

# FCC Radio Test Report

## FCC ID: Q78-ZXHNHS320

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

**Project No.** : 1704C225  
**Equipment** : WIRELESS HD IP CAMERA  
**Model Name** : HS320  
**Applicant** : ZTE Corporation  
**Address** : ZTE Plaza, Hi-Tech Park, Nanshan District,  
Shenzhen, Guangdong, P.R.China

**Date of Receipt** : Apr 18, 2017  
**Date of Test** : Apr 18, 2017 ~ May 08, 2017  
**Issued Date** : May 23, 2017  
**Tested by** : BTL Inc.

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### REPORT ISSUED HISTORY

Issued No.	Description	Issued Date
BTL-FCCP-1-1704C225	Original Issue.	May 23, 2017

## 1. CERTIFICATION

Equipment : WIRELESS HD IP CAMERA  
Brand Name : ZTE 中兴, ZTE  
Model Name : HS320  
Applicant : ZTE Corporation  
Manufacturer: ZTE Corporation  
Address : ZTE Plaza, Hi-Tech Park, Nanshan District, Shenzhen, Guangdong, P.R.China  
Date of Test : Apr 18, 2017 ~ May 08, 2017  
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-1-1704C225) 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	
	15.247(d)/ 15.205/ 15.209	Transmitter Radiated Emissions	PASS	

Note:

(1) "N/A" denotes test is not applicable in this test report.

## 2.1 TEST FACILITY

The test facilities used to collect the test data in this report is at the location of No.3,Jinshagang 1st Road, Shixia, Dalang Town, Dongguan, Guangdong, China.  
 BTL's test firm number for FCC: 319330

## 2.2 MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2. The BTL measurement uncertainty is less than the CISPR 16-4-2  $U_{\text{cispr}}$  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 Measurement:

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

### B. Radiated Measurement:

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

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

### 3. GENERAL INFORMATION

#### 3.1 GENERAL DESCRIPTION OF EUT

Equipment	WIRELESS HD IP CAMERA	
Brand Name	ZTE 中兴, ZTE	
Model Name	HS320	
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 150 Mbps
	Output Power (Max.)	802.11b: 21.67 dBm 802.11g: 24.50 dBm 802.11n(20MHz): 24.35 dBm
Power Source	DC Voltage supplied from AC/DC adapter. Model: RD0501000-USBA-18MG	
Power Rating	I/P: 100-240~ 50/60Hz 0.25A MAX    O/P: 5V 1000mA	

**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.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	N/A	N/A	PCB	N/A	0.87

### 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	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

For Band Edge 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

6dB Spectrum Bandwidth	
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

Maximum Conducted Output Power	
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

Power Spectral Density	
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:

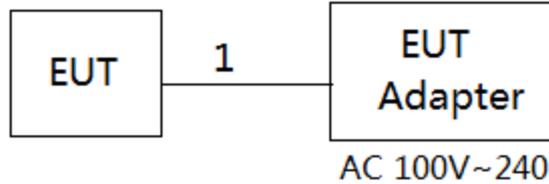
- (1) The measurements are performed at the high, middle, low available channels.
- (2) 802.11b mode: DBPSK (1Mbps)  
 802.11g mode: OFDM (6Mbps)  
 802.11n HT20 mode : BPSK (6.5Mbps)  
 For radiated emission tests, the highest output powers were set for final test.
- (3) For radiated below 1G test, 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%.

### 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	N/A		
Frequency (MHz)	2412	2437	2462
802.11b	18	21	21
802.11g	12	25	15
802.11n (20MHz)	11	26	14

**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.
-	-	-	-	-	-

Item	Shielded Type	Ferrite Core	Length	Note
1	NO	NO	2.6m	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 (dBµV)	
	Quasi-peak	Average
0.15 -0.50	66 to 56*	56 to 46*
0.50 -5.0	56	46
5.0 -30.0	60	50

Note:

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

The following table is the setting of the receiver

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

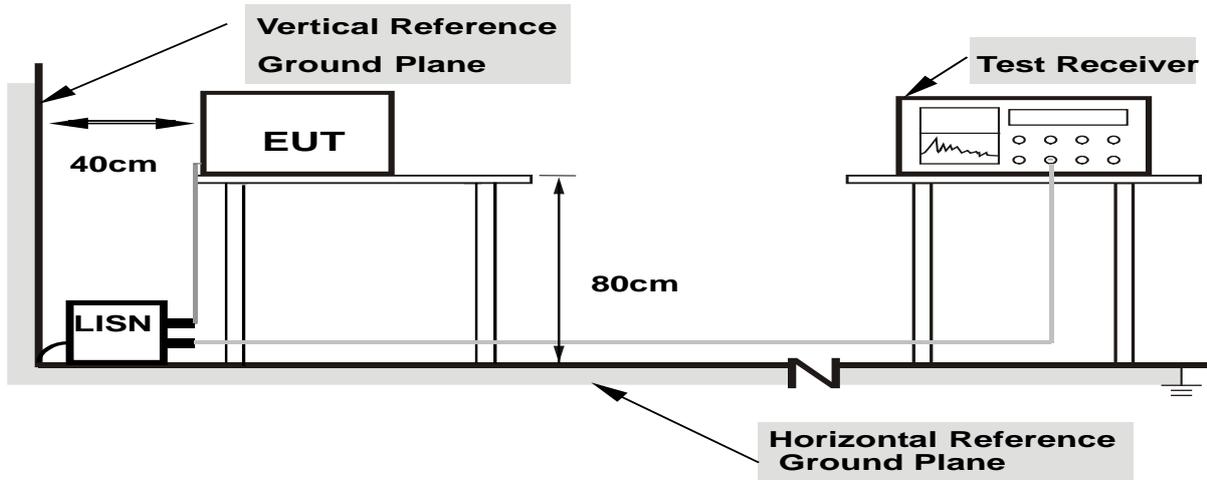
#### 4.1.2 TEST PROCEDURE

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

#### 4.1.3 DEVIATION FROM TEST STANDARD

No deviation

**4.1.4 TEST SETUP**



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

**4.1.5 EUT OPERATING CONDITIONS**

The EUT was 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**

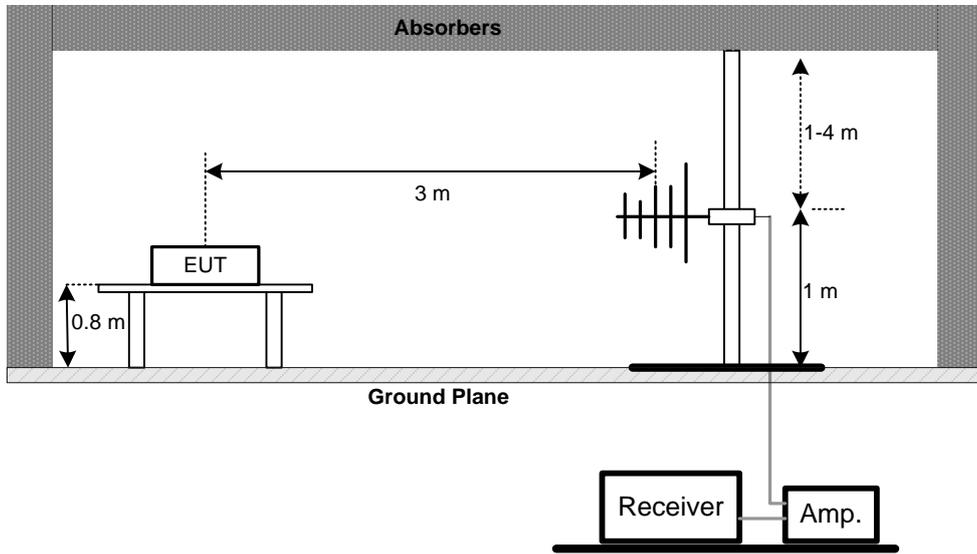
- a. The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1GHz)
- b. The measuring distance 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 0.8m 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**

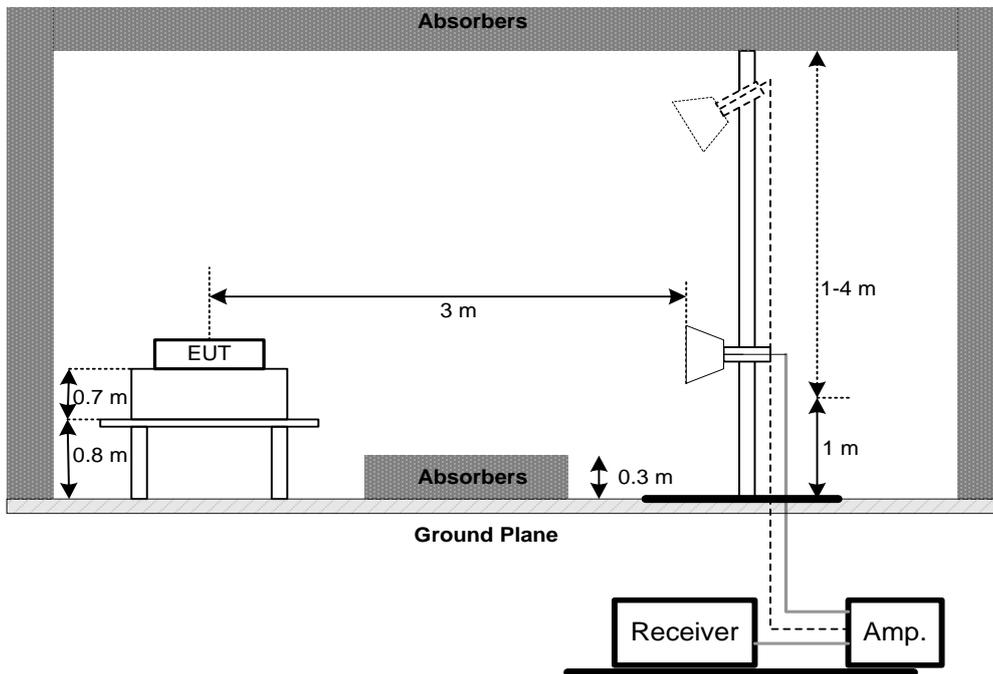
No deviation

**4.2.4 TEST SETUP**

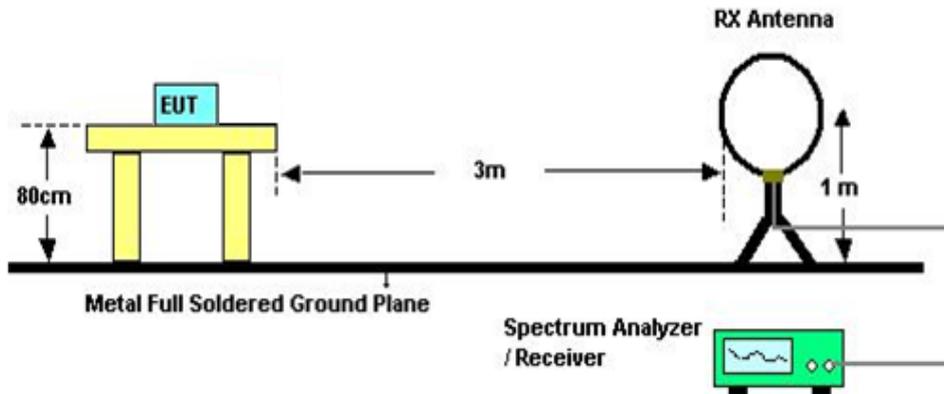
(A) Radiated Emission Test Set-Up Frequency Below 1 GHz



(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: 55%    Test Voltage: AC 120V/60Hz

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

Please refer to the Attachment B

Remark:

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

**4.2.8 TEST RESULTS (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: 55%    Test Voltage: AC 120V/60Hz

**5.1.6 TEST RESULTS**

Please refer to the Attachment E.

**6. MAXIMUM PEAK CONDUCTED OUTPUT POWER TEST**

**6.1 APPLIED PROCEDURES / LIMIT**

FCC Part15 (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.

**6.1.2 DEVIATION FROM STANDARD**

No deviation.

**6.1.3 TEST SETUP**



**6.1.4 EUT OPERATION CONDITIONS**

The EUT was programmed to be in continuously transmitting mode.

**6.1.5 EUT TEST CONDITIONS**

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

**6.1.6 TEST RESULTS**

Please refer to the Attachment F.

## 7. ANTENNA CONDUCTED SPURIOUS EMISSION

### 7.1 APPLIED PROCEDURES / LIMIT

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

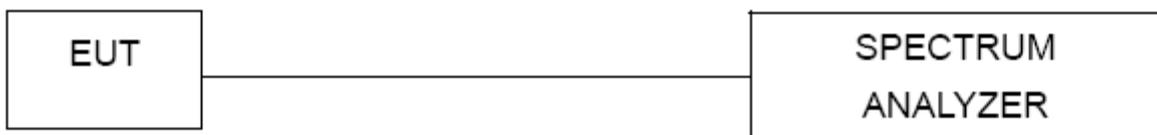
#### 7.1.1 TEST PROCEDURE

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

#### 7.1.2 DEVIATION FROM STANDARD

No deviation.

#### 7.1.3 TEST SETUP



#### 7.1.4 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

#### 7.1.5 EUT TEST CONDITIONS

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

#### 7.1.6 TEST RESULTS

Please refer to the Attachment G.

## 8. POWER SPECTRAL DENSITY TEST

### 8.1 APPLIED PROCEDURES / LIMIT

FCC 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: 55%    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	EMI Test Receiver	R&S	ESCI	100382	Mar. 26, 2018
2	LISN	EMCO	3816/2	52765	Mar. 26, 2018
3	50Ω Terminator	SHX	TF2-3G-A	8122901	Mar. 26, 2018
4	TWO-LINE V-NETWORK	R&S	ENV216	101447	Mar. 26, 2018
5	Cable	emci	RG223(9KHz-30MHz)(5m)	N/A	Mar. 07, 2018
6	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A

Radiated Emission Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Antenna	Schwarbeck	VULB9160	9160-3232	Mar. 26, 2018
2	Amplifier	HP	8447D	2944A09673	Oct. 20, 2017
3	Receiver	AGILENT	N9038A	MY52130039	Sep. 04, 2017
4	Cable	emci	LMR-400(30MHz-1GHz)(8m+5m)	N/A	Jun. 27, 2017
5	Control	CT	SC100	N/A	N/A
6	Position Control	MF	MF-7802	MF780208416	N/A
7	Antenna	ETS	3115	00075789	Mar. 26, 2018
8	Amplifier	Agilent	8449B	3008A02274	Feb. 22, 2018
9	Receiver	AGILENT	N9038A	MY52130039	Sep. 04, 2017
10	Test Cable	emci	EMC104-SM-SM-10000(1GHz-26.5GHz)	C-68	Jun. 26, 2017
11	Controller	CT	SC100	N/A	N/A
12	Broad-Band Horn Antenna	Schwarzbeck	BBHA 9170	9170319	Apr. 22, 2018
13	Microwave Preamplifier With Adaptor	EMC INSTRUMENT	EMC2654045	980039 & HA01	Mar. 26, 2018
14	Active Loop Antenna	R&S	HFH2-Z2	830749/020	Sep. 06, 2017
15	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A

6dB Bandwidth Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP 40	100185	Sep. 04, 2017

Peak Output Power Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	P-series Power meter	Agilent	N1911A	MY45100473	Mar. 26, 2018
2	Wireband Power sensor	Agilent	N1921A	MY51100041	Mar. 26, 2018

Antenna Conducted Spurious Emission Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP 40	100185	Sep. 04, 2017

Power Spectral Density Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP 40	100185	Sep. 04, 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**



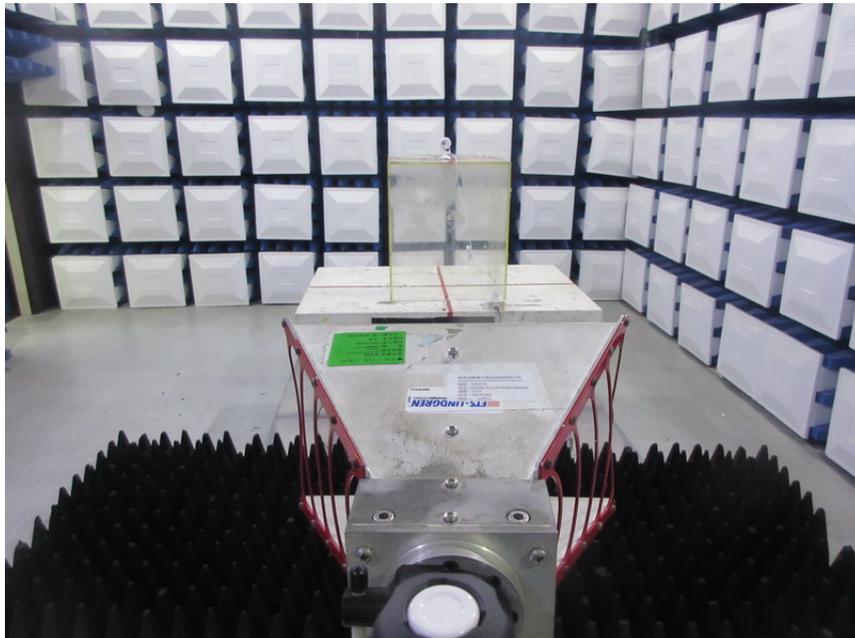
**Radiated Measurement Photos**

**30MHz to 1000MHz**



**Radiated Measurement Photos**

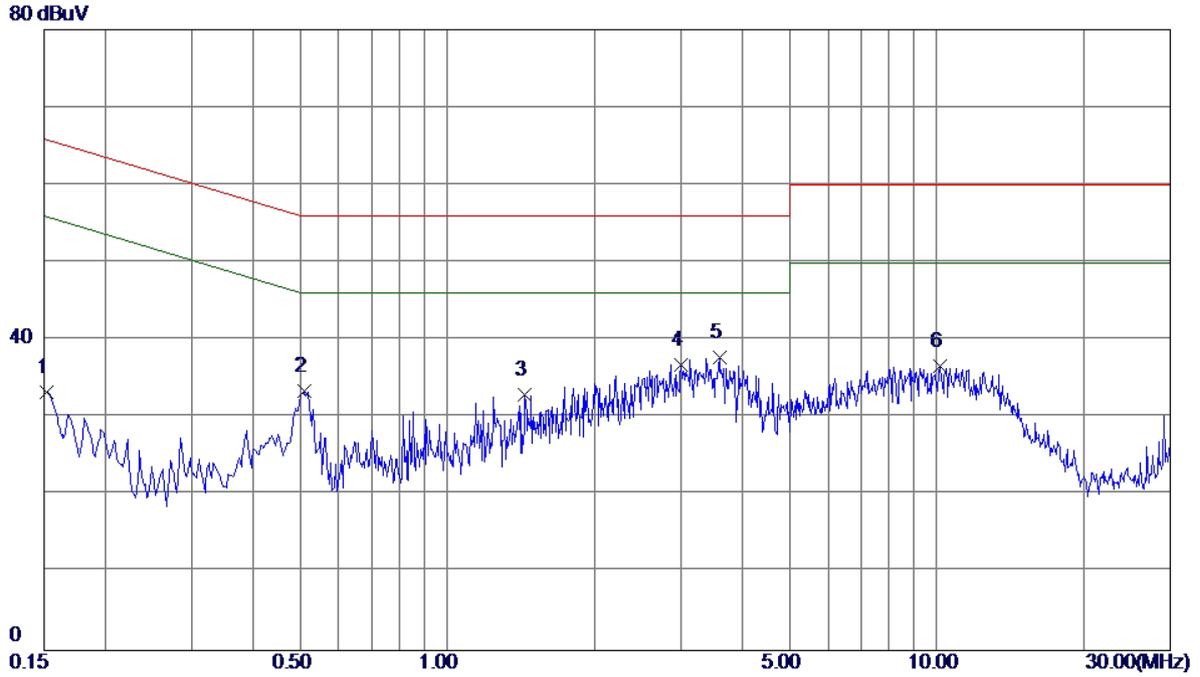
**Above 1000MHz**



## ATTACHMENT A - CONDUCTED EMISSION

Test Mode : TX Mode

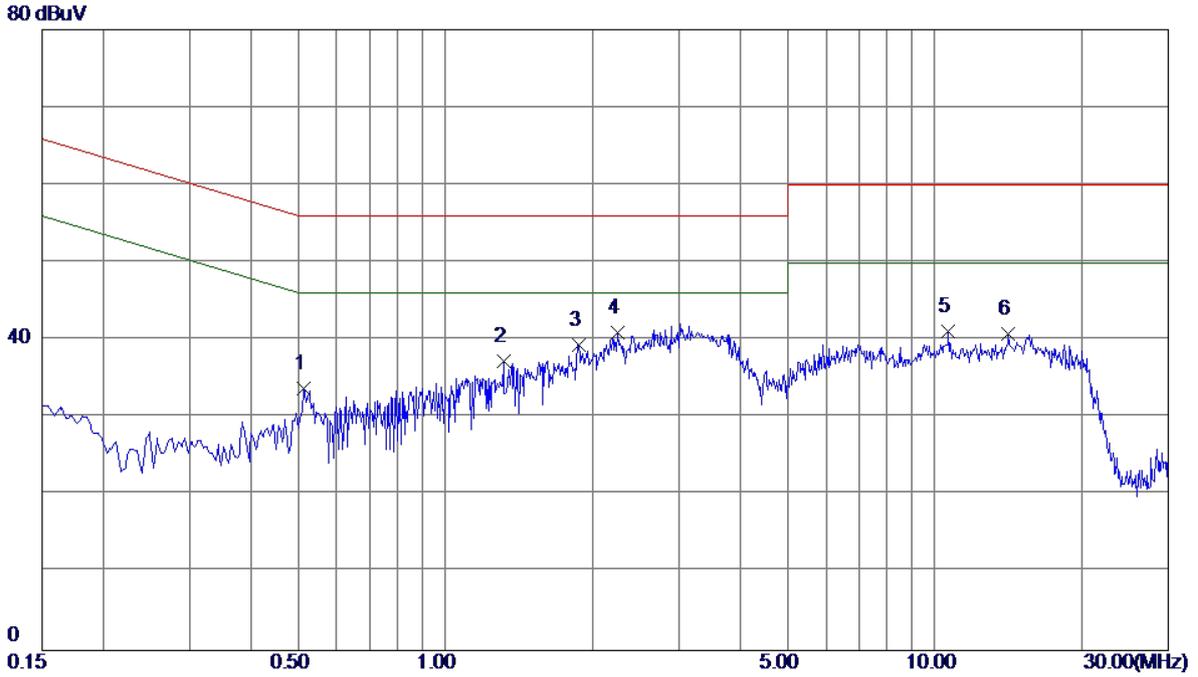
**Line**



No.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1	0.1514	23.57	9.75	33.32	65.92	-32.60	Peak	
2	0.5100	23.72	9.76	33.48	56.00	-22.52	Peak	
3	1.4414	23.11	9.81	32.92	56.00	-23.08	Peak	
4	2.9984	26.87	9.86	36.73	56.00	-19.27	Peak	
5 *	3.5970	27.97	9.86	37.83	56.00	-18.17	Peak	
6	10.1532	26.63	10.05	36.68	60.00	-23.32	Peak	

Test Mode : TX Mode

**Neutral**

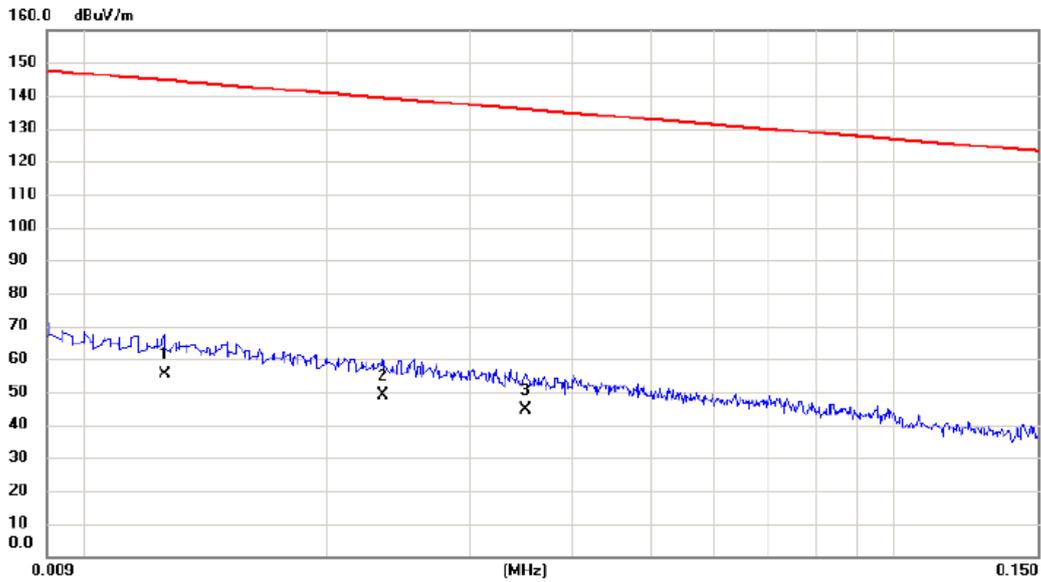


No.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1	0.5143	24.04	9.66	33.70	56.00	-22.30	Peak	
2	1.3152	27.55	9.68	37.23	56.00	-18.77	Peak	
3	1.8732	29.63	9.72	39.35	56.00	-16.65	Peak	
4 *	2.2513	31.22	9.73	40.95	56.00	-15.05	Peak	
5	10.6350	31.08	10.03	41.11	60.00	-18.89	Peak	
6	14.1403	30.59	10.24	40.83	60.00	-19.17	Peak	

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

Test Mode: TX B MODE CHANNEL 01

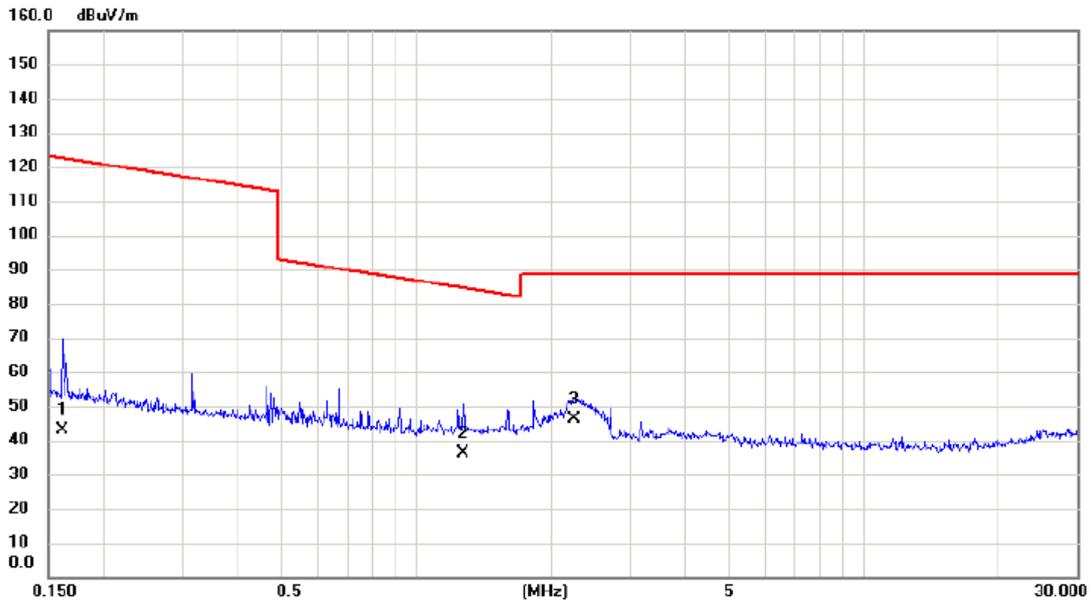
Ant 0°



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	0.013	34.71	20.58	55.29	144.68	-89.39	AVG	
2		0.023	29.47	19.52	48.99	139.30	-90.31	AVG	
3		0.035	25.34	19.17	44.51	135.80	-91.29	AVG	

Test Mode: TX B MODE CHANNEL 01

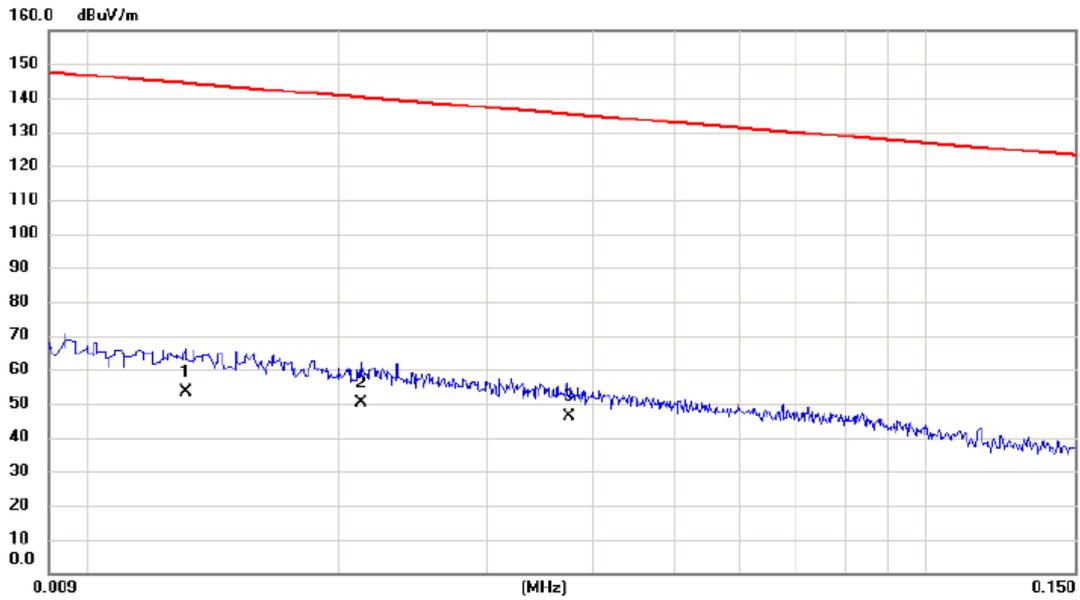
Ant 0°



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		0.162	26.04	16.91	42.95	122.53	-79.58	AVG	
2		1.269	20.62	15.78	36.40	84.62	-48.22	QP	
3	*	2.249	30.88	15.44	46.32	88.63	-42.31	QP	

