FCC Radio Test Report

FCC ID: 2AB9W-3F11X

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

Project No.	:	1411074
Equipment	:	3D Printer
Model Name	:	da Vinci 1.1 Plus
Applicant	:	XYZprinting, Inc.
Address	:	10F., No.99, Sec. 5, Nanjing E. Rd., Songshan Dist., Taipei City 10571, Taiwan (R.O.C.)

Date of Receipt	:	Nov. 11, 2014
Date of Test	:	Nov. 11, 2014~Dec. 03, 2014
Issued Date	:	Dec. 04, 2014
Tested by	:	BTL Inc.

Testing Engineer : (Josh Lin)

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Declaration

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

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Limitation

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

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REPORT ISSUED HISTORY

Issued No.	Description	Issued Date
BTL-FCCP-1-1411074	Original Issue.	Dec. 04, 2014

1. CERTIFICATION

Equipment	:	3D Printer
Brand Name	:	XYZprinting
Model Name	:	da Vinci 1.1 Plus
Applicant	:	XYZprinting, Inc.
Manufacturer	:	Cal-Comp Electronics (Thailand) Public Company Limited
Address	:	138, Moo 4, Phechkasem Road, Sapang, Koawyoi, Petchaburi 76140, Thailand.
Factory	:	Cal-Comp Electronics (Thailand) Public Company Limited
Address	:	138, Moo 4, Phechkasem Road, Sapang, Koawyoi, Petchaburi 76140, Thailand.
Date of Test	:	Nov. 11, 2014~Dec. 03, 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-1-1411074) 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)

2.1TEST FACILITY

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

Conducted emission Test:

C02: 1F., No. 61, Ln. 77, Sing-ai Rd., Neihu Dist., Taipei City 114, Taiwan (R.O.C.)

Radiated emission Test (Below 1 GHz):

CB08: 1F., No. 61, Ln. 77, Sing-ai Rd., Neihu Dist., Taipei City 114, Taiwan (R.O.C.)

Radiated emission Test (Above 1 GHz):

CB08: 1F., No. 61, Ln. 77, Sing-ai Rd., Neihu Dist., Taipei City 114, Taiwan (R.O.C.)

2.2MEASUREMENT UNCERTAINTY

The measurement uncertainty is not specified by FCC rules for reference only.

The reported uncertainty of measurement **y** ± **U**,where expended uncertainty **U** is based on a standard uncertainty multiplied by a coverage factor of **k=2**,providing a level of confidence of approximately **95**%.

The measurement instrumentation uncertainty considerations contained in CISPR 16-4-2.

A. Conducted emission test:

Test Site	Measurement Frequency Range	U,(dB)	NOTE
C02	150 kHz ~ 30 MHz	2.59	

B. Radiated emission test:

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

Our calculated Measurement Instrumentation Uncertainty is shown in the tables above. These are our U_{lab} values in CISPR 16-4-2 terminology.

Since Table 1 of CISPR 16-4-2 has values of measurement instrumentation uncertainty, called U_{CISPR}, as follows:

Conducted Disturbance (mains port) – 150 kHz – 30 MHz: 3.6 dB

Radiated Disturbance (electric field strength on an open area test site or alternative test site) – 30 MHz – 1000 MHz: 5.2 dB

It can be seen that our U_{lab} values are smaller than U_{CISPR}.

If U_{lab} is less than or equal to U_{CISPR}, then:

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

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

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

3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

Equipment	3D Printer	
Brand Name	XYZprinting	
Model Name	da Vinci 1.1 Plus	
Model Difference	N/A	
Product Description	Operation Frequency	2412~2462 MHz
	Modulation Technology	802.11b:DSSS 802.11g:OFDM 802.11n:OFDM
	Bit Rate of Transmitter	802.11b: 11/5.5/2/1 Mbps 802.11g: 54/48/36/24/18/12/9/6 Mbps 802.11n up to 65 Mbps
	Output Power (Max.)	802.11b: 13.52dBm 802.11g: 18.63dBm 802.11n(20MHz): 17.77dBm
Power Source	AC Mains	
Power Rating	100-127V~ , 4.0A, 200-240V~ 2.0A, 50/60Hz	

Note:

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

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

3. Table for Filed Antenna

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)	Note
1	WIESON	GY136HT0131C-001	Internal	N/A	2.73	TX/RX

3.2 DESCRIPTION OF TEST MODES

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

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

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

For Conducted Test	
Final Test Mode	Description
Mode 4	TX MODE

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

Note:

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

(2) 802.11b mode: DBPSK (1Mbps)
802.11g mode: OFDM (6Mbps)
802.11n HT20 mode : BPSK (6.5Mbps)
For radiated emission tests, the highest output powers were set for final test.

(3) For radiated below 1G test, the 802.11b is found to be the worst case and recorded.

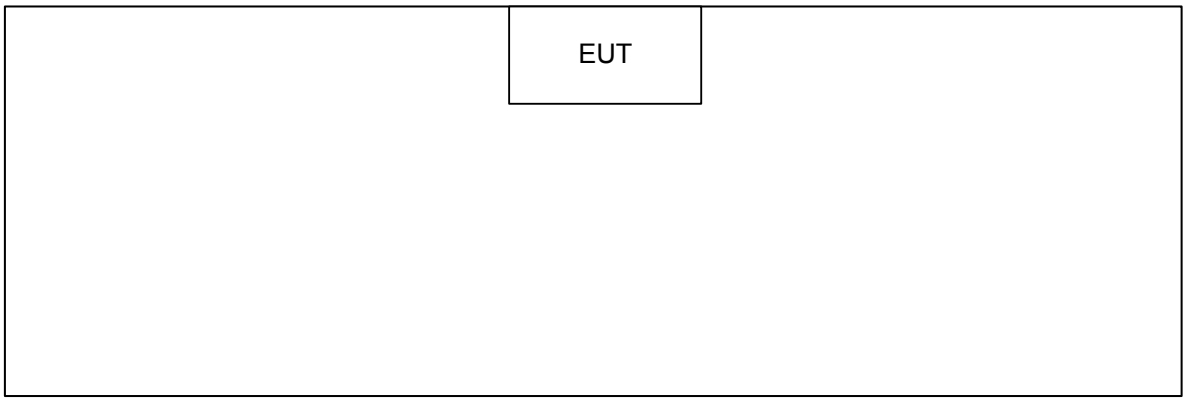
(4) The EUT was programmed to be in continuously transmitting mode and the transmit duty cycle is not less than 98%.

3.3 TABLE OF PARAMETERS OF TEXT SOFTWARE SETTING

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

Test software version	softwave		
Frequency (MHz)	2412	2437	2462
802.11b	N/A	N/A	N/A
802.11g	N/A	N/A	N/A
802.11n (20MHz)	N/A	N/A	N/A

3.4 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED



3.5 DESCRIPTION OF SUPPORT UNITS

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

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

Item	Shielded Type	Ferrite Core	Length	Note
-	-	-	-	

4. EMC EMISSION TEST

4.1 CONDUCTED EMISSION MEASUREMENT

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

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

Note:

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

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

The following table is the setting of the receiver

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

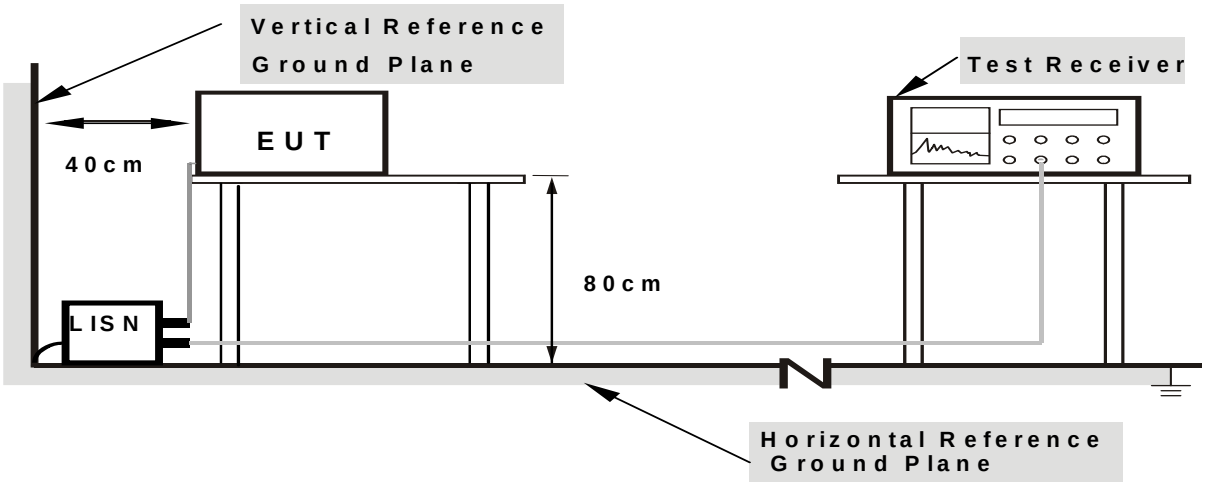
4.1.2 TEST PROCEDURE

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

4.1.3 DEVIATION FROM TEST STANDARD

No deviation

4.1.4 TEST SETUP



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

4.1.5 EUT OPERATING CONDITIONS

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

4.1.6 EUT TEST CONDITIONS

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

4.1.7 TEST RESULTS

Please refer to the Attachment A.

4.2 RADIATED EMISSION MEASUREMENT

4.2.1 RADIATED EMISSION LIMITS

20dB in any 100 KHz bandwidth outside the operating frequency band. In case the emission fall within the restricted band specified on 15.205(a), 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

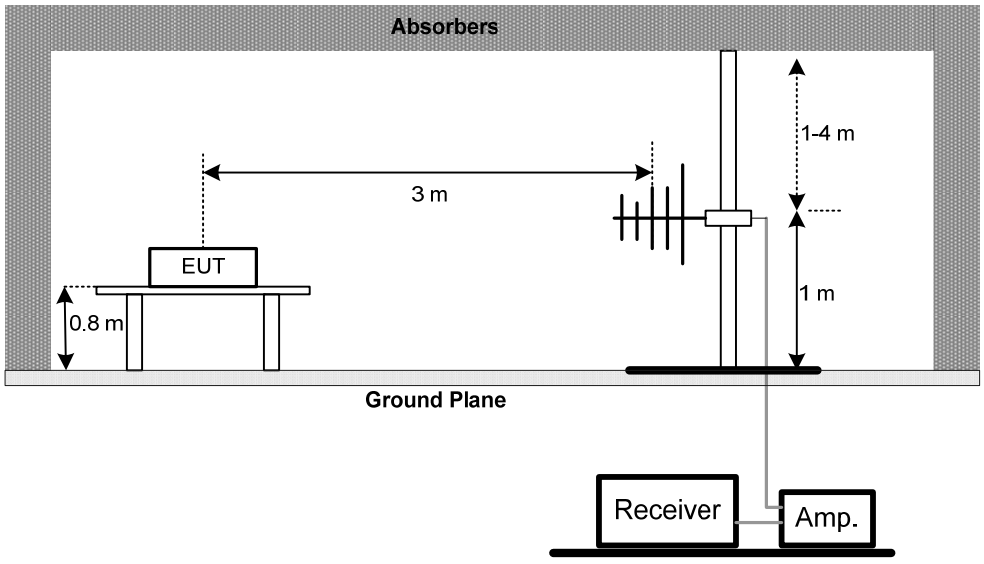
a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1GHz)
b. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a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

4.2.3 DEVIATION FROM TEST STANDARD

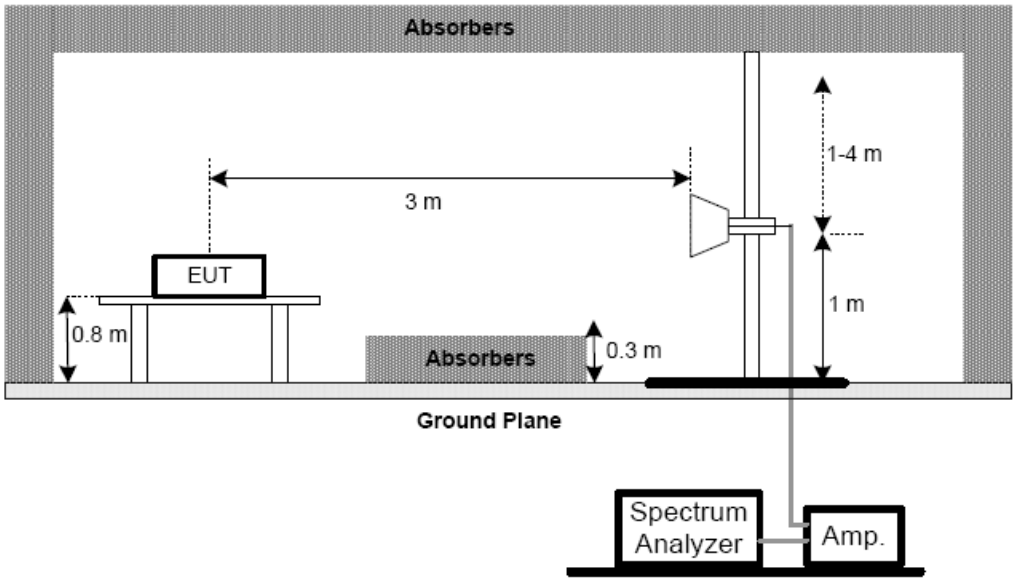
No deviation

4.2.4 TEST SETUP

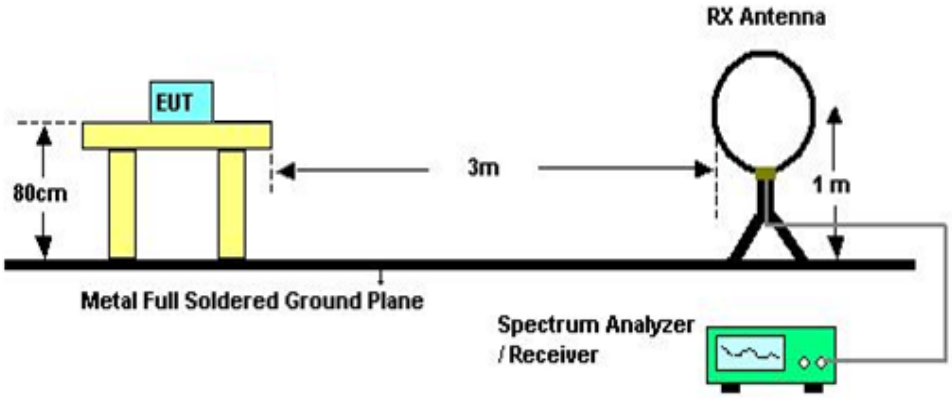
(A) Radiated Emission Test Set-Up Frequency Below 1 GHz



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



(C) For radiated emissions below 30MHz



4.2.5 EUT OPERATING CONDITIONS

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

4.2.6 EUT TEST CONDITIONS

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

4.2.7 TEST RESULTS (9KHZ TO 30MHZ)

Please refer to the Attachment B

Remark:

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

4.2.8 TEST RESULTS (BETWEEN 30MHZ TO 1000 MHZ)

Please refer to the Attachment C.

4.2.9 TEST RESULTS (ABOVE 1000 MHZ)

Please refer to the Attachment D.

Remark:

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

5. BANDWIDTH TEST

5.1 APPLIED PROCEDURES

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

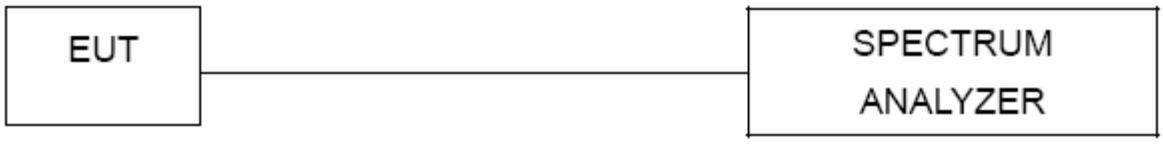
5.1.1 TEST PROCEDURE

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

5.1.2 DEVIATION FROM STANDARD

No deviation.

5.1.3 TEST SETUP



5.1.4 EUT OPERATION CONDITIONS

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

5.1.5 EUT TEST CONDITIONS

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

5.1.6 TEST RESULTS

Please refer to the Attachment E.

6. MAXIMUM PEAK CONDUCTED OUTPUT POWER TEST

6.1 APPLIED PROCEDURES / LIMIT

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

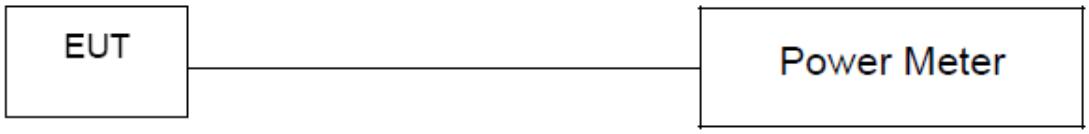
6.1.1 TEST PROCEDURE

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

6.1.2 DEVIATION FROM STANDARD

No deviation.

6.1.3 TEST SETUP



6.1.4 EUT OPERATION CONDITIONS

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

6.1.5 EUT TEST CONDITIONS

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

6.1.6 TEST RESULTS

Please refer to the Attachment F.

7. ANTENNA CONDUCTED SPURIOUS EMISSION

7.1 APPLIED PROCEDURES / LIMIT

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

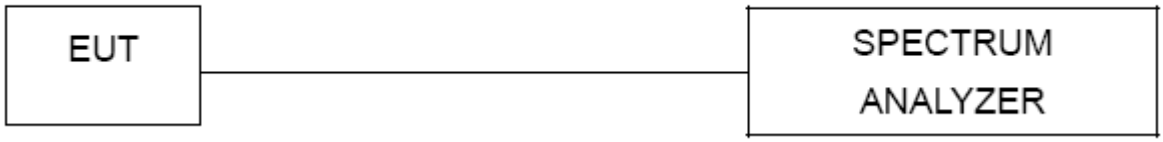
7.1.1 TEST PROCEDURE

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

7.1.2 DEVIATION FROM STANDARD

No deviation.

7.1.3 TEST SETUP



7.1.4 EUT OPERATION CONDITIONS

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

7.1.5 EUT TEST CONDITIONS

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

7.1.6 TEST RESULTS

Please refer to the Attachment G.

8. POWER SPECTRAL DENSITY TEST

8.1 APPLIED PROCEDURES / LIMIT

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

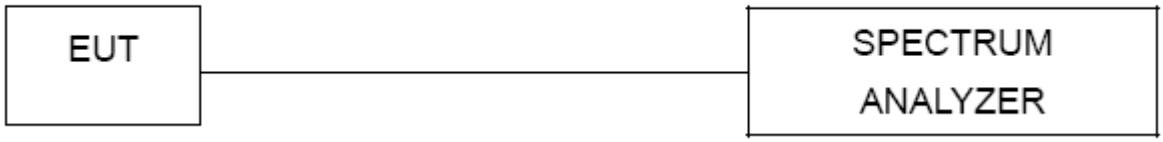
8.1.1 TEST PROCEDURE

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

8.1.2 DEVIATION FROM STANDARD

No deviation.

8.1.3 TEST SETUP



8.1.4 EUT OPERATION CONDITIONS

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

8.1.5 EUT TEST CONDITIONS

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

8.1.6 TEST RESULTS

Please refer to the Attachment H.

9. MEASUREMENT INSTRUMENTS LIST

Conducted Emission Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	LISN	R&S	ENV216	100087	Nov. 23, 2014
2	Test Cable	TIMES	CFD300-NL	C01	Jun. 15, 2015
3	EMI Test Receiver	R&S	ESCI	100082	Apr. 13, 2015
4	Measurement Software	EZ	EZ_EMC (Version NB-02A)	N/A	N/A

Radiated Emission Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP30	100854	Oct. 26, 2015
2	Horn Antenna	Schwarzbeck	BBHA 9120	D-325	Apr. 14, 2015
3	Microwave Pre_amplifier	Agilent	8449B	3008A01714	Apr. 15, 2015
4	Microflex Cable	Harbour industries	27478LL142	1m	May. 12, 2015
5	Microflex Cable	EMC	S104-SMA	8m	May. 12, 2015
6	Microflex Cable	Harbour industries	27478LL142	3m	May. 12, 2015
7	Test Cable	LMR	LMR-400	12m	May. 13, 2015
8	Test Cable	LMR	LMR-400	3m	May. 13, 2015
9	Pre-Amplifier	Anritsu	MH648A	M92649	Jun. 17, 2015
10	Log-Bicon Antenna	Schwarzbeck	VULB9168-352	9168-352	July. 10, 2015

6dB Bandwidth Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP30	100854	Oct. 26, 2015

Peak Output Power Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Power Meter	Anritsu	ML2495A	1128008	Aug. 8, 2015
2	Power Meter Sensor	Anritsu	MA2411B	1126001	Aug. 8, 2015

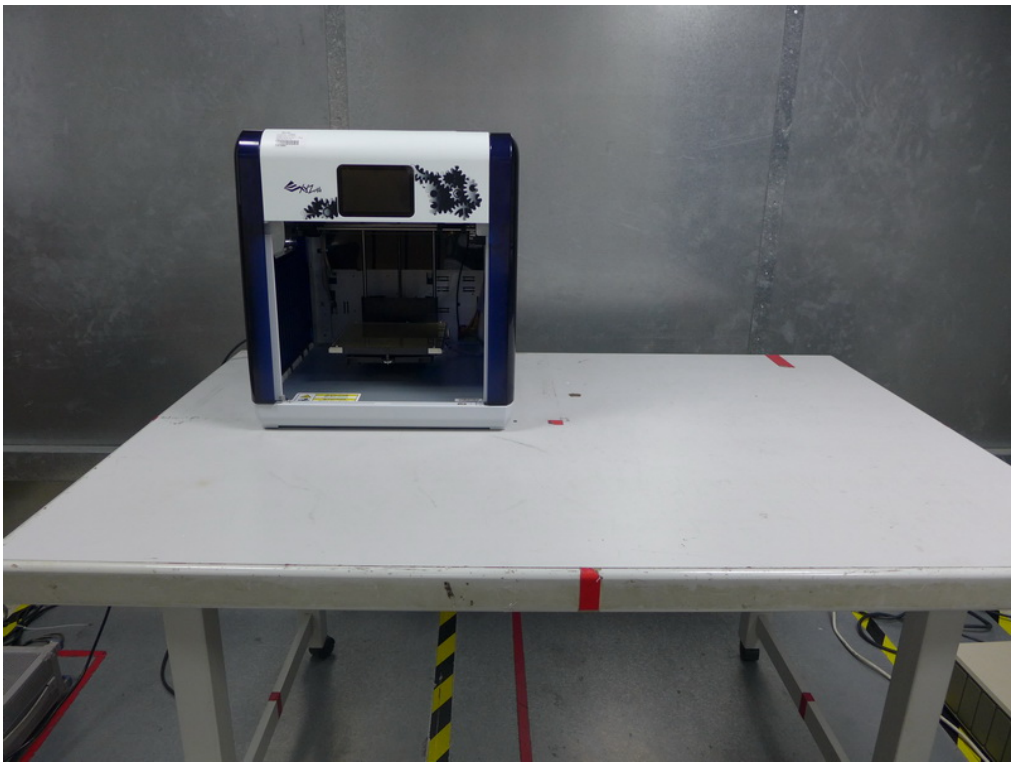
Antenna Conducted Spurious Emission Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP30	100854	Oct. 26, 2015

Power Spectral Density Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP30	100854	Oct. 26, 2015

