

FCC 47 CFR PART 22H and 24E

Product Type : Dual Sim Smart phone
Applicant : QBEX Electronics Corporation
Address : 1606 NW 84th Ave, MIAMI, FL33126, USA
Trade Name : QBEX
Model Number : QBA757
Test Specification : FCC 47 CFR PART 22H: Oct, 2011
FCC 47 CFR PART 24E: Oct, 2011
ANSI/TIA-603-C-2004

Application Purpose : Original
Receive Date : Aug. 29, 2012
Test Dates : Sep. 04 ~ Oct. 01, 2012
Issue Date : Oct. 05, 2012

Issue by

A Test Lab Techno Corp.
No. 140-1, Changan Street, Bade City,
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Taiwan Accreditation Foundation accreditation number: 1330

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Revision History

| Rev. | Issue Date | Revisions | Revised By |
|------|---------------|---------------|------------|
| 00 | Oct. 05, 2012 | Initial Issue | |
| | | | |
| | | | |
| | | | |

Verification of Compliance

Issued Date: 10/05/2012

Product Type : Dual Sim Smart phone

Applicant : QBEX Electronics Corporation

Address : 1606 NW 84th Ave, MIAMI, FL33126, USA

Trade Name : QBEX

Model Number : QBA757

FCC ID : XFM-QBA757

EUT Rated Voltage : DC 5.0V, 1000mA

Test Voltage : 120 Vac / 60 Hz

Applicable Standard : FCC 47 CFR PART 22H: Oct, 2011
FCC 47 CFR PART 24E: Oct, 2011
ANSI/TIA-603-C-2004

Application Purpose : Original


Test Result : Complied

Performing Lab. : A Test Lab Techno Corp.
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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 : 

(Manager)

(Murphy Wang)

Reviewed By : 

(Testing Engineer)

(Fly Lu)

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1 General Information

1.1. EUT Description

| | | | | | |
|----------------------|---------------------------|-------------------------------------------------------------------------------------------------------------------------------|--------------------|--------------------|------------|
| Applicant | | QBEX Electronics Corporation | | | |
| Applicant Address | | 1606 NW 84th Ave, MIAMI, FL33126, USA | | | |
| Manufacturer | | TRANSAVA INC. (SZ) | | | |
| Manufacturer Address | | Unit 10c, Block 7, East Pacific Garden 2, Shen Zhen, Guangdong, China 518040 | | | |
| Product Type | | Dual Sim Smart phone | | | |
| Trade Name | | QBEX | | | |
| Model Number | | QBA757 | | | |
| FCC ID | | XFM-QBA757 | | | |
| Mode | GSM/ GPRS | Band | UL Frequency (MHz) | DL Frequency (MHz) | Modulation |
| | | 850 | 824.2 ~ 848.8 | 869.2 ~ 893.8 | GMSK/8PSK |
| | | 1900 | 1850.2 ~ 1909.8 | 1930.2 ~ 1989.8 | GMSK/8PSK |
| | WCDMA/ HSDPA/ HSUPA | Band | UL Frequency (MHz) | DL Frequency (MHz) | Modulation |
| | | V | 826.4 ~ 846.6 | 871.4 ~ 891.6 | QPSK |
| Channel Control | | Auto | | | |
| Type of Antenna | | Internal Antenan | | | |
| Antenna Gain (dBi) | | GSM/GPRS 850 : -0.16 dBi GSM/GPRS 1900 : 2.18 dBi WCDMA/ HSDPA/ HSUPA Band V : -0.16 dBi | | | |
| Max. RF Output | | GSM/GPRS 850 : 31.98 dBm / 1.578 W GSM/GPRS 1900 : 29.28 dBm / 0.847 W WCDMA/ HSDPA/ HSUPA Band V : 26.03 dBm / 0.401 W | | | |
| Max. ERP/EIRP | | GSM/GPRS 850 : 26.41 dBm / 0.438 W GSM/GPRS 1900 : 22.24 dBm / 0.167 W WCDMA/ HSDPA/ HSUPA Band V : 24.02 dBm / 0.252 W | | | |
| Emission Designator | | GSM/GPRS 850 : 247KGXW GSM/GPRS 1900 : 249KGXW WCDMA/ HSDPA/ HSUPA Band V : 4M17F9W | | | |

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: GSM 850 Link Mode |
| Mode 2: GSM 1900 Link Mode |
| Mode 3: WCDMA Band V Link Mode |

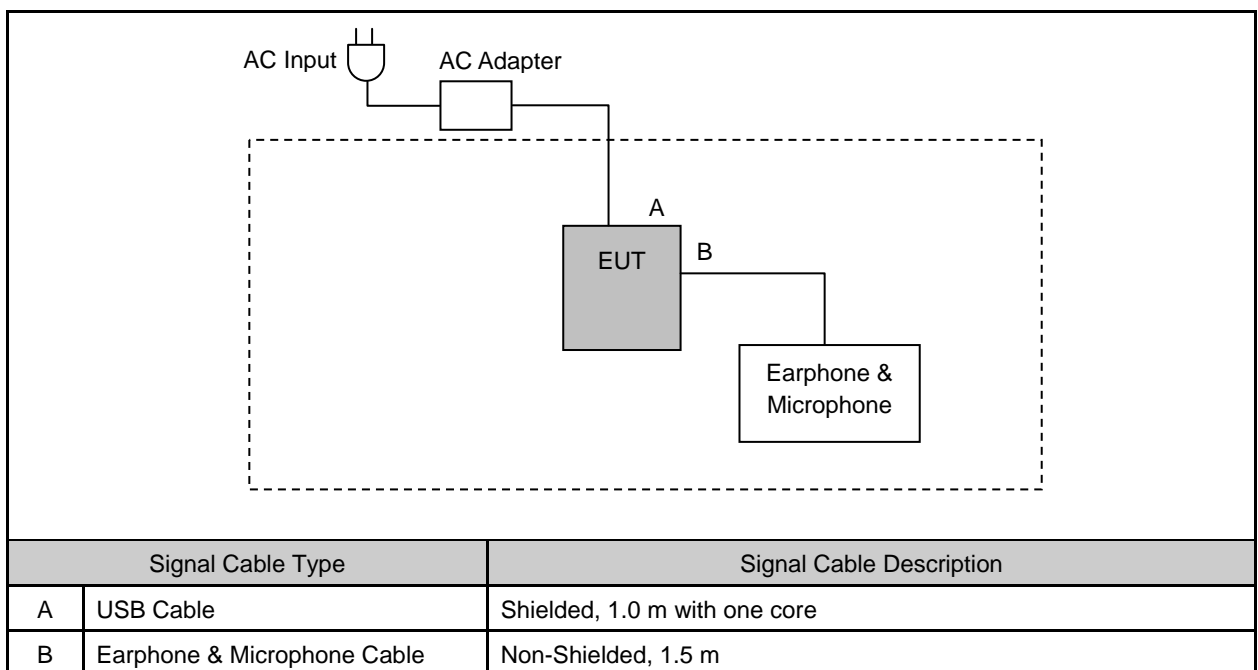
Note: Regards to the frequency band operation: the lowest, middle and highest frequency of channel were selected to perform the test, then shown on this report.

By preliminary testing and verifying three axis (X, Y and Z) position of EUT transmitted status, it was found that "X 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 | 23.0 |
| Humidity (%RH) | 25-75 | 55.2 |
| 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 ₁₀ (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 ₁₀ (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 ₁₀ (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

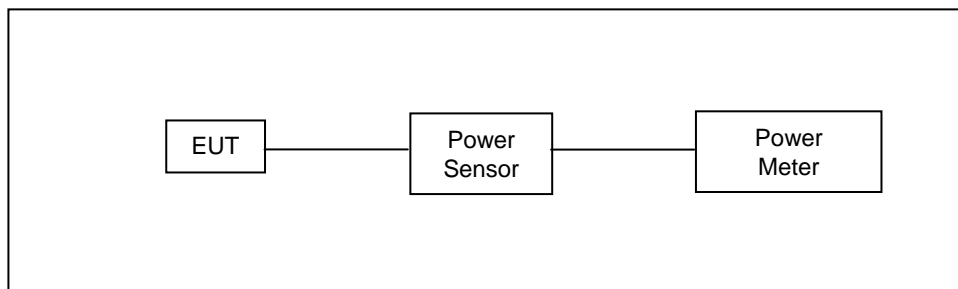
2.2. Test Instruments

| 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: ⁽¹⁾ Calibration period 1 year. ⁽²⁾ 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 | QBA757 | | | | | | |
|------------------|-----------------|----------------------------|-----------------|---------------------|-------|--------------|--------------|
| Test Item | RF Output Power | | | | | | |
| Date of Test | 09/04/2012 | | | Test Site | | TE05 | |
| Bands | Modulation Type | Data Rate | Frequency (MHz) | Burst Average Power | | Peak Power | |
| | | | | (dBm) | (W) | (dBm) | (W) |
| GSM 850 (SIM 1) | GMSK | 1Down1Up (Duty Factor 1/8) | 824.2 | 31.32 | 1.355 | 31.43 | 1.390 |
| | | | 836.6 | 31.88 | 1.542 | 31.96 | 1.570 |
| | | | 848.8 | 31.33 | 1.358 | 31.52 | 1.419 |
| GRRS 850 (SIM 1) | GMSK | 4Down1Up (Duty Factor 1/8) | 824.2 | 31.29 | 1.346 | 31.41 | 1.384 |
| | | | 836.6 | 31.82 | 1.521 | 31.94 | 1.563 |
| | | | 848.8 | 31.31 | 1.352 | 31.49 | 1.409 |
| | | 3Down2Up (Duty Factor 2/8) | 824.2 | 30.53 | 1.130 | 30.66 | 1.164 |
| | | | 836.6 | 30.93 | 1.239 | 31.08 | 1.282 |
| | | | 848.8 | 30.51 | 1.125 | 30.62 | 1.153 |
| | | 2Down3Up (Duty Factor 3/8) | 824.2 | 28.96 | 0.787 | 29.13 | 0.818 |
| | | | 836.6 | 29.38 | 0.867 | 29.49 | 0.889 |
| | | | 848.8 | 28.95 | 0.785 | 29.11 | 0.815 |
| | | 1Down4Up (Duty Factor 4/8) | 824.2 | 28.21 | 0.662 | 28.39 | 0.690 |
| | | | 836.6 | 28.56 | 0.718 | 28.75 | 0.750 |
| | | | 848.8 | 28.12 | 0.649 | 28.23 | 0.665 |
| GSM 850 (SIM 2) | GMSK | 1Down1Up (Duty Factor 1/8) | 824.2 | 31.35 | 1.365 | 31.47 | 1.403 |
| | | | 836.6 | 31.90 | 1.549 | 31.98 | 1.578 |
| | | | 848.8 | 31.35 | 1.365 | 31.54 | 1.426 |
| GRRS 850 (SIM 2) | GMSK | 4Down1Up (Duty Factor 1/8) | 824.2 | 31.32 | 1.355 | 31.44 | 1.393 |
| | | | 836.6 | 31.84 | 1.528 | 31.96 | 1.570 |
| | | | 848.8 | 31.33 | 1.358 | 31.51 | 1.416 |
| | | 3Down2Up (Duty Factor 2/8) | 824.2 | 30.55 | 1.135 | 30.68 | 1.169 |
| | | | 836.6 | 30.96 | 1.247 | 31.11 | 1.291 |
| | | | 848.8 | 30.53 | 1.130 | 30.64 | 1.159 |
| | | 2Down3Up (Duty Factor 3/8) | 824.2 | 28.98 | 0.791 | 29.15 | 0.822 |
| | | | 836.6 | 29.43 | 0.877 | 29.54 | 0.899 |
| | | | 848.8 | 28.97 | 0.789 | 29.13 | 0.818 |
| | | 1Down4Up (Duty Factor 4/8) | 824.2 | 28.23 | 0.665 | 28.41 | 0.693 |
| | | | 836.6 | 28.59 | 0.723 | 28.79 | 0.757 |
| | | | 848.8 | 28.15 | 0.653 | 28.26 | 0.670 |

Note: 1. The peak power testing result was used peak detector.

2. SIM1 & SIM2 can't transmit at the same time

| Model Number | QBA757 | | | | | | |
|-------------------|-----------------|----------------------------|-----------------|---------------------|-------|--------------|--------------|
| Test Item | RF Output Power | | | | | | |
| Date of Test | 09/04/2012 | | | Test Site | | TE05 | |
| Bands | Modulation Type | Data Rate | Frequency (MHz) | Burst Average Power | | Peak Power | |
| | | | | (dBm) | (W) | (dBm) | (W) |
| GSM 1900 (SIM 1) | GMSK | 1Down1Up (Duty Factor 1/8) | 1850.20 | 28.69 | 0.740 | 28.81 | 0.760 |
| | | | 1880.00 | 28.73 | 0.746 | 28.88 | 0.773 |
| | | | 1909.80 | 28.96 | 0.787 | 29.28 | 0.847 |
| GRRS 1900 (SIM 1) | GMSK | 4Down1Up (Duty Factor 1/8) | 1850.20 | 28.63 | 0.729 | 28.77 | 0.753 |
| | | | 1880.00 | 28.71 | 0.743 | 28.86 | 0.769 |
| | | | 1909.80 | 28.88 | 0.773 | 29.25 | 0.841 |
| | | 3Down2Up (Duty Factor 2/8) | 1850.20 | 27.43 | 0.553 | 27.66 | 0.583 |
| | | | 1880.00 | 27.52 | 0.565 | 27.69 | 0.587 |
| | | | 1909.80 | 27.73 | 0.593 | 27.99 | 0.630 |
| | | 2Down3Up (Duty Factor 3/8) | 1850.20 | 25.32 | 0.340 | 25.56 | 0.360 |
| | | | 1880.00 | 25.41 | 0.348 | 25.59 | 0.362 |
| | | | 1909.80 | 25.74 | 0.375 | 25.96 | 0.394 |
| | | 1Down4Up (Duty Factor 4/8) | 1850.20 | 24.52 | 0.283 | 24.66 | 0.292 |
| | | | 1880.00 | 24.64 | 0.291 | 24.79 | 0.301 |
| | | | 1909.80 | 24.84 | 0.305 | 24.96 | 0.313 |
| GSM 1900 (SIM 2) | GMSK | 1Down1Up (Duty Factor 1/8) | 1850.20 | 28.71 | 0.743 | 28.83 | 0.764 |
| | | | 1880.00 | 28.76 | 0.752 | 28.91 | 0.778 |
| | | | 1909.80 | 28.99 | 0.793 | 29.10 | 0.813 |
| GRRS 1900 (SIM 2) | GMSK | 4Down1Up (Duty Factor 1/8) | 1850.20 | 28.65 | 0.733 | 28.79 | 0.757 |
| | | | 1880.00 | 28.74 | 0.748 | 28.89 | 0.774 |
| | | | 1909.80 | 28.90 | 0.776 | 29.27 | 0.845 |
| | | 3Down2Up (Duty Factor 2/8) | 1850.20 | 27.45 | 0.556 | 27.68 | 0.586 |
| | | | 1880.00 | 27.54 | 0.568 | 27.71 | 0.590 |
| | | | 1909.80 | 27.76 | 0.597 | 28.02 | 0.634 |
| | | 2Down3Up (Duty Factor 3/8) | 1850.20 | 25.34 | 0.342 | 25.58 | 0.361 |
| | | | 1880.00 | 25.43 | 0.349 | 25.61 | 0.364 |
| | | | 1909.80 | 25.77 | 0.378 | 25.99 | 0.397 |
| | | 1Down4Up (Duty Factor 4/8) | 1850.20 | 24.54 | 0.284 | 24.68 | 0.294 |
| | | | 1880.00 | 24.67 | 0.293 | 24.83 | 0.304 |
| | | | 1909.80 | 24.88 | 0.308 | 24.99 | 0.316 |

Note: 1. The peak power testing result was used peak detector.

2. SIM1 & SIM2 can't transmit at the same time

| Model Number | QBA757 | | | | | | |
|--------------|-----------------|----------|-----------------|---------------------|-------|--------------|--------------|
| Test Item | RF Output Power | | | | | | |
| Date of Test | 09/04/2012 | | | 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 | 23.12 | 0.205 | 26.03 | 0.401 |
| | | | 836.6 | 22.84 | 0.192 | 25.86 | 0.385 |
| | | | 846.6 | 22.96 | 0.198 | 25.94 | 0.393 |
| HSDPA Band V | QPSK | 1 | 826.4 | 22.93 | 0.196 | 25.96 | 0.394 |
| | | | 836.6 | 22.77 | 0.189 | 25.88 | 0.387 |
| | | | 846.6 | 22.89 | 0.195 | 25.92 | 0.391 |
| | | 2 | 826.4 | 22.92 | 0.196 | 25.95 | 0.394 |
| | | | 836.6 | 22.76 | 0.189 | 25.87 | 0.386 |
| | | | 846.6 | 22.86 | 0.193 | 25.89 | 0.388 |
| | | 3 | 826.4 | 22.44 | 0.175 | 25.47 | 0.352 |
| | | | 836.6 | 22.29 | 0.169 | 25.40 | 0.347 |
| | | | 846.6 | 22.40 | 0.174 | 25.43 | 0.349 |
| | | 4 | 826.4 | 22.41 | 0.174 | 25.44 | 0.350 |
| | | | 836.6 | 22.24 | 0.167 | 25.35 | 0.343 |
| | | | 846.6 | 22.38 | 0.173 | 25.41 | 0.348 |
| HSUPA Band V | QPSK | 1 | 826.4 | 22.21 | 0.166 | 25.66 | 0.368 |
| | | | 836.6 | 22.13 | 0.163 | 25.49 | 0.354 |
| | | | 846.6 | 22.18 | 0.165 | 25.59 | 0.362 |
| | | 2 | 826.4 | 20.19 | 0.104 | 23.64 | 0.231 |
| | | | 836.6 | 20.12 | 0.103 | 23.48 | 0.223 |
| | | | 846.6 | 20.16 | 0.104 | 23.57 | 0.228 |
| | | 3 | 826.4 | 21.19 | 0.132 | 24.64 | 0.291 |
| | | | 836.6 | 21.13 | 0.130 | 24.49 | 0.281 |
| | | | 846.6 | 21.14 | 0.130 | 24.55 | 0.285 |
| | | 4 | 826.4 | 20.16 | 0.104 | 23.61 | 0.230 |
| | | | 836.6 | 20.09 | 0.102 | 23.45 | 0.221 |
| | | | 846.6 | 20.15 | 0.104 | 23.56 | 0.227 |
| | | 5 | 826.4 | 22.15 | 0.164 | 25.60 | 0.363 |
| | | | 836.6 | 22.09 | 0.162 | 25.45 | 0.351 |
| | | | 846.6 | 22.11 | 0.163 | 25.52 | 0.356 |

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

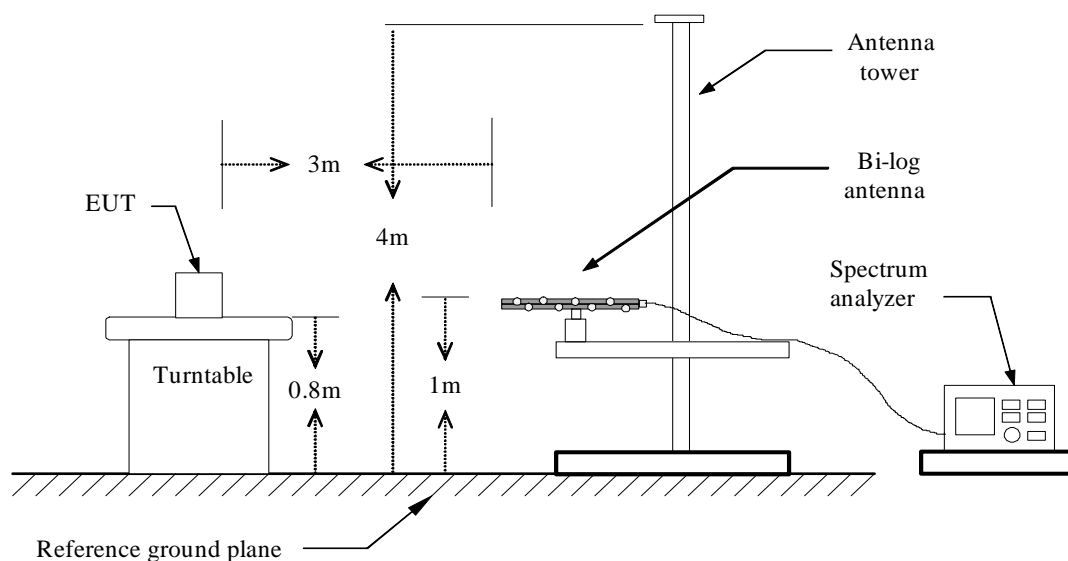
| 3 Meter Chamber | | | | | |
|-----------------------------------|--------------------------------|--------------|---------------|------------|--------|
| Equipment | Manufacturer | Model Number | Serial Number | Cal. Date | Remark |
| RF Pre-selector | Agilent | N9039A | MY46520256 | 01/16/2012 | (2) |
| Spectrum Analyzer | Agilent | E4446A | MY46180578 | 01/16/2012 | (1) |
| Pre Amplifier | Agilent | 8449B | 3008A02237 | 02/22/2012 | (1) |
| Pre Amplifier | Agilent | 8447D | 2944A10961 | 02/22/2012 | (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 | 12/20/2011 | (1) |

Remark: ⁽¹⁾ Calibration period 1 year. ⁽²⁾ Calibration period 2 years.

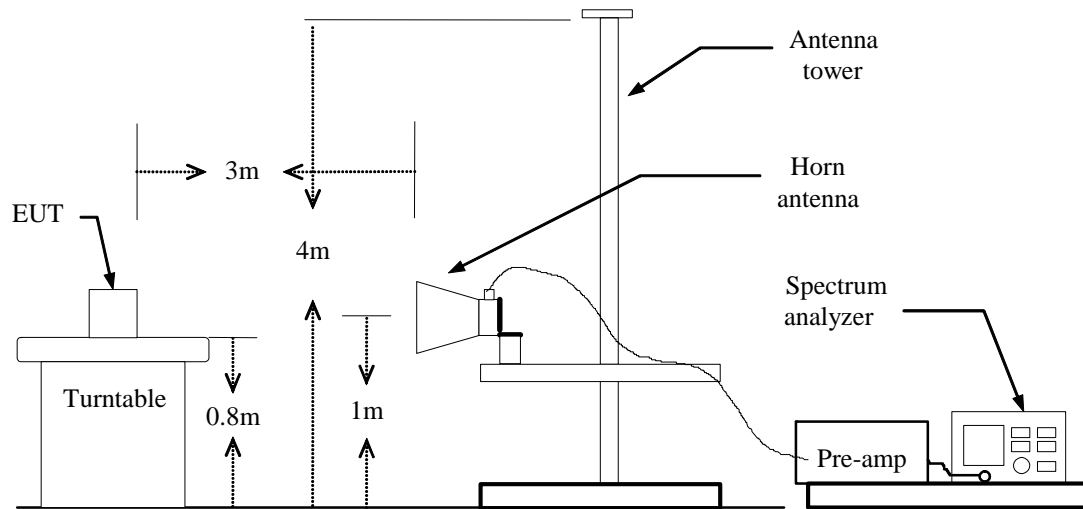
Note: N.C.R. = No Calibration Request.

3.3. Setup

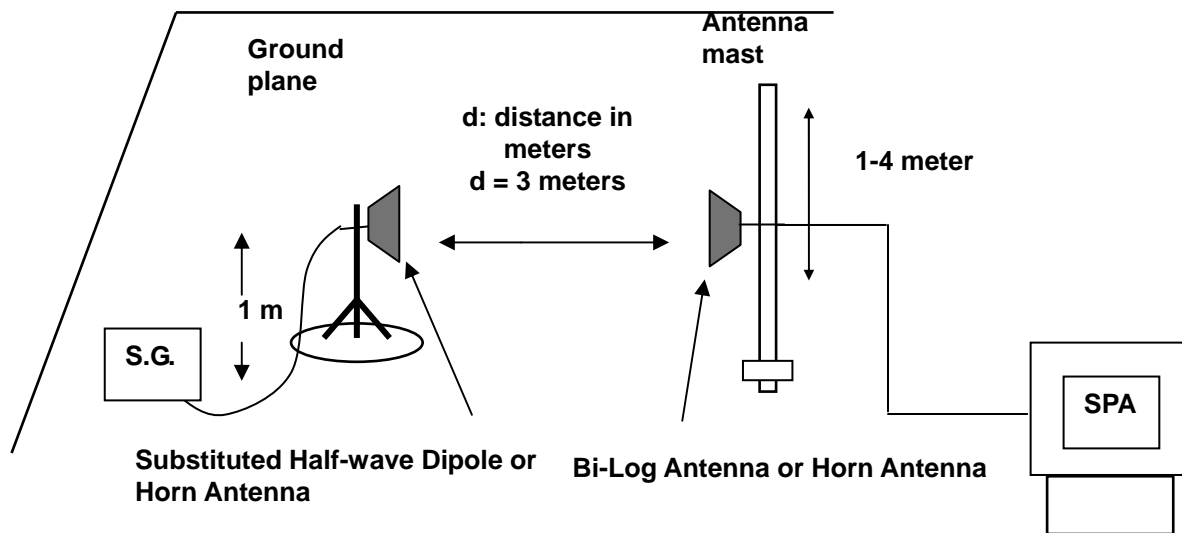
Below 1 GHz



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 ± 3.072 dB.

