

FCC Radio Test Report

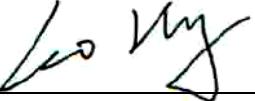
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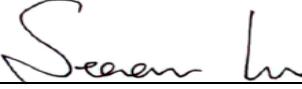
This report concerns (check one): Original Grant Class II Change

Project No. : 1501C108
Equipment : FACEBOOK COUNTER DISPLAY
Model Name : COUNTER; FACEBOOK 5D
Applicant : Smiirl
Address : 57 rue faubourg Saint Antoine, 75011 Paris

Date of Receipt : Jan. 05, 2015
Date of Test : Jan. 05, 2015~Feb. 12, 2015
Issued Date : Feb. 13, 2015
Tested by : BTL Inc.

Testing Engineer : 
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Technical Manager : 
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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-1-1501C108	Original Issue.	Feb. 13, 2015

1. CERTIFICATION

Equipment : FACEBOOK COUNTER DISPLAY
Brand Name : SMIIRL
Model Name : COUNTER; FACEBOOK 5D
Applicant : Smiirl
Manufacturer : AZTECH TECHNOLOGIES PTE LTD
Address : 31, UBI ROAD 1, #09-01, SINGAPORE 408694
Factory : Aztech Communication Device (DG) LTD
Address : Jiu Jiang Shui Village, Chang Ping Town, Dong Guan City, Guang Dong Province, China.
Date of Test : Jan. 05, 2015~Feb. 12, 2015
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-1-1501C108) 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
	FCC		
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 expended uncertainty U is based on a standard uncertainty multiplied by a coverage factor of $k=2$, providing a level of confidence of approximately 95 % .

A. Conducted Measurement :

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

B. Radiated Measurement :

Test Site	Method	Measurement Frequency Range	Ant. H / V	U, (dB)	NOTE
DG-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	FACEBOOK COUNTER DISPLAY	
Brand Name	SMIIRL	
Model Name	COUNTER; FACEBOOK 5D	
Model Difference	Only differ in model name.	
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 150 Mbps
	Output Power (Max.)	802.11b: 20.12dBm 802.11g: 23.11dBm 802.11n(20MHz): 23.02dBm 802.11n(40MHz): 22.36dBm
Power Source	DC Voltage supplied from AC/DC adapter. Brand/Model:AMIGO/AMS35-0501000F	
Power Rating	I/P: AC 100-240V 50/60Hz 0.5A O/P: DC 5V 1.0A	

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) 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	WALSIN	RFECA3216060A1T	Chip	N/A	2.00	TX/RX
2	WALSIN	RFECA3216060A1T	Chip	N/A	2.00	RX

Note: ANT 2 only has receiving function

3.2 DESCRIPTION OF TEST MODES

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

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

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

For Conducted Test	
Final Test Mode	Description
Mode 5	TX MODE

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

Note:

- (1) The measurements are performed at the high, middle, low available channels.
- (2) 802.11b mode: DBPSK (1Mbps)
802.11g mode: OFDM (6Mbps)
802.11n HT20 mode : BPSK (6.5Mbps)
802.11n HT40 mode : BPSK (13Mbps)

For radiated emission tests, the highest output powers were set for final test.

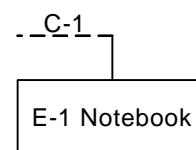
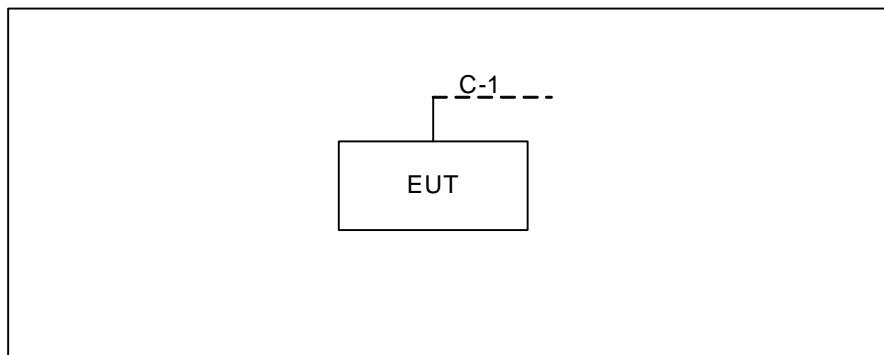
- (3) For radiated below 1G test, the 802.11b is found to be the worst case and recorded.
- (4) The EUT was programmed to be in continuously transmitting mode and the transmit duty cycle is not less than 98%.

3.3 TABLE OF PARAMETERS OF TEXT SOFTWARE SETTING

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

Test software version	Atheros Radio Test 2(ART2-GUI)		
Frequency (MHz)	2412	2437	2462
802.11b	16	16.5	16
802.11g	17	17	14
802.11n (20MHz)	16	17	13
Frequency	2422	2437	2452
802.11n (40MHz)	14.5	16.5	13

3.4 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED



3.2 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
E-1	Notebook	DELL	INSPIRON 1420	DOC	JX193A01SDC2	

Item	Shielded Type	Ferrite Core	Length	Note
C-1	NO	NO	10m	RJ45 Cable

4. EMC EMISSION TEST

4.1 CONDUCTED EMISSION MEASUREMENT

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

Frequency of Emission (MHz)	Conducted Limit (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

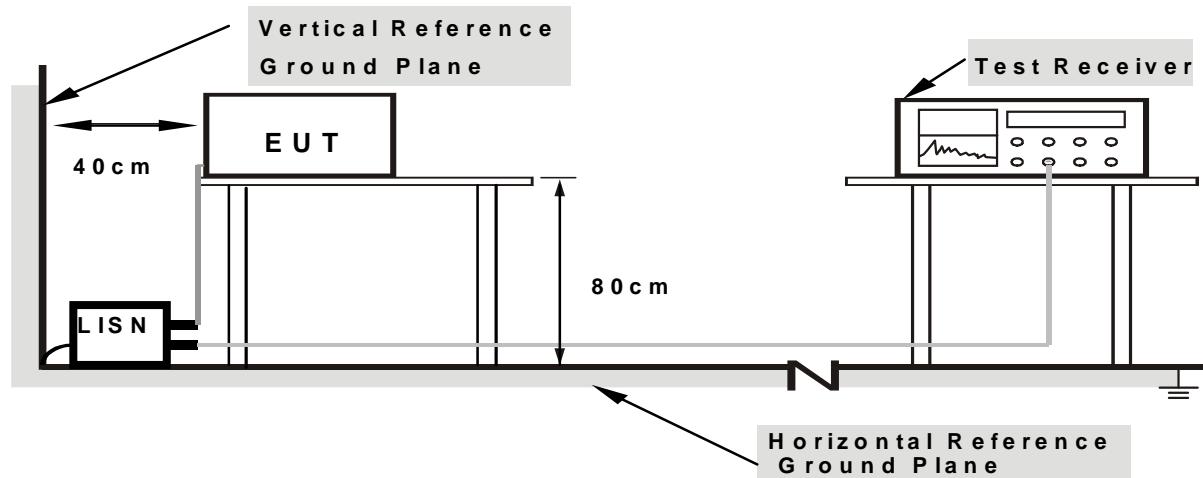
4.1.2 TEST PROCEDURE

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

$$\text{Measurement Value} = \text{Reading Level} + \text{Correct Factor}$$

$$\text{Correct Factor} = \text{Antenna Factor} + \text{Cable Loss} - \text{Amplifier Gain(if use)}$$

$$\text{Margin Level} = \text{Measurement Value} - \text{Limit Value}$$

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

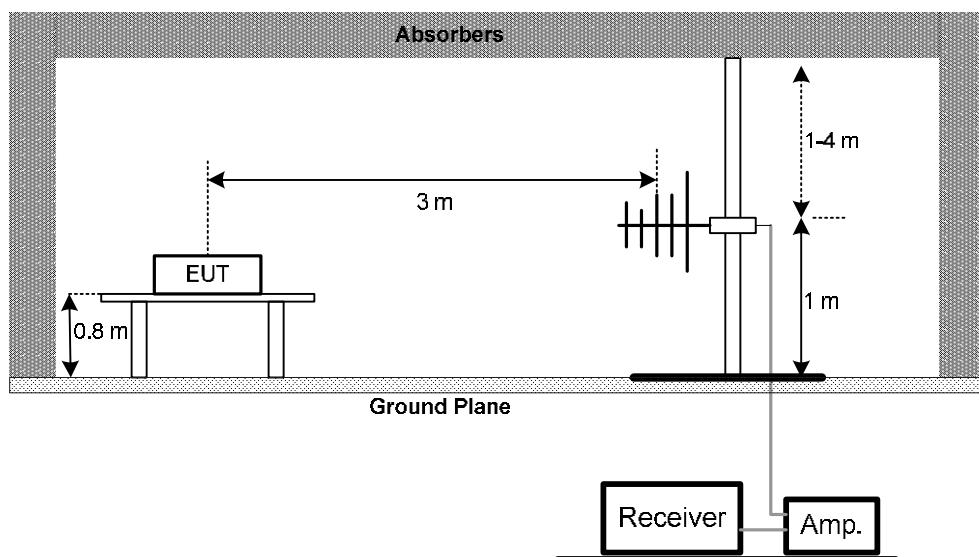
- The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1GHz)
- The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3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

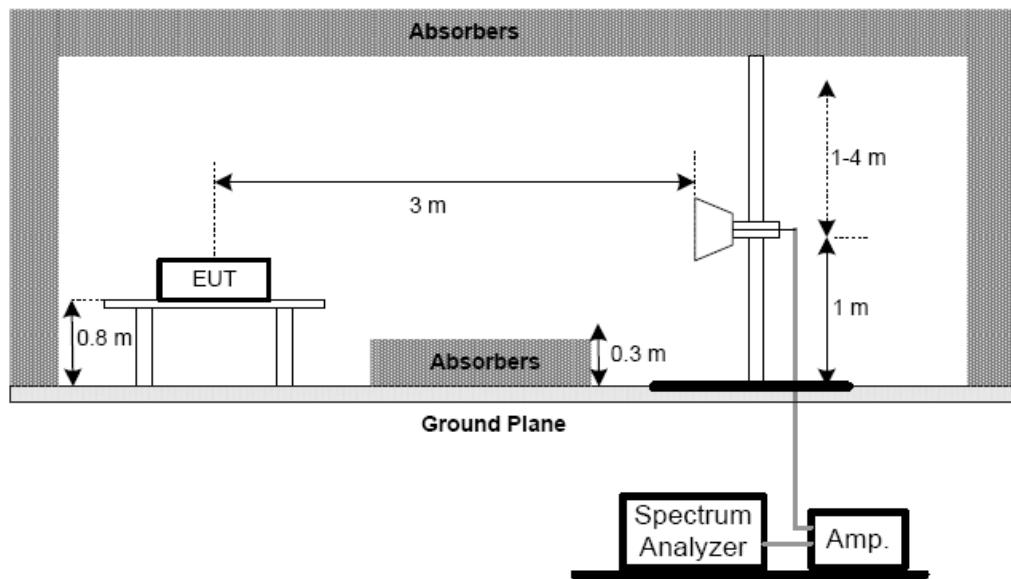
No deviation

4.2.4 TEST SETUP

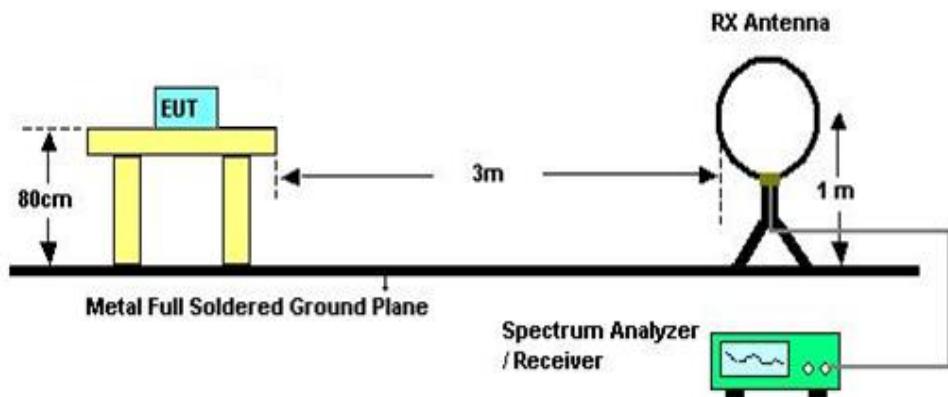
(A) Radiated Emission Test Set-Up Frequency Below 1 GHz



(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: 26°C Relative Humidity: 60% 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

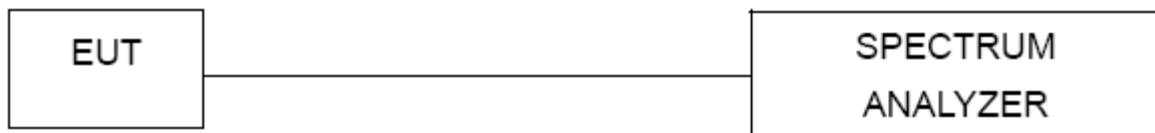
5.1.1 TEST PROCEDURE

- 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: 26°C Relative Humidity: 61% 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: 26°C Relative Humidity: 61% 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.

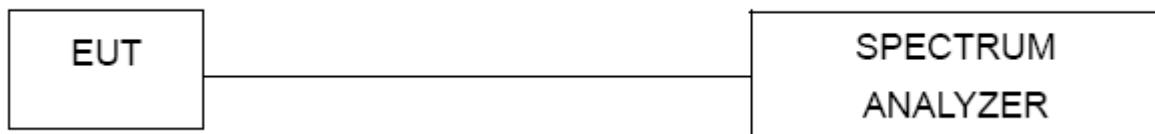
7.1.1 TEST PROCEDURE

- 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: 26°C Relative Humidity: 61% 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: 26°C Relative Humidity: 61% 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	Schwarbeck	VULB9160	9160-3232	Mar. 29, 2015
2	Amplifier	HP	8447D	2944A09673	Mar. 29, 2015
3	Receiver	AGILENT	N9038A	MY52130039	Sep. 30, 2015
4	Test Cable	N/A	C-01_CB03	N/A	Jul. 01, 2015
5	Controller	CT	SC100	N/A	N/A
6	Antenna	ETS	3115	00075789	Mar. 29, 2015
7	Amplifier	Agilent	8449B	3008A02274	Mar. 29, 2015
8	Receiver	AGILENT	N9038A	MY52130039	Sep. 30, 2015
9	Test Cable	HUBER+SUHNER	C-48	N/A	Apr. 30, 2015
10	Controller	CT	SC100	N/A	N/A
11	Broad-Band Horn Antenna	Schwarzbeck	BBHA 9170	9170319	Feb. 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

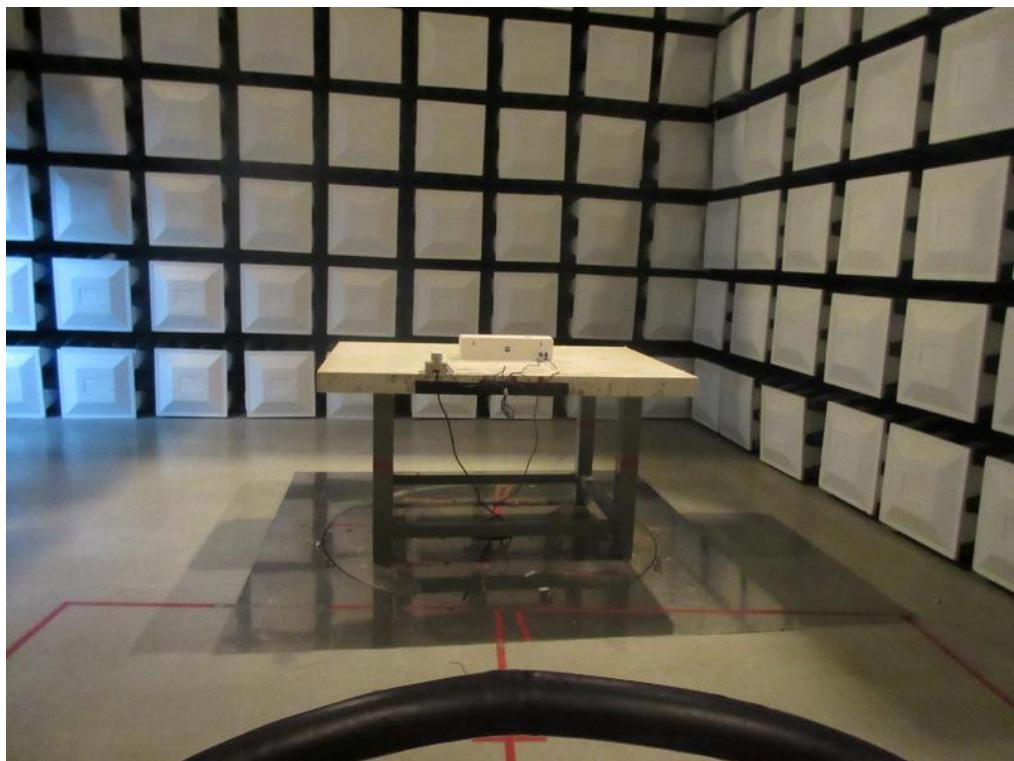
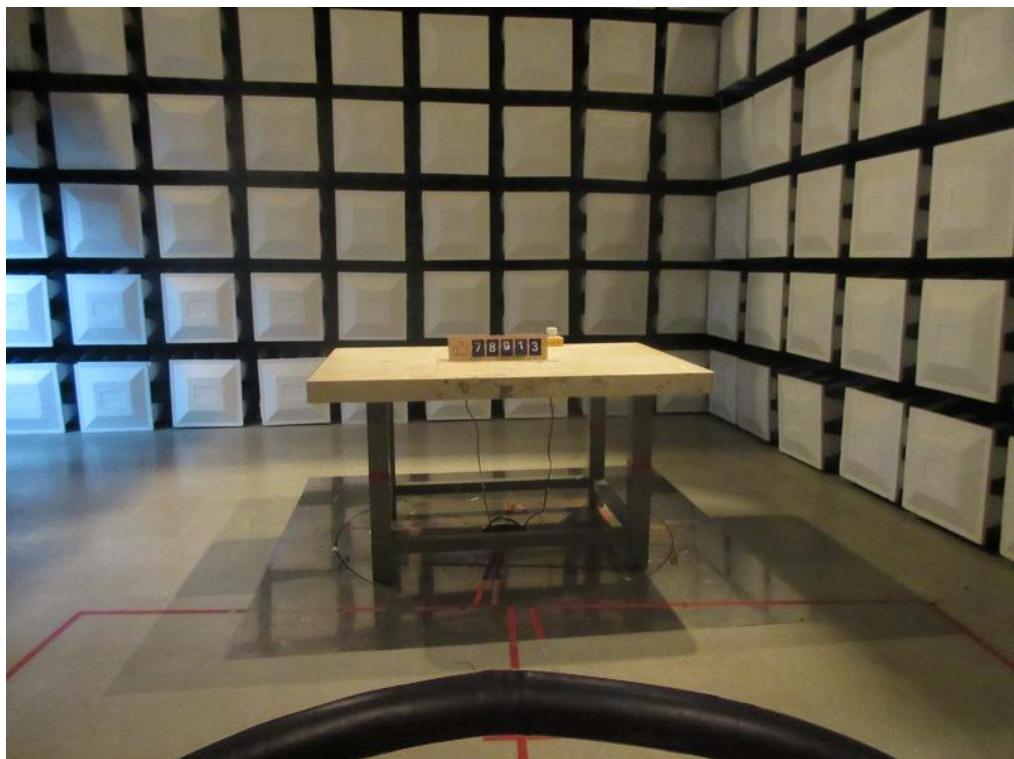
Remark: "N/A" denotes no model name, serial no. or calibration specified.

All calibration period of equipment list is one year.

10. EUT TEST PHOTO**Conducted Measurement Photos**

Radiated Measurement Photos

9KHz to 30MHz



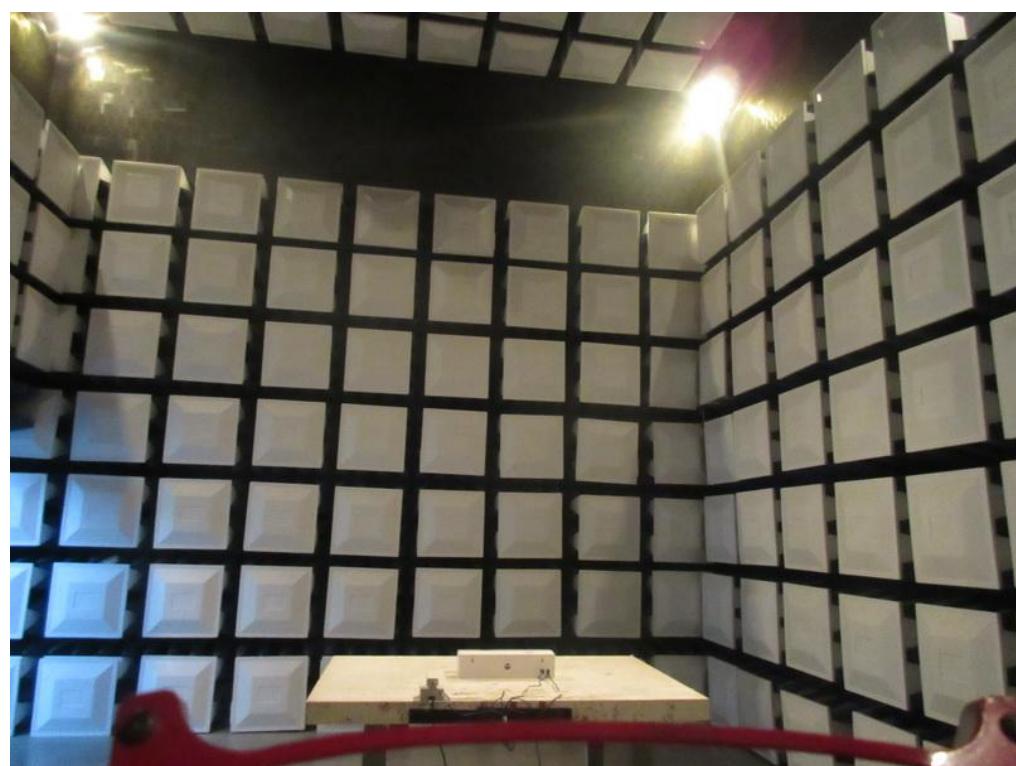
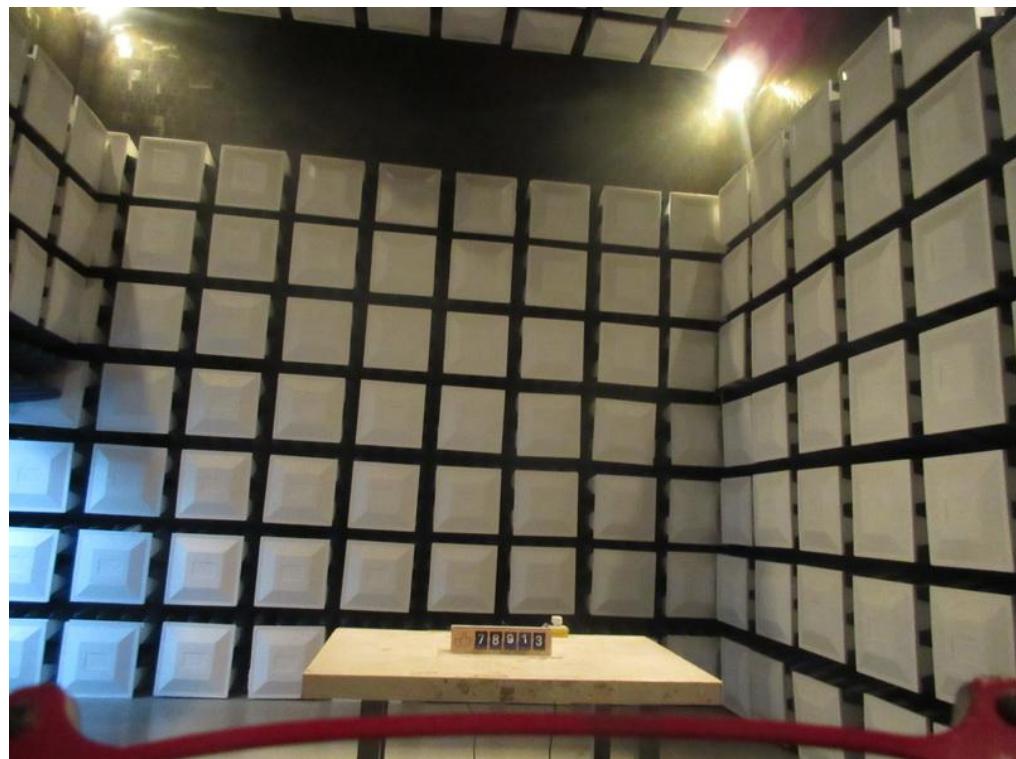
Radiated Measurement Photos