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

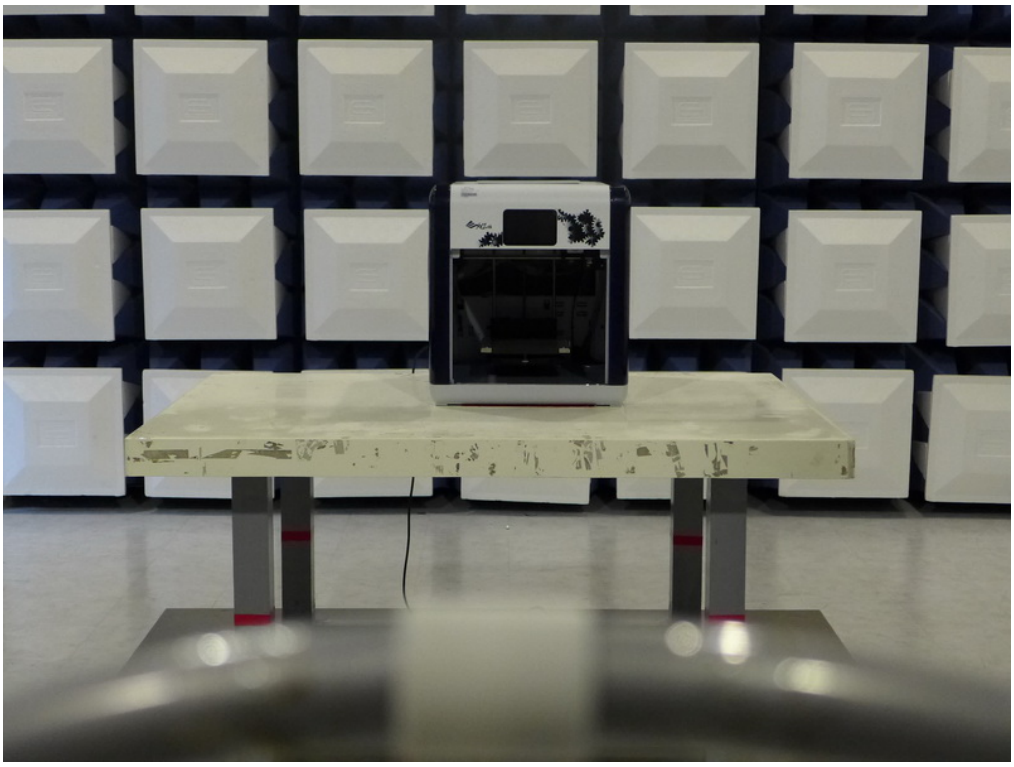
10. EUT TEST PHOTO

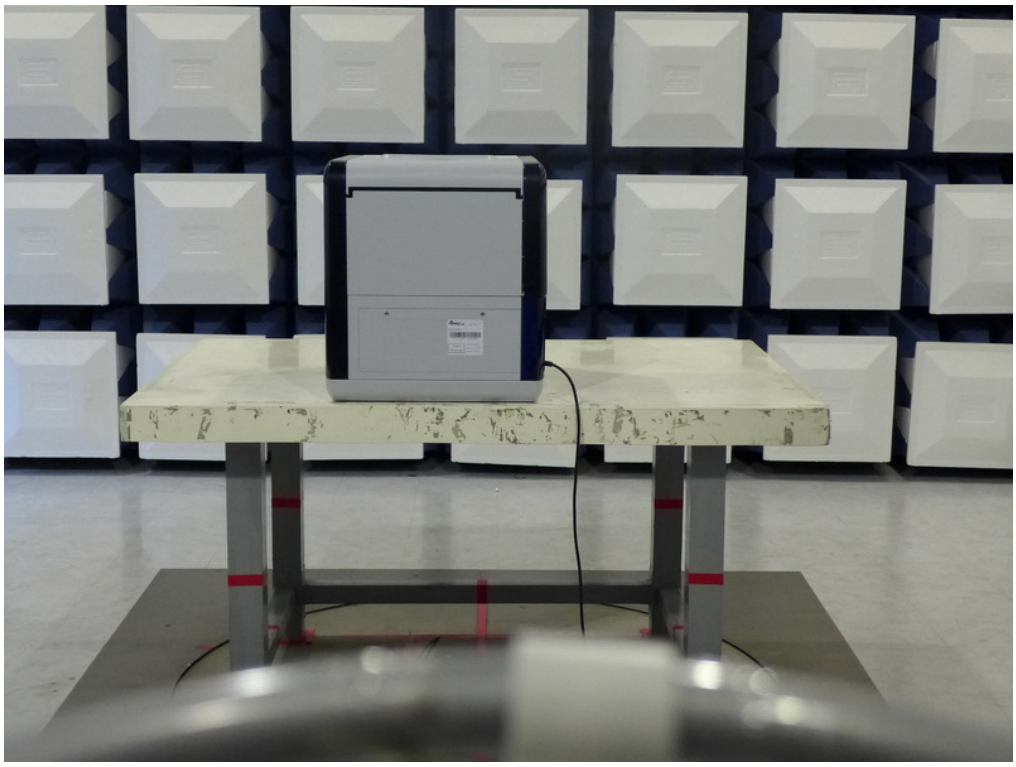
Conducted Measurement Photos



Radiated Measurement Photos

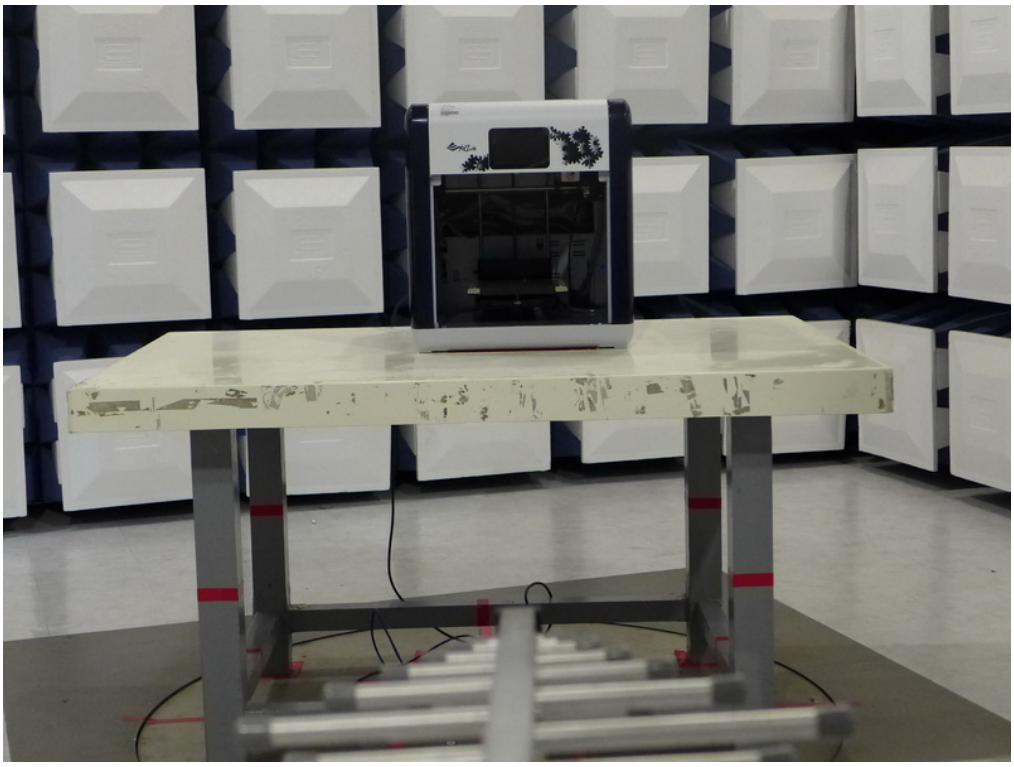
9KHz to 30MHz

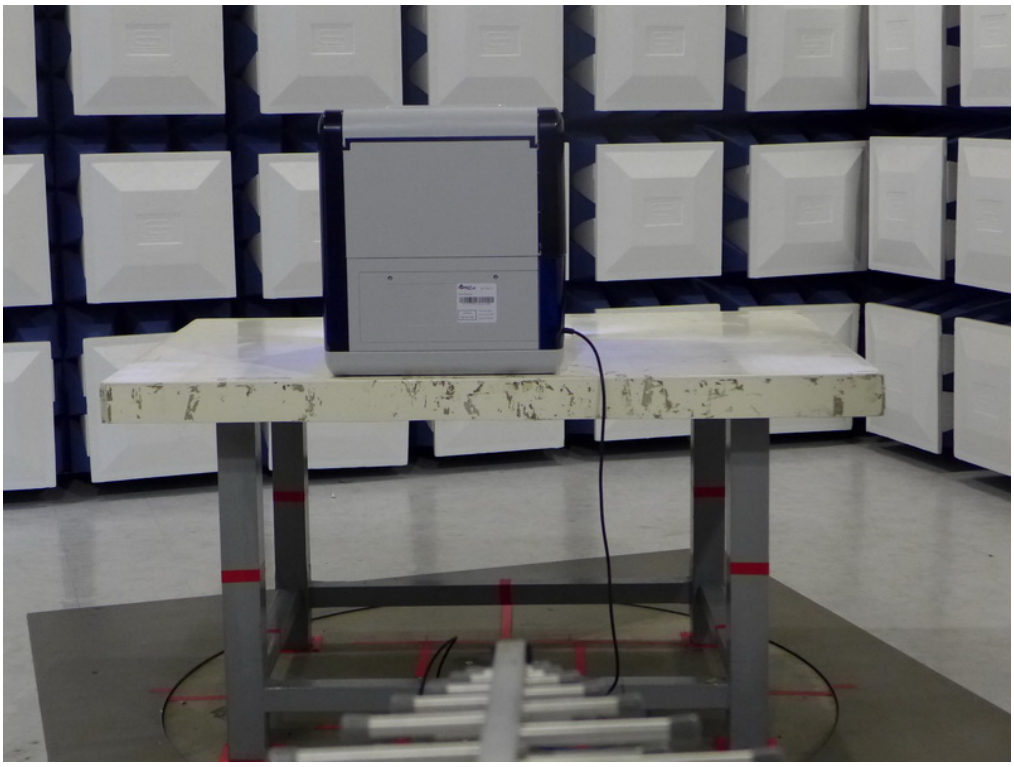




Radiated Measurement Photos

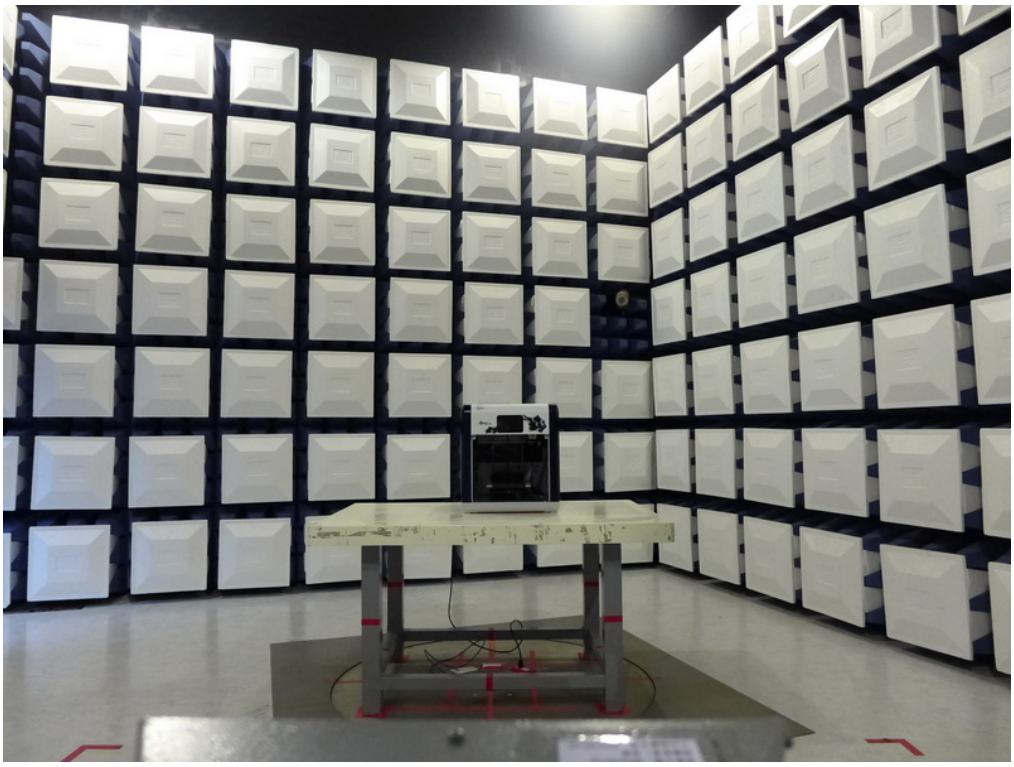
30MHz to 1000MHz

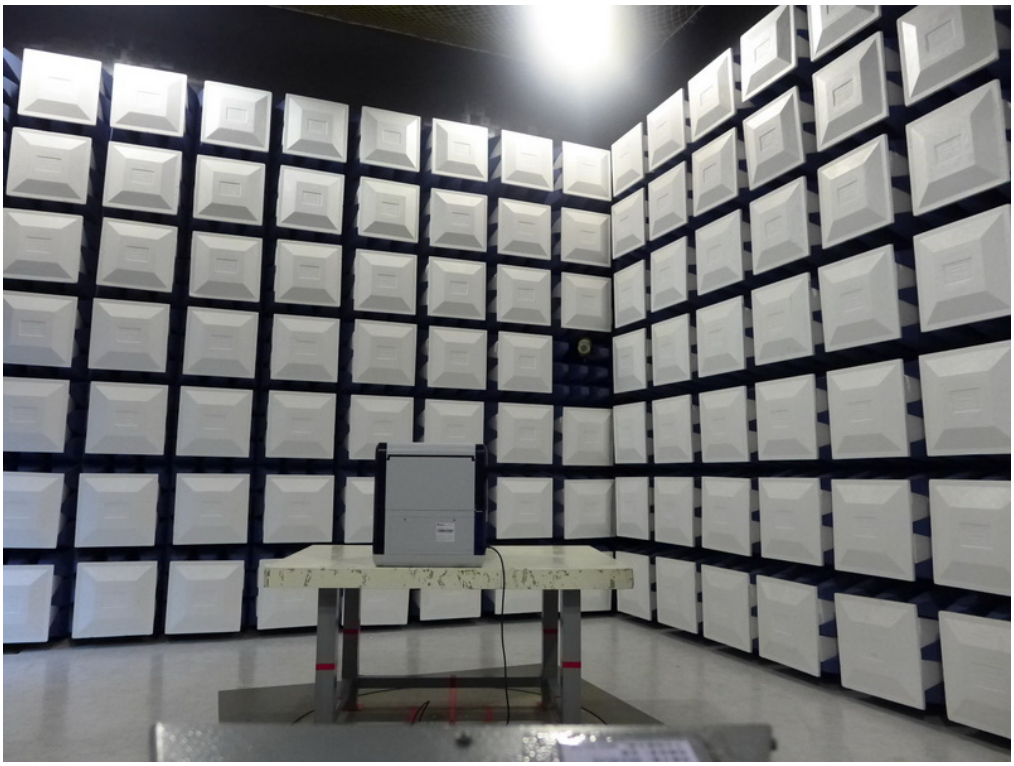




Radiated Measurement Photos

Above 1000MHz

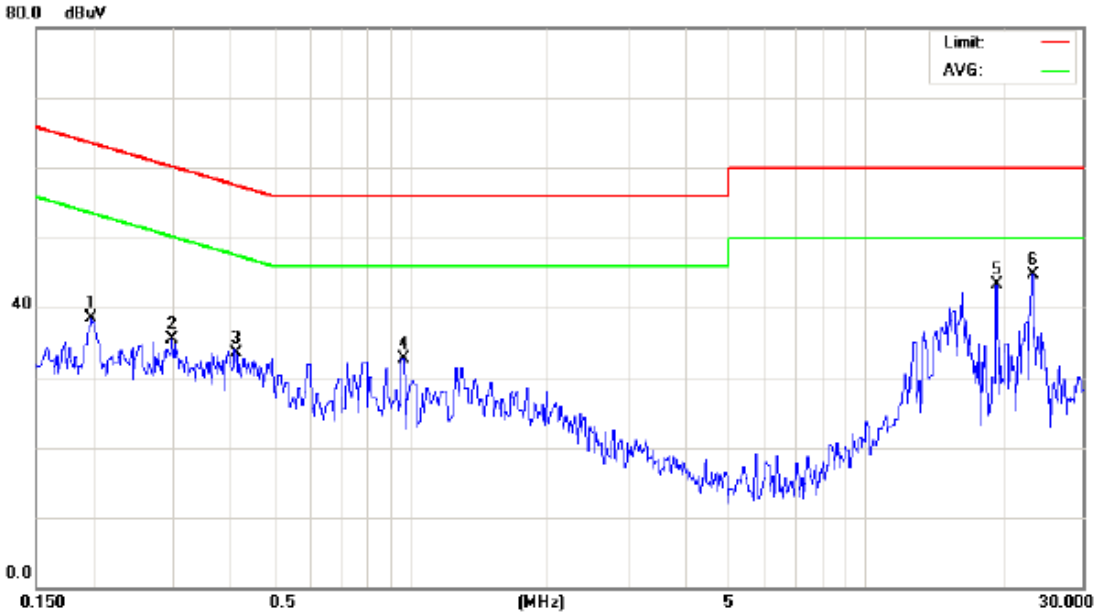




ATTACHMENT A - CONDUCTED EMISSION

Test Mode :	TX MODE

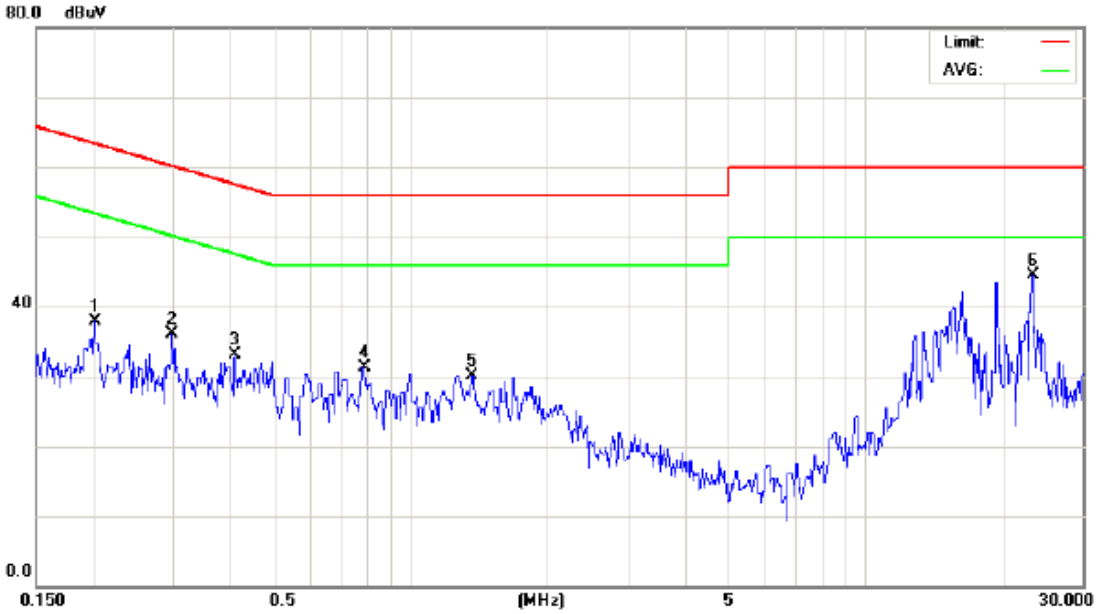
Line



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1983	28.91	9.65	38.56	63.68	-25.12	peak	
2		0.2976	25.72	9.76	35.48	60.31	-24.83	peak	
3		0.4117	23.61	9.89	33.50	57.61	-24.11	peak	
4		0.9590	22.93	9.70	32.63	56.00	-23.37	peak	
5		19.3500	32.82	10.50	43.32	60.00	-16.68	peak	
6	*	23.1500	34.17	10.46	44.63	60.00	-15.37	peak	

Test Mode :	TX MODE

Neutral



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.2011	28.21	9.64	37.85	63.56	-25.71	peak	
2		0.2976	26.39	9.65	36.04	60.31	-24.27	peak	
3		0.4103	23.52	9.66	33.18	57.64	-24.46	peak	
4		0.7880	21.54	9.68	31.22	56.00	-24.78	peak	
5		1.3639	20.43	9.72	30.15	56.00	-25.85	peak	
6	*	23.1500	34.09	10.49	44.58	60.00	-15.42	peak	

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

Test Mode:	TX Mode 2412MHz

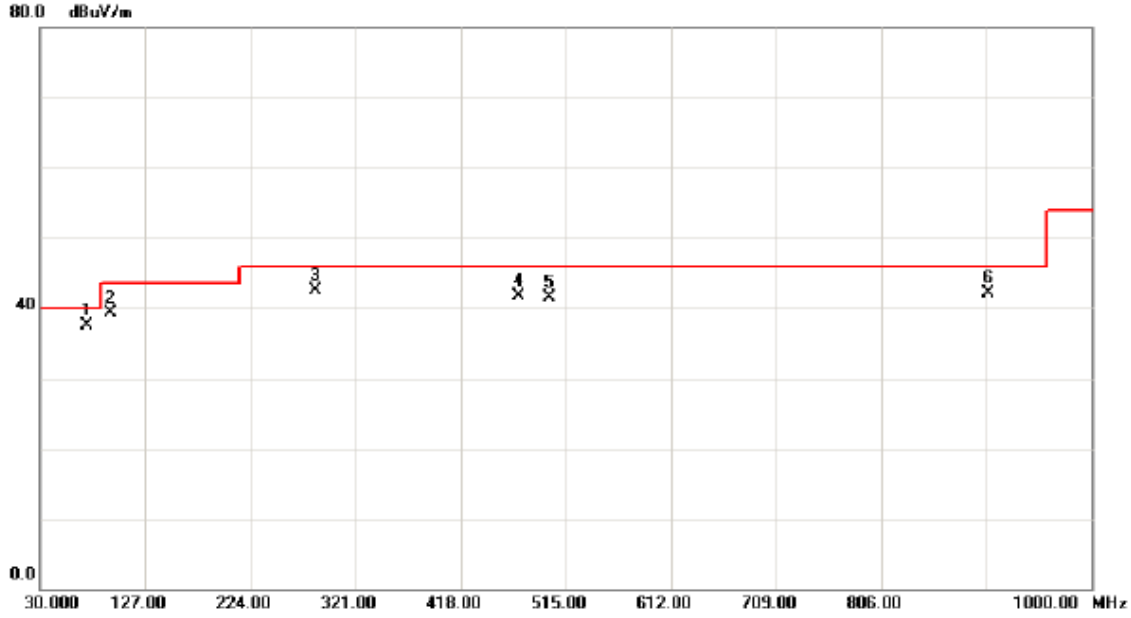
Freq. (MHz)	Ant. 0°/90°	Reading(RA) (dBuV)	Corr.Factor(CF) (dB)	Measured(FS) (dBuV/m)	Limits(QP) (dBuV/m)	Margin (dB)	Note
0.0136	0°	22.31	65.66	124.93	-59.27	-78.64	AVG
0.0136	0°	22.31	53.71	124.93	-71.22	-94.66	PK
0.0251	0°	22.02	63.86	119.61	-55.75	-74.32	AVG
0.0251	0°	22.02	50.63	119.61	-68.98	-91.23	PK
0.0389	0°	21.68	55.96	115.81	-59.85	-71.53	AVG
0.0389	0°	21.68	46.26	115.81	-69.55	-88.75	PK
0.0620	0°	21.21	56.19	111.76	-55.57	-70.76	AVG
0.0620	0°	21.21	45.59	111.76	-66.17	-85.94	PK
0.2557	0°	20.44	54.61	99.45	-44.84	-58.30	AVG
0.2557	0°	20.44	43.26	99.45	-56.19	-76.00	PK
1.3250	0°	20.28	57.43	65.16	-7.73	-17.41	QP

Freq. (MHz)	Ant. 0°/90°	Reading(RA) (dBuV)	Corr.Factor(CF) (dB)	Measured(FS) (dBuV/m)	Limits(QP) (dBuV/m)	Margin (dB)	Note
0.0133	90°	47.28	22.32	69.60	125.13	-55.53	AVG
0.0133	90°	32.21	22.32	54.53	125.13	-70.60	PK
0.0249	90°	43.52	22.03	65.55	119.68	-54.13	AVG
0.0249	90°	29.51	22.03	51.54	119.68	-68.14	PK
0.0395	90°	35.82	21.66	57.48	115.67	-58.19	AVG
0.0395	90°	24.21	21.66	45.87	115.67	-69.80	PK
0.0626	90°	36.52	21.20	57.72	111.67	-53.95	AVG
0.0626	90°	23.58	21.20	44.78	111.67	-66.89	PK
0.2561	90°	33.28	20.44	53.72	99.44	-45.71	AVG
0.2561	90°	22.41	20.44	42.85	99.44	-56.58	PK
1.3240	90°	39.57	20.28	59.85	65.17	-5.32	QP

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

Test Mode:	TX B MODE CHANNEL 01

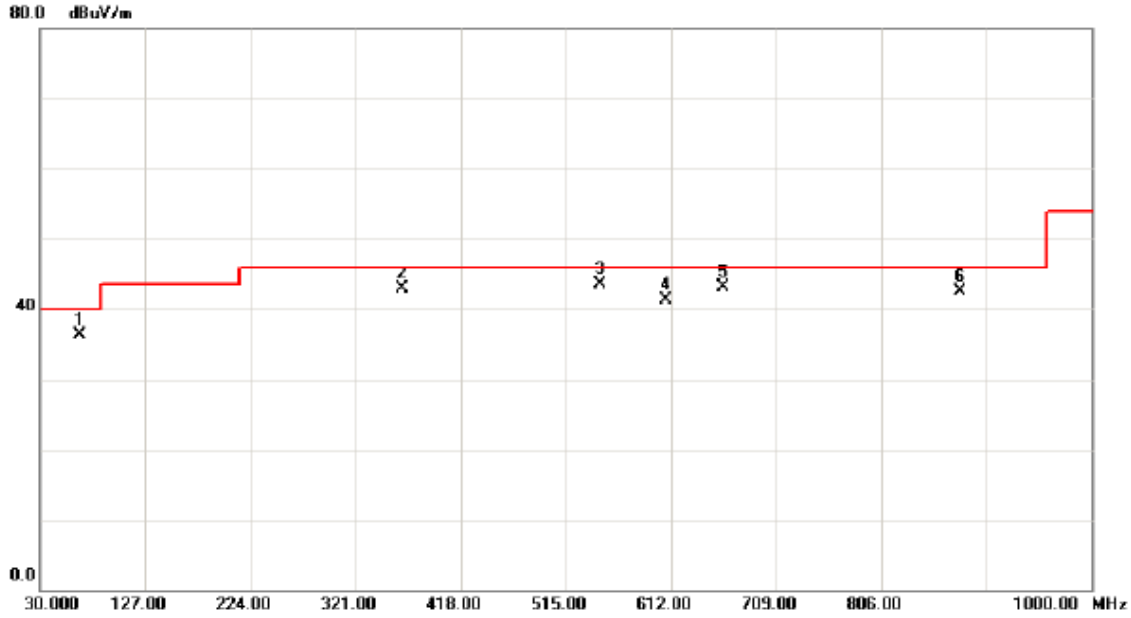
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	*	73.6500	54.48	-16.93	37.55	40.00	-2.45	peak	
2		95.4750	58.77	-19.50	39.27	43.50	-4.23	peak	
3		284.6250	56.25	-13.84	42.41	46.00	-3.59	peak	
4		471.3500	51.28	-9.51	41.77	46.00	-4.23	peak	
5		500.4500	50.84	-9.30	41.54	46.00	-4.46	peak	
6		905.4250	44.84	-2.71	42.13	46.00	-3.87	peak	

