

FCC Radio Test Report

FCC ID: 2ADZRG240WB

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

Project No. : 1411C236
Equipment : GPON ONU
Model Name : G-240W-B
Applicant : Alcatel-Lucent Shanghai Bell Co. Ltd.
Address : 6B602, 388 Ningqiao Road Pudong, Shanghai

Date of Receipt : Nov. 24, 2014
Date of Test : Nov. 24, 2014 ~ Dec. 19, 2014
Issued Date : Dec. 22, 2014
Tested by : BTL Inc.

Testing Engineer : David Mao
(David Mao)

Technical Manager : Leo Hung
(Leo Hung)

Authorized Signatory : Steven Lu
(Steven Lu)

B T L I N C .

No.3, Jinshagang 1st Road, Shixia, Dalang Town, Dongguan,
Guangdong, China.

TEL: +86-769-8318-3000 FAX: +86-769-8319-6000

Declaration

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

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

BTL's reports must not be used by the client to claim product endorsement by the authorities or any agency of the Government.

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

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

Limitation

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

Table of Contents	Page
1 . CERTIFICATION	6
2 . SUMMARY OF TEST RESULTS	7
2.1 TEST FACILITY	8
2.2 MEASUREMENT UNCERTAINTY	8
3 . GENERAL INFORMATION	9
3.1 GENERAL DESCRIPTION OF EUT	9
3.2 DESCRIPTION OF TEST MODES	11
3.3 TABLE OF PARAMETERS OF TEXT SOFTWARE SETTING	12
3.4 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED	13
3.5 DESCRIPTION OF SUPPORT UNITS	13
4 . EMC EMISSION TEST	14
4.1 CONDUCTED EMISSION MEASUREMENT	14
4.1.1 POWER LINE CONDUCTED EMISSION LIMITS	14
4.1.2 TEST PROCEDURE	14
4.1.3 DEVIATION FROM TEST STANDARD	14
4.1.4 TEST SETUP	15
4.1.5 EUT OPERATING CONDITIONS	15
4.1.6 EUT TEST CONDITIONS	15
4.1.7 TEST RESULTS	15
4.2 RADIATED EMISSION MEASUREMENT	16
4.2.1 RADIATED EMISSION LIMITS	16
4.2.2 TEST PROCEDURE	17
4.2.3 DEVIATION FROM TEST STANDARD	17
4.2.4 TEST SETUP	17
4.2.5 EUT OPERATING CONDITIONS	18
4.2.6 EUT TEST CONDITIONS	18
4.2.7 TEST RESULTS (9KHZ TO 30MHZ)	19
4.2.8 TEST RESULTS (BETWEEN 30MHZ TO 1000 MHZ)	19
4.2.9 TEST RESULTS (ABOVE 1000 MHZ)	19
5 . BANDWIDTH TEST	20
5.1 APPLIED PROCEDURES	20
5.1.1 TEST PROCEDURE	20
5.1.2 DEVIATION FROM STANDARD	20
5.1.3 TEST SETUP	20
5.1.4 EUT OPERATION CONDITIONS	20
5.1.5 EUT TEST CONDITIONS	20
5.1.6 TEST RESULTS	20

Table of Contents	Page
6 . MAXIMUM PEAK CONDUCTED OUTPUT POWER TEST	21
6.1 APPLIED PROCEDURES / LIMIT	21
6.1.1 TEST PROCEDURE	21
6.1.2 DEVIATION FROM STANDARD	21
6.1.3 TEST SETUP	21
6.1.4 EUT OPERATION CONDITIONS	21
6.1.5 EUT TEST CONDITIONS	21
6.1.6 TEST RESULTS	21
7 . ANTENNA CONDUCTED SPURIOUS EMISSION	22
7.1 APPLIED PROCEDURES / LIMIT	22
7.1.1 TEST PROCEDURE	22
7.1.2 DEVIATION FROM STANDARD	22
7.1.3 TEST SETUP	22
7.1.4 EUT OPERATION CONDITIONS	22
7.1.5 EUT TEST CONDITIONS	22
7.1.6 TEST RESULTS	22
8 . POWER SPECTRAL DENSITY TEST	23
8.1 APPLIED PROCEDURES / LIMIT	23
8.1.1 TEST PROCEDURE	23
8.1.2 DEVIATION FROM STANDARD	23
8.1.3 TEST SETUP	23
8.1.4 EUT OPERATION CONDITIONS	23
8.1.5 EUT TEST CONDITIONS	23
8.1.6 TEST RESULTS	23
9 . MEASUREMENT INSTRUMENTS LIST	24
10 . EUT TEST PHOTO	26
ATTACHMENT A - CONDUCTED EMISSION	30
ATTACHMENT B - RADIATED EMISSION (9KHZ TO 30MHZ)	33
ATTACHMENT C - RADIATED EMISSION (30MHZ TO 1000MHZ)	35
ATTACHMENT D - RADIATED EMISSION (ABOVE 1000MHZ)	42
ATTACHMENT E - BANDWIDTH	91
ATTACHMENT F – MAXIMUM PEAK CONDUCTED OUTPUT POWER	100
ATTACHMENT G - ANTENNA CONDUCTED SPURIOUS EMISSION	104
ATTACHMENT H - POWER SPECTRAL DENSITY	137

REPORT ISSUED HISTORY

Issued No.	Description	Issued Date
BTL-FCCP-1-1411C236	Original Issue.	Dec. 22, 2014

1. CERTIFICATION

Equipment : GPON ONU
Brand Name : Alcatel-Lucent
Model Name : G-240W-B
Applicant : Alcatel-Lucent Shanghai Bell Co. Ltd.
Manufacturer : Alcatel-Lucent Shanghai Bell Co. Ltd.
Address : 6B602, 388 Ningqiao Road Pudong, Shanghai
Factory : 1. Taicang T&W Electronics Co.,Ltd.
2. Shenzhen Gongjin Electronics Co.,Ltd.
Address : 1. Jiangnan Road 89,Ludu Town,Taicang,Jiangsu 215412,P.R.China
2. No 2&3 Buildings, Mingwei Factory Area, Songgang Road West,No. A
Building, 1#Songgang Road Songgang Sub-District,Shenzhen,Guangdong,
518105,P.R.China
Date of Test : Nov. 24, 2014 ~ Dec. 19, 2014
Test Sample : ENGINEERING SAMPLE
Standard(s) : FCC Part15, Subpart C: 2013 (15.247) / ANSI C63.4-2009

The above equipment has been tested and found compliance with the requirement of the relative standards by BTL Inc.

The test data, data evaluation, and equipment configuration contained in our test report (Ref No. BTL-FCCP-1-1411C236) were obtained utilizing the test procedures, test instruments, test sites that has been accredited by the Authority of TAF according to the ISO-17025 quality assessment standard and technical standard(s).

2. SUMMARY OF TEST RESULTS

Test procedures according to the technical standard(s):

Applied Standard(s): FCC Part15 (15.247) , Subpart C: 2013			
Standard(s) Section	Test Item	Judgment	Remark
15.207	Conducted Emission	PASS	
15.247(d)	Antenna conducted Spurious Emission	PASS	
15.247(a)(2)	6dB Bandwidth	PASS	
15.247(b)(3)	Peak Output Power	PASS	
15.247(e)	Power Spectral Density	PASS	
15.203	Antenna Requirement	PASS	
15.209/15.205	Transmitter Radiated Emissions	PASS	

NOTE:

- (1) "N/A" denotes test is not applicable in this test report.
- (2) The test follows FCC KDB Publication No. 558074 D01 DTS Meas Guidance v03r02 (Measurement Guidelines of DTS)

2.1 TEST FACILITY

The test facilities used to collect the test data in this report is **DG-C02/DG-CB03** at the location of No.3,Jinshagang 1st Road, Shixia, Dalang Town, Dongguan, Guangdong, China.523792
BTL's test firm number for FCC: 319330

2.2 MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

The reported uncertainty of measurement $y \pm U$, where expanded uncertainty U is based on a standard uncertainty multiplied by a coverage factor of $k=2$, providing a level of confidence of approximately 95 % ◦

A. Conducted Measurement :

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

B. Radiated Measurement :

Test Site	Method	Measurement Frequency Range	Ant. H / V	U, (dB)	Note
DG-C 03	CISPR	9KHz~30MHz	V	3.79	
		9KHz~30MHz	H	3.57	
		30MHz ~ 200MHz	V	3.82	
		30MHz ~ 200MHz	H	3.60	
		200MHz ~ 1,000MHz	V	3.86	
		200MHz ~ 1,000MHz	H	3.94	
		1GHz~18GHz	V	3.12	
		1GHz~18GHz	H	3.68	
		18GHz~40GHz	V	4.15	
		18GHz~40GHz	H	4.14	

3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

Equipment	GPON ONU	
Brand Name	Alcatel-Lucent	
Model Name	G-240W-B	
Model Difference	Please refer to note 2 on this page	
Product Description	Operation Frequency	2412~2462 MHz
	Modulation Technology	802.11b:DSSS 802.11g:OFDM 802.11n:OFDM
	Bit Rate of Transmitter	802.11b: 11/5.5/2/1 Mbps 802.11g: 54/48/36/24/18/12/9/6 Mbps 802.11n up to 300 Mbps
	Output Power (Max.)	802.11b: 19.84 dBm 802.11g: 26.62 dBm 802.11n(20MHz): 29.59 dBm 802.11n(40MHz): 25.22 dBm
Power Source	#1 DC voltage supplied from AC Adapter. Brand/ Model: Mass Power/WHF-1200300VA #2 Supplied form UPS. Brand/ Model: CyberPower/DTC36U12V3-G	
Power Rating	#1 I/P: AC 100-240V 50/60Hz, 1.0A O/P: DC 12.0V 3.0A #2 I/P: AC 100-240V 50/60Hz, 1.0A O/P: DC 12.0V 36W	

Note:

1. For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.
- 2.

	KIT Part Number	EMA Part Number
G-240W-B	3FE56636AAAA	3FE56756BAAA
	3FE56636BAAA	3FE56756AABA
	3FE56636CAAA	3FE56756AABA
	3FE56636CBAA	3FE56756ABBA

2. Channel List:

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

3. Table for Filed Antenna

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)	Note
1	Airgain	N2420S	Embedded	U.FL	3.20	-
2	Airgain	N2420S	Embedded	U.FL	3.20	-
3	Airgain	N2420S	Embedded	U.FL	3.20	-

Note:

- (1) The EUT incorporates a MIMO function. Physically, the EUT provides three completed three transmitters and three receivers (3T3R), all transmit signals are completely uncorrelated, then, **Direction gain = G_{ANT}** , that is Directional gain=1.8
- (2) ANT 1 was the worst case for 1TX.

4.

Operating Mode TX Mode	1TX	3TX
	802.11b	V (ANT 1)
802.11g	V (ANT 1)	-
802.11n(20MHz)	-	V (ANT 1 + ANT 2+ANT3)
802.11n(40MHz)	-	V (ANT 1 + ANT 2+ANT3)

3.2 DESCRIPTION OF TEST MODES

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

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

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

For Conducted Test	
Final Test Mode	Description
Mode 5	TX MODE

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

Note:

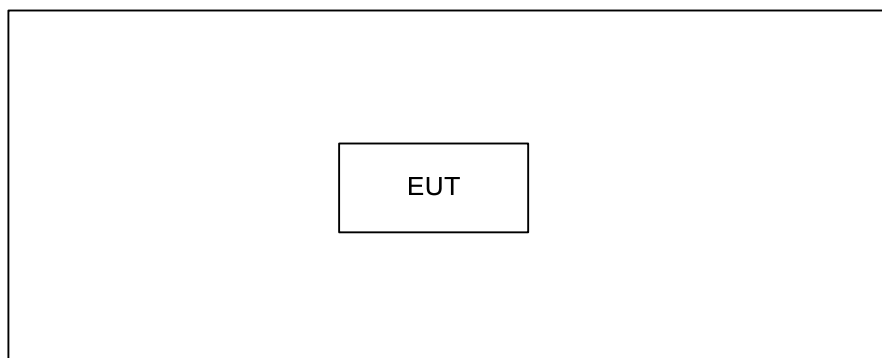
- (1) The measurements are performed at the high, middle, low available channels.
- (2) 802.11b mode: DBPSK (1Mbps)
 802.11g mode: OFDM (6Mbps)
 802.11n HT20 mode : BPSK (27Mbps)
 802.11n HT40 mode : BPSK (54Mbps)
 For radiated emission tests, the highest output powers were set for final test.
- (3) For radiated below 1G test, the 802.11b is found to be the worst case and recorded.
- (4) The EUT was programmed to be in continuously transmitting mode and the transmit duty cycle is not less than 98%.

3.3 TABLE OF PARAMETERS OF TEXT SOFTWARE SETTING

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

Test software version	MTOOL		
Frequency (MHz)	2412	2437	2462
IEEE 802.11b DSSS	56	64	68
IEEE 802.11g OFDM	48	80	48
IEEE 802.11n (20MHz)	46	72	42
Frequency	2422	2437	2452
IEEE 802.11n (40MHz)	40	50	43

3.4 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED



3.5 DESCRIPTION OF SUPPORT UNITS

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

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

Item	Shielded Type	Ferrite Core	Length	Note
-	-	-	-	

4. EMC EMISSION TEST

4.1 CONDUCTED EMISSION MEASUREMENT

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

Frequency of Emission (MHz)	Conducted Limit (dB μ V)	
	Quasi-peak	Average
0.15 -0.5	66 to 56*	56 to 46*
0.50 -5.0	56	46
5.0 -30.0	60	50

Note:

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

The following table is the setting of the receiver

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

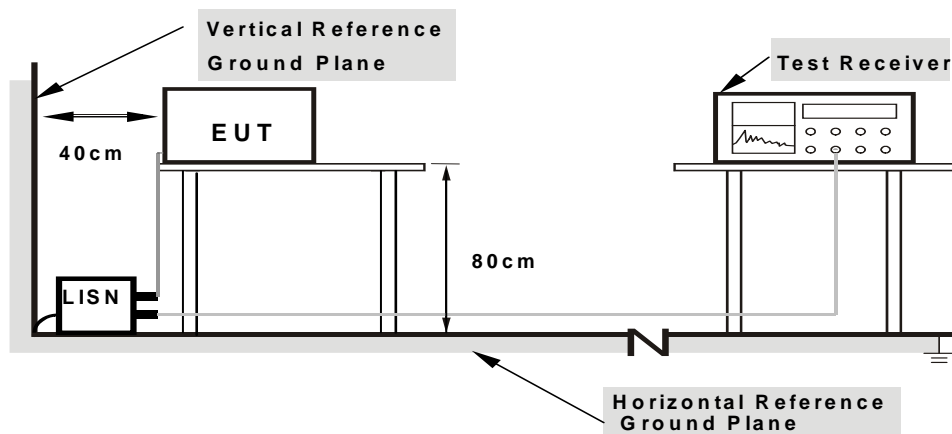
4.1.2 TEST PROCEDURE

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

4.1.3 DEVIATION FROM TEST STANDARD

No deviation

4.1.4 TEST SETUP



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

4.1.5 EUT OPERATING CONDITIONS

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

4.1.6 EUT TEST CONDITIONS

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

4.1.7 TEST RESULTS

Please refer to the Attachment A.

4.2 RADIATED EMISSION MEASUREMENT

4.2.1 RADIATED EMISSION LIMITS

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

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

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

LIMITS OF RADIATED EMISSION MEASUREMENT (Above 1000MHz)

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

Notes:

- (1) The limit for radiated test was performed according to FCC PART 15C.
- (2) The tighter limit applies at the band edges.
- (3) Emission level (dBuV/m)=20log Emission level (uV/m).
- (4) The test result calculated as following:
 Measurement Value = Reading Level + Correct Factor
 Correct Factor = Antenna Factor + Cable Loss - Amplifier Gain(if use)
 Margin Level = Measurement Value - Limit Value

Spectrum Parameter	Setting
Attenuation	Auto
Start Frequency	1000 MHz
Stop Frequency	10th carrier harmonic
RBW / VBW (Emission in restricted band)	RBW 1MHz VBW 3MHz peak detector for Pk value RMS detector for AV value

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

4.2.2 TEST PROCEDURE

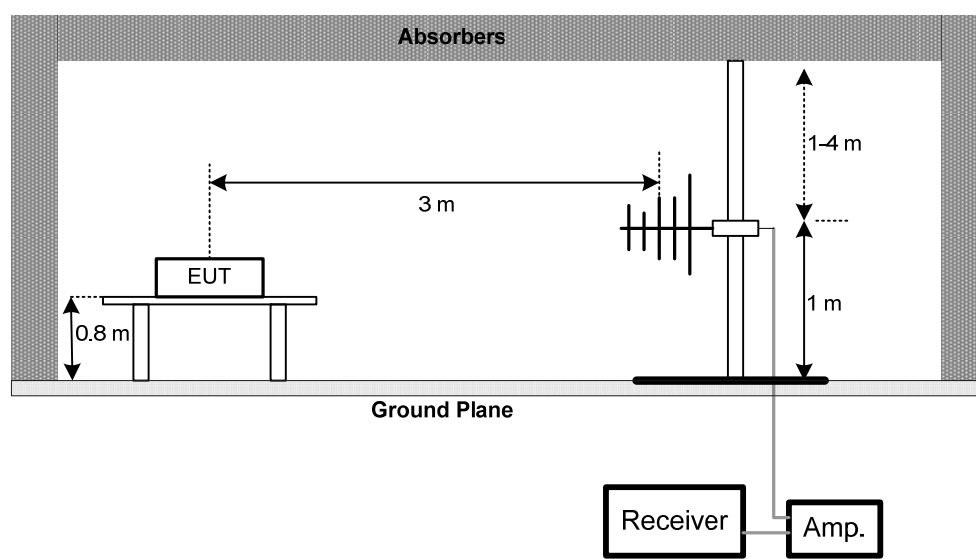
- The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1GHz)
- The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3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

4.2.3 DEVIATION FROM TEST STANDARD

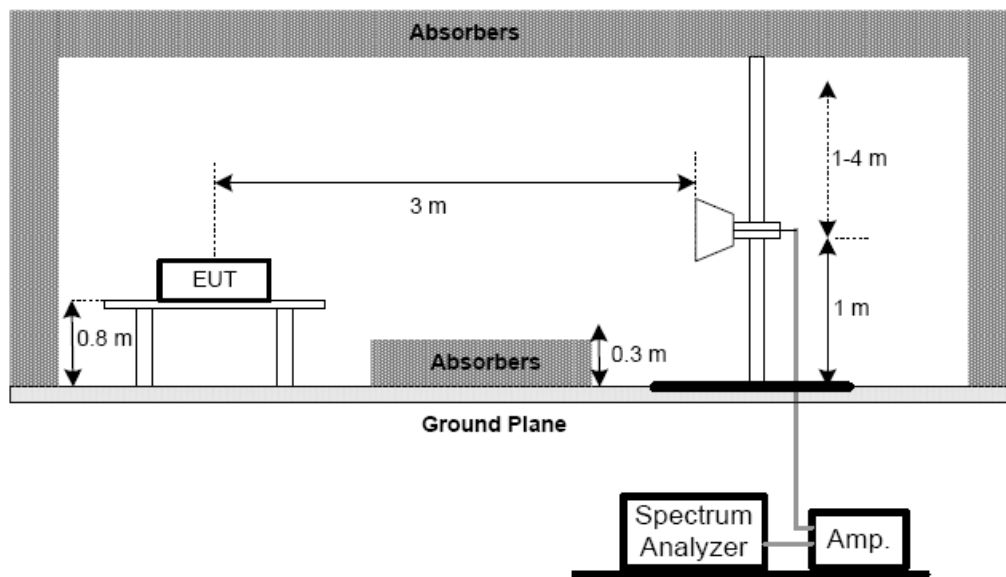
No deviation

4.2.4 TEST SETUP

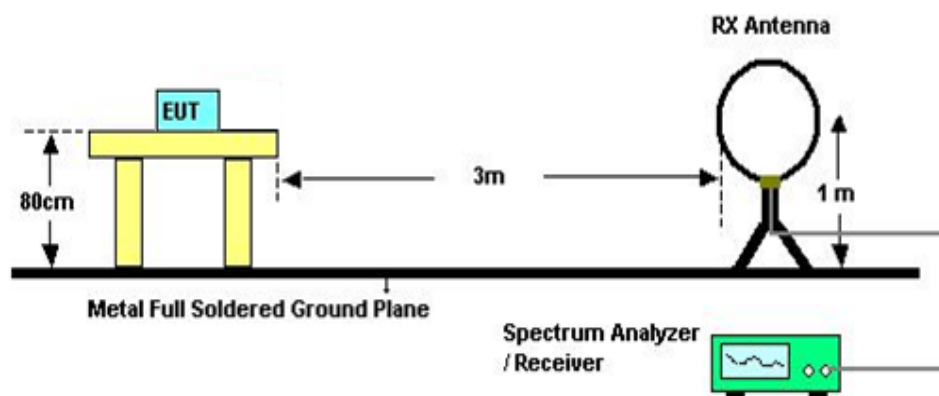
(A) Radiated Emission Test Set-Up Frequency Below 1 GHz



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



(C) For radiated emissions below 30MHz



4.2.5 EUT OPERATING CONDITIONS

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

4.2.6 EUT TEST CONDITIONS

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

4.2.7 TEST RESULTS (9KHZ TO 30MHZ)

Please refer to the Attachment B

Remark:

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

4.2.8 TEST RESULTS (BETWEEN 30MHZ TO 1000 MHZ)

Please refer to the Attachment C.

4.2.9 TEST RESULTS (ABOVE 1000 MHZ)

Please refer to the Attachment D.

Remark:

- (1) No limit: This is fundamental signal, the judgment is not applicable.
For fundamental signal judgment was referred to Peak output test.

5. BANDWIDTH TEST

5.1 APPLIED PROCEDURES

FCC Part15 (15.247) , Subpart C			
Section	Test Item	Frequency Range (MHz)	Result
15.247(a)(2)	Bandwidth	2400-2483.5	PASS

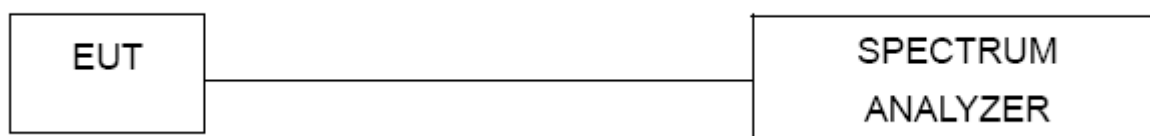
5.1.1 TEST PROCEDURE

- a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,
- b. Spectrum Setting: RBW= 100KHz, VBW=300KHz, Sweep time = 2.5 ms.

5.1.2 DEVIATION FROM STANDARD

No deviation.

5.1.3 TEST SETUP



5.1.4 EUT OPERATION CONDITIONS

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

5.1.5 EUT TEST CONDITIONS

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

5.1.6 TEST RESULTS

Please refer to the Attachment E.

6. MAXIMUM PEAK CONDUCTED OUTPUT POWER TEST

6.1 APPLIED PROCEDURES / LIMIT

FCC Part15 (15.247) , Subpart C				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247(b)(3)	Maximum Output Power	1 Watt or 30dBm	2400-2483.5	PASS

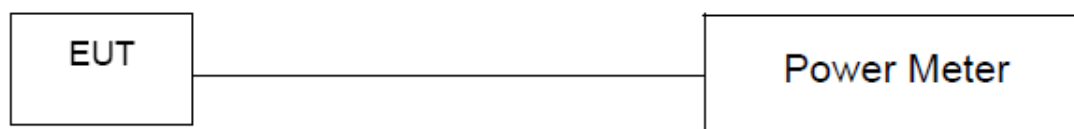
6.1.1 TEST PROCEDURE

- The EUT was directly connected to the power meter and antenna output port as show in the block diagram below,
- The maximum peak conducted output power was performed in accordance with method 9.1.2 of FCC KDB 558074 D01 DTS Meas Guidance v03r02.

6.1.2 DEVIATION FROM STANDARD

No deviation.

6.1.3 TEST SETUP



6.1.4 EUT OPERATION CONDITIONS

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

Transmit output power was measured while the host equipment supply voltage was varied from 85 % to 115 % of the nominal rated supply voltage. No change in transmit output power was observed.

6.1.5 EUT TEST CONDITIONS

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

6.1.6 TEST RESULTS

Please refer to the Attachment F.

7. ANTENNA CONDUCTED SPURIOUS EMISSION

7.1 APPLIED PROCEDURES / LIMIT

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

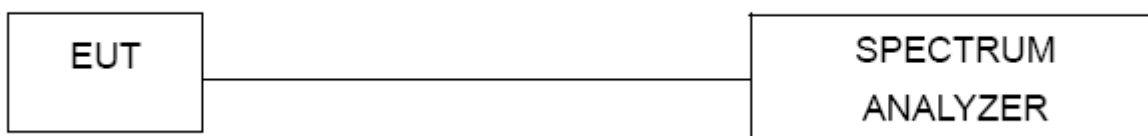
7.1.1 TEST PROCEDURE

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

7.1.2 DEVIATION FROM STANDARD

No deviation.

7.1.3 TEST SETUP



7.1.4 EUT OPERATION CONDITIONS

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

7.1.5 EUT TEST CONDITIONS

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

7.1.6 TEST RESULTS

Please refer to the Attachment G.

8. POWER SPECTRAL DENSITY TEST

8.1 APPLIED PROCEDURES / LIMIT

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

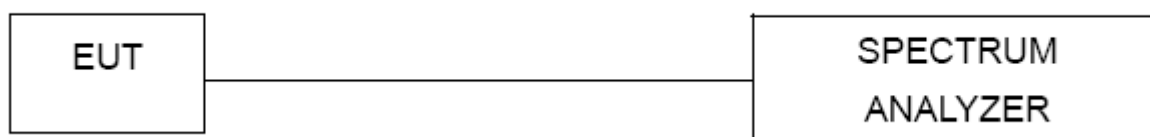
8.1.1 TEST PROCEDURE

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

8.1.2 DEVIATION FROM STANDARD

No deviation.

8.1.3 TEST SETUP



8.1.4 EUT OPERATION CONDITIONS

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

8.1.5 EUT TEST CONDITIONS

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

8.1.6 TEST RESULTS

Please refer to the Attachment H.

9. MEASUREMENT INSTRUMENTS LIST

Conducted Emission Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	LISN	EMCO	3816/2	00052765	Mar. 29, 2015
2	LISN	R&S	ENV216	101447	Mar. 29, 2015
3	Test Cable	N/A	C_17	N/A	Mar. 14, 2015
4	EMI TEST RECEIVER	R&S	ESCS30	833364/017	Mar. 29, 2015
5	50Ω Terminator	SHX	TF2-3G-A	08122902	Mar. 29, 2015
6	Measurement Software	Farad	EZ-EMC Ver.NB-03A1 -01	N/A	N/A

Radiated Emission Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Antenna	Schwarzbeck	VULB9160	9160-3232	Mar. 29, 2015
2	Amplifier	HP	8447D	2944A09673	Mar. 29, 2015
3	Receiver	AGILENT	N9038A	MY5213003 9	Sep. 30, 2015
4	Test Cable	N/A	C-01_CB03	N/A	Jul. 01, 2015
5	Controller	CT	SC100	N/A	N/A
6	Antenna	ETS	3115	00075789	Mar. 29, 2015
7	Amplifier	Agilent	8449B	3008A02274	Mar. 29, 2015
8	Receiver	AGILENT	N9038A	MY5213003 9	Sep. 30, 2015
9	Test Cable	HUBER+SUHNER	C-48	N/A	Apr. 30, 2015
10	Controller	CT	SC100	N/A	N/A
11	Broad-Band Horn Antenna	Schwarzbeck	BBHA 9170	9170319	Feb. 22, 2015
12	Microwave Preamplifier With Adaptor	EMC INSTRUMENT	EMC2654045	980039 & HA01	Feb. 22, 2015
13	Active Loop Antenna	R&S	HFH2-Z2	830749/020	Mar. 29, 2015
14	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A

6dB Bandwidth Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP 40	100185	Nov. 02, 2015

Peak Output Power Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	P-series Power meter	Agilent	N1911A	MY45100473	Mar. 29, 2015
2	Wireband Power sensor	Agilent	N1921A	MY51100041	Mar. 29, 2015

Antenna Conducted Spurious Emission Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP 40	100185	Nov. 02, 2015

Power Spectral Density Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP 40	100185	Nov. 02, 2015

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

10. EUT TEST PHOTO

Conducted Measurement Photos



Radiated Measurement Photos

9KHz to 30MHz



Radiated Measurement Photos

30MHz to 1000MHz



Radiated Measurement Photos

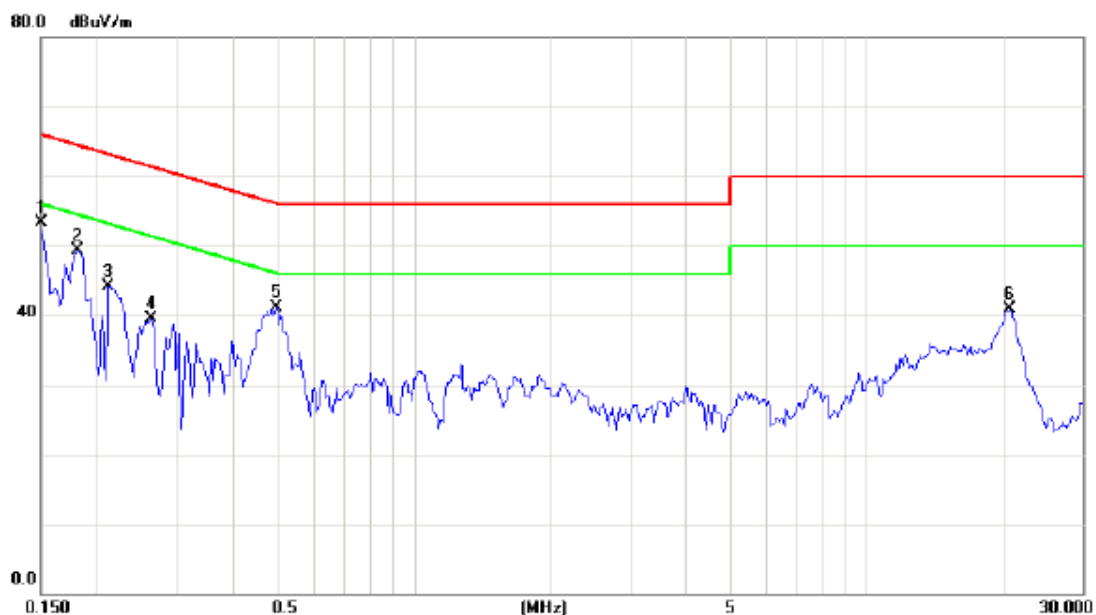
Above 1000MHz



ATTACHMENT A - CONDUCTED EMISSION

Test Mode : TX MODE

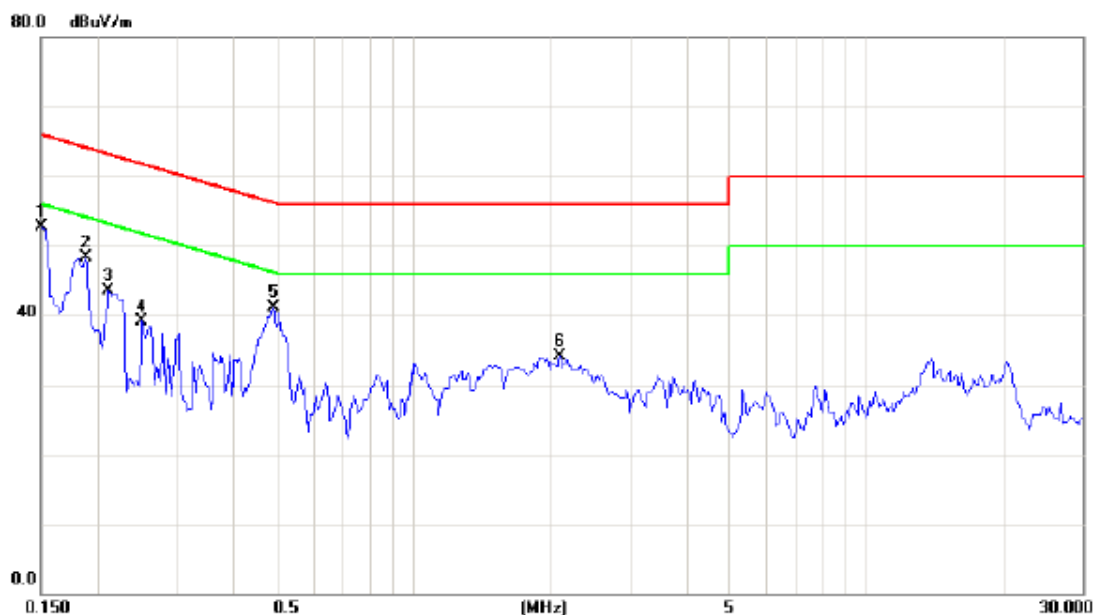
Line



No.	Mk.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	0.1500	43.80	9.52	53.32	66.00	-12.68	peak	
2		0.1812	39.75	9.53	49.28	64.43	-15.15	peak	
3		0.2125	34.56	9.55	44.11	63.11	-19.00	peak	
4		0.2633	30.01	9.58	39.59	61.33	-21.74	peak	
5		0.4977	31.34	9.70	41.04	56.04	-15.00	peak	
6		20.7930	30.41	10.47	40.88	60.00	-19.12	peak	

Test Mode : TX MODE

Neutral



No.	Mk.	Freq. MHz	Reading Level dBuV/m	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	0.1500	43.15	9.63	52.78	66.00	-13.22	peak	
2		0.1891	38.61	9.61	48.22	64.08	-15.86	peak	
3		0.2125	33.81	9.61	43.42	63.11	-19.69	peak	
4		0.2516	29.58	9.62	39.20	61.70	-22.50	peak	
5		0.4898	31.42	9.64	41.06	56.17	-15.11	peak	
6		2.1031	24.43	9.74	34.17	56.00	-21.83	peak	

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

Test Mode: TX Mode 2412MHz

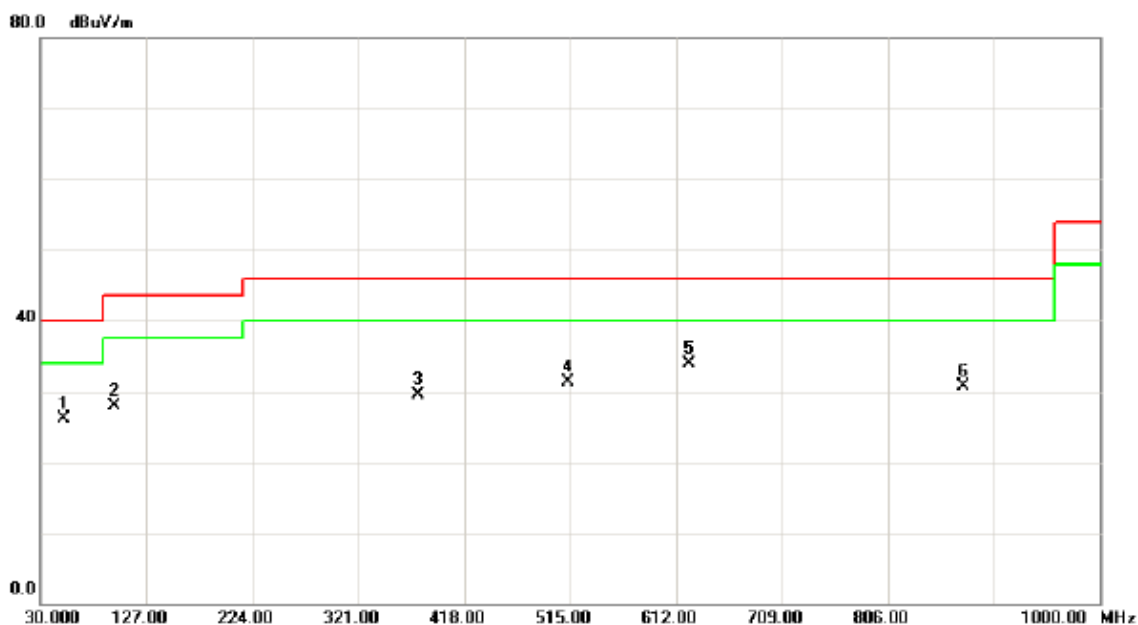
Frequency (MHz)	Ant 0°/90°	Read level dBuV/m	Factor (dB)	Measured(FS) (dBuV/m)	Limit(QP) (dBuV/m)	Margin (dB)	Note
0.00925	0°	13.17	24.98	38.15	108.28	-70.13	AVG
0.00928	0°	14.25	24.98	39.23	128.28	-89.05	PEAK
0.0122	0°	6.71	24.79	31.50	105.88	-74.37	AVG
0.0124	0°	7.29	24.79	32.08	125.88	-93.79	PEAK
0.0253	0°	3.58	23.96	27.54	99.54	-72.00	AVG
0.0254	0°	5.14	23.96	29.10	119.54	-90.44	PEAK
0.0312	0°	1.23	23.59	24.82	97.72	-72.90	AVG
0.0314	0°	3.16	23.59	26.75	117.72	-90.97	PEAK
0.5881	0°	29.43	20.08	49.51	72.22	-22.70	QP
1.7543	0°	21.37	19.52	40.89	69.54	-28.65	QP

Frequency (MHz)	Ant 0°/90°	Read level dBuV/m	Factor (dB)	Measured(FS) (dBuV/m)	Limit(QP) (dBuV/m)	Margin (dB)	Note
0.00921	90°	13.26	24.30	37.56	128.32	-90.76	AVG
0.00923	90°	14.34	24.30	38.64	148.32	-109.68	PEAK
0.0245	90°	6.77	24.02	30.79	119.82	-89.04	AVG
0.0246	90°	8.43	24.02	32.45	139.82	-107.38	PEAK
0.031	90°	3.36	23.60	26.96	117.78	-90.81	AVG
0.0312	90°	5.21	23.60	28.81	137.78	-108.96	PEAK
0.0436	90°	0.83	22.81	23.64	114.81	-91.18	AVG
0.0438	90°	3.04	22.81	25.85	134.81	-108.97	PEAK
0.4927	90°	30.56	19.82	50.38	73.75	-23.38	QP
1.7172	90°	21.43	19.53	40.96	69.54	-28.58	QP

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

Test Mode: TX B MODE CHANNEL 01

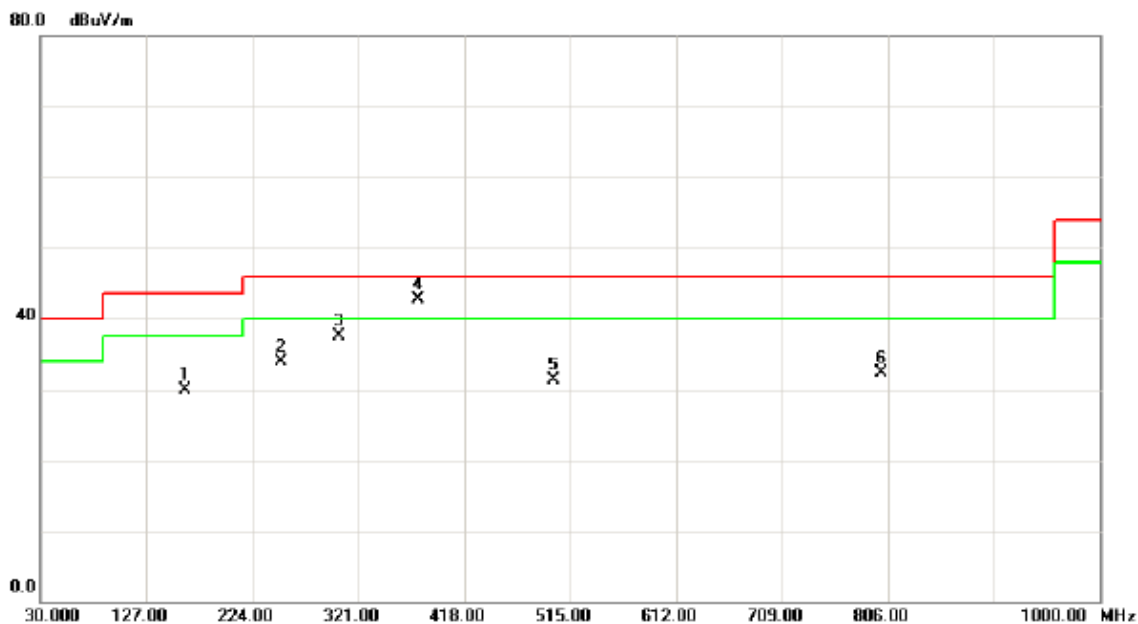
Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		51.3400	40.11	-14.03	26.08	40.00	-13.92	peak	
2		97.9000	44.62	-16.68	27.94	43.50	-15.56	peak	
3		375.3200	40.15	-10.64	29.51	46.00	-16.49	peak	
4		513.0600	41.19	-9.84	31.35	46.00	-14.65	peak	
5	*	624.6100	40.36	-6.55	33.81	46.00	-12.19	peak	
6		874.8700	32.97	-2.35	30.62	46.00	-15.38	peak	