30MHz to 1000MHz



Radiated Measurement Photos

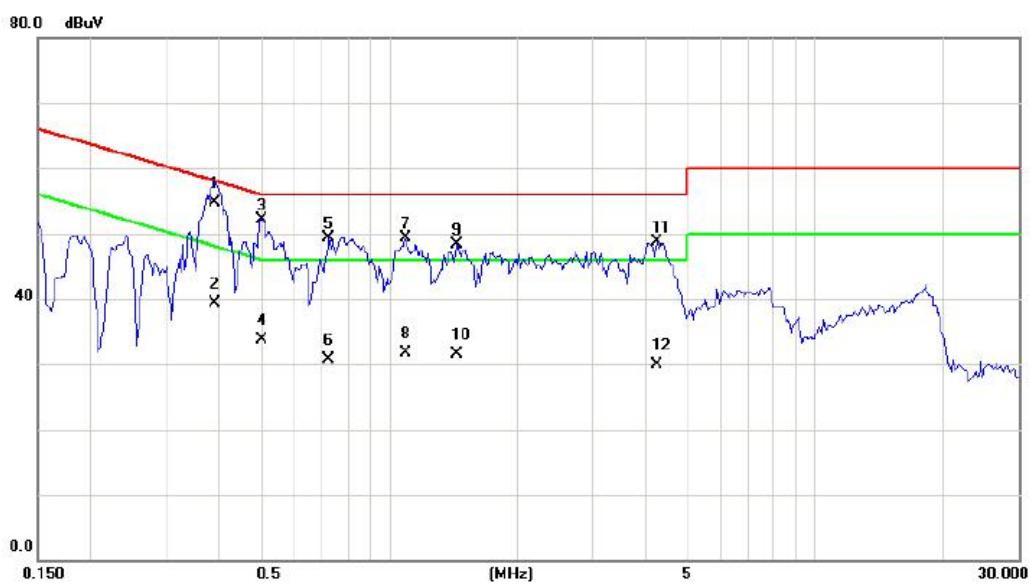
Above 1000MHz



ATTACHMENT A - CONDUCTED EMISSION

Test Mode : TX MODE

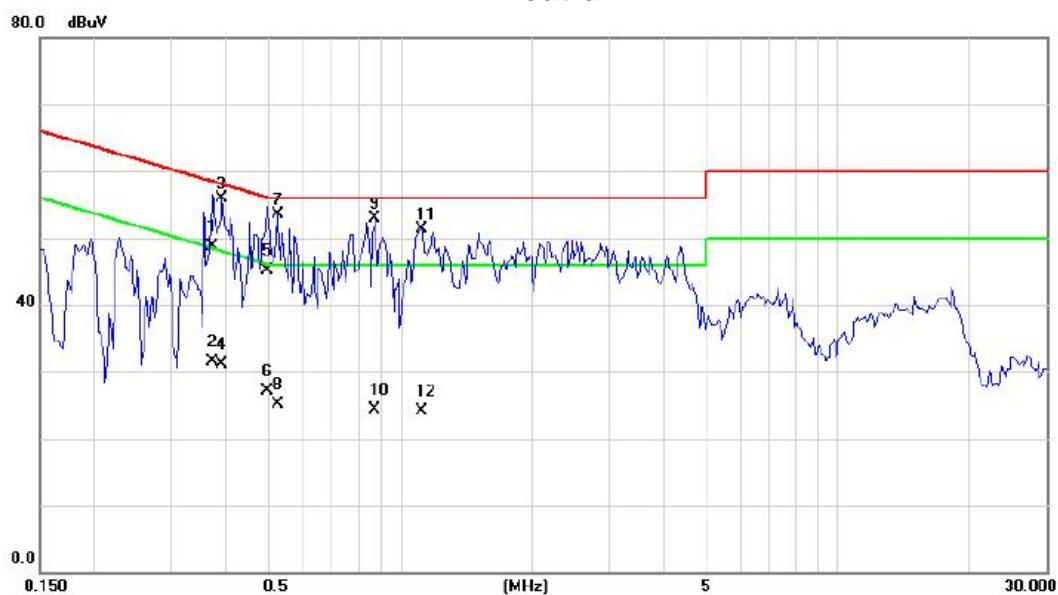
Line



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Margin	Detector	Comment
			Level	Factor	ment				
		MHz	dBuV	dB	dBuV	dB			
1	*	0.3922	45.10	9.59	54.69	58.02	-3.33	QP	
2		0.3922	29.80	9.59	39.39	48.02	-8.63	AVG	
3		0.5055	42.54	9.64	52.18	56.00	-3.82	peak	
4		0.5055	24.10	9.64	33.74	46.00	-12.26	AVG	
5		0.7242	39.79	9.56	49.35	56.00	-6.65	peak	
6		0.7242	21.10	9.56	30.66	46.00	-15.34	AVG	
7		1.0953	39.73	9.62	49.35	56.00	-6.65	peak	
8		1.0953	22.10	9.62	31.72	46.00	-14.28	AVG	
9		1.4470	38.79	9.61	48.40	56.00	-7.60	peak	
10		1.4470	21.90	9.61	31.51	46.00	-14.49	AVG	
11		4.2500	38.98	9.65	48.63	56.00	-7.37	peak	
12		4.2500	20.30	9.65	29.95	46.00	-16.05	AVG	

Test Mode : TX MODE

Neutral



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Margin	Detector	Comment
			Level	Factor	ment				
		MHz	dBuV	dB	dBuV	dB			
1		0.3727	39.10	9.58	48.68	58.44	-9.76	QP	
2		0.3727	21.90	9.58	31.48	48.44	-16.96	AVG	
3 *		0.3922	46.30	9.58	55.88	58.02	-2.14	peak	
4		0.3922	21.60	9.58	31.18	48.02	-16.84	AVG	
5		0.4977	35.50	9.58	45.08	56.04	-10.96	QP	
6		0.4977	17.50	9.58	27.08	46.04	-18.96	AVG	
7		0.5250	43.90	9.58	53.48	56.00	-2.52	peak	
8		0.5250	15.60	9.58	25.18	46.00	-20.82	AVG	
9		0.8766	43.22	9.59	52.81	56.00	-3.19	peak	
10		0.8766	14.80	9.59	24.39	46.00	-21.61	AVG	
11		1.1187	41.74	9.60	51.34	56.00	-4.66	peak	
12		1.1187	14.60	9.60	24.20	46.00	-21.80	AVG	

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

Test Mode:	TX Mode 2412MHz
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Frequency (MHz)	Ant 0°/90°	Read level dBuV/m	Factor (dB)	Measured(FS) (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Note
0.0167	0°	13.68	24.30	37.98	123.15	-85.17	AVG
0.0167	0°	14.52	24.30	38.82	143.15	-104.33	PEAK
0.0355	0°	6.77	23.32	30.09	116.60	-86.51	AVG
0.0355	0°	7.56	23.32	30.88	136.60	-105.72	PEAK
0.0384	0°	3.74	23.13	26.87	115.92	-89.04	AVG
0.0384	0°	5.39	23.13	28.52	135.92	-107.39	PEAK
0.0466	0°	0.89	22.62	23.51	114.24	-90.73	AVG
0.0466	0°	2.88	22.62	25.50	134.24	-108.74	PEAK
2.0645	0°	30.64	19.46	50.10	69.54	-19.44	QP
3.3678	0°	21.69	18.94	40.63	69.54	-28.91	QP

Frequency (MHz)	Ant 0°/90°	Read level dBuV/m	Factor (dB)	Measured(FS) (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Note
0.0157	90°	13.54	24.30	37.84	123.69	-85.85	AVG
0.0157	90°	14.46	24.30	38.76	143.69	-104.93	PEAK
0.0354	90°	6.38	23.32	29.70	116.62	-86.92	AVG
0.0354	90°	8.72	23.32	32.04	136.62	-104.58	PEAK
0.0373	90°	3.63	23.20	26.83	116.17	-89.34	AVG
0.0373	90°	5.37	23.20	28.57	136.17	-107.60	PEAK
0.0677	90°	0.64	22.05	22.69	110.99	-88.31	AVG
0.0677	90°	2.97	22.05	25.02	130.99	-105.98	PEAK
2.0563	90°	30.62	19.47	50.09	69.54	-19.45	QP
3.2479	90°	21.67	18.92	40.59	69.54	-28.95	QP

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

Test Mode: TX B MODE CHANNEL 01

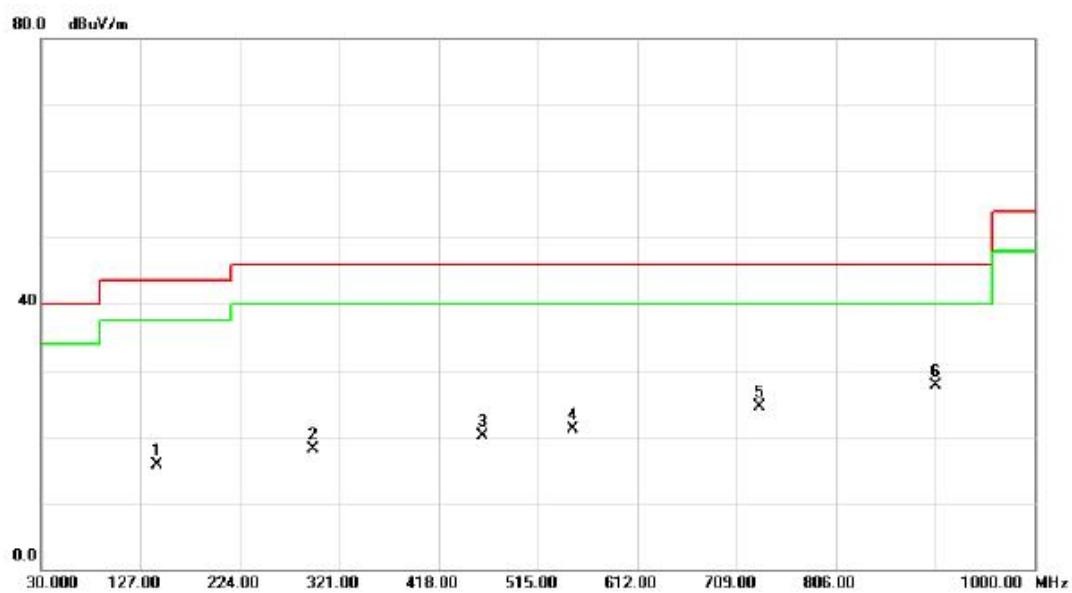
Vertical



No. Mk.	Freq. MHz	Reading dBuV	Correct Factor	Measure- ment dBuV/m	Limit dBuV/m	Margin	Detector	Comment
1	137.6700	35.70	-13.14	22.56	43.50	-20.94	peak	
2	179.3800	31.22	-12.98	18.24	43.50	-25.26	peak	
3	299.6600	28.98	-10.99	17.99	46.00	-28.01	peak	
4	456.8000	29.78	-8.88	20.90	46.00	-25.10	peak	
5	649.8300	29.45	-5.16	24.29	46.00	-21.71	peak	
6 *	855.4700	29.90	-2.97	26.93	46.00	-19.07	peak	

Test Mode: TX B MODE CHANNEL 01

Horizontal



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Margin	Detector	Comment
			Level	Factor	ment				
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		142.5200	28.80	-13.17	15.63	43.50	-27.87	peak	
2		295.7800	29.16	-11.07	18.09	46.00	-27.91	peak	
3		460.6800	29.16	-9.02	20.14	46.00	-25.86	peak	
4		548.9500	29.11	-7.99	21.12	46.00	-24.88	peak	
5		731.3100	29.27	-4.75	24.52	46.00	-21.48	peak	
6	*	903.0000	29.10	-1.45	27.65	46.00	-18.35	peak	

Test Mode: TX B MODE CHANNEL 06

Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Margin	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector Comment
1		137.6700	33.70	-13.14	20.56	43.50	-22.94	peak
2		299.6600	29.98	-10.99	18.99	46.00	-27.01	peak
3		456.8000	30.78	-8.88	21.90	46.00	-24.10	peak
4		595.5100	31.06	-7.91	23.15	46.00	-22.85	peak
5		709.9700	31.29	-4.87	26.42	46.00	-19.58	peak
6	*	939.8600	29.55	-0.47	29.08	46.00	-16.92	peak

Test Mode: TX B MODE CHANNEL 06

Horizontal



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Margin	Detector	Comment
			Level	Factor	ment				
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		142.5200	30.80	-13.17	17.63	43.50	-25.87	peak	
2		295.7800	32.16	-11.07	21.09	46.00	-24.91	peak	
3		456.8000	32.62	-8.88	23.74	46.00	-22.26	peak	
4		641.1000	32.43	-5.64	26.79	46.00	-19.21	peak	
5		811.8200	28.84	-2.95	25.89	46.00	-20.11	peak	
6	*	953.4400	29.94	-0.23	29.71	46.00	-16.29	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	Margin dB	Detector	Comment
1	137.6700	35.70	-13.14	22.56	43.50	-20.94	peak	
2	179.3800	33.22	-12.98	20.24	43.50	-23.26	peak	
3	299.6600	30.98	-10.99	19.99	46.00	-26.01	peak	
4	485.9000	34.94	-9.99	24.95	46.00	-21.05	peak	
5	695.4200	31.29	-4.95	26.34	46.00	-19.66	peak	
6 *	921.4300	30.52	-0.96	29.56	46.00	-16.44	peak	

Test Mode: TX B MODE CHANNEL 11

Horizontal



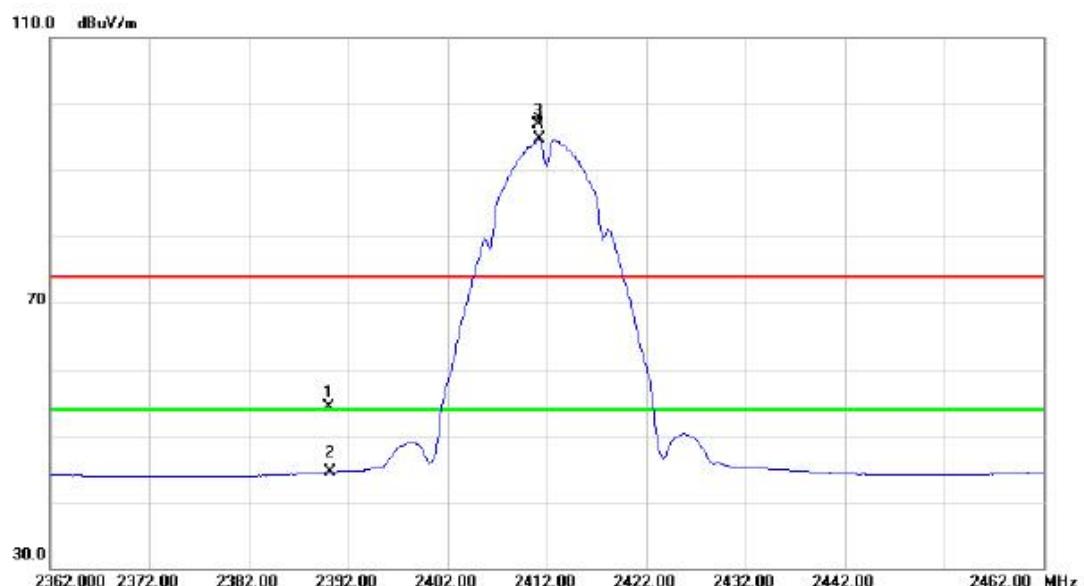
No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Margin	Detector	Comment
			Level	Factor	ment				
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		142.5200	28.80	-13.17	15.63	43.50	-27.87	peak	
2		299.6600	29.21	-10.99	18.22	46.00	-27.78	peak	
3		368.5300	30.66	-10.95	19.71	46.00	-26.29	peak	
4		553.8000	31.67	-7.93	23.74	46.00	-22.26	peak	
5		683.7800	29.57	-5.00	24.57	46.00	-21.43	peak	
6	*	818.6100	29.79	-2.98	26.81	46.00	-19.19	peak	

ATTACHMENT D - RADIATED EMISSION (ABOVE 1000MHZ)

Orthogonal Axis : X

Test Mode : TX B MODE 2412MHz

Vertical



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Detector	Comment
			Level	Factor	ment				
		MHz	dBuV	dB	dBuV/m	dB			
1		2390.000	22.45	31.88	54.33	74.00	-19.67	peak	
2		2390.000	12.62	31.88	44.50	54.00	-9.50	AVG	
3	X	2411.100	64.97	31.91	96.88	74.00	22.88	peak	No Limit
4	*	2411.200	62.73	31.91	94.64	54.00	40.64	AVG	No Limit

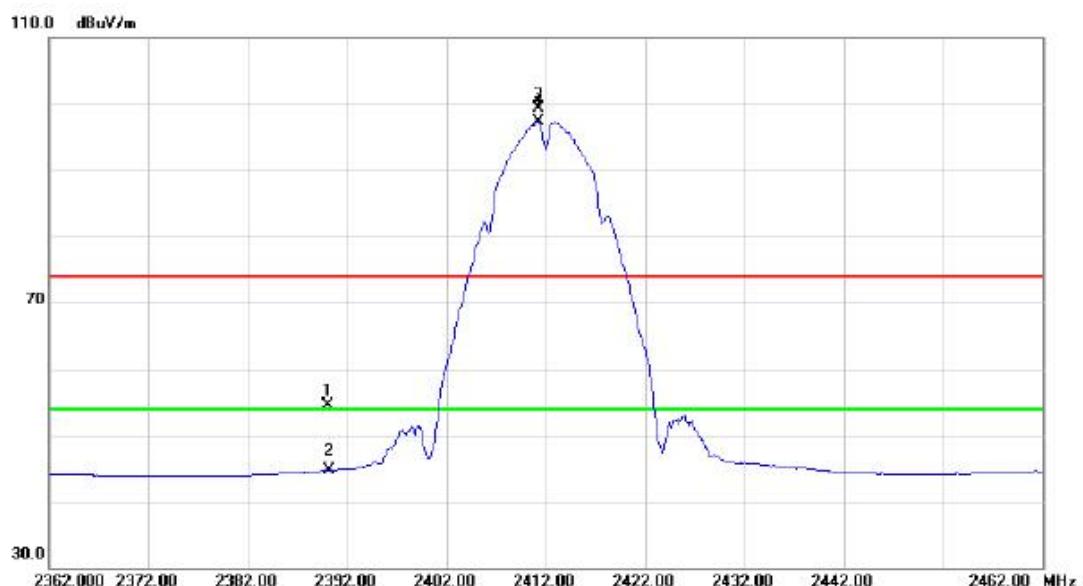
Orthogonal Axis :	X
Test Mode :	TX B MODE 2412MHz

Vertical

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Detector	Comment
			Level	Factor	ment				
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1	*	4823.960	47.37	3.62	50.99	54.00	-3.01	AVG	
2		4823.980	48.23	3.62	51.85	74.00	-22.15	peak	

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

Horizontal



No.	Mk.	Reading	Correct	Measure-	Limit	Over	Detector	Comment
		Freq.	Level	Factor				
		MHz	dBuV	dB	dBuV/m	dB		
1		2390.000	22.58	31.88	54.46	74.00	-19.54	peak
2		2390.000	12.80	31.88	44.68	54.00	-9.32	AVG
3	X	2411.200	67.45	31.91	99.36	74.00	25.36	peak No Limit
4	*	2411.200	65.40	31.91	97.31	54.00	43.31	AVG No Limit

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

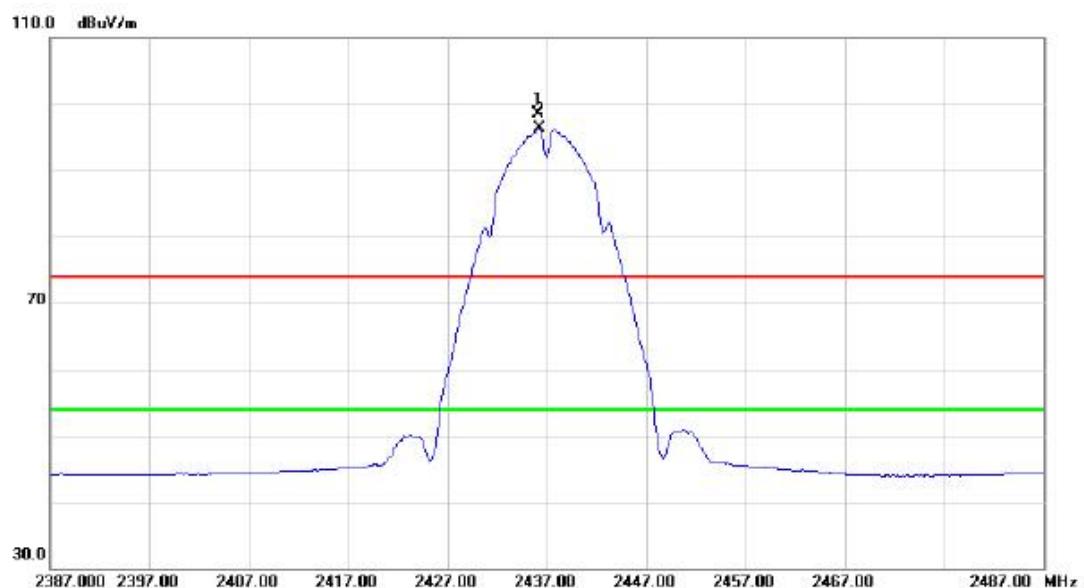
Horizontal

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Detector	Comment
			Level	Factor	ment				
1		4823.880	48.84	3.62	52.46	74.00	-21.54	peak	
2	*	4823.960	47.34	3.62	50.96	54.00	-3.04	AVG	

Orthogonal Axis : X

Test Mode : TX B MODE 2437MHz

Vertical



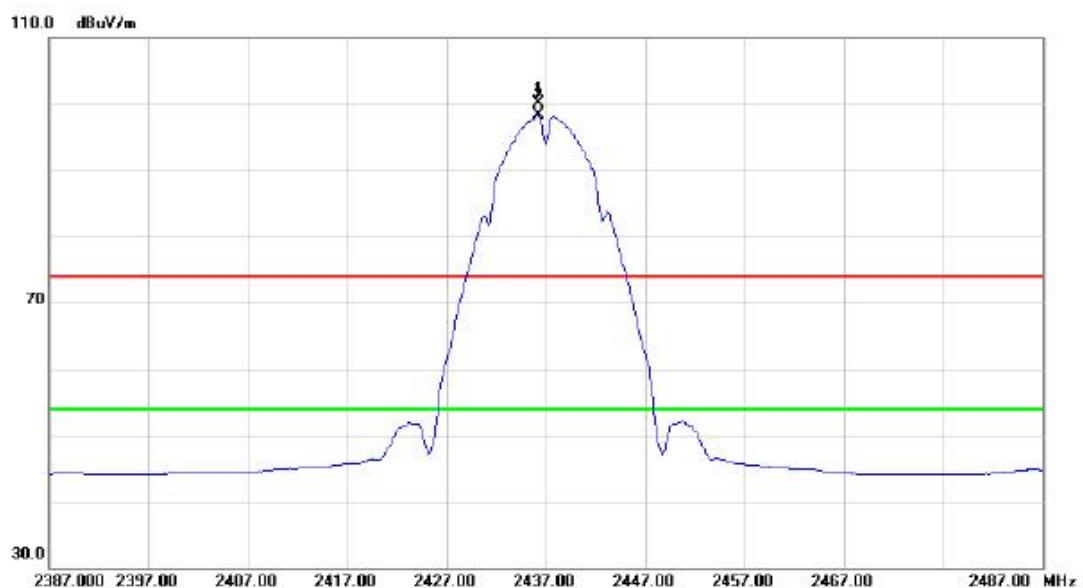
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			Level	Factor	ment				
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1	X	2436.100	66.50	31.94	98.44	74.00	24.44	peak	No Limit
2	*	2436.200	64.27	31.94	96.21	54.00	42.21	AVG	No Limit