Test Mode: TX B MODE CHANNEL 01

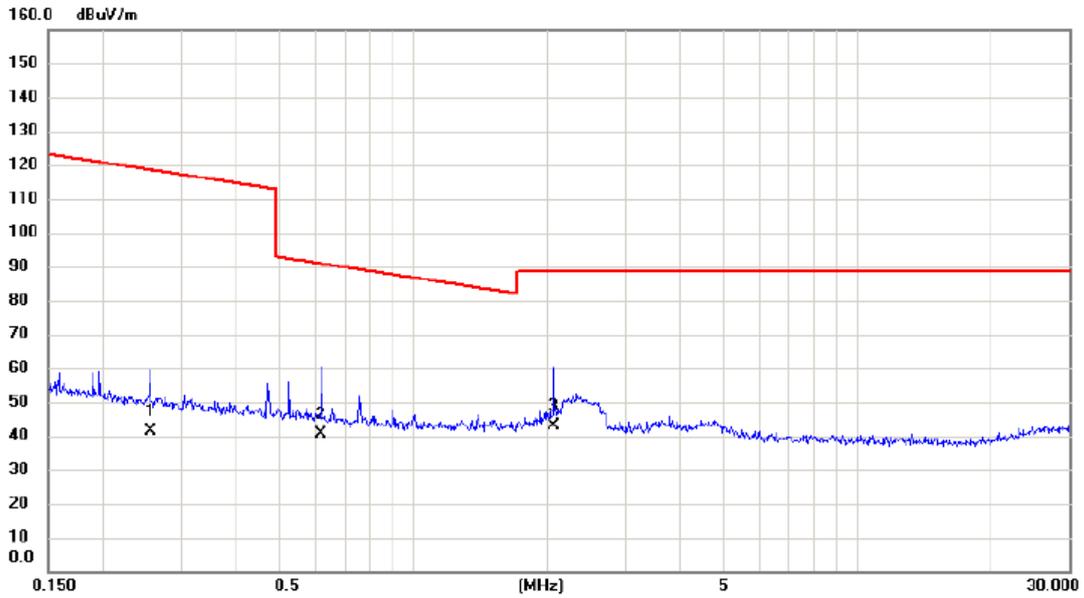
Ant 90°



No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	0.013	32.76	20.52	53.28	144.34	-91.06	AVG	
2	0.021	30.71	19.58	50.29	140.16	-89.87	AVG	
3 *	0.037	27.30	19.09	46.39	135.20	-88.81	AVG	

Test Mode: TX B MODE CHANNEL 01

Ant 90°

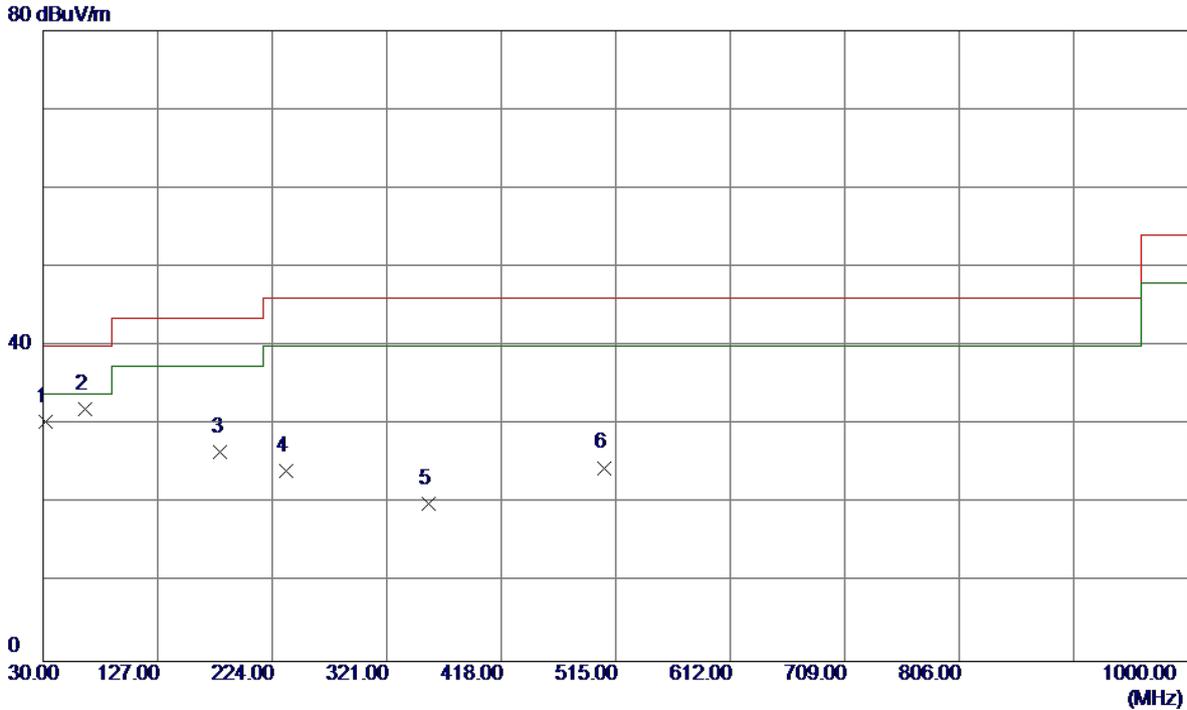


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		0.256	24.80	16.65	41.45	118.52	-77.07	AVG	
2		0.621	24.47	16.33	40.80	90.84	-50.04	QP	
3	*	2.066	27.62	15.49	43.11	88.63	-45.52	QP	

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

Test Mode: TX B MODE CHANNEL 01

**Vertical**

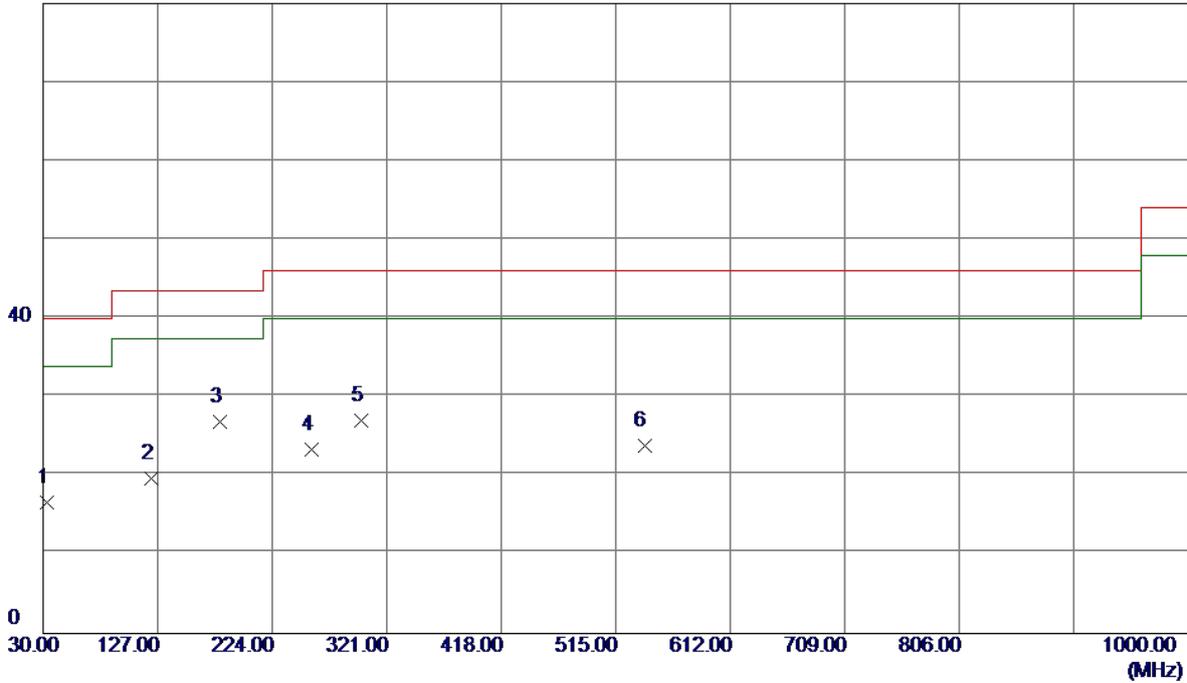


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	31.9400	45.16	-14.82	30.34	40.00	-9.66	Peak	
2 *	65.8900	47.09	-15.12	31.97	40.00	-8.03	Peak	
3	180.3500	38.18	-11.67	26.51	43.50	-16.99	Peak	
4	235.6400	37.94	-13.80	24.14	46.00	-21.86	Peak	
5	356.8900	31.26	-11.25	20.01	46.00	-25.99	Peak	
6	505.3000	32.38	-7.82	24.56	46.00	-21.44	Peak	

Test Mode: TX B MODE CHANNEL 01

**Horizontal**

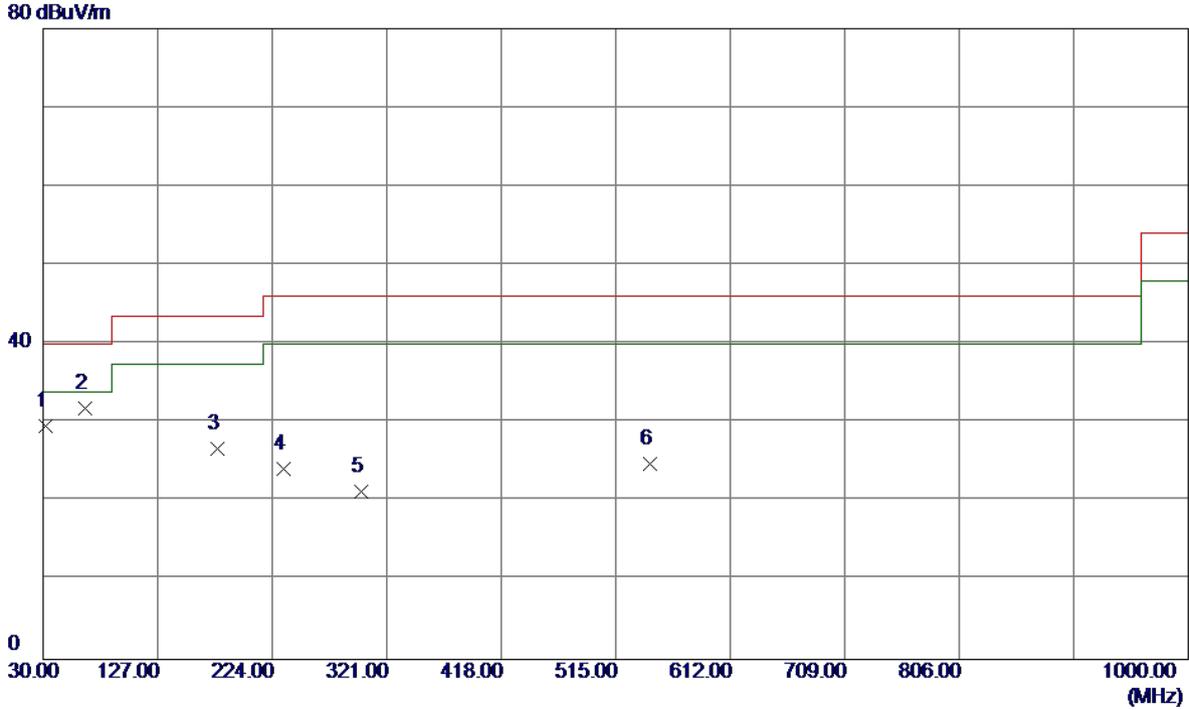
80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	32.9100	31.28	-14.67	16.61	40.00	-23.39	Peak	
2	121.1800	34.73	-14.98	19.75	43.50	-23.75	Peak	
3 *	179.3800	38.48	-11.66	26.82	43.50	-16.68	Peak	
4	256.9800	38.40	-14.98	23.42	46.00	-22.58	Peak	
5	299.6600	39.43	-12.33	27.10	46.00	-18.90	Peak	
6	539.2500	30.98	-7.09	23.89	46.00	-22.11	Peak	

Test Mode: TX B MODE CHANNEL 06

**Vertical**

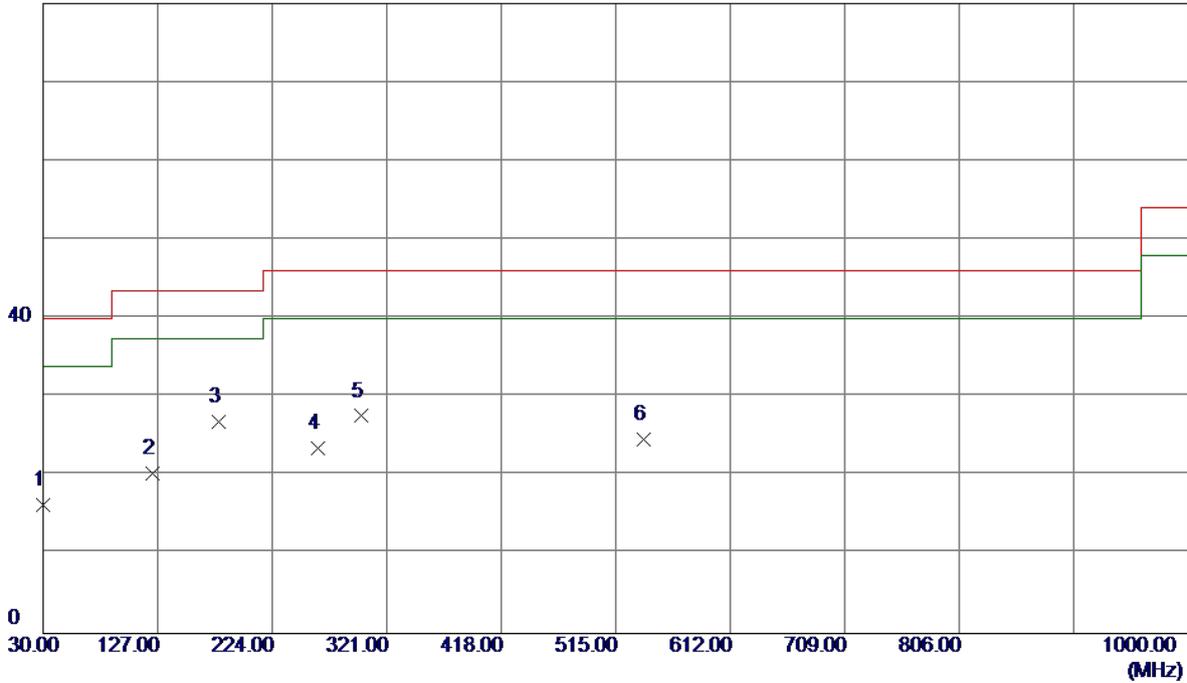


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	31.9400	44.39	-14.82	29.57	40.00	-10.43	Peak	
2 *	65.8900	46.91	-15.12	31.79	40.00	-8.21	Peak	
3	177.4400	38.46	-11.72	26.74	43.50	-16.76	Peak	
4	233.7000	37.92	-13.76	24.16	46.00	-21.84	Peak	
5	299.6600	33.68	-12.33	21.35	46.00	-24.65	Peak	
6	544.1000	31.80	-6.99	24.81	46.00	-21.19	Peak	

Test Mode: TX B MODE CHANNEL 06

**Horizontal**

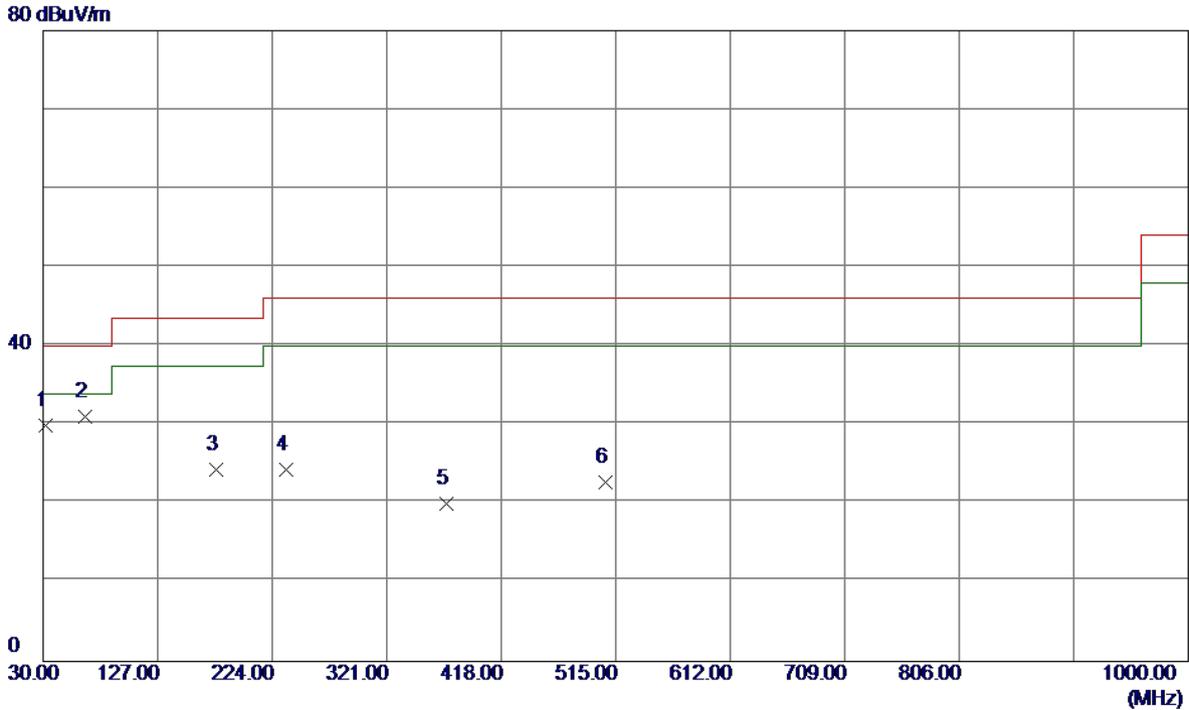
80 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	30.0000	31.35	-15.04	16.31	40.00	-23.69	Peak	
2	123.1200	35.14	-14.84	20.30	43.50	-23.20	Peak	
3 *	178.4100	38.57	-11.69	26.88	43.50	-16.62	Peak	
4	262.8000	38.74	-15.26	23.48	46.00	-22.52	Peak	
5	299.6600	39.93	-12.33	27.60	46.00	-18.40	Peak	
6	538.2800	31.79	-7.11	24.68	46.00	-21.32	Peak	

Test Mode: TX B MODE CHANNEL 11

**Vertical**

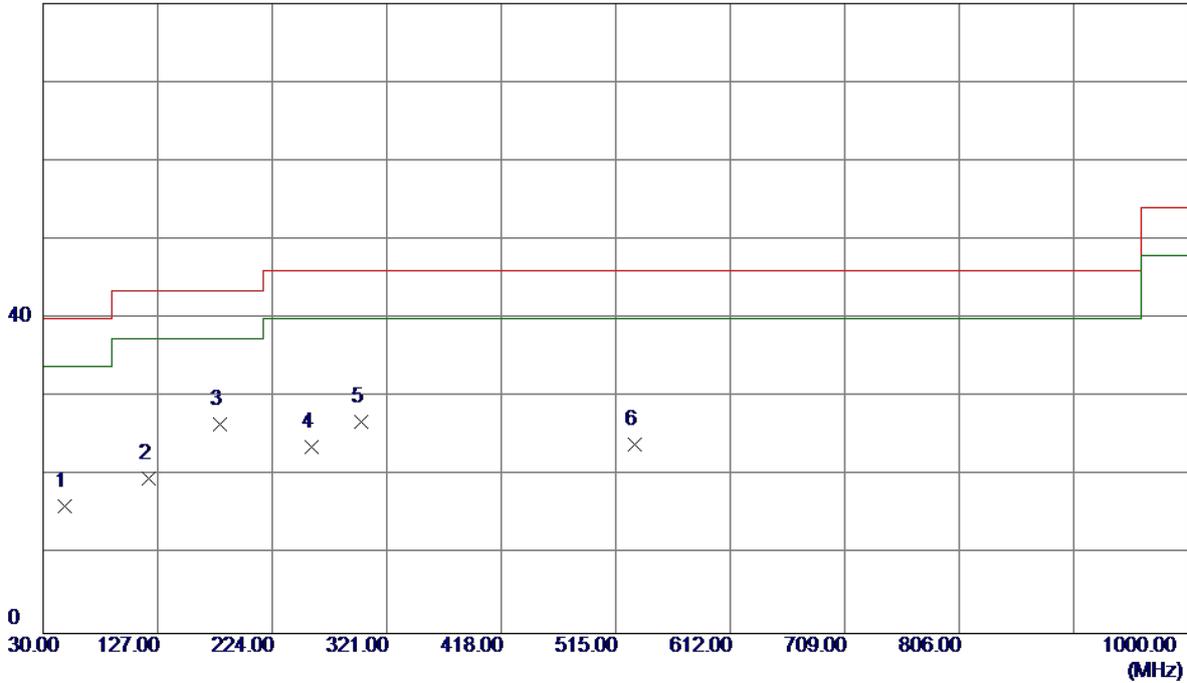


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	31.9400	44.77	-14.82	29.95	40.00	-10.05	Peak	
2 *	65.8900	46.21	-15.12	31.09	40.00	-8.91	Peak	
3	176.4700	36.10	-11.75	24.35	43.50	-19.15	Peak	
4	235.6400	38.19	-13.80	24.39	46.00	-21.61	Peak	
5	371.4400	31.01	-11.07	19.94	46.00	-26.06	Peak	
6	506.2700	30.51	-7.80	22.71	46.00	-23.29	Peak	

Test Mode: TX B MODE CHANNEL 11

**Horizontal**

80 dBuV/m

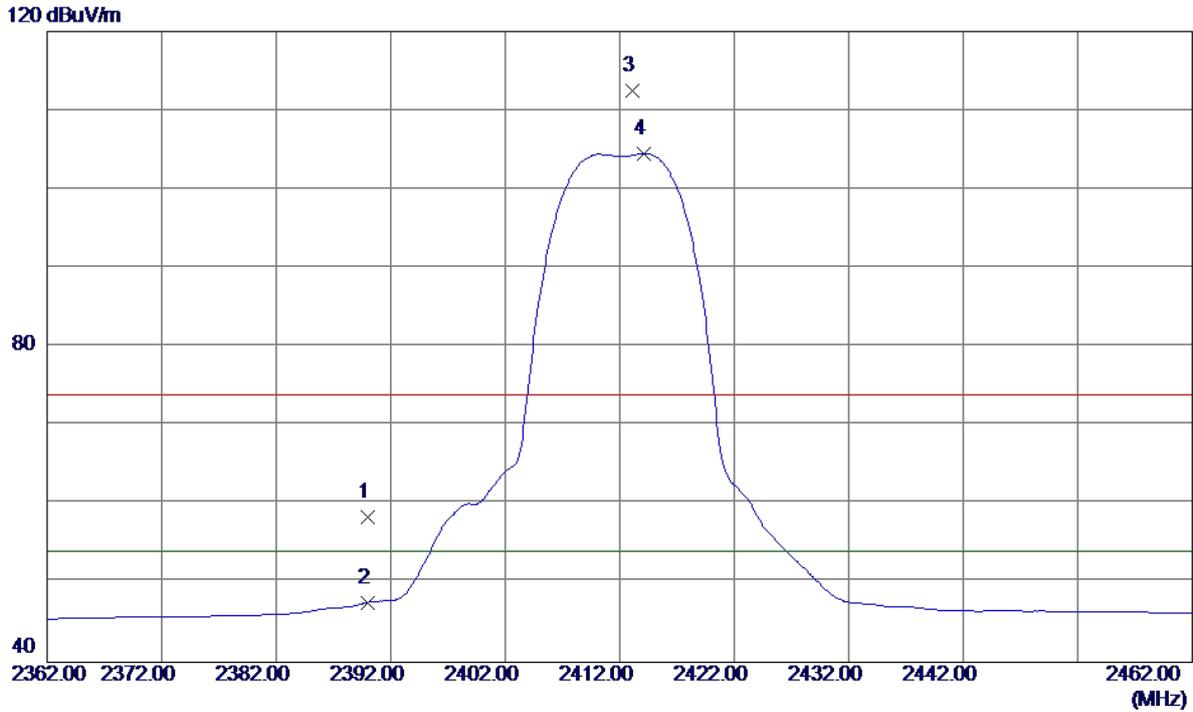


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	48.4300	29.22	-13.02	16.20	40.00	-23.80	Peak	
2	119.2400	34.80	-15.12	19.68	43.50	-23.82	Peak	
3 *	179.3800	38.25	-11.66	26.59	43.50	-16.91	Peak	
4	256.9800	38.64	-14.98	23.66	46.00	-22.34	Peak	
5	299.6600	39.26	-12.33	26.93	46.00	-19.07	Peak	
6	531.4900	31.20	-7.26	23.94	46.00	-22.06	Peak	

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

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

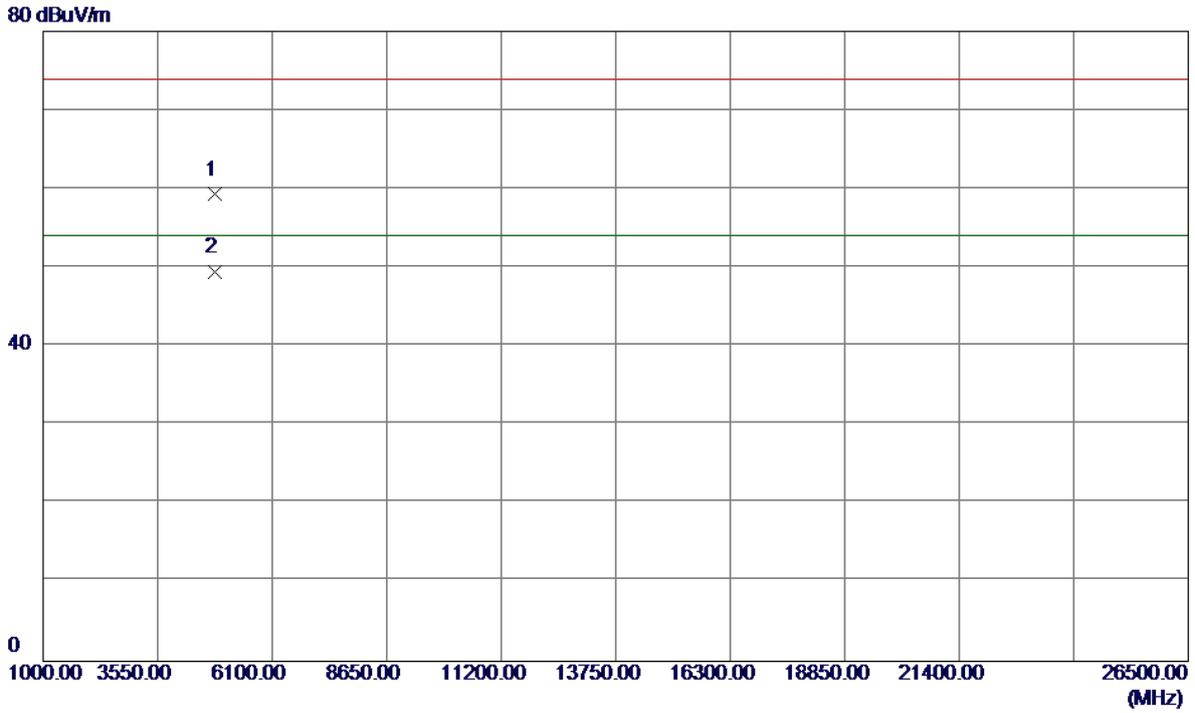
**Vertical**



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	25.98	32.38	58.36	74.00	-15.64	Peak	
2	2390.0000	15.20	32.38	47.58	54.00	-6.42	AVG	
3	2413.1000	79.94	32.46	112.40	74.00	38.40	Peak	NO LIMIT
4 *	2414.1000	72.07	32.46	104.53	54.00	50.53	AVG	NO LIMIT

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

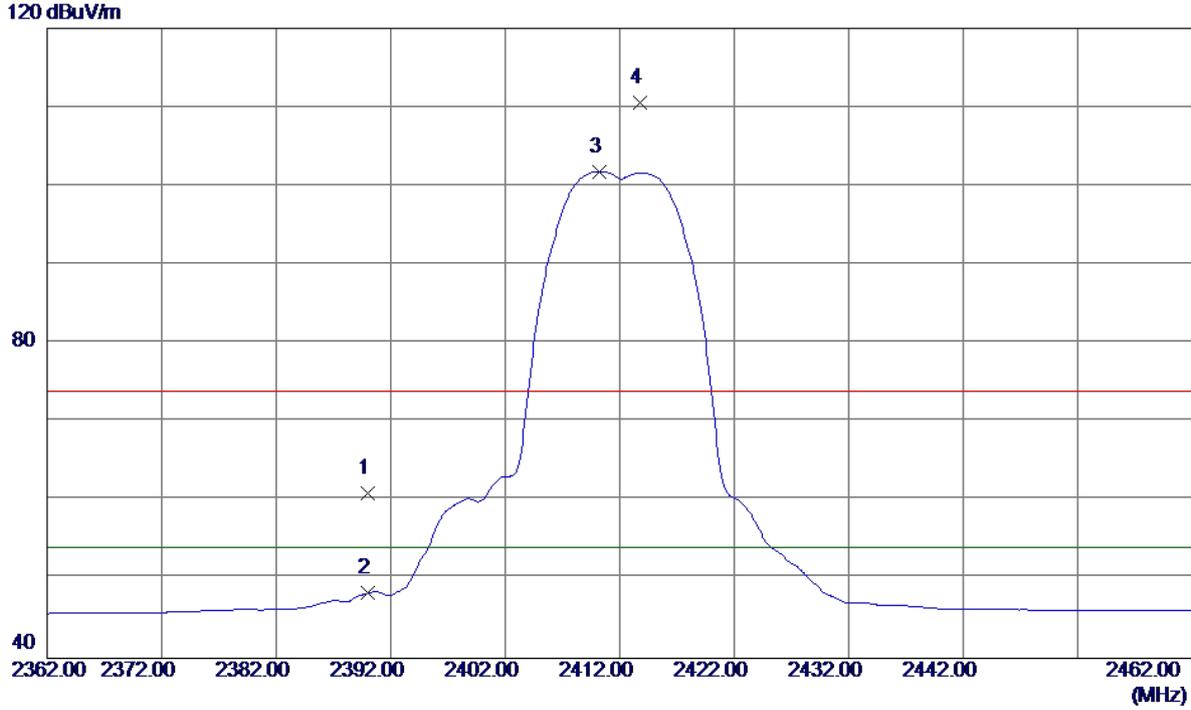
**Vertical**



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4823.8500	53.81	5.47	59.28	74.00	-14.72	Peak	
2 *	4825.9500	43.90	5.48	49.38	54.00	-4.62	AVG	