Test Mode: TX B MODE CHANNEL 01

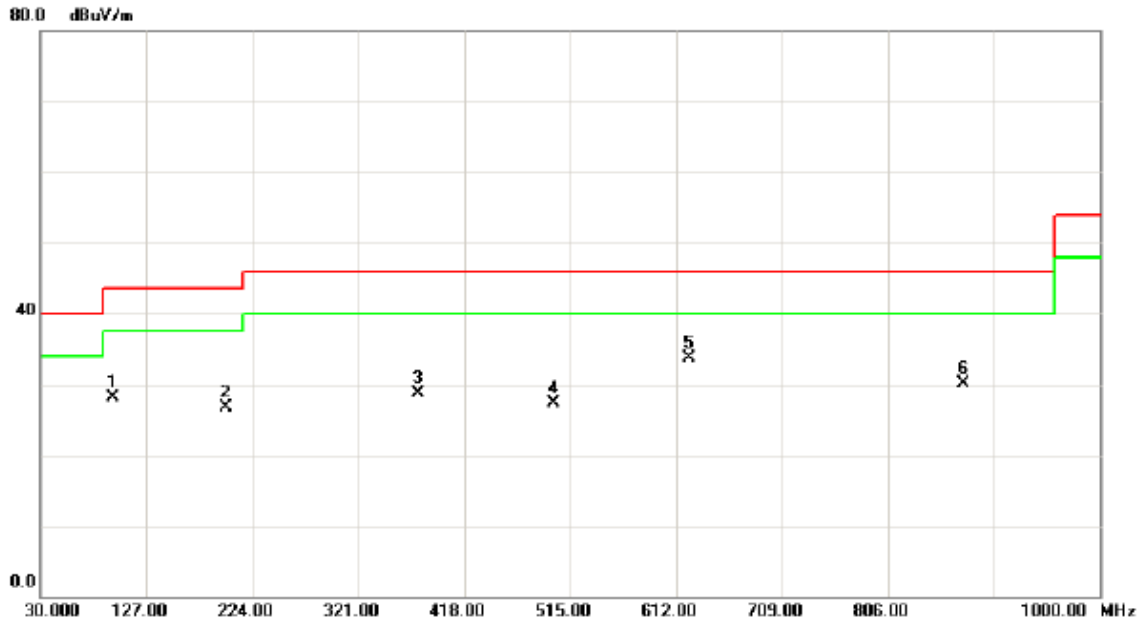
Horizontal



No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	162.8900	43.54	-13.56	29.98	43.50	-13.52	peak	
2	250.1900	47.86	-14.02	33.84	46.00	-12.16	peak	
3	303.5400	48.58	-11.05	37.53	46.00	-8.47	peak	
4 *	375.3200	53.30	-10.64	42.66	46.00	-3.34	peak	
5	500.4500	41.74	-10.50	31.24	46.00	-14.76	peak	
6	800.1800	35.10	-2.89	32.21	46.00	-13.79	peak	

Test Mode: TX B MODE CHANNEL 06

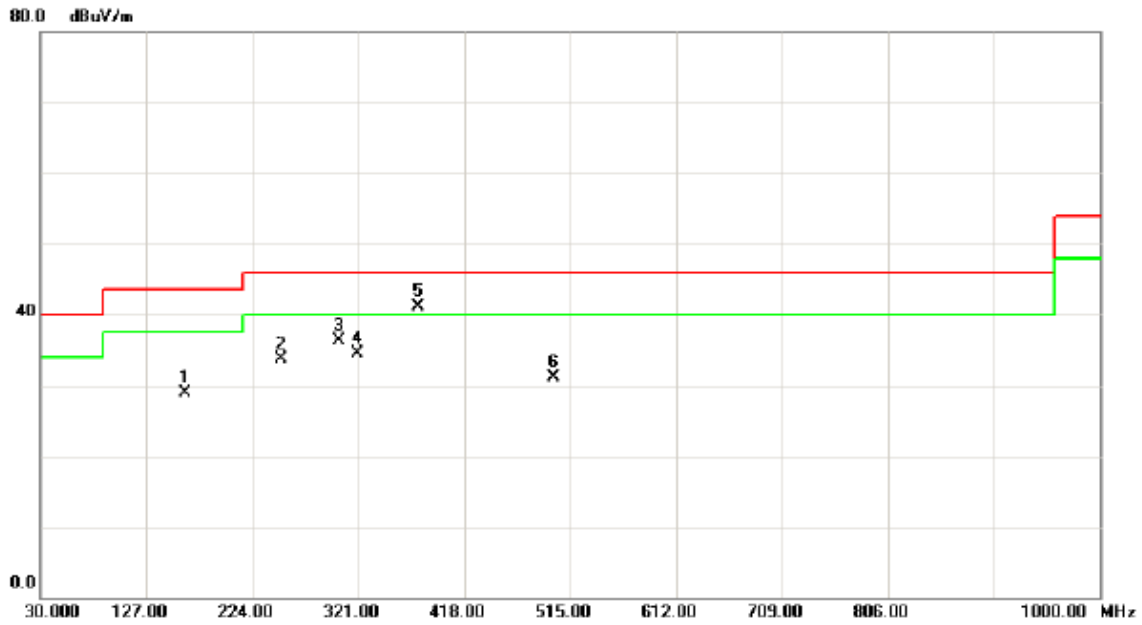
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		96.9300	44.86	-16.84	28.02	43.50	-15.48	peak	
2		199.7500	41.66	-14.97	26.69	43.50	-16.81	peak	
3		375.3200	39.37	-10.64	28.73	46.00	-17.27	peak	
4		500.4500	37.82	-10.50	27.32	46.00	-18.68	peak	
5	*	624.6100	40.20	-6.55	33.65	46.00	-12.35	peak	
6		874.8700	32.37	-2.35	30.02	46.00	-15.98	peak	

Test Mode: TX B MODE CHANNEL 06

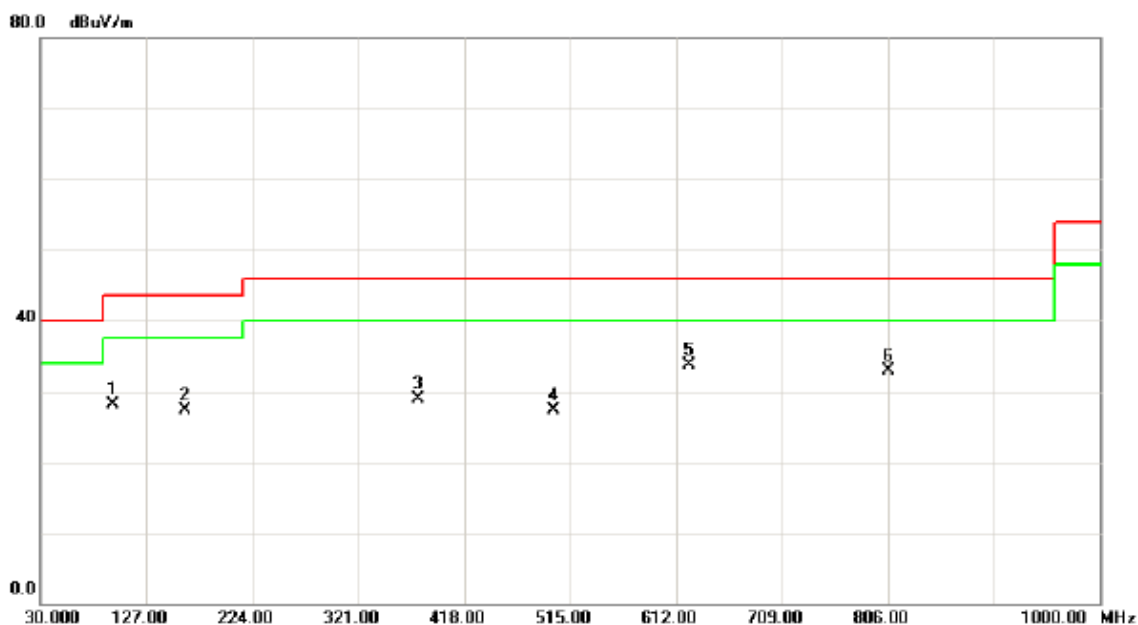
Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		162.8900	42.49	-13.56	28.93	43.50	-14.57	peak	
2		250.1900	47.81	-14.02	33.79	46.00	-12.21	peak	
3		303.5400	47.37	-11.05	36.32	46.00	-9.68	peak	
4		320.0300	45.85	-11.31	34.54	46.00	-11.46	peak	
5	*	375.3200	51.77	-10.64	41.13	46.00	-4.87	peak	
6		500.4500	41.55	-10.50	31.05	46.00	-14.95	peak	

Test Mode: TX B MODE CHANNEL 11

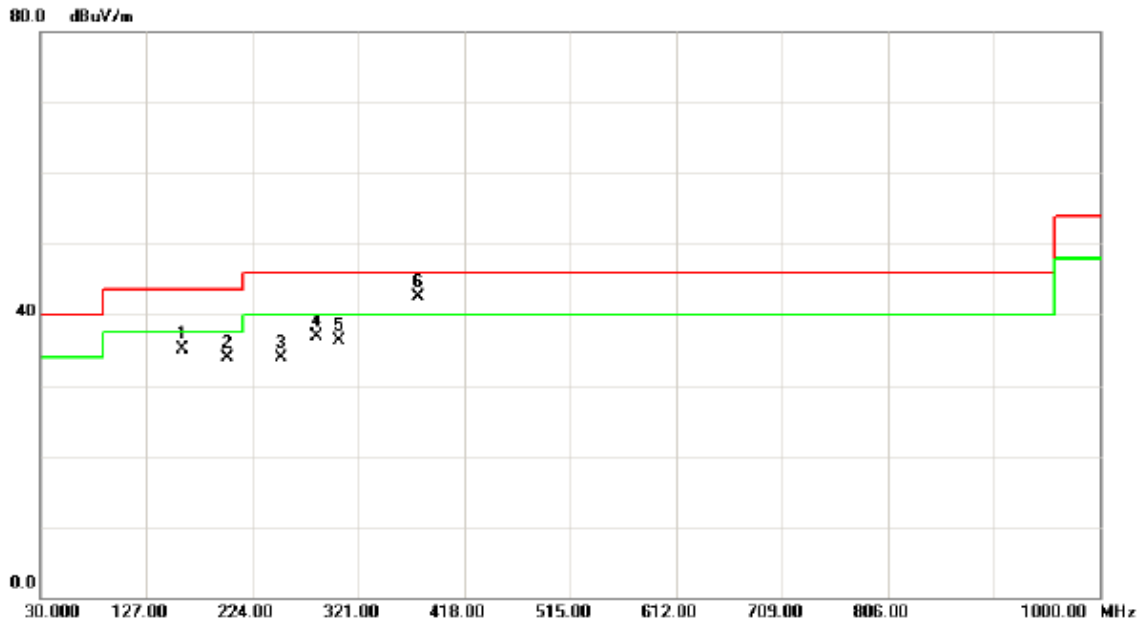
Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		95.9600	45.15	-16.98	28.17	43.50	-15.33	peak	
2		162.8900	40.78	-13.56	27.22	43.50	-16.28	peak	
3		375.3200	39.54	-10.64	28.90	46.00	-17.10	peak	
4		500.4500	37.71	-10.50	27.21	46.00	-18.79	peak	
5	*	624.6100	40.22	-6.55	33.67	46.00	-12.33	peak	
6		806.9700	35.91	-2.92	32.99	46.00	-13.01	peak	

Test Mode: TX B MODE CHANNEL 11

Horizontal

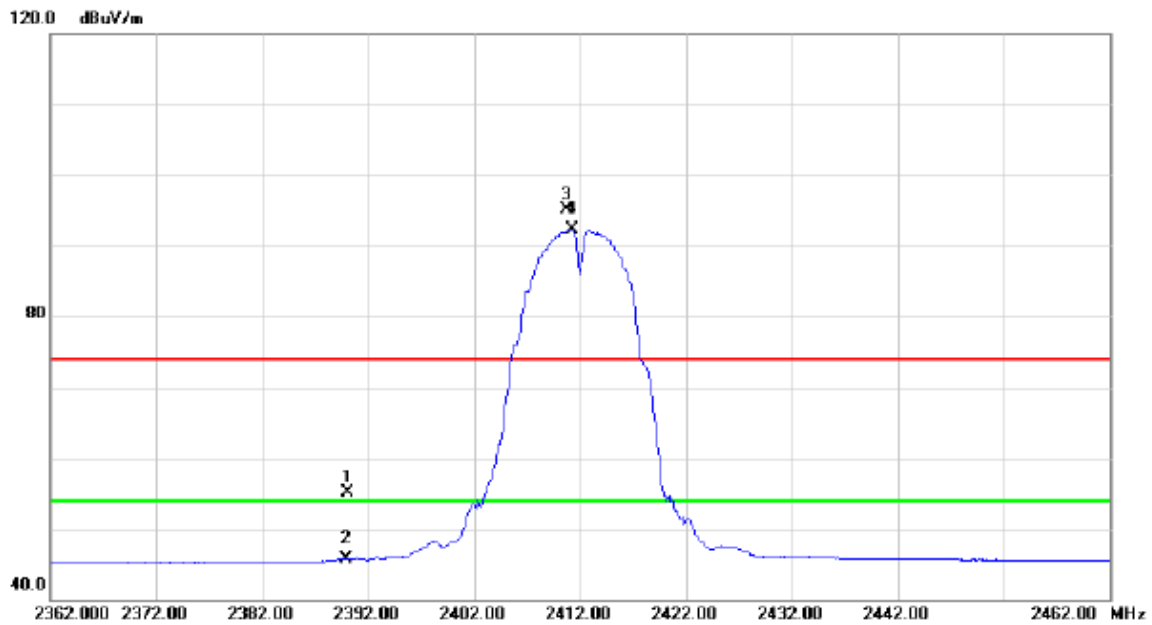


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		159.9800	48.94	-13.89	35.05	43.50	-8.45	peak	
2		200.7200	49.00	-15.02	33.98	43.50	-9.52	peak	
3		250.1900	47.96	-14.02	33.94	46.00	-12.06	peak	
4		282.2000	48.99	-12.06	36.93	46.00	-9.07	peak	
5		303.5400	47.45	-11.05	36.40	46.00	-9.60	peak	
6	*	375.3200	53.10	-10.64	42.46	46.00	-3.54	peak	

ATTACHMENT D - RADIATED EMISSION (ABOVE 1000MHZ)

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

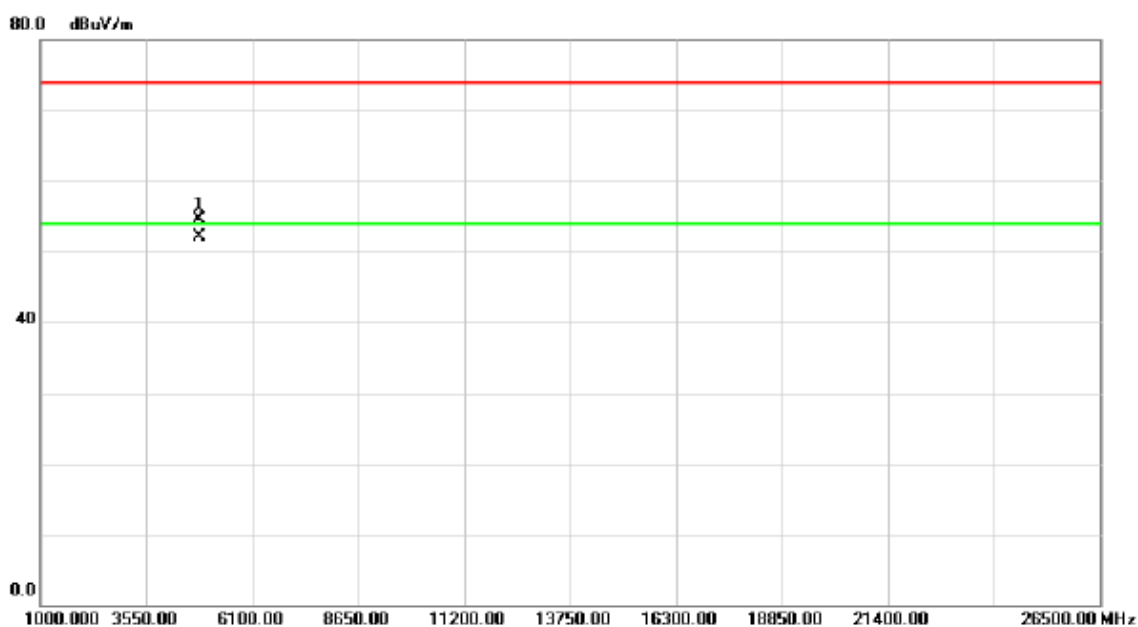
Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		2390.000	23.13	31.88	55.01	74.00	-18.99	peak	
2		2390.000	13.77	31.88	45.65	54.00	-8.35	AVG	
3	X	2410.700	63.25	31.91	95.16	74.00	21.16	peak	No Limit
4	*	2411.200	60.39	31.91	92.30	54.00	38.30	AVG	No Limit

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

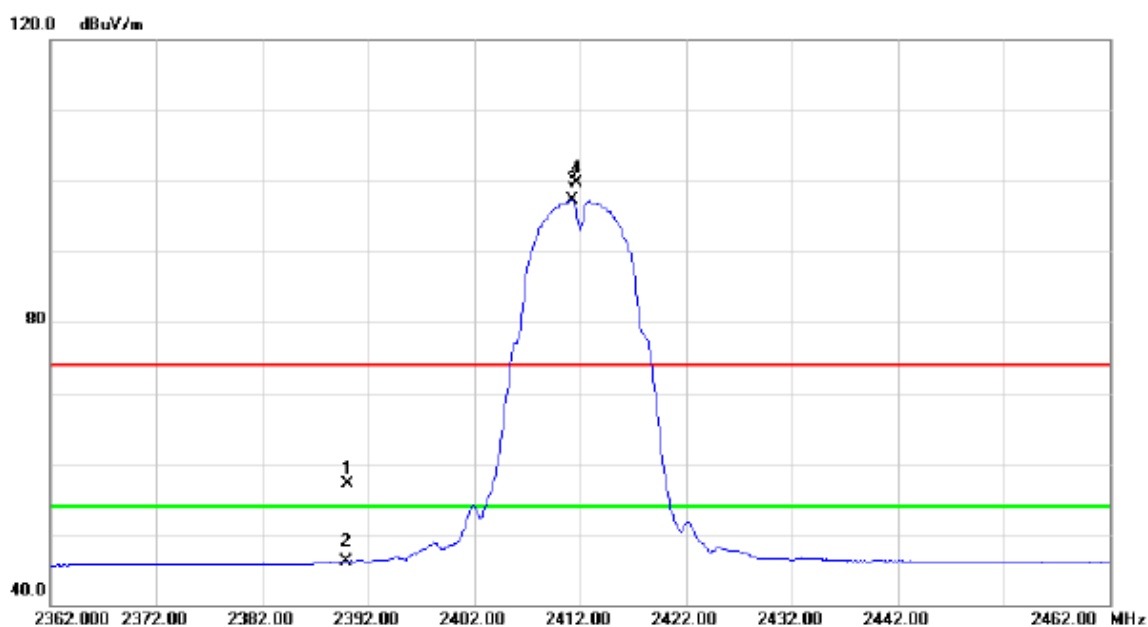
Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		4824.080	50.90	3.62	54.52	74.00	-19.48	peak	
2	*	4824.080	48.51	3.62	52.13	54.00	-1.87	AVG	

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

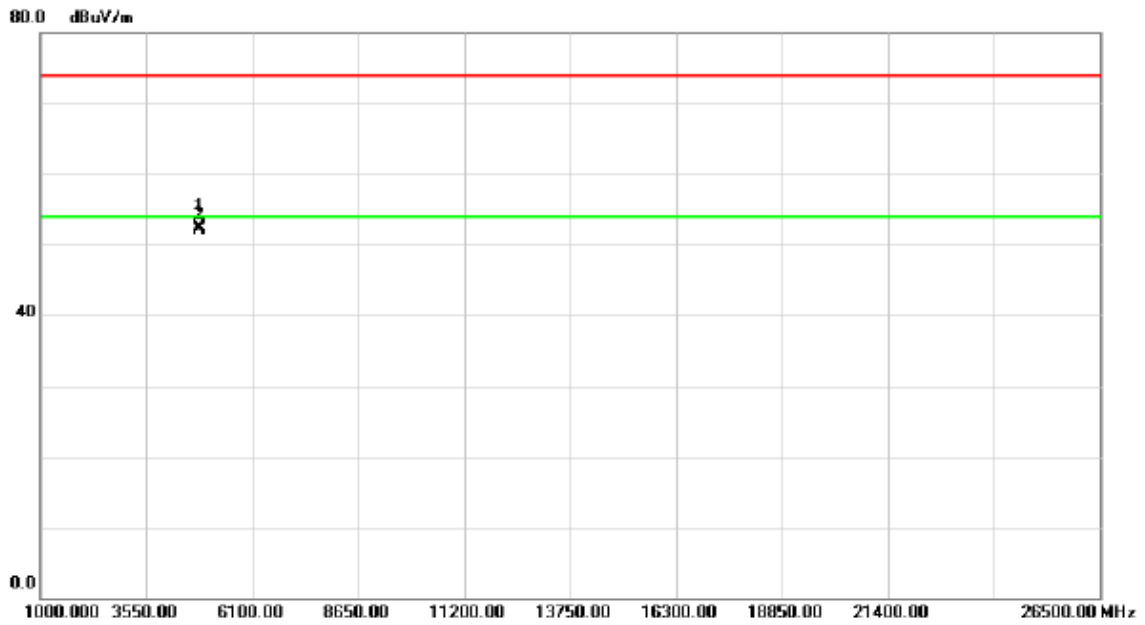
Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		2390.000	25.13	31.88	57.01	74.00	-16.99	peak	
2		2390.000	14.27	31.88	46.15	54.00	-7.85	AVG	
3	*	2411.200	65.39	31.91	97.30	54.00	43.30	AVG	No Limit
4	X	2411.700	67.76	31.91	99.67	74.00	25.67	peak	No Limit

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

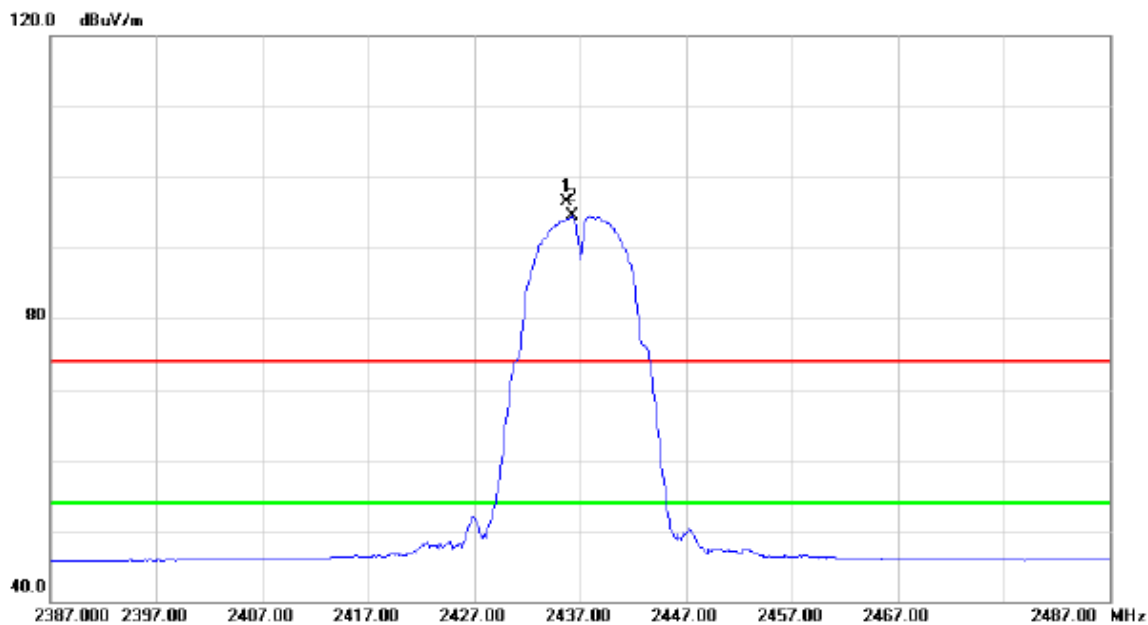
Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	4824.040	48.83	3.62	52.45	54.00	-1.55	AVG	
2		4824.080	48.49	3.62	52.11	74.00	-21.89	peak	

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

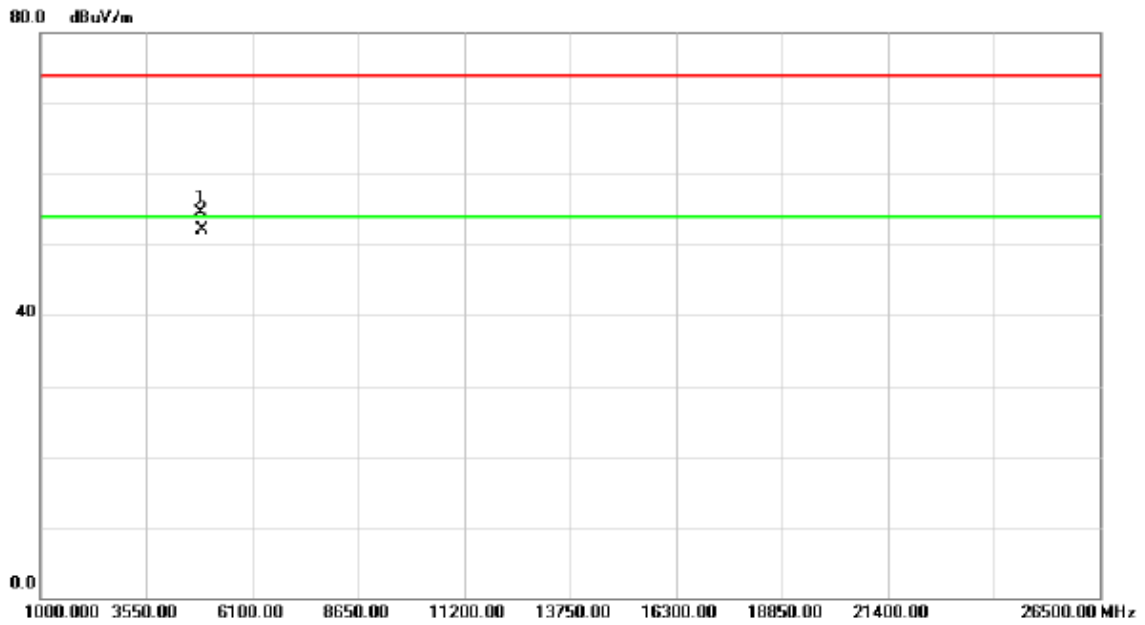
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1	X	2435.700	64.47	31.94	96.41	74.00	22.41	peak	No Limit
2	*	2436.200	62.49	31.94	94.43	54.00	40.43	AVG	No Limit

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

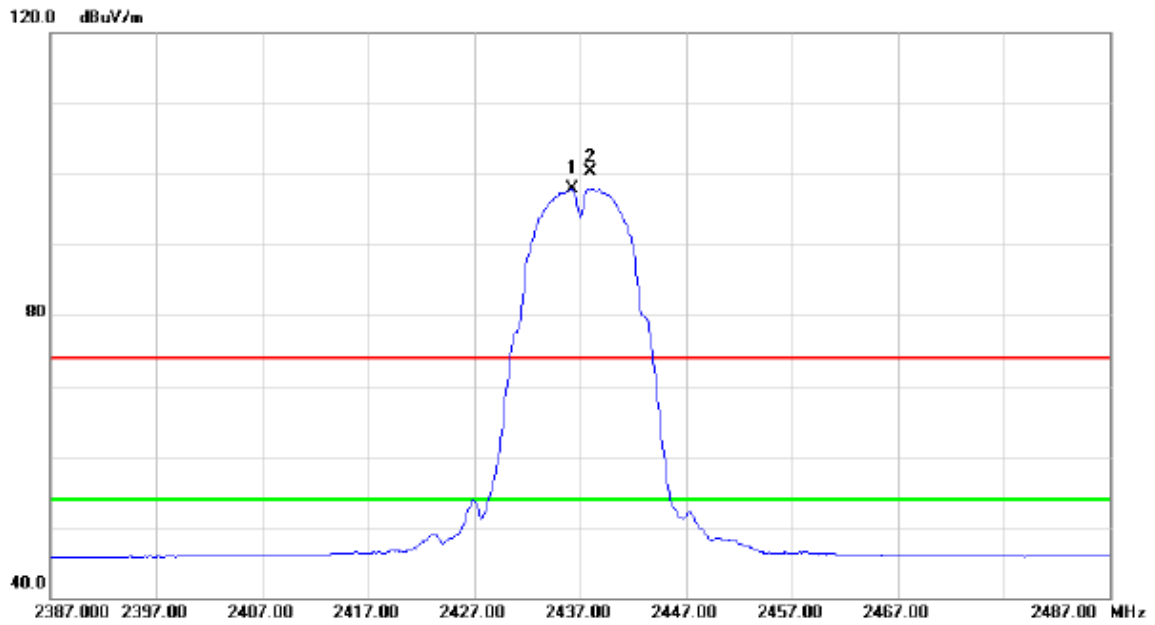
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		4874.100	50.85	3.72	54.57	74.00	-19.43	peak	
2	*	4874.100	48.42	3.72	52.14	54.00	-1.86	AVG	

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

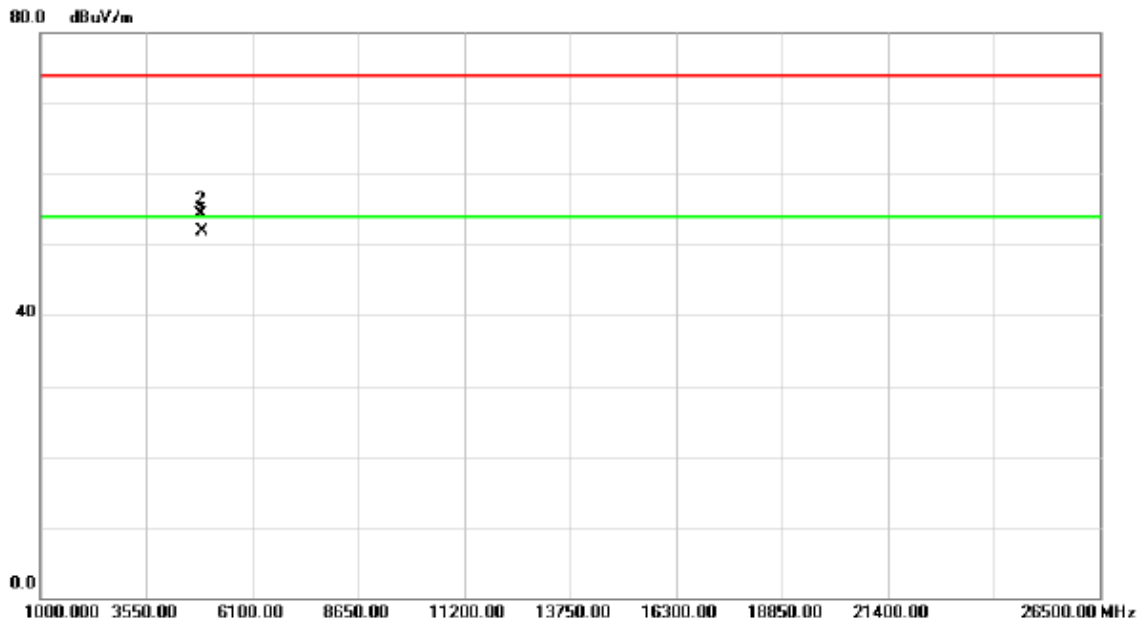
Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	2436.200	65.99	31.94	97.93	54.00	43.93	AVG	No Limit
2	X	2438.000	68.39	31.94	100.33	74.00	26.33	peak	No Limit

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

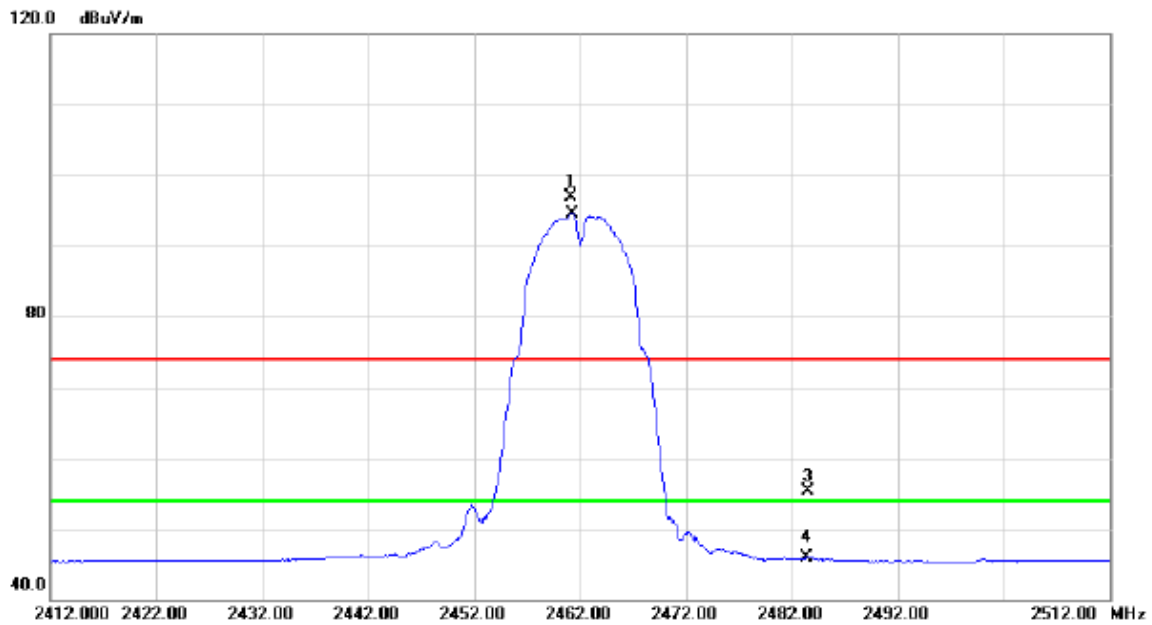
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1	*	4874.050	48.28	3.72	52.00	54.00	-2.00	AVG	
2		4874.150	50.54	3.72	54.26	74.00	-19.74	peak	

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

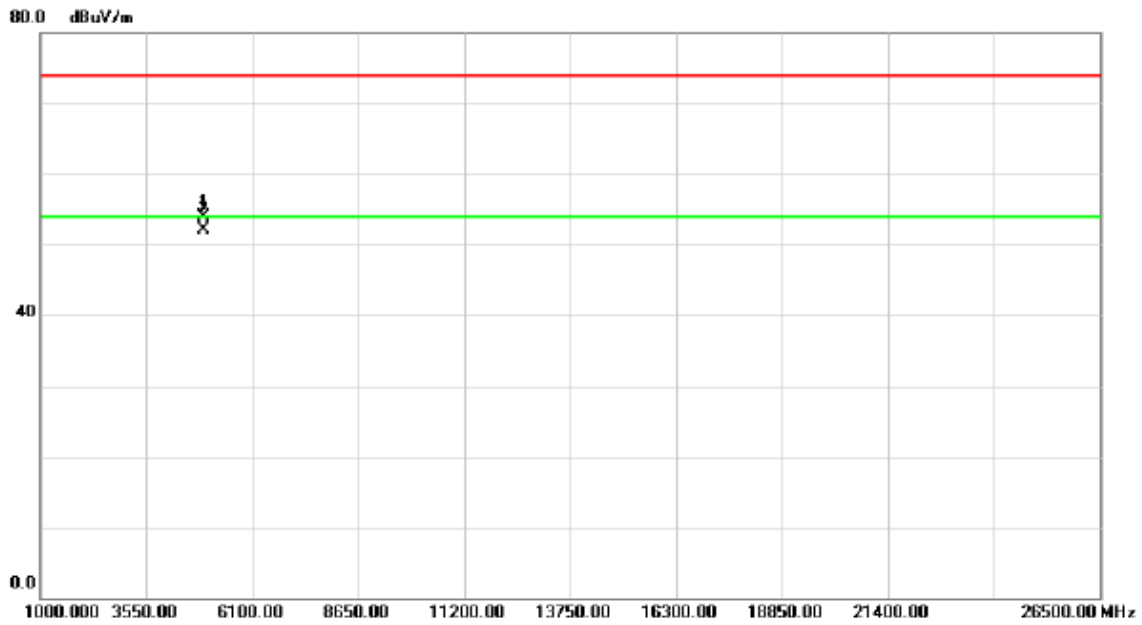
Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	X	2461.100	64.94	31.98	96.92	74.00	22.92	peak	No Limit
2	*	2461.200	62.62	31.98	94.60	54.00	40.60	AVG	No Limit
3		2483.500	23.39	32.01	55.40	74.00	-18.60	peak	
4		2483.500	13.83	32.01	45.84	54.00	-8.16	AVG	

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

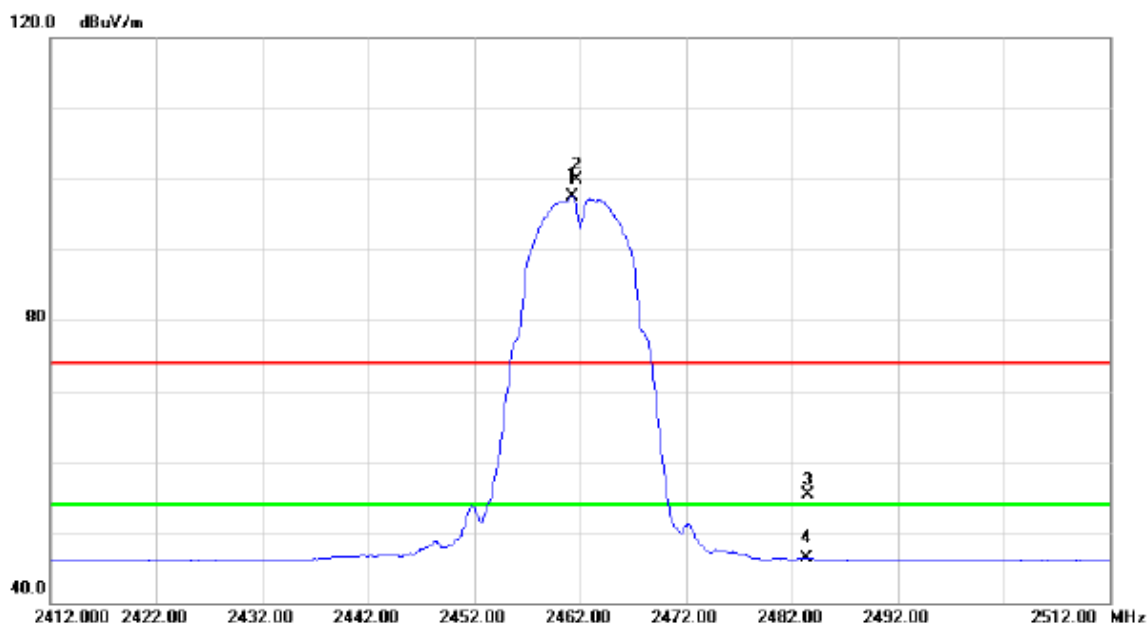
Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		4924.060	50.11	3.80	53.91	74.00	-20.09	peak	
2	*	4924.060	48.29	3.80	52.09	54.00	-1.91	AVG	

