# FCC Radio Test Report

## FCC ID: 2ABZMW185AP

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

| | | |
|---|---|---|
| **Project No.** | : | 1502C010 |
| **Equipment** | : | 1750M 11AC High Power Ceiling Access Point |
| **Model Name** | : | W185AP |
| **Applicant** | : | SHENZHEN IP-COM NETWORKS CO.,LTD. |
| **Address** | : | Room 101, Unit A, First Floor, Tower E3, No. 1001, Zhongshanyuan Road, Nanshan District, Shenzhen, China. 518052 |

| | | |
|---|---|---|
| **Date of Receipt** | : | Feb.02, 2015 |
| **Date of Test** | : | Feb.02, 2015~Mar. 20, 2015 |
| **Issued Date** | : | Mar. 23, 2015 |
| **Tested by** | : | BTL Inc. |

**Testing Engineer** : David Mao
(David Mao)

**Technical Manager** : Leo Hung
(Leo Hung)

**Authorized Signatory** : Steven Lu
(Steven Lu)


**B T L I N C .**

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## Declaration

**BTL** represents to the client that testing is done in accordance with standard procedures as applicable and that test instruments used has been calibrated with the standards traceable to National Measurement Laboratory (**NML**) of **R.O.C**, or National Institute of Standards and Technology (**NIST**) of **U.S.A.**

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

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**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.

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## REPORT ISSUED HISTORY

| Issued No. | Description | Issued Date |
|---|---|---|
| BTL-FCCP-1-1502C010 | Original Issue. | Mar. 23, 2015 |

## 1. CERTIFICATION

| | | |
|---|---|---|
| Equipment | : | 1750M 11AC High Power Ceiling Access Point |
| Brand Name | : | IP-COM |
| Model Name | : | W185AP |
| Applicant | : | SHENZHEN IP-COM NETWORKS CO.,LTD. |
| Manufacturer | : | SHENZHEN IP-COM NETWORKS CO.,LTD. |
| Address | : | Room 101, Unit A, First Floor, Tower E3, No. 1001, Zhongshanyuan Road, Nanshan District, Shenzhen, China. 518052 |
| Date of Test | : | Feb. 02, 2015~Mar. 20, 2015 |
| Test Sample | : | ENGINEERING SAMPLE |
| Standard(s) | : | FCC Part15, Subpart C: 2014 (15.247) / ANSI C63.4-2009 |

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-1-1502C010) were obtained utilizing the test procedures, test instruments, test sites that has been accredited by the Authority of TAF according to the ISO-17025 quality assessment standard and technical standard(s).

## 2. SUMMARY OF TEST RESULTS

Test procedures according to the technical standard(s):

| Applied Standard(s): FCC Part15 (15.247) , Subpart C: 2014 | | | |
|---|---|---|---|
| Standard(s) Section<br>**FCC** | 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) The test follows FCC KDB Publication No. 558074 D01 DTS Meas Guidance v03r02 (Measurement Guidelines of DTS)

## 2.1 TEST FACILITY

The test facilities used to collect the test data in this report is **DG-C02/DG-CB03** at the location of No.3,Jinshagang 1st Road, Shixia, Dalang Town, Dongguan, Guangdong, China.523792
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 reported uncertainty of measurement y ± U, where expended uncertainty U is based on a standard uncertainty multiplied by a coverage factor of k=2, providing a level of confidence of approximately 95 %。

A. Conducted Measurement :

| Test Site | Method | Measurement Frequency Range | U, (dB) | NOTE |
|---|---|---|---|---|
| DG-C02 | CISPR | 150 KHz ~ 30MHz | 1.94 | |

B. Radiated Measurement :

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

# 3. GENERAL INFORMATION

## 3.1 GENERAL DESCRIPTION OF EUT

| | | |
|---|---|---|
| Equipment | 1750M 11AC High Power Ceiling Access Point | |
| Brand Name | IP-COM | |
| Model Name | W185AP | |
| Model Difference | N/A | |
| Product Description | For the information of EUT's HW version/SW version/ Serial number, please refer to the operation description file. | |
| | Operation Frequency | 2412~2462 MHz |
| | Modulation Technology | 802.11b:DSSS<br>802.11g:OFDM<br>802.11n:OFDM |
| | Bit Rate of Transmitter | 802.11b: 11/5.5/2/1 Mbps<br>802.11g:<br>54/48/36/24/18/12/9/6 Mbps<br>802.11n up to 450 Mbps |
| | Output Power (Max.) | 802.11b: 22.80dBm<br>802.11g: 25.93dBm<br>802.11n(20MHz): 29.96dBm<br>802.11n(40MHz): 28.78dBm |
| Power Source | DC Voltage Supplied from AC/DC adapter<br>Brand/Model: GOSPELL DIGTAL TECHNOLOGY CO.,LTD/GP306A-510-125 | |
| Power Rating | I/P: 100-240V ~1.5A MAX 50/60Hz O/P: 51V /1.25A | |

Note:

1. For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.
2. The product will be sold with 2 kinds of base plates, the test results would not be affected by the appearance difference.

2. Channel List:

| CH01 – CH11 for 802.11b, 802.11g, 802.11n(20MHz)<br>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) | Note |
|---|---|---|---|---|---|---|
| 1 | N/A | N/A | Internal | Ipex | 3.00 | 2.4G |
| 2 | N/A | N/A | Internal | Ipex | 3.00 | 2.4G |
| 3 | N/A | N/A | Internal | Ipex | 3.00 | 2.4G |

Note:
(1) The EUT incorporates a MIMO function. Physically, the EUT provides three completed transmitters and receivers (3T3R).
(2) ANT 1 is the worst case for 1TX

4.

| Operating Mode / TX Mode | 1TX | 3TX |
|---|---|---|
| 802.11b | V (ANT 1) | - |
| 802.11g | V (ANT 1) | - |
| 802.11n(20MHz) | - | V (ANT 1 + ANT 2+ANT 3) |
| 802.11n(40MHz) | - | V (ANT 1 + ANT 2+ANT 3) |

## 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 | TX MODE |

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

| **For Conducted Test** | |
|---|---|
| Final Test Mode | Description |
| Mode 5 | TX MODE |

| **For Radiated Test** | |
|---|---|
| Final Test Mode | Description |
| Mode 1 | TX B MODE CHANNEL 01/06/11 |
| Mode 2 | TX G MODE CHANNEL 01/06/11 |
| Mode 3 | TX N-20MHZ MODE CHANNEL 01/06/11 |
| 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 (19.50Mbps)
802.11n HT40 mode : BPSK (40.50Mbps)
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.

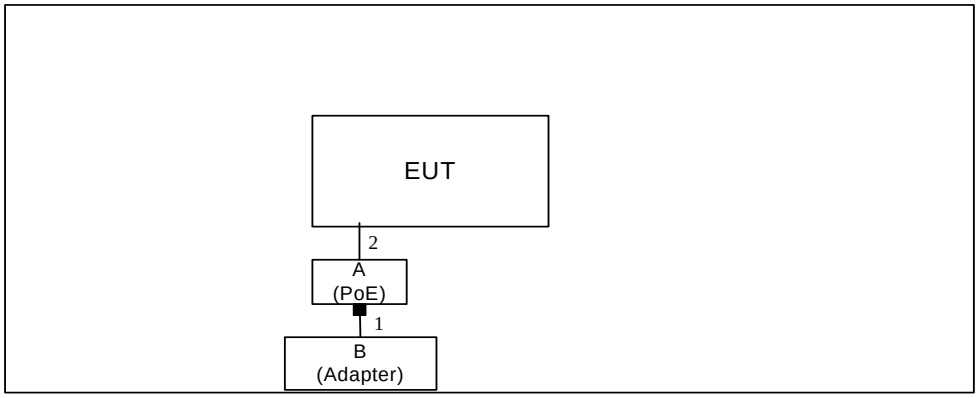
(4) The EUT was programmed to be in continuously transmitting mode and the transmit duty cycle is not less than 98%.

### 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 | MTool_2.0.1.1 | | |
|---|---|---|---|
| Frequency (MHz) | 2412 | 2437 | 2462 |
| 802.11b | 78 | 87 | 88 |
| 802.11g | 70 | 75 | 75 |
| 802.11n (20MHz) | 62 | 69 | 69 |
| Frequency | 2422 | 2437 | 2452 |
| 802.11n (40MHz) | 50 | 62 | 62 |

## 3.4 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED




■ ferrite core

## 3.5 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

| Item | Equipment | Mfr/Brand | Model/Type No. | FCC ID/IC | Series No. | Note |
|---|---|---|---|---|---|---|
| A | PoE | IP-COM | G10P | N/A | N/A | |
| B | Adapter | GOSPELL | GP306A-510-125 | N/A | N/A | |

| Item | Shielded Type | Ferrite Core | Length | Note |
|---|---|---|---|---|
| 1 | NO | YES | 1m | DC cable |
| 2 | NO | NO | 1m | RJ45 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 -0.5 | 66 to 56* | 56 to 46* |
| 0.50 -5.0 | 56 | 46 |
| 5.0 -30.0 | 60 | 50 |

Note:

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

(2) The test result calculated as following:
Measurement Value = Reading Level + Correct Factor
Correct Factor = Insertion Loss + Cable Loss + Attenuator Factor(if use)
Margin Level = Measurement Value - Limit Value

The following table is the setting of the receiver

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

### 4.1.2 TEST PROCEDURE

a. The EUT was placed 0.8 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.

b. Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.

c. I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.

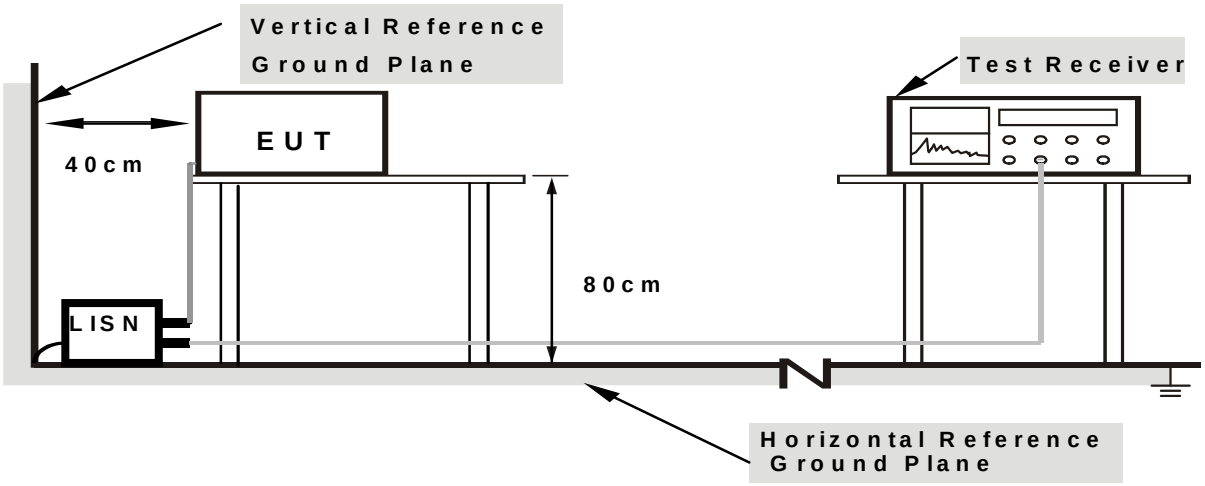
d. LISN at least 80 cm from nearest part of EUT chassis.

e. For the actual test configuration, please refer to the related Item –EUT Test Photos.

### 4.1.3 DEVIATION FROM TEST STANDARD

No deviation

### 4.1.4 TEST SETUP




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

### 4.1.5 EUT OPERATING CONDITIONS

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

### 4.1.6 EUT TEST CONDITIONS

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

### 4.1.7 TEST RESULTS

Please refer to the Attachment A.

## 4.2 RADIATED EMISSION MEASUREMENT

### 4.2.1 RADIATED EMISSION LIMITS

20dB in any 100 KHz bandwidth outside the operating frequency band. In case the emission fall within the restricted band specified on 15.205(a), then the 15.209(a) limit in the table below has to be followed.

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

| Frequency (MHz) | Field Strength (microvolts/meter) | Measurement Distance (meters) |
|---|---|---|
| 0.009~0.490 | 2400/F(KHz) | 300 |
| 0.490~1.705 | 24000/F(KHz) | 30 |
| 1.705~30.0 | 30 | 30 |
| 30~88 | 100 | 3 |
| 88~216 | 150 | 3 |
| 216~960 | 200 | 3 |
| 960~1000 | 500 | 3 |

LIMITS OF RADIATED EMISSION MEASUREMENT (Above 1000MHz)

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

Notes:

(1) The limit for radiated test was performed according to FCC PART 15C.

(2) The tighter limit applies at the band edges.

(3) Emission level (dBuV/m)=20log Emission level (uV/m).

(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) | RBW 1MHz VBW 3MHz peak detector for Pk value<br>RMS detector for AV value |

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

### 4.2.2 TEST PROCEDURE

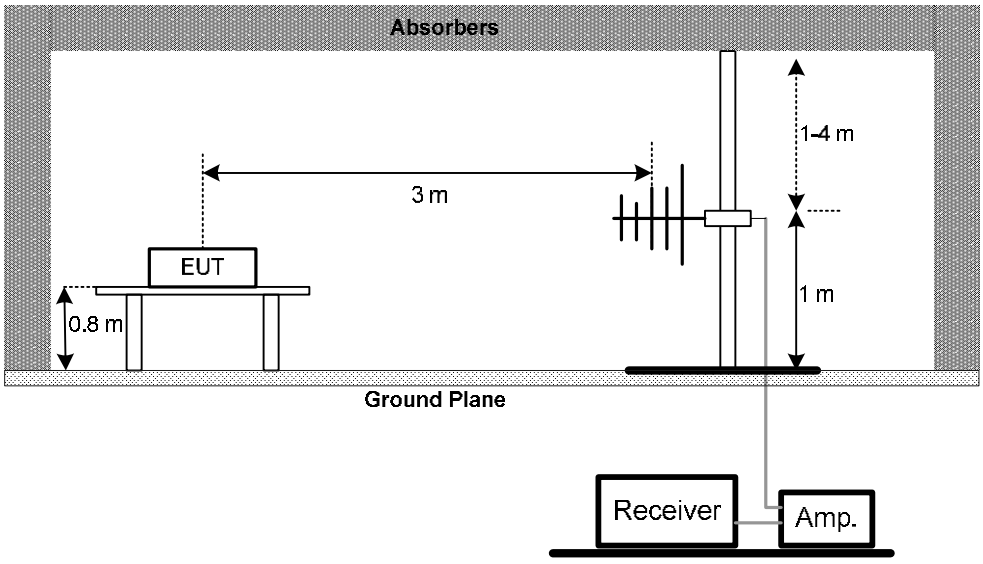
a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1GHz)
b. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter fully-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(above 1GHz)
c. The height of the equipment or of the substitution antenna shall be 0.8 m; the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
d. The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
e. If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed.
f. For the actual test configuration, please refer to the related Item –EUT Test Photos.

### 4.2.3 DEVIATION FROM TEST STANDARD

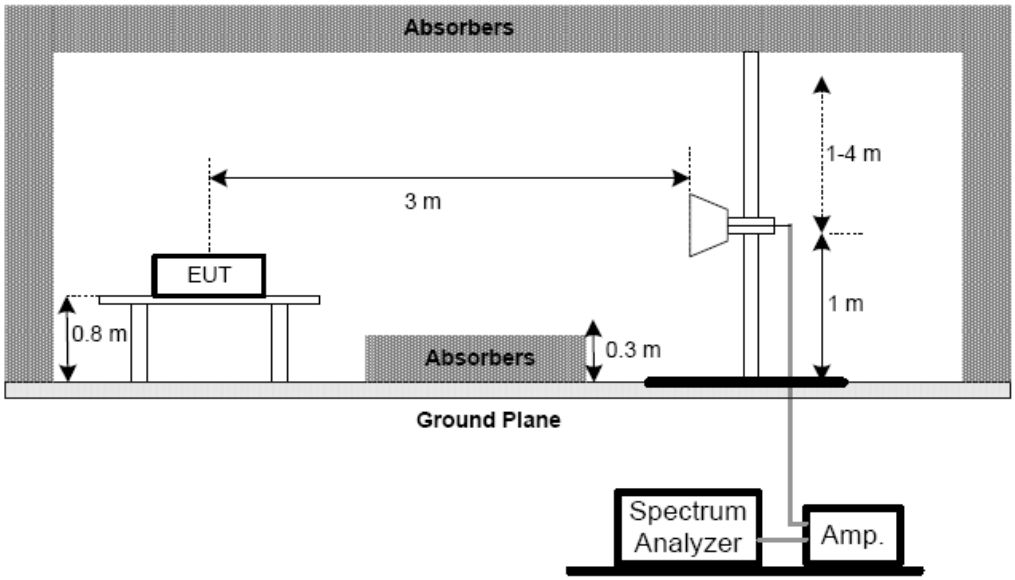
No deviation

### 4.2.4 TEST SETUP

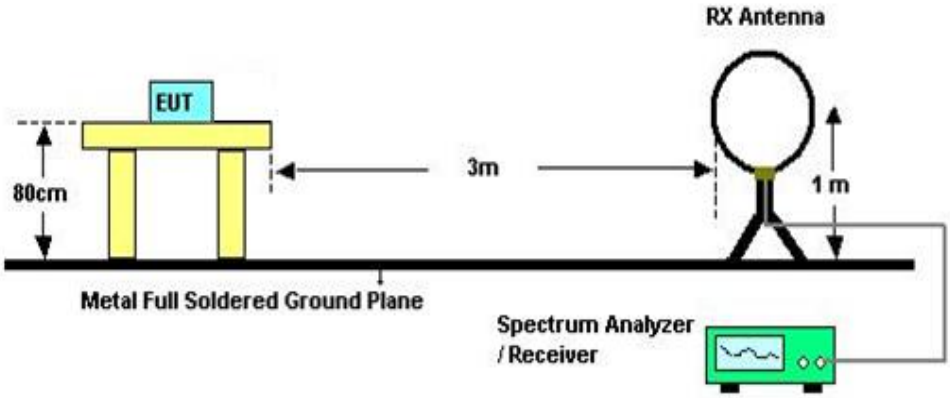
(A) Radiated Emission Test Set-Up Frequency Below 1 GHz



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




(C) For radiated emissions below 30MHz




### 4.2.5 EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of **4.1.5 Unless** otherwise a special operating condition is specified in the follows during the testing.

### 4.2.6 EUT TEST CONDITIONS

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

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

Please refer to the Attachment B

Remark:

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

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

Please refer to the Attachment C.

### 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 |

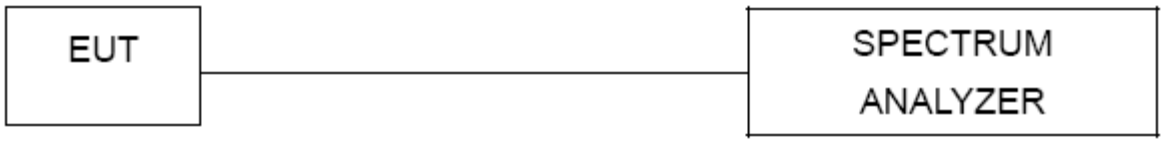
### 5.1.1 TEST PROCEDURE

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 tested system was configured as the statements of 4.1.5 Unless otherwise a special operating condition is specified in the follows during the testing.

### 5.1.5 EUT TEST CONDITIONS

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

### 5.1.6 TEST RESULTS

Please refer to the Attachment E.

# 6. MAXIMUM 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 |

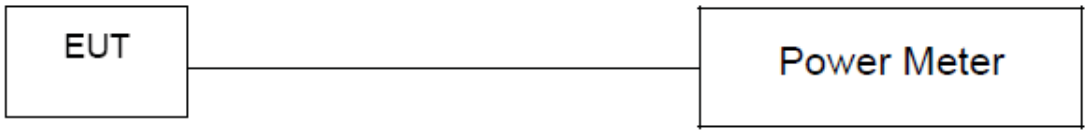
### 6.1.1 TEST PROCEDURE

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 v03r02.

### 6.1.2 DEVIATION FROM STANDARD

No deviation.

### 6.1.3 TEST SETUP




### 6.1.4 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 4.1.5 Unless otherwise a special operating condition is specified in the follows during the testing.
Transmit output power was measured while the host equipment supply voltage was varied from 85 % to 115 % of the nominal rated supply voltage. No change in transmit output power was observed.

### 6.1.5 EUT TEST CONDITIONS

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

### 6.1.6 TEST RESULTS

Please refer to the Attachment F.

# 7. ANTENNA CONDUCTED SPURIOUS EMISSION

## 7.1 APPLIED PROCEDURES / LIMIT

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

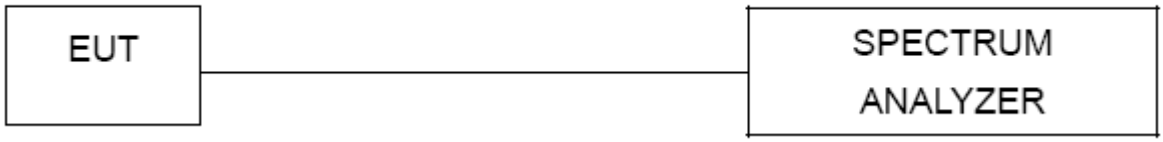
### 7.1.1 TEST PROCEDURE

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

### 7.1.2 DEVIATION FROM STANDARD

No deviation.

### 7.1.3 TEST SETUP




### 7.1.4 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 4.1.5 Unless otherwise a special operating condition is specified in the follows during the testing.

### 7.1.5 EUT TEST CONDITIONS

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

### 7.1.6 TEST RESULTS

Please refer to the Attachment G.

# 8. POWER SPECTRAL DENSITY TEST

## 8.1 APPLIED PROCEDURES / LIMIT

| FCC Part15 (15.247) , Subpart C | | | | |
|---|---|---|---|---|
| Section | Test Item | Limit | Frequency Range (MHz) | Result |
| 15.247(e) | Power Spectral Density | 8 dBm (in any 3KHz) | 2400-2483.5 | PASS |

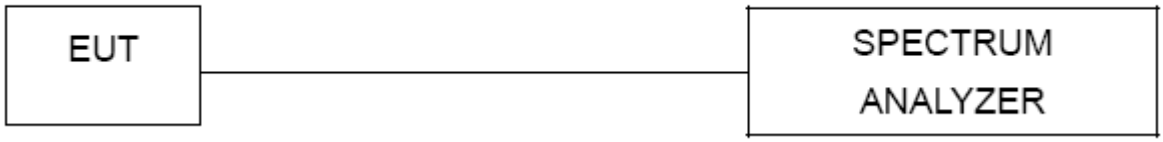
### 8.1.1 TEST PROCEDURE

a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,
b. Spectrum Setting: RBW=3KHz, VBW=10KHz, Sweep time = Auto.

### 8.1.2 DEVIATION FROM STANDARD

No deviation.

### 8.1.3 TEST SETUP




### 8.1.4 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 4.1.5 Unless otherwise a special operating condition is specified in the follows during the testing.

### 8.1.5 EUT TEST CONDITIONS

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

### 8.1.6 TEST RESULTS

Please refer to the Attachment H.

## 9. MEASUREMENT INSTRUMENTS LIST

| Conducted Emission Measurement | | | | | |
|---|---|---|---|---|---|
| Item | Kind of Equipment | Manufacturer | Type No. | Serial No. | Calibrated until |
| 1 | LISN | EMCO | 3816/2 | 00052765 | Mar. 29, 2015 |
| 2 | LISN | R&S | ENV216 | 101447 | Mar. 29, 2015 |
| 3 | Test Cable | N/A | C_17 | N/A | Mar. 13, 2016 |
| 4 | EMI TEST RECEIVER | R&S | ESCS30 | 833364/017 | Mar. 29, 2015 |
| 5 | 50Ω Terminator | SHX | TF2-3G-A | 08122902 | Mar. 29, 2015 |
| 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. 29, 2015 |
| 2 | Amplifier | HP | 8447D | 2944A09673 | Mar. 29, 2015 |
| 3 | Receiver | AGILENT | N9038A | MY52130039 | Sep. 30, 2015 |
| 4 | Test Cable | N/A | C-01_CB03 | N/A | Jul. 01, 2015 |
| 5 | Controller | CT | SC100 | N/A | N/A |
| 6 | Antenna | ETS | 3115 | 00075789 | Mar. 29, 2015 |
| 7 | Amplifier | Agilent | 8449B | 3008A02274 | Mar. 29, 2015 |
| 8 | Receiver | AGILENT | N9038A | MY52130039 | Sep. 30, 2015 |
| 9 | Test Cable | HUBER+SUHNER | C-48 | N/A | Apr. 30, 2015 |
| 10 | Controller | CT | SC100 | N/A | N/A |
| 11 | Broad-Band Horn Antenna | Schwarzbeck | BBHA 9170 | 9170319 | Feb. 21, 2016 |
| 12 | Microwave Preamplifier With Adaptor | EMC INSTRUMENT | EMC2654045 | 980039 & HA01 | Feb. 21, 2016 |
| 13 | Active Loop Antenna | R&S | HFH2-Z2 | 830749/020 | Mar. 29, 2015 |
| 14 | 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 | Nov. 02, 2015 |
| 2 | Test Cable | N/A | CL-CB12-001 | N/A | Oct. 22, 2015 |

| Peak Output Power Measurement | | | | | |
|---|---|---|---|---|---|
| Item | Kind of Equipment | Manufacturer | Type No. | Serial No. | Calibrated until |
| 1 | P-series Power meter | Agilent | N1911A | MY45100473 | Mar. 29, 2015 |
| 2 | Wireband Power sensor | Agilent | N1921A | MY51100041 | Mar. 29, 2015 |
| 3 | Test Cable | N/A | CL-CB12-001 | N/A | Oct. 22, 2015 |

| Antenna Conducted Spurious Emission Measurement | | | | | |
|---|---|---|---|---|---|
| Item | Kind of Equipment | Manufacturer | Type No. | Serial No. | Calibrated until |
| 1 | Spectrum Analyzer | R&S | FSP 40 | 100185 | Nov. 02, 2015 |
| 2 | Test Cable | N/A | CL-CB12-001 | N/A | Oct. 22, 2015 |

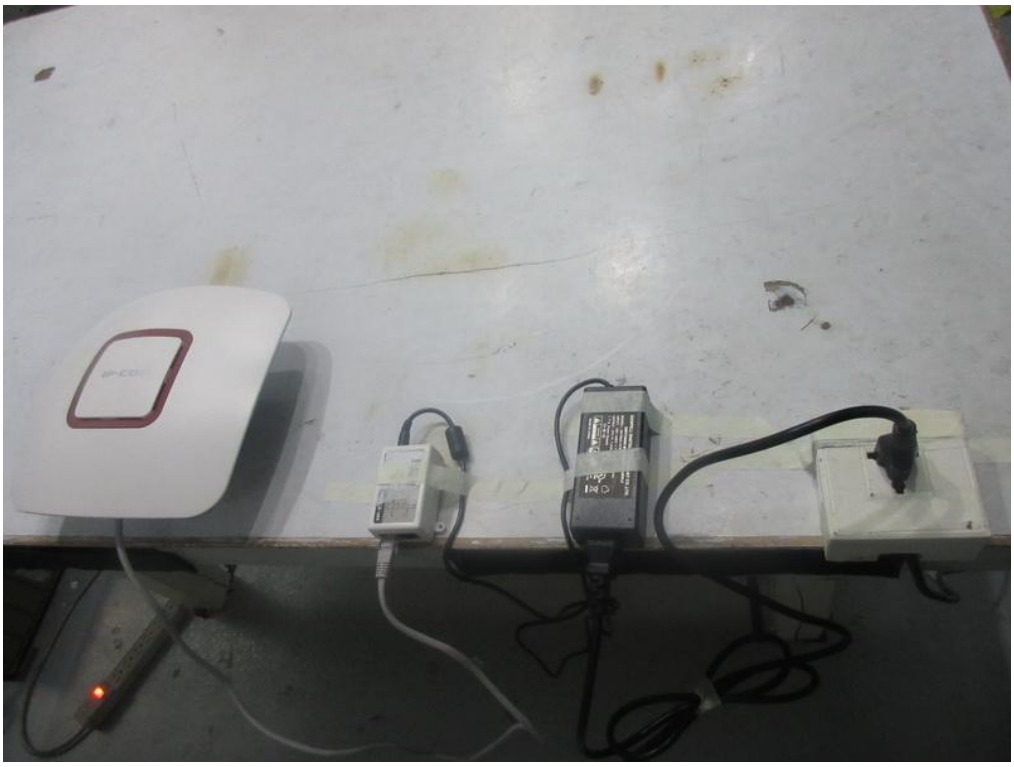
| Power Spectral Density Measurement | | | | | |
|---|---|---|---|---|---|
| Item | Kind of Equipment | Manufacturer | Type No. | Serial No. | Calibrated until |
| 1 | Spectrum Analyzer | R&S | FSP 40 | 100185 | Nov. 02, 2015 |
| 2 | Test Cable | N/A | CL-CB12-001 | N/A | Oct. 22, 2015 |

