

FCC Radio Test Report

FCC ID: V7TN301

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

Project No. : 1308C212J
Equipment : Wireless N301 Easy Setup Router
Model Name : N301
Applicant : SHENZHEN TENDA TECHNOLOGY CO.,LTD.
Address : Tenda Industrial Park, No. 34-1, Shilong Rd., Shiyan
Town, Bao'an District, Shenzhen, P.R.China 518108

Date of Receipt : Aug. 22, 2013, Aug. 09, 2016
Date of Test : Aug. 22, 2013~ Sep. 11, 2013
Aug. 09, 2016 ~ Aug. 16, 2016
Issued Date : Aug. 19, 2016
Tested by : BTL Inc.

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Declaration

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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

Issue No.	Description	Issued Date
NEI-FCCP-1-1308C212	Original Report	Sep. 12, 2013
BTL-FCCP-1-1308C212J	Compared with previous report (NEI-FCCP-1-1308C212), The standards are updated to the latest and The new adapter added and test items of Conducted Emission and Transmitter Radiated Emissions below 1G&Above 1G are evaluated and recorded in this report.	Aug. 18, 2016

1. CERTIFICATION

Equipment : Wireless N301 Easy Setup Router
Brand Name : Tenda
Model Name : N301
Applicant : SHENZHEN TENDA TECHNOLOGY CO.,LTD.
Manufacturer : SHENZHEN TENDA TECHNOLOGY CO.,LTD.
Address : Tenda Industrial Park, No. 34-1, Shilong Rd., Shiyan Town, Bao'an District,
Shenzhen, P.R.China 518108
Date of Test : Aug. 22, 2013~ Sep. 11, 2013
Aug. 09, 2016 ~ Aug. 16, 2016
Test Item : ENGINEERING SAMPLE
Standard(s) : FCC Part15, Subpart C:(15.247) / ANSI C63.10-2013

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

The test data, data evaluation, and equipment configuration contained in our test report (Ref No. BTL-FCCP-1-1308C212J) 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 standards:

FCC Part15 (15.247) , Subpart C				
Standard	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.

2.1 TEST FACILITY

The test facilities used to collect the test data in this report is at the location of No.3, Jinshagang 1st Road, Shixia, Dalang Town, Dongguan, Guangdong, China.
 BTL's test firm number is 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 measurement instrumentation uncertainty considerations contained in CISPR 16-4-2.

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

A. Conducted Measurement :

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

B. Radiated Measurement :

Test Site	Method	Measurement Frequency Range	Ant. H / V	U , (dB)
DG-CB03	CISPR	9K~30MHz	V	3.79
		9K~30MHz	H	3.57
		30MHz ~ 200MHz	V	3.82
		30MHz ~ 200MHz	H	3.60
		200MHz ~ 1,000MHz		3.86
		200MHz ~ 1,000MHz	H	3.94
		1GHz~18GHz	V	3.12
		GHZ~18GHZ	H	3.68
		18GHz~40GHz	V	4.15
		18GHz~40GHz	H	4.14

3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

Equipment	Wireless N301 Easy Setup Router	
Brand Name	Tenda	
Model Name	N301	
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 300 Mbps
	Output Power (Max.)	802.11b: 15.75 dBm 802.11g: 18.99 dBm 802.11n(20MHz):21.55 dBm 802.11n(40MHz):17.62 dBm
Power Source	DC Voltage supplied from AC/DC adapter 1# Brand / Model: HEWEISHUN / TEA09U-09060 2# Brand / Model: HEWEISHUN / BN049-A05009U	
Power Rating	I/P AC 100-240V 50/60Hz 0.3A O/P 9V 600mA	

Note:

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

2.

CH 01 – CH 11 for 802.11b, 802.11g, 802.11n(20MHz) CH 03 – CH 09 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	S/N	Antenna Type	Connector	Gain (dBi)	Note
1	Tenda	50000931	Dipole	N/A	4.94	65mm
2	Tenda	50000933	Dipole	N/A	4.94	125mm

Note: The EUT incorporates a MIMO function. Physically, the EUT provides two completed transmitters and two receivers (2T2R), all transmit signals are completely uncorrelated, then, Direction gain = G_{ANT} , that is Directional gain=4.94.

4.

Operating Mode TX Mode	1TX	2TX
	802.11b	V (ANT 1 or ANT 2)
802.11g	V (ANT 1 or ANT 2)	-
802.11n(20MHz)	-	V (ANT 1 & ANT 2)
802.11n(40MHz)	-	V (ANT 1 & ANT 2)

3.2 DESCRIPTION OF TEST MODES

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

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

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

For Conducted Test	
Final Test Mode	Description
Mode 5	TX Mode

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

Note:

- (1) The measurements are performed at the high, middle, low available channels.
- (2) 802.11b mode: DBPSK (1Mbps)
 802.11g mode: OFDM (6Mbps)
 802.11n HT20 mode : BPSK (6.5Mbps)
 802.11n HT40 mode : BPSK (13.5Mbps)
 For radiated emission tests, the highest output powers were set for final test.
- (3) The EUT was pre-tested on positioned of each 3 axis. The worst case was found positioned on X-plane. Therefore only the test data of this X-plane was used for radiated emission measurement test.
- (4) N301 with detachable antenna is the worst case and include in the test report.

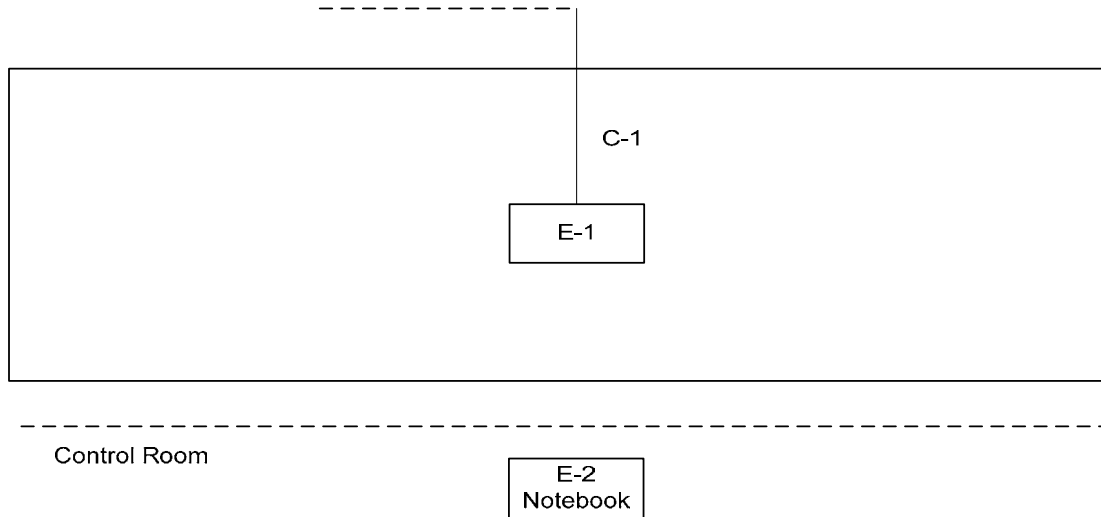
3.3 TABLE OF PARAMETERS OF TEXT SOFTWARE SETTING

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	Duck_1_1-9		
Frequency	2412 MHz	2437 MHz	2462 MHz
IEEE 802.11b DSSS	50	52	54
IEEE 802.11g OFDM	48	48	50

Test software version	Duck_1_1-9		
Frequency (MHz)	2412 MHz	2437 MHz	2462 MHz
IEEE 802.11n (20MHz)	43	43	43
Frequency (MHz)	2422 MHz	2437 MHz	2452 MHz
IEEE 802.11n (40MHz)	35	36	36

3.4 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED



3.5 DESCRIPTION OF SUPPORT UNITS

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

Item	Equipment	Mfr/Brand	Model/Type No.	FCC ID	Series No.
E-1	Wireless N301 Easy Setup Router	Tenda	N301	V7TN301	N/A
E-2	Notebook	Dell	INSPIRON 1420	DOC	JX193A01SDC2

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

Note:

- (1) The support equipment was authorized by Declaration of Confirmation.
- (2) For detachable type I/O cable should be specified the length in m in 『Length』 column.

4. EMC EMISSION TEST

4.1 CONDUCTED EMISSION MEASUREMENT

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

FREQUENCY (MHz)	Class A (dBuV)		Class B (dBuV)		Standard
	Quasi-peak	Average	Quasi-peak	Average	
0.15 -0.5	79.00	66.00	66 - 56 *	56 - 46 *	CISPR
0.50 -5.0	73.00	60.00	56.00	46.00	CISPR
5.0 -30.0	73.00	60.00	60.00	50.00	CISPR

0.15 -0.5	79.00	66.00	66 - 56 *	56 - 46 *	FCC
0.50 -5.0	73.00	60.00	56.00	46.00	FCC
5.0 -30.0	73.00	60.00	60.00	50.00	FCC

Note:

(1) The tighter limit applies at the band edges.

(2) The limit of " * " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.

4.1.2 MEASUREMENT INSTRUMENTS LIST AND SETTING

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last Calibration	Next Calibration
1	LISN	EMCO	3816/2	0052765	Mar. 26, 2016	Mar. 27, 2017
2	LISN	R&S	ENV216	101447	Mar. 26, 2016	Mar. 27, 2017
3	Test Cable	emci	RG223(9KHz-30MHz)	C_17	Mar. 09, 2016	Mar. 10, 2017
4	EMI Test Receiver	R&S	ESCI	100382	Mar. 26, 2016	Mar. 27, 2017
5	50Ω Terminator	SHX	TF2-3G-A	08122901	Mar. 26, 2016	Mar. 27, 2017
6	Measurement Software	Farad	EZ-EMC Ver.NB-03A 1-01	N/A	N/A	N/A

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

All calibration period of equipment list is one year.

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

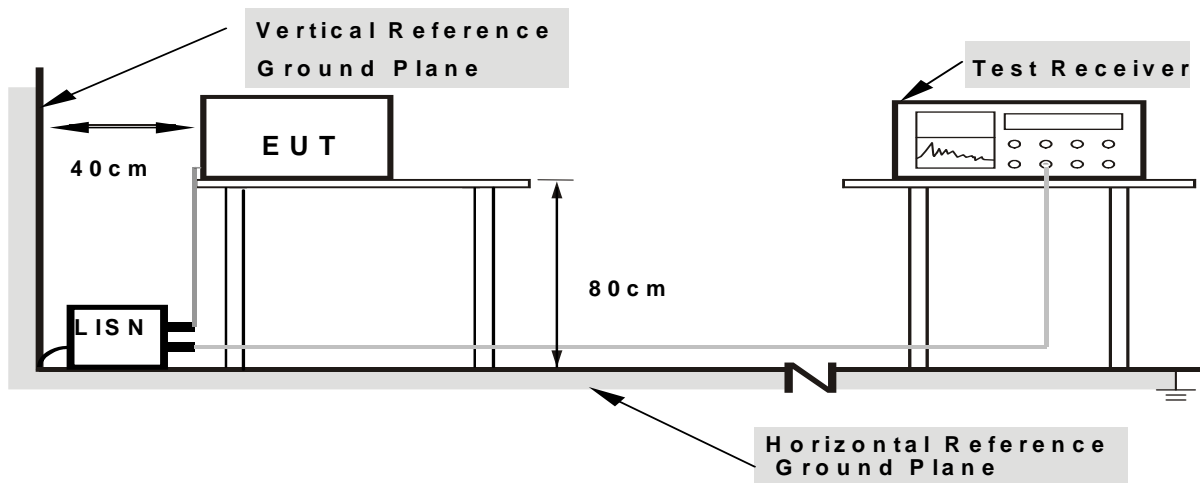
4.1.3 TEST PROCEDURE

- 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.

4.1.4 DEVIATION FROM TEST STANDARD

No deviation

4.1.5 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**

4.1.6 EUT OPERATING CONDITIONS

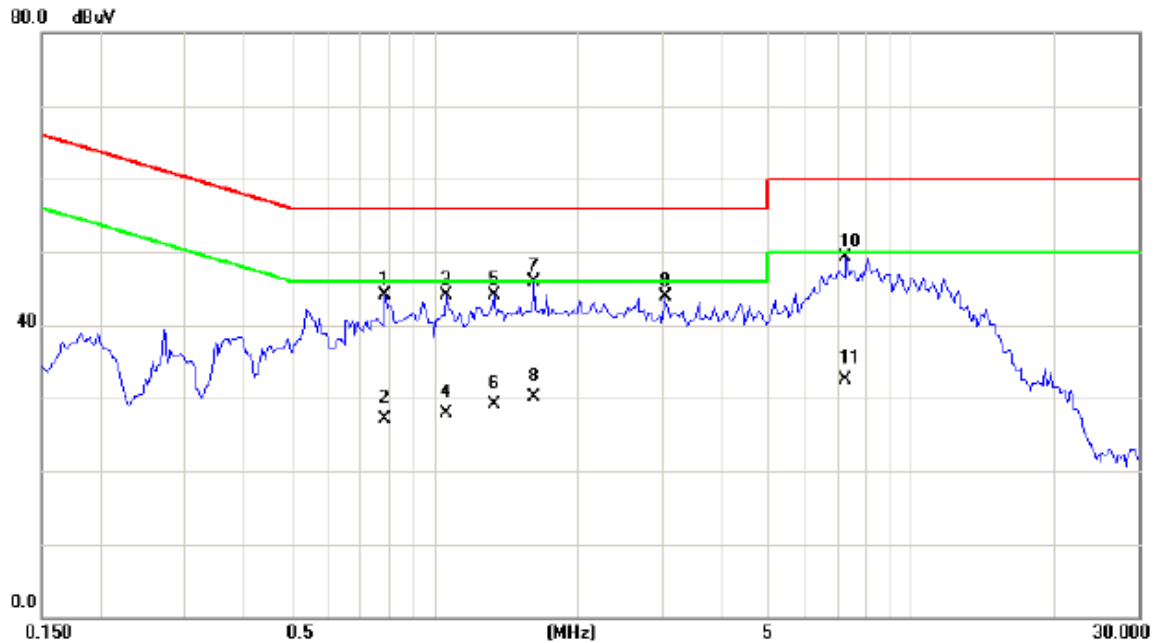
The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.
The EUT was programmed to be in continuously transmitting mode.

4.1.7 TEST RESULTS

Remark

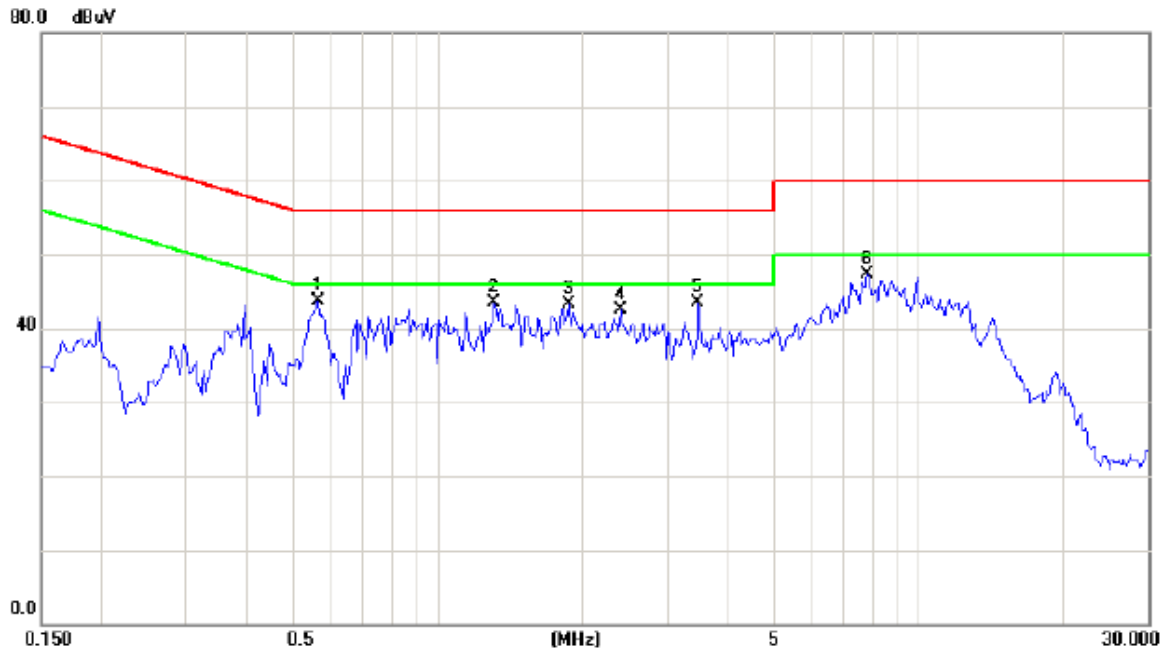
- (1) All readings are QP Mode value unless otherwise stated AVG in column of『Note』. If the QP Mode Measured value compliance with the QP Limits and lower than AVG Limits, the EUT shall be deemed to meet both QP & AVG Limits and then only QP Mode was measured, but AVG Mode didn't perform. In this case, a “ * ” marked in AVG Mode column of Interference Voltage Measured.
- (2) Measuring frequency range from 150KHz to 30MHz.

EUT:	Wireless N301 Easy Setup Router	Model Name:	N301
Temperature:	24 °C	Relative Humidity:	55 %
Test Power:	AC 120V/60Hz	Phase:	Line
Test Mode :	TX Mode_ Adapter: TEA09U-09060		



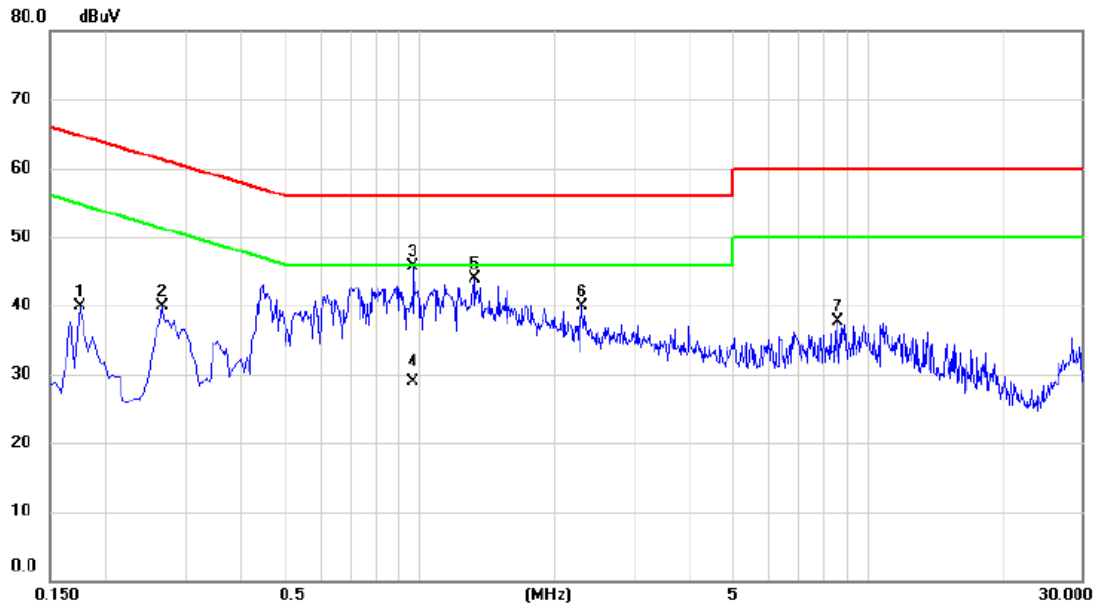
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1		0.7906	34.42	9.70	44.12	56.00	-11.88	peak	
2		0.7906	17.40	9.70	27.10	46.00	-18.90	AVG	
3		1.0562	34.36	9.72	44.08	56.00	-11.92	peak	
4		1.0562	18.20	9.72	27.92	46.00	-18.08	AVG	
5		1.3336	34.42	9.73	44.15	56.00	-11.85	peak	
6		1.3336	19.30	9.73	29.03	46.00	-16.97	AVG	
7	*	1.6266	36.08	9.75	45.83	56.00	-10.17	peak	
8		1.6266	20.30	9.75	30.05	46.00	-15.95	AVG	
9		3.0470	34.04	9.80	43.84	56.00	-12.16	peak	
10		7.3242	39.22	10.01	49.23	60.00	-10.77	peak	
11		7.3242	22.40	10.01	32.41	50.00	-17.59	AVG	

EUT:	Wireless N301 Easy Setup Router	Model Name:	N301
Temperature:	24 °C	Relative Humidity:	55 %
Test Power:	AC 120V/60Hz	Phase:	Neutral
Test Mode :	TX Mode _Adapter: TEA09U-09060		



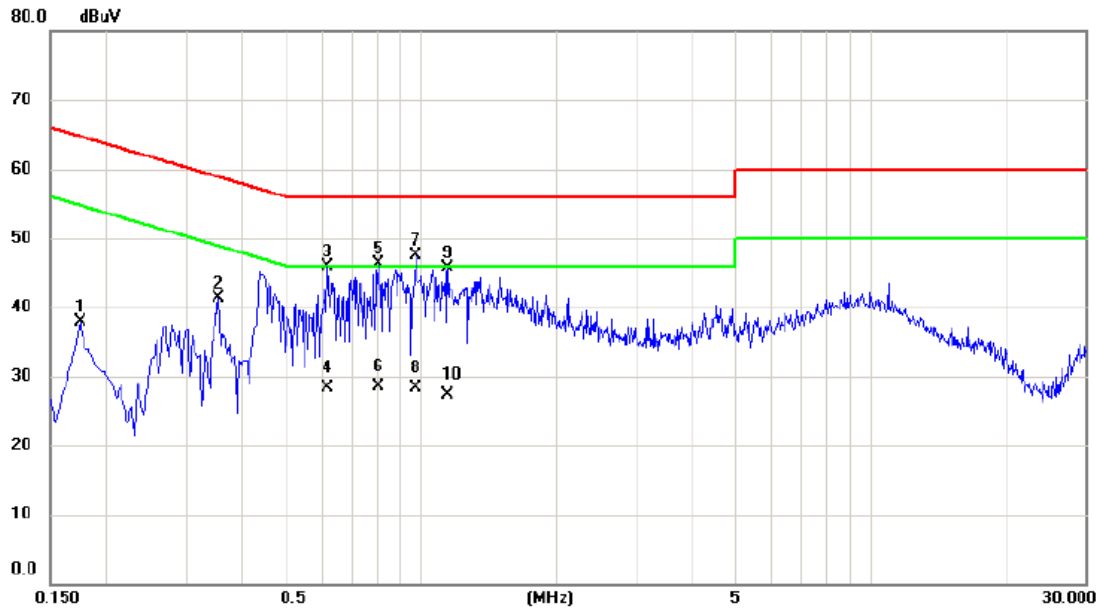
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1	*	0.5641	34.04	9.68	43.72	56.00	-12.28	peak	
2		1.3141	33.84	9.75	43.59	56.00	-12.41	peak	
3		1.8766	33.44	9.78	43.22	56.00	-12.78	peak	
4		2.4078	32.76	9.80	42.56	56.00	-13.44	peak	
5		3.4805	33.62	9.87	43.49	56.00	-12.51	peak	
6		7.8242	37.22	10.13	47.35	60.00	-12.65	peak	

EUT:	Wireless N301 Easy Setup Router	Model Name:	N301
Temperature:	24 °C	Relative Humidity:	55 %
Test Power:	AC 120V/60Hz	Phase:	Line
Test Mode :	TX Mode_ Adapter: BN049-A05009U		



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1		0.1740	30.43	9.52	39.95	64.77	-24.82	peak	
2		0.2660	30.36	9.53	39.89	61.24	-21.35	peak	
3	*	0.9660	35.97	9.76	45.73	56.00	-10.27	peak	
4		0.9660	19.10	9.76	28.86	46.00	-17.14	AVG	
5		1.3220	34.14	9.81	43.95	56.00	-12.05	peak	
6		2.3060	29.80	10.01	39.81	56.00	-16.19	peak	
7		8.5780	27.54	10.19	37.73	60.00	-22.27	peak	

EUT:	Wireless N301 Easy Setup Router	Model Name:	N301
Temperature:	24 °C	Relative Humidity:	55 %
Test Power:	AC 120V/60Hz	Phase:	Neutral
Test Mode :	TX Mode _Adapter: BN049-A05009U		



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Margin dB	Detector	Comment
1		0.1740	28.50	9.43	37.93	64.77	-26.84	peak	
2		0.3540	31.72	9.53	41.25	58.87	-17.62	peak	
3		0.6180	36.40	9.44	45.84	56.00	-10.16	peak	
4		0.6180	18.80	9.44	28.24	46.00	-17.76	AVG	
5		0.8020	36.73	9.55	46.28	56.00	-9.72	peak	
6		0.8020	19.00	9.55	28.55	46.00	-17.45	AVG	
7	*	0.9700	37.75	9.66	47.41	56.00	-8.59	peak	
8		0.9700	18.70	9.66	28.36	46.00	-17.64	AVG	
9		1.1420	35.97	9.66	45.63	56.00	-10.37	peak	
10		1.1420	17.70	9.66	27.36	46.00	-18.64	AVG	

4.2 RADIATED EMISSION MEASUREMENT

4.2.1 RADIATED EMISSION LIMITS (Frequency Range 9KHz-1000MHz)

20dBc 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.

Frequencies (MHz)	Field Strength (micorvolts/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 3m)	
	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).

4.2.2 MEASUREMENT INSTRUMENTS LIST AND SETTING

Radiated Emission Measurement					
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Antenna	Schwarzbeck	VULB9160	9160-3232	Mar. 27, 2017
2	Amplifier	HP	8447D	2944A09673	Nov. 09, 2016
3	Receiver	AGILENT	N9038A	MY5213003 9	Oct. 11, 2016
4	Test Cable	emci	LMR-400(30MHz-1GHz)	C-01	Jun. 28, 2016
5	Control	CT	SC100	N/A	N/A
6	Position Control	MF	MF-7802	MF78020841 6	N/A
7	Antenna	ETS	3115	00075789	Mar. 27, 2017
8	Amplifier	Agilent	8449B	3008A02274	Nov. 01, 2016
9	Receiver	AGILENT	N9038A	MY5213003 9	Oct. 11, 2016
10	Test Cable	emci	EMC104-SM-S M-10000(1GHz - 26.5GHz)	C-68	Jun. 27, 2017
11	Controller	CT	SC100	N/A	N/A
12	Broad-Band Horn Antenna	Schwarzbeck	BBHA 9170	9170319	Apr. 23, 2017
13	Microwave Preamplifier With Adaptor	EMC INSTRUMENT	EMC2654045	980039 & HA01	Mar. 27, 2017
14	Active Loop Antenna	R&S	HFH2-Z2	830749/020	Sep. 07, 2016
15	Measurement Software	Farad	EZ-EMC Ver.NB-03A1-01	N/A	N/A

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

All calibration period of equipment list is one year.

Spectrum Parameter	Setting
Attenuation	Auto
Start Frequency	1000 MHz
Stop Frequency	10th carrier harmonic
RB / VB (Emission in restricted band)	1MHz / 1MHz for Peak, 1 MHz / 10Hz for Average

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

4.2.3 TEST PROCEDURE

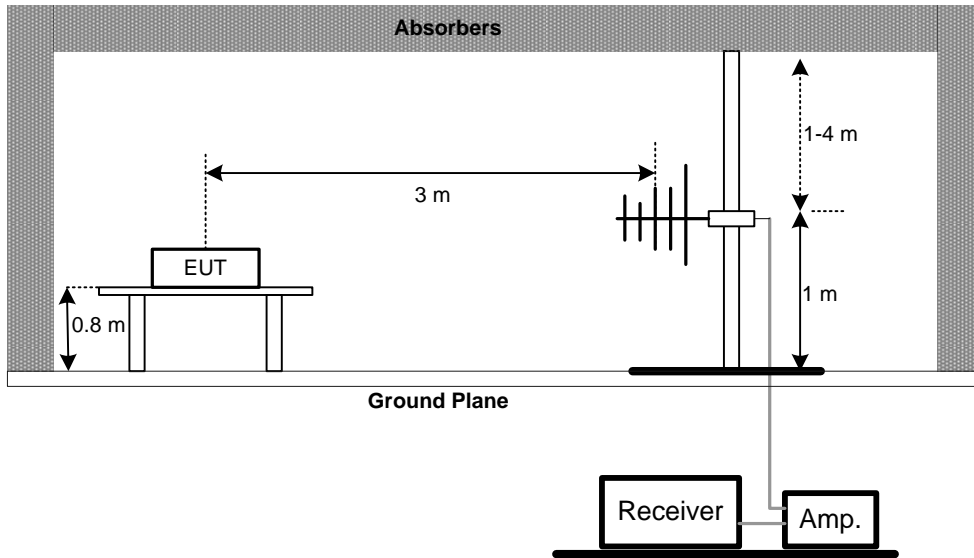
- a. The measuring distance of at 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 0.8 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(below 1GHz)
- b. The measuring distance of at 3 m shall be used for measurements. The EUT was placed on the top of a rotating table 1.5 meter above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.(above 1GHz)
- c. The height of the equipment or of the substitution antenna shall be 0.8m or 1.5m; the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights find the maximum reading (used Bore sight function).
- e. The receiver system was set to peak and average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1GHz.
- f. The initial step in collecting conducted emission data is a receiver peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- g. All readings are Peak unless otherwise stated QP in column of Note. Peak denotes that the Peak reading compliance with the QP Limits and then QP Mode measurement didn't perform. (below 1GHz)
- h. All readings are Peak Mode value unless otherwise stated AVG in column of Note. If the Peak Mode Measured value compliance with the Peak Limits and lower than AVG Limits, the EUT shall be deemed to meet both Peak & AVG Limits and then only Peak Mode was measured, but AVG Mode didn't perform. (above 1GHz)
- i. For the actual test configuration, please refer to the related Item –EUT Test Photos.

4.2.4 DEVIATION FROM TEST STANDARD

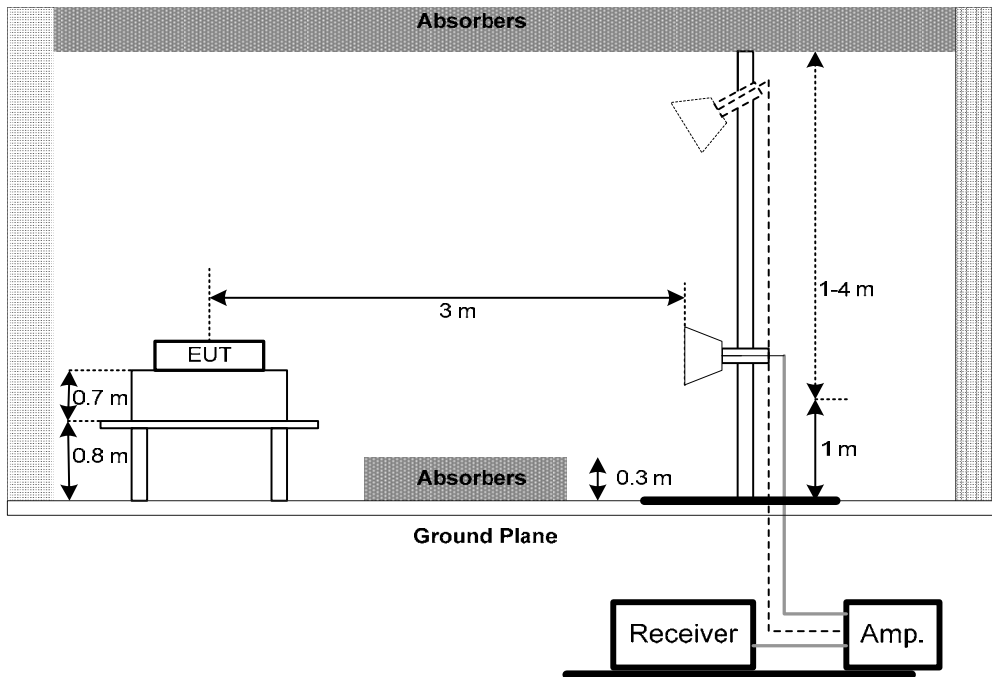
No deviation

4.2.5 TEST SETUP

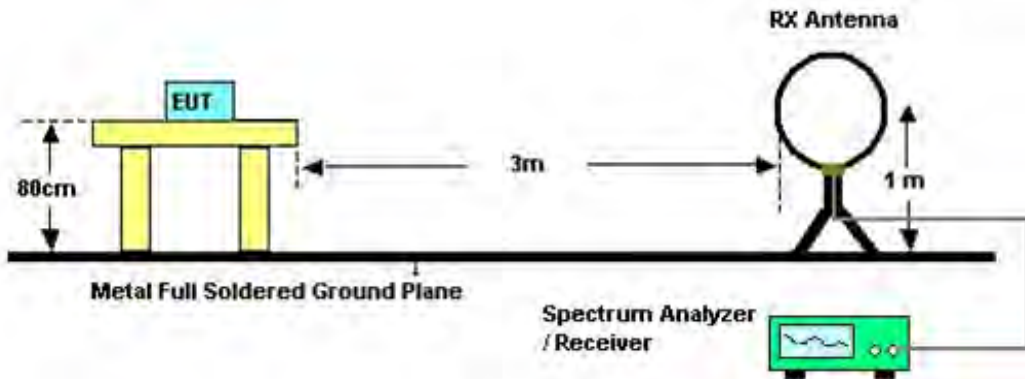
(A) Radiated Emission Test Set-Up Frequency Below 1 GHz



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



(C) For radiated emissions below 30MHz



4.2.6 EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of 4.1.6 Unless otherwise a special operating condition is specified in the follows during the testing.

4.2.7 TEST RESULTS (BELOW 30MHZ)

EUT :	Wireless N301 Easy Setup Router	Model Name:	N301
Temperature :	24 °C	Relative Humidity:	54 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60 z
Test Mode :	TX MODE_ Adapter: TEA09U-09060		

Freq. (MHz)	Ant. 0°/90°	Reading(RA) (dBuV)	Corr.Factor(CF) (dB)	Measured(FS) (dBuV/m)	Limits(QP) (dBuV/m)	Margin (dB)	Note
0.0096	0°	25.74	24.30	50.04	127.96	-77.92	AVG
0.0096	0°	28.06	24.30	52.36	147.96	-95.60	PK
0.0350	0°	22.31	23.35	45.66	116.72	-71.06	AVG
0.0350	0°	24.15	23.35	47.50	136.72	-89.22	PK
0.0427	0°	20.04	22.86	42.90	115.00	-72.09	AVG
0.0427	0°	22.71	22.86	45.57	135.00	-89.42	PK
0.0598	0°	18.06	22.20	40.26	112.07	-71.81	AVG
0.0598	0°	21.39	22.20	43.59	132.07	-88.48	PK
0.2814	0°	21.89	20.33	42.22	98.62	-56.40	AVG
0.2814	0°	23.02	20.33	43.35	118.62	-75.27	PK
1.6520	0°	28.17	19.54	47.71	63.24	-15.54	QP

Freq. (MHz)	Ant. 0°/90°	Reading(RA) (dBuV)	Corr.Factor(CF) (dB)	Measured(FS) (dBuV/m)	Limits(QP) (dBuV/m)	Margin (dB)	Note
0.0098	90°	19.58	24.30	43.88	127.78	-83.90	AVG
0.0098	90°	22.13	24.30	46.43	147.78	-101.35	PK
0.0205	90°	16.79	24.27	41.06	121.37	-80.31	AVG
0.0205	90°	19.45	24.27	43.72	141.37	-97.65	PK
0.0469	90°	20.14	22.60	42.74	114.18	-71.45	AVG
0.0469	90°	23.01	22.60	45.61	134.18	-88.58	PK
0.0741	90°	21.44	21.92	43.36	110.21	-66.85	AVG
0.0741	90°	24.66	21.92	46.58	130.21	-83.63	PK
0.3680	90°	21.07	20.12	41.19	96.29	-55.10	AVG
0.3680	90°	24.96	20.12	45.08	116.29	-71.21	PK
1.6530	90°	25.74	19.54	45.28	63.24	-17.96	QP

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.

EUT :	Wireless N301 Easy Setup Router	Model Name:	N301
Temperature :	24 °C	Relative Humidity:	54 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX MODE_ Adapter: BN049-A05009U		

Freq. (MHz)	Ant. 0°/90°	Reading(RA) (dBuV)	Corr.Factor(CF) (dB)	Measured(FS) (dBuV/m)	Limits(QP) (dBuV/m)	Margin (dB)	Note
0.0097	0°	13.41	24.95	38.36	127.87	-89.51	AVG
0.0097	0°	14.28	24.95	39.23	147.87	-108.64	PEAK
0.0279	0°	6.73	23.80	30.53	118.69	-88.16	AVG
0.0279	0°	8.12	23.80	31.92	138.69	-106.77	PEAK
0.0372	0°	3.17	23.21	26.38	116.19	-89.81	AVG
0.0372	0°	5.58	23.21	28.79	136.19	-107.40	PEAK
0.0571	0°	1.16	22.26	23.42	112.47	-89.05	AVG
0.0571	0°	2.53	22.26	24.79	132.47	-107.68	PEAK
0.5035	0°	19.36	19.81	39.17	73.56	-34.39	QP
1.9567	0°	23.71	19.50	43.21	69.54	-26.33	QP

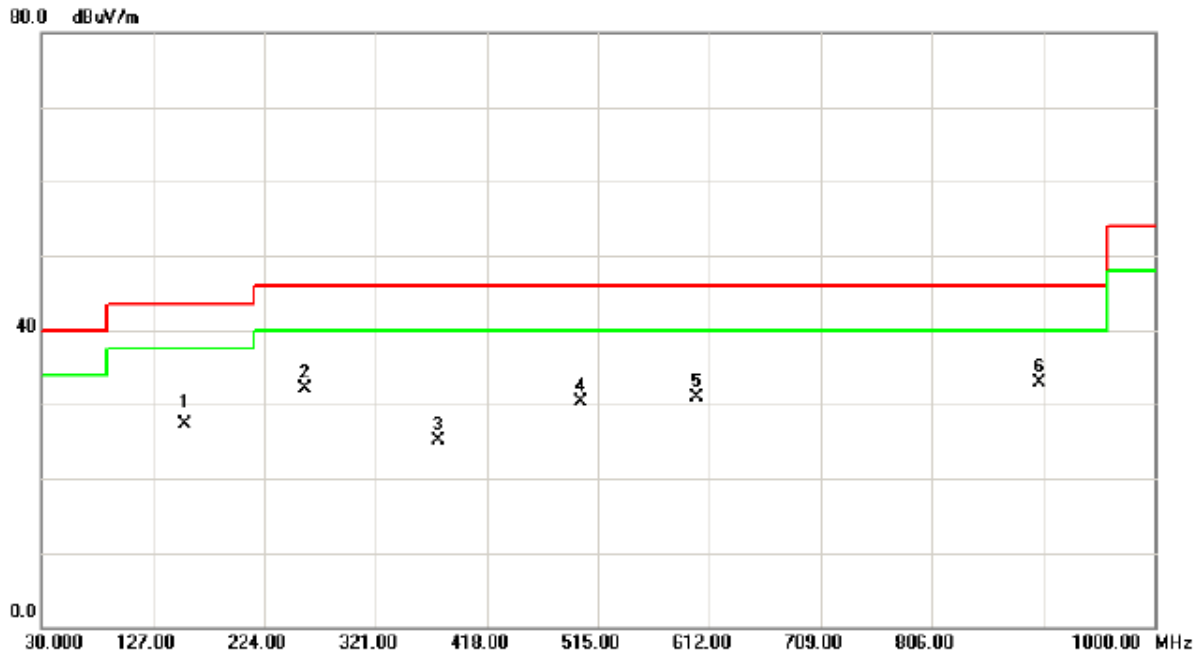
Freq. (MHz)	Ant. 0°/90°	Reading(RA) (dBuV)	Corr.Factor(CF) (dB)	Measured(FS) (dBuV/m)	Limits(QP) (dBuV/m)	Margin (dB)	Note
0.0124	90°	13.16	24.30	37.46	125.74	-88.28	AVG
0.0124	90°	14.89	24.30	39.19	145.74	-106.55	PEAK
0.0277	90°	7.28	23.81	31.09	118.75	-87.66	AVG
0.0277	90°	8.94	23.81	32.75	138.75	-106.00	PEAK
0.0431	90°	5.23	22.84	28.07	114.91	-86.85	AVG
0.0431	90°	6.19	22.84	29.03	134.91	-105.89	PEAK
0.0542	90°	1.54	22.32	23.86	112.92	-89.07	AVG
0.0542	90°	2.86	22.32	25.18	132.92	-107.75	PEAK
0.6234	90°	22.17	20.19	42.36	71.71	-29.34	QP
2.0524	90°	24.56	19.47	44.03	69.54	-25.51	QP

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.。

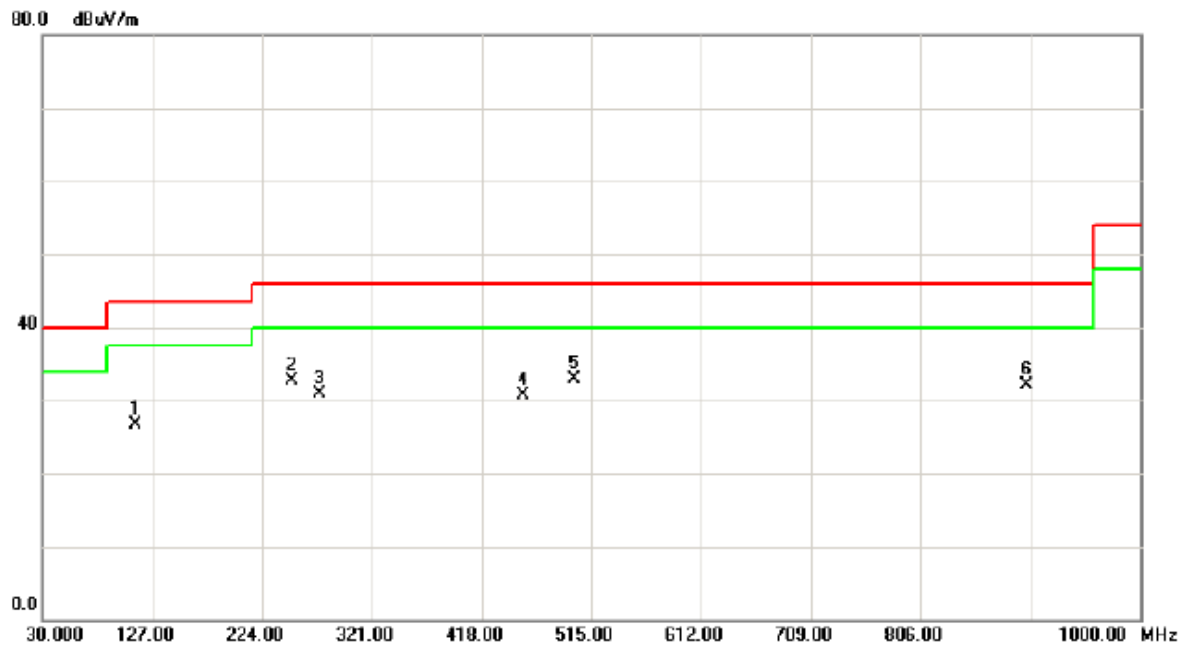
4.2.8 TEST RESULTS (BETWEEN 30 – 1000 MHZ)

EUT:	Wireless N301 Easy Setup Router	Model Name:	N301
Temperature:	24 °C	Relative Humidity:	54 %
Test Voltage:	AC 120V/60Hz	Polarization:	Vertical
Test Mode:	TX B MODE CHANNEL 01_ Adapter: TEA09U-09060		



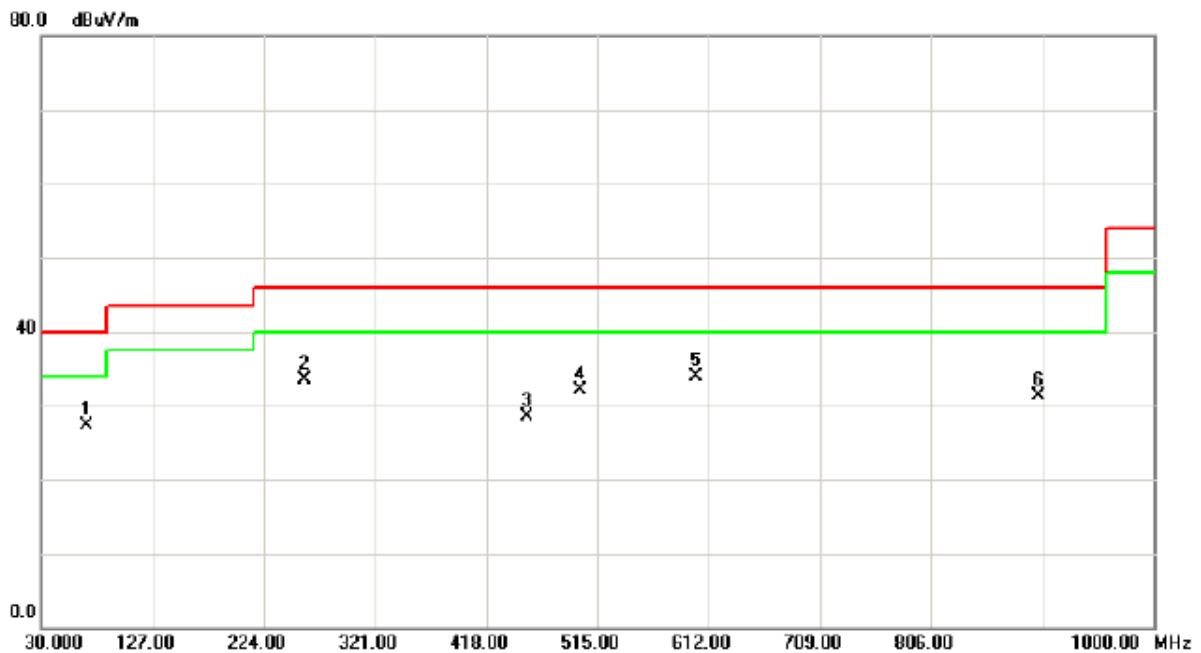
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		155.1300	45.29	-17.90	27.39	43.50	-16.11	AVG	
2		258.9200	46.56	-14.45	32.11	46.00	-13.89	peak	
3		375.3200	35.73	-10.66	25.07	46.00	-20.93	peak	
4		500.4500	38.59	-8.37	30.22	46.00	-15.78	peak	
5		600.3600	36.48	-5.49	30.99	46.00	-15.01	peak	
6	*	900.0900	34.81	-1.91	32.90	46.00	-13.10	peak	

EUT:	Wireless N301 Easy Setup Router	Model Name:	N301
Temperature:	24 °C	Relative Humidity:	54 %
Test Voltage:	AC 120V/60Hz	Polarization:	Horizontal
Test Mode:	TX B MODE CHANNEL 01_ Adapter: TEA09U-09060		



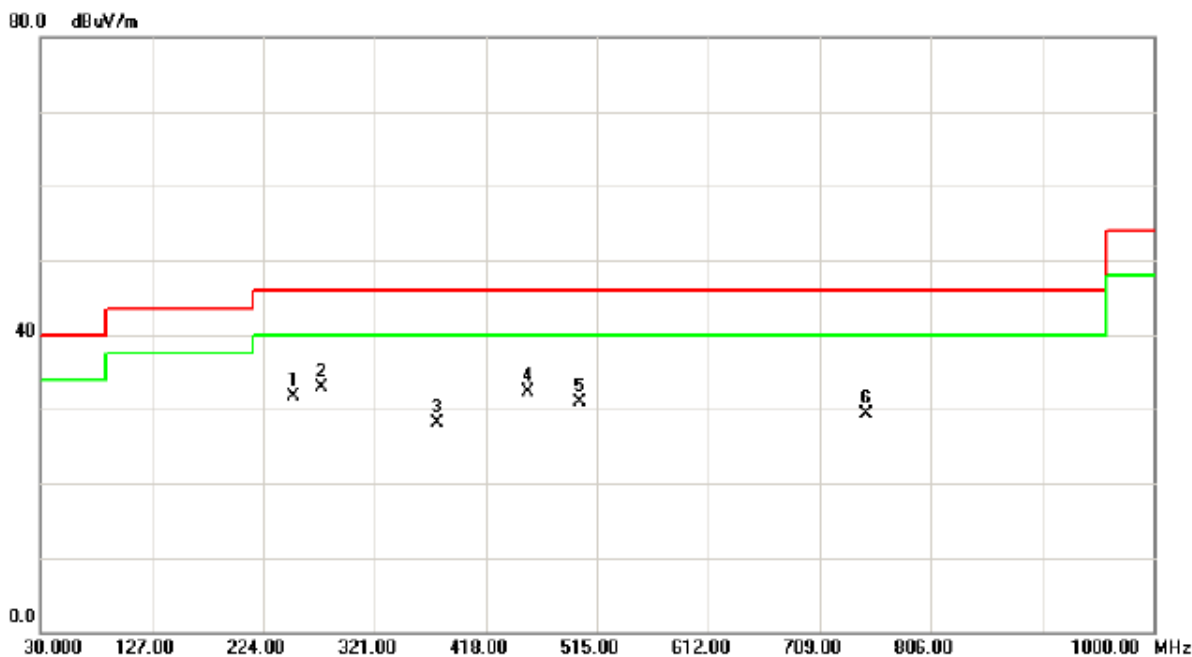
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		111.4800	45.19	-18.58	26.61	43.50	-16.89	peak	
2		250.1900	47.69	-15.02	32.67	46.00	-13.33	peak	
3		274.4400	44.34	-13.52	30.82	46.00	-15.18	peak	
4		454.8600	39.62	-8.93	30.69	46.00	-15.31	peak	
5	*	499.4800	41.26	-8.40	32.86	46.00	-13.14	peak	
6		900.0900	34.08	-1.91	32.17	46.00	-13.83	peak	

EUT:	Wireless N301 Easy Setup Router	Model Name:	N301
Temperature:	24 °C	Relative Humidity:	54 %
Test Voltage:	AC 120V/60Hz	Polarization:	Vertical
Test Mode:	TX B MODE CHANNEL 06_ Adapter: TEA09U-09060		



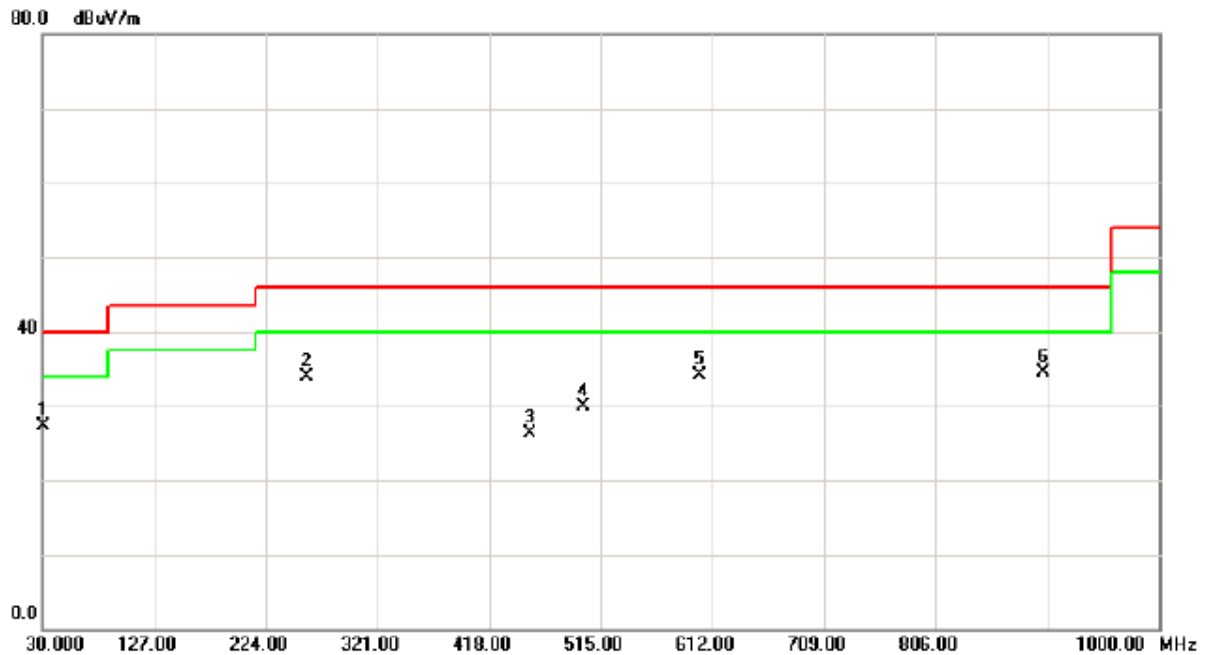
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		68.8000	45.58	-18.32	27.26	40.00	-12.74	peak	
2		258.9200	47.96	-14.45	33.51	46.00	-12.49	peak	
3		452.9200	37.45	-8.95	28.50	46.00	-17.50	peak	
4		500.4500	40.49	-8.37	32.12	46.00	-13.88	peak	
5	*	600.3600	39.38	-5.49	33.89	46.00	-12.11	peak	
6		900.0900	33.21	-1.91	31.30	46.00	-14.70	peak	

EUT:	Wireless N301 Easy Setup Router	Model Name:	N301
Temperature:	24 °C	Relative Humidity:	54 %
Test Voltage:	AC 120V/60Hz	Polarization:	Horizontal
Test Mode:	TX B MODE CHANNEL 06_ Adapter: TEA09U-09060		



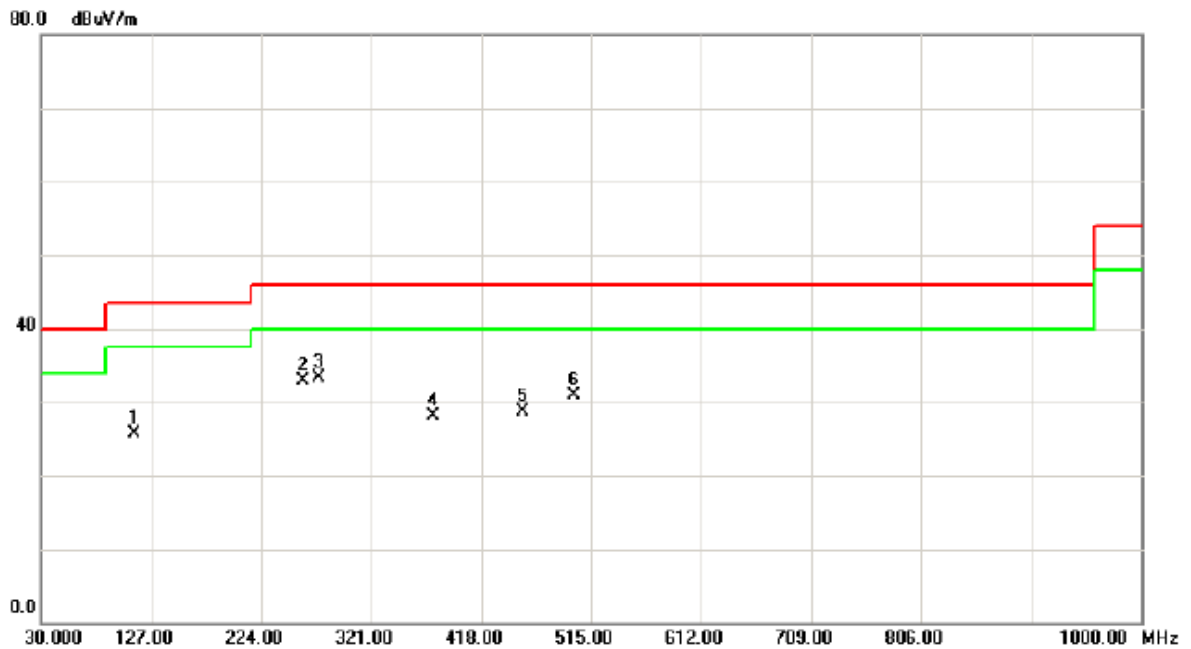
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		250.1900	46.74	-15.02	31.72	46.00	-14.28	peak	
2	*	274.4400	46.39	-13.52	32.87	46.00	-13.13	peak	
3		375.3200	38.79	-10.66	28.13	46.00	-17.87	peak	
4		454.8600	41.17	-8.93	32.24	46.00	-13.76	peak	
5		499.4800	39.31	-8.40	30.91	46.00	-15.09	peak	
6		749.7400	33.56	-4.24	29.32	46.00	-16.68	peak	