3.6. Test Result

| Model Number | QBA757 | | | | | | | |
|--------------|-----------------|-----------------|-------------|------------------|-------------------------|--------------|--------------|-------|
| Test Item | ERP/EIRP | | | | | | | |
| Date of Test | 10/01/2012 | | | | | Test Site | TE01 | |
| Bands | Modulation Type | Frequency (MHz) | Ant. Polar. | Read Level (dBm) | Correction Factor (dBm) | ERP | | Limit |
| | | | | | | (dBm) | (W) | |
| GSM 850 | GMSK | 824.2 | H | 10.26 | 11.95 | 22.21 | 0.166 | < 7W |
| | | | V | 15.12 | 11.29 | 26.41 | 0.438 | < 7W |
| | | 836.6 | H | 8.53 | 12.07 | 20.60 | 0.115 | < 7W |
| | | | V | 13.85 | 11.34 | 25.19 | 0.330 | < 7W |
| | | 848.8 | H | 7.24 | 12.51 | 19.75 | 0.094 | < 7W |
| | | | V | 13.19 | 11.47 | 24.66 | 0.292 | < 7W |

| Model Number | QBA757 | | | | | | | |
|--------------|-----------------|-----------------|-------------|------------------|-------------------------|--------------|--------------|-------|
| Test Item | ERP/EIRP | | | | | | | |
| Date of Test | 10/01/2012 | | | | | Test Site | TE01 | |
| Bands | Modulation Type | Frequency (MHz) | Ant. Polar. | Read Level (dBm) | Correction Factor (dBm) | EIRP | | Limit |
| | | | | | | (dBm) | (W) | |
| GSM 1900 | GMSK | 1850.20 | H | 11.63 | 10.49 | 22.12 | 0.163 | < 2W |
| | | | V | 13.74 | 8.33 | 22.07 | 0.161 | < 2W |
| | | 1880.00 | H | 10.94 | 10.51 | 21.45 | 0.140 | < 2W |
| | | | V | 13.22 | 8.57 | 21.79 | 0.151 | < 2W |
| | | 1909.80 | H | 11.37 | 10.52 | 21.89 | 0.155 | < 2W |
| | | | V | 13.43 | 8.81 | 22.24 | 0.167 | < 2W |

| Model Number | QBA757 | | | | | | | |
|--------------|-----------------|-----------------|-------------|------------------|-------------------------|--------------|--------------|-------|
| Test Item | ERP/EIRP | | | | | | | |
| Date of Test | 10/01/2012 | | | | | 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 | 9.56 | 11.31 | 20.87 | 0.122 | < 7W |
| | | | V | 12.71 | 11.31 | 24.02 | 0.252 | < 7W |
| | | 836.6 | H | 8.44 | 11.33 | 19.77 | 0.095 | < 7W |
| | | | V | 10.04 | 11.34 | 21.38 | 0.137 | < 7W |
| | | 846.6 | H | 8.77 | 11.43 | 20.20 | 0.105 | < 7W |
| | | | H | 11.55 | 11.42 | 22.97 | 0.198 | < 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.

4 Occupied Bandwidth Test

4.1. Limit

The Occupied Bandwidth Limit:

N/A.

The Band Edge 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.

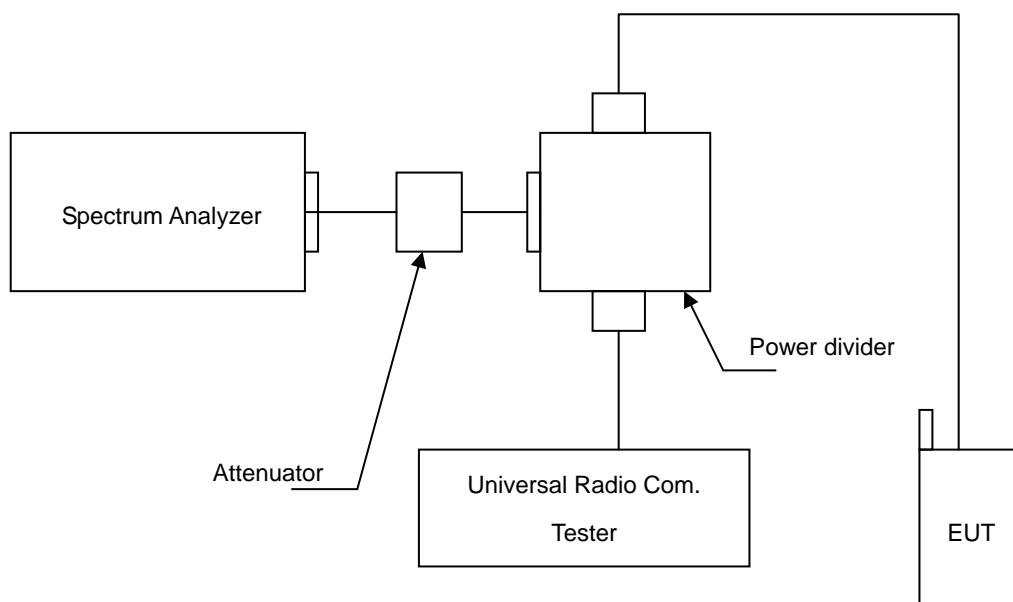
4.2. Test Instruments

| 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: ⁽¹⁾ Calibration period 1 year. ⁽²⁾ 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.
3. 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.
4. The band edge setting:
 - a. RB=10 kHz; VB=30 kHz for GSM 850 and PCS 1900.
 - b. RB=100 kHz; VB=300 kHz for WCDMA Band V and WCDMA Band II.

4.5. Uncertainty

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

4.6. Test Result

99% Occupied Bandwidth

| Model Number | QBA757 | | | |
|--------------|--------------------|-----------------|---------------------|-----------------------|
| Test Item | Occupied Bandwidth | | | |
| Date of Test | 09/04/2012 | | | Test Site TE05 |
| Bands | Channel | Frequency (MHz) | 99% Bandwidth (kHz) | Note |
| GSM 850 | 128 | 824.2 | 246.1306 | RBW:10KHz , VBW:30KHz |
| | 190 | 836.6 | 246.8689 | RBW:10KHz , VBW:30KHz |
| | 251 | 848.8 | 246.0720 | RBW:10KHz , VBW:30KHz |
| GSM 1900 | 512 | 1850.20 | 246.7830 | RBW:10KHz , VBW:30KHz |
| | 661 | 1880.00 | 247.4876 | RBW:10KHz , VBW:30KHz |
| | 810 | 1909.80 | 248.6003 | RBW:10KHz , VBW:30KHz |


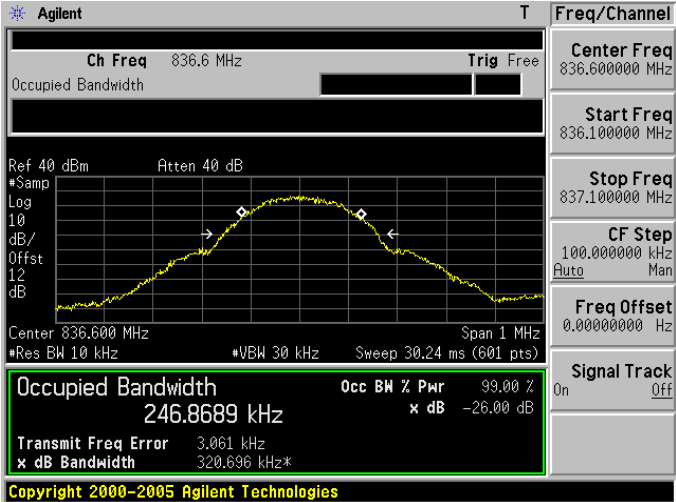
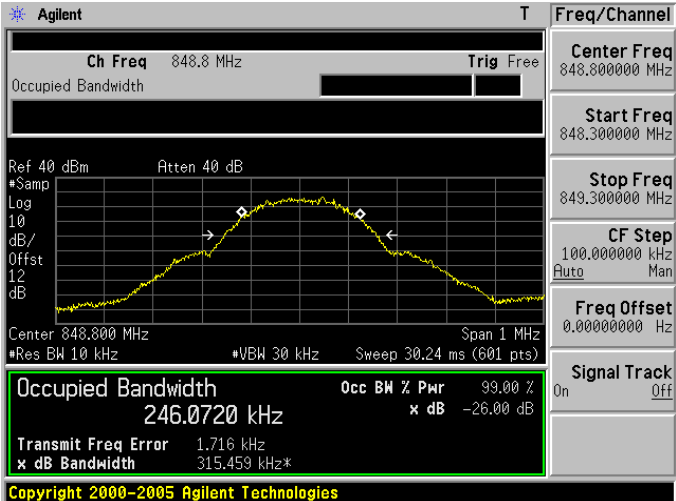
| Model Number | QBA757 | | | |
|--------------|--------------------|-----------------|---------------------|-------------------------|
| Test Item | Occupied Bandwidth | | | |
| Date of Test | 09/04/2012 | | | Test Site TE05 |
| Bands | Channel | Frequency (MHz) | 99% Bandwidth (MHz) | Note |
| WCDMA Band V | 4132 | 826.4 | 4.1629 | RBW:100KHz , VBW:300KHz |
| | 4183 | 836.6 | 4.1494 | RBW:100KHz , VBW:300KHz |
| | 4233 | 846.6 | 4.1698 | RBW:100KHz , VBW:300KHz |

Band Edge

| Model Number | QBA757 | | | | | |
|--------------|------------|---------|-----------------|-----------------|-------------|--------|
| Test Item | Band Edge | | | | | |
| Date of Test | 09/04/2012 | | | Test Site | TE05 | |
| Bands | | Channel | Frequency (MHz) | Bandwidth (dBm) | Limit (dBm) | Result |
| GSM 850 | Lower | 128 | 823.9850 | -14.17 | -13 | Pass |
| | Higher | 251 | 849.0180 | -14.68 | -13 | Pass |
| GSM 1900 | Lower | 512 | 1850.000 | -26.69 | -13 | Pass |
| | Higher | 810 | 1910.020 | -28.75 | -13 | Pass |
| WCDMA Band V | Lower | 4132 | 823.9200 | -24.04 | -13 | Pass |
| | Higher | 4233 | 849.0000 | -25.81 | -13 | Pass |

4.7. Test Graphs

99% Occupied Bandwidth

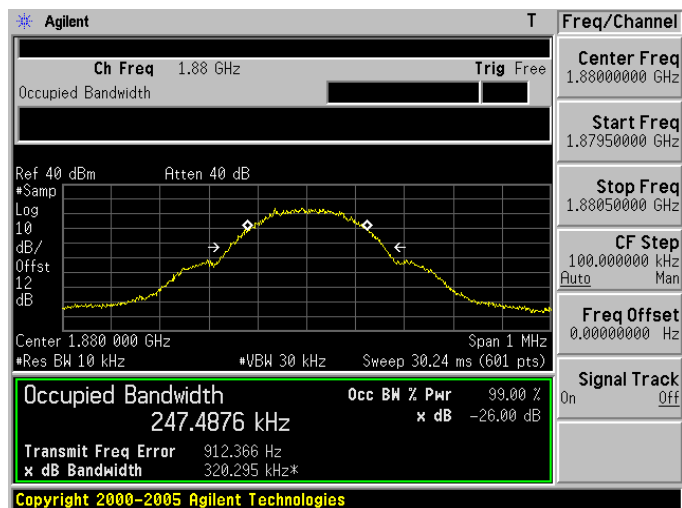
| Mode 1: GSM 850 Link Mode | |
|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 824.2 MHz |  <p>Agilent R T Freq/Channel</p> <p>Ch Freq 824.2 MHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Ref 40 dBm Atten 40 dB</p> <p>*Samp Log 10 dB/Offst 12 dB</p> <p>Center 824.200 MHz Span 1 MHz</p> <p>*Res BW 10 kHz *VBW 30 kHz Sweep 30.24 ms (601 pts)</p> <p>Occupied Bandwidth 246.1306 kHz Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error 1.152 kHz</p> <p>x dB Bandwidth 318.083 kHz*</p> <p>Copyright 2000-2005 Agilent Technologies</p> <p>Freq/Channel</p> <p>Center Freq 824.200000 MHz</p> <p>Start Freq 823.700000 MHz</p> <p>Stop Freq 824.700000 MHz</p> <p>CF Step 100.000000 kHz Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> |
| 836.6 MHz |  <p>Agilent T Freq/Channel</p> <p>Ch Freq 836.6 MHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Ref 40 dBm Atten 40 dB</p> <p>*Samp Log 10 dB/Offst 12 dB</p> <p>Center 836.600 MHz Span 1 MHz</p> <p>*Res BW 10 kHz *VBW 30 kHz Sweep 30.24 ms (601 pts)</p> <p>Occupied Bandwidth 246.8689 kHz Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error 3.061 kHz</p> <p>x dB Bandwidth 320.696 kHz*</p> <p>Copyright 2000-2005 Agilent Technologies</p> <p>Freq/Channel</p> <p>Center Freq 836.600000 MHz</p> <p>Start Freq 836.100000 MHz</p> <p>Stop Freq 837.100000 MHz</p> <p>CF Step 100.000000 kHz Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> |
| 848.8 MHz |  <p>Agilent T Freq/Channel</p> <p>Ch Freq 848.8 MHz Trig Free</p> <p>Occupied Bandwidth</p> <p>Ref 40 dBm Atten 40 dB</p> <p>*Samp Log 10 dB/Offst 12 dB</p> <p>Center 848.800 MHz Span 1 MHz</p> <p>*Res BW 10 kHz *VBW 30 kHz Sweep 30.24 ms (601 pts)</p> <p>Occupied Bandwidth 246.0720 kHz Occ BW % Pwr 99.00 % x dB -26.00 dB</p> <p>Transmit Freq Error 1.716 kHz</p> <p>x dB Bandwidth 315.459 kHz*</p> <p>Copyright 2000-2005 Agilent Technologies</p> <p>Freq/Channel</p> <p>Center Freq 848.800000 MHz</p> <p>Start Freq 848.300000 MHz</p> <p>Stop Freq 849.300000 MHz</p> <p>CF Step 100.000000 kHz Auto Man</p> <p>Freq Offset 0.00000000 Hz</p> <p>Signal Track On Off</p> |

Mode 2: GSM 1900 Link Mode

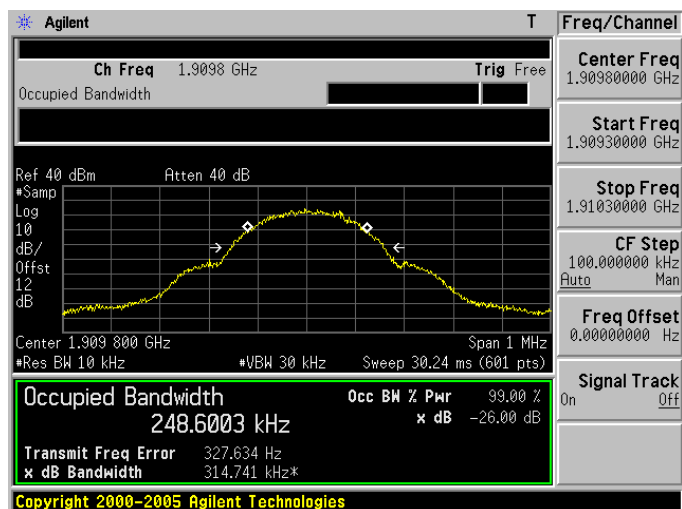
1850.20 MHz



1880.00 MHz

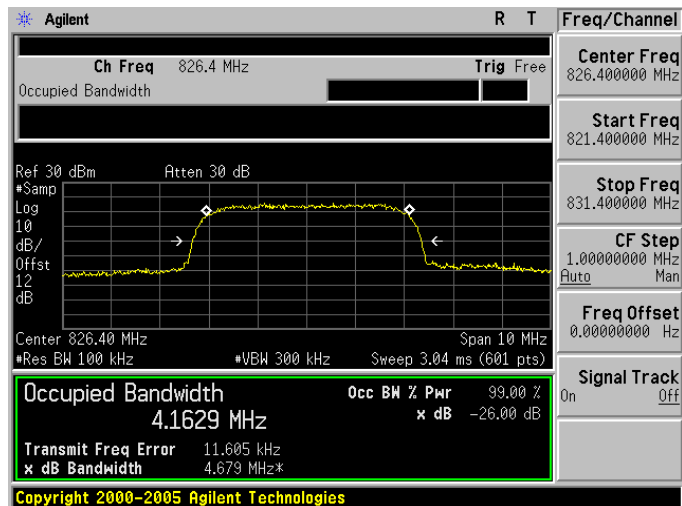


1909.80 MHz

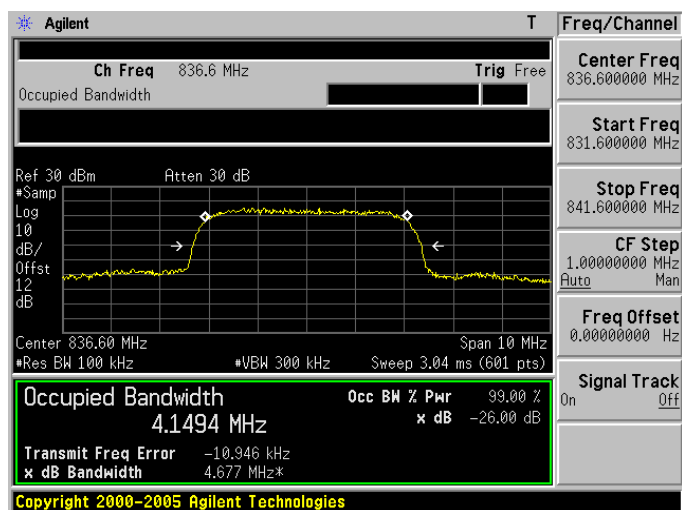


Mode 3: WCDMA Band V Link Mode

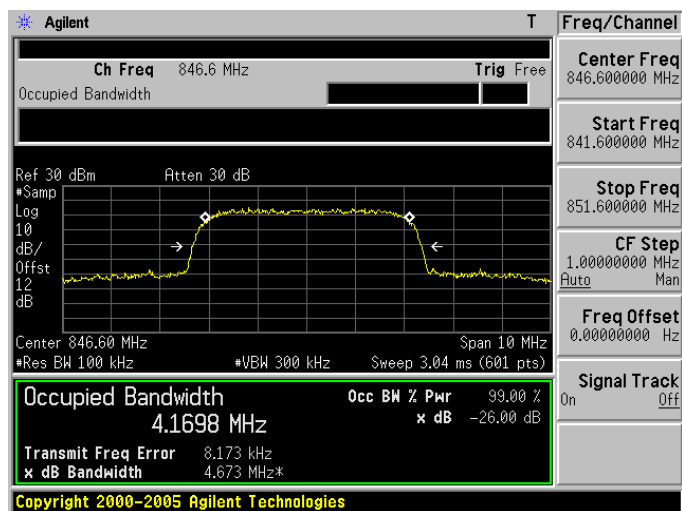
826.4 MHz



836.6 MHz



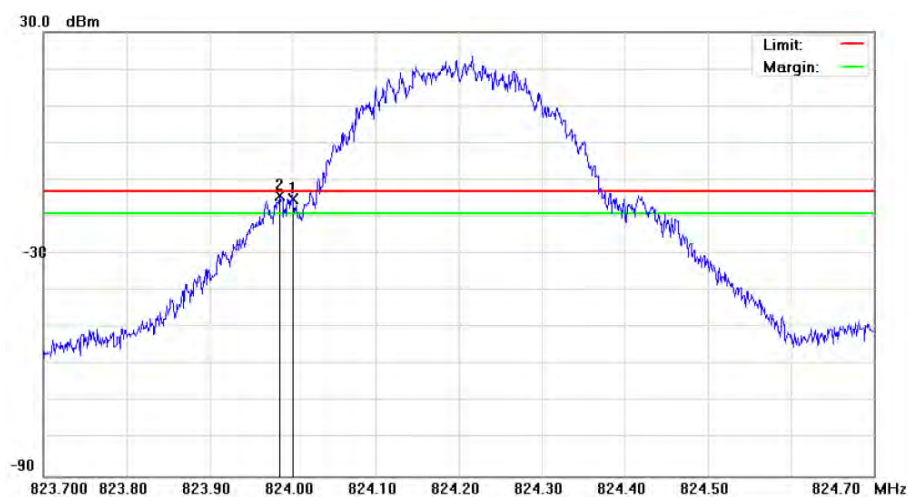
846.6 MHz



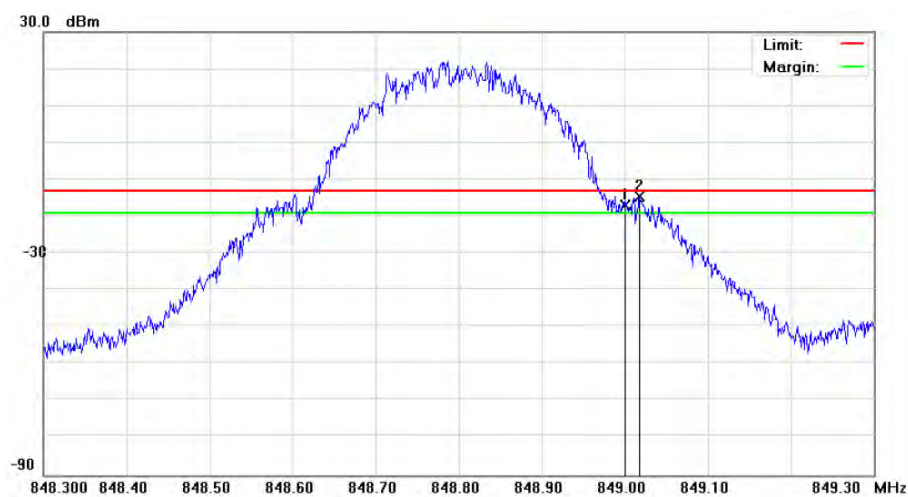
Band Edge

Mode 1: GSM 850 Link Mode

Lower Band

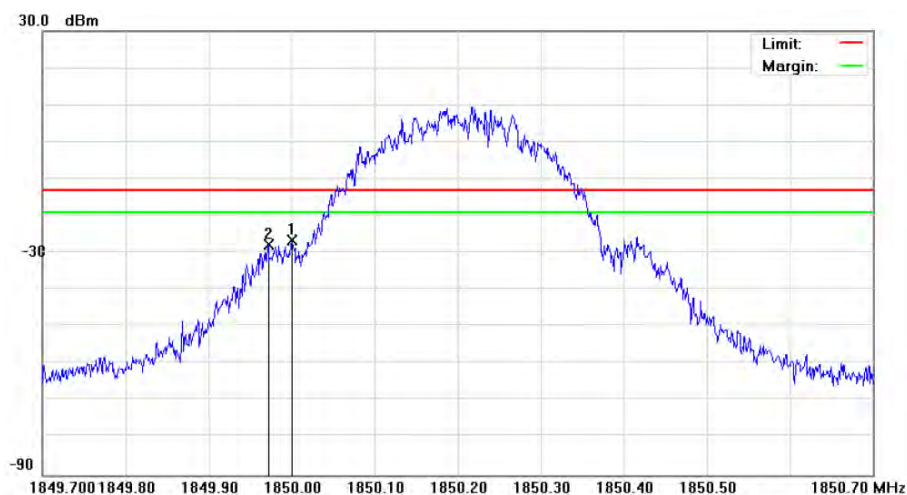


Higher Band

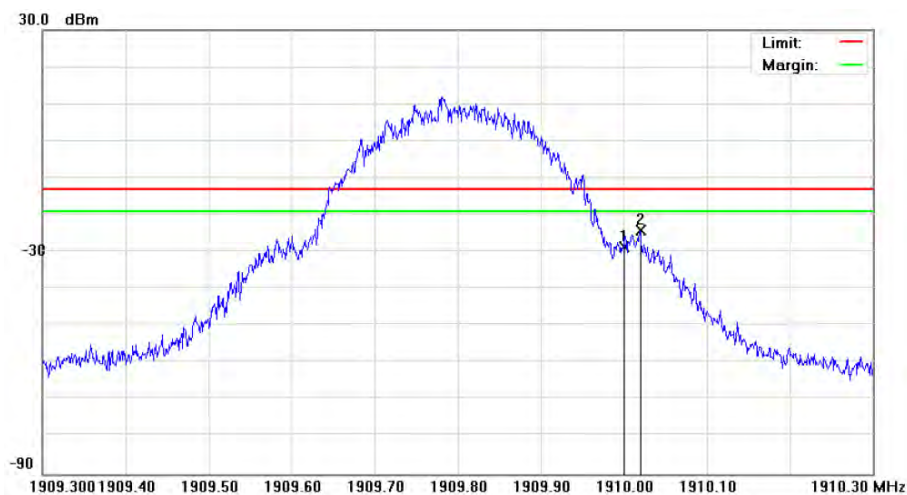


Mode 2: GSM 1900 Link Mode

Lower Band



Higher Band

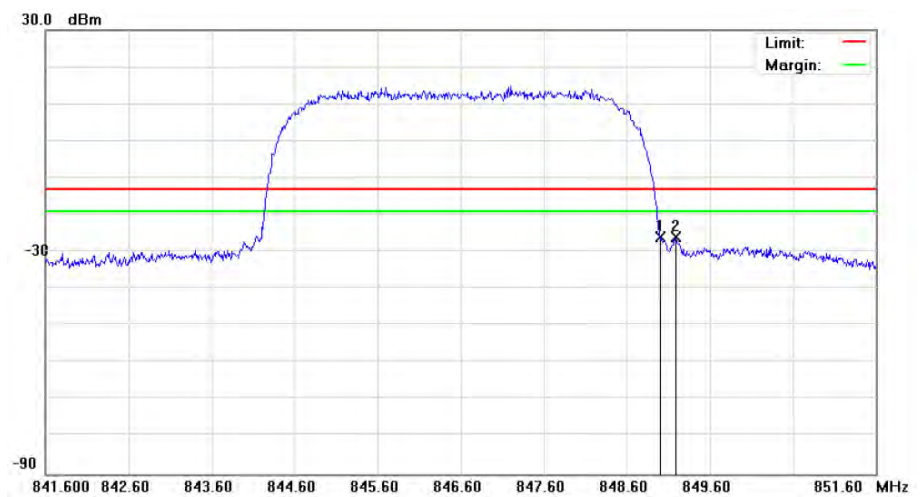


Mode 3: WCDMA Band V Link Mode

Lower Band



Higher Band



5 Conducted Spurious Emission Test

5.1. 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.