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

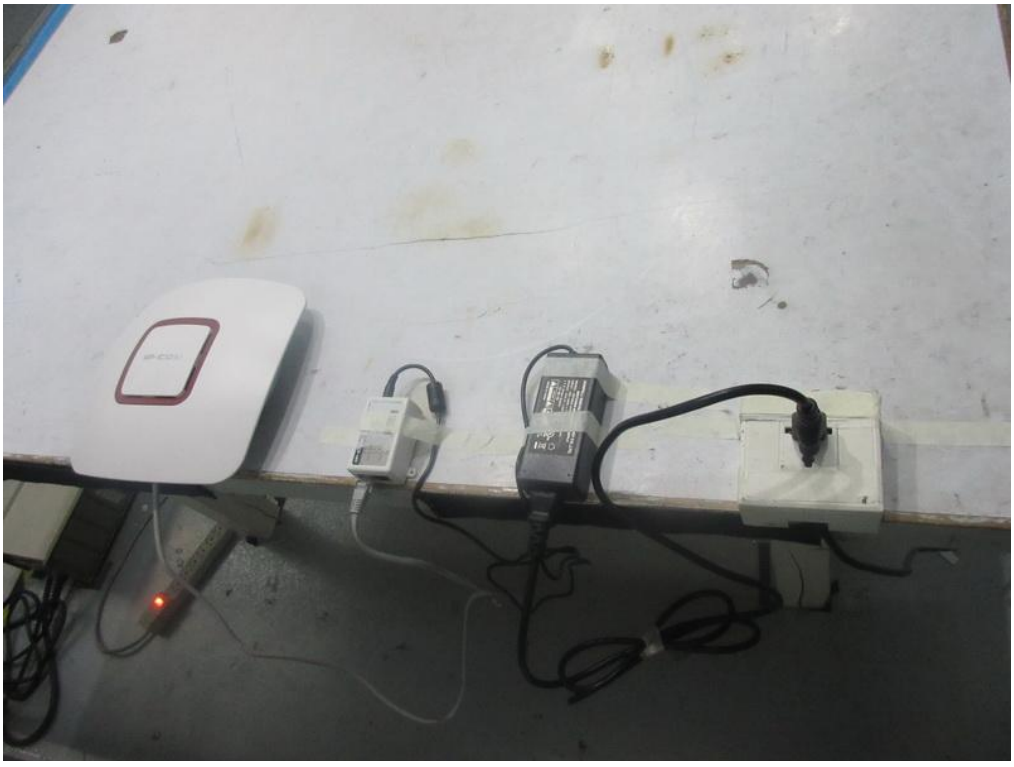
**Conducted Measurement Photos**

**High base plate**



**Conducted Measurement Photos**

**Low base plate**

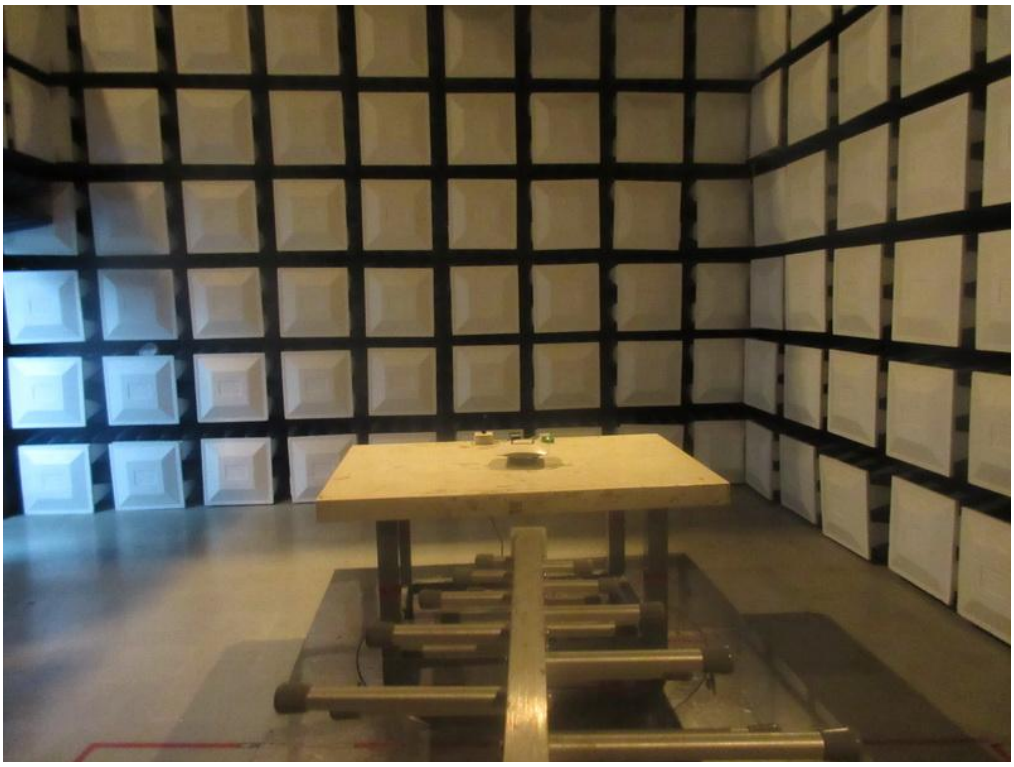


## Radiated Measurement Photos

**High base plate**
**9KHz to 30MHz**

## Radiated Measurement Photos

**High base plate**
**30MHz to 1000MHz**



## Radiated Measurement Photos

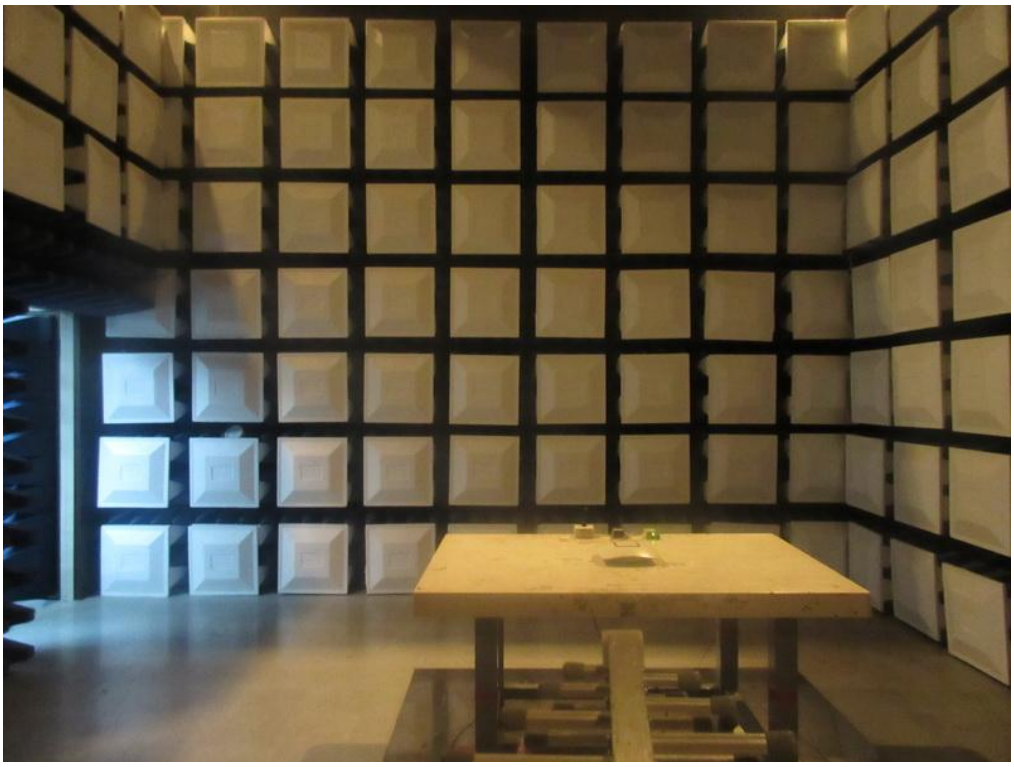
**High base plate**
**Above 1000MHz**

## Radiated Measurement Photos

**Low base plate**
**9KHz to 30MHz**

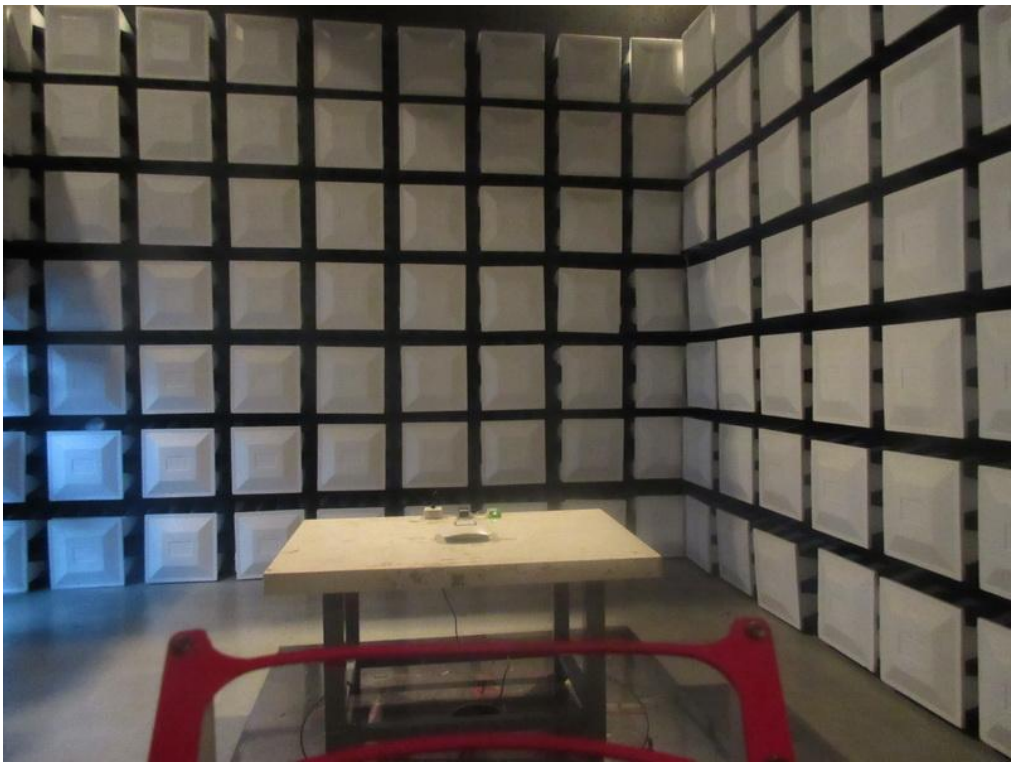
## Radiated Measurement Photos

**Low base plate**
**30MHz to 1000MHz**



## Radiated Measurement Photos

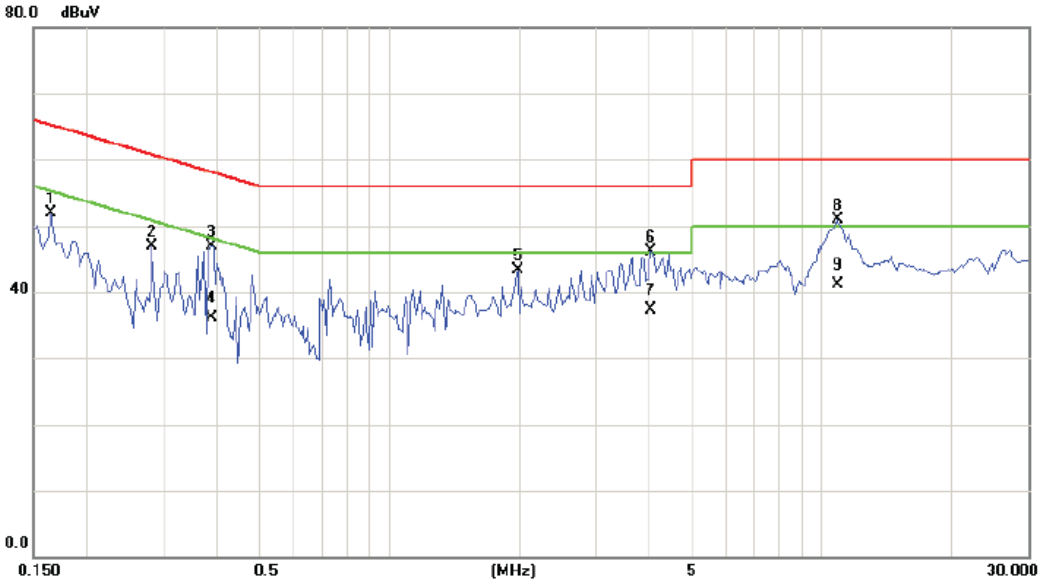
**Low base plate**
**Above 1000MHz**



# ATTACHMENT A - CONDUCTED EMISSION

| Test Mode : | TX MODE |
|---|---|

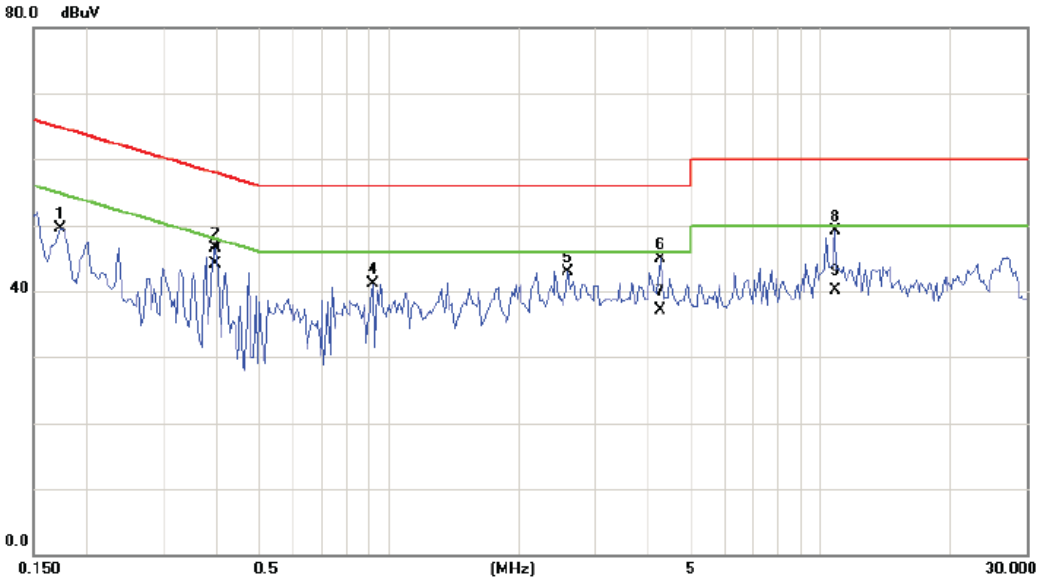
**Line**




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV | dBuV | dB | Detector | Comment |
| 1 | | 0.1655 | 42.43 | 9.49 | 51.92 | 65.18 | -13.26 | peak | |
| 2 | | 0.2828 | 37.27 | 9.54 | 46.81 | 60.73 | -13.92 | peak | |
| 3 | | 0.3883 | 37.23 | 9.59 | 46.82 | 58.10 | -11.28 | peak | |
| 4 | | 0.3883 | 26.50 | 9.59 | 36.09 | 48.10 | -12.01 | AVG | |
| 5 | | 1.9781 | 33.65 | 9.60 | 43.25 | 56.00 | -12.75 | peak | |
| 6 | | 4.0313 | 36.54 | 9.64 | 46.18 | 56.00 | -9.82 | peak | |
| 7 | * | 4.0313 | 27.61 | 9.64 | 37.25 | 46.00 | -8.75 | AVG | |
| 8 | | 10.8750 | 41.00 | 9.81 | 50.81 | 60.00 | -9.19 | peak | |
| 9 | | 10.8750 | 31.29 | 9.81 | 41.10 | 50.00 | -8.90 | AVG | |

| Test Mode : | TX MODE |
|---|---|

## Neutral




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV | dBuV | dB | Detector | Comment |
| 1 | | 0.1734 | 40.00 | 9.58 | 49.58 | 64.80 | -15.22 | peak | |
| 2 | | 0.3961 | 36.85 | 9.58 | 46.43 | 57.93 | -11.50 | peak | |
| 3 | * | 0.3961 | 34.60 | 9.58 | 44.18 | 47.93 | -3.75 | AVG | |
| 4 | | 0.9195 | 31.59 | 9.60 | 41.19 | 56.00 | -14.81 | peak | |
| 5 | | 2.5992 | 33.28 | 9.64 | 42.92 | 56.00 | -13.08 | peak | |
| 6 | | 4.2500 | 35.16 | 9.67 | 44.83 | 56.00 | -11.17 | peak | |
| 7 | | 4.2500 | 27.40 | 9.67 | 37.07 | 46.00 | -8.93 | AVG | |
| 8 | | 10.7852 | 39.33 | 9.81 | 49.14 | 60.00 | -10.86 | peak | |
| 9 | | 10.7852 | 30.25 | 9.81 | 40.06 | 50.00 | -9.94 | AVG | |

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

| Test Mode: | TX Mode 2412MHz |
|---|---|

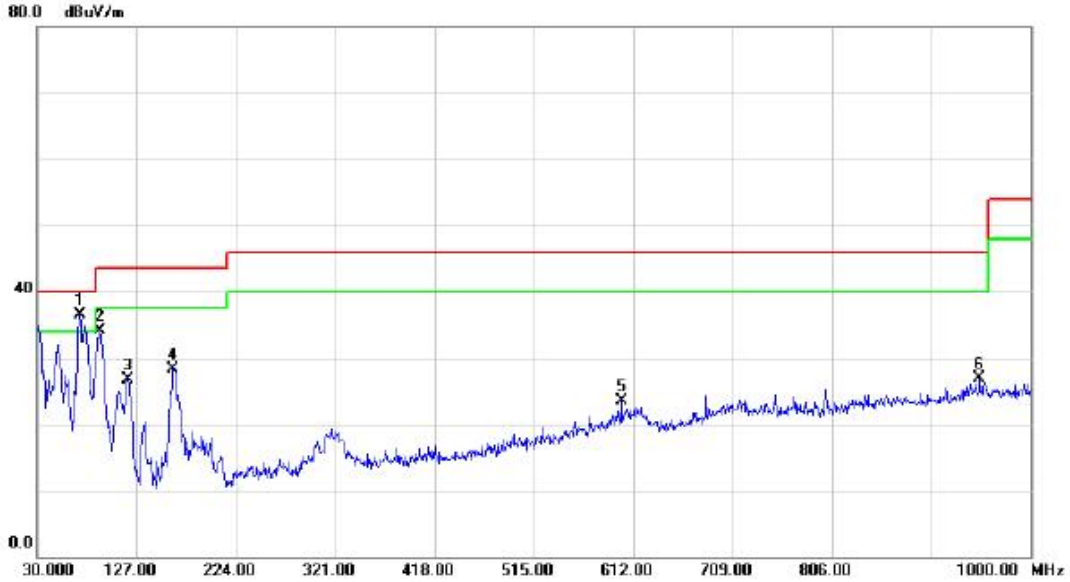
| Frequency (MHz) | Ant 0°/90° | Read level dBuV/m | Factor (dB) | Measured(FS) (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Note |
|---|---|---|---|---|---|---|---|
| 0.0066 | 0° | 12.45 | 25.15 | 37.60 | 111.21 | -73.61 | AVG |
| 0.0066 | 0° | 14.06 | 25.15 | 39.21 | 131.21 | -92.00 | PEAK |
| 0.0217 | 0° | 5.19 | 24.19 | 29.38 | 100.88 | -71.49 | AVG |
| 0.0217 | 0° | 7.56 | 24.19 | 31.75 | 120.88 | -89.12 | PEAK |
| 0.0326 | 0° | 3.62 | 23.50 | 27.12 | 97.34 | -70.22 | AVG |
| 0.0326 | 0° | 5.38 | 23.50 | 28.88 | 117.34 | -88.46 | PEAK |
| 0.0352 | 0° | 0.85 | 23.34 | 24.19 | 96.67 | -72.49 | AVG |
| 0.0352 | 0° | 2.68 | 23.34 | 26.02 | 116.67 | -90.66 | PEAK |
| 0.4960 | 0° | 30.15 | 19.81 | 49.96 | 73.69 | -23.73 | QP |
| 1.8540 | 0° | 21.29 | 19.51 | 40.80 | 69.54 | -28.74 | QP |

| Frequency (MHz) | Ant 0°/90° | Read level dBuV/m | Factor (dB) | Measured(FS) (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Note |
|---|---|---|---|---|---|---|---|
| 0.0068 | 90° | 12.02 | 24.30 | 36.32 | 130.95 | -94.63 | AVG |
| 0.0068 | 90° | 14.16 | 24.30 | 38.46 | 150.95 | -112.49 | PEAK |
| 0.0358 | 90° | 6.25 | 23.30 | 29.55 | 116.53 | -86.98 | AVG |
| 0.0358 | 90° | 8.55 | 23.30 | 31.85 | 136.53 | -104.68 | PEAK |
| 0.0443 | 90° | 3.85 | 22.76 | 26.61 | 114.68 | -88.07 | AVG |
| 0.0443 | 90° | 5.42 | 22.76 | 28.18 | 134.68 | -106.50 | PEAK |
| 0.0482 | 90° | 0.96 | 22.51 | 23.47 | 113.94 | -90.47 | AVG |
| 0.0482 | 90° | 2.71 | 22.51 | 25.22 | 133.94 | -108.72 | PEAK |
| 0.5210 | 90° | 30.46 | 19.87 | 50.33 | 73.27 | -22.94 | QP |
| 1.8380 | 90° | 21.48 | 19.52 | 41.00 | 69.54 | -28.54 | QP |

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

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

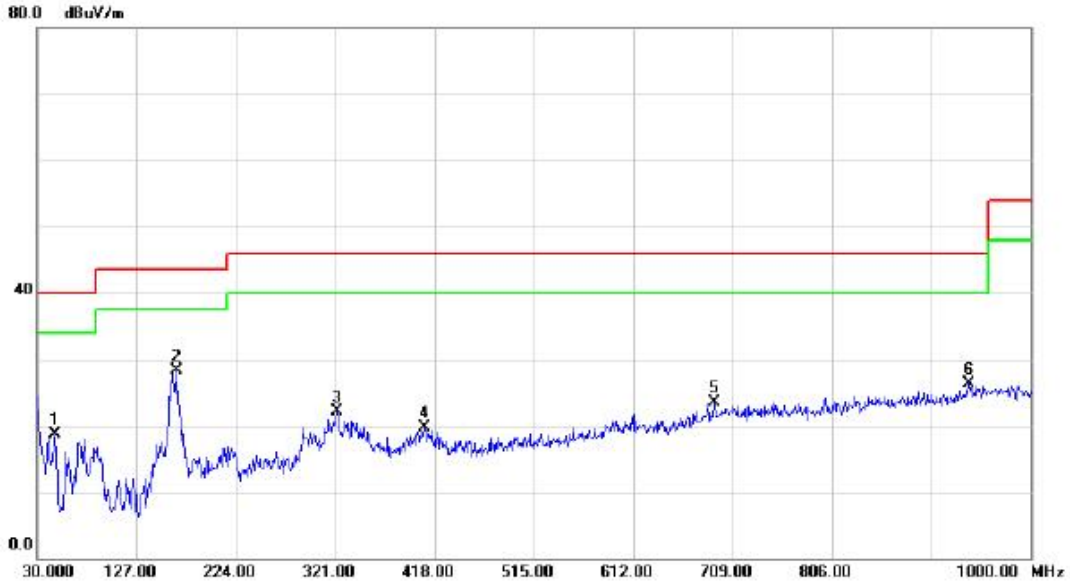
**Vertical**




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | * | 71.7100 | 59.79 | -23.38 | 36.41 | 40.00 | -3.59 | peak | |
| 2 | | 91.1100 | 56.16 | -21.96 | 34.20 | 43.50 | -9.30 | peak | |
| 3 | | 118.2700 | 49.00 | -22.25 | 26.75 | 43.50 | -16.75 | peak | |
| 4 | | 162.8900 | 50.06 | -21.85 | 28.21 | 43.50 | -15.29 | peak | |
| 5 | | 600.3600 | 32.02 | -8.51 | 23.51 | 46.00 | -22.49 | peak | |
| 6 | | 950.5300 | 30.20 | -3.21 | 26.99 | 46.00 | -19.01 | peak | |

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

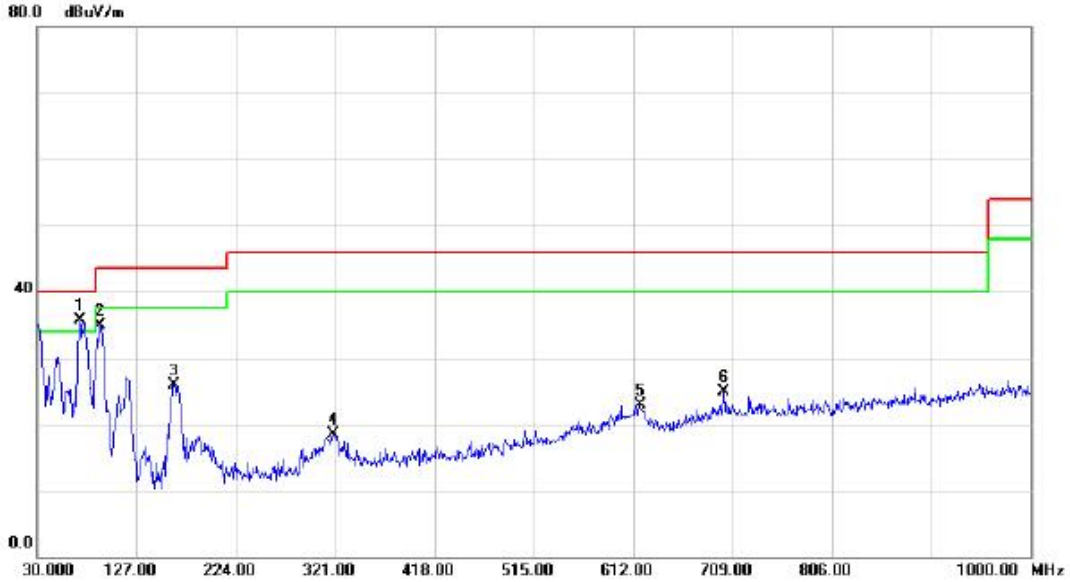
**Horizontal**




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | | 47.4600 | 38.13 | -19.38 | 18.75 | 40.00 | -21.25 | peak | |
| 2 | * | 165.8000 | 50.07 | -21.70 | 28.37 | 43.50 | -15.13 | peak | |
| 3 | | 322.9400 | 37.39 | -15.20 | 22.19 | 46.00 | -23.81 | peak | |
| 4 | | 408.3000 | 32.98 | -13.29 | 19.69 | 46.00 | -26.31 | peak | |
| 5 | | 691.5400 | 30.14 | -6.64 | 23.50 | 46.00 | -22.50 | peak | |
| 6 | | 939.8600 | 29.92 | -3.52 | 26.40 | 46.00 | -19.60 | peak | |

| Test Mode: | TX B MODE CHANNEL 06 |
|---|---|

**Vertical**




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | * | 71.7100 | 59.09 | -23.38 | 35.71 | 40.00 | -4.29 | peak | |
| 2 | | 91.1100 | 56.90 | -21.96 | 34.94 | 43.50 | -8.56 | peak | |
| 3 | | 163.8600 | 47.78 | -21.81 | 25.97 | 43.50 | -17.53 | peak | |
| 4 | | 319.0600 | 33.87 | -15.34 | 18.53 | 46.00 | -27.47 | peak | |
| 5 | | 618.7900 | 31.45 | -8.46 | 22.99 | 46.00 | -23.01 | peak | |
| 6 | | 700.2700 | 31.10 | -6.28 | 24.82 | 46.00 | -21.18 | peak | |

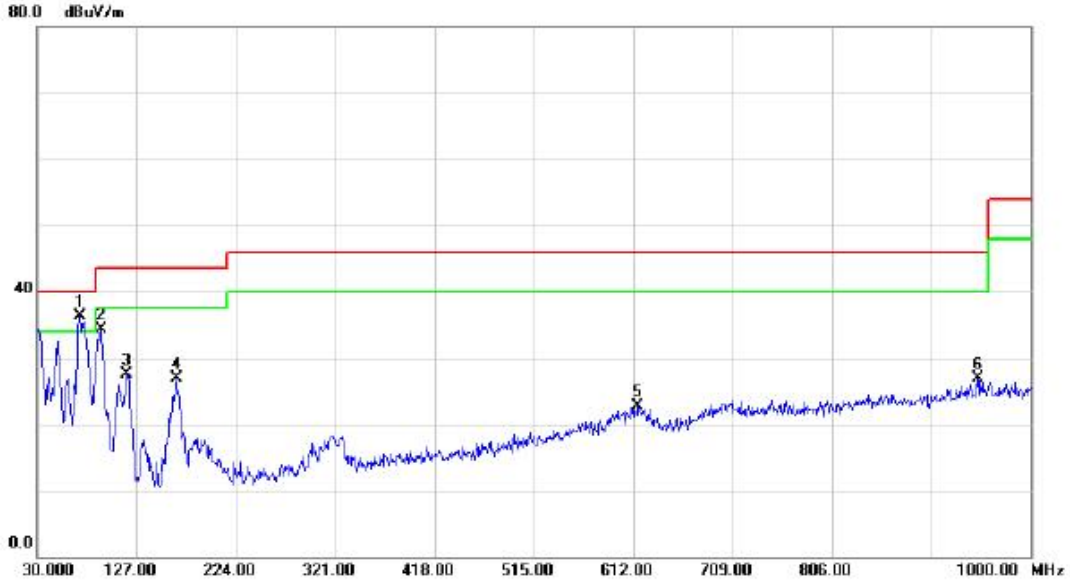
| Test Mode: | TX B MODE CHANNEL 06 |
|---|---|

**Horizontal**


| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | | 71.7100 | 44.24 | -23.38 | 20.86 | 40.00 | -19.14 | peak | |
| 2 | * | 163.8600 | 48.36 | -21.81 | 26.55 | 43.50 | -16.95 | peak | |
| 3 | | 216.2400 | 37.04 | -18.93 | 18.11 | 46.00 | -27.89 | peak | |
| 4 | | 319.0600 | 36.93 | -15.34 | 21.59 | 46.00 | -24.41 | peak | |
| 5 | | 687.6600 | 30.00 | -6.80 | 23.20 | 46.00 | -22.80 | peak | |
| 6 | | 944.7100 | 29.70 | -3.37 | 26.33 | 46.00 | -19.67 | peak | |

| Test Mode: | TX B MODE CHANNEL 11 |
|---|---|

**Vertical**




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | * | 71.7100 | 59.72 | -23.38 | 36.34 | 40.00 | -3.66 | peak | |
| 2 | | 92.0800 | 56.24 | -21.91 | 34.33 | 43.50 | -9.17 | peak | |
| 3 | | 117.3000 | 49.78 | -22.22 | 27.56 | 43.50 | -15.94 | peak | |
| 4 | | 165.8000 | 48.56 | -21.70 | 26.86 | 43.50 | -16.64 | peak | |
| 5 | | 616.8500 | 31.25 | -8.47 | 22.78 | 46.00 | -23.22 | peak | |
| 6 | | 948.5900 | 30.10 | -3.26 | 26.84 | 46.00 | -19.16 | peak | |

| Test Mode: | TX B MODE CHANNEL 11 |
|---|---|

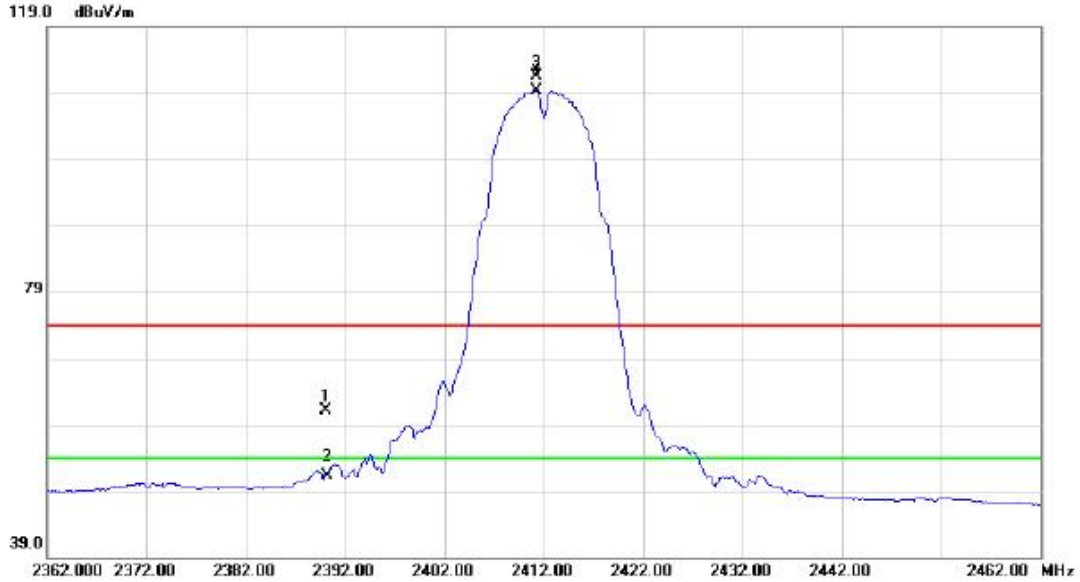
**Horizontal**


| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | | 71.7100 | 44.53 | -23.38 | 21.15 | 40.00 | -18.85 | peak | |
| 2 | * | 163.8600 | 49.48 | -21.81 | 27.67 | 43.50 | -15.83 | peak | |
| 3 | | 317.1200 | 36.00 | -15.45 | 20.55 | 46.00 | -25.45 | peak | |
| 4 | | 674.0800 | 30.28 | -7.37 | 22.91 | 46.00 | -23.09 | peak | |
| 5 | | 828.3100 | 30.25 | -5.41 | 24.84 | 46.00 | -21.16 | peak | |
| 6 | | 973.8100 | 29.53 | -3.11 | 26.42 | 54.00 | -27.58 | peak | |

# ATTACHMENT D - RADIATED EMISSION (ABOVE 1000MHZ)

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

**Vertical**




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | | 2390.000 | 29.27 | 31.88 | 61.15 | 74.00 | -12.85 | peak | |
| 2 | | 2390.000 | 19.33 | 31.88 | 51.21 | 54.00 | -2.79 | AVG | |
| 3 | X | 2411.200 | 79.68 | 31.91 | 111.59 | 74.00 | 37.59 | peak | no limit |
| 4 | * | 2411.200 | 77.47 | 31.91 | 109.38 | 54.00 | 55.38 | AVG | no limit |

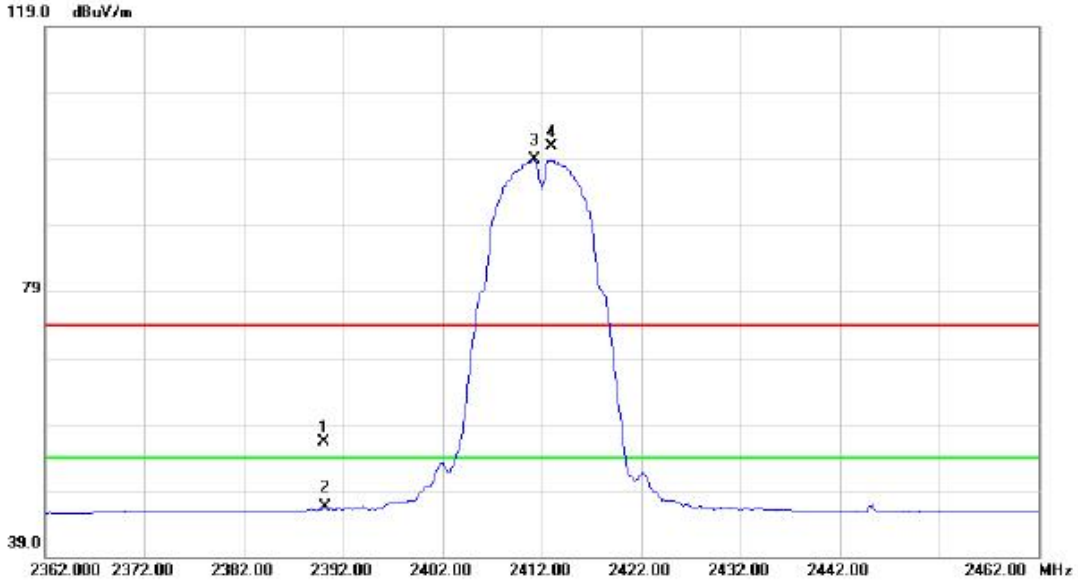
| | |
|---|---|
| Orthogonal Axis : | X |
| Test Mode : | TX B MODE 2412MHz |

**Vertical**


| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | | 4824.050 | 42.56 | 3.62 | 46.18 | 74.00 | -27.82 | peak | |
| 2 | * | 4824.050 | 40.46 | 3.62 | 44.08 | 54.00 | -9.92 | AVG | |

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

**Horizontal**




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | | 2390.000 | 24.40 | 31.88 | 56.28 | 74.00 | -17.72 | peak | |
| 2 | | 2390.000 | 14.56 | 31.88 | 46.44 | 54.00 | -7.56 | AVG | |
| 3 | * | 2411.200 | 67.03 | 31.91 | 98.94 | 54.00 | 44.94 | AVG | no limit |
| 4 | X | 2413.000 | 69.07 | 31.91 | 100.98 | 74.00 | 26.98 | peak | no limit |

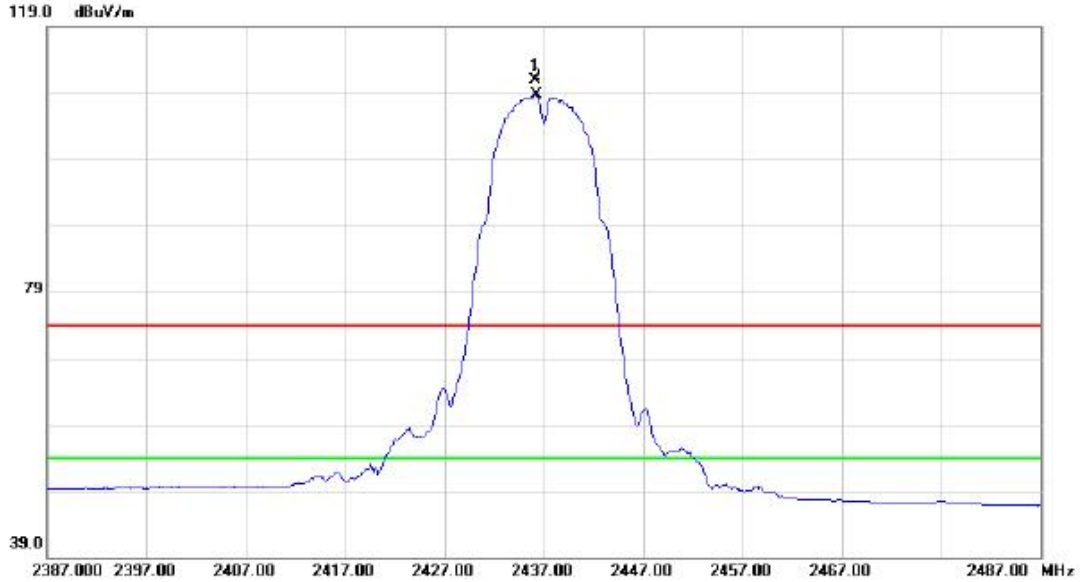
| | |
|---|---|
| Orthogonal Axis : | X |
| Test Mode : | TX B MODE 2412MHz |

**Horizontal**


| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | | 4824.050 | 39.64 | 3.62 | 43.26 | 74.00 | -30.74 | peak | |
| 2 | * | 4824.050 | 36.06 | 3.62 | 39.68 | 54.00 | -14.32 | AVG | |

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

**Vertical**




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | X | 2436.100 | 78.91 | 31.94 | 110.85 | 74.00 | 36.85 | peak | no limit |
| 2 | * | 2436.200 | 76.81 | 31.94 | 108.75 | 54.00 | 54.75 | AVG | no limit |