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

Vertical

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Detector	Comment
			Level	Factor	ment				
1		4873.840	48.95	3.72	52.67	74.00	-21.33	peak	
2	*	4873.960	47.81	3.72	51.53	54.00	-2.47	AVG	

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

Horizontal

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Detector	Comment
			Level	Factor	ment				
1	X	2436.200	68.18	31.94	100.12	74.00	26.12	peak	No Limit
2	*	2436.200	66.32	31.94	98.26	54.00	44.26	AVG	No Limit

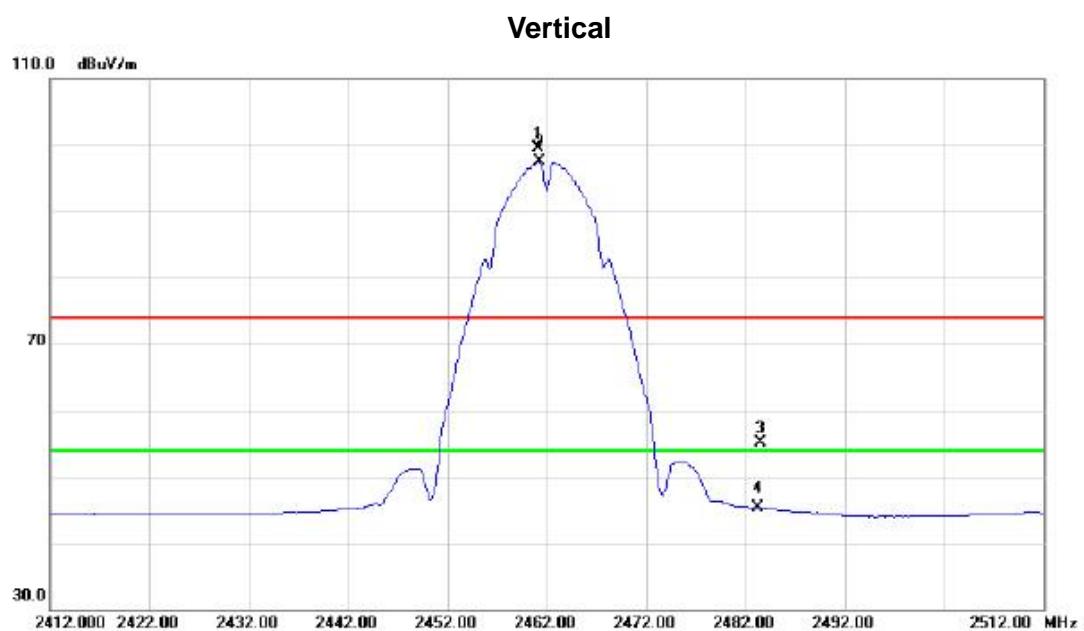
Orthogonal Axis :	X
Test Mode :	TX B MODE 2437MHz

Horizontal

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Detector	Comment
			Level	Factor	ment				
1		4873.880	48.49	3.72	52.21	74.00	-21.79	peak	
2	*	4873.940	47.66	3.72	51.38	54.00	-2.62	AVG	

Orthogonal Axis : X

Test Mode : TX B MODE 2462MHz



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Detector	Comment
			Level	Factor	ment				
		MHz	dBuV	dB	dBuV/m	dB			
1	X	2461.100	67.48	31.98	99.46	74.00	25.46	peak	No Limit
2	*	2461.200	65.54	31.98	97.52	54.00	43.52	AVG	No Limit
3		2483.500	23.02	32.01	55.03	74.00	-18.97	peak	
4		2483.500	13.22	32.01	45.23	54.00	-8.77	AVG	

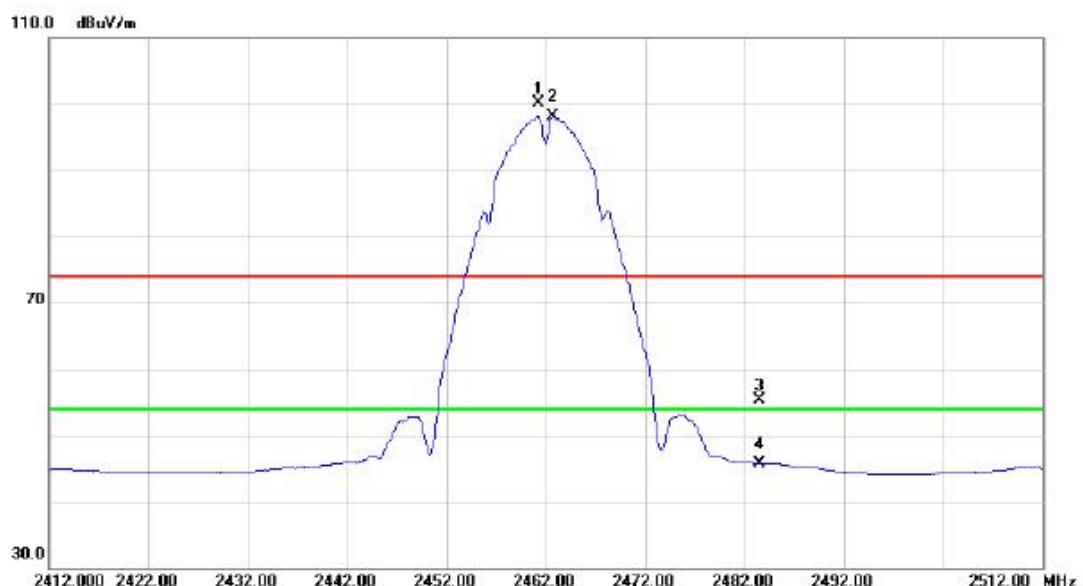
Orthogonal Axis :	X
Test Mode :	TX B MODE 2462MHz

Vertical

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Detector	Comment
			Level	Factor	ment				
1		4923.920	46.36	3.80	50.16	74.00	-23.84	peak	
2	*	4923.940	44.21	3.80	48.01	54.00	-5.99	AVG	

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

Horizontal



No.	Mk.	Reading	Correct	Measure-	Limit	Over	Detector	Comment
		Freq.	Level	Factor				
		MHz	dBuV	dB	dBuV/m	dB		
1	X	2461.200	68.04	31.98	100.02	74.00	26.02	peak No Limit
2	*	2462.700	66.12	31.98	98.10	54.00	44.10	AVG No Limit
3		2483.500	23.24	32.01	55.25	74.00	-18.75	peak
4		2483.500	13.77	32.01	45.78	54.00	-8.22	AVG

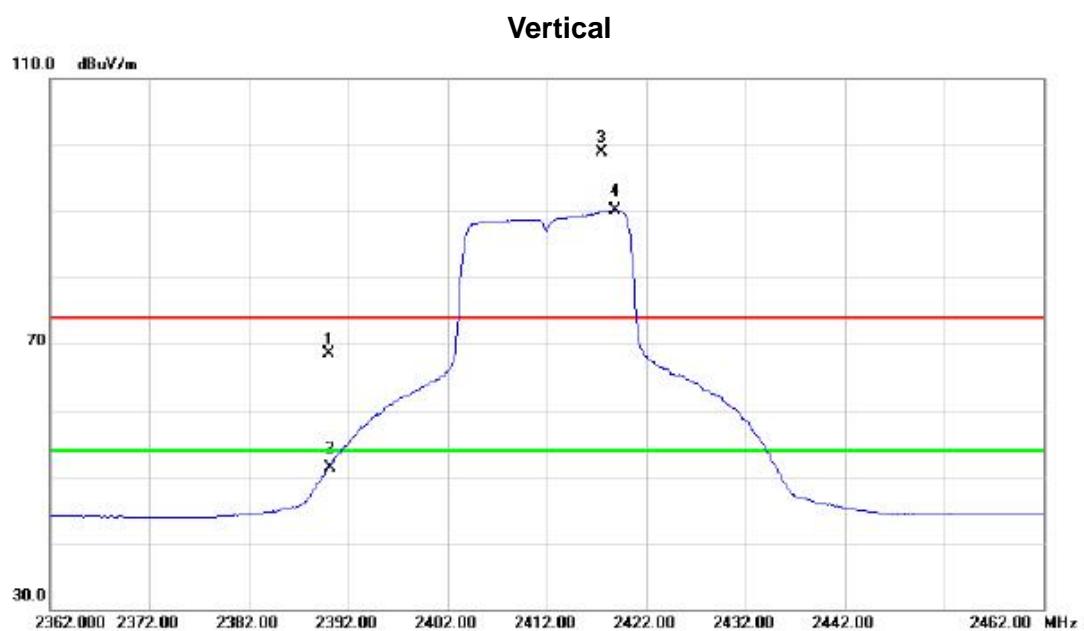
Orthogonal Axis :	X
Test Mode :	TX B MODE 2462MHz

Horizontal

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Detector	Comment
			Level	Factor	ment				
1	*	4923.960	47.01	3.80	50.81	54.00	-3.19	AVG	
2		4924.080	48.25	3.80	52.05	74.00	-21.95	peak	

Orthogonal Axis : X

Test Mode : TX G MODE 2412MHz



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Detector	Comment
			Level	Factor	ment				
		MHz	dBuV	dB	dBuV/m	dB			
1		2390.000	36.60	31.88	68.48	74.00	-5.52	peak	
2		2390.000	19.44	31.88	51.32	54.00	-2.68	AVG	
3	X	2417.500	67.01	31.91	98.92	74.00	24.92	peak	No Limit
4	*	2418.800	58.18	31.92	90.10	54.00	36.10	AVG	No Limit

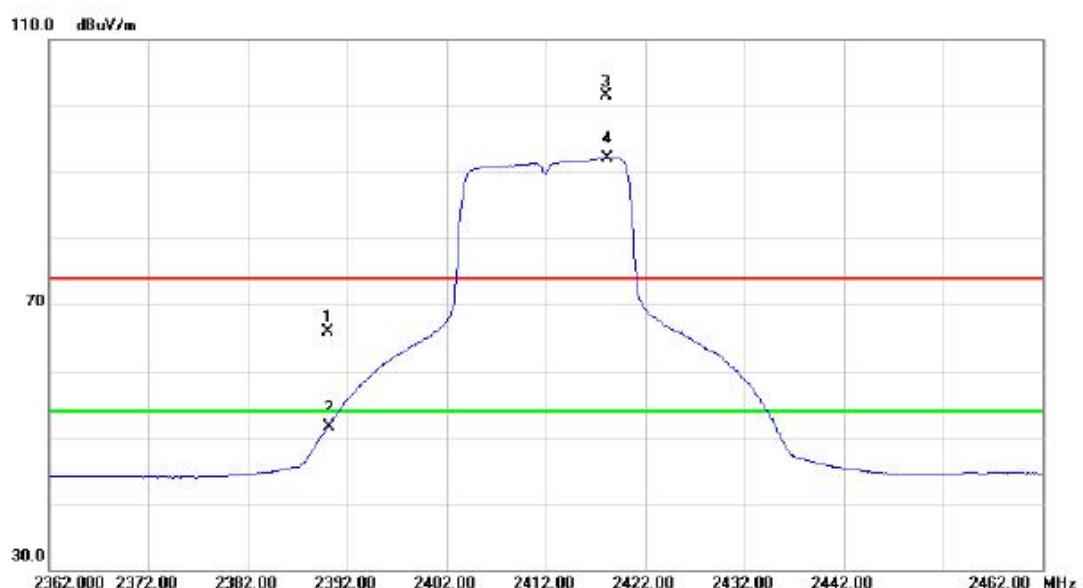
Orthogonal Axis :	X
Test Mode :	TX G MODE 2412MHz

Vertical

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Detector	Comment
			Level	Factor	ment				
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1	*	4824.060	39.27	3.62	42.89	54.00	-11.11	AVG	
	2	4824.480	51.10	3.62	54.72	74.00	-19.28	peak	

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

Horizontal



No.	Mk.	Reading	Correct	Measure-	Limit	Over	Detector	Comment
		Freq.	Level	Factor				
		MHz	dBuV	dB	dBuV/m	dB		
1		2390.000	34.07	31.88	65.95	74.00	-8.05	peak
2		2390.000	19.71	31.88	51.59	54.00	-2.41	AVG
3	X	2418.100	69.65	31.91	101.56	74.00	27.56	peak No Limit
4	*	2418.200	60.20	31.91	92.11	54.00	38.11	AVG No Limit

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

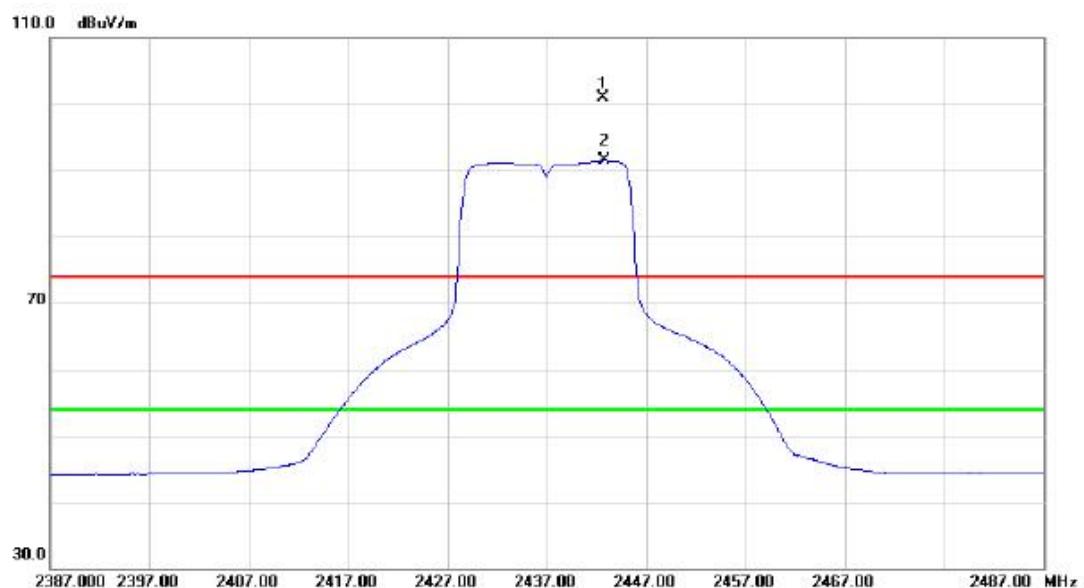
Horizontal

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Detector	Comment
			Level	Factor	ment				
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1	*	4824.160	36.87	3.62	40.49	54.00	-13.51	AVG	
2		4824.240	47.25	3.62	50.87	74.00	-23.13	peak	

Orthogonal Axis : X

Test Mode : TX G MODE 2437MHz

Vertical



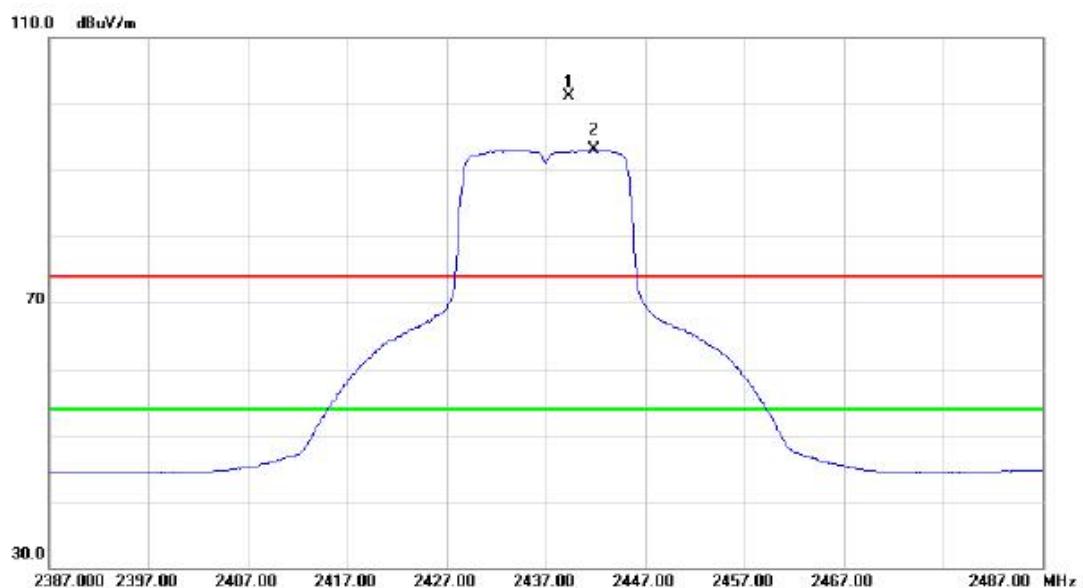
No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Comment
			Level	Factor	ment			
		MHz	dBuV	dB	dBuV/m	dB	Detector	
1	X	2442.600	68.94	31.95	100.89	74.00	26.89	peak No Limit
2	*	2442.800	59.47	31.95	91.42	54.00	37.42	AVG No Limit

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

Vertical

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Detector	Comment
			Level	Factor	ment				
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1	*	4873.360	36.81	3.72	40.53	54.00	-13.47	AVG	
2		4874.740	47.94	3.72	51.66	74.00	-22.34	peak	

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

Horizontal

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Detector	Comment
			Level	Factor	ment				
		MHz	dBuV	dB	dBuV/m	dB			
1	X	2439.300	69.26	31.94	101.20	74.00	27.20	peak	No Limit
2	*	2441.800	61.06	31.95	93.01	54.00	39.01	AVG	No Limit

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

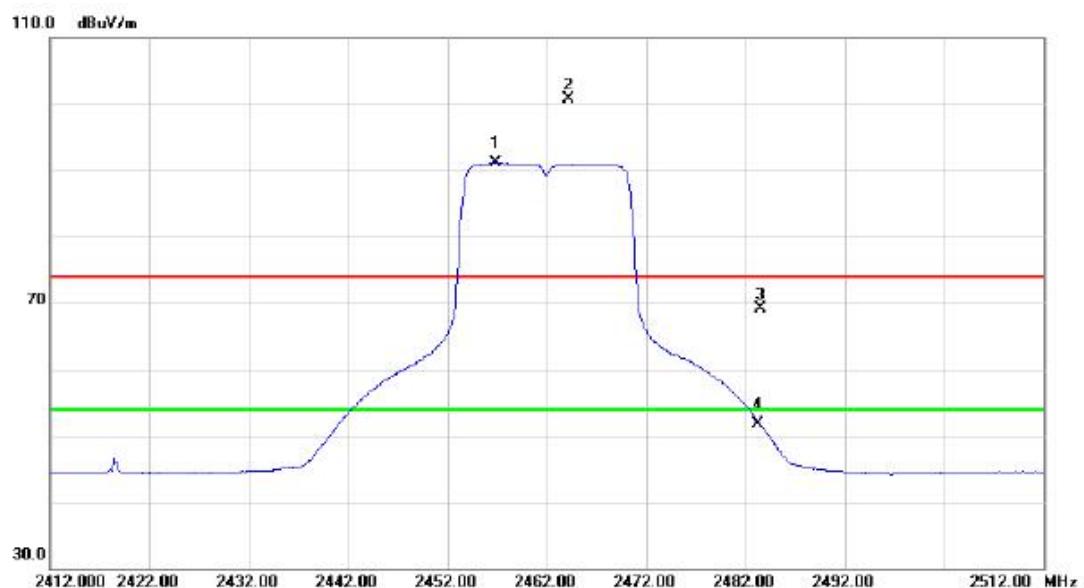
Horizontal

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Detector	Comment
			Level	Factor	ment				
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		4873.100	49.52	3.72	53.24	74.00	-20.76	peak	
2	*	4873.440	39.13	3.72	42.85	54.00	-11.15	AVG	

Orthogonal Axis : X

Test Mode : TX G MODE 2462MHz

Vertical



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Detector	Comment
			Level	Factor	ment				
		MHz	dBuV	dB	dBuV/m	dB			
1	*	2456.900	59.12	31.98	91.10	54.00	37.10	AVG	No Limit
2	X	2464.200	68.69	31.98	100.67	74.00	26.67	peak	No Limit
3		2483.500	37.14	32.01	69.15	74.00	-4.85	peak	
4		2483.500	19.69	32.01	51.70	54.00	-2.30	AVG	

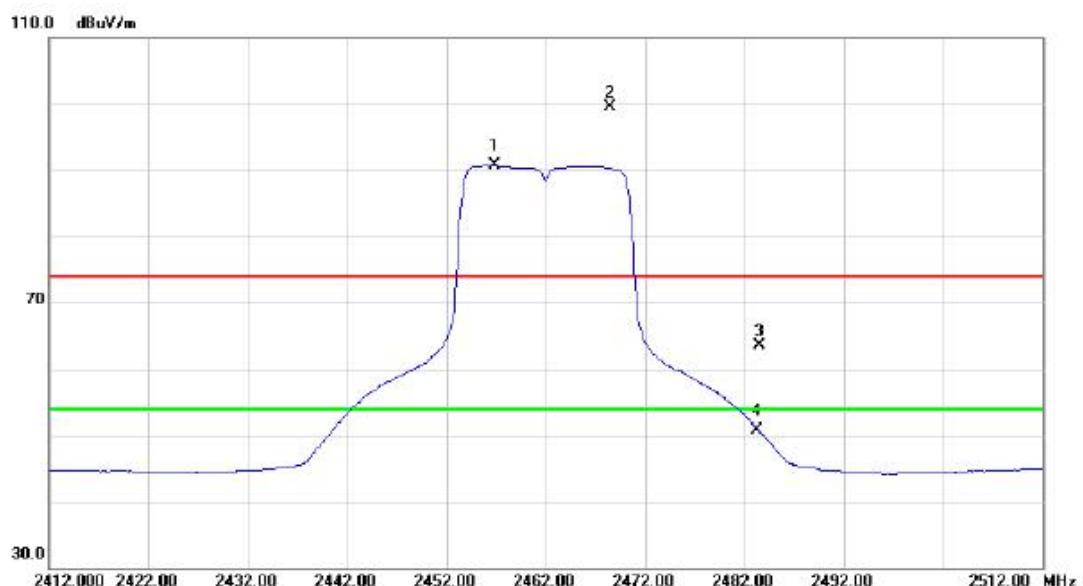
Orthogonal Axis :	X
Test Mode :	TX G MODE 2462MHz

Vertical

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Detector	Comment
			Level	Factor	ment				
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		4923.280	40.38	3.80	44.18	74.00	-29.82	peak	
2	*	4924.020	29.65	3.80	33.45	54.00	-20.55	AVG	

