# FCC Radio Test Report

## FCC ID: Q3N-8231

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

| | | |
|---|---|---|
| **Project No.** | : | 1411165A |
| **Equipment** | : | Terminal |
| **Model Name** | : | 8231 |
| **Applicant** | : | CIPHERLAB CO., LTD. |
| **Address** | : | 12F, 333, Dunhua S. Rd., Sec. 2, Taipei, Taiwan |

| | | |
|---|---|---|
| **Date of Receipt** | : | May 26, 2015 |
| **Date of Test** | : | May 26, 2015 ~ Jun. 10, 2015 |
| **Issued Date** | : | Jun. 15, 2015 |
| **Tested by** | : | BTL Inc. |

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

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

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


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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.**

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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-3-1411165A | Original Issue. | Jun. 15, 2015 |

## 1. CERTIFICATION

| | | |
|---|---|---|
| Equipment | : | Terminal |
| Brand Name | : | CIPHERLAB |
| Model Name | : | 8231 |
| Applicant | : | CIPHERLAB CO., LTD. |
| Manufacturer | : | CIPHERLAB CO., LTD. |
| Address | : | 12F, 333, Dunhua S. Rd., Sec. 2, Taipei, Taiwan |
| Factory | : | CIPHERLAB CO., LTD. |
| Address | : | 12F, 333, Dunhua S. Rd., Sec. 2, Taipei, Taiwan |
| Date of Test | : | May 26, 2015 ~ Jun. 10, 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-3-1411165A) 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):

| Standard(s) Section | Test Item | Judgment | Remark |
|---|---|---|---|
| 15.207 | Conducted Emission | PASS | |
| 15.247(d) | Antenna conducted Spurious Emission | PASS | |
| 15.247(a)(2) | 6dB Bandwidth | PASS | |
| 15.247(b)(3) | Peak Output Power | PASS | |
| 15.247(e) | Power Spectral Density | PASS | |
| 15.203 | Antenna Requirement | PASS | |
| 15.209/15.205 | Transmitter Radiated Emissions | PASS | |

NOTE:

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

(2) The test follows FCC KDB Publication No. 558074 D01 DTS Meas Guidance v03r02 (Measurement Guidelines of DTS)

## 2.1TEST FACILITY

The test facilities used to collect the test data in this report:

**Conducted emission Test:**

**C05:** (FCC RN:965108; FCC DN:TW1082)
No. 68-1, Ln. 169, Sec.2, Datong Rd., Xizhi Dist., New Taipei City 221, Taiwan

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

**CB08:** (FCC RN: 614388; FCC DN: TW1054; IC Assigned Code: 4428A-1)
1F., No. 61, Ln. 77, Sing-ai Rd., Neihu Dist., Taipei City 114, Taiwan (R.O.C.)

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

**CB08:** (FCC RN: 614388; FCC DN: TW1054; IC Assigned Code: 4428A-1)
1F., No. 61, Ln. 77, Sing-ai Rd., Neihu Dist., Taipei City 114, Taiwan (R.O.C.)

## 2.2MEASUREMENT UNCERTAINTY

**The measurement uncertainty is not specified by FCC rules for reference only.**
The reported uncertainty of measurement **y** ± **U**,where expanded uncertainty **U** is based on a standard uncertainty multiplied by a coverage factor of **k=2**,providing a level of confidence of approximately **95**%.
The measurement instrumentation uncertainty considerations contained in CISPR 16-4-2.

A. Conducted emission test:

| Test Site | Measurement Frequency Range | U,(dB) | NOTE |
|---|---|---|---|
| C05 | 150 kHz ~ 30 MHz | 1.94 | |

B. Radiated emission test:

| Test Site | Item | Measurement Frequency Range | | Uncertainty | NOTE |
|---|---|---|---|---|---|
| CB08 | Radiated emission at 3m | Horizontal Polarization | 30 - 200MHz | 3.35 dB | |
| | | | 200 - 1000MHz | 3.11 dB | |
| | | | 1 - 18GHz | 3.97 dB | |
| | | | 18 - 40GHz | 4.01 dB | |
| | | Vertical Polarization | 30 - 200MHz | 3.22 dB | |
| | | | 200 - 1000MHz | 3.24 dB | |
| | | | 1 - 18GHz | 4.05 dB | |
| | | | 18 - 40GHz | 4.04 dB | |

Our calculated Measurement Instrumentation Uncertainty is shown in the tables above. These are our $U_{lab}$ values in CISPR 16-4-2 terminology.
Since Table 1 of CISPR 16-4-2 has values of measurement instrumentation uncertainty, called $U_{CISPR}$, as follows:

Conducted Disturbance (mains port) – 150 kHz – 30 MHz: 3.6 dB
Radiated Disturbance (electric field strength on an open area test site or alternative test site) – 30 MHz – 1000 MHz: 5.2 dB

It can be seen that our $U_{lab}$ values are smaller than $U_{CISPR}$.
If $U_{lab}$ is less than or equal to $U_{CISPR}$, then:

- compliance is deemed to occur if no measured disturbance level exceeds the disturbance limit;
- non-compliance is deemed to occur if any measured disturbance level exceeds the disturbance limit.

If $U_{lab}$ is greater than $U_{CISPR}$, then:

- compliance is deemed to occur if no measured disturbance level, increased by ($U_{lab}$ - $U_{CISPR}$), exceeds the disturbance limit;
- non-compliance is deemed to occur if any measured disturbance level, increased by ($U_{lab}$ - $U_{CISPR}$), exceeds the disturbance limit.

# 3. GENERAL INFORMATION

## 3.1 GENERAL DESCRIPTION OF EUT

| | | |
|---|---|---|
| Equipment | Terminal | |
| Brand Name | CIPHERLAB | |
| Model Name | 8231 | |
| Model Difference | Only differ in model name. | |
| Product Description | 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: 54/48/36/24/18/12/9/6 Mbps<br>802.11n: 802.11n up to150 Mbps |
| | Output Power (Max.) | 802.11b: 14.74dBm<br>802.11g: 22.77dBm<br>802.11n(20MHz): 21.21dBm |
| Power Source | #1 DC Voltage supplied from AC adapter.<br>Brand/Model: ADAPTER TECH./STD-05030V<br>#2 DC Voltage supplied from USB host.<br>#3 Supplied from Li-ion Battery.<br>Model:BA-80S1A2 | |
| Power Rating | #1 I/P:AC 100-240V~47-63Hz 0.48A MAX O/P:5V/3A 15W MAX<br>#2 I/P: DC 5V 500mA<br>#3 DC 3.7V 1200mAh,4.44Wh | |

Note:

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

2. Channel List:

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

3. Table for Filed Antenna

| Ant. | Brand | Model Name | Antenna Type | Connector | Gain (dBi) |
|---|---|---|---|---|---|
| 1 | CIPHERLAB | 8231 WIFI Antenna | PIFA | N/A | 2.41 |

4.

| Operating Mode / TX Mode | 1TX |
|---|---|
| 802.11b | V |
| 802.11g | V |
| 802.11n(20MHz) | V |

## 3.2 DESCRIPTION OF TEST MODES

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

| Pretest Mode | Description |
|---|---|
| Mode 1 | TX B MODE CHANNEL 01/06/11 |
| Mode 2 | TX G MODE CHANNEL 01/06/11 |
| Mode 3 | TX N-20MHZ MODE CHANNEL 01/06/11 |
| Mode 4 | TX MODE |

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

| **For Conducted Test** | |
|---|---|
| Final Test Mode | Description |
| Mode 4 | TX MODE |

| **For Radiated Test** | |
|---|---|
| Final Test Mode | Description |
| Mode 1 | TX B MODE CHANNEL 01/06/11 |
| Mode 2 | TX G MODE CHANNEL 01/06/11 |
| Mode 3 | TX N-20MHZ MODE CHANNEL 01/06/11 |

Note:

(1) The measurements are performed at the high, middle, low available channels.

(2) 802.11b mode: DBPSK (1Mbps)
802.11g mode: OFDM (6Mbps)
802.11n HT20 mode : BPSK (13Mbps)
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.

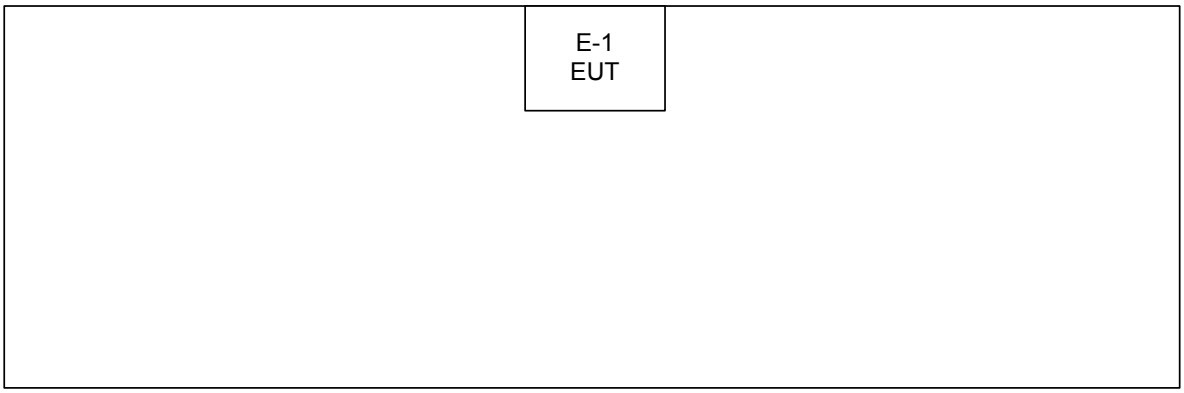
(4) The EUT was programmed to be in continuously transmitting mode and the transmit duty cycle is not less than 98%.

### 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 | 0 | | |
|---|---|---|---|
| Frequency (MHz) | 2412 | 2437 | 2462 |
| 802.11b | 14 | 14 | 14 |
| 802.11g | 13 | 13 | 13 |
| 802.11n (20MHz) | 11 | 11 | 11 |

## 3.4 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED




## 3.5 DESCRIPTION OF SUPPORT UNITS

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

| Item | Equipment | Mfr/Brand | Model/Type No. | FCC ID/IC | Series No. | Note |
|---|---|---|---|---|---|---|
| - | - | - | - | - | - | - |

| Item | Shielded Type | Ferrite Core | Length | Note |
|---|---|---|---|---|
| - | - | - | - | - |

# 4. EMC EMISSION TEST

## 4.1 CONDUCTED EMISSION MEASUREMENT

### 4.1.1 POWER LINE CONDUCTED EMISSION Limits (Frequency Range 150KHz-30MHz)

| Frequency 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 |

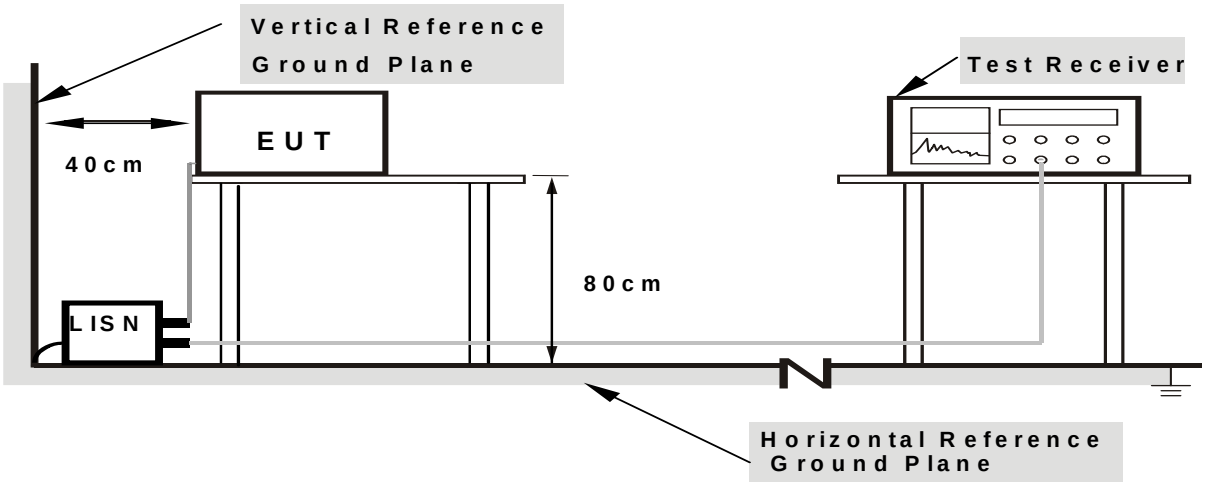
### 4.1.2 TEST PROCEDURE

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) & RSS-210 section 2.2& Annex 8 (A8.5), then the 15.209(a)& RSS-Gen 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 or PK detector |

### 4.2.2 TEST PROCEDURE

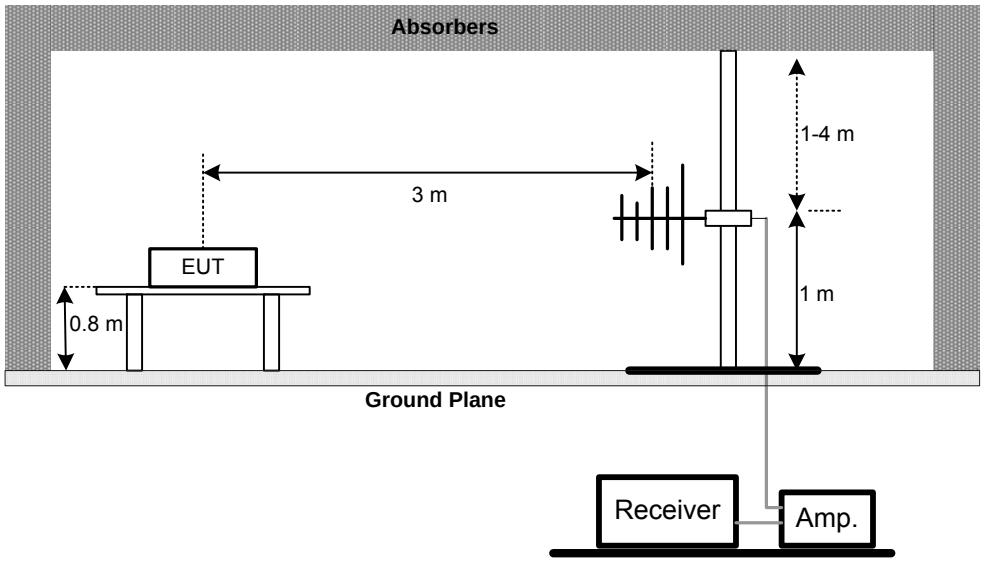
a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1GHz)
b. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a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

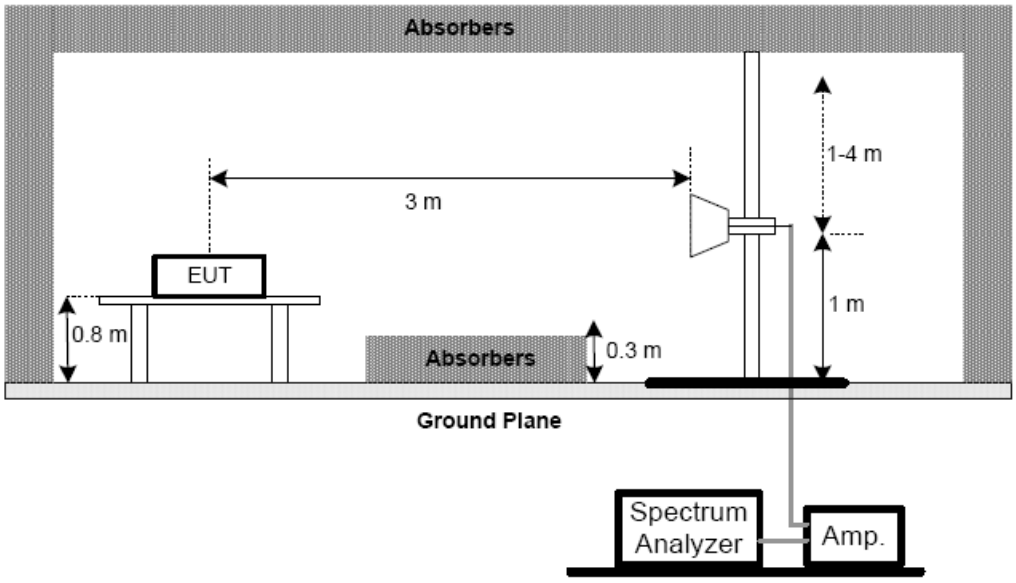
No deviation

### 4.2.4 TEST SETUP

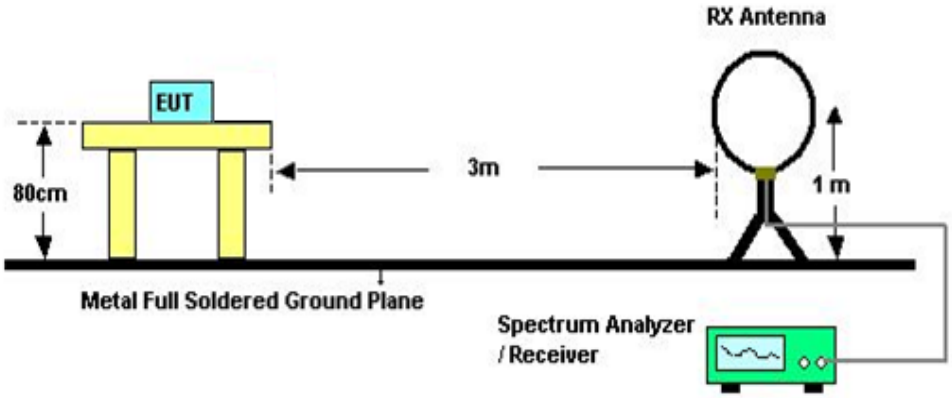
(A) Radiated Emission Test Set-Up Frequency Below 1 GHz



(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 |

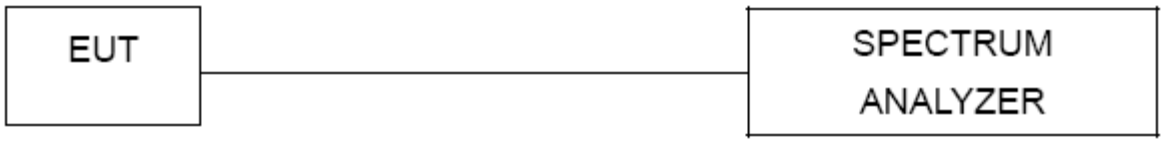
#### 5.1.1 TEST PROCEDURE

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 |

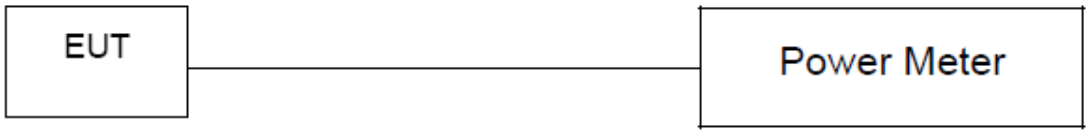
#### 6.1.1 TEST PROCEDURE

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.

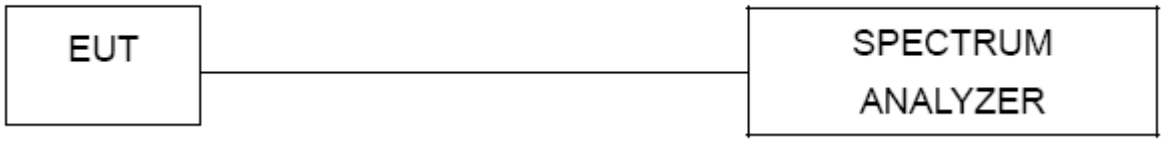
### 7.1.1 TEST PROCEDURE

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 |

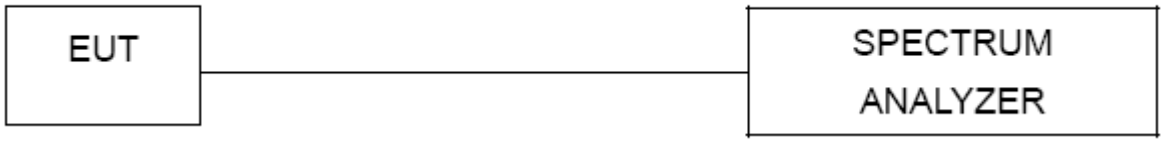
#### 8.1.1 TEST PROCEDURE

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 | TWO-LINE V-NETWORK | R&S | ENV216 | 101050 | Feb. 01, 2016 |
| 2 | Test Cable | TIMES | CFD300-NL | C05 | Jun. 11, 2015 |
| 3 | EMI Test Receiver | R&S | ESR3 | 101854 | Dec. 09, 2015 |

| Radiated Emission Measurement | | | | | |
|---|---|---|---|---|---|
| Item | Kind of Equipment | Manufacturer | Type No. | Serial No. | Calibrated until |
| 1 | Spectrum Analyzer | R&S | FSP-40 | 100129 | Jan.07, 2016 |
| 2 | Horn Antenna | Schwarzbeck | BBHA 9120 | D-325 | Jun. 15, 2016 |
| 3 | Microwave Pre_amplifier | Agilent | 8449B | 3008A01714 | Apr. 16, 2016 |
| 4 | Microflex Cable | Harbour industries | 27478LL142 | 1m | May. 13, 2016 |
| 5 | Microflex Cable | EMC | S104-SMA | 8m | May. 15, 2016 |
| 6 | Microflex Cable | Harbour industries | 27478LL142 | 3m | May. 13, 2016 |
| 7 | Test Cable | LMR | LMR-400 | 12m | May. 14, 2016 |
| 8 | Test Cable | LMR | LMR-400 | 3m | May. 14, 2016 |
| 9 | Pre-Amplifier | Anritsu | MH648A | M92649 | Jun. 20, 2015 |
| 10 | Log-Bicon Antenna | Schwarzbeck | VULB9168-352 | 9168-352 | Jun. 20, 2015 |
| 11 | Loop Antenna | EMCO | 6502 | 00042960 | Nov. 08, 2015 |

| 6dB Bandwidth Measurement | | | | | |
|---|---|---|---|---|---|
| Item | Kind of Equipment | Manufacturer | Type No. | Serial No. | Calibrated until |
| 1 | Spectrum Analyzer | R&S | FSP-40 | 100129 | Jan. 07, 2016 |

| Peak Output Power Measurement | | | | | |
|---|---|---|---|---|---|
| Item | Kind of Equipment | Manufacturer | Type No. | Serial No. | Calibrated until |
| 1 | Power Meter | Anritsu | ML2495A | 1128008 | Aug. 08, 2015 |
| 2 | Power Meter Sensor | Anritsu | MA2411B | 1126001 | Aug. 08, 2015 |

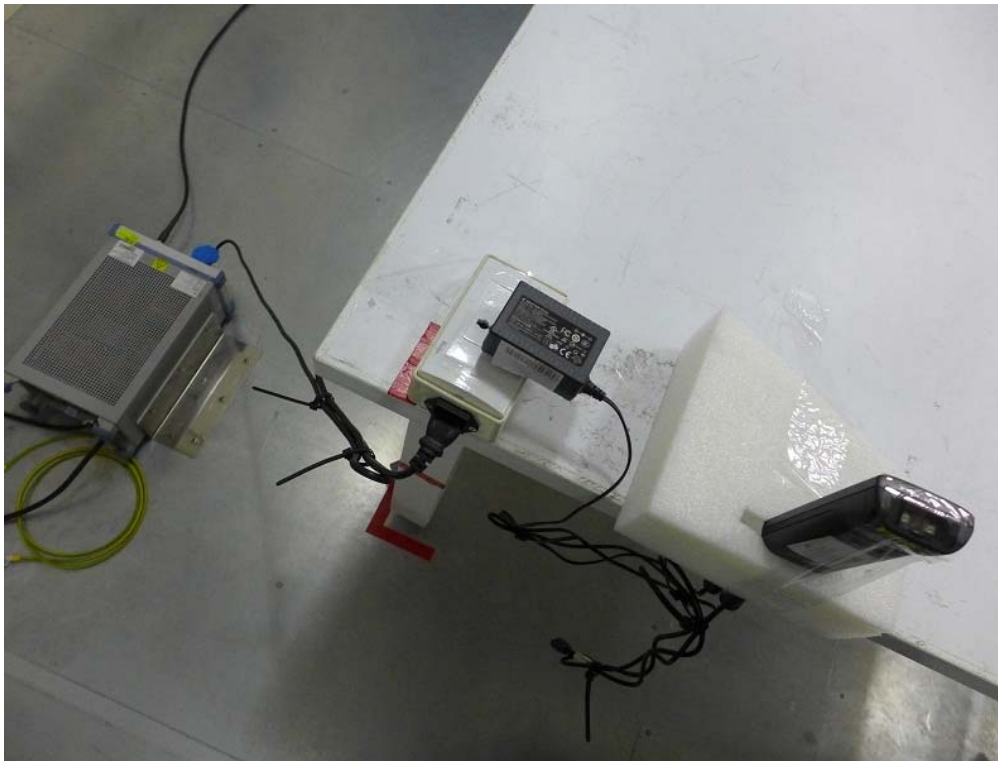
| Antenna Conducted Spurious Emission Measurement | | | | | |
|---|---|---|---|---|---|
| Item | Kind of Equipment | Manufacturer | Type No. | Serial No. | Calibrated until |
| 1 | Spectrum Analyzer | R&S | FSP-40 | 100129 | Jan. 07, 2016 |

| Power Spectral Density Measurement | | | | | |
|---|---|---|---|---|---|
| Item | Kind of Equipment | Manufacturer | Type No. | Serial No. | Calibrated until |
| 1 | Spectrum Analyzer | R&S | FSP-40 | 100129 | Jan. 07, 2016 |

