

# FCC Radio Test Report

**FCC ID: NDD9574761609**

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

**Project No.** : 1609061  
**Equipment** : In-Wall AP  
**Test Model** : EW-7476IWC  
**Serial Model** : IAP1200  
**Applicant** : EDIMAX TECHNOLOGY CO., LTD.  
**Address** : No.3, Wu-Chuan 3rd Road, Wu-Ku Industrial Park,  
New Taipei City, Taiwan

**Date of Receipt** : Sep. 20, 2016  
**Date of Test** : Sep. 20, 2016 ~ Nov. 10, 2016  
**Issued Date** : Nov. 14, 2016  
**Tested by** : BTL Inc.

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

**Technical Manager** : Jeff Yang  
(Jeff Yang)

**Authorized Signatory** : Andy Chiu  
(Andy Chiu)

**B T L I N C .**

B1, No.37, Lane 365, Yang Guang St.,  
Nei-Hu District, Taipei City 114, Taiwan.  
TEL:+886-2-2657-3299 FAX: +886-2- 2657-3331

### Declaration

**BTL** represents to the client that testing is done in accordance with standard procedures as applicable and that test instruments used has been calibrated with standards traceable to international standard(s) and/or national standard(s).

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

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

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

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

### Limitation

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

Table of Contents	Page
<b>1 . CERTIFICATION</b>	<b>6</b>
<b>2 . SUMMARY OF TEST RESULTS</b>	<b>7</b>
<b>2.1 TEST FACILITY</b>	<b>8</b>
<b>2.2 MEASUREMENT UNCERTAINTY</b>	<b>8</b>
<b>3 . GENERAL INFORMATION</b>	<b>10</b>
<b>3.1 GENERAL DESCRIPTION OF EUT</b>	<b>10</b>
<b>3.2 DESCRIPTION OF TEST MODES</b>	<b>12</b>
<b>3.3 TABLE OF PARAMETERS OF TEXT SOFTWARE SETTING</b>	<b>13</b>
<b>3.4 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED</b>	<b>14</b>
<b>3.5 DESCRIPTION OF SUPPORT UNITS</b>	<b>14</b>
<b>4 . EMC EMISSION TEST</b>	<b>15</b>
<b>4.1 CONDUCTED EMISSION MEASUREMENT</b>	<b>15</b>
<b>4.1.1 POWER LINE CONDUCTED EMISSION LIMITS</b>	<b>15</b>
<b>4.1.2 TEST PROCEDURE</b>	<b>15</b>
<b>4.1.3 DEVIATION FROM TEST STANDARD</b>	<b>15</b>
<b>4.1.4 TEST SETUP</b>	<b>16</b>
<b>4.1.5 EUT OPERATING CONDITIONS</b>	<b>16</b>
<b>4.1.6 EUT TEST CONDITIONS</b>	<b>16</b>
<b>4.1.7 TEST RESULTS</b>	<b>16</b>
<b>4.2 RADIATED EMISSION MEASUREMENT</b>	<b>17</b>
<b>4.2.1 RADIATED EMISSION LIMITS</b>	<b>17</b>
<b>4.2.2 TEST PROCEDURE</b>	<b>18</b>
<b>4.2.3 DEVIATION FROM TEST STANDARD</b>	<b>18</b>
<b>4.2.4 TEST SETUP</b>	<b>19</b>
<b>4.2.5 EUT OPERATING CONDITIONS</b>	<b>20</b>
<b>4.2.6 EUT TEST CONDITIONS</b>	<b>20</b>
<b>4.2.7 TEST RESULTS (9KHZ TO 30MHZ)</b>	<b>21</b>
<b>4.2.8 TEST RESULTS (30MHZ TO 1000 MHZ)</b>	<b>21</b>
<b>4.2.9 TEST RESULTS (ABOVE 1000 MHZ)</b>	<b>21</b>
<b>5 . BANDWIDTH TEST</b>	<b>22</b>
<b>5.1 APPLIED PROCEDURES</b>	<b>22</b>
<b>5.1.1 TEST PROCEDURE</b>	<b>22</b>
<b>5.1.2 DEVIATION FROM STANDARD</b>	<b>22</b>
<b>5.1.3 TEST SETUP</b>	<b>22</b>
<b>5.1.4 EUT OPERATION CONDITIONS</b>	<b>22</b>
<b>5.1.5 EUT TEST CONDITIONS</b>	<b>22</b>
<b>5.1.6 TEST RESULTS</b>	<b>22</b>
<b>6 . MAXIMUM PEAK CONDUCTED OUTPUT POWER TEST</b>	<b>23</b>

**Table of Contents**

	<b>Page</b>
<b>6.1 APPLIED PROCEDURES / LIMIT</b>	<b>23</b>
<b>6.1.1 TEST PROCEDURE</b>	23
<b>6.1.2 DEVIATION FROM STANDARD</b>	23
<b>6.1.3 TEST SETUP</b>	23
<b>6.1.4 EUT OPERATION CONDITIONS</b>	23
<b>6.1.5 EUT TEST CONDITIONS</b>	23
<b>6.1.6 TEST RESULTS</b>	23
<b>7 . ANTENNA CONDUCTED SPURIOUS EMISSION</b>	<b>24</b>
<b>7.1 APPLIED PROCEDURES / LIMIT</b>	24
<b>7.1.1 TEST PROCEDURE</b>	24
<b>7.1.2 DEVIATION FROM STANDARD</b>	24
<b>7.1.3 TEST SETUP</b>	24
<b>7.1.4 EUT OPERATION CONDITIONS</b>	24
<b>7.1.5 EUT TEST CONDITIONS</b>	24
<b>7.1.6 TEST RESULTS</b>	24
<b>8 . POWER SPECTRAL DENSITY TEST</b>	<b>25</b>
<b>8.1 APPLIED PROCEDURES / LIMIT</b>	25
<b>8.1.1 TEST PROCEDURE</b>	25
<b>8.1.2 DEVIATION FROM STANDARD</b>	25
<b>8.1.3 TEST SETUP</b>	25
<b>8.1.4 EUT OPERATION CONDITIONS</b>	25
<b>8.1.5 EUT TEST CONDITIONS</b>	25
<b>8.1.6 TEST RESULTS</b>	25
<b>9 . MEASUREMENT INSTRUMENTS LIST</b>	<b>26</b>
<b>10 . EUT TEST PHOTO</b>	<b>28</b>
<b>ATTACHMENT A - CONDUCTED EMISSION</b>	<b>32</b>
<b>ATTACHMENT B - RADIATED EMISSION (9KHZ TO 30MHZ)</b>	<b>35</b>
<b>ATTACHMENT C - RADIATED EMISSION (30MHZ TO 1000MHZ)</b>	<b>40</b>
<b>ATTACHMENT D - RADIATED EMISSION (ABOVE 1000MHZ)</b>	<b>43</b>
<b>ATTACHMENT E - BANDWIDTH</b>	<b>92</b>
<b>ATTACHMENT F – MAXIMUM PEAK CONDUCTED OUTPUT POWER</b>	<b>109</b>
<b>ATTACHMENT G - ANTENNA CONDUCTED SPURIOUS EMISSION</b>	<b>114</b>
<b>ATTACHMENT H - POWER SPECTRAL DENSITY</b>	<b>155</b>

**REPORT ISSUED HISTORY**

Issued No.	Description	Issued Date
BTL-FCCP-1-1609061	Original Issue.	Nov. 14, 2016

## 1. CERTIFICATION

Equipment : In-Wall AP  
Brand Name : EDIMAX  
Test Model : EW-7476IWC  
Serial Model : IAP1200  
Applicant : EDIMAX TECHNOLOGY CO., LTD.  
Manufacturer : EDIMAX TECHNOLOGY CO., LTD.  
Address : No.3, Wu-Chuan 3rd Road, Wu-Ku Industrial Park, New Taipei City, Taiwan  
Date of Test : Sep. 20, 2016 ~ Nov. 10, 2016  
Test Sample : Production 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-1-1609061) 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):

**CB15:** (FCC RN:674415; FCC DN:TW0659)

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

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

**CB15:** (FCC RN:674415; FCC DN:TW0659)

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

## 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  $U_{cisp}$  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	$U_{cisp}$ (dB)
C05	CISPR	150 kHz ~ 30MHz	3.06

### B. Radiated emission test:

Test Site	Method	Measurement Frequency Range	$U_{cisp}$ (dB)
CB15 (3m)	CISPR	9kHz ~ 150kHz	2.96
		150kHz ~ 30MHz	2.74

Test Site	Method	Measurement Frequency Range	Ant.	$U_{cisp}$ (dB)
CB15 (3m)	CISPR	30MHz ~ 200MHz	V	4.76
		30MHz ~ 200MHz	H	4.28
		200MHz ~ 1,000MHz	V	5.08
		200MHz ~ 1,000MHz	H	4.50

Test Site	Method	Measurement Frequency Range	Ant.	$U_{cisp}$ (dB)
CB15 (3m)	CISPR	1GHz ~ 6GHz	V	4.48
		1GHz ~ 6GHz	H	4.50
		6GHz ~ 18GHz	V	4.30
		6GHz ~ 18GHz	H	4.14

Test Site	Method	Measurement Frequency Range	$U_{cisp}$ (dB)
CB15 (1m)	CISPR	18 ~ 26.5 GHz	4.72
		26.5 ~ 40 GHz	5.20

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

Since Table 1 of CISPR 16-4-2 has values of measurement instrumentation uncertainty, called  $U_{CISPR}$ , 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  $U_{lab}$  values are smaller than  $U_{CISPR}$ .

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	In-Wall AP		
Brand Name	EDIMAX		
Test Model	EW-7476IWC		
Serial Model	IAP1200		
Model Difference	For marketing use only.		
EUT Power Rating	I/P: DC 48V via PoE.		
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: 300 Mbps	
	Output Power (Max.)	802.11b: 22.84 dBm 802.11g: 25.85 dBm 802.11n(20MHz): 25.77 dBm 802.11n(40MHz): 24.97 dBm	

Note:

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

CH01 – CH11 for 802.11b, 802.11g, 802.11n(20MHz) CH03 – CH09 for 802.11n(40MHz)							
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
01	2412	04	2427	07	2442	10	2457
02	2417	05	2432	08	2447	11	2462
03	2422	06	2437	09	2452		

3. Table for Filed Antenna

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	N/A	N/A	PIFA	IPEX	2.08
2	N/A	N/A	PIFA	IPEX	1.94

Note:

- (1) The EUT incorporates a MIMO function. Physically, the EUT provides two completed two transmitters and two receivers (2T2R).
- (2) Directional gain =  $10 \log(((10^{(Ant 1/20)}+10^{(Ant 2/20)})^2)/2) = 5.02 \text{ dBi}$ .  
Reduced value = 0 dB. (5.02 dBi < 6 dBi)

4.

Operating Mode	TX Mode	2TX
802.11b		V (ANT 1 + ANT 2)
802.11g		V (ANT 1 + ANT 2)
802.11n(20MHz)		V (ANT 1 + ANT 2)
802.11n(40MHz)		V (ANT 1 + ANT 2)

### 3.2 DESCRIPTION OF TEST MODES

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

Pretest Mode	Description
Mode 1	TX B MODE CHANNEL 01/06/11
Mode 2	TX G MODE CHANNEL 01/06/11
Mode 3	TX N-20MHZ MODE CHANNEL 01/06/11
Mode 4	TX N-40MHZ MODE CHANNEL 03/06/09
Mode 5	Normal Link

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

For Conducted Test	
Final Test Mode	Description
Mode 5	Normal Link

For Radiated Test	
Final Test Mode	Description
Mode 1	TX B MODE CHANNEL 01/06/11
Mode 2	TX G MODE CHANNEL 01/06/11
Mode 3	TX N-20MHZ MODE CHANNEL 01/06/11
Mode 4	TX N-40MHZ MODE CHANNEL 03/06/09

Note:

- (1) The measurements are performed at the high, middle, low available channels.
- (2) 802.11b mode: DBPSK (1Mbps)  
802.11g mode: OFDM (6Mbps)  
802.11n HT20 mode : BPSK (13Mbps)  
802.11n HT40 mode : BPSK (27Mbps)

For radiated emission tests, the highest output powers were set for final test.

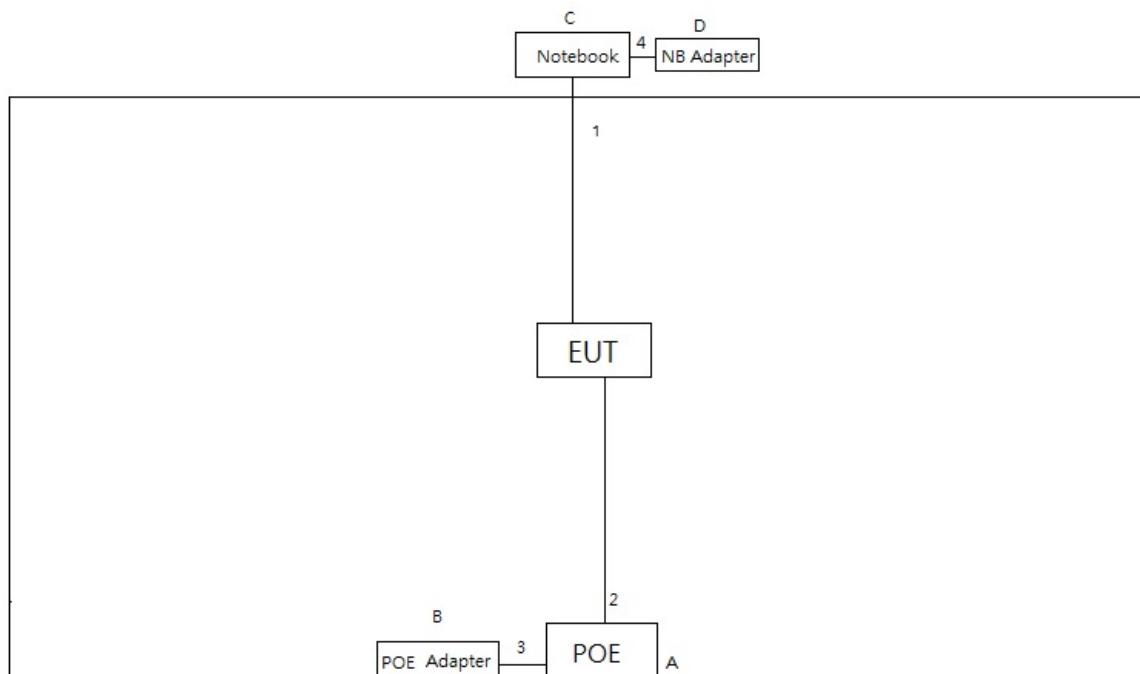
- (3) For radiated below 1G test, the 802.11b is found to be the worst case and recorded.
- (4) The EUT was programmed to be in continuously transmitting mode and the transmit duty cycle is not less than 98%.

### 3.3 TABLE OF PARAMETERS OF TEXT SOFTWARE SETTING

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

Test software version	QA Tool_v1.0.6.2 (MT7620A)		
Frequency (MHz)	2412	2437	2462
802.11b	15	19	16
802.11g	11	1C	15
802.11n (20MHz)	0F	1C	13
Frequency	2422	2437	2452
802.11n (40MHz)	0C	16	0F

### 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	POE	N/A	N/A	N/A	N/A
B	POE Adapter	DVE	DSA-48PFA-480204801 00	N/A	N/A
C	Notebook PC	acer	MS2392	DOC	X450JN-0023D 4200H
D	AC Adapter	acer	PA-1450-26	DOC	N/A

Item	Shielded Type	Ferrite Core	Length	Note
1	NO	NO	5.0m	RJ45
2	NO	NO	5.0m	RJ45
3	NO	NO	1.5m	Power Cable
4	NO	NO	1.0m	Power 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 -0.50	66 to 56*	56 to 46*
0.50 -5.0	56	46
5.0 -30.0	60	50

Note:

(1) The limit of " \* " decreases with the logarithm of the frequency

(2) The test result calculated as following:

Measurement Value = Reading Level + Correct Factor

Correct Factor = Insertion Loss + Cable Loss + Attenuator Factor(if use)

Margin Level = Measurement Value - Limit Value

The following table is the setting of the receiver

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

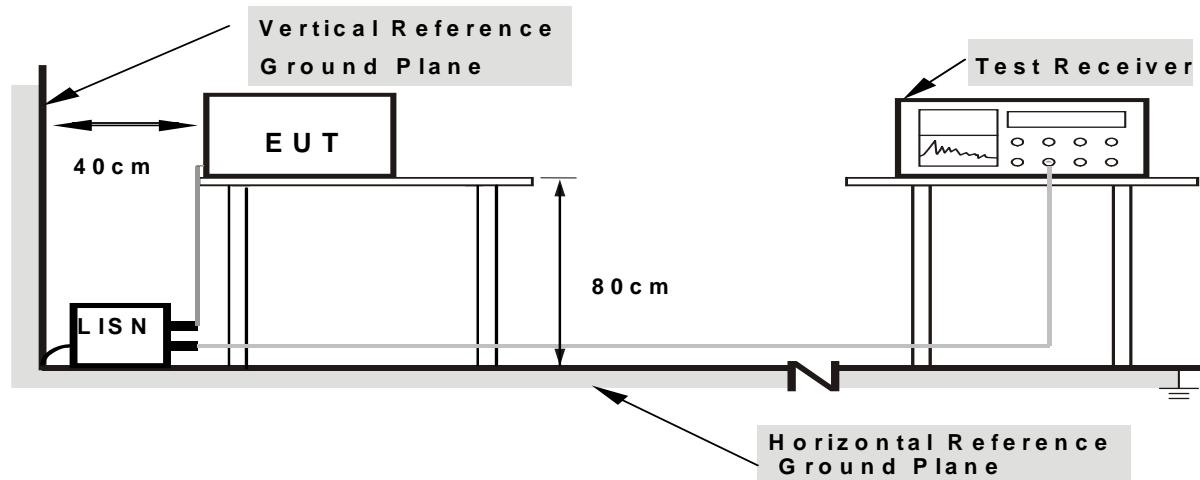
#### 4.1.2 TEST PROCEDURE

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

#### 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: 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

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

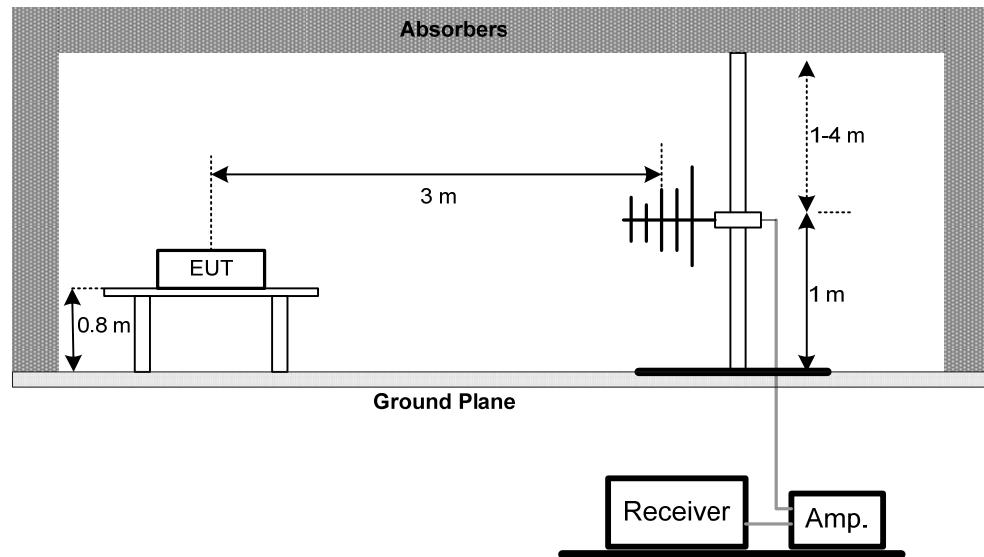
- The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1GHz)
- The measuring distance of 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)
- The height of the equipment or of the substitution antenna shall be 0.8 m or 1.5 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.
- 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).
- 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.
- 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.
- 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)
- 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)
- For the actual test configuration, please refer to the related Item –EUT Test Photos.

#### 4.2.3 DEVIATION FROM TEST STANDARD

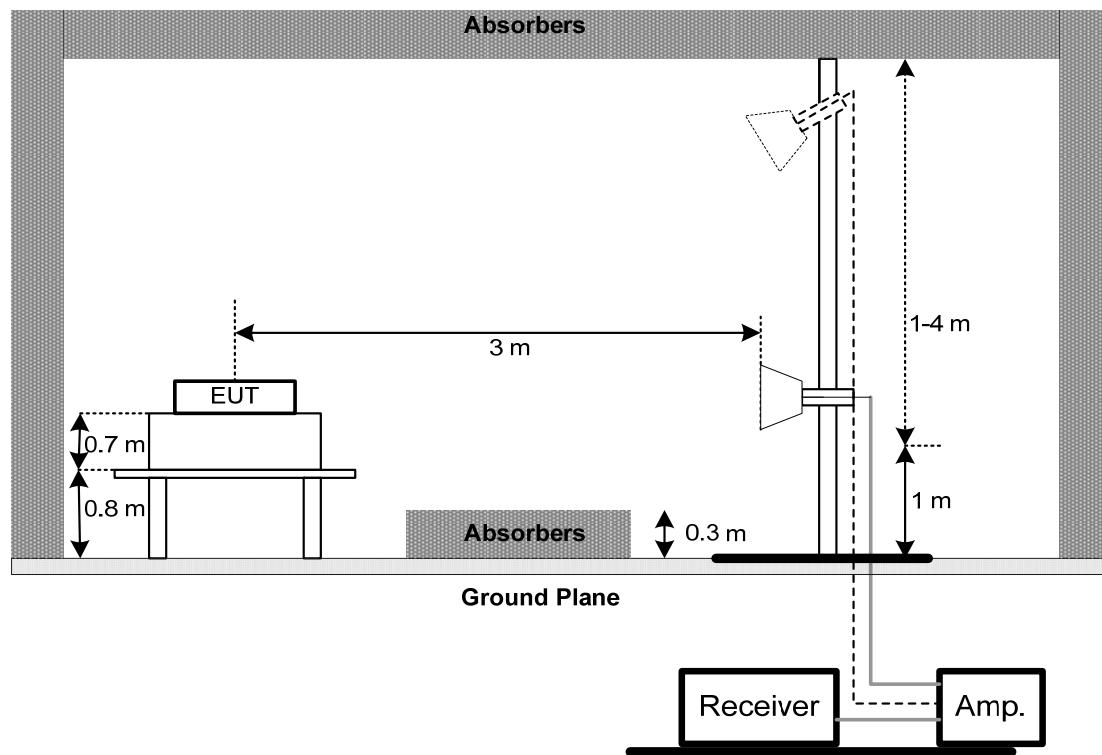
No deviation

#### 4.2.4 TEST SETUP

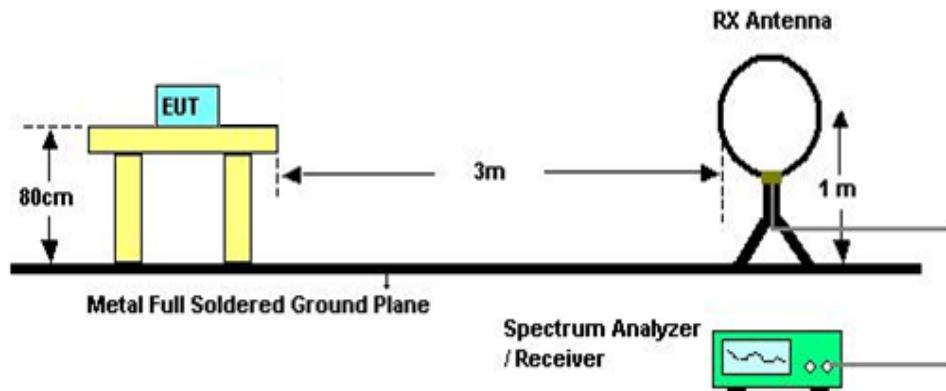
(A) Radiated Emission Test Set-Up Frequency Below 1 GHz



(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: DC 48V

#### **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

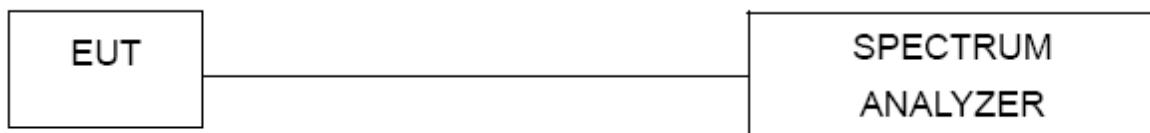
#### 5.1.1 TEST PROCEDURE

- The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,
- 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: 55%    Test Voltage: DC 48V

#### 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

- The EUT was directly connected to the power meter and antenna output port as show in the block diagram below,
- The maximum peak conducted output power was performed in accordance with method 9.1.2 of FCC KDB 558074 D01 DTS Meas Guidance v03r04.

#### 6.1.2 DEVIATION FROM STANDARD

No deviation.

#### 6.1.3 TEST SETUP



#### 6.1.4 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

#### 6.1.5 EUT TEST CONDITIONS

Temperature: 25°C    Relative Humidity: 55%    Test Voltage: DC 48V

#### 6.1.6 TEST RESULTS

Please refer to the Attachment F.

## 7. ANTENNA CONDUCTED SPURIOUS EMISSION

### 7.1 APPLIED PROCEDURES / LIMIT

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

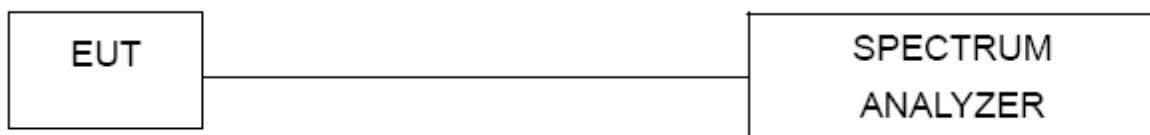
#### 7.1.1 TEST PROCEDURE

- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,
- b. Spectrum Setting: RBW= 100KHz, VBW=300KHz, Sweep time = Auto.
- c. Offset=antenna gain+cable loss

#### 7.1.2 DEVIATION FROM STANDARD

No deviation.

#### 7.1.3 TEST SETUP



#### 7.1.4 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

#### 7.1.5 EUT TEST CONDITIONS

Temperature: 25°C    Relative Humidity: 55%    Test Voltage: DC 48V

#### 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

- The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,
- 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: 55%    Test Voltage: DC 48V

#### 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	Jan. 26, 2017
2	Test Cable	TIMES	CFD300-NL	C02	Jun. 15, 2017
3	EMI Test Receiver	R&S	ESR7	101433	Dec. 10, 2016
4	Measurement Software	EZ	EZ_EMC (Version NB-03A)	N/A	N/A

Radiated Emission Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Trilog-Broadband Antenna	Schwarzbeck	VULB9168-352	9168-352	Feb. 04, 2017
2	Horn Antenna	Schwarzbeck	BBHA 9120	D-546	Nov. 05, 2017
3	Pre-Amplifier	HP	8447D	2944A08891	Mar. 09 2017
4	Pre-Amplifier	Agilent	8449B	3008A02331	Jan. 24, 2017
5	Test Cable	EMCI	EMC8D-NM-NM -8000	150301	Mar. 09, 2017
6	Test Cable	EMCI	EMC104-SM-S M-2500	150303	Mar. 09, 2017
7	Test Cable	EMCI	EMC104-NM-S M-1000	150304	Mar. 09, 2017
8	Test Cable	EMCI	EMC104-SM-S M-5000	150302	Mar. 29, 2017
9	Test Cable	EMCI	EMC104-SM-S M-800	150305	Mar. 29, 2017
10	EXA Spectrum Analyzer	Agilent	N9010A	MY5222099 0	Feb. 24, 2017
11	EMI Test Receiver	Agilent	N9038A	MY5121021 5	Jan. 08, 2017
12	Loop Antenna	EMCO	6502	00042960	Nov. 05. 2017
13	Horn Antenna	Schwarzbeck	BBHA-9170	187	May 12, 2017

**6dB Bandwidth Measurement**

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP-40	100129	Jan. 18, 2017

**Peak Output Power Measurement**

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Power Meter	Anritsu	ML2487A	6K00004714	May 18, 2017
2	Power Meter Sensor	Anritsu	MA2491A	034138	May 17, 2017

**Antenna Conducted Spurious Emission Measurement**

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP-40	100129	Jan. 18, 2017

**Power Spectral Density Measurement**

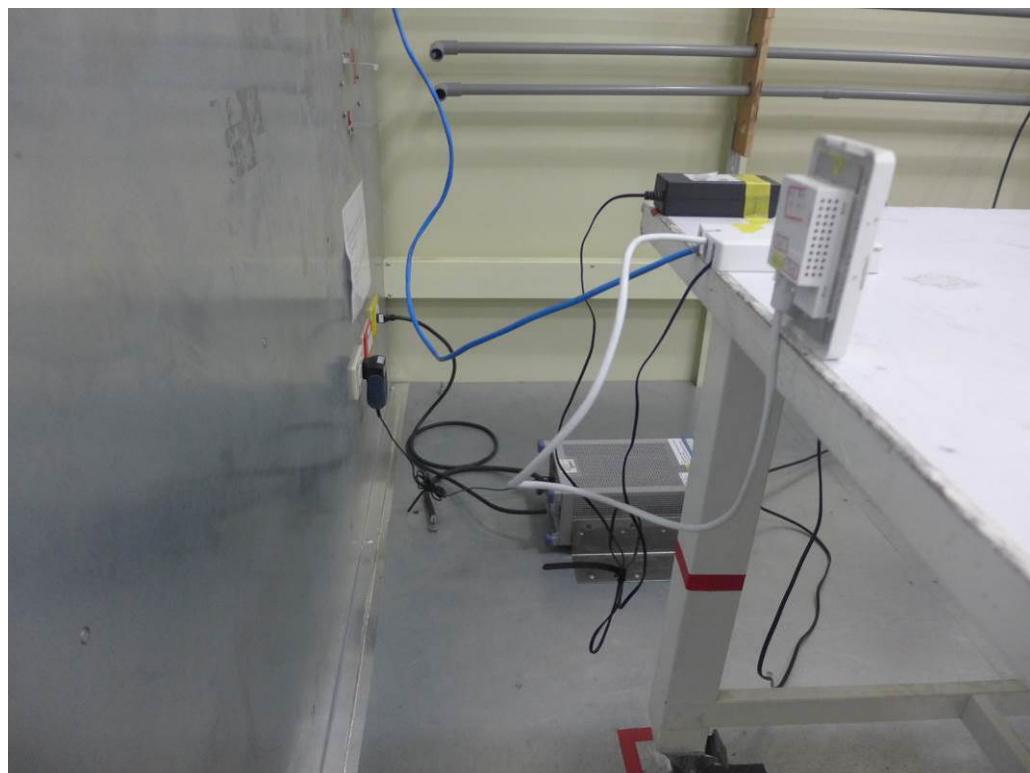
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP-40	100129	Jan. 18, 2017

Remark: "N/A" denotes no model name, serial no. or calibration specified.