5.2. Test Instruments

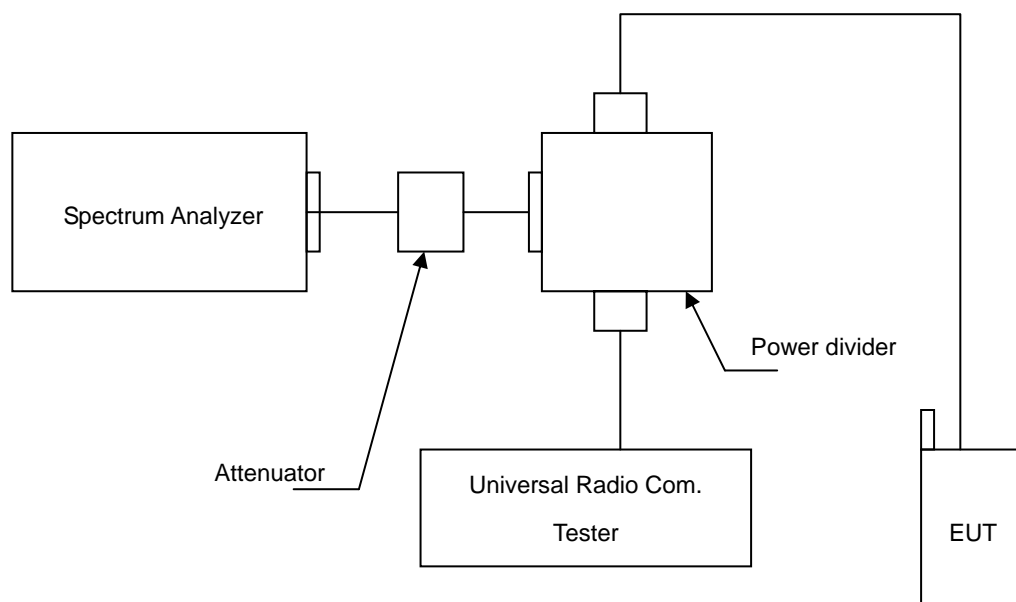
| Equipment | Manufacturer | Model Number | Serial Number | Cal. Date | Remark |
|--------------------------------------|--------------|--------------|---------------|------------|--------|
| Universal Radio Communication Tester | R & S | CMU200 | 109369 | 08/07/2012 | (2) |
| Spectrum Analyzer | Agilent | 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: ⁽¹⁾ Calibration period 1 year. ⁽²⁾ Calibration period 2 years.

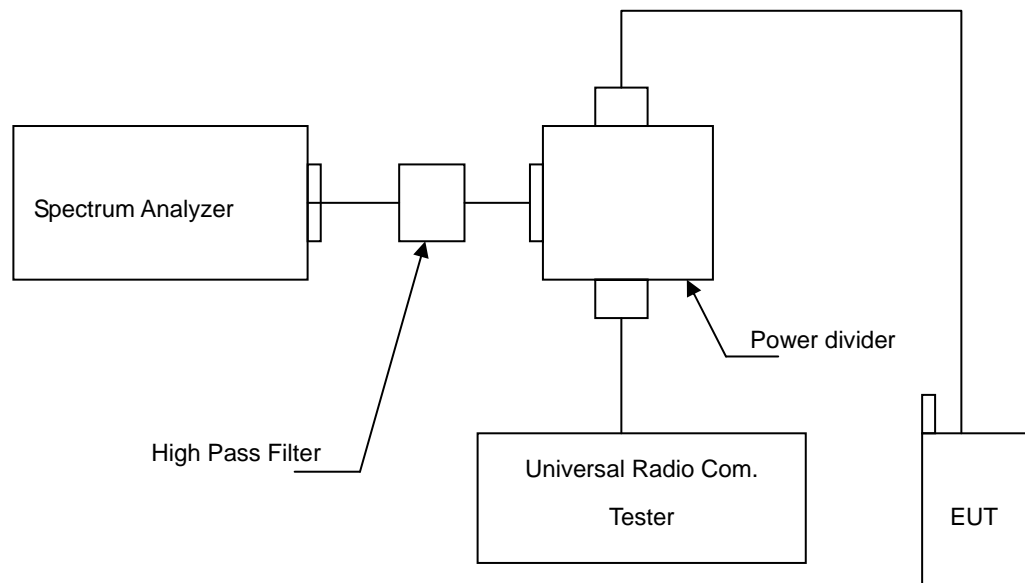
Note: N.C.R. = No Calibration Request.

5.3. Setup

Below 2.8GHz



Above 2.8GHz



5.4. 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.

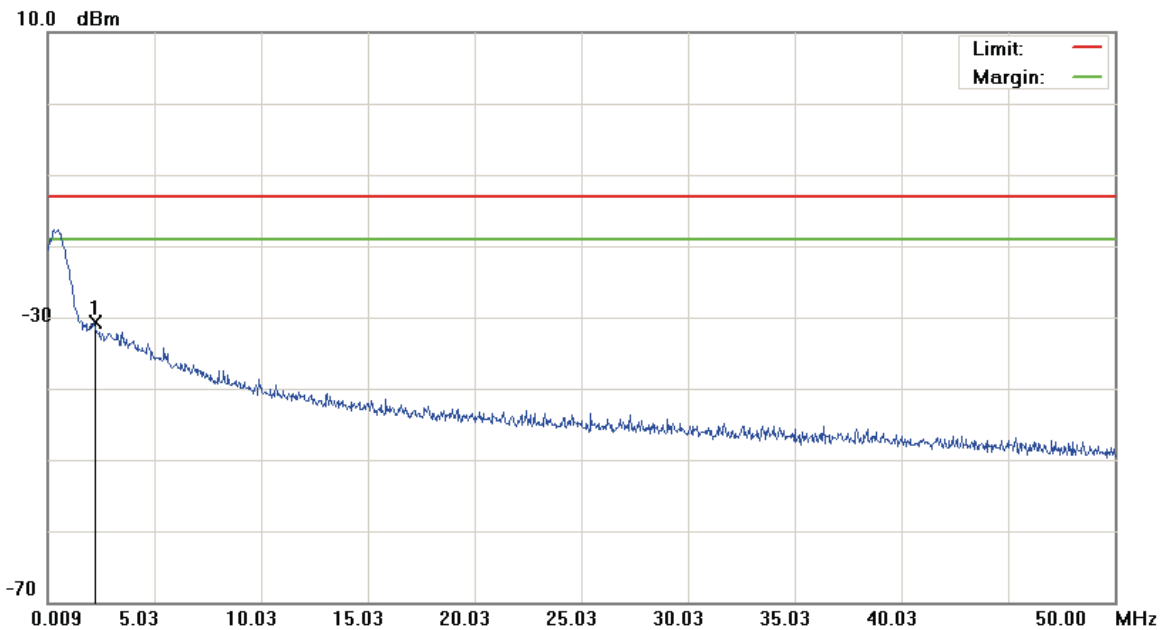
5.5. Uncertainty

The measurement uncertainty is evaluated as ± 2.24 dB.

5.6. Test Result

| | | | |
|--------------|--------------------------|-----------|------|
| Model Number | QBA757 | | |
| Test Item | Conducted Emission | | |
| Test Mode | Mode 1 / Mode 2 / Mode 3 | | |
| Date of Test | 09/04/2012 | Test Site | TE05 |

File :AVA757(CH128) Data :#1 Date:2012/9/4 Time: 下午 01:30:33

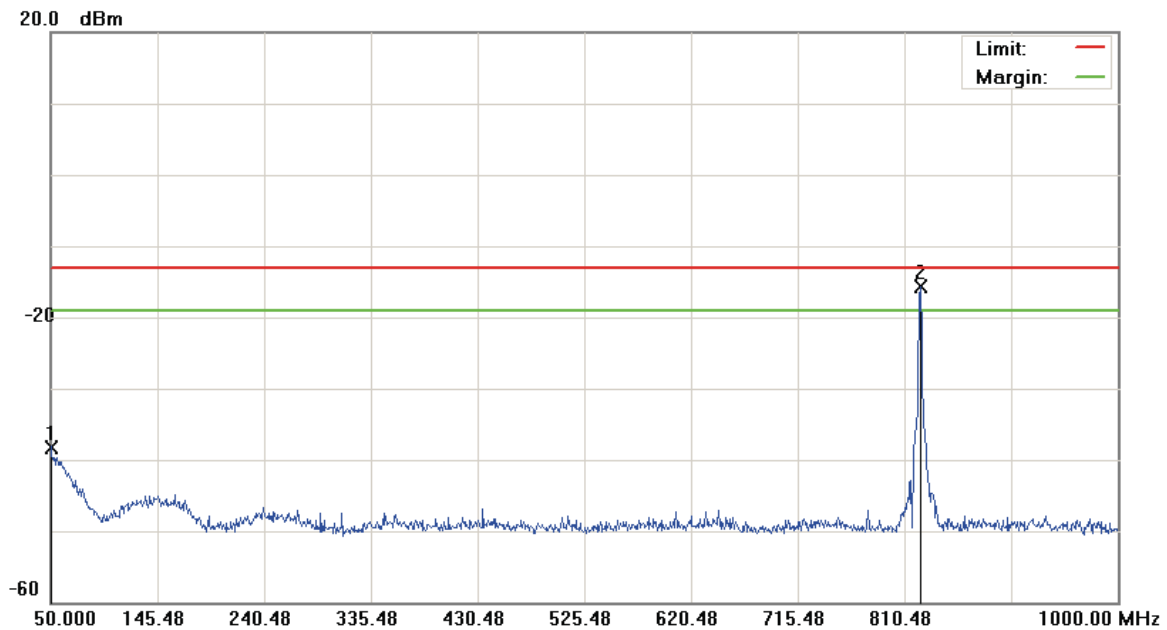


| | | |
|-----------------------------------------|-----------------------------------|-----------------------------|
| Site: : RF Conducted | Polarization: Conducted po | Temperature: 23 °C |
| Limit: FCC Part 22 conducted(9k-12.75G) | Power: AC 120V/60Hz | Humidity: 55.2 % |
| EUT: Dual Sim Smart phone | Distance: | RBW: 1000 KHz VBW: 1000 KHz |
| M/N: QBA757 | | |
| Mode: 1 | | |
| Note: | | |

| No. | Mk. | Freq. MHz | Reading Level dBm | Correct Factor dB | Measure- ment dBm | Limit dBm | Over dB | Antenna Height cm | Table Degree | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|------------|-------------------------|-----------------|---------|
| 1 | * | 2.1836 | -62.05 | 31.34 | -30.71 | -13.00 | -17.71 | peak | | |

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

File :AVA757(CH128) Data :#2 Date:2012/9/4 Time: 下午 01:30:57

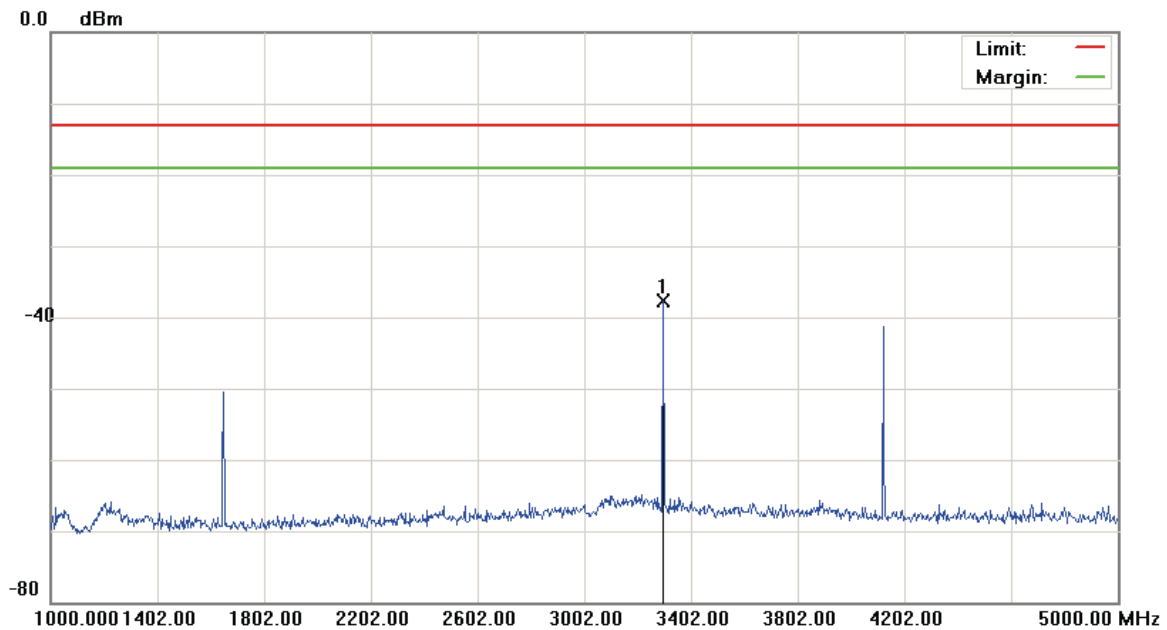


Site: : RF Conducted Polarization: *Conducted po* Temperature: 23 °C
 Limit: FCC Part 22 conducted(9k-12.75G) Power: AC 120V/60Hz Humidity: 55.2 %
 EUT: Dual Sim Smart phone Distance: RBW: 1000 KHz VBW: 1000 KHz
 M/N: QBA757
 Mode: 1
 Note:

| 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 | | 50.4750 | -52.81 | 14.61 | -38.20 | -13.00 | -25.20 | peak | | |
| 2 | * | 824.2500 | -19.58 | 3.84 | -15.74 | -13.00 | -2.74 | peak | | Tx |

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

File :AVA757(CH128) Data :#3 Date:2012/9/4 Time: 下午 03:51:21

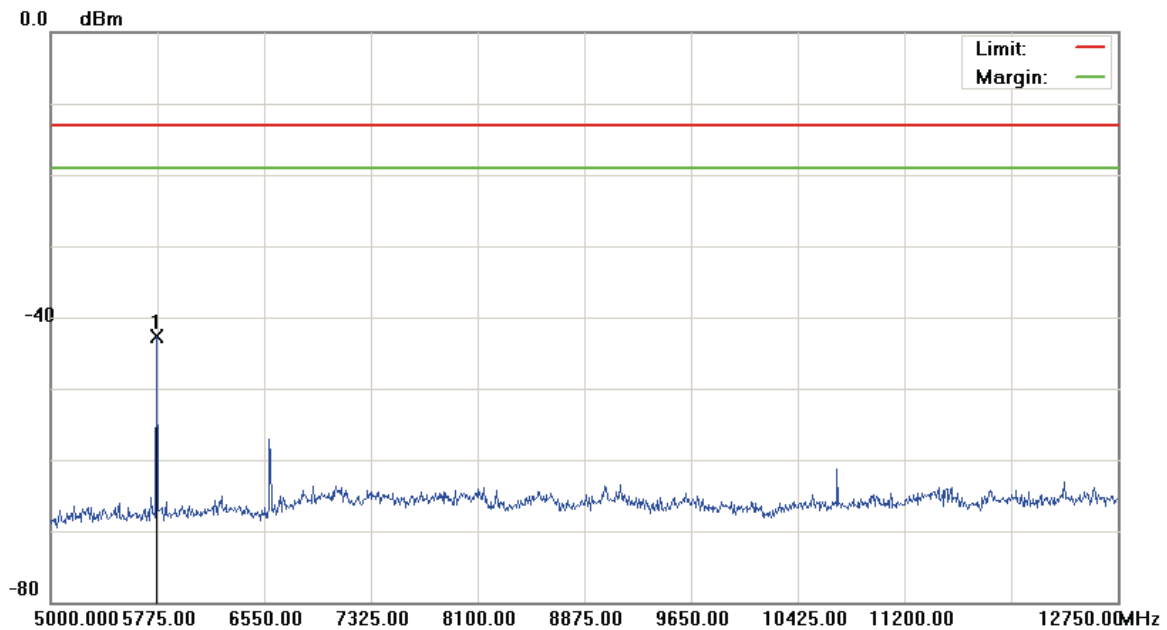


| | | |
|-----------------------------------------|-----------------------------------|-----------------------------|
| Site: : RF Conducted | Polarization: <i>Conducted po</i> | Temperature: 23 °C |
| Limit: FCC Part 22 conducted(9k-12.75G) | Power: AC 120V/60Hz | Humidity: 55.2 % |
| EUT: Dual Sim Smart phone | Distance: | RBW: 1000 KHz VBW: 1000 KHz |
| M/N: QBA757 | | |
| Mode: 1 | | |
| Note: | | |

| No. | Mk. | Freq. MHz | Reading Level dBm | Correct Factor dB | Measure- ment dBm | Limit dBm | Over dB | Antenna Height cm | Table Degree | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|------------|-------------------------|-----------------|---------|
| 1 | * | 3296.000 | -42.21 | 4.44 | -37.77 | -13.00 | -24.77 | peak | | |

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

File :AVA757(CH128) Data :#4 Date:2012/9/4 Time: 下午 03:51:44

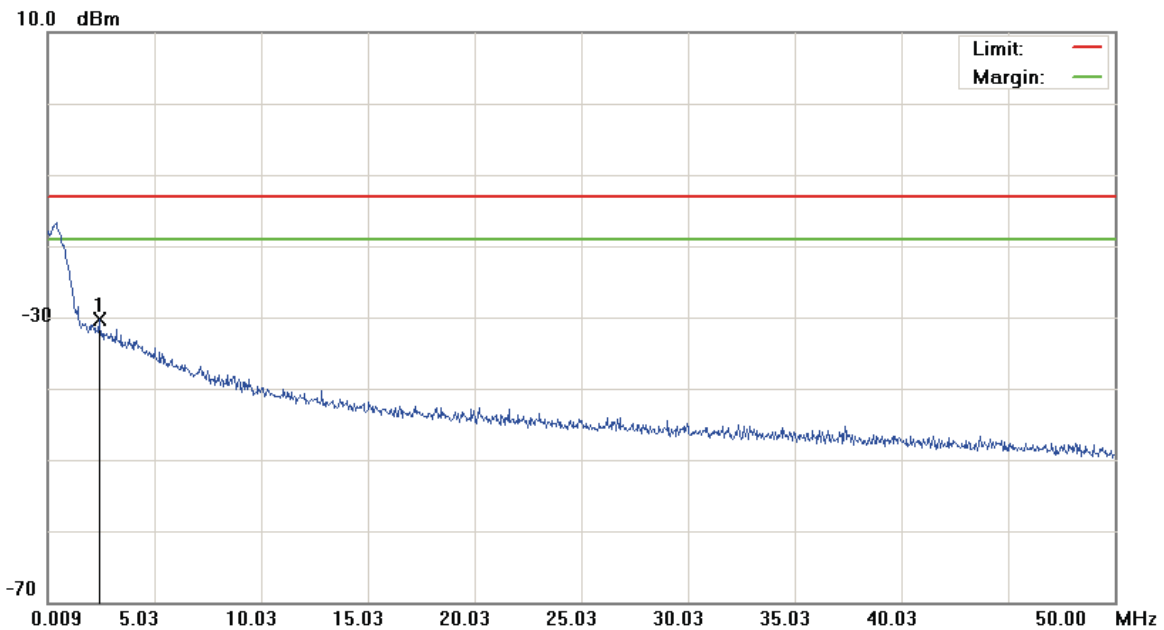


| | | |
|-----------------------------------------|-----------------------------------|-----------------------------|
| Site: : RF Conducted | Polarization: <i>Conducted po</i> | Temperature: 23 °C |
| Limit: FCC Part 22 conducted(9k-12.75G) | Power: AC 120V/60Hz | Humidity: 55.2 % |
| EUT: Dual Sim Smart phone | Distance: | RBW: 1000 KHz VBW: 1000 KHz |
| M/N: QBA757 | | |
| Mode: 1 | | |
| Note: | | |

| No. | Mk. | Freq. MHz | Reading Level dBm | Correct Factor dB | Measure- ment dBm | Limit dBm | Over dB | Antenna Height cm | Table Degree | Detector | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|------------|-------------------------|-----------------|----------|---------|
| 1 | * | 5767.250 | -47.69 | 4.98 | -42.71 | -13.00 | -29.71 | | | peak | |

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

File :AVA757(CH190) Data :#1 Date:2012/9/4 Time: 下午 01:41:06

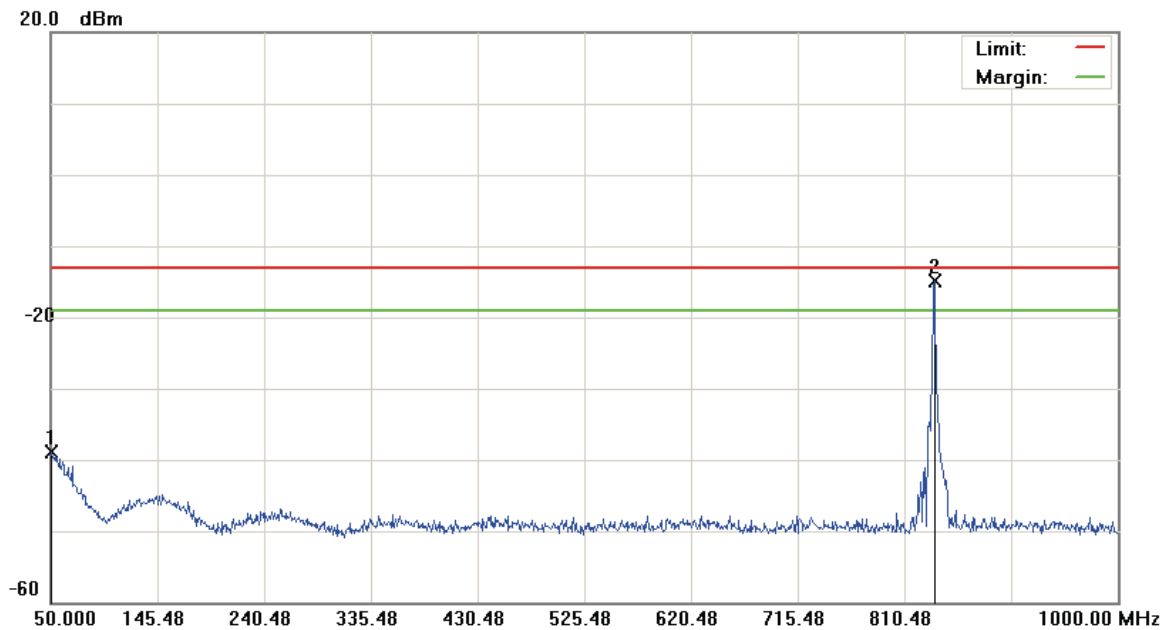


Site: : RF Conducted Polarization: **Conducted po** Temperature: 23 °C
 Limit: FCC Part 22 conducted(9k-12.75G) Power: AC 120V/60Hz Humidity: 55.2 %
 EUT: Dual Sim Smart phone Distance: RBW: 1000 KHz VBW: 1000 KHz
 M/N: QBA757
 Mode: 1
 Note:

| No. | Mk. | Freq. MHz | Reading Level dBm | Correct Factor dB | Measure- ment dBm | Limit dBm | Over dB | Antenna Height cm | Table Degree | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|------------|-------------------------|-----------------|---------|
| 1 | * | 2.4336 | -61.02 | 30.80 | -30.22 | -13.00 | -17.22 | peak | | |

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

File :AVA757(CH190) Data :#2 Date:2012/9/4 Time: 下午 01:41:30



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: Dual Sim Smart phone Distance: RBW: 1000 KHz VBW: 1000 KHz
 M/N: QBA757
 Mode: 1
 Note:

| 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 | | 50.4750 | -53.59 | 14.61 | -38.98 | -13.00 | -25.98 | peak | | |
| 2 | * | 836.6000 | -18.92 | 3.96 | -14.96 | -13.00 | -1.96 | peak | | Tx |

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

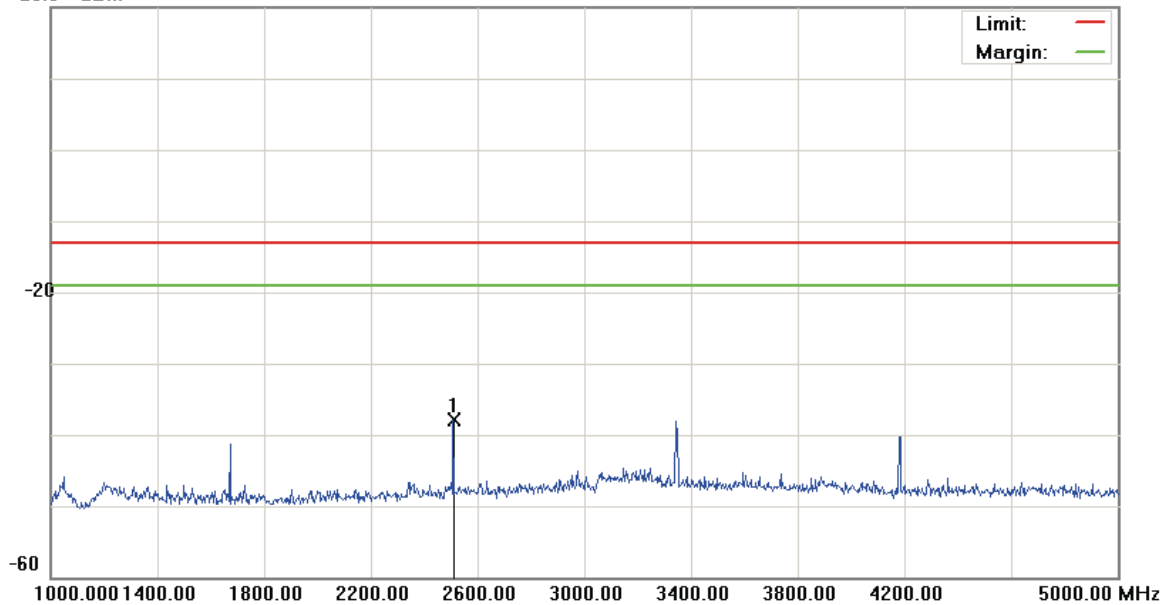
File :AVA757(CH190)