Test Mode:	TX B MODE CHANNEL 01

Horizontal

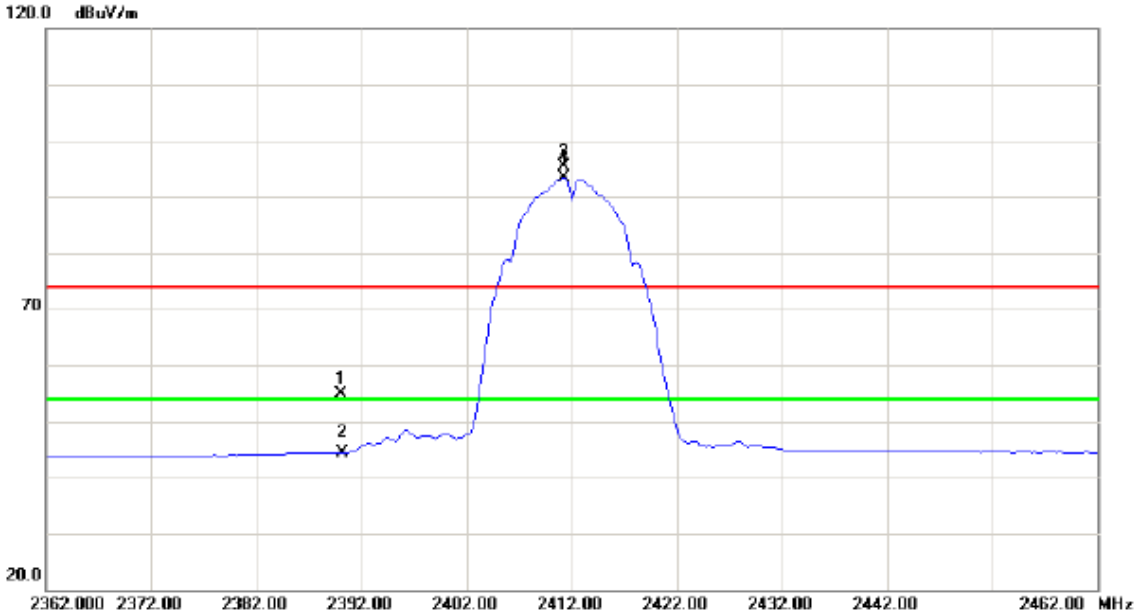


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		66.3750	52.07	-15.71	36.36	40.00	-3.64	peak	
2		364.6500	54.82	-11.97	42.85	46.00	-3.15	peak	
3	*	546.5250	51.63	-8.07	43.56	46.00	-2.44	peak	
4		607.1500	48.73	-7.37	41.36	46.00	-4.64	peak	
5		660.5000	49.60	-6.59	43.01	46.00	-2.99	peak	
6		878.7500	45.74	-3.26	42.48	46.00	-3.52	peak	

ATTACHMENT D - RADIATED EMISSION (ABOVE 1000MHZ)

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

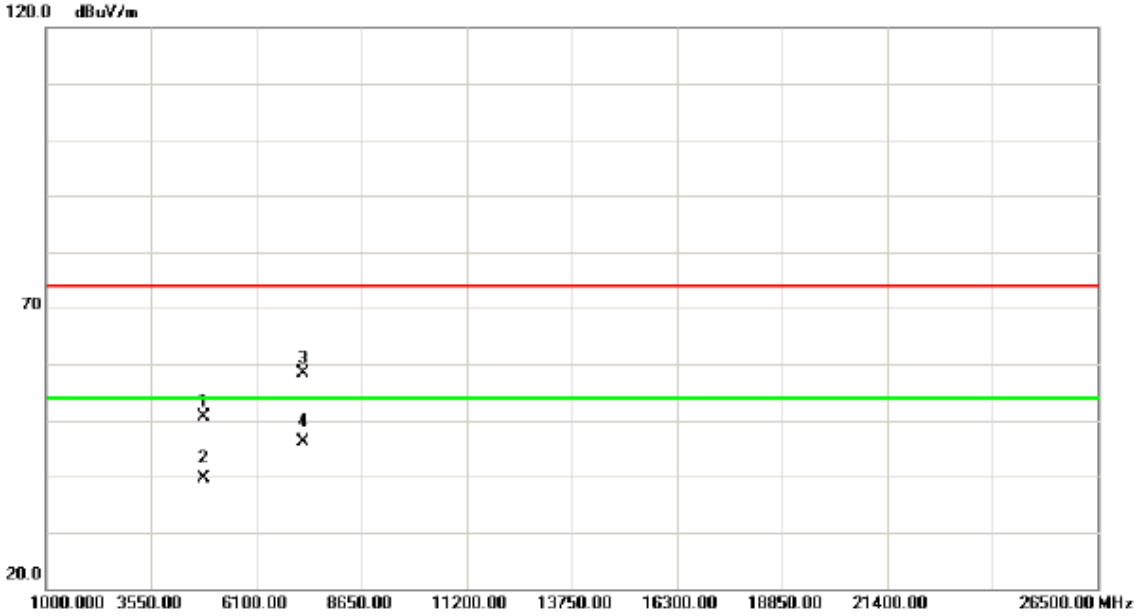
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2390.000	23.87	31.02	54.89	74.00	-19.11	peak	
2		2390.000	13.30	31.02	44.32	54.00	-9.68	AVG	
3	X	2411.250	64.21	31.12	95.33	74.00	21.33	peak	no limit
4	*	2411.250	62.21	31.12	93.33	54.00	39.33	AVG	no limit

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

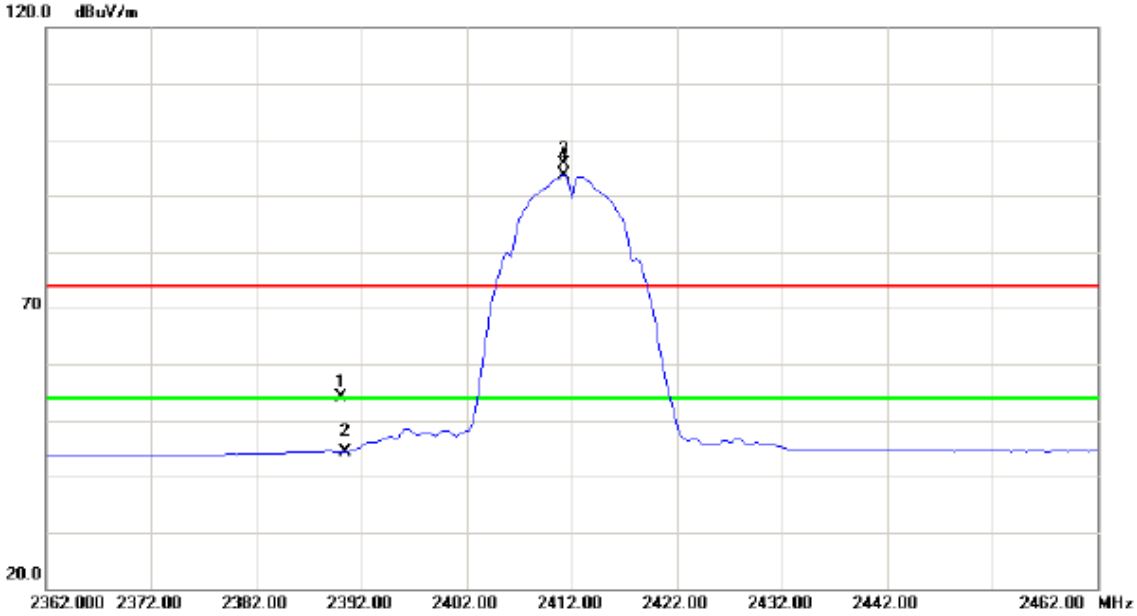
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4824.095	43.76	6.78	50.54	74.00	-23.46	peak	
2		4824.095	32.80	6.78	39.58	54.00	-14.42	AVG	
3		7236.145	43.20	15.17	58.37	74.00	-15.63	peak	
4	*	7236.145	30.94	15.17	46.11	54.00	-7.89	AVG	

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

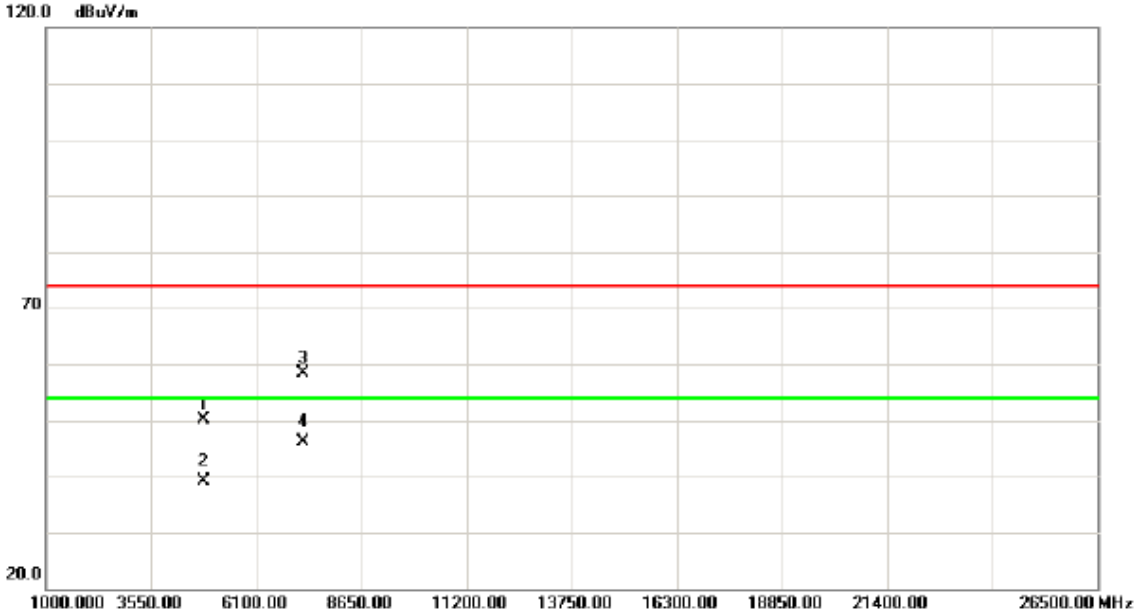
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2390.000	23.17	31.02	54.19	74.00	-19.81	peak	
2		2390.000	13.33	31.02	44.35	54.00	-9.65	AVG	
3	X	2411.250	64.57	31.12	95.69	74.00	21.69	peak	no limit
4	*	2411.250	62.60	31.12	93.72	54.00	39.72	AVG	no limit

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

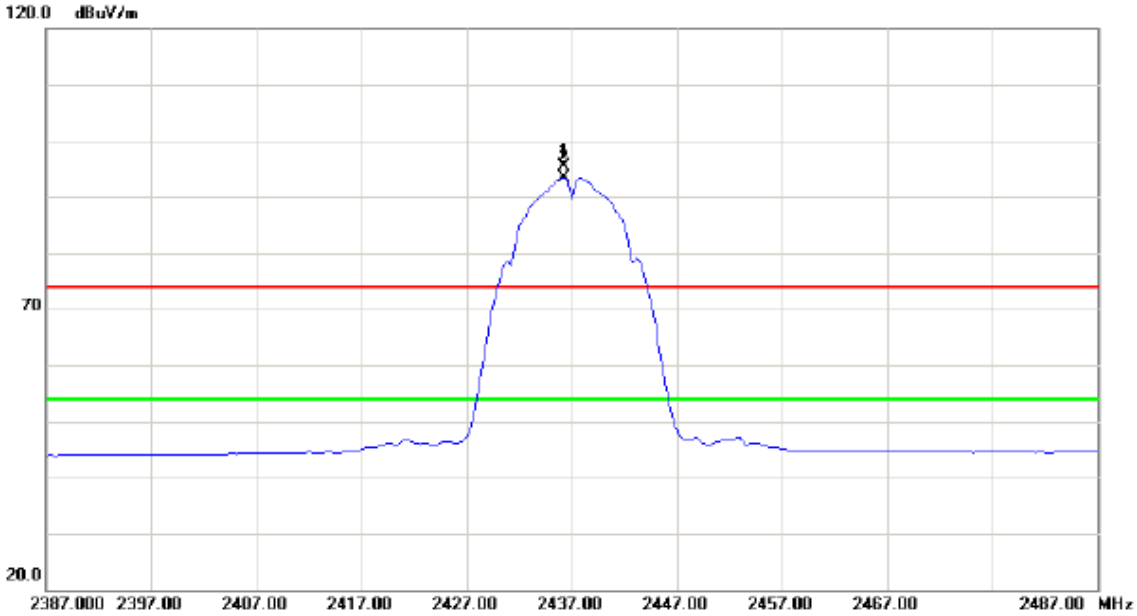
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4824.015	43.27	6.78	50.05	74.00	-23.95	peak	
2		4824.015	32.30	6.78	39.08	54.00	-14.92	AVG	
3		7235.935	43.12	15.17	58.29	74.00	-15.71	peak	
4	*	7235.935	30.89	15.17	46.06	54.00	-7.94	AVG	

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

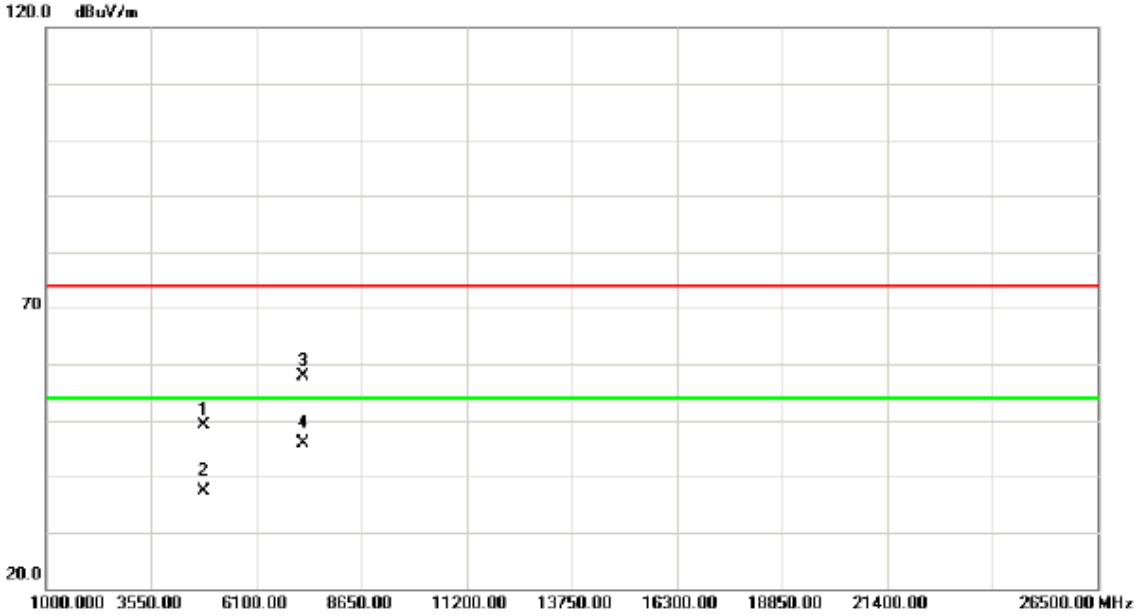
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	X	2436.250	64.21	31.24	95.45	74.00	21.45	peak	no limit
2	*	2436.250	62.24	31.24	93.48	54.00	39.48	AVG	no limit

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

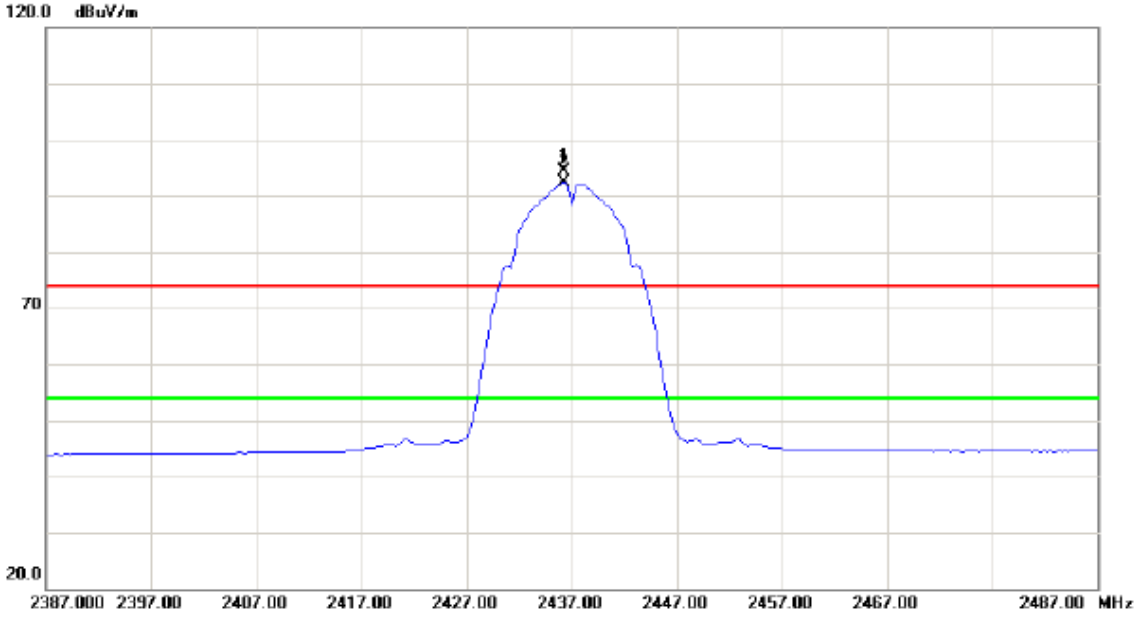
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4824.030	42.42	6.78	49.20	74.00	-24.80	peak	
2		4824.030	30.63	6.78	37.41	54.00	-16.59	AVG	
3		7235.935	42.60	15.17	57.77	74.00	-16.23	peak	
4	*	7235.935	30.73	15.17	45.90	54.00	-8.10	AVG	

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

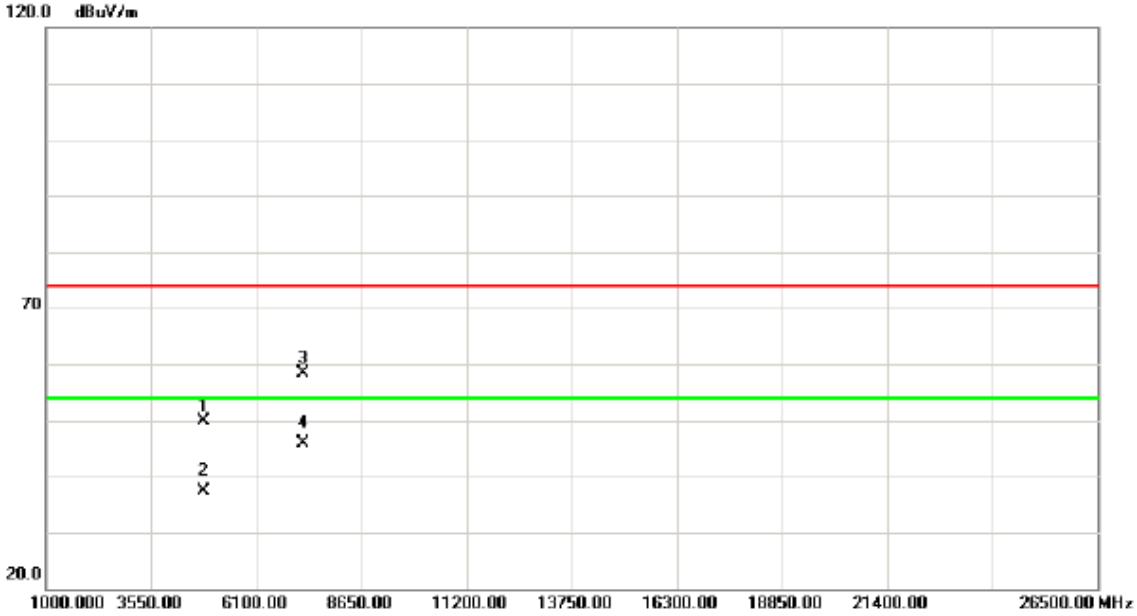
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	X	2436.250	63.10	31.24	94.34	74.00	20.34	peak	no limit
2	*	2436.250	61.09	31.24	92.33	54.00	38.33	AVG	no limit

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

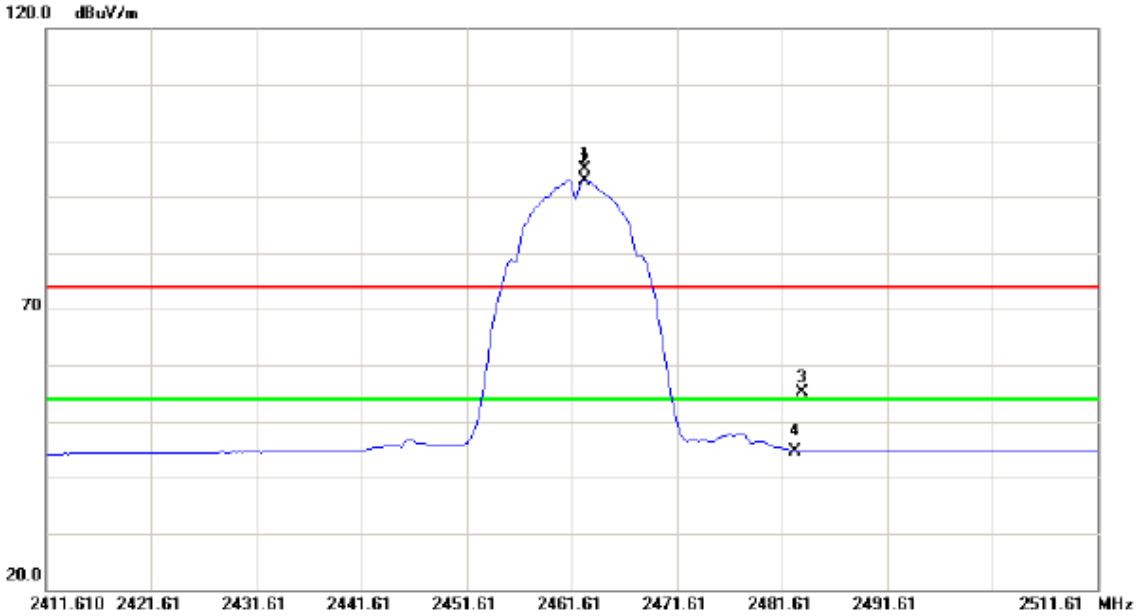
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4823.950	43.01	6.78	49.79	74.00	-24.21	peak	
2		4823.950	30.59	6.78	37.37	54.00	-16.63	AVG	
3		7236.345	43.24	15.17	58.41	74.00	-15.59	peak	
4	*	7236.345	30.63	15.17	45.80	54.00	-8.20	AVG	

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

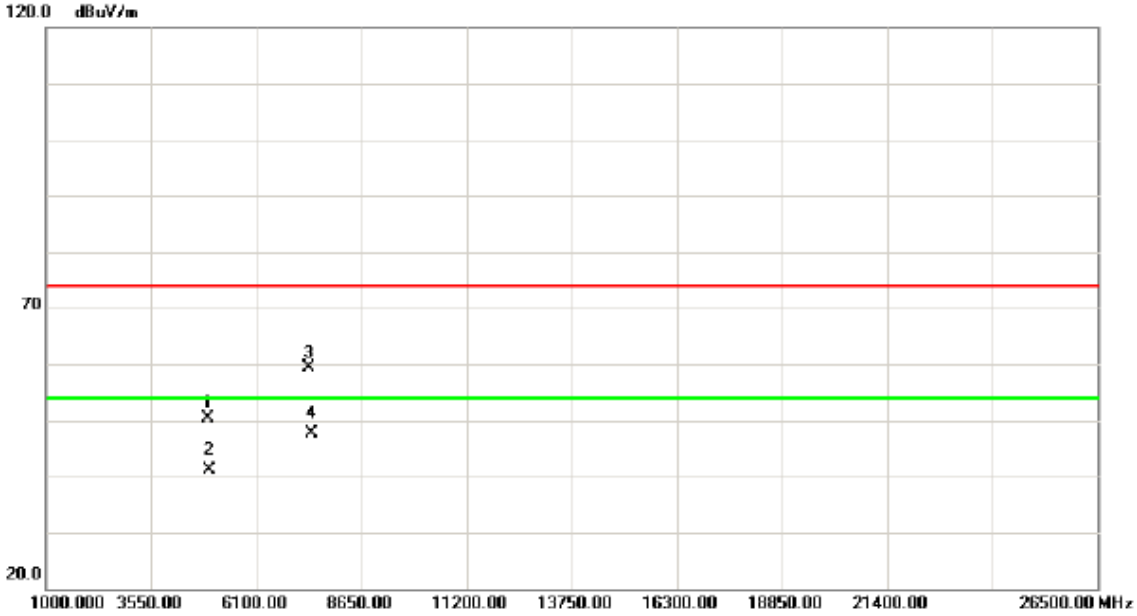
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	X	2462.860	63.52	31.36	94.88	74.00	20.88	peak	no limit
2	*	2462.860	61.63	31.36	92.99	54.00	38.99	AVG	no limit
3		2483.500	23.59	31.46	55.05	74.00	-18.95	peak	
4		2483.500	13.25	31.46	44.71	54.00	-9.29	AVG	