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

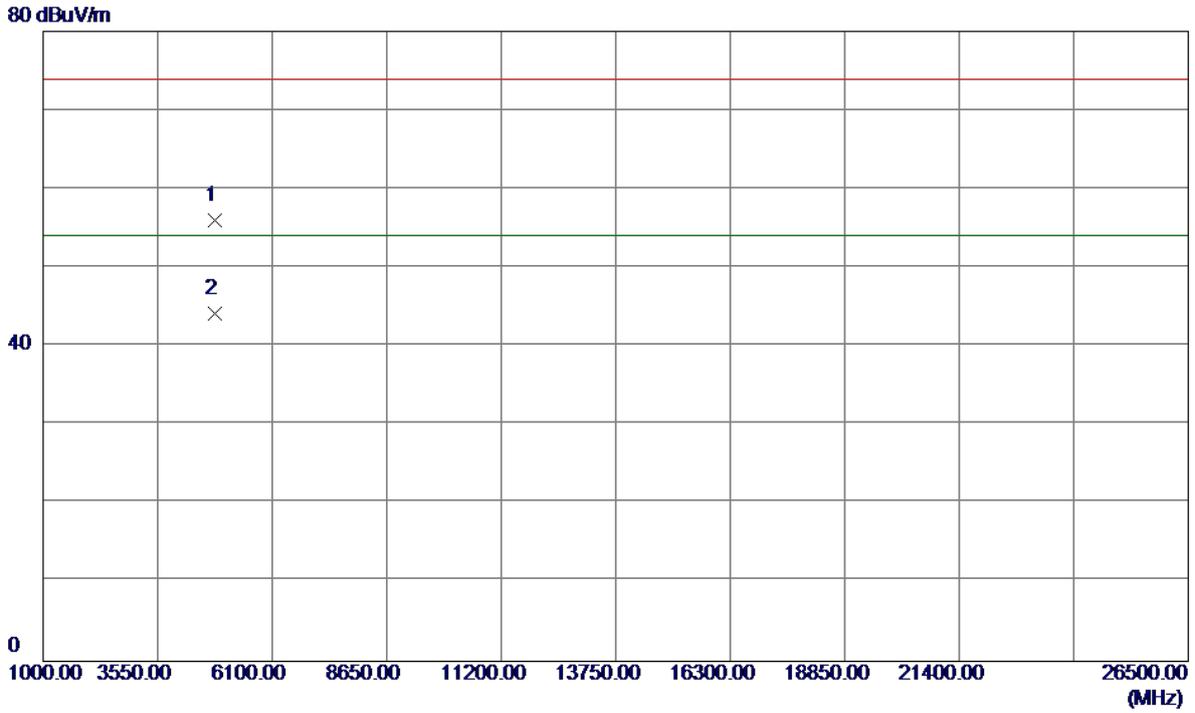
**Horizontal**



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	28.60	32.38	60.98	74.00	-13.02	Peak	
2	2390.0000	15.87	32.38	48.25	54.00	-5.75	AVG	
3 *	2410.2000	69.35	32.45	101.80	54.00	47.80	AVG	NO LIMIT
4	2413.8000	78.02	32.46	110.48	74.00	36.48	Peak	NO LIMIT

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

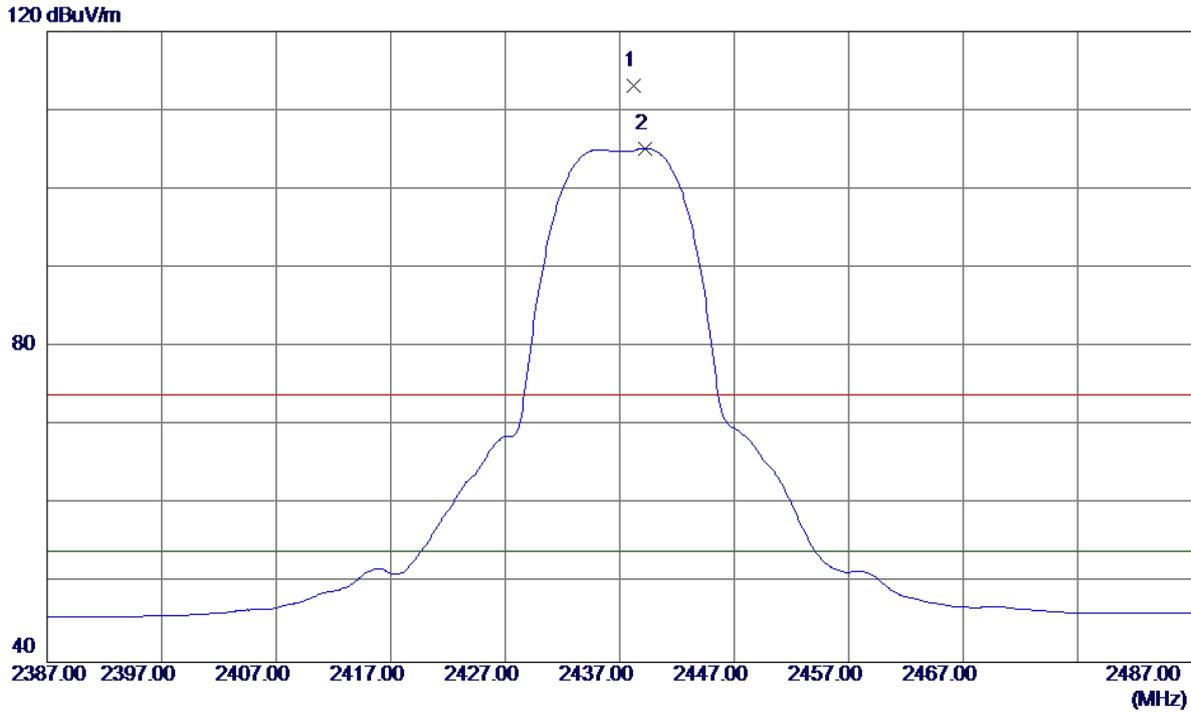
**Horizontal**



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4824.0400	50.53	5.47	56.00	74.00	-18.00	Peak	
2 *	4825.8200	38.69	5.48	44.17	54.00	-9.83	AVG	

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

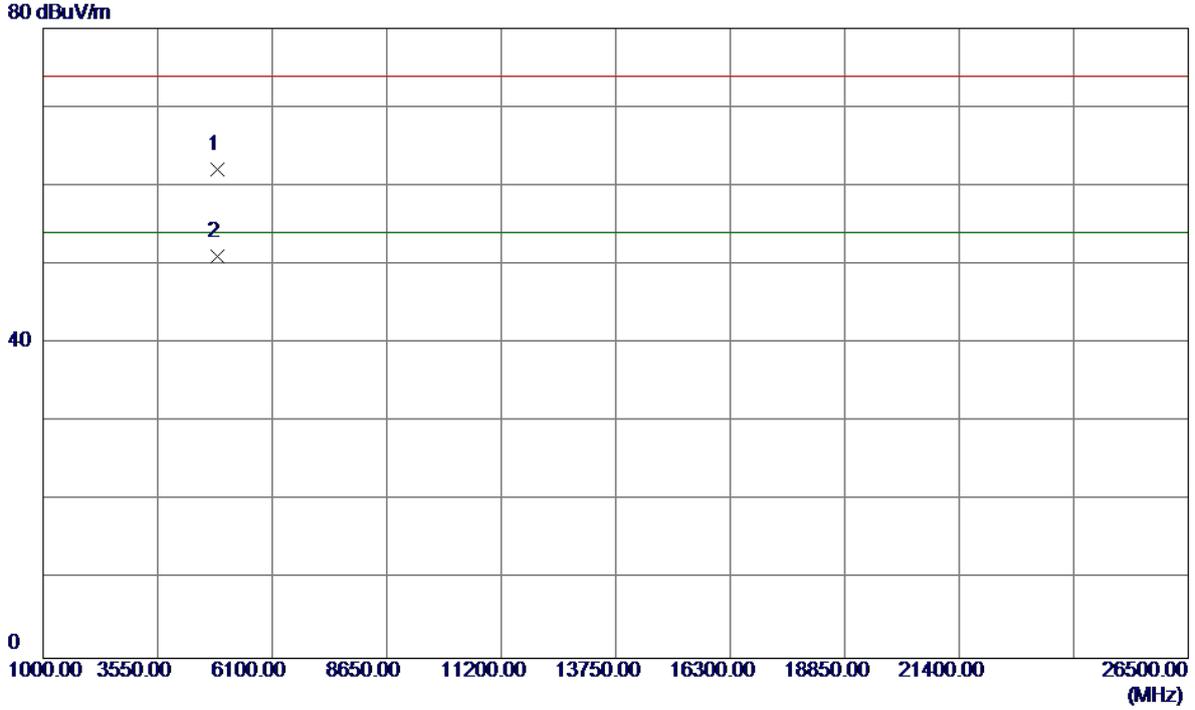
**Vertical**



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2438.2000	80.64	32.55	113.19	74.00	39.19	Peak	NO LIMIT
2 *	2439.2000	72.62	32.55	105.17	54.00	51.17	AVG	NO LIMIT

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

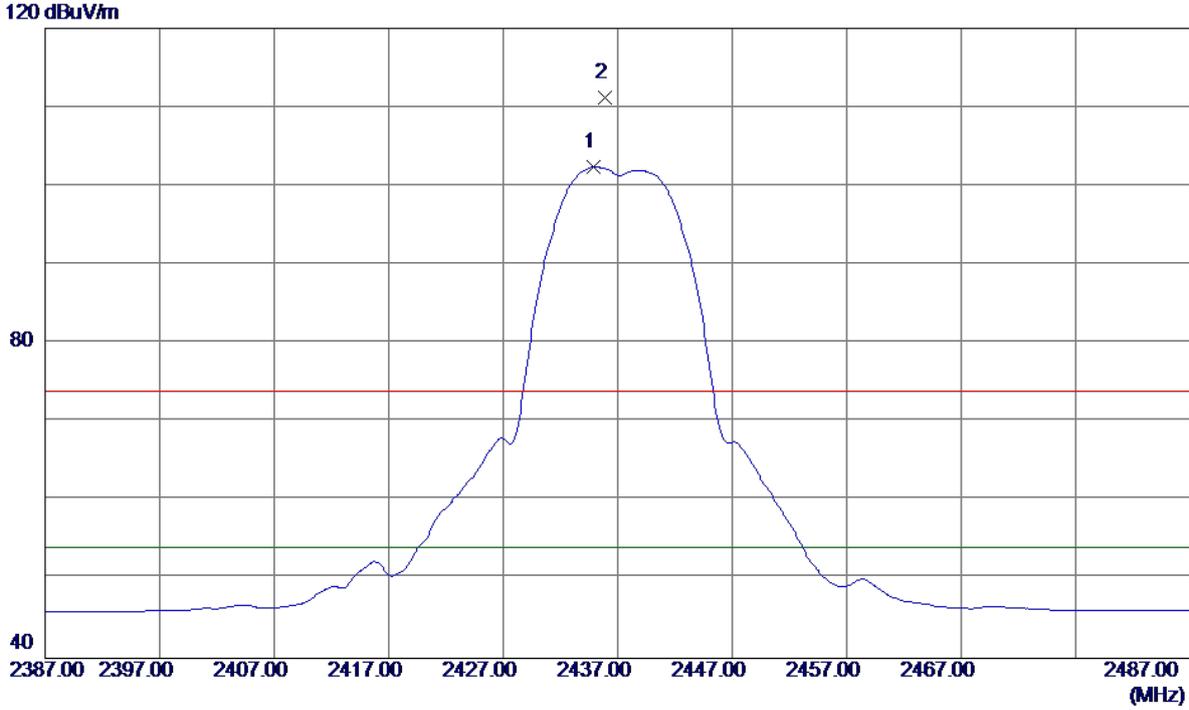
**Vertical**



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4874.1000	56.44	5.61	62.05	74.00	-11.95	Peak	
2 *	4876.0000	45.35	5.62	50.97	54.00	-3.03	AVG	

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

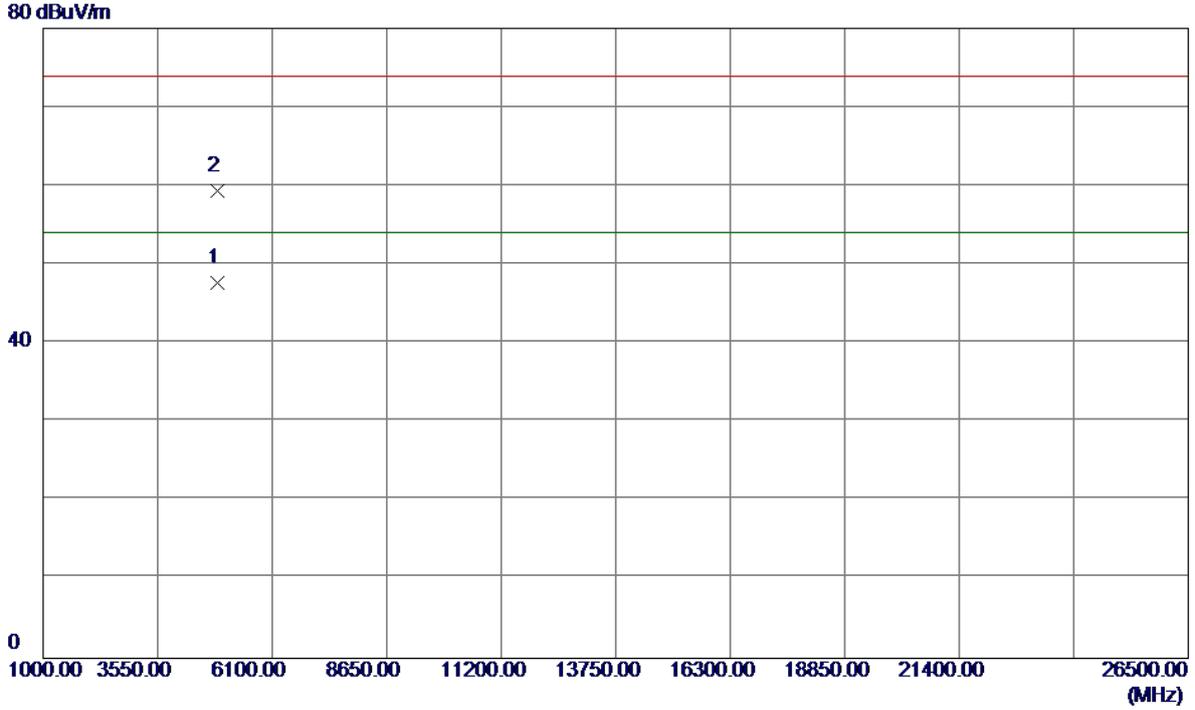
**Horizontal**



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	2434.9000	69.81	32.54	102.35	54.00	48.35	AVG	NO LIMIT
2	2435.9000	78.68	32.54	111.22	74.00	37.22	Peak	NO LIMIT

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

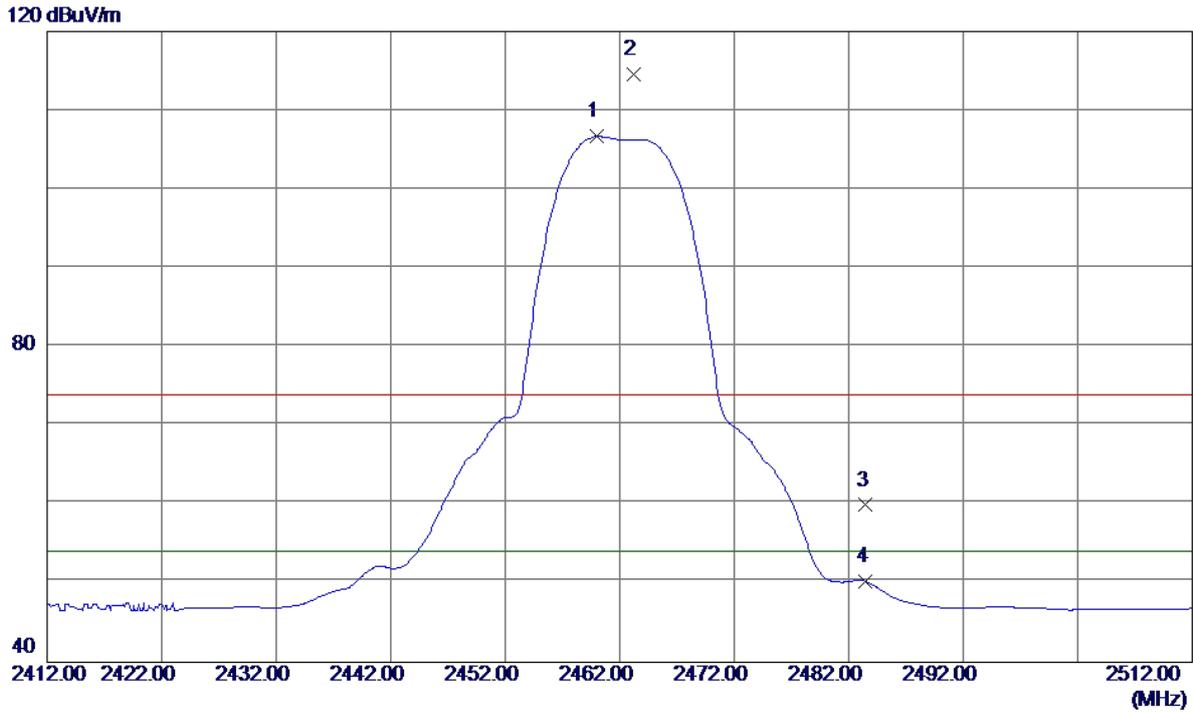
**Horizontal**



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4871.9600	42.04	5.60	47.64	54.00	-6.36	AVG	
2	4874.0400	53.72	5.61	59.33	74.00	-14.67	Peak	

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

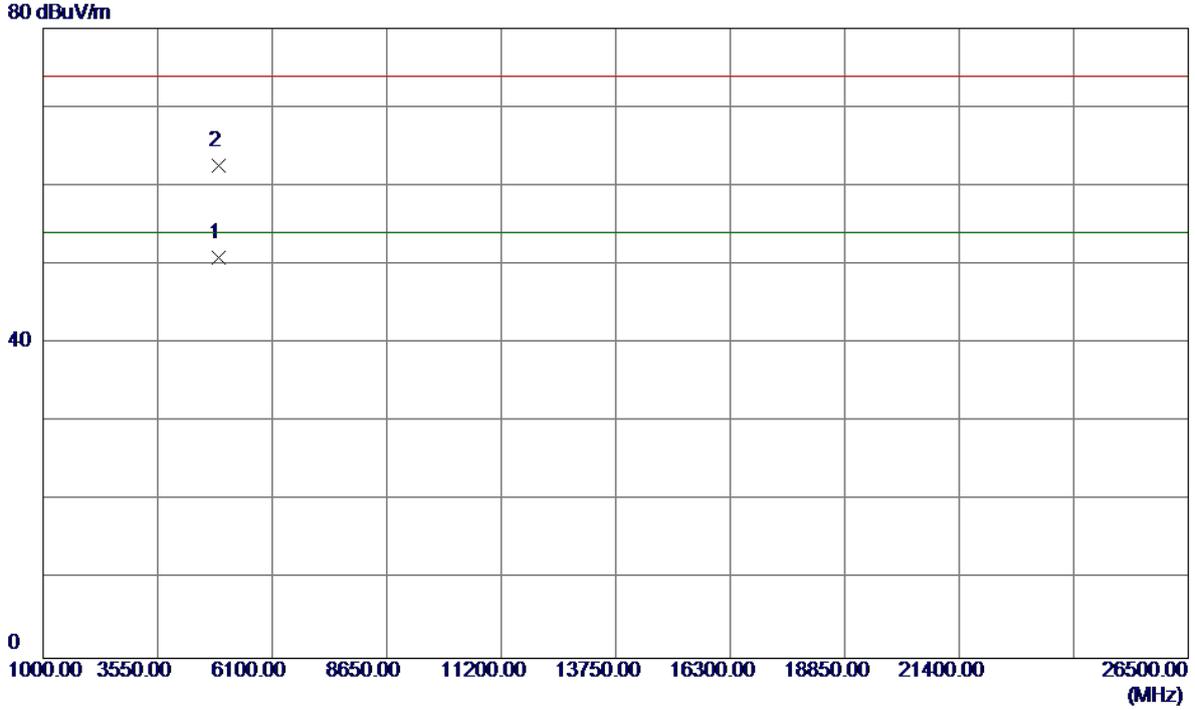
**Vertical**



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	2460.0000	74.06	32.63	106.69	54.00	52.69	AVG	NO LIMIT
2	2463.2000	81.84	32.64	114.48	74.00	40.48	Peak	NO LIMIT
3	2483.5000	27.21	32.71	59.92	74.00	-14.08	Peak	
4	2483.5000	17.54	32.71	50.25	54.00	-3.75	AVG	

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

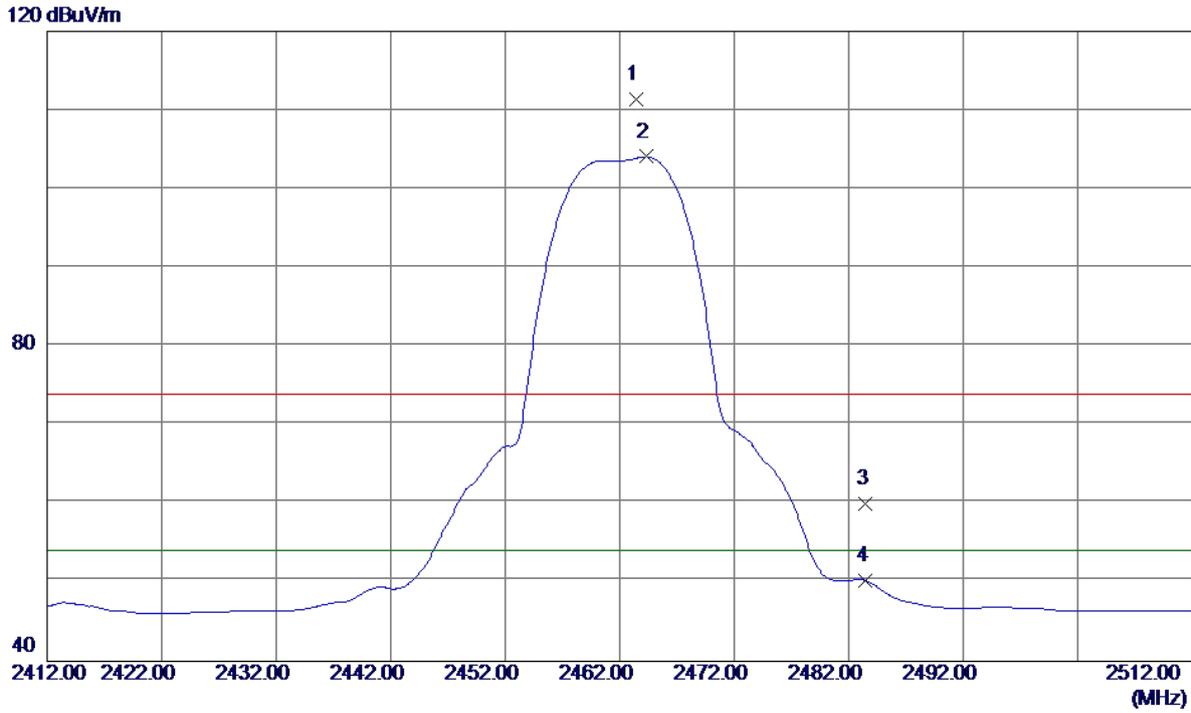
**Vertical**



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4921.9500	45.10	5.74	50.84	54.00	-3.16	AVG	
2	4923.9500	56.76	5.74	62.50	74.00	-11.50	Peak	

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

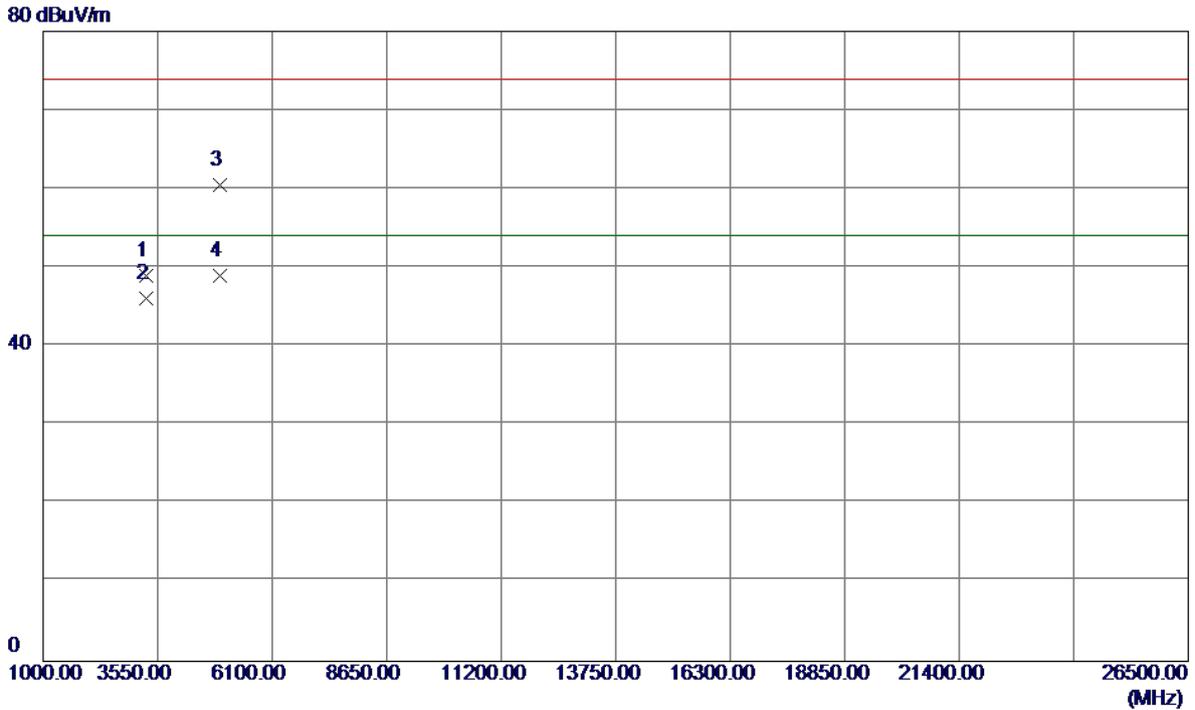
**Horizontal**



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2463.4000	78.75	32.64	111.39	74.00	37.39	Peak	NO LIMIT
2 *	2464.3000	71.44	32.64	104.08	54.00	50.08	AVG	NO LIMIT
3	2483.5000	27.34	32.71	60.05	74.00	-13.95	Peak	
4	2483.5000	17.52	32.71	50.23	54.00	-3.77	AVG	

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

**Horizontal**

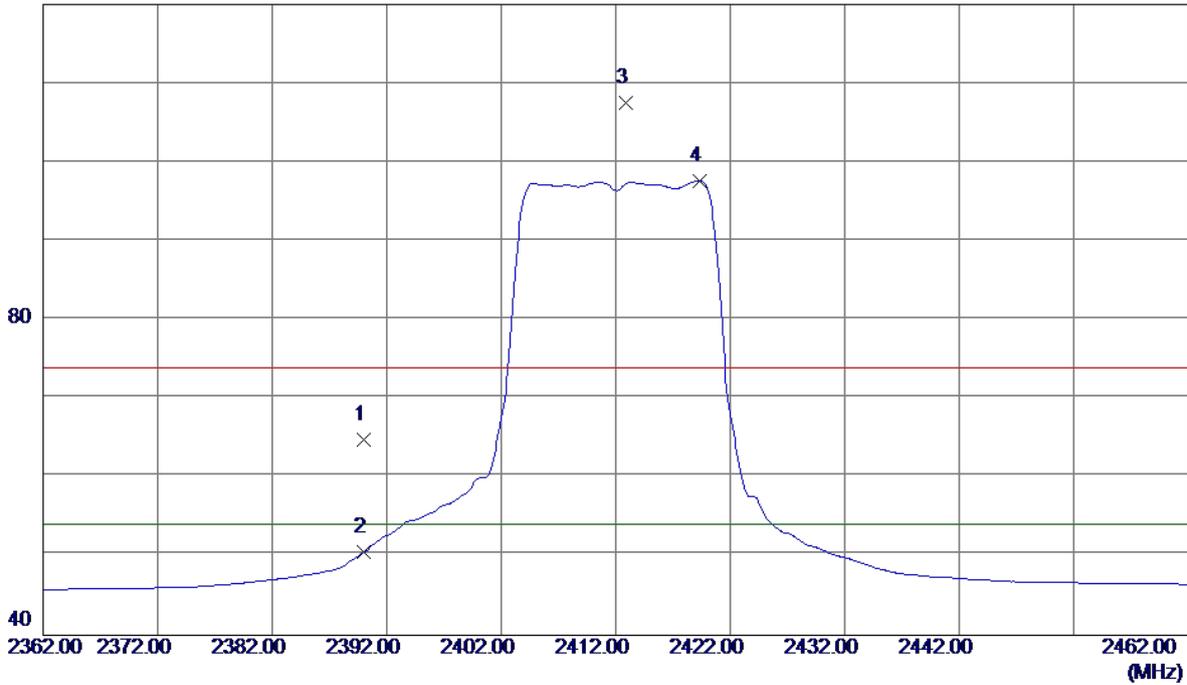


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	3282.7250	47.20	1.70	48.90	74.00	-25.10	Peak	
2	3282.7300	44.44	1.70	46.14	54.00	-7.86	AVG	
3	4924.2500	54.74	5.75	60.49	74.00	-13.51	Peak	
4 *	4925.9500	43.17	5.75	48.92	54.00	-5.08	AVG	

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

**Vertical**

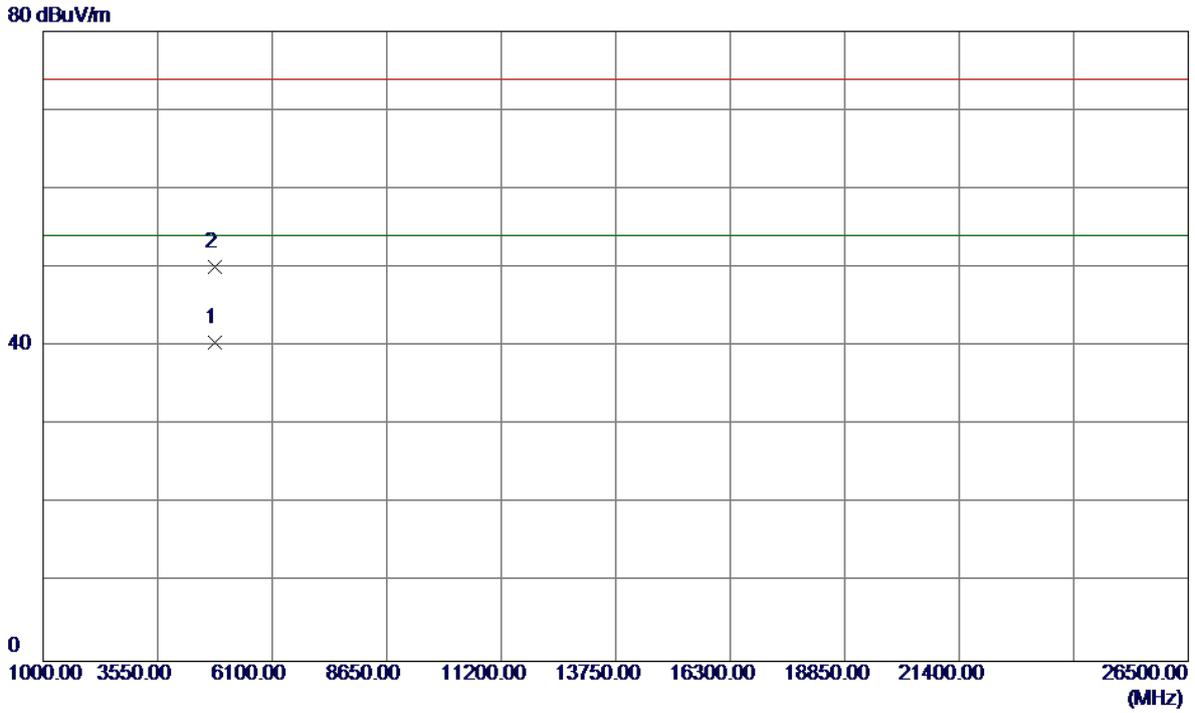
120 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	32.39	32.38	64.77	74.00	-9.23	Peak	
2	2390.0000	18.12	32.38	50.50	54.00	-3.50	AVG	
3	2412.9000	75.12	32.46	107.58	74.00	33.58	Peak	NO LIMIT
4 *	2419.3000	65.16	32.48	97.64	54.00	43.64	AVG	NO LIMIT

