# FCC Radio Test Report

## FCC ID: QISAGS2-L03

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

| | | |
|---|---|---|
| **Project No.** | : | 1808C216 |
| **Equipment** | : | HUAWEI MediaPad T5 |
| **Test Model** | : | AGS2-L03 |
| **Series Model** | : | N/A |
| **Applicant** | : | Huawei Technologies Co., Ltd. |
| **Address** | : | Administration Building, Headquarters of Huawei Technologies Co., Ltd., Bantian, Longgang District, Shenzhen, 518129, P.R.C |

| | | |
|---|---|---|
| **Date of Receipt** | : | Aug. 24, 2018 |
| **Date of Test** | : | Aug. 27, 2018~Sep. 07, 2018 |
| **Issued Date** | : | Sep. 12, 2018 |
| **Tested by** | : | BTL Inc. |

**Testing Engineer** : Paul. Li
(Paul Li)

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(David Mao)

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(Steven Lu)


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NVLAP® TESTING NVLAP LAB CODE 200788-0

## Declaration

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

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

The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the U.S. Government.

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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.

**BTL** is not responsible for the sampling stage, so the results only apply to the sample as received.

The information, data and test plan are provided by manufacturer, so it is manufacturer's responsibility to ensure that the apparatus meets the essential requirements in all the possible configurations as representative of its intended use.

## 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-3-1808C216 | Original Issue. | Sep. 12, 2018 |

## 1. CERTIFICATION

| | | |
|---|---|---|
| Equipment | : | HUAWEI MediaPad T5 |
| Brand Name | : | HUAWEI |
| Test Model | : | AGS2-L03 |
| Series Model | : | N/A |
| Applicant | : | Huawei Technologies Co., Ltd. |
| Manufacturer | : | Huawei Technologies Co., Ltd. |
| Address | : | Administration Building, Headquarters of Huawei Technologies Co., Ltd., Bantian, Longgang District, Shenzhen, 518129, P.R.C |
| Factory | : | Huawei Technologies Co., Ltd. |
| Address | : | Building, Headquarters of Huawei Technologies Co., Ltd., Bantian, Longgang District, Shenzhen, 518129, P.R.C |
| Date of Test | : | Aug. 27, 2018~Sep. 07, 2018 |
| Test Sample | : | Engineering Sample No.: D180807232 for conducted, D180807229 for radiated. |
| Standard(s) | : | FCC Part15, Subpart C (15.247) / ANSI C63.10-2013 |

The above equipment has been tested and found compliance with the requirement of the relative standards by BTL Inc.
The test data, data evaluation, and equipment configuration contained in our test report (Ref No. BTL-FCCP-3-1808C216) were obtained utilizing the test procedures, test instruments, test sites that has been accredited by the Authority of NVLAP according to the ISO-17025 quality assessment standard and technical standard(s).

**Test results included in this report is only for the WLAN 2.4G part.**

## 2. SUMMARY OF TEST RESULTS

Test procedures according to the technical standard(s):

| Applied Standard(s): FCC Part15 (15.247) , Subpart C | | | |
|---|---|---|---|
| Standard(s) Section | Test Item | Judgment | Remark |
| 15.207 | Conducted Emission | PASS | |
| 15.247(d) | Antenna conducted Spurious Emission | PASS | |
| 15.247(a)(2) | 6 dB Bandwidth | PASS | |
| 15.247(b)(3) | Maximum output power | PASS | |
| 15.247(e) | Power Spectral Density | PASS | |
| 15.203 | Antenna Requirement | PASS | |
| 15.247(d)/ 15.205/ 15.209 | Transmitter Radiated Emissions | PASS | |

Note:

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

## 2.1 TEST FACILITY

The test facilities used to collect the test data in this report is at the location of No.3,Jinshagang 1st Road, Shixia, Dalang Town, Dongguan, Guangdong, China.
BTL's test firm number for FCC: 854385
BTL's designation number for FCC: CN5020

## 2.2 MEASUREMENT UNCERTAINTY

The measurement uncertainty figures shall be calculated according the methods described in the ETSI TR 100 028 and shall correspond to an expansion factor (coverage factor) k=1.96 or k=2(which provide confidence levels of respectively 90% and 95.45% in the case where the distributions characterizing the actual measurement uncertainties are normal (Gaussian)). Measurement Uncertainty for a Level of Confidence of 95 %, U=2xUc(y).

The BTL measurement uncertainty as below table:

A. Conducted Measurement:

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

B. Radiated Measurement:

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

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

# 3. GENERAL INFORMATION

## 3.1 GENERAL DESCRIPTION OF EUT

| | | |
|---|---|---|
| Equipment | HUAWEI MediaPad T5 | |
| Brand Name | HUAWEI | |
| Test Model | AGS2-L03 | |
| Series Model | N/A | |
| Model Difference(s) | N/A | |
| Software Version | A6t6e | |
| Hardware Version | AGS2-L03 8.0.0.20(C605) | |
| Product Description | Operation Frequency | 2412 MHz ~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 up to 150 Mbps |
| | Output Power (Max.) | 802.11b: 20.58 dBm<br>802.11g: 20.37 dBm<br>802.11n(20 MHz): 20.78 dBm<br>802.11n(40 MHz): 20.57 dBm |
| Power Source | 1# DC voltage supplied from AC/DC adapter.<br>Model: HW-050100U01<br>2# Supplied from battery.<br>Model: HB2899C0ECW-C | |
| Power Rating | 1# I/P: 100-240V~,50/60Hz,0.2A<br>O/P: DC 5V, 1A<br>2# DC 3.82V, 4980mAh | |

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(20 MHz)<br>CH03 - CH09 for 802.11n(40 MHz) | | | | | | | |
|---|---|---|---|---|---|---|---|
| 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 | HUAWEI | N/A | Internal | N/A | 0.1 |

4 The EUT contains following accessory devices.

| Item | Manufacturer | Factory | Description |
|---|---|---|---|
| Adapter | Huawei Technologies Co., Ltd. | HUIZHOU BYD ELECTRONIC CO., LTD. | PDM Number: 02220780<br>Model Name: HW-050100U01<br>Input Voltage :<br>100-240V ~50/60Hz, 0.2A<br>Output Voltage: DC 5V,1A<br>(The EU and US adapter are the same PCB board of same factory) |
| | | Shenzhen Huntkey Electric Co., Ltd. | |
| | | DONG GUAN PHITEK ELECTRONICS CO., LTD. | |
| Battery | Huawei Technologies Co.,Ltd. | SCUD (FUJIAN) Electronics Co., Ltd | PDM Number: 24022744<br>Model Name: HB2899C0ECW-C<br>Rated Voltage: DC 3.82V<br>Rated Capacity: 4980mAh |
| USB Cable | Huawei Technologies Co.,Ltd. | FOXCONN INTERCONNECT TECHNOLOGY LIMITED | Model Name: 04071002 |
| | | HONGLIN TECHNOLOGY CO.,LTD | |
| | | Luxshare Precision Industry Co., Ltd. | |

## 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-20 MHz Mode Channel 01/06/11 |
| Mode 4 | TX N-40 MHz 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-20 MHz Mode Channel 01/06/11 |
| Mode 4 | TX N-40 MHz Mode Channel 03/06/09 |

| **For Band Edge Test** | |
|---|---|
| Final Test Mode: | Description |
| Mode 1 | TX B Mode Channel 01/06/11 |
| Mode 2 | TX G Mode Channel 01/06/11 |
| Mode 3 | TX N-20 MHz Mode Channel 01/06/11 |
| Mode 4 | TX N-40 MHz Mode Channel 03/06/09 |

| 6 dB Spectrum Bandwidth | |
|---|---|
| Final Test Mode: | Description |
| Mode 1 | TX B Mode Channel 01/06/11 |
| Mode 2 | TX G Mode Channel 01/06/11 |
| Mode 3 | TX N-20 MHz Mode Channel 01/06/11 |
| Mode 4 | TX N-40 MHz Mode Channel 03/06/09 |

| Maximum Output Power | |
|---|---|
| Final Test Mode: | Description |
| Mode 1 | TX B Mode Channel 01/06/11 |
| Mode 2 | TX G Mode Channel 01/06/11 |
| Mode 3 | TX N-20 MHz Mode Channel 01/06/11 |
| Mode 4 | TX N-40 MHz Mode Channel 03/06/09 |

| Power Spectral Density | |
|---|---|
| Final Test Mode: | Description |
| Mode 1 | TX B Mode Channel 01/06/11 |
| Mode 2 | TX G Mode Channel 01/06/11 |
| Mode 3 | TX N-20 MHz Mode Channel 01/06/11 |
| Mode 4 | TX N-40 MHz Mode Channel 03/06/09 |

Note:

(1)Radiated Emissions of middle channel is performed and Band edge of high and low channels are performed.

(2) 802.11b mode: DSSS (1 Mbps)
802.11g mode: OFDM (6 Mbps)
802.11n HT20 mode : OFDM (6.5 Mbps)
802.11n HT40 mode : OFDM (13.5 Mbps)

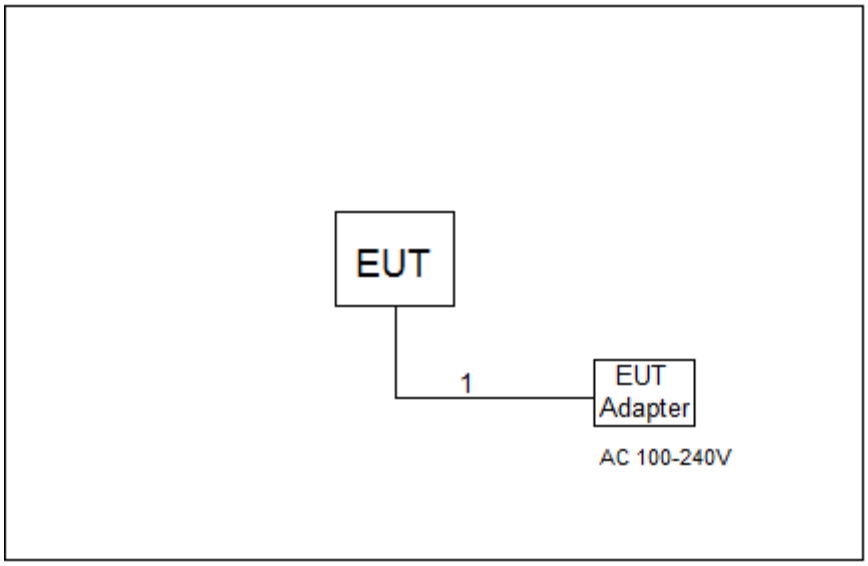
(3) For radiated 30 MHz to 1000 MHz test, the 802.11b is found to be the worst case and recorded.

### 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 | WiFiRFAuth.apk | | |
|---|---|---|---|
| Frequency (MHz) | 2412 | 2437 | 2462 |
| 802.11b | 16 | 16 | 16 |
| 802.11g | 9 | 9 | 9 |
| 802.11n (20 MHz) | 9 | 9 | 9 |
| Frequency (MHz) | 2422 | 2437 | 2452 |
| 802.11n (40 MHz) | 8 | 8 | 8 |

### 3.4 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED




### 3.5 DESCRIPTION OF SUPPORT UNITS

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

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

| Item | Shielded Type | Ferrite Core | Length | Note |
|---|---|---|---|---|
| 1 | NO | NO | 1.2m | DC Cable |

# 4. EMC EMISSION TEST

## 4.1 CONDUCTED EMISSION MEASUREMENT

### 4.1.1 POWER LINE CONDUCTED EMISSION LIMITS (Frequency Range 150 kHz-30 MHz)

| Frequency of Emission (MHz) | Conducted Limit (dBμV) | |
|---|---|---|
| | Quasi-peak | Average |
| 0.15 - 0.50 | 66 to 56* | 56 to 46* |
| 0.50 - 5.0 | 56 | 46 |
| 5.0 - 30.0 | 60 | 50 |

Note:

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

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

The following table is the setting of the receiver

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

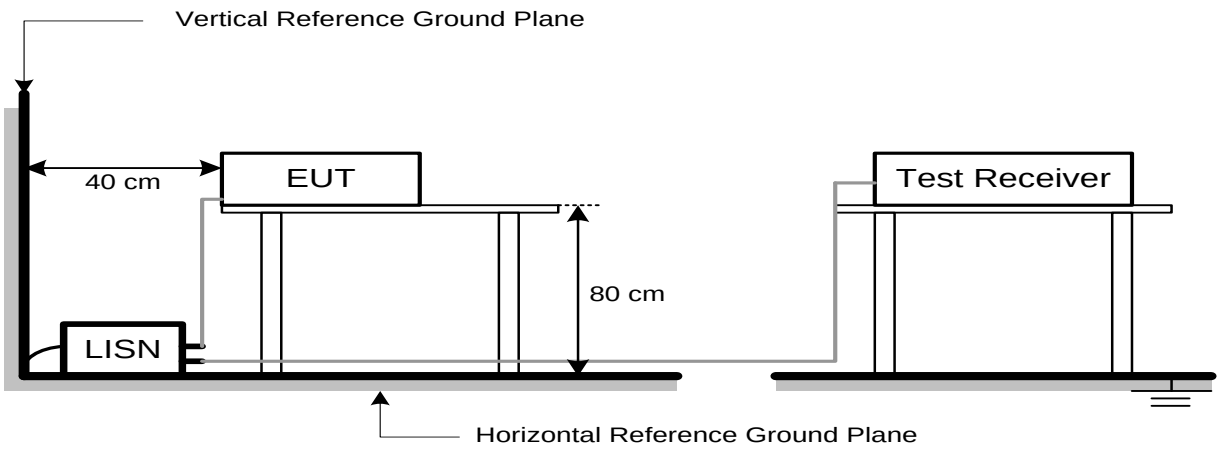
### 4.1.2 TEST PROCEDURE

a. The EUT was placed 0.8 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipment 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




### 4.1.5 EUT OPERATING CONDITIONS

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

### 4.1.6 EUT TEST CONDITIONS

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

### 4.1.7 TEST RESULTS

Please refer to the Appendix A.

## 4.2 RADIATED EMISSION MEASUREMENT

### 4.2.1 RADIATED EMISSION LIMITS

In case the emission fall within the restricted band specified on 15.205(a), then the 15.209(a) limit in the table below has to be followed.

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

| 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 1000 MHz)

| Frequency (MHz) | Band edge at 3m (dBµV/m) | | Harmonic at 1.5m (dBµV/m) | |
|---|---|---|---|---|
| | Peak | Average | Peak | Average |
| Above 1000 | 74 | 54 | 80 (Note 5) | 60(Note 5) |

Note:

(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

(5)

$$FS_{\text{limit}} = FS_{\max} - 20\log\left(\frac{d_{\text{limit}}}{d_{\text{measure}}}\right)$$

20log d limit/d measure=20log 3/1.5=6 dB.

| Spectrum Parameter | Setting |
|---|---|
| Attenuation | Auto |
| Start Frequency | 1000 MHz |
| Stop Frequency | 10th carrier harmonic |
| RBW / VBW<br>(Emission in restricted band) | 1 MHz / 3 MHz for Peak,<br>1 MHz / 1/T for Average |

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

### 4.2.2 TEST PROCEDURE

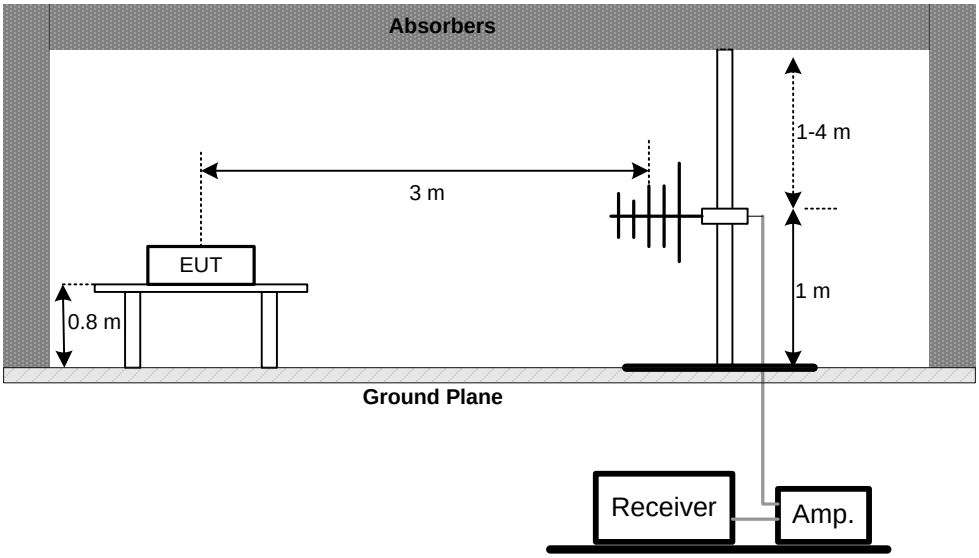
a. The measuring distance of 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1 GHz)
b. The measuring distance of 3 m or 1.5m shall be used for measurements. The EUT was placed on the top of a rotating table 1.5 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(above 1GHz)
c. The height of the equipment or of the substitution antenna shall be 0.8m or 1.5m; the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights find the maximum reading (used Bore sight function).
e. The receiver system was set to peak and average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz.
f. The initial step in collecting radiated emission data is a receiver peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
g. All readings are Peak unless otherwise stated QP in column of Note. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn‘t perform. (below 1 GHz)
h. All readings are Peak Mode value unless otherwise stated AVG in column of Note. If the Peak Mode Measured value compliance with the Peak Limits and lower than AVG Limits, the EUT shall be deemed to meet both Peak & AVG Limits and then only Peak Mode was measured, but AVG Mode didn‘t perform. (above 1 GHz)
i. For the actual test configuration, please refer to the related Item -EUT Test Photos.

### 4.2.3 DEVIATION FROM TEST STANDARD

No deviation

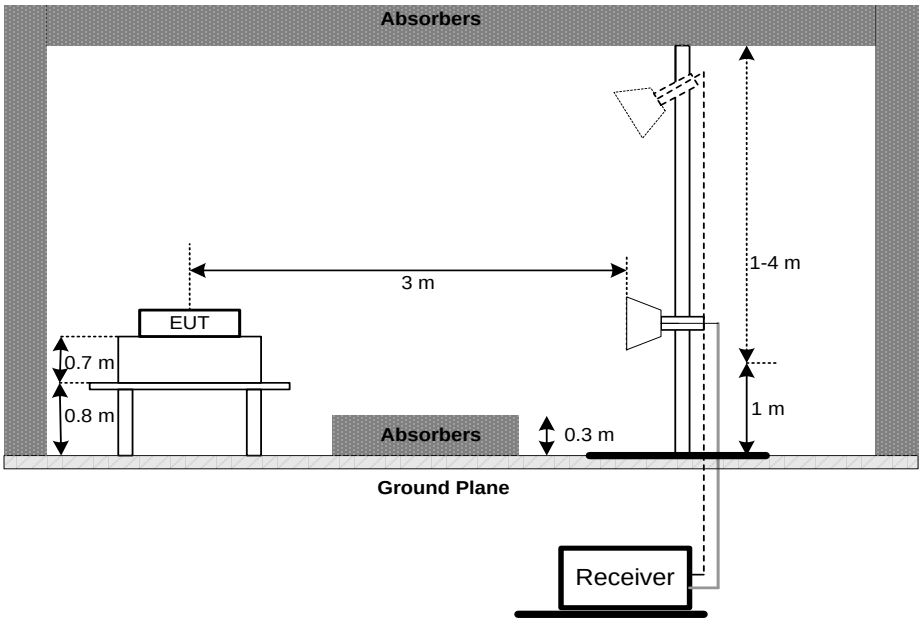
### 4.2.4 TEST SETUP

(A) Radiated Emission Test Set-Up Frequency 30 MHz-1000 MHz

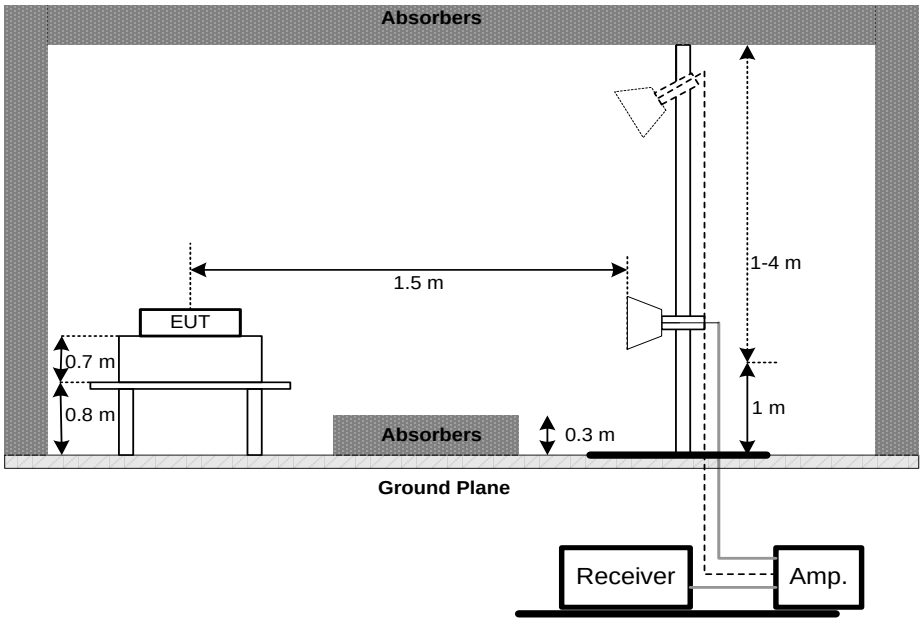


(B) Radiated Emission Test Set-Up Frequency Above 1 GHz

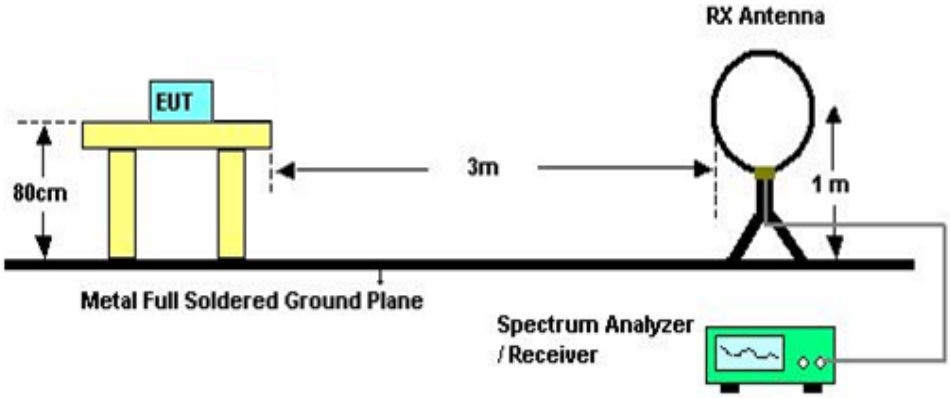
Band edge




Harmonic



(C) For Radiated Emissions 9 kHz-30 MHz




### 4.2.5 EUT OPERATING CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

### 4.2.6 EUT TEST CONDITIONS

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

### 4.2.7 TEST RESULTS (9 kHz TO 30 MHz)

Please refer to the Appendix 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 (30 MHz TO 1000 MHz)

Please refer to the Appendix C.

### 4.2.9 TEST RESULTS (ABOVE 1000 MHz)

Please refer to the Appendix 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 |

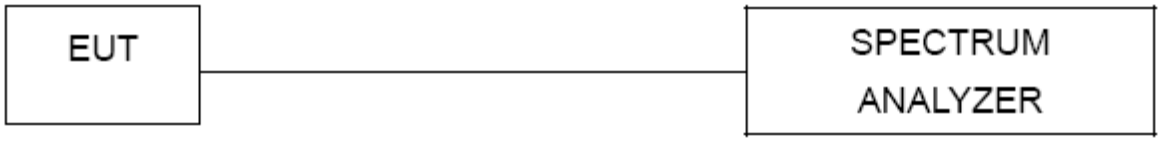
#### 5.1.1 TEST PROCEDURE

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= 100 kHz, VBW=300 kHz, Sweep time = 2.5 ms.

#### 5.1.2 DEVIATION FROM STANDARD

No deviation.

#### 5.1.3 TEST SETUP




#### 5.1.4 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

#### 5.1.5 EUT TEST CONDITIONS

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

#### 5.1.6 TEST RESULTS

Please refer to the Appendix E.

# 6. MAXIMUM 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 30 dBm | 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 v04 DTS Meas Guidance.

### 6.1.2 DEVIATION FROM STANDARD

No deviation.

### 6.1.3 TEST SETUP


### 6.1.4 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

### 6.1.5 EUT TEST CONDITIONS

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

### 6.1.6 TEST RESULTS

Please refer to the Appendix 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 or a radiated measurement, provided the transmitter demonstrates compliance with the peak Output Power limits. If the transmitter complies with the Output Power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)).

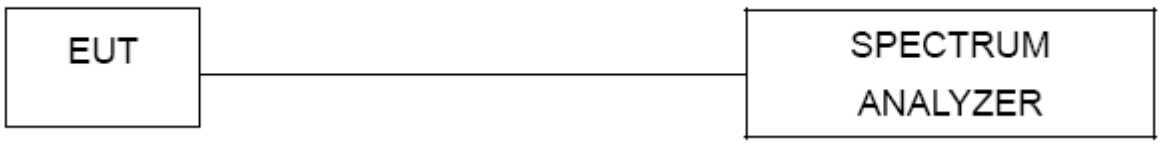
### 7.1.1 TEST PROCEDURE

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= 100 kHz, VBW=300 kHz, Sweep time = Auto.
c. Offset=antenna gain+cable loss

### 7.1.2 DEVIATION FROM STANDARD

No deviation.

### 7.1.3 TEST SETUP




### 7.1.4 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

### 7.1.5 EUT TEST CONDITIONS

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

### 7.1.6 TEST RESULTS

Please refer to the Appendix 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 3 kHz) | 2400-2483.5 | PASS |

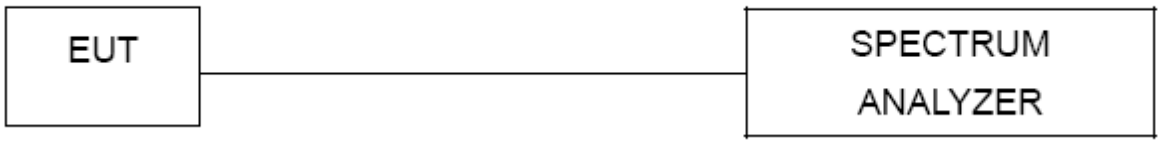
### 8.1.1 TEST PROCEDURE

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=3 kHz, VBW=10 kHz, Sweep time = Auto.

### 8.1.2 DEVIATION FROM STANDARD

No deviation.

### 8.1.3 TEST SETUP




### 8.1.4 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

### 8.1.5 EUT TEST CONDITIONS

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

### 8.1.6 TEST RESULTS

Please refer to the Appendix H.

## 9. MEASUREMENT INSTRUMENTS LIST

| Conducted Emission Measurement | | | | | |
|---|---|---|---|---|---|
| Item | Kind of Equipment | Manufacturer | Type No. | Serial No. | Calibrated until |
| 1 | EMI Test Receiver | R&S | ESCI | 100382 | Mar. 11, 2019 |
| 2 | LISN | EMCO | 3816/2 | 52765 | Mar. 11, 2019 |
| 3 | 50Ω Terminator | SHX | TF2-3G-A | 8122901 | Mar. 11, 2019 |
| 4 | TWO-LINE V-NETWORK | R&S | ENV216 | 101447 | Mar. 11, 2019 |
| 5 | Measurement Software | Farad | EZ-EMC Ver.NB-03A1-01 | N/A | N/A |
| 6 | Cable | N/A | RG223 | 12m | Mar. 23, 2019 |

| Radiated Emission Measurement - 9kHz TO 30 MHz | | | | | |
|---|---|---|---|---|---|
| Item | Kind of Equipment | Manufacturer | Type No. | Serial No. | Calibrated until |
| 1 | Loop Antenna | EM | EM-6876-1 | 230 | Feb. 07, 2019 |
| 2 | Cable | N/A | RG 213/U | C-102 | Jun. 01, 2019 |
| 3 | EMI Test Receiver | R&S | ESCI | 100382 | Mar. 11, 2019 |
| 4 | Measurement Software | Farad | EZ-EMC Ver.NB-03A1-01 | N/A | N/A |

| Radiated Emission Measurement – 30 MHz TO 1000 MHz | | | | | |
|---|---|---|---|---|---|
| Item | Kind of Equipment | Manufacturer | Type No. | Serial No. | Calibrated until |
| 1 | Antenna | Schwarbeck | VULB9160 | 9160-3232 | Mar. 11, 2019 |
| 2 | Amplifier | HP | 8447D | 2944A09673 | Aug. 11, 2019 |
| 3 | Receiver | Agilent | N9038A | MY52130039 | Aug. 11, 2019 |
| 4 | Cable | emci | LMR-400(30MHz-1 GHz)(8m+5m) | N/A | May 25, 2019 |
| 5 | Controller | CT | SC100 | N/A | N/A |
| 6 | Controller | MF | MF-7802 | MF780208416 | N/A |
| 7 | Measurement Software | Farad | EZ-EMC Ver.NB-03A1-01 | N/A | N/A |

| Radiated Emission Measurement - Above 1GHz | | | | | |
|---|---|---|---|---|---|
| Item | Kind of Equipment | Manufacturer | Type No. | Serial No. | Calibrated until |
| 1 | Double Ridged Guide Antenna | ETS | 3115 | 75789 | Mar. 11, 2019 |
| 2 | Broad-Band Horn Antenna | Schwarzbeck | BBHA 9170 | 9170319 | Jun. 30, 2019 |
| 3 | Amplifier | Agilent | 8449B | 3008A02274 | Mar. 11, 2019 |
| 4 | Microwave Preamplifier With Adaptor | EMC INSTRUMENT | EMC2654045 | 980039 & HA01 | Mar. 11, 2019 |
| 5 | Receiver | Agilent | N9038A | MY52130039 | Aug. 11, 2019 |
| 6 | Controller | CT | SC100 | N/A | N/A |
| 7 | Controller | MF | MF-7802 | MF780208416 | N/A |
| 8 | Cable | mitron | B10-01-01-12M | 18072744 | Jul. 30, 2019 |
| 9 | Measurement Software | Farad | EZ-EMC Ver.NB-03A1-01 | N/A | N/A |

| 6 dB Bandwidth | | | | | |
|---|---|---|---|---|---|
| Item | Kind of Equipment | Manufacturer | Type No. | Serial No. | Calibrated until |
| 1 | Spectrum Analyzer | R&S | FSP40 | 100185 | Aug. 11, 2019 |

| Maximum output power | | | | | |
|---|---|---|---|---|---|
| Item | Kind of Equipment | Manufacturer | Type No. | Serial No. | Calibrated until |
| 1 | Power Meter | ANRITSU | ML2495A | 1128009 | Mar. 11, 2019 |
| 2 | Pulse Power Sensor | ANRITSU | MA 2411B | 1027500 | Mar. 11, 2019 |

| Antenna Conducted Spurious Emission | | | | | |
|---|---|---|---|---|---|
| Item | Kind of Equipment | Manufacturer | Type No. | Serial No. | Calibrated until |
| 1 | Spectrum Analyzer | R&S | FSP40 | 100185 | Aug. 11, 2019 |

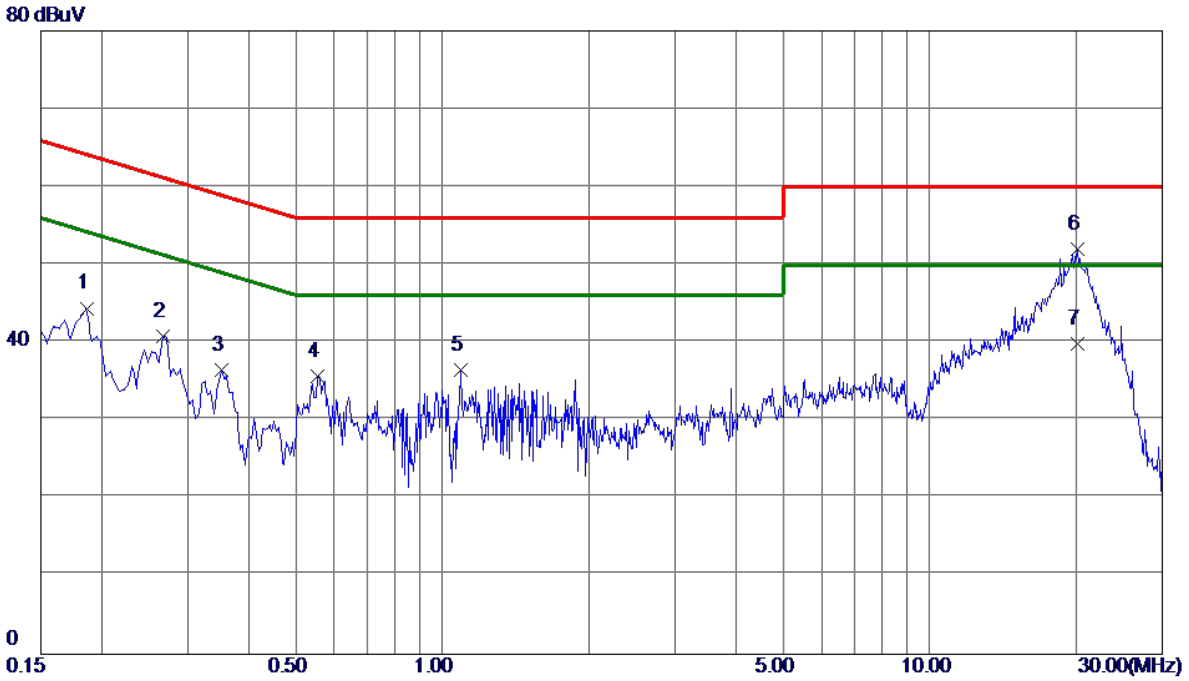
| Power Spectral Density | | | | | |
|---|---|---|---|---|---|
| Item | Kind of Equipment | Manufacturer | Type No. | Serial No. | Calibrated until |
| 1 | Spectrum Analyzer | R&S | FSP40 | 100185 | Aug. 11, 2019 |

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

# APPENDIX A - CONDUCTED EMISSION

| Test Mode: | TX Mode _Adapter: Huntkey |
|---|---|

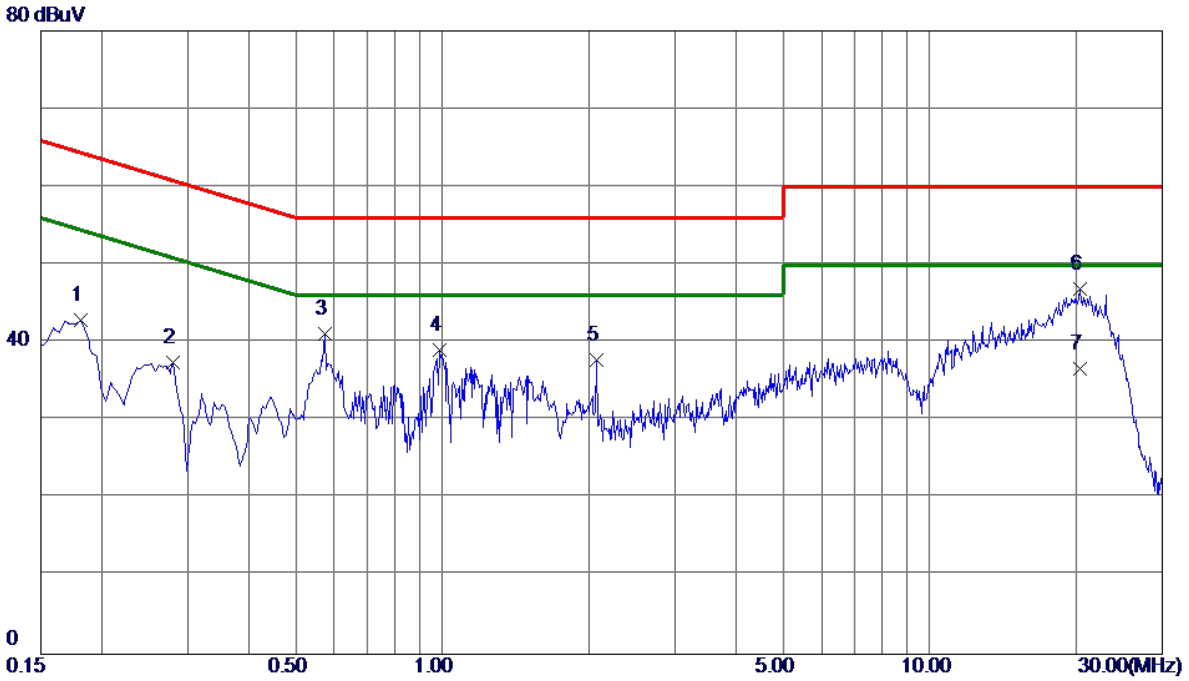
## Line




| No. | Freq. | Reading Level | Correct Factor | Measurement | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|
| | MHz | dBuV | dB | dBuV | dBuV | dB | Detector | Comment |
| 1 | 0.1860 | 34.58 | 9.82 | 44.40 | 64.21 | -19.81 | Peak | |
| 2 | 0.2670 | 31.03 | 9.82 | 40.85 | 61.21 | -20.36 | Peak | |
| 3 | 0.3525 | 26.73 | 9.81 | 36.54 | 58.90 | -22.36 | Peak | |
| 4 | 0.5550 | 25.85 | 9.81 | 35.66 | 56.00 | -20.34 | Peak | |
| 5 | 1.0905 | 26.53 | 9.93 | 36.46 | 56.00 | -19.54 | Peak | |
| 6 * | 20.0715 | 40.75 | 11.19 | 51.94 | 60.00 | -8.06 | Peak | |
| 7 | 20.0715 | 28.60 | 11.19 | 39.79 | 50.00 | -10.21 | AVG | |

| Test Mode: | TX Mode _Adapter: Huntkey |
|---|---|

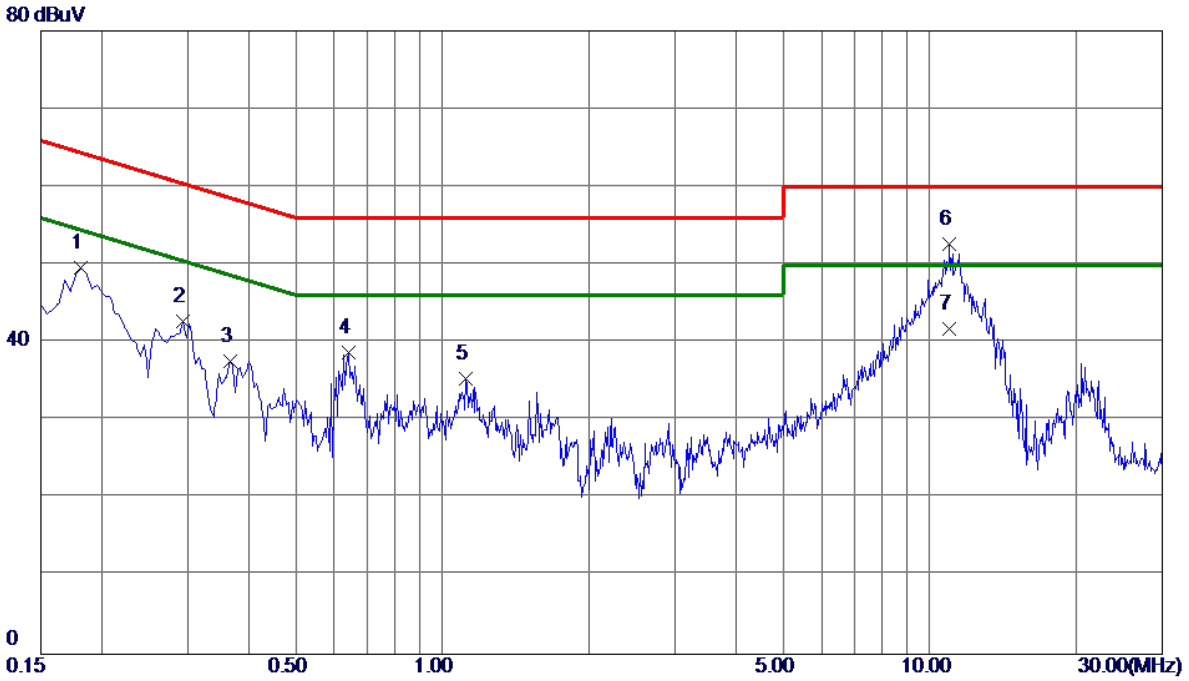
## Neutral




| No. | Freq. | Reading Level | Correct Factor | Measurement | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|
| | MHz | dBuV | dB | dBuV | dBuV | dB | Detector | Comment |
| 1 | 0.1815 | 33.01 | 9.91 | 42.92 | 64.42 | -21.50 | Peak | |
| 2 | 0.2805 | 27.48 | 9.93 | 37.41 | 60.80 | -23.39 | Peak | |
| 3 | 0.5730 | 31.19 | 9.97 | 41.16 | 56.00 | -14.84 | Peak | |
| 4 | 0.9870 | 28.91 | 10.12 | 39.03 | 56.00 | -16.97 | Peak | |
| 5 | 2.0715 | 27.57 | 10.19 | 37.76 | 56.00 | -18.24 | Peak | |
| 6 * | 20.3190 | 35.34 | 11.48 | 46.82 | 60.00 | -13.18 | Peak | |
| 7 | 20.3190 | 25.11 | 11.48 | 36.59 | 50.00 | -13.41 | AVG | |

| Test Mode: | TX Mode _Adapter: PHITEK |
|---|---|

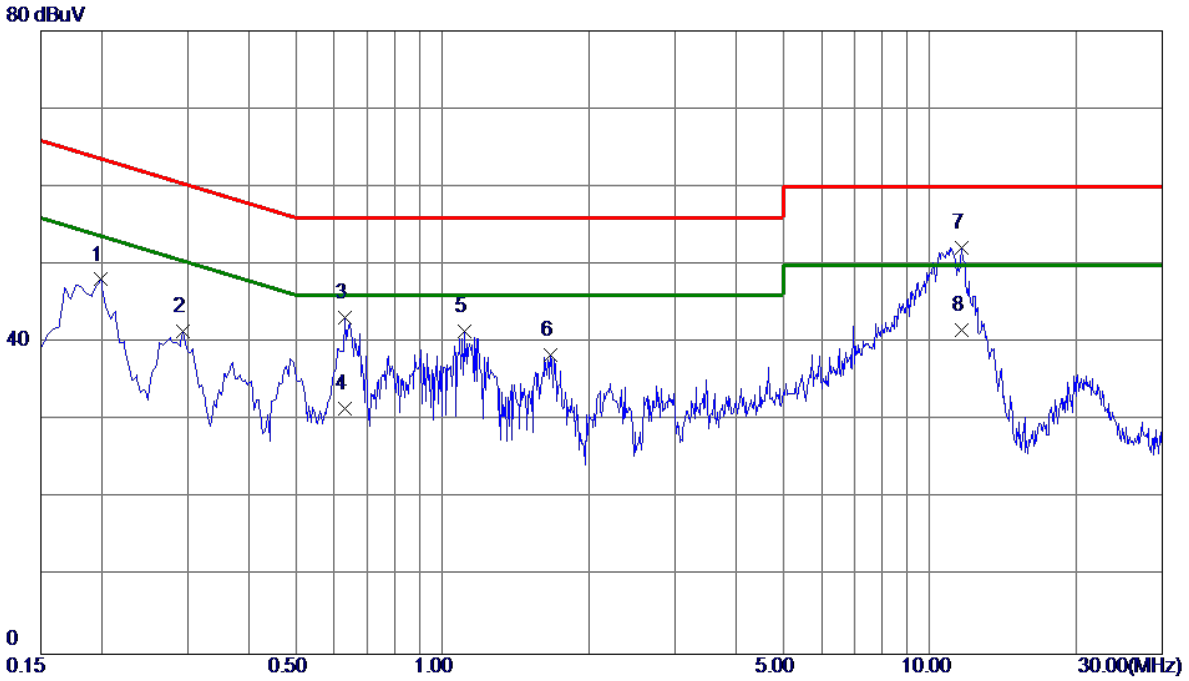
## Line




| No. | Freq. | Reading Level | Correct Factor | Measurement | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|
| | MHz | dBuV | dB | dBuV | dBuV | dB | Detector | Comment |
| 1 | 0.1815 | 39.84 | 9.82 | 49.66 | 64.42 | -14.76 | Peak | |
| 2 | 0.2940 | 32.84 | 9.82 | 42.66 | 60.41 | -17.75 | Peak | |
| 3 | 0.3660 | 27.76 | 9.81 | 37.57 | 58.59 | -21.02 | Peak | |
| 4 | 0.6405 | 28.85 | 9.85 | 38.70 | 56.00 | -17.30 | Peak | |
| 5 | 1.1174 | 25.43 | 9.93 | 35.36 | 56.00 | -20.64 | Peak | |
| 6 * | 10.9950 | 42.13 | 10.54 | 52.67 | 60.00 | -7.33 | Peak | |
| 7 | 10.9950 | 31.20 | 10.54 | 41.74 | 50.00 | -8.26 | AVG | |