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

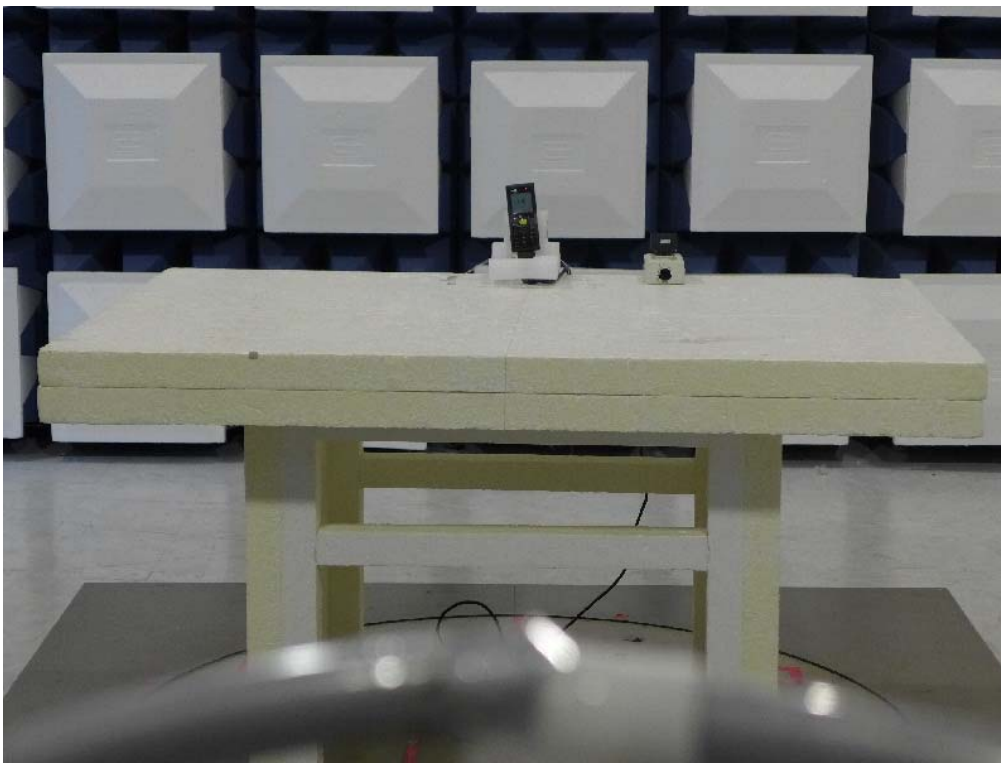
## 10. EUT TEST PHOTO

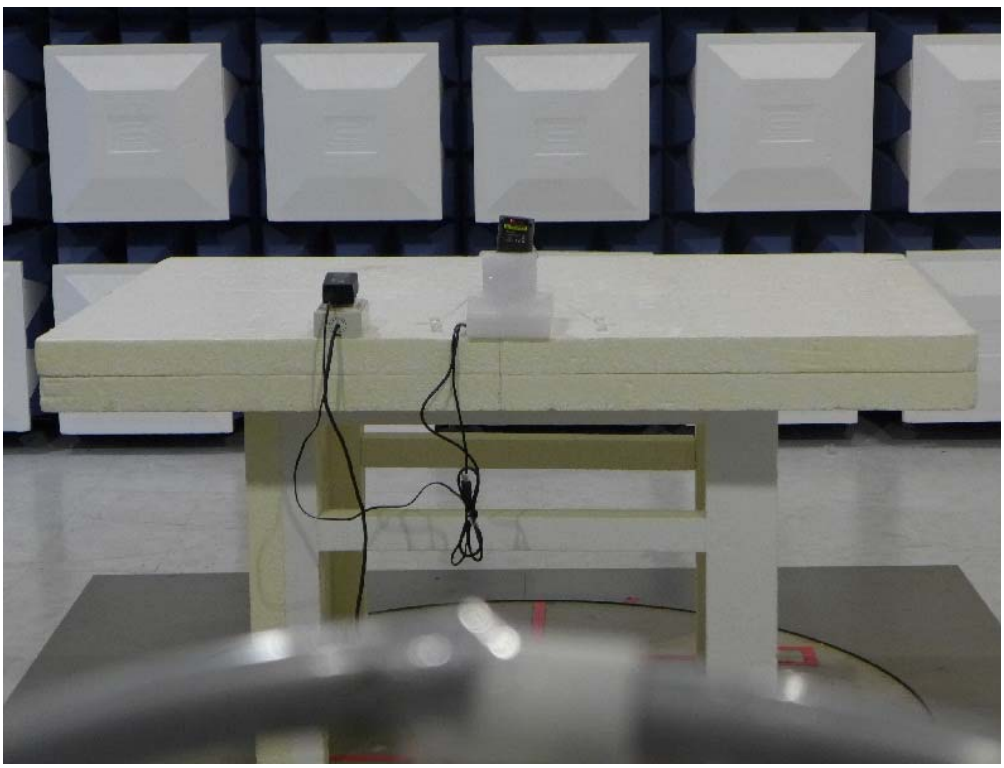
**Conducted Measurement Photos**



## Radiated Measurement Photos

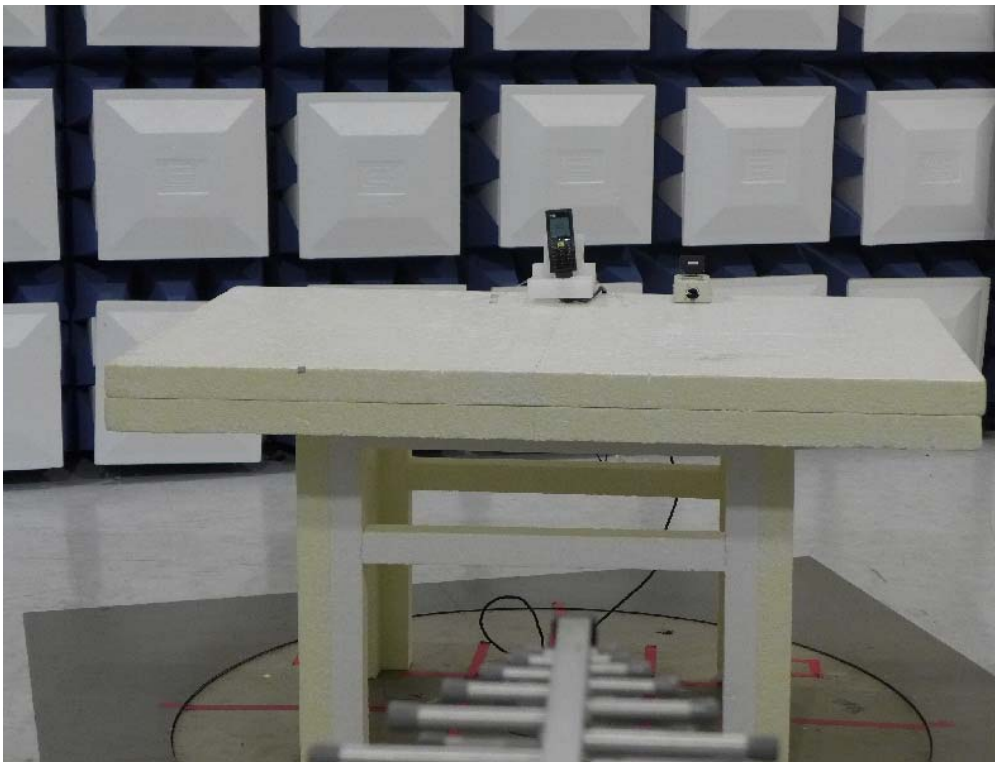
**9K-30MHz**

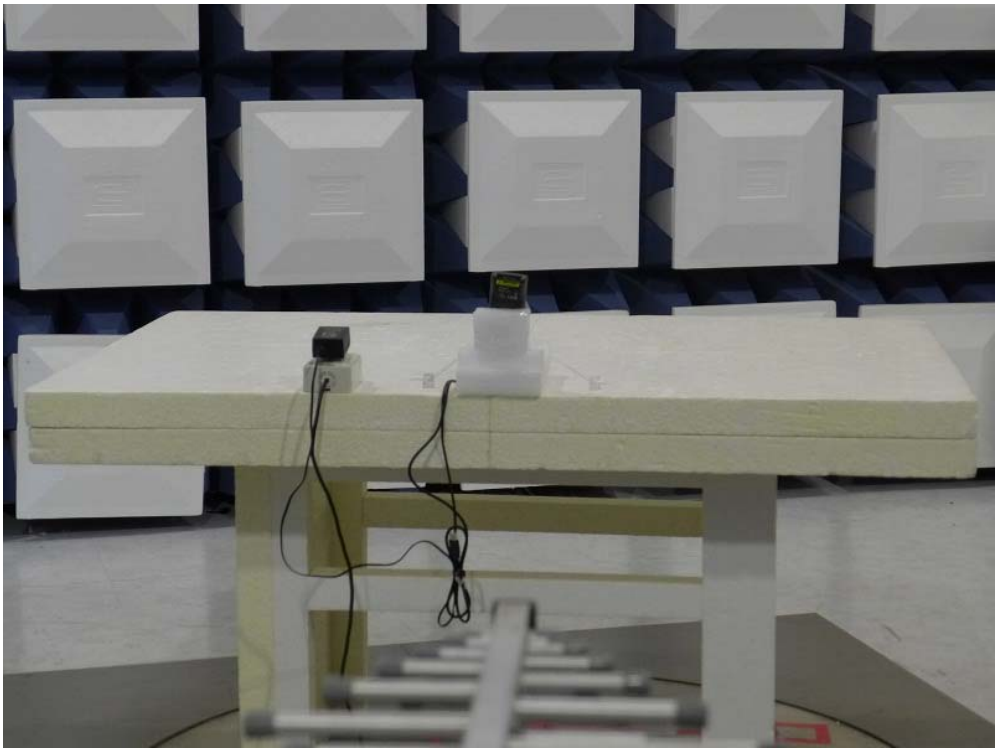




## Radiated Measurement Photos

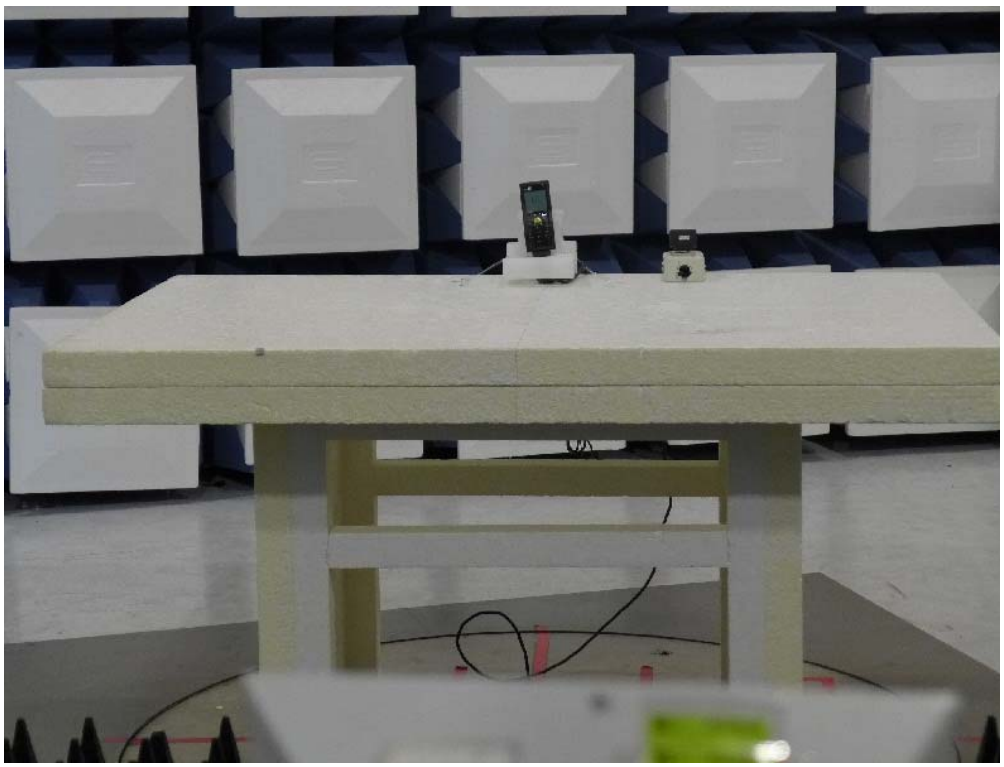
**30MHz-1G**

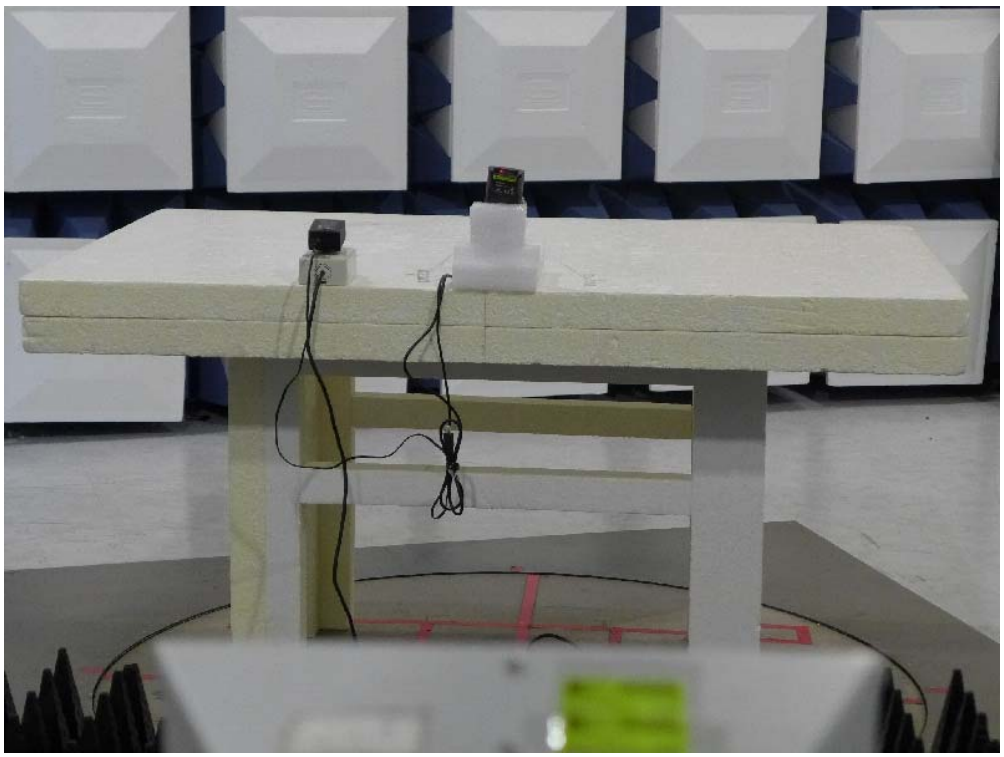




## Radiated Measurement Photos

### Above 1G

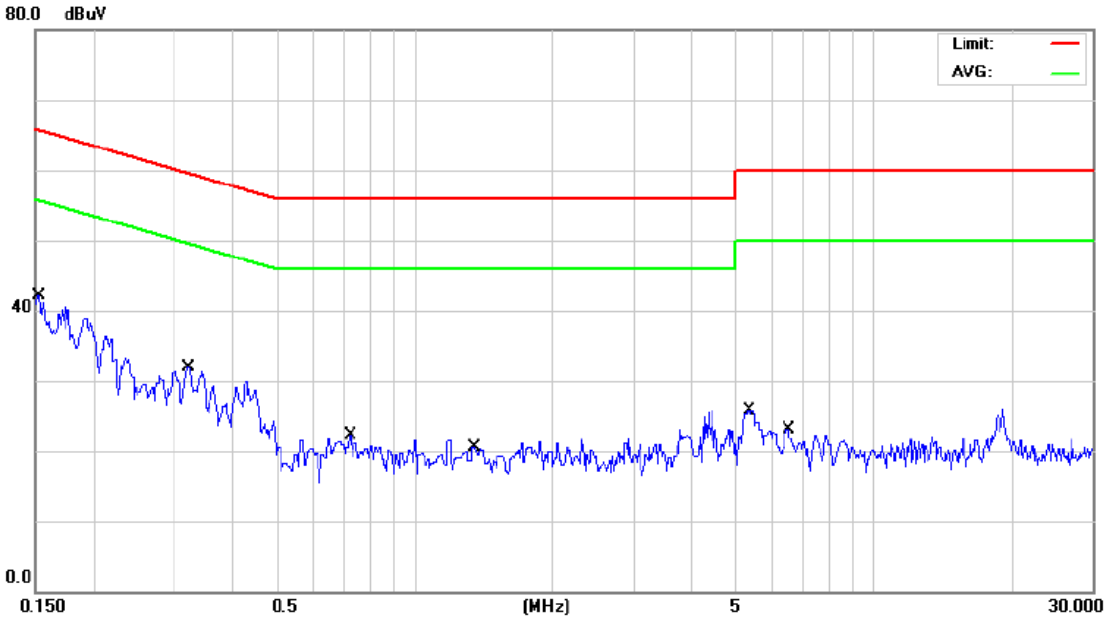




# ATTACHMENT A - CONDUCTED EMISSION

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

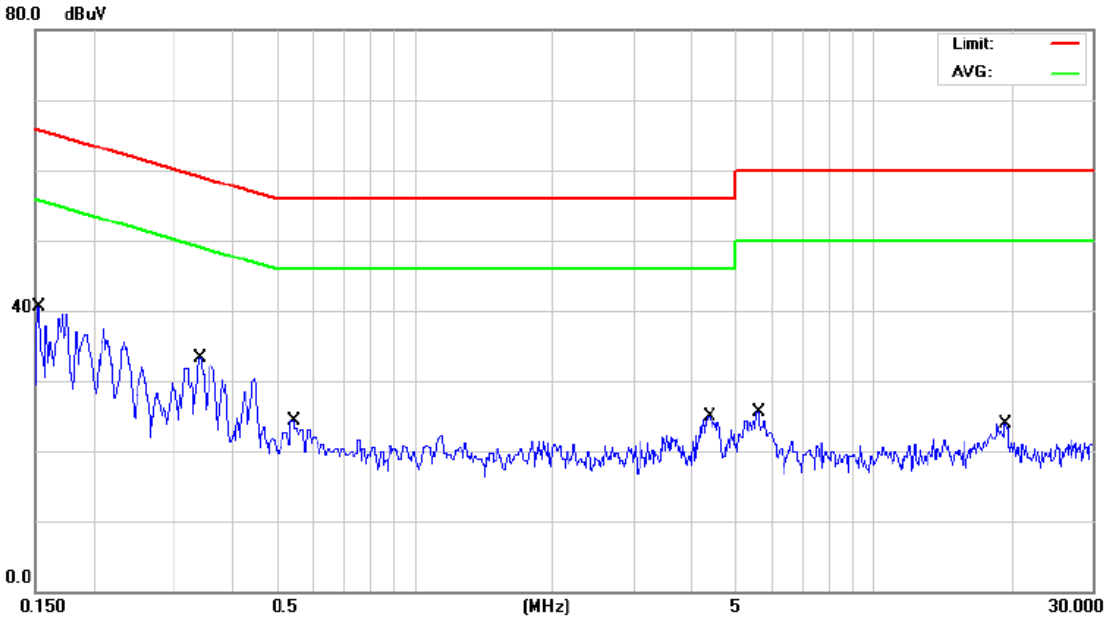
**Line**




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV | dBuV | dB | Detector | Comment |
| 1 | | 0.1521 | 25.70 | 9.64 | 35.34 | 65.88 | -30.54 | QP | |
| 2 | | 0.1521 | 12.90 | 9.64 | 22.54 | 55.88 | -33.34 | AVG | |
| 3 | | 0.3221 | 17.90 | 9.63 | 27.53 | 59.65 | -32.12 | QP | |
| 4 | * | 0.3221 | 15.10 | 9.63 | 24.73 | 49.65 | -24.92 | AVG | |
| 5 | | 0.7250 | 5.90 | 9.66 | 15.56 | 56.00 | -40.44 | QP | |
| 6 | | 0.7250 | 4.30 | 9.66 | 13.96 | 46.00 | -32.04 | AVG | |
| 7 | | 1.3459 | 3.40 | 9.69 | 13.09 | 56.00 | -42.91 | QP | |
| 8 | | 1.3459 | 1.00 | 9.69 | 10.69 | 46.00 | -35.31 | AVG | |
| 9 | | 5.3499 | 9.30 | 9.86 | 19.16 | 60.00 | -40.84 | QP | |
| 10 | | 5.3499 | 6.60 | 9.86 | 16.46 | 50.00 | -33.54 | AVG | |
| 11 | | 6.4999 | 4.10 | 9.88 | 13.98 | 60.00 | -46.02 | QP | |
| 12 | | 6.4999 | 2.50 | 9.88 | 12.38 | 50.00 | -37.62 | AVG | |

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

## Neutral




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV | dBuV | dB | Detector | Comment |
| 1 | | 0.1521 | 22.60 | 9.63 | 32.23 | 65.88 | -33.65 | QP | |
| 2 | | 0.1521 | 10.00 | 9.63 | 19.63 | 55.88 | -36.25 | AVG | |
| 3 | | 0.3410 | 21.10 | 9.64 | 30.74 | 59.18 | -28.44 | QP | |
| 4 | * | 0.3410 | 19.30 | 9.64 | 28.94 | 49.18 | -20.24 | AVG | |
| 5 | | 0.5450 | 8.80 | 9.65 | 18.45 | 56.00 | -37.55 | QP | |
| 6 | | 0.5450 | 7.90 | 9.65 | 17.55 | 46.00 | -28.45 | AVG | |
| 7 | | 4.3880 | 11.90 | 9.82 | 21.72 | 56.00 | -34.28 | QP | |
| 8 | | 4.3880 | 3.60 | 9.82 | 13.42 | 46.00 | -32.58 | AVG | |
| 9 | | 5.6000 | 9.80 | 9.85 | 19.65 | 60.00 | -40.35 | QP | |
| 10 | | 5.6000 | 8.60 | 9.85 | 18.45 | 50.00 | -31.55 | AVG | |
| 11 | | 19.3500 | 6.90 | 9.87 | 16.77 | 60.00 | -43.23 | QP | |
| 12 | | 19.3500 | 2.60 | 9.87 | 12.47 | 50.00 | -37.53 | AVG | |

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

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

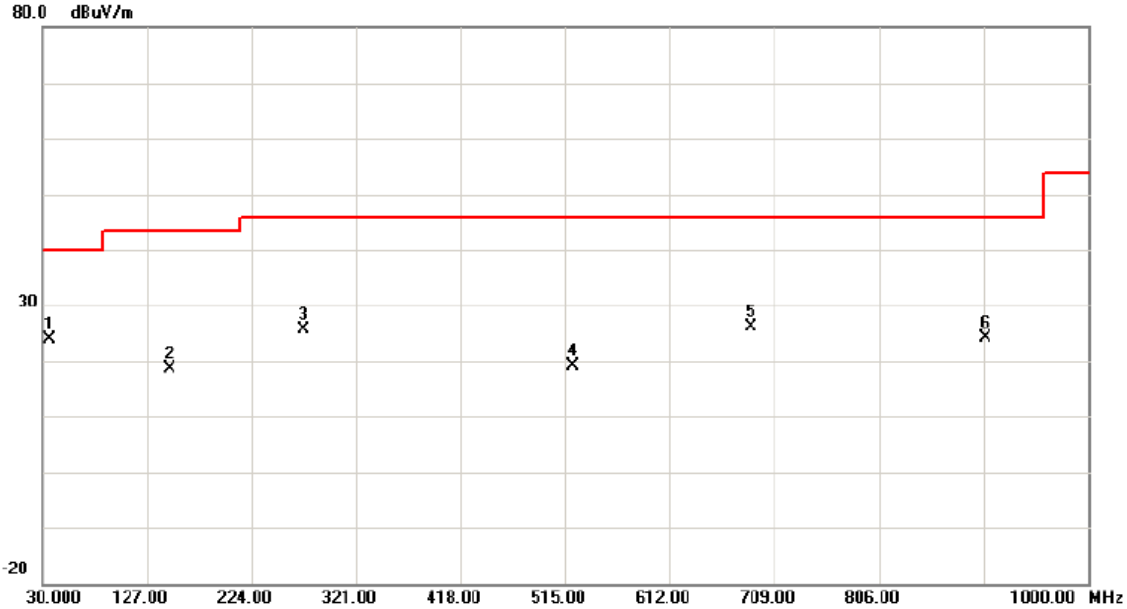
| Freq. (MHz) | Ant. 0°/90° | Reading(RA) (dBuV) | Corr.Factor(CF) (dB) | Measured(FS) (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Note |
|---|---|---|---|---|---|---|---|
| 0.0150 | 0° | 33.45 | 22.28 | 55.73 | 104.08 | -48.36 | AVG |
| 0.0150 | 0° | 44.21 | 22.28 | 66.49 | 124.08 | -57.60 | PK |
| 0.0255 | 0° | 28.54 | 22.01 | 50.55 | 99.47 | -48.92 | AVG |
| 0.0255 | 0° | 33.65 | 22.01 | 55.66 | 119.47 | -63.81 | PK |
| 0.0366 | 0° | 24.84 | 21.74 | 46.58 | 96.33 | -49.76 | AVG |
| 0.0366 | 0° | 32.65 | 21.74 | 54.39 | 116.33 | -61.95 | PK |
| 0.0600 | 0° | 24.72 | 21.24 | 45.96 | 92.04 | -46.08 | AVG |
| 0.0600 | 0° | 34.65 | 21.24 | 55.89 | 112.04 | -56.15 | PK |
| 1.2650 | 0° | 34.82 | 20.34 | 55.16 | 65.56 | -10.41 | QP |
| 1.1353 | 0° | 37.52 | 20.46 | 57.98 | 66.50 | -8.52 | QP |

| Freq. (MHz) | Ant. 0°/90° | Reading(RA) (dBuV) | Corr.Factor(CF) (dB) | Measured(FS) (dBuV/m) | Limits (dBuV/m) | Margin (dB) | Note |
|---|---|---|---|---|---|---|---|
| 0.0132 | 90° | 34.12 | 22.32 | 56.44 | 105.19 | -48.75 | AVG |
| 0.0132 | 90° | 48.24 | 22.32 | 70.56 | 125.19 | -54.63 | PK |
| 0.0257 | 90° | 27.31 | 22.01 | 49.32 | 99.41 | -50.09 | AVG |
| 0.0257 | 90° | 42.15 | 22.01 | 64.16 | 119.41 | -55.25 | PK |
| 0.0345 | 90° | 26.31 | 21.79 | 48.10 | 96.85 | -48.75 | AVG |
| 0.0345 | 90° | 35.47 | 21.79 | 57.26 | 116.85 | -59.59 | PK |
| 0.0632 | 90° | 22.34 | 21.19 | 43.53 | 91.59 | -48.06 | AVG |
| 0.0632 | 90° | 38.16 | 21.19 | 59.35 | 111.59 | -52.24 | PK |
| 1.2510 | 90° | 34.62 | 20.35 | 54.97 | 65.66 | -10.69 | QP |
| 1.6500 | 90° | 36.51 | 19.95 | 56.46 | 63.25 | -6.79 | QP |

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

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

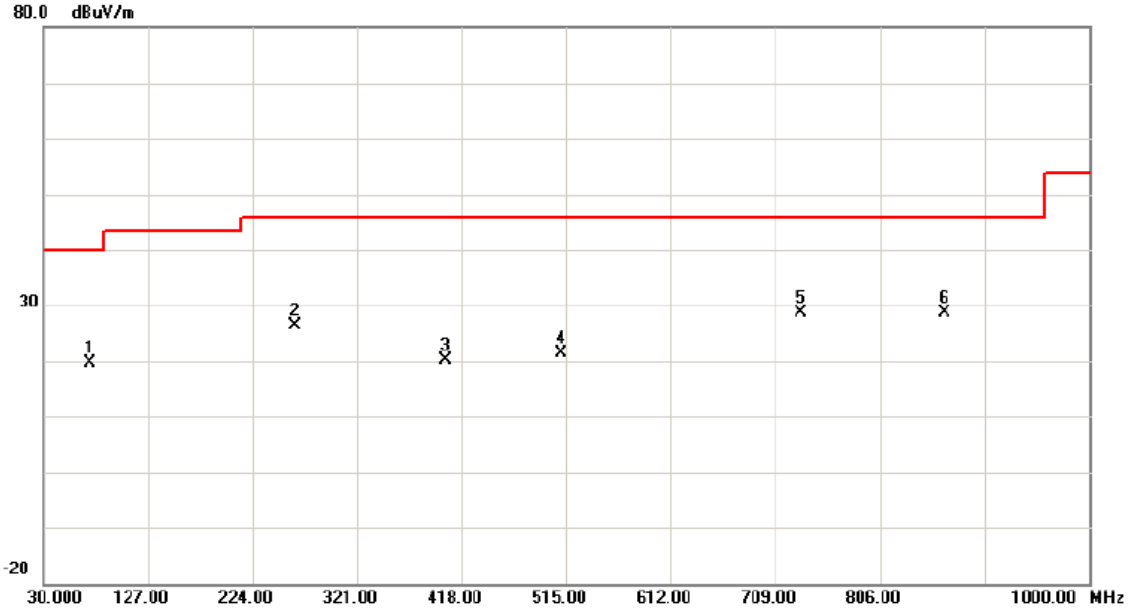
**Vertical**




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | Antenna Height | Table Degree | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | cm | degree | Comment |
| 1 | * | 37.2750 | 38.77 | -14.78 | 23.99 | 40.00 | -16.01 | peak | | | |
| 2 | | 148.8250 | 33.10 | -14.38 | 18.72 | 43.50 | -24.78 | peak | | | |
| 3 | | 272.5000 | 39.97 | -14.25 | 25.72 | 46.00 | -20.28 | peak | | | |
| 4 | | 522.2750 | 27.96 | -8.90 | 19.06 | 46.00 | -26.94 | peak | | | |
| 5 | | 687.1750 | 32.36 | -6.14 | 26.22 | 46.00 | -19.78 | peak | | | |
| 6 | | 905.4250 | 27.17 | -2.96 | 24.21 | 46.00 | -21.79 | peak | | | |