Data :#3

Date:2012/9/4

Time: 下午 03:52:19

20.0 dBm



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: Dual Sim Smart phone

Distance:

RBW: 1000 KHz VBW: 1000 KHz

M/N: QBA757

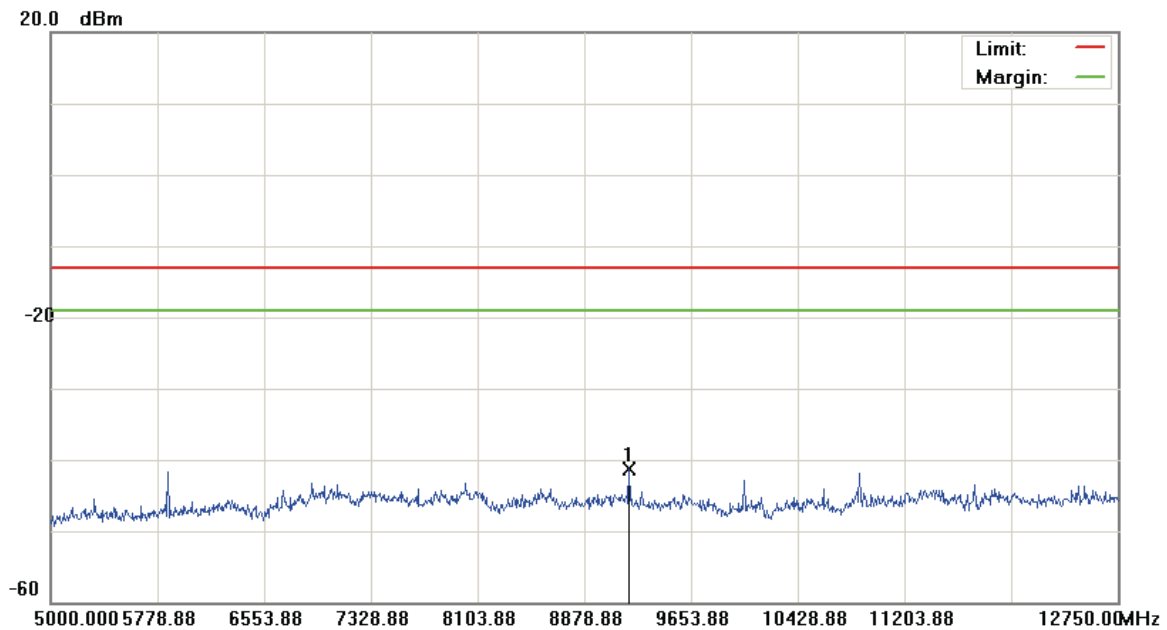
Mode: 1

Note:

| 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 | * | 2510.000 | -42.26 | 4.36 | -37.90 | -13.00 | -24.90 | peak | | |

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

File :AVA757(CH190) Data :#4 Date:2012/9/4 Time: 下午 03:52:43

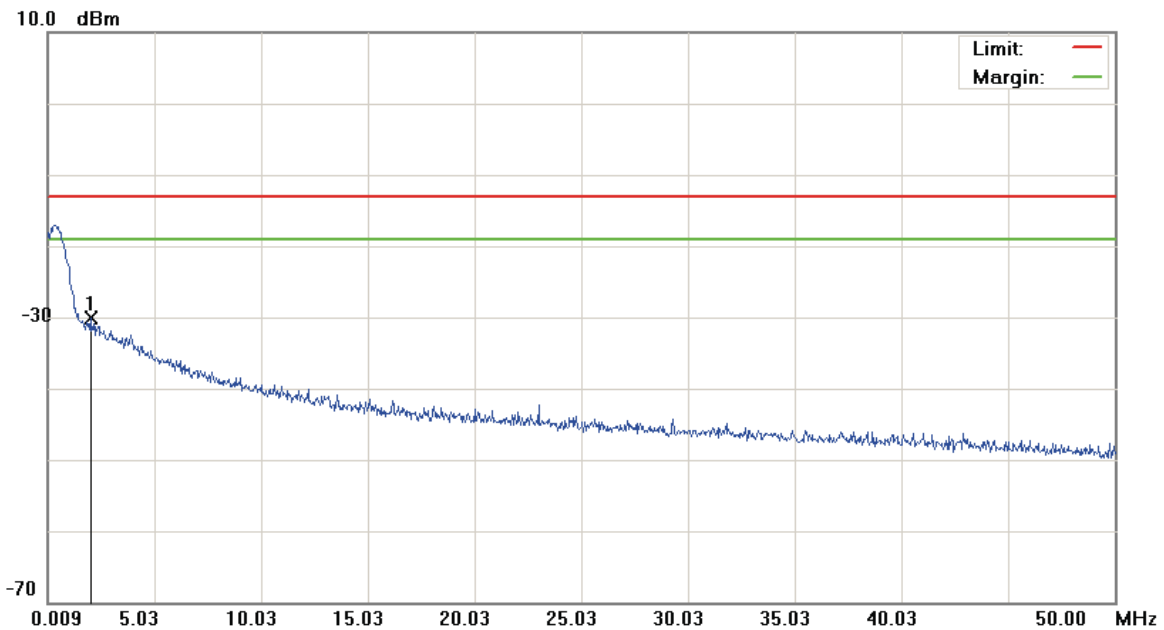


Site: : RF Conducted Polarization: *Conducted po* Temperature: 23 °C
 Limit: FCC Part 22 conducted(9k-12.75G) Power: AC 120V/60Hz Humidity: 55.2 %
 EUT: Dual Sim Smart phone Distance: RBW: 1000 KHz VBW: 1000 KHz
 M/N: QBA757
 Mode: 1
 Note:

| No. | Mk. | Freq. MHz | Reading Level dBm | Correct Factor dB | Measure- ment dBm | Limit dBm | Over dB | Antenna Height cm | Table Degree | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|------------|-------------------------|-----------------|---------|
| 1 | * | 9200.500 | -46.78 | 5.50 | -41.28 | -13.00 | -28.28 | peak | | |

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

File:AVA757(CH251) Data :#1 Date:2012/9/4 Time: 下午 01:43:10

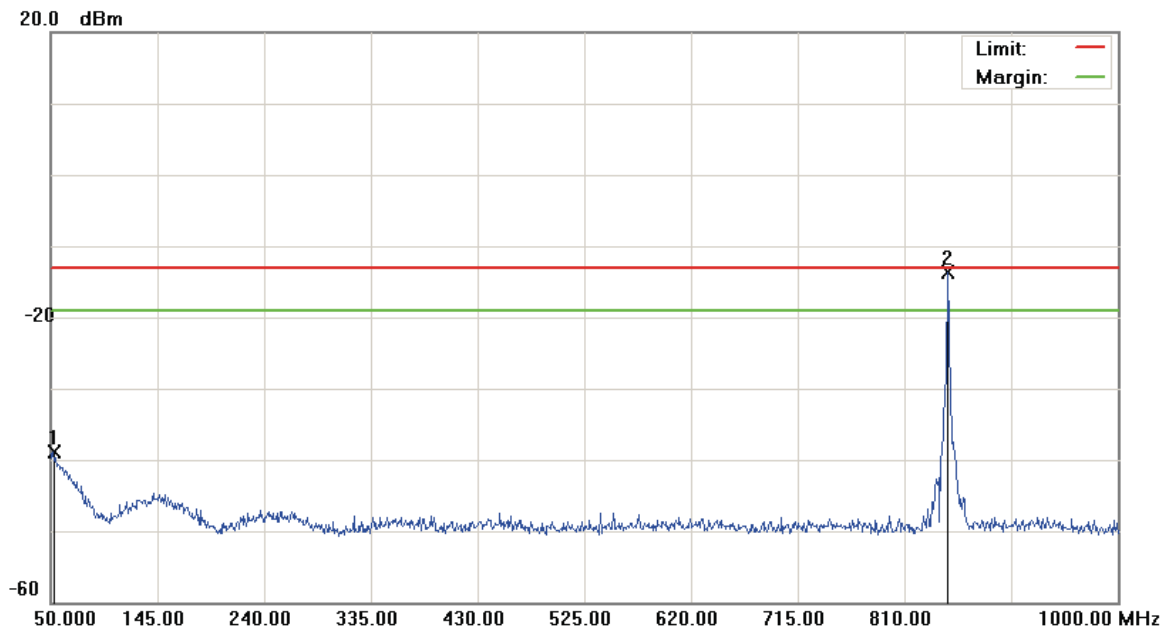


Site: : RF Conducted Polarization: **Conducted po** Temperature: 23 °C
 Limit: FCC Part 22 conducted(9k-12.75G) Power: AC 120V/60Hz Humidity: 55.2 %
 EUT: Dual Sim Smart phone Distance: RBW: 1000 KHz VBW: 1000 KHz
 M/N: QBA757
 Mode: 1
 Note:

| No. | Mk. | Freq. MHz | Reading Level dBm | Correct Factor dB | Measure- ment dBm | Limit dBm | Over dB | Antenna Height cm | Table Degree | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|------------|-------------------------|-----------------|---------|
| 1 | * | 2.0085 | -61.53 | 31.37 | -30.16 | -13.00 | -17.16 | peak | | |

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

File :AVA757(CH251) Data :#2 Date:2012/9/4 Time: 下午 01:43:34

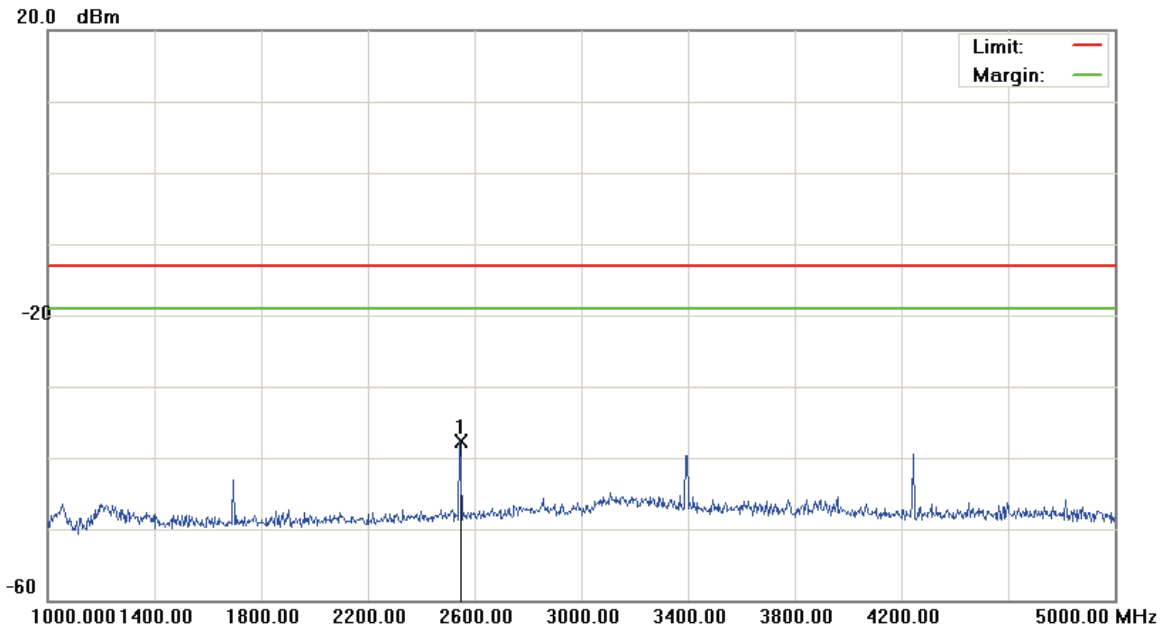


Site: : RF Conducted Polarization: *Conducted po* Temperature: 23 °C
 Limit: FCC Part 22 conducted(9k-12.75G) Power: AC 120V/60Hz Humidity: 55.2 %
 EUT: Dual Sim Smart phone Distance: RBW: 1000 KHz VBW: 1000 KHz
 M/N: QBA757
 Mode: 1
 Note:

| 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 | | 52.3750 | -53.19 | 14.27 | -38.92 | -13.00 | -25.92 | peak | | |
| 2 | * | 848.9500 | -17.73 | 3.98 | -13.75 | -13.00 | -0.75 | peak | | Tx |

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

File :AVA757(CH251) Data :#3 Date:2012/9/4 Time: 下午 03:53:14



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: Dual Sim Smart phone Distance: RBW: 1000 KHz VBW: 1000 KHz
M/N: QBA757
Mode: 1
Note:

| No. | Mk. | Freq. MHz | Reading Level dBm | Correct Factor dB | Measure- ment dBm | Limit dBm | Over dB | Antenna Height cm | Table Degree | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|------------|-------------------------|-----------------|---------|
| 1 | * | 2546.000 | -42.16 | 4.45 | -37.71 | -13.00 | -24.71 | peak | | |

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

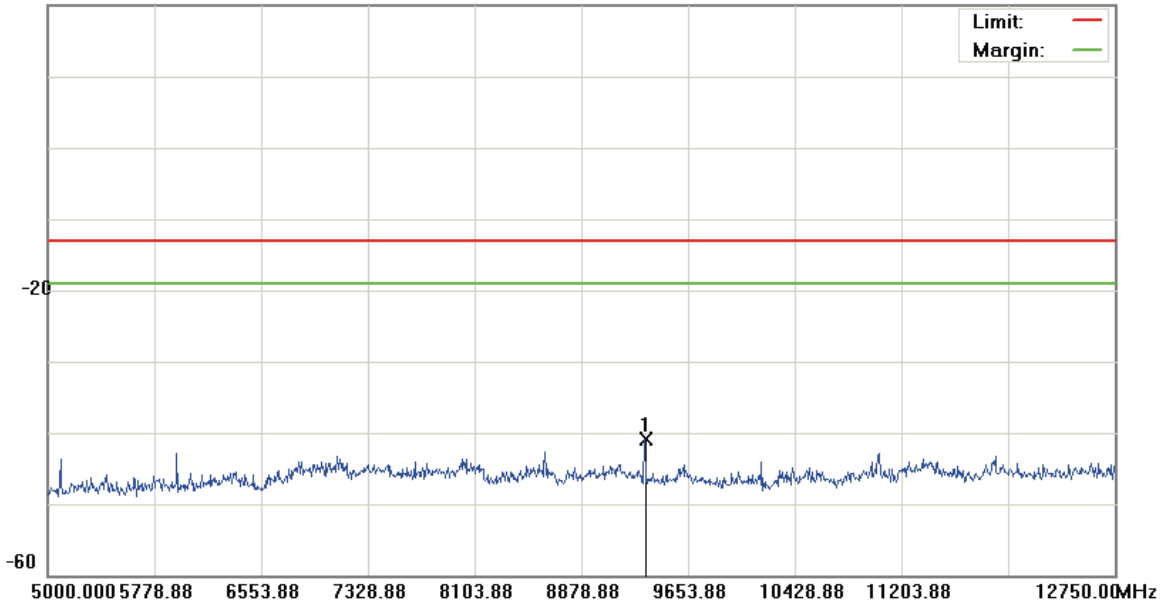
File :AVA757(CH251)

Data :#4

Date:2012/9/4

Time: 下午 03:53:38

20.0 dBm

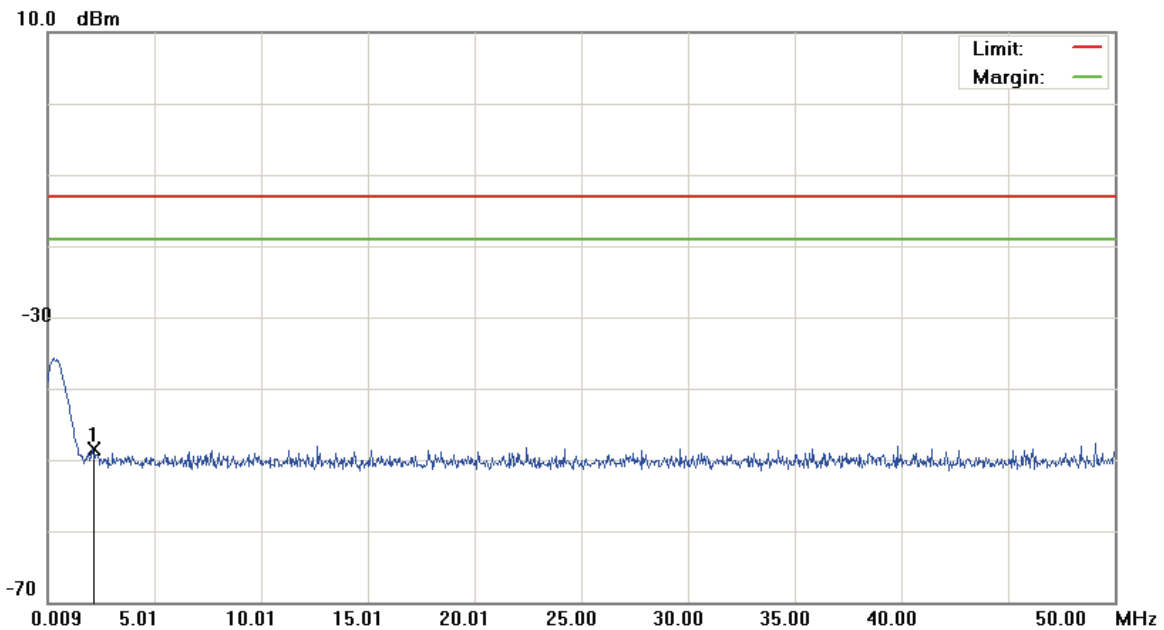


| | | |
|-----------------------------------------|-----------------------------------|-----------------------------|
| Site: : RF Conducted | Polarization: <i>Conducted po</i> | Temperature: 23 °C |
| Limit: FCC Part 22 conducted(9k-12.75G) | Power: AC 120V/60Hz | Humidity: 55.2 % |
| EUT: Dual Sim Smart phone | Distance: | RBW: 1000 KHz VBW: 1000 KHz |
| M/N: QBA757 | | |
| Mode: 1 | | |
| Note: | | |

| No. | Mk. | Freq. MHz | Reading Level dBm | Correct Factor dB | Measure- ment dBm | Limit dBm | Over dB | Antenna Height cm | Table Degree | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|------------|-------------------------|-----------------|---------|
| 1 | * | 9336.125 | -46.12 | 5.15 | -40.97 | -13.00 | -27.97 | peak | | |

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

File :AVA757(CH512) Data :#1 Date:2012/9/4 Time: 下午 01:18:27



| | | |
|-----------------------------------------|-----------------------------------|-----------------------------|
| Site: : RF Conducted | Polarization: Conducted po | Temperature: 23 °C |
| Limit: FCC Part 24 conducted(9k-12.75G) | Power: AC 120V/60Hz | Humidity: 55.2 % |
| EUT: Dual Sim Smart phone | Distance: | RBW: 1000 KHz VBW: 1000 KHz |
| M/N: QBA757 | | |
| Mode: 1 | | |
| Note: | | |

| No. | Mk. | Freq. MHz | Reading Level dBm | Correct Factor dB | Measure- ment dBm | Limit dBm | Over dB | Antenna Height cm | Table Degree | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|------------|-------------------------|-----------------|---------|
| 1 | * | 2.1335 | -61.70 | 13.14 | -48.56 | -13.00 | -35.56 | peak | | |

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

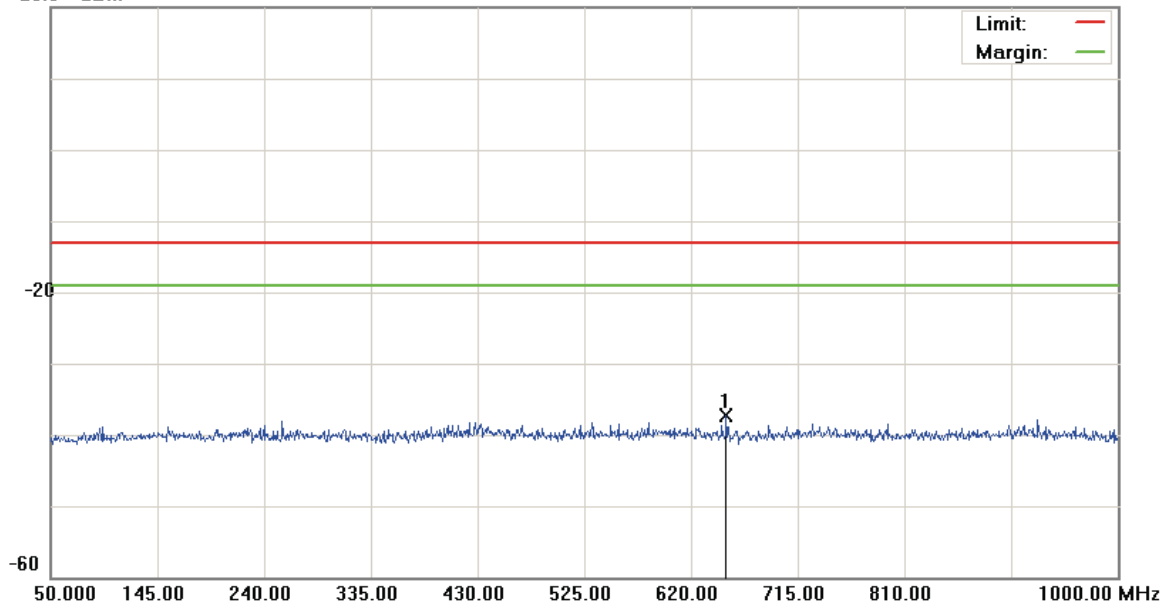
File:AVA757(CH512)

Data :#2

Date:2012/9/4

Time: 下午 01:18:51

20.0 dBm



Site: : RF Conducted

Polarization: *Conducted po*

Temperature: 23 °C

Limit: FCC Part 24 conducted(9k-12.75G)

Power: AC 120V/60Hz

Humidity: 55.2 %

EUT: Dual Sim Smart phone

Distance:

RBW: 1000 KHz VBW: 1000 KHz

M/N: QBA757

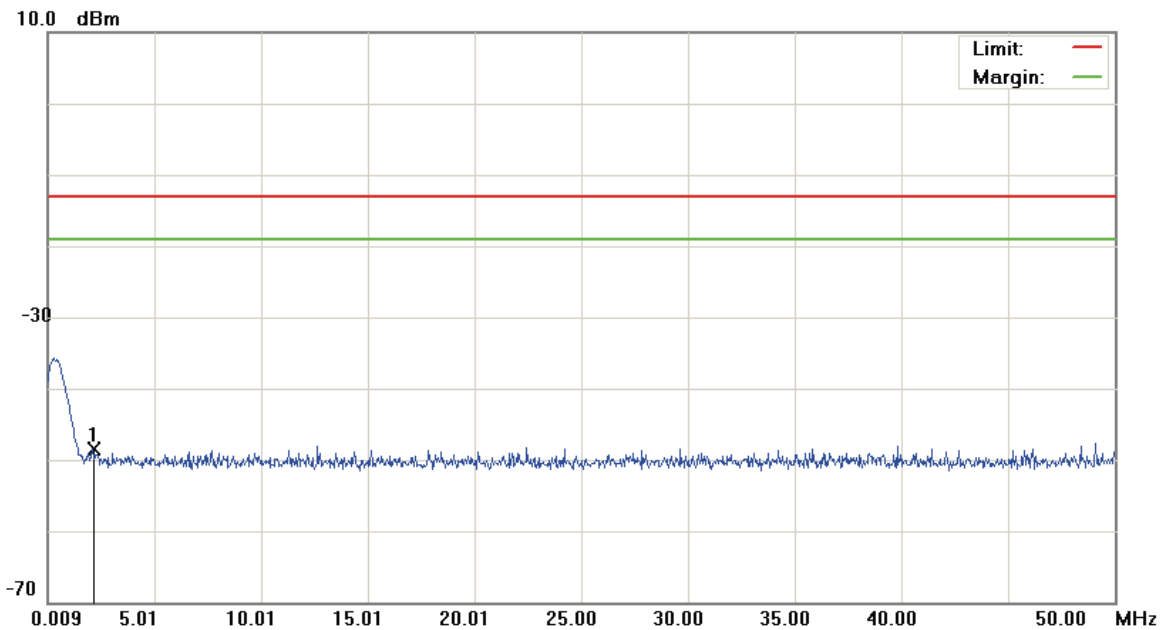
Mode: 2

Note:

| 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 | * | 651.3500 | -50.32 | 13.12 | -37.20 | -13.00 | -24.20 | peak | | |