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

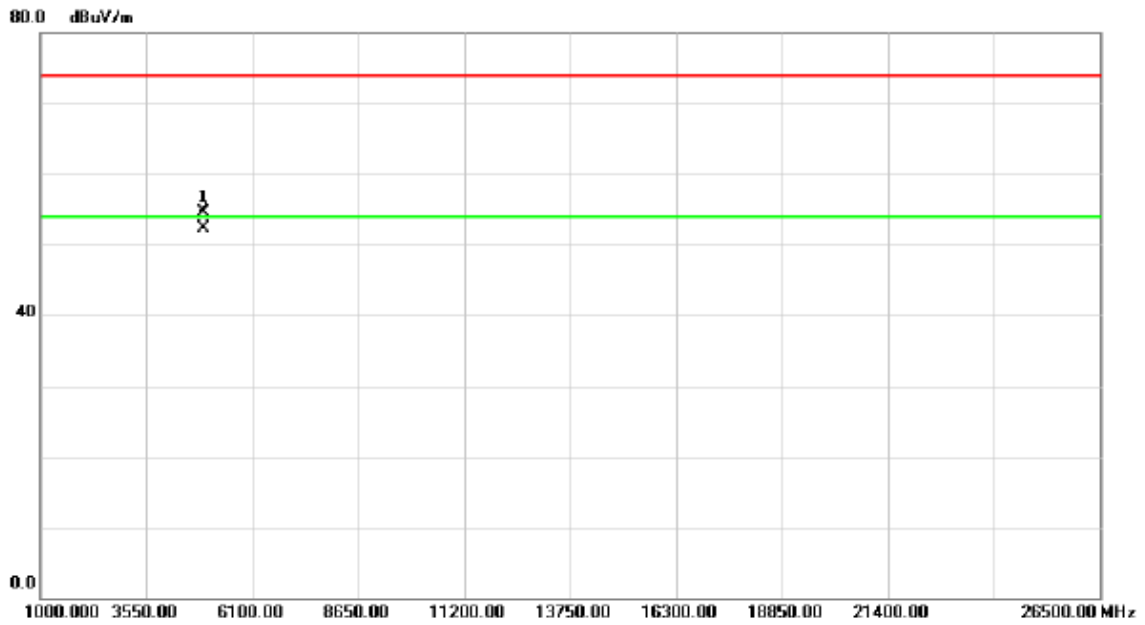
Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	2461.200	65.62	31.98	97.60	54.00	43.60	AVG	No Limit
2	X	2461.600	67.94	31.98	99.92	74.00	25.92	peak	No Limit
3		2483.500	23.39	32.01	55.40	74.00	-18.60	peak	
4		2483.500	14.33	32.01	46.34	54.00	-7.66	AVG	

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

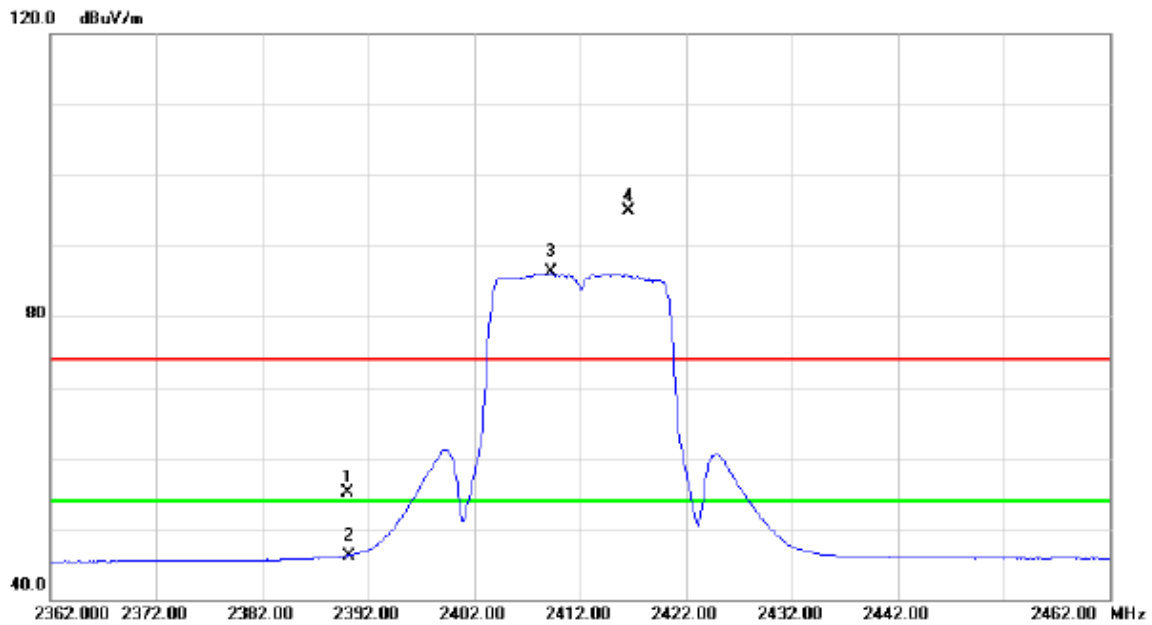
Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		4924.060	50.73	3.80	54.53	74.00	-19.47	peak	
2	*	4924.060	48.47	3.80	52.27	54.00	-1.73	AVG	

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

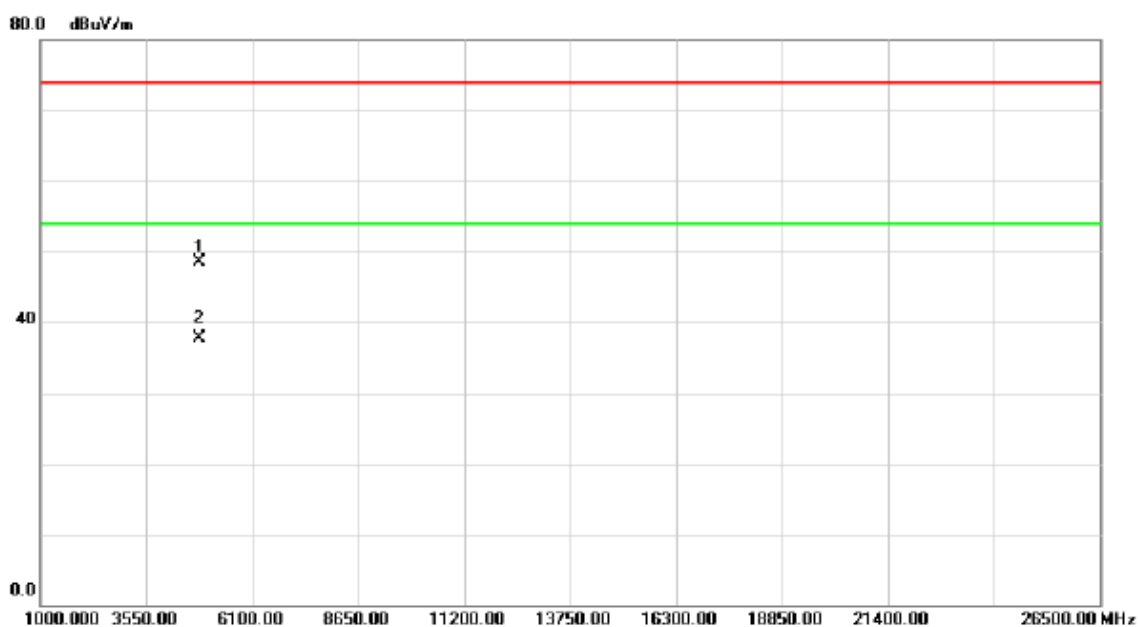
Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		2390.000	23.27	31.88	55.15	74.00	-18.85	peak	
2		2390.000	14.27	31.88	46.15	54.00	-7.85	AVG	
3	*	2409.200	54.30	31.91	86.21	54.00	32.21	AVG	No Limit
4	X	2416.600	63.02	31.91	94.93	74.00	20.93	peak	No Limit

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

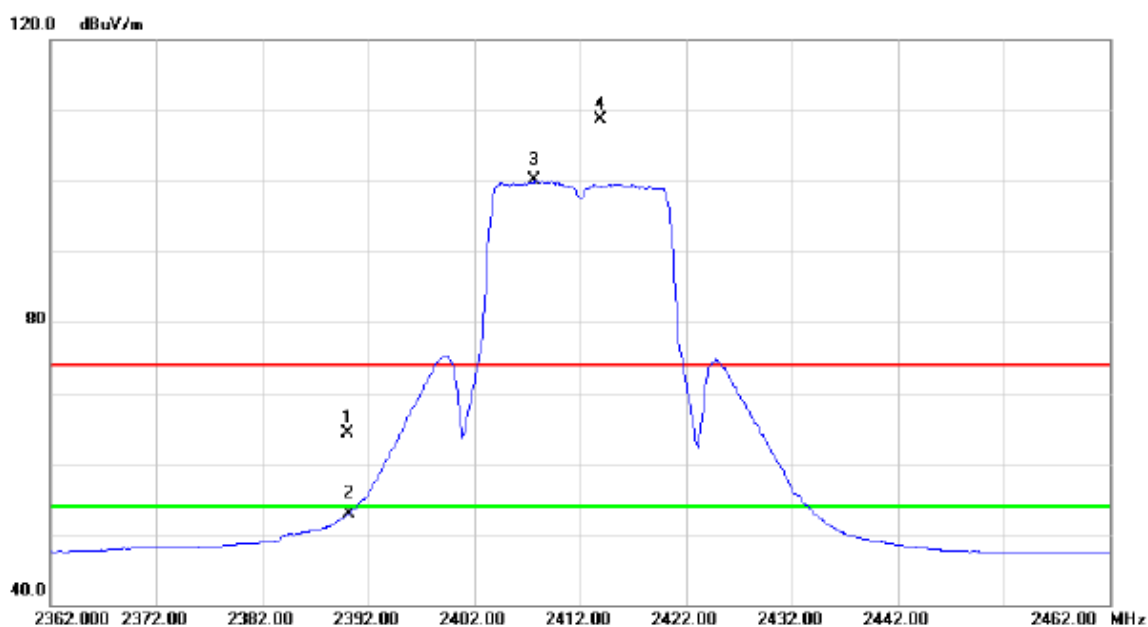
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		4823.450	44.92	3.62	48.54	74.00	-25.46	peak	
2	*	4824.150	34.12	3.62	37.74	54.00	-16.26	AVG	

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

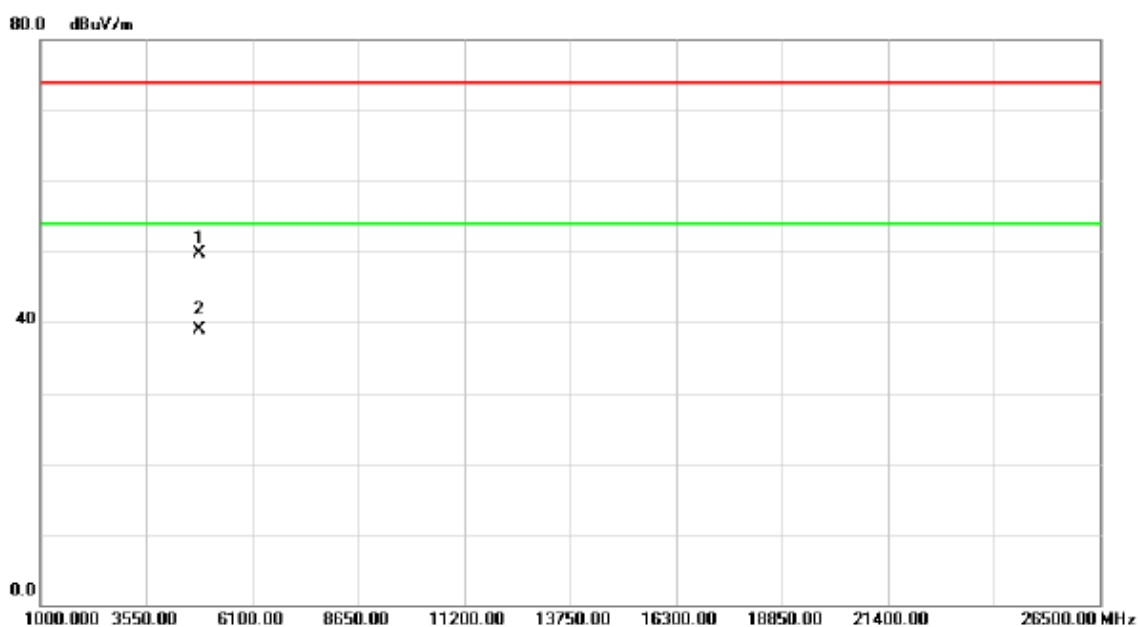
Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		2390.000	32.40	31.88	64.28	74.00	-9.72	peak	
2		2390.000	20.93	31.88	52.81	54.00	-1.19	AVG	
3	*	2407.700	68.11	31.91	100.02	54.00	46.02	AVG	No Limit
4	X	2413.900	76.74	31.91	108.65	74.00	34.65	peak	No Limit

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

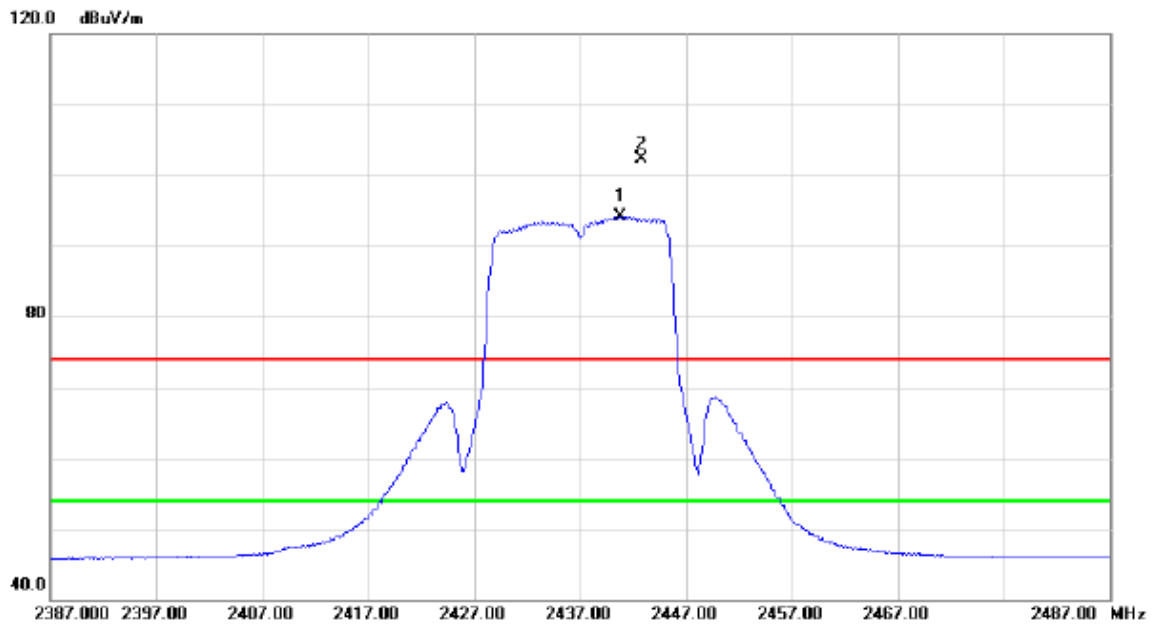
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		4822.550	46.09	3.62	49.71	74.00	-24.29	peak	
2	*	4824.050	35.29	3.62	38.91	54.00	-15.09	AVG	

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

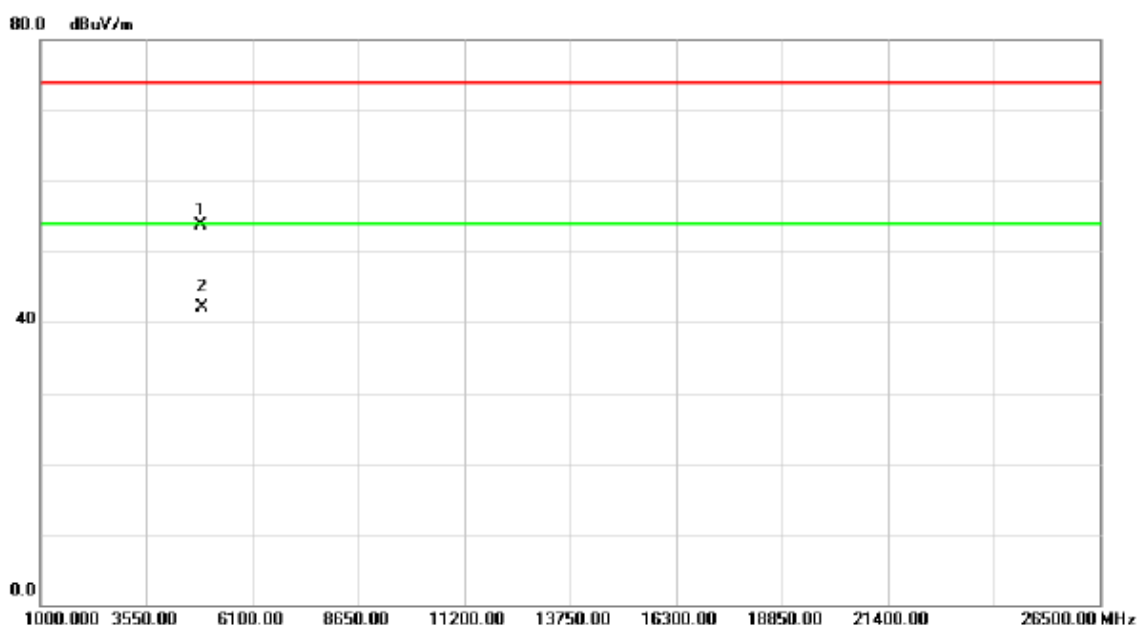
Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	2440.800	62.19	31.95	94.14	54.00	40.14	AVG	No Limit
2	X	2442.800	70.31	31.95	102.26	74.00	28.26	peak	No Limit

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

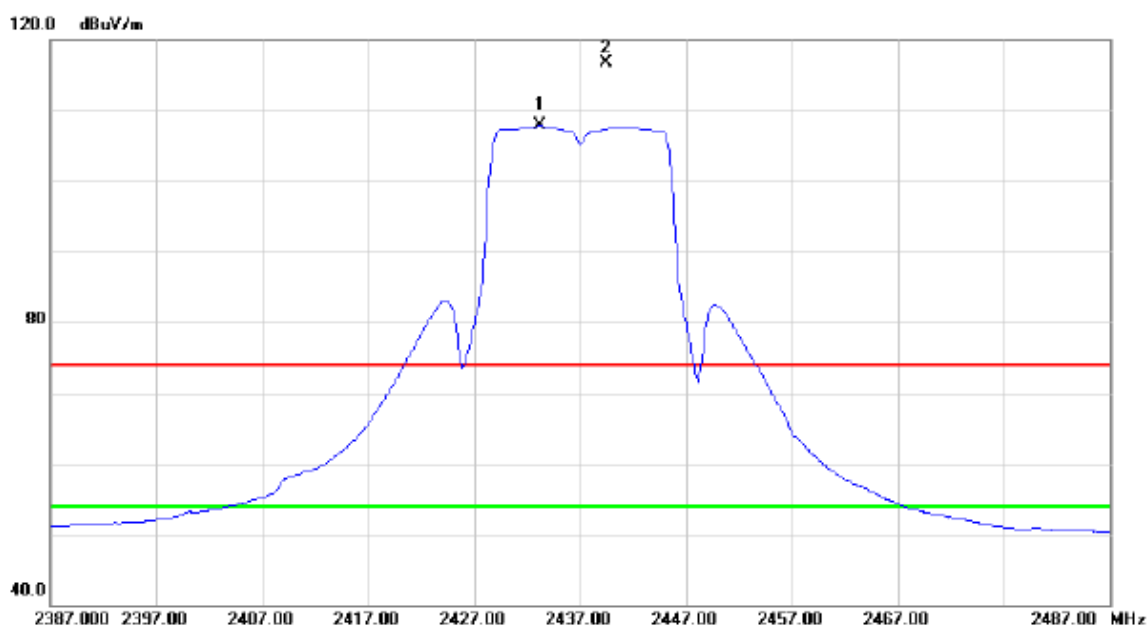
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		4874.300	49.98	3.72	53.70	74.00	-20.30	peak	
2	*	4874.300	38.31	3.72	42.03	54.00	-11.97	AVG	

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

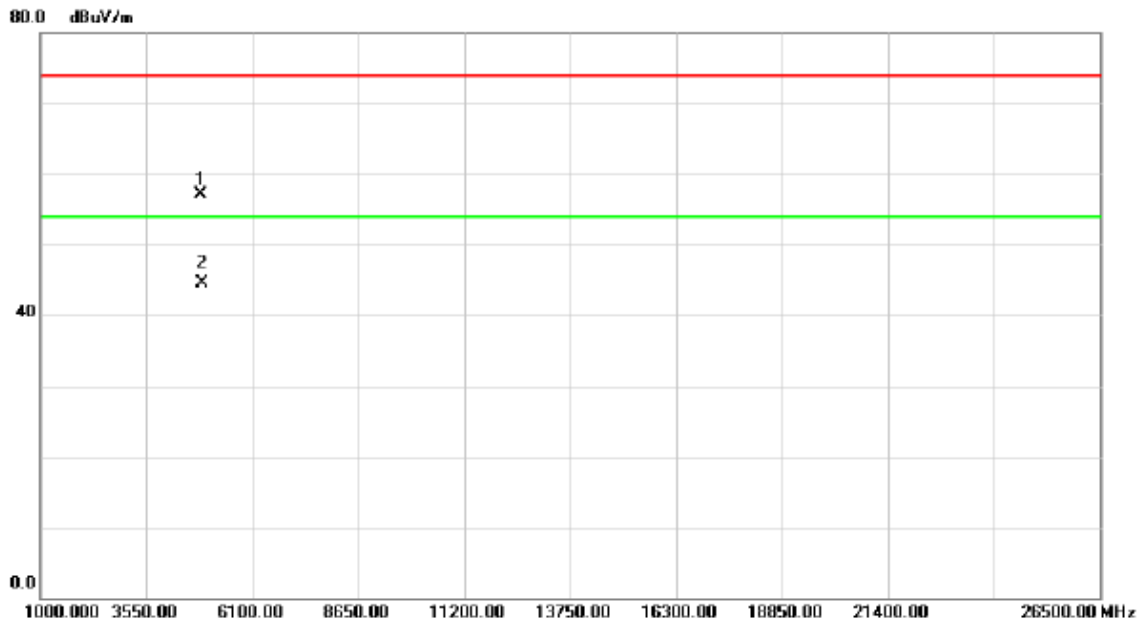
Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	2433.200	75.89	31.94	107.83	54.00	53.83	AVG	No Limit
2	X	2439.500	84.86	31.94	116.80	74.00	42.80	peak	No Limit

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

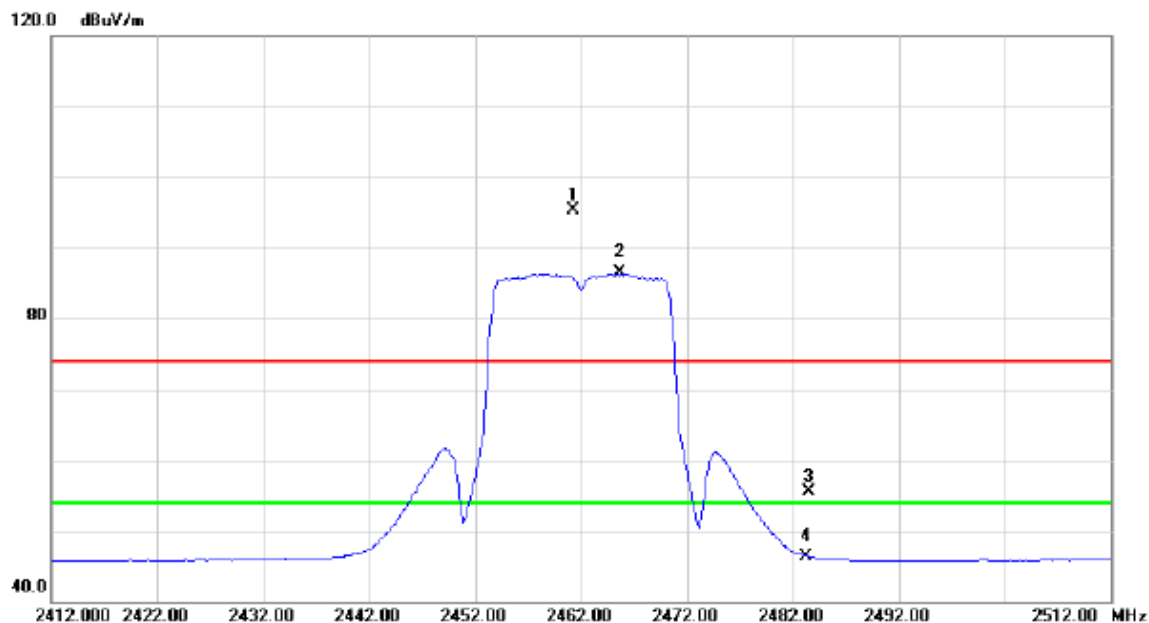
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		4873.000	53.39	3.72	57.11	74.00	-16.89	peak	
2	*	4873.100	40.82	3.72	44.54	54.00	-9.46	AVG	

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

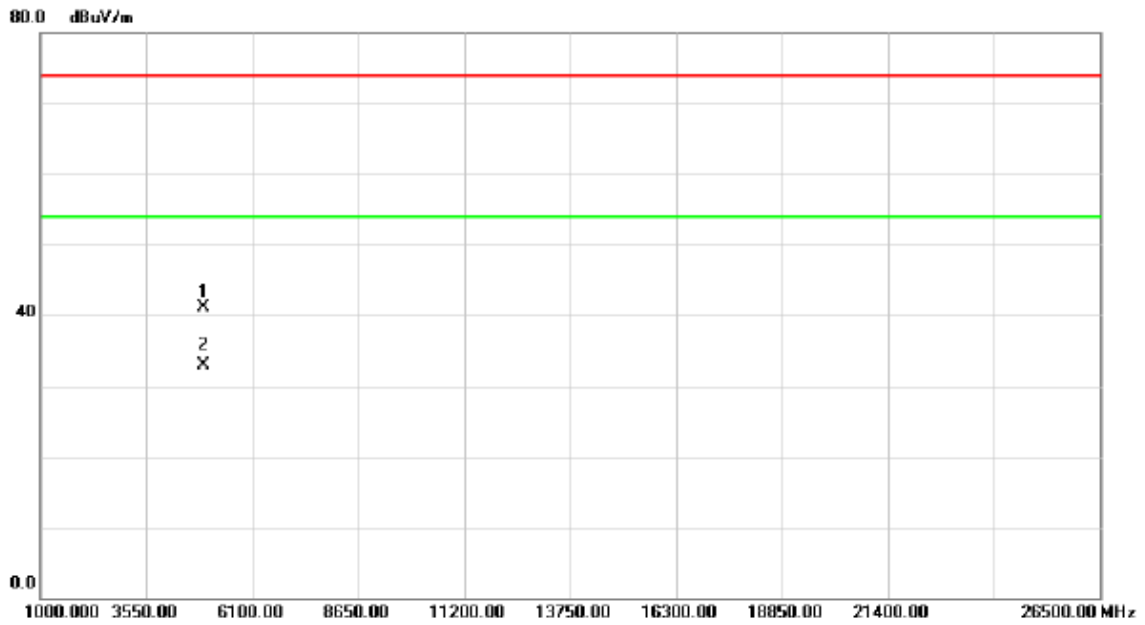
Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	X	2461.200	63.32	31.98	95.30	74.00	21.30	peak	No Limit
2	*	2465.700	54.42	31.98	86.40	54.00	32.40	AVG	No Limit
3		2483.500	23.53	32.01	55.54	74.00	-18.46	peak	
4		2483.500	14.32	32.01	46.33	54.00	-7.67	AVG	

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

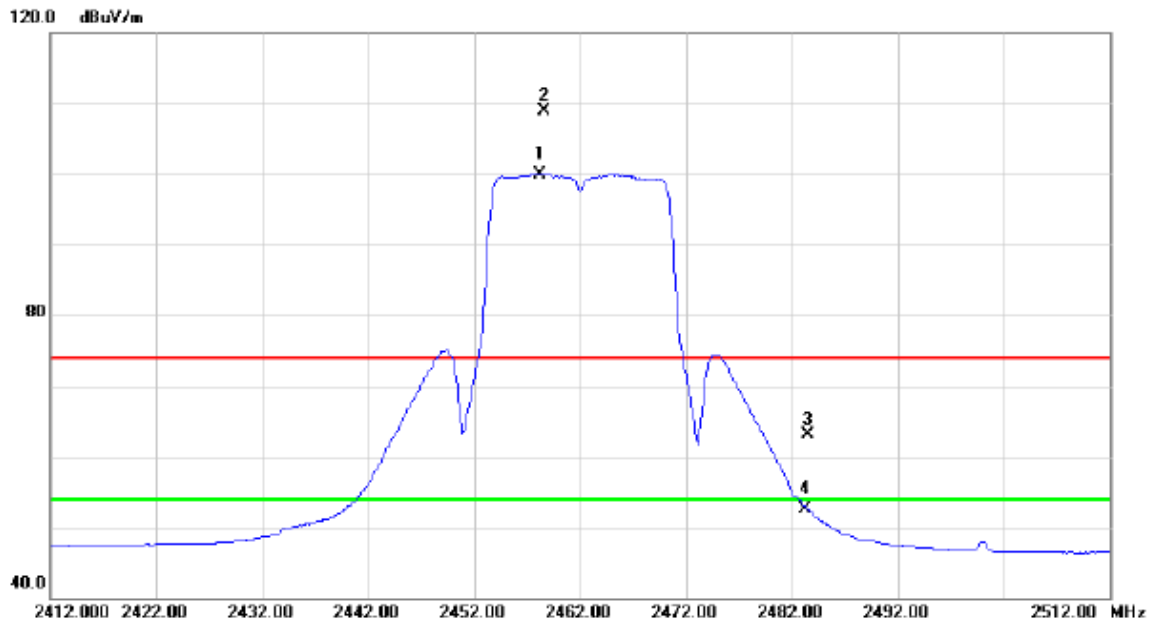
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		4924.250	37.37	3.80	41.17	74.00	-32.83	peak	
2	*	4924.250	29.13	3.80	32.93	54.00	-21.07	AVG	

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

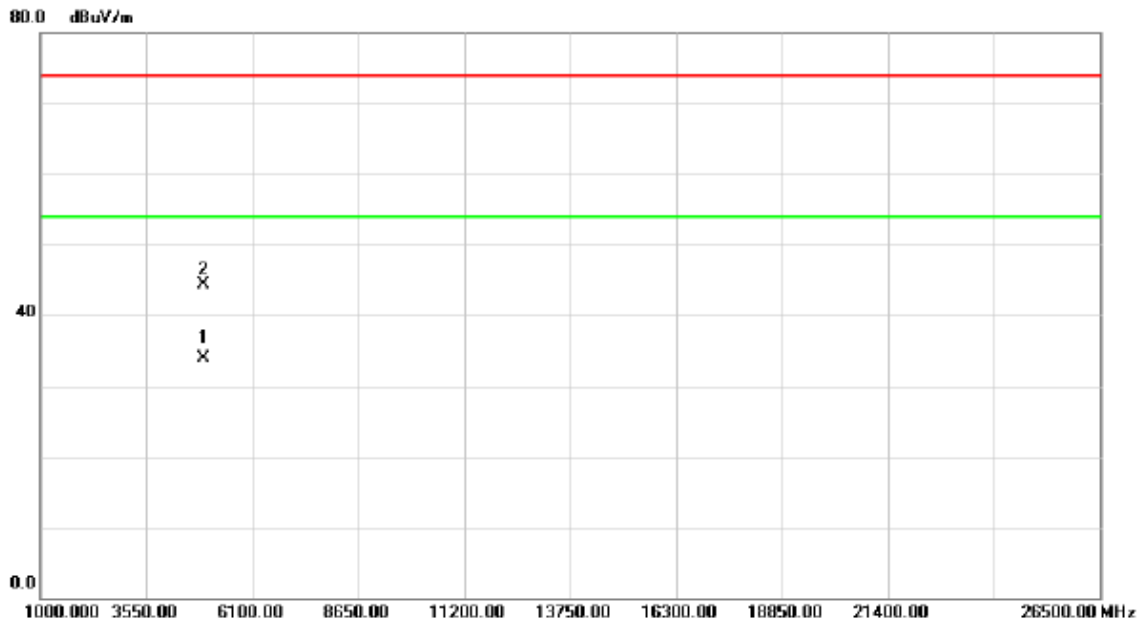
Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	2458.200	68.01	31.98	99.99	54.00	45.99	AVG	No Limit
2	X	2458.600	76.98	31.98	108.96	74.00	34.96	peak	No Limit
3		2483.500	31.00	32.01	63.01	74.00	-10.99	peak	
4		2483.500	20.58	32.01	52.59	54.00	-1.41	AVG	

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

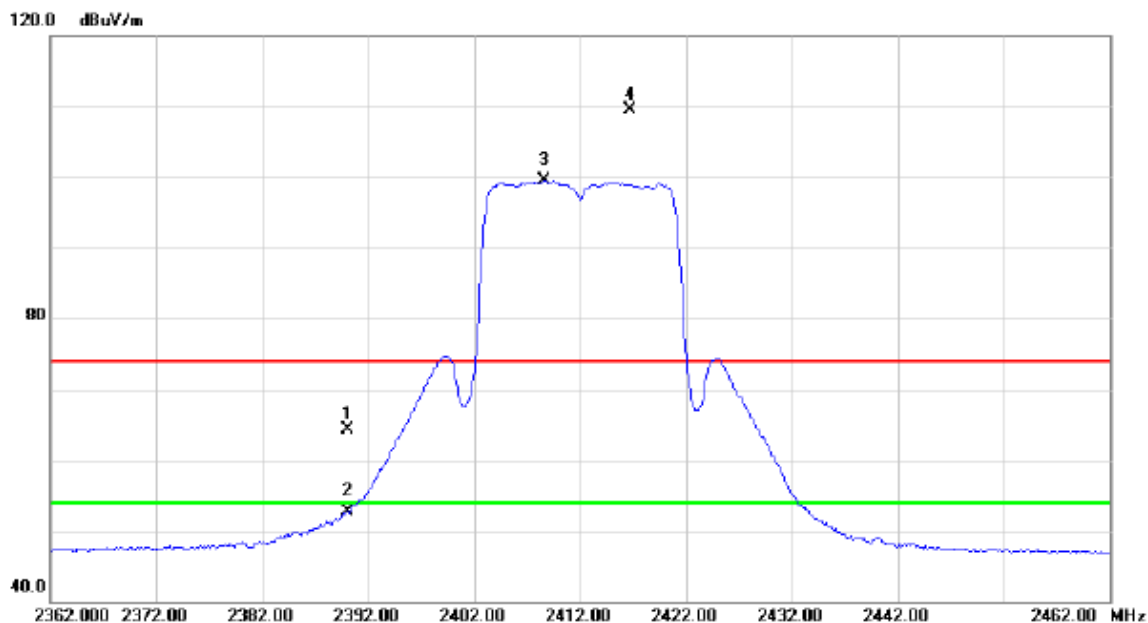
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1	*	4923.150	30.19	3.80	33.99	54.00	-20.01	AVG	
2		4923.500	40.51	3.80	44.31	74.00	-29.69	peak	

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

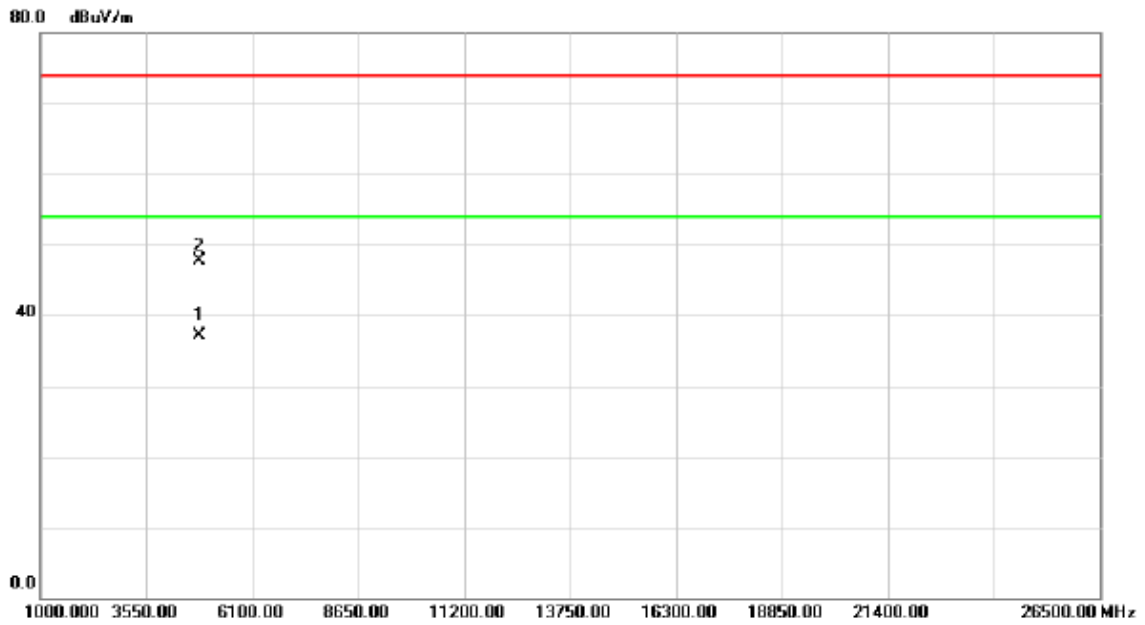
Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		2390.000	32.43	31.88	64.31	74.00	-9.69	peak	
2		2390.000	20.76	31.88	52.64	54.00	-1.36	AVG	
3	*	2408.600	67.57	31.91	99.48	54.00	45.48	AVG	No Limit
4	X	2416.700	77.54	31.91	109.45	74.00	35.45	peak	No Limit

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

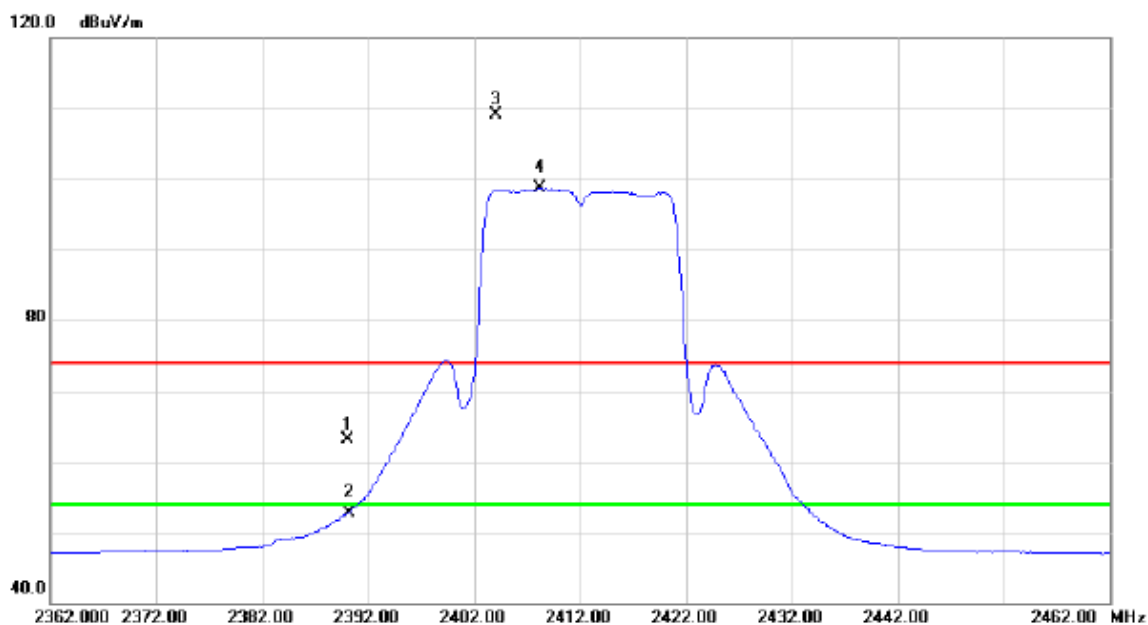
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1	*	4824.050	33.41	3.62	37.03	54.00	-16.97	AVG	
2		4825.000	44.12	3.62	47.74	74.00	-26.26	peak	

