A Test Lab Techno Corp.

Changan Lab：No. 140 -1, Changan Street, Bade City, Taoyuan County, Taiwan R.O.C.
Tel：886-3-271-0188 / Fax：886-3-271-0190

P22 & P24 Test Report

Test Report No.	：	**0811FR14**
Applicant	：	**Inventec Corporation**
Manufacturer	：	**Inventec Corporation**
Model Name	：	**PDA PHONE**
Trade Mark	：	**PHAROS**
Model Number	：	**Pharos Traveler 117**
FCC ID	：	**DGIBC0312AAA000**
Tx Frequency Range	：	**824.2 - 848.8MHz (GSM 850)**
		1850.2 - 1909.8MHz (PCS 1900)
Dates of Test	：	**Apr. 24 ~ May. 08, 2008, Nov. 21 ~ Nov. 26, 2008**
Test Specification	：	**47 CFR Part 22H, 24E & ANSI/TIA-603-C-2004**
Application	：	**Class II permissive change**
Location of Test Lab.	：	**Chang-an Lab.**

1. The test operations have to be performed with cautious behavior, the test results are as attached.
2. The test results are under chamber environment of A Test Lab Techno Corp. A Test Lab Techno Corp. does not assume responsibility for any conclusions and generalizations drawn from the test results with regard to other specimens or samples.
3. The measurement report has to be written approval of A Test Lab Techno Corp. It may only be reproduced or published in full.

Country Huang 20081127
Measurement Center Manager

John Cheng 20081127
Testing Engineer

Contents

1. General Information

Applicant：

Inventec Corporation
Inventec Building, 66 Hou-Kang Street, Shih-Lin District, Taipei 11170, Taiwan

Manufacturer	:	Inventec Corporation Inventec Building, 66 Hou-Kang Street,
		Shih-Lin District, Taipei 11170, Taiwan
Product Name	:	PDA PHONE
Trade Mark	:	PHAROS
Model Number	:	Pharos Traveler 117
FCC ID	:	DGIBC0312AAA000
TX Frequency	:	824.2 - 848.8 MHz (GSM 850) 1850.2 - 1909.8 MHz (PCS 1900) 826.6 - 846.4 MHz (WCDMA Band V) 1852.6 - 1907.4 MHz (WCDMA Band II)
RX Frequency	:	869.2 - 893.8 MHz (GSM 850) 1930.2 - 1989.8 MHz (PCS 1900) 871.4 - 891.6 MHz (WCDMA Band V) 1932.4 - 1987.6 MHz (WCDMA Band II)
Antenna Type	:	Internal antenna
Maximum Output Power to Antenna (Conducted)	:	32.00 dBm (GSM 850) 29.08 dBm (PCS 1900) 22.00 dBm (WCDMA Band V) 23.48 dBm (WCDMA Band II)
Max. ERP/EIRP Power	:	0.716 W / 28.55 dBm ERP (GSM 850) 1.400 W / 31.46 dBm EIRP (PCS 1900) 0.097 W / 19.87 dBm ERP (WCDMA Band V) 0.450 W / 26.53 dBm EIRP (WCDMA Band II)
Type of Emission	:	GSM 850 : 245KGXW EGPRS 850 : 240KG7W PCS 1900 : 245KGXW EGPRS 1900 : 243KG7W WCDMA Band V : 4M17F9W WCDMA Band II : 4M19F9W
Power Rating (DC , Voltage and Current of RF element or PA)	:	3.7V / 1.41 A
Digital Modulation Emission	:	GMSK(GSM 850 / PCS1900) QPSK(WCDMA Band V / WCDMA Band II)
Power Supply Type	:	AC Adapter
DC Power Cord	:	Shielded USB Cable, 1.5 meter, Cigarette Plug
Adapter	:	PI ELECTRONICS / AD 7112B
DUT Stage	:	Production Unit

2. Test Configuration of Equipment under Test

2.1 Test Manner

1. The spurious emission measurements were carried out in semi-anechoic chamber with 3-meter test range.
2. During all testing, EUT is in link mode with base station emulator at maximum power level. (PCL=5 for GSM 850 or PCL=0 for PCS 1900)
3. Frequency range investigated: radiated emission 30 MHz to 9000 MHz for GSM850; 30MHz to 19000 MHz for PCS 1900.

2.2 Class II permissive change description

The model (PHAROS_Pharos Traveler 117) is the variant product of velocitymobile_velocity 103; velocitymobile_velocity 103 FCC ID is DGIBC0312AAA000. PHAROS_Pharos Traveler 117 is changed from velocitymobile_velocity 103; the difference from velocitymobile_velocity 103 is the model number and the PCB Layout.

2.3 Test Mode

Preliminary tests were performed in different data mode to find the worst case. The data mode shown in the table below is the worst-case rate (Blue color). Investigation has been done on all the possible configurations for searching the worst cases. The following table is a list of the test modes shown in this test report.

Band	Mode	CH	Frequency (MHz)	Conducted Power (dBm)	Worst
GSM 850	---	Lowest	824.2	32.00	■
		Middle	836.6	31.47	□
		Highest	848.8	31.49	□
GPRS 850	3Down2Up	Lowest	824.2	31.79	□
		Middle	836.6	31.46	□
		Highest	848.8	31.38	□
	3Down1Up	Lowest	824.2	31.72	□
		Middle	836.6	31.41	□
		Highest	848.8	31.32	□
EGPRS 850	3Down2Up	Lowest	824.2	26.68	□
		Middle	836.6	26.58	□
		Highest	848.8	26.45	□
	3Down1Up	Lowest	824.2	26.63	□
		Middle	836.6	26.57	□
		Highest	848.8	26.42	□

Band	Mode	CH	Frequency (MHz)	Conducted Power (dBm)	Worst
PCS 1900	---	Lowest	1850.2	29.08	■
		Middle	1880.0	28.89	□
		Highest	1909.8	28.67	□
GPRS 1900	3Down2Up	Lowest	1850.2	28.37	□
		Middle	1880.0	28.19	□
		Highest	1909.8	28.10	□
	3Down1Up	Lowest	1850.2	28.35	□
		Middle	1880.0	28.12	□
		Highest	1909.8	28.09	□
EGPRS 1900	3Down2Up	Lowest	1850.2	25.27	□
		Middle	1880.0	25.18	□
		Highest	1909.8	25.17	□
	3Down1Up	Lowest	1850.2	25.25	□
		Middle	1880.0	25.19	□
		Highest	1909.8	25.16	□

Band	Date Rate or Sub-test	Mode	CH	Frequency (MHz)	Conducted Power (dBm)	Worst
WCDMA V	---	12.2k RMC	Lowest	826.4	22.00	□
		12.2k RMC	Middle	836.0	21.79	□
		12.2k RMC	Highest	846.4	22.16	■
HSDPA V	1	12.2k RMC	Lowest	826.4	19.89	□
		12.2k RMC	Middle	836.0	19.82	□
		12.2k RMC	Highest	846.4	19.81	□
HSUPA V	1	12.2k RMC	Lowest	826.4	21.76	□
		12.2k RMC	Middle	836.0	21.48	□
		12.2k RMC	Highest	846.4	22.15	□

Band	Date Rate or Sub-test	Mode	CH	Frequency (MHz)	Conducted Power (dBm)	Worst
WCDMA II	---	12.2k RMC	Lowest	1852.4	23.48	■
		12.2k RMC	Middle	1880.0	22.31	□
		12.2k RMC	Highest	1907.6	22.08	□
HSDPA II	1	12.2k RMC	Lowest	1852.4	22.91	□
		12.2k RMC	Middle	1880.0	21.68	□
		12.2k RMC	Highest	1907.6	21.60	□
HSUPA II	1	12.2k RMC	Lowest	1852.4	22.68	□
		12.2k RMC	Middle	1880.0	21.51	□
		12.2k RMC	Highest	1907.6	21.28	□

Test Mode List													
Section	DESCRIPTION OF TEST	GSM 850	GPRS 850 (3Down2Up)	EGPRS 850 (3Down2Up)	PCS 1900	GPRS 1900 (3Down2Up)	EGPRS 1900 (3Down2Up)	WCDMA Band V	HSDPA Band V(Sub-Test 1)	HSUPA Band V(Sub-Test 1)	WCDMA Band II	HSDPA Band II(Sub-Test 1)	HSUPA Band II(Sub-Test 1)
4.2	RF Output Power	■	■	■	■	■	■	■	■	■	■	■	■
4.3	ERP / EIRP	■	□	■	■	□	■	■	□	□	■	□	□
4.4	Occupied Bandwidth & Band Edge Measurement	■	□	■	■	□	■	■	□	□	■	□	□
4.5	Conducted Spurious Emission	■	□	□	■	□	□	■	□	□	■	□	□
4.6	Field Strength of Spurious Radiation	■	□	□	■	□	□	■	□	□	■	□	□
4.7	Frequency Stability vs. Temperature	■	□	□	■	□	□	■	□	□	■	□	□
4.8	Frequency Stability vs. Voltage	■	□	□	■	□	□	■	□	□	■	□	□
4.9	AC Power Conducted Emissions Requirements	■	□	□	■	□	□	■	□	□	■	□	□