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

File :AVA757(CH512) Data :#1 Date:2012/9/4 Time: 下午 01:18:27

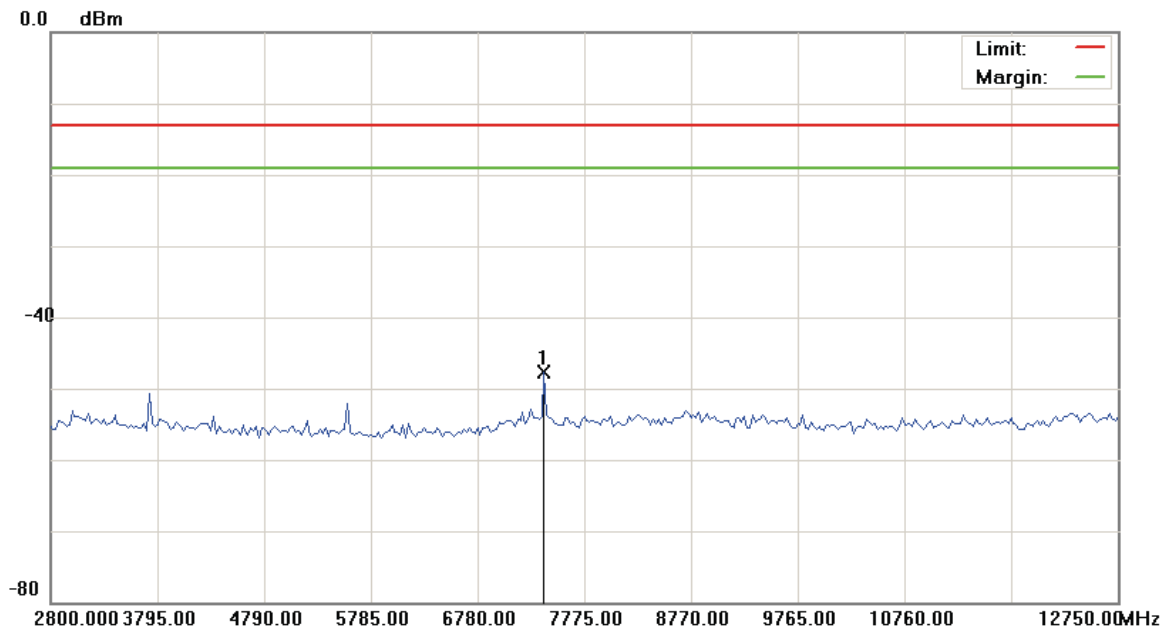


Site: : RF Conducted Polarization: **Conducted po** Temperature: 23 °C
 Limit: FCC Part 24 conducted(9k-12.75G) Power: AC 120V/60Hz Humidity: 55.2 %
 EUT: Dual Sim Smart phone Distance: RBW: 1000 KHz VBW: 1000 KHz
 M/N: QBA757
 Mode: 2
 Note:

| No. | Mk. | Freq. MHz | Reading Level dBm | Correct Factor dB | Measure- ment dBm | Limit dBm | Over dB | Antenna Height cm | Table Degree | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|------------|-------------------------|-----------------|---------|
| 1 | * | 2.1335 | -61.70 | 13.14 | -48.56 | -13.00 | -35.56 | peak | | |

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

File :AVA757(CH512) Data :#4 Date:2012/9/4 Time: 下午 03:46:48

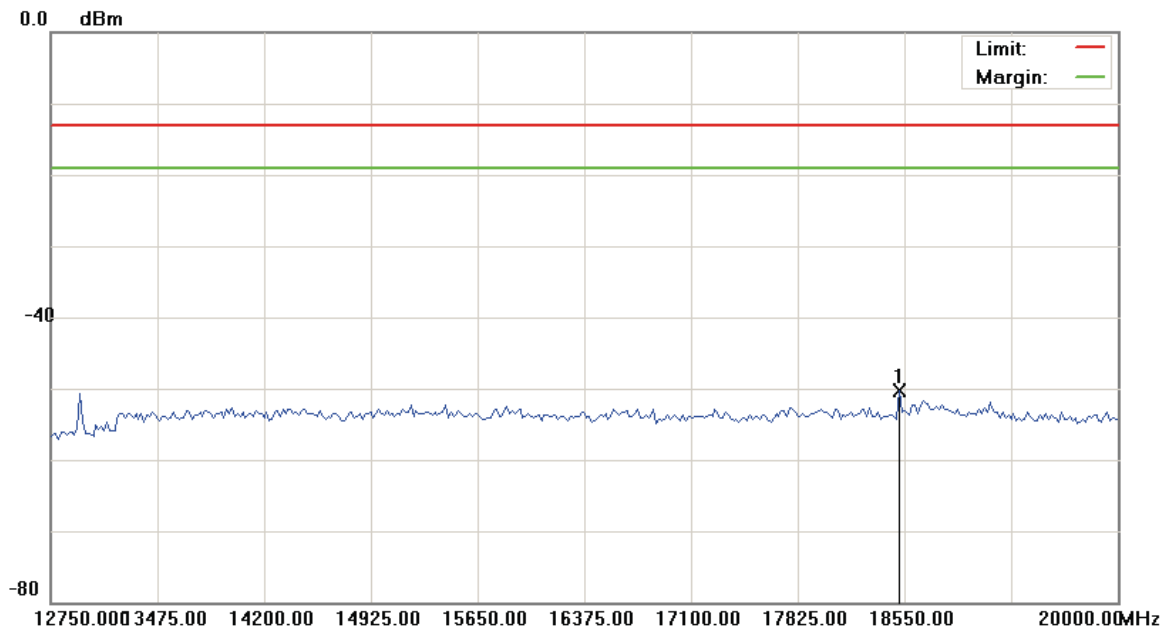


Site: : RF Conducted Polarization: **Conducted po** Temperature: 23 °C
 Limit: FCC Part 24 conducted(9k-12.75G) Power: AC 120V/60Hz Humidity: 55.2 %
 EUT: Dual Sim Smart phone Distance: RBW: 1000 KHz VBW: 1000 KHz
 M/N: QBA757
 Mode: 2
 Note:

| No. | Mk. | Freq. MHz | Reading Level dBm | Correct Factor dB | Measure- ment dBm | Limit dBm | Over dB | Antenna Height cm | Table Degree | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|------------|-------------------------|-----------------|---------|
| 1 | * | 7401.875 | -52.73 | 5.09 | -47.64 | -13.00 | -34.64 | peak | | |

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

File:AVA757(CH512) Data :#5 Date:2012/9/4 Time: 下午 03:47:08

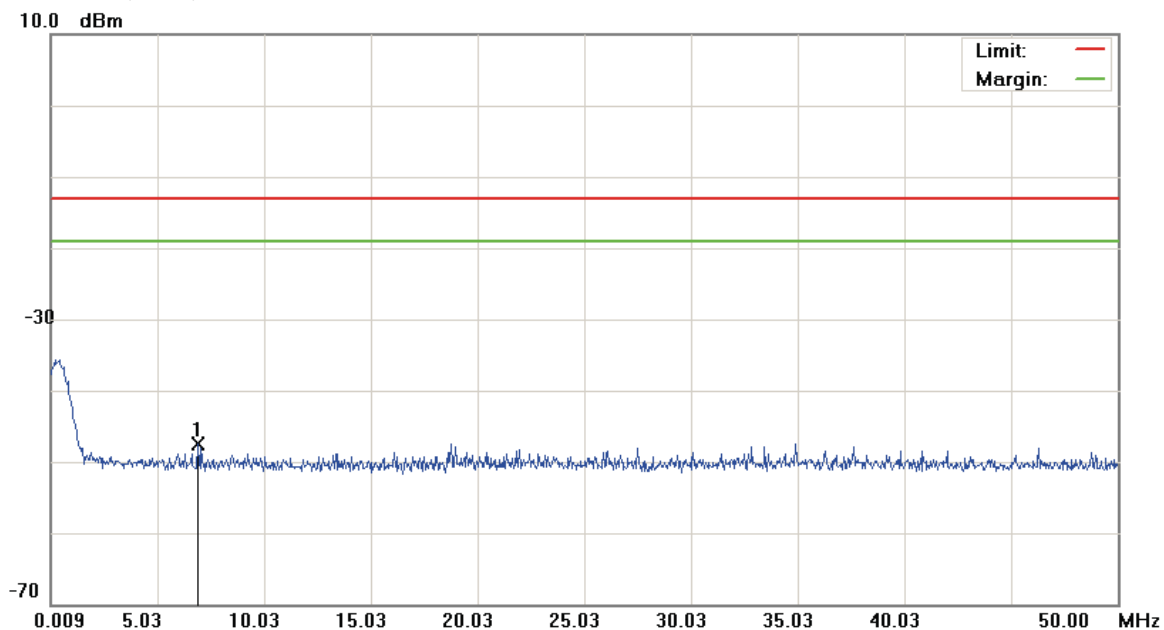


Site: : RF Conducted Polarization: **Conducted po** Temperature: 23 °C
Limit: FCC Part 24 conducted(9k-12.75G) Power: AC 120V/60Hz Humidity: 55.2 %
EUT: Dual Sim Smart phone Distance: RBW: 1000 KHz VBW: 1000 KHz
M/N: QBA757
Mode: 2
Note:

| No. | Mk. | Freq. MHz | Reading Level dBm | Correct Factor dB | Measure- ment dBm | Limit dBm | Over dB | Antenna Height cm | Table Degree | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|------------|-------------------------|-----------------|---------|
| 1 | * | 18513.750 | -57.36 | 7.02 | -50.34 | -13.00 | -37.34 | peak | | |

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

File :AVA757(CH661) Data :#1 Date:2012/9/4 Time: 下午 01:19:37



Site: : RF Conducted Polarization: *Conducted po* Temperature: 23 °C
 Limit: FCC Part 24 conducted(9k-12.75G) Power: AC 120V/60Hz Humidity: 55.2 %
 EUT: Dual Sim Smart phone Distance: RBW: 1000 KHz VBW: 1000 KHz
 M/N: QBA757
 Mode: 2
 Note:

| No. | Mk. | Freq. MHz | Reading Level dBm | Correct Factor dB | Measure- ment dBm | Limit dBm | Over dB | Antenna Height cm | Table Degree | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|------------|-------------------------|-----------------|---------|
| 1 | * | 6.9077 | -60.71 | 13.27 | -47.44 | -13.00 | -34.44 | peak | | |

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

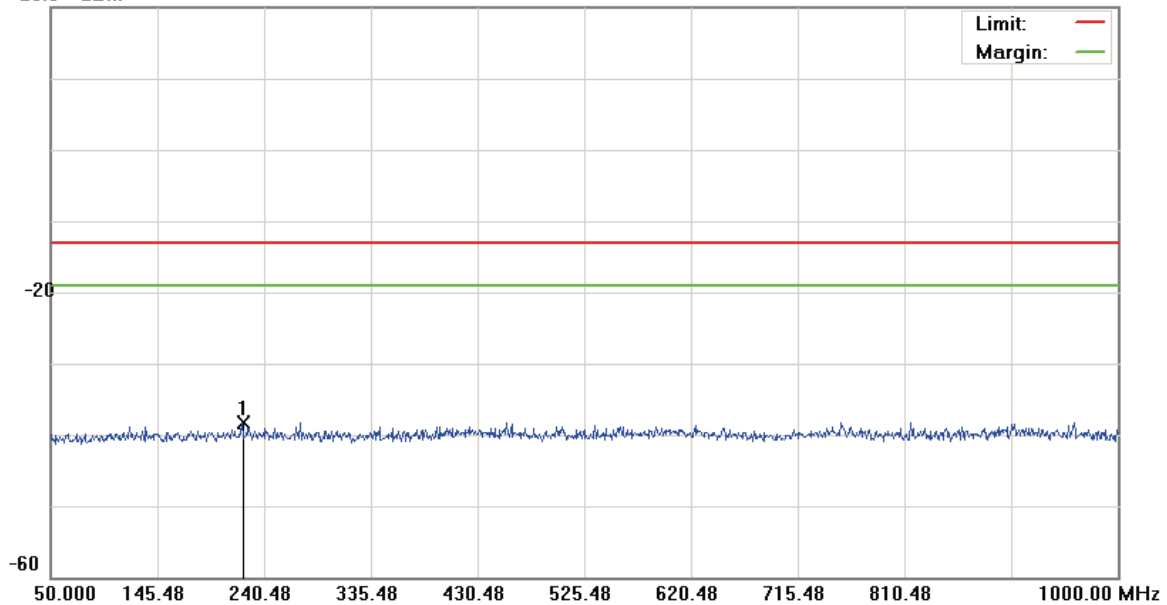
File :AVA757(CH661)

Data :#2

Date:2012/9/4

Time: 下午 01:20:01

20.0 dBm



Site: : RF Conducted

Polarization: *Conducted po*

Temperature: 23 °C

Limit: FCC Part 24 conducted(9k-12.75G)

Power: AC 120V/60Hz

Humidity: 55.2 %

EUT: Dual Sim Smart phone

Distance:

RBW: 1000 KHz VBW: 1000 KHz

M/N: QBA757

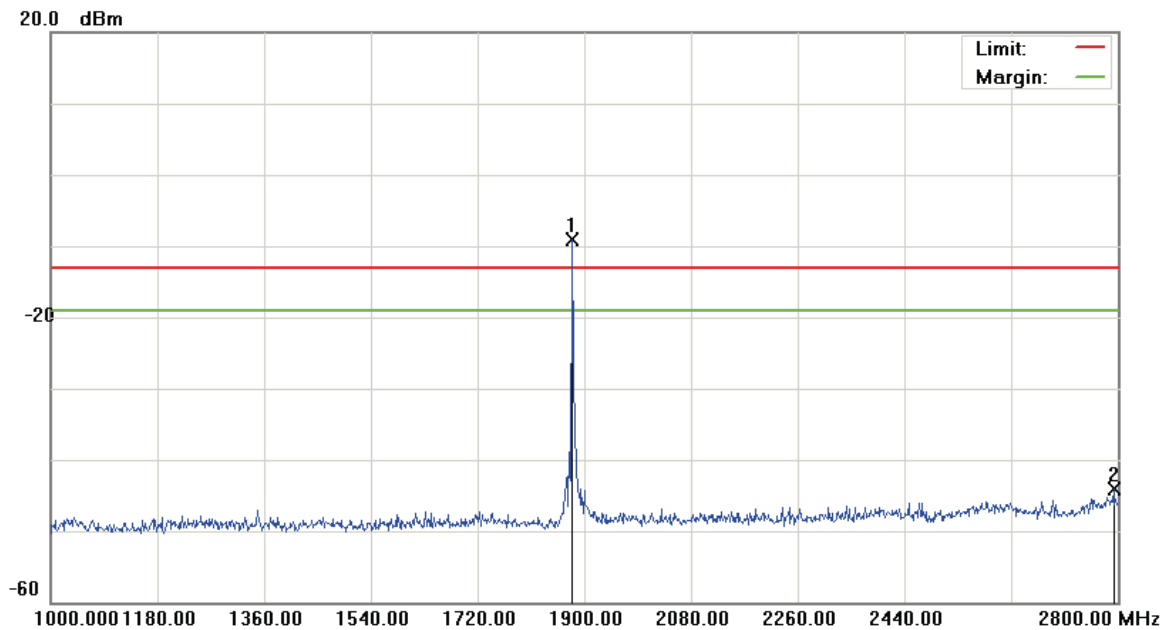
Mode: 2

Note:

| No. | Mk. | Freq. MHz | Reading Level dBm | Correct Factor dB | Measure- ment dBm | Limit dBm | Over dB | Antenna Height cm | Table Degree | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|------------|-------------------------|-----------------|---------|
| 1 | * | 220.5250 | -51.53 | 13.24 | -38.29 | -13.00 | -25.29 | peak | | |

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

File :AVA757(CH661) Data :#3 Date:2012/9/4 Time: 下午 01:25:00

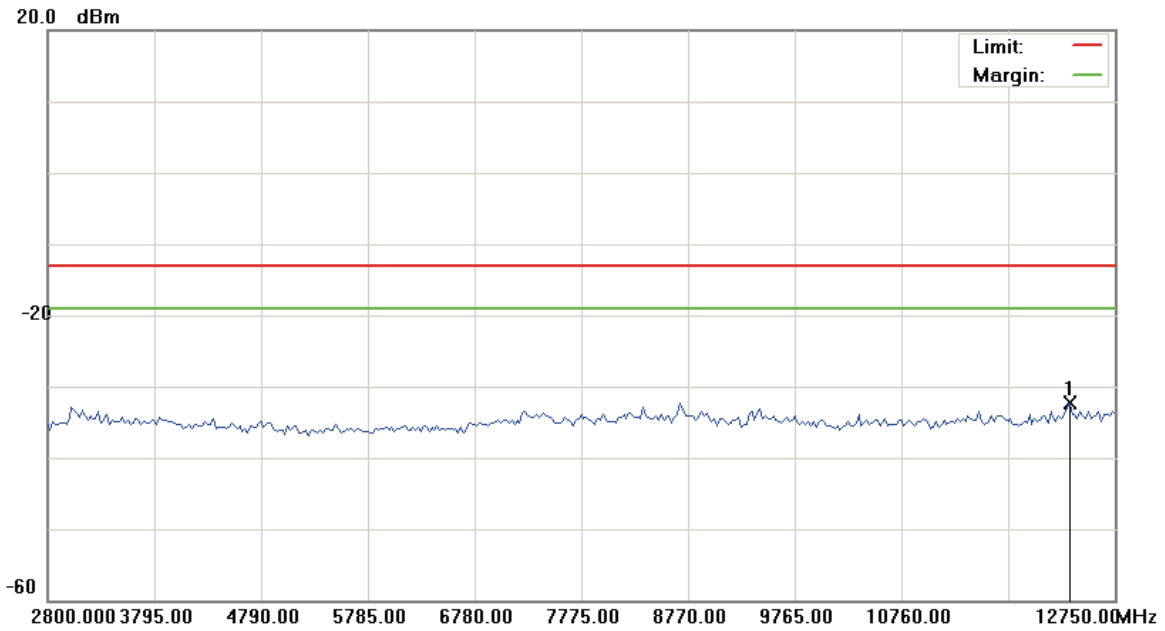


Site: : RF Conducted Polarization: *Conducted po* Temperature: 23 °C
 Limit: FCC Part 24 conducted(9k-12.75G) Power: AC 120V/60Hz Humidity: 55.2 %
 EUT: Dual Sim Smart phone Distance: RBW: 1000 KHz VBW: 1000 KHz
 M/N: QBA757
 Mode: 2
 Note:

| 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 | * | 1880.200 | -13.75 | 4.65 | -9.10 | -13.00 | 3.90 | peak | | Tx |
| 2 | | 2792.800 | -50.09 | 5.90 | -44.19 | -13.00 | -31.19 | peak | | |

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

File:AVA757(CH661) Data :#4 Date:2012/9/4 Time: 下午 03:47:40



| | | |
|-----------------------------------------|-----------------------------------|-----------------------------|
| Site: : RF Conducted | Polarization: Conducted po | Temperature: 23 °C |
| Limit: FCC Part 24 conducted(9k-12.75G) | Power: AC 120V/60Hz | Humidity: 55.2 % |
| EUT: Dual Sim Smart phone | Distance: | RBW: 1000 KHz VBW: 1000 KHz |
| M/N: QBA757 | | |
| Mode: 2 | | |
| Note: | | |

| No. | Mk. | Freq. MHz | Reading Level dBm | Correct Factor dB | Measure- ment dBm | Limit dBm | Over dB | Antenna Height cm | Table Degree | Detector | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|------------|-------------------------|-----------------|----------|---------|
| 1 | * | 12327.125 | -37.51 | 5.18 | -32.33 | -13.00 | -19.33 | | | peak | |

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

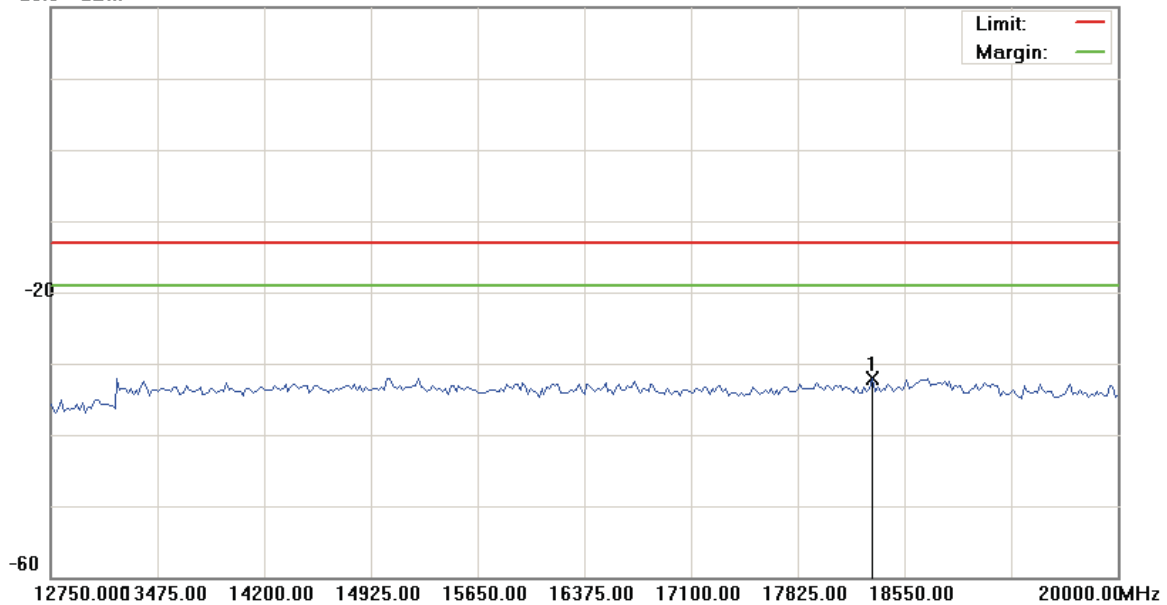
File:AVA757(CH661)

Data :#5

Date:2012/9/4

Time: 下午 03:47:59

20.0 dBm



Site: : RF Conducted

Polarization: **Conducted po**

Temperature: 23 °C

Limit: FCC Part 24 conducted(9k-12.75G)

Power: AC 120V/60Hz

Humidity: 55.2 %

EUT: Dual Sim Smart phone

Distance:

RBW: 1000 KHz VBW: 1000 KHz

M/N: QBA757

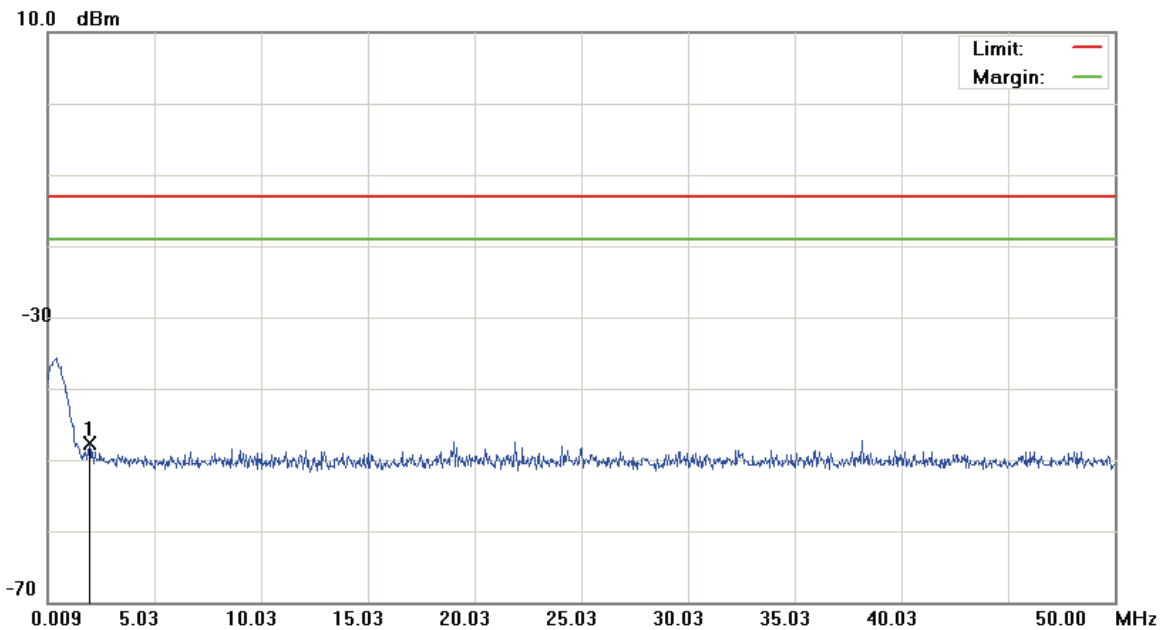
Mode: 2

Note:

| 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 | * | 18332.500 | -39.01 | 6.96 | -32.05 | -13.00 | -19.05 | peak | | |