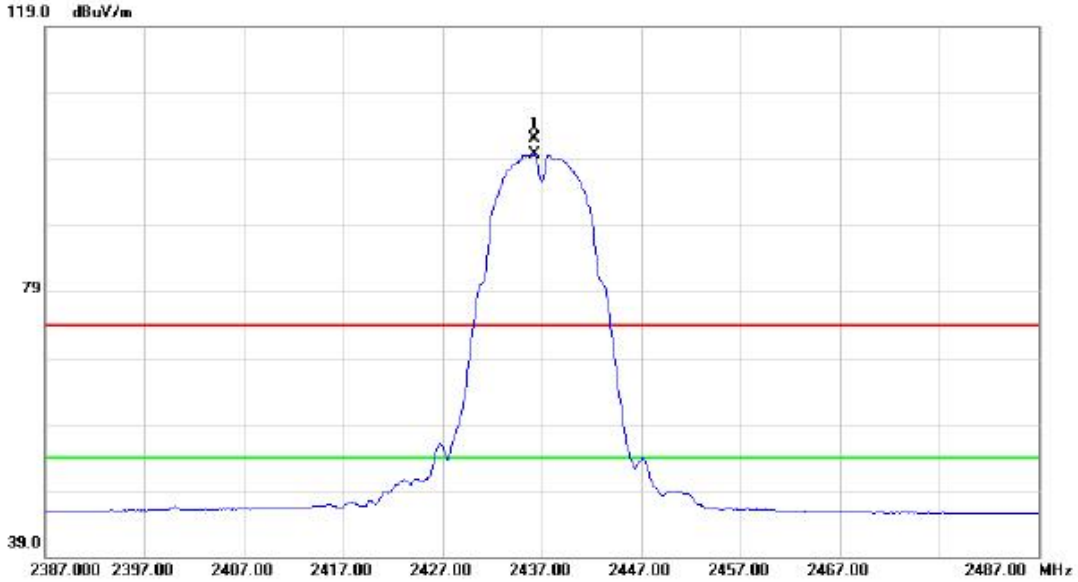
| | |
|---|---|
| Orthogonal Axis : | X |
| Test Mode : | TX B MODE 2437MHz |

**Vertical**


| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | | 4874.000 | 46.58 | 3.72 | 50.30 | 74.00 | -23.70 | peak | |
| 2 | * | 4874.000 | 45.09 | 3.72 | 48.81 | 54.00 | -5.19 | AVG | |

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

**Horizontal**




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | X | 2436.200 | 70.21 | 31.94 | 102.15 | 74.00 | 28.15 | peak | no limit |
| 2 | * | 2436.200 | 67.70 | 31.94 | 99.64 | 54.00 | 45.64 | AVG | no limit |

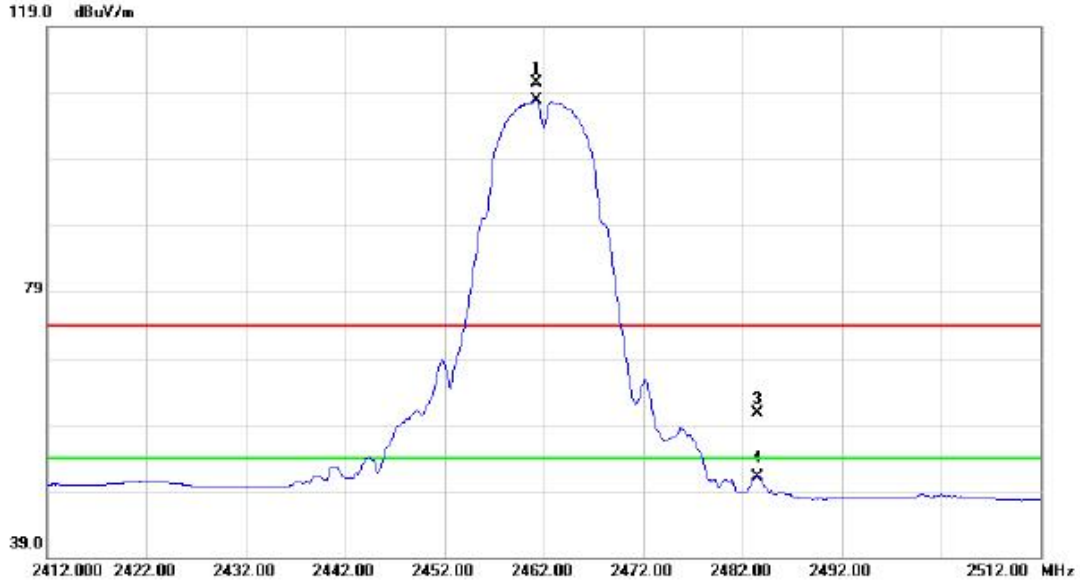
| | |
|---|---|
| Orthogonal Axis : | X |
| Test Mode : | TX B MODE 2437MHz |

**Horizontal**


| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | | 4874.000 | 40.62 | 3.72 | 44.34 | 74.00 | -29.66 | peak | |
| 2 | * | 4874.000 | 36.85 | 3.72 | 40.57 | 54.00 | -13.43 | AVG | |

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

**Vertical**




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | X | 2461.200 | 78.62 | 31.98 | 110.60 | 74.00 | 36.60 | peak | no limit |
| 2 | * | 2461.200 | 75.95 | 31.98 | 107.93 | 54.00 | 53.93 | AVG | no limit |
| 3 | | 2483.500 | 28.63 | 32.01 | 60.64 | 74.00 | -13.36 | peak | |
| 4 | | 2483.500 | 19.13 | 32.01 | 51.14 | 54.00 | -2.86 | AVG | |

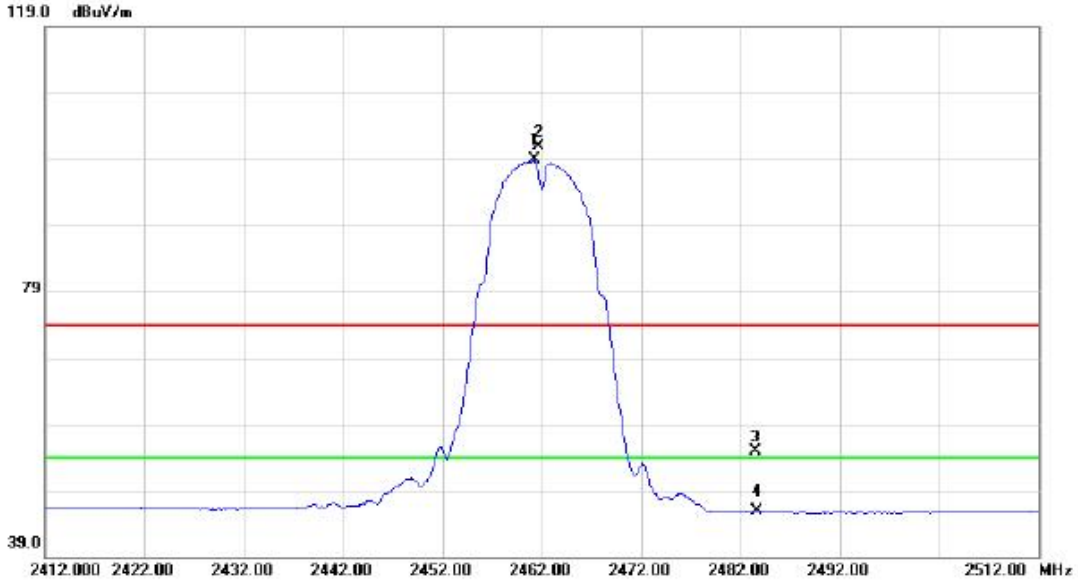
| | |
|---|---|
| Orthogonal Axis : | X |
| Test Mode : | TX B MODE 2462MHz |

**Vertical**


| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | | 4923.950 | 48.95 | 3.80 | 52.75 | 74.00 | -21.25 | peak | |
| 2 | * | 4923.950 | 47.31 | 3.80 | 51.11 | 54.00 | -2.89 | AVG | |

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

**Horizontal**




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | * | 2461.200 | 66.88 | 31.98 | 98.86 | 54.00 | 44.86 | AVG | no limit |
| 2 | X | 2461.600 | 68.97 | 31.98 | 100.95 | 74.00 | 26.95 | peak | no limit |
| 3 | | 2483.500 | 22.91 | 32.01 | 54.92 | 74.00 | -19.08 | peak | |
| 4 | | 2483.500 | 13.95 | 32.01 | 45.96 | 54.00 | -8.04 | AVG | |

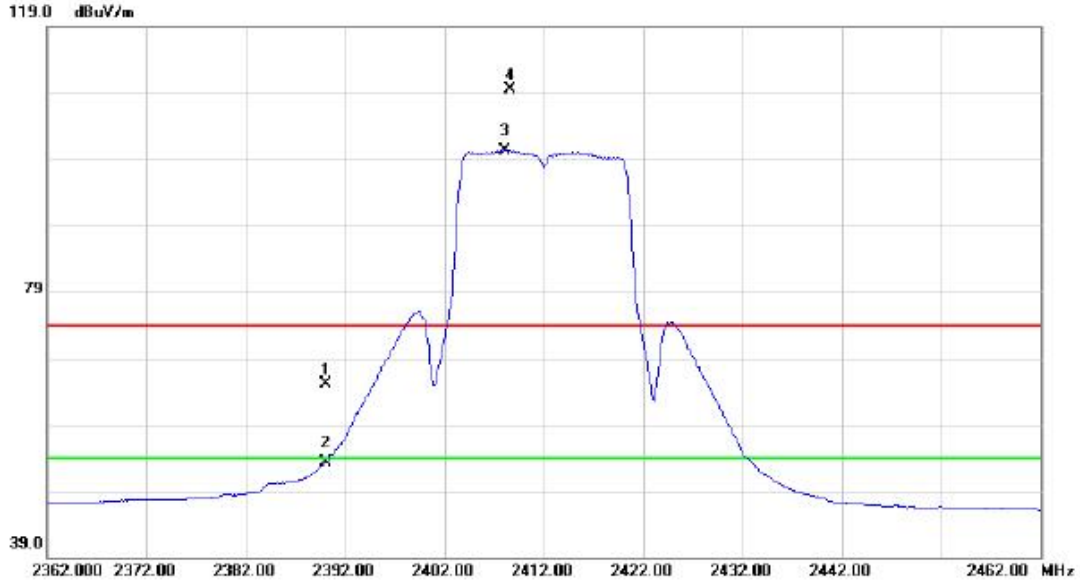
| | |
|---|---|
| Orthogonal Axis : | X |
| Test Mode : | TX B MODE 2462MHz |

**Horizontal**


| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | | 4923.950 | 44.77 | 3.80 | 48.57 | 74.00 | -25.43 | peak | |
| 2 | * | 4923.950 | 41.26 | 3.80 | 45.06 | 54.00 | -8.94 | AVG | |

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

**Vertical**




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | | 2390.000 | 33.17 | 31.88 | 65.05 | 74.00 | -8.95 | peak | |
| 2 | | 2390.000 | 21.45 | 31.88 | 53.33 | 54.00 | -0.67 | AVG | |
| 3 | * | 2408.100 | 68.38 | 31.91 | 100.29 | 54.00 | 46.29 | AVG | no limit |
| 4 | X | 2408.600 | 77.51 | 31.91 | 109.42 | 74.00 | 35.42 | peak | no limit |

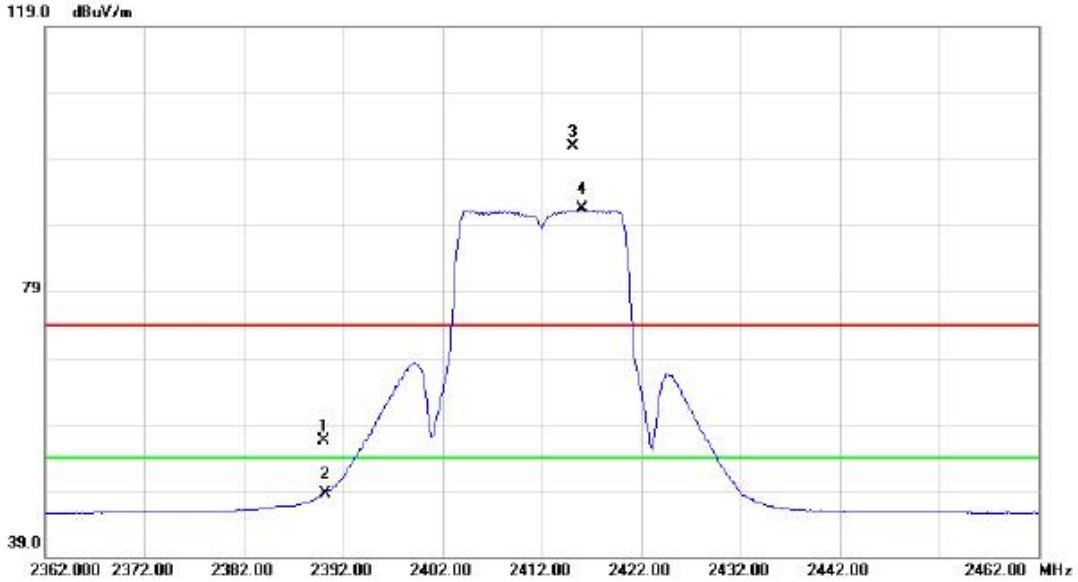
| | |
|---|---|
| Orthogonal Axis : | X |
| Test Mode : | TX G MODE 2412MHz |

**Vertical**


| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | | 4824.250 | 34.98 | 3.62 | 38.60 | 74.00 | -35.40 | peak | |
| 2 | * | 4824.250 | 28.87 | 3.62 | 32.49 | 54.00 | -21.51 | AVG | |

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

**Horizontal**




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | | 2390.000 | 24.62 | 31.88 | 56.50 | 74.00 | -17.50 | peak | |
| 2 | | 2390.000 | 16.66 | 31.88 | 48.54 | 54.00 | -5.46 | AVG | |
| 3 | X | 2415.100 | 69.07 | 31.91 | 100.98 | 74.00 | 26.98 | peak | no limit |
| 4 | * | 2416.000 | 59.54 | 31.91 | 91.45 | 54.00 | 37.45 | AVG | no limit |

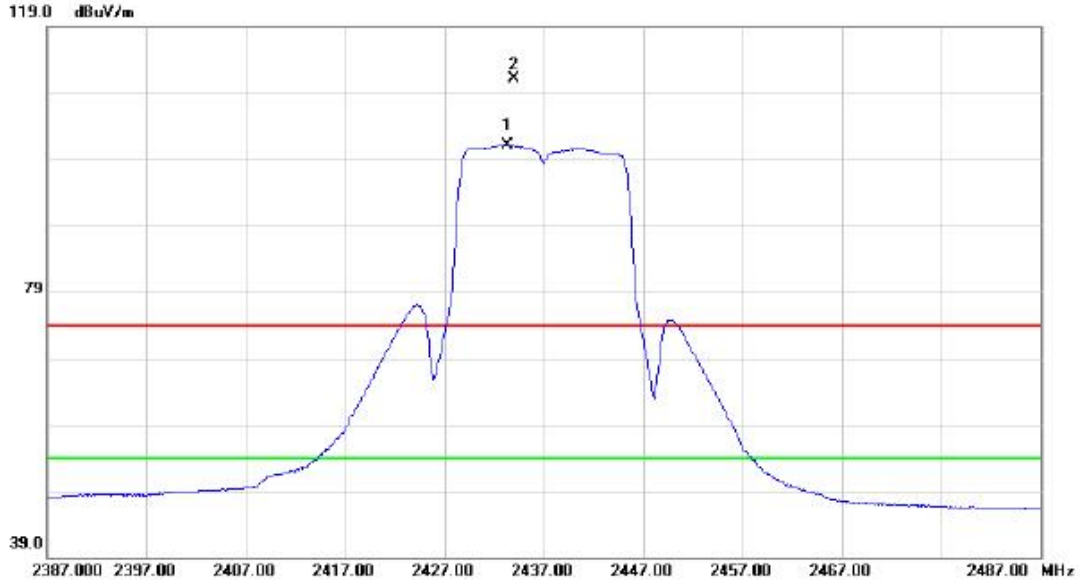
| | |
|---|---|
| Orthogonal Axis : | X |
| Test Mode : | TX G MODE 2412MHz |

**Horizontal**


| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | | 4823.150 | 34.98 | 3.62 | 38.60 | 74.00 | -35.40 | peak | |
| 2 | * | 4823.150 | 28.02 | 3.62 | 31.64 | 54.00 | -22.36 | AVG | |

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

**Vertical**




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | * | 2433.300 | 69.23 | 31.94 | 101.17 | 54.00 | 47.17 | AVG | no limit |
| 2 | X | 2434.000 | 79.07 | 31.94 | 111.01 | 74.00 | 37.01 | peak | no limit |

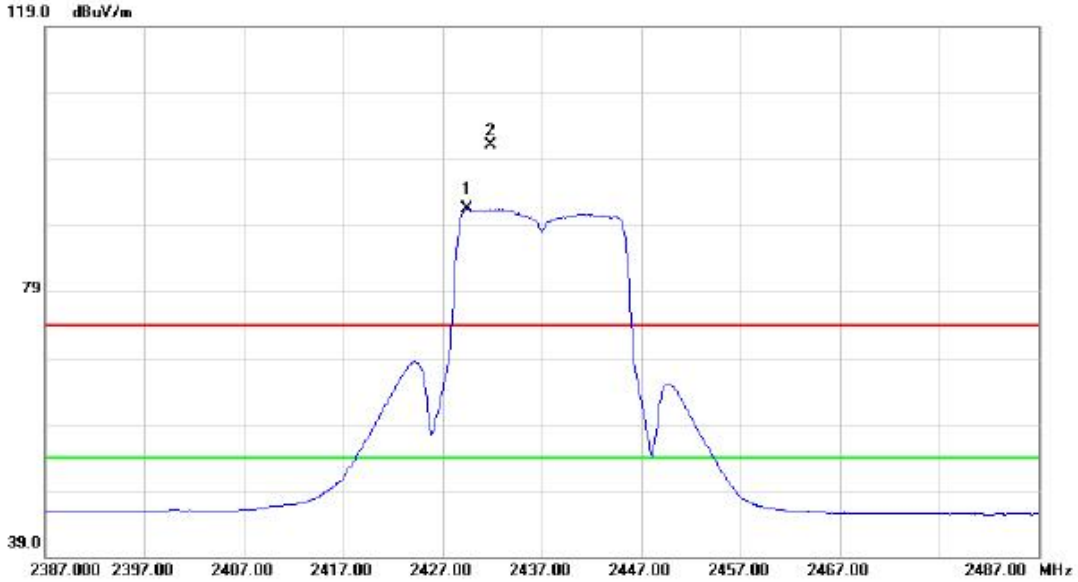
| | |
|---|---|
| Orthogonal Axis : | X |
| Test Mode : | TX G MODE 2437MHz |

**Vertical**


| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | | 4873.350 | 38.31 | 3.72 | 42.03 | 74.00 | -31.97 | peak | |
| 2 | * | 4873.350 | 30.84 | 3.72 | 34.56 | 54.00 | -19.44 | AVG | |

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

**Horizontal**




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | * | 2429.500 | 59.61 | 31.93 | 91.54 | 54.00 | 37.54 | AVG | no limit |
| 2 | X | 2431.900 | 69.21 | 31.94 | 101.15 | 74.00 | 27.15 | peak | no limit |

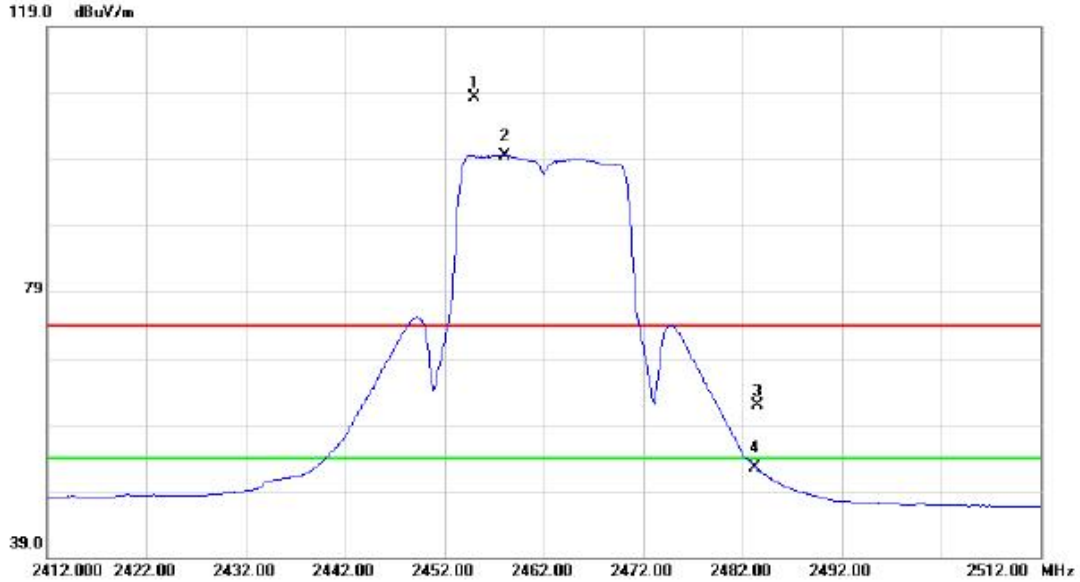
| | |
|---|---|
| Orthogonal Axis : | X |
| Test Mode : | TX G MODE 2437MHz |

**Horizontal**


| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | | 4872.600 | 34.83 | 3.72 | 38.55 | 74.00 | -35.45 | peak | |
| 2 | * | 4872.600 | 27.83 | 3.72 | 31.55 | 54.00 | -22.45 | AVG | |

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

**Vertical**




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | X | 2455.000 | 76.31 | 31.96 | 108.27 | 74.00 | 34.27 | peak | no limit |
| 2 | * | 2458.000 | 67.56 | 31.98 | 99.54 | 54.00 | 45.54 | AVG | no limit |
| 3 | | 2483.500 | 29.80 | 32.01 | 61.81 | 74.00 | -12.19 | peak | |
| 4 | | 2483.500 | 20.42 | 32.01 | 52.43 | 54.00 | -1.57 | AVG | |

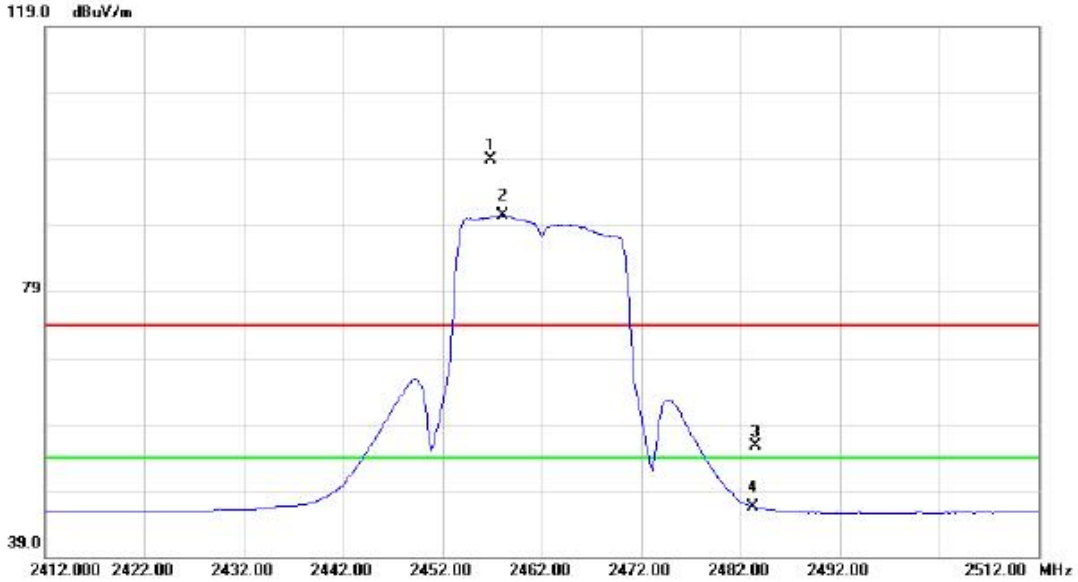
| | |
|---|---|
| Orthogonal Axis : | X |
| Test Mode : | TX G MODE 2462MHz |

**Vertical**


| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | | 4924.050 | 40.27 | 3.80 | 44.07 | 74.00 | -29.93 | peak | |
| 2 | * | 4924.050 | 32.25 | 3.80 | 36.05 | 54.00 | -17.95 | AVG | |

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

**Horizontal**




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | X | 2456.900 | 66.92 | 31.98 | 98.90 | 74.00 | 24.90 | peak | no limit |
| 2 | * | 2458.100 | 58.44 | 31.98 | 90.42 | 54.00 | 36.42 | AVG | no limit |
| 3 | | 2483.500 | 23.61 | 32.01 | 55.62 | 74.00 | -18.38 | peak | |
| 4 | | 2483.500 | 14.56 | 32.01 | 46.57 | 54.00 | -7.43 | AVG | |

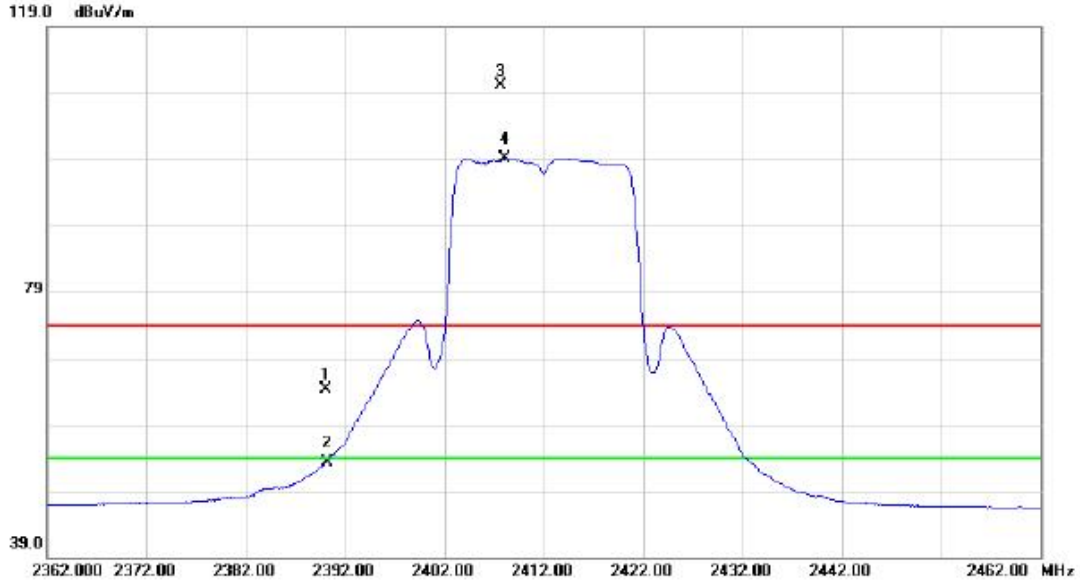
| | |
|---|---|
| Orthogonal Axis : | X |
| Test Mode : | TX G MODE 2462MHz |

**Horizontal**


| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | | 4924.050 | 35.71 | 3.80 | 39.51 | 74.00 | -34.49 | peak | |
| 2 | * | 4924.050 | 27.14 | 3.80 | 30.94 | 54.00 | -23.06 | AVG | |

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

**Vertical**




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | | 2390.000 | 32.46 | 31.88 | 64.34 | 74.00 | -9.66 | peak | |
| 2 | | 2390.000 | 21.40 | 31.88 | 53.28 | 54.00 | -0.72 | AVG | |
| 3 | X | 2407.700 | 78.20 | 31.91 | 110.11 | 74.00 | 36.11 | peak | no limit |
| 4 | * | 2408.100 | 67.15 | 31.91 | 99.06 | 54.00 | 45.06 | AVG | no limit |

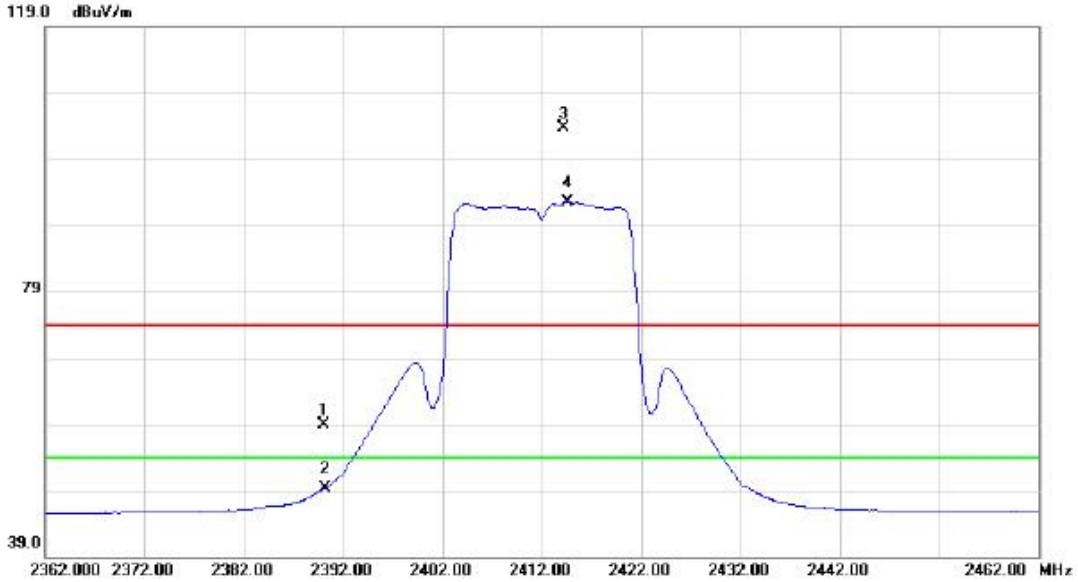
| | |
|---|---|
| Orthogonal Axis : | X |
| Test Mode : | TX N-20M MODE 2412MHz |

**Vertical**


| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | | 4823.200 | 37.46 | 3.62 | 41.08 | 74.00 | -32.92 | peak | |
| 2 | * | 4823.200 | 27.35 | 3.62 | 30.97 | 54.00 | -23.03 | AVG | |

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

**Horizontal**




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | | 2390.000 | 27.01 | 31.88 | 58.89 | 74.00 | -15.11 | peak | |
| 2 | | 2390.000 | 17.32 | 31.88 | 49.20 | 54.00 | -4.80 | AVG | |
| 3 | X | 2414.200 | 71.87 | 31.91 | 103.78 | 74.00 | 29.78 | peak | no limit |
| 4 | * | 2414.600 | 60.59 | 31.91 | 92.50 | 54.00 | 38.50 | AVG | no limit |

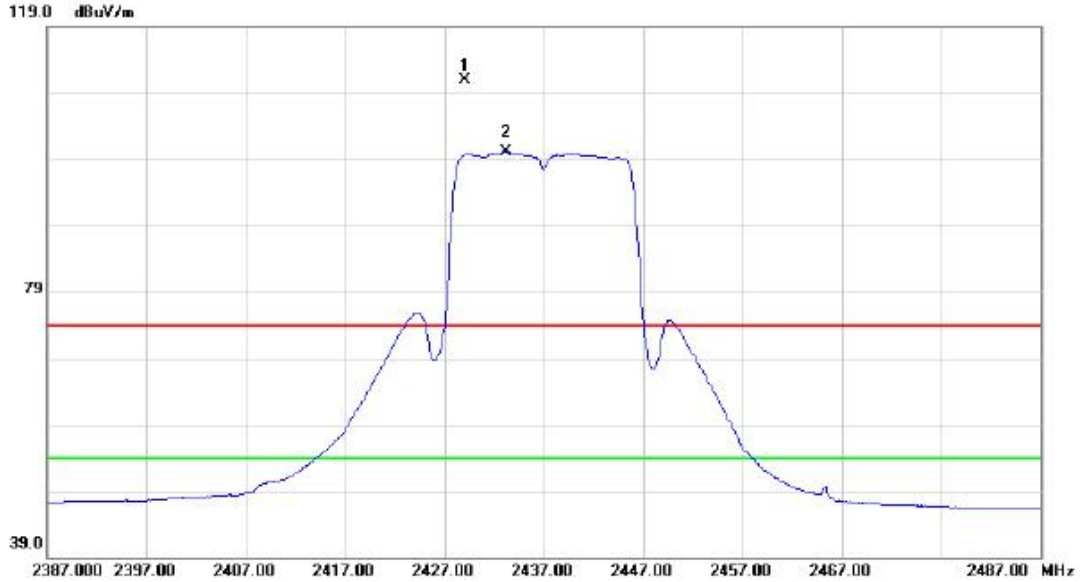
| | |
|---|---|
| Orthogonal Axis : | X |
| Test Mode : | TX N-20M MODE 2412MHz |

**Horizontal**


| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | | 4824.250 | 35.96 | 3.62 | 39.58 | 74.00 | -34.42 | peak | |
| 2 | * | 4824.250 | 28.45 | 3.62 | 32.07 | 54.00 | -21.93 | AVG | |

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

**Vertical**




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | X | 2429.100 | 78.97 | 31.93 | 110.90 | 74.00 | 36.90 | peak | no limit |
| 2 | * | 2433.200 | 68.23 | 31.94 | 100.17 | 54.00 | 46.17 | AVG | no limit |

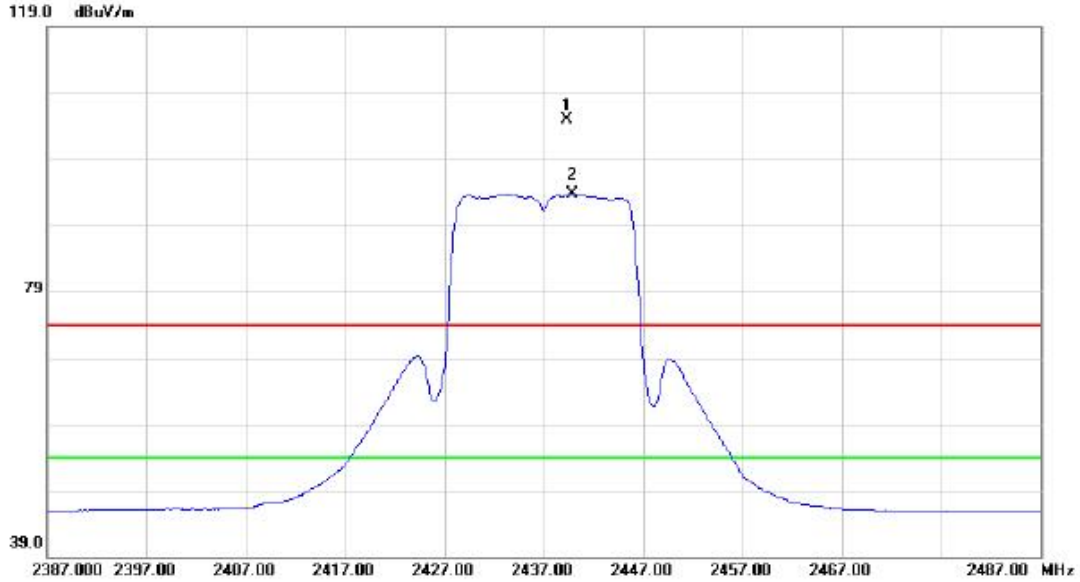
| | |
|---|---|
| Orthogonal Axis : | X |
| Test Mode : | TX N-20M MODE 2437MHz |

**Vertical**


| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | | 4873.800 | 40.22 | 3.72 | 43.94 | 74.00 | -30.06 | peak | |
| 2 | * | 4873.800 | 30.15 | 3.72 | 33.87 | 54.00 | -20.13 | AVG | |

