



Neutron Engineering Inc.

Wireless LAN Radio Test Report

FCC ID: BQO-XC900M

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

Issued Date : Mar. 07, 2012

Project No. : 1202057

Equipment : 802.11b/g miniPCI Module

Model Name : XC900M

Applicant : XAGYL COMMUNICATIONS

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Tested by: Neutron Engineering Inc. EMC Laboratory

Date of Receipt: Feb. 10, 2012

Date of Test: Feb. 10, 2012 ~ Mar. 02, 2012

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Declaration

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

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Limitation

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



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1. CERTIFICATION

Equipment : 802.11b/g miniPCI Module
Brand Name : XAGYL
Model Name : XC900M
Applicant : XAGYL COMMUNICATIONS
Date of Test : Feb. 10, 2012 ~ Mar. 02, 2012
Standards : FCC Part15, Subpart C: 2010 / ANCI C63.4 : 2003

The above equipment has been tested and found compliance with the requirement of the relative standards by Neutron Engineering Inc. EMC Laboratory.
The test data, data evaluation, and equipment configuration contained in our test report (Ref No. NEI-FCCP-1-1202057) were obtained utilizing the test procedures, test instruments, test sites that has been accredited by the Authority of NVLAP and 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, Subpart C: 2010			
Standard Section	Test Item	Judgment	Remark
15.207	Conducted Emission	PASS	
15.247 (c)	Antenna conducted Spurious Emission	PASS	
15.247 (a)(2)	6dB Bandwidth	PASS	
15.247 (b)	Peak Output Power	PASS	
15.247 (c)	Radiated Spurious Emission	PASS	
15.247 (d)	Power Spectral Density	PASS	
15.203	Antenna Requirement	PASS	
1.1307 1.1310 2.1091 2.1093	RF Exposure Compliance	PASS	

NOTE:

- (1) "N/A" denotes test is not applicable in this Test Report
- (2) Portable device; SAR report is required.
- (3) Reference standerads is FCCP-102



2.1 TEST FACILITY

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

- C02:** (VCCI RN: C-3477; FCC RN: 614388; FCC DN: TW1054)
1F., No. 61, Ln. 77, Sing-ai Rd., Neihu Dist., Taipei City 114, Taiwan (R.O.C.)
- CB08:** (VCCI RN: G-91; FCC RN: 614388; FCC DN: TW1054;
IC Assigned Code: 4428C-1)
1F., No. 61, Ln. 77, Sing-ai Rd., Neihu Dist., Taipei City 114, Taiwan (R.O.C.)

2.2 MEASUREMENT UNCERTAINTY

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%.

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

A. Conducted Measurement :

Test Site	Method	Measurement Frequency Range	U , (dB)	NOTE
C02	ANSI	150 kHz ~ 30 MHz	2.5	

B. Radiated Measurement :

Test Site	Item	Measurement Frequency Range	Uncertainty	NOTE
CB08	Radiated Emission at 3m	Horizontal Polarization	30 - 00MHz	3.35 dB
			200 - 1000MHz	3.1 dB
			1 - 18GHz	3.7 dB
			18 - 40GHz	4.01 dB
	Vertical Polarization		30 - 200MHz	3.22 dB
			200 - 1000MHz	3.24 dB
			1 - 18GHz	4.05 dB
			18 - 40GHz	4.04 dB

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

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

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

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

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



3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

Equipment	802.11b/g miniPCI Module	
Brand Name	XAGYL	
Model Name	XC900M	
OEM Brand/Model Name	N/A	
Model Difference	N/A	
Product Description	The EUT is an 802.11b/g miniPCI Module.	
	Operation Frequency:	Normal: 907~922 MHz Extended: 905~925 MHz
	Modulation Type:	802.11b:DSSS (CCK, DQPSK, DBPSK) 802.11g:OFDM (BPSK, QPSK, 16QAM, 64QAM)
	Bit Rate of Transmitter:	802.11b: 11/5.5/2/1 Mbps 802.11g: 54/48/36/24/18/12/9/6 Mbps
	Channel Bandwidth:	Normal: 907MHz: 5/10M 912MHz: 5/10/20M 917MHz: 5/10/20M 922MHz: 5/10M Extended: 905MHz: 5M 910MHz: 5/10M 915MHz: 5/10/20M 920MHz: 5/10M 925MHz: 5M
	Number Of Channel	Please see Note 2.
	Antenna Designation:	Please see Note 3.
	Antenna Gain(Peak)	Please see Note 3.
	Conducted Output Power(Max):	Normal: 802.11b: 29.32 dBm Normal: 802.11g: 29.51 dBm Extended: 802.11b: 29.51 dBm Extended: 802.11g: 29.52 dBm
	Based on the application, features, or specification exhibited in User's Manual, the EUT is considered as an ITE/Computing Device. More details of EUT technical specification, please refer to the User's Manual.	
Power Source	Supplied from miniPCI Slot.	
Power Rating	Please refer to the User's Manual	
Products Covered	1 * Antenna 1 * Antenna Cable	
Connecting I/O Port(s)	Please refer to the User's Manual	
EUT Modification(s)	N/A	



Note:

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

Channel List			
Normal		Extended	
Channel	Frequency (MHz)	Channel	Frequency (MHz)
01	907	01	905
02	912	02	910
03	917	03	915
04	922	04	920
		05	925

3. Table for Filed Antenna

Ant.	Brand	Model Name	Antenna Type	Connector	Cable loss (min.)	Gain (dBi)
1	XAGYL	MA9-5N	Omni Directional	MMCX	0.5	5.50

NOTE: Total Gain: $5.5 - 0.5 = 5\text{dBi}$



3.2 DESCRIPTION OF TEST MODES

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

Pretest Test Mode	Description
Mode 1	Transmit: IEEE 802.11b/20MHz Bandwidth/ 912 MHz, 917 MHz, 915 MHz
Mode 2	Transmit: IEEE 802.11g/5MHz Bandwidth/ 907 MHz, 912 MHz, 917 MHz, 922 MHz, 905 MHz, 910 MHz, 915 MHz, 920MHz, 925 MHz
Mode 3	Transmit: IEEE 802.11g/10MHz Bandwidth/ 907 MHz, 912 MHz, 917 MHz, 922 MHz, 910 MHz, 915 MHz, 920MHz,
Mode 4	Transmit: IEEE 802.11g/20MHz Bandwidth/ 912 MHz, 917 MHz, 915 MHz

During the output power test, all data rates have been investigated and the highest output powers were recorded are as follows:

802.11b mode: CCK (1Mbps)

802.11g mode: BPSK (6Mbps)

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

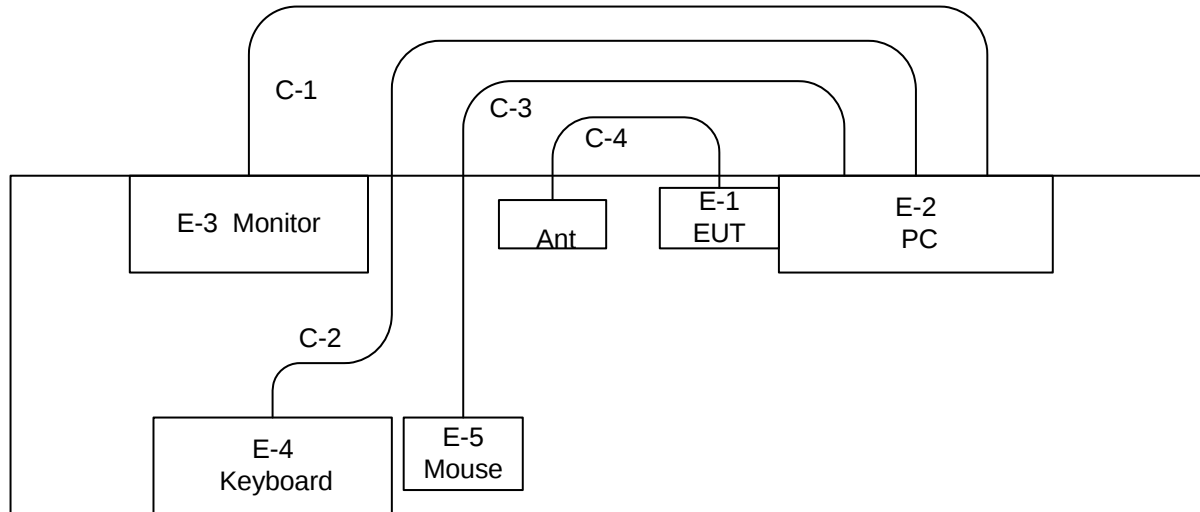
All test item following channel(s) was (were) selected for the final test as listed below.

Test Items	Mode	Data Rate	Bandwidth (MHz)	Frequency (MHz)	Note
Conducted Emission	802.11g/BPSK	6 Mbps	5	912	
Radiated Spurious Emission (30MHz~1GHz)	802.11g/BPSK	6 Mbps	20	912	
Radiated Spurious Emissions (1GHz~26.5GHz)	802.11b/CCK	1 Mbps	20	912/917/ 915	
	802.11g/BPSK	6 Mbps	5	907/912/922/ 905/915/925	
	802.11g/BPSK	6 Mbps	10	907/912/922/ 915	
	802.11g/BPSK	6 Mbps	20	912/ 915	
6dB Bandwidth	802.11b/CCK	1 Mbps	20	912/917/ 915	
	802.11g/BPSK	6 Mbps	5	907/912/922/ 905/915/925	
	802.11g/BPSK	6 Mbps	10	907/912/922/ 915	
	802.11g/BPSK	6 Mbps	20	912/ 915	



Peak Output Power	802.11b/CCK	1 Mbps	20	912/917/ 915	
	802.11g/BPSK	6 Mbps	5	907/912/922/ 905/915/925	
	802.11g/BPSK	6 Mbps	10	907/912/922/ 915	
	802.11g/BPSK	6 Mbps	20	912/ 915	
Antenna conducted Spurious Emission	802.11b/CCK	1 Mbps	20	912/917	
	802.11g/BPSK	6 Mbps	5	907/922/ 905/925	
	802.11g/BPSK	6 Mbps	10	907/922	
Power Spectral Density	802.11b/CCK	1 Mbps	20	912/917/ 915	
	802.11g/BPSK	6 Mbps	5	907/912/922/ 905/915/925	
	802.11g/BPSK	6 Mbps	10	907/912/922/ 915	
	802.11g/BPSK	6 Mbps	20	912/ 915	
RF Exposure Compliance	802.11b/CCK	1 Mbps	20	912/917/ 915	
	802.11g/BPSK	6 Mbps	5	907/912/922/ 905/915/925	
	802.11g/BPSK	6 Mbps	10	907/912/922/ 915	
	802.11g/BPSK	6 Mbps	20	912/ 915	

3.3 BLOCK DIAGRAM SHOWING THE CONFIGURATION OF RADIATED EMISSION TESTED



C-1 VGA Cable
C-2 PS2 Cable
C-3 PS2 Cable
C-4 ANT Cable



3.4 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.	Note
E-1	802.11b/g miniPCI Module	XAGYL	XC900M	BQO-XC900M	N/A	EUT
E-2	PC	HP	HP Compaq dx7400 MT	DOC	SGH7480DKZ	
E-3	24" LCD Monitor	DELL	2408WFPb	DOC	071863-11	
E-4	PS/2 K/B	Logitech	Y-SJ17(ACK260A)	DOC	SYU44664880	
E-5	PS/2 Mouse	Logitech	M-SBF69	DOC	HCA44601156	

Item	Shielded Type	Ferrite Core	Length	Note
C-1	YES	YES	1.8M	VGA Cable
C-2	YES	N/A	1.7M	PS2 Cable
C-3	YES	N/A	1.7M	PS2 Cable
C-4	N/A	N/A	1.3M	ANT 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 cm in 『Length』 column.
- (3) " ※ " denotes the support equipment by applicant.



4. EMC EMISSION TEST

4.1 CONDUCTED EMISSION MEASUREMENT

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

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

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

4.1.2 MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	LISN	EMCO	3816/2	00066528	Mar. 22, 2012
2	Test Cable	TIMES	CFD300-NL	130	Jun. 16, 2012
3	TWO-LINE -NETWORK	R&S	ENV216	101050	Jun. 06, 2012
4	EMI Test Receiver	R&S	ESCS 30	8333641017	Jul. 26, 2012

Remark: " N/A" denotes No Model Name , Serial No. or No Calibration specified.

4.1.3 TEST PROCEDURE

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

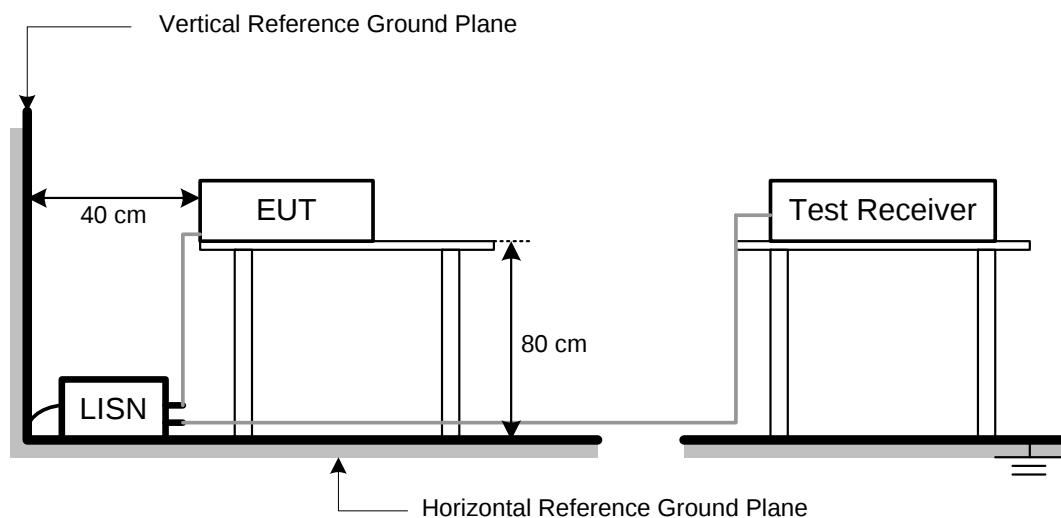
NOTE:

- Reading in which marked as Peak, QP or AVG means measurements by using are Quasi-Peak or Average Mode with Detector BW=9 kHz; SPA setting in RBW=10 kHz, VBW =10 kHz, Swp. Time = 0.2 sec./ MHz.
- All readings are Peak Mode value unless otherwise stated QP or AVG in column of Note. If the Peak or 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 Peak or QP Mode was measured, but AVG Mode didn't perform.

4.1.4 DEVIATION FROM TEST STANDARD

No deviation

4.1.5 TEST SETUP





4.1.6 EUT OPERATING CONDITIONS

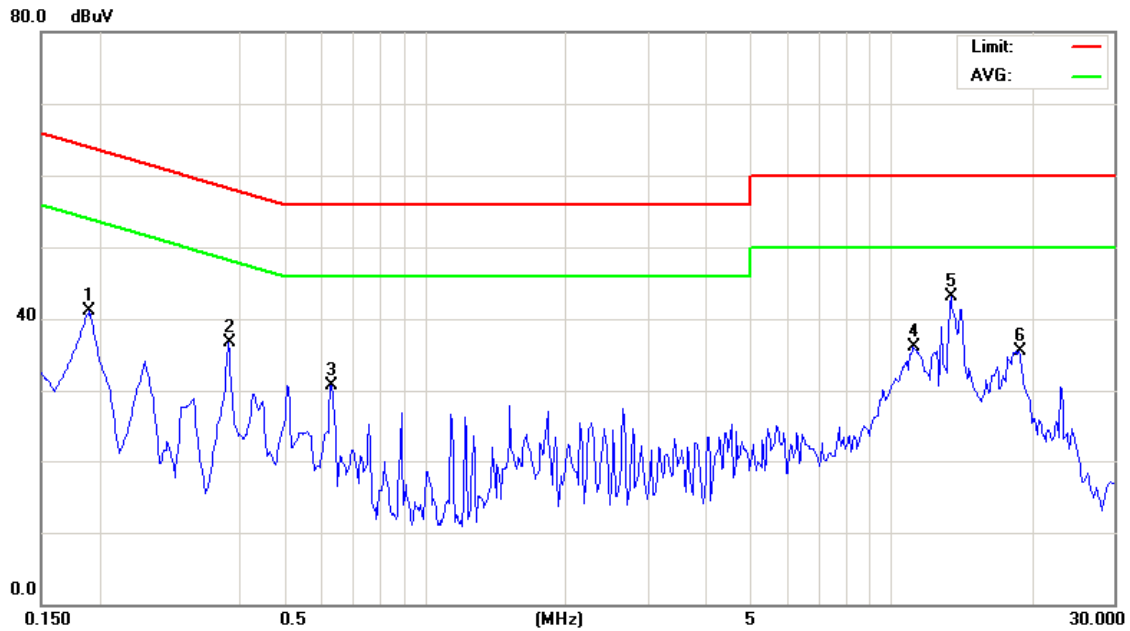
The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.



4.1.7 TEST RESULTS

EUT :	802.11b/g miniPCI Module	Model Name :	XC900M
Temperature :	24° C	Relative Humidity :	46%
Test Voltage :	AC 120V/60Hz (System)		
Test Mode :	Transmit: IEEE 802.11g/5MHz Bandwidth/912 MHz		

Phase: Line

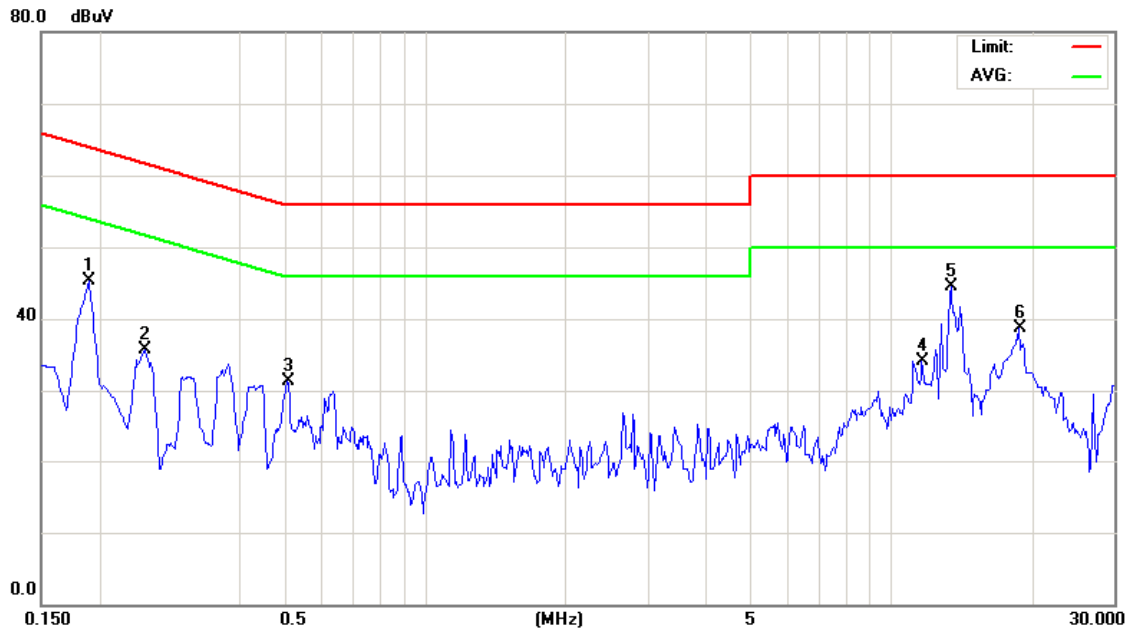


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1		0.1904	31.58	9.60	41.18	64.02	-22.84	peak	
2		0.3799	27.03	9.62	36.65	58.28	-21.63	peak	
3		0.6298	21.17	9.62	30.79	56.00	-25.21	peak	
4		11.1499	26.23	9.83	36.06	60.00	-23.94	peak	
5	*	13.4200	33.24	9.86	43.10	60.00	-16.90	peak	
6		18.7299	25.59	9.91	35.50	60.00	-24.50	peak	



EUT :	802.11b/g miniPCI Module	Model Name :	XC900M
Temperature :	24° C	Relative Humidity :	46%
Test Voltage :	AC 120V/60Hz (System)		
Test Mode :	Transmit: IEEE 802.11g/5MHz Bandwidth/912 MHz		

Phase: Neutral



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1		0.1897	35.67	9.60	45.27	64.05	-18.78	peak	
2		0.2500	26.12	9.60	35.72	61.76	-26.04	peak	
3		0.5098	21.65	9.62	31.27	56.00	-24.73	peak	
4		11.6499	24.29	9.84	34.13	60.00	-25.87	peak	
5	*	13.4200	34.55	9.87	44.42	60.00	-15.58	peak	
6		18.7600	28.67	9.94	38.61	60.00	-21.39	peak	



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
Above 960	500	3

LIMITS OF RADIATED EMISSION MEASUREMENT (Above 1000MHz)

FREQUENCY (MHz)	Class A (dBuV/m) (at 3m)		Class B (dBuV/m) (at 3m)	
	PEAK	AVERAGE	PEAK	AVERAGE
Above 1000	80	60	74	54

Notes:

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

**4.2.2 MEASUREMENT INSTRUMENTS LIST**

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP-40	100129	Oct. 16, 2012
2	Horn Antenna	Schwarzbeck	BBHA 9120	D-325	Dec. 15, 2012
3	Microwave Pre_amplifier	Agilent	8449B	3008A01714	Apr. 18, 2012
4	Microflex Cable	N/A	N/A	1m	May. 18, 2012
5	Microflex Cable	AISI	S104-SMAP-1	10m	Aug. 21, 2012
6	Microflex Cable	N/A	N/A	3m	Aug. 21, 2012
7	Test Cable	N/A	LMR-400	966_12m	Jun. 16, 2012
8	Test Cable	N/A	LMR-400	966_3m	Jun. 16, 2012
9	Pre-Amplifier	EMC	EMC-330	980001	Jun. 02, 2012
10	Log-Bicon Antenna	Schwarzbeck	VULB9168-352	9168-352	Jun. 20, 2012

Remark: " N/A" denotes No Model Name / Serial No. and No Calibration specified.



4.2.3 TEST PROCEDURE

- a. The measuring distance of at 3 m shall be used for measurements at frequency up to 1GHz. For frequencies above 1GHz, any suitable measuring distance may be used.
- b. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 m Semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- c. The height of the equipment or of the substitution antenna shall be 0.8 m; the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- e. If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed.
- f. EUT Orthogonal Axes :
"X" - denotes Laid on Table ; "Y" - denotes Vertical Stand ; "Z" - denotes Side Stand
- g. For the actual test configuration, please refer to the related Item –EUT Test Photos.
- h. The testing follows the guidelines in ANSI C63.4-2003 and FCC Public Notice DA 00-705 Measurement Guidelines. In case the emission is fail due to the used RBW / VBW is too wide, marker-delta method of FCC Public Notice DA 00-705 will be followed.

NOTE: (30-1000MHz)

- a. Reading in which marked as QP or Peak means measurements by using are Quasi-Peak Mode with Detector BW=120 kHz; SPA setting in RBW=120 kHz, VBW =120 kHz, Swp. Time = 0.3 sec./ MHz.
- b. 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.

NOTE: (Above 1000MHz)

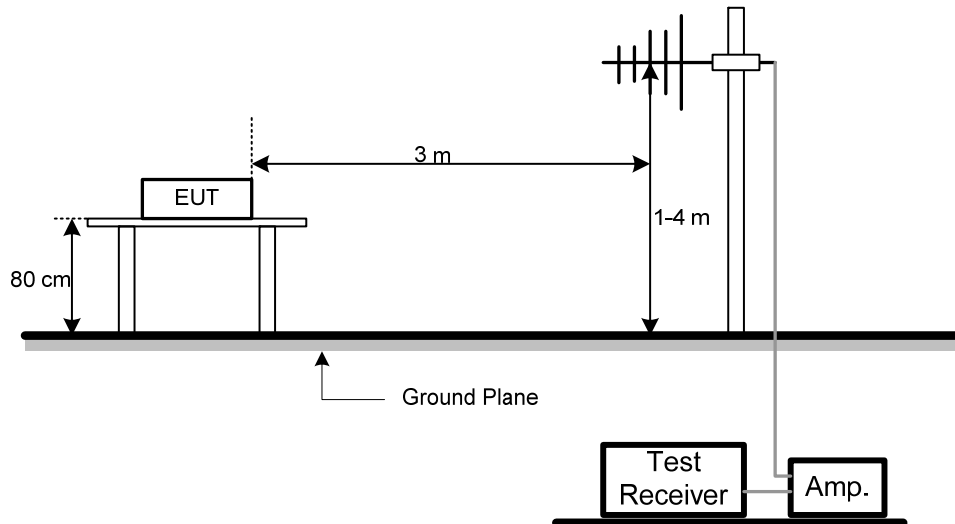
- a. Reading in which marked as Peak means measurements by using are Peak Mode with instrument setting in RBW= 1 MHz, VBW= 1 MHz, Swp. Time = Auto.
Reading in which marked as AV means measurements by using are Average Mode with instrument setting in RBW= 1 MHz, VBW= 10 Hz, Swp. Time = Auto.
- b. All 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.

4.2.4 DEVIATION FROM TEST STANDARD

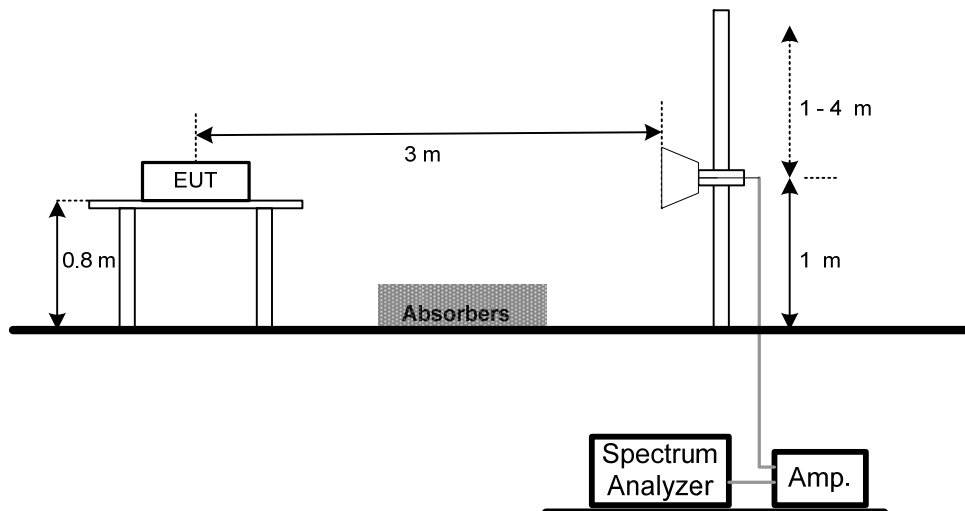
No deviation

4.2.5 TEST SETUP

Radiated Emission Test Set-Up Frequency 30 - 1000MHz



Radiated Emission Test Set-Up Frequency Above 1 GHz



4.2.6 EUT OPERATING CONDITIONS

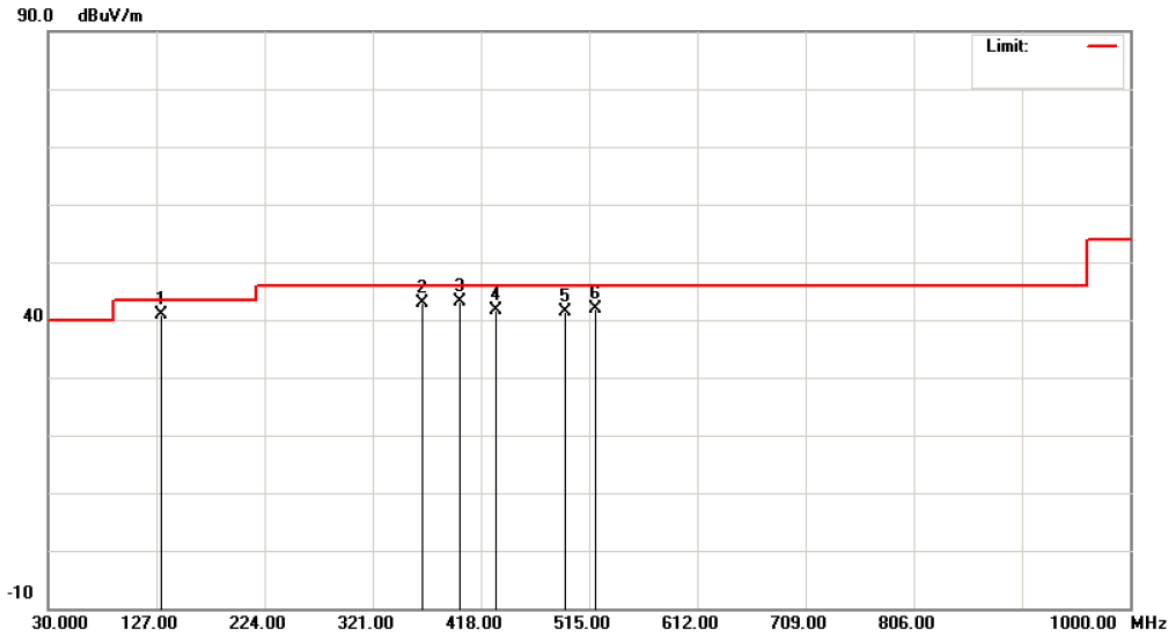
The EUT tested system was configured as the statements of **4.1.6** Unless otherwise a special operating condition is specified in the follows during the testing.