All calibration period of equipment list is one year.

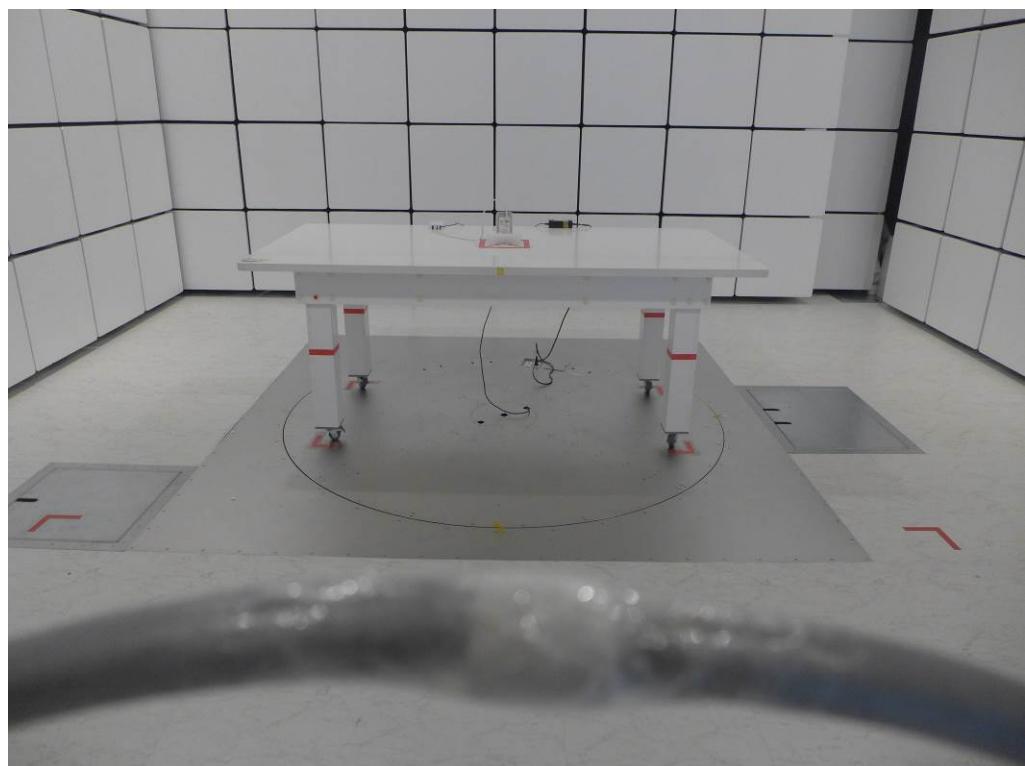
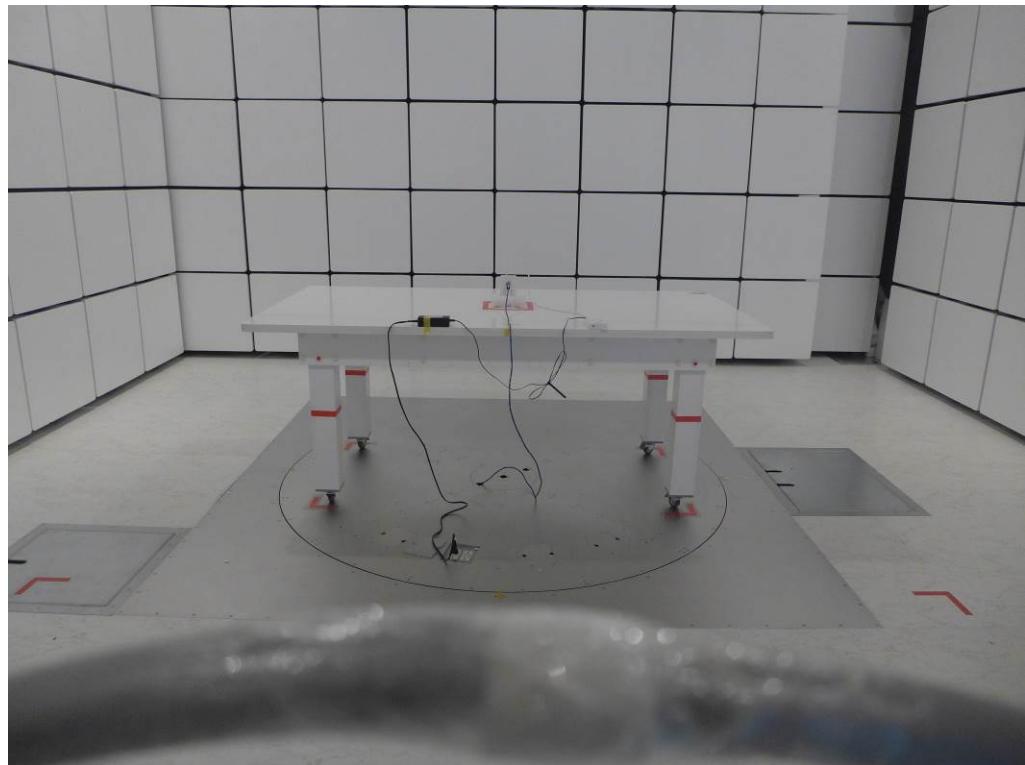
## 10. EUT TEST PHOTO

### Conducted Measurement Photos



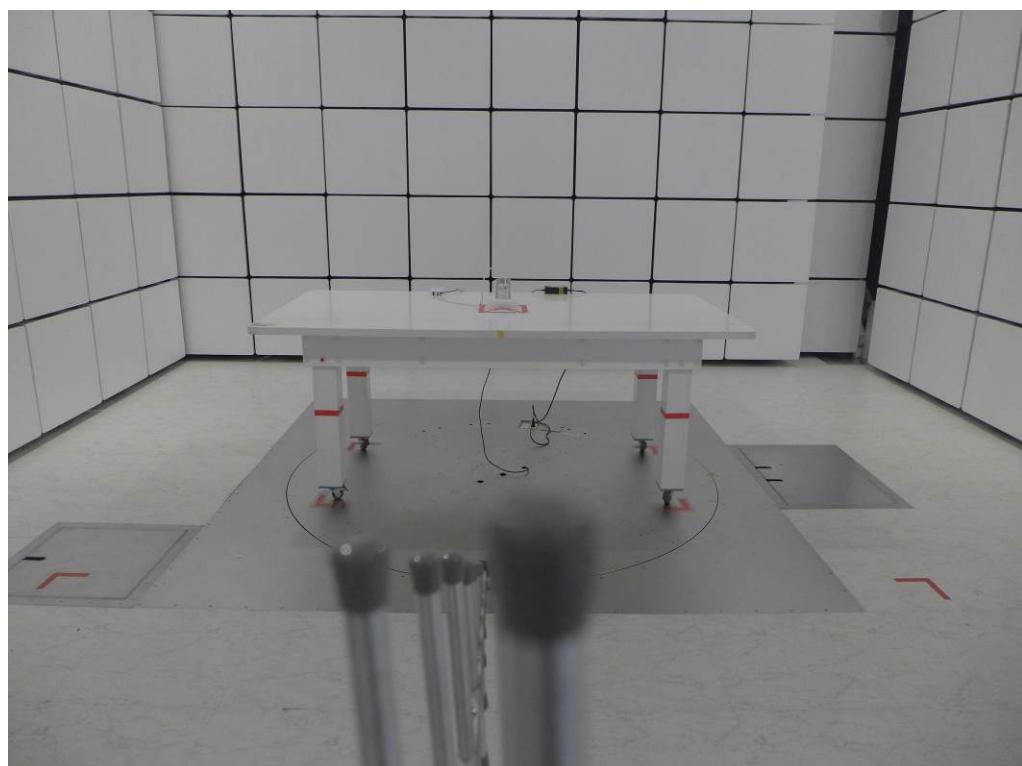
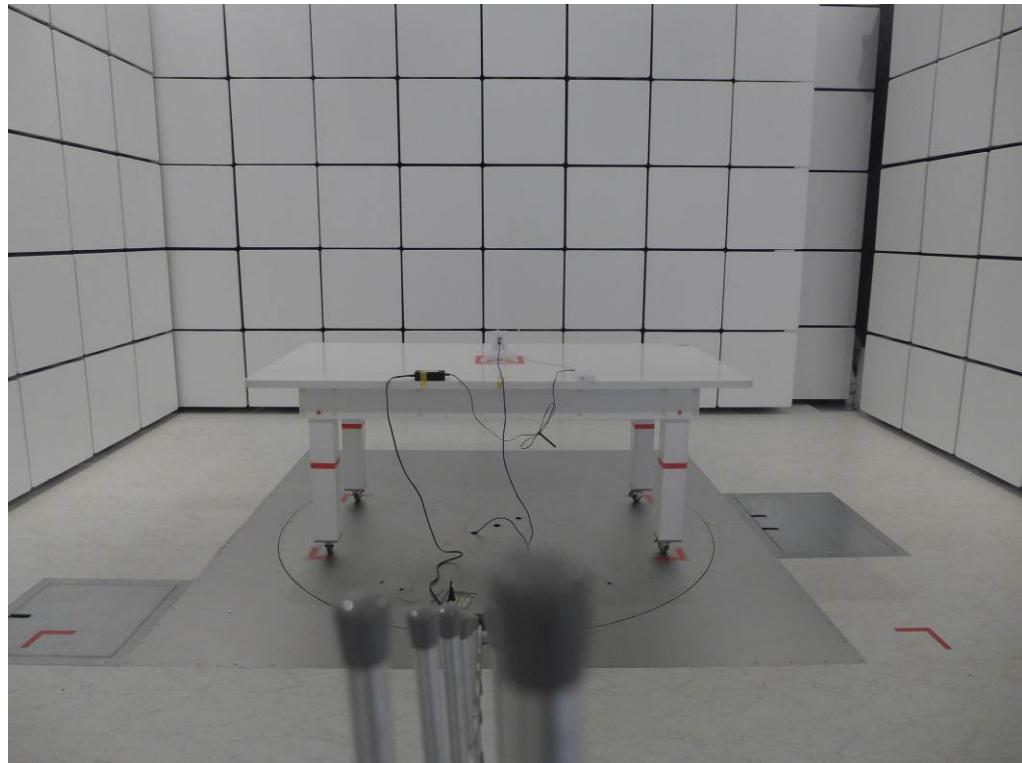
### Radiated Measurement Photos

**9KHz to 30MHz**



### Radiated Measurement Photos

**30MHz to 1000MHz**



### Radiated Measurement Photos

**Above 1000MHz**



## ATTACHMENT A - CONDUCTED EMISSION

Test Mode : Normal Link

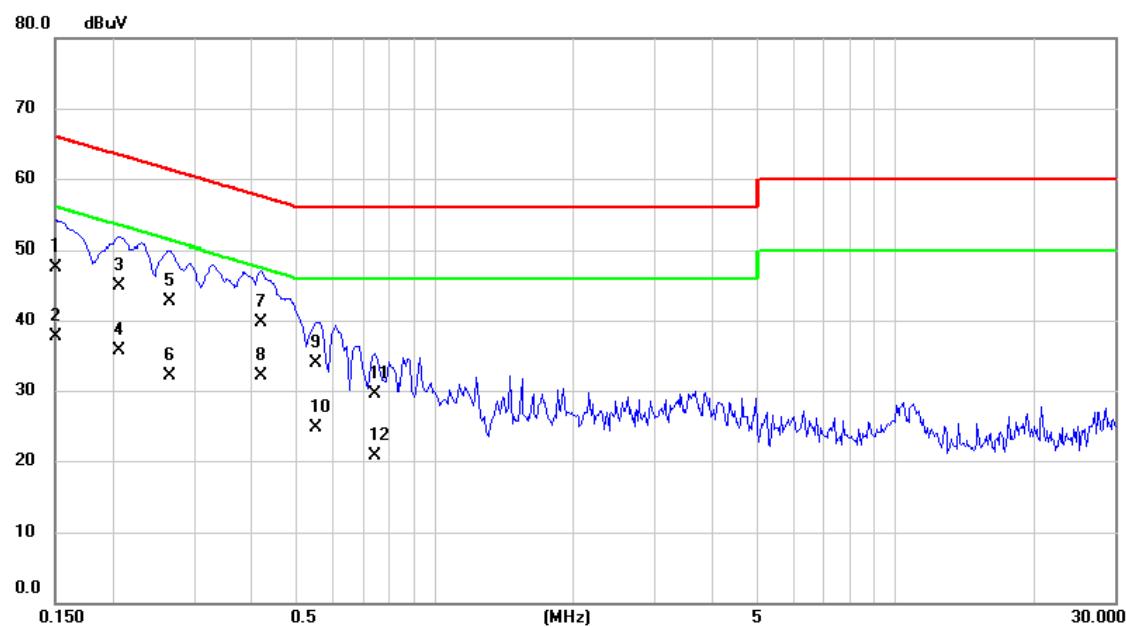
## Line



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Margin	
			Level	Factor	ment		dB	dBuV
1		0.1500	37.80	9.66	47.46	66.00	-18.54	QP
2	*	0.1500	28.70	9.66	38.36	56.00	-17.64	AVG
3		0.2095	34.70	9.66	44.36	63.23	-18.87	QP
4		0.2095	24.00	9.66	33.66	53.23	-19.57	AVG
5		0.2606	32.80	9.66	42.46	61.41	-18.95	QP
6		0.2606	22.50	9.66	32.16	51.41	-19.25	AVG
7		0.3880	30.20	9.66	39.86	58.11	-18.25	QP
8		0.3880	20.80	9.66	30.46	48.11	-17.65	AVG
9		0.5450	24.50	9.67	34.17	56.00	-21.83	QP
10		0.5450	16.10	9.67	25.77	46.00	-20.23	AVG
11		0.9230	20.10	9.67	29.77	56.00	-26.23	QP
12		0.9230	16.20	9.67	25.87	46.00	-20.13	AVG

Test Mode : Normal Link

## Neutral

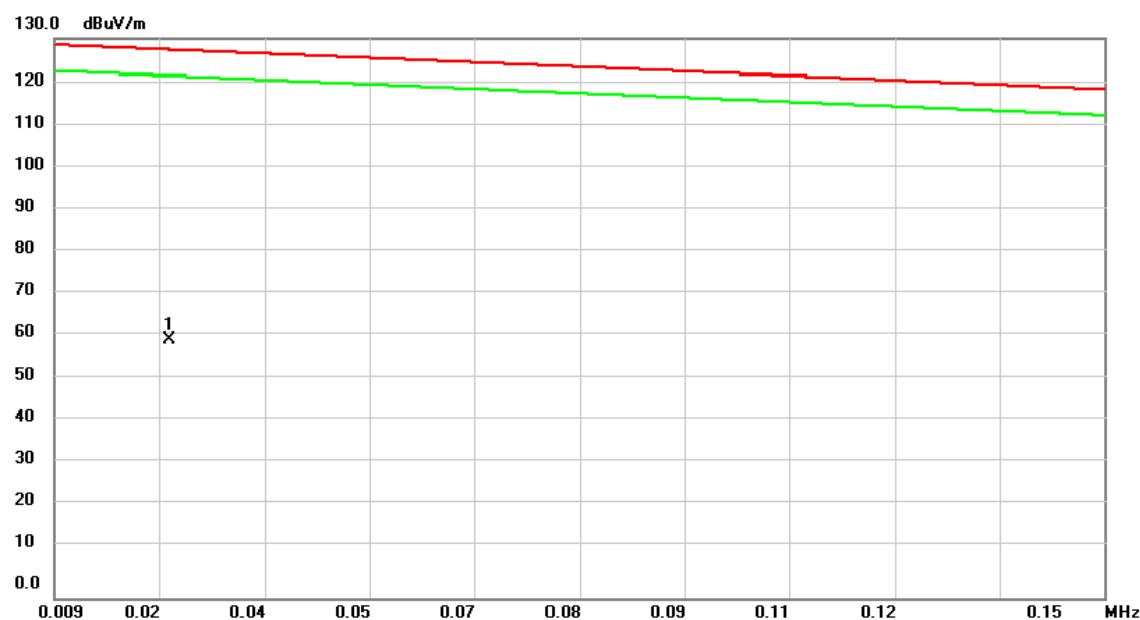


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dB	Margin	
							Detector	Comment
1		0.1500	37.90	9.67	47.57	66.00	-18.43	QP
2		0.1500	28.10	9.67	37.77	56.00	-18.23	AVG
3		0.2060	35.30	9.66	44.96	63.37	-18.41	QP
4		0.2060	26.00	9.66	35.66	53.37	-17.71	AVG
5		0.2648	33.10	9.66	42.76	61.28	-18.52	QP
6		0.2648	22.40	9.66	32.06	51.28	-19.22	AVG
7		0.4195	30.10	9.66	39.76	57.46	-17.70	QP
8	*	0.4195	22.50	9.66	32.16	47.46	-15.30	AVG
9		0.5540	24.20	9.67	33.87	56.00	-22.13	QP
10		0.5540	15.00	9.67	24.67	46.00	-21.33	AVG
11		0.7430	19.90	9.68	29.58	56.00	-26.42	QP
12		0.7430	11.10	9.68	20.78	46.00	-25.22	AVG

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

Test Mode: TX

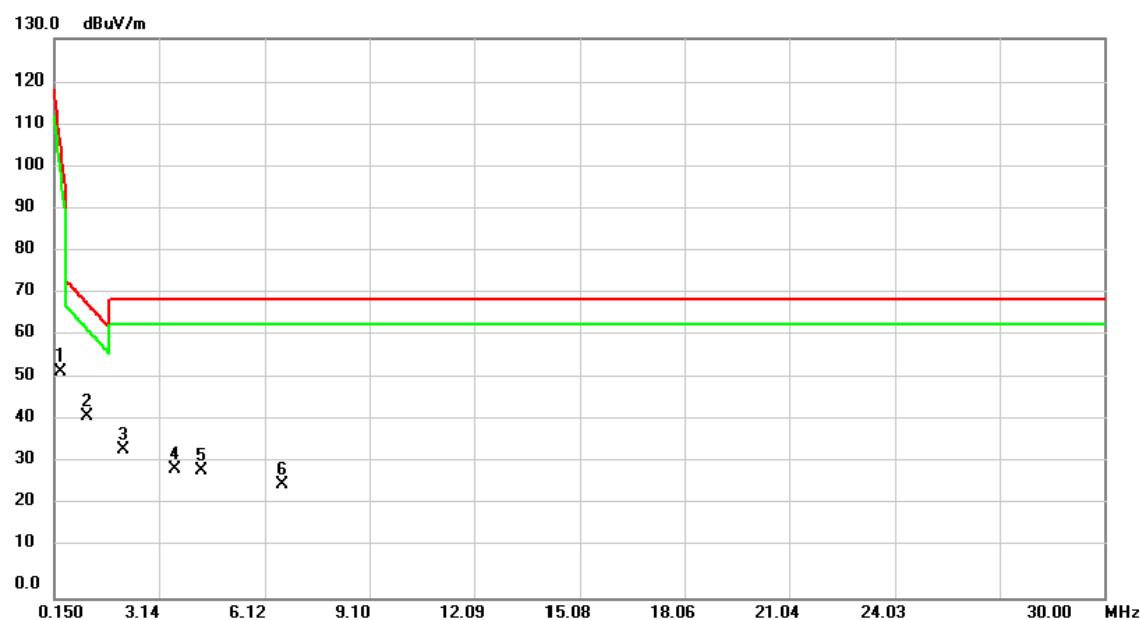
OPEN



No.	Mk.	Reading Level	Correct Factor	Measure- ment	Limit	Margin	
		MHz	dBuV	dB	dBuV/m	dB	Detector Comment
1	*	0.0246	43.53	16.48	60.01	127.39	-67.38 peak

Test Mode: TX

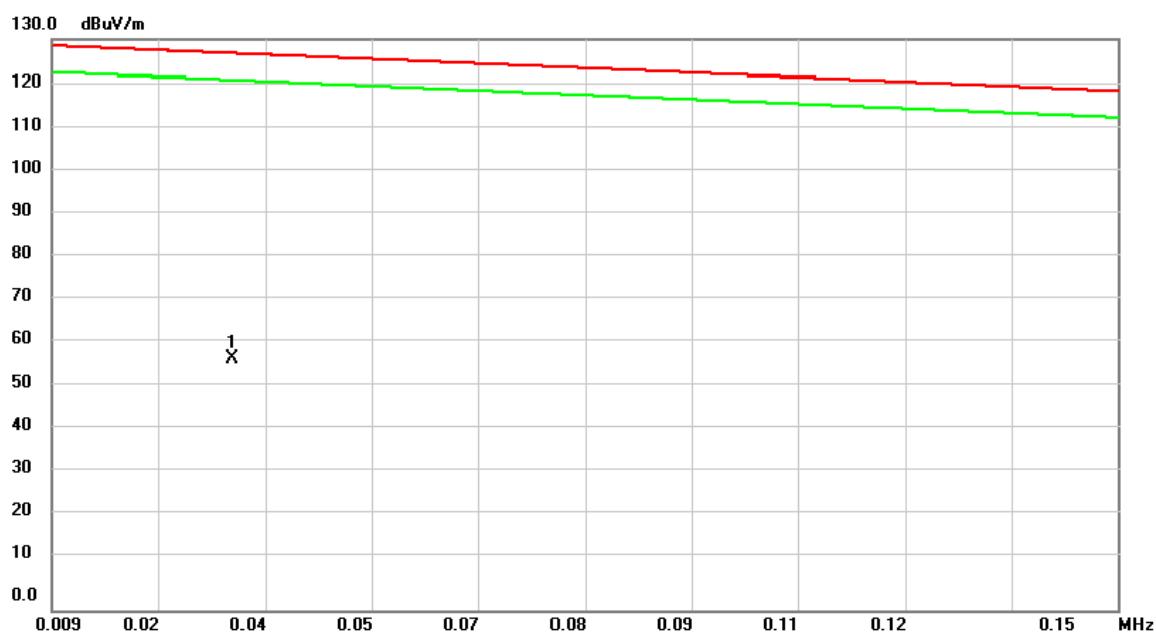
OPEN



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector Comment
1		0.3291	40.93	11.80	52.73	105.41	-52.68	peak
2	*	1.0750	30.36	11.97	42.33	68.59	-26.26	peak
3		2.1200	23.06	11.50	34.56	69.54	-34.98	peak
4		3.5825	18.91	11.19	30.10	69.54	-39.44	peak
5		4.3290	18.38	11.30	29.68	69.54	-39.86	peak
6		6.6272	15.26	11.37	26.63	69.54	-42.91	peak

Test Mode: TX

CLOSE



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector Comment
1	*	0.0330	42.59	14.70	57.29	126.79	-69.50	peak

Test Mode: TX

CLOSE

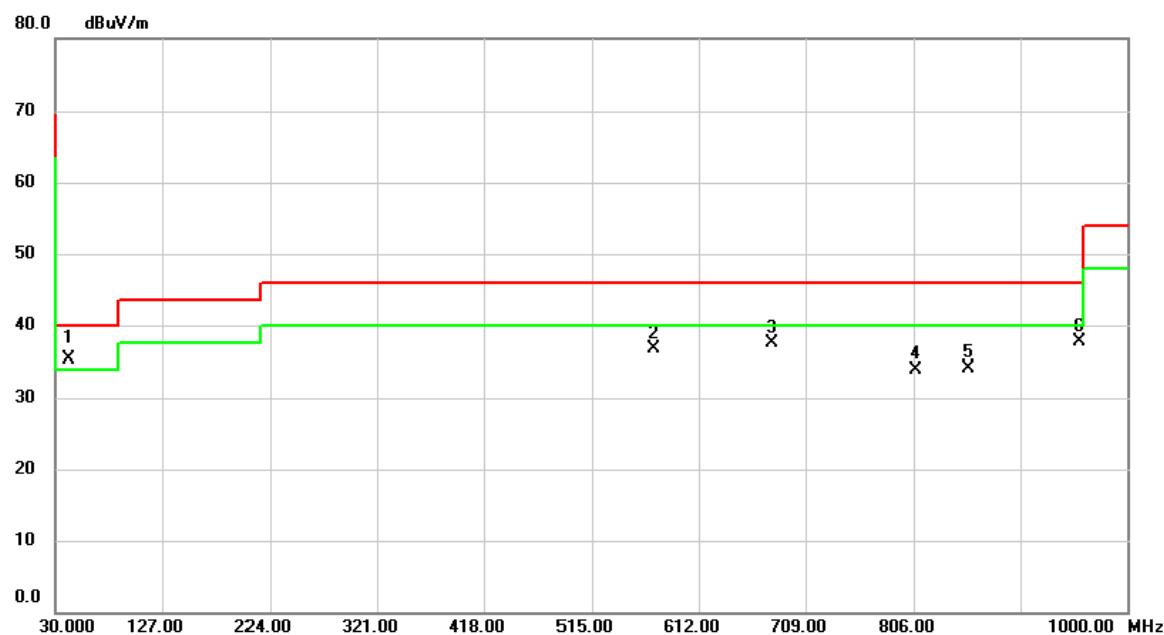


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	2.2395	24.62	11.44	36.06	69.54	-33.48	peak	
2		3.9410	18.34	11.24	29.58	69.54	-39.96	peak	
3		5.2842	16.97	11.39	28.36	69.54	-41.18	peak	
4		9.5228	13.44	11.31	24.75	69.54	-44.79	peak	
5		12.1493	12.61	11.24	23.85	69.54	-45.69	peak	
6		20.3883	11.79	10.93	22.72	69.54	-46.82	peak	

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

Test Mode: TX B MODE

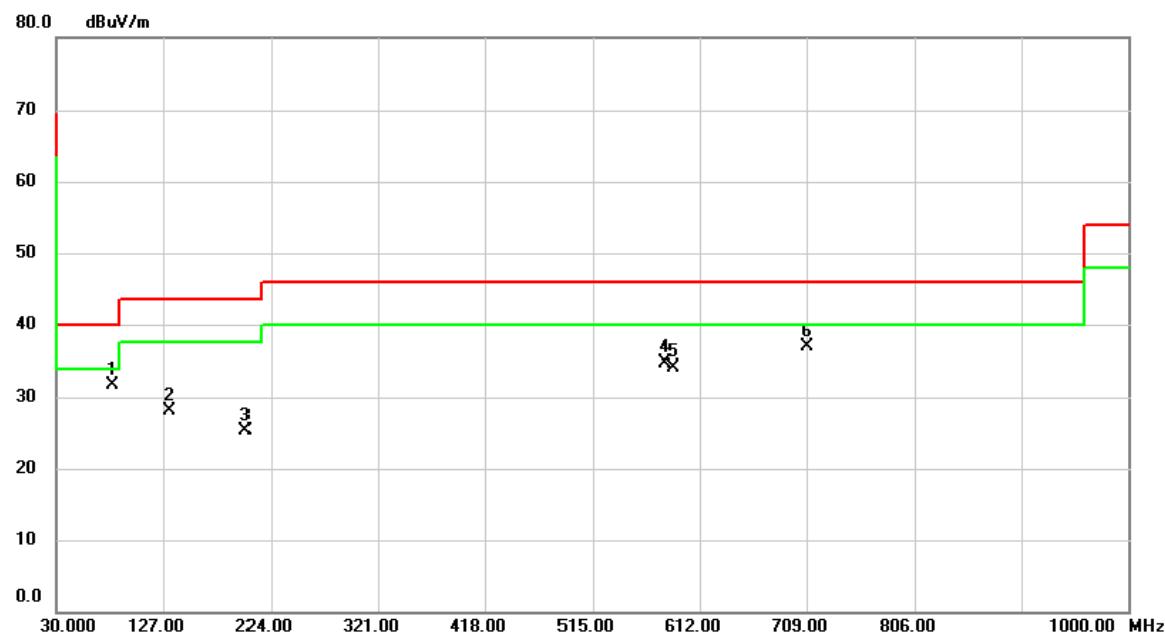
## Vertical



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Margin	Comment
			Level	Factor	ment			
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1	*	42.6100	43.90	-8.58	35.32	40.00	-4.68	QP
2		571.2600	38.08	-1.37	36.71	46.00	-9.29	peak
3		678.9300	37.15	0.40	37.55	46.00	-8.45	peak
4		807.9400	31.31	2.53	33.84	46.00	-12.16	peak
5		855.4700	30.96	3.23	34.19	46.00	-11.81	peak
6		956.3500	32.66	5.07	37.73	46.00	-8.27	peak

Test Mode: TX B MODE

## Horizontal

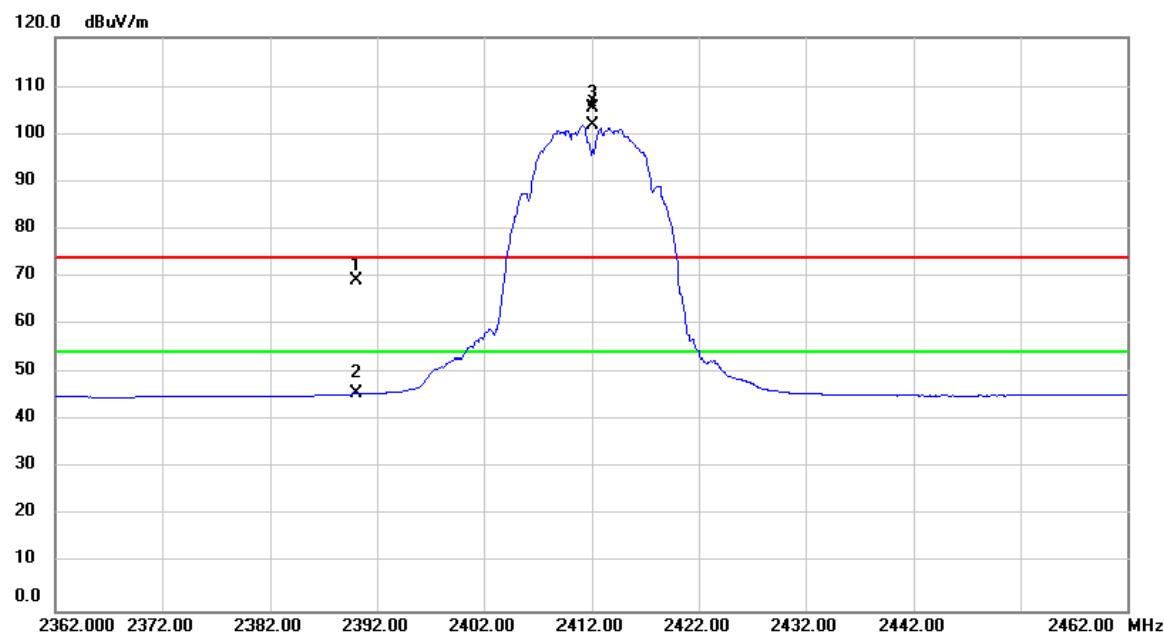


No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Margin	
			Level	Factor	ment			
		MHz	dBuV	dB	dBuV/m	dB	Detector	Comment
1	*	81.4100	44.35	-12.56	31.79	40.00	-8.21	peak
2		132.8200	37.68	-9.52	28.16	43.50	-15.34	peak
3		200.7200	36.36	-11.06	25.30	43.50	-18.20	peak
4		579.9900	35.77	-1.14	34.63	46.00	-11.37	peak
5		587.7500	35.00	-0.93	34.07	46.00	-11.93	peak
6		709.9700	35.91	1.07	36.98	46.00	-9.02	peak