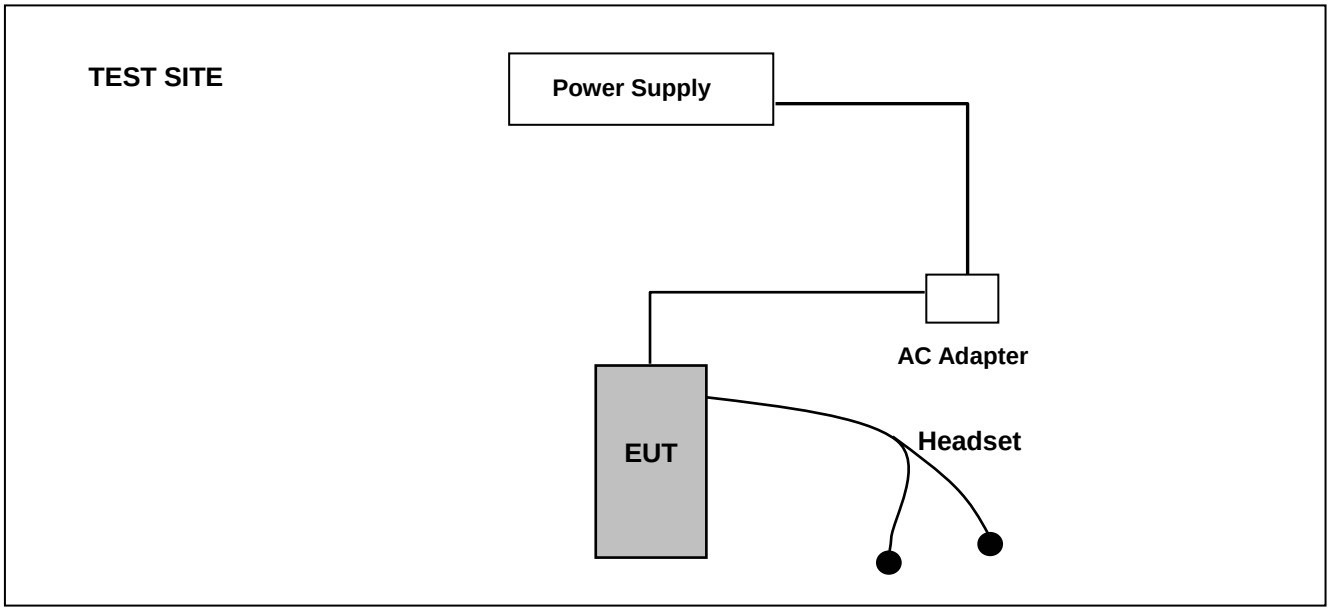
Comment:

1. The GSM 850's RF Output Power value was higher than GPRS 850 and EGPRS 850 condition. The GSM 850 is testing all items.
   The EGPRS 850(3Down2up) is testing section 4.2, 4.3 and 4.4.

2. The PCS 1900's RF Output Power value was more high than GPRS 1900 and EGPRS1900 condition. The PCS 1900 be testing all items.
   The EGPRS 1900(3Down2up) is testing section 4.2, 4.3 and 4.4.

3. The WCDMA Band V & Band II the RF Output Power value was higher than HSDPA Band V & Band II and HSUPA Band V & Band II condition. The WCDMA Band V & Band II is testing all items.
   The HSDPA Band V & Band II and HSUPA Band V & Band II be testing section 4.2and 4.3.

2.4 Connection Diagram of Test System



During EMI testing (LINK) the EUT (PDA PHONE)'s Power port was connected to AC Adapter. EUT (PDA PHONE)'s ear port connected to headset.

2.5 Ancillary Equipment List

1. Base Station(R&S) CMU200 106656
2. Power Supply (GW) 12P3A H281001

3. General Information of Test Site

Test Site Location: No. 140 -1, Changan Street, Bade City, Taoyuan County, Taiwan R.O.C.
TEL: 886-3-271-0188 FAX: 886-3-271-0190

Registration Number：854525
Designation Number：TW1330

The chamber meets the characteristics of ANSI C63.4-2006. This site is on file with the FCC.

3.1 Test Voltage

DC 3.7V / 1.41 A (Battery)

3.2 Test in Compliance with

47 CFR Part 22H and 24E, Part 2 and 24, ANSI/TIA-603-C-2004

3.3 Frequency Range Investigated

1. Radiation: from 30 MHz to 9000 MHz for GSM 850.
2. Radiation: from 30 MHz to 19000 MHz for PCS 1900.

3.4 Test Distance

The test distance of radiated emission from antenna to EUT is 3 m.

4. Test Data and Test Result

4.1 List of Measurements and Examinations

Some test items of PHAROS_Pharos Traveler 117 copy from the original report which is velocitymobile_velocity 103 (report number: 0802FR16).

FCC Rule	DESCRIPTION OF TEST	Result	Section	Note
§ 2.1046	RF Output Power	Passed	4.2	
§ 22.913 § 24.232	ERP / EIRP	Passed	4.3	
§ 2.1049 § 22.917 § 24.238(b)	Occupied Bandwidth & Band Edge Measurement	Passed	4.4	
§ 2.1051	Conducted Emission	Passed	4.5	Reference Report No.: 0802FR16
§ 2.1053	Field Strength of Spurious Radiation	Passed	4.6	
§ 2.1055 § 22.355 § 24.235	Frequency Stability vs. Temperature	Passed	4.7	Reference Report No.: 0802FR16
§ 2.1055 § 22.355 § 24.235	Frequency Stability vs. Voltage	Passed	4.8	Reference Report No.: 0802FR16
§ 15.207	AC Power Conducted Emissions Requirements	Passed	4.9	

4.2 RF Output Power

4.2.1 Measurement Instruments：

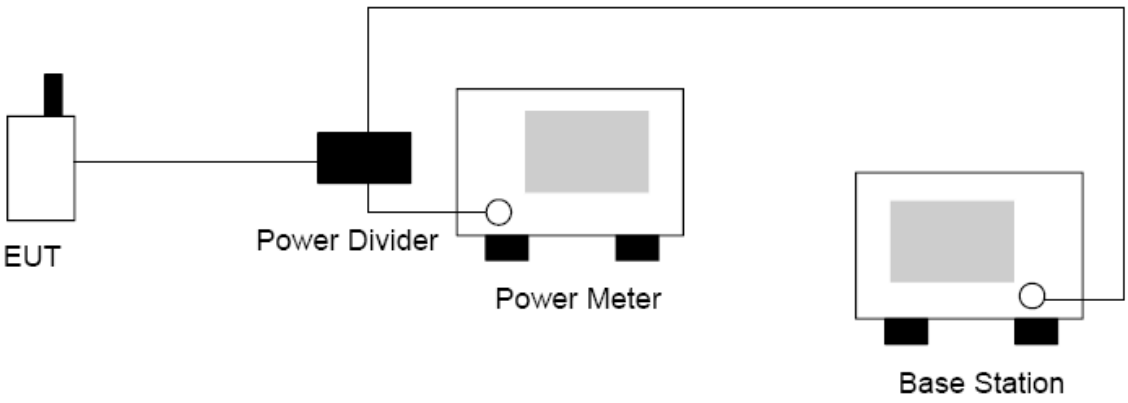
As described in chapter 5 of this test report.

4.2.2 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.

4.2.3 Test Setup Layout：



4.2.4 Test Result：

Bands	Channel	Frequency (MHz)		Conducted Power (dBm)	Conducted Power (Watts)
GSM 850	128	Low	824.2	**32.00**	**1.585**
	190	Mid	836.4	**31.47**	**1.403**
	251	High	848.8	**31.49**	**1.409**

Note: The testing result was used peak detector.

Bands	Channel	Frequency (MHz)		Conducted Power (dBm)	Conducted Power (Watts)
GPRS 850 3Down2Up	128	Low	824.2	**31.79**	**1.510**
	190	Mid	836.4	**31.46**	**1.400**
	251	High	848.8	**31.38**	**1.374**

Note: The testing result was used peak detector.