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

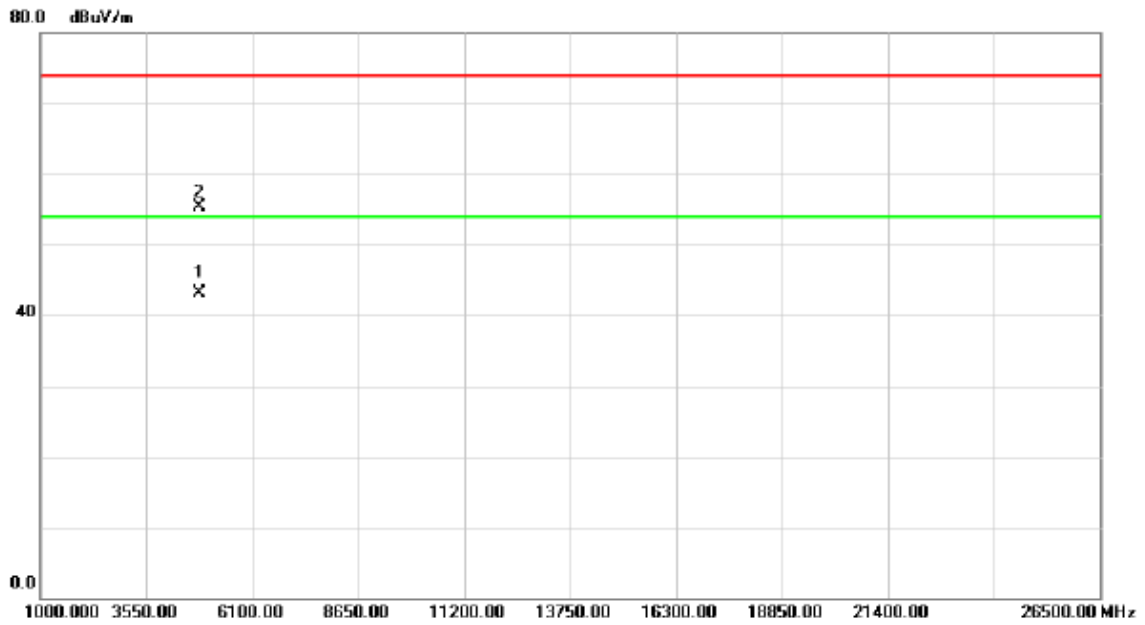
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		2390.000	31.29	31.88	63.17	74.00	-10.83	peak	
2		2390.000	20.76	31.88	52.64	54.00	-1.36	AVG	
3	X	2404.100	77.18	31.89	109.07	74.00	35.07	peak	No Limit
4	*	2408.200	66.77	31.91	98.68	54.00	44.68	AVG	No Limit

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

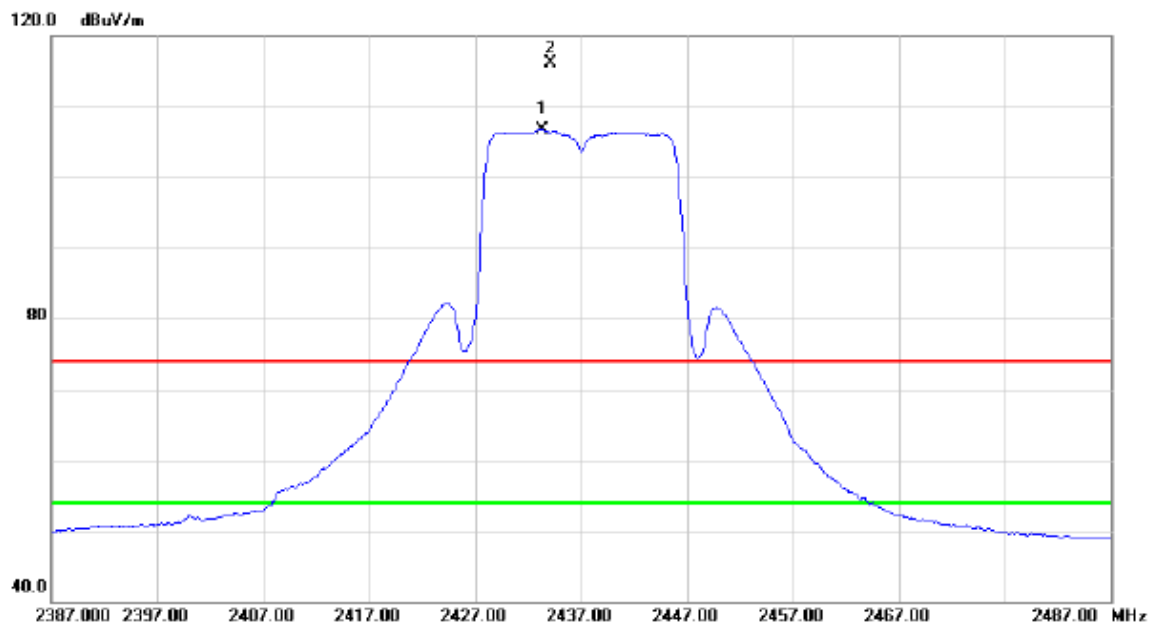
Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	4823.050	39.45	3.62	43.07	54.00	-10.93	AVG	
2		4823.750	51.66	3.62	55.28	74.00	-18.72	peak	

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

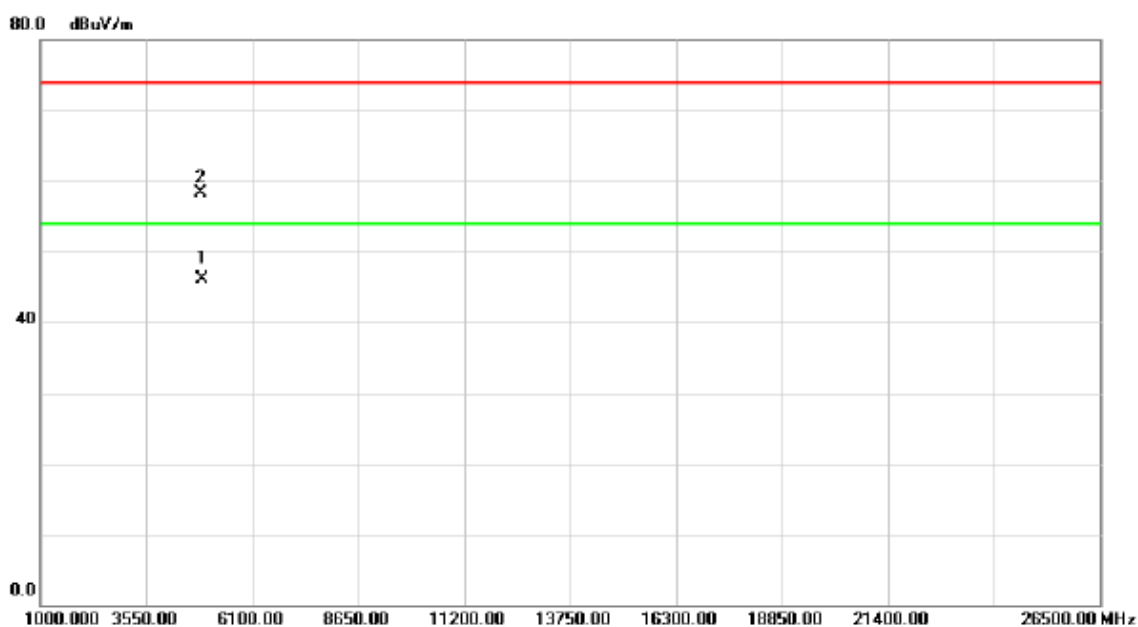
Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	2433.300	74.78	31.94	106.72	54.00	52.72	AVG	No Limit
2	X	2434.100	84.07	31.94	116.01	74.00	42.01	peak	No Limit

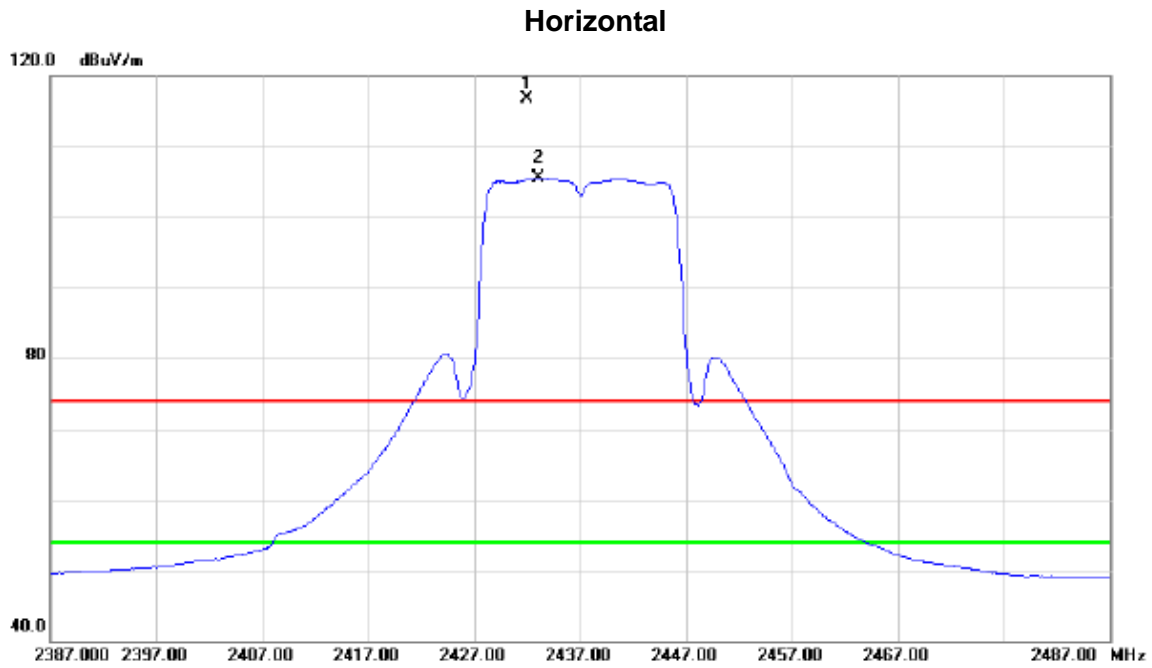
Orthogonal Axis :	X
Test Mode :	TX N-20M MODE 2437MHz

Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1	*	4875.350	42.37	3.72	46.09	54.00	-7.91	AVG	
2		4872.300	54.53	3.72	58.25	74.00	-15.75	peak	

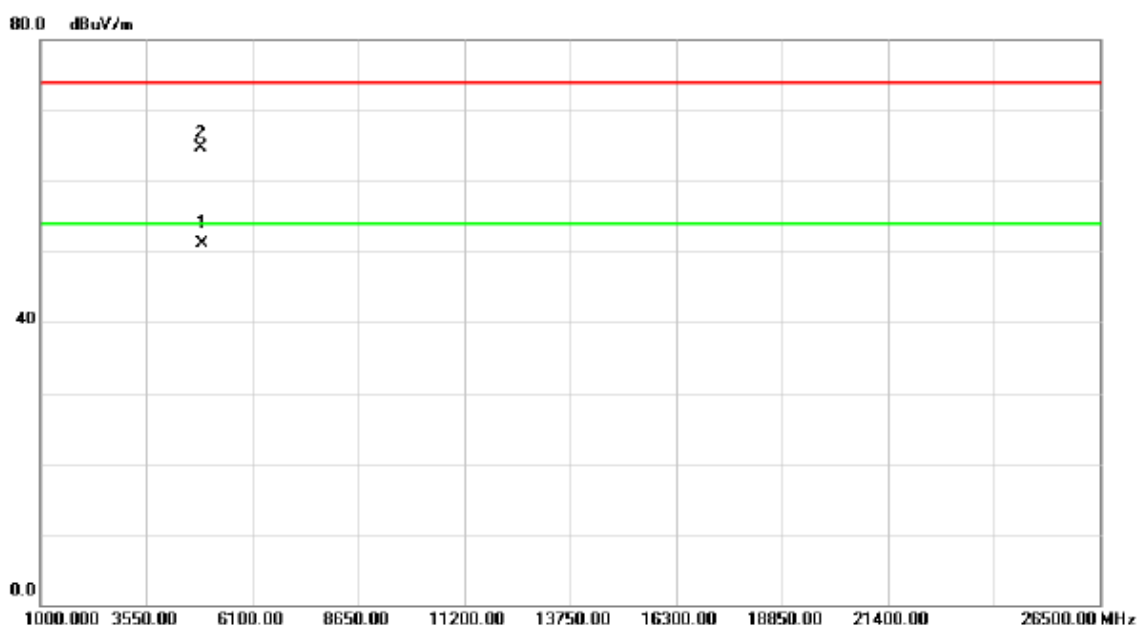
Orthogonal Axis :	X
Test Mode :	TX N-20M MODE 2437MHz



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1	X	2432.000	84.68	31.94	116.62	74.00	42.62	peak	No Limit
2	*	2433.100	73.57	31.94	105.51	54.00	51.51	AVG	No Limit

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

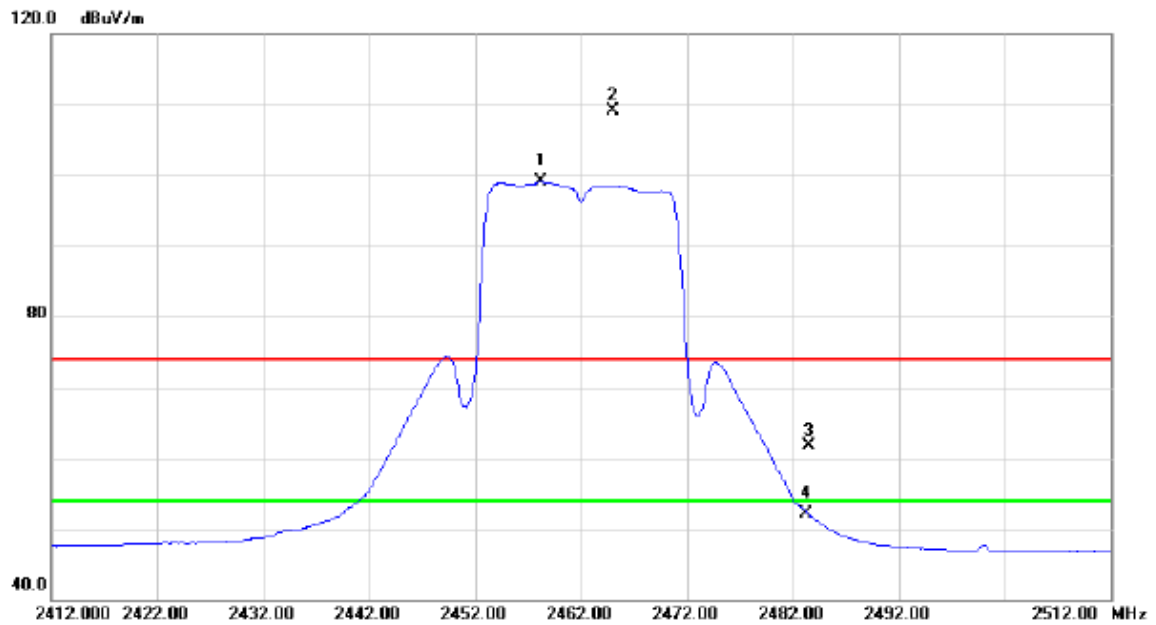
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1	*	4872.850	47.31	3.72	51.03	54.00	-2.97	AVG	
2		4874.150	60.90	3.72	64.62	74.00	-9.38	peak	

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

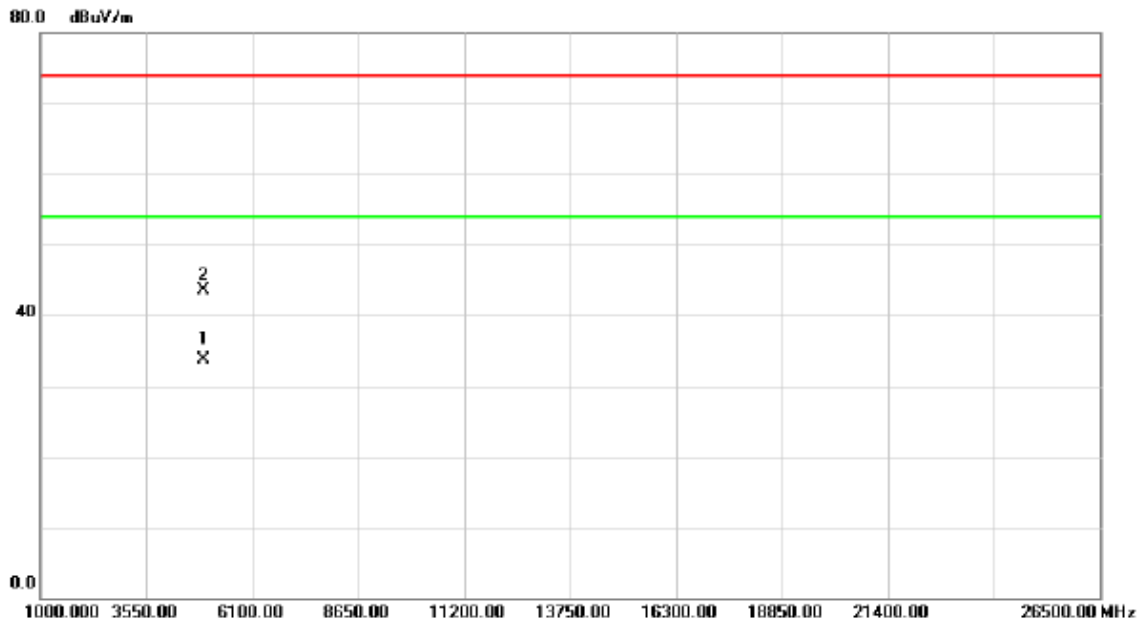
Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	2458.200	67.06	31.98	99.04	54.00	45.04	AVG	No Limit
2	X	2465.000	77.03	31.98	109.01	74.00	35.01	peak	No Limit
3		2483.500	29.69	32.01	61.70	74.00	-12.30	peak	
4		2483.500	20.06	32.01	52.07	54.00	-1.93	AVG	

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

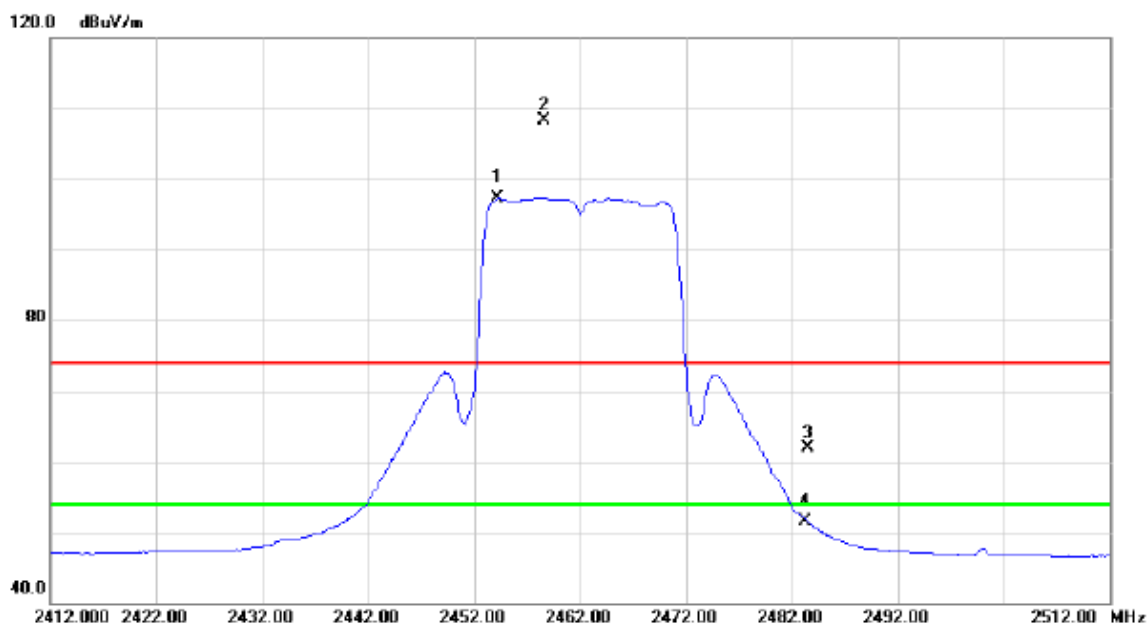
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1	*	4925.200	29.82	3.80	33.62	54.00	-20.38	AVG	
2		4923.650	39.62	3.80	43.42	74.00	-30.58	peak	

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

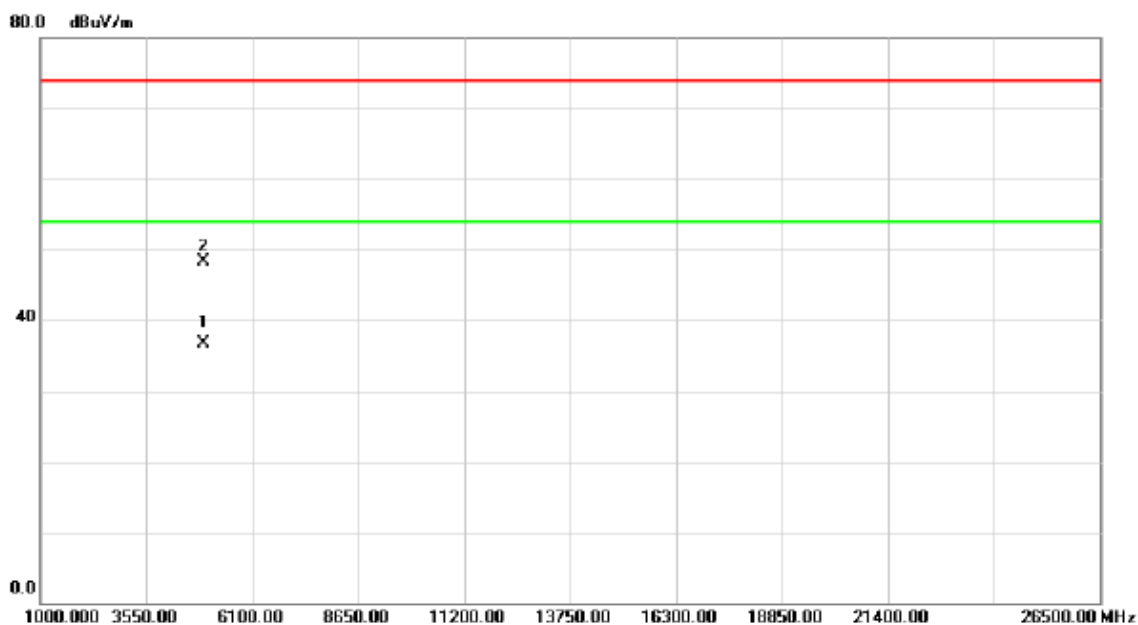
Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	2454.200	65.40	31.96	97.36	54.00	43.36	AVG	No Limit
2	X	2458.600	76.36	31.98	108.34	74.00	34.34	peak	No Limit
3		2483.500	29.98	32.01	61.99	74.00	-12.01	peak	
4		2483.500	19.51	32.01	51.52	54.00	-2.48	AVG	

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

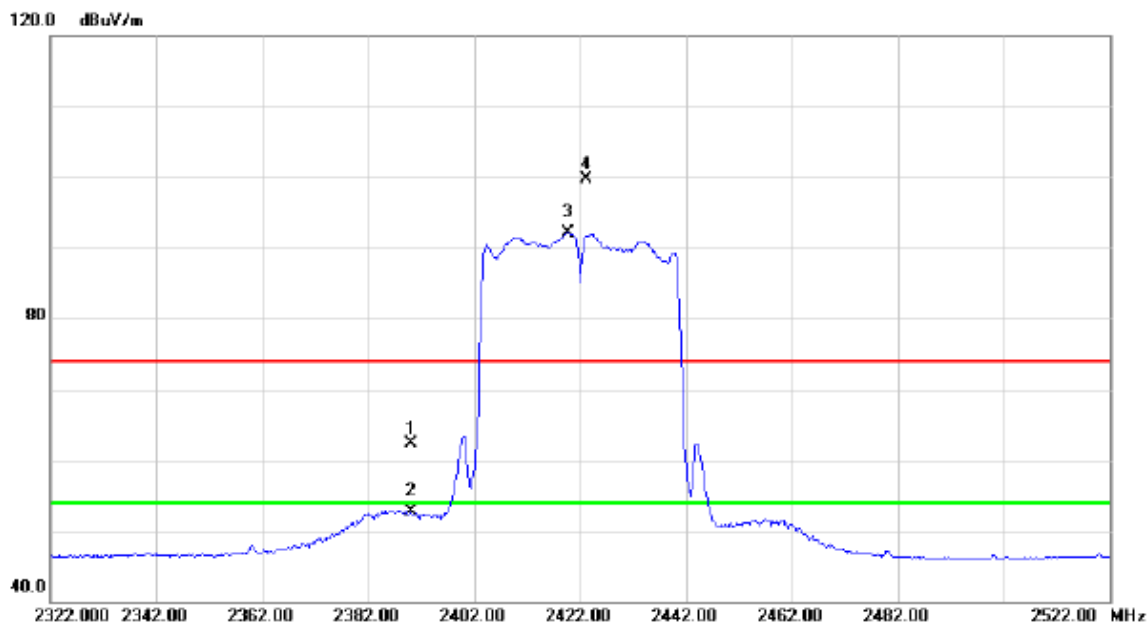
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1	*	4922.650	32.85	3.80	36.65	54.00	-17.35	AVG	
2		4925.050	44.52	3.80	48.32	74.00	-25.68	peak	

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

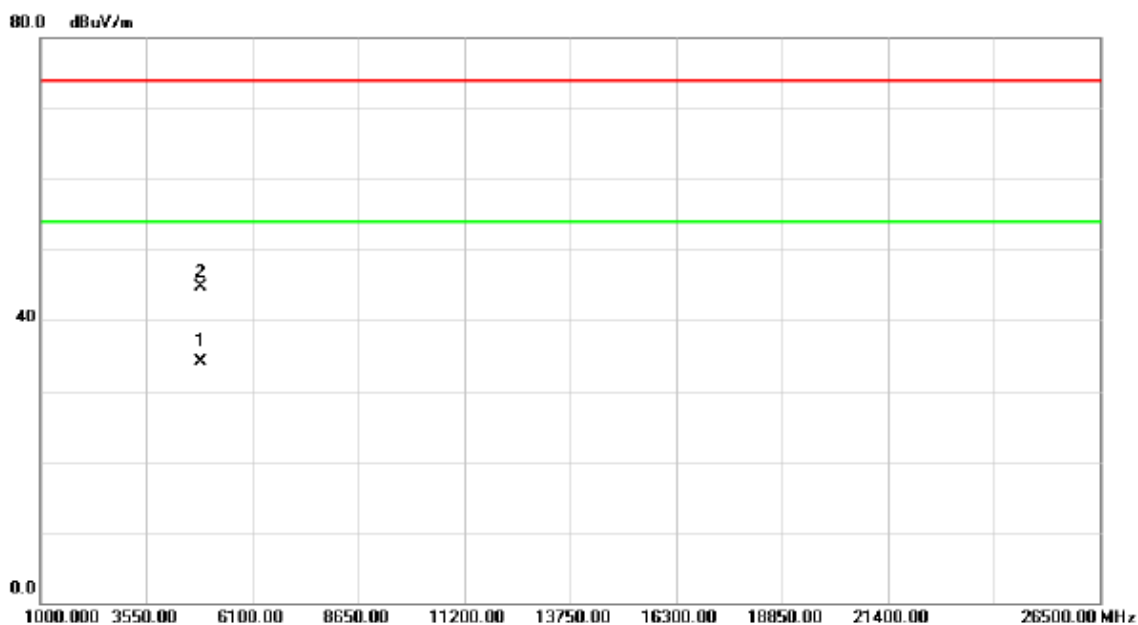
Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		2390.000	30.37	31.88	62.25	74.00	-11.75	peak	
2		2390.000	20.76	31.88	52.64	54.00	-1.36	AVG	
3	*	2419.800	60.23	31.92	92.15	54.00	38.15	AVG	No Limit
4	X	2423.200	67.78	31.93	99.71	74.00	25.71	peak	No Limit

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

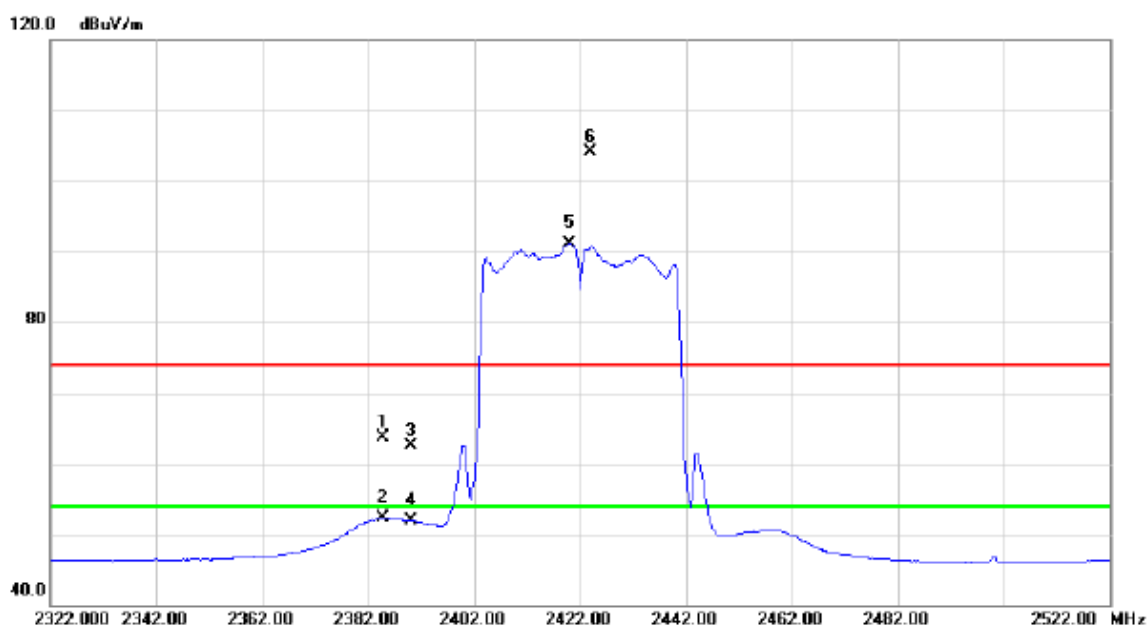
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1	*	4844.170	30.37	3.66	34.03	54.00	-19.97	AVG	
2		4844.530	41.08	3.66	44.74	74.00	-29.26	peak	

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

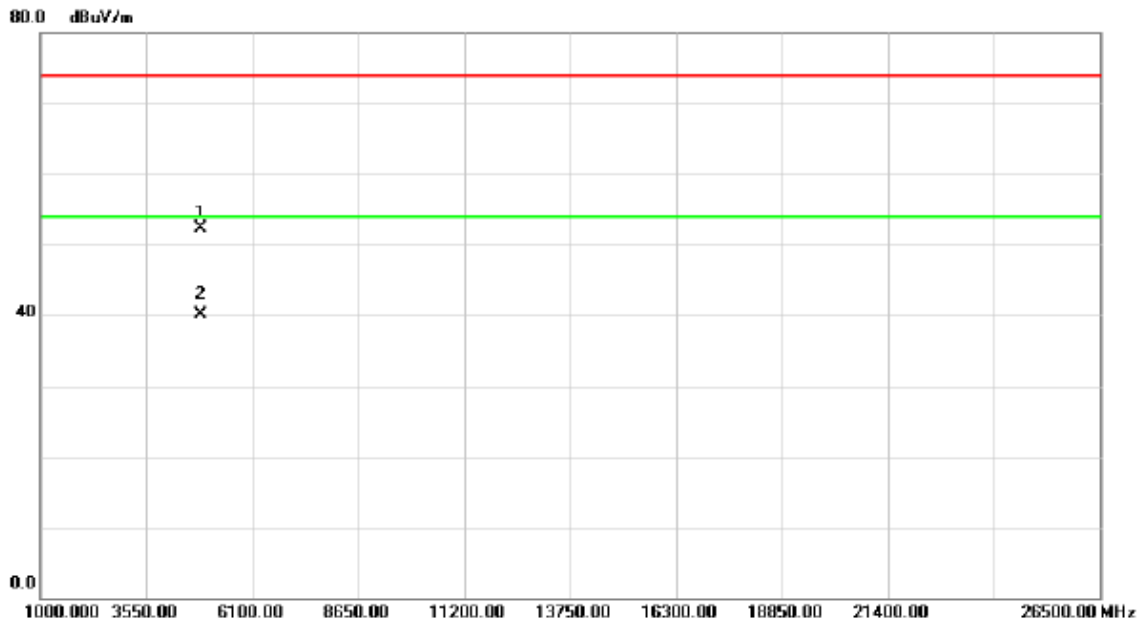
Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		2384.800	31.83	31.87	63.70	74.00	-10.30	peak	
2		2384.800	20.47	31.87	52.34	54.00	-1.66	AVG	
3		2390.000	30.71	31.88	62.59	74.00	-11.41	peak	
4		2390.000	20.03	31.88	51.91	54.00	-2.09	AVG	
5	*	2420.000	59.19	31.92	91.11	54.00	37.11	AVG	No Limit
6	X	2424.000	72.08	31.93	104.01	74.00	30.01	peak	No Limit

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

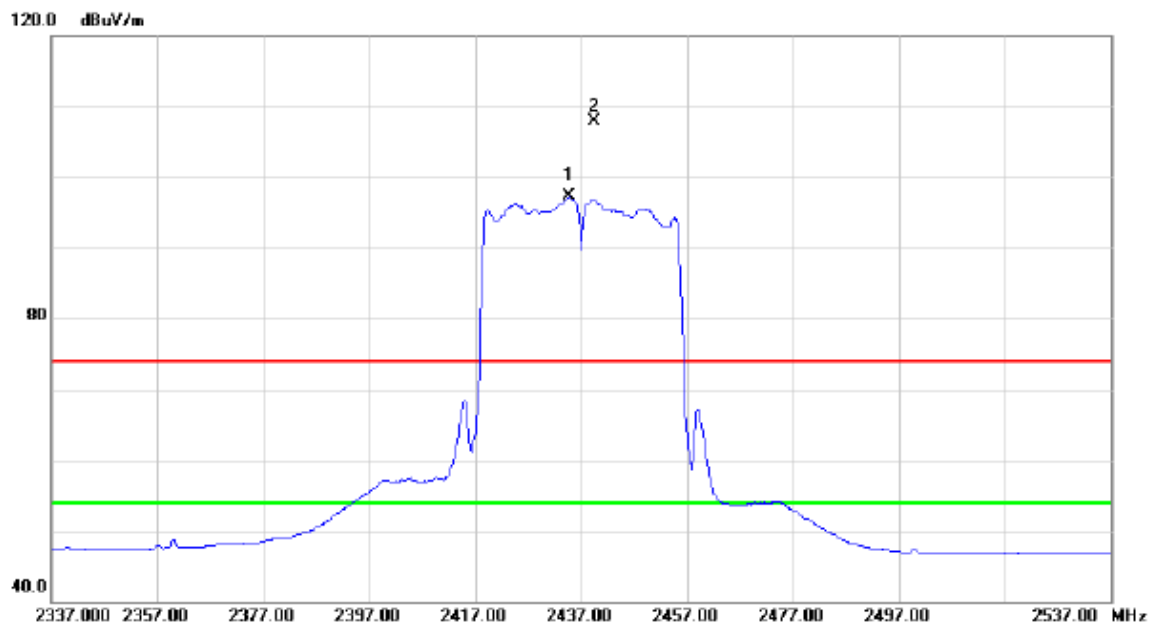
Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		4844.300	48.59	3.66	52.25	74.00	-21.75	peak	
2	*	4848.370	36.42	3.67	40.09	54.00	-13.91	AVG	

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

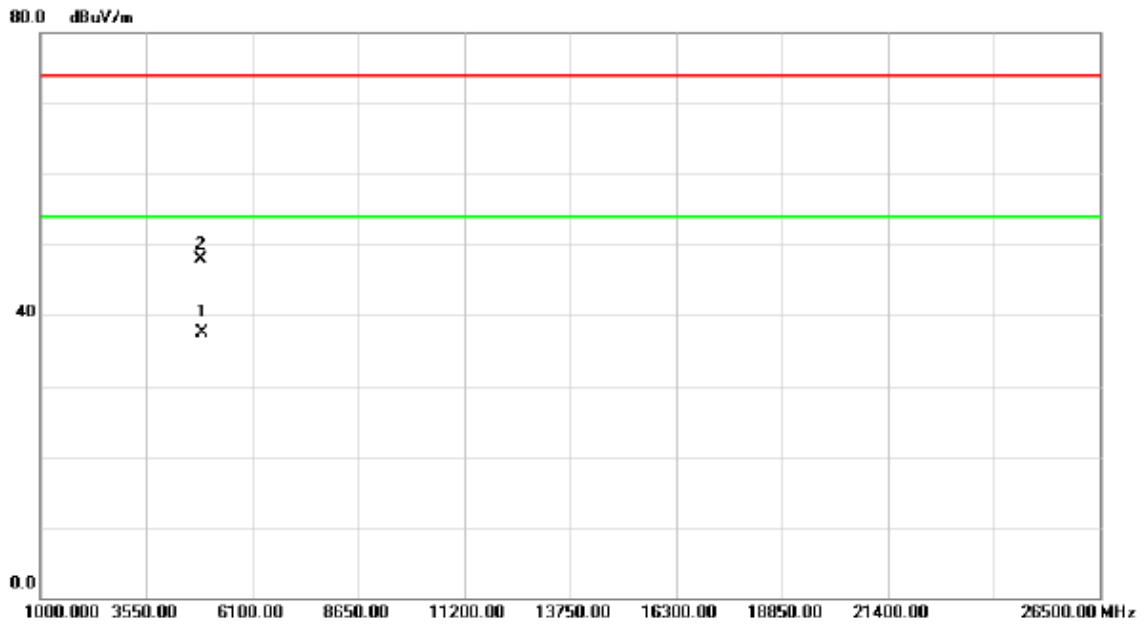
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	2434.800	65.28	31.94	97.22	54.00	43.22	AVG	No Limit
2	X	2439.400	75.97	31.94	107.91	74.00	33.91	peak	No Limit

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

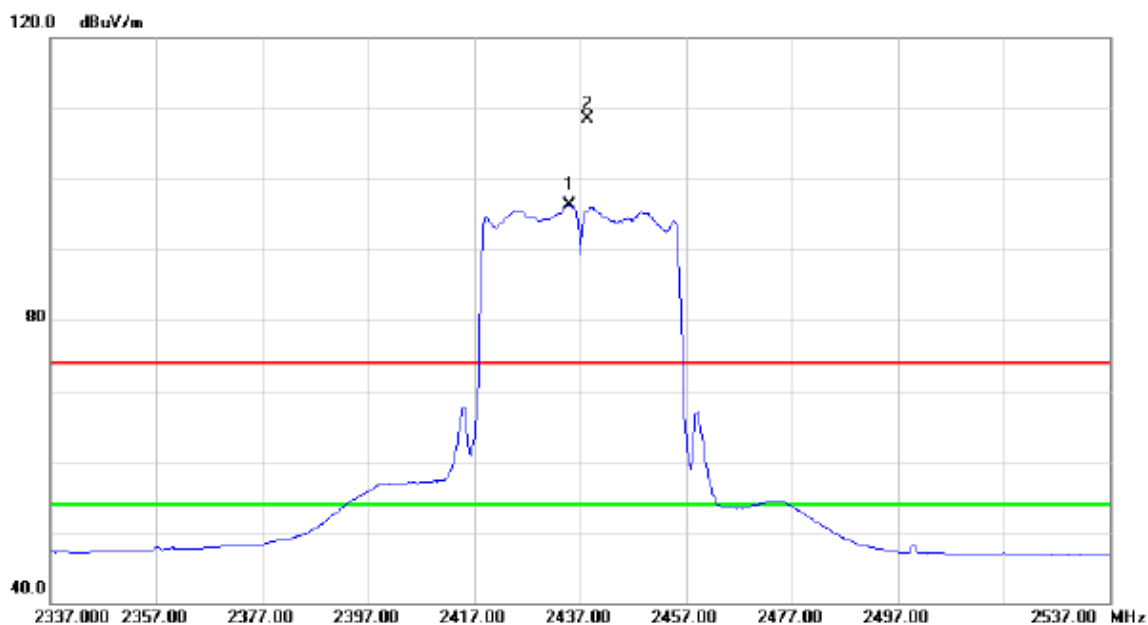
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1	*	4874.160	33.71	3.72	37.43	54.00	-16.57	AVG	
2		4875.370	44.25	3.72	47.97	74.00	-26.03	peak	