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

**Horizontal**




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | X | 2439.300 | 73.06 | 31.94 | 105.00 | 74.00 | 31.00 | peak | no limit |
| 2 | * | 2439.900 | 61.78 | 31.95 | 93.73 | 54.00 | 39.73 | AVG | no limit |

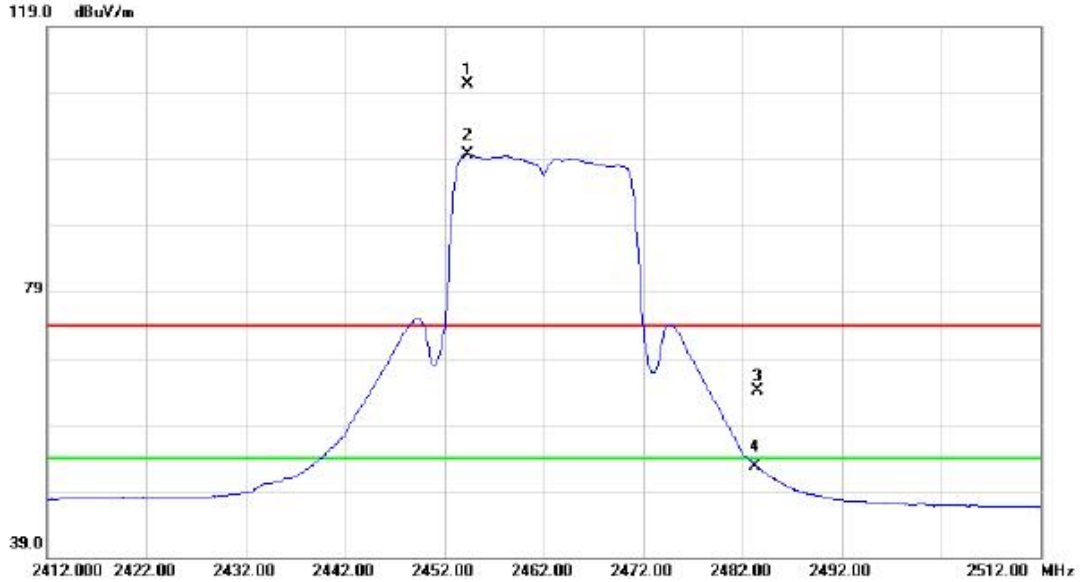
| | |
|---|---|
| Orthogonal Axis : | X |
| Test Mode : | TX N-20M MODE 2437MHz |

**Horizontal**


| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | | 4874.100 | 37.26 | 3.72 | 40.98 | 74.00 | -33.02 | peak | |
| 2 | * | 4874.100 | 27.87 | 3.72 | 31.59 | 54.00 | -22.41 | AVG | |

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

**Vertical**




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | X | 2454.300 | 78.29 | 31.96 | 110.25 | 74.00 | 36.25 | peak | no limit |
| 2 | * | 2454.300 | 67.76 | 31.96 | 99.72 | 54.00 | 45.72 | AVG | no limit |
| 3 | | 2483.500 | 32.13 | 32.01 | 64.14 | 74.00 | -9.86 | peak | |
| 4 | | 2483.500 | 20.74 | 32.01 | 52.75 | 54.00 | -1.25 | AVG | |

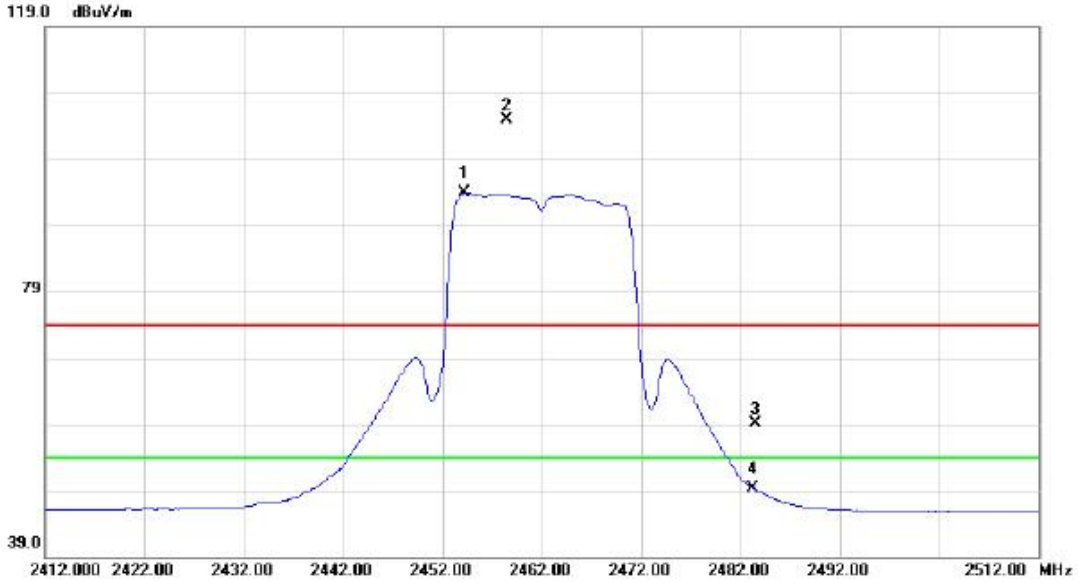
| | |
|---|---|
| Orthogonal Axis : | X |
| Test Mode : | TX N-20M MODE 2462MHz |

**Vertical**


| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | | 4922.950 | 43.50 | 3.80 | 47.30 | 74.00 | -26.70 | peak | |
| 2 | * | 4922.950 | 30.93 | 3.80 | 34.73 | 54.00 | -19.27 | AVG | |

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

**Horizontal**




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | * | 2454.200 | 61.99 | 31.96 | 93.95 | 54.00 | 39.95 | AVG | no limit |
| 2 | X | 2458.500 | 72.98 | 31.98 | 104.96 | 74.00 | 30.96 | peak | no limit |
| 3 | | 2483.500 | 27.10 | 32.01 | 59.11 | 74.00 | -14.89 | peak | |
| 4 | | 2483.500 | 17.21 | 32.01 | 49.22 | 54.00 | -4.78 | AVG | |

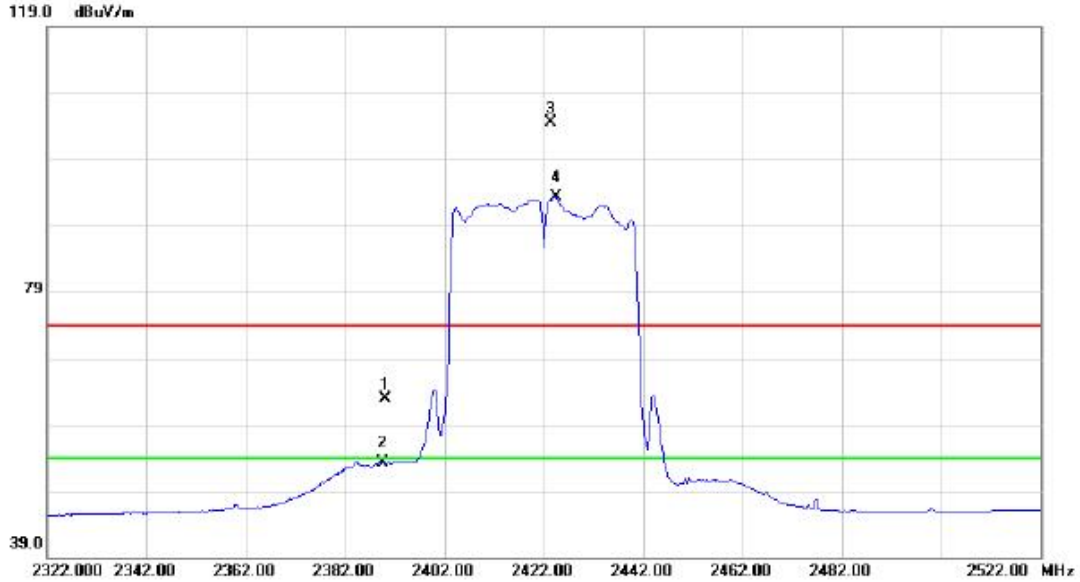
| | |
|---|---|
| Orthogonal Axis : | X |
| Test Mode : | TX N-20M MODE 2462MHz |

**Horizontal**


| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | | 4923.800 | 38.41 | 3.80 | 42.21 | 74.00 | -31.79 | peak | |
| 2 | * | 4923.800 | 28.31 | 3.80 | 32.11 | 54.00 | -21.89 | AVG | |

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

**Vertical**




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | | 2390.000 | 31.06 | 31.88 | 62.94 | 74.00 | -11.06 | peak | |
| 2 | | 2390.000 | 21.32 | 31.88 | 53.20 | 54.00 | -0.80 | AVG | |
| 3 | X | 2423.400 | 72.56 | 31.93 | 104.49 | 74.00 | 30.49 | peak | no limit |
| 4 | * | 2424.400 | 61.34 | 31.93 | 93.27 | 54.00 | 39.27 | AVG | no limit |

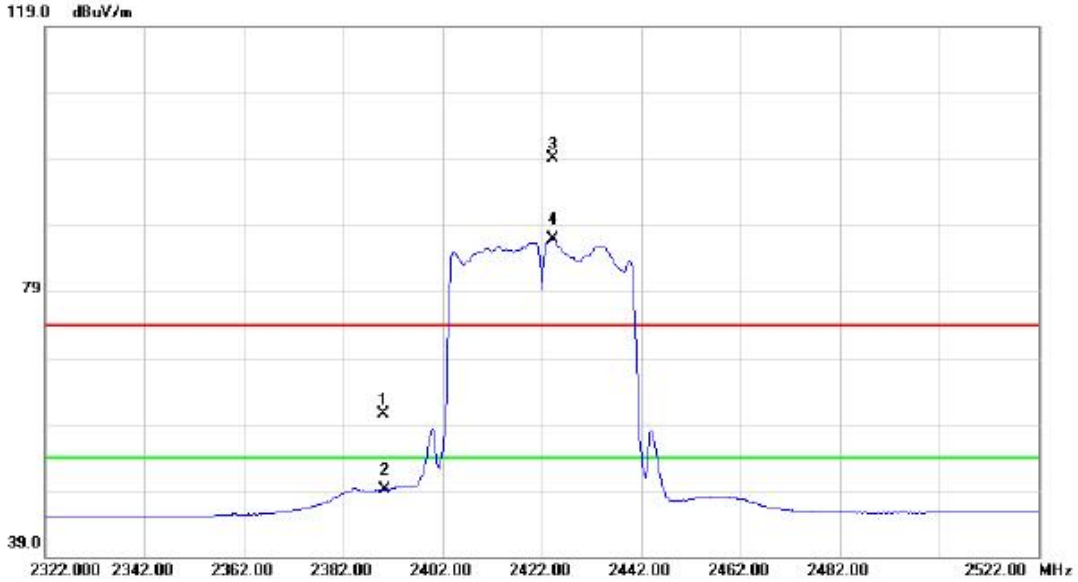
| | |
|---|---|
| Orthogonal Axis : | X |
| Test Mode : | TX N-40M MODE 2422MHz |

**Vertical**


| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | | 4844.050 | 35.06 | 3.66 | 38.72 | 74.00 | -35.28 | peak | |
| 2 | * | 4844.050 | 26.84 | 3.66 | 30.50 | 54.00 | -23.50 | AVG | |

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

**Horizontal**




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | | 2390.000 | 28.70 | 31.88 | 60.58 | 74.00 | -13.42 | peak | |
| 2 | | 2390.000 | 17.23 | 31.88 | 49.11 | 54.00 | -4.89 | AVG | |
| 3 | X | 2424.200 | 67.21 | 31.93 | 99.14 | 74.00 | 25.14 | peak | no limit |
| 4 | * | 2424.200 | 55.02 | 31.93 | 86.95 | 54.00 | 32.95 | AVG | no limit |

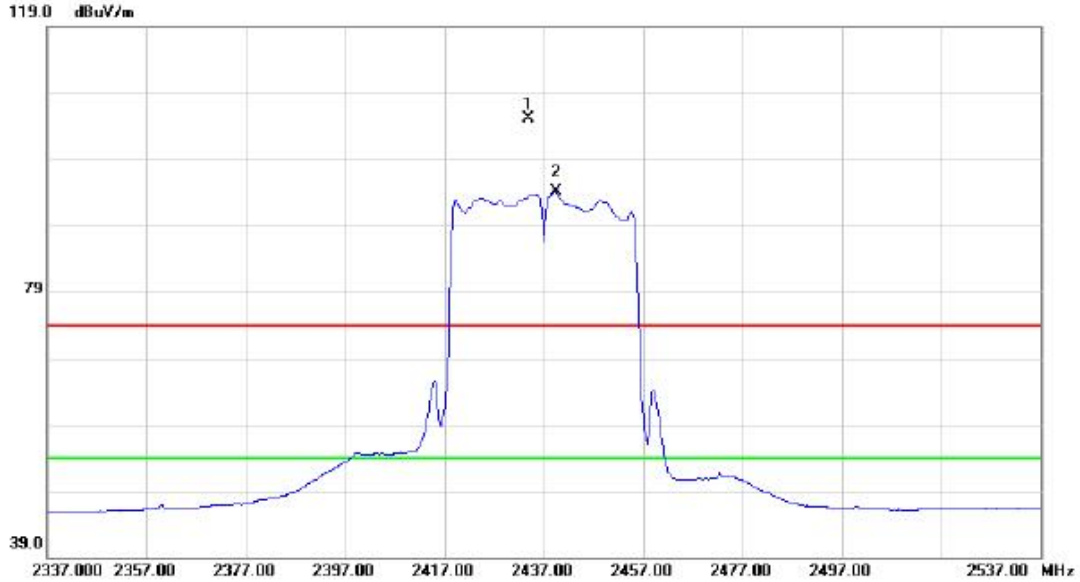
| | |
|---|---|
| Orthogonal Axis : | X |
| Test Mode : | TX N-40M MODE 2422MHz |

**Horizontal**


| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | | 4844.900 | 33.14 | 3.62 | 36.76 | 74.00 | -37.24 | peak | |
| 2 | * | 4844.900 | 25.87 | 3.62 | 29.49 | 54.00 | -24.51 | AVG | |

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

**Vertical**




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | X | 2433.800 | 73.14 | 31.94 | 105.08 | 74.00 | 31.08 | peak | no limit |
| 2 | * | 2439.400 | 62.08 | 31.94 | 94.02 | 54.00 | 40.02 | AVG | no limit |

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

**Vertical**


| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | | 4873.050 | 38.30 | 3.72 | 42.02 | 74.00 | -31.98 | peak | |
| 2 | * | 4873.050 | 28.59 | 3.72 | 32.31 | 54.00 | -21.69 | AVG | |

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

**Horizontal**


| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | * | 2439.200 | 58.41 | 31.94 | 90.35 | 54.00 | 36.35 | AVG | no limit |
| 2 | X | 2439.400 | 70.24 | 31.94 | 102.18 | 74.00 | 28.18 | peak | no limit |
| 3 | | 2483.500 | 26.61 | 32.01 | 58.62 | 74.00 | -15.38 | peak | |
| 4 | | 2483.500 | 15.01 | 32.01 | 47.02 | 54.00 | -6.98 | AVG | |

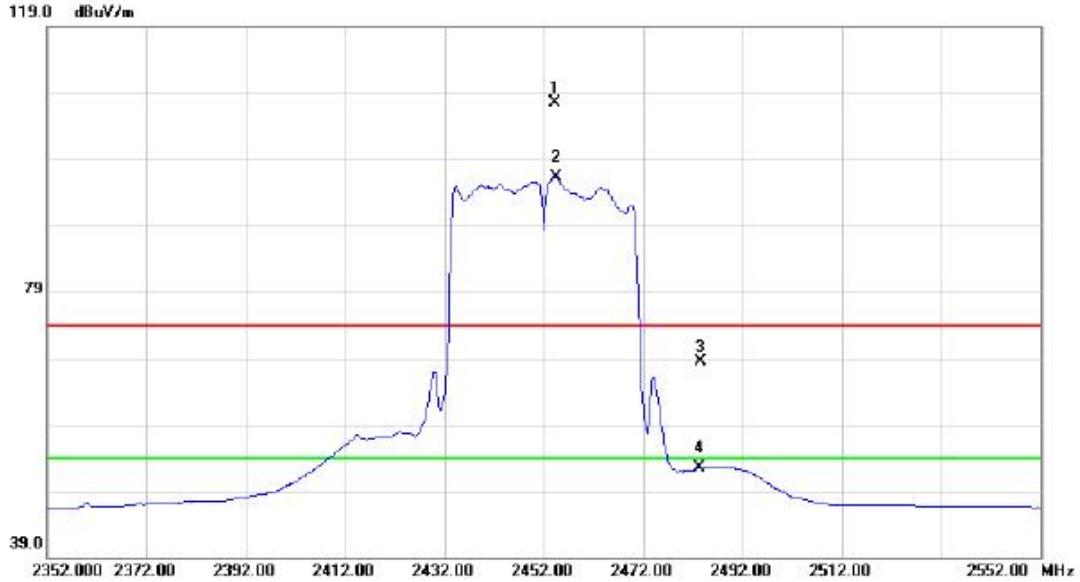
| | |
|---|---|
| Orthogonal Axis : | X |
| Test Mode : | TX N-40M MODE 2437MHz |

**Horizontal**


| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | | 4872.650 | 37.23 | 3.72 | 40.95 | 74.00 | -33.05 | peak | |
| 2 | * | 4872.650 | 27.32 | 3.72 | 31.04 | 54.00 | -22.96 | AVG | |

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

**Vertical**




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | X | 2454.200 | 75.61 | 31.96 | 107.57 | 74.00 | 33.57 | peak | no limit |
| 2 | * | 2454.400 | 64.42 | 31.96 | 96.38 | 54.00 | 42.38 | AVG | no limit |
| 3 | | 2483.500 | 36.51 | 32.01 | 68.52 | 74.00 | -5.48 | peak | |
| 4 | | 2483.500 | 20.52 | 32.01 | 52.53 | 54.00 | -1.47 | AVG | |

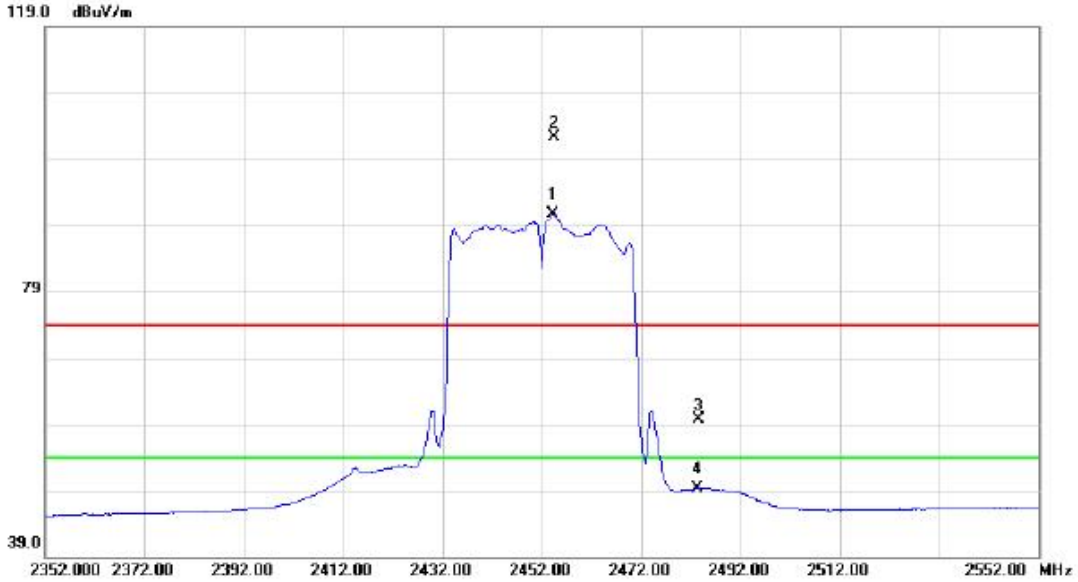
| | |
|---|---|
| Orthogonal Axis : | X |
| Test Mode : | TX N-40M MODE 2452MHz |

**Vertical**


| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | | 4903.000 | 39.22 | 3.76 | 42.98 | 74.00 | -31.02 | peak | |
| 2 | * | 4903.000 | 28.81 | 3.76 | 32.57 | 54.00 | -21.43 | AVG | |

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

**Horizontal**




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | * | 2454.200 | 58.66 | 31.96 | 90.62 | 54.00 | 36.62 | AVG | no limit |
| 2 | X | 2454.400 | 70.38 | 31.96 | 102.34 | 74.00 | 28.34 | peak | no limit |
| 3 | | 2483.500 | 27.75 | 32.01 | 59.76 | 74.00 | -14.24 | peak | |
| 4 | | 2483.500 | 17.25 | 32.01 | 49.26 | 54.00 | -4.74 | AVG | |

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

**Horizontal**

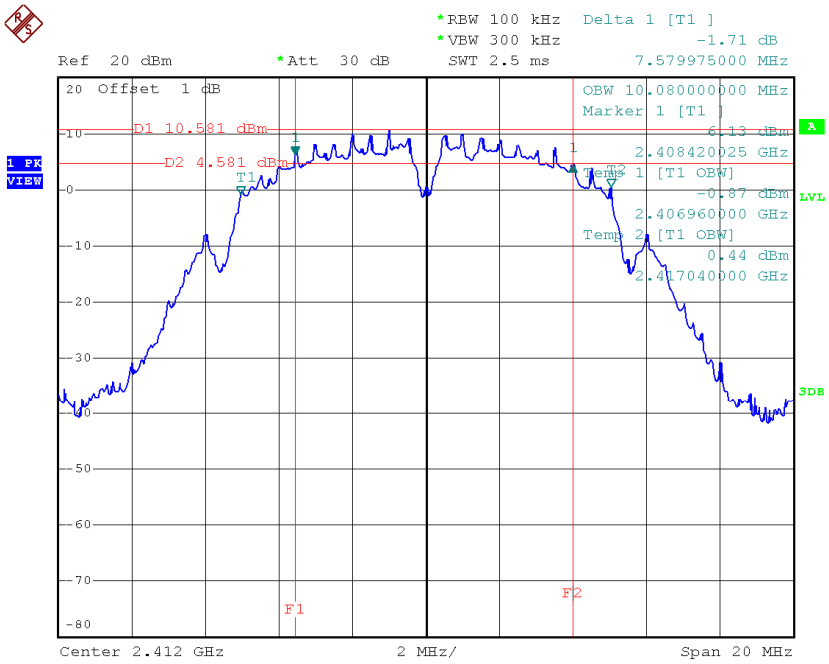

| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | | 4902.950 | 39.14 | 3.76 | 42.90 | 74.00 | -31.10 | peak | |
| 2 | * | 4902.950 | 27.07 | 3.76 | 30.83 | 54.00 | -23.17 | AVG | |

# ATTACHMENT E - BANDWIDTH

**Test Mode : TX B Mode_CH01/06/11**

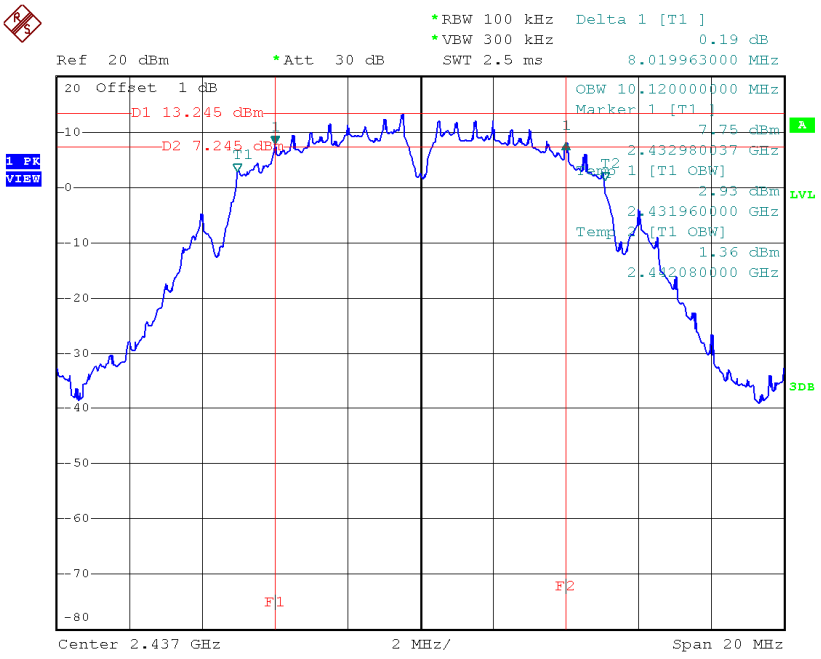
| Frequency (MHz) | 6dB Bandwidth (MHz) | 99% Occupied BW (MHz) | Min. Limit (kHz) | Test Result |
|---|---|---|---|---|
| 2412 | 7.58 | 10.08 | 500 | Complies |
| 2437 | 8.02 | 10.12 | 500 | Complies |
| 2462 | 8.13 | 10.08 | 500 | Complies |

**TX CH01**



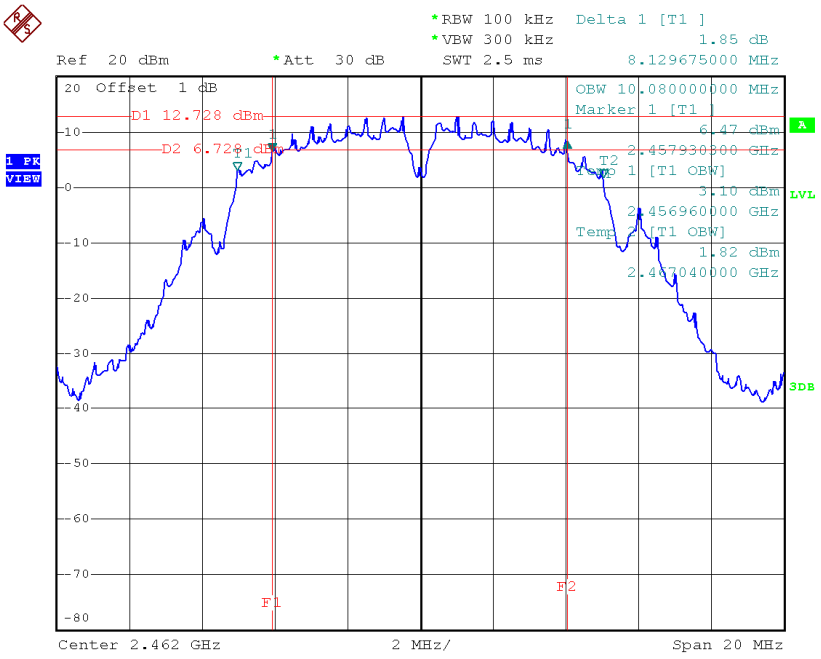

Date: 9.FEB.2015 10:16:40

## TX CH06




Date: 9.FEB.2015 10:19:21

## TX CH11

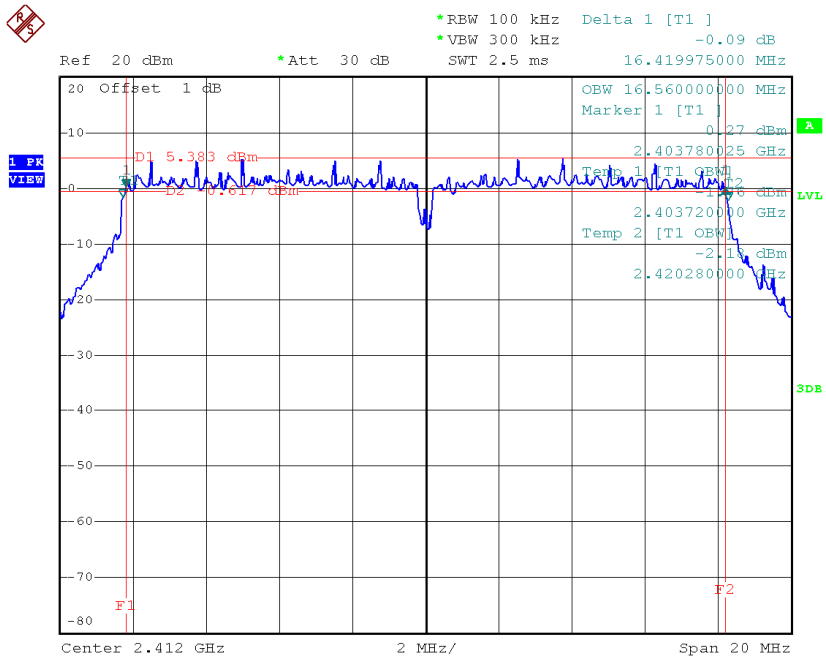



Date: 9.FEB.2015 10:20:41

## Test Mode: TX G Mode_CH01/06/11

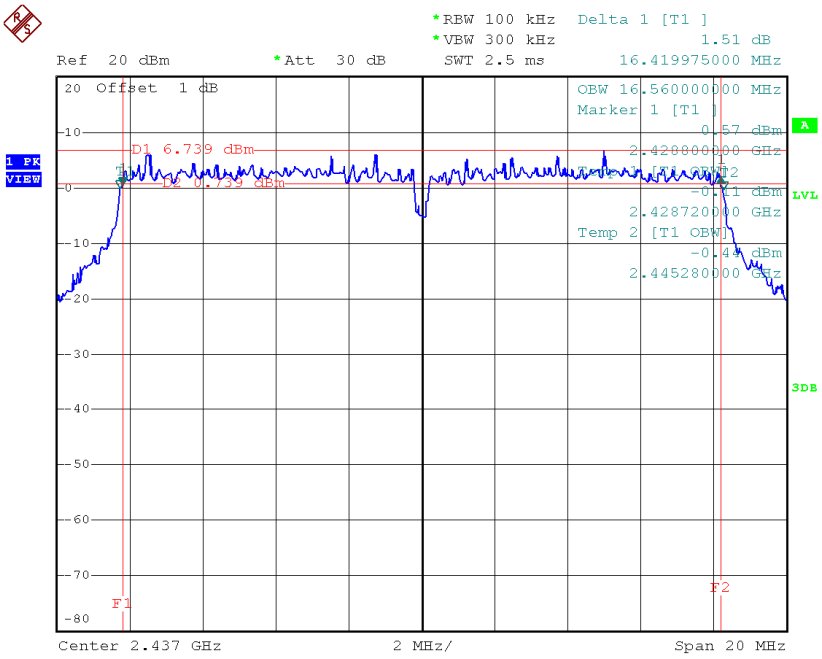
| Frequency (MHz) | 6dB Bandwidth (MHz) | 99% Occupied BW (MHz) | Min. Limit (kHz) | Test Result |
|---|---|---|---|---|
| 2412 | 16.41 | 16.56 | 500 | Complies |
| 2437 | 16.42 | 16.56 | 500 | Complies |
| 2462 | 16.47 | 16.56 | 500 | Complies |

**TX CH01**



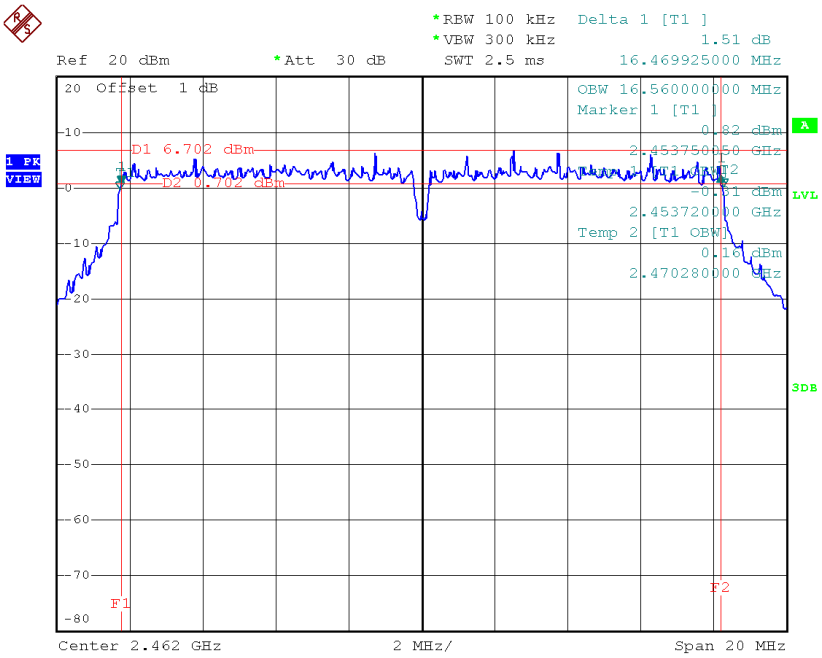

Date: 9.FEB.2015 10:21:54

## TX CH06




Date: 9.FEB.2015 10:22:57

## TX CH11

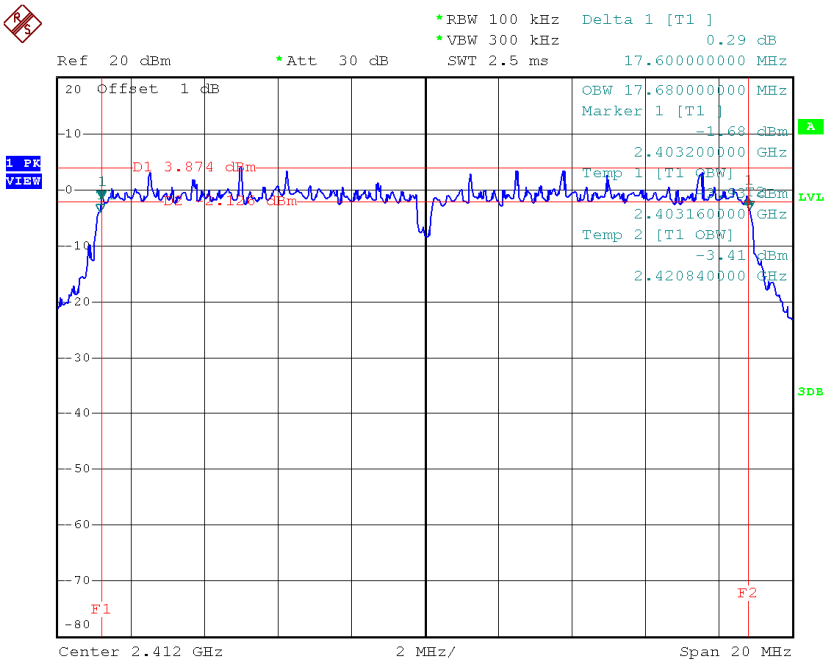



Date: 9.FEB.2015 10:23:52

**Test Mode : TX N-20MHz Mode_CH01/06/11**

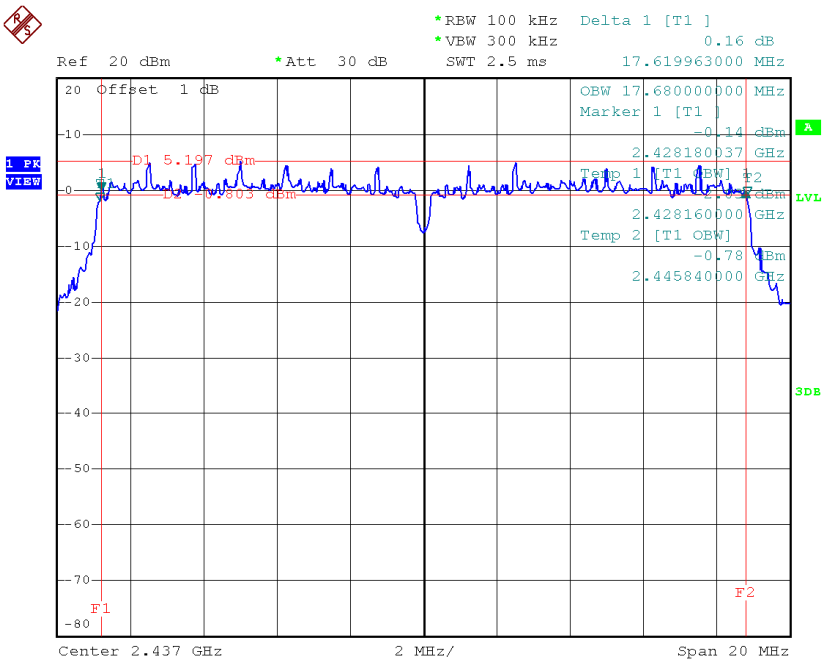
| Frequency (MHz) | 6dB Bandwidth (MHz) | 99% Occupied BW (MHz) | Min. Limit (kHz) | Test Result |
|---|---|---|---|---|
| 2412 | 17.60 | 17.68 | 500 | Complies |
| 2437 | 17.62 | 17.68 | 500 | Complies |
| 2462 | 17.62 | 17.68 | 500 | Complies |