Bands	Channel	Frequency (MHz)		Conducted Power (dBm)	Conducted Power (Watts)
EGPRS 850 3Down2Up	128	Low	824.2	**26.68**	**0.466**
	190	Mid	836.4	**26.58**	**0.455**
	251	High	848.8	**26.45**	**0.442**

Note: The testing result was used peak detector.

Bands	Channel	Frequency (MHz)		Conducted Power (dBm)	Conducted Power (Watts)
PCS 1900	512	Low	1850.2	**29.08**	**0.809**
	661	Mid	1880.0	**28.89**	**0.774**
	810	High	1909.8	**28.67**	**0.736**

Note: The testing result was used peak detector.

Bands	Channel	Frequency (MHz)		Conducted Power (dBm)	Conducted Power (Watts)
GPRS 1900 3Down2Up	512	Low	1850.2	**28.37**	**0.687**
	661	Mid	1880.0	**28.19**	**0.659**
	810	High	1909.8	**28.10**	**0.646**

Note: The testing result was used peak detector.

Bands	Channel	Frequency (MHz)		Conducted Power (dBm)	Conducted Power (Watts)
EGPRS 1900 3Down2Up	512	Low	1850.2	**25.27**	**0.337**
	661	Mid	1880.0	**25.18**	**0.330**
	810	High	1909.8	**25.17**	**0.329**

Note: The testing result was used peak detector.

Bands	Channel	Frequency (MHz)		Conducted Power (dBm)	Conducted Power (Watts)
WCDMA Band V	4132	Low	826.4	**22.00**	**0.158**
	4182	Mid	836.4	**21.79**	**0.151**
	4233	High	846.4	**22.16**	**0.164**

Note: The testing result was used peak detector.

Bands	Channel	Frequency (MHz)		Conducted Power (dBm)	Conducted Power (Watts)
HSDPA Band V Sub-test 1	4132	Low	826.4	**19.89**	**0.097**
	4182	Mid	836.4	**19.82**	**0.096**
	4233	High	846.4	**19.81**	**0.096**

Note: The testing result was used peak detector.

Bands	Channel	Frequency (MHz)		Conducted Power (dBm)	Conducted Power (Watts)
HSUPA Band V Sub-test 1	4132	Low	826.4	**21.76**	**0.150**
	4182	Mid	836.4	**21.48**	**0.141**
	4233	High	846.4	**22.15**	**0.164**

Note: The testing result was used peak detector.

Bands	Channel	Frequency (MHz)		Conducted Power (dBm)	Conducted Power (Watts)
WCDMA Band II	9262	Low	1852.4	**23.48**	**0.223**
	9400	Mid	1880.0	**22.31**	**0.170**
	9538	High	1907.6	**22.08**	**0.161**

Note: The testing result was used peak detector.

Bands	Channel	Frequency (MHz)		Conducted Power (dBm)	Conducted Power (Watts)
HSDPA Band II Sub-test 1	9262	Low	1852.4	**22.91**	**0.195**
	9400	Mid	1880.0	**21.68**	**0.147**
	9538	High	1907.6	**21.60**	**0.145**

Note: The testing result was used peak detector.

Bands	Channel	Frequency (MHz)		Conducted Power (dBm)	Conducted Power (Watts)
HSUPA Band II Sub-test 1	9262	Low	1852.4	**22.68**	**0.185**
	9400	Mid	1880.0	**21.51**	**0.142**
	9538	High	1907.6	**21.28**	**0.134**

Note: The testing result was used peak detector.

4.3 ERP / EIRP Measurement

Equivalent isotropic radiated power measurements by substitution method according to ANSI/TIA/EIA-603-B-2002.

4.3.1 Measurement Instruments

As described in chapter 5 of this test report.

4.3.2 Test Procedure

The phone was tested in an anechoic chamber with a 3-axis position system that permits taking complete spherical scans of the EUT's 3-axis radiation patterns. For all tests, the phone was supported in a free space type environment, vertically oriented in the chamber. Tests were done for GSM 850 three frequencies (824.2, 836.6 and 848.8 MHz) and GSM 1900 three frequencies (1850.2, 1880.00, and 1909.80 MHz).
GSM measurements were made with the phone placed in a call using the CMU200 mobile station test set. The phone was weakly coupled to the test set and configured to transmit in full data rate mode.
The radiated power was measured using ETS-LINDGREN OTA Chamber in "Peak" mode. From these measurements, the software calculates the angle at which maximum radiated power occurs for each case, and the radiated power at this angle was extracted from the data.

Each individual data point in a radiated power or sensitivity measurement is referred to as the effective isotropic radiated power or effective isotropic sensitivity. That is, the desired information is how the measured quantity relates to the same quantity from an isotropic radiator. Thus, the reference measurement must relate the power received or transmitted at the EUT test equipment (spectrum analyzer or communication tester) back to the power transmitted or received at a theoretical isotropic radiator. The total path loss then, is just the difference in dB between the power transmitted or received at the isotropic radiator and that seen at the test equipment (see follow Figure 1).

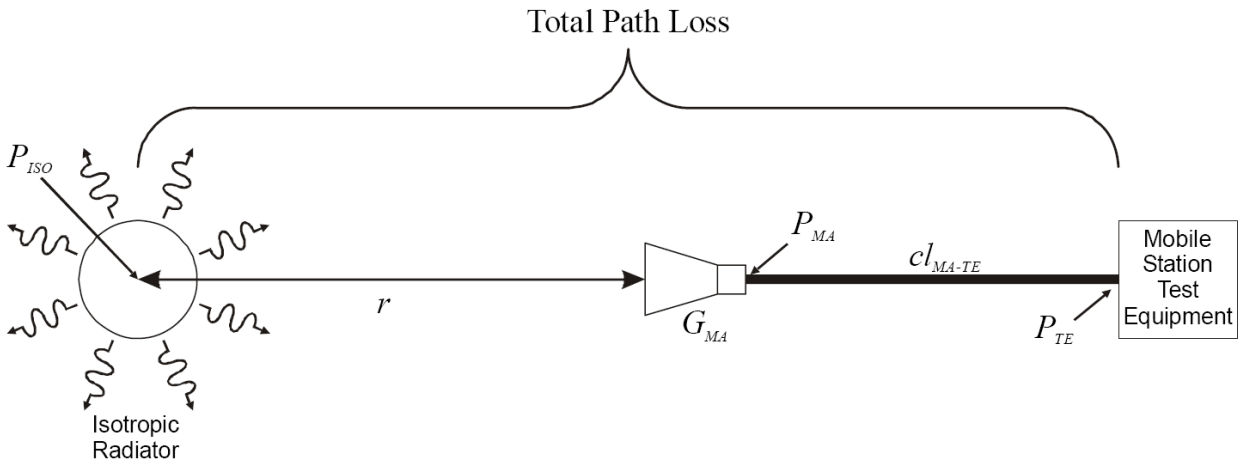


Figure 1. THEORETICAL CASE FOR DETERMINING PATH LOSS

In equation form, this becomes:

Equation 1

$$PL = P_{ISO} - P_{TE},$$

where PL is the total path loss, P_{ISO} is the power radiated by the theoretical isotropic radiator, and P_{TE} is the power received at the test equipment port. As can be seen in Figure 1, this quantity includes the range path loss due to the range length r, the gain of the measurement antenna, and any loss terms associated with the cabling, connections, amplifiers, splitters, etc. between the measurement antenna and the test equipment port.

Figure 2 shows a typical real world configuration for measuring the path loss. In this case, a reference antenna with known gain is used in place of the theoretical isotropic source. The path loss may then be determined from the power into the reference antenna by adding the gain of the reference antenna. That is:

Equation 2

$$P_{ISO} = P_{RA} + G_{RA},$$

where P_{RA} is the power radiated by reference antenna, and G_{RA} is the gain of the reference antenna, so that:

Equation 3

$$PL = P_{RA} + G_{RA} - P_{TE},$$

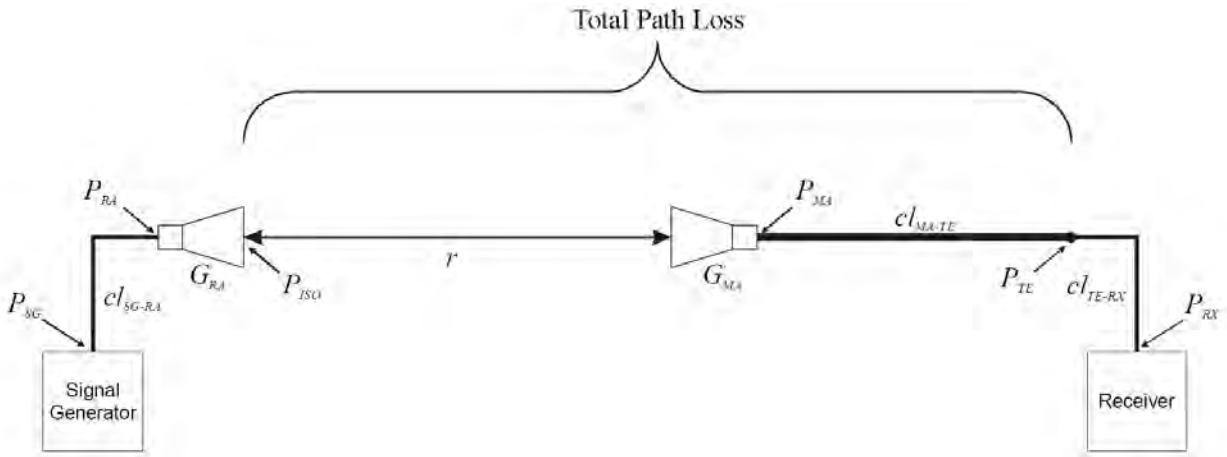


Figure 2. TYPICAL CONFIGURATION FOR MEASURING PATH LOSS

In order to determine P_{RA}, it is necessary to perform a cable reference measurement to remove the effects of the cable loss between signal generator and reference antenna, and between the test equipment port and the receiver. This establishes a reference point at the input to the reference antenna. Figure 3 illustrates the cable reference measurement configuration. Assuming the power level at the signal generator is fixed, it is easy to show that the difference between P_{RA} and P_{TE} in Figure 2 is given by:

Equation 4

$$P_{RA} - P_{TE} = P_{RX}' - P_{RX},$$

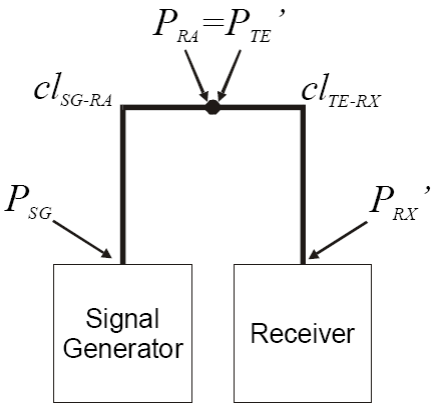


Figure 3. CABLE REFERENCE CALIBRATION CONFIGURATION

Where $P_{RX'}$ is the power measured at the receiver during the cable reference test, and P_{RX} is the power measured at the receiver during the range path loss measurement in Figure 2. Thus, the path loss is then just given by:

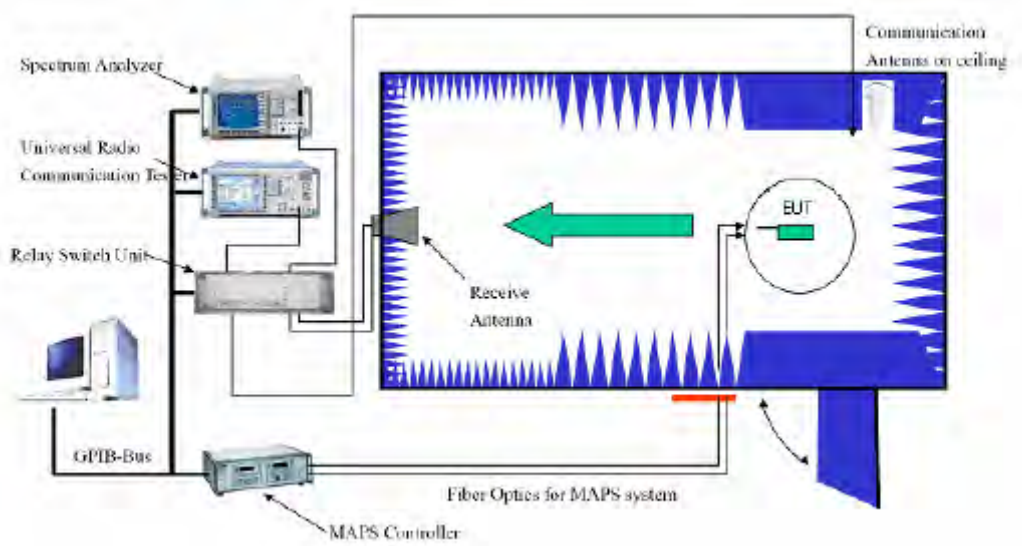
Equation 5

$$PL = G_{RA} + P_{RX}\text{'} - P_{RX'}$$

$$EIRP = P_t + P_L$$

P_t = Often referred to as antenna output power

4.3.3 Test Setup Layout of ERP/EIRP



4.3.4 Test Result

GSM 850 Radiated Power ERP				
Maximum Output Power				
Frequency (MHz)	Read Level (dBm)	Correction factor (dBm)	ERP (dBm)	ERP (W)
824.20	78.05	-49.5	**28.55**	**0.716**
836.40	77.95	-49.7	**28.22**	**0.664**
848.80	77.07	-49.7	**27.36**	**0.545**

EGPRS 850 Radiated Power ERP				
Maximum Output Power				
Frequency (MHz)	Read Level (dBm)	Correction factor (dBm)	ERP (dBm)	ERP (W)
824.20	72.73	-49.5	**23.23**	**0.210**
836.40	73.04	-49.7	**23.33**	**0.215**
848.80	72.05	-49.7	**22.32**	**0.171**

Note:

1. ERP/EIRP = Read Level + Correction factor.
2. For CDMA signals, a peak detector is used, with RBW = VBW = 3 MHz.
3. For WCDMA signals, a peak detector is used with RBW = VBW = 5MHz.
4. For AMPS, GSM, and NADC TDMA signals, a peak detector is used, with RBW = VBW= 1 MHz.

PCS 1900 Radiated Power EIRP				
Maximum Output Power				
Frequency (MHz)	Read Level (dBm)	Correction factor (dBm)	EIRP (dBm)	EIRP (W)
1850.20	86.86	-55.4	**31.46**	**1.400**
1880.00	86.17	-55.6	**30.59**	**1.146**
1909.80	84.99	-55.7	**29.20**	**0.832**

EGPRS 1900 Radiated Power EIRP				
Maximum Output Power				
Frequency (MHz)	Read Level (dBm)	Correction factor (dBm)	EIRP (dBm)	EIRP (W)
1850.20	83.06	-55.4	**27.65**	**0.582**
1880.00	82.49	-55.6	**26.88**	**0.488**
1909.80	81.39	-55.7	**25.70**	**0.372**

WCDMA Band V Radiated Power ERP				
Maximum Output Power				
Frequency (MHz)	Read Level (dBm)	Correction factor (dBm)	ERP (dBm)	ERP (W)
826.40	68.07	-49.5	**18.57**	**0.072**
836.40	66.3	-49.7	**16.63**	**0.046**
846.60	69.59	-49.7	**19.87**	**0.097**

WCDMA Band II Radiated Power EIRP				
Maximum Output Power				
Frequency (MHz)	Read Level (dBm)	Correction factor (dBm)	EIRP (dBm)	EIRP (W)
1852.40	81.45	-55.4	**26.53**	**0.450**
1880.00	80.51	-55.6	**25.46**	**0.352**
1907.60	79.54	-55.7	**24.24**	**0.265**

Note:

1. ERP/EIRP = Read Level + Correction factor.
2. For CDMA signals, a peak detector is used, with RBW = VBW = 3 MHz.
3. For WCDMA signals, a peak detector is used with RBW = VBW = 5MHz.
4. For AMPS, GSM, and NADC TDMA signals, a peak detector is used, with RBW = VBW= 1 MHz.