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

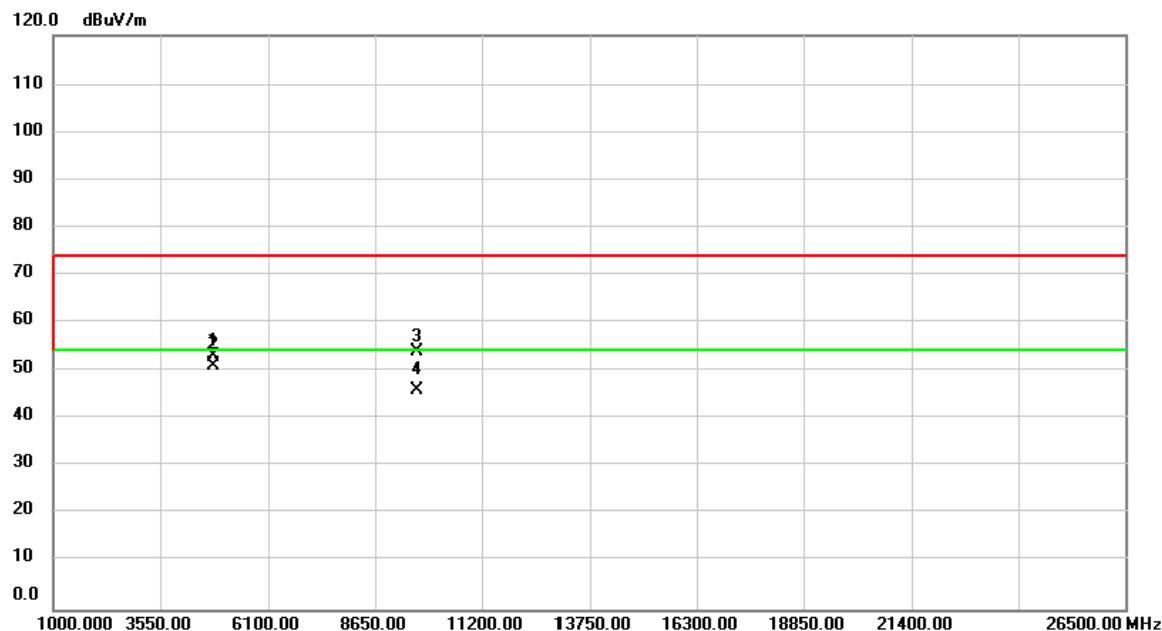
Orthogonal Axis :	X
Test Mode :	TX B MODE 2412MHz

## Vertical



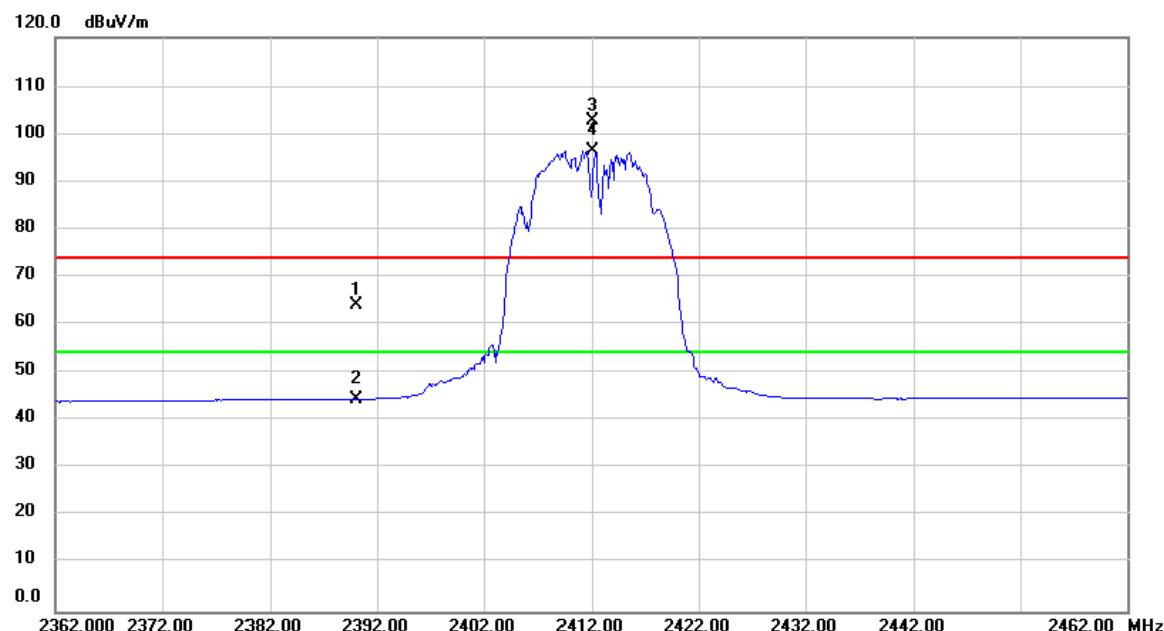
No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Margin	Detector	Comment
			Level	Factor	ment				
MHz dBuV dB dBuV/m dBuV/m dB Detector Comment									
1		2390.000	38.27	30.96	69.23	74.00	-4.77	peak	
2		2390.000	14.67	30.96	45.63	54.00	-8.37	AVG	
3	X	2412.000	74.39	31.04	105.43	74.00	31.43	peak	No Limit
4	*	2412.000	70.83	31.04	101.87	54.00	47.87	AVG	No Limit

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

**Vertical**

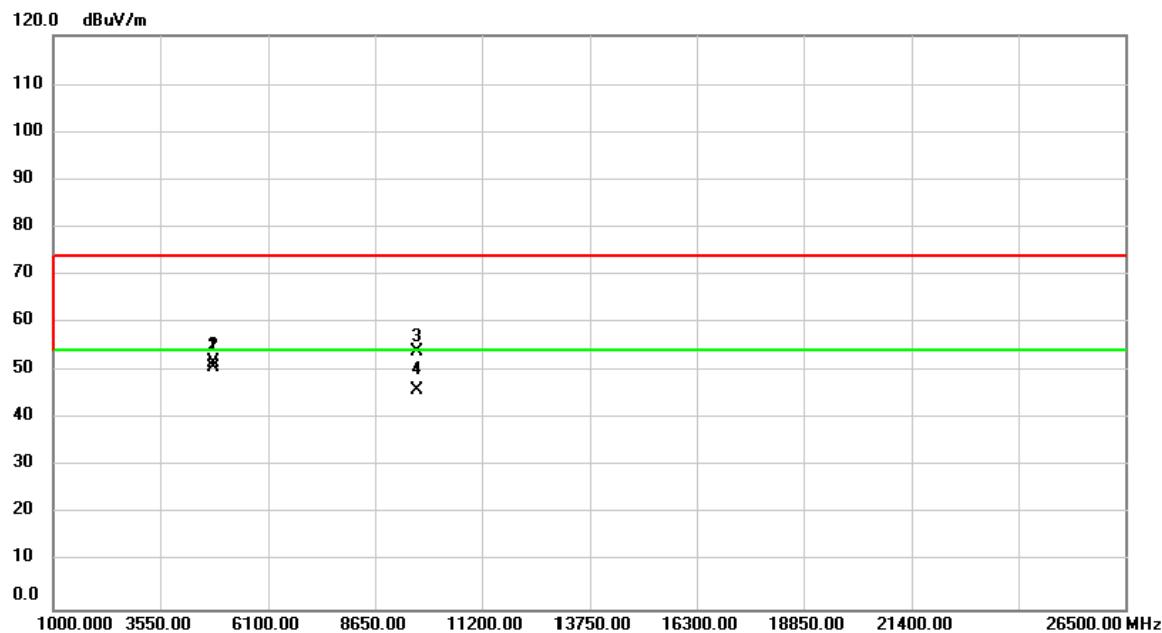
No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Margin	Detector	Comment
			Level	Factor	ment				
1		4824.000	64.29	-11.47	52.82	74.00	-21.18	peak	
2	*	4824.000	62.60	-11.47	51.13	54.00	-2.87	AVG	
3		9648.000	53.14	0.81	53.95	74.00	-20.05	peak	
4		9648.000	45.37	0.81	46.18	54.00	-7.82	AVG	

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

**Horizontal**

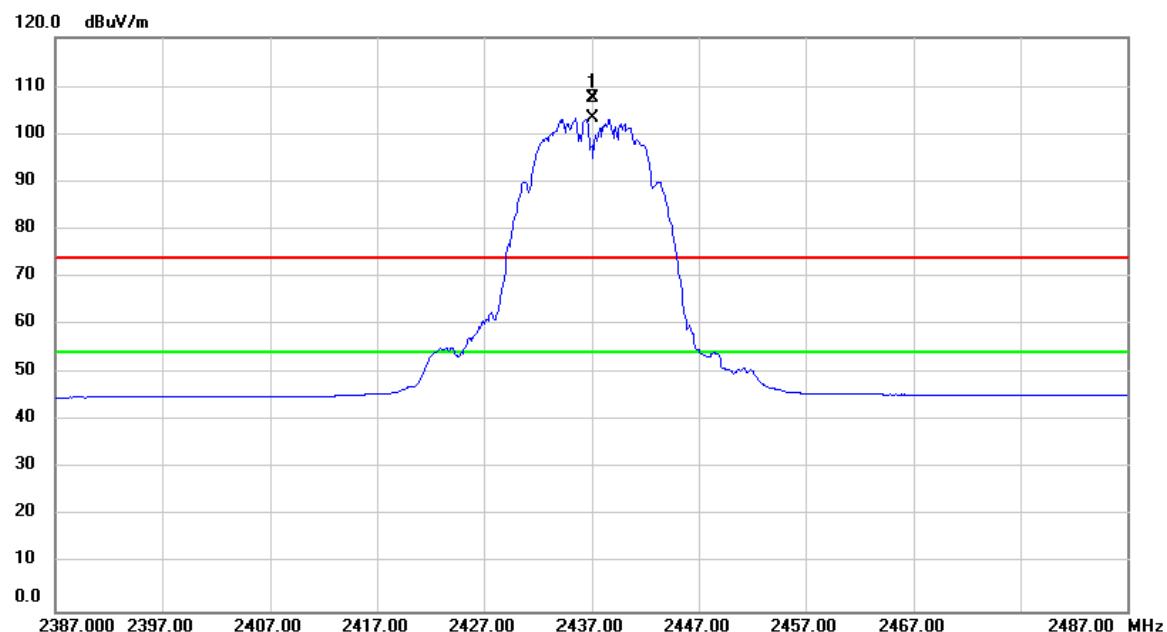
No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Margin	Comment	
			Level	Factor	ment				
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2390.000	33.06	30.96	64.02	74.00	-9.98	peak	
2		2390.000	13.62	30.96	44.58	54.00	-9.42	AVG	
3	X	2412.000	71.63	31.04	102.67	74.00	28.67	peak	No Limit
4	*	2412.000	65.55	31.04	96.59	54.00	42.59	AVG	No Limit

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

**Horizontal**

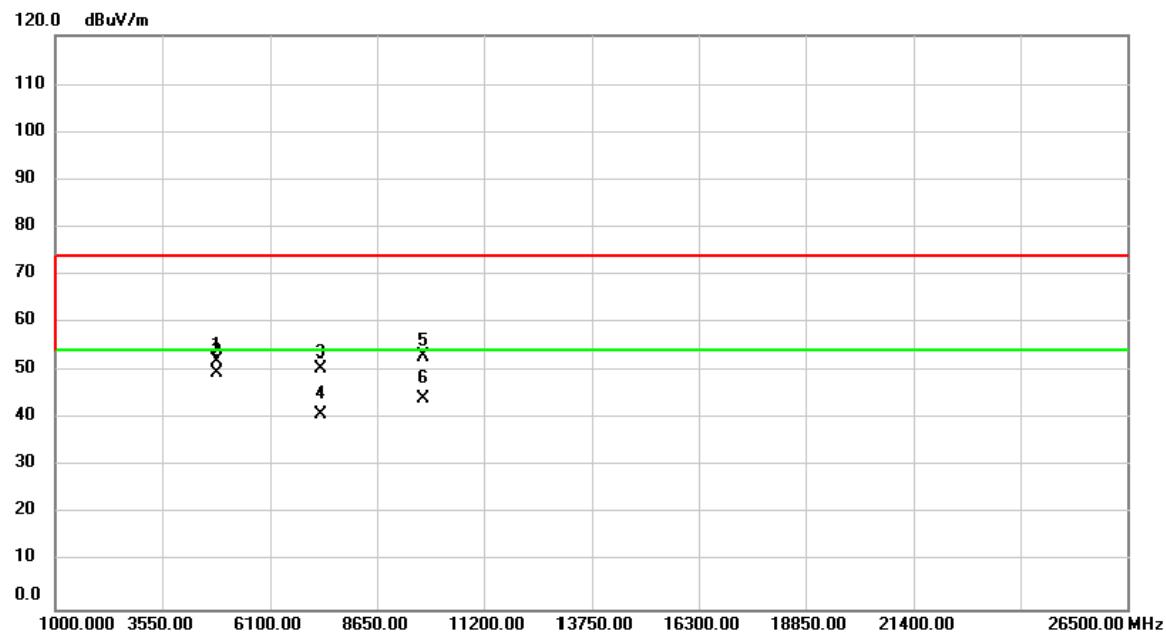
No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Margin	Detector	Comment
			Level	Factor	ment				
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		4824.000	63.33	-11.47	51.86	74.00	-22.14	peak	
2	*	4824.120	62.39	-11.47	50.92	54.00	-3.08	AVG	
3		9648.000	52.99	0.81	53.80	74.00	-20.20	peak	
4		9648.000	45.13	0.81	45.94	54.00	-8.06	AVG	

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

**Vertical**

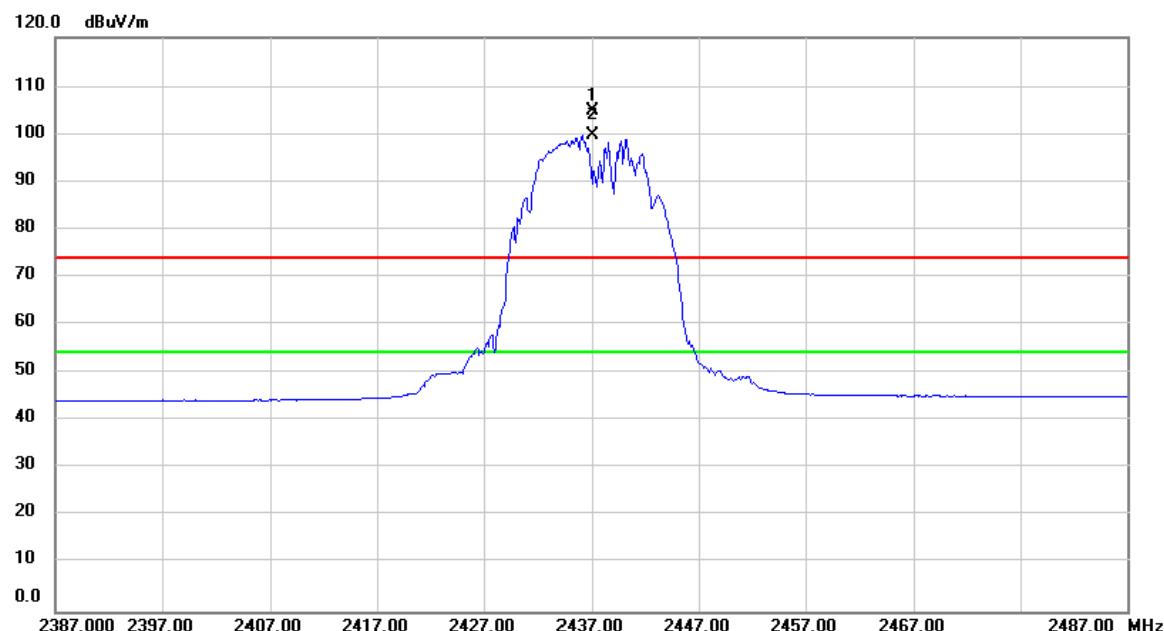
No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Margin	Detector	Comment
			Level	Factor	ment				
1	X	2437.000	76.56	31.13	107.69	74.00	33.69	peak	No Limit
2	*	2437.000	72.18	31.13	103.31	54.00	49.31	AVG	No Limit

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

**Vertical**

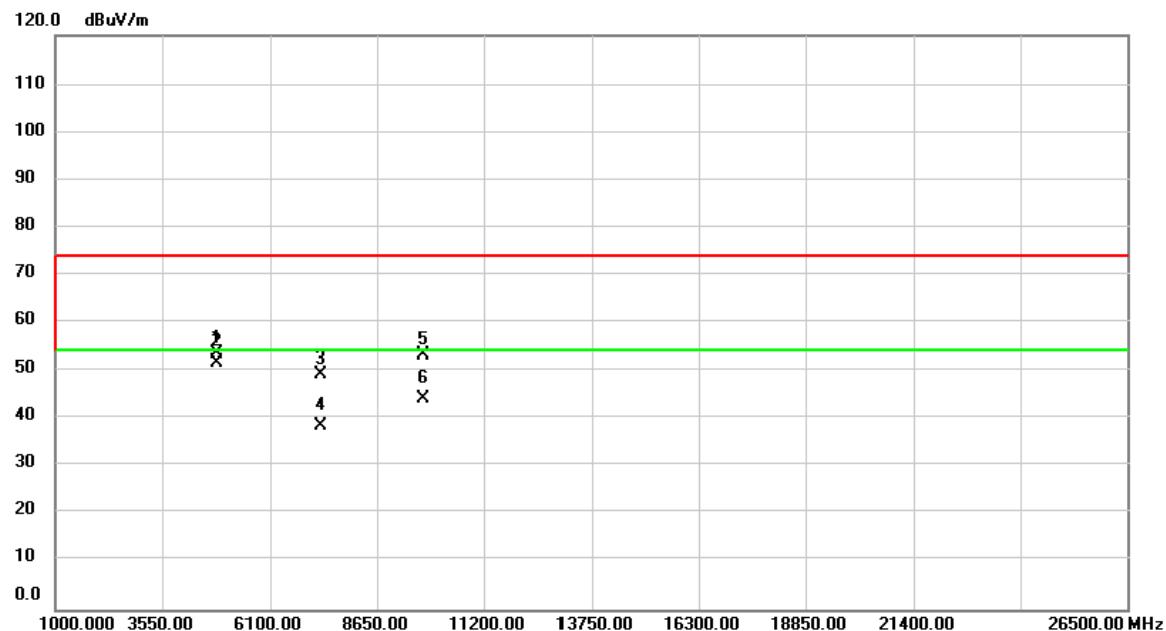
No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Margin	Detector	Comment
			Level	Factor	ment				
1		4874.000	63.55	-11.39	52.16	74.00	-21.84	peak	
2	*	4874.000	61.19	-11.39	49.80	54.00	-4.20	AVG	
3		7311.000	55.58	-5.07	50.51	74.00	-23.49	peak	
4		7311.000	45.94	-5.07	40.87	54.00	-13.13	AVG	
5		9748.000	51.77	1.10	52.87	74.00	-21.13	peak	
6		9748.000	43.03	1.10	44.13	54.00	-9.87	AVG	

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

**Horizontal**

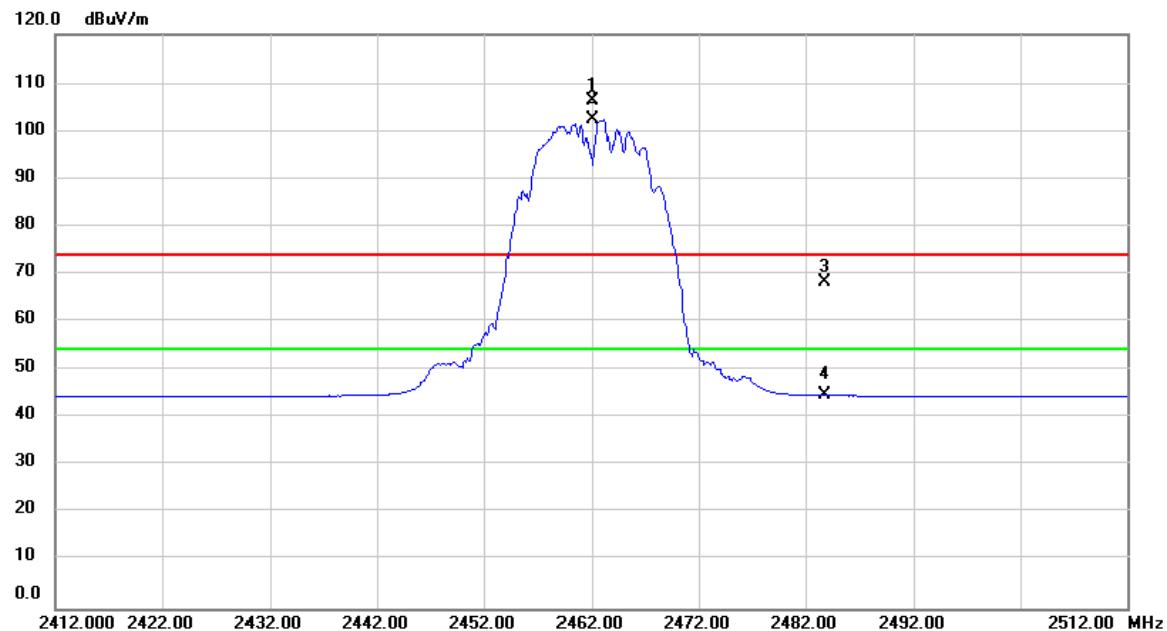
No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Margin	Detector	Comment
			Level	Factor	ment				
		MHz	dBuV	dB	dBuV/m	dB			
1	X	2437.000	73.73	31.13	104.86	74.00	30.86	peak	No Limit
2	*	2437.000	68.53	31.13	99.66	54.00	45.66	AVG	No Limit

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

**Horizontal**

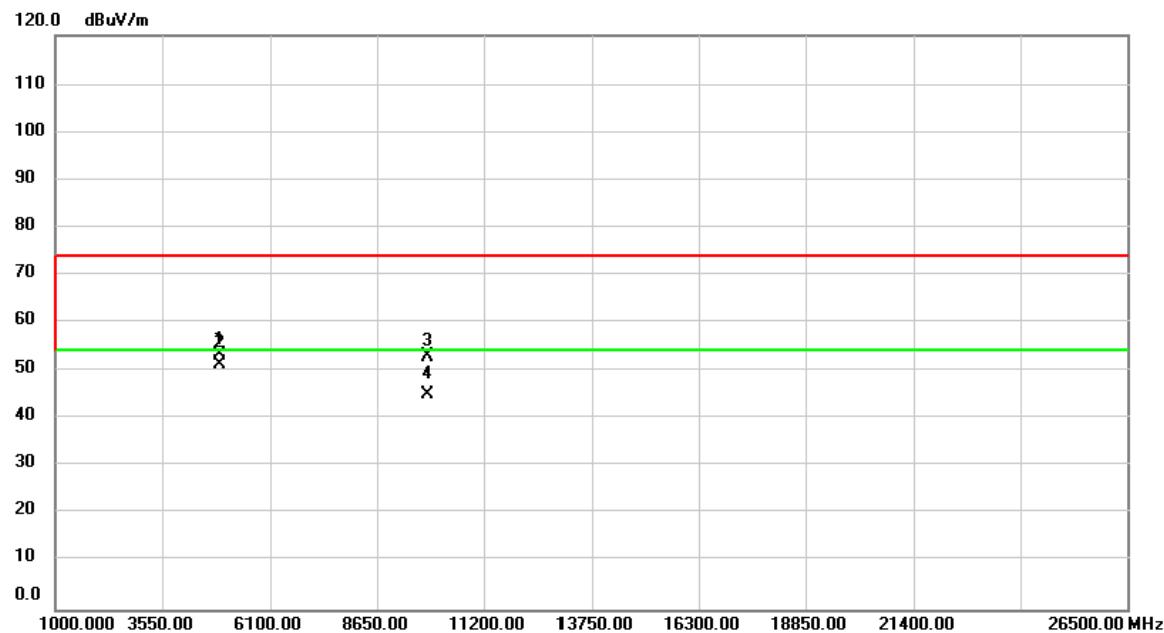
No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Margin	Detector	Comment
			Level	Factor	ment				
1		4874.000	64.94	-11.39	53.55	74.00	-20.45	peak	
2	*	4874.000	63.14	-11.39	51.75	54.00	-2.25	AVG	
3		7311.000	54.32	-5.07	49.25	74.00	-24.75	peak	
4		7311.000	43.56	-5.07	38.49	54.00	-15.51	AVG	
5		9748.000	52.03	1.10	53.13	74.00	-20.87	peak	
6		9748.000	43.22	1.10	44.32	54.00	-9.68	AVG	

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

**Vertical**

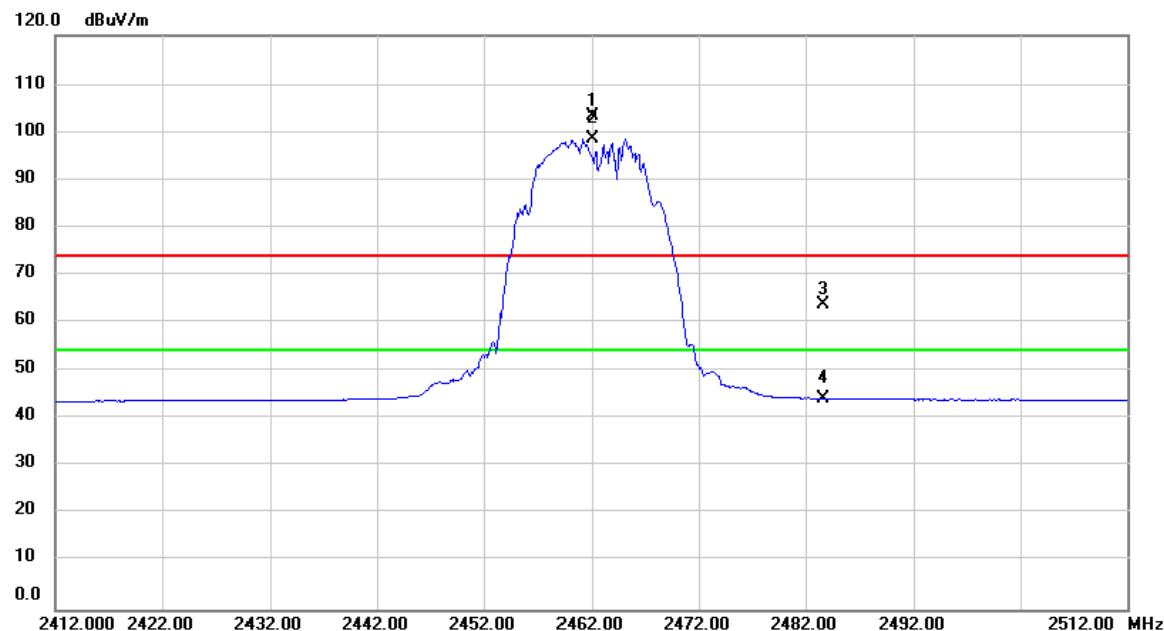
No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Margin	Detector	Comment
			Level	Factor	ment				
1	X	2462.000	74.98	31.23	106.21	74.00	32.21	peak	No Limit
2	*	2462.000	71.19	31.23	102.42	54.00	48.42	AVG	No Limit
3		2483.830	36.91	31.31	68.22	74.00	-5.78	peak	
4		2483.830	13.51	31.31	44.82	54.00	-9.18	AVG	

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

**Vertical**

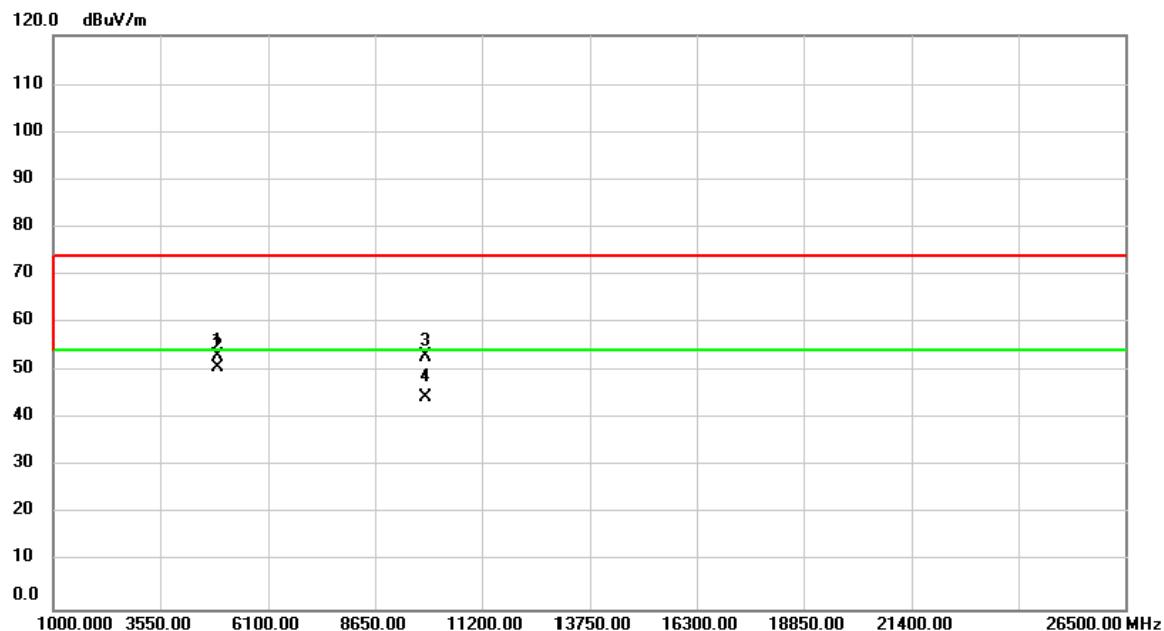
No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Margin	Detector	Comment
			Level	Factor	ment				
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		4924.000	64.65	-11.32	53.33	74.00	-20.67	peak	
2	*	4924.000	62.66	-11.32	51.34	54.00	-2.66	AVG	
3		9848.000	51.57	1.39	52.96	74.00	-21.04	peak	
4		9848.000	43.71	1.39	45.10	54.00	-8.90	AVG	