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

**Horizontal**

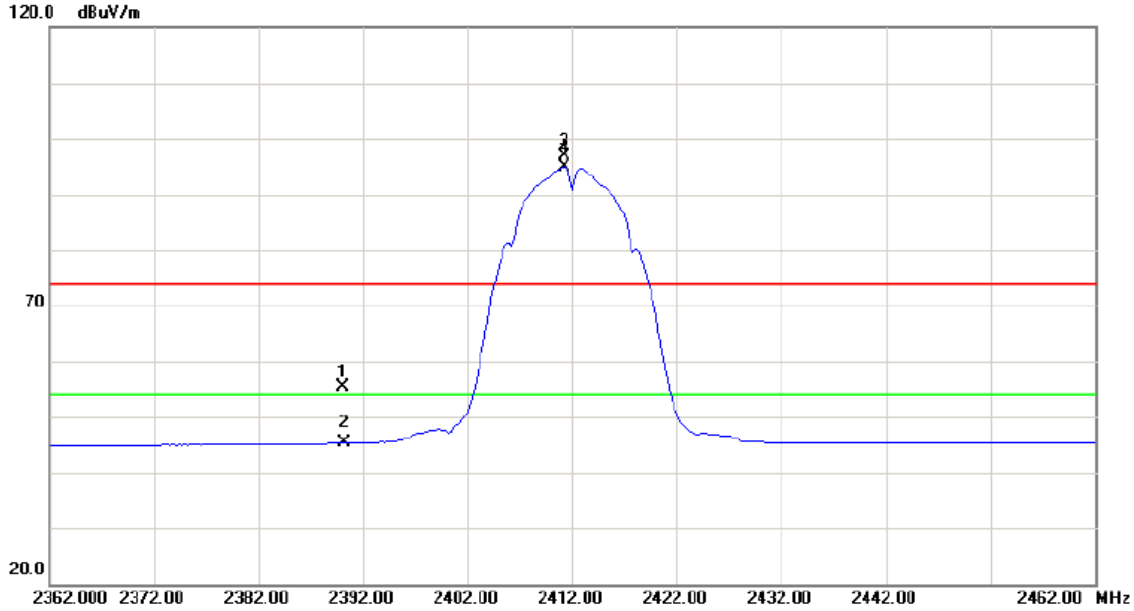



| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | Antenna Height | Table Degree | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | cm | degree | Comment |
| 1 | | 73.6500 | 36.81 | -17.14 | 19.67 | 40.00 | -20.33 | peak | | | |
| 2 | | 262.8000 | 40.99 | -14.60 | 26.39 | 46.00 | -19.61 | peak | | | |
| 3 | | 403.4500 | 31.34 | -11.21 | 20.13 | 46.00 | -25.87 | peak | | | |
| 4 | | 510.1500 | 30.53 | -9.25 | 21.28 | 46.00 | -24.72 | peak | | | |
| 5 | | 733.2500 | 33.95 | -5.43 | 28.52 | 46.00 | -17.48 | peak | | | |
| 6 | * | 866.6250 | 32.53 | -3.86 | 28.67 | 46.00 | -17.33 | peak | | | |

# ATTACHMENT D - RADIATED EMISSION (ABOVE 1000MHZ)

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

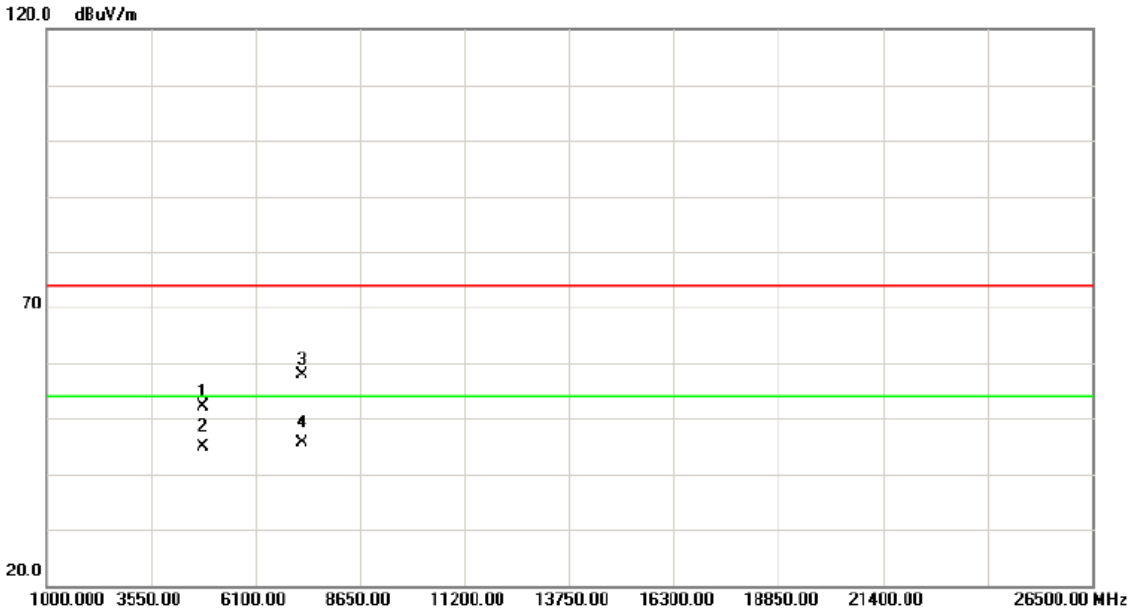
**Vertical**




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | Antenna Height | Table Degree | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | cm | degree | Comment |
| 1 | | 2390.000 | 23.96 | 31.30 | 55.26 | 74.00 | -18.74 | peak | | | |
| 2 | | 2390.000 | 13.96 | 31.30 | 45.26 | 54.00 | -8.74 | AVG | | | |
| 3 | X | 2411.250 | 65.57 | 31.39 | 96.96 | 74.00 | 22.96 | peak | | | NO LIMIT |
| 4 | * | 2411.250 | 63.53 | 31.39 | 94.92 | 54.00 | 40.92 | AVG | | | NO LIMIT |

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

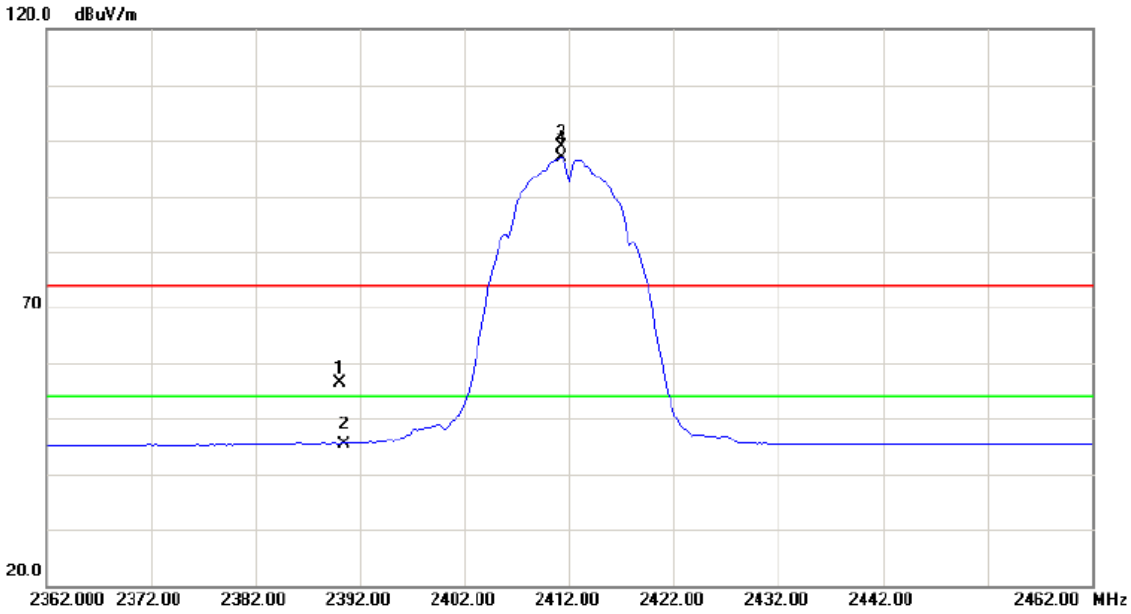
**Vertical**




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | Antenna Height | Table Degree | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | cm | degree | Comment |
| 1 | | 4824.050 | 44.86 | 7.30 | 52.16 | 74.00 | -21.84 | peak | | | |
| 2 | | 4824.050 | 37.70 | 7.30 | 45.00 | 54.00 | -9.00 | AVG | | | |
| 3 | | 7232.225 | 42.61 | 15.19 | 57.80 | 74.00 | -16.20 | peak | | | |
| 4 | * | 7232.225 | 30.37 | 15.19 | 45.56 | 54.00 | -8.44 | AVG | | | |

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

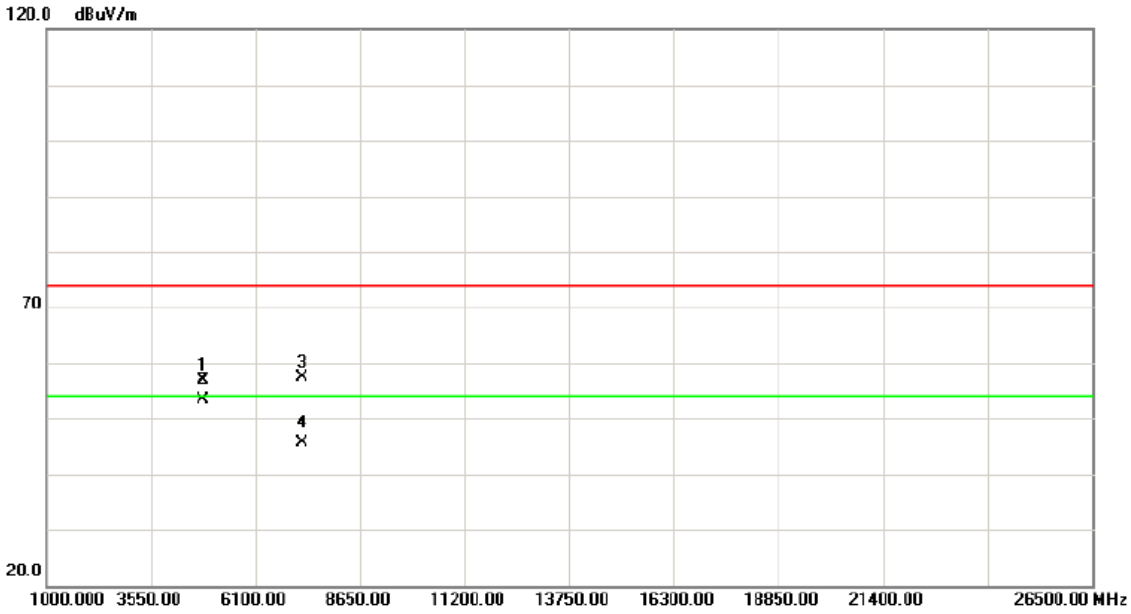
**Horizontal**




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | Antenna Height | Table Degree | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | cm | degree | Comment |
| 1 | | 2390.000 | 25.07 | 31.30 | 56.37 | 74.00 | -17.63 | peak | | | |
| 2 | | 2390.000 | 14.18 | 31.30 | 45.48 | 54.00 | -8.52 | AVG | | | |
| 3 | X | 2411.250 | 67.50 | 31.39 | 98.89 | 74.00 | 24.89 | peak | | | NO LIMIT |
| 4 | * | 2411.250 | 65.45 | 31.39 | 96.84 | 54.00 | 42.84 | AVG | | | NO LIMIT |

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

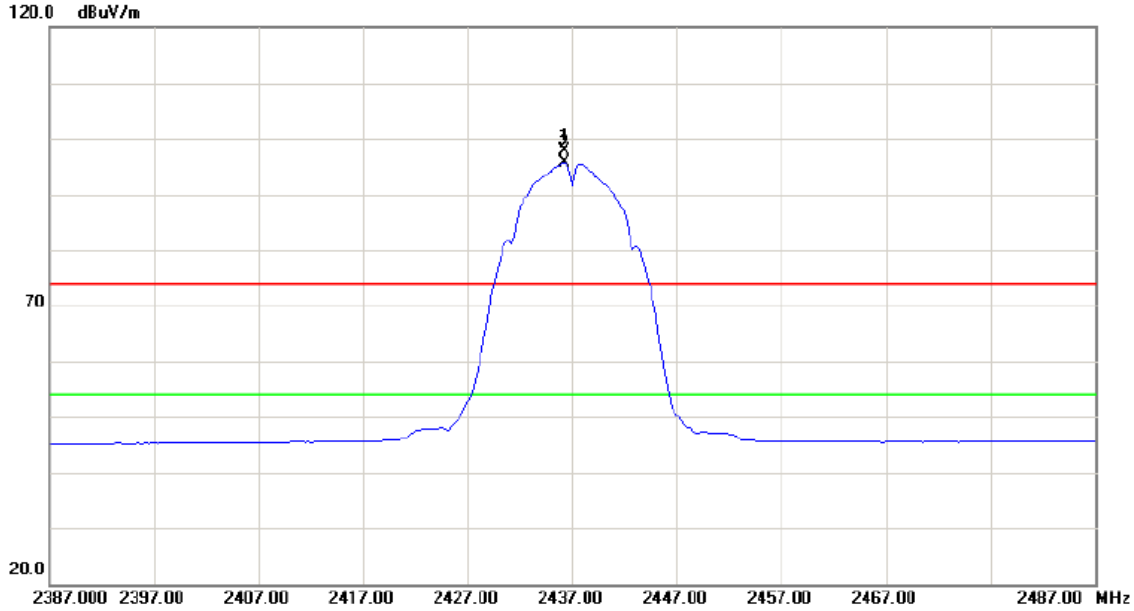
**Horizontal**




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | Antenna Height | Table Degree | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | cm | degree | Comment |
| 1 | | 4824.225 | 49.70 | 7.30 | 57.00 | 74.00 | -17.00 | peak | | | |
| 2 | * | 4824.225 | 46.16 | 7.30 | 53.46 | 54.00 | -0.54 | AVG | | | |
| 3 | | 7231.375 | 42.12 | 15.19 | 57.31 | 74.00 | -16.69 | peak | | | |
| 4 | | 7231.375 | 30.41 | 15.19 | 45.60 | 54.00 | -8.40 | AVG | | | |

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

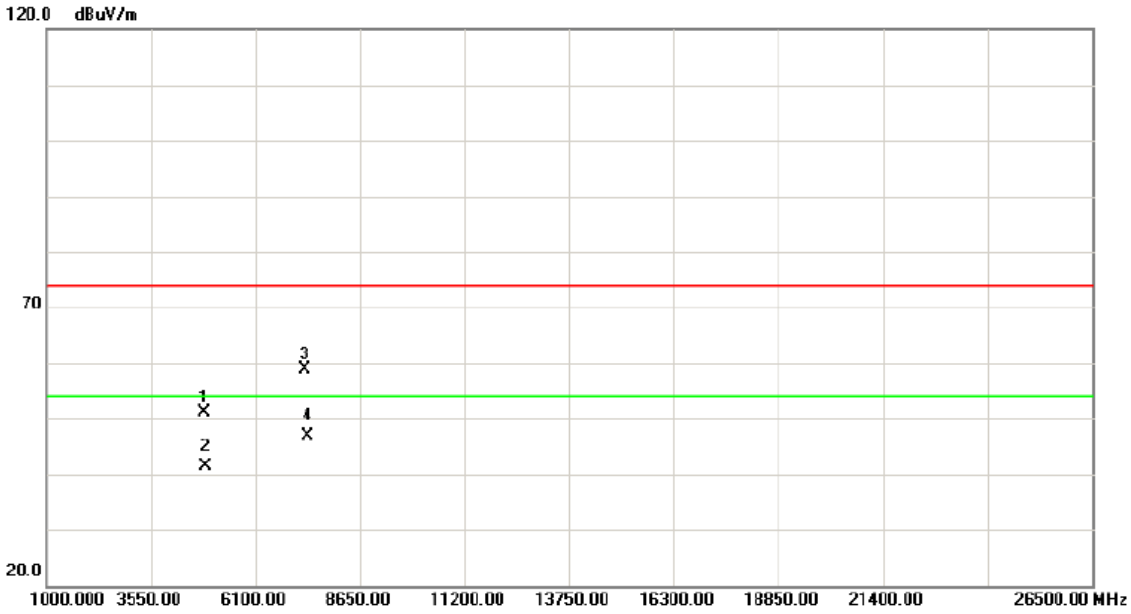
**Vertical**




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | Antenna Height | Table Degree | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | cm | degree | Comment |
| 1 | X | 2436.250 | 66.38 | 31.49 | 97.87 | 74.00 | 23.87 | peak | | | NO LIMIT |
| 2 | * | 2436.250 | 64.20 | 31.49 | 95.69 | 54.00 | 41.69 | AVG | | | NO LIMIT |

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

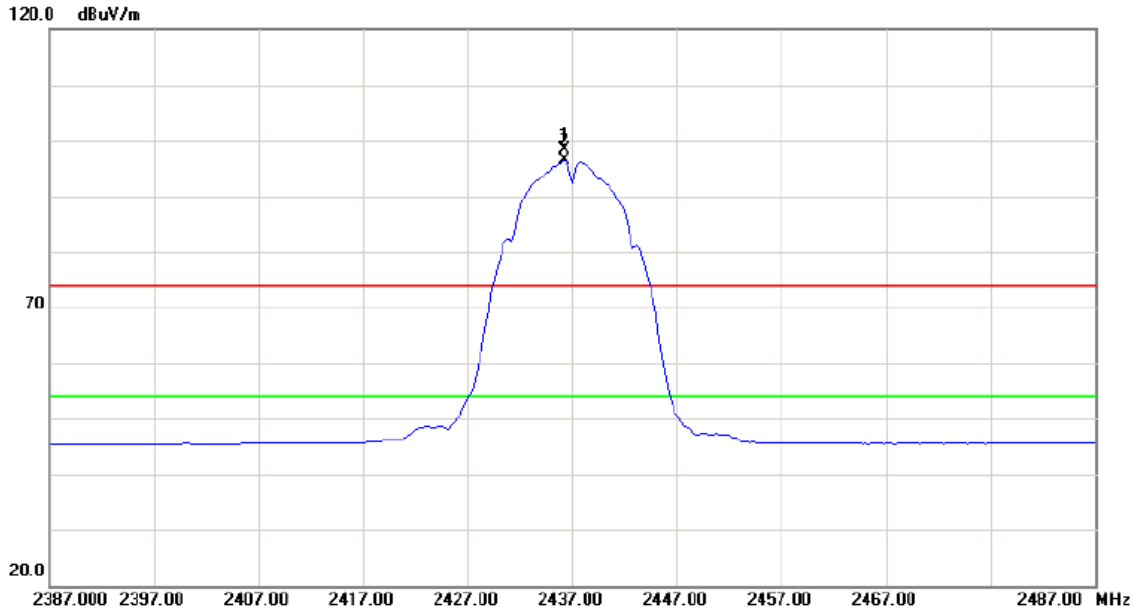
**Vertical**




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | Antenna Height | Table Degree | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | cm | degree | Comment |
| 1 | | 4872.200 | 43.68 | 7.35 | 51.03 | 74.00 | -22.97 | peak | | | |
| 2 | | 4872.200 | 34.07 | 7.35 | 41.42 | 54.00 | -12.58 | AVG | | | |
| 3 | | 7313.350 | 43.21 | 15.68 | 58.89 | 74.00 | -15.11 | peak | | | |
| 4 | * | 7313.350 | 31.20 | 15.68 | 46.88 | 54.00 | -7.12 | AVG | | | |

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

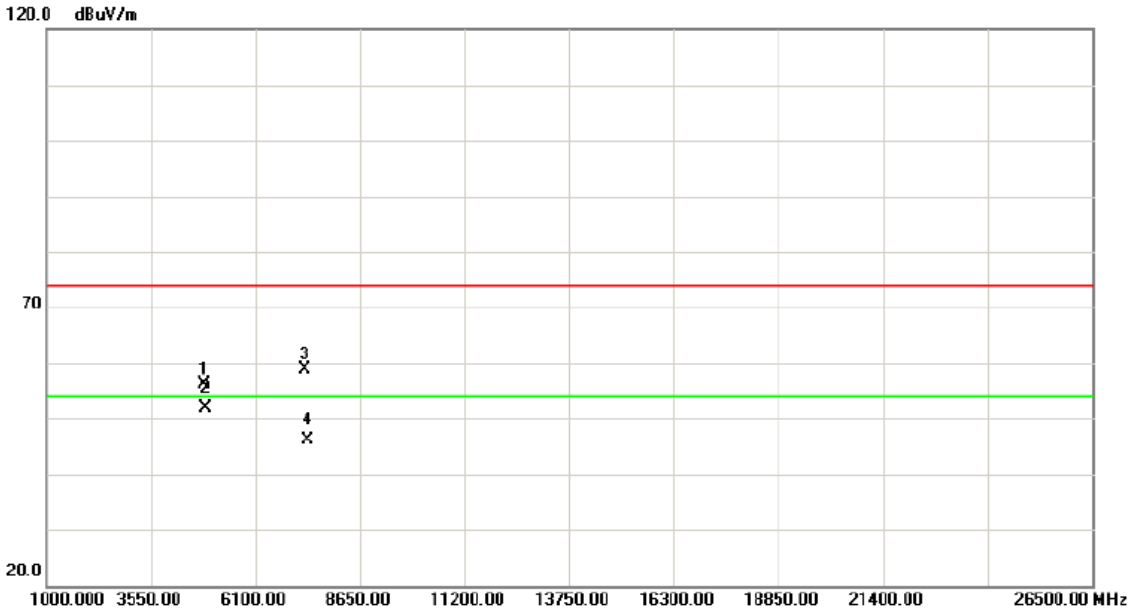
**Horizontal**




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | Antenna Height | Table Degree | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | cm | degree | Comment |
| 1 | X | 2436.250 | 66.97 | 31.49 | 98.46 | 74.00 | 24.46 | peak | | | NO LIMIT |
| 2 | * | 2436.250 | 64.83 | 31.49 | 96.32 | 54.00 | 42.32 | AVG | | | NO LIMIT |

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

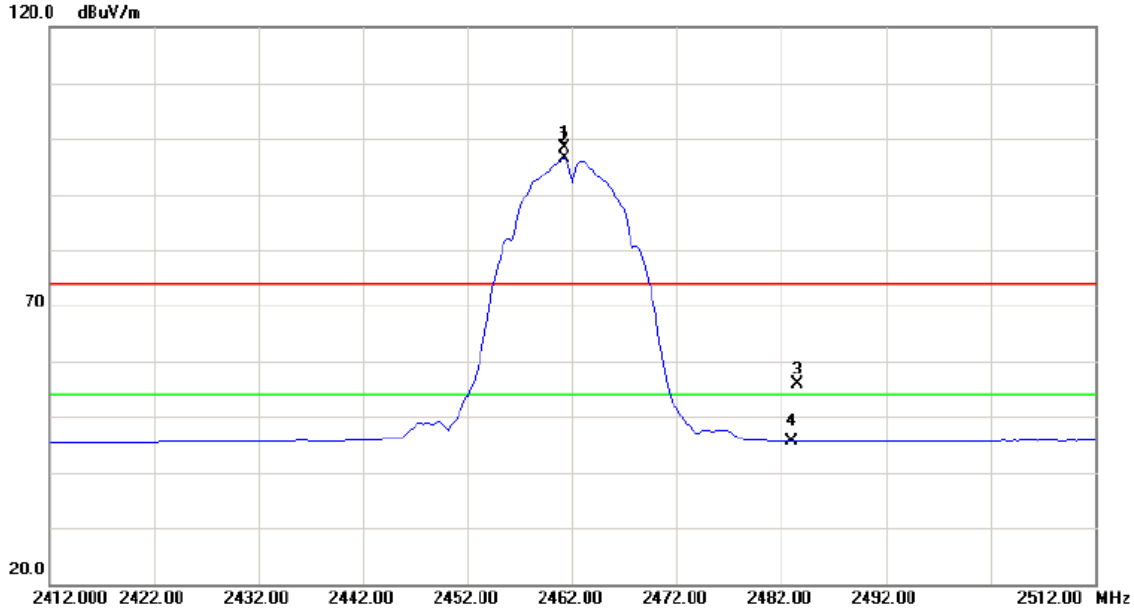
**Horizontal**




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | Antenna Height | Table Degree | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | cm | degree | Comment |
| 1 | | 4874.200 | 48.76 | 7.35 | 56.11 | 74.00 | -17.89 | peak | | | |
| 2 | * | 4874.200 | 44.43 | 7.35 | 51.78 | 54.00 | -2.22 | AVG | | | |
| 3 | | 7314.900 | 43.12 | 15.68 | 58.80 | 74.00 | -15.20 | peak | | | |
| 4 | | 7314.900 | 30.49 | 15.68 | 46.17 | 54.00 | -7.83 | AVG | | | |

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

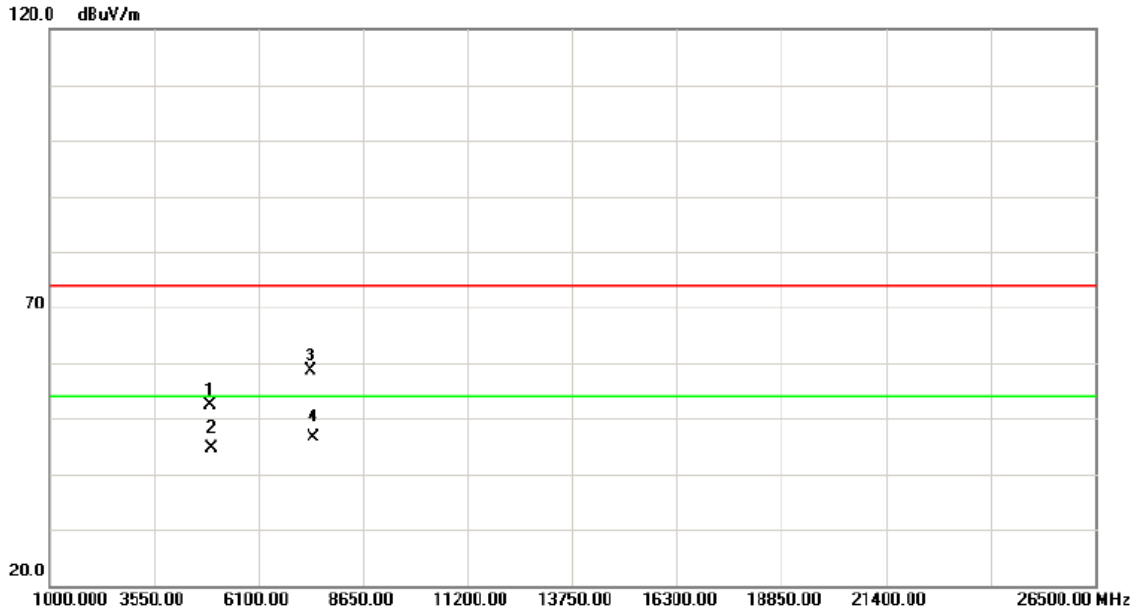
**Vertical**




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | Antenna Height | Table Degree | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | cm | degree | Comment |
| 1 | X | 2461.250 | 66.89 | 31.59 | 98.48 | 74.00 | 24.48 | peak | | | NO LIMIT |
| 2 | * | 2461.250 | 64.73 | 31.59 | 96.32 | 54.00 | 42.32 | AVG | | | NO LIMIT |
| 3 | | 2483.500 | 24.10 | 31.68 | 55.78 | 74.00 | -18.22 | peak | | | |
| 4 | | 2483.500 | 13.94 | 31.68 | 45.62 | 54.00 | -8.38 | AVG | | | |