4.2.7 TEST RESULTS-BETWEEN 30MHZ - 1000MHZ - TX

EUT :	802.11b/g miniPCI Module	Model Name :	XC900M
Temperature :	26° C	Relative Humidity :	60%
Test Voltage :	AC 120V/60Hz (System)	Orthogonal Axes:	Y
Test Mode :	Transmit: IEEE 802.11g/5MHz Bandwidth/912 MHz		

Polarization: Vertical

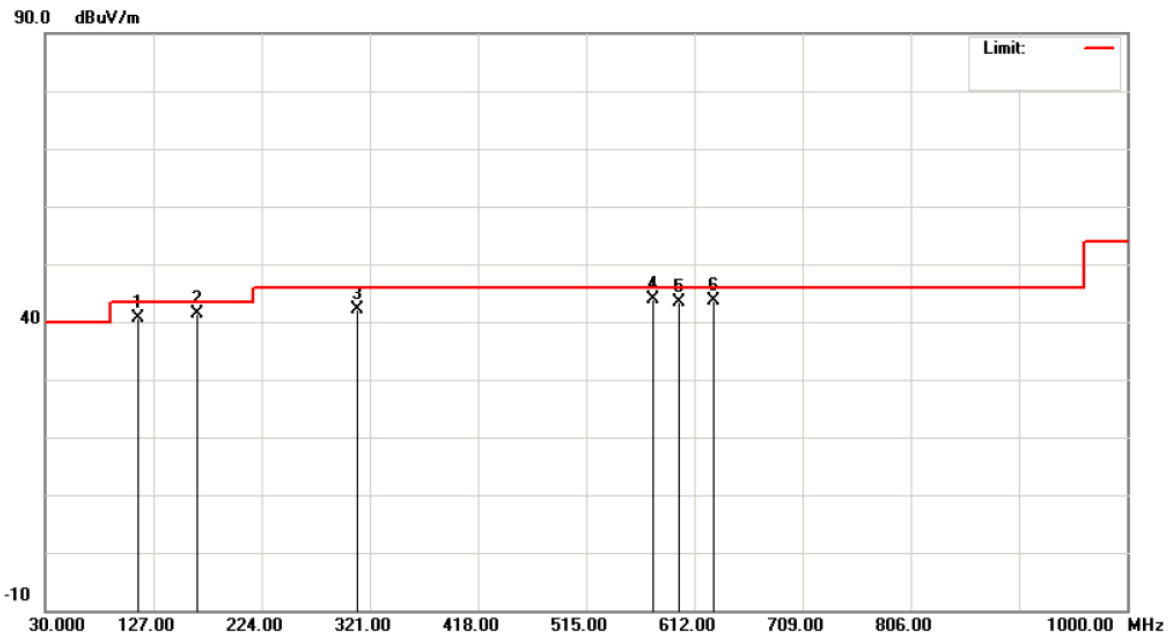


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	130.8800	27.30	13.60	40.90	43.50	-2.60	peak	
2		365.6199	25.74	17.06	42.80	46.00	-3.20	peak	
3		398.6000	25.34	17.91	43.25	46.00	-2.75	peak	
4		431.5798	23.00	18.73	41.73	46.00	-4.27	peak	
5		493.6600	21.59	19.81	41.40	46.00	-4.60	peak	
6		520.8200	21.72	20.25	41.97	46.00	-4.03	peak	



EUT :	802.11b/g miniPCI Module	Model Name :	XC900M
Temperature :	26 ° C	Relative Humidity :	60%
Test Voltage :	AC 120V/60Hz (System)	Orthogonal Axes:	Y
Test Mode :	Transmit: IEEE 802.11g/5MHz Bandwidth/912 MHz		

Polarization: Horizontal



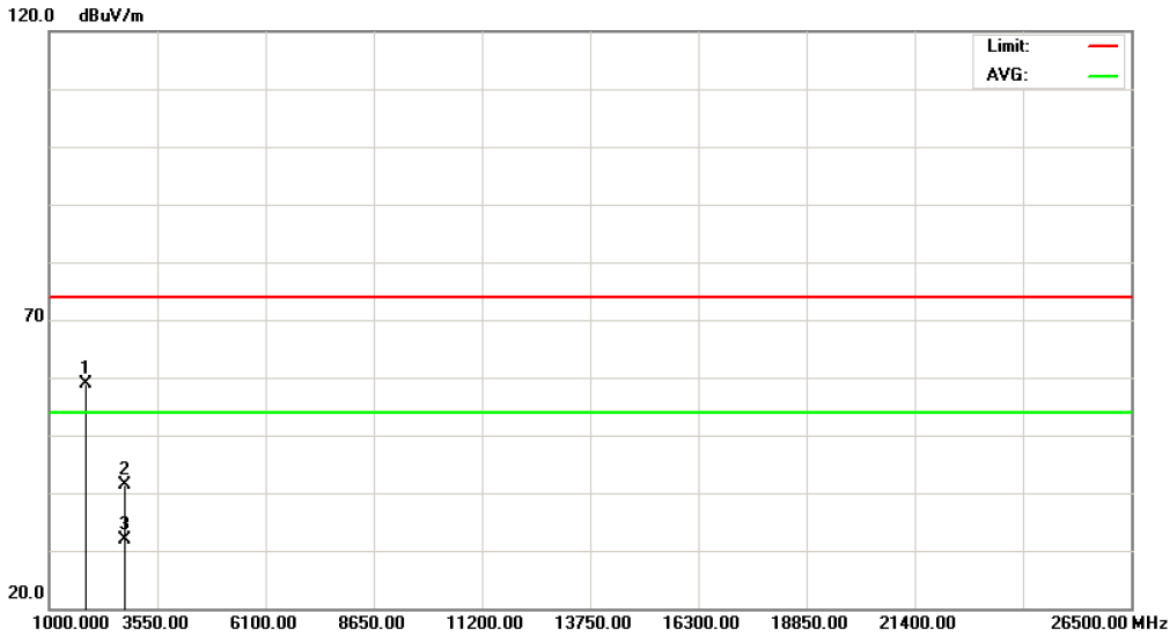
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		113.4199	28.57	12.02	40.59	43.50	-2.91	peak	
2		165.8000	26.92	14.45	41.37	43.50	-2.13	peak	
3		309.3598	26.42	15.68	42.10	46.00	-3.90	peak	
4	*	575.1400	22.43	21.45	43.88	46.00	-2.12	peak	
5		598.4199	21.15	22.11	43.26	46.00	-2.74	peak	
6		629.4600	21.04	22.57	43.61	46.00	-2.39	peak	



4.2.8 TEST RESULTS - ABOVE 1000MHZ - TX

EUT :	802.11b/g miniPCI Module	Model Name :	XC900M
Temperature :	26° C	Relative Humidity :	60%
Test Voltage :	AC 120V/60Hz (System)	Orthogonal Axes:	Y
Test Mode :	Transmit: IEEE 802.11b/20MHz Bandwidth/912 MHz		

Polarization: Vertical

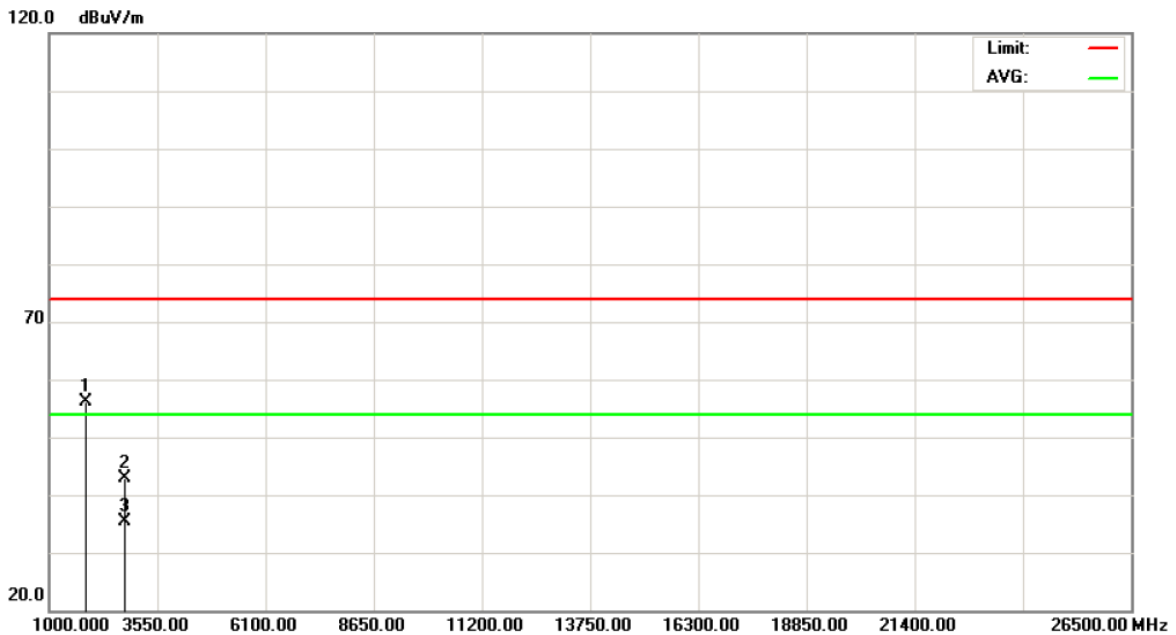


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	1824.840	63.42	-4.64	58.78	74.00	-15.22	peak	
2		2736.720	43.18	-1.73	41.45	74.00	-32.55	peak	
3		2736.720	33.52	-1.73	31.79	54.00	-22.21	AVG	



EUT :	802.11b/g miniPCI Module	Model Name :	XC900M
Temperature :	26° C	Relative Humidity :	60%
Test Voltage :	AC 120V/60Hz (System)	Orthogonal Axes:	Y
Test Mode :	Transmit: IEEE 802.11b/20MHz Bandwidth/912 MHz		

Polarization: Horizontal

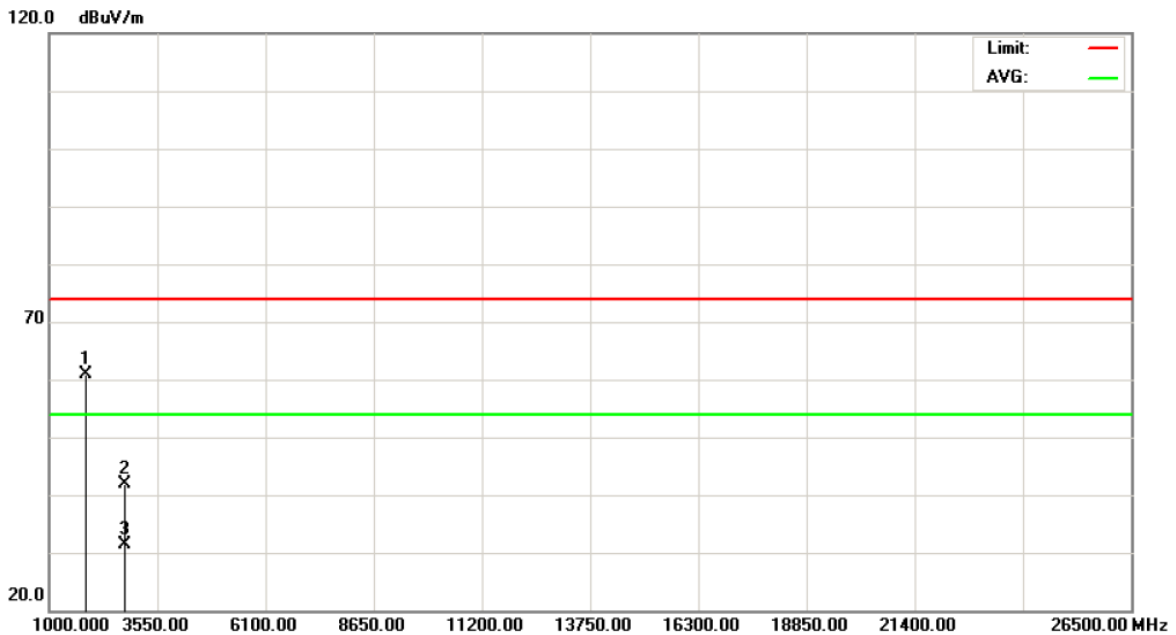


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	1824.930	60.82	-4.64	56.18	74.00	-17.82	peak	
2		2736.760	44.67	-1.73	42.94	74.00	-31.06	peak	
3		2736.760	37.12	-1.73	35.39	54.00	-18.61	AVG	



EUT :	802.11b/g miniPCI Module	Model Name :	XC900M
Temperature :	26° C	Relative Humidity :	60%
Test Voltage :	AC 120V/60Hz (System)	Orthogonal Axes:	Y
Test Mode :	Transmit: IEEE 802.11b/20MHz Bandwidth/917 MHz		

Polarization: Vertical

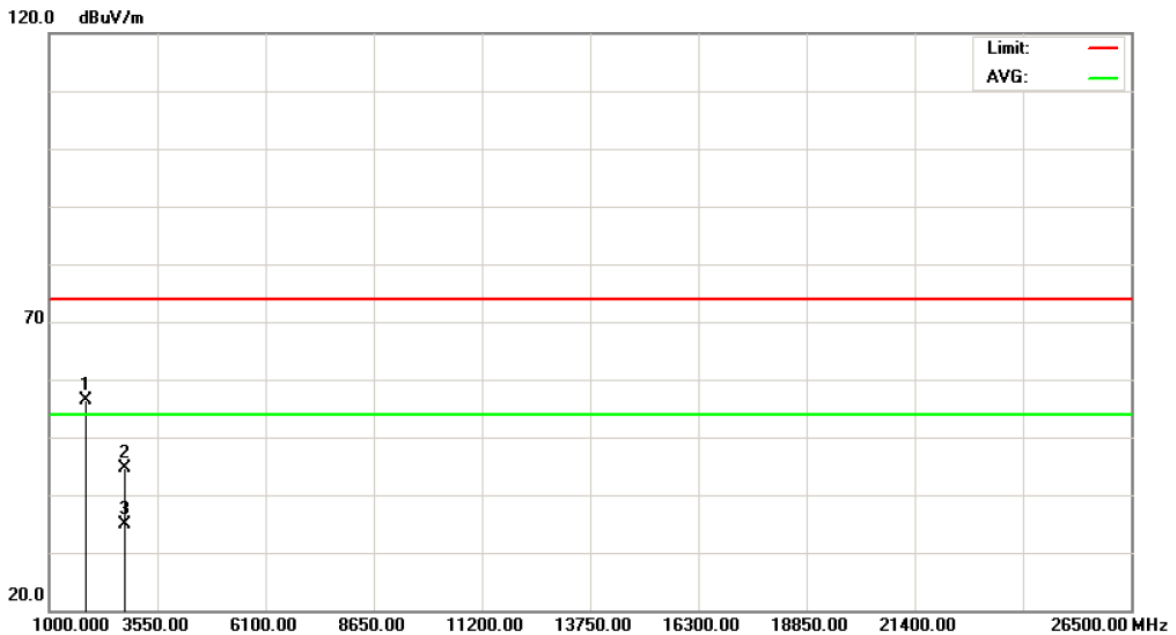


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	1834.840	65.37	-4.60	60.77	74.00	-13.23	peak	
2		2751.720	43.67	-1.72	41.95	74.00	-32.05	peak	
3		2751.720	33.02	-1.72	31.30	54.00	-22.70	AVG	



EUT :	802.11b/g miniPCI Module	Model Name :	XC900M
Temperature :	26° C	Relative Humidity :	60%
Test Voltage :	AC 120V/60Hz (System)	Orthogonal Axes:	Y
Test Mode :	Transmit: IEEE 802.11b/20MHz Bandwidth/917 MHz		

Polarization: Horizontal

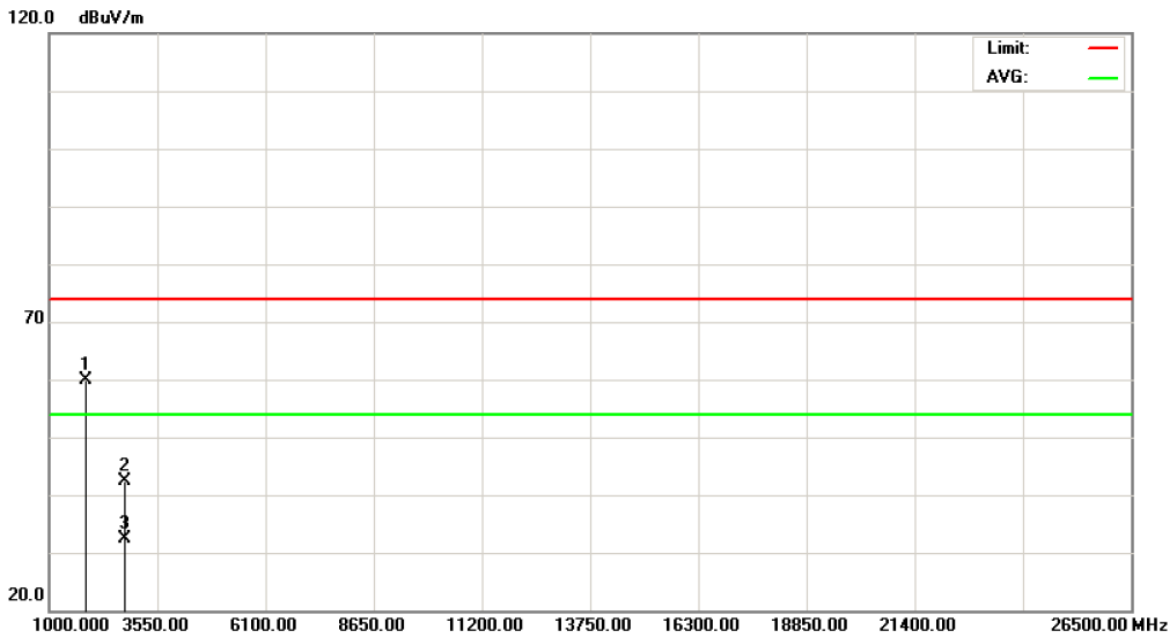


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	1834.930	61.02	-4.60	56.42	74.00	-17.58	peak	
2		2751.760	46.27	-1.72	44.55	74.00	-29.45	peak	
3		2751.760	36.65	-1.72	34.93	54.00	-19.07	AVG	



EUT :	802.11b/g miniPCI Module	Model Name :	XC900M
Temperature :	26° C	Relative Humidity :	60%
Test Voltage :	AC 120V/60Hz (System)	Orthogonal Axes:	Y
Test Mode :	Transmit: IEEE 802.11b/20MHz Bandwidth/915 MHz		

Polarization: Vertical

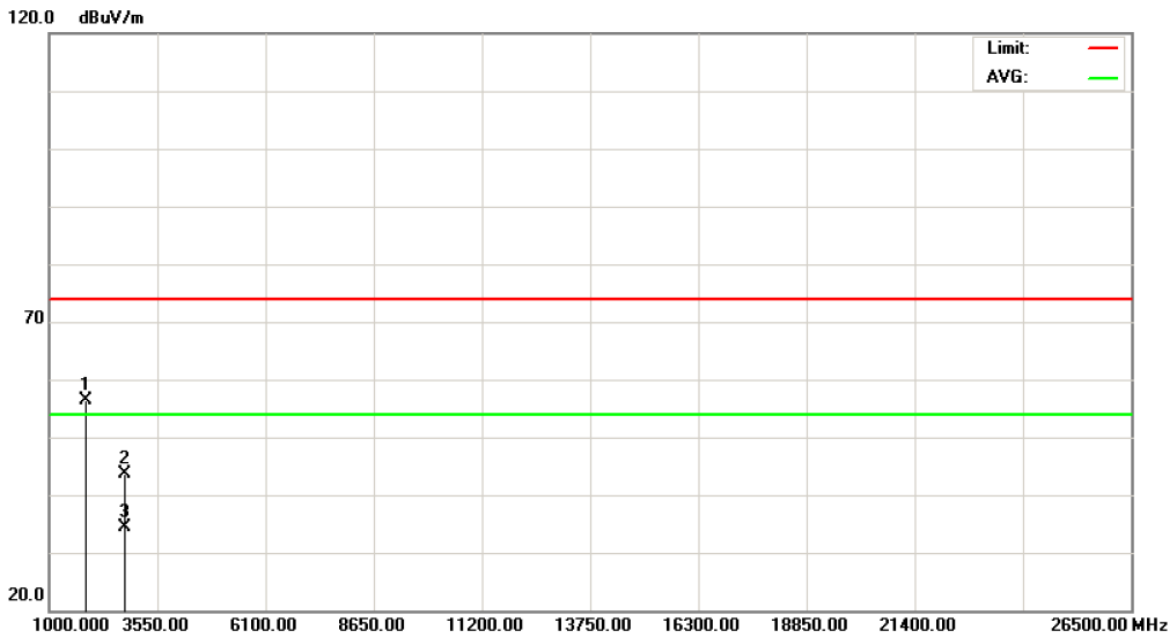


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	1830.840	64.51	-4.62	59.89	74.00	-14.11	peak	
2		2745.720	44.20	-1.72	42.48	74.00	-31.52	peak	
3		2745.720	34.02	-1.72	32.30	54.00	-21.70	AVG	



EUT :	802.11b/g miniPCI Module	Model Name :	XC900M
Temperature :	26° C	Relative Humidity :	60%
Test Voltage :	AC 120V/60Hz (System)	Orthogonal Axes:	Y
Test Mode :	Transmit: IEEE 802.11b/20MHz Bandwidth/915 MHz		

Polarization: Horizontal

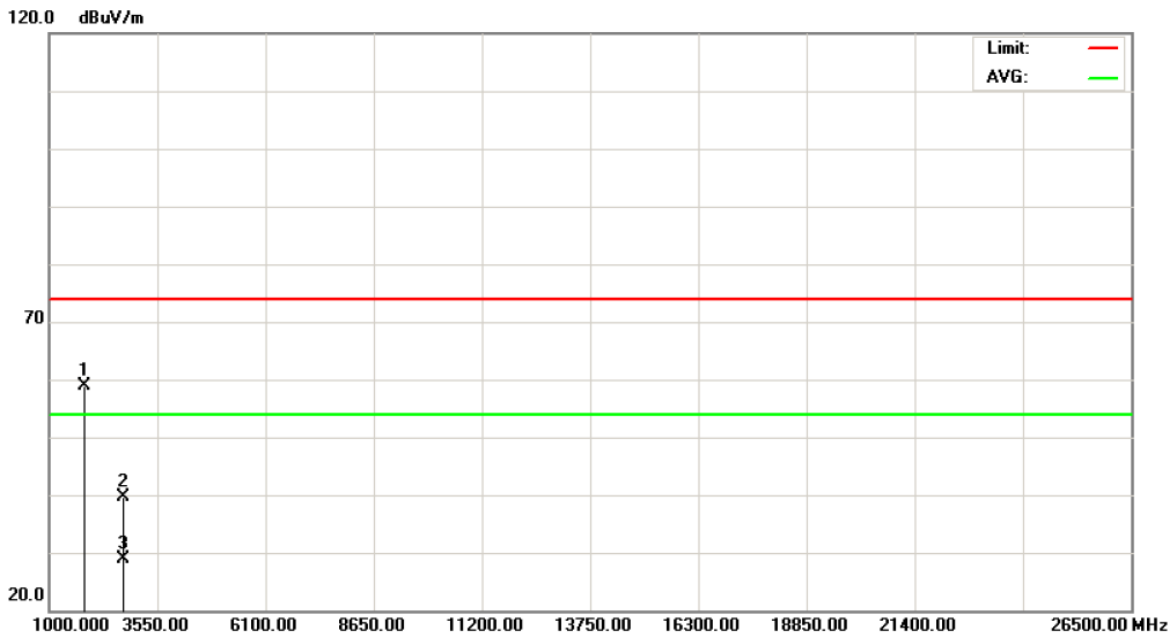


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	1830.930	60.94	-4.61	56.33	74.00	-17.67	peak	
2		2745.760	45.37	-1.72	43.65	74.00	-30.35	peak	
3		2745.760	35.99	-1.72	34.27	54.00	-19.73	AVG	



EUT :	802.11b/g miniPCI Module	Model Name :	XC900M
Temperature :	26° C	Relative Humidity :	60%
Test Voltage :	AC 120V/60Hz (System)	Orthogonal Axes:	Y
Test Mode :	Transmit: IEEE 802.11g/5MHz Bandwidth/907 MHz		

Polarization: Vertical

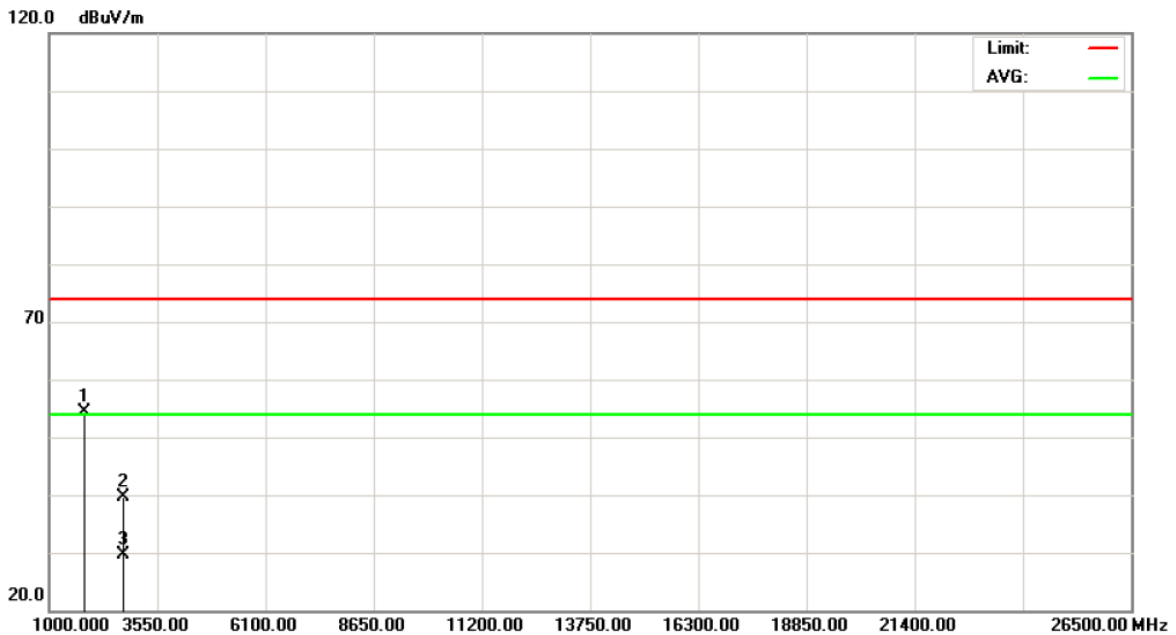


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	1813.940	63.51	-4.67	58.84	74.00	-15.16	peak	
2		2720.680	41.33	-1.74	39.59	74.00	-34.41	peak	
3		2720.680	30.72	-1.74	28.98	54.00	-25.02	AVG	



EUT :	802.11b/g miniPCI Module	Model Name :	XC900M
Temperature :	26° C	Relative Humidity :	60%
Test Voltage :	AC 120V/60Hz (System)	Orthogonal Axes:	Y
Test Mode :	Transmit: IEEE 802.11g/5MHz Bandwidth/907 MHz		

Polarization: Horizontal

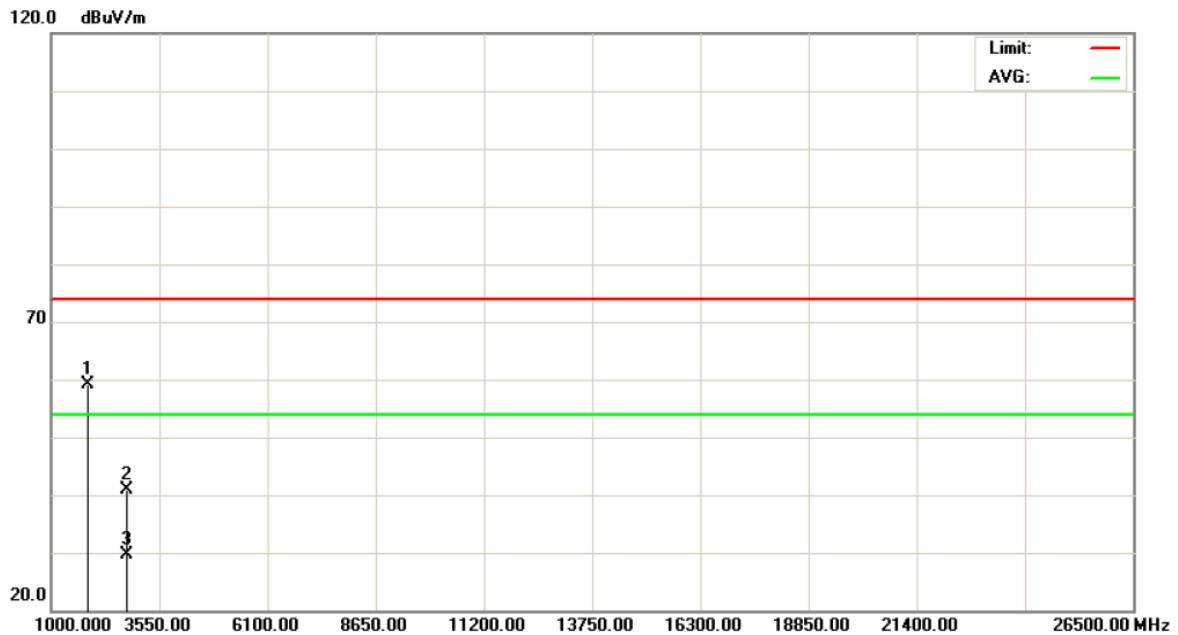


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	1814.000	59.08	-4.67	54.41	74.00	-19.59	peak	
2		2721.440	41.46	-1.74	39.72	74.00	-34.28	peak	
3		2721.440	31.40	-1.74	29.66	54.00	-24.34	AVG	



EUT :	802.11b/g miniPCI Module	Model Name :	XC900M
Temperature :	26° C	Relative Humidity :	60%
Test Voltage :	AC 120V/60Hz (System)	Orthogonal Axes:	Y
Test Mode :	Transmit: IEEE 802.11g/5MHz Bandwidth/912 MHz		

Polarization: Vertical

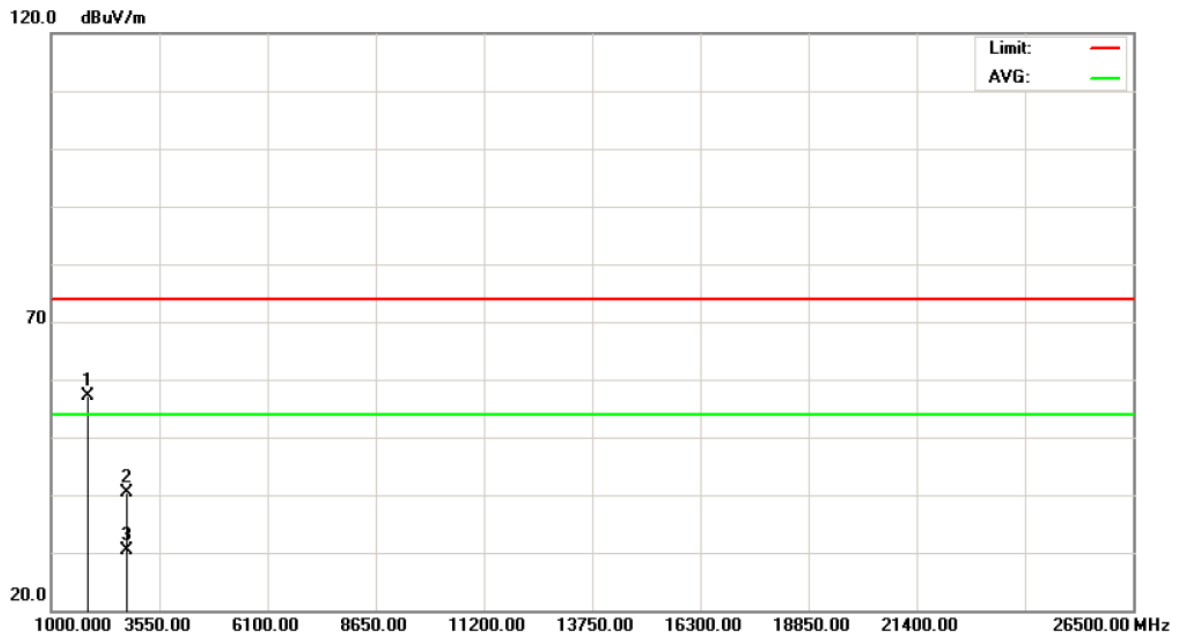


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	1823.700	63.74	-4.64	59.10	74.00	-14.90	peak	
2		2736.160	42.49	-1.73	40.76	74.00	-33.24	QP	
3		2736.160	31.30	-1.73	29.57	54.00	-24.43	AVG	



EUT :	802.11b/g miniPCI Module	Model Name :	XC900M
Temperature :	26° C	Relative Humidity :	60%
Test Voltage :	AC 120V/60Hz (System)	Orthogonal Axes:	Y
Test Mode :	Transmit: IEEE 802.11g/5MHz Bandwidth/912 MHz		

Polarization: Horizontal

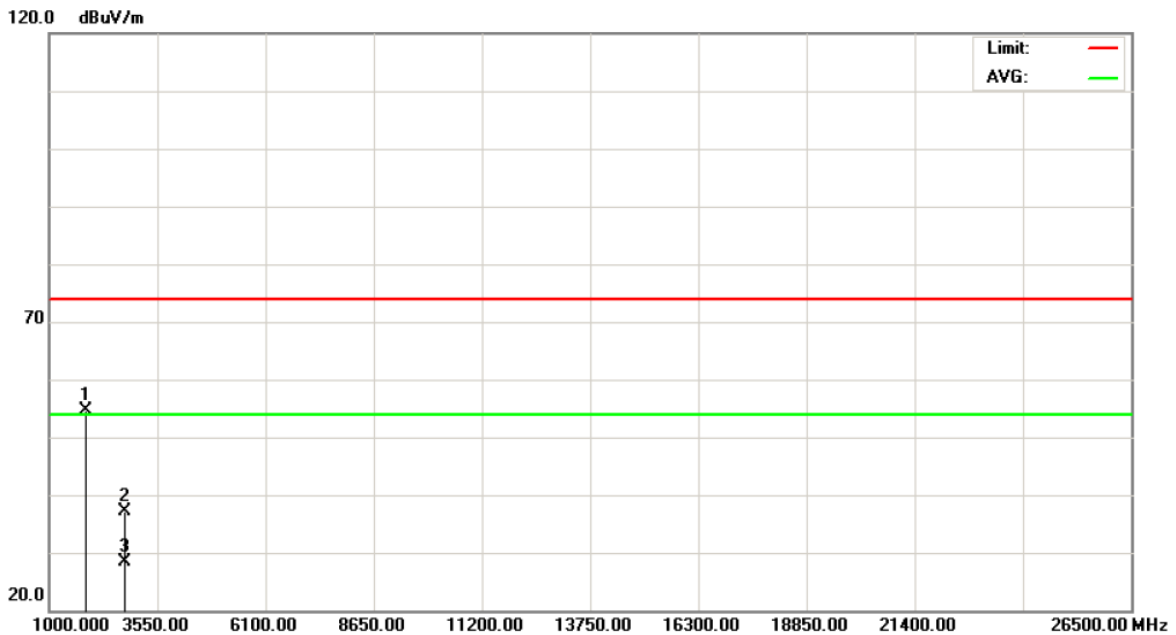


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	1822.400	61.76	-4.64	57.12	74.00	-16.88	peak	
2		2736.180	42.22	-1.73	40.49	74.00	-33.51	peak	
3		2736.180	32.02	-1.73	30.29	54.00	-23.71	AVG	