EUT:	Wireless N301 Easy Setup Router	Model Name:	N301
Temperature:	24 °C	Relative Humidity:	54 %
Test Voltage:	AC 120V/60Hz	Polarization:	Vertical
Test Mode:	TX B MODE CHANNEL 11_ Adapter: TEA09U-09060		



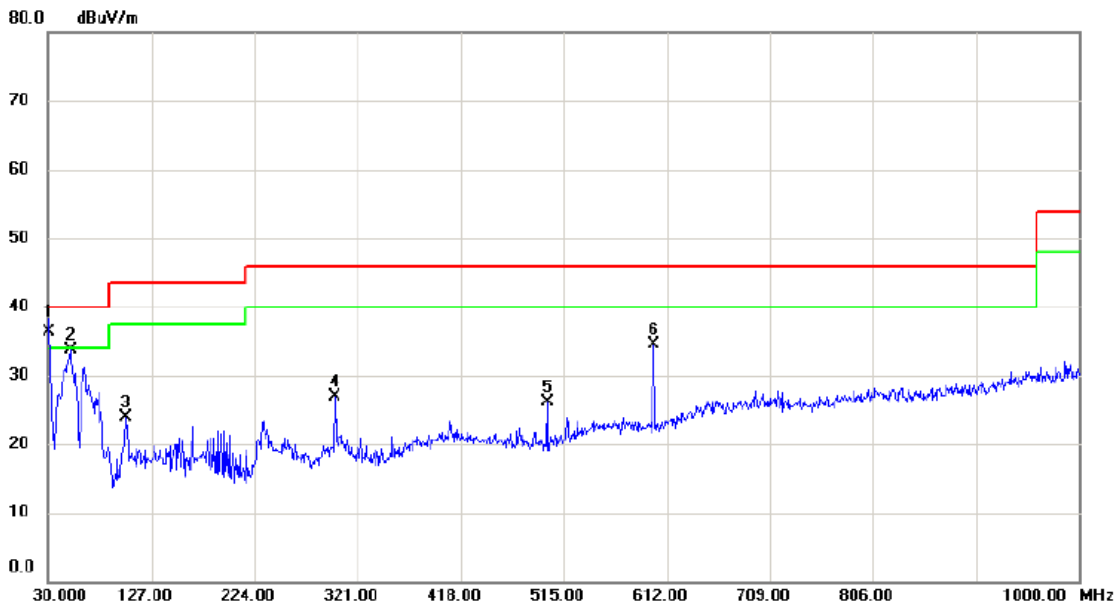
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		30.9700	43.44	-16.23	27.21	40.00	-12.79	peak	
2		258.9200	48.26	-14.45	33.81	46.00	-12.19	peak	
3		452.9200	35.25	-8.95	26.30	46.00	-19.70	peak	
4		500.4500	38.29	-8.37	29.92	46.00	-16.08	peak	
5		600.3600	39.68	-5.49	34.19	46.00	-11.81	peak	
6	*	900.0900	36.51	-1.91	34.60	46.00	-11.40	peak	

EUT:	Wireless N301 Easy Setup Router	Model Name:	N301
Temperature:	24 °C	Relative Humidity:	54 %
Test Voltage:	AC 120V/60Hz	Polarization:	Horizontal
Test Mode:	TX B MODE CHANNEL 11_ Adapter: TEA09U-09060		



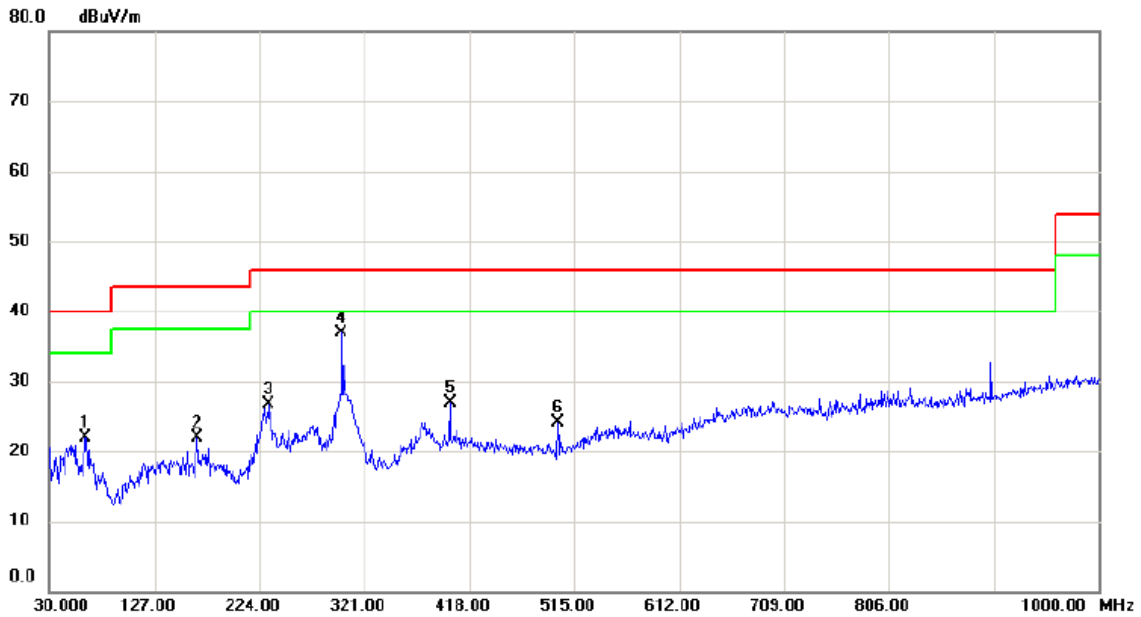
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		111.4800	44.26	-18.58	25.68	43.50	-17.82	peak	
2		260.8600	47.22	-14.34	32.88	46.00	-13.12	peak	
3	*	274.4400	46.91	-13.52	33.39	46.00	-12.61	peak	
4		375.3200	38.81	-10.66	28.15	46.00	-17.85	peak	
5		454.8600	37.69	-8.93	28.76	46.00	-17.24	peak	
6		499.4800	39.33	-8.40	30.93	46.00	-15.07	peak	

EUT:	Wireless N301 Easy Setup Router	Model Name:	N301
Temperature:	24 °C	Relative Humidity:	54 %
Test Voltage:	AC 120V/60Hz	Polarization:	Vertical
Test Mode:	TX B MODE CHANNEL 01_ Adapter: BN049-A05009U		



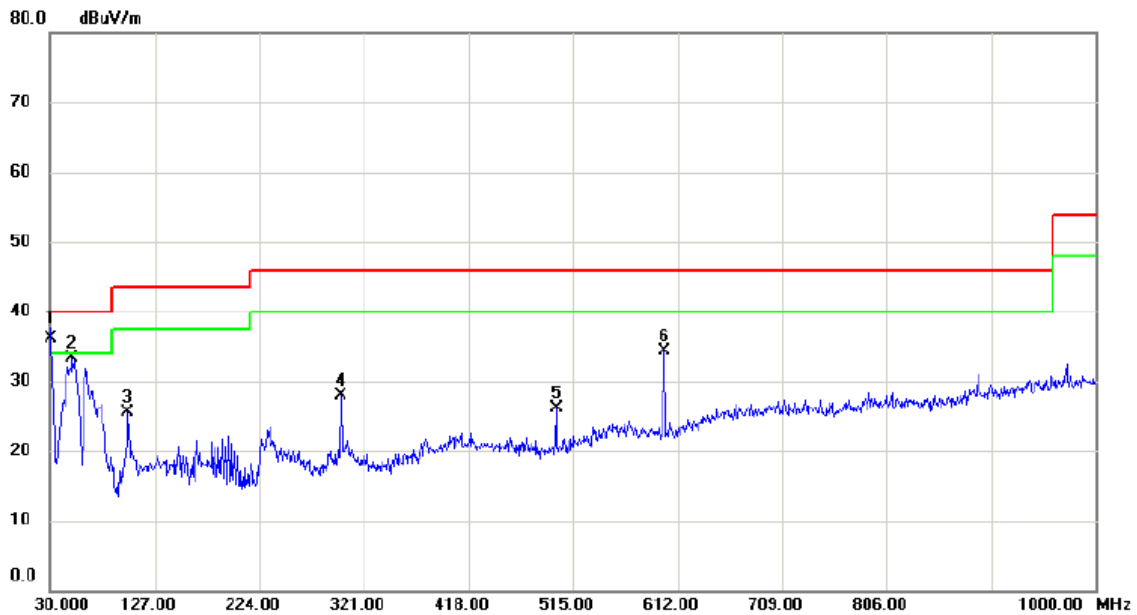
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	30.0000	49.09	-12.80	36.29	40.00	-3.71	QP	
2		50.8550	45.88	-12.23	33.65	40.00	-6.35	peak	
3		102.7500	38.16	-14.35	23.81	43.50	-19.69	peak	
4		300.1450	36.92	-9.94	26.98	46.00	-19.02	peak	
5		499.9650	33.75	-7.65	26.10	46.00	-19.90	peak	
6		599.8750	39.29	-4.83	34.46	46.00	-11.54	peak	

EUT:	Wireless N301 Easy Setup Router	Model Name:	N301
Temperature:	24 °C	Relative Humidity:	54 %
Test Voltage:	AC 120V/60Hz	Polarization:	Horizontal
Test Mode:	TX B MODE CHANNEL 01_ Adapter: BN049-A05009U		



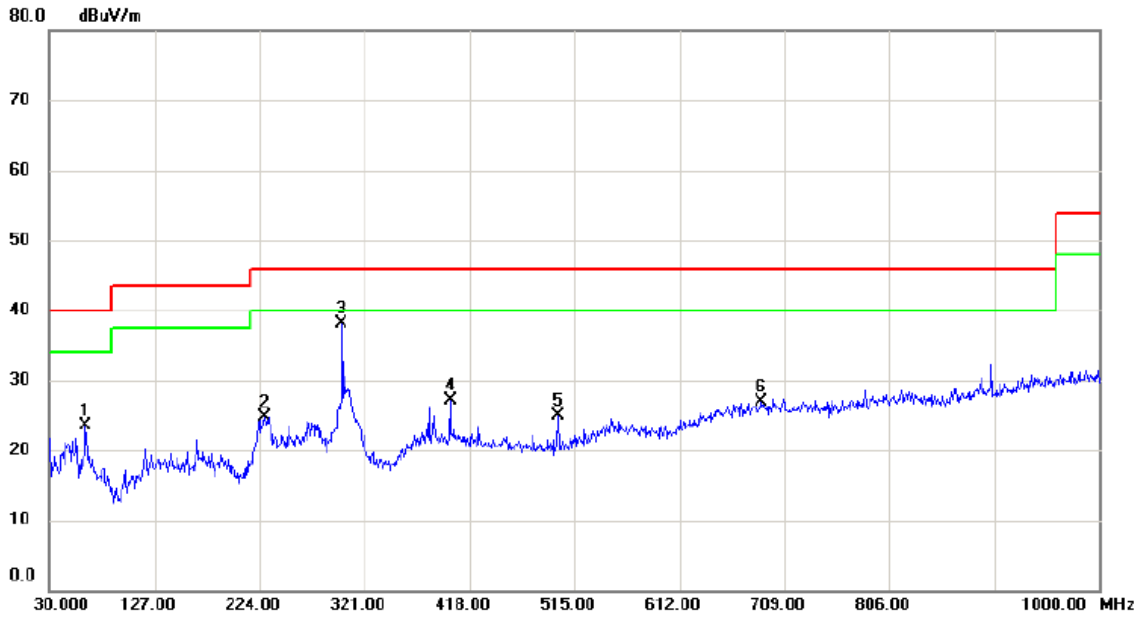
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		63.4650	35.90	-13.90	22.00	40.00	-18.00	peak	
2		166.2850	33.21	-11.40	21.81	43.50	-21.69	peak	
3		232.7300	39.82	-13.05	26.77	46.00	-19.23	peak	
4	*	300.1450	46.81	-9.94	36.87	46.00	-9.13	peak	
5		400.0550	34.18	-7.20	26.98	46.00	-19.02	peak	
6		499.9650	31.73	-7.65	24.08	46.00	-21.92	peak	

EUT:	Wireless N301 Easy Setup Router	Model Name:	N301
Temperature:	24 °C	Relative Humidity:	54 %
Test Voltage:	AC 120V/60Hz	Polarization:	Vertical
Test Mode:	TX B MODE CHANNEL 06_ Adapter: BN049-A05009U		



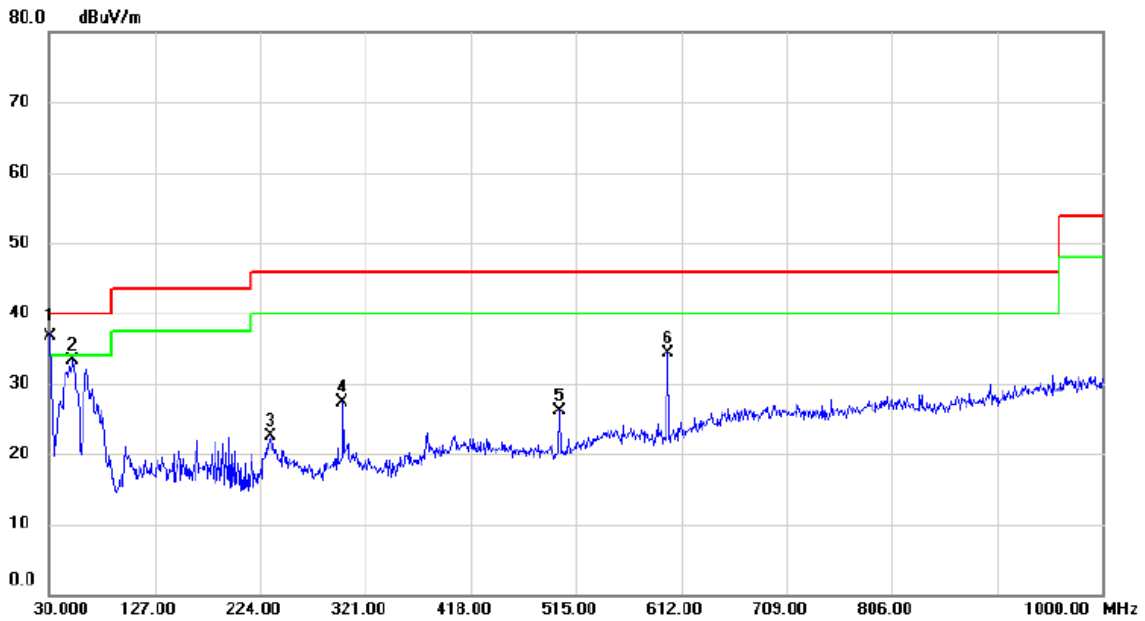
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	30.0000	48.95	-12.80	36.15	40.00	-3.85	QP	
2		50.3700	45.33	-12.12	33.21	40.00	-6.79	peak	
3		102.2650	39.82	-14.38	25.44	43.50	-18.06	peak	
4		300.1450	37.85	-9.94	27.91	46.00	-18.09	peak	
5		499.9650	33.69	-7.65	26.04	46.00	-19.96	peak	
6		599.8750	39.19	-4.83	34.36	46.00	-11.64	peak	

EUT:	Wireless N301 Easy Setup Router	Model Name:	N301
Temperature:	24 °C	Relative Humidity:	54 %
Test Voltage:	AC 120V/60Hz	Polarization:	Horizontal
Test Mode:	TX B MODE CHANNEL 06_ Adapter: BN049-A05009U		



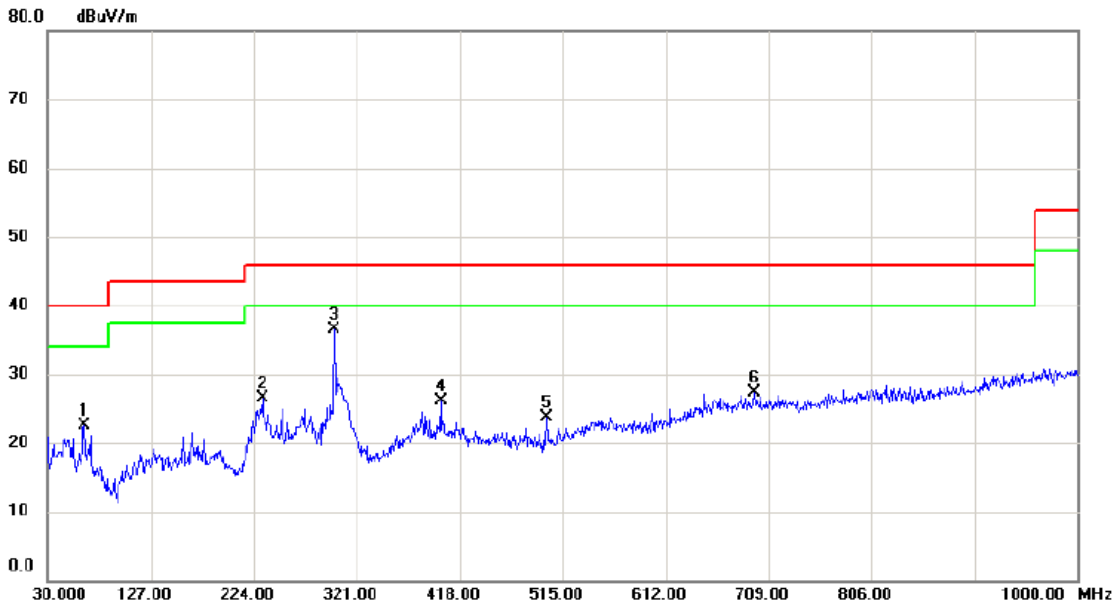
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		62.9800	37.42	-13.96	23.46	40.00	-16.54	peak	
2		228.8500	37.80	-13.05	24.75	46.00	-21.25	peak	
3	*	300.1450	47.99	-9.94	38.05	46.00	-7.95	peak	
4		400.0550	34.23	-7.20	27.03	46.00	-18.97	peak	
5		499.9650	32.53	-7.65	24.88	46.00	-21.12	peak	
6		687.6600	27.80	-0.91	26.89	46.00	-19.11	peak	

EUT:	Wireless N301 Easy Setup Router	Model Name:	N301
Temperature:	24 °C	Relative Humidity:	54 %
Test Voltage:	AC 120V/60Hz	Polarization:	Vertical
Test Mode:	TX B MODE CHANNEL 11_ Adapter: BN049-A05009U		



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	30.0000	49.44	-12.80	36.64	40.00	-3.36	QP	
2		51.3400	45.64	-12.36	33.28	40.00	-6.72	peak	
3		233.2150	35.49	-13.07	22.42	46.00	-23.58	peak	
4		300.1450	37.31	-9.94	27.37	46.00	-18.63	peak	
5		499.9650	33.77	-7.65	26.12	46.00	-19.88	peak	
6		599.8750	39.14	-4.83	34.31	46.00	-11.69	peak	

EUT:	Wireless N301 Easy Setup Router	Model Name:	N301
Temperature:	24 °C	Relative Humidity:	54 %
Test Voltage:	AC 120V/60Hz	Polarization:	Horizontal
Test Mode:	TX B MODE CHANNEL 11_ Adapter: BN049-A05009U		

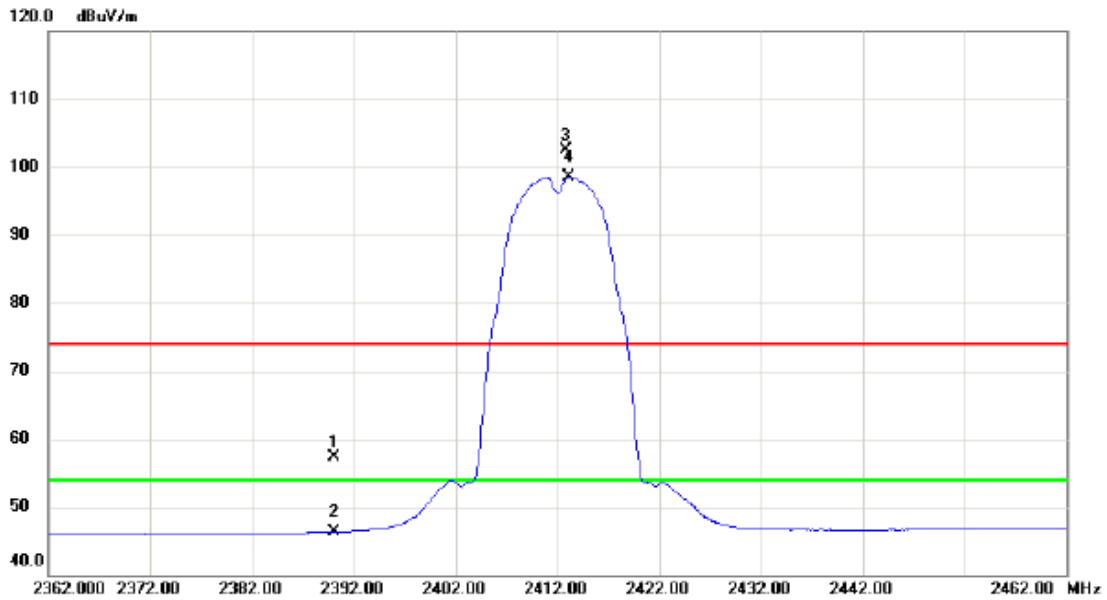


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		63.9500	36.30	-13.85	22.45	40.00	-17.55	peak	
2		232.2450	39.57	-13.02	26.55	46.00	-19.45	peak	
3	*	300.1450	46.49	-9.94	36.55	46.00	-9.45	peak	
4		400.0550	33.32	-7.20	26.12	46.00	-19.88	peak	
5		499.9650	31.44	-7.65	23.79	46.00	-22.21	peak	
6		695.9050	27.96	-0.74	27.22	46.00	-18.78	peak	

4.2.9 TEST RESULTS (ABOVE 1000 MHZ)

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

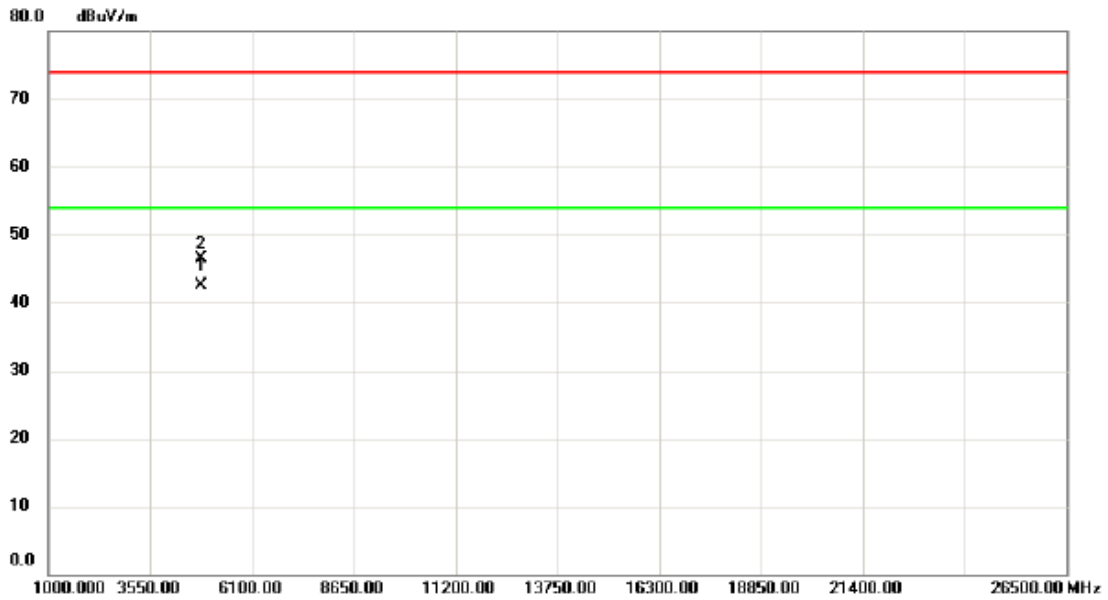
Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		2390.000	23.48	33.87	57.35	74.00	-16.65	peak	
2		2390.000	12.43	33.87	46.30	54.00	-7.70	AVG	
3	X	2412.900	68.57	34.01	102.58	74.00	28.58	peak	No Limit
4	*	2413.200	64.57	34.01	98.58	54.00	44.58	AVG	No Limit

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

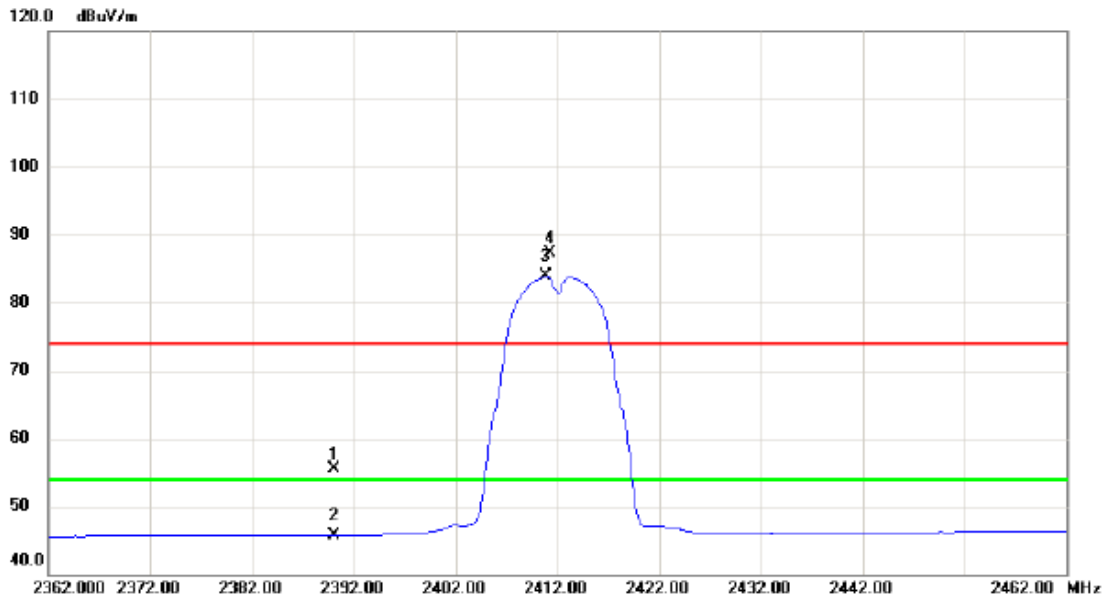
Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	4824.005	37.09	5.46	42.55	54.00	-11.45	AVG	
2		4824.005	40.97	5.46	46.43	74.00	-27.57	peak	

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

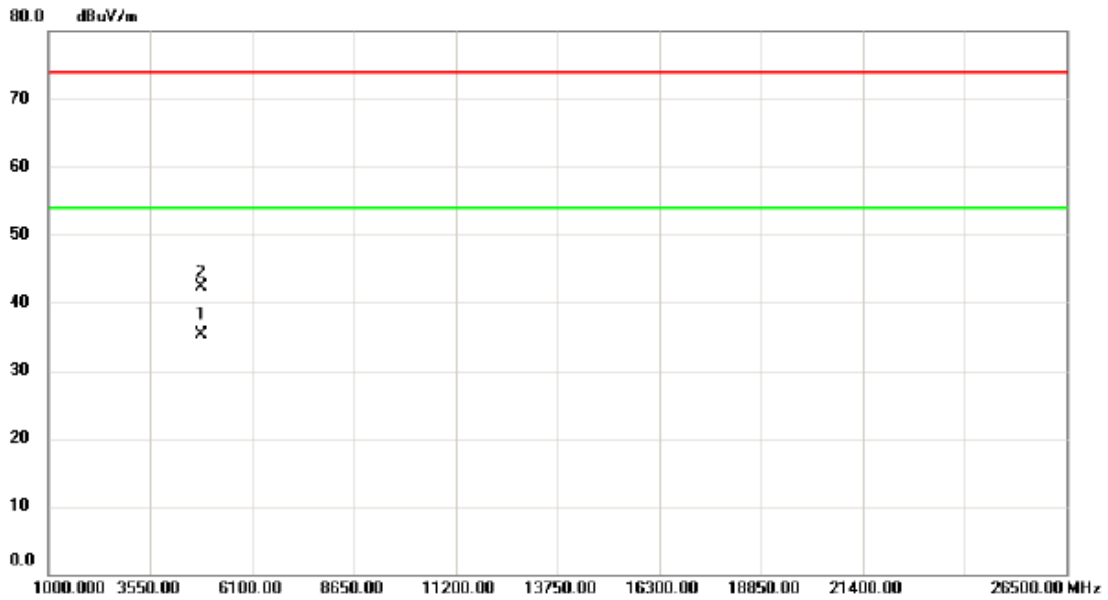
Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		2390.000	21.70	33.87	55.57	74.00	-18.43	peak	
2		2390.000	11.88	33.87	45.75	54.00	-8.25	AVG	
3	*	2410.900	49.88	34.00	83.88	54.00	29.88	AVG	No Limit
4	X	2411.300	53.30	34.00	87.30	74.00	13.30	peak	No Limit

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

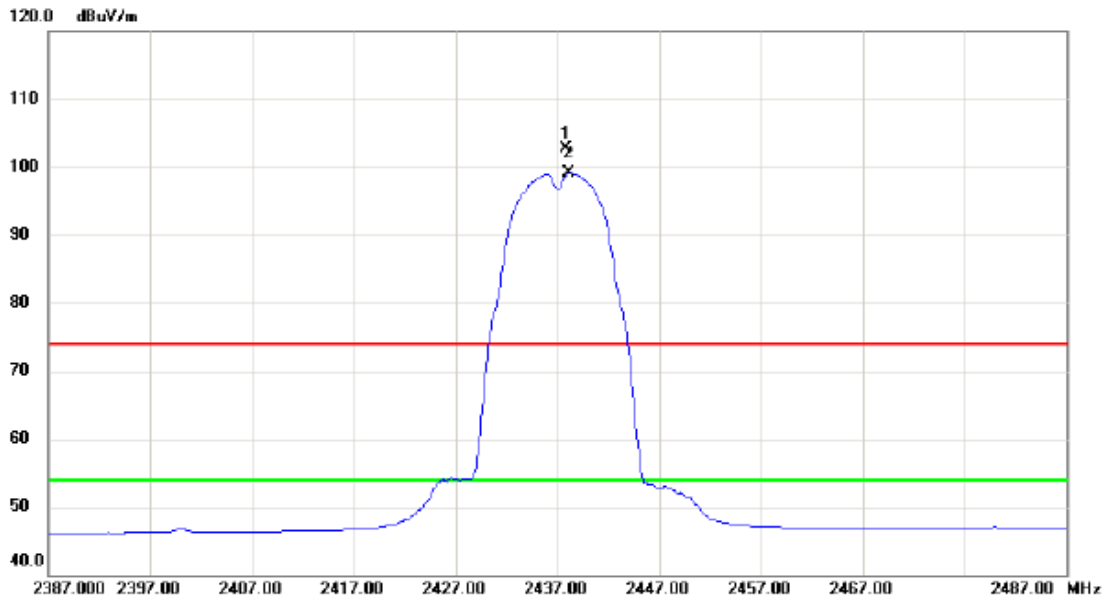
Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	4824.045	29.93	5.46	35.39	54.00	-18.61	AVG	
2		4824.070	36.81	5.46	42.27	74.00	-31.73	peak	

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

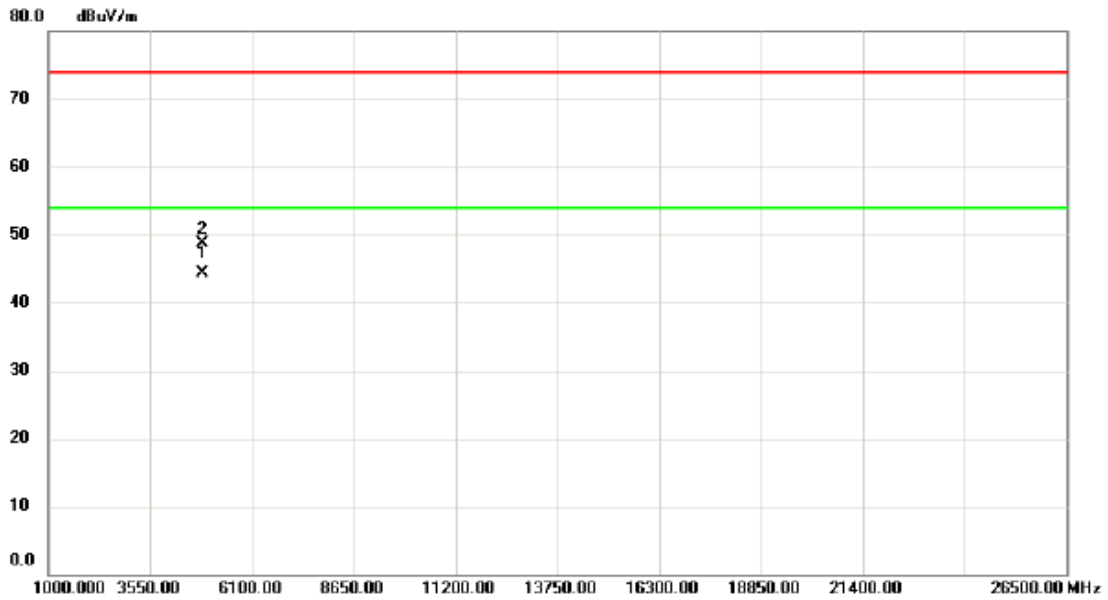
Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	X	2437.900	68.57	34.15	102.72	74.00	28.72	peak	No Limit
2	*	2438.200	65.02	34.16	99.18	54.00	45.18	AVG	No Limit

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

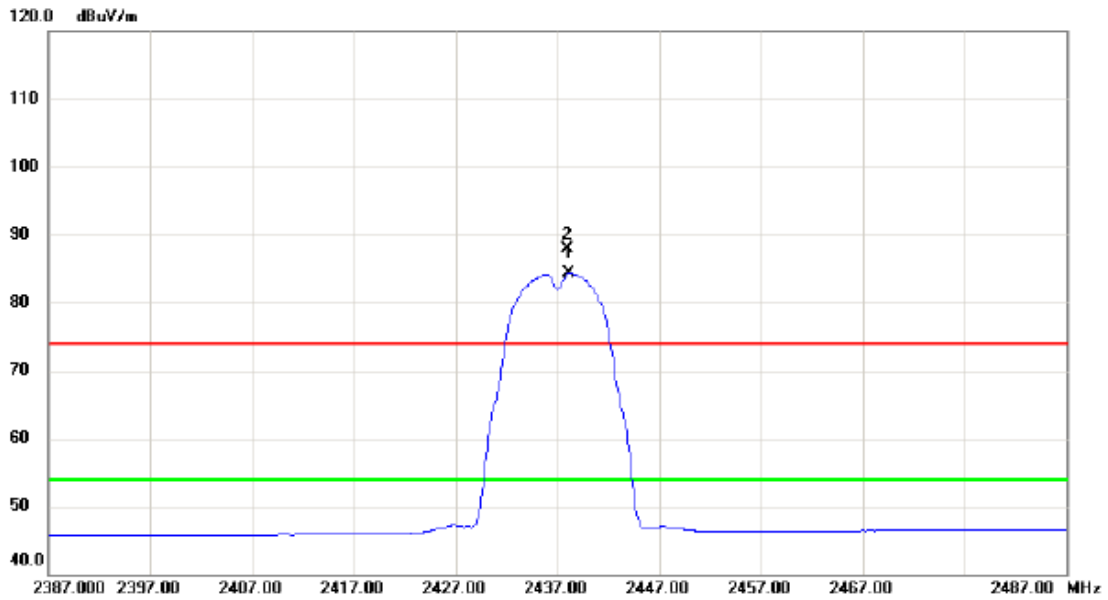
Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	4874.050	38.55	5.71	44.26	54.00	-9.74	AVG	
2		4874.060	43.06	5.71	48.77	74.00	-25.23	peak	

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

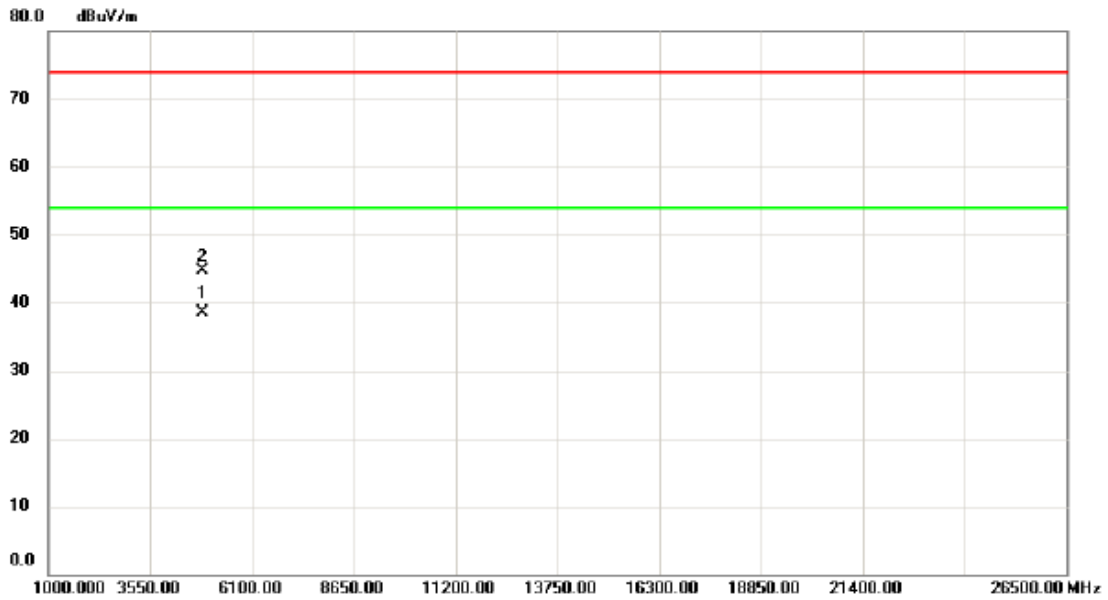
Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	2438.200	50.22	34.16	84.38	54.00	30.38	AVG	No Limit
2	X	2438.000	53.67	34.15	87.82	74.00	13.82	peak	No Limit

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

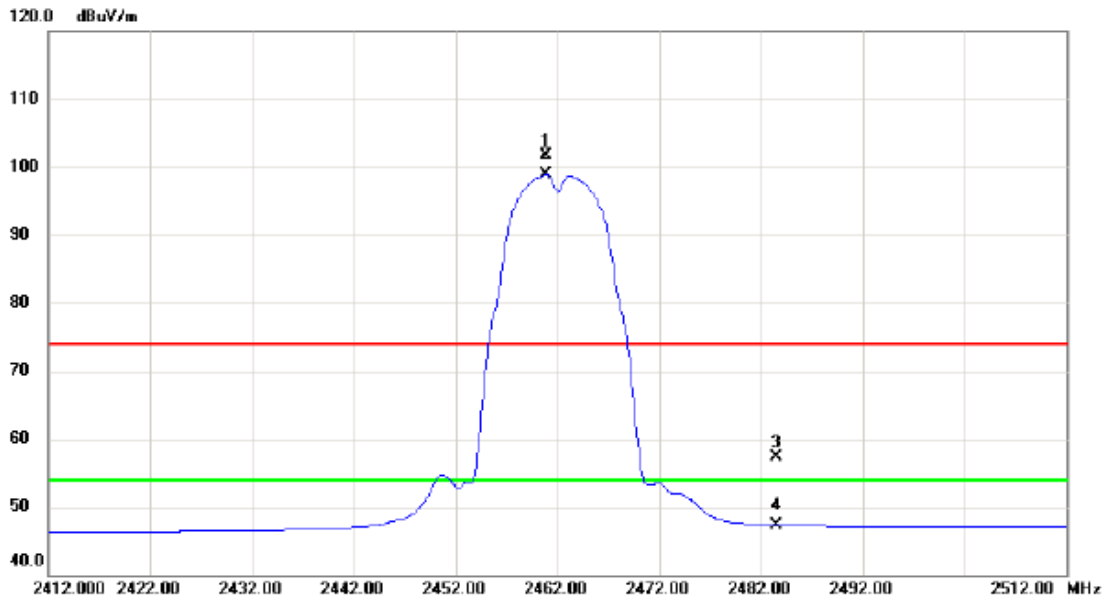
Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	4874.090	32.81	5.71	38.52	54.00	-15.48	AVG	
2		4874.170	39.00	5.71	44.71	74.00	-29.29	peak	

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

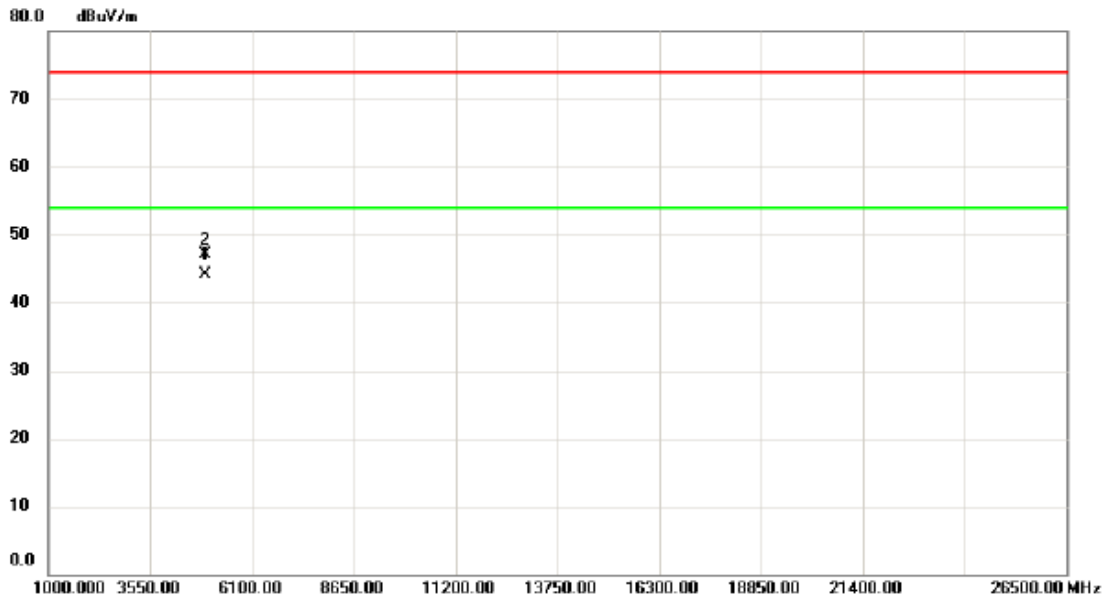
Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	X	2460.900	67.38	34.28	101.66	74.00	27.66	peak	No Limit
2	*	2460.900	64.60	34.28	98.88	54.00	44.88	AVG	No Limit
3		2483.500	22.87	34.41	57.28	74.00	-16.72	peak	
4		2483.500	12.86	34.41	47.27	54.00	-6.73	AVG	

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

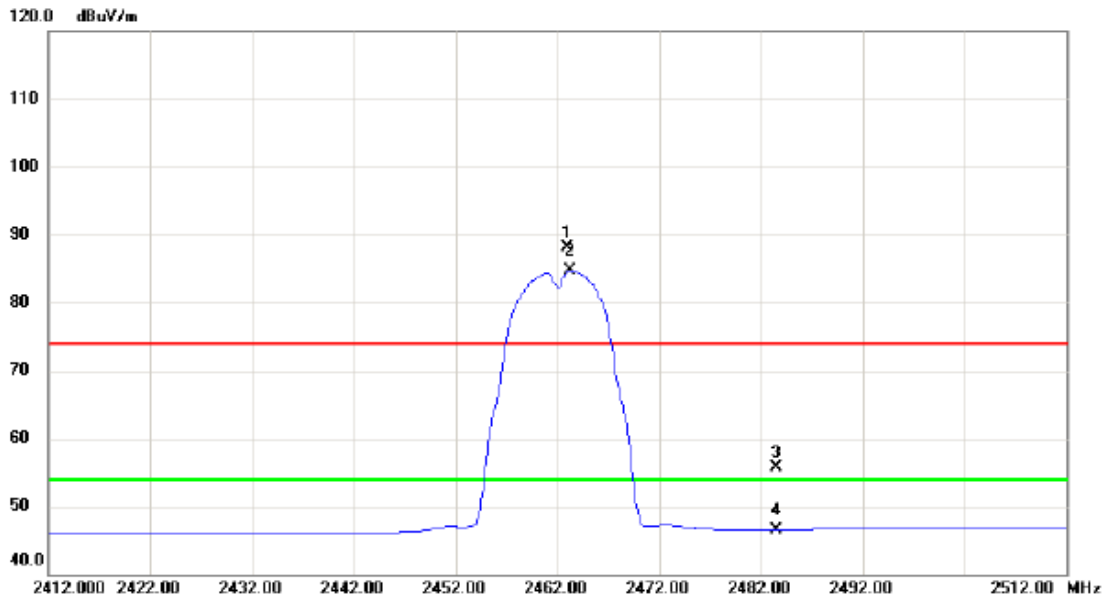
Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	4924.020	38.16	5.94	44.10	54.00	-9.90	AVG	
2		4924.040	41.09	5.94	47.03	74.00	-26.97	peak	

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

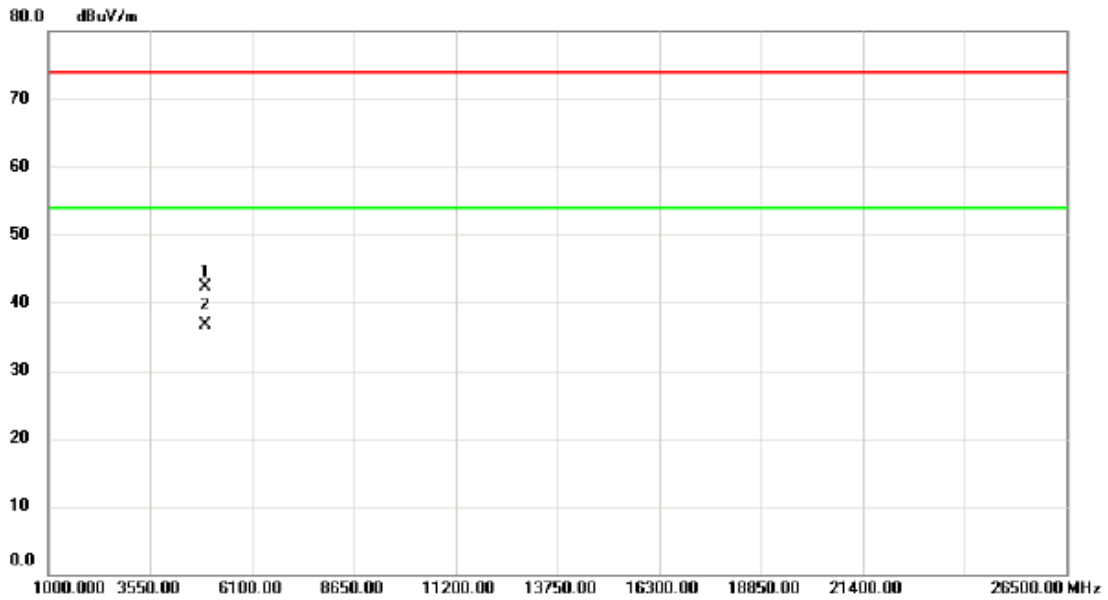
Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	X	2463.000	53.77	34.30	88.07	74.00	14.07	peak	No Limit
2	*	2463.300	50.44	34.30	84.74	54.00	30.74	AVG	No Limit
3		2483.500	21.37	34.41	55.78	74.00	-18.22	peak	
4		2483.500	12.18	34.41	46.59	54.00	-7.41	AVG	

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

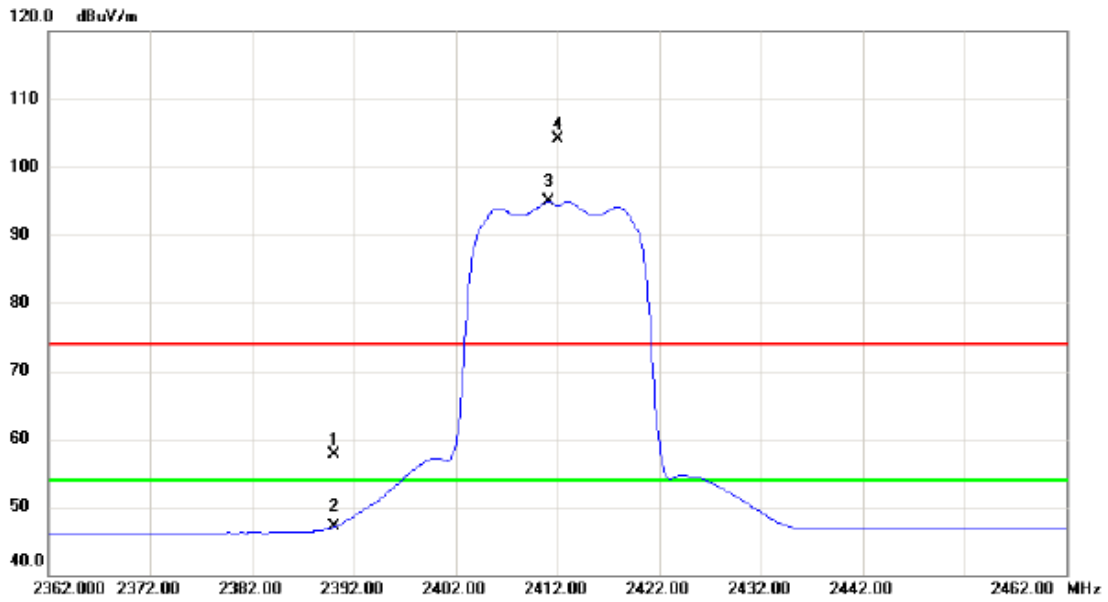
Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		4924.030	36.39	5.94	42.33	74.00	-31.67	peak	
2	*	4924.035	30.79	5.94	36.73	54.00	-17.27	AVG	

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

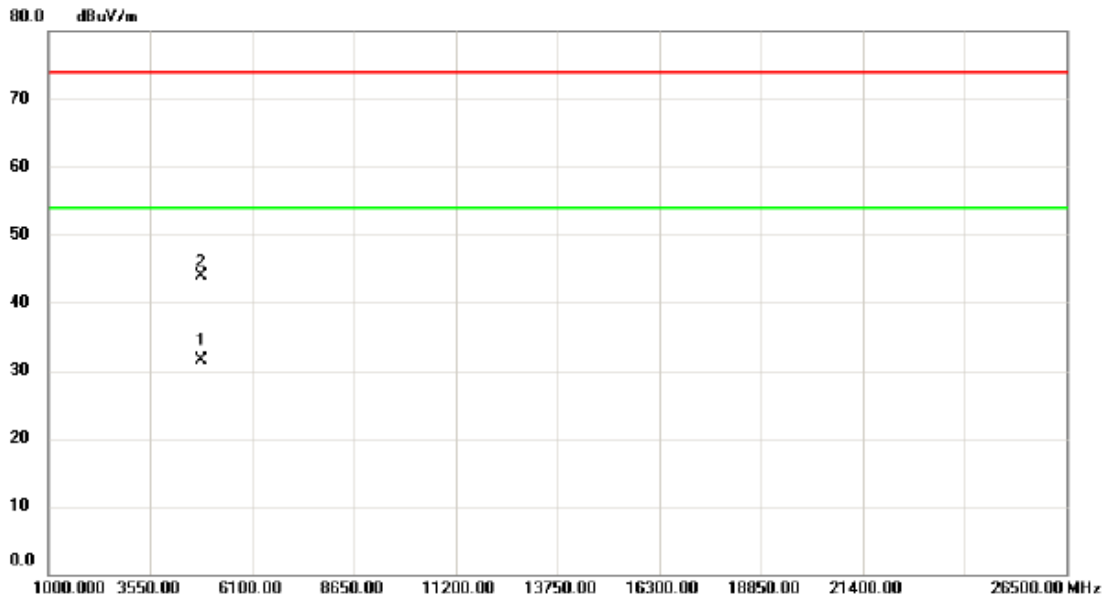
Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		2390.000	23.82	33.87	57.69	74.00	-16.31	peak	
2		2390.000	13.18	33.87	47.05	54.00	-6.95	AVG	
3	*	2411.100	60.94	34.00	94.94	54.00	40.94	AVG	No Limit
4	X	2412.100	70.06	34.01	104.07	74.00	30.07	peak	No Limit

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

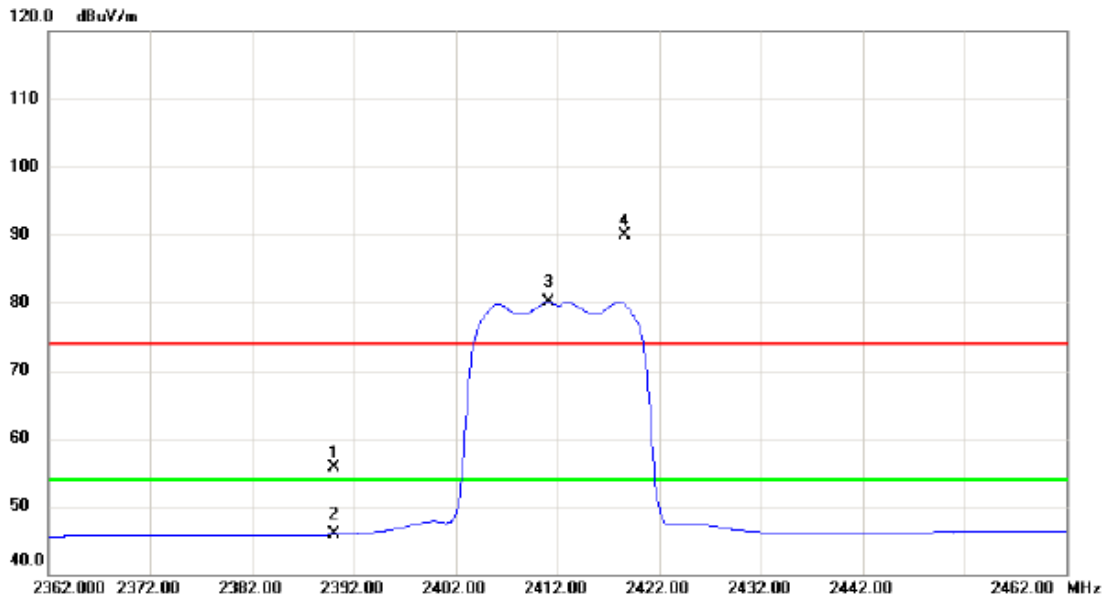
Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	4822.950	26.02	5.45	31.47	54.00	-22.53	AVG	
2		4824.600	38.49	5.46	43.95	74.00	-30.05	peak	