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

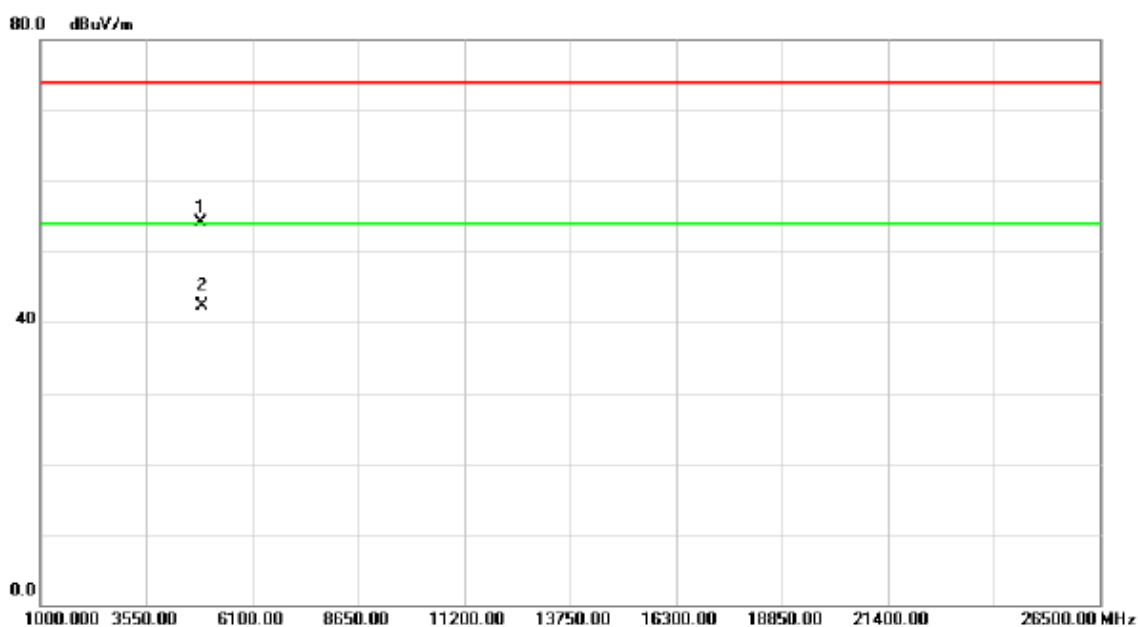
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1	*	2435.000	64.29	31.94	96.23	54.00	42.23	AVG	No Limit
2	X	2438.400	76.48	31.94	108.42	74.00	34.42	peak	No Limit

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

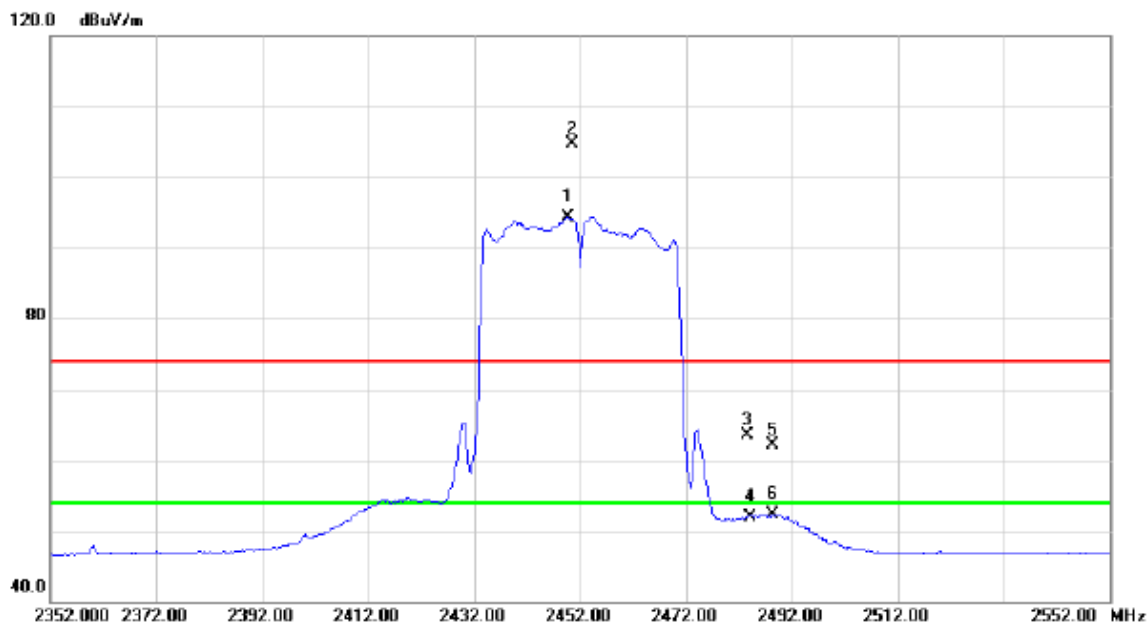
Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		4873.500	50.31	3.72	54.03	74.00	-19.97	peak	
2	*	4875.070	38.52	3.72	42.24	54.00	-11.76	AVG	

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

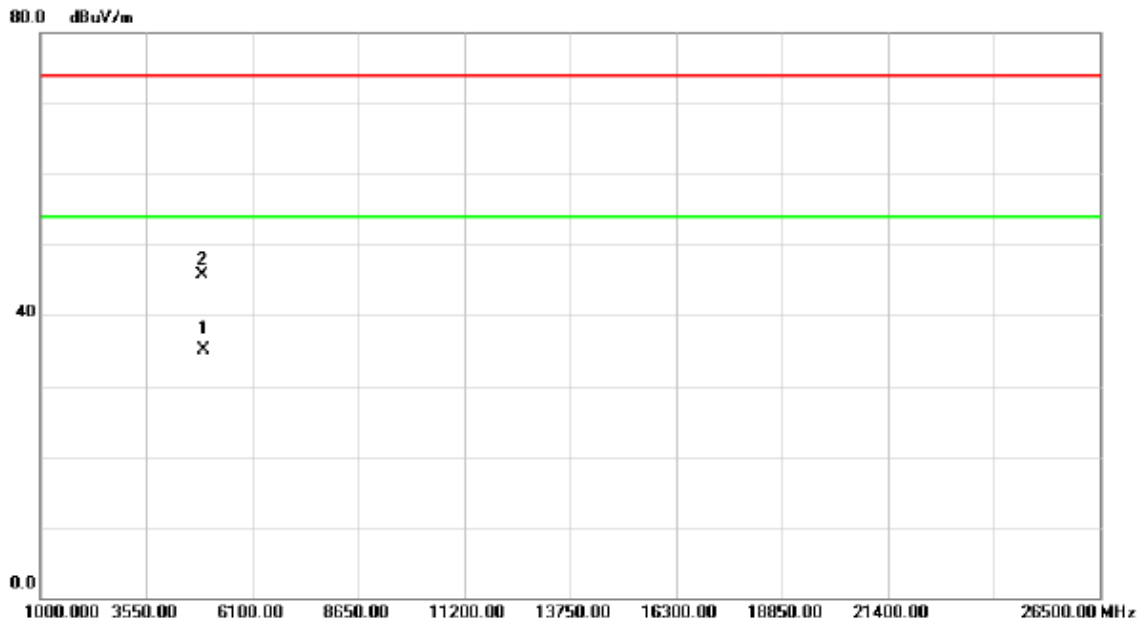
Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	2449.800	62.37	31.96	94.33	54.00	40.33	AVG	No Limit
2	X	2450.600	72.81	31.96	104.77	74.00	30.77	peak	No Limit
3		2483.500	31.41	32.01	63.42	74.00	-10.58	peak	
4		2483.500	19.96	32.01	51.97	54.00	-2.03	AVG	
5		2488.400	30.17	32.01	62.18	74.00	-11.82	peak	
6		2488.400	20.26	32.01	52.27	54.00	-1.73	AVG	

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

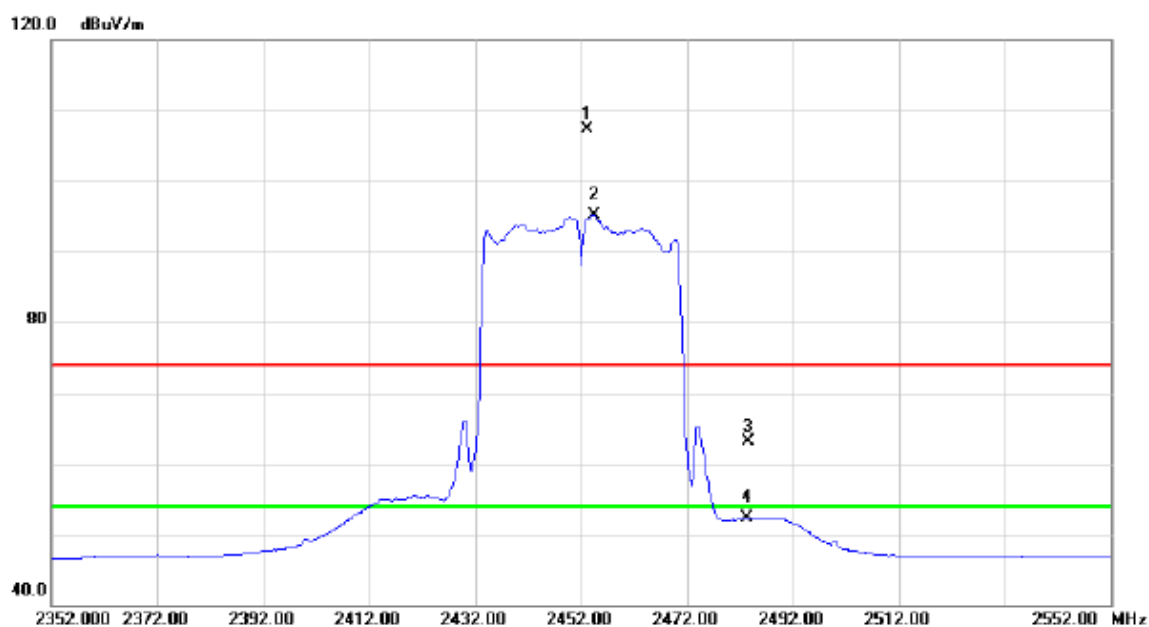
Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	4904.470	31.26	3.77	35.03	54.00	-18.97	AVG	
2		4904.890	41.97	3.77	45.74	74.00	-28.26	peak	

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

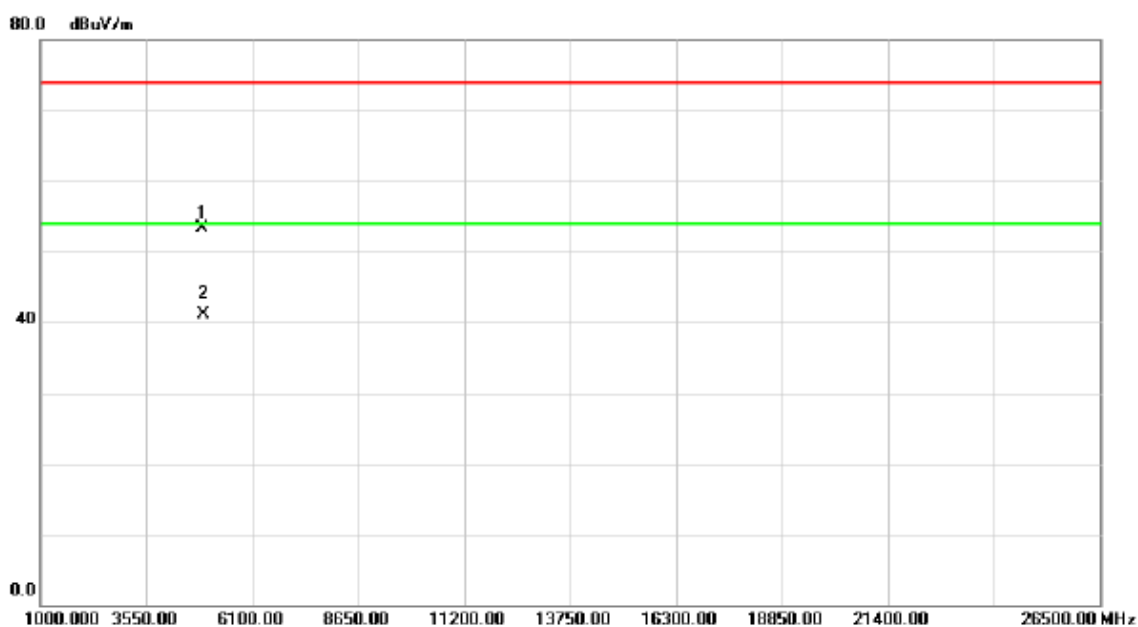
Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	X	2453.200	75.26	31.96	107.22	74.00	33.22	peak	No Limit
2	*	2454.400	63.18	31.96	95.14	54.00	41.14	AVG	No Limit
3		2483.500	31.15	32.01	63.16	74.00	-10.84	peak	
4		2483.500	20.23	32.01	52.24	54.00	-1.76	AVG	

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

Horizontal



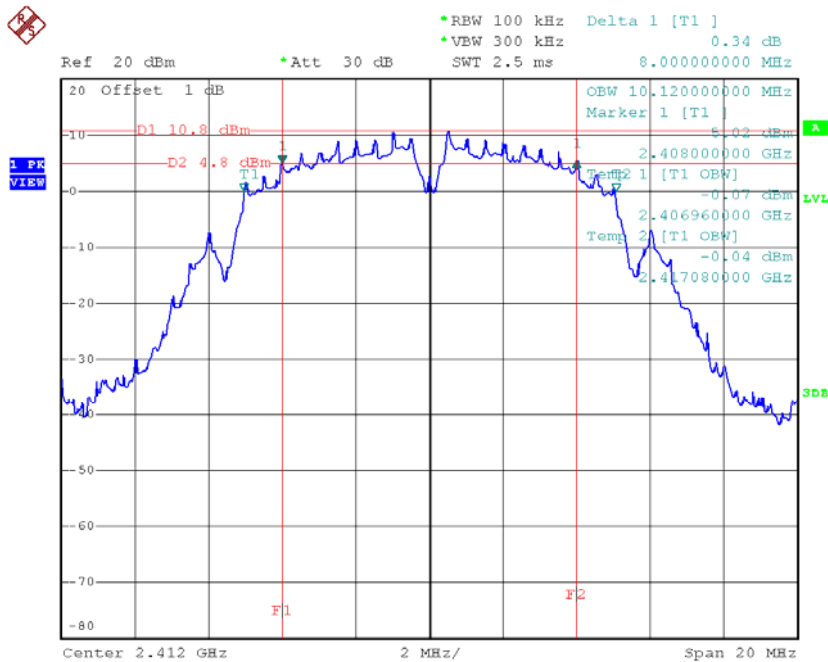
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		4903.300	49.48	3.77	53.25	74.00	-20.75	peak	
2	*	4904.370	37.32	3.77	41.09	54.00	-12.91	AVG	

ATTACHMENT E - BANDWIDTH

Test Mode : TX B Mode_CH01/06/11

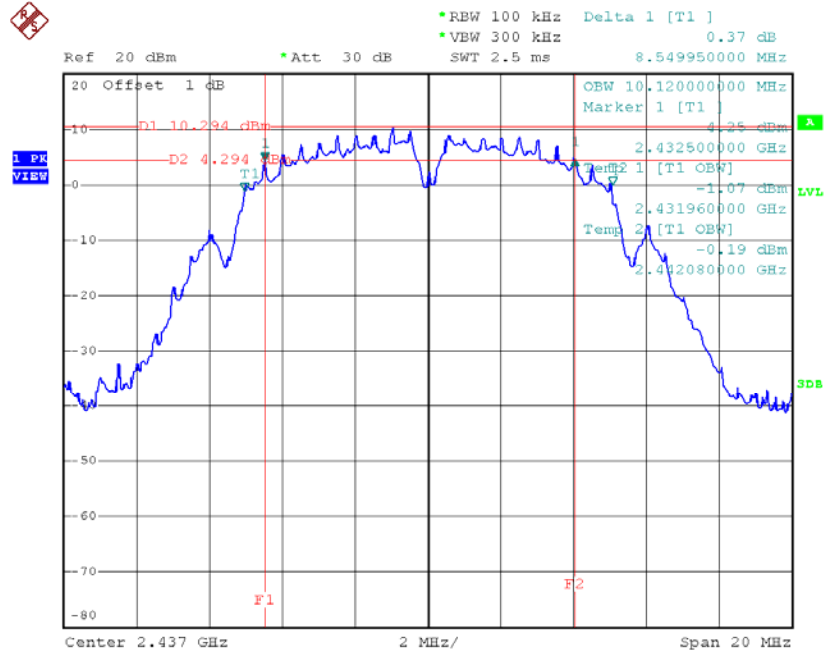
Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2412	8.00	10.12	500	Complies
2437	8.55	10.12	500	Complies
2462	8.19	10.12	500	Complies

TX CH01



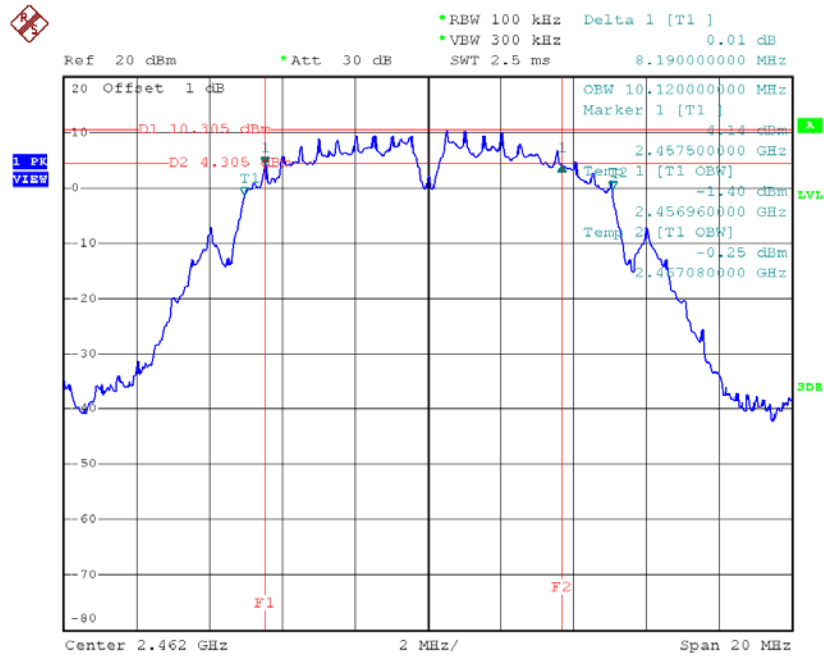
Date: 26.NOV.2014 20:05:10

TX CH06



Date: 26.NOV.2014 20:02:00

TX CH11

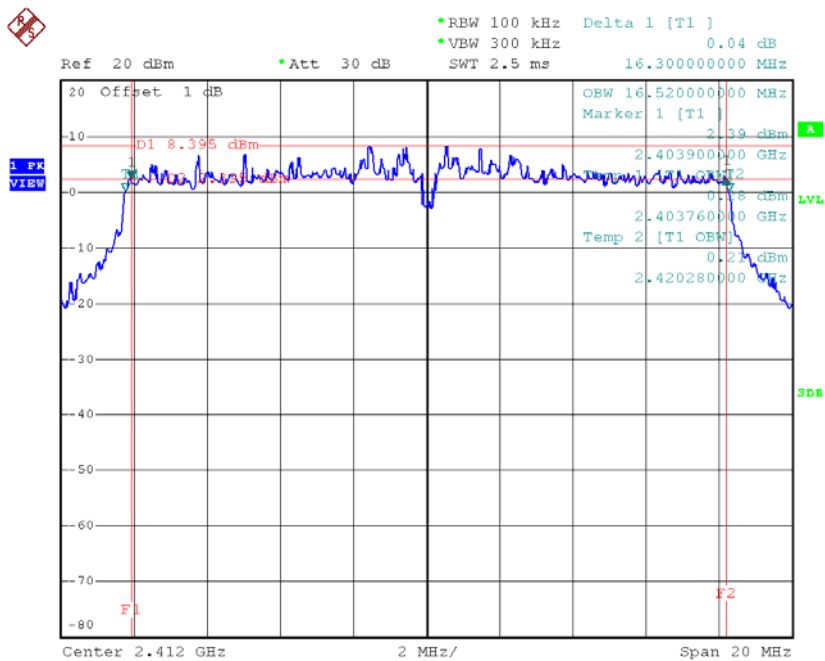


Date: 26.NOV.2014 20:02:49

Test Mode: TX G Mode_CH01/06/11

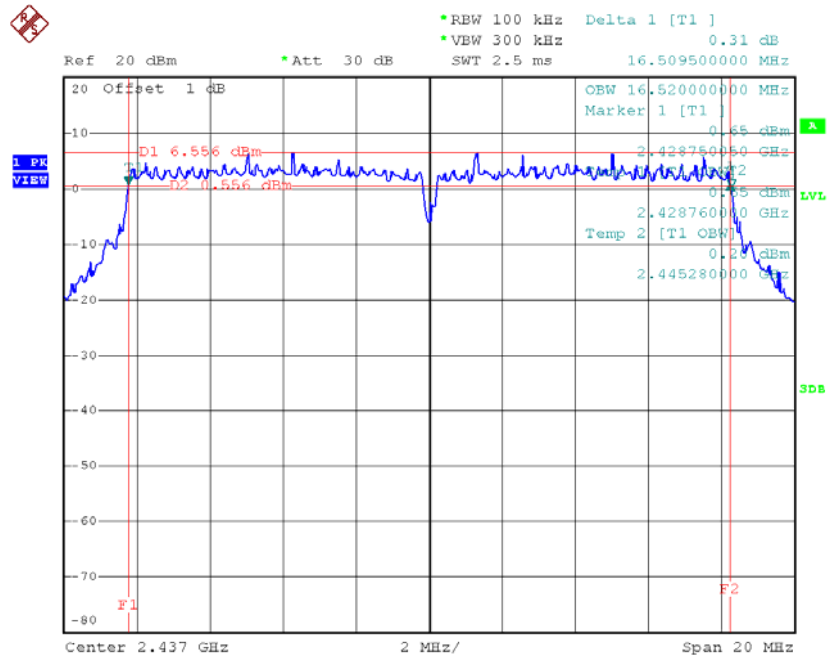
Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2412	16.30	16.52	500	Complies
2437	16.51	16.52	500	Complies
2462	16.50	16.56	500	Complies

TX CH01



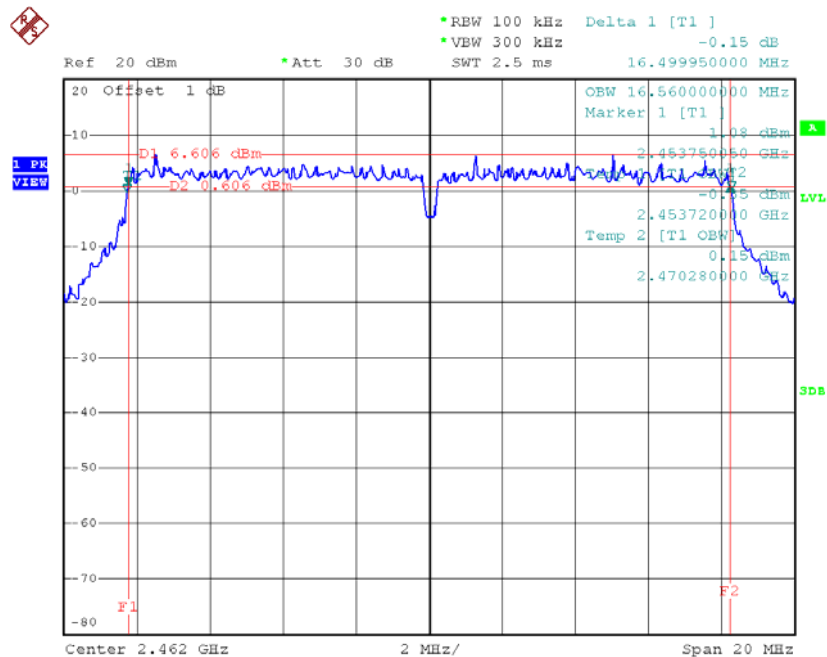
Date: 26.NOV.2014 20:05:36

TX CH06



Date: 26.NOV.2014 20:06:29

TX CH11

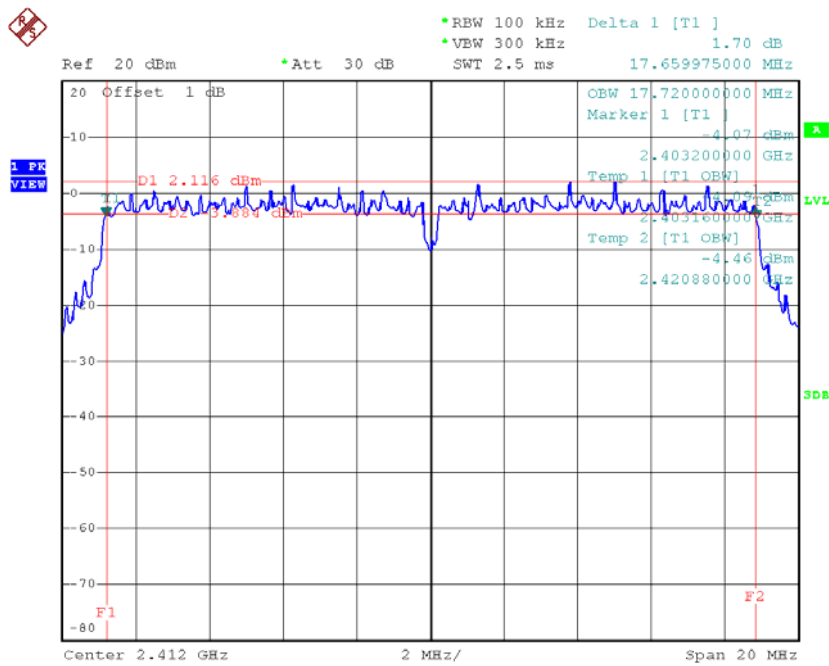


Date: 26.NOV.2014 20:07:14

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

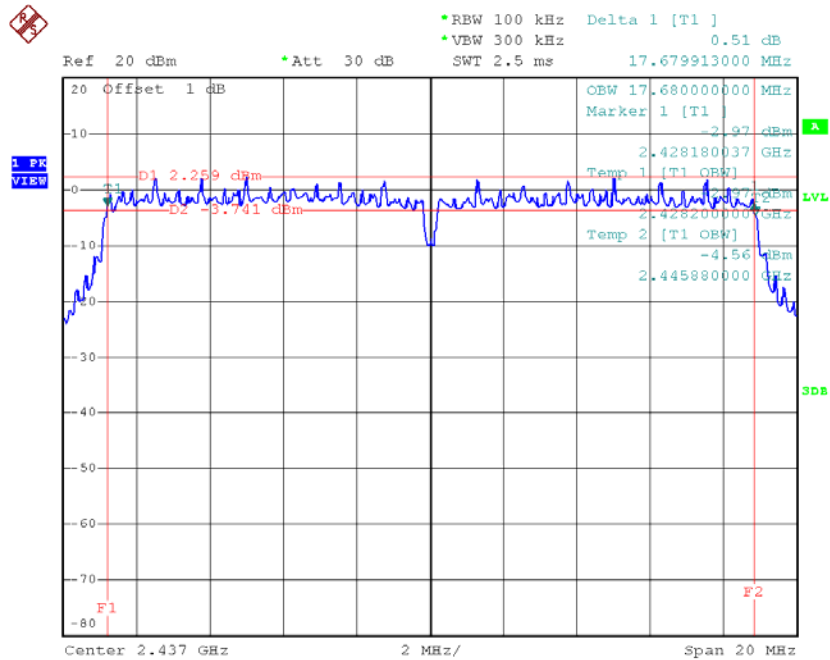
Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2412	17.66	17.72	500	Complies
2437	17.68	17.68	500	Complies
2462	17.71	17.68	500	Complies

TX CH01



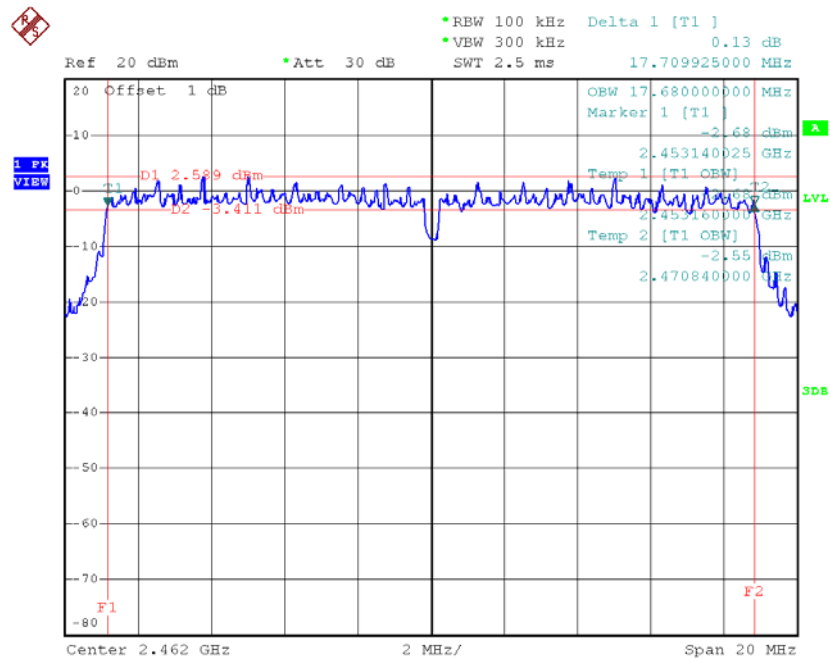
Date: 26.NOV.2014 20:08:54

TX CH06



Date: 26.NOV.2014 20:09:46

TX CH11

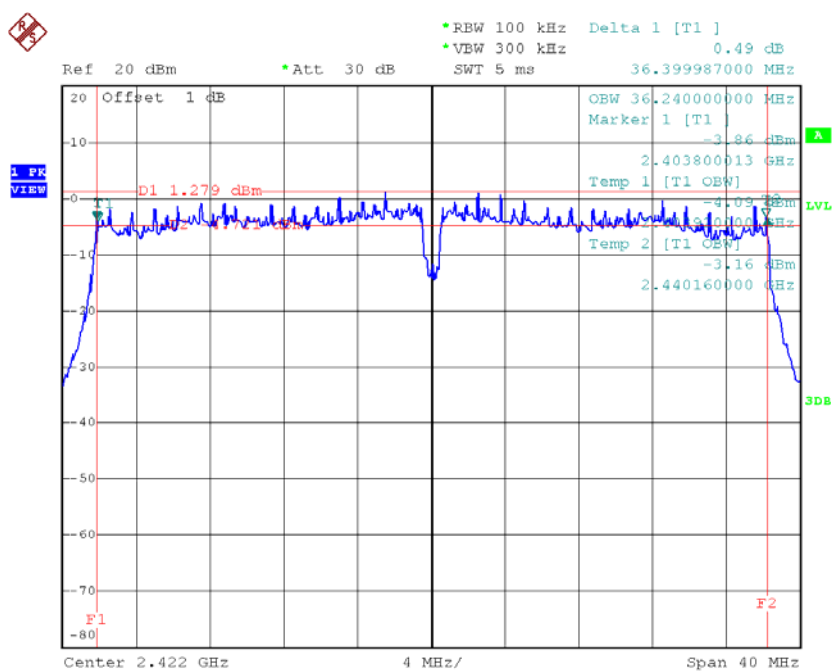


Date: 26.NOV.2014 20:10:40

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

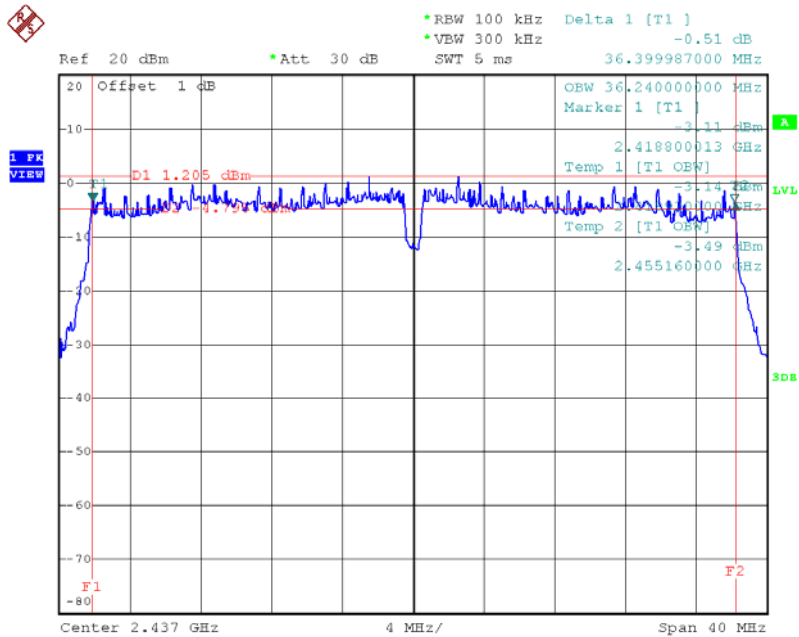
Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2422	36.40	36.24	500	Complies
2437	36.40	36.24	500	Complies
2452	36.48	36.24	500	Complies

TX CH03



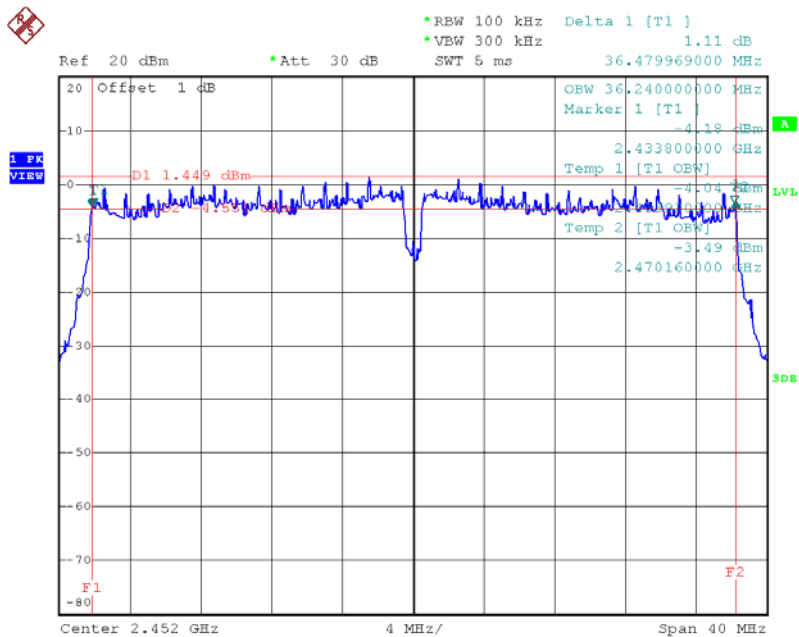
Date: 26.NOV.2014 20:26:39

TX CH06



Date: 26.NOV.2014 20:27:32

TX CH09



Date: 26.NOV.2014 20:28:20

ATTACHMENT F – MAXIMUM PEAK CONDUCTED OUTPUT POWER

Test Mode :TX B Mode_CH01/06/11

Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2412	16.47	0.0444	30.00	1.00	Complies
2437	18.40	0.0692	30.00	1.00	Complies
2462	19.84	0.0964	30.00	1.00	Complies

Test Mode :TX G Mode_CH01/06/11

Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2412	18.66	0.0735	30.00	1.00	Complies
2437	26.62	0.4592	30.00	1.00	Complies
2462	19.15	0.0822	30.00	1.00	Complies

Test Mode :TX N20 Mode_CH01/06/11_ANT 1

Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2412	17.42	0.0552	30.00	1.00	Complies
2437	24.37	0.2735	30.00	1.00	Complies
2462	17.56	0.0570	30.00	1.00	Complies

Test Mode :TX N20 Mode_CH01/06/11_ANT 2

Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2412	18.82	0.0762	30.00	1.00	Complies
2437	25.42	0.3483	30.00	1.00	Complies
2462	18.23	0.0665	30.00	1.00	Complies

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

Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2412	17.32	0.0540	30.00	1.00	Complies
2437	24.59	0.2877	30.00	1.00	Complies
2462	17.53	0.0566	30.00	1.00	Complies

Test Mode :TX N20 Mode_CH01/06/11_Total

Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2412	22.68	0.1854	30.00	1.00	Complies
2437	29.59	0.9096	30.00	1.00	Complies
2462	22.56	0.1802	30.00	1.00	Complies

Test Mode :TX N40 Mode_CH03/06/09_ANT 1

Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2422	16.14	0.0411	30.00	1.00	Complies
2437	20.31	0.1074	30.00	1.00	Complies
2452	17.64	0.0581	30.00	1.00	Complies

Test Mode :TX N40 Mode_CH03/06/09_ANT 2

Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2422	16.74	0.0472	30.00	1.00	Complies
2437	20.75	0.1189	30.00	1.00	Complies
2452	18.67	0.0736	30.00	1.00	Complies

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

Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2422	16.23	0.0420	30.00	1.00	Complies
2437	20.26	0.1062	30.00	1.00	Complies
2452	17.89	0.0615	30.00	1.00	Complies

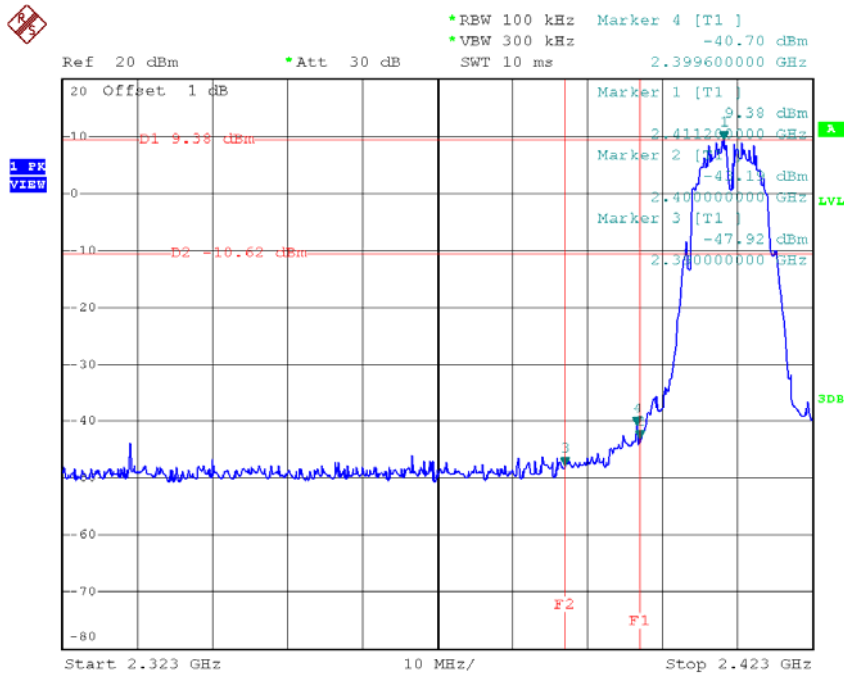
Test Mode :TX N40 Mode_CH03/06/09_Total

Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2422	21.15	0.1303	30.00	1.00	Complies
2437	25.22	0.3324	30.00	1.00	Complies
2452	22.86	0.1932	30.00	1.00	Complies

**ATTACHMENT G - ANTENNA CONDUCTED SPURIOUS
EMISSION**

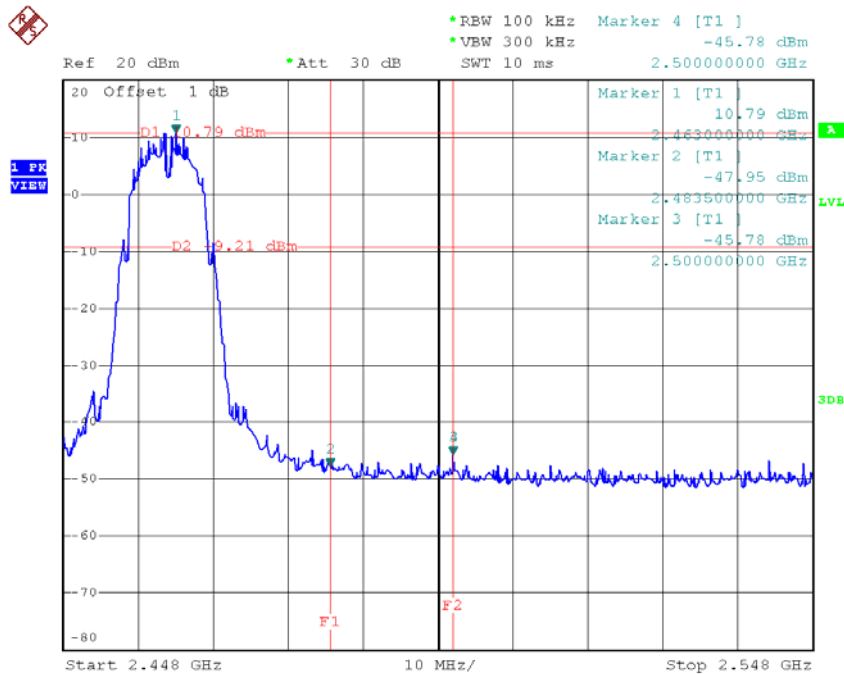
Test Mode :	TX B Mode
--------------------	------------------