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

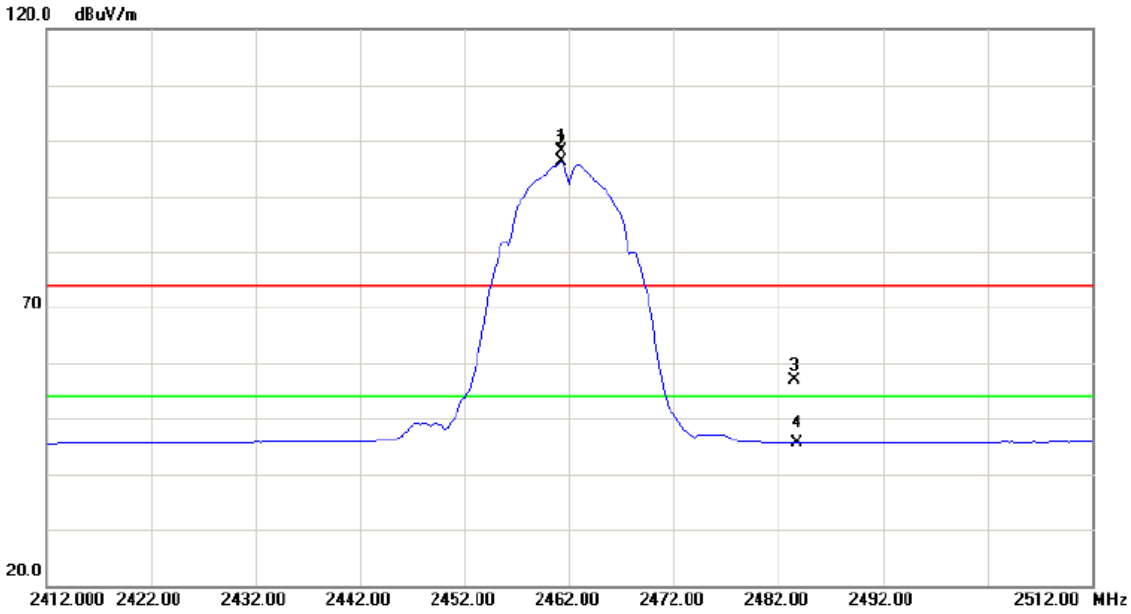
**Vertical**




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | Antenna Height | Table Degree | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | cm | degree | Comment |
| 1 | | 4923.900 | 45.06 | 7.39 | 52.45 | 74.00 | -21.55 | peak | | | |
| 2 | | 4923.900 | 37.15 | 7.39 | 44.54 | 54.00 | -9.46 | AVG | | | |
| 3 | | 7386.100 | 42.42 | 16.11 | 58.53 | 74.00 | -15.47 | peak | | | |
| 4 | * | 7386.100 | 30.44 | 16.11 | 46.55 | 54.00 | -7.45 | AVG | | | |

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

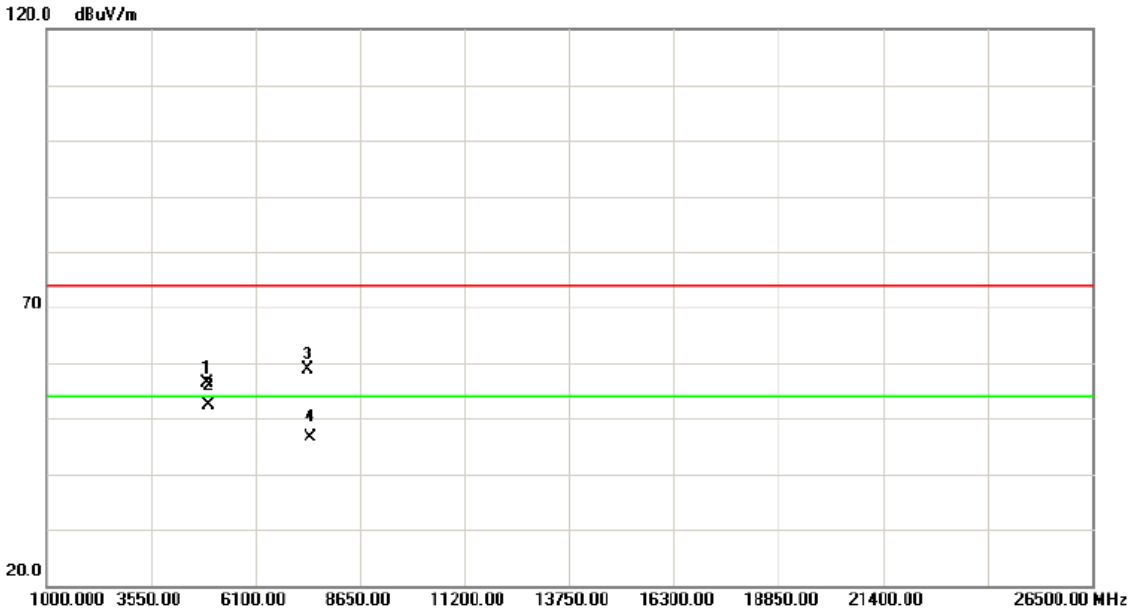
**Horizontal**




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | Antenna Height | Table Degree | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | cm | degree | Comment |
| 1 | X | 2461.250 | 66.57 | 31.59 | 98.16 | 74.00 | 24.16 | peak | | | NO LIMIT |
| 2 | * | 2461.250 | 64.54 | 31.59 | 96.13 | 54.00 | 42.13 | AVG | | | NO LIMIT |
| 3 | | 2483.500 | 25.14 | 31.68 | 56.82 | 74.00 | -17.18 | peak | | | |
| 4 | | 2483.500 | 13.97 | 31.68 | 45.65 | 54.00 | -8.35 | AVG | | | |

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

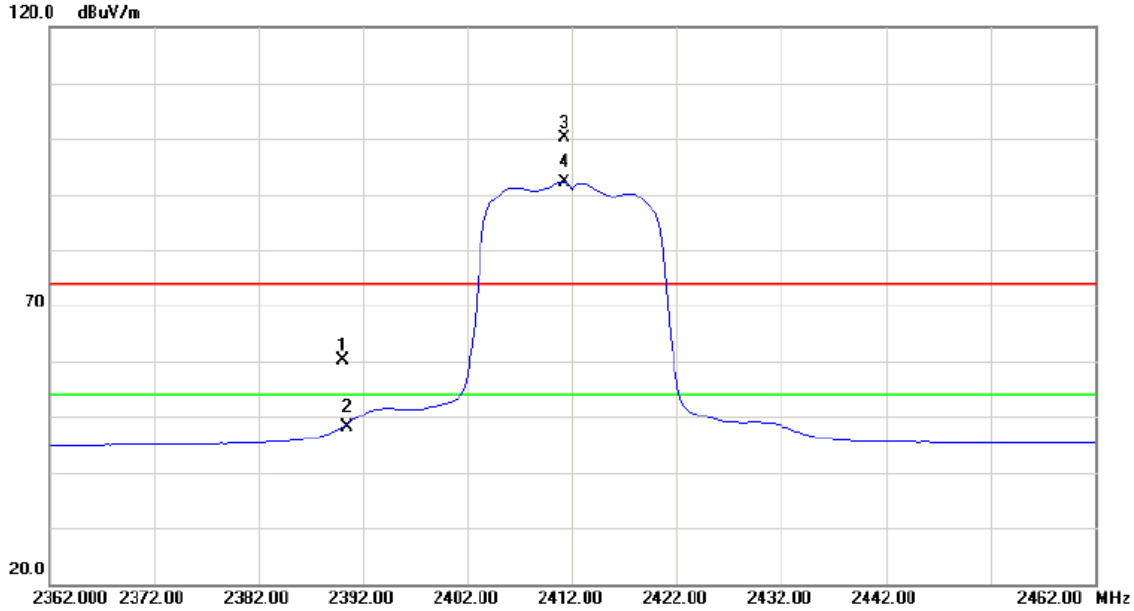
**Horizontal**




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | Antenna Height | Table Degree | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | cm | degree | Comment |
| 1 | | 4924.050 | 49.03 | 7.39 | 56.42 | 74.00 | -17.58 | peak | | | |
| 2 | * | 4924.050 | 45.06 | 7.39 | 52.45 | 54.00 | -1.55 | AVG | | | |
| 3 | | 7383.400 | 42.87 | 16.09 | 58.96 | 74.00 | -15.04 | peak | | | |
| 4 | | 7383.400 | 30.54 | 16.09 | 46.63 | 54.00 | -7.37 | AVG | | | |

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

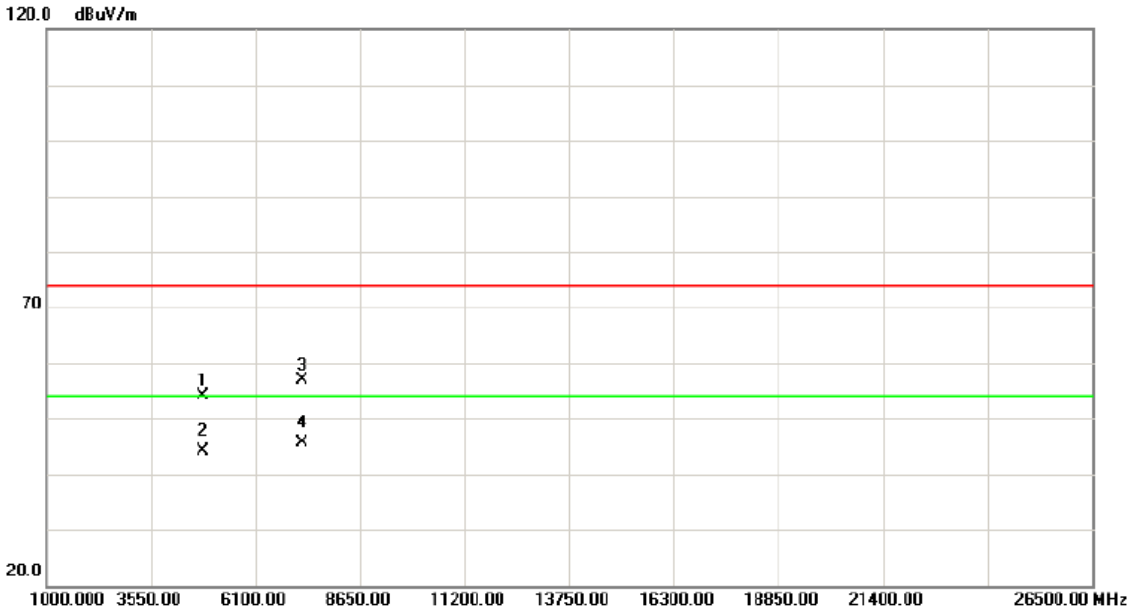
**Vertical**




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | Antenna Height | Table Degree | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | cm | degree | Comment |
| 1 | | 2390.000 | 28.77 | 31.30 | 60.07 | 74.00 | -13.93 | peak | | | |
| 2 | | 2390.000 | 16.86 | 31.30 | 48.16 | 54.00 | -5.84 | AVG | | | |
| 3 | X | 2411.250 | 68.62 | 31.39 | 100.01 | 74.00 | 26.01 | peak | | | NO LIMIT |
| 4 | * | 2411.250 | 60.77 | 31.39 | 92.16 | 54.00 | 38.16 | AVG | | | NO LIMIT |

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

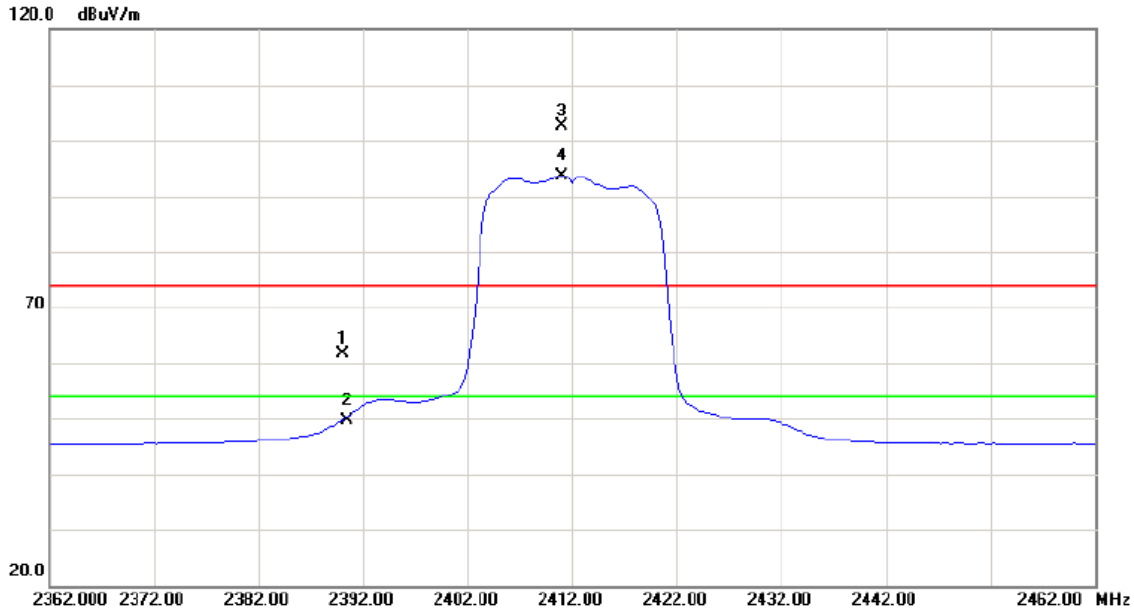
**Vertical**




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | Antenna Height | Table Degree | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | cm | degree | Comment |
| 1 | | 4824.500 | 46.71 | 7.30 | 54.01 | 74.00 | -19.99 | peak | | | |
| 2 | | 4824.500 | 36.87 | 7.30 | 44.17 | 54.00 | -9.83 | AVG | | | |
| 3 | | 7231.125 | 41.58 | 15.19 | 56.77 | 74.00 | -17.23 | peak | | | |
| 4 | * | 7231.125 | 30.39 | 15.19 | 45.58 | 54.00 | -8.42 | AVG | | | |

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

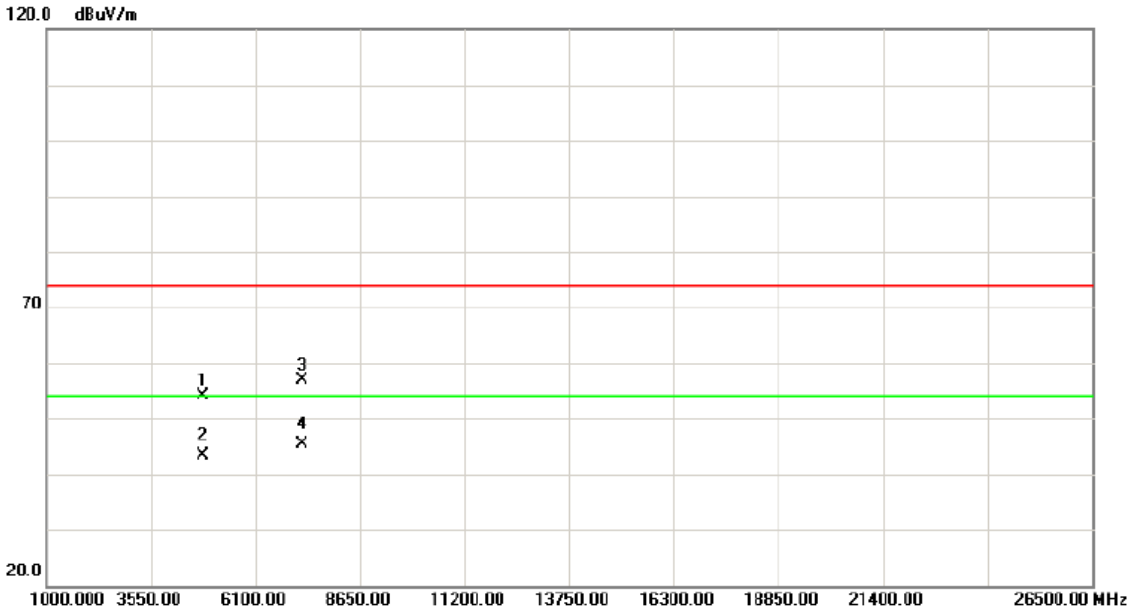
**Horizontal**




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | Antenna Height | Table Degree | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | cm | degree | Comment |
| 1 | | 2390.000 | 30.35 | 31.30 | 61.65 | 74.00 | -12.35 | peak | | | |
| 2 | | 2390.000 | 18.35 | 31.30 | 49.65 | 54.00 | -4.35 | AVG | | | |
| 3 | X | 2411.000 | 71.29 | 31.39 | 102.68 | 74.00 | 28.68 | peak | | | NO LIMIT |
| 4 | * | 2411.000 | 62.27 | 31.39 | 93.66 | 54.00 | 39.66 | AVG | | | NO LIMIT |

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

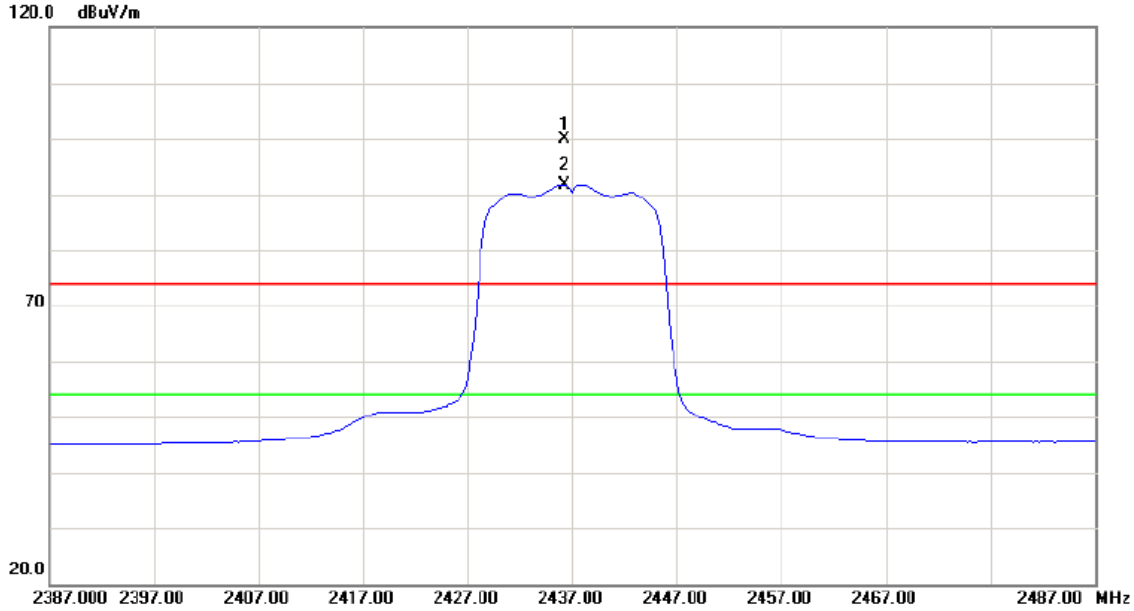
**Horizontal**




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | Antenna Height | Table Degree | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | cm | degree | Comment |
| 1 | | 4824.625 | 46.82 | 7.30 | 54.12 | 74.00 | -19.88 | peak | | | |
| 2 | | 4824.625 | 35.96 | 7.30 | 43.26 | 54.00 | -10.74 | AVG | | | |
| 3 | | 7233.250 | 41.71 | 15.19 | 56.90 | 74.00 | -17.10 | peak | | | |
| 4 | * | 7233.250 | 30.26 | 15.19 | 45.45 | 54.00 | -8.55 | AVG | | | |

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

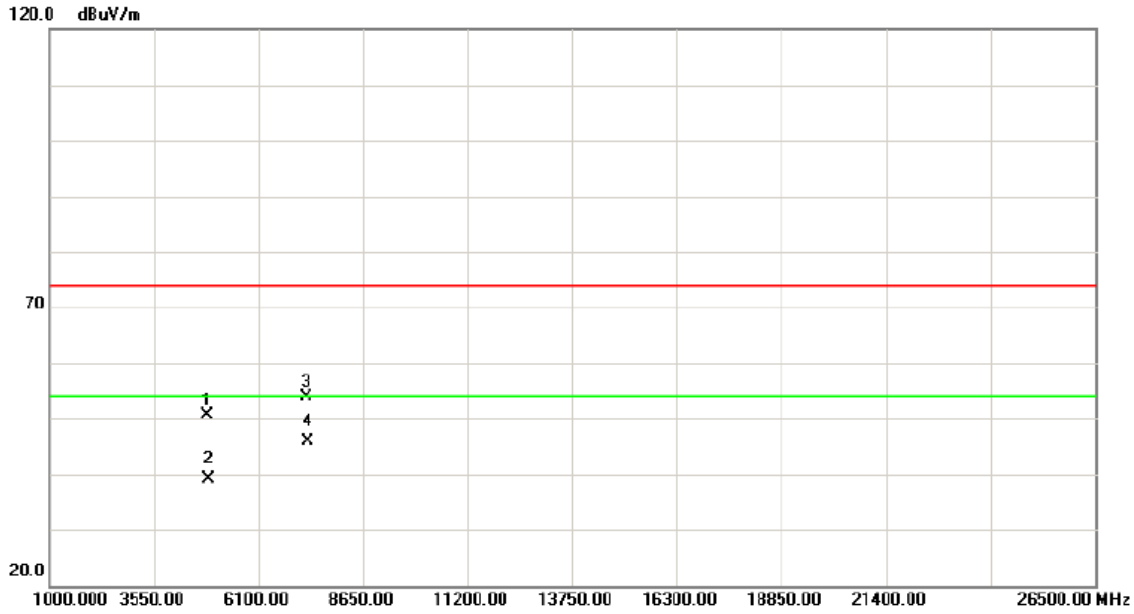
**Vertical**




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | Antenna Height | Table Degree | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | cm | degree | Comment |
| 1 | X | 2436.250 | 68.35 | 31.49 | 99.84 | 74.00 | 25.84 | peak | | | NO LIMIT |
| 2 | * | 2436.250 | 60.20 | 31.49 | 91.69 | 54.00 | 37.69 | AVG | | | NO LIMIT |

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

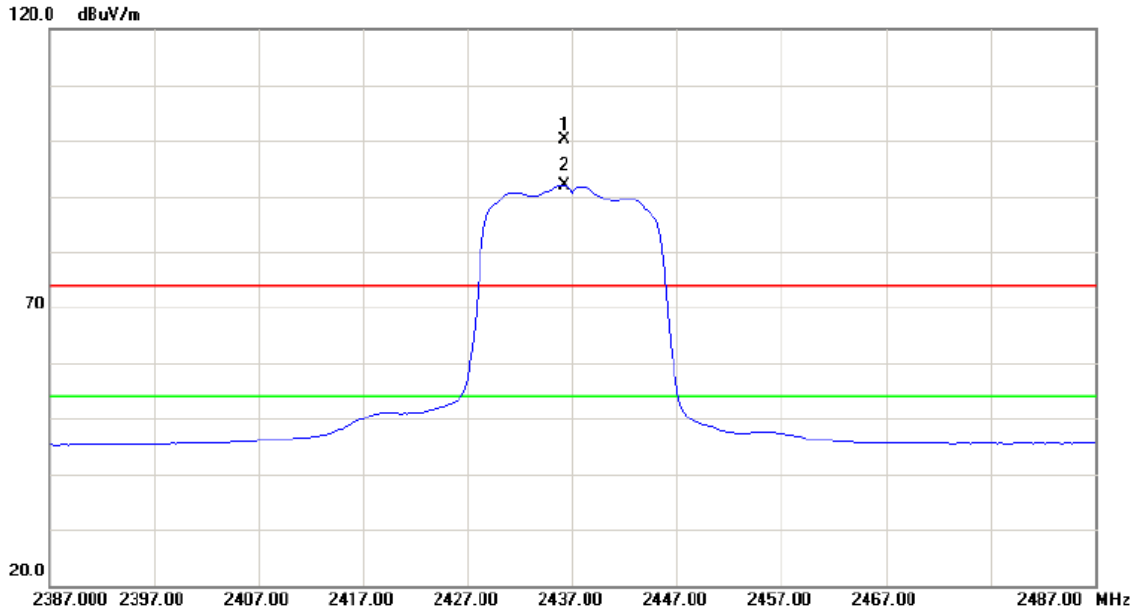
**Vertical**




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | Antenna Height | Table Degree | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | cm | degree | Comment |
| 1 | | 4867.625 | 43.32 | 7.35 | 50.67 | 74.00 | -23.33 | peak | | | |
| 2 | | 4867.625 | 31.80 | 7.35 | 39.15 | 54.00 | -14.85 | AVG | | | |
| 3 | | 7286.125 | 38.35 | 15.52 | 53.87 | 74.00 | -20.13 | peak | | | |
| 4 | * | 7286.125 | 30.40 | 15.52 | 45.92 | 54.00 | -8.08 | AVG | | | |

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

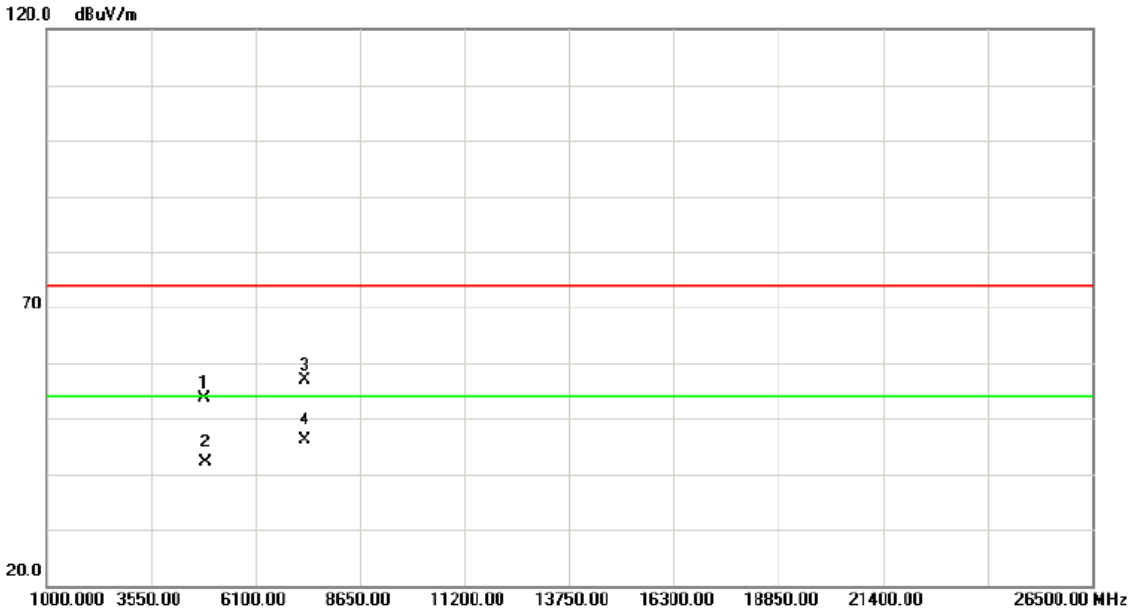
**Horizontal**




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | Antenna Height | Table Degree | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | cm | degree | Comment |
| 1 | X | 2436.250 | 68.58 | 31.49 | 100.07 | 74.00 | 26.07 | peak | | | NO LIMIT |
| 2 | * | 2436.250 | 60.45 | 31.49 | 91.94 | 54.00 | 37.94 | AVG | | | NO LIMIT |