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

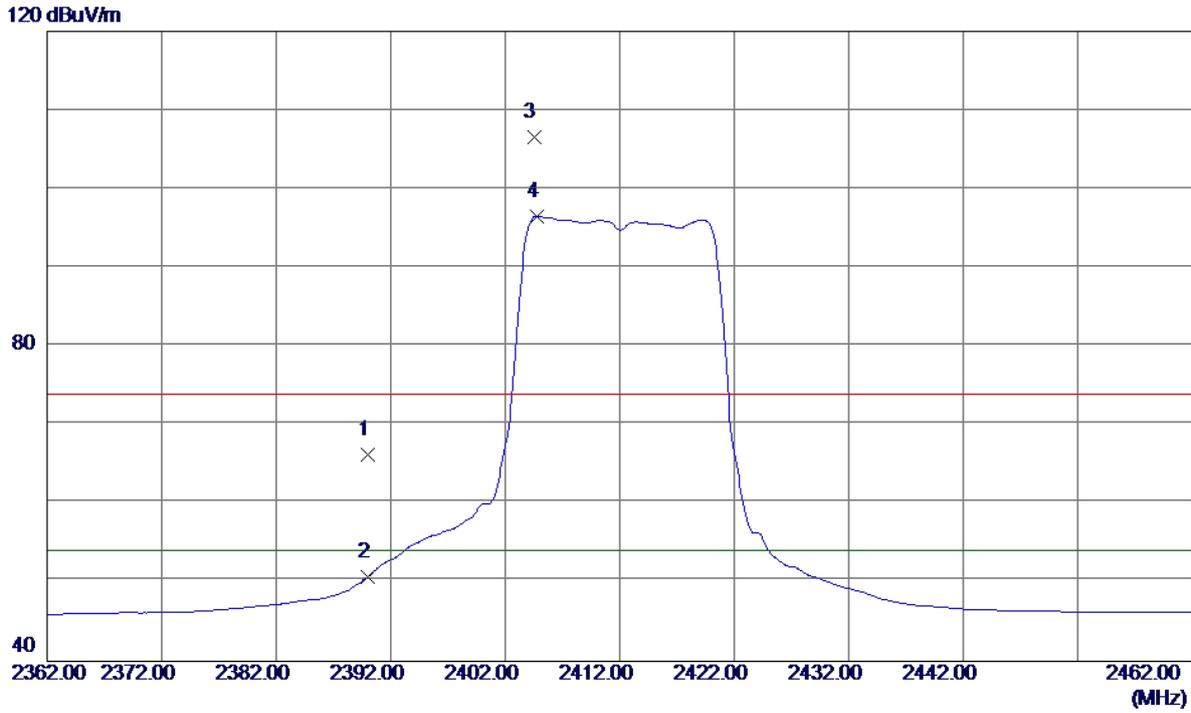
**Vertical**



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4824.0500	35.05	5.47	40.52	54.00	-13.48	AVG	
2	4824.2000	44.53	5.48	50.01	74.00	-23.99	Peak	

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

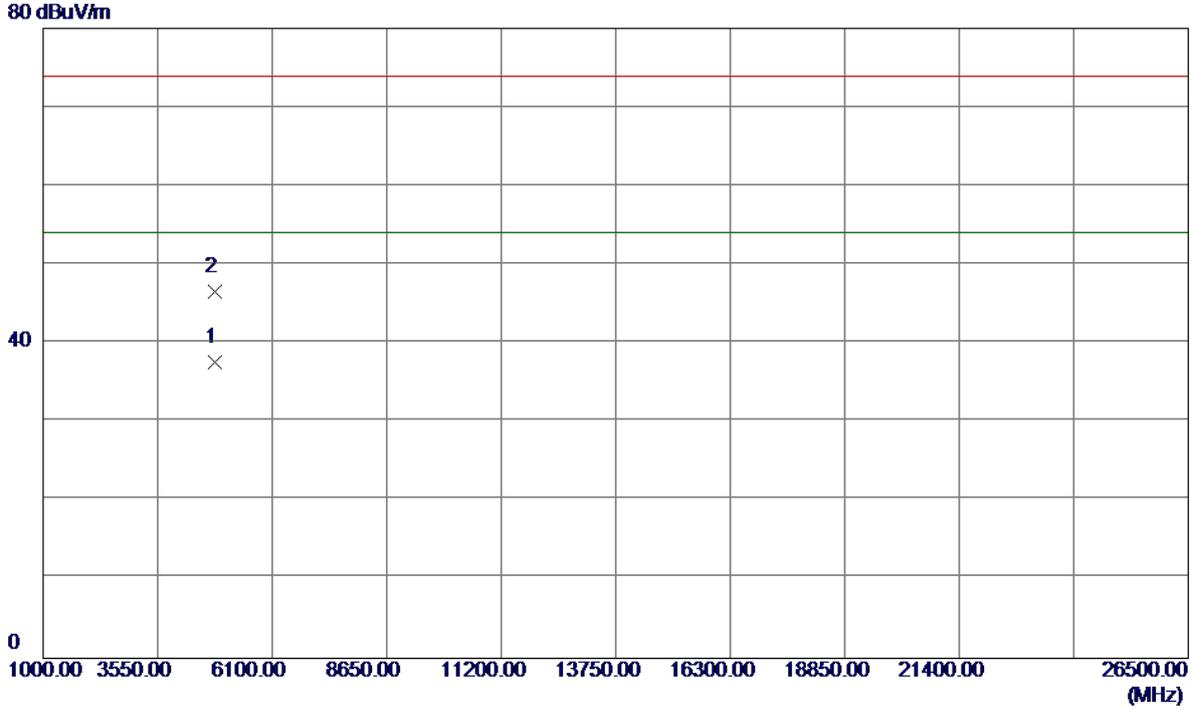
**Horizontal**



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	33.91	32.38	66.29	74.00	-7.71	Peak	
2	2390.0000	18.36	32.38	50.74	54.00	-3.26	AVG	
3	2404.5000	74.17	32.43	106.60	74.00	32.60	Peak	NO LIMIT
4 *	2404.8000	64.06	32.43	96.49	54.00	42.49	AVG	NO LIMIT

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

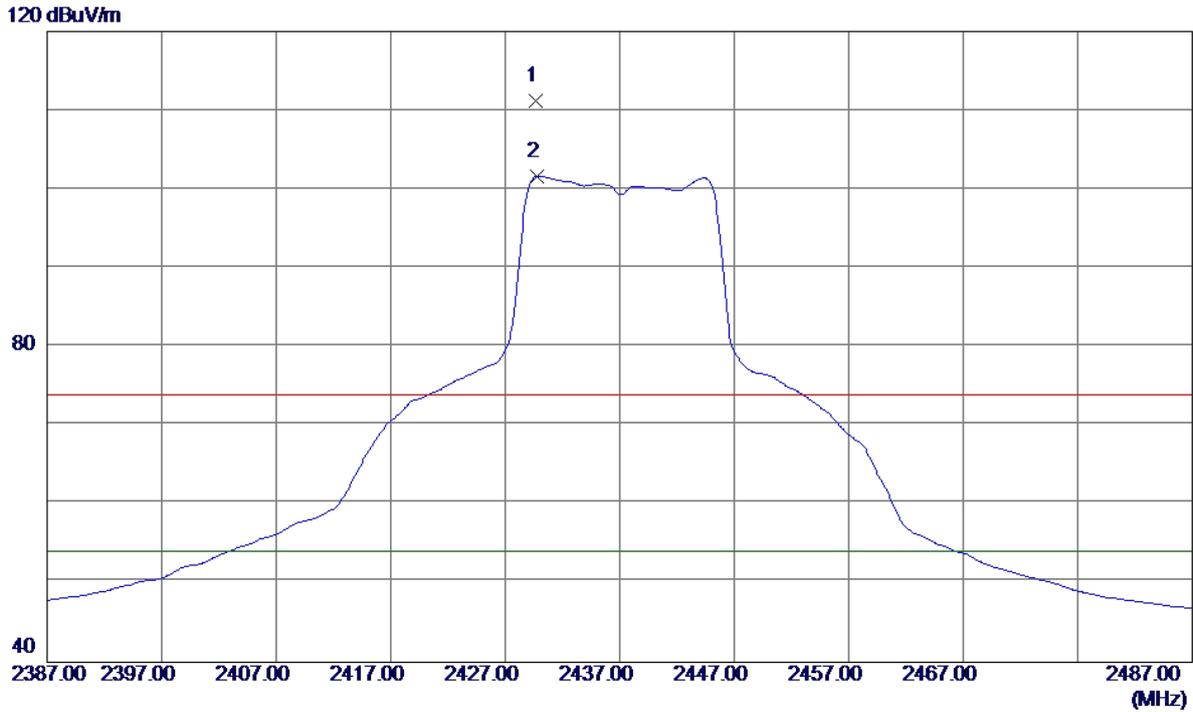
**Horizontal**



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4823.9800	32.11	5.47	37.58	54.00	-16.42	AVG	
2	4824.4800	41.10	5.48	46.58	74.00	-27.42	Peak	

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

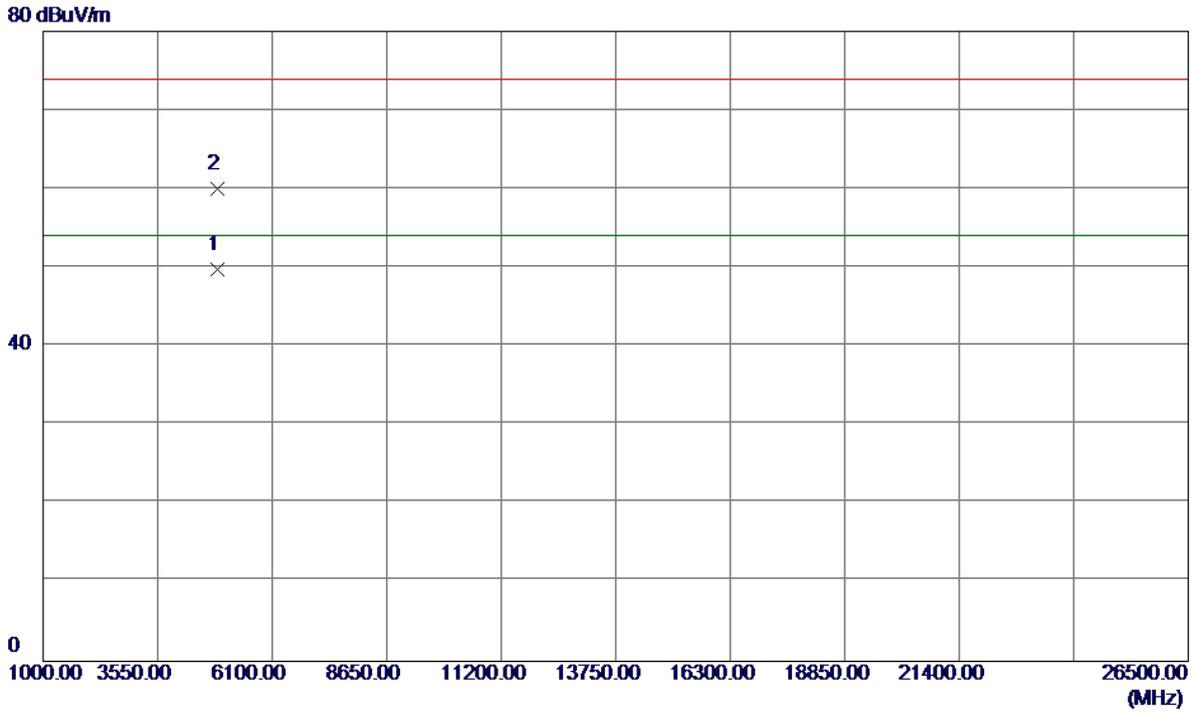
**Vertical**



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2429.7000	78.75	32.52	111.27	74.00	37.27	Peak	NO LIMIT
2 *	2429.8000	69.12	32.52	101.64	54.00	47.64	AVG	NO LIMIT

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

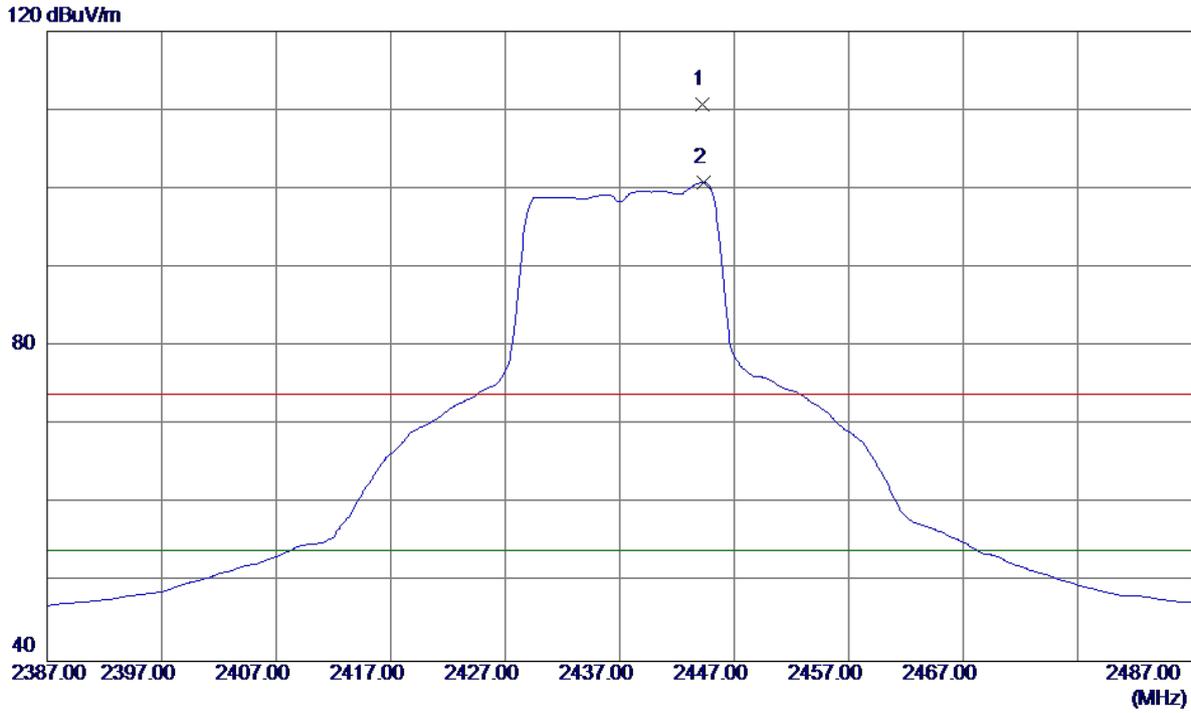
**Vertical**



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4874.0000	44.18	5.61	49.79	54.00	-4.21	AVG	
2	4874.1500	54.37	5.61	59.98	74.00	-14.02	Peak	

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

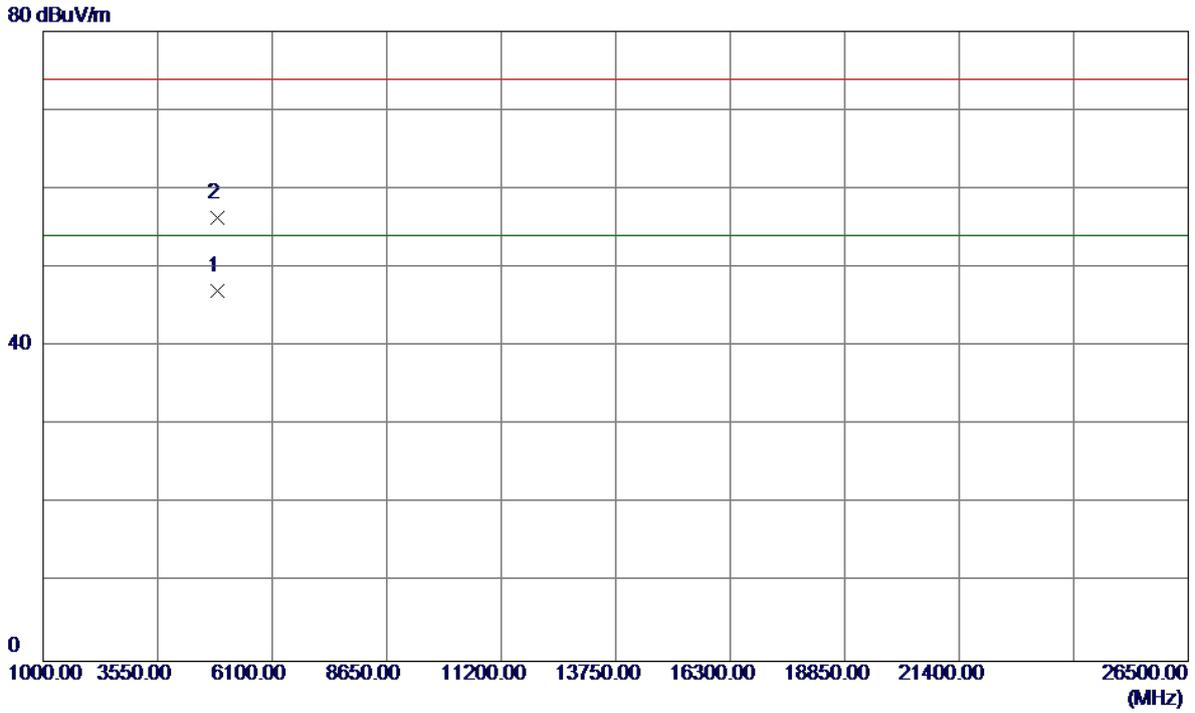
**Horizontal**



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2444.2000	78.10	32.57	110.67	74.00	36.67	Peak	NO LIMIT
2 *	2444.3000	68.24	32.57	100.81	54.00	46.81	AVG	NO LIMIT

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

**Horizontal**

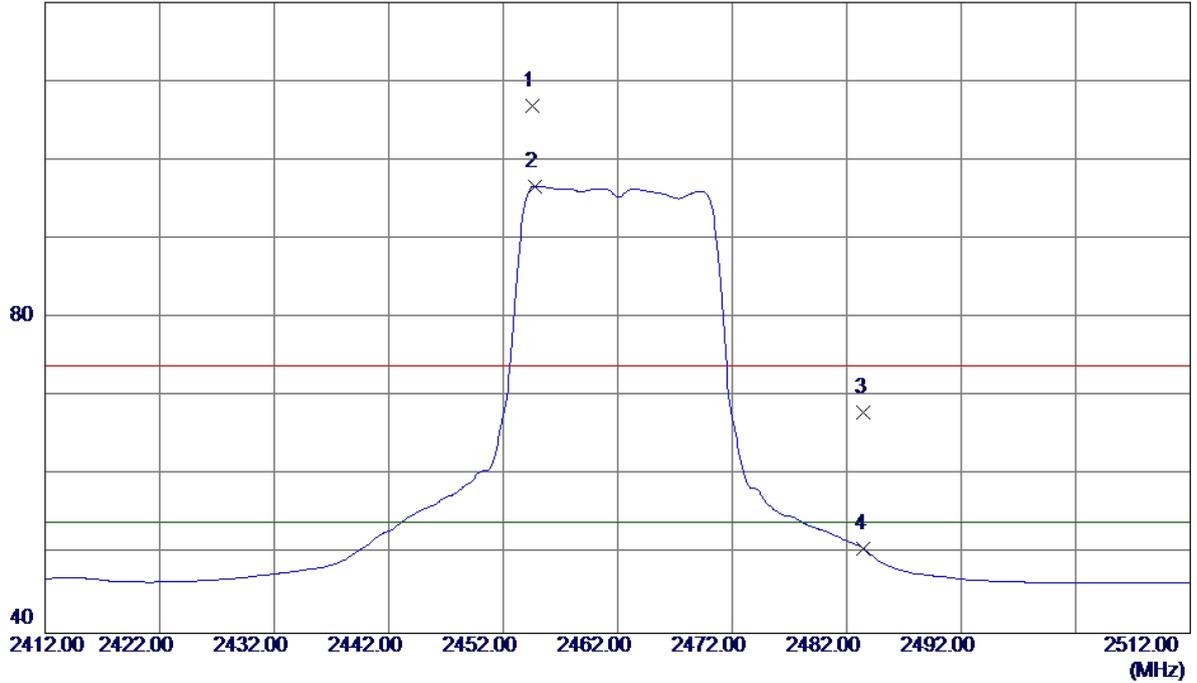


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4874.3200	41.50	5.61	47.11	54.00	-6.89	AVG	
2	4875.7599	50.65	5.61	56.26	74.00	-17.74	Peak	

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

**Vertical**

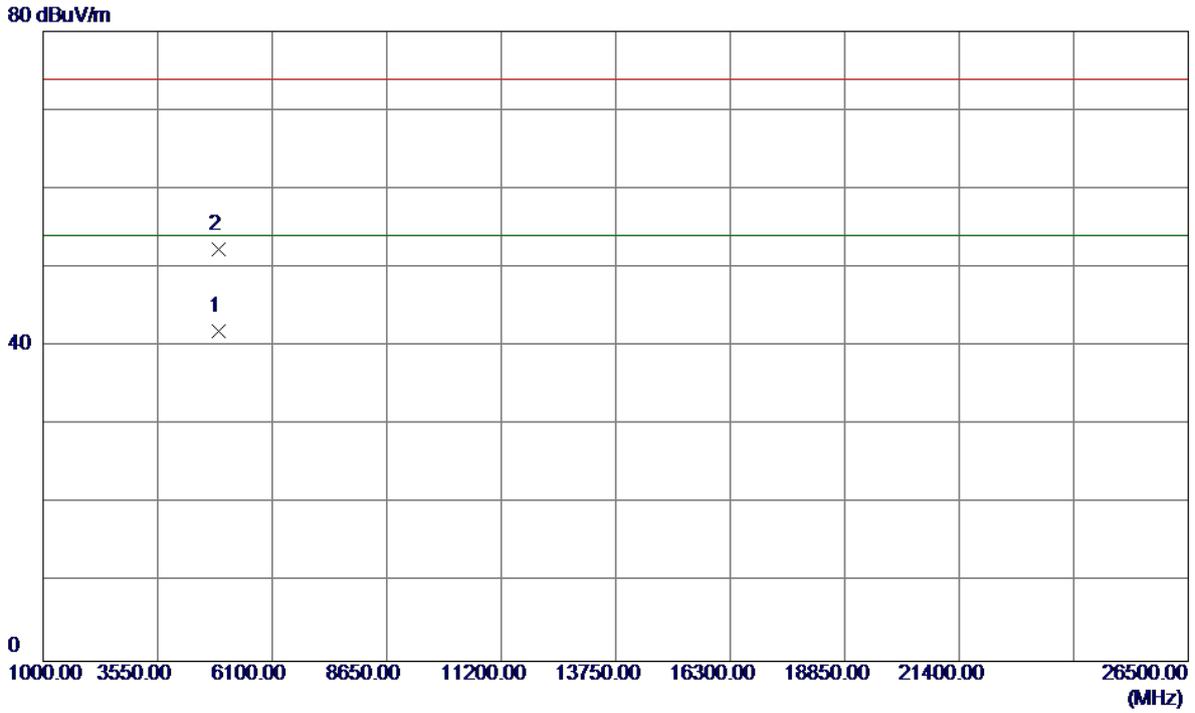
120 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2454.6000	74.23	32.61	106.84	74.00	32.84	Peak	NO LIMIT
2 *	2454.8000	64.10	32.61	96.71	54.00	42.71	AVG	NO LIMIT
3	2483.5000	35.35	32.71	68.06	74.00	-5.94	Peak	
4	2483.5000	17.98	32.71	50.69	54.00	-3.31	AVG	

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

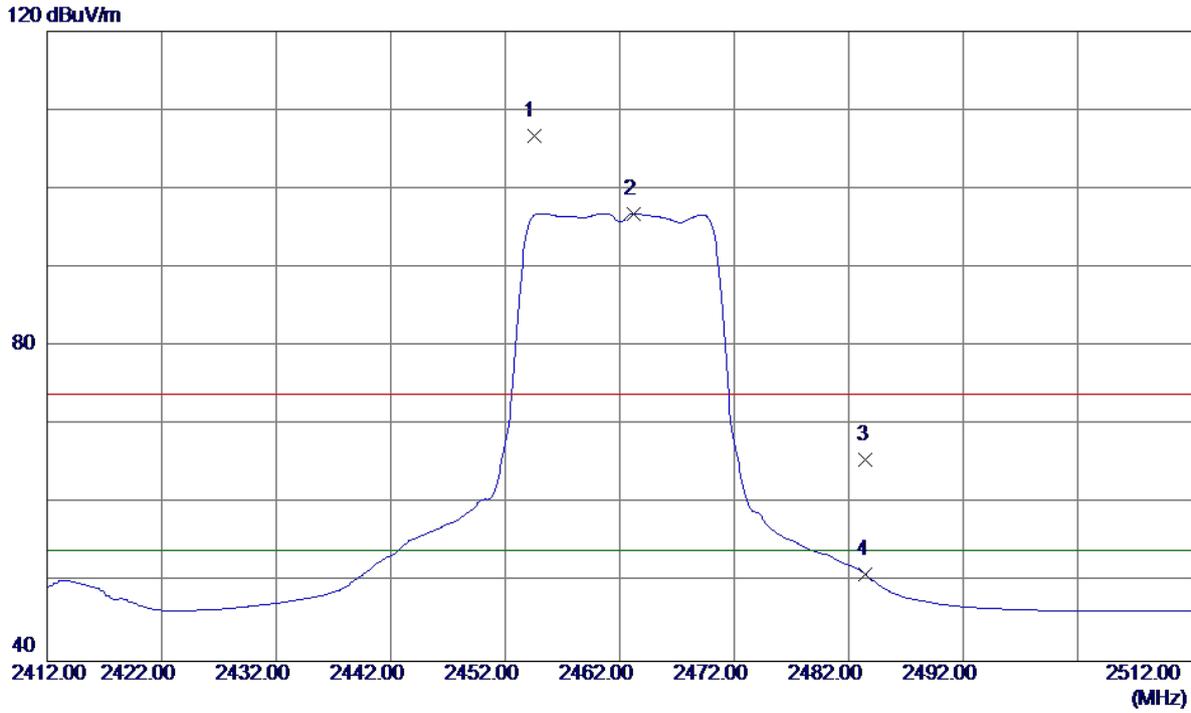
**Vertical**



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4924.1000	36.18	5.75	41.93	54.00	-12.07	AVG	
2	4924.1500	46.53	5.75	52.28	74.00	-21.72	Peak	

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

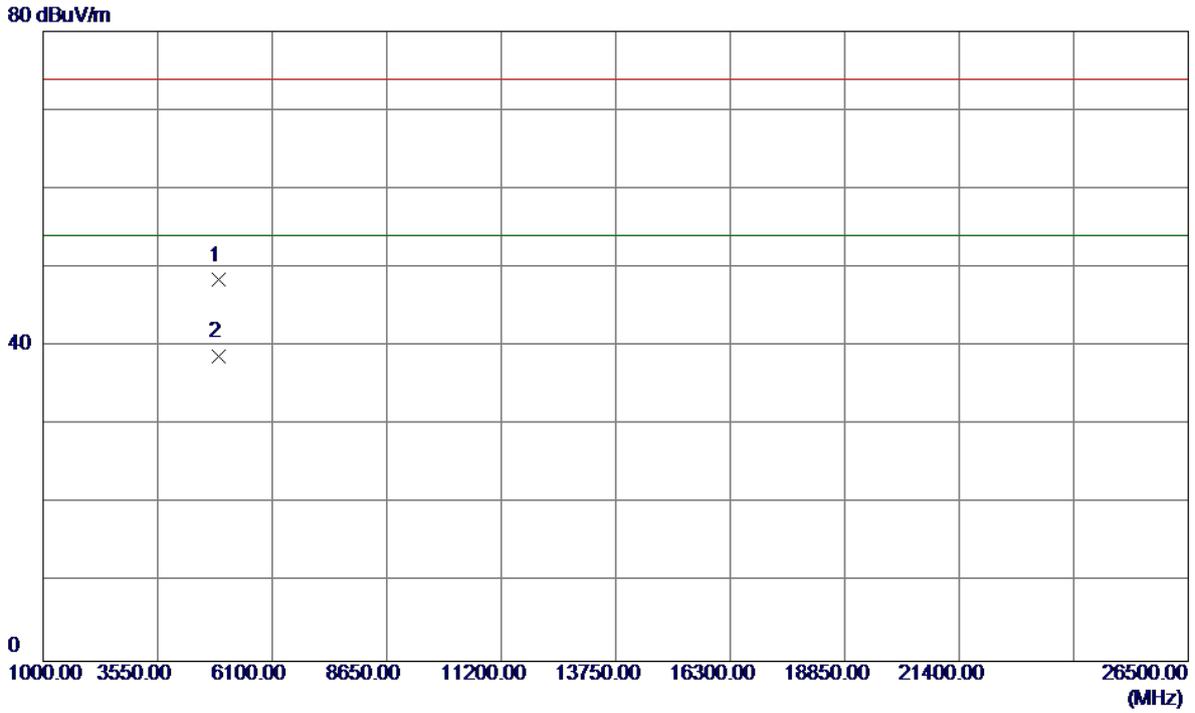
**Horizontal**



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2454.5000	74.19	32.61	106.80	74.00	32.80	Peak	NO LIMIT
2 *	2463.2000	64.20	32.64	96.84	54.00	42.84	AVG	NO LIMIT
3	2483.5000	32.84	32.71	65.55	74.00	-8.45	Peak	
4	2483.5000	18.30	32.71	51.01	54.00	-2.99	AVG	

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

**Horizontal**

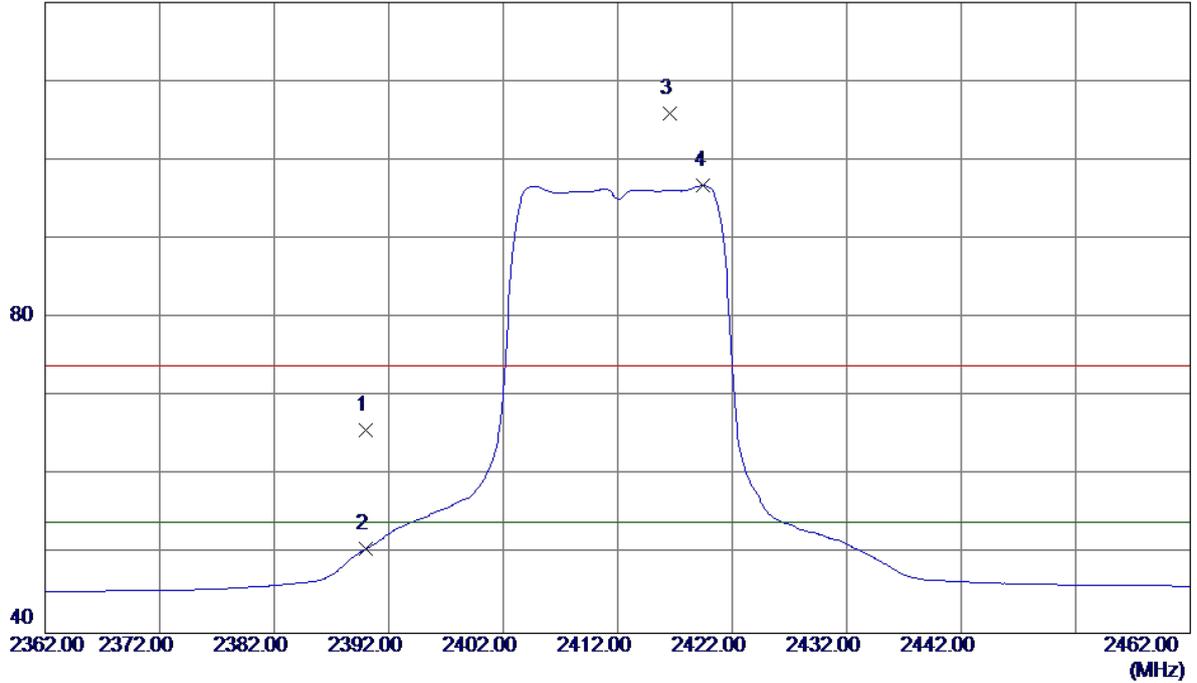


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4924.1400	42.65	5.75	48.40	74.00	-25.60	Peak	
2 *	4924.1600	33.04	5.75	38.79	54.00	-15.21	AVG	