TX B mode CH01



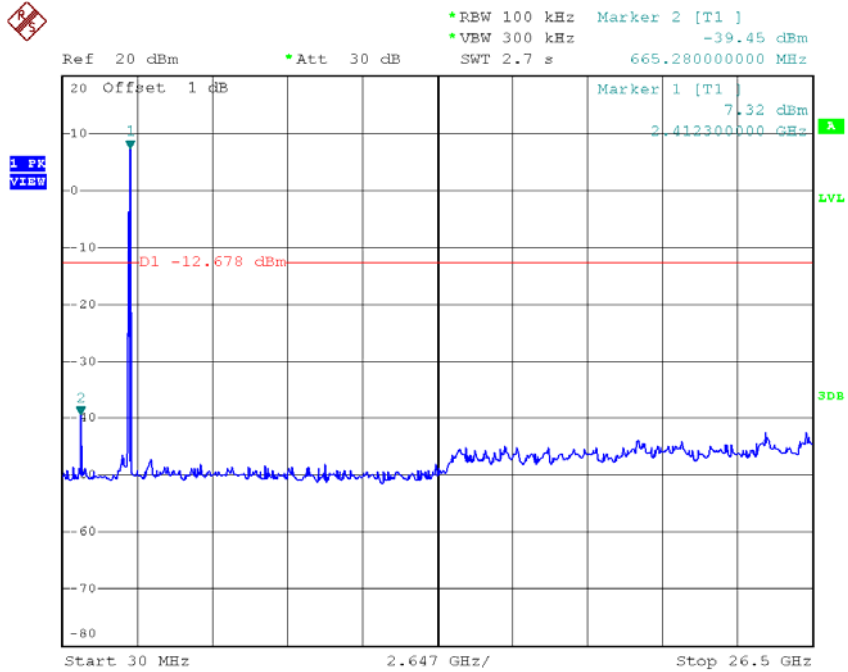
Date: 26.NOV.2014 20:01:13

TX B mode CH11



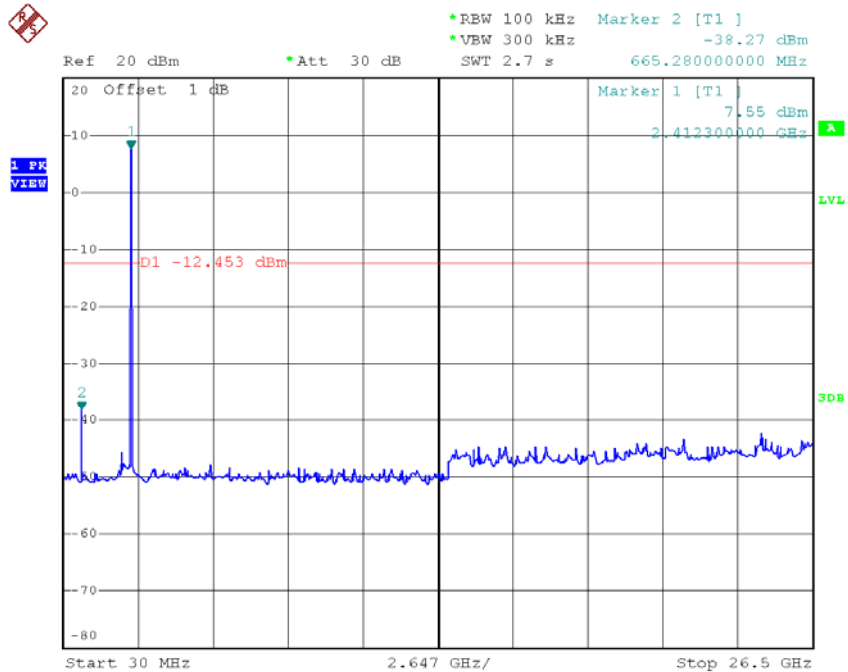
Date: 26.NOV.2014 20:03:10

TX B mode CH01 (10 Harmonic of the frequency)



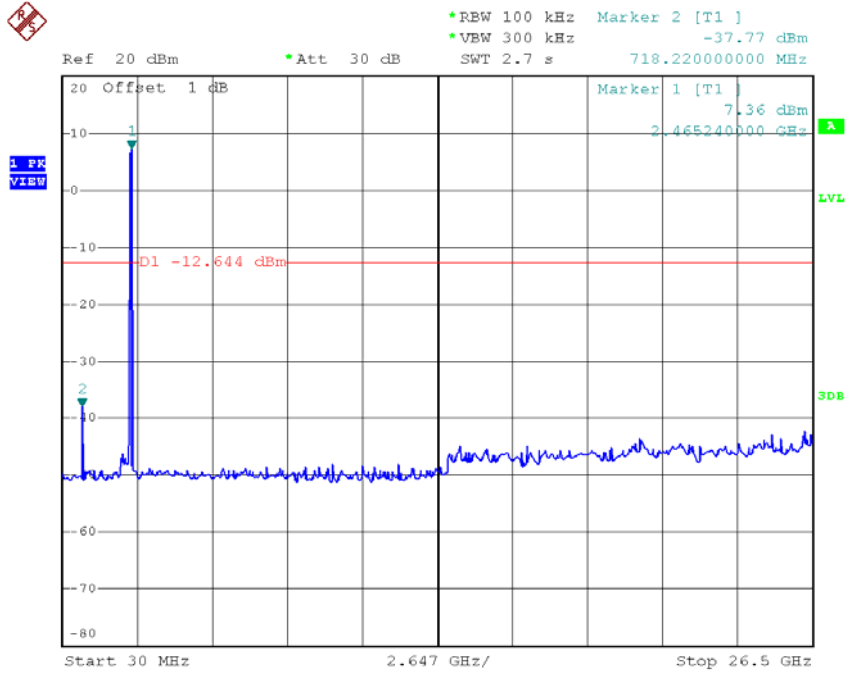
Date: 26.NOV.2014 20:01:05

TX B mode CH06 (10 Harmonic of the frequency)



Date: 26.NOV.2014 20:02:13

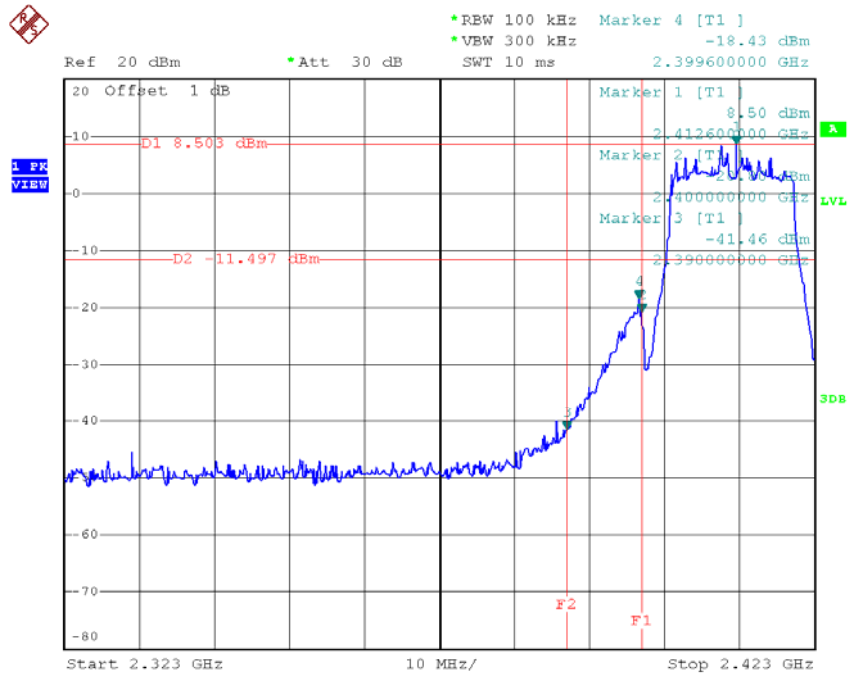
TX B mode CH11 (10 Harmonic of the frequency)



Date: 26.NOV.2014 20:03:03

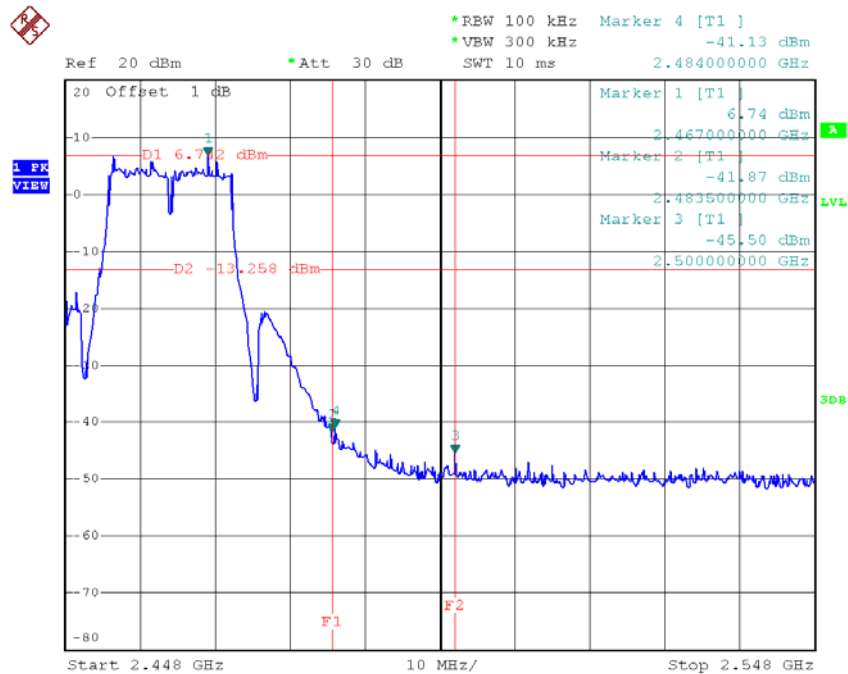
Test Mode :	TX G Mode
--------------------	------------------

TX G mode CH01



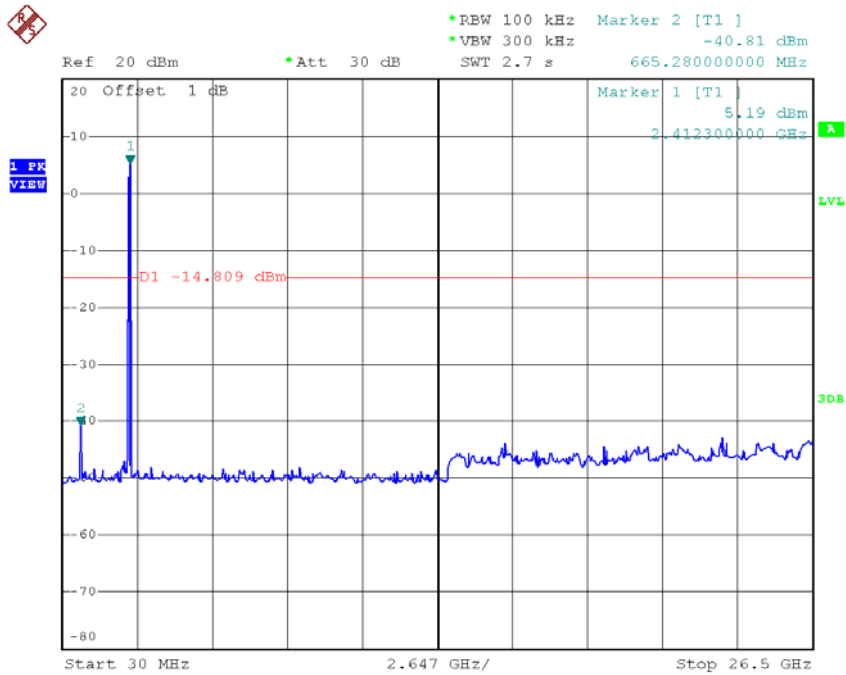
Date: 26.NOV.2014 20:05:57

TX G mode CH11



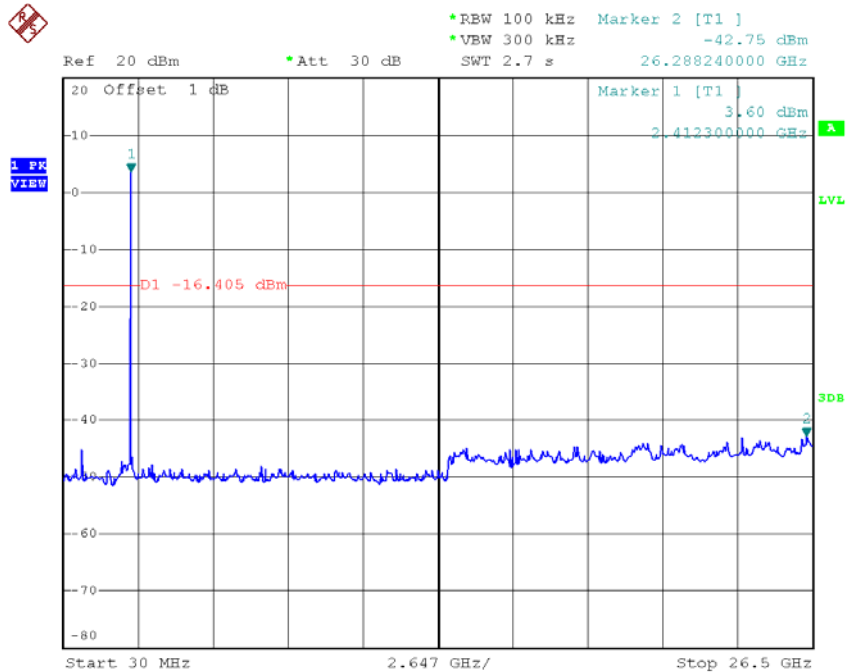
Date: 26.NOV.2014 20:07:34

TX G mode CH01 (10 Harmonic of the frequency)



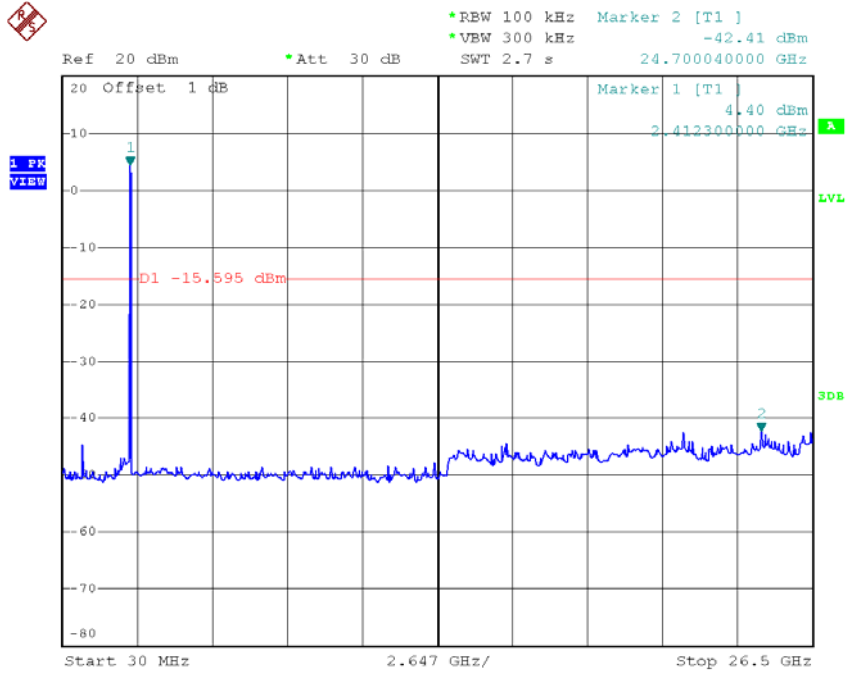
Date: 26.NOV.2014 20:05:49

TX G mode CH06 (10 Harmonic of the frequency)



Date: 26.NOV.2014 20:06:43

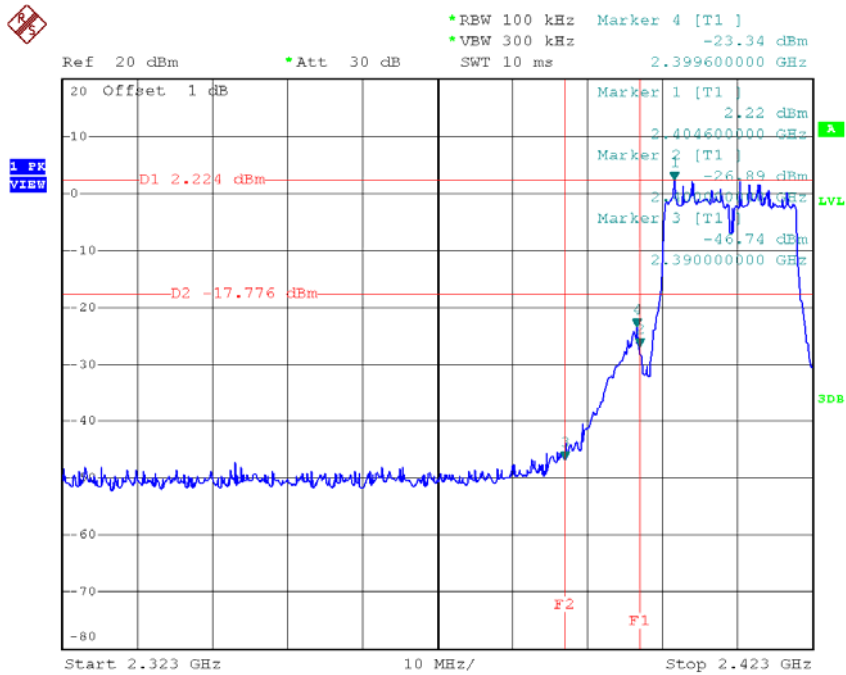
TX G mode CH11 (10 Harmonic of the frequency)



Date: 26.NOV.2014 20:07:27

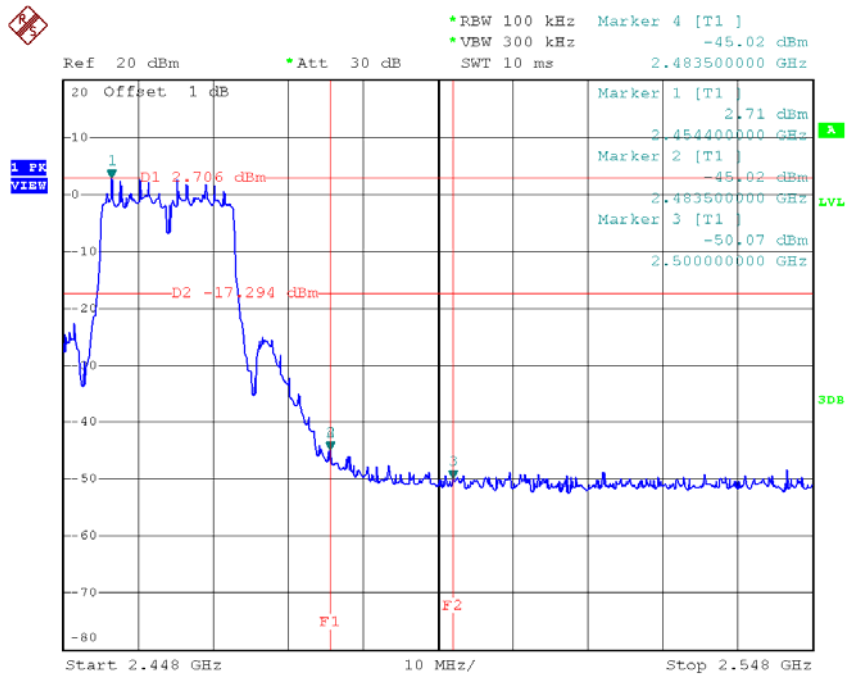
Test Mode :	TX N-20M Mode_ANT 1
--------------------	----------------------------

TX HT20 mode CH01



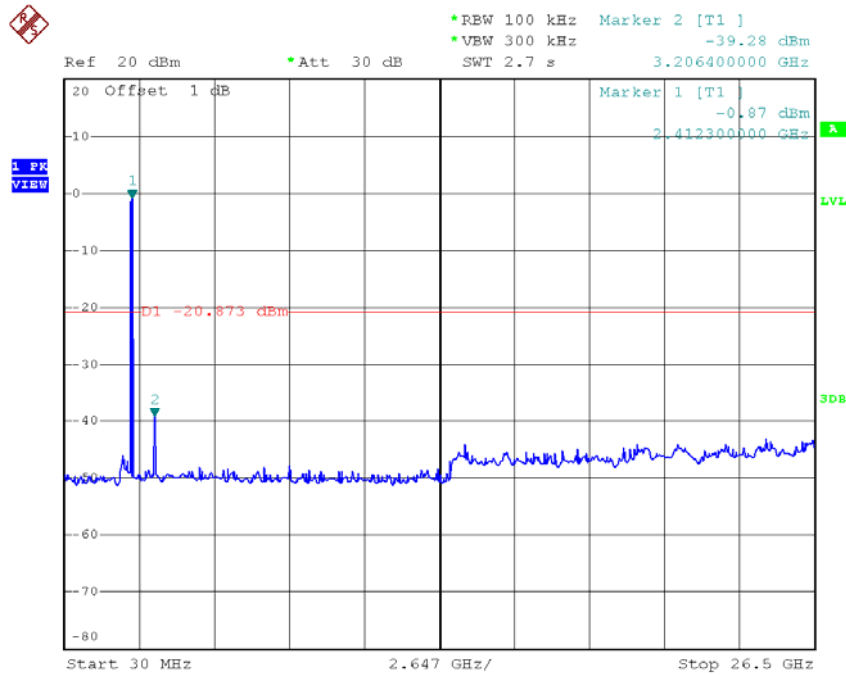
Date: 26.NOV.2014 20:12:33

TX HT20 mode CH11



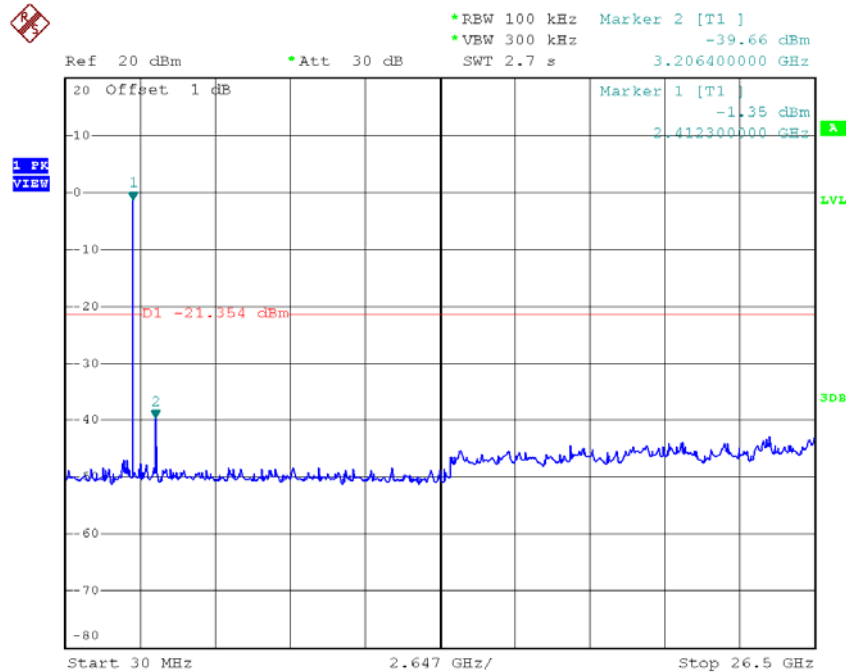
Date: 26.NOV.2014 20:14:08

TX HT20 mode CH01 (10 Harmonic of the frequency)



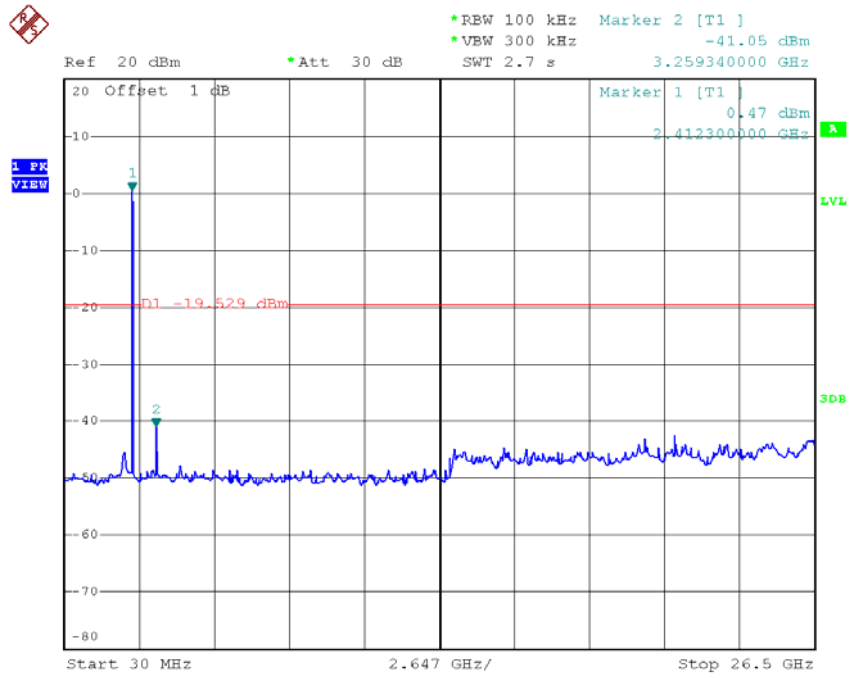
Date: 26.NOV.2014 20:12:25

TX HT20 mode CH06 (10 Harmonic of the frequency)



Date: 26.NOV.2014 20:13:19

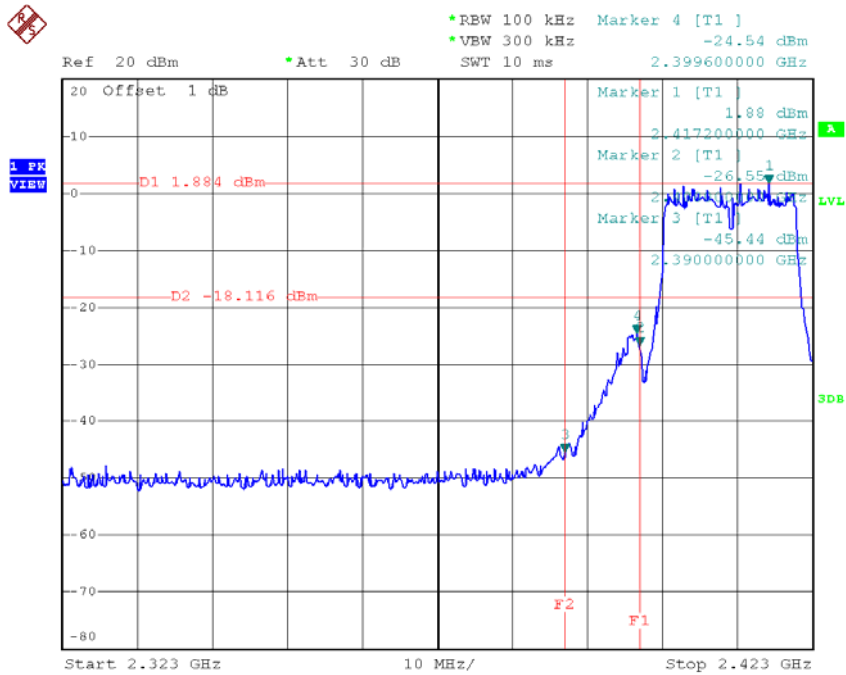
TX HT20 mode CH11 (10 Harmonic of the frequency)



Date: 26.NOV.2014 20:14:01

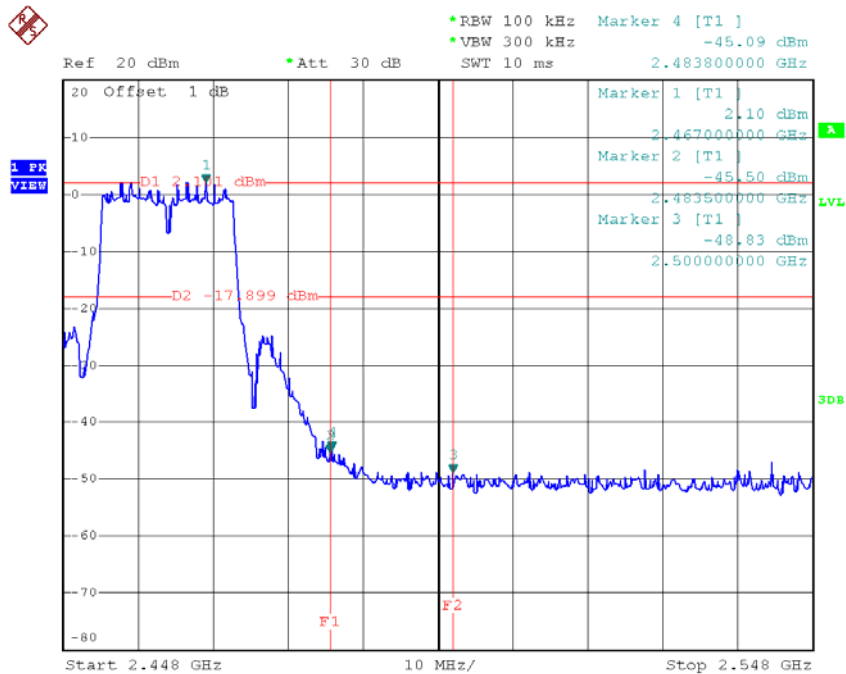
Test Mode :	TX N-20M Mode_ANT 2
--------------------	----------------------------

TX HT20 mode CH01



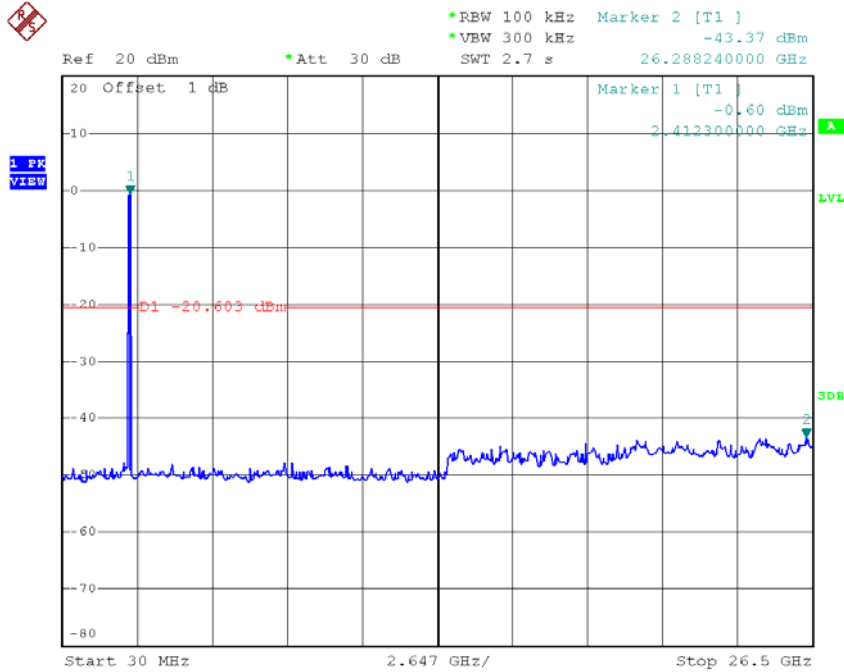
Date: 26.NOV.2014 20:09:15

TX HT20 mode CH11



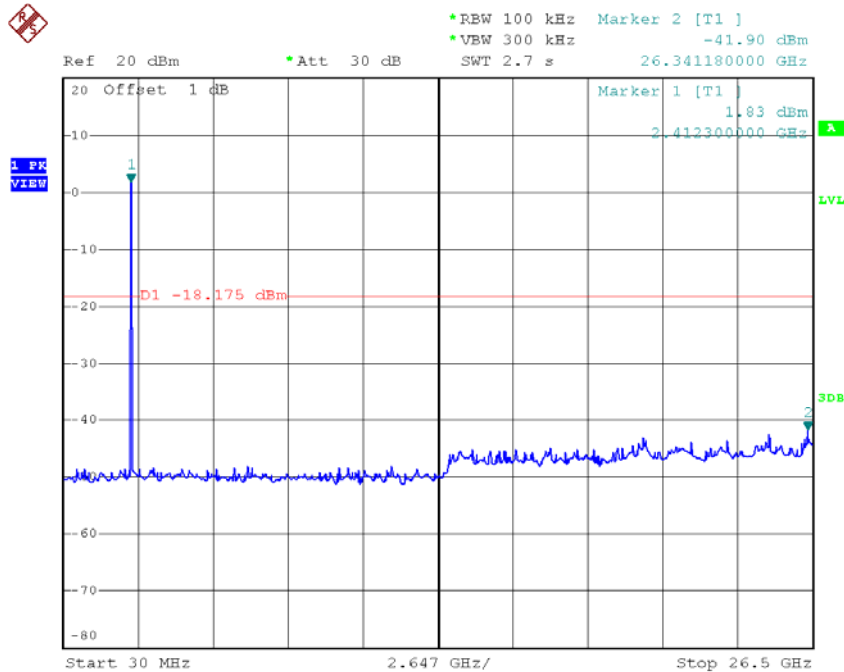
Date: 26.NOV.2014 20:11:01

TX HT20 mode CH01 (10 Harmonic of the frequency)



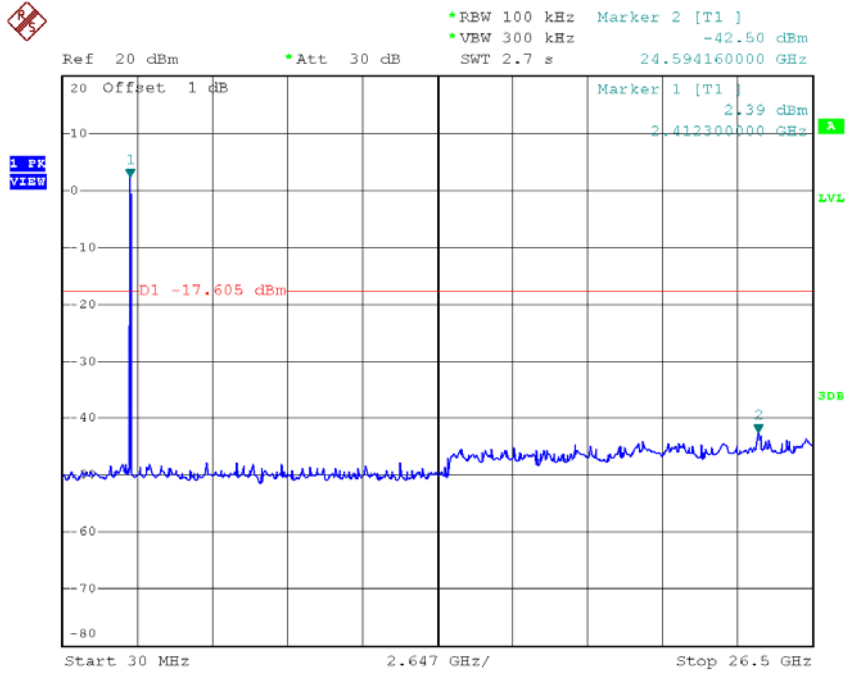
Date: 26.NOV.2014 20:09:08

TX HT20 mode CH06 (10 Harmonic of the frequency)



Date: 26.NOV.2014 20:10:00

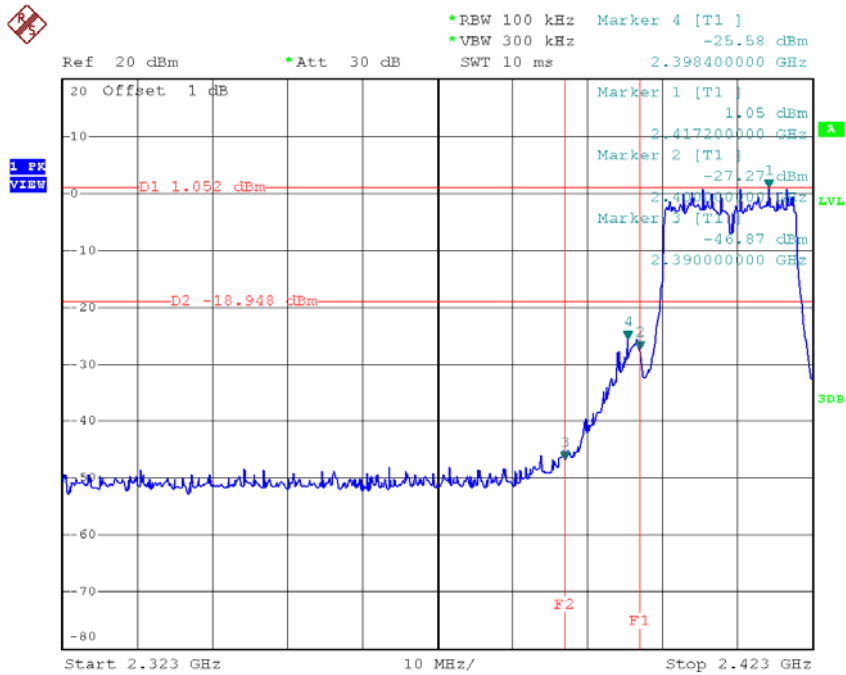
TX HT20 mode CH11 (10 Harmonic of the frequency)



Date: 26.NOV.2014 20:10:54

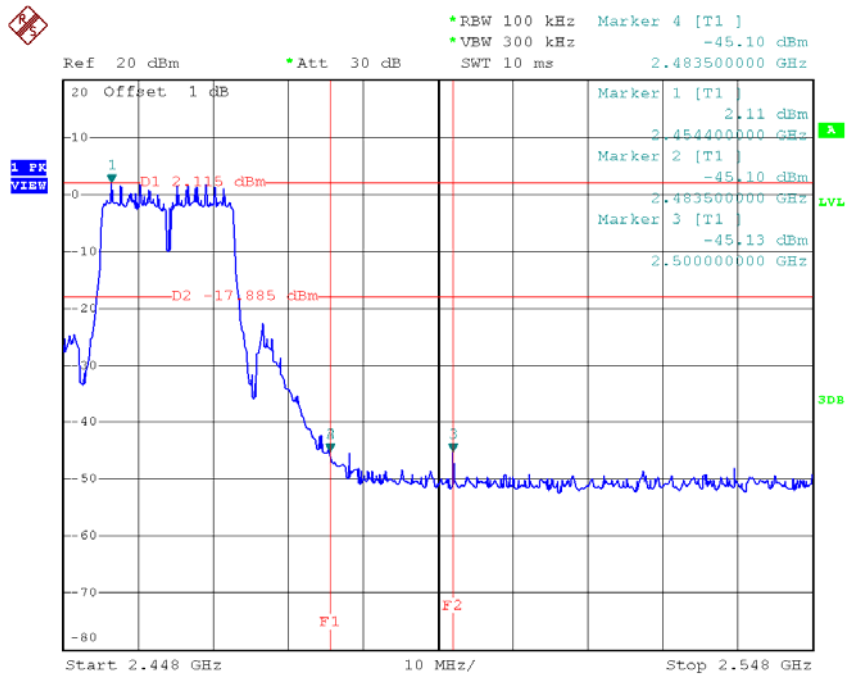
Test Mode :	TX N-20M Mode_ANT 3
--------------------	----------------------------