| Test Mode: | TX Mode _Adapter: PHITEK |
|---|---|

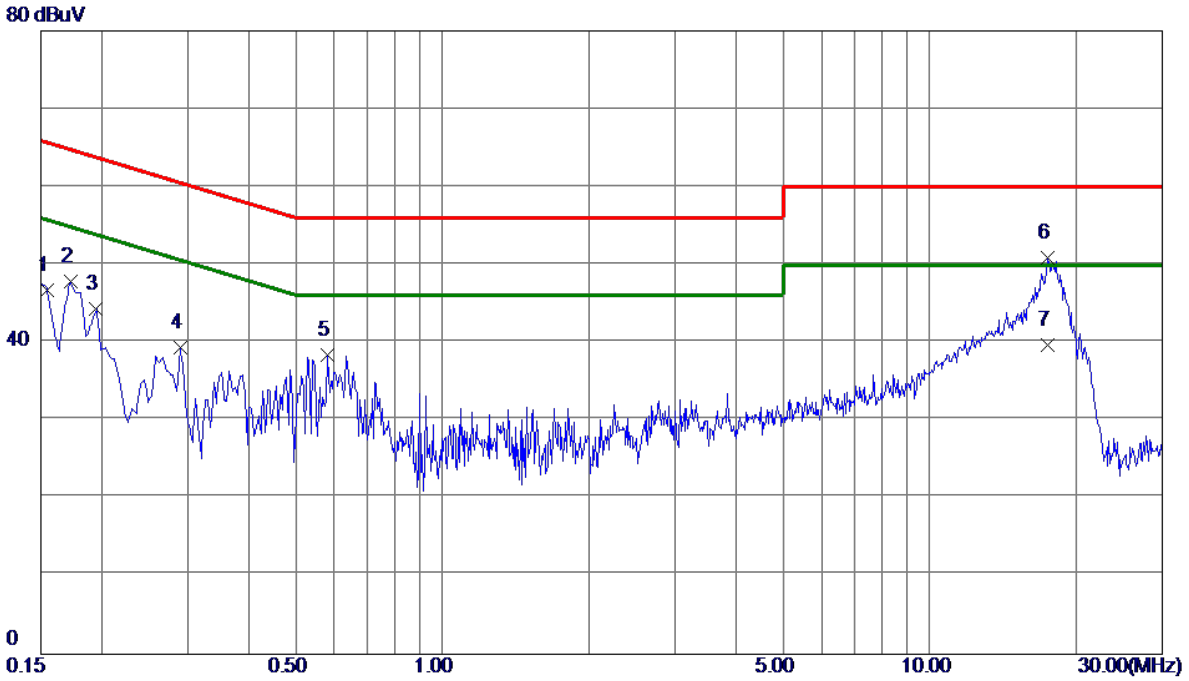
## Neutral




| No. | Freq. | Reading Level | Correct Factor | Measurement | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|
| | MHz | dBuV | dB | dBuV | dBuV | dB | Detector | Comment |
| 1 | 0.1995 | 38.17 | 9.91 | 48.08 | 63.63 | -15.55 | Peak | |
| 2 | 0.2940 | 31.50 | 9.93 | 41.43 | 60.41 | -18.98 | Peak | |
| 3 | 0.6315 | 33.22 | 10.00 | 43.22 | 56.00 | -12.78 | Peak | |
| 4 | 0.6315 | 21.50 | 10.00 | 31.50 | 46.00 | -14.50 | AVG | |
| 5 | 1.1085 | 31.36 | 10.13 | 41.49 | 56.00 | -14.51 | Peak | |
| 6 | 1.6710 | 28.23 | 10.17 | 38.40 | 56.00 | -17.60 | Peak | |
| 7 * | 11.6520 | 41.35 | 10.86 | 52.21 | 60.00 | -7.79 | Peak | |
| 8 | 11.6520 | 30.80 | 10.86 | 41.66 | 50.00 | -8.34 | AVG | |

| Test Mode: | TX Mode _Adapter: BYD |
|---|---|

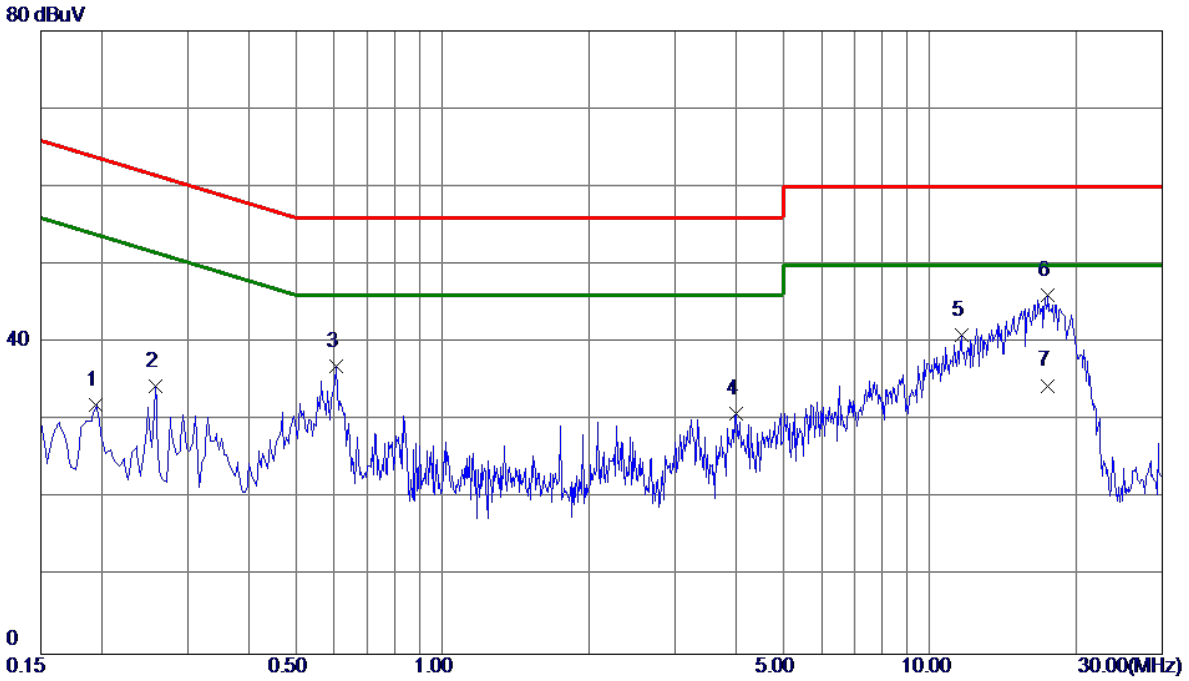
## Line




| No. | Freq. | Reading Level | Correct Factor | Measurement | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|
| | MHz | dBuV | dB | dBuV | dBuV | dB | Detector | Comment |
| 1 | 0.1548 | 36.92 | 9.82 | 46.74 | 65.74 | -19.00 | Peak | |
| 2 | 0.1725 | 38.07 | 9.82 | 47.89 | 64.84 | -16.95 | Peak | |
| 3 | 0.1949 | 34.45 | 9.82 | 44.27 | 63.83 | -19.56 | Peak | |
| 4 | 0.2895 | 29.53 | 9.82 | 39.35 | 60.54 | -21.19 | Peak | |
| 5 | 0.5820 | 28.53 | 9.82 | 38.35 | 56.00 | -17.65 | Peak | |
| 6 * | 17.4480 | 39.87 | 10.97 | 50.84 | 60.00 | -9.16 | Peak | |
| 7 | 17.4480 | 28.70 | 10.97 | 39.67 | 50.00 | -10.33 | AVG | |

| Test Mode: | TX Mode _Adapter: BYD |
|---|---|

## Neutral

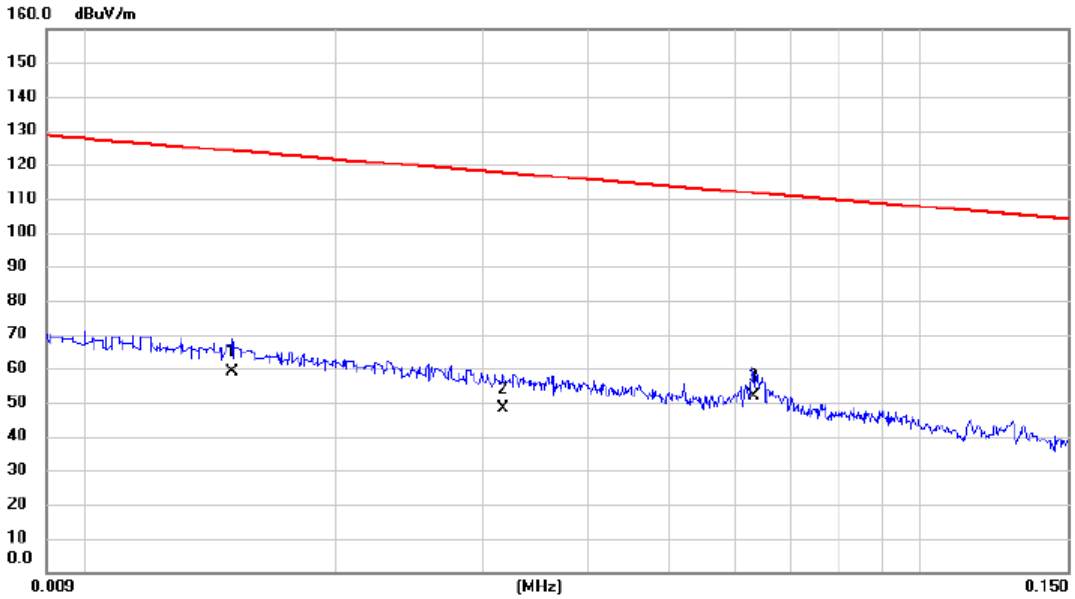



| No. | Freq. | Reading Level | Correct Factor | Measurement | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|
| | MHz | dBuV | dB | dBuV | dBuV | dB | Detector | Comment |
| 1 | 0.1949 | 22.09 | 9.91 | 32.00 | 63.83 | -31.83 | Peak | |
| 2 | 0.2580 | 24.44 | 9.92 | 34.36 | 61.50 | -27.14 | Peak | |
| 3 | 0.6045 | 26.91 | 9.98 | 36.89 | 56.00 | -19.11 | Peak | |
| 4 | 4.0109 | 20.50 | 10.32 | 30.82 | 56.00 | -25.18 | Peak | |
| 5 | 11.5980 | 30.13 | 10.85 | 40.98 | 60.00 | -19.02 | Peak | |
| 6 * | 17.4794 | 34.73 | 11.28 | 46.01 | 60.00 | -13.99 | Peak | |
| 7 | 17.4794 | 23.20 | 11.28 | 34.48 | 50.00 | -15.52 | AVG | |

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

| Test Mode: | TX Mode _Adapter: Huntkey |
|---|---|

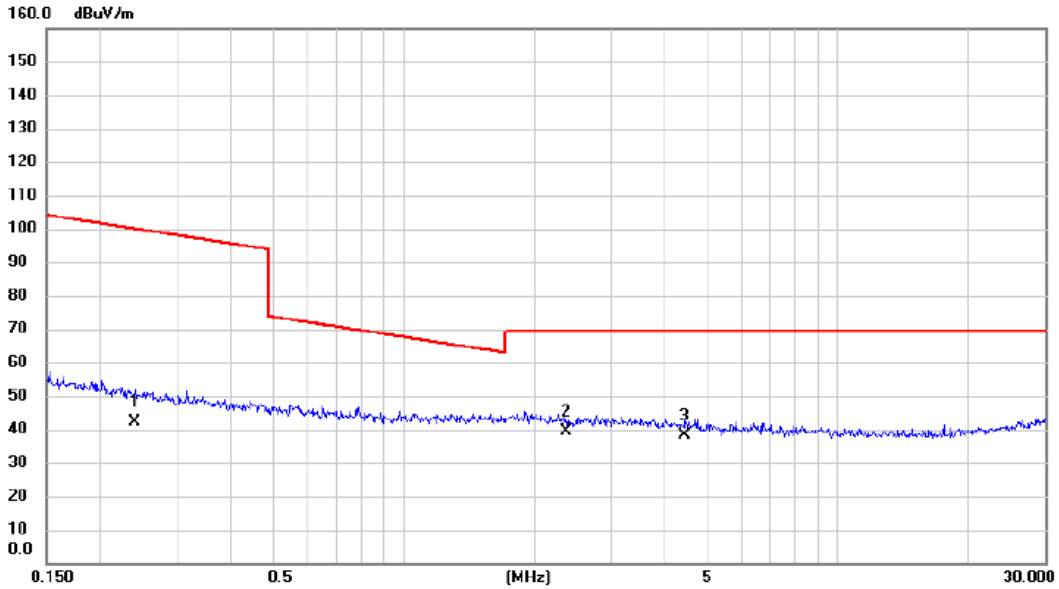
Ant 0°




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | | 0.0150 | 38.10 | 20.72 | 58.82 | 124.08 | -65.26 | AVG | |
| 2 | | 0.0317 | 28.30 | 19.82 | 48.12 | 117.58 | -69.46 | AVG | |
| 3 | * | 0.0631 | 32.50 | 19.27 | 51.77 | 111.60 | -59.83 | AVG | |

| Test Mode: | TX Mode_Adapter: Huntkey |
|---|---|

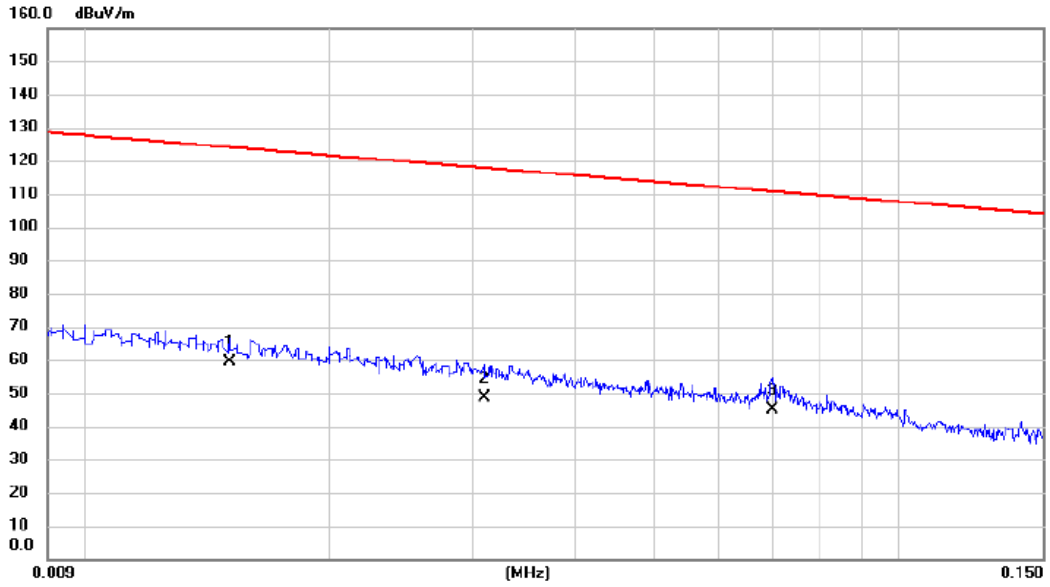
Ant 0°




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | | 0.2404 | 25.10 | 17.08 | 42.18 | 99.99 | -57.81 | AVG | |
| 2 | * | 2.3585 | 22.70 | 16.90 | 39.60 | 69.54 | -29.94 | QP | |
| 3 | | 4.4540 | 22.80 | 15.49 | 38.29 | 69.54 | -31.25 | QP | |

| Test Mode: | TX Mode_Adapter: Huntkey |
|---|---|

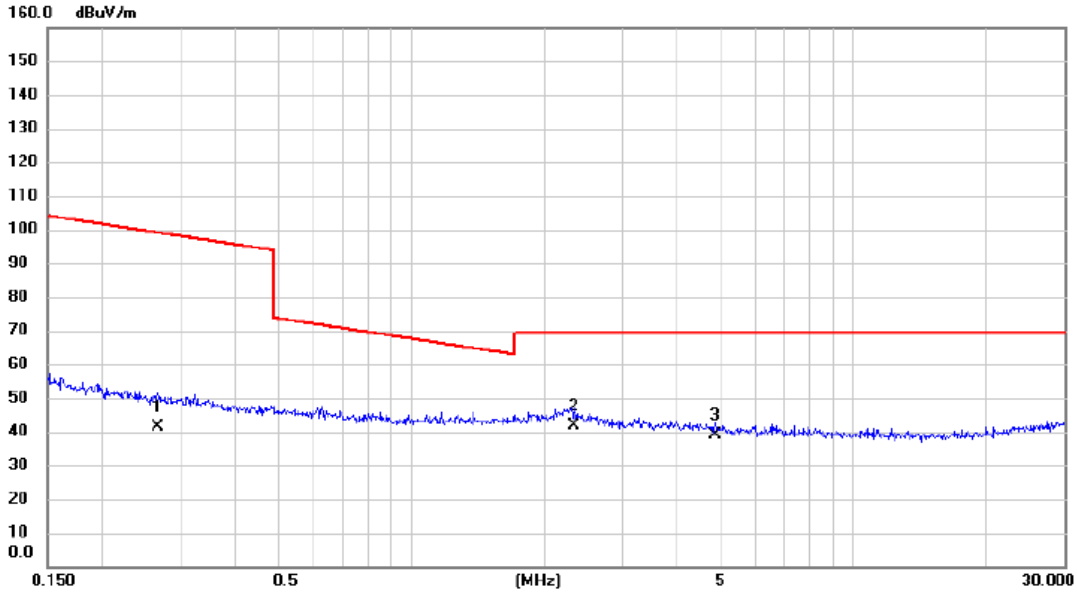
Ant 90°




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | * | 0.0151 | 38.50 | 20.71 | 59.21 | 124.03 | -64.82 | AVG | |
| 2 | | 0.0310 | 28.80 | 19.84 | 48.64 | 117.78 | -69.14 | AVG | |
| 3 | | 0.0700 | 25.70 | 19.13 | 44.83 | 110.70 | -65.87 | AVG | |

| Test Mode: | TX Mode_Adapter: Huntkey |
|---|---|

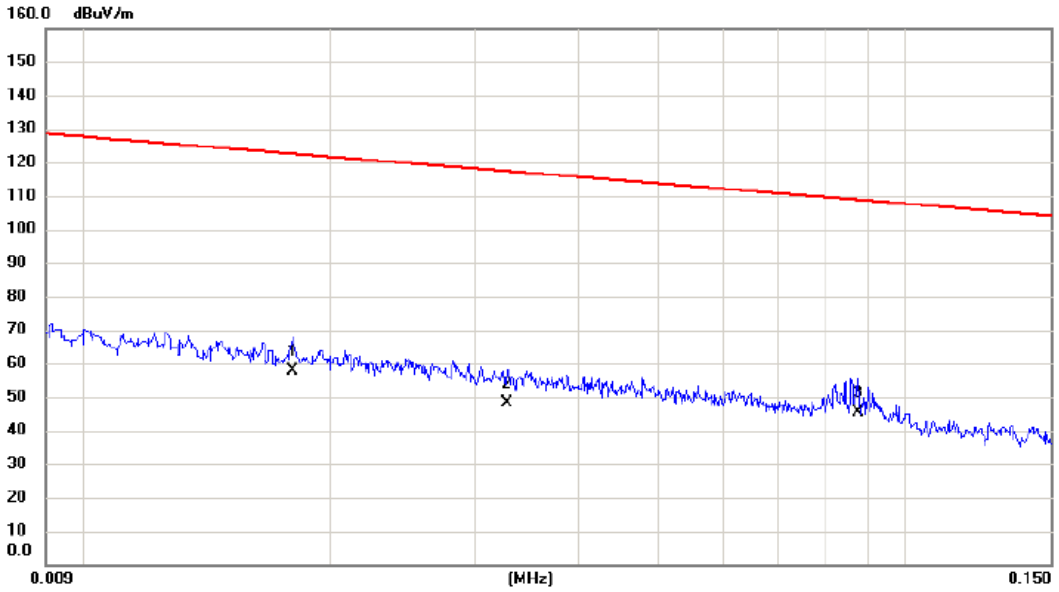
Ant 90°




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | | 0.2672 | 24.30 | 17.05 | 41.35 | 99.07 | -57.72 | AVG | |
| 2 | * | 2.3336 | 24.70 | 16.92 | 41.62 | 69.54 | -27.92 | QP | |
| 3 | | 4.8738 | 23.60 | 15.25 | 38.85 | 69.54 | -30.69 | QP | |

| Test Mode: | TX Mode _Adapter: PHITEK |
|---|---|

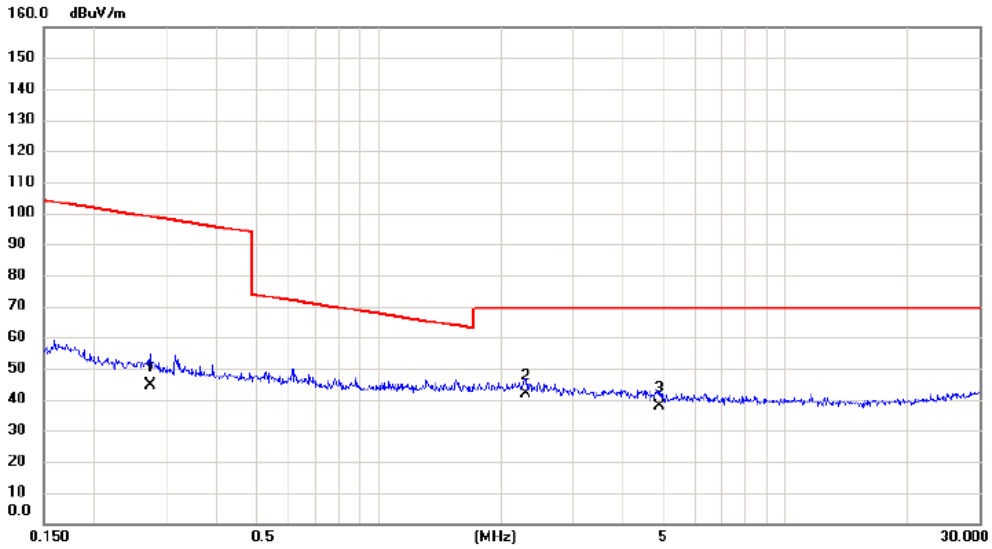
Ant 0°




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | | 0.0180 | 37.60 | 20.30 | 57.90 | 122.50 | -64.60 | AVG | |
| 2 | | 0.0328 | 28.50 | 19.81 | 48.31 | 117.29 | -68.98 | AVG | |
| 3 | * | 0.0875 | 26.80 | 18.73 | 45.53 | 108.76 | -63.23 | AVG | |

| Test Mode: | TX Mode_Adapter: PHITEK |
|---|---|

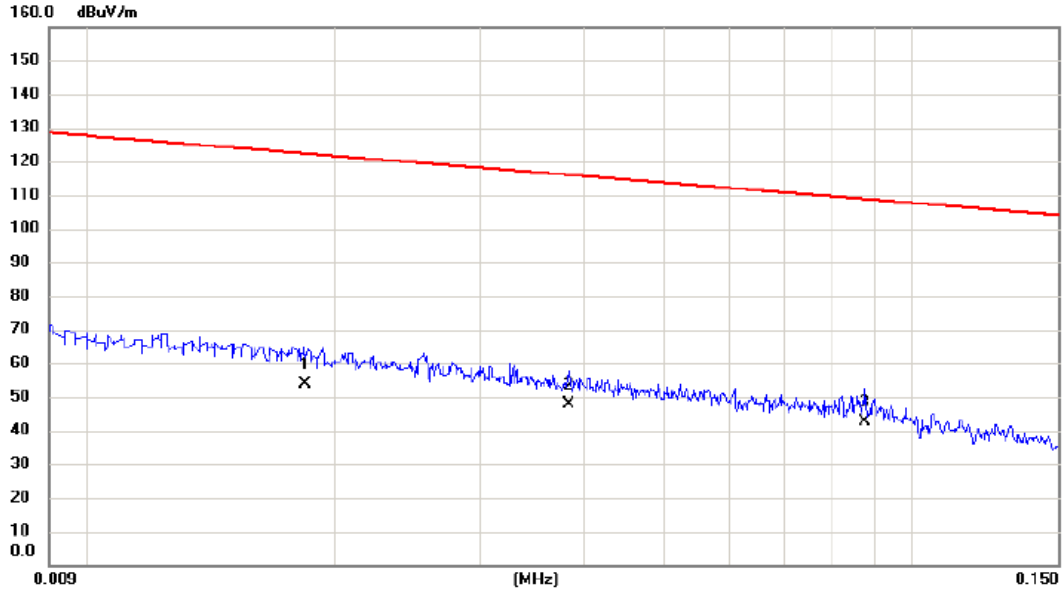
Ant 0°




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | | 0.2744 | 27.50 | 17.05 | 44.55 | 98.84 | -54.29 | AVG | |
| 2 | * | 2.2968 | 24.80 | 16.94 | 41.74 | 69.54 | -27.80 | QP | |
| 3 | | 4.8997 | 22.40 | 15.23 | 37.63 | 69.54 | -31.91 | QP | |

| Test Mode: | TX Mode_Adapter: PHITEK |
|---|---|

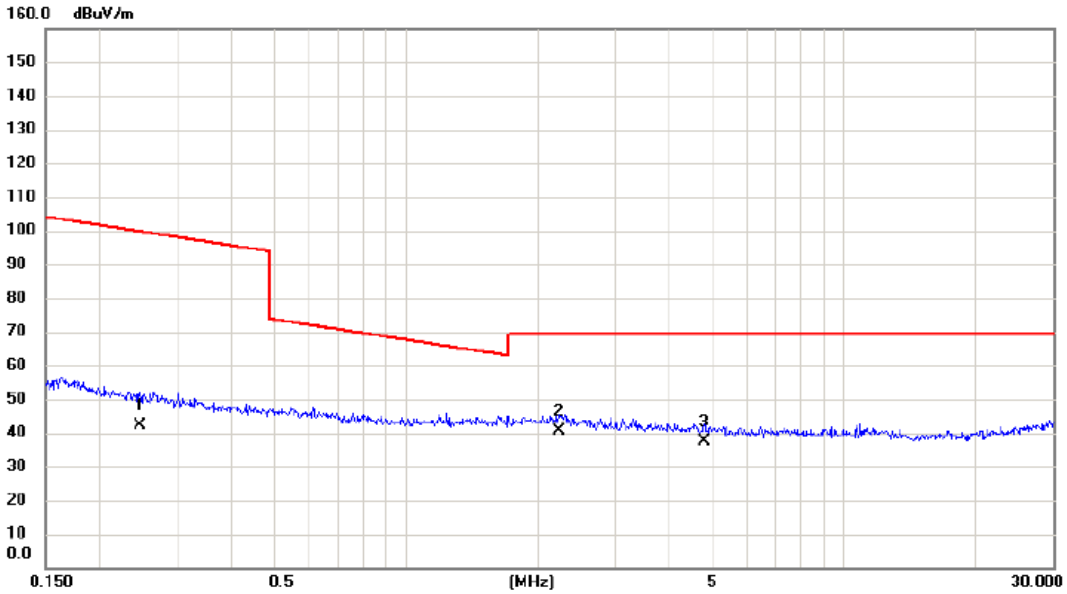
Ant 90°




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | | 0.0184 | 33.60 | 20.24 | 53.84 | 122.31 | -68.47 | AVG | |
| 2 | | 0.0383 | 28.10 | 19.72 | 47.82 | 115.94 | -68.12 | AVG | |
| 3 | * | 0.0875 | 23.70 | 18.73 | 42.43 | 108.76 | -66.33 | AVG | |

| Test Mode: | TX Mode_Adapter: PHITEK |
|---|---|

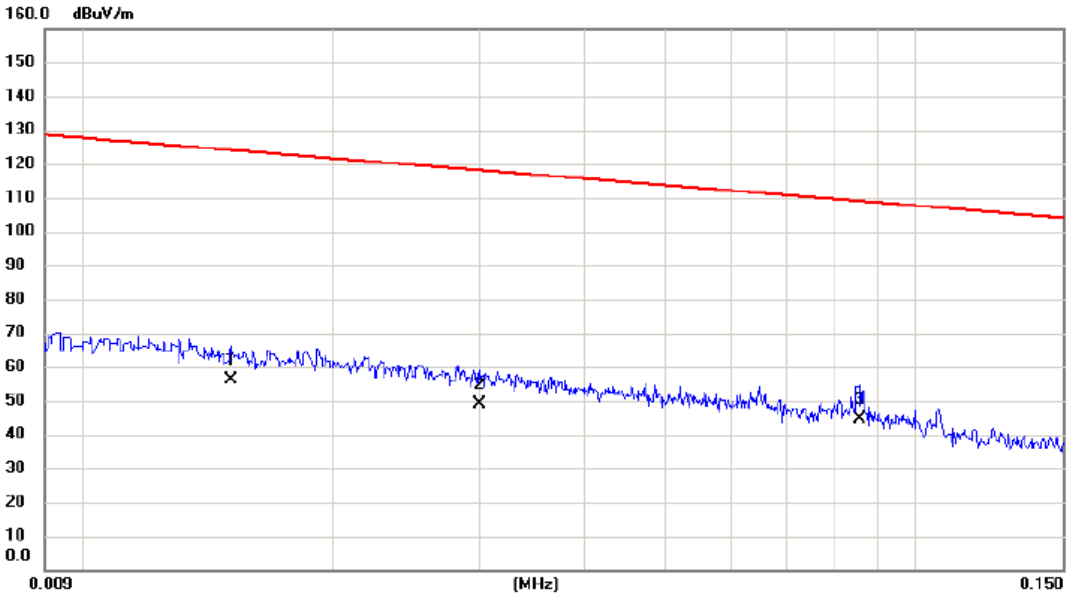
Ant 90°




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | | 0.2468 | 25.20 | 17.07 | 42.27 | 99.76 | -57.49 | AVG | |
| 2 | * | 2.2367 | 23.60 | 16.97 | 40.57 | 69.54 | -28.97 | QP | |
| 3 | | 4.7970 | 22.20 | 15.29 | 37.49 | 69.54 | -32.05 | QP | |

| Test Mode: | TX Mode _Adapter: BYD |
|---|---|

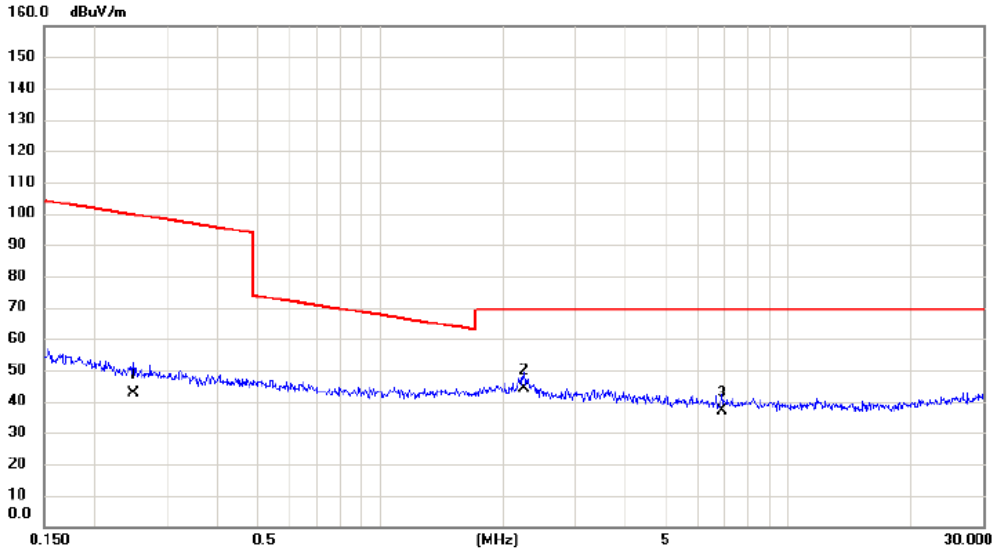
Ant 0°




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | | 0.0151 | 35.60 | 20.71 | 56.31 | 124.03 | -67.72 | AVG | |
| 2 | | 0.0300 | 29.21 | 19.85 | 49.06 | 118.06 | -69.00 | AVG | |
| 3 | * | 0.0857 | 25.90 | 18.77 | 44.67 | 108.95 | -64.28 | AVG | |

| Test Mode: | TX Mode_Adapter: BYD |
|---|---|

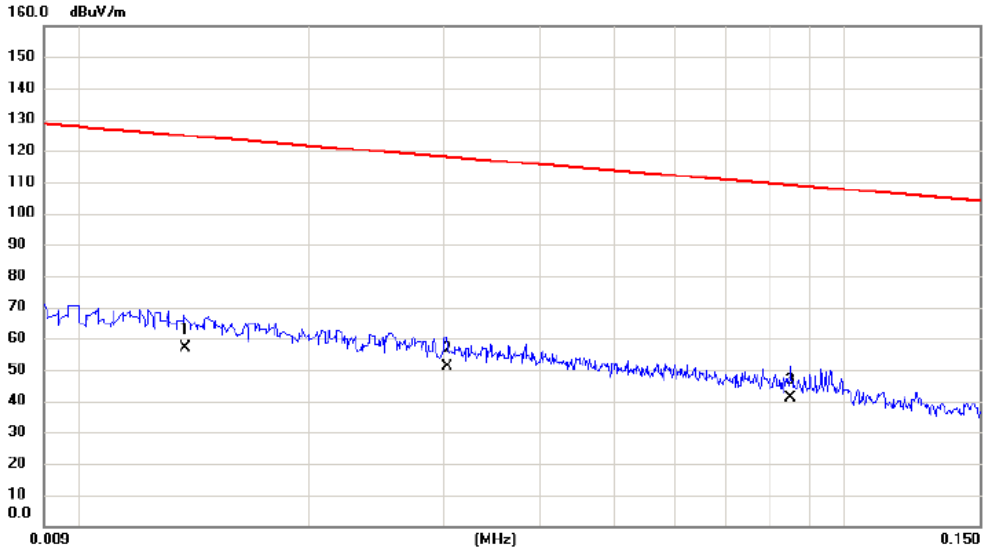
Ant 0°




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | | 0.2481 | 25.40 | 17.06 | 42.46 | 99.71 | -57.25 | AVG | |
| 2 | * | 2.2486 | 27.30 | 16.96 | 44.26 | 69.54 | -25.28 | QP | |
| 3 | | 6.8776 | 22.10 | 14.86 | 36.96 | 69.54 | -32.58 | QP | |

| Test Mode: | TX Mode_Adapter: BYD |
|---|---|

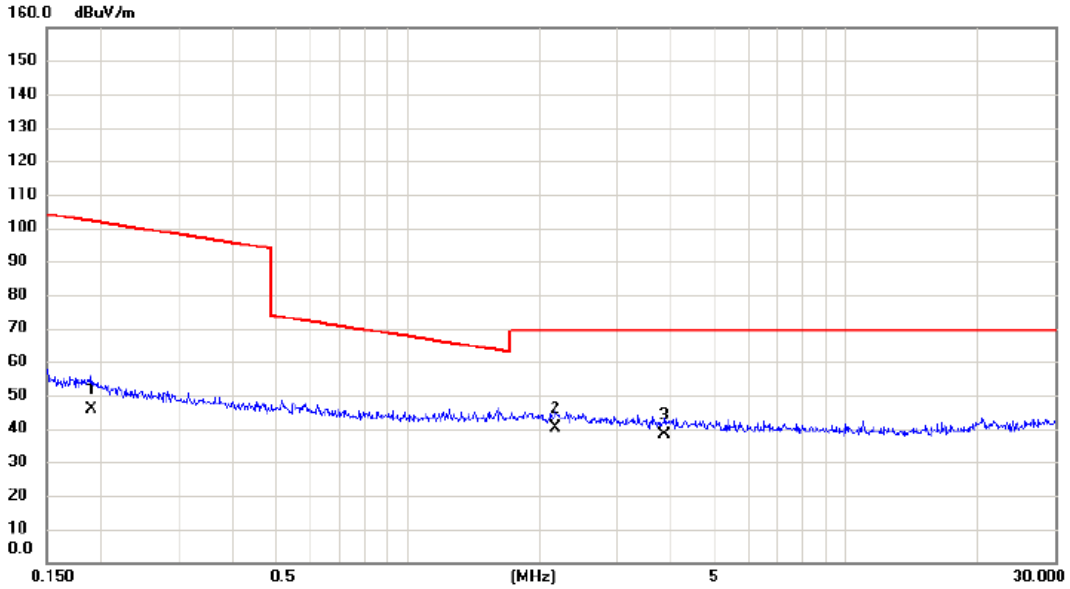
Ant 90°




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | | 0.0138 | 36.30 | 20.89 | 57.19 | 124.81 | -67.62 | AVG | |
| 2 | * | 0.0303 | 31.10 | 19.85 | 50.95 | 117.98 | -67.03 | AVG | |
| 3 | | 0.0850 | 22.40 | 18.79 | 41.19 | 109.02 | -67.83 | AVG | |

| Test Mode: | TX Mode_Adapter: BYD |
|---|---|

Ant 90°

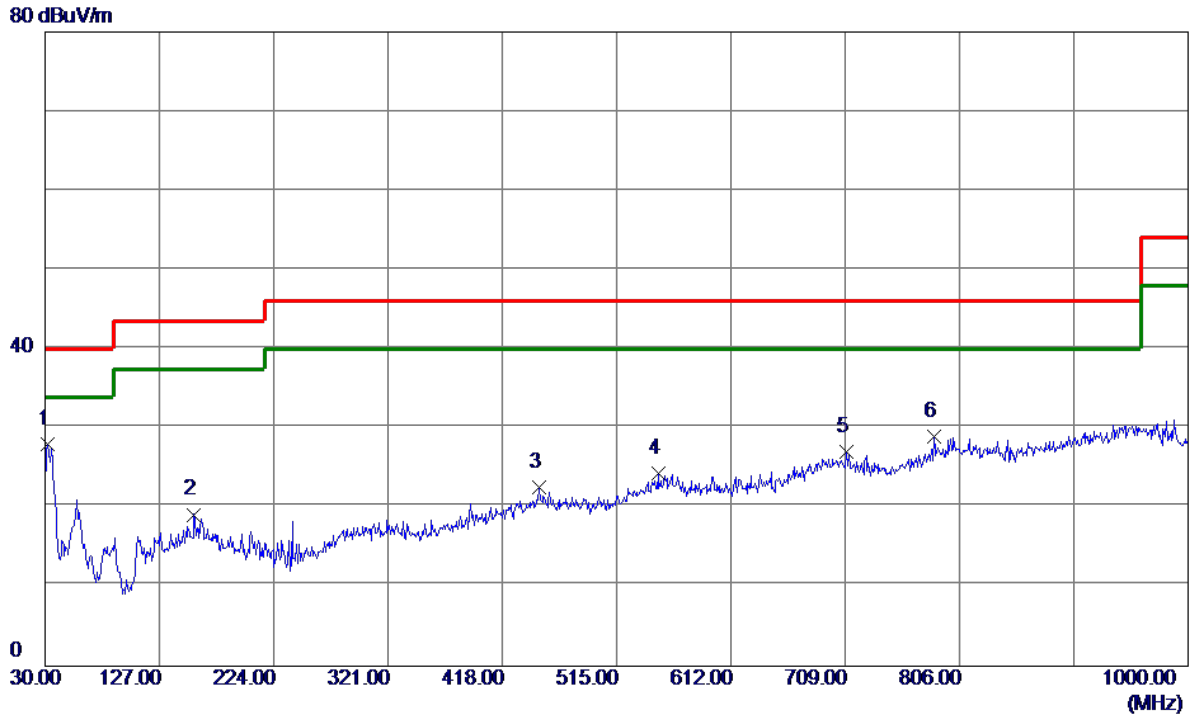



| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | | 0.1894 | 28.50 | 17.17 | 45.67 | 102.06 | -56.39 | AVG | |
| 2 | * | 2.1783 | 23.40 | 17.00 | 40.40 | 69.54 | -29.14 | QP | |
| 3 | | 3.8603 | 22.30 | 15.86 | 38.16 | 69.54 | -31.38 | QP | |

