

## FCC 47 CFR PART 22H and 24E

### Test Report

Product Type : Wireless Module  
Applicant : Sierra Wireless Inc.,  
Address : 13811 Wireless Way Richmond, British Columbia, Canada, V6V 3A4.  
Trade Name : AirPrime  
Model Number : AirPrime AR7550  
Test Specification : FCC 47 CFR PART 22H: Oct, 2012  
FCC 47 CFR PART 24E: Oct, 2012  
CANADA RSS-132 ISSUE 3: Jan. 2013  
CANADA RSS-133 ISSUE 6: Jan. 2013  
Canada RSS-Gen ISSUE 3: Dec., 2010  
ANSI/TIA-603-C-2004  
  
Application Purpose : Original  
Receive Date : Feb. 20, 2013  
Test Period : Mar. 08 ~ Mar. 15, 2013  
Issue Date : Mar. 21, 2013

#### Issue by

A Test Lab Techno Corp.  
No. 140-1, Changan Street, Bade City,  
Taoyuan County 334, Taiwan R.O.C.  
Tel : +886-3-2710188 / Fax : +886-3-2710190



Taiwan Accreditation Foundation accreditation number: 1330



**Note:** This report shall not be reproduced except in full, without the written approval of A Test Lab Techno Corp. This document may be altered or revised by A Test Lab Techno Corp. personnel only, and shall be noted in the revision section of the document. The client should not use it to claim product endorsement by TAF, or any government agencies. The test results in the report only apply to the tested sample.

**Revision History**

Rev.	Issue Date	Revisions	Revised By
00	Mar. 21, 2013	Initial Issue	


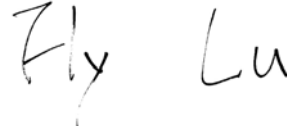
## Verification of Compliance

Issued Date: 03/21/2012

Product Type : Wireless Module  
Applicant : Sierra Wireless Inc.,  
Address : 13811 Wireless Way Richmond, British Columbia, Canada, V6V 3A4.  
Trade Name : AirPrime  
Model Number : AirPrime AR7550  
FCC ID : N7NAR7550  
IC : 2417C-AR7550  
EUT Rated Voltage : DC 3.7V  
Test Voltage : 120 Vac / 60 Hz  
Applicable Standard : FCC 47 CFR PART 22H: Oct, 2012  
FCC 47 CFR PART 24E: Oct, 2012  
CANADA RSS-132 ISSUE 3: Jan. 2013  
CANADA RSS-133 ISSUE 6: Jan. 2013  
Canada RSS-Gen ISSUE 3: Dec., 2010  
ANSI/TIA-603-C-2004  
Application Purpose : Original  
Test Result : Complied  
Performing Lab. : A Test Lab Techno Corp.  
No. 140-1, Changan Street, Bade City,  
Taoyuan County 334, Taiwan R.O.C.  
Tel : +886-3-2710188 / Fax : +886-3-2710190  
  
Taiwan Accreditation Foundation accreditation number: 1330  
<http://www.atl-lab.com.tw/e-index.htm>

The above equipment was tested by A Test Lab Techno Corp. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.4: 2009 and the energy emitted by the sample tested as described in this report is in compliance with the requirements of FCC Rules Part 22H, Part 24E.

The test results of this report relate only to the tested sample identified in this report.

Approved By :  Reviewed By :   
(Manager) (Murphy Wang) (Testing Engineer) (Fly Lu)

## TABLE OF CONTENTS

<b>1</b>	<b>General Information .....</b>	<b>6</b>
1.1.	EUT Description .....	6
1.2.	Mode of Operation.....	7
1.3.	EUT Exercise Software .....	7
1.4.	Configuration of Test System Details .....	7
1.5.	Test Site Environment .....	8
1.6.	Summary of Test Result .....	8
<b>2</b>	<b>RF Output Power Test .....</b>	<b>9</b>
2.1.	Limit .....	9
2.2.	Test Instruments .....	9
2.3.	Test Setup.....	9
2.4.	Test Procedure .....	9
2.5.	Uncertainty .....	9
2.6.	Test Result.....	10
<b>3</b>	<b>Effective Radiated Power / Equivalent Isotropic Radiated Power Test.....</b>	<b>13</b>
3.1.	Limit .....	13
3.2.	Test Instruments .....	13
3.3.	Setup .....	13
3.4.	Test Procedure .....	15
3.5.	Uncertainty .....	15
3.6.	Test Result.....	16
<b>4</b>	<b>Occupied Bandwidth Test .....</b>	<b>18</b>
4.1.	Limit .....	18
4.2.	Test Instruments .....	18
4.3.	Setup .....	18
4.4.	Test Procedure .....	19
4.5.	Uncertainty .....	19
4.6.	Test Result.....	19
4.7.	Test Graphs .....	20
<b>5</b>	<b>Band Edge Test .....</b>	<b>26</b>
5.1.	Limit .....	26
5.2.	Test Instruments .....	26
5.3.	Setup .....	26
5.4.	Test Procedure .....	27
5.5.	Uncertainty .....	27
5.6.	Test Result.....	27
5.7.	Test Graphs .....	28

<b>6</b>	<b>Conducted Spurious Emission Test .....</b>	<b>32</b>
6.1.	Limit .....	32
6.2.	Test Instruments .....	32
6.3.	Setup .....	32
6.4.	Test Procedure .....	33
6.5.	Uncertainty .....	33
6.6.	Test Result.....	33
<b>7</b>	<b>Field Strength of Spurious Radiation Test .....</b>	<b>88</b>
7.1.	Limit .....	88
7.2.	Test Instruments .....	88
7.3.	Setup .....	89
7.4.	Test Procedure .....	89
7.5.	Uncertainty .....	90
7.6.	Test Result.....	91
<b>8</b>	<b>Frequency Stability (Temperature &amp; Voltage Variation) Test .....</b>	<b>104</b>
8.1.	Limit .....	104
8.2.	Test Instruments .....	104
8.3.	Setup .....	105
8.4.	Test Procedure .....	106
8.5.	Uncertainty .....	106
8.6.	Test Result.....	106

# 1 General Information

## 1.1. EUT Description

Applicant		Sierra Wireless Inc.,			
Applicant Address		13811 Wireless Way Richmond, British Columbia, Canada, V6V 3A4.			
Manufacturer		Sierra Wireless Inc.,			
Manufacturer Address		13811 Wireless Way Richmond, British Columbia, Canada, V6V 3A4.			
Product Type		Wireless Module			
Trade Name		AirPrime			
Model Number		AirPrime AR7550			
FCC ID		N7NAR7550			
IC		2417C-AR7550			
IMEI No.		352766050007814			
Mode	WCDMA/ HSDPA/ HSUPA	Band	UL Frequency (MHz)	DL Frequency (MHz)	Modulation
		II	1852.4 ~ 1907.6	1932.4 ~ 1987.6	QPSK
		V	826.4 ~ 846.6	871.4 ~ 891.6	QPSK
	CDMA/ 1xEV-DO	Band	UL Frequency (MHz)	DL Frequency (MHz)	Modulation
		800 (BC 0)	824.70 ~ 848.31	869.70 ~ 893.31	QPSK
		1900 (BC 1)	1851.25 ~ 1908.75	1931.25 ~ 1988.75	QPSK
Channel Control		Auto			
Type of Antenna		Dipole Antenna			
Antenna Gain (dBi)		WCDMA/HSDPA/HSUPA Band II: 1.75dBi			
		WCDMA/HSDPA/HSUPA Band V: 1dBi			
		CDMA/1xEV-DO 800 (BC0): 1dBi			
		CDMA/1xEV-DO 1900 (BC1): 1.75 dBi			
Max. RF Output power		WCDMA/HSDPA/HSUPA Band II : 27.18 dBm / 0.522 W			
		WCDMA/HSDPA/HSUPA Band V : 26.99 dBm / 0.500 W			
		CDMA 800 (BC 0) : 23.95 dBm / 0.248 W			
		1xEV-DO 800 (BC 0) : 29.33 dBm / 0.857 W			
		CDMA 1900 (BC 1) : 23.85 dBm / 0.243 W			
		1xEV-DO 1900 (BC 1) : 29.01 dBm / 0.796 W			
Max. ERP/EIRP		WCDMA Band II : 25.85 dBm / 0.385 W			
		WCDMA Band V : 29.06 dBm / 0.805 W			
		CDMA 800 (BC 0) : 30.89 dBm / 1.227 W			
		CDMA 1900 (BC 1) : 27.74 dBm / 0.594 W			
Emission Designator		WCDMA Band II : 4M17F9W			
		WCDMA Band V : 4M19F9W			
		CDMA 800 (BC 0) : 1M28F9W			
		1xEV-DO 800 (BC 0) : 1M27F9W			
		CDMA 1900 (BC 1) : 1M28F9W			
		1xEV-DO 1900 (BC 1) : 1M27F9W			

## 1.2. Mode of Operation

ATL has verified the construction and function in typical operation. All the test modes were carried out with the EUT in normal operation, which was shown in this test report and defined as:

Test Mode
Mode 1: WCDMA Band II Link Mode
Mode 2: WCDMA Band V Link Mode
Mode 3: CDMA 800 (BC 0) Link Mode
Mode 4: CDMA 1900 (BC 1) Link Mode
Mode 5: 1xEV-DO 800 (BC 0) Link Mode
Mode 6: 1xEV-DO 1900 (BC 1) Link Mode
Mode 7: Receive Mode

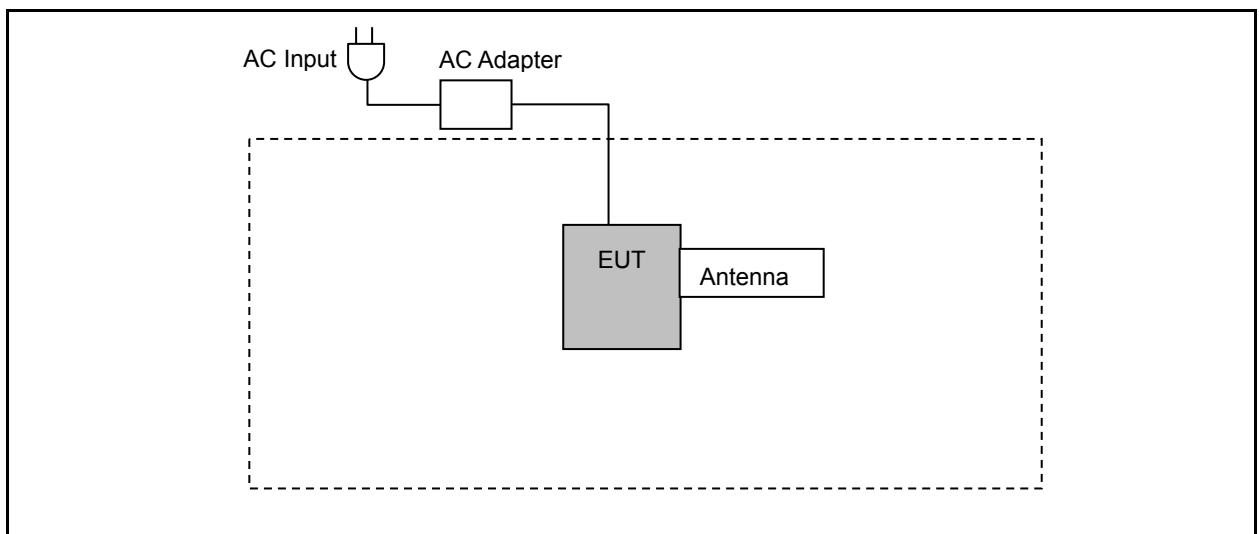
Note: Regards to the frequency band operation: the lowest, middle and highest frequency of channel were selected to perform the test, then shown on this report.

By preliminary testing and verifying three axis (X, Y and Z) position of EUT transmitted status, it was found that "Y axis" position was the worst, then the final test was executed the worst condition and test data were recorded in this report.

## 1.3. EUT Exercise Software

1	Setup the EUT and Base Station (CMU200) as shown on 1.4.
2	Turn on the power of all equipment.

## 1.4. Configuration of Test System Details



### 1.5. Test Site Environment

Items	Required (IEC 68-1)	Actual
Temperature (°C)	15-35	26
Humidity (%RH)	25-75	60
Barometric pressure (mbar)	860-1060	950

### 1.6. Summary of Test Result

Description	FCC Rule	IC Rule	Limit	Result
Conducted Output Power	§2.1046	N/A	N/A	Pass
Effective Radiated Power	§22.913(a)(2)	RSS-132(4.4) SRSP-503(5.1.3)	< 7 Watts for FCC (<6.3 Watts for IC)	Pass
Equivalent Isotropic Radiated Power	§24.232(c)	RSS-133 (6.4) SRSP-510(5.1.2)	< 2 Watts	Pass
Occupied Bandwidth	§2.1049 §22.917(a) §24.238(a)	RSS-Gen (4.6.1)	N/A	Pass
Band Edge Measurement	§2.1051 §22.917(a) §24.238(a)	RSS-132 (4.5.1)RSS-133 (6.5.1)	< 43+10log <sub>10</sub> (P[Watts])	Pass
Conducted Spurious Emission	§2.1051 §22.917(a) §24.238(a)	RSS-132 (4.5.1) RSS-133 (6.5.1)	< 43+10log <sub>10</sub> (P[Watts])	Pass
Field Strength of Spurious Radiation	§2.1053 §22.917(a) §24.238(a)	RSS-132 (4.5.1) RSS-133 (6.5.1) RSS-Gen (4.10)	< 43+10log <sub>10</sub> (P[Watts])	Pass
Frequency Stability for Temperature & Voltage	§2.1055 §22.355 §24.235	RSS-132(4.3) RSS-133(6.3)	< 2.5 ppm	Pass



## 2 RF Output Power Test

### 2.1. Limit

N/A

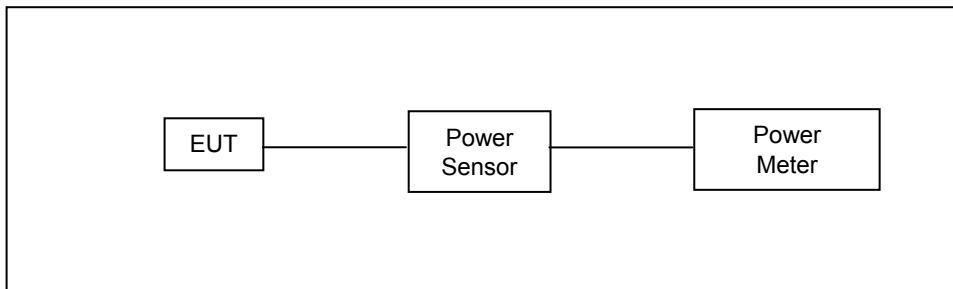
### 2.2. Test Instruments

Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Remark
Universal Radio Communication Tester	R & S	CMU200	109369	08/07/2012	(2)
Single Channel PK Power Sensor	Agilent	N1911A	MY45101619	12/15/2011	(2)
Wideband Power Meter	Agilent	N1921A	MY45241957	12/15/2011	(2)
Test Site	ATL	TE05	TE05	N.C.R.	-----

Remark: <sup>(1)</sup> Calibration period 1 year. <sup>(2)</sup> Calibration period 2 years.

Note: N.C.R. = No Calibration Request.

### 2.3. Test Setup



### 2.4. Test Procedure

The measurement is made according to ANSI/TIA-603-C-2004 as follows:

1. The transmitter output was connected to power meter and base station through Power Divider.
2. Set base station for EUT at GSM 850: PCL=5 and PCS 1900: PCL=0.
3. Set base station for EUT at WCDMA Band V and WCDMA Band II, power level was set to maximum.
4. Select lowest, middle, and highest channels for each band.

### 2.5. Uncertainty

The measurement uncertainty is defined as for RF output power measurement is 1.2 dB.

**2.6. Test Result**

Model Number	AirPrime AR7550						
Test Item	RF Output Power						
Date of Test	03/08/2013			Test Site		TE05	
Bands	Modulation Type	Sub-Test	Frequency (MHz)	Burst Average Power		Peak Power	
				(dBm)	(W)	(dBm)	(W)
WCDMA Band II	QPSK	----	1852.4	23.54	0.226	<b>27.18</b>	<b>0.522</b>
			1880.0	23.40	0.219	27.11	0.514
			1907.6	23.36	0.217	27.04	0.506
HSDPA Band II	QPSK	1	1852.4	22.75	0.188	26.39	0.436
			1880.0	22.61	0.182	26.32	0.429
			1907.6	22.54	0.179	26.21	0.418
		2	1852.4	22.72	0.187	26.36	0.433
			1880.0	22.59	0.182	26.30	0.427
			1907.6	22.50	0.178	26.17	0.414
		3	1852.4	22.24	0.167	25.88	0.387
			1880.0	22.09	0.162	25.80	0.380
			1907.6	22.03	0.160	25.70	0.372
		4	1852.4	22.26	0.168	25.90	0.389
			1880.0	22.08	0.161	25.79	0.379
			1907.6	22.04	0.160	25.71	0.372
HSUPA Band II	QPSK	1	1852.4	22.47	0.177	26.18	0.415
			1880.0	22.36	0.172	26.13	0.410
			1907.6	22.27	0.169	26.05	0.403
		2	1852.4	20.46	0.111	24.17	0.261
			1880.0	20.33	0.108	24.10	0.257
			1907.6	20.26	0.106	24.04	0.254
		3	1852.4	21.48	0.141	25.19	0.330
			1880.0	21.35	0.136	25.12	0.325
			1907.6	21.29	0.135	25.07	0.321
		4	1852.4	20.48	0.112	24.19	0.262
			1880.0	20.36	0.109	24.11	0.258
			1907.6	20.27	0.106	24.05	0.254
		5	1852.4	22.45	0.176	26.16	0.413
			1880.0	22.34	0.171	26.11	0.408
			1907.6	22.25	0.168	26.03	0.401

Note: The peak power testing result was used peak detector.

Model Number	AirPrime AR7550						
Test Item	RF Output Power						
Date of Test	03/08/2013			Test Site		TE05	
Bands	Modulation Type	Sub-Test	Frequency (MHz)	Burst Average Power		Peak Power	
				(dBm)	(W)	(dBm)	(W)
WCDMA Band V	QPSK	-----	826.4	23.41	0.219	<b>26.99</b>	<b>0.500</b>
			836.6	23.37	0.217	26.96	0.497
			846.6	23.32	0.215	26.92	0.492
HSDPA Band V	QPSK	1	826.4	22.51	0.178	26.06	0.404
			836.6	22.46	0.176	26.04	0.402
			846.6	22.41	0.174	25.99	0.397
		2	826.4	22.49	0.177	26.04	0.402
			836.6	22.43	0.175	26.01	0.399
			846.6	22.40	0.174	25.98	0.396
		3	826.4	22.02	0.159	25.57	0.361
			836.6	21.96	0.157	25.54	0.358
			846.6	21.89	0.155	25.47	0.352
		4	826.4	22.01	0.159	25.56	0.360
			836.6	21.98	0.158	25.56	0.360
			846.6	21.90	0.155	25.48	0.353
HSUPA Band V	QPSK	1	826.4	22.32	0.171	25.86	0.385
			836.6	22.27	0.169	25.75	0.376
			846.6	22.19	0.166	25.63	0.366
		2	826.4	20.31	0.107	23.85	0.243
			836.6	20.25	0.106	23.73	0.236
			846.6	20.19	0.104	23.63	0.231
		3	826.4	21.32	0.136	24.86	0.306
			836.6	21.26	0.134	24.74	0.298
			846.6	21.17	0.131	24.61	0.289
		4	826.4	20.32	0.108	23.86	0.243
			836.6	20.28	0.107	23.76	0.238
			846.6	20.17	0.104	23.61	0.230
		5	826.4	22.30	0.170	25.84	0.384
			836.6	22.26	0.168	25.74	0.375
			846.6	22.15	0.164	25.59	0.362

Note: The peak power testing result was used peak detector.

Model Number	AirPrime AR7550						
Test Item	RF Output Power						
Date of Test	03/08/2013			Test Site		TE05	
Bands	Modulation Type	RC/TAP (REV)	Frequency (MHz)	Burst Average Power		Peak Power	
				(dBm)	(W)	(dBm)	(W)
CDMA 800 (BC 0)	QPSK	RC1/SO55	824.70	23.89	0.245	<b>23.95</b>	<b>0.248</b>
			836.52	23.86	0.243	23.94	0.248
			848.31	23.82	0.241	23.92	0.247
		RC3/SO55	824.70	23.85	0.243	23.92	0.247
			836.52	23.81	0.240	23.85	0.243
			848.31	23.77	0.238	23.81	0.240
1xEV-DO 800 (BC 0)	QPSK	Rel.0 RTAP	824.70	23.44	0.221	29.40	0.871
			836.52	23.38	0.218	29.11	0.815
			848.31	23.25	0.211	29.03	0.800
		Rel.A RETAP	824.70	23.38	0.218	<b>29.33</b>	<b>0.857</b>
			836.52	23.28	0.213	29.06	0.805
			848.31	23.21	0.209	29.02	0.798
CDMA 1900 (BC 1)	QPSK	RC1/SO55	1851.25	23.79	0.239	<b>23.85</b>	<b>0.243</b>
			1880.00	23.53	0.225	23.59	0.229
			1908.75	23.49	0.223	23.54	0.226
		RC3/SO55	1851.25	23.74	0.237	23.81	0.240
			1880.00	23.46	0.222	23.53	0.225
			1908.75	23.39	0.218	23.46	0.222
1xEV-DO 1900 (BC 1)	QPSK	Rel.0 RTAP	1851.25	23.30	0.214	<b>29.01</b>	<b>0.796</b>
			1880.00	23.23	0.210	28.88	0.773
			1908.75	23.16	0.207	28.11	0.647
		Rel.A RETAP	1851.25	23.27	0.212	28.96	0.787
			1880.00	23.20	0.209	28.84	0.766
			1908.75	23.11	0.205	28.79	0.757

Note: The peak power testing result was used peak detector.

### 3 Effective Radiated Power / Equivalent Isotropic Radiated Power Test

#### 3.1. Limit

For FCC Part 22.913(a)(2): The ERP of mobile transmitters and auxiliary test transmitters must not exceed 7 Watts.

For FCC Part 24.232(b): The EIRP of mobile transmitters and auxiliary test transmitters must not exceed 2 Watts.

#### 3.2. Test Instruments

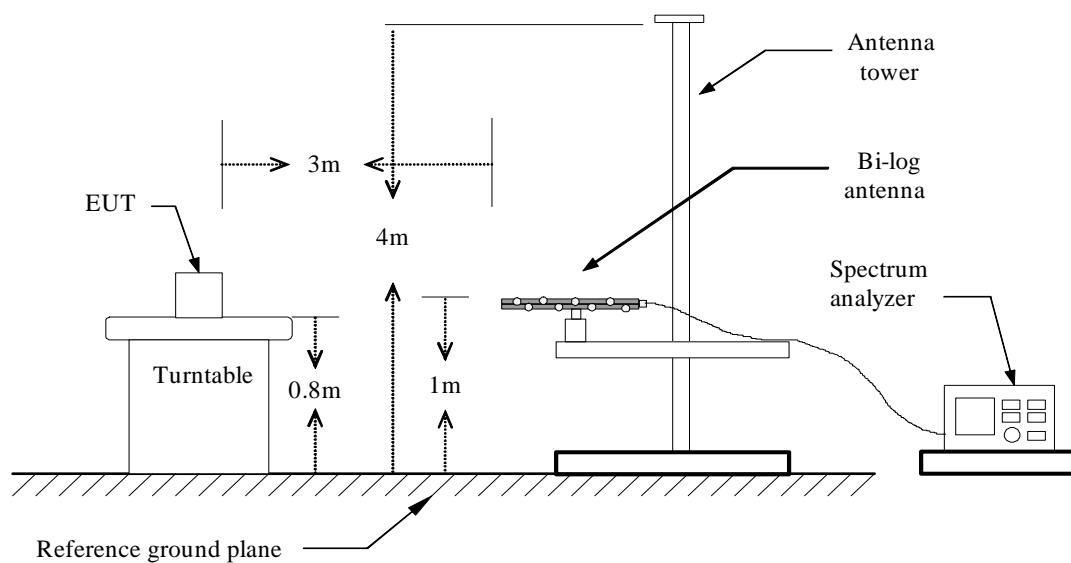
3 Meter Chamber					
Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Remark
RF Pre-selector	Agilent	N9039A	MY46520256	01/21/2013	(2)
Spectrum Analyzer	Agilent	E4446A	MY46180578	01/21/2013	(1)
Pre Amplifier	Agilent	8449B	3008A02237	02/21/2013	(1)
Pre Amplifier	Agilent	8447D	2944A10961	02/21/2013	(1)
Broadband Antenna (30MHz~1GHz)	SCHWARZBECK MESS-ELEKTRONIK	VULB9163	9163-270	06/29/2012	(1)
Horn Antenna (1~18GHz)	SCHWARZBECK MESS-ELEKTRONIK	BBHA9120D	9120D-550	06/15/2012	(1)
Horn Antenna (18~40GHz)	SCHWARZBECK MESS-ELEKTRONIK	BBHA9170	9170-320	06/21/2012	(1)
Test Site	ATL	TE01	888001	08/28/2012	(1)

Remark: <sup>(1)</sup> Calibration period 1 year. <sup>(2)</sup> Calibration period 2 years.

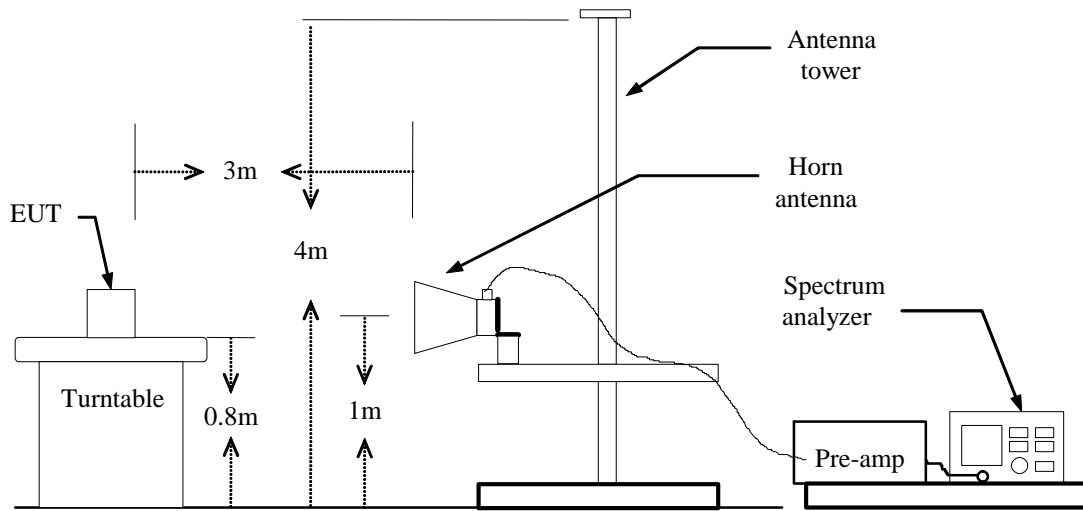
Note: N.C.R. = No Calibration Request.

#### 3.3. Setup

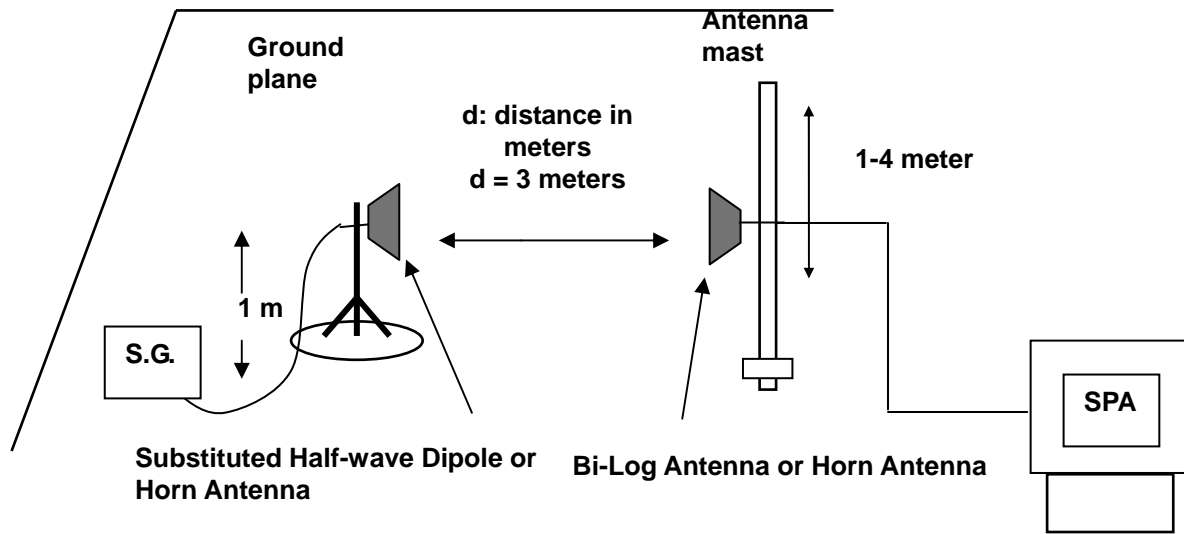
Below 1 GHz



Above 1 GHz



For Substituted Method Test Set-UP



### 3.4. Test Procedure

The measurement is made according to ANSI/TIA-603-C-2004 as follows:

The EUT was placed on a non-conductive turntable using a non-conductive support. The radiated emission at the fundamental frequency was measured at 3 m with a test antenna and EMI spectrum analyzer.

During the measurement of the EUT, the resolution bandwidth was set to 3MHz and the average bandwidth was set to 3MHz. The highest emission was recorded with the rotation of the turntable and the lowering of the test antenna.

The reading was recorded and the field strength (E in dBuV/m) was calculated.

ERP in frequency band 824-849MHz, and EIRP in frequency band 1851.25 –1910MHz were measured using a substitution method. The EUT was replaced by half-wave dipole (824-849MHz) or horn antenna (1851.25-1910MHz) connected to a signal generator. The spectrum analyzer reading was recorded and ERP/EIRP was calculated as follows:

$$\text{ERP} = \text{S.G. output (dBm)} + \text{Antenna Gain (dBd)} - \text{Cable (dB)}$$

$$\text{EIRP} = \text{S.G. output (dBm)} + \text{Antenna Gain (dBi)} - \text{Cable (dB)}$$

### 3.5. Uncertainty

The measurement uncertainty is defined as for Field Strength of Spurious Radiation measurement is  $\pm 3.072$  dB.

**3.6. Test Result**

Model Number	AirPrime AR7550								
Test Item	EIRP								
Date of Test	03/12/2013					Test Site	TE01		
Bands	Modulation Type	Frequency (MHz)	Ant. Polar.	Read Level (dBm)	Correction Factor (dBm)	EIRP		Limit	
						(dBm)	(W)		
WCDMA Band II	QPSK	1852.4	H	9.91	13.56	23.47	0.222	< 2W	
			V	14.12	11.42	25.54	0.358	< 2W	
		1880.0	H	13.24	11.64	24.88	0.308	< 2W	
			V	14.21	11.64	25.85	0.385	< 2W	
		1907.6	H	11.98	11.87	23.85	0.243	< 2W	
			V	13.74	11.87	25.61	0.364	< 2W	

Model Number	AirPrime AR7550								
Test Item	ERP								
Date of Test	03/12/2013					Test Site	TE01		
Bands	Modulation Type	Frequency (MHz)	Ant. Polar.	Read Level (dBm)	Correction Factor (dBm)	ERP		Limit	
						(dBm)	(W)		
WCDMA Band V	QPSK	826.4	H	16.82	11.97	28.79	0.757	< 7W	
			V	16.69	11.30	27.99	0.630	< 7W	
		836.6	H	16.99	12.07	29.06	0.805	< 7W	
			V	16.70	11.34	28.04	0.637	< 7W	
		846.6	H	16.65	12.35	29.00	0.794	< 7W	
			V	17.19	11.42	28.61	0.726	< 7W	

Model Number	AirPrime AR7550								
Test Item	ERP								
Date of Test	03/12/2013					Test Site	TE01		
Bands	Modulation Type	Frequency (MHz)	Ant. Polar.	Read Level (dBm)	Correction Factor (dBm)	ERP		Limit	
						(dBm)	(W)		
CDMA 800 (BC 0)	QPSK	824.70	H	18.07	11.96	30.03	1.007	< 7W	
			V	19.59	11.30	30.89	1.227	< 7W	
		836.52	H	17.85	12.07	29.92	0.982	< 7W	
			V	18.10	11.34	29.44	0.879	< 7W	
		848.31	H	18.28	12.48	30.76	1.191	< 7W	
			V	17.81	11.46	29.27	0.845	< 7W	

Note: 1. ERP/EIRP = Read Level + Correction factor.

2. For WCDMA signals, a peak detector is used with RBW = VBW = 5MHz.

3. For AMPS, GSM, and NADC TDMA signals, a peak detector is used, with RBW = VBW= 1 MHz.



Model Number	AirPrime AR7550								
Test Item	EIRP								
Date of Test	03/12/2013					Test Site	TE01		
Bands	Modulation Type	Frequency (MHz)	Ant. Polar.	Read Level (dBm)	Correction Factor (dBm)	EIRP		Limit	
						(dBm)	(W)		
CDMA 1900 (BC 1)	QPSK	1851.25	H	13.27	13.55	26.82	0.481	< 2W	
			V	15.56	11.40	26.96	0.497	< 2W	
		1880.00	H	10.16	13.58	23.74	0.237	< 2W	
			V	14.64	11.65	26.29	0.426	< 2W	
		1908.75	H	15.11	11.90	27.01	0.502	< 2W	
			V	15.84	11.90	27.74	0.594	< 2W	

Note: 1. ERP/EIRP = Read Level + Correction factor.

2. For WCDMA signals, a peak detector is used with RBW = VBW = 5MHz.

3. For AMPS, GSM, and NADC TDMA signals, a peak detector is used, with RBW = VBW= 1 MHz.

## 4 Occupied Bandwidth Test

### 4.1. Limit

The Occupied Bandwidth Limit:

N/A.