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

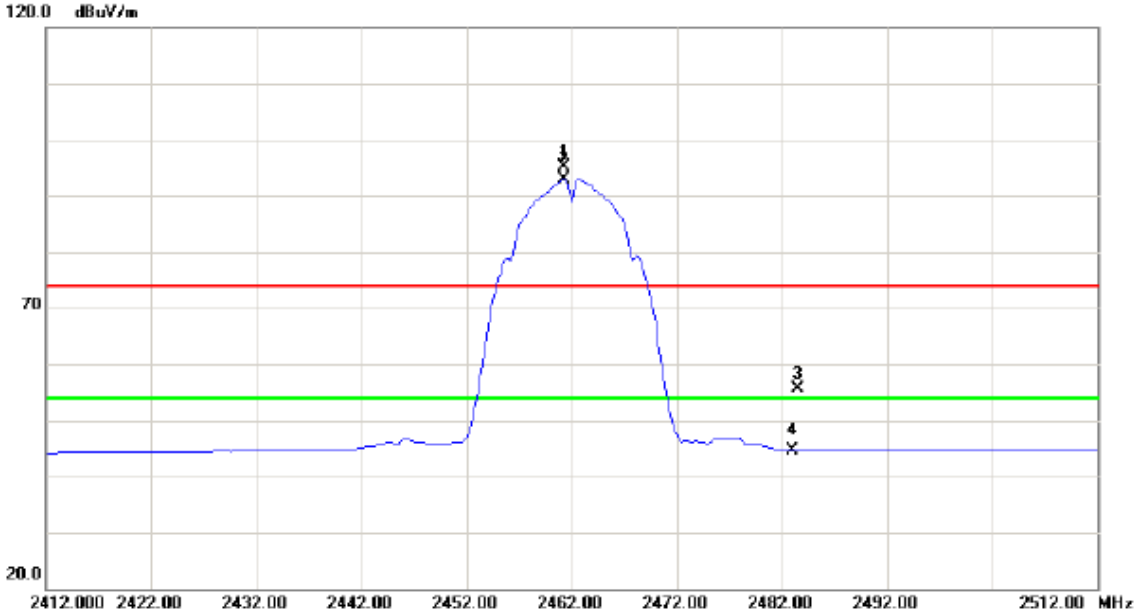
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4924.035	43.55	6.77	50.32	74.00	-23.68	peak	
2		4924.035	34.31	6.77	41.08	54.00	-12.92	AVG	
3		7386.255	43.50	15.98	59.48	74.00	-14.52	peak	
4	*	7386.255	31.70	15.98	47.68	54.00	-6.32	AVG	

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

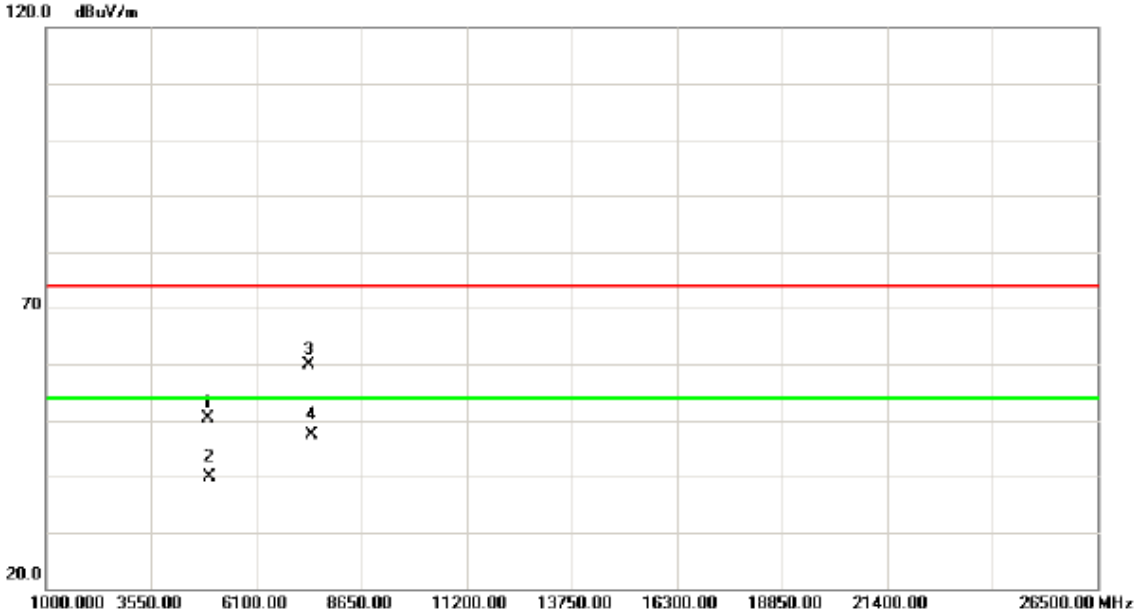
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	X	2461.250	63.78	31.36	95.14	74.00	21.14	peak	no limit
2	*	2461.250	61.59	31.36	92.95	54.00	38.95	AVG	no limit
3		2483.500	24.08	31.46	55.54	74.00	-18.46	peak	
4		2483.500	13.11	31.46	44.57	54.00	-9.43	AVG	

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

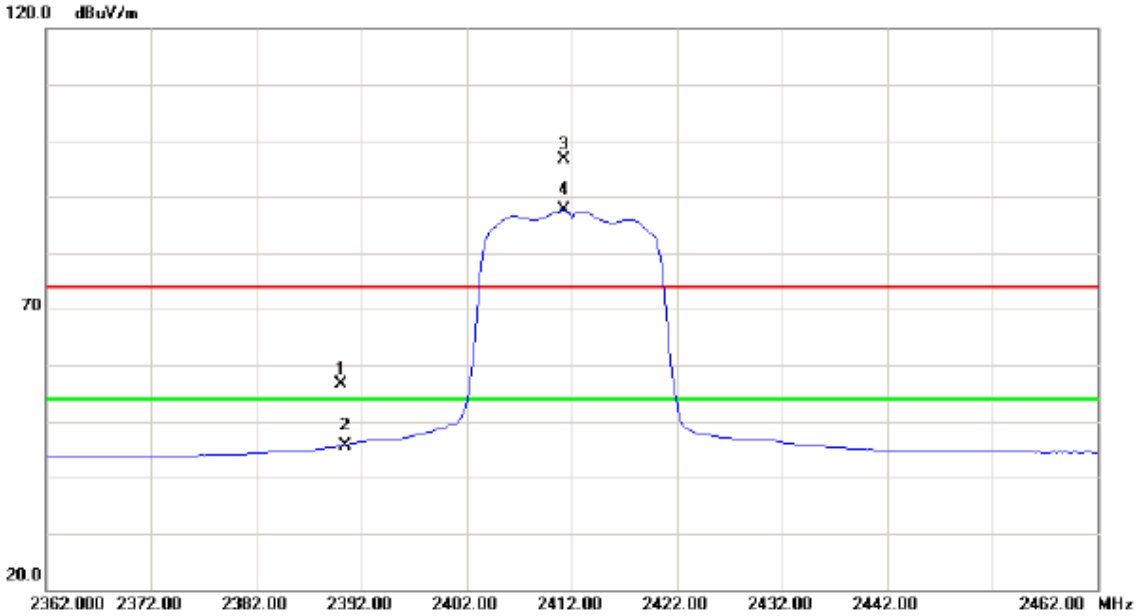
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4924.065	43.49	6.77	50.26	74.00	-23.74	peak	
2		4924.065	33.09	6.77	39.86	54.00	-14.14	AVG	
3		7386.065	43.87	15.98	59.85	74.00	-14.15	peak	
4	*	7386.065	31.50	15.98	47.48	54.00	-6.52	AVG	

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

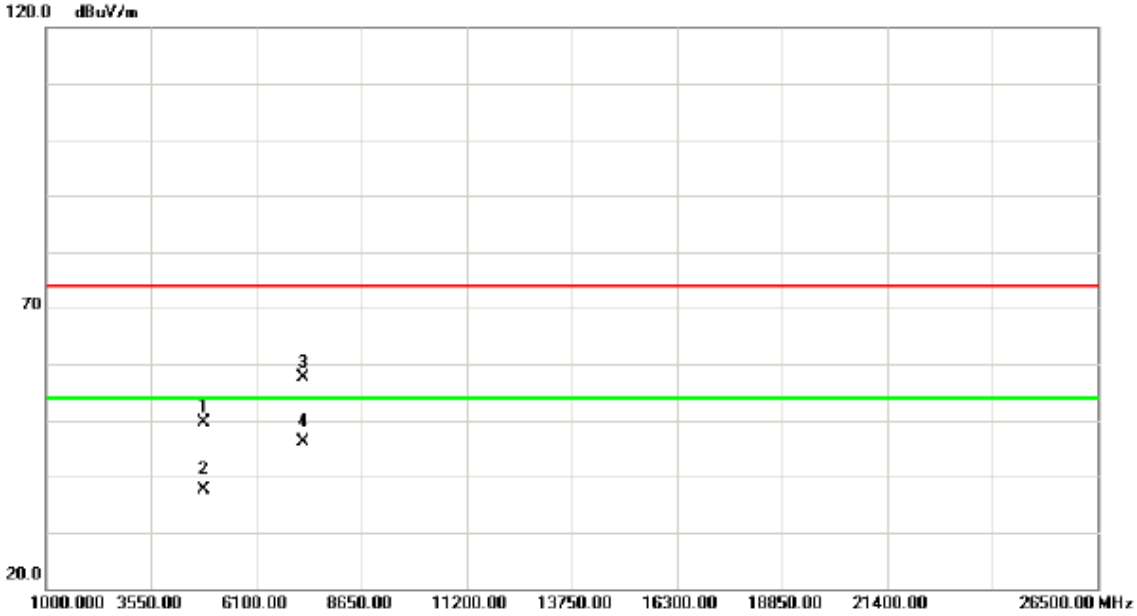
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2390.000	25.71	31.02	56.73	74.00	-17.27	peak	
2		2390.000	14.61	31.02	45.63	54.00	-8.37	AVG	
3	X	2411.250	65.41	31.12	96.53	74.00	22.53	peak	no limit
4	*	2411.250	56.46	31.12	87.58	54.00	33.58	AVG	no limit

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

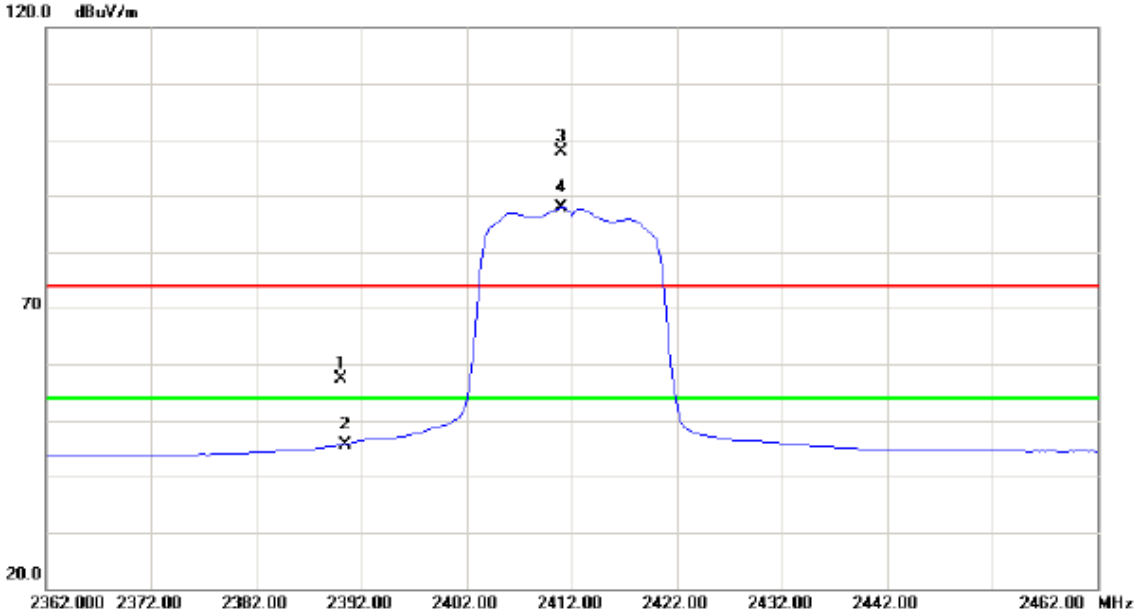
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4824.085	42.83	6.78	49.61	74.00	-24.39	peak	
2		4824.085	30.90	6.78	37.68	54.00	-16.32	AVG	
3		7235.945	42.58	15.17	57.75	74.00	-16.25	peak	
4	*	7235.945	30.99	15.17	46.16	54.00	-7.84	AVG	

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

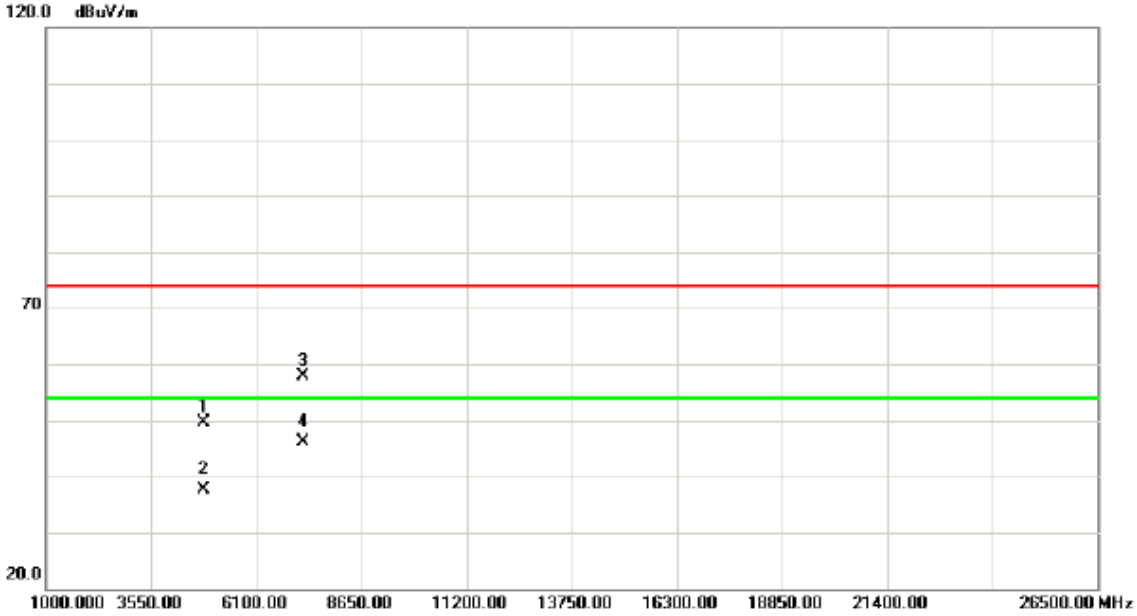
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2390.000	26.33	31.02	57.35	74.00	-16.65	peak	
2		2390.000	14.61	31.02	45.63	54.00	-8.37	AVG	
3	X	2411.000	66.78	31.12	97.90	74.00	23.90	peak	no limit
4	*	2411.000	56.64	31.12	87.76	54.00	33.76	AVG	no limit

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

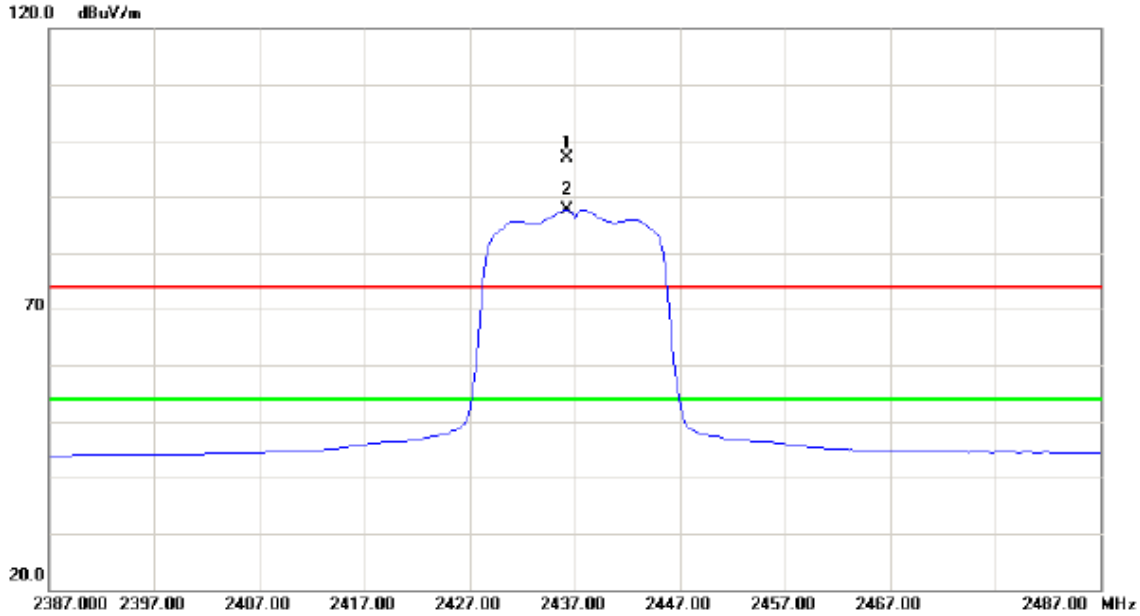
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4823.950	42.96	6.78	49.74	74.00	-24.26	peak	
2		4823.950	30.75	6.78	37.53	54.00	-16.47	AVG	
3		7235.925	42.70	15.17	57.87	74.00	-16.13	peak	
4	*	7235.925	30.92	15.17	46.09	54.00	-7.91	AVG	

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

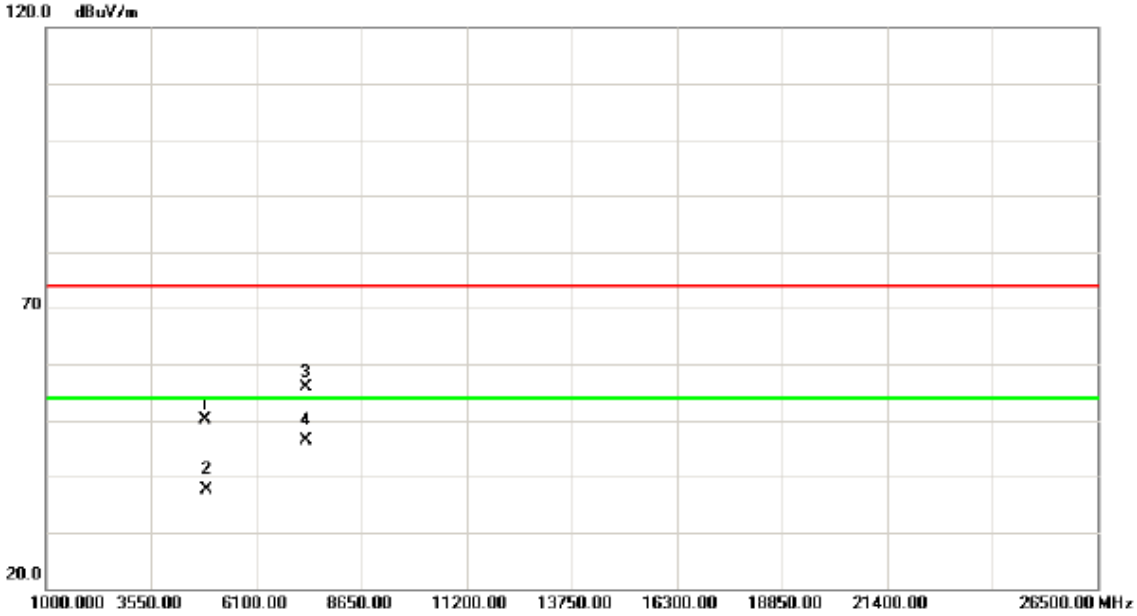
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	X	2436.250	65.74	31.24	96.98	74.00	22.98	peak	no limit
2	*	2436.250	56.31	31.24	87.55	54.00	33.55	AVG	no limit

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

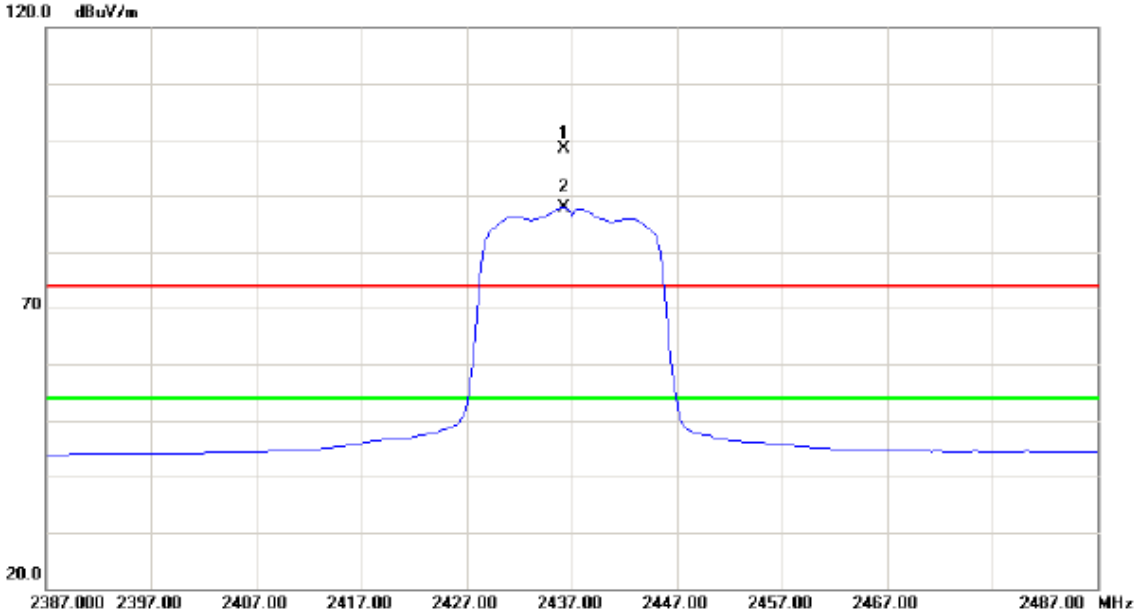
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4873.775	43.29	6.78	50.07	74.00	-23.93	peak	
2		4873.775	30.89	6.78	37.67	54.00	-16.33	AVG	
3		7308.688	40.44	15.56	56.00	74.00	-18.00	peak	
4	*	7308.688	30.85	15.56	46.41	54.00	-7.59	AVG	

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

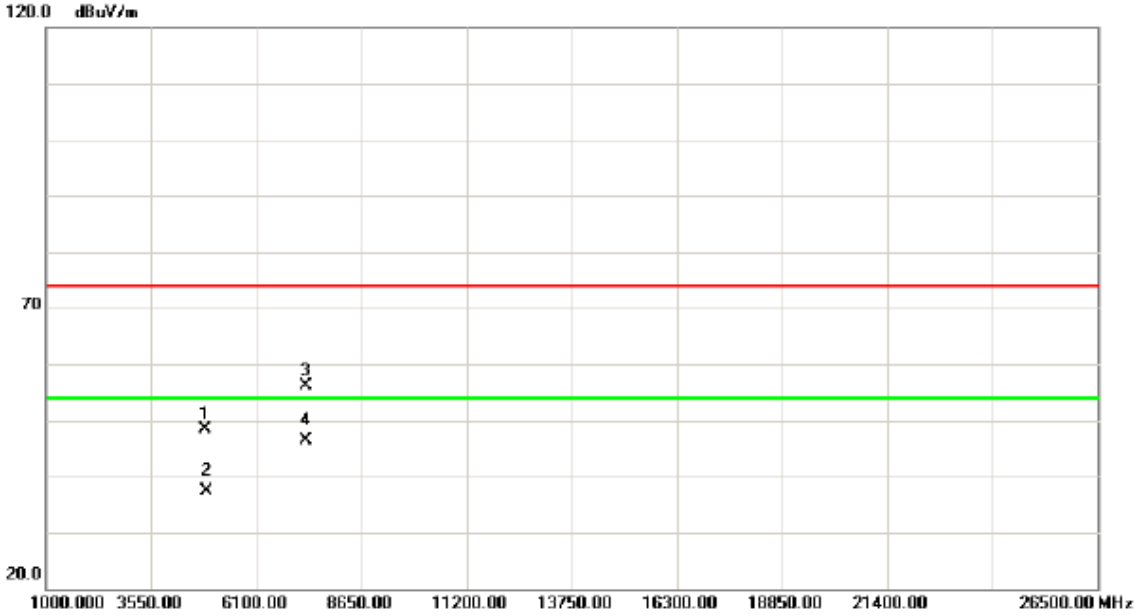
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	X	2436.250	67.23	31.24	98.47	74.00	24.47	peak	no limit
2	*	2436.250	56.54	31.24	87.78	54.00	33.78	AVG	no limit

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

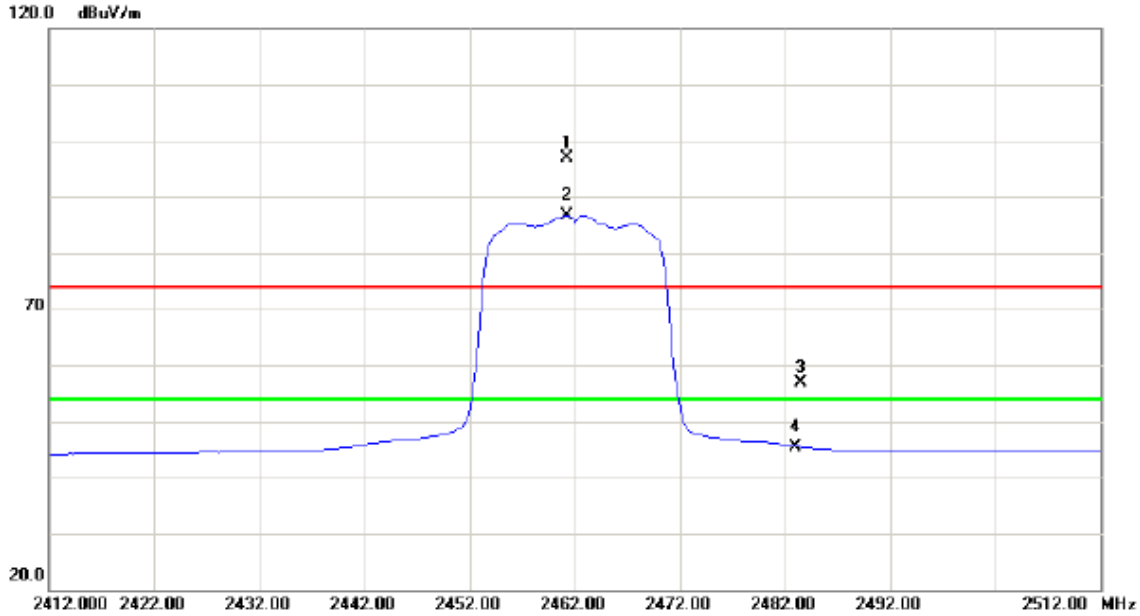
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4872.400	41.66	6.78	48.44	74.00	-25.56	peak	
2		4872.450	30.71	6.78	37.49	54.00	-16.51	AVG	
3		7310.750	40.58	15.57	56.15	74.00	-17.85	peak	
4	*	7310.750	30.80	15.57	46.37	54.00	-7.63	AVG	