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

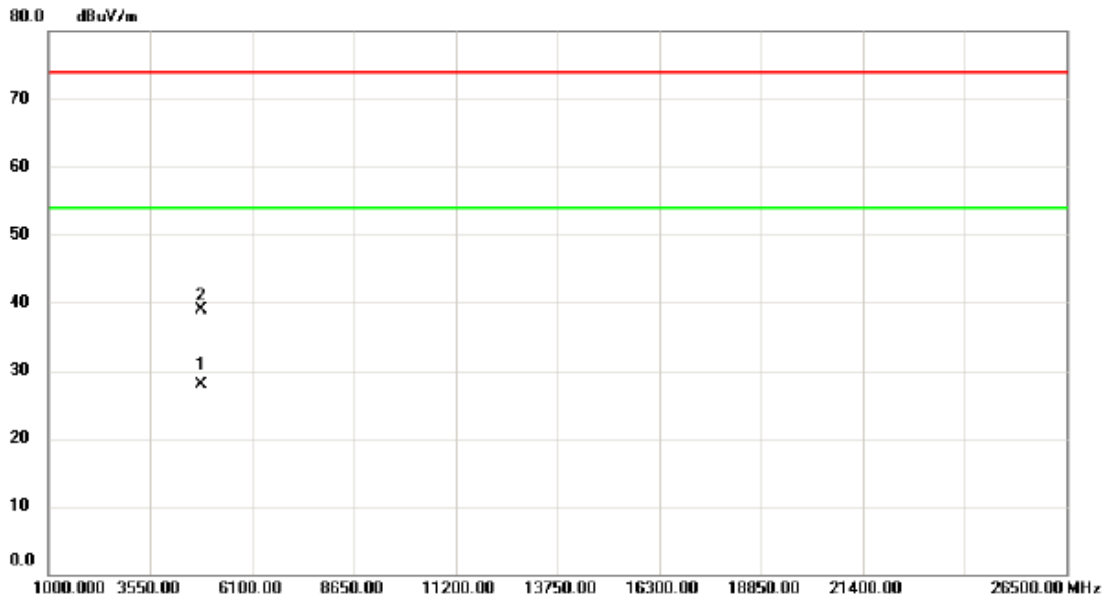
Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		2390.000	21.83	33.87	55.70	74.00	-18.30	peak	
2		2390.000	11.94	33.87	45.81	54.00	-8.19	AVG	
3	*	2411.200	46.18	34.00	80.18	54.00	26.18	AVG	No Limit
4	X	2418.600	55.82	34.05	89.87	74.00	15.87	peak	No Limit

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

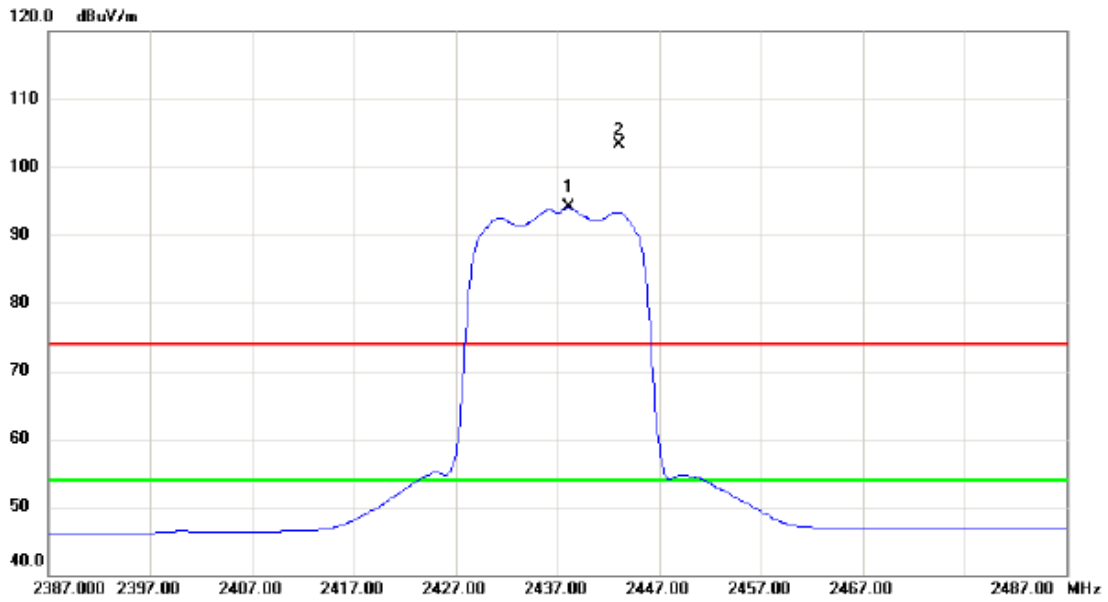
Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	4819.700	22.54	5.44	27.98	54.00	-26.02	AVG	
2		4820.300	33.41	5.44	38.85	74.00	-35.15	peak	

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

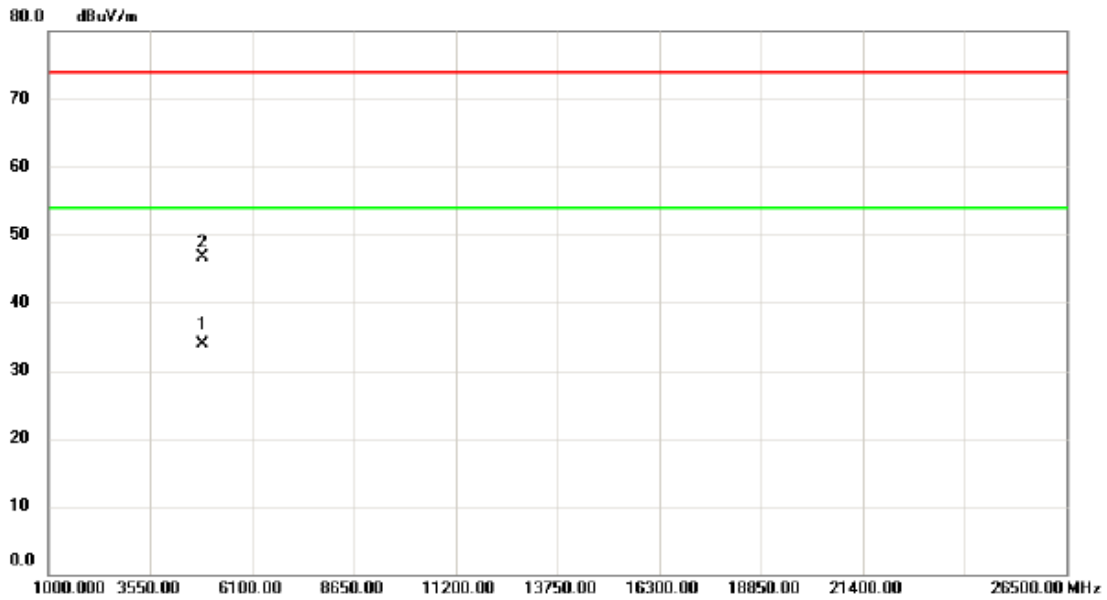
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1	*	2438.100	59.90	34.16	94.06	54.00	40.06	AVG	No Limit
2	X	2443.000	69.04	34.18	103.22	74.00	29.22	peak	No Limit

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

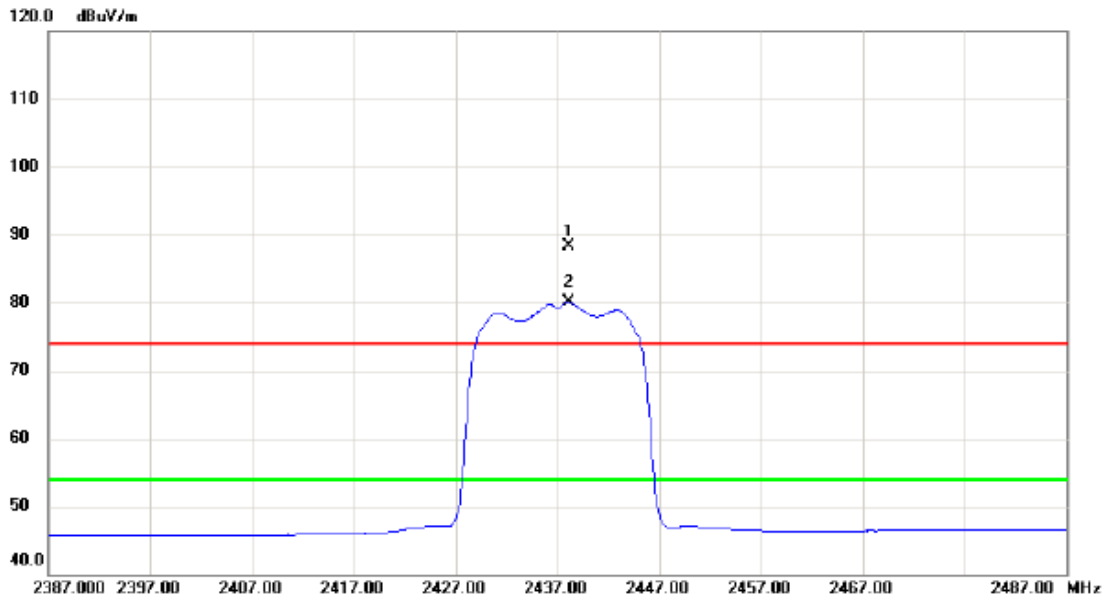
Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	4873.800	28.30	5.70	34.00	54.00	-20.00	AVG	
2		4874.600	40.92	5.71	46.63	74.00	-27.37	peak	

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

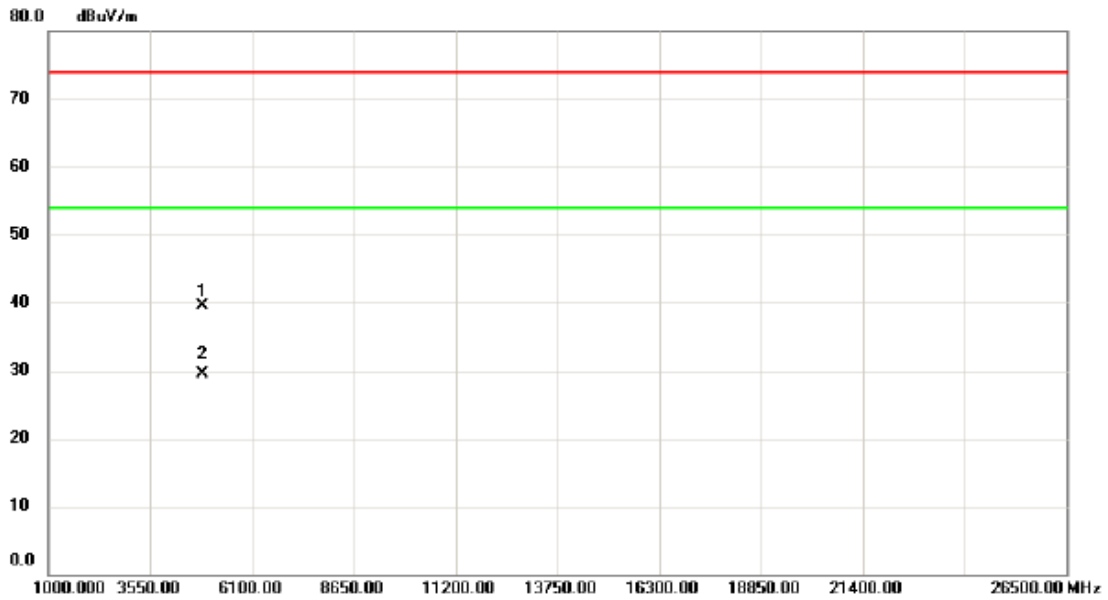
Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	X	2438.100	54.13	34.16	88.29	74.00	14.29	peak	No Limit
2	*	2438.100	45.88	34.16	80.04	54.00	26.04	AVG	No Limit

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

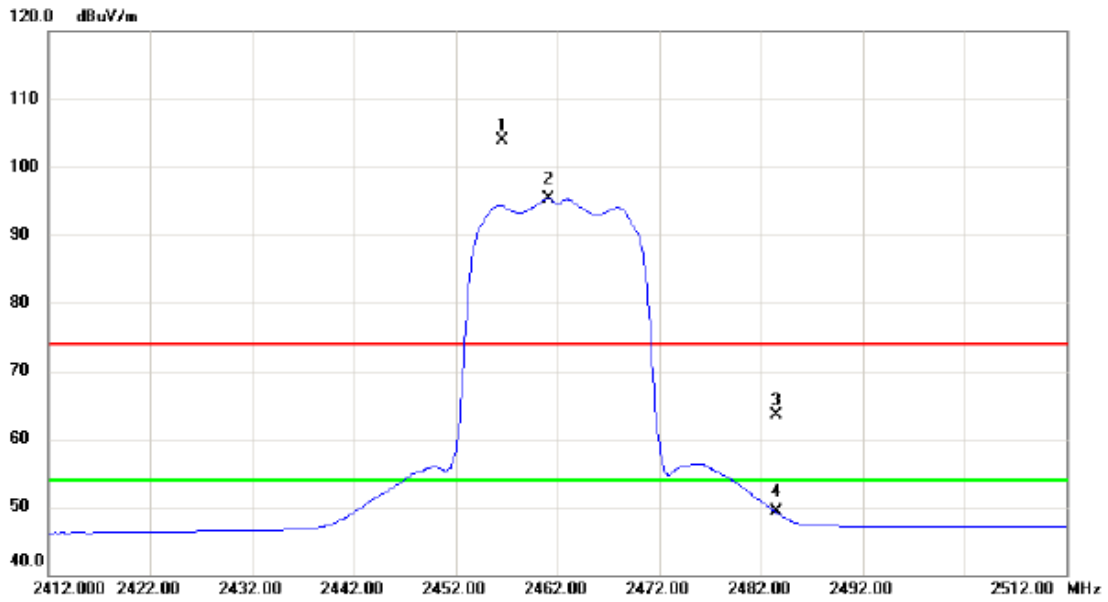
Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		4872.700	33.76	5.70	39.46	74.00	-34.54	peak	
2	*	4874.000	23.87	5.71	29.58	54.00	-24.42	AVG	

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

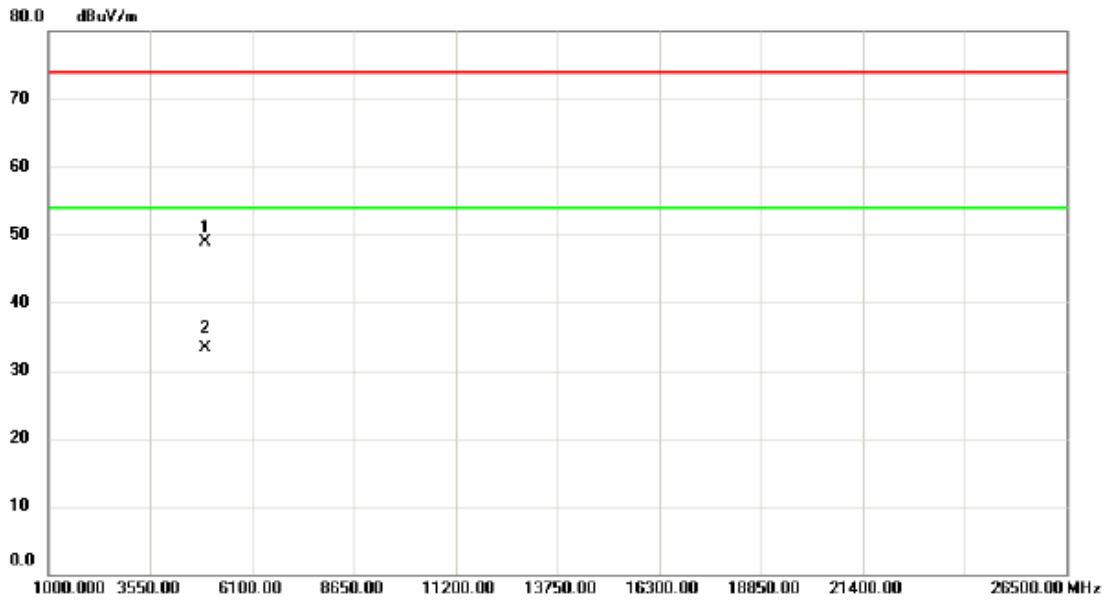
Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	X	2456.600	69.68	34.26	103.94	74.00	29.94	peak	No Limit
2	*	2461.100	61.08	34.28	95.36	54.00	41.36	AVG	No Limit
3		2483.500	29.04	34.41	63.45	74.00	-10.55	peak	
4		2483.500	14.89	34.41	49.30	54.00	-4.70	AVG	

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

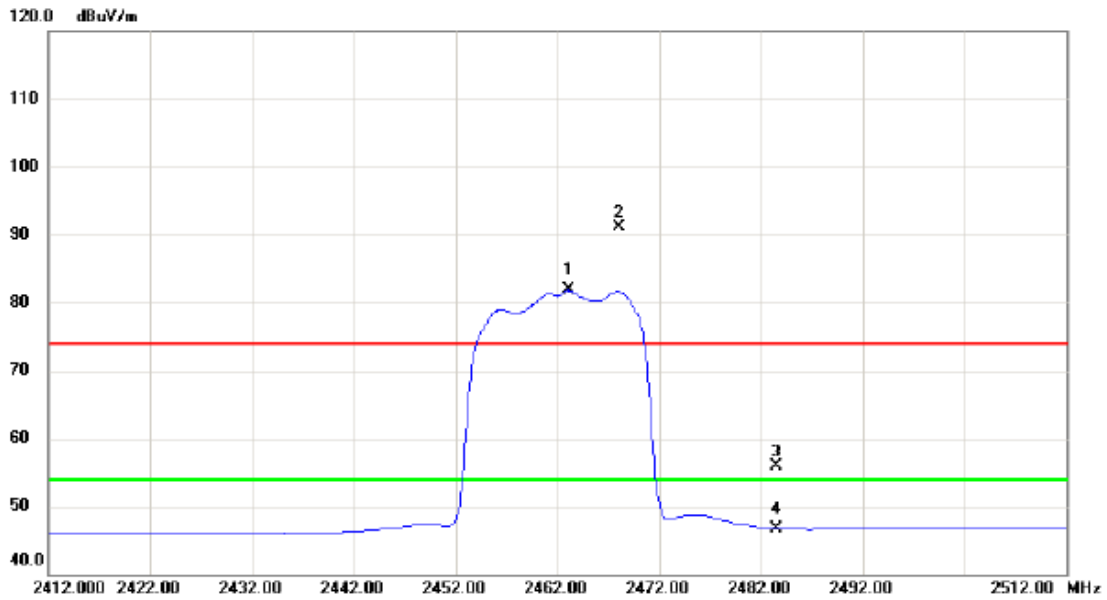
Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		4920.300	42.94	5.92	48.86	74.00	-25.14	peak	
2	*	4923.800	27.36	5.93	33.29	54.00	-20.71	AVG	

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

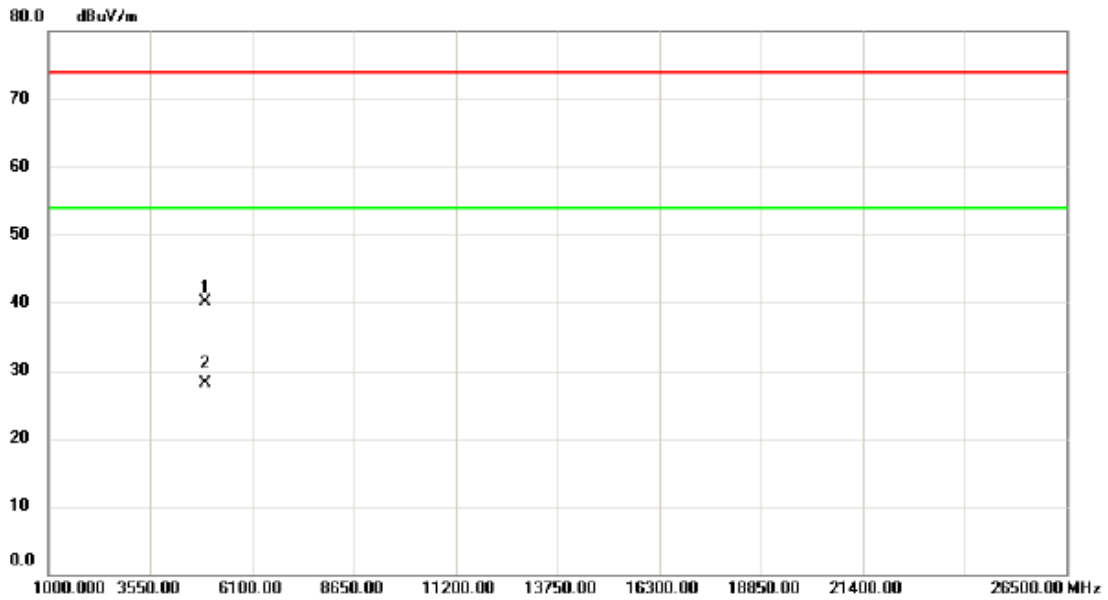
Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	2463.100	47.51	34.30	81.81	54.00	27.81	AVG	No Limit
2	X	2468.000	56.74	34.32	91.06	74.00	17.06	peak	No Limit
3		2483.500	21.52	34.41	55.93	74.00	-18.07	peak	
4		2483.500	12.30	34.41	46.71	54.00	-7.29	AVG	

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

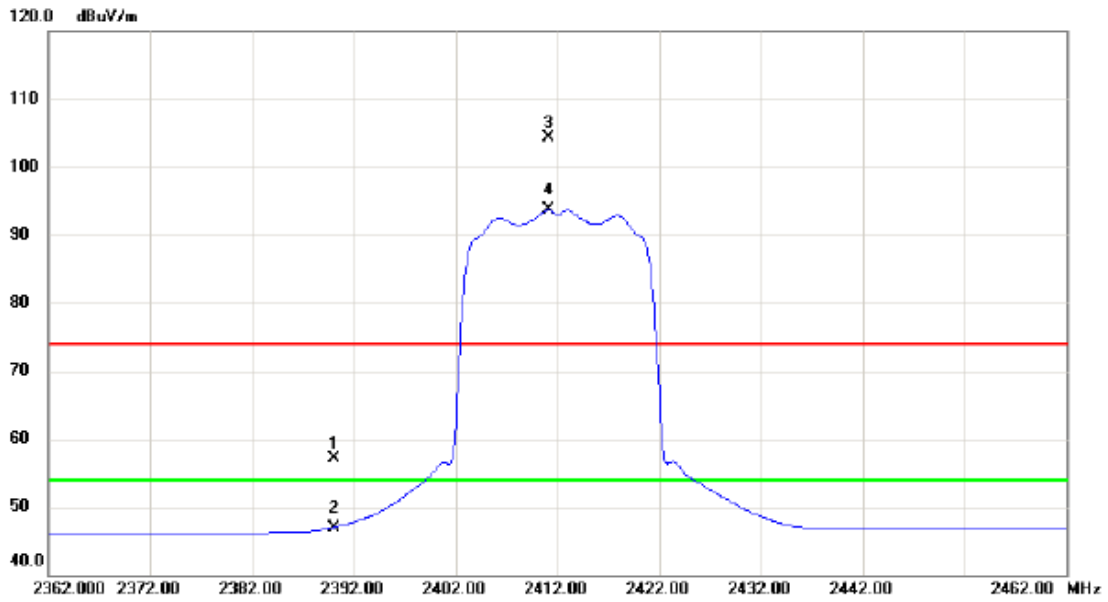
Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		4920.100	34.27	5.92	40.19	74.00	-33.81	peak	
2	*	4925.900	22.19	5.95	28.14	54.00	-25.86	AVG	

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

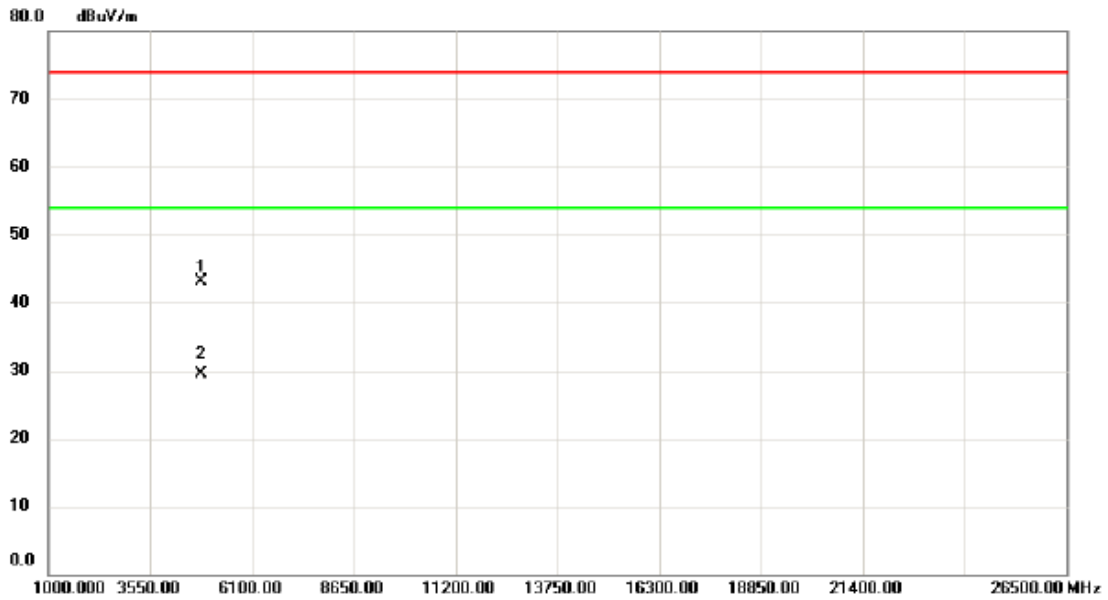
Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		2390.000	23.28	33.87	57.15	74.00	-16.85	peak	
2		2390.000	13.10	33.87	46.97	54.00	-7.03	AVG	
3	X	2411.100	70.23	34.00	104.23	74.00	30.23	peak	No Limit
4	*	2411.100	59.69	34.00	93.69	54.00	39.69	AVG	No Limit

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

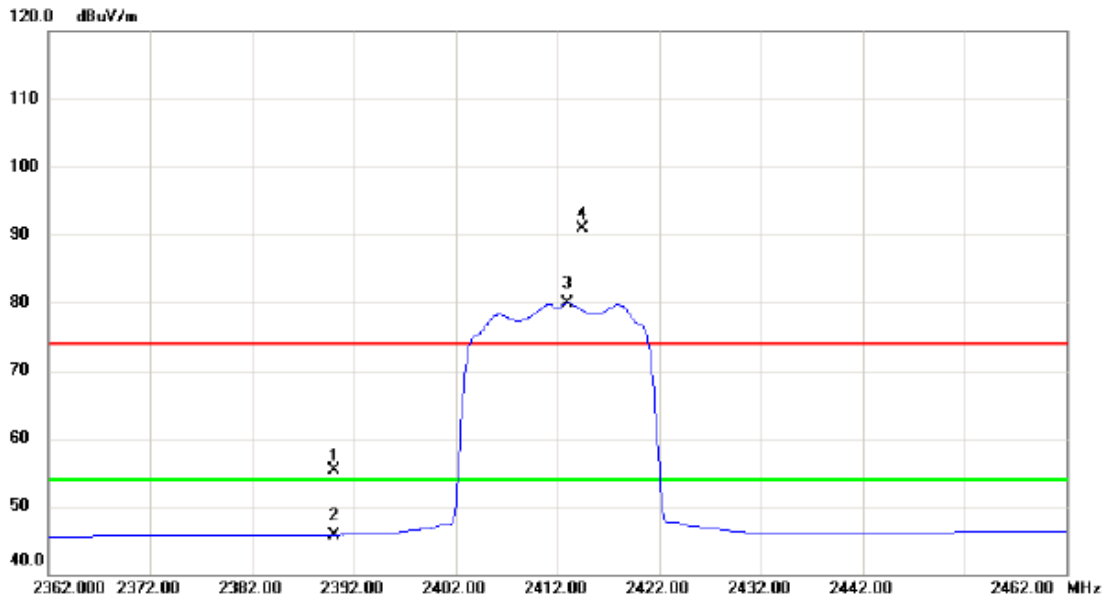
Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		4823.400	37.69	5.45	43.14	74.00	-30.86	peak	
2	*	4824.150	24.06	5.46	29.52	54.00	-24.48	AVG	

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

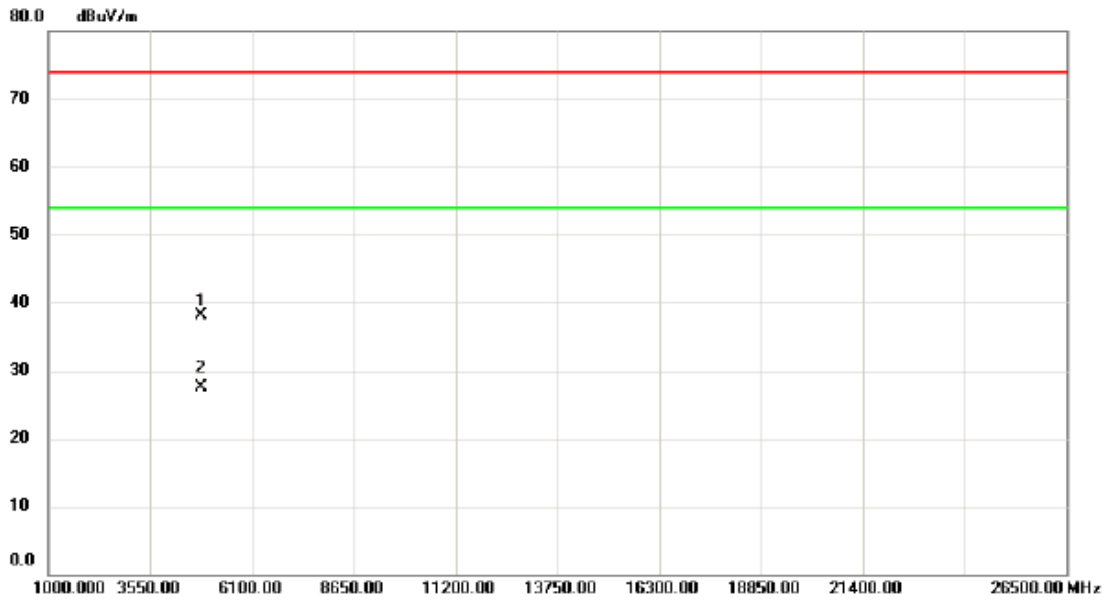
Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		2390.000	21.33	33.87	55.20	74.00	-18.80	peak	
2		2390.000	11.90	33.87	45.77	54.00	-8.23	AVG	
3	*	2413.000	45.92	34.01	79.93	54.00	25.93	AVG	No Limit
4	X	2414.500	56.82	34.02	90.84	74.00	16.84	peak	No Limit

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

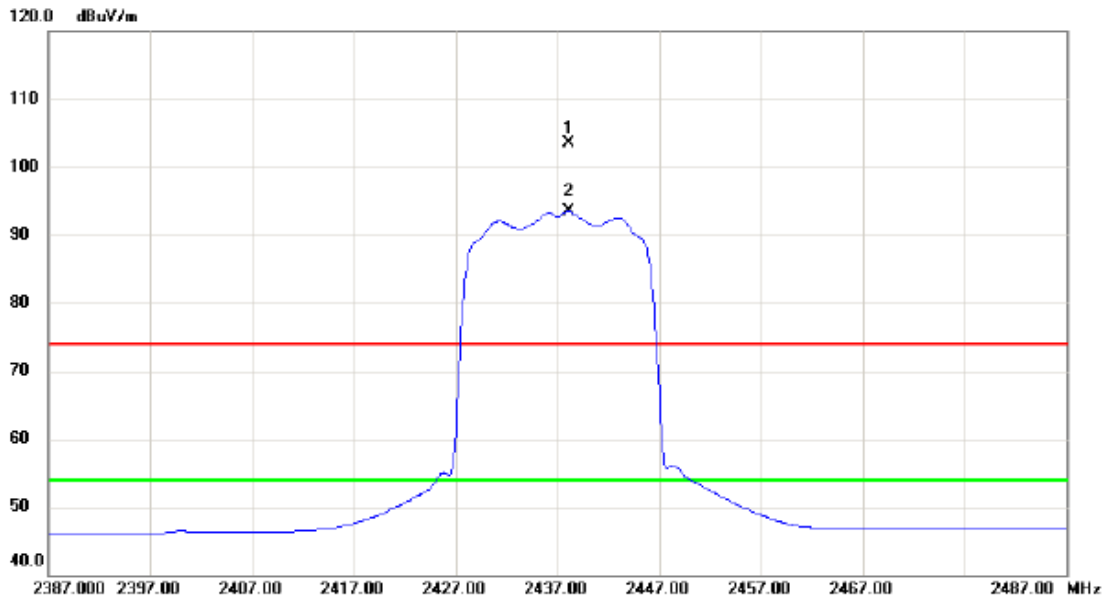
Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		4820.300	32.75	5.44	38.19	74.00	-35.81	peak	
2	*	4820.800	22.05	5.44	27.49	54.00	-26.51	AVG	

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

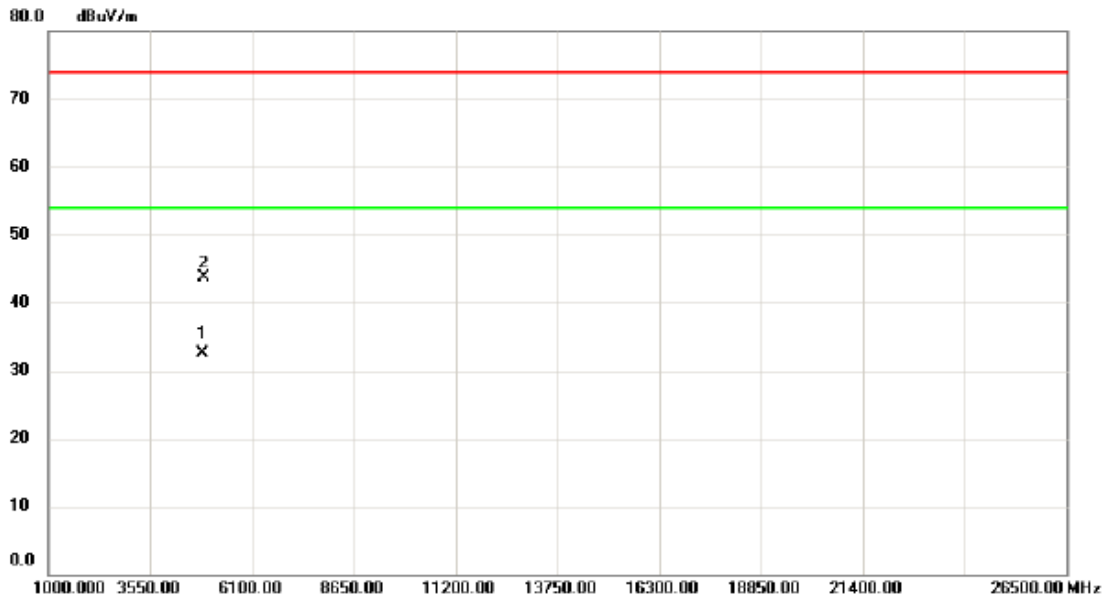
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1	X	2438.100	69.36	34.16	103.52	74.00	29.52	peak	No Limit
2	*	2438.100	59.33	34.16	93.49	54.00	39.49	AVG	No Limit

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

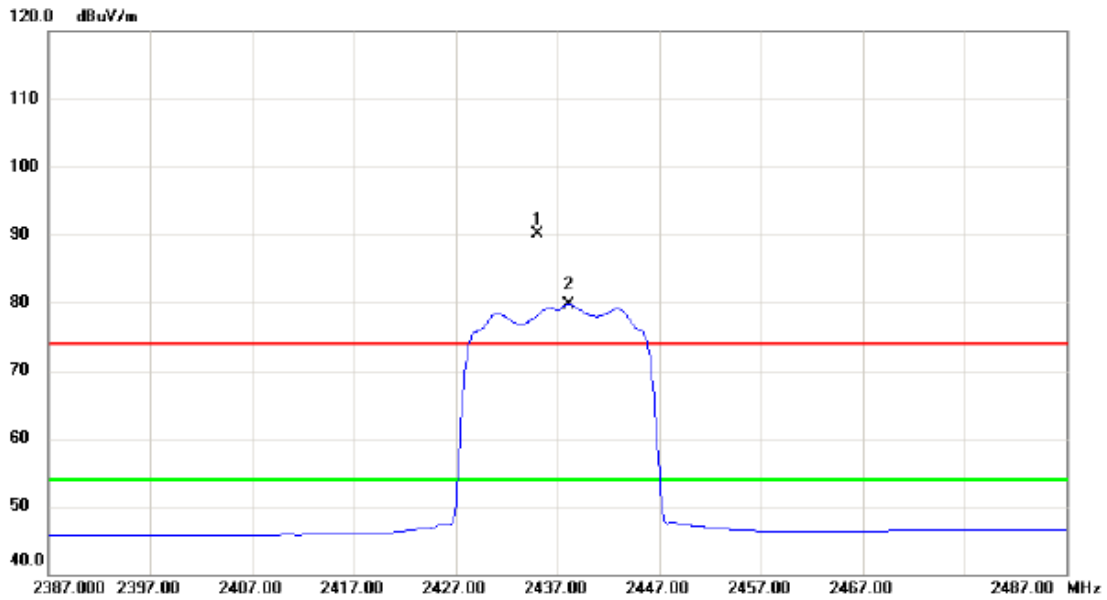
Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	4874.050	26.81	5.71	32.52	54.00	-21.48	AVG	
2		4876.300	37.91	5.71	43.62	74.00	-30.38	peak	

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

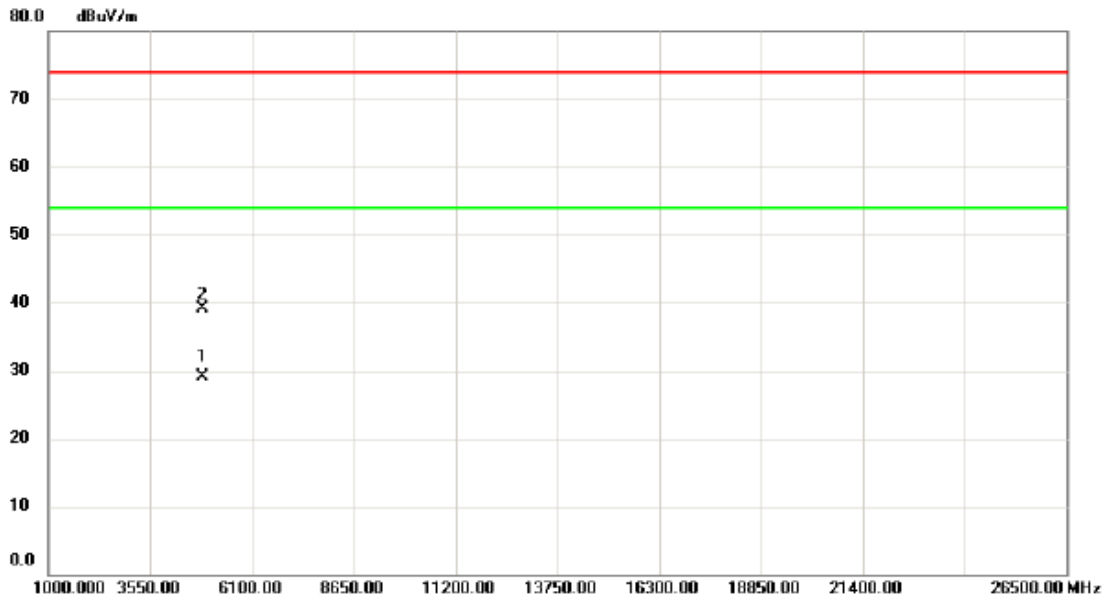
Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	X	2435.100	55.99	34.13	90.12	74.00	16.12	peak	No Limit
2	*	2438.100	45.62	34.16	79.78	54.00	25.78	AVG	No Limit

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

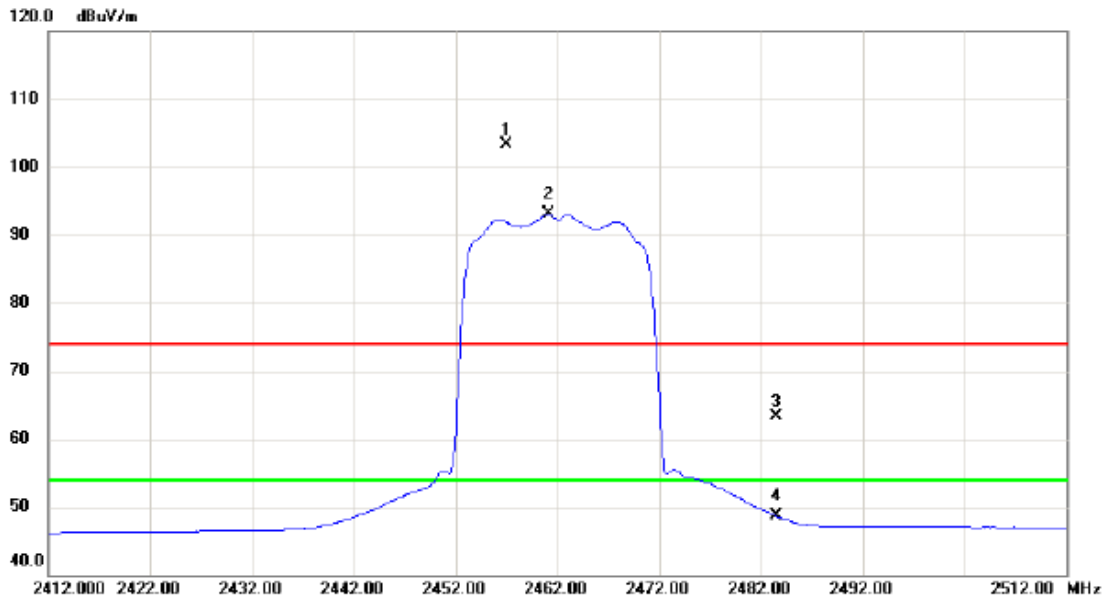
Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	4874.300	23.30	5.71	29.01	54.00	-24.99	AVG	
2		4875.600	33.38	5.70	39.08	74.00	-34.92	peak	

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

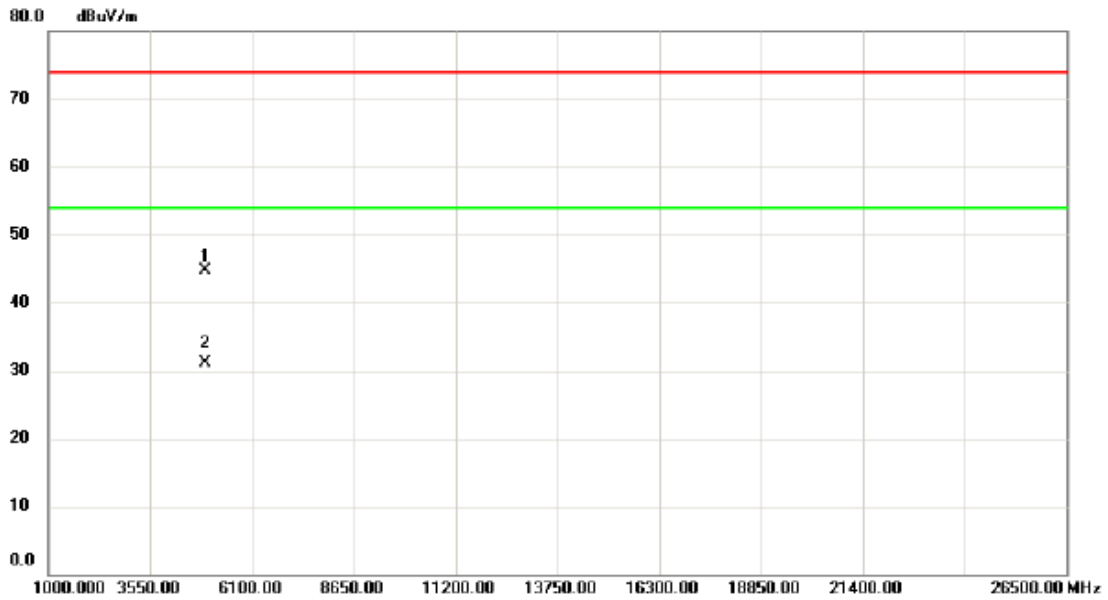
Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	X	2457.000	69.09	34.26	103.35	74.00	29.35	peak	No Limit
2	*	2461.100	58.77	34.28	93.05	54.00	39.05	AVG	No Limit
3		2483.500	28.93	34.41	63.34	74.00	-10.66	peak	
4		2483.500	14.29	34.41	48.70	54.00	-5.30	AVG	

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

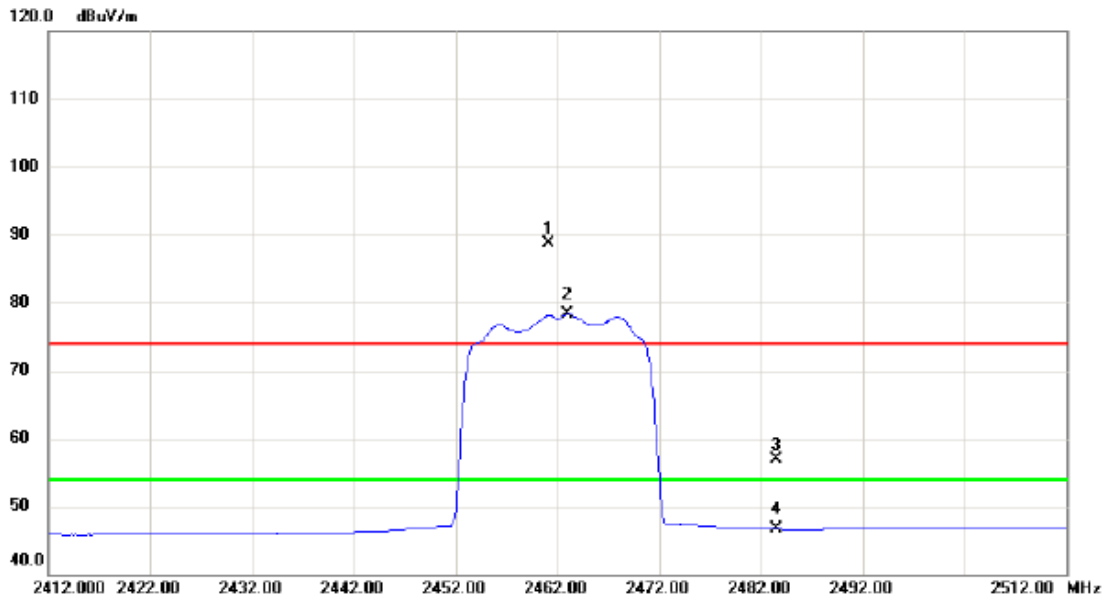
Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		4923.000	38.78	5.93	44.71	74.00	-29.29	peak	
2	*	4924.200	25.11	5.94	31.05	54.00	-22.95	AVG	

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

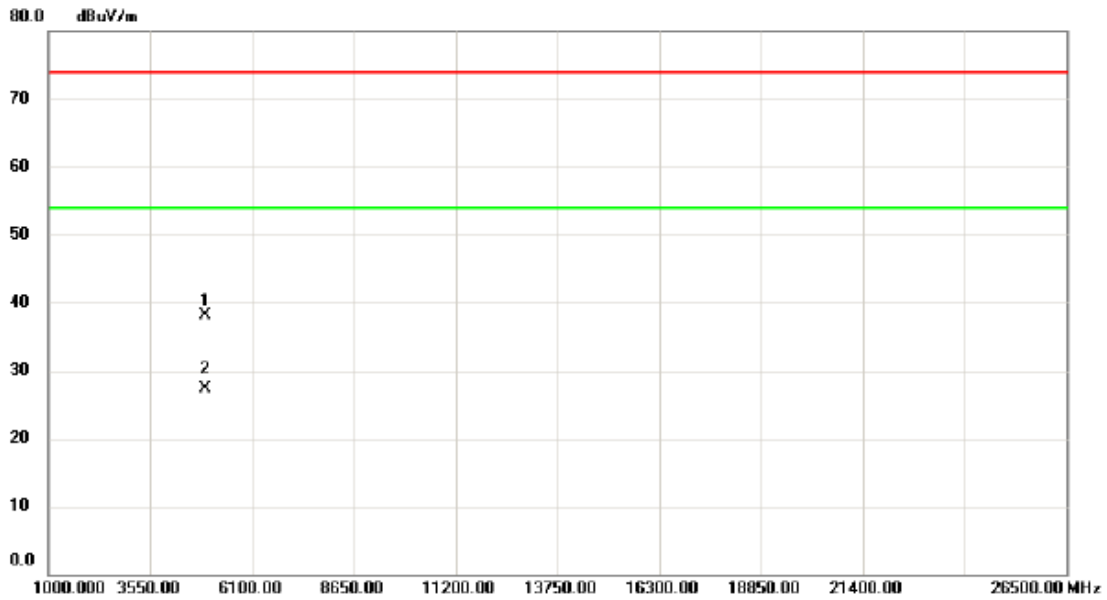
Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	X	2461.100	54.43	34.28	88.71	74.00	14.71	peak	No Limit
2	*	2463.000	44.08	34.30	78.38	54.00	24.38	AVG	No Limit
3		2483.500	22.51	34.41	56.92	74.00	-17.08	peak	
4		2483.500	12.19	34.41	46.60	54.00	-7.40	AVG	

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

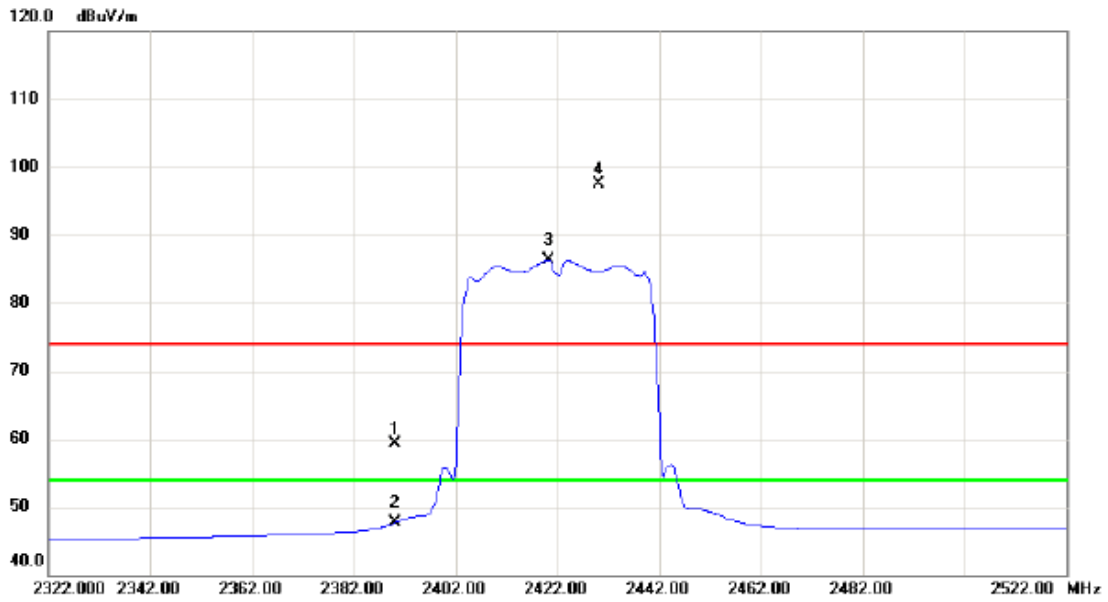
Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		4920.600	32.13	5.92	38.05	74.00	-35.95	peak	
2	*	4925.000	21.44	5.94	27.38	54.00	-26.62	AVG	

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

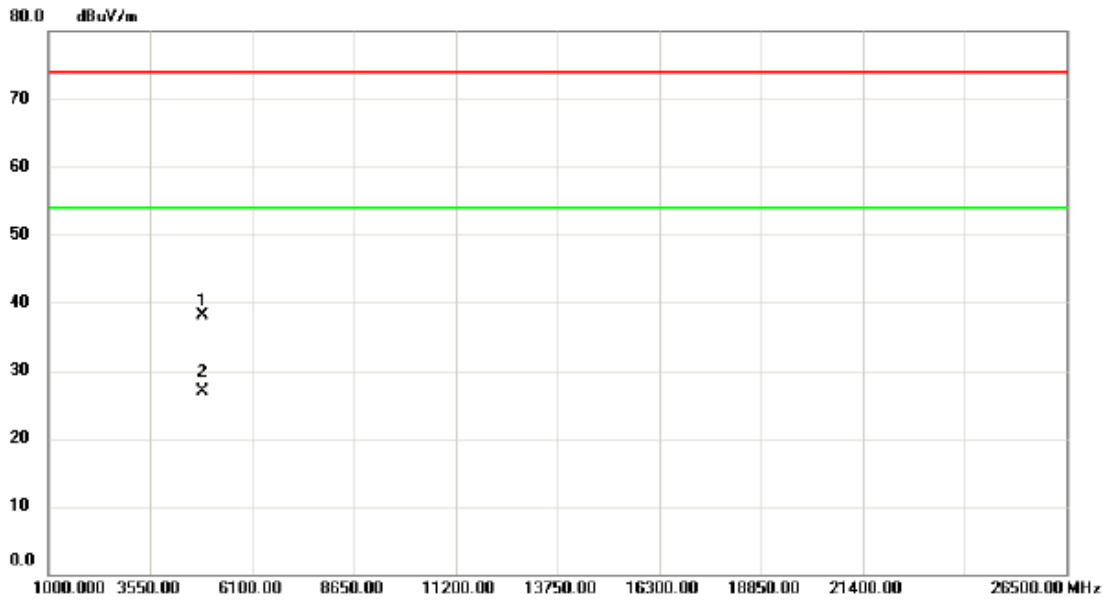
Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		2390.000	25.41	33.87	59.28	74.00	-14.72	peak	
2		2390.000	13.81	33.87	47.68	54.00	-6.32	AVG	
3	*	2420.200	52.33	34.05	86.38	54.00	32.38	AVG	No Limit
4	X	2430.000	63.36	34.11	97.47	74.00	23.47	peak	No Limit

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

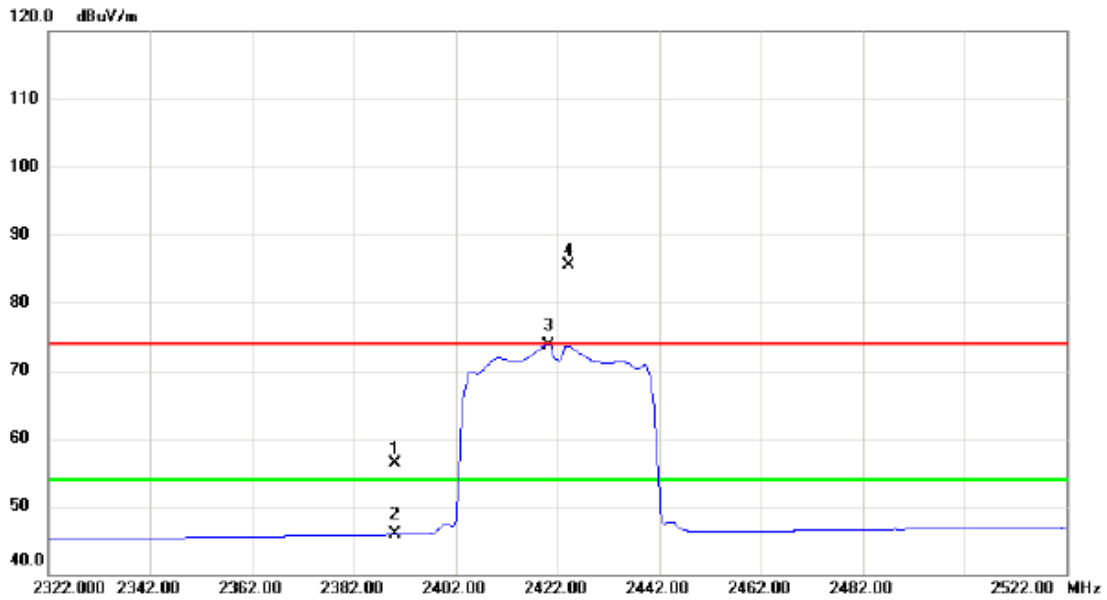
Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		4843.460	32.56	5.54	38.10	74.00	-35.90	peak	
2	*	4844.100	21.28	5.54	26.82	54.00	-27.18	AVG	