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

| Test Mode: | TX B Mode Channel 06_Adapter: Huntkey |
|---|---|

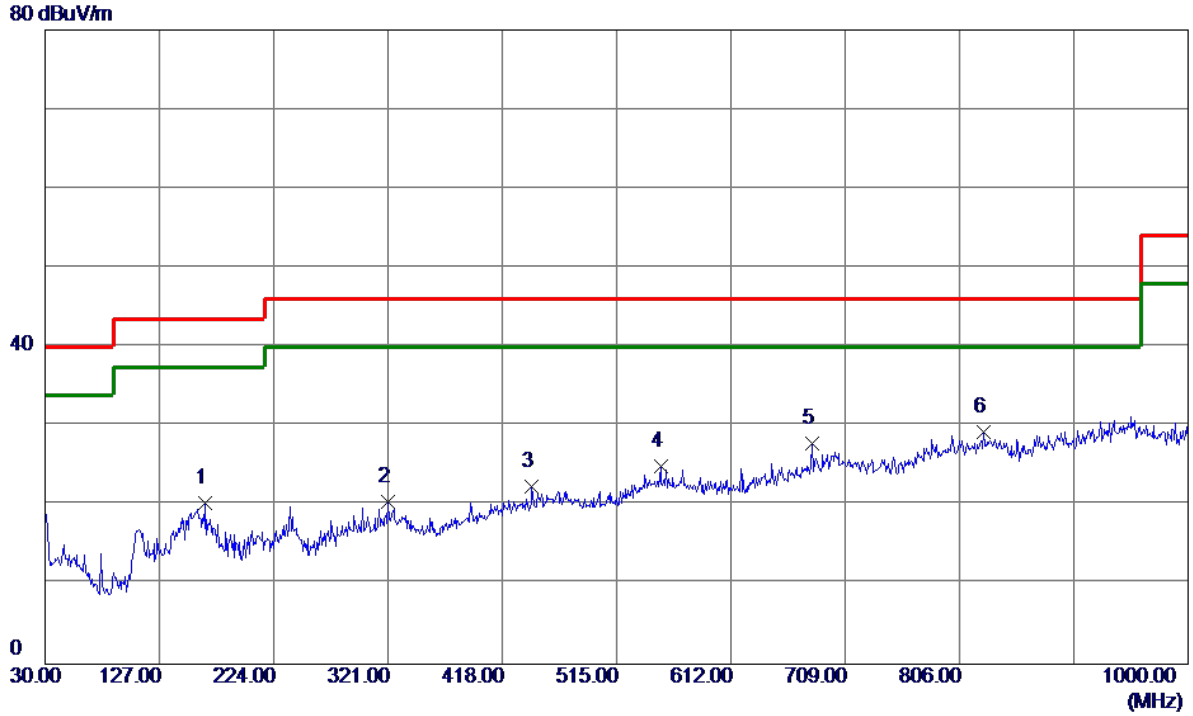
**Vertical**




| No. | Freq. | Reading Level | Correct Factor | Measure ment | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|
| | MHz | dBuV/m | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 * | 32.4250 | 43.04 | -14.99 | 28.05 | 40.00 | -11.95 | Peak | |
| 2 | 156.5850 | 30.02 | -10.90 | 19.12 | 43.50 | -24.38 | Peak | |
| 3 | 449.5250 | 29.95 | -7.42 | 22.53 | 46.00 | -23.47 | Peak | |
| 4 | 550.4050 | 29.86 | -5.47 | 24.39 | 46.00 | -21.61 | Peak | |
| 5 | 709.9699 | 30.11 | -3.00 | 27.11 | 46.00 | -18.89 | Peak | |
| 6 | 784.1750 | 30.94 | -1.99 | 28.95 | 46.00 | -17.05 | Peak | |

| Test Mode: | TX B Mode Channel 06_Adapter: Huntkey |
|---|---|

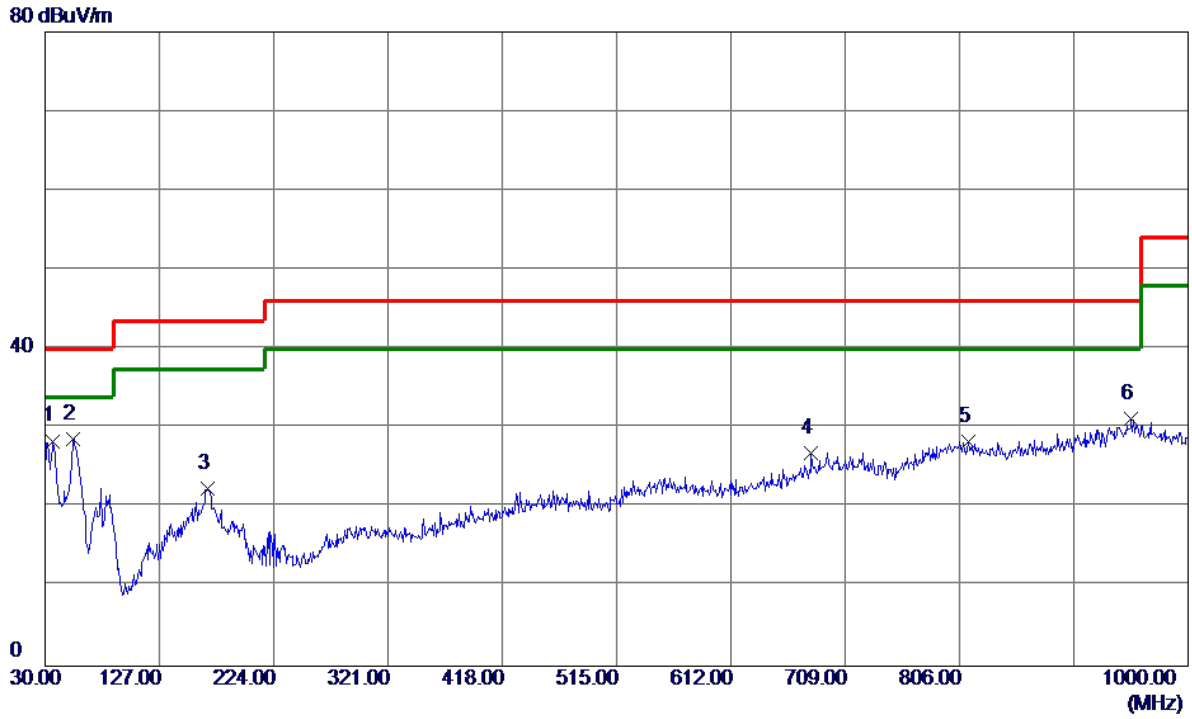
**Horizontal**




| No. | Freq. | Reading Level | Correct Factor | Measure ment | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|
| | MHz | dBuV/m | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | 165.8000 | 31.21 | -10.95 | 20.26 | 43.50 | -23.24 | Peak | |
| 2 | 321.0000 | 31.19 | -10.67 | 20.52 | 46.00 | -25.48 | Peak | |
| 3 | 443.2200 | 30.05 | -7.67 | 22.38 | 46.00 | -23.62 | Peak | |
| 4 | 552.3449 | 30.45 | -5.50 | 24.95 | 46.00 | -21.05 | Peak | |
| 5 | 681.3550 | 31.43 | -3.65 | 27.78 | 46.00 | -18.22 | Peak | |
| 6 * | 826.3700 | 30.69 | -1.45 | 29.24 | 46.00 | -16.76 | Peak | |

| Test Mode: | TX B Mode Channel 06_Adapter: PHITEK |
|---|---|

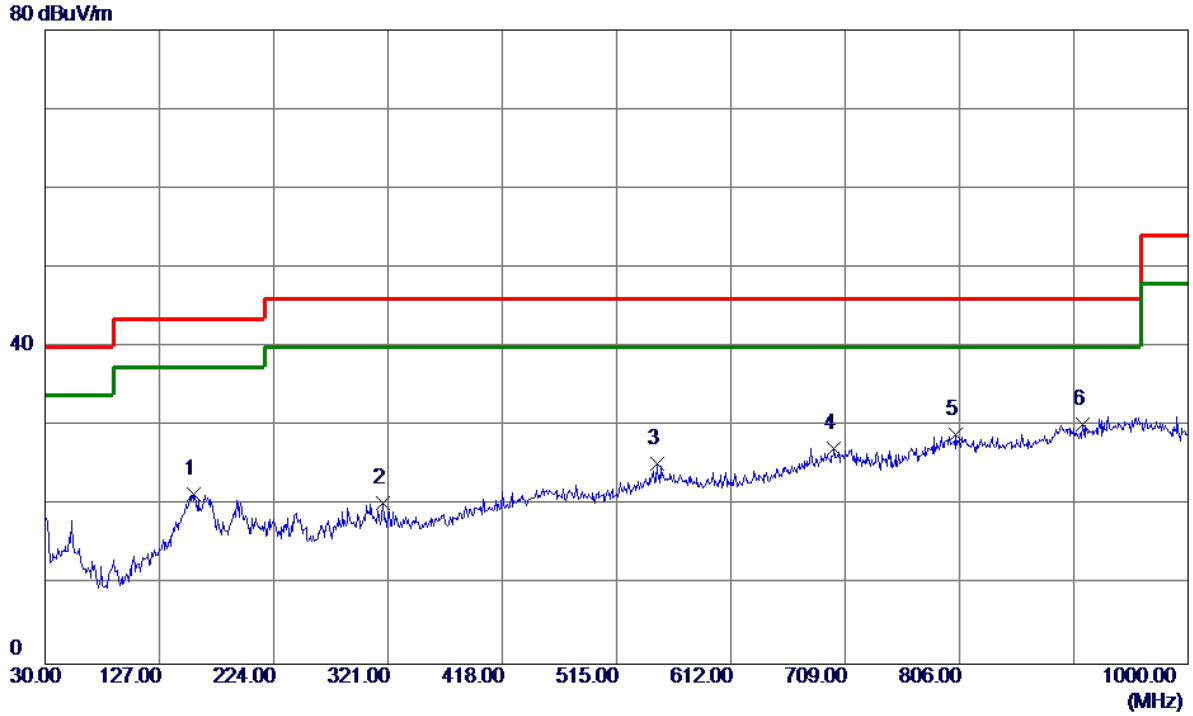
**Vertical**




| No. | Freq. | Reading Level | Correct Factor | Measure ment | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|
| | MHz | dBuV/m | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | 36.7900 | 43.26 | -14.86 | 28.40 | 40.00 | -11.60 | Peak | |
| 2 * | 53.7650 | 43.65 | -14.94 | 28.71 | 40.00 | -11.29 | Peak | |
| 3 | 167.7400 | 33.44 | -11.06 | 22.38 | 43.50 | -21.12 | Peak | |
| 4 | 680.3850 | 30.62 | -3.70 | 26.92 | 46.00 | -19.08 | Peak | |
| 5 | 813.7600 | 29.64 | -1.25 | 28.39 | 46.00 | -17.61 | Peak | |
| 6 | 951.5000 | 29.86 | 1.37 | 31.23 | 46.00 | -14.77 | Peak | |

| Test Mode: | TX B Mode Channel 06_Adapter: PHITEK |
|---|---|

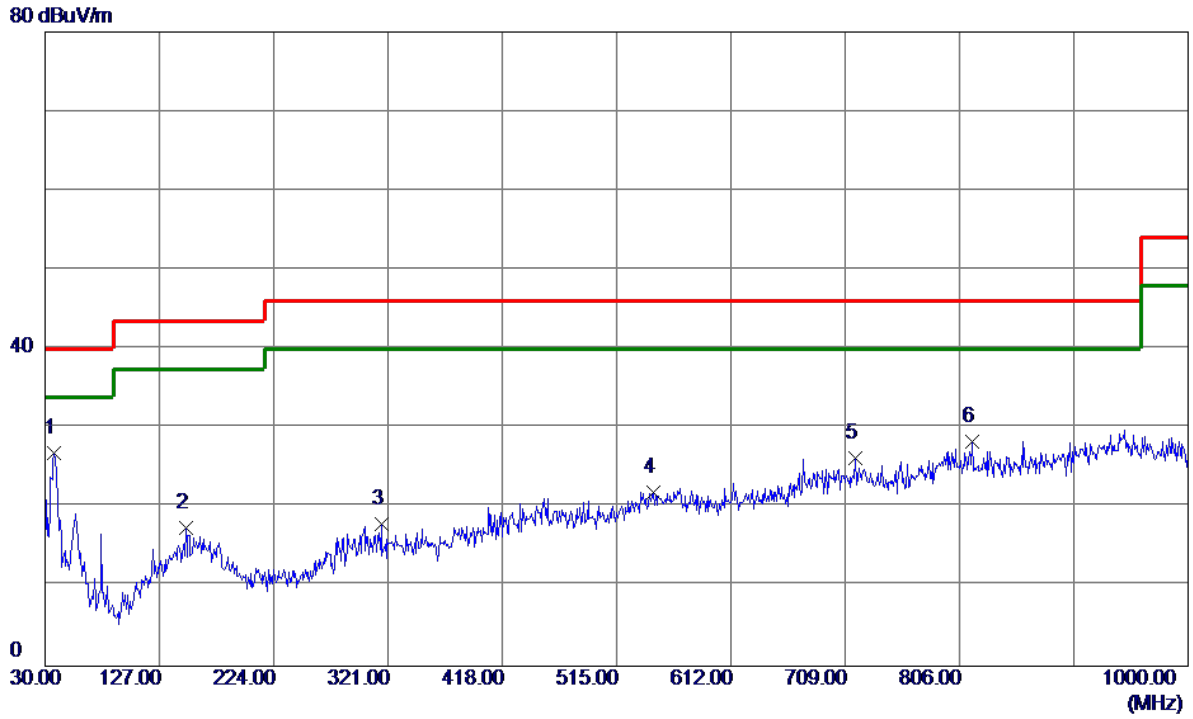
**Horizontal**




| No. | Freq. | Reading Level | Correct Factor | Measure ment | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|
| | MHz | dBuV/m | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | 155.6150 | 32.37 | -10.99 | 21.38 | 43.50 | -22.12 | Peak | |
| 2 | 316.6350 | 30.90 | -10.61 | 20.29 | 46.00 | -25.71 | Peak | |
| 3 | 549.4350 | 30.84 | -5.50 | 25.34 | 46.00 | -20.66 | Peak | |
| 4 | 699.3000 | 30.03 | -2.78 | 27.25 | 46.00 | -18.75 | Peak | |
| 5 | 803.0900 | 30.07 | -1.09 | 28.98 | 46.00 | -17.02 | Peak | |
| 6 * | 910.2750 | 30.36 | -0.19 | 30.17 | 46.00 | -15.83 | Peak | |

| Test Mode: | TX B Mode Channel 06_Adapter: BYD |
|---|---|

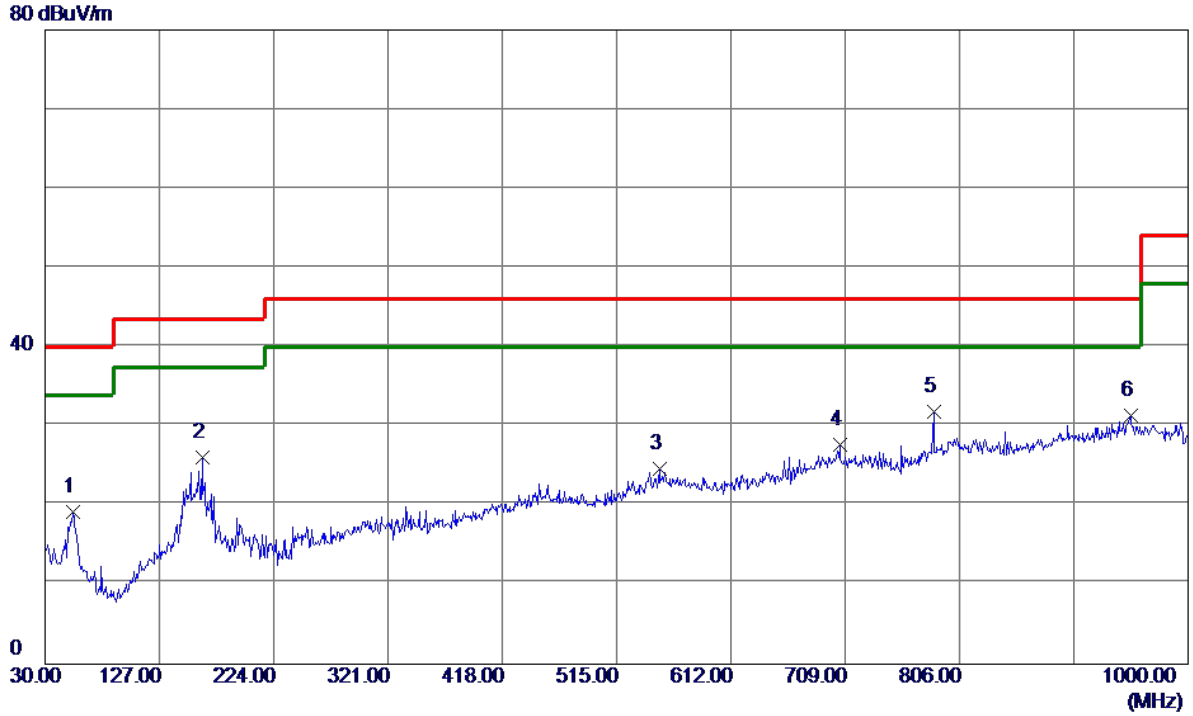
**Vertical**




| No. | Freq. | Reading Level | Correct Factor | Measure ment | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|
| | MHz | dBuV/m | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 * | 37.7599 | 41.57 | -14.70 | 26.87 | 40.00 | -13.13 | Peak | |
| 2 | 149.3100 | 28.92 | -11.54 | 17.38 | 43.50 | -26.12 | Peak | |
| 3 | 315.6650 | 28.52 | -10.59 | 17.93 | 46.00 | -28.07 | Peak | |
| 4 | 546.0400 | 27.60 | -5.71 | 21.89 | 46.00 | -24.11 | Peak | |
| 5 | 717.7300 | 29.44 | -3.21 | 26.23 | 46.00 | -19.77 | Peak | |
| 6 | 817.1550 | 29.69 | -1.31 | 28.38 | 46.00 | -17.62 | Peak | |

| Test Mode: | TX B Mode Channel 06_Adapter: BYD |
|---|---|

**Horizontal**

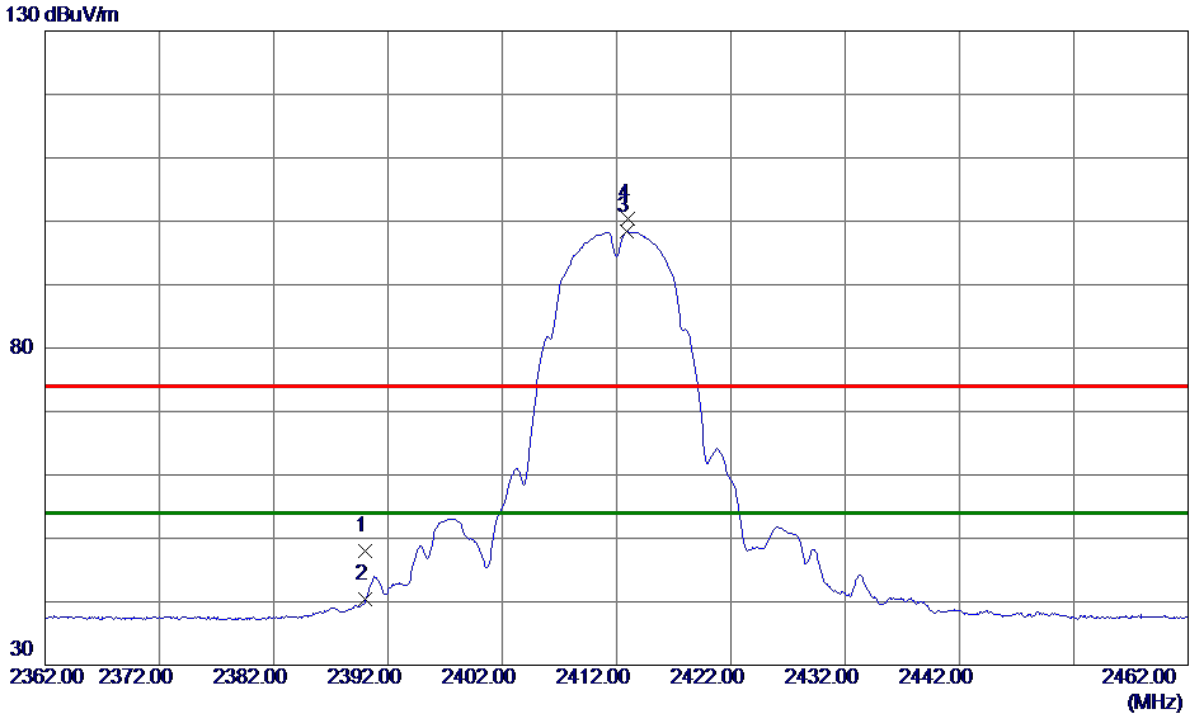



| No. | Freq. | Reading Level | Correct Factor | Measure ment | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|
| | MHz | dBuV/m | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | 53.7650 | 34.07 | -14.94 | 19.13 | 40.00 | -20.87 | Peak | |
| 2 | 163.3750 | 36.83 | -10.80 | 26.03 | 43.50 | -17.47 | Peak | |
| 3 | 551.3750 | 30.08 | -5.49 | 24.59 | 46.00 | -21.41 | Peak | |
| 4 | 704.6350 | 30.56 | -2.87 | 27.69 | 46.00 | -18.31 | Peak | |
| 5 * | 784.1750 | 33.76 | -1.99 | 31.77 | 46.00 | -14.23 | Peak | |
| 6 | 951.0150 | 29.93 | 1.39 | 31.32 | 46.00 | -14.68 | Peak | |

# APPENDIX D - RADIATED EMISSION (ABOVE 1000 MHZ)

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

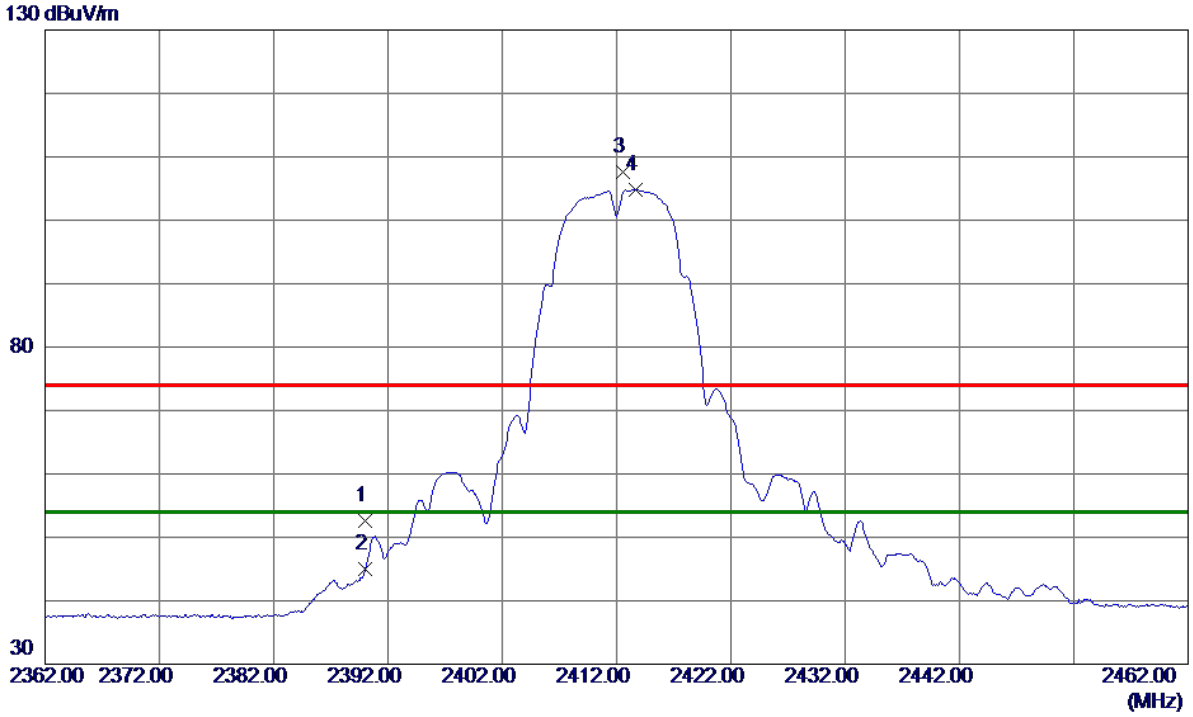
**Vertical**




| No. | Freq. | Reading Level | Correct Factor | Measure ment | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|
| | MHz | dBuV/m | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | 2390.0000 | 40.54 | 7.39 | 47.93 | 74.00 | -26.07 | Peak | |
| 2 | 2390.0000 | 32.92 | 7.39 | 40.31 | 54.00 | -13.69 | AVG | |
| 3 * | 2412.8500 | 91.06 | 7.37 | 98.43 | 54.00 | 44.43 | AVG | No Limit |
| 4 | 2412.9500 | 93.06 | 7.37 | 100.43 | 74.00 | 26.43 | Peak | No Limit |

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

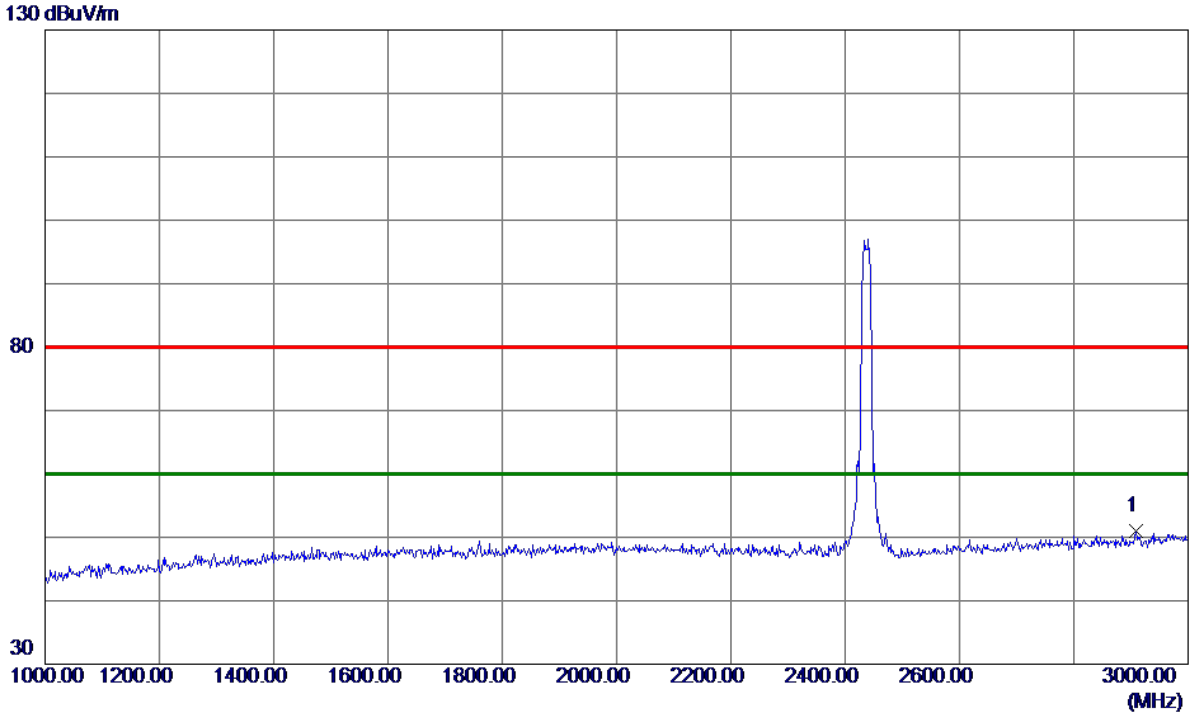
**Horizontal**




| No. | Freq. | Reading Level | Correct Factor | Measure ment | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|
| | MHz | dBuV/m | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | 2390.0000 | 45.30 | 7.39 | 52.69 | 74.00 | -21.31 | Peak | |
| 2 | 2390.0000 | 37.62 | 7.39 | 45.01 | 54.00 | -8.99 | AVG | |
| 3 | 2412.6000 | 100.24 | 7.37 | 107.61 | 74.00 | 33.61 | Peak | No Limit |
| 4 * | 2413.7000 | 97.40 | 7.37 | 104.77 | 54.00 | 50.77 | AVG | No Limit |

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

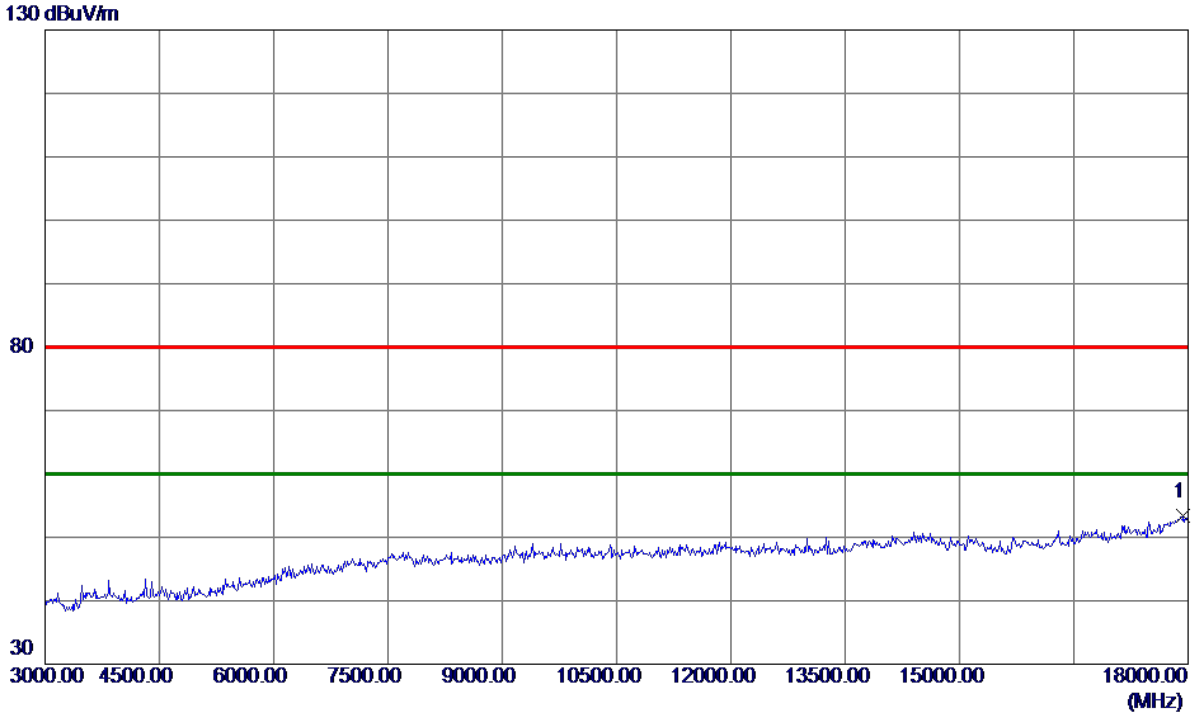
**Vertical**




| No. | Freq. | Reading Level | Correct Factor | Measure ment | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|
| | MHz | dBuV/m | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 * | 2909.0000 | 41.16 | 9.80 | 50.96 | 80.00 | -29.04 | Peak | |

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

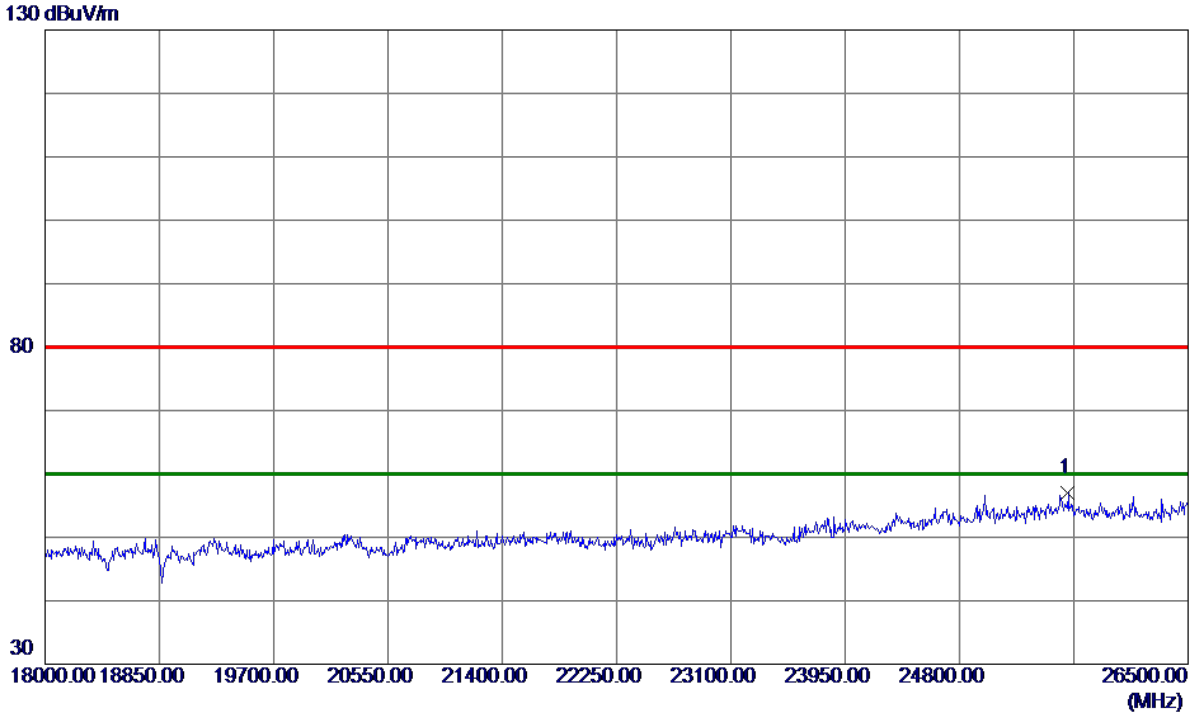
**Vertical**




| No. | Freq. | Reading Level | Correct Factor | Measure ment | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|
| | MHz | dBuV/m | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 * | 17940.0000 | 35.71 | 17.59 | 53.30 | 80.00 | -26.70 | Peak | |

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

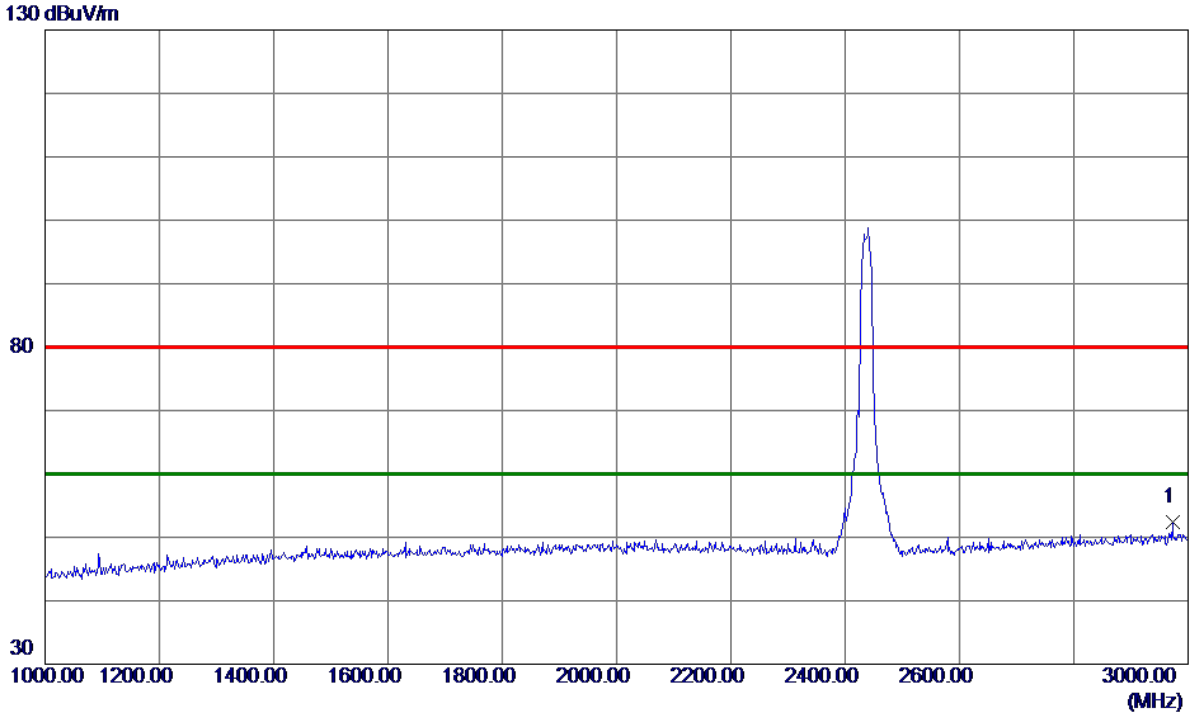
**Vertical**




| No. | Freq. | Reading Level | Correct Factor | Measure ment | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|
| | MHz | dBuV/m | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 * | 25607.5000 | 39.85 | 17.20 | 57.05 | 80.00 | -22.95 | Peak | |

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

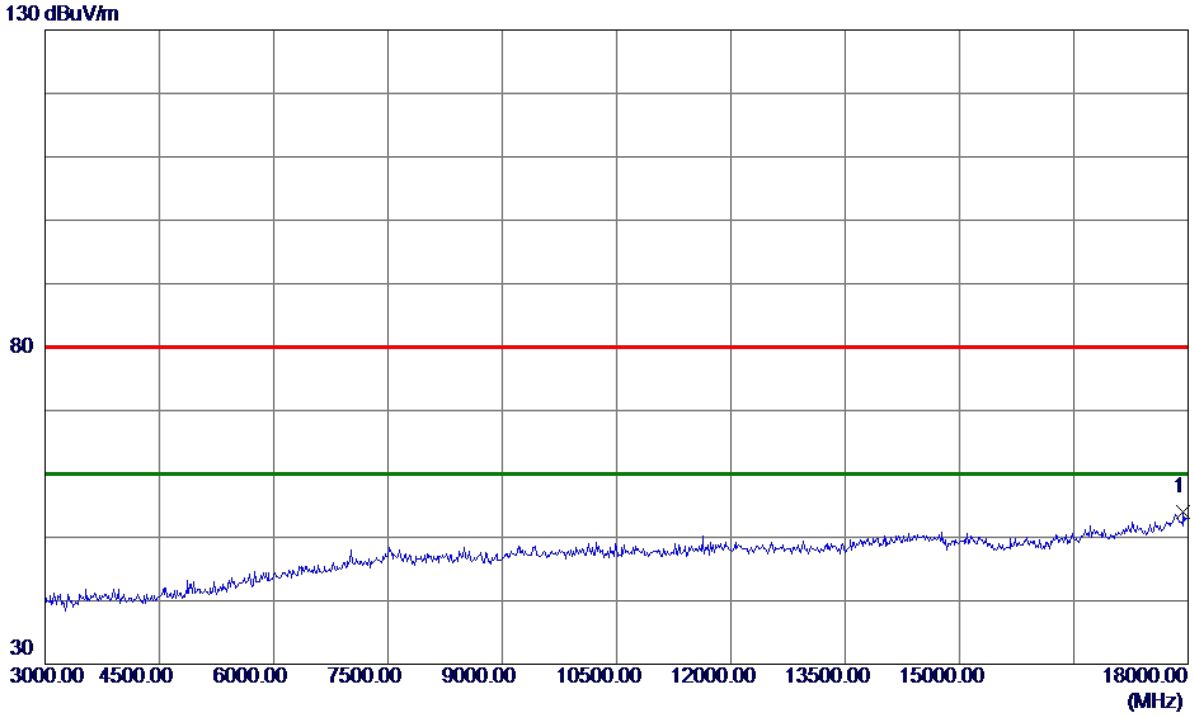
**Horizontal**




| No. | Freq. | Reading Level | Correct Factor | Measure ment | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|
| | MHz | dBuV/m | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 * | 2973.0000 | 42.14 | 10.20 | 52.34 | 80.00 | -27.66 | Peak | |

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

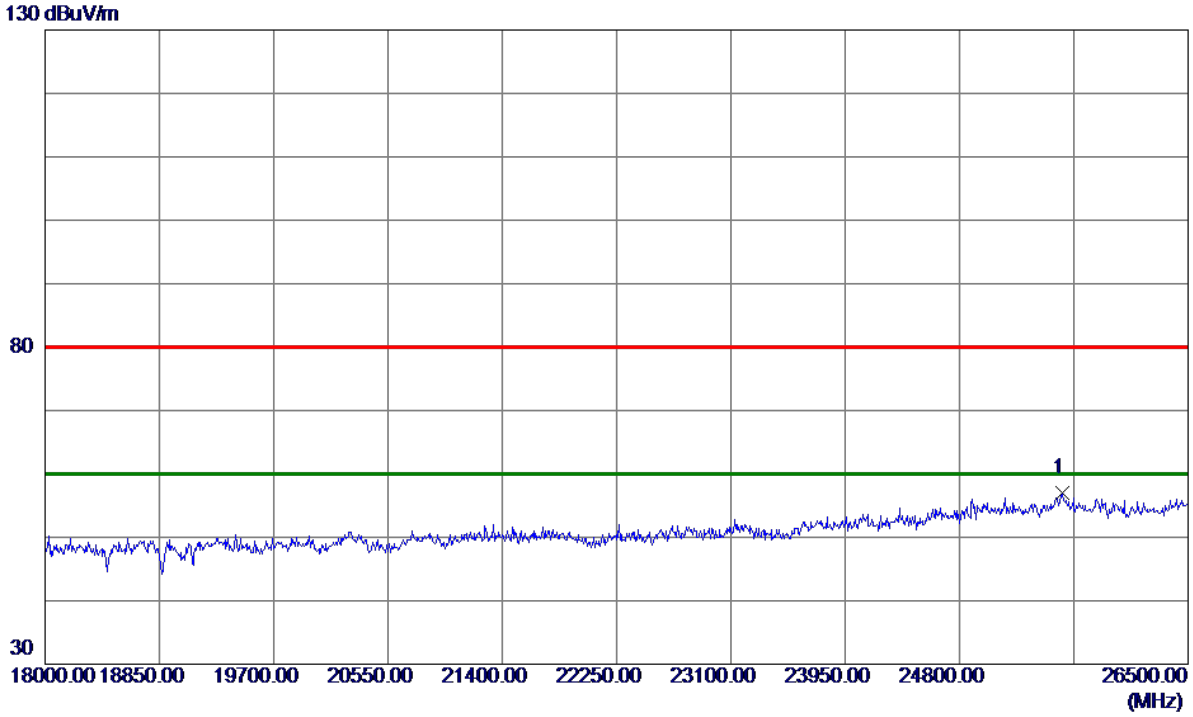
**Horizontal**




| No. | Freq. | Reading Level | Correct Factor | Measure ment | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|
| | MHz | dBuV/m | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 * | 17940.0000 | 36.49 | 17.59 | 54.08 | 80.00 | -25.92 | Peak | |

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

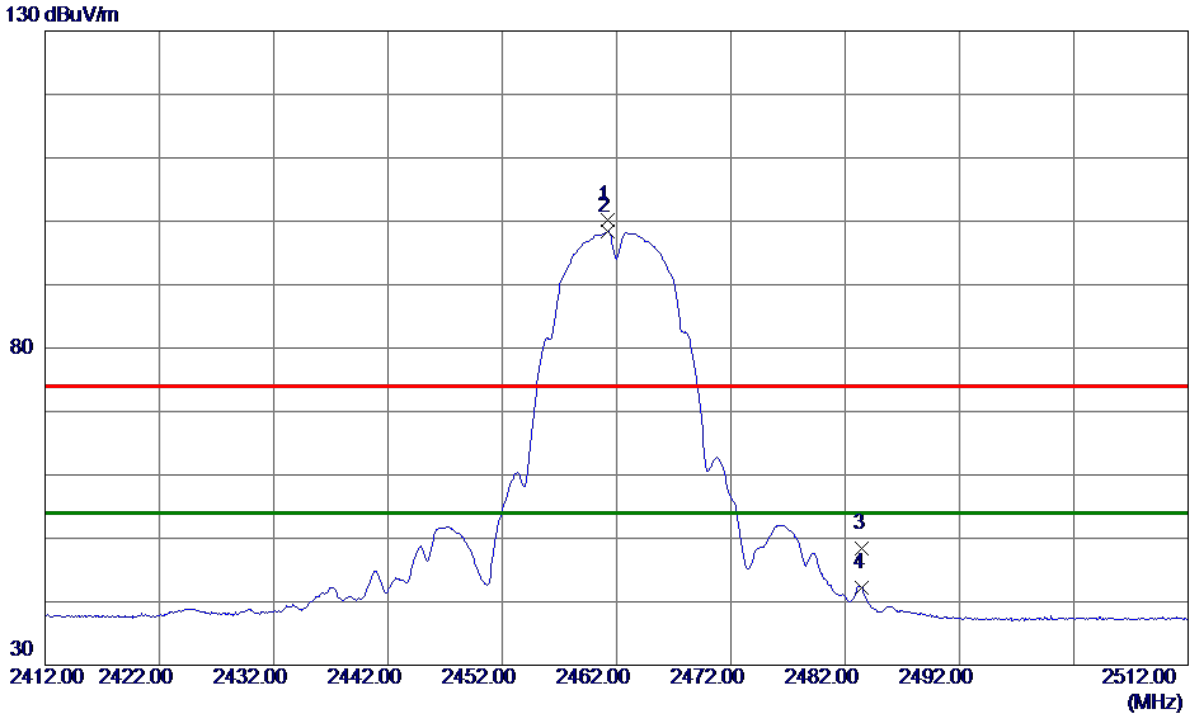
**Horizontal**




| No. | Freq. | Reading Level | Correct Factor | Measure ment | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|
| | MHz | dBuV/m | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 * | 25569.2500 | 39.82 | 17.25 | 57.07 | 80.00 | -22.93 | Peak | |

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

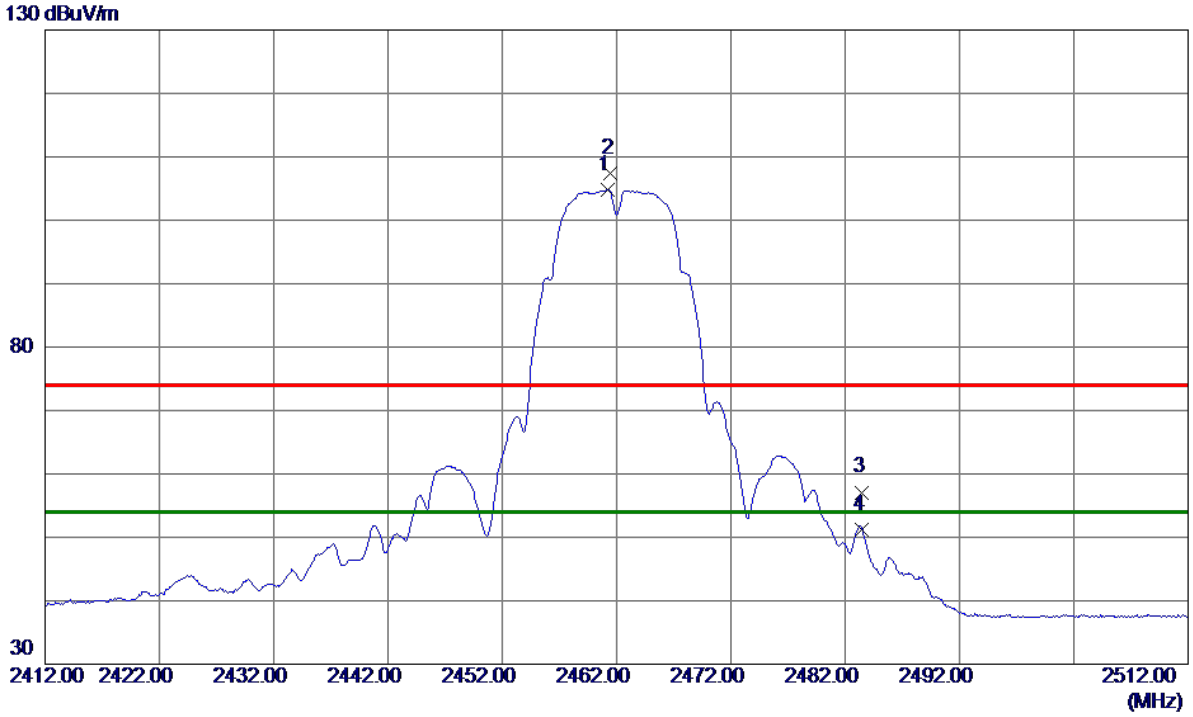
**Vertical**




| No. | Freq. | Reading Level | Correct Factor | Measure ment | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|
| | MHz | dBuV/m | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | 2461.2000 | 92.95 | 7.33 | 100.28 | 74.00 | 26.28 | Peak | No Limit |
| 2 * | 2461.2500 | 91.00 | 7.33 | 98.33 | 54.00 | 44.33 | AVG | No Limit |
| 3 | 2483.5000 | 41.02 | 7.32 | 48.34 | 74.00 | -25.66 | Peak | |
| 4 | 2483.5000 | 34.83 | 7.32 | 42.15 | 54.00 | -11.85 | AVG | |

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

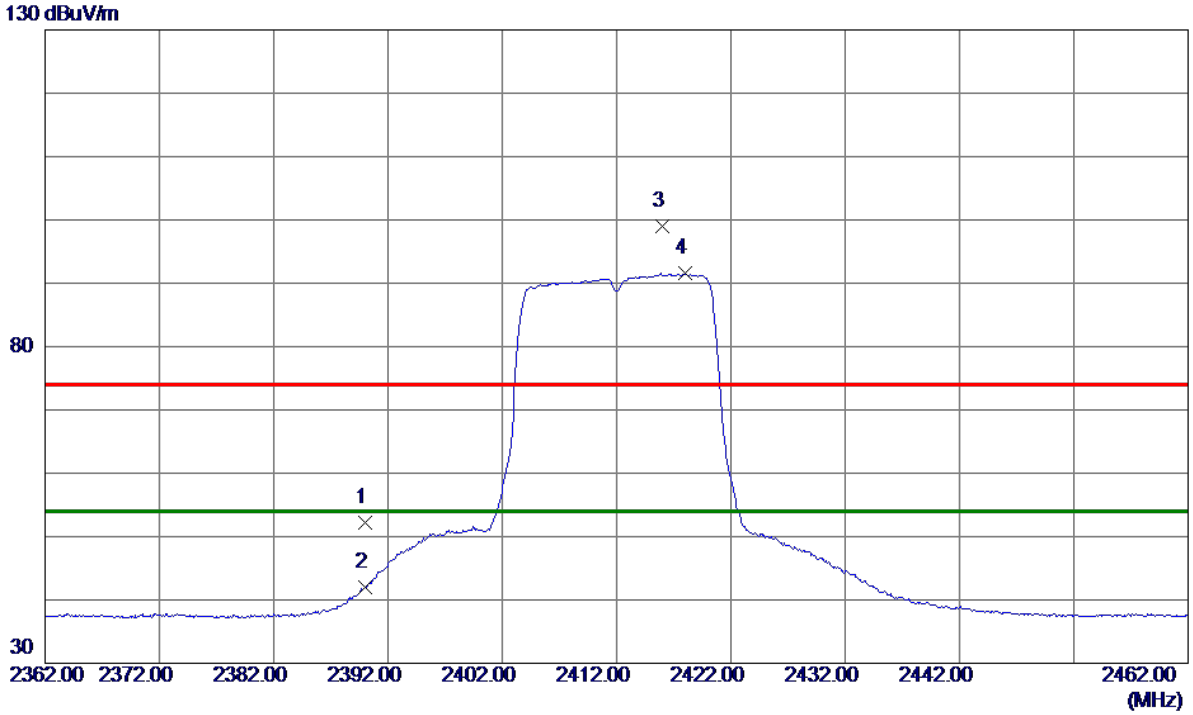
**Horizontal**




| No. | Freq. | Reading Level | Correct Factor | Measure ment | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|
| | MHz | dBuV/m | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 * | 2461.2000 | 97.44 | 7.33 | 104.77 | 54.00 | 50.77 | AVG | No Limit |
| 2 | 2461.5000 | 100.15 | 7.33 | 107.48 | 74.00 | 33.48 | Peak | No Limit |
| 3 | 2483.5000 | 49.78 | 7.32 | 57.10 | 74.00 | -16.90 | Peak | |
| 4 | 2483.5000 | 43.86 | 7.32 | 51.18 | 54.00 | -2.82 | AVG | |