EUT :	802.11b/g miniPCI Module	Model Name :	XC900M
Temperature :	26° C	Relative Humidity :	60%
Test Voltage :	AC 120V/60Hz (System)	Orthogonal Axes:	Y
Test Mode :	Transmit: IEEE 802.11g/5MHz Bandwidth/922 MHz		

Polarization: Vertical

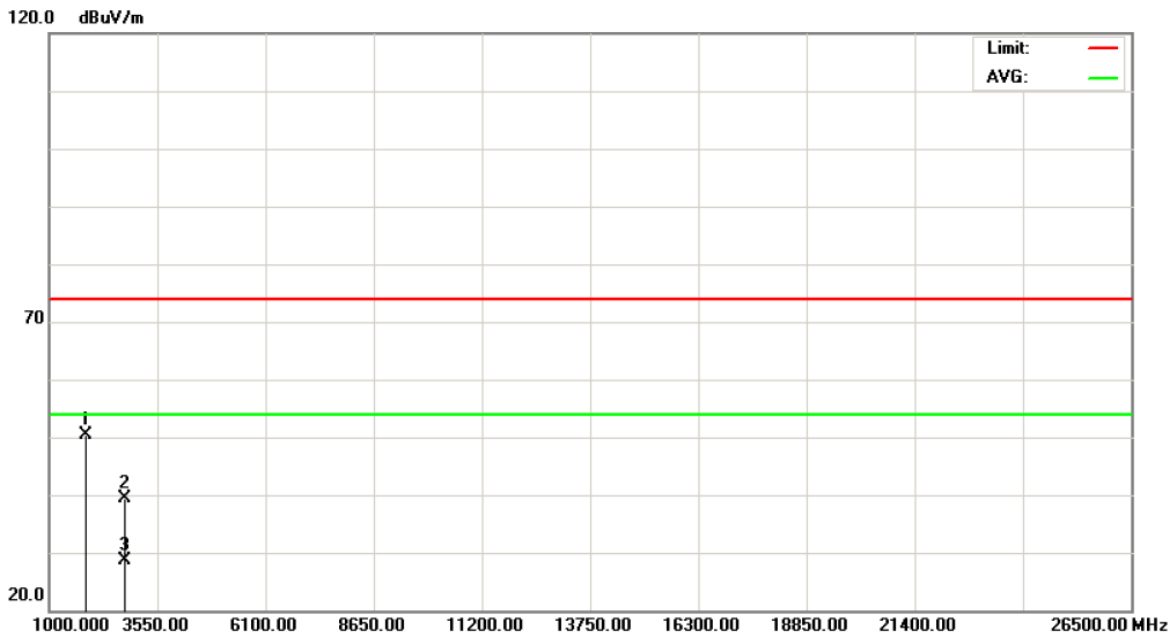


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	1842.460	59.22	-4.58	54.64	74.00	-19.36	peak	
2		2765.940	38.96	-1.71	37.25	74.00	-36.75	peak	
3		2765.940	30.10	-1.71	28.39	54.00	-25.61	AVG	



EUT :	802.11b/g miniPCI Module	Model Name :	XC900M
Temperature :	26° C	Relative Humidity :	60%
Test Voltage :	AC 120V/60Hz (System)	Orthogonal Axes:	Y
Test Mode :	Transmit: IEEE 802.11g/5MHz Bandwidth/922 MHz		

Polarization: Horizontal

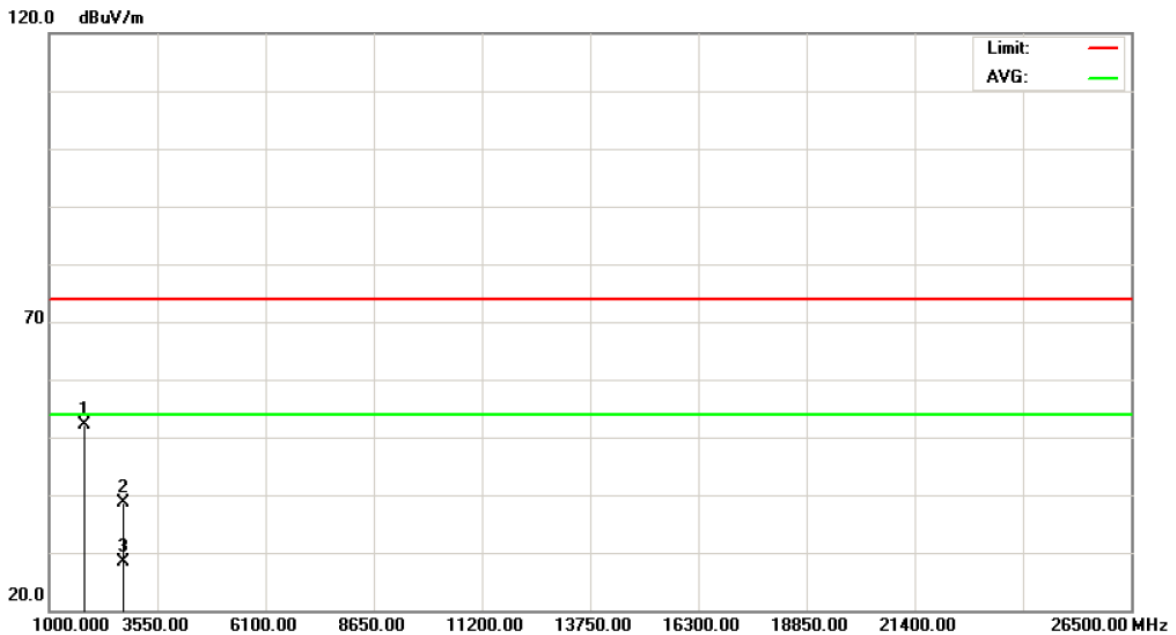


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	1841.880	54.98	-4.58	50.40	74.00	-23.60	peak	
2		2765.820	41.19	-1.71	39.48	74.00	-34.52	peak	
3		2765.820	30.33	-1.71	28.62	54.00	-25.38	AVG	



EUT :	802.11b/g miniPCI Module	Model Name :	XC900M
Temperature :	26° C	Relative Humidity :	60%
Test Voltage :	AC 120V/60Hz (System)	Orthogonal Axes:	Y
Test Mode :	Transmit: IEEE 802.11g/5MHz Bandwidth/905 MHz		

Polarization: Vertical

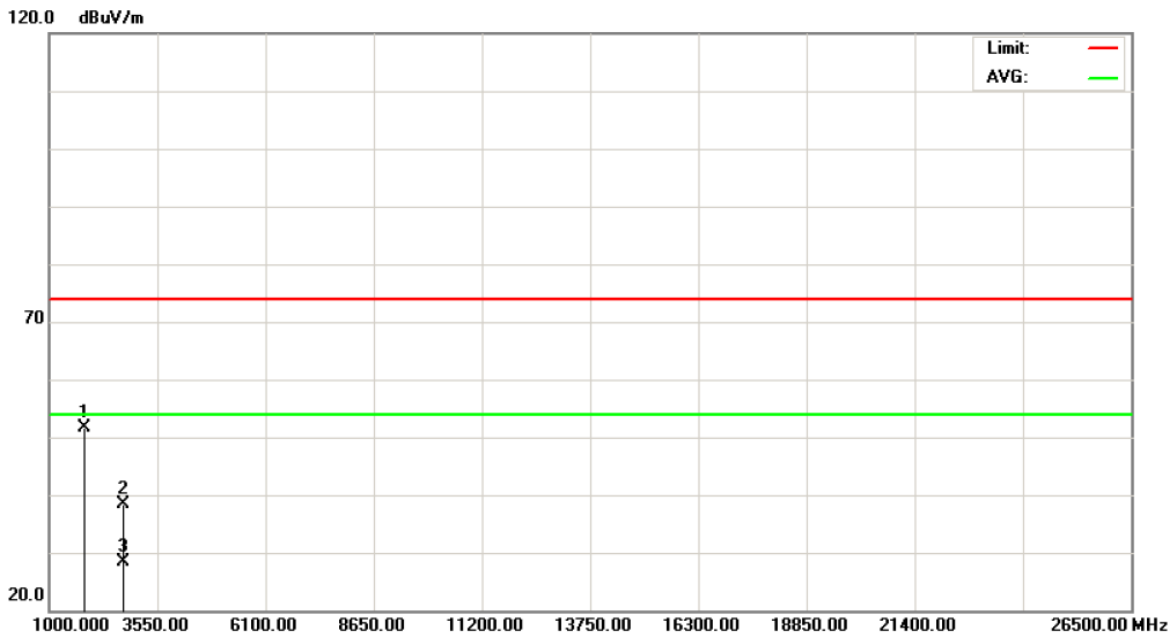


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	1810.800	56.75	-4.68	52.07	74.00	-21.93	peak	
2		2715.320	40.41	-1.75	38.66	74.00	-35.34	peak	
3		2715.320	30.04	-1.75	28.29	54.00	-25.71	AVG	



EUT :	802.11b/g miniPCI Module	Model Name :	XC900M
Temperature :	26° C	Relative Humidity :	60%
Test Voltage :	AC 120V/60Hz (System)	Orthogonal Axes:	Y
Test Mode :	Transmit: IEEE 802.11g/5MHz Bandwidth/905 MHz		

Polarization: Horizontal

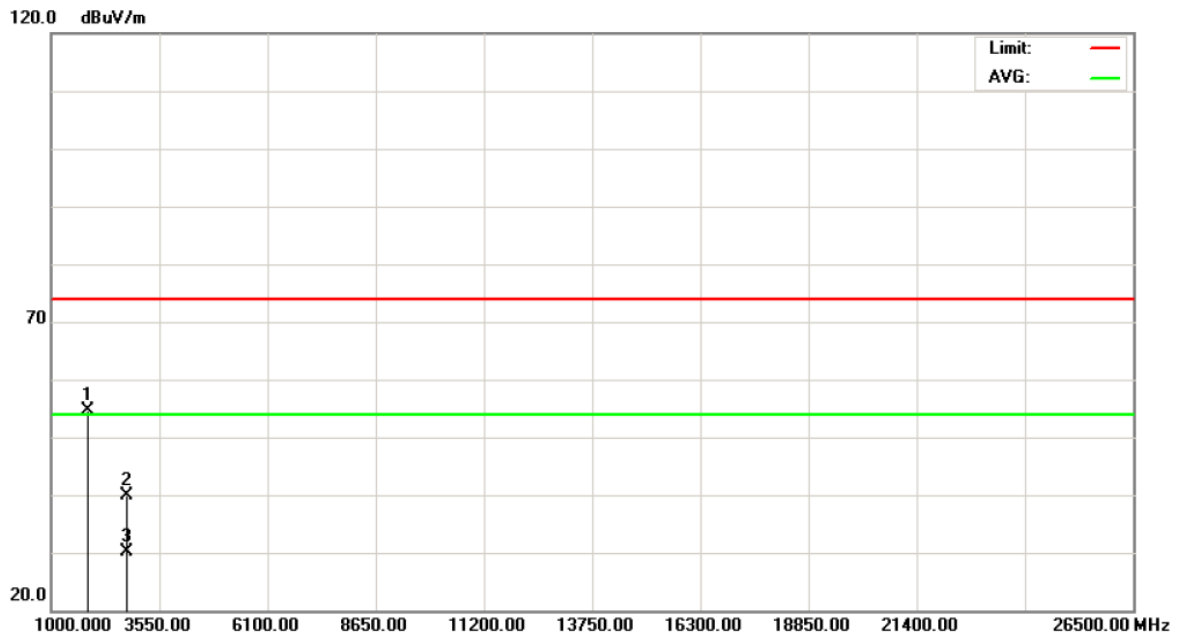


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	1810.280	56.30	-4.69	51.61	74.00	-22.39	peak	
2		2714.920	40.21	-1.75	38.46	74.00	-35.54	peak	
3		2714.920	30.18	-1.75	28.43	54.00	-25.57	AVG	



EUT :	802.11b/g miniPCI Module	Model Name :	XC900M
Temperature :	26° C	Relative Humidity :	60%
Test Voltage :	AC 120V/60Hz (System)	Orthogonal Axes:	Y
Test Mode :	Transmit: IEEE 802.11g/5MHz Bandwidth/915 MHz		

Polarization: Vertical

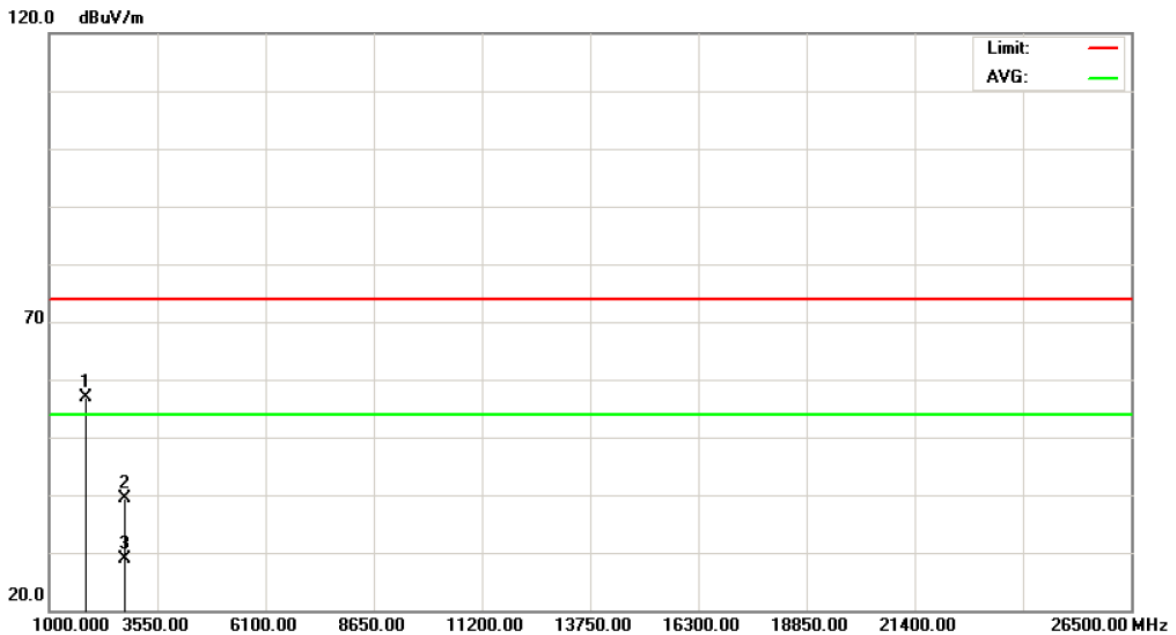


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	1827.280	59.36	-4.63	54.73	74.00	-19.27	peak	
2		2744.820	41.69	-1.72	39.97	74.00	-34.03	peak	
3		2744.820	31.76	-1.72	30.04	54.00	-23.96	AVG	



EUT :	802.11b/g miniPCI Module	Model Name :	XC900M
Temperature :	26° C	Relative Humidity :	60%
Test Voltage :	AC 120V/60Hz (System)	Orthogonal Axes:	Y
Test Mode :	Transmit: IEEE 802.11g/5MHz Bandwidth/915 MHz		

Polarization: Horizontal

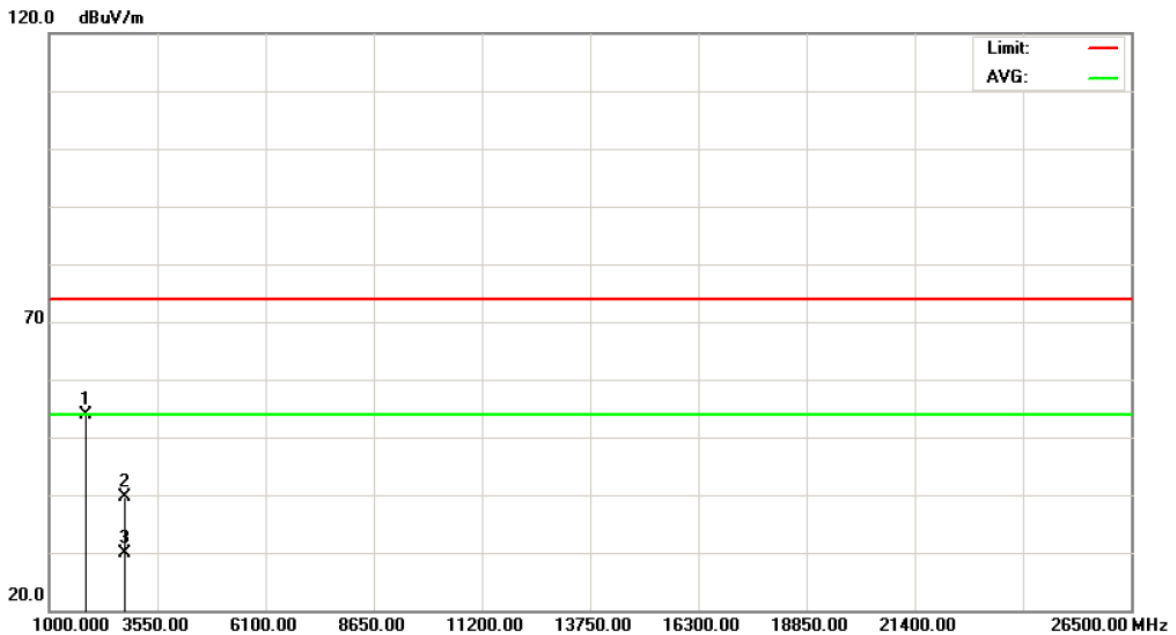


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	1827.800	61.57	-4.63	56.94	74.00	-17.06	peak	
2		2745.280	41.15	-1.72	39.43	74.00	-34.57	peak	
3		2745.280	30.62	-1.72	28.90	54.00	-25.10	AVG	



EUT :	802.11b/g miniPCI Module	Model Name :	XC900M
Temperature :	26° C	Relative Humidity :	60%
Test Voltage :	AC 120V/60Hz (System)	Orthogonal Axes:	Y
Test Mode :	Transmit: IEEE 802.11g/5MHz Bandwidth/925 MHz		

Polarization: Vertical

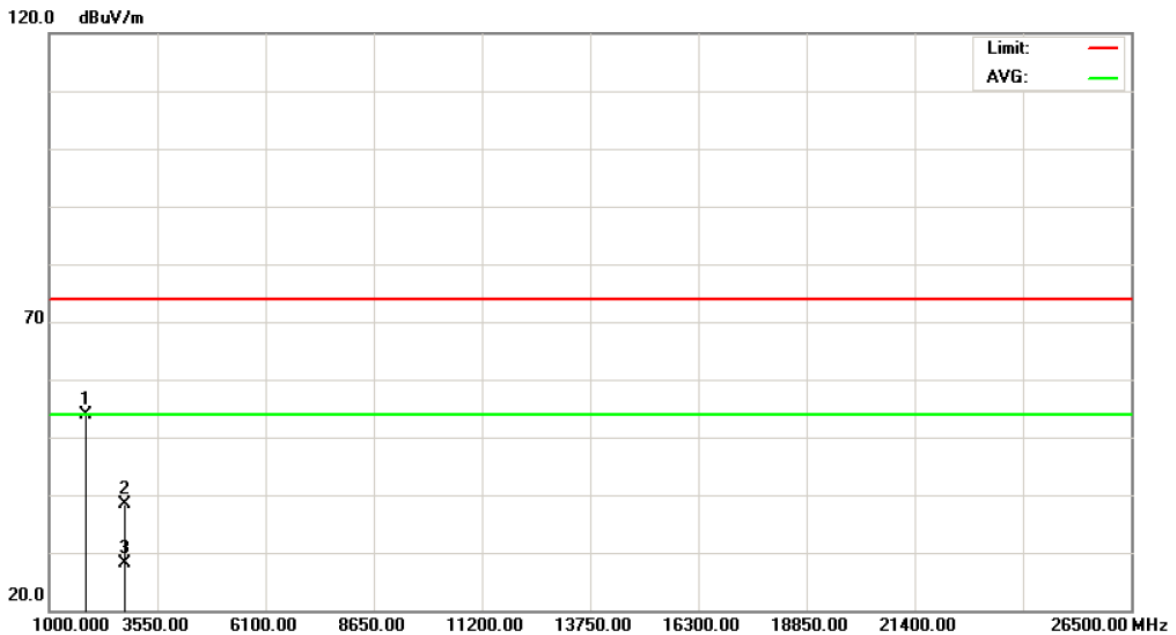


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	1848.680	58.38	-4.55	53.83	74.00	-20.17	peak	
2		2772.420	41.33	-1.70	39.63	74.00	-34.37	peak	
3		2772.420	31.53	-1.70	29.83	54.00	-24.17	AVG	



EUT :	802.11b/g miniPCI Module	Model Name :	XC900M
Temperature :	26° C	Relative Humidity :	60%
Test Voltage :	AC 120V/60Hz (System)	Orthogonal Axes:	Y
Test Mode :	Transmit: IEEE 802.11g/5MHz Bandwidth/925 MHz		

Polarization: Horizontal

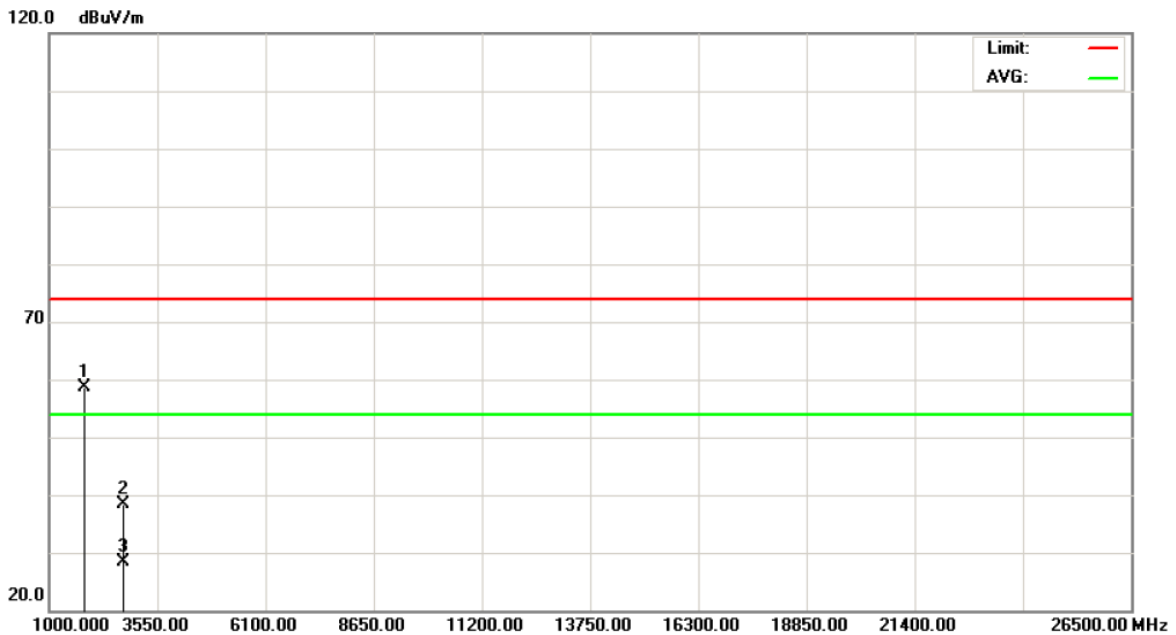


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	1847.300	58.38	-4.56	53.82	74.00	-20.18	peak	
2		2774.900	40.15	-1.70	38.45	74.00	-35.55	peak	
3		2774.900	29.77	-1.70	28.07	54.00	-25.93	AVG	



EUT :	802.11b/g miniPCI Module	Model Name :	XC900M
Temperature :	26° C	Relative Humidity :	60%
Test Voltage :	AC 120V/60Hz (System)	Orthogonal Axes:	Y
Test Mode :	Transmit: IEEE 802.11g/10MHz Bandwidth/907 MHz		

Polarization: Vertical

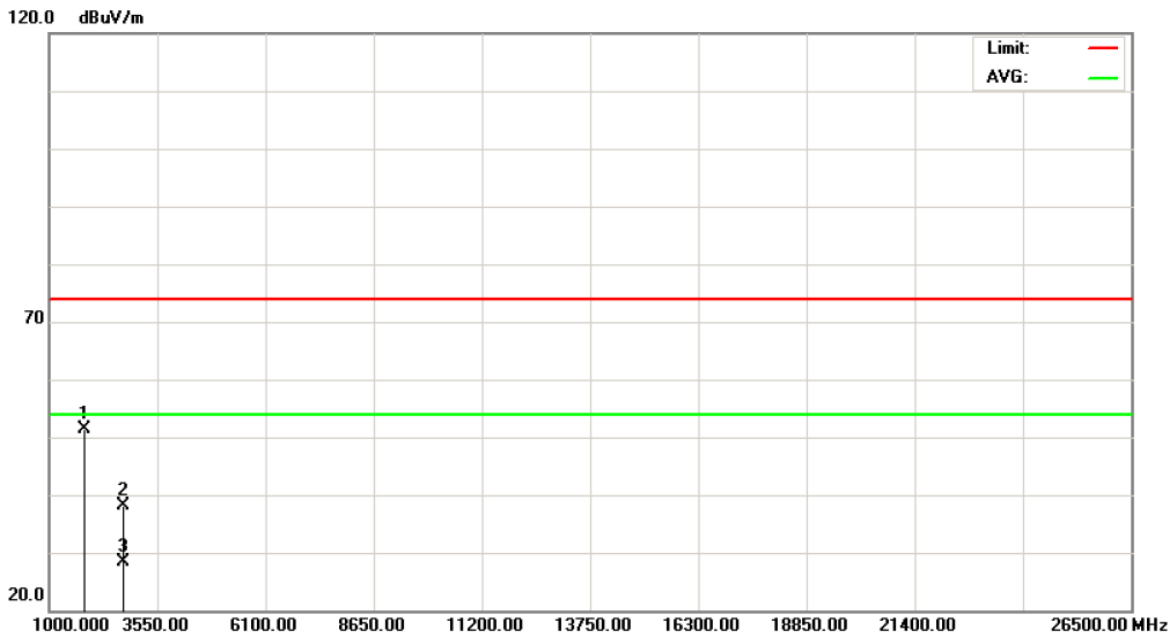


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	1811.800	63.26	-4.68	58.58	74.00	-15.42	peak	
2		2721.280	40.23	-1.74	38.49	74.00	-35.51	peak	
3		2721.280	30.04	-1.74	28.30	54.00	-25.70	AVG	



EUT :	802.11b/g miniPCI Module	Model Name :	XC900M
Temperature :	26° C	Relative Humidity :	60%
Test Voltage :	AC 120V/60Hz (System)	Orthogonal Axes:	Y
Test Mode :	Transmit: IEEE 802.11g/10MHz Bandwidth/907 MHz		

Polarization: Horizontal

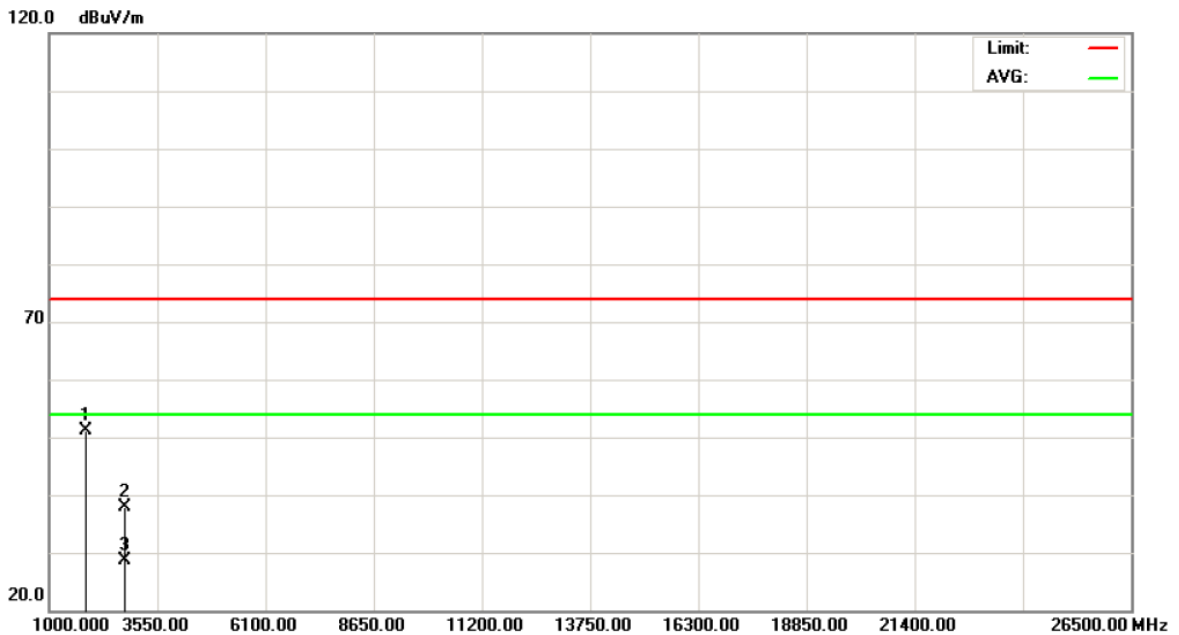


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	1813.880	56.12	-4.67	51.45	74.00	-22.55	peak	
2		2720.880	39.93	-1.74	38.19	74.00	-35.81	peak	
3		2720.880	30.07	-1.74	28.33	54.00	-25.67	AVG	



EUT :	802.11b/g miniPCI Module	Model Name :	XC900M
Temperature :	26° C	Relative Humidity :	60%
Test Voltage :	AC 120V/60Hz (System)	Orthogonal Axes:	Y
Test Mode :	Transmit: IEEE 802.11g/10MHz Bandwidth/912 MHz		