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

**Horizontal**

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Margin	Comment
			Level	Factor	ment			
		MHz	dBuV	dB	dBuV/m	dB	Detector	
1	X	2462.000	72.24	31.23	103.47	74.00	29.47	peak No Limit
2	*	2462.000	67.23	31.23	98.46	54.00	44.46	AVG No Limit
3		2483.731	32.32	31.31	63.63	74.00	-10.37	peak
4		2483.731	13.07	31.31	44.38	54.00	-9.62	AVG

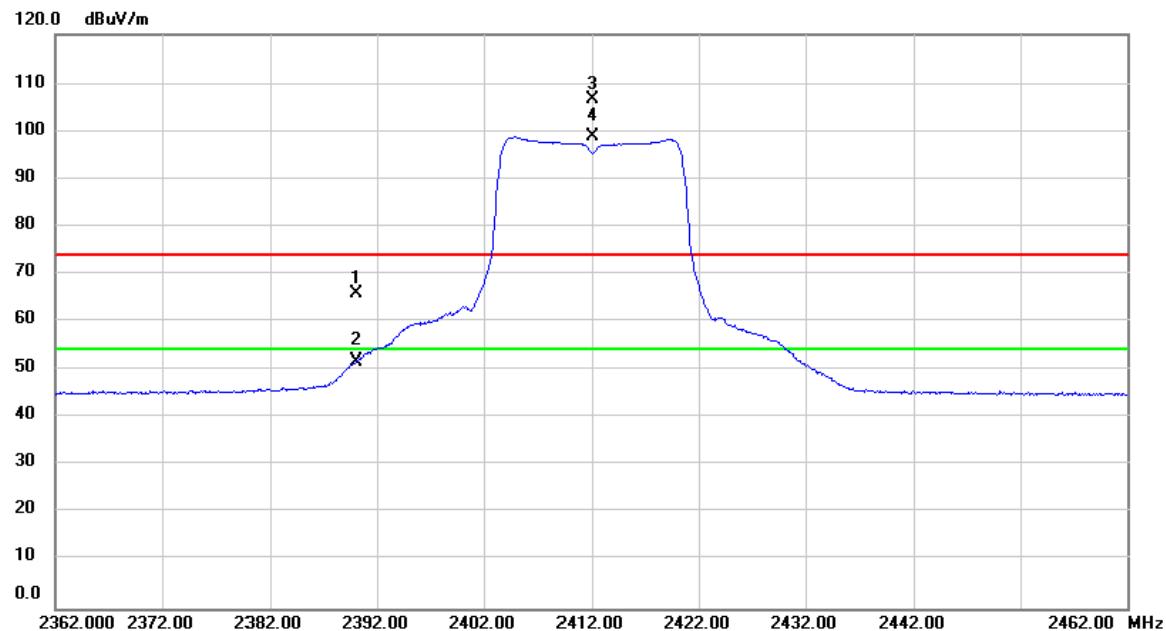
Orthogonal Axis :	X
Test Mode :	TX B MODE 2462MHz

**Horizontal**

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Margin	Detector	Comment
			Level	Factor	ment				
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		4924.000	64.32	-11.32	53.00	74.00	-21.00	peak	
2	*	4924.030	62.28	-11.32	50.96	54.00	-3.04	AVG	
3		9848.000	51.44	1.39	52.83	74.00	-21.17	peak	
4		9848.000	43.14	1.39	44.53	54.00	-9.47	AVG	

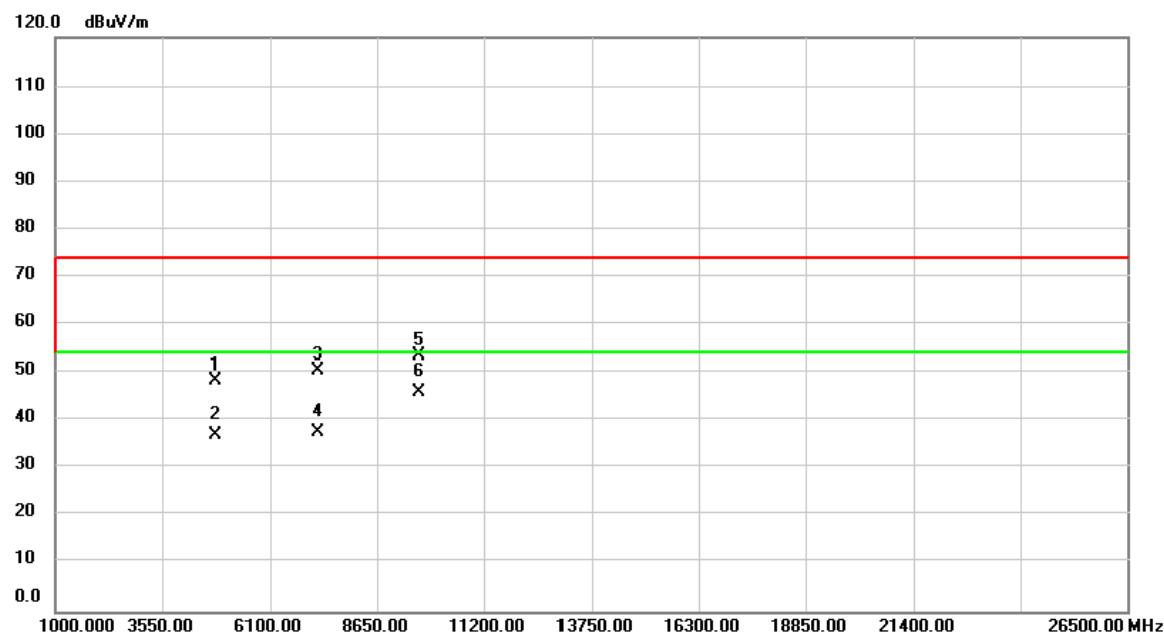
Orthogonal Axis :	X
Test Mode :	TX G MODE 2412MHz

## Vertical



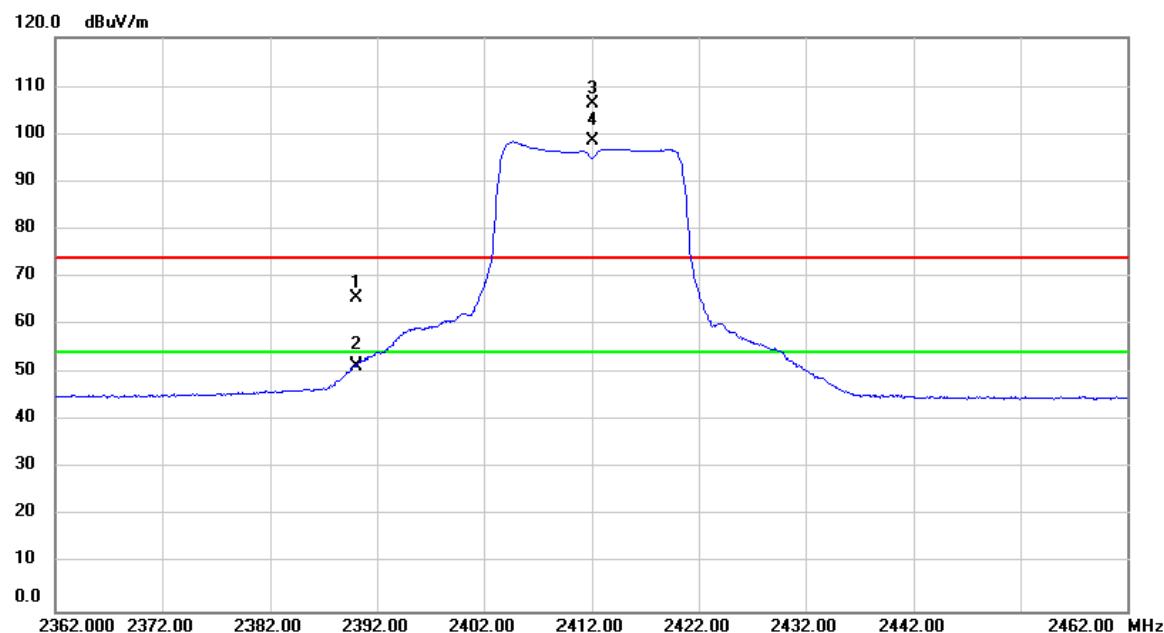
No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Margin	Detector	Comment
			Level	Factor	ment				
1		2390.000	34.91	30.96	65.87	74.00	-8.13	peak	
2		2390.000	20.90	30.96	51.86	54.00	-2.14	AVG	
3	X	2412.000	75.75	31.04	106.79	74.00	32.79	peak	No Limit
4	*	2412.000	67.74	31.04	98.78	54.00	44.78	AVG	No Limit

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

**Vertical**

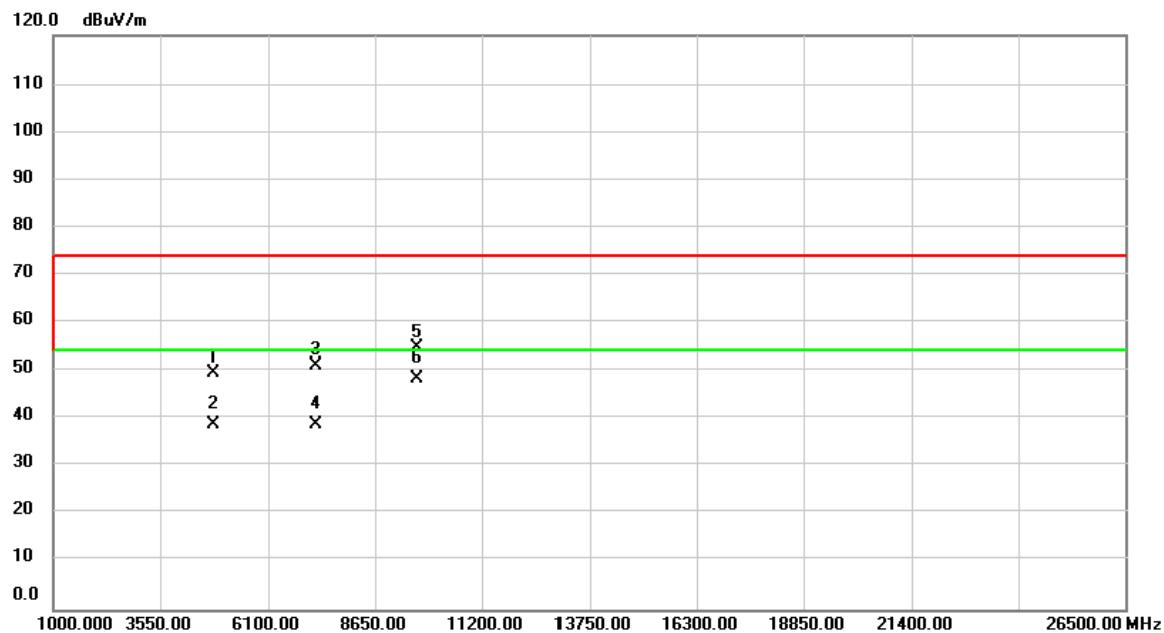
No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Margin	Detector	Comment
			Level	Factor	ment				
1		4824.000	59.92	-11.47	48.45	74.00	-25.55	peak	
2		4824.000	48.57	-11.47	37.10	54.00	-16.90	AVG	
3		7236.000	55.78	-5.36	50.42	74.00	-23.58	peak	
4		7236.000	43.12	-5.36	37.76	54.00	-16.24	AVG	
5		9648.000	52.77	0.81	53.58	74.00	-20.42	peak	
6	*	9648.000	45.13	0.81	45.94	54.00	-8.06	AVG	

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

**Horizontal**

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Margin	Comment	
			Level	Factor	ment				
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2390.000	34.49	30.96	65.45	74.00	-8.55	peak	
2		2390.000	20.59	30.96	51.55	54.00	-2.45	AVG	
3	X	2412.000	75.22	31.04	106.26	74.00	32.26	peak	No Limit
4	*	2412.000	67.39	31.04	98.43	54.00	44.43	AVG	No Limit

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

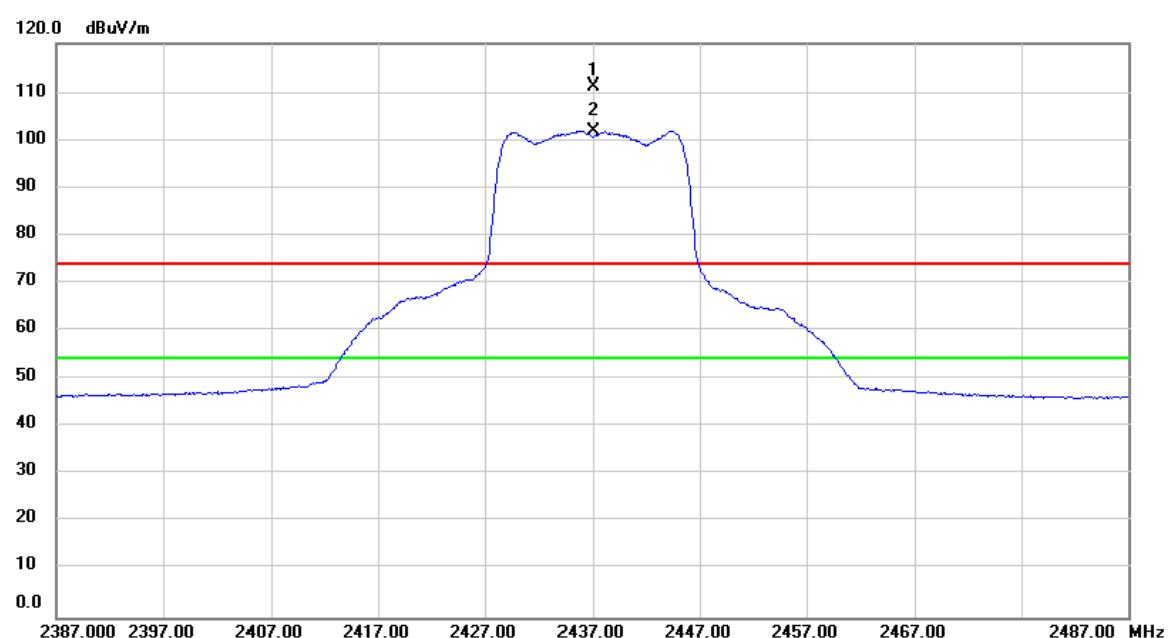
**Horizontal**

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Margin	Detector	Comment
			Level	Factor	ment				
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		4824.000	61.25	-11.47	49.78	74.00	-24.22	peak	
2		4824.000	50.28	-11.47	38.81	54.00	-15.19	AVG	
3		7236.000	56.40	-5.36	51.04	74.00	-22.96	peak	
4		7236.000	44.15	-5.36	38.79	54.00	-15.21	AVG	
5		9648.000	53.86	0.81	54.67	74.00	-19.33	peak	
6	*	9648.000	47.65	0.81	48.46	54.00	-5.54	AVG	

Orthogonal Axis : X

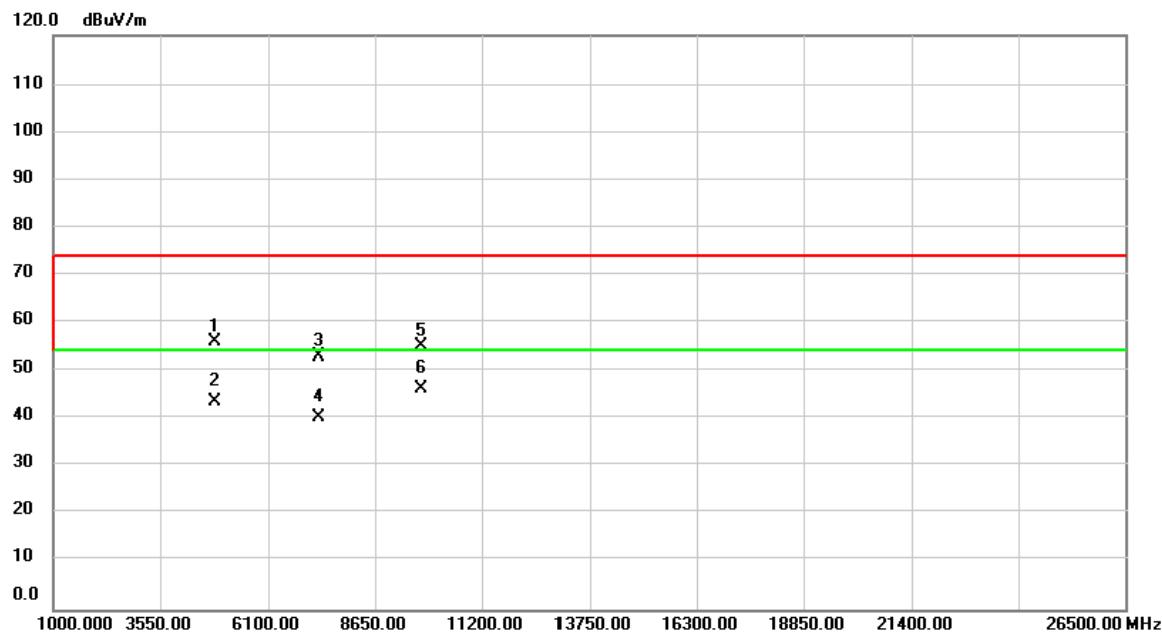
Test Mode : TX G MODE 2437MHz

## Vertical



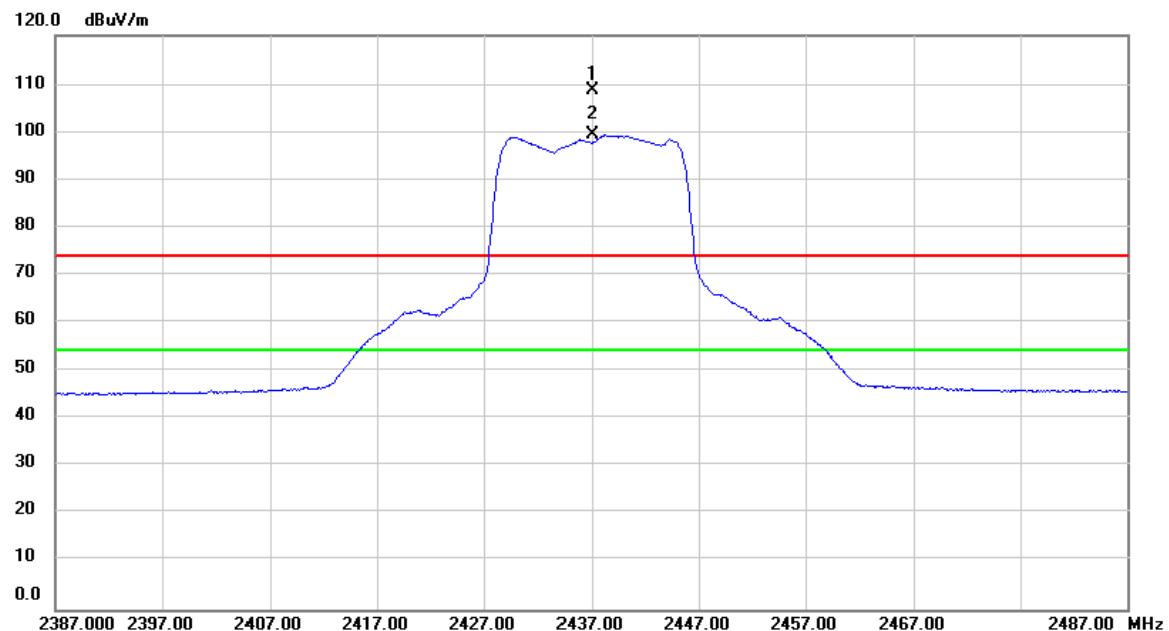
No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Margin	Detector	Comment
			Level	Factor	ment				
		MHz	dBuV	dB	dBuV/m	dB			
1	X	2437.000	80.15	31.13	111.28	74.00	37.28	peak	No Limit
2	*	2437.000	70.75	31.13	101.88	54.00	47.88	AVG	No Limit

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

**Vertical**

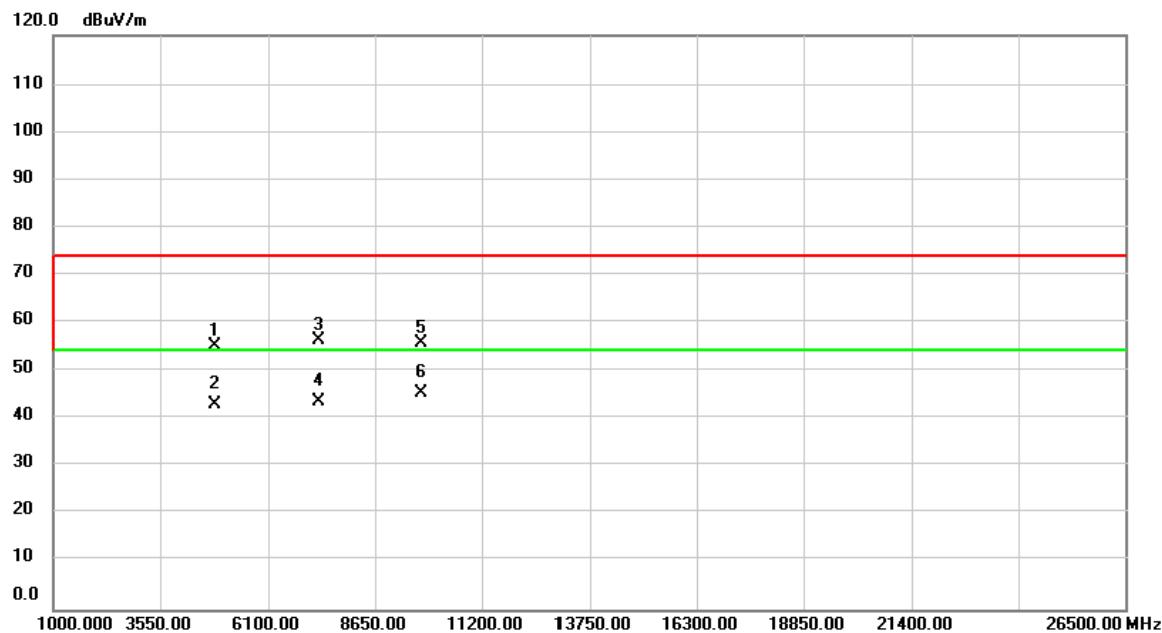
No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Margin	Detector	Comment
			Level	Factor	ment				
1		4874.000	67.46	-11.39	56.07	74.00	-17.93	peak	
2		4874.000	54.93	-11.39	43.54	54.00	-10.46	AVG	
3		7311.000	57.93	-5.07	52.86	74.00	-21.14	peak	
4		7311.000	45.45	-5.07	40.38	54.00	-13.62	AVG	
5		9748.000	53.92	1.10	55.02	74.00	-18.98	peak	
6	*	9748.110	45.22	1.10	46.32	54.00	-7.68	AVG	

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

**Horizontal**

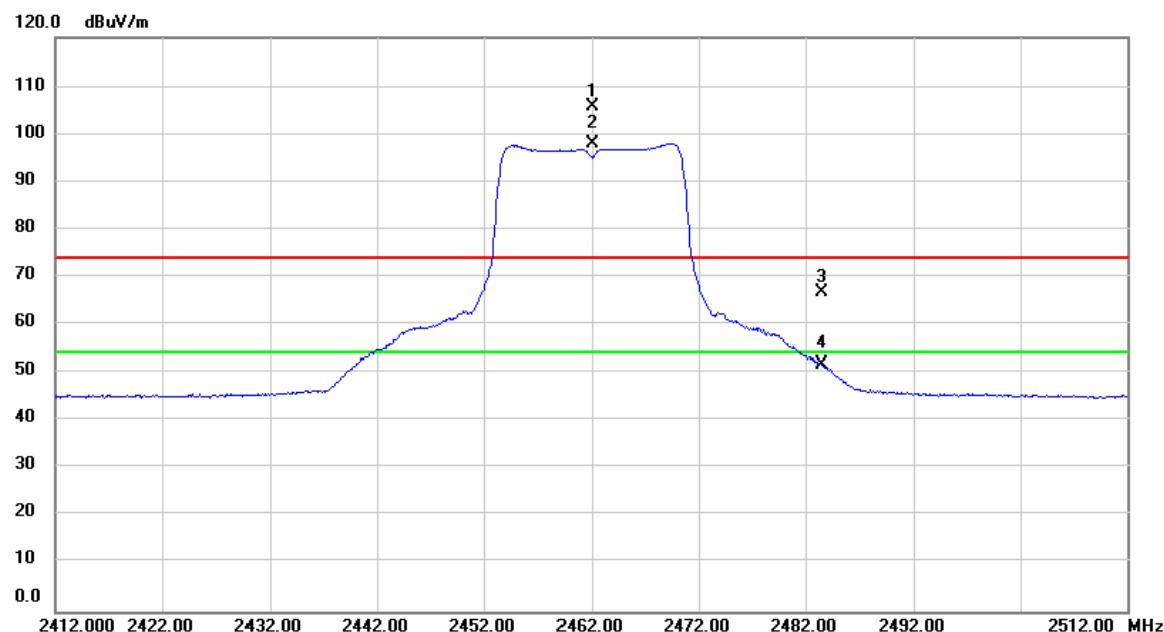
No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Margin	Detector	Comment
			Level	Factor	ment				
		MHz	dBuV	dB	dBuV/m	dB			
1	X	2437.000	77.62	31.13	108.75	74.00	34.75	peak	No Limit
2	*	2437.000	68.21	31.13	99.34	54.00	45.34	AVG	No Limit

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

**Horizontal**

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Margin	Detector	Comment
			Level	Factor	ment				
1		4874.000	66.39	-11.39	55.00	74.00	-19.00	peak	
2		4874.000	54.52	-11.39	43.13	54.00	-10.87	AVG	
3		7311.000	61.46	-5.07	56.39	74.00	-17.61	peak	
4		7311.000	48.58	-5.07	43.51	54.00	-10.49	AVG	
5		9748.000	54.49	1.10	55.59	74.00	-18.41	peak	
6	*	9748.000	44.44	1.10	45.54	54.00	-8.46	AVG	

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

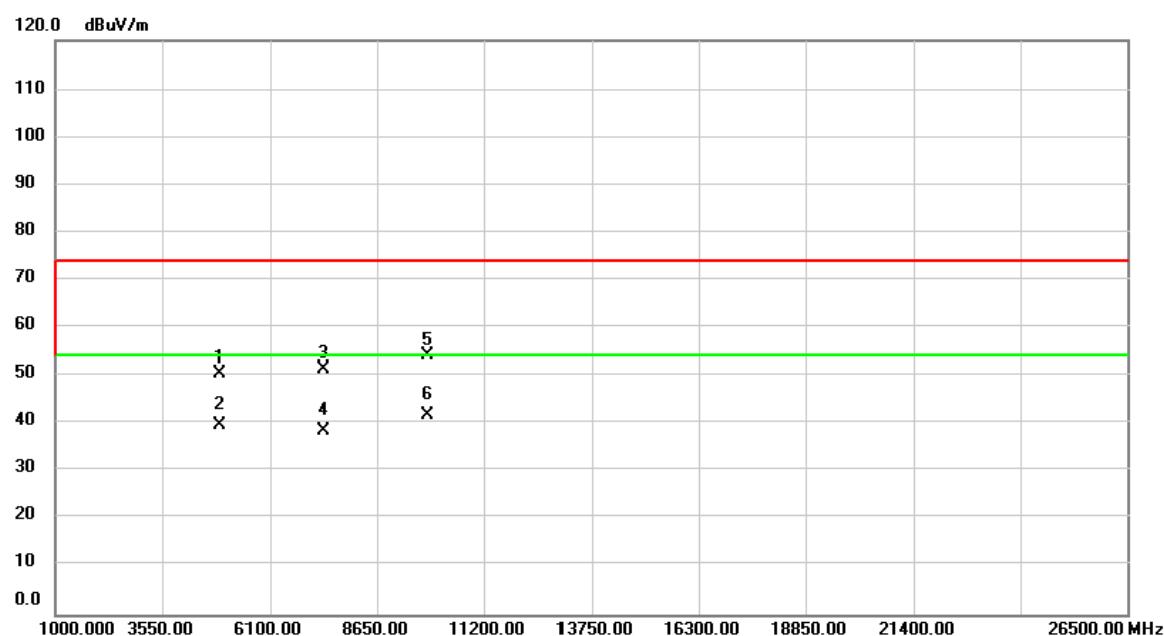
**Vertical**

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Margin	Detector	Comment
			Level	Factor	ment				
1	X	2462.000	74.41	31.23	105.64	74.00	31.64	peak	No Limit
2	*	2462.000	66.81	31.23	98.04	54.00	44.04	AVG	No Limit
3		2483.500	35.50	31.31	66.81	74.00	-7.19	peak	
4		2483.500	20.46	31.31	51.77	54.00	-2.23	AVG	