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

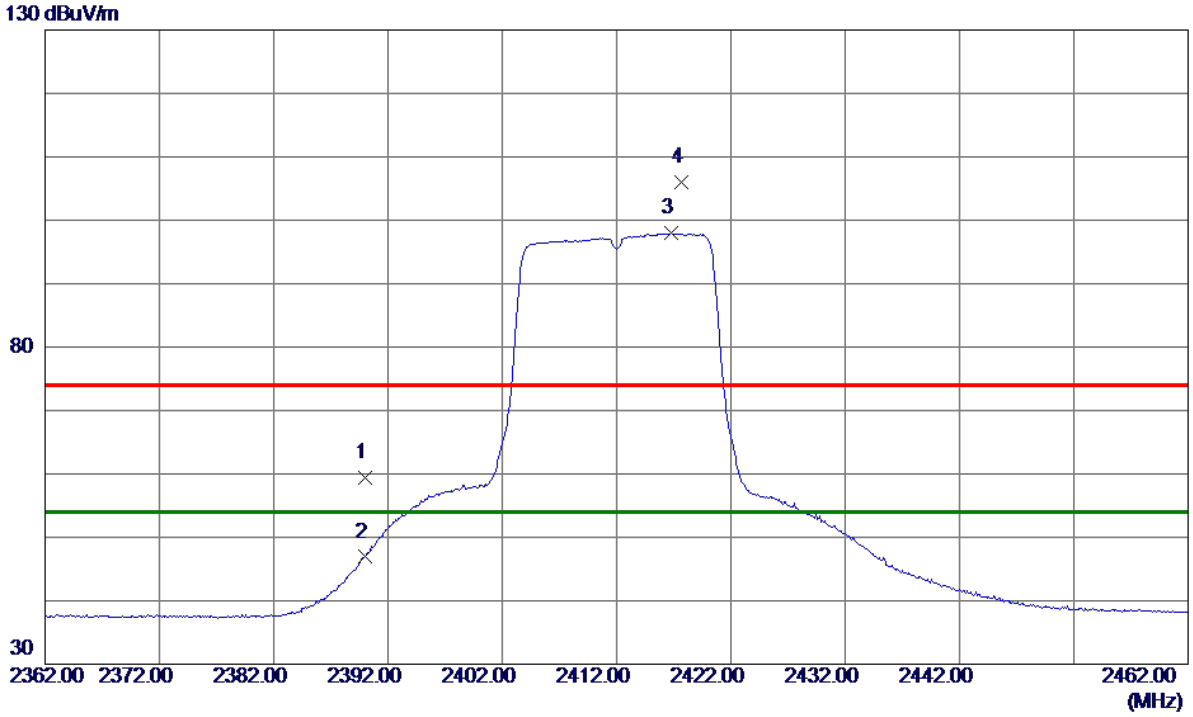
**Vertical**




| No. | Freq. | Reading Level | Correct Factor | Measure ment | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|
| | MHz | dBuV/m | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | 2390.0000 | 44.90 | 7.39 | 52.29 | 74.00 | -21.71 | Peak | |
| 2 | 2390.0000 | 34.69 | 7.39 | 42.08 | 54.00 | -11.92 | AVG | |
| 3 | 2416.0500 | 91.67 | 7.37 | 99.04 | 74.00 | 25.04 | Peak | No Limit |
| 4 * | 2418.0500 | 84.15 | 7.37 | 91.52 | 54.00 | 37.52 | AVG | No Limit |

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

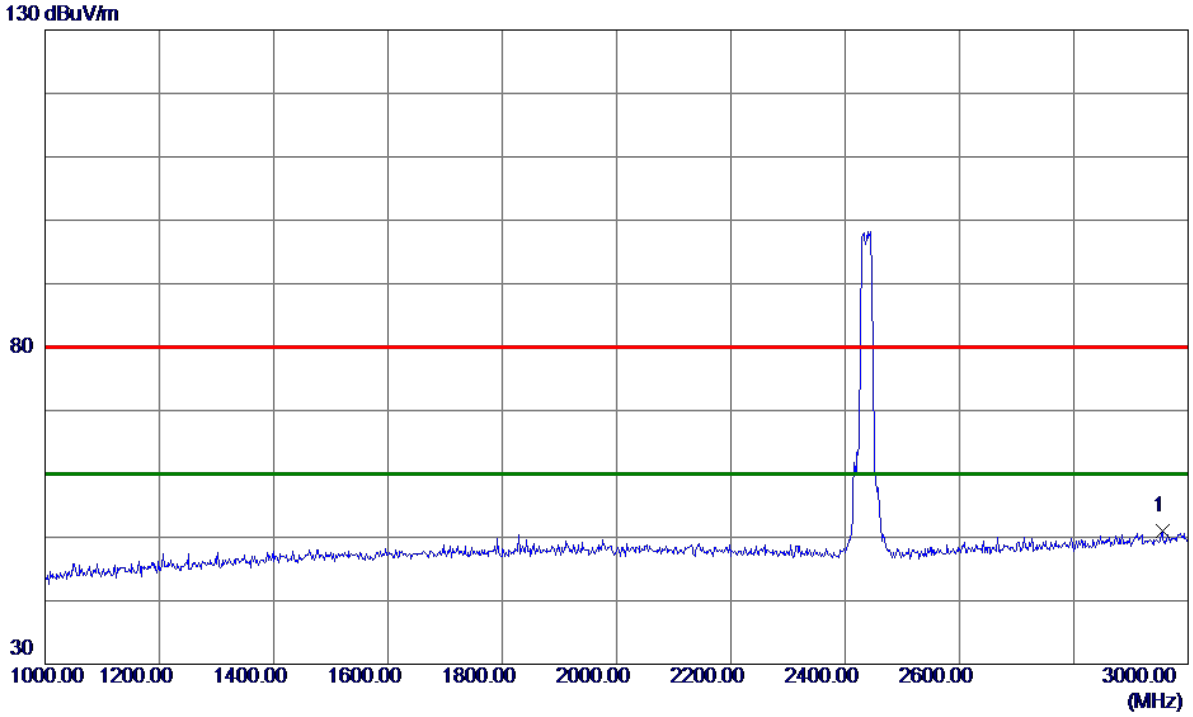
**Horizontal**




| No. | Freq. | Reading Level | Correct Factor | Measure ment | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|
| | MHz | dBuV/m | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | 2390.0000 | 52.00 | 7.39 | 59.39 | 74.00 | -14.61 | Peak | |
| 2 | 2390.0000 | 39.51 | 7.39 | 46.90 | 54.00 | -7.10 | AVG | |
| 3 * | 2416.8000 | 90.58 | 7.37 | 97.95 | 54.00 | 43.95 | AVG | No Limit |
| 4 | 2417.7000 | 98.53 | 7.37 | 105.90 | 74.00 | 31.90 | Peak | No Limit |

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

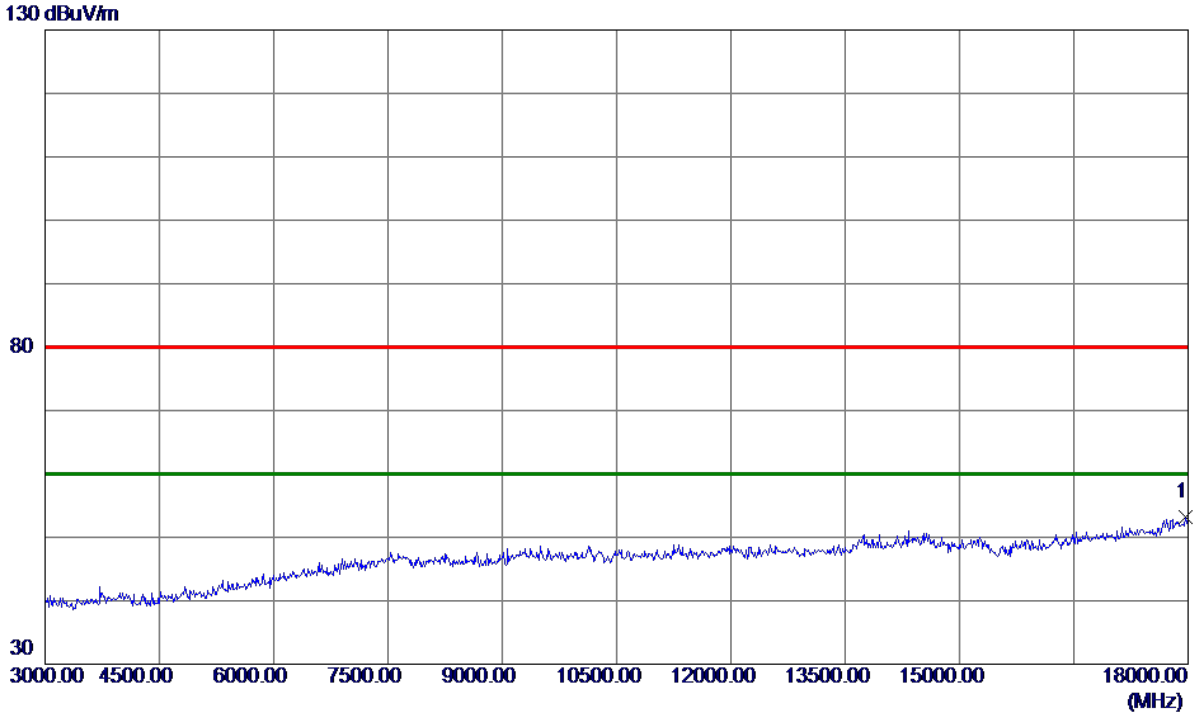
**Vertical**




| No. | Freq. | Reading Level | Correct Factor | Measure ment | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|
| | MHz | dBuV/m | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 * | 2955.0000 | 40.83 | 10.09 | 50.92 | 80.00 | -29.08 | Peak | |

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

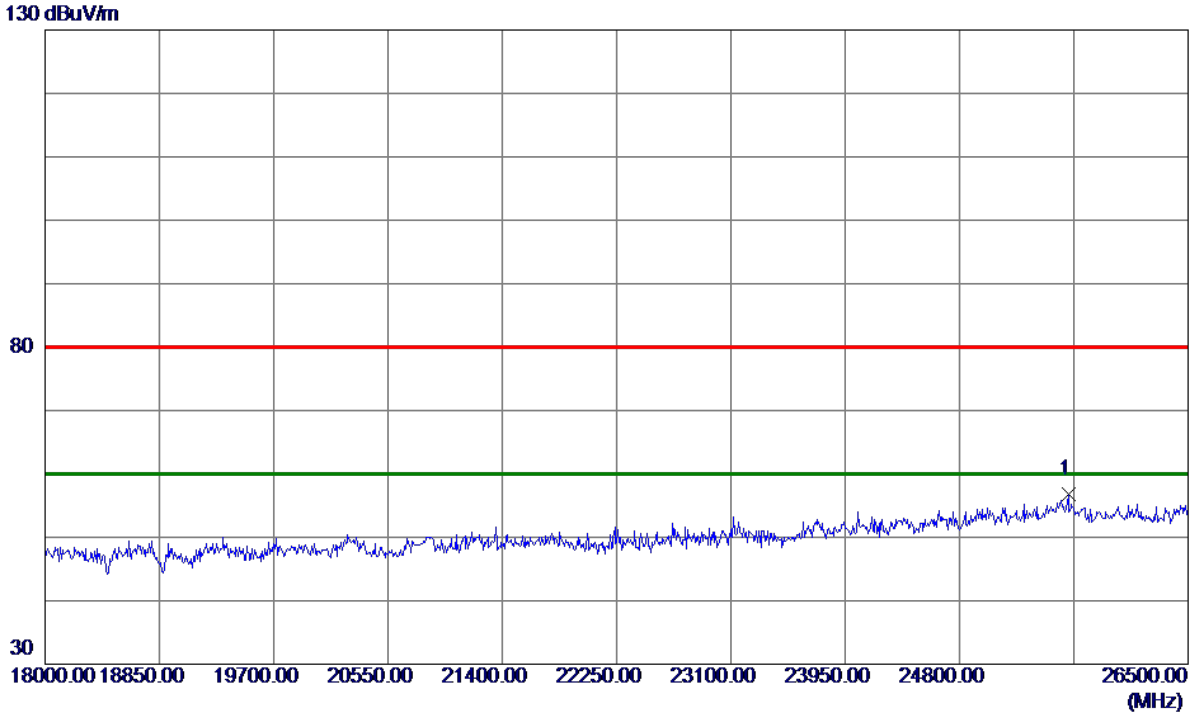
**Vertical**




| No. | Freq. | Reading Level | Correct Factor | Measure ment | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|
| | MHz | dBuV/m | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 * | 17970.0000 | 35.45 | 17.68 | 53.13 | 80.00 | -26.87 | Peak | |

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

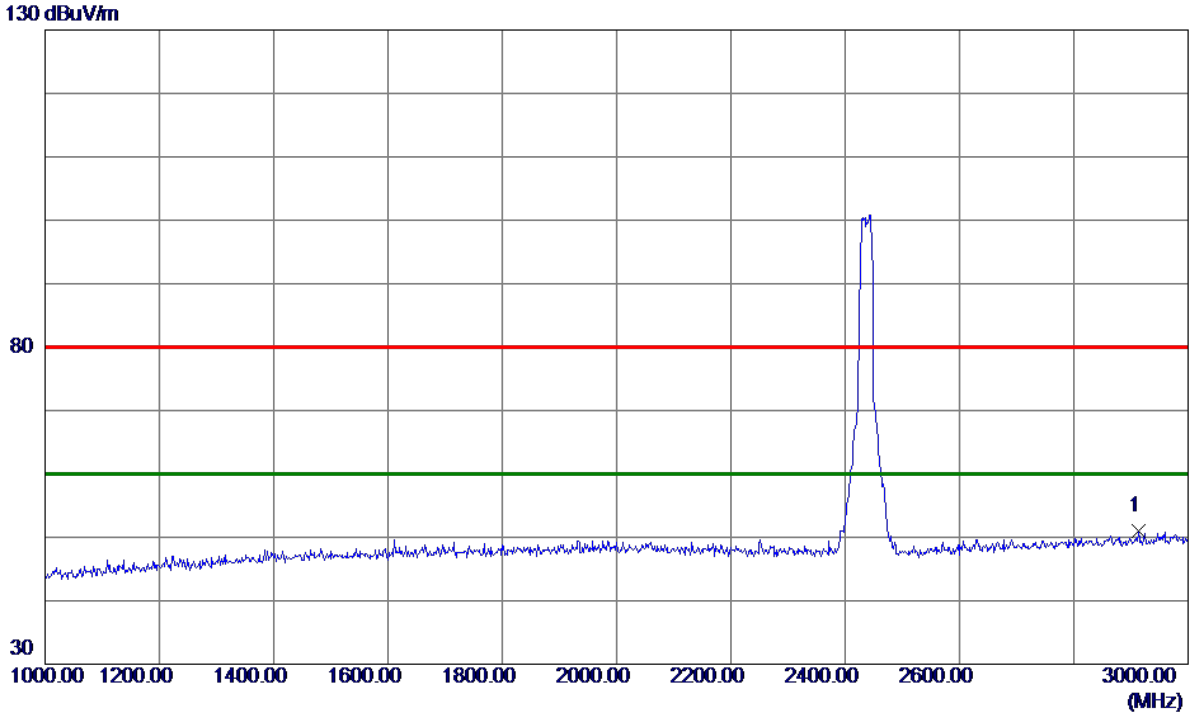
**Vertical**




| No. | Freq. | Reading Level | Correct Factor | Measure ment | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|
| | MHz | dBuV/m | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 * | 25611.7500 | 39.61 | 17.20 | 56.81 | 80.00 | -23.19 | Peak | |

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

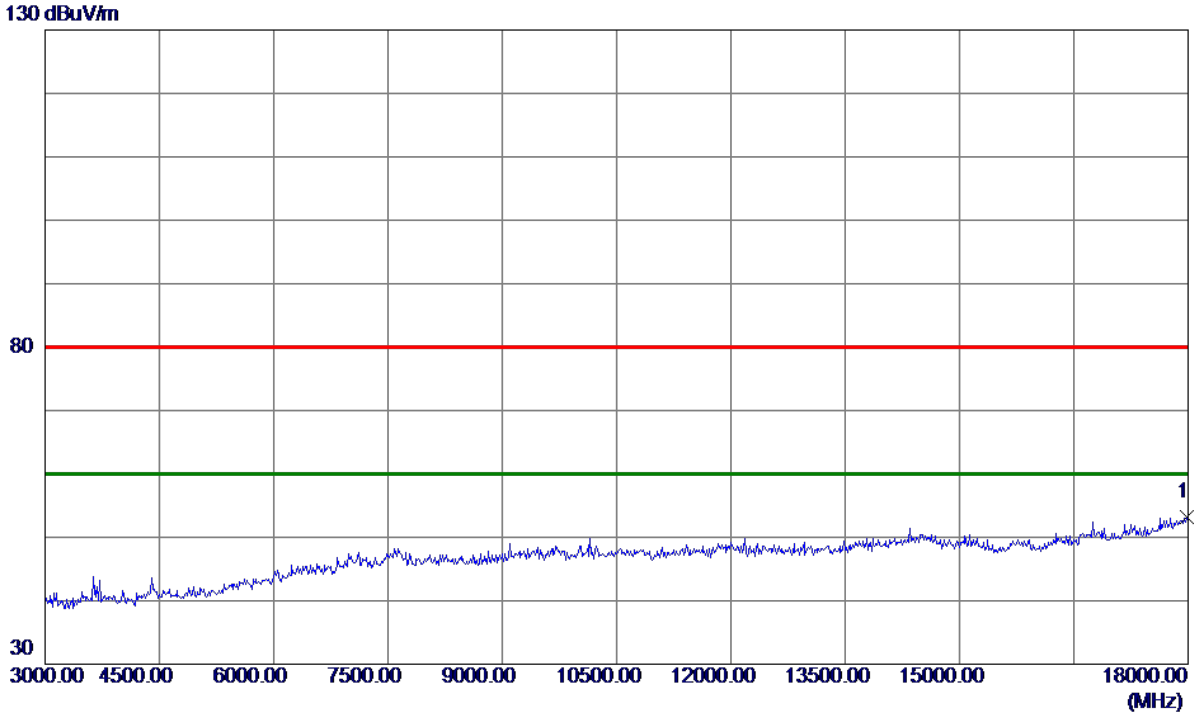
**Horizontal**




| No. | Freq. | Reading Level | Correct Factor | Measure ment | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|
| | MHz | dBuV/m | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 * | 2913.0000 | 41.16 | 9.83 | 50.99 | 80.00 | -29.01 | Peak | |

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

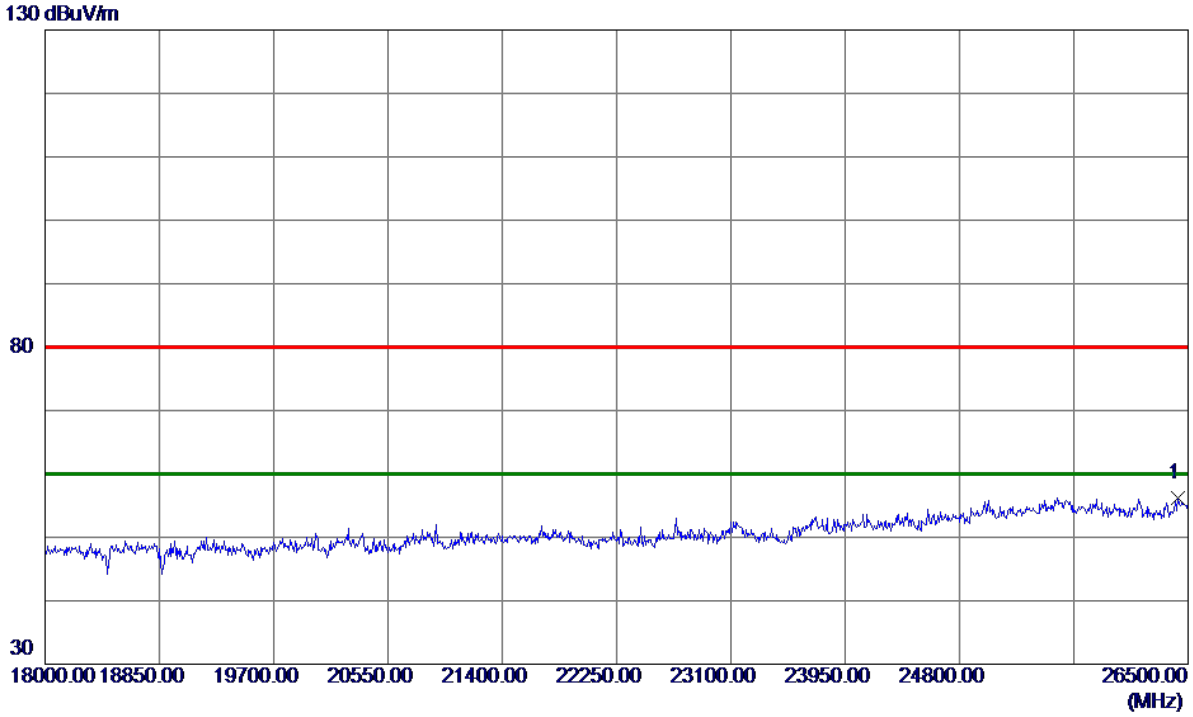
**Horizontal**




| No. | Freq. | Reading Level | Correct Factor | Measure ment | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|
| | MHz | dBuV/m | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 * | 17985.0000 | 35.45 | 17.72 | 53.17 | 80.00 | -26.83 | Peak | |

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

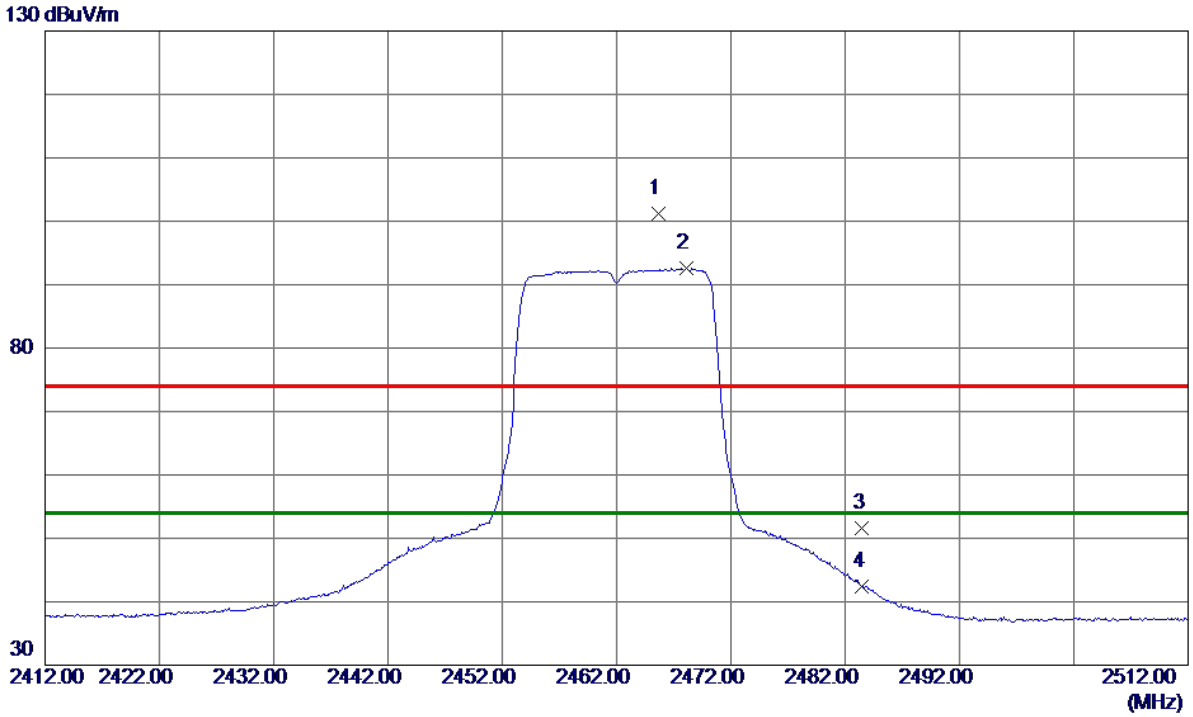
**Horizontal**




| No. | Freq. | Reading Level | Correct Factor | Measure ment | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|
| | MHz | dBuV/m | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 * | 26427.7500 | 38.41 | 17.84 | 56.25 | 80.00 | -23.75 | Peak | |

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

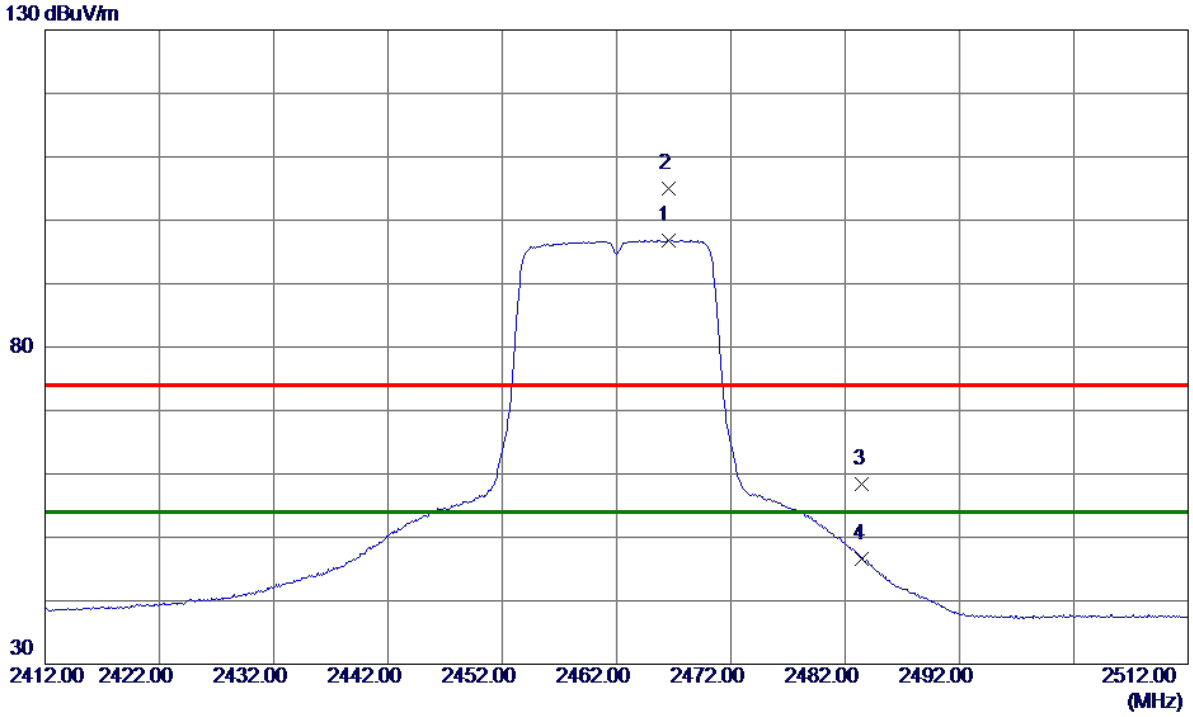
**Vertical**




| No. | Freq. | Reading Level | Correct Factor | Measure ment | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|
| | MHz | dBuV/m | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | 2465.6500 | 93.86 | 7.33 | 101.19 | 74.00 | 27.19 | Peak | No Limit |
| 2 * | 2468.1500 | 85.23 | 7.33 | 92.56 | 54.00 | 38.56 | AVG | No Limit |
| 3 | 2483.5000 | 44.23 | 7.32 | 51.55 | 74.00 | -22.45 | Peak | |
| 4 | 2483.5000 | 35.03 | 7.32 | 42.35 | 54.00 | -11.65 | AVG | |

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

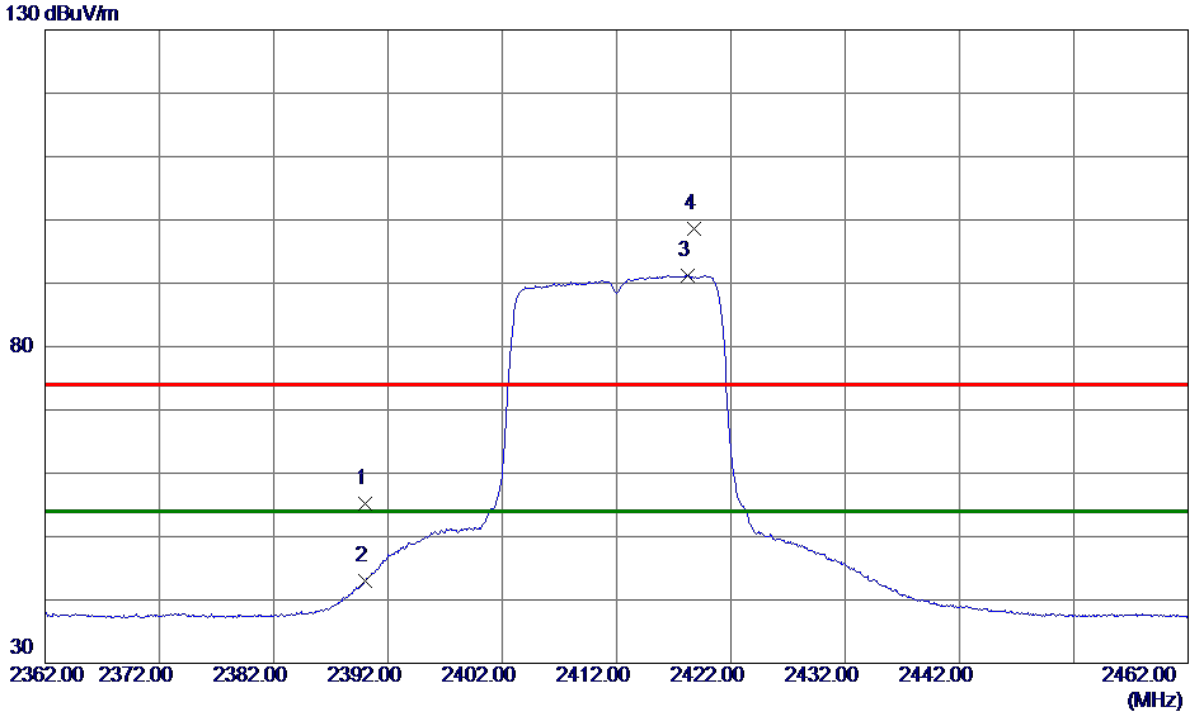
**Horizontal**




| No. | Freq. | Reading Level | Correct Factor | Measure ment | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|
| | MHz | dBuV/m | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 * | 2466.5000 | 89.49 | 7.33 | 96.82 | 54.00 | 42.82 | AVG | No Limit |
| 2 | 2466.6000 | 97.64 | 7.33 | 104.97 | 74.00 | 30.97 | Peak | No Limit |
| 3 | 2483.5000 | 51.02 | 7.32 | 58.34 | 74.00 | -15.66 | Peak | |
| 4 | 2483.5000 | 39.35 | 7.32 | 46.67 | 54.00 | -7.33 | AVG | |

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

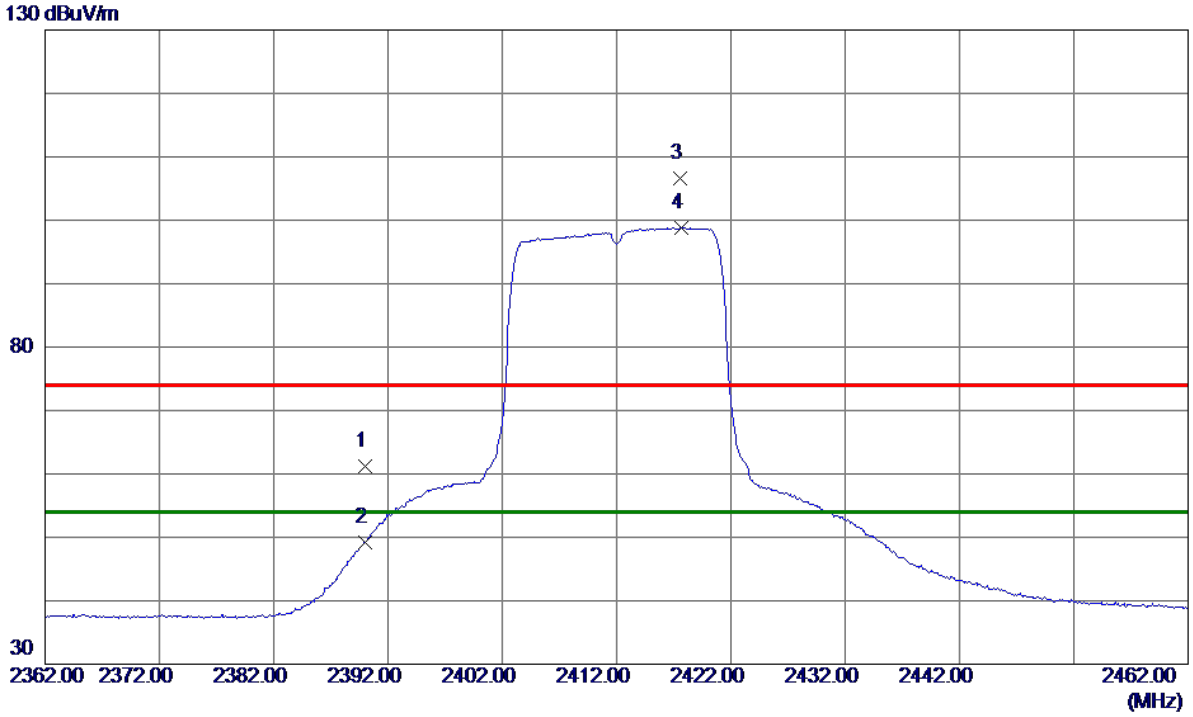
**Vertical**




| No. | Freq. | Reading Level | Correct Factor | Measure ment | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|
| | MHz | dBuV/m | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | 2390.0000 | 47.87 | 7.39 | 55.26 | 74.00 | -18.74 | Peak | |
| 2 | 2390.0000 | 35.64 | 7.39 | 43.03 | 54.00 | -10.97 | AVG | |
| 3 * | 2418.2000 | 83.90 | 7.37 | 91.27 | 54.00 | 37.27 | AVG | No Limit |
| 4 | 2418.8000 | 91.27 | 7.37 | 98.64 | 74.00 | 24.64 | Peak | No Limit |

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

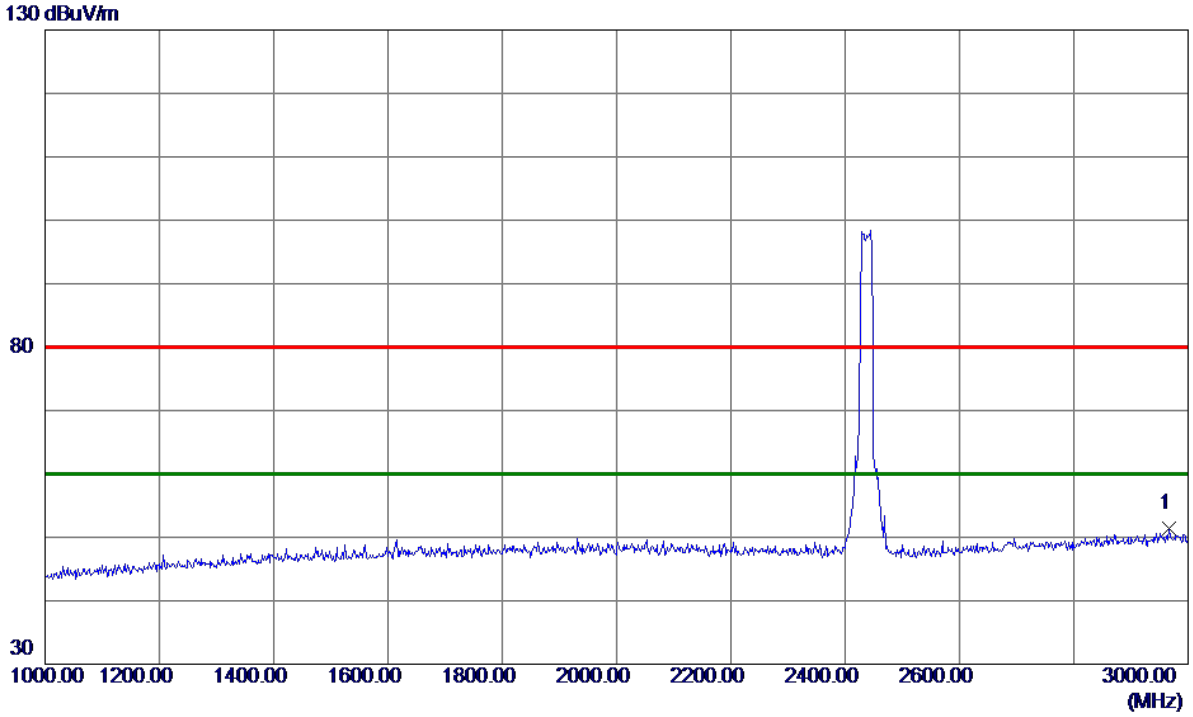
**Horizontal**




| No. | Freq. | Reading Level | Correct Factor | Measure ment | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|
| | MHz | dBuV/m | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | 2390.0000 | 53.83 | 7.39 | 61.22 | 74.00 | -12.78 | Peak | |
| 2 | 2390.0000 | 41.79 | 7.39 | 49.18 | 54.00 | -4.82 | AVG | |
| 3 | 2417.6000 | 99.15 | 7.37 | 106.52 | 74.00 | 32.52 | Peak | No Limit |
| 4 * | 2417.7000 | 91.45 | 7.37 | 98.82 | 54.00 | 44.82 | AVG | No Limit |

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

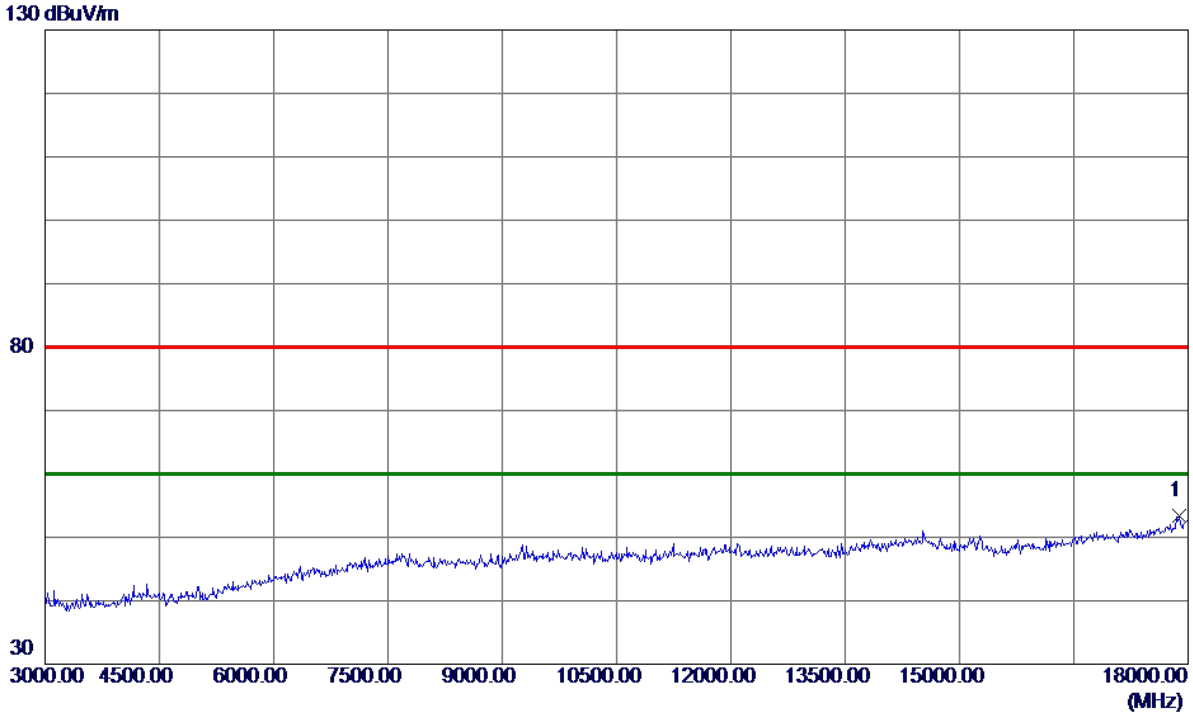
**Vertical**




| No. | Freq. | Reading Level | Correct Factor | Measure ment | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|
| | MHz | dBuV/m | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 * | 2967.0000 | 41.28 | 10.16 | 51.44 | 80.00 | -28.56 | Peak | |

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

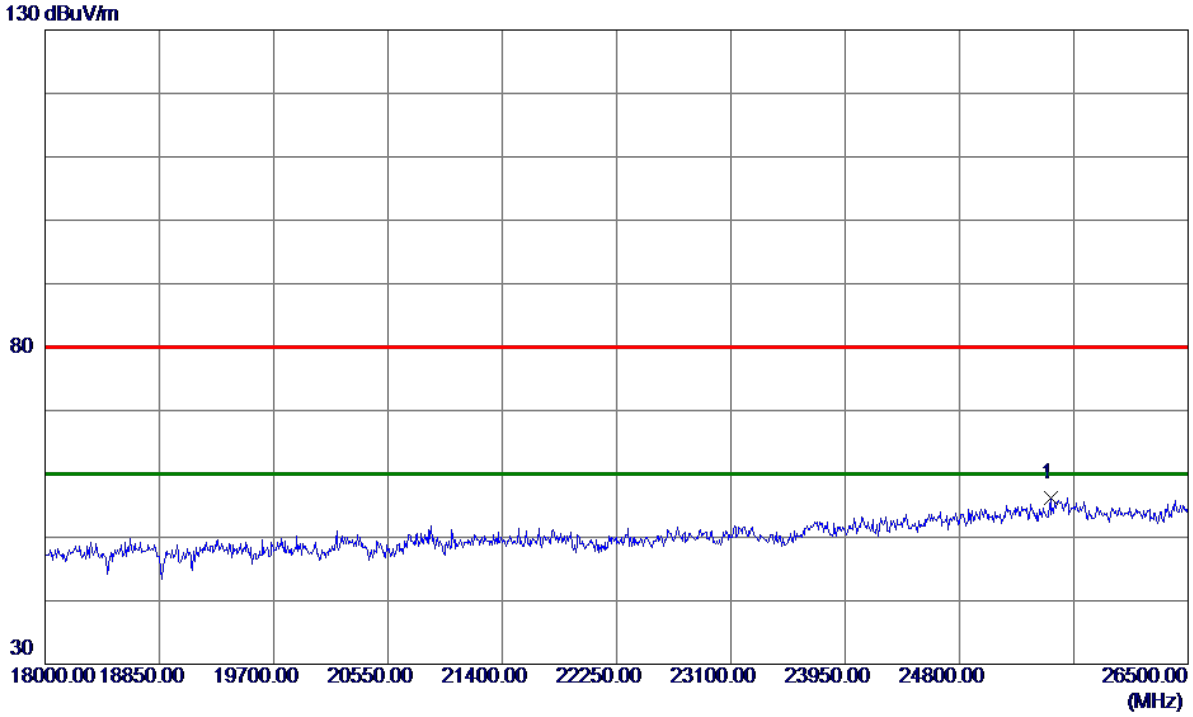
**Vertical**




| No. | Freq. | Reading Level | Correct Factor | Measure ment | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|
| | MHz | dBuV/m | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 * | 17880.0000 | 36.07 | 17.41 | 53.48 | 80.00 | -26.52 | Peak | |