Polarization: Vertical

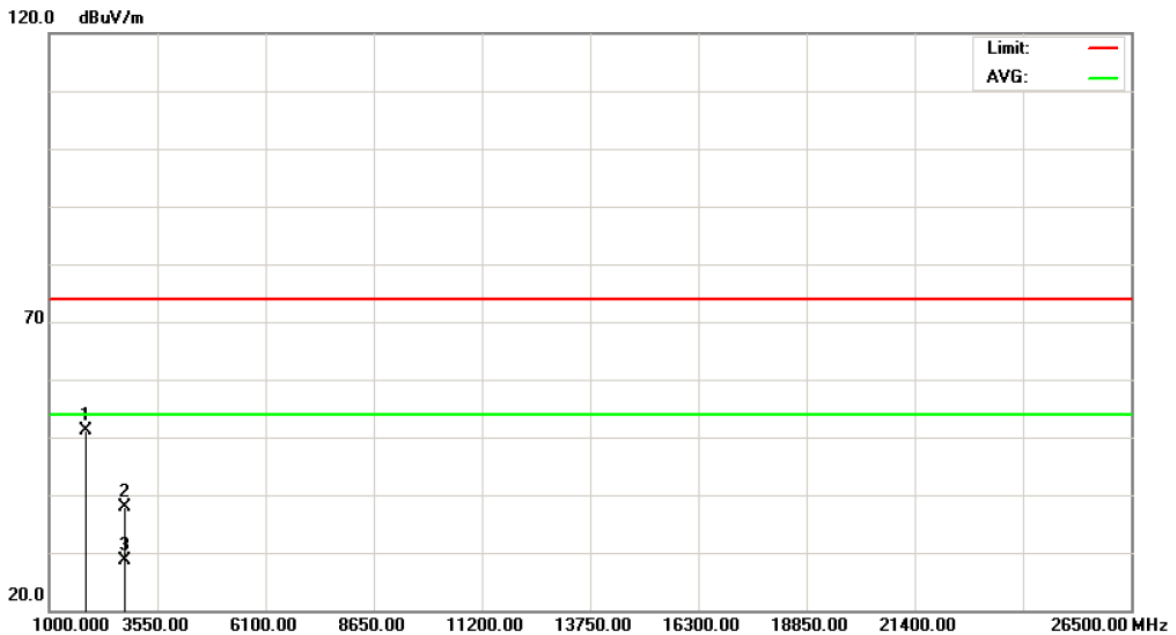


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	1823.720	55.74	-4.64	51.10	74.00	-22.90	peak	
2		2735.800	39.71	-1.73	37.98	74.00	-36.02	peak	
3		2735.800	30.28	-1.73	28.55	54.00	-25.45	AVG	



EUT :	802.11b/g miniPCI Module	Model Name :	XC900M
Temperature :	26° C	Relative Humidity :	60%
Test Voltage :	AC 120V/60Hz (System)	Orthogonal Axes:	Y
Test Mode :	Transmit: IEEE 802.11g/10MHz Bandwidth/912 MHz		

Polarization: Horizontal

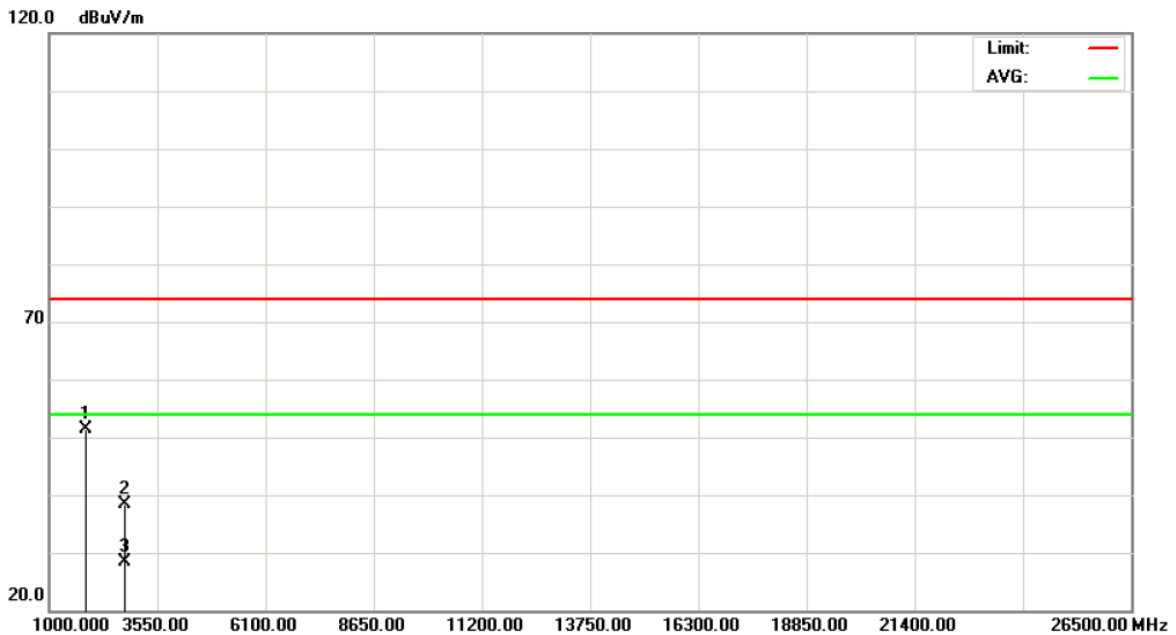


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	1823.720	55.74	-4.64	51.10	74.00	-22.90	peak	
2		2735.800	39.71	-1.73	37.98	74.00	-36.02	peak	
3		2735.800	30.28	-1.73	28.55	54.00	-25.45	AVG	



EUT :	802.11b/g miniPCI Module	Model Name :	XC900M
Temperature :	26° C	Relative Humidity :	60%
Test Voltage :	AC 120V/60Hz (System)	Orthogonal Axes:	Y
Test Mode :	Transmit: IEEE 802.11g/10MHz Bandwidth/922 MHz		

Polarization: Vertical

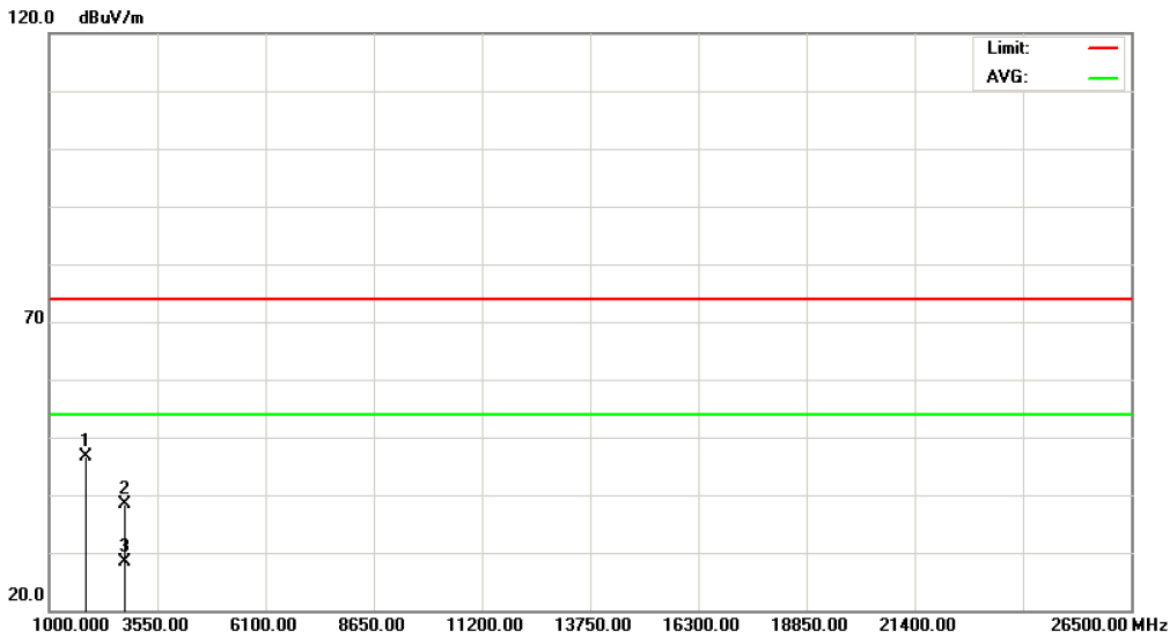


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	1838.920	55.86	-4.59	51.27	74.00	-22.73	peak	
2		2766.000	40.08	-1.71	38.37	74.00	-35.63	peak	
3		2766.000	30.08	-1.71	28.37	54.00	-25.63	AVG	



EUT :	802.11b/g miniPCI Module	Model Name :	XC900M
Temperature :	26° C	Relative Humidity :	60%
Test Voltage :	AC 120V/60Hz (System)	Orthogonal Axes:	Y
Test Mode :	Transmit: IEEE 802.11g/10MHz Bandwidth/922 MHz		

Polarization: Horizontal

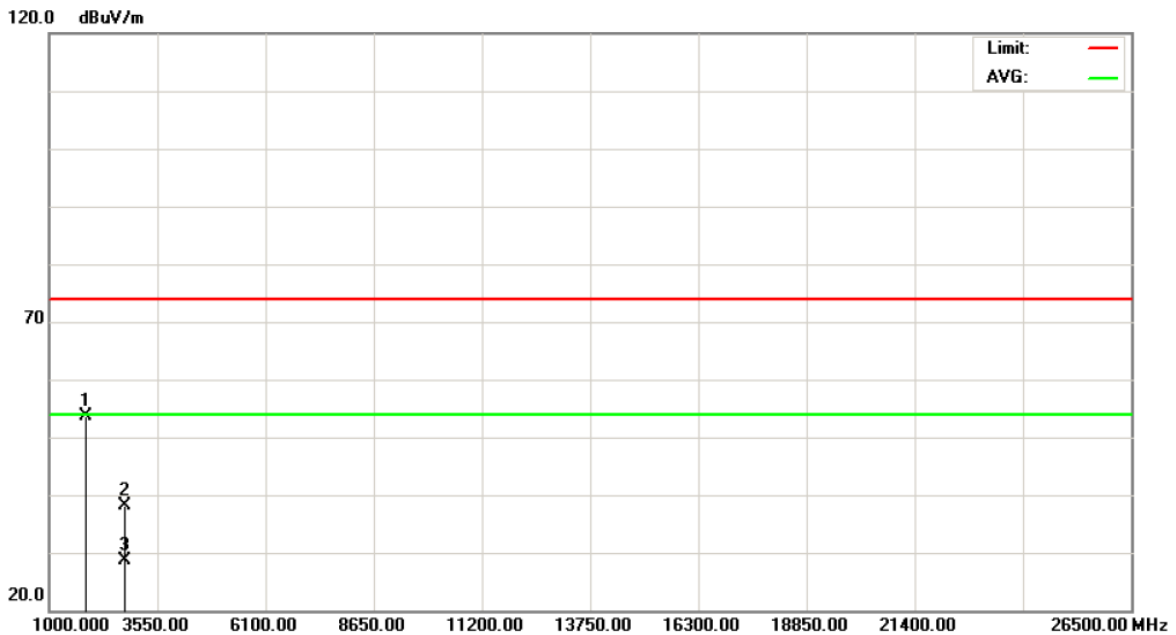


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		1842.200	51.09	-4.58	46.51	74.00	-27.49	peak	
2		2765.760	40.21	-1.71	38.50	74.00	-35.50	peak	
3	*	2765.760	30.15	-1.71	28.44	54.00	-25.56	AVG	



EUT :	802.11b/g miniPCI Module	Model Name :	XC900M
Temperature :	26° C	Relative Humidity :	60%
Test Voltage :	AC 120V/60Hz (System)	Orthogonal Axes:	Y
Test Mode :	Transmit: IEEE 802.11g/10MHz Bandwidth/915 MHz		

Polarization: Vertical

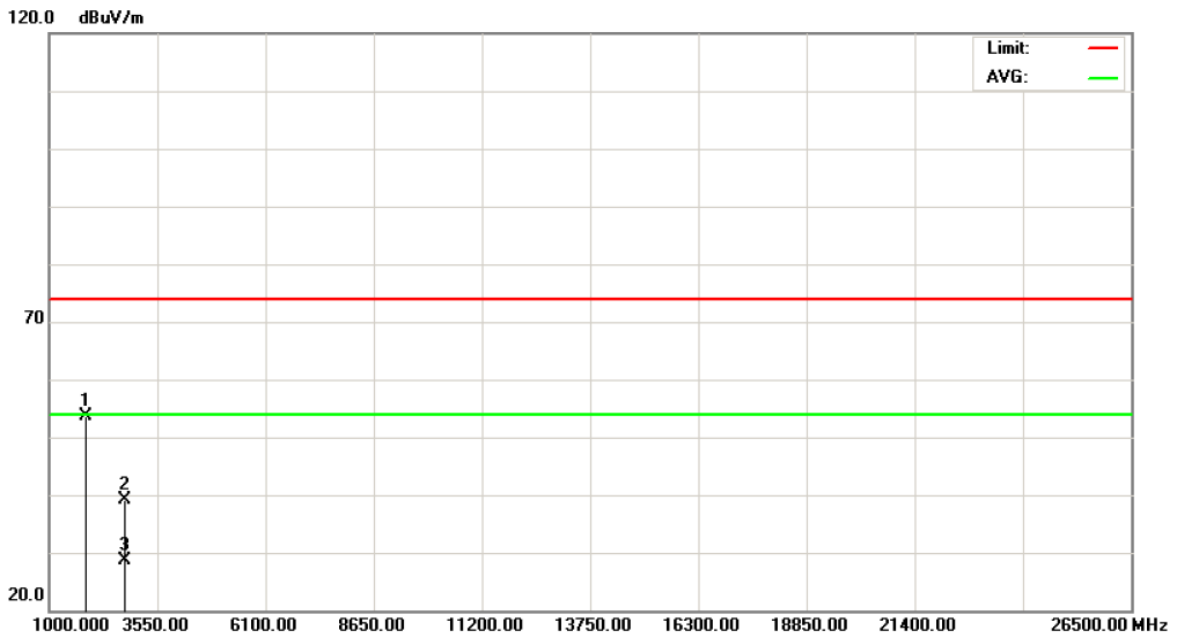


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	1829.120	58.37	-4.62	53.75	74.00	-20.25	peak	
2		2745.360	39.75	-1.72	38.03	74.00	-35.97	peak	
3		2745.360	30.42	-1.72	28.70	54.00	-25.30	AVG	



EUT :	802.11b/g miniPCI Module	Model Name :	XC900M
Temperature :	26° C	Relative Humidity :	60%
Test Voltage :	AC 120V/60Hz (System)	Orthogonal Axes:	Y
Test Mode :	Transmit: IEEE 802.11g/10MHz Bandwidth/915 MHz		

Polarization: Horizontal

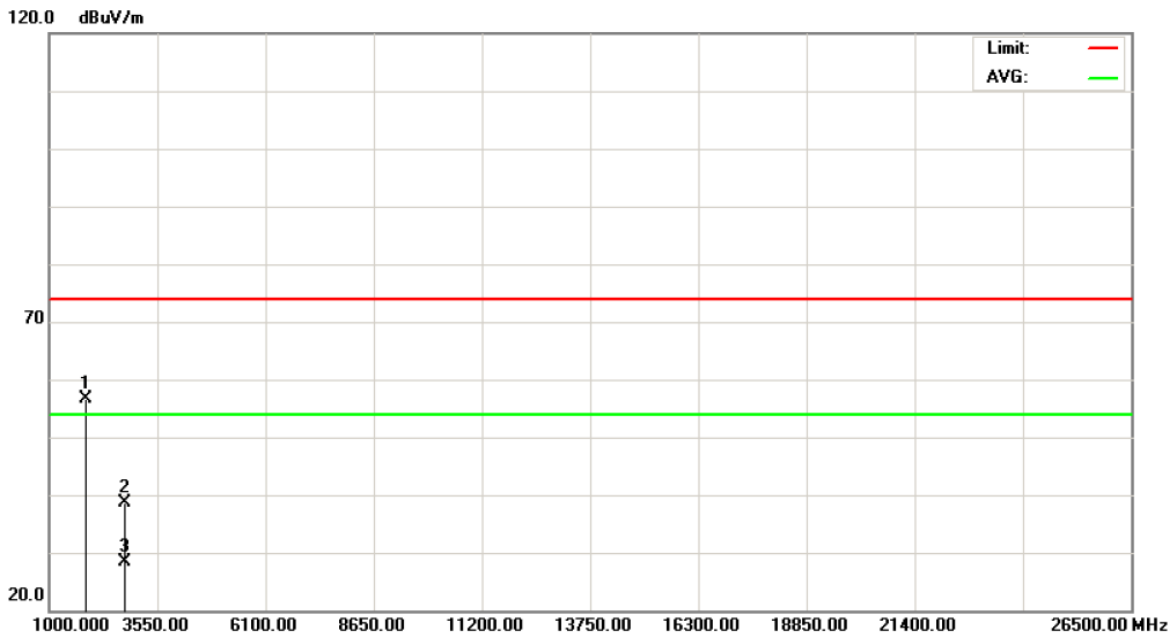


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	1825.640	58.29	-4.63	53.66	74.00	-20.34	peak	
2		2745.680	40.95	-1.72	39.23	74.00	-34.77	peak	
3		2745.680	30.42	-1.72	28.70	54.00	-25.30	AVG	



EUT :	802.11b/g miniPCI Module	Model Name :	XC900M
Temperature :	26° C	Relative Humidity :	60%
Test Voltage :	AC 120V/60Hz (System)	Orthogonal Axes:	Y
Test Mode :	Transmit: IEEE 802.11g/20MHz Bandwidth/912 MHz		

Polarization: Vertical

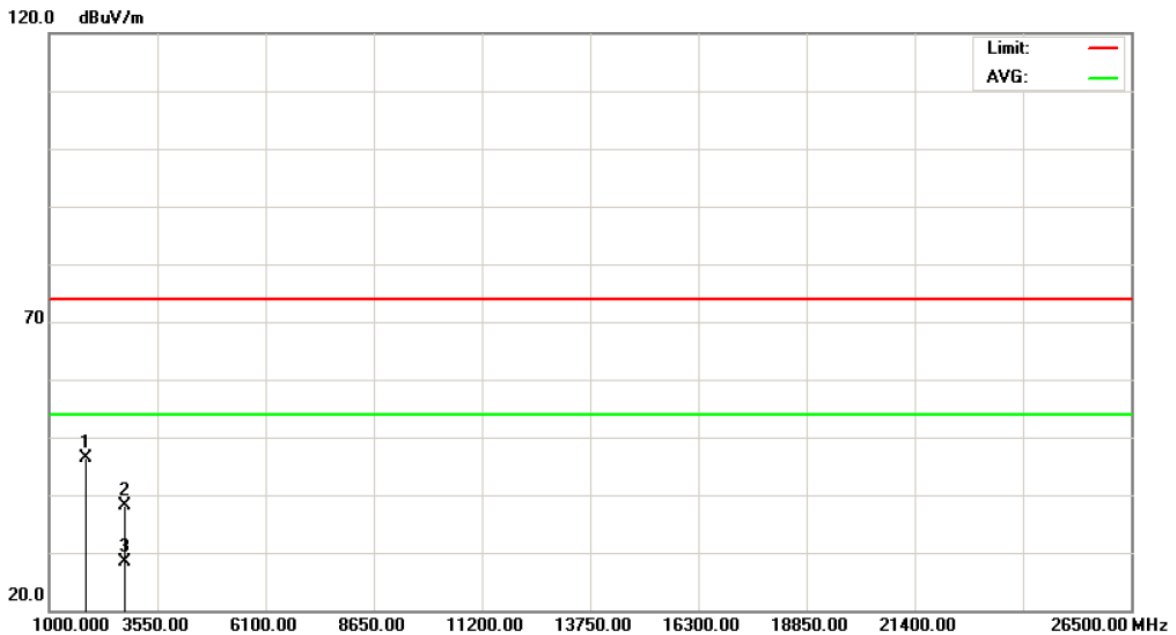


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	1823.500	61.34	-4.64	56.70	74.00	-17.30	peak	
2		2734.500	40.38	-1.73	38.65	74.00	-35.35	peak	
3		2734.500	30.13	-1.73	28.40	54.00	-25.60	AVG	



EUT :	802.11b/g miniPCI Module	Model Name :	XC900M
Temperature :	26° C	Relative Humidity :	60%
Test Voltage :	AC 120V/60Hz (System)	Orthogonal Axes:	Y
Test Mode :	Transmit: IEEE 802.11g/20MHz Bandwidth/912 MHz		

Polarization: Horizontal

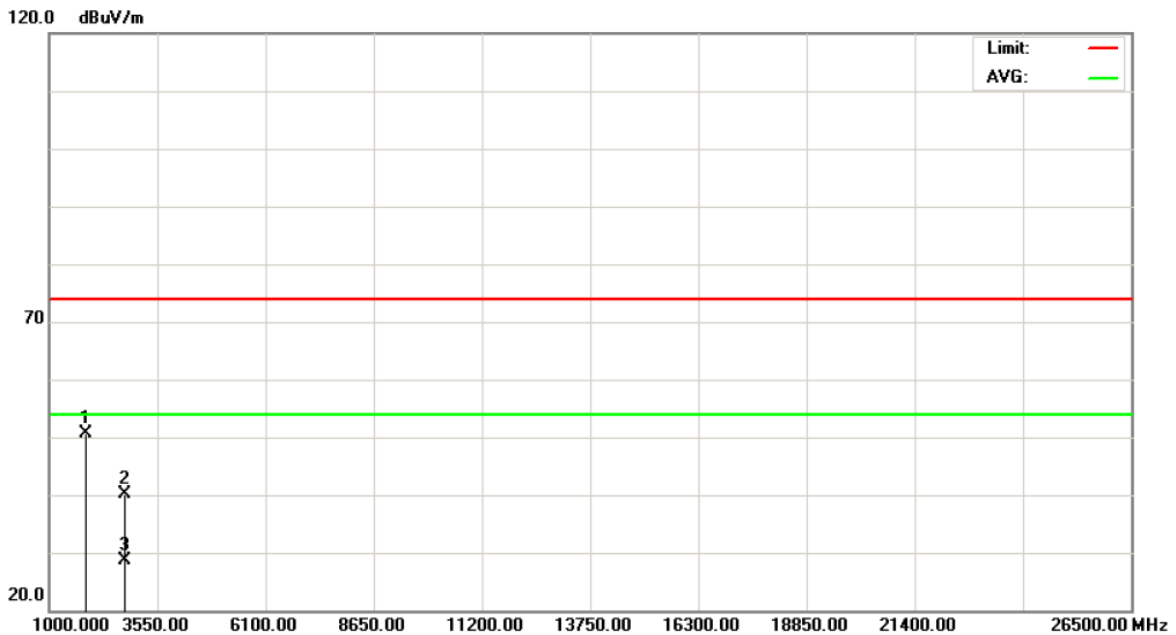


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		1822.400	50.99	-4.64	46.35	74.00	-27.65	peak	
2		2735.800	39.83	-1.73	38.10	74.00	-35.90	peak	
3	*	2735.800	29.99	-1.73	28.26	54.00	-25.74	AVG	



EUT :	802.11b/g miniPCI Module	Model Name :	XC900M
Temperature :	26° C	Relative Humidity :	60%
Test Voltage :	AC 120V/60Hz (System)	Orthogonal Axes:	Y
Test Mode :	Transmit: IEEE 802.11g/20MHz Bandwidth/915 MHz		

Polarization: Vertical

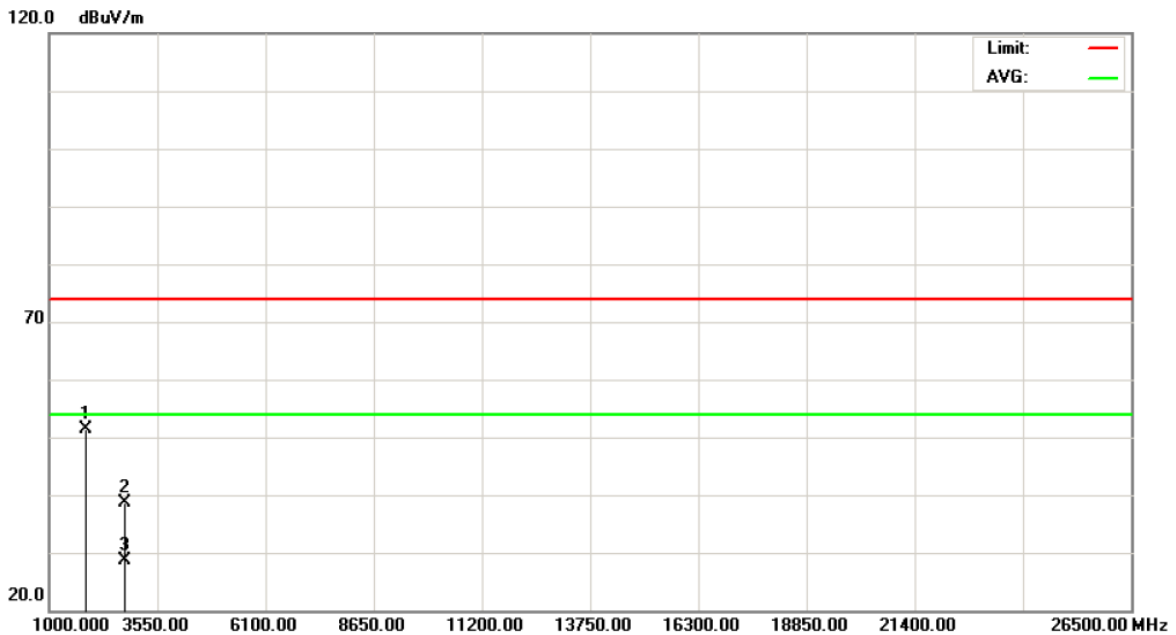


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	1830.800	55.37	-4.62	50.75	74.00	-23.25	peak	
2		2746.200	41.87	-1.72	40.15	74.00	-33.85	peak	
3		2746.200	30.25	-1.72	28.53	54.00	-25.47	AVG	



EUT :	802.11b/g miniPCI Module	Model Name :	XC900M
Temperature :	26° C	Relative Humidity :	60%
Test Voltage :	AC 120V/60Hz (System)	Orthogonal Axes:	Y
Test Mode :	Transmit: IEEE 802.11g/20MHz Bandwidth/915 MHz		

Polarization: Horizontal



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1	*	1825.400	56.11	-4.63	51.48	74.00	-22.52	peak	
2		2745.500	40.37	-1.72	38.65	74.00	-35.35	peak	
3		2745.500	30.34	-1.72	28.62	54.00	-25.38	AVG	



5. BANDWIDTH TEST

5.1 APPLIED PROCEDURES / LIMIT

FCC Part15, Subpart C: 2010			
Test Item	Limit	Frequency Range (MHz)	Result
Bandwidth	$\geq 500\text{KHz}$ (6dB bandwidth)	902-928	PASS

5.1.1 MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP-40	100129	Oct. 06, 2012

Remark: " N/A" denotes No Model Name , Serial No. or No Calibration specified.

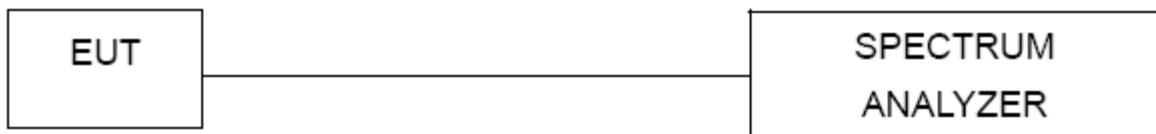
5.1.2 TEST PROCEDURE

- 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=100KHz, Sweep time = Auto.

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.



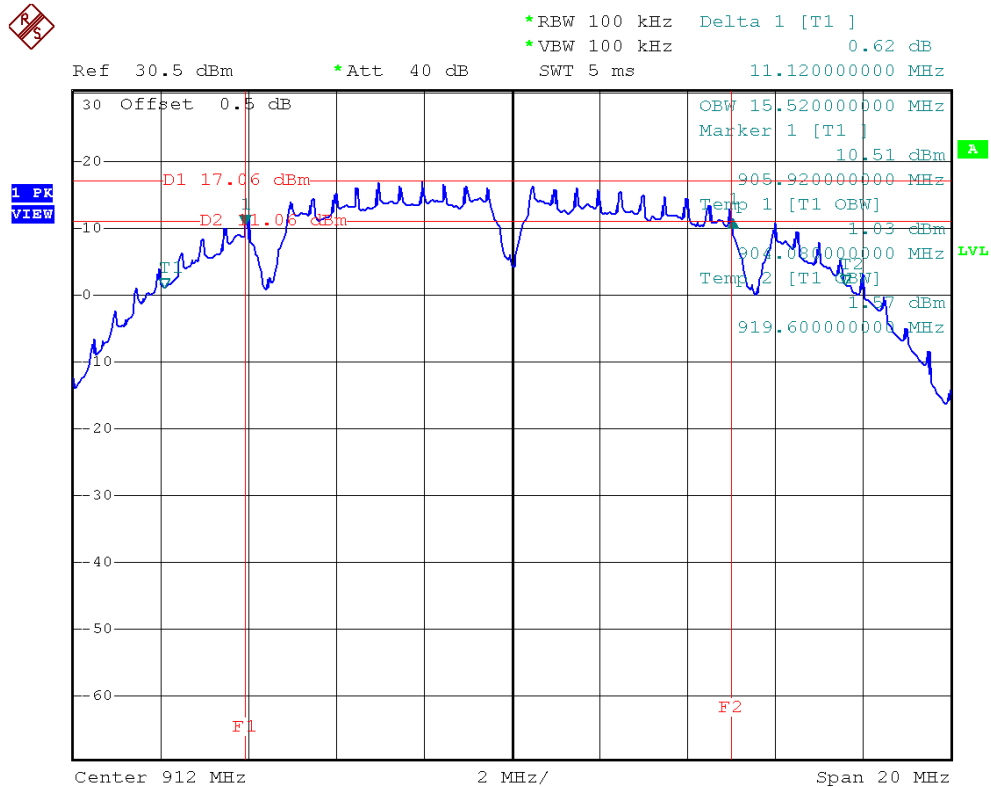
5.1.6 TEST RESULTS

EUT :	802.11b/g miniPCI Module	Model Name :	XC900M
Temperature :	26 °C	Relative Humidity :	60%
Test Voltage :	AC 120V/60Hz (System)		
Test Mode :	Transmit: IEEE 802.11b/20MHz Bandwidth/912 MHz, 917 MHz		

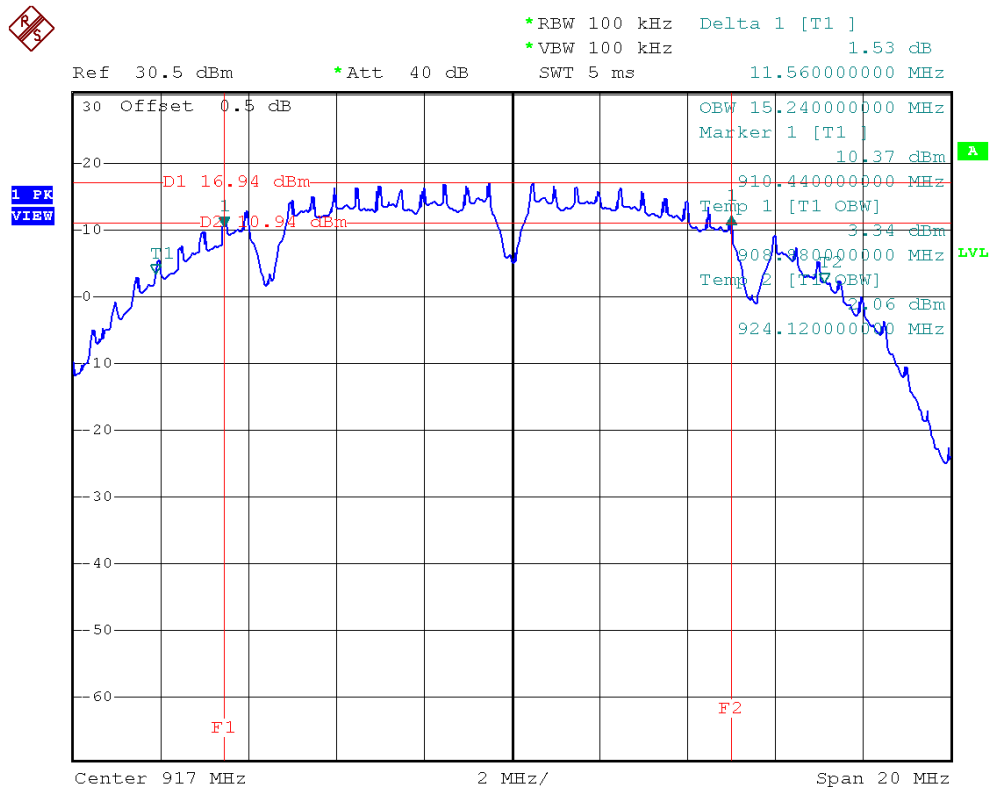
Frequency	Bandwidth (MHz)	99% Occupied BW (MHz)	LIMIT (kHz)	Judgement
912MHz	11.12	15.52	500	Pass
917MHz	11.56	15.24	500	Pass