Orthogonal Axis : X

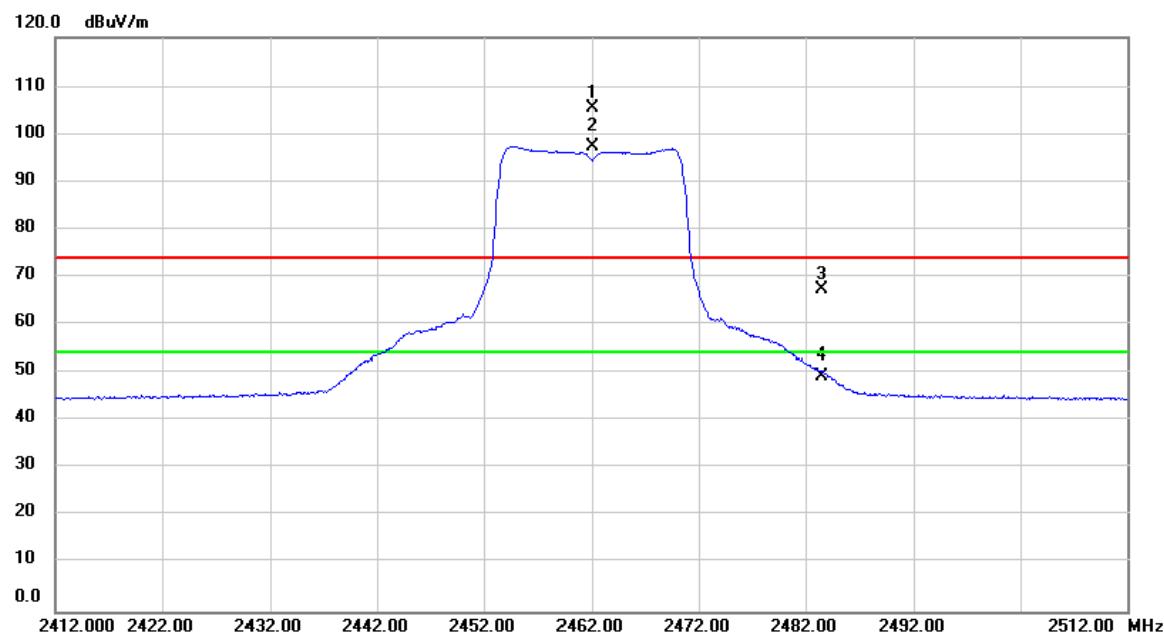
Test Mode : TX G MODE 2462MHz

## Vertical



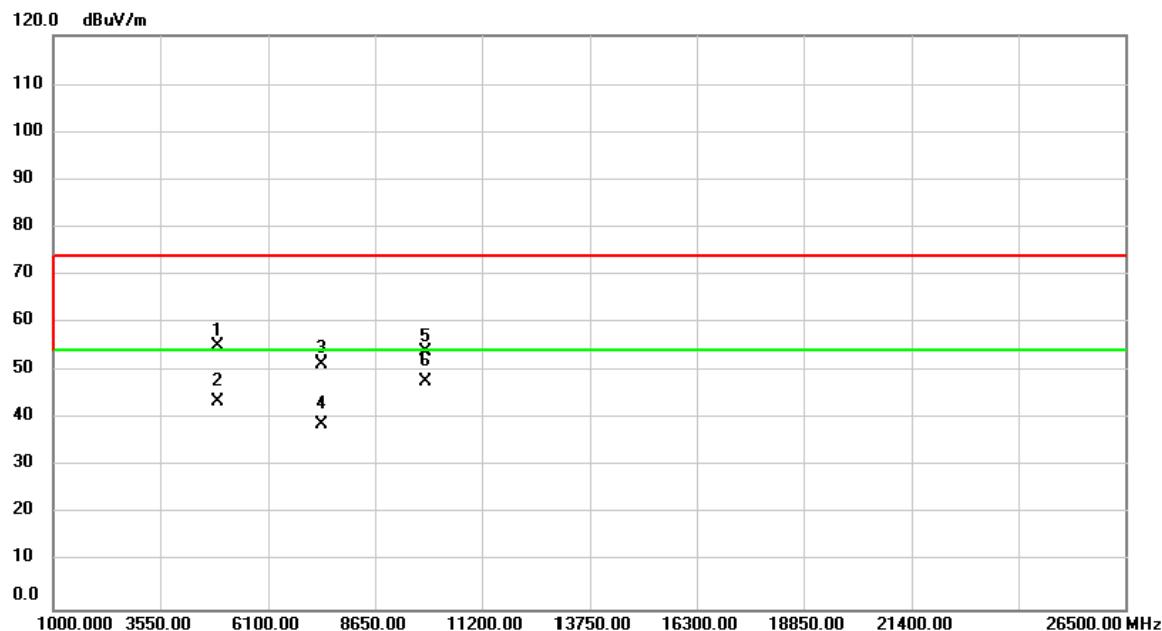
No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Margin	Detector	Comment
			Level	Factor	ment				
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		4924.000	62.01	-11.32	50.69	74.00	-23.31	peak	
2		4924.000	51.11	-11.32	39.79	54.00	-14.21	AVG	
3		7386.000	56.38	-4.80	51.58	74.00	-22.42	peak	
4		7386.000	43.44	-4.80	38.64	54.00	-15.36	AVG	
5		9848.000	52.69	1.39	54.08	74.00	-19.92	peak	
6	*	9848.000	40.33	1.39	41.72	54.00	-12.28	AVG	

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

**Horizontal**

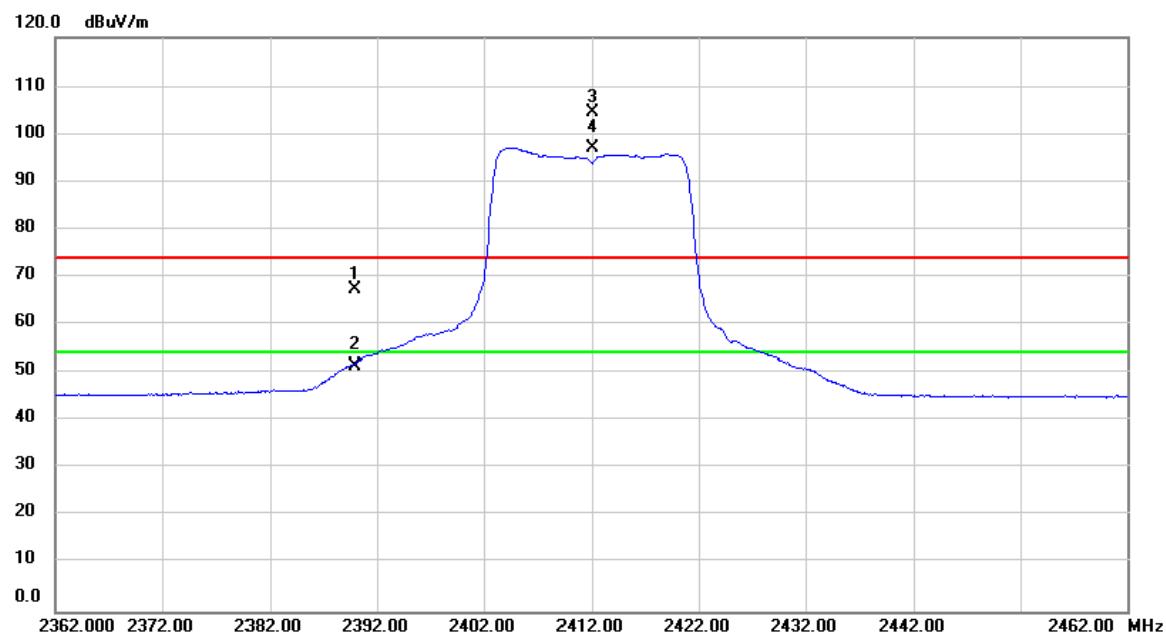
No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Margin	Comment
			Level	Factor	ment			
		MHz	dBuV	dB	dBuV/m	dB	Detector	
1	X	2462.000	74.08	31.23	105.31	74.00	31.31	peak No Limit
2	*	2462.000	66.24	31.23	97.47	54.00	43.47	AVG No Limit
3		2483.500	36.02	31.31	67.33	74.00	-6.67	peak
4		2483.500	18.19	31.31	49.50	54.00	-4.50	AVG

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

**Horizontal**

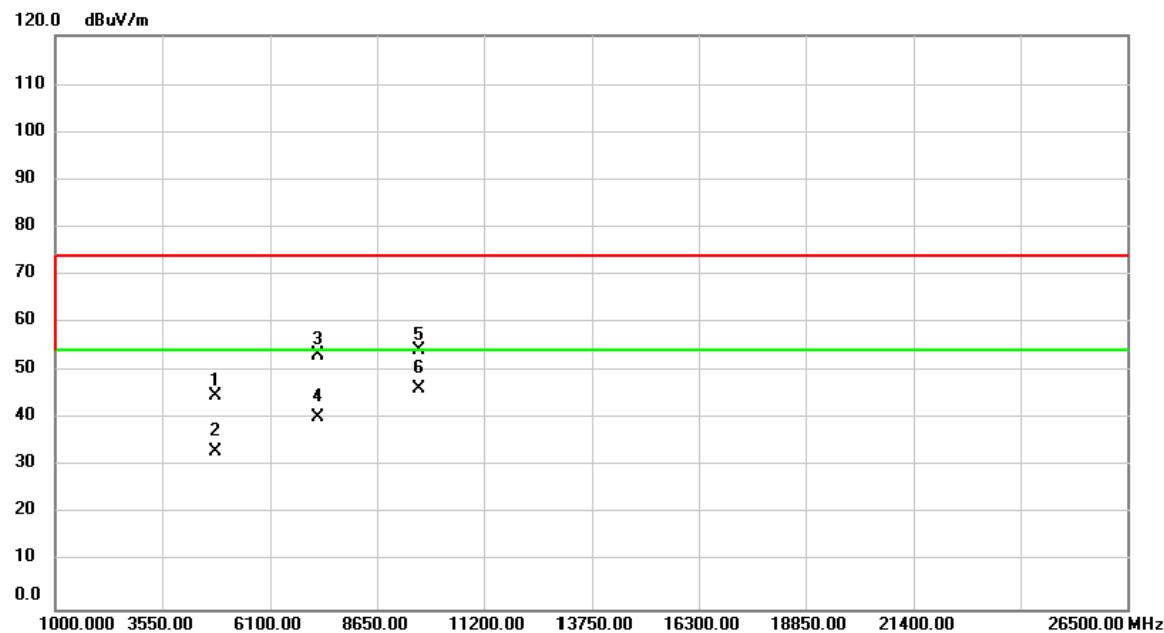
No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Margin	Detector	Comment
			Level	Factor	ment				
1		4924.000	66.33	-11.32	55.01	74.00	-18.99	peak	
2		4924.000	54.83	-11.32	43.51	54.00	-10.49	AVG	
3		7386.000	56.33	-4.80	51.53	74.00	-22.47	peak	
4		7386.000	43.61	-4.80	38.81	54.00	-15.19	AVG	
5		9848.000	52.37	1.39	53.76	74.00	-20.24	peak	
6	*	9848.000	46.59	1.39	47.98	54.00	-6.02	AVG	

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

**Vertical**

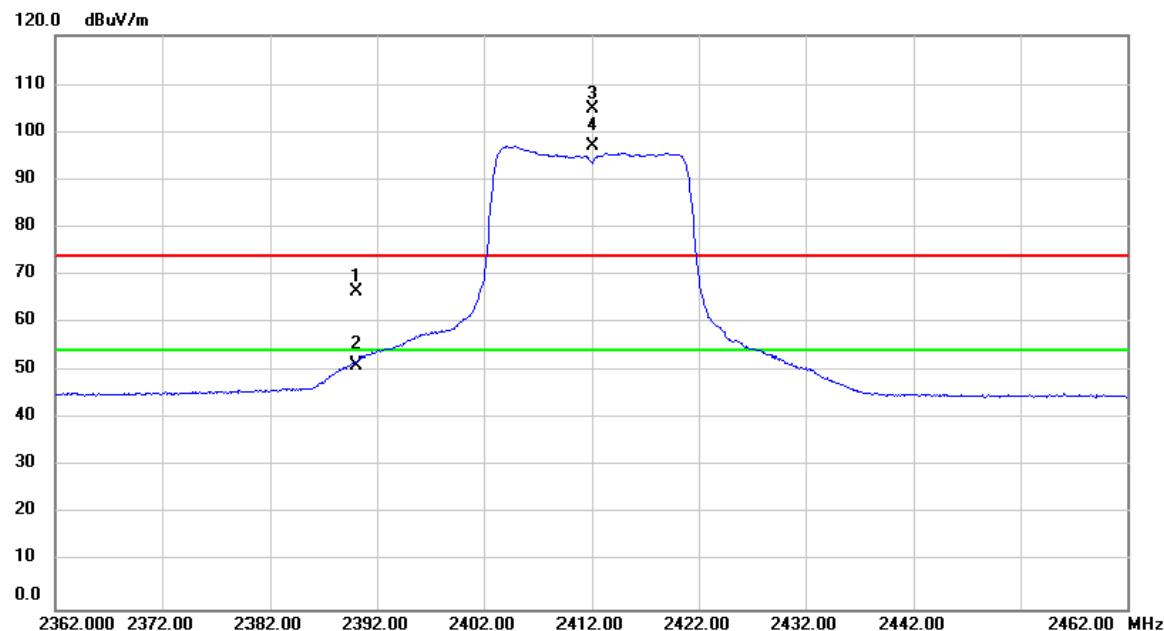
No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Margin	Detector	Comment
			Level	Factor	ment				
1		2389.900	36.39	30.96	67.35	74.00	-6.65	peak	
2		2389.900	20.44	30.96	51.40	54.00	-2.60	AVG	
3	X	2412.000	73.48	31.04	104.52	74.00	30.52	peak	No Limit
4	*	2412.000	66.04	31.04	97.08	54.00	43.08	AVG	No Limit

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

**Vertical**

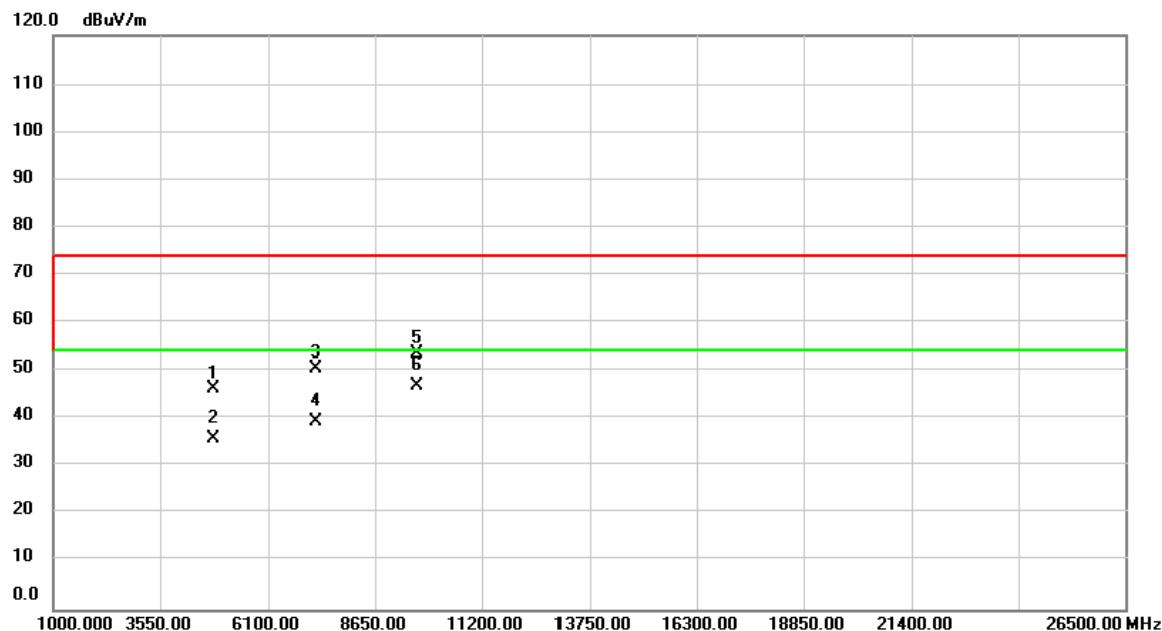
No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Margin	Detector	Comment
			Level	Factor	ment				
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		4824.000	56.38	-11.47	44.91	74.00	-29.09	peak	
2		4824.000	44.67	-11.47	33.20	54.00	-20.80	AVG	
3		7236.000	58.49	-5.36	53.13	74.00	-20.87	peak	
4		7236.000	45.56	-5.36	40.20	54.00	-13.80	AVG	
5		9648.000	53.47	0.81	54.28	74.00	-19.72	peak	
6	*	9648.000	45.68	0.81	46.49	54.00	-7.51	AVG	

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

**Horizontal**

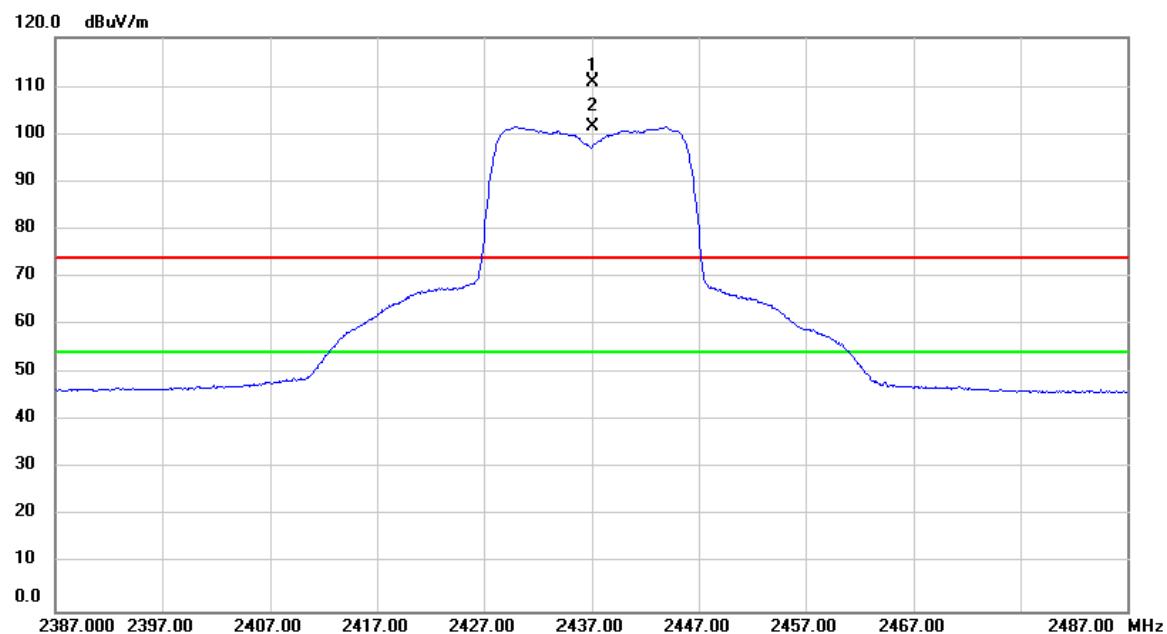
No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Margin	Comment
			Level	Factor	ment			
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1		2390.000	35.44	30.96	66.40	74.00	-7.60	peak
2		2390.000	20.27	30.96	51.23	54.00	-2.77	AVG
3	X	2412.000	73.93	31.04	104.97	74.00	30.97	peak No Limit
4	*	2412.000	65.93	31.04	96.97	54.00	42.97	AVG No Limit

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

**Horizontal**

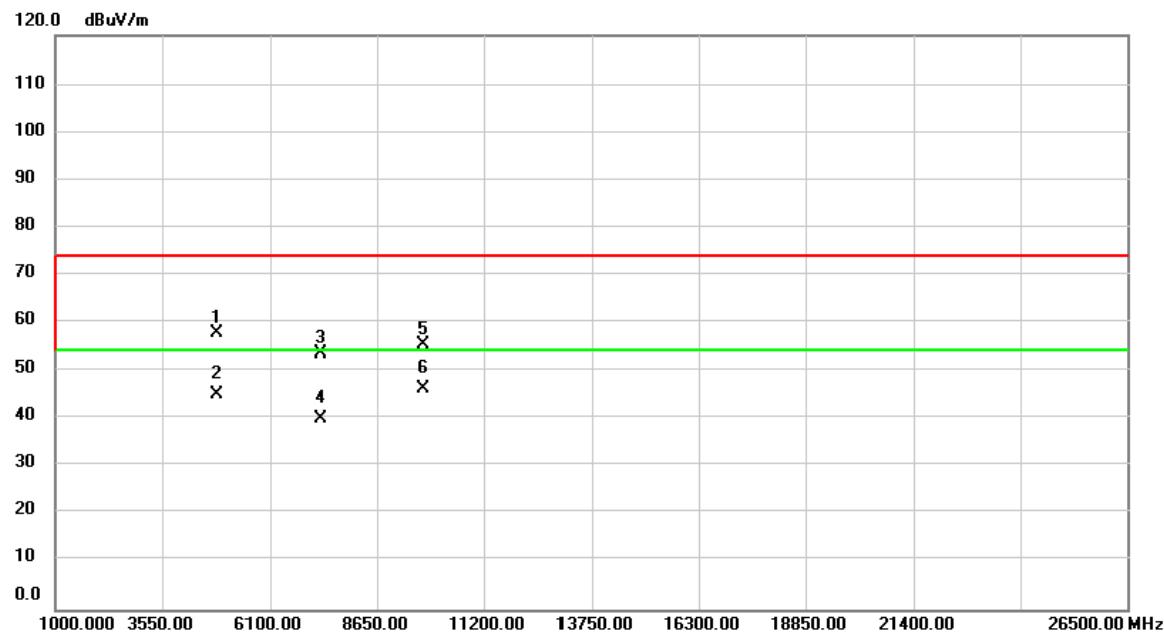
No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Margin	Detector	Comment
			Level	Factor	ment				
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		4824.000	57.97	-11.47	46.50	74.00	-27.50	peak	
2		4824.000	47.34	-11.47	35.87	54.00	-18.13	AVG	
3		7236.000	55.87	-5.36	50.51	74.00	-23.49	peak	
4		7236.000	44.67	-5.36	39.31	54.00	-14.69	AVG	
5		9648.000	52.67	0.81	53.48	74.00	-20.52	peak	
6	*	9648.000	46.23	0.81	47.04	54.00	-6.96	AVG	

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

**Vertical**

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Margin	Detector	Comment
			Level	Factor	ment				
1	X	2437.000	79.72	31.13	110.85	74.00	36.85	peak	No Limit
2	*	2437.000	70.51	31.13	101.64	54.00	47.64	AVG	No Limit

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

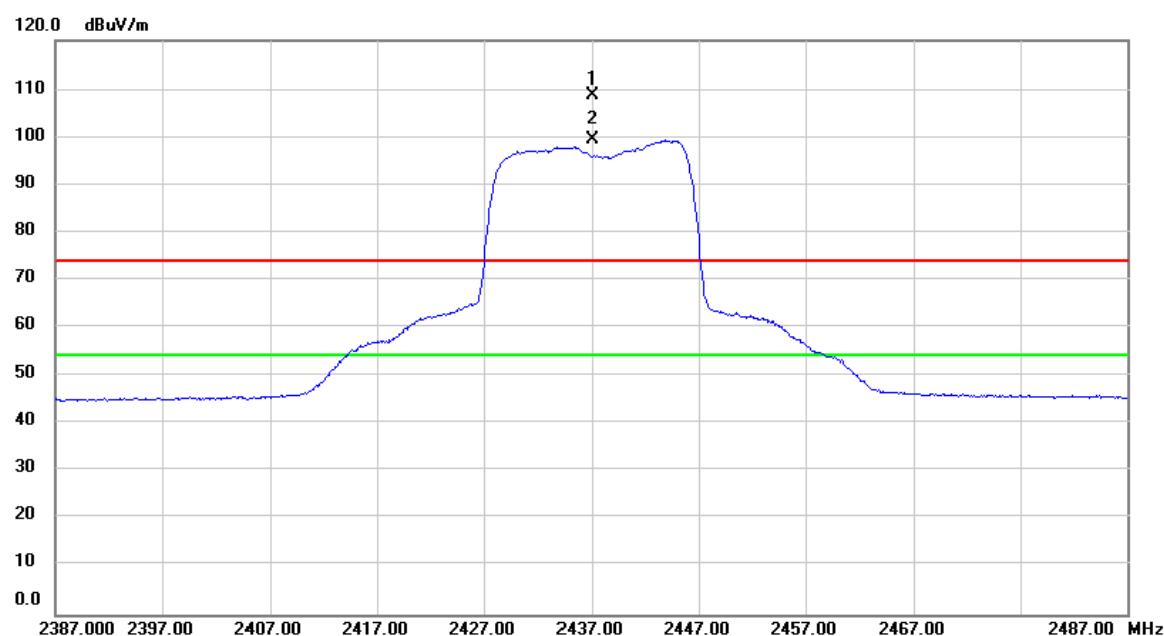
**Vertical**

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Margin	Detector	Comment
			Level	Factor	ment				
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		4874.000	69.24	-11.39	57.85	74.00	-16.15	peak	
2		4874.000	56.50	-11.39	45.11	54.00	-8.89	AVG	
3		7311.000	58.75	-5.07	53.68	74.00	-20.32	peak	
4		7311.000	45.04	-5.07	39.97	54.00	-14.03	AVG	
5		9748.000	54.33	1.10	55.43	74.00	-18.57	peak	
6	*	9748.000	45.14	1.10	46.24	54.00	-7.76	AVG	

Orthogonal Axis : X

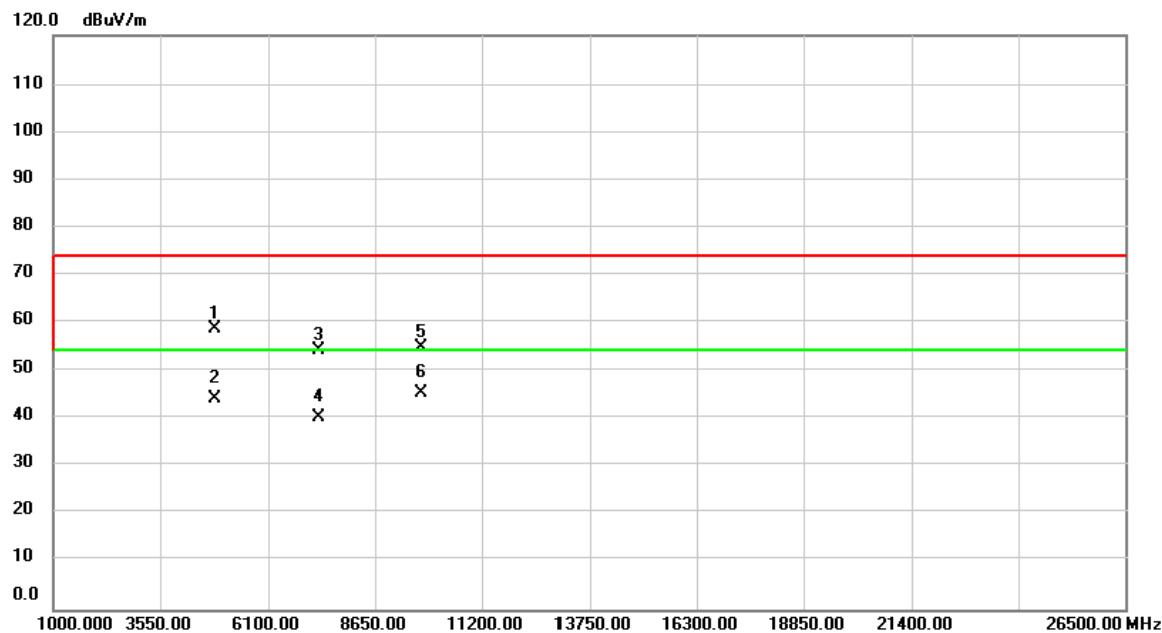
Test Mode : TX N-20M MODE 2437MHz

## Horizontal



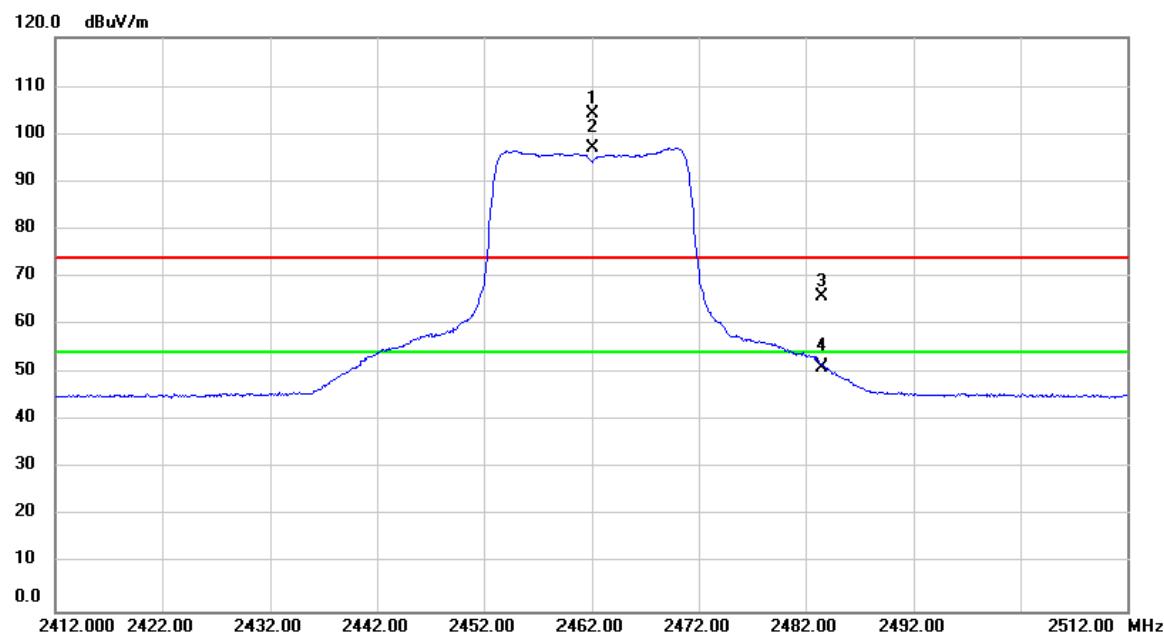
No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Margin	Detector	Comment
			Level	Factor	ment				
		MHz	dBuV	dB	dBuV/m	dB			
1	X	2437.000	77.73	31.13	108.86	74.00	34.86	peak	No Limit
2	*	2437.000	68.25	31.13	99.38	54.00	45.38	AVG	No Limit

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

**Horizontal**

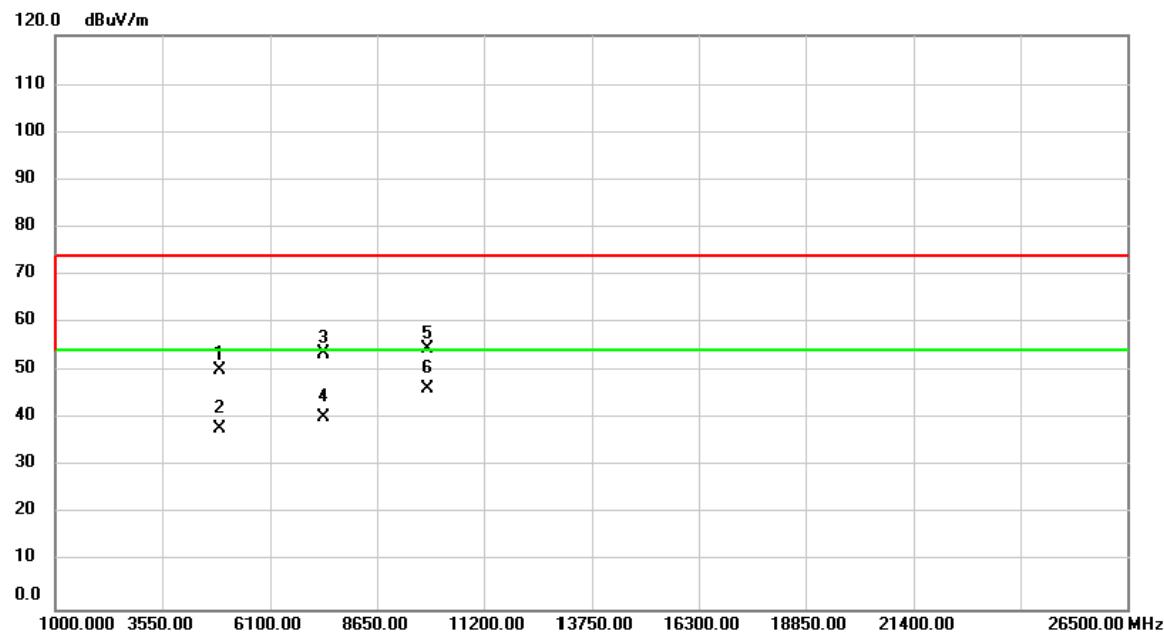
No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Margin	Detector	Comment
			Level	Factor	ment				
1		4874.000	69.94	-11.39	58.55	74.00	-15.45	peak	
2		4874.000	55.69	-11.39	44.30	54.00	-9.70	AVG	
3		7311.000	59.13	-5.07	54.06	74.00	-19.94	peak	
4		7311.000	45.43	-5.07	40.36	54.00	-13.64	AVG	
5		9748.000	53.69	1.10	54.79	74.00	-19.21	peak	
6	*	9748.000	44.48	1.10	45.58	54.00	-8.42	AVG	