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

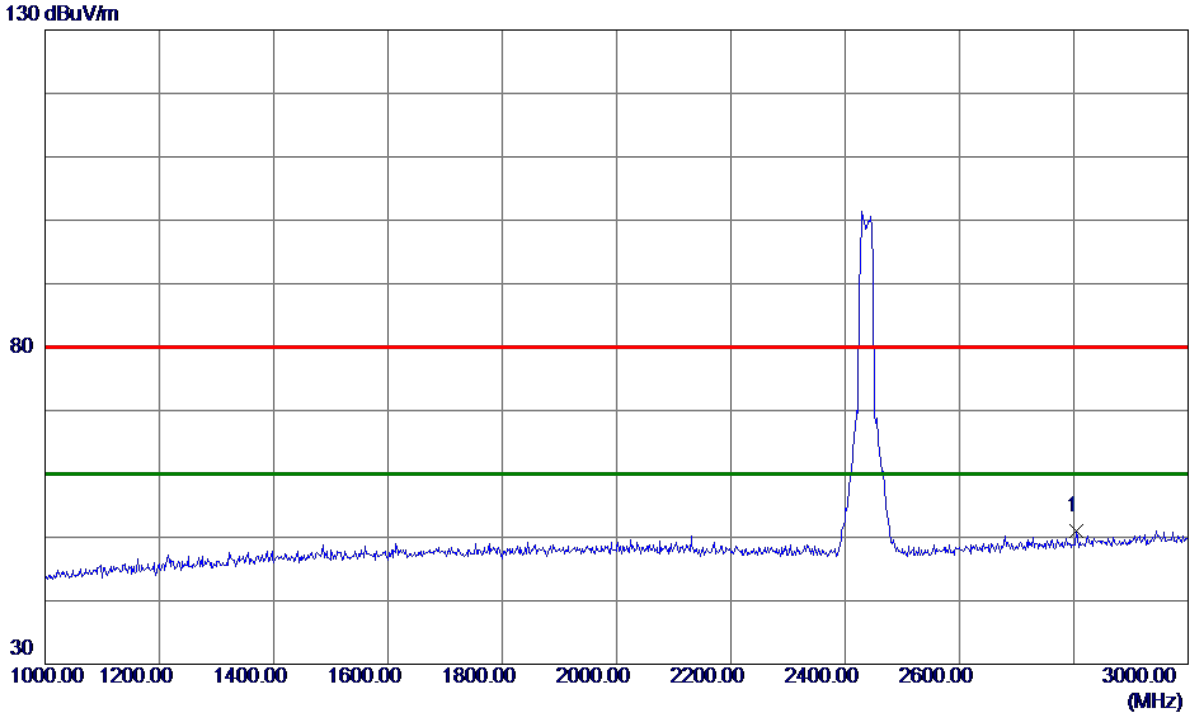
**Vertical**




| No. | Freq. | Reading Level | Correct Factor | Measure ment | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|
| | MHz | dBuV/m | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 * | 25475.7500 | 38.93 | 17.31 | 56.24 | 80.00 | -23.76 | Peak | |

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

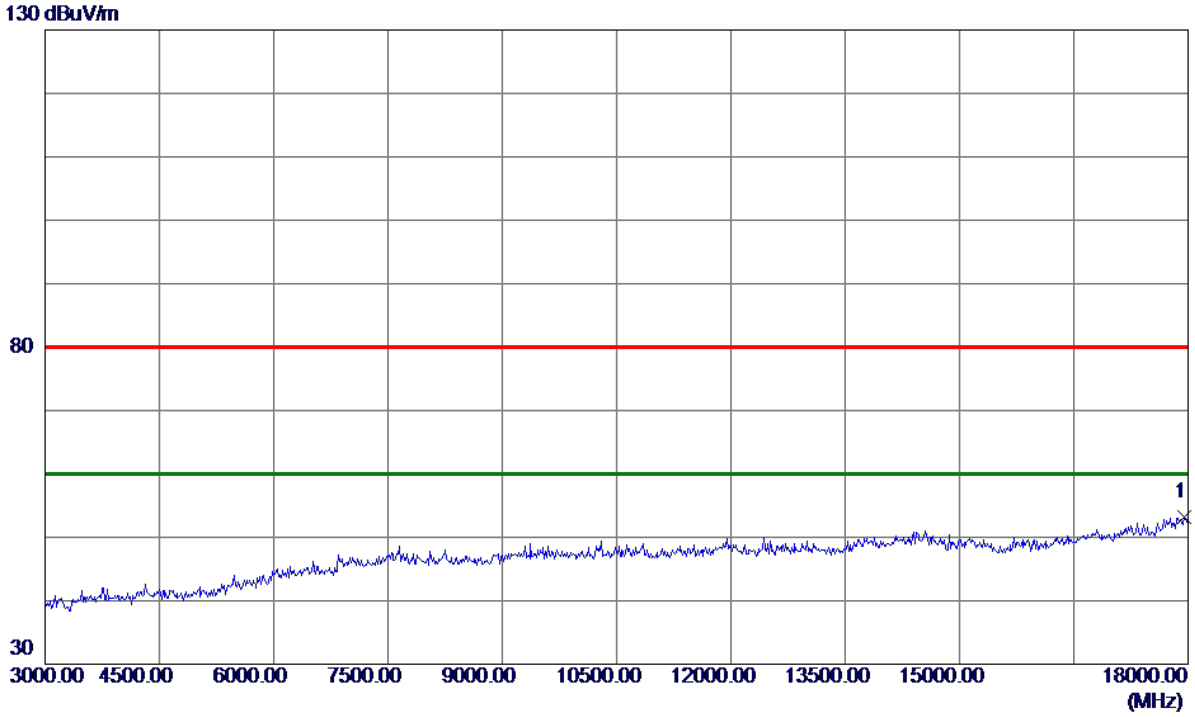
**Horizontal**




| No. | Freq. | Reading Level | Correct Factor | Measure ment | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|
| | MHz | dBuV/m | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 * | 2805.0000 | 41.92 | 9.17 | 51.09 | 80.00 | -28.91 | Peak | |

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

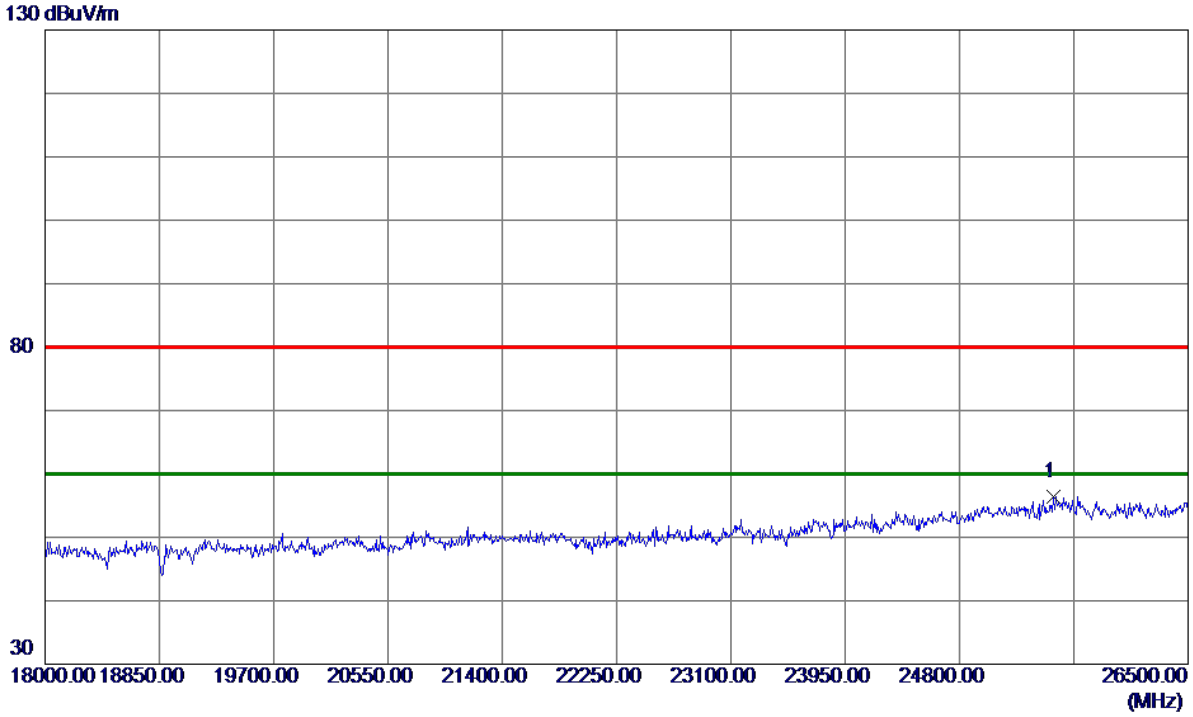
**Horizontal**




| No. | Freq. | Reading Level | Correct Factor | Measure ment | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|
| | MHz | dBuV/m | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 * | 17955.0000 | 35.64 | 17.63 | 53.27 | 80.00 | -26.73 | Peak | |

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

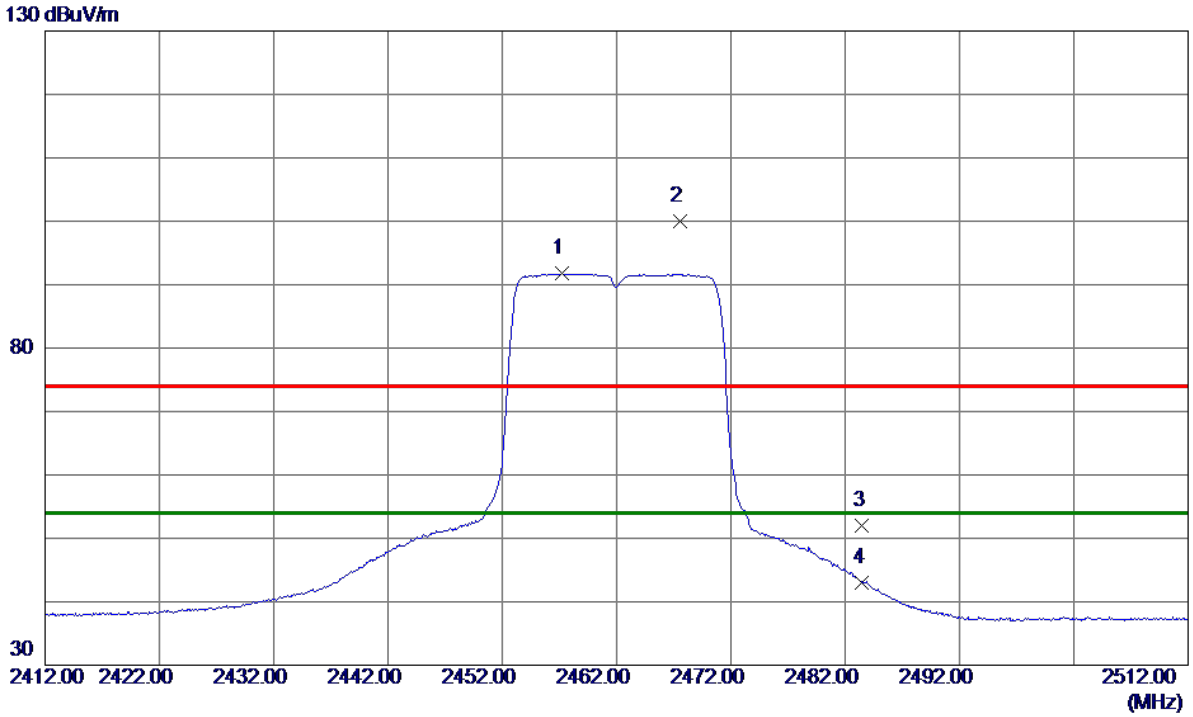
**Horizontal**




| No. | Freq. | Reading Level | Correct Factor | Measure ment | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|
| | MHz | dBuV/m | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 * | 25497.0000 | 39.16 | 17.32 | 56.48 | 80.00 | -23.52 | Peak | |

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

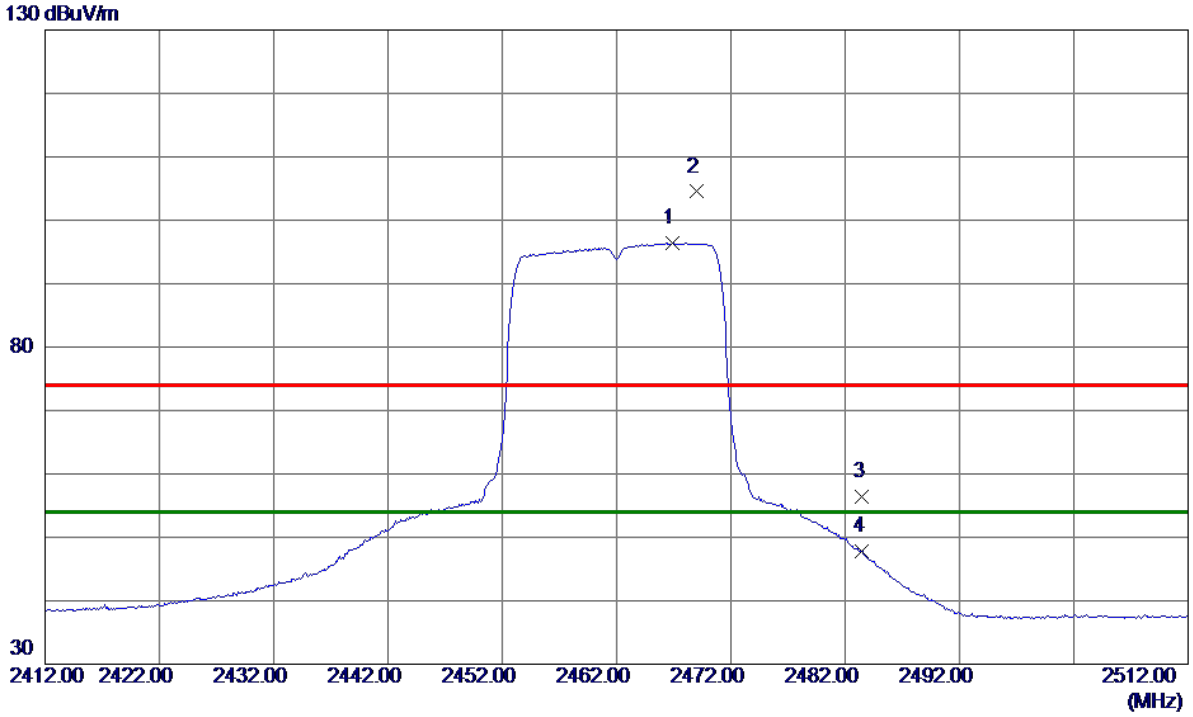
**Vertical**




| No. | Freq. | Reading Level | Correct Factor | Measure ment | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|
| | MHz | dBuV/m | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 * | 2457.2500 | 84.45 | 7.34 | 91.79 | 54.00 | 37.79 | AVG | No Limit |
| 2 | 2467.5500 | 92.69 | 7.33 | 100.02 | 74.00 | 26.02 | Peak | No Limit |
| 3 | 2483.5000 | 44.60 | 7.32 | 51.92 | 74.00 | -22.08 | Peak | |
| 4 | 2483.5000 | 35.60 | 7.32 | 42.92 | 54.00 | -11.08 | AVG | |

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

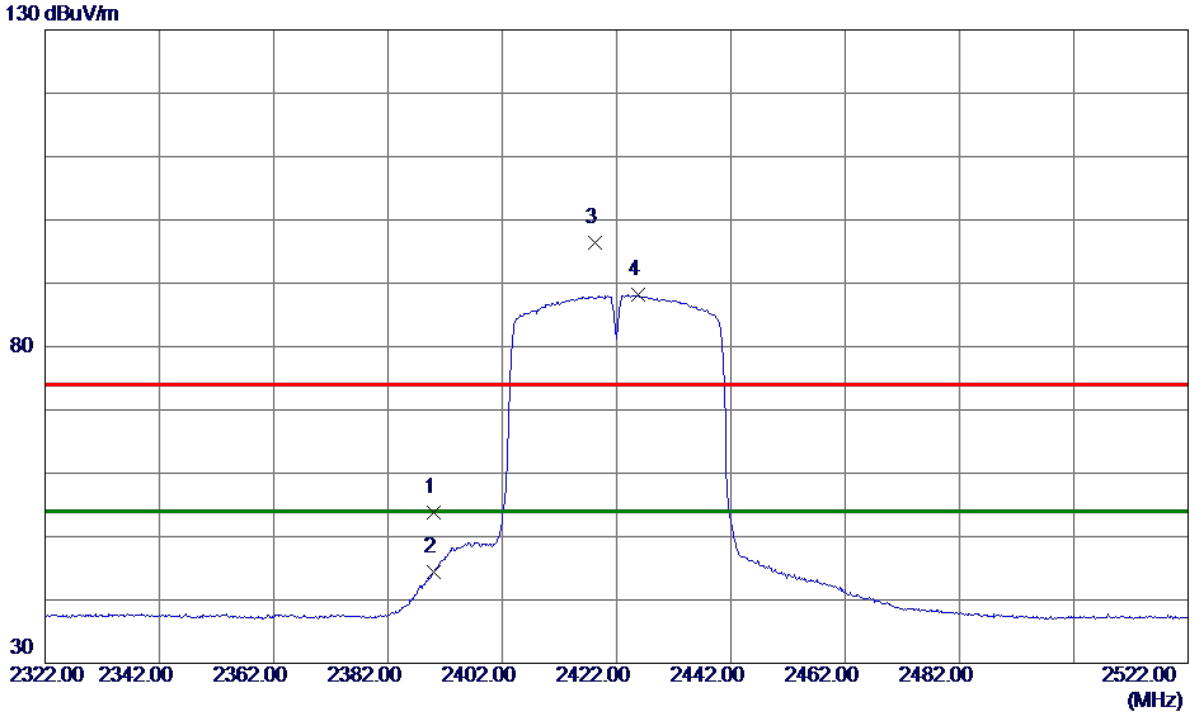
**Horizontal**




| No. | Freq. | Reading Level | Correct Factor | Measure ment | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|
| | MHz | dBuV/m | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 * | 2466.9000 | 89.06 | 7.33 | 96.39 | 54.00 | 42.39 | AVG | No Limit |
| 2 | 2469.0000 | 97.17 | 7.33 | 104.50 | 74.00 | 30.50 | Peak | No Limit |
| 3 | 2483.5000 | 49.17 | 7.32 | 56.49 | 74.00 | -17.51 | Peak | |
| 4 | 2483.5000 | 40.52 | 7.32 | 47.84 | 54.00 | -6.16 | AVG | |

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

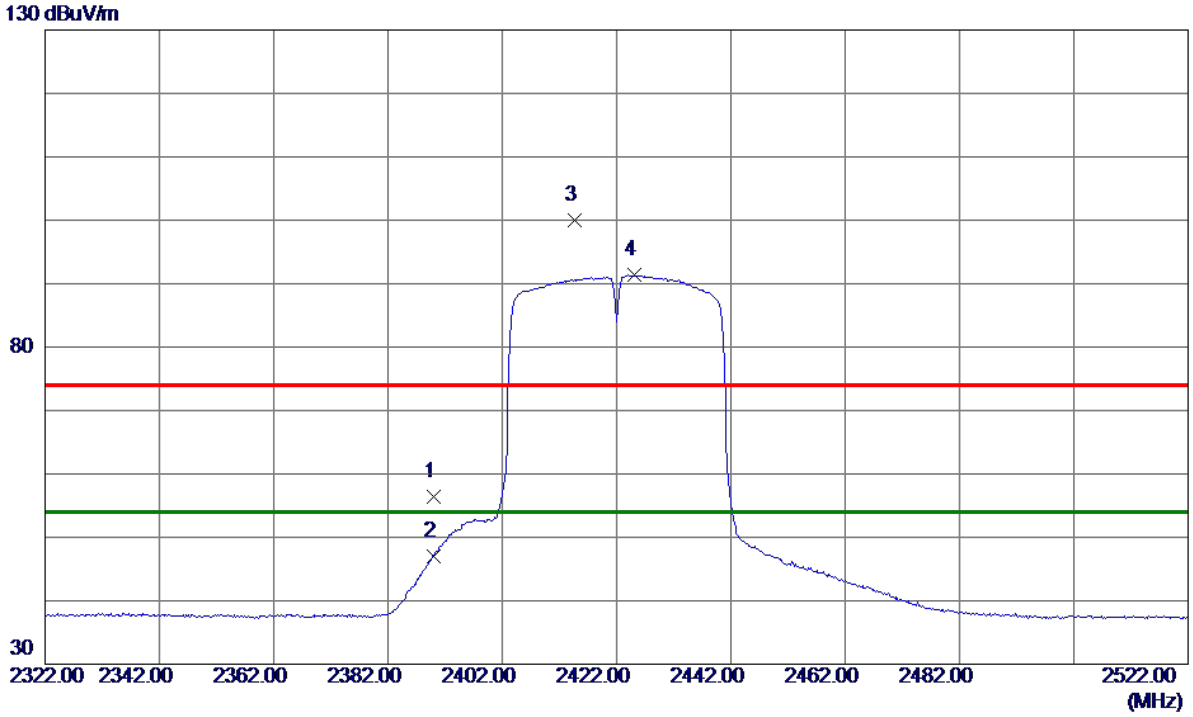
**Vertical**




| No. | Freq. | Reading Level | Correct Factor | Measure ment | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|
| | MHz | dBuV/m | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | 2390.0000 | 46.37 | 7.39 | 53.76 | 74.00 | -20.24 | Peak | |
| 2 | 2390.0000 | 36.98 | 7.39 | 44.37 | 54.00 | -9.63 | AVG | |
| 3 | 2418.2000 | 88.95 | 7.37 | 96.32 | 74.00 | 22.32 | Peak | No Limit |
| 4 * | 2425.7000 | 80.86 | 7.36 | 88.22 | 54.00 | 34.22 | AVG | No Limit |

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

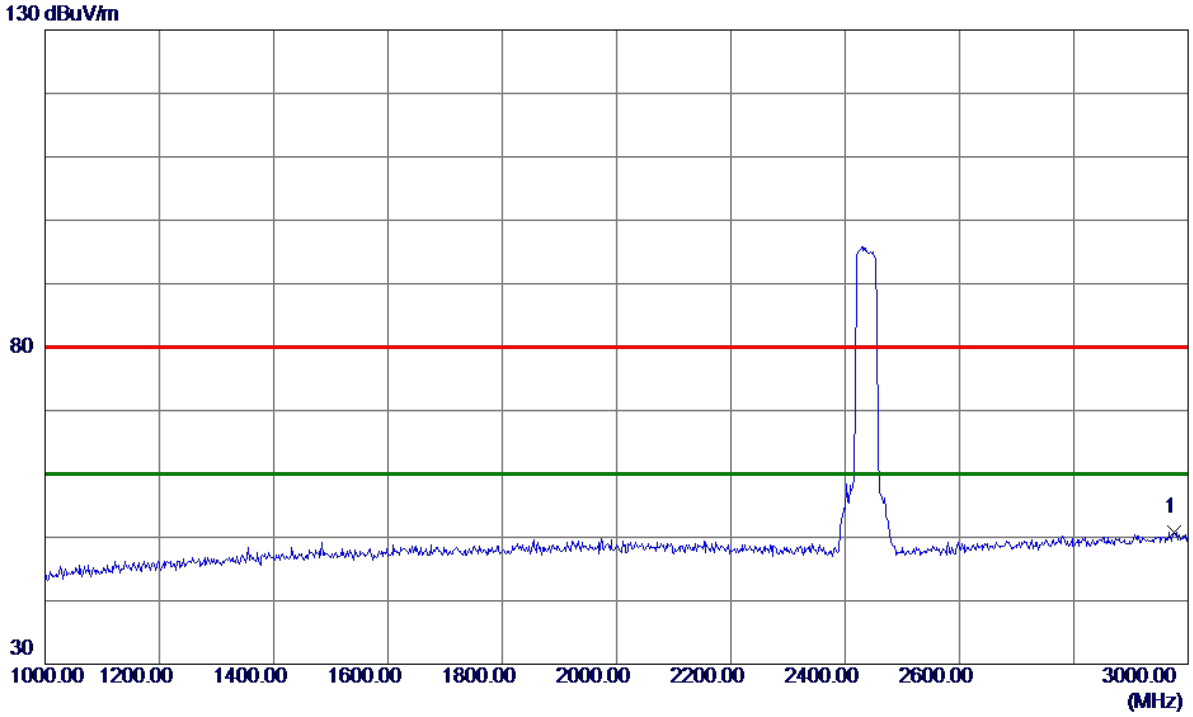
**Horizontal**




| No. | Freq. | Reading Level | Correct Factor | Measure ment | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|
| | MHz | dBuV/m | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 | 2390.0000 | 48.96 | 7.39 | 56.35 | 74.00 | -17.65 | Peak | |
| 2 | 2390.0000 | 39.68 | 7.39 | 47.07 | 54.00 | -6.93 | AVG | |
| 3 | 2414.6000 | 92.65 | 7.37 | 100.02 | 74.00 | 26.02 | Peak | No Limit |
| 4 * | 2425.2000 | 83.95 | 7.36 | 91.31 | 54.00 | 37.31 | AVG | No Limit |

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

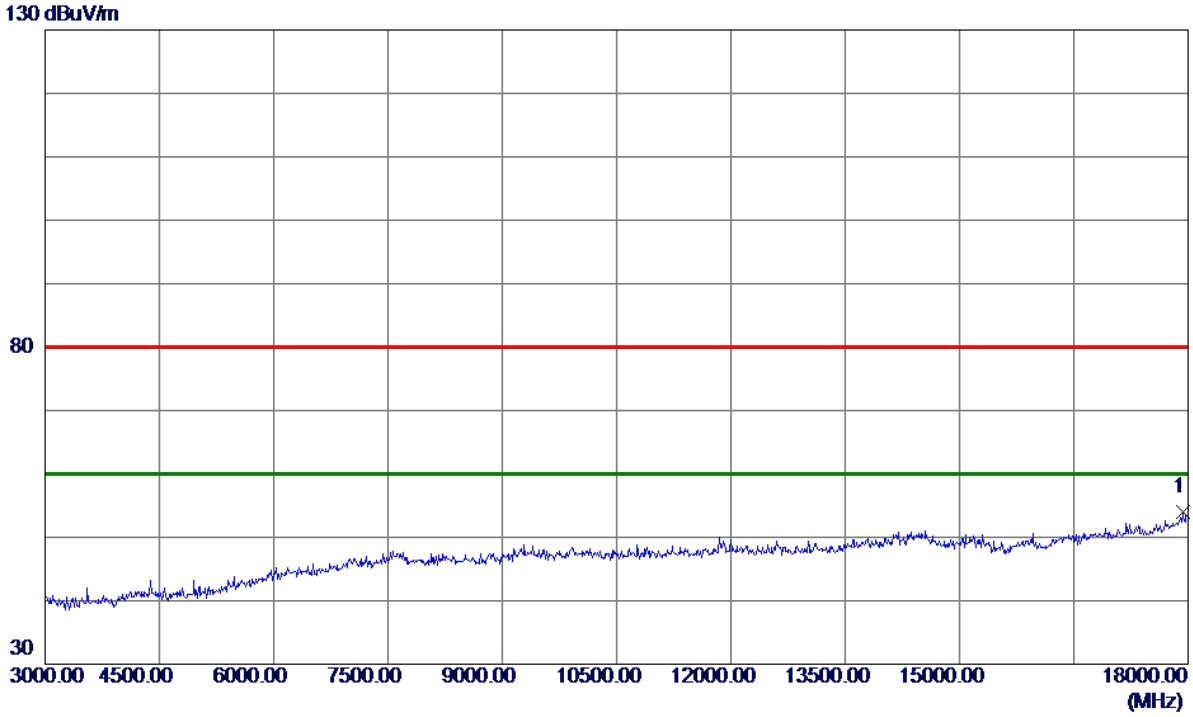
**Vertical**




| No. | Freq. | Reading Level | Correct Factor | Measure ment | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|
| | MHz | dBuV/m | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 * | 2975.0000 | 40.57 | 10.21 | 50.78 | 80.00 | -29.22 | Peak | |

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

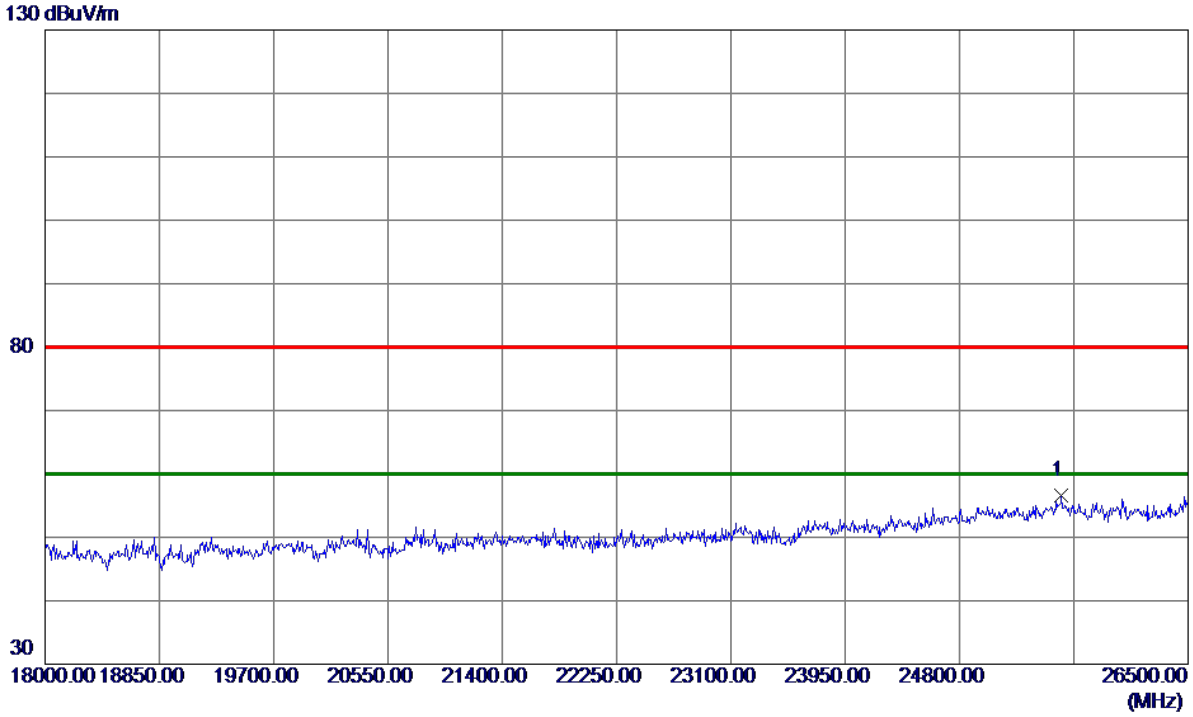
**Vertical**




| No. | Freq. | Reading Level | Correct Factor | Measure ment | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|
| | MHz | dBuV/m | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 * | 17932.5000 | 36.48 | 17.57 | 54.05 | 80.00 | -25.95 | Peak | |

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

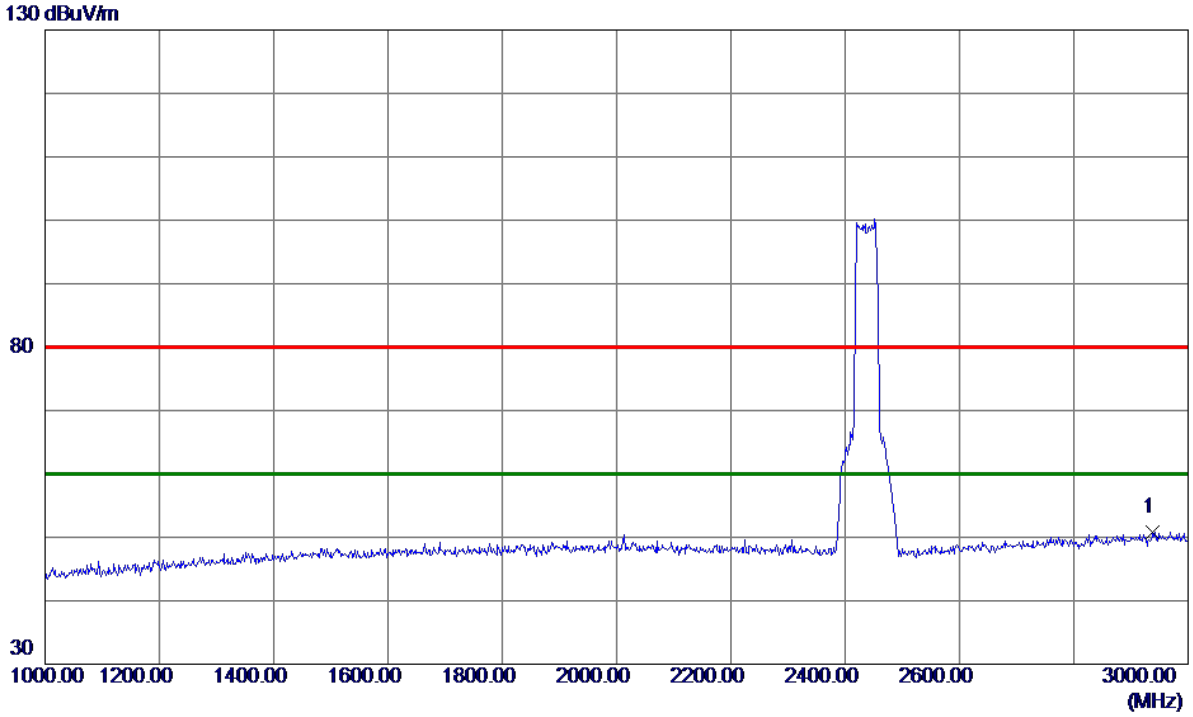
**Vertical**




| No. | Freq. | Reading Level | Correct Factor | Measure ment | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|
| | MHz | dBuV/m | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 * | 25556.5000 | 39.26 | 17.26 | 56.52 | 80.00 | -23.48 | Peak | |

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

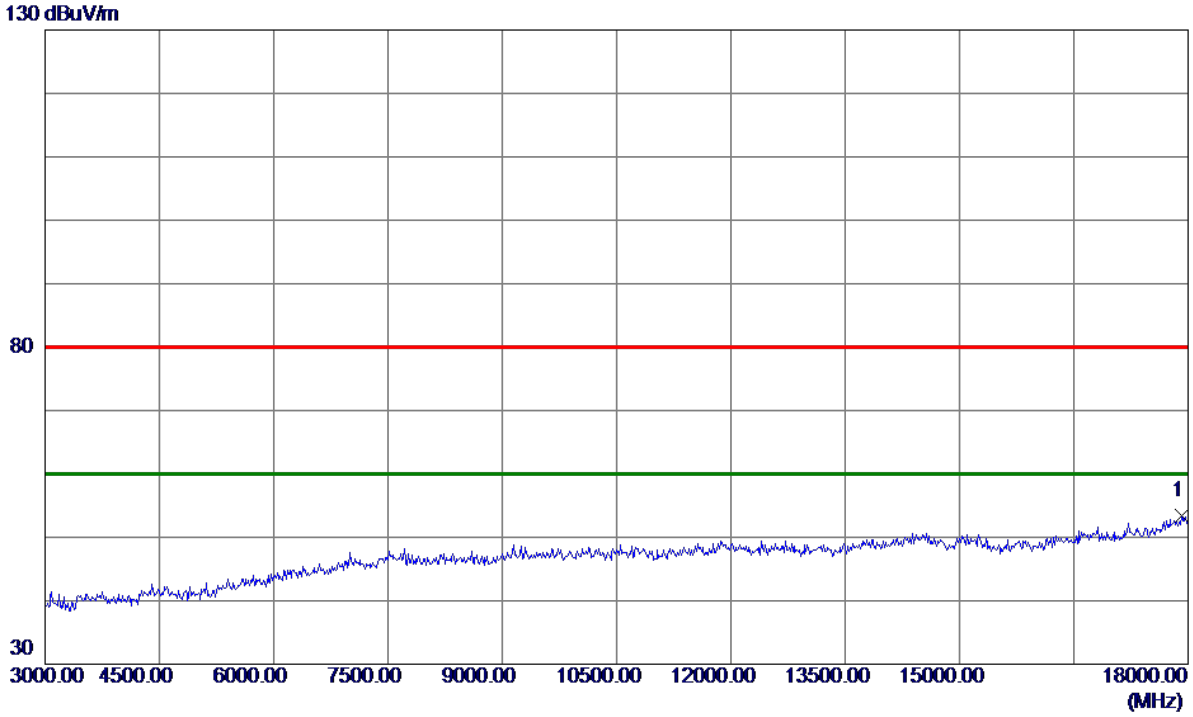
**Horizontal**




| No. | Freq. | Reading Level | Correct Factor | Measure ment | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|
| | MHz | dBuV/m | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 * | 2938.0000 | 40.86 | 9.98 | 50.84 | 80.00 | -29.16 | Peak | |

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

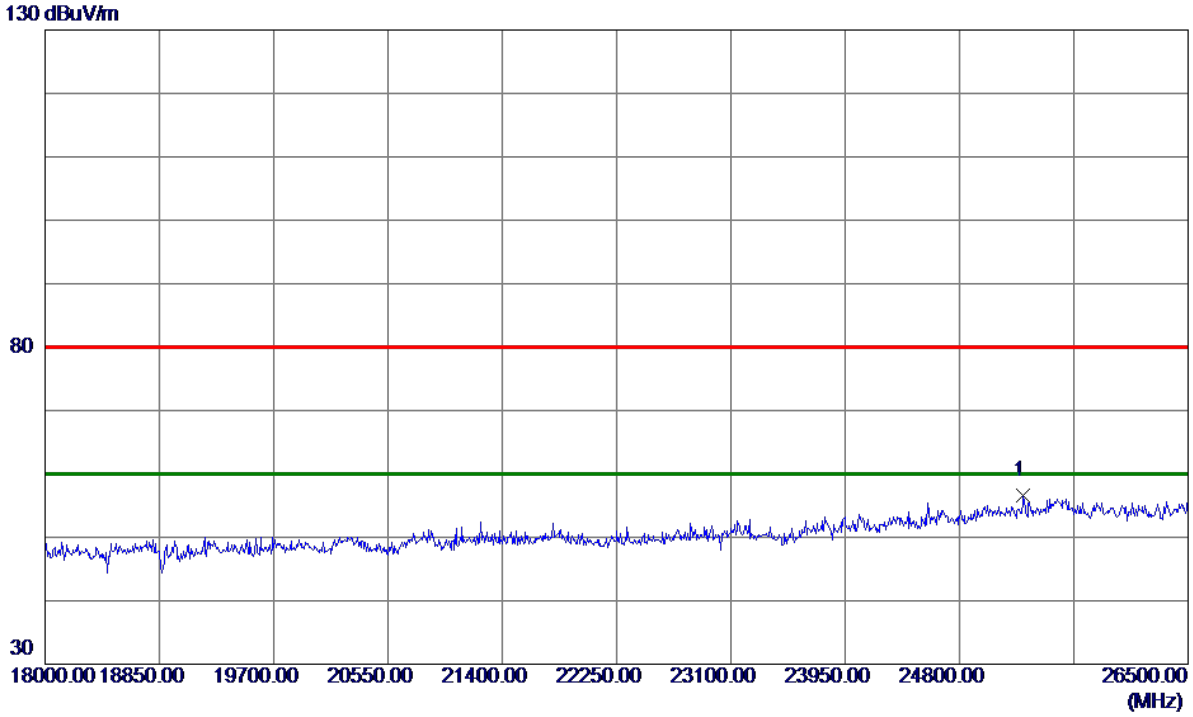
**Horizontal**




| No. | Freq. | Reading Level | Correct Factor | Measure ment | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|
| | MHz | dBuV/m | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 * | 17910.0000 | 35.88 | 17.50 | 53.38 | 80.00 | -26.62 | Peak | |

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

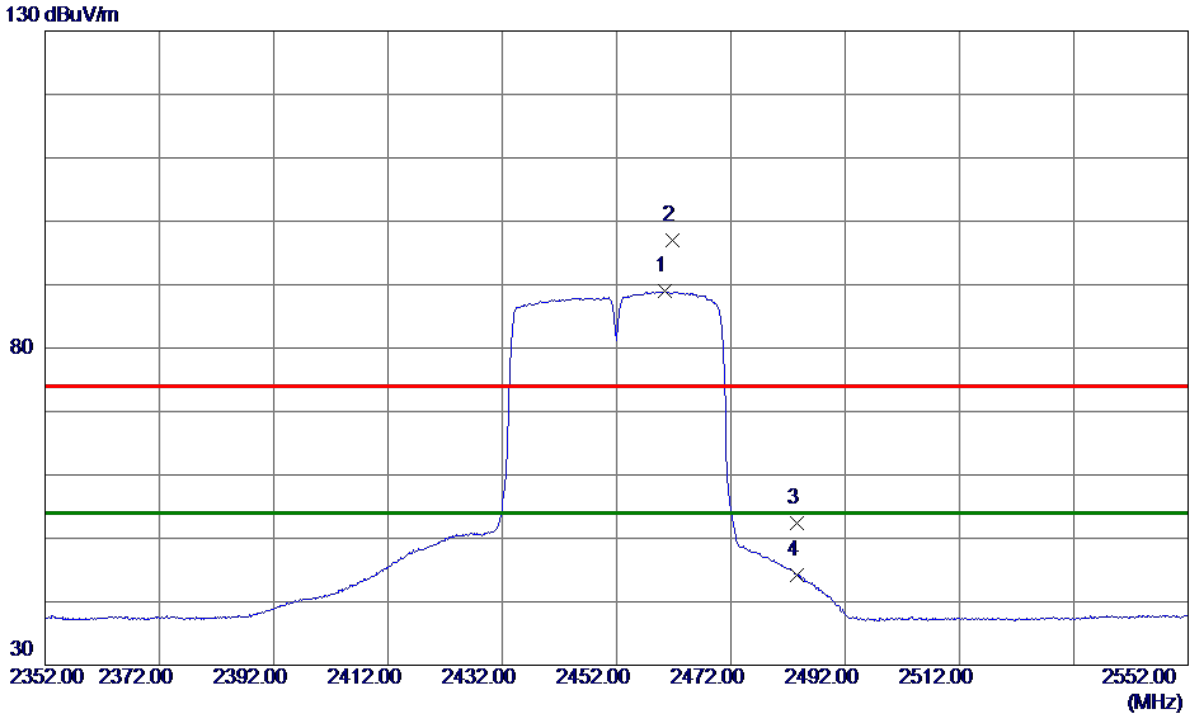
**Horizontal**




| No. | Freq. | Reading Level | Correct Factor | Measure ment | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|
| | MHz | dBuV/m | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 * | 25276.0000 | 39.48 | 17.19 | 56.67 | 80.00 | -23.33 | Peak | |

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

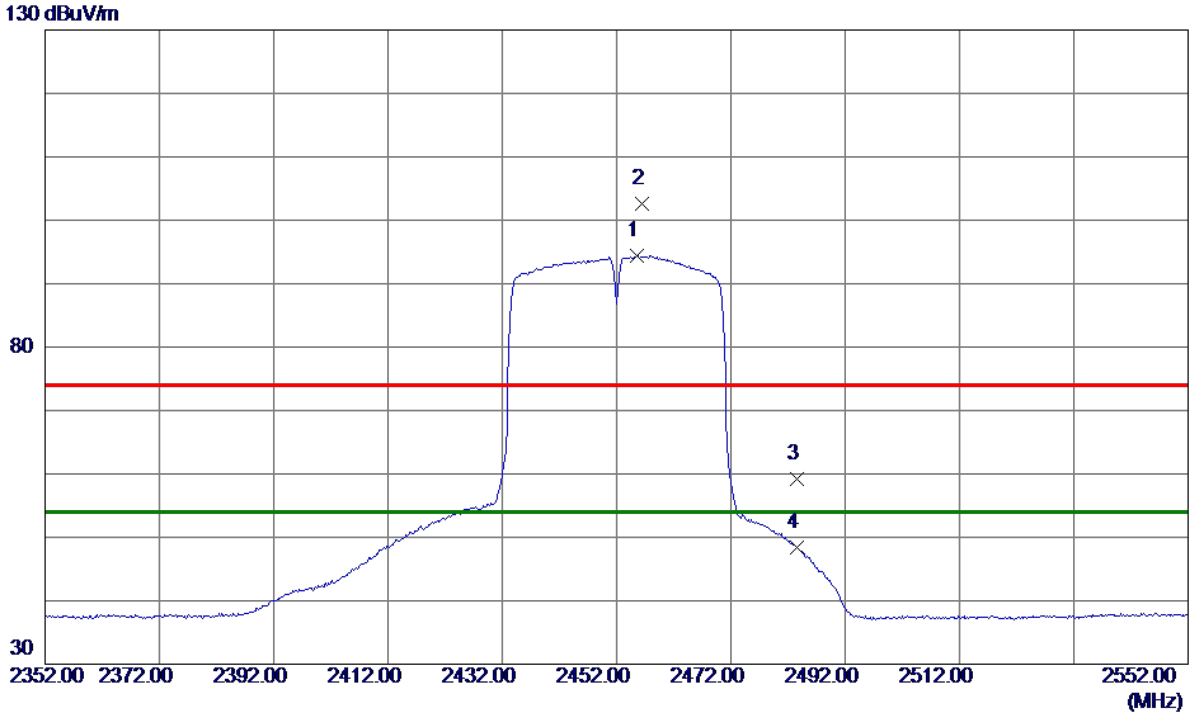
**Vertical**




| No. | Freq. | Reading Level | Correct Factor | Measure ment | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|
| | MHz | dBuV/m | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 * | 2460.5000 | 81.57 | 7.33 | 88.90 | 54.00 | 34.90 | AVG | No Limit |
| 2 | 2461.7000 | 89.70 | 7.33 | 97.03 | 74.00 | 23.03 | Peak | No Limit |
| 3 | 2483.5000 | 45.09 | 7.32 | 52.41 | 74.00 | -21.59 | Peak | |
| 4 | 2483.5000 | 36.95 | 7.32 | 44.27 | 54.00 | -9.73 | AVG | |