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

Horizontal



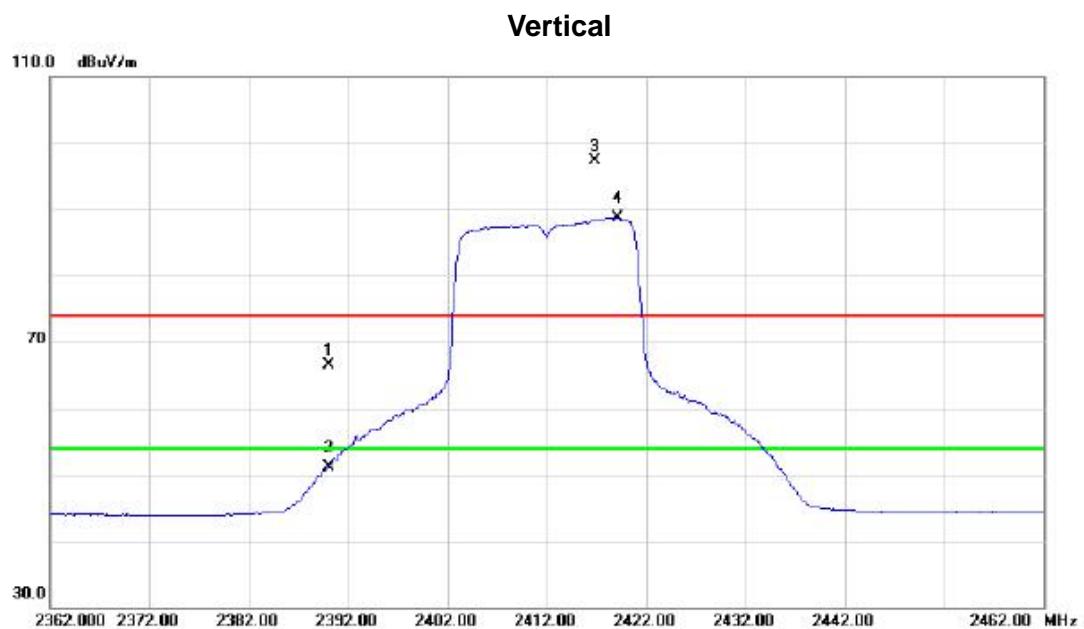
No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Detector	Comment
			Level	Factor	ment				
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1	*	2456.900	58.68	31.98	90.66	54.00	36.66	AVG	No Limit
2	X	2468.500	67.50	31.98	99.48	74.00	25.48	peak	No Limit
3		2483.500	31.50	32.01	63.51	74.00	-10.49	peak	
4		2483.500	18.66	32.01	50.67	54.00	-3.33	AVG	

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

Horizontal

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Detector	Comment
			Level	Factor	ment				
1		4923.260	44.90	3.80	48.70	74.00	-25.30	peak	
2	*	4923.480	33.17	3.80	36.97	54.00	-17.03	AVG	

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



No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dB	Over	Comment
		dBuV	dB	dBuV/m	dB	Detector	
1	2390.000	34.59	31.88	66.47	74.00	-7.53	peak
2	2390.000	19.23	31.88	51.11	54.00	-2.89	AVG
3	X 2416.800	65.47	31.91	97.38	74.00	23.38	peak No Limit
4	* 2419.100	56.76	31.92	88.68	54.00	34.68	AVG No Limit

Orthogonal Axis : X

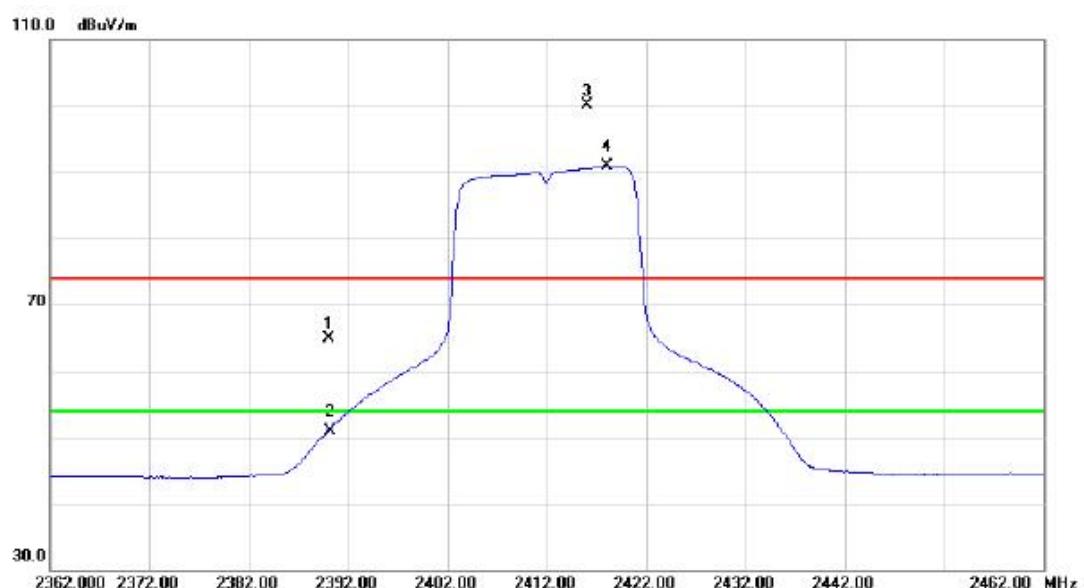
Test Mode : TX N-20M MODE 2412MHz

Vertical

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Detector	Comment
			Level	Factor	ment				
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		4823.840	47.17	3.62	50.79	74.00	-23.21	peak	
2	*	4824.980	36.53	3.62	40.15	54.00	-13.85	AVG	

Orthogonal Axis : X

Test Mode : TX N-20M MODE 2412MHz

Horizontal

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Comment
			Level	Factor	ment			
		MHz	dBuV	dB	dBuV/m	dB	Detector	
1		2390.000	32.99	31.88	64.87	74.00	-9.13	peak
2		2390.000	19.03	31.88	50.91	54.00	-3.09	AVG
3	X	2416.000	68.26	31.91	100.17	74.00	26.17	peak No Limit
4	*	2418.100	58.92	31.91	90.83	54.00	36.83	AVG No Limit

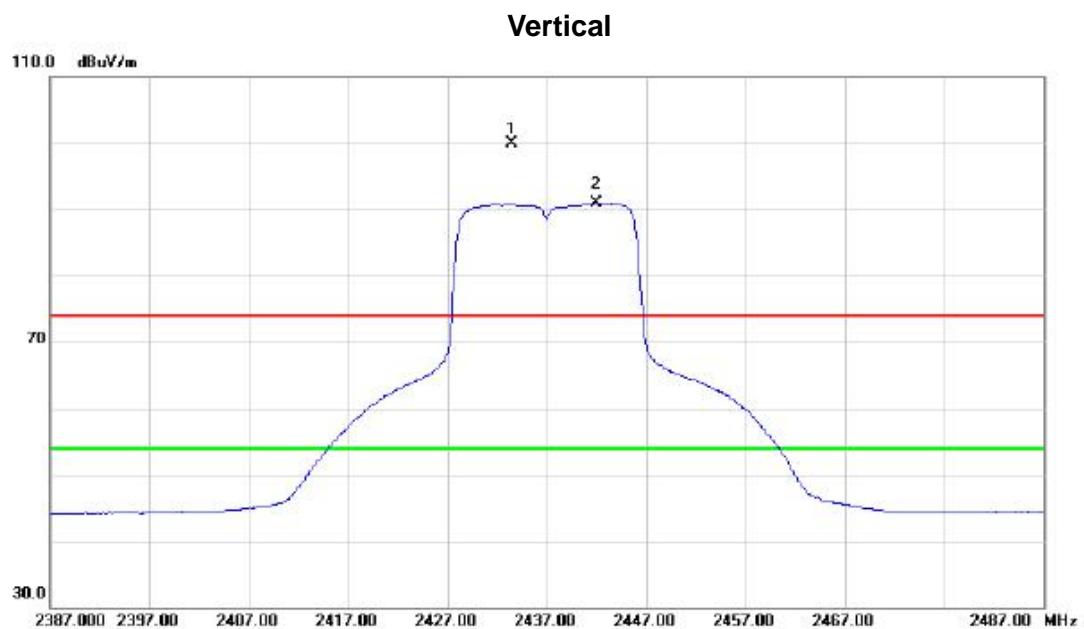
Orthogonal Axis : X

Test Mode : TX N-20M MODE 2412MHz

Horizontal

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Detector	Comment
			Level	Factor	ment				
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		4822.840	48.68	3.62	52.30	74.00	-21.70	peak	
2	*	4823.660	36.15	3.62	39.77	54.00	-14.23	AVG	

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



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Comment
			Level	Factor	ment			
		MHz	dBuV	dB	dBuV/m	dB	Detector	
1	X	2433.500	67.92	31.94	99.86	74.00	25.86	peak No Limit
2	*	2442.000	58.92	31.95	90.87	54.00	36.87	AVG No Limit

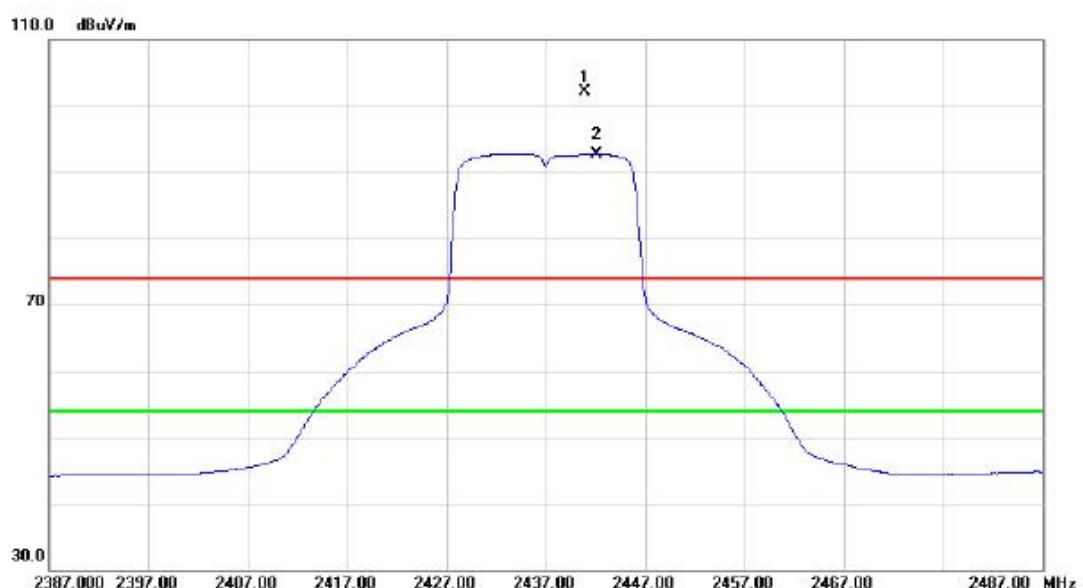
Orthogonal Axis :	X
Test Mode :	TX N-20M MODE 2437MHz

Vertical

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Detector	Comment
			Level	Factor	ment				
1		4873.020	47.87	3.72	51.59	74.00	-22.41	peak	
2	*	4873.940	36.49	3.72	40.21	54.00	-13.79	AVG	

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

Horizontal



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Detector	Comment
			Level	Factor	ment				
1	X	2440.900	70.07	31.95	102.02	74.00	28.02	peak	No Limit
2	*	2442.100	60.82	31.95	92.77	54.00	38.77	AVG	No Limit

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

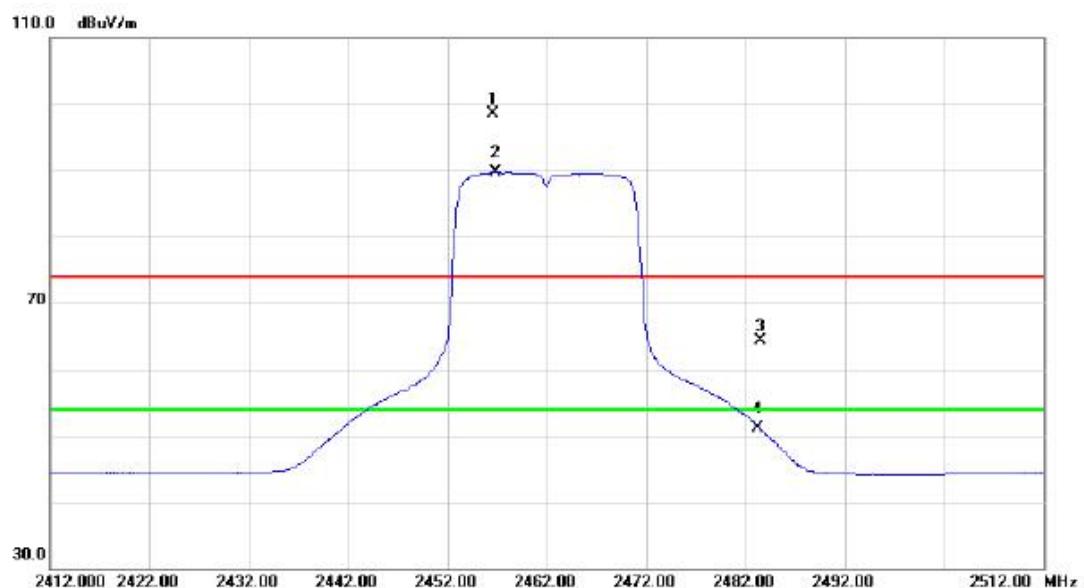
Horizontal

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Detector	Comment
			Level	Factor	ment				
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1	*	4873.620	37.97	3.72	41.69	54.00	-12.31	AVG	
2		4874.040	49.76	3.72	53.48	74.00	-20.52	peak	

Orthogonal Axis : X

Test Mode : TX N-20M MODE 2462MHz

Vertical



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Detector	Comment
			Level	Factor	ment				
		MHz	dBuV	dB	dBuV/m	dB			
1	X	2456.600	66.54	31.97	98.51	74.00	24.51	peak	No Limit
2	*	2456.900	57.74	31.98	89.72	54.00	35.72	AVG	No Limit
3		2483.500	32.28	32.01	64.29	74.00	-9.71	peak	
4		2483.500	19.01	32.01	51.02	54.00	-2.98	AVG	

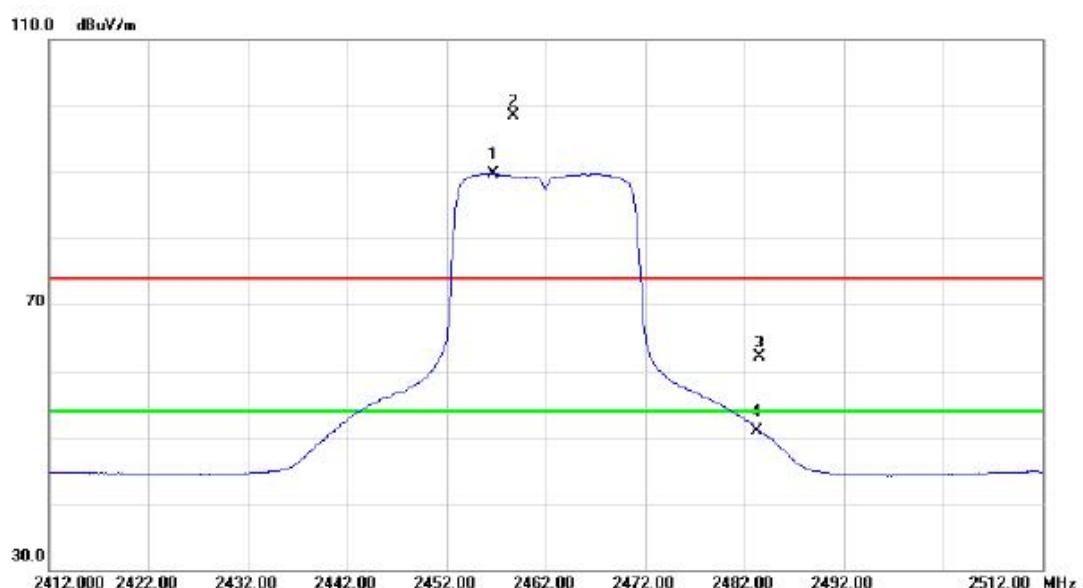
Orthogonal Axis :	X
Test Mode :	TX N-20M MODE 2462MHz

Vertical

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Detector	Comment
			Level	Factor	ment				
1		4923.620	39.31	3.80	43.11	74.00	-30.89	peak	
2	*	4923.740	28.99	3.80	32.79	54.00	-21.21	AVG	

Orthogonal Axis : X

Test Mode : TX N-20M MODE 2462MHz

Horizontal

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Detector	Comment
			Level	Factor	ment				
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1	*	2456.700	57.73	31.97	89.70	54.00	35.70	AVG	No Limit
2	X	2458.700	66.60	31.98	98.58	74.00	24.58	peak	No Limit
3		2483.500	30.09	32.01	62.10	74.00	-11.90	peak	
4		2483.500	18.93	32.01	50.94	54.00	-3.06	AVG	

Orthogonal Axis : X

Test Mode : TX N-20M MODE 2462MHz

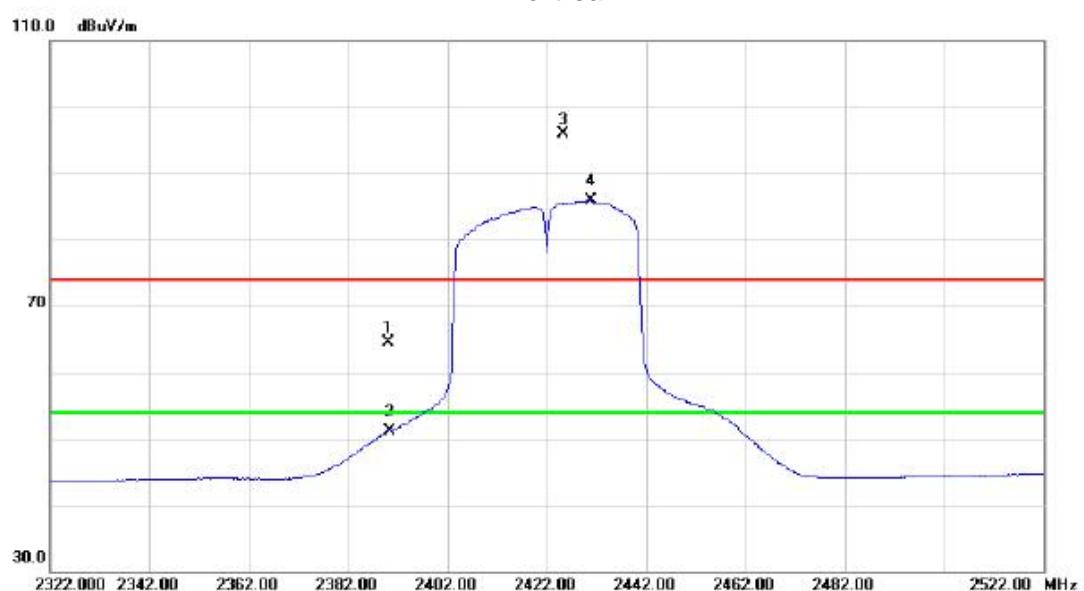
Horizontal

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Detector	Comment
			Level	Factor	ment				
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1	*	4923.640	31.78	3.80	35.58	54.00	-18.42	AVG	
2		4924.760	42.79	3.80	46.59	74.00	-27.41	peak	

Orthogonal Axis : X

Test Mode : TX N-40M MODE 2422MHz

Vertical



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Detector	Comment
			Level	Factor	ment				
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		2390.000	32.72	31.88	64.60	74.00	-9.40	peak	
2		2390.000	19.14	31.88	51.02	54.00	-2.98	AVG	
3	X	2425.200	63.97	31.93	95.90	74.00	21.90	peak	No Limit
4	*	2430.800	53.89	31.93	85.82	54.00	31.82	AVG	No Limit

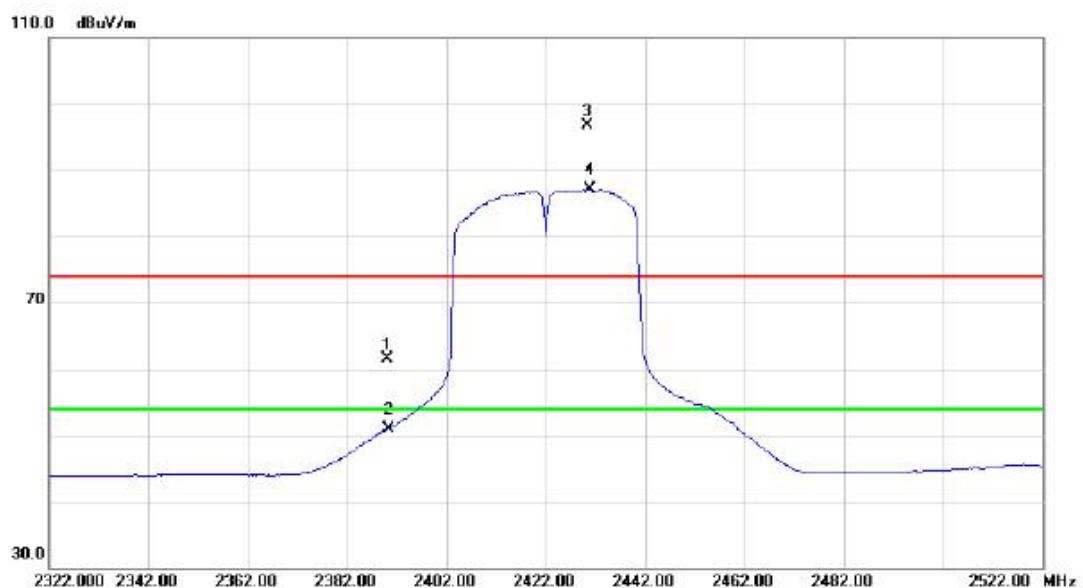
Orthogonal Axis :	X
Test Mode :	TX N-40M MODE 2422MHz

Vertical

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Detector	Comment
			Level	Factor	ment				
1		4843.440	40.71	3.66	44.37	74.00	-29.63	peak	
2	*	4845.120	31.25	3.66	34.91	54.00	-19.09	AVG	

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

Horizontal



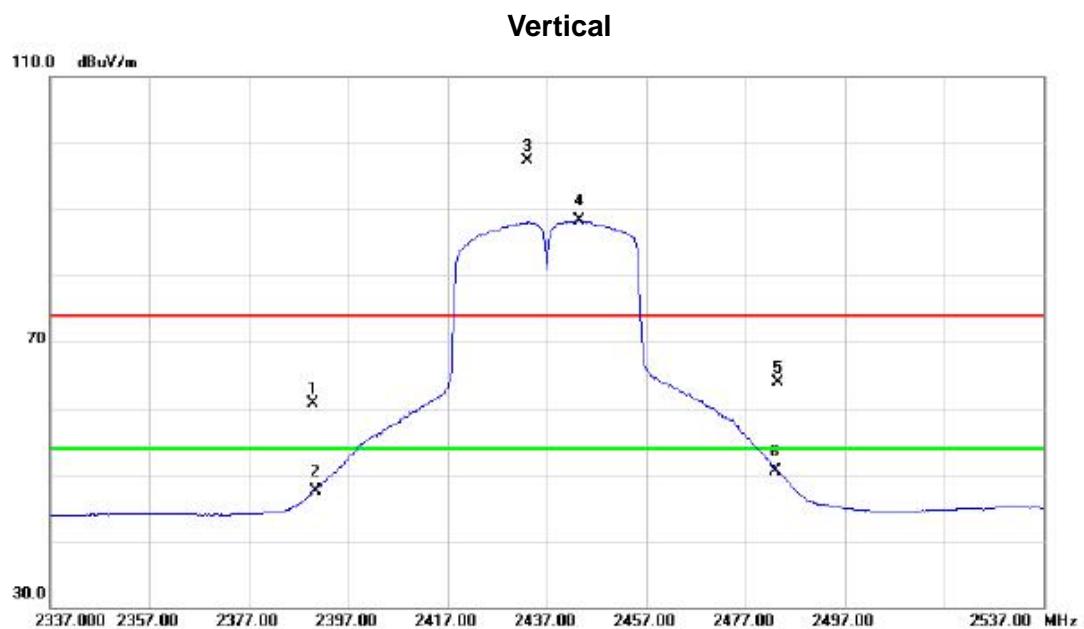
No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Comment
			Level	Factor	ment			
		MHz	dBuV	dB	dBuV/m	dB	Detector	
1		2390.000	29.68	31.88	61.56	74.00	-12.44	peak
2		2390.000	19.05	31.88	50.93	54.00	-3.07	AVG
3	X	2430.400	64.75	31.93	96.68	74.00	22.68	peak No Limit
4	*	2430.800	55.19	31.93	87.12	54.00	33.12	AVG No Limit