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

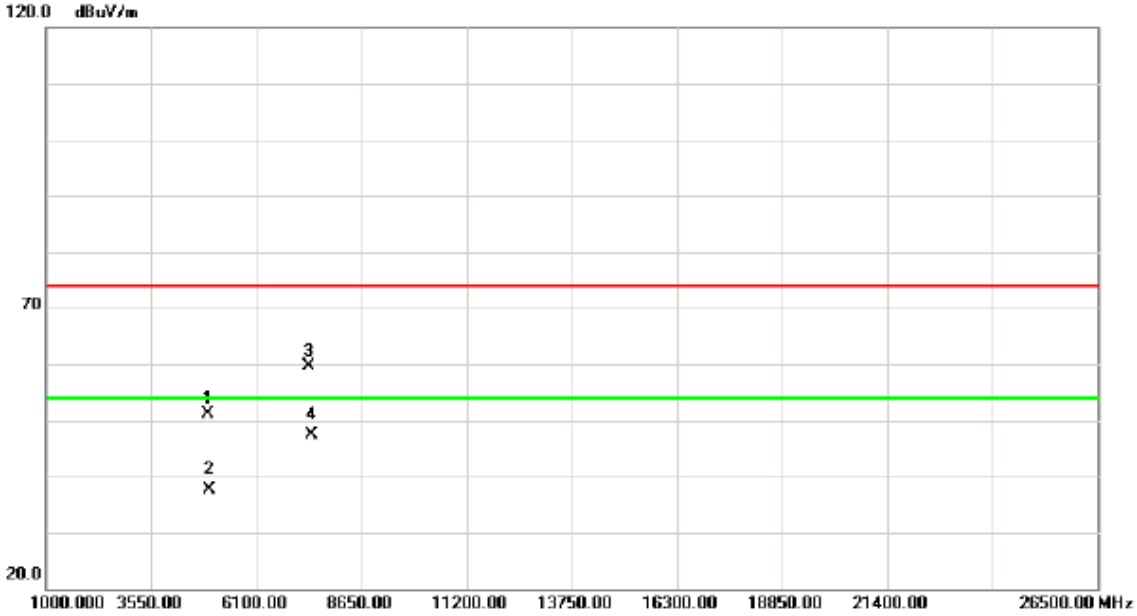
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	X	2461.250	65.55	31.36	96.91	74.00	22.91	peak	no limit
2	*	2461.250	55.27	31.36	86.63	54.00	32.63	AVG	no limit
3		2483.500	25.48	31.46	56.94	74.00	-17.06	peak	
4		2483.500	14.01	31.46	45.47	54.00	-8.53	AVG	

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

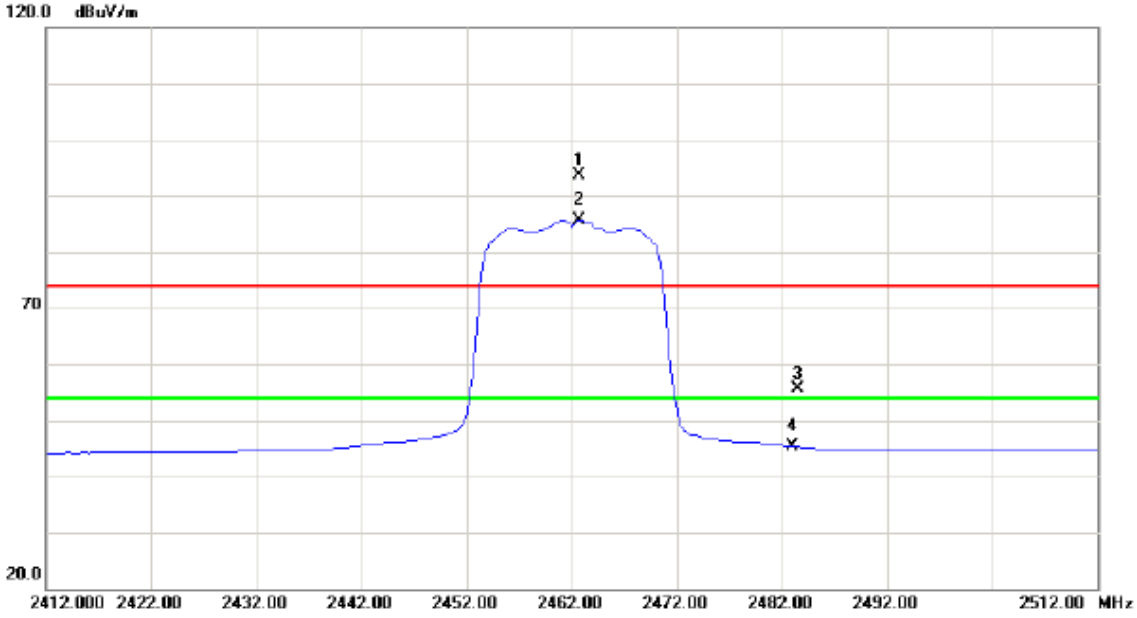
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4923.640	44.44	6.77	51.21	74.00	-22.79	peak	
2		4923.640	30.97	6.77	37.74	54.00	-16.26	AVG	
3		7386.085	43.65	15.98	59.63	74.00	-14.37	peak	
4	*	7386.085	31.50	15.98	47.48	54.00	-6.52	AVG	

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

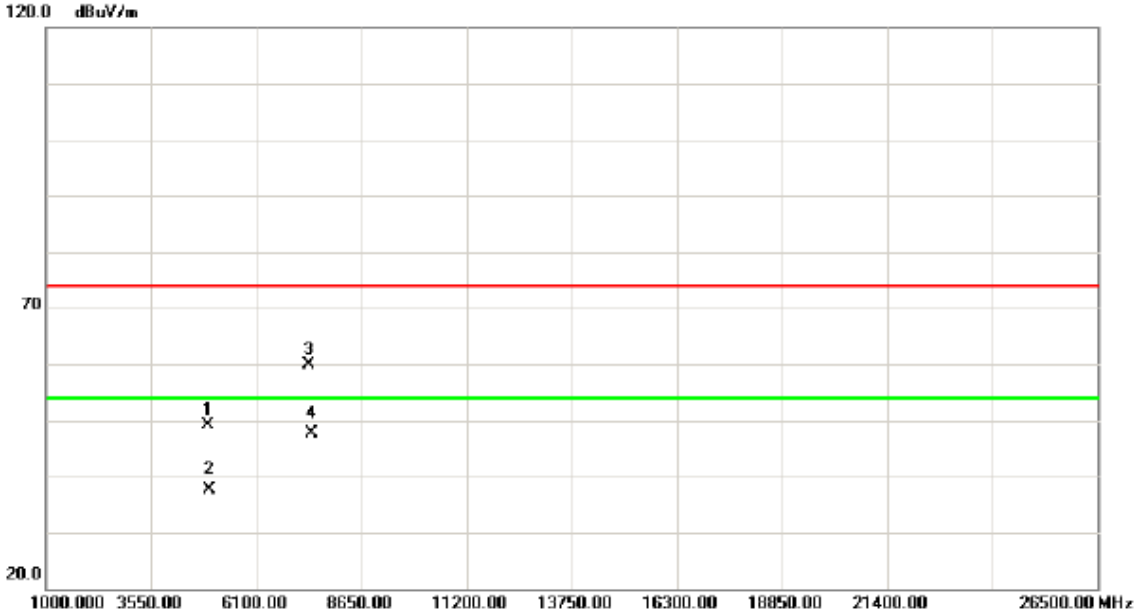
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	X	2462.750	62.22	31.36	93.58	74.00	19.58	peak	no limit
2	*	2462.750	54.21	31.36	85.57	54.00	31.57	AVG	no limit
3		2483.500	24.16	31.46	55.62	74.00	-18.38	peak	
4		2483.500	13.81	31.46	45.27	54.00	-8.73	AVG	

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

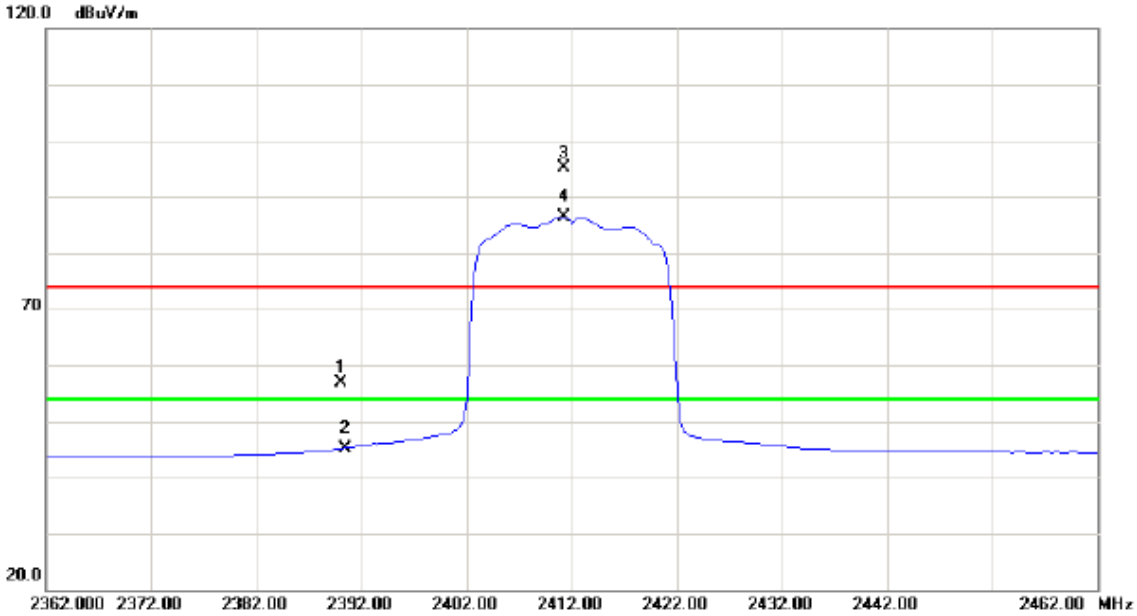
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4924.125	42.45	6.77	49.22	74.00	-24.78	peak	
2		4924.125	30.96	6.77	37.73	54.00	-16.27	AVG	
3		7386.120	44.02	15.98	60.00	74.00	-14.00	peak	
4	*	7386.120	31.53	15.98	47.51	54.00	-6.49	AVG	

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

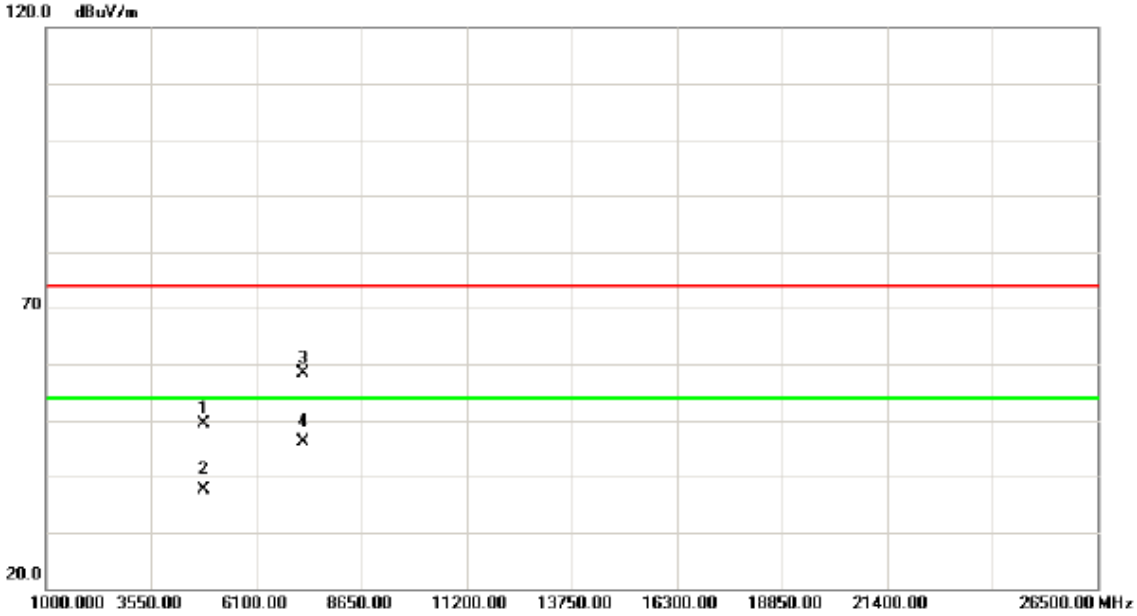
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2390.000	25.98	31.02	57.00	74.00	-17.00	peak	
2		2390.000	14.11	31.02	45.13	54.00	-8.87	AVG	
3	X	2411.250	64.06	31.12	95.18	74.00	21.18	peak	no limit
4	*	2411.250	55.30	31.12	86.42	54.00	32.42	AVG	no limit

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

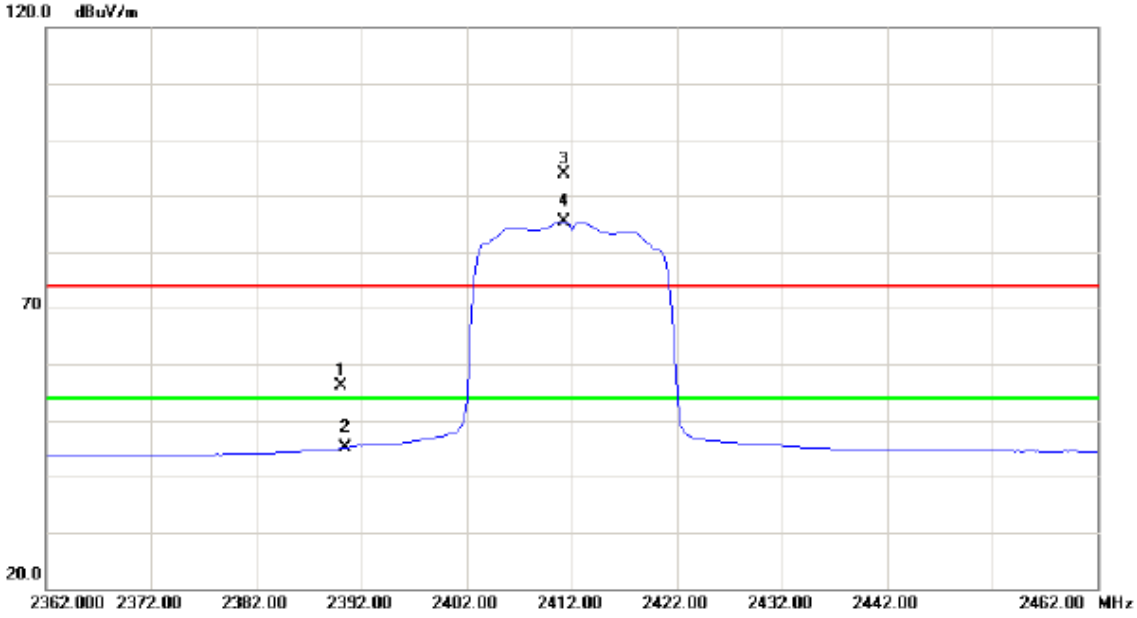
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4824.035	42.71	6.78	49.49	74.00	-24.51	peak	
2		4824.035	30.92	6.78	37.70	54.00	-16.30	AVG	
3		7235.975	43.19	15.17	58.36	74.00	-15.64	peak	
4	*	7235.975	30.99	15.17	46.16	54.00	-7.84	AVG	

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

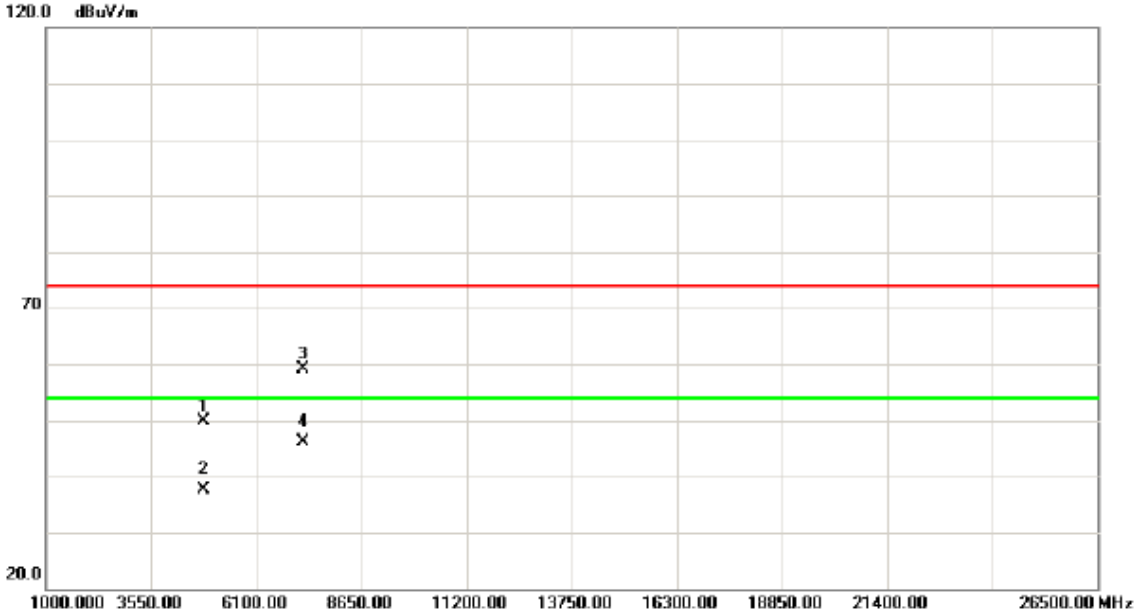
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		2390.000	25.04	31.02	56.06	74.00	-17.94	peak	
2		2390.000	14.05	31.02	45.07	54.00	-8.93	AVG	
3	X	2411.250	62.86	31.12	93.98	74.00	19.98	peak	no limit
4	*	2411.250	54.29	31.12	85.41	54.00	31.41	AVG	no limit

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

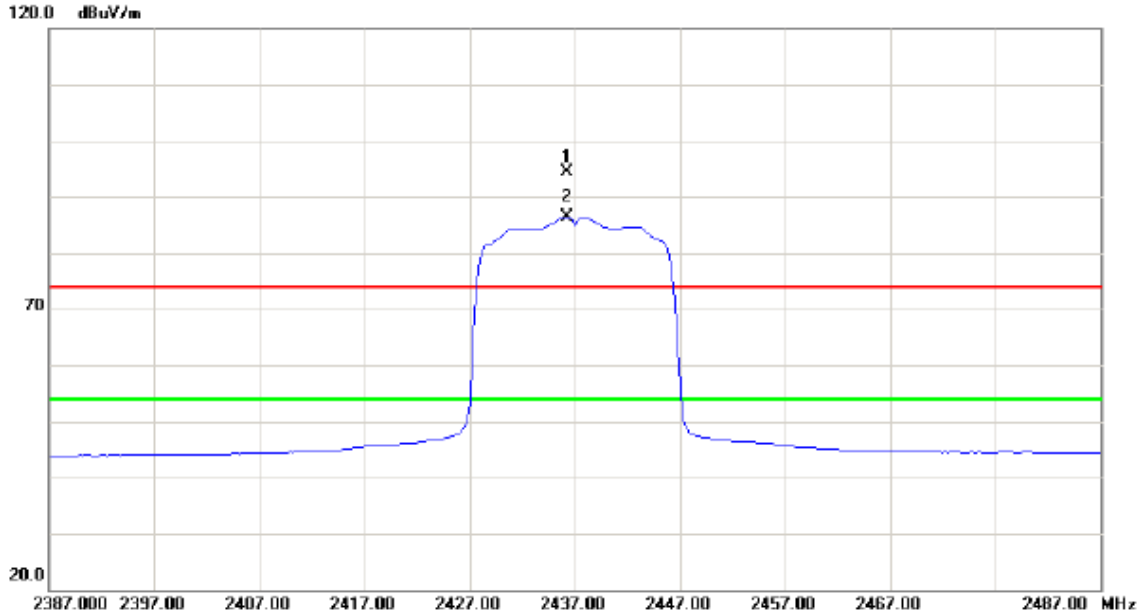
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4823.910	42.99	6.78	49.77	74.00	-24.23	peak	
2		4823.910	30.79	6.78	37.57	54.00	-16.43	AVG	
3		7235.600	43.85	15.17	59.02	74.00	-14.98	peak	
4	*	7235.600	30.89	15.17	46.06	54.00	-7.94	AVG	

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

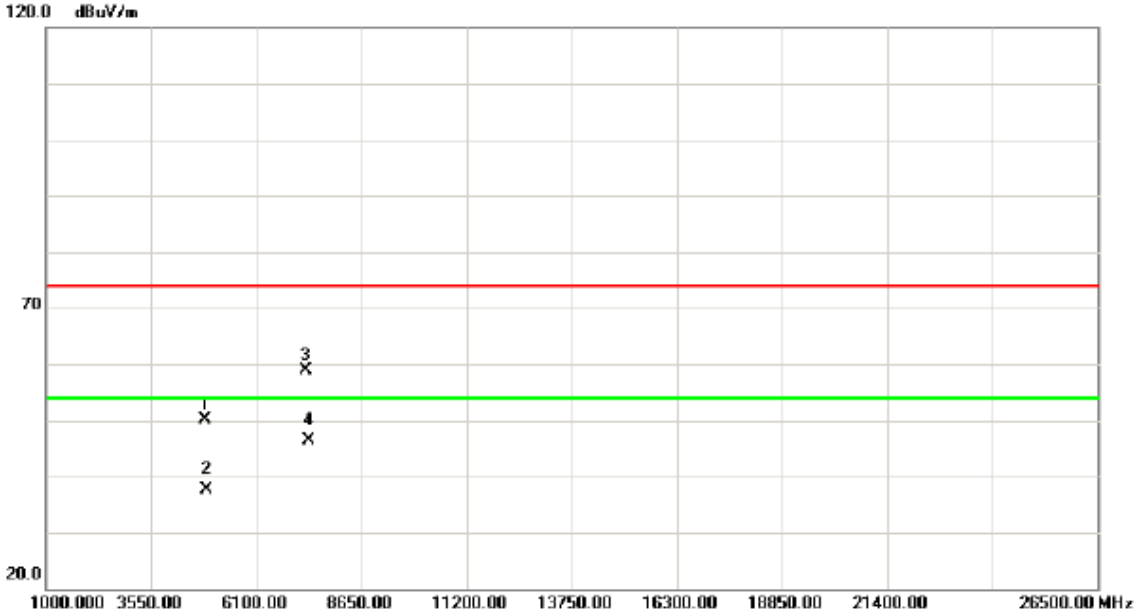
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	X	2436.250	63.16	31.24	94.40	74.00	20.40	peak	no limit
2	*	2436.250	55.05	31.24	86.29	54.00	32.29	AVG	no limit

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

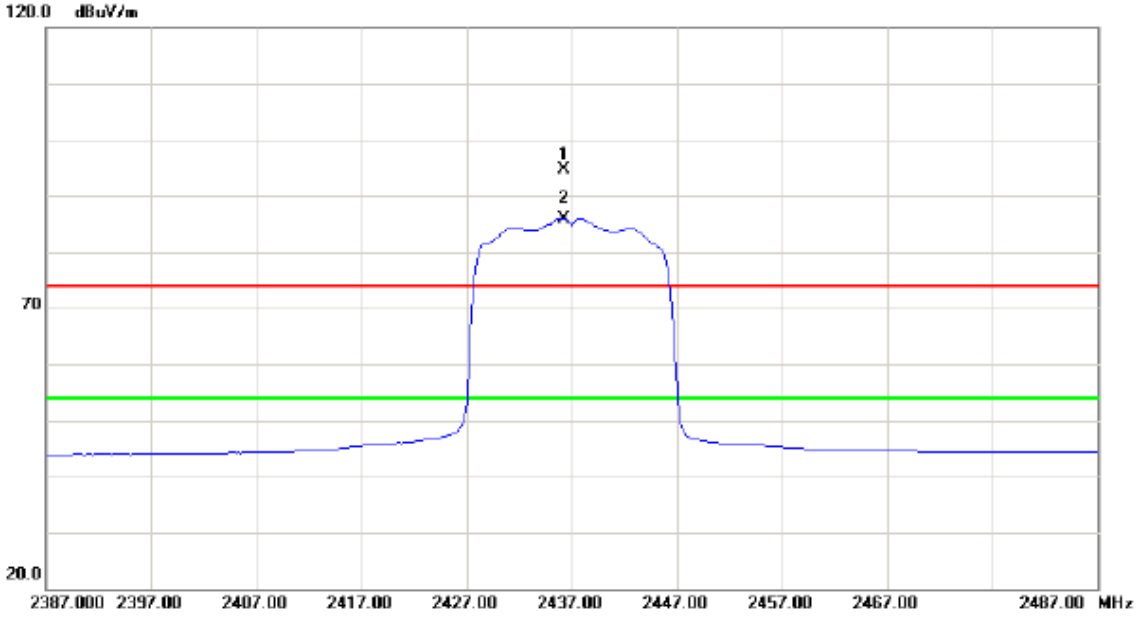
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4874.025	43.30	6.78	50.08	74.00	-23.92	peak	
2		4874.025	30.75	6.78	37.53	54.00	-16.47	AVG	
3		7311.475	43.22	15.58	58.80	74.00	-15.20	peak	
4	*	7311.475	30.72	15.58	46.30	54.00	-7.70	AVG	