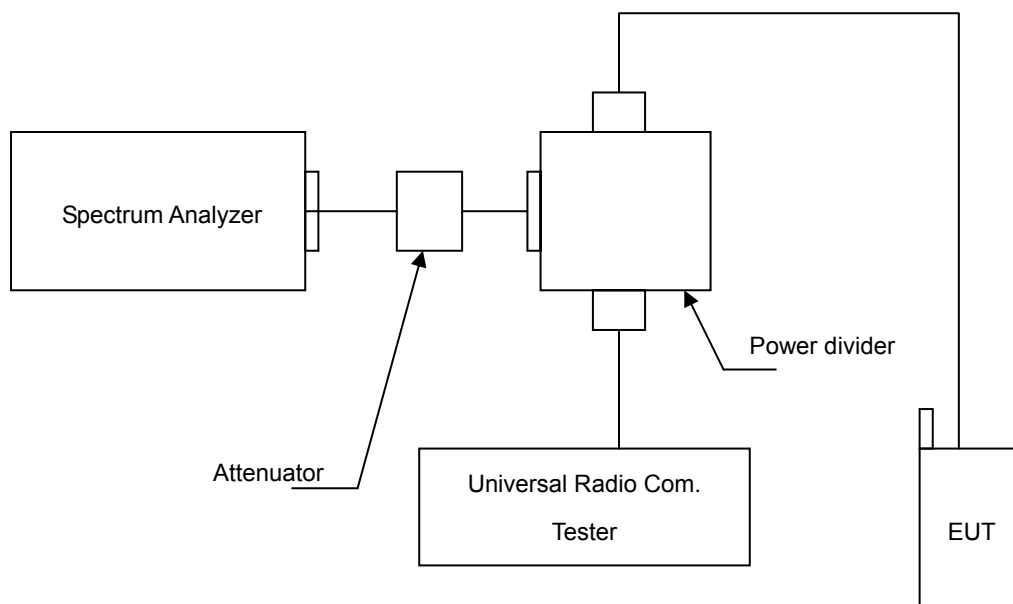
### 4.2. Test Instruments

Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Remark
Universal Radio Communication Tester	R & S	CMU200	109369	08/07/2012	(2)
Spectrum Analyzer	Agilent	E4445A	MY46181986	05/10/2012	(1)
Attenuator	RADIALL	R41572000	0603033073	N.C.R.	-----
Power Divider	Agilent	87302C	3239A00760	N.C.R.	-----
Test Site	ATL	TE05	TE05	N.C.R.	-----

Remark: <sup>(1)</sup> Calibration period 1 year. <sup>(2)</sup> Calibration period 2 years.

Note: N.C.R. = No Calibration Request.

### 4.3. Setup



#### 4.4. Test Procedure

The measurement is made according to FCC rules part 22 and 24:

1. The EUT was connected to Spectrum Analyzer and Base Station via Power Divider.
2. The occupied bandwidth of middle channel for the highest and lowest RF powers was measured.

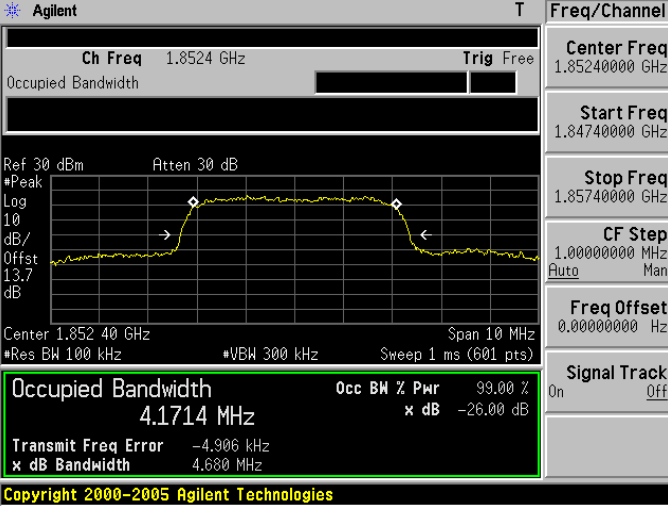
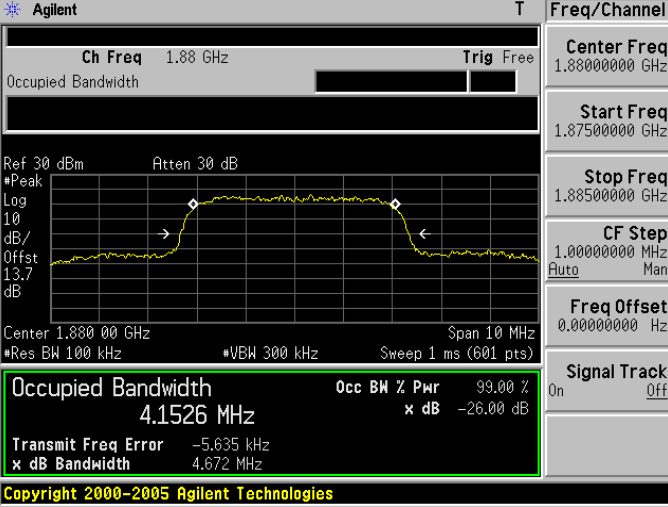
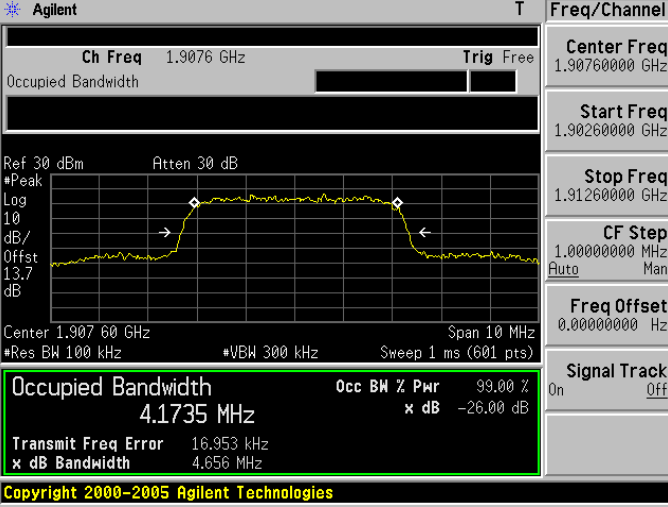
#### 4.5. Uncertainty

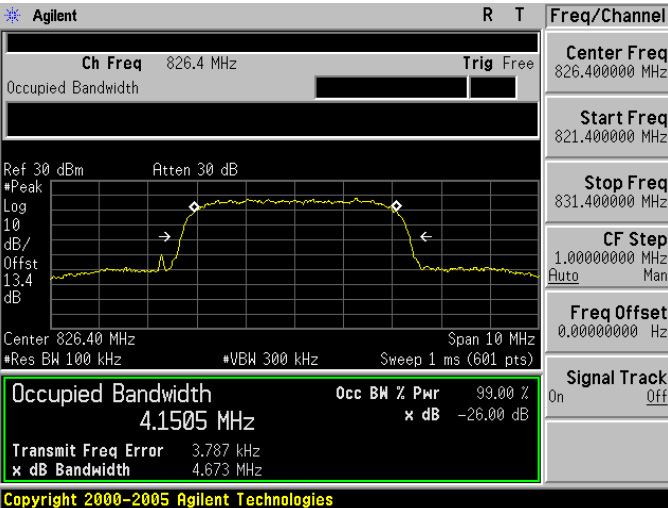
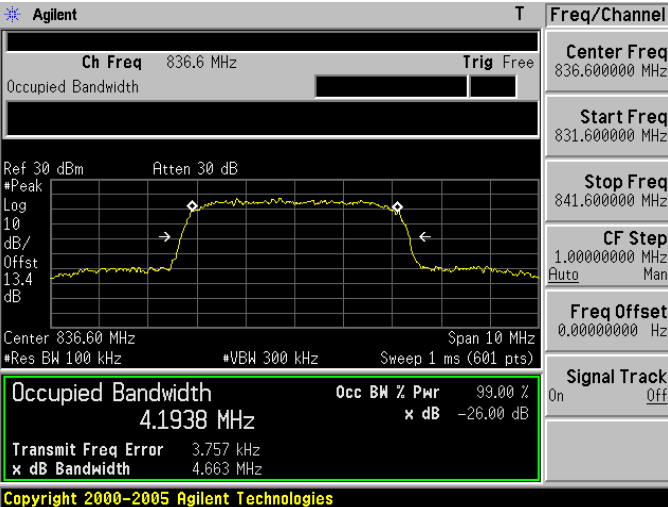
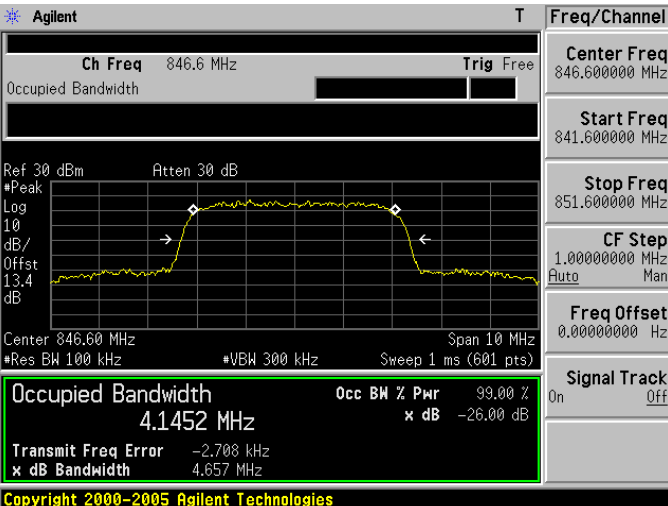
The measurement uncertainty is defined as  $\pm 10\text{Hz}$

#### 4.6. Test Result

Model Number	AirPrime AR7550				
Test Item	Occupied Bandwidth				
Date of Test	03/08/2013			Test Site	TE05
Bands	Channel	Frequency (MHz)	99% Bandwidth (MHz)	Note	
WCDMA Band II	9262	1852.4	4.1714	RBW:100KHz , VBW:300KHz	
	9400	1880.0	4.1526	RBW:100KHz , VBW:300KHz	
	9538	1907.6	4.1735	RBW:100KHz , VBW:300KHz	
WCDMA Band V	4132	826.4	4.1505	RBW:100KHz , VBW:300KHz	
	4183	836.6	4.1938	RBW:100KHz , VBW:300KHz	
	4233	846.6	4.1452	RBW:100KHz , VBW:300KHz	
CDMA 800 (BC 0)	1013	824.70	1.2817	RBW:30KHz , VBW:300KHz	
	384	836.52	1.2741	RBW:30KHz , VBW:300KHz	
	777	848.31	1.2748	RBW:30KHz , VBW:300KHz	
CDMA 1900 (BC 1)	25	1851.25	1.2721	RBW:30KHz , VBW:300KHz	
	600	1880.00	1.2712	RBW:30KHz , VBW:300KHz	
	1175	1908.75	1.2789	RBW:30KHz , VBW:300KHz	
1xEV-DO 800 (BC 0)	1013	824.70	1.2706	RBW:30KHz , VBW:300KHz	
	384	836.52	1.2697	RBW:30KHz , VBW:300KHz	
	777	848.31	1.2722	RBW:30KHz , VBW:300KHz	
1xEV-DO 1900 (BC 1)	25	1851.25	1.2688	RBW:30KHz , VBW:300KHz	
	600	1880.00	1.2730	RBW:30KHz , VBW:300KHz	
	1175	1908.75	1.2731	RBW:30KHz , VBW:300KHz	

4.7. Test Graphs

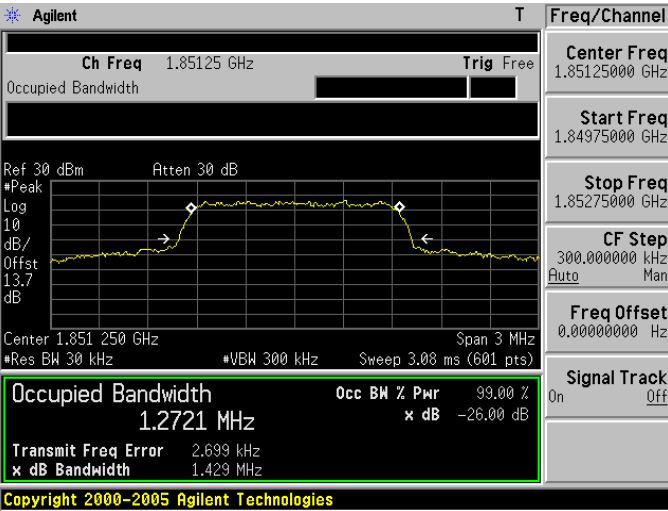
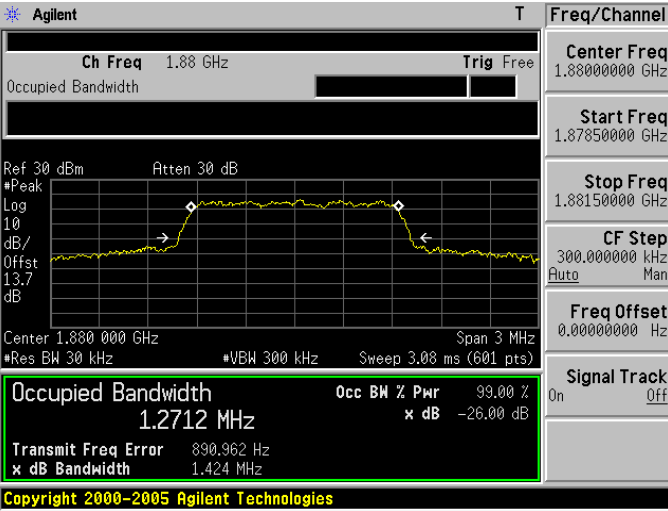
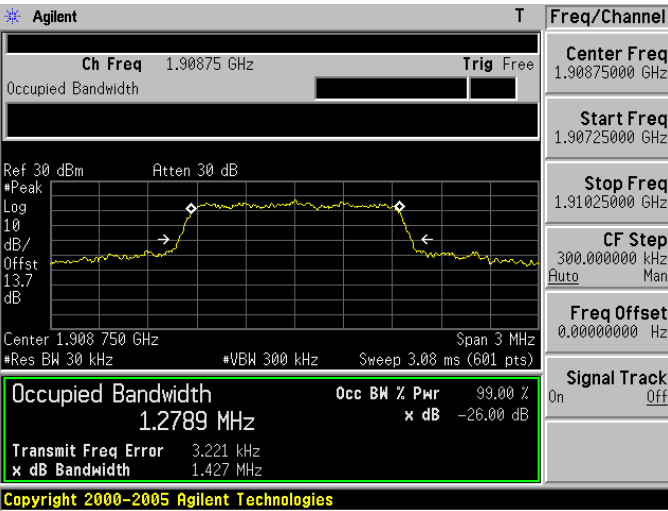
Mode 1: WCDMA Band II Link Mode	
1850.20 MHz	 <p>Agilent T Freq/Channel</p> <p>Ch Freq 1.8524 GHz Trig Free</p> <p>Center Freq 1.85240000 GHz</p> <p>Start Freq 1.84740000 GHz</p> <p>Stop Freq 1.85740000 GHz</p> <p>CF Step 1.00000000 MHz Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> <p>Ref 30 dBm Atten 30 dB</p> <p>#Peak Log 10 dB/Offst 13.7 dB</p> <p>Center 1.852 40 GHz Span 10 MHz</p> <p>#Res BW 100 kHz #VBW 300 kHz Sweep 1 ms (601 pts)</p> <p><b>Occupied Bandwidth 4.1714 MHz</b> Occ BH % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error -4.906 kHz</p> <p>x dB Bandwidth 4.680 MHz</p> <p>Copyright 2000-2005 Agilent Technologies</p>
1880.00 MHz	 <p>Agilent T Freq/Channel</p> <p>Ch Freq 1.88 GHz Trig Free</p> <p>Center Freq 1.88000000 GHz</p> <p>Start Freq 1.87500000 GHz</p> <p>Stop Freq 1.88500000 GHz</p> <p>CF Step 1.00000000 MHz Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> <p>Ref 30 dBm Atten 30 dB</p> <p>#Peak Log 10 dB/Offst 13.7 dB</p> <p>Center 1.880 00 GHz Span 10 MHz</p> <p>#Res BW 100 kHz #VBW 300 kHz Sweep 1 ms (601 pts)</p> <p><b>Occupied Bandwidth 4.1526 MHz</b> Occ BH % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error -5.635 kHz</p> <p>x dB Bandwidth 4.672 MHz</p> <p>Copyright 2000-2005 Agilent Technologies</p>
1909.80 MHz	 <p>Agilent T Freq/Channel</p> <p>Ch Freq 1.9076 GHz Trig Free</p> <p>Center Freq 1.90760000 GHz</p> <p>Start Freq 1.90260000 GHz</p> <p>Stop Freq 1.91260000 GHz</p> <p>CF Step 1.00000000 MHz Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> <p>Ref 30 dBm Atten 30 dB</p> <p>#Peak Log 10 dB/Offst 13.7 dB</p> <p>Center 1.907 60 GHz Span 10 MHz</p> <p>#Res BW 100 kHz #VBW 300 kHz Sweep 1 ms (601 pts)</p> <p><b>Occupied Bandwidth 4.1735 MHz</b> Occ BH % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error 16.953 kHz</p> <p>x dB Bandwidth 4.656 MHz</p> <p>Copyright 2000-2005 Agilent Technologies</p>

Mode 2: WCDMA Band V Link Mode	
826.4 MHz	 <p>Agilent R T Freq/Channel</p> <p>Ch Freq 826.4 MHz Trig Free</p> <p>Center Freq 826.400000 MHz</p> <p>Start Freq 821.400000 MHz</p> <p>Stop Freq 831.400000 MHz</p> <p>CF Step 1.00000000 MHz Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> <p>Ref 30 dBm Atten 30 dB</p> <p>Peak</p> <p>Log</p> <p>10 dB/Offst 13.4 dB</p> <p>Center 826.40 MHz Span 10 MHz</p> <p>Res BW 100 kHz VBW 300 kHz Sweep 1 ms (601 pts)</p> <p>Occupied Bandwidth 4.1505 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error 3.787 kHz x dB Bandwidth 4.673 MHz</p> <p>Copyright 2000-2005 Agilent Technologies</p>
836.6 MHz	 <p>Agilent T Freq/Channel</p> <p>Ch Freq 836.6 MHz Trig Free</p> <p>Center Freq 836.600000 MHz</p> <p>Start Freq 831.600000 MHz</p> <p>Stop Freq 841.600000 MHz</p> <p>CF Step 1.00000000 MHz Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> <p>Ref 30 dBm Atten 30 dB</p> <p>Peak</p> <p>Log</p> <p>10 dB/Offst 13.4 dB</p> <p>Center 836.60 MHz Span 10 MHz</p> <p>Res BW 100 kHz VBW 300 kHz Sweep 1 ms (601 pts)</p> <p>Occupied Bandwidth 4.1938 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error 3.757 kHz x dB Bandwidth 4.663 MHz</p> <p>Copyright 2000-2005 Agilent Technologies</p>
846.6 MHz	 <p>Agilent T Freq/Channel</p> <p>Ch Freq 846.6 MHz Trig Free</p> <p>Center Freq 846.600000 MHz</p> <p>Start Freq 841.600000 MHz</p> <p>Stop Freq 851.600000 MHz</p> <p>CF Step 1.00000000 MHz Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> <p>Ref 30 dBm Atten 30 dB</p> <p>Peak</p> <p>Log</p> <p>10 dB/Offst 13.4 dB</p> <p>Center 846.60 MHz Span 10 MHz</p> <p>Res BW 100 kHz VBW 300 kHz Sweep 1 ms (601 pts)</p> <p>Occupied Bandwidth 4.1452 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error -2.708 kHz x dB Bandwidth 4.657 MHz</p> <p>Copyright 2000-2005 Agilent Technologies</p>

Mode 3: CDMA 800 (BC 0) Link Mode

824.70	<p>Agilent T</p> <p>Ch Freq 824.7 MHz Trig Free</p> <p>Center Freq 824.700000 MHz</p> <p>Start Freq 823.200000 MHz</p> <p>Stop Freq 826.200000 MHz</p> <p>CF Step 300.000000 kHz Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> <p>Ref 30 dBm Atten 30 dB</p> <p>#Peak</p> <p>Log</p> <p>10</p> <p>dB/</p> <p>Offst 13.4</p> <p>dB</p> <p>Center 824.700 MHz Span 3 MHz</p> <p>#Res BW 30 kHz #VBW 300 kHz Sweep 3.00 ms (601 pts)</p> <p>Occupied Bandwidth 1.2817 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error -903.738 Hz</p> <p>x dB Bandwidth 1.424 MHz</p> <p>Copyright 2000-2005 Agilent Technologies</p>
836.52	<p>Agilent T</p> <p>Ch Freq 836.52 MHz Trig Free</p> <p>Center Freq 836.520000 MHz</p> <p>Start Freq 835.020000 MHz</p> <p>Stop Freq 838.020000 MHz</p> <p>CF Step 300.000000 kHz Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> <p>Ref 30 dBm Atten 30 dB</p> <p>#Peak</p> <p>Log</p> <p>10</p> <p>dB/</p> <p>Offst 13.4</p> <p>dB</p> <p>Center 836.520 MHz Span 3 MHz</p> <p>#Res BW 30 kHz #VBW 300 kHz Sweep 3.00 ms (601 pts)</p> <p>Occupied Bandwidth 1.2741 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error 343.120 Hz</p> <p>x dB Bandwidth 1.418 MHz</p> <p>Copyright 2000-2005 Agilent Technologies</p>
848.31	<p>Agilent T</p> <p>Ch Freq 848.31 MHz Trig Free</p> <p>Center Freq 848.310000 MHz</p> <p>Start Freq 846.810000 MHz</p> <p>Stop Freq 849.810000 MHz</p> <p>CF Step 300.000000 kHz Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> <p>Ref 30 dBm Atten 30 dB</p> <p>#Peak</p> <p>Log</p> <p>10</p> <p>dB/</p> <p>Offst 13.4</p> <p>dB</p> <p>Center 848.310 MHz Span 3 MHz</p> <p>#Res BW 30 kHz #VBW 300 kHz Sweep 3.00 ms (601 pts)</p> <p>Occupied Bandwidth 1.2748 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error -1.823 kHz</p> <p>x dB Bandwidth 1.423 MHz</p> <p>Copyright 2000-2005 Agilent Technologies</p>

Mode 4: CDMA 1900 (BC 1) Link Mode

<p>1851.25</p>	 <p>Agilent T</p> <p>Ch Freq 1.85125 GHz Trig Free</p> <p>Center Freq 1.85125000 GHz</p> <p>Start Freq 1.84975000 GHz</p> <p>Stop Freq 1.85275000 GHz</p> <p>CF Step 300.000000 kHz Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> <p>Ref 30 dBm Atten 30 dB</p> <p>#Peak</p> <p>Log</p> <p>10</p> <p>dB/</p> <p>Offst 13.7</p> <p>dB</p> <p>Center 1.851 250 GHz Span 3 MHz</p> <p>#Res BW 30 kHz #VBW 300 kHz Sweep 3.00 ms (601 pts)</p> <p>Occupied Bandwidth 1.2721 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error 2.699 kHz x dB Bandwidth 1.429 MHz</p> <p>Copyright 2000-2005 Agilent Technologies</p>
<p>1880.00</p>	 <p>Agilent T</p> <p>Ch Freq 1.88 GHz Trig Free</p> <p>Center Freq 1.88000000 GHz</p> <p>Start Freq 1.87850000 GHz</p> <p>Stop Freq 1.88150000 GHz</p> <p>CF Step 300.000000 kHz Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> <p>Ref 30 dBm Atten 30 dB</p> <p>#Peak</p> <p>Log</p> <p>10</p> <p>dB/</p> <p>Offst 13.7</p> <p>dB</p> <p>Center 1.880 000 GHz Span 3 MHz</p> <p>#Res BW 30 kHz #VBW 300 kHz Sweep 3.00 ms (601 pts)</p> <p>Occupied Bandwidth 1.2712 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error 890.962 Hz x dB Bandwidth 1.424 MHz</p> <p>Copyright 2000-2005 Agilent Technologies</p>
<p>1908.75</p>	 <p>Agilent T</p> <p>Ch Freq 1.90875 GHz Trig Free</p> <p>Center Freq 1.90875000 GHz</p> <p>Start Freq 1.90725000 GHz</p> <p>Stop Freq 1.91025000 GHz</p> <p>CF Step 300.000000 kHz Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> <p>Ref 30 dBm Atten 30 dB</p> <p>#Peak</p> <p>Log</p> <p>10</p> <p>dB/</p> <p>Offst 13.7</p> <p>dB</p> <p>Center 1.908 750 GHz Span 3 MHz</p> <p>#Res BW 30 kHz #VBW 300 kHz Sweep 3.00 ms (601 pts)</p> <p>Occupied Bandwidth 1.2789 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error 3.221 kHz x dB Bandwidth 1.427 MHz</p> <p>Copyright 2000-2005 Agilent Technologies</p>

Mode 5: 1xEV-DO 800 (BC 0) Link Mode	
824.70	<p><b>Agilent</b> T</p> <p>Ch Freq 824.7 MHz Trig Free</p> <p>Center Freq 824.700000 MHz</p> <p>Start Freq 823.200000 MHz</p> <p>Stop Freq 826.200000 MHz</p> <p>CF Step 300.000000 kHz Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> <p>Ref 30 dBm Atten 30 dB</p> <p>#Peak</p> <p>Log</p> <p>10</p> <p>dB/</p> <p>Offst 13.4</p> <p>dB</p> <p>Center 824.700 MHz Span 3 MHz</p> <p>#Res BW 30 kHz #VBW 300 kHz Sweep 3.08 ms (601 pts)</p> <p><b>Occupied Bandwidth</b> Occ BW % Pwr 99.00 %</p> <p><b>1.2706 MHz</b> x dB -26.00 dB</p> <p>Transmit Freq Error 2.228 kHz</p> <p>x dB Bandwidth 1.424 MHz</p> <p>Copyright 2000-2005 Agilent Technologies</p>
836.52	<p><b>Agilent</b> T</p> <p>Ch Freq 836.52 MHz Trig Free</p> <p>Center Freq 836.520000 MHz</p> <p>Start Freq 835.020000 MHz</p> <p>Stop Freq 838.020000 MHz</p> <p>CF Step 300.000000 kHz Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> <p>Ref 30 dBm Atten 30 dB</p> <p>#Peak</p> <p>Log</p> <p>10</p> <p>dB/</p> <p>Offst 13.4</p> <p>dB</p> <p>Center 836.520 MHz Span 3 MHz</p> <p>#Res BW 30 kHz #VBW 300 kHz Sweep 3.08 ms (601 pts)</p> <p><b>Occupied Bandwidth</b> Occ BW % Pwr 99.00 %</p> <p><b>1.2697 MHz</b> x dB -26.00 dB</p> <p>Transmit Freq Error 366.621 Hz</p> <p>x dB Bandwidth 1.426 MHz</p> <p>Copyright 2000-2005 Agilent Technologies</p>
848.31	<p><b>Agilent</b> T</p> <p>Ch Freq 848.31 MHz Trig Free</p> <p>Center Freq 848.310000 MHz</p> <p>Start Freq 846.810000 MHz</p> <p>Stop Freq 849.810000 MHz</p> <p>CF Step 300.000000 kHz Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> <p>Ref 30 dBm Atten 30 dB</p> <p>#Peak</p> <p>Log</p> <p>10</p> <p>dB/</p> <p>Offst 13.4</p> <p>dB</p> <p>Center 848.310 MHz Span 3 MHz</p> <p>#Res BW 30 kHz #VBW 300 kHz Sweep 3.08 ms (601 pts)</p> <p><b>Occupied Bandwidth</b> Occ BW % Pwr 99.00 %</p> <p><b>1.2722 MHz</b> x dB -26.00 dB</p> <p>Transmit Freq Error 2.301 kHz</p> <p>x dB Bandwidth 1.423 MHz</p> <p>Copyright 2000-2005 Agilent Technologies</p>



Mode 6: 1xEV-DO 1900 (BC 1) Link Mode

<p>1851.25</p>	<p>Agilent T</p> <p>Ch Freq 1.85125 GHz Trig Free</p> <p>Center Freq 1.85125000 GHz</p> <p>Start Freq 1.84975000 GHz</p> <p>Stop Freq 1.85275000 GHz</p> <p>CF Step 300.000000 kHz Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> <p>Occupied Bandwidth 1.2688 MHz</p> <p>Occ BW % Pwr 99.00 %</p> <p>x dB Bandwidth -26.00 dB</p> <p>Transmit Freq Error -1.704 kHz</p> <p>x dB Bandwidth 1.426 MHz</p> <p>Copyright 2000-2005 Agilent Technologies</p>
<p>1880.00</p>	<p>Agilent R T</p> <p>Ch Freq 1.88 GHz Trig Free</p> <p>Center Freq 1.88000000 GHz</p> <p>Start Freq 1.87850000 GHz</p> <p>Stop Freq 1.88150000 GHz</p> <p>CF Step 300.000000 kHz Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> <p>Occupied Bandwidth 1.2730 MHz</p> <p>Occ BW % Pwr 99.00 %</p> <p>x dB Bandwidth -26.00 dB</p> <p>Transmit Freq Error 1.499 kHz</p> <p>x dB Bandwidth 1.425 MHz</p> <p>Copyright 2000-2005 Agilent Technologies</p>
<p>1908.75</p>	<p>Agilent T</p> <p>Ch Freq 1.90875 GHz Trig Free</p> <p>Center Freq 1.90875000 GHz</p> <p>Start Freq 1.90725000 GHz</p> <p>Stop Freq 1.91025000 GHz</p> <p>CF Step 300.000000 kHz Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> <p>Occupied Bandwidth 1.2731 MHz</p> <p>Occ BW % Pwr 99.00 %</p> <p>x dB Bandwidth -26.00 dB</p> <p>Transmit Freq Error 975.325 Hz</p> <p>x dB Bandwidth 1.424 MHz</p> <p>Copyright 2000-2005 Agilent Technologies</p>

## 5 Band Edge Test

### 5.1. Limit

The Band Edge Limit:

§22.917(a), §24.238(a)

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least  $43 + 10\log_{10}(P)$  dB.

§90.691

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least  $50 + 10\log_{10}(P[\text{Watts}])$  at Band Edge and for all out-of-band emissions within 37.5Khz of Block Edge.

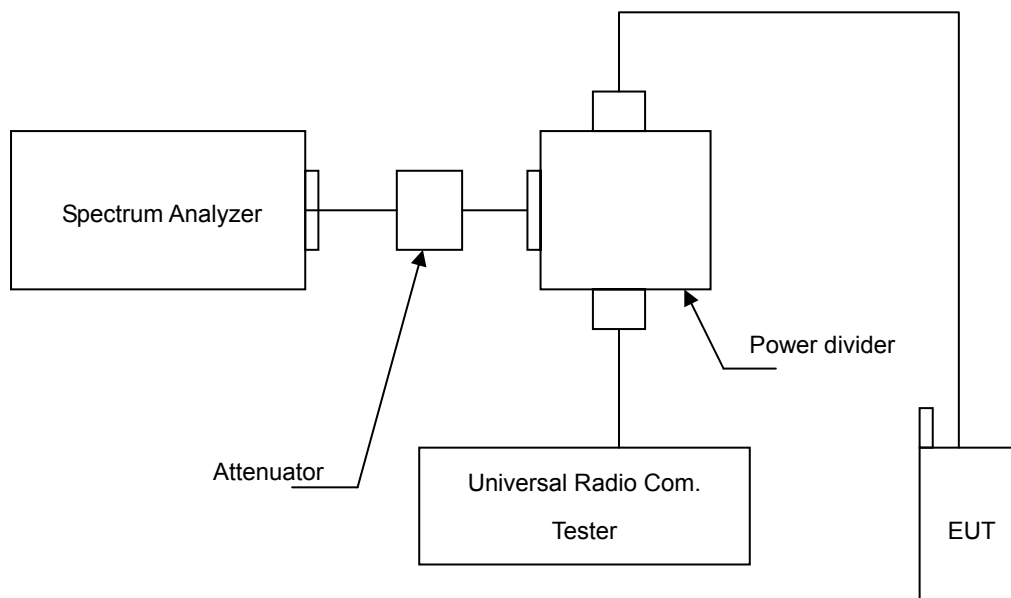
### 5.2. Test Instruments

Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Remark
Universal Radio Communication Tester	R & S	CMU200	109369	08/07/2012	(2)
Spectrum Analyzer	Agilent	E4445A	MY46181986	05/10/2012	(1)
Attenuator	RADIALL	R41572000	0603033073	N.C.R.	-----
Power Divider	Agilent	87302C	3239A00760	N.C.R.	-----
Test Site	ATL	TE05	TE05	N.C.R.	-----

Remark: <sup>(1)</sup> Calibration period 1 year. <sup>(2)</sup> Calibration period 2 years.

Note: N.C.R. = No Calibration Request.

### 5.3. Setup



#### 5.4. Test Procedure

The measurement is made according to FCC rules part 22 and 24:

3. The EUT was connected to Spectrum Analyzer and Base Station via Power Divider.
4. The band edge of low and high channels for the highest RF powers within the transmitting frequency band were measured. Setting RBW as roughly BW/100.
5. The band edge setting:
  - a. RB=10 kHz; VB=30 kHz for GSM system.
  - b. RB=100 kHz; VB=300 kHz for WCDMA system.