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

**Vertical**

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Margin	Comment
			Level	Factor	ment			
1	X	2462.000	73.07	31.23	104.30	74.00	30.30	peak No Limit
2	*	2462.000	65.74	31.23	96.97	54.00	42.97	AVG No Limit
3		2483.500	34.57	31.31	65.88	74.00	-8.12	peak
4		2483.500	19.96	31.31	51.27	54.00	-2.73	AVG

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

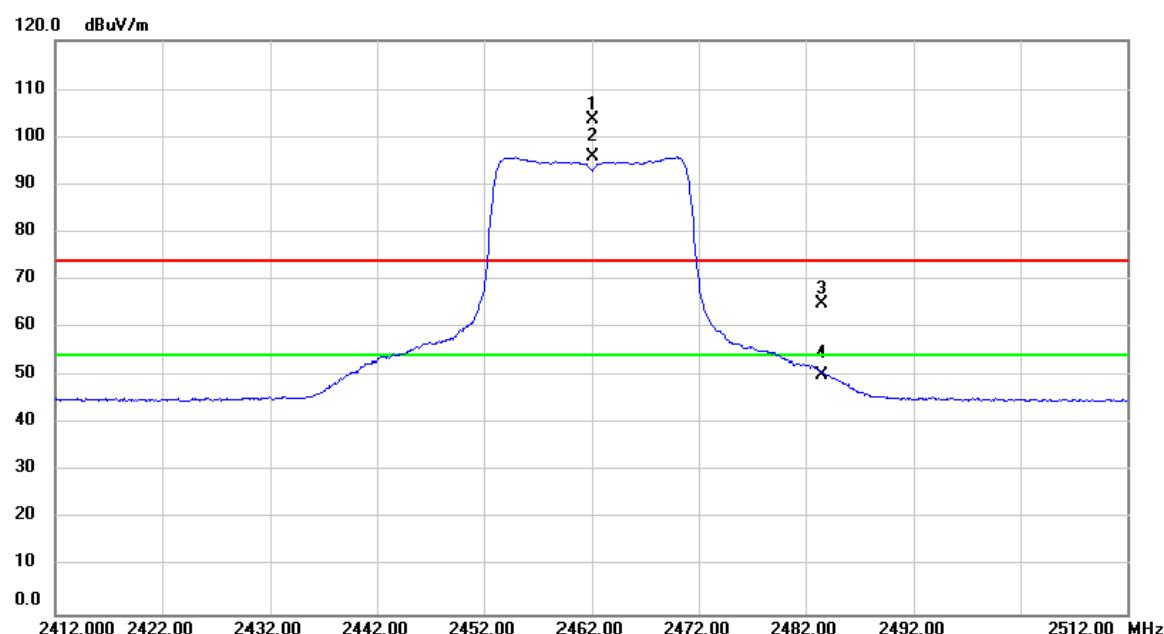
**Vertical**

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Margin	Detector	Comment
			Level	Factor	ment				
1		4924.000	61.72	-11.32	50.40	74.00	-23.60	peak	
2		4924.000	49.26	-11.32	37.94	54.00	-16.06	AVG	
3		7386.000	58.41	-4.80	53.61	74.00	-20.39	peak	
4		7386.000	45.23	-4.80	40.43	54.00	-13.57	AVG	
5		9848.000	53.16	1.39	54.55	74.00	-19.45	peak	
6	*	9848.000	45.11	1.39	46.50	54.00	-7.50	AVG	

Orthogonal Axis : X

Test Mode : TX N-20M MODE 2462MHz

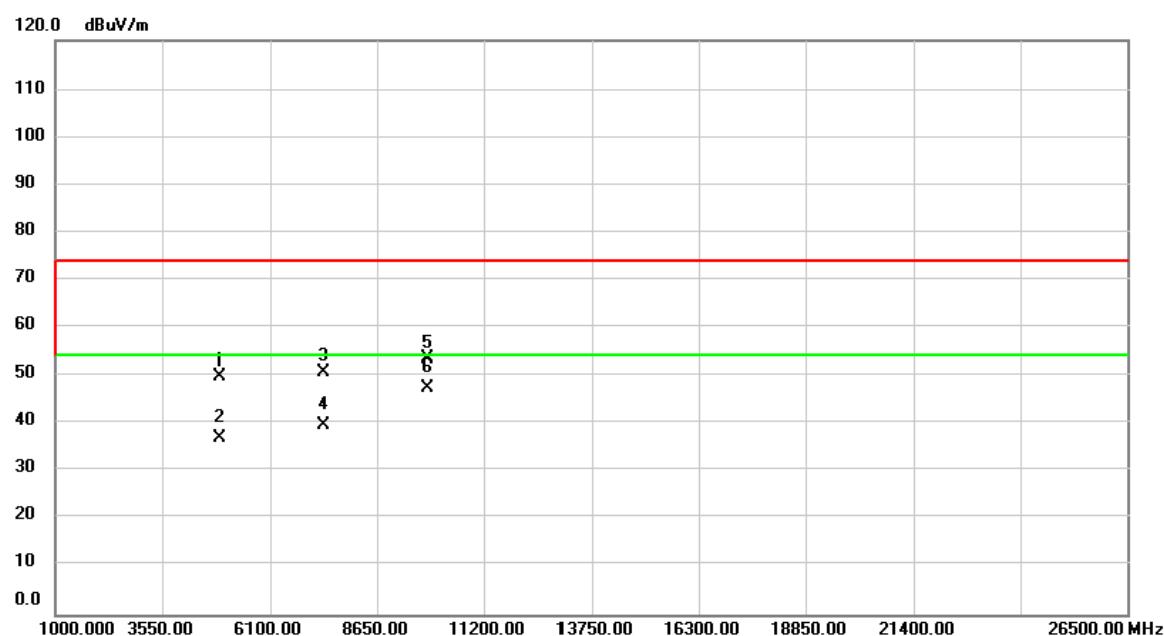
## Horizontal



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Margin	Comment
			Level	Factor	ment			
		MHz	dBuV	dB	dBuV/m	dB	Detector	
1	X	2462.000	72.33	31.23	103.56	74.00	29.56	peak No Limit
2	*	2462.000	64.55	31.23	95.78	54.00	41.78	AVG No Limit
3		2483.500	33.62	31.31	64.93	74.00	-9.07	peak
4		2483.500	18.96	31.31	50.27	54.00	-3.73	AVG

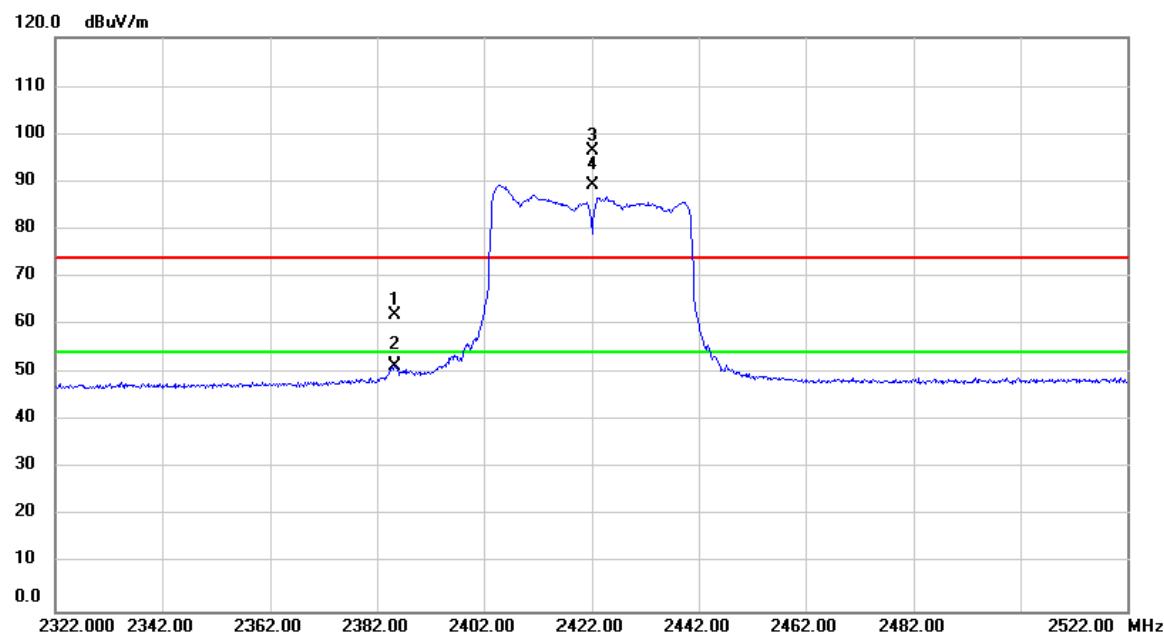
Orthogonal Axis : X

Test Mode : TX N-20M MODE 2462MHz

**Horizontal**

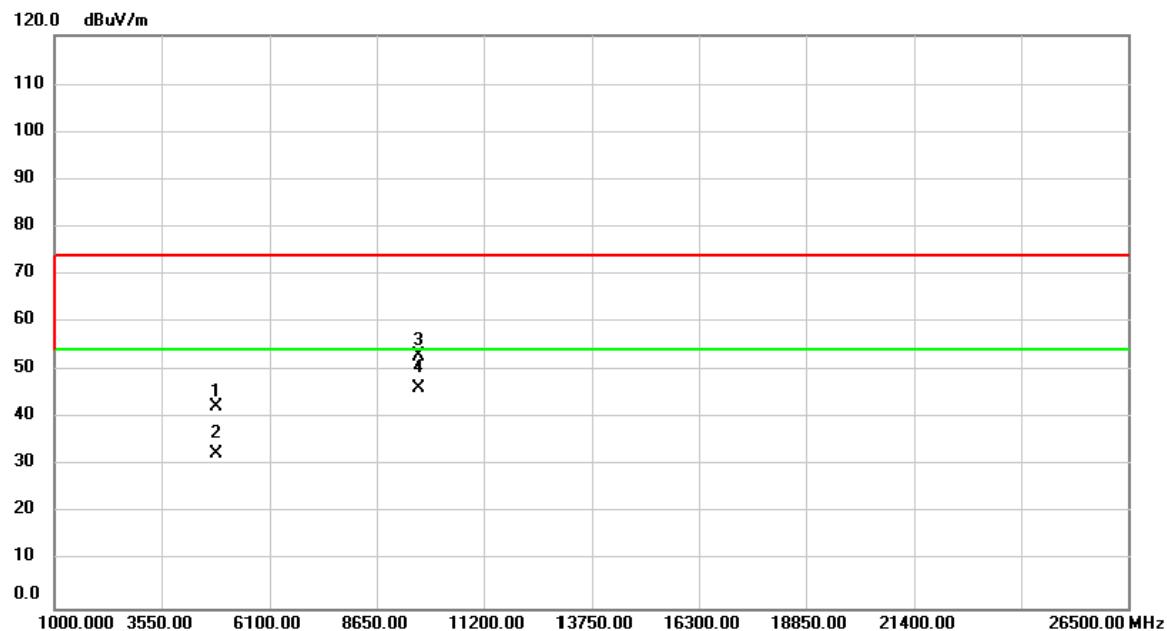
No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Margin	Detector	Comment
			Level	Factor	ment				
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		4924.000	61.31	-11.32	49.99	74.00	-24.01	peak	
2		4924.000	48.33	-11.32	37.01	54.00	-16.99	AVG	
3		7386.000	55.63	-4.80	50.83	74.00	-23.17	peak	
4		7386.000	44.61	-4.80	39.81	54.00	-14.19	AVG	
5		9848.000	52.16	1.39	53.55	74.00	-20.45	peak	
6	*	9848.000	46.21	1.39	47.60	54.00	-6.40	AVG	

Orthogonal Axis :	X
Test Mode :	TX N-40M MODE 2422MHz

**Vertical**

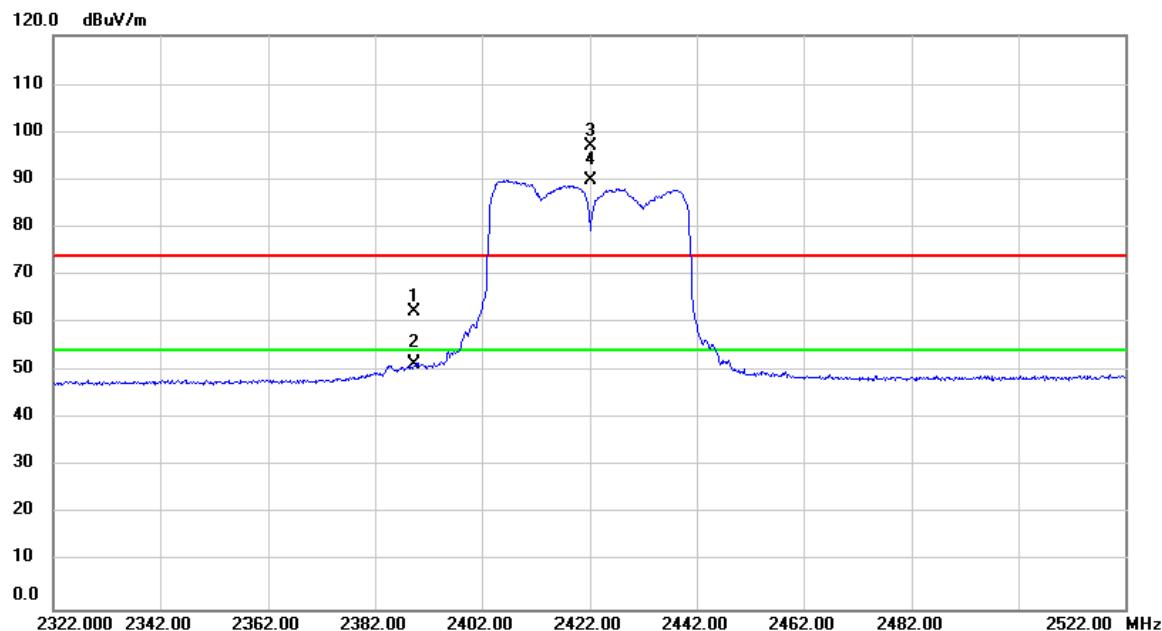
No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Margin	Comment
			Level	Factor	ment			
1		2385.376	31.12	30.95	62.07	74.00	-11.93	peak
2		2385.376	20.45	30.95	51.40	54.00	-2.60	AVG
3	X	2422.000	65.49	31.08	96.57	74.00	22.57	peak No Limit
4	*	2422.000	58.29	31.08	89.37	54.00	35.37	AVG No Limit

Orthogonal Axis :	X
Test Mode :	TX N-40M MODE 2422MHz

**Vertical**

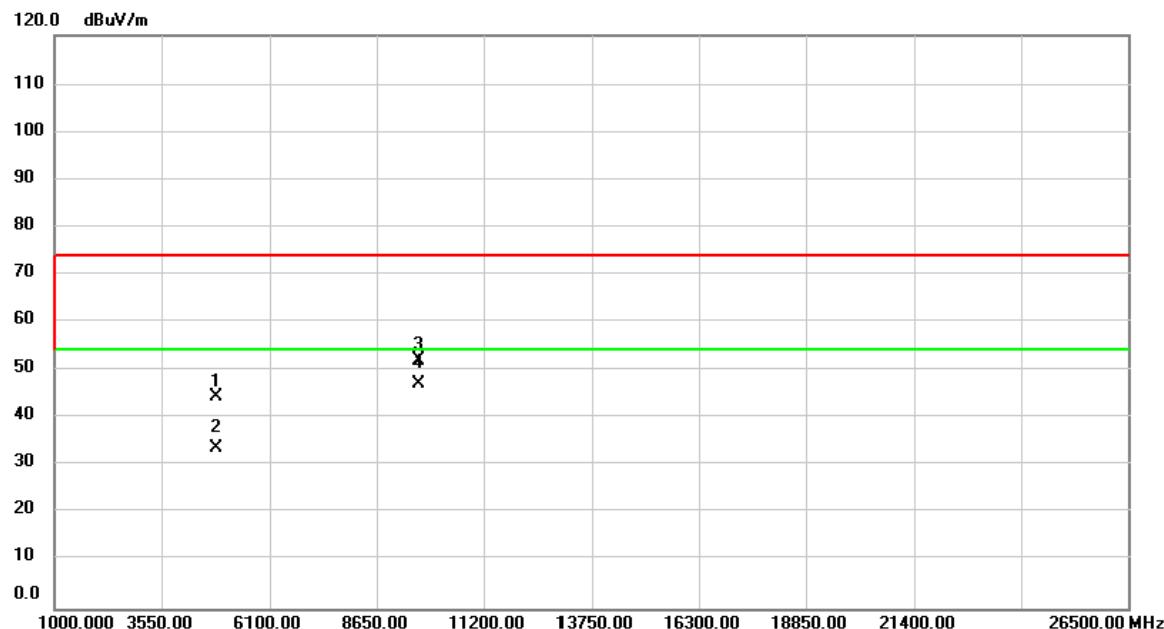
No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Margin	Comment
			Level	Factor	ment			
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1		4844.000	53.75	-11.44	42.31	74.00	-31.69	peak
2		4844.000	44.10	-11.44	32.66	54.00	-21.34	AVG
3		9688.000	52.21	0.81	53.02	74.00	-20.98	peak
4	*	9688.000	45.61	0.81	46.42	54.00	-7.58	AVG

Orthogonal Axis :	X
Test Mode :	TX N-40M MODE 2422MHz

**Horizontal**

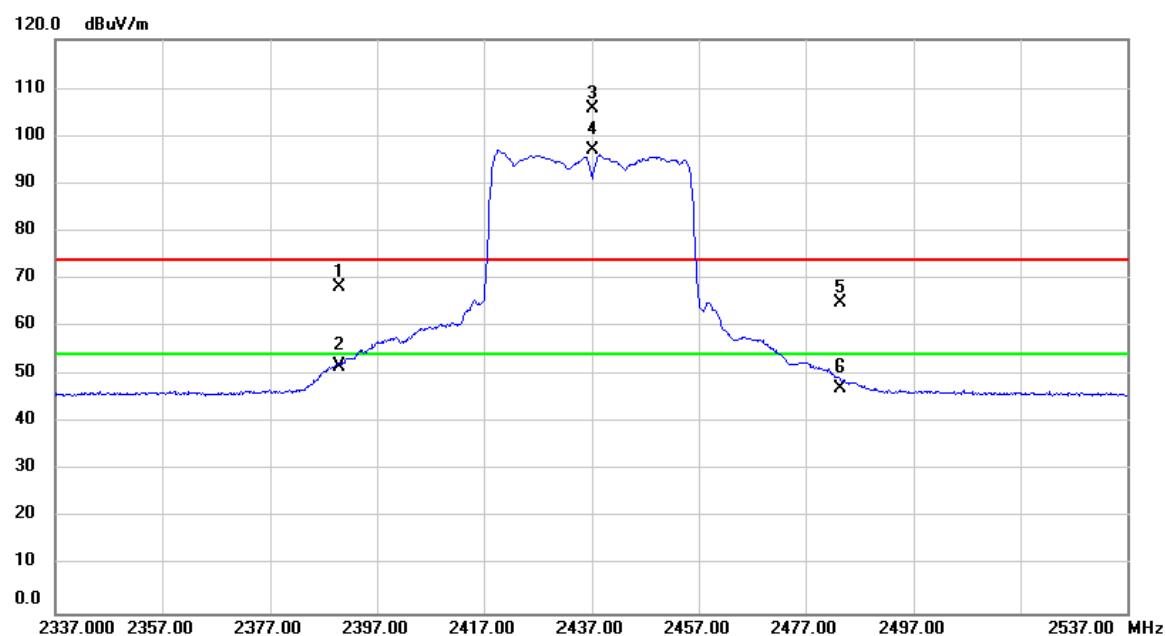
No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Margin	Comment
			Level	Factor	ment			
		MHz	dBuV	dB	dBuV/m	dB	Detector	
1		2389.456	31.25	30.96	62.21	74.00	-11.79	peak
2		2389.456	20.45	30.96	51.41	54.00	-2.59	AVG
3	X	2422.000	66.06	31.08	97.14	74.00	23.14	peak No Limit
4	*	2422.000	58.82	31.08	89.90	54.00	35.90	AVG No Limit

Orthogonal Axis :	X
Test Mode :	TX N-40M MODE 2422MHz

**Horizontal**

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4844.000	55.85	-11.44	44.41	74.00	-29.59	peak	
2		4844.000	45.28	-11.44	33.84	54.00	-20.16	AVG	
3		9688.000	51.23	0.81	52.04	74.00	-21.96	peak	
4	*	9688.000	46.32	0.81	47.13	54.00	-6.87	AVG	

Orthogonal Axis :	X
Test Mode :	TX N-40M MODE 2437MHz

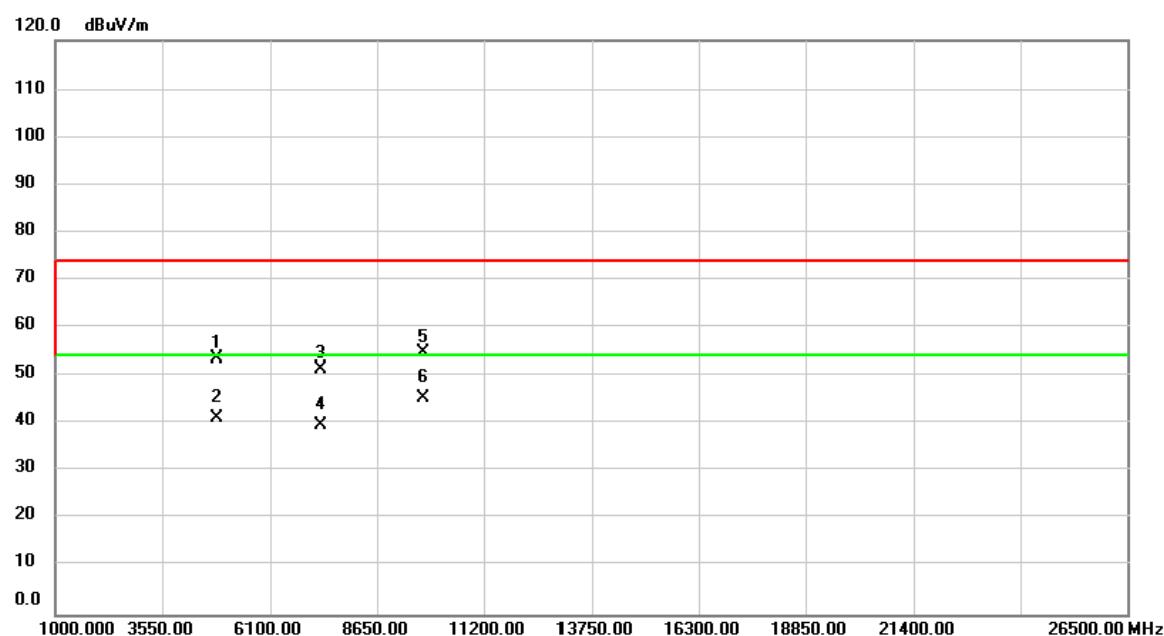
**Vertical**

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Margin	Comment
			Level	Factor	ment			
1		2389.841	37.17	30.96	68.13	74.00	-5.87	peak
2		2389.841	20.84	30.96	51.80	54.00	-2.20	AVG
3	X	2437.000	74.69	31.13	105.82	74.00	31.82	peak No Limit
4	*	2437.000	65.88	31.13	97.01	54.00	43.01	AVG No Limit
5		2483.566	33.60	31.31	64.91	74.00	-9.09	peak
6		2483.566	16.01	31.31	47.32	54.00	-6.68	AVG

Orthogonal Axis : X

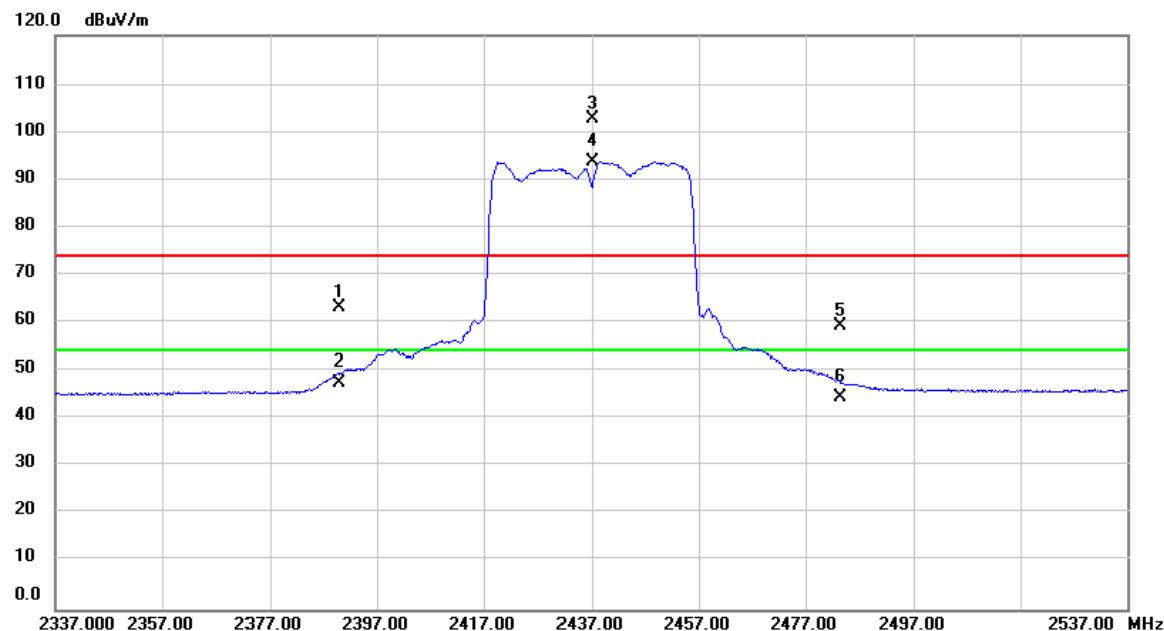
Test Mode : TX N-40M MODE 2437MHz

## Vertical



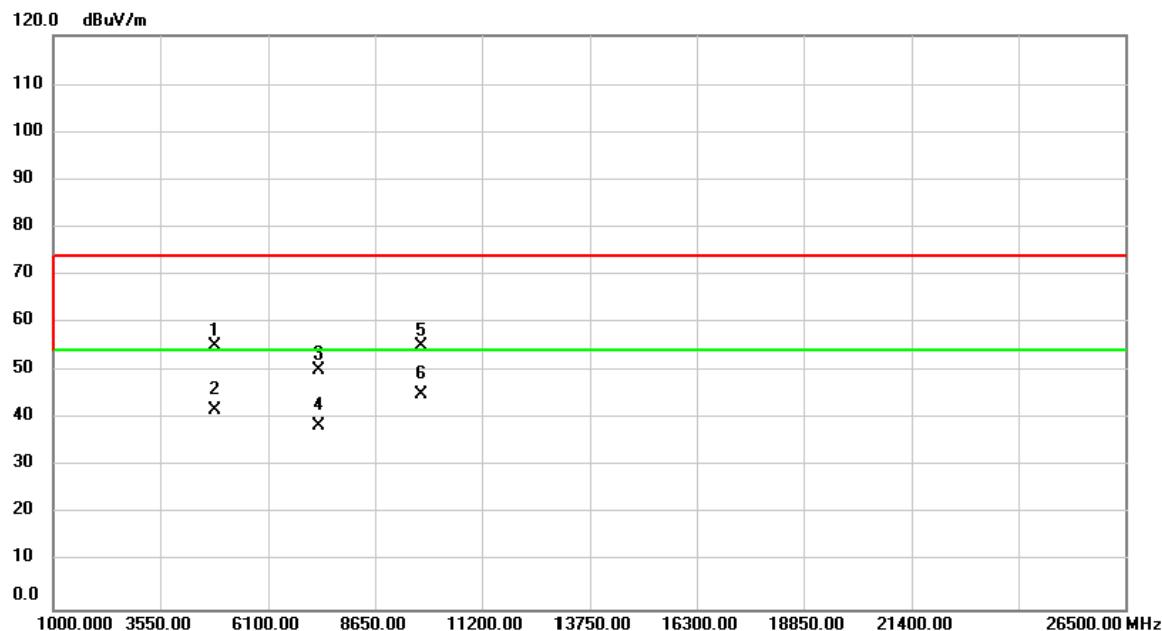
No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Margin	Detector	Comment
			Level	Factor	ment				
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		4874.000	64.82	-11.39	53.43	74.00	-20.57	peak	
2		4874.000	52.72	-11.39	41.33	54.00	-12.67	AVG	
3		7311.000	56.44	-5.07	51.37	74.00	-22.63	peak	
4		7311.000	44.93	-5.07	39.86	54.00	-14.14	AVG	
5		9748.000	53.77	1.10	54.87	74.00	-19.13	peak	
6	*	9748.000	44.29	1.10	45.39	54.00	-8.61	AVG	