**TX CH01**



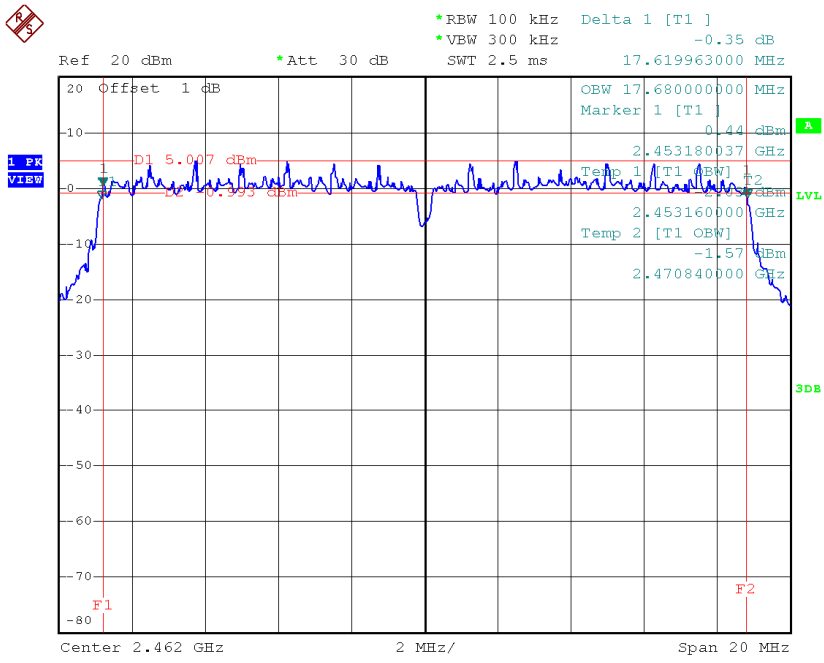

Date: 9.FEB.2015 10:25:28

## TX CH06




Date: 9.FEB.2015 10:27:08

## TX CH11

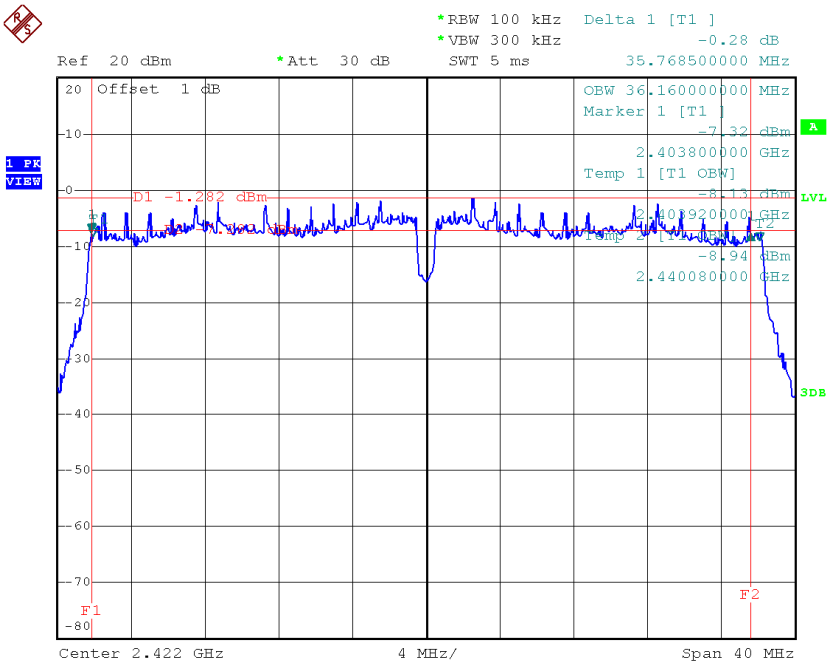



Date: 9.FEB.2015 10:27:59

**Test Mode : TX N-40MHz Mode_CH03/06/09**

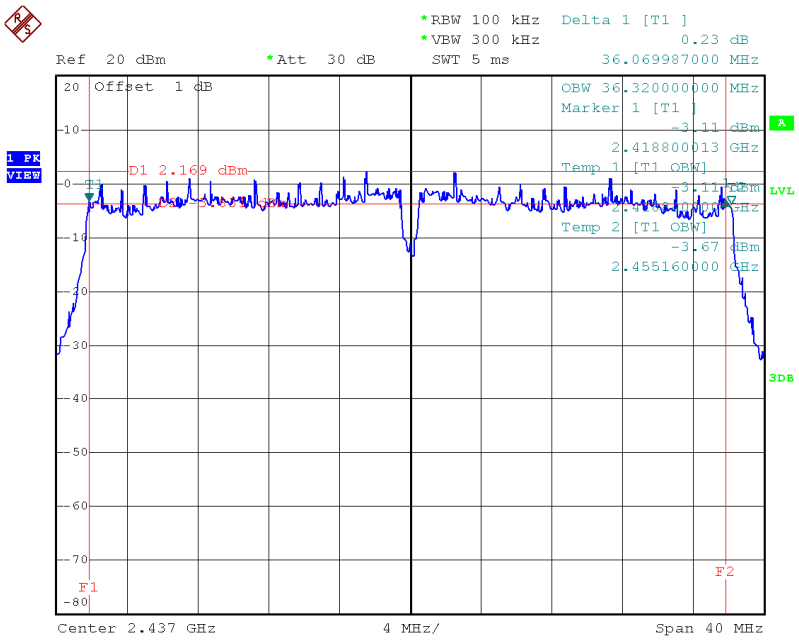
| Frequency (MHz) | 6dB Bandwidth (MHz) | 99% Occupied BW (MHz) | Min. Limit (kHz) | Test Result |
|---|---|---|---|---|
| 2422 | 35.77 | 36.16 | 500 | Complies |
| 2437 | 36.07 | 36.32 | 500 | Complies |
| 2452 | 35.84 | 36.32 | 500 | Complies |

**TX CH03**



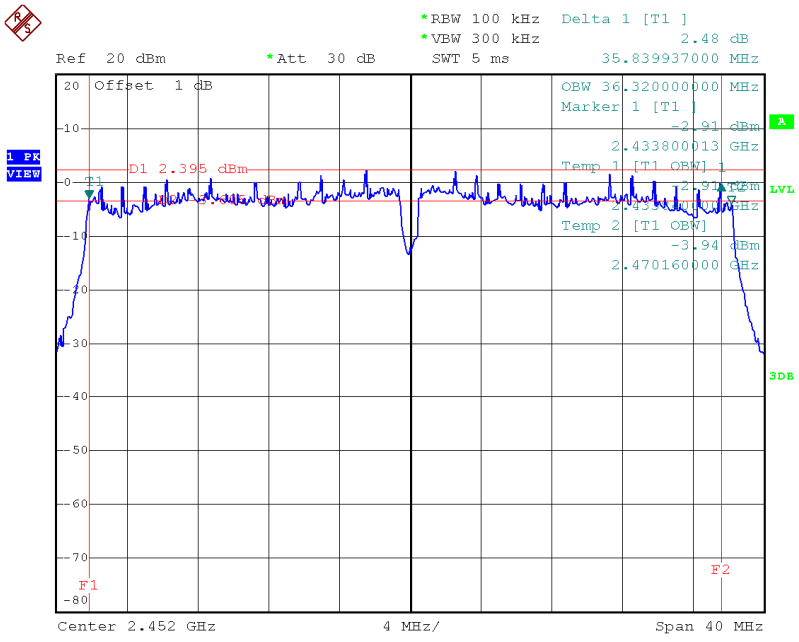

Date: 9.FEB.2015 10:29:02

## TX CH06




Date: 9.FEB.2015 16:02:58

## TX CH09




Date: 9.FEB.2015 16:03:48

# 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 | 20.54 | 0.11 | 30.00 | 1.00 | Complies |
| 2437 | 22.77 | 0.19 | 30.00 | 1.00 | Complies |
| 2462 | 22.80 | 0.19 | 30.00 | 1.00 | 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 | 25.47 | 0.35 | 30.00 | 1.00 | Complies |
| 2437 | 25.93 | 0.39 | 30.00 | 1.00 | Complies |
| 2462 | 25.57 | 0.36 | 30.00 | 1.00 | 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 | 23.90 | 0.25 | 30.00 | 1.00 | Complies |
| 2437 | 25.03 | 0.32 | 30.00 | 1.00 | Complies |
| 2462 | 25.16 | 0.33 | 30.00 | 1.00 | 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 | 24.14 | 0.26 | 30.00 | 1.00 | Complies |
| 2437 | 25.27 | 0.34 | 30.00 | 1.00 | Complies |
| 2462 | 25.06 | 0.32 | 30.00 | 1.00 | Complies |

**Test Mode :TX N20 Mode_CH01/06/11_ANT 3**

| Frequency (MHz) | Conducted Power (dBm) | Conducted Power (W) | Max. Limit (dBm) | Max. Limit (W) | Result |
|---|---|---|---|---|---|
| 2412 | 24.13 | 0.26 | 30.00 | 1.00 | Complies |
| 2437 | 25.26 | 0.34 | 30.00 | 1.00 | Complies |
| 2462 | 25.21 | 0.33 | 30.00 | 1.00 | 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 | 28.83 | 0.76 | 30.00 | 1.00 | Complies |
| 2437 | 29.96 | 0.99 | 30.00 | 1.00 | Complies |
| 2462 | 29.91 | 0.98 | 30.00 | 1.00 | 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 | 20.23 | 0.11 | 30.00 | 1.00 | Complies |
| 2437 | 23.91 | 0.25 | 30.00 | 1.00 | Complies |
| 2452 | 23.86 | 0.24 | 30.00 | 1.00 | 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 | 21.03 | 0.13 | 30.00 | 1.00 | Complies |
| 2437 | 24.19 | 0.26 | 30.00 | 1.00 | Complies |
| 2452 | 24.71 | 0.30 | 30.00 | 1.00 | Complies |

**Test Mode :TX N40 Mode_CH03/06/09_ANT 3**

| Frequency (MHz) | Conducted Power (dBm) | Conducted Power (W) | Max. Limit (dBm) | Max. Limit (W) | Result |
|---|---|---|---|---|---|
| 2422 | 20.92 | 0.12 | 30.00 | 1.00 | Complies |
| 2437 | 23.93 | 0.25 | 30.00 | 1.00 | Complies |
| 2452 | 13.86 | 0.02 | 30.00 | 1.00 | Complies |

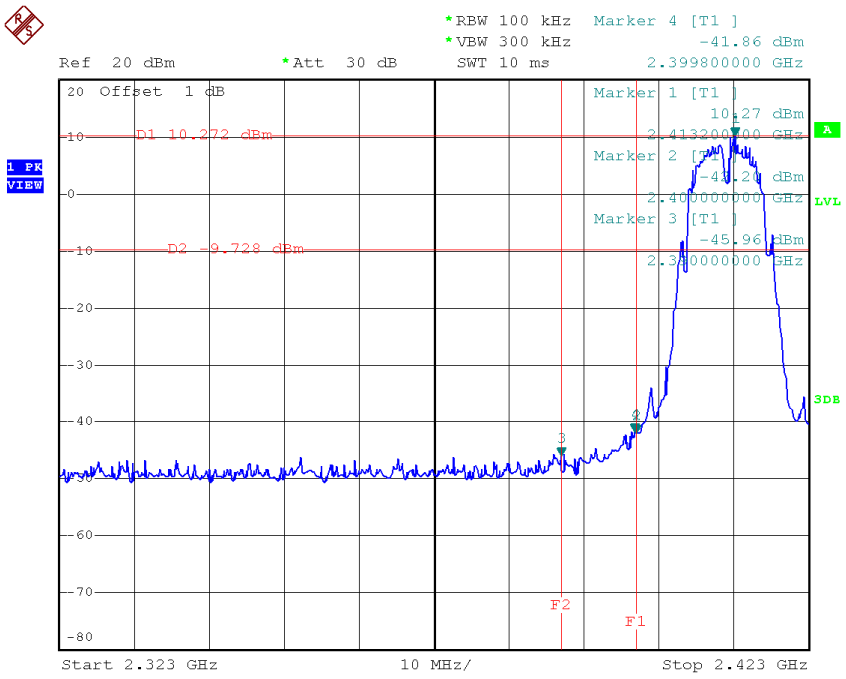
**Test Mode :TX N40 Mode_CH03/06/09_Total**

| Frequency (MHz) | Conducted Power (dBm) | Conducted Power (W) | Max. Limit (dBm) | Max. Limit (W) | Result |
|---|---|---|---|---|---|
| 2422 | 25.51 | 0.36 | 30.00 | 1.00 | Complies |
| 2437 | 28.78 | 0.76 | 30.00 | 1.00 | Complies |
| 2452 | 27.51 | 0.56 | 30.00 | 1.00 | Complies |

# ATTACHMENT G - ANTENNA CONDUCTED SPURIOUS EMISSION

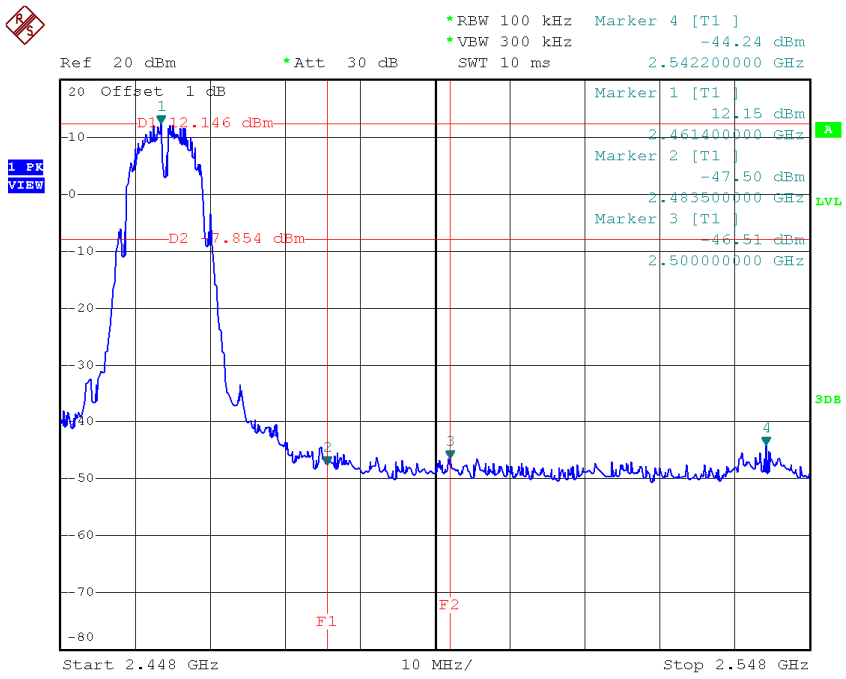
| Test Mode : | TX B Mode_ANT 1 |
|---|---|

## TX B mode CH01



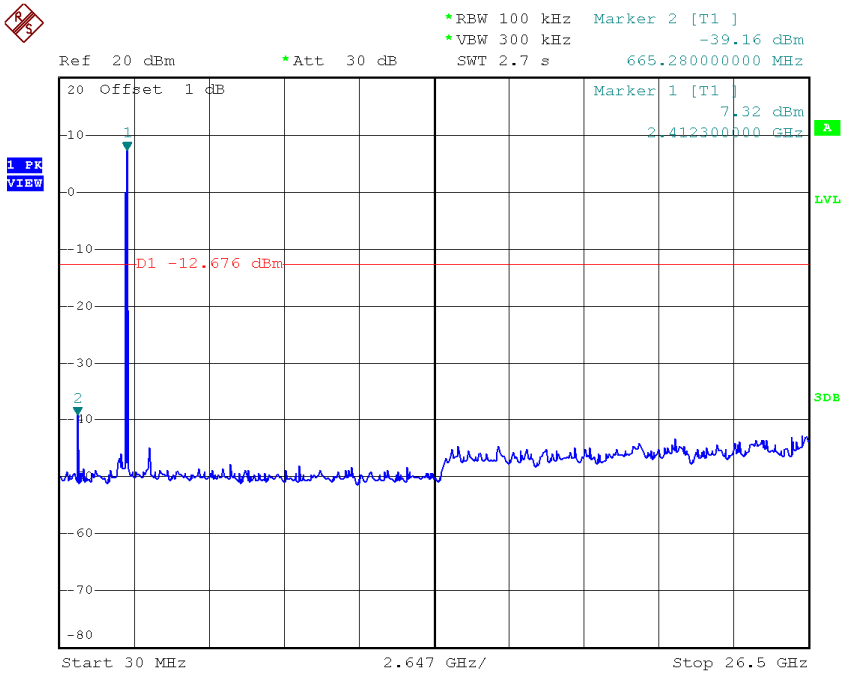

Date: 9.FEB.2015 10:17:02

## TX B mode CH11



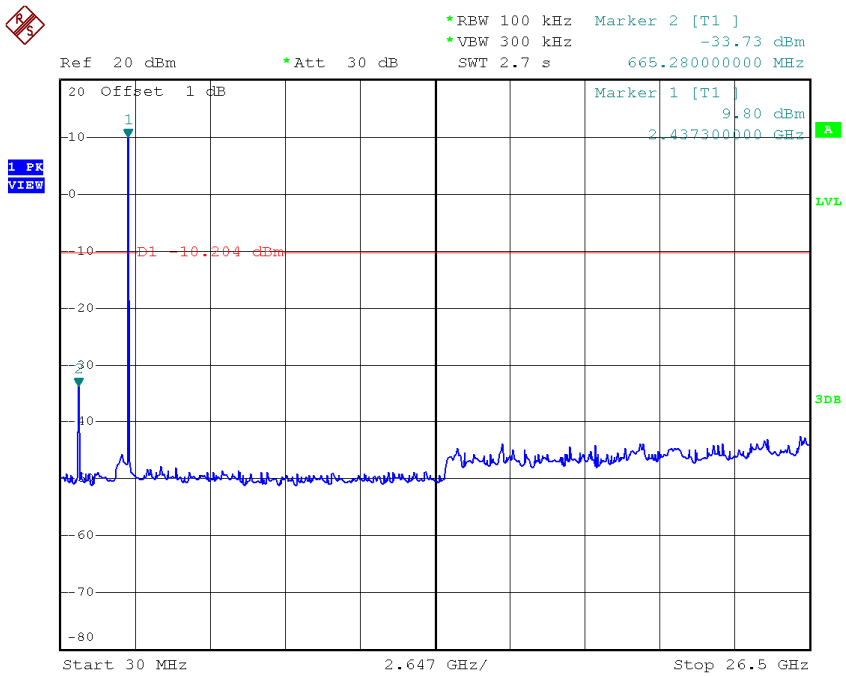

Date: 9.FEB.2015 10:21:02

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



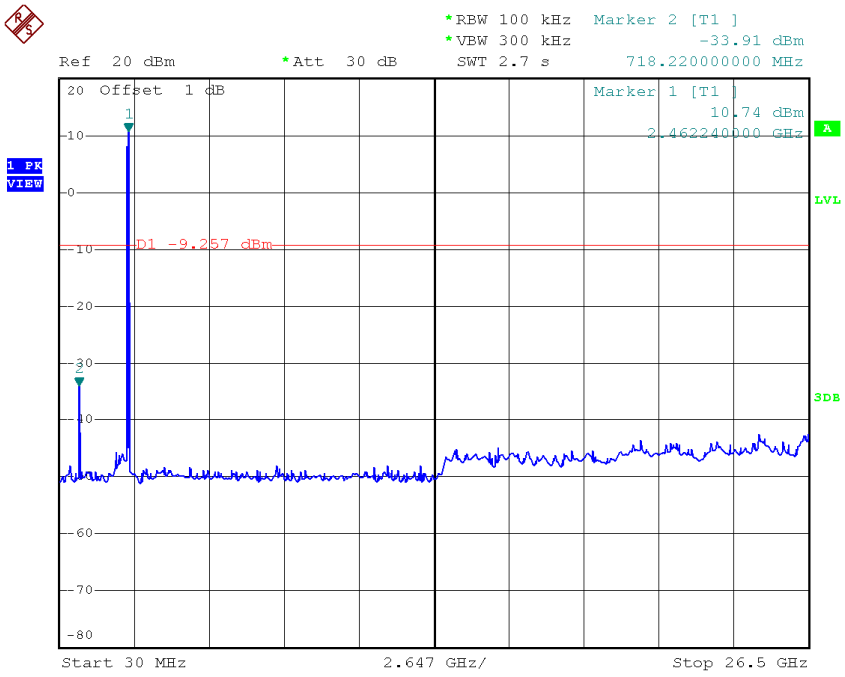

Date: 9.FEB.2015 10:16:54

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




Date: 9.FEB.2015 10:19:35

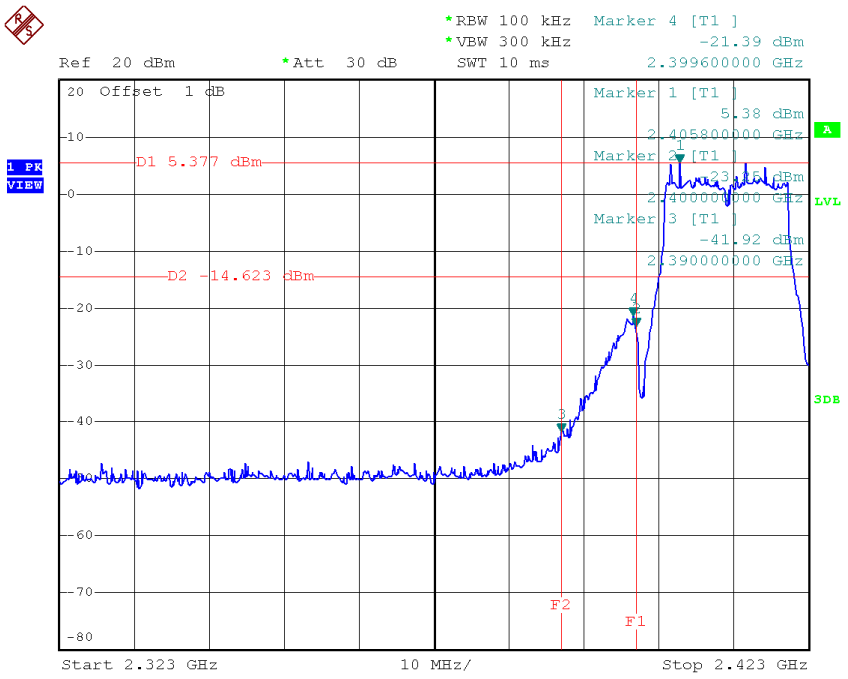
## TX B mode CH11 (10 Harmonic of the frequency)




Date: 9.FEB.2015 10:20:54

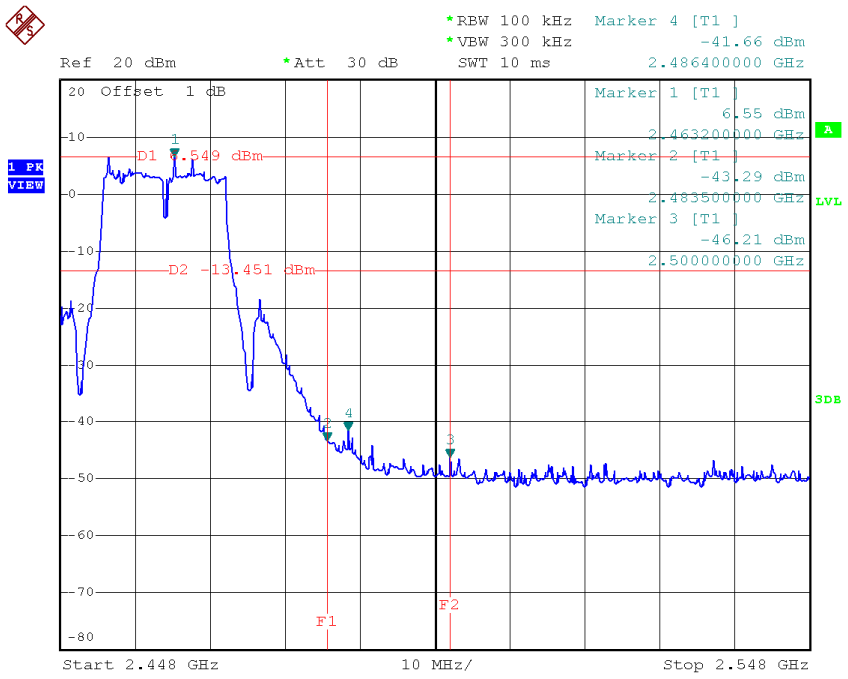
| | |
|---|---|
| **Test Mode :** | **TX G Mode_ANT 1** |

## TX G mode CH01



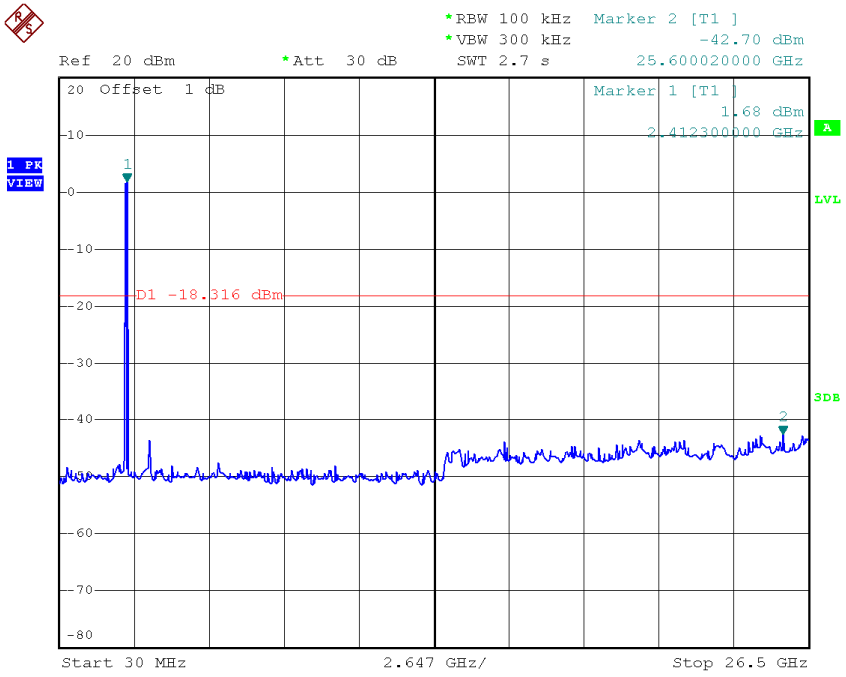

Date: 9.FEB.2015 10:22:15

## TX G mode CH11



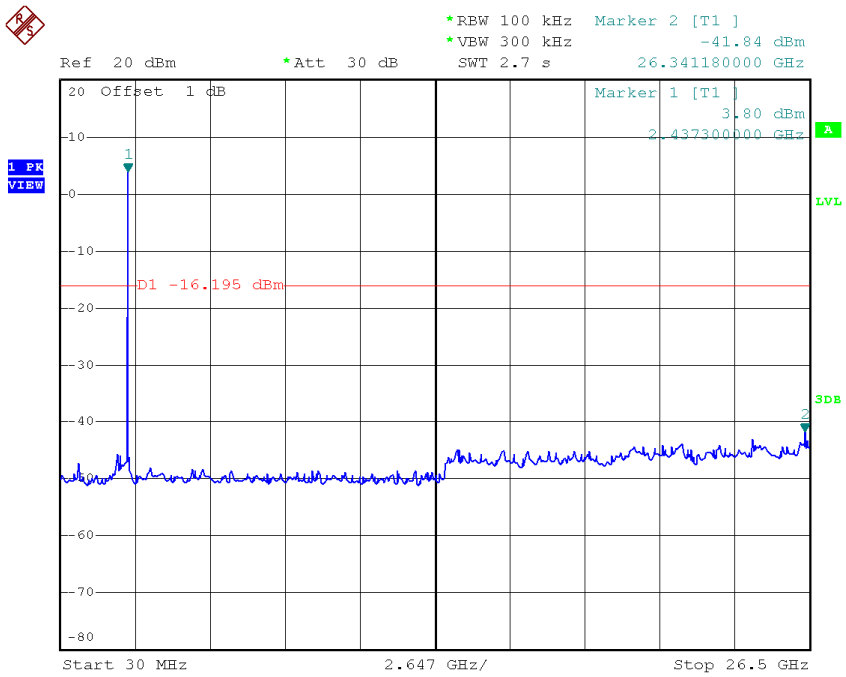

Date: 9.FEB.2015 10:24:13

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



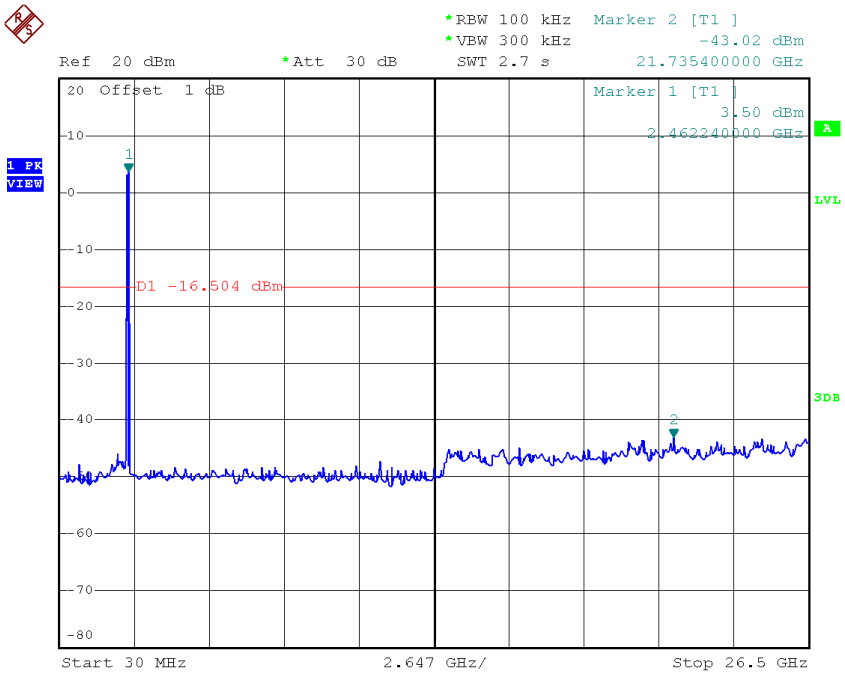

Date: 9.FEB.2015 10:22:07

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




Date: 9.FEB.2015 10:23:11

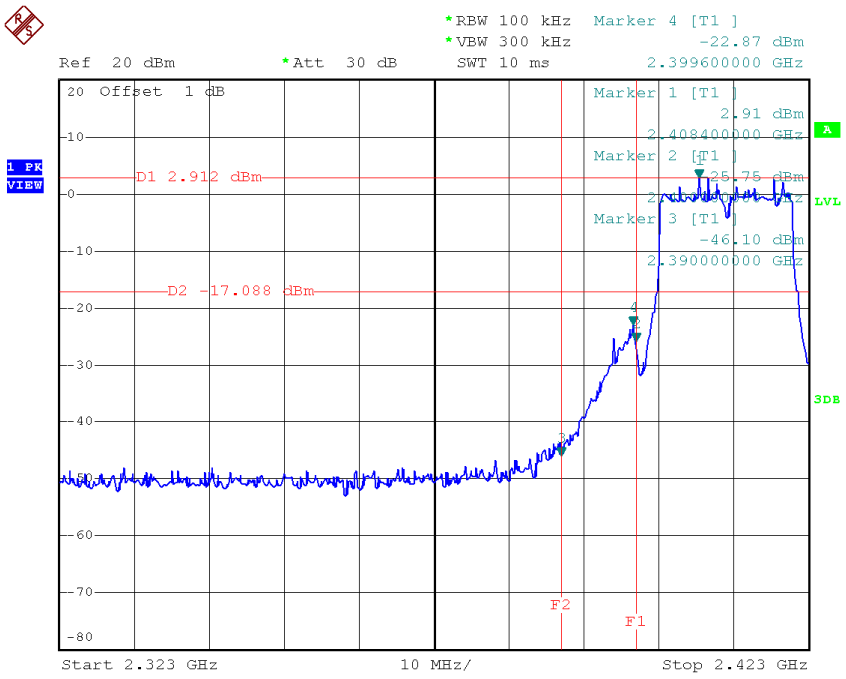
## TX G mode CH11 (10 Harmonic of the frequency)