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

**Vertical**

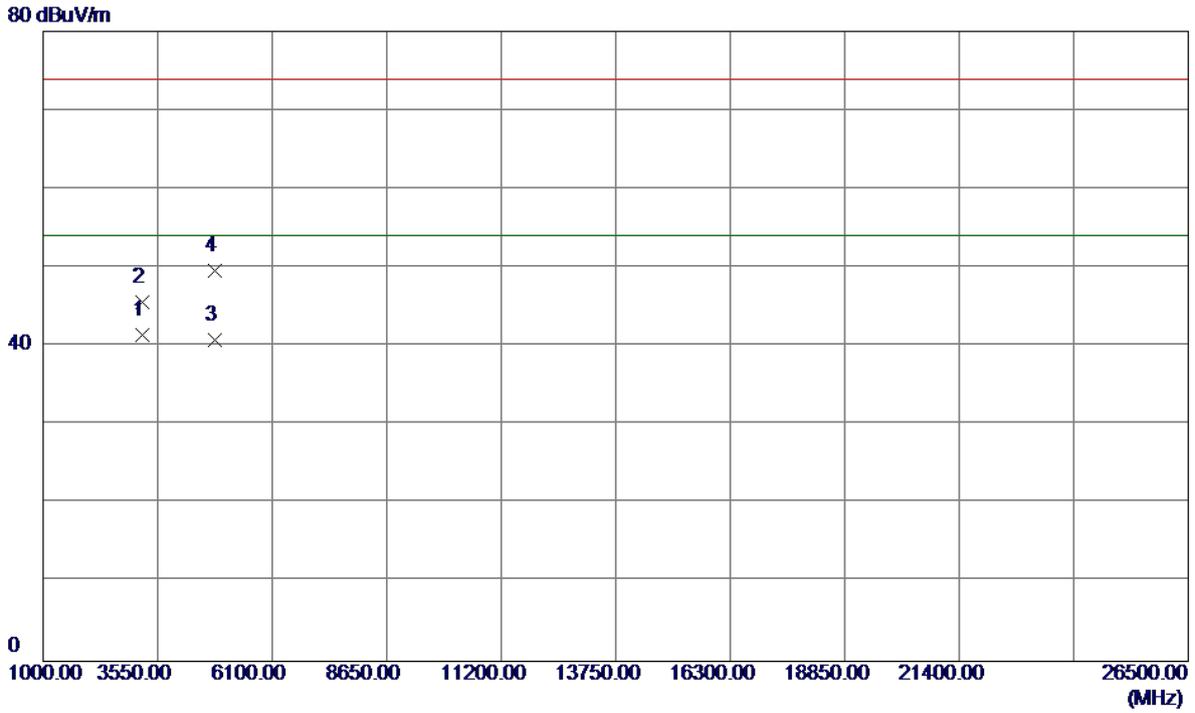
120 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	33.32	32.38	65.70	74.00	-8.30	Peak	
2	2390.0000	18.31	32.38	50.69	54.00	-3.31	AVG	
3	2416.6000	73.39	32.47	105.86	74.00	31.86	Peak	NO LIMIT
4 *	2419.5000	64.29	32.48	96.77	54.00	42.77	AVG	NO LIMIT

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

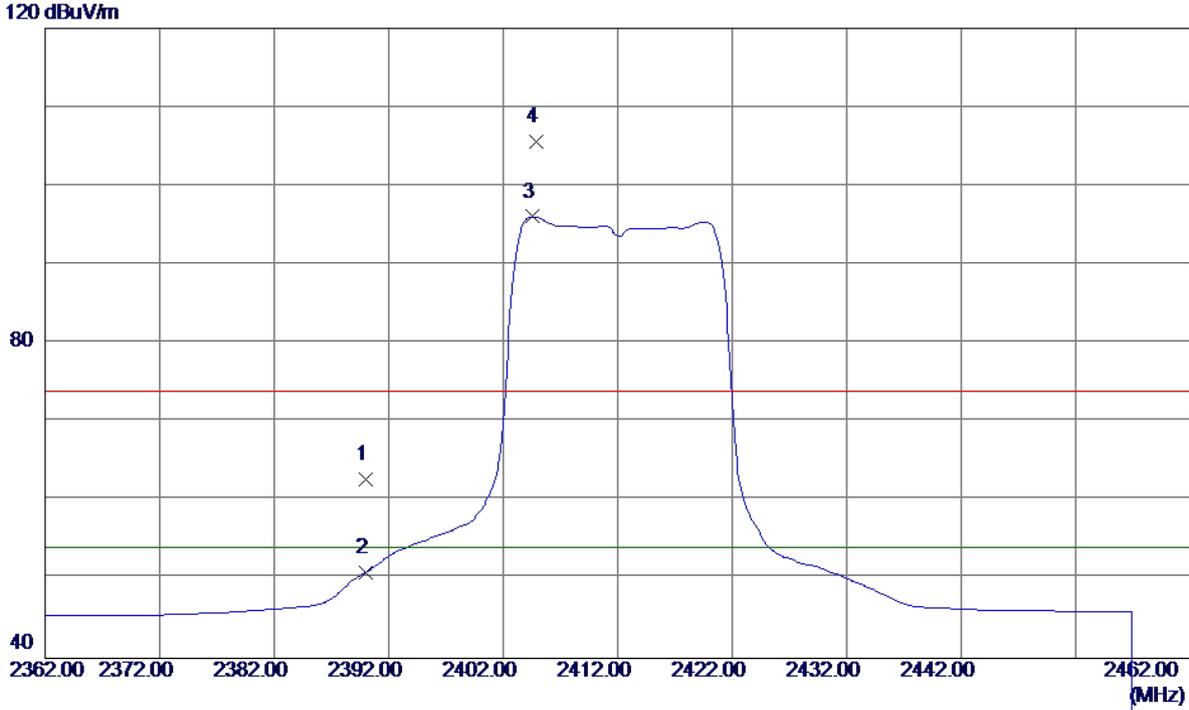
**Vertical**



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	3215.9920	39.86	1.57	41.43	54.00	-12.57	AVG	
2	3216.1040	44.07	1.57	45.64	74.00	-28.36	Peak	
3	4823.8800	35.34	5.47	40.81	54.00	-13.19	AVG	
4	4824.0000	44.06	5.47	49.53	74.00	-24.47	Peak	

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

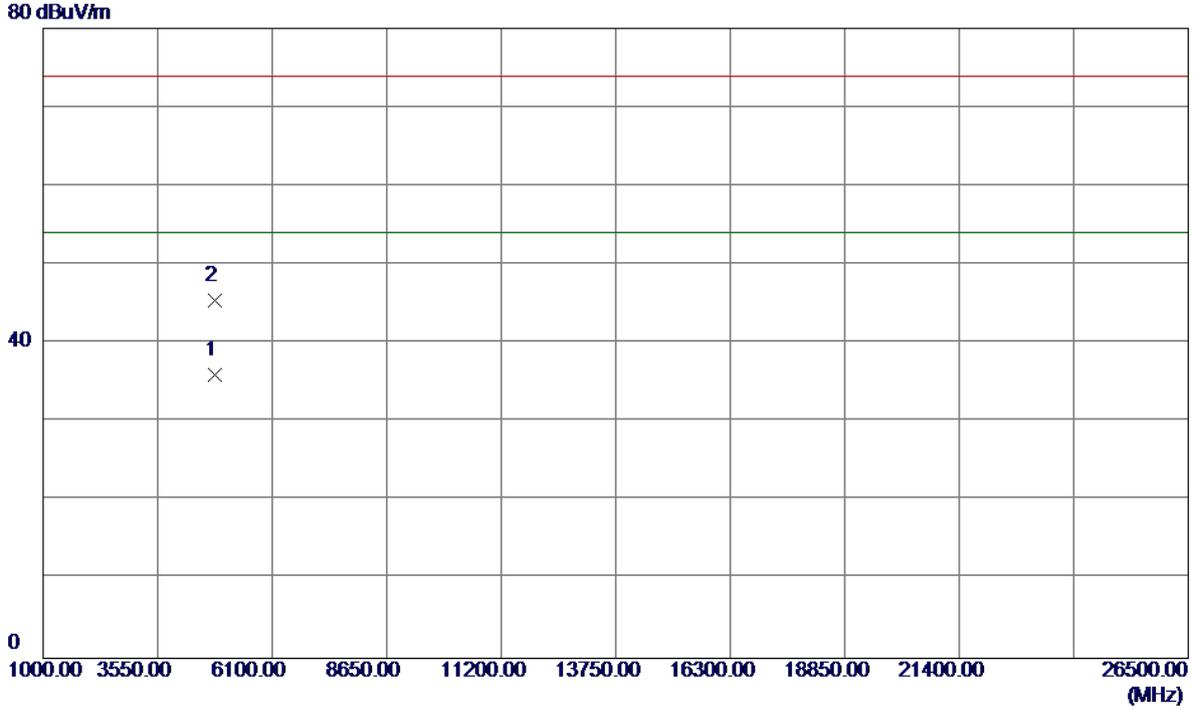
**Horizontal**



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	2390.0000	30.33	32.38	62.71	74.00	-11.29	Peak	
2	2390.0000	18.55	32.38	50.93	54.00	-3.07	AVG	
3 *	2404.6000	63.65	32.43	96.08	54.00	42.08	AVG	NO LIMIT
4	2404.9000	73.12	32.43	105.55	74.00	31.55	Peak	NO LIMIT

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

**Horizontal**

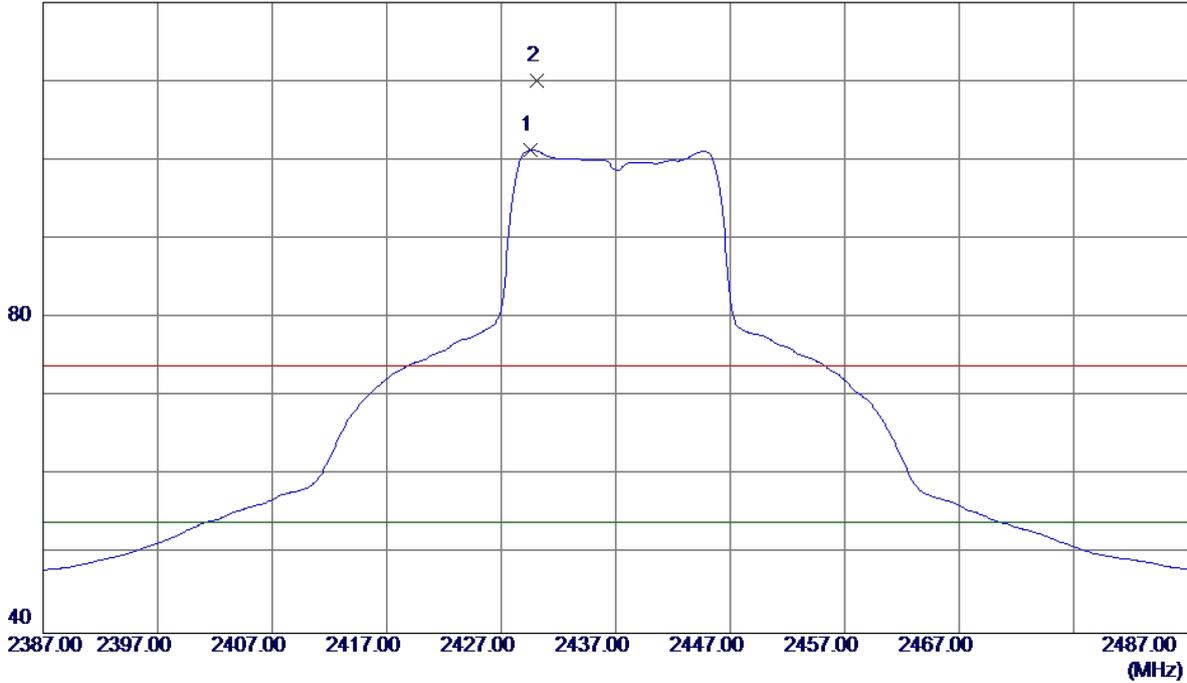


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4823.9600	30.51	5.47	35.98	54.00	-18.02	AVG	
2	4824.0000	39.92	5.47	45.39	74.00	-28.61	Peak	

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

**Vertical**

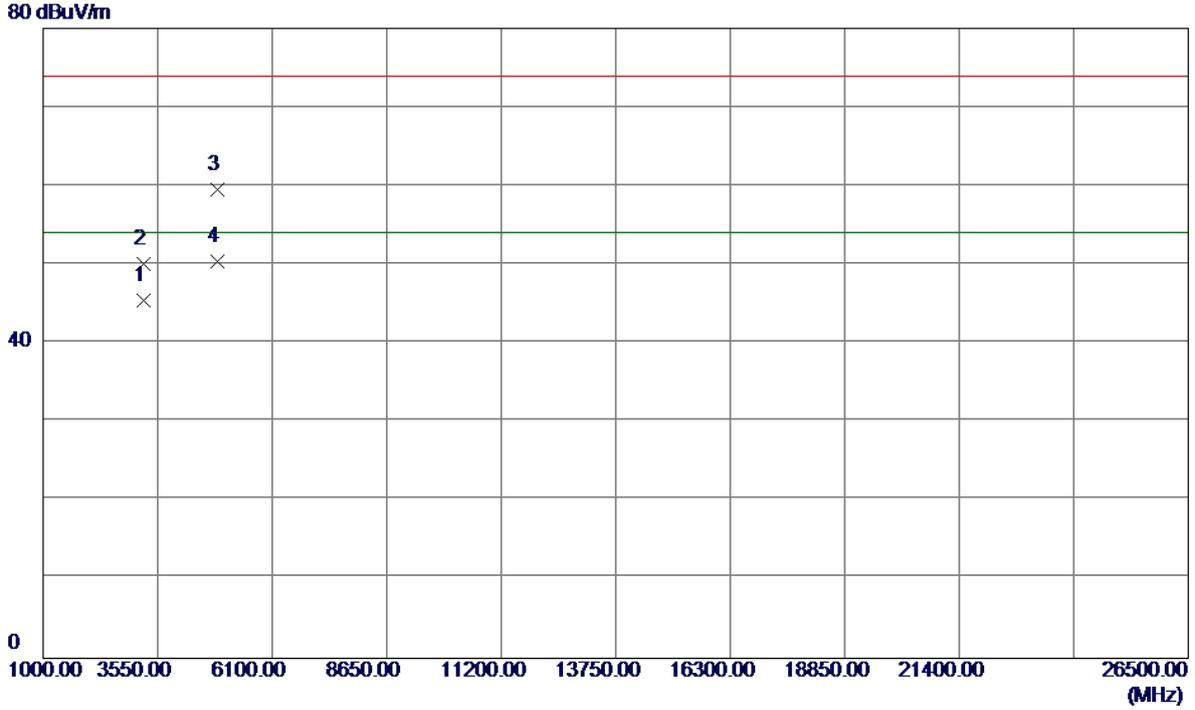
120 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	2429.6000	68.76	32.52	101.28	54.00	47.28	AVG	NO LIMIT
2	2430.1000	77.62	32.52	110.14	74.00	36.14	Peak	NO LIMIT

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

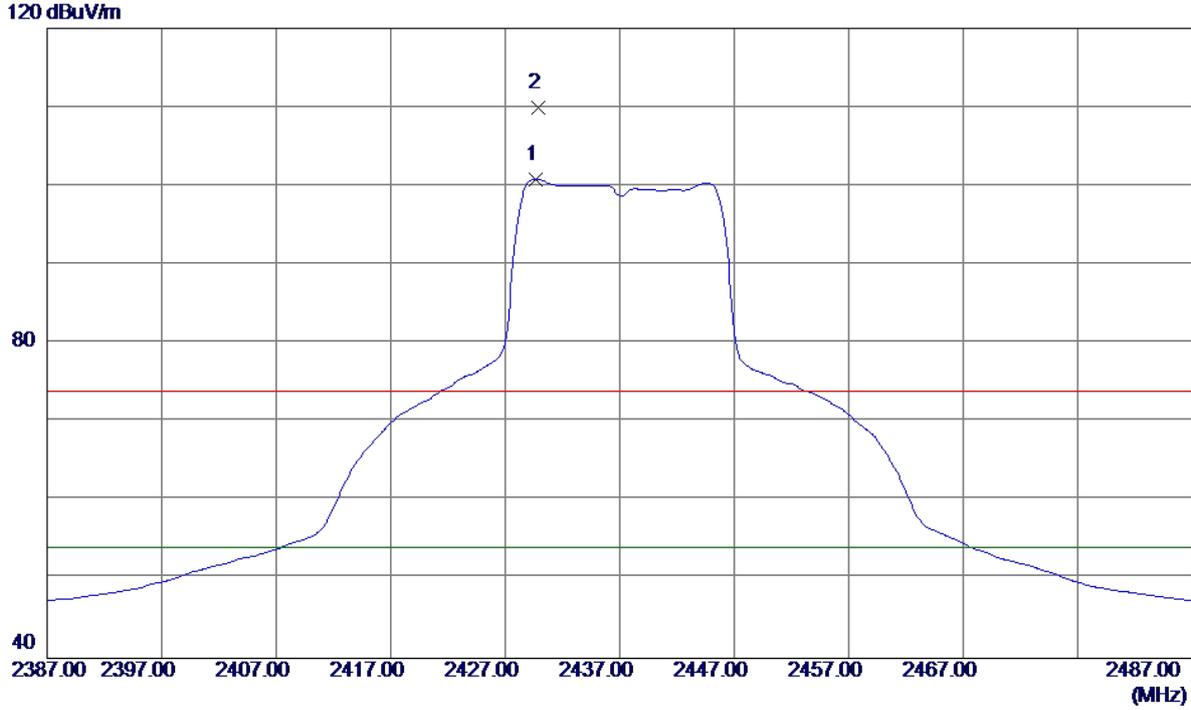
**Vertical**



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	3249.4300	43.84	1.63	45.47	54.00	-8.53	AVG	
2	3249.5300	48.42	1.63	50.05	74.00	-23.95	Peak	
3	4873.1500	53.86	5.61	59.47	74.00	-14.53	Peak	
4 *	4873.9000	44.79	5.61	50.40	54.00	-3.60	AVG	

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

**Horizontal**



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	2429.7000	68.34	32.52	100.86	54.00	46.86	AVG	NO LIMIT
2	2429.9000	77.45	32.52	109.97	74.00	35.97	Peak	NO LIMIT

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

**Horizontal**

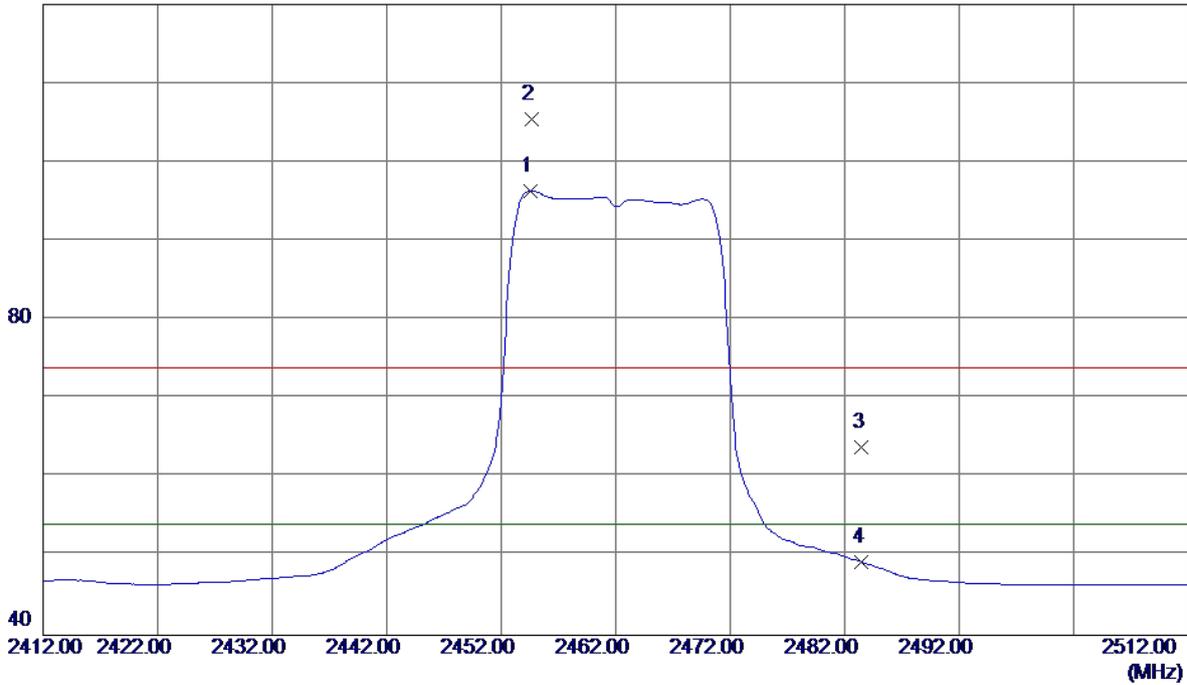


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4874.0800	41.62	5.61	47.23	54.00	-6.77	AVG	
2	4874.6600	51.34	5.61	56.95	74.00	-17.05	Peak	

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

**Vertical**

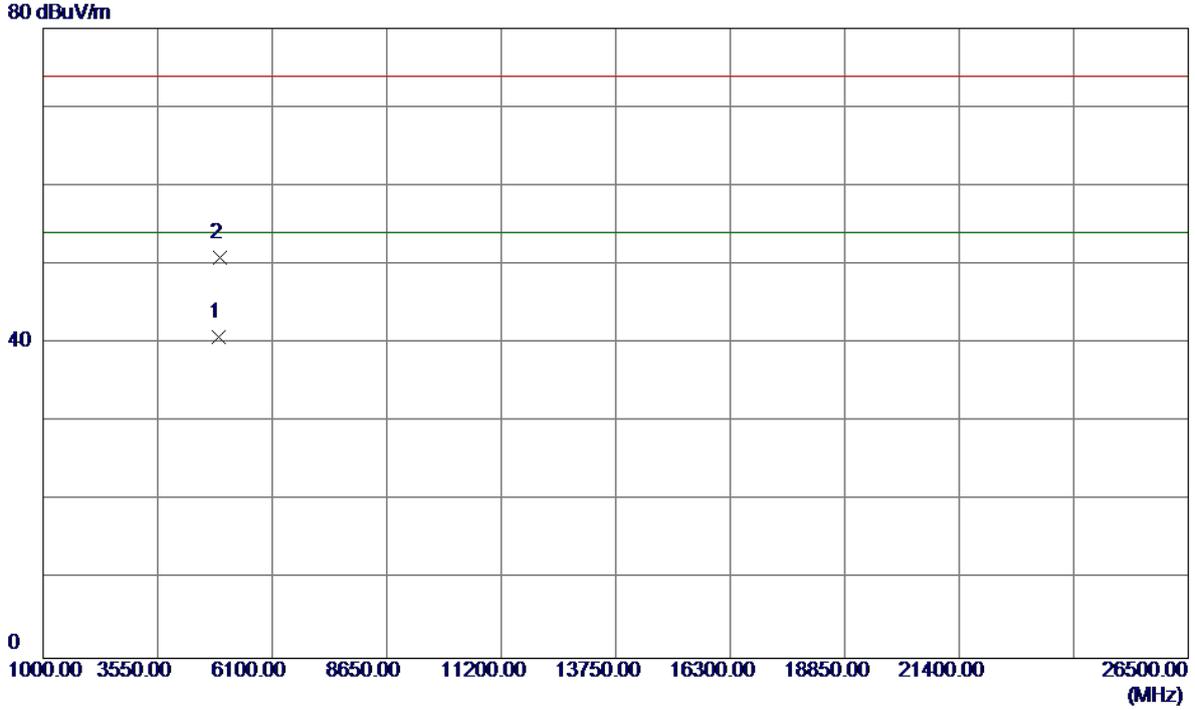
120 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	2454.6000	63.71	32.61	96.32	54.00	42.32	AVG	NO LIMIT
2	2454.7000	72.89	32.61	105.50	74.00	31.50	Peak	NO LIMIT
3	2483.5000	31.17	32.71	63.88	74.00	-10.12	Peak	
4	2483.5000	16.59	32.71	49.30	54.00	-4.70	AVG	

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

**Vertical**

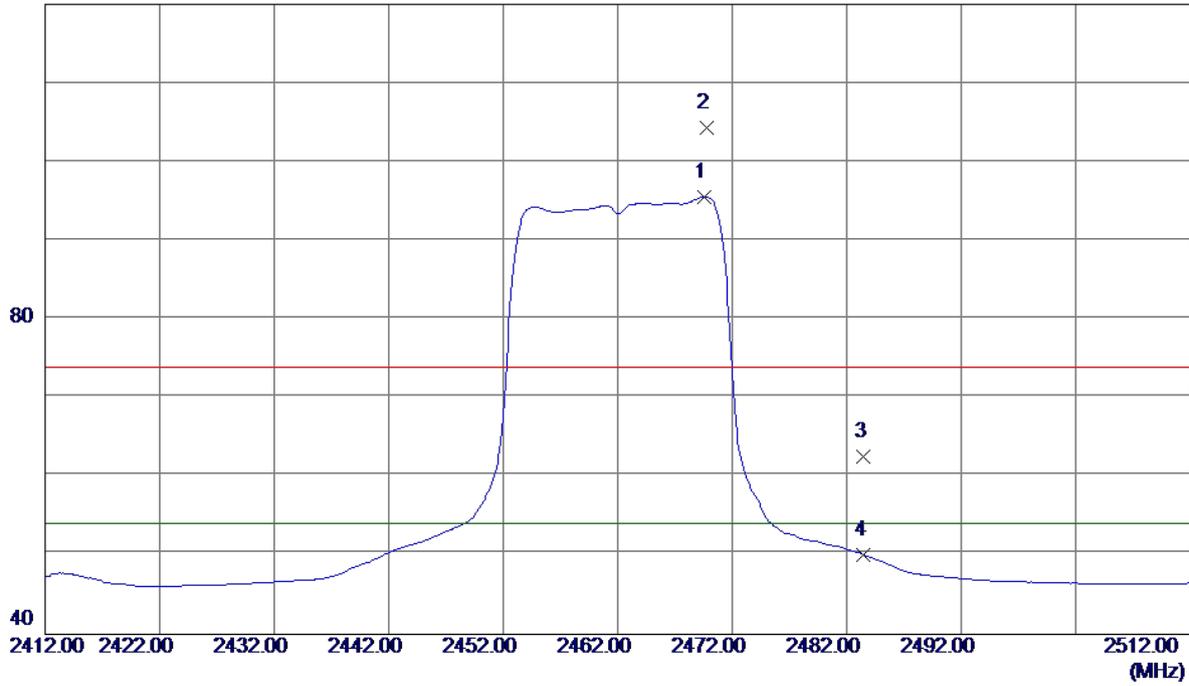


No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4924.0500	35.05	5.74	40.79	54.00	-13.21	AVG	
2	4925.6500	45.19	5.75	50.94	74.00	-23.06	Peak	

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

**Horizontal**

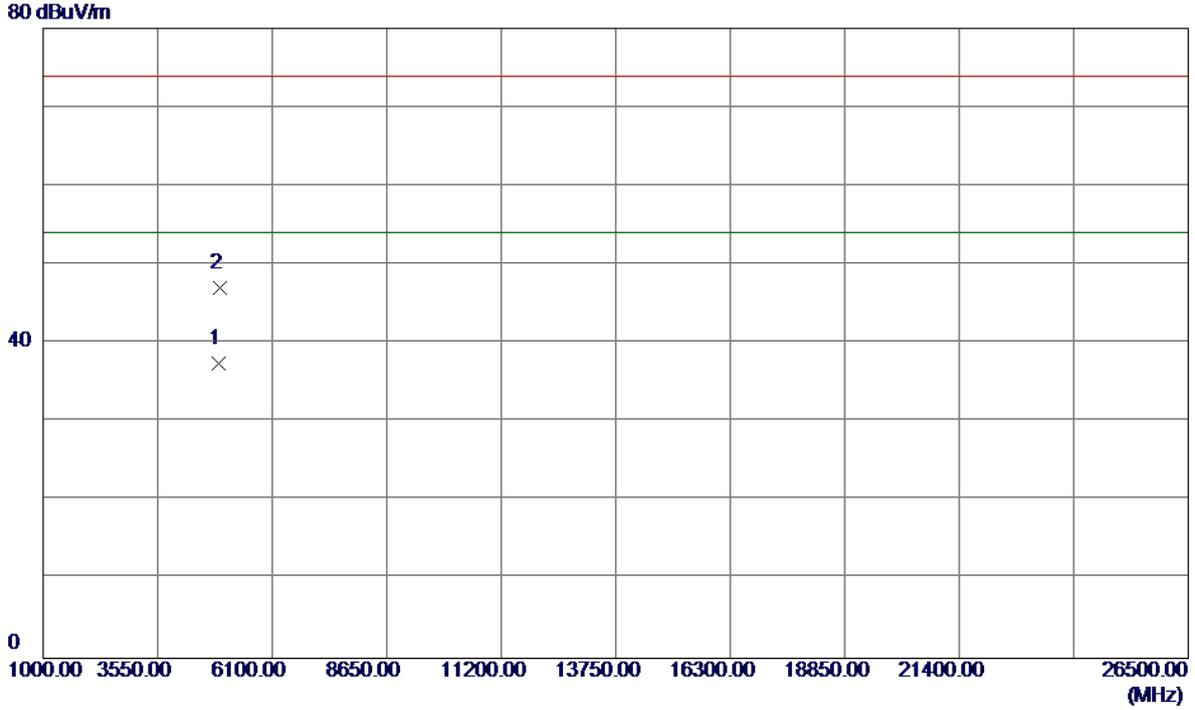
120 dBuV/m



No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	2469.6000	62.90	32.66	95.56	54.00	41.56	AVG	NO LIMIT
2	2469.8000	71.67	32.66	104.33	74.00	30.33	Peak	NO LIMIT
3	2483.5000	29.78	32.71	62.49	74.00	-11.51	Peak	
4	2483.5000	17.39	32.71	50.10	54.00	-3.90	AVG	