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

**Horizontal**



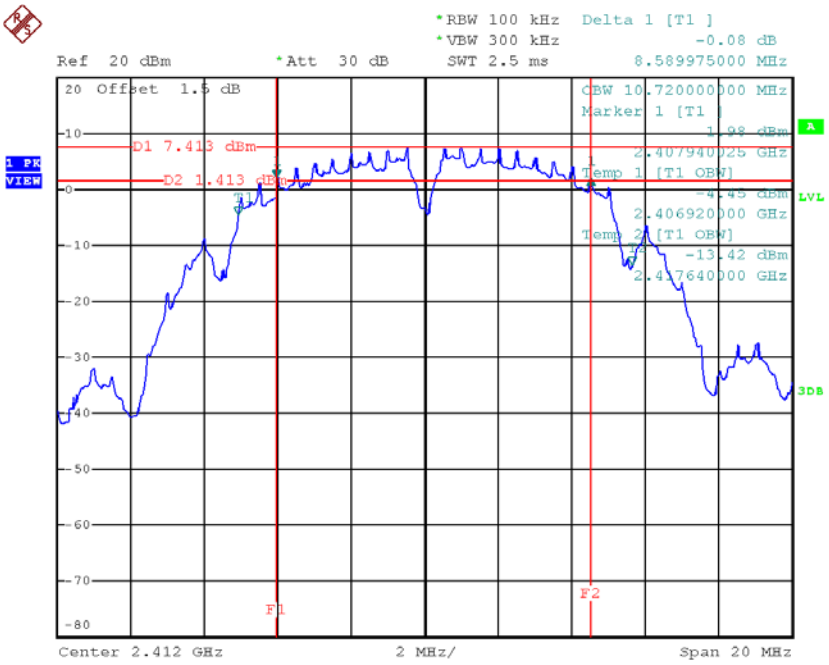

| No. | Freq. | Reading Level | Correct Factor | Measure ment | Limit | Margin | | |
|---|---|---|---|---|---|---|---|---|
| | MHz | dBuV/m | dB | dBuV/m | dBuV/m | dB | Detector | Comment |
| 1 * | 2455.6000 | 87.07 | 7.34 | 94.41 | 54.00 | 40.41 | AVG | No Limit |
| 2 | 2456.4000 | 95.29 | 7.34 | 102.63 | 74.00 | 28.63 | Peak | No Limit |
| 3 | 2483.5000 | 51.83 | 7.32 | 59.15 | 74.00 | -14.85 | Peak | |
| 4 | 2483.5000 | 41.04 | 7.32 | 48.36 | 54.00 | -5.64 | AVG | |

# APPENDIX E - BANDWIDTH

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

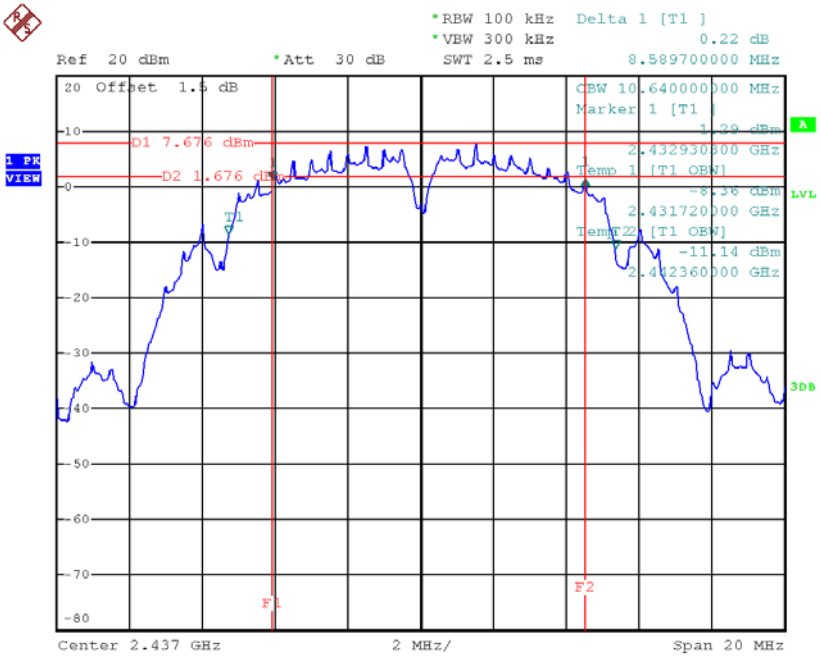
| Frequency (MHz) | 6 dB Bandwidth (MHz) | 99% Occupied BW (MHz) | Min. Limit (kHz) | Test Result |
|---|---|---|---|---|
| 2412 | 8.59 | 10.72 | 500 | Complies |
| 2437 | 8.59 | 10.64 | 500 | Complies |
| 2462 | 8.62 | 10.64 | 500 | Complies |

**TX CH01**



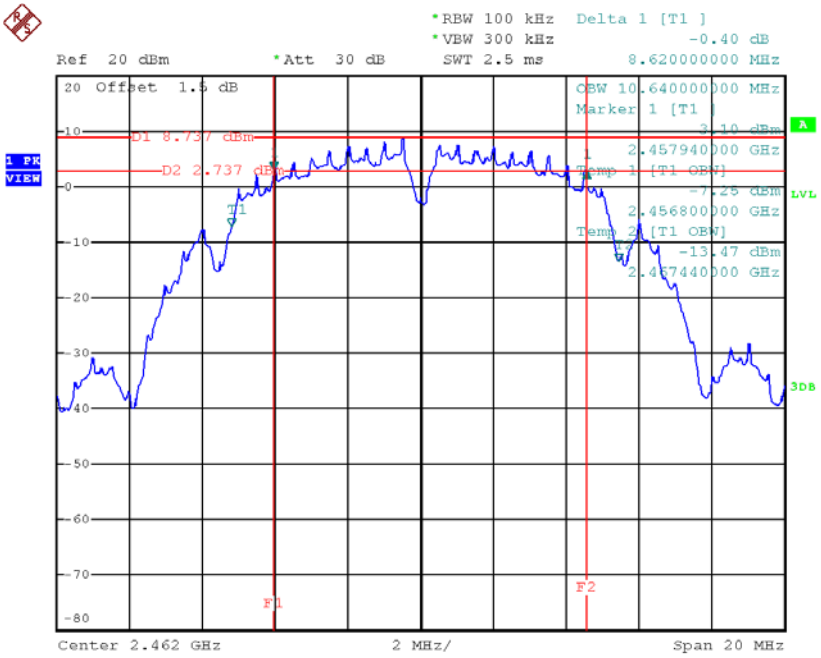

Date: 30.AUG.2018 10:14:40

## TX CH06




Date: 30.AUG.2018 09:53:34

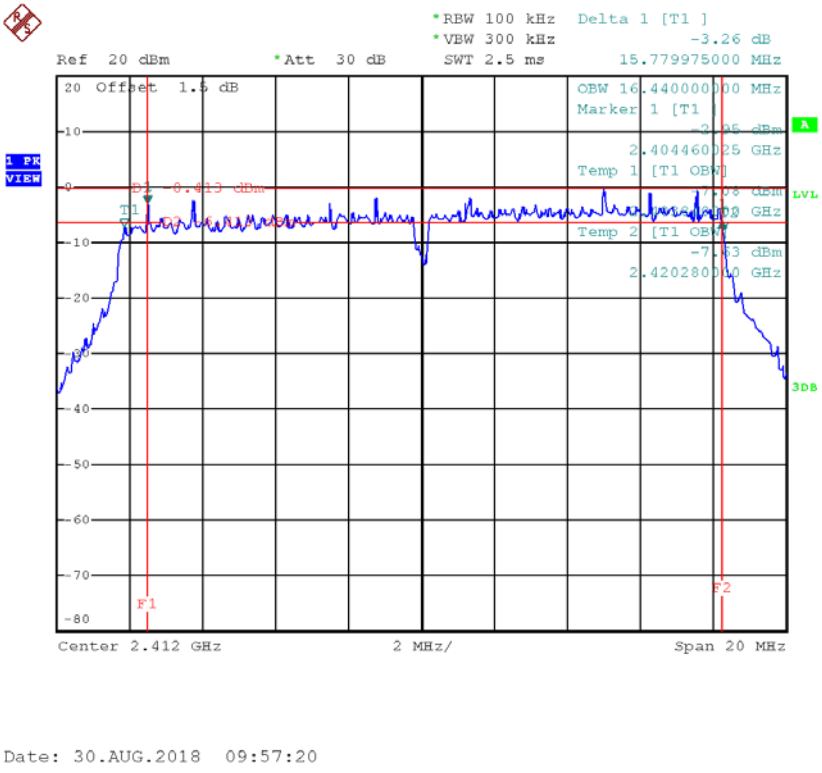
## TX CH11




Date: 30.AUG.2018 09:55:08

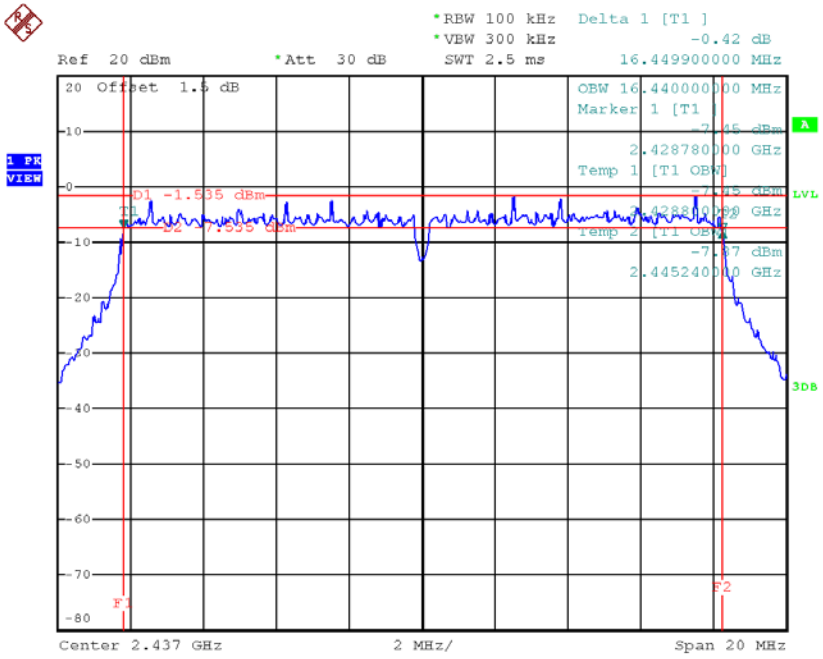
| Test Mode: TX G Mode_CH01/06/11 | | | | |
|---|---|---|---|---|
| Frequency (MHz) | 6 dB Bandwidth (MHz) | 99% Occupied BW (MHz) | Min. Limit (kHz) | Test Result |
| 2412 | 15.78 | 16.44 | 500 | Complies |
| 2437 | 16.45 | 16.44 | 500 | Complies |
| 2462 | 16.44 | 16.44 | 500 | Complies |

**TX CH01**



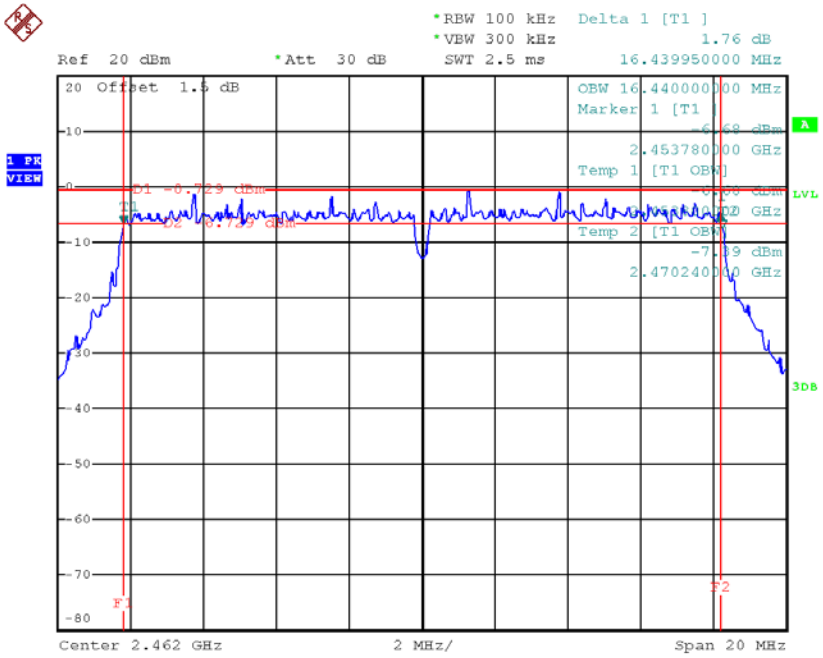

Date: 30.AUG.2018 09:57:20

## TX CH06




Date: 30.AUG.2018 09:58:37

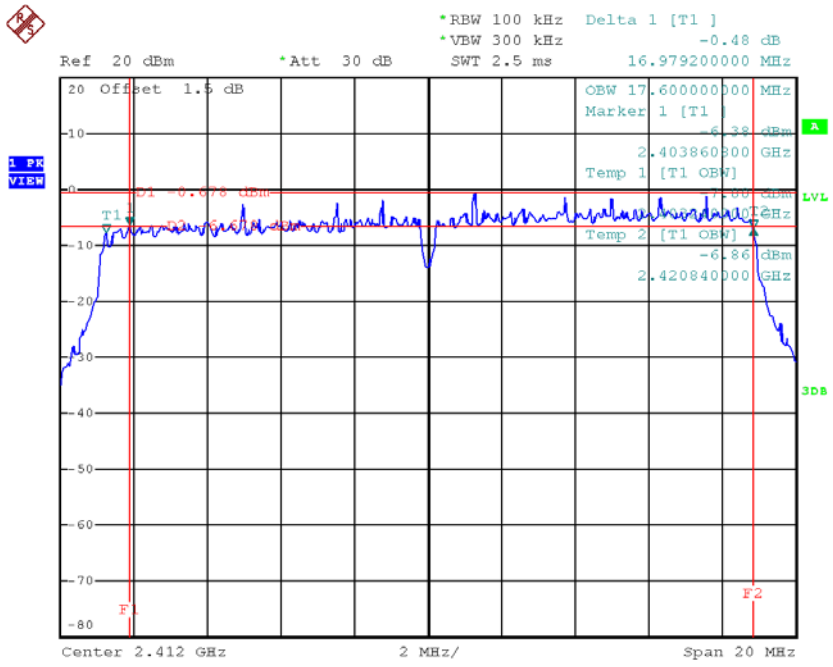
## TX CH11




Date: 30.AUG.2018 10:00:48

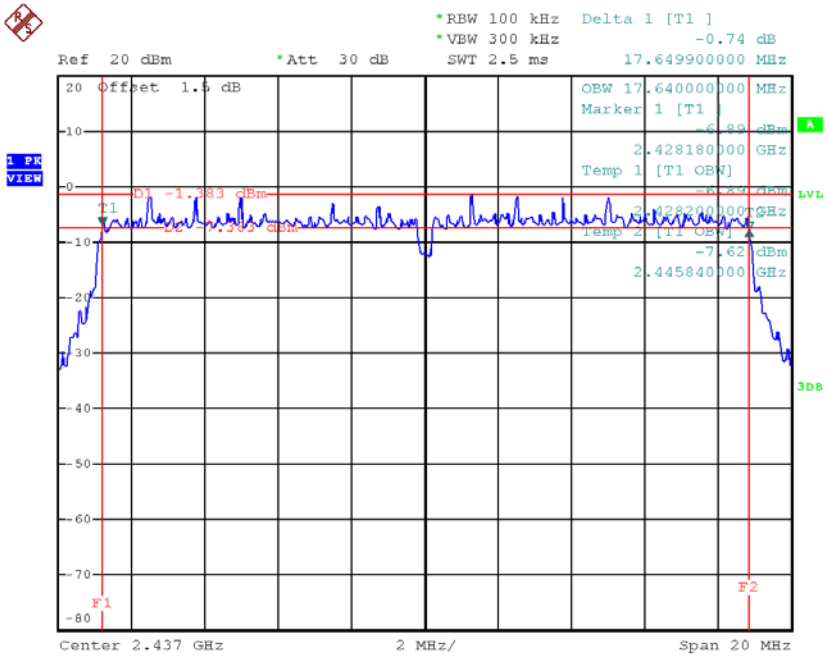
| Test Mode: TX N-20MHz Mode_CH01/06/11 | | | | |
|---|---|---|---|---|
| Frequency (MHz) | 6 dB Bandwidth (MHz) | 99% Occupied BW (MHz) | Min. Limit (kHz) | Test Result |
| 2412 | 16.98 | 17.60 | 500 | Complies |
| 2437 | 17.65 | 17.64 | 500 | Complies |
| 2462 | 17.66 | 17.64 | 500 | Complies |

**TX CH01**



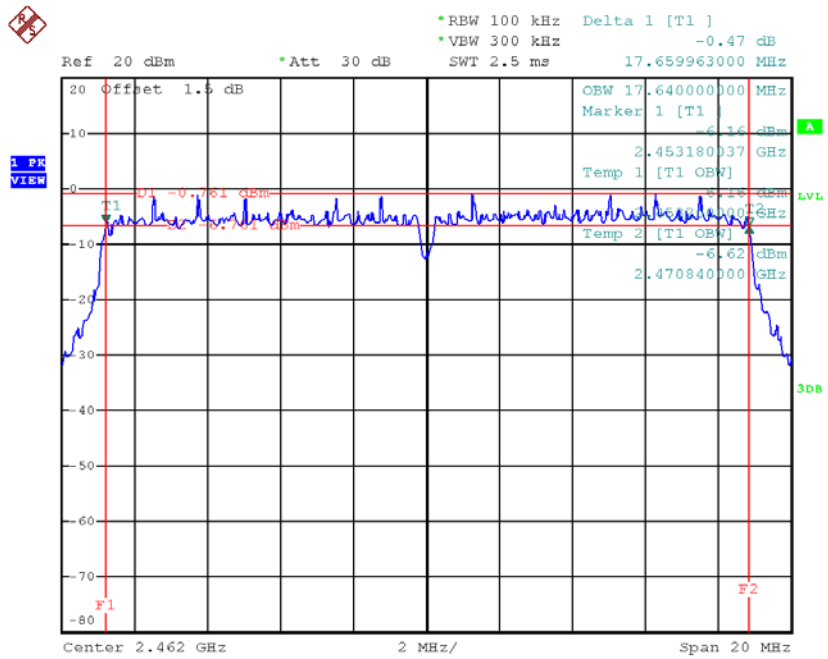

Date: 30.AUG.2018 10:02:19

## TX CH06




Date: 30.AUG.2018 10:03:33

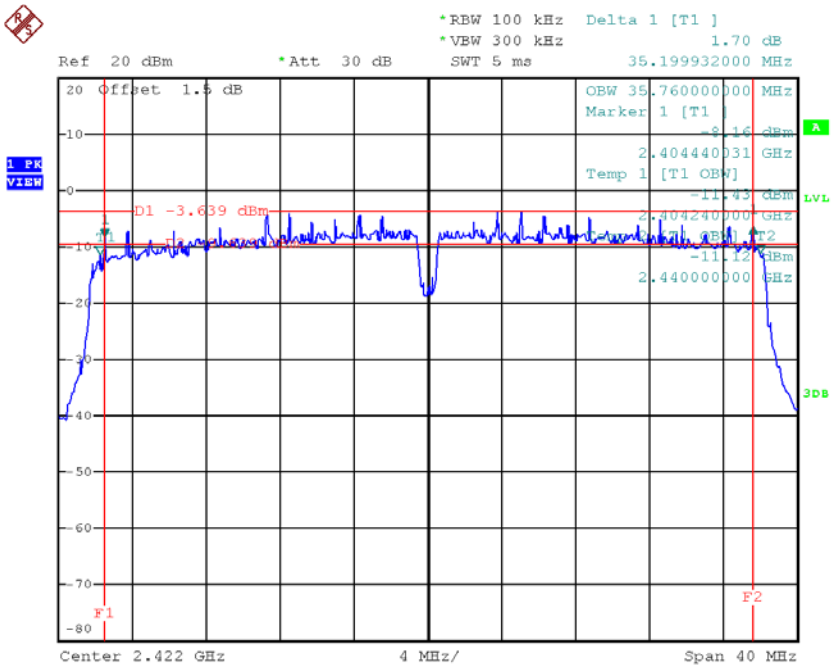
## TX CH11




Date: 30.AUG.2018 10:05:32

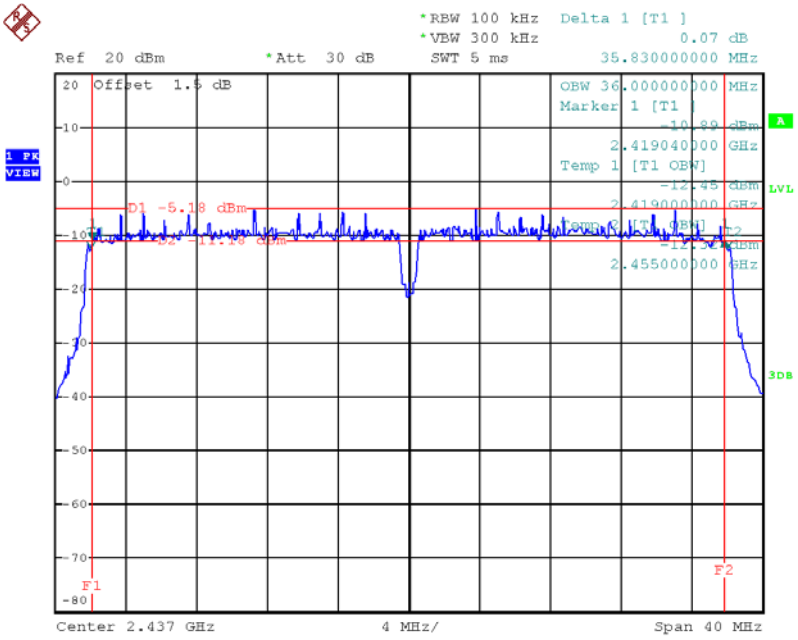
| Test Mode: TX N-40MHz Mode_CH03/06/09 | | | | |
|---|---|---|---|---|
| Frequency (MHz) | 6 dB Bandwidth (MHz) | 99% Occupied BW (MHz) | Min. Limit (kHz) | Test Result |
| 2422 | 35.20 | 35.76 | 500 | Complies |
| 2437 | 35.83 | 36.00 | 500 | Complies |
| 2452 | 35.59 | 35.92 | 500 | Complies |

**TX CH03**



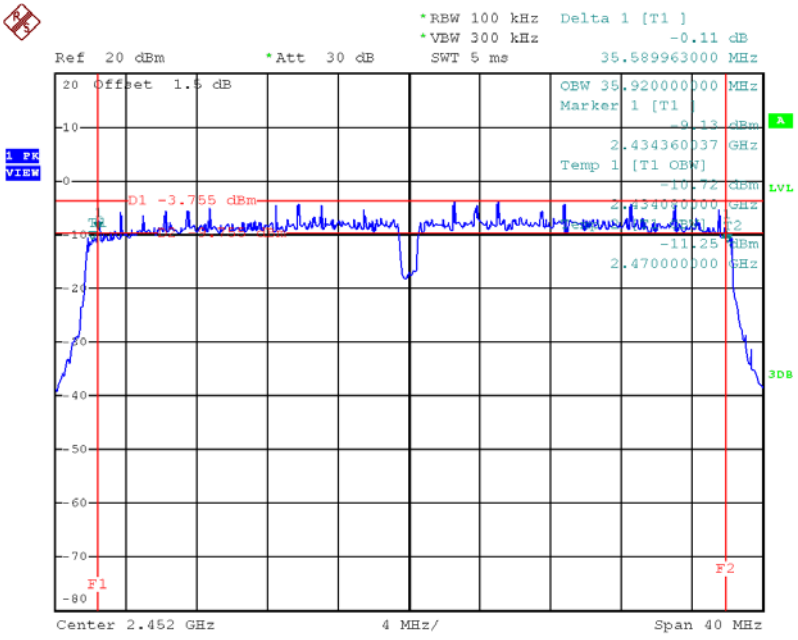

Date: 30.AUG.2018 10:08:12

## TX CH06




Date: 30.AUG.2018 10:09:38

## TX CH09




Date: 30.AUG.2018 10:11:18

# APPENDIX F - MAXIMUM OUTPUT POWER

| Test Mode: TX B Mode_CH01/06/11 | | | | | |
|---|---|---|---|---|---|
| Frequency (MHz) | Output Power (dBm) | Output Power (W) | Max. Limit (dBm) | Max. Limit (W) | Result |
| 2412 | 20.58 | 0.11 | 30.00 | 1.00 | Complies |
| 2437 | 20.27 | 0.11 | 30.00 | 1.00 | Complies |
| 2462 | 20.21 | 0.10 | 30.00 | 1.00 | Complies |

| Test Mode: TX G Mode_CH01/06/11 | | | | | |
|---|---|---|---|---|---|
| Frequency (MHz) | Output Power (dBm) | Output Power (W) | Max. Limit (dBm) | Max. Limit (W) | Result |
| 2412 | 20.37 | 0.11 | 30.00 | 1.00 | Complies |
| 2437 | 19.96 | 0.10 | 30.00 | 1.00 | Complies |
| 2462 | 19.94 | 0.10 | 30.00 | 1.00 | Complies |

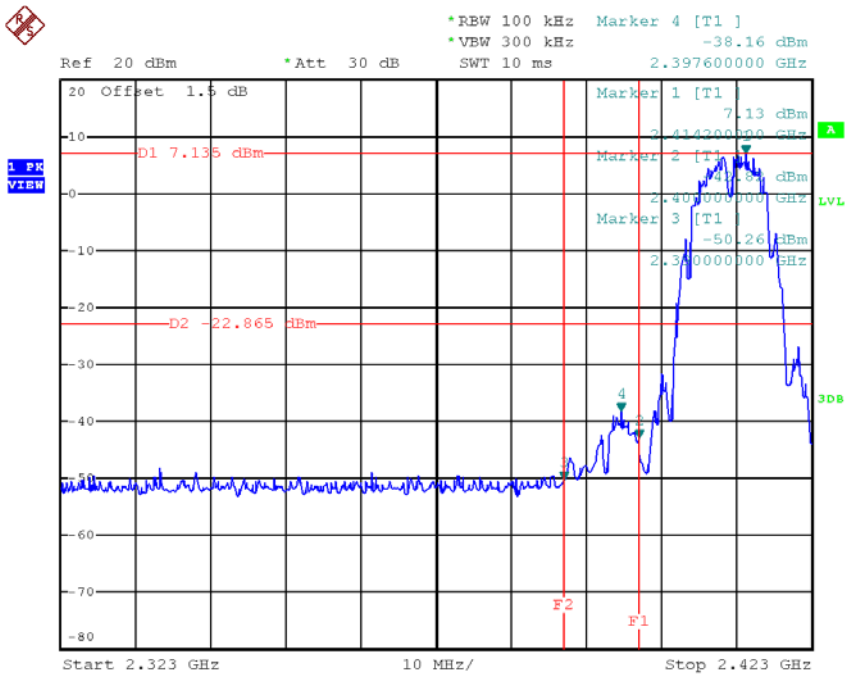
| Test Mode: TX N20 Mode_CH01/06/11 | | | | | |
|---|---|---|---|---|---|
| Frequency (MHz) | Output Power (dBm) | Output Power (W) | Max. Limit (dBm) | Max. Limit (W) | Result |
| 2412 | 20.68 | 0.12 | 30.00 | 1.00 | Complies |
| 2437 | 20.78 | 0.12 | 30.00 | 1.00 | Complies |
| 2462 | 20.37 | 0.11 | 30.00 | 1.00 | Complies |

| Test Mode: TX N40 Mode_CH03/06/09 | | | | | |
|---|---|---|---|---|---|
| Frequency (MHz) | Output Power (dBm) | Output Power (W) | Max. Limit (dBm) | Max. Limit (W) | Result |
| 2422 | 19.58 | 0.09 | 30.00 | 1.00 | Complies |
| 2437 | 20.57 | 0.11 | 30.00 | 1.00 | Complies |
| 2452 | 20.27 | 0.11 | 30.00 | 1.00 | Complies |

# APPENDIX G - ANTENNA CONDUCTED SPURIOUS EMISSION

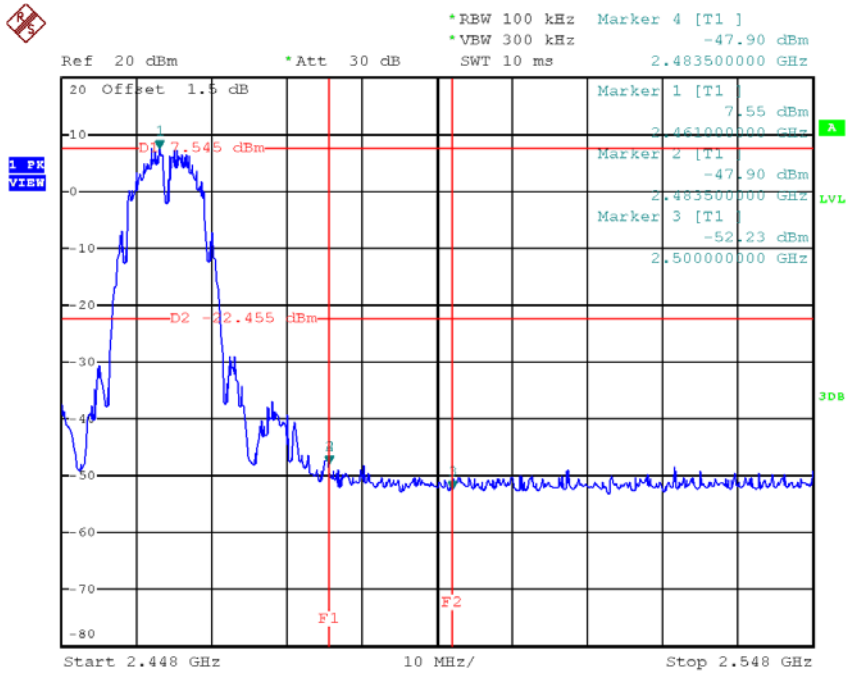
| Test Mode: | TX B Mode |
|---|---|

**TX B mode CH01**



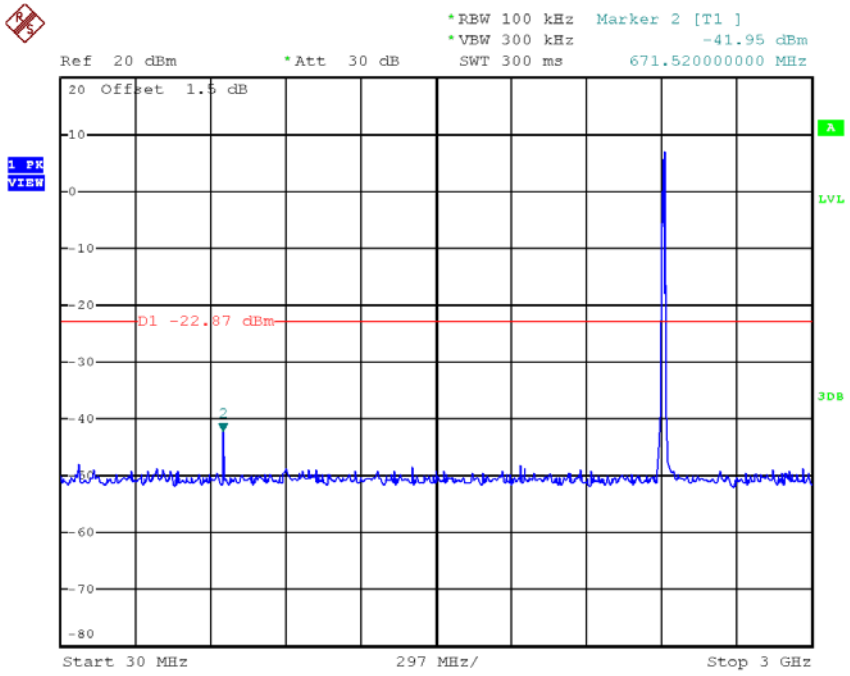

Date: 30.AUG.2018 09:50:44

**TX B mode CH11**

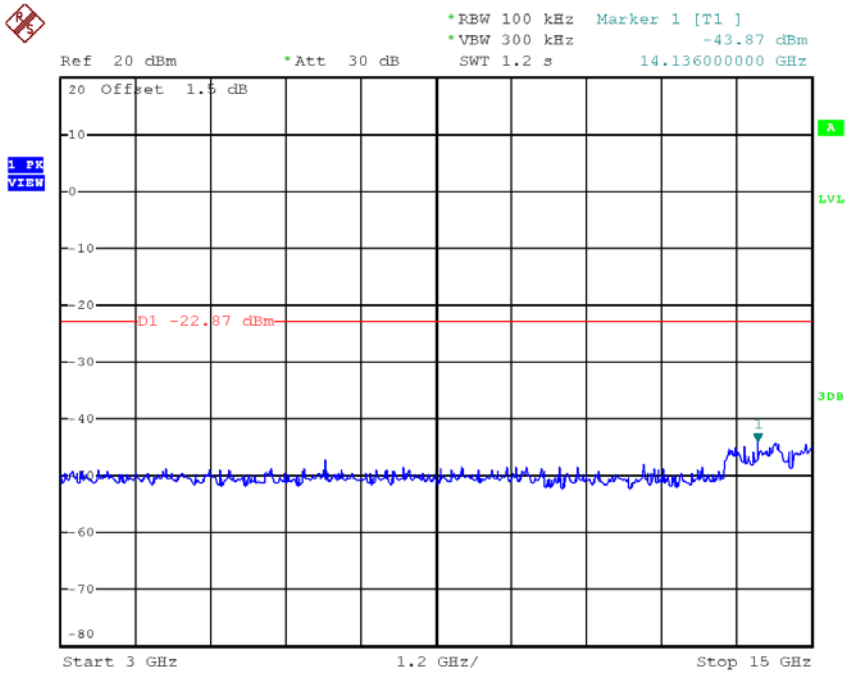



Date: 30.AUG.2018 09:55:15

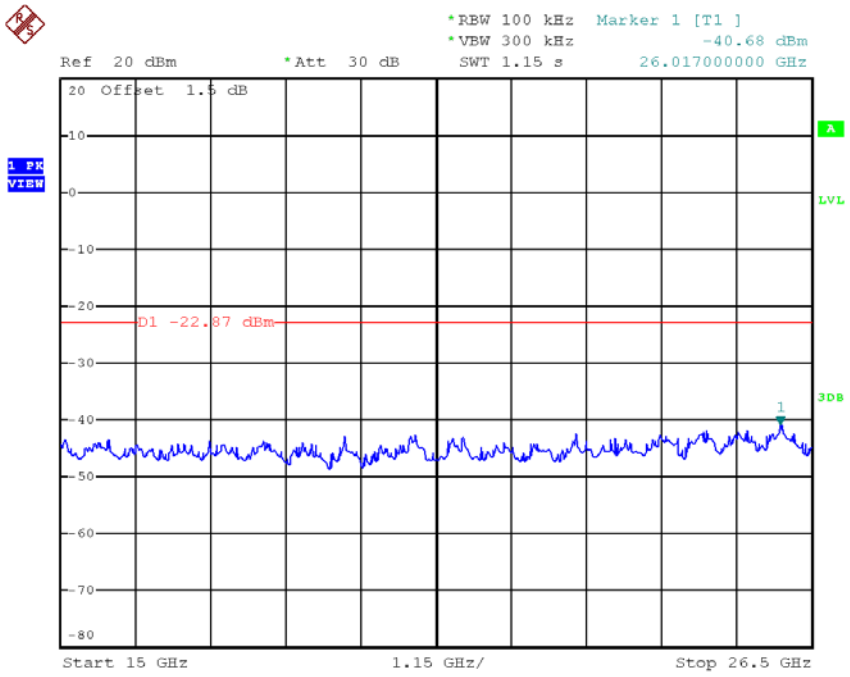
## TX B mode CH01 (10th Harmonic of the frequency)




Date: 30.AUG.2018 09:50:57

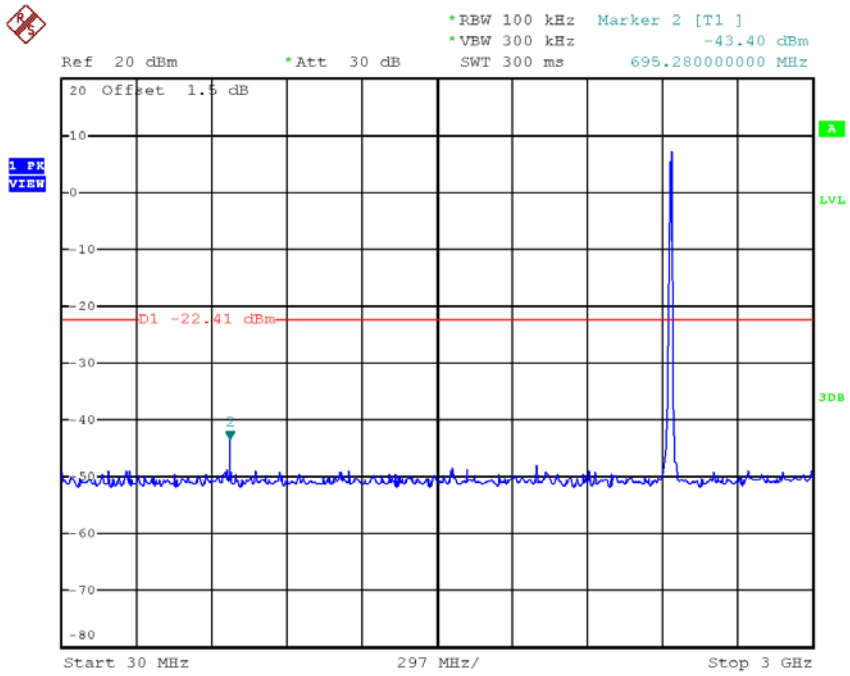



Date: 30.AUG.2018 09:51:04

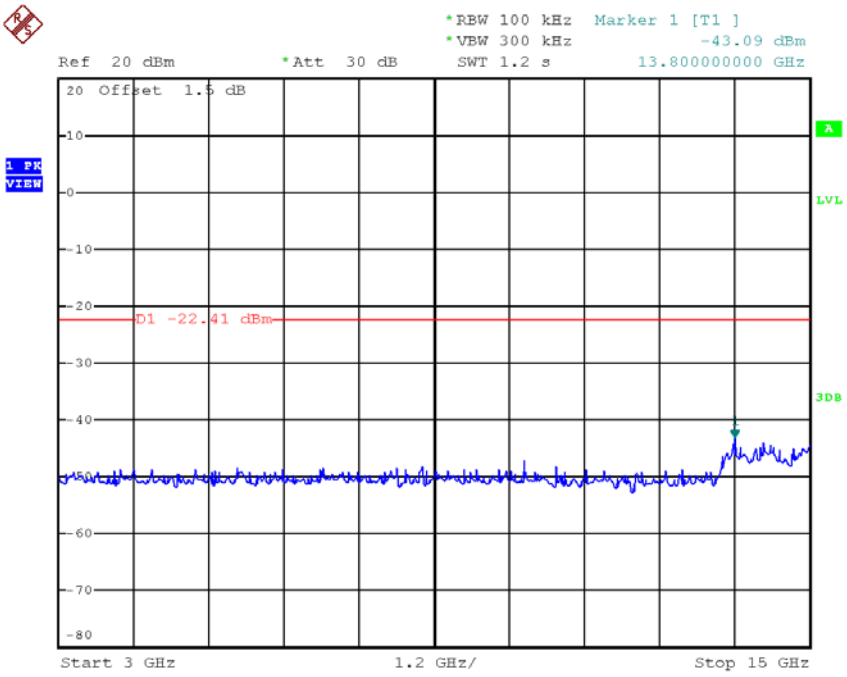



Date: 30.AUG.2018 09:51:11

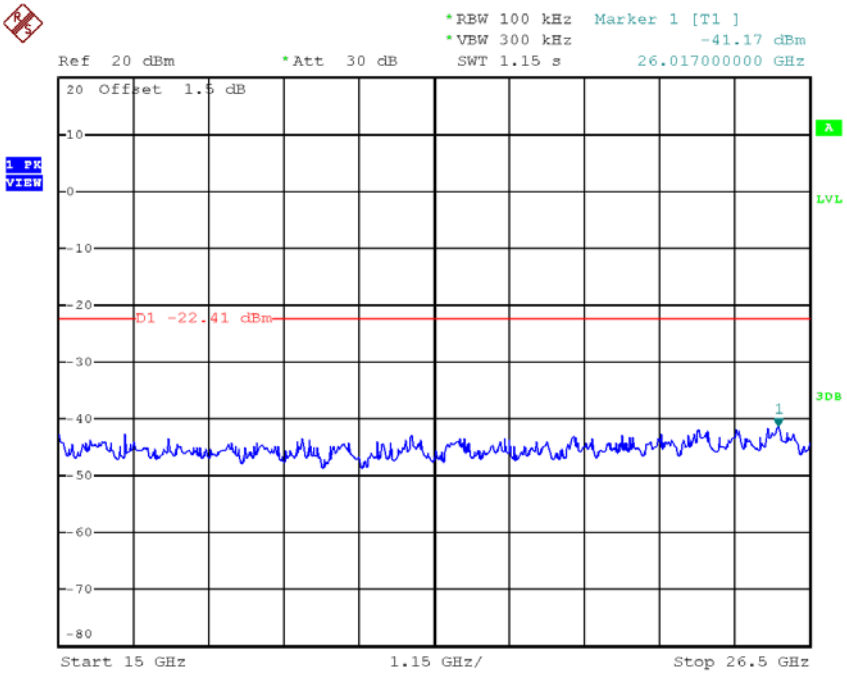
**TX B mode CH06 (10th Harmonic of the frequency)**




Date: 30.AUG.2018 09:53:54

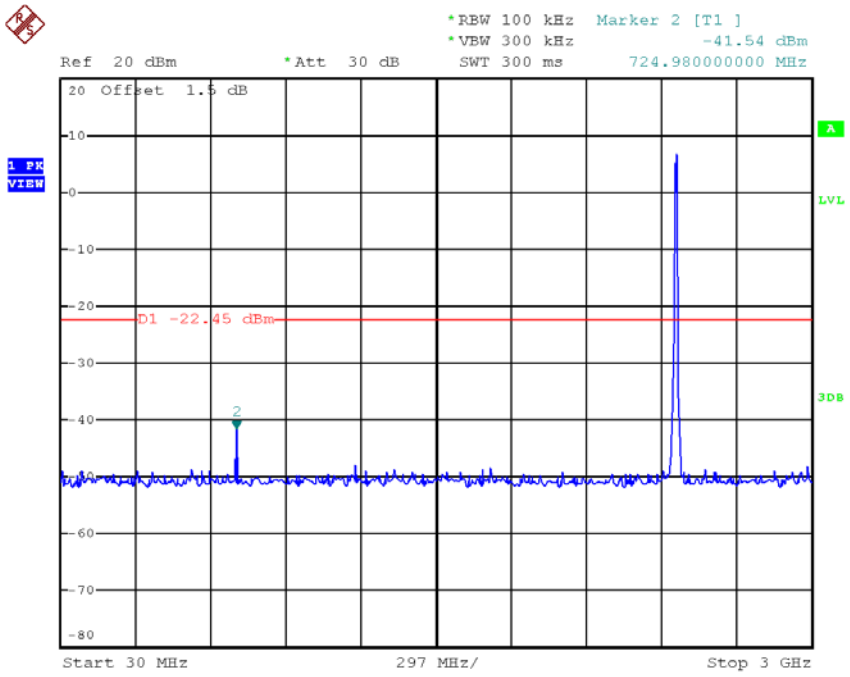



Date: 30.AUG.2018 09:54:01

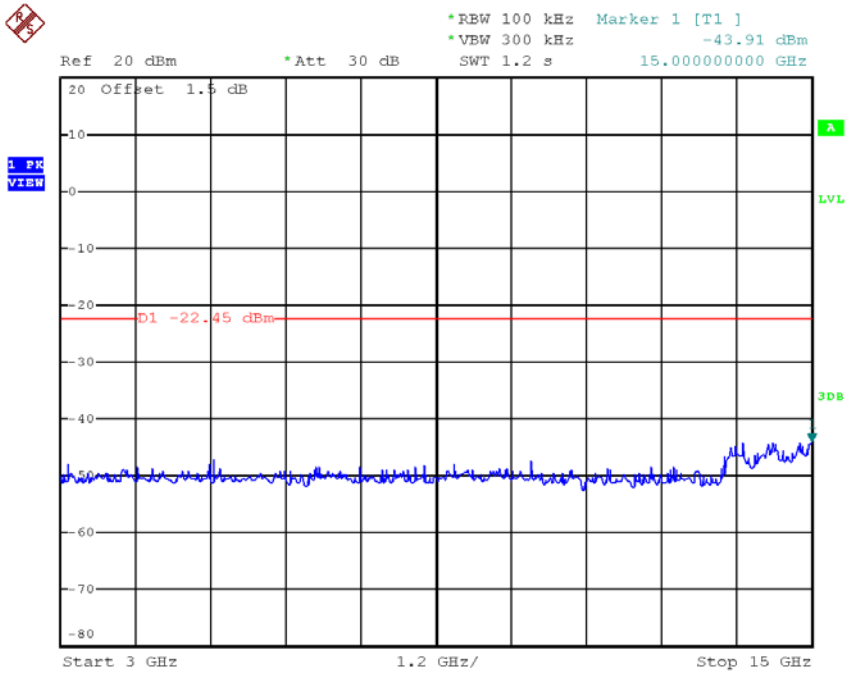



Date: 30.AUG.2018 09:54:09

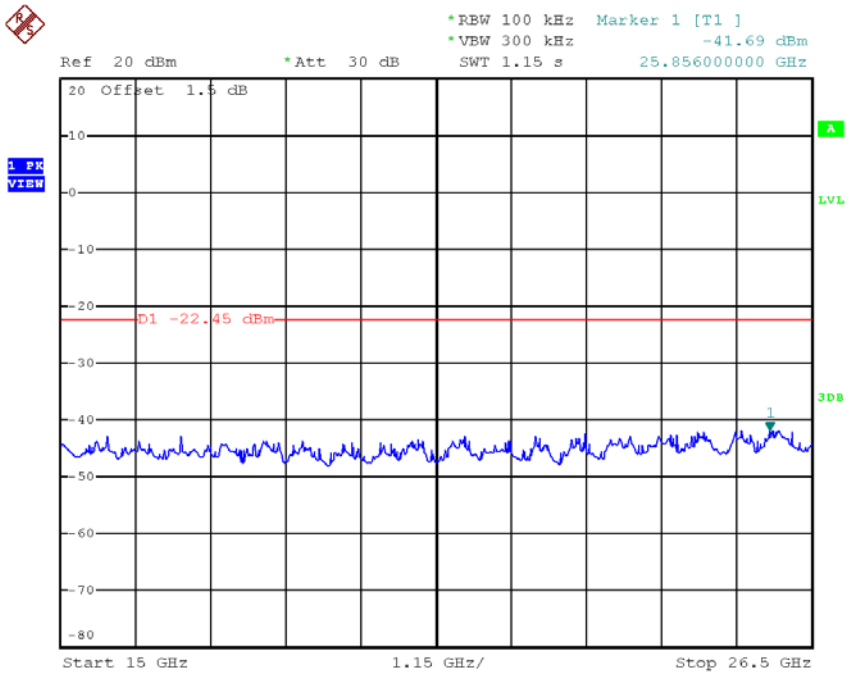
## TX B mode CH11 (10th Harmonic of the frequency)