Date: 9.FEB.2015 10:24:05

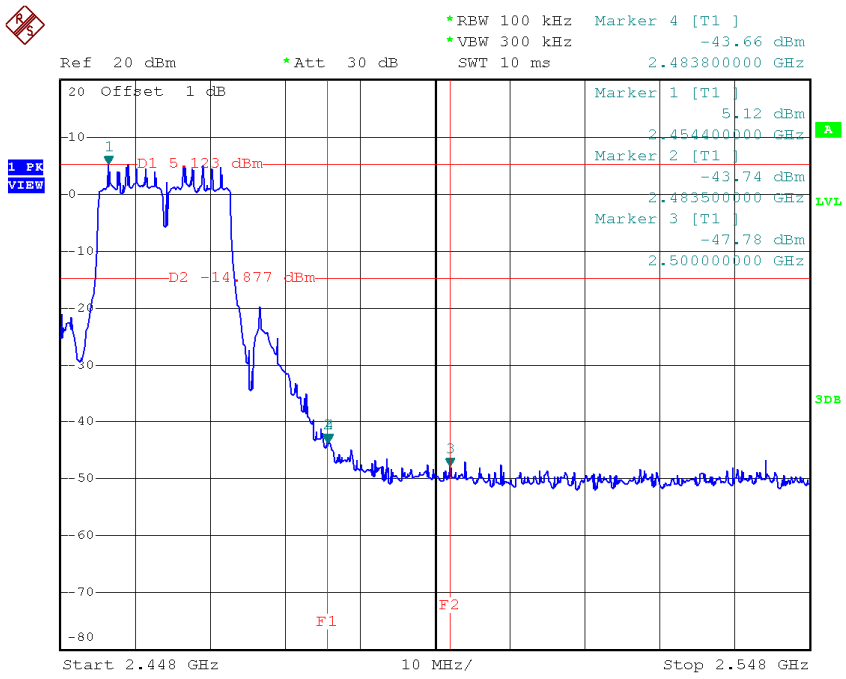
| | |
|---|---|
| **Test Mode :** | **TX N-20M Mode_ANT 1** |

## TX HT20 mode CH01



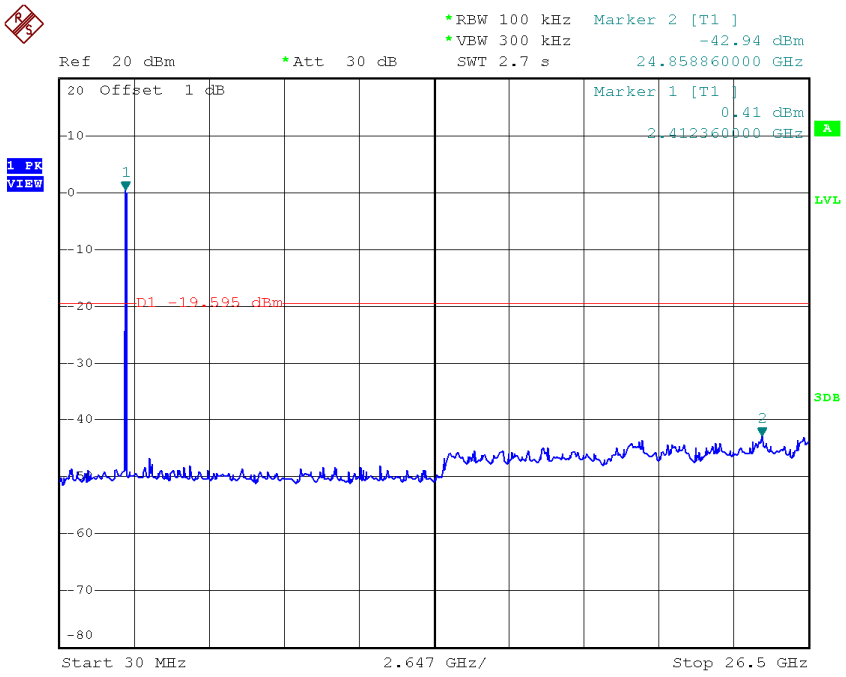

Date: 9.FEB.2015 10:25:49

## TX HT20 mode CH11



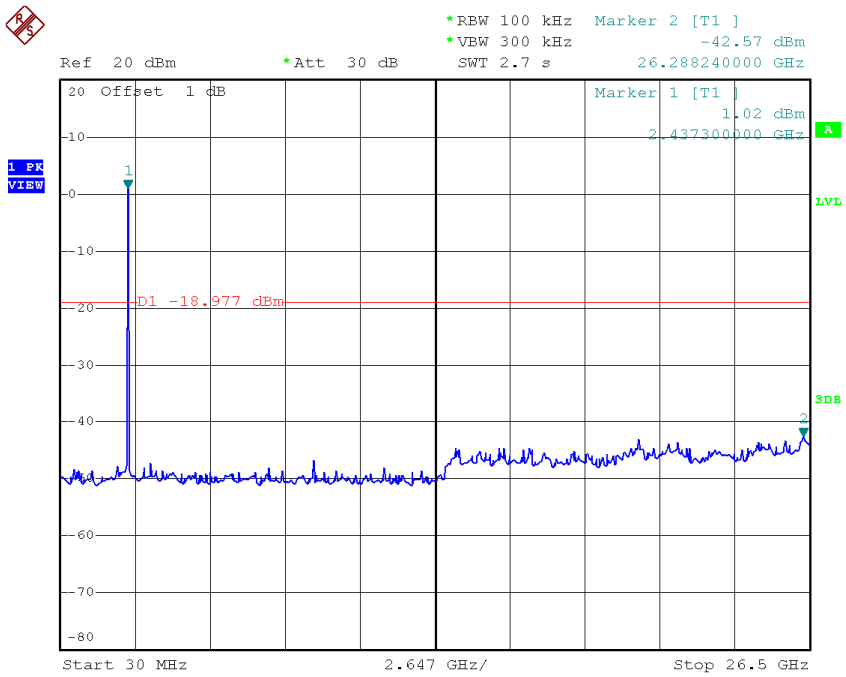

Date: 9.FEB.2015 10:28:20

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



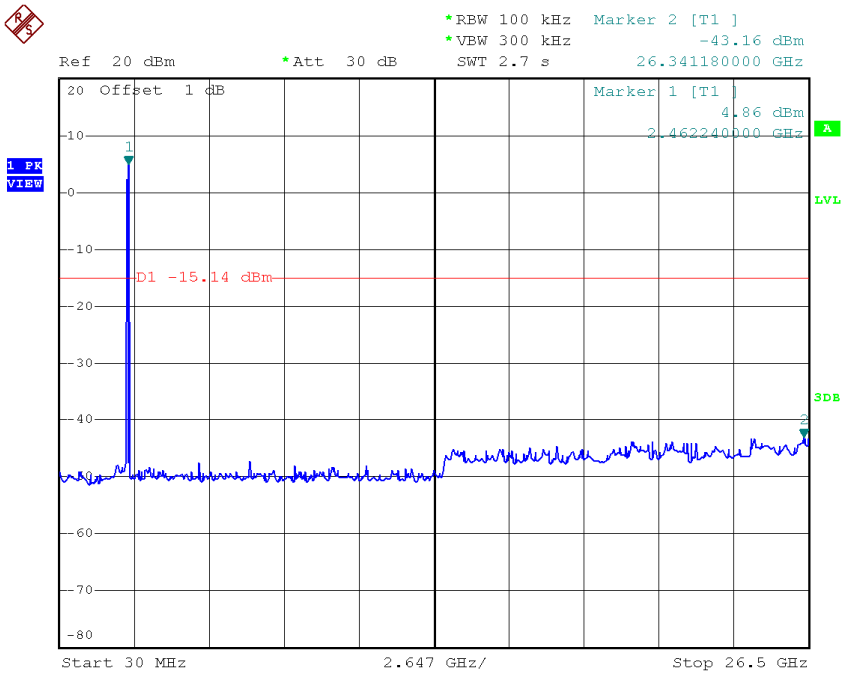

Date: 9.FEB.2015 10:25:42

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




Date: 9.FEB.2015 10:27:22

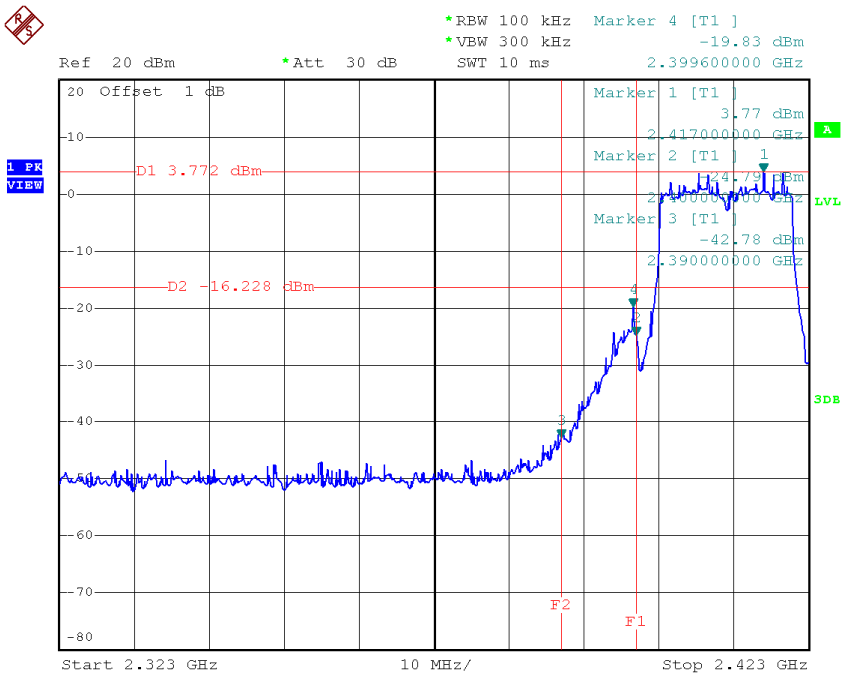
## TX HT20 mode CH11 (10 Harmonic of the frequency)




Date: 9.FEB.2015 10:28:13

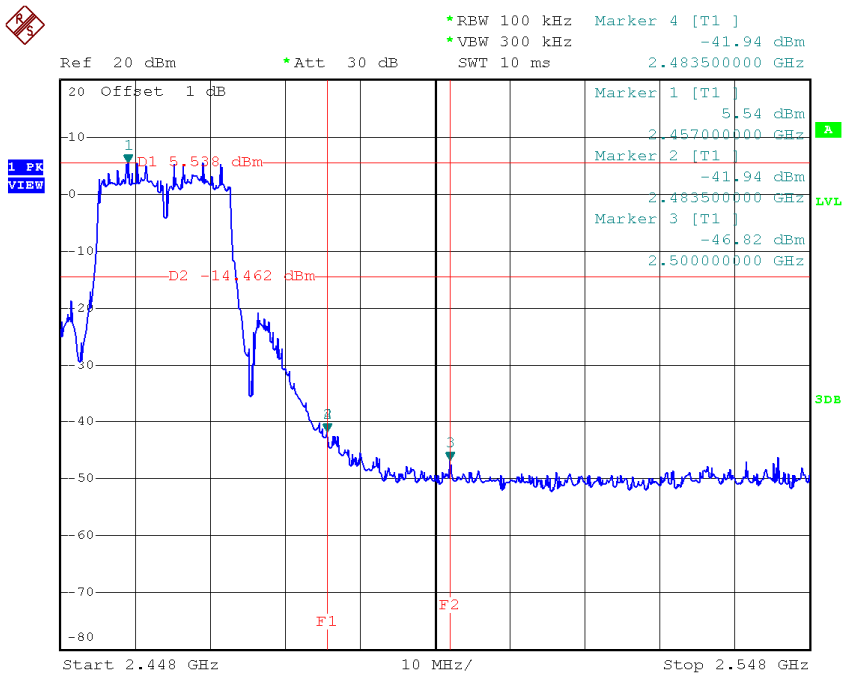
| Test Mode : | TX N-20M Mode_ANT 2 |
|---|---|

## TX HT20 mode CH01



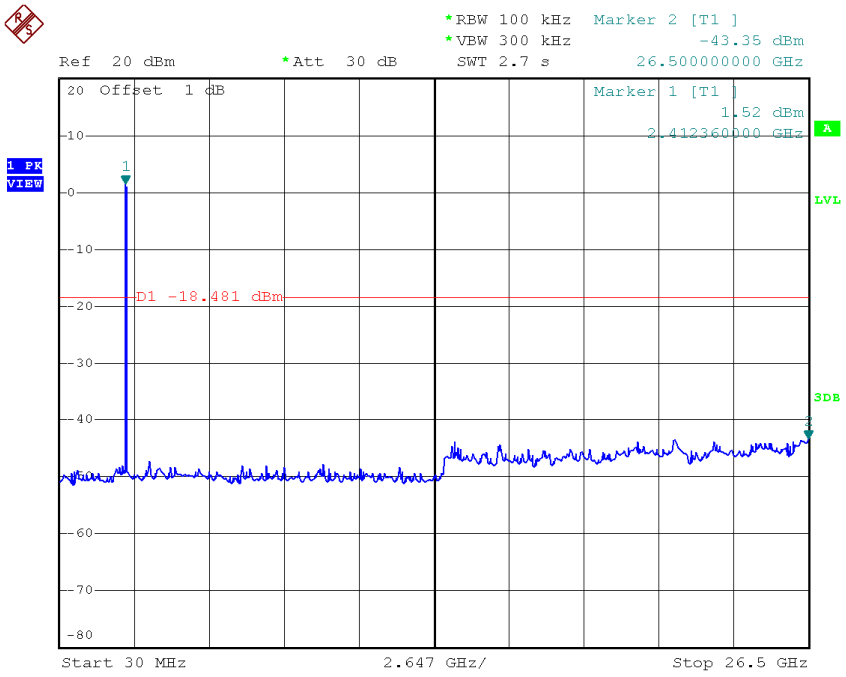

Date: 9.FEB.2015 16:11:49

## TX HT20 mode CH11



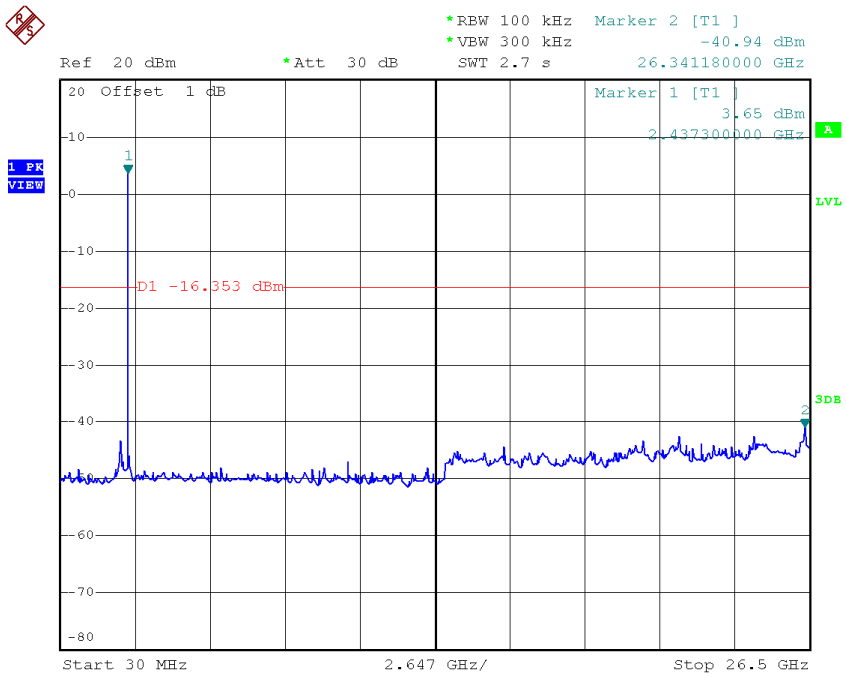

Date: 9.FEB.2015 16:13:43

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



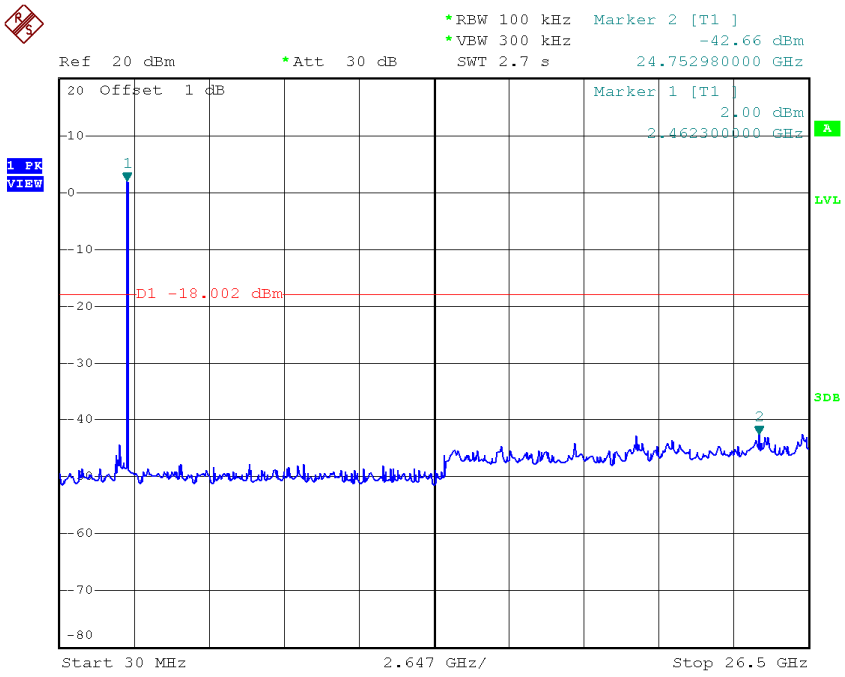

Date: 9.FEB.2015 16:11:42

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




Date: 9.FEB.2015 16:12:48

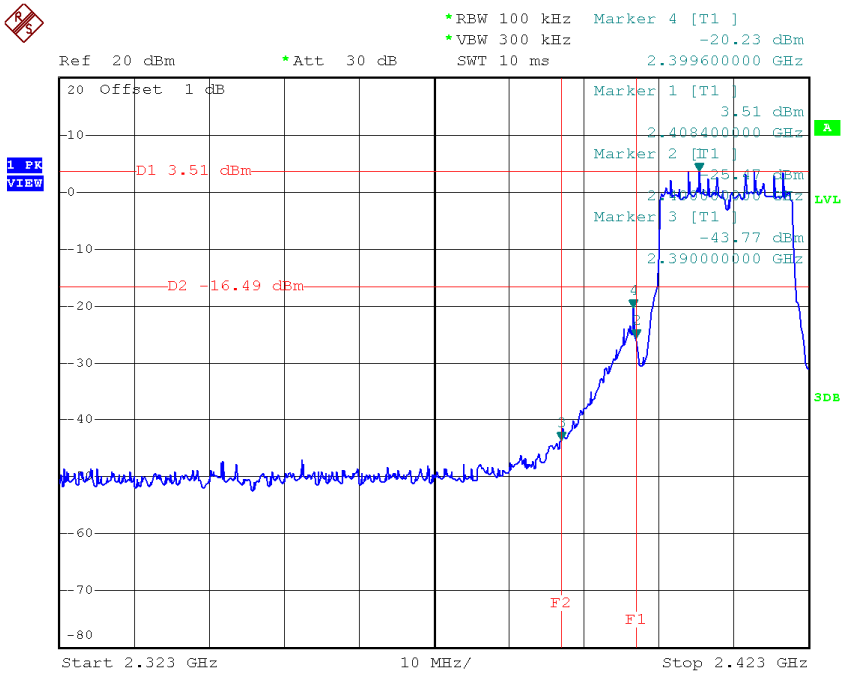
## TX HT20 mode CH11 (10 Harmonic of the frequency)




Date: 9.FEB.2015 16:13:35

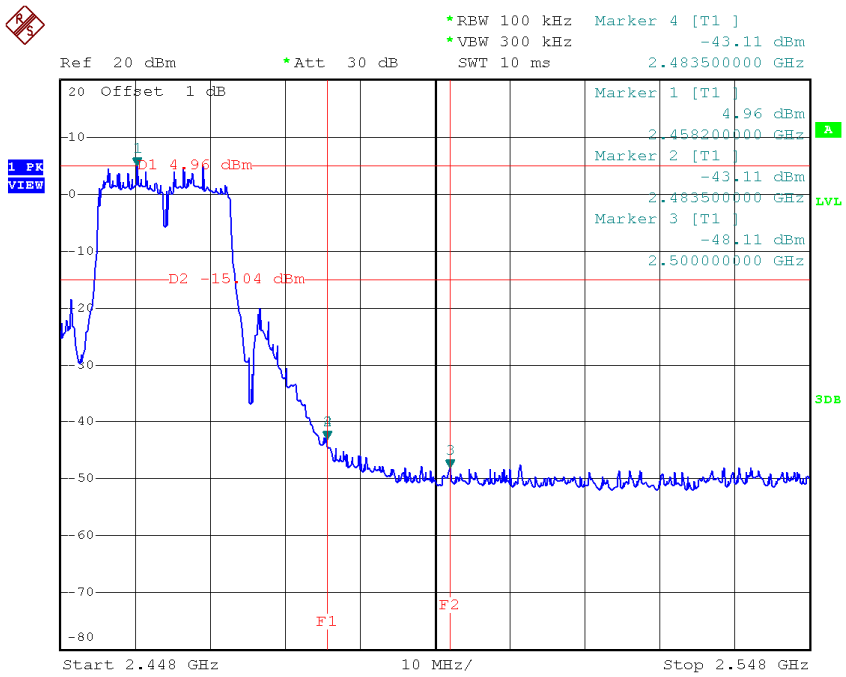
| Test Mode : | TX N-20M Mode_ANT 3 |
|---|---|

## TX HT20 mode CH01



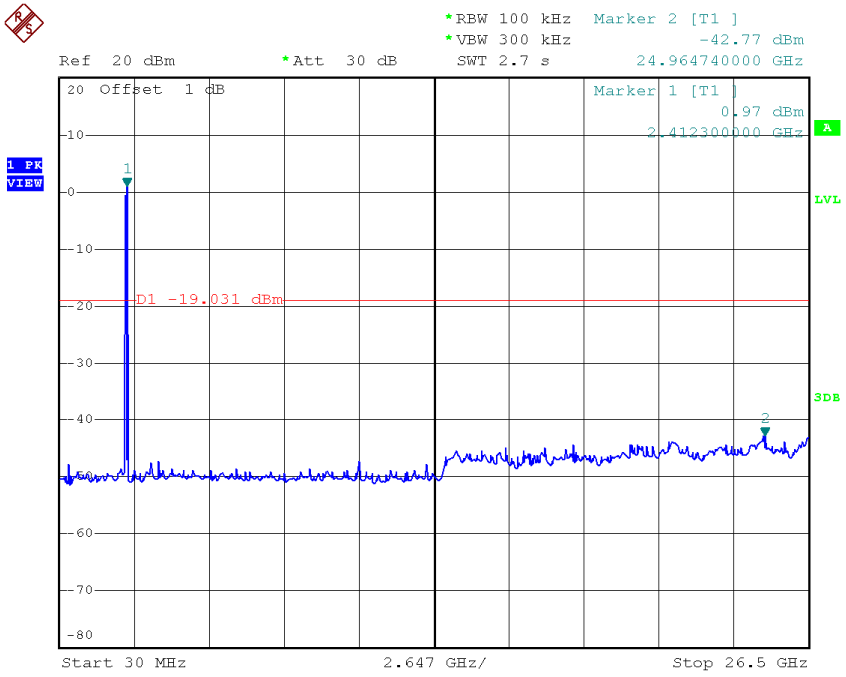

Date: 9.FEB.2015 16:22:08

## TX HT20 mode CH11



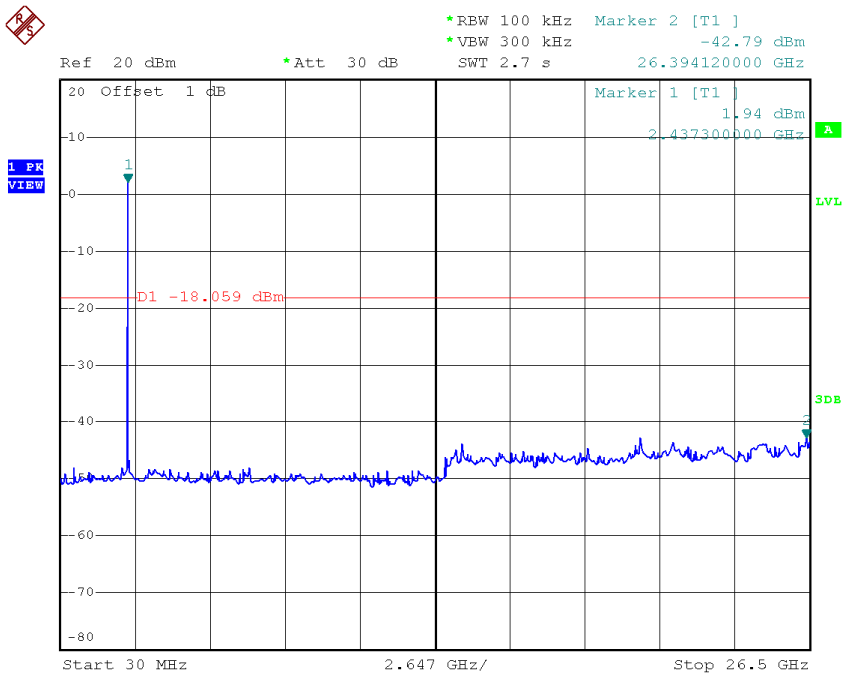

Date: 9.FEB.2015 16:24:11

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



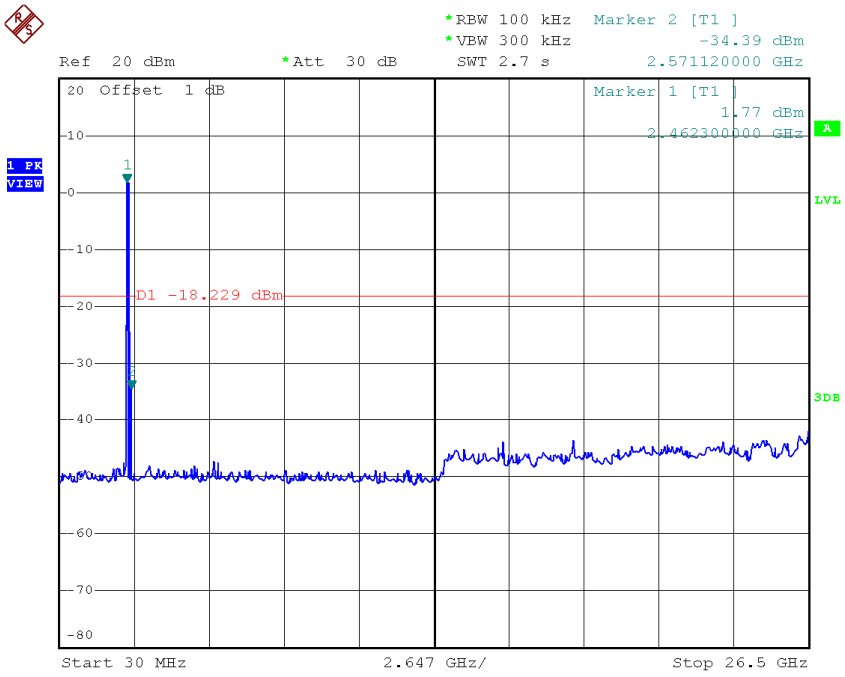

Date: 9.FEB.2015 16:22:01

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




Date: 9.FEB.2015 16:23:07

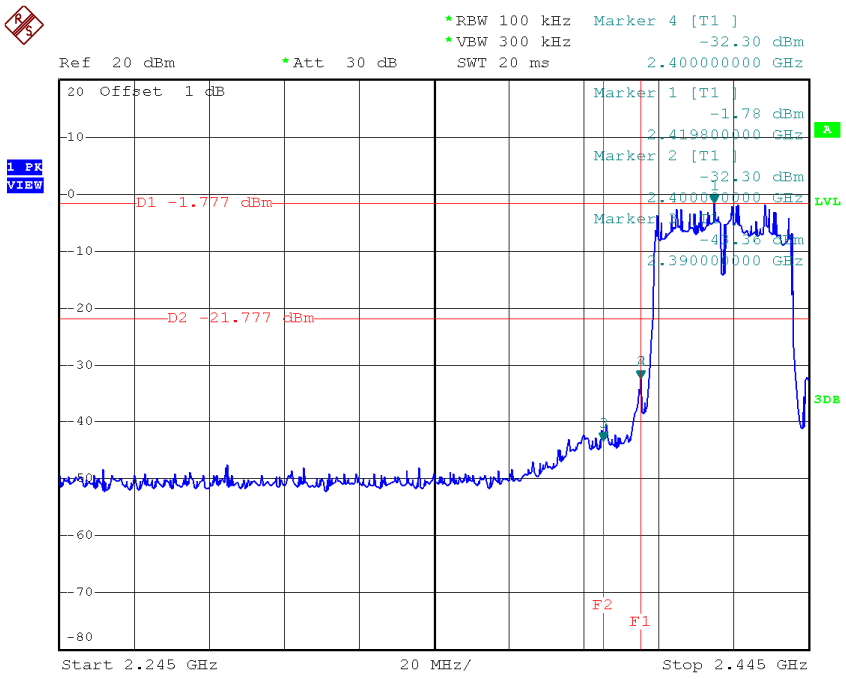
## TX HT20 mode CH11 (10 Harmonic of the frequency)




Date: 9.FEB.2015 16:24:03

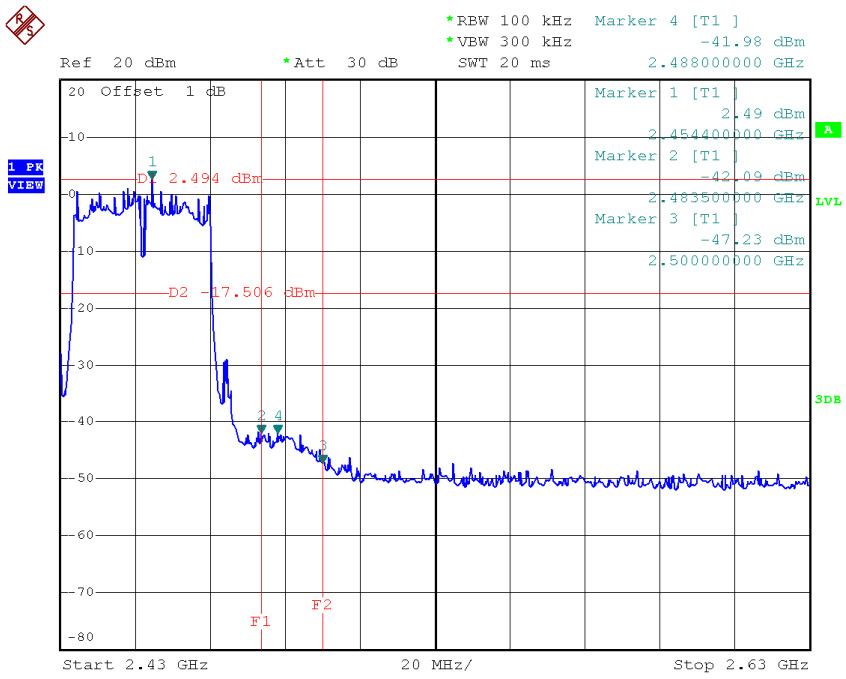
| | |
|---|---|
| **Test Mode :** | **TX N-40M Mode_ANT 1** |

## TX HT40 mode CH03



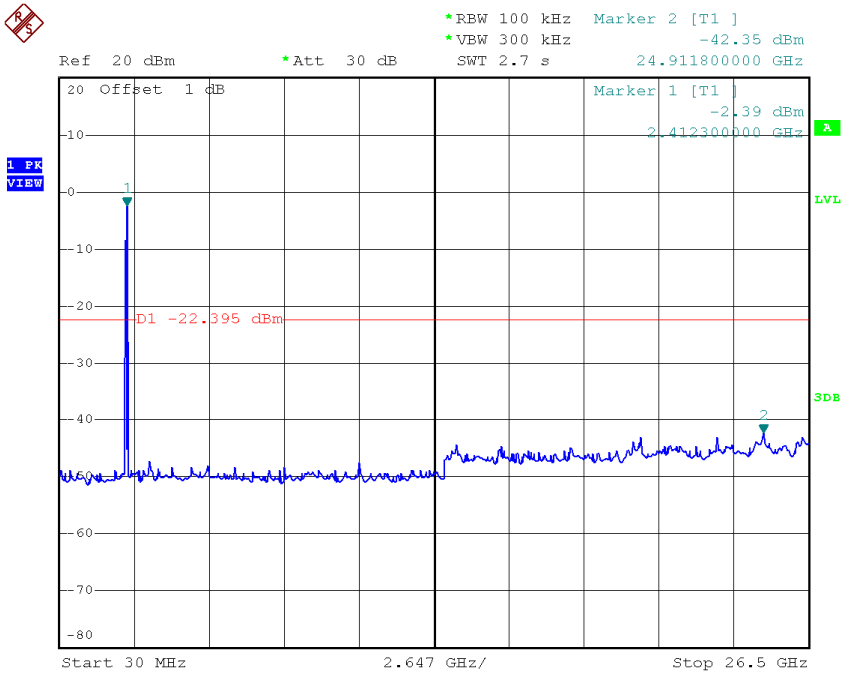

Date: 9.FEB.2015 10:35:46

## TX HT40 mode CH09



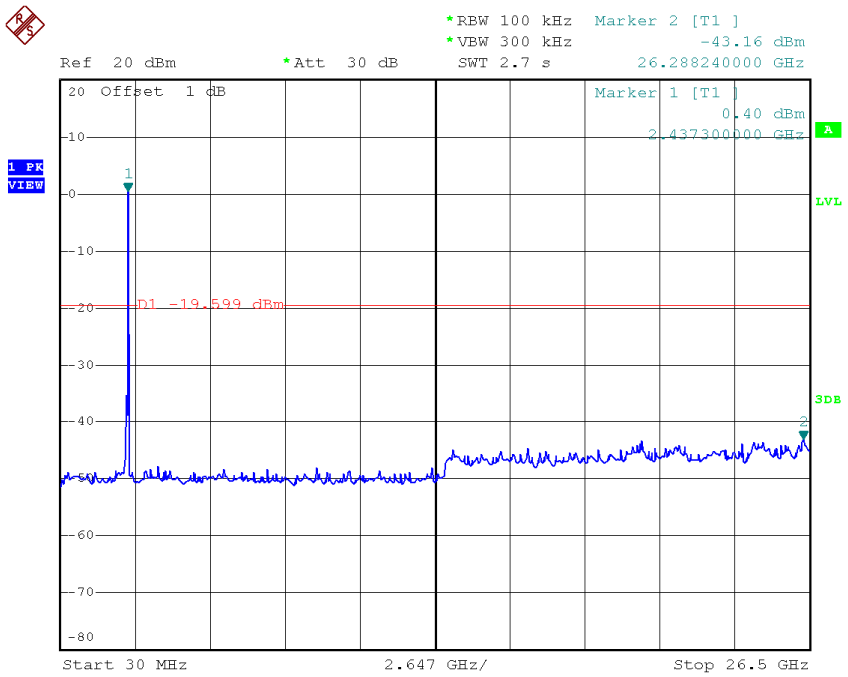

Date: 9.FEB.2015 16:04:09

## TX HT40 mode CH03 (10 Harmonic of the frequency)



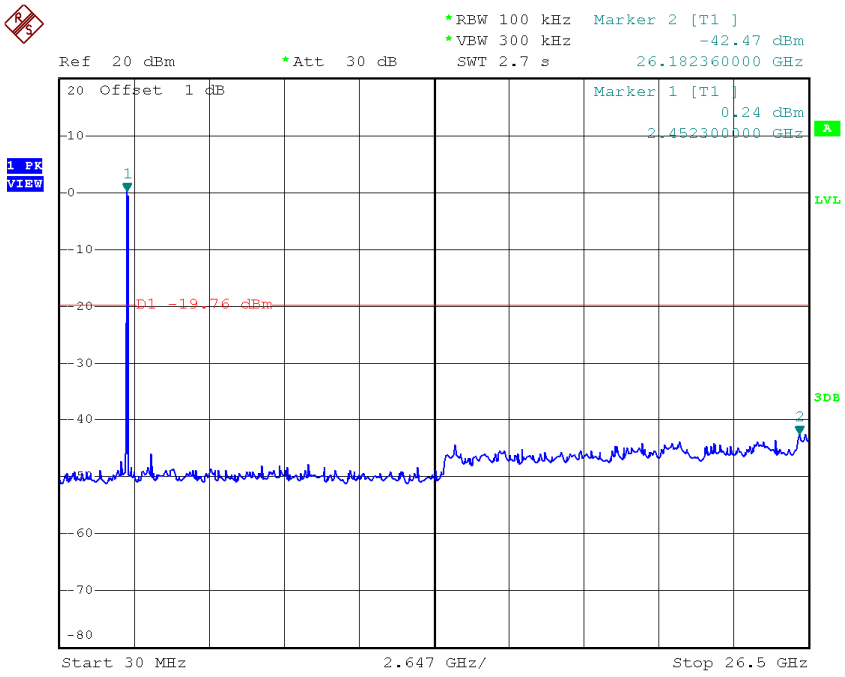

Date: 9.FEB.2015 10:29:16

## TX HT40 mode CH06 (10 Harmonic of the frequency)




Date: 9.FEB.2015 16:03:12

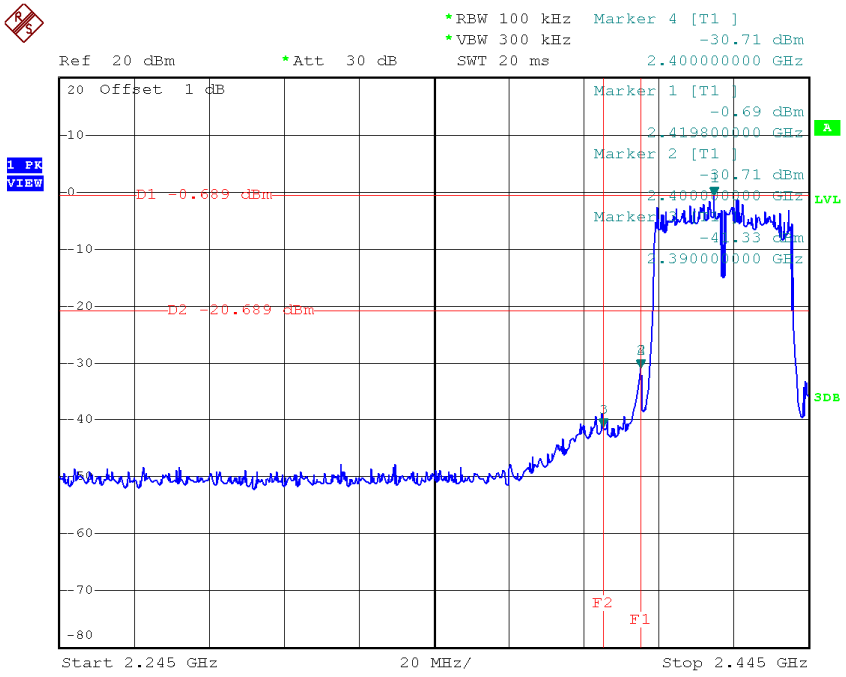
## TX HT40 mode CH09 (10 Harmonic of the frequency)