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

**Horizontal**



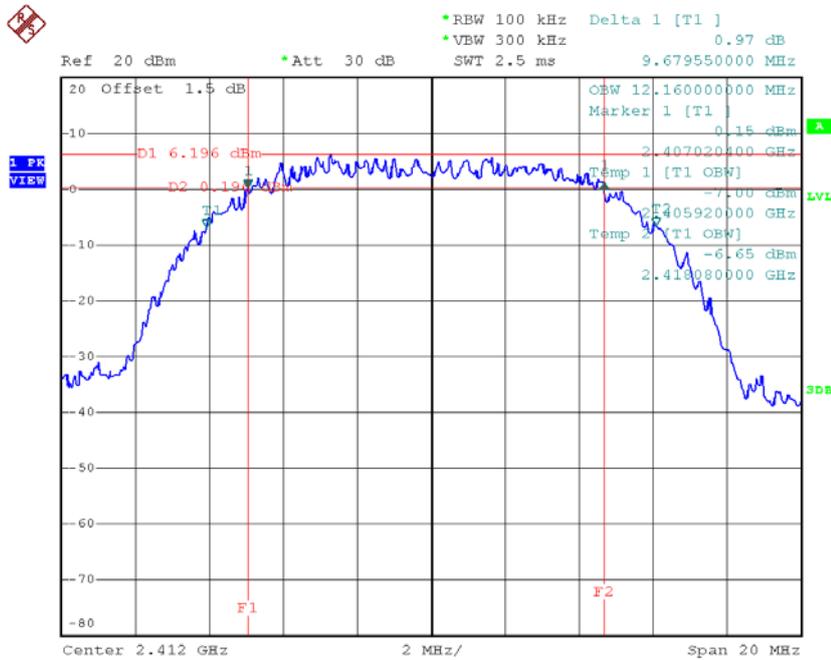
No.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1 *	4924.0600	31.70	5.74	37.44	54.00	-16.56	AVG	
2	4925.0200	41.28	5.75	47.03	74.00	-26.97	Peak	

## ATTACHMENT E - BANDWIDTH

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

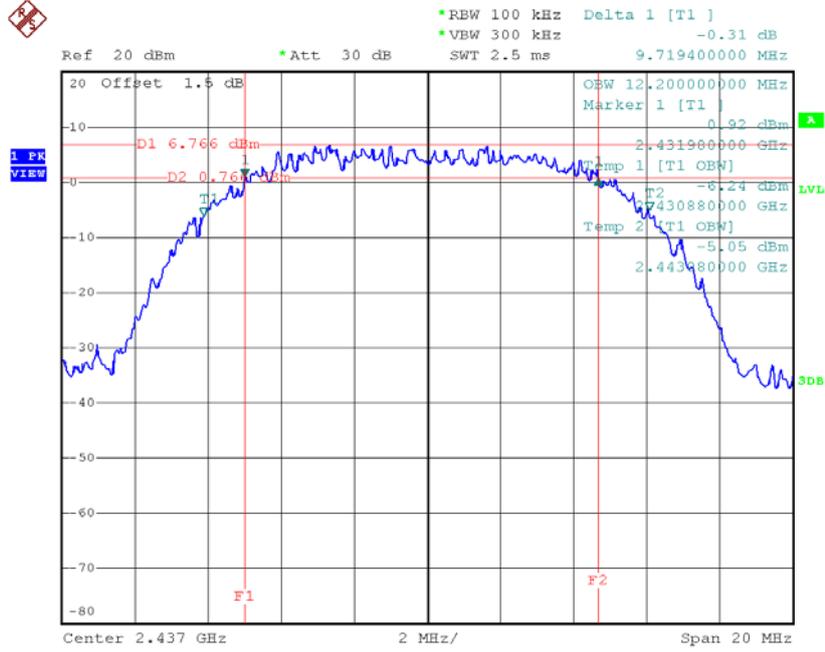
Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2412	9.68	12.16	500	Complies
2437	9.72	12.20	500	Complies
2462	9.56	12.32	500	Complies

**TX CH01**



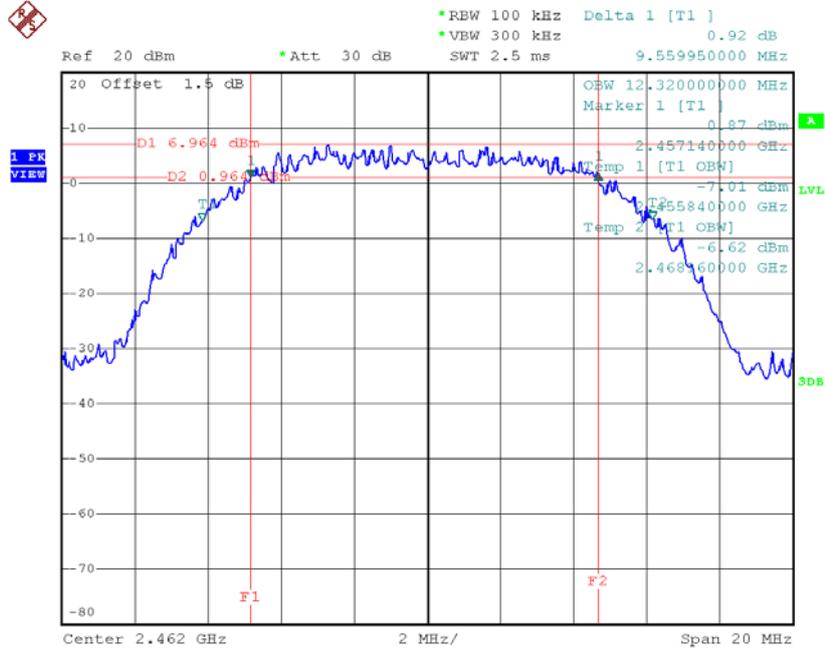
Date: 4.MAY.2017 11:52:44

**TX CH06**



Date: 4.MAY.2017 11:54:45

**TX CH11**

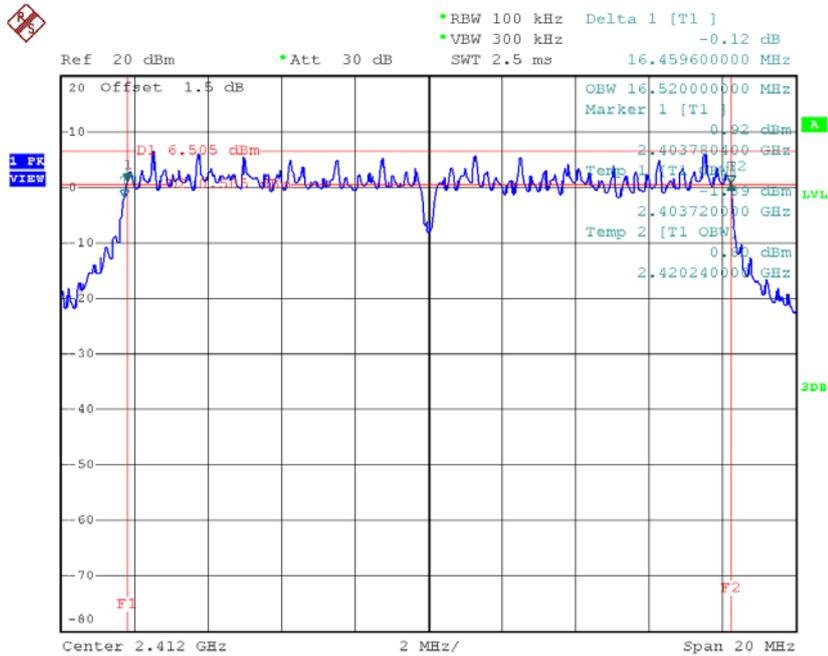


Date: 4.MAY.2017 11:58:57

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

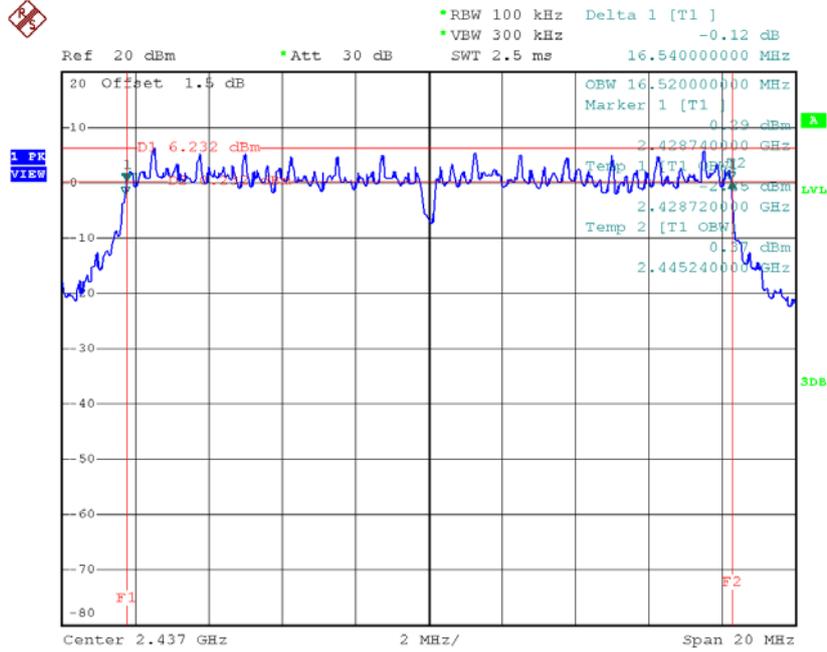
Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2412	16.46	16.52	500	Complies
2437	16.54	16.52	500	Complies
2462	16.52	16.52	500	Complies

**TX CH01**



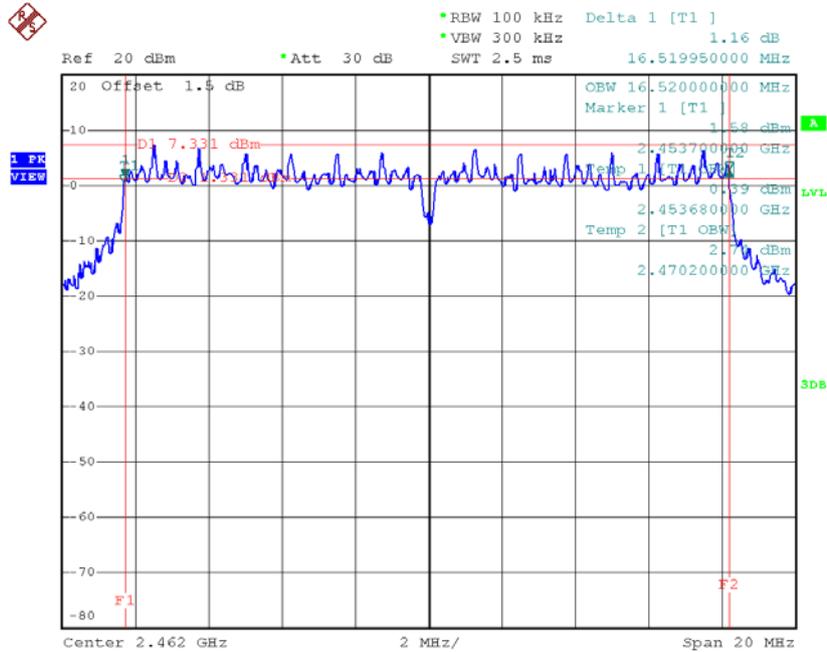
Date: 4.MAY.2017 12:00:47

**TX CH06**



Date: 4.MAY.2017 12:02:43

**TX CH11**

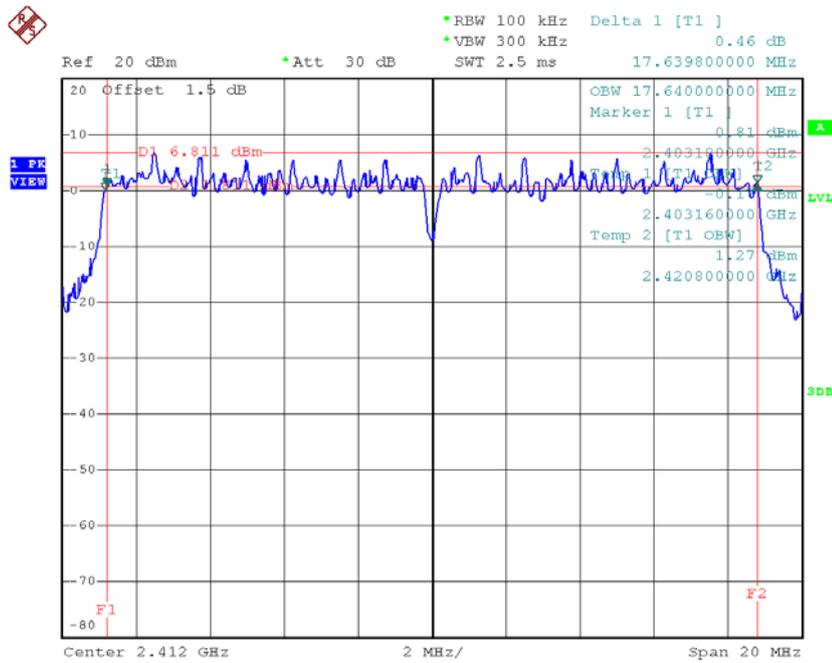


Date: 4.MAY.2017 12:15:59

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

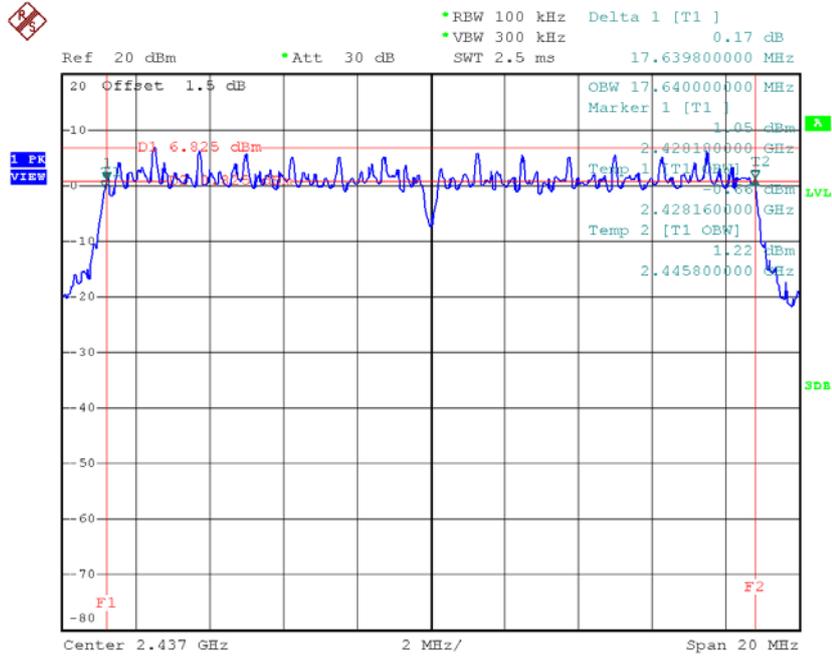
Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2412	17.64	17.64	500	Complies
2437	17.64	17.64	500	Complies
2462	17.34	17.60	500	Complies

**TX CH01**



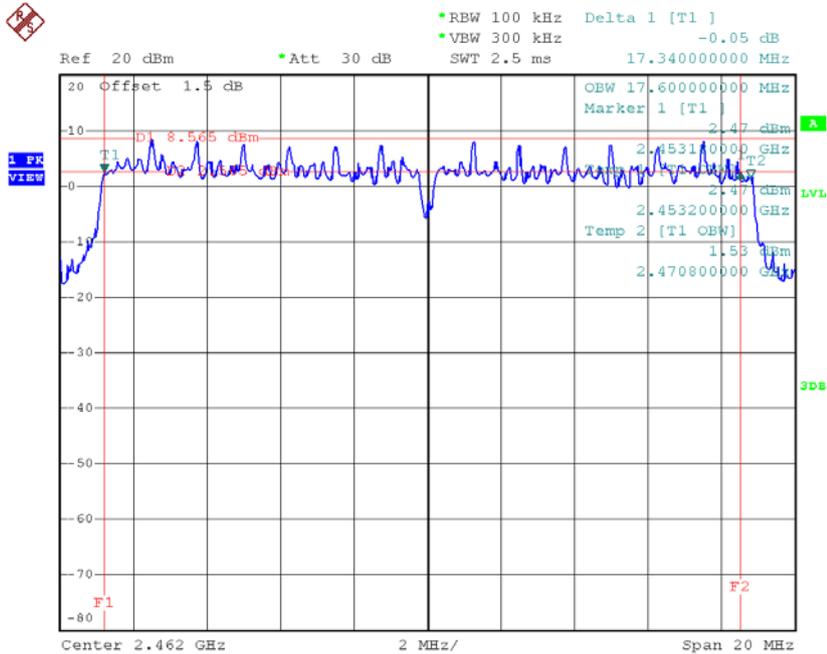
Date: 4.MAY.2017 12:17:46

**TX CH06**



Date: 4.MAY.2017 12:19:24

**TX CH11**



Date: 4.MAY.2017 14:29:30

# 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	21.61	0.14	30.00	1.00	Complies
2437	21.67	0.15	30.00	1.00	Complies
2462	21.49	0.14	30.00	1.00	Complies

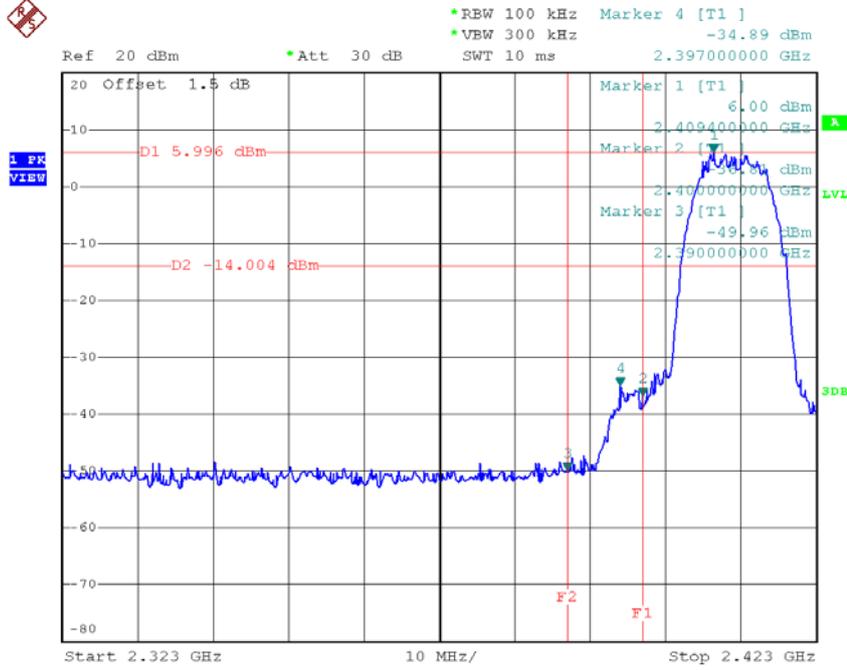
Test Mode :TX G Mode_CH01/06/11					
Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2412	22.01	0.16	30.00	1.00	Complies
2437	24.50	0.28	30.00	1.00	Complies
2462	21.96	0.16	30.00	1.00	Complies

Test Mode :TX N20 Mode_CH01/06/11					
Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2412	20.44	0.11	30.00	1.00	Complies
2437	24.35	0.27	30.00	1.00	Complies
2462	20.38	0.11	30.00	1.00	Complies

# ATTACHMENT G - ANTENNA CONDUCTED SPURIOUS EMISSION

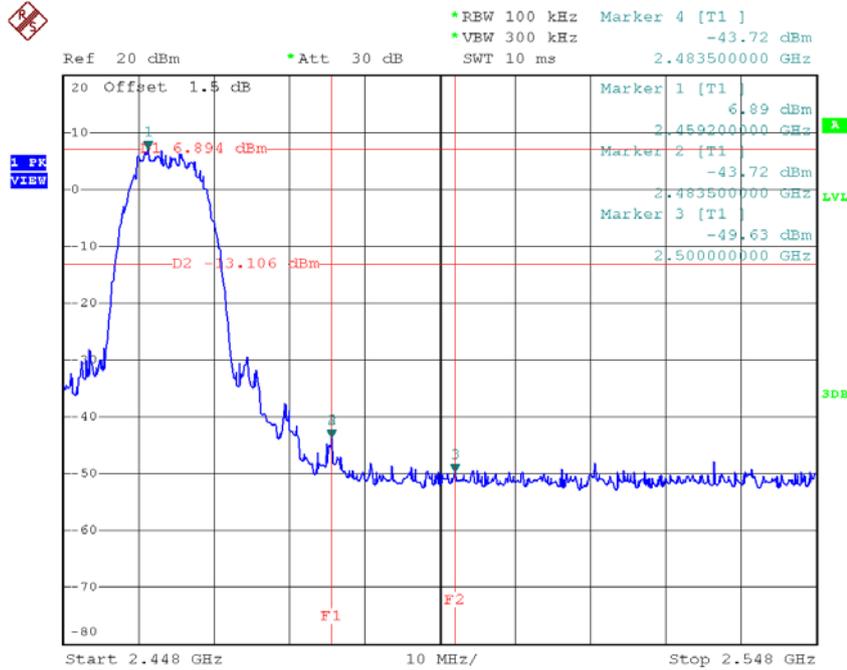
Test Mode : TX B Mode

**TX B mode CH01**



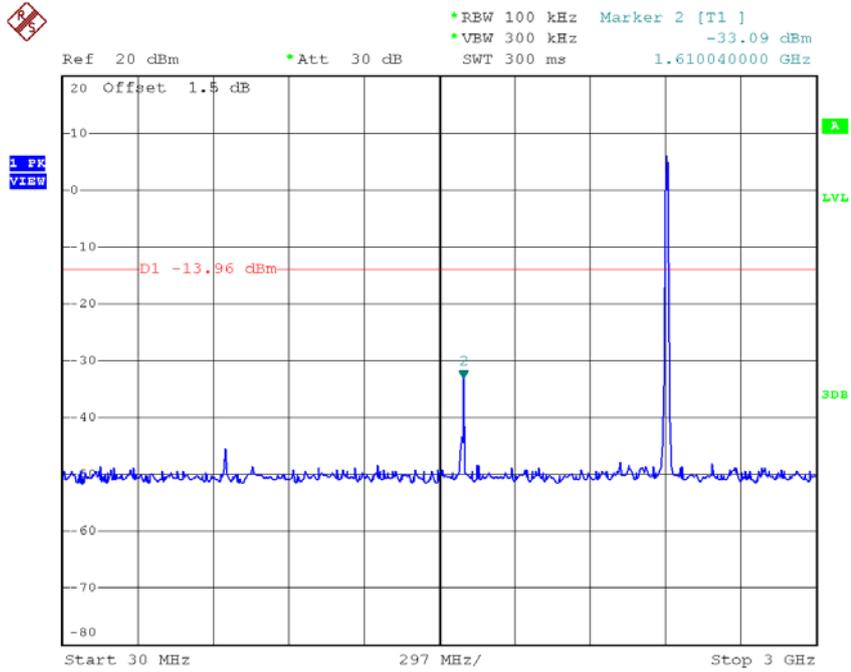
Date: 4.MAY.2017 11:53:25

**TX B mode CH11**

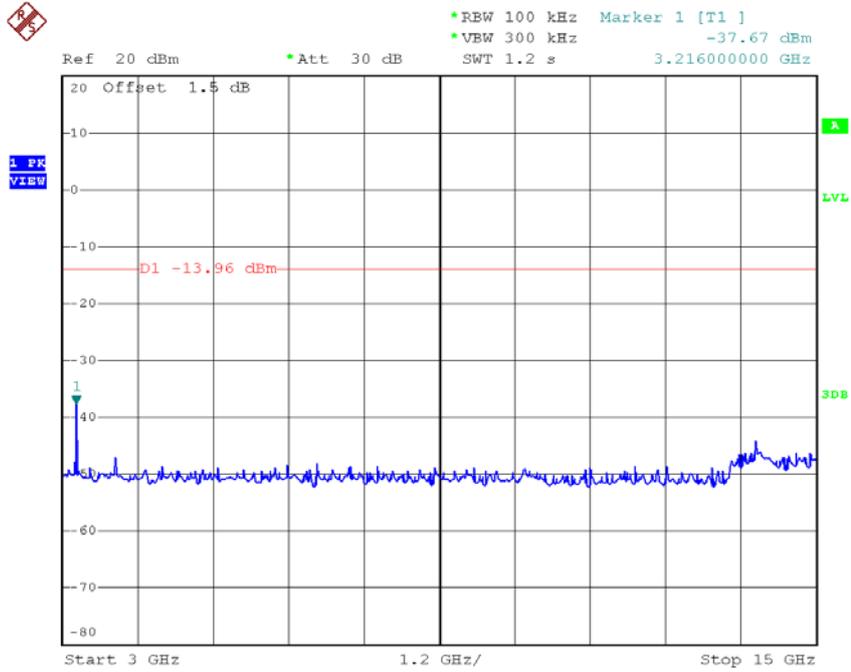


Date: 4.MAY.2017 11:59:38

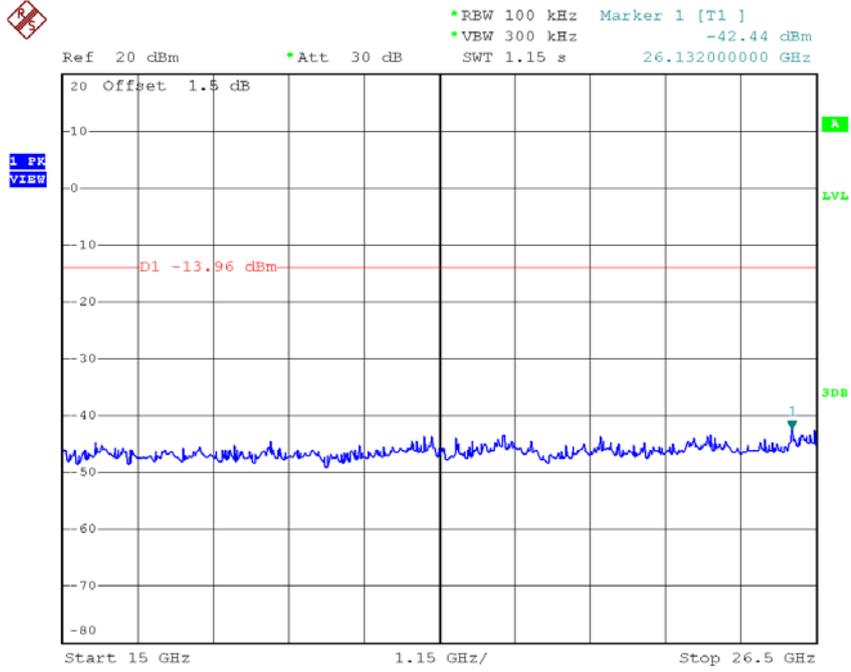
**TX B mode CH01 (10 Harmonic of the frequency)**



Date: 4.MAY.2017 11:52:59

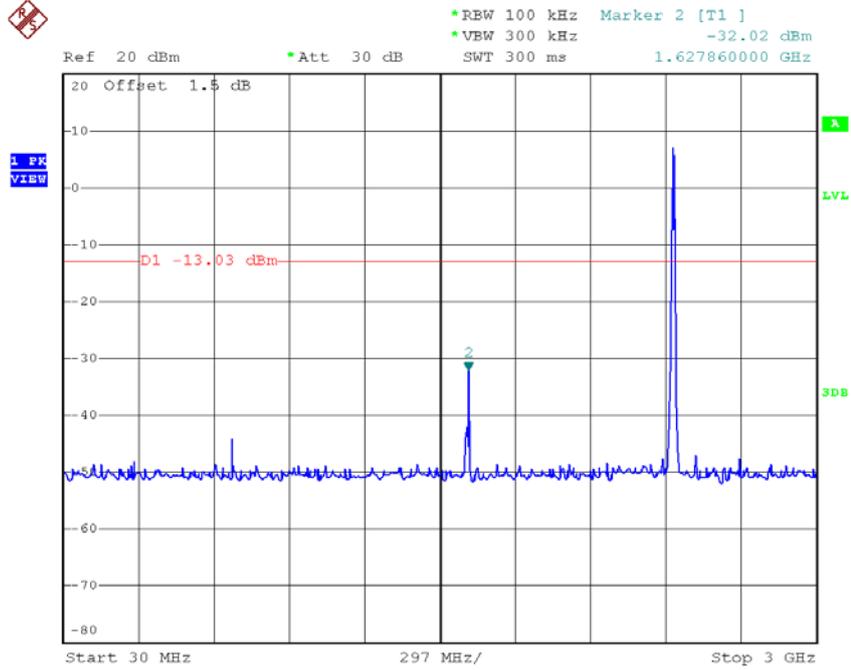


Date: 4.MAY.2017 11:53:08



Date: 4.MAY.2017 11:53:17

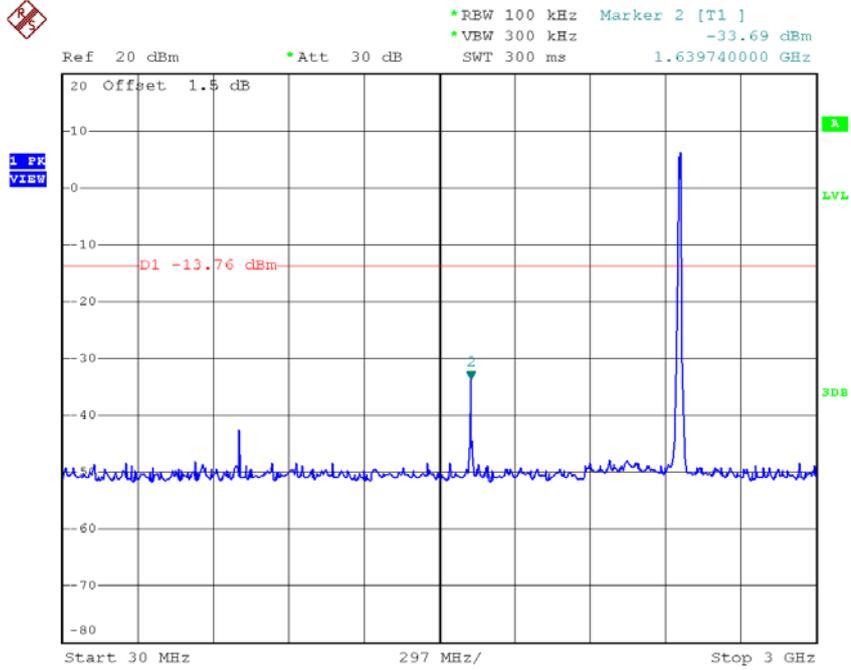
### TX B mode CH06 (10 Harmonic of the frequency)