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

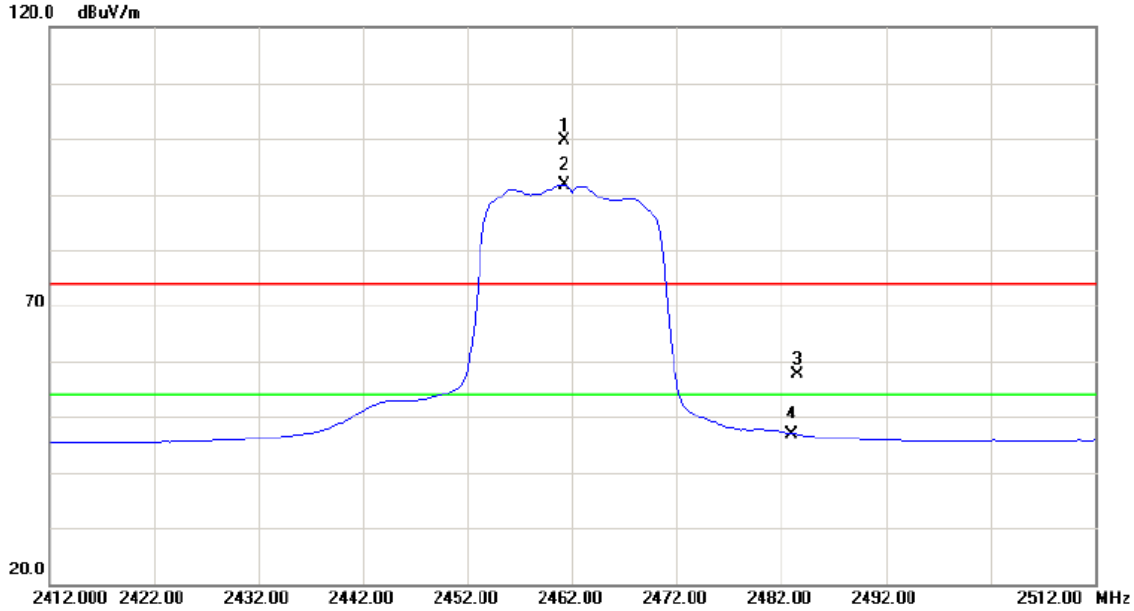
**Horizontal**




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | Antenna Height | Table Degree | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | cm | degree | Comment |
| 1 | | 4872.250 | 46.36 | 7.35 | 53.71 | 74.00 | -20.29 | peak | | | |
| 2 | | 4872.250 | 34.75 | 7.35 | 42.10 | 54.00 | -11.90 | AVG | | | |
| 3 | | 7305.500 | 41.36 | 15.63 | 56.99 | 74.00 | -17.01 | peak | | | |
| 4 | * | 7305.500 | 30.55 | 15.63 | 46.18 | 54.00 | -7.82 | AVG | | | |

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

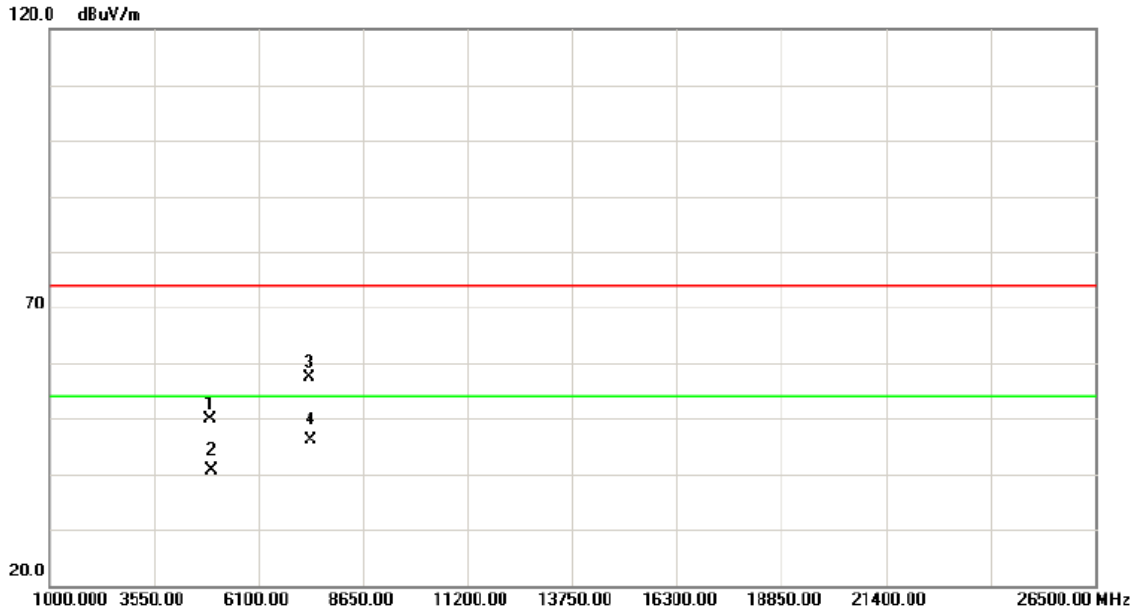
**Vertical**




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | Antenna Height | Table Degree | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | cm | degree | Comment |
| 1 | X | 2461.250 | 67.92 | 31.59 | 99.51 | 74.00 | 25.51 | peak | | | NO LIMIT |
| 2 | * | 2461.250 | 60.13 | 31.59 | 91.72 | 54.00 | 37.72 | AVG | | | NO LIMIT |
| 3 | | 2483.500 | 26.07 | 31.68 | 57.75 | 74.00 | -16.25 | peak | | | |
| 4 | | 2483.500 | 15.26 | 31.68 | 46.94 | 54.00 | -7.06 | AVG | | | |

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

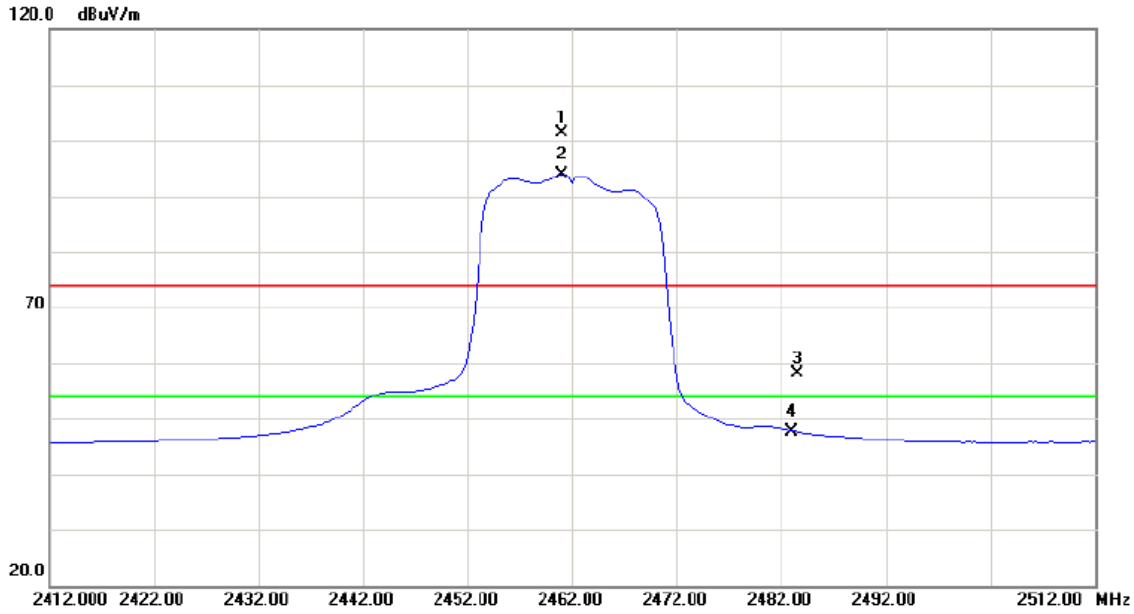
**Vertical**




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | Antenna Height | Table Degree | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | cm | degree | Comment |
| 1 | | 4923.250 | 42.48 | 7.39 | 49.87 | 74.00 | -24.13 | peak | | | |
| 2 | | 4923.250 | 33.32 | 7.39 | 40.71 | 54.00 | -13.29 | AVG | | | |
| 3 | | 7348.250 | 41.49 | 15.90 | 57.39 | 74.00 | -16.61 | peak | | | |
| 4 | * | 7348.250 | 30.29 | 15.90 | 46.19 | 54.00 | -7.81 | AVG | | | |

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

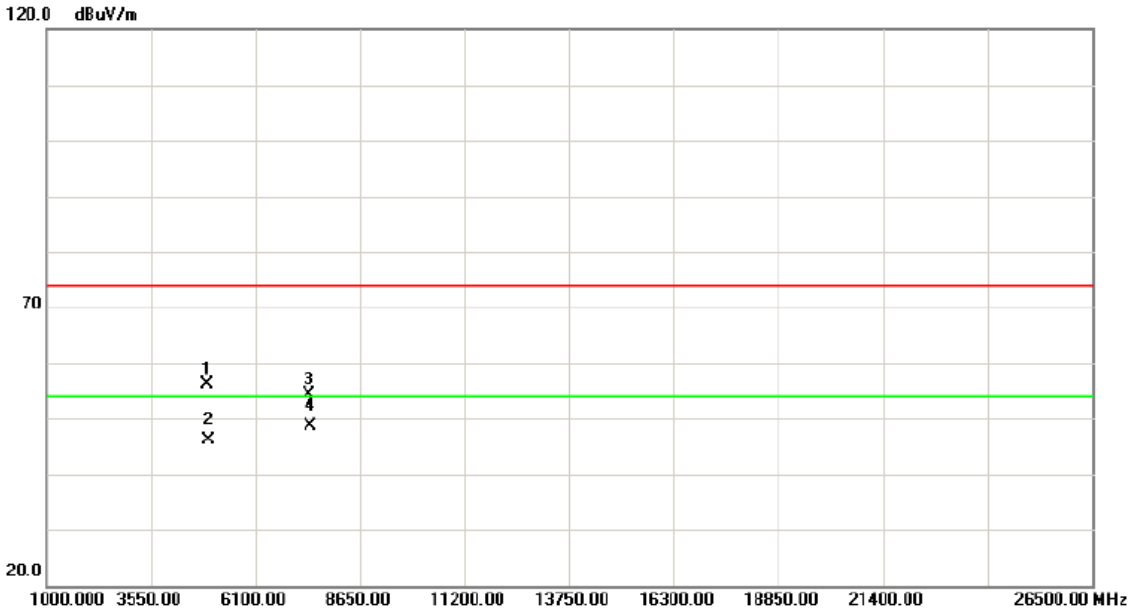
**Horizontal**




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | Antenna Height | Table Degree | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | cm | degree | Comment |
| 1 | X | 2461.000 | 69.78 | 31.59 | 101.37 | 74.00 | 27.37 | peak | | | NO LIMIT |
| 2 | * | 2461.000 | 62.30 | 31.59 | 93.89 | 54.00 | 39.89 | AVG | | | NO LIMIT |
| 3 | | 2483.500 | 26.46 | 31.68 | 58.14 | 74.00 | -15.86 | peak | | | |
| 4 | | 2483.500 | 15.97 | 31.68 | 47.65 | 54.00 | -6.35 | AVG | | | |

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

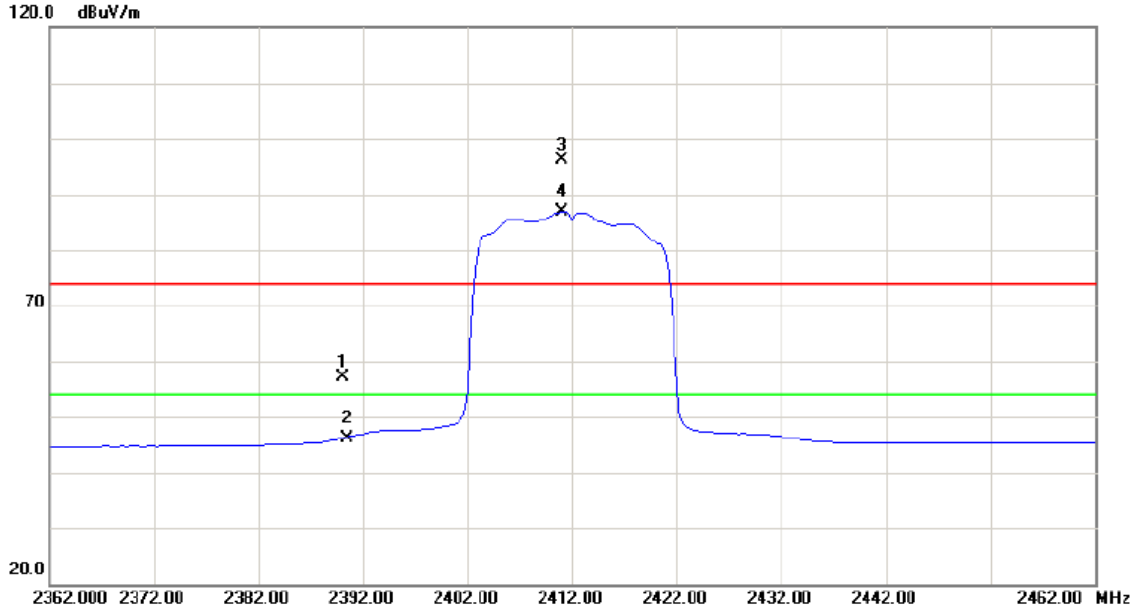
**Horizontal**




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | Antenna Height | Table Degree | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | cm | degree | Comment |
| 1 | | 4921.500 | 48.82 | 7.40 | 56.22 | 74.00 | -17.78 | peak | | | |
| 2 | | 4921.500 | 38.72 | 7.40 | 46.12 | 54.00 | -7.88 | AVG | | | |
| 3 | | 7407.750 | 38.09 | 16.25 | 54.34 | 74.00 | -19.66 | peak | | | |
| 4 | * | 7407.750 | 32.28 | 16.25 | 48.53 | 54.00 | -5.47 | AVG | | | |

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

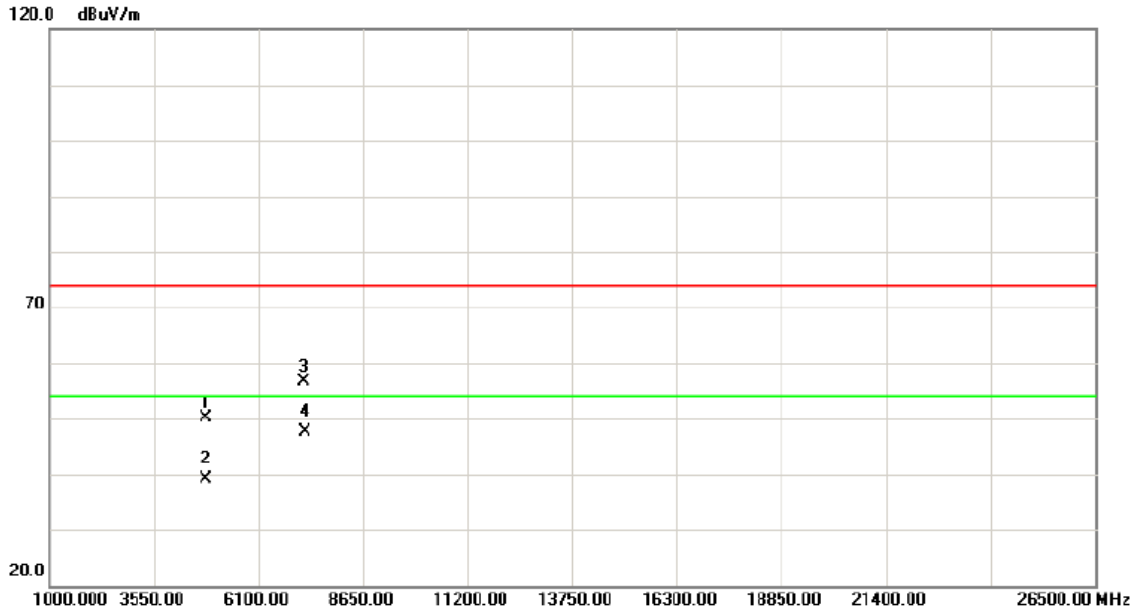
**Vertical**




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | Antenna Height | Table Degree | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | cm | degree | Comment |
| 1 | | 2390.000 | 25.80 | 31.30 | 57.10 | 74.00 | -16.90 | peak | | | |
| 2 | | 2390.000 | 14.85 | 31.30 | 46.15 | 54.00 | -7.85 | AVG | | | |
| 3 | X | 2411.000 | 64.79 | 31.39 | 96.18 | 74.00 | 22.18 | peak | | | NO LIMIT |
| 4 | * | 2411.000 | 55.46 | 31.39 | 86.85 | 54.00 | 32.85 | AVG | | | NO LIMIT |

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

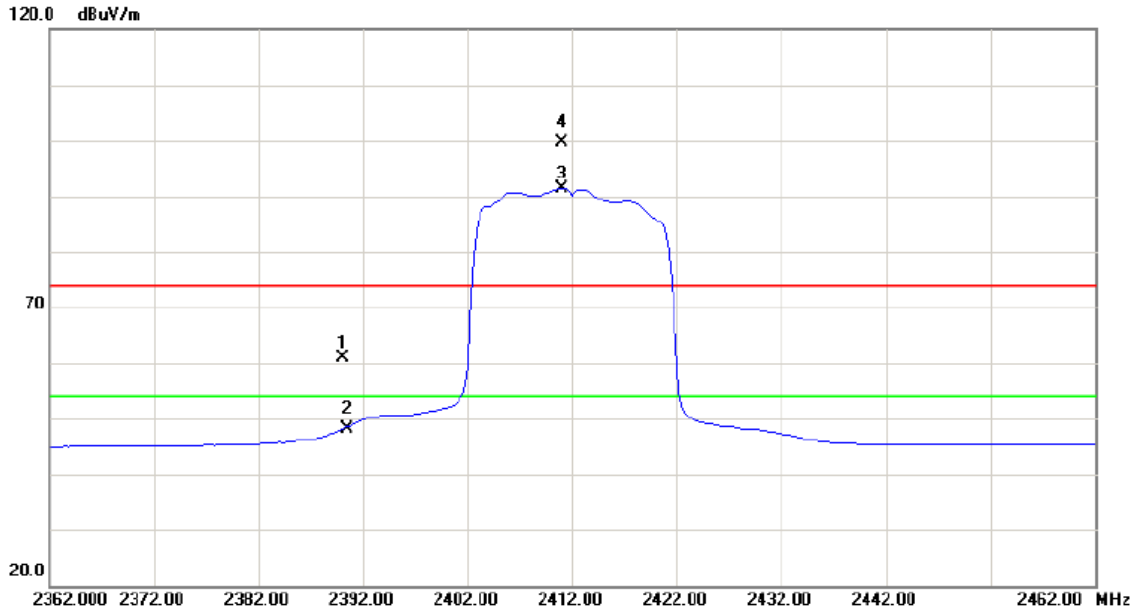
**Vertical**




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | Antenna Height | Table Degree | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | cm | degree | Comment |
| 1 | | 4822.600 | 42.75 | 7.30 | 50.05 | 74.00 | -23.95 | peak | | | |
| 2 | | 4822.600 | 31.86 | 7.30 | 39.16 | 54.00 | -14.84 | AVG | | | |
| 3 | | 7217.000 | 41.63 | 15.10 | 56.73 | 74.00 | -17.27 | peak | | | |
| 4 | * | 7217.000 | 32.42 | 15.10 | 47.52 | 54.00 | -6.48 | AVG | | | |

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

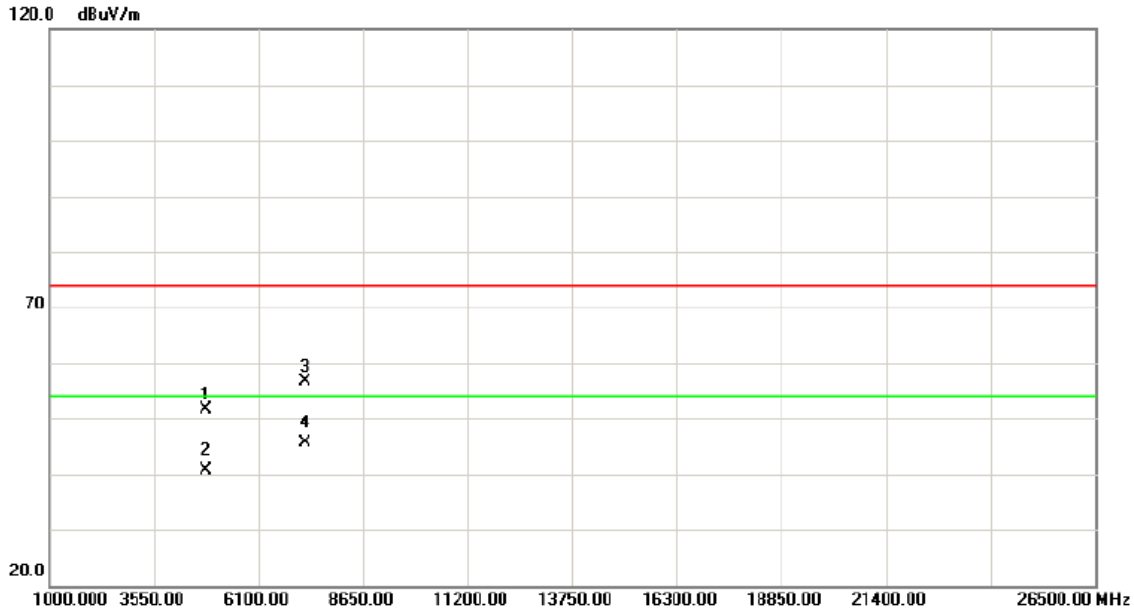
**Horizontal**




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | Antenna Height | Table Degree | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | cm | degree | Comment |
| 1 | | 2390.000 | 29.65 | 31.30 | 60.95 | 74.00 | -13.05 | peak | | | |
| 2 | | 2390.000 | 16.83 | 31.30 | 48.13 | 54.00 | -5.87 | AVG | | | |
| 3 | X | 2411.000 | 60.11 | 31.39 | 91.50 | 74.00 | 17.50 | peak | | | NO LIMIT |
| 4 | * | 2411.000 | 68.36 | 31.39 | 99.75 | 54.00 | 45.75 | AVG | | | NO LIMIT |

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

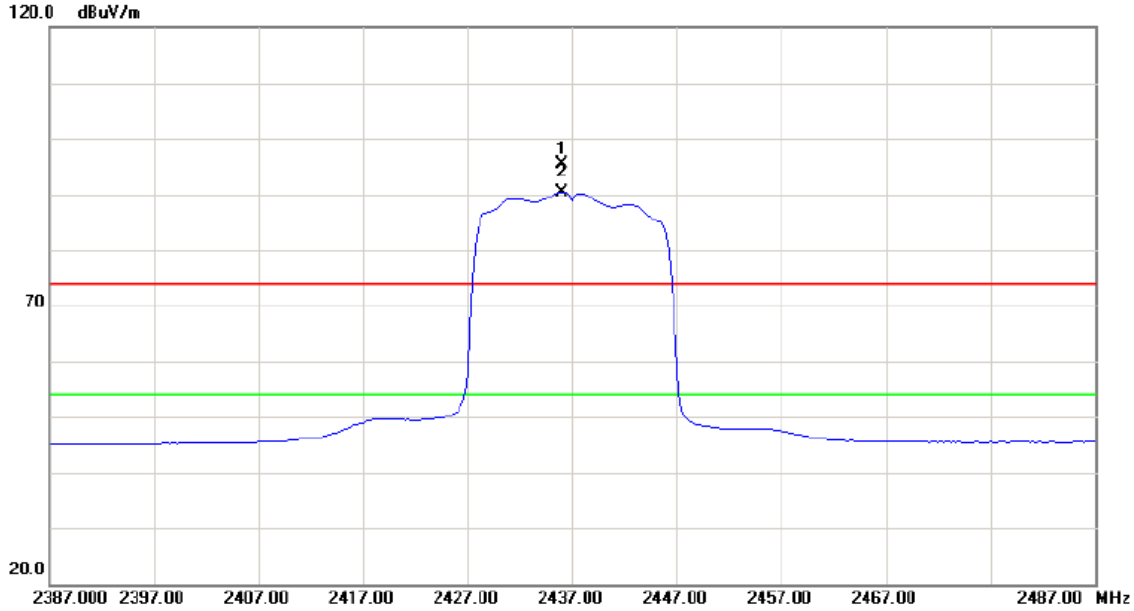
**Horizontal**




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | Antenna Height | Table Degree | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | cm | degree | Comment |
| 1 | | 4823.500 | 44.29 | 7.30 | 51.59 | 74.00 | -22.41 | peak | | | |
| 2 | | 4823.500 | 33.22 | 7.30 | 40.52 | 54.00 | -13.48 | AVG | | | |
| 3 | | 7225.500 | 41.60 | 15.15 | 56.75 | 74.00 | -17.25 | peak | | | |
| 4 | * | 7225.500 | 30.41 | 15.15 | 45.56 | 54.00 | -8.44 | AVG | | | |

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

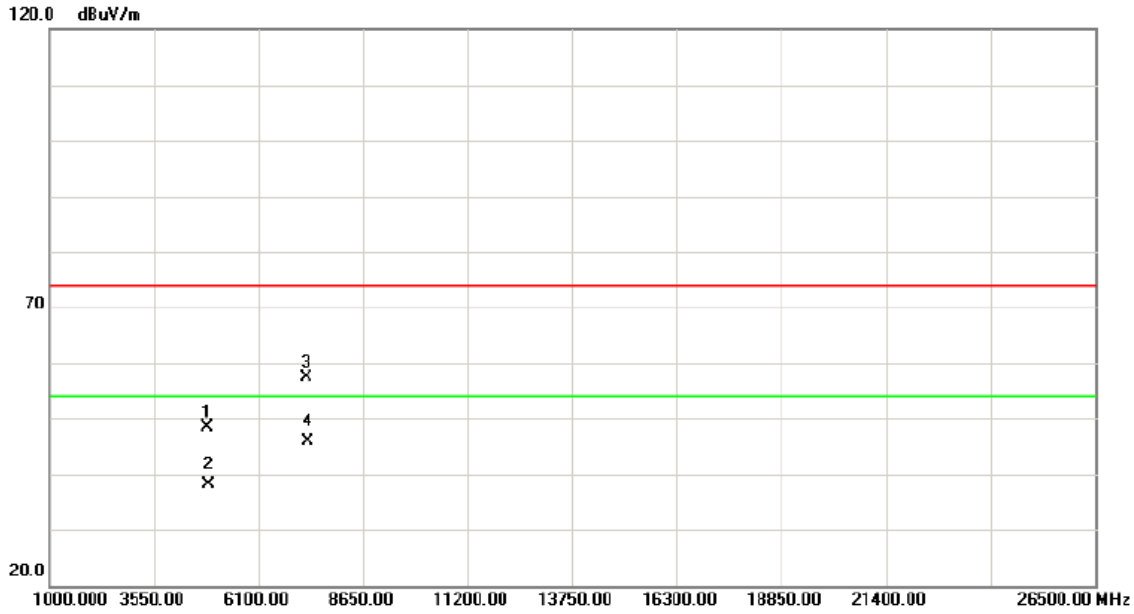
**Vertical**




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | Antenna Height | Table Degree | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | cm | degree | Comment |
| 1 | X | 2436.000 | 63.92 | 31.49 | 95.41 | 74.00 | 21.41 | peak | | | NO LIMIT |
| 2 | * | 2436.000 | 58.98 | 31.49 | 90.47 | 54.00 | 36.47 | AVG | | | NO LIMIT |