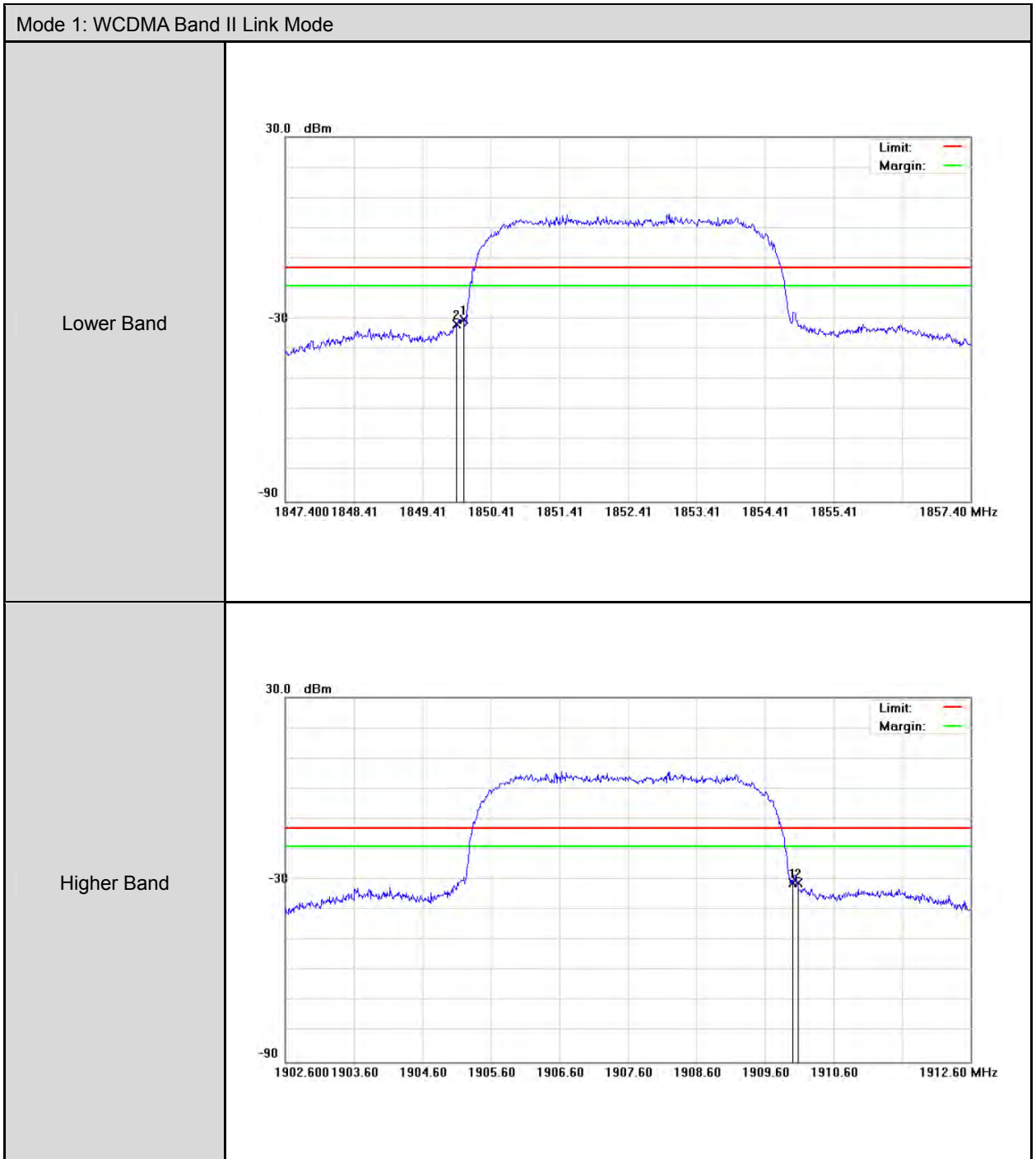
#### 5.5. Uncertainty

The measurement uncertainty is defined as  $\pm 10\text{Hz}$

#### 5.6. Test Result

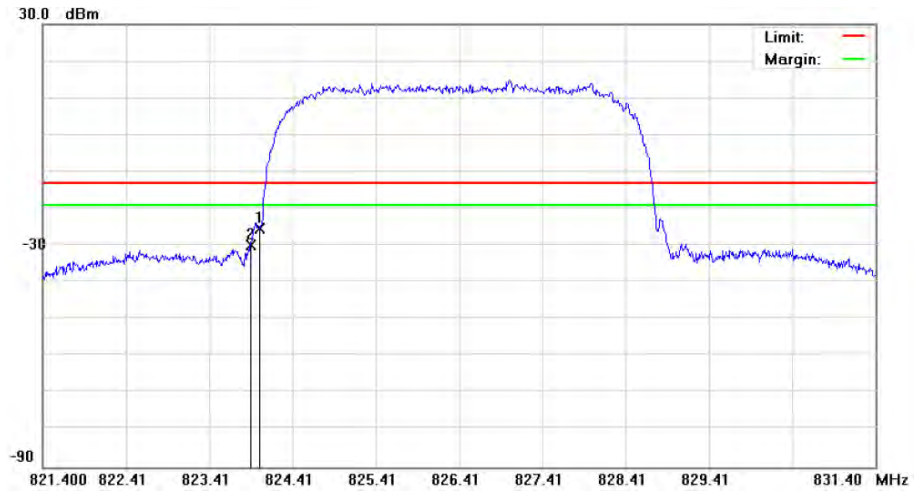
Model Number		AirPrime AR7550				
Test Item		Band Edge				
Date of Test		03/08/2013			Test Site	TE05
Bands		Channel	Frequency (MHz)	Bandwidth (dBm)	Limit (dBm)	Result
WCDMA Band II	Lower	9262	1850.000	-30.19	-13	Pass
	Higher	9538	1910.000	-31.15	-13	Pass
WCDMA Band V	Lower	4132	824.0000	-25.28	-13	Pass
	Higher	4233	849.0000	-25.42	-13	Pass

**5.7. Test Graphs**

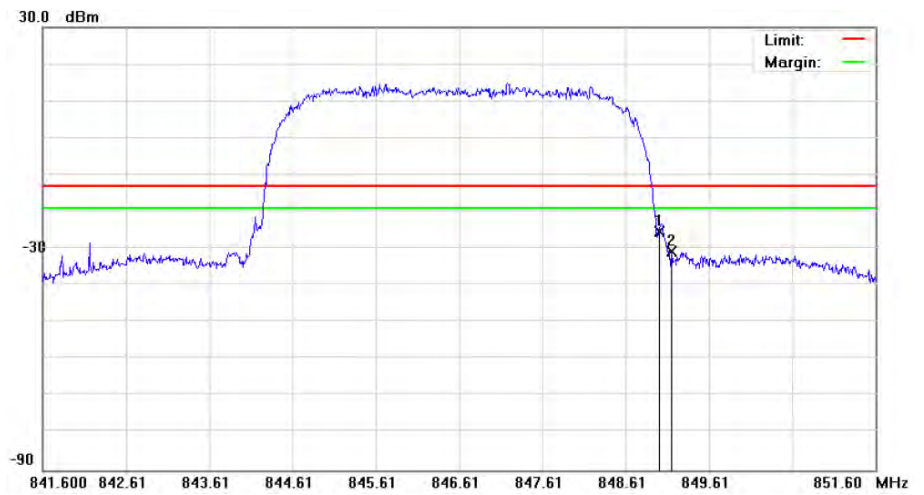


Mode 2: WCDMA Band V Link Mode

Lower Band

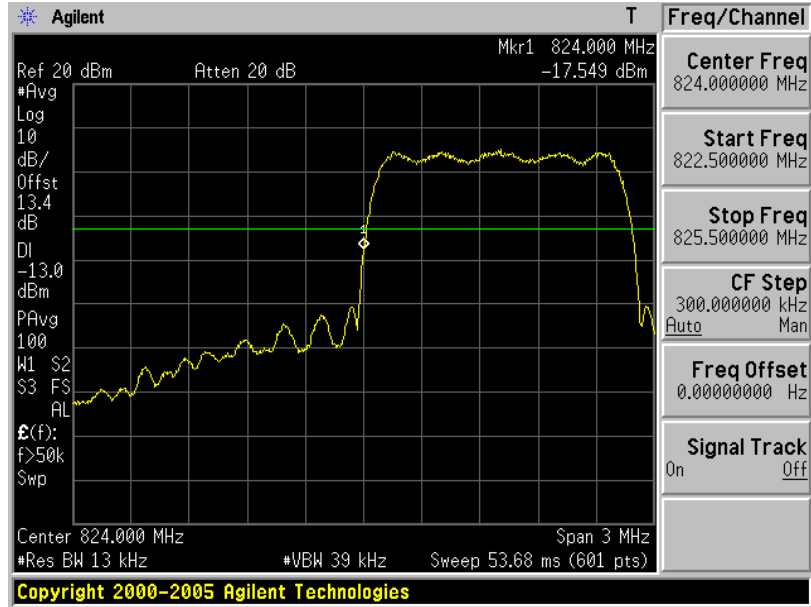


Higher Band

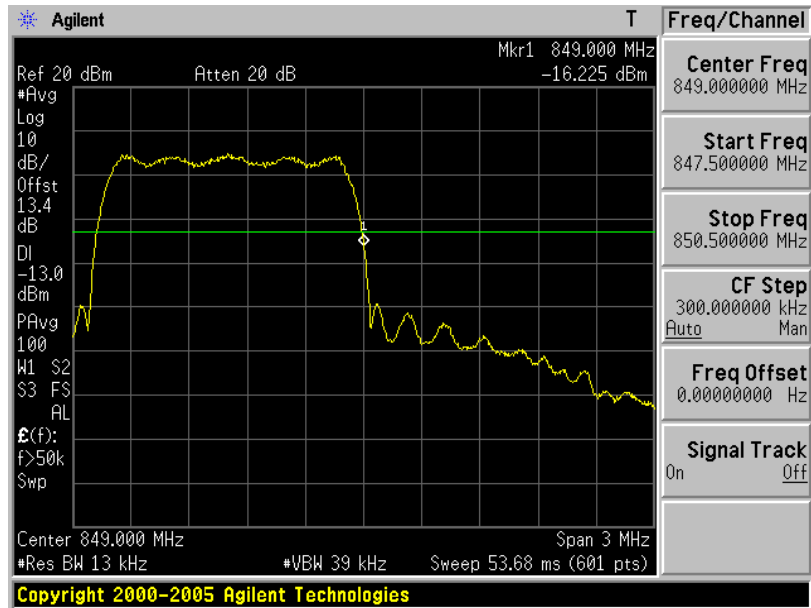


Mode 3: CDMA 800 (BC 0) Link Mode

Lower Band

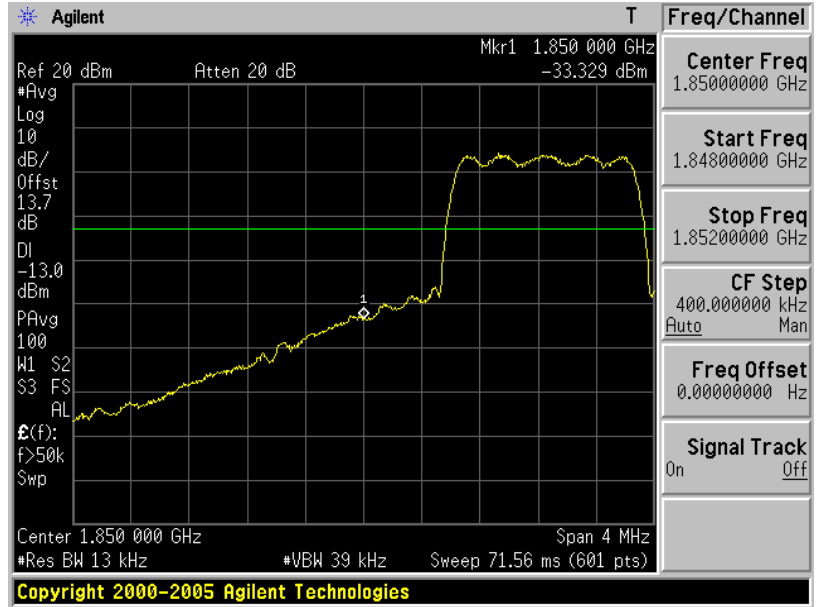


Higher Band

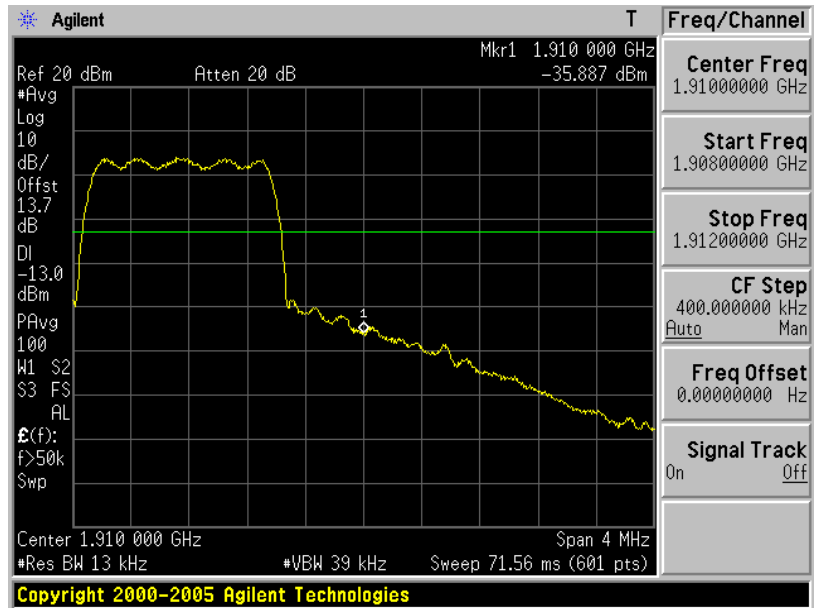


Mode 4: CDMA 1900 (BC 1) Link Mode

Lower Band



Higher Band



## 6 Conducted Spurious Emission Test

### 6.1. Limit

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least  $43 + 10\log(P)$  dB.

### 6.2. Test Instruments

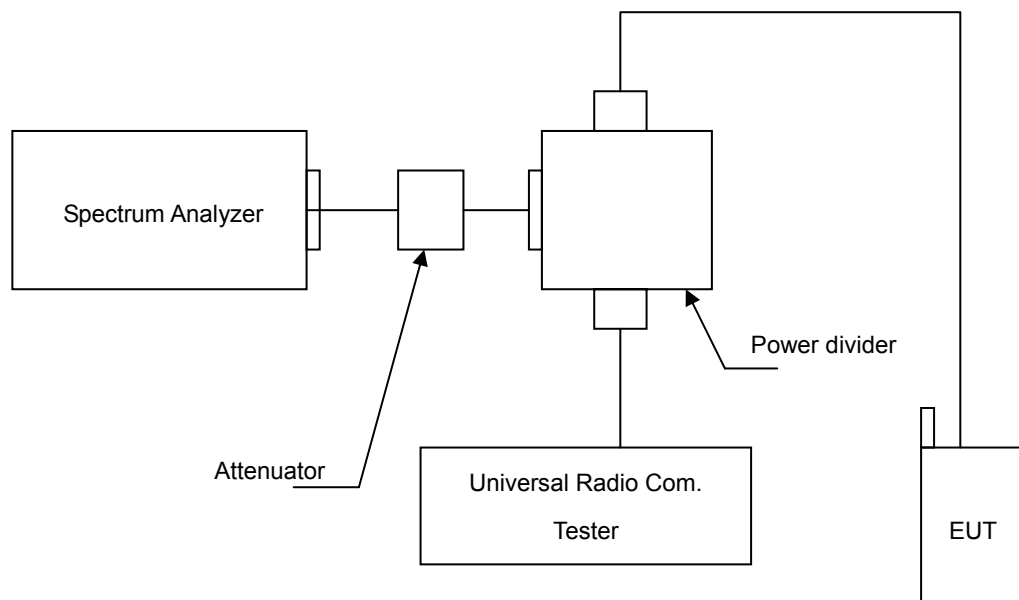
Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Remark
Universal Radio Communication Tester	R & S	CMU200	109369	08/07/2012	(2)
Spectrum Analyzer	Agilent	E4445A	MY46181986	05/10/2012	(1)
Attenuator	RADIALL	R41572000	0603033073	N.C.R.	-----
Power Divider	Agilent	87302C	3239A00760	N.C.R.	-----
Test Site	ATL	TE05	TE05	N.C.R.	-----

Remark: <sup>(1)</sup> Calibration period 1 year. <sup>(2)</sup> Calibration period 2 years.

Note: N.C.R. = No Calibration Request.

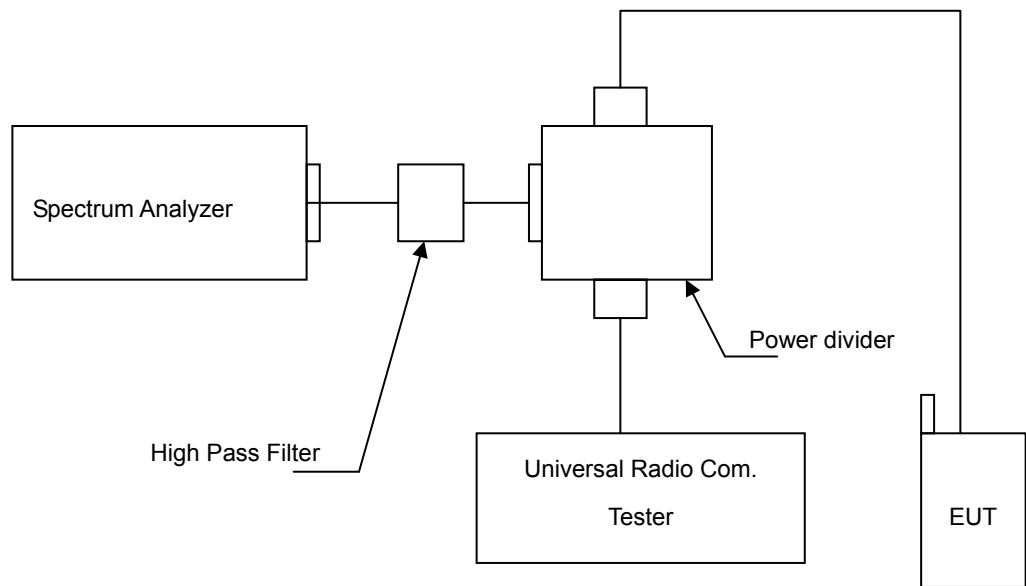
### 6.3. Setup

Below 2.8GHz





Above 2.8GHz



#### 6.4. Test Procedure

1. The EUT was connected to Spectrum Analyzer and Base Station via Power Divider.
2. The middle channel for the highest RF power within the transmitting frequency was measured.
3. The conducted spurious emission for the whole frequency range was taken.
4. Test setting at GSM 850 RB>100 kHz, VB>100 kHz; PCS 1900 RB>1MHz, VB>1MHz.

#### 6.5. Uncertainty

The measurement uncertainty is evaluated as  $\pm 2.24$  dB.

#### 6.6. Test Result

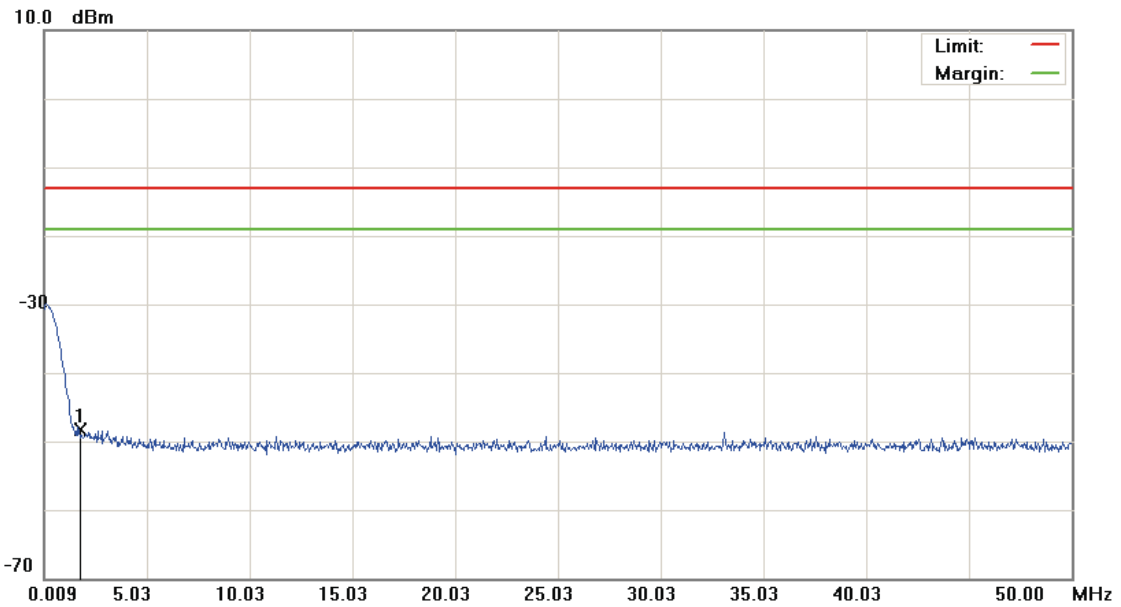
Model Number	AirPrime AR7550		
Test Item	Conducted Emission		
Test Mode	Mode 1 / Mode 2 / Mode 3 / Mode 4		
Date of Test	03/08/2013	Test Site	TE05

File: AR7550(CH9262)

Data: #1

Date: 2013/3/8

Time: 下午 01:24:25



Site: : RF Conducted	Polarization: <i>Conducted po</i>	Temperature: 23 °C
Limit: FCC Part 24 conducted(9k-26.5G)	Power: AC 120V/60Hz	Humidity: 55.2 %
EUT: Wireless Module	Distance:	RBW: 1000 KHz VBW: 1000 KHz
M/N: AirPrime AR7550		
Mode: Mode 1		
Note: CH 9262		

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	Comment
		MHz	dBm	dB	dBm	dBm	dB	cm	degree	
1	*	1.7337	-60.87	12.60	-48.27	-13.00	-35.27	peak		

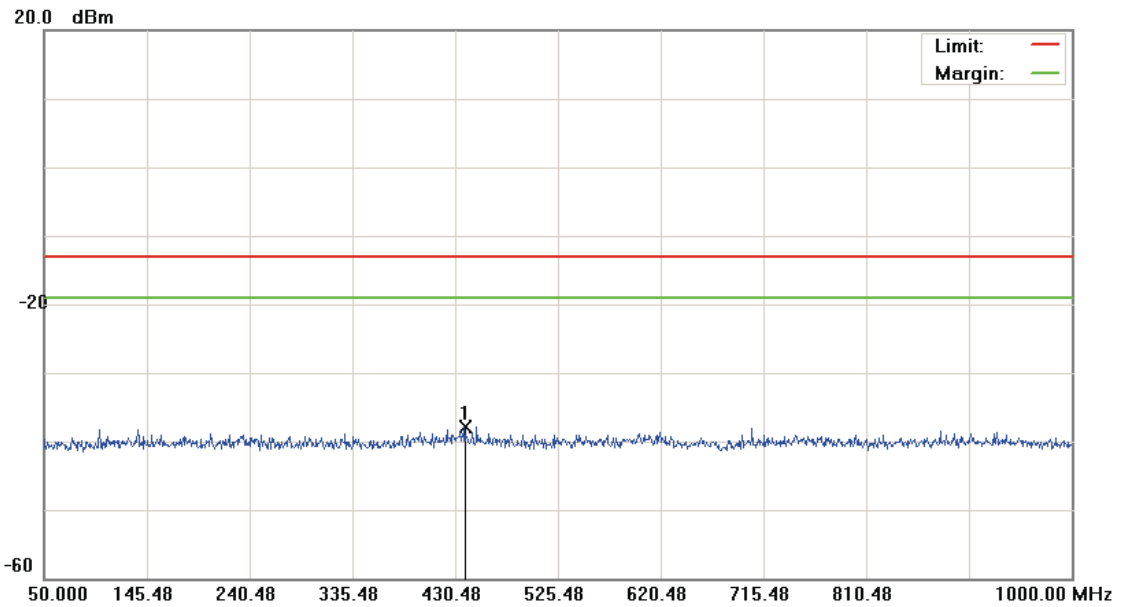
\*:Maximum data    x:Over limit    !:over margin

File: AR7550(CH9262)

Data: #2

Date: 2013/3/8

Time: 下午 01:24:49



Site: : RF Conducted	Polarization: <i>Conducted po</i>	Temperature: 23 °C
Limit: FCC Part 24 conducted(9k-26.5G)	Power: AC 120V/60Hz	Humidity: 55.2 %
EUT: Wireless Module	Distance:	RBW: 1000 KHz VBW: 1000 KHz
M/N: AirPrime AR7550		
Mode: Mode 1		
Note: CH 9262		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Detector	Antenna Height cm	Table Degree degree	Comment
1	*	439.0250	-51.03	13.21	-37.82	-13.00	-24.82	peak			

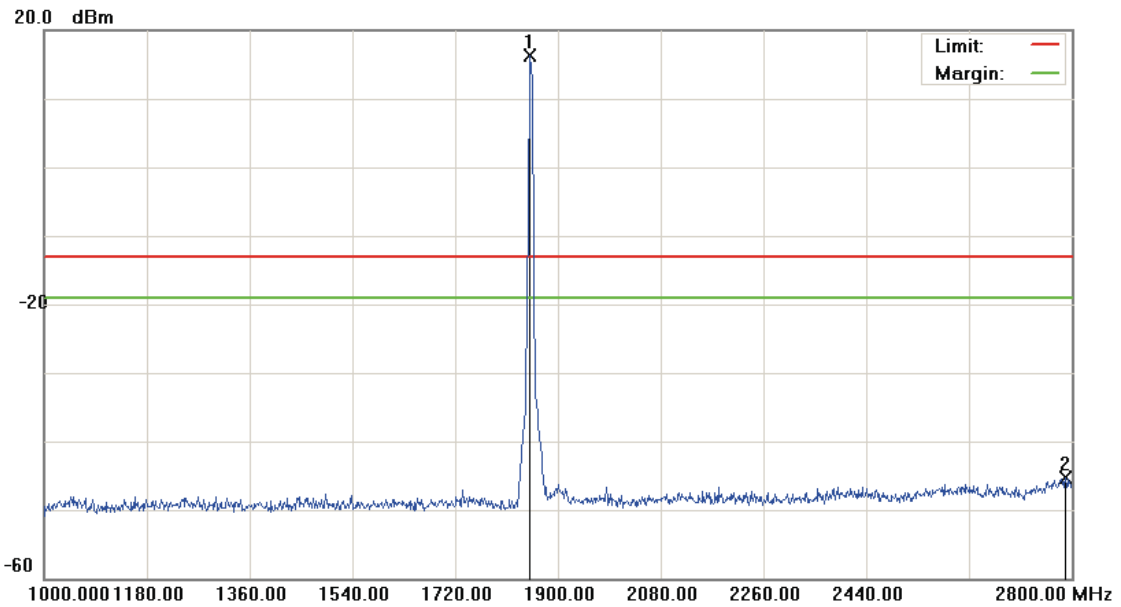
\*:Maximum data    x:Over limit    !:over margin

File: AR7550(CH9262)

Data: #3

Date: 2013/3/8

Time: 下午 01:28:58



Site: : RF Conducted

 Polarization: *Conducted po*

Temperature: 23 °C

Limit: FCC Part 24 conducted(9k-26.5G)

Power: AC 120V/60Hz

Humidity: 55.2 %

EUT: Wireless Module

Distance:

RBW: 1000 KHz VBW: 1000 KHz

M/N: AirPrime AR7550

Mode: Mode 1

Note: CH 9262

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Detector	Antenna Height cm	Table Degree degree	Comment
1	*	1850.500	12.05	4.26	16.31	-13.00	29.31	peak			Tx
2		2789.200	-51.22	5.89	-45.33	-13.00	-32.33	peak			

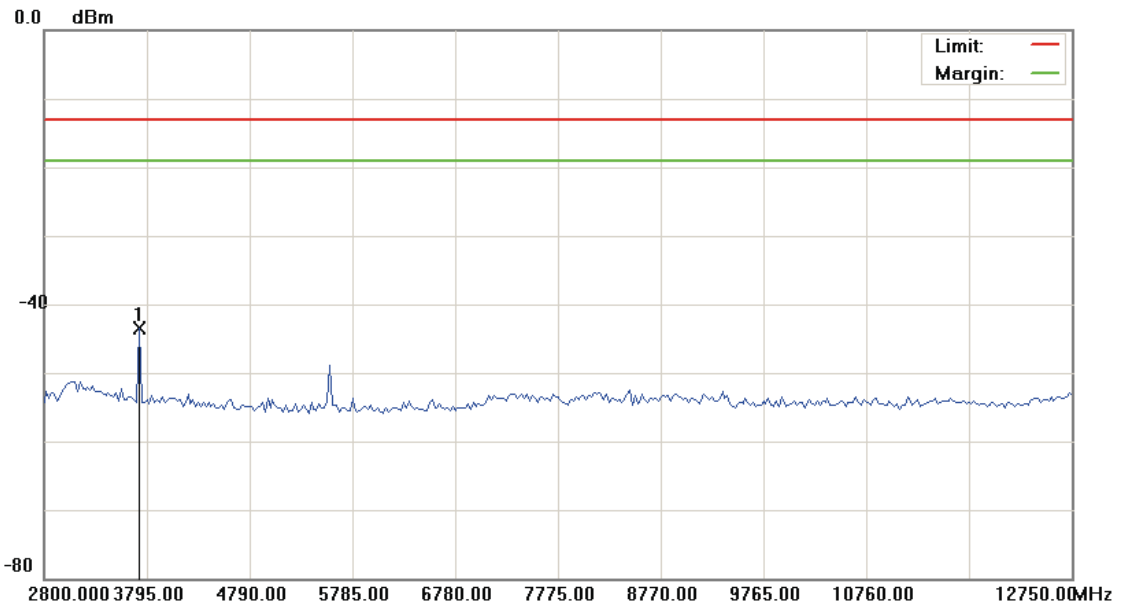
\*:Maximum data    x:Over limit    !:over margin

File: AR7550(CH9262)

Data: #4

Date: 2013/3/8

Time: 下午 01:56:38



Site: : RF Conducted	Polarization: <i>Conducted po</i>	Temperature: 23 °C
Limit: FCC Part 24 conducted(9k-26.5G)	Power: AC 120V/60Hz	Humidity: 55.2 %
EUT: Wireless Module	Distance:	RBW: 1000 KHz VBW: 1000 KHz
M/N: AirPrime AR7550		
Mode: Mode 1		
Note: CH 9262		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Detector	Antenna Height cm	Table Degree degree	Comment
1	*	3720.375	-48.38	4.88	-43.50	-13.00	-30.50	peak			

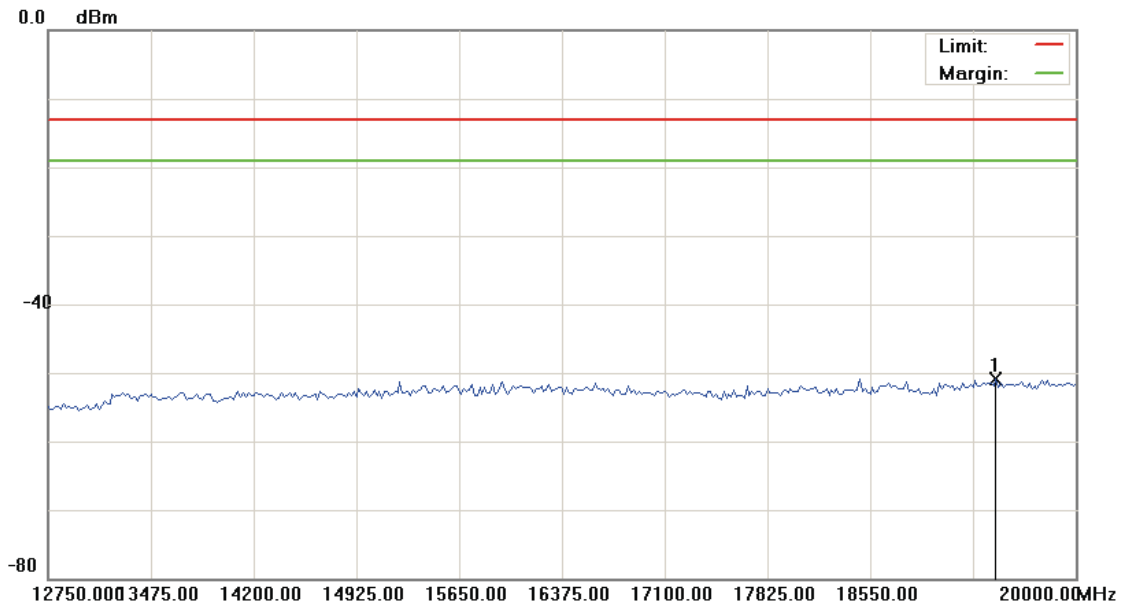
\*:Maximum data    x:Over limit    !:over margin

File: AR7550(CH9262)

Data: #5

Date: 2013/3/8

Time: 下午 01:56:57



Site: : RF Conducted	Polarization: <i>Conducted po</i>	Temperature: 23 °C
Limit: FCC Part 24 conducted(9k-26.5G)	Power: AC 120V/60Hz	Humidity: 55.2 %
EUT: Wireless Module	Distance:	RBW: 1000 KHz VBW: 1000 KHz
M/N: AirPrime AR7550		
Mode: Mode 1		
Note: CH 9262		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Detector	Antenna Height cm	Table Degree degree	Comment
1	*	19438.125	-58.18	7.28	-50.90	-13.00	-37.90	peak			

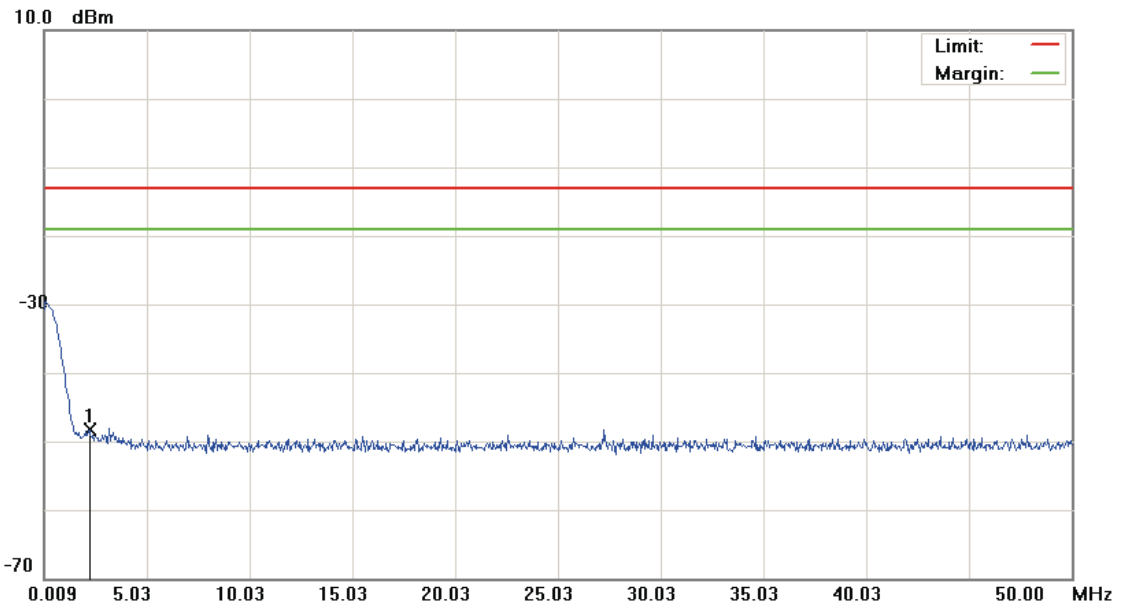
\*:Maximum data    x:Over limit    !:over margin

File: AR7550(CH9400)

Data: #1

Date: 2013/3/8

Time: 下午 01:25:46



Site: : RF Conducted	Polarization: <i>Conducted po</i>	Temperature: 23 °C
Limit: FCC Part 24 conducted(9k-26.5G)	Power: AC 120V/60Hz	Humidity: 55.2 %
EUT: Wireless Module	Distance:	RBW: 1000 KHz VBW: 1000 KHz
M/N: AirPrime AR7550		
Mode: Mode 1		
Note: CH 9400		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Detector	Antenna Height cm	Table Degree degree	Comment
1	*	2.2086	-61.33	13.09	-48.24	-13.00	-35.24	peak			