4.4 Occupied Bandwidth and Band Edge Measurement

4.4.1 Measurement Instruments

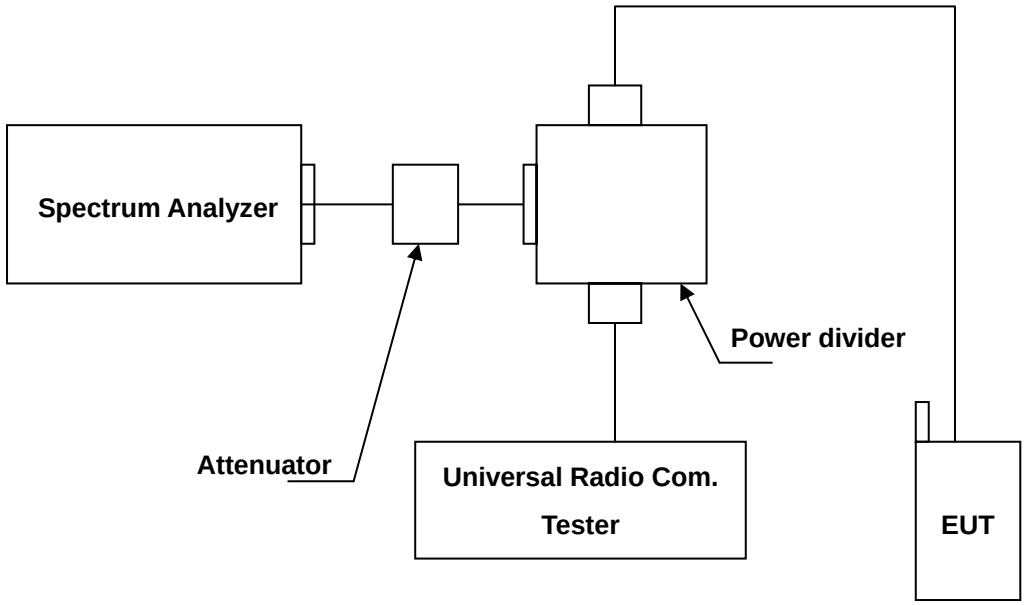
As described in chapter 5 of this test report.

4.4.2 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=3 kHz; VB=3 kHz for GSM 850 and PCS 1900.
   b. RB=100 kHz; VB=100 kHz for WCDMA Band V and WCDMA Band II.

4.4.3 Test Setup Layout



4.4.4 Occupied Bandwidth Test Result

GSM 850		
Channel	**Frequency (MHz)**	**Output Power - 26 dBc Bandwidth (kHz)**
128	824.2	**245.7070**
190	836.6	**248.2061**
251	848.8	**245.4186**
RB:3KHz , VBW:10KHz		

EGPRS 850		
Channel	**Frequency (MHz)**	**Output Power - 26 dBc Bandwidth (kHz)**
128	824.2	**239.1699**
190	836.6	**240.7938**
251	848.8	**237.9366**
RB:3KHz , VBW:10KHz		

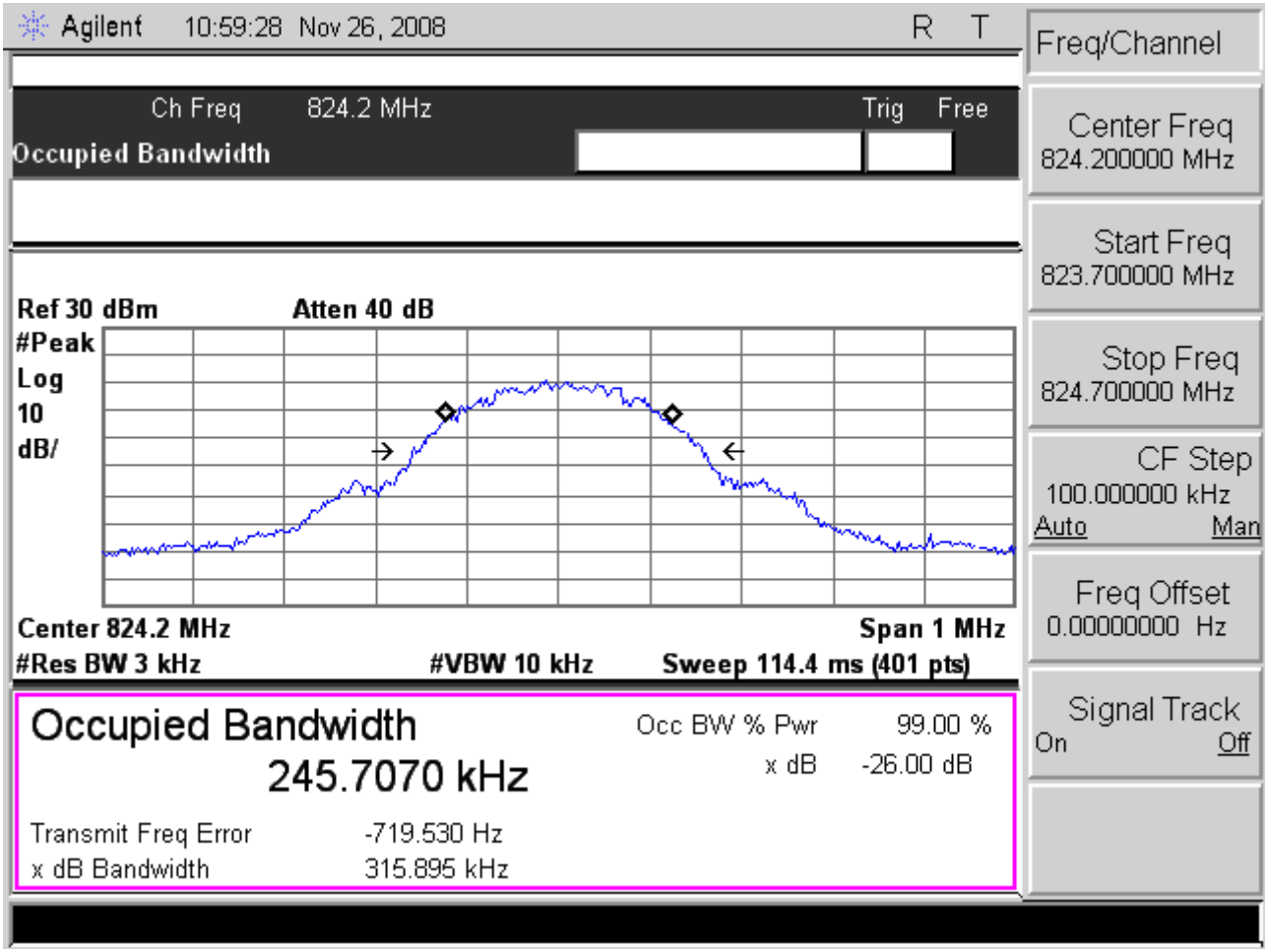
PCS 1900		
Channel	**Frequency (MHz)**	**Output Power - 26 dBc Bandwidth (kHz)**
512	1850.2	**248.6975**
661	1880.0	**244.5598**
810	1909.8	**249.7455**
RB:3KHz , VBW:10KHz		

EGPRS 1900		
Channel	**Frequency (MHz)**	**Output Power - 26 dBc Bandwidth (kHz)**
512	1850.2	**243.8439**
661	1880.0	**237.5296**
810	1909.8	**241.3414**
RB:3KHz , VBW:10KHz		

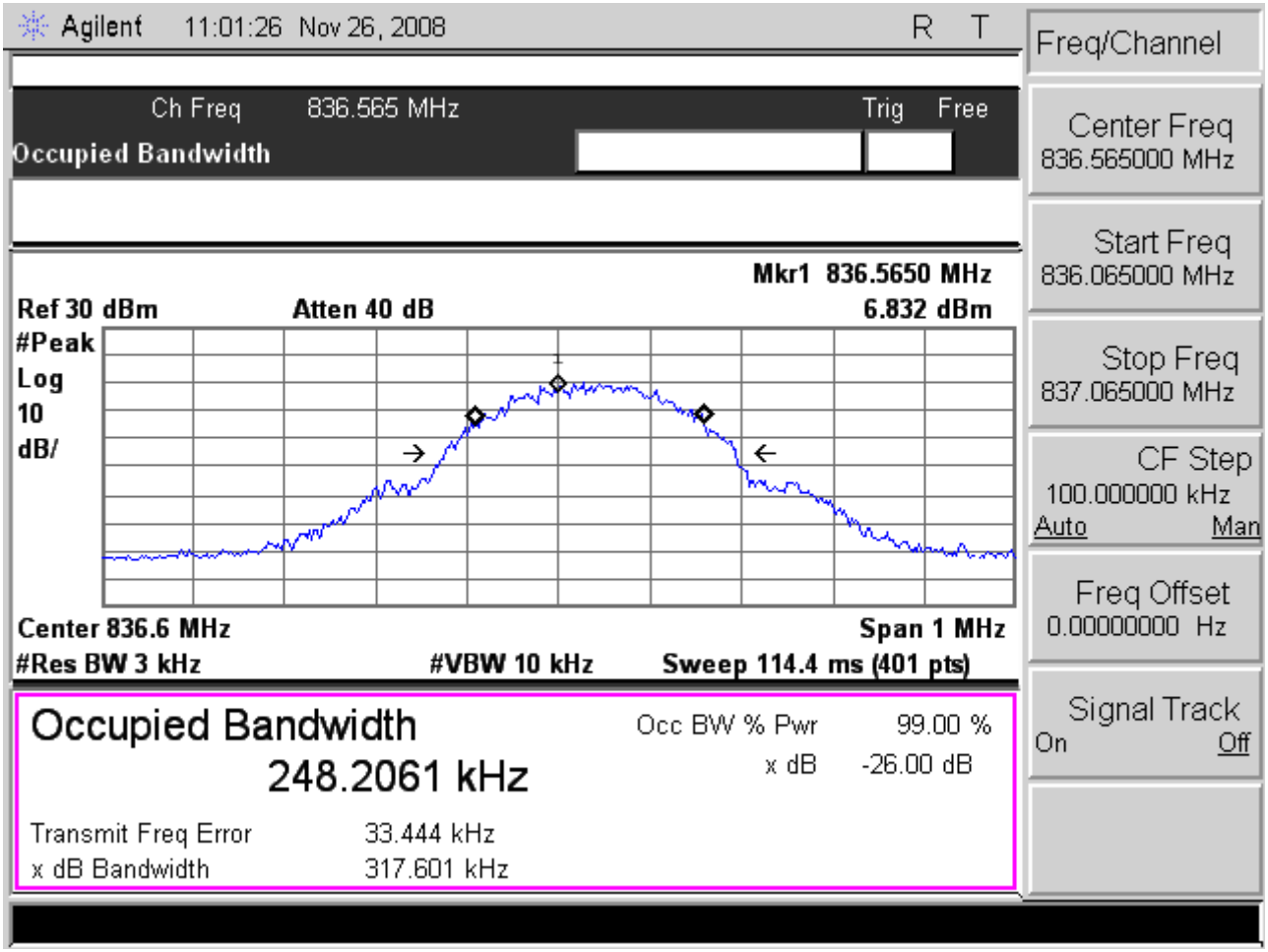
WCDMA Band V		
Channel	**Frequency (MHz)**	**Output Power - 26 dBc Bandwidth (MHz)**
4132	826.4	**4.1564**
4182	836.4	**4.1563**
4233	846.6	**4.1456**
RB:30KHz , VBW:300KHz		