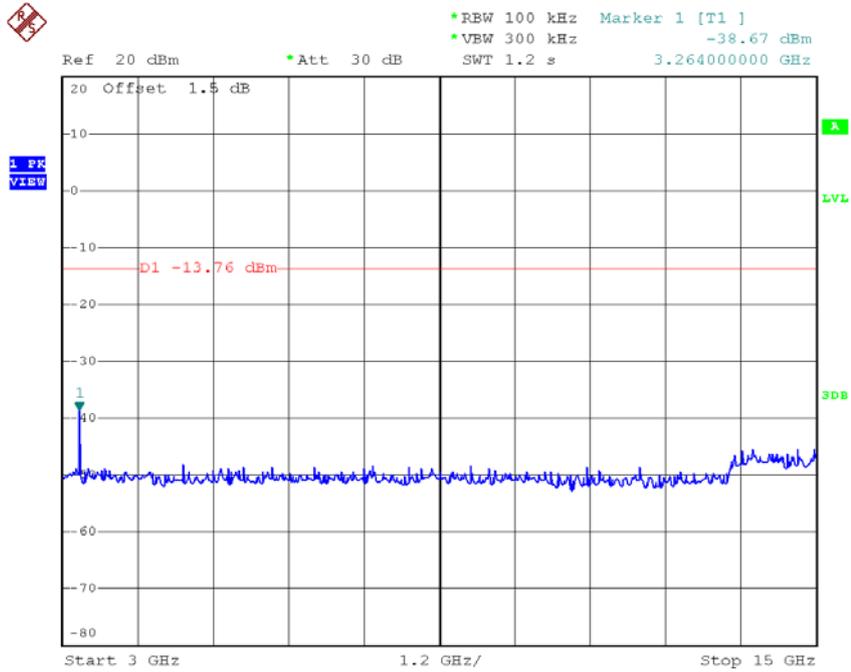
Date: 4.MAY.2017 11:55:00



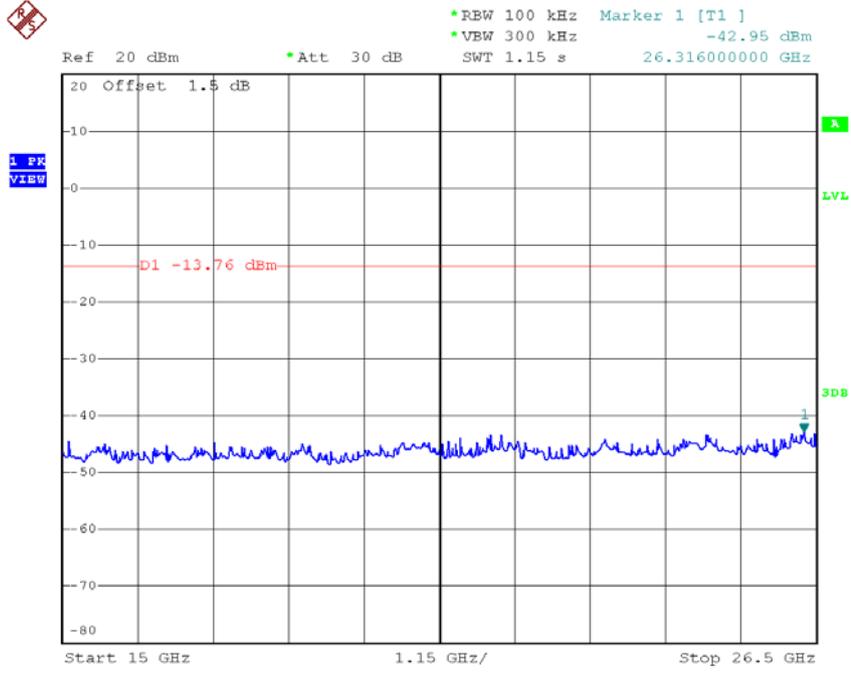
### TX B mode CH11 (10 Harmonic of the frequency)



Date: 4.MAY.2017 11:59:12



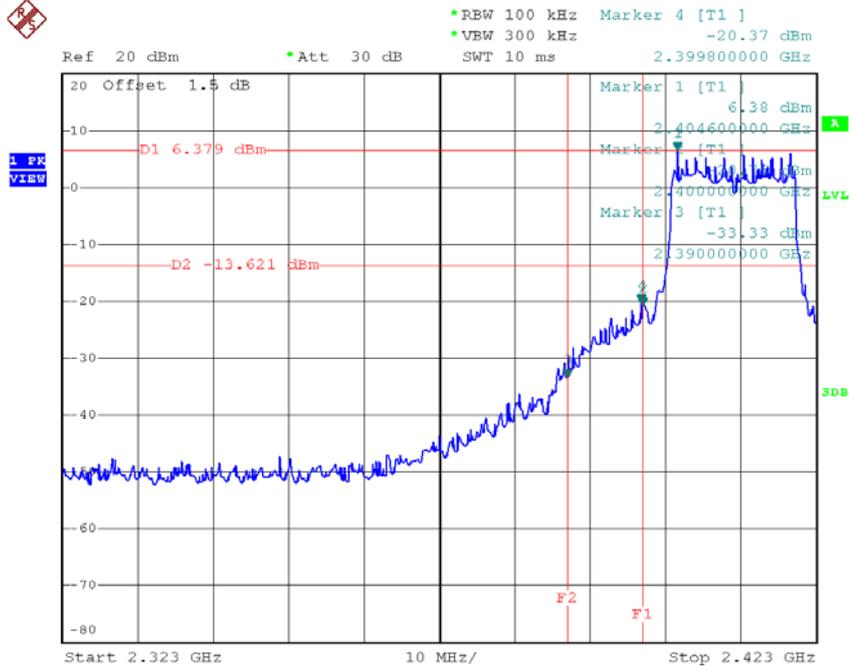
Date: 4.MAY.2017 11:59:21



Date: 4.MAY.2017 11:59:30

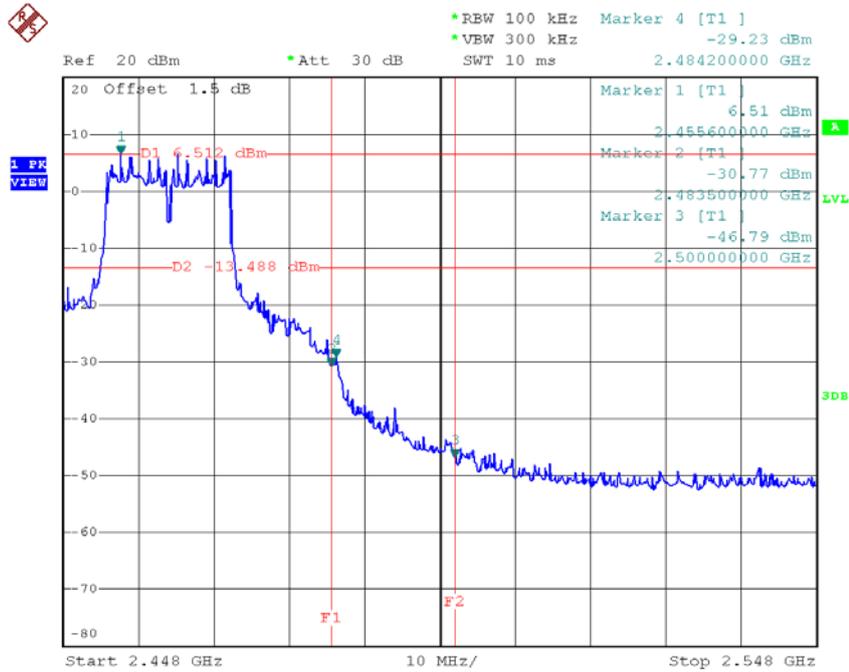
Test Mode : TX G Mode

**TX G mode CH01**



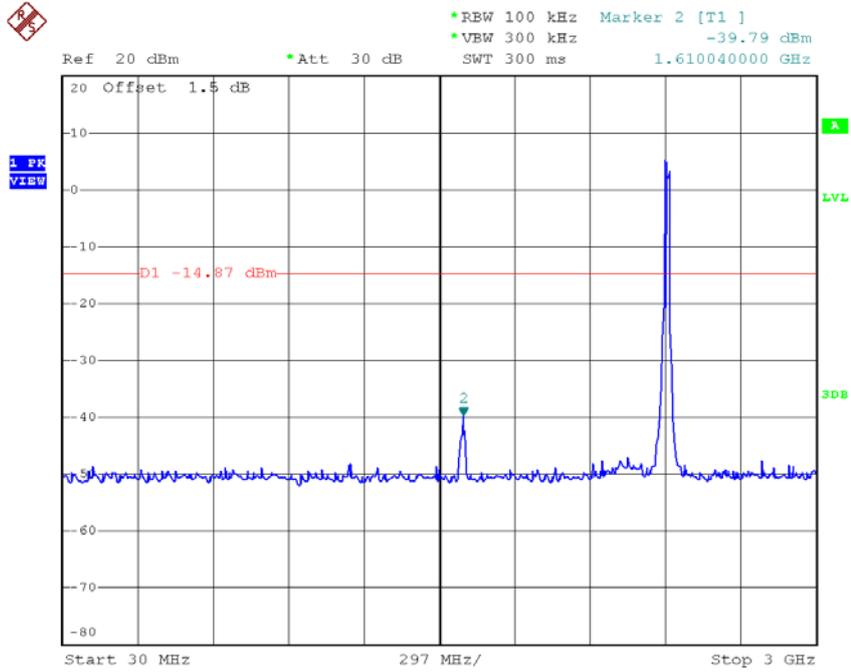
Date: 4.MAY.2017 12:01:29

**TX G mode CH11**

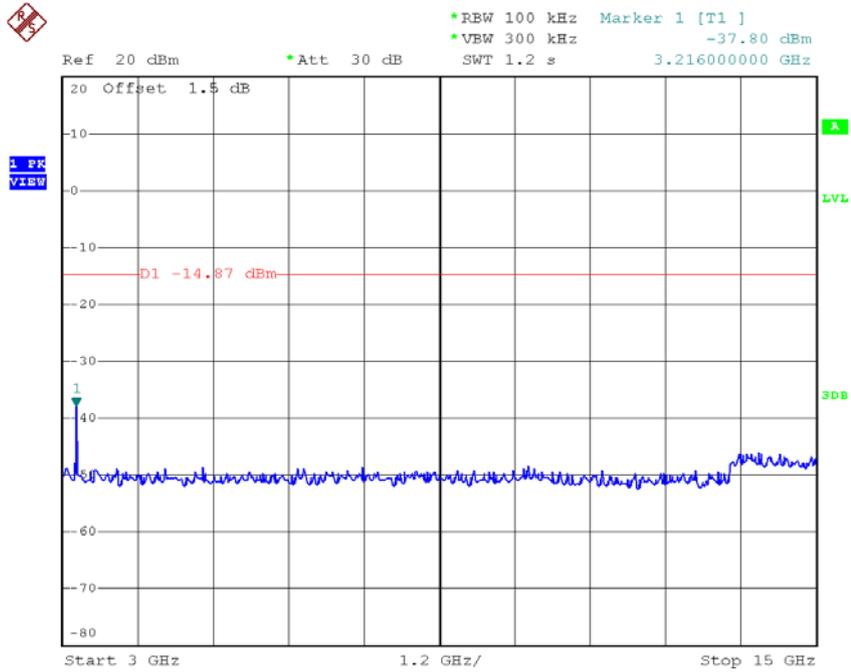


Date: 4.MAY.2017 12:16:41

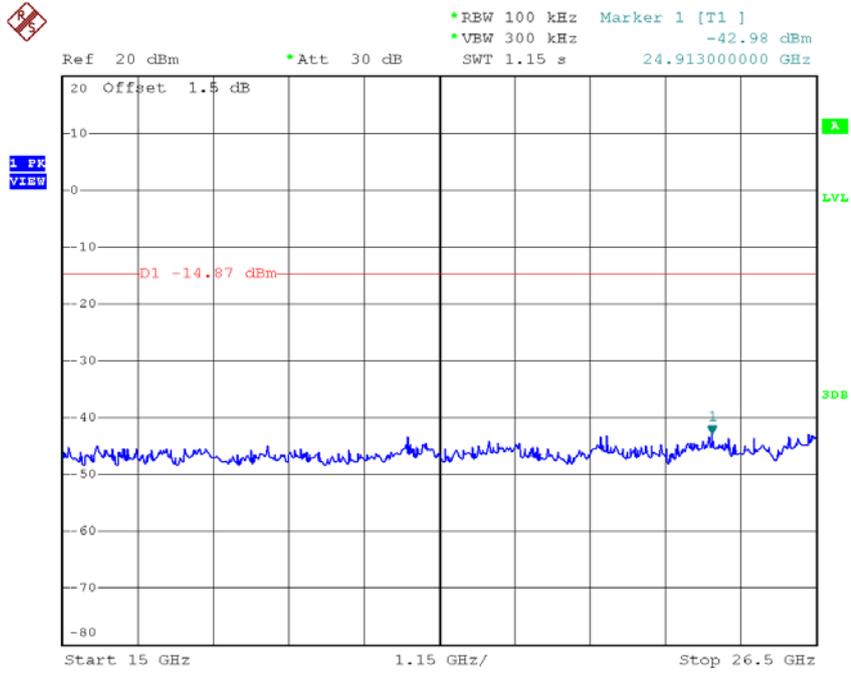
**TX G mode CH01 (10 Harmonic of the frequency)**



Date: 4.MAY.2017 12:01:02

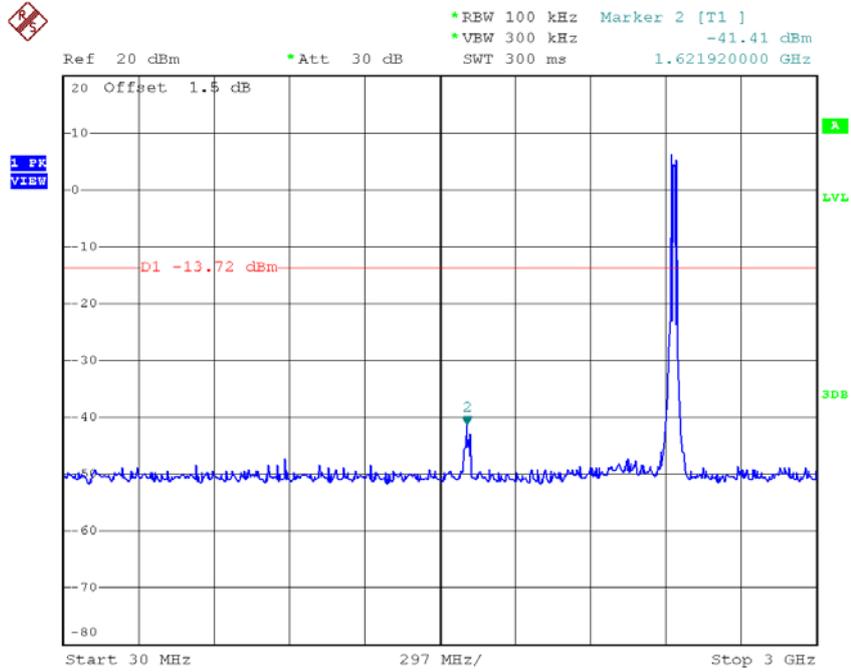


Date: 4.MAY.2017 12:01:11

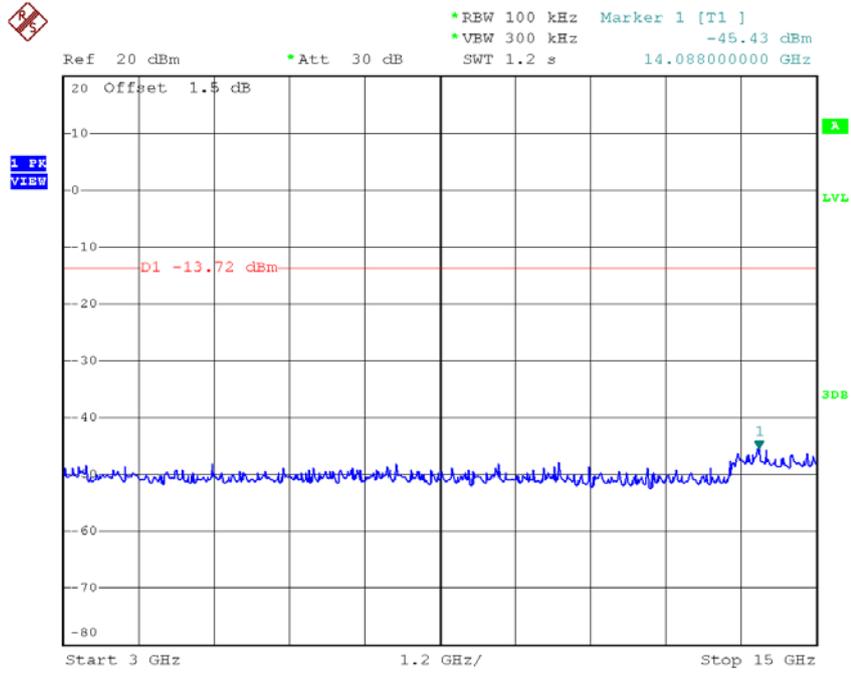


Date: 4.MAY.2017 12:01:20

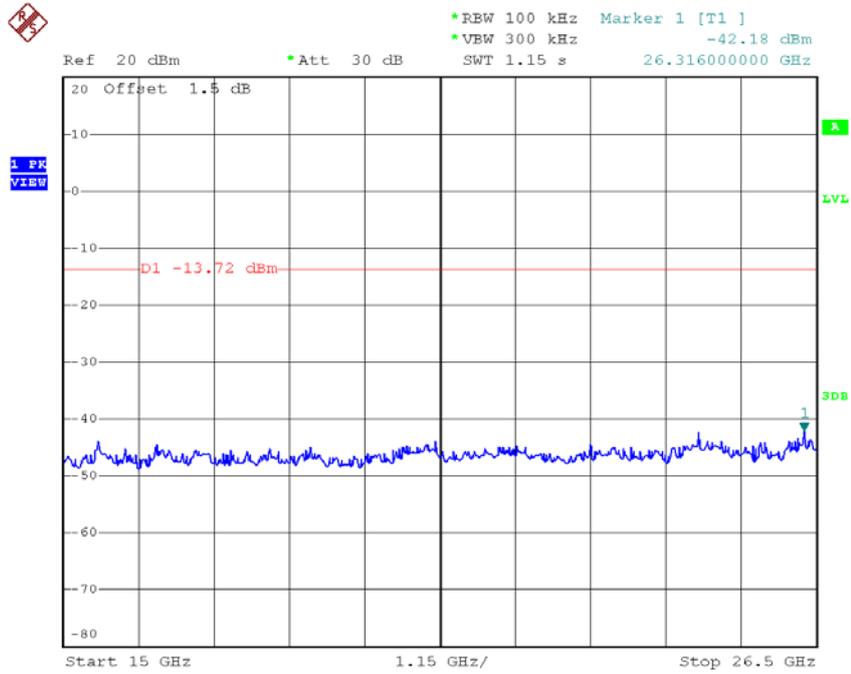
### TX G mode CH06 (10 Harmonic of the frequency)



Date: 4.MAY.2017 12:02:57

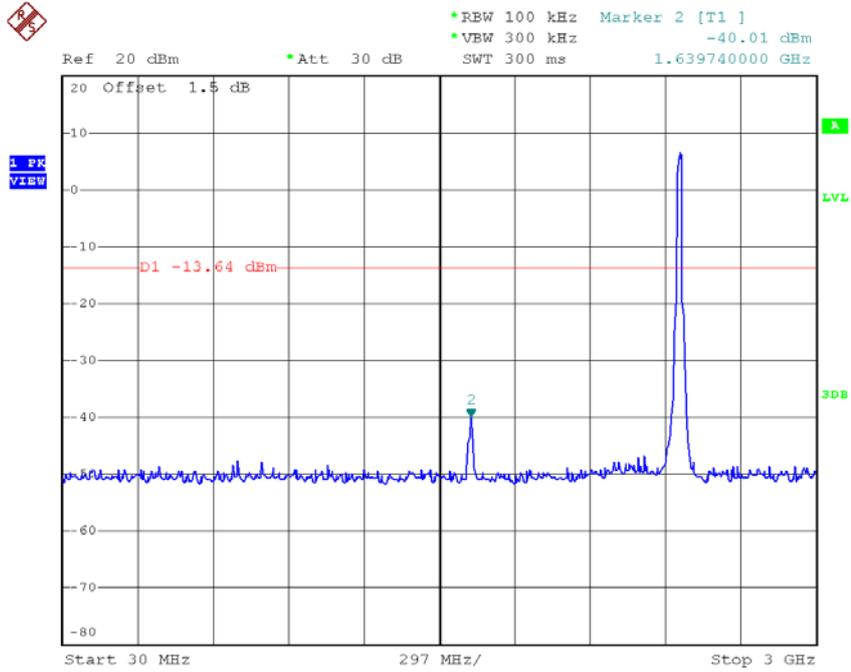


Date: 4.MAY.2017 12:03:07

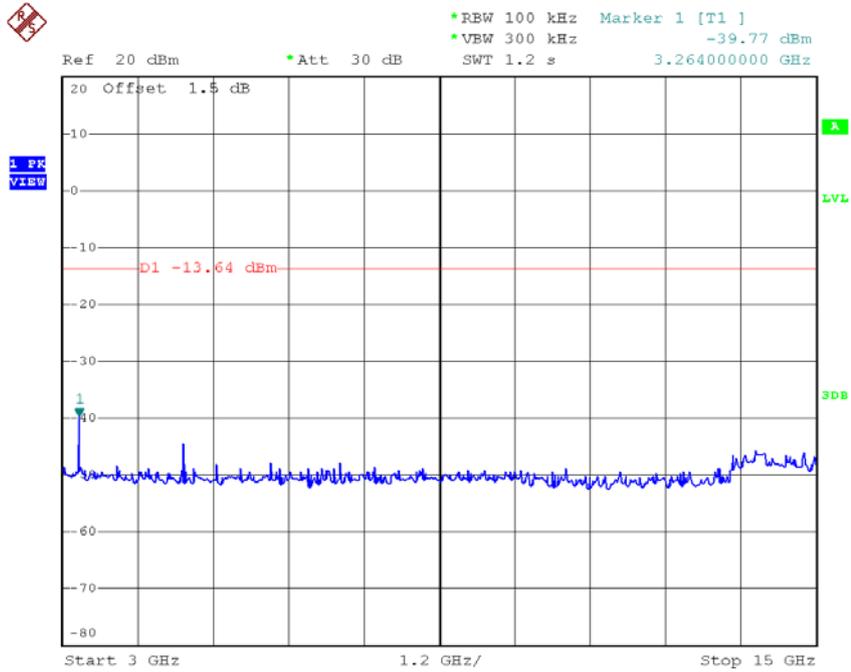


Date: 4.MAY.2017 12:03:16

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



Date: 4.MAY.2017 12:16:14

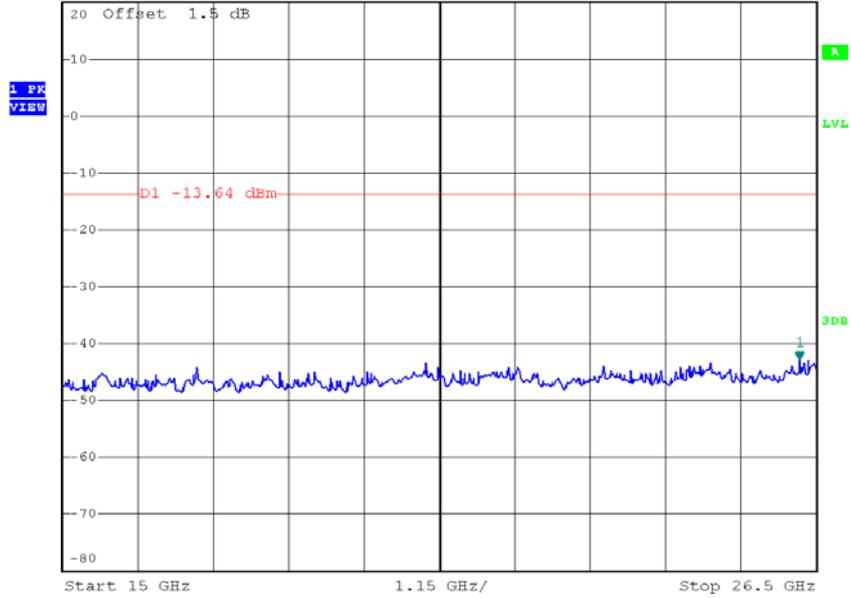


Date: 4.MAY.2017 12:16:23



\*REW 100 kHz Marker 1 [T1 ]  
\*VBW 300 kHz -42.85 dBm  
SWT 1.15 s 26.247000000 GHz

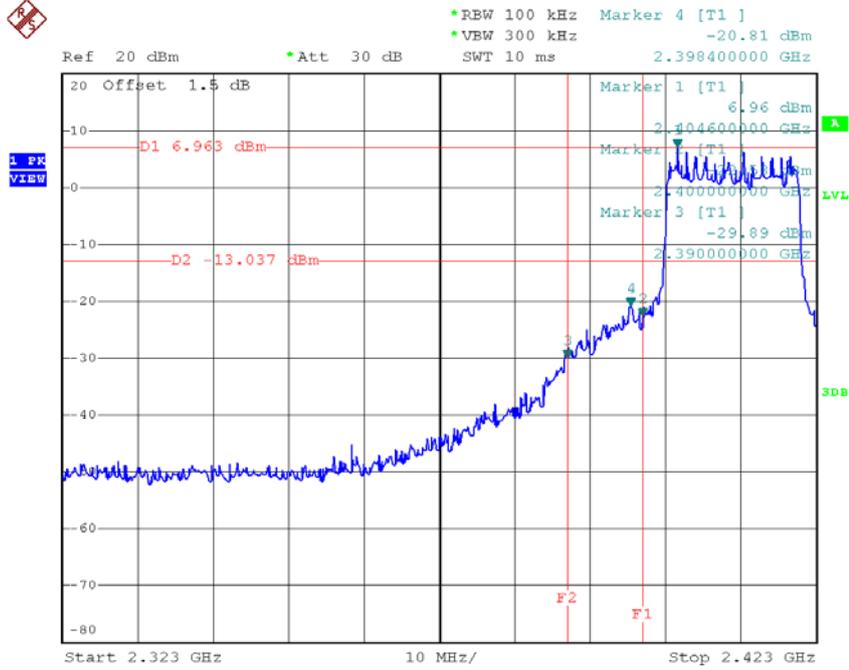
Ref 20 dBm \*Att 30 dB



Date: 4.MAY.2017 12:16:32

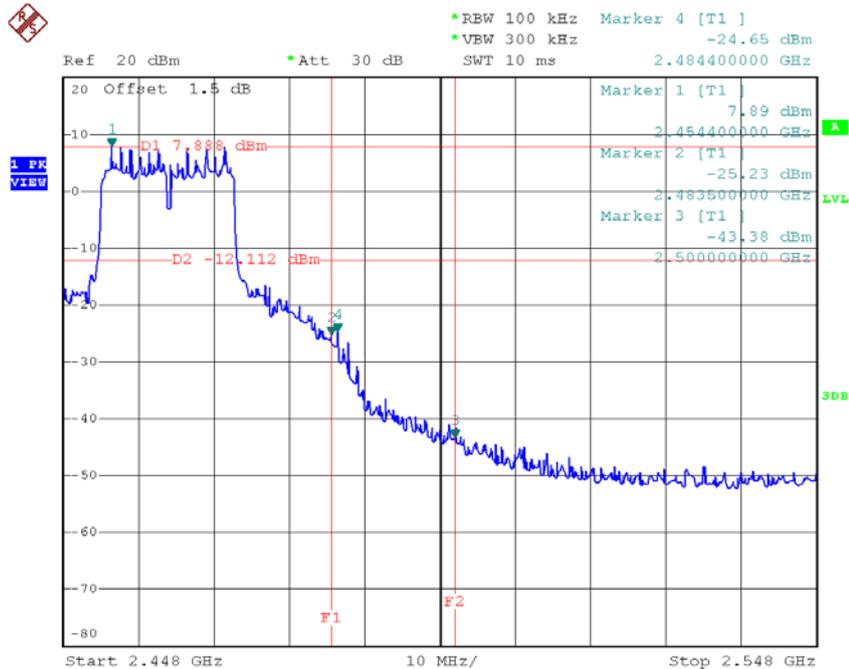
Test Mode : TX N-20M Mode

**TX HT20 mode CH01**



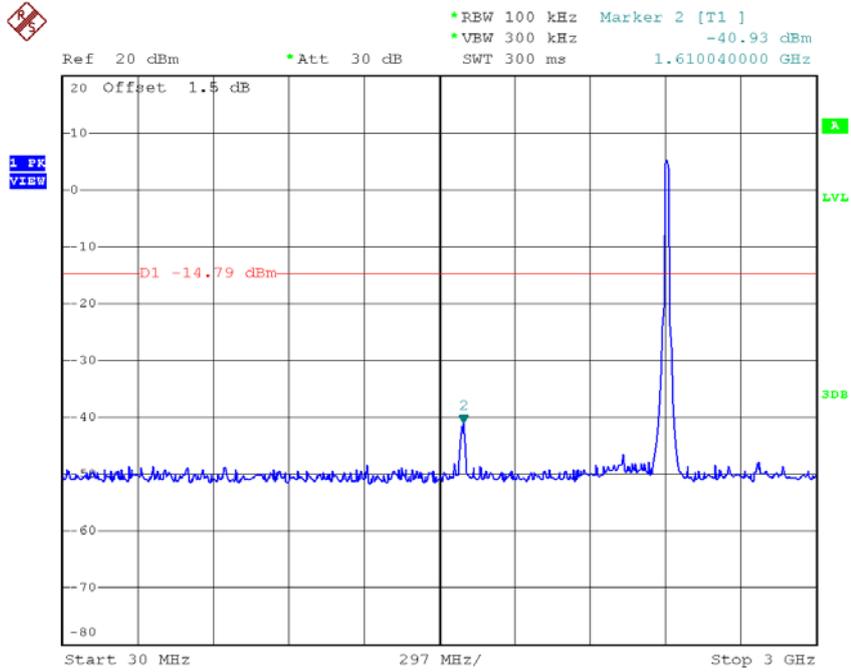
Date: 4.MAY.2017 12:18:27

**TX HT20 mode CH11**

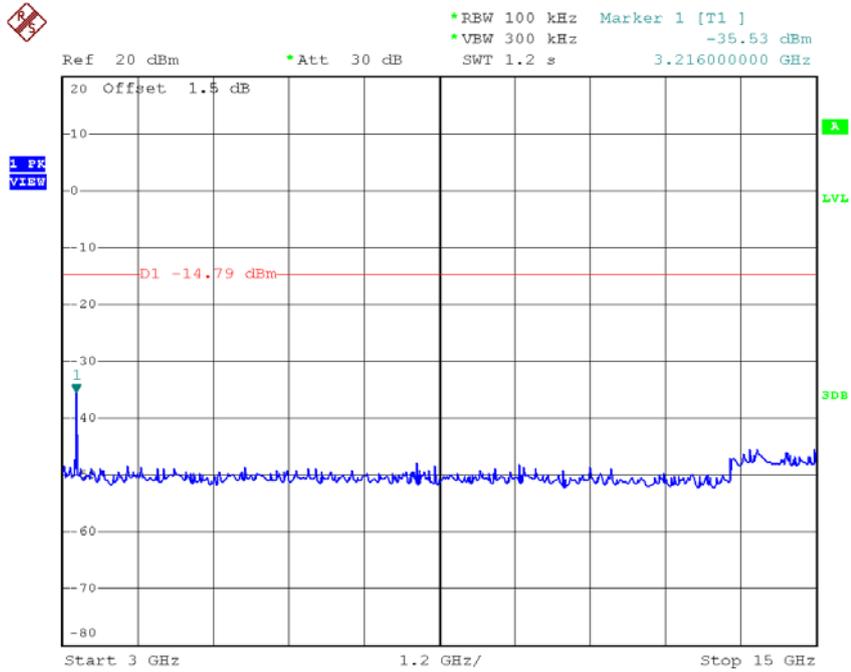


Date: 4.MAY.2017 14:30:09

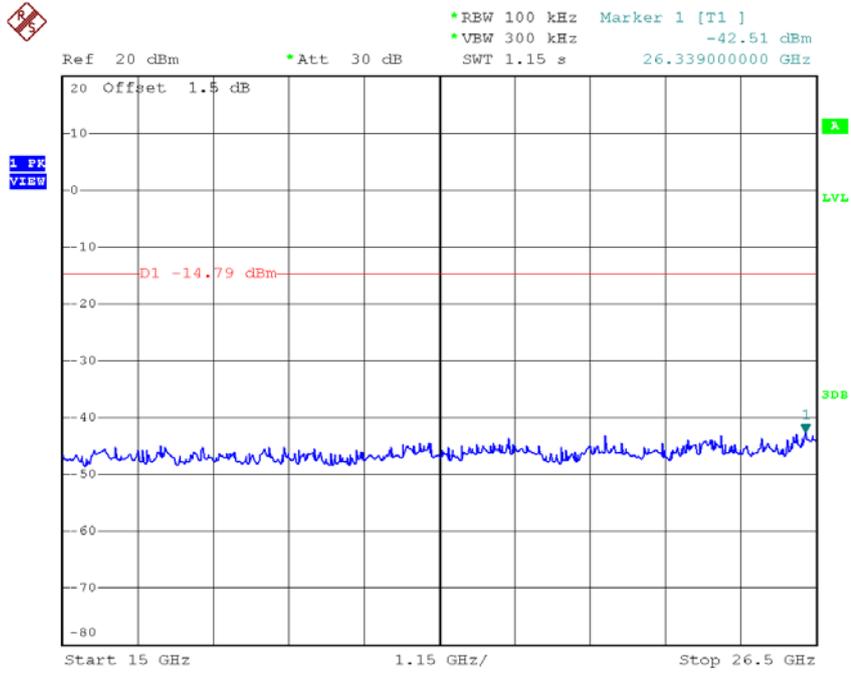
### TX HT20 mode CH01 (10 Harmonic of the frequency)