IEEE 802.11b/20MHz Bandwidth/912 MHz



IEEE 802.11b/20MHz Bandwidth/917 MHz

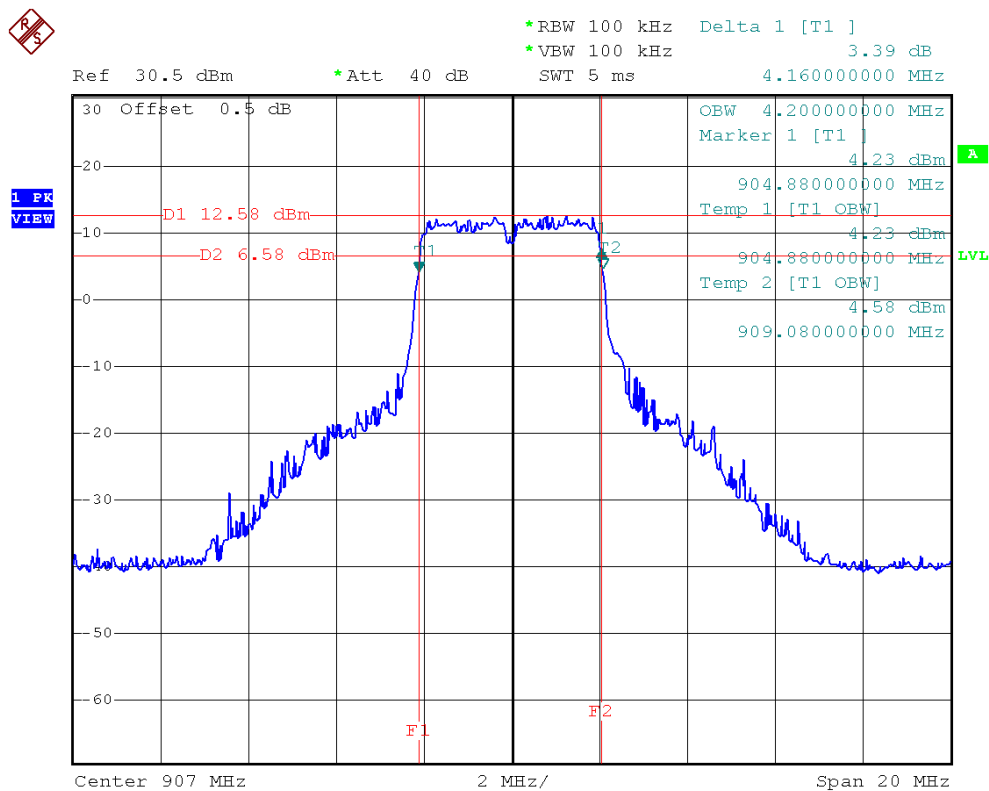




EUT :	802.11b/g miniPCI Module	Model Name :	XC900M
Temperature :	26 °C	Relative Humidity :	60%
Test Voltage :	AC 120V/60Hz (System)		
Test Mode :	Transmit: IEEE 802.11g/5MHz Bandwidth/907 MHz, 912 MHz, 922 MHz		

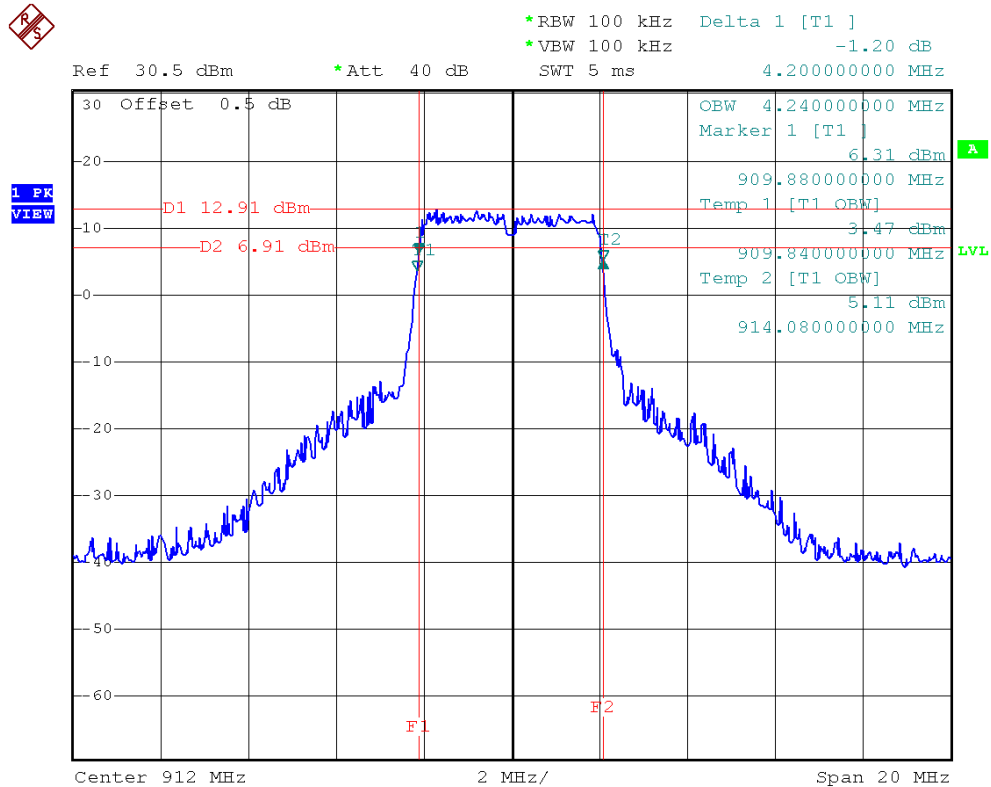
Frequency	Bandwidth (MHz)	99% Occupied BW (MHz)	LIMIT (kHz)	Judgement
907MHz	4.16	4.20	500	Pass
912MHz	4.20	4.24	500	Pass
922MHz	4.16	4.20	500	Pass

Transmit: IEEE 802.11g/5MHz Bandwidth/907 MHz

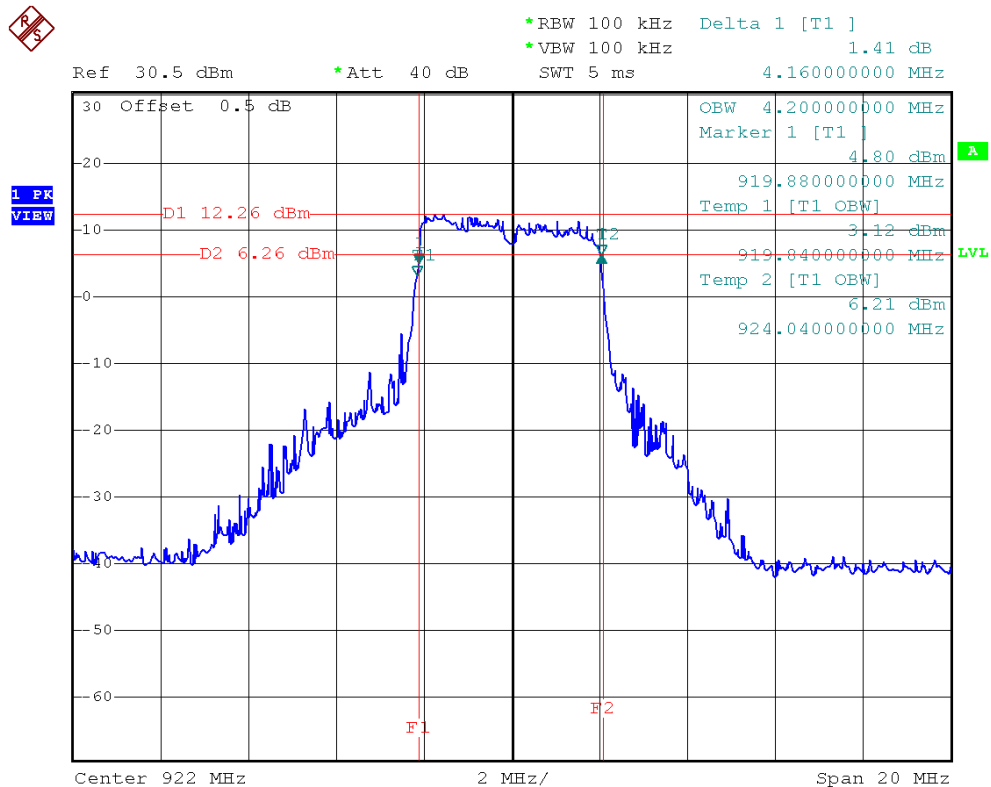




Transmit: IEEE 802.11g/5MHz Bandwidth/912 MHz



Transmit: IEEE 802.11g/5MHz Bandwidth/922 MHz

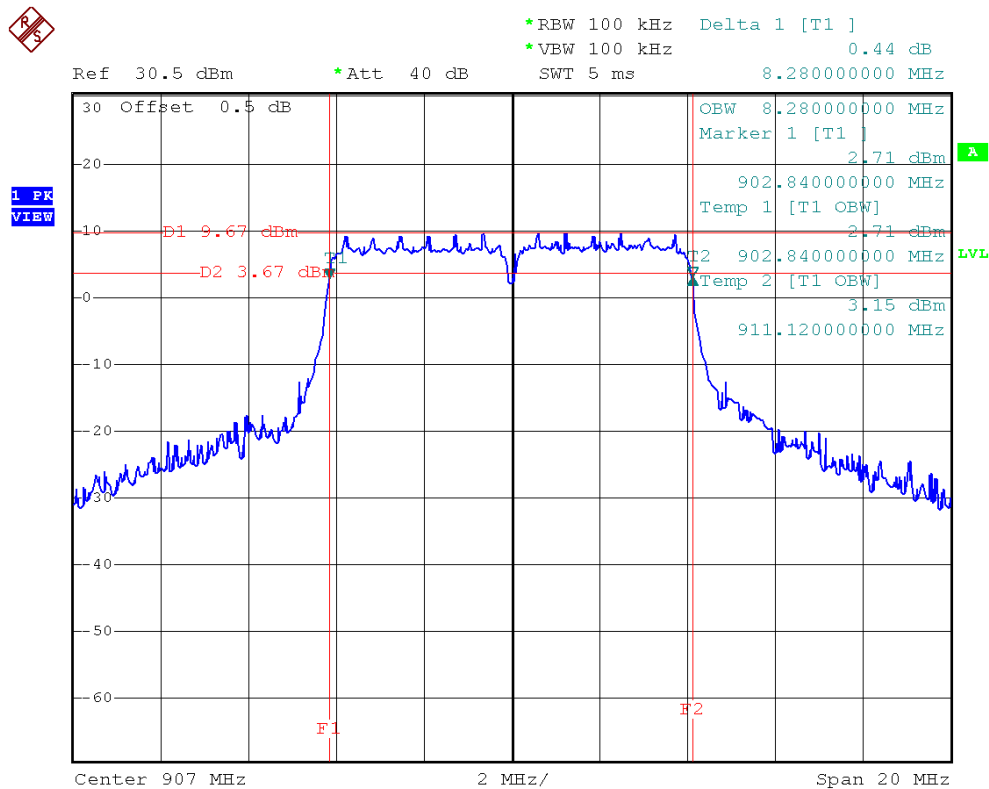




EUT :	802.11b/g miniPCI Module	Model Name :	XC900M
Temperature :	26 °C	Relative Humidity :	60%
Test Voltage :	AC 120V/60Hz (System)		
Test Mode :	Transmit: IEEE 802.11g/10MHz Bandwidth/907 MHz, 912 MHz, 922 MHz		

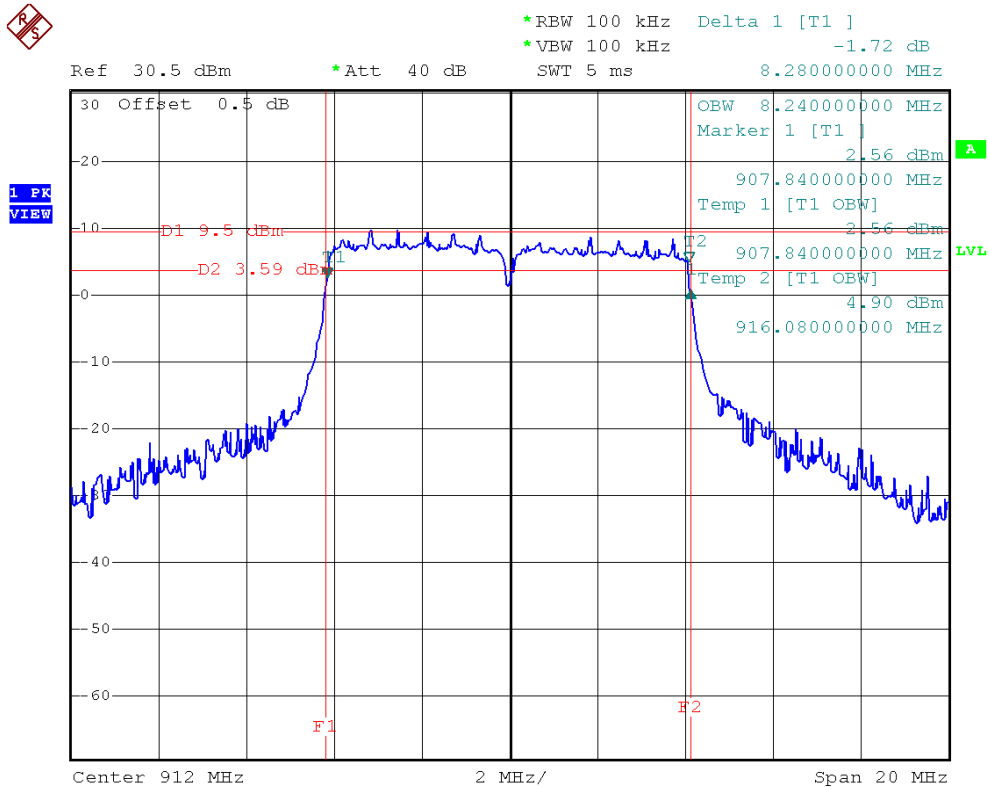
Frequency	Bandwidth (MHz)	99% Occupied BW (MHz)	LIMIT (kHz)	Judgement
907MHz	8.28	8.28	500	Pass
912MHz	8.28	8.24	500	Pass
922MHz	7.32	8.16	500	Pass

Transmit: IEEE 802.11g/10MHz Bandwidth/907 MHz

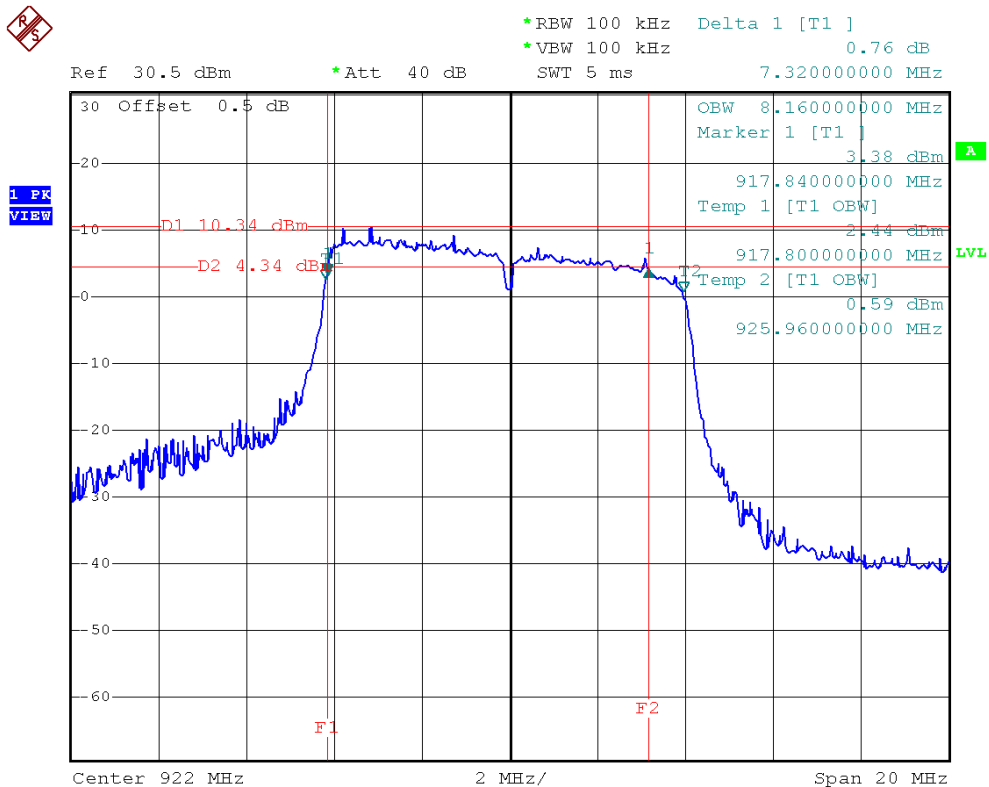




Transmit: IEEE 802.11g/10MHz Bandwidth/912 MHz



Transmit: IEEE 802.11g/10MHz Bandwidth/922 MHz

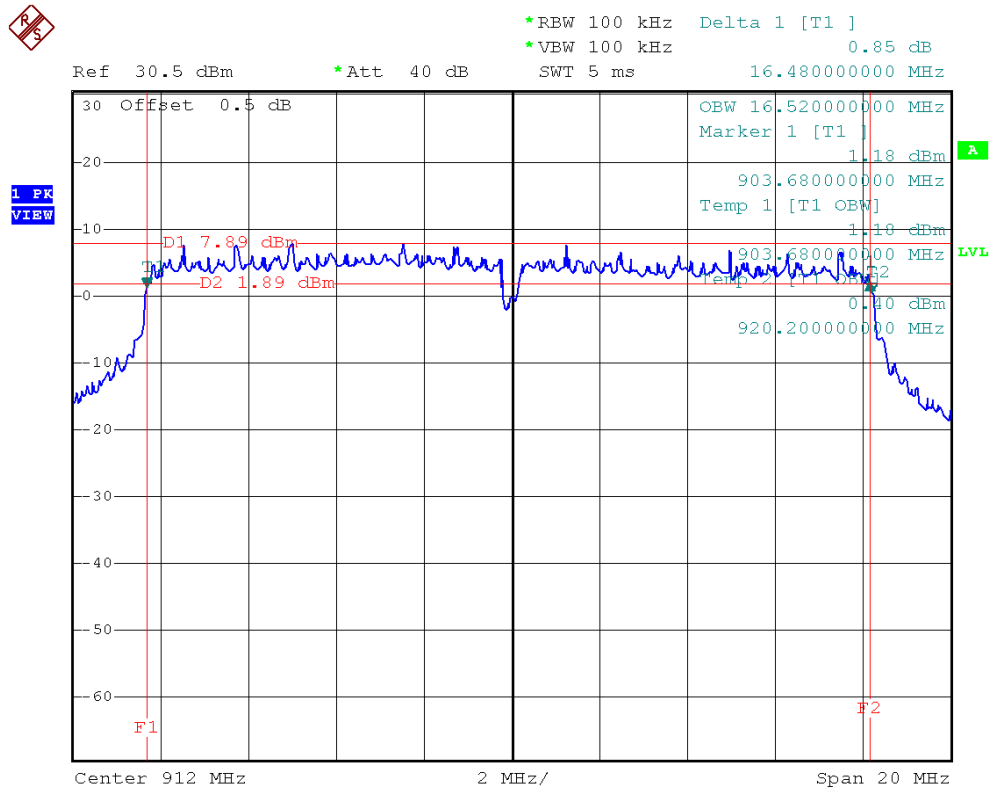




EUT :	802.11b/g miniPCI Module	Model Name :	XC900M
Temperature :	26 °C	Relative Humidity :	60%
Test Voltage :	AC 120V/60Hz (System)		
Test Mode :	Transmit: IEEE 802.11g/20MHz Bandwidth/912 MHz		

Frequency	Bandwidth (MHz)	99% Occupied BW (MHz)	LIMIT (kHz)	Judgement
912MHz	16.48	16.52	500	Pass

Transmit: IEEE 802.11g/20MHz Bandwidth/912 MHz

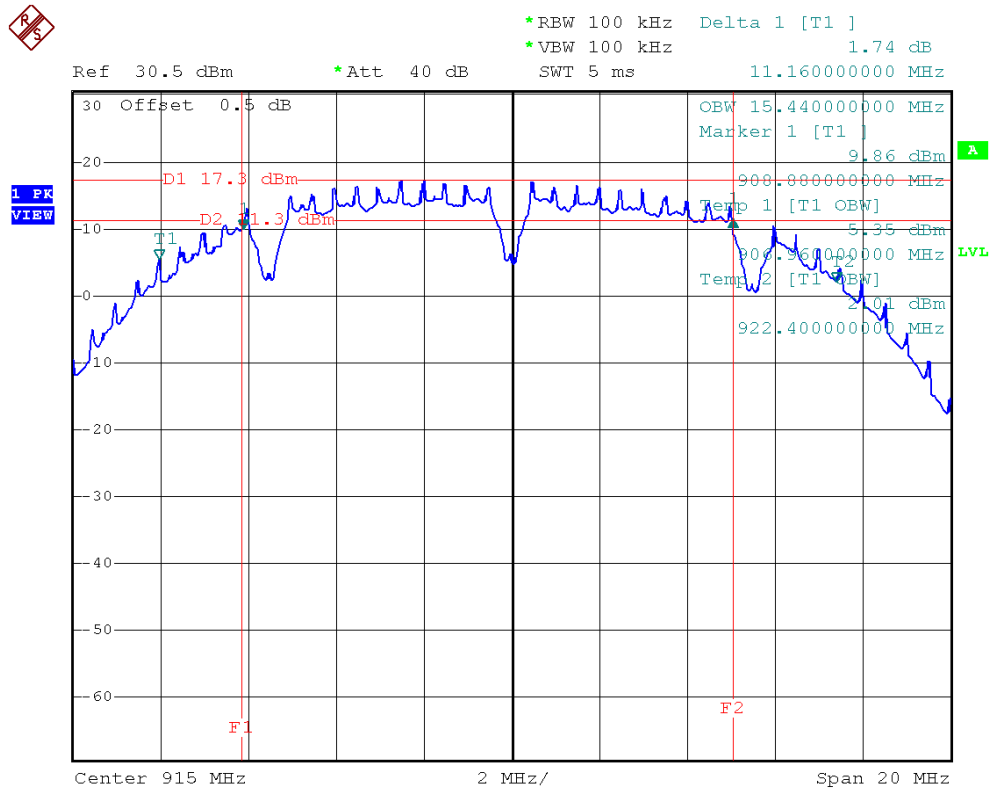




EUT :	802.11b/g miniPCI Module	Model Name :	XC900M
Temperature :	26 °C	Relative Humidity :	60%
Test Voltage :	AC 120V/60Hz (System)		
Test Mode :	Transmit: IEEE 802.11b/20MHz Bandwidth/915 MHz		

Frequency	Bandwidth (MHz)	99% Occupied BW (MHz)	LIMIT (kHz)	Judgement
915MHZ	11.16	15.44	500	Pass

Transmit: IEEE 802.11b/20MHz Bandwidth/915 MHz

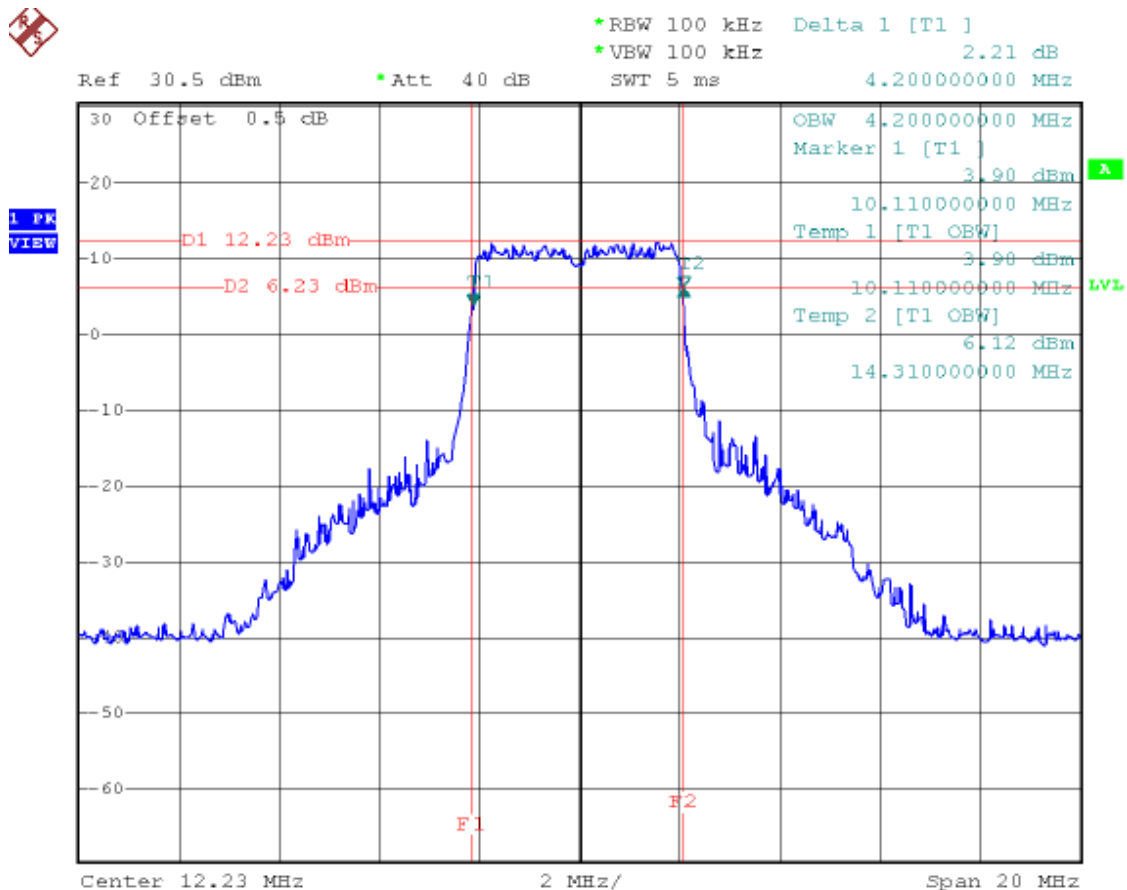




EUT :	802.11b/g miniPCI Module	Model Name :	XC900M
Temperature :	26 °C	Relative Humidity :	60%
Test Voltage :	AC 120V/60Hz (System)		
Test Mode :	Transmit: IEEE 802.11g/5MHz Bandwidth/905 MHz, 915 MHz, 925 MHz		

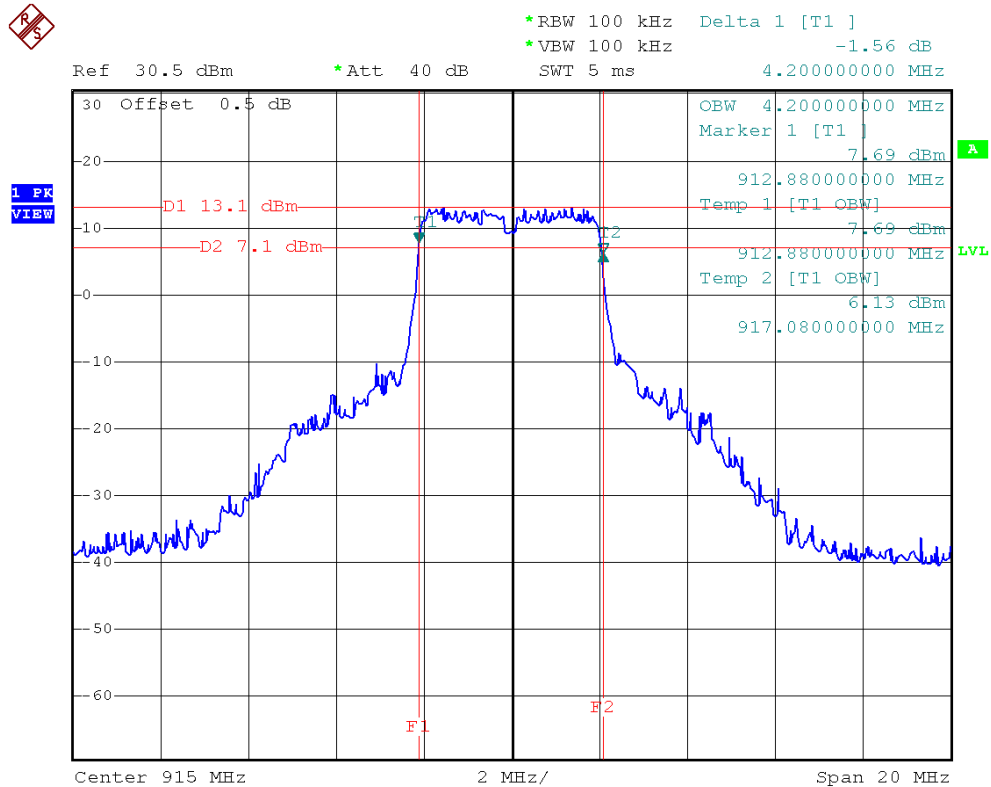
Frequency	Bandwidth (MHz)	99% Occupied BW (MHz)	LIMIT (kHz)	Judgement
905MHz	4.20	4.20	500	Pass
915MHz	4.20	4.20	500	Pass
925MHz	3.36	4.12	500	Pass