WCDMA Band II		
Channel	**Frequency (MHz)**	**Output Power - 26 dBc Bandwidth (MHz)**
9262	1852.4	**4.1755**
9400	1880.0	**4.1763**
9538	1907.6	**4.1705**
RB:30KHz , VBW:300KHz		

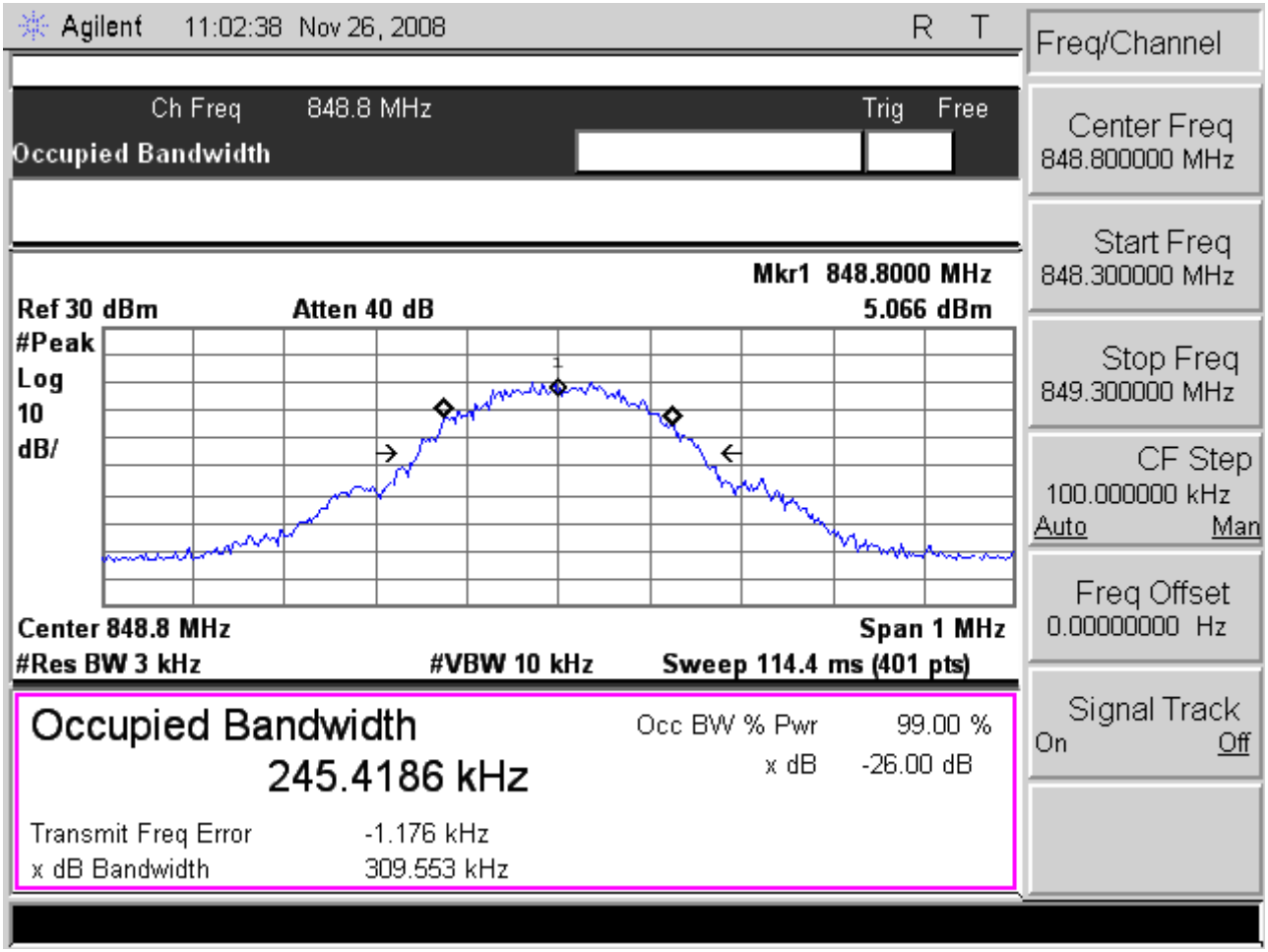
Test Mode: GSM 850 CH128 99% Occupied Bandwidth



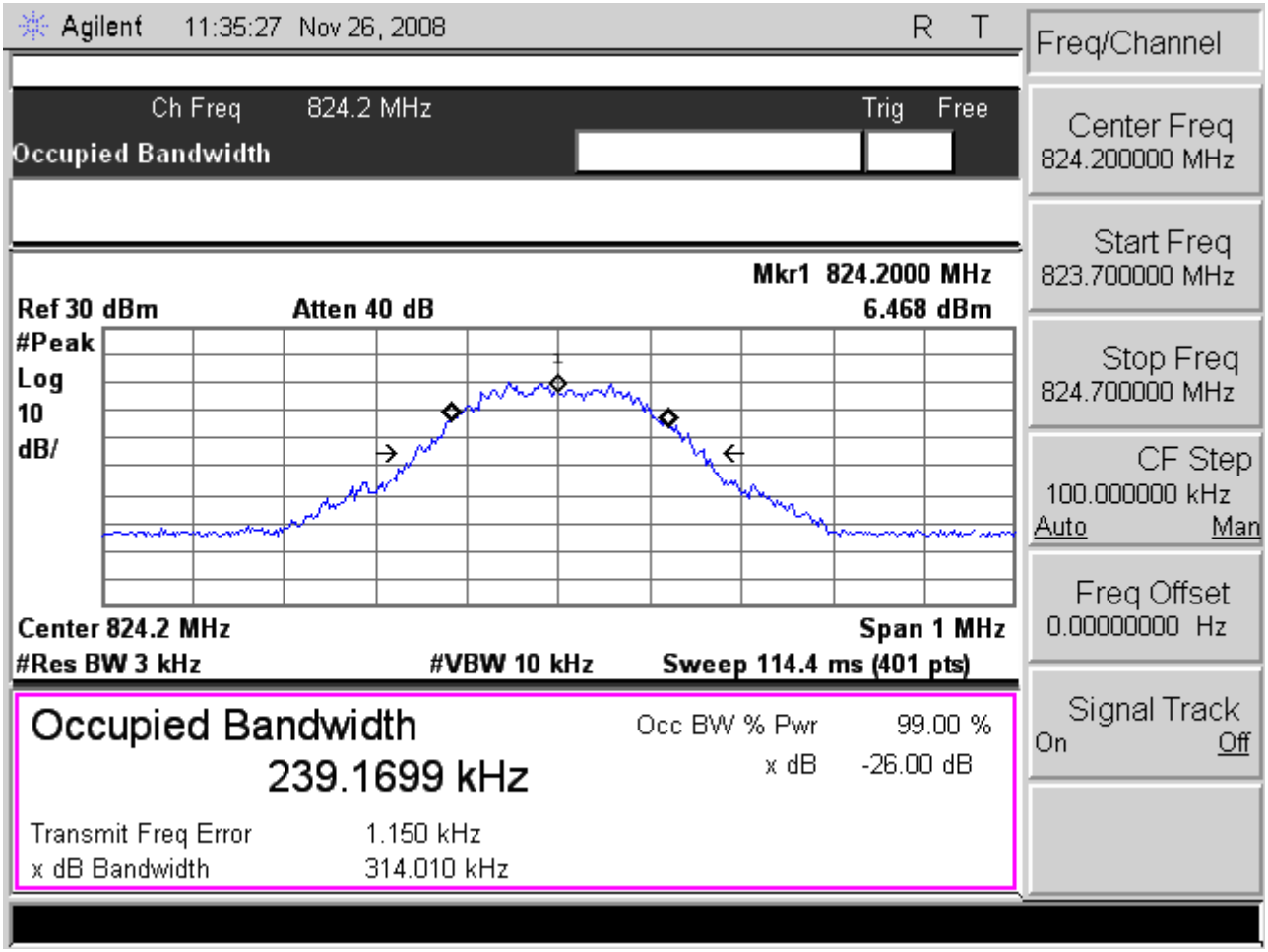
Test Mode: GSM 850 CH190 99% Occupied Bandwidth