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

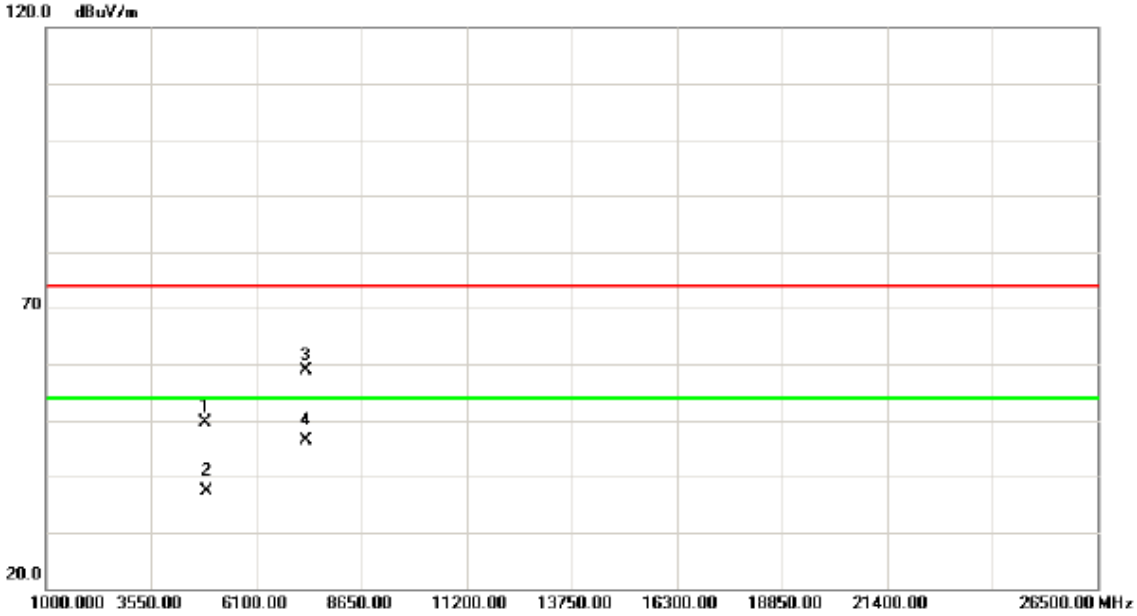
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	X	2436.250	63.29	31.24	94.53	74.00	20.53	peak	no limit
2	*	2436.250	54.65	31.24	85.89	54.00	31.89	AVG	no limit

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

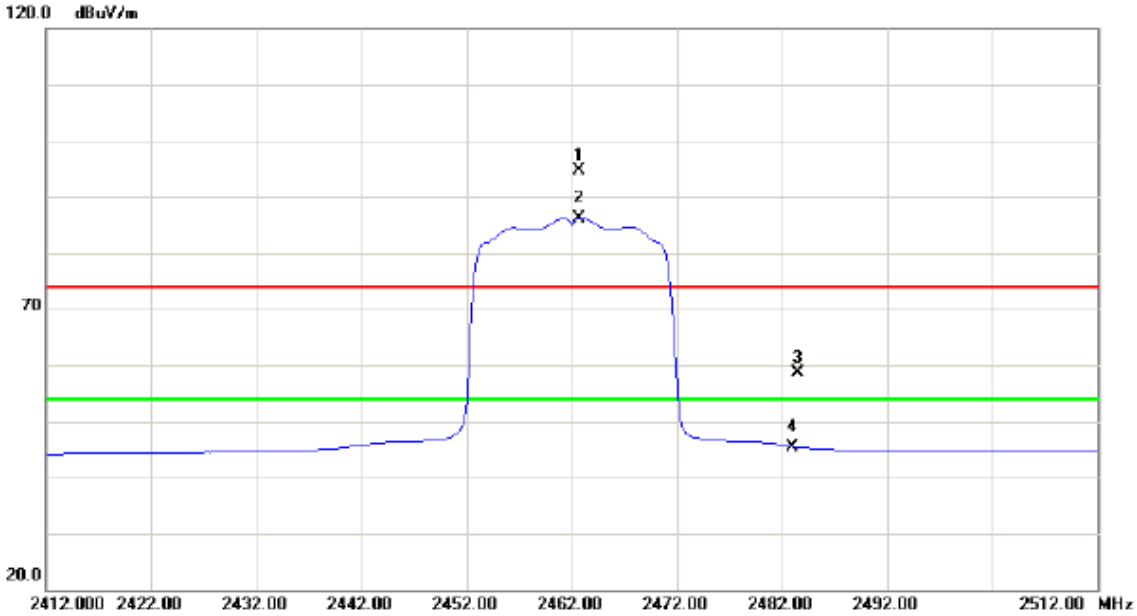
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4874.065	42.77	6.78	49.55	74.00	-24.45	peak	
2		4874.065	30.62	6.78	37.40	54.00	-16.60	AVG	
3		7311.080	43.25	15.57	58.82	74.00	-15.18	peak	
4	*	7311.080	30.78	15.57	46.35	54.00	-7.65	AVG	

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

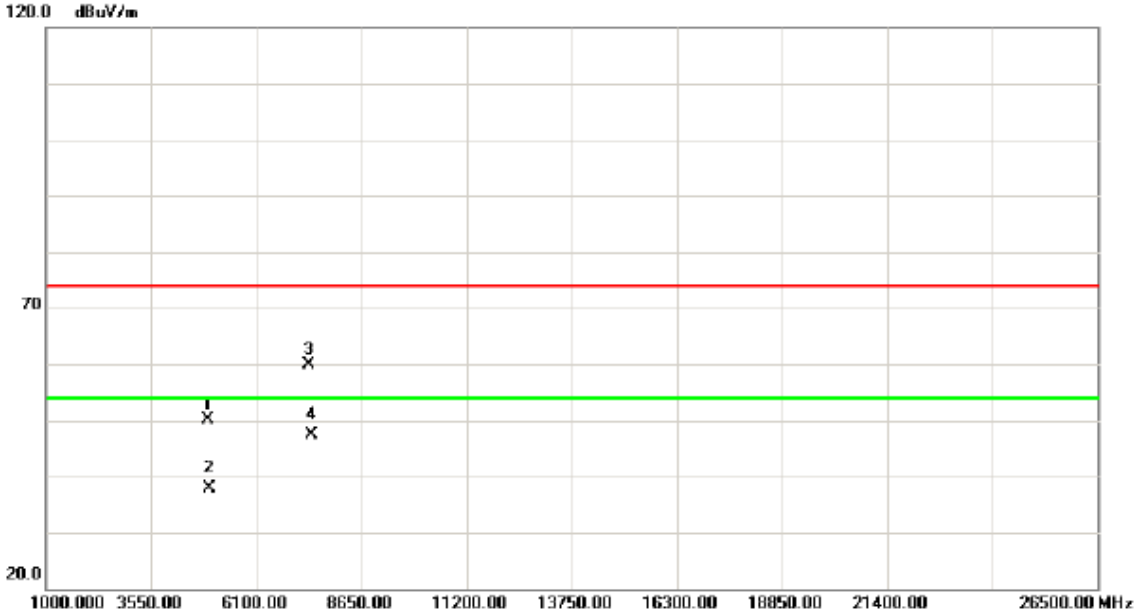
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	X	2462.750	63.23	31.36	94.59	74.00	20.59	peak	no limit
2	*	2462.750	54.76	31.36	86.12	54.00	32.12	AVG	no limit
3		2483.500	27.28	31.46	58.74	74.00	-15.26	peak	
4		2483.500	14.01	31.46	45.47	54.00	-8.53	AVG	

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

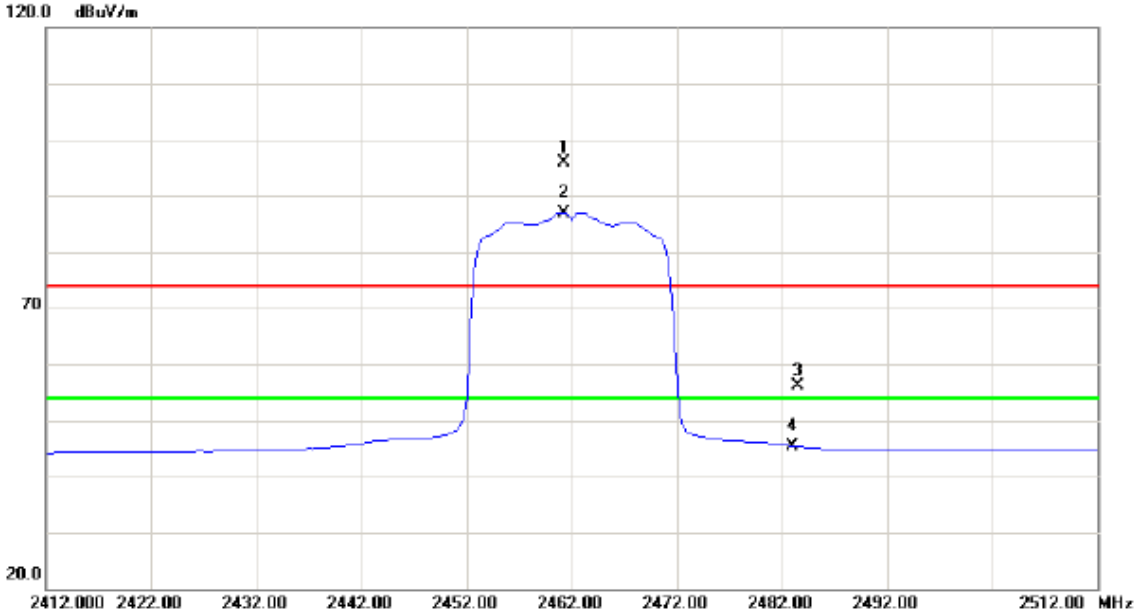
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4923.875	43.25	6.77	50.02	74.00	-23.98	peak	
2		4923.875	31.11	6.77	37.88	54.00	-16.12	AVG	
3		7386.070	43.89	15.98	59.87	74.00	-14.13	peak	
4	*	7386.070	31.44	15.98	47.42	54.00	-6.58	AVG	

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

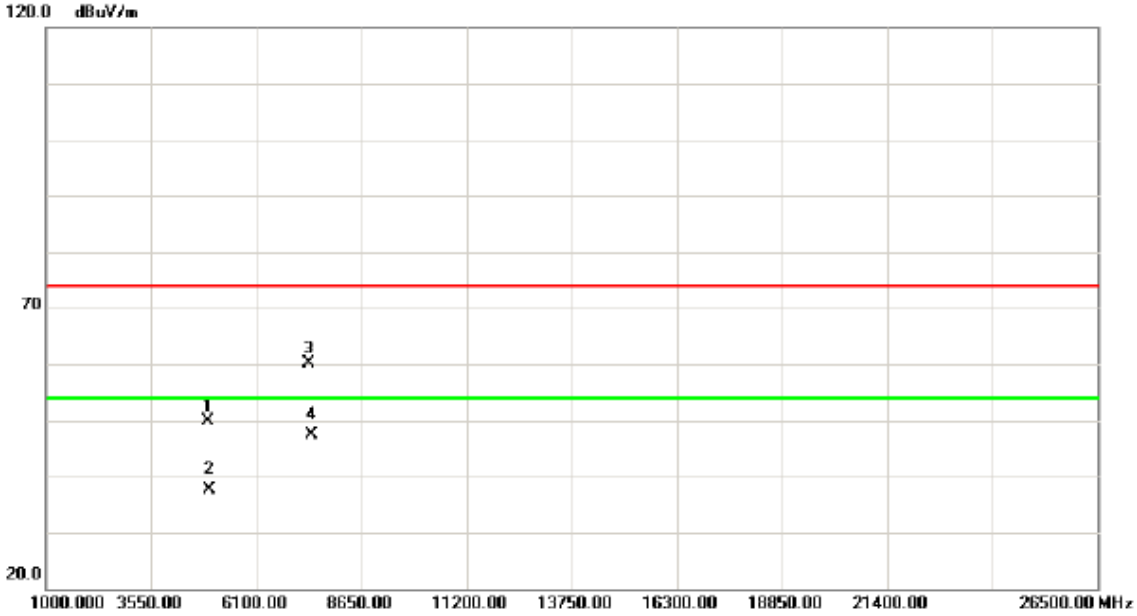
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	X	2461.250	64.41	31.36	95.77	74.00	21.77	peak	no limit
2	*	2461.250	55.57	31.36	86.93	54.00	32.93	AVG	no limit
3		2483.500	24.72	31.46	56.18	74.00	-17.82	peak	
4		2483.500	13.84	31.46	45.30	54.00	-8.70	AVG	

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

Horizontal



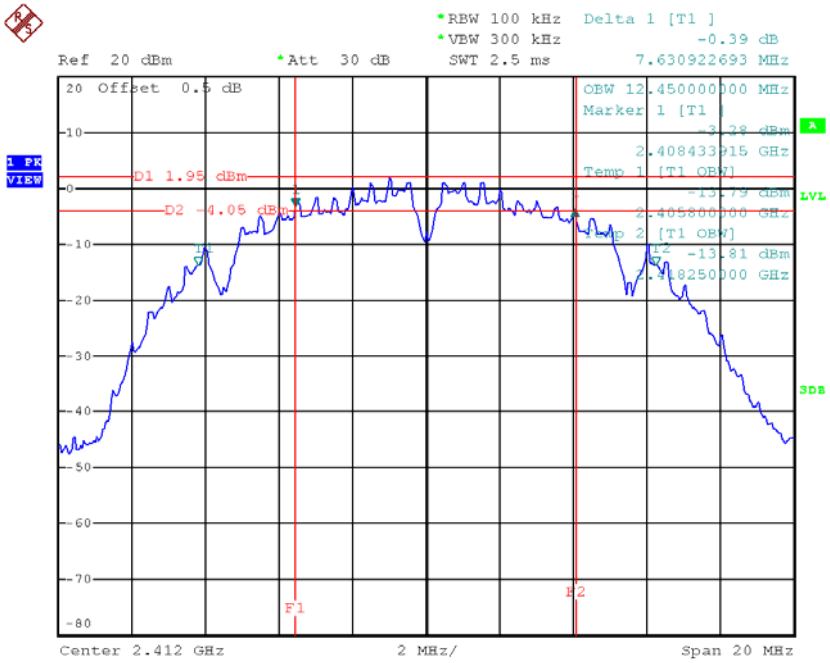
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1		4924.875	43.02	6.77	49.79	74.00	-24.21	peak	
2		4924.875	30.82	6.77	37.59	54.00	-16.41	AVG	
3		7386.390	44.22	15.98	60.20	74.00	-13.80	peak	
4	*	7386.390	31.43	15.98	47.41	54.00	-6.59	AVG	

ATTACHMENT E - BANDWIDTH

Test Mode : TX B Mode_CH01/06/11

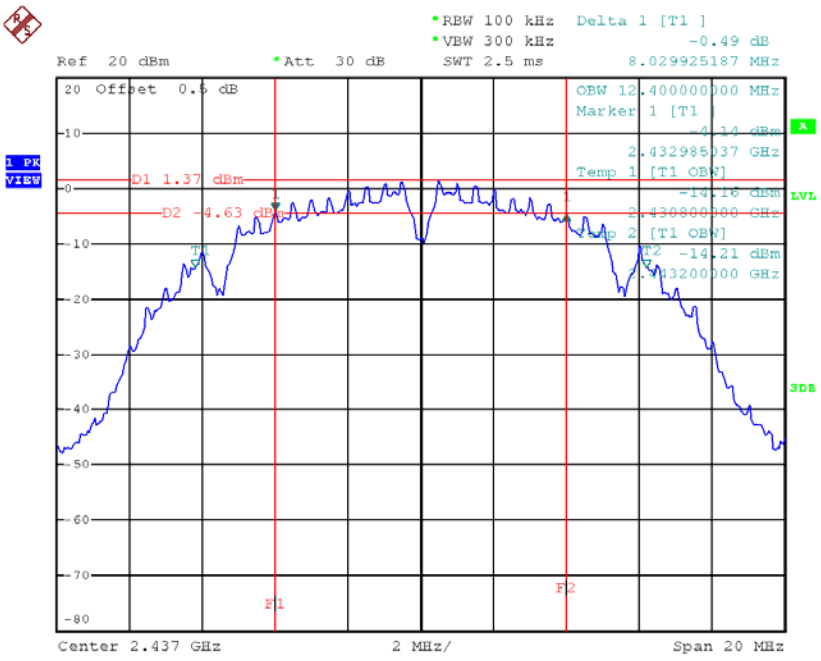
Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2412	7.63	12.45	500	Complies
2437	8.03	12.40	500	Complies
2462	8.13	12.40	500	Complies

TX CH01



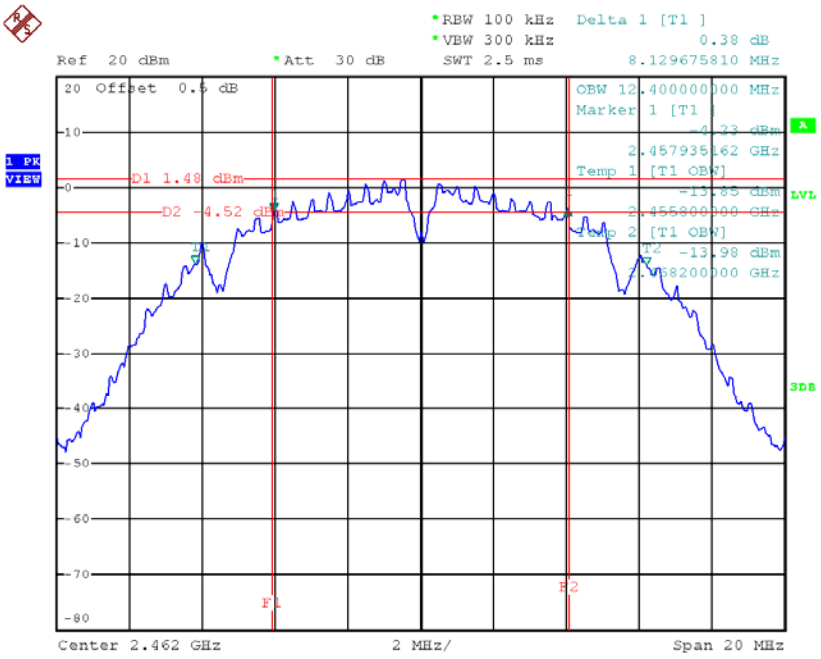
Date: 20.NOV.2014 20:30:29

TX CH06



Date: 20.NOV.2014 20:32:38

TX CH11

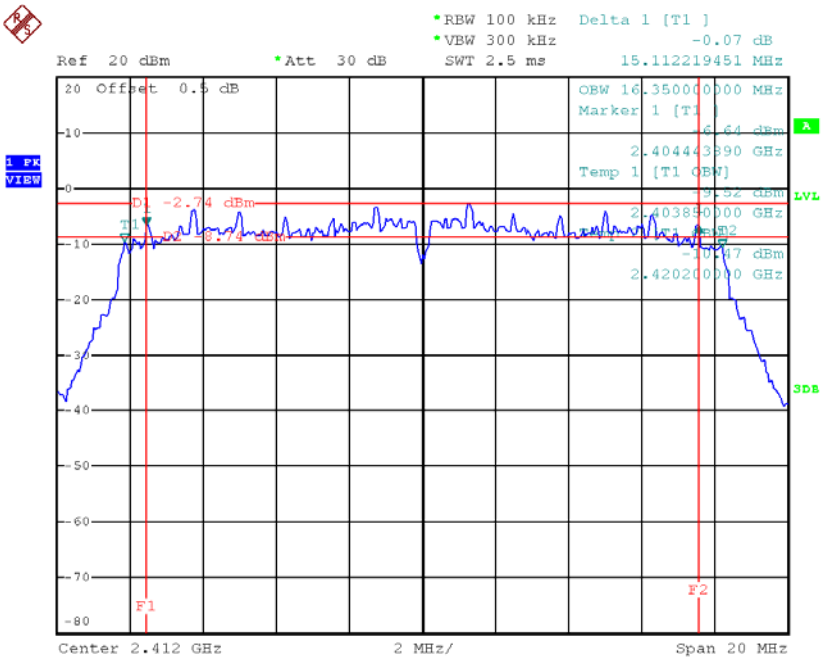


Date: 20.NOV.2014 20:33:57

Test Mode: TX G Mode_CH01/06/11

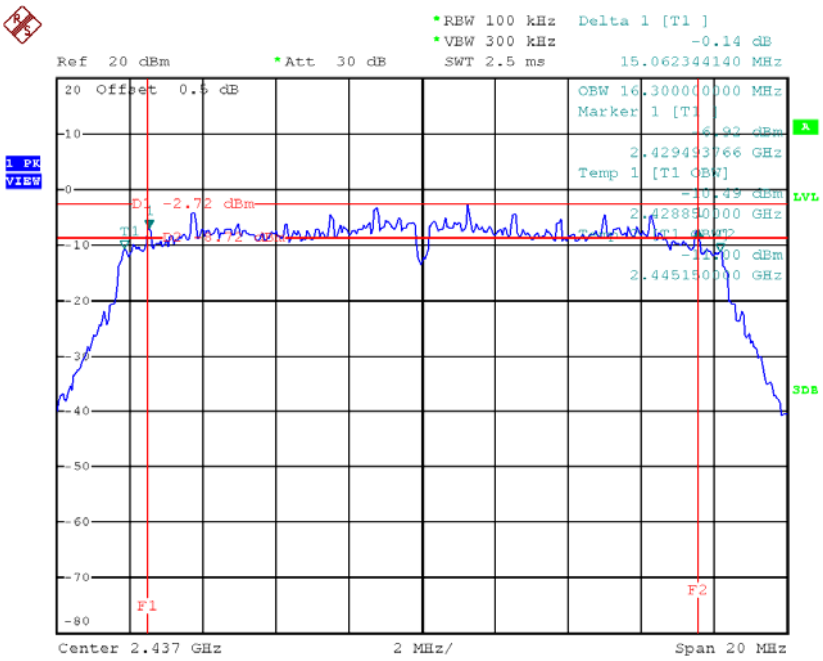
Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2412	15.11	16.35	500	Complies
2437	15.06	16.30	500	Complies
2462	14.21	16.30	500	Complies

TX CH01



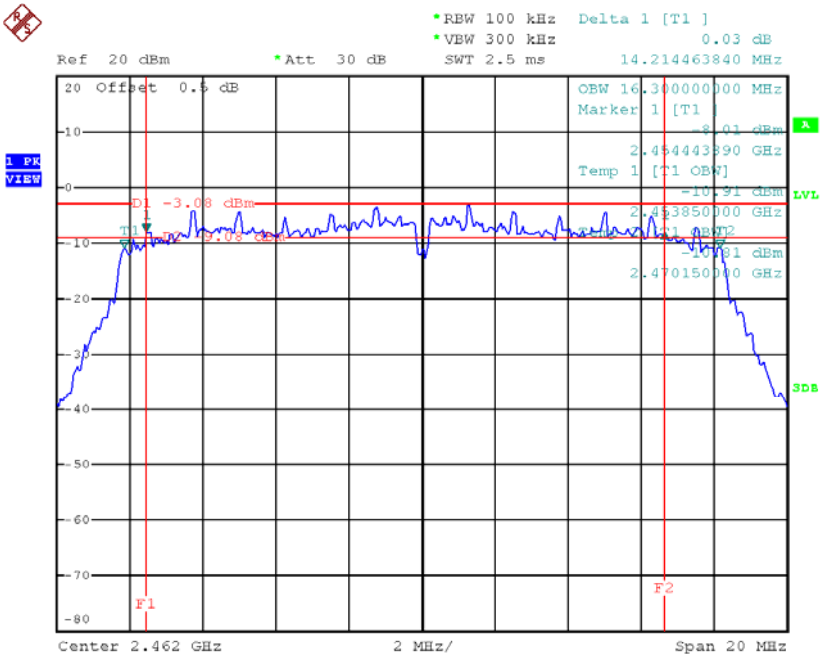
Date: 20.NOV.2014 20:36:31

TX CH06



Date: 20.NOV.2014 20:39:11

TX CH11

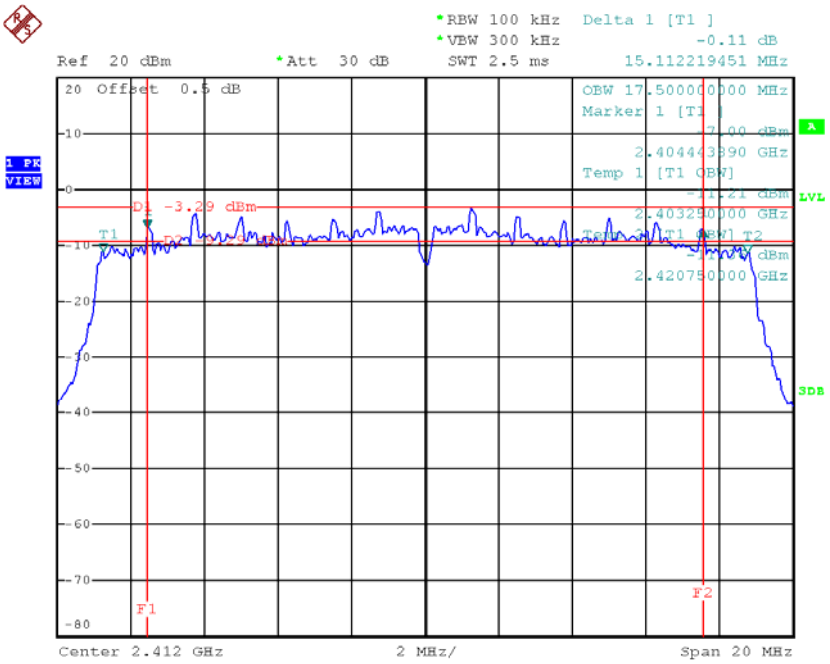


Date: 20.NOV.2014 20:40:42

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

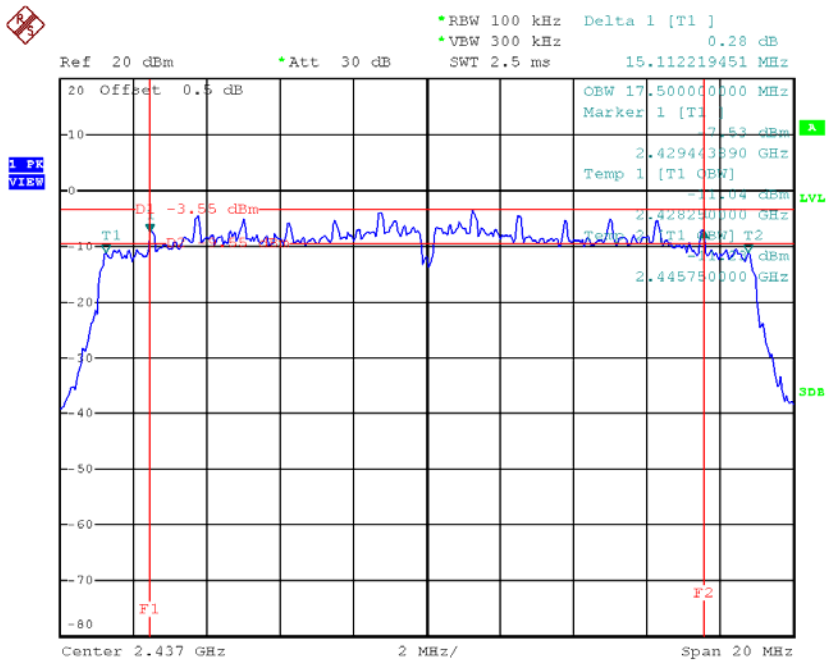
Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2412	15.11	17.50	500	Complies
2437	15.11	17.50	500	Complies
2462	15.11	17.50	500	Complies

