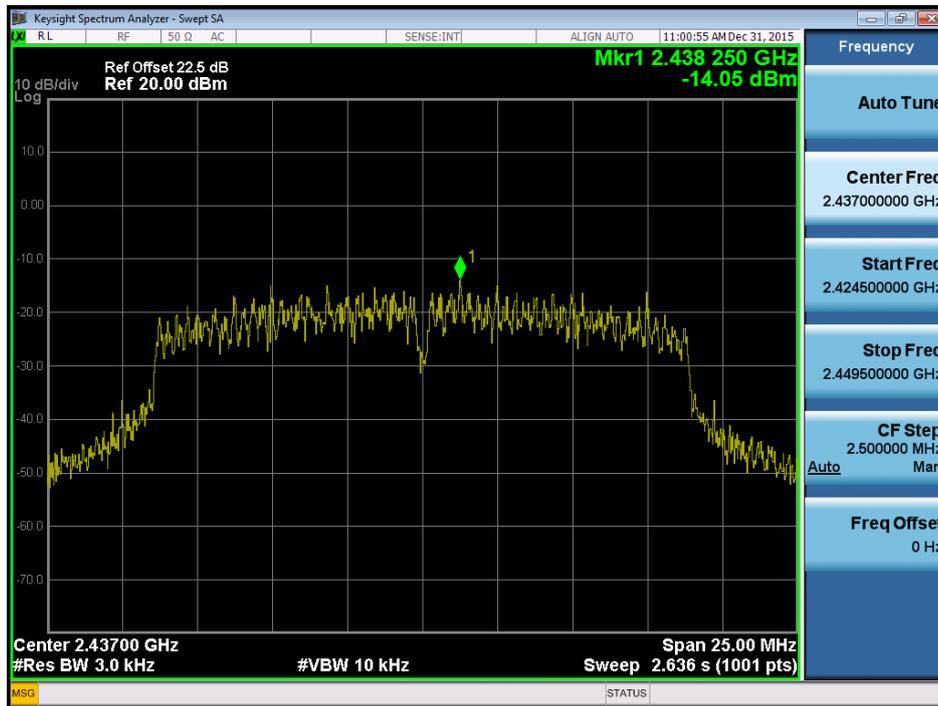
**Test Mode : TX N-20M Mode\_CH01/06/11**

Frequency (MHz)	Power Density (dBm/3kHz)	Power Density (mW/3kHz)	Max. Limit (dBm/3kHz)	Result
2412	-16.68	0.02	8.00	Complies
2437	-14.05	0.04	8.00	Complies
2462	-15.87	0.03	8.00	Complies

**TX CH01**



### TX CH06



### TX CH11