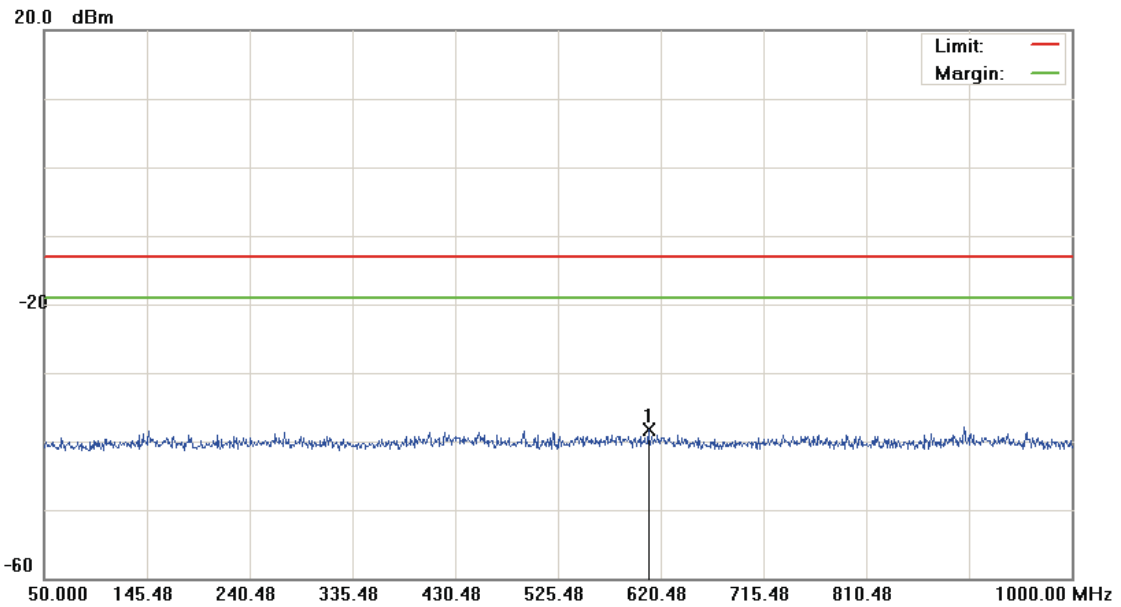
\*:Maximum data    x:Over limit    !:over margin

File: AR7550(CH9400)

Data: #2

Date: 2013/3/8

Time: 下午 01:26:10



Site: : RF Conducted	Polarization: <i>Conducted po</i>	Temperature: 23 °C
Limit: FCC Part 24 conducted(9k-26.5G)	Power: AC 120V/60Hz	Humidity: 55.2 %
EUT: Wireless Module	Distance:	RBW: 1000 KHz VBW: 1000 KHz
M/N: AirPrime AR7550		
Mode: Mode 1		
Note: CH 9400		

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	Comment
		MHz	dBm	dB	dBm	dBm	dB	cm	degree	
1	*	609.0750	-51.48	13.17	-38.31	-13.00	-25.31	peak		

\*:Maximum data    x:Over limit    !:over margin

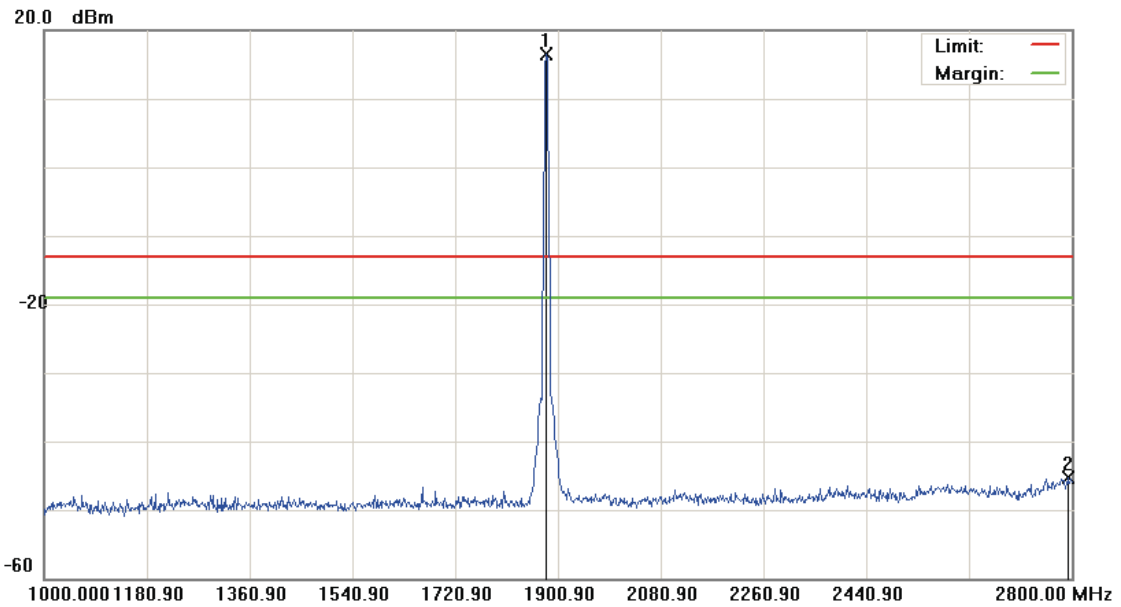


File: AR7550(CH9400)

Data: #3

Date: 2013/3/8

Time: 下午 01:30:03



Site: : RF Conducted	Polarization: <i>Conducted po</i>	Temperature: 23 °C
Limit: FCC Part 24 conducted(9k-26.5G)	Power: AC 120V/60Hz	Humidity: 55.2 %
EUT: Wireless Module	Distance:	RBW: 1000 KHz VBW: 1000 KHz
M/N: AirPrime AR7550		
Mode: Mode 1		
Note: CH 9400		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Detector	Antenna Height cm	Table Degree degree	Comment
1	*	1878.400	11.89	4.61	16.50	-13.00	29.50	peak			Tx
2		2794.600	-51.10	5.90	-45.20	-13.00	-32.20	peak			

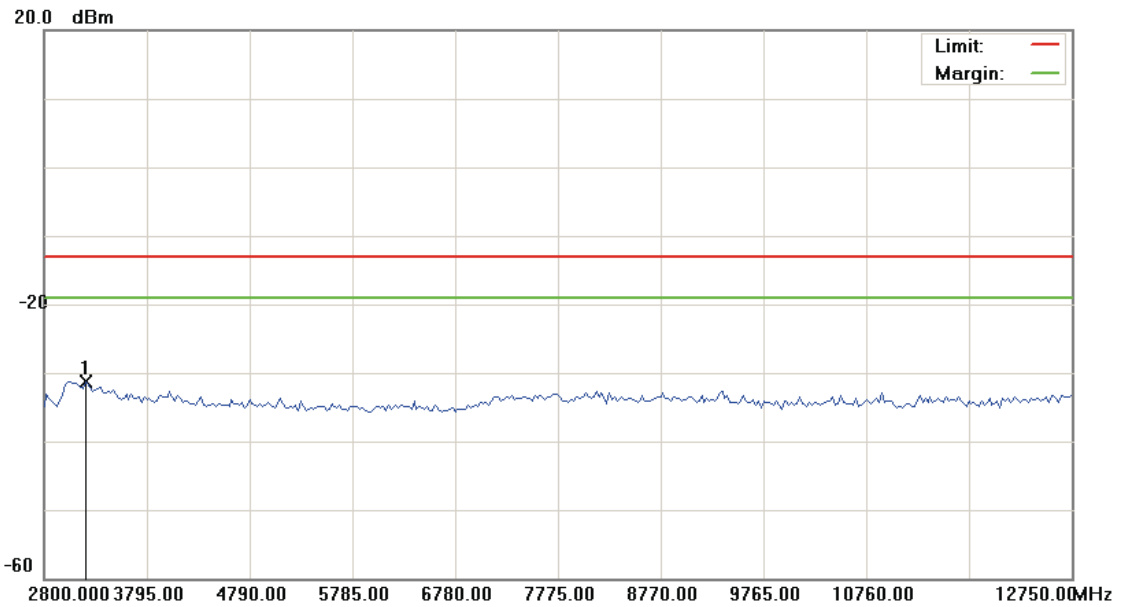
\*:Maximum data    x:Over limit    !:over margin

File: AR7550(CH9400)

Data: #4

Date: 2013/3/8

Time: 下午 01:57:26

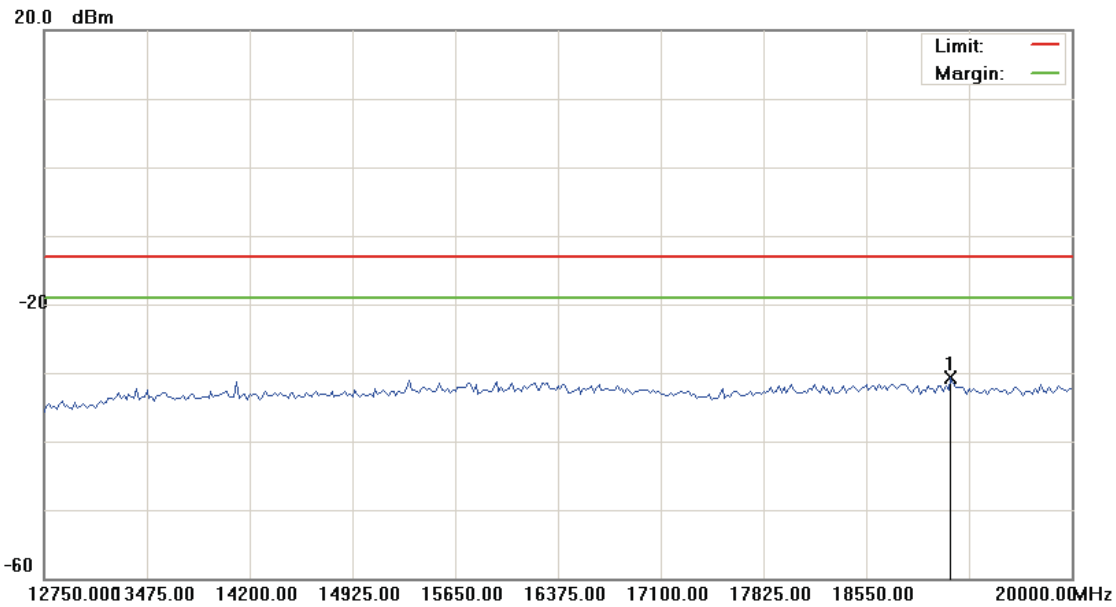


Site: : RF Conducted	Polarization: <i>Conducted po</i>	Temperature: 23 °C
Limit: FCC Part 24 conducted(9k-26.5G)	Power: AC 120V/60Hz	Humidity: 55.2 %
EUT: Wireless Module	Distance:	RBW: 1000 KHz VBW: 1000 KHz
M/N: AirPrime AR7550		
Mode: Mode 1		
Note: CH 9400		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Detector	Antenna Height cm	Table Degree degree	Comment
1	*	3198.000	-36.47	5.22	-31.25	-13.00	-18.25	peak			

\*:Maximum data    x:Over limit    !:over margin

File: AR7550(CH9400)      Data: #5      Date: 2013/3/8      Time: 下午 01:57:46



Site: : RF Conducted	Polarization: <i>Conducted po</i>	Temperature: 23 °C
Limit: FCC Part 24 conducted(9k-26.5G)	Power: AC 120V/60Hz	Humidity: 55.2 %
EUT: Wireless Module	Distance:	RBW: 1000 KHz VBW: 1000 KHz
M/N: AirPrime AR7550		
Mode: Mode 1		
Note: CH 9400		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Detector	Antenna Height cm	Table Degree degree	Comment
1	*	19148.125	-37.87	7.20	-30.67	-13.00	-17.67	peak			

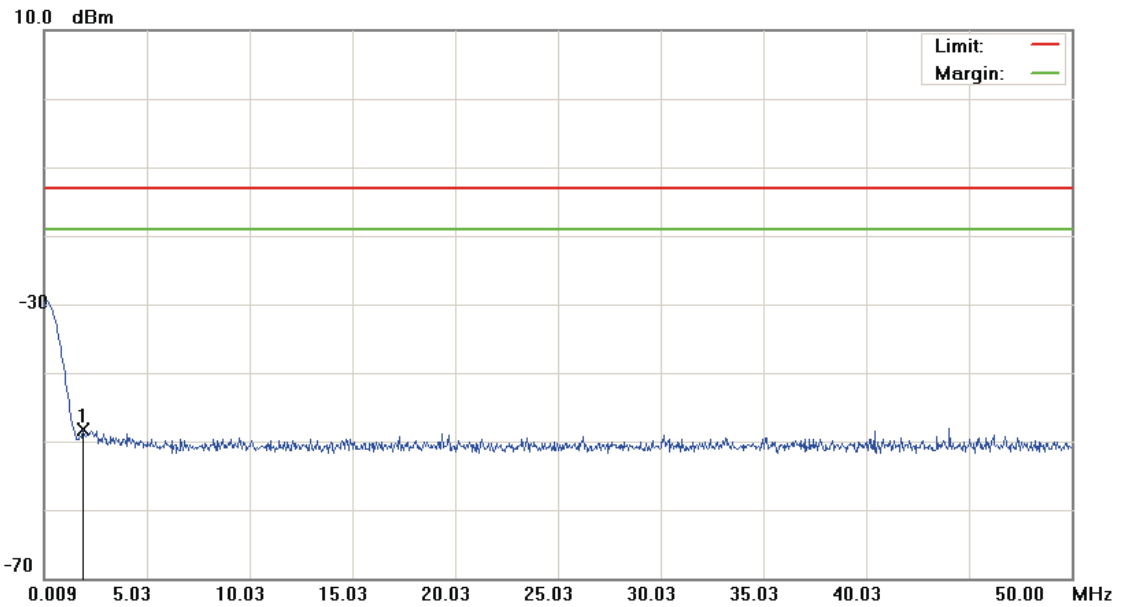
\*:Maximum data    x:Over limit    !:over margin

File: AR7550(CH9538)

Data: #1

Date: 2013/3/8

Time: 下午 01:26:59



Site: : RF Conducted	Polarization: <i>Conducted po</i>	Temperature: 23 °C
Limit: FCC Part 24 conducted(9k-26.5G)	Power: AC 120V/60Hz	Humidity: 55.2 %
EUT: Wireless Module	Distance:	RBW: 1000 KHz VBW: 1000 KHz
M/N: AirPrime AR7550		
Mode: Mode 1		
Note: CH 9538		

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	Detector	Comment
		MHz	dBm	dB	dBm	dBm	dB	cm	degree		
1	*	1.9087	-61.29	12.95	-48.34	-13.00	-35.34			peak	

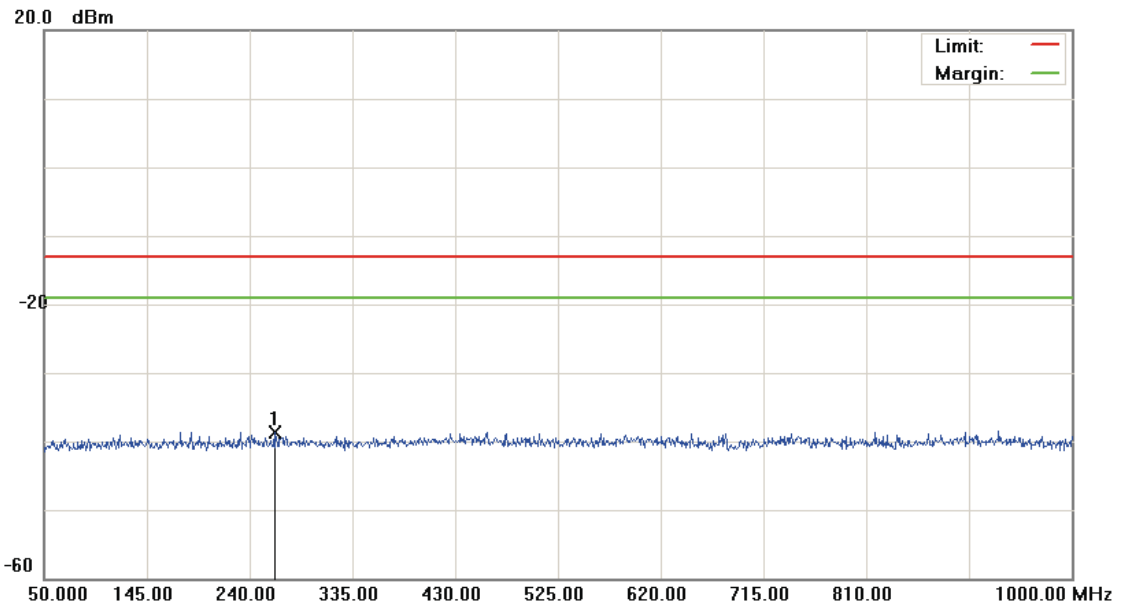
\*:Maximum data    x:Over limit    !:over margin

File: AR7550(CH9538)

Data: #2

Date: 2013/3/8

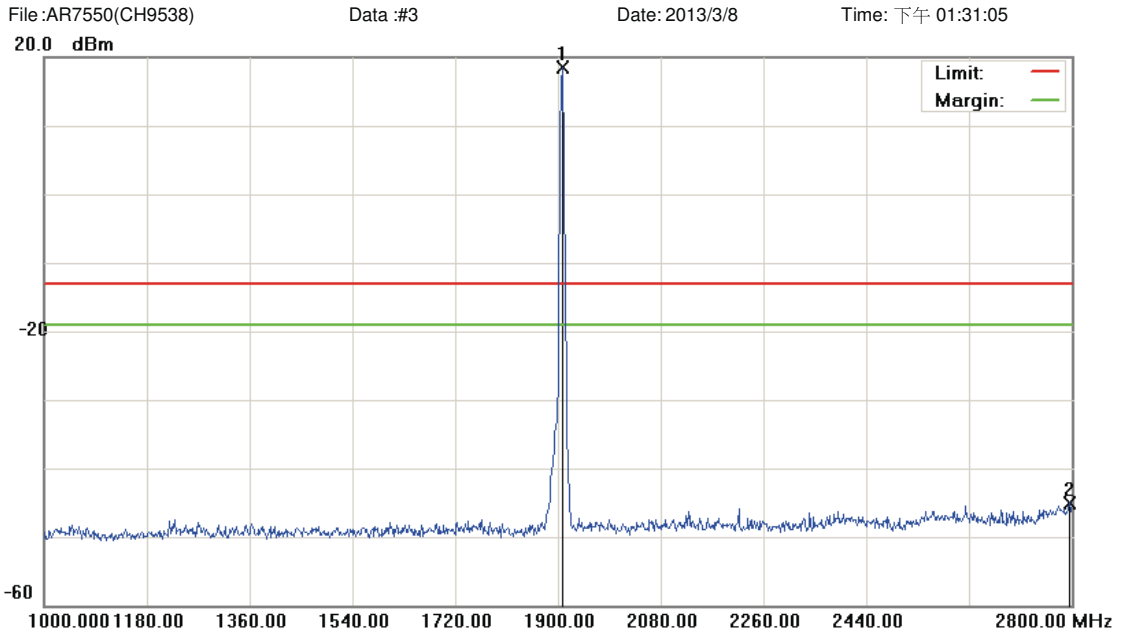
Time: 下午 01:27:23



Site: : RF Conducted	Polarization: <i>Conducted po</i>	Temperature: 23 °C
Limit: FCC Part 24 conducted(9k-26.5G)	Power: AC 120V/60Hz	Humidity: 55.2 %
EUT: Wireless Module	Distance:	RBW: 1000 KHz VBW: 1000 KHz
M/N: AirPrime AR7550		
Mode: Mode 1		
Note: CH 9538		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Detector	Antenna Height cm	Table Degree degree	Comment
1	*	262.8000	-51.90	13.29	-38.61	-13.00	-25.61	peak			

\*:Maximum data    x:Over limit    !:over margin



Site: : RF Conducted	Polarization: <i>Conducted po</i>	Temperature: 23 °C
Limit: FCC Part 24 conducted(9k-26.5G)	Power: AC 120V/60Hz	Humidity: 55.2 %
EUT: Wireless Module	Distance:	RBW: 1000 KHz VBW: 1000 KHz
M/N: AirPrime AR7550		
Mode: Mode 1		
Note: CH 9538		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Detector	Antenna Height cm	Table Degree degree	Comment
1	*	1909.000	12.68	5.80	18.48	-13.00	31.48	peak			Tx
2		2796.400	-50.90	5.90	-45.00	-13.00	-32.00	peak			

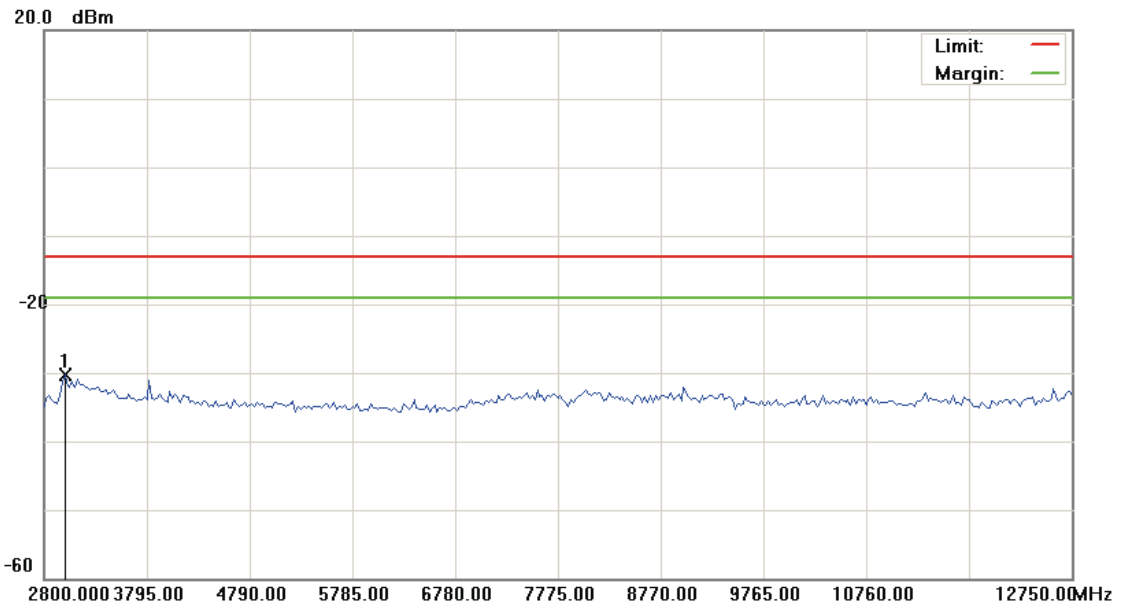
\*:Maximum data    x:Over limit    !:over margin

File: AR7550(CH9538)

Data: #4

Date: 2013/3/8

Time: 下午 01:58:26



Site: : RF Conducted	Polarization: <i>Conducted po</i>	Temperature: 23 °C
Limit: FCC Part 24 conducted(9k-26.5G)	Power: AC 120V/60Hz	Humidity: 55.2 %
EUT: Wireless Module	Distance:	RBW: 1000 KHz VBW: 1000 KHz
M/N: AirPrime AR7550		
Mode: Mode 1		
Note: CH 9538		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree degree	Comment
1	*	2999.000	-35.72	5.48	-30.24	-13.00	-17.24	peak		

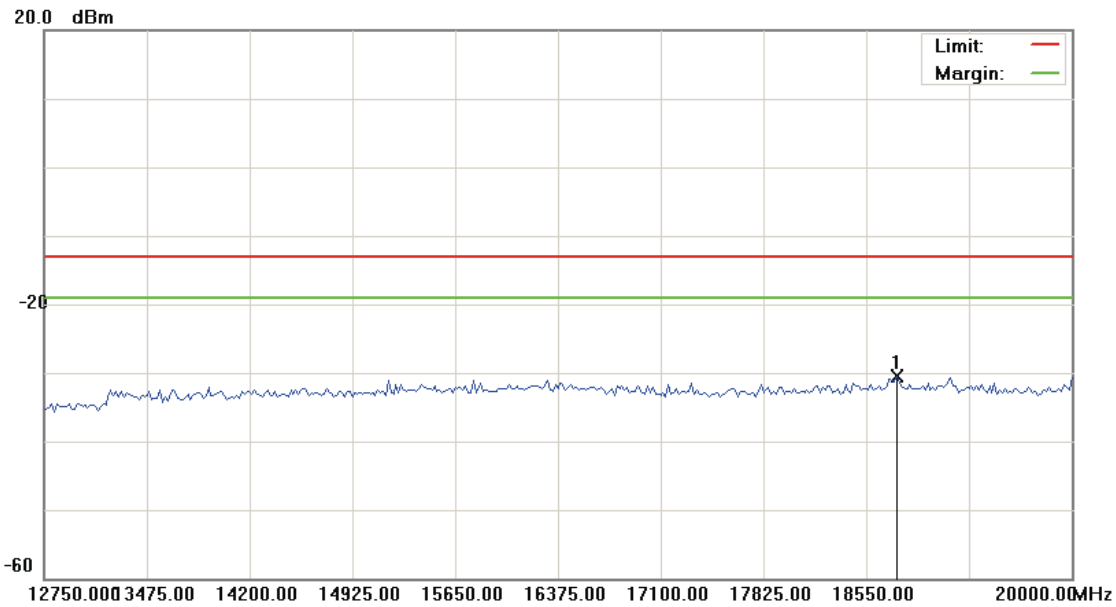
\*:Maximum data x:Over limit !:over margin

File: AR7550(CH9538)

Data: #5

Date: 2013/3/8

Time: 下午 01:58:46



Site: : RF Conducted	Polarization: <i>Conducted po</i>	Temperature: 23 °C
Limit: FCC Part 24 conducted(9k-26.5G)	Power: AC 120V/60Hz	Humidity: 55.2 %
EUT: Wireless Module	Distance:	RBW: 1000 KHz VBW: 1000 KHz
M/N: AirPrime AR7550		
Mode: Mode 1		
Note: CH 9538		

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree
		MHz	dBm	dB	dBm	dBm	dB	cm	degree
1	*	18767.500	-37.63	7.09	-30.54	-13.00	-17.54	peak	

\*:Maximum data x:Over limit !:over margin

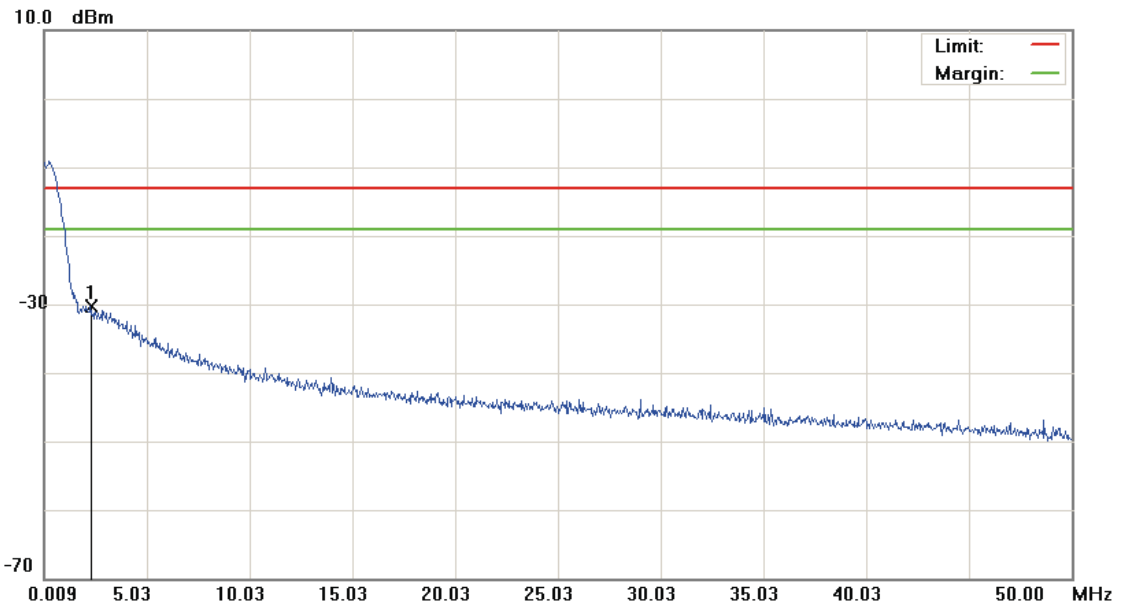


File: AR7550(CH4132)

Data: #1

Date: 2013/3/8

Time: 下午 02:09:20



Site: : RF Conducted	Polarization: <i>Conducted po</i>	Temperature: 23 °C
Limit: FCC Part 22 conducted(9k-12.75G)	Power: AC 120V/60Hz	Humidity: 55.2 %
EUT: Wireless Module	Distance:	RBW: 1000 KHz VBW: 1000 KHz
M/N: AirPrime AR7550		
Mode: Mode 2		
Note: CH 4132		

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	Detector	Comment
		MHz	dBm	dB	dBm	dBm	dB	cm	degree		
1	*	2.2835	-61.34	31.07	-30.27	-13.00	-17.27			peak	

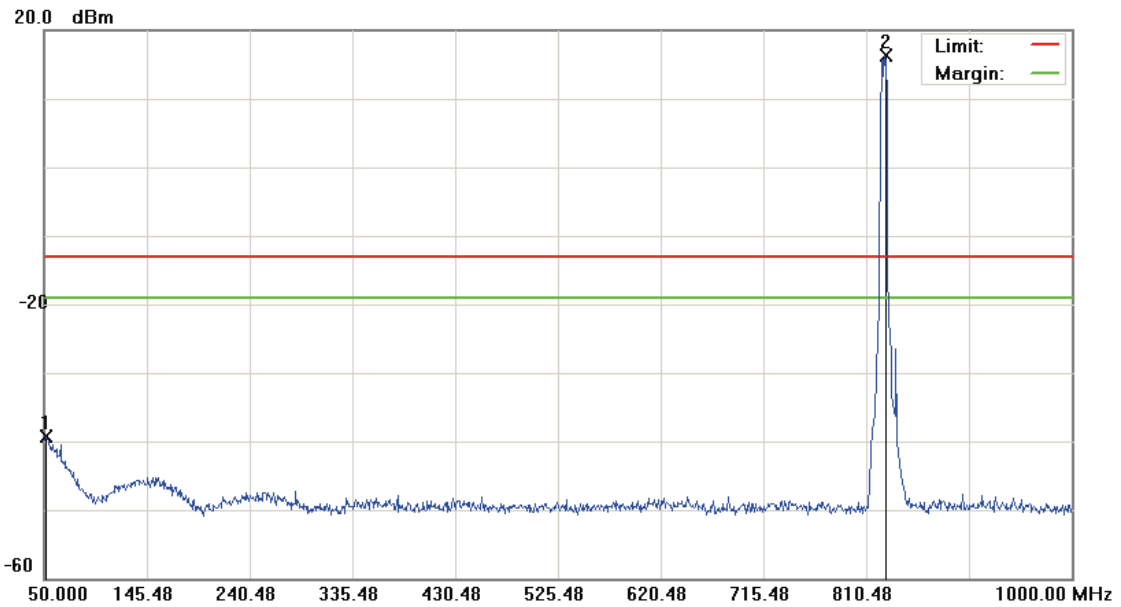
\*:Maximum data x:Over limit !:over margin

File: AR7550(CH4132)

Data :#2

Date: 2013/3/8

Time: 下午 02:09:44



Site: : RF Conducted	Polarization: <i>Conducted po</i>	Temperature: 23 °C
Limit: FCC Part 22 conducted(9k-12.75G)	Power: AC 120V/60Hz	Humidity: 55.2 %
EUT: Wireless Module	Distance:	RBW: 1000 KHz VBW: 1000 KHz
M/N: AirPrime AR7550		
Mode: Mode 2		
Note: CH 4132		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Detector	Antenna Height cm	Table Degree degree	Comment
1		51.9000	-53.60	14.36	-39.24	-13.00	-26.24	peak			
2	*	827.5750	12.38	3.87	16.25	-13.00	29.25	peak			Tx

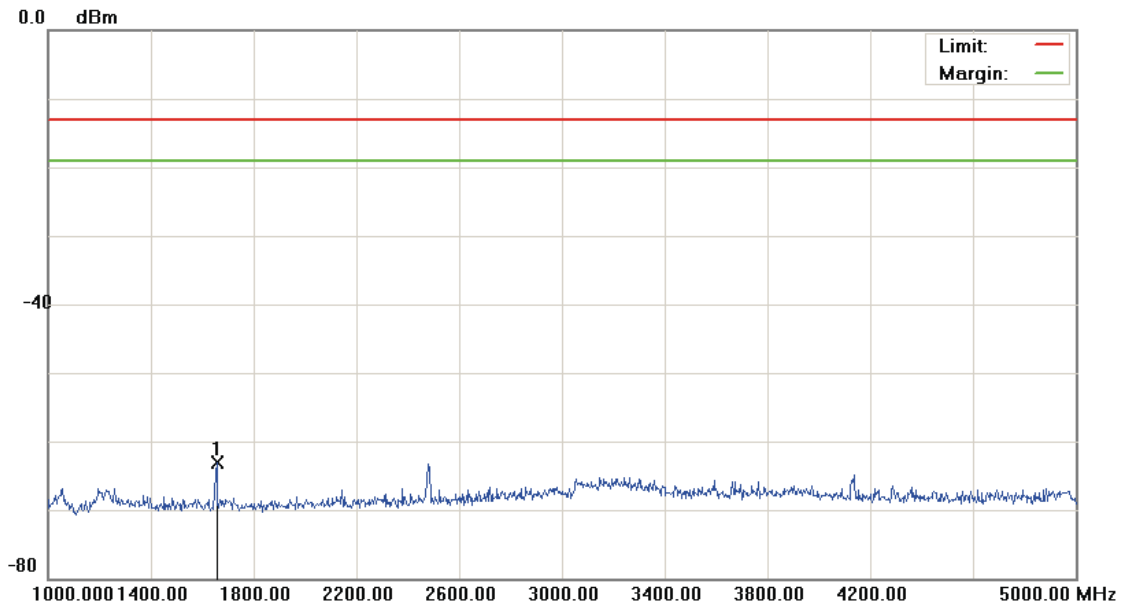
\*:Maximum data x:Over limit !:over margin

File: AR7550(CH4132)

Data: #3

Date: 2013/3/8

Time: 下午 02:51:52



Site: : RF Conducted	Polarization: <i>Conducted po</i>	Temperature: 23 °C
Limit: FCC Part 22 conducted(9k-12.75G)	Power: AC 120V/60Hz	Humidity: 55.2 %
EUT: Wireless Module	Distance:	RBW: 1000 KHz VBW: 1000 KHz
M/N: AirPrime AR7550		
Mode: Mode 2		
Note: CH 4132		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Detector	Antenna Height cm	Table Degree degree	Comment
1	*	1656.000	-67.54	4.45	-63.09	-13.00	-50.09	peak			