TX HT20 mode CH01



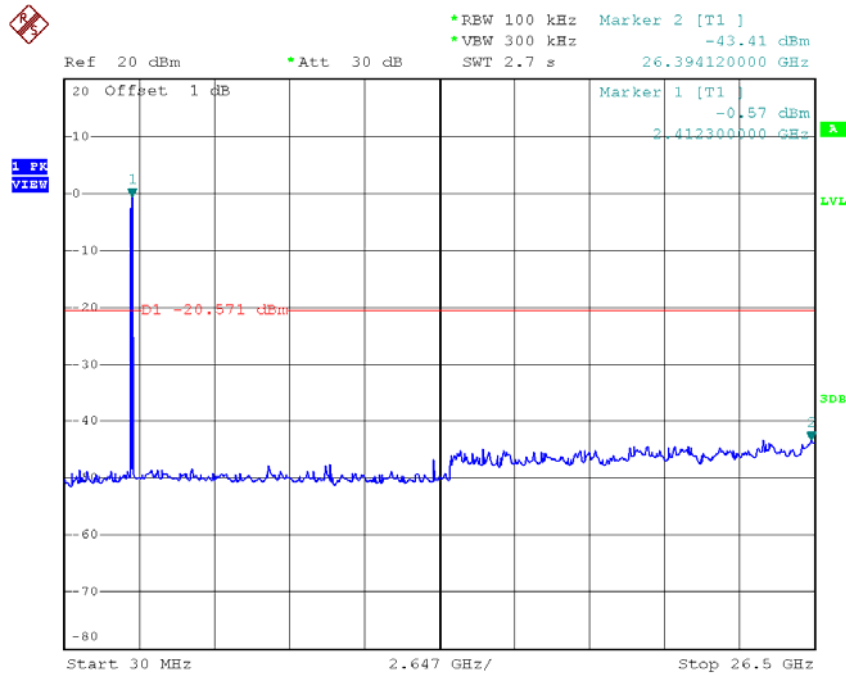
Date: 26.NOV.2014 20:16:05

TX HT20 mode CH11



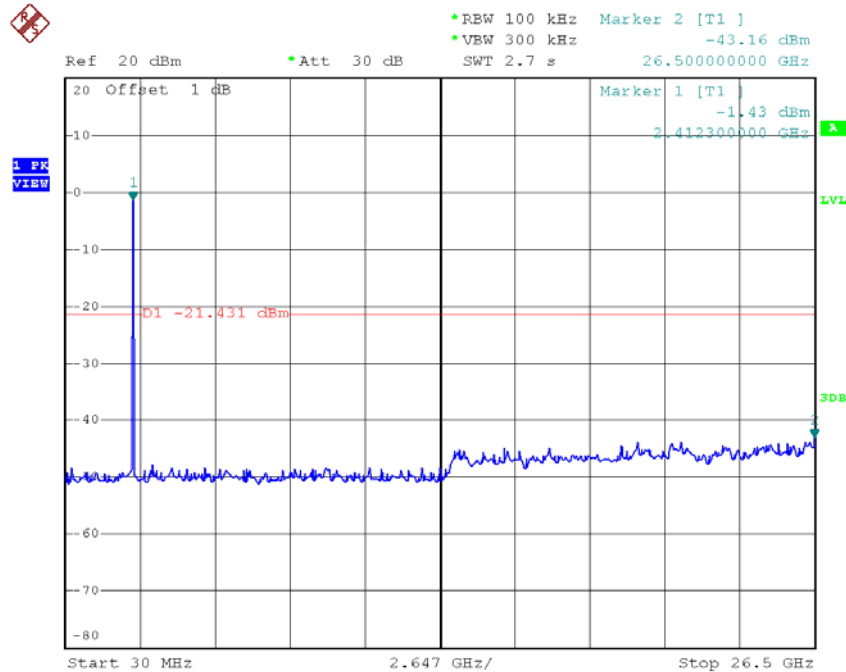
Date: 26.NOV.2014 20:17:54

TX HT20 mode CH01 (10 Harmonic of the frequency)



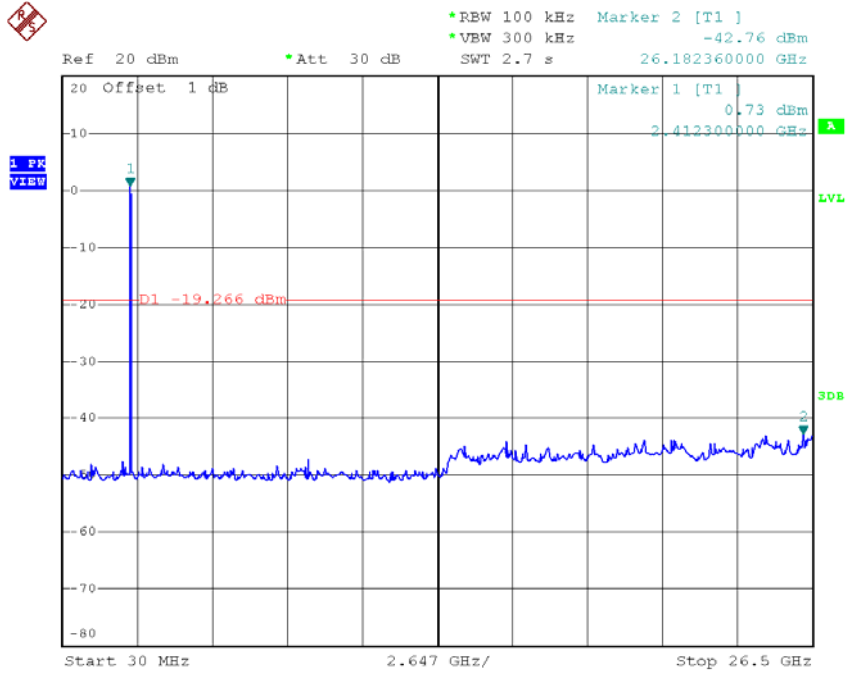
Date: 26.NOV.2014 20:15:58

TX HT20 mode CH06 (10 Harmonic of the frequency)



Date: 26.NOV.2014 20:16:51

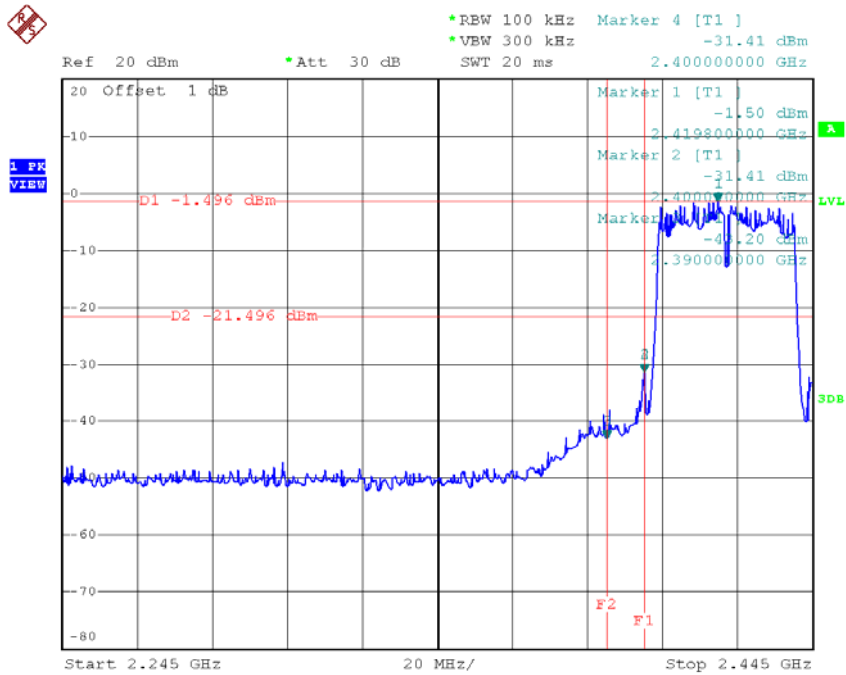
TX HT20 mode CH11 (10 Harmonic of the frequency)



Date: 26.NOV.2014 20:17:46

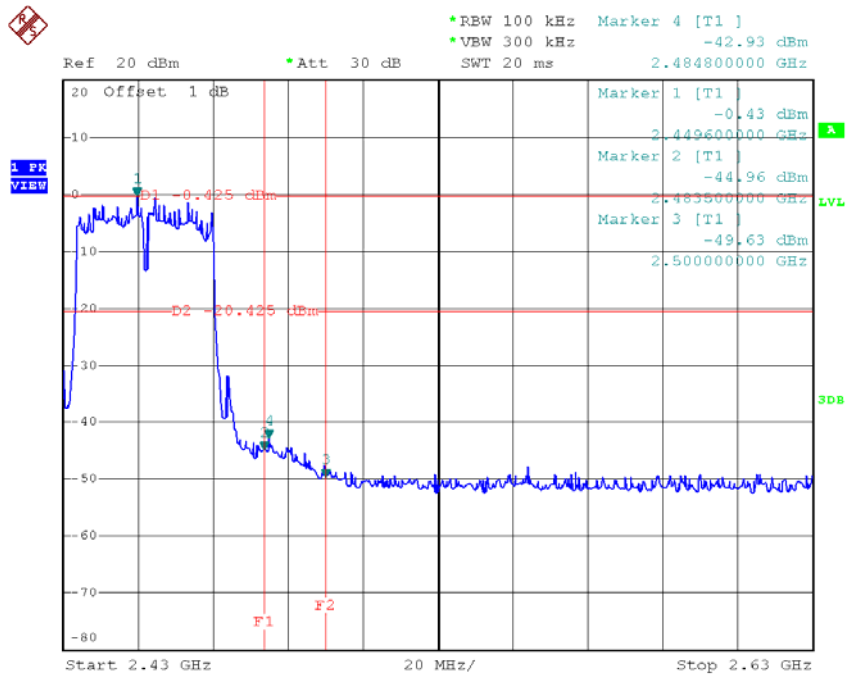
Test Mode :	TX N-40M Mode_ANT 1
-------------	---------------------

TX HT40 mode CH03



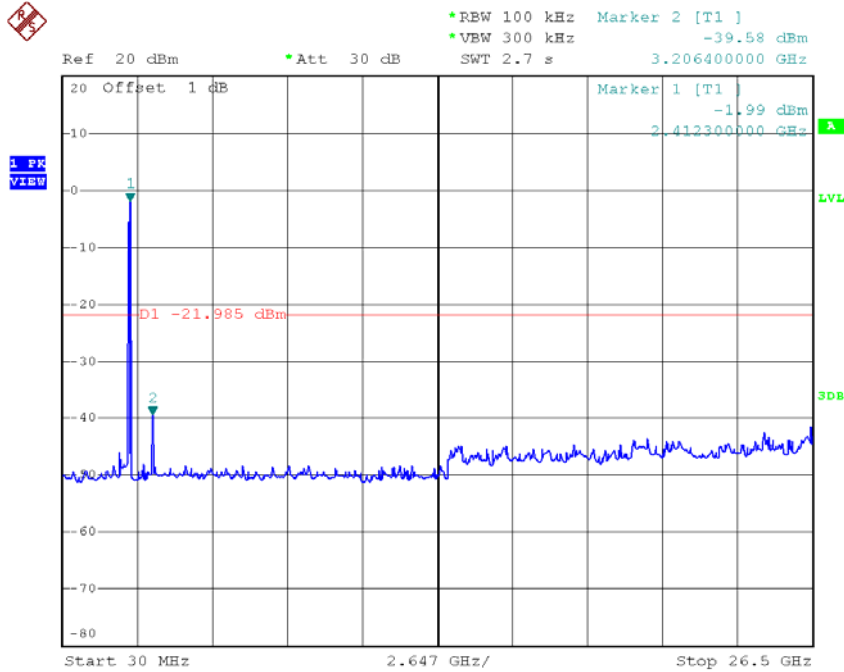
Date: 26.NOV.2014 20:23:29

TX HT40 mode CH09



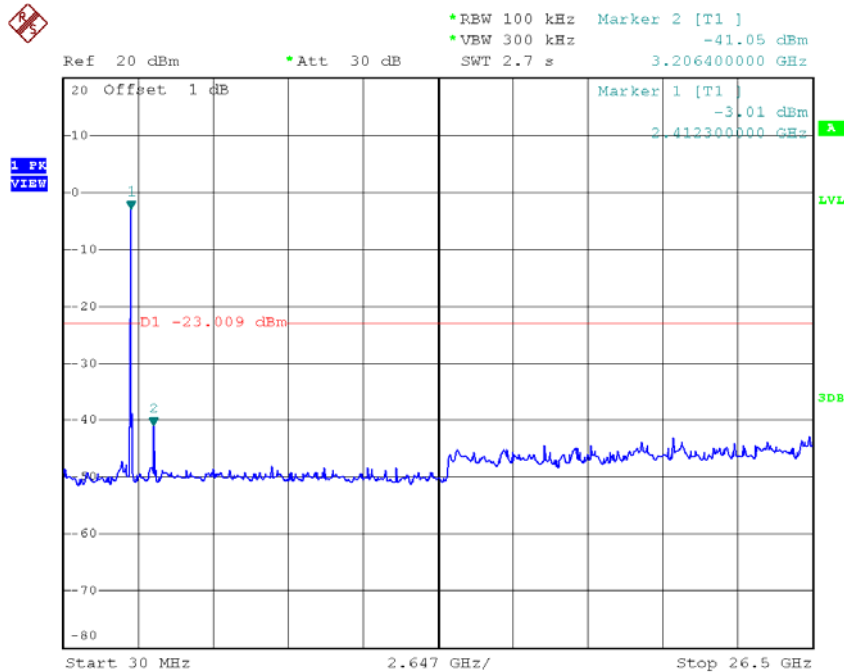
Date: 26.NOV.2014 20:25:17

TX HT40 mode CH03 (10 Harmonic of the frequency)



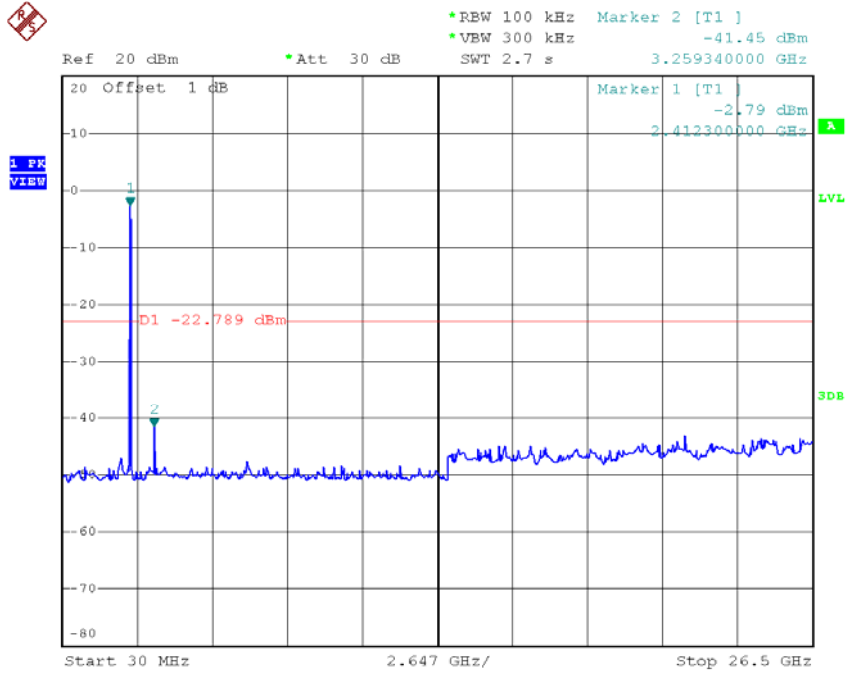
Date: 26.NOV.2014 20:23:21

TX HT40 mode CH06 (10 Harmonic of the frequency)



Date: 26.NOV.2014 20:24:20

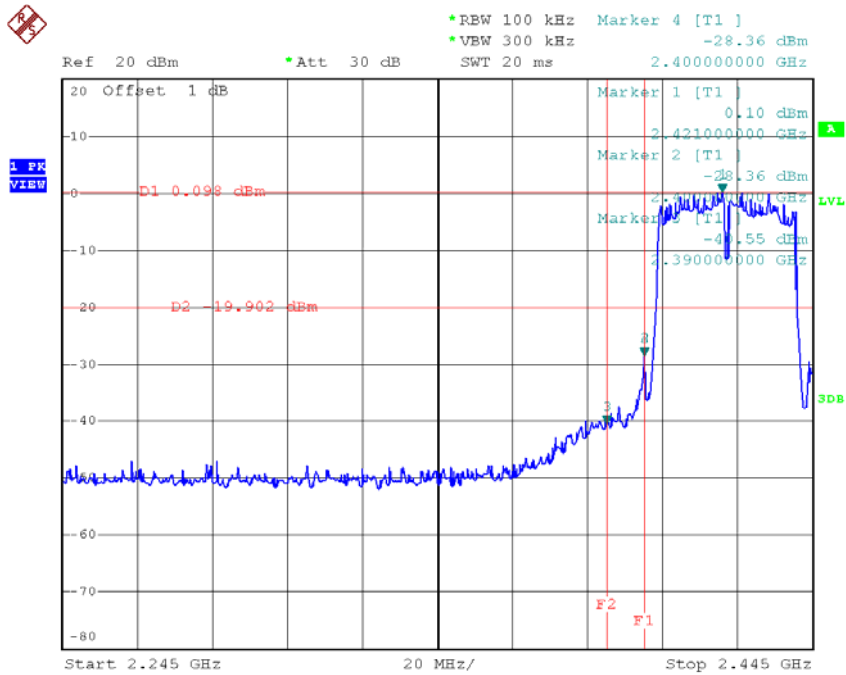
TX HT40 mode CH09 (10 Harmonic of the frequency)



Date: 26.NOV.2014 20:25:10

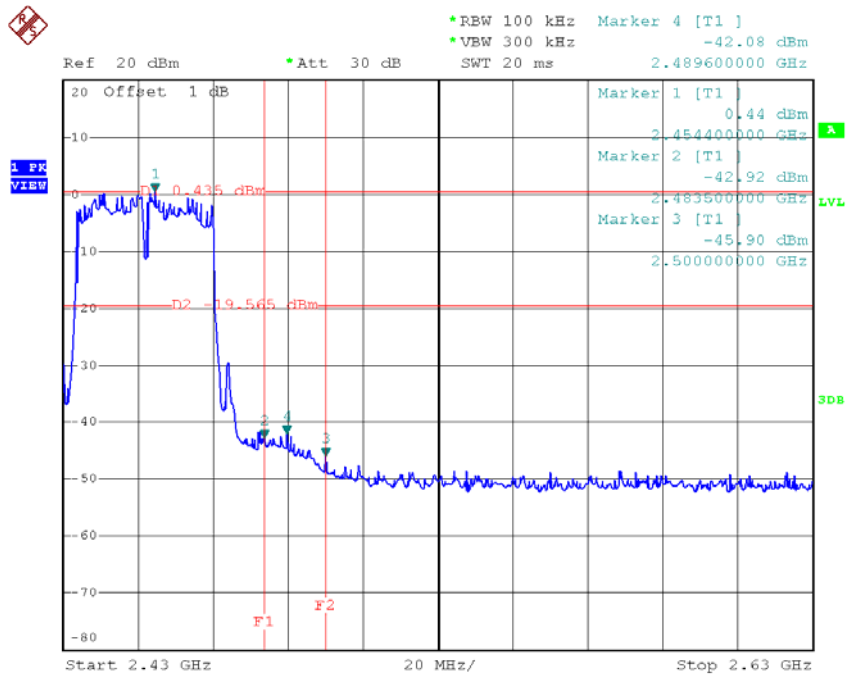
Test Mode :	TX N-40M Mode_ANT 2
-------------	---------------------

TX HT40 mode CH03



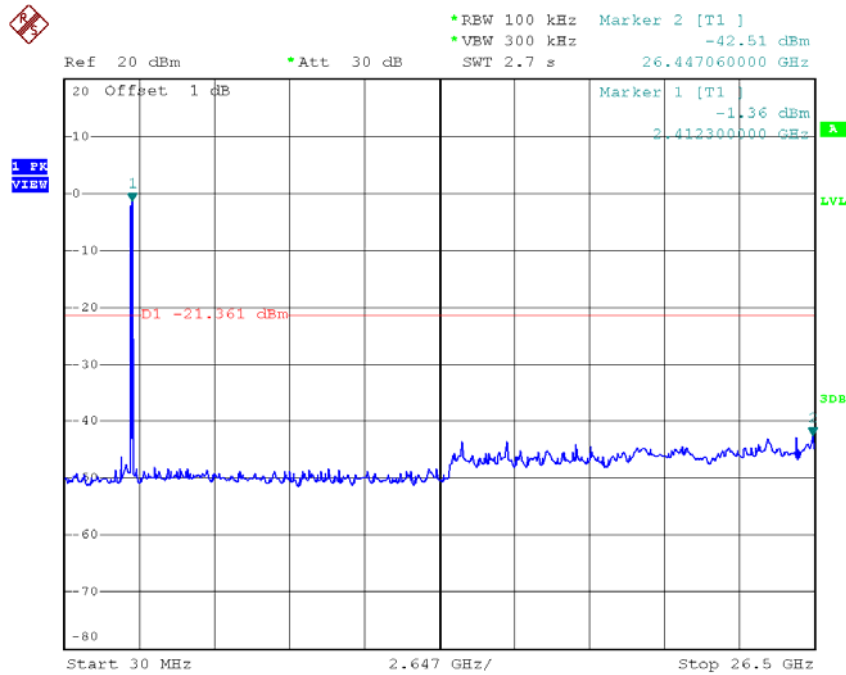
Date: 26.NOV.2014 20:26:59

TX HT40 mode CH09



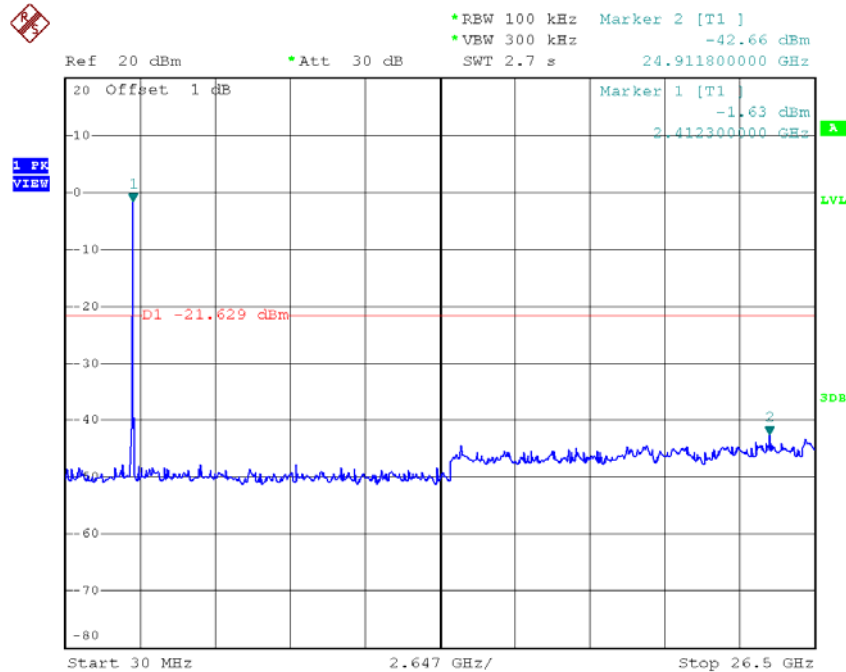
Date: 26.NOV.2014 20:28:40

TX HT40 mode CH03 (10 Harmonic of the frequency)



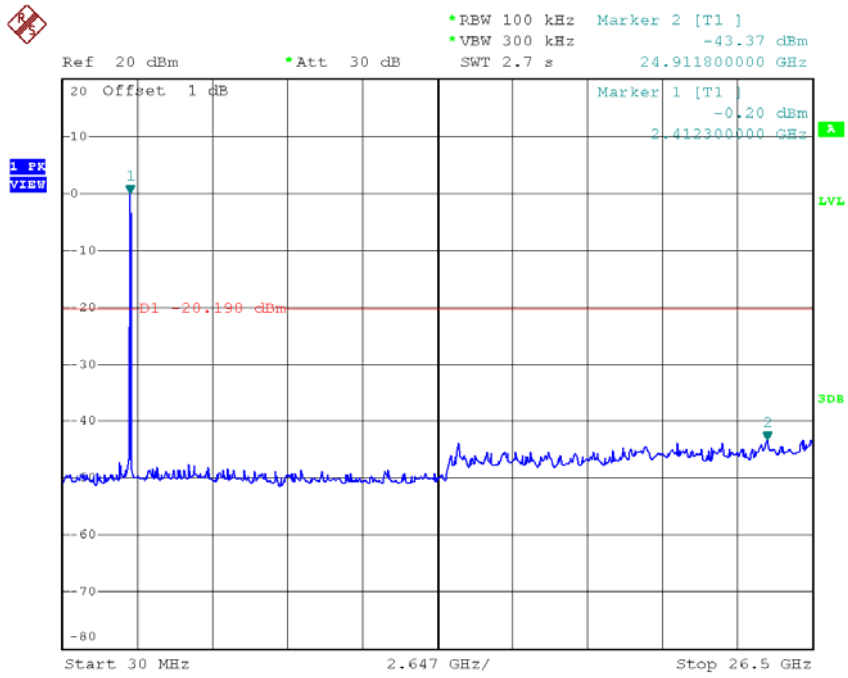
Date: 26.NOV.2014 20:26:52

TX HT40 mode CH06 (10 Harmonic of the frequency)



Date: 26.NOV.2014 20:27:45

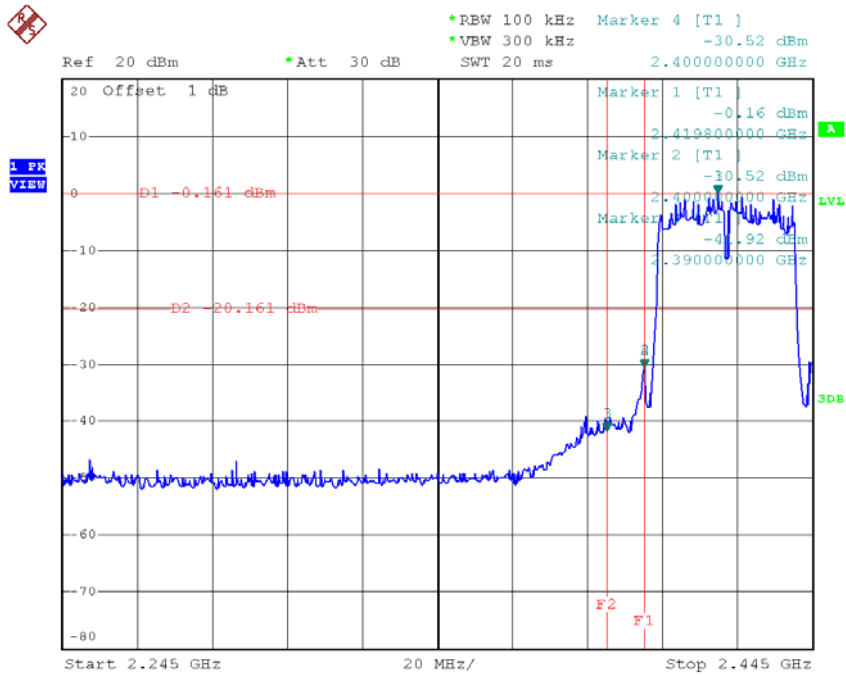
TX HT40 mode CH09 (10 Harmonic of the frequency)



Date: 26.NOV.2014 20:28:33

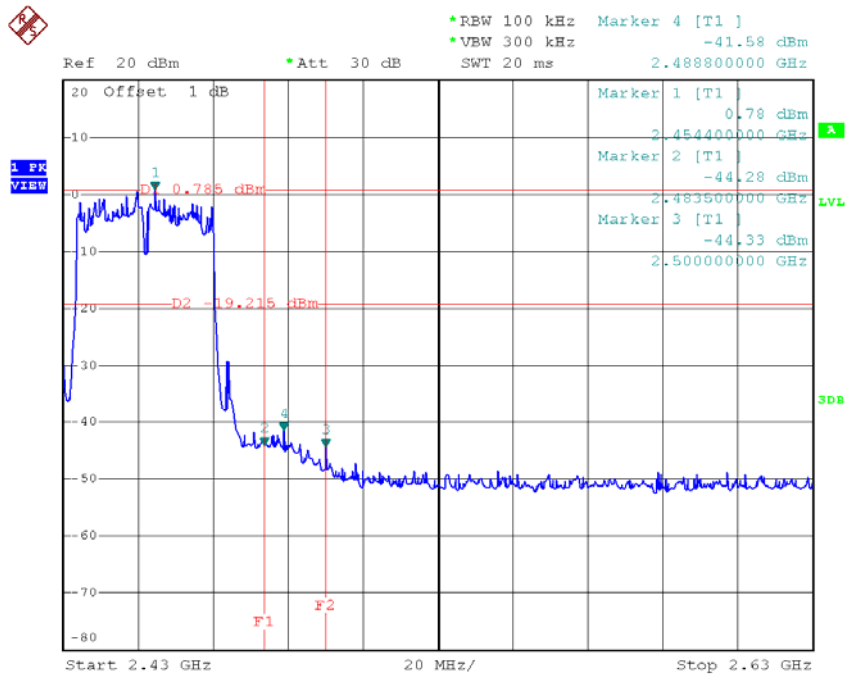
Test Mode :	TX N-40M Mode_ANT 3
--------------------	----------------------------

TX HT40 mode CH03



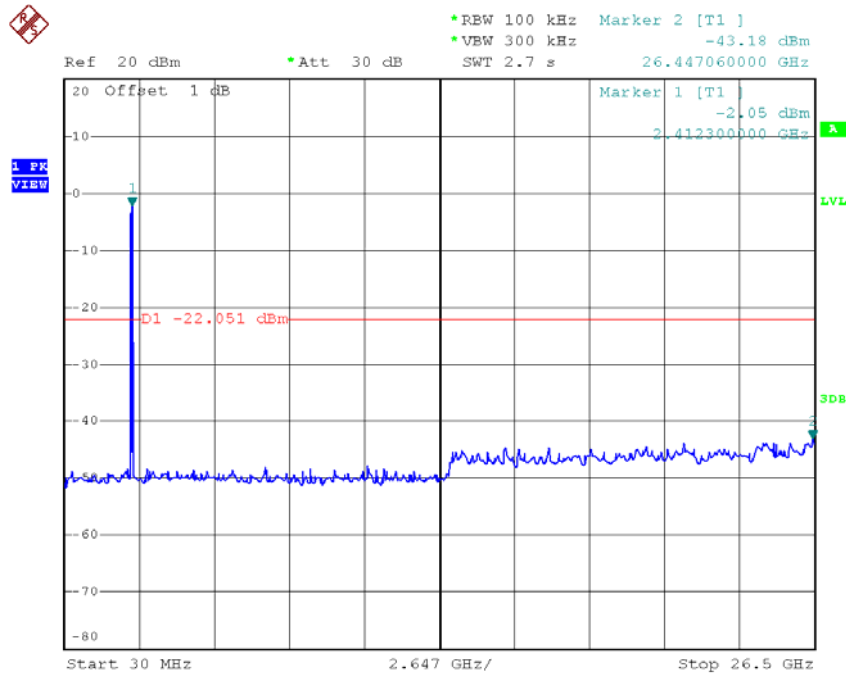
Date: 26.NOV.2014 20:19:30

TX HT40 mode CH09



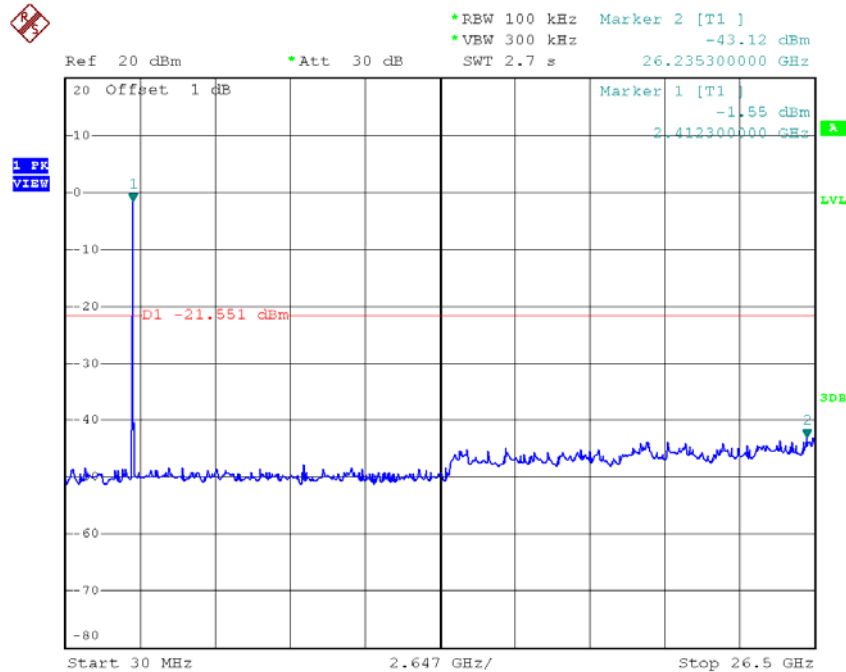
Date: 26.NOV.2014 20:21:15

TX HT40 mode CH03 (10 Harmonic of the frequency)



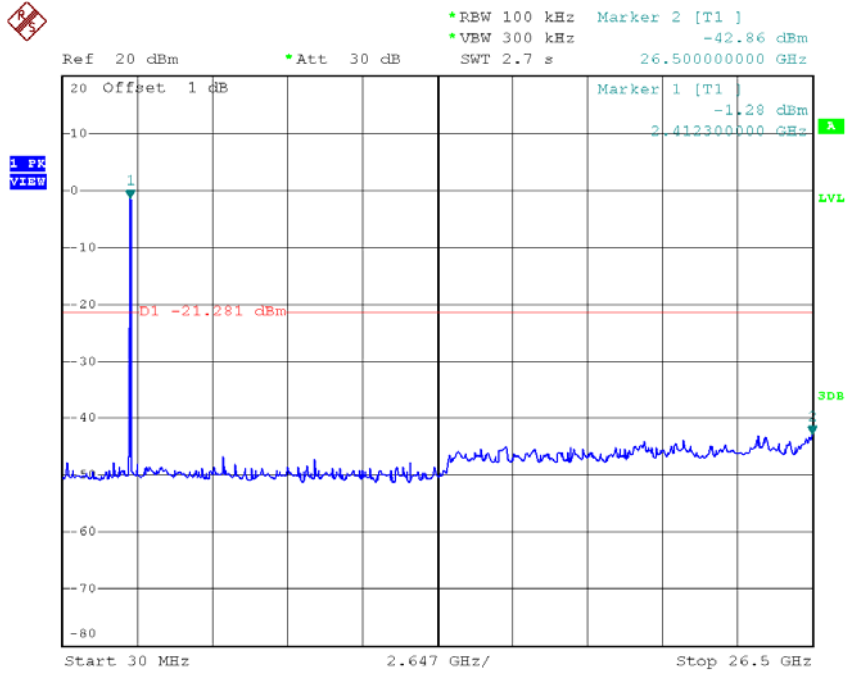
Date: 26.NOV.2014 20:19:23

TX HT40 mode CH06 (10 Harmonic of the frequency)



Date: 26.NOV.2014 20:20:18

TX HT40 mode CH09 (10 Harmonic of the frequency)



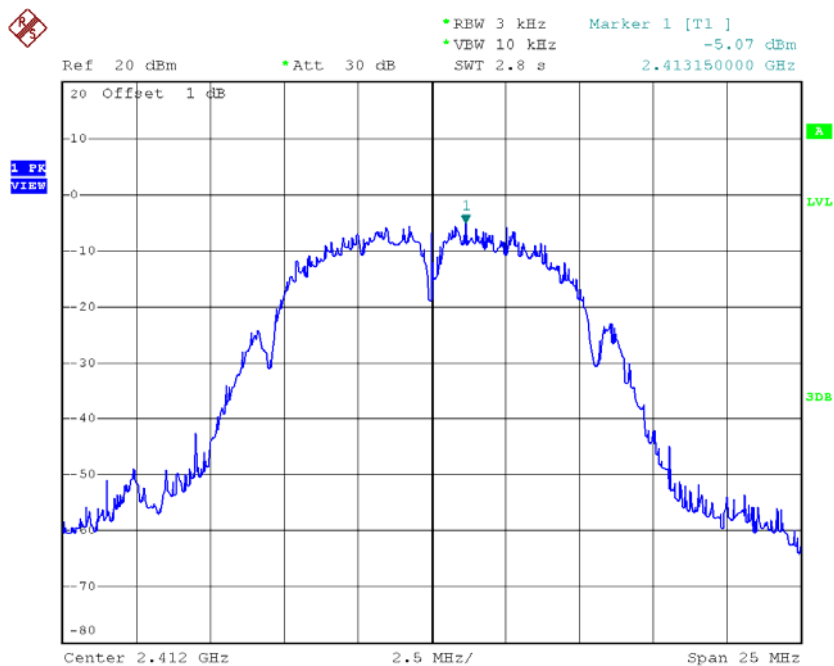
Date: 26.NOV.2014 20:21:08

ATTACHMENT H - POWER SPECTRAL DENSITY

Test Mode :TX B Mode_CH01/06/11

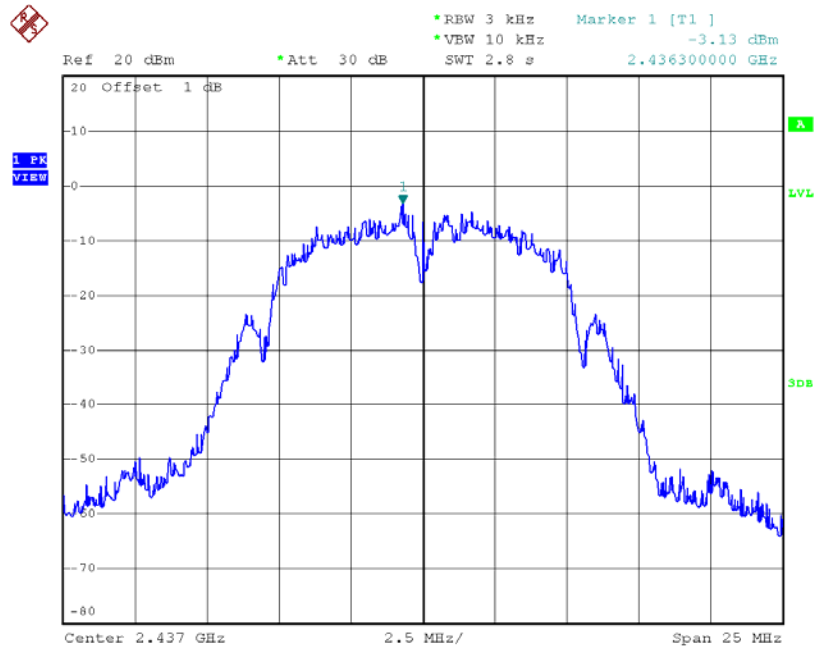
Frequency (MHz)	Power Density (dBm/3kHz)	Power Density (mW/3kHz)	Max. Limit (dBm)	Result
2412	-5.07	0.31	8.00	Complies
2437	-3.13	0.49	8.00	Complies
2462	-4.30	0.37	8.00	Complies