Orthogonal Axis :	X
Test Mode :	TX N-40M MODE 2437MHz

**Horizontal**

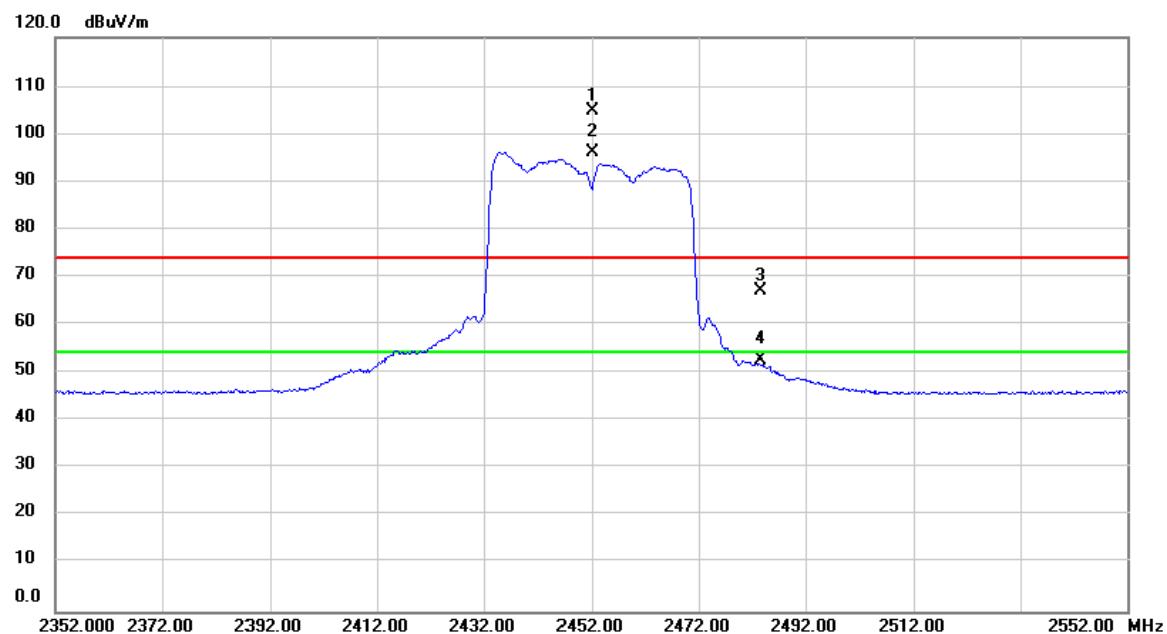
No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Margin	Comment	
			Level	Factor	ment				
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2389.947	32.11	30.96	63.07	74.00	-10.93	peak	
2		2389.947	16.48	30.96	47.44	54.00	-6.56	AVG	
3	X	2437.000	71.49	31.13	102.62	74.00	28.62	peak	No Limit
4	*	2437.000	62.64	31.13	93.77	54.00	39.77	AVG	No Limit
5		2483.589	28.07	31.31	59.38	74.00	-14.62	peak	
6		2483.589	13.21	31.31	44.52	54.00	-9.48	AVG	

Orthogonal Axis :	X
Test Mode :	TX N-40M MODE 2437MHz

**Horizontal**

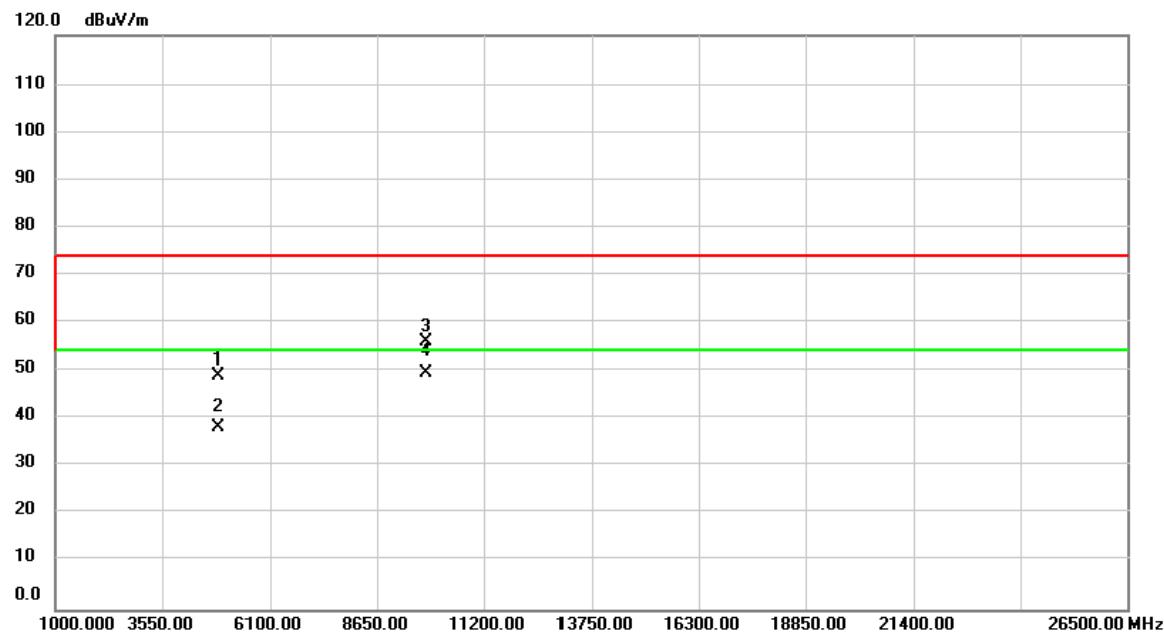
No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Margin	Detector	Comment
			Level	Factor	ment				
1		4874.000	66.49	-11.39	55.10	74.00	-18.90	peak	
2		4874.000	53.35	-11.39	41.96	54.00	-12.04	AVG	
3		7311.000	55.42	-5.07	50.35	74.00	-23.65	peak	
4		7311.000	43.57	-5.07	38.50	54.00	-15.50	AVG	
5		9748.000	53.81	1.10	54.91	74.00	-19.09	peak	
6	*	9748.000	44.19	1.10	45.29	54.00	-8.71	AVG	

Orthogonal Axis :	X
Test Mode :	TX N-40M MODE 2452MHz

**Vertical**

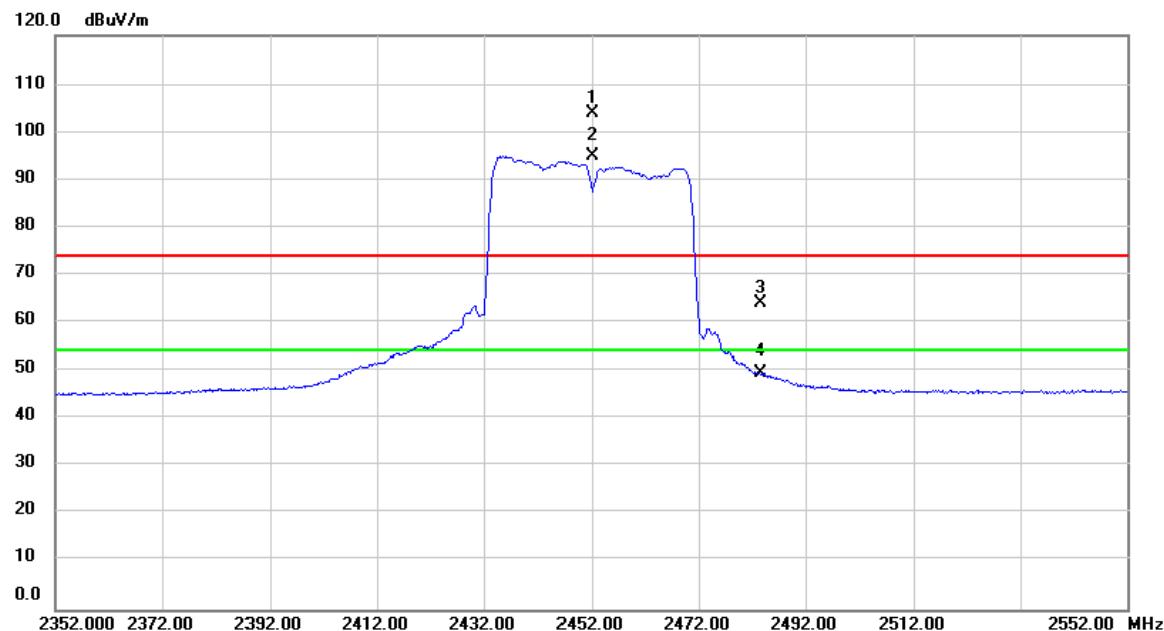
No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Margin	Detector	Comment
			Level	Factor	ment				
1	X	2452.000	73.77	31.20	104.97	74.00	30.97	peak	No Limit
2	*	2452.000	65.04	31.20	96.24	54.00	42.24	AVG	No Limit
3		2483.500	35.65	31.31	66.96	74.00	-7.04	peak	
4		2483.500	21.47	31.31	52.78	54.00	-1.22	AVG	

Orthogonal Axis :	X
Test Mode :	TX N-40M MODE 2452MHz

**Vertical**

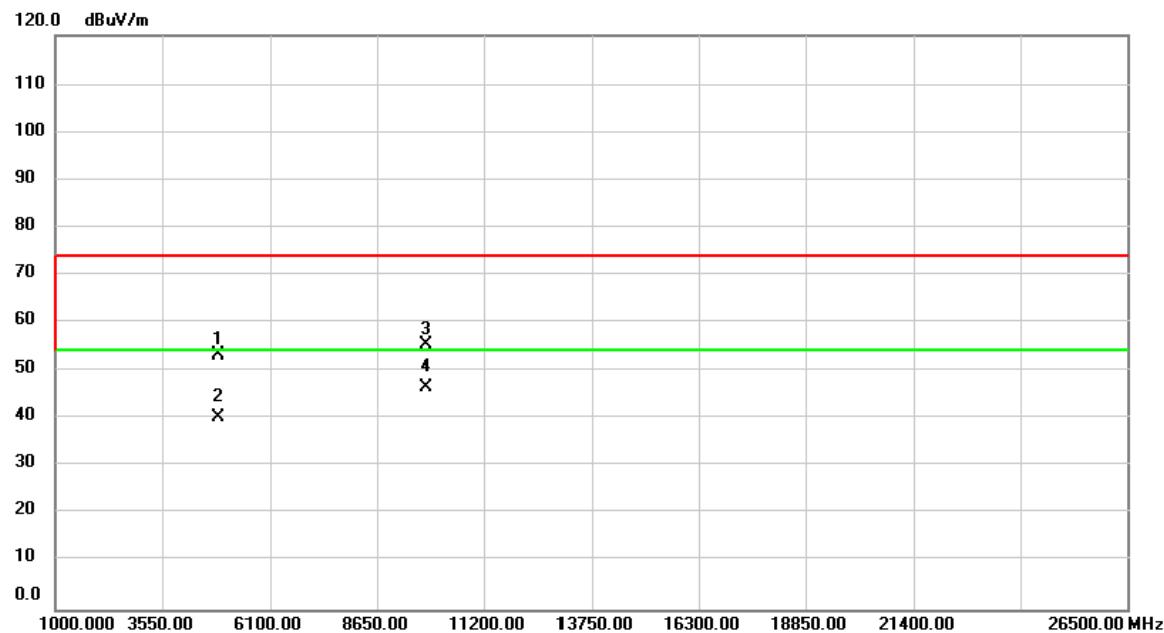
No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Margin	Detector	Comment
			Level	Factor	ment				
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		4904.000	60.48	-11.34	49.14	74.00	-24.86	peak	
2		4904.000	49.72	-11.34	38.38	54.00	-15.62	AVG	
3		9808.000	54.74	1.27	56.01	74.00	-17.99	peak	
4	*	9808.000	48.49	1.27	49.76	54.00	-4.24	AVG	

Orthogonal Axis :	X
Test Mode :	TX N-40M MODE 2452MHz

**Horizontal**

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Margin	Comment
			Level	Factor	ment			
		MHz	dBuV	dB	dBuV/m	dB	Detector	
1	X	2452.000	72.70	31.20	103.90	74.00	29.90	peak No Limit
2	*	2452.000	63.71	31.20	94.91	54.00	40.91	AVG No Limit
3		2483.715	32.87	31.31	64.18	74.00	-9.82	peak
4		2483.715	18.44	31.31	49.75	54.00	-4.25	AVG

Orthogonal Axis :	X
Test Mode :	TX N-40M MODE 2452MHz

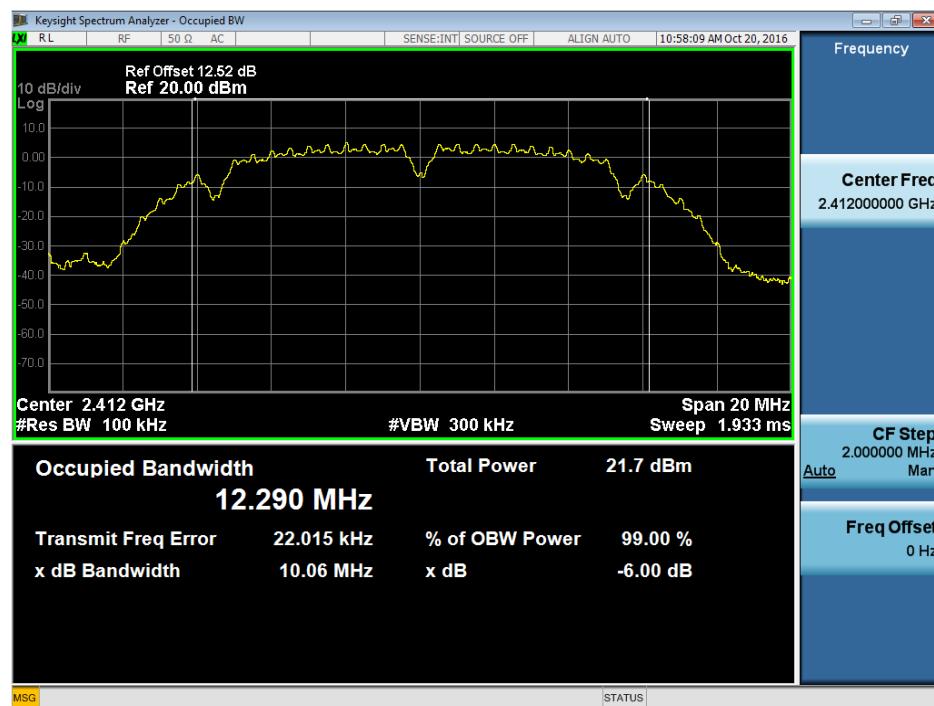
**Horizontal**

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Margin	Detector	Comment
			Level	Factor	ment				
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		4904.000	64.60	-11.34	53.26	74.00	-20.74	peak	
2		4904.000	51.83	-11.34	40.49	54.00	-13.51	AVG	
3		9808.000	54.22	1.27	55.49	74.00	-18.51	peak	
4	*	9808.000	45.39	1.27	46.66	54.00	-7.34	AVG	

## ATTACHMENT E - BANDWIDTH

**Test Mode : TX B Mode\_CH01/06/11\_ANT 1**

Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2412	10.06	12.29	500	Complies
2437	10.06	12.28	500	Complies
2462	10.09	12.28	500	Complies

**TX CH01**

## TX CH06

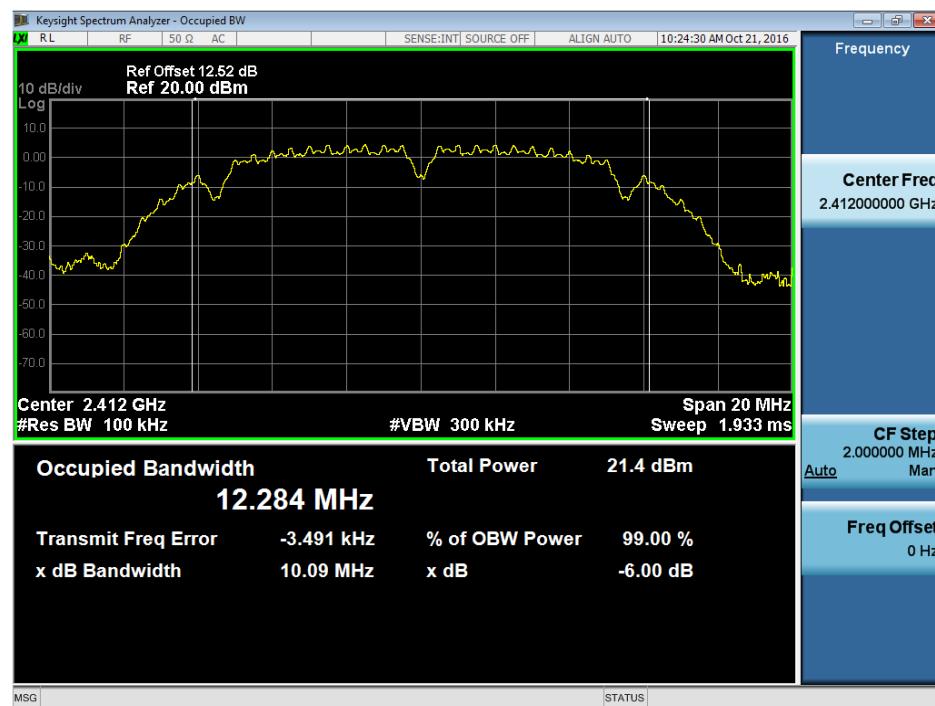


## TX CH11



**Test Mode : TX B Mode\_CH01/06/11\_ANT 2**

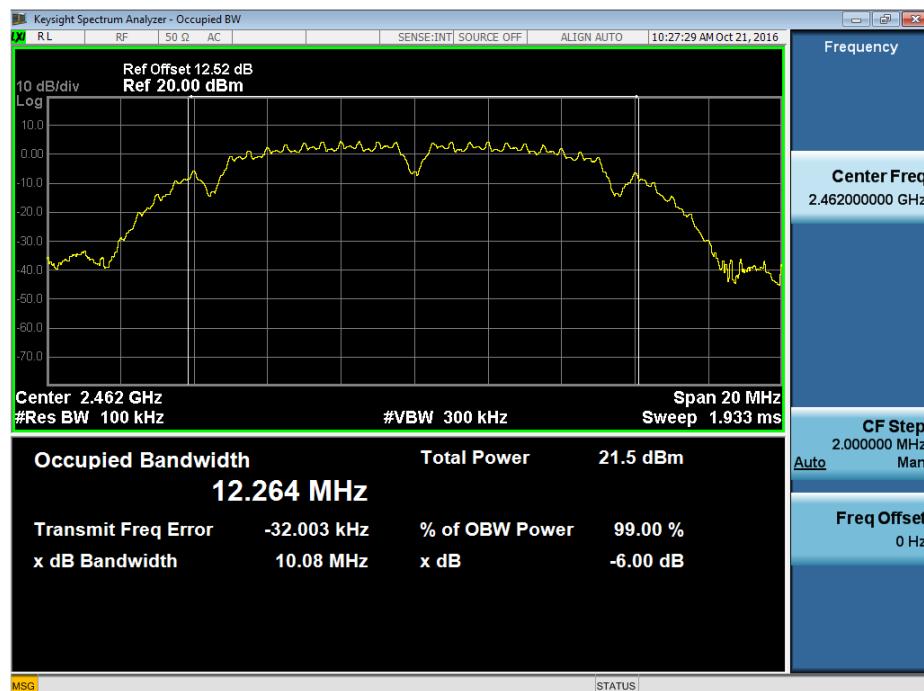
Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2412	10.09	12.28	500	Complies
2437	10.09	12.29	500	Complies
2462	10.08	12.26	500	Complies

**TX CH01**

## TX CH06



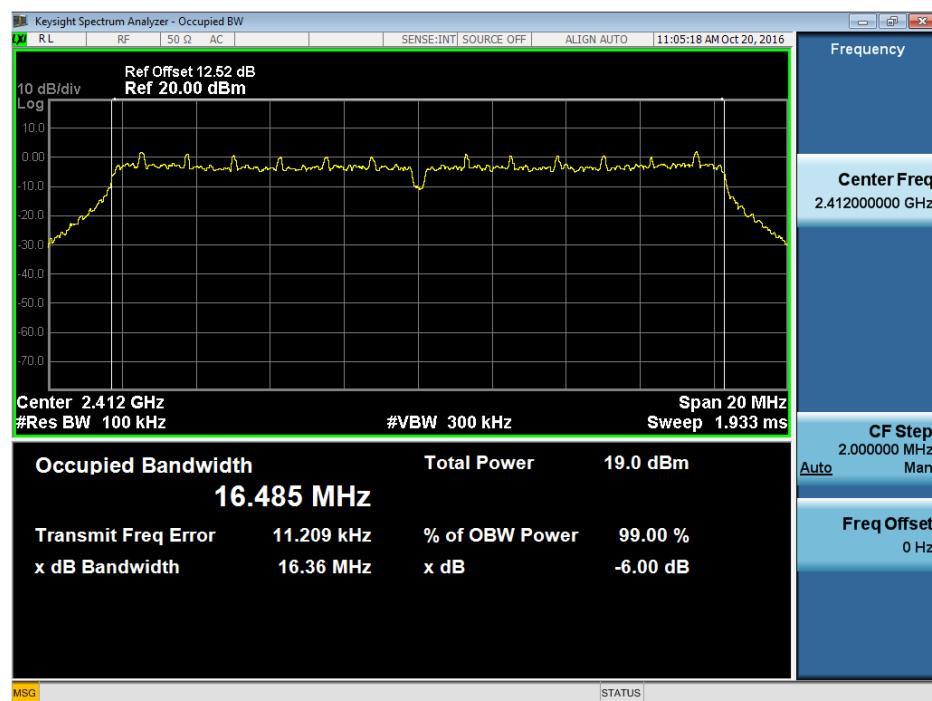
## TX CH11



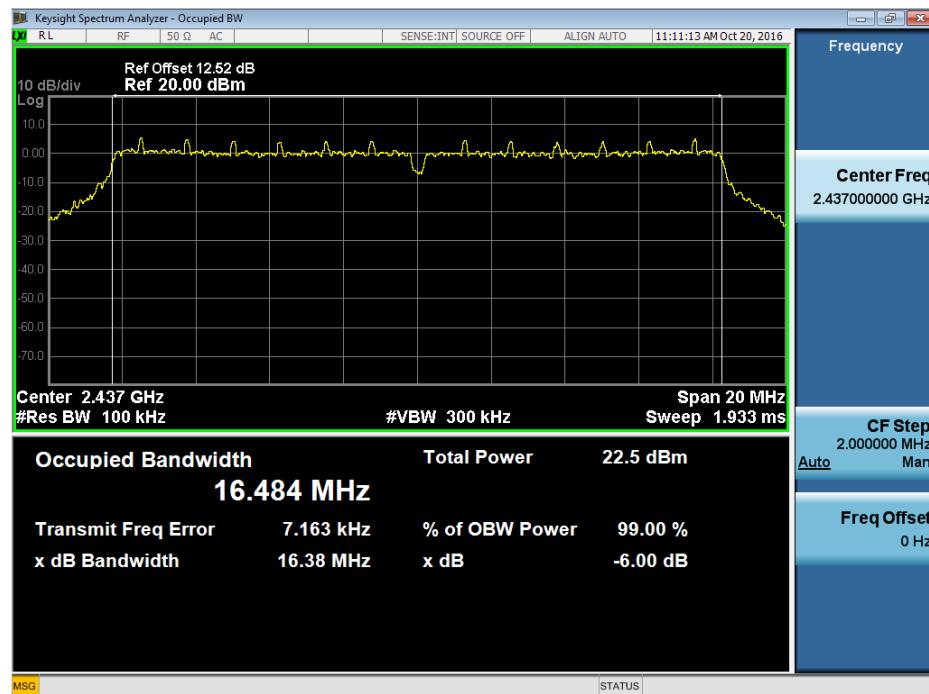
## Test Mode: TX G Mode\_CH01/06/11\_ANT 1

Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2412	16.36	16.49	500	Complies
2437	16.38	16.48	500	Complies
2462	16.36	16.49	500	Complies

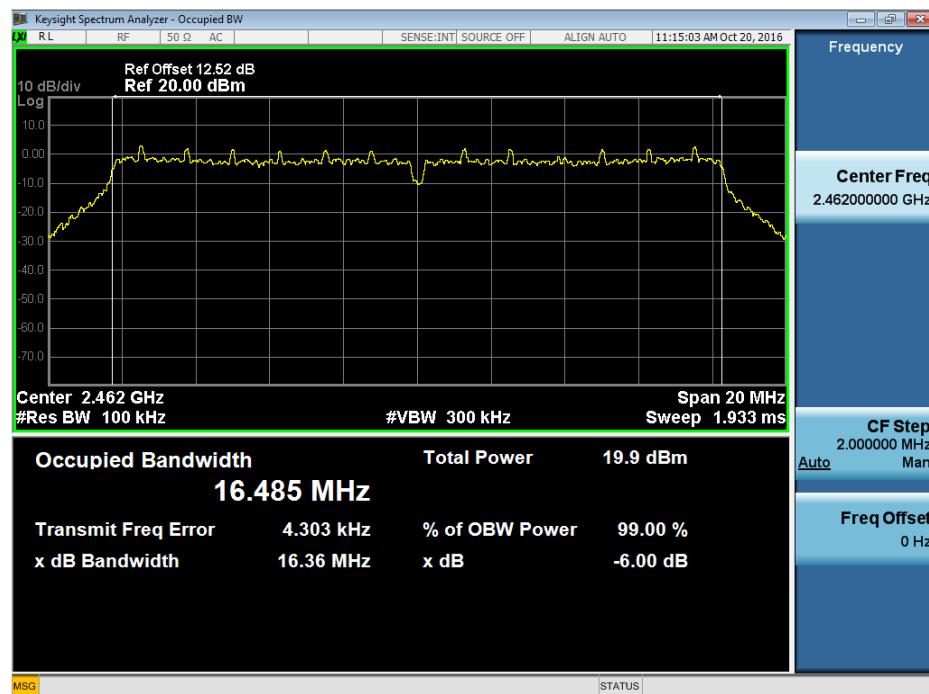
## TX CH01



## TX CH06



## TX CH11



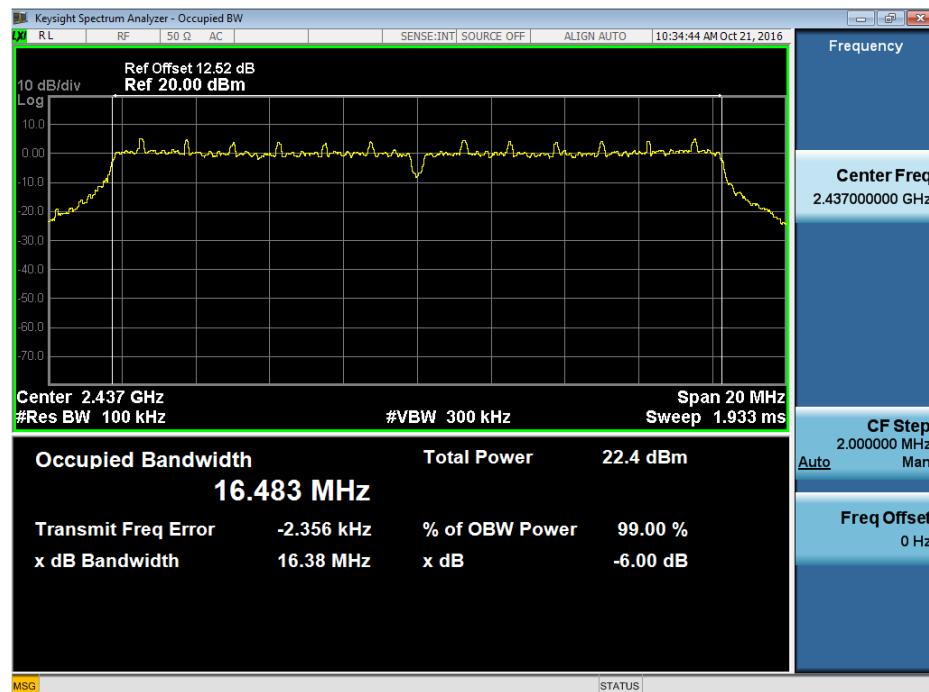
## Test Mode: TX G Mode\_CH01/06/11\_ANT 2

Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2412	16.38	16.48	500	Complies
2437	16.38	16.48	500	Complies
2462	16.35	16.48	500	Complies