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

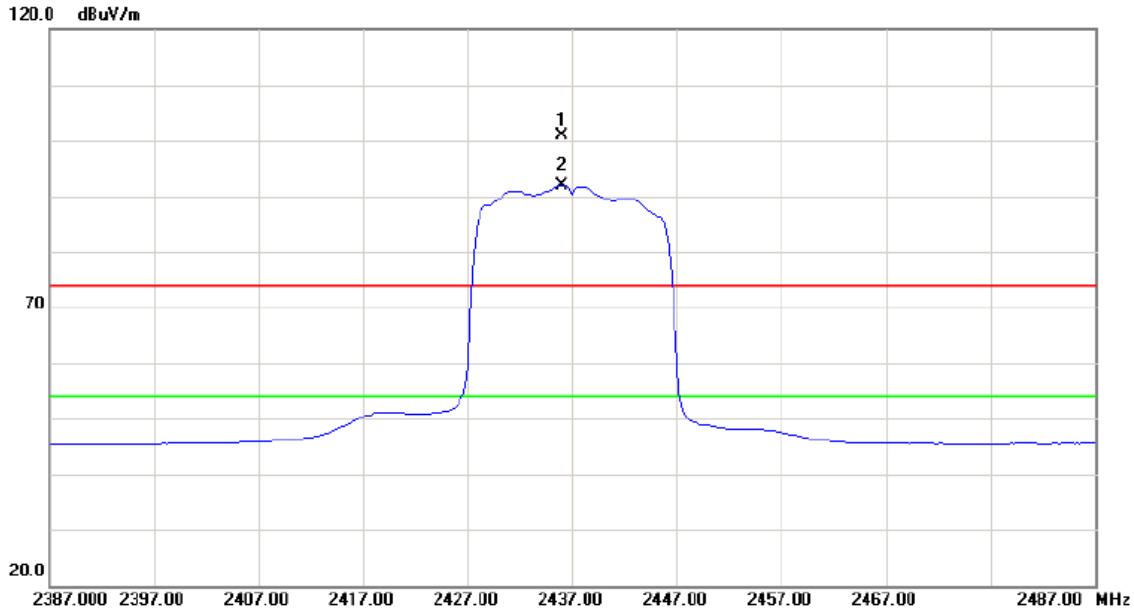
**Vertical**




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | Antenna Height | Table Degree | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | cm | degree | Comment |
| 1 | | 4865.250 | 41.08 | 7.35 | 48.43 | 74.00 | -25.57 | peak | | | |
| 2 | | 4865.250 | 30.85 | 7.35 | 38.20 | 54.00 | -15.80 | AVG | | | |
| 3 | | 7287.625 | 41.95 | 15.53 | 57.48 | 74.00 | -16.52 | peak | | | |
| 4 | * | 7287.625 | 30.46 | 15.53 | 45.99 | 54.00 | -8.01 | AVG | | | |

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

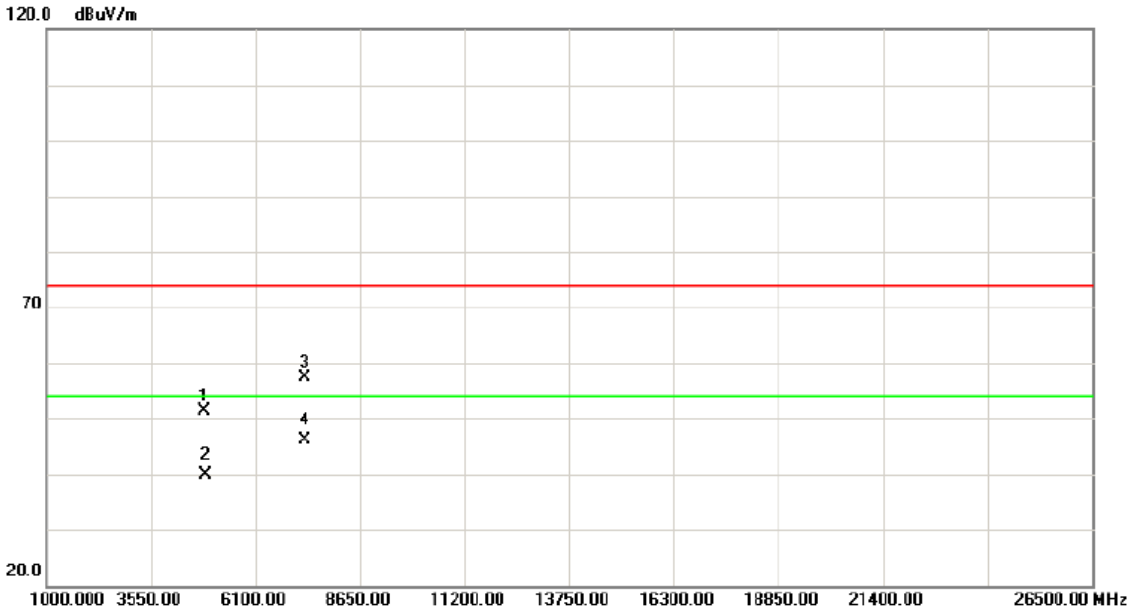
**Horizontal**




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | Antenna Height | Table Degree | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | cm | degree | Comment |
| 1 | X | 2436.000 | 69.45 | 31.49 | 100.94 | 74.00 | 26.94 | peak | | | NO LIMIT |
| 2 | * | 2436.000 | 60.44 | 31.49 | 91.93 | 54.00 | 37.93 | AVG | | | NO LIMIT |

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

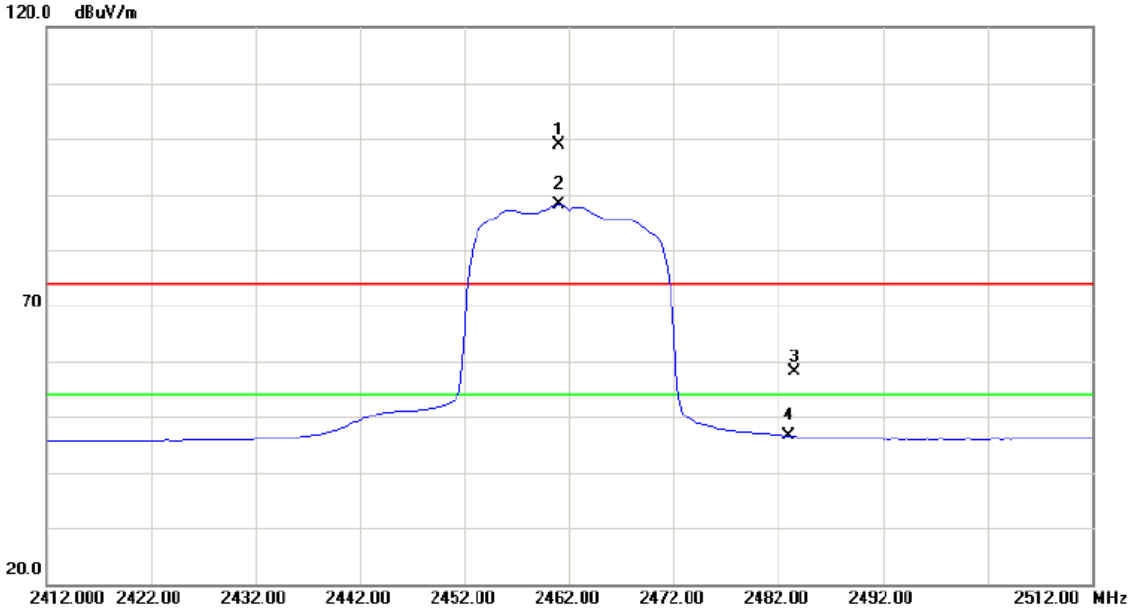
**Horizontal**




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | Antenna Height | Table Degree | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | cm | degree | Comment |
| 1 | | 4874.875 | 44.12 | 7.35 | 51.47 | 74.00 | -22.53 | peak | | | |
| 2 | | 4874.875 | 32.54 | 7.35 | 39.89 | 54.00 | -14.11 | AVG | | | |
| 3 | | 7301.125 | 41.81 | 15.60 | 57.41 | 74.00 | -16.59 | peak | | | |
| 4 | * | 7301.125 | 30.53 | 15.60 | 46.13 | 54.00 | -7.87 | AVG | | | |

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

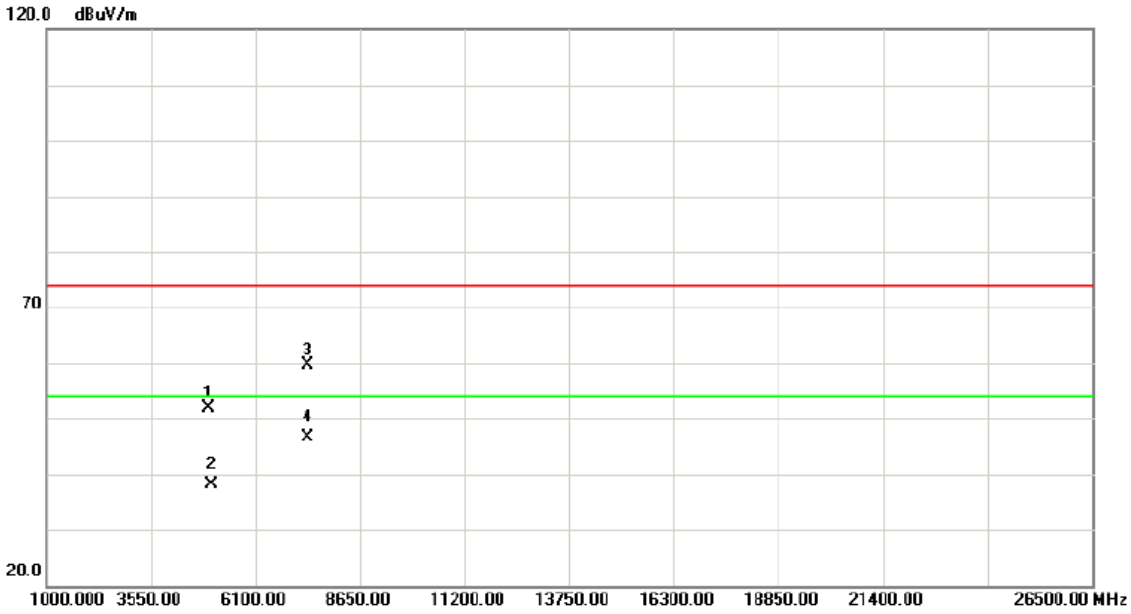
**Vertical**




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | Antenna Height | Table Degree | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | cm | degree | Comment |
| 1 | X | 2461.000 | 67.19 | 31.59 | 98.78 | 74.00 | 24.78 | peak | | | NO LIMIT |
| 2 | * | 2461.000 | 56.47 | 31.59 | 88.06 | 54.00 | 34.06 | AVG | | | NO LIMIT |
| 3 | | 2483.500 | 26.51 | 31.68 | 58.19 | 74.00 | -15.81 | peak | | | |
| 4 | | 2483.500 | 14.89 | 31.68 | 46.57 | 54.00 | -7.43 | AVG | | | |

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

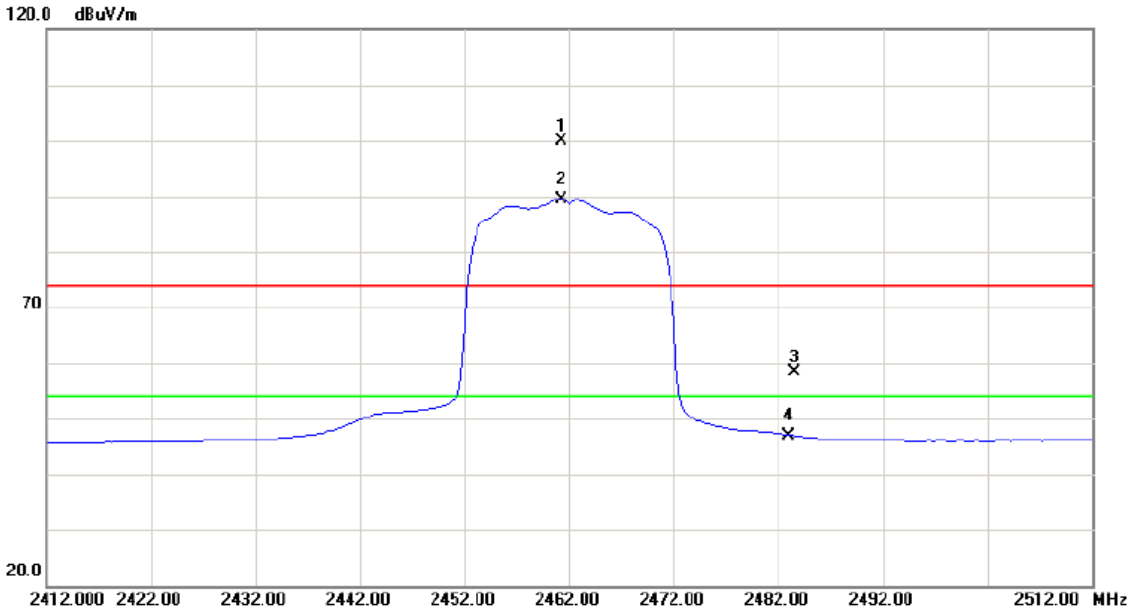
**Vertical**




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | Antenna Height | Table Degree | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | cm | degree | Comment |
| 1 | | 4958.000 | 44.37 | 7.43 | 51.80 | 74.00 | -22.20 | peak | | | |
| 2 | | 4958.000 | 30.58 | 7.43 | 38.01 | 54.00 | -15.99 | AVG | | | |
| 3 | | 7367.000 | 43.67 | 16.00 | 59.67 | 74.00 | -14.33 | peak | | | |
| 4 | * | 7367.000 | 30.70 | 16.00 | 46.70 | 54.00 | -7.30 | AVG | | | |

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

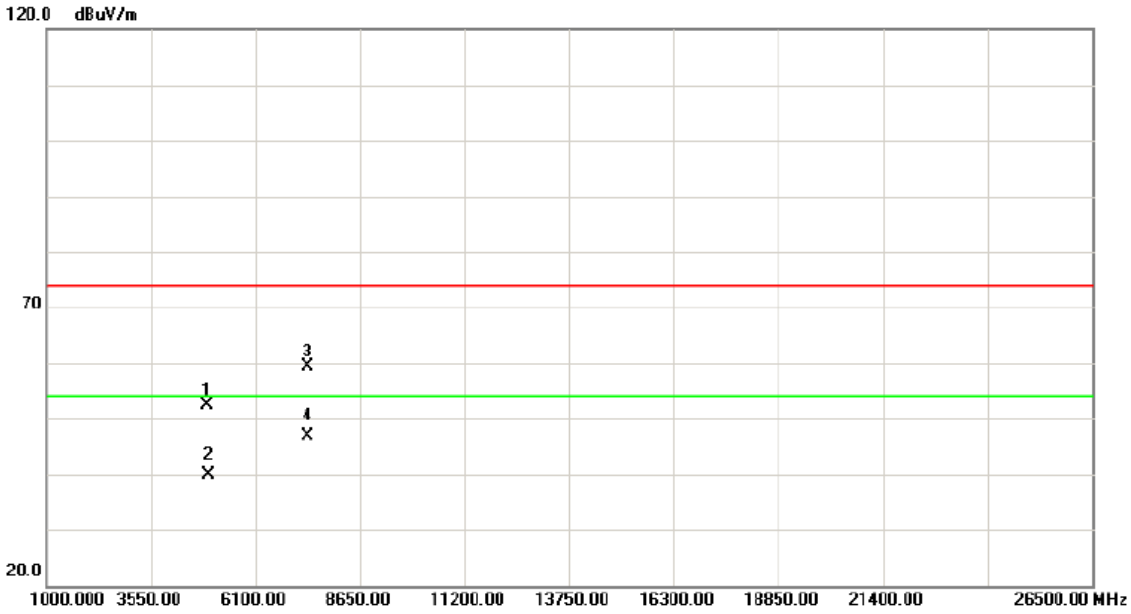
**Horizontal**




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | Antenna Height | Table Degree | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | cm | degree | Comment |
| 1 | X | 2461.250 | 68.22 | 31.59 | 99.81 | 74.00 | 25.81 | peak | | | NO LIMIT |
| 2 | * | 2461.250 | 57.88 | 31.59 | 89.47 | 54.00 | 35.47 | AVG | | | NO LIMIT |
| 3 | | 2483.500 | 26.62 | 31.68 | 58.30 | 74.00 | -15.70 | peak | | | |
| 4 | | 2483.500 | 15.28 | 31.68 | 46.96 | 54.00 | -7.04 | AVG | | | |

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

**Horizontal**



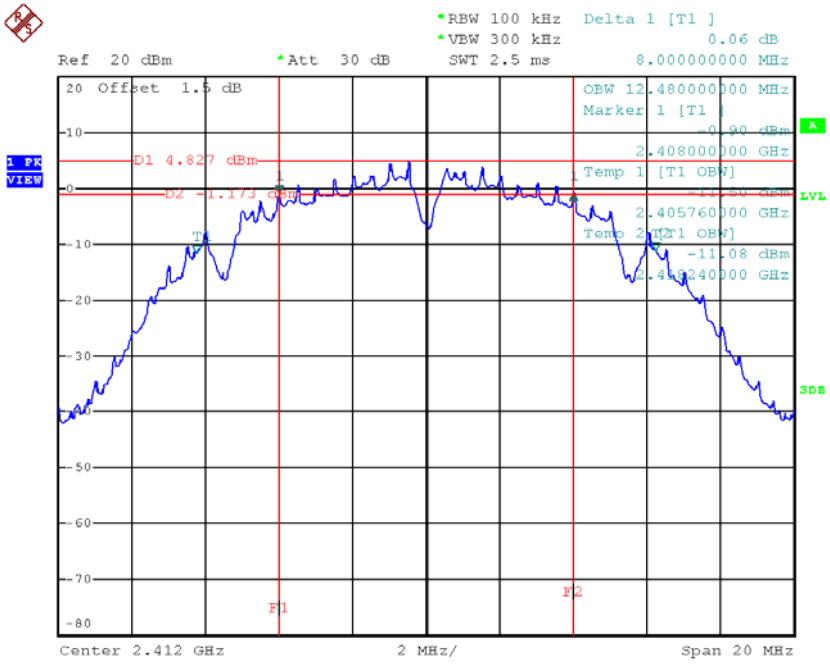

| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | Antenna Height | Table Degree | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | cm | degree | Comment |
| 1 | | 4926.500 | 45.10 | 7.40 | 52.50 | 74.00 | -21.50 | peak | | | |
| 2 | | 4926.500 | 32.44 | 7.40 | 39.84 | 54.00 | -14.16 | AVG | | | |
| 3 | | 7372.625 | 43.33 | 16.03 | 59.36 | 74.00 | -14.64 | peak | | | |
| 4 | * | 7372.625 | 30.97 | 16.03 | 47.00 | 54.00 | -7.00 | AVG | | | |

# ATTACHMENT E - BANDWIDTH

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

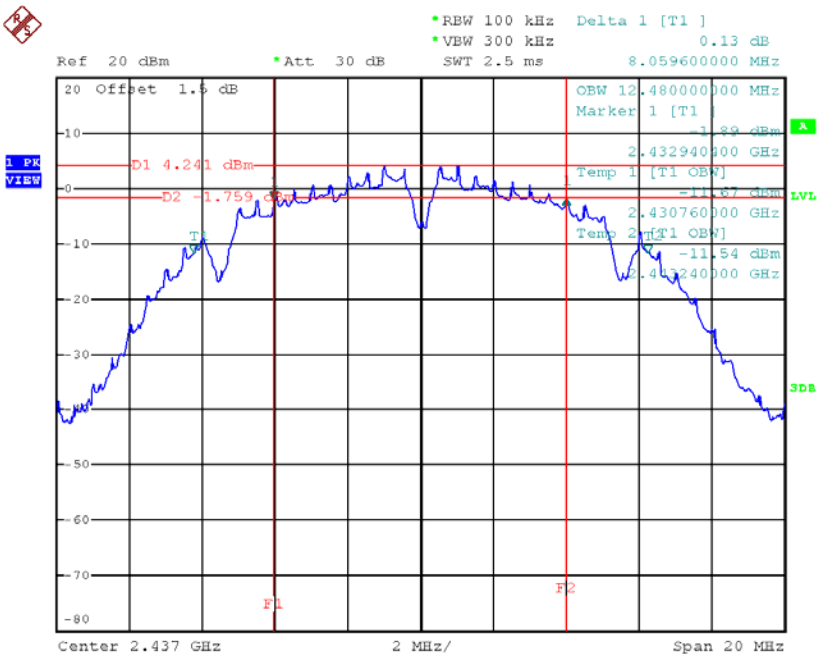
| Frequency (MHz) | 6dB Bandwidth (MHz) | 99% Occupied BW (MHz) | Min. Limit (kHz) | Test Result |
|---|---|---|---|---|
| 2412 | 8.00 | 12.48 | 500 | Complies |
| 2437 | 8.06 | 12.48 | 500 | Complies |
| 2462 | 8.02 | 12.44 | 500 | Complies |

**TX CH01**



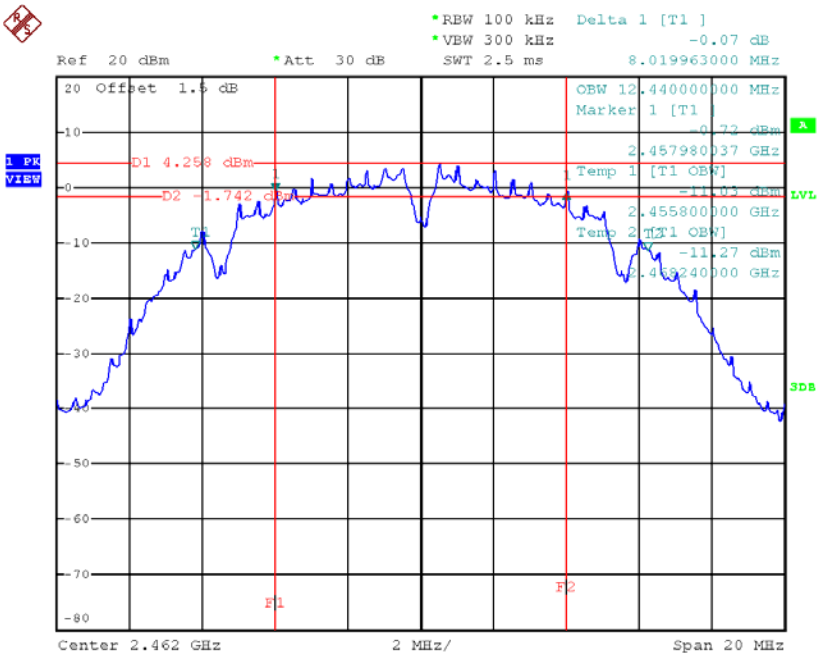

Date: 5.JUN.2015 17:57:14

## TX CH06




Date: 5.JUN.2015 17:59:18

## TX CH11

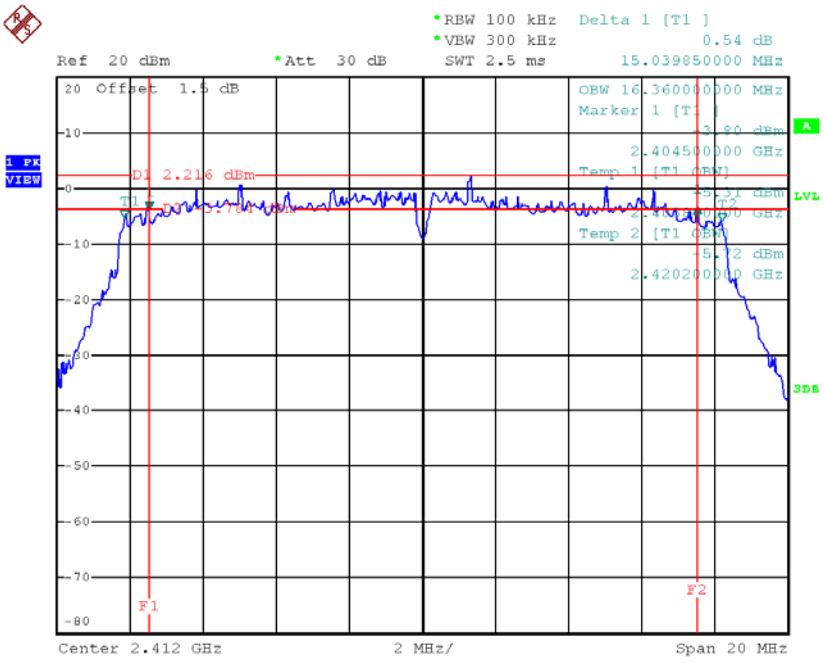



Date: 5.JUN.2015 18:00:28

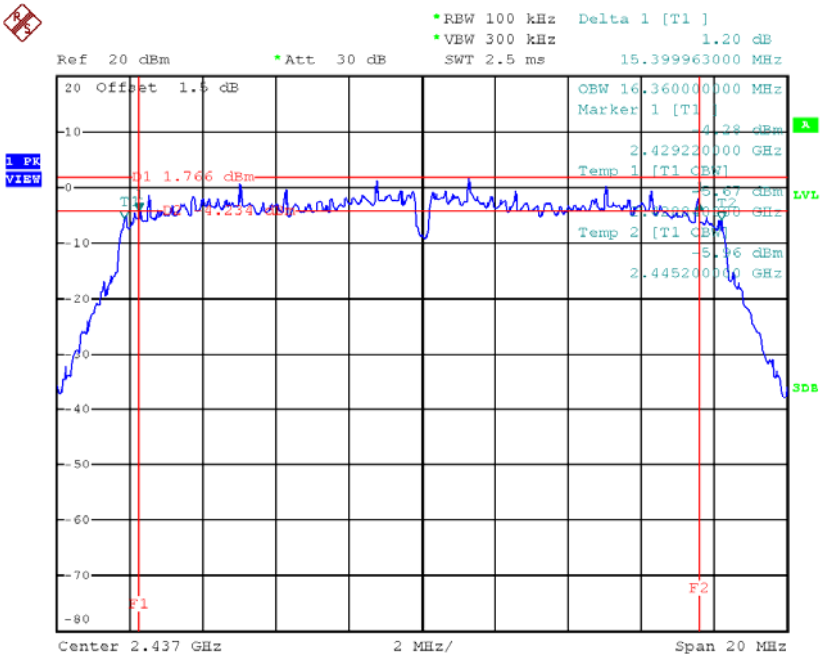
| Test Mode: TX G Mode_CH01/06/11 |
|---|

| Frequency (MHz) | 6dB Bandwidth (MHz) | 99% Occupied BW (MHz) | Min. Limit (kHz) | Test Result |
|---|---|---|---|---|
| 2412 | 15.04 | 16.36 | 500 | Complies |
| 2437 | 15.40 | 16.36 | 500 | Complies |
| 2462 | 15.67 | 16.36 | 500 | Complies |