TX CH01



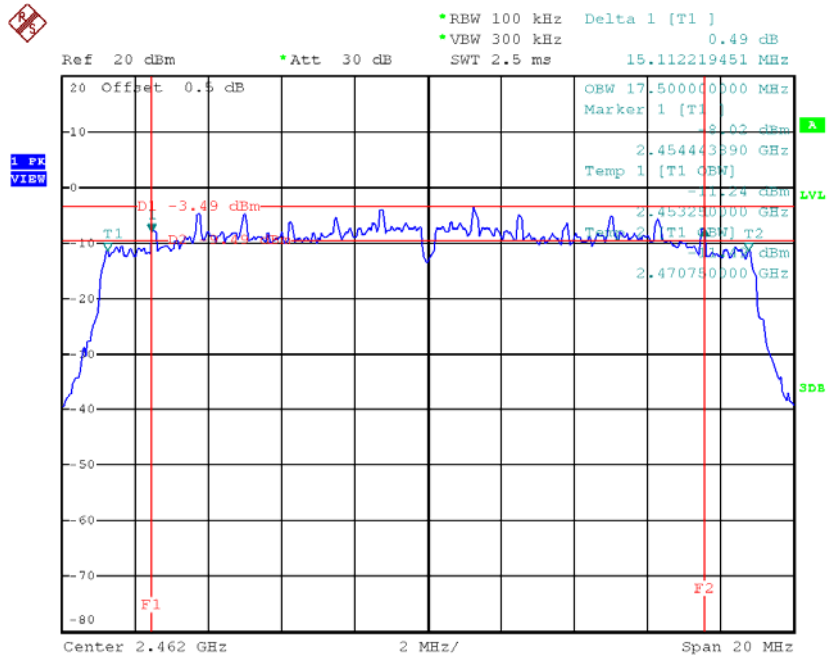
Date: 20.NOV.2014 20:45:15

TX CH06



Date: 20.NOV.2014 20:47:00

TX CH11



Date: 20.NOV.2014 20:48:50

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	13.52	0.02	30.00	1.00	Complies
2437	13.48	0.02	30.00	1.00	Complies
2462	13.23	0.02	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	18.63	0.07	30.00	1.00	Complies
2437	18.57	0.07	30.00	1.00	Complies
2462	18.54	0.07	30.00	1.00	Complies

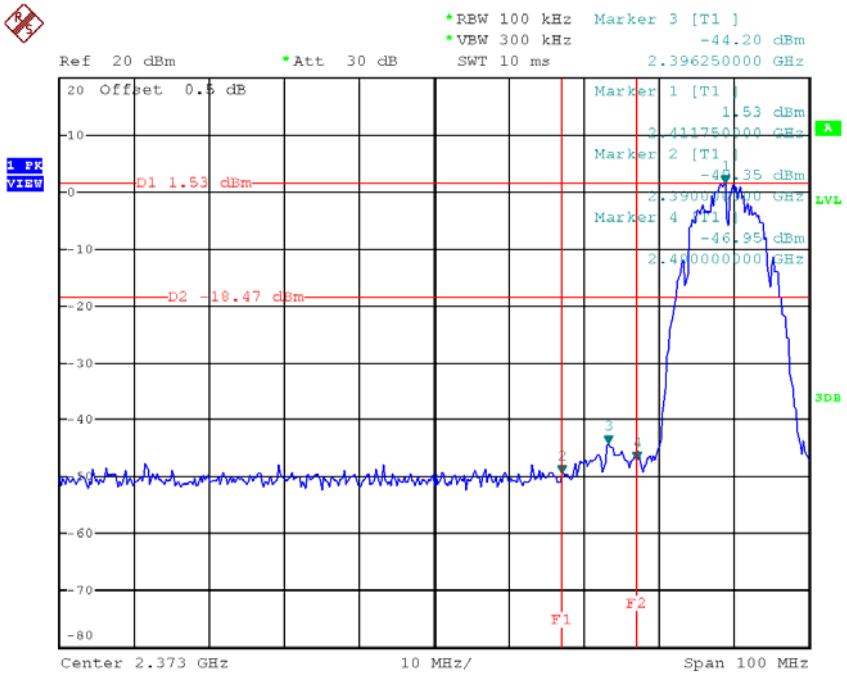
Test Mode :TX N20 Mode_CH01/06/11

Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2412	17.75	0.06	30.00	1.00	Complies
2437	17.77	0.06	30.00	1.00	Complies
2462	17.63	0.06	30.00	1.00	Complies

ATTACHMENT G - ANTENNA CONDUCTED SPURIOUS EMISSION

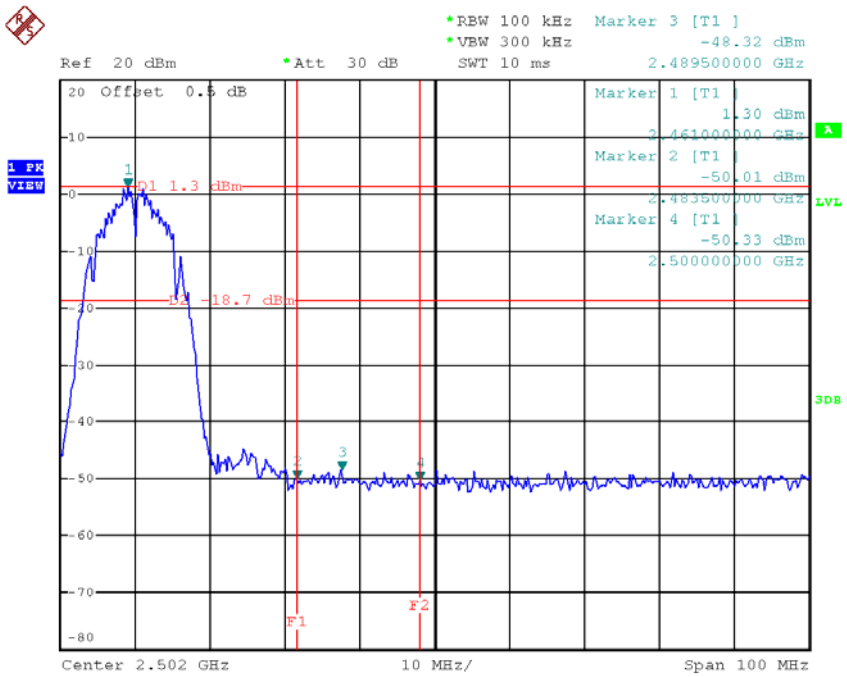
Test Mode :	**TX B Mode**

TX B mode CH01



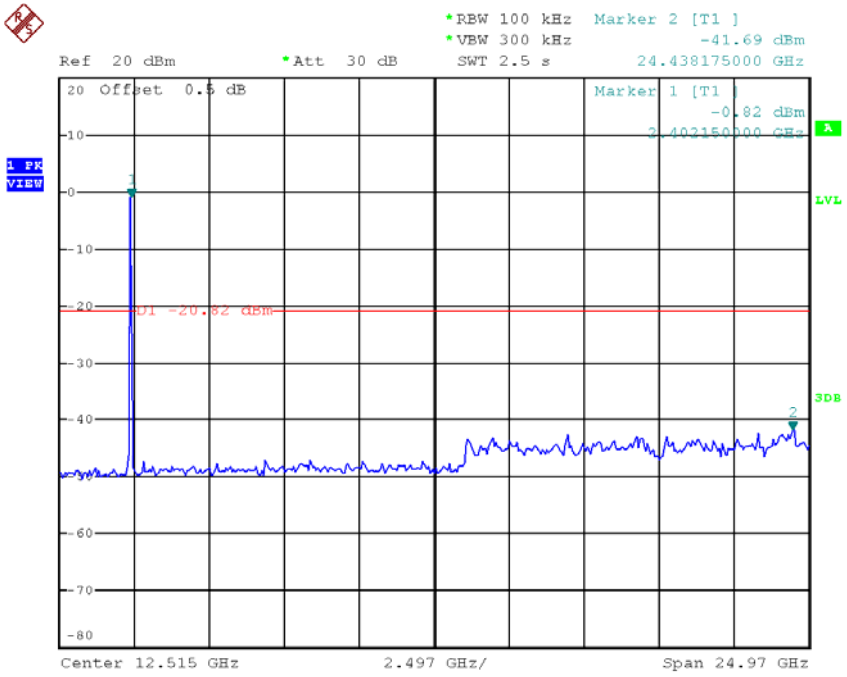
Date: 20.NOV.2014 20:30:41

TX B mode CH11



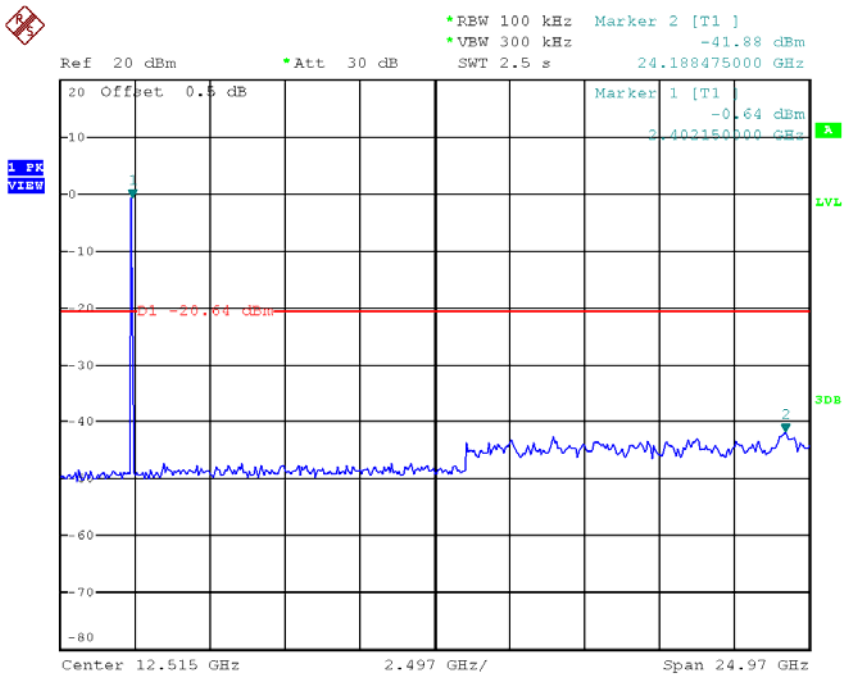
Date: 20.NOV.2014 20:34:09

TX B mode CH01 (10 Harmonic of the frequency)



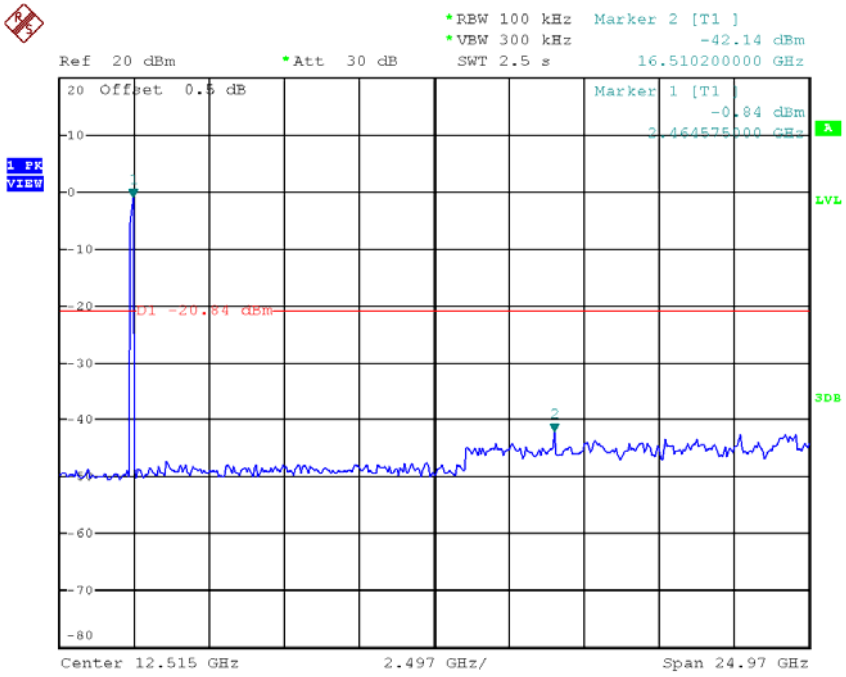
Date: 20.NOV.2014 20:29:45

TX B mode CH06 (10 Harmonic of the frequency)



Date: 20.NOV.2014 20:32:14

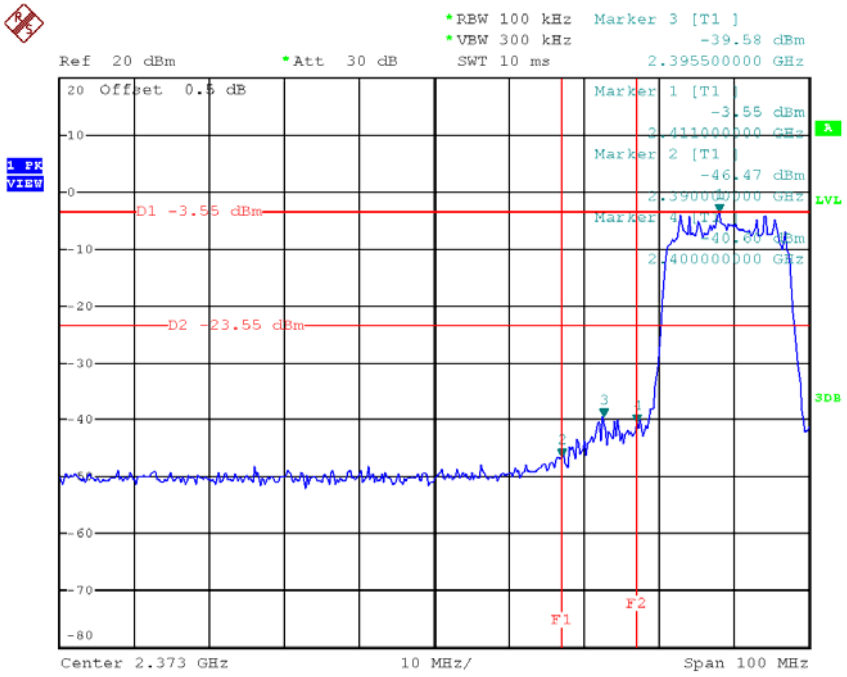
TX B mode CH11 (10 Harmonic of the frequency)



Date: 20.NOV.2014 20:33:36

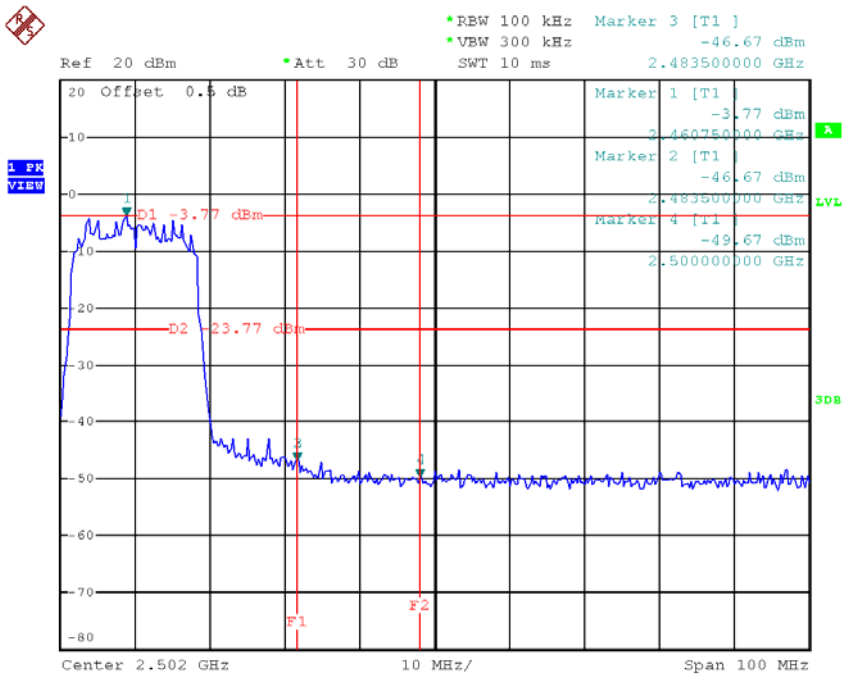
Test Mode :	**TX G Mode**

TX G mode CH01



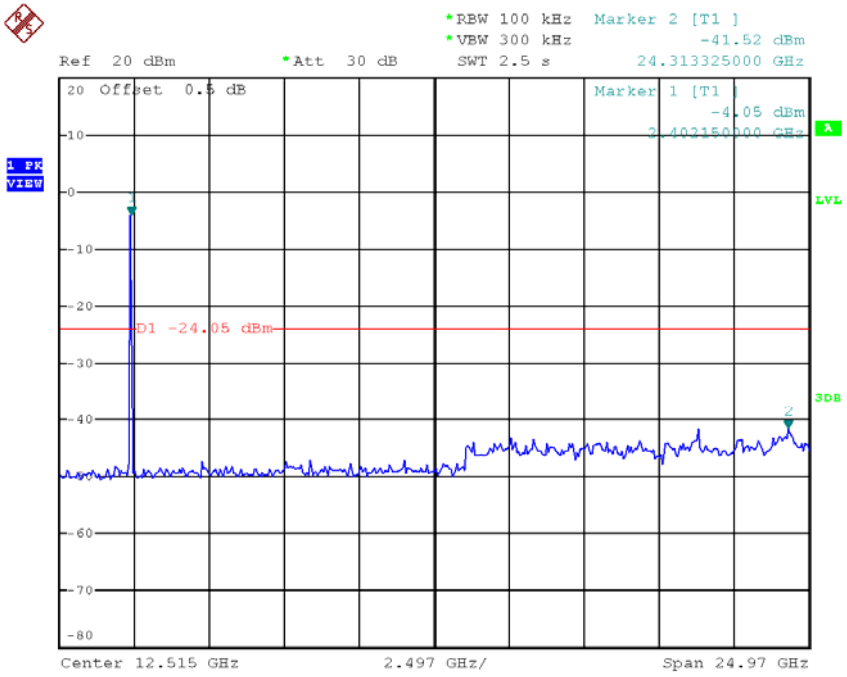
Date: 20.NOV.2014 20:36:48

TX G mode CH11



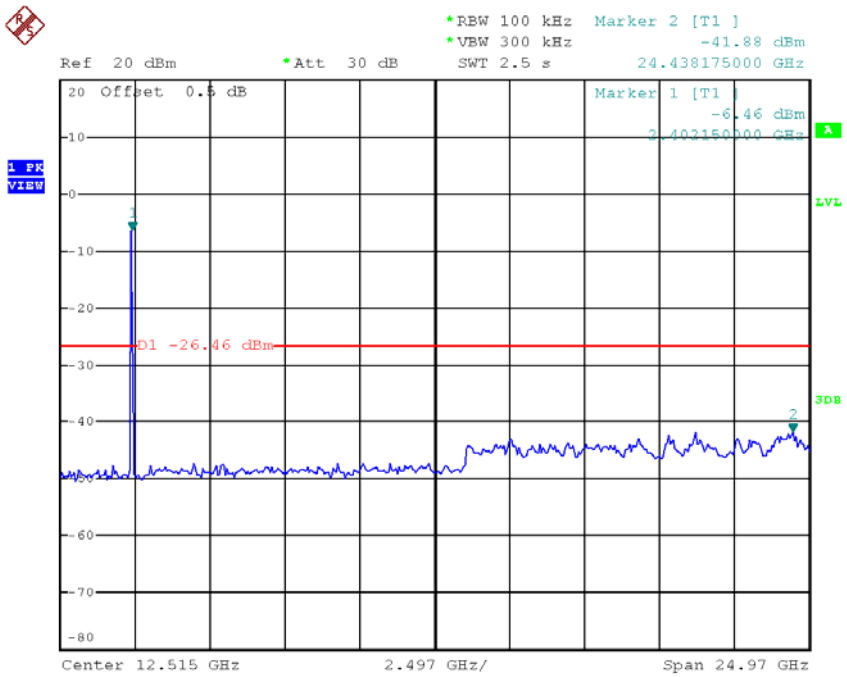
Date: 20.NOV.2014 20:40:57

TX G mode CH01 (10 Harmonic of the frequency)



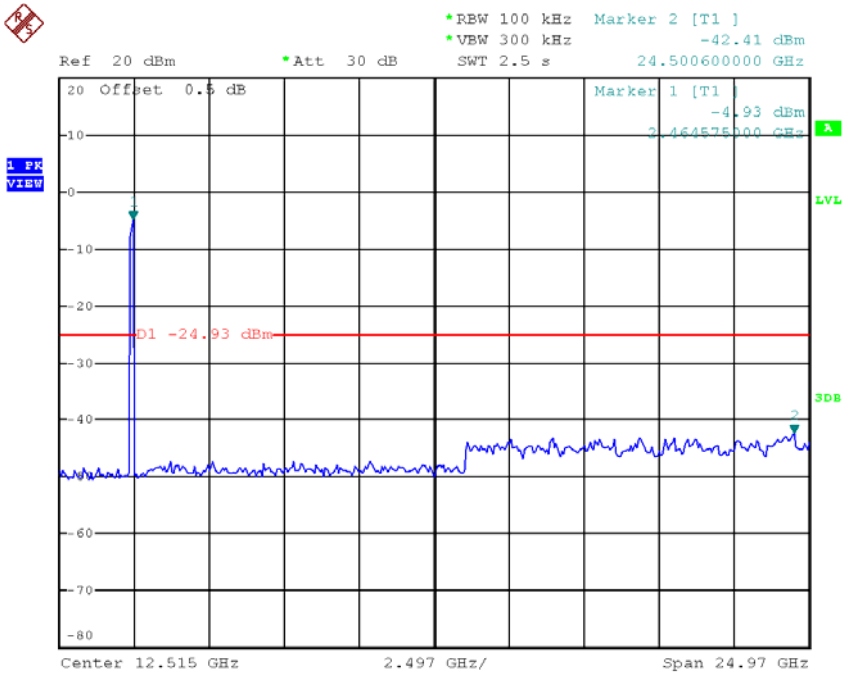
Date: 20.NOV.2014 20:36:11

TX G mode CH06 (10 Harmonic of the frequency)



Date: 20.NOV.2014 20:38:54

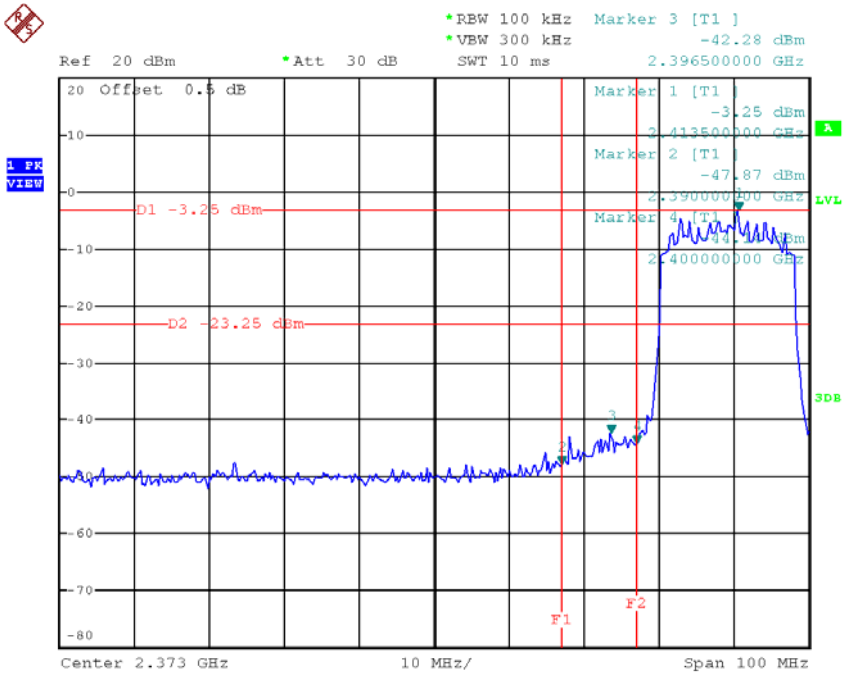
TX G mode CH11 (10 Harmonic of the frequency)