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

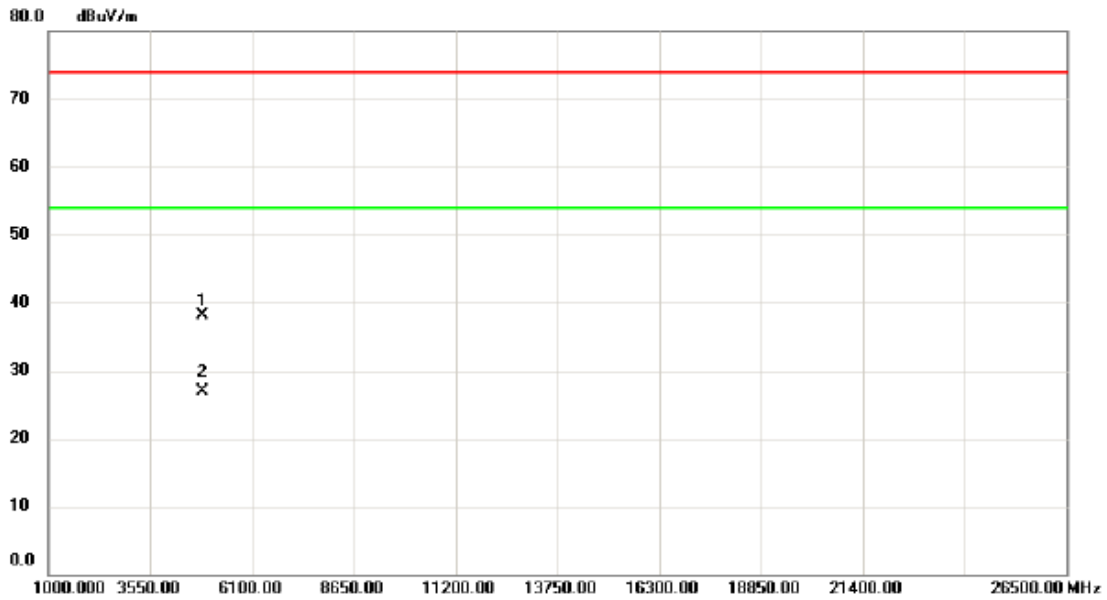
Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		2390.000	22.36	33.87	56.23	74.00	-17.77	peak	
2		2390.000	11.96	33.87	45.83	54.00	-8.17	AVG	
3	*	2420.200	39.73	34.05	73.78	54.00	19.78	AVG	No Limit
4	X	2424.200	51.37	34.07	85.44	74.00	11.44	peak	No Limit

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

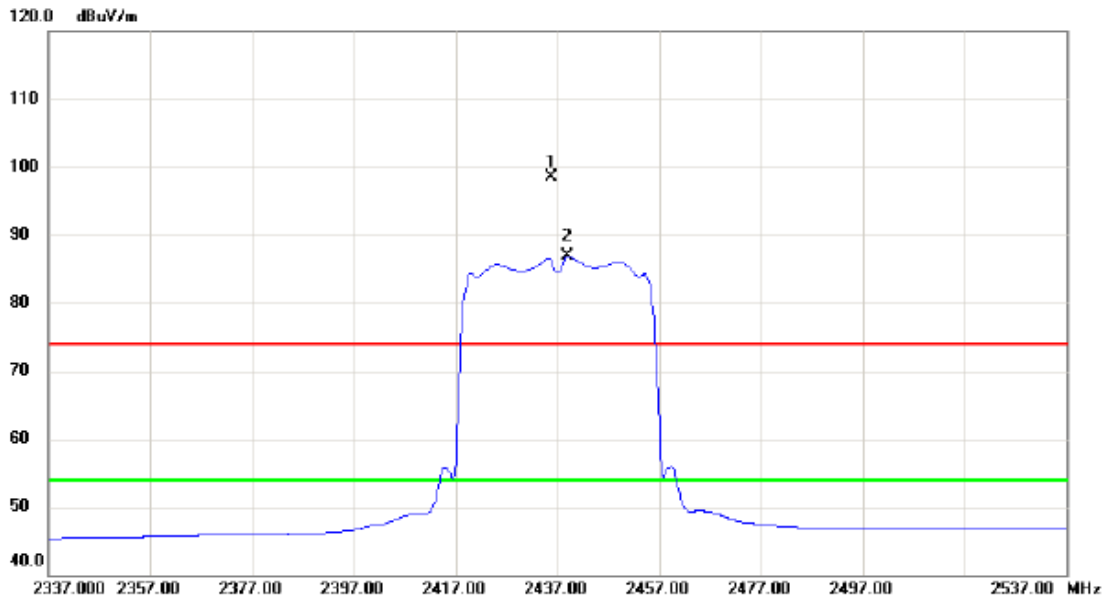
Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		4843.760	32.53	5.54	38.07	74.00	-35.93	peak	
2	*	4844.200	21.30	5.54	26.84	54.00	-27.16	AVG	

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

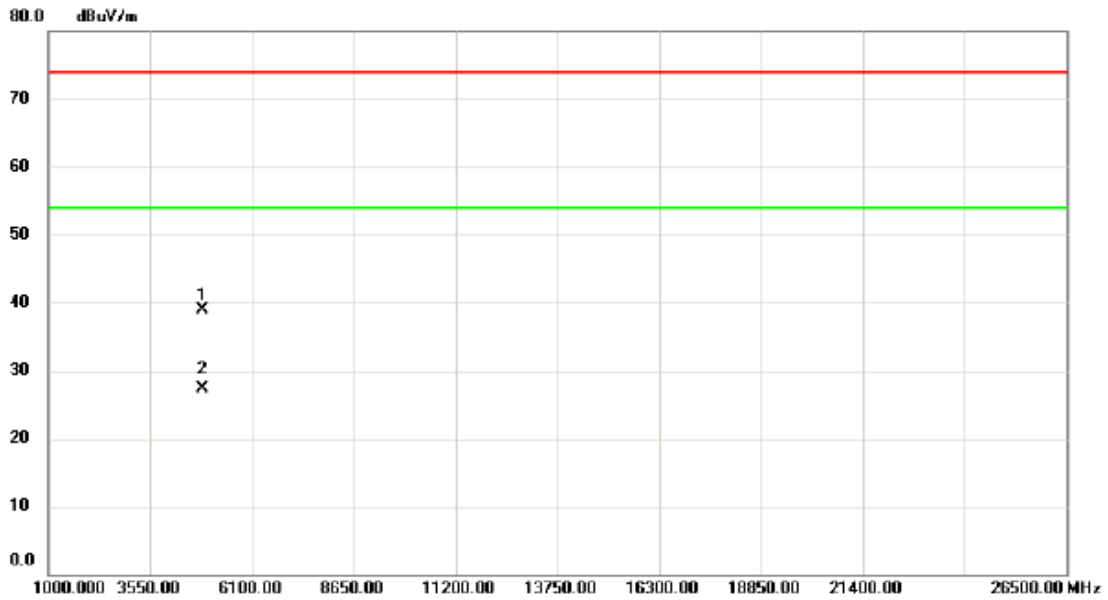
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB		
1	X	2435.800	64.31	34.14	98.45	74.00	24.45	peak	No Limit
2	*	2439.000	52.72	34.16	86.88	54.00	32.88	AVG	No Limit

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

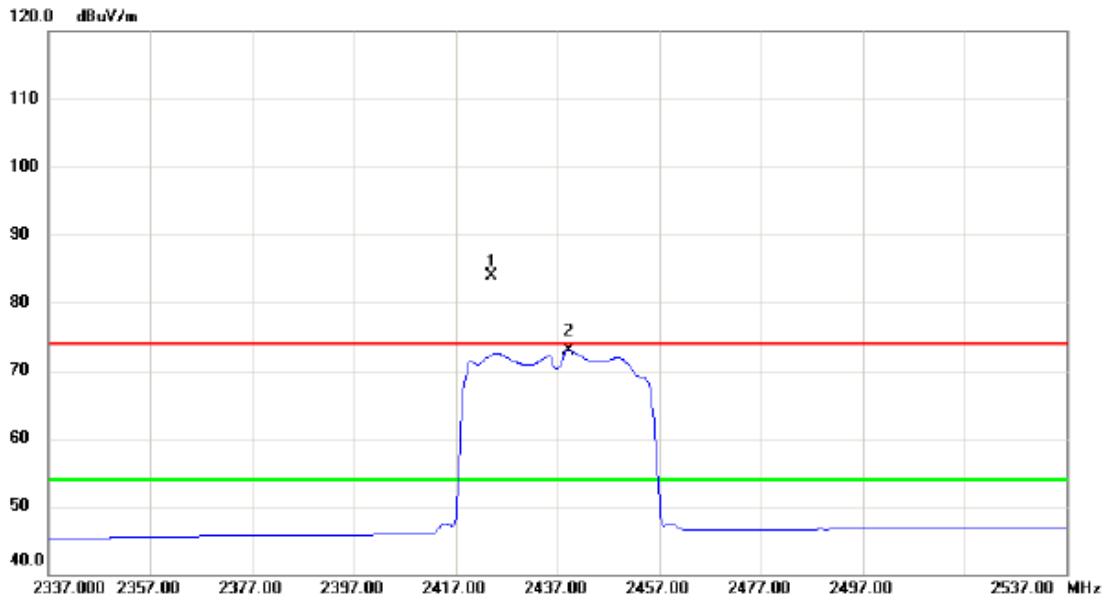
Vertical



No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	4873.140	33.13	5.70	38.83	74.00	-35.17	peak	
2 *	4873.860	21.60	5.70	27.30	54.00	-26.70	AVG	

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

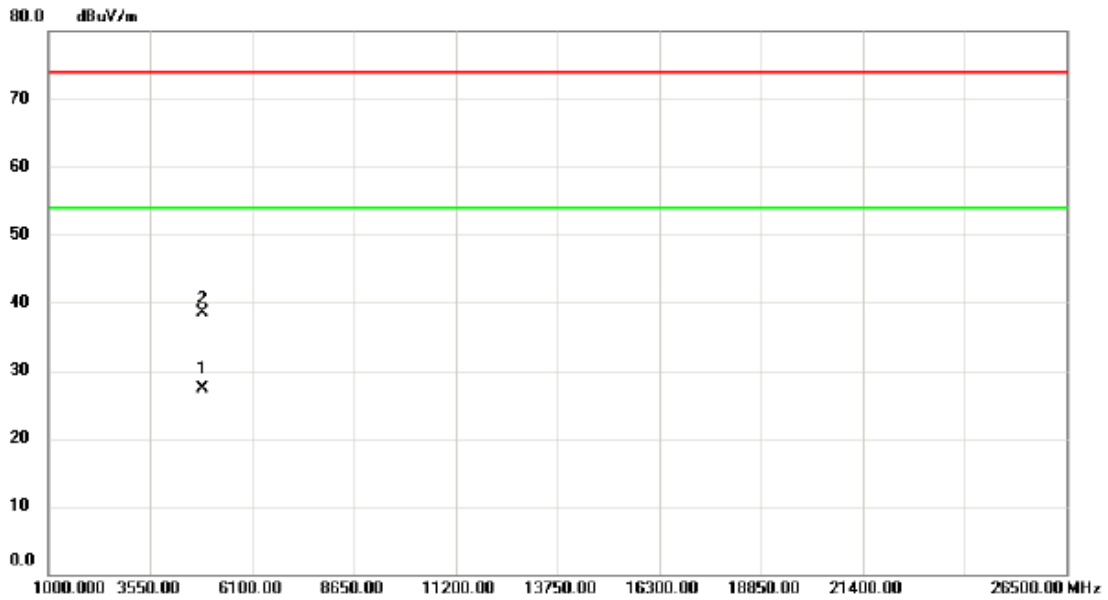
Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	X	2424.200	49.78	34.07	83.85	74.00	9.85	peak	No Limit
2	*	2439.200	38.75	34.16	72.91	54.00	18.91	AVG	No Limit

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

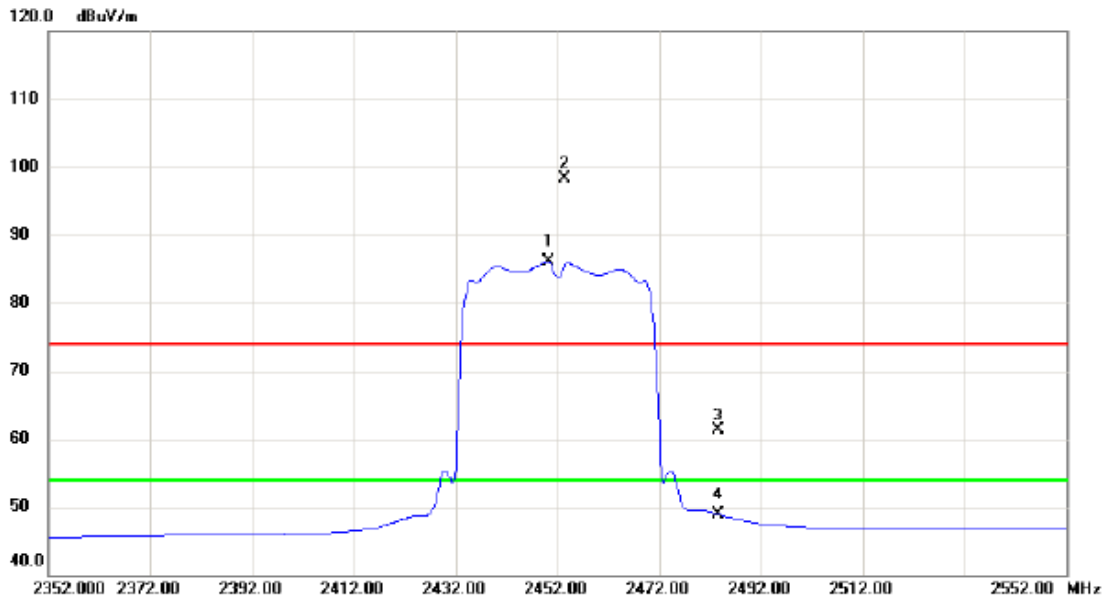
Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	4874.400	21.64	5.71	27.35	54.00	-26.65	AVG	
2		4874.800	32.82	5.71	38.53	74.00	-35.47	peak	

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

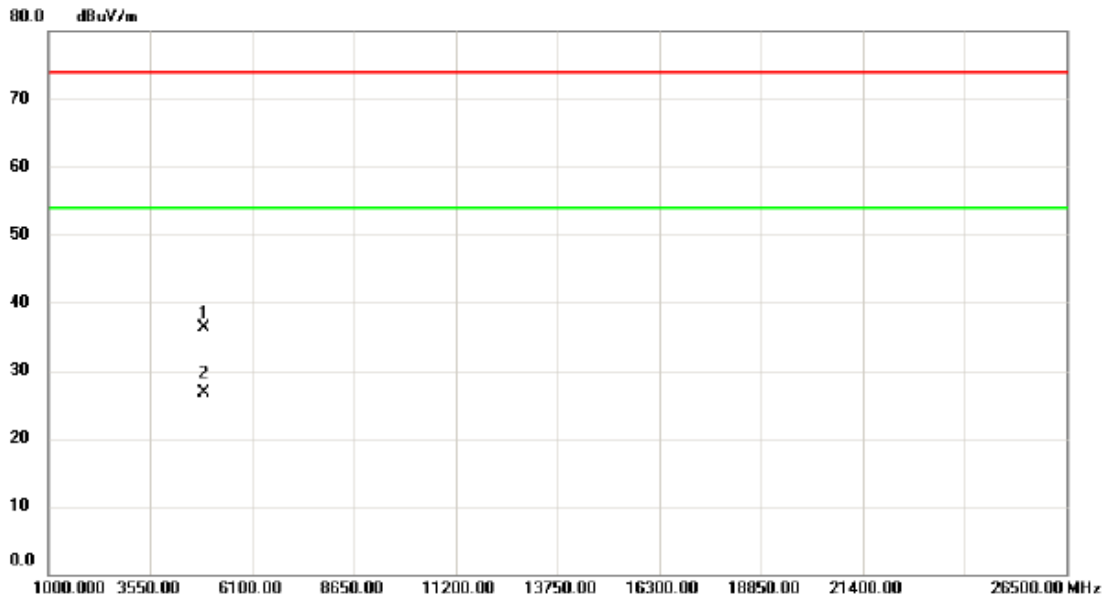
Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	2450.200	51.87	34.22	86.09	54.00	32.09	AVG	No Limit
2	X	2453.600	64.04	34.25	98.29	74.00	24.29	peak	No Limit
3		2483.500	26.89	34.41	61.30	74.00	-12.70	peak	
4		2483.500	14.53	34.41	48.94	54.00	-5.06	AVG	

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

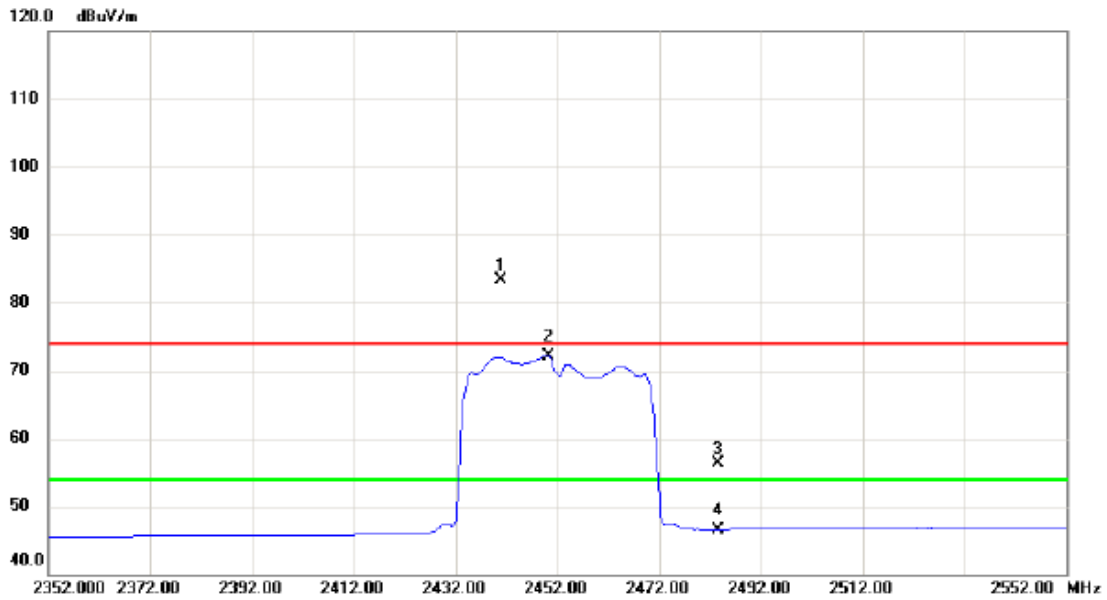
Vertical



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1		4903.900	30.42	5.85	36.27	74.00	-37.73	peak	
2	*	4903.900	20.78	5.85	26.63	54.00	-27.37	AVG	

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

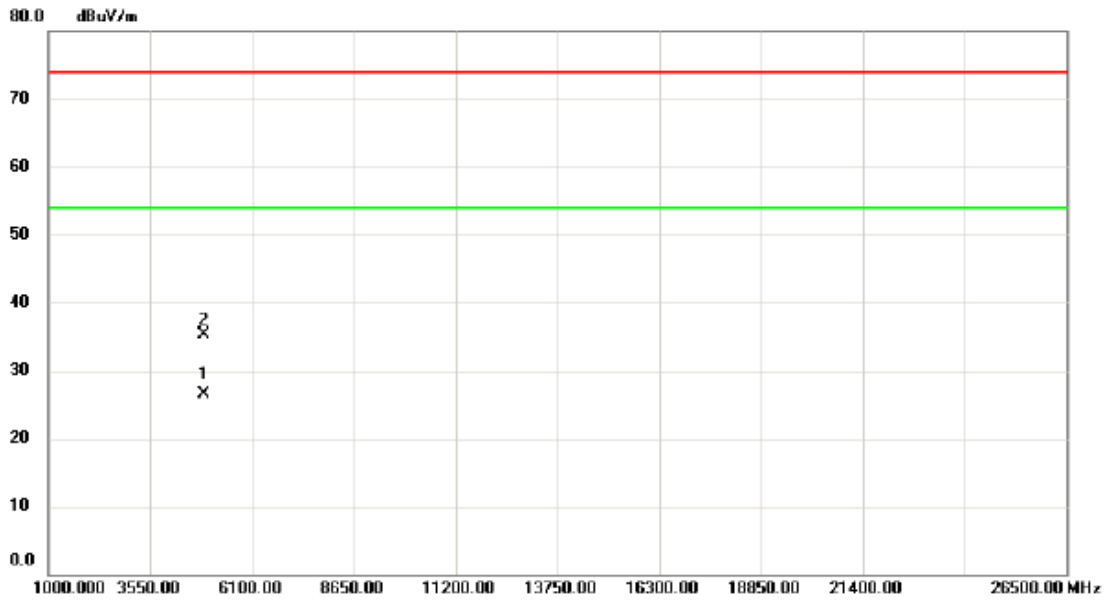
Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	X	2441.000	49.08	34.17	83.25	74.00	9.25	peak	No Limit
2	*	2450.200	37.89	34.22	72.11	54.00	18.11	AVG	No Limit
3		2483.500	21.82	34.41	56.23	74.00	-17.77	peak	
4		2483.500	12.18	34.41	46.59	54.00	-7.41	AVG	

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

Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Margin dB	Detector	Comment
1	*	4904.080	20.66	5.85	26.51	54.00	-27.49	AVG	
2		4904.780	29.45	5.85	35.30	74.00	-38.70	peak	

5. BANDWIDTH TEST

5.1 Applied procedures / limit

FCC Part15 (15.247) , Subpart C			
Section	Test Item	Frequency Range (MHz)	Result
15.247(a)(2) RSS-GEN section 4.6.1	Bandwidth	2400-2483.5	PASS

5.1.1 MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last Calibration	Next Calibration
1	Spectrum Analyzer	R&S	FSP_40	100185	Nov. 17.2012	Nov. 16.2013

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

5.1.2 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.

5.1.3 DEVIATION FROM STANDARD

No deviation.

5.1.4 TEST SETUP



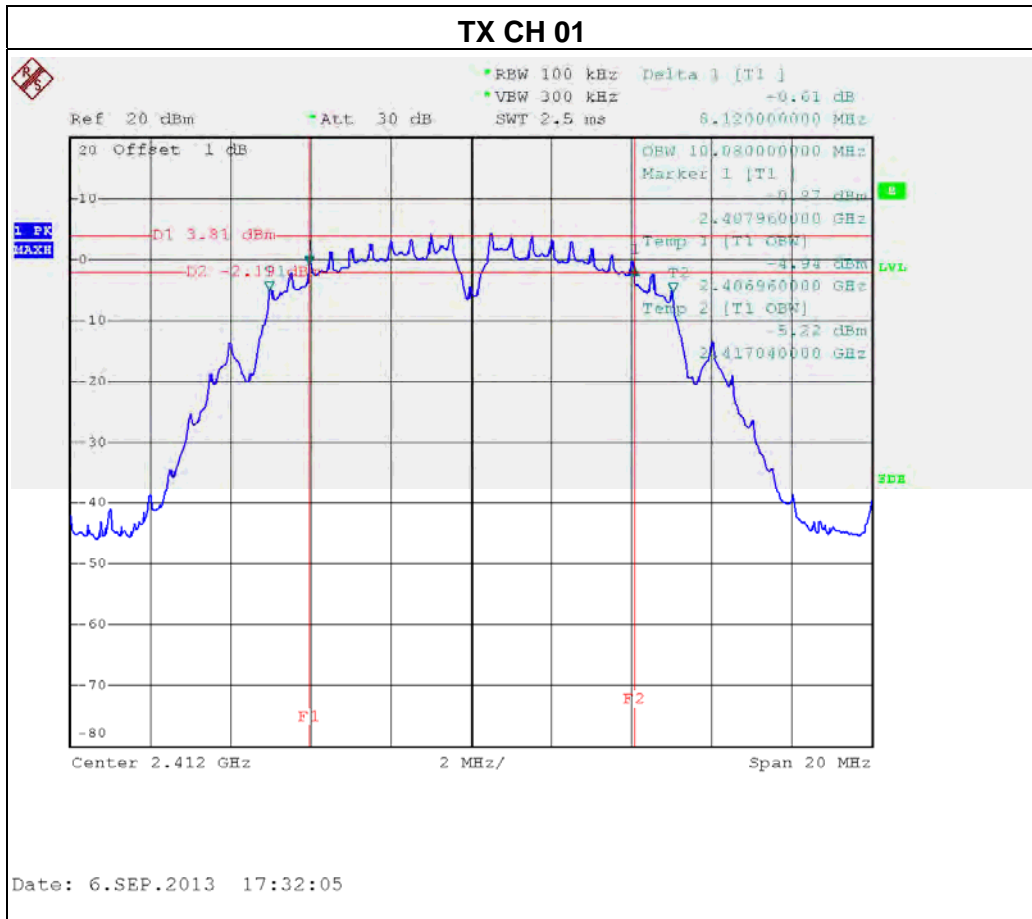
5.1.5 EUT OPERATION CONDITIONS

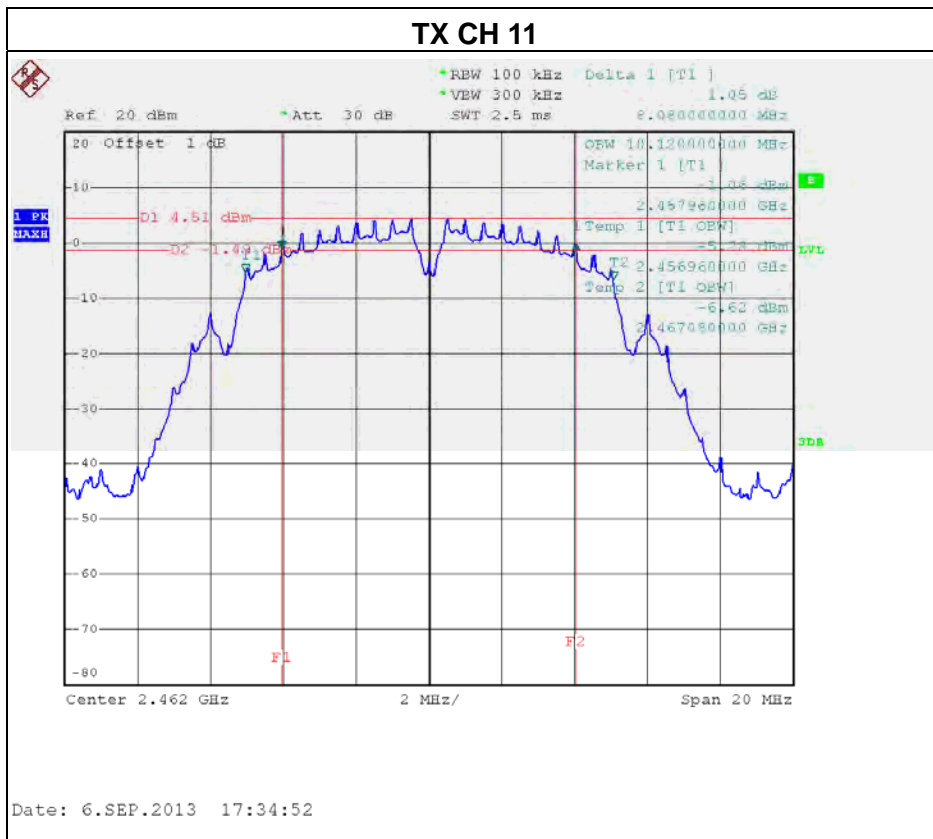
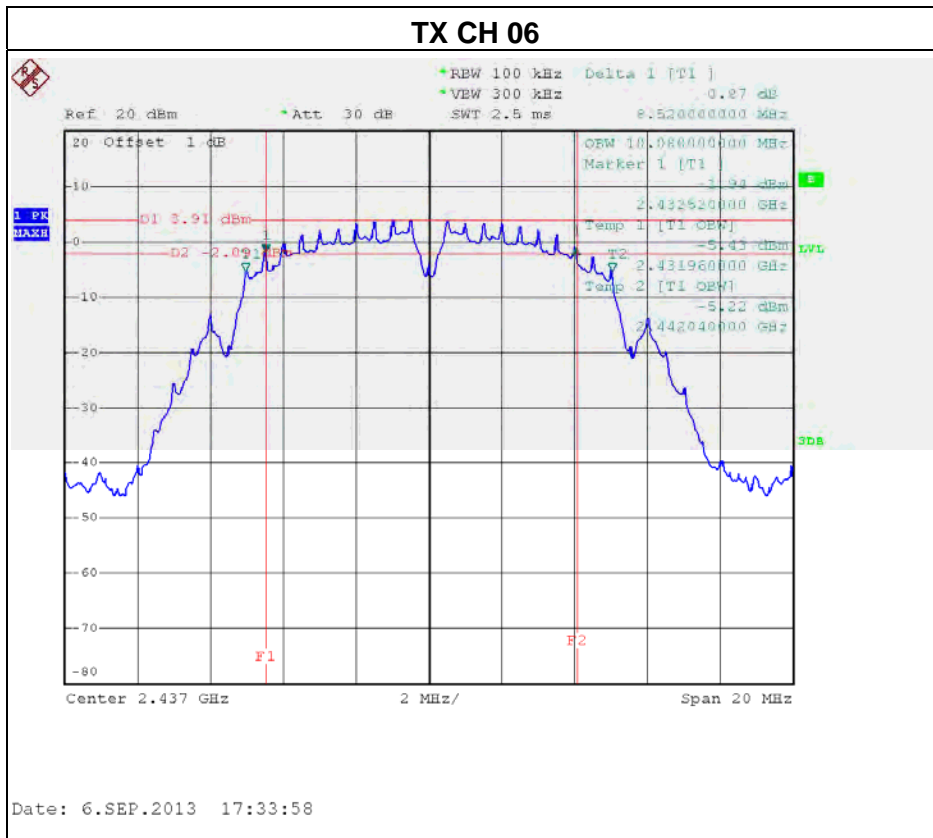
The EUT tested system was configured as the statements of 4.1.6 Unless otherwise a special operating condition is specified in the follows during the testing.

5.1.6 TEST RESULTS

EUT :	Wireless N301 Easy Setup Router	Model Name. :	N301
Temperature :	24 °C	Relative Humidity :	60 %
Pressure :	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE /CH01, CH06, CH11		

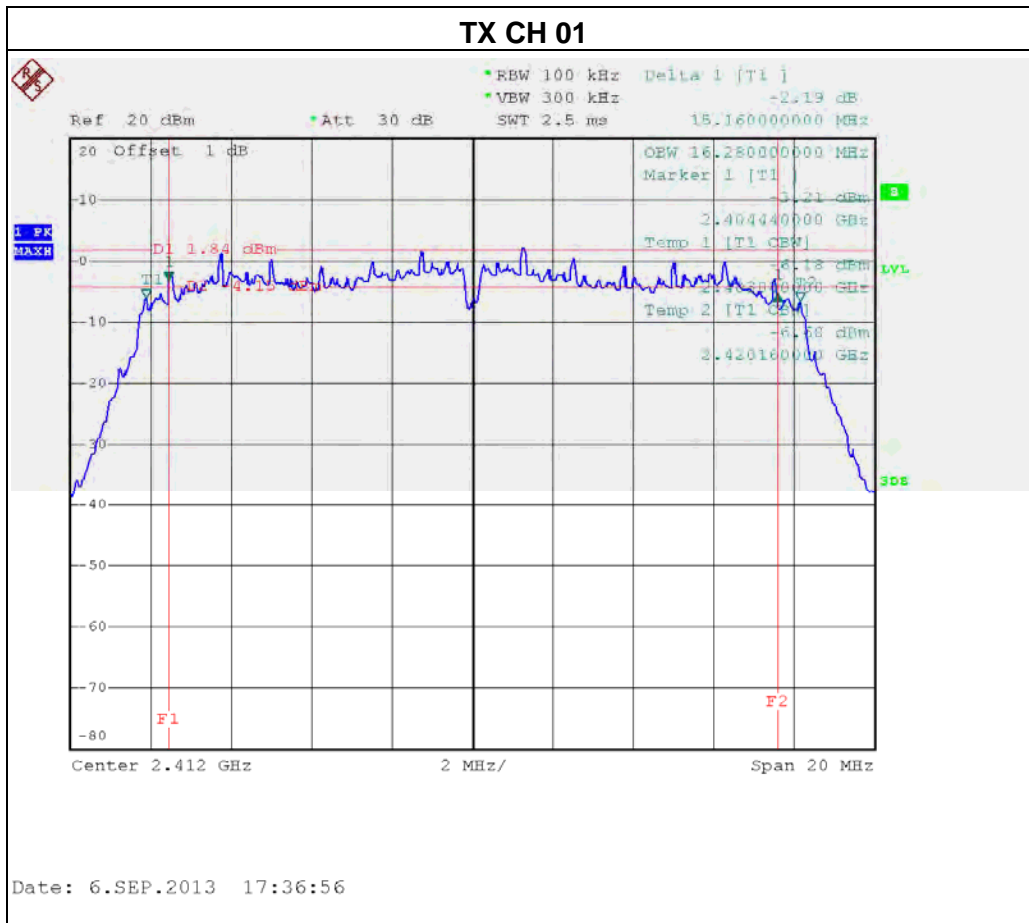
Test Channel	Frequency (MHz)	Bandwidth (MHz)	Result
CH01	2412	8.12	PASS
CH06	2437	8.52	PASS
CH11	2462	8.08	PASS

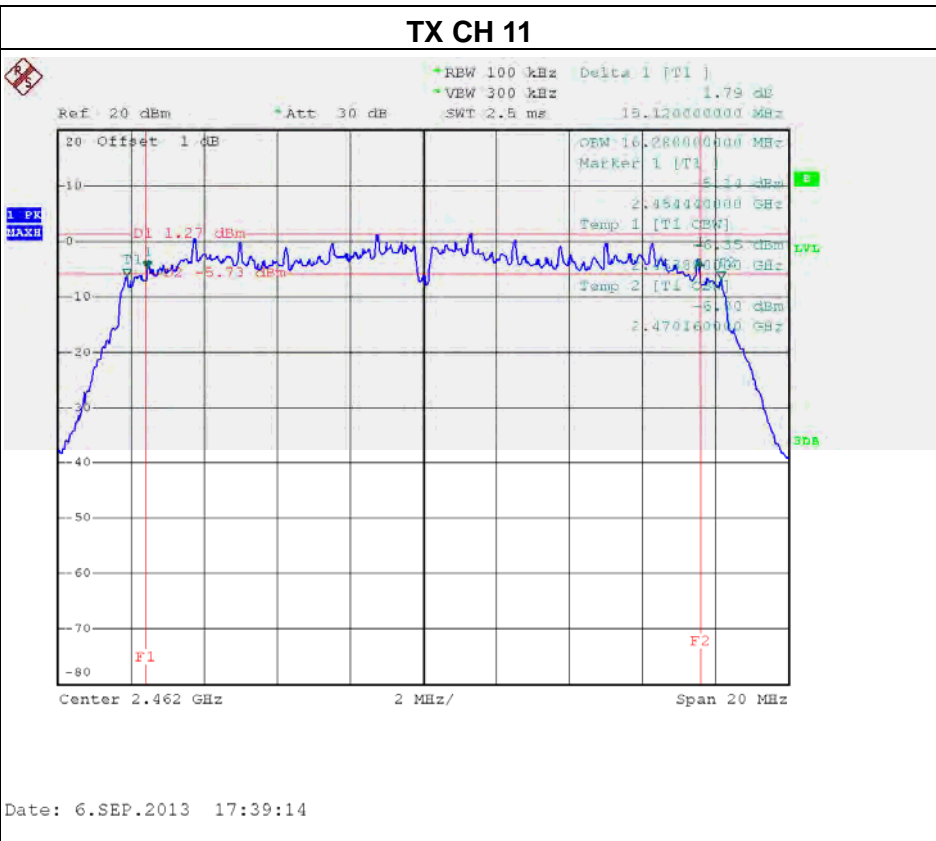
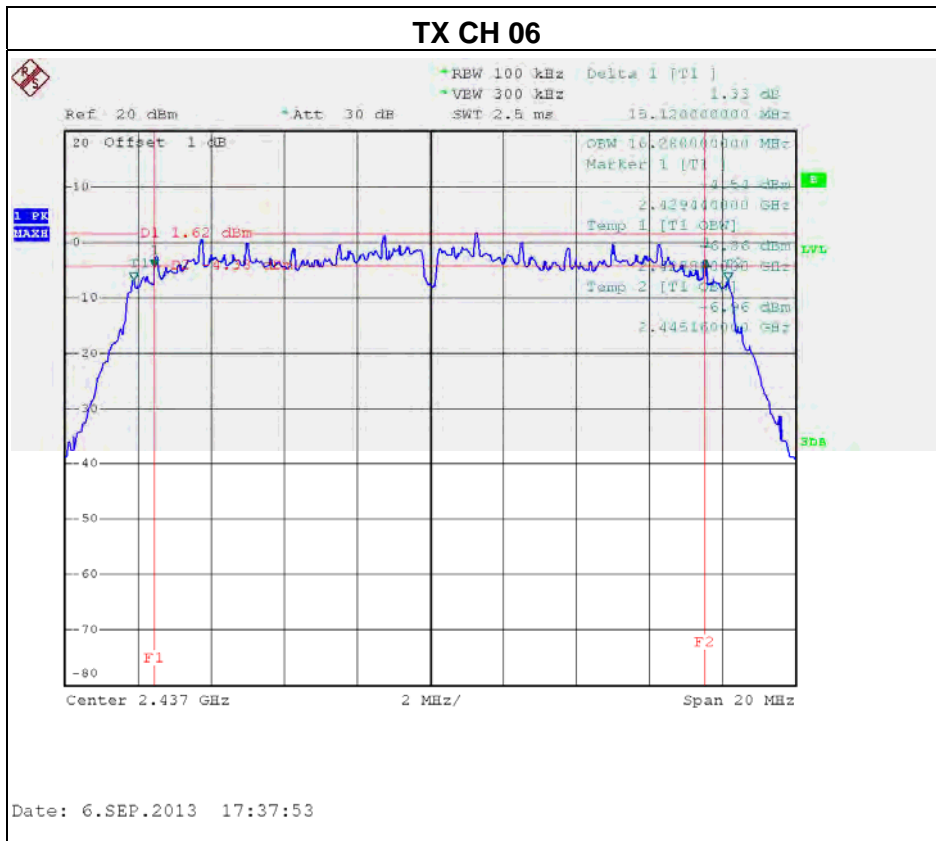




EUT :	Wireless N301 Easy Setup Router	Model Name. :	N301
Temperature :	24 °C	Relative Humidity :	60 %
Pressure :	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX G MODE /CH01, CH06, CH11		

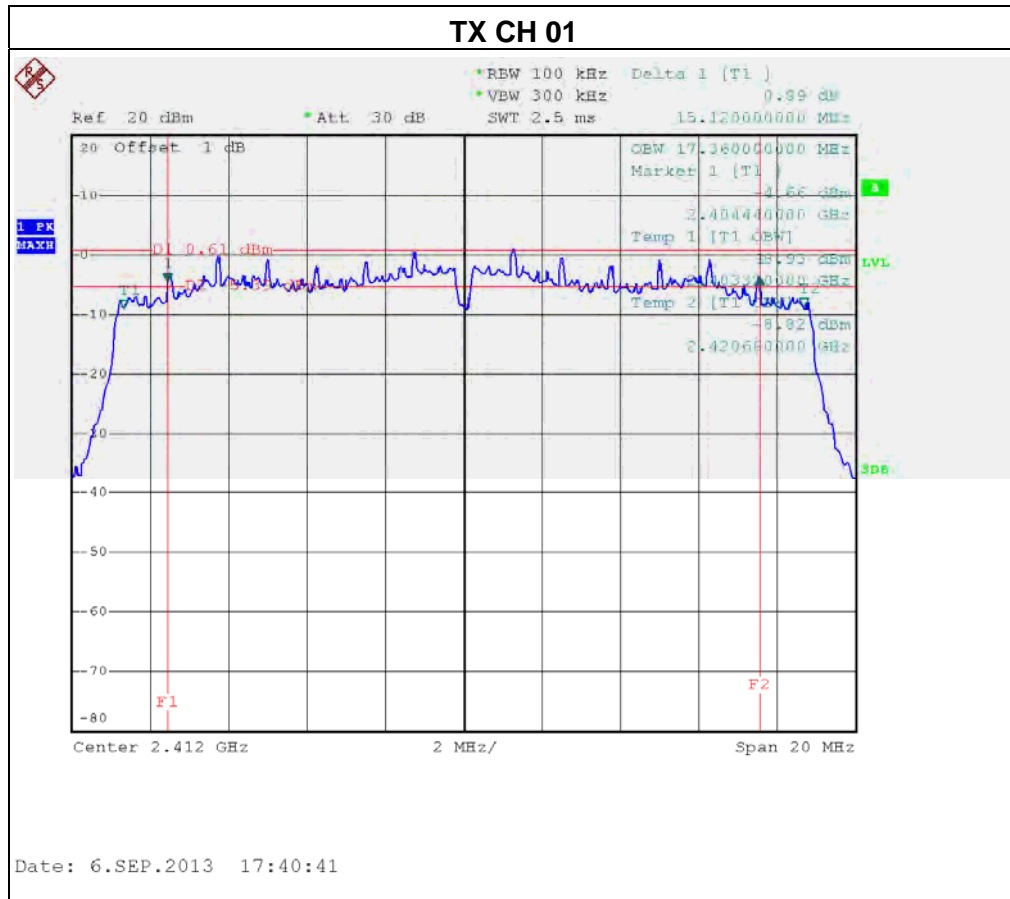
Test Channel	Frequency (MHz)	Bandwidth (MHz)	Result
CH01	2412	15.16	PASS
CH06	2437	15.12	PASS
CH11	2462	15.12	PASS

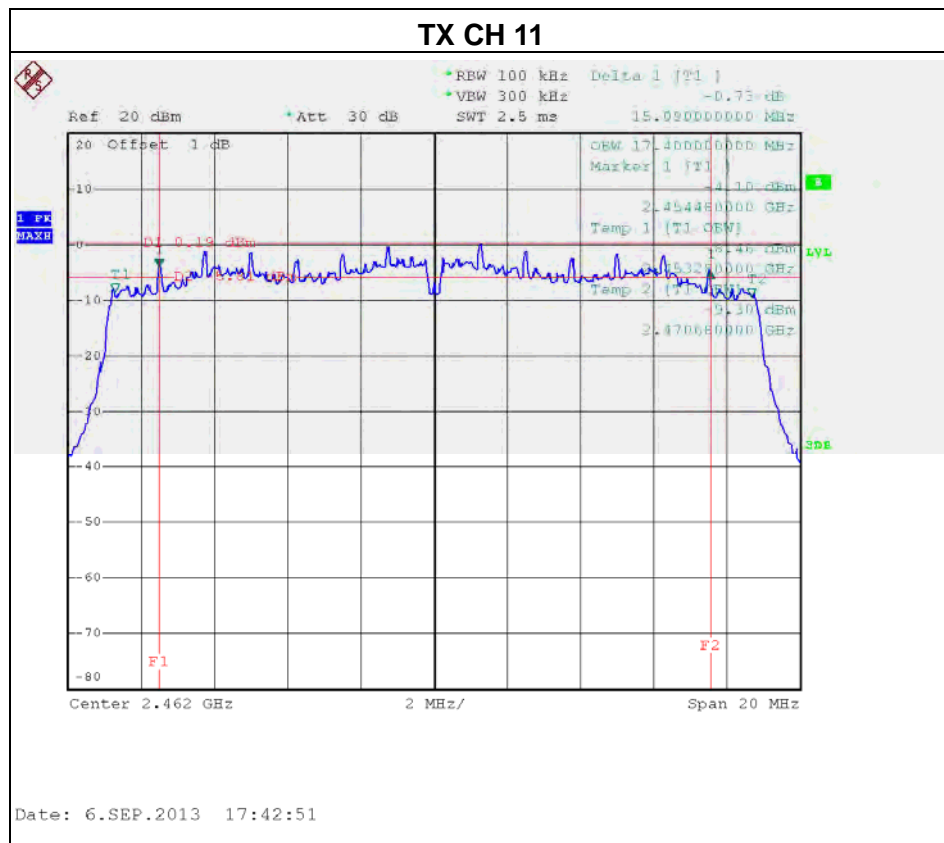
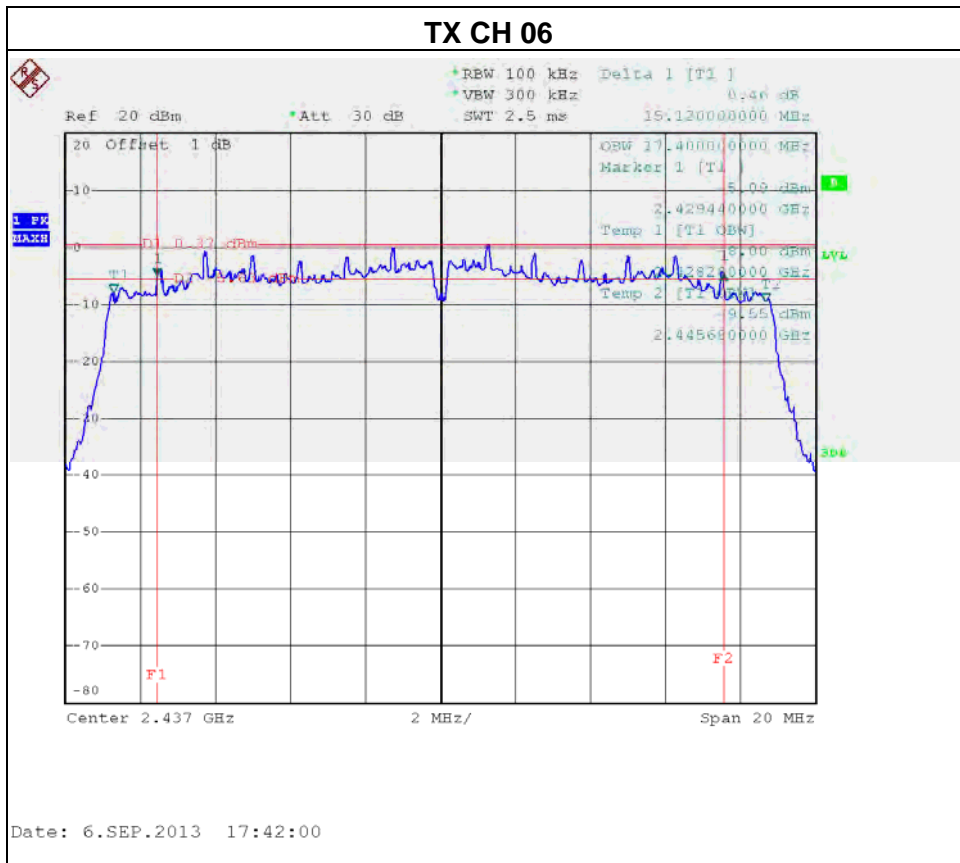




EUT :	Wireless N301 Easy Setup Router	Model Name. :	N301
Temperature :	24 °C	Relative Humidity :	60 %
Pressure :	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N MODE -20MHz/ CH01, CH06, CH11-ANT 1		

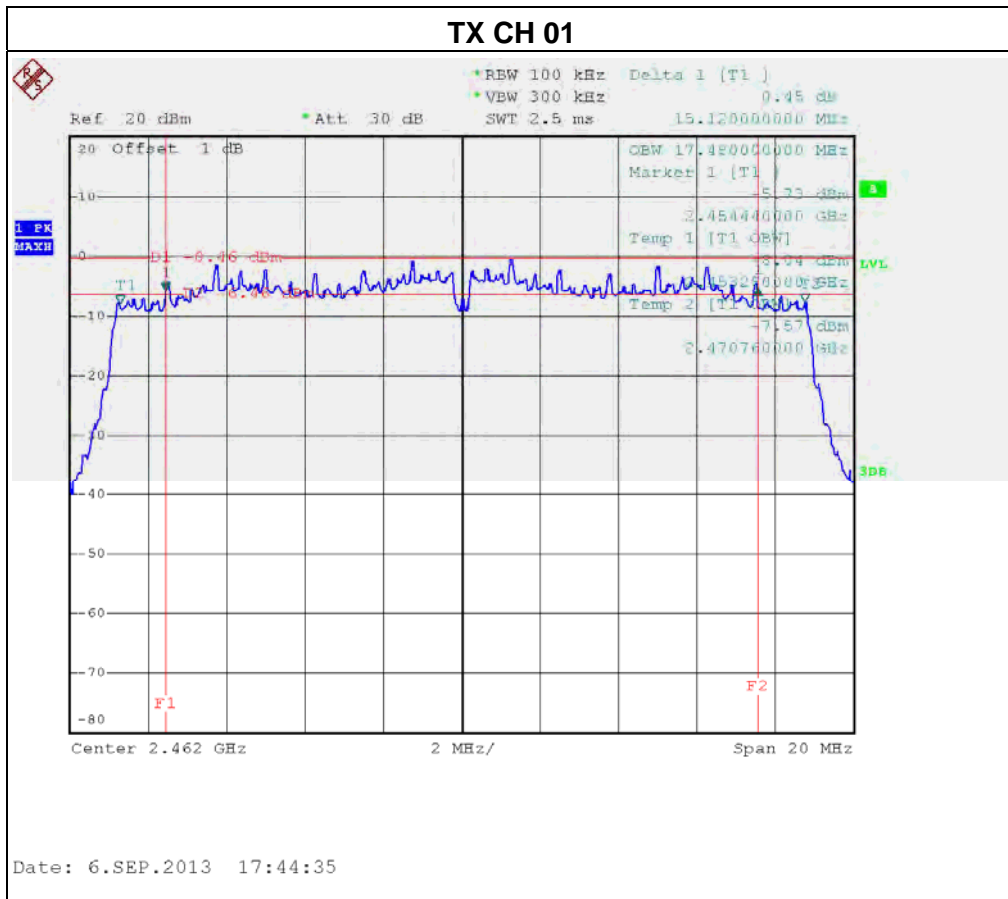
Test Channel	Frequency (MHz)	Bandwidth (MHz)	Result
CH01	2412	15.12	PASS
CH06	2437	15.12	PASS
CH11	2462	15.08	PASS

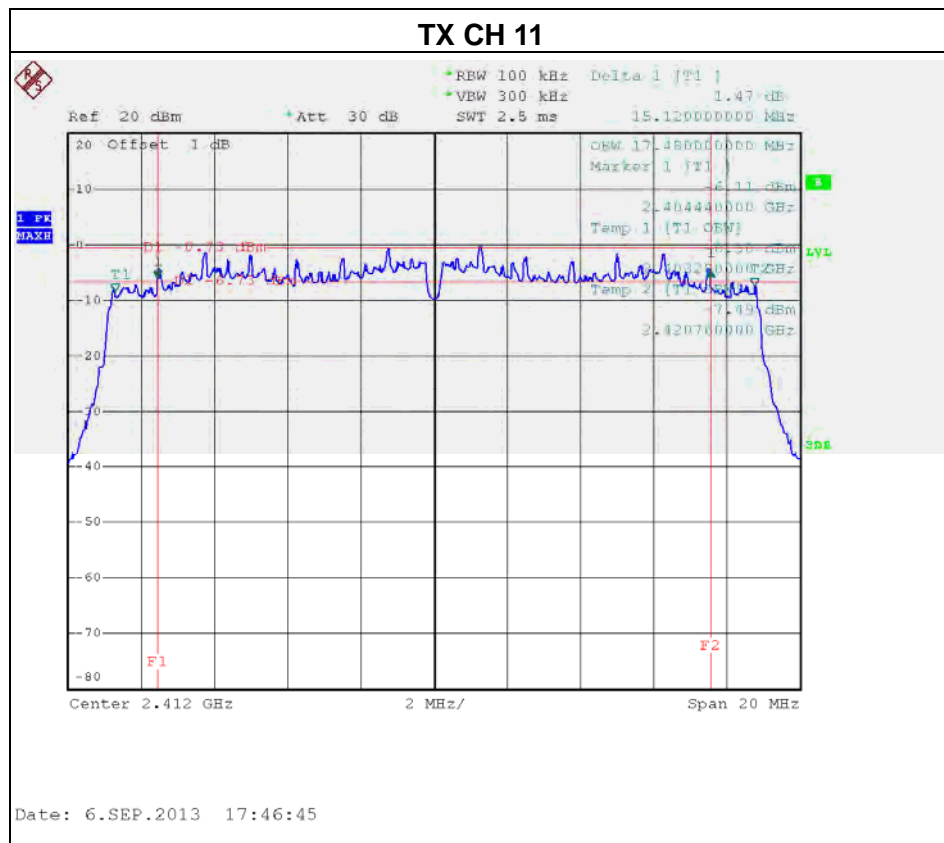
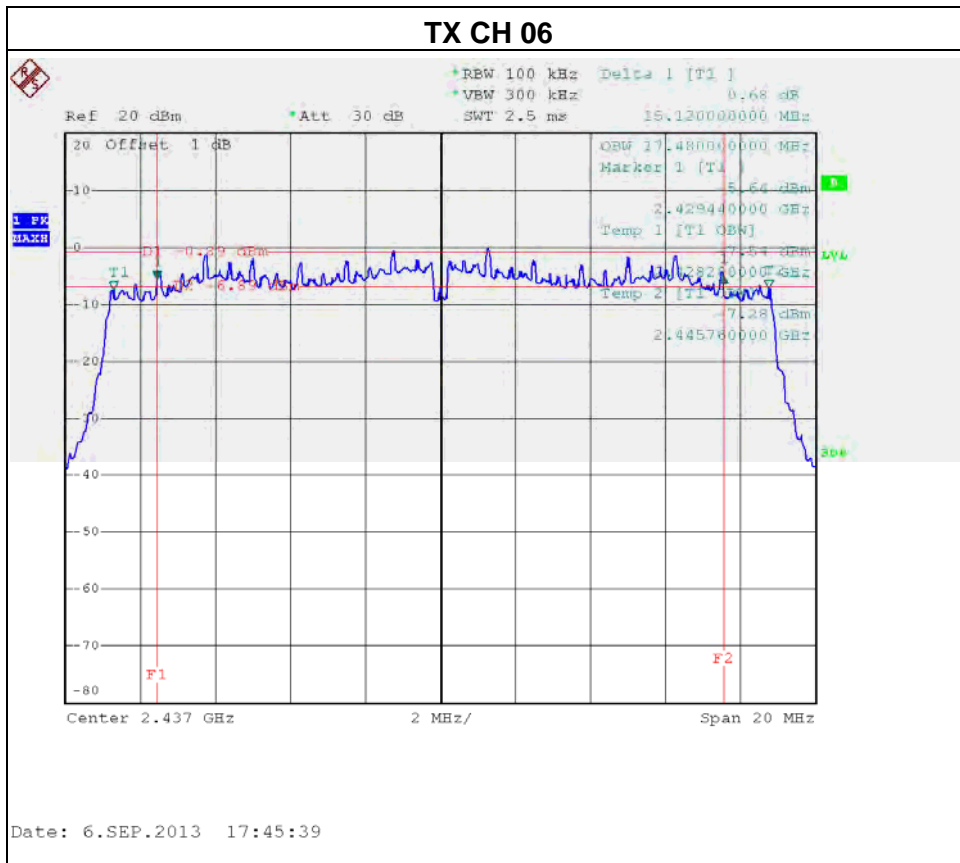




EUT :	Wireless N301 Easy Setup Router	Model Name. :	N301
Temperature :	24 °C	Relative Humidity :	60 %
Pressure :	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N MODE -20MHz/ CH01, CH06, CH11-ANT 2		