Transmit: IEEE 802.11g/5MHz Bandwidth/905 MHz

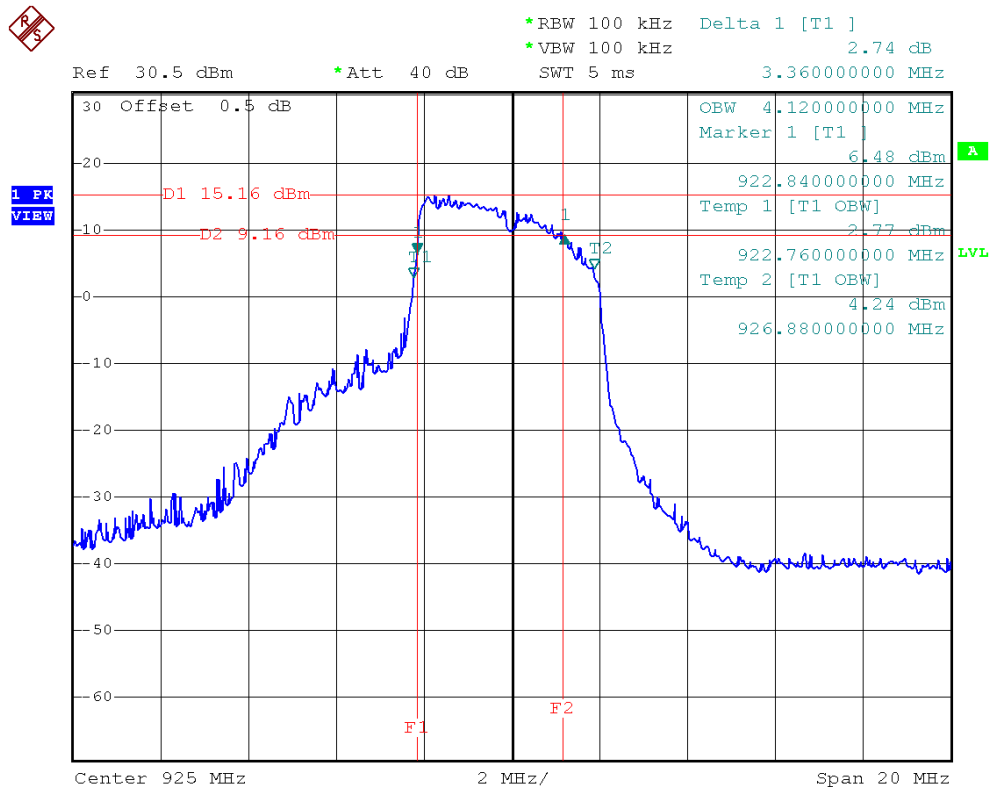




Transmit: IEEE 802.11g/5MHz Bandwidth/915 MHz



Transmit: IEEE 802.11g/5MHz Bandwidth/925 MHz

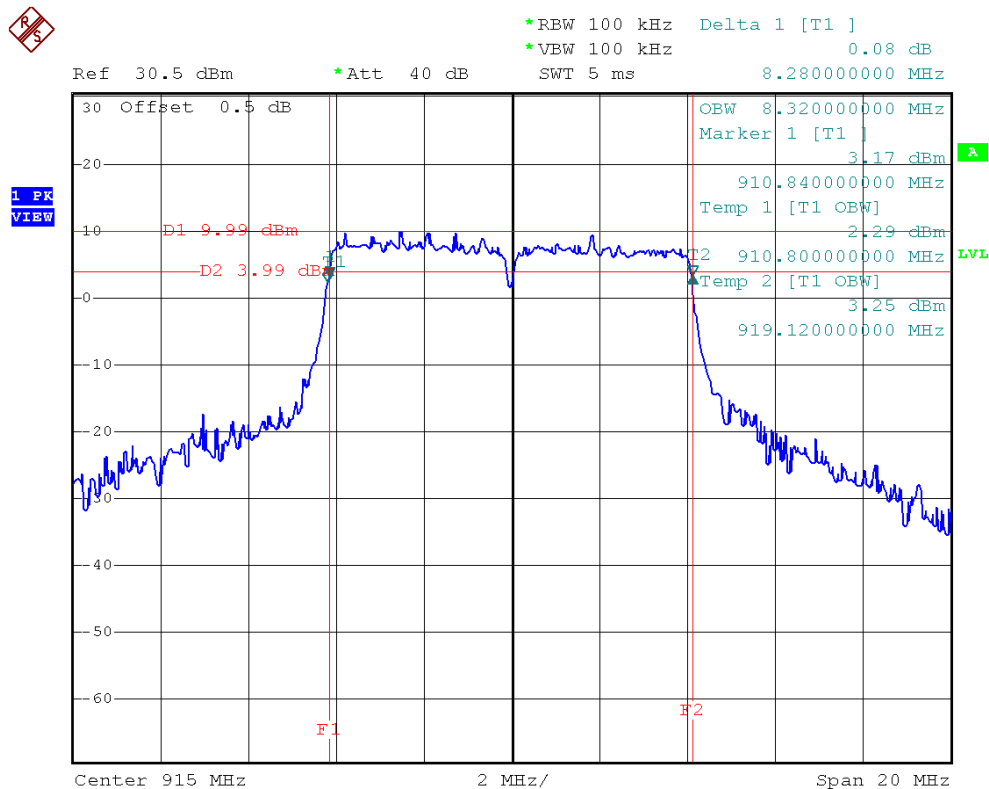




EUT :	802.11b/g miniPCI Module	Model Name :	XC900M
Temperature :	26 °C	Relative Humidity :	60%
Test Voltage :	AC 120V/60Hz (System)		
Test Mode :	Transmit: IEEE 802.11g/10MHz Bandwidth/915 MHz		

Frequency	Bandwidth (MHz)	99% Occupied BW (MHz)	LIMIT (kHz)	Judgement
915MHZ	8.28	8.32	500	Pass

Transmit: IEEE 802.11g/10MHz Bandwidth/915 MHz

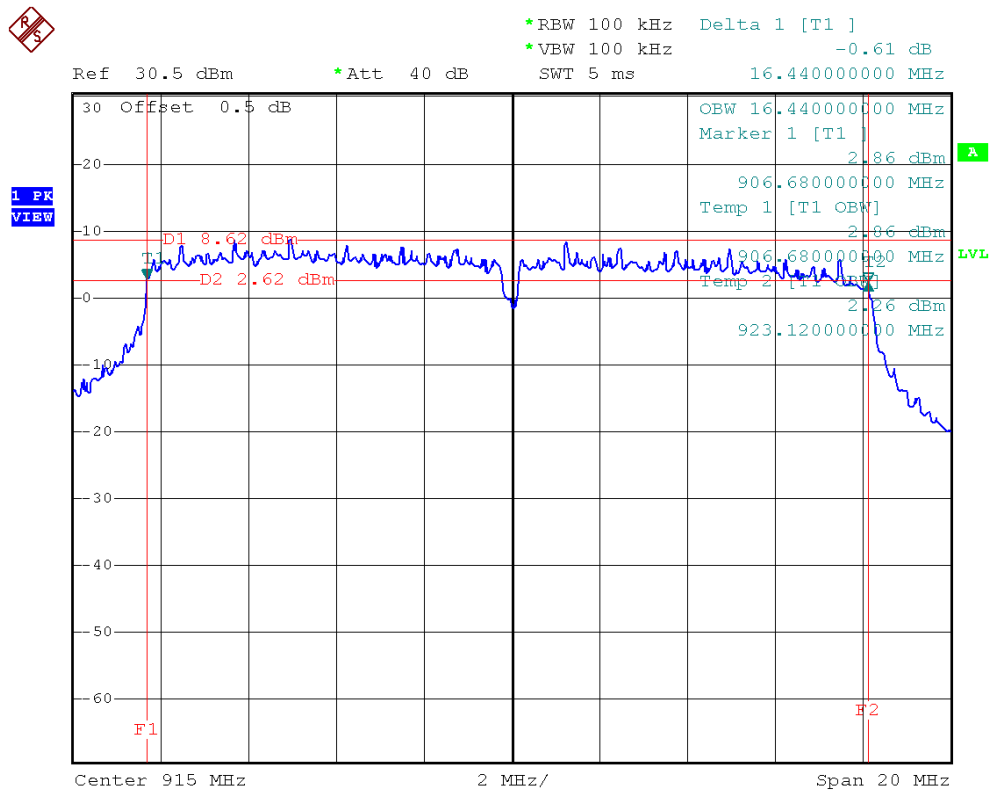




EUT :	802.11b/g miniPCI Module	Model Name :	XC900M
Temperature :	26 °C	Relative Humidity :	60%
Test Voltage :	AC 120V/60Hz (System)		
Test Mode :	Transmit: IEEE 802.11g/20MHz Bandwidth/915 MHz		

Frequency	Bandwidth (MHz)	99% Occupied BW (MHz)	LIMIT (kHz)	Judgement
915MHZ	16.44	16.44	500	Pass

Transmit: IEEE 802.11g/20MHz Bandwidth/915 MHz





6. PEAK OUTPUT POWER TEST

6.1 APPLIED PROCEDURES / LIMIT

FCC Part15, Subpart C: 2010			
Test Item	Limit	Frequency Range (MHz)	Result
Peak Output Power	1 watt or 30dBm	902-928	PASS

6.1.1 MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Power Meter	Anritsu	ML2487A	6K00004714	Feb. 20, 2013
2	Power Meter Sensor	Anritsu	MA2491A	34138	Feb. 20, 2013

Remark: " N/A" denotes No Model Name , Serial No. or No Calibration specified.

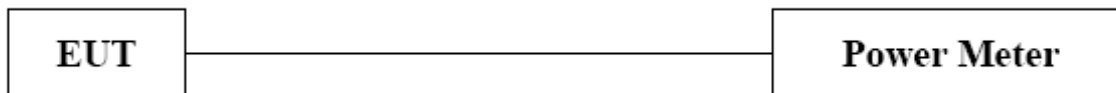
6.1.2 TEST PROCEDURE

The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,

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.



6.1.6 TEST RESULTS

EUT :	802.11b/g miniPCI Module	Model Name :	XC900M
Temperature :	26 °C	Relative Humidity :	60%
Test Voltage :	AC 120V/60Hz (System)		
Test Mode :	Transmit: IEEE 802.11b/ 20MHz Bandwidth /912 MHz, 917 MHz		

Frequency	Peak Output Power (dBm)	LIMIT (dBm)	LIMIT (W)	Judgement
912MHz	29.12	30.00	1.0000	Pass
917MHz	29.32	30.00	1.0000	Pass



EUT :	802.11b/g miniPCI Module	Model Name :	XC900M
Temperature :	26 ° C	Relative Humidity :	60%
Test Voltage :	AC 120V/60Hz (System)		
Test Mode :	Transmit: IEEE 802.11g/5MHz Bandwidth/907 MHz, 912 MHz, 922 MHz		

Frequency	Peak Output Power (dBm)	LIMIT (dBm)	LIMIT (W)	Judgement
907MHz	29.42	30.00	1.0000	Pass
912MHz	29.08	30.00	1.0000	Pass
922MHz	29.13	30.00	1.0000	Pass



EUT :	802.11b/g miniPCI Module	Model Name :	XC900M
Temperature :	26 ° C	Relative Humidity :	60%
Test Voltage :	AC 120V/60Hz (System)		
Test Mode :	Transmit: IEEE 802.11g/10MHz Bandwidth/907 MHz, 912 MHz, 922 MHz		

Frequency	Peak Output Power (dBm)	LIMIT (dBm)	LIMIT (W)	Judgement
907MHz	29.51	30.00	1.0000	Pass
912MHz	29.24	30.00	1.0000	Pass
922MHz	29.34	30.00	1.0000	Pass



EUT :	802.11b/g miniPCI Module	Model Name :	XC900M
Temperature :	26 ° C	Relative Humidity :	60%
Test Voltage :	AC 120V/60Hz (System)		
Test Mode :	Transmit: IEEE 802.11g/20MHz Bandwidth/912 MHz		

Frequency	Peak Output Power (dBm)	LIMIT (dBm)	LIMIT (W)	Judgement
912MHz	29.18	30.00	1.0000	Pass



EUT :	802.11b/g miniPCI Module	Model Name :	XC900M
Temperature :	26 ° C	Relative Humidity :	60%
Test Voltage :	AC 120V/60Hz (System)		
Test Mode :	Transmit: IEEE 802.11b/20MHz Bandwidth/915 MHz		

Frequency	Peak Output Power (dBm)	LIMIT (dBm)	LIMIT (W)	Judgement
915MHz	29.51	30.00	1.0000	Pass



EUT :	802.11b/g miniPCI Module	Model Name :	XC900M
Temperature :	26 ° C	Relative Humidity :	60%
Test Voltage :	AC 120V/60Hz (System)		
Test Mode :	Transmit: IEEE 802.11g/5MHz Bandwidth/905 MHz, 915 MHz, 925 MHz		

Frequency	Peak Output Power (dBm)	LIMIT (dBm)	LIMIT (W)	Judgement
905MHz	29.23	30.00	1.0000	Pass
915MHz	29.27	30.00	1.0000	Pass
925MHz	29.23	30.00	1.0000	Pass



EUT :	802.11b/g miniPCI Module	Model Name :	XC900M
Temperature :	26 ° C	Relative Humidity :	60%
Test Voltage :	AC 120V/60Hz (System)		
Test Mode :	Transmit: IEEE 802.11g/10MHz Bandwidth/915 MHz		

Frequency	Peak Output Power (dBm)	LIMIT (dBm)	LIMIT (W)	Judgement
915MHZ	29.37	30.00	1.0000	Pass



EUT :	802.11b/g miniPCI Module	Model Name :	XC900M
Temperature :	26 ° C	Relative Humidity :	60%
Test Voltage :	AC 120V/60Hz (System)		
Test Mode :	Transmit: IEEE 802.11g/20MHz Bandwidth/915 MHz		

Frequency	Peak Output Power (dBm)	LIMIT (dBm)	LIMIT (W)	Judgement
915MHZ	29.52	30.00	1.0000	Pass



7. ANTENNA CONDUCTED SPURIOUS EMISSION

7.1 APPLIED PROCEDURES / LIMIT

FCC Part15, Subpart C: 2010			
Test Item	Limit	Frequency Range (MHz)	Result
Antenna conducted Spurious Emission	20dB less than the peak value of fundamental frequency	30-25000	PASS

7.1.1 MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP-40	100129	Oct. 06, 2012

Remark: " N/A" denotes No Model Name , Serial No. or No Calibration specified.

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=100KHz, Sweep time = Auto.

7.1.3 DEVIATION FROM STANDARD

No deviation.

7.1.4 TEST SETUP



7.1.5 EUT OPERATION CONDITIONS

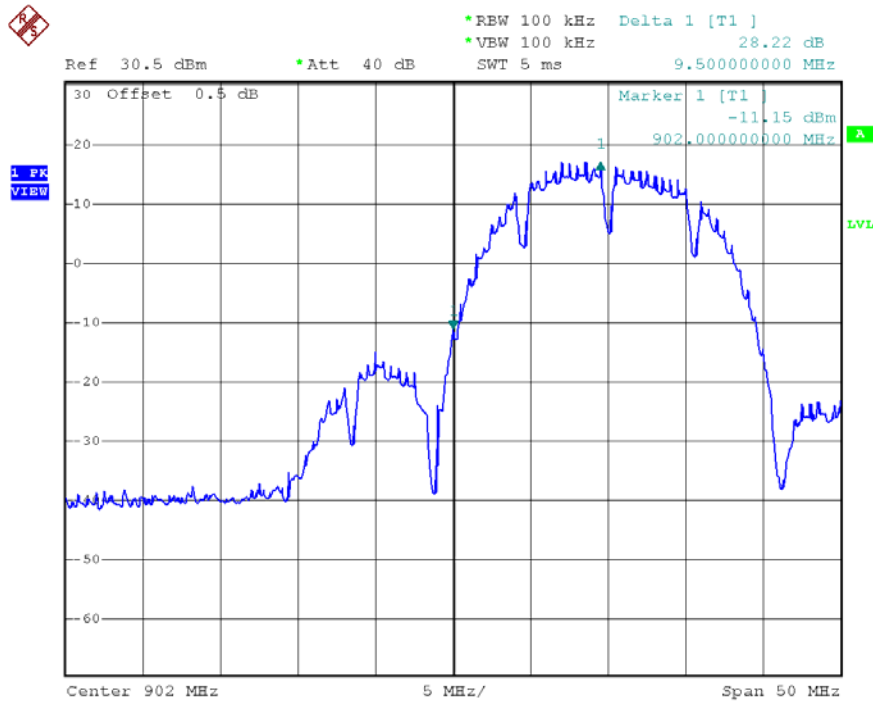
The EUT tested system was configured as the statements of 4.1.6 Unless otherwise a special operating condition is specified in the follows during the testing.



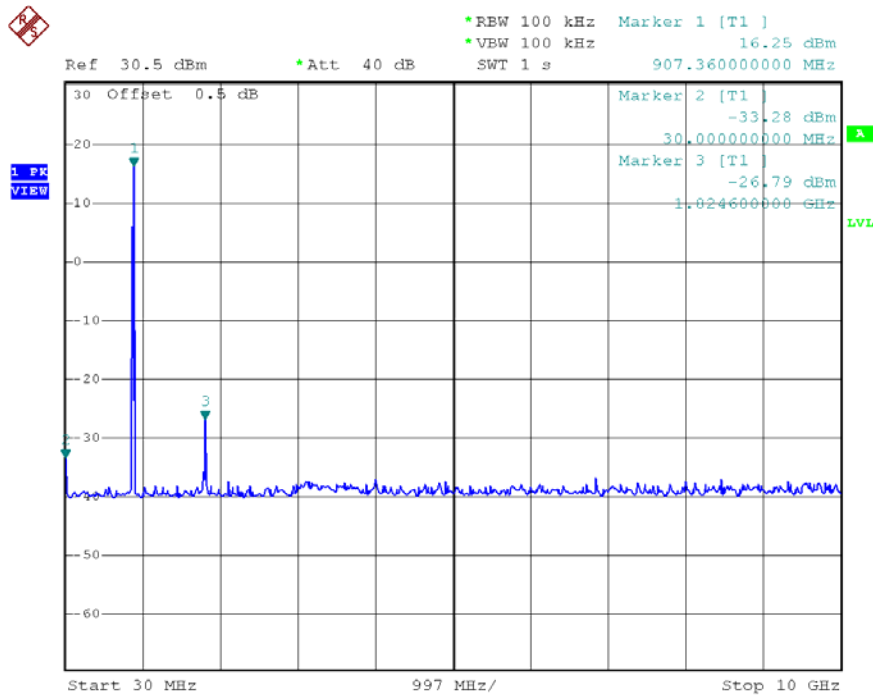
7.1.6 TEST RESULTS

EUT :	802.11b/g miniPCI Module	Model Name :	XC900M
Temperature :	26 °C	Relative Humidity :	60%
Test Voltage :	AC 120V/60Hz (System)		
Test Mode :	Transmit: IEEE 802.11b/20MHz Bandwidth/912 MHz		

IEEE 802.11b/20MHz Bandwidth/912 MHz/AVERAGE LOW



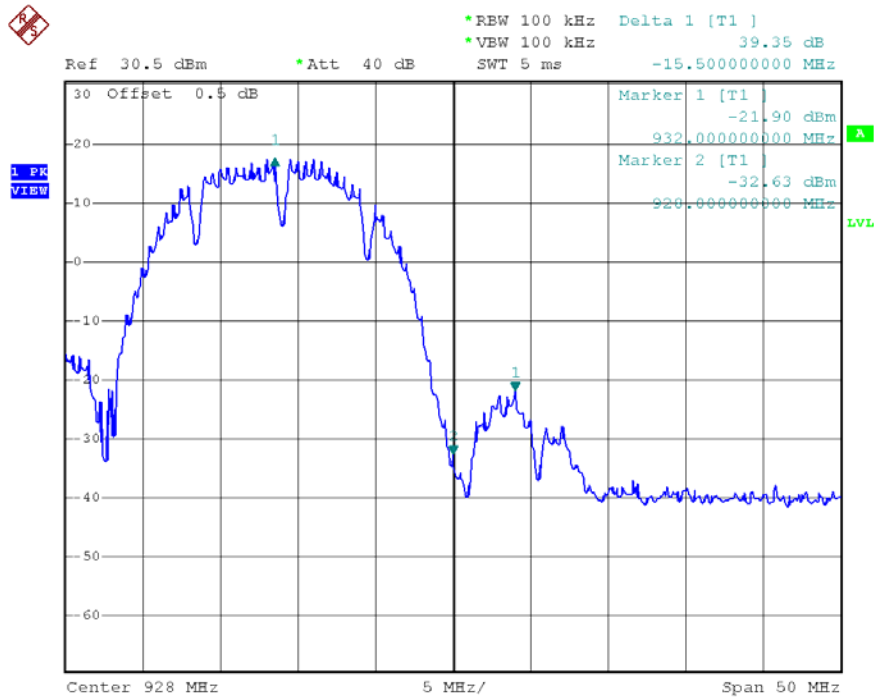
IEEE 802.11b/20MHz Bandwidth/912 MHz/CONDUCTED EMISSION



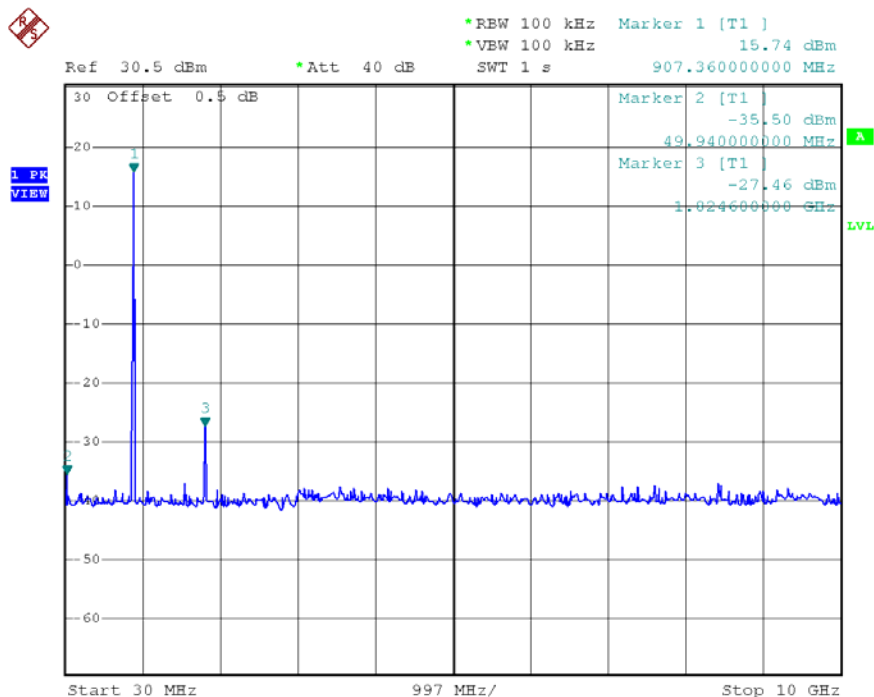


EUT :	802.11b/g miniPCI Module	Model Name :	XC900M
Temperature :	26 °C	Relative Humidity :	60%
Test Voltage :	AC 120V/60Hz (System)		
Test Mode :	Transmit: IEEE 802.11b/20MHz Bandwidth/917 MHz		

IEEE 802.11b/20MHz Bandwidth/917 MHz/AVERAGE HIGH



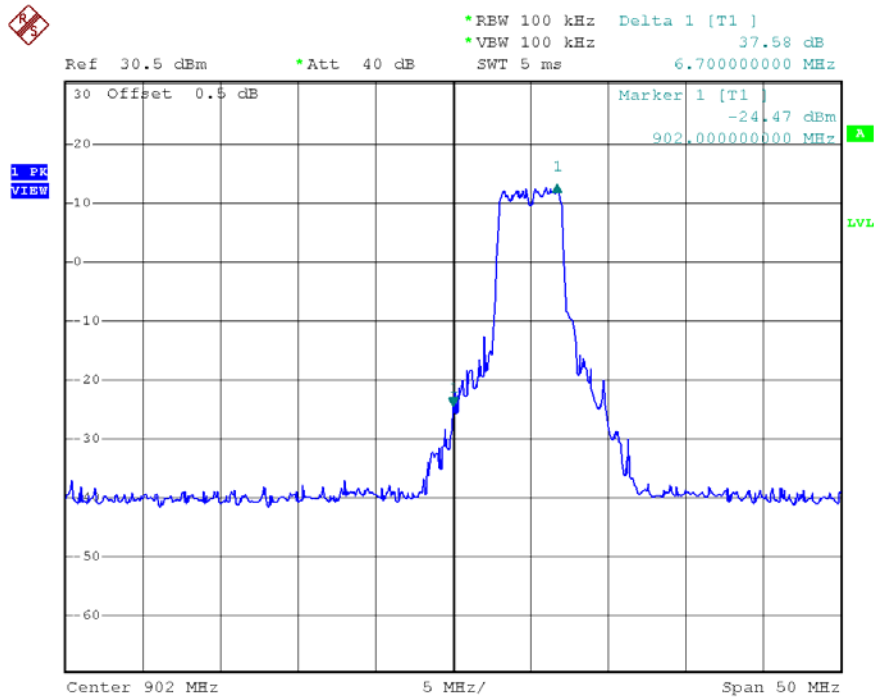
IEEE 802.11b/20MHz Bandwidth/917 MHz/CONDUCTED EMISSION



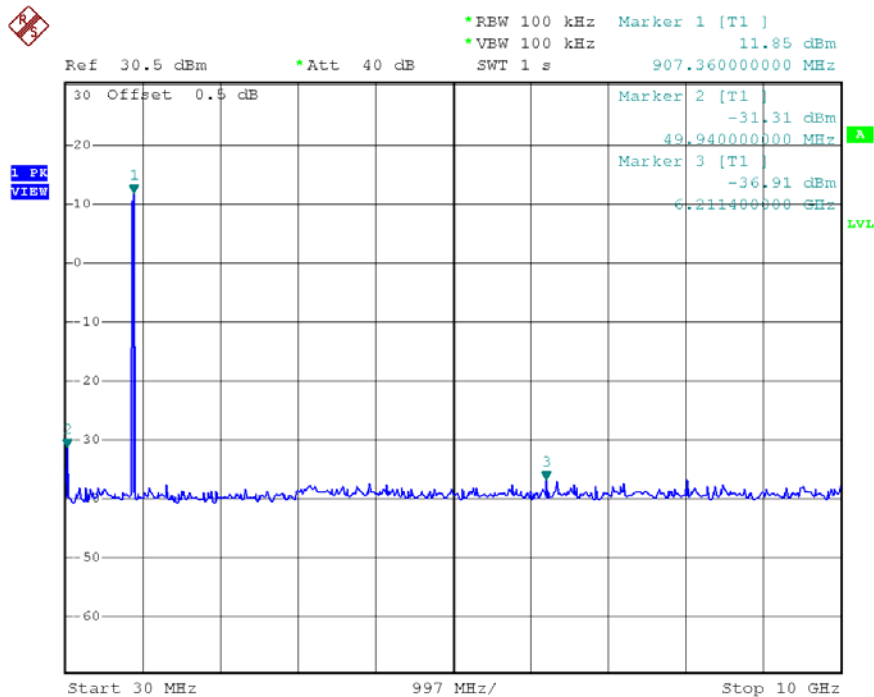


EUT :	802.11b/g miniPCI Module	Model Name :	XC900M
Temperature :	26 °C	Relative Humidity :	60%
Test Voltage :	AC 120V/60Hz (System)		
Test Mode :	Transmit: IEEE 802.11g/5MHz Bandwidth/907 MHz		

IEEE 802.11g/5MHz Bandwidth/907 MHz/AVERAGE LOW



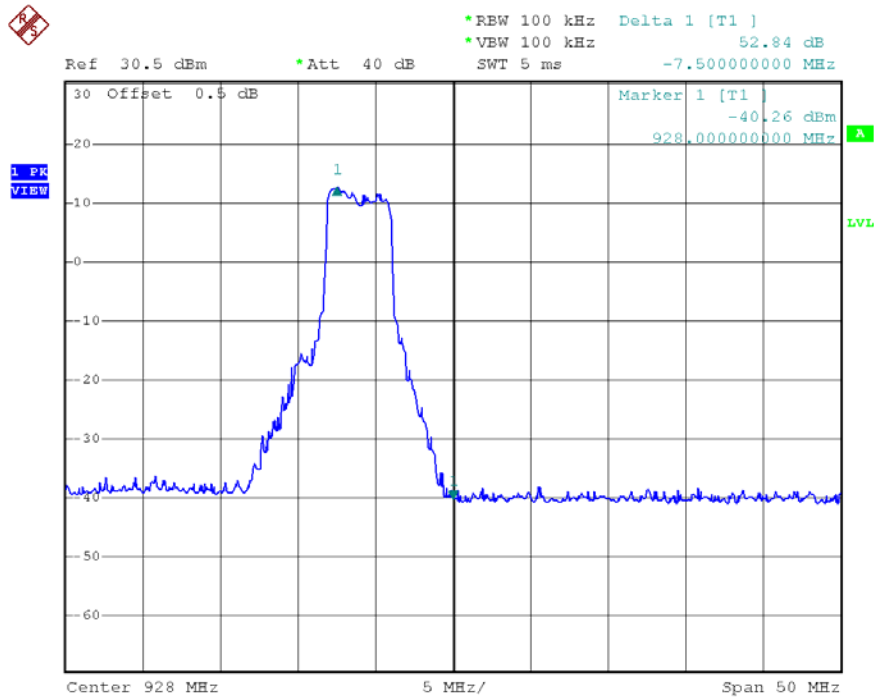
IEEE 802.11g/5MHz Bandwidth/907 MHz/CONDUCTED EMISSION



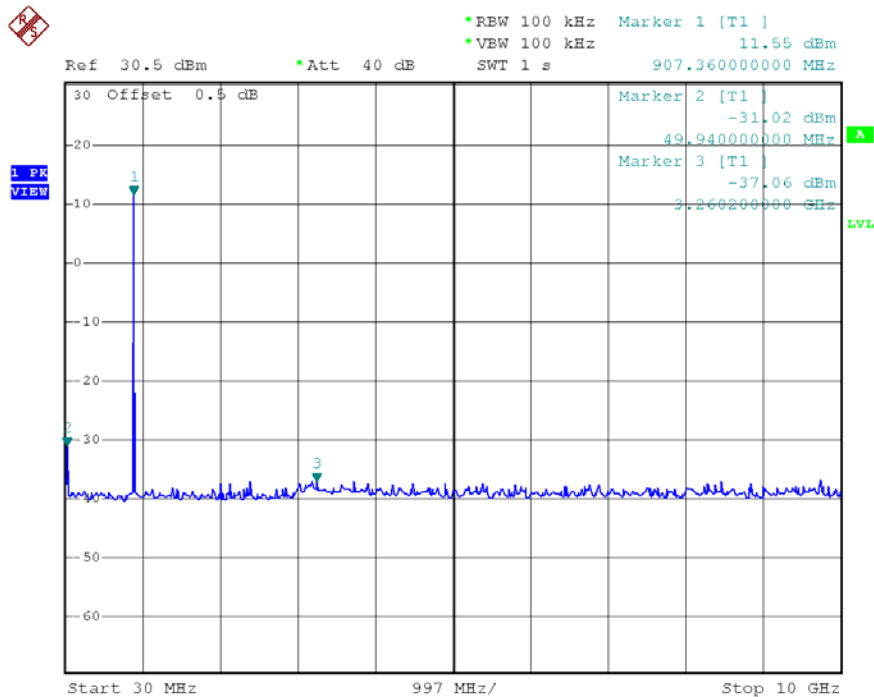


EUT :	802.11b/g miniPCI Module	Model Name :	XC900M
Temperature :	26 °C	Relative Humidity :	60%
Test Voltage :	AC 120V/60Hz (System)		
Test Mode :	Transmit: IEEE 802.11g/5MHz Bandwidth/922 MHz		

IEEE 802.11g/5MHz Bandwidth/922 MHz/AVERAGE HIGH



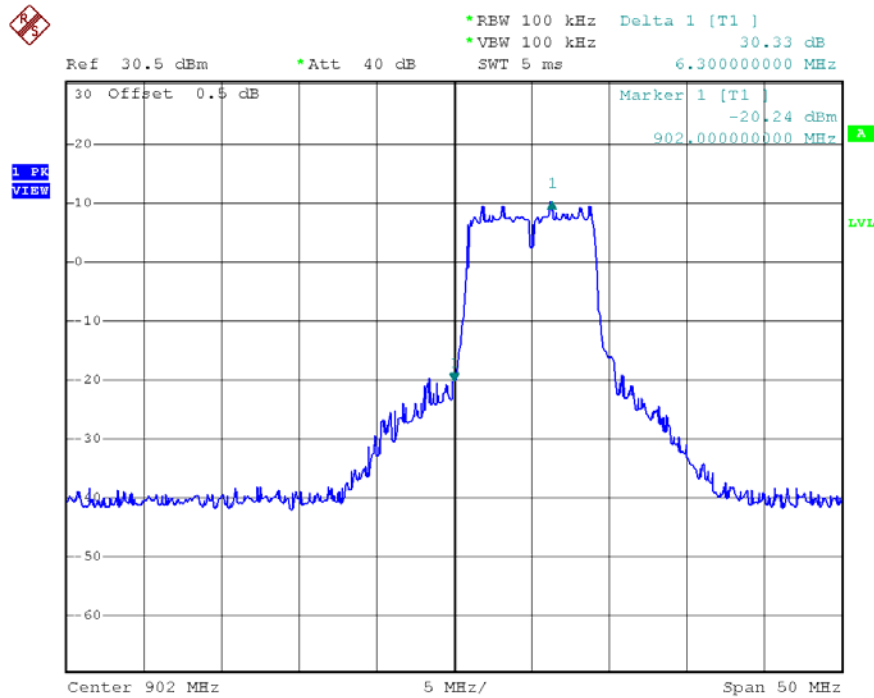
IEEE 802.11g/5MHz Bandwidth/922 MHz/CONDUCTED EMISSION