Date: 9.FEB.2015 16:04:02

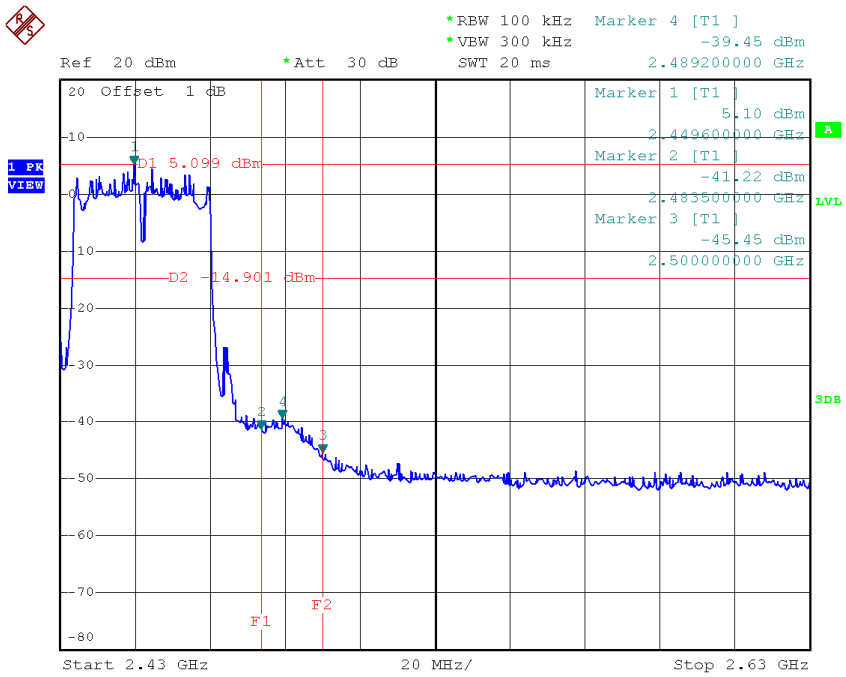
| Test Mode : | TX N-40M Mode_ANT 2 |
|---|---|

## TX HT40 mode CH03



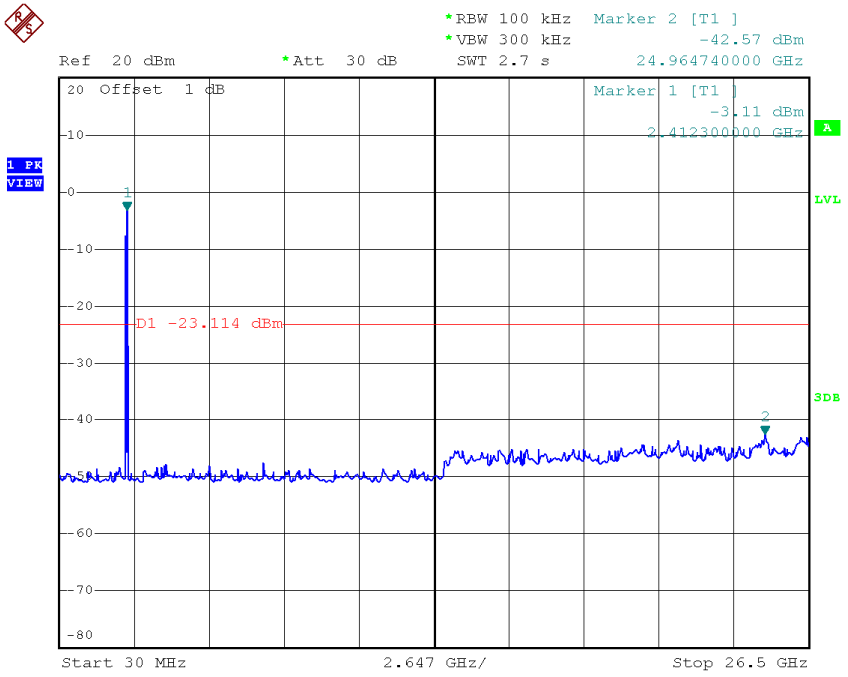

Date: 9.FEB.2015 16:14:47

## TX HT40 mode CH09



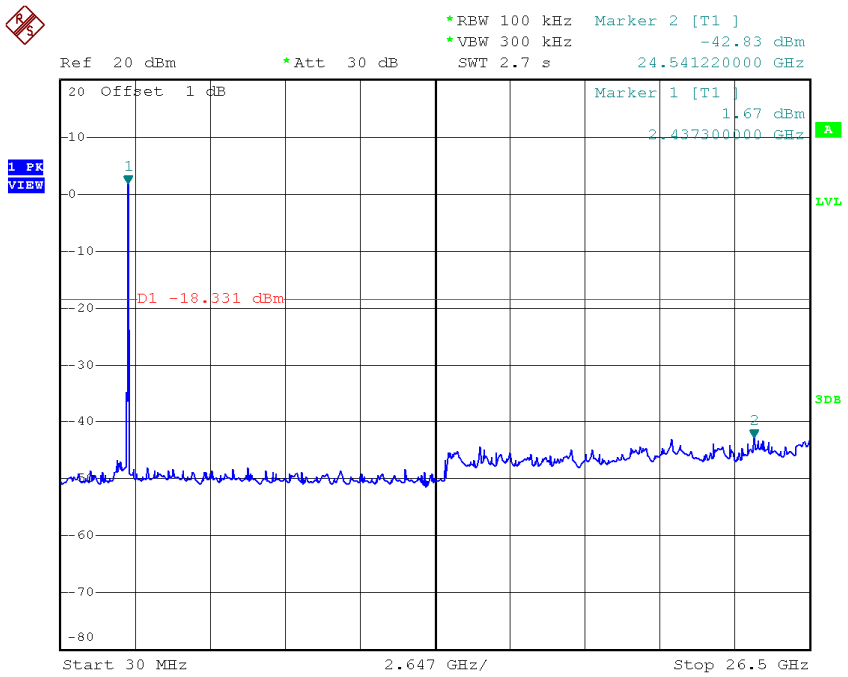

Date: 9.FEB.2015 16:17:48

## TX HT40 mode CH03 (10 Harmonic of the frequency)



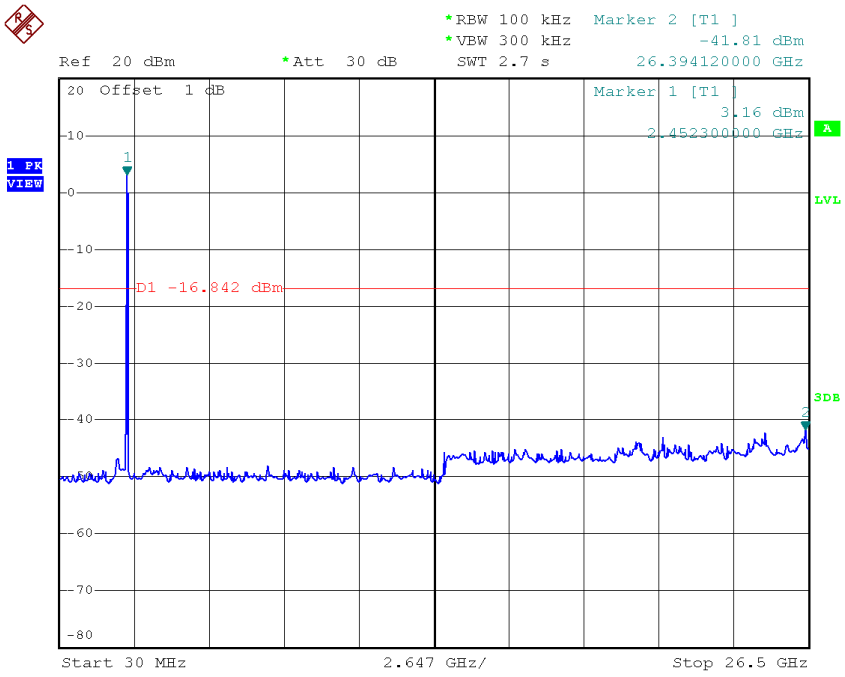

Date: 9.FEB.2015 16:14:40

## TX HT40 mode CH06 (10 Harmonic of the frequency)




Date: 9.FEB.2015 16:16:51

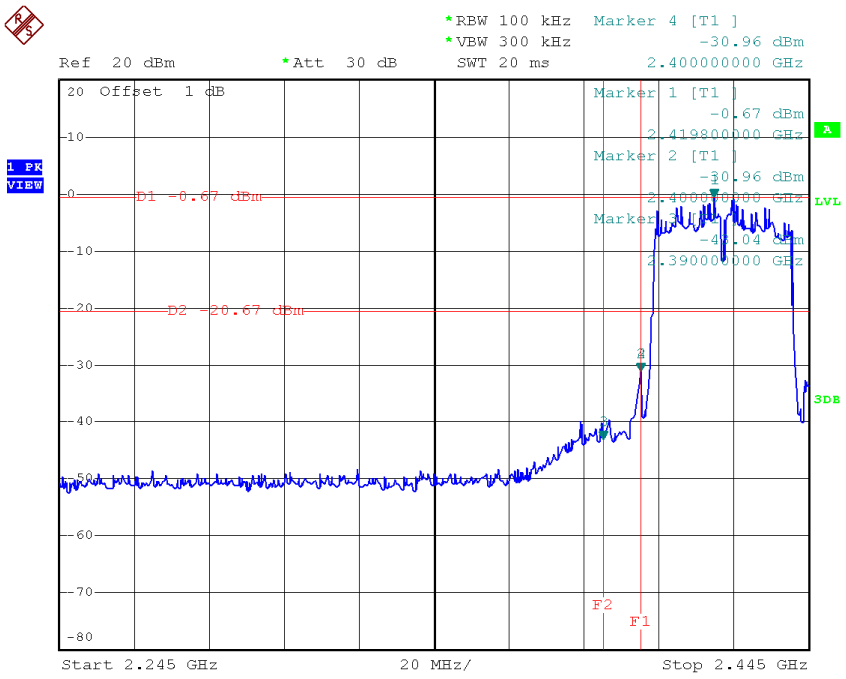
## TX HT40 mode CH09 (10 Harmonic of the frequency)




Date: 9.FEB.2015 16:17:41

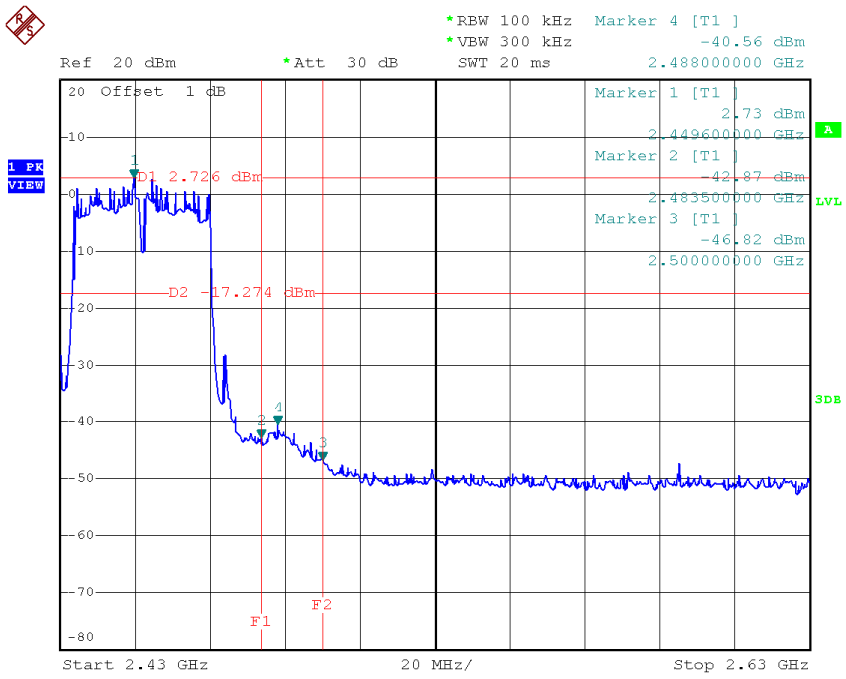
| Test Mode : | TX N-40M Mode_ANT 3 |
|---|---|

## TX HT40 mode CH03



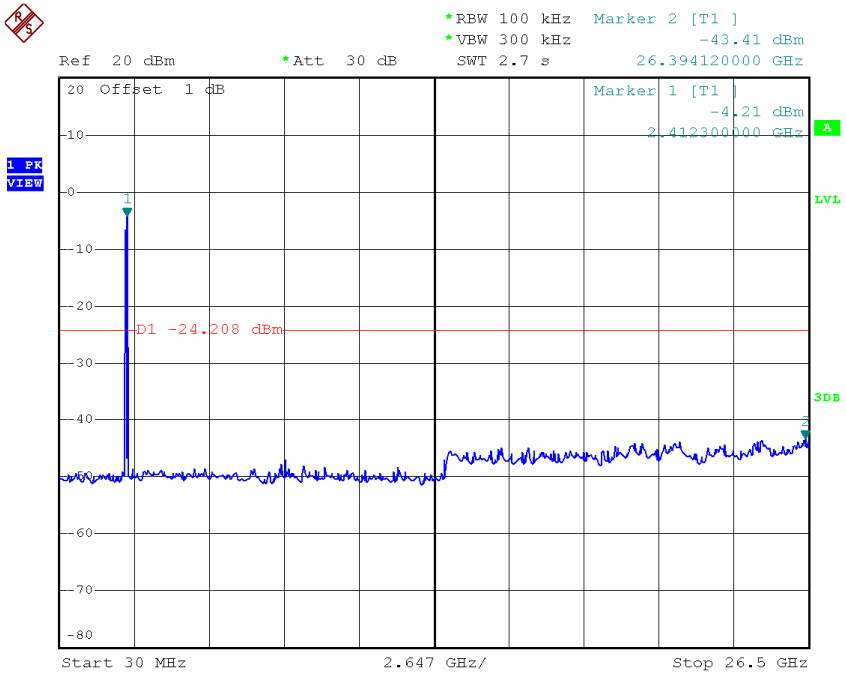

Date: 9.FEB.2015 16:25:23

## TX HT40 mode CH09



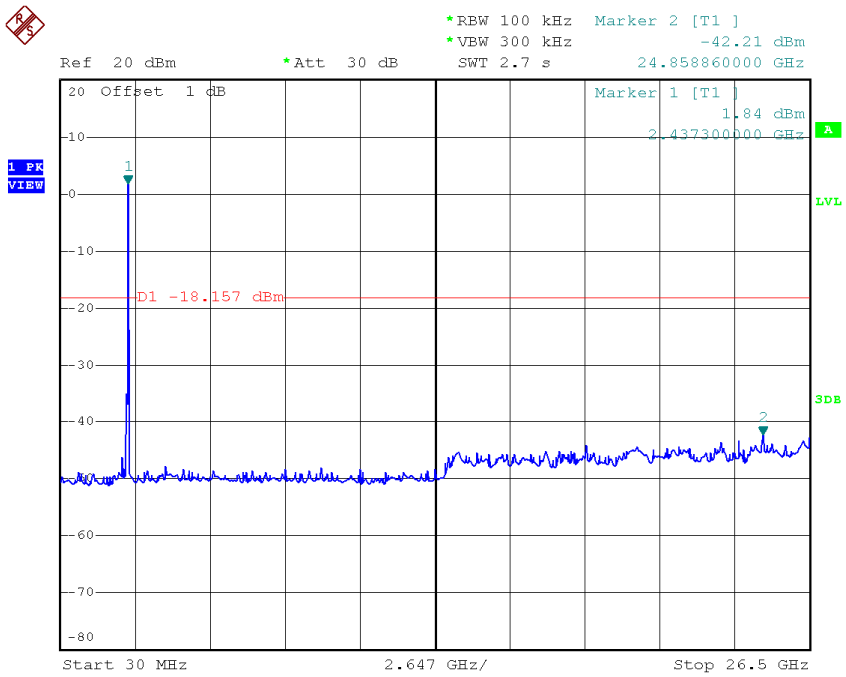

Date: 9.FEB.2015 16:27:43

## TX HT40 mode CH03 (10 Harmonic of the frequency)



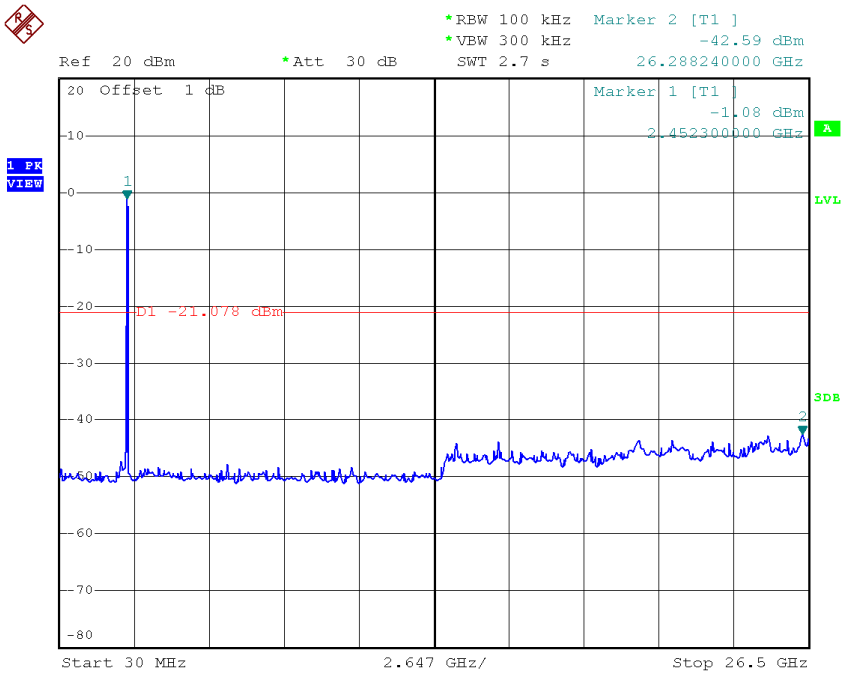

Date: 9.FEB.2015 16:25:16

## TX HT40 mode CH06 (10 Harmonic of the frequency)




Date: 9.FEB.2015 16:26:45

## TX HT40 mode CH09 (10 Harmonic of the frequency)



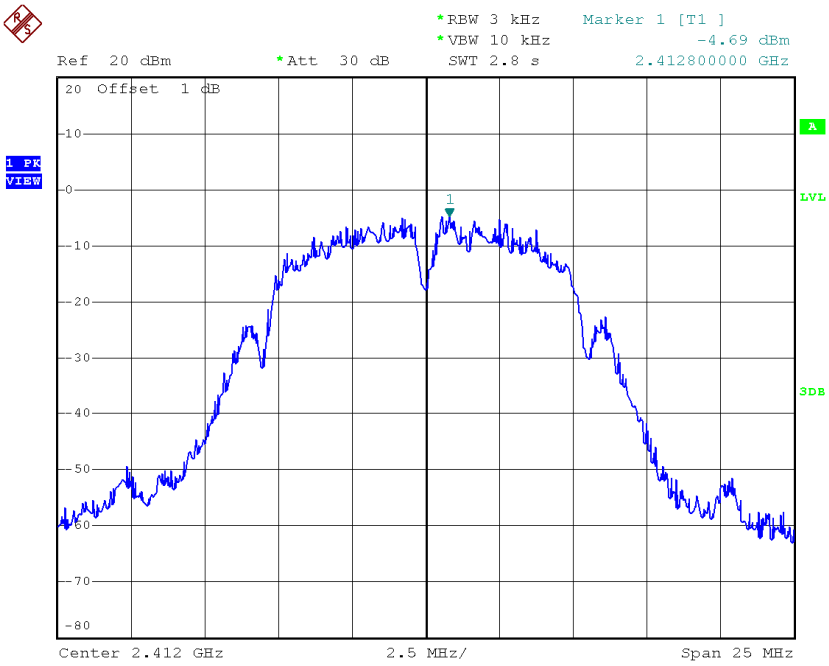

Date: 9.FEB.2015 16:27:35

# ATTACHMENT H - POWER SPECTRAL DENSITY

**Test Mode :TX B Mode_CH01/06/11_ANT 1**

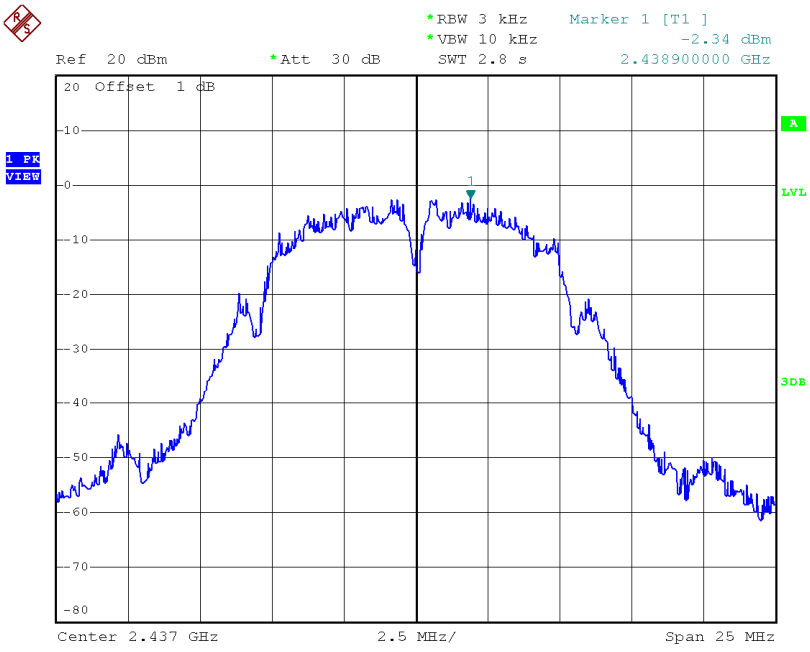
| Frequency (MHz) | Power Density (dBm/3kHz) | Power Density (mW/3kHz) | Max. Limit (dBm/3kHz) | Result |
|---|---|---|---|---|
| 2412 | -4.69 | 0.34 | 8.00 | Complies |
| 2437 | -2.34 | 0.58 | 8.00 | Complies |
| 2462 | -2.42 | 0.57 | 8.00 | Complies |

**TX CH01**



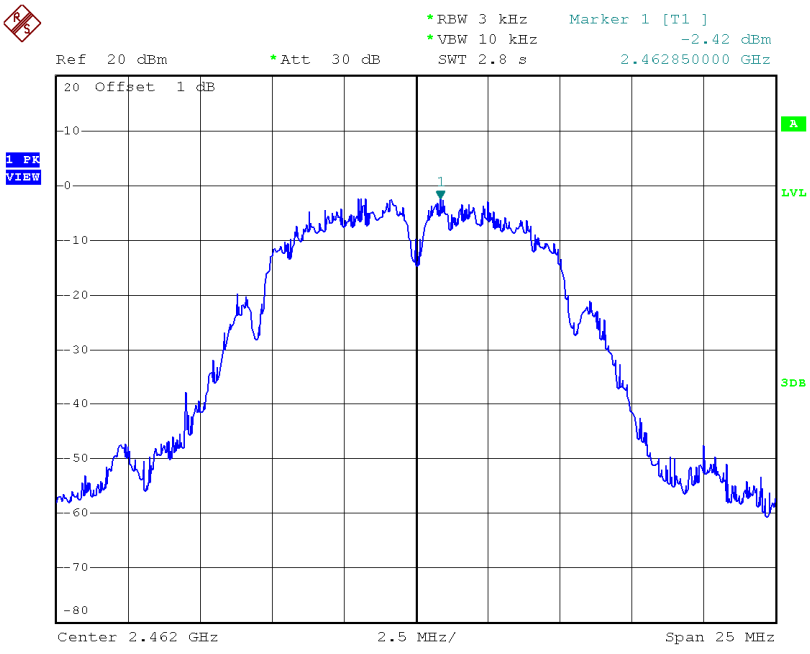

Date: 9.FEB.2015 10:17:11

## TX CH06




Date: 9.FEB.2015 10:19:44

## TX CH11

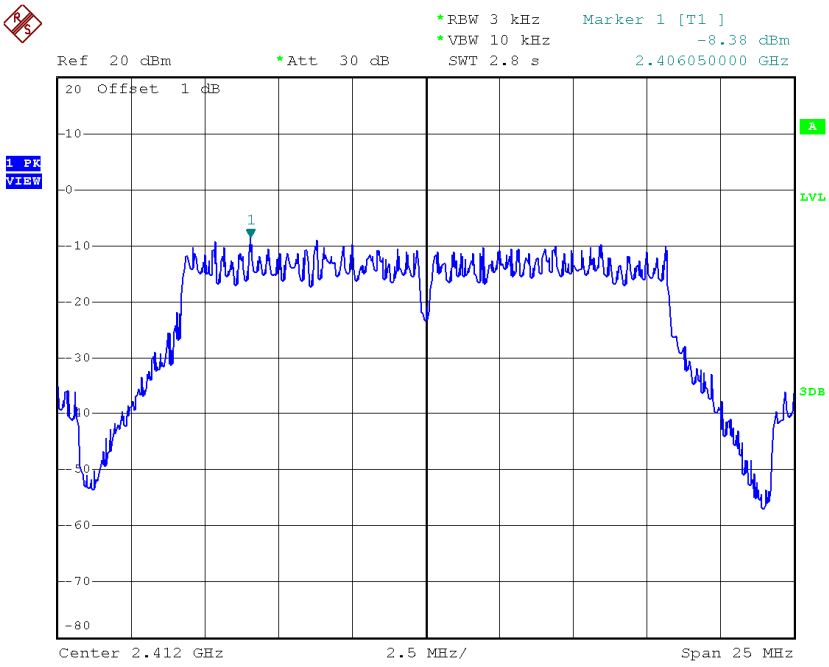



Date: 9.FEB.2015 10:21:11

**Test Mode :TX G Mode_CH01/06/11_ANT 1**

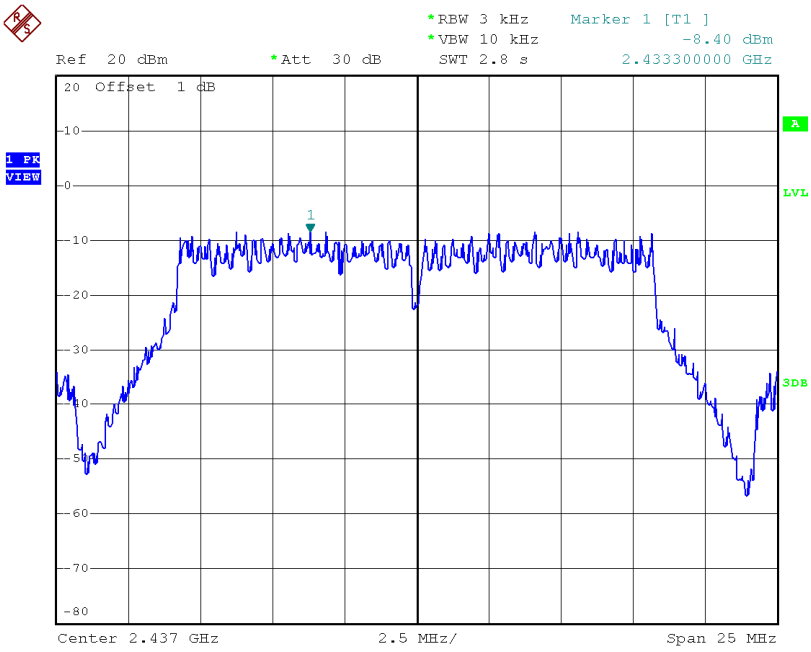
| Frequency (MHz) | Power Density (dBm/3kHz) | Power Density (mW/3kHz) | Max. Limit (dBm/3kHz) | Result |
|---|---|---|---|---|
| 2412 | -8.38 | 0.15 | 8.00 | Complies |
| 2437 | -8.40 | 0.14 | 8.00 | Complies |
| 2462 | -7.58 | 0.17 | 8.00 | Complies |

**TX CH01**



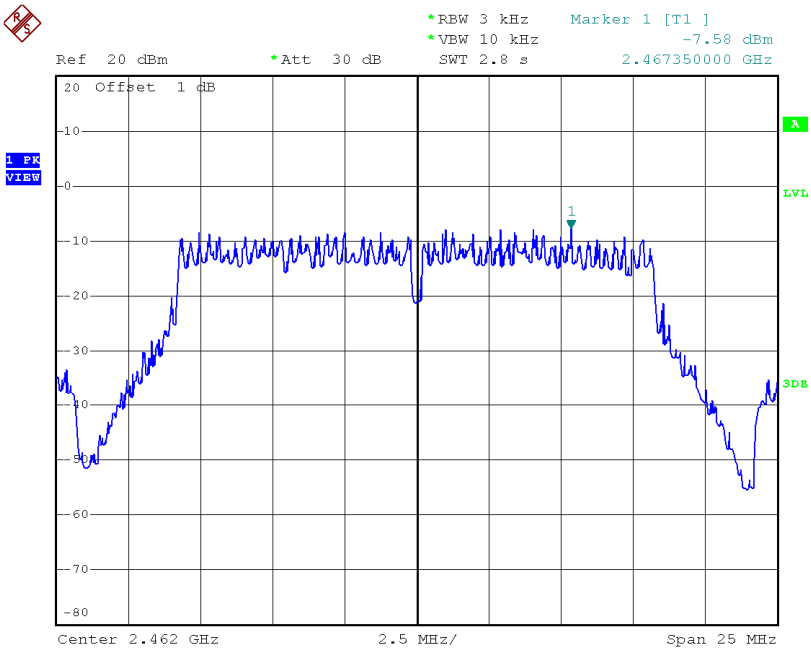

Date: 9.FEB.2015 10:22:23

## TX CH06




Date: 9.FEB.2015 10:23:20

## TX CH11

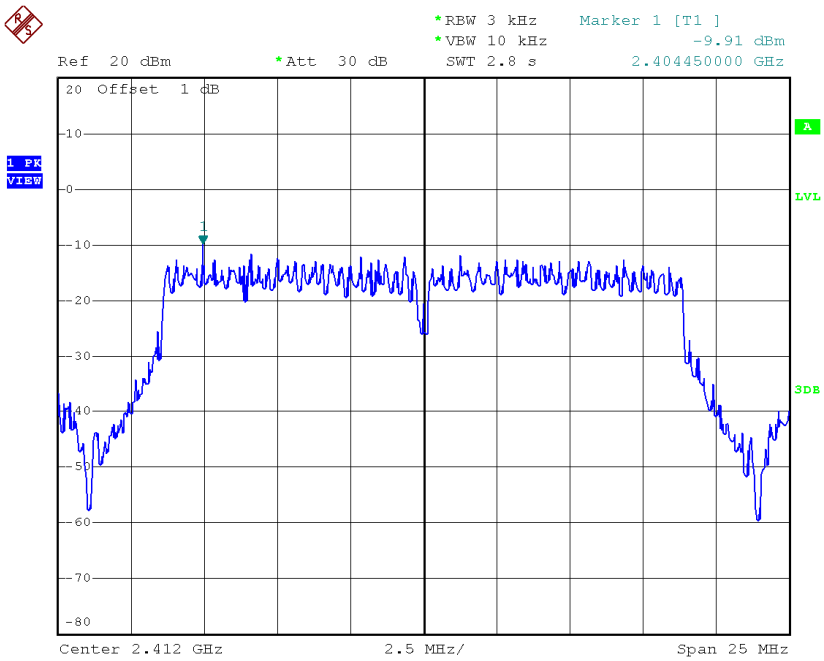



Date: 9.FEB.2015 10:24:21

**Test Mode : TX N-20M Mode_CH01/06/11_ANT 1**

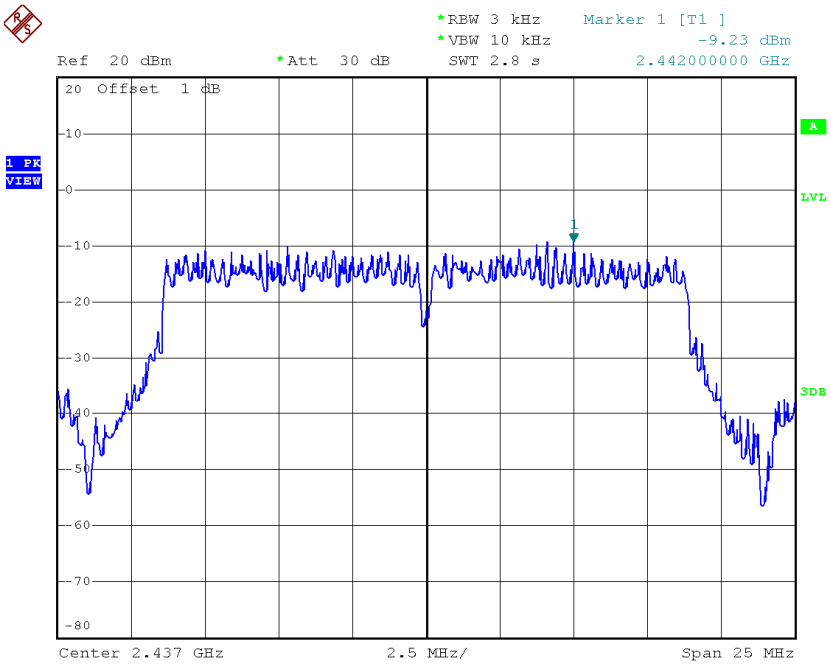
| Frequency (MHz) | Power Density (dBm/3kHz) | Power Density (mW/3kHz) | Max. Limit (dBm/3kHz) | Result |
|---|---|---|---|---|
| 2412 | -9.91 | 0.10 | 8.00 | Complies |
| 2437 | -9.23 | 0.12 | 8.00 | Complies |
| 2462 | -8.84 | 0.13 | 8.00 | Complies |