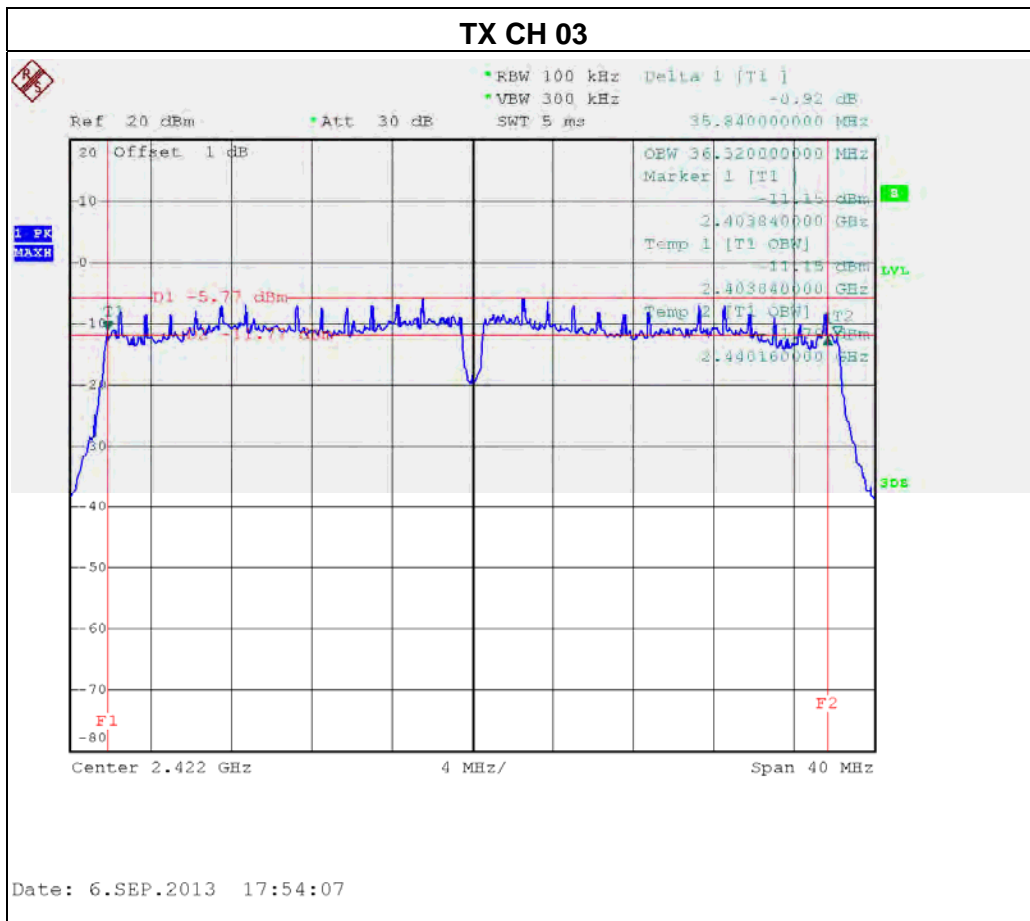
Test Channel	Frequency (MHz)	Bandwidth (MHz)	Result
CH01	2412	15.12	PASS
CH06	2437	15.12	PASS
CH11	2462	15.12	PASS

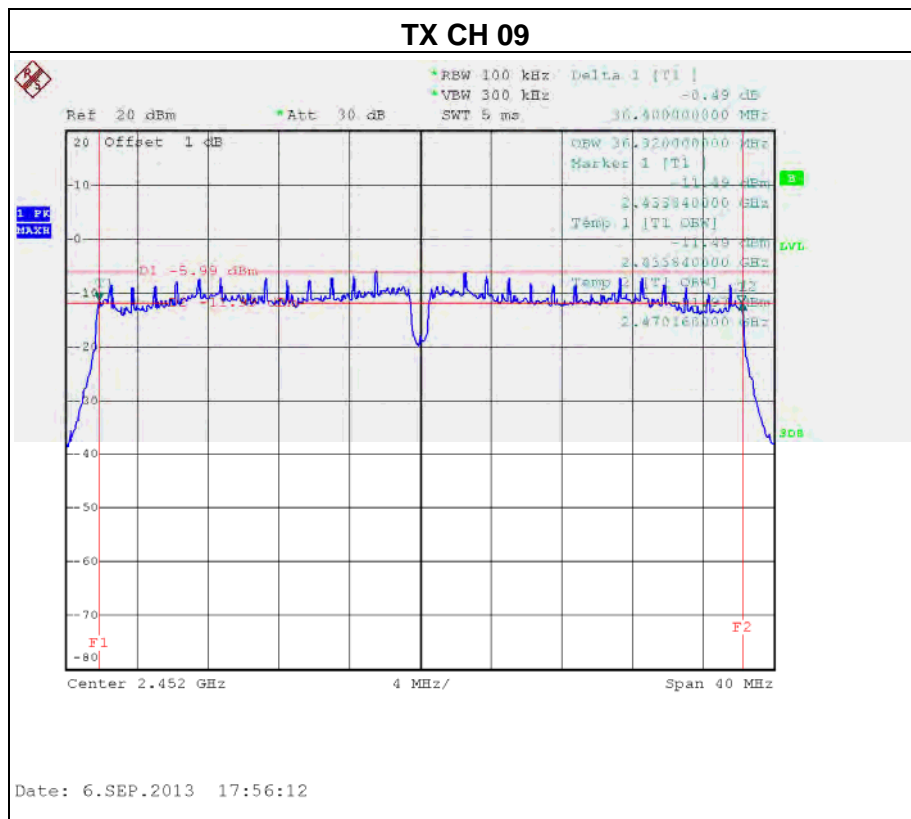
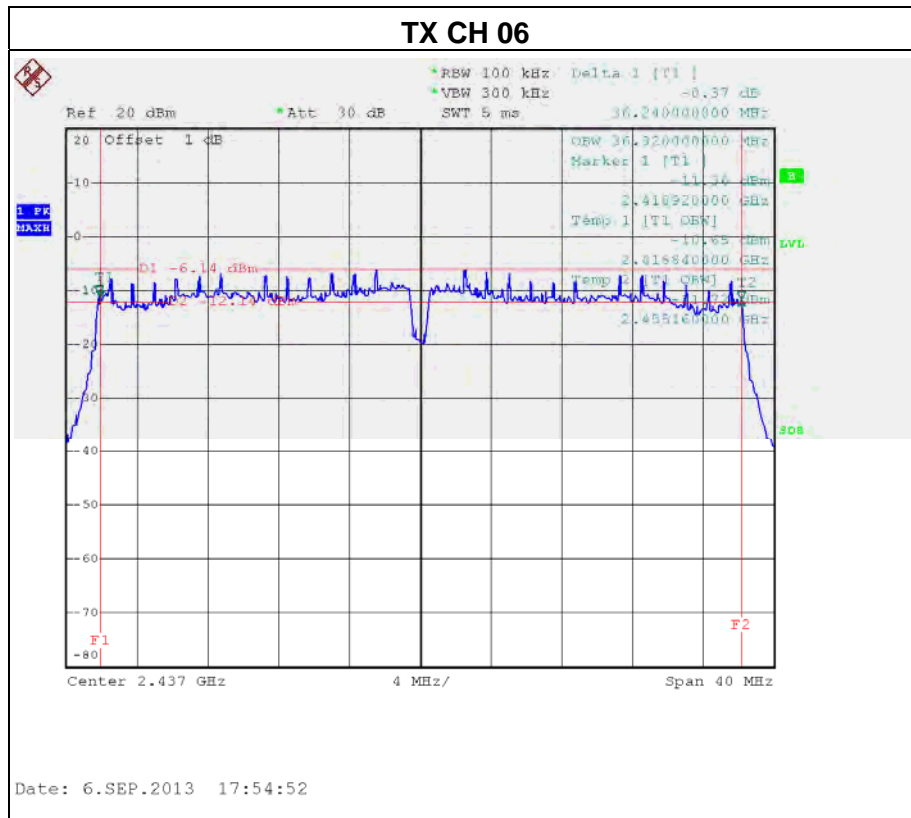




EUT :	Wireless N301 Easy Setup Router	Model Name. :	N301
Temperature :	24 °C	Relative Humidity :	60 %
Pressure :	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N MODE -40MHz/ CH03, CH06, CH09-ANT 1		

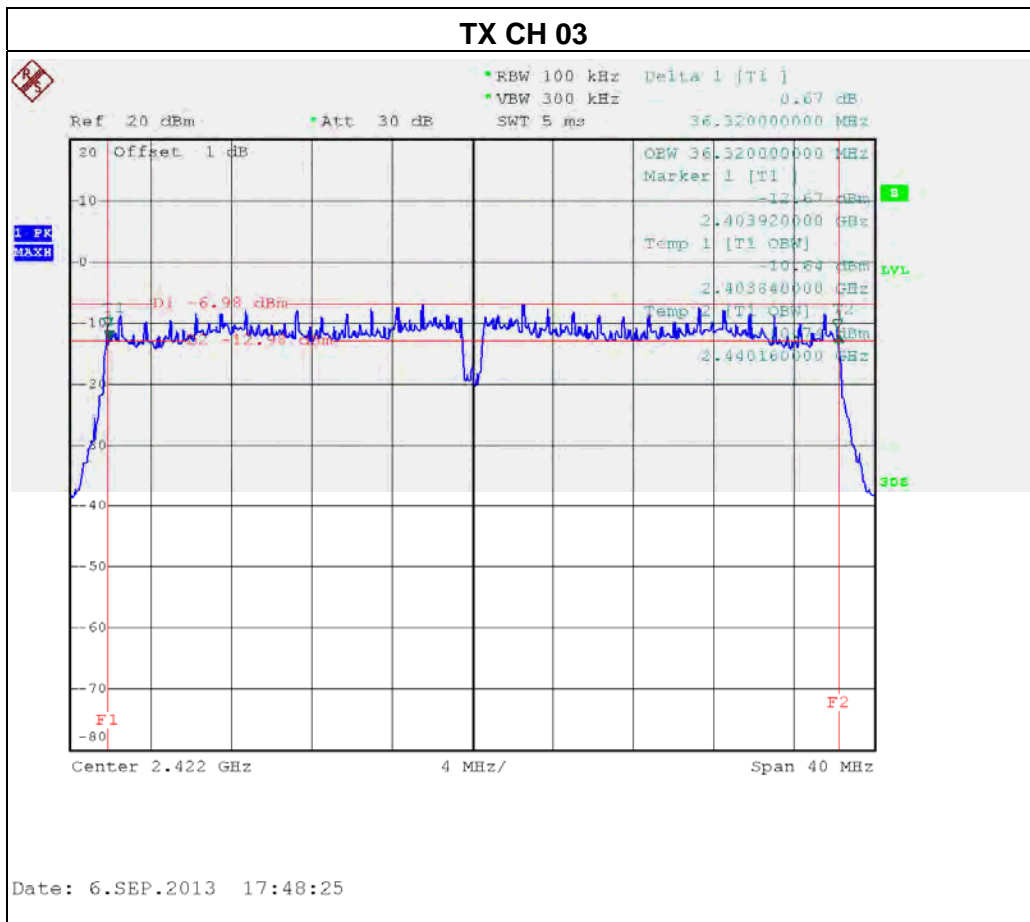
Test Channel	Frequency (MHz)	Bandwidth (MHz)	Result
CH03	2422	35.84	PASS
CH06	2437	36.24	PASS
CH09	2452	36.40	PASS

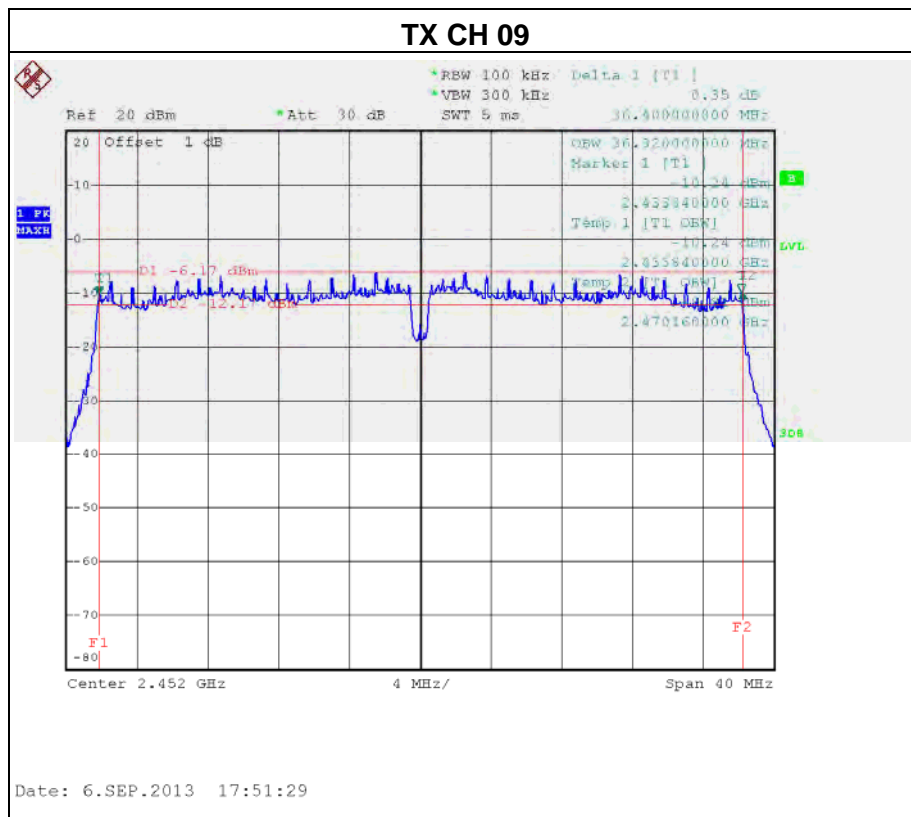
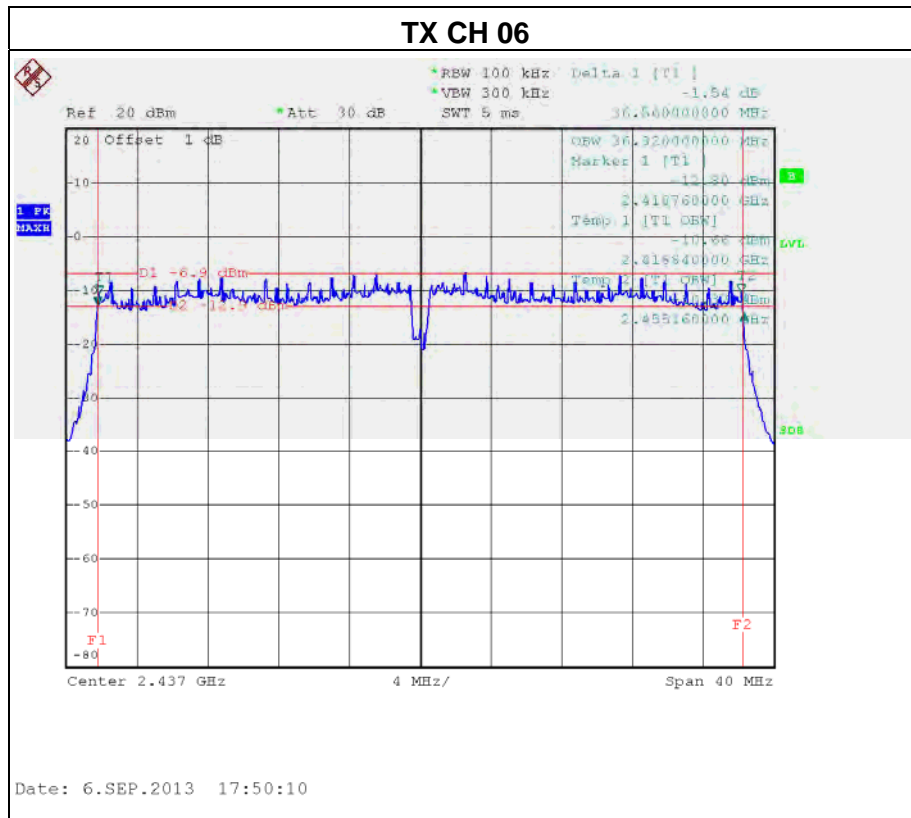




EUT :	Wireless N301 Easy Setup Router	Model Name. :	N301
Temperature :	24 °C	Relative Humidity :	60 %
Pressure :	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N MODE -40MHz/ CH03, CH06, CH09-ANT 2		

Test Channel	Frequency (MHz)	Bandwidth (MHz)	Result
CH03	2422	36.32	PASS
CH06	2437	36.56	PASS
CH09	2452	36.40	PASS





6. MAXIMUM OUTPUT POWER TEST

6.1 Applied procedures / limit

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

6.1.1 MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last Calibration	Next Calibration
1	P-series Power meter	Agilent	N1911A	MY45100473	May.04.2013	Apr.25.2014
2	Wireband Power sensor	Agilent	N1921A	MY51100041	May.04.2013	Apr.25.2014

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

All calibration period of equipment list is one year.

6.1.2 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 v03r05 and FCC KDB 662911 D01 Multiple Transmitter Output v02r01.

6.1.3 DEVIATION FROM STANDARD

No deviation.

6.1.4 TEST SETUP



6.1.5 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 4.1.6 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.

6.1.6 TEST RESULTS

EUT :	Wireless N301 Easy Setup Router	Model Name :	N301
Temperature :	24 °C	Relative Humidity :	60 %
Pressure :	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE /CH01, CH06, CH11		

Frequency (MHz)	Peak Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
2412 MHz	15.46	30	1
2437 MHz	15.49	30	1
2462 MHz	15.75	30	1

EUT :	Wireless N301 Easy Setup Router	Model Name :	N301
Temperature :	24 °C	Relative Humidity :	60 %
Pressure :	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX G MODE /CH01, CH06, CH11		

Frequency (MHz)	Peak Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
2412 MHz	18.97	30	1
2437 MHz	18.99	30	1
2462 MHz	18.83	30	1

EUT :	Wireless N301 Easy Setup Router	Model Name :	N301
Temperature :	24 °C	Relative Humidity :	60 %
Pressure :	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-20M MODE /CH01, CH06, CH11-ANT 1		

Frequency (MHz)	Peak Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
2412 MHz	18.54	30	1
2437 MHz	18.63	30	1
2462 MHz	18.47	30	1

EUT :	Wireless N301 Easy Setup Router	Model Name :	N301
Temperature :	24 °C	Relative Humidity :	60 %
Pressure :	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-20M MODE /CH01, CH06, CH11-ANT 2		

Frequency (MHz)	Peak Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
2412 MHz	18.39	30	1
2437 MHz	18.45	30	1
2462 MHz	18.56	30	1

EUT :	Wireless N301 Easy Setup Router	Model Name :	N301
Temperature :	24 °C	Relative Humidity :	60 %
Pressure :	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-20M MODE /CH01, CH06, CH11-ANT 1+ANT 2		

Frequency (MHz)	Peak Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
2412 MHz	21.48	30	1
2437 MHz	21.55	30	1
2462 MHz	21.53	30	1

Note: The EUT incorporates a MIMO function. Physically, the EUT provides two completed transmitters and two receivers (2T2R), all transmit signals are completely uncorrelated, then, Direction gain = G_{ANT} , that is Directional gain=4.94.

EUT :	Wireless N301 Easy Setup Router	Model Name :	N301
Temperature :	24 °C	Relative Humidity :	60 %
Pressure :	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-40M MODE /CH03, CH06, CH09-ANT 1		

Frequency (MHz)	Peak Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
2422 MHz	14.56	30	1
2437 MHz	14.35	30	1
2452 MHz	14.67	30	1

EUT :	Wireless N301 Easy Setup Router	Model Name :	N301
Temperature :	24 °C	Relative Humidity :	60 %
Pressure :	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-40M MODE /CH03, CH06, CH09-ANT 2		

Frequency (MHz)	Peak Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
2422 MHz	14.49	30	1
2437 MHz	14.52	30	1
2452 MHz	14.54	30	1

EUT :	Wireless N301 Easy Setup Router	Model Name :	N301
Temperature :	24 °C	Relative Humidity :	60 %
Pressure :	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-40M MODE /CH03, CH06, CH09-ANT 1+ANT 2		

Frequency (MHz)	Peak Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
2422 MHz	17.54	30	1
2437 MHz	17.45	30	1
2452 MHz	17.62	30	1

Note: The EUT incorporates a MIMO function. Physically, the EUT provides two completed transmitters and two receivers (2T2R), all transmit signals are completely uncorrelated, then, Direction gain = G_{ANT} , that is Directional gain=4.94.

7. ANTENNA CONDUCTED SPURIOUS EMISSION

7.1 Applied procedures / limit

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.

Frequencies (MHz)	Field Strength (micorvolts/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

7.1.1 MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last Calibration	Next Calibration
1	Spectrum Analyzer	R&S	FSP_40	100185	Nov. 17.2012	Nov. 16.2013

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

7.1.2 TEST PROCEDURE

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

7.1.3 DEVIATION FROM STANDARD

No deviation.

7.1.4 TEST SETUP



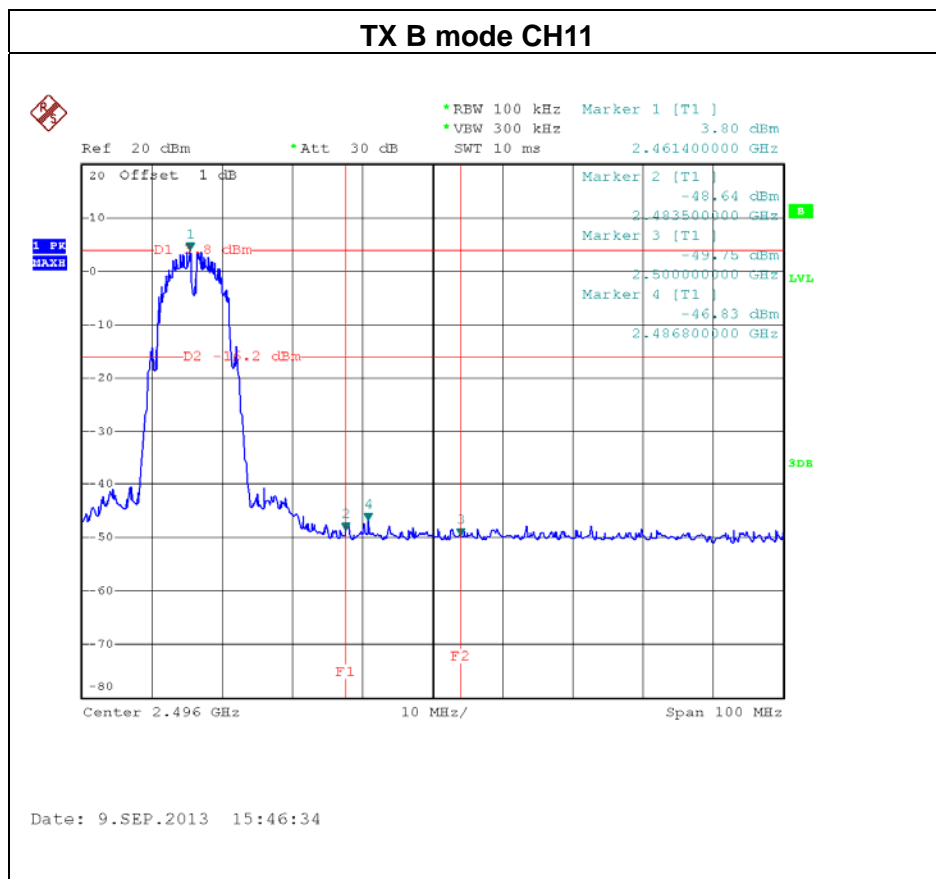
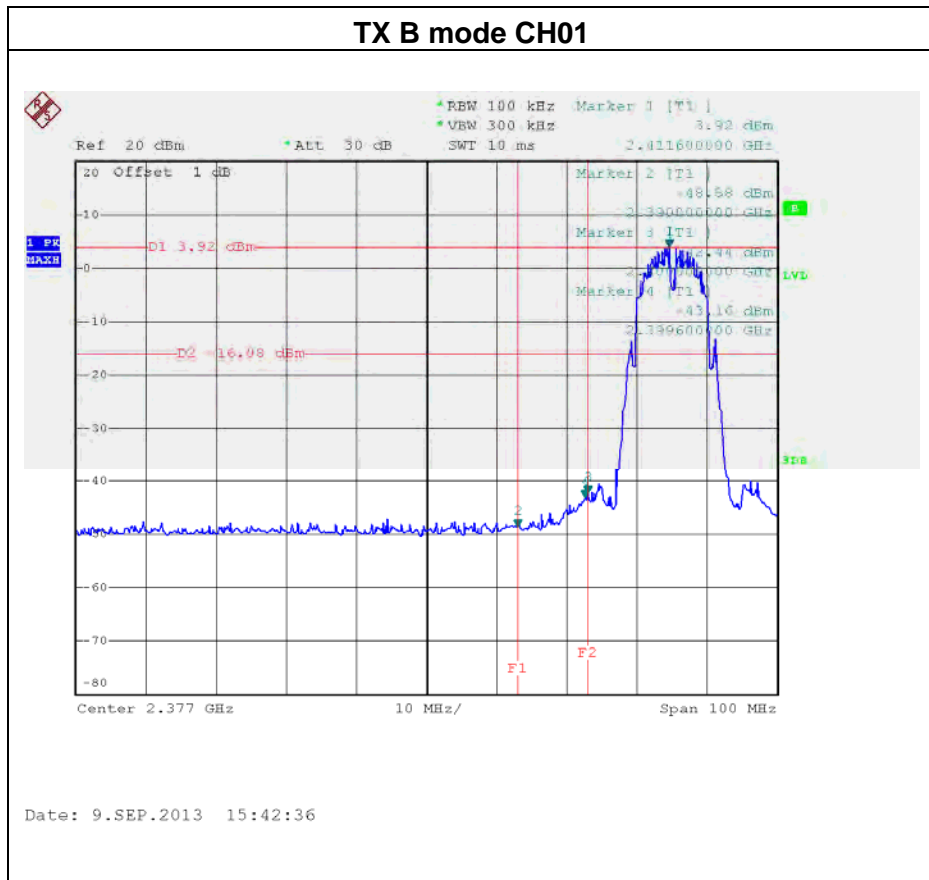
7.1.5 EUT OPERATION CONDITIONS

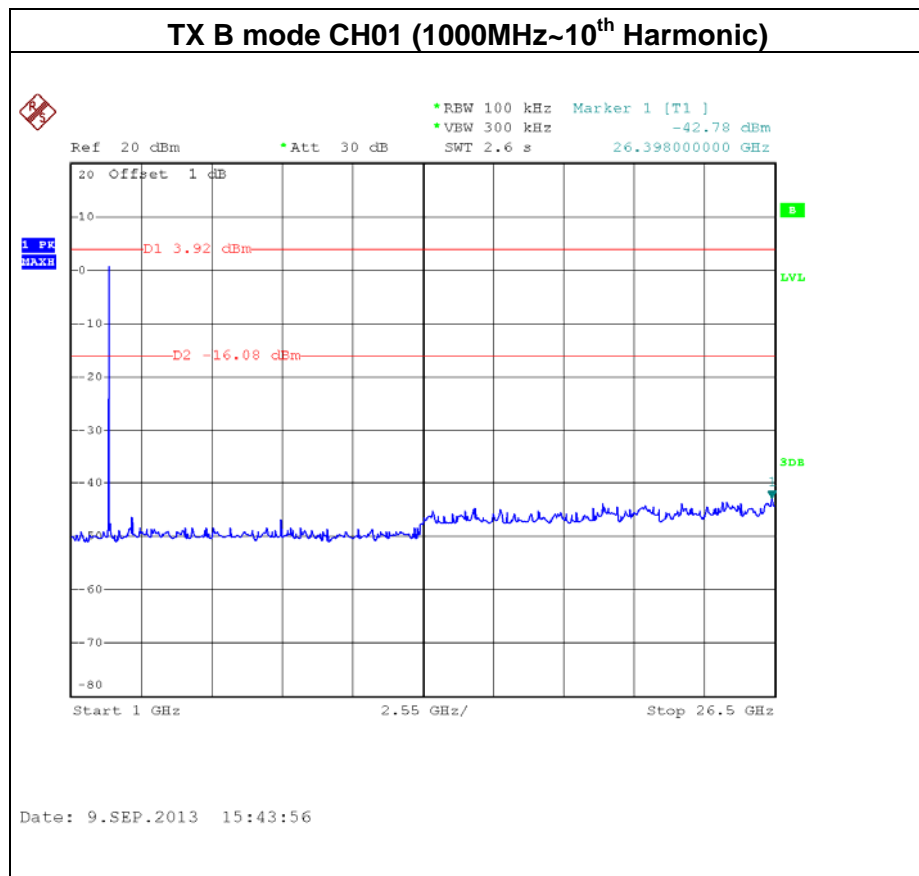
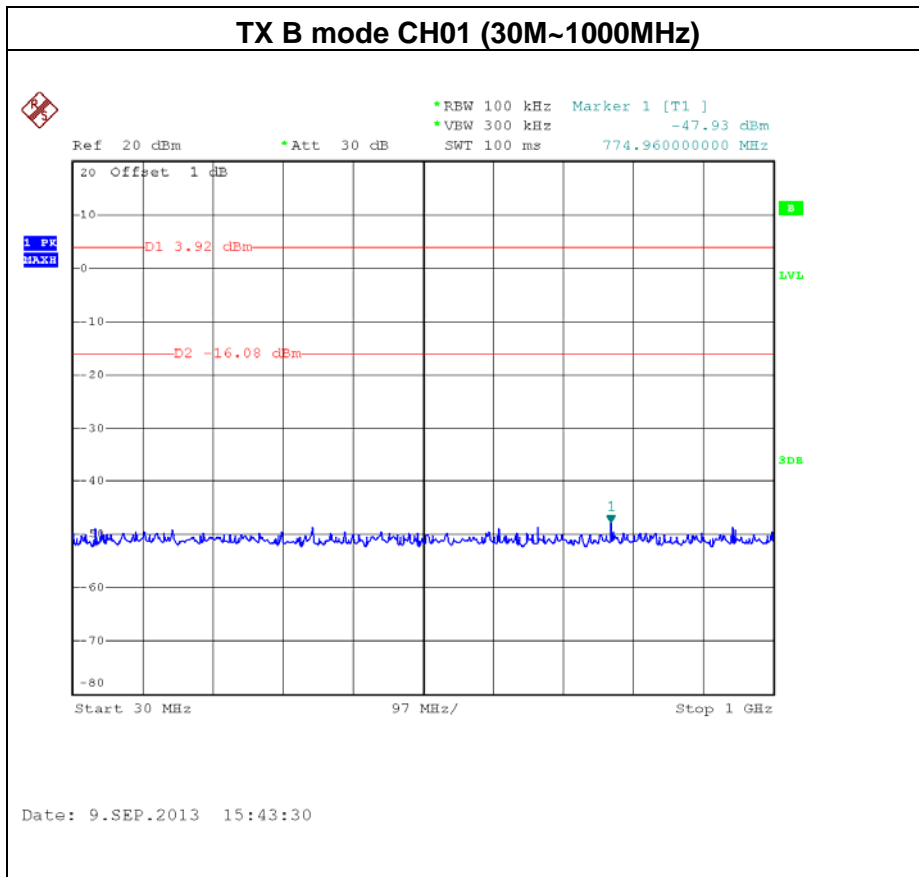
The EUT tested system was configured as the statements of 4.1.6 Unless otherwise a special operating condition is specified in the follows during the testing.

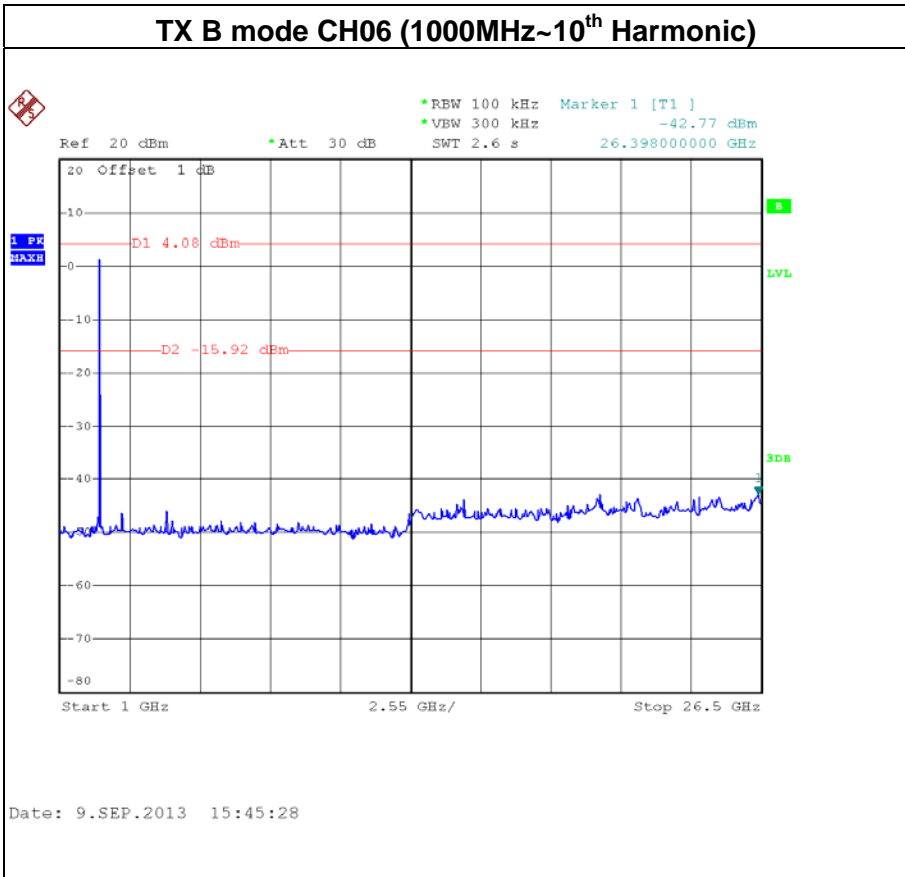
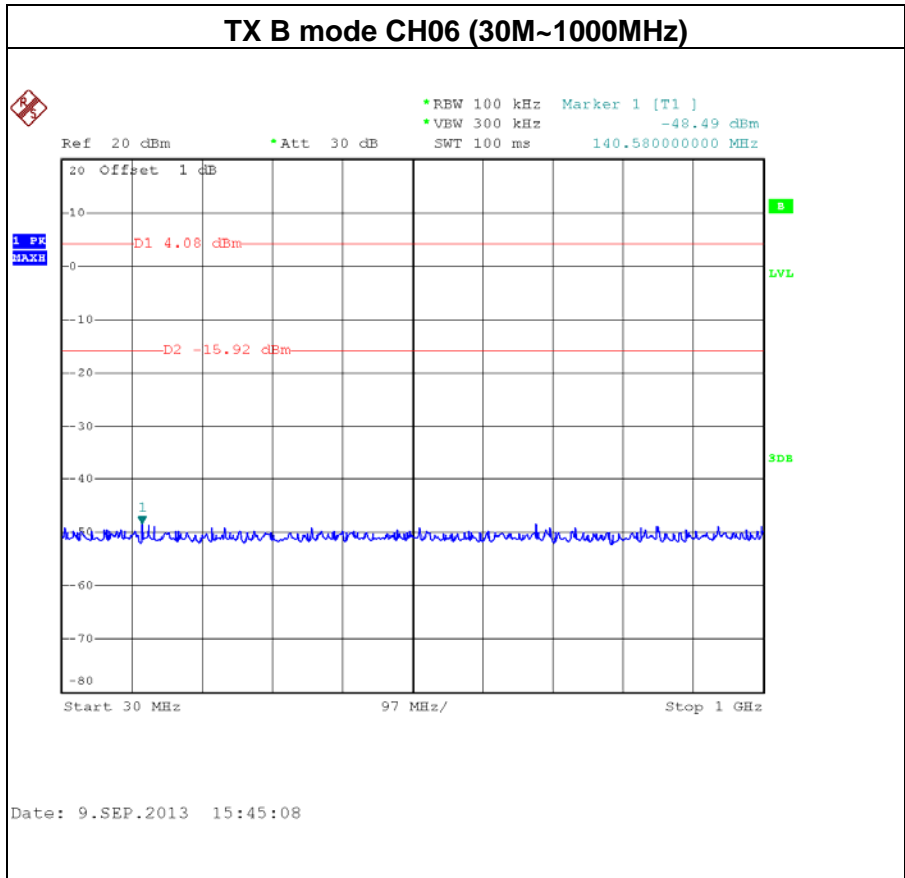
7.1.6 TEST RESULTS

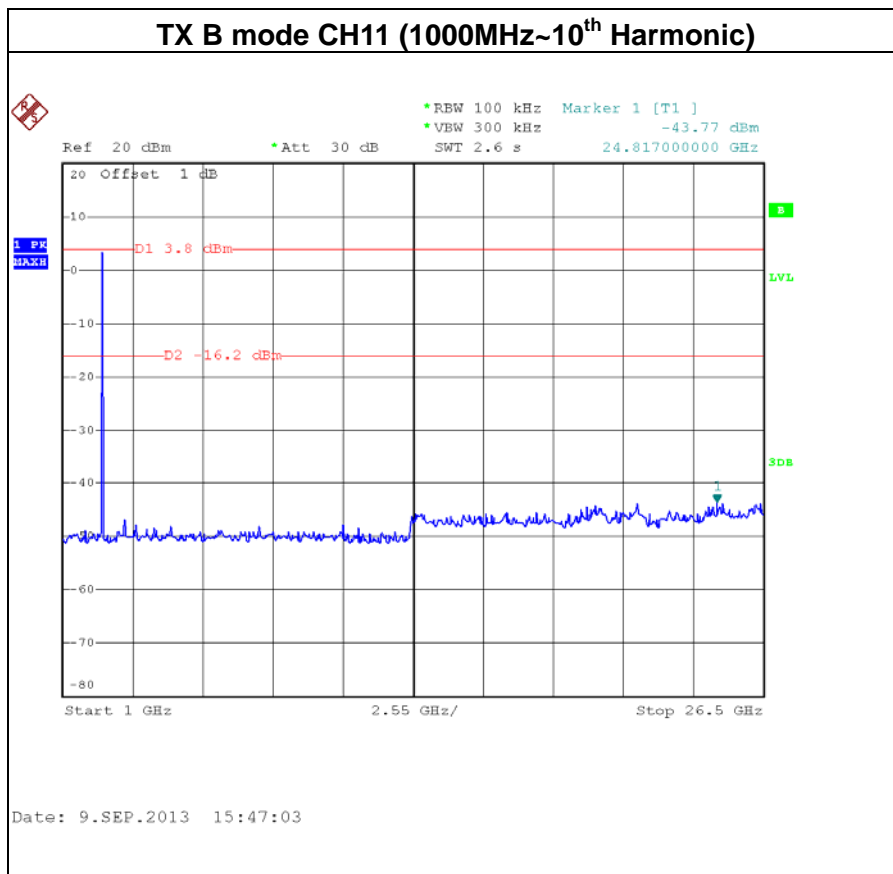
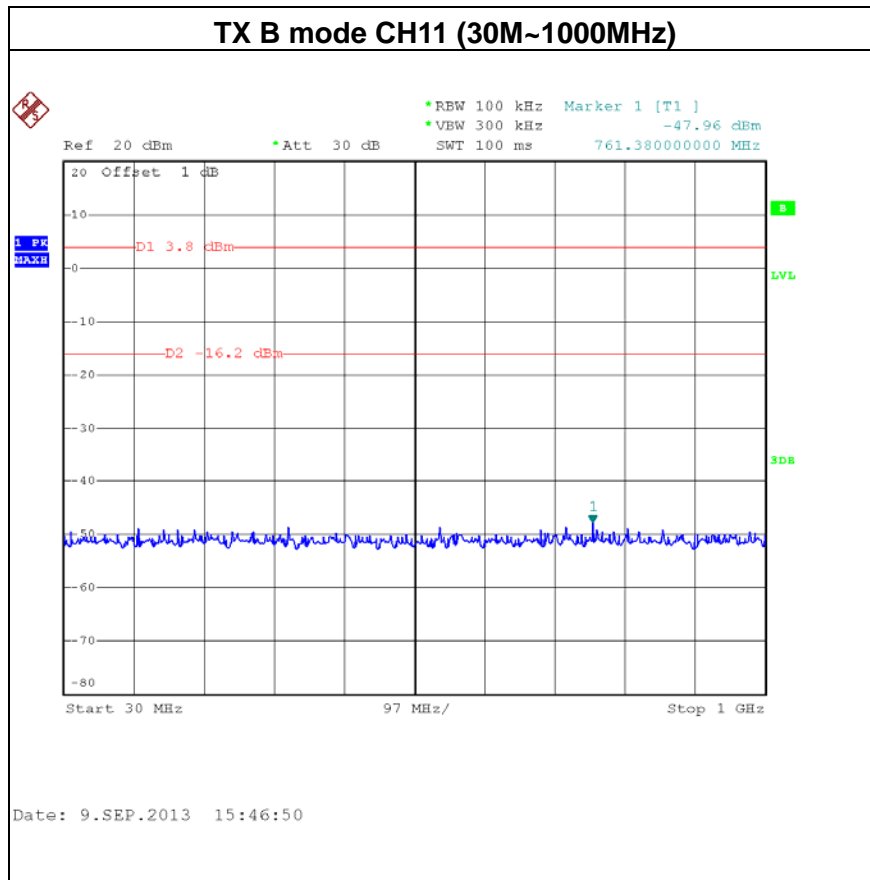
EUT :	Wireless N301 Easy Setup Router	Model Name :	N301
Temperature :	24 °C	Relative Humidity :	60 %
Pressure :	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE /CH01, CH06 , CH11		

Channel of Worst Data: CH01			
The max. radio frequency power in any 100kHz bandwidth outside the frequency band		The max. radio frequency power in any 100 kHz bandwidth within the frequency band.	
FREQUENCY(MHz)	POWER(dBm)	FREQUENCY(MHz)	POWER(dBm)
2400.00	-42.44	2486.80	-46.83
Result			
In any 100kHz bandwidth outside the frequency band, the radio frequency power is at least 20dB below that in the 100kHz bandwidth within the band that contains the highest lever of the desired power.			



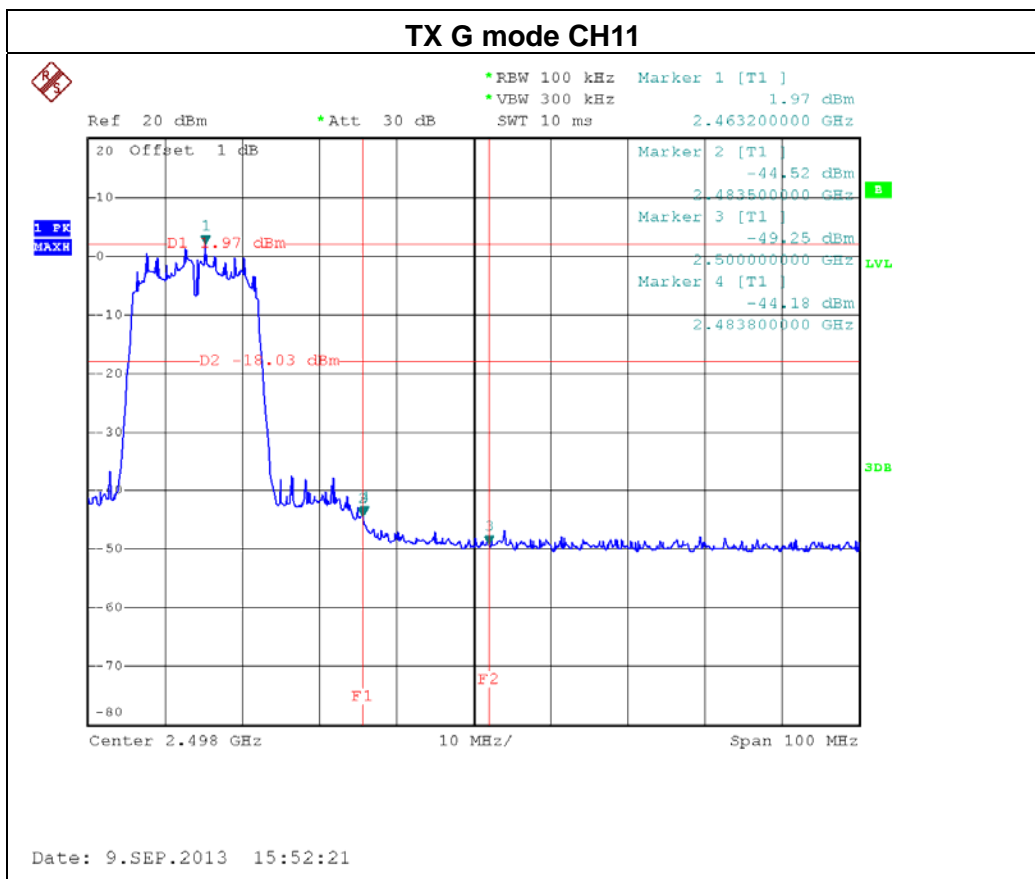
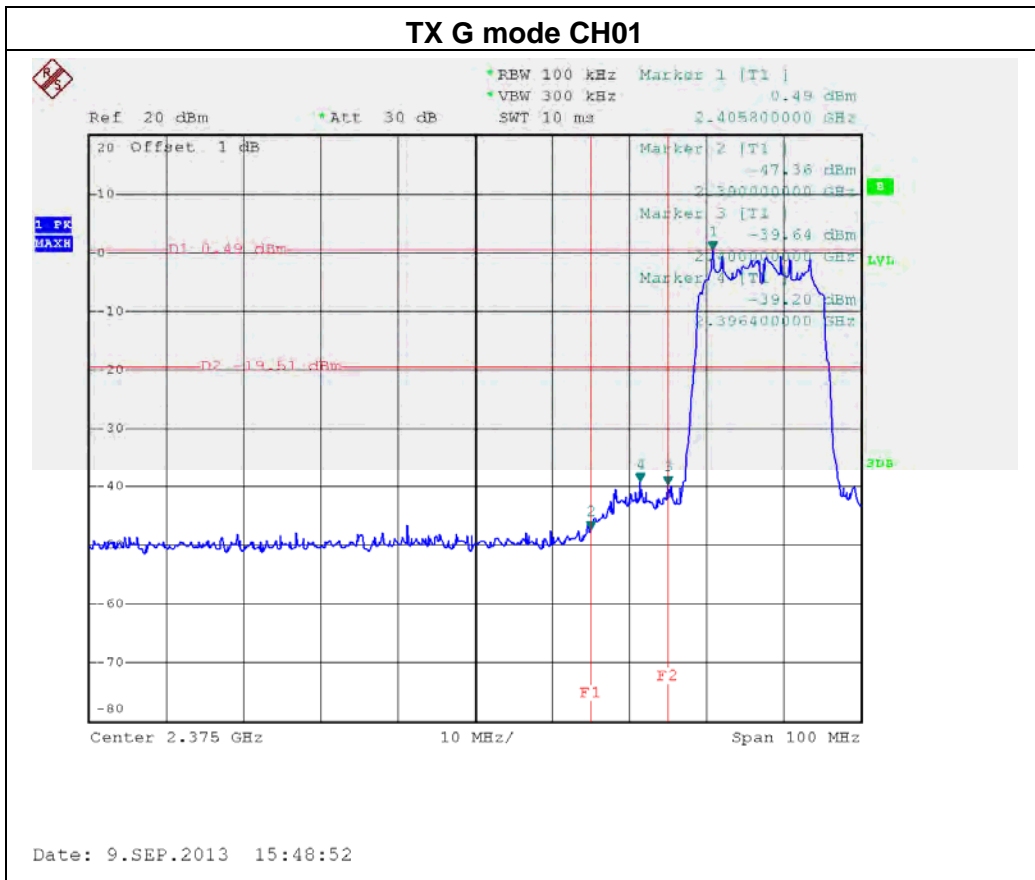


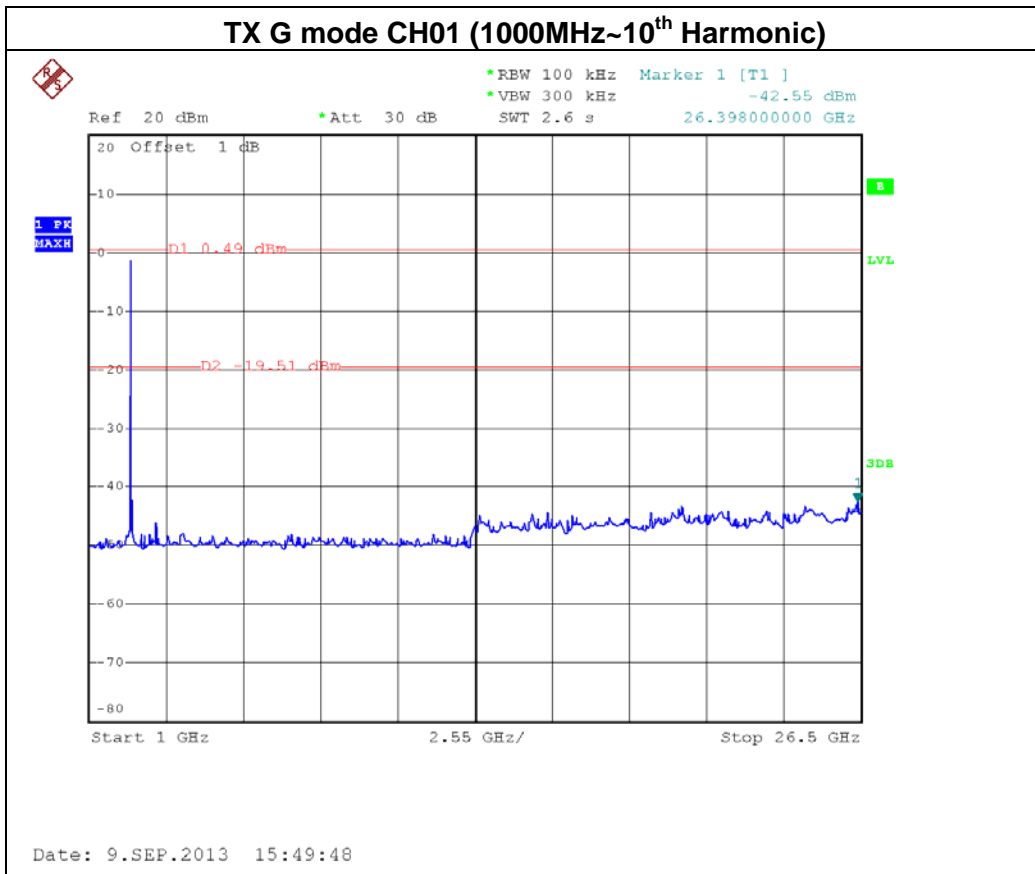
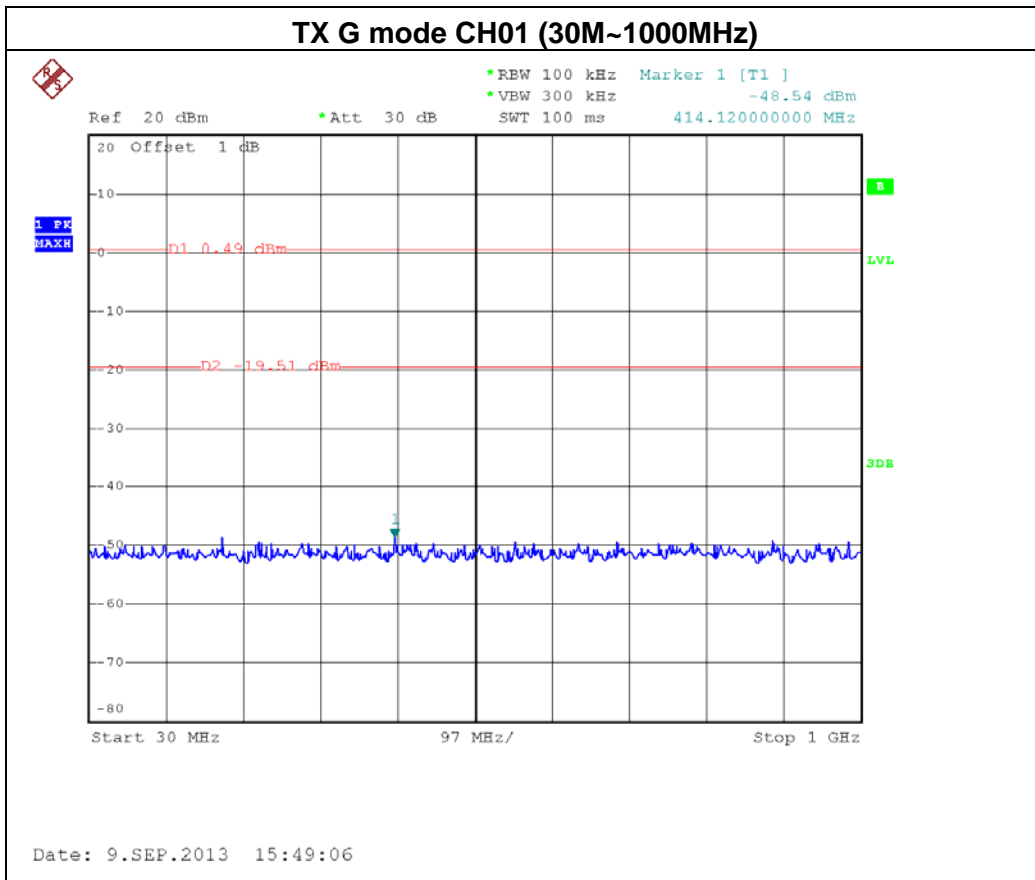


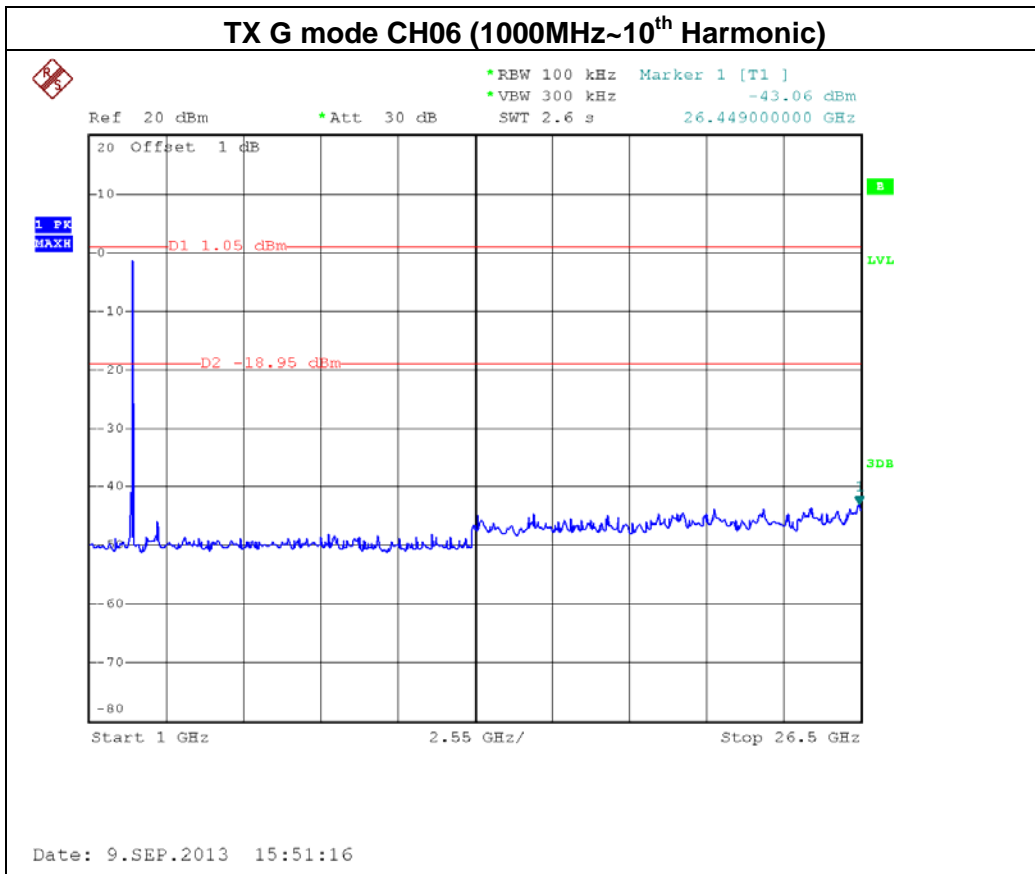
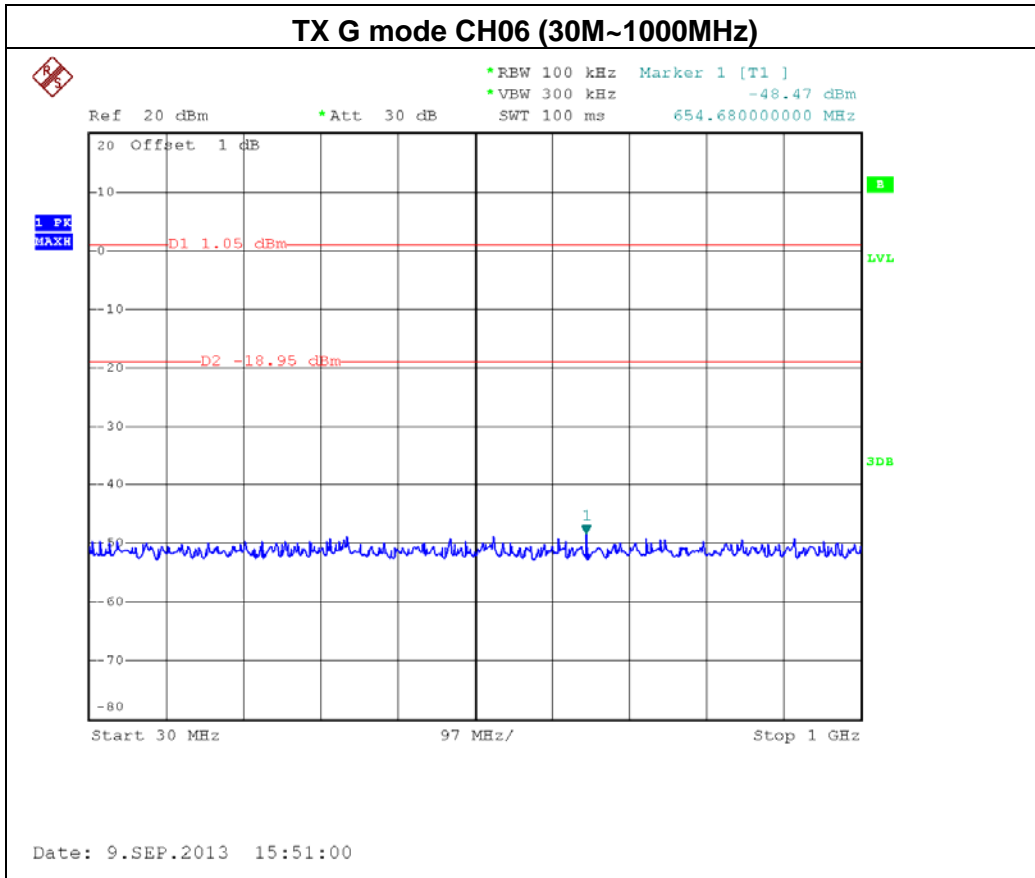


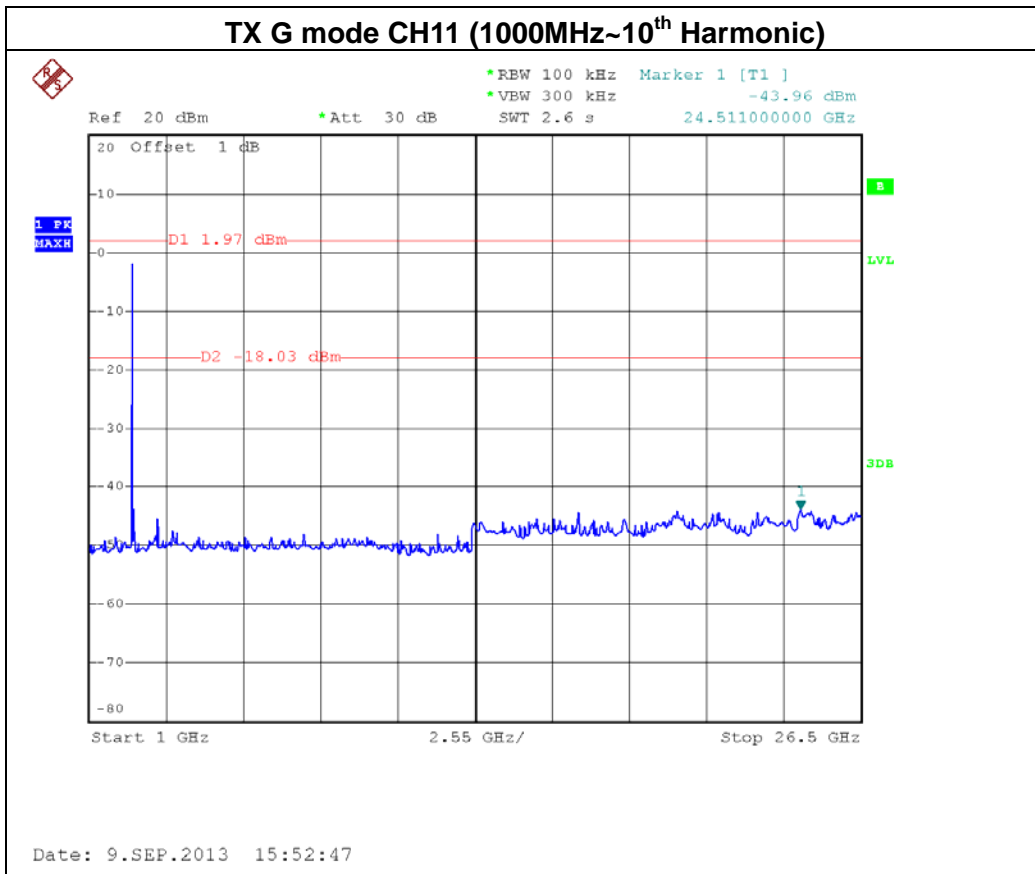
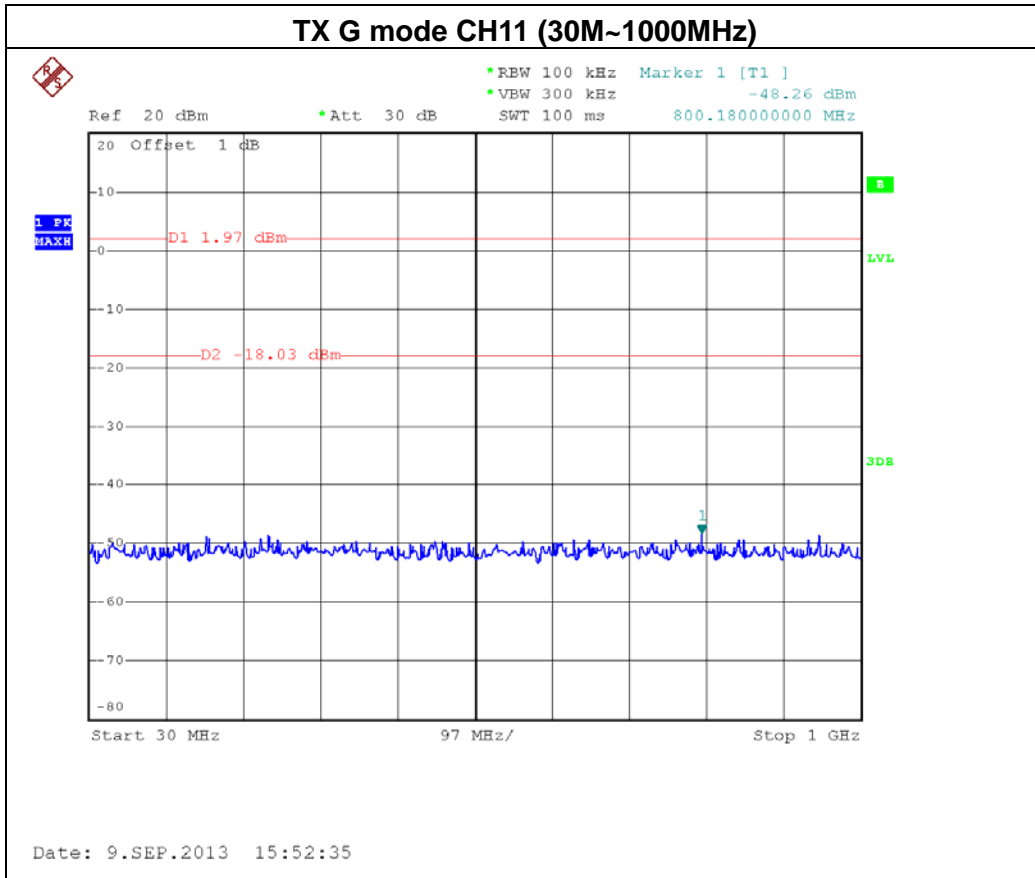
EUT :	Wireless N301 Easy Setup Router	Model Name :	N301
Temperature :	24 °C	Relative Humidity :	60 %
Pressure :	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX G MODE / CH01, CH06 , CH11		

Channel of Worst Data: CH01			
The max. radio frequency power in any 100kHz bandwidth outside the frequency band		The max. radio frequency power in any 100 kHz bandwidth within the frequency band.	
FREQUENCY(MHz)	POWER(dBm)	FREQUENCY(MHz)	POWER(dBm)
2396.40	-39.20	2483.80	-44.18
Result			
In any 100kHz bandwidth outside the frequency band, the radio frequency power is at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power.			