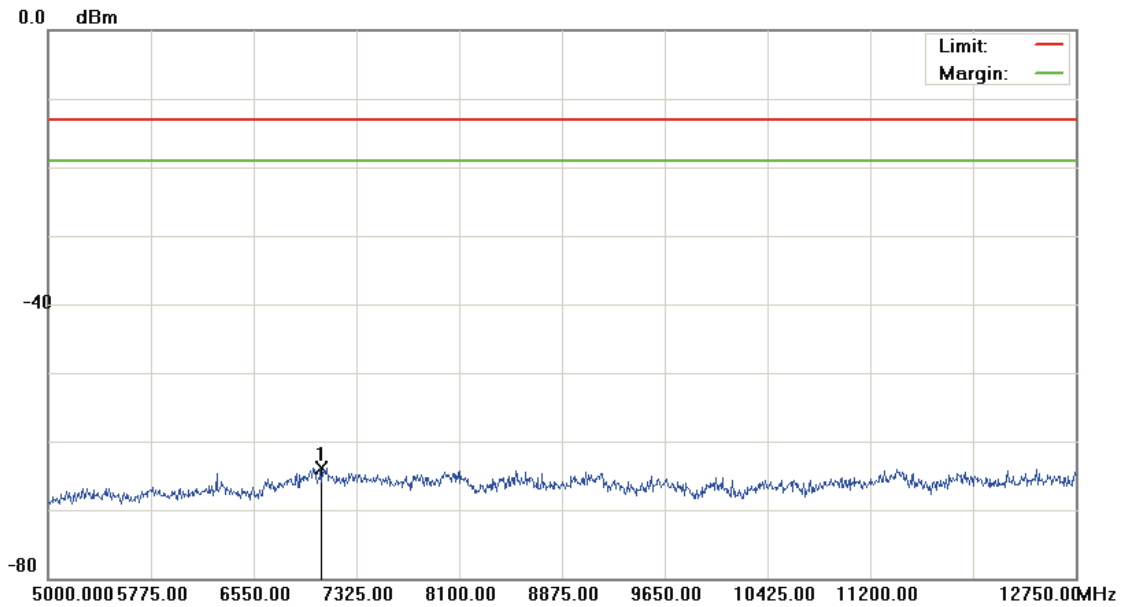
\*:Maximum data    x:Over limit    !:over margin

File: AR7550(CH4132)

Data: #4

Date: 2013/3/8

Time: 下午 02:52:14



Site: : RF Conducted	Polarization: <i>Conducted po</i>	Temperature: 23 °C
Limit: FCC Part 22 conducted(9k-12.75G)	Power: AC 120V/60Hz	Humidity: 55.2 %
EUT: Wireless Module	Distance:	RBW: 1000 KHz VBW: 1000 KHz
M/N: AirPrime AR7550		
Mode: Mode 2		
Note: CH 4132		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Detector	Antenna Height cm	Table Degree degree	Comment
1	*	7057.625	-68.74	4.85	-63.89	-13.00	-50.89	peak			

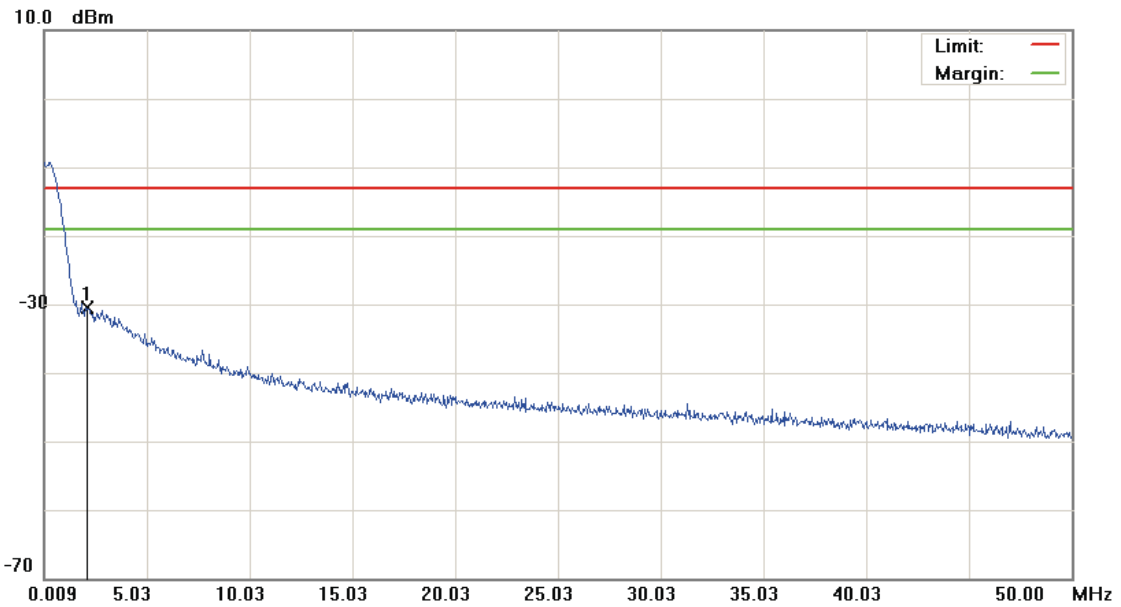
\*:Maximum data    x:Over limit    !:over margin

File: AR7550(CH4183)

Data: #1

Date: 2013/3/8

Time: 下午 02:11:27



Site: : RF Conducted	Polarization: <i>Conducted po</i>	Temperature: 23 °C
Limit: FCC Part 22 conducted(9k-12.75G)	Power: AC 120V/60Hz	Humidity: 55.2 %
EUT: Wireless Module	Distance:	RBW: 1000 KHz VBW: 1000 KHz
M/N: AirPrime AR7550		
Mode: Mode 2		
Note: CH 4183		

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	Detector	Comment
		MHz	dBm	dB	dBm	dBm	dB	cm	degree		
1	*	2.0836	-61.91	31.50	-30.41	-13.00	-17.41			peak	

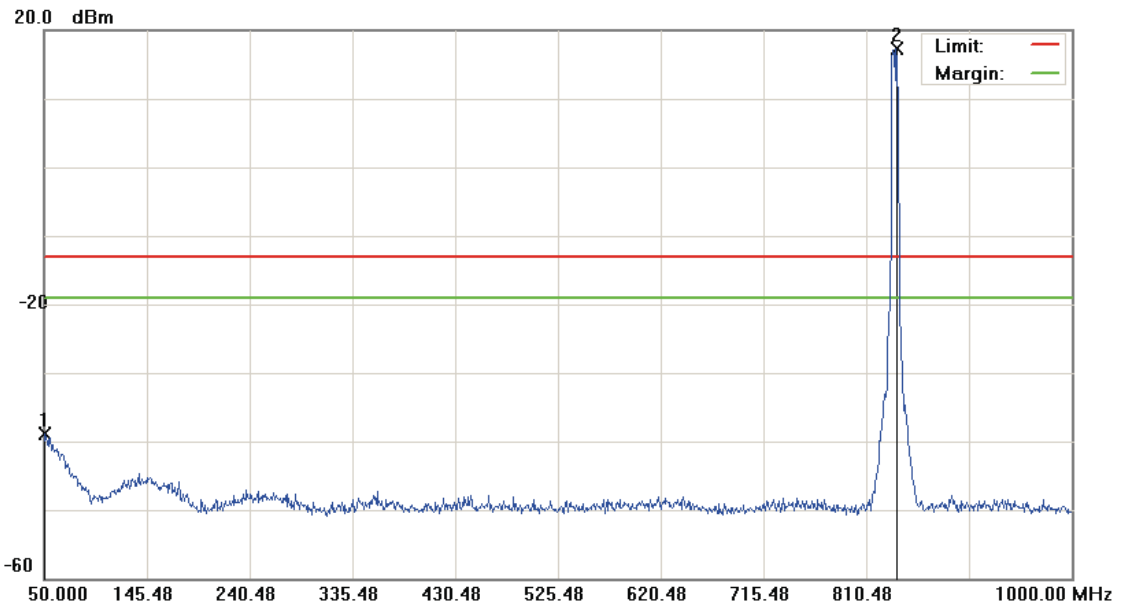
\*:Maximum data    x:Over limit    !:over margin

File: AR7550(CH4183)

Data :#2

Date: 2013/3/8

Time: 下午 02:11:51



Site: : RF Conducted	Polarization: <i>Conducted po</i>	Temperature: 23 °C
Limit: FCC Part 22 conducted(9k-12.75G)	Power: AC 120V/60Hz	Humidity: 55.2 %
EUT: Wireless Module	Distance:	RBW: 1000 KHz VBW: 1000 KHz
M/N: AirPrime AR7550		
Mode: Mode 2		
Note: CH 4183		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Detector	Antenna Height cm	Table Degree degree	Comment
1		50.4750	-53.43	14.61	-38.82	-13.00	-25.82	peak			
2	*	838.0250	13.28	3.97	17.25	-13.00	30.25	peak			Tx

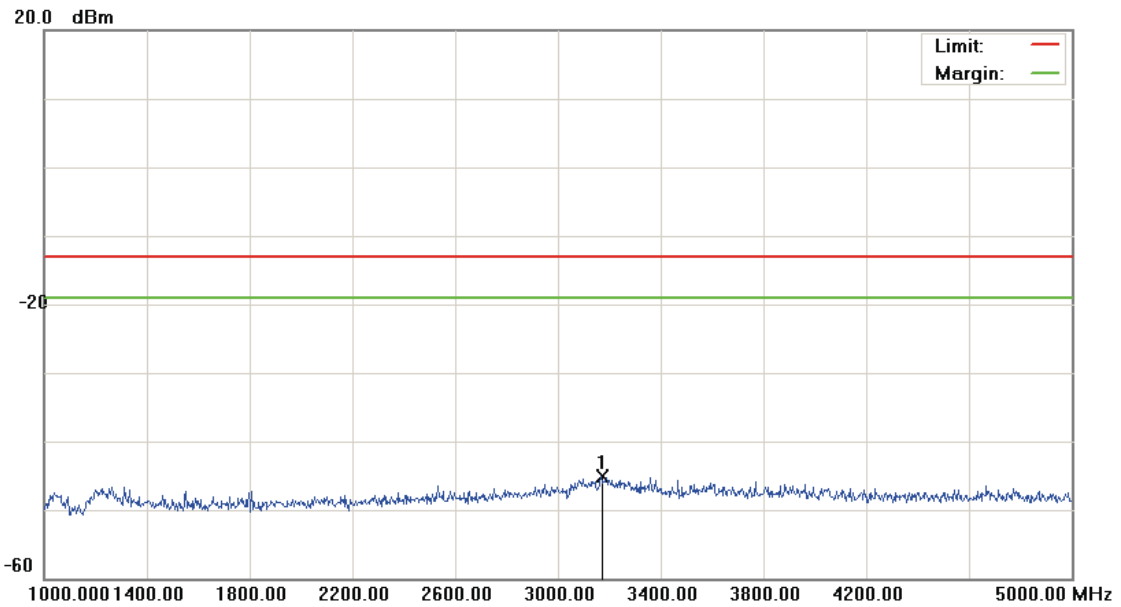
\*:Maximum data    x:Over limit    !:over margin

File: AR7550(CH4183)

Data: #3

Date: 2013/3/8

Time: 下午 02:53:30



Site: : RF Conducted	Polarization: <i>Conducted po</i>	Temperature: 23 °C
Limit: FCC Part 22 conducted(9k-12.75G)	Power: AC 120V/60Hz	Humidity: 55.2 %
EUT: Wireless Module	Distance:	RBW: 1000 KHz VBW: 1000 KHz
M/N: AirPrime AR7550		
Mode: Mode 2		
Note: CH 4183		

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	Detector	Comment
		MHz	dBm	dB	dBm	dBm	dB	cm	degree		
1	*	3170.000	-49.70	4.60	-45.10	-13.00	-32.10			peak	

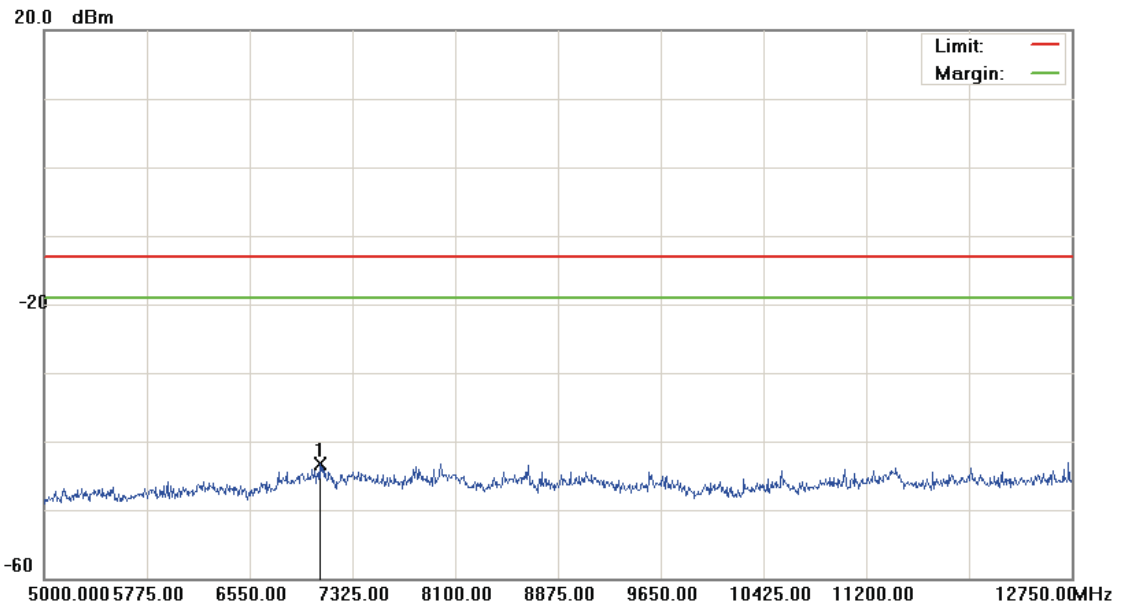
\*:Maximum data    x:Over limit    !:over margin

File: AR7550(CH4183)

Data: #4

Date: 2013/3/8

Time: 下午 02:53:53



Site: : RF Conducted	Polarization: <i>Conducted po</i>	Temperature: 23 °C
Limit: FCC Part 22 conducted(9k-12.75G)	Power: AC 120V/60Hz	Humidity: 55.2 %
EUT: Wireless Module	Distance:	RBW: 1000 KHz VBW: 1000 KHz
M/N: AirPrime AR7550		
Mode: Mode 2		
Note: CH 4183		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Detector	Antenna Height cm	Table Degree degree	Comment
1	*	7080.875	-48.32	4.98	-43.34	-13.00	-30.34	peak			

\*:Maximum data    x:Over limit    !:over margin

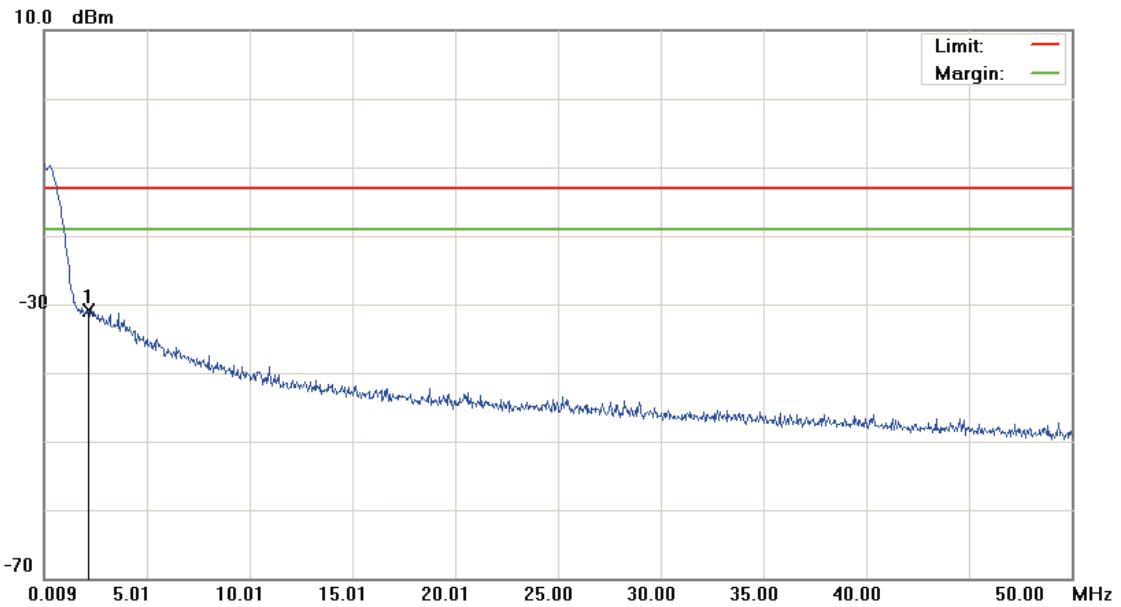


File: AR7550(CH4233)

Data: #1

Date: 2013/3/8

Time: 下午 02:13:33



Site: : RF Conducted	Polarization: <i>Conducted po</i>	Temperature: 23 °C
Limit: FCC Part 22 conducted(9k-12.75G)	Power: AC 120V/60Hz	Humidity: 55.2 %
EUT: Wireless Module	Distance:	RBW: 1000 KHz VBW: 1000 KHz
M/N: AirPrime AR7550		
Mode: Mode 2		
Note: CH 4233		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Detector	Antenna Height cm	Table Degree degree	Comment
1	*	2.1585	-62.32	31.41	-30.91	-13.00	-17.91	peak			

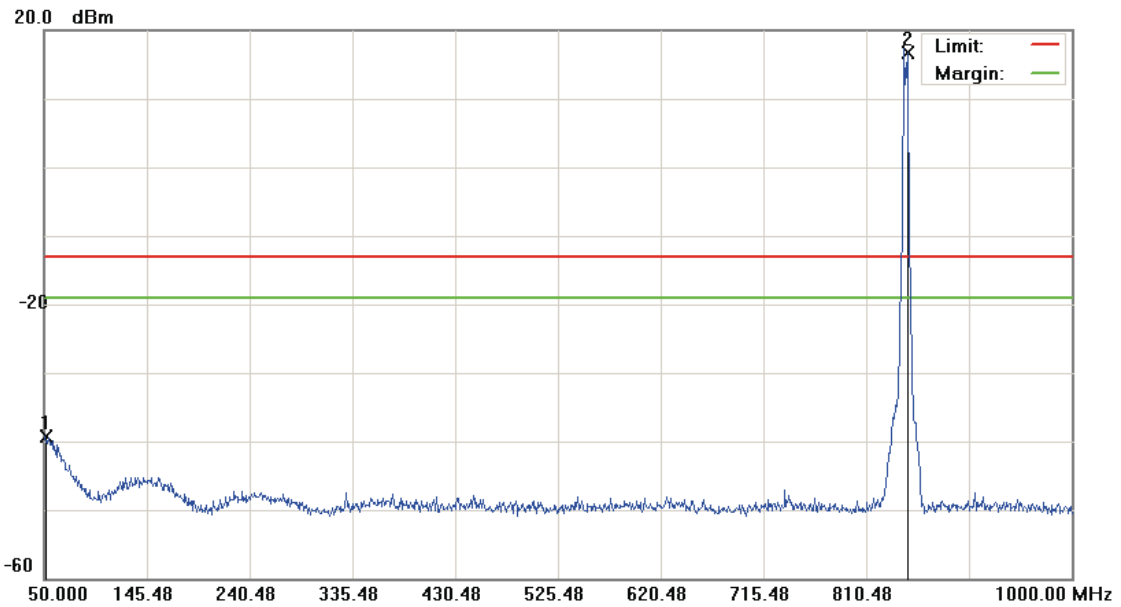
\*:Maximum data    x:Over limit    !:over margin

File: AR7550(CH4233)

Data :#2

Date: 2013/3/8

Time: 下午 02:13:57



Site: : RF Conducted	Polarization: <i>Conducted po</i>	Temperature: 23 °C
Limit: FCC Part 22 conducted(9k-12.75G)	Power: AC 120V/60Hz	Humidity: 55.2 %
EUT: Wireless Module	Distance:	RBW: 1000 KHz VBW: 1000 KHz
M/N: AirPrime AR7550		
Mode: Mode 2		
Note: CH 4233		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Detector	Antenna Height cm	Table Degree degree	Comment
1		51.4250	-53.68	14.44	-39.24	-13.00	-26.24	peak			
2	*	848.0000	12.76	3.98	16.74	-13.00	29.74	peak			Tx

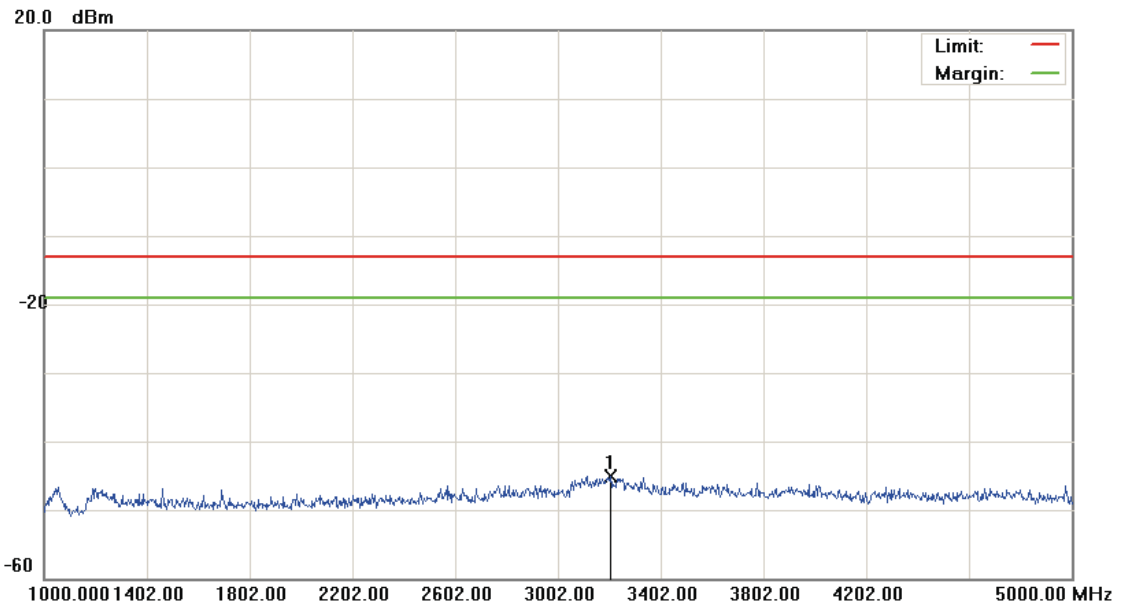
\*:Maximum data x:Over limit !:over margin

File: AR7550(CH4233)

Data :#3

Date: 2013/3/8

Time: 下午 02:54:26



Site: : RF Conducted	Polarization: <i>Conducted po</i>	Temperature: 23 °C
Limit: FCC Part 22 conducted(9k-12.75G)	Power: AC 120V/60Hz	Humidity: 55.2 %
EUT: Wireless Module	Distance:	RBW: 1000 KHz VBW: 1000 KHz
M/N: AirPrime AR7550		
Mode: Mode 2		
Note: CH 4233		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Detector	Antenna Height cm	Table Degree degree	Comment
1	*	3204.000	-49.77	4.66	-45.11	-13.00	-32.11	peak			

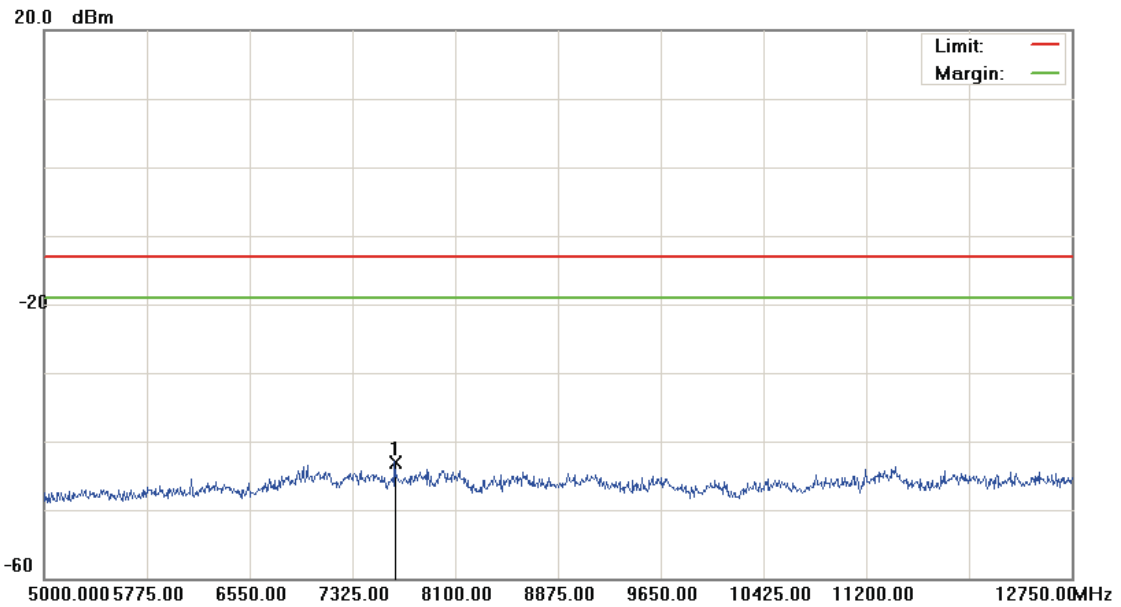
\*:Maximum data    x:Over limit    !:over margin

File: AR7550(CH4233)

Data: #4

Date: 2013/3/8

Time: 下午 02:54:49



Site: : RF Conducted	Polarization: <i>Conducted po</i>	Temperature: 23 °C
Limit: FCC Part 22 conducted(9k-12.75G)	Power: AC 120V/60Hz	Humidity: 55.2 %
EUT: Wireless Module	Distance:	RBW: 1000 KHz VBW: 1000 KHz
M/N: AirPrime AR7550		
Mode: Mode 2		
Note: CH 4233		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Detector	Antenna Height cm	Table Degree degree	Comment
1	*	7646.625	-48.12	5.12	-43.00	-13.00	-30.00	peak			

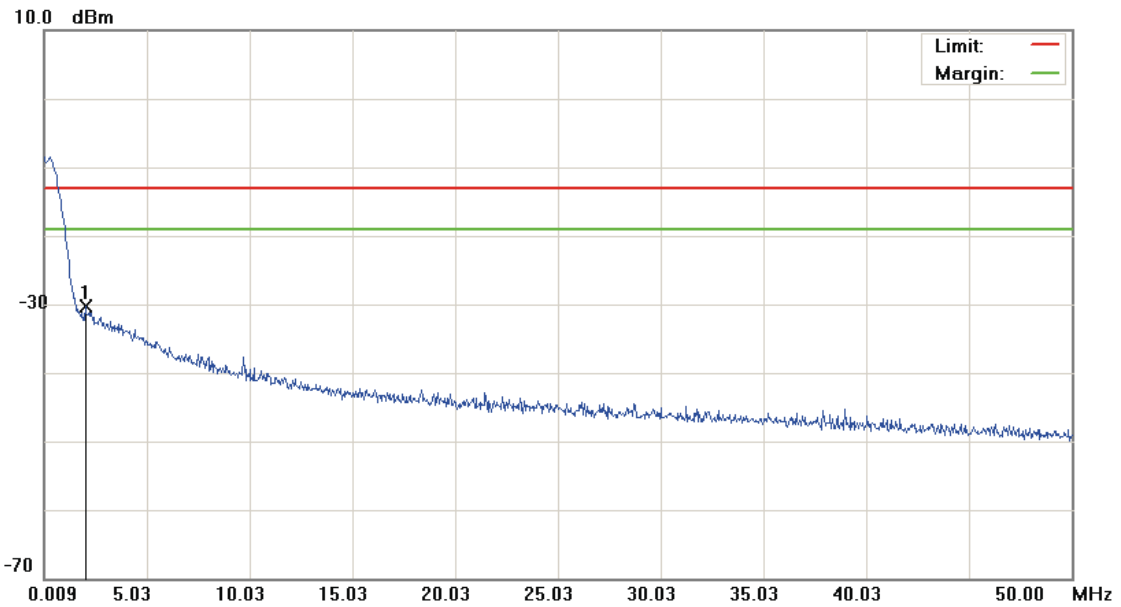
\*:Maximum data    x:Over limit    !:over margin

File: AR7550(CH1013)

Data: #1

Date: 2013/3/8

Time: 下午 02:24:23



Site: : RF Conducted	Polarization: <i>Conducted po</i>	Temperature: 23 °C
Limit: FCC Part 22 conducted(9k-12.75G)	Power: AC 120V/60Hz	Humidity: 55.2 %
EUT: Wireless Module	Distance:	RBW: 1000 KHz VBW: 1000 KHz
M/N: AirPrime AR7550		
Mode: Mode 3		
Note: CH 1013		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Detector	Antenna Height cm	Table Degree degree	Comment
1	*	2.0335	-61.61	31.41	-30.20	-13.00	-17.20	peak			

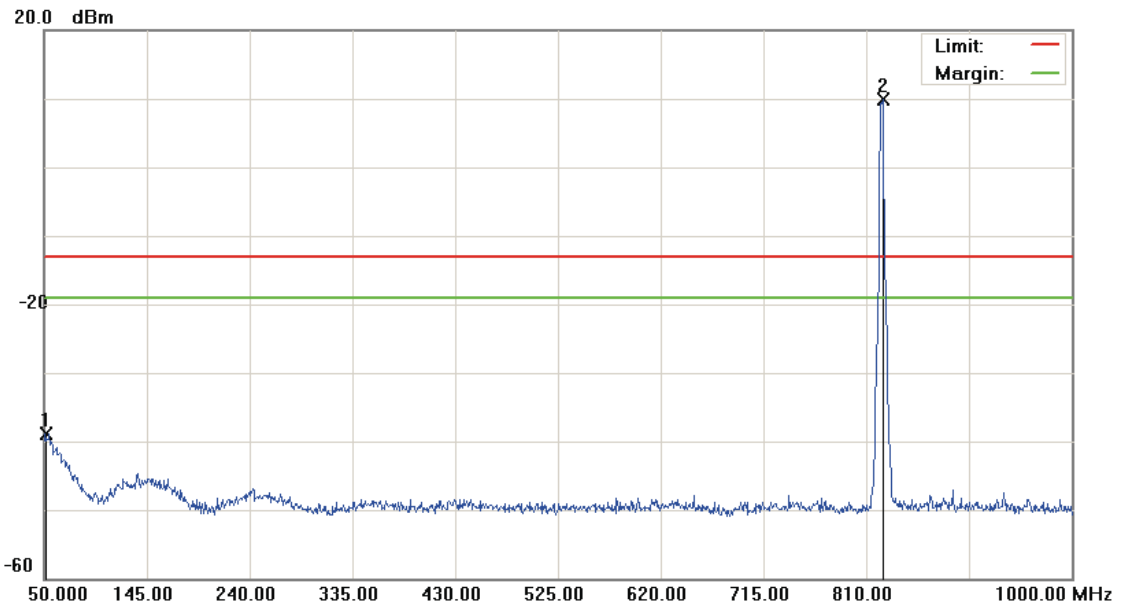
\*:Maximum data    x:Over limit    !:over margin

File: AR7550(CH1013)

Data :#2

Date: 2013/3/8

Time: 下午 02:24:47



Site: : RF Conducted

 Polarization: *Conducted po*

Temperature: 23 °C

Limit: FCC Part 22 conducted(9k-12.75G)

Power: AC 120V/60Hz

Humidity: 55.2 %

EUT: Wireless Module

Distance:

RBW: 1000 KHz VBW: 1000 KHz

M/N: AirPrime AR7550

Mode: Mode 3

Note: CH 1013

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Detector	Antenna Height cm	Table Degree degree	Comment
1		51.4250	-53.26	14.44	-38.82	-13.00	-25.82	peak			
2	*	825.2000	6.04	3.84	9.88	-13.00	22.88	peak			Tx

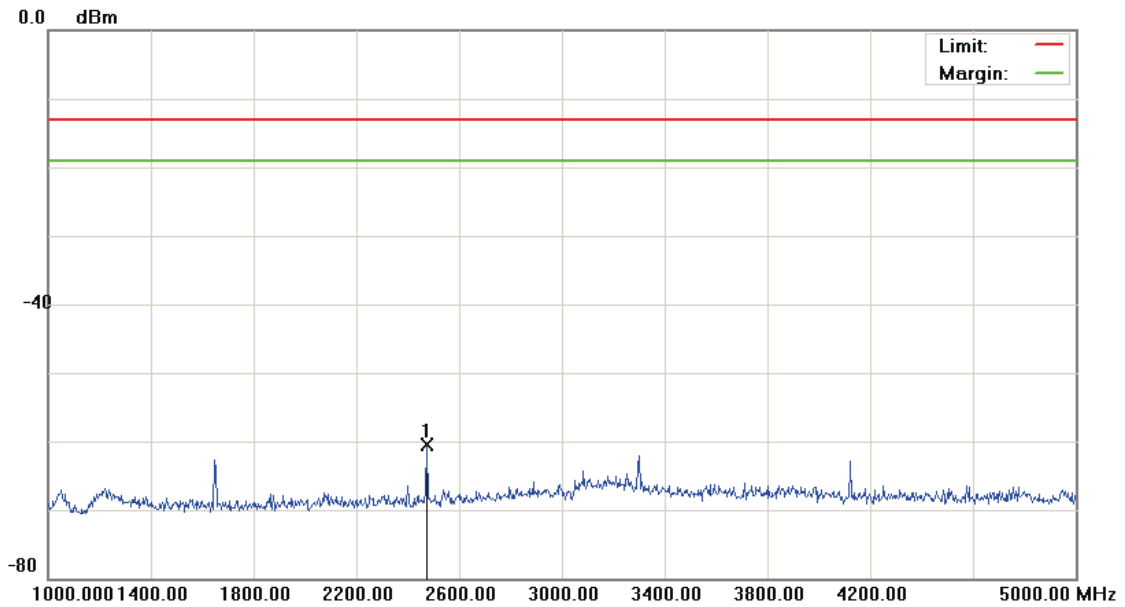
\*:Maximum data    x:Over limit    !:over margin

File: AR7550(CH1013)

Data: #3

Date: 2013/3/8

Time: 下午 02:30:27



Site: : RF Conducted	Polarization: <i>Conducted po</i>	Temperature: 23 °C
Limit: FCC Part 22 conducted(9k-12.75G)	Power: AC 120V/60Hz	Humidity: 55.2 %
EUT: Wireless Module	Distance:	RBW: 1000 KHz VBW: 1000 KHz
M/N: AirPrime AR7550		
Mode: Mode 3		
Note: CH 1013		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Detector	Antenna Height cm	Table Degree degree	Comment
1	*	2474.000	-64.90	4.45	-60.45	-13.00	-47.45	peak			