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

Horizontal

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Detector	Comment
			Level	Factor	ment				
1	*	4842.980	31.73	3.66	35.39	54.00	-18.61	AVG	
2		4844.680	43.78	3.66	47.44	74.00	-26.56	peak	

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



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Detector	Comment
			Level	Factor	ment				
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1		2390.000	28.90	31.88	60.78	74.00	-13.22	peak	
2		2390.000	15.53	31.88	47.41	54.00	-6.59	AVG	
3	X	2433.000	65.28	31.94	97.22	74.00	23.22	peak	No Limit
4	*	2443.400	56.31	31.95	88.26	54.00	34.26	AVG	No Limit
5		2483.500	31.94	32.01	63.95	74.00	-10.05	peak	
6		2483.500	18.46	32.01	50.47	54.00	-3.53	AVG	

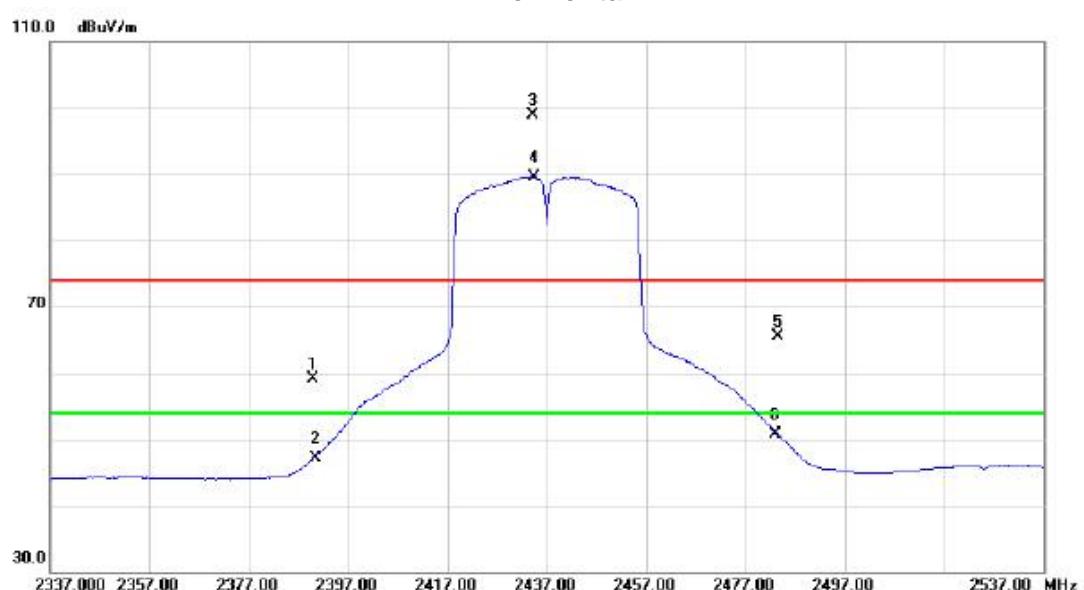
Orthogonal Axis :	X
Test Mode :	TX N-40M MODE 2437MHz

Vertical

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Detector	Comment
			Level	Factor	ment				
1	*	4873.040	32.60	3.72	36.32	54.00	-17.68	AVG	
2		4873.860	44.15	3.72	47.87	74.00	-26.13	peak	

Orthogonal Axis : X

Test Mode : TX N-40M MODE 2437MHz

Horizontal

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Comment
			Level	Factor	ment			
		MHz	dBuV	dB	dBuV/m	dB	Detector	
1		2390.000	27.16	31.88	59.04	74.00	-14.96	peak
2		2390.000	15.20	31.88	47.08	54.00	-6.92	AVG
3	X	2434.200	66.89	31.94	98.83	74.00	24.83	peak No Limit
4	*	2434.400	57.63	31.94	89.57	54.00	35.57	AVG No Limit
5		2483.500	33.59	32.01	65.60	74.00	-8.40	peak
6		2483.500	18.71	32.01	50.72	54.00	-3.28	AVG

Orthogonal Axis : X

Test Mode : TX N-40M MODE 2437MHz

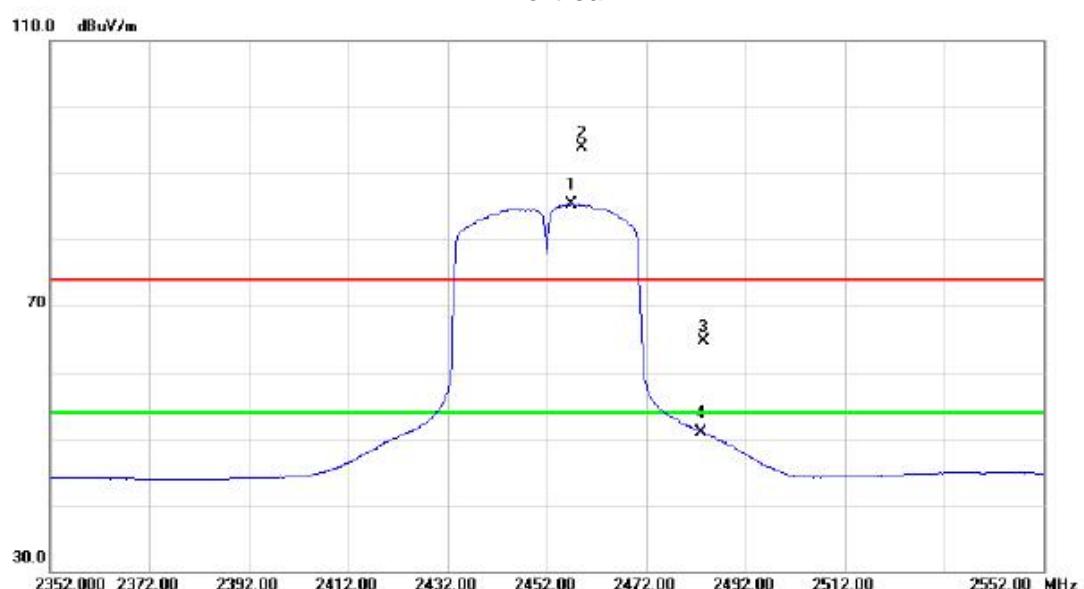
Horizontal

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Detector	Comment
			Level	Factor	ment				
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1	*	4872.940	34.54	3.72	38.26	54.00	-15.74	AVG	
2		4874.860	45.67	3.72	49.39	74.00	-24.61	peak	

Orthogonal Axis : X

Test Mode : TX N-40M MODE 2452MHz

Vertical



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Detector	Comment
			Level	Factor	ment				
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1	*	2457.000	53.24	31.98	85.22	54.00	31.22	AVG	No Limit
2	X	2459.000	61.91	31.98	93.89	74.00	19.89	peak	No Limit
3		2483.500	32.64	32.01	64.65	74.00	-9.35	peak	
4		2483.500	18.92	32.01	50.93	54.00	-3.07	AVG	

Orthogonal Axis : X

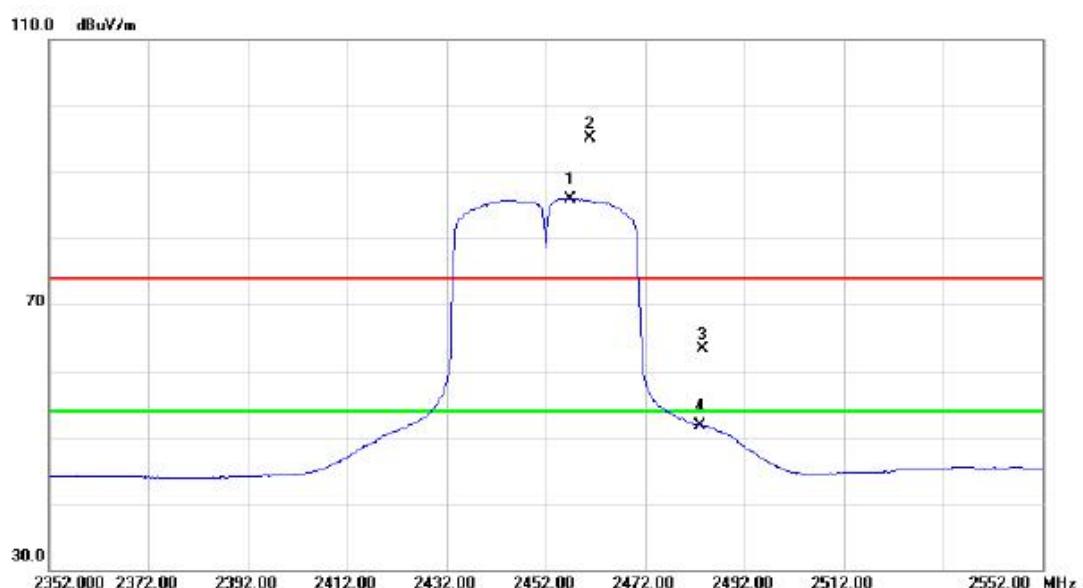
Test Mode : TX N-40M MODE 2452MHz

Vertical

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Detector	Comment
			Level	Factor	ment				
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1	*	4903.140	27.53	3.77	31.30	54.00	-22.70	AVG	
2		4903.420	38.63	3.77	42.40	74.00	-31.60	peak	

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

Horizontal



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Detector	Comment
			Level	Factor	ment				
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1	*	2457.000	53.99	31.98	85.97	54.00	31.97	AVG	No Limit
2	X	2461.000	63.21	31.98	95.19	74.00	21.19	peak	No Limit
3		2483.500	31.26	32.01	63.27	74.00	-10.73	peak	
4		2483.500	19.76	32.01	51.77	54.00	-2.23	AVG	

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

Horizontal

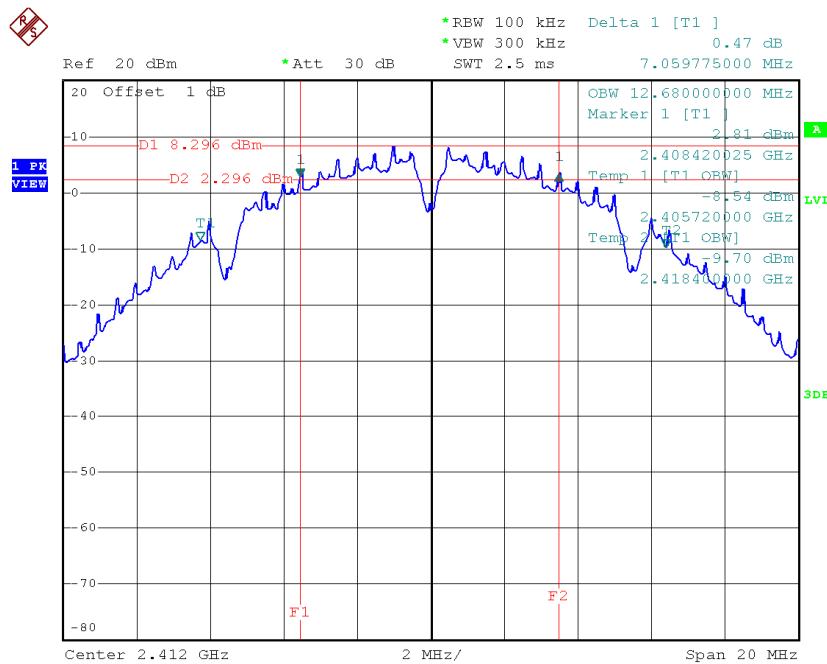
No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Detector	Comment
			Level	Factor	ment				
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1	*	4903.120	28.83	3.76	32.59	54.00	-21.41	AVG	
2		4904.880	40.57	3.77	44.34	74.00	-29.66	peak	

ATTACHMENT E - BANDWIDTH

Test Mode : TX B Mode_CH01/06/11

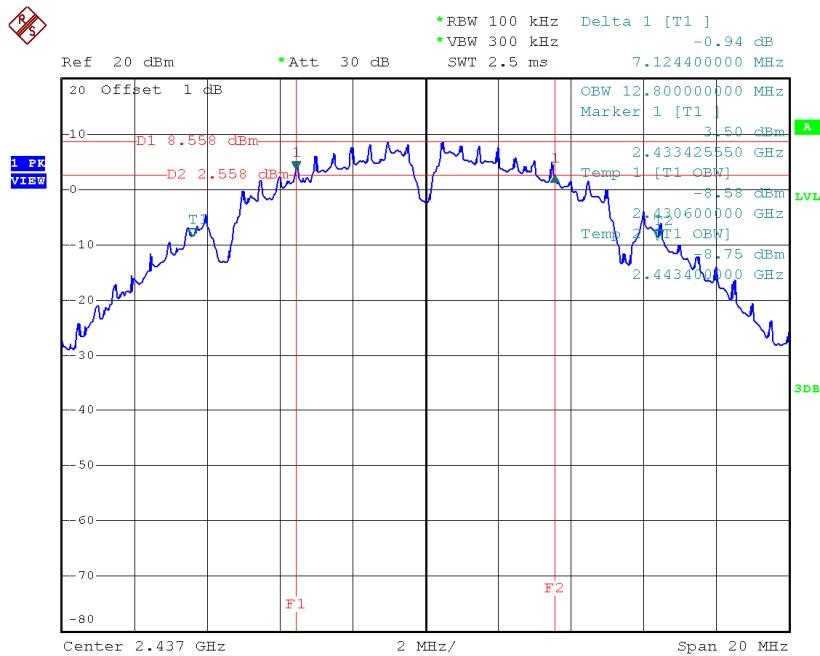
Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2412	7.06	12.68	500	Complies
2437	7.12	12.80	500	Complies
2462	7.59	12.60	500	Complies

TX CH01



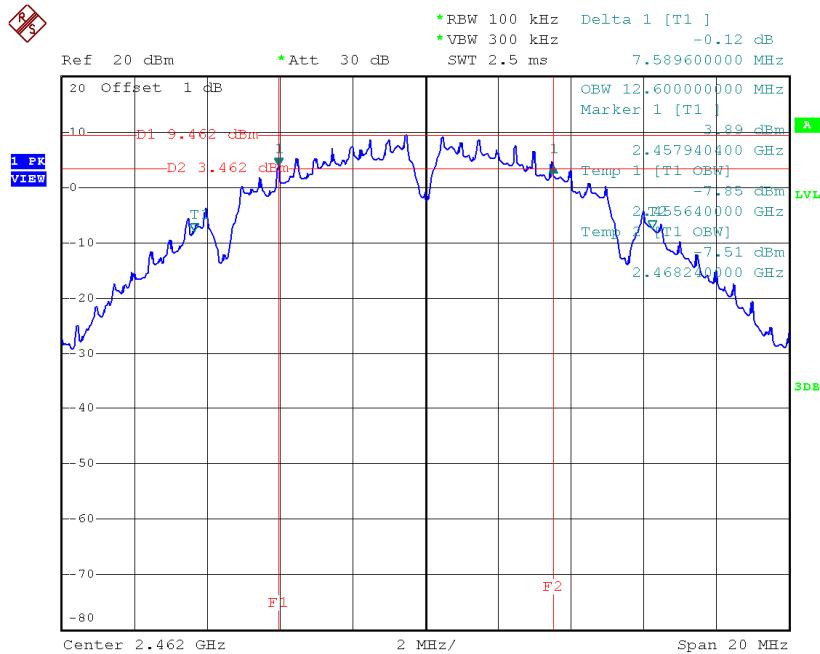
Date: 23.JAN.2015 14:41:07

TX CH06



Date: 23.JAN.2015 14:45:12

TX CH11

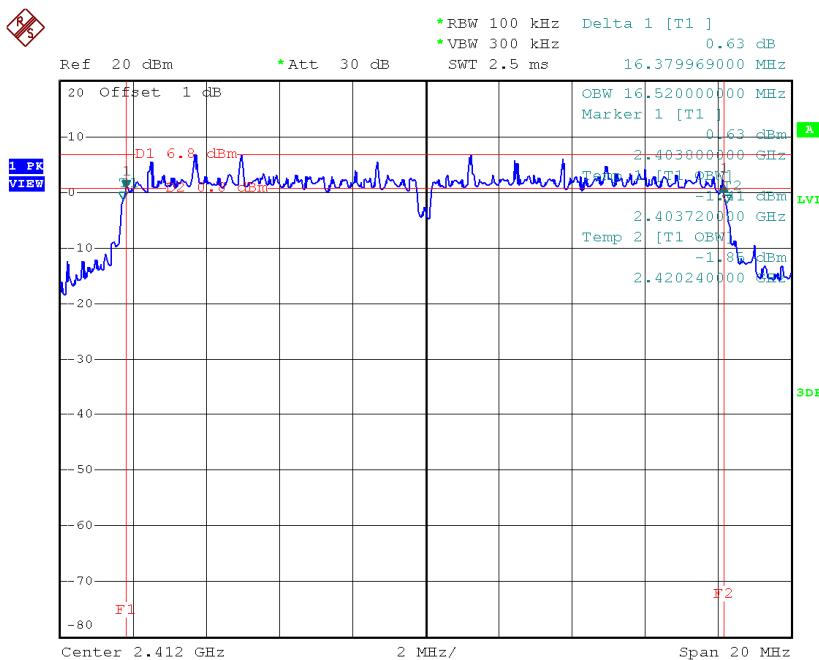


Date: 23.JAN.2015 14:46:30

Test Mode: TX G Mode_CH01/06/11

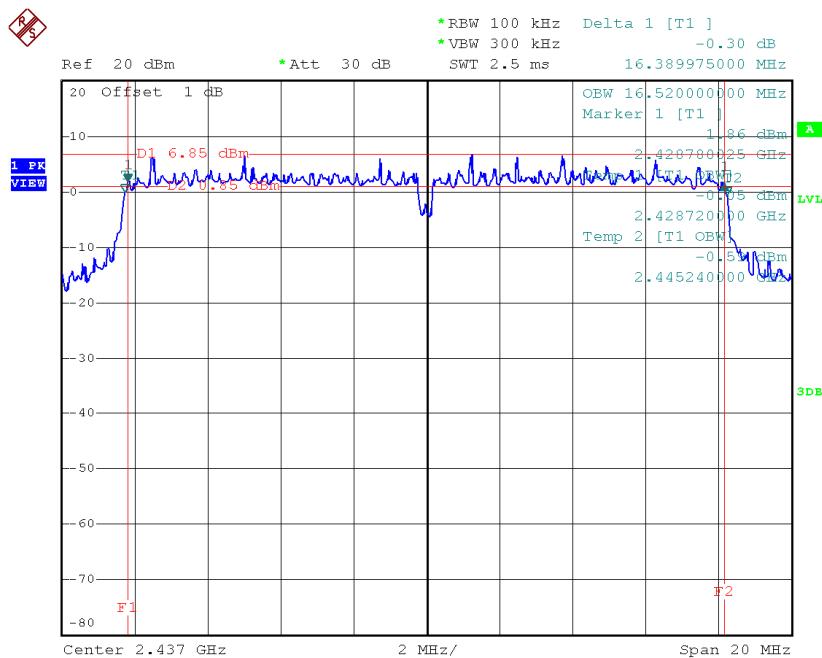
Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2412	16.38	16.52	500	Complies
2437	16.39	16.52	500	Complies
2462	16.32	16.40	500	Complies

TX CH01



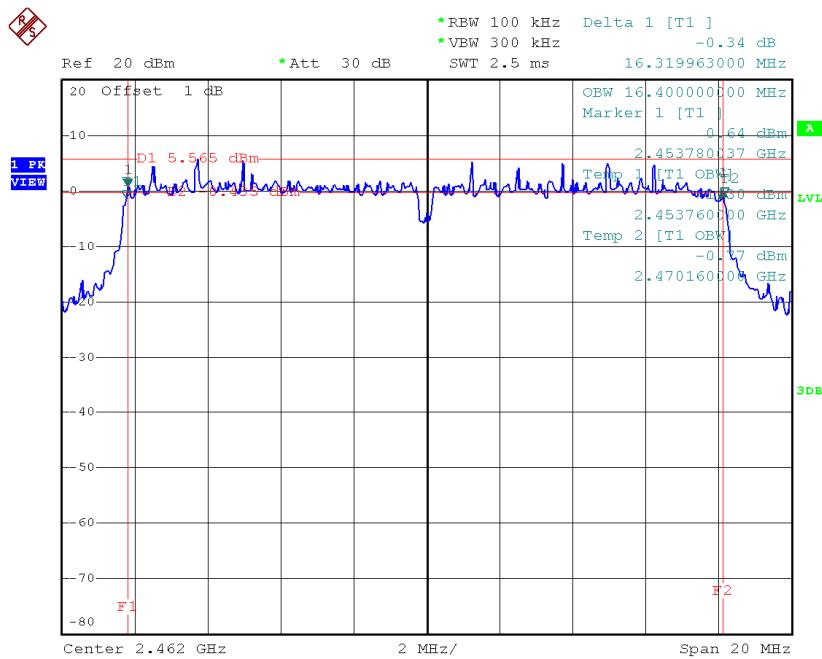
Date: 23.JAN.2015 14:48:35

TX CH06



Date: 23.JAN.2015 14:50:45

TX CH11

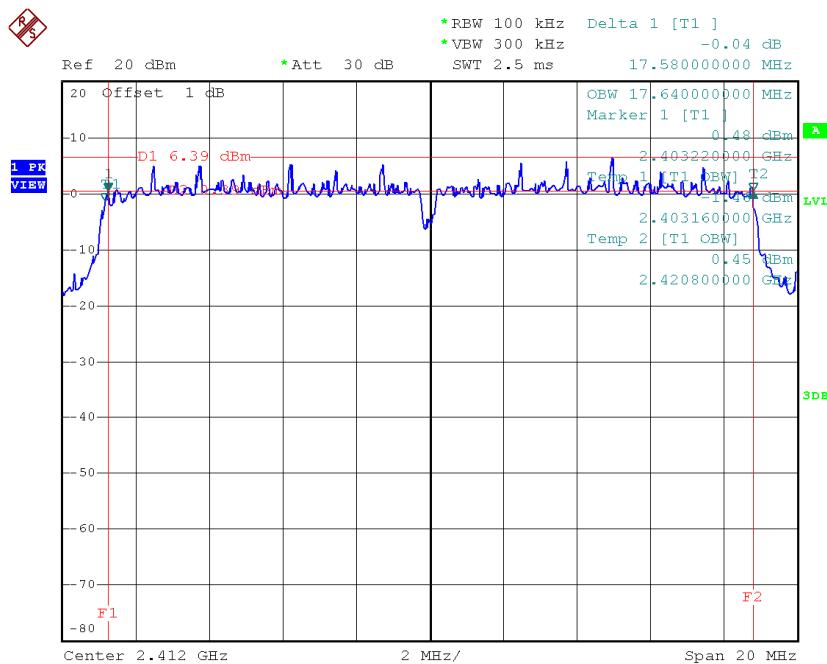


Date: 23.JAN.2015 14:53:00

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

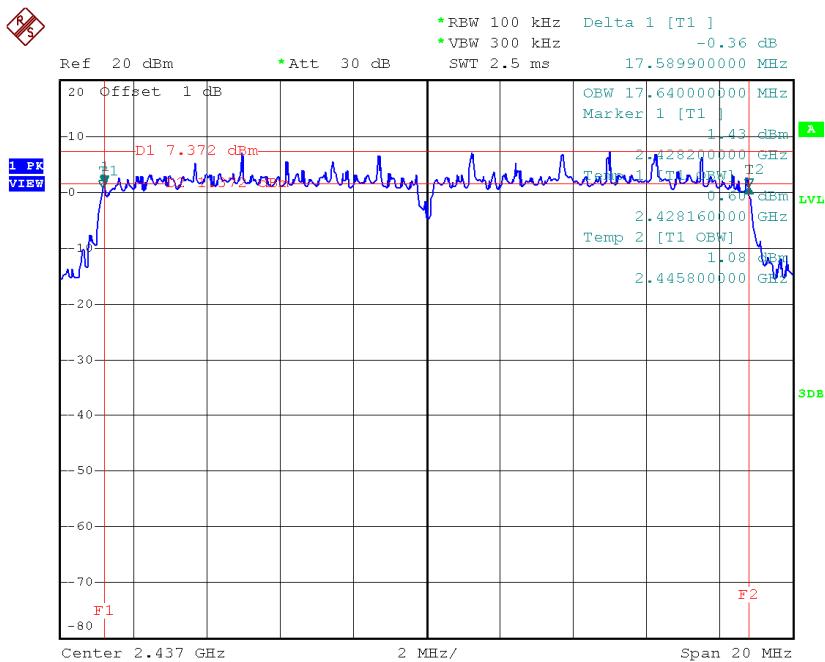
Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2412	17.58	17.64	500	Complies
2437	17.59	17.64	500	Complies
2462	17.56	17.64	500	Complies