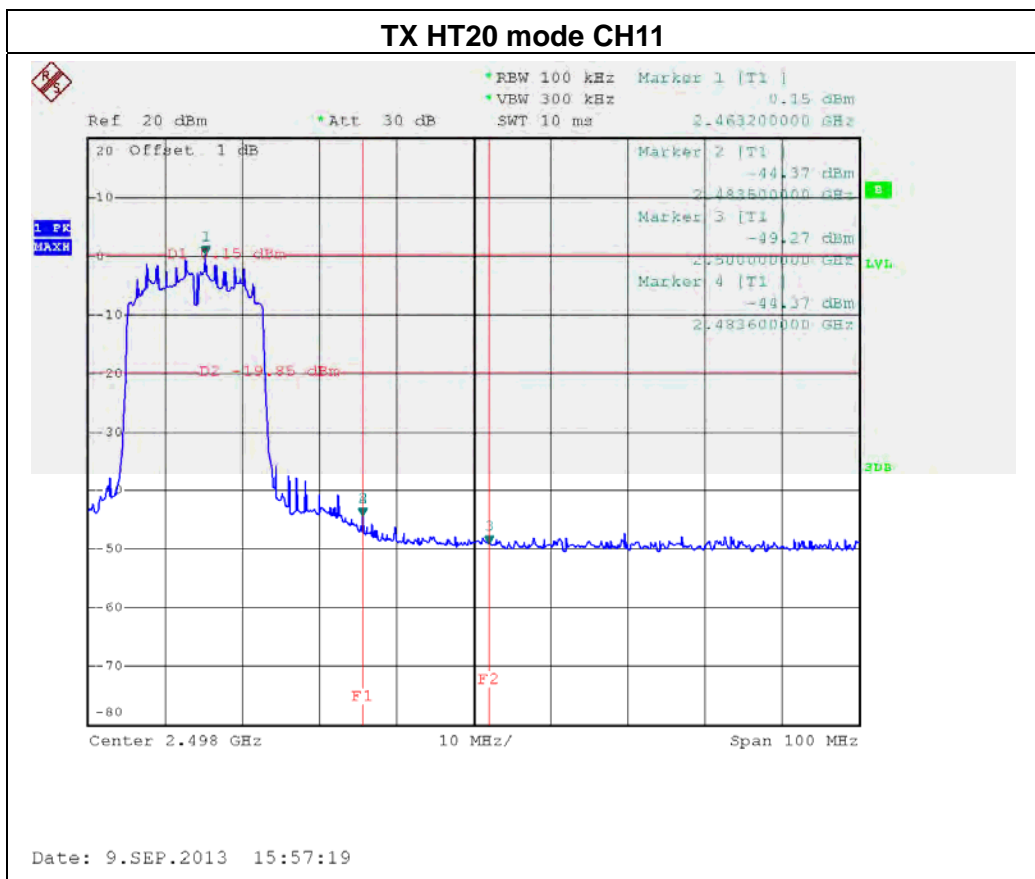
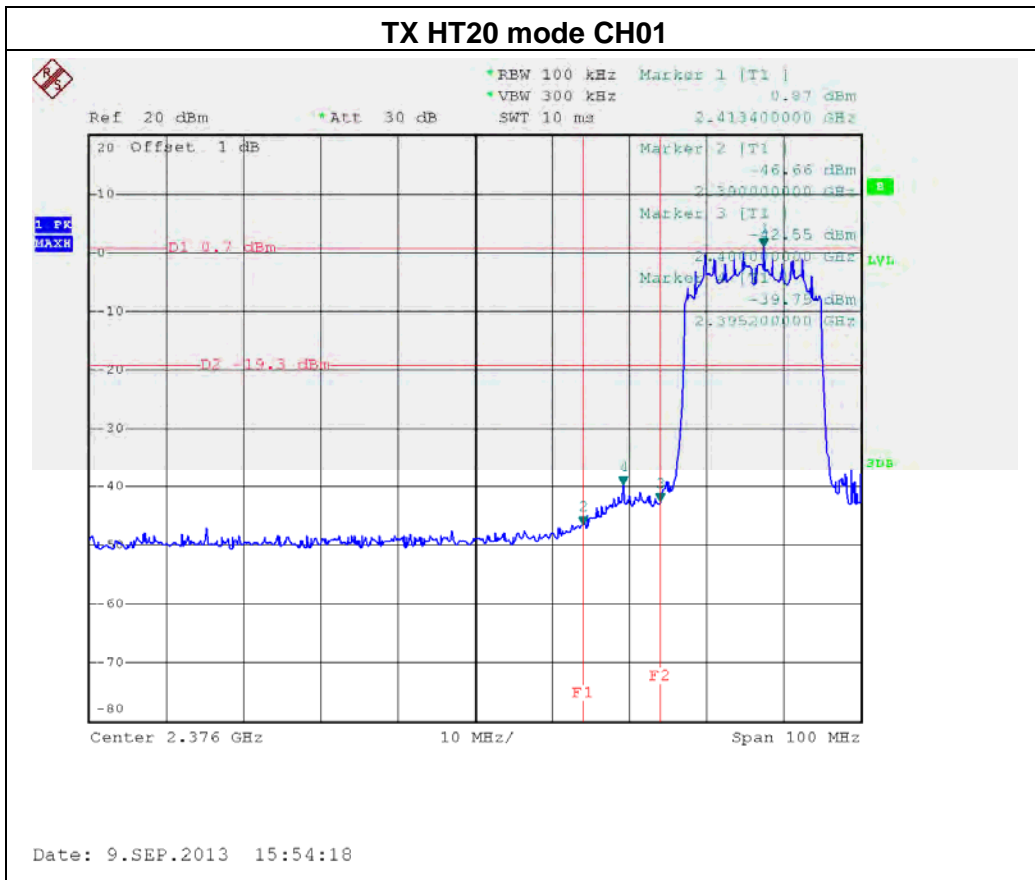


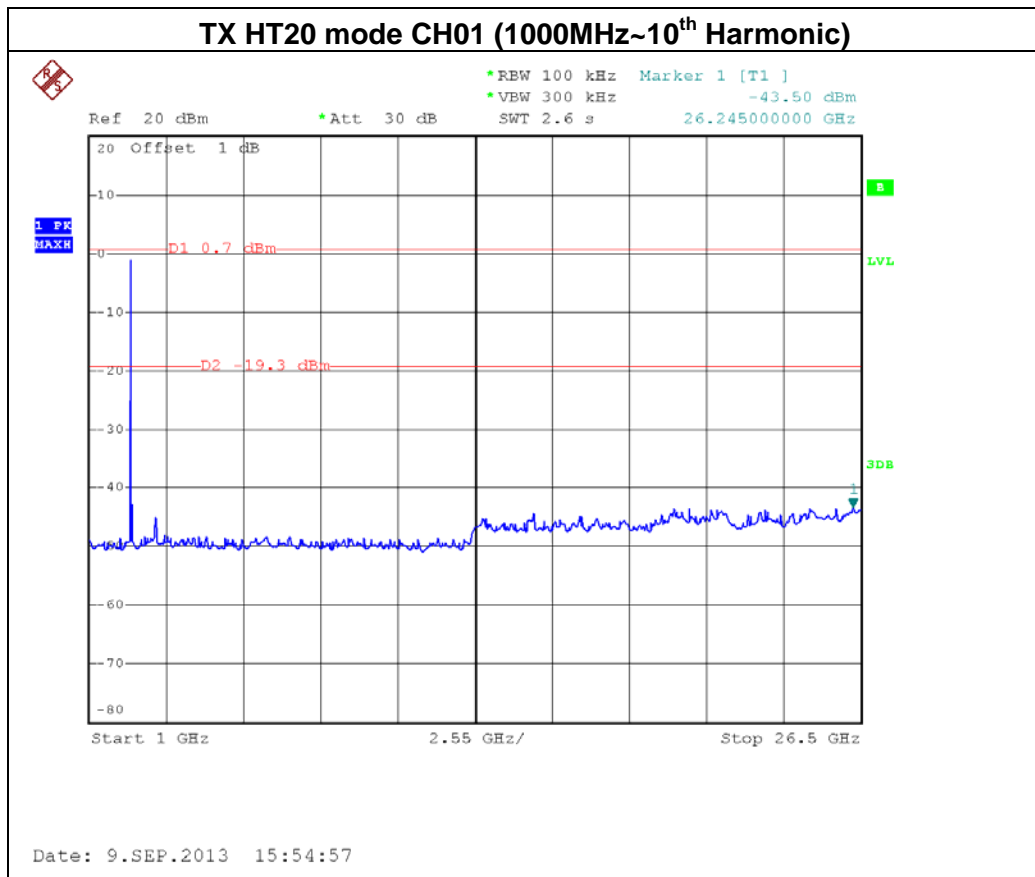
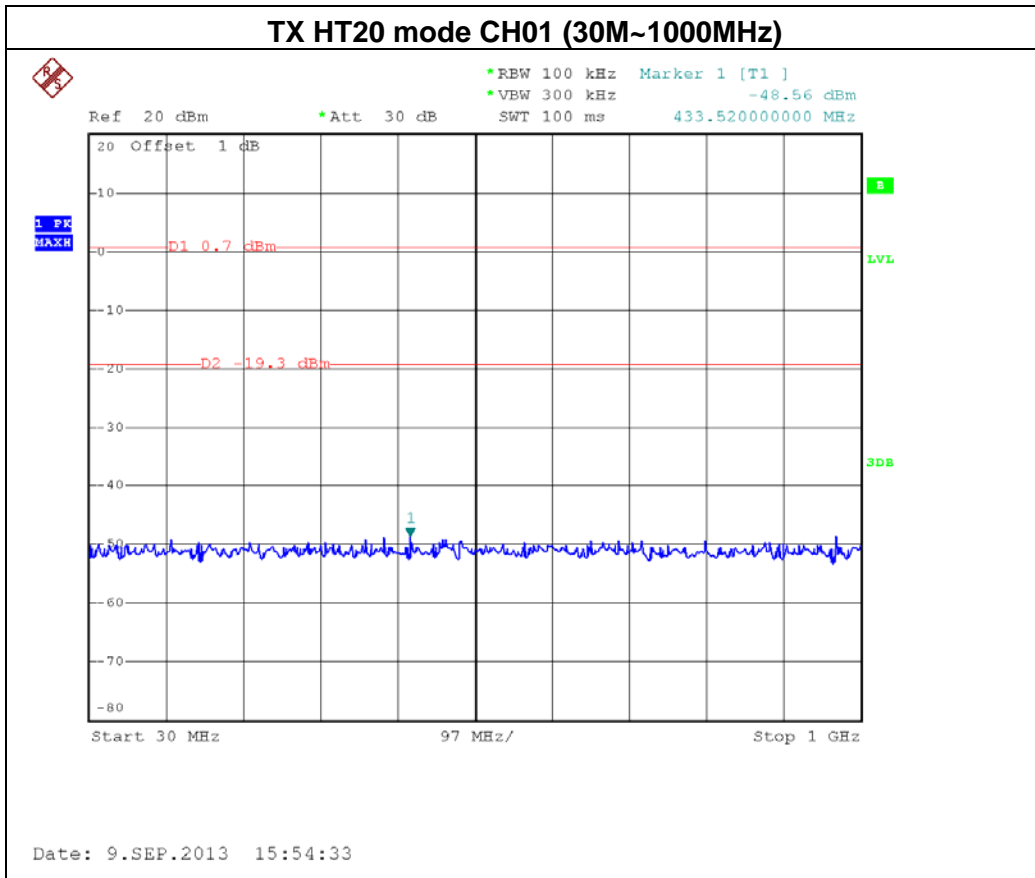


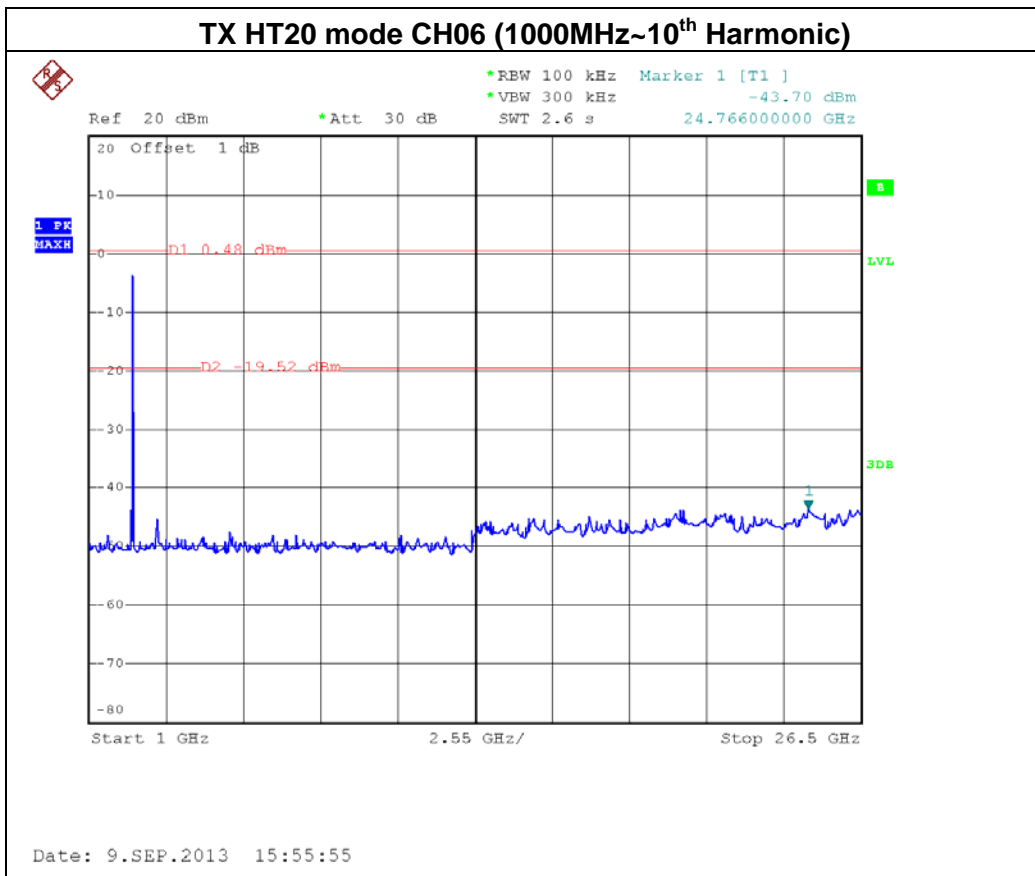
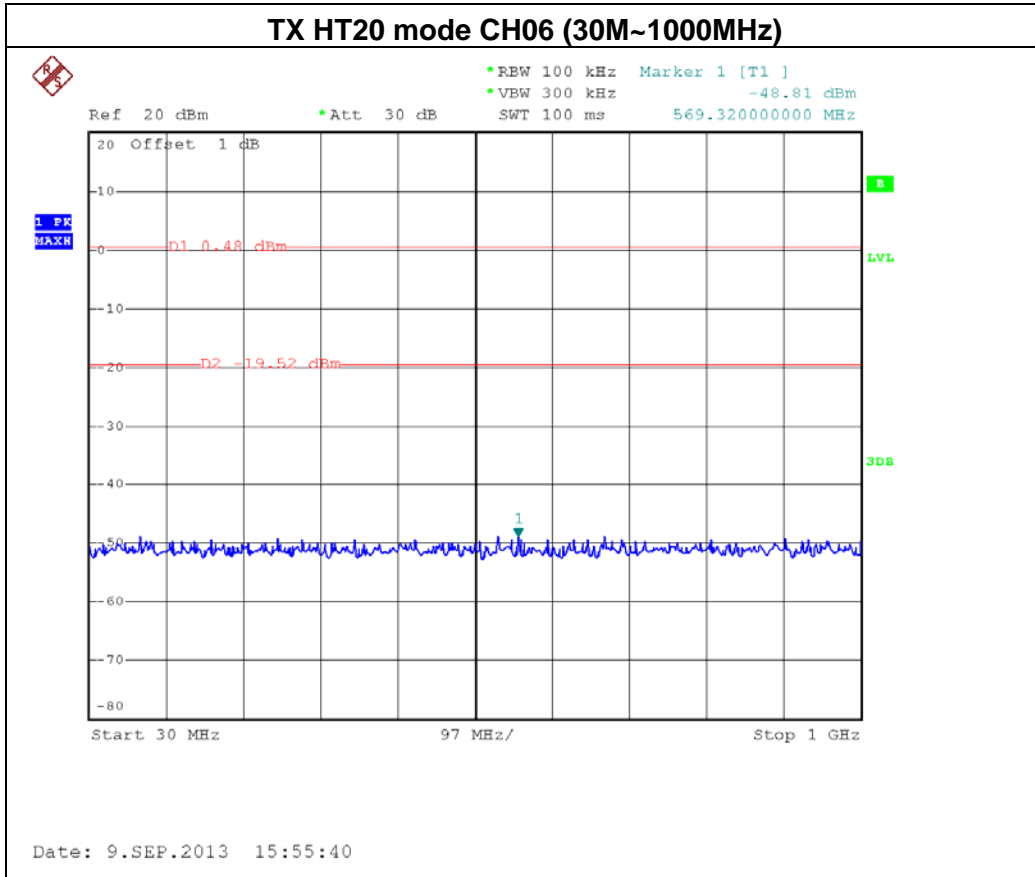


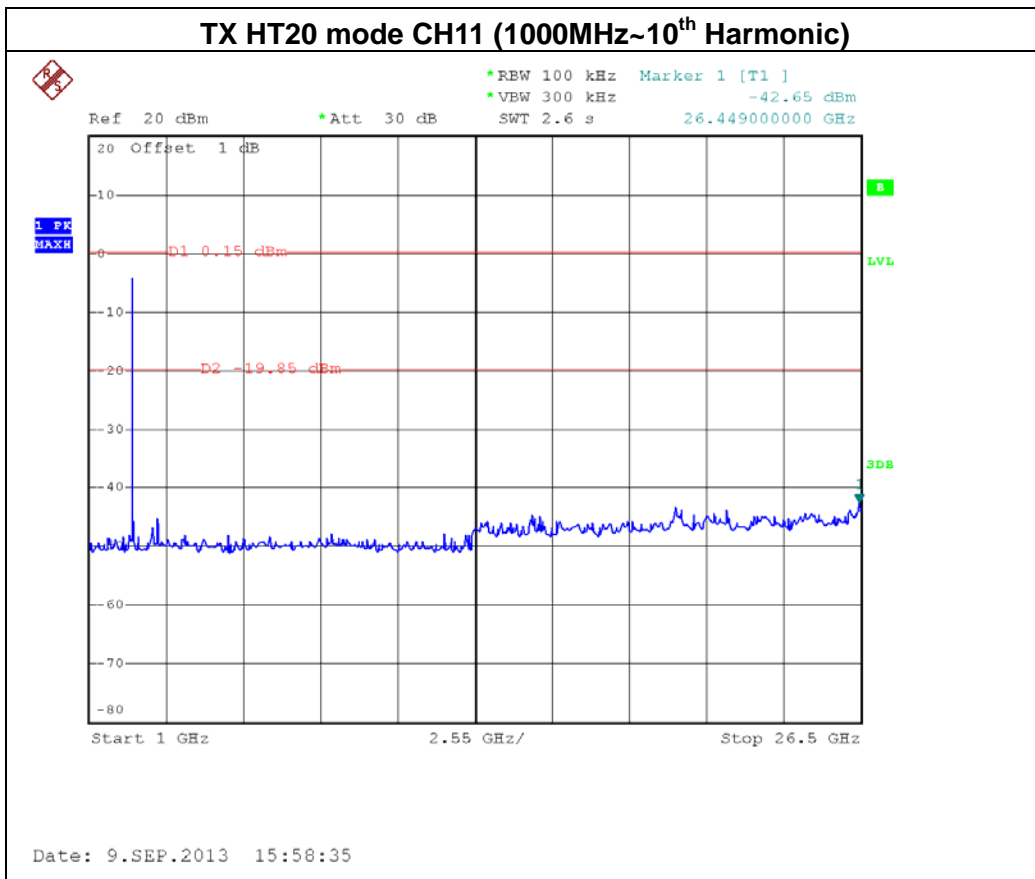
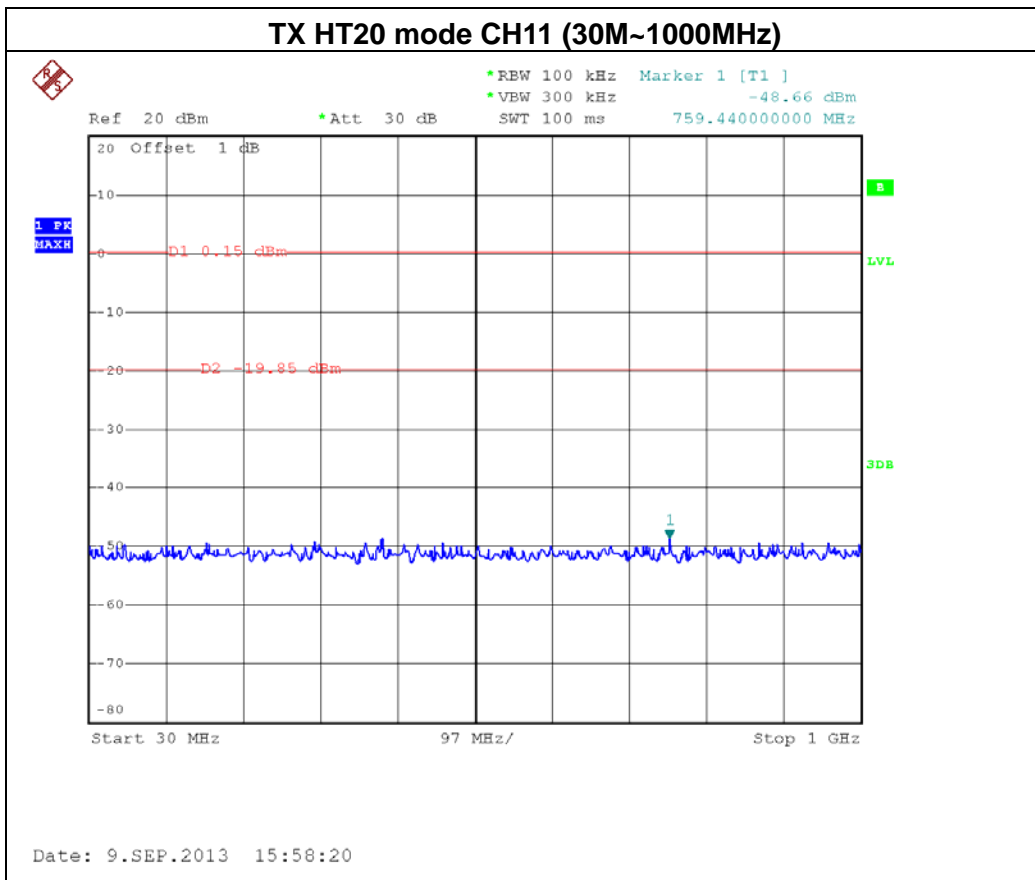
EUT :	Wireless N301 Easy Setup Router	Model Name :	N301
Temperature :	24 °C	Relative Humidity :	60 %
Pressure :	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-20M MODE / CH01, CH06 , CH11-ANT 1		

Channel of Worst Data: CH01			
The max. radio frequency power in any 100kHz bandwidth outside the frequency band		The max. radio frequency power in any 100 kHz bandwidth within the frequency band.	
FREQUENCY(MHz)	POWER(dBm)	FREQUENCY(MHz)	POWER(dBm)
2395.20	-39.75	2483.50	-44.37
Result			
In any 100kHz bandwidth outside the frequency band, the radio frequency power is at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power.			



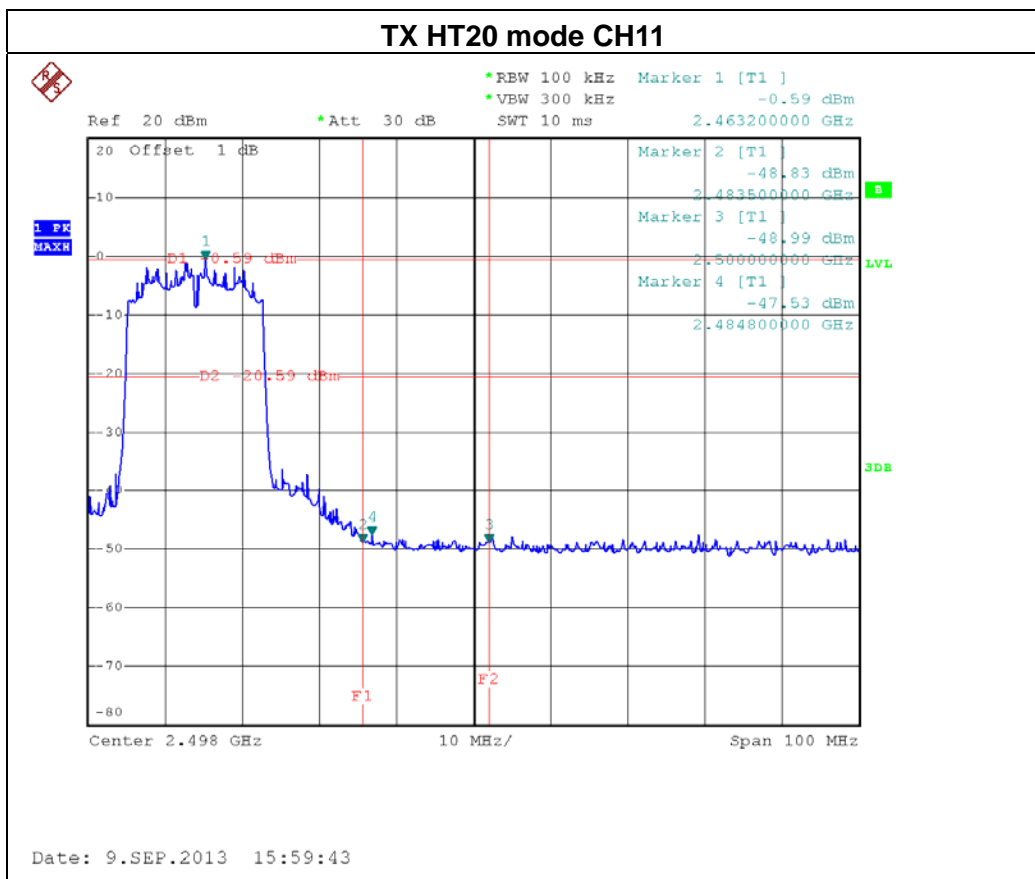
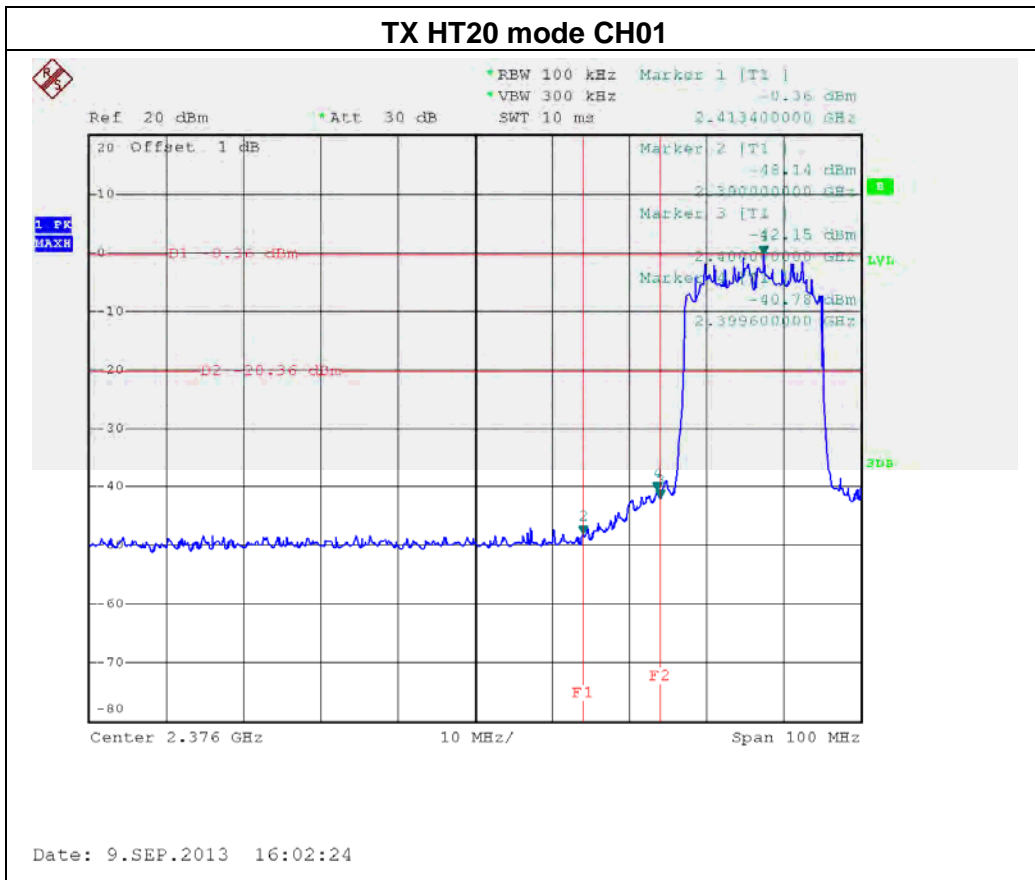


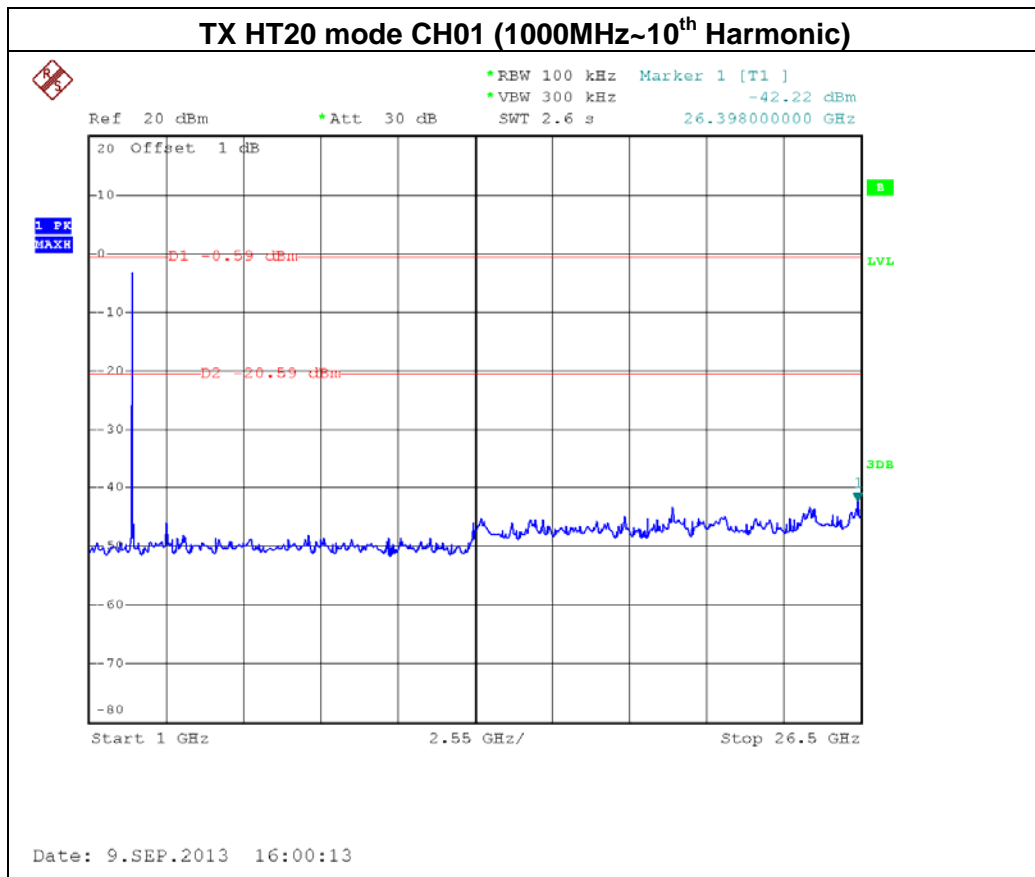
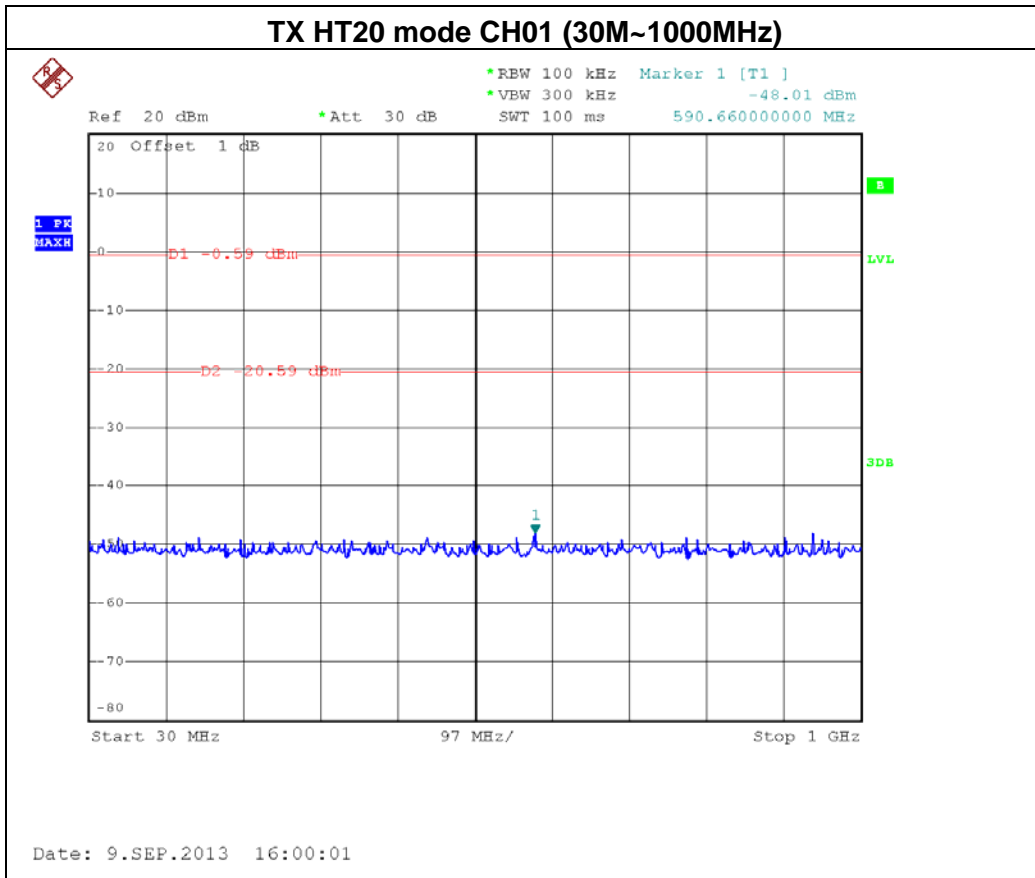


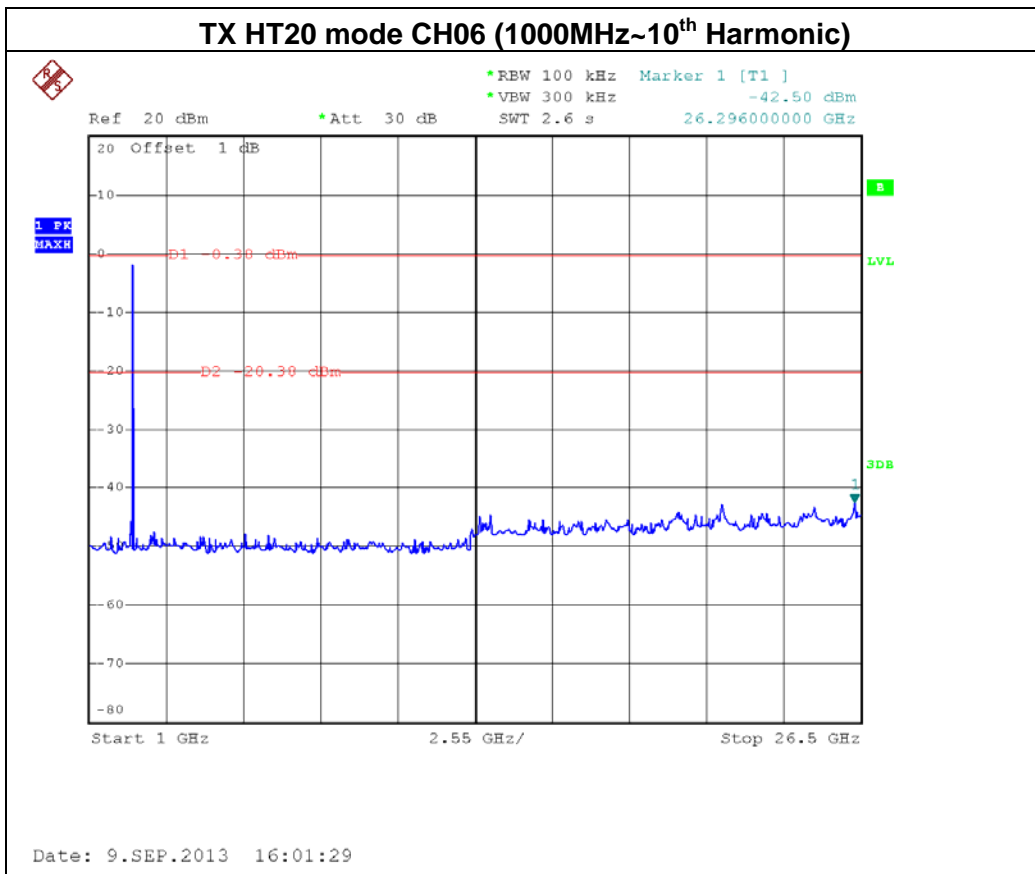
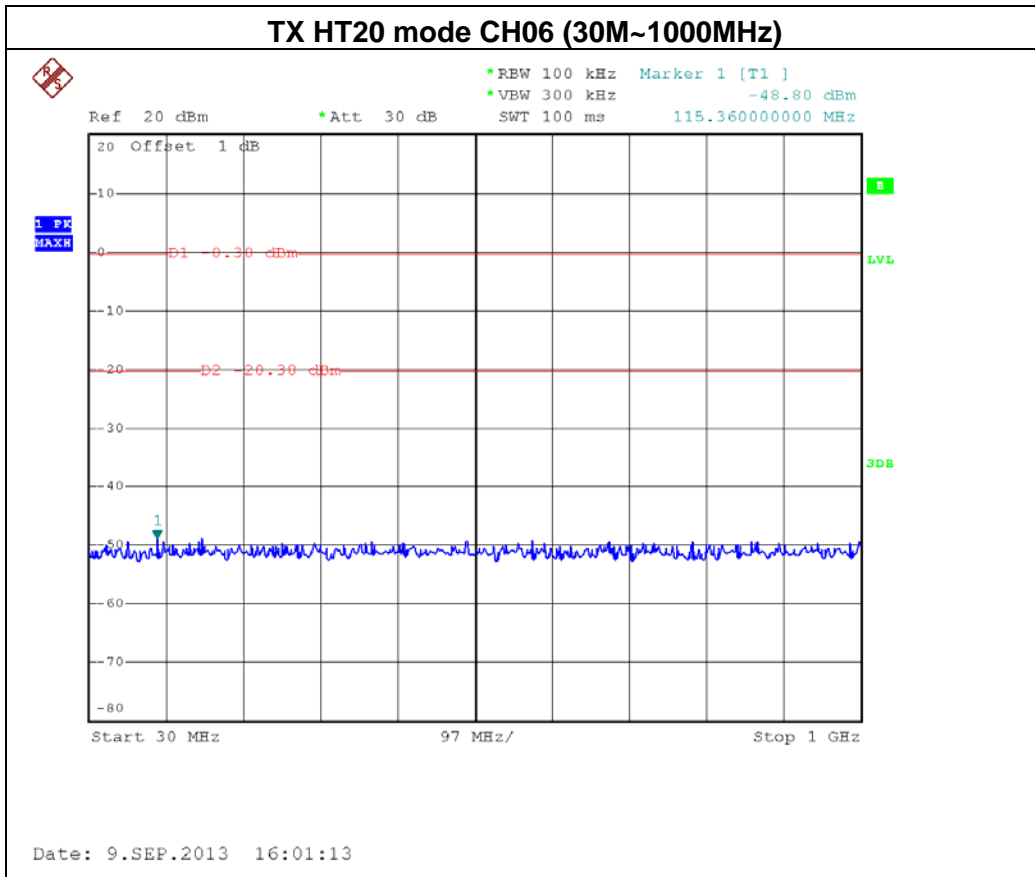


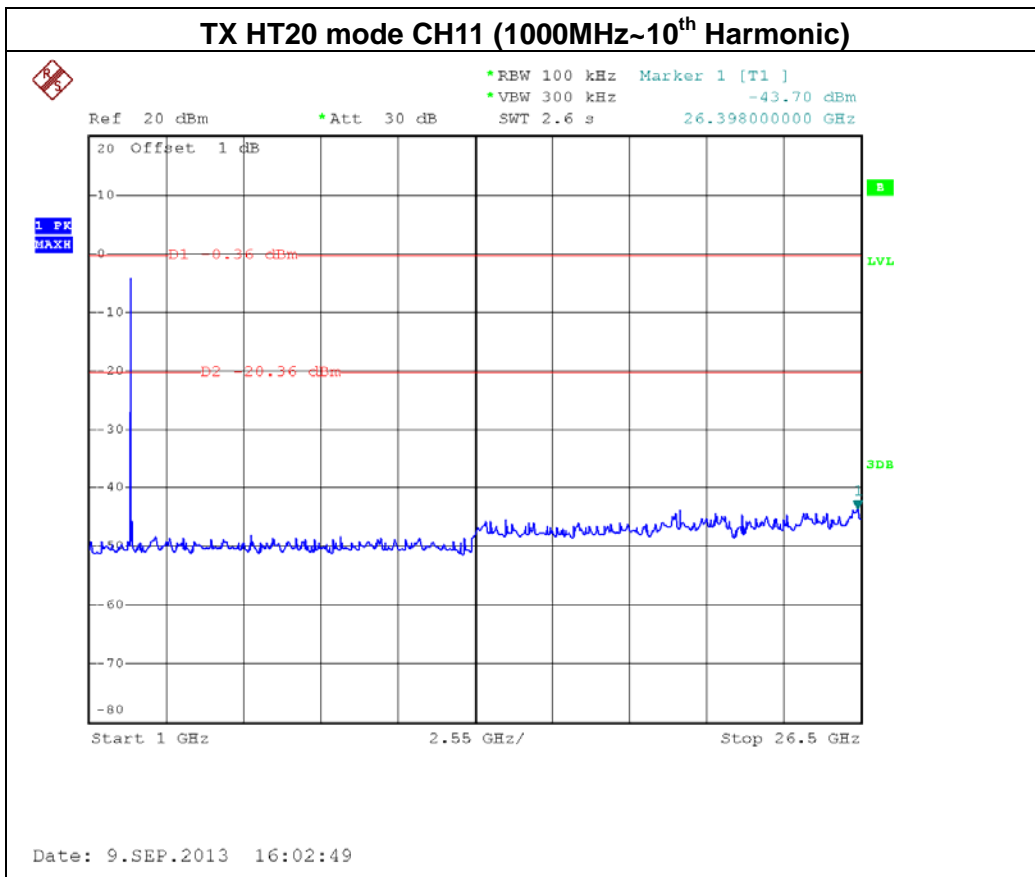
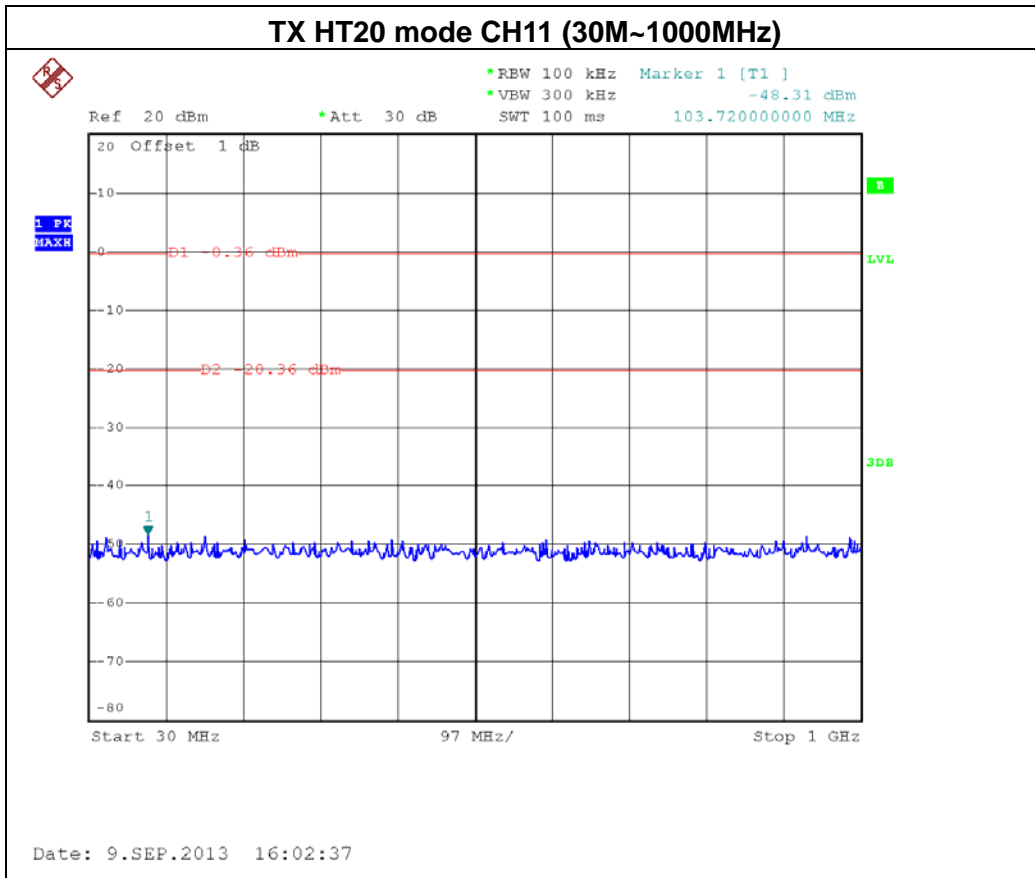
EUT :	Wireless N301 Easy Setup Router	Model Name :	N301
Temperature :	24 °C	Relative Humidity :	60 %
Pressure :	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-20M MODE / CH01, CH06 , CH11-ANT 2		

Channel of Worst Data: CH01			
The max. radio frequency power in any 100kHz bandwidth outside the frequency band		The max. radio frequency power in any 100 kHz bandwidth within the frequency band.	
FREQUENCY(MHz)	POWER(dBm)	FREQUENCY(MHz)	POWER(dBm)
2399.60	-40.78	2484.80	-47.53
Result			
In any 100kHz bandwidth outside the frequency band, the radio frequency power is at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power.			