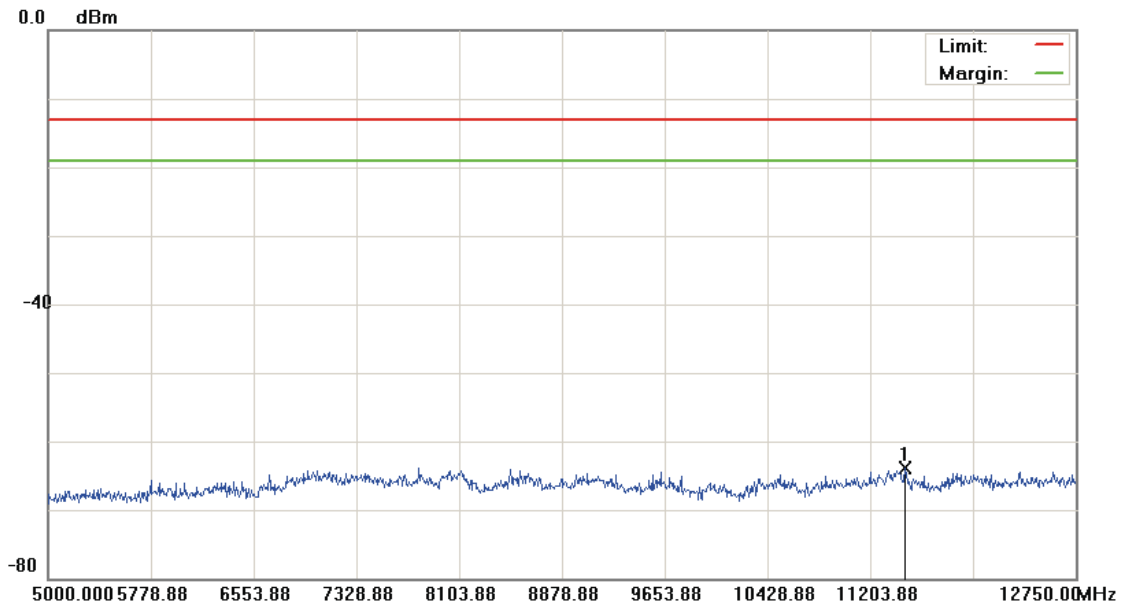
\*:Maximum data    x:Over limit    !:over margin

File: AR7550(CH1013)

Data: #4

Date: 2013/3/8

Time: 下午 02:30:50



Site: : RF Conducted	Polarization: <i>Conducted po</i>	Temperature: 23 °C
Limit: FCC Part 22 conducted(9k-12.75G)	Power: AC 120V/60Hz	Humidity: 55.2 %
EUT: Wireless Module	Distance:	RBW: 1000 KHz VBW: 1000 KHz
M/N: AirPrime AR7550		
Mode: Mode 3		
Note: CH 1013		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Detector	Antenna Height cm	Table Degree degree	Comment
1	*	11463.500	-69.28	5.35	-63.93	-13.00	-50.93	peak			

\*:Maximum data    x:Over limit    !:over margin

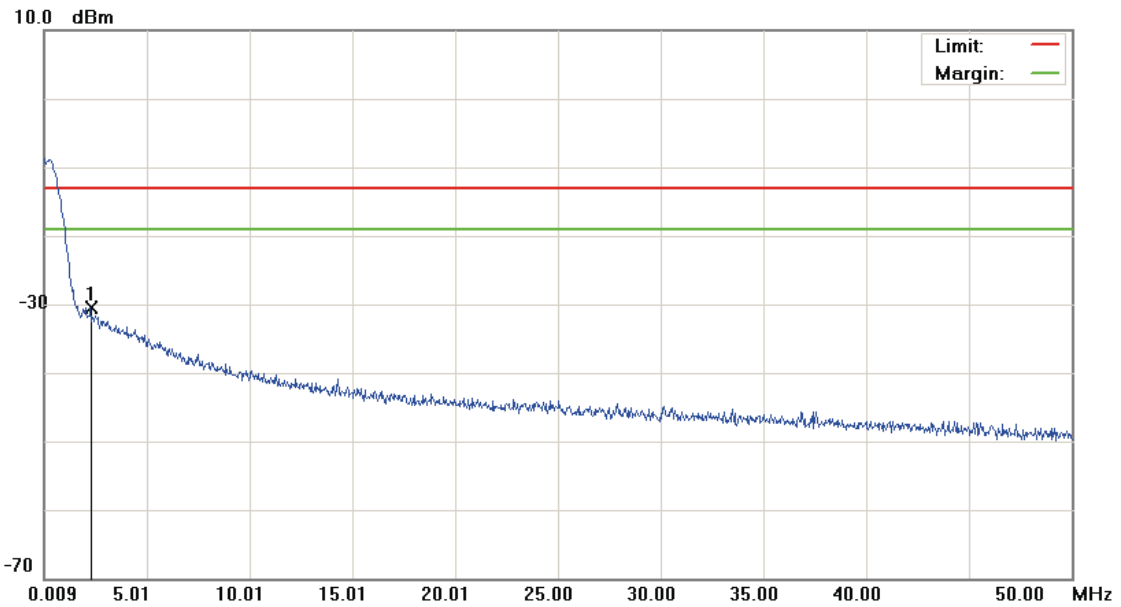


File: AR7550(CH384)

Data: #1

Date: 2013/3/8

Time: 下午 02:22:27



Site: : RF Conducted	Polarization: <i>Conducted po</i>	Temperature: 23 °C
Limit: FCC Part 22 conducted(9k-12.75G)	Power: AC 120V/60Hz	Humidity: 55.2 %
EUT: Wireless Module	Distance:	RBW: 1000 KHz VBW: 1000 KHz
M/N: AirPrime AR7550		
Mode: Mode 3		
Note: CH 384		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Detector	Antenna Height cm	Table Degree degree	Comment
1	*	2.2835	-61.50	31.07	-30.43	-13.00	-17.43	peak			

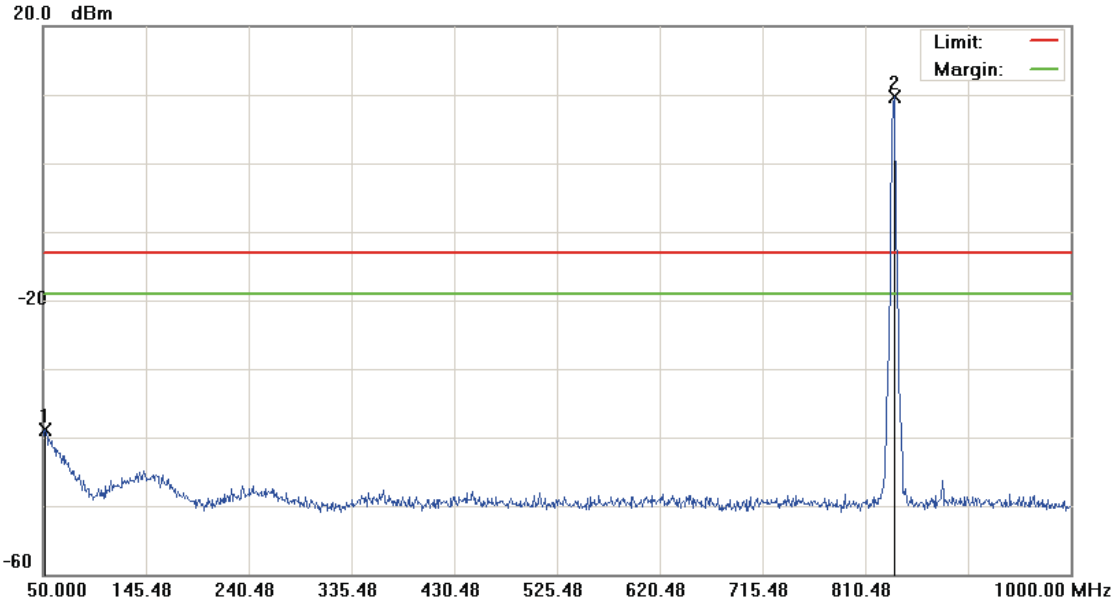
\*:Maximum data    x:Over limit    !:over margin

File :AR7550(CH384)

Data :#2

Date: 2013/3/8

Time: 下午 02:22:51



Site: : RF Conducted	Polarization: <i>Conducted po</i>	Temperature: 23 °C
Limit: FCC Part 22 conducted(9k-12.75G)	Power: AC 120V/60Hz	Humidity: 55.2 %
EUT: Wireless Module	Distance:	RBW: 1000 KHz VBW: 1000 KHz
M/N: AirPrime AR7550		
Mode: Mode 3		
Note: CH 384		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Detector	Antenna Height cm	Table Degree degree	Comment
1		51.9000	-53.26	14.36	-38.90	-13.00	-25.90	peak			
2	*	837.0750	5.79	3.96	9.75	-13.00	22.75	peak			Tx

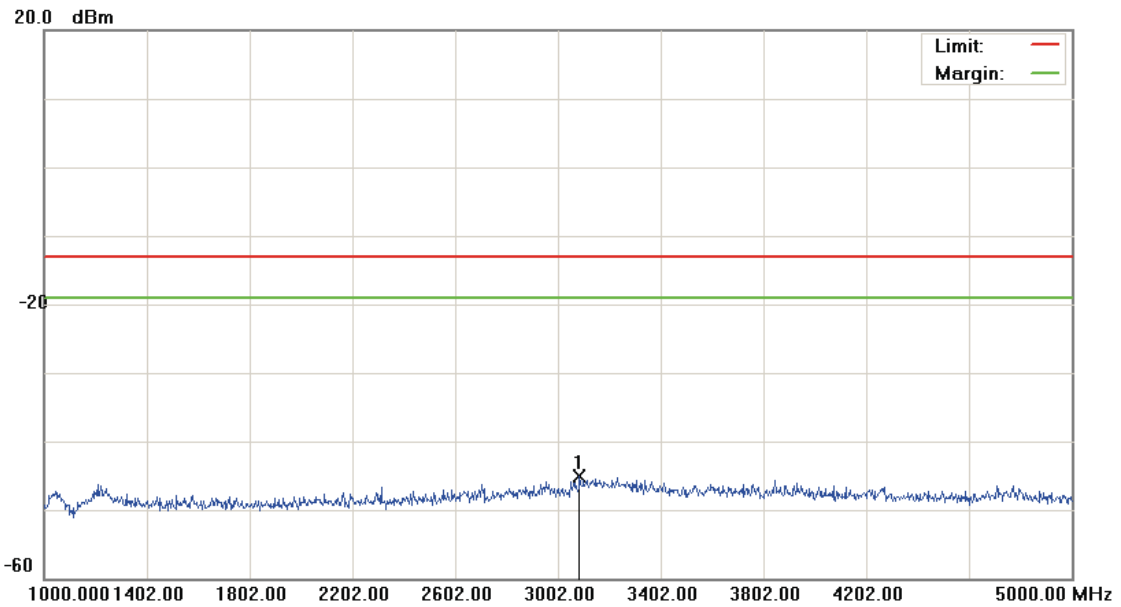
\*:Maximum data x:Over limit !:over margin

File :AR7550(CH384)

Data :#3

Date: 2013/3/8

Time: 下午 02:45:48



Site: : RF Conducted	Polarization: <i>Conducted po</i>	Temperature: 23 °C
Limit: FCC Part 22 conducted(9k-12.75G)	Power: AC 120V/60Hz	Humidity: 55.2 %
EUT: Wireless Module	Distance:	RBW: 1000 KHz VBW: 1000 KHz
M/N: AirPrime AR7550		
Mode: Mode 3		
Note: CH 384		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Detector	Antenna Height cm	Table Degree degree	Comment
1	*	3084.000	-49.65	4.48	-45.17	-13.00	-32.17	peak			

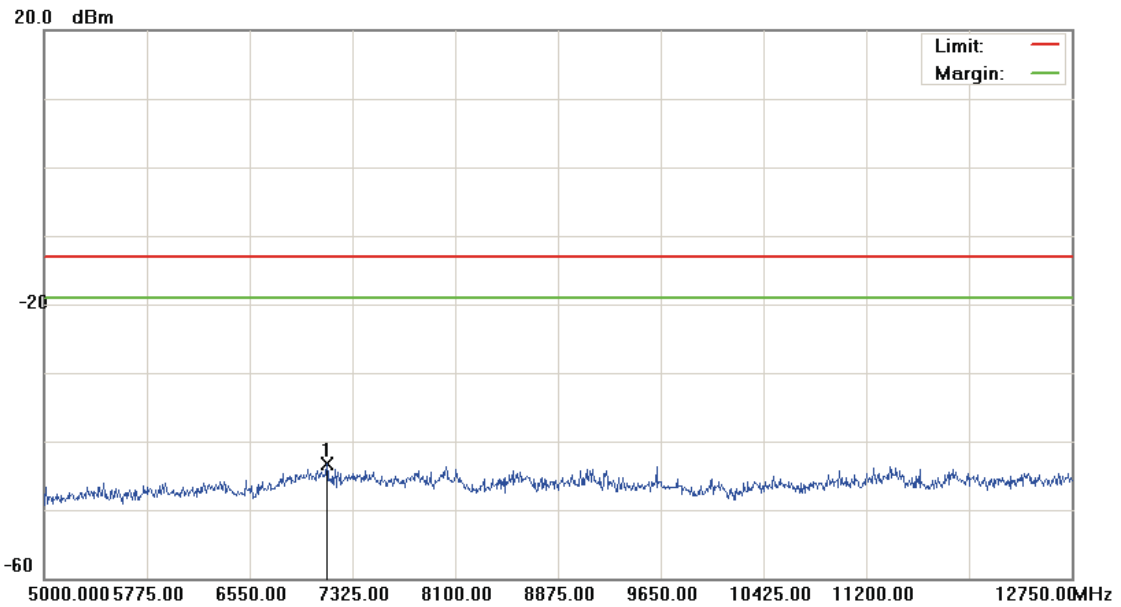
\*:Maximum data    x:Over limit    !:over margin

File :AR7550(CH384)

Data :#4

Date: 2013/3/8

Time: 下午 02:46:11



Site: : RF Conducted	Polarization: <i>Conducted po</i>	Temperature: 23 °C
Limit: FCC Part 22 conducted(9k-12.75G)	Power: AC 120V/60Hz	Humidity: 55.2 %
EUT: Wireless Module	Distance:	RBW: 1000 KHz VBW: 1000 KHz
M/N: AirPrime AR7550		
Mode: Mode 3		
Note: CH 384		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Detector	Antenna Height cm	Table Degree degree	Comment
1	*	7131.250	-48.58	5.22	-43.36	-13.00	-30.36	peak			

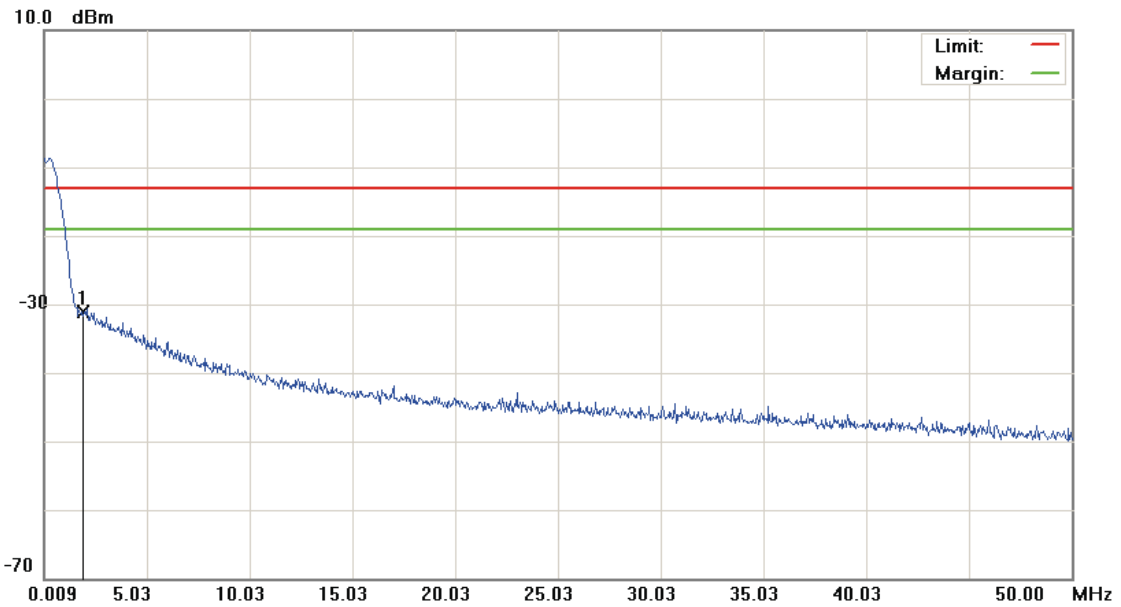
\*:Maximum data x:Over limit !:over margin

File: AR7550(CH777)

Data: #1

Date: 2013/3/8

Time: 下午 02:26:12



Site: : RF Conducted	Polarization: <i>Conducted po</i>	Temperature: 23 °C
Limit: FCC Part 22 conducted(9k-12.75G)	Power: AC 120V/60Hz	Humidity: 55.2 %
EUT: Wireless Module	Distance:	RBW: 1000 KHz VBW: 1000 KHz
M/N: AirPrime AR7550		
Mode: Mode 3		
Note: CH 777		

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	Detector	Comment
		MHz	dBm	dB	dBm	dBm	dB	cm	degree		
1	*	1.8836	-62.30	31.17	-31.13	-13.00	-18.13			peak	

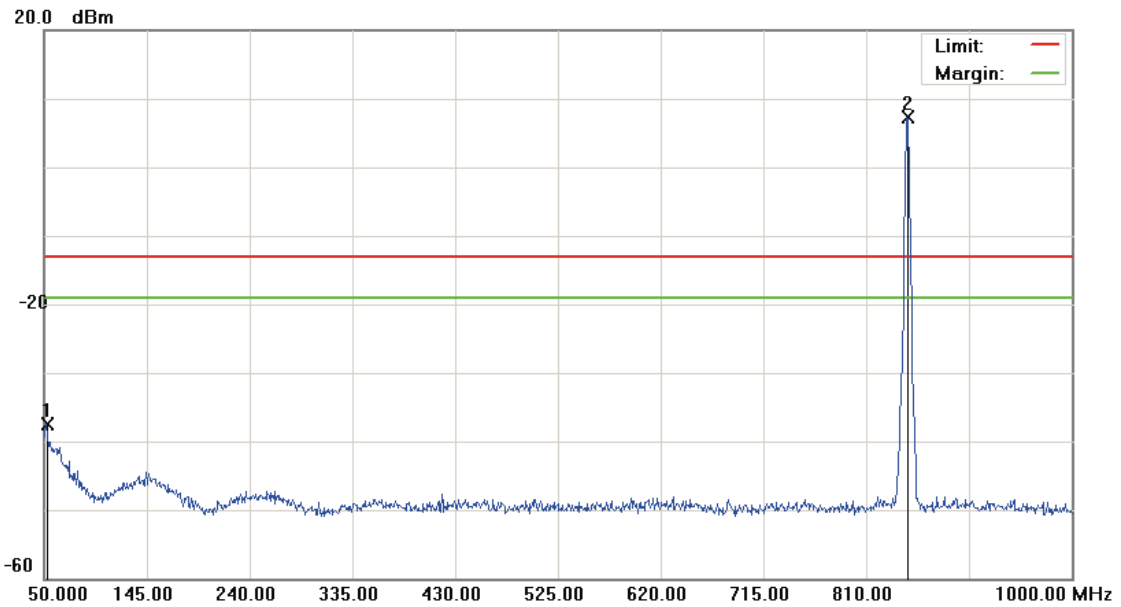
\*:Maximum data    x:Over limit    !:over margin

File: AR7550(CH777)

Data: #2

Date: 2013/3/8

Time: 下午 02:26:36



Site: : RF Conducted

 Polarization: *Conducted po*

Temperature: 23 °C

Limit: FCC Part 22 conducted(9k-12.75G)

Power: AC 120V/60Hz

Humidity: 55.2 %

EUT: Wireless Module

Distance:

RBW: 1000 KHz VBW: 1000 KHz

M/N: AirPrime AR7550

Mode: Mode 3

Note: CH 777

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Detector	Antenna Height cm	Table Degree degree	Comment
1		52.3750	-51.79	14.27	-37.52	-13.00	-24.52	peak			
2	*	847.5250	3.25	3.98	7.23	-13.00	20.23	peak			Tx

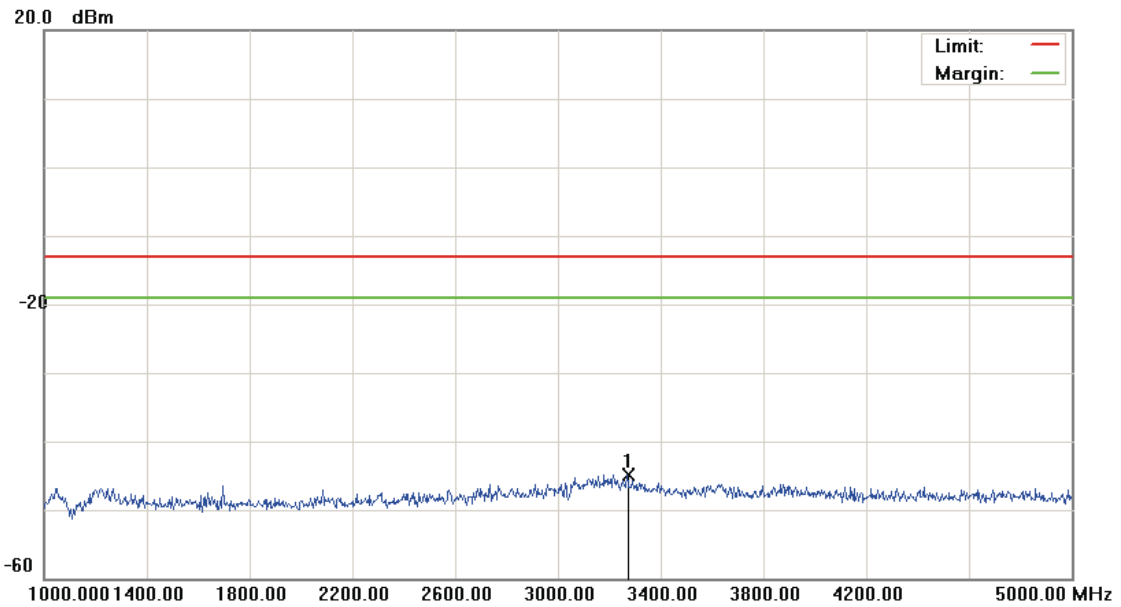
\*:Maximum data    x:Over limit    !:over margin

File :AR7550(CH777)

Data :#3

Date: 2013/3/8

Time: 下午 02:46:50



Site: : RF Conducted	Polarization: <i>Conducted po</i>	Temperature: 23 °C
Limit: FCC Part 22 conducted(9k-12.75G)	Power: AC 120V/60Hz	Humidity: 55.2 %
EUT: Wireless Module	Distance:	RBW: 1000 KHz VBW: 1000 KHz
M/N: AirPrime AR7550		
Mode: Mode 3		
Note: CH 777		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree degree	Comment
1	*	3270.000	-49.40	4.59	-44.81	-13.00	-31.81	peak		

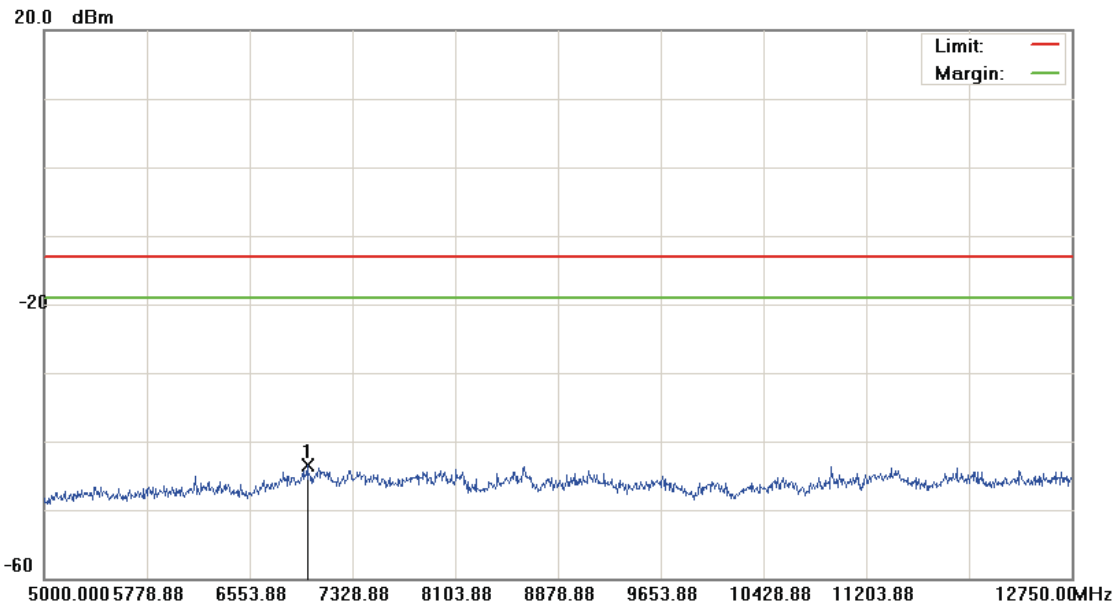
\*:Maximum data x:Over limit !:over margin

File: AR7550(CH777)

Data: #4

Date: 2013/3/8

Time: 下午 02:47:13



Site: : RF Conducted	Polarization: <i>Conducted po</i>	Temperature: 23 °C
Limit: FCC Part 22 conducted(9k-12.75G)	Power: AC 120V/60Hz	Humidity: 55.2 %
EUT: Wireless Module	Distance:	RBW: 1000 KHz VBW: 1000 KHz
M/N: AirPrime AR7550		
Mode: Mode 3		
Note: CH 777		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Detector	Antenna Height cm	Table Degree degree	Comment
1	*	6987.875	-48.50	4.95	-43.55	-13.00	-30.55	peak			

\*:Maximum data    x:Over limit    !:over margin

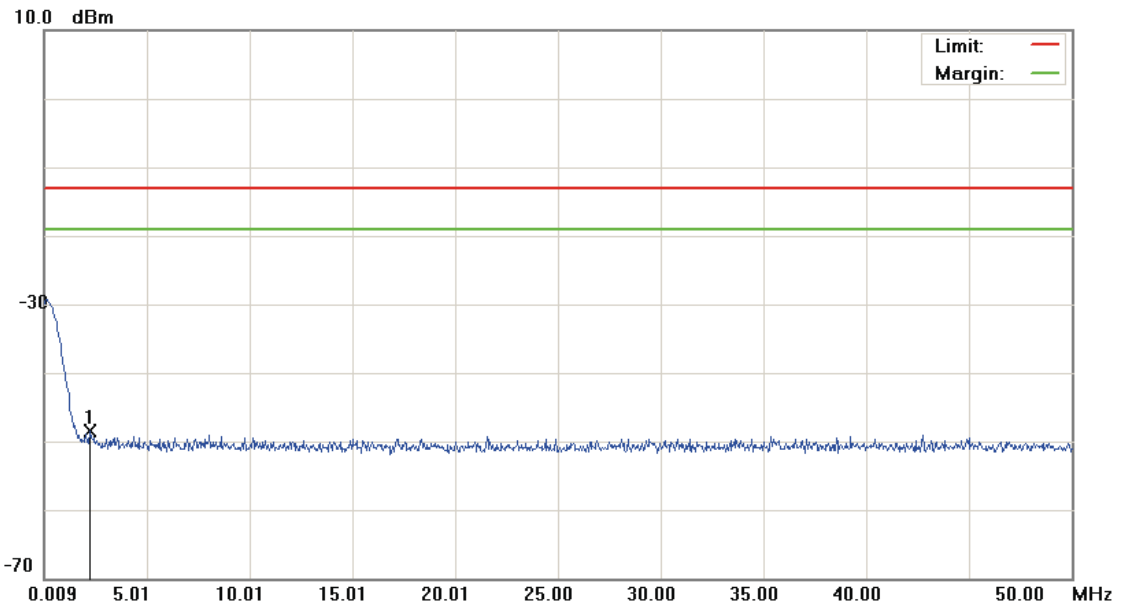


File :AR7550(CH25)

Data :#1

Date: 2013/3/8

Time: 下午 01:36:31



Site: : RF Conducted	Polarization: <i>Conducted po</i>	Temperature: 23 °C
Limit: FCC Part 24 conducted(9k-26.5G)	Power: AC 120V/60Hz	Humidity: 55.2 %
EUT: Wireless Module	Distance:	RBW: 1000 KHz VBW: 1000 KHz
M/N: AirPrime AR7550		
Mode: Mode 4		
Note: CH 25		

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	Comment
		MHz	dBm	dB	dBm	dBm	dB	cm	degree	
1	*	2.2086	-61.54	13.09	-48.45	-13.00	-35.45	peak		

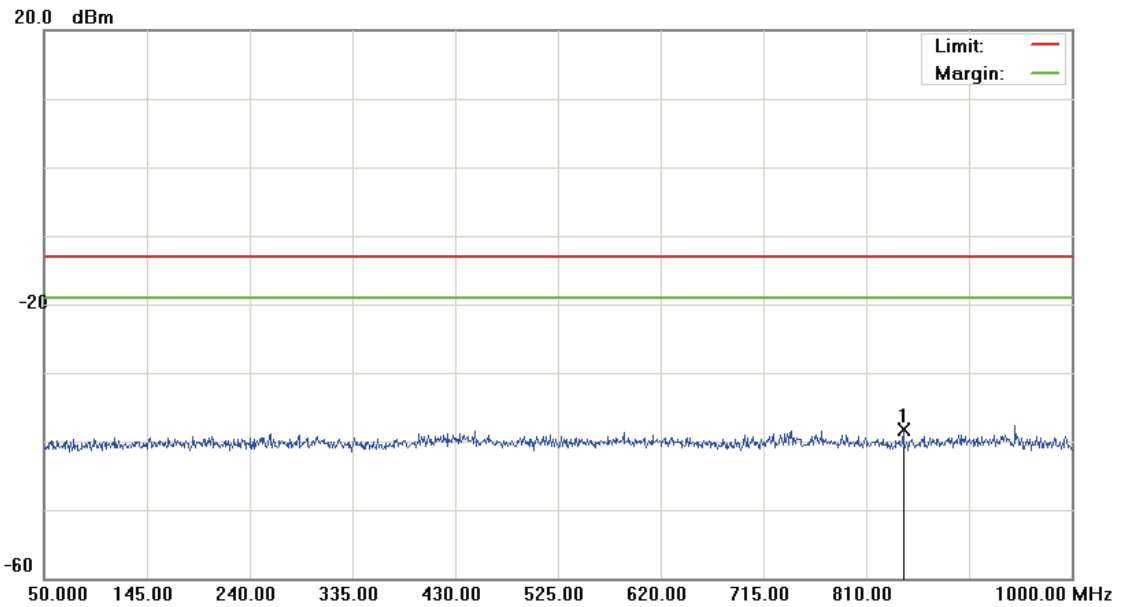
\*:Maximum data    x:Over limit    !:over margin

File :AR7550(CH25)

Data :#2

Date: 2013/3/8

Time: 下午 01:36:55



Site: : RF Conducted	Polarization: <i>Conducted po</i>	Temperature: 23 °C
Limit: FCC Part 24 conducted(9k-26.5G)	Power: AC 120V/60Hz	Humidity: 55.2 %
EUT: Wireless Module	Distance:	RBW: 1000 KHz VBW: 1000 KHz
M/N: AirPrime AR7550		
Mode: Mode 4		
Note: CH 25		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Detector	Antenna Height cm	Table Degree degree	Comment
1	*	844.2000	-51.51	13.22	-38.29	-13.00	-25.29	peak			

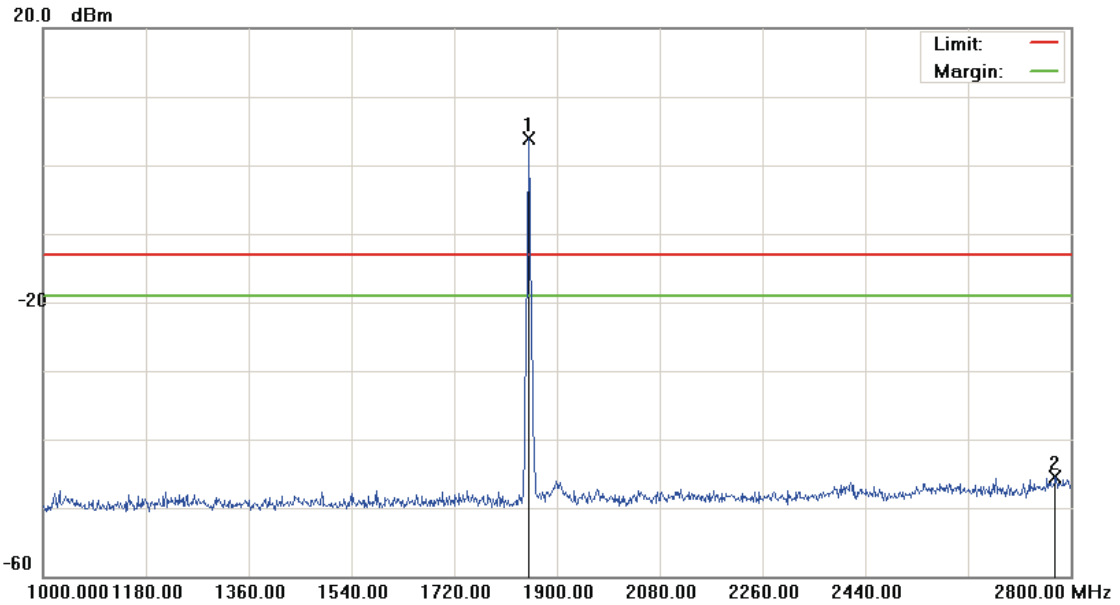
\*:Maximum data    x:Over limit    !:over margin

File :AR7550(CH25)

Data :#3

Date: 2013/3/8

Time: 下午 01:42:33



Site: : RF Conducted	Polarization: <i>Conducted po</i>	Temperature: 23 °C
Limit: FCC Part 24 conducted(9k-26.5G)	Power: AC 120V/60Hz	Humidity: 55.2 %
EUT: Wireless Module	Distance:	RBW: 1000 KHz VBW: 1000 KHz
M/N: AirPrime AR7550		
Mode: Mode 4		
Note: CH 25		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Detector	Antenna Height cm	Table Degree degree	Comment
1	*	1850.500	-0.39	4.26	3.87	-13.00	16.87	peak			Tx
2		2773.000	-51.34	5.78	-45.56	-13.00	-32.56	peak			