Date: 30.AUG.2018 09:55:28



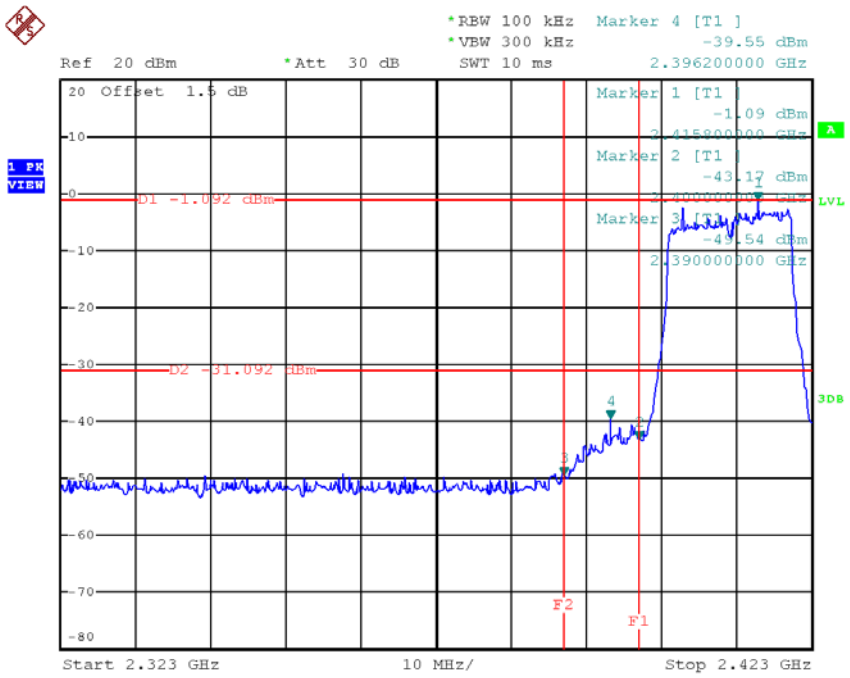

Date: 30.AUG.2018 09:55:35




Date: 30.AUG.2018 09:55:42

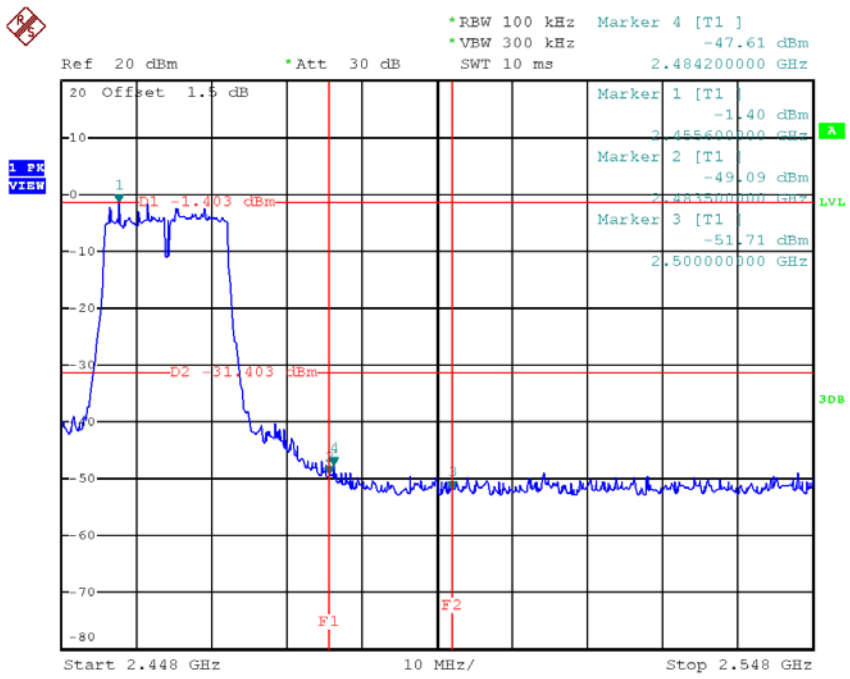
| Test Mode: | TX G Mode |
|---|---|

**TX G mode CH01**



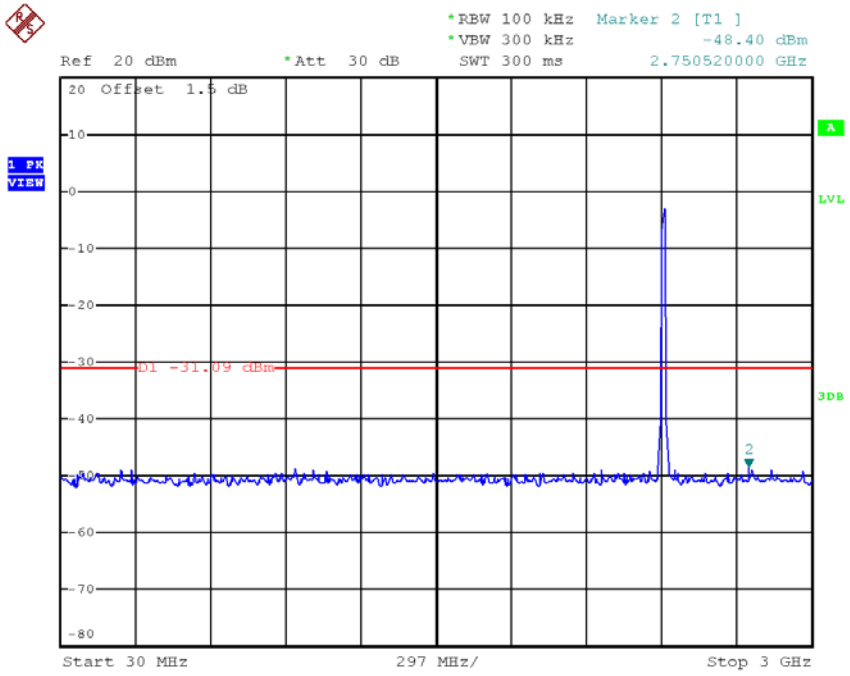

Date: 30.AUG.2018 09:57:27

**TX G mode CH11**

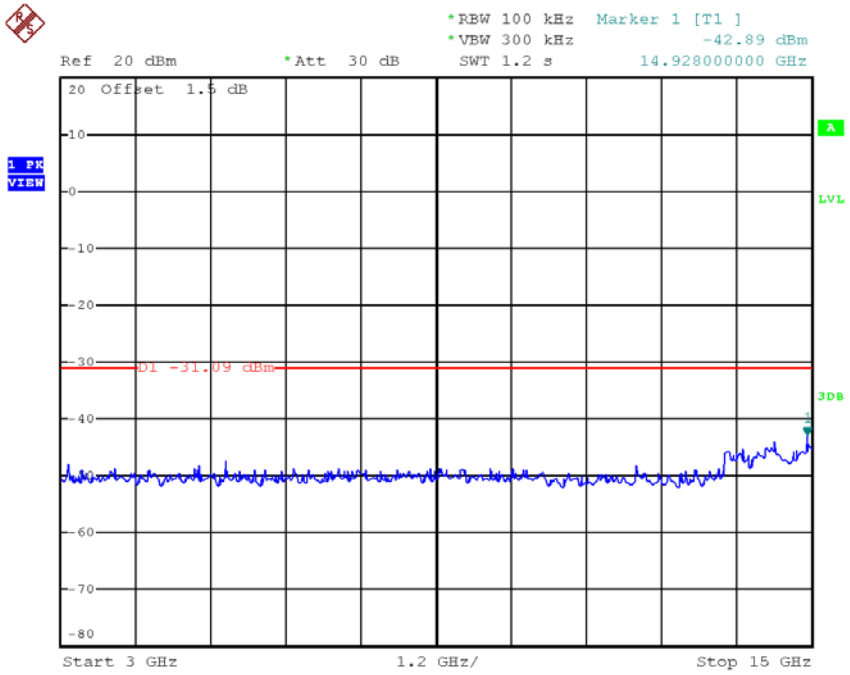



Date: 30.AUG.2018 10:00:55

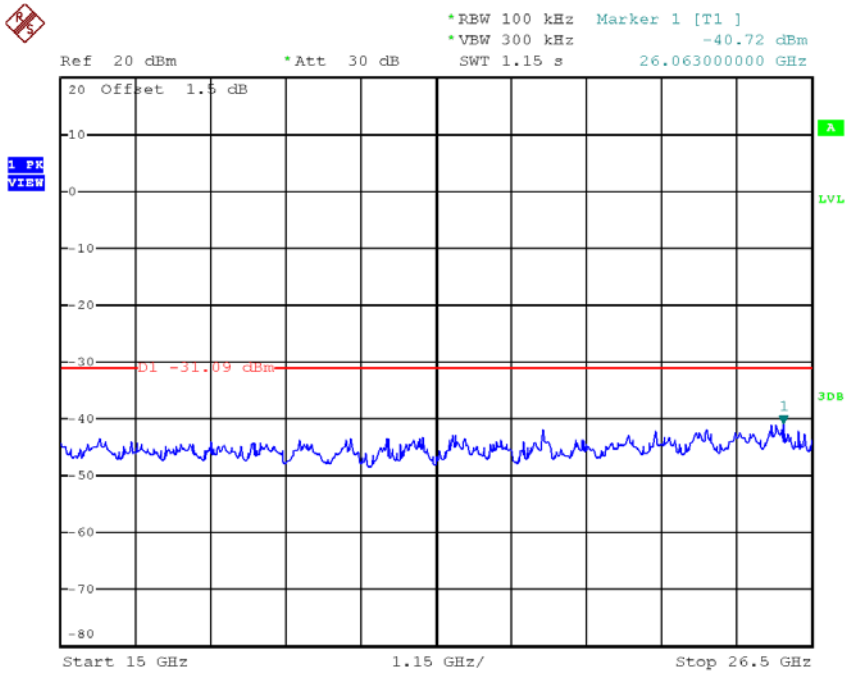
## TX G mode CH01 (10th Harmonic of the frequency)




Date: 30.AUG.2018 09:57:40

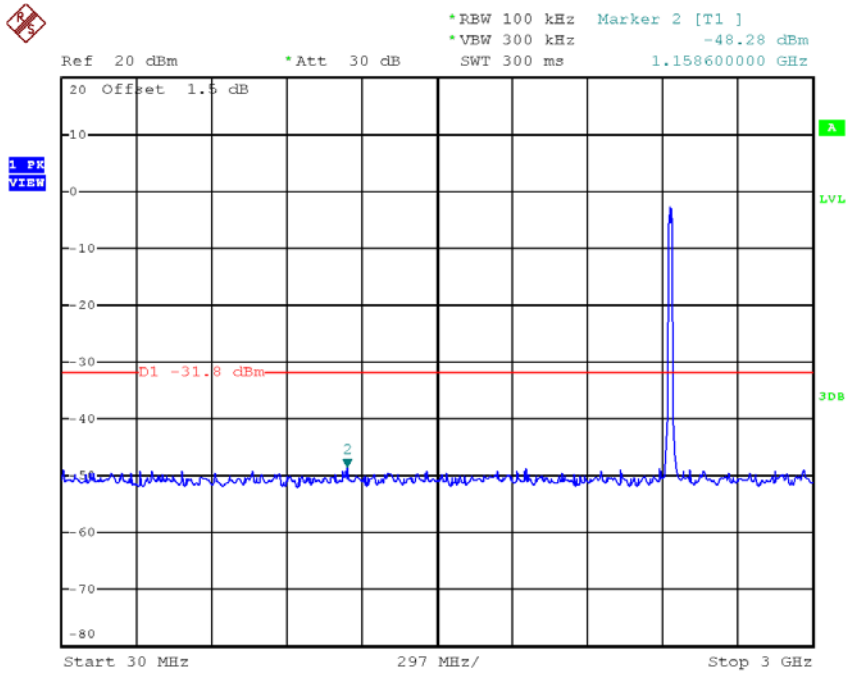



Date: 30.AUG.2018 09:57:47

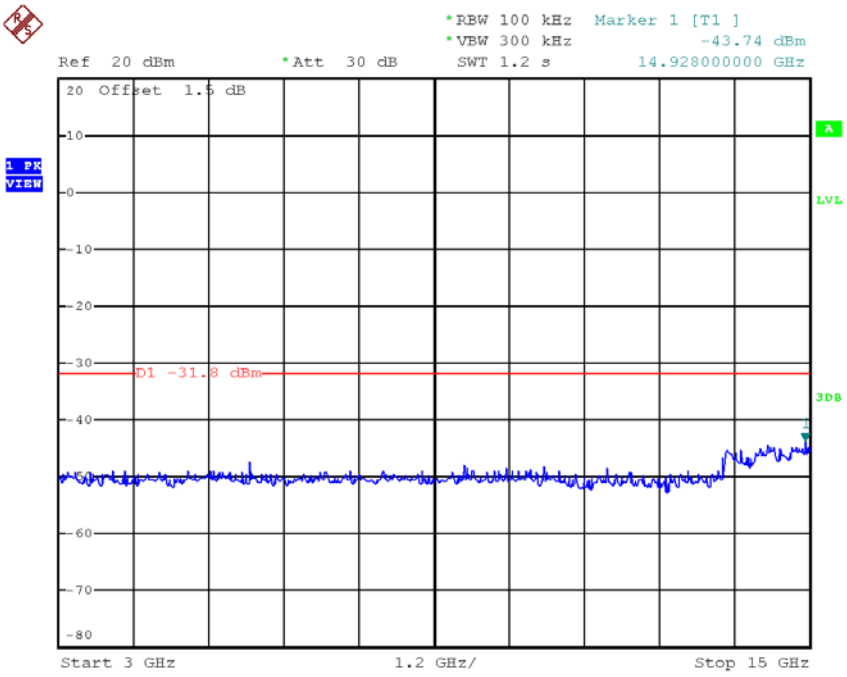



Date: 30.AUG.2018 09:57:54

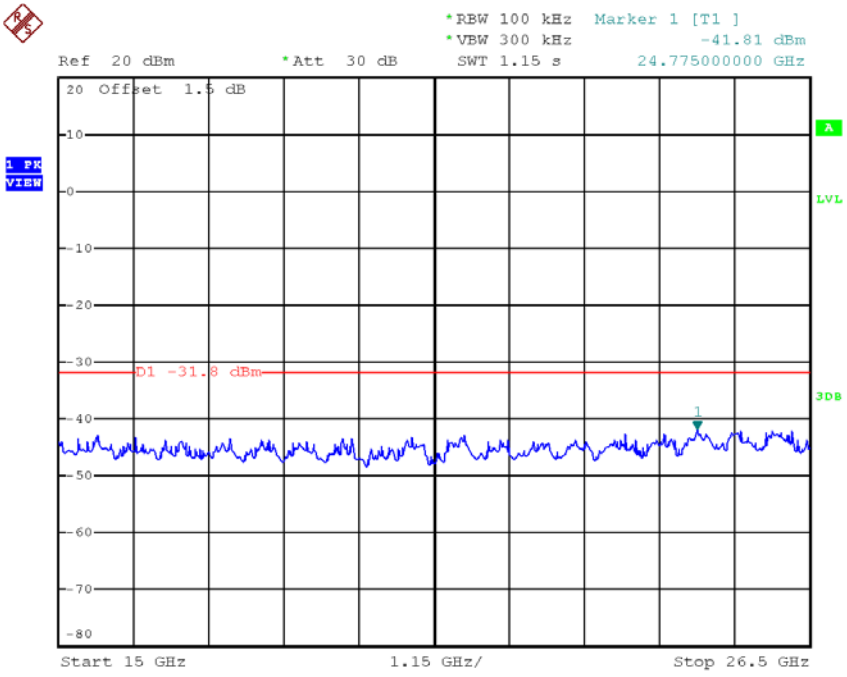
**TX G mode CH06 (10th Harmonic of the frequency)**




Date: 30.AUG.2018 09:58:57

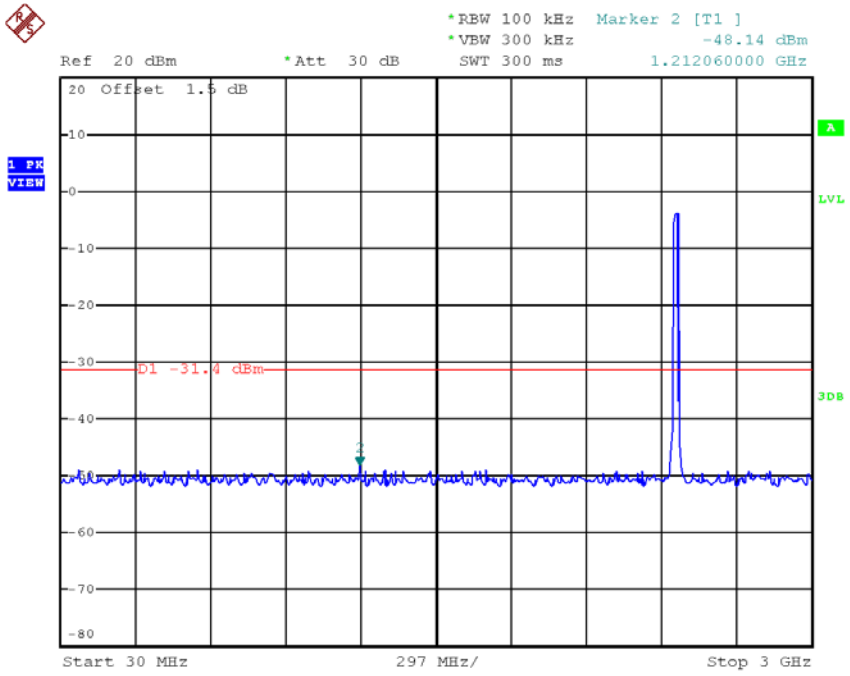



Date: 30.AUG.2018 09:59:04

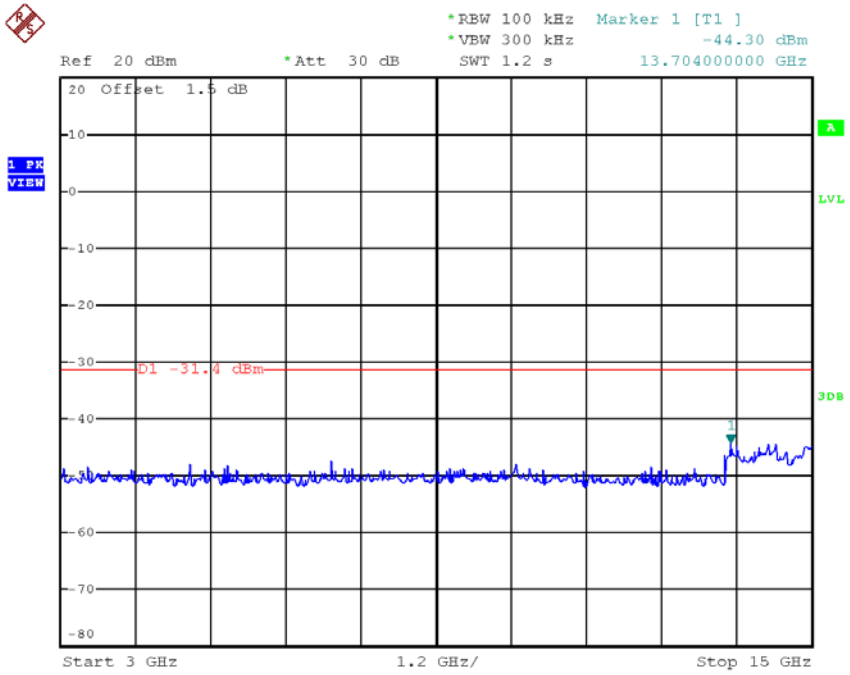



Date: 30.AUG.2018 09:59:12

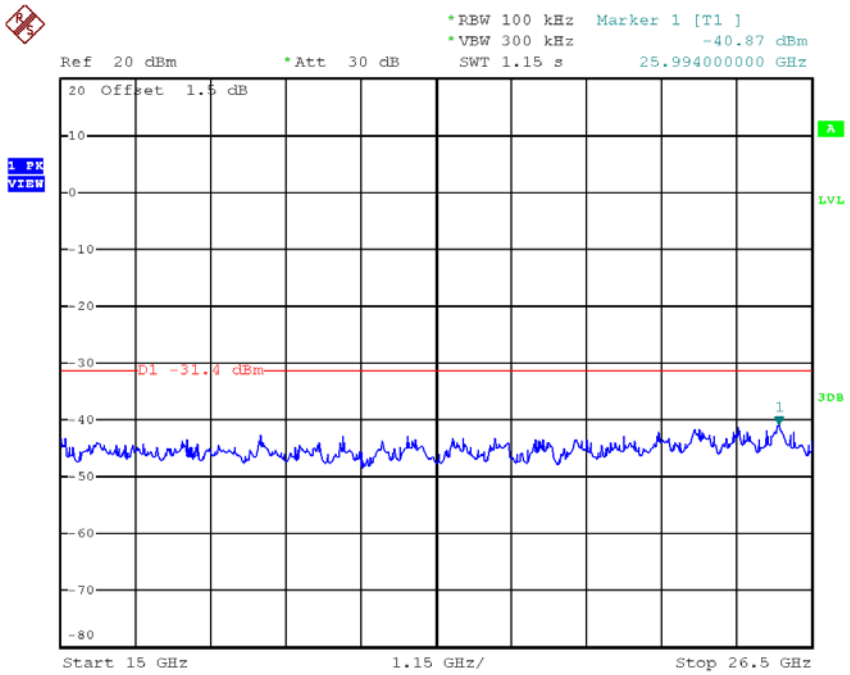
## TX G mode CH11 (10th Harmonic of the frequency)




Date: 30.AUG.2018 10:01:08



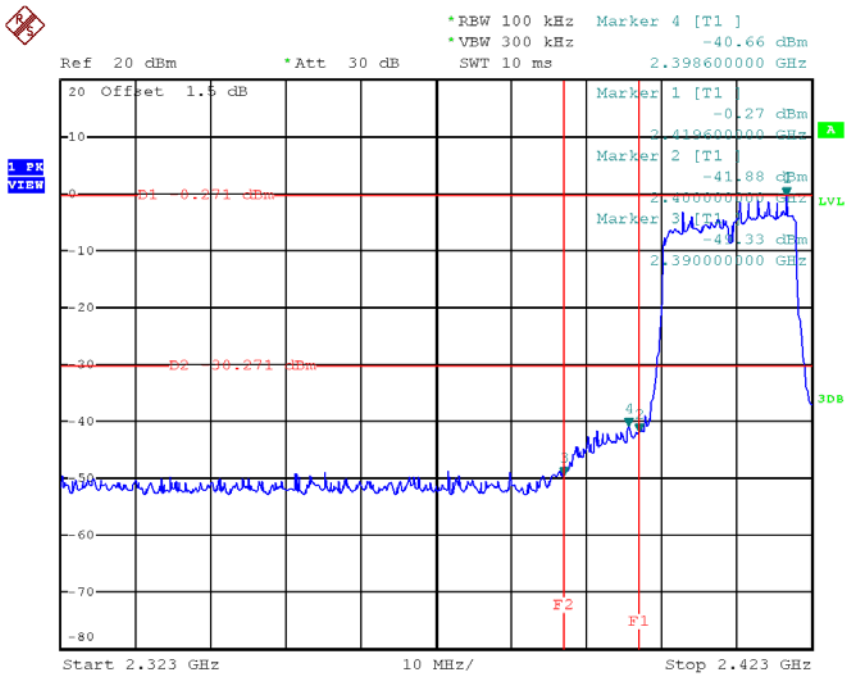

Date: 30.AUG.2018 10:01:15




Date: 30.AUG.2018 10:01:22

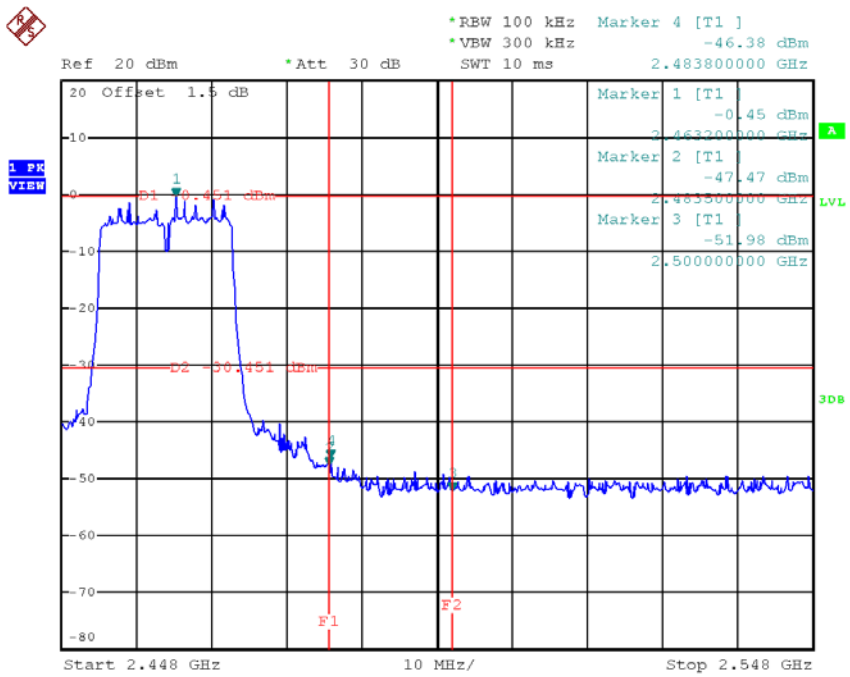
| Test Mode: | TX N-20M Mode |
|---|---|

**TX HT20 mode CH01**



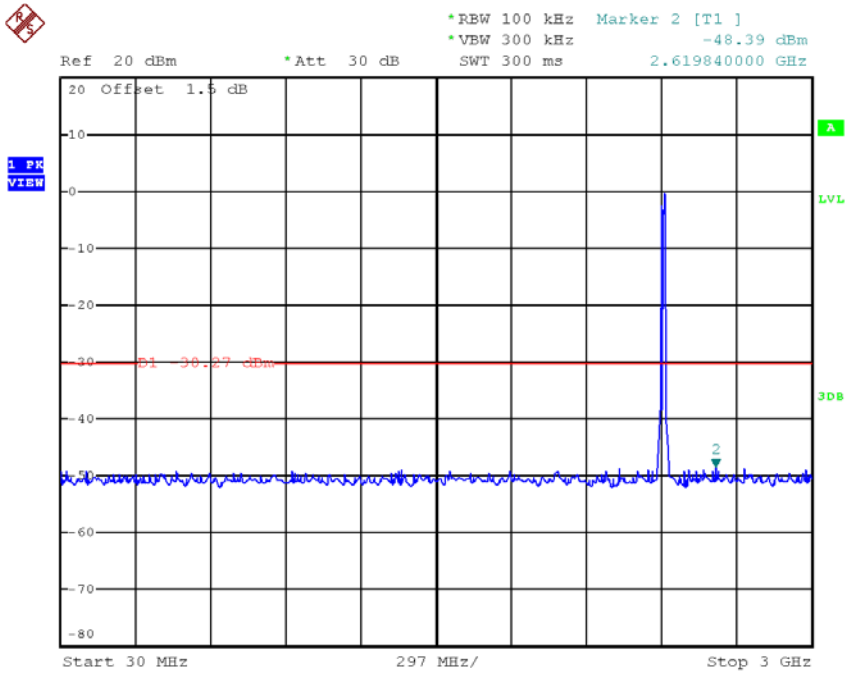

Date: 30.AUG.2018 10:02:27

**TX HT20 mode CH11**

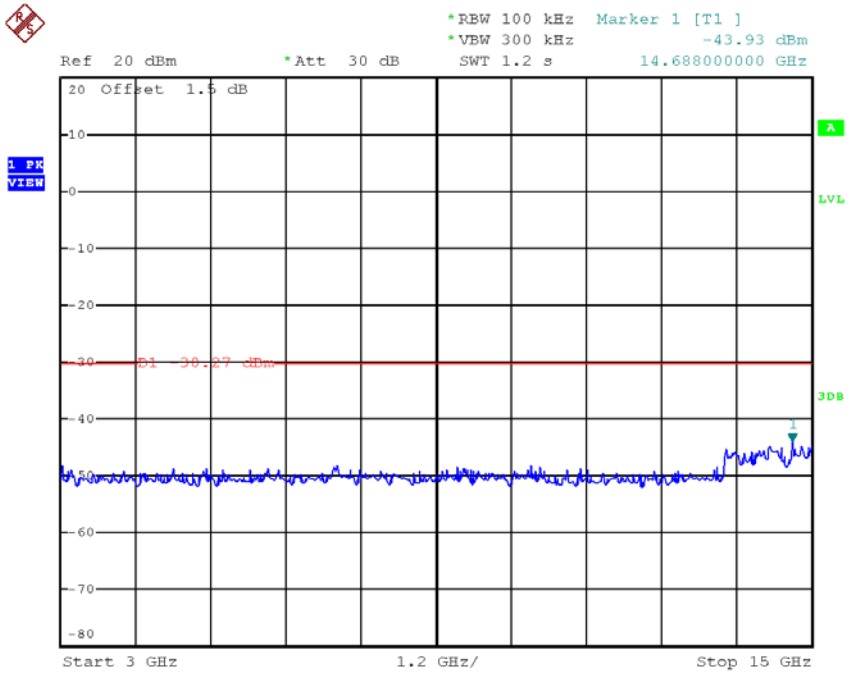



Date: 30.AUG.2018 10:05:40

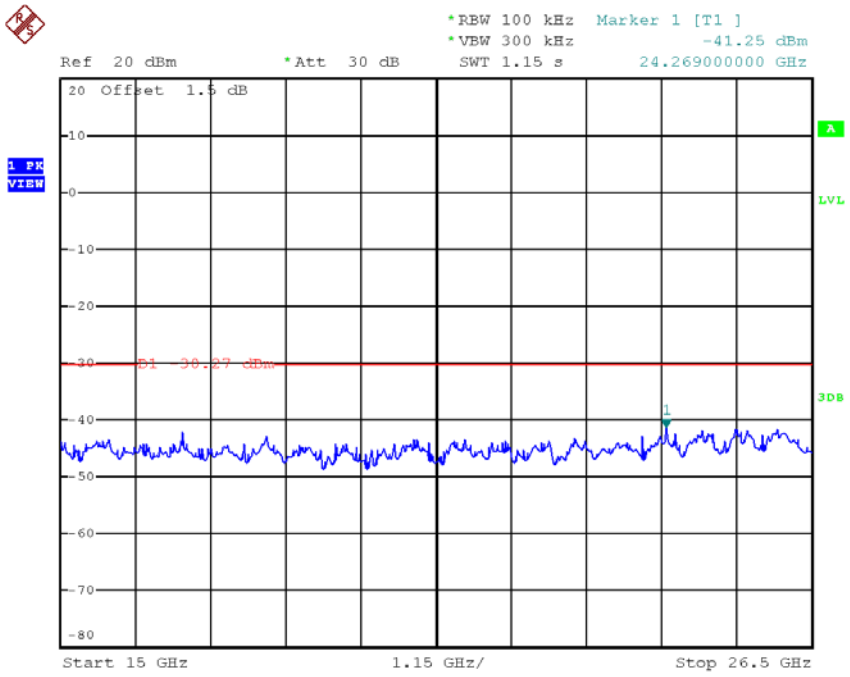
## TX HT20 mode CH01 (10th Harmonic of the frequency)




Date: 30.AUG.2018 10:02:40

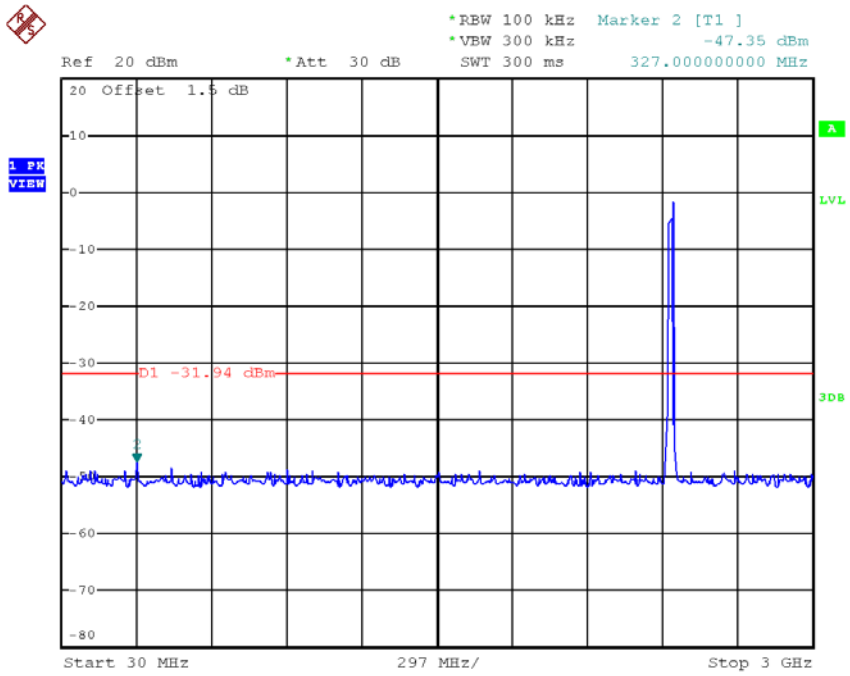



Date: 30.AUG.2018 10:02:47

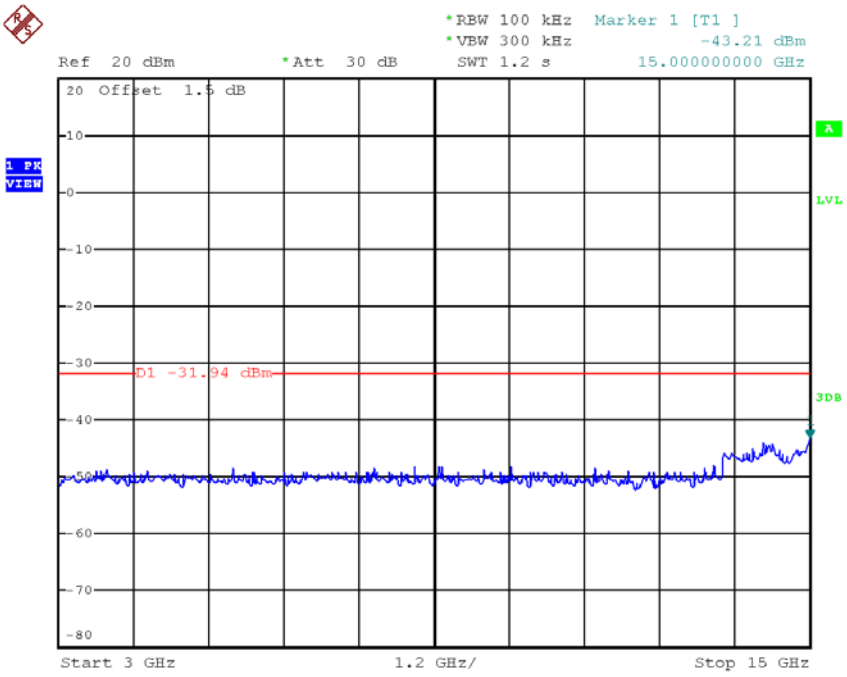



Date: 30.AUG.2018 10:02:54

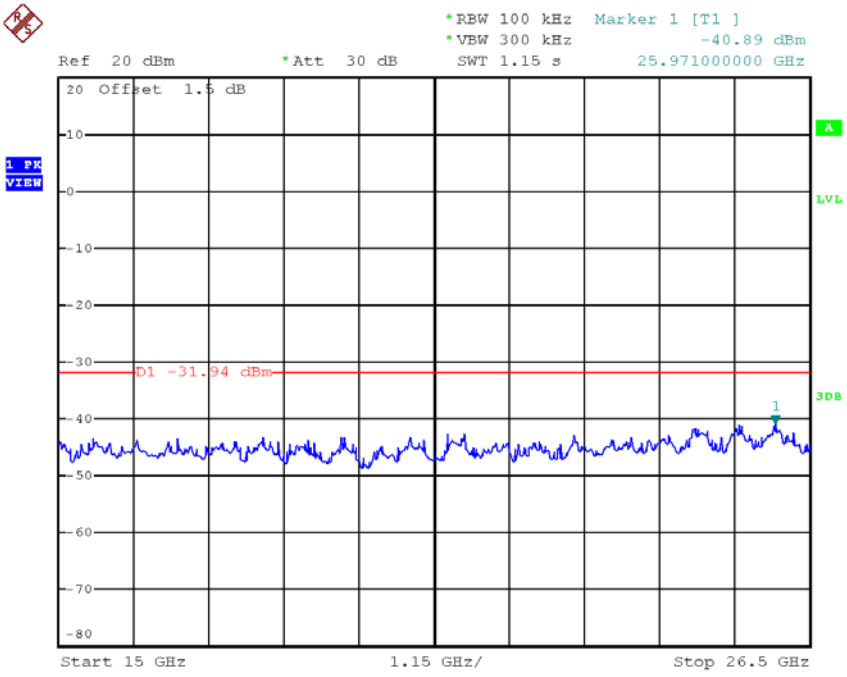
**TX HT20 mode CH06 (10th Harmonic of the frequency)**




Date: 30.AUG.2018 10:03:54

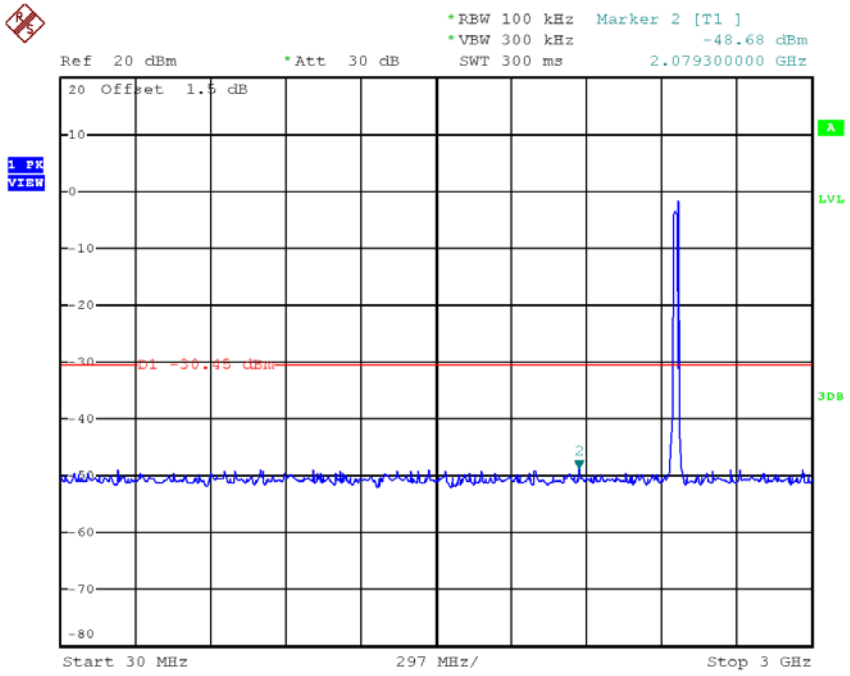



Date: 30.AUG.2018 10:04:01

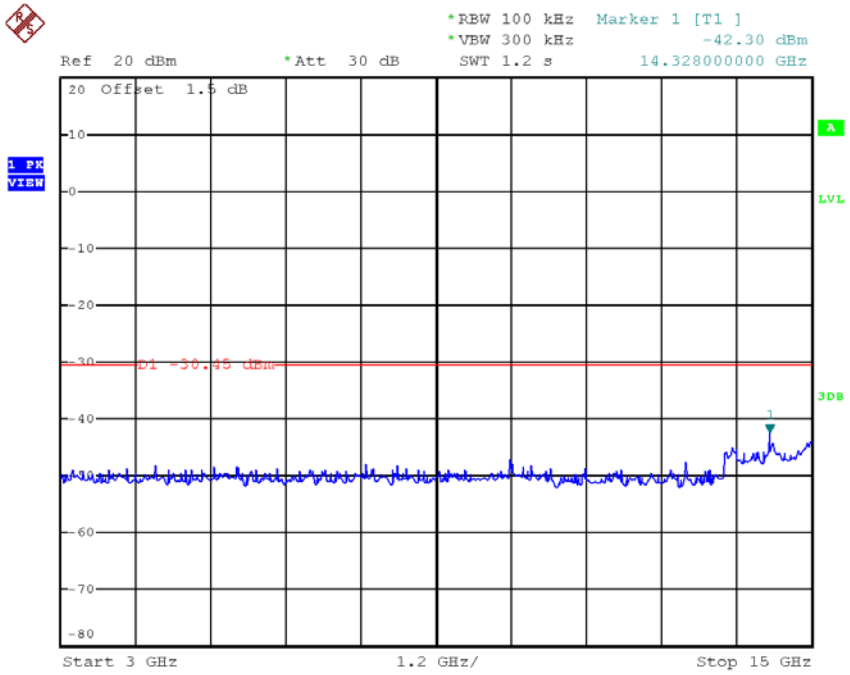



Date: 30.AUG.2018 10:04:08

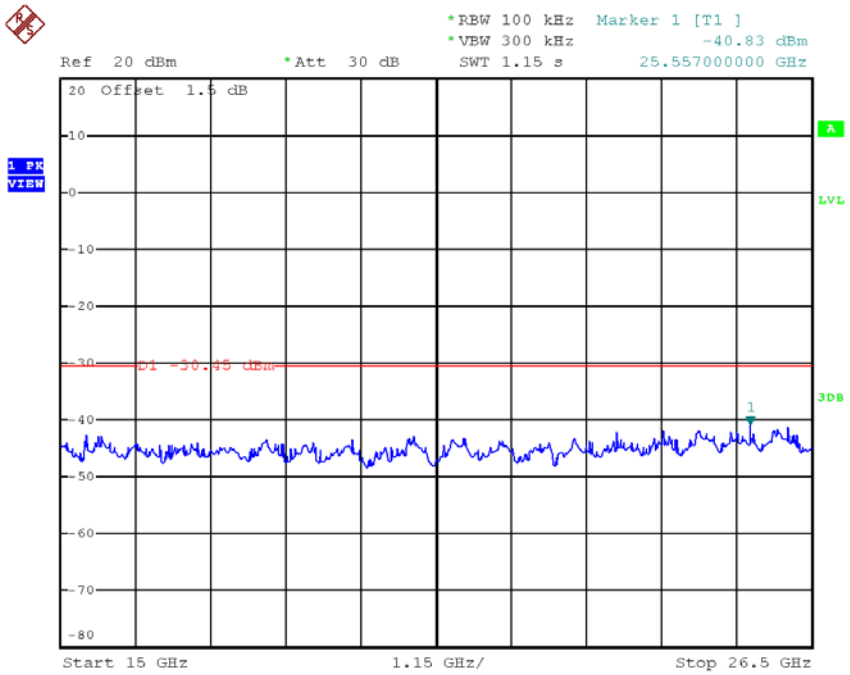
## TX HT20 mode CH11 (10th Harmonic of the frequency)