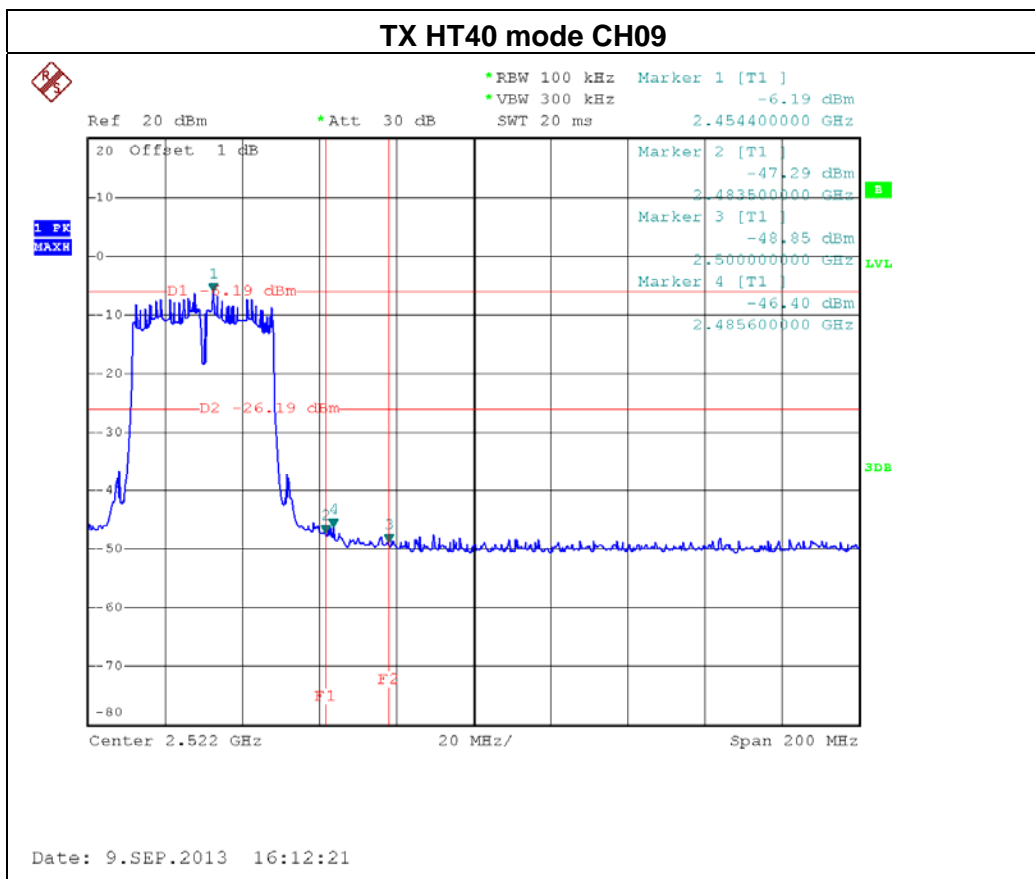
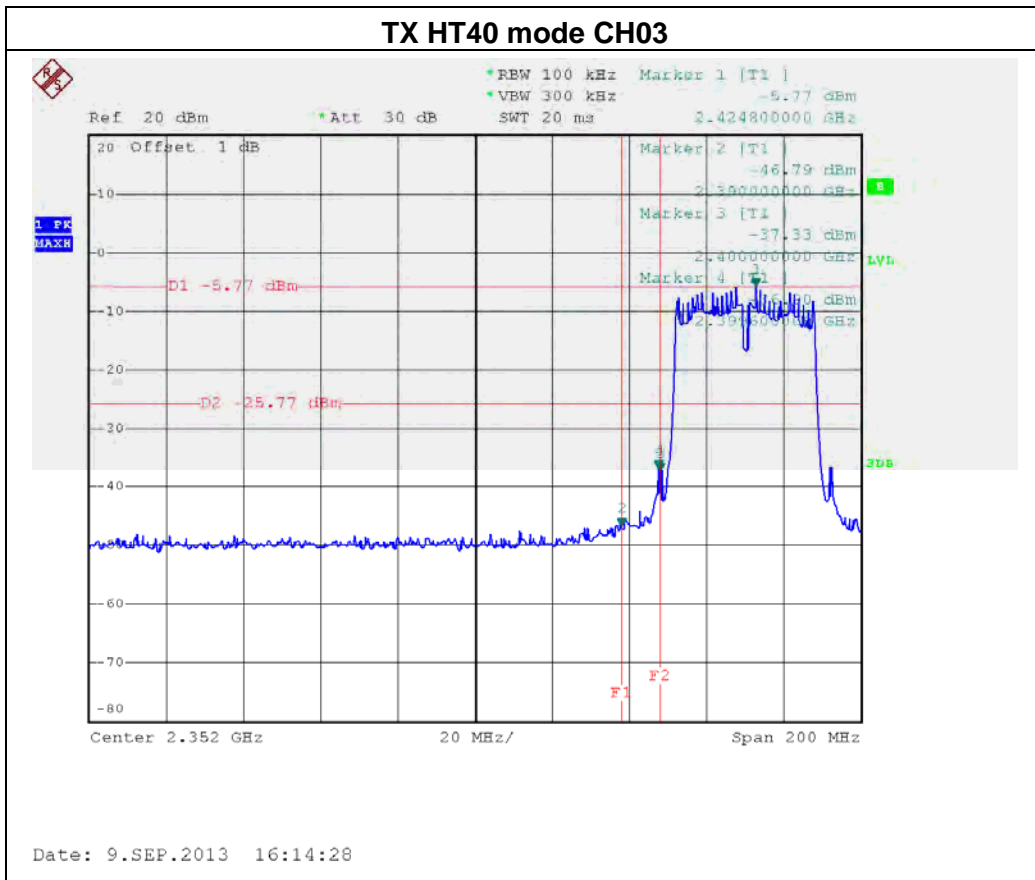


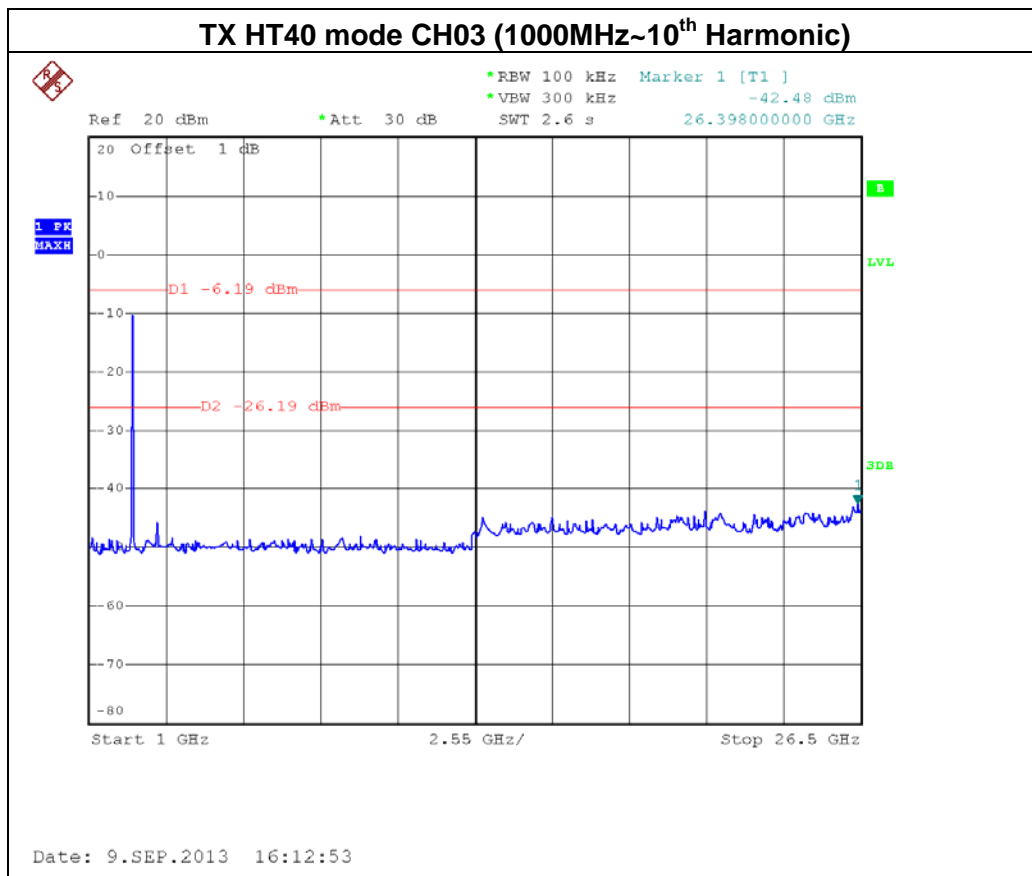
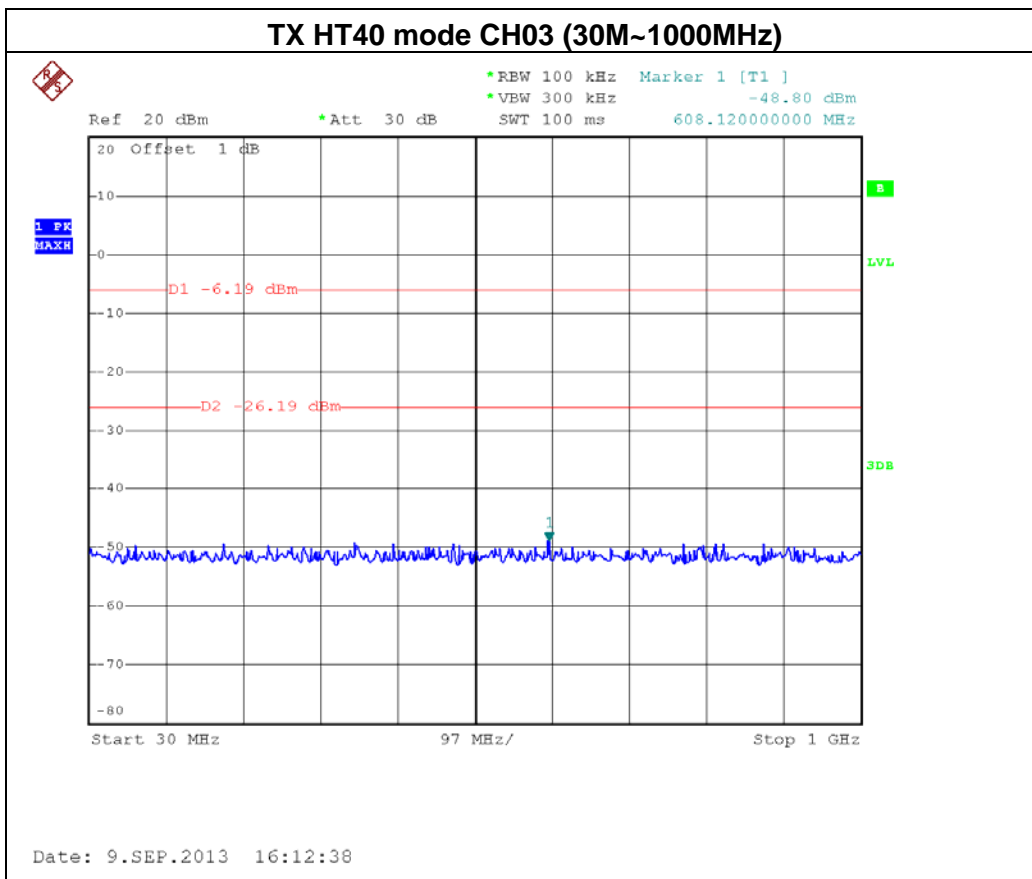


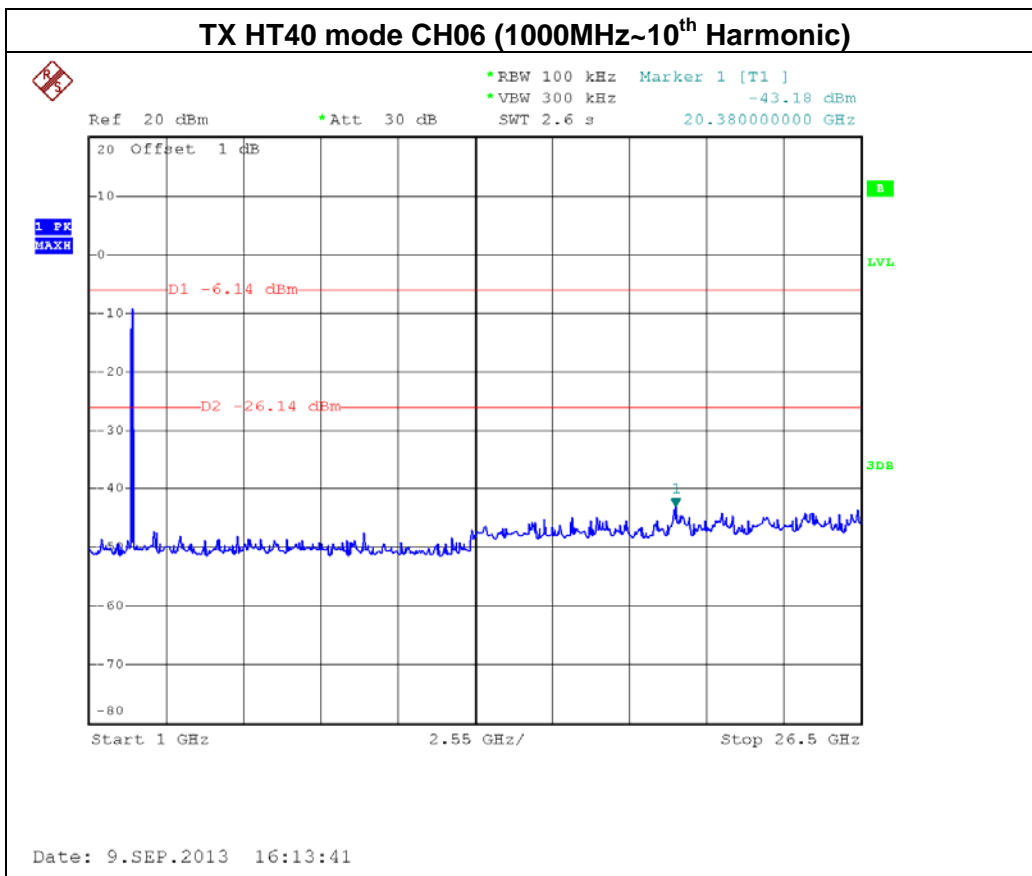
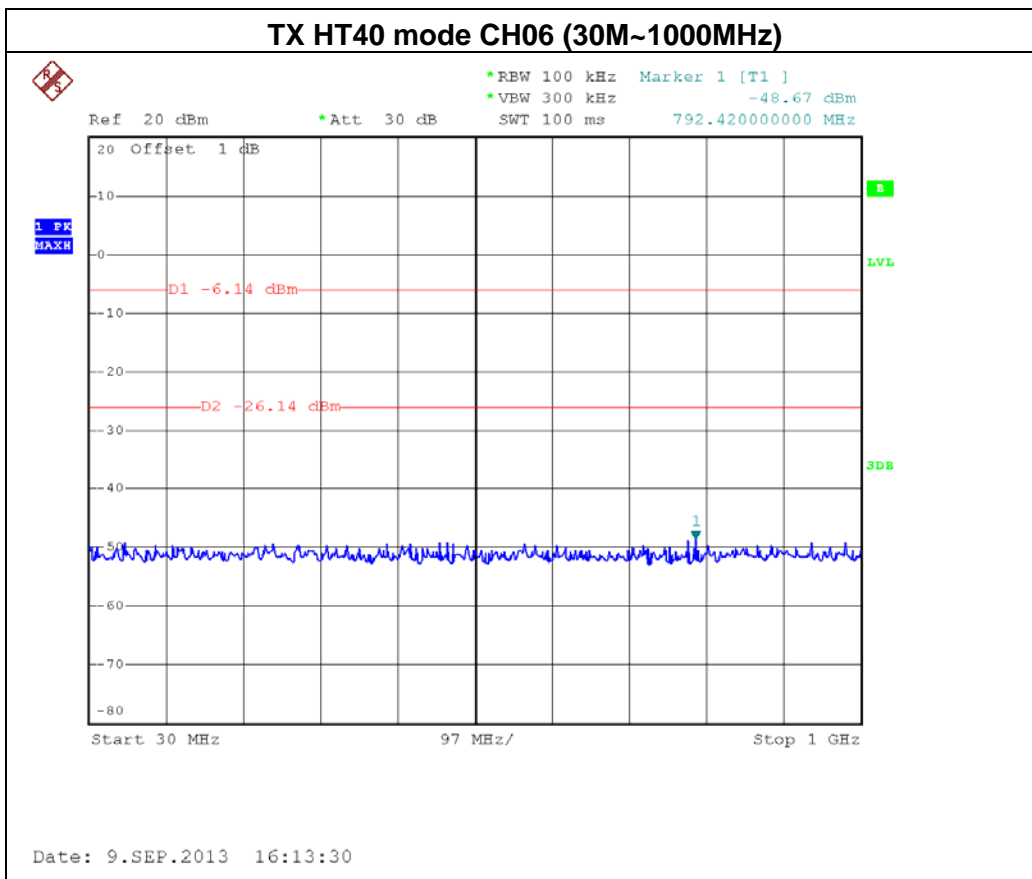


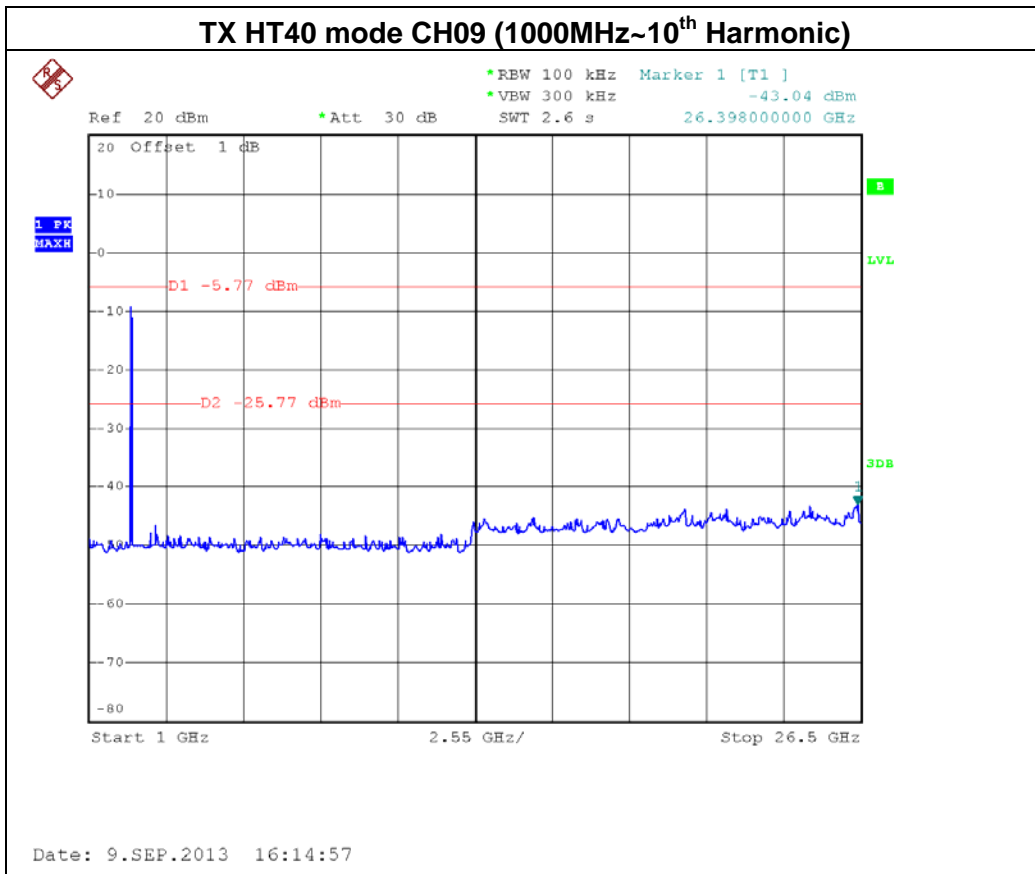
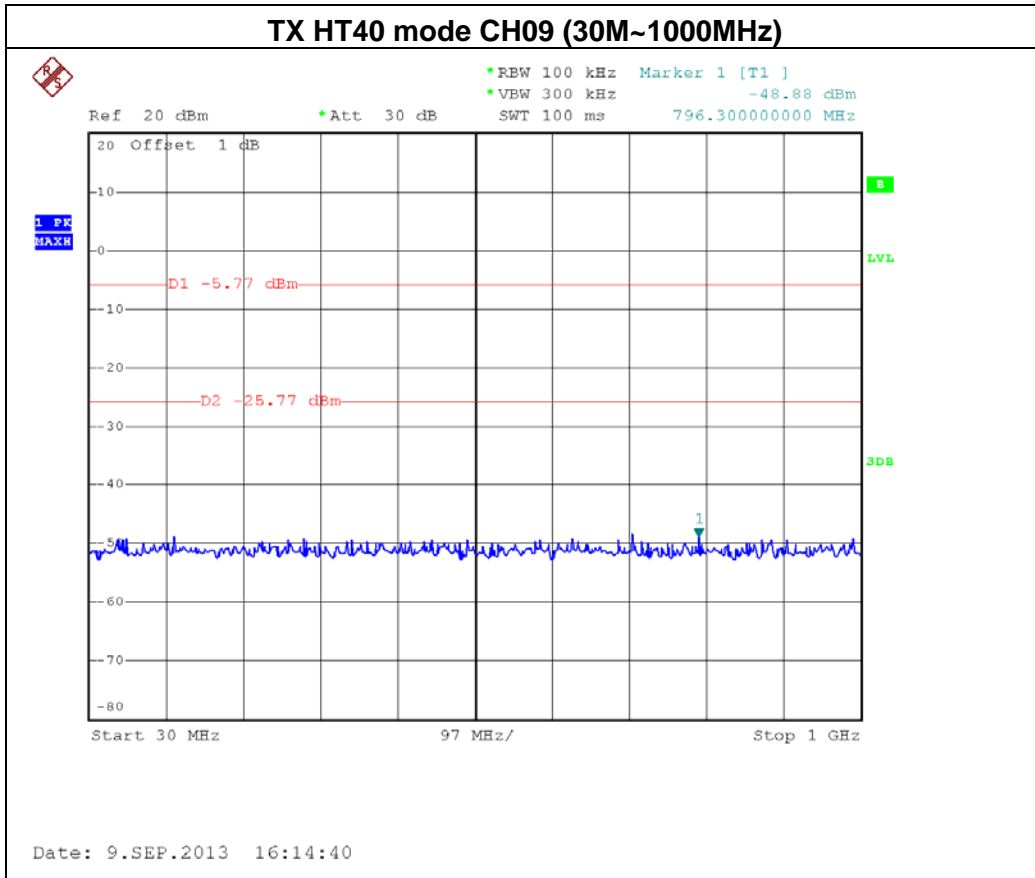
EUT :	Wireless N301 Easy Setup Router	Model Name :	N301
Temperature :	24 °C	Relative Humidity :	60 %
Pressure :	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-40M MODE / CH03, CH06 , CH09-ANT 1		

Channel of Worst Data: CH09			
The max. radio frequency power in any 100kHz bandwidth outside the frequency band		The max. radio frequency power in any 100 kHz bandwidth within the frequency band.	
FREQUENCY(MHz)	POWER(dBm)	FREQUENCY(MHz)	POWER(dBm)
2399.60	-36.80	2485.60	-46.40
Result			
In any 100kHz bandwidth outside the frequency band, the radio frequency power is at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power.			



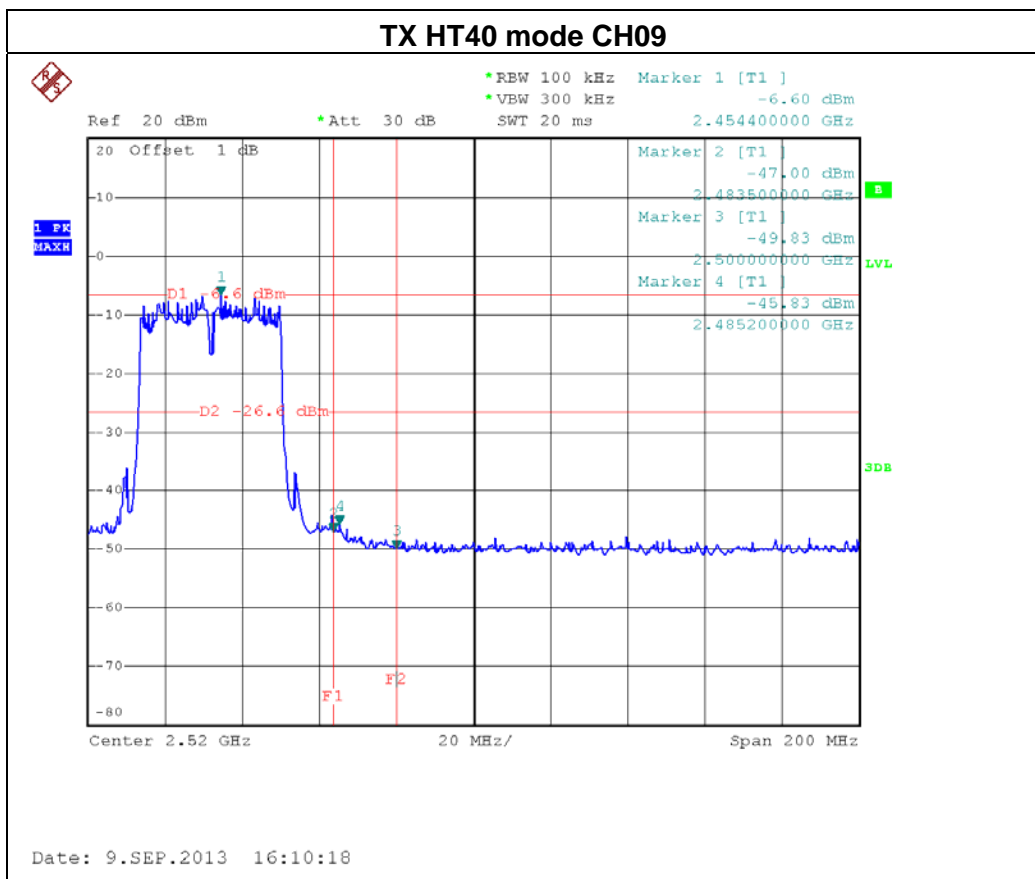
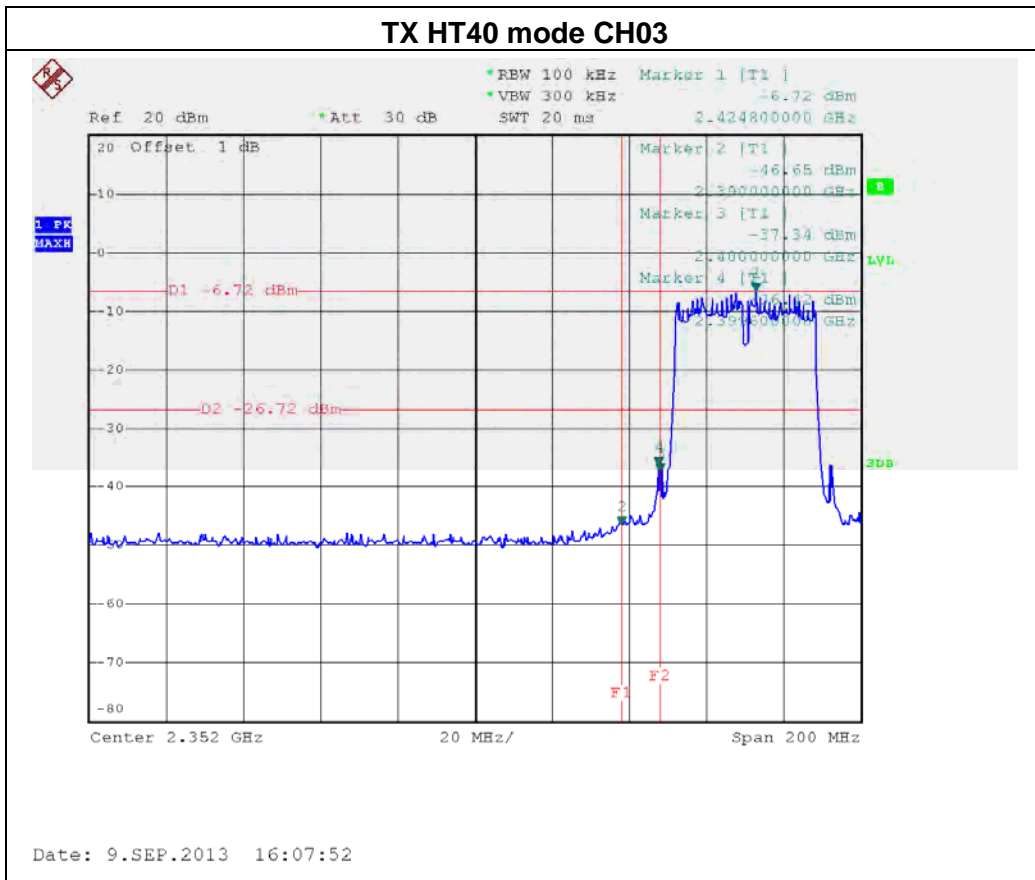


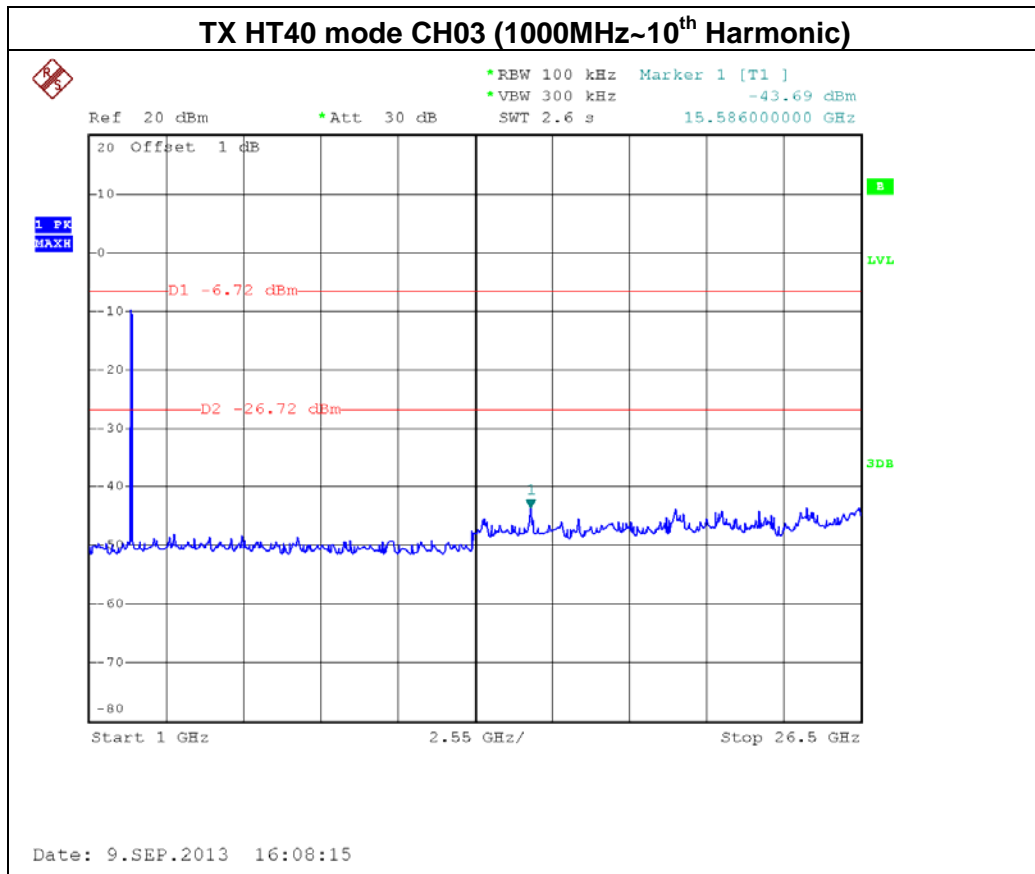
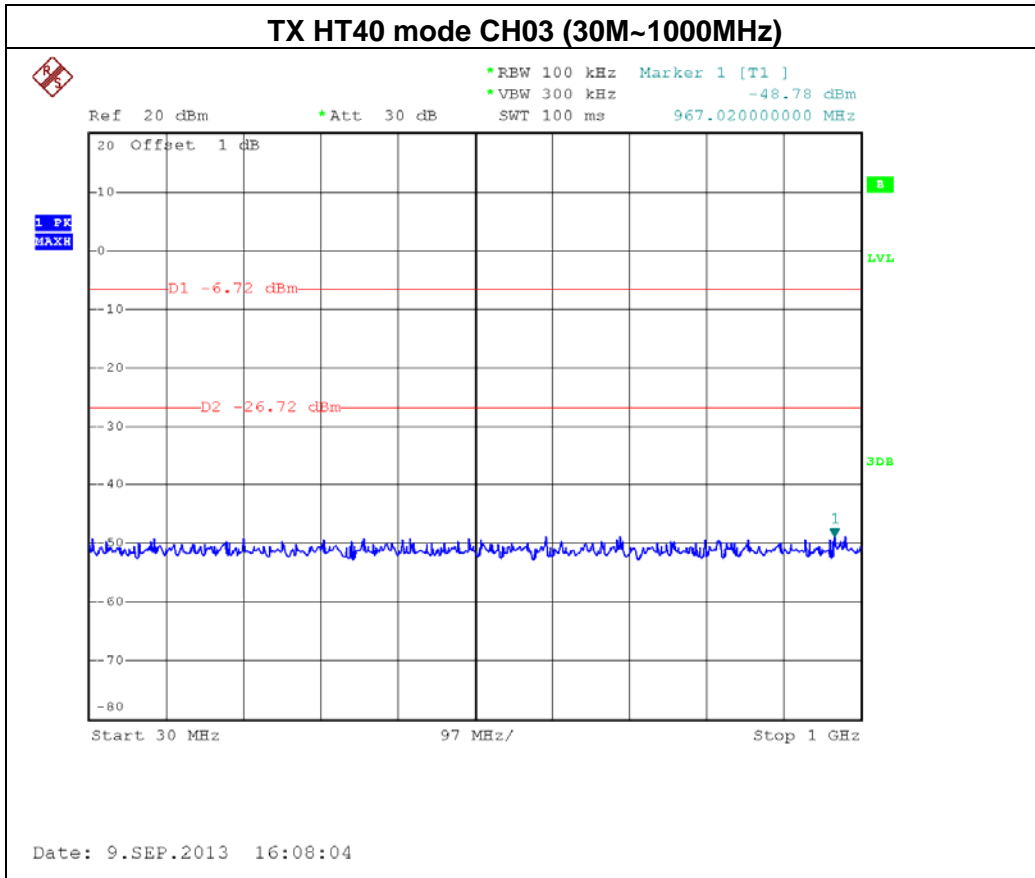


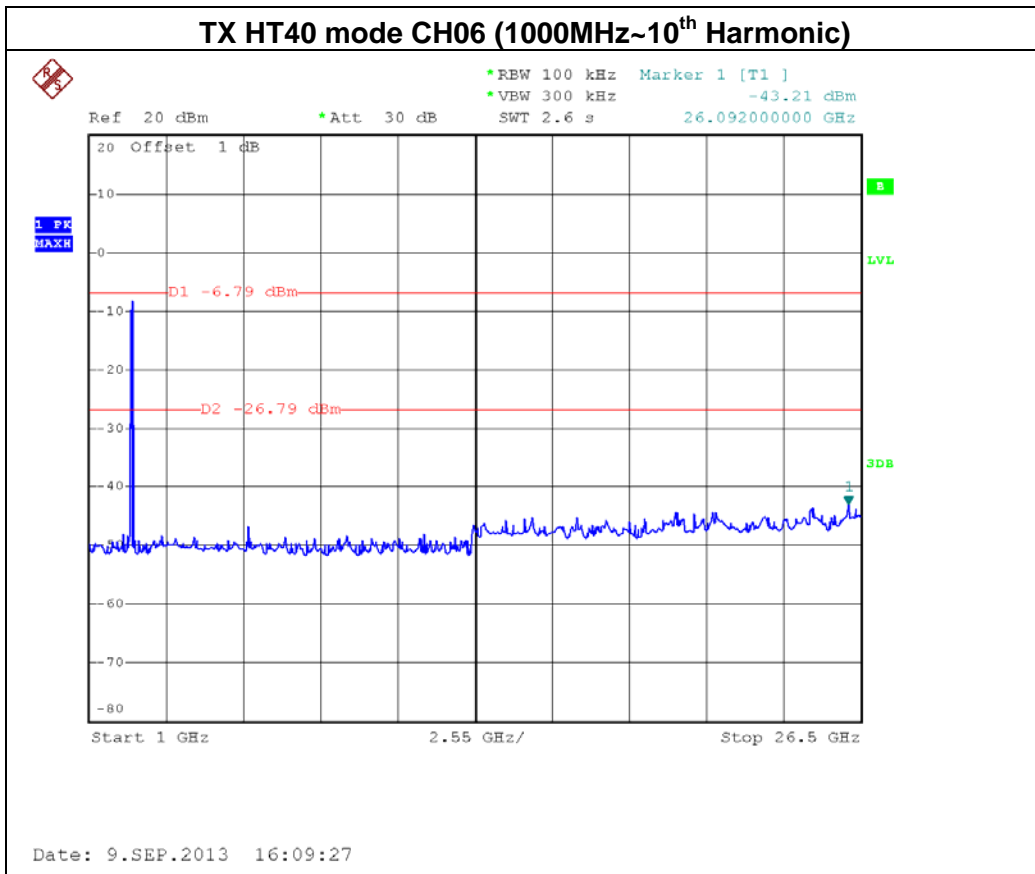
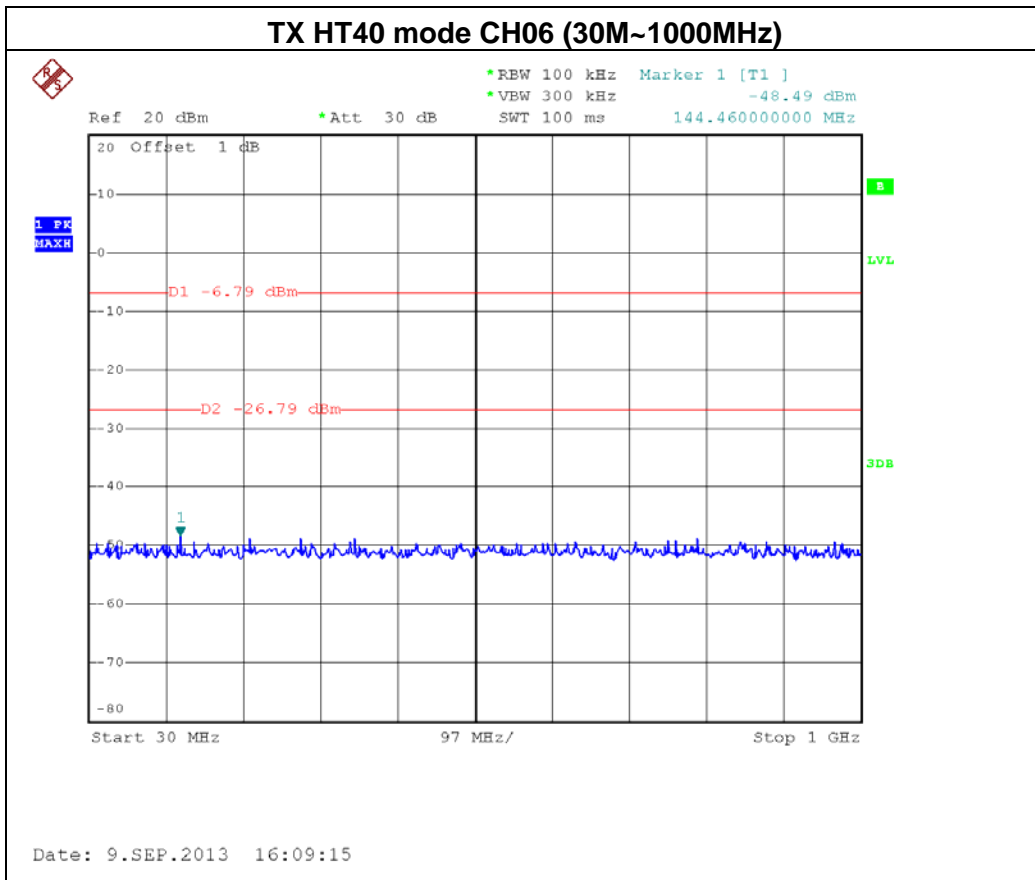


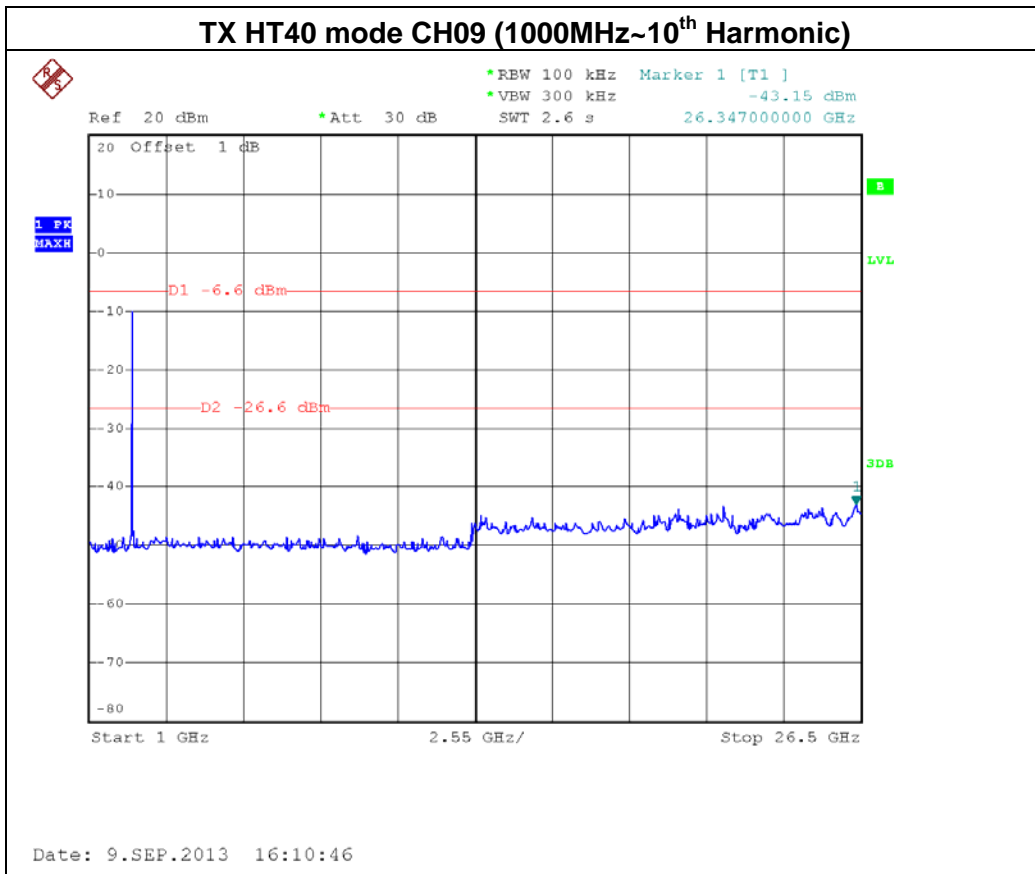
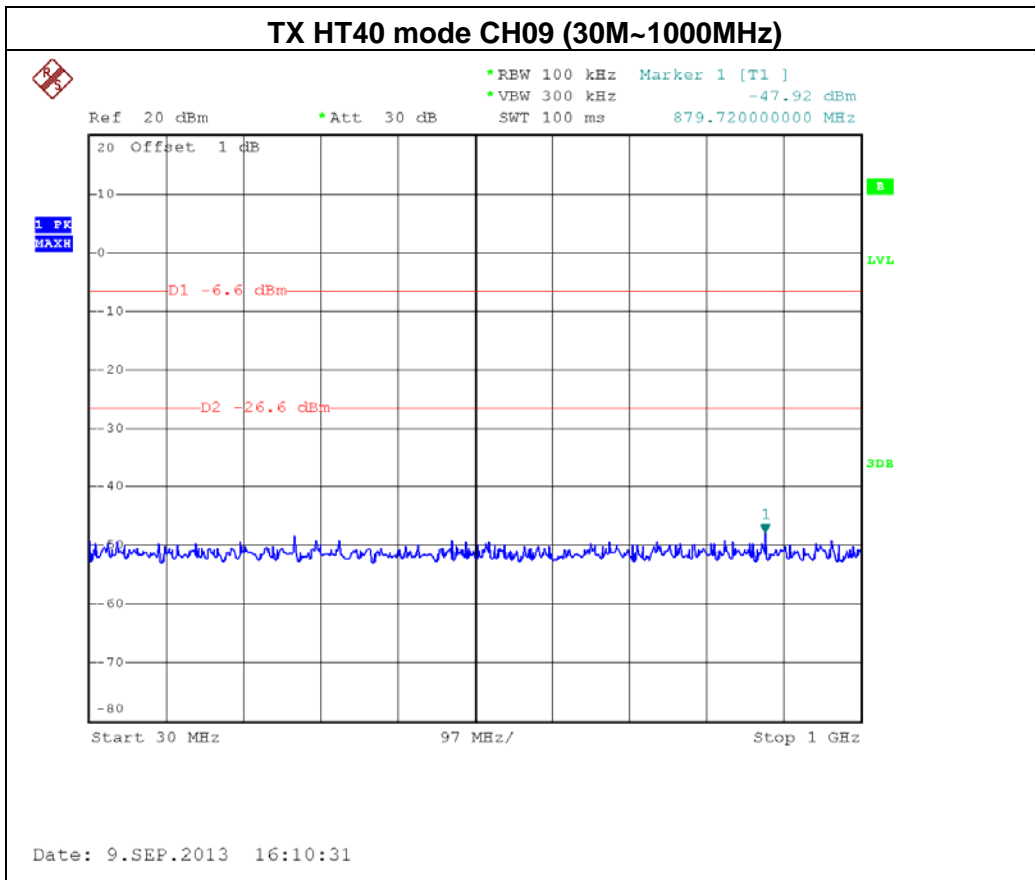
EUT :	Wireless N301 Easy Setup Router	Model Name :	N301
Temperature :	24 °C	Relative Humidity :	60 %
Pressure :	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-40M MODE / CH03, CH06 , CH09-ANT 2		

Channel of Worst Data: CH09			
The max. radio frequency power in any 100kHz bandwidth outside the frequency band		The max. radio frequency power in any 100 kHz bandwidth within the frequency band.	
FREQUENCY(MHz)	POWER(dBm)	FREQUENCY(MHz)	POWER(dBm)
2399.60	-36.42	2485.20	-45.83
Result			
In any 100kHz bandwidth outside the frequency band, the radio frequency power is at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power.			









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) RSS-210 A8.2(b)	Power Spectral Density	8 dBm (in any 3KHz)	2400-2483.5	PASS

8.1.1 MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last Calibration	Next Calibration
1	Spectrum Analyzer	R&S	FSP_40	100185	Nov. 17.2012	Nov. 16.2013

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

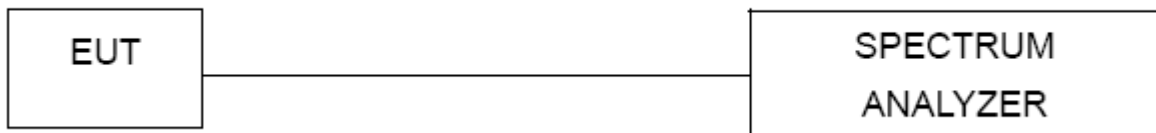
8.1.2 TEST PROCEDURE

- 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=10 KHz, Sweep time = Auto.

8.1.3 DEVIATION FROM STANDARD

No deviation.

8.1.4 TEST SETUP



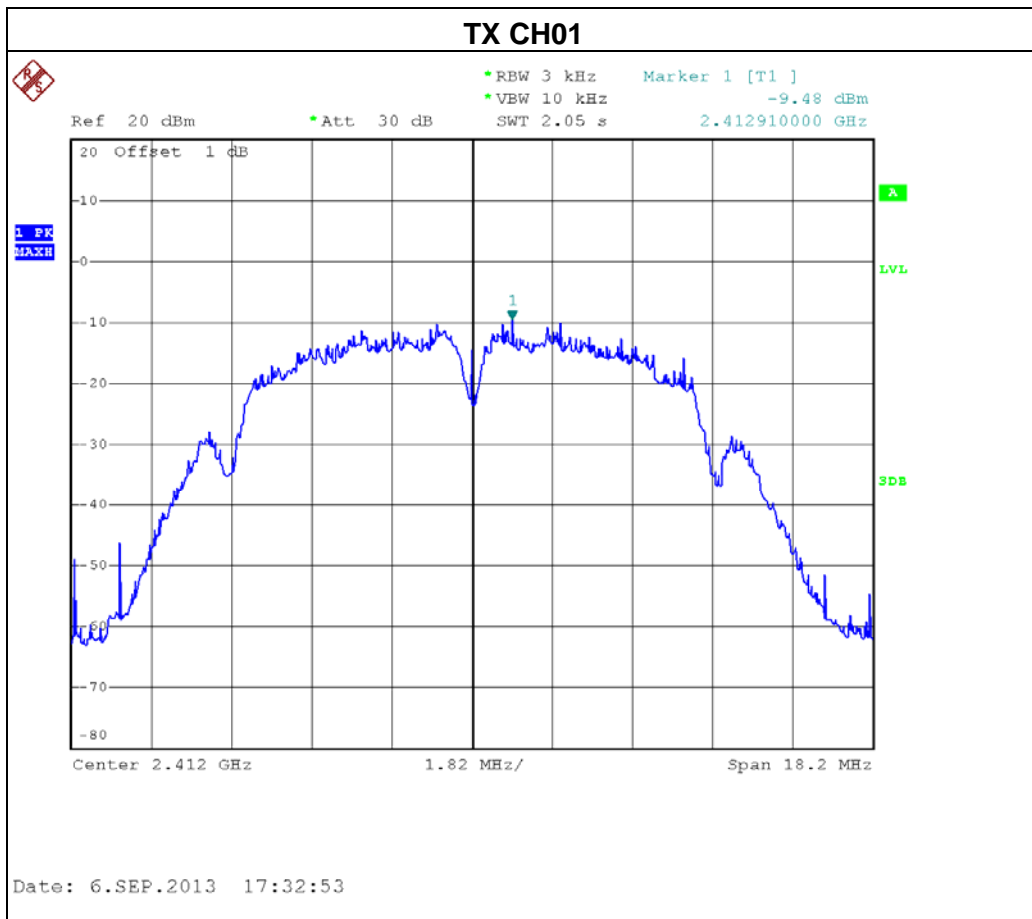
8.1.5 EUT OPERATION CONDITIONS

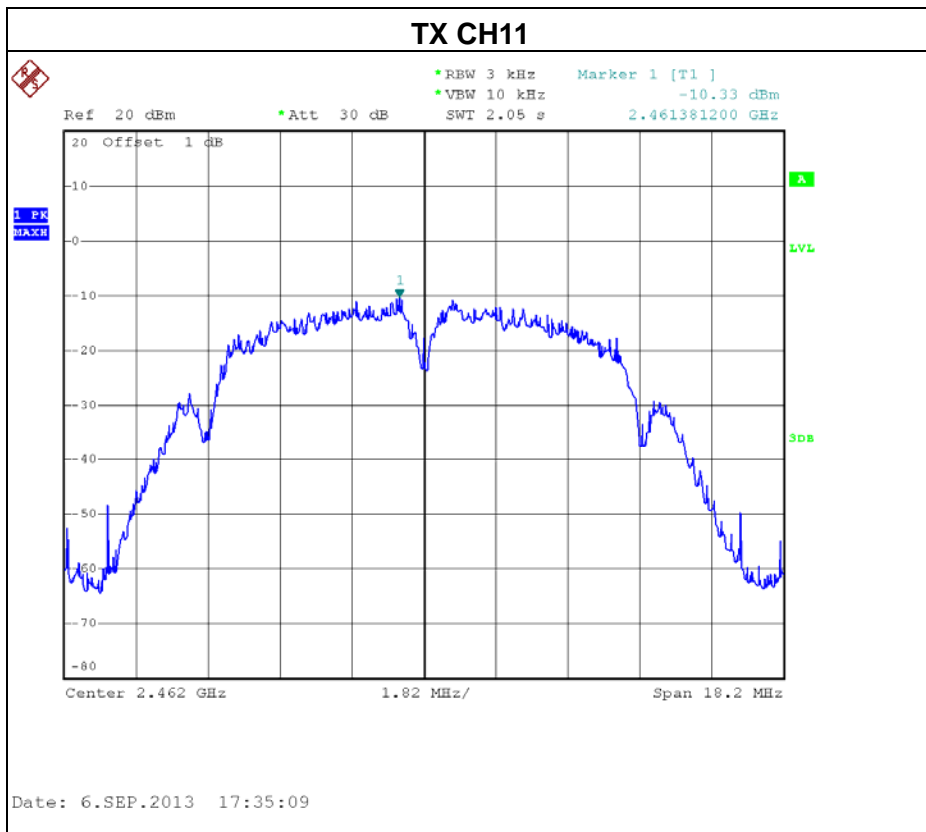
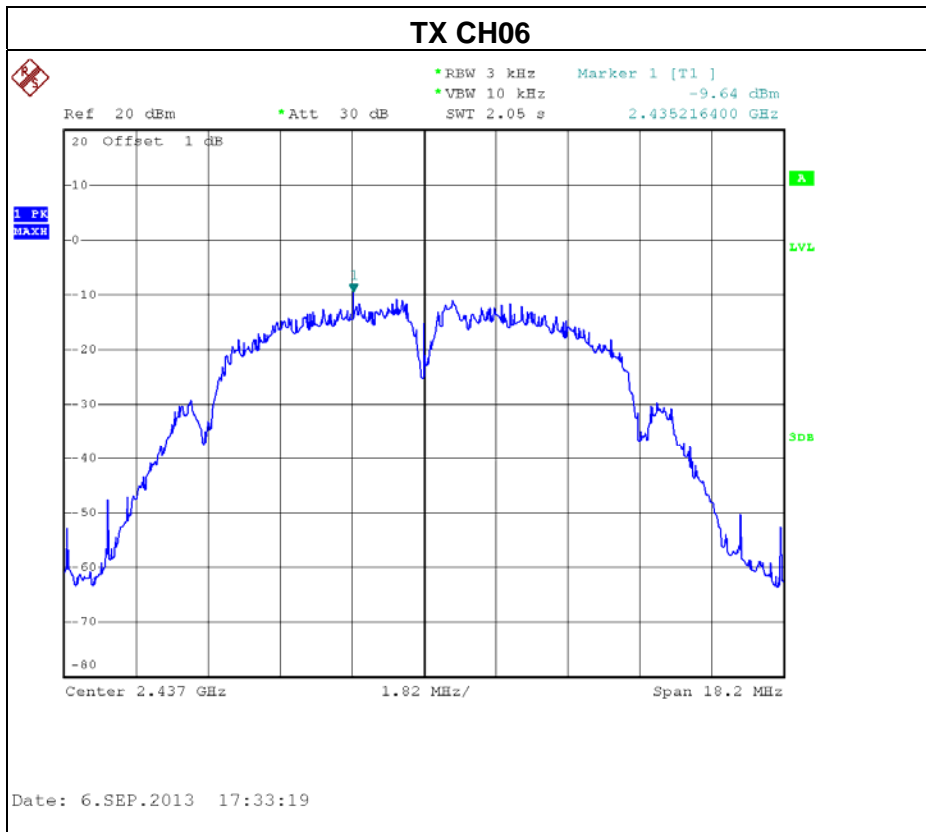
The EUT tested system was configured as the statements of 4.1.6 Unless otherwise a special operating condition is specified in the follows during the testing.