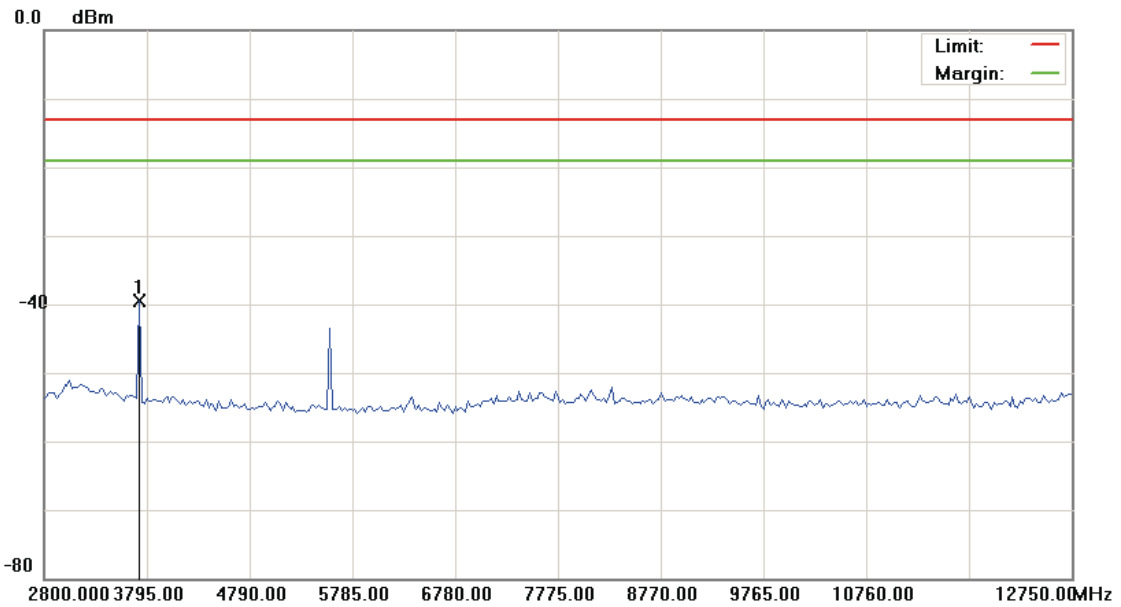
\*:Maximum data    x:Over limit    !:over margin

File :AR7550(CH25)

Data :#4

Date: 2013/3/8

Time: 下午 01:51:14



Site: : RF Conducted	Polarization: <i>Conducted po</i>	Temperature: 23 °C
Limit: FCC Part 24 conducted(9k-26.5G)	Power: AC 120V/60Hz	Humidity: 55.2 %
EUT: Wireless Module	Distance:	RBW: 1000 KHz VBW: 1000 KHz
M/N: AirPrime AR7550		
Mode: Mode 4		
Note: CH 25		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Detector	Antenna Height cm	Table Degree degree	Comment
1	*	3720.375	-44.39	4.88	-39.51	-13.00	-26.51	peak			

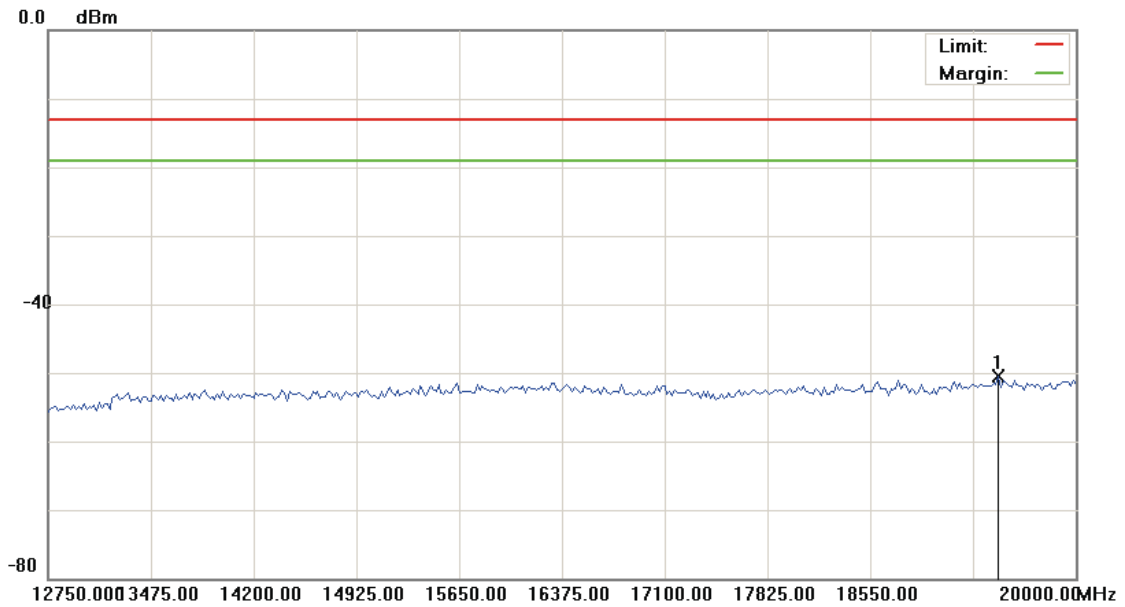
\*:Maximum data x:Over limit !:over margin

File :AR7550(CH25)

Data :#5

Date: 2013/3/8

Time: 下午 01:51:33



Site: : RF Conducted	Polarization: <i>Conducted po</i>	Temperature: 23 °C
Limit: FCC Part 24 conducted(9k-26.5G)	Power: AC 120V/60Hz	Humidity: 55.2 %
EUT: Wireless Module	Distance:	RBW: 1000 KHz VBW: 1000 KHz
M/N: AirPrime AR7550		
Mode: Mode 4		
Note: CH 25		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree degree	Comment
1	*	19456.250	-57.78	7.28	-50.50	-13.00	-37.50	peak		

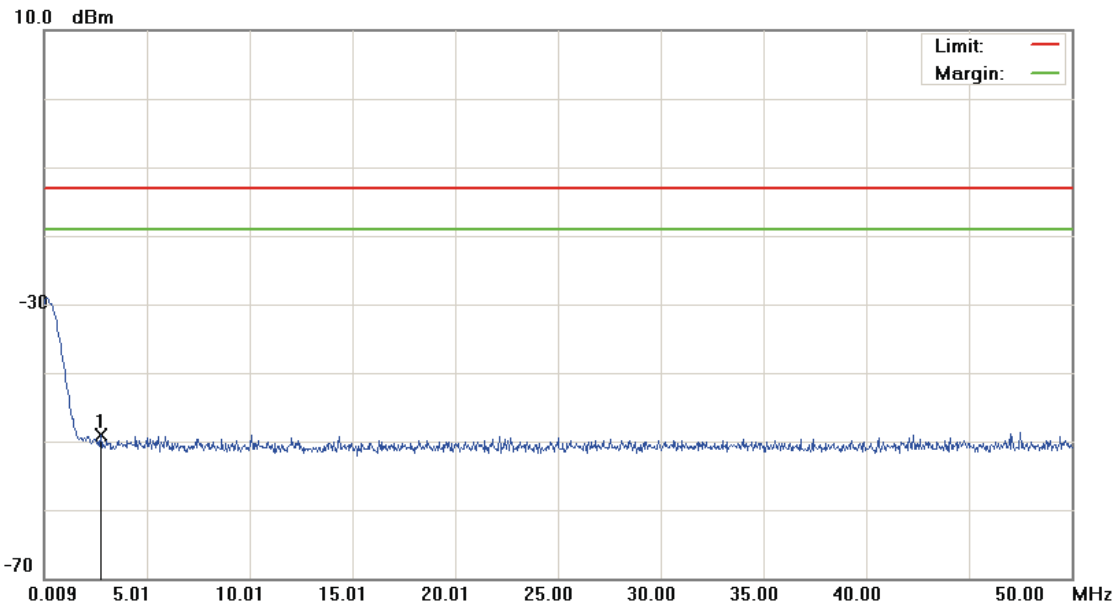
\*:Maximum data    x:Over limit    !:over margin

File :AR7550(CH600)

Data :#1

Date: 2013/3/8

Time: 下午 01:37:48



Site: : RF Conducted	Polarization: <i>Conducted po</i>	Temperature: 23 °C
Limit: FCC Part 24 conducted(9k-26.5G)	Power: AC 120V/60Hz	Humidity: 55.2 %
EUT: Wireless Module	Distance:	RBW: 1000 KHz VBW: 1000 KHz
M/N: AirPrime AR7550		
Mode: Mode 4		
Note: CH 600		

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	Comment
		MHz	dBm	dB	dBm	dBm	dB	cm	degree	
1	*	2.7585	-62.01	12.87	-49.14	-13.00	-36.14			peak

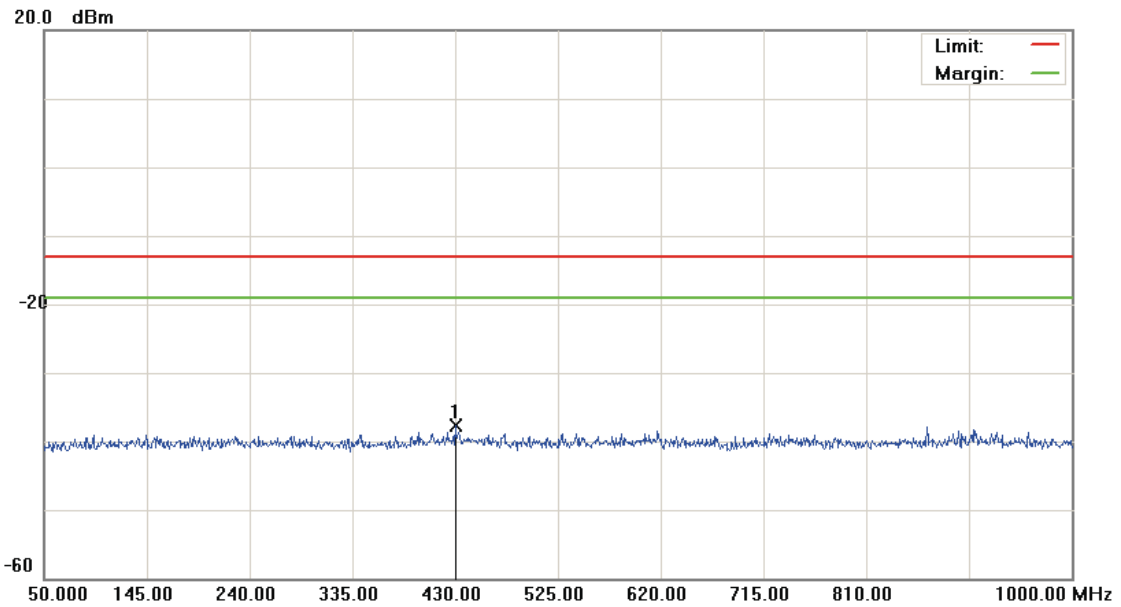
\*:Maximum data    x:Over limit    !:over margin

File :AR7550(CH600)

Data :#2

Date: 2013/3/8

Time: 下午 01:38:12



Site: : RF Conducted	Polarization: <i>Conducted po</i>	Temperature: 23 °C
Limit: FCC Part 24 conducted(9k-26.5G)	Power: AC 120V/60Hz	Humidity: 55.2 %
EUT: Wireless Module	Distance:	RBW: 1000 KHz VBW: 1000 KHz
M/N: AirPrime AR7550		
Mode: Mode 4		
Note: CH 600		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Detector	Antenna Height cm	Table Degree degree	Comment
1	*	430.4750	-50.92	13.25	-37.67	-13.00	-24.67	peak			

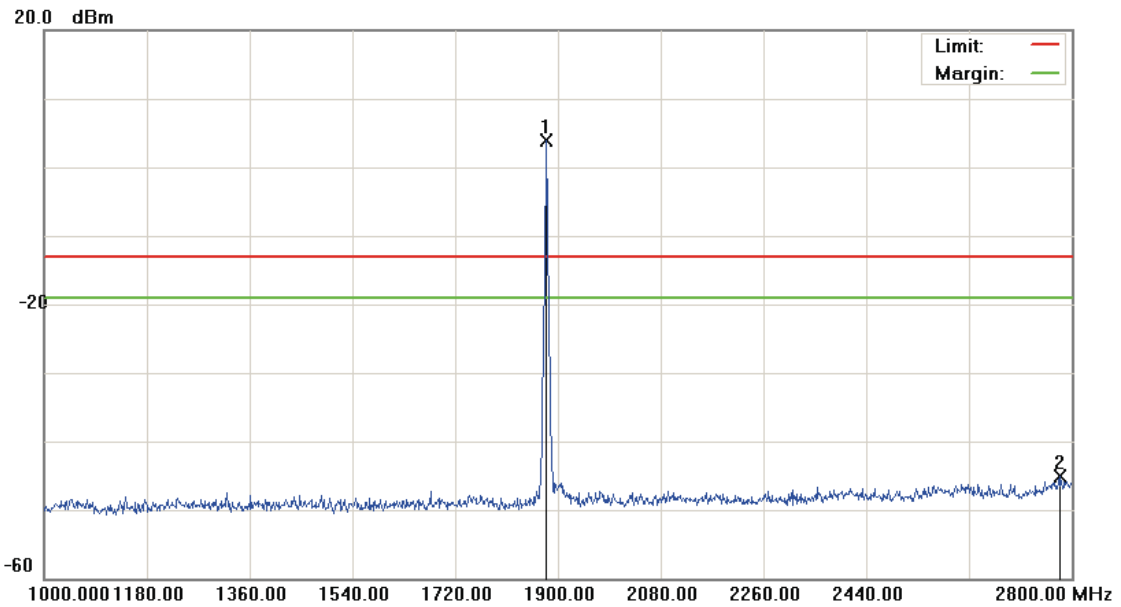
\*:Maximum data    x:Over limit    !:over margin

File: AR7550(CH600)

Data: #3

Date: 2013/3/8

Time: 下午 01:44:07



Site: : RF Conducted	Polarization: <i>Conducted po</i>	Temperature: 23 °C
Limit: FCC Part 24 conducted(9k-26.5G)	Power: AC 120V/60Hz	Humidity: 55.2 %
EUT: Wireless Module	Distance:	RBW: 1000 KHz VBW: 1000 KHz
M/N: AirPrime AR7550		
Mode: Mode 4		
Note: CH 600		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Detector	Antenna Height cm	Table Degree degree	Comment
1	*	1880.200	-0.76	4.65	3.89	-13.00	16.89	peak			Tx
2		2778.400	-50.97	5.86	-45.11	-13.00	-32.11	peak			

\*:Maximum data    x:Over limit    !:over margin

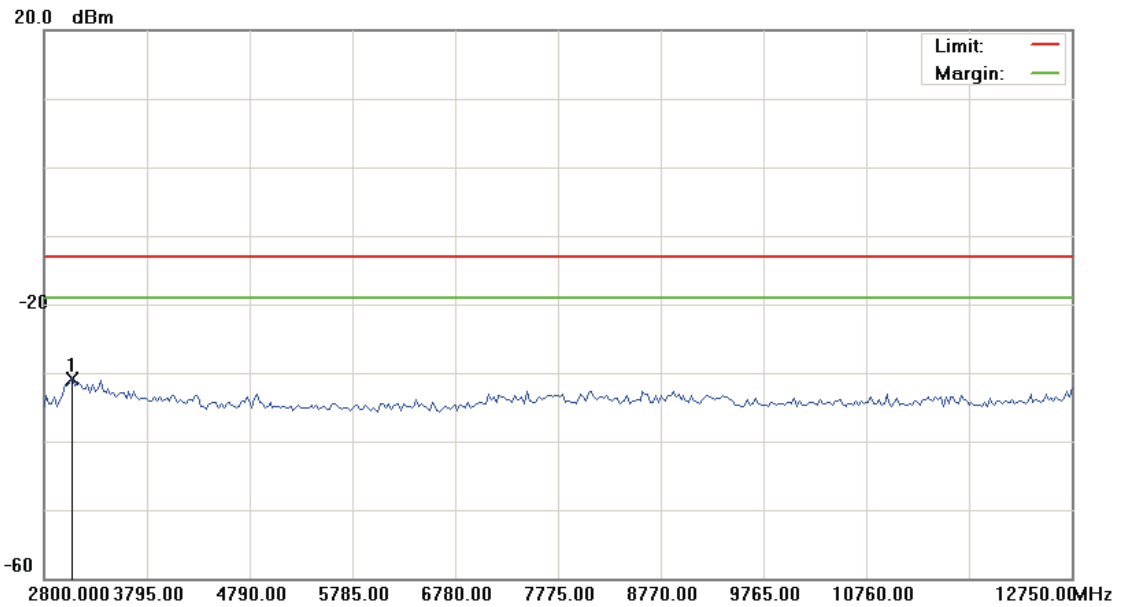


File :AR7550(CH600)

Data :#4

Date: 2013/3/8

Time: 下午 01:52:10



Site: : RF Conducted	Polarization: <i>Conducted po</i>	Temperature: 23 °C
Limit: FCC Part 24 conducted(9k-26.5G)	Power: AC 120V/60Hz	Humidity: 55.2 %
EUT: Wireless Module	Distance:	RBW: 1000 KHz VBW: 1000 KHz
M/N: AirPrime AR7550		
Mode: Mode 4		
Note: CH 600		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Detector	Antenna Height cm	Table Degree degree	Comment
1	*	3073.625	-36.20	5.40	-30.80	-13.00	-17.80	peak			

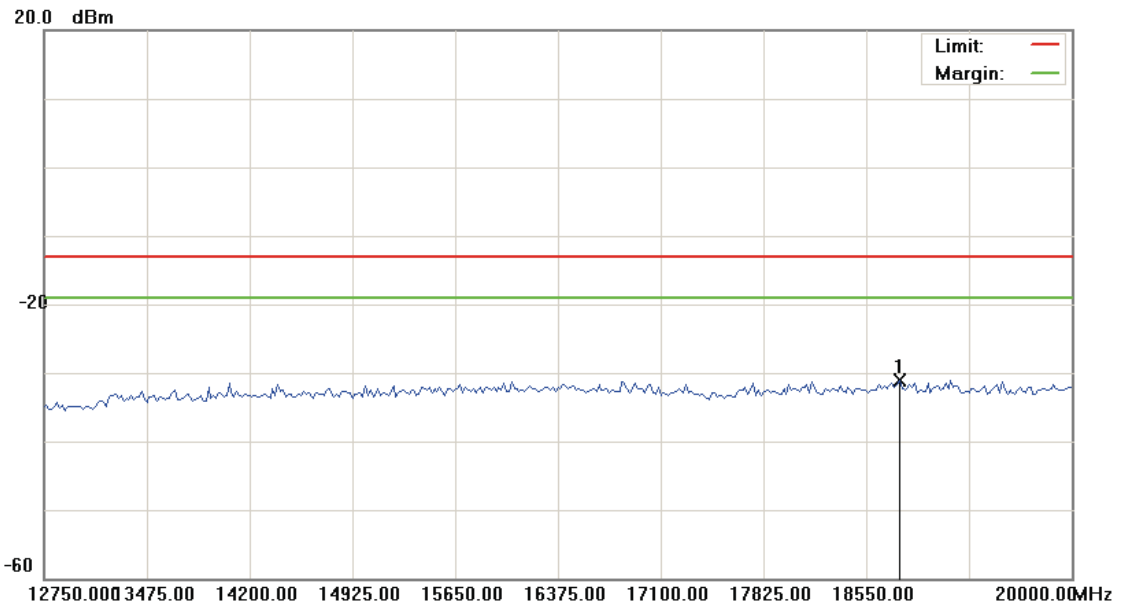
\*:Maximum data x:Over limit !:over margin

File :AR7550(CH600)

Data :#5

Date: 2013/3/8

Time: 下午 01:52:30



Site: : RF Conducted	Polarization: <i>Conducted po</i>	Temperature: 23 °C
Limit: FCC Part 24 conducted(9k-26.5G)	Power: AC 120V/60Hz	Humidity: 55.2 %
EUT: Wireless Module	Distance:	RBW: 1000 KHz VBW: 1000 KHz
M/N: AirPrime AR7550		
Mode: Mode 4		
Note: CH 600		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree degree	Comment
1	*	18785.625	-38.13	7.09	-31.04	-13.00	-18.04	peak		

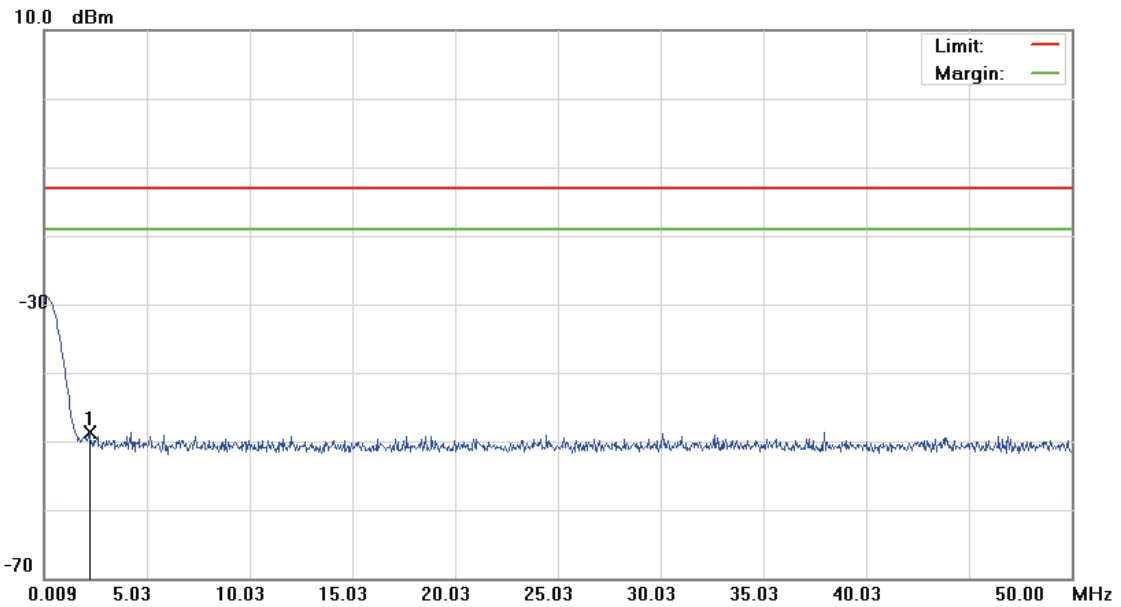
\*:Maximum data x:Over limit !:over margin

File: AR7550(CH1175)

Data: #1

Date: 2013/3/8

Time: 下午 01:39:11



Site: : RF Conducted	Polarization: <i>Conducted po</i>	Temperature: 23 °C
Limit: FCC Part 24 conducted(9k-26.5G)	Power: AC 120V/60Hz	Humidity: 55.2 %
EUT: Wireless Module	Distance:	RBW: 1000 KHz VBW: 1000 KHz
M/N: AirPrime AR7550		
Mode: Mode 4		
Note: CH 1175		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Detector	Antenna Height cm	Table Degree degree	Comment
1	*	2.2336	-61.74	13.08	-48.66	-13.00	-35.66	peak			

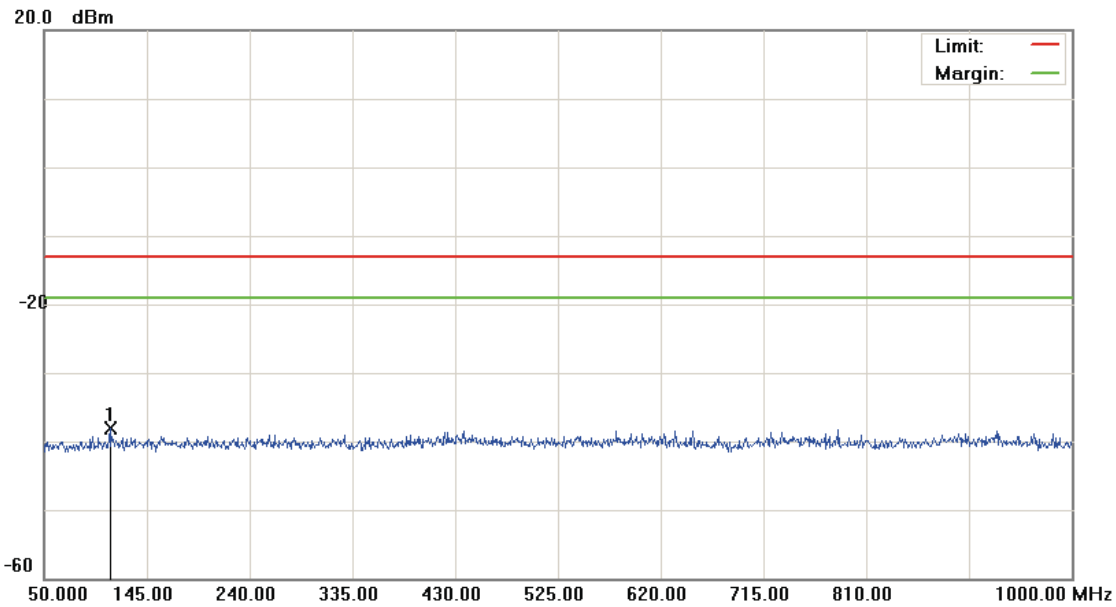
\*:Maximum data    x:Over limit    !:over margin

File: AR7550(CH1175)

Data :#2

Date: 2013/3/8

Time: 下午 01:39:35



Site: : RF Conducted	Polarization: <i>Conducted po</i>	Temperature: 23 °C
Limit: FCC Part 24 conducted(9k-26.5G)	Power: AC 120V/60Hz	Humidity: 55.2 %
EUT: Wireless Module	Distance:	RBW: 1000 KHz VBW: 1000 KHz
M/N: AirPrime AR7550		
Mode: Mode 4		
Note: CH 1175		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Antenna Height cm	Table Degree degree	Comment
1	*	111.2750	-51.51	13.33	-38.18	-13.00	-25.18	peak		

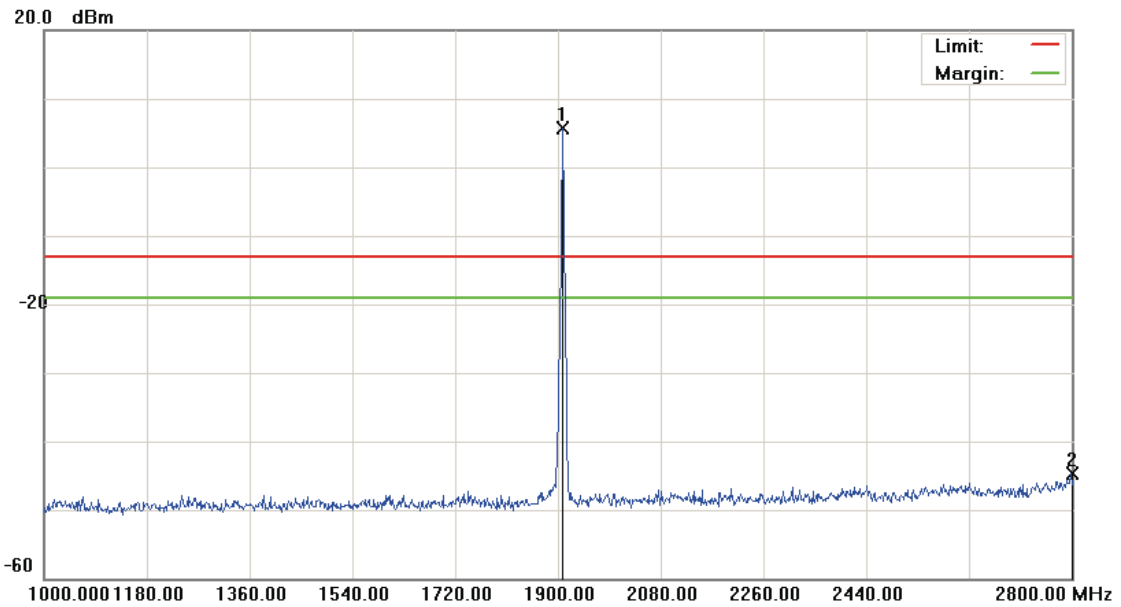
\*:Maximum data    x:Over limit    !:over margin

File: AR7550(CH1175)

Data: #3

Date: 2013/3/8

Time: 下午 01:48:24



Site: : RF Conducted	Polarization: <i>Conducted po</i>	Temperature: 23 °C
Limit: FCC Part 24 conducted(9k-26.5G)	Power: AC 120V/60Hz	Humidity: 55.2 %
EUT: Wireless Module	Distance:	RBW: 1000 KHz VBW: 1000 KHz
M/N: AirPrime AR7550		
Mode: Mode 4		
Note: CH 1175		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Detector	Antenna Height cm	Table Degree degree	Comment
1	*	1908.100	-0.18	5.88	5.70	-13.00	18.70	peak			Tx
2		2799.100	-50.67	5.91	-44.76	-13.00	-31.76	peak			

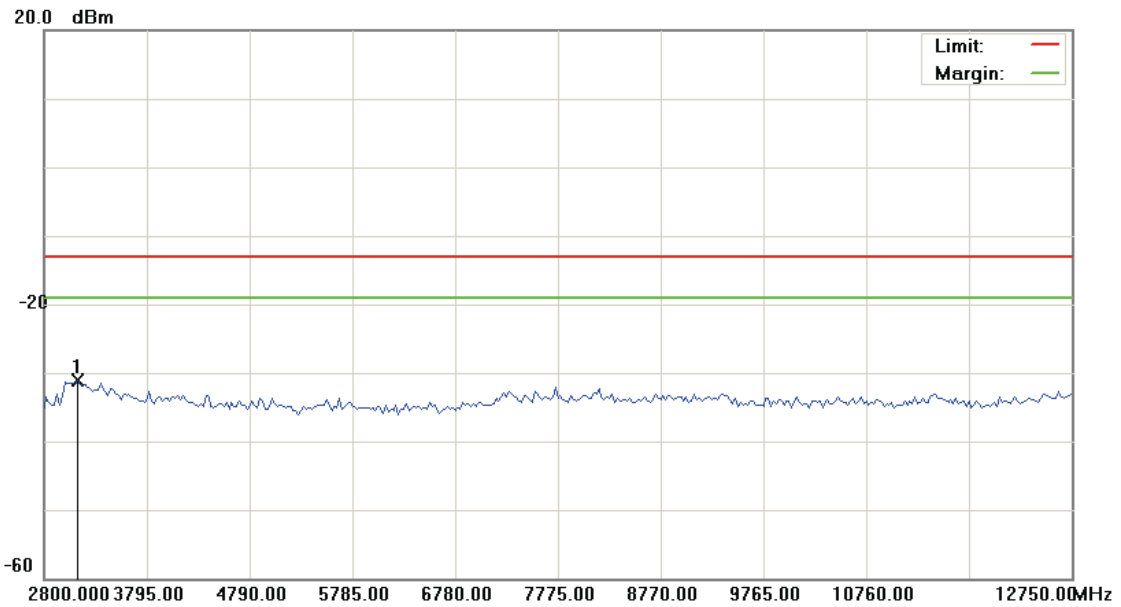
\*:Maximum data x:Over limit !:over margin

File: AR7550(CH1175)

Data: #4

Date: 2013/3/8

Time: 下午 01:52:57



Site: : RF Conducted	Polarization: <i>Conducted po</i>	Temperature: 23 °C
Limit: FCC Part 24 conducted(9k-26.5G)	Power: AC 120V/60Hz	Humidity: 55.2 %
EUT: Wireless Module	Distance:	RBW: 1000 KHz VBW: 1000 KHz
M/N: AirPrime AR7550		
Mode: Mode 4		
Note: CH 1175		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Detector	Antenna Height cm	Table Degree degree	Comment
1	*	3123.375	-36.40	5.30	-31.10	-13.00	-18.10	peak			

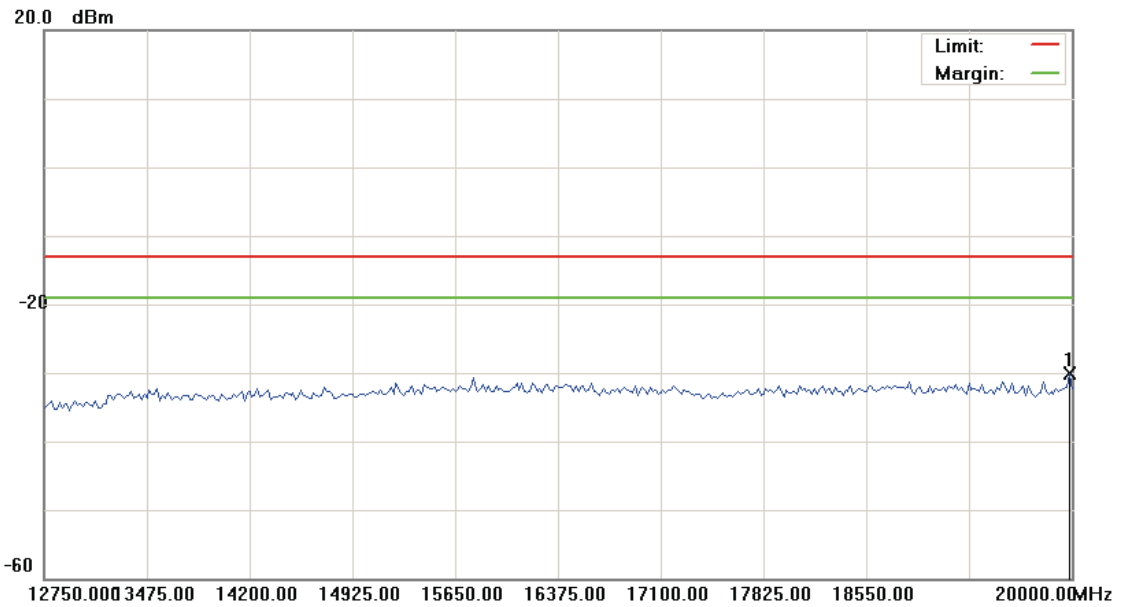
\*:Maximum data    x:Over limit    !:over margin

File: AR7550(CH1175)

Data: #5

Date: 2013/3/8

Time: 下午 01:53:17



Site: : RF Conducted	Polarization: <i>Conducted po</i>	Temperature: 23 °C
Limit: FCC Part 24 conducted(9k-26.5G)	Power: AC 120V/60Hz	Humidity: 55.2 %
EUT: Wireless Module	Distance:	RBW: 1000 KHz VBW: 1000 KHz
M/N: AirPrime AR7550		
Mode: Mode 4		
Note: CH 1175		

No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Detector	Antenna Height cm	Table Degree degree	Comment
1	*	19981.875	-37.51	7.43	-30.08	-13.00	-17.08	peak			

\*:Maximum data x:Over limit !:over margin

## 7 Field Strength of Spurious Radiation Test

### 7.1. Limit

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least  $43 + 10\log(P)$  dB.

It is measured by means of a calibrated spectrum analyzer and scanned from 30 MHz up to a frequency including its 10th harmonic.