**TX CH01**



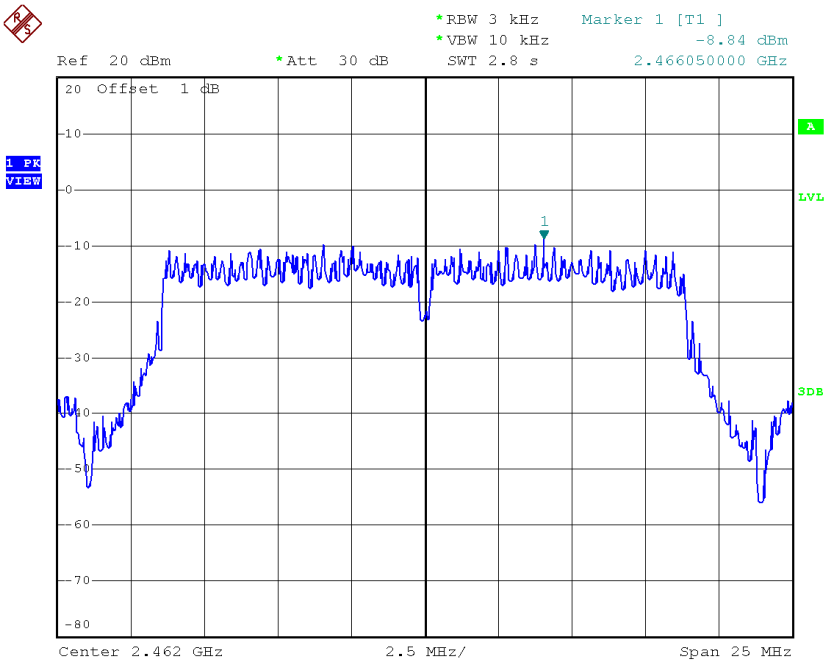

Date: 9.FEB.2015 10:25:58

## TX CH06




Date: 9.FEB.2015 10:27:31

## TX CH11

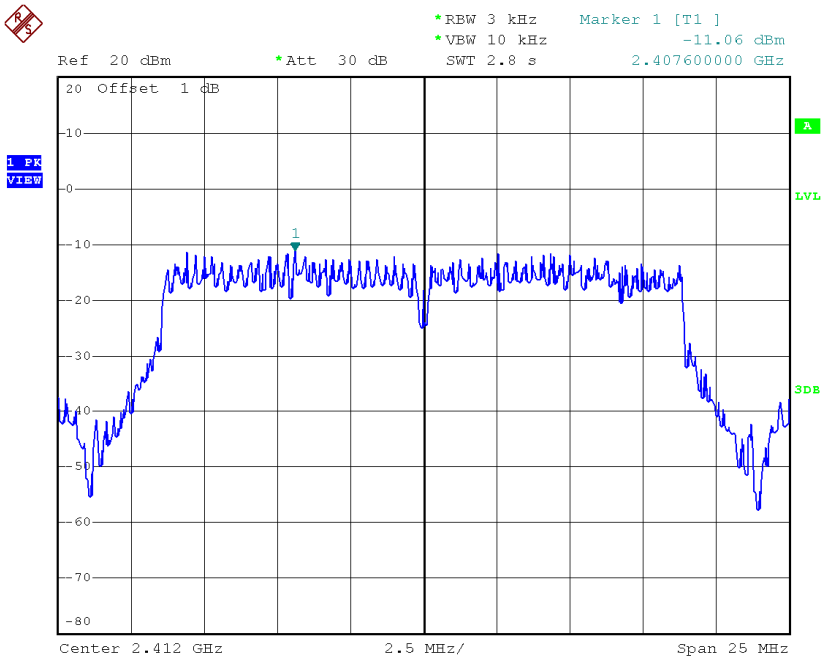



Date: 9.FEB.2015 10:28:29

**Test Mode : TX N-20M Mode_CH01/06/11_ANT 2**

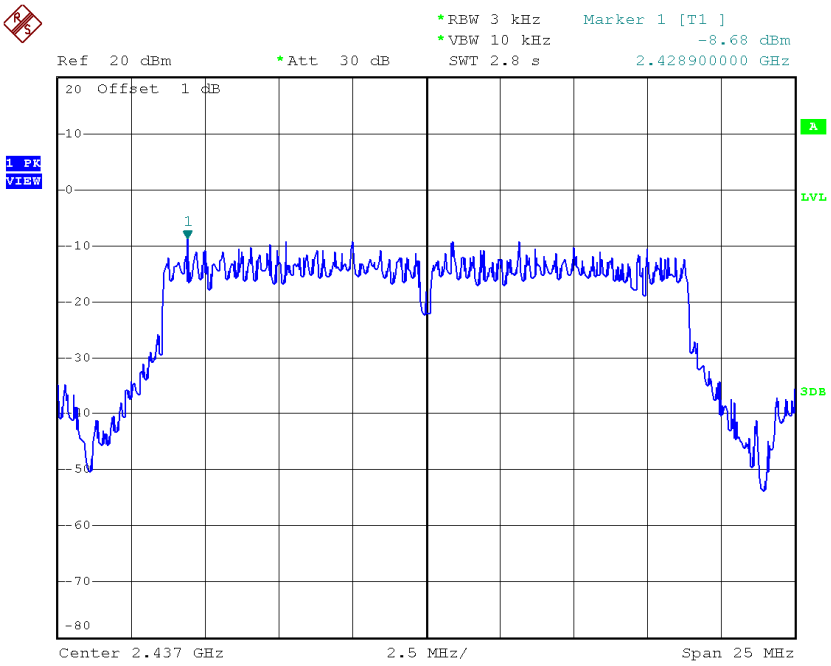
| Frequency (MHz) | Power Density (dBm/3kHz) | Power Density (mW/3kHz) | Max. Limit (dBm/3kHz) | Result |
|---|---|---|---|---|
| 2412 | -11.06 | 0.08 | 8.00 | Complies |
| 2437 | -8.68 | 0.14 | 8.00 | Complies |
| 2462 | -8.42 | 0.14 | 8.00 | Complies |

**TX CH01**



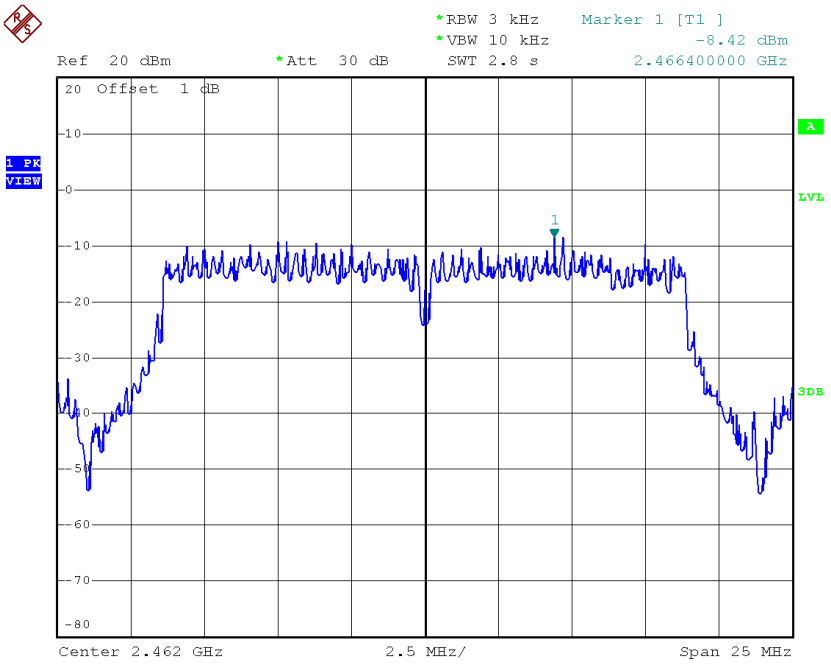

Date: 9.FEB.2015 16:11:58

## TX CH06




Date: 9.FEB.2015 16:12:56

## TX CH11

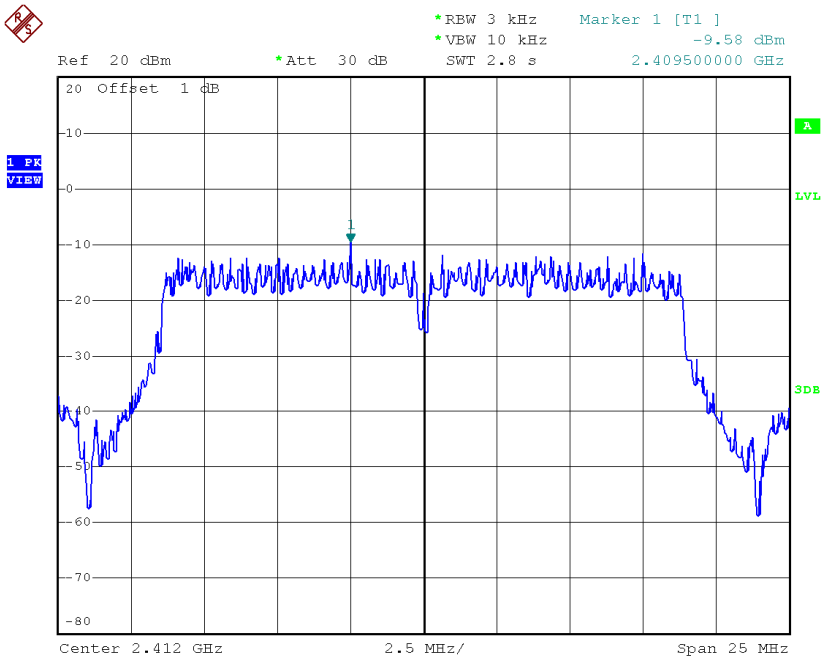



Date: 9.FEB.2015 16:13:52

**Test Mode : TX N-20M Mode_CH01/06/11_ANT 3**

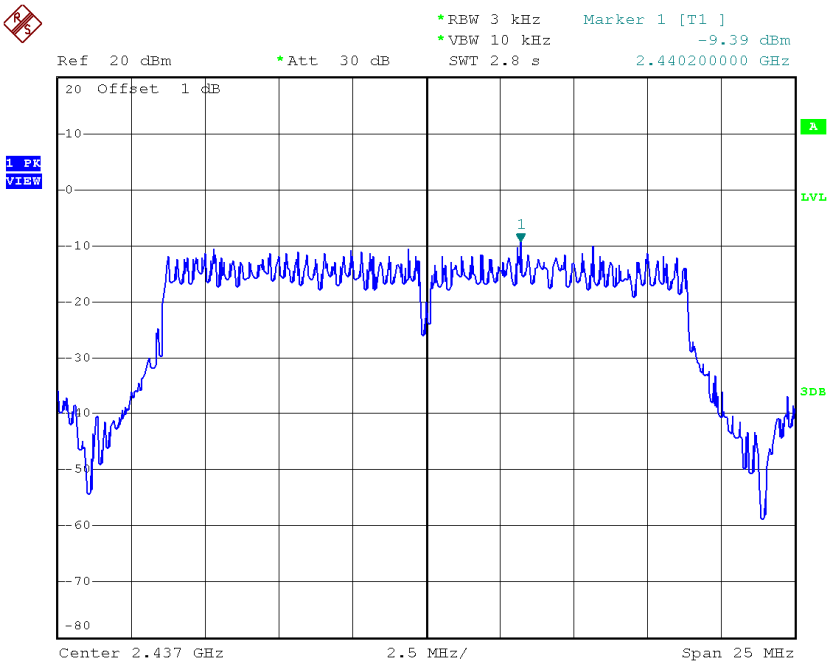
| Frequency (MHz) | Power Density (dBm/3kHz) | Power Density (mW/3kHz) | Max. Limit (dBm/3kHz) | Result |
|---|---|---|---|---|
| 2412 | -9.58 | 0.11 | 8.00 | Complies |
| 2437 | -9.39 | 0.12 | 8.00 | Complies |
| 2462 | -9.26 | 0.12 | 8.00 | Complies |

**TX CH01**



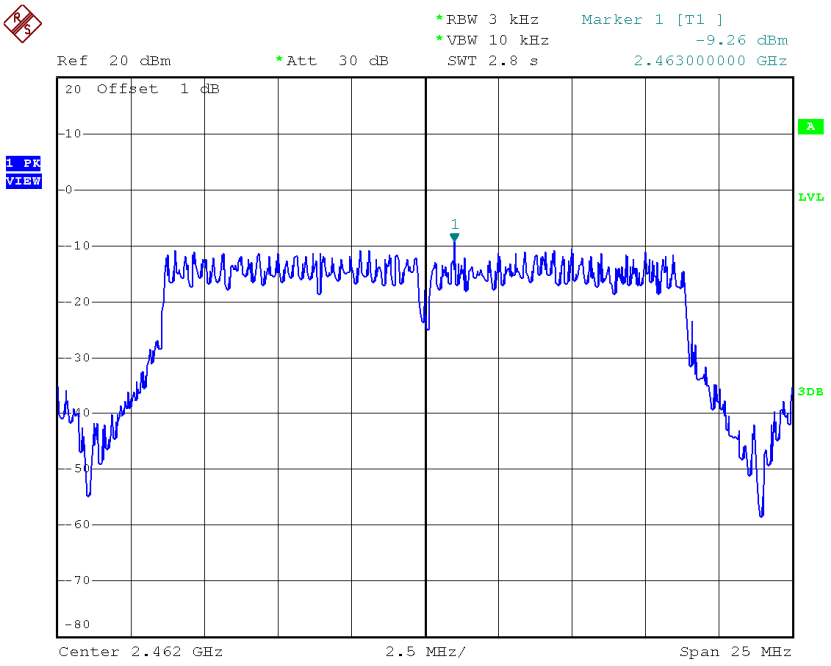

Date: 9.FEB.2015 16:22:17

## TX CH06




Date: 9.FEB.2015 16:23:15

## TX CH11




Date: 9.FEB.2015 16:24:19

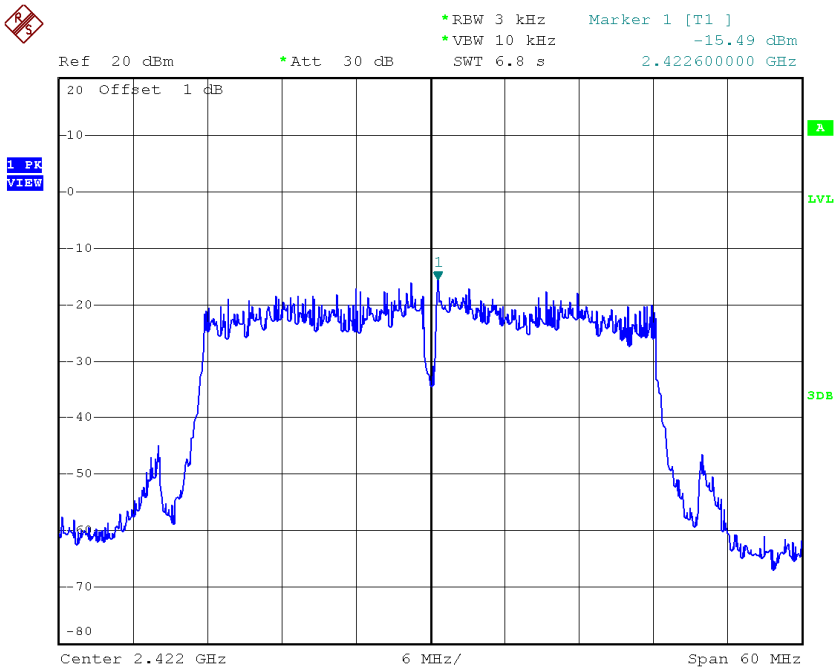
**Test Mode : TX N-20M Mode_CH01/06/11_Total**

| Frequency (MHz) | Power Density (dBm/3kHz) | Power Density (mW/3kHz) | Max. Limit (dBm/3kHz) | Result |
|---|---|---|---|---|
| 2412 | -5.37 | 0.29 | 8.00 | Complies |
| 2437 | -4.32 | 0.37 | 8.00 | Complies |
| 2462 | -4.06 | 0.39 | 8.00 | Complies |

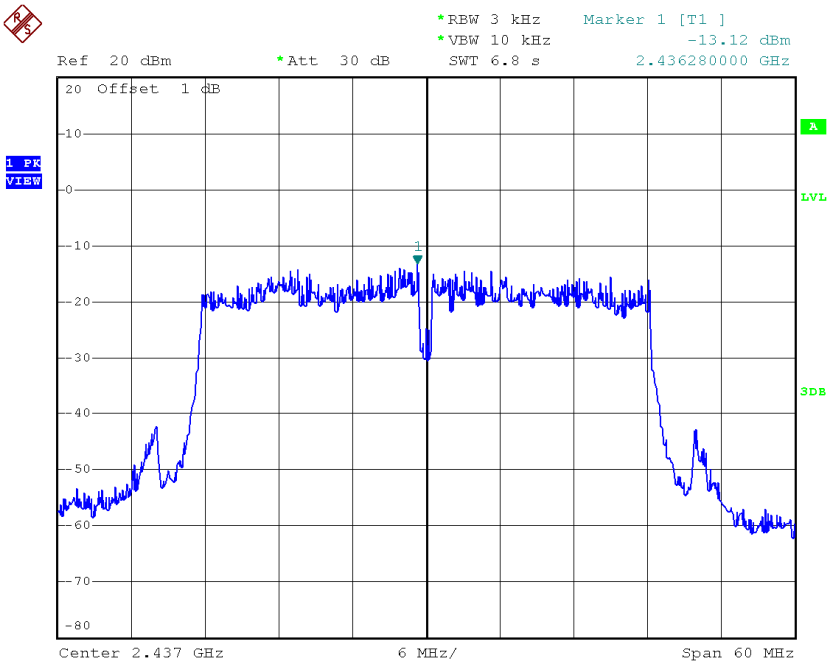
**Test Mode : TX N-40M Mode_CH03/06/09_ANT 1**

| Frequency (MHz) | Power Density (dBm/3kHz) | Power Density (mW/3kHz) | Max. Limit (dBm/3kHz) | Result |
|---|---|---|---|---|
| 2422 | -15.49 | 0.03 | 8.00 | Complies |
| 2437 | -13.12 | 0.05 | 8.00 | Complies |
| 2452 | -13.48 | 0.04 | 8.00 | Complies |

**TX CH03**

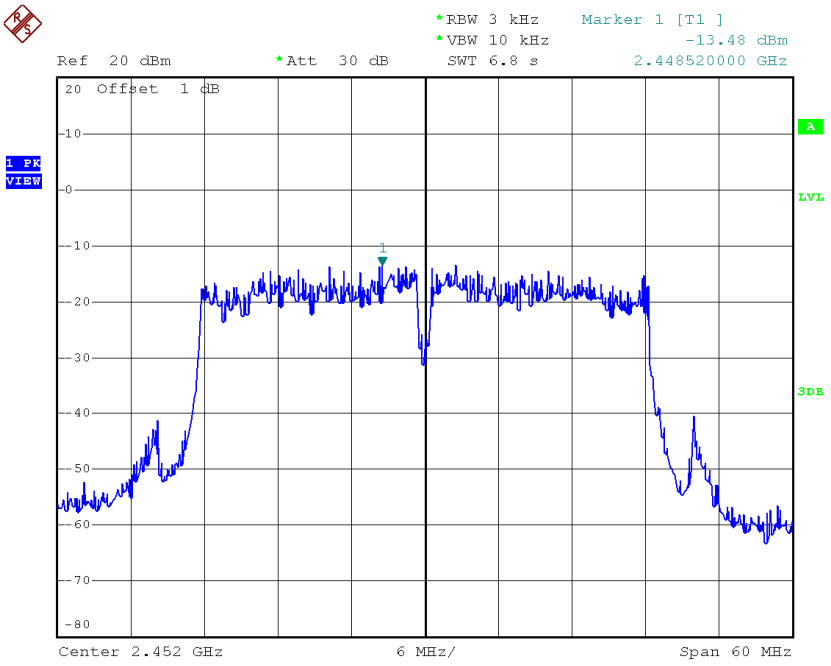


## TX CH06




Date: 9.FEB.2015 16:03:24

## TX CH09

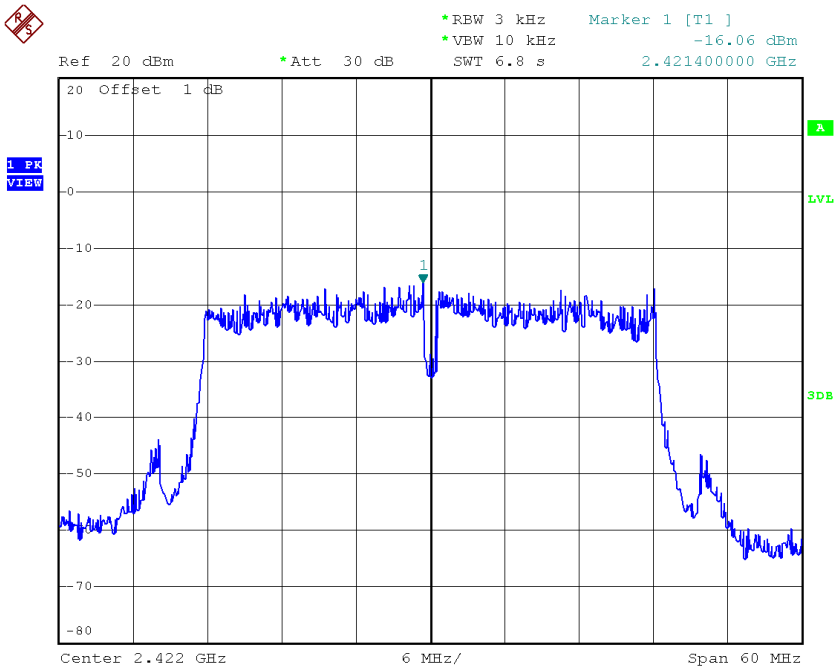



Date: 9.FEB.2015 16:04:21

**Test Mode : TX N-40M Mode_CH03/06/09_ANT 2**

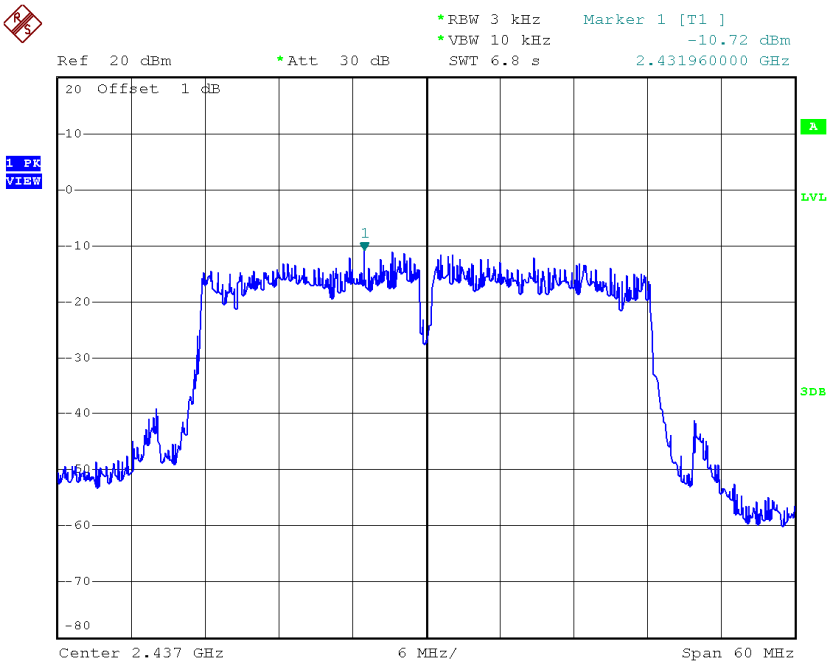
| Frequency (MHz) | Power Density (dBm/3kHz) | Power Density (mW/3kHz) | Max. Limit (dBm/3kHz) | Result |
|---|---|---|---|---|
| 2422 | -16.06 | 0.02 | 8.00 | Complies |
| 2437 | -10.72 | 0.08 | 8.00 | Complies |
| 2452 | -10.64 | 0.09 | 8.00 | Complies |

**TX CH03**



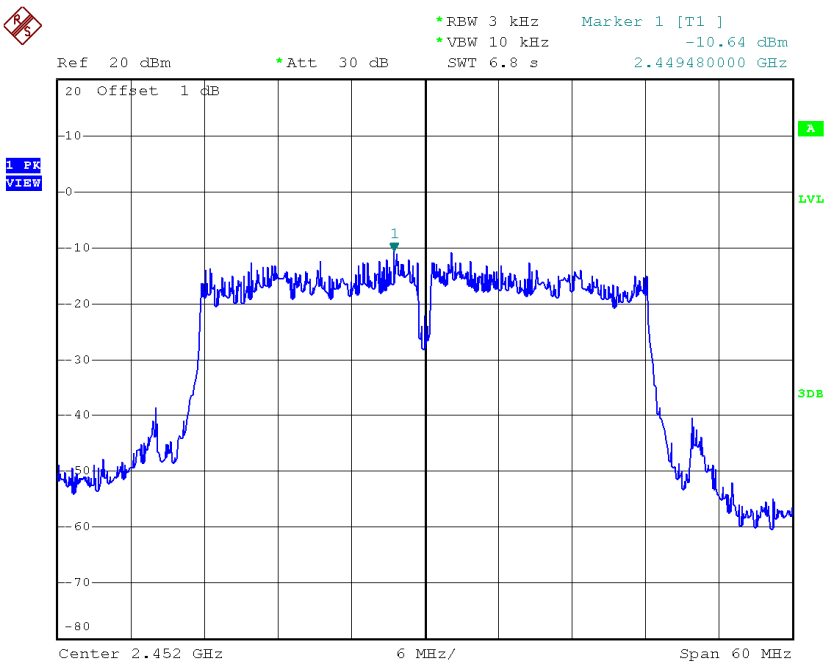

Date: 9.FEB.2015 16:14:59

## TX CH06




Date: 9.FEB.2015 16:17:03

## TX CH09

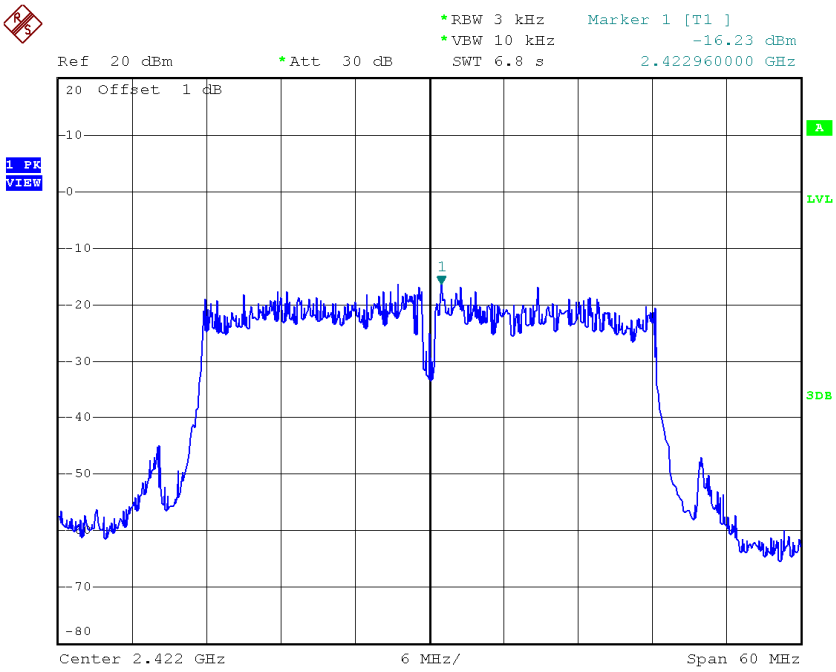



Date: 9.FEB.2015 16:18:00

**Test Mode : TX N-40M Mode_CH03/06/09_ANT 3**

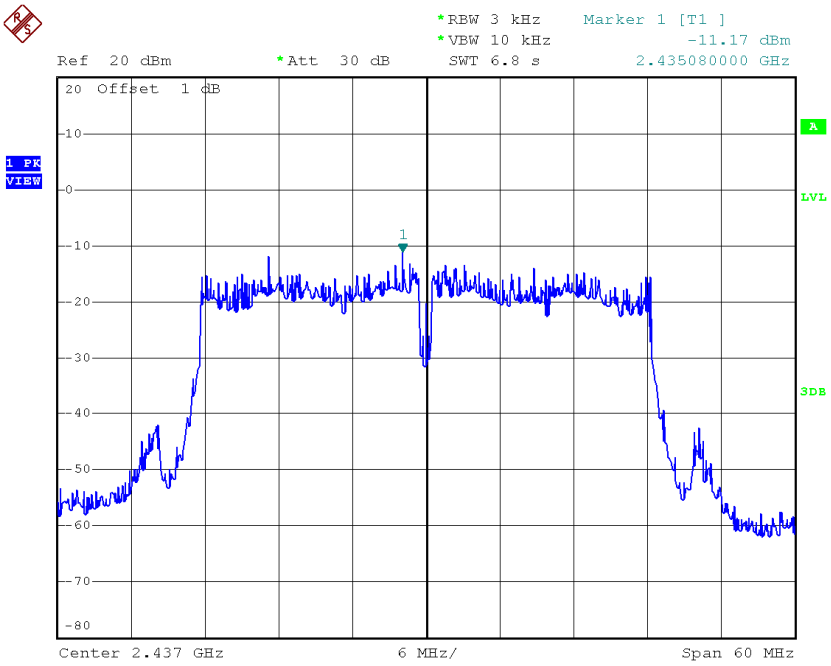
| Frequency (MHz) | Power Density (dBm/3kHz) | Power Density (mW/3kHz) | Max. Limit (dBm/3kHz) | Result |
|---|---|---|---|---|
| 2422 | -16.23 | 0.02 | 8.00 | Complies |
| 2437 | -11.17 | 0.08 | 8.00 | Complies |
| 2452 | -13.13 | 0.05 | 8.00 | Complies |

**TX CH03**



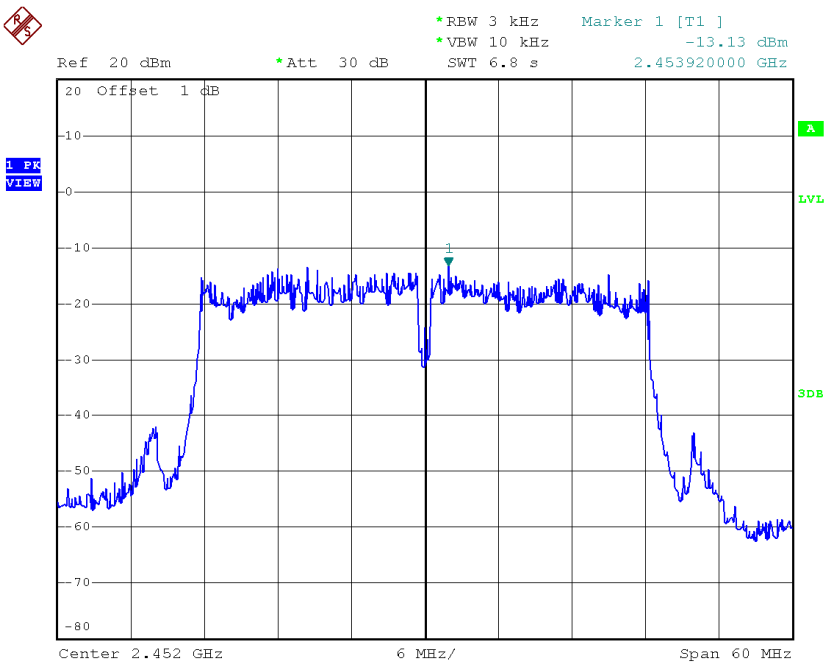

Date: 9.FEB.2015 16:25:35

## TX CH06




Date: 9.FEB.2015 16:26:57

## TX CH09




Date: 9.FEB.2015 16:27:55

**Test Mode : TX N-40M Mode_CH03/06/09_Total**

| Frequency (MHz) | Power Density (dBm/3kHz) | Power Density (mW/3kHz) | Max. Limit (dBm/3kHz) | Result |
|---|---|---|---|---|
| 2422 | -11.14 | 0.08 | 8.00 | Complies |
| 2437 | -6.78 | 0.21 | 8.00 | Complies |
| 2452 | -7.45 | 0.18 | 8.00 | Complies |