8.1.6 TEST RESULTS

EUT :	Wireless N301 Easy Setup Router	Model Name :	N301
Temperature :	24 °C	Relative Humidity :	60 %
Pressure :	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE /CH01, CH06, CH11		

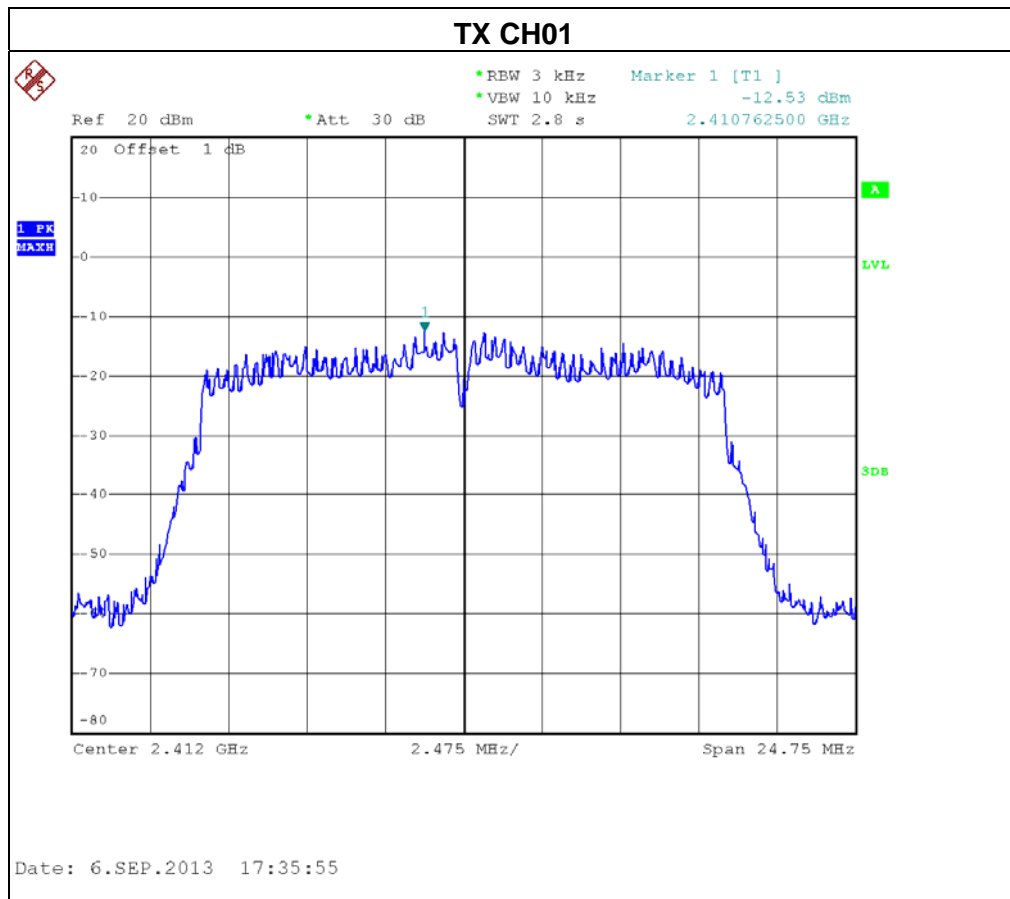
Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH01	2412 MHz	-9.48	8
CH06	2437 MHz	-9.64	8
CH11	2462 MHz	-10.33	8

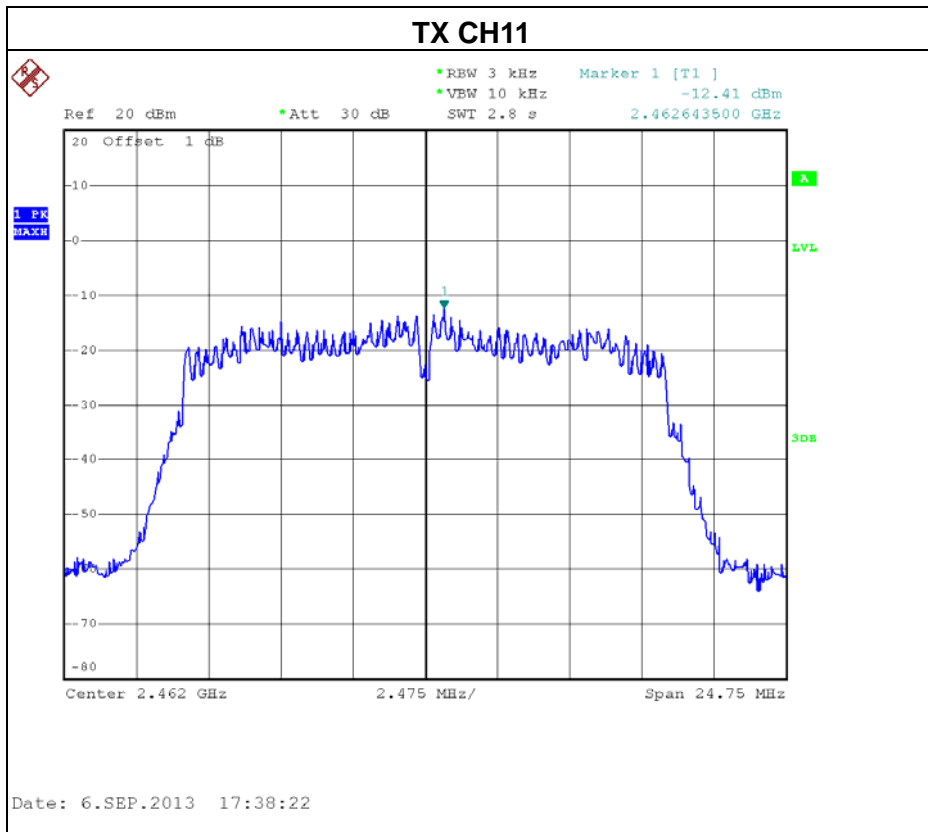
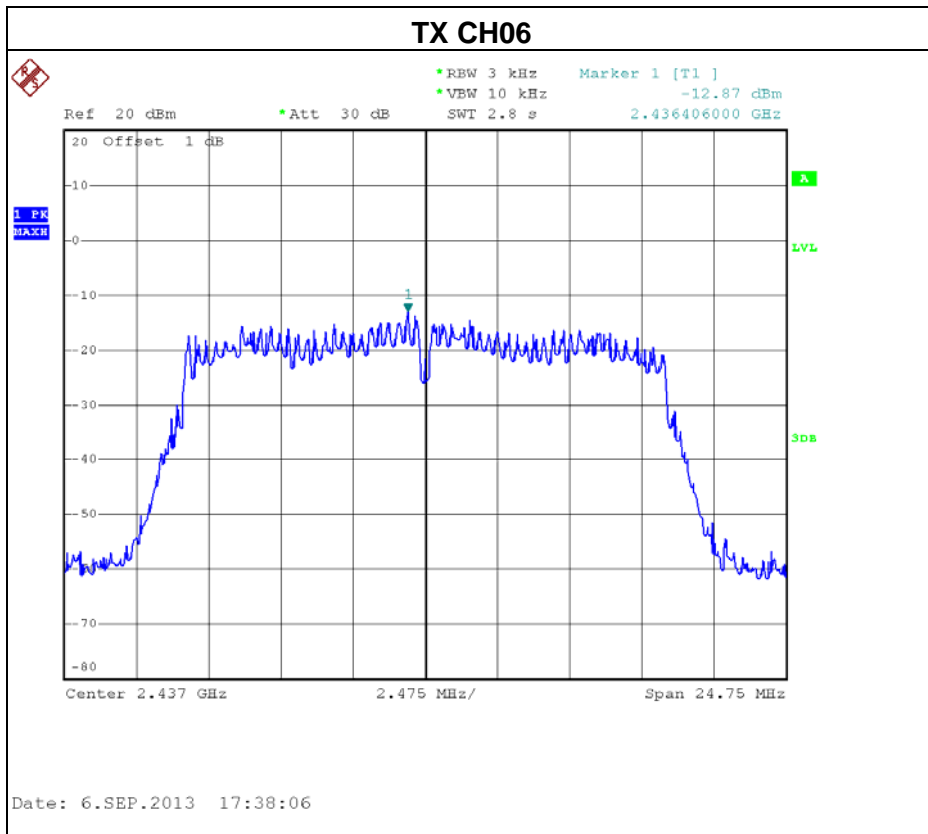




EUT :	Wireless N301 Easy Setup Router	Model Name :	N301
Temperature :	24 °C	Relative Humidity :	60 %
Pressure :	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX G MODE /CH01, CH06, CH11		

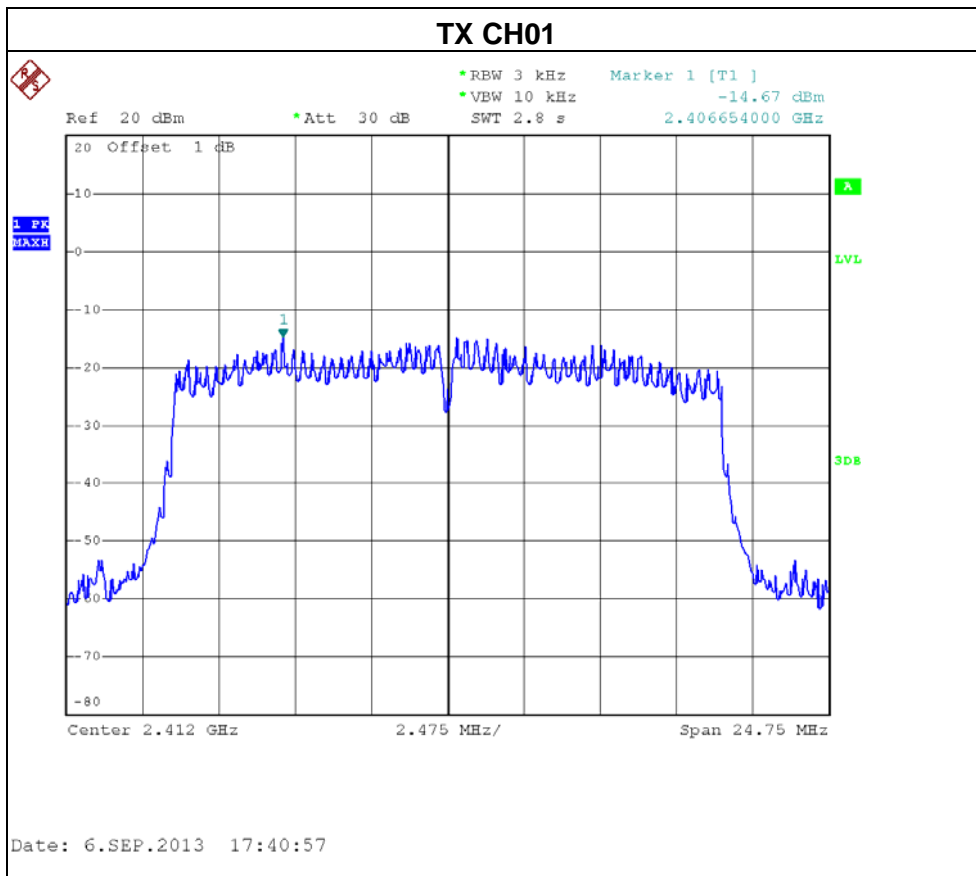
Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH01	2412 MHz	-12.53	8
CH06	2437 MHz	-12.87	8
CH11	2462 MHz	-12.41	8

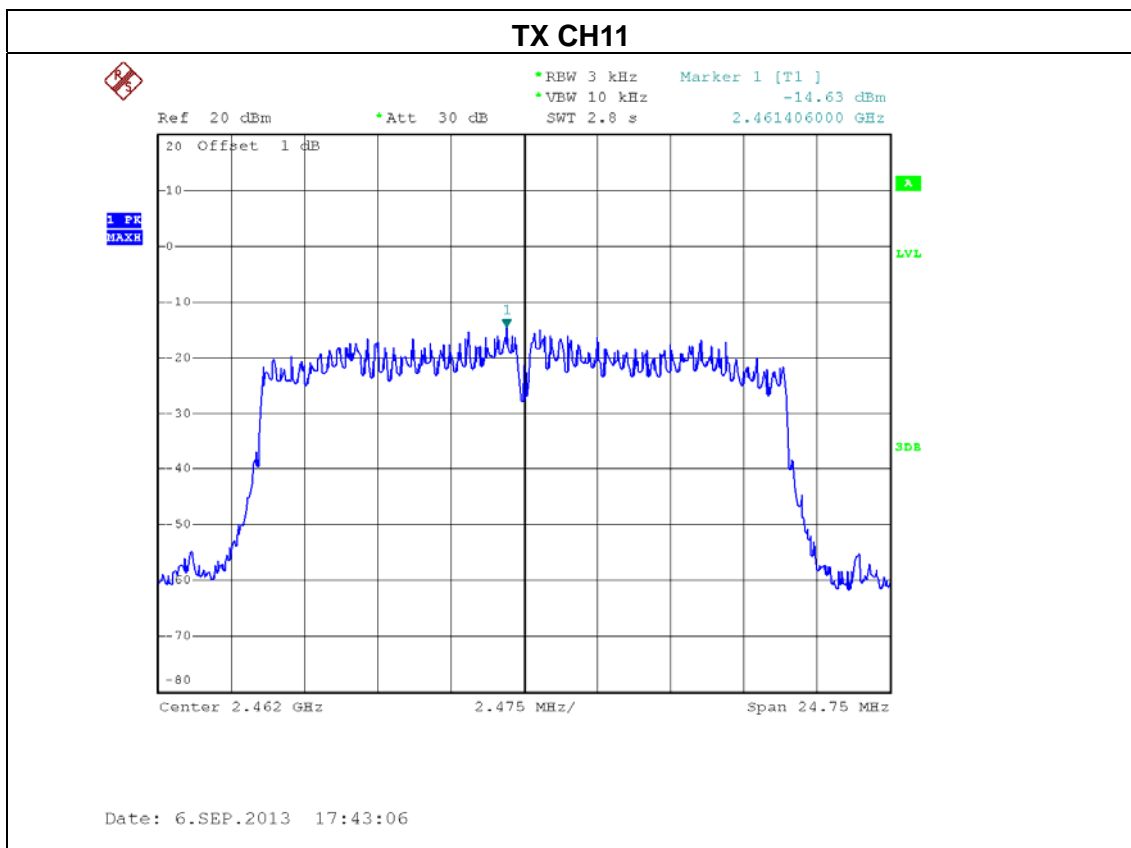
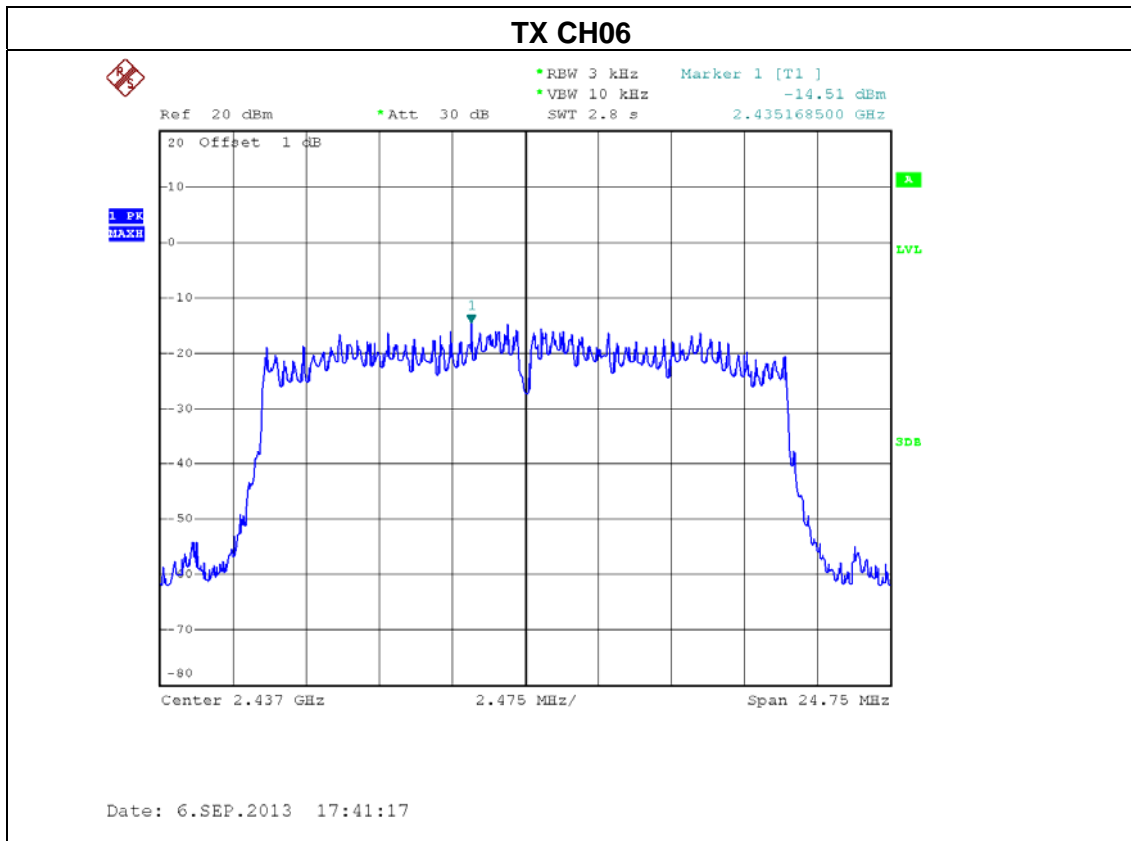




EUT :	Wireless N301 Easy Setup Router	Model Name :	N301
Temperature :	24 °C	Relative Humidity :	60 %
Pressure :	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N MODE-20MHz /CH01, CH06, CH11-ANT 1		

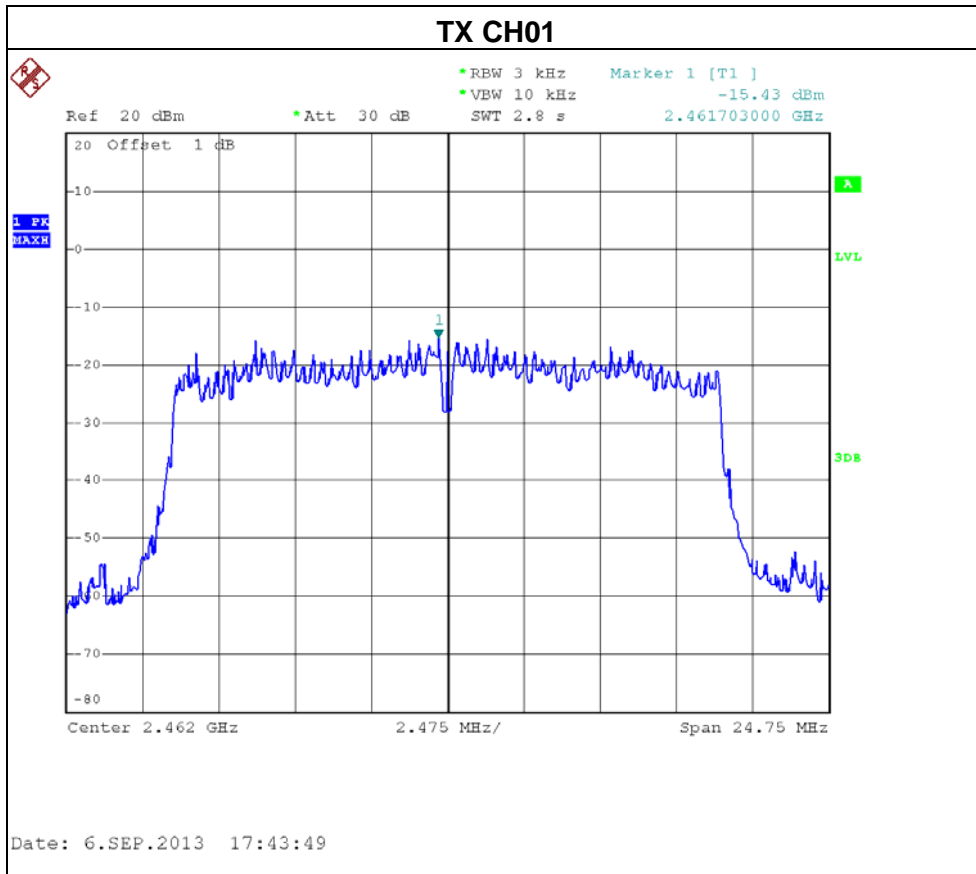
Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH01	2412 MHz	-14.67	8
CH06	2437 MHz	-14.51	8
CH11	2462 MHz	-14.63	8

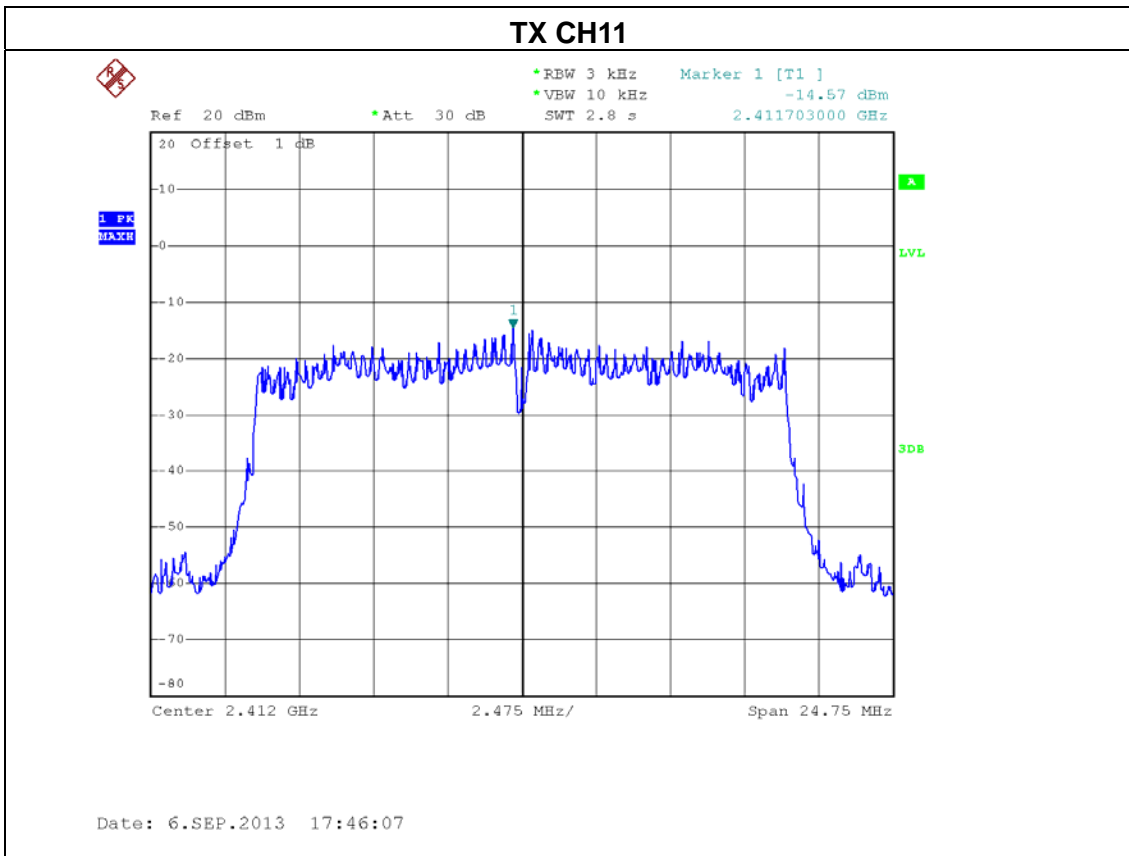
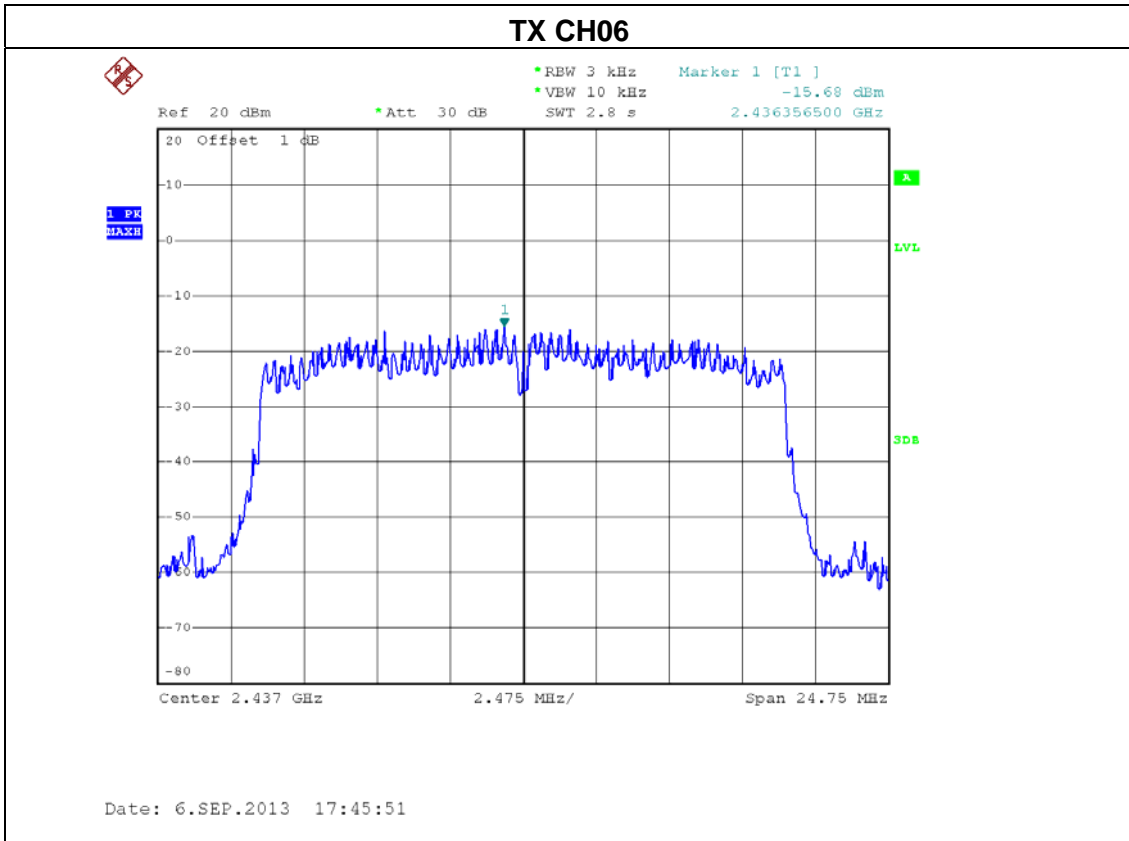




EUT :	Wireless N301 Easy Setup Router	Model Name :	N301
Temperature :	24 °C	Relative Humidity :	60 %
Pressure :	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N MODE-20MHz /CH01, CH06, CH11-ANT 2		

Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH01	2412 MHz	-15.43	8
CH06	2437 MHz	-15.68	8
CH11	2462 MHz	-14.57	8





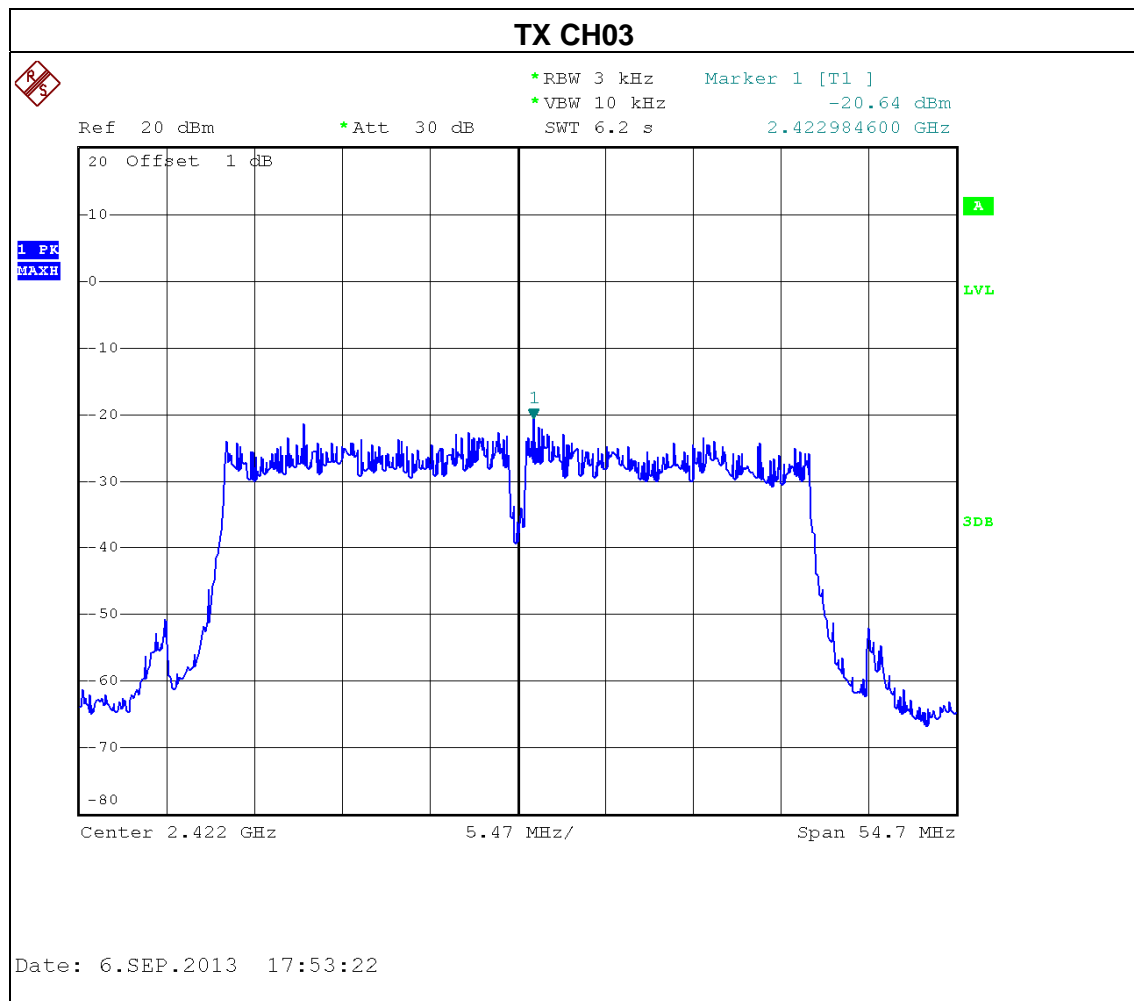
EUT :	Wireless N301 Easy Setup Router	Model Name :	N301
Temperature :	24 °C	Relative Humidity :	60 %
Pressure :	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N MODE-20MHz /CH01, CH06, CH11-ANT 1+ANT 2		

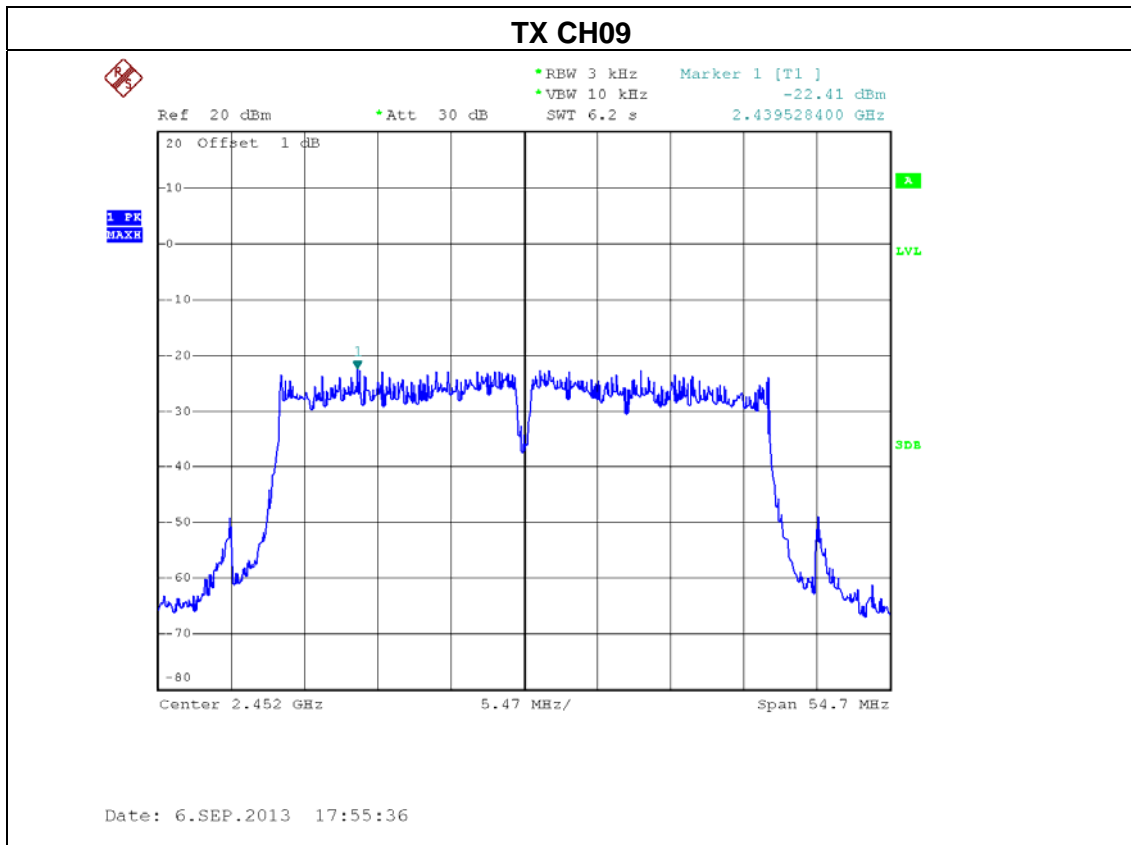
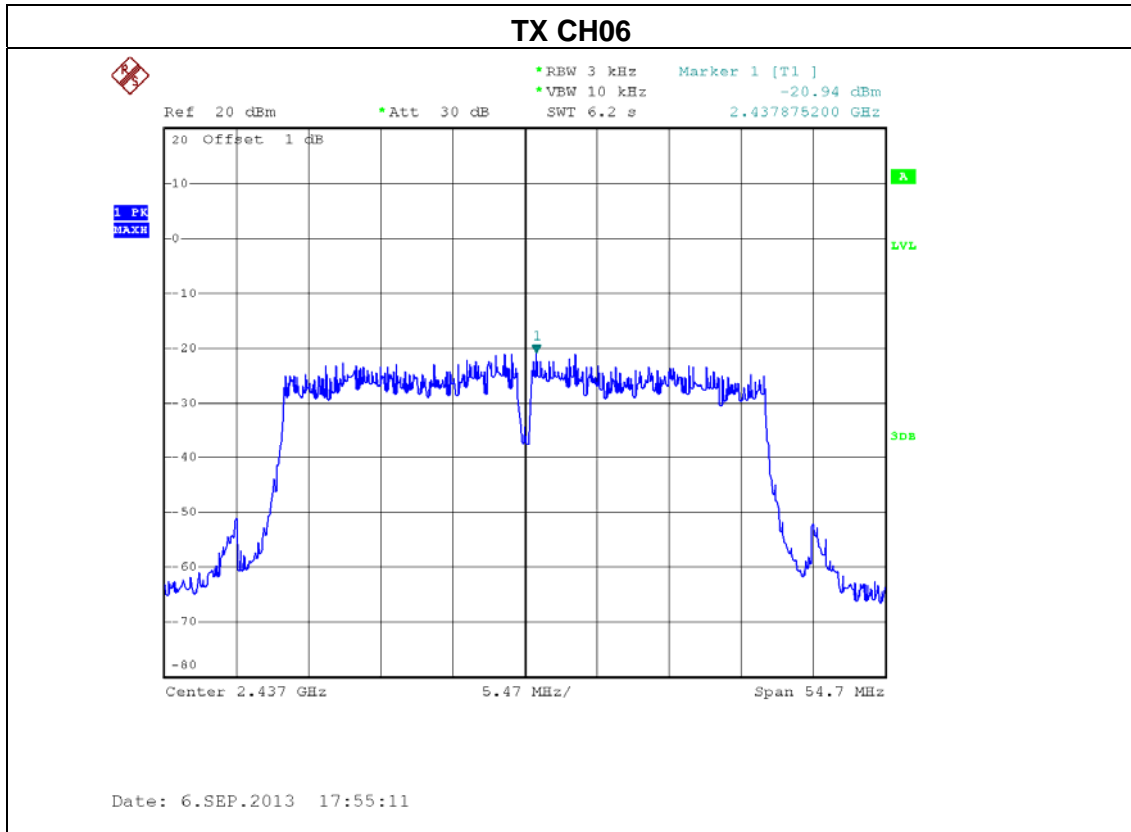
Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH01	2412 MHz	-12.03	8
CH06	2437 MHz	-12.05	8
CH11	2462 MHz	-11.59	8

Note: The EUT incorporates a MIMO function. Physically, the EUT provides two completed transmitters and two receivers (2T2R), all transmit signals are completely uncorrelated, then, Direction gain = G_{ANT} , that is Directional gain=4.94.

EUT :	Wireless N301 Easy Setup Router	Model Name :	N301
Temperature :	24 °C	Relative Humidity :	60 %
Pressure :	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N MODE-40MHz /CH03, CH06, CH09-ANT 1		

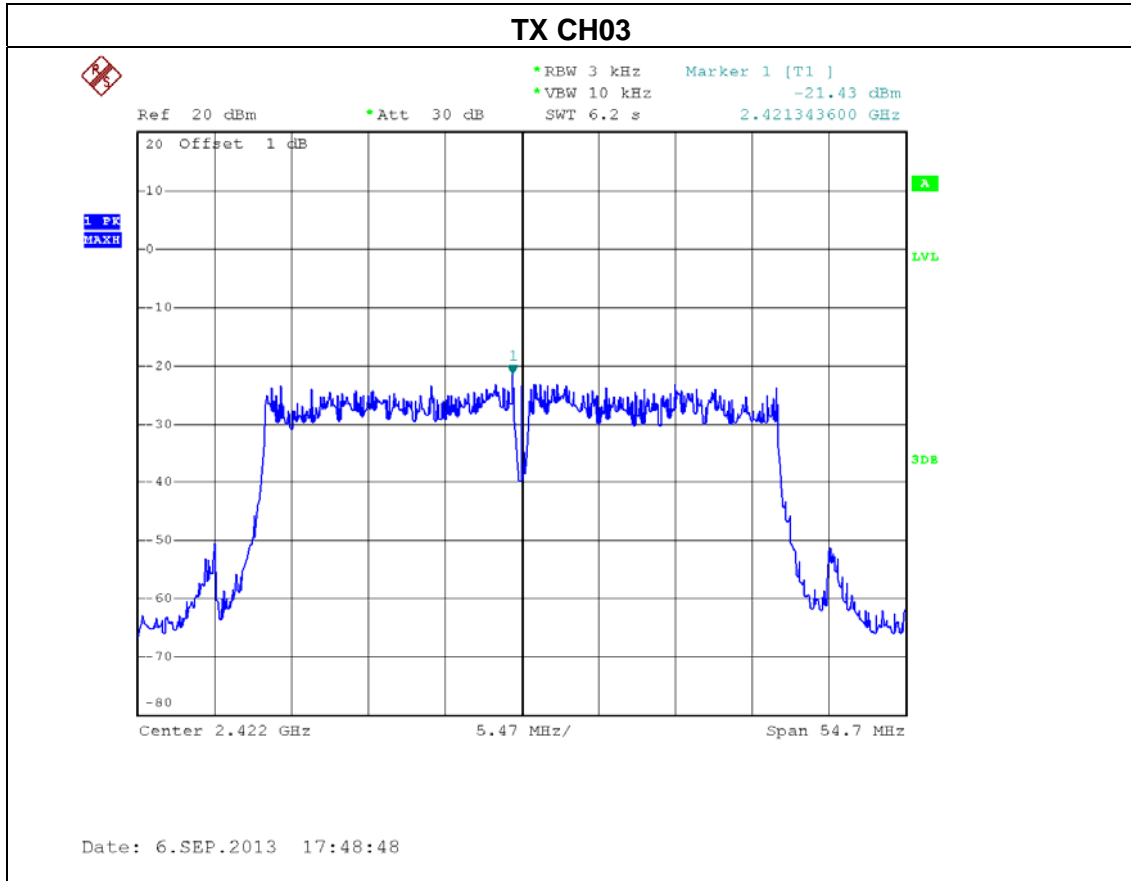
Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH03	2422 MHz	-20.64	8
CH06	2437 MHz	-20.94	8
CH09	2452 MHz	-22.41	8

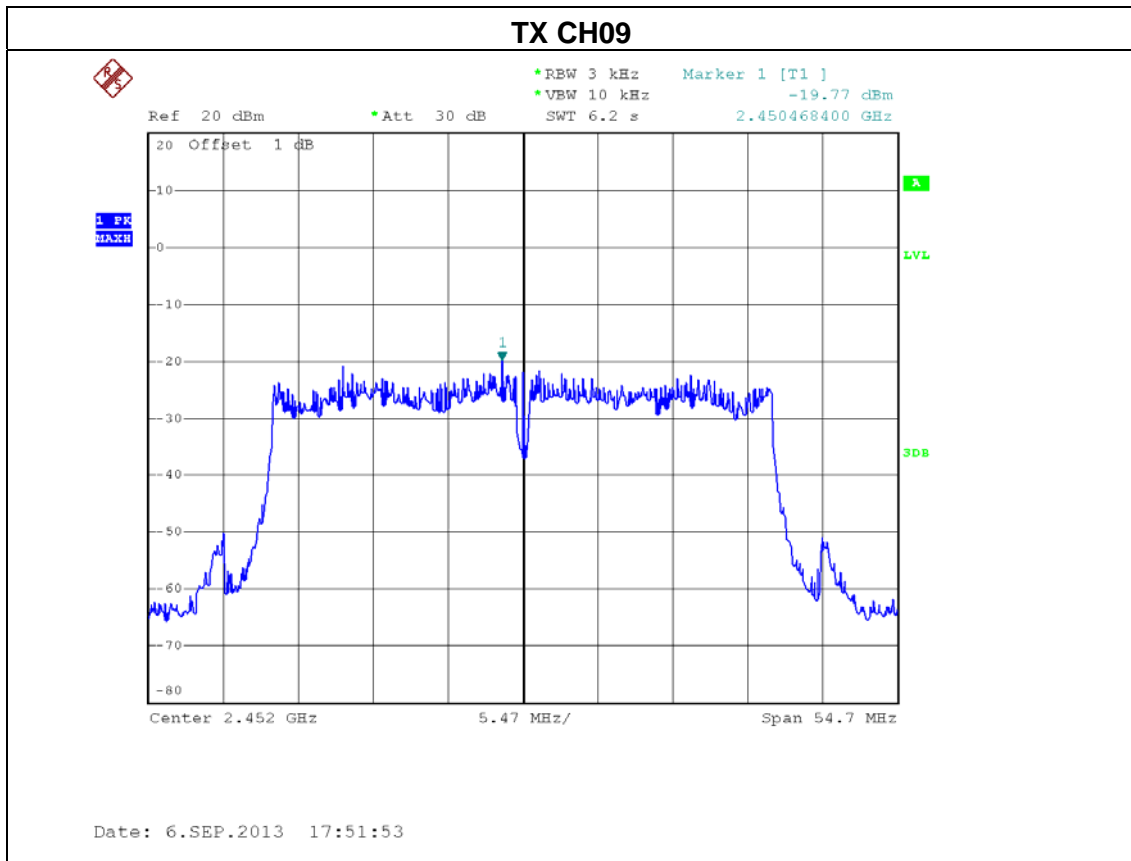
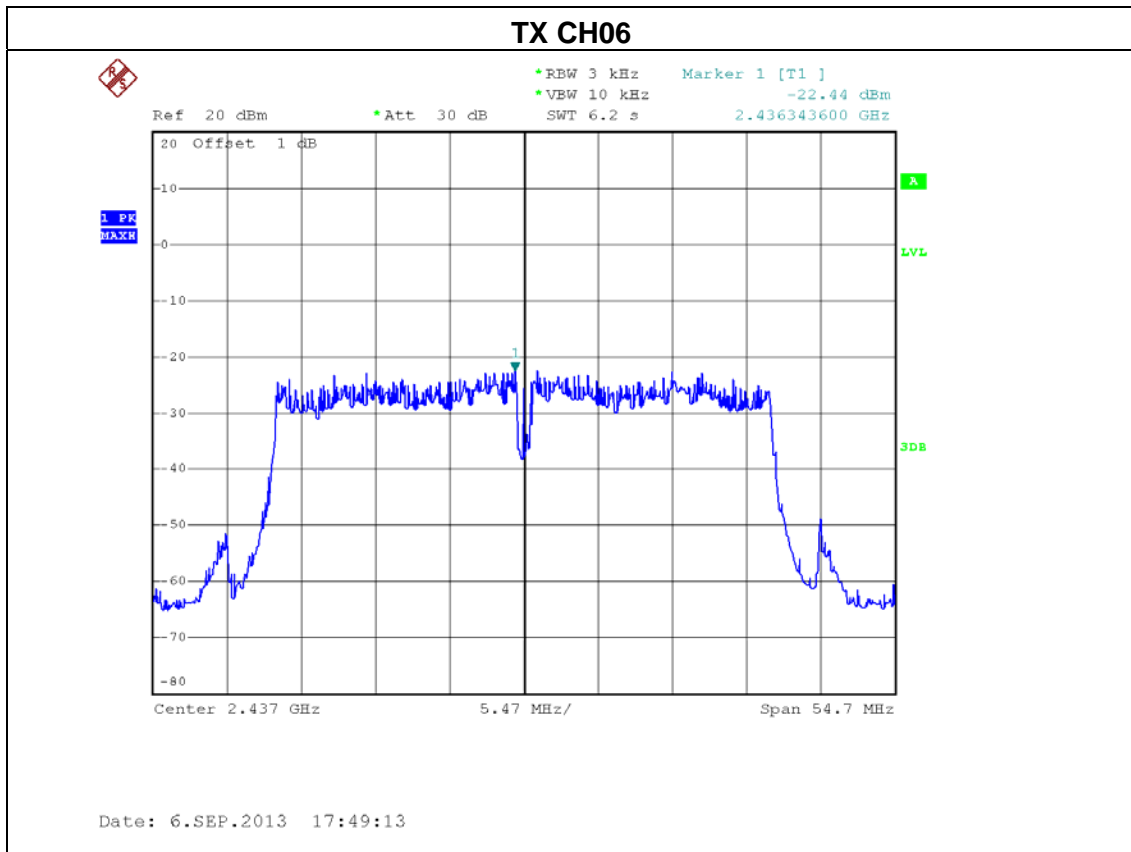




EUT :	Wireless N301 Easy Setup Router	Model Name :	N301
Temperature :	24 °C	Relative Humidity :	60 %
Pressure :	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N MODE-40MHz /CH03, CH06, CH09-ANT 2		

Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH03	2422 MHz	-21.43	8
CH06	2437 MHz	-22.44	8
CH09	2452 MHz	-19.77	8





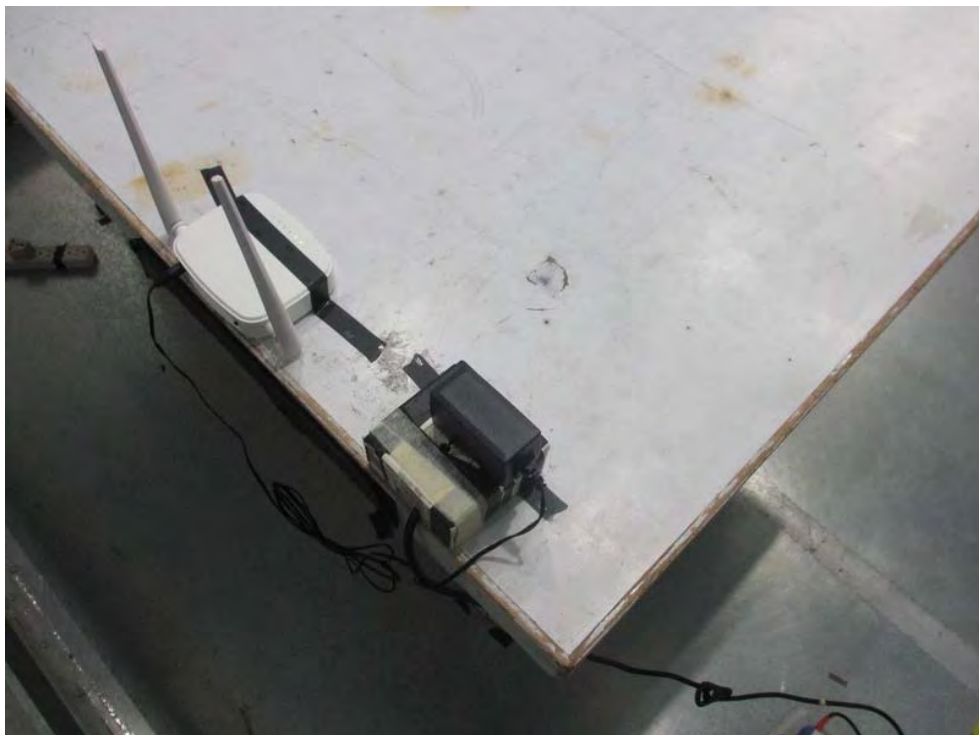
EUT :	Wireless N301 Easy Setup Router	Model Name :	N301
Temperature :	24 °C	Relative Humidity :	60 %
Pressure :	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N MODE-40MHz /CH03, CH06, CH09-ANT 1+ANT 2		

Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH03	2422 MHz	-18.01	8
CH06	2437 MHz	-18.62	8
CH09	2452 MHz	-17.88	8

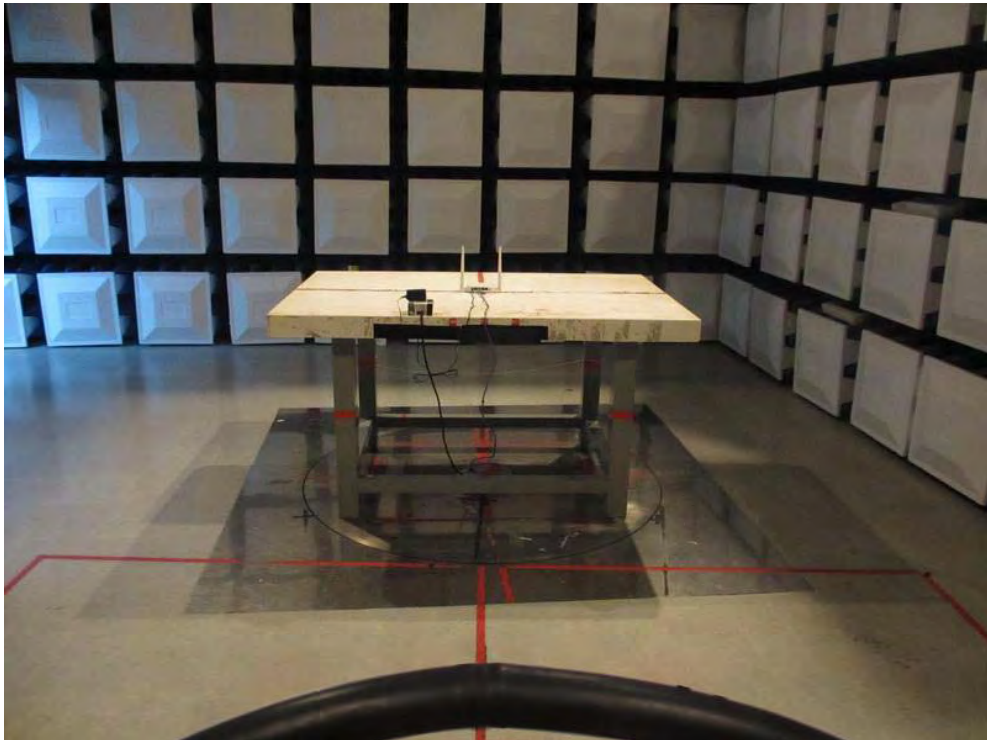
Note: The EUT incorporates a MIMO function. Physically, the EUT provides two completed transmitters and two receivers (2T2R), all transmit signals are completely uncorrelated, then, Direction gain = G_{ANT} , that is Directional gain=4.94.

9. EUT TEST PHOTO

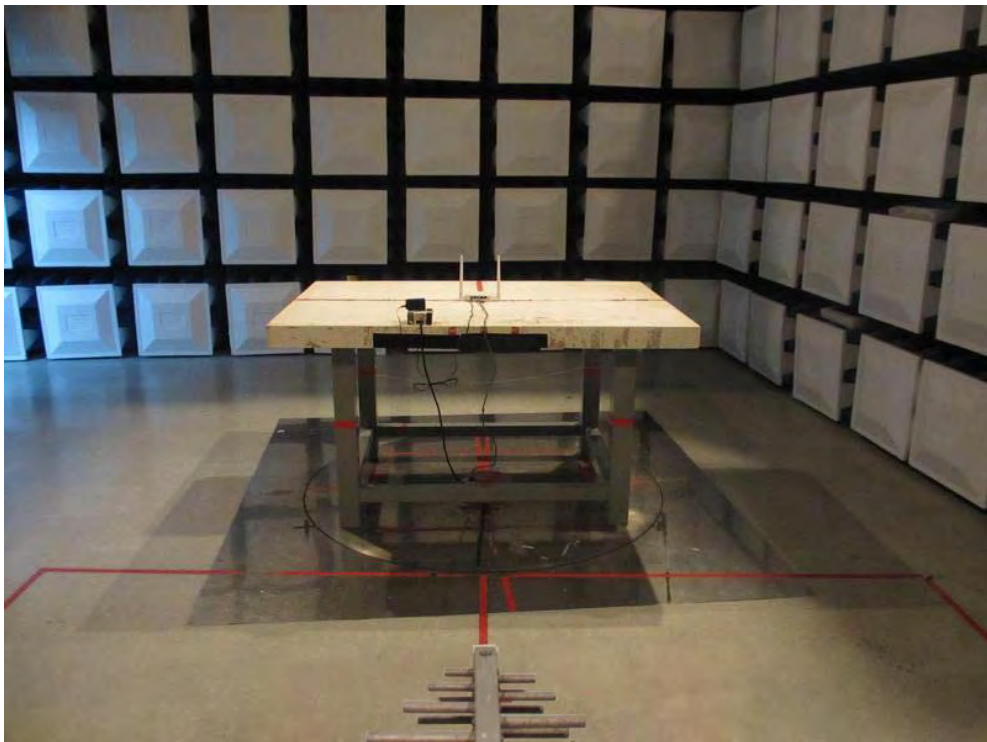
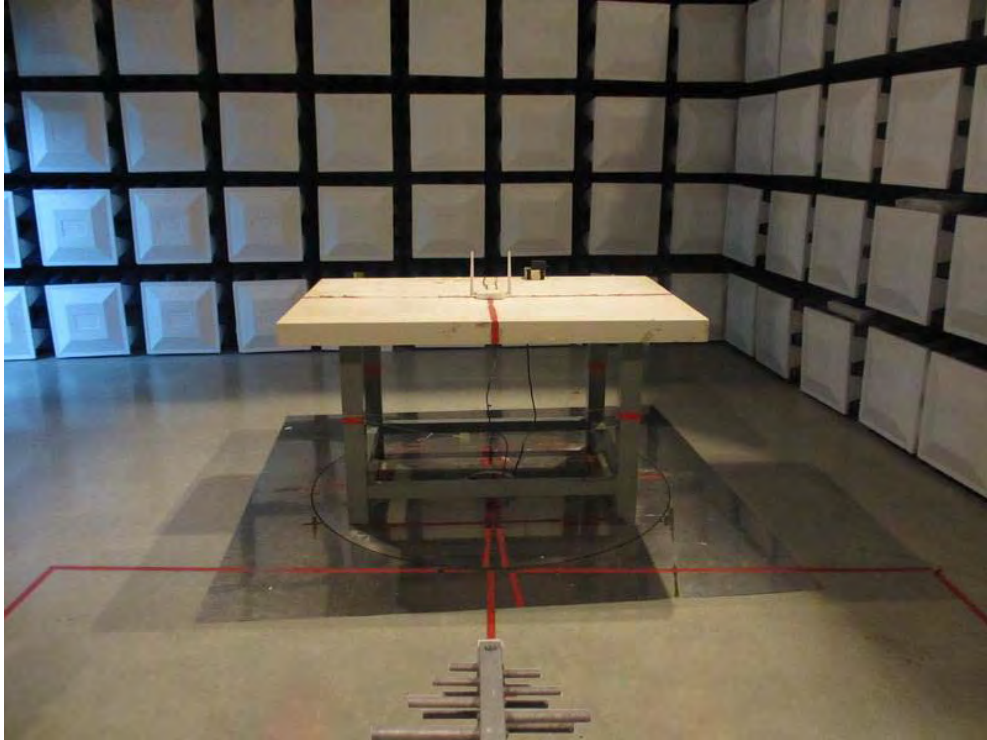
Conducted Measurement Photos



**Radiated Measurement Photos
9KHz-30MHz**



**Radiated Measurement Photos
30MHz -1000MHz**



**Radiated Measurement Photos
Above 1000MHz**