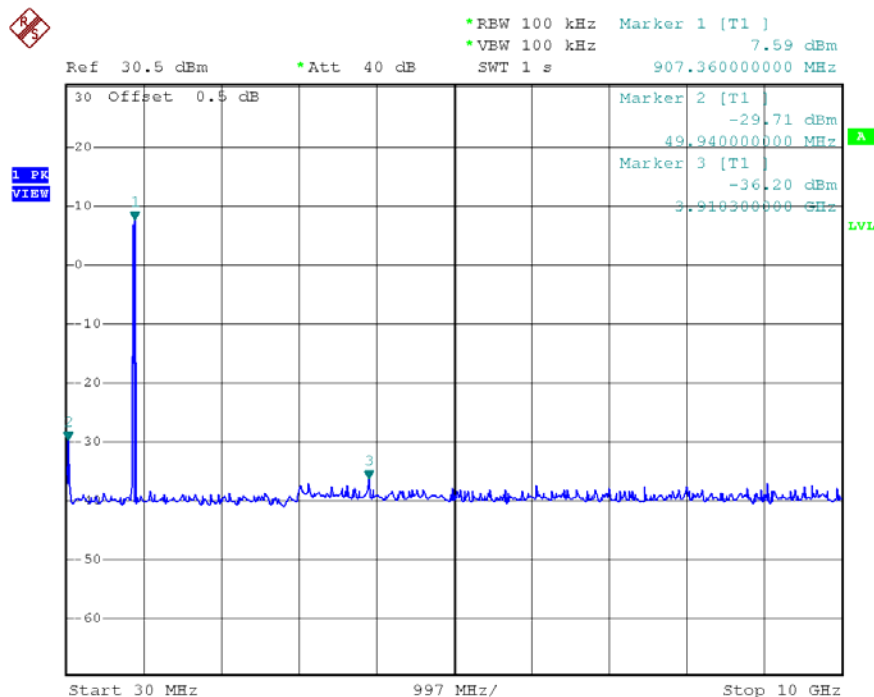


EUT :	802.11b/g miniPCI Module	Model Name :	XC900M
Temperature :	26 °C	Relative Humidity :	60%
Test Voltage :	AC 120V/60Hz (System)		
Test Mode :	Transmit: IEEE 802.11g/10MHz Bandwidth/907 MHz		

IEEE 802.11g/10MHz Bandwidth/907 MHz/AVERAGE LOW



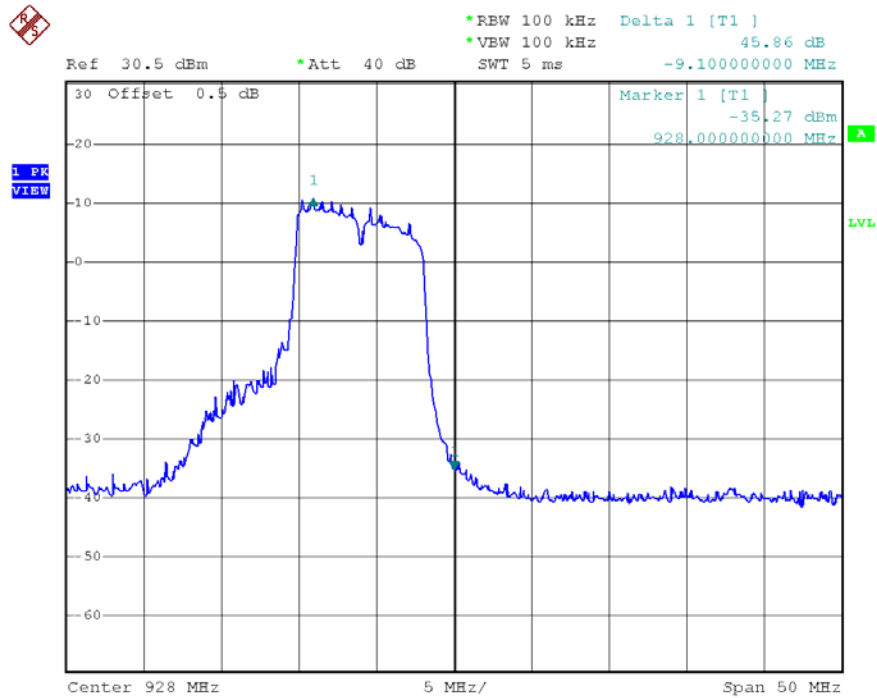
IEEE 802.11g/10MHz Bandwidth/907 MHz/CONDUCTED EMISSION



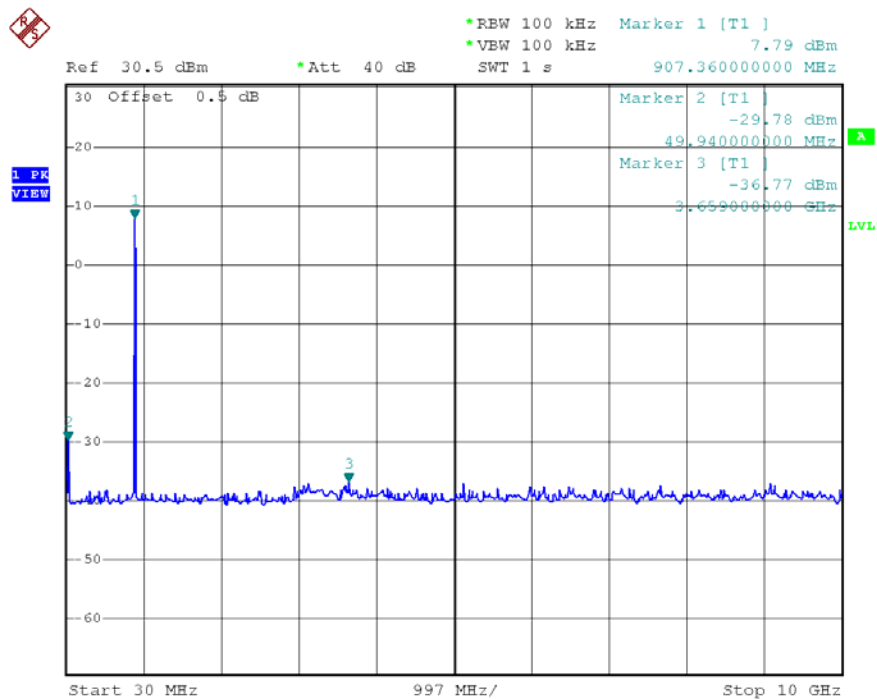


EUT :	802.11b/g miniPCI Module	Model Name :	XC900M
Temperature :	26 °C	Relative Humidity :	60%
Test Voltage :	AC 120V/60Hz (System)		
Test Mode :	Transmit: IEEE 802.11g/10MHz Bandwidth/922 MHz		

IEEE 802.11g/10MHz Bandwidth/922 MHz/AVERAGE HIGH



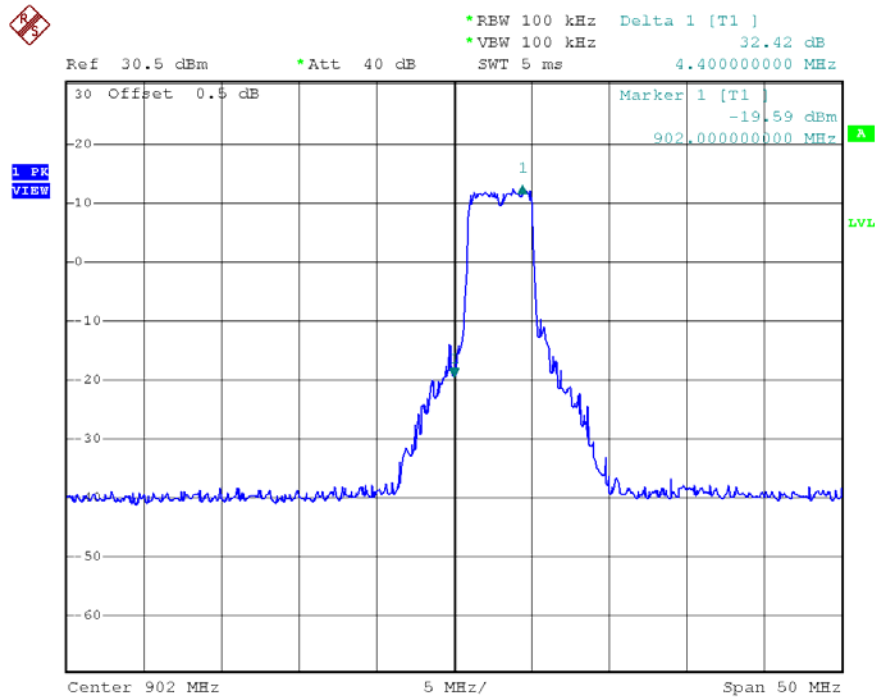
IEEE 802.11g/10MHz Bandwidth/922 MHz/CONDUCTED EMISSION



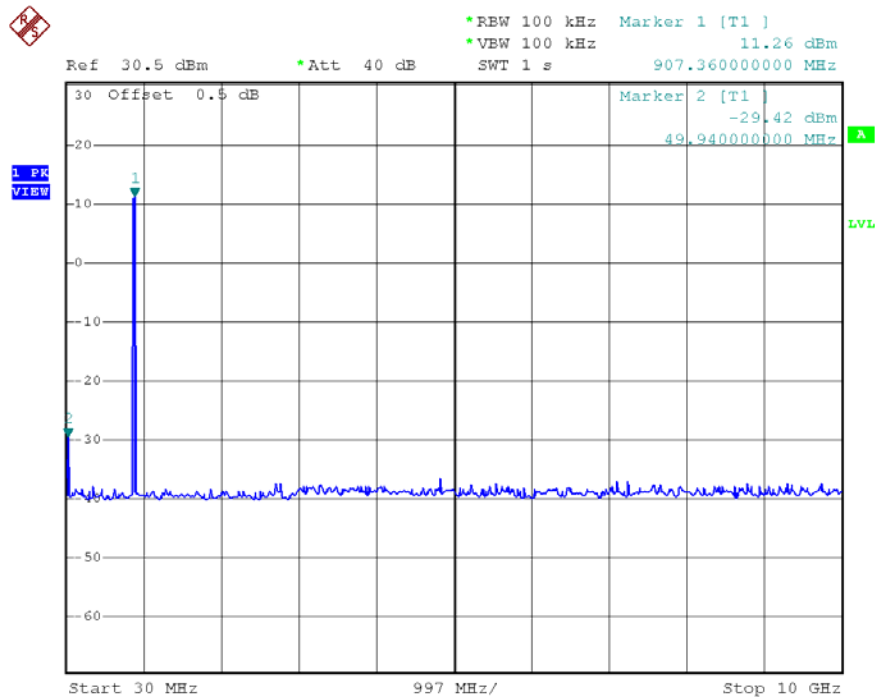


EUT :	802.11b/g miniPCI Module	Model Name :	XC900M
Temperature :	26 °C	Relative Humidity :	60%
Test Voltage :	AC 120V/60Hz (System)		
Test Mode :	Transmit: IEEE 802.11g/5MHz Bandwidth/905 MHz		

IEEE 802.11g/5MHz Bandwidth/905 MHz/AVERAGE LOW



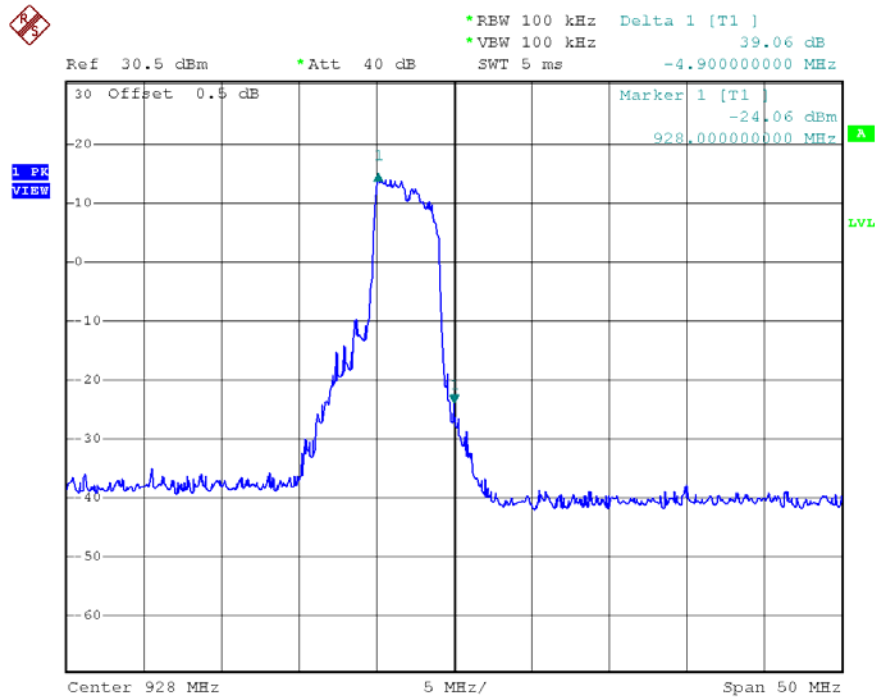
IEEE 802.11g/5MHz Bandwidth/905 MHz/CONDUCTED EMISSION



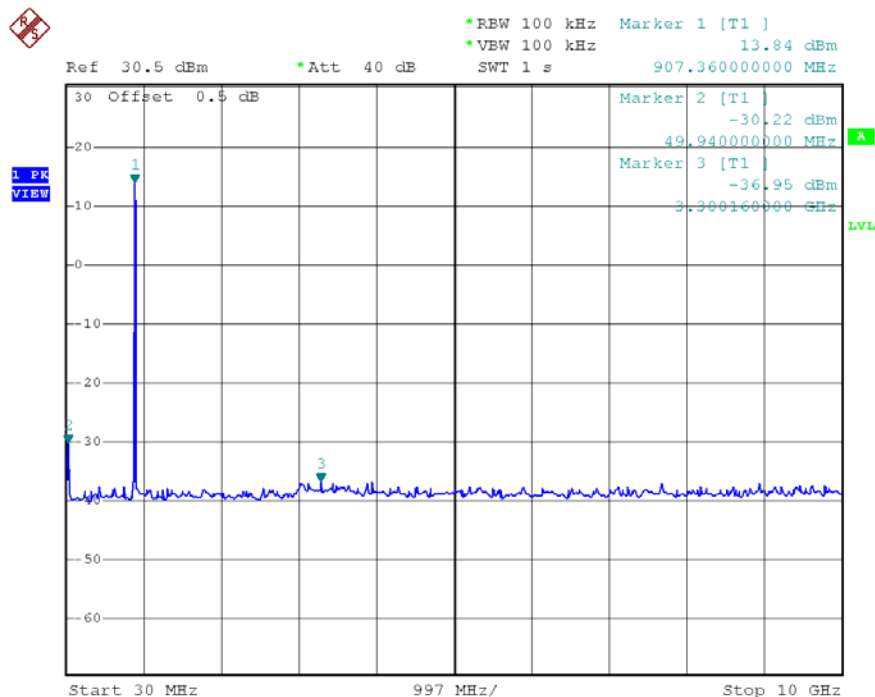


EUT :	802.11b/g miniPCI Module	Model Name :	XC900M
Temperature :	26 °C	Relative Humidity :	60%
Test Voltage :	AC 120V/60Hz (System)		
Test Mode :	Transmit: IEEE 802.11g/5MHz Bandwidth/925 MHz		

IEEE 802.11g/5MHz Bandwidth/925 MHz/AVERAGE HIGH



IEEE 802.11g/5MHz Bandwidth/925 MHz/CONDUCTED EMISSION





8. POWER SPECTRAL DENSITY TEST

8.1 APPLIED PROCEDURES / LIMIT

FCC Part15, Subpart C: 2010			
Test Item	Limit	Frequency Range (MHz)	Result
Power Spectral Density	8 dBm (in any 3KHz)	902-928	PASS

8.1.1 MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Spectrum Analyzer	R&S	FSP-40	100129	Oct. 06, 2012

Remark: " N/A" denotes No Model Name, Serial No. or No Calibration specified.

8.1.2 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=3KHz, VBW=30KHz, Sweep time = 500s.

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.



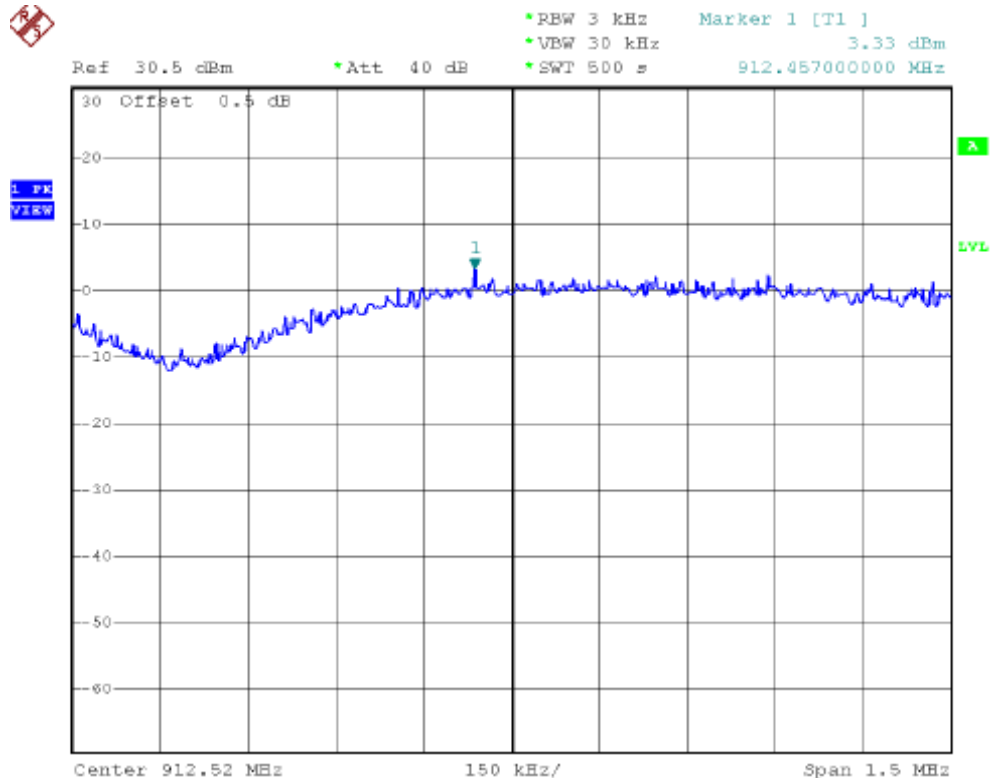
8.1.6 TEST RESULTS

EUT :	802.11b/g miniPCI Module	Model Name :	XC900M
Temperature :	26 ° C	Relative Humidity :	60%
Test Voltage :	AC 120V/60Hz (System)		
Test Mode :	Transmit: IEEE 802.11b/20MHz Bandwidth/912 MHz, 917 MHz		

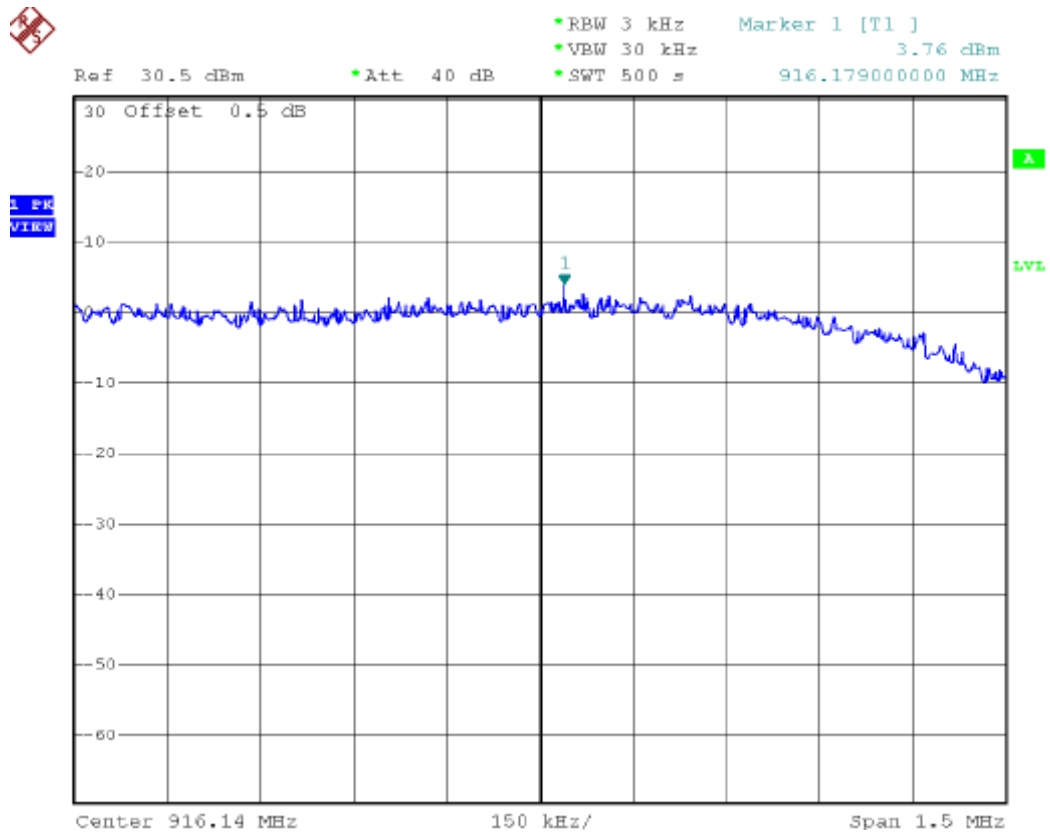
Frequency	Power Density (dBm)	LIMIT (dBm)	Test Result
912MHz	3.33	8	Pass
917MHz	3.76	8	Pass



IEEE 802.11b/20MHz Bandwidth/912 MHz



IEEE 802.11b/20MHz Bandwidth/917 MHz

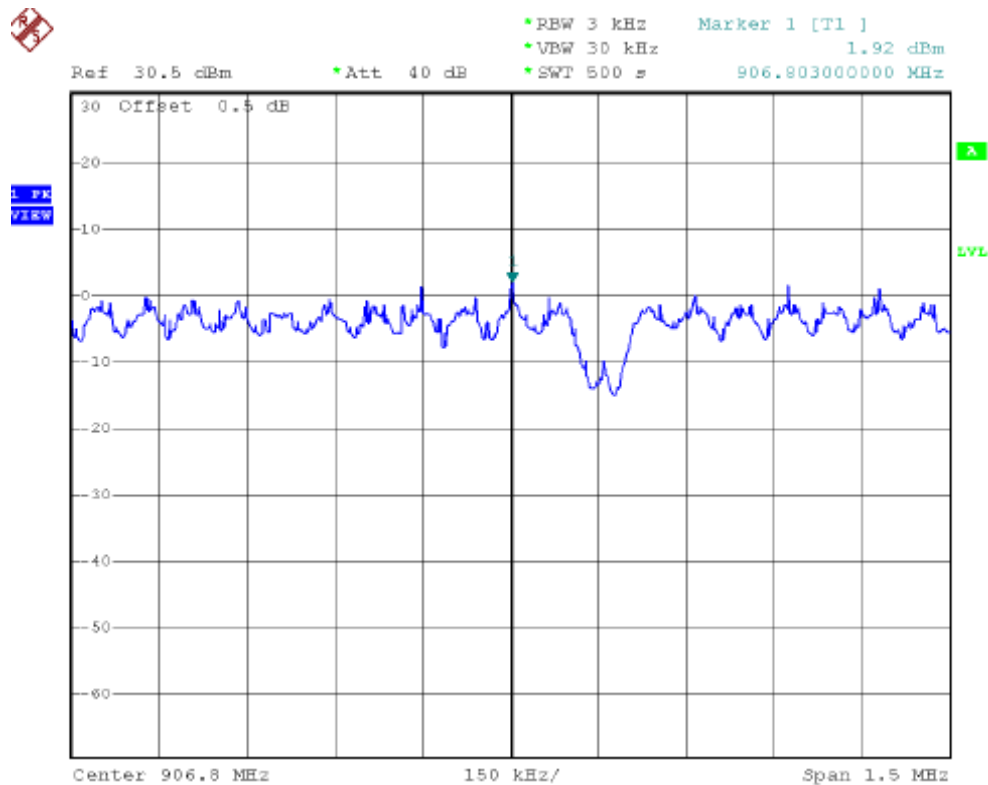




EUT :	802.11b/g miniPCI Module	Model Name :	XC900M
Temperature :	26° C	Relative Humidity :	60%
Test Voltage :	AC 120V/60Hz (System)		
Test Mode :	Transmit: IEEE 802.11g/5MHz Bandwidth/907 MHz, 912 MHz, 922 MHz		

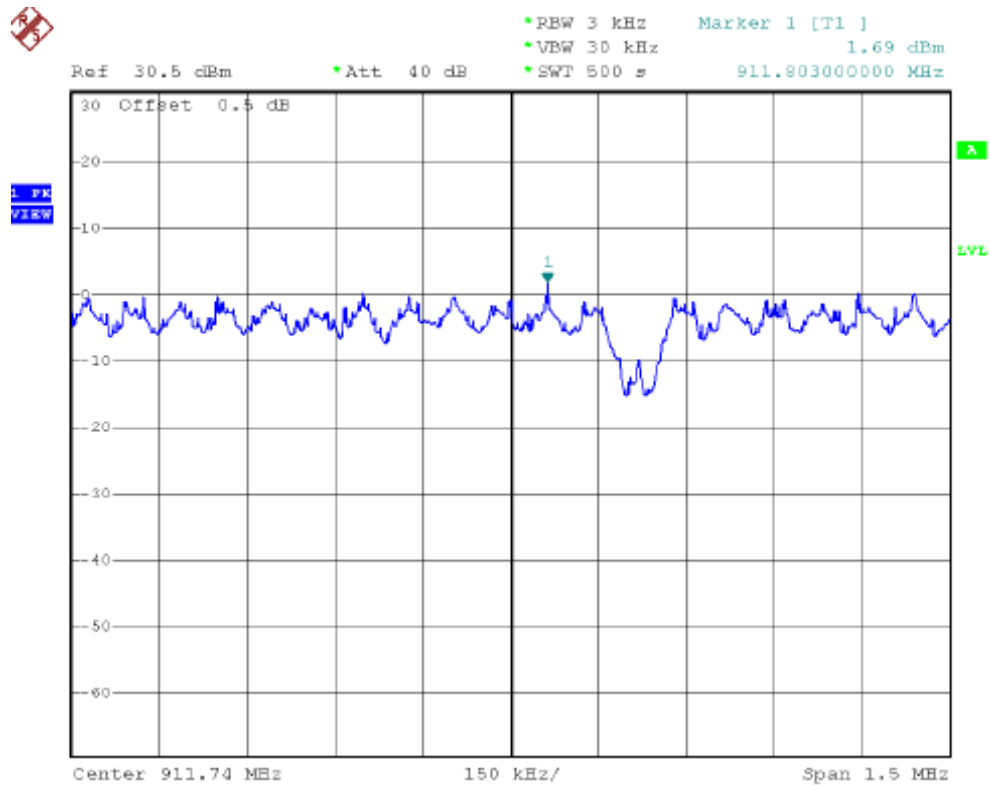
Frequency	Power Density (dBm)	LIMIT (dBm)	Test Result
907MHz	1.92	8	Pass
912MHz	1.69	8	Pass
922MHz	0.81	8	Pass

IEEE 802.11g/5MHz Bandwidth/907 MHz

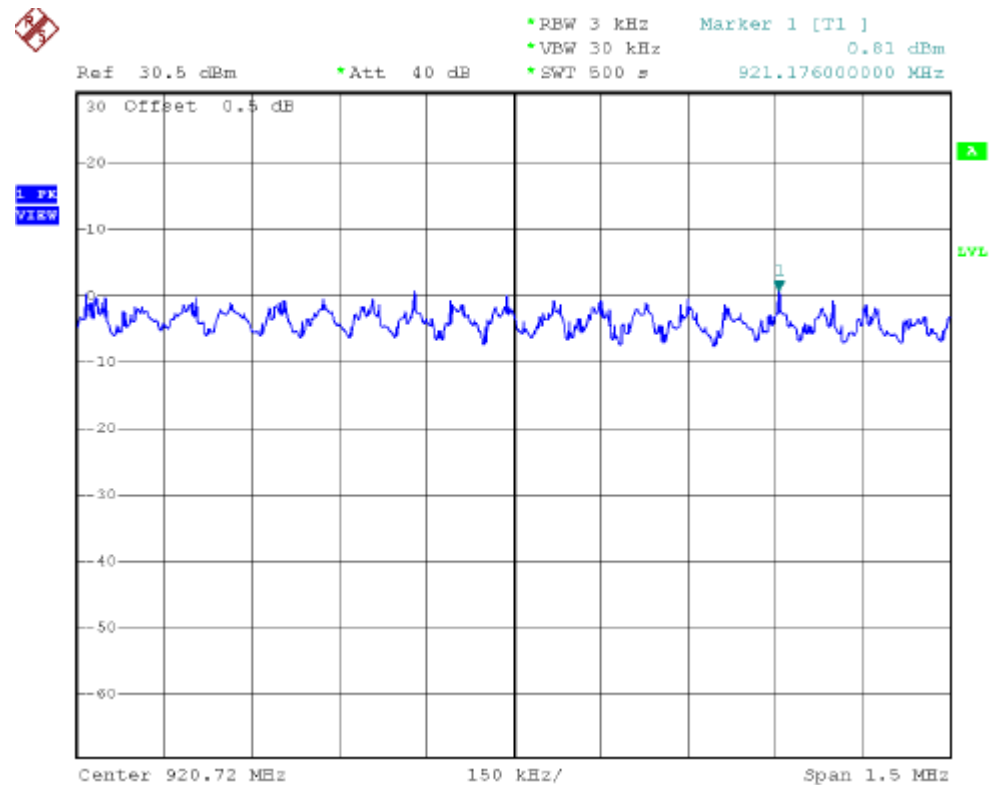




IEEE 802.11g/5MHz Bandwidth/912 MHz



IEEE 802.11g/5MHz Bandwidth/922 MHz

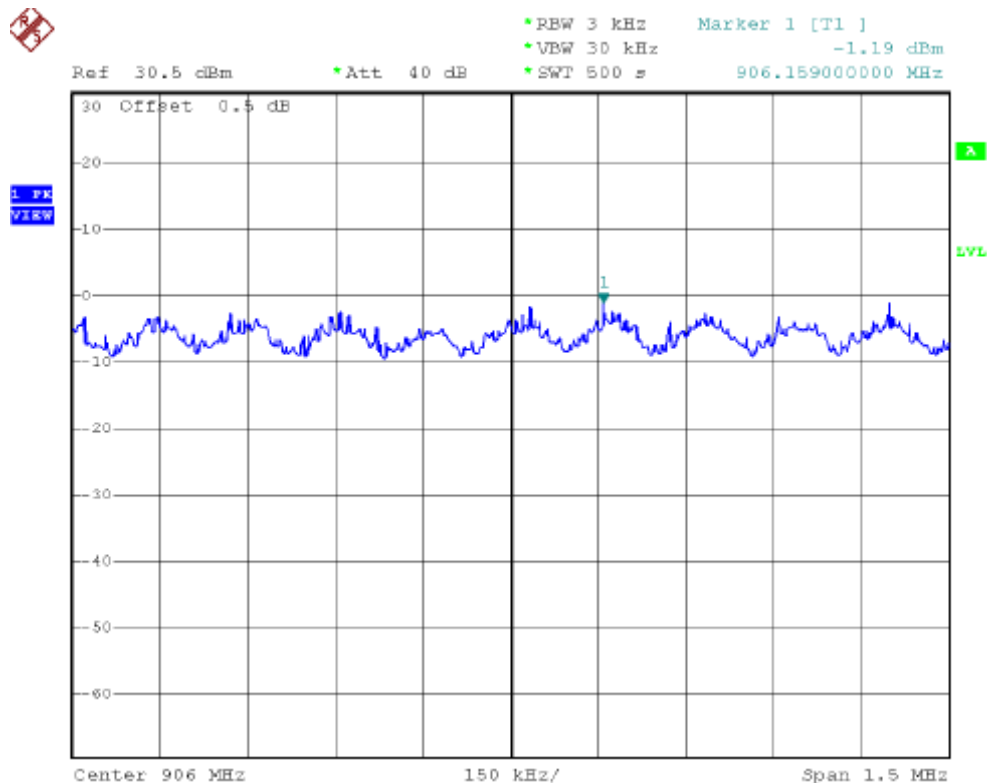




EUT :	802.11b/g miniPCI Module	Model Name :	XC900M
Temperature :	26° C	Relative Humidity :	60%
Test Voltage :	AC 120V/60Hz (System)		
Test Mode :	Transmit: IEEE 802.11g/10MHz Bandwidth/907 MHz, 912 MHz, 922 MHz		