**TX CH01**

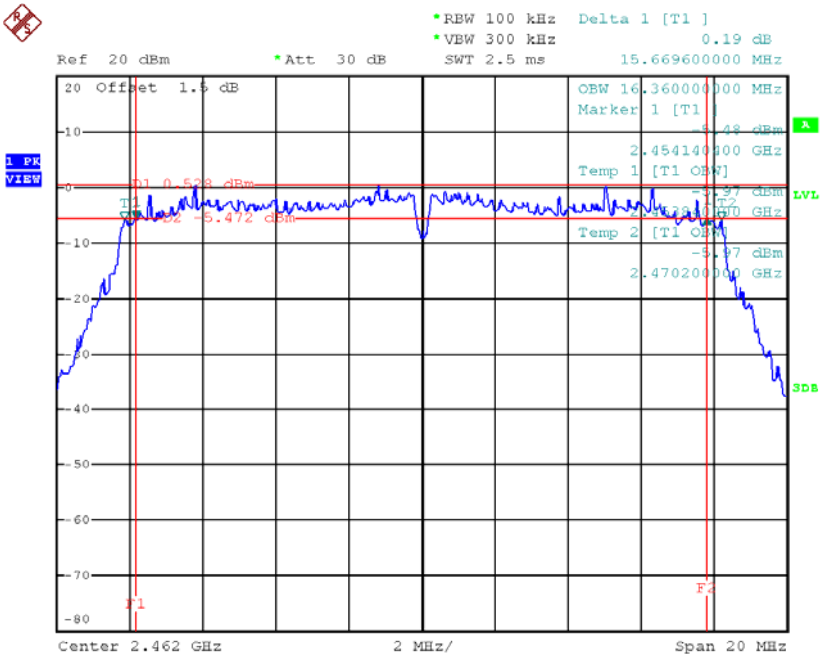


## TX CH06




Date: 5.JUN.2015 18:05:10

## TX CH11

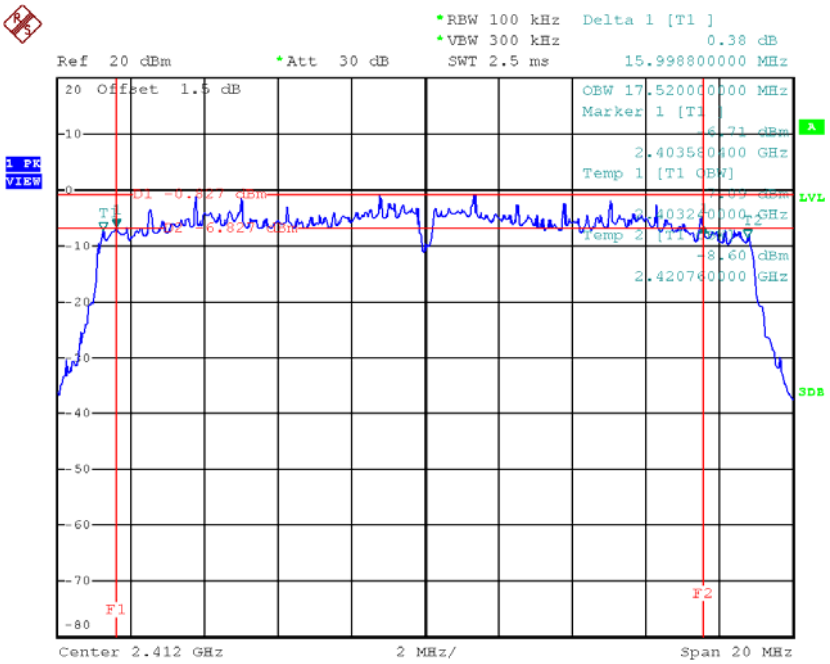



Date: 5.JUN.2015 18:06:24

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

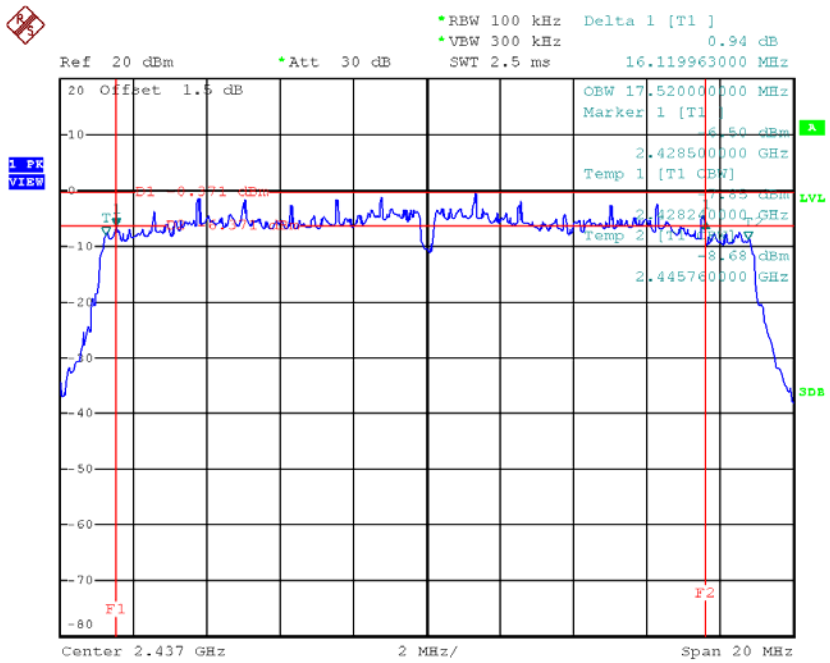
| Frequency (MHz) | 6dB Bandwidth (MHz) | 99% Occupied BW (MHz) | Min. Limit (kHz) | Test Result |
|---|---|---|---|---|
| 2412 | 16.00 | 17.52 | 500 | Complies |
| 2437 | 16.12 | 17.52 | 500 | Complies |
| 2462 | 15.12 | 17.56 | 500 | Complies |

**TX CH01**



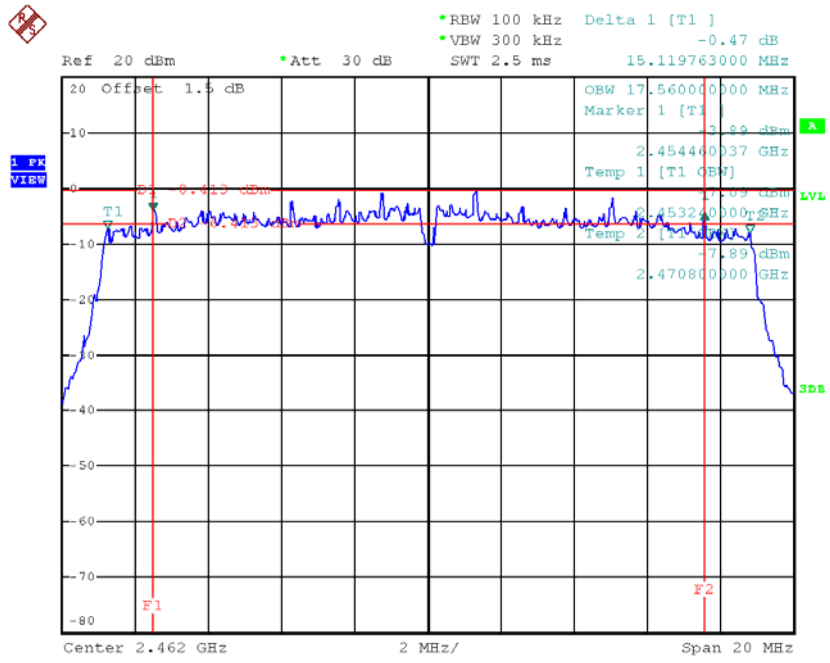

Date: 5.JUN.2015 18:08:39

## TX CH06




Date: 5.JUN.2015 18:09:38

## TX CH11




Date: 5.JUN.2015 18:10:57

# ATTACHMENT F – MAXIMUM PEAK CONDUCTED OUTPUT POWER

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

| Frequency (MHz) | Conducted Power (dBm) | Conducted Power (W) | Max. Limit (dBm) | Max. Limit (W) | Result |
|---|---|---|---|---|---|
| 2412 | 14.55 | 0.03 | 30.00 | 1.00 | Complies |
| 2437 | 14.65 | 0.03 | 30.00 | 1.00 | Complies |
| 2462 | 14.74 | 0.03 | 30.00 | 1.00 | Complies |

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

| Frequency (MHz) | Conducted Power (dBm) | Conducted Power (W) | Max. Limit (dBm) | Max. Limit (W) | Result |
|---|---|---|---|---|---|
| 2412 | 22.05 | 0.16 | 30.00 | 1.00 | Complies |
| 2437 | 22.77 | 0.19 | 30.00 | 1.00 | Complies |
| 2462 | 22.74 | 0.19 | 30.00 | 1.00 | Complies |

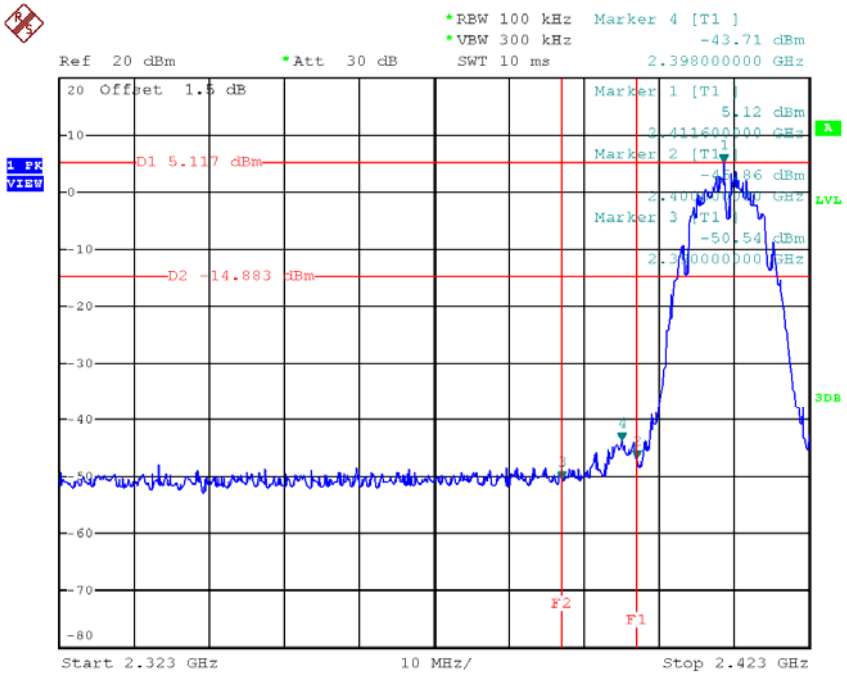
**Test Mode :TX N20 Mode_CH01/06/11**

| Frequency (MHz) | Conducted Power (dBm) | Conducted Power (W) | Max. Limit (dBm) | Max. Limit (W) | Result |
|---|---|---|---|---|---|
| 2412 | 21.21 | 0.13 | 30.00 | 1.00 | Complies |
| 2437 | 20.49 | 0.11 | 30.00 | 1.00 | Complies |
| 2462 | 20.32 | 0.11 | 30.00 | 1.00 | Complies |

# ATTACHMENT G - ANTENNA CONDUCTED SPURIOUS EMISSION

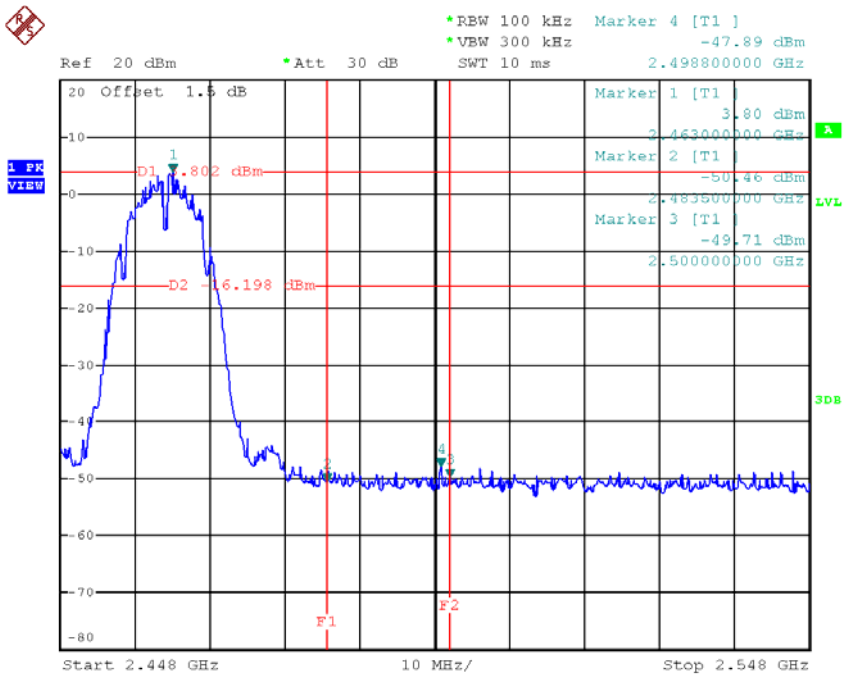
| | |
|---|---|
| **Test Mode :** | **TX B Mode** |

## TX B mode CH01



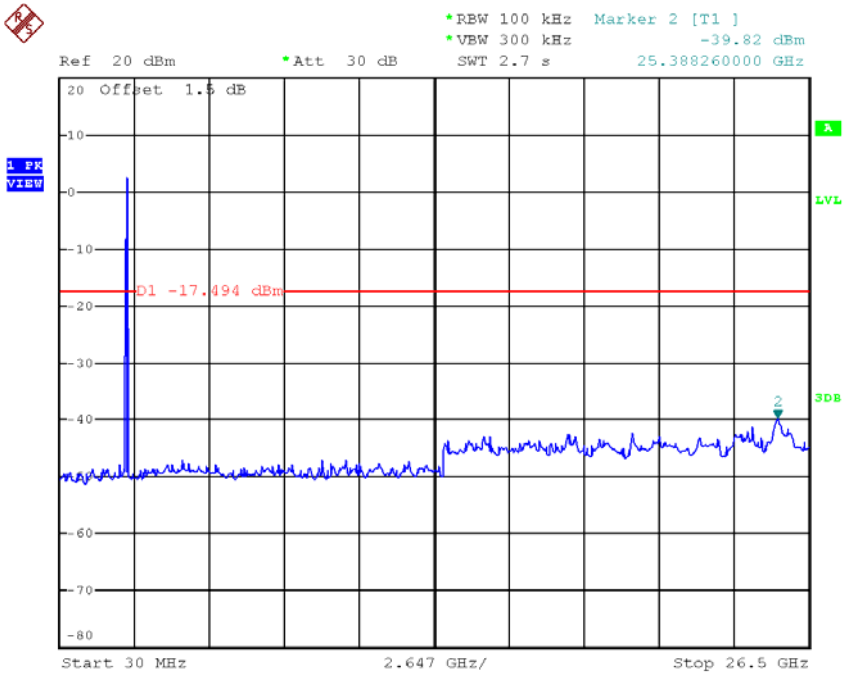

Date: 5.JUN.2015 17:57:35

## TX B mode CH11



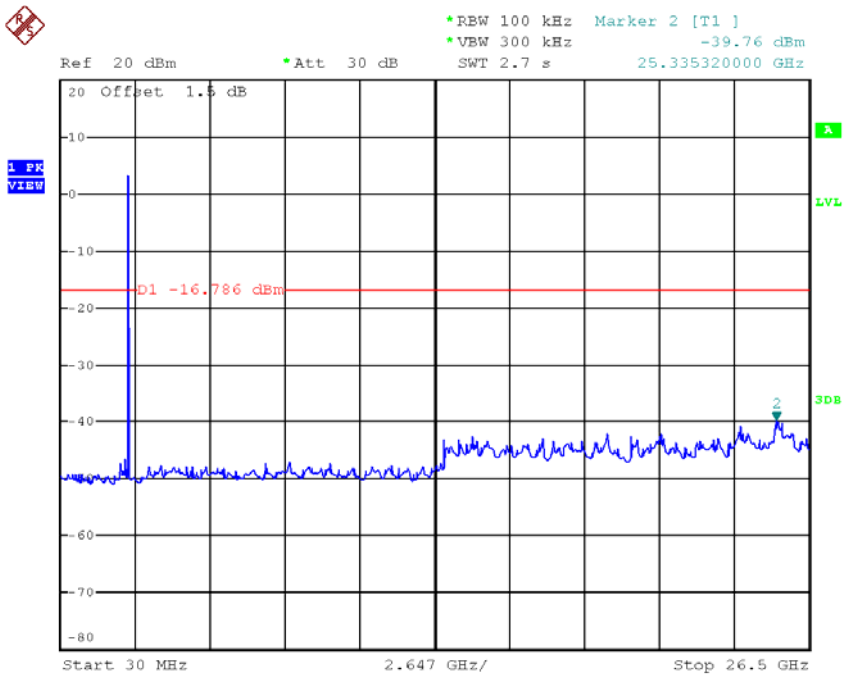

Date: 5.JUN.2015 18:01:05

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



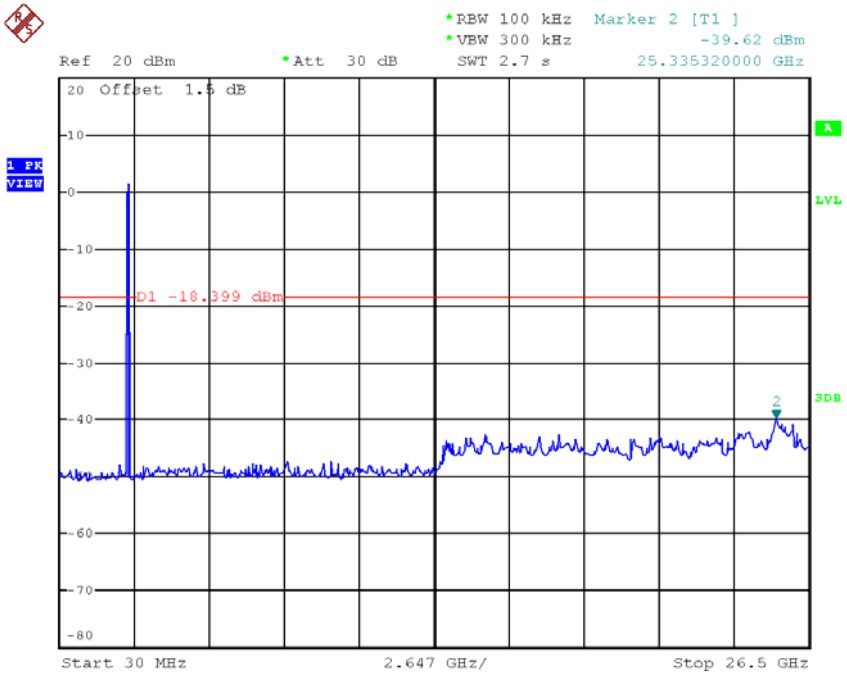

Date: 5.JUN.2015 17:57:28

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




Date: 5.JUN.2015 17:59:31

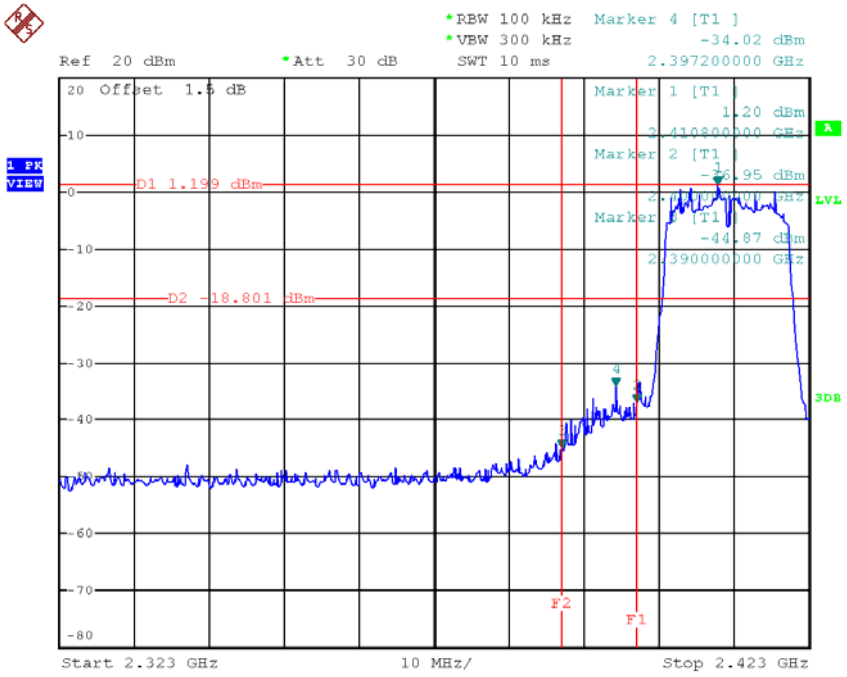
## TX B mode CH11 (10 Harmonic of the frequency)




Date: 5.JUN.2015 18:00:41

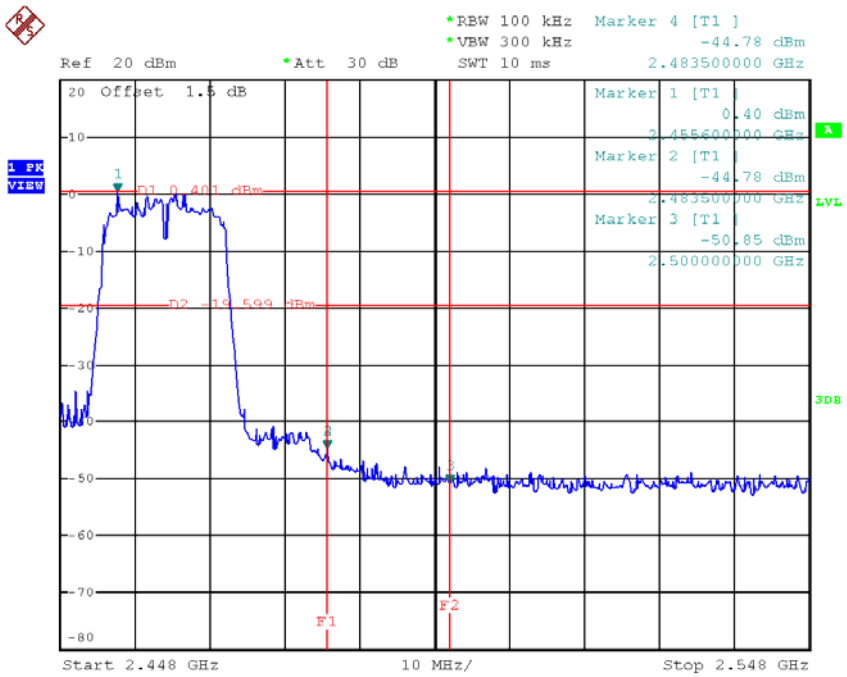
| Test Mode : | TX G Mode |
|---|---|

## TX G mode CH01



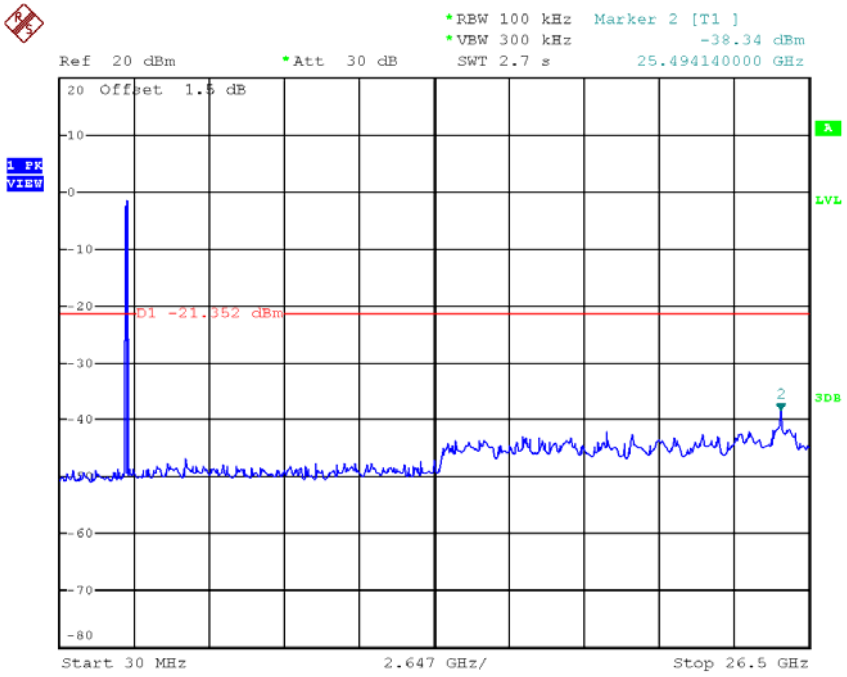

Date: 5.JUN.2015 18:04:25

## TX G mode CH11



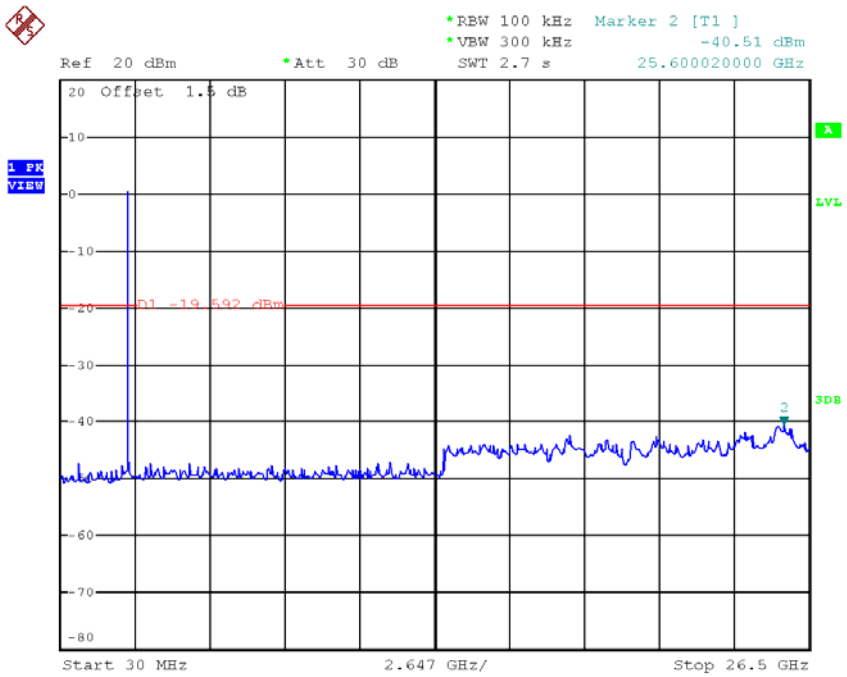

Date: 5.JUN.2015 18:06:43

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



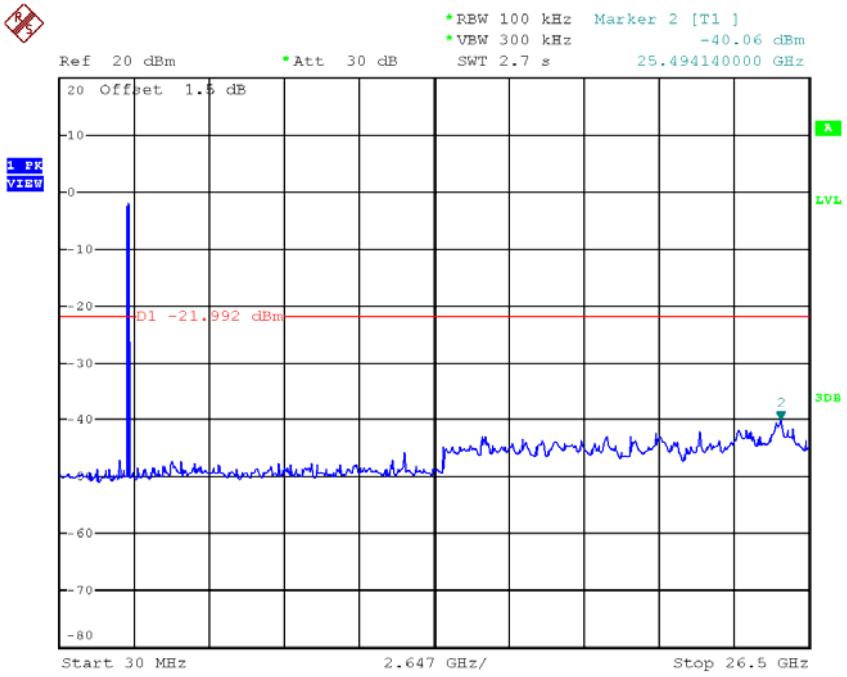

Date: 5.JUN.2015 18:04:18

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




Date: 5.JUN.2015 18:05:23

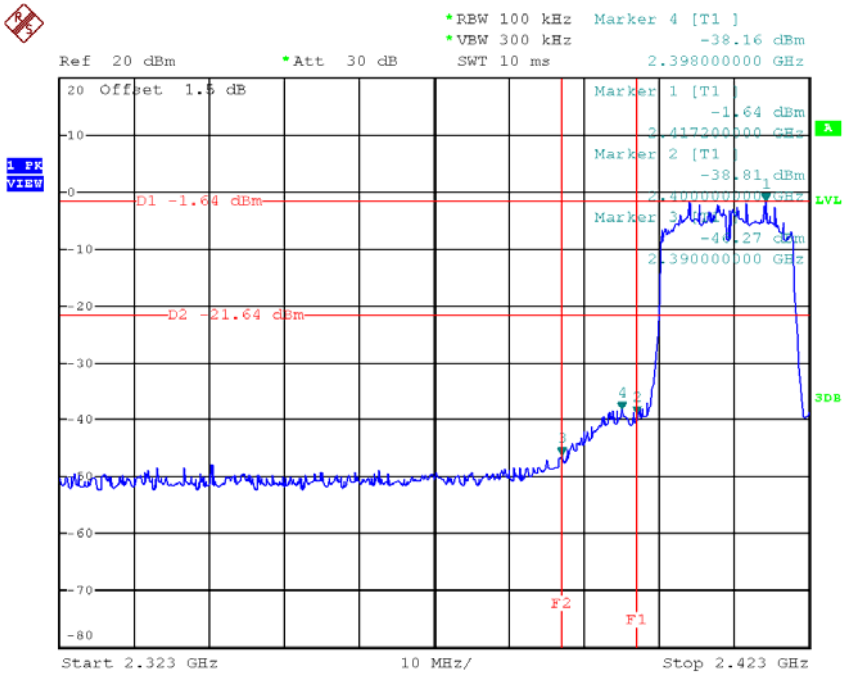
## TX G mode CH11 (10 Harmonic of the frequency)