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

File :AVA757(CH810) Data :#1 Date:2012/9/4 Time: 下午 01:20:44

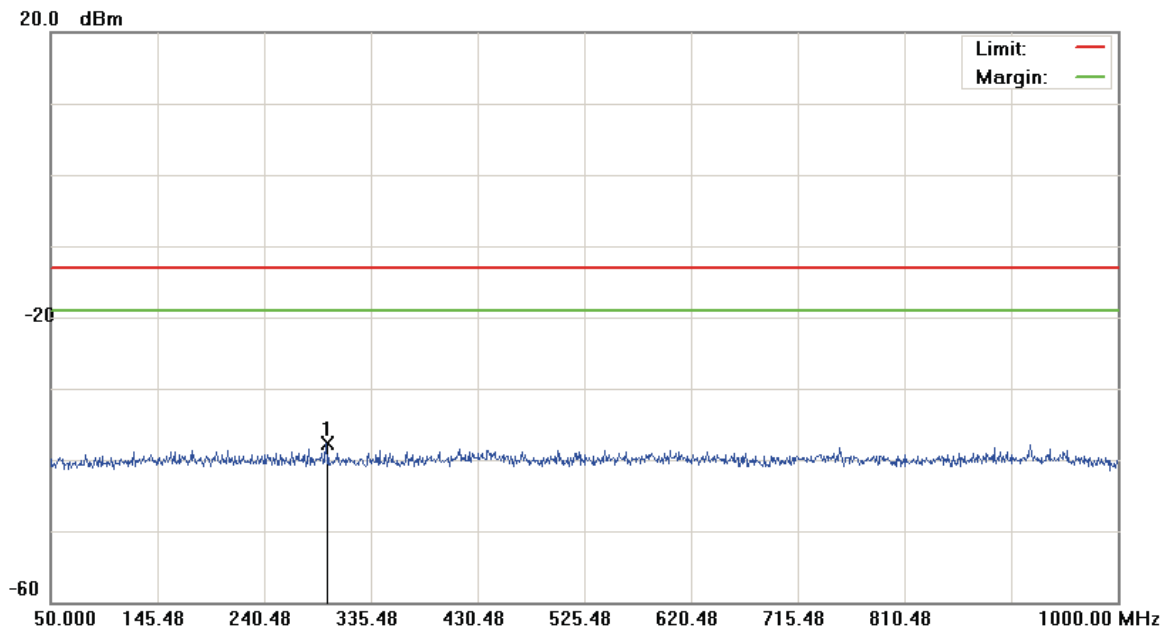


Site: : RF Conducted Polarization: **Conducted po** Temperature: 23 °C
 Limit: FCC Part 24 conducted(9k-12.75G) Power: AC 120V/60Hz Humidity: 55.2 %
 EUT: Dual Sim Smart phone Distance: RBW: 1000 KHz VBW: 1000 KHz
 M/N: QBA757
 Mode: 2
 Note:

| No. | Mk. | Freq. MHz | Reading Level dBm | Correct Factor dB | Measure- ment dBm | Limit dBm | Over dB | Antenna Height cm | Table Degree | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|------------|-------------------------|-----------------|---------|
| 1 | * | 1.9585 | -60.79 | 13.08 | -47.71 | -13.00 | -34.71 | peak | | |

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

File:AVA757(CH810) Data :#2 Date:2012/9/4 Time: 下午 01:21:08

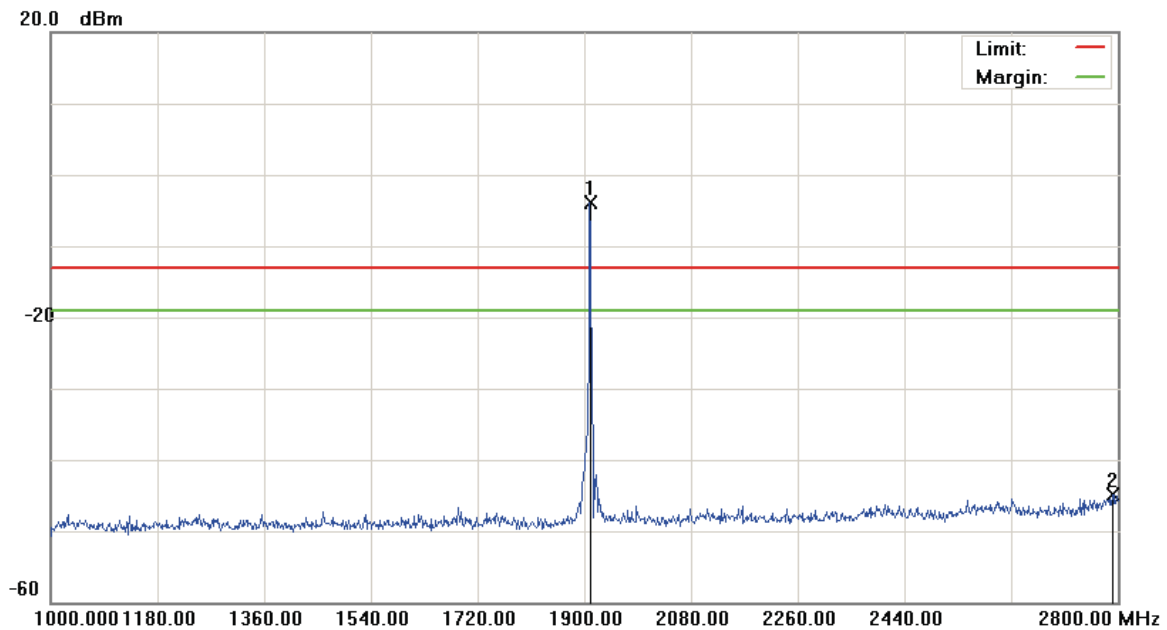


Site: : RF Conducted Polarization: *Conducted po* Temperature: 23 °C
 Limit: FCC Part 24 conducted(9k-12.75G) Power: AC 120V/60Hz Humidity: 55.2 %
 EUT: Dual Sim Smart phone Distance: RBW: 1000 KHz VBW: 1000 KHz
 M/N: QBA757
 Mode: 2
 Note:

| No. | Mk. | Freq. MHz | Reading Level dBm | Correct Factor dB | Measure- ment dBm | Limit dBm | Over dB | Antenna Height cm | Table Degree | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|------------|-------------------------|-----------------|---------|
| 1 | * | 295.5750 | -51.05 | 13.29 | -37.76 | -13.00 | -24.76 | peak | | |

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

File :AVA757(CH810) Data :#3 Date:2012/9/4 Time: 下午 01:26:13

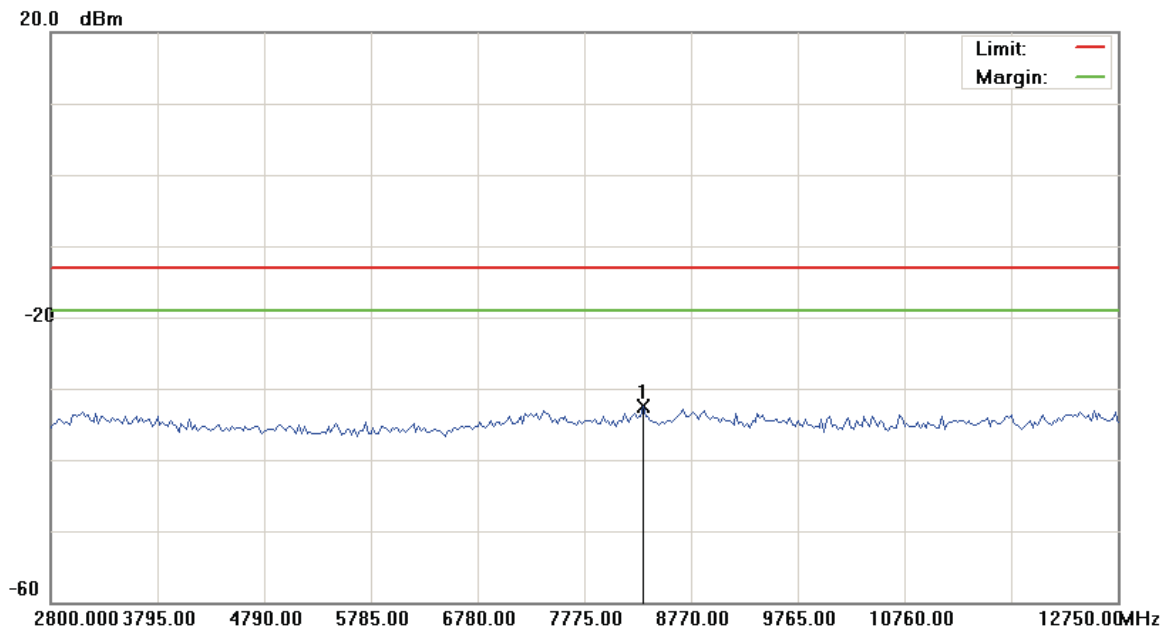


Site: : RF Conducted Polarization: *Conducted po* Temperature: 23 °C
Limit: FCC Part 24 conducted(9k-12.75G) Power: AC 120V/60Hz Humidity: 55.2 %
EUT: Dual Sim Smart phone Distance: RBW: 1000 KHz VBW: 1000 KHz
M/N: QBA757
Mode: 2
Note:

| 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 | * | 1909.900 | -9.70 | 5.71 | -3.99 | -13.00 | 9.01 | peak | | Tx |
| 2 | | 2791.000 | -50.77 | 5.90 | -44.87 | -13.00 | -31.87 | peak | | |

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

File:AVA757(CH810) Data :#4 Date:2012/9/4 Time: 下午 03:48:29

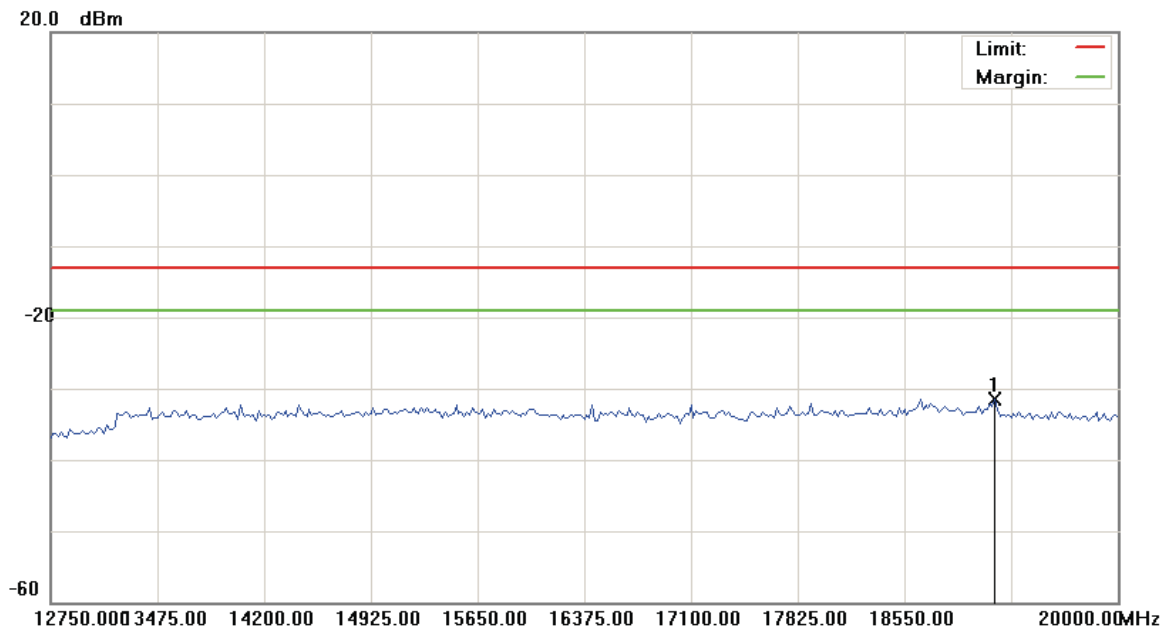


| | | |
|-----------------------------------------|-----------------------------------|-----------------------------|
| Site: : RF Conducted | Polarization: Conducted po | Temperature: 23 °C |
| Limit: FCC Part 24 conducted(9k-12.75G) | Power: AC 120V/60Hz | Humidity: 55.2 % |
| EUT: Dual Sim Smart phone | Distance: | RBW: 1000 KHz VBW: 1000 KHz |
| M/N: QBA757 | | |
| Mode: 2 | | |
| Note: | | |

| No. | Mk. | Freq. MHz | Reading Level dBm | Correct Factor dB | Measure- ment dBm | Limit dBm | Over dB | Antenna Height cm | Table Degree | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|------------|-------------------------|-----------------|---------|
| 1 | * | 8322.250 | -38.36 | 5.80 | -32.56 | -13.00 | -19.56 | peak | | |

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

File:AVA757(CH810) Data :#5 Date:2012/9/4 Time: 下午 03:48:49



Site: : RF Conducted Polarization: **Conducted po** Temperature: 23 °C
 Limit: FCC Part 24 conducted(9k-12.75G) Power: AC 120V/60Hz Humidity: 55.2 %
 EUT: Dual Sim Smart phone Distance: RBW: 1000 KHz VBW: 1000 KHz
 M/N: QBA757
 Mode: 2
 Note:

| 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 | * | 19166.250 | -38.67 | 7.20 | -31.47 | -13.00 | -18.47 | peak | | |

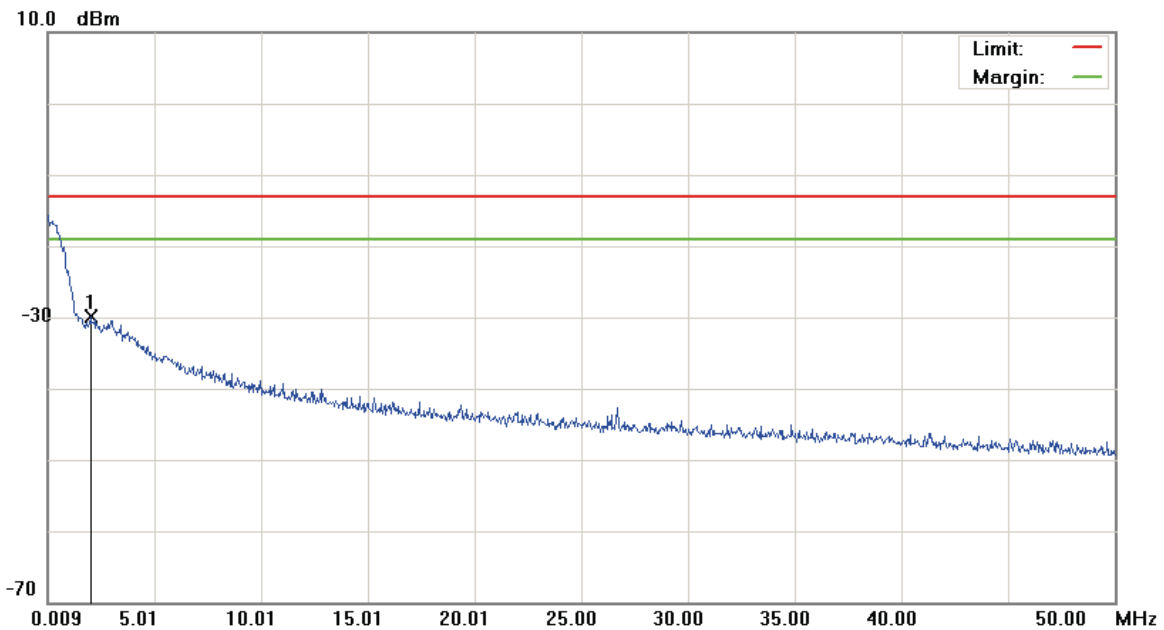
*:Maximum data x:Over limit !:over margin

File :AVA757(CH4132)

Data :#1

Date: 2012/9/4

Time: 下午 03:20:40



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: Dual Sim Smart phone

Distance:

RBW: 1000 KHz VBW: 1000 KHz

M/N: QBA757

Mode: 3

Note:

| No. | Mk. | Freq. MHz | Reading Level dBm | Correct Factor dB | Measure- ment dBm | Limit dBm | Over dB | Antenna Height cm | Table Degree | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|------------|-------------------------|-----------------|---------|
| 1 | * | 2.0335 | -61.31 | 31.41 | -29.90 | -13.00 | -16.90 | peak | | |

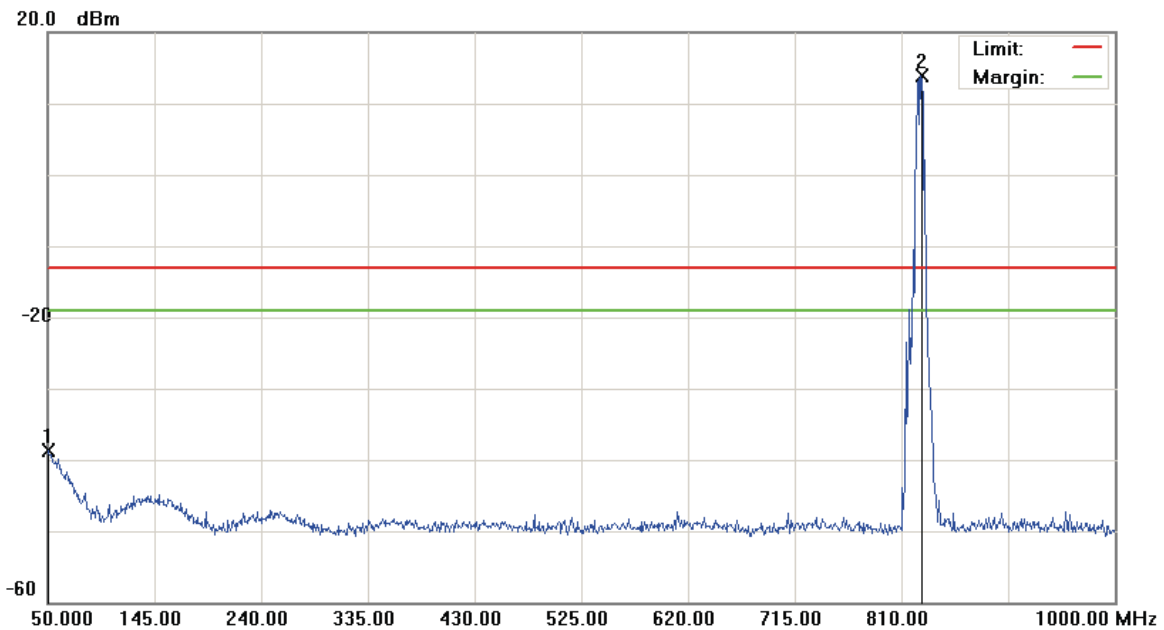
*:Maximum data x:Over limit !:over margin

File :AVA757(CH4132)

Data :#2

Date: 2012/9/4

Time: 下午 03:21:05



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: Dual Sim Smart phone

Distance:

RBW: 1000 KHz VBW: 1000 KHz

M/N: QBA757

Mode: 3

Note:

| 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 | | 50.0000 | -53.44 | 14.69 | -38.75 | -13.00 | -25.75 | peak | | |
| 2 | * | 827.5750 | 10.03 | 3.87 | 13.90 | -13.00 | 26.90 | peak | | Tx |

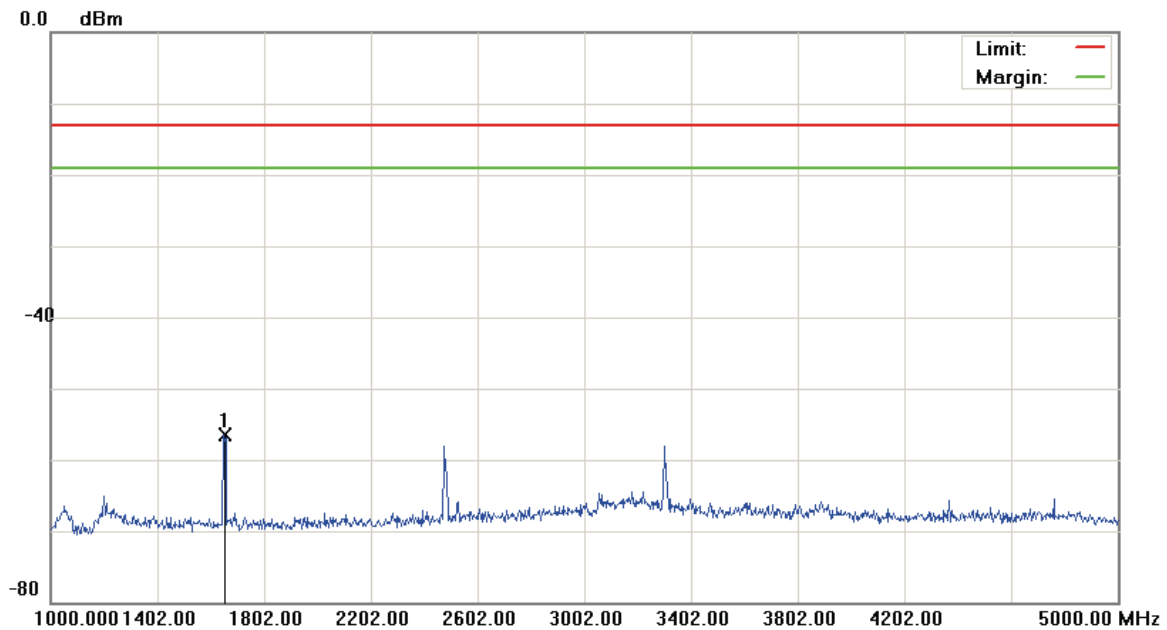
*:Maximum data x:Over limit !:over margin

File :AVA757(CH4132)

Data :#3

Date: 2012/9/4

Time: 下午 03:29:37



| | | |
|-----------------------------------------|-----------------------------------|-----------------------------|
| 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: Dual Sim Smart phone | Distance: | RBW: 1000 KHz VBW: 1000 KHz |
| M/N: QBA757 | | |
| Mode: 3 | | |
| Note: | | |

| No. | Mk. | Freq. MHz | Reading Level dBm | Correct Factor dB | Measure- ment dBm | Limit dBm | Over dB | Antenna Height cm | Table Degree | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|------------|-------------------------|-----------------|---------|
| 1 | * | 1650.000 | -60.85 | 4.45 | -56.40 | -13.00 | -43.40 | peak | | |

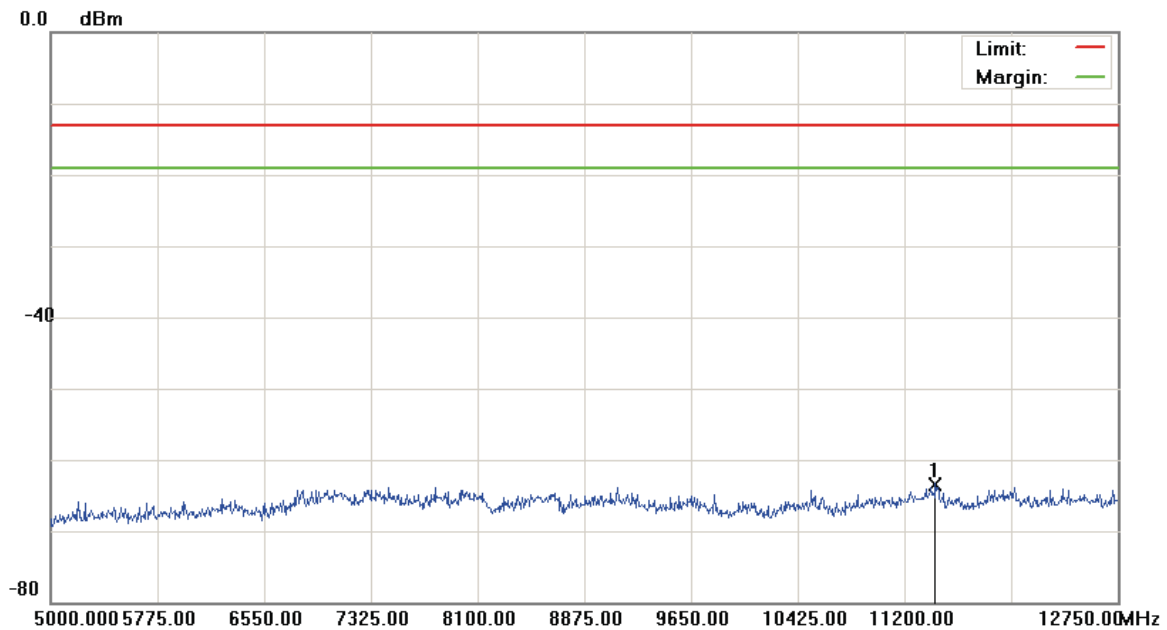
*:Maximum data x:Over limit !:over margin

File :AVA757(CH4132)

Data :#4

Date: 2012/9/4

Time: 下午 03:30:01



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: Dual Sim Smart phone

Distance:

RBW: 1000 KHz VBW: 1000 KHz

M/N: QBA757

Mode: 3

Note:

| 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 | * | 11424.750 | -68.97 | 5.57 | -63.40 | -13.00 | -50.40 | peak | | |

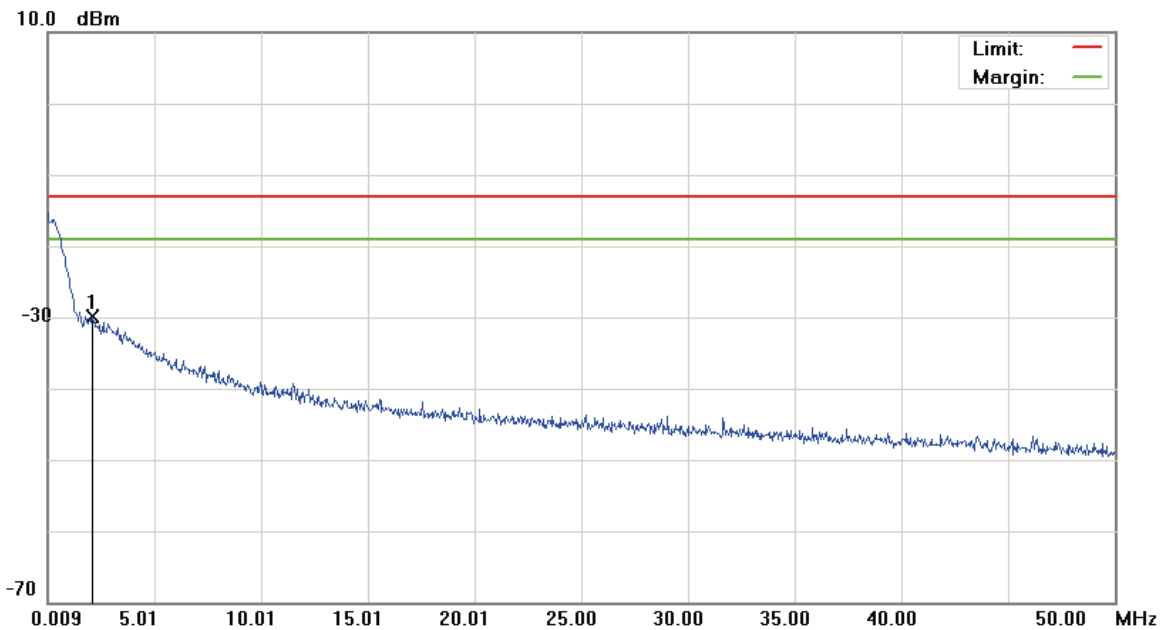
*:Maximum data x:Over limit !:over margin