TX CH01



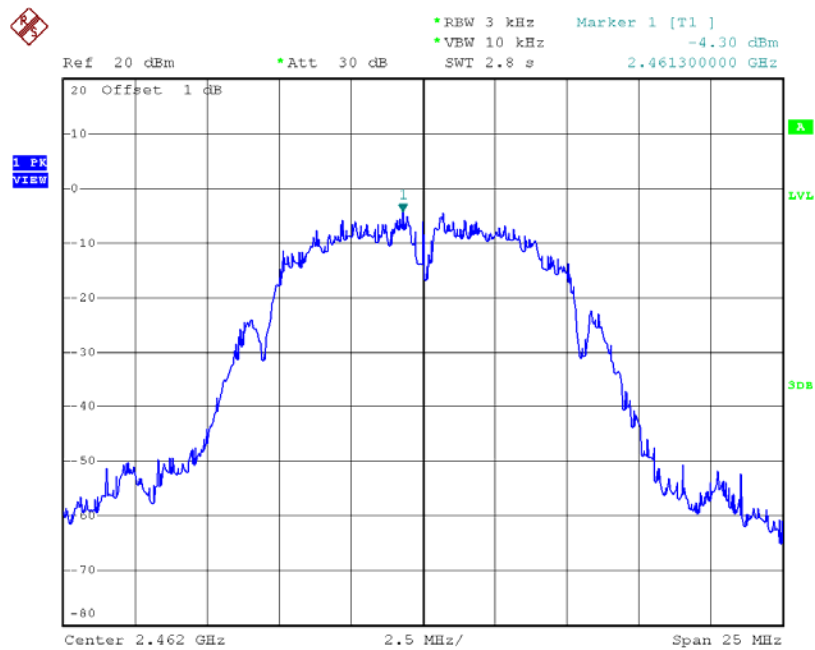
Date: 26.NOV.2014 20:01:21

TX CH06



Date: 26.NOV.2014 20:02:22

TX CH11

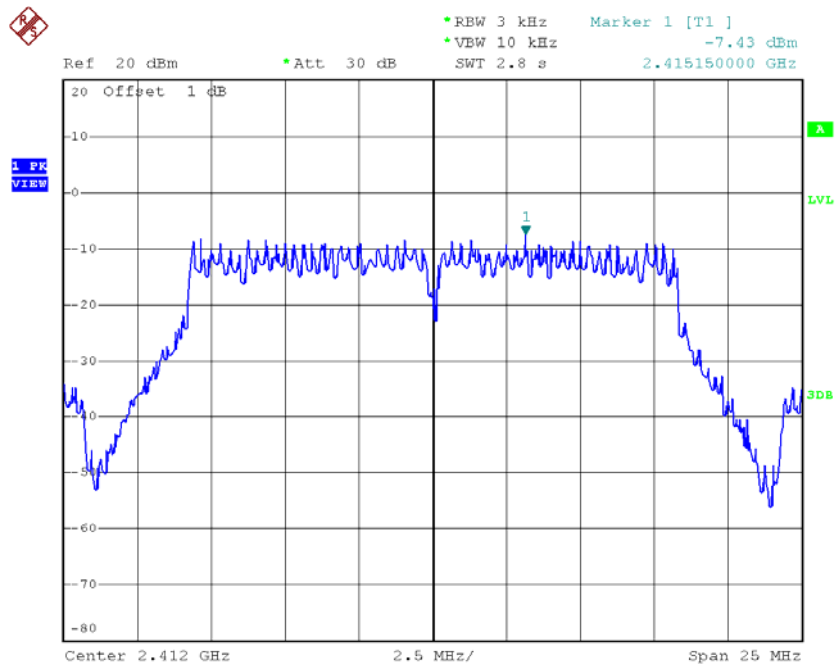


Date: 26.NOV.2014 20:03:19

Test Mode :TX G Mode_CH01/06/11

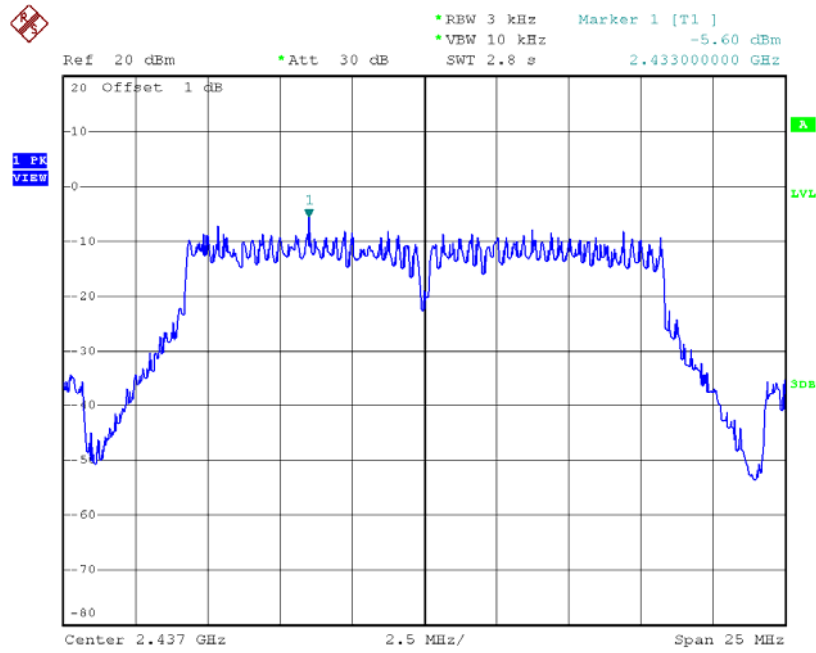
Frequency (MHz)	Power Density (dBm/3kHz)	Power Density (mW/3kHz)	Max. Limit (dBm)	Result
2412	-7.43	0.18	8.00	Complies
2437	-5.60	0.28	8.00	Complies
2462	-7.43	0.18	8.00	Complies

TX CH01



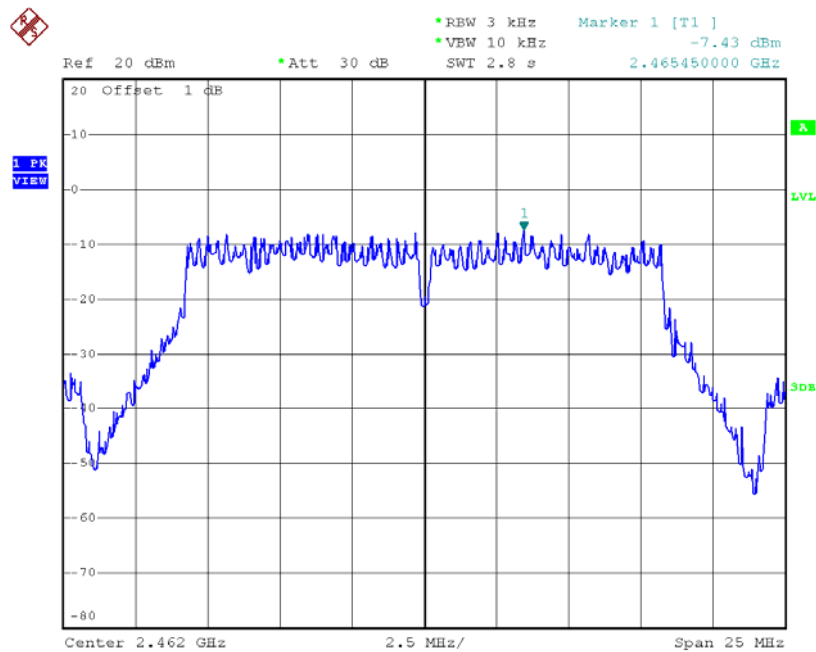
Date: 26.NOV.2014 20:06:06

TX CH06



Date: 26.NOV.2014 20:06:52

TX CH11

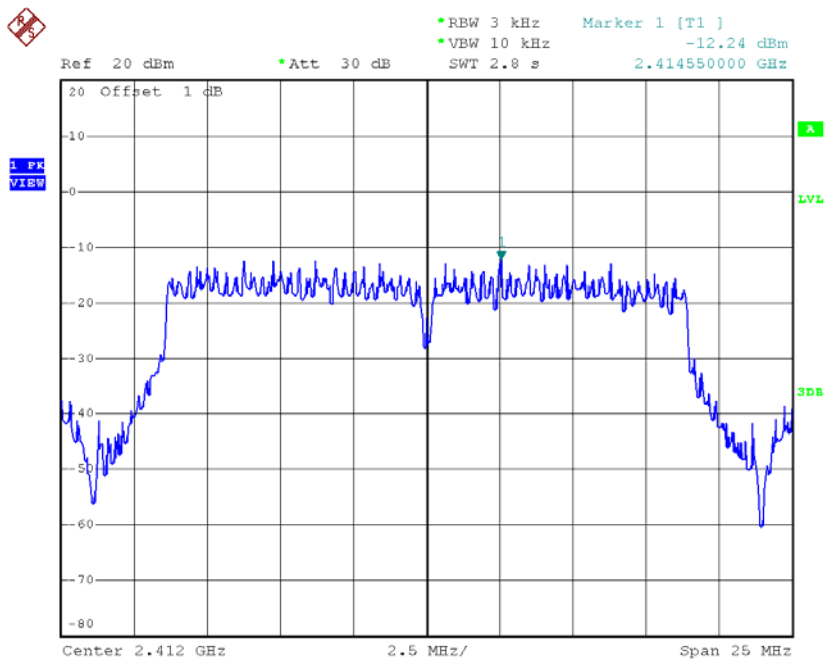


Date: 26.NOV.2014 20:07:43

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

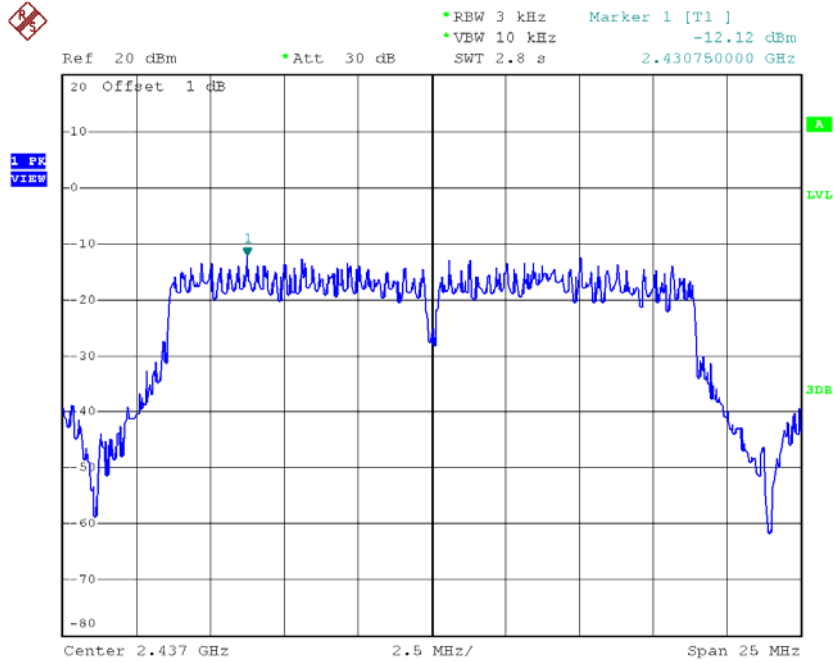
Frequency (MHz)	Power Density (dBm/3kHz)	Power Density (mW/3kHz)	Max. Limit (dBm)	Result
2412	-12.24	0.06	8.00	Complies
2437	-12.12	0.06	8.00	Complies
2462	-12.08	0.06	8.00	Complies

TX CH01



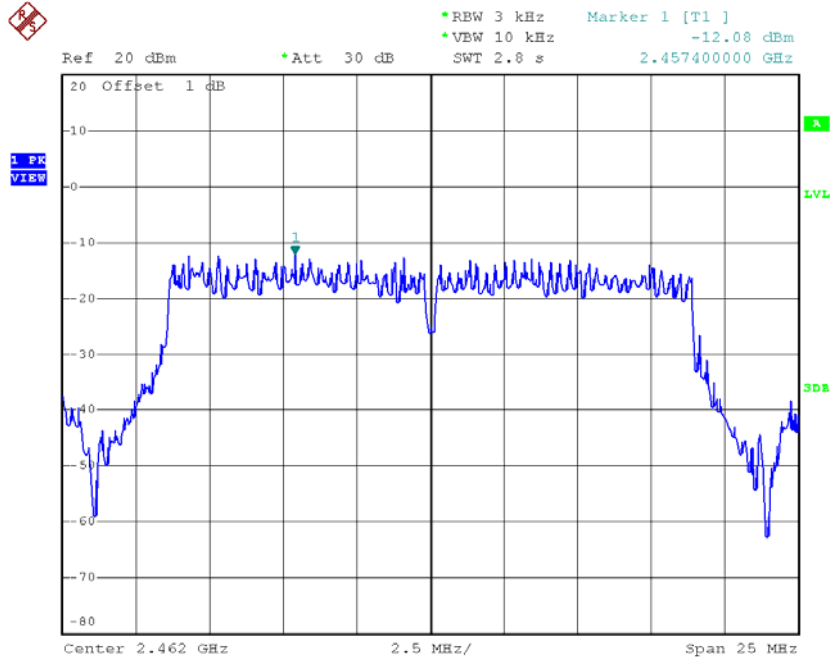
Date: 26.NOV.2014 20:12:41

TX CH06



Date: 26.NOV.2014 20:13:27

TX CH11

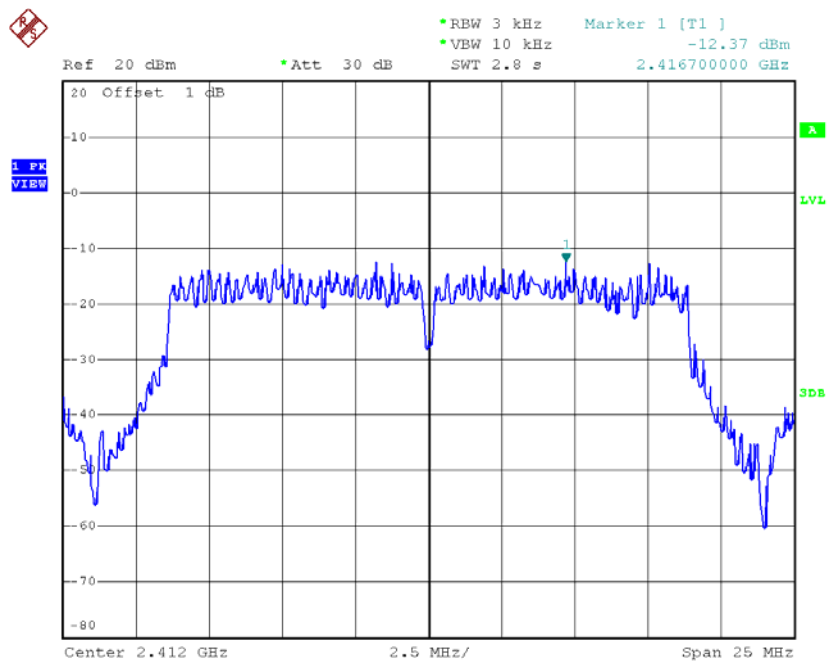


Date: 26.NOV.2014 20:14:17

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

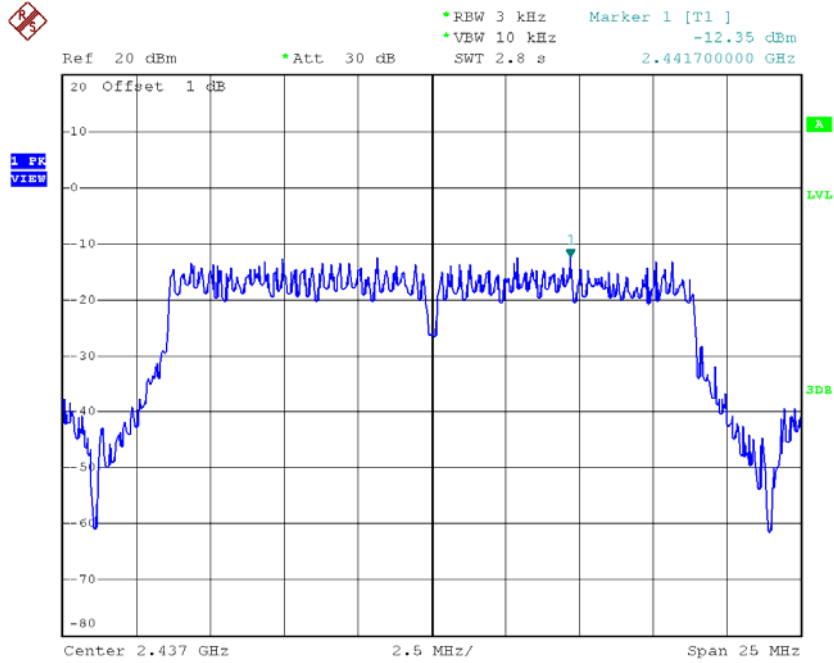
Frequency (MHz)	Power Density (dBm/3kHz)	Power Density (mW/3kHz)	Max. Limit (dBm)	Result
2412	-12.37	0.06	8.00	Complies
2437	-12.35	0.06	8.00	Complies
2462	-12.41	0.06	8.00	Complies

TX CH01



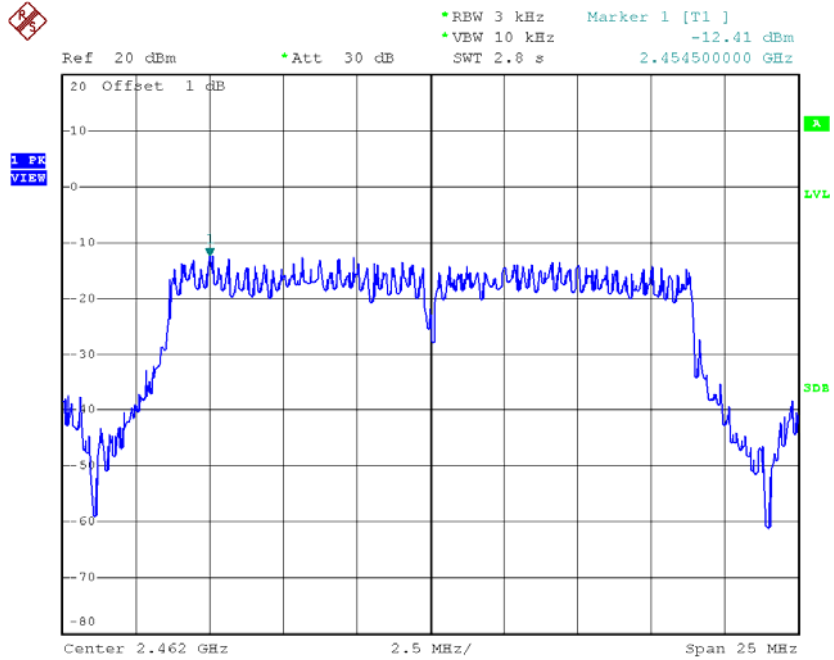
Date: 26.NOV.2014 20:09:24

TX CH06



Date: 26.NOV.2014 20:10:09

TX CH11

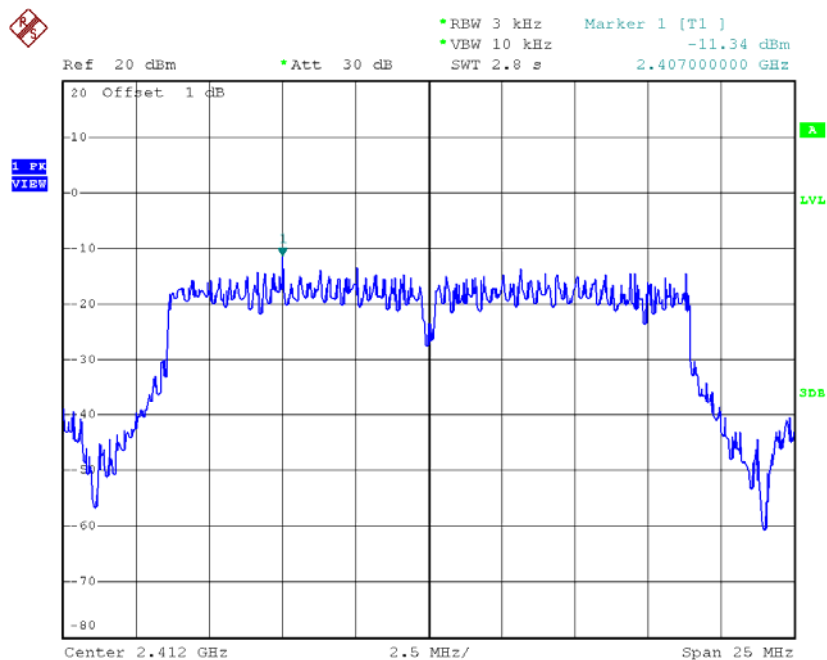


Date: 26.NOV.2014 20:11:10

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

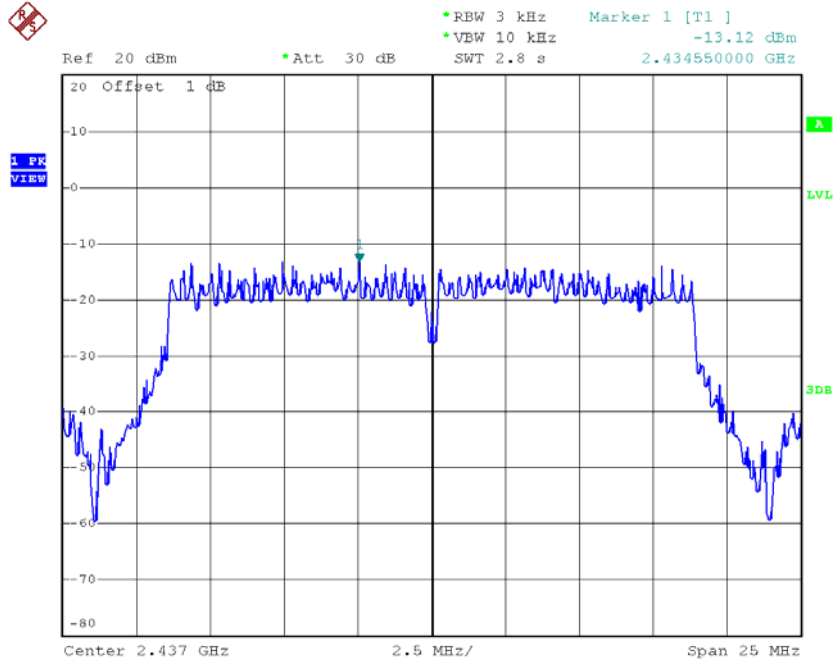
Frequency (MHz)	Power Density (dBm/3kHz)	Power Density (mW/3kHz)	Max. Limit (dBm)	Result
2412	-11.34	0.07	8.00	Complies
2437	-13.12	0.05	8.00	Complies
2462	-11.95	0.06	8.00	Complies

TX CH01



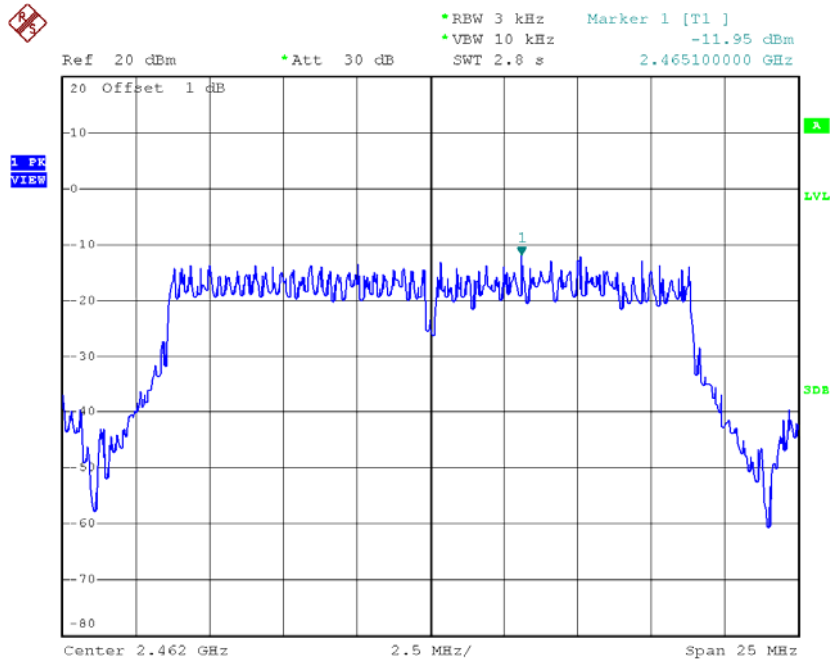
Date: 26.NOV.2014 20:16:14

TX CH06



Date: 26.NOV.2014 20:17:00

TX CH11



Date: 26.NOV.2014 20:18:03

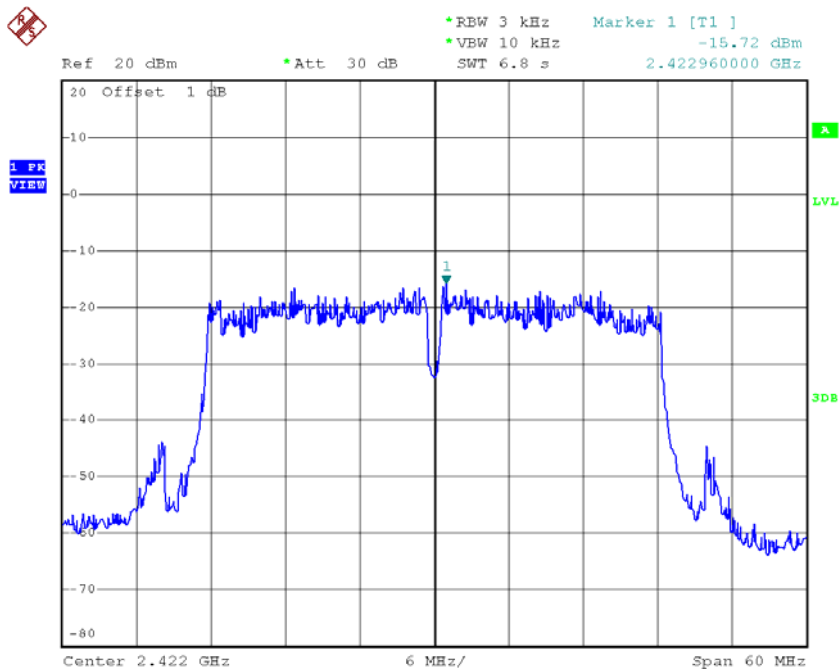
Test Mode : TX N-20M Mode_CH01/06/11_Total

Frequency (MHz)	Power Density (dBm/3kHz)	Power Density (mW/3kHz)	Max. Limit (dBm)	Result
2412	-7.19	0.19	8.00	Complies
2437	-7.74	0.17	8.00	Complies
2462	-7.37	0.18	8.00	Complies

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

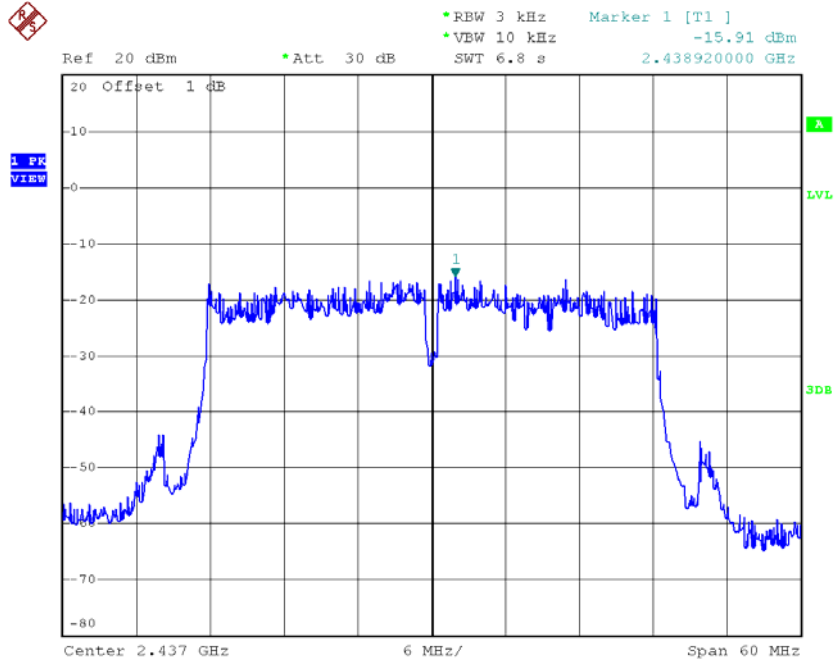
Frequency (MHz)	Power Density (dBm/3kHz)	Power Density (mW/3kHz)	Max. Limit (dBm)	Result
2422	-15.72	0.03	8.00	Complies
2437	-15.91	0.03	8.00	Complies
2452	-15.38	0.03	8.00	Complies

TX CH03



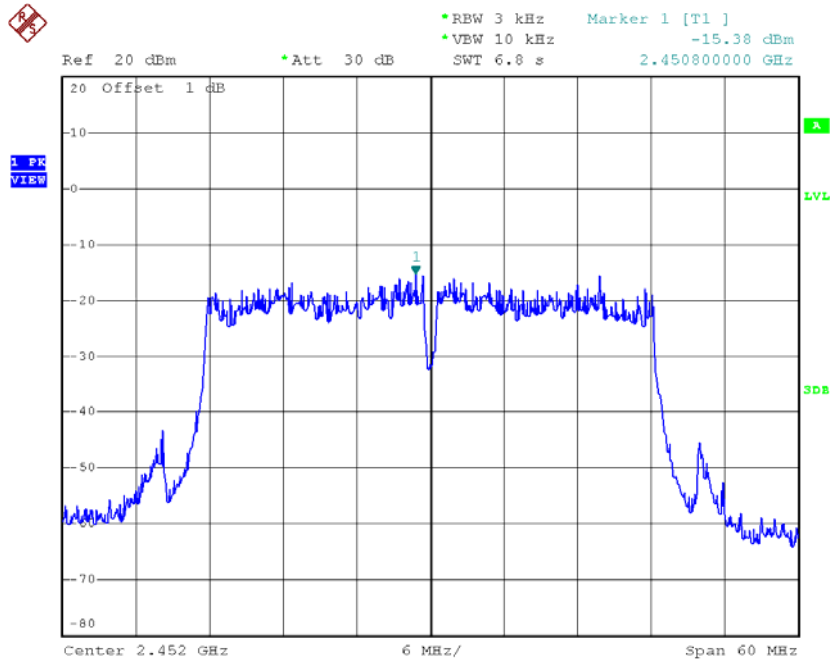
Date: 26.NOV.2014 20:23:41

TX CH06



Date: 26.NOV.2014 20:24:31

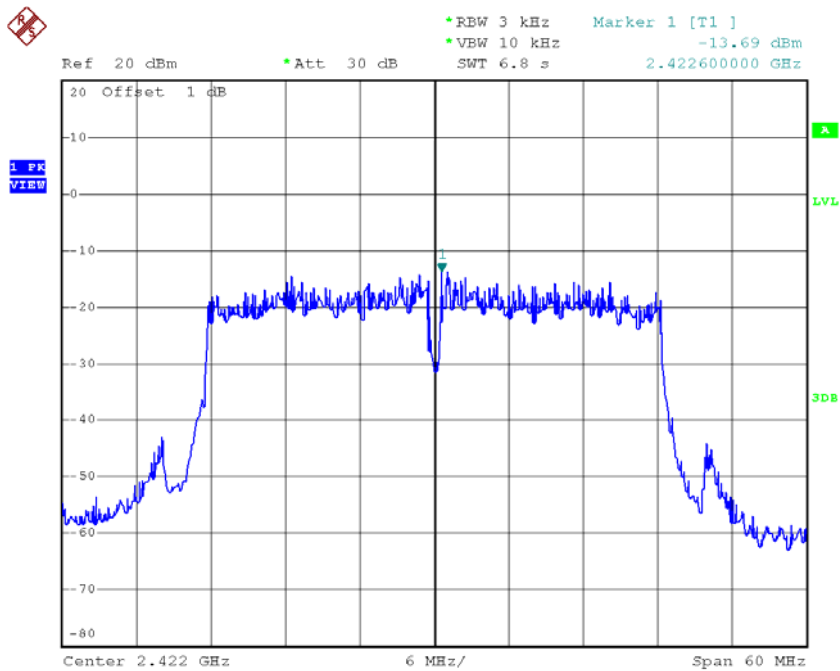
TX CH09



Date: 26.NOV.2014 20:25:29

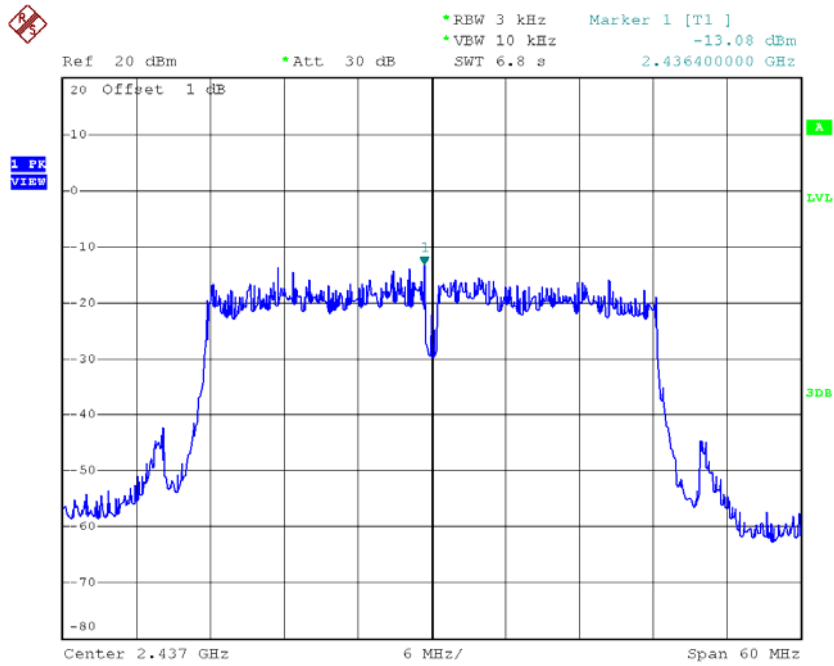
Test Mode : TX N-40M Mode_CH03/06/09_ANT 2

Frequency (MHz)	Power Density (dBm/3kHz)	Power Density (mW/3kHz)	Max. Limit (dBm)	Result
2422	-13.69	0.04	8.00	Complies
2437	-13.08	0.05	8.00	Complies
2452	-13.70	0.04	8.00	Complies

TX CH03


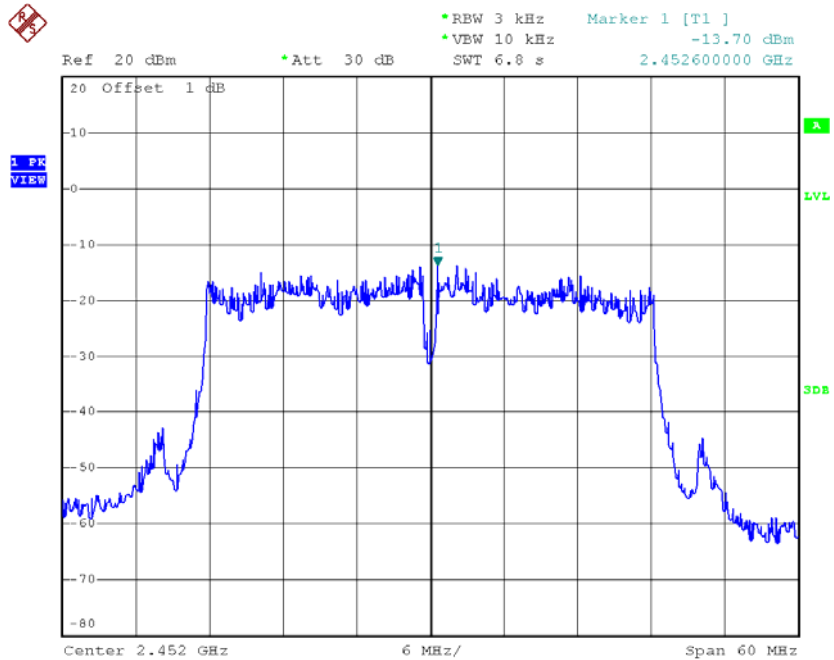
Date: 26.NOV.2014 20:27:11

TX CH06



Date: 26.NOV.2014 20:27:57

TX CH09

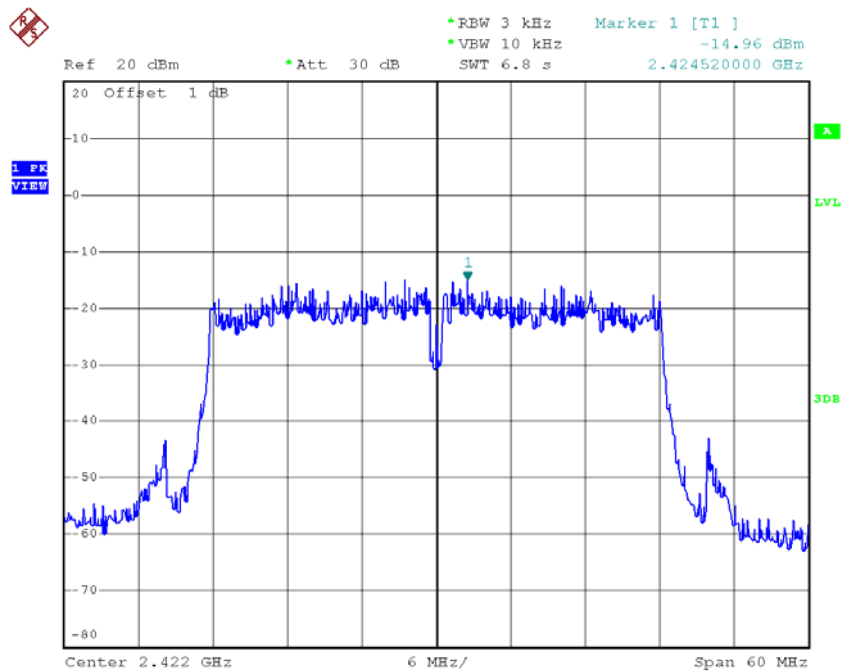


Date: 26.NOV.2014 20:28:52

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

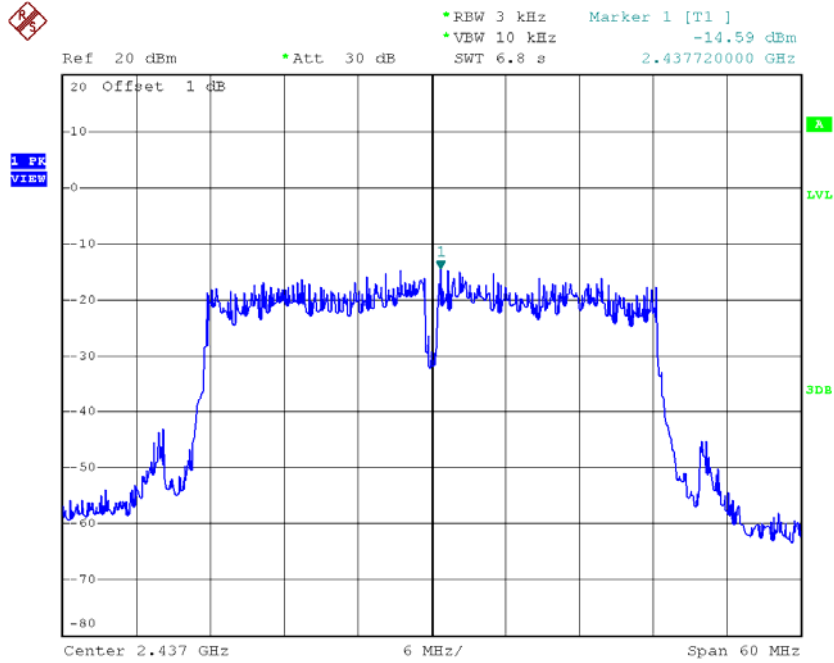
Frequency (MHz)	Power Density (dBm/3kHz)	Power Density (mW/3kHz)	Max. Limit (dBm)	Result
2422	-14.96	0.03	8.00	Complies
2437	-14.59	0.03	8.00	Complies
2452	-12.97	0.05	8.00	Complies

TX CH03



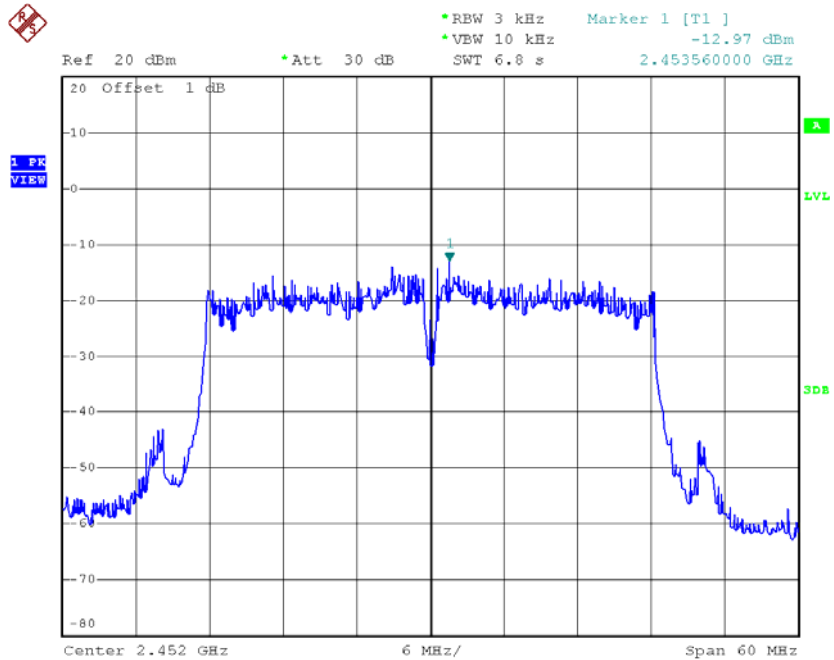
Date: 26.NOV.2014 20:19:42

TX CH06



Date: 26.NOV.2014 20:20:30

TX CH09



Date: 26.NOV.2014 20:21:27

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

Frequency (MHz)	Power Density (dBm/3kHz)	Power Density (mW/3kHz)	Max. Limit (dBm)	Result
2422	-9.94	0.10	8.00	Complies
2437	-9.60	0.11	8.00	Complies
2452	-9.13	0.12	8.00	Complies