Date: 20.NOV.2014 20:40:22

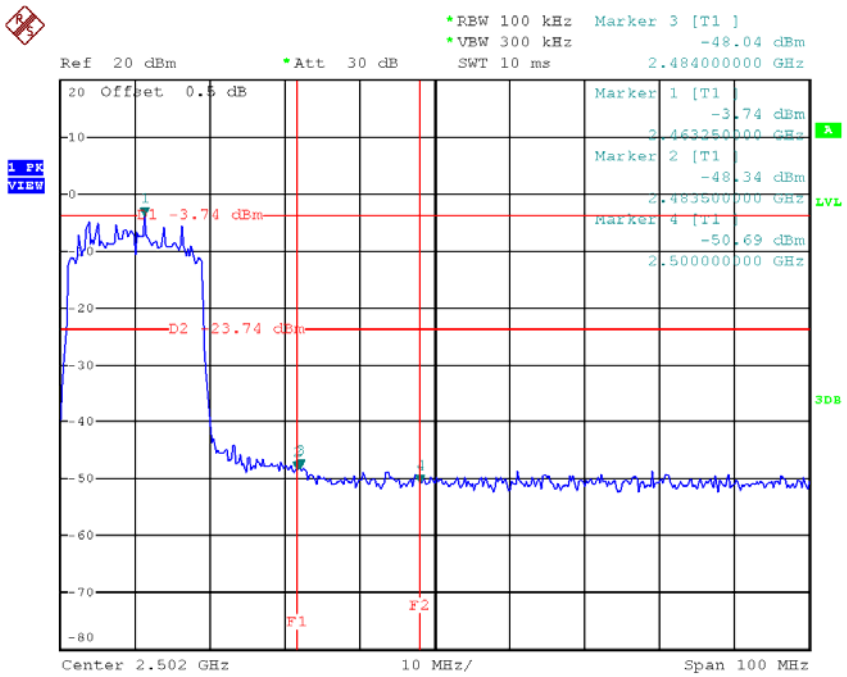
Test Mode :	TX N-20M Mode

TX HT20 mode CH01



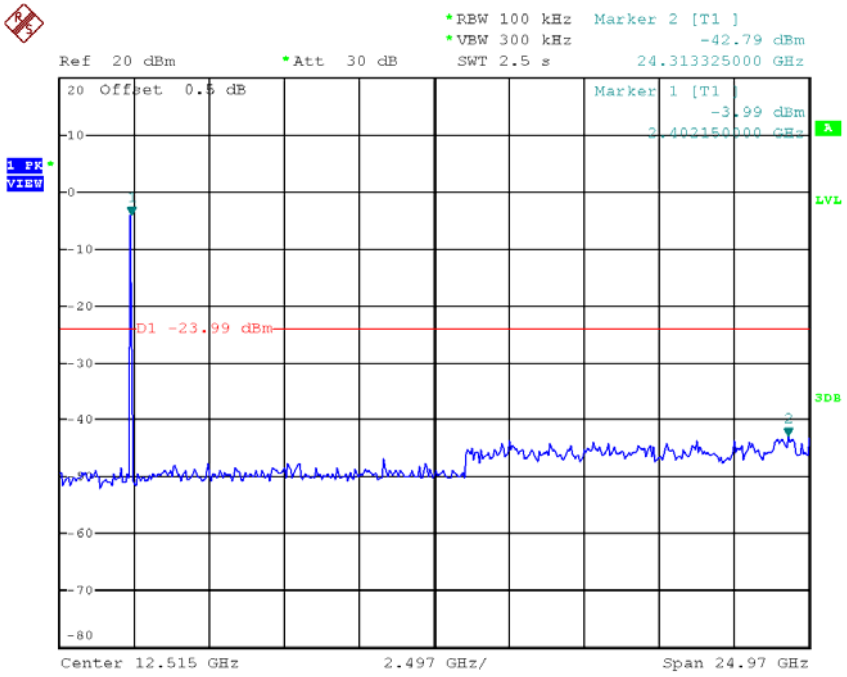
Date: 20.NOV.2014 20:45:31

TX HT20 mode CH11



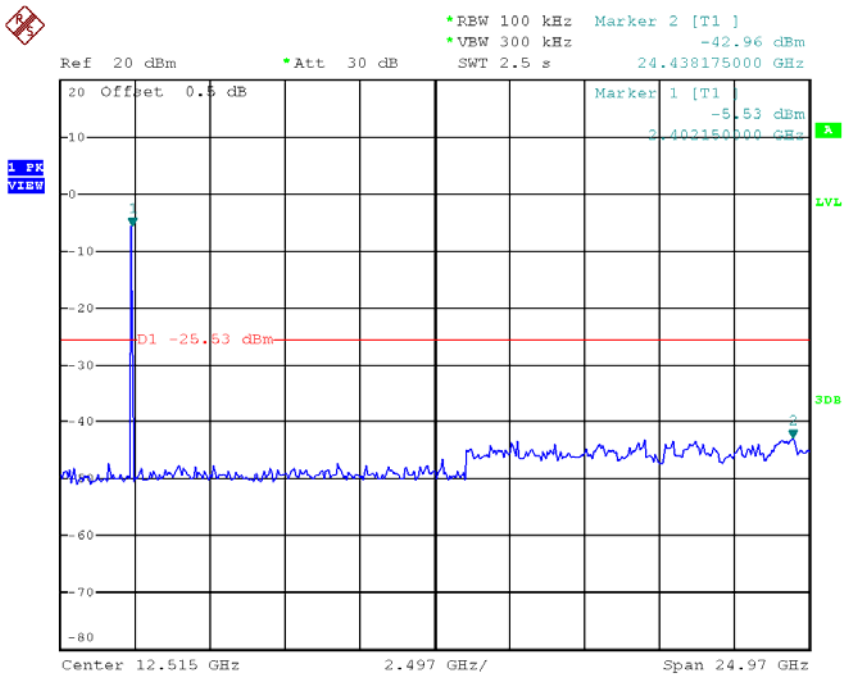
Date: 20.NOV.2014 20:49:02

TX HT20 mode CH01 (10 Harmonic of the frequency)



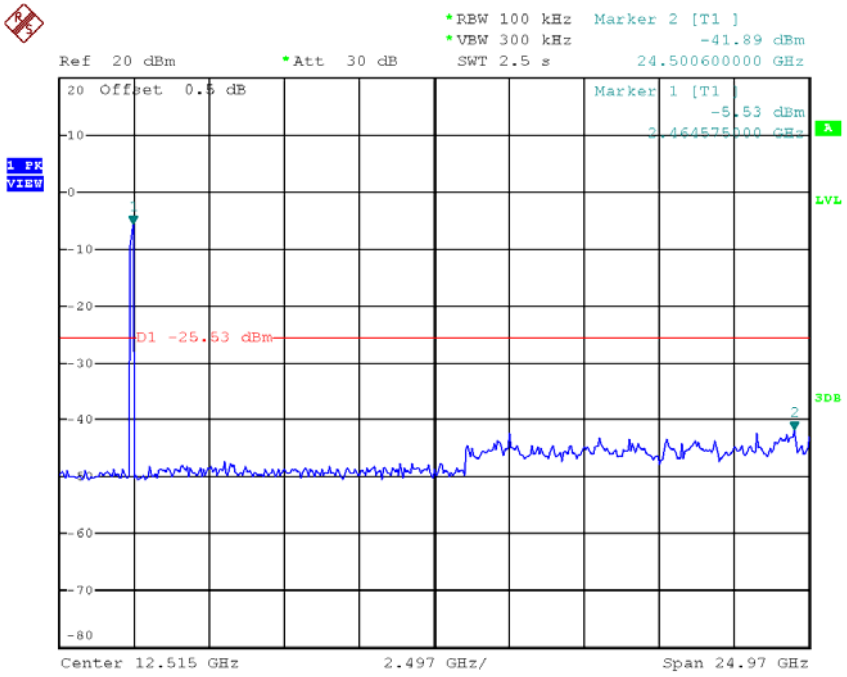
Date: 20.NOV.2014 20:44:54

TX HT20 mode CH06 (10 Harmonic of the frequency)



Date: 20.NOV.2014 20:46:34

TX HT20 mode CH11 (10 Harmonic of the frequency)



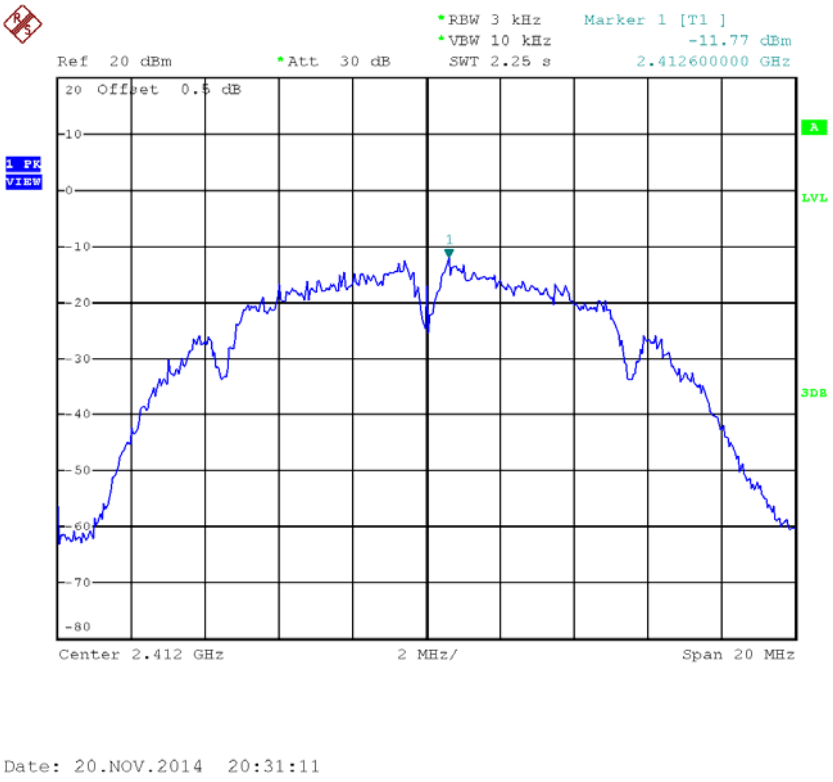
Date: 20.NOV.2014 20:48:30

ATTACHMENT H - POWER SPECTRAL DENSITY

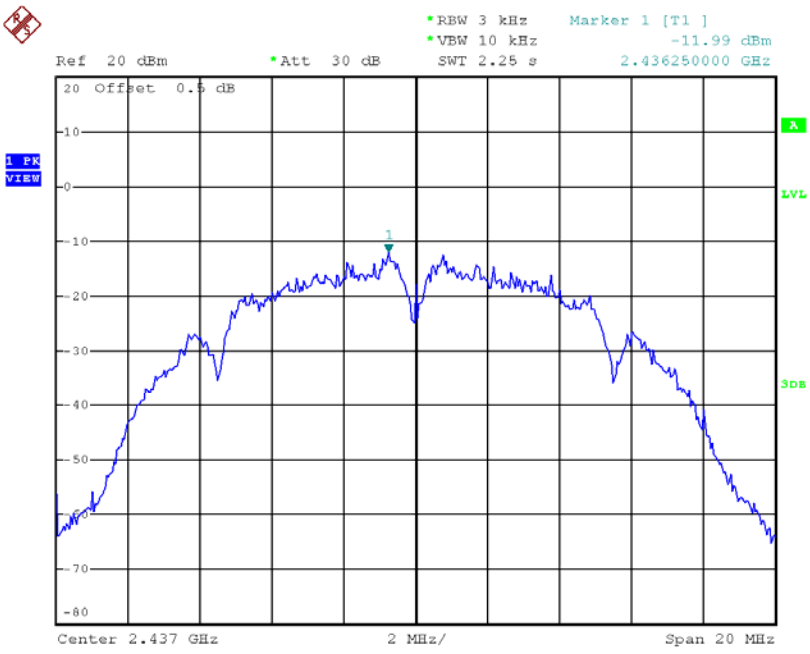
Test Mode :TX B Mode_CH01/06/11

Frequency (MHz)	Power Density (dBm/3kHz)	Power Density (mW/3kHz)	Max. Limit (dBm/3kHz)	Result
2412	-11.77	0.07	8.00	Complies
2437	-11.99	0.06	8.00	Complies
2462	-13.42	0.05	8.00	Complies

TX CH01

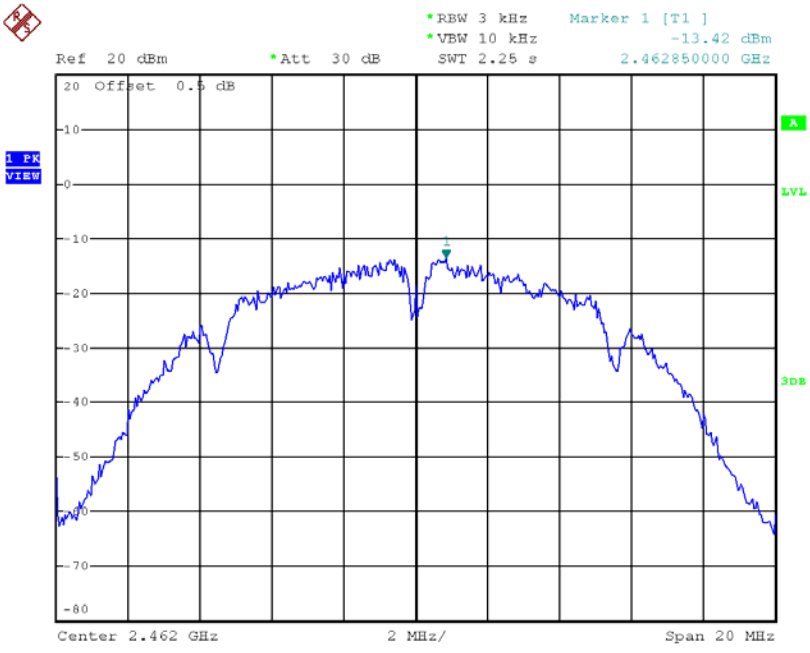


TX CH06



Date: 20.NOV.2014 20:33:02

TX CH11

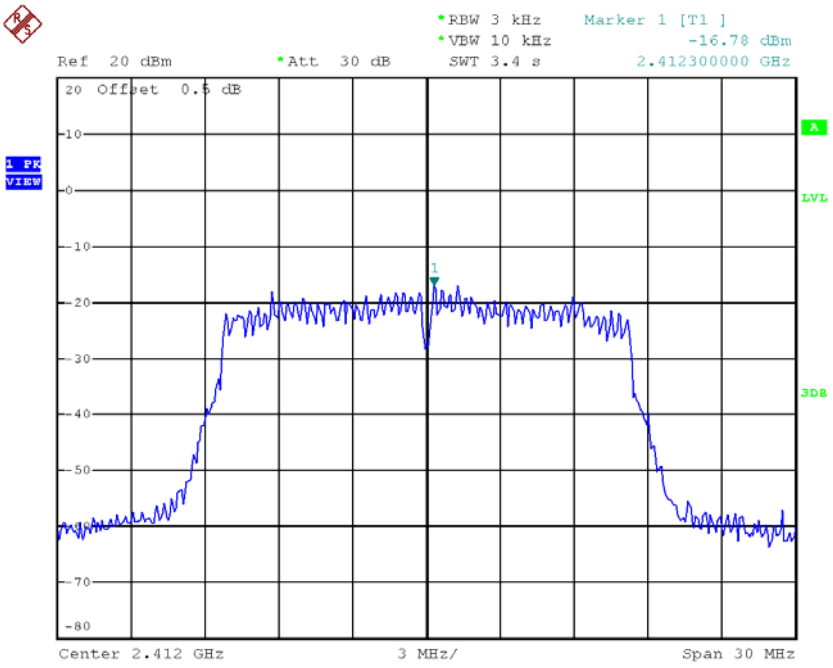


Date: 20.NOV.2014 20:34:29

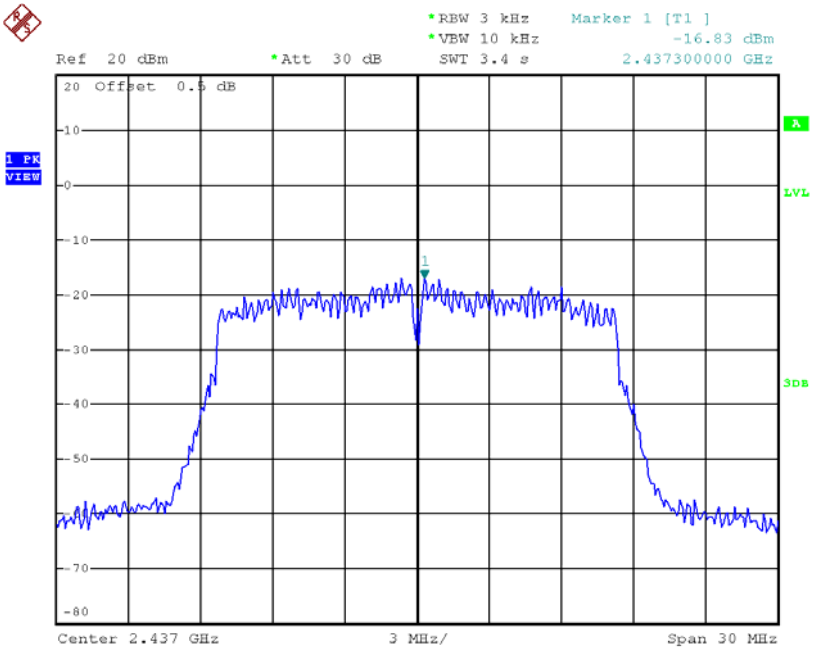
Test Mode :TX G Mode_CH01/06/11

Frequency (MHz)	Power Density (dBm/3kHz)	Power Density (mW/3kHz)	Max. Limit (dBm/3kHz)	Result
2412	-16.78	0.02	8.00	Complies
2437	-16.83	0.02	8.00	Complies
2462	-16.89	0.02	8.00	Complies

TX CH01

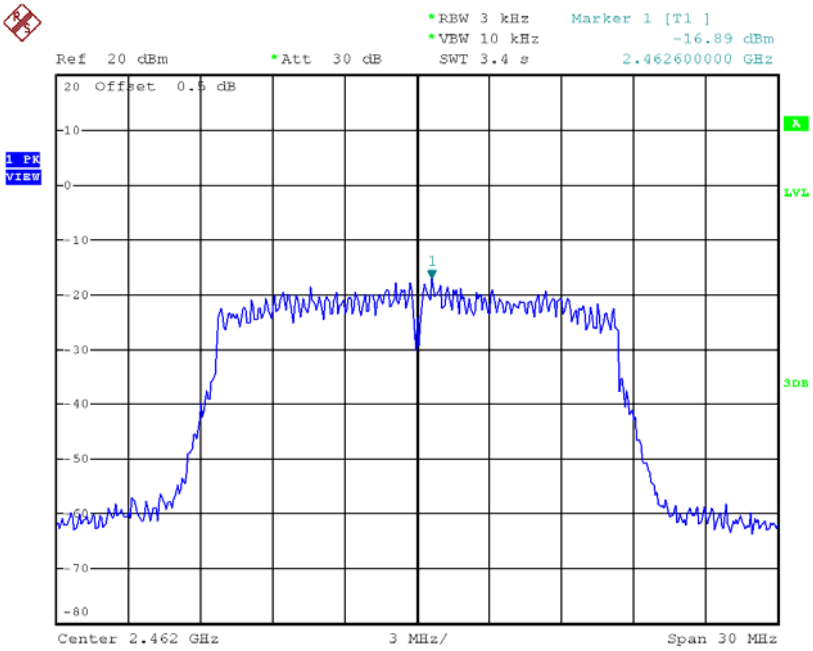


TX CH06



Date: 20.NOV.2014 20:39:41

TX CH11

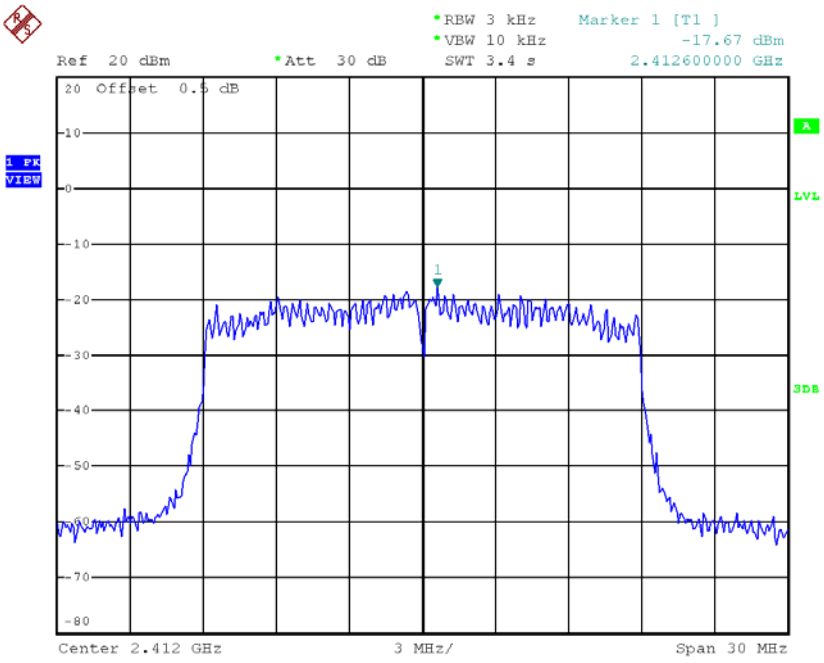


Date: 20.NOV.2014 20:41:21

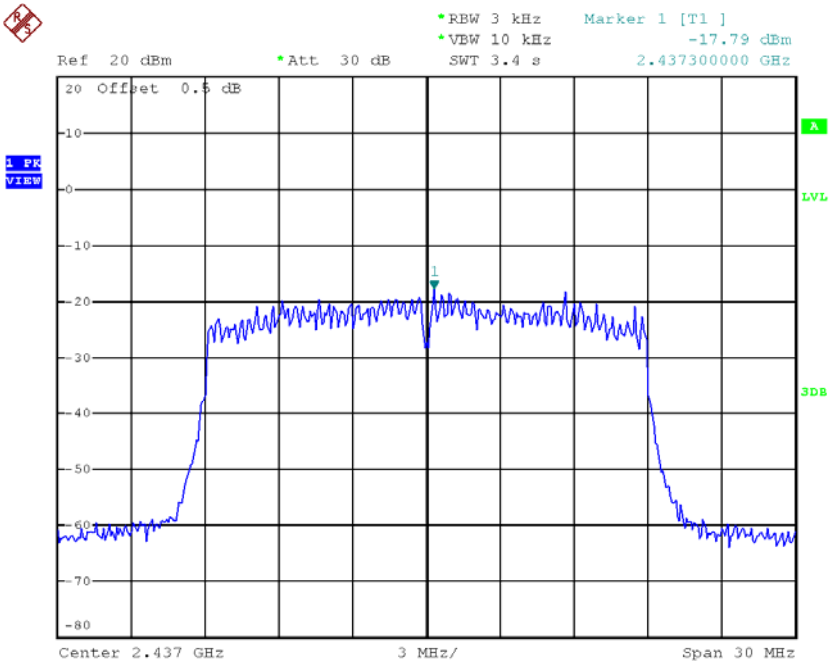
Test Mode : TX N-20M Mode_CH01/06/11

Frequency (MHz)	Power Density (dBm/3kHz)	Power Density (mW/3kHz)	Max. Limit (dBm/3kHz)	Result
2412	-17.67	0.02	8.00	Complies
2437	-17.79	0.02	8.00	Complies
2462	-18.53	0.01	8.00	Complies

TX CH01

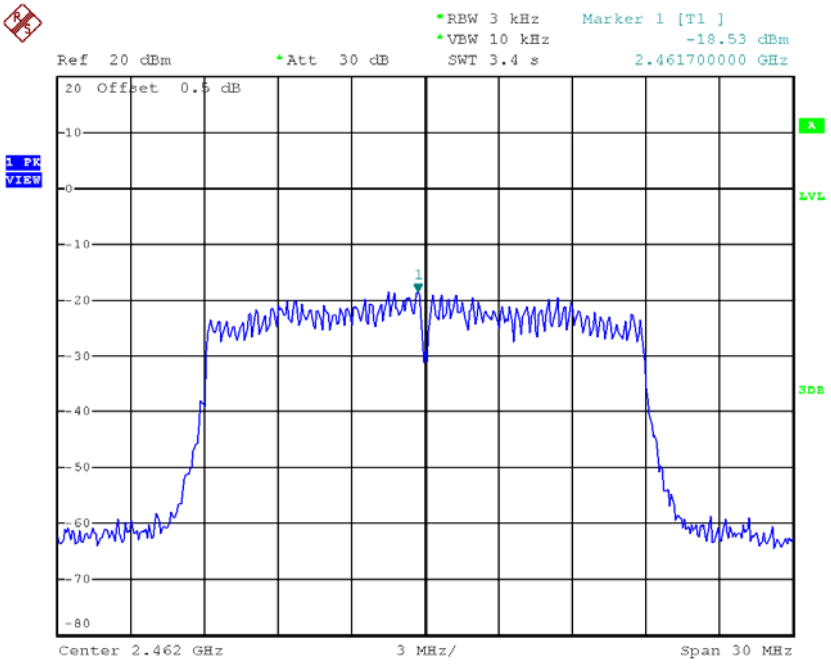


TX CH06



Date: 20.NOV.2014 20:47:24

TX CH11



Date: 20.NOV.2014 20:49:22