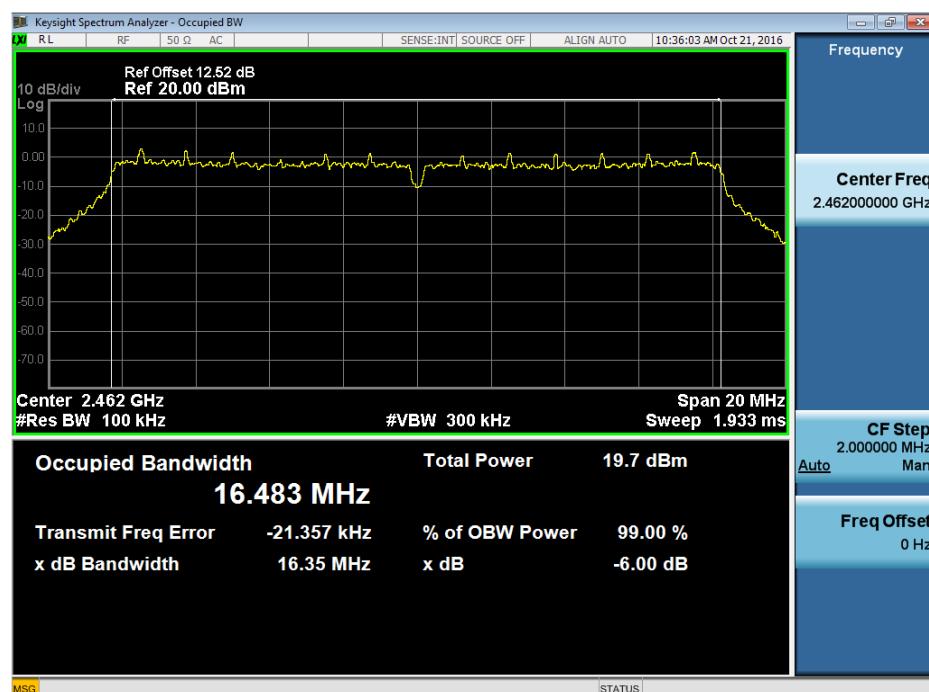
## TX CH01



## TX CH06



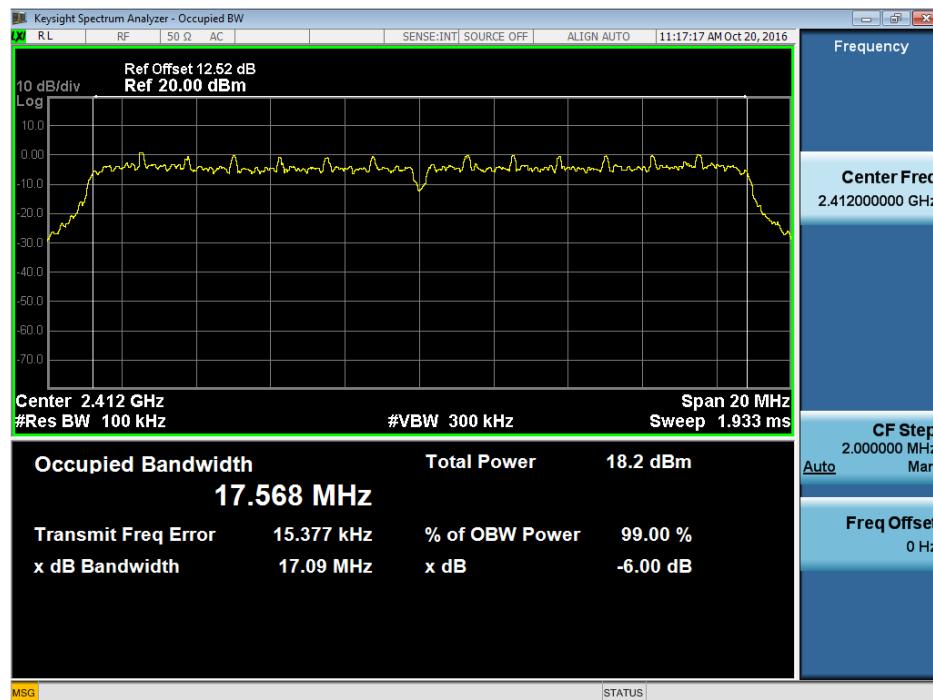
## TX CH11



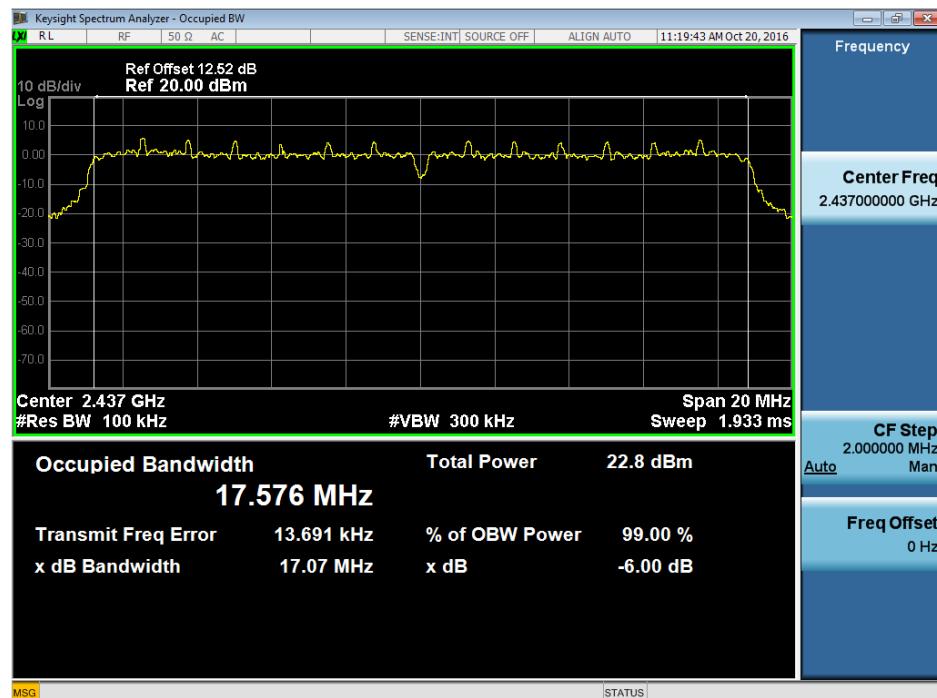
## Test Mode : TX N-20MHz Mode\_CH01/06/11\_ANT 1

Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2412	17.09	17.57	500	Complies
2437	17.07	17.58	500	Complies
2462	17.32	17.57	500	Complies

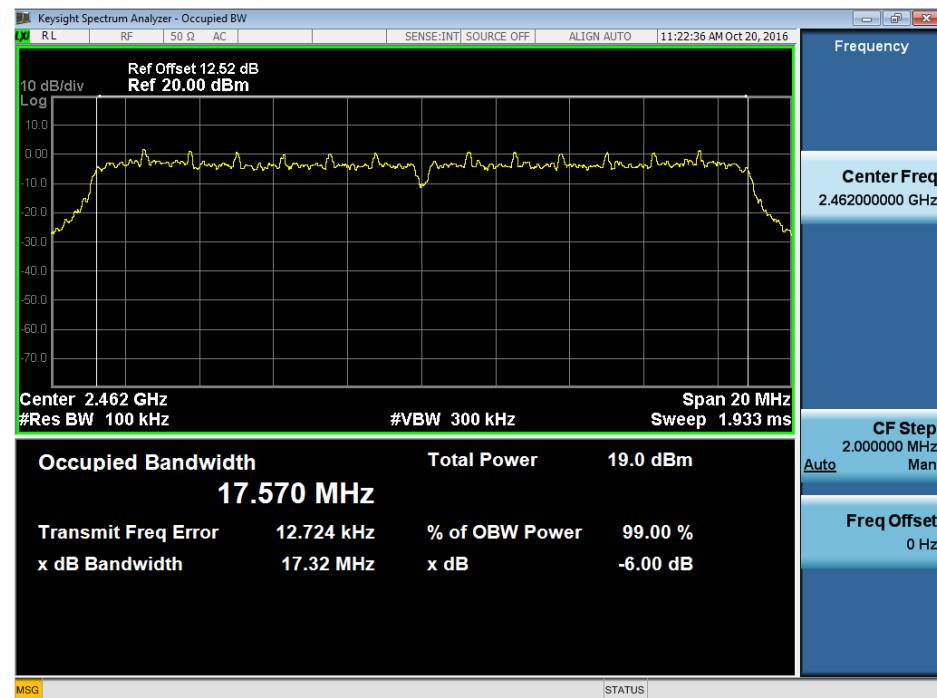
## TX CH01



## TX CH06

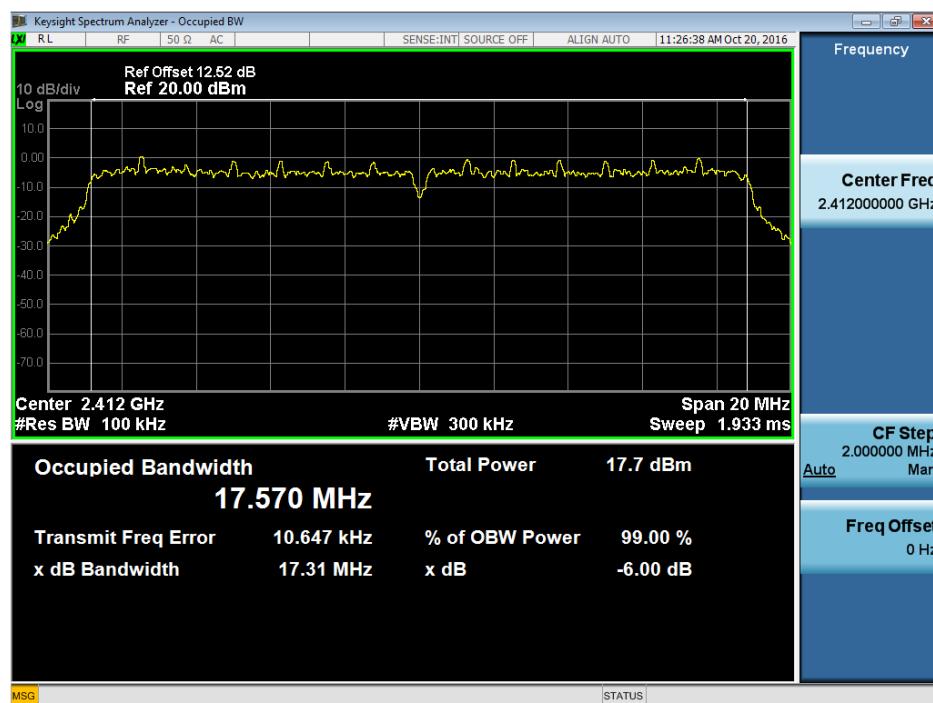


## TX CH11

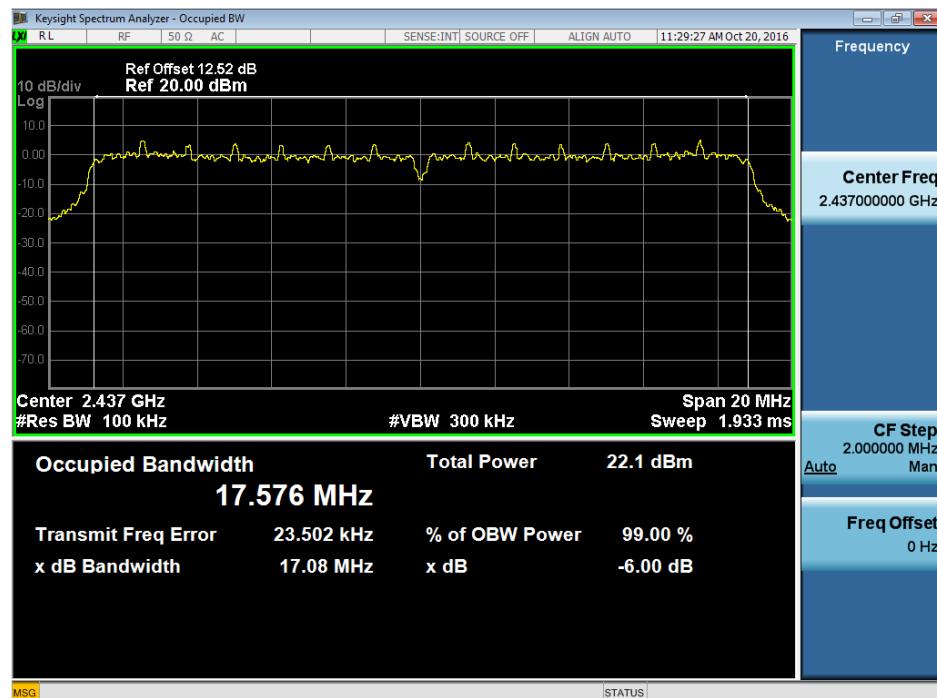


**Test Mode : TX N-20MHz Mode\_CH01/06/11\_ANT 2**

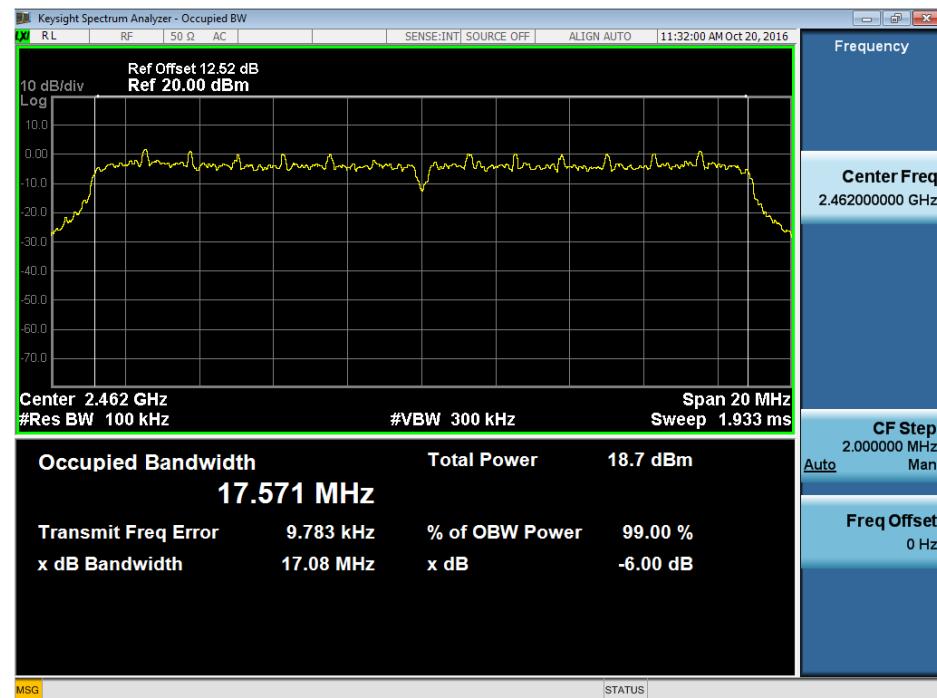
Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2412	17.31	17.57	500	Complies
2437	17.08	17.58	500	Complies
2462	17.08	17.57	500	Complies

**TX CH01**

## TX CH06



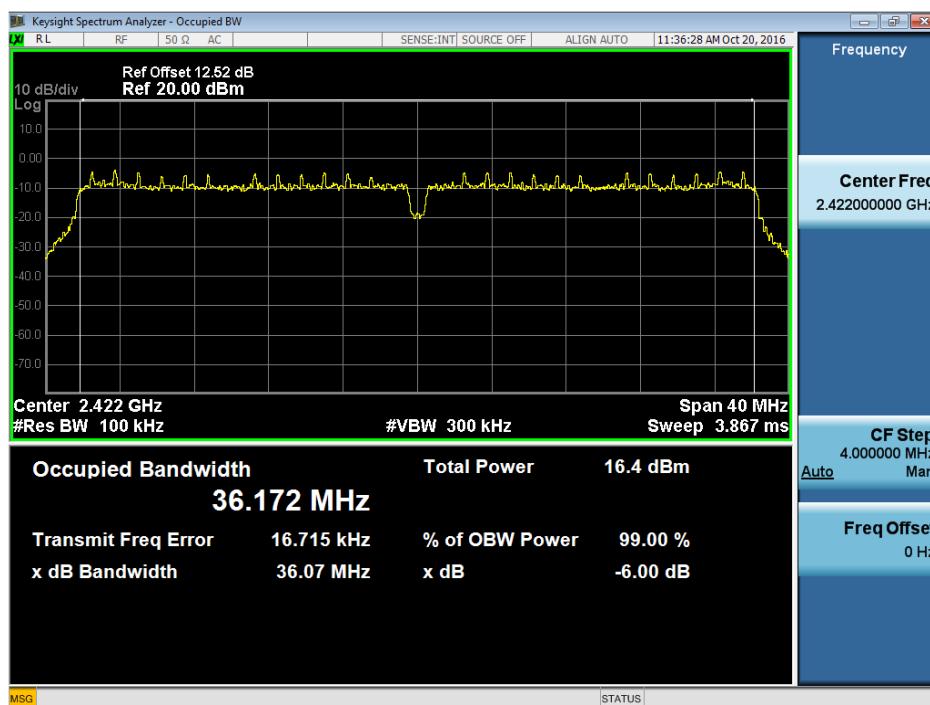
## TX CH11



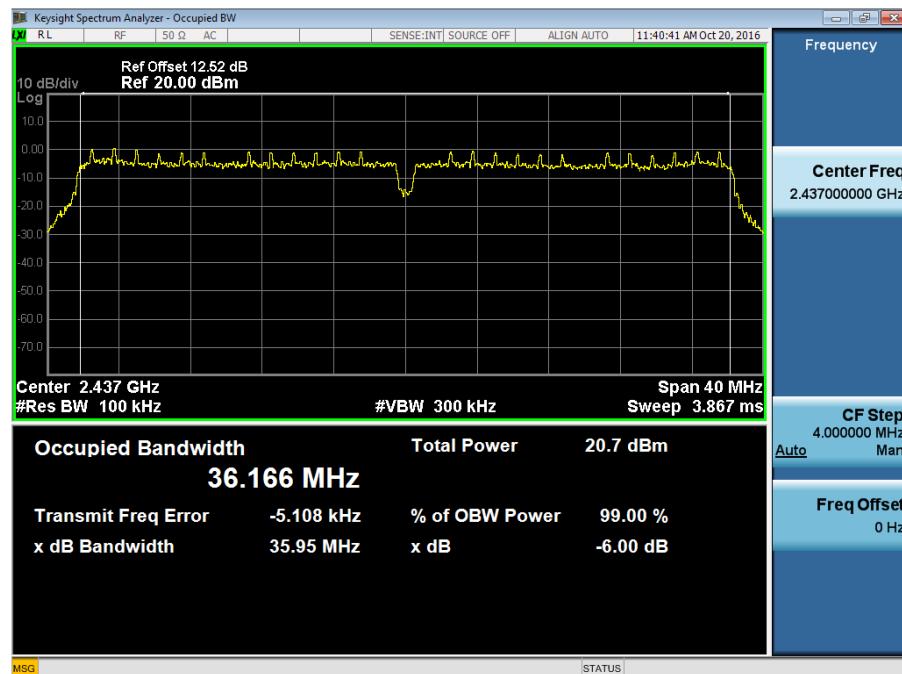
## Test Mode : TX N-40MHz Mode\_CH03/06/09\_ANT 1

Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2422	36.07	36.17	500	Complies
2437	35.95	36.17	500	Complies
2452	35.95	36.17	500	Complies

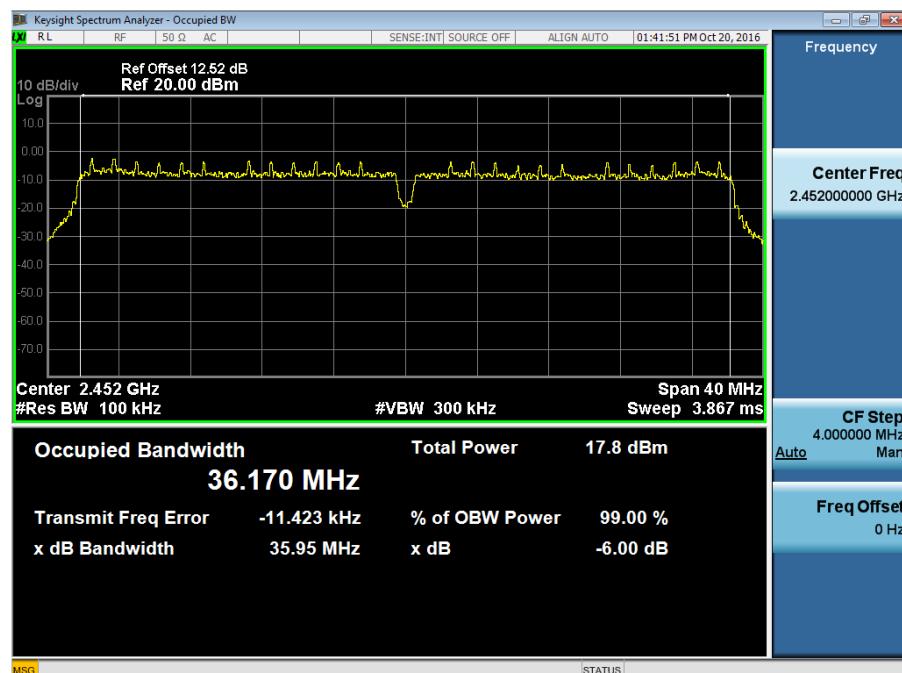
## TX CH03



## TX CH06



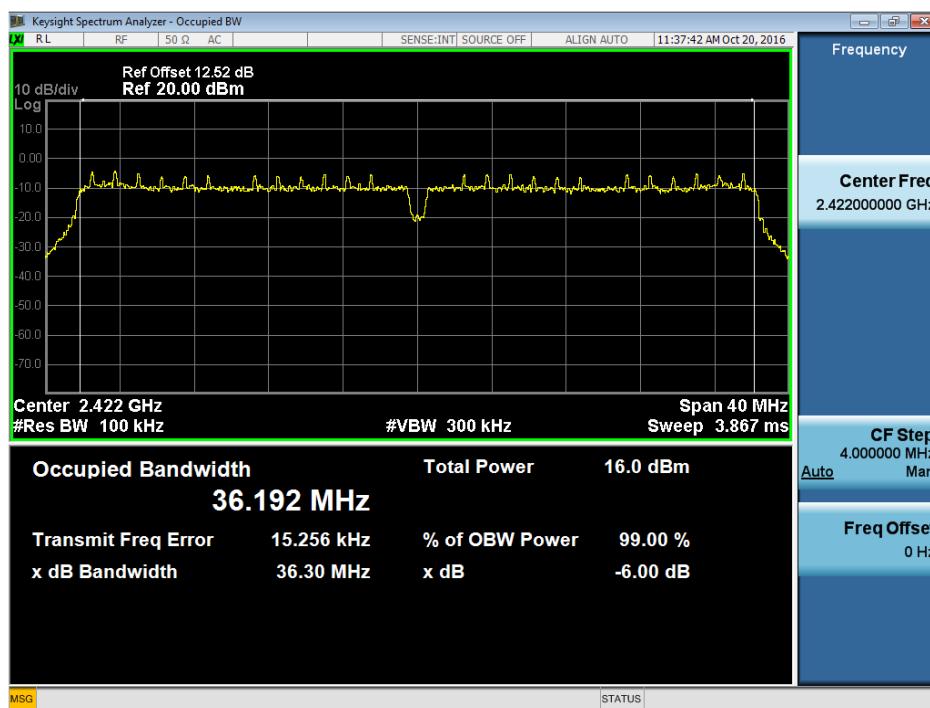
## TX CH09



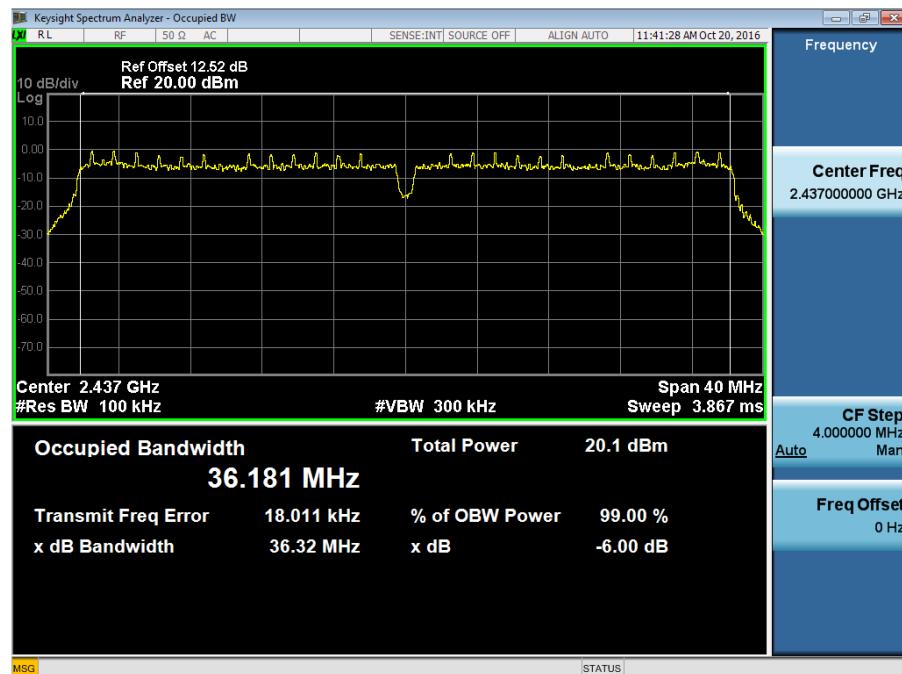
## Test Mode : TX N-40MHz Mode\_CH03/06/09\_ANT 2

Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2422	36.30	36.19	500	Complies
2437	36.32	36.18	500	Complies
2452	35.72	36.12	500	Complies

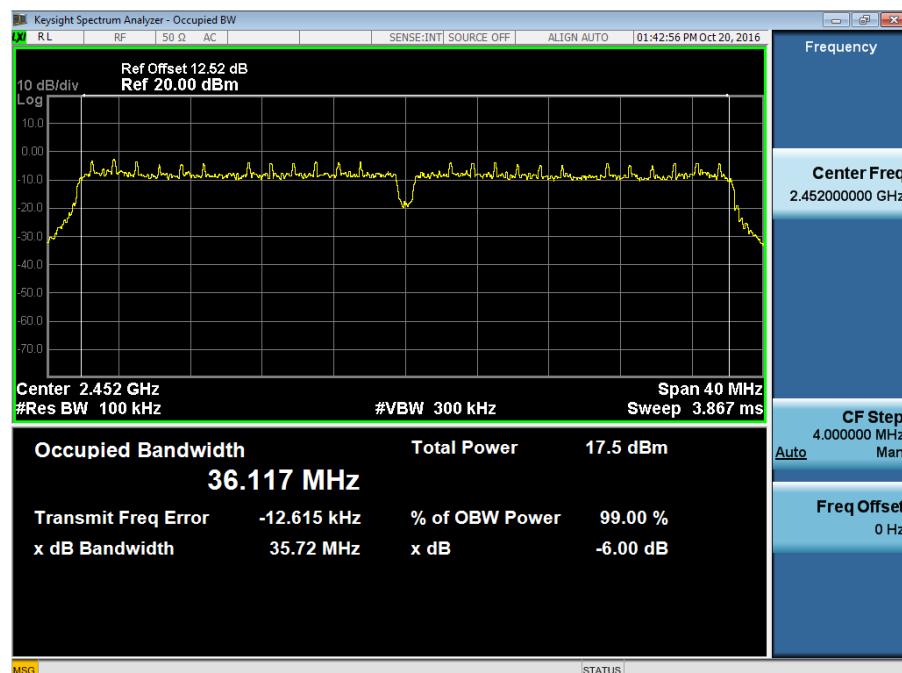
## TX CH03



## TX CH06



## TX CH09



## ATTACHMENT F – MAXIMUM PEAK CONDUCTED OUTPUT POWER

**Test Mode :TX B Mode\_CH01/06/11\_ANT 1**

Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2412	18.43	0.0697	30.00	1.0000	Complies
2437	20.03	0.1007	30.00	1.0000	Complies
2462	18.73	0.0746	30.00	1.0000	Complies

**Test Mode :TX B Mode\_CH01/06/11\_ANT 2**

Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2412	18.32	0.0679	30.00	1.0000	Complies
2437	19.63	0.0918	30.00	1.0000	Complies
2462	17.85	0.0610	30.00	1.0000	Complies

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

Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2412	21.39	0.1376	30.00	1.0000	Complies
2437	22.84	0.1925	30.00	1.0000	Complies
2462	21.32	0.1356	30.00	1.0000	Complies

Test Mode :TX G Mode_CH01/06/11_ANT 1					
Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2412	21.95	0.1567	30.00	1.0000	Complies
2437	22.91	0.1954	30.00	1.0000	Complies
2462	22.43	0.1750	30.00	1.0000	Complies

Test Mode :TX G Mode_CH01/06/11_ANT 2					
Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2412	21.70	0.1479	30.00	1.0000	Complies
2437	22.76	0.1888	30.00	1.0000	Complies
2462	21.69	0.1476	30.00	1.0000	Complies

Test Mode :TX G Mode_CH01/06/11_Total					
Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2412	24.84	0.3046	30.00	1.0000	Complies
2437	25.85	0.3842	30.00	1.0000	Complies
2462	25.09	0.3226	30.00	1.0000	Complies

Test Mode :TX N20 Mode_CH01/06/11_ANT 1					
Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2412	21.17	0.1309	30.00	1.0000	Complies
2437	22.87	0.1936	30.00	1.0000	Complies
2462	20.92	0.1236	30.00	1.0000	Complies

Test Mode :TX N20 Mode_CH01/06/11_ANT 2					
Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2412	20.97	0.1250	30.00	1.0000	Complies
2437	22.65	0.1841	30.00	1.0000	Complies
2462	20.92	0.1236	30.00	1.0000	Complies

Test Mode :TX N20 Mode_CH01/06/11_Total					
Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2412	24.08	0.2559	30.00	1.0000	Complies
2437	25.77	0.3777	30.00	1.0000	Complies
2462	23.93	0.2472	30.00	1.0000	Complies

Test Mode :TX N40 Mode_CH03/06/09_ANT 1					
Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2422	19.66	0.0925	30.00	1.0000	Complies
2437	22.16	0.1644	30.00	1.0000	Complies
2452	20.76	0.1191	30.00	1.0000	Complies

Test Mode :TX N40 Mode_CH03/06/09_ANT 2					
Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2422	19.52	0.0895	30.00	1.0000	Complies
2437	21.76	0.1500	30.00	1.0000	Complies
2452	20.21	0.1050	30.00	1.0000	Complies

Test Mode :TX N40 Mode_CH03/06/09_Total					
Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2422	22.60	0.1820	30.00	1.0000	Complies
2437	24.97	0.3144	30.00	1.0000	Complies
2452	23.50	0.2241	30.00	1.0000	Complies

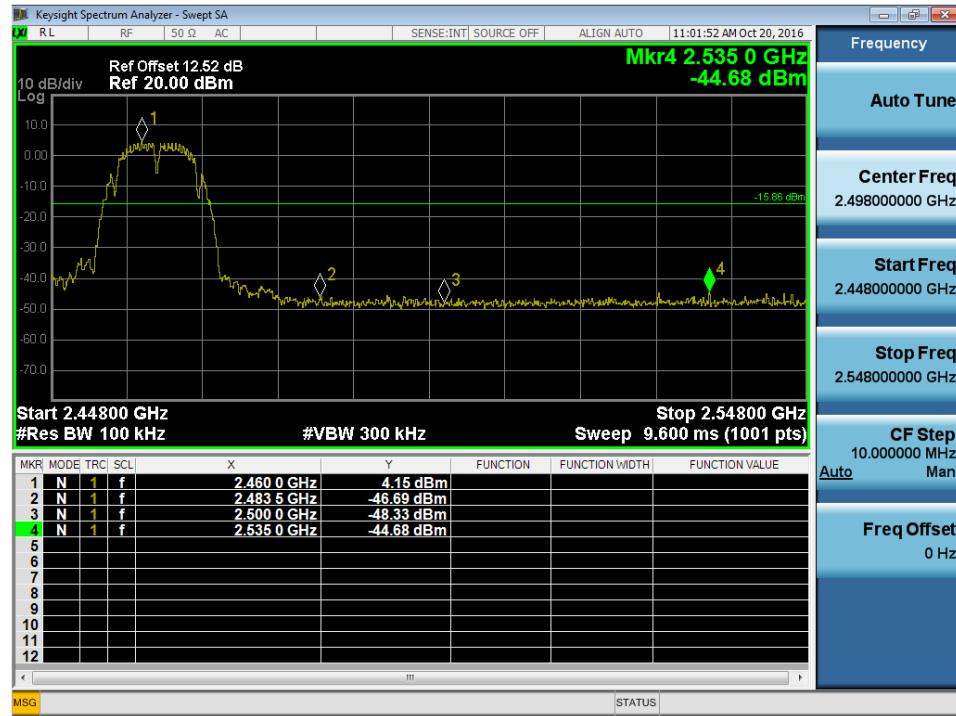
## **ATTACHMENT G - ANTENNA CONDUCTED SPURIOUS EMISSION**

<b>Test Mode :</b>	<b>TX B Mode_ANT 1</b>
--------------------	------------------------

## 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)



<b>Test Mode :</b>	<b>TX B Mode_ANT 2</b>
--------------------	------------------------

## 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)



<b>Test Mode :</b>	<b>TX G Mode_ANT 1</b>
--------------------	------------------------

## 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)