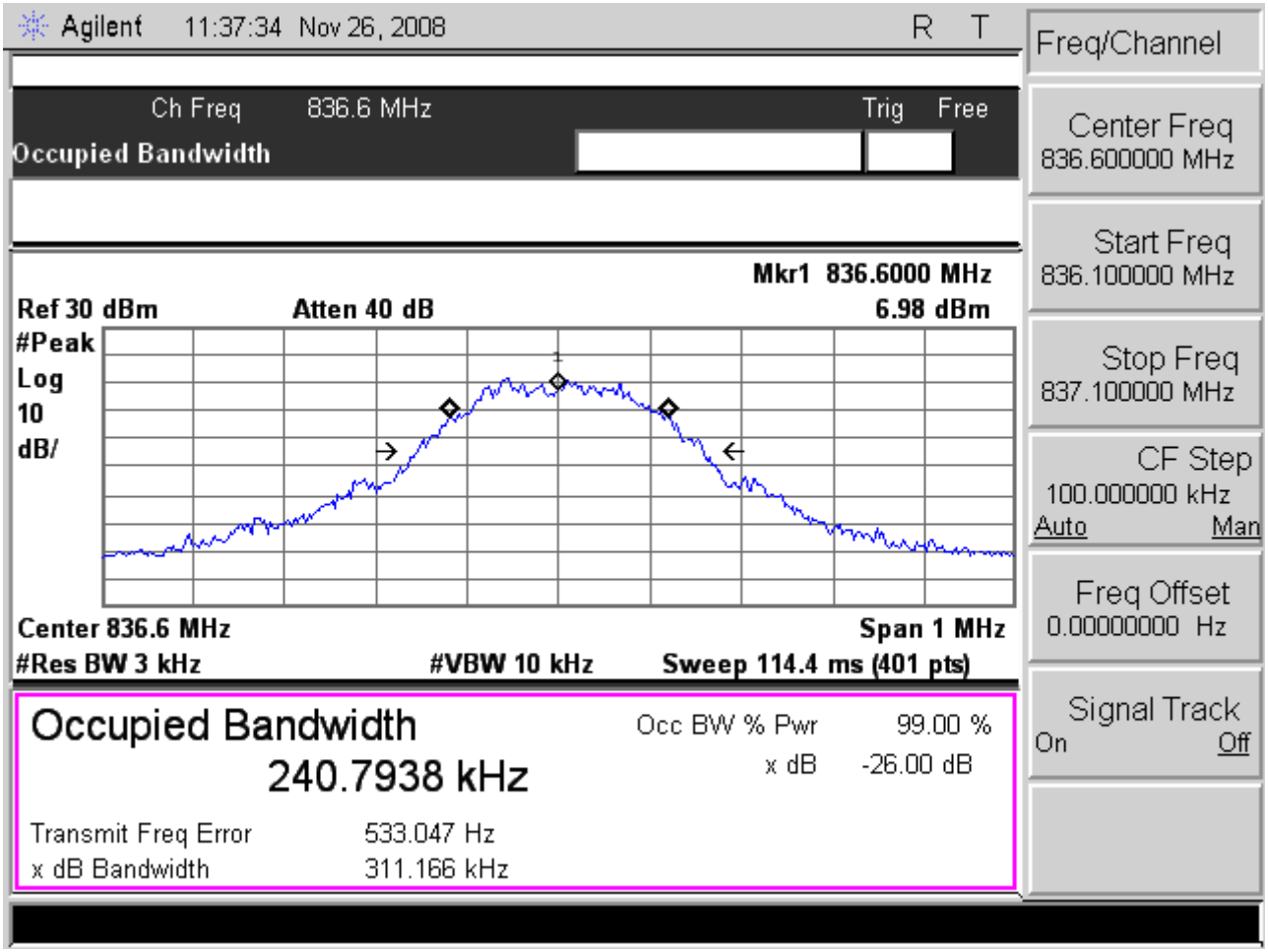
Test Mode: GSM 850 CH251 99% Occupied Bandwidth



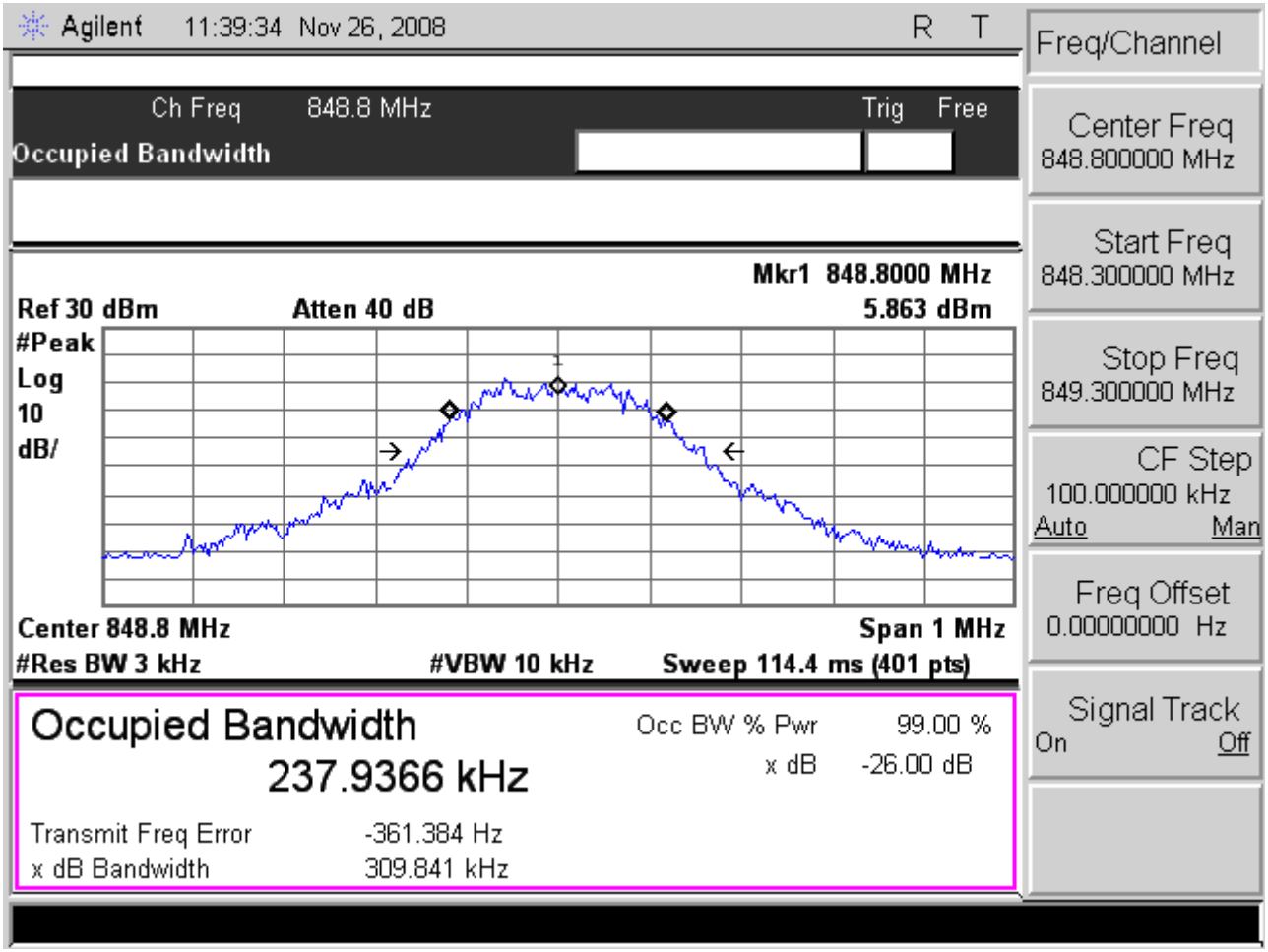
Test Mode: EGPRS 850 CH128 99% Occupied Bandwidth