### 7.2. Test Instruments

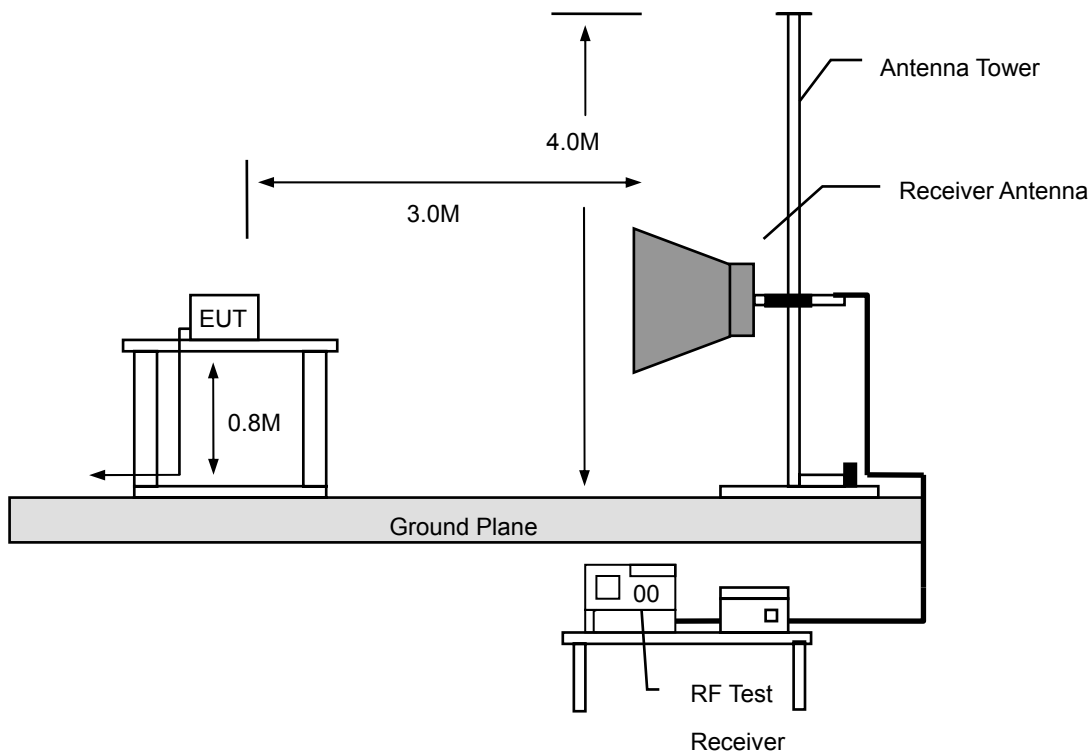
3 Meter Chamber					
Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Remark
RF Pre-selector	Agilent	N9039A	MY46520256	01/21/2013	(2)
Spectrum Analyzer	Agilent	E4446A	MY46180578	01/21/2013	(1)
Pre Amplifier	Agilent	8449B	3008A02237	02/21/2013	(1)
Pre Amplifier	Agilent	8447D	2944A10961	02/21/2013	(1)
Broadband Antenna (30MHz~1GHz)	SCHWARZBECK MESS-ELEKTRONIK	VULB9163	9163-270	06/29/2012	(1)
Horn Antenna (1~18GHz)	SCHWARZBECK MESS-ELEKTRONIK	BBHA9120D	9120D-550	06/15/2012	(1)
Horn Antenna (18~40GHz)	SCHWARZBECK MESS-ELEKTRONIK	BBHA9170	9170-320	06/21/2012	(1)
Test Site	ATL	TE01	888001	08/28/2012	(1)

Remark: <sup>(1)</sup> Calibration period 1 year. <sup>(2)</sup> Calibration period 2 years.

Note: N.C.R. = No Calibration Request.



### 7.3. Setup



### 7.4. Test Procedure

Final radiation measurements were made on a three-meter, Semi Anechoic Chamber. The EUT system was placed on a nonconductive turntable which is 0.8 meters height, top surface 1.0 x 1.5 meter. The spectrum was examined from 250 MHz to 2.5 GHz in order to cover the whole spectrum below 10th harmonic which could generate from the EUT. During the test, EUT was set to transmit continuously & Measurements spectrum range from 30 MHz to 26.5 GHz is investigated.

For measurements below 1 GHz the resolution bandwidth is set to 100 kHz for peak detection measurements or 120 kHz for quasi-peak detection measurements. Peak detection is used unless otherwise noted as quasi-peak.

For measurements above 1 GHz the resolution bandwidth is set to 1 MHz, and then the video bandwidth is set to 1 MHz for peak measurements and 10 Hz for average measurements.

A nonconductive material surrounded the EUT to supporting the EUT for standing on three orthogonal planes. At each condition, the EUT was rotated 360 degrees, and the antenna was raised and lowered from one to four meters to find the maximum emission levels. Measurements were taken using both horizontal and vertical antenna polarization.

SCHWARZBECK MESS-ELEKTRONIK Biconilog Antenna (mode VULB9163) at 3 Meter and the SCHWARZBECK Double Ridged Guide Antenna (model BBHA9120D&9170) was used in frequencies 1 – 26.5 GHz at a distance of 1 meter. All test results were extrapolated to equivalent signal at 3 meters utilizing an inverse linear distance extrapolation Factor (20dB/decade).

For testing above 1GHz, the emission level of the EUT in peak mode was 20dB lower than average limit (that means the emission level in peak mode also complies with the limit in average mode), then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.

Appropriate preamplifiers were used for improving sensitivity and precautions were taken to avoid overloading or desensitizing the spectrum analyzer. No post – detector video filters were used in the test.

The spectrum analyzer's 6 dB bandwidth was set to 1 MHz, and the analyzer was operated in the peak detection mode, for frequencies both below and up 1 GHz. The average levels were obtained by subtracting the duty cycle correction factor from the peak readings.

The following procedures were used to convert the emission levels measured in decibels referenced to 1 microvolt (dBuV) into field intensity in micro volts pre meter (uV/m).

The actual field intensity in decibels referenced to 1 microvolt in to field intensity in micro volts per meter (dBuV/m).

The actual field intensity in decibels referenced to 1 microvolt per meter (dBuV/m) is determined by algebraically adding the measured reading in dBuV, the antenna factor (dB), and cable loss (dB) and Subtracting the gain of preamplifier (dB) is auto calculate in spectrum analyzer.

(1)  $\text{Amplitude (dBuV/m)} = \text{FI (dBuV)} + \text{AF (dBuV)} + \text{CL (dBuV)} - \text{Gain (dB)}$

FI= Reading of the field intensity.

AF= Antenna factor.

CL= Cable loss.

P.S Amplitude is auto calculate in spectrum analyzer.

(2)  $\text{Actual Amplitude (dBuV/m)} = \text{Amplitude (dBuV)} - \text{Dis(dB)}$

The FCC specified emission limits were calculated according the EUT operating frequency and by following linear interpolation equations:

(a) For fundamental frequency : Transmitter Output < +30dBm

(b) For spurious frequency : Spurious emission limits = fundamental emission limit /10

## 7.5. Uncertainty

The measurement uncertainty is defined as for Field Strength of Spurious Radiation measurement is  $\pm 3.072$  dB.

**7.6. Test Result**

Standard:	FCC Part 22	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	AirPrime AR7550	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	1	Date:	03/12/2013
Frequency:	1852.4 MHz	Test By:	Fly Lu

Frequency (MHz)	Reading (dBm)	Correct Factor (dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
145.5000	-72.23	-3.10	-75.33	-13.00	-62.33	peak	H
288.0000	-73.06	-3.55	-76.61	-13.00	-63.61	peak	H
403.0000	-79.88	2.67	-77.21	-13.00	-64.21	peak	H
547.0000	-70.58	8.10	-62.48	-13.00	-49.48	peak	H
751.5000	-81.24	8.71	-72.53	-13.00	-59.53	peak	H
841.5000	-80.31	12.17	-68.14	-13.00	-55.14	peak	H
3136.000	-71.19	18.10	-53.09	-13.00	-40.09	peak	H
5764.000	-72.94	27.12	-45.82	-13.00	-32.82	peak	H
7552.000	-73.03	33.77	-39.26	-13.00	-26.26	peak	H
160.5000	-73.26	12.20	-61.06	-13.00	-48.06	peak	V
304.5000	-78.35	2.33	-76.02	-13.00	-63.02	peak	V
430.0000	-75.18	1.39	-73.79	-13.00	-60.79	peak	V
582.5000	-80.32	6.11	-74.21	-13.00	-61.21	peak	V
676.0000	-76.36	9.53	-66.83	-13.00	-53.83	peak	V
858.5000	-81.31	11.59	-69.72	-13.00	-56.72	peak	V
3076.000	-70.06	20.66	-49.40	-13.00	-36.40	peak	V
5380.000	-74.59	27.67	-46.92	-13.00	-33.92	peak	V
7492.000	-74.39	31.07	-43.32	-13.00	-30.32	peak	V

Standard:	FCC Part 22	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	AirPrime AR7550	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	1	Date:	03/12/2013
Frequency:	1880.0 MHz	Test By:	Fly Lu

Frequency (MHz)	Reading (dBm)	Correct Factor (dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
200.0000	-77.48	2.95	-74.53	-13.00	-61.53	peak	H
288.0000	-76.28	-3.55	-79.83	-13.00	-66.83	peak	H
469.0000	-80.53	5.12	-75.41	-13.00	-62.41	peak	H
547.0000	-70.51	8.10	-62.41	-13.00	-49.41	peak	H
768.0000	-79.34	9.54	-69.80	-13.00	-56.80	peak	H
900.0000	-81.66	14.06	-67.60	-13.00	-54.60	peak	H
2944.000	-71.60	17.60	-54.00	-13.00	-41.00	peak	H
5104.000	-72.52	24.24	-48.28	-13.00	-35.28	peak	H
7132.000	-72.00	32.94	-39.06	-13.00	-26.06	peak	H
160.5000	-73.84	12.20	-61.64	-13.00	-48.64	peak	V
307.0000	-77.80	2.13	-75.67	-13.00	-62.67	peak	V
386.5000	-73.01	1.53	-71.48	-13.00	-58.48	peak	V
576.0000	-78.91	5.60	-73.31	-13.00	-60.31	peak	V
676.0000	-76.88	9.53	-67.35	-13.00	-54.35	peak	V
845.0000	-80.40	11.42	-68.98	-13.00	-55.98	peak	V
3124.000	-70.14	20.95	-49.19	-13.00	-36.19	peak	V
5020.000	-73.03	27.14	-45.89	-13.00	-32.89	peak	V
7108.000	-73.42	30.68	-42.74	-13.00	-29.74	peak	V

Standard:	FCC Part 22	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	AirPrime AR7550	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	1	Date:	03/12/2013
Frequency:	1907.6 MHz	Test By:	Fly Lu

Frequency (MHz)	Reading (dBm)	Correct Factor (dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
160.0000	-77.36	1.45	-75.91	-13.00	-62.91	peak	H
230.5000	-78.81	-0.98	-79.79	-13.00	-66.79	peak	H
400.0000	-77.77	2.55	-75.22	-13.00	-62.22	peak	H
576.0000	-70.49	7.63	-62.86	-13.00	-49.86	peak	H
662.5000	-80.08	7.14	-72.94	-13.00	-59.94	peak	H
859.5000	-81.27	13.00	-68.27	-13.00	-55.27	peak	H
3136.000	-71.34	18.10	-53.24	-13.00	-40.24	peak	H
5692.000	-74.97	26.83	-48.14	-13.00	-35.14	peak	H
7636.000	-73.77	33.75	-40.02	-13.00	-27.02	peak	H
163.5000	-70.36	9.37	-60.99	-13.00	-47.99	peak	V
307.0000	-77.65	2.13	-75.52	-13.00	-62.52	peak	V
386.5000	-73.19	1.53	-71.66	-13.00	-58.66	peak	V
557.0000	-79.34	4.35	-74.99	-13.00	-61.99	peak	V
676.0000	-76.25	9.53	-66.72	-13.00	-53.72	peak	V
853.5000	-81.29	11.53	-69.76	-13.00	-56.76	peak	V
3028.000	-71.55	20.39	-51.16	-13.00	-38.16	peak	V
4960.000	-71.84	27.03	-44.81	-13.00	-31.81	peak	V
6880.000	-74.89	30.24	-44.65	-13.00	-31.65	peak	V

Standard:	FCC Part 22	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	AirPrime AR7550	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	2	Date:	03/12/2013
Frequency:	826.4 MHz	Test By:	Fly Lu

Frequency (MHz)	Reading (dBm)	Correct Factor (dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
145.5000	-72.23	-3.10	-75.33	-13.00	-62.33	peak	H
288.0000	-73.06	-3.55	-76.61	-13.00	-63.61	peak	H
403.0000	-79.88	2.67	-77.21	-13.00	-64.21	peak	H
547.0000	-70.58	8.10	-62.48	-13.00	-49.48	peak	H
751.5000	-81.24	8.71	-72.53	-13.00	-59.53	peak	H
841.5000	-80.31	12.17	-68.14	-13.00	-55.14	peak	H
3136.000	-71.19	18.10	-53.09	-13.00	-40.09	peak	H
5764.000	-72.94	27.12	-45.82	-13.00	-32.82	peak	H
7552.000	-73.03	33.77	-39.26	-13.00	-26.26	peak	H
160.5000	-73.26	12.20	-61.06	-13.00	-48.06	peak	V
304.5000	-78.35	2.33	-76.02	-13.00	-63.02	peak	V
430.0000	-75.18	1.39	-73.79	-13.00	-60.79	peak	V
582.5000	-80.32	6.11	-74.21	-13.00	-61.21	peak	V
676.0000	-76.36	9.53	-66.83	-13.00	-53.83	peak	V
858.5000	-81.31	11.59	-69.72	-13.00	-56.72	peak	V
3076.000	-70.06	20.66	-49.40	-13.00	-36.40	peak	V
5380.000	-74.59	27.67	-46.92	-13.00	-33.92	peak	V
7492.000	-74.39	31.07	-43.32	-13.00	-30.32	peak	V

Standard:	FCC Part 22	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	AirPrime AR7550	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	2	Date:	03/12/2013
Frequency:	836.6 MHz	Test By:	Fly Lu

Frequency (MHz)	Reading (dBm)	Correct Factor (dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
200.0000	-77.48	2.95	-74.53	-13.00	-61.53	peak	H
288.0000	-76.28	-3.55	-79.83	-13.00	-66.83	peak	H
469.0000	-80.53	5.12	-75.41	-13.00	-62.41	peak	H
547.0000	-70.51	8.10	-62.41	-13.00	-49.41	peak	H
768.0000	-79.34	9.54	-69.80	-13.00	-56.80	peak	H
900.0000	-81.66	14.06	-67.60	-13.00	-54.60	peak	H
2944.000	-71.60	17.60	-54.00	-13.00	-41.00	peak	H
5104.000	-72.52	24.24	-48.28	-13.00	-35.28	peak	H
7132.000	-72.00	32.94	-39.06	-13.00	-26.06	peak	H
160.5000	-73.84	12.20	-61.64	-13.00	-48.64	peak	V
307.0000	-77.80	2.13	-75.67	-13.00	-62.67	peak	V
386.5000	-73.01	1.53	-71.48	-13.00	-58.48	peak	V
576.0000	-78.91	5.60	-73.31	-13.00	-60.31	peak	V
676.0000	-76.88	9.53	-67.35	-13.00	-54.35	peak	V
845.0000	-80.40	11.42	-68.98	-13.00	-55.98	peak	V
3124.000	-70.14	20.95	-49.19	-13.00	-36.19	peak	V
5020.000	-73.03	27.14	-45.89	-13.00	-32.89	peak	V
7108.000	-73.42	30.68	-42.74	-13.00	-29.74	peak	V

Standard:	FCC Part 22	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	AirPrime AR7550	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	2	Date:	03/12/2013
Frequency:	846.6 MHz	Test By:	Fly Lu

Frequency (MHz)	Reading (dBm)	Correct Factor (dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
160.0000	-77.36	1.45	-75.91	-13.00	-62.91	peak	H
230.5000	-78.81	-0.98	-79.79	-13.00	-66.79	peak	H
400.0000	-77.77	2.55	-75.22	-13.00	-62.22	peak	H
576.0000	-70.49	7.63	-62.86	-13.00	-49.86	peak	H
662.5000	-80.08	7.14	-72.94	-13.00	-59.94	peak	H
859.5000	-81.27	13.00	-68.27	-13.00	-55.27	peak	H
3136.000	-71.34	18.10	-53.24	-13.00	-40.24	peak	H
5692.000	-74.97	26.83	-48.14	-13.00	-35.14	peak	H
7636.000	-73.77	33.75	-40.02	-13.00	-27.02	peak	H
163.5000	-70.36	9.37	-60.99	-13.00	-47.99	peak	V
307.0000	-77.65	2.13	-75.52	-13.00	-62.52	peak	V
386.5000	-73.19	1.53	-71.66	-13.00	-58.66	peak	V
557.0000	-79.34	4.35	-74.99	-13.00	-61.99	peak	V
676.0000	-76.25	9.53	-66.72	-13.00	-53.72	peak	V
853.5000	-81.29	11.53	-69.76	-13.00	-56.76	peak	V
3028.000	-71.55	20.39	-51.16	-13.00	-38.16	peak	V
4960.000	-71.84	27.03	-44.81	-13.00	-31.81	peak	V
6880.000	-74.89	30.24	-44.65	-13.00	-31.65	peak	V



Standard:	FCC Part 22	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	AirPrime AR7550	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	3	Date:	03/12/2013
Frequency:	824.70 MHz	Test By:	Fly Lu

Frequency (MHz)	Reading (dBm)	Correct Factor (dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
145.5000	-69.54	-3.10	-72.64	-13.00	-59.64	peak	H
230.5000	-79.55	-0.98	-80.53	-13.00	-67.53	peak	H
365.0000	-79.72	0.23	-79.49	-13.00	-66.49	peak	H
499.0000	-76.56	6.91	-69.65	-13.00	-56.65	peak	H
595.0000	-78.17	7.86	-70.31	-13.00	-57.31	peak	H
739.5000	-81.01	8.19	-72.82	-13.00	-59.82	peak	H
3136.000	-70.03	18.10	-51.93	-13.00	-38.93	peak	H
5380.000	-74.83	25.50	-49.33	-13.00	-36.33	peak	H
7216.000	-73.17	33.14	-40.03	-13.00	-27.03	peak	H
160.5000	-71.53	12.20	-59.33	-13.00	-46.33	peak	V
278.5000	-77.40	0.72	-76.68	-13.00	-63.68	peak	V
430.0000	-75.02	1.39	-73.63	-13.00	-60.63	peak	V
547.0000	-80.06	4.30	-75.76	-13.00	-62.76	peak	V
647.5000	-81.12	8.90	-72.22	-13.00	-59.22	peak	V
759.0000	-81.25	10.94	-70.31	-13.00	-57.31	peak	V
3052.000	-71.54	20.53	-51.01	-13.00	-38.01	peak	V
5068.000	-73.38	27.21	-46.17	-13.00	-33.17	peak	V
7060.000	-73.70	30.63	-43.07	-13.00	-30.07	peak	V

Standard:	FCC Part 22	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	AirPrime AR7550	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	3	Date:	03/12/2013
Frequency:	836.52 MHz	Test By:	Fly Lu

Frequency (MHz)	Reading (dBm)	Correct Factor (dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
145.0000	-69.07	-3.25	-72.32	-13.00	-59.32	peak	H
288.0000	-74.73	-3.55	-78.28	-13.00	-65.28	peak	H
425.0000	-81.09	3.55	-77.54	-13.00	-64.54	peak	H
537.5000	-72.58	8.18	-64.40	-13.00	-51.40	peak	H
608.0000	-78.49	7.85	-70.64	-13.00	-57.64	peak	H
770.0000	-81.64	9.64	-72.00	-13.00	-59.00	peak	H
3004.000	-70.94	17.74	-53.20	-13.00	-40.20	peak	H
5200.000	-74.85	24.67	-50.18	-13.00	-37.18	peak	H
7012.000	-72.18	32.68	-39.50	-13.00	-26.50	peak	H
161.5000	-71.28	11.27	-60.01	-13.00	-47.01	peak	V
307.0000	-76.99	2.13	-74.86	-13.00	-61.86	peak	V
378.0000	-72.35	1.71	-70.64	-13.00	-57.64	peak	V
529.5000	-79.50	3.66	-75.84	-13.00	-62.84	peak	V
676.0000	-77.78	9.53	-68.25	-13.00	-55.25	peak	V
720.0000	-80.99	10.86	-70.13	-13.00	-57.13	peak	V
3052.000	-71.58	20.53	-51.05	-13.00	-38.05	peak	V
5116.000	-72.82	27.27	-45.55	-13.00	-32.55	peak	V
7168.000	-74.34	30.75	-43.59	-13.00	-30.59	peak	V

Standard:	FCC Part 22	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	AirPrime AR7550	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	3	Date:	03/12/2013
Frequency:	848.31 MHz	Test By:	Fly Lu

Frequency (MHz)	Reading (dBm)	Correct Factor (dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
146.5000	-69.99	-2.80	-72.79	-13.00	-59.79	peak	H
230.5000	-78.67	-0.98	-79.65	-13.00	-66.65	peak	H
403.0000	-78.17	2.67	-75.50	-13.00	-62.50	peak	H
576.0000	-72.54	7.63	-64.91	-13.00	-51.91	peak	H
671.0000	-79.97	7.09	-72.88	-13.00	-59.88	peak	H
775.5000	-80.14	9.94	-70.20	-13.00	-57.20	peak	H
3316.000	-70.06	18.59	-51.47	-13.00	-38.47	peak	H
5344.000	-74.36	25.34	-49.02	-13.00	-36.02	peak	H
7360.000	-74.16	33.46	-40.70	-13.00	-27.70	peak	H
160.0000	-72.62	12.68	-59.94	-13.00	-46.94	peak	V
299.0000	-79.58	2.63	-76.95	-13.00	-63.95	peak	V
378.0000	-72.08	1.71	-70.37	-13.00	-57.37	peak	V
458.0000	-77.13	1.69	-75.44	-13.00	-62.44	peak	V
603.5000	-79.98	7.70	-72.28	-13.00	-59.28	peak	V
706.5000	-78.68	10.41	-68.27	-13.00	-55.27	peak	V
2992.000	-71.10	20.17	-50.93	-13.00	-37.93	peak	V
5056.000	-73.77	27.19	-46.58	-13.00	-33.58	peak	V
7168.000	-73.58	30.75	-42.83	-13.00	-29.83	peak	V

Standard:	FCC Part 22	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	AirPrime AR7550	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	4	Date:	03/12/2013
Frequency:	1851.25 MHz	Test By:	Fly Lu

Frequency (MHz)	Reading (dBm)	Correct Factor (dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
143.5000	-72.10	-3.71	-75.81	-13.00	-62.81	peak	H
288.0000	-74.90	-3.55	-78.45	-13.00	-65.45	peak	H
427.0000	-79.86	3.59	-76.27	-13.00	-63.27	peak	H
533.0000	-72.52	8.04	-64.48	-13.00	-51.48	peak	H
679.0000	-80.65	7.03	-73.62	-13.00	-60.62	peak	H
820.5000	-80.23	11.92	-68.31	-13.00	-55.31	peak	H
3148.000	-70.68	18.14	-52.54	-13.00	-39.54	peak	H
5812.000	-73.48	27.30	-46.18	-13.00	-33.18	peak	H
7600.000	-74.30	33.76	-40.54	-13.00	-27.54	peak	H
160.0000	-73.98	12.68	-61.30	-13.00	-48.30	peak	V
220.5000	-80.76	5.13	-75.63	-13.00	-62.63	peak	V
386.5000	-73.38	1.53	-71.85	-13.00	-58.85	peak	V
486.5000	-79.30	2.50	-76.80	-13.00	-63.80	peak	V
676.0000	-76.58	9.53	-67.05	-13.00	-54.05	peak	V
821.0000	-79.96	11.28	-68.68	-13.00	-55.68	peak	V
2992.000	-70.43	20.17	-50.26	-13.00	-37.26	peak	V
5116.000	-73.68	27.27	-46.41	-13.00	-33.41	peak	V
7156.000	-73.21	30.72	-42.49	-13.00	-29.49	peak	V

Standard:	FCC Part 22	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	AirPrime AR7550	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	4	Date:	03/12/2013
Frequency:	1880.00 MHz	Test By:	Fly Lu

Frequency (MHz)	Reading (dBm)	Correct Factor (dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
161.0000	-75.89	0.68	-75.21	-13.00	-62.21	peak	H
288.0000	-74.91	-3.55	-78.46	-13.00	-65.46	peak	H
428.5000	-79.32	3.62	-75.70	-13.00	-62.70	peak	H
576.0000	-70.43	7.63	-62.80	-13.00	-49.80	peak	H
727.5000	-80.29	7.76	-72.53	-13.00	-59.53	peak	H
905.0000	-81.54	14.22	-67.32	-13.00	-54.32	peak	H
3628.000	-72.19	19.37	-52.82	-13.00	-39.82	peak	H
5908.000	-74.86	27.69	-47.17	-13.00	-34.17	peak	H
7468.000	-74.06	33.71	-40.35	-13.00	-27.35	peak	H
164.0000	-71.03	8.89	-62.14	-13.00	-49.14	peak	V
307.0000	-77.68	2.13	-75.55	-13.00	-62.55	peak	V
458.0000	-75.32	1.69	-73.63	-13.00	-60.63	peak	V
593.0000	-79.62	6.91	-72.71	-13.00	-59.71	peak	V
719.5000	-80.69	10.85	-69.84	-13.00	-56.84	peak	V
860.0000	-81.08	11.61	-69.47	-13.00	-56.47	peak	V
3004.000	-71.60	20.25	-51.35	-13.00	-38.35	peak	V
5092.000	-73.37	27.25	-46.12	-13.00	-33.12	peak	V
6736.000	-74.29	29.86	-44.43	-13.00	-31.43	peak	V

Standard:	FCC Part 22	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	AirPrime AR7550	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	4	Date:	03/12/2013
Frequency:	1908.75 MHz	Test By:	Fly Lu

Frequency (MHz)	Reading (dBm)	Correct Factor (dB)	Result (dBm)	Limit (dBm)	Margin (dB)	Remark	Ant.Polar. H / V
161.5000	-77.15	0.28	-76.87	-13.00	-63.87	peak	H
288.0000	-76.39	-3.55	-79.94	-13.00	-66.94	peak	H
430.0000	-79.44	3.67	-75.77	-13.00	-62.77	peak	H
537.5000	-70.23	8.18	-62.05	-13.00	-49.05	peak	H
670.5000	-79.40	7.10	-72.30	-13.00	-59.30	peak	H
816.0000	-80.49	11.78	-68.71	-13.00	-55.71	peak	H
3232.000	-70.17	18.36	-51.81	-13.00	-38.81	peak	H
5428.000	-72.69	25.73	-46.96	-13.00	-33.96	peak	H
7072.000	-71.92	32.81	-39.11	-13.00	-26.11	peak	H
160.0000	-73.66	12.68	-60.98	-13.00	-47.98	peak	V
332.5000	-77.22	1.13	-76.09	-13.00	-63.09	peak	V
430.0000	-75.90	1.39	-74.51	-13.00	-61.51	peak	V
587.0000	-80.49	6.46	-74.03	-13.00	-61.03	peak	V
676.0000	-77.38	9.53	-67.85	-13.00	-54.85	peak	V
850.0000	-81.04	11.49	-69.55	-13.00	-56.55	peak	V
2884.000	-70.98	19.39	-51.59	-13.00	-38.59	peak	V
5044.000	-74.90	27.18	-47.72	-13.00	-34.72	peak	V
7108.000	-73.00	30.68	-42.32	-13.00	-29.32	peak	V

Standard:	RSS-Gen	Test Distance:	3m
Test item:	Radiated Emission	Power:	AC 120V/60Hz
Model Number:	AirPrime AR7550	Temp.(°C)/Hum.(%RH):	26(°C)/60%RH
Mode:	7	Date:	03/12/2013
		Test By:	Fly Lu

Frequency (MHz)	Reading (dBuV)	Correct Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Remark	Ant.Polar. H / V
3244.000	38.79	2.75	41.54	74.00	-32.46	peak	H
5105.500	36.61	8.81	45.42	74.00	-28.58	peak	H
6712.000	36.24	13.78	50.02	74.00	-23.98	peak	H
3040.000	39.35	2.29	41.64	74.00	-32.36	peak	V
4697.500	36.67	7.57	44.24	74.00	-29.76	peak	V
6737.500	35.95	13.86	49.81	74.00	-24.19	peak	V

## 8 Frequency Stability (Temperature & Voltage Variation) Test

### 8.1. Limit

The frequency stability shall be measured by variation of ambient temperature and variation of primary supply voltage to ensure that the fundamental emission stays within the authorized frequency block. The frequency stability of the transmitter shall be maintained within  $\pm 0.00025\%$  ( $\pm 2.5\text{ppm}$ ) of the center frequency.

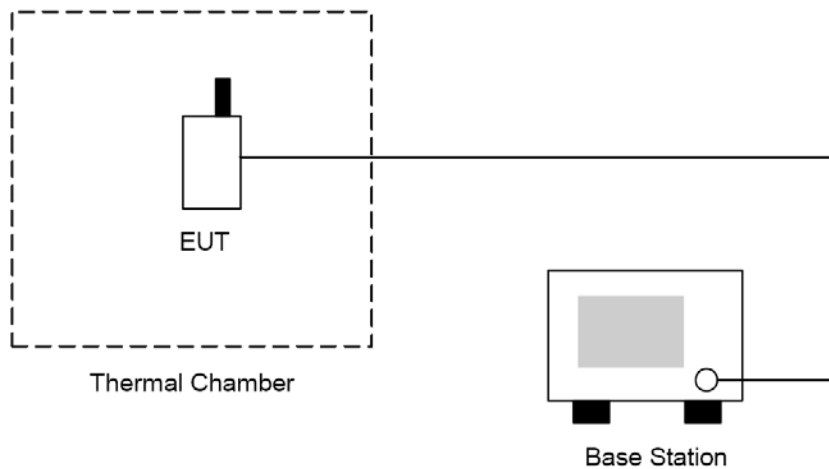
### 8.2. Test Instruments

Equipment	Manufacturer	Model Number	Serial Number	Cal. Date	Remark
Universal Radio Communication Tester	R & S	CMU200	109369	08/07/2012	(2)
Temperature & Humidity Chamber	TAICHY	MHU-225LA	980729	08/07/2012	(1)
Test Site	ATL	TE05	TE05	N.C.R.	-----

Remark: <sup>(1)</sup> Calibration period 1 year. <sup>(2)</sup> Calibration period 2 years.

Note: N.C.R. = No Calibration Request.

### 8.3. Setup





## 8.4. Test Procedure

The measurement is made according to FCC rules part 22 and 24:

1. The EUT and test equipment were set up as shown on the following section.
2. With all power removed, the temperature was decreased to  $-30^{\circ}\text{C}$  and permitted to stabilize for three hours. Power was applied and the maximum change in frequency was note within one minute.
3. With power OFF, the temperature was raised in  $10^{\circ}\text{C}$  steps. The sample was permitted to stabilize at each step for at least one-half hour. Power was applied and the maximum frequency change was noted within one minute.
4. The EUT was placed in a temperature chamber at  $25 \pm 5^{\circ}\text{C}$  and connected as the following section.
5. The power supply voltage to the EUT was varied from BEP to 115% of the nominal value measured at the input to the EUT.
6. The temperature tests were performed for the worst case.
7. Test data was recorded.

## 8.5. Uncertainty

The measurement uncertainty is defined as for Frequency Stability (Temperature Variation) measurement is  $\pm 10\text{Hz}$ .

**8.6. Test Result**

Model Number	AirPrime AR7550					
Test Item	Frequency Stability (Temperature & Voltage Variation)					
Test Mode	Mode 1					
Date of Test	03/15/2013				Test Site	TE05
Level	Voltage [Vac]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Result
Normal	120	-30	3	0.002	±2.5	Pass
Normal	120	-20	-4	-0.002	±2.5	Pass
Normal	120	-10	6	0.003	±2.5	Pass
Normal	120	0	11	0.006	±2.5	Pass
Normal	120	10	9	0.005	±2.5	Pass
Battery full point	138	20	9	0.005	±2.5	Pass
Normal	120	20	13	0.007	±2.5	Pass
Battery cut-off point	102	20	-8	-0.004	±2.5	Pass
Normal	120	30	21	0.011	±2.5	Pass
Normal	120	40	25	0.013	±2.5	Pass
Normal	120	50	31	0.016	±2.5	Pass

Model Number	AirPrime AR7550					
Test Item	Frequency Stability (Temperature & Voltage Variation)					
Test Mode	Mode 2					
Date of Test	03/15/2013				Test Site	TE05
Level	Voltage [Vac]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Result
Normal	120	-30	22	0.026	±2.5	Pass
Normal	120	-20	21	0.025	±2.5	Pass
Normal	120	-10	16	0.019	±2.5	Pass
Normal	120	0	5	0.006	±2.5	Pass
Normal	120	10	11	0.013	±2.5	Pass
Battery full point	138	20	-6	-0.007	±2.5	Pass
Normal	120	20	18	0.022	±2.5	Pass
Battery cut-off point	102	20	26	0.031	±2.5	Pass
Normal	120	30	-5	-0.006	±2.5	Pass
Normal	120	40	-9	-0.011	±2.5	Pass
Normal	120	50	-11	-0.013	±2.5	Pass

Model Number	AirPrime AR7550					
Test Item	Frequency Stability (Temperature & Voltage Variation)					
Test Mode	Mode 3					
Date of Test	03/15/2013				Test Site	TE05
Level	Voltage [Vac]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Result
Normal	120	-30	-6	-0.007	±2.5	Pass
Normal	120	-20	-3	-0.004	±2.5	Pass
Normal	120	-10	11	0.013	±2.5	Pass
Normal	120	0	12	0.014	±2.5	Pass
Normal	120	10	-9	-0.011	±2.5	Pass
Battery full point	138	20	12	0.014	±2.5	Pass
Normal	120	20	-9	-0.011	±2.5	Pass
Battery cut-off point	102	20	14	0.017	±2.5	Pass
Normal	120	30	13	0.016	±2.5	Pass
Normal	120	40	12	0.014	±2.5	Pass
Normal	120	50	11	0.013	±2.5	Pass

Model Number	AirPrime AR7550					
Test Item	Frequency Stability (Temperature & Voltage Variation)					
Test Mode	Mode 4					
Date of Test	03/15/2013				Test Site	TE05
Level	Voltage [Vac]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Result
Normal	120	-30	13	0.007	±2.5	Pass
Normal	120	-20	21	0.011	±2.5	Pass
Normal	120	-10	16	0.009	±2.5	Pass
Normal	120	0	22	0.012	±2.5	Pass
Normal	120	10	31	0.016	±2.5	Pass
Battery full point	138	20	21	0.011	±2.5	Pass
Normal	120	20	31	0.016	±2.5	Pass
Battery cut-off point	102	20	16	0.009	±2.5	Pass
Normal	120	30	-9	-0.005	±2.5	Pass
Normal	120	40	12	0.006	±2.5	Pass
Normal	120	50	25	0.013	±2.5	Pass