Date: 30.AUG.2018 10:05:53



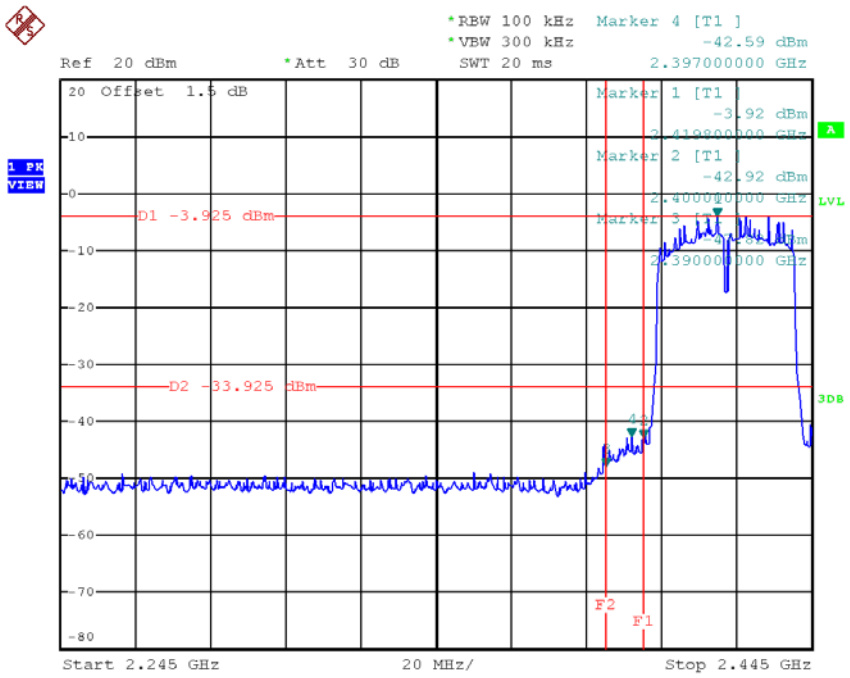

Date: 30.AUG.2018 10:06:00




Date: 30.AUG.2018 10:06:07

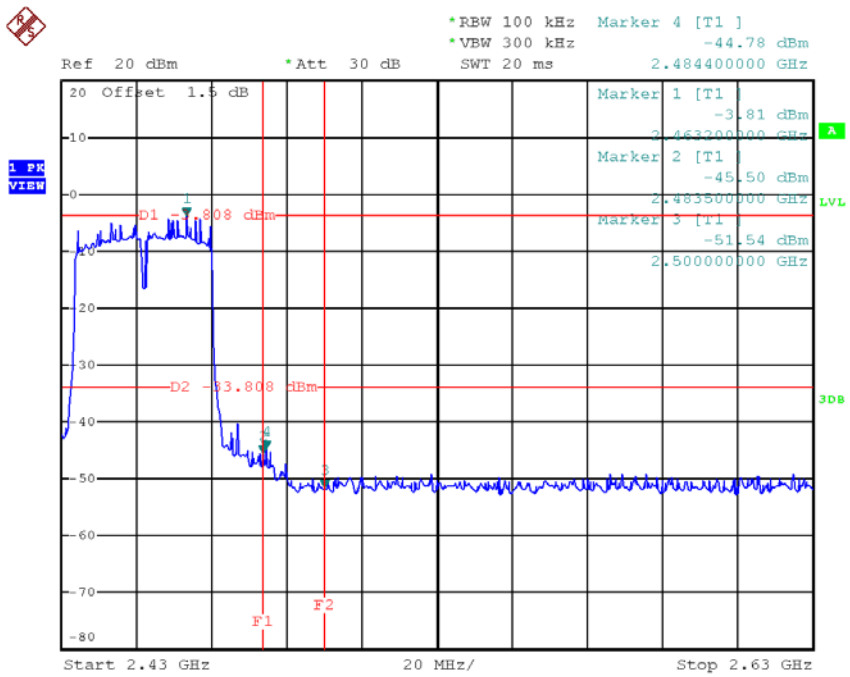
| Test Mode: | TX N-40M Mode |
|---|---|

**TX HT40 mode CH03**



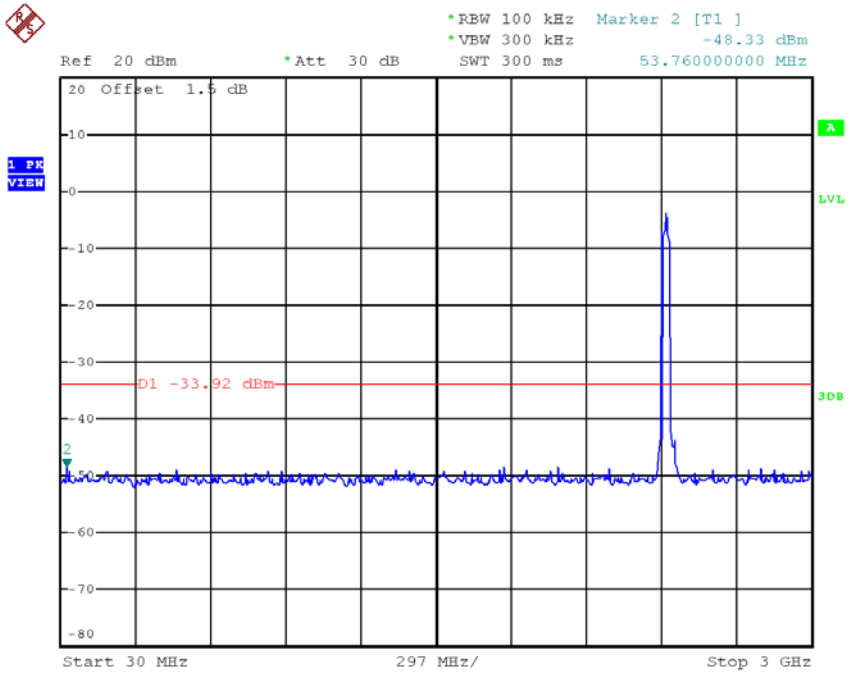

Date: 30.AUG.2018 10:08:19

**TX HT40 mode CH09**

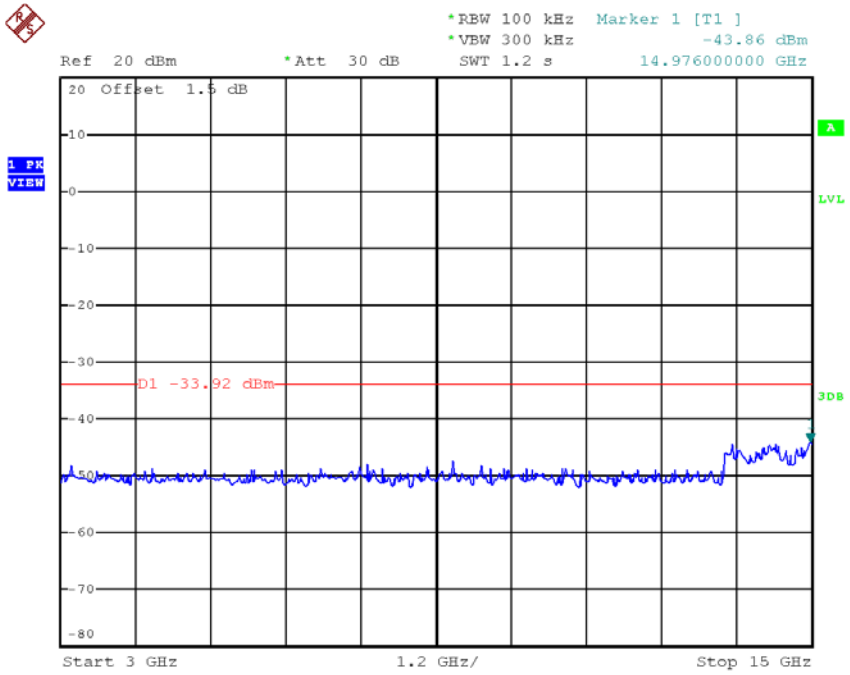



Date: 30.AUG.2018 10:11:25

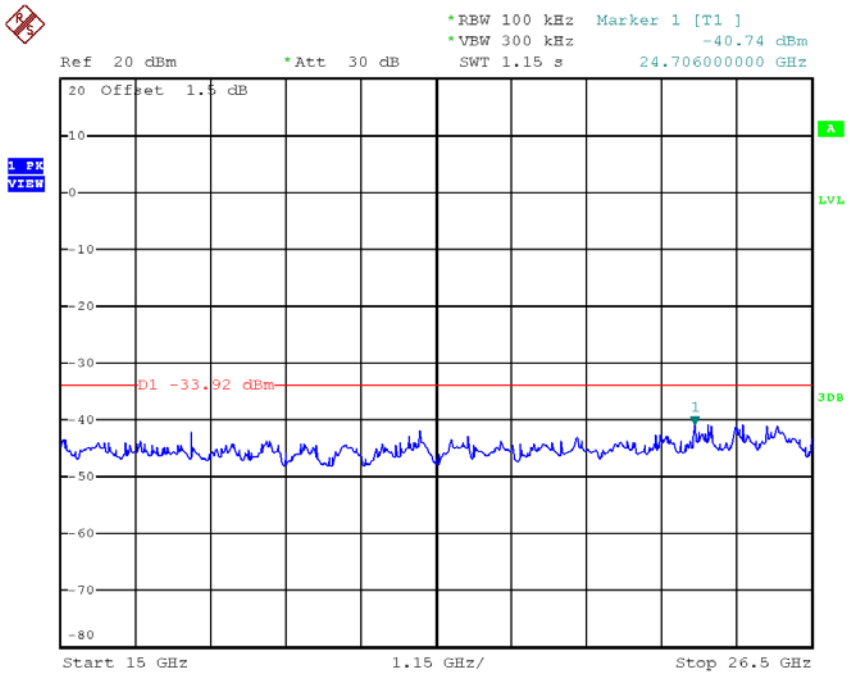
## TX HT40 mode CH03 (10th Harmonic of the frequency)




Date: 30.AUG.2018 10:08:32

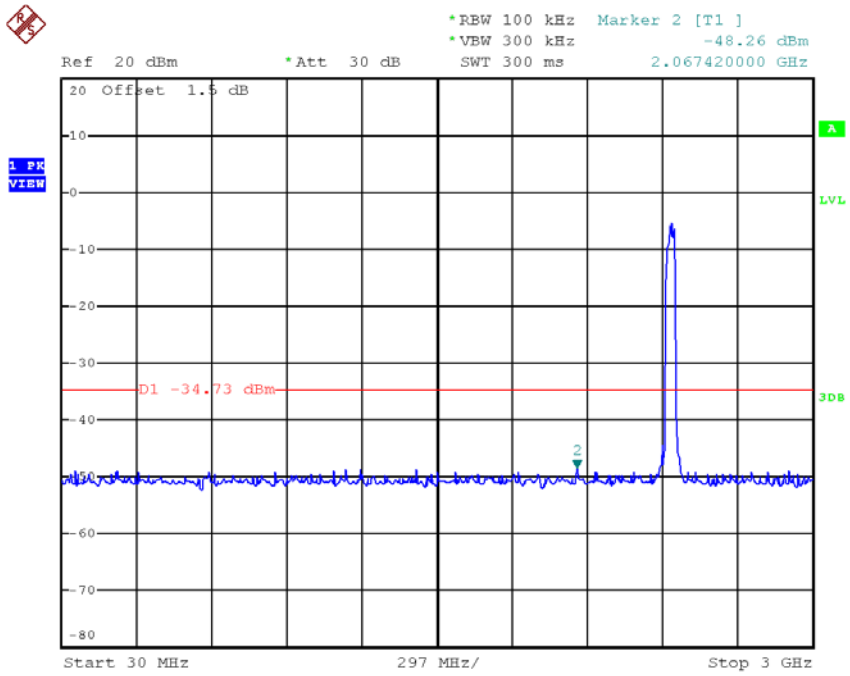



Date: 30.AUG.2018 10:08:39

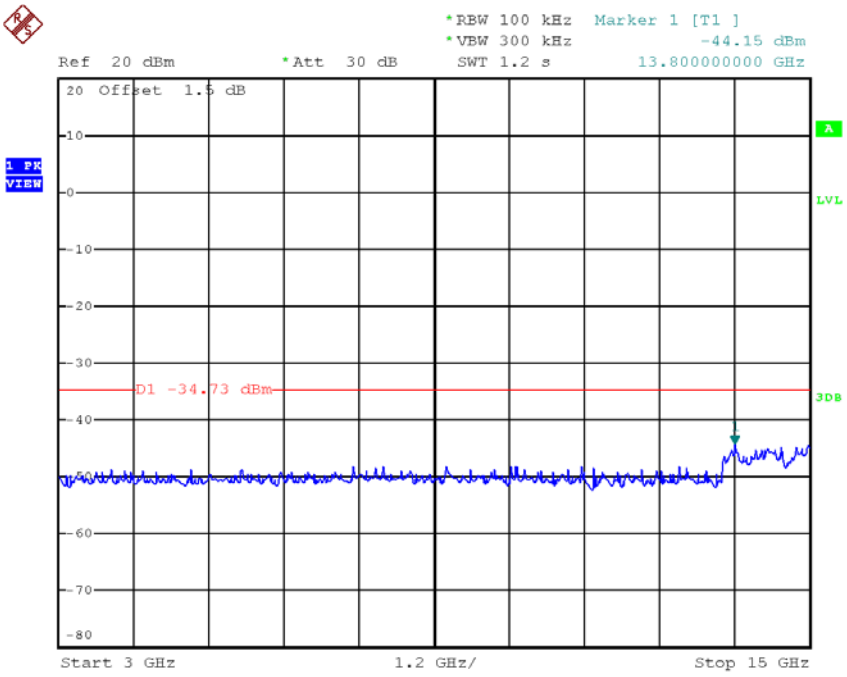



Date: 30.AUG.2018 10:08:46

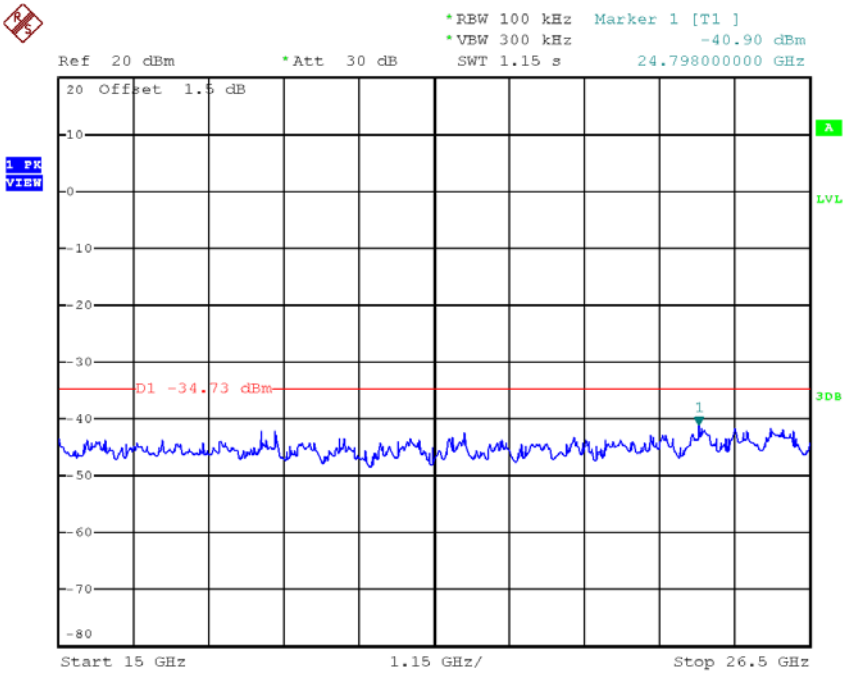
**TX HT40 mode CH06 (10th Harmonic of the frequency)**




Date: 30.AUG.2018 10:09:58

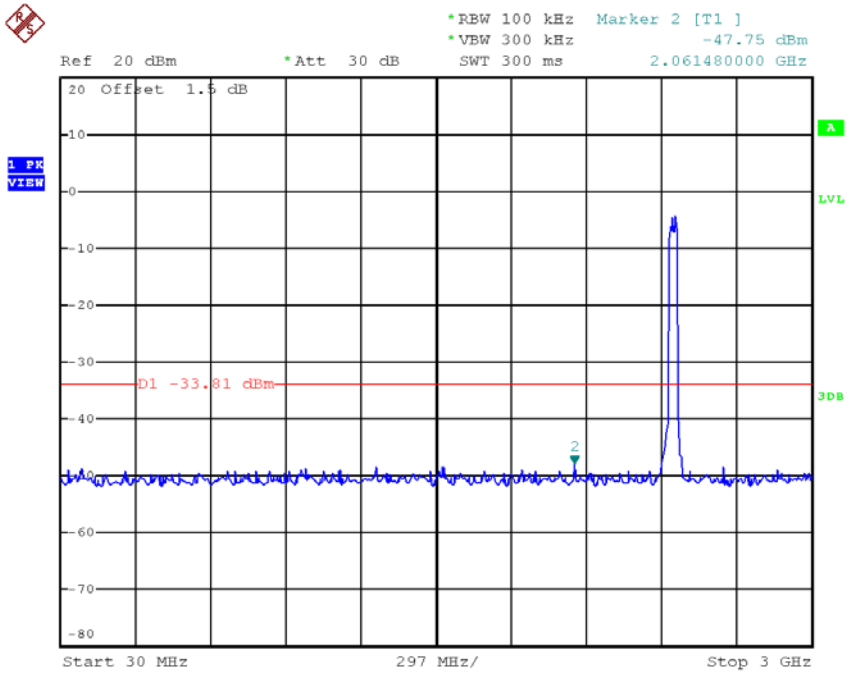



Date: 30.AUG.2018 10:10:06

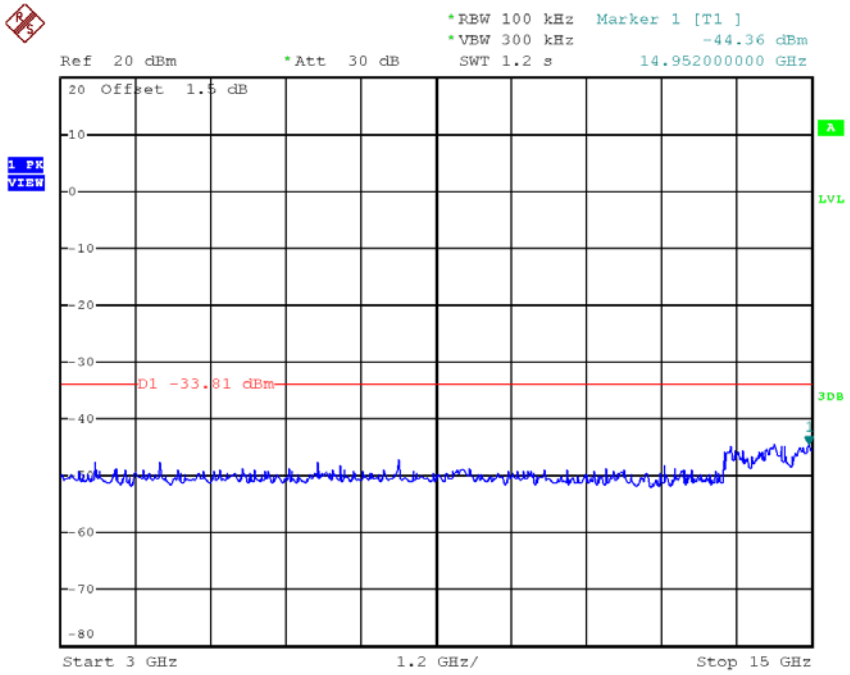



Date: 30.AUG.2018 10:10:13

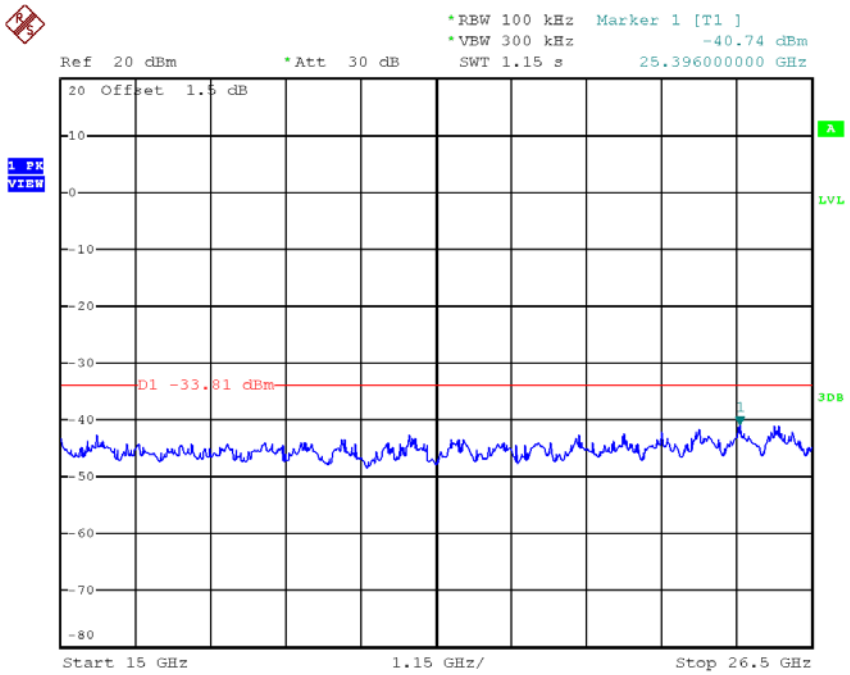
## TX HT40 mode CH09 (10th Harmonic of the frequency)




Date: 30.AUG.2018 10:11:38




Date: 30.AUG.2018 10:11:45



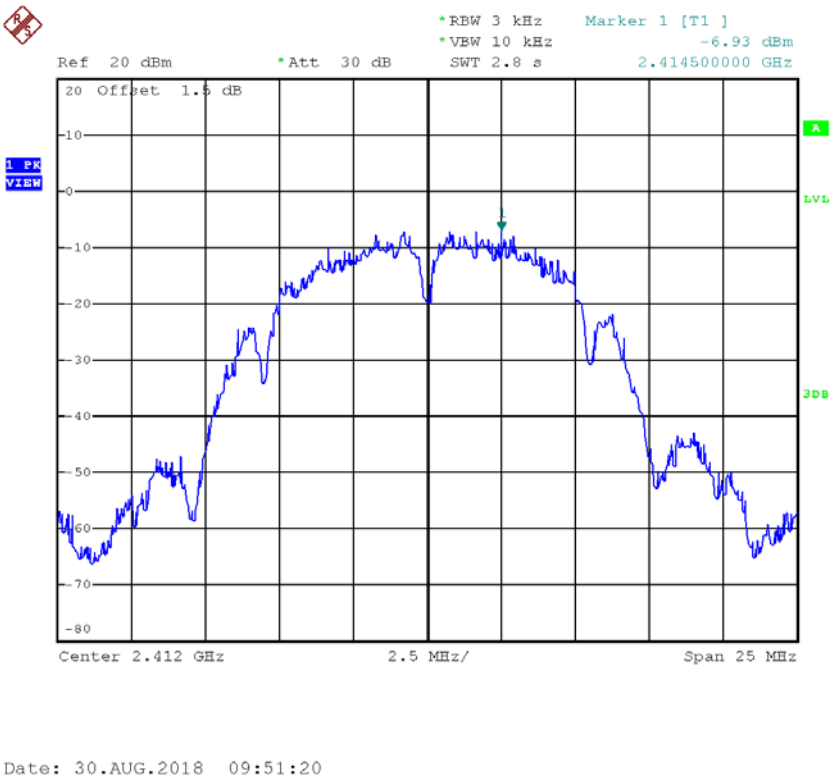

Date: 30.AUG.2018 10:11:53

# APPENDIX H - POWER SPECTRAL DENSITY

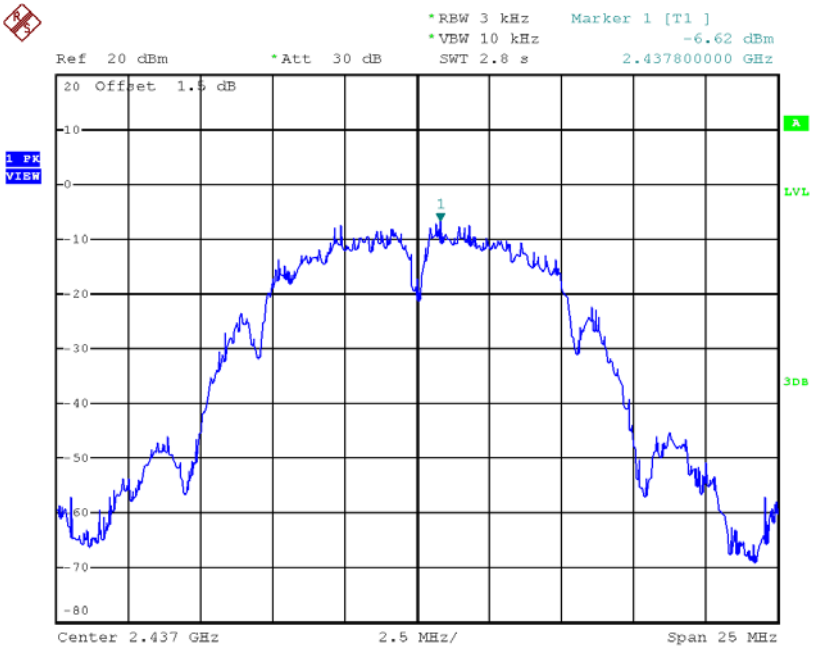
| Test Mode: TX B Mode_CH01/06/11 |
|---|

| Frequency (MHz) | Power Density (dBm/3 kHz) | Power Density (mW/3 kHz) | Max. Limit (dBm/3 kHz) | Result |
|---|---|---|---|---|
| 2412 | -6.93 | 0.2028 | 8.00 | Complies |
| 2437 | -6.62 | 0.2178 | 8.00 | Complies |
| 2462 | -6.66 | 0.2158 | 8.00 | Complies |

**TX CH01**

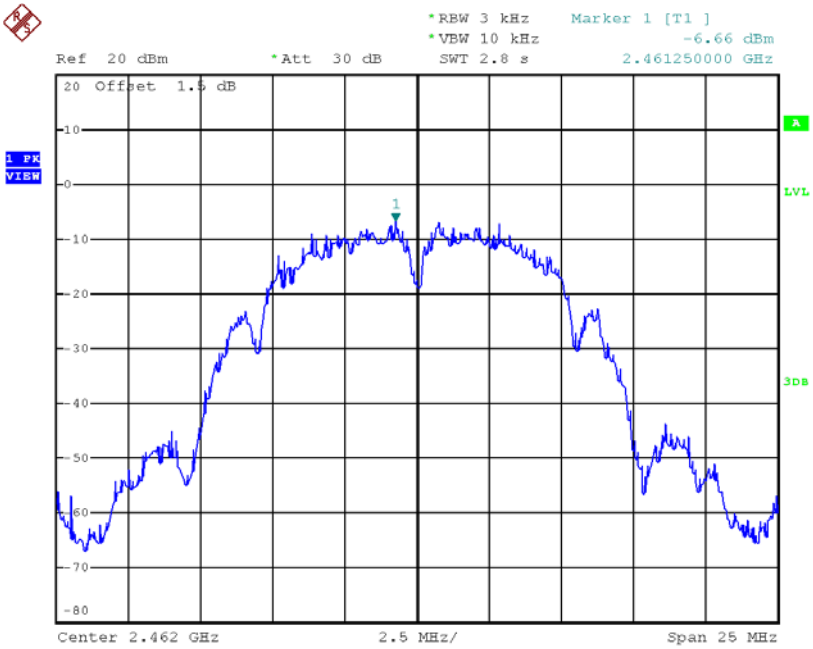


## TX CH06




Date: 30.AUG.2018 09:54:17

## TX CH11

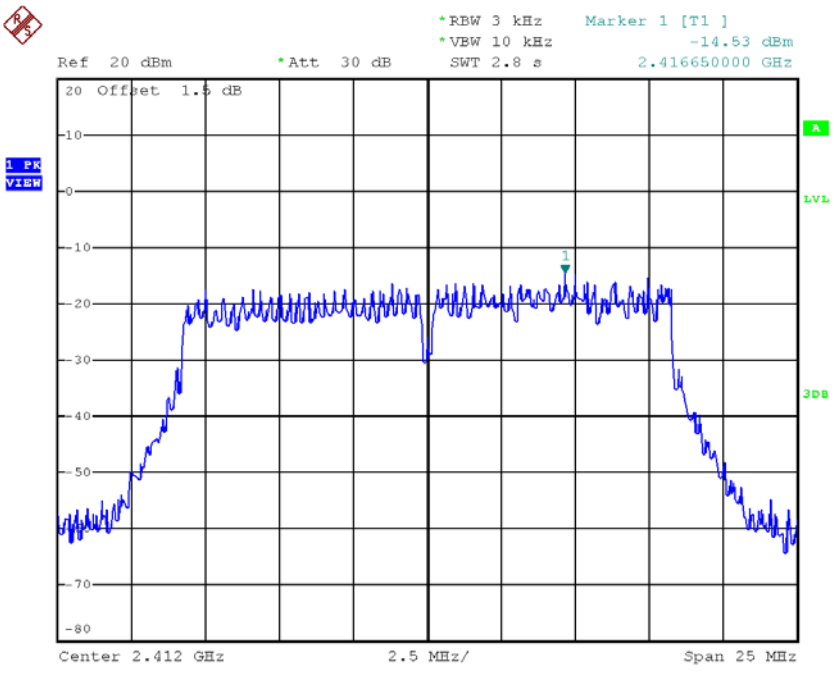



Date: 30.AUG.2018 09:55:51

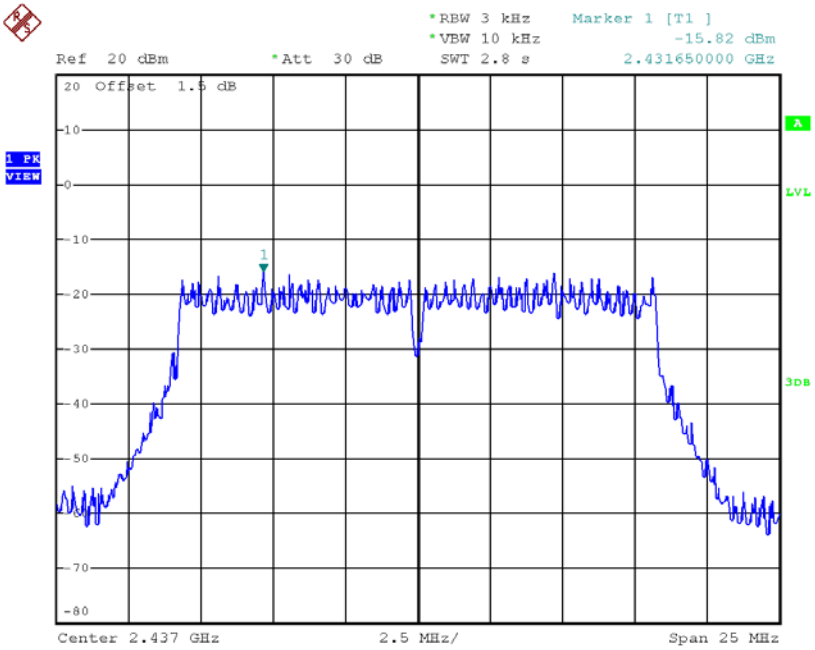
| Test Mode: TX G Mode_CH01/06/11 |
|---|

| Frequency (MHz) | Power Density (dBm/3 kHz) | Power Density (mW/3 kHz) | Max. Limit (dBm/3 kHz) | Result |
|---|---|---|---|---|
| 2412 | -14.53 | 0.0352 | 8.00 | Complies |
| 2437 | -15.82 | 0.0262 | 8.00 | Complies |
| 2462 | -15.41 | 0.0288 | 8.00 | Complies |

**TX CH01**

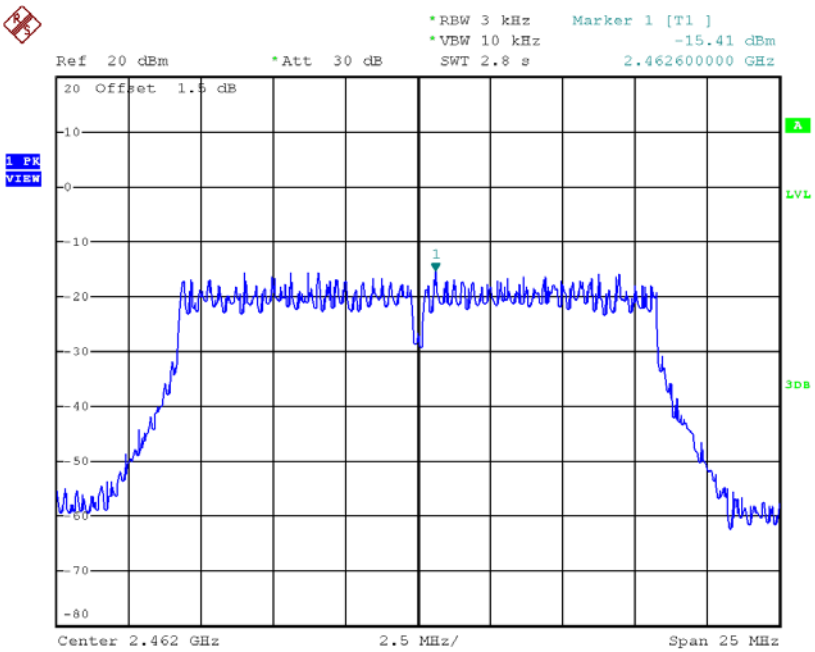


## TX CH06




Date: 30.AUG.2018 09:59:20

## TX CH11

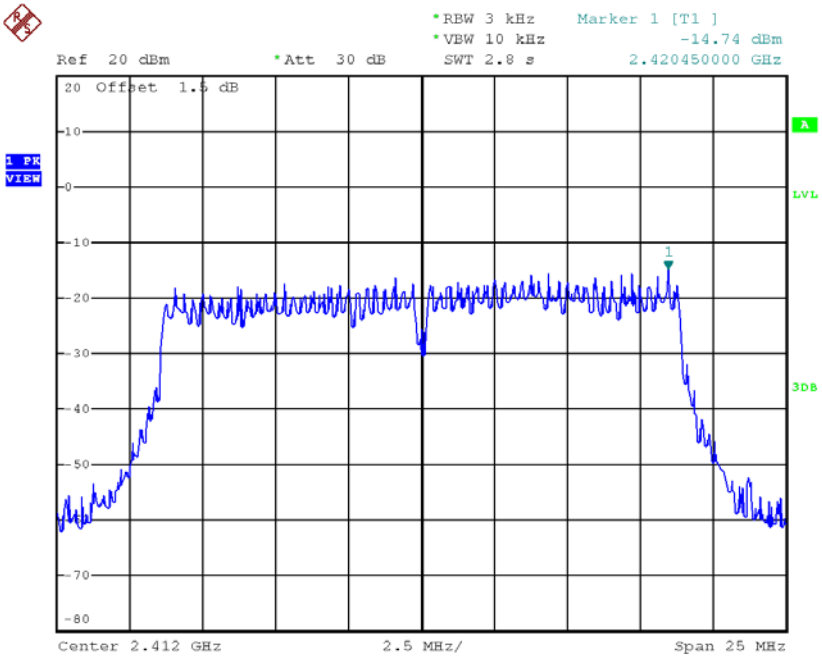



Date: 30.AUG.2018 10:01:31

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

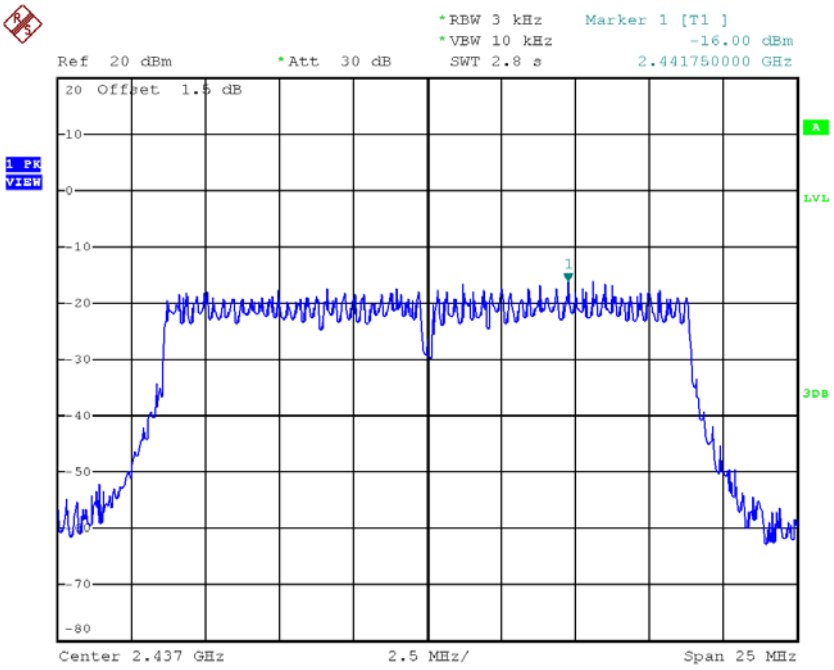
| Frequency (MHz) | Power Density (dBm/3 kHz) | Power Density (mW/3 kHz) | Max. Limit (dBm/3 kHz) | Result |
|---|---|---|---|---|
| 2412 | -14.74 | 0.0336 | 8.00 | Complies |
| 2437 | -16.00 | 0.0251 | 8.00 | Complies |
| 2462 | -13.42 | 0.0455 | 8.00 | Complies |

**TX CH01**



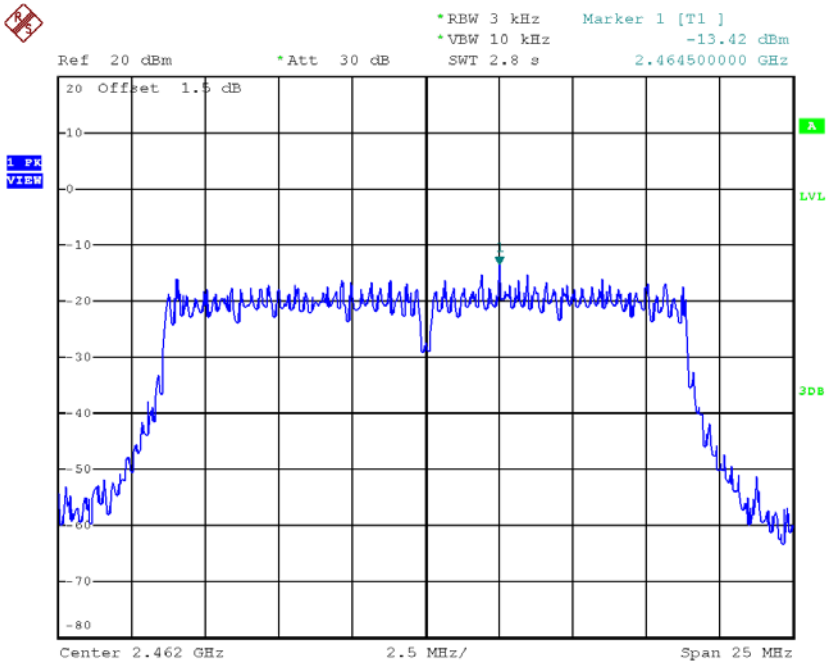

Date: 30.AUG.2018 10:03:02

## TX CH06




Date: 30.AUG.2018 10:04:16

## TX CH11

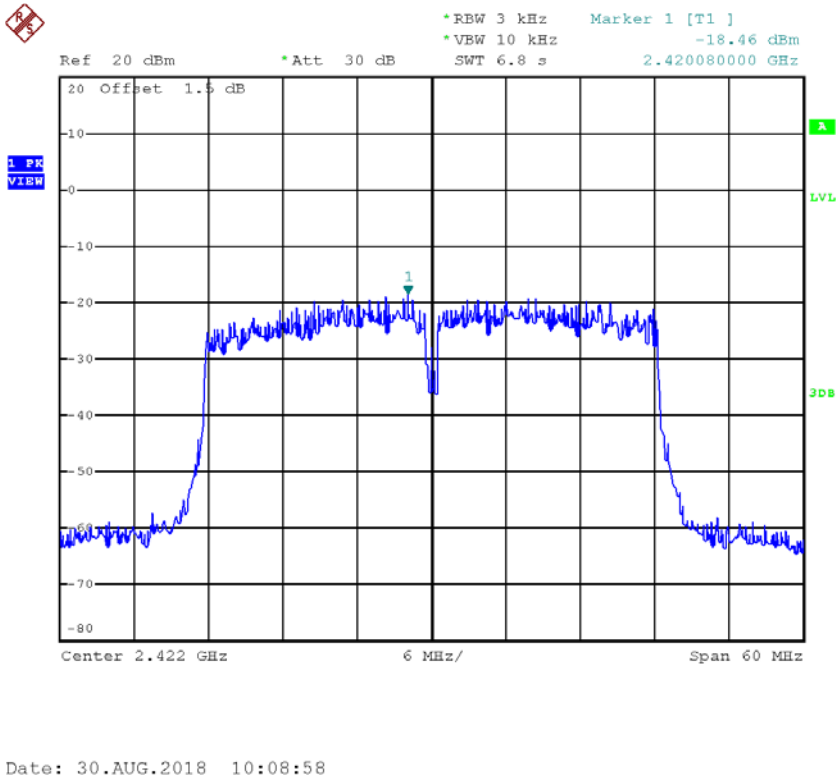



Date: 30.AUG.2018 10:06:15

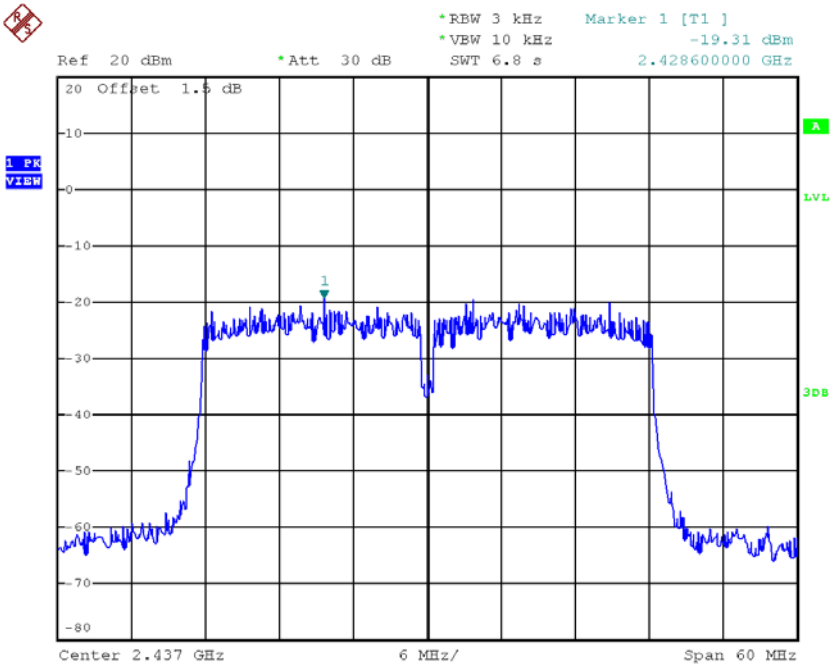
| Test Mode: TX N-40M Mode_CH03/06/09 |
|---|

| Frequency (MHz) | Power Density (dBm/3 kHz) | Power Density (mW/3 kHz) | Max. Limit (dBm/3 kHz) | Result |
|---|---|---|---|---|
| 2422 | -18.46 | 0.0143 | 8.00 | Complies |
| 2437 | -19.31 | 0.0117 | 8.00 | Complies |
| 2452 | -18.85 | 0.0130 | 8.00 | Complies |

**TX CH03**

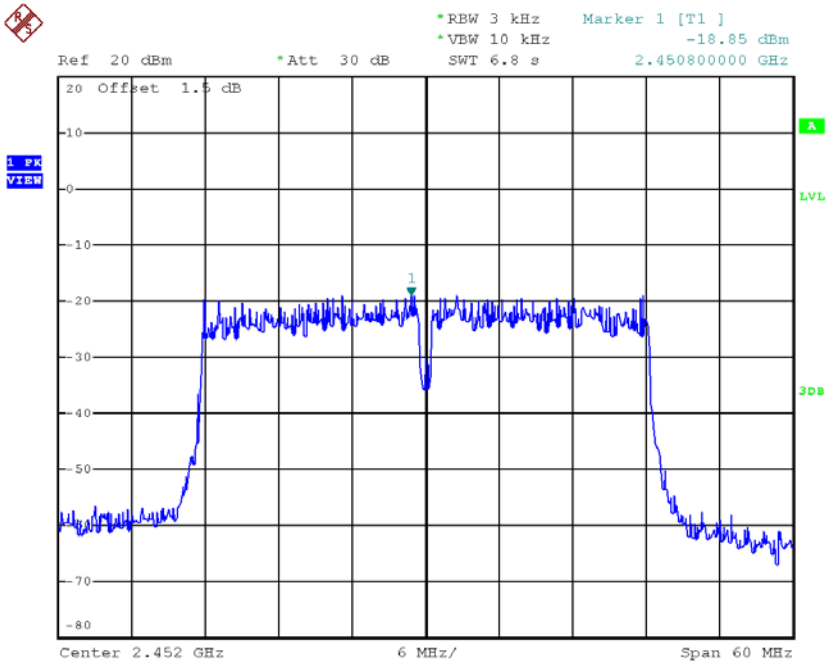


## TX CH06




Date: 30.AUG.2018 10:10:24

## TX CH09




Date: 30.AUG.2018 10:12:04