Date: 5.JUN.2015 18:06:36

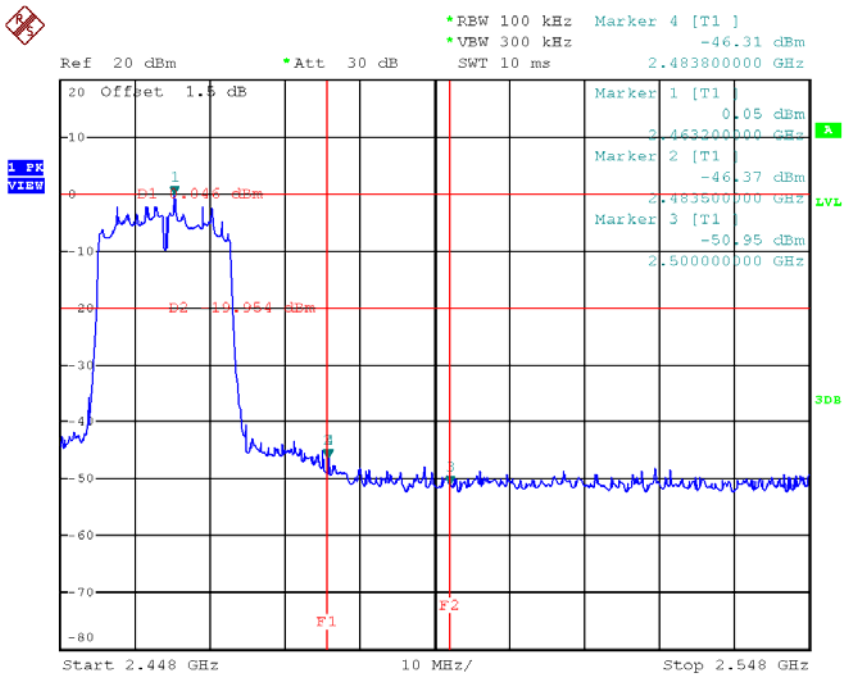
| Test Mode : | TX N-20M Mode |
|---|---|

## TX HT20 mode CH01



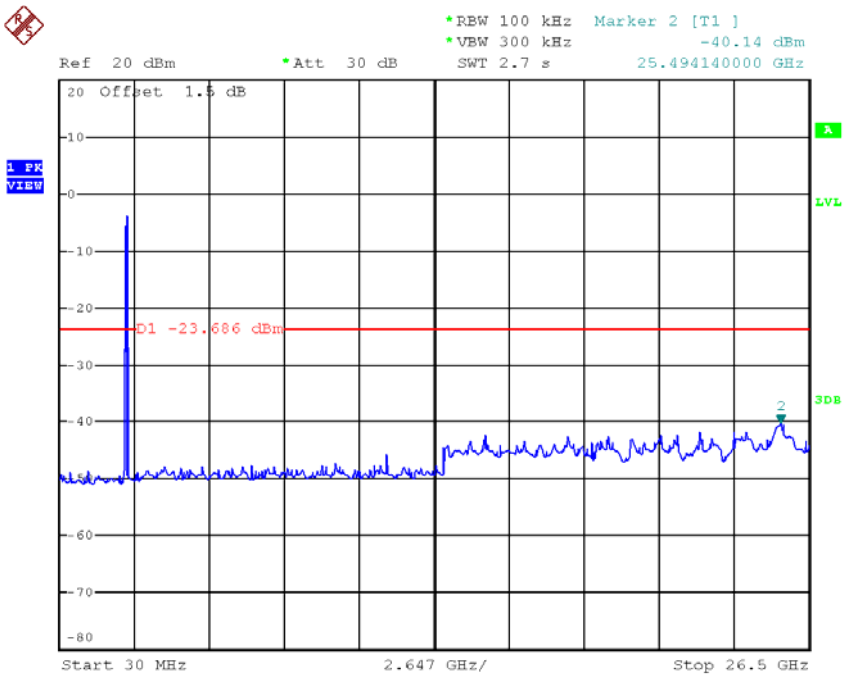

Date: 5.JUN.2015 18:08:59

## TX HT20 mode CH11



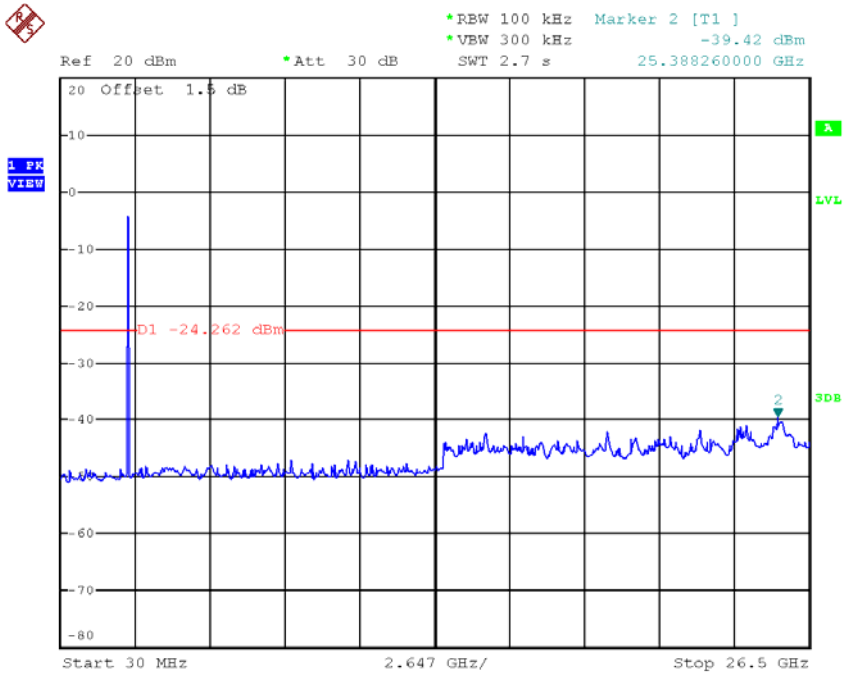

Date: 5.JUN.2015 18:11:34

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



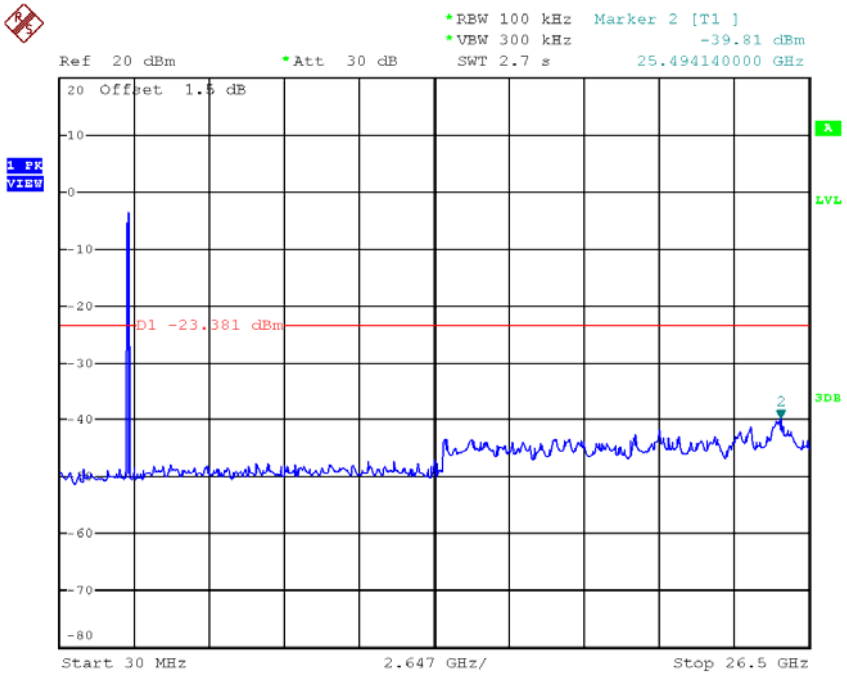

Date: 5.JUN.2015 18:08:52

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




Date: 5.JUN.2015 18:09:50

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



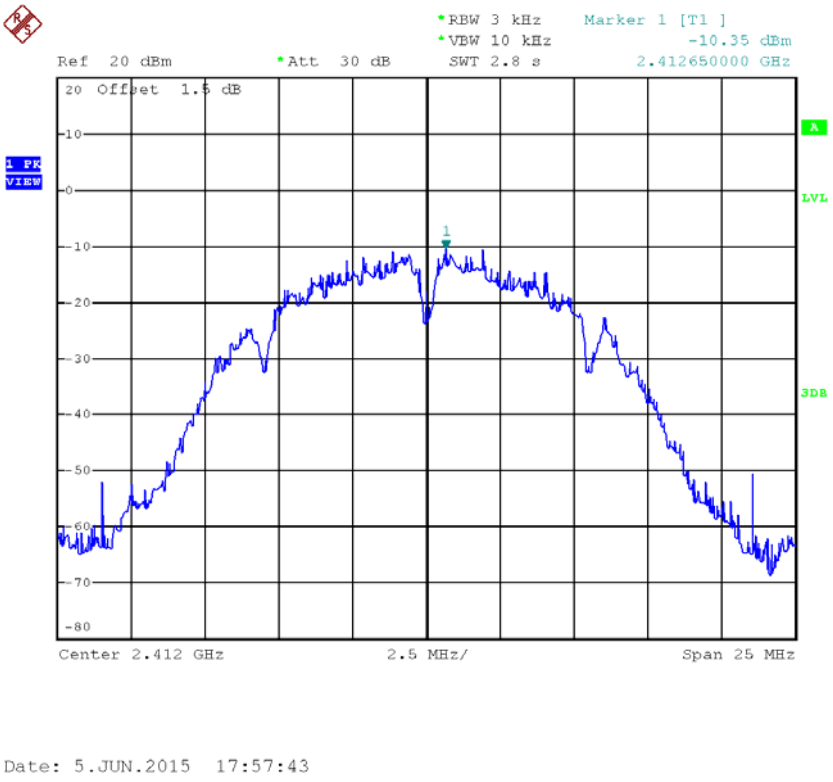

Date: 5.JUN.2015 18:11:10

# ATTACHMENT H - POWER SPECTRAL DENSITY

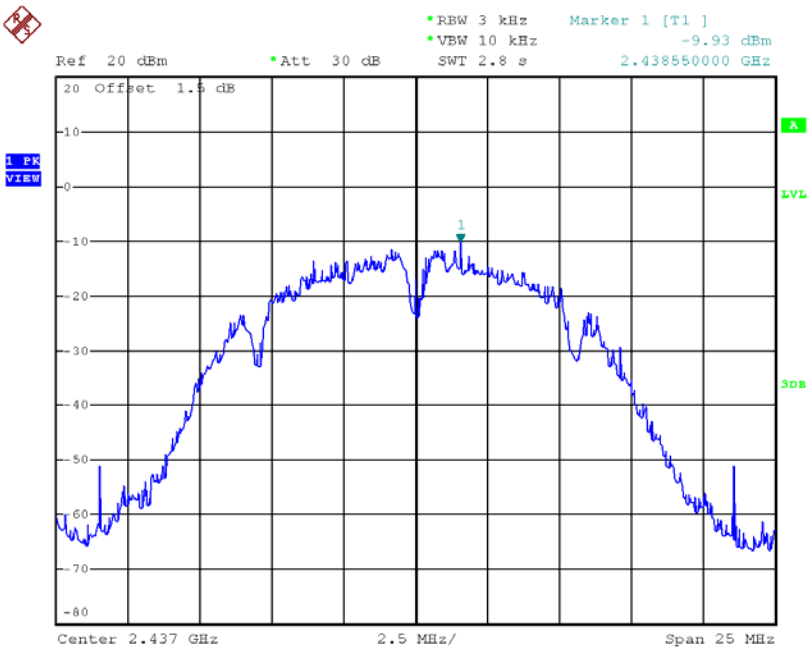
**Test Mode :TX B Mode_CH01/06/11**

| Frequency (MHz) | Power Density (dBm/3kHz) | Power Density (mW/3kHz) | Max. Limit (dBm/3kHz) | Result |
|---|---|---|---|---|
| 2412 | -10.35 | 0.09 | 8.00 | Complies |
| 2437 | -9.93 | 0.10 | 8.00 | Complies |
| 2462 | -10.09 | 0.10 | 8.00 | Complies |

**TX CH01**

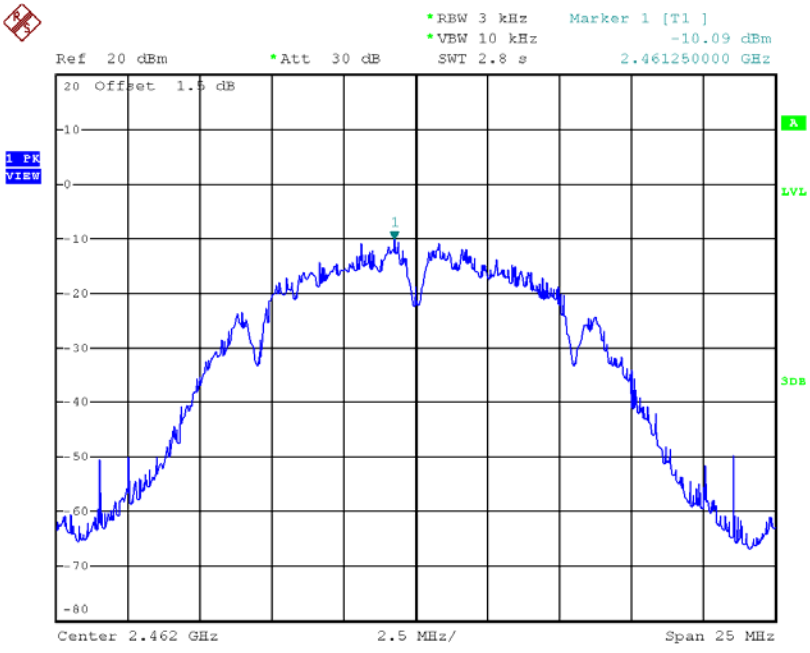


## TX CH06




Date: 5.JUN.2015 17:59:40

## TX CH11

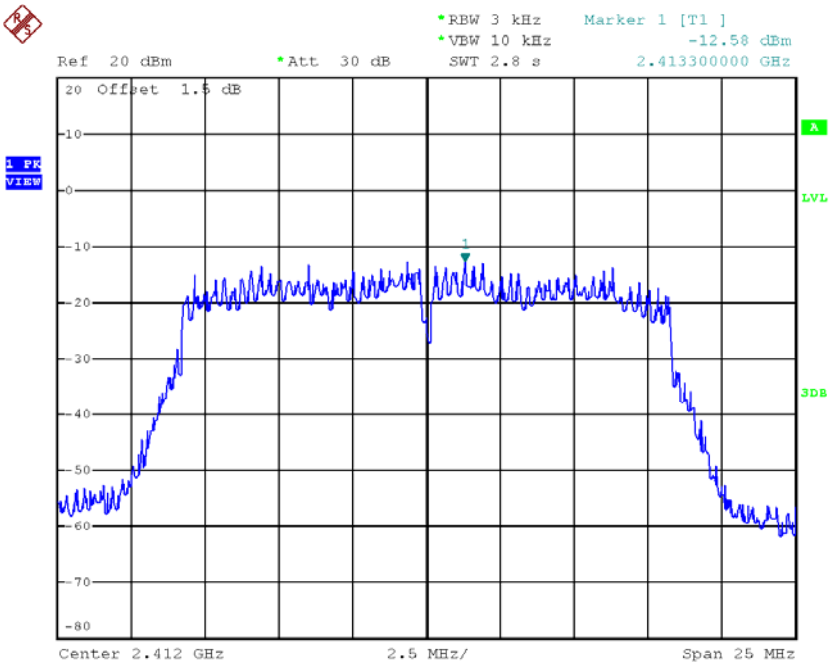



Date: 5.JUN.2015 18:01:14

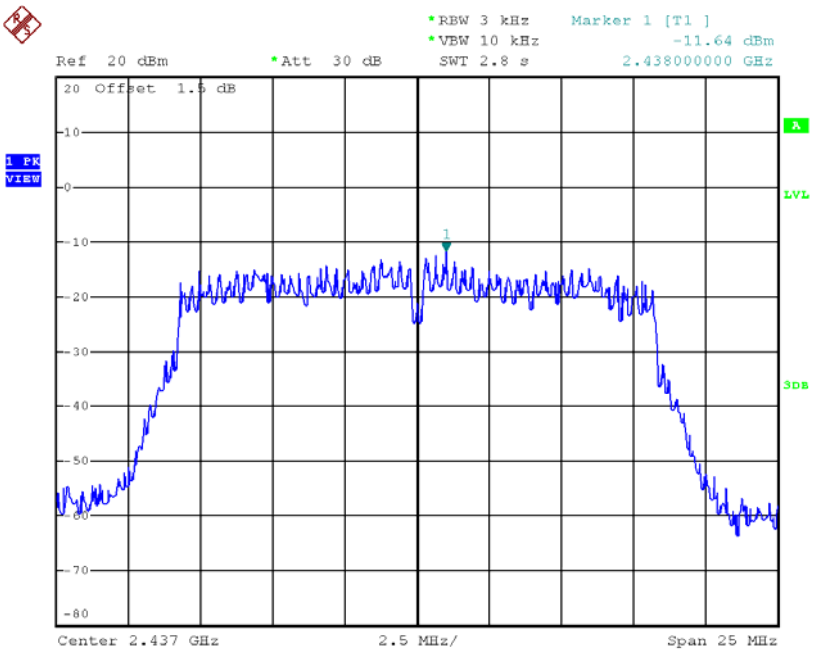
**Test Mode :TX G Mode_CH01/06/11**

| Frequency (MHz) | Power Density (dBm/3kHz) | Power Density (mW/3kHz) | Max. Limit (dBm/3kHz) | Result |
|---|---|---|---|---|
| 2412 | -12.58 | 0.06 | 8.00 | Complies |
| 2437 | -11.64 | 0.07 | 8.00 | Complies |
| 2462 | -12.82 | 0.05 | 8.00 | Complies |

**TX CH01**

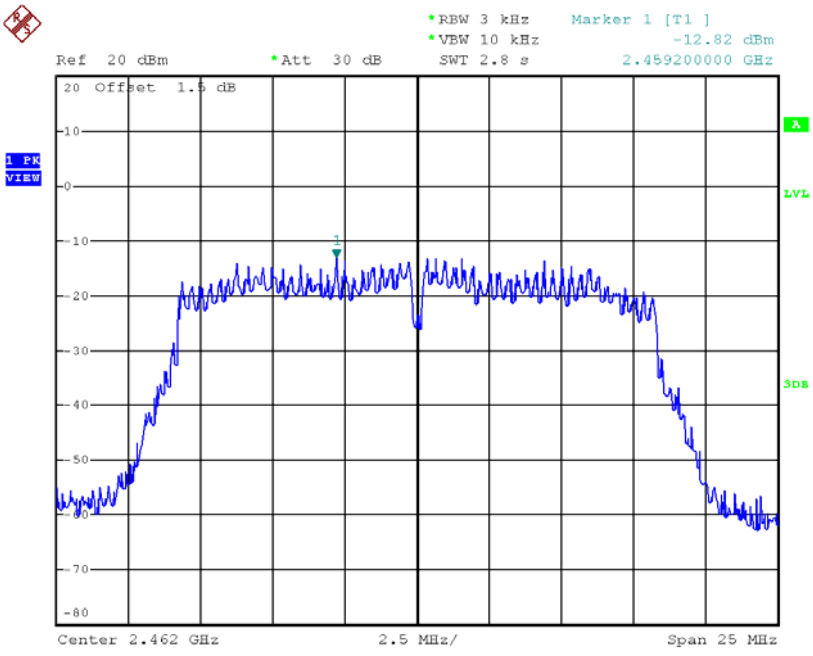


## TX CH06




Date: 5.JUN.2015 18:05:31

## TX CH11

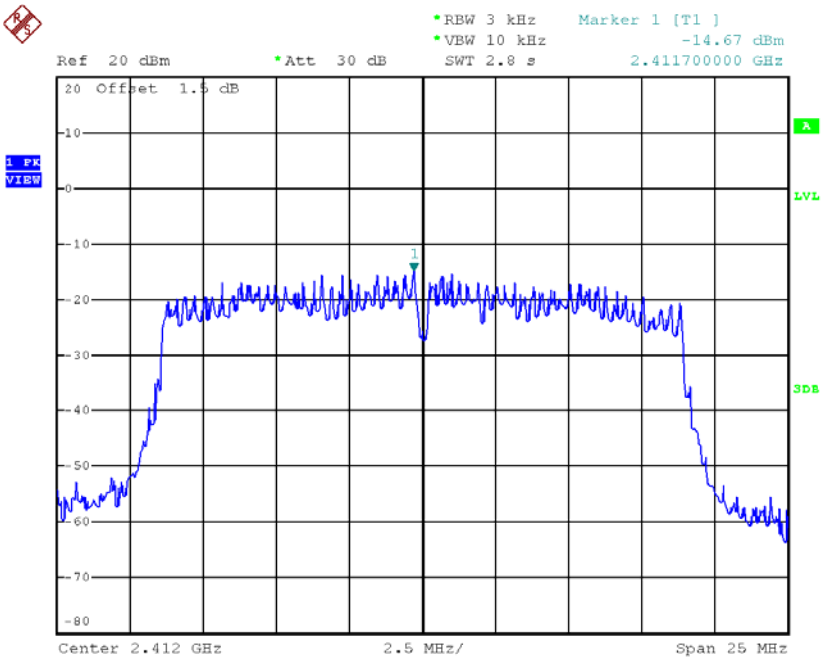



Date: 5.JUN.2015 18:06:52

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

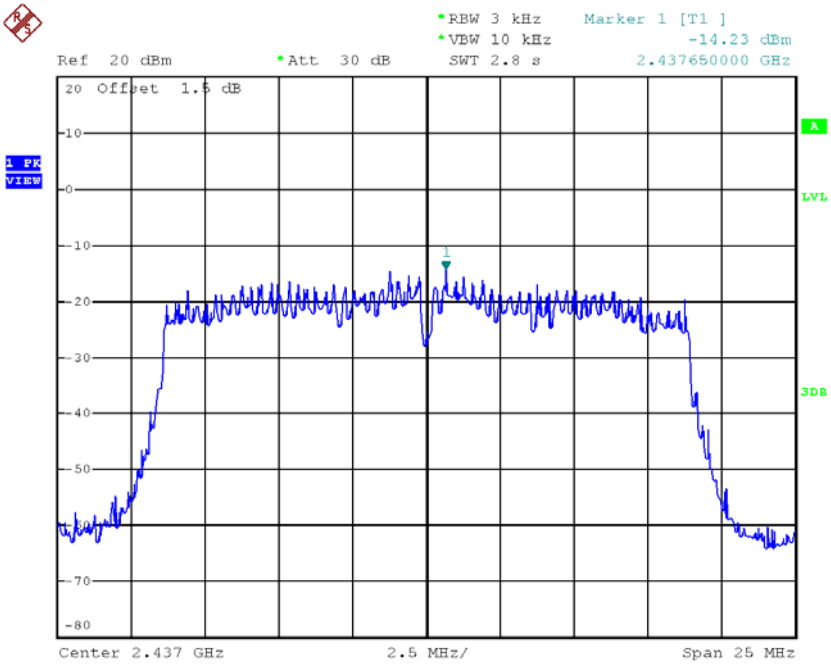
| Frequency (MHz) | Power Density (dBm/3kHz) | Power Density (mW/3kHz) | Max. Limit (dBm/3kHz) | Result |
|---|---|---|---|---|
| 2412 | -14.67 | 0.03 | 8.00 | Complies |
| 2437 | -14.23 | 0.04 | 8.00 | Complies |
| 2462 | -14.97 | 0.03 | 8.00 | Complies |

**TX CH01**



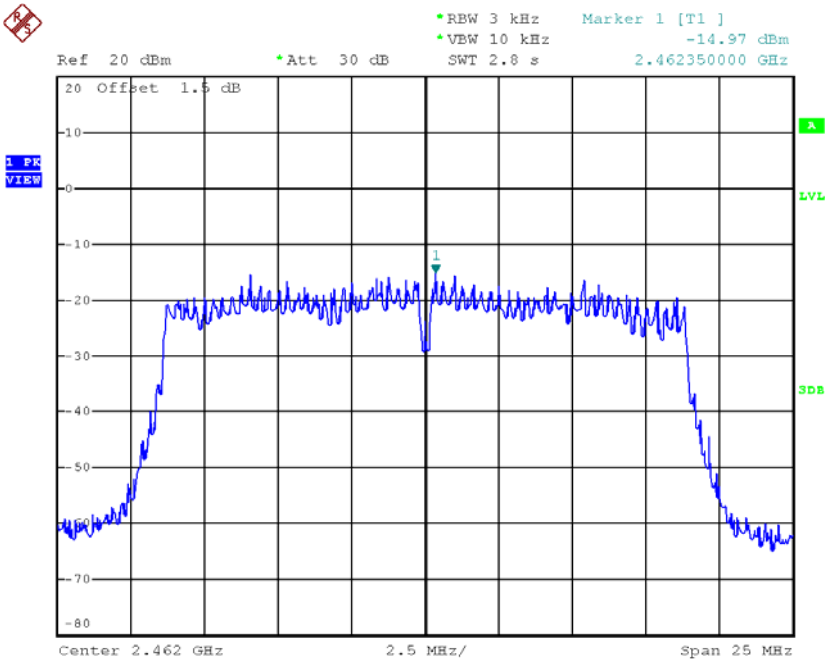

Date: 5.JUN.2015 18:09:08

## TX CH06




Date: 5.JUN.2015 18:09:59

## TX CH11




Date: 5.JUN.2015 18:11:43