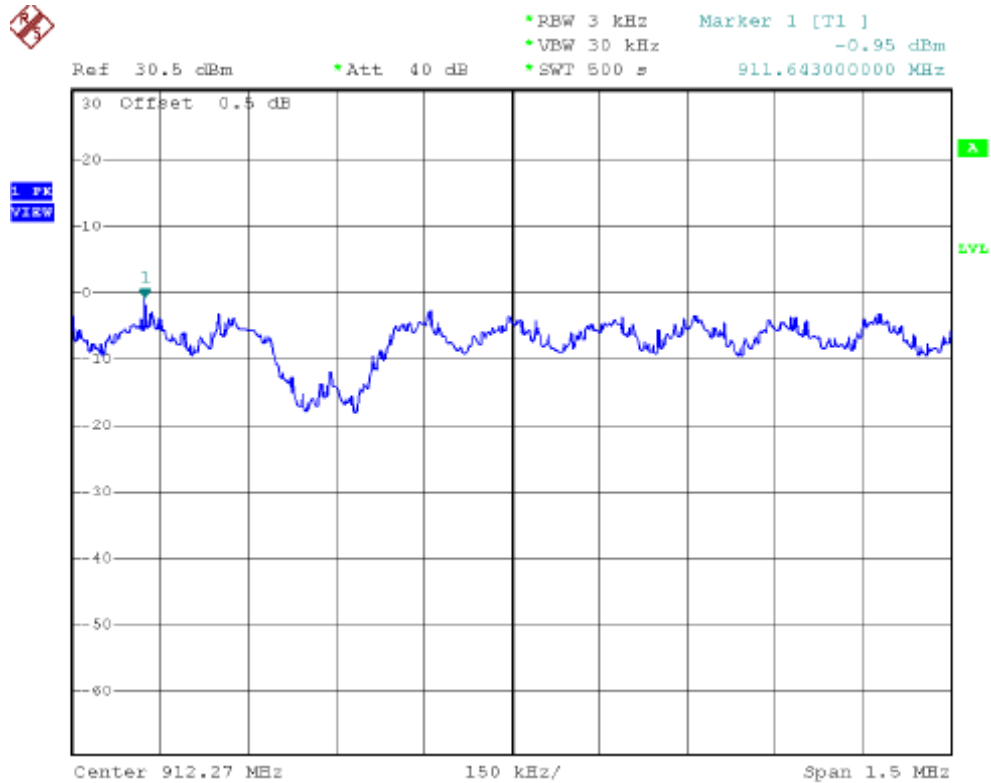
Frequency	Power Density (dBm)	LIMIT (dBm)	Test Result
907MHz	-1.19	8	Pass
912MHz	-0.95	8	Pass
922MHz	-1.53	8	Pass

IEEE 802.11g/10MHz Bandwidth/907 MHz

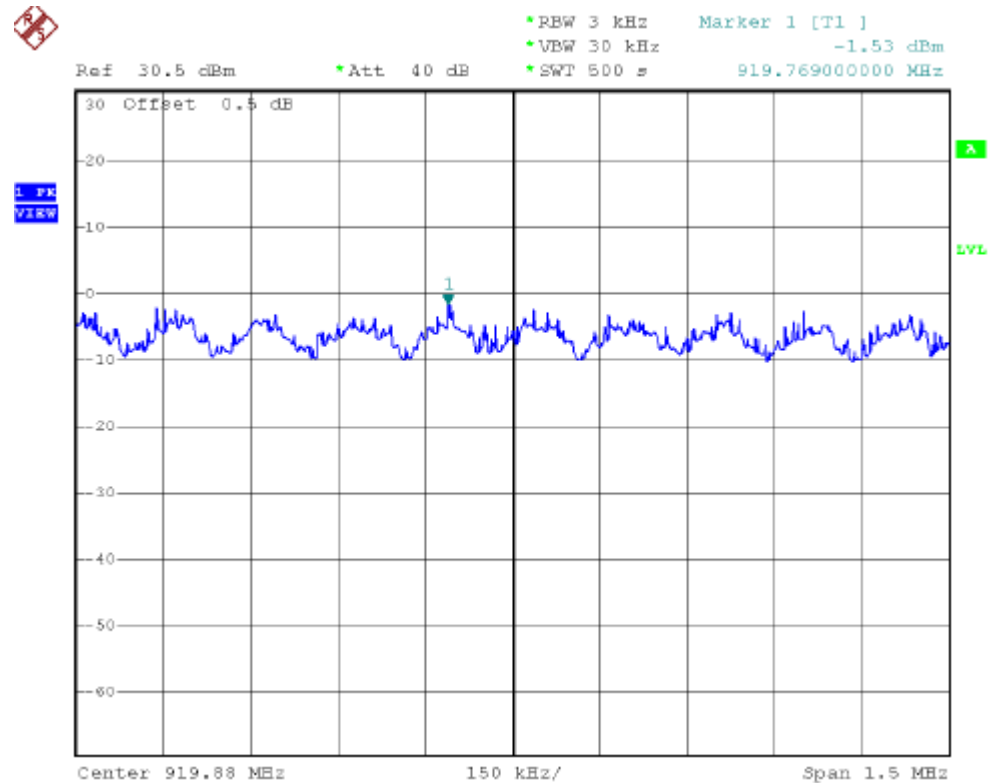




IEEE 802.11g/10MHz Bandwidth/912 MHz



IEEE 802.11g/10MHz Bandwidth/922 MHz

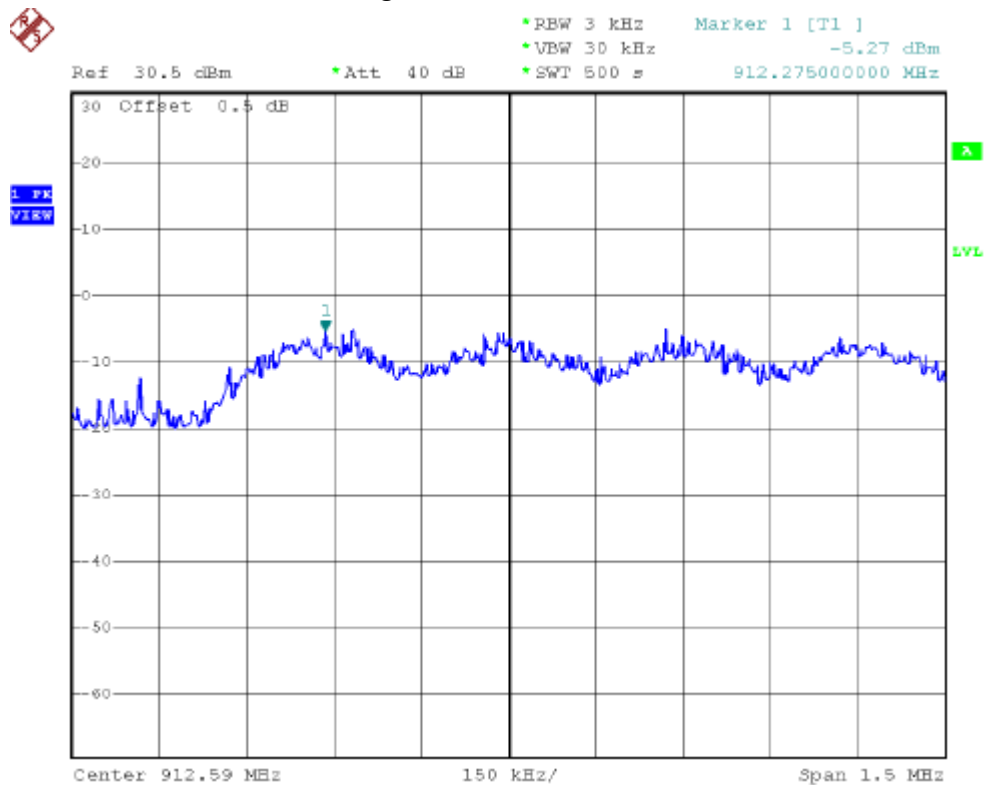




EUT :	802.11b/g miniPCI Module	Model Name :	XC900M
Temperature :	26 °C	Relative Humidity :	60%
Test Voltage :	AC 120V/60Hz (System)		
Test Mode :	Transmit: IEEE 802.11g/20MHz Bandwidth/912 MHz		

Frequency	Power Density (dBm)	LIMIT (dBm)	Test Result
912MHz	-5.27	8	Pass

IEEE 802.11g/20MHz Bandwidth/912 MHz

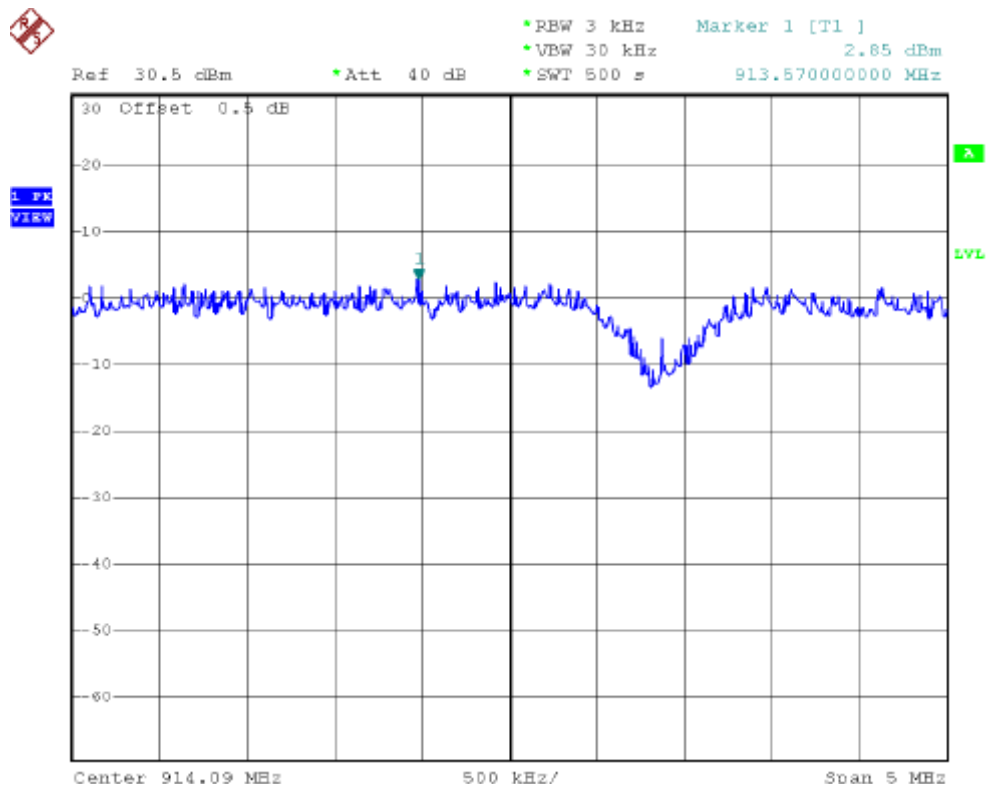




EUT :	802.11b/g miniPCI Module	Model Name :	XC900M
Temperature :	26 °C	Relative Humidity :	60%
Test Voltage :	AC 120V/60Hz (System)		
Test Mode :	Transmit: IEEE 802.11b/20MHz Bandwidth/915 MHz		

Frequency	Power Density (dBm)	LIMIT (dBm)	Test Result
915MHZ	2.85	8	Pass

IEEE 802.11b/20MHz Bandwidth/915 MHz

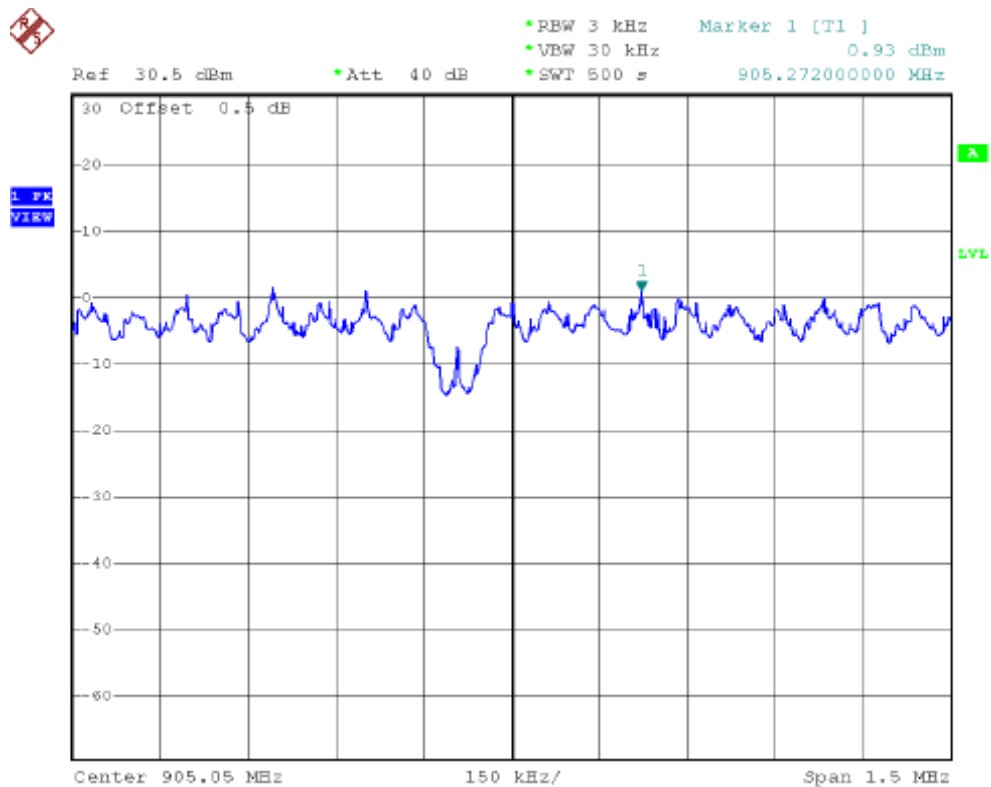




EUT :	802.11b/g miniPCI Module	Model Name :	XC900M
Temperature :	26° C	Relative Humidity :	60%
Test Voltage :	AC 120V/60Hz (System)		
Test Mode :	Transmit: IEEE 802.11g/5MHz Bandwidth/905 MHz, 915 MHz, 925 MHz		

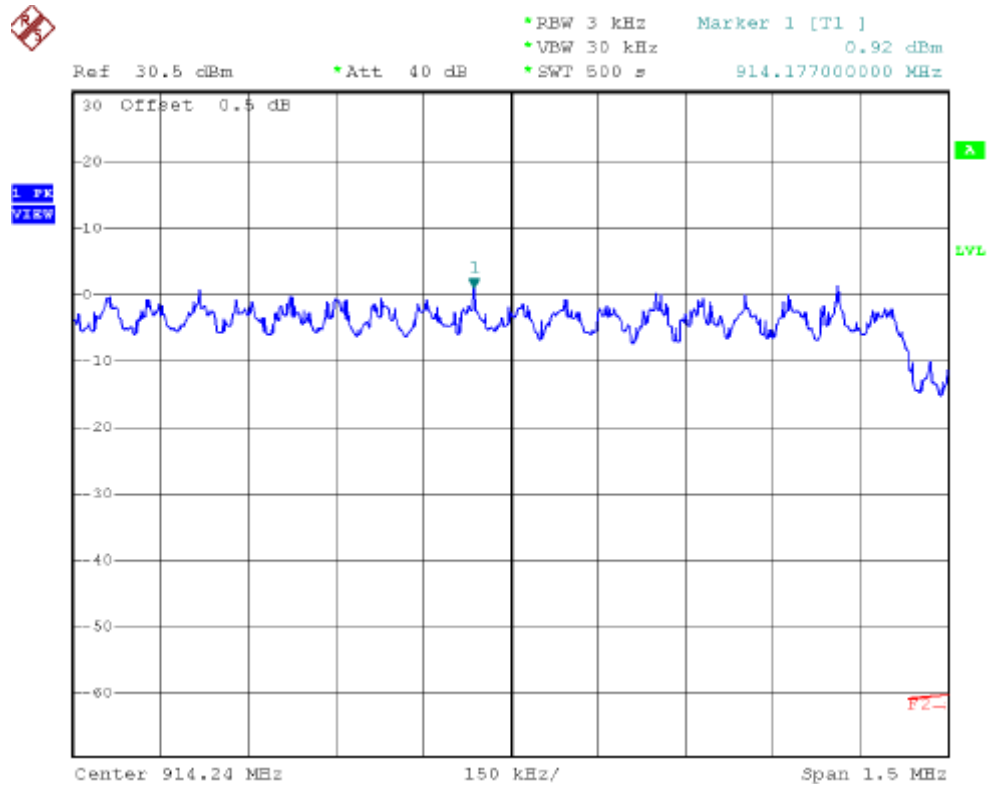
Frequency	Power Density (dBm)	LIMIT (dBm)	Test Result
905MHz	0.93	8	Pass
915MHz	0.92	8	Pass
925MHz	3.52	8	Pass

IEEE 802.11g/5MHz Bandwidth/905 MHz

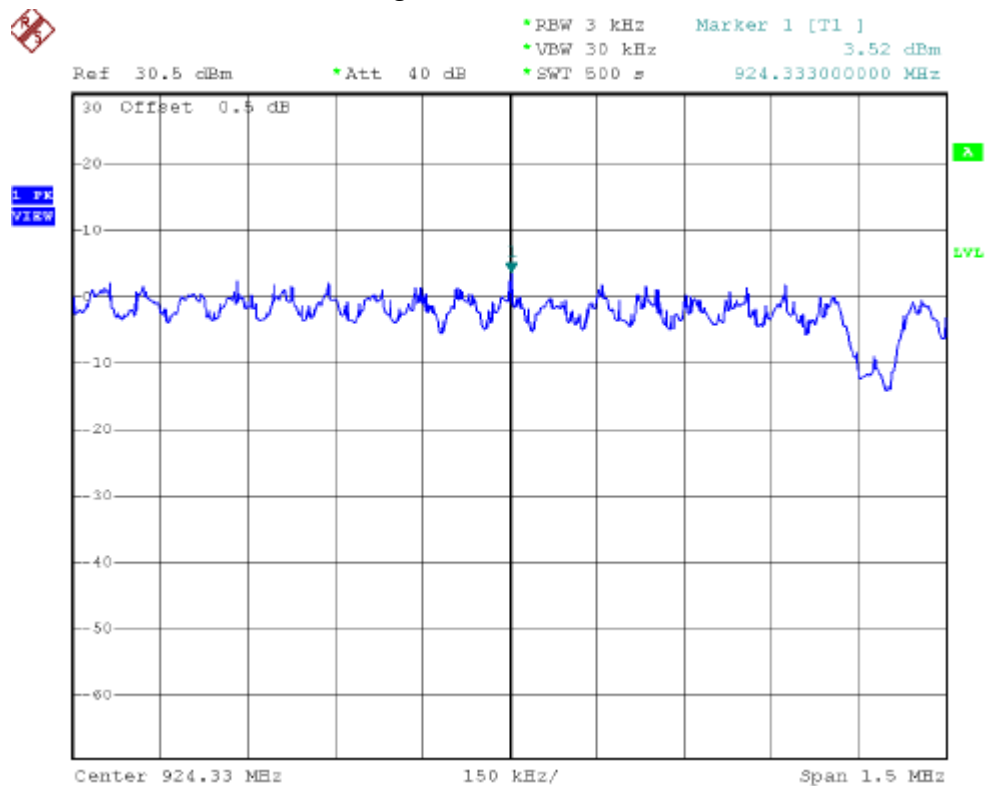




IEEE 802.11g/5MHz Bandwidth/915 MHz



IEEE 802.11g/5MHz Bandwidth/925 MHz

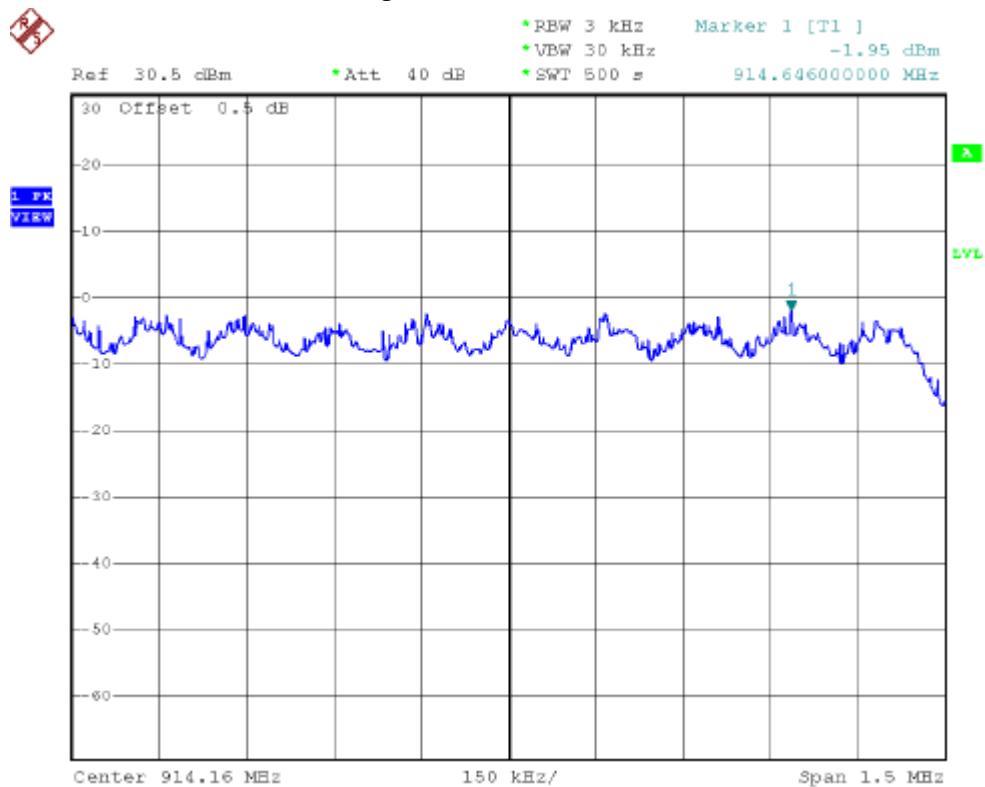




EUT :	802.11b/g miniPCI Module	Model Name :	XC900M
Temperature :	26° C	Relative Humidity :	60%
Test Voltage :	AC 120V/60Hz (System)		
Test Mode :	Transmit: IEEE 802.11g/10MHz Bandwidth/915 MHz		

Frequency	Power Density (dBm)	LIMIT (dBm)	Test Result
915MHZ	-1.95	8	Pass

IEEE 802.11g/10MHz Bandwidth/915 MHz

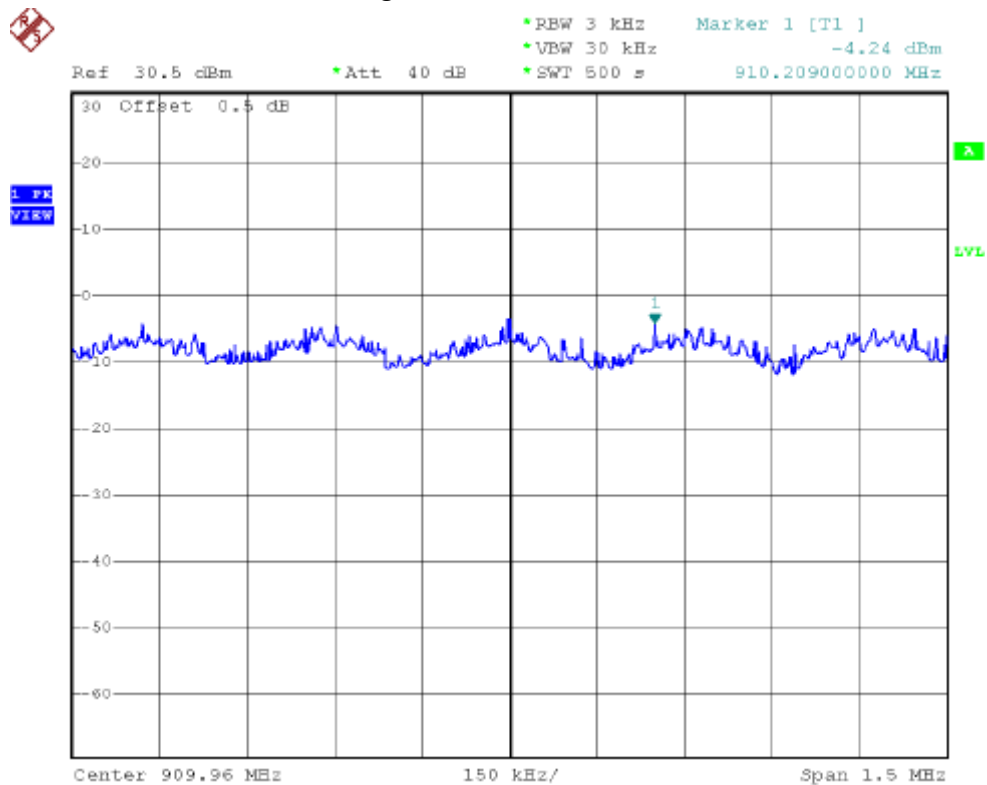




EUT :	802.11b/g miniPCI Module	Model Name :	XC900M
Temperature :	26 ° C	Relative Humidity :	60%
Test Voltage :	AC 120V/60Hz (System)		
Test Mode :	Transmit: IEEE 802.11g/20MHz Bandwidth/915 MHz		

Frequency	Power Density (dBm)	LIMIT (dBm)	Test Result
915MHZ	-4.24	8	Pass

IEEE 802.11g/20MHz Bandwidth/915 MHz





9. RF EXPOSURE TEST

9.1 APPLIED PROCEDURES / LIMIT

Systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy levels in excess limit for maximum permissible exposure. In accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091 this device has been defined as a mobile device whereby a distance of 0.2 m normally can be maintained between the user and the device.

(A) Limits for Occupational / Controlled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/ cm ²)	Averaging Time E ² , H ² or S (minutes)
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842 / f	4.89 / f	(900 / f)*	6
30-300	61.4	0.163	1.0	6
300-1500			F/300	6
1500-100,000			5	6

(B) Limits for General Population / Uncontrolled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/ cm ²)	Averaging Time E ² , H ² or S (minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f)*	30
30-300	27.5	0.073	0.2	30
300-1500			F/1500	30
1500-100,000			1.0	30

Note: f = frequency in MHz ; *Plane-wave equivalent power density

9.1.1 MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Calibrated until
1	Power Meter	Anritsu	ML2487A	6K00004714	Feb. 20, 2013
2	Power Meter Sensor	Anritsu	MA2491A	34138	Feb. 20, 2013

Remark: " N/A" denotes No Model Name , Serial No. or No Calibration specified.

9.1.2 MPE CALCULATION METHOD

$$E \text{ (V/m)} = \frac{\sqrt{30 \times P \times G}}{d}$$

$$\text{Power Density: } Pd \text{ (W/m}^2\text{)} = \frac{E^2}{377}$$

E = Electric field (V/m)

P = Peak RF output power (W)

G = EUT Antenna numeric gain (numeric)

d = Separation distance between radiator and human body (m)

The formula can be changed to

$$Pd = \frac{30 \times P \times G}{377 \times d^2}$$

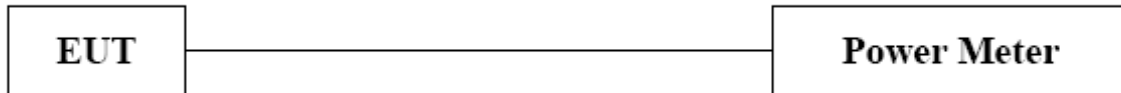
From the peak EUT RF output power, the minimum mobile separation distance, d=0.2m, as well as the gain of the used antenna, the RF power density can be obtained



9.1.3 DEVIATION FROM STANDARD

No deviation.

9.1.4 TEST SETUP



9.1.5 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.



9.1.6 TEST RESULTS

EUT :	802.11b/g miniPCI Module	Model Name :	XC900M
Temperature :	26 ° C	Relative Humidity :	60%
Test Voltage :	AC 120V/60Hz (System)		
Test Mode :	Transmit: IEEE 802.11b/20MHz Bandwidth/912 MHz, 917 MHz		

Frequency	Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
912MHz	5.50	3.5481	29.1200	816.5824	0.576701	1	Pass
917MHz	5.50	3.5481	29.3200	855.0667	0.603880	1	Pass



EUT :	802.11b/g miniPCI Module	Model Name :	XC900M
Temperature :	26 ° C	Relative Humidity :	60%
Test Voltage :	AC 120V/60Hz (System)		
Test Mode :	Transmit: IEEE 802.11g/5MHz Bandwidth/907 MHz, 912 MHz, 922 MHz		

Frequency	Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
907MHz	5.50	3.5481	29.4200	874.9838	0.617946	1	Pass
912MHz	5.50	3.5481	29.0800	809.0959	0.571413	1	Pass
922MHz	5.50	3.5481	29.1300	818.4648	0.578030	1	Pass



EUT :	802.11b/g miniPCI Module	Model Name :	XC900M
Temperature :	26 ° C	Relative Humidity :	60%
Test Voltage :	AC 120V/60Hz (System)		
Test Mode :	Transmit: IEEE 802.11g/10MHz Bandwidth/907 MHz, 912 MHz, 922 MHz		

Frequency	Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
907MHz	5.50	3.5481	29.5100	893.3055	0.630885	1	Pass
912MHz	5.50	3.5481	29.2400	839.4600	0.592858	1	Pass
922MHz	5.50	3.5481	29.3400	859.0135	0.606667	1	Pass



EUT :	802.11b/g miniPCI Module	Model Name :	XC900M
Temperature :	26 ° C	Relative Humidity :	60%
Test Voltage :	AC 120V/60Hz (System)		
Test Mode :	Transmit: Transmit: IEEE 802.11g/20MHz Bandwidth/912 MHz		

Frequency	Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
912MHz	5.50	3.5481	29.1800	827.9422	0.584723	1	Pass



EUT :	802.11b/g miniPCI Module	Model Name :	XC900M
Temperature :	26 ° C	Relative Humidity :	60%
Test Voltage :	AC 120V/60Hz (System)		
Test Mode :	Transmit: IEEE 802.11b/20MHz Bandwidth/915 MHz		

Frequency	Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
915MHZ	5.50	3.5481	29.5100	893.3055	0.630885	1	Pass



EUT :	802.11b/g miniPCI Module	Model Name :	XC900M
Temperature :	26 ° C	Relative Humidity :	60%
Test Voltage :	AC 120V/60Hz (System)		
Test Mode :	Transmit: IEEE 802.11g/5MHz Bandwidth/905 MHz, 915 MHz, 925 MHz		

Frequency	Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
905MHz	5.50	3.5481	29.2300	837.5293	0.591494	1	Pass
915MHz	5.50	3.5481	29.2700	845.2788	0.596967	1	Pass
925MHz	5.50	3.5481	29.2300	837.5293	0.591494	1	Pass



EUT :	802.11b/g miniPCI Module	Model Name :	XC900M
Temperature :	26 ° C	Relative Humidity :	60%
Test Voltage :	AC 120V/60Hz (System)		
Test Mode :	Transmit: IEEE 802.11g/10MHz Bandwidth/915 MHz		

Frequency	Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
915MHZ	5.50	3.5481	29.3700	864.9679	0.610872	1	Pass



EUT :	802.11b/g miniPCI Module	Model Name :	XC900M
Temperature :	26 ° C	Relative Humidity :	60%
Test Voltage :	AC 120V/60Hz (System)		
Test Mode :	Transmit: IEEE 802.11g/20MHz Bandwidth/915 MHz		

Frequency	Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
915MHZ	5.50	3.5481	29.5200	895.3648	0.632340	1	Pass