TX CH01



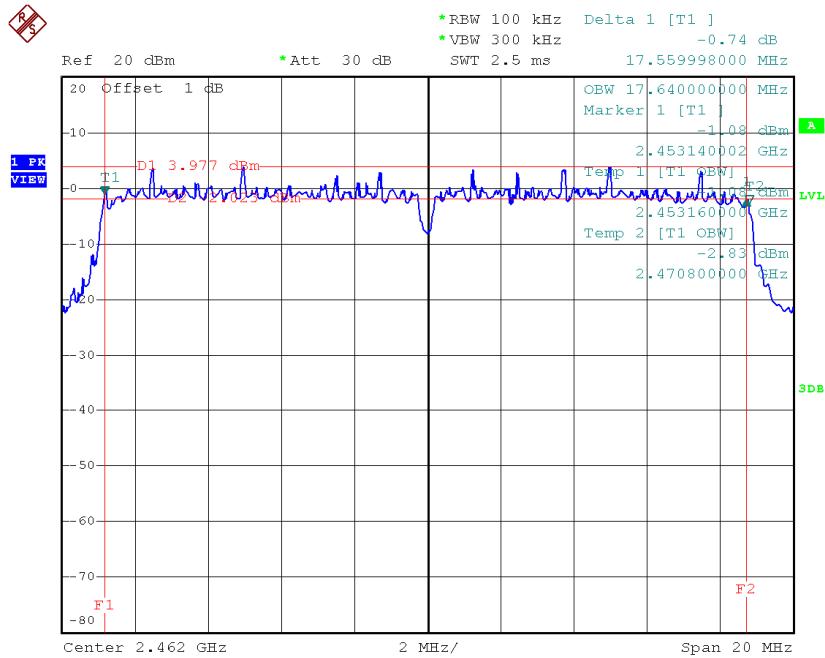
Date: 23.JAN.2015 14:55:12

TX CH06



Date: 23.JAN.2015 14:57:09

TX CH11

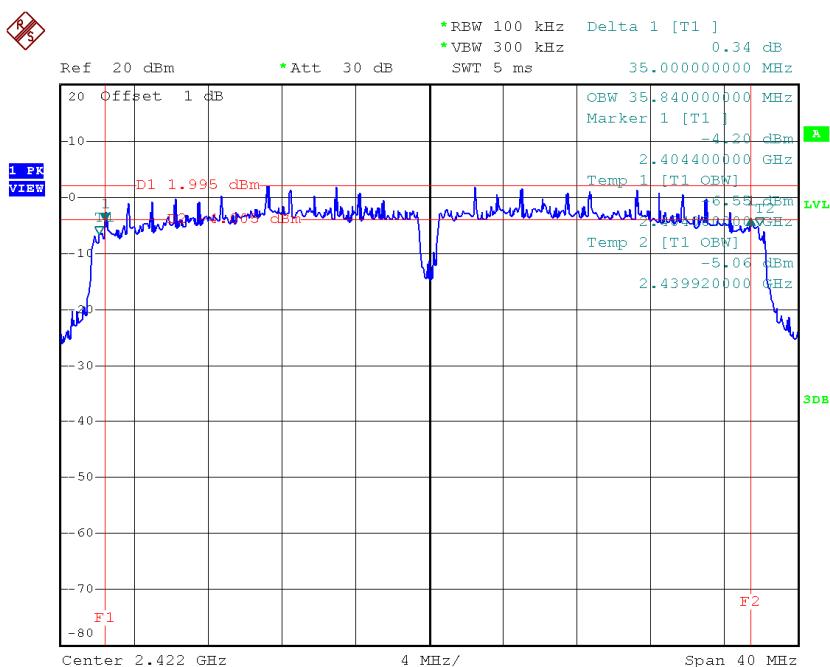


Date: 23.JAN.2015 14:58:23

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

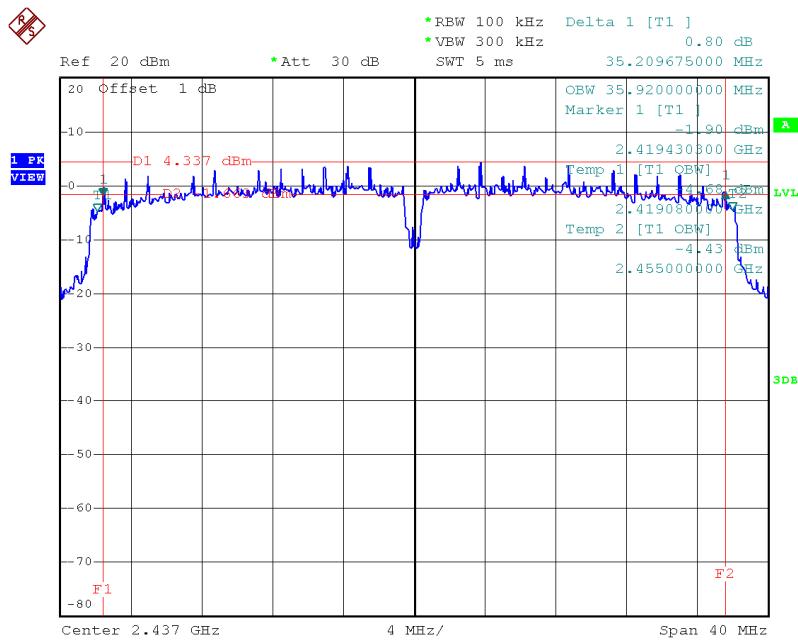
Frequency (MHz)	6dB Bandwidth (MHz)	99% Occupied BW (MHz)	Min. Limit (kHz)	Test Result
2422	35.00	35.84	500	Complies
2437	35.21	35.92	500	Complies
2452	35.04	35.84	500	Complies

TX CH03



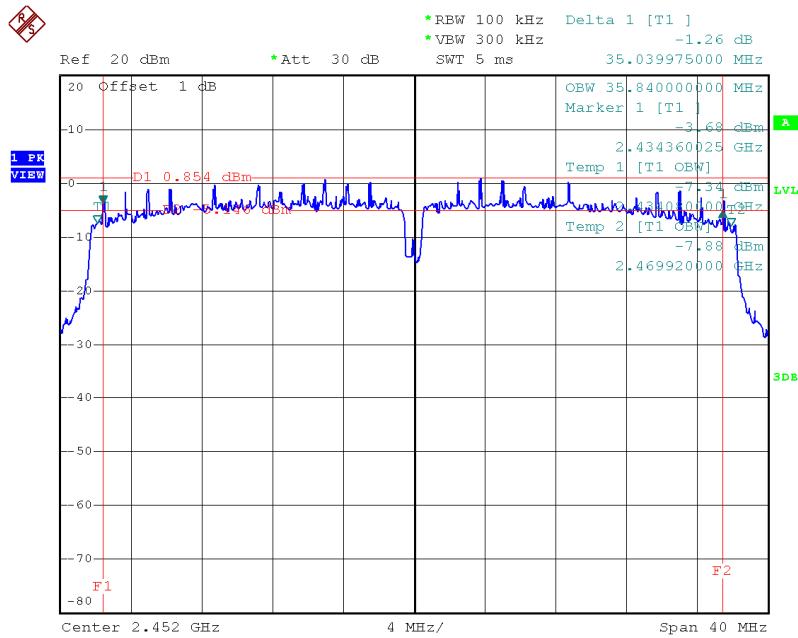
Date: 23.JAN.2015 15:00:39

TX CH06



Date: 23.JAN.2015 15:12:53

TX CH09



Date: 23.JAN.2015 15:07:48

**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	19.10	0.08	30.00	1.00	Complies
2437	19.73	0.09	30.00	1.00	Complies
2462	20.12	0.10	30.00	1.00	Complies

Test Mode :TX G Mode_CH01/06/11

Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2412	22.60	0.18	30.00	1.00	Complies
2437	23.11	0.20	30.00	1.00	Complies
2462	22.22	0.17	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	22.02	0.16	30.00	1.00	Complies
2437	23.02	0.20	30.00	1.00	Complies
2462	21.61	0.14	30.00	1.00	Complies

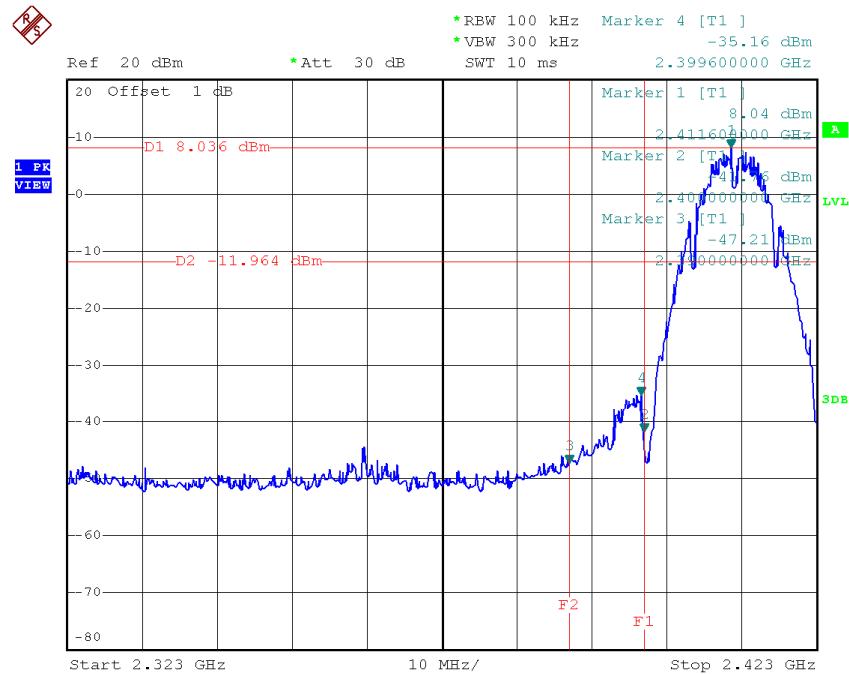
Test Mode :TX N40 Mode_CH03/06/09

Frequency (MHz)	Conducted Power (dBm)	Conducted Power (W)	Max. Limit (dBm)	Max. Limit (W)	Result
2422	21.56	0.14	30.00	1.00	Complies
2437	22.36	0.17	30.00	1.00	Complies
2452	21.11	0.13	30.00	1.00	Complies

**ATTACHMENT G - ANTENNA CONDUCTED SPURIOUS
EMISSION**

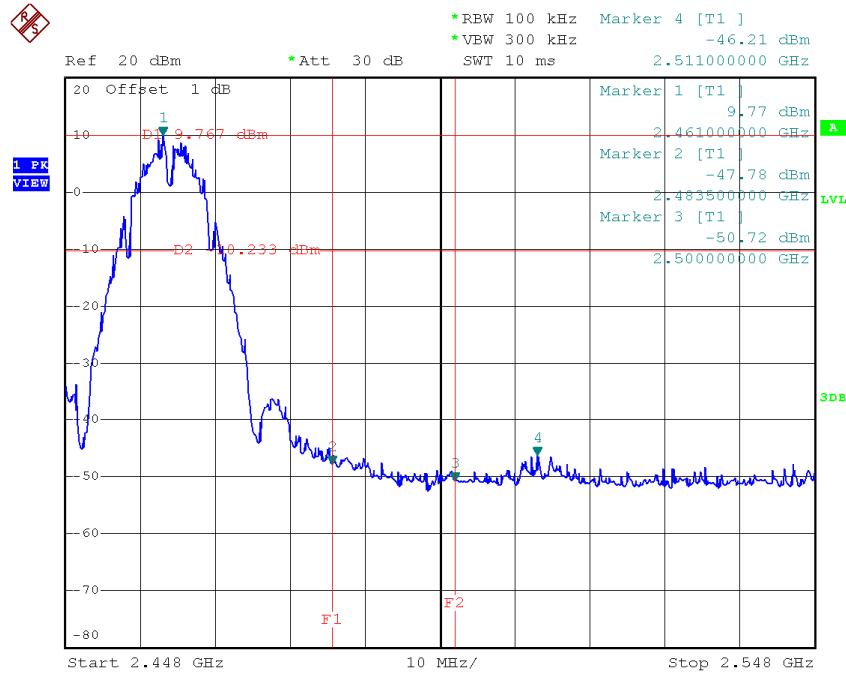
Test Mode :	TX B Mode
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TX B mode CH01

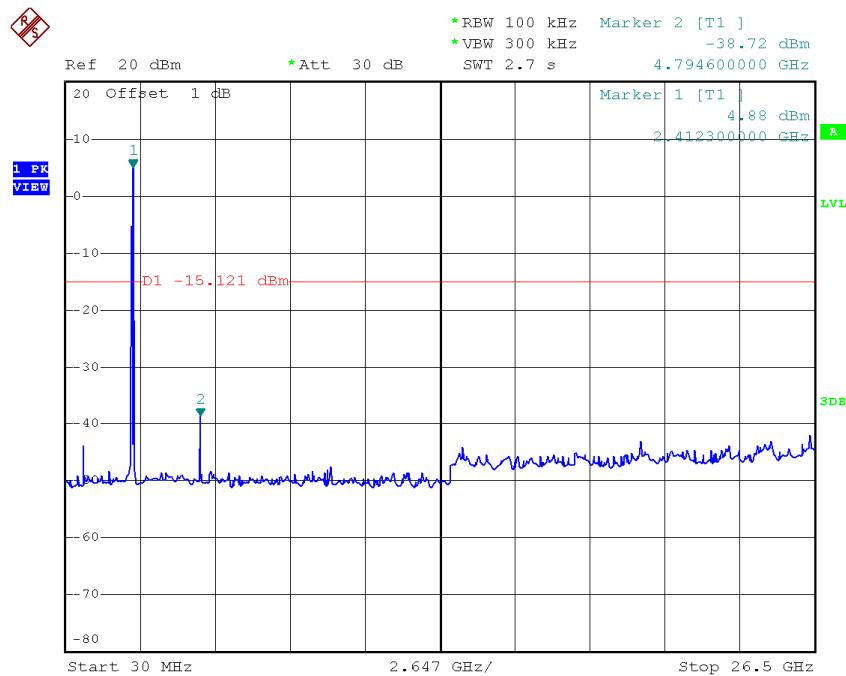


Date: 23.JAN.2015 14:41:29

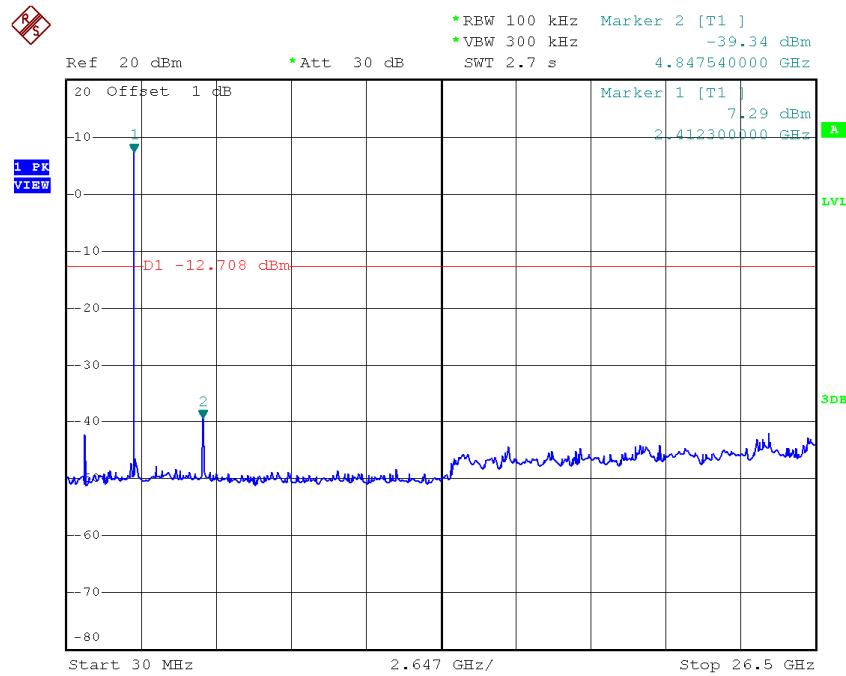
TX B mode CH11



Date: 23.JAN.2015 14:46:51

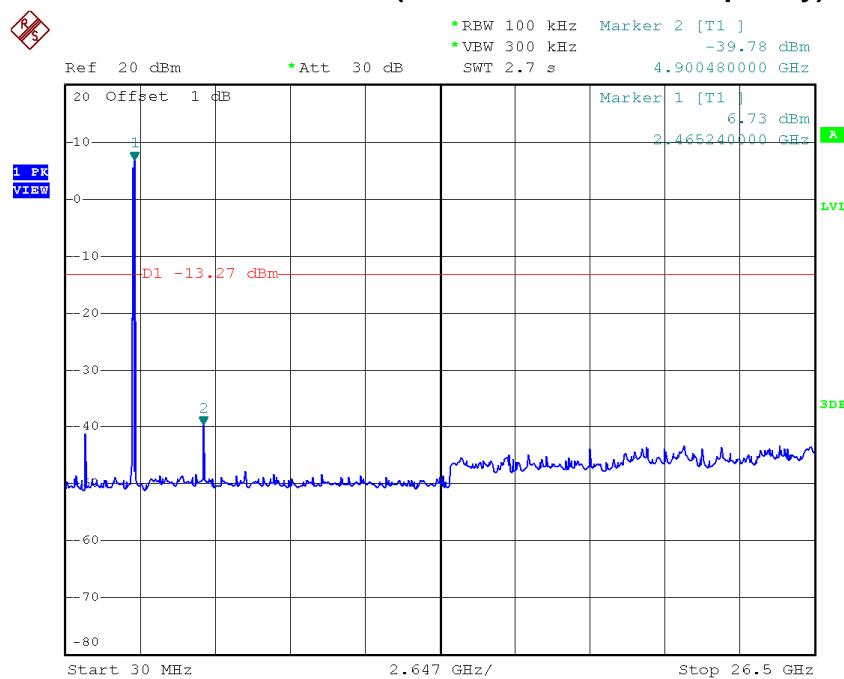
TX B mode CH01 (10 Harmonic of the frequency)

Date: 23.JAN.2015 14:41:21

TX B mode CH06 (10 Harmonic of the frequency)

Date: 23.JAN.2015 14:45:26

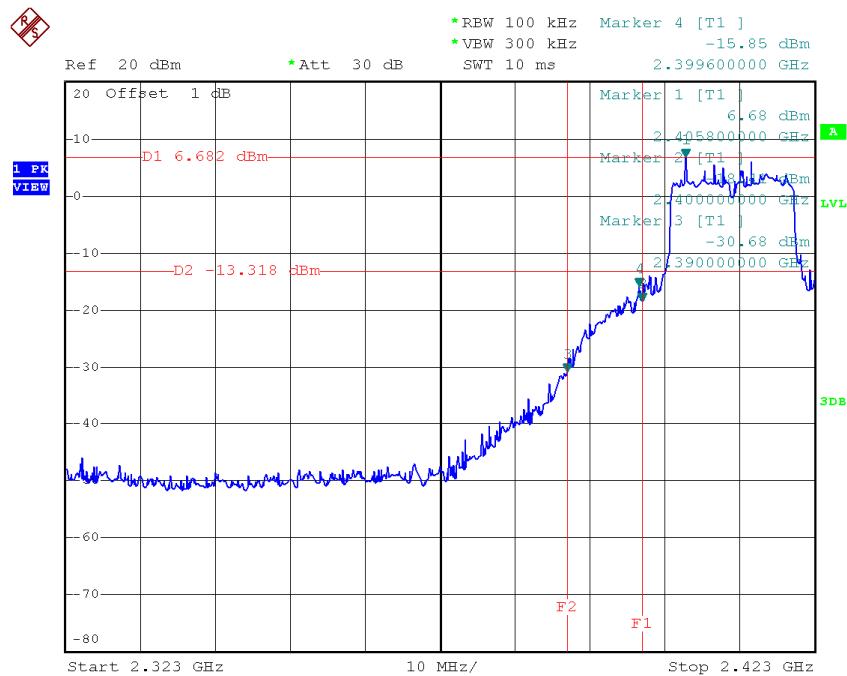
TX B mode CH11 (10 Harmonic of the frequency)



Date: 23.JAN.2015 14:46:43

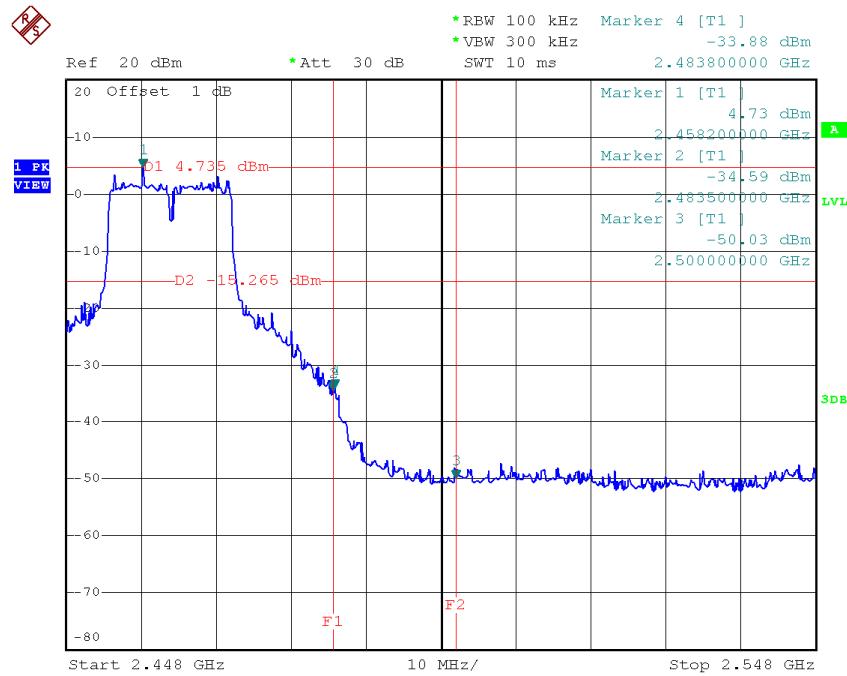
Test Mode :	TX G Mode
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TX G mode CH01