File :AVA757(CH4183)

Data :#1

Date: 2012/9/4

Time: 下午 03:22:55



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: Dual Sim Smart phone

Distance:

RBW: 1000 KHz VBW: 1000 KHz

M/N: QBA757

Mode: 3

Note:

| No. | Mk. | Freq. MHz | Reading Level dBm | Correct Factor dB | Measure- ment dBm | Limit dBm | Over dB | Antenna Height cm | Table Degree | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|------------|-------------------------|-----------------|---------|
| 1 | * | 2.1086 | -61.38 | 31.54 | -29.84 | -13.00 | -16.84 | peak | | |

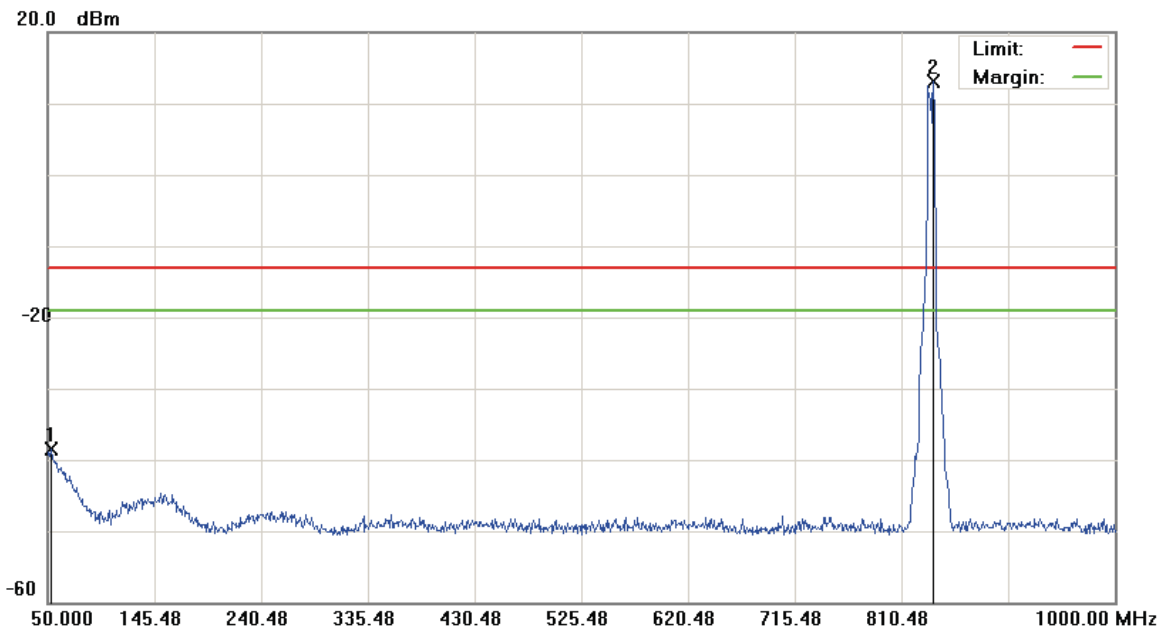
*:Maximum data x:Over limit !:over margin

File :AVA757(CH4183)

Data :#2

Date: 2012/9/4

Time: 下午 03:23:19



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: Dual Sim Smart phone

Distance:

RBW: 1000 KHz VBW: 1000 KHz

M/N: QBA757

Mode: 3

Note:

| 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 | | 52.8500 | -52.70 | 14.19 | -38.51 | -13.00 | -25.51 | peak | | |
| 2 | * | 838.5000 | 9.21 | 3.97 | 13.18 | -13.00 | 26.18 | peak | | Tx |

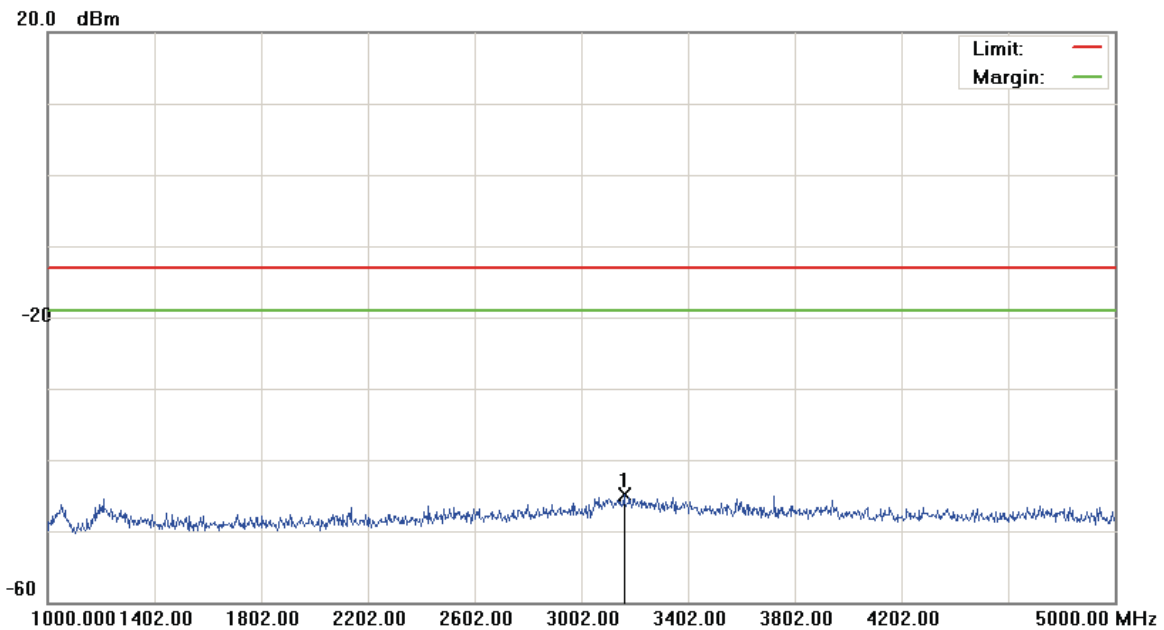
*:Maximum data x:Over limit !:over margin

File :AVA757(CH4183)

Data :#3

Date: 2012/9/4

Time: 下午 03:30:37



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: Dual Sim Smart phone

Distance:

RBW: 1000 KHz VBW: 1000 KHz

M/N: QBA757

Mode: 3

Note:

| No. | Mk. | Freq. MHz | Reading Level dBm | Correct Factor dB | Measure- ment dBm | Limit dBm | Over dB | Antenna Height cm | Table Degree | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|------------|-------------------------|-----------------|---------|
| 1 | * | 3162.000 | -49.48 | 4.58 | -44.90 | -13.00 | -31.90 | peak | | |

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

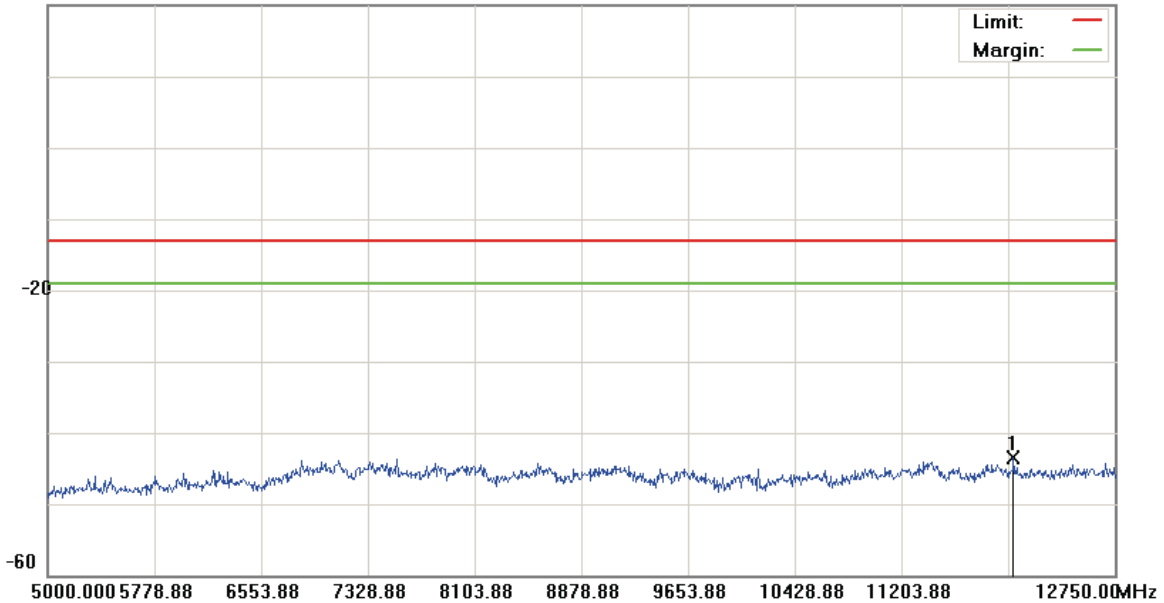
File :AVA757(CH4183)

Data :#4

Date: 2012/9/4

Time: 下午 03:31:01

20.0 dBm



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: Dual Sim Smart phone Distance: RBW: 1000 KHz VBW: 1000 KHz
 M/N: QBA757
 Mode: 3
 Note:

| 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 | * | 12013.750 | -48.78 | 5.29 | -43.49 | -13.00 | -30.49 | peak | | |

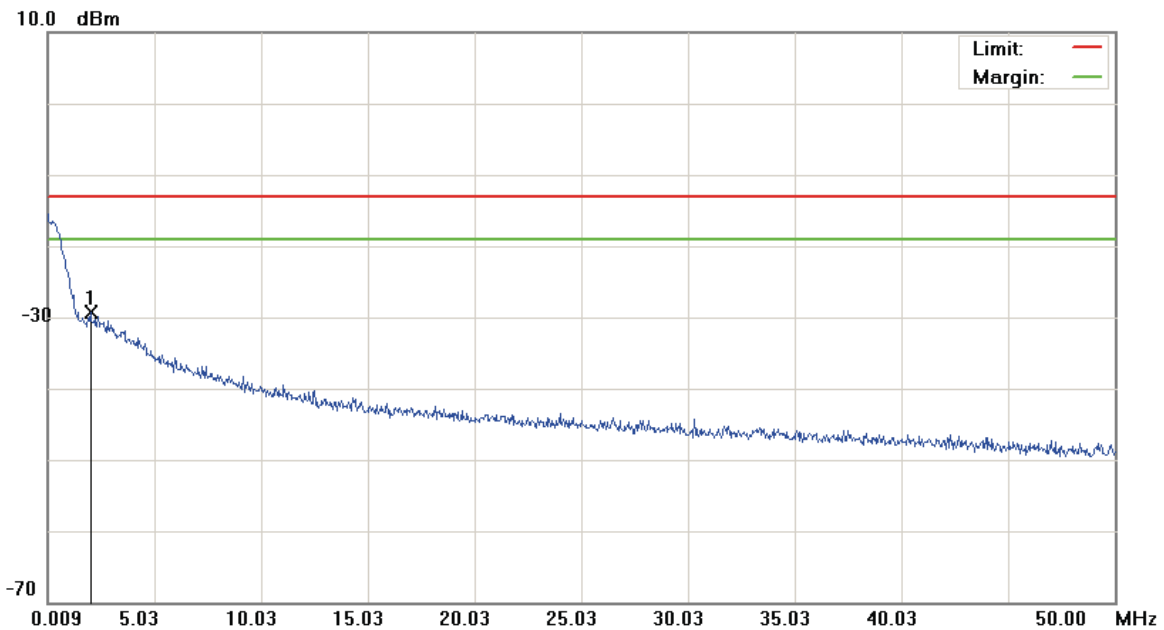
*:Maximum data x:Over limit !:over margin

File :AVA757(CH4233)

Data :#1

Date: 2012/9/4

Time: 下午 03:25:09



Site: : RF Conducted

Polarization: *Conducted po*

Temperature: 23 ℃

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

Power: AC 120V/60Hz

Humidity: 55.2 %

EUT: Dual Sim Smart phone

Distance:

RBW: 1000 KHz VBW: 1000 KHz

M/N: QBA757

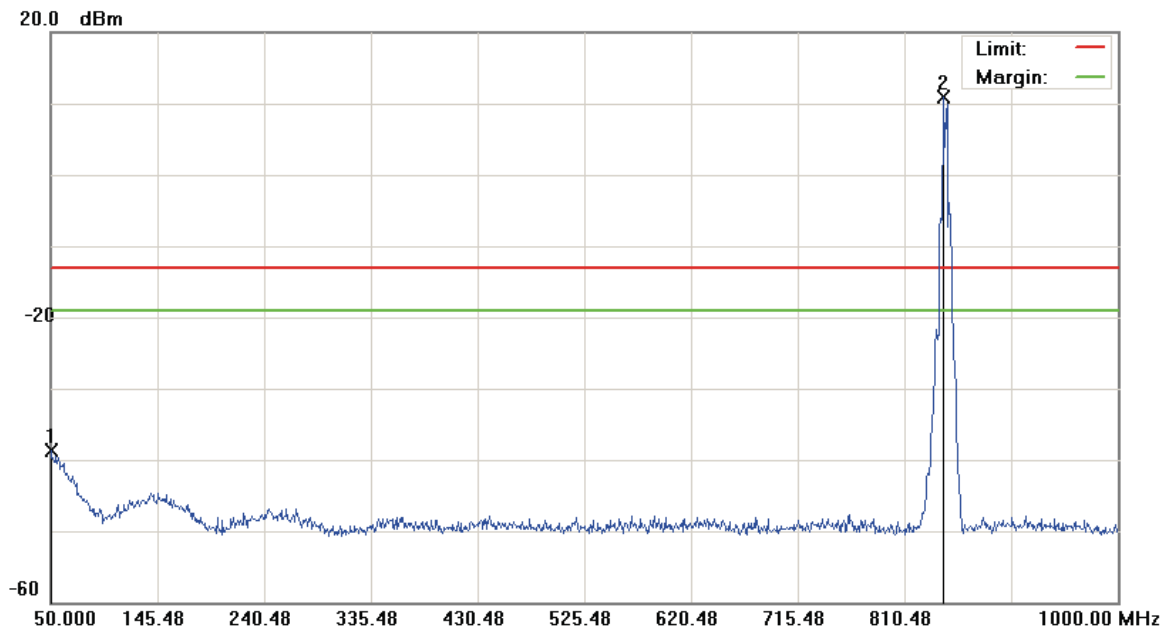
Mode: 3

Note:

| No. | Mk. | Freq. MHz | Reading Level dBm | Correct Factor dB | Measure- ment dBm | Limit dBm | Over dB | Antenna Height cm | Table Degree | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|------------|-------------------------|-----------------|---------|
| 1 | * | 2.0085 | -60.67 | 31.37 | -29.30 | -13.00 | -16.30 | peak | | |

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

File :AVA757(CH4233) Data :#2 Date:2012/9/4 Time: 下午 03:25:34



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: Dual Sim Smart phone Distance: RBW: 1000 KHz VBW: 1000 KHz
 M/N: QBA757
 Mode: 3
 Note:

| 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 | | 50.4750 | -53.39 | 14.61 | -38.78 | -13.00 | -25.78 | peak | | |
| 2 | * | 845.1500 | 6.85 | 3.99 | 10.84 | -13.00 | 23.84 | peak | | Tx |

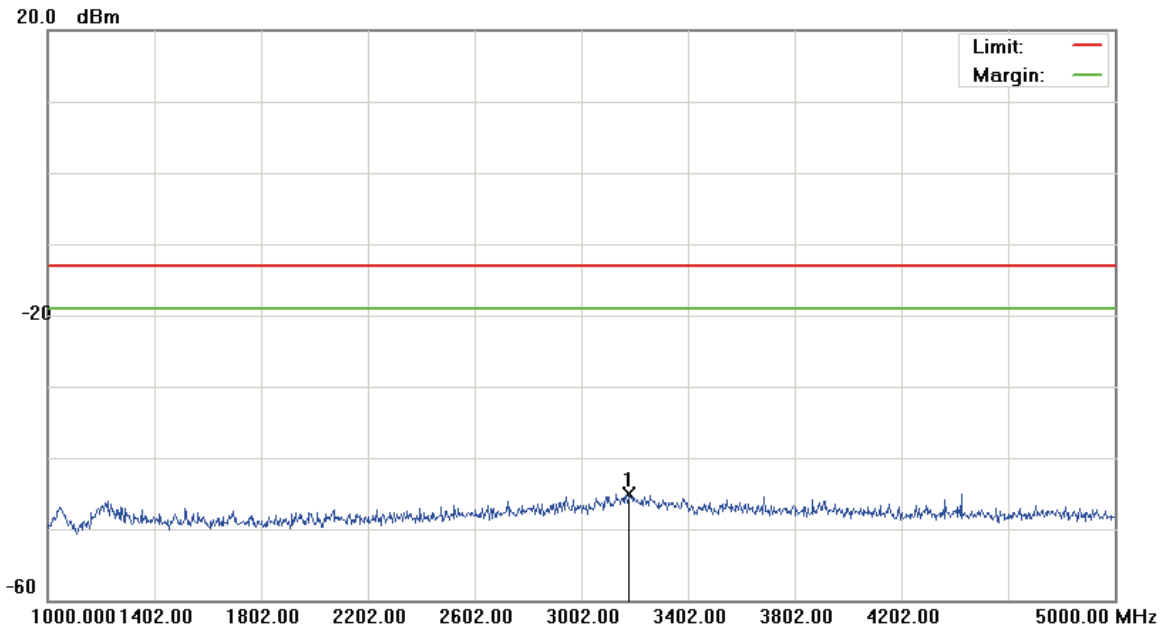
*:Maximum data x:Over limit !:over margin

File :AVA757(CH4233)

Data :#3

Date: 2012/9/4

Time: 下午 03:31:43



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: Dual Sim Smart phone

Distance:

RBW: 1000 KHz VBW: 1000 KHz

M/N: QBA757

Mode: 3

Note:

| No. | Mk. | Freq. MHz | Reading Level dBm | Correct Factor dB | Measure- ment dBm | Limit dBm | Over dB | Antenna Height cm | Table Degree | Comment |
|-----|-----|--------------|-------------------------|-------------------------|-------------------------|--------------|------------|-------------------------|-----------------|---------|
| 1 | * | 3180.000 | -49.70 | 4.62 | -45.08 | -13.00 | -32.08 | peak | | |

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

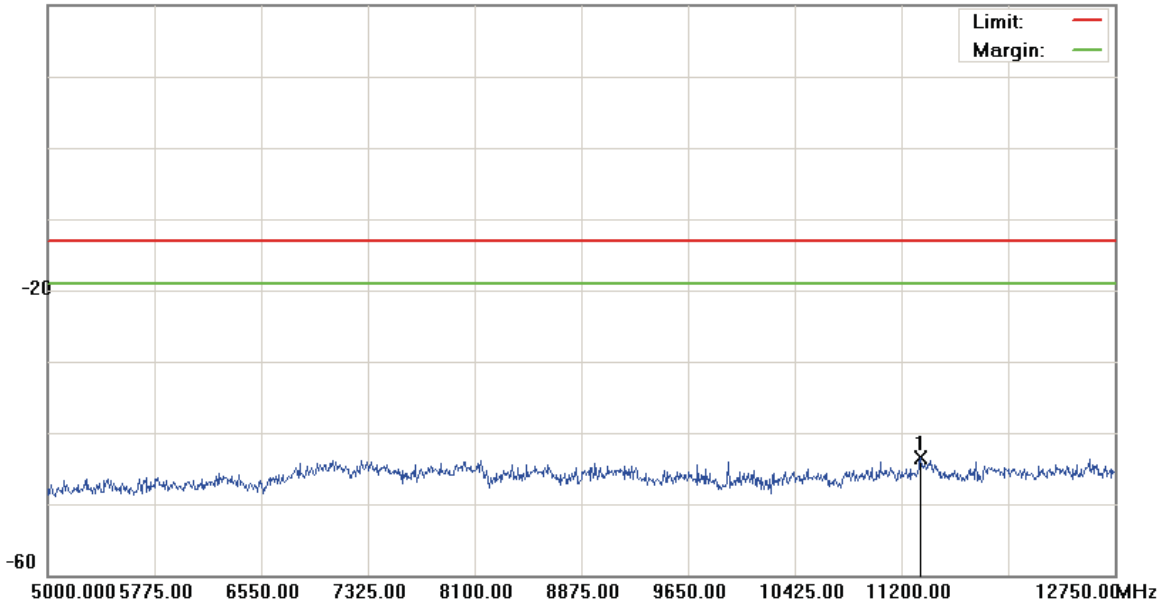
File :AVA757(CH4233)

Data :#4

Date: 2012/9/4

Time: 下午 03:32:06

20.0 dBm



| | | |
|-----------------------------------------|-----------------------------------|-----------------------------|
| 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: Dual Sim Smart phone | Distance: | RBW: 1000 KHz VBW: 1000 KHz |
| M/N: QBA757 | | |
| Mode: 3 | | |
| Note: | | |

| 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 | * | 11339.500 | -48.71 | 5.20 | -43.51 | -13.00 | -30.51 | peak | | |

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

6 Field Strength of Spurious Radiation 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.

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

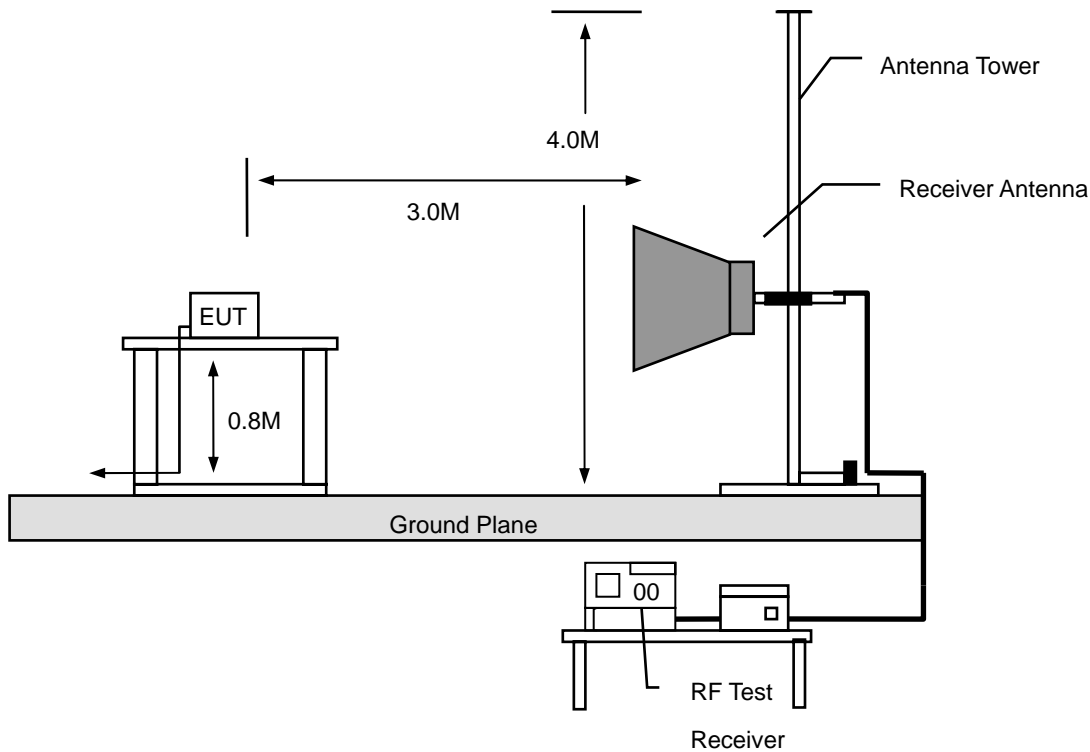
6.2. Test Instruments

| 3 Meter Chamber | | | | | |
|-----------------------------------|--------------------------------|--------------|---------------|------------|--------|
| Equipment | Manufacturer | Model Number | Serial Number | Cal. Date | Remark |
| RF Pre-selector | Agilent | N9039A | MY46520256 | 01/16/2012 | (2) |
| Spectrum Analyzer | Agilent | E4446A | MY46180578 | 01/16/2012 | (1) |
| Pre Amplifier | Agilent | 8449B | 3008A02237 | 02/22/2012 | (1) |
| Pre Amplifier | Agilent | 8447D | 2944A10961 | 02/22/2012 | (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 | 12/20/2011 | (1) |

Remark: ⁽¹⁾ Calibration period 1 year. ⁽²⁾ Calibration period 2 years.

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

6.3. Setup



6.4. 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

6.5. Uncertainty

The measurement uncertainty is defined as for Field Strength of Spurious Radiation measurement is ± 3.072 dB.