Date: 4.MAY.2017 12:18:00

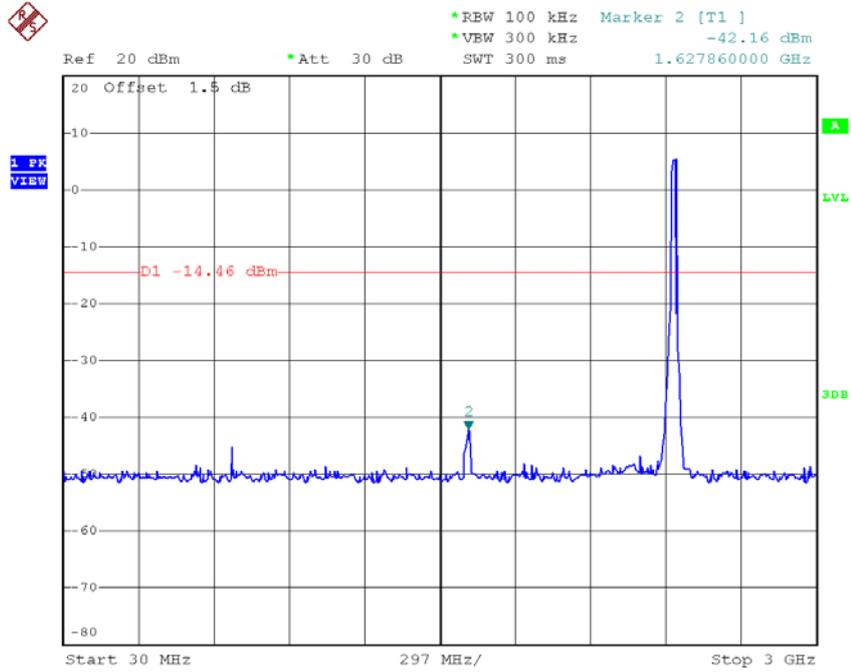


Date: 4.MAY.2017 12:18:10

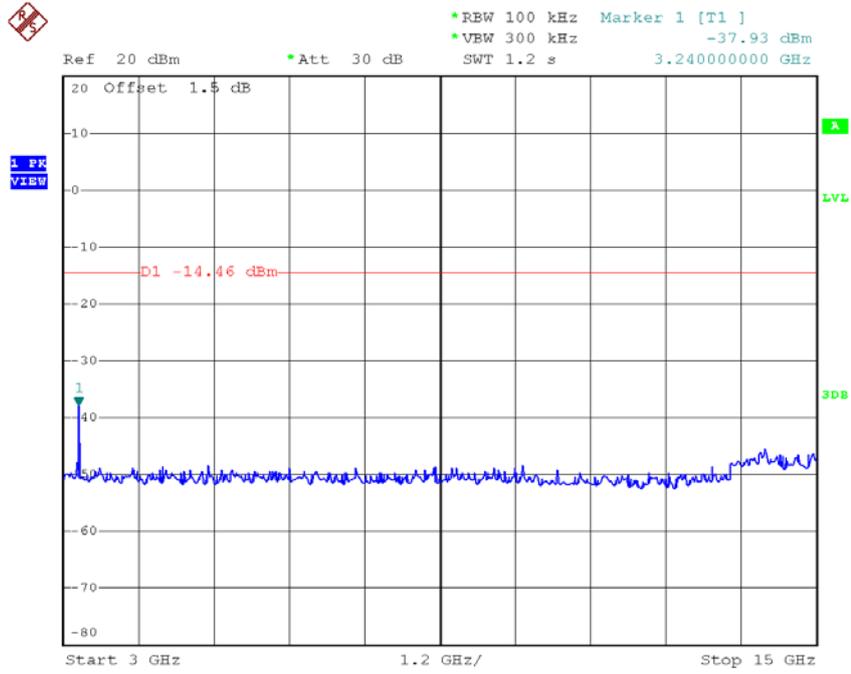


Date: 4.MAY.2017 12:18:19

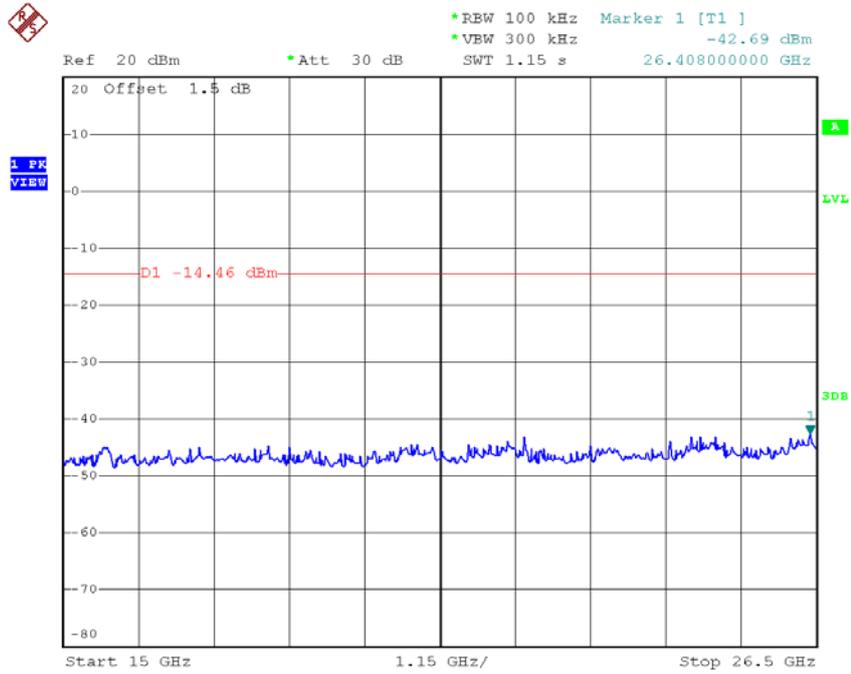
**TX HT20 mode CH06 (10 Harmonic of the frequency)**



Date: 4.MAY.2017 12:19:39

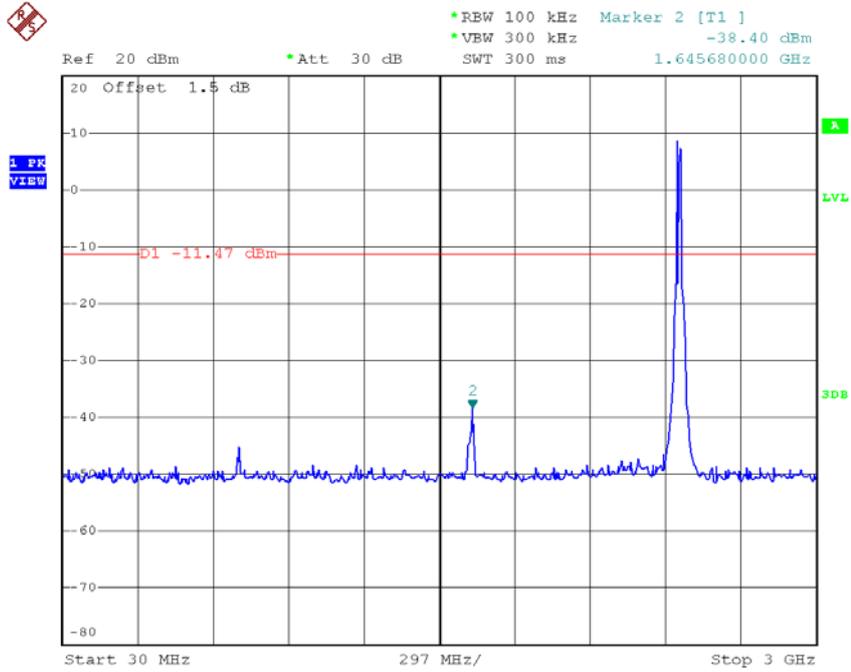


Date: 4.MAY.2017 12:19:48

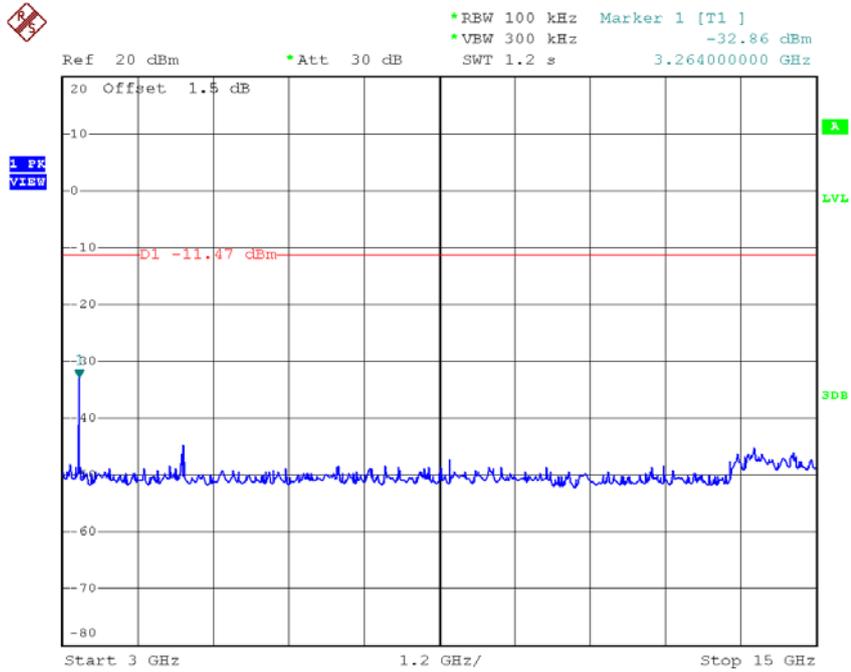


Date: 4.MAY.2017 12:19:57

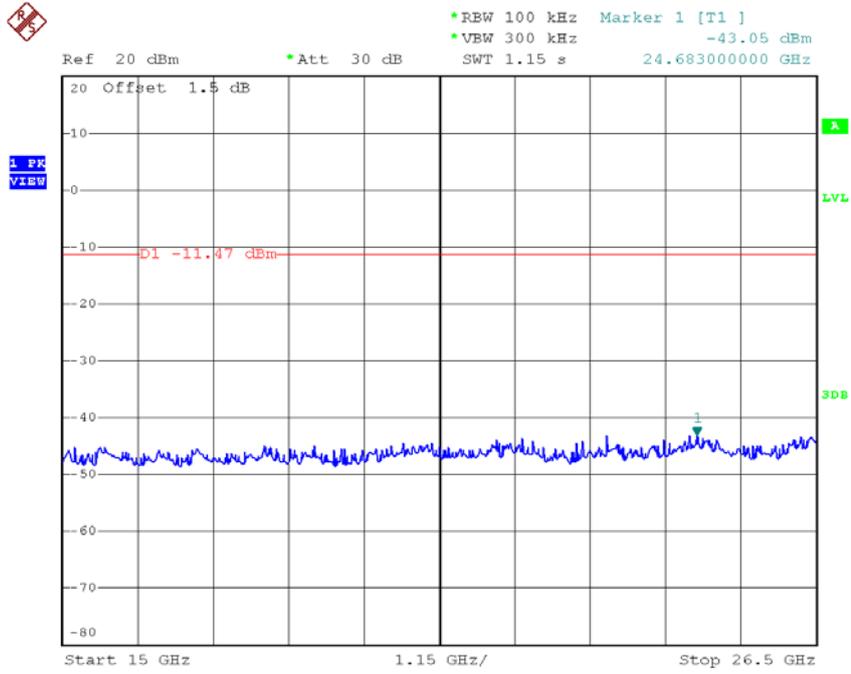
**TX HT20 mode CH11 (10 Harmonic of the frequency)**



Date: 4.MAY.2017 14:29:44



Date: 4.MAY.2017 14:29:53



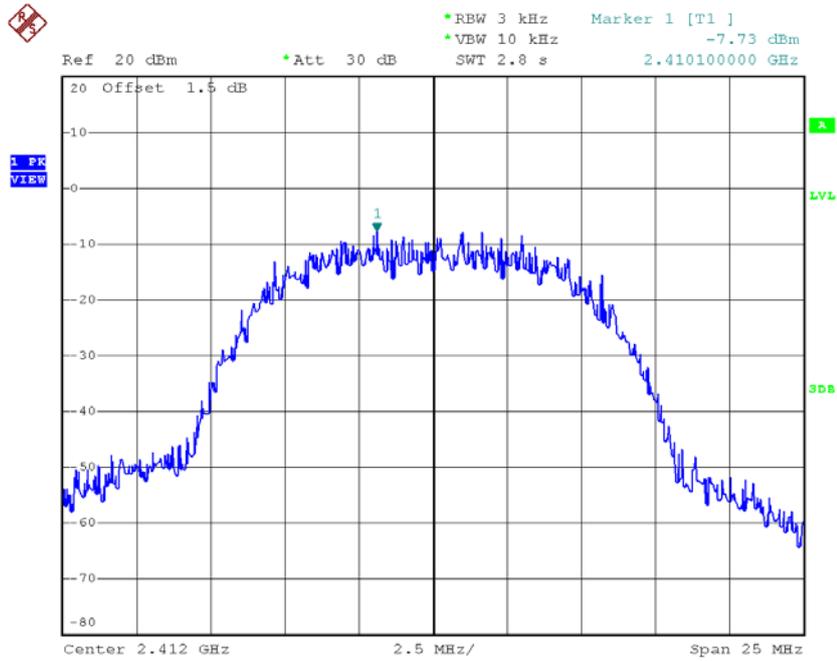
Date: 4.MAY.2017 14:30:01

## ATTACHMENT H - POWER SPECTRAL DENSITY

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

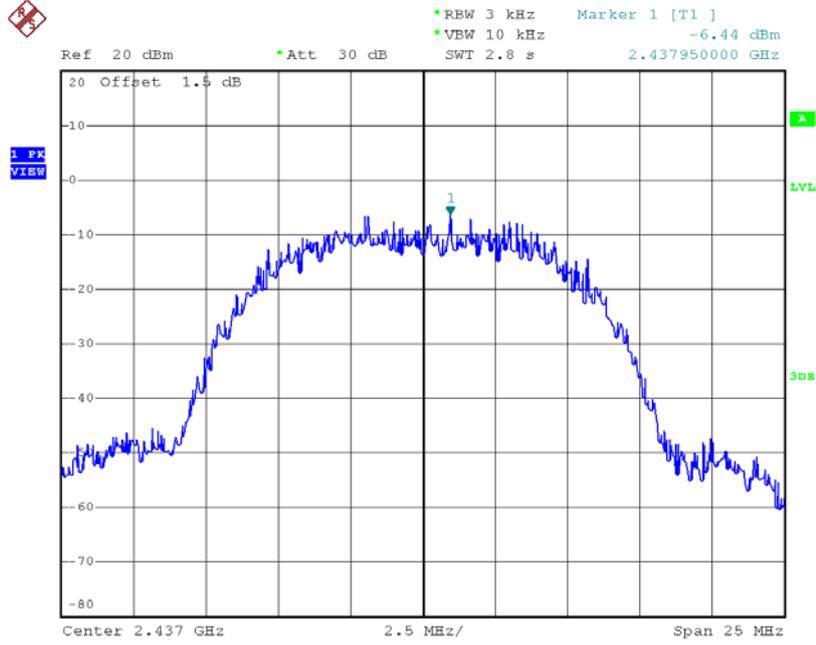
Frequency (MHz)	Power Density (dBm/3kHz)	Power Density (mW/3kHz)	Max. Limit (dBm/3kHz)	Result
2412	-7.73	0.1687	8.00	Complies
2437	-6.44	0.2270	8.00	Complies
2462	-6.61	0.2183	8.00	Complies

**TX CH01**



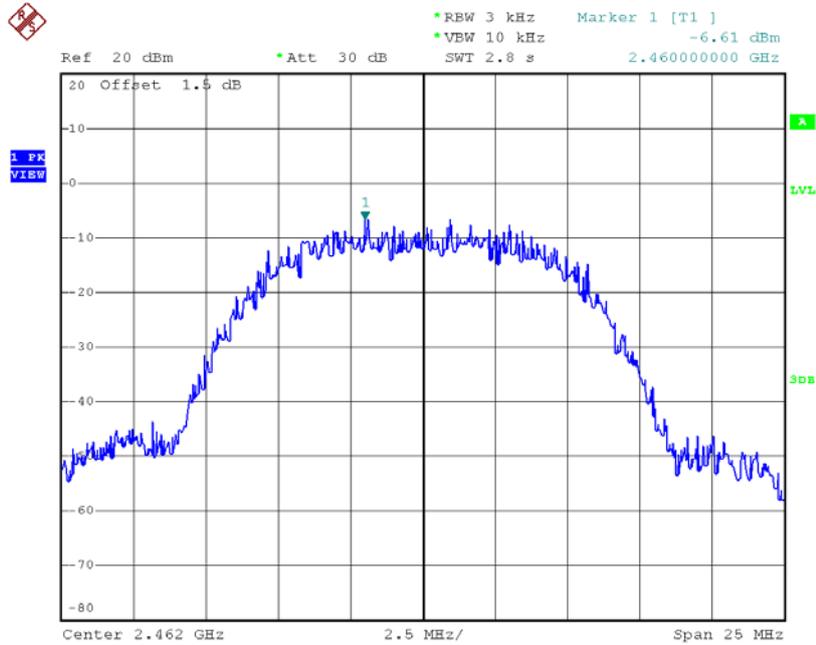
Date: 4.MAY.2017 11:53:35

### TX CH06



Date: 4.MAY.2017 11:55:28

### TX CH11

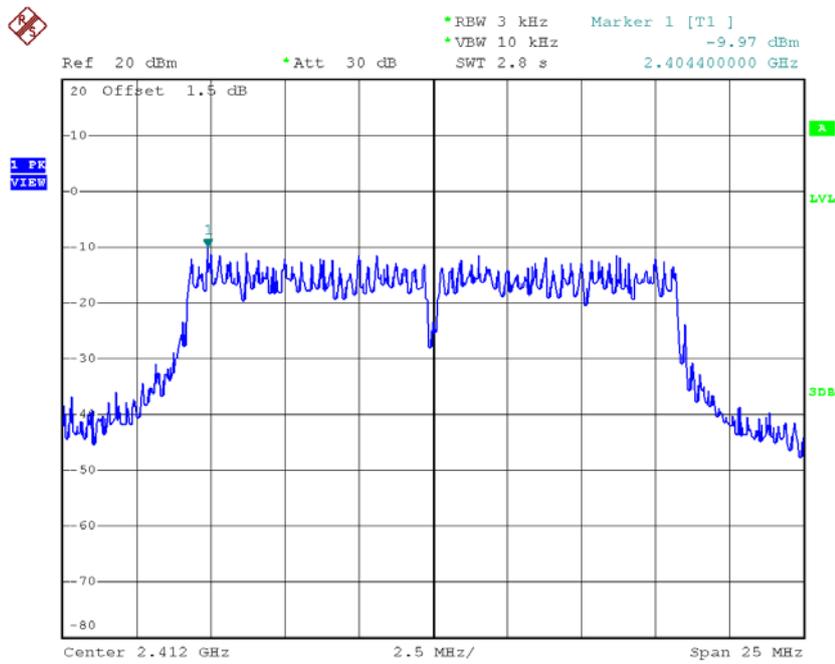


Date: 4.MAY.2017 11:59:48

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

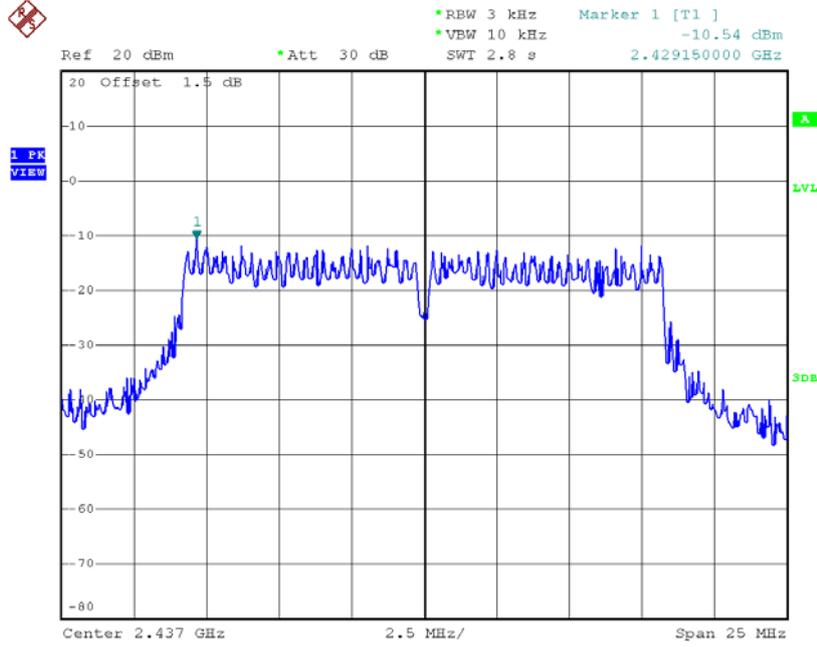
Frequency (MHz)	Power Density (dBm/3kHz)	Power Density (mW/3kHz)	Max. Limit (dBm/3kHz)	Result
2412	-9.97	0.1007	8.00	Complies
2437	-10.54	0.0883	8.00	Complies
2462	-10.23	0.0948	8.00	Complies

**TX CH01**



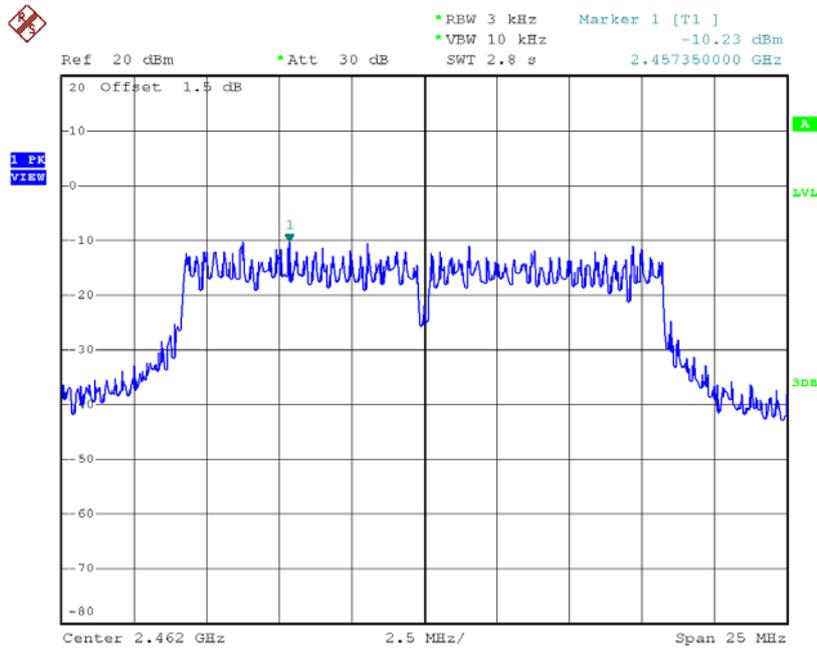
Date: 4.MAY.2017 12:01:38

### TX CH06



Date: 4.MAY.2017 12:03:26

### TX CH11

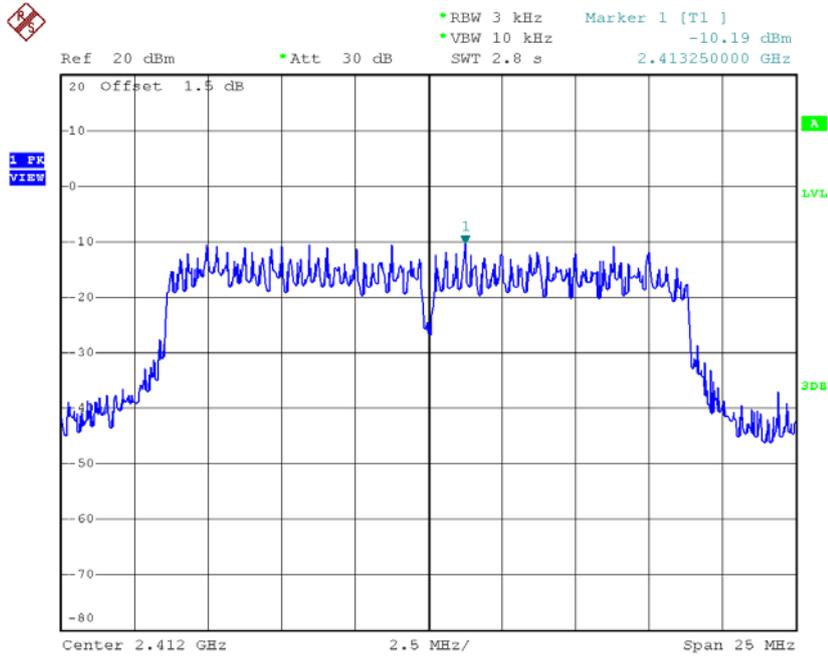


Date: 4.MAY.2017 12:16:51

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

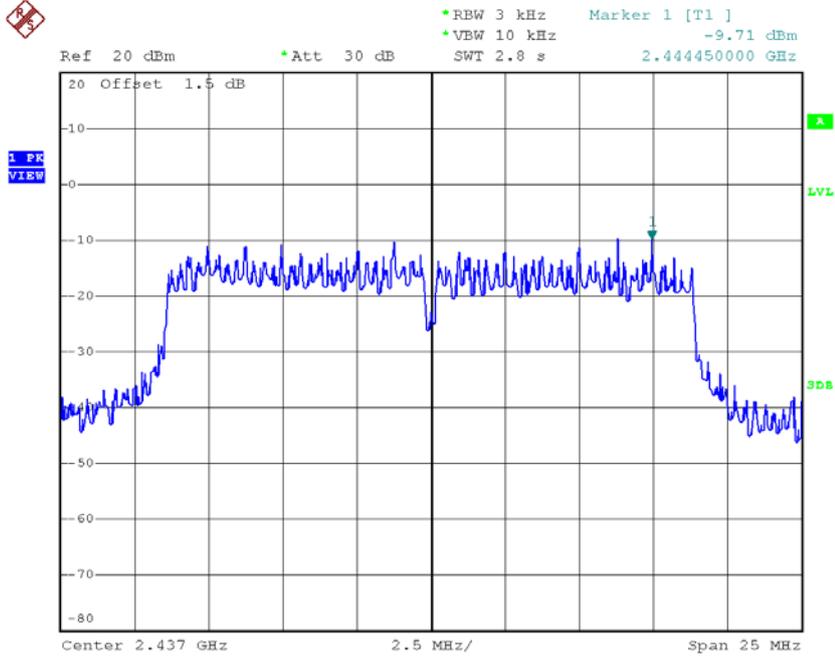
Frequency (MHz)	Power Density (dBm/3kHz)	Power Density (mW/3kHz)	Max. Limit (dBm/3kHz)	Result
2412	-10.19	0.0957	8.00	Complies
2437	-9.71	0.1069	8.00	Complies
2462	-9.23	0.1194	8.00	Complies

**TX CH01**



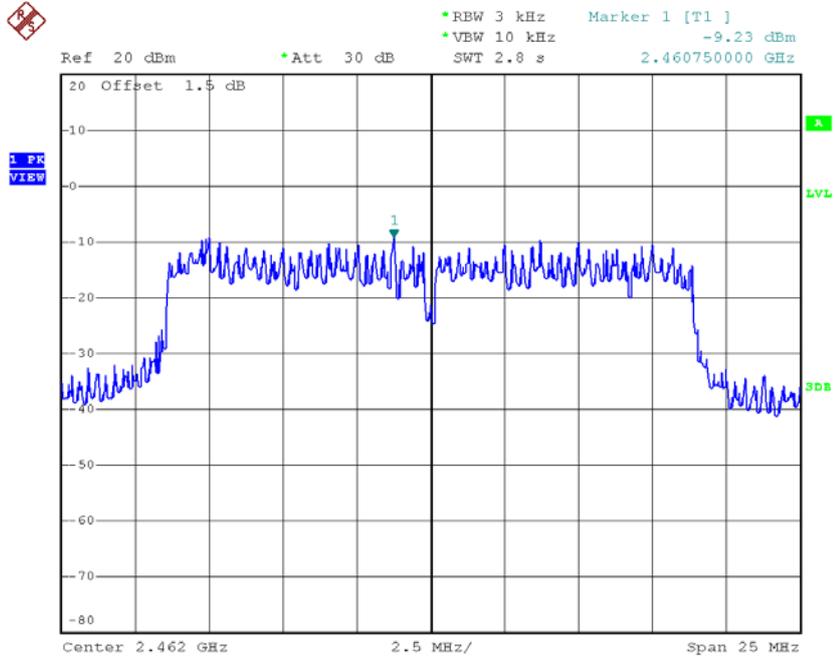
Date: 4.MAY.2017 12:18:37

### TX CH06



Date: 4.MAY.2017 12:20:07

### TX CH11



Date: 4.MAY.2017 14:30:18