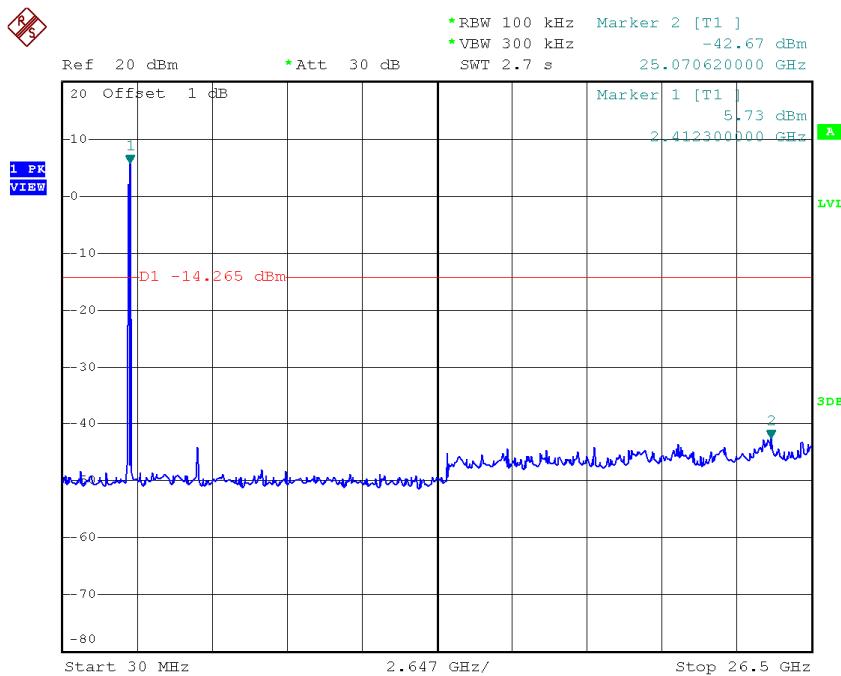


Date: 23.JAN.2015 14:48:56

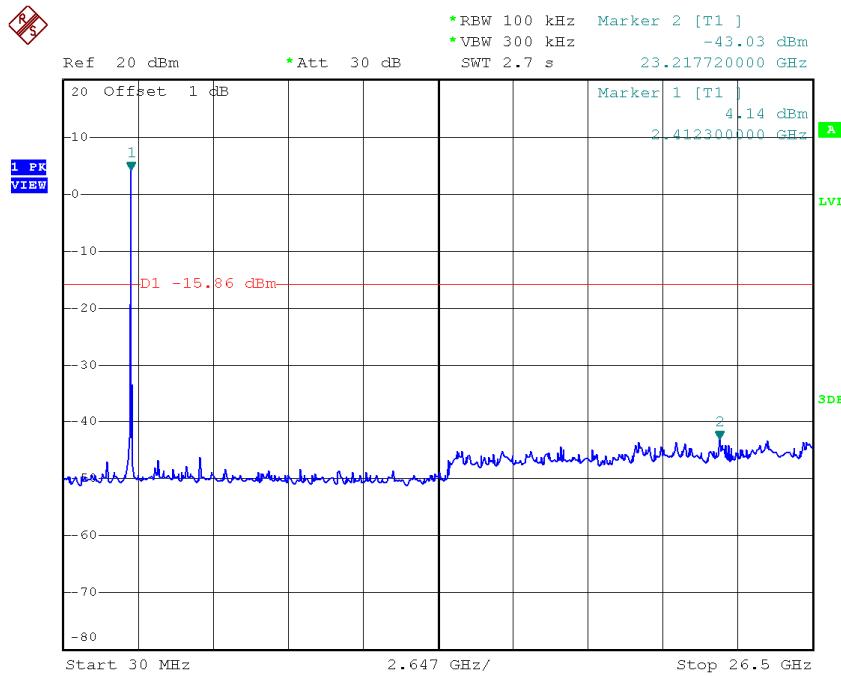
TX G mode CH11



Date: 23.JAN.2015 14:53:21

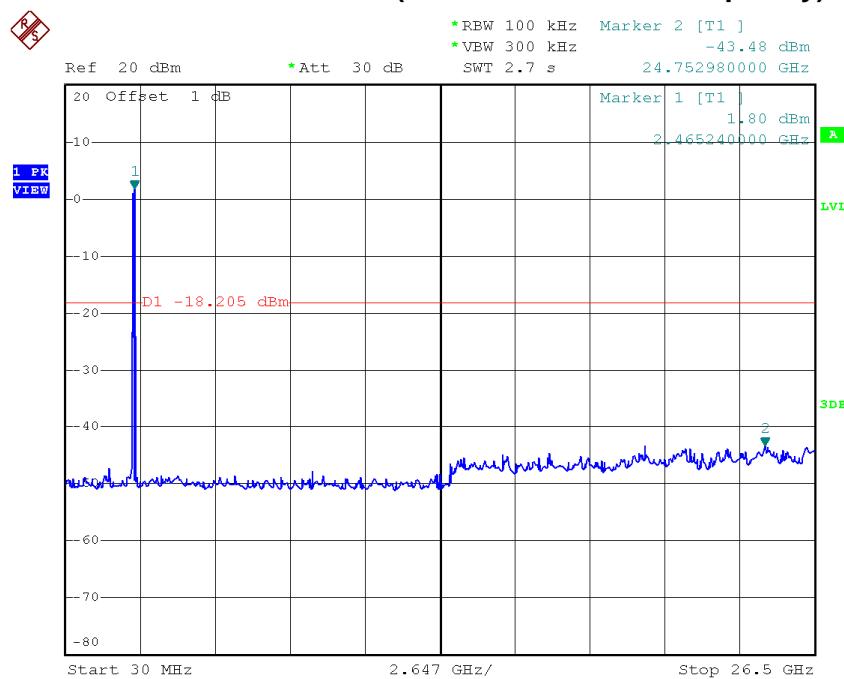
TX G mode CH01 (10 Harmonic of the frequency)

Date: 23.JAN.2015 14:48:49

TX G mode CH06 (10 Harmonic of the frequency)

Date: 23.JAN.2015 14:50:59

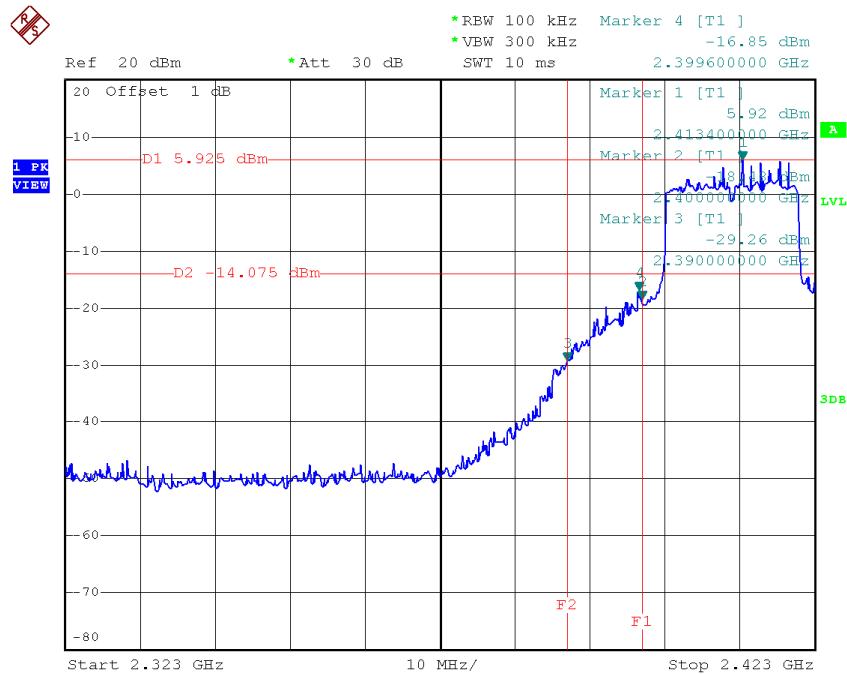
TX G mode CH11 (10 Harmonic of the frequency)



Date: 23.JAN.2015 14:53:13

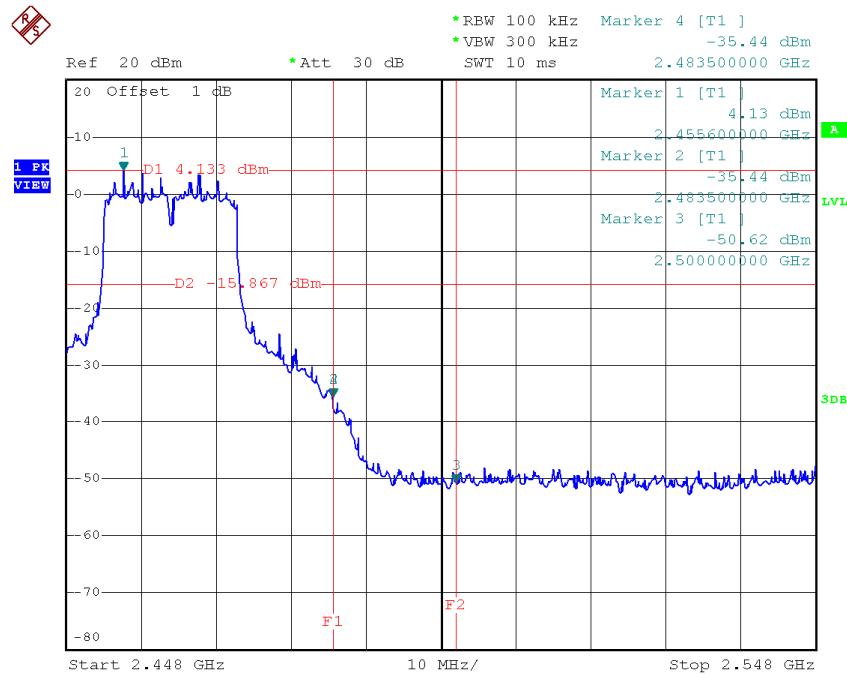
Test Mode :	TX N-20M Mode
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TX HT20 mode CH01



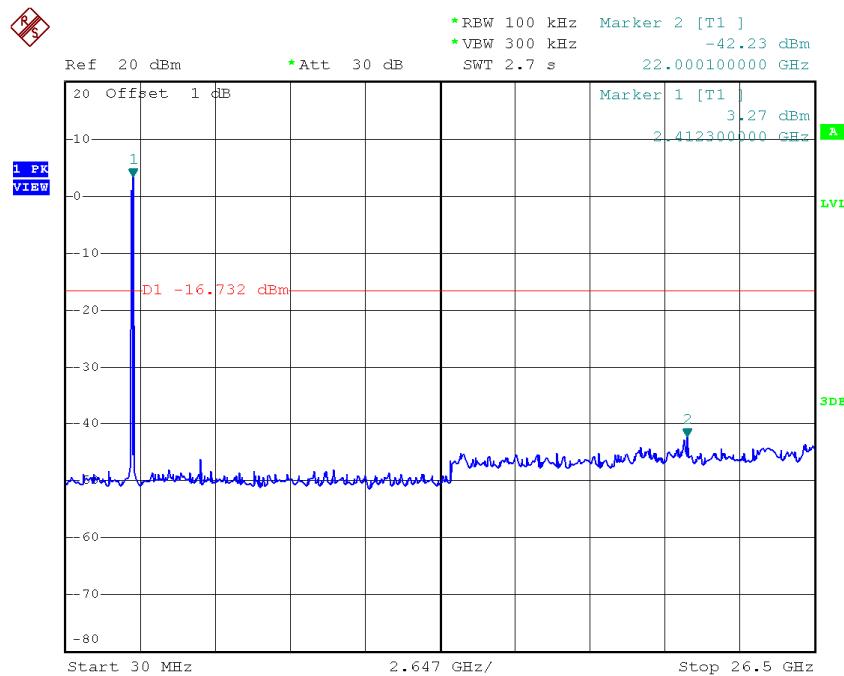
Date: 23.JAN.2015 14:55:33

TX HT20 mode CH11



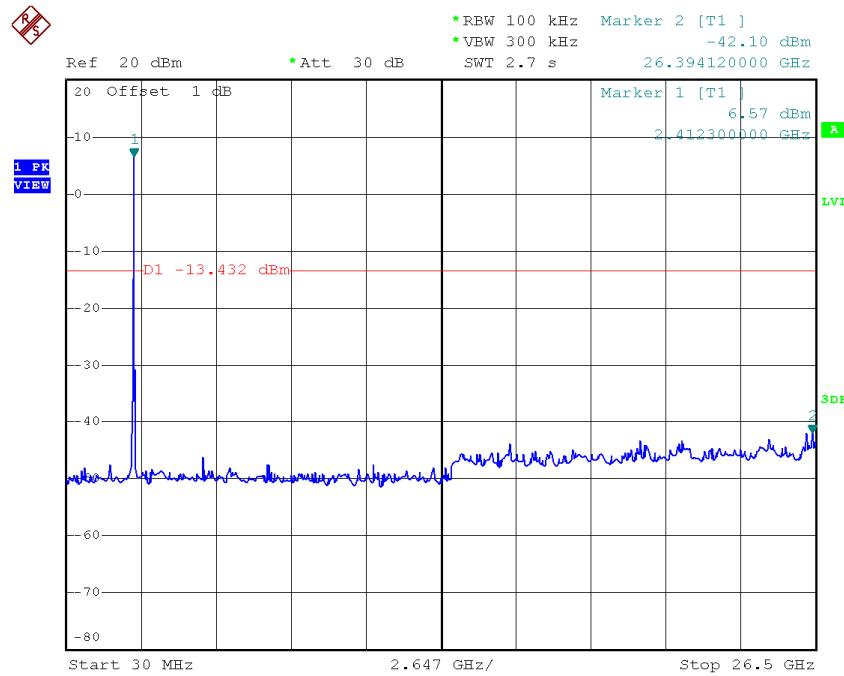
Date: 23.JAN.2015 14:58:44

TX HT20 mode CH01 (10 Harmonic of the frequency)



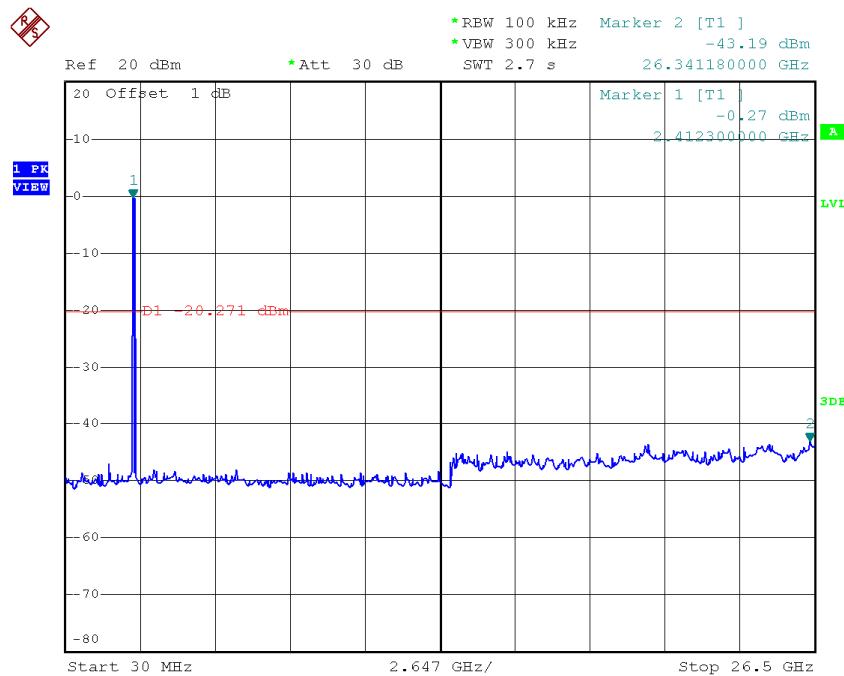
Date: 23.JAN.2015 14:55:26

TX HT20 mode CH06 (10 Harmonic of the frequency)



Date: 23.JAN.2015 14:57:23

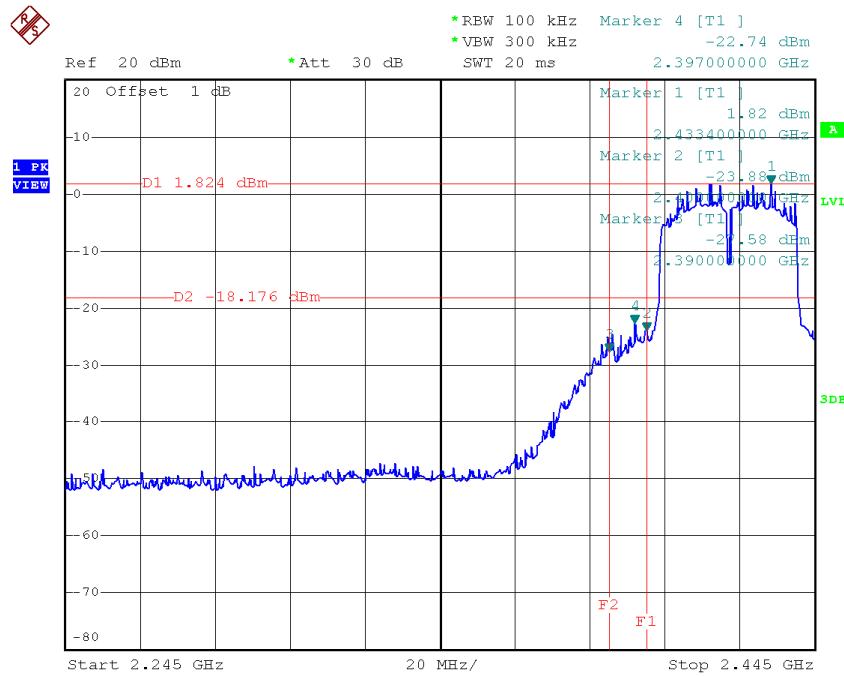
TX HT20 mode CH11 (10 Harmonic of the frequency)



Date: 23.JAN.2015 14:58:36

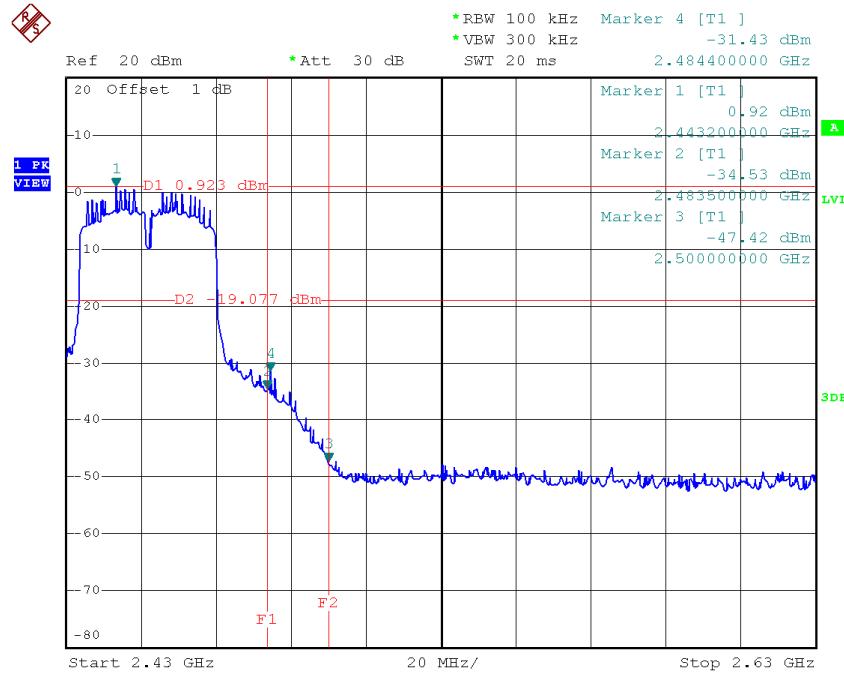
Test Mode :	TX N-40M Mode
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TX HT40 mode CH03



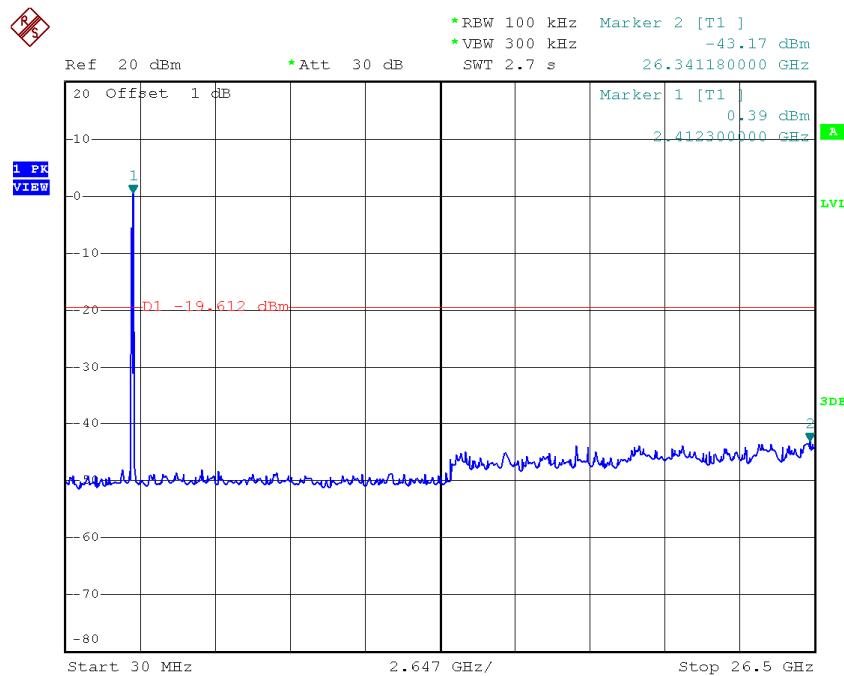
Date: 23.JAN.2015 15:01:01

TX HT40 mode CH09



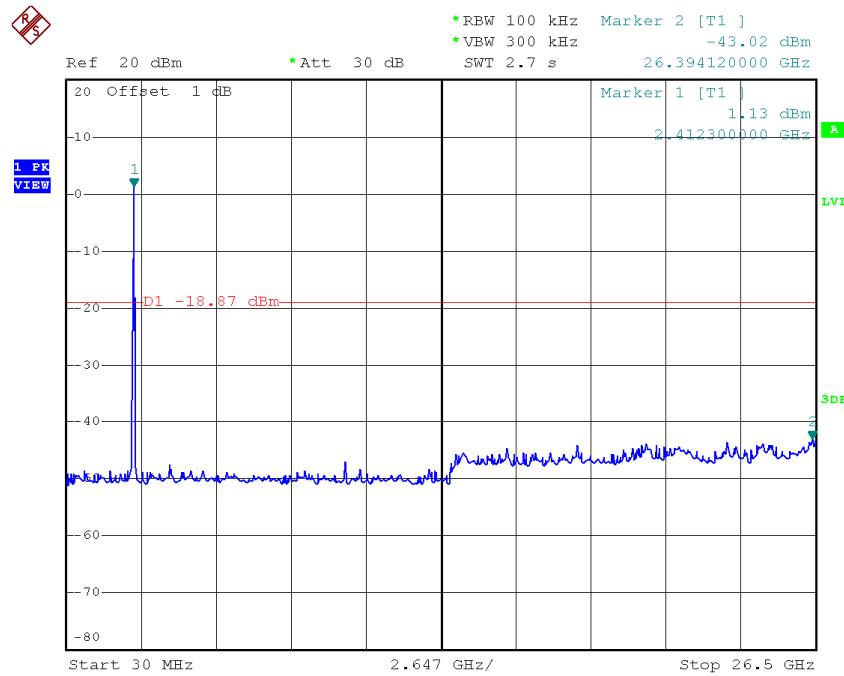
Date: 23.JAN.2015 15:08:09

TX HT40 mode CH03 (10 Harmonic of the frequency)



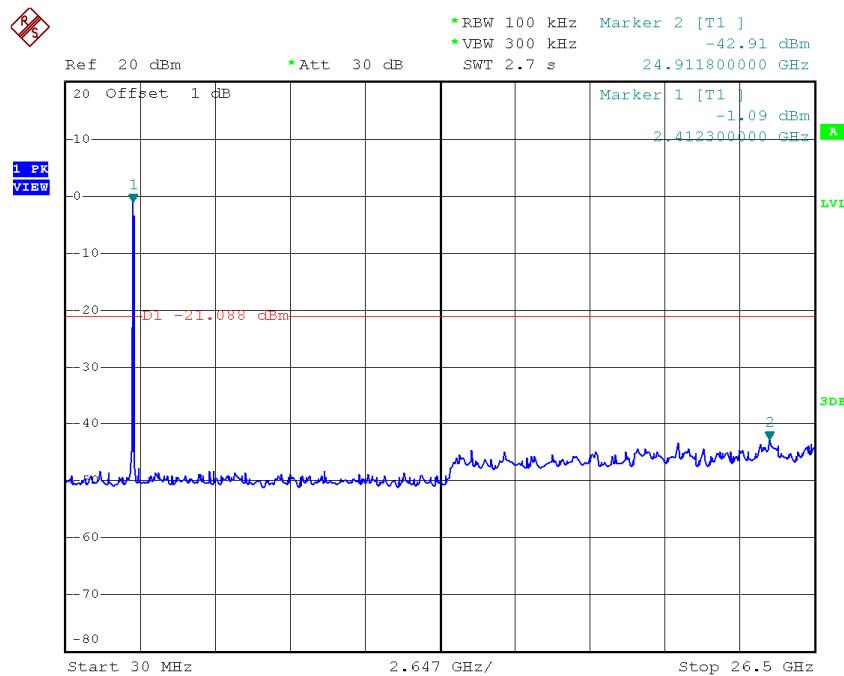
Date: 23.JAN.2015 15:00:53

TX HT40 mode CH06 (10 Harmonic of the frequency)