6.6. Test Result

| | | | |
|---------------|-------------------|----------------------|--------------|
| Standard: | FCC Part 22 | Test Distance: | 3m |
| Test item: | Radiated Emission | Power: | AC 120V/60Hz |
| Model Number: | QBA757 | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Mode: | 1 | Date: | 09/24/2012 |
| Frequency: | 824.2 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 | -60.33 | 1.45 | -58.88 | -13.00 | -45.88 | peak | H |
| 260.0000 | -61.17 | -4.34 | -65.51 | -13.00 | -52.51 | peak | H |
| 430.0000 | -70.19 | 3.67 | -66.52 | -13.00 | -53.52 | peak | H |
| 490.0000 | -72.88 | 6.36 | -66.52 | -13.00 | -53.52 | peak | H |
| 546.0000 | -76.32 | 8.12 | -68.20 | -13.00 | -55.20 | peak | H |
| 760.0000 | -77.72 | 9.09 | -68.63 | -13.00 | -55.63 | peak | H |
| 2308.000 | -68.38 | 11.55 | -56.83 | -13.00 | -43.83 | peak | H |
| 4828.000 | -68.98 | 19.04 | -49.94 | -13.00 | -36.94 | peak | H |
| 7396.000 | -72.24 | 28.87 | -43.37 | -13.00 | -30.37 | peak | H |
| 160.5000 | -66.58 | 12.20 | -54.38 | -13.00 | -41.38 | peak | V |
| 260.0000 | -65.98 | -1.56 | -67.54 | -13.00 | -54.54 | peak | V |
| 390.0000 | -71.09 | 1.49 | -69.60 | -13.00 | -56.60 | peak | V |
| 490.0000 | -77.35 | 2.57 | -74.78 | -13.00 | -61.78 | peak | V |
| 680.0000 | -79.30 | 9.56 | -69.74 | -13.00 | -56.74 | peak | V |
| 748.5000 | -78.85 | 10.69 | -68.16 | -13.00 | -55.16 | peak | V |
| 2800.000 | -67.82 | 14.79 | -53.03 | -13.00 | -40.03 | peak | V |
| 5212.000 | -71.26 | 23.47 | -47.79 | -13.00 | -34.79 | peak | V |
| 7324.000 | -72.20 | 26.14 | -46.06 | -13.00 | -33.06 | peak | V |

| | | | |
|---------------|-------------------|----------------------|--------------|
| Standard: | FCC Part 22 | Test Distance: | 3m |
| Test item: | Radiated Emission | Power: | AC 120V/60Hz |
| Model Number: | QBA757 | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Mode: | 1 | Date: | 09/24/2012 |
| 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 |
|--------------------|------------------|------------------------|-----------------|----------------|----------------|--------|---------------------|
| 158.0000 | -61.44 | 0.82 | -60.62 | -13.00 | -47.62 | peak | H |
| 260.0000 | -62.71 | -4.34 | -67.05 | -13.00 | -54.05 | peak | H |
| 390.0000 | -72.20 | 1.66 | -70.54 | -13.00 | -57.54 | peak | H |
| 490.0000 | -71.82 | 6.36 | -65.46 | -13.00 | -52.46 | peak | H |
| 599.0000 | -79.79 | 7.93 | -71.86 | -13.00 | -58.86 | peak | H |
| 780.0000 | -79.13 | 10.19 | -68.94 | -13.00 | -55.94 | peak | H |
| 2644.000 | -69.33 | 12.69 | -56.64 | -13.00 | -43.64 | peak | H |
| 4624.000 | -70.92 | 17.81 | -53.11 | -13.00 | -40.11 | peak | H |
| 6820.000 | -71.90 | 27.08 | -44.82 | -13.00 | -31.82 | peak | H |
| 160.5000 | -65.73 | 12.20 | -53.53 | -13.00 | -40.53 | peak | V |
| 260.0000 | -64.47 | -1.56 | -66.03 | -13.00 | -53.03 | peak | V |
| 390.0000 | -72.64 | 1.49 | -71.15 | -13.00 | -58.15 | peak | V |
| 548.5000 | -78.73 | 4.31 | -74.42 | -13.00 | -61.42 | peak | V |
| 669.5000 | -80.07 | 9.46 | -70.61 | -13.00 | -57.61 | peak | V |
| 796.5000 | -80.17 | 11.77 | -68.40 | -13.00 | -55.40 | peak | V |
| 2968.000 | -68.39 | 16.16 | -52.23 | -13.00 | -39.23 | peak | V |
| 4828.000 | -70.65 | 23.00 | -47.65 | -13.00 | -34.65 | peak | V |
| 7312.000 | -71.24 | 26.12 | -45.12 | -13.00 | -32.12 | peak | V |

| | | | |
|---------------|-------------------|----------------------|--------------|
| Standard: | FCC Part 22 | Test Distance: | 3m |
| Test item: | Radiated Emission | Power: | AC 120V/60Hz |
| Model Number: | QBA757 | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Mode: | 1 | Date: | 09/24/2012 |
| Frequency: | 848.8 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 | -61.40 | 1.45 | -59.95 | -13.00 | -46.95 | peak | H |
| 260.0000 | -63.16 | -4.34 | -67.50 | -13.00 | -54.50 | peak | H |
| 390.0000 | -74.54 | 1.66 | -72.88 | -13.00 | -59.88 | peak | H |
| 490.0000 | -73.49 | 6.36 | -67.13 | -13.00 | -54.13 | peak | H |
| 608.0000 | -78.69 | 7.85 | -70.84 | -13.00 | -57.84 | peak | H |
| 780.0000 | -79.50 | 10.19 | -69.31 | -13.00 | -56.31 | peak | H |
| 3016.000 | -68.40 | 13.98 | -54.42 | -13.00 | -41.42 | peak | H |
| 4744.000 | -70.98 | 18.54 | -52.44 | -13.00 | -39.44 | peak | H |
| 6976.000 | -71.62 | 27.51 | -44.11 | -13.00 | -31.11 | peak | H |
| 160.0000 | -66.68 | 12.68 | -54.00 | -13.00 | -41.00 | peak | V |
| 260.0000 | -63.33 | -1.56 | -64.89 | -13.00 | -51.89 | peak | V |
| 390.0000 | -71.16 | 1.49 | -69.67 | -13.00 | -56.67 | peak | V |
| 468.0000 | -75.76 | 1.99 | -73.77 | -13.00 | -60.77 | peak | V |
| 628.0000 | -80.34 | 8.79 | -71.55 | -13.00 | -58.55 | peak | V |
| 767.0000 | -79.42 | 11.07 | -68.35 | -13.00 | -55.35 | peak | V |
| 3052.000 | -69.15 | 16.74 | -52.41 | -13.00 | -39.41 | peak | V |
| 5188.000 | -71.70 | 23.46 | -48.24 | -13.00 | -35.24 | peak | V |
| 7516.000 | -71.90 | 26.50 | -45.40 | -13.00 | -32.40 | peak | V |

| | | | |
|---------------|-------------------|----------------------|--------------|
| Standard: | FCC Part 22 | Test Distance: | 3m |
| Test item: | Radiated Emission | Power: | AC 120V/60Hz |
| Model Number: | QBA757 | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Mode: | 2 | Date: | 09/24/2012 |
| Frequency: | 1850.2 MHz | Test By: | Fly Lu |

| Frequency (MHz) | Reading (dBm) | Correct Factor (dB) | Result (dBm) | Limit (dBm) | Margin (dB) | Remark | Ant.Polar. H / V |
|--------------------|------------------|------------------------|-----------------|----------------|----------------|--------|---------------------|
| 159.5000 | -61.82 | 1.30 | -60.52 | -13.00 | -47.52 | peak | H |
| 260.0000 | -61.54 | -4.34 | -65.88 | -13.00 | -52.88 | peak | H |
| 390.0000 | -74.17 | 1.66 | -72.51 | -13.00 | -59.51 | peak | H |
| 490.0000 | -70.96 | 6.36 | -64.60 | -13.00 | -51.60 | peak | H |
| 610.0000 | -80.19 | 7.82 | -72.37 | -13.00 | -59.37 | peak | H |
| 773.0000 | -78.95 | 9.81 | -69.14 | -13.00 | -56.14 | peak | H |
| 3292.000 | -69.33 | 14.85 | -54.48 | -13.00 | -41.48 | peak | H |
| 5968.000 | -72.13 | 22.95 | -49.18 | -13.00 | -36.18 | peak | H |
| 7624.000 | -71.78 | 29.30 | -42.48 | -13.00 | -29.48 | peak | H |
| 160.5000 | -67.25 | 12.20 | -55.05 | -13.00 | -42.05 | peak | V |
| 260.0000 | -63.64 | -1.56 | -65.20 | -13.00 | -52.20 | peak | V |
| 390.0000 | -69.29 | 1.49 | -67.80 | -13.00 | -54.80 | peak | V |
| 490.0000 | -77.46 | 2.57 | -74.89 | -13.00 | -61.89 | peak | V |
| 623.5000 | -79.88 | 8.85 | -71.03 | -13.00 | -58.03 | peak | V |
| 755.0000 | -79.56 | 10.84 | -68.72 | -13.00 | -55.72 | peak | V |
| 3244.000 | -68.59 | 17.93 | -50.66 | -13.00 | -37.66 | peak | V |
| 5104.000 | -70.80 | 23.46 | -47.34 | -13.00 | -34.34 | peak | V |
| 7228.000 | -71.50 | 25.96 | -45.54 | -13.00 | -32.54 | peak | V |

| | | | |
|---------------|-------------------|----------------------|--------------|
| Standard: | FCC Part 22 | Test Distance: | 3m |
| Test item: | Radiated Emission | Power: | AC 120V/60Hz |
| Model Number: | QBA757 | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Mode: | 2 | Date: | 09/24/2012 |
| 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 |
|--------------------|------------------|------------------------|-----------------|----------------|----------------|--------|---------------------|
| 160.0000 | -61.61 | 1.45 | -60.16 | -13.00 | -47.16 | peak | H |
| 260.0000 | -62.15 | -4.34 | -66.49 | -13.00 | -53.49 | peak | H |
| 430.0000 | -70.46 | 3.67 | -66.79 | -13.00 | -53.79 | peak | H |
| 520.0000 | -74.03 | 7.65 | -66.38 | -13.00 | -53.38 | peak | H |
| 665.5000 | -79.60 | 7.12 | -72.48 | -13.00 | -59.48 | peak | H |
| 799.5000 | -79.92 | 11.22 | -68.70 | -13.00 | -55.70 | peak | H |
| 3376.000 | -69.42 | 15.10 | -54.32 | -13.00 | -41.32 | peak | H |
| 5524.000 | -71.84 | 21.75 | -50.09 | -13.00 | -37.09 | peak | H |
| 7216.000 | -71.34 | 28.28 | -43.06 | -13.00 | -30.06 | peak | H |
| 161.0000 | -66.31 | 11.75 | -54.56 | -13.00 | -41.56 | peak | V |
| 260.0000 | -64.18 | -1.56 | -65.74 | -13.00 | -52.74 | peak | V |
| 390.0000 | -69.63 | 1.49 | -68.14 | -13.00 | -55.14 | peak | V |
| 528.5000 | -79.01 | 3.59 | -75.42 | -13.00 | -62.42 | peak | V |
| 678.5000 | -79.93 | 9.54 | -70.39 | -13.00 | -57.39 | peak | V |
| 850.0000 | -78.45 | 11.49 | -66.96 | -13.00 | -53.96 | peak | V |
| 3388.000 | -69.95 | 18.82 | -51.13 | -13.00 | -38.13 | peak | V |
| 5380.000 | -72.26 | 23.48 | -48.78 | -13.00 | -35.78 | peak | V |
| 7252.000 | -72.46 | 26.00 | -46.46 | -13.00 | -33.46 | peak | V |

| | | | |
|---------------|-------------------|----------------------|--------------|
| Standard: | FCC Part 22 | Test Distance: | 3m |
| Test item: | Radiated Emission | Power: | AC 120V/60Hz |
| Model Number: | QBA757 | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Mode: | 2 | Date: | 09/24/2012 |
| Frequency: | 1909.8 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 | -61.91 | 1.45 | -60.46 | -13.00 | -47.46 | peak | H |
| 260.0000 | -62.46 | -4.34 | -66.80 | -13.00 | -53.80 | peak | H |
| 430.0000 | -69.92 | 3.67 | -66.25 | -13.00 | -53.25 | peak | H |
| 520.0000 | -73.21 | 7.65 | -65.56 | -13.00 | -52.56 | peak | H |
| 680.0000 | -78.23 | 7.02 | -71.21 | -13.00 | -58.21 | peak | H |
| 840.0000 | -79.50 | 12.10 | -67.40 | -13.00 | -54.40 | peak | H |
| 3472.000 | -69.04 | 15.41 | -53.63 | -13.00 | -40.63 | peak | H |
| 5524.000 | -71.04 | 21.75 | -49.29 | -13.00 | -36.29 | peak | H |
| 7288.000 | -71.78 | 28.52 | -43.26 | -13.00 | -30.26 | peak | H |
| 160.0000 | -66.47 | 12.68 | -53.79 | -13.00 | -40.79 | peak | V |
| 260.0000 | -64.76 | -1.56 | -66.32 | -13.00 | -53.32 | peak | V |
| 390.0000 | -70.93 | 1.49 | -69.44 | -13.00 | -56.44 | peak | V |
| 527.5000 | -79.47 | 3.54 | -75.93 | -13.00 | -62.93 | peak | V |
| 683.0000 | -79.68 | 9.65 | -70.03 | -13.00 | -57.03 | peak | V |
| 815.0000 | -80.02 | 11.43 | -68.59 | -13.00 | -55.59 | peak | V |
| 3232.000 | -68.01 | 17.85 | -50.16 | -13.00 | -37.16 | peak | V |
| 5236.000 | -70.94 | 23.47 | -47.47 | -13.00 | -34.47 | peak | V |
| 7204.000 | -71.13 | 25.90 | -45.23 | -13.00 | -32.23 | peak | V |

| | | | |
|---------------|-------------------|----------------------|--------------|
| Standard: | FCC Part 22 | Test Distance: | 3m |
| Test item: | Radiated Emission | Power: | AC 120V/60Hz |
| Model Number: | QBA757 | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Mode: | 3 | Date: | 09/24/2012 |
| 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 |
|--------------------|------------------|------------------------|-----------------|----------------|----------------|--------|---------------------|
| 160.0000 | -61.50 | 1.45 | -60.05 | -13.00 | -47.05 | peak | H |
| 260.0000 | -62.05 | -4.34 | -66.39 | -13.00 | -53.39 | peak | H |
| 390.0000 | -71.83 | 1.66 | -70.17 | -13.00 | -57.17 | peak | H |
| 490.0000 | -72.05 | 6.36 | -65.69 | -13.00 | -52.69 | peak | H |
| 612.5000 | -80.08 | 7.80 | -72.28 | -13.00 | -59.28 | peak | H |
| 730.0000 | -78.77 | 7.85 | -70.92 | -13.00 | -57.92 | peak | H |
| 3448.000 | -69.30 | 15.33 | -53.97 | -13.00 | -40.97 | peak | H |
| 5644.000 | -71.67 | 22.08 | -49.59 | -13.00 | -36.59 | peak | H |
| 7504.000 | -72.14 | 29.20 | -42.94 | -13.00 | -29.94 | peak | H |
| 160.0000 | -65.12 | 12.68 | -52.44 | -13.00 | -39.44 | peak | V |
| 260.0000 | -64.80 | -1.56 | -66.36 | -13.00 | -53.36 | peak | V |
| 390.0000 | -69.09 | 1.49 | -67.60 | -13.00 | -54.60 | peak | V |
| 569.0000 | -77.83 | 5.07 | -72.76 | -13.00 | -59.76 | peak | V |
| 682.0000 | -80.09 | 9.63 | -70.46 | -13.00 | -57.46 | peak | V |
| 795.5000 | -79.72 | 11.74 | -67.98 | -13.00 | -54.98 | peak | V |
| 2992.000 | -68.88 | 16.36 | -52.52 | -13.00 | -39.52 | peak | V |
| 5116.000 | -71.37 | 23.45 | -47.92 | -13.00 | -34.92 | peak | V |
| 7588.000 | -71.96 | 26.48 | -45.48 | -13.00 | -32.48 | peak | V |

| | | | |
|---------------|-------------------|----------------------|--------------|
| Standard: | FCC Part 22 | Test Distance: | 3m |
| Test item: | Radiated Emission | Power: | AC 120V/60Hz |
| Model Number: | QBA757 | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Mode: | 3 | Date: | 09/24/2012 |
| 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 |
|--------------------|------------------|------------------------|-----------------|----------------|----------------|--------|---------------------|
| 160.0000 | -61.90 | 1.45 | -60.45 | -13.00 | -47.45 | peak | H |
| 260.0000 | -61.13 | -4.34 | -65.47 | -13.00 | -52.47 | peak | H |
| 430.0000 | -69.25 | 3.67 | -65.58 | -13.00 | -52.58 | peak | H |
| 546.0000 | -76.72 | 8.12 | -68.60 | -13.00 | -55.60 | peak | H |
| 677.0000 | -79.66 | 7.05 | -72.61 | -13.00 | -59.61 | peak | H |
| 819.0000 | -80.44 | 11.89 | -68.55 | -13.00 | -55.55 | peak | H |
| 2896.000 | -66.18 | 13.56 | -52.62 | -13.00 | -39.62 | peak | H |
| 5224.000 | -71.43 | 20.82 | -50.61 | -13.00 | -37.61 | peak | H |
| 7540.000 | -72.28 | 29.23 | -43.05 | -13.00 | -30.05 | peak | H |
| 130.5000 | -70.04 | 14.10 | -55.94 | -13.00 | -42.94 | peak | V |
| 260.0000 | -63.69 | -1.56 | -65.25 | -13.00 | -52.25 | peak | V |
| 390.0000 | -69.41 | 1.49 | -67.92 | -13.00 | -54.92 | peak | V |
| 490.0000 | -77.37 | 2.57 | -74.80 | -13.00 | -61.80 | peak | V |
| 617.0000 | -80.68 | 8.68 | -72.00 | -13.00 | -59.00 | peak | V |
| 763.5000 | -79.88 | 11.02 | -68.86 | -13.00 | -55.86 | peak | V |
| 3652.000 | -68.77 | 19.84 | -48.93 | -13.00 | -35.93 | peak | V |
| 5464.000 | -72.24 | 23.49 | -48.75 | -13.00 | -35.75 | peak | V |
| 7384.000 | -71.85 | 26.26 | -45.59 | -13.00 | -32.59 | peak | V |

| | | | |
|---------------|-------------------|----------------------|--------------|
| Standard: | FCC Part 22 | Test Distance: | 3m |
| Test item: | Radiated Emission | Power: | AC 120V/60Hz |
| Model Number: | QBA757 | Temp.(°C)/Hum.(%RH): | 26(°C)/60%RH |
| Mode: | 3 | Date: | 09/24/2012 |
| 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 |
|--------------------|------------------|------------------------|-----------------|----------------|----------------|--------|---------------------|
| 159.5000 | -60.91 | 1.30 | -59.61 | -13.00 | -46.61 | peak | H |
| 260.0000 | -61.87 | -4.34 | -66.21 | -13.00 | -53.21 | peak | H |
| 390.0000 | -72.08 | 1.66 | -70.42 | -13.00 | -57.42 | peak | H |
| 520.0000 | -72.04 | 7.65 | -64.39 | -13.00 | -51.39 | peak | H |
| 621.0000 | -80.20 | 7.65 | -72.55 | -13.00 | -59.55 | peak | H |
| 786.0000 | -80.20 | 10.50 | -69.70 | -13.00 | -56.70 | peak | H |
| 2716.000 | -68.30 | 12.94 | -55.36 | -13.00 | -42.36 | peak | H |
| 5248.000 | -71.76 | 20.89 | -50.87 | -13.00 | -37.87 | peak | H |
| 7492.000 | -71.77 | 29.17 | -42.60 | -13.00 | -29.60 | peak | H |
| 160.0000 | -68.15 | 12.68 | -55.47 | -13.00 | -42.47 | peak | V |
| 260.0000 | -64.84 | -1.56 | -66.40 | -13.00 | -53.40 | peak | V |
| 390.0000 | -70.15 | 1.49 | -68.66 | -13.00 | -55.66 | peak | V |
| 534.5000 | -79.74 | 3.95 | -75.79 | -13.00 | -62.79 | peak | V |
| 650.0000 | -79.51 | 9.00 | -70.51 | -13.00 | -57.51 | peak | V |
| 786.5000 | -80.35 | 11.47 | -68.88 | -13.00 | -55.88 | peak | V |
| 3700.000 | -69.80 | 19.93 | -49.87 | -13.00 | -36.87 | peak | V |
| 5488.000 | -71.32 | 23.48 | -47.84 | -13.00 | -34.84 | peak | V |
| 7552.000 | -71.62 | 26.49 | -45.13 | -13.00 | -32.13 | peak | V |

7 Frequency Stability (Temperature & Voltage Variation) Test

7.1. 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.

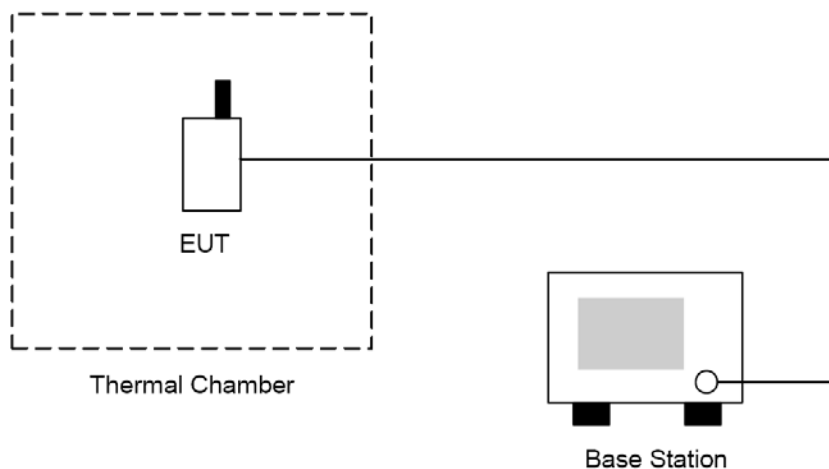
7.2. Test Instruments

| 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: ⁽¹⁾ Calibration period 1 year. ⁽²⁾ Calibration period 2 years.

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

7.3. Setup



7.4. 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°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°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.

7.5. Uncertainty

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

7.6. Test Result

| Model Number | QBA757 | | | | | |
|-----------------------|-------------------------------------------------------|------------------|----------------|-----------------|-------------|--------|
| Test Item | Frequency Stability (Temperature & Voltage Variation) | | | | | |
| Test Mode | Mode 1 | | | | | |
| Date of Test | 09/04/2012 | | | | Test Site | TE05 |
| Level | Voltage [Vdc] | Temperature (°C) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Result |
| Normal | 3.70 | -30 | 10 | 0.012 | ±2.5 | Pass |
| Normal | 3.70 | -20 | 11 | 0.013 | ±2.5 | Pass |
| Normal | 3.70 | -10 | 13 | 0.016 | ±2.5 | Pass |
| Normal | 3.70 | 0 | 8 | 0.010 | ±2.5 | Pass |
| Normal | 3.70 | 10 | 7 | 0.008 | ±2.5 | Pass |
| Battery full point | 4.25 | 20 | 15 | 0.018 | ±2.5 | Pass |
| Normal | 3.70 | 20 | 14 | 0.017 | ±2.5 | Pass |
| Battery cut-off point | 3.40 | 20 | 11 | 0.013 | ±2.5 | Pass |
| Normal | 3.70 | 30 | 11 | 0.013 | ±2.5 | Pass |
| Normal | 3.70 | 40 | 12 | 0.014 | ±2.5 | Pass |
| Normal | 3.70 | 50 | 9 | 0.011 | ±2.5 | Pass |

| Model Number | QBA757 | | | | | |
|-----------------------|-------------------------------------------------------|------------------|----------------|-----------------|-------------|--------|
| Test Item | Frequency Stability (Temperature & Voltage Variation) | | | | | |
| Test Mode | Mode 2 | | | | | |
| Date of Test | 09/04/2012 | | | | Test Site | TE05 |
| Level | Voltage [Vdc] | Temperature (°C) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Result |
| Normal | 3.70 | -30 | 34 | 0.018 | ±2.5 | Pass |
| Normal | 3.70 | -20 | 32 | 0.017 | ±2.5 | Pass |
| Normal | 3.70 | -10 | 31 | 0.016 | ±2.5 | Pass |
| Normal | 3.70 | 0 | 25 | 0.013 | ±2.5 | Pass |
| Normal | 3.70 | 10 | 20 | 0.011 | ±2.5 | Pass |
| Battery full point | 4.25 | 20 | 33 | 0.018 | ±2.5 | Pass |
| Normal | 3.70 | 20 | 21 | 0.011 | ±2.5 | Pass |
| Battery cut-off point | 3.40 | 20 | 29 | 0.015 | ±2.5 | Pass |
| Normal | 3.70 | 30 | 21 | 0.011 | ±2.5 | Pass |
| Normal | 3.70 | 40 | 29 | 0.015 | ±2.5 | Pass |
| Normal | 3.70 | 50 | 38 | 0.020 | ±2.5 | Pass |

| | | | | | | |
|-----------------------|-------------------------------------------------------|------------------|----------------|-----------------|-------------|--------|
| Model Number | QBA757 | | | | | |
| Test Item | Frequency Stability (Temperature & Voltage Variation) | | | | | |
| Test Mode | Mode 3 | | | | | |
| Date of Test | 09/04/2012 | | | | Test Site | TE05 |
| Level | Voltage [Vdc] | Temperature (°C) | Deviation (Hz) | Deviation (ppm) | Limit (ppm) | Result |
| Normal | 3.70 | -30 | -5 | -0.006 | ±2.5 | Pass |
| Normal | 3.70 | -20 | 4 | 0.005 | ±2.5 | Pass |
| Normal | 3.70 | -10 | 2 | 0.002 | ±2.5 | Pass |
| Normal | 3.70 | 0 | 1 | 0.001 | ±2.5 | Pass |
| Normal | 3.70 | 10 | 6 | 0.007 | ±2.5 | Pass |
| Battery full point | 4.25 | 20 | -4 | -0.005 | ±2.5 | Pass |
| Normal | 3.70 | 20 | 5 | 0.006 | ±2.5 | Pass |
| Battery cut-off point | 3.40 | 20 | 6 | 0.007 | ±2.5 | Pass |
| Normal | 3.70 | 30 | -3 | -0.004 | ±2.5 | Pass |
| Normal | 3.70 | 40 | 7 | 0.008 | ±2.5 | Pass |
| Normal | 3.70 | 50 | 2 | 0.002 | ±2.5 | Pass |