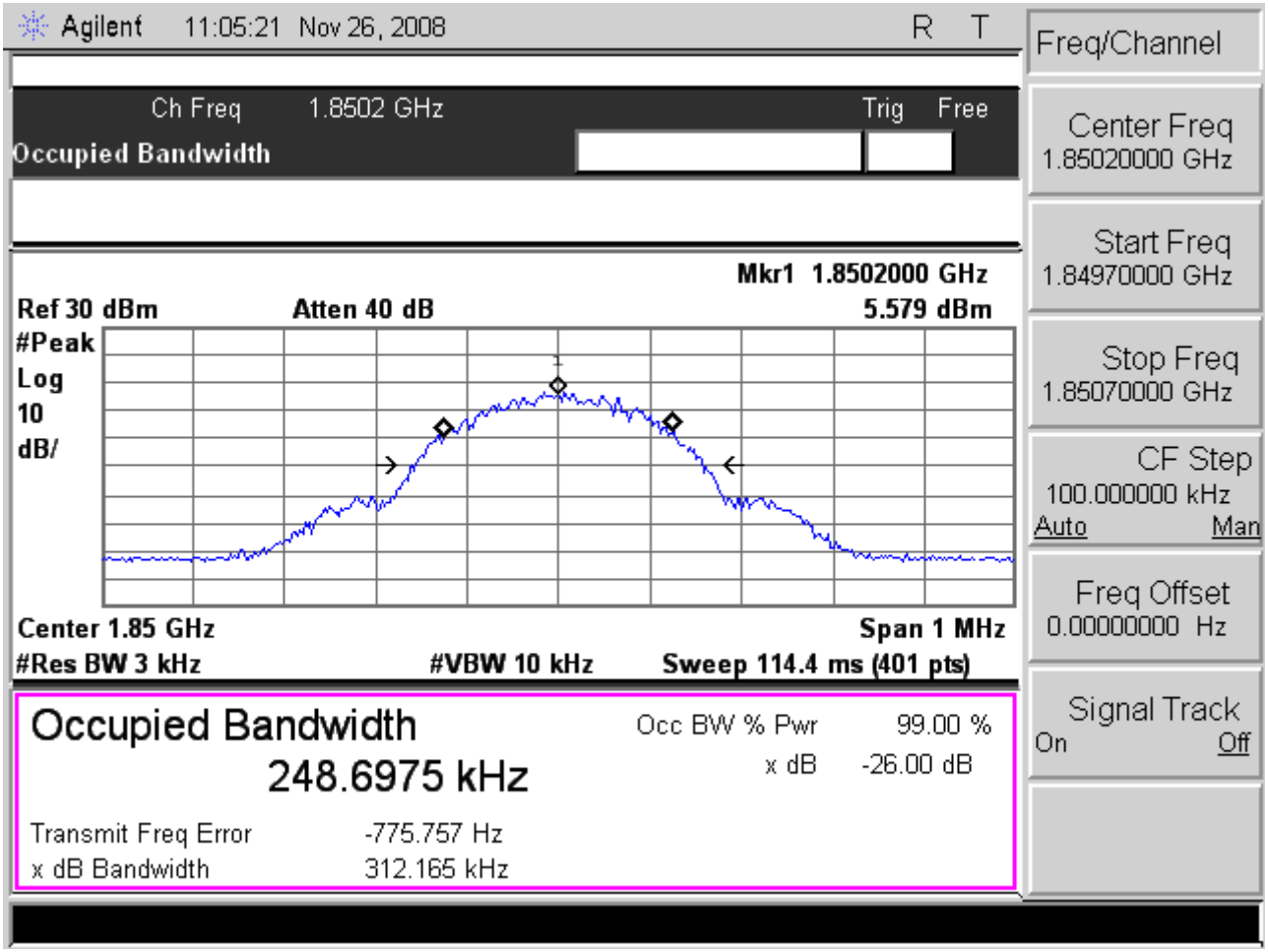
Test Mode: EGPRS 850 CH190 99% Occupied Bandwidth



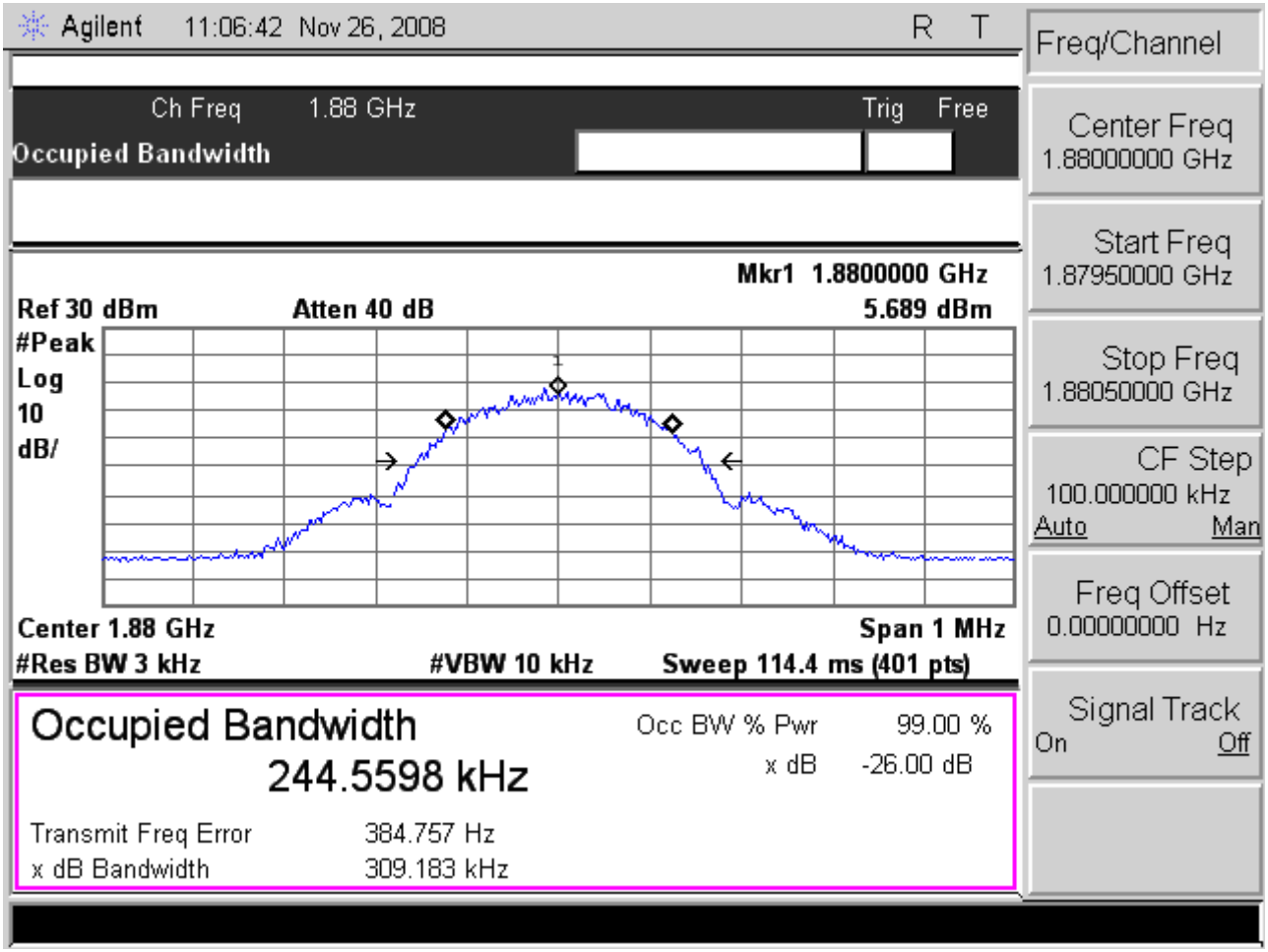
Test Mode: EGPRS 850 CH251 99% Occupied Bandwidth