Date: 23.JAN.2015 15:05:29

TX HT40 mode CH09 (10 Harmonic of the frequency)



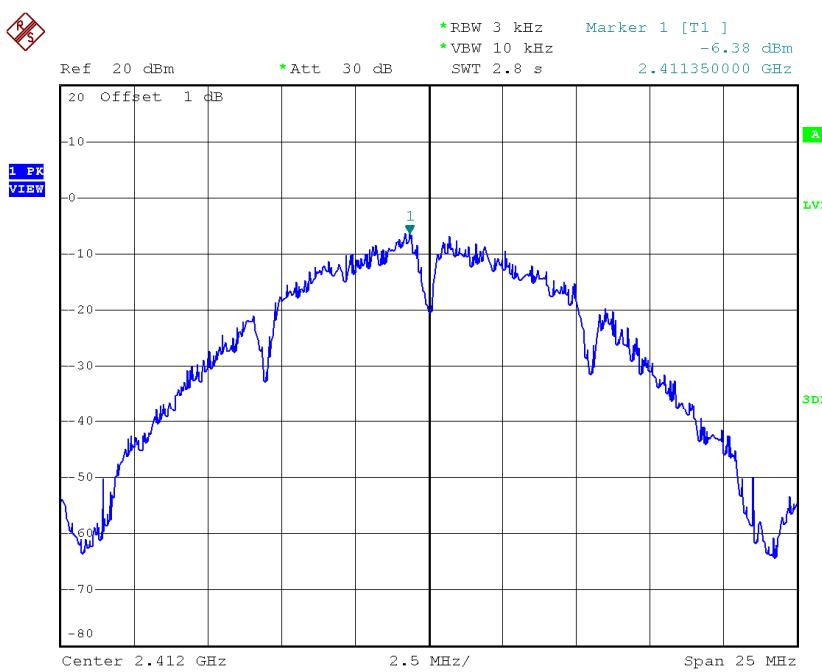
Date: 23.JAN.2015 15:08:02

ATTACHMENT H - POWER SPECTRAL DENSITY

Test Mode :TX B Mode_CH01/06/11

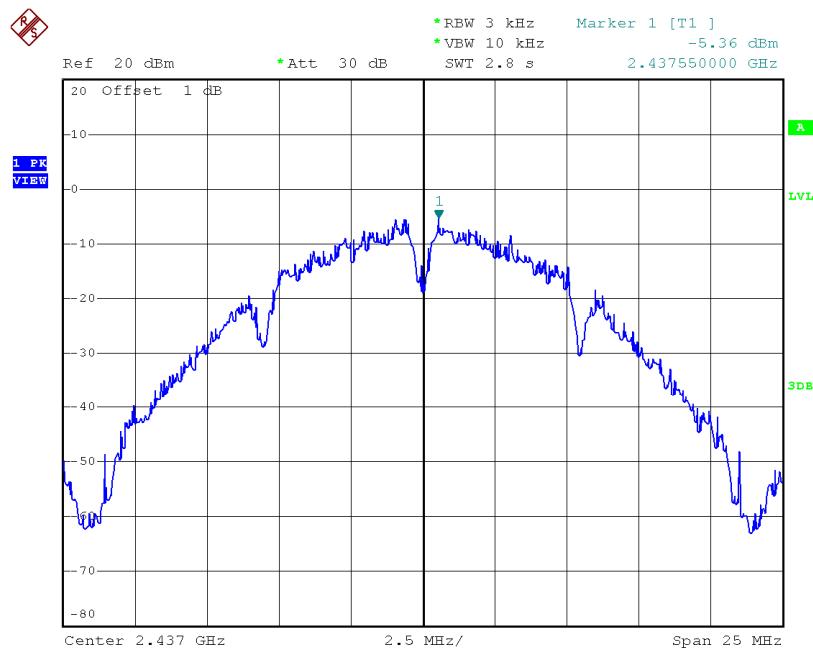
Frequency (MHz)	Power Density (dBm/3kHz)	Power Density (mW/3kHz)	Max. Limit (dBm/3kHz)	Result
2412	-6.38	0.23	8.00	Complies
2437	-5.36	0.29	8.00	Complies
2462	-5.44	0.29	8.00	Complies

TX CH01



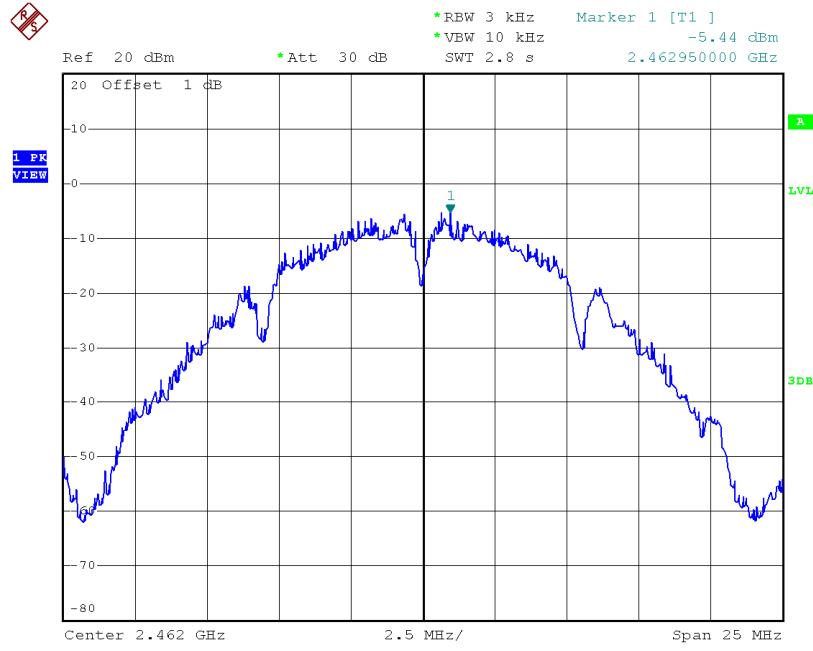
Date: 23.JAN.2015 14:41:38

TX CH06



Date: 23.JAN.2015 14:45:35

TX CH11

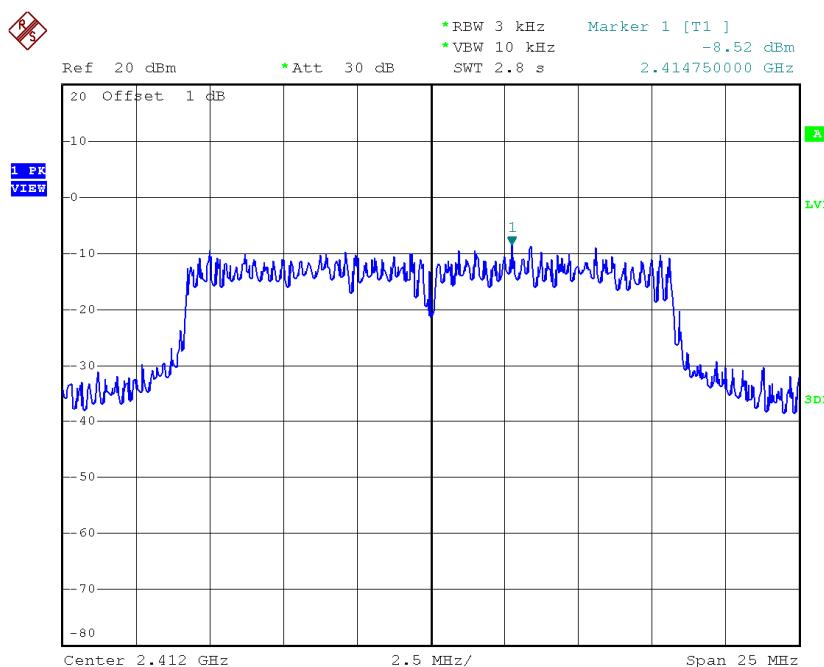


Date: 23.JAN.2015 14:46:59

Test Mode :TX G Mode_CH01/06/11

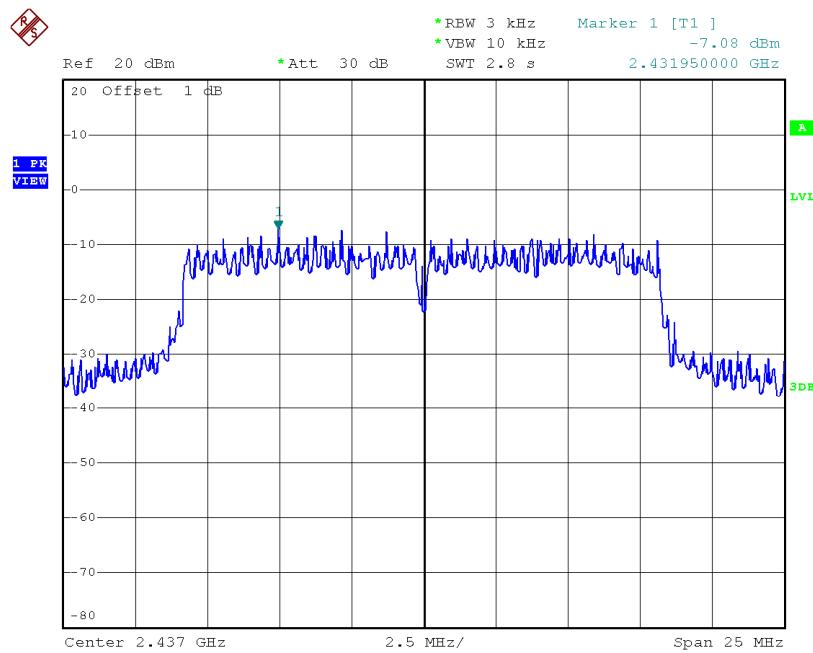
Frequency (MHz)	Power Density (dBm/3kHz)	Power Density (mW/3kHz)	Max. Limit (dBm/3kHz)	Result
2412	-8.52	0.14	8.00	Complies
2437	-7.08	0.20	8.00	Complies
2462	-9.81	0.10	8.00	Complies

TX CH01



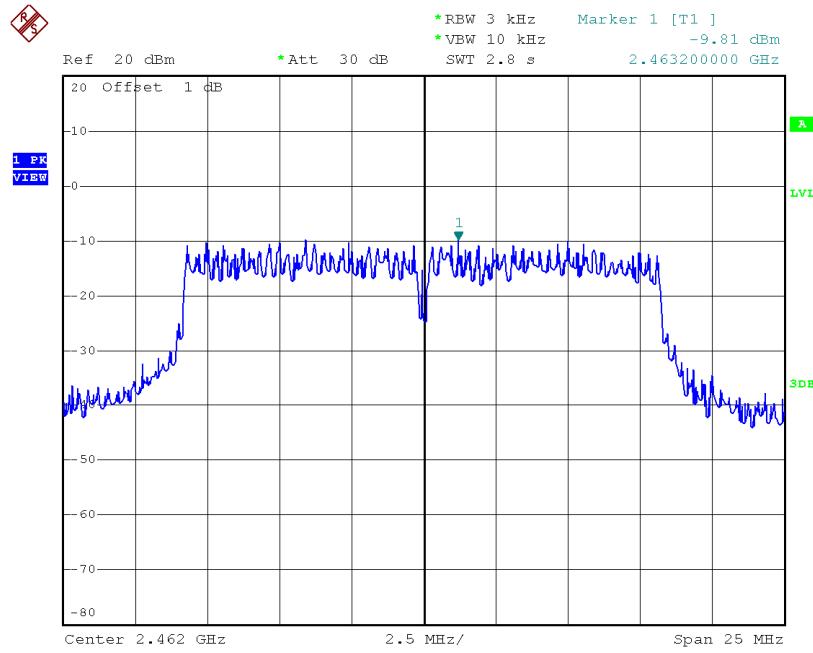
Date: 23.JAN.2015 14:49:05

TX CH06



Date: 23.JAN.2015 14:51:08

TX CH11

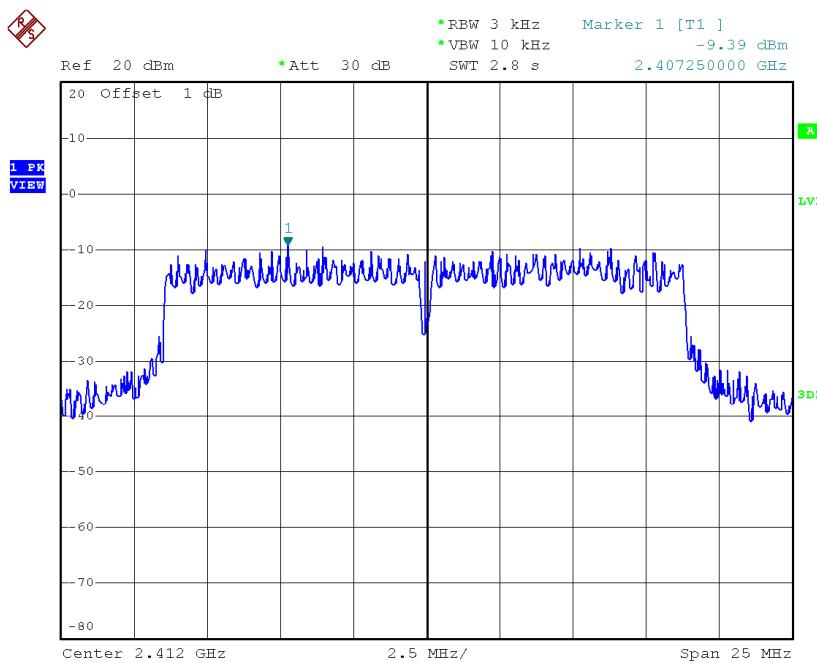


Date: 23.JAN.2015 14:53:30

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

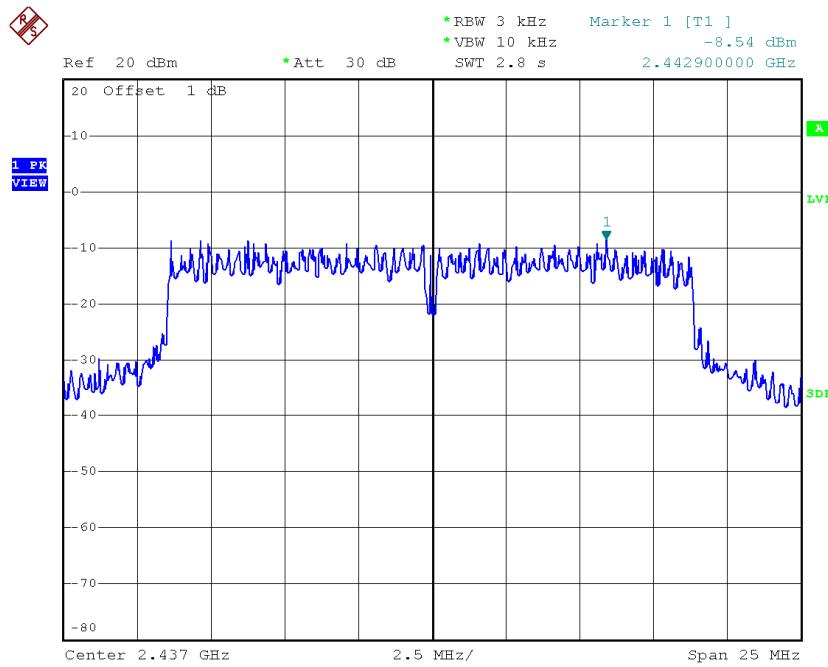
Frequency (MHz)	Power Density (dBm/3kHz)	Power Density (mW/3kHz)	Max. Limit (dBm/3kHz)	Result
2412	-9.39	0.12	8.00	Complies
2437	-8.54	0.14	8.00	Complies
2462	-10.84	0.08	8.00	Complies

TX CH01



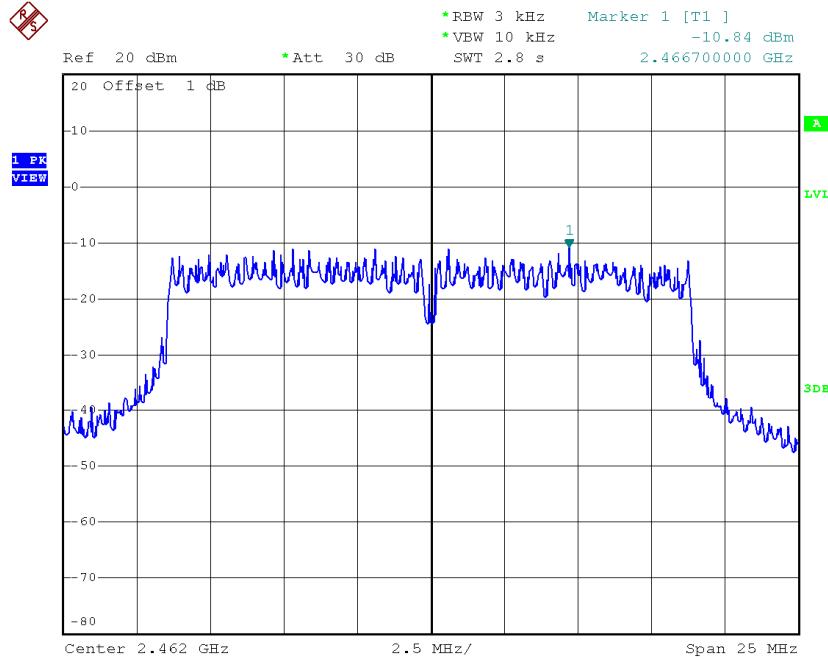
Date: 23.JAN.2015 14:55:42

TX CH06



Date: 23.JAN.2015 14:57:32

TX CH11

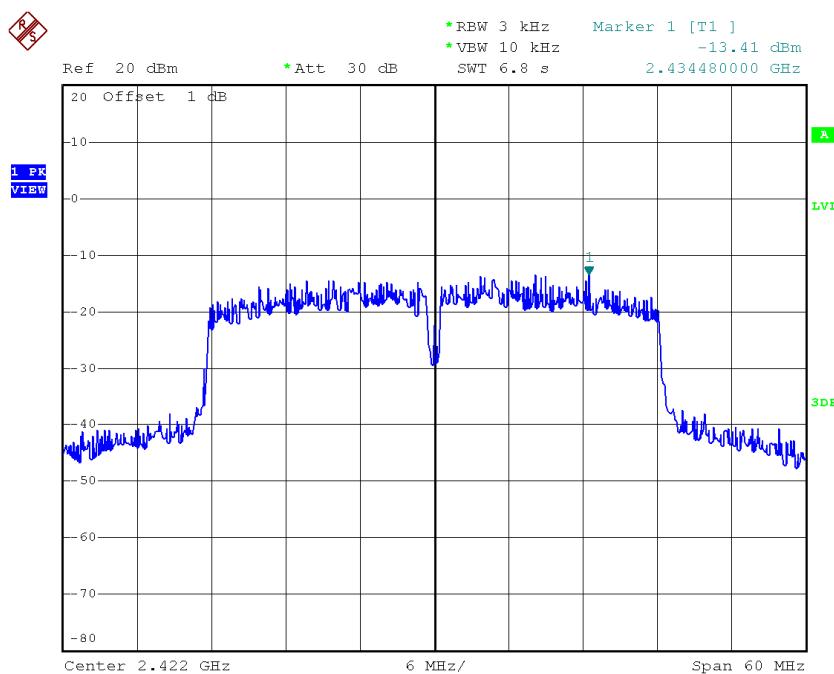


Date: 23.JAN.2015 14:58:53

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

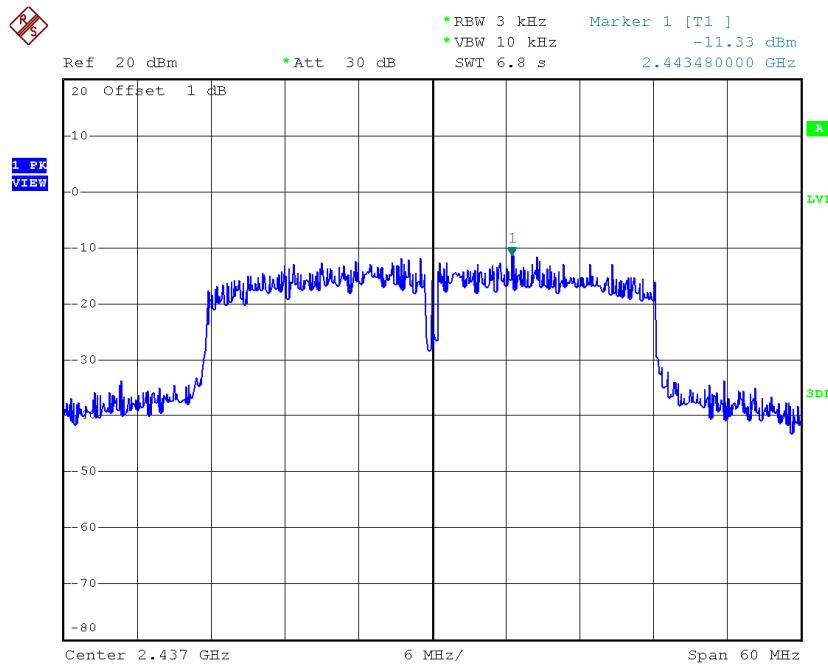
Frequency (MHz)	Power Density (dBm/3kHz)	Power Density (mW/3kHz)	Max. Limit (dBm/3kHz)	Result
2422	-13.41	0.05	8.00	Complies
2437	-11.33	0.07	8.00	Complies
2452	-14.08	0.04	8.00	Complies

TX CH03



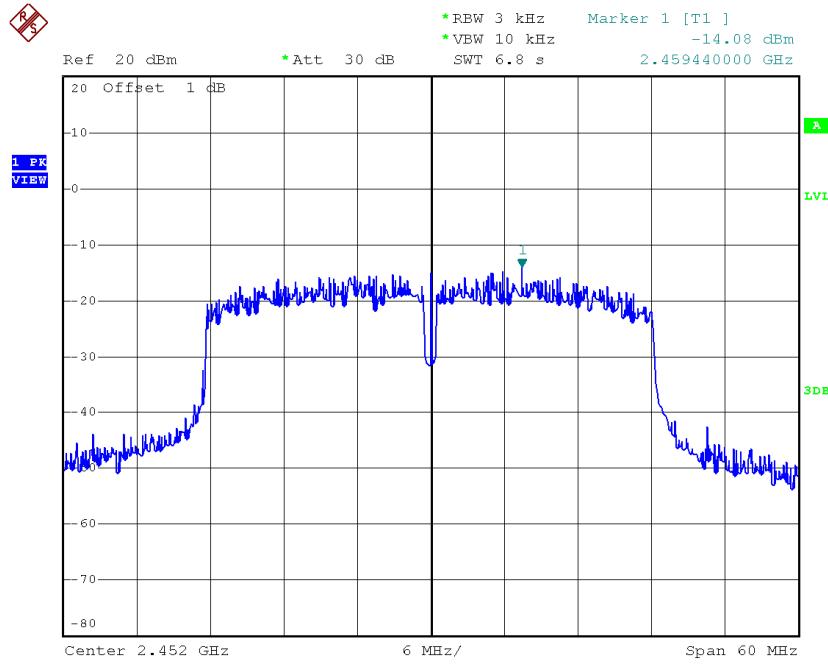
Date: 23.JAN.2015 15:01:12

TX CH06



Date: 23.JAN.2015 15:05:41

TX CH09



Date: 23.JAN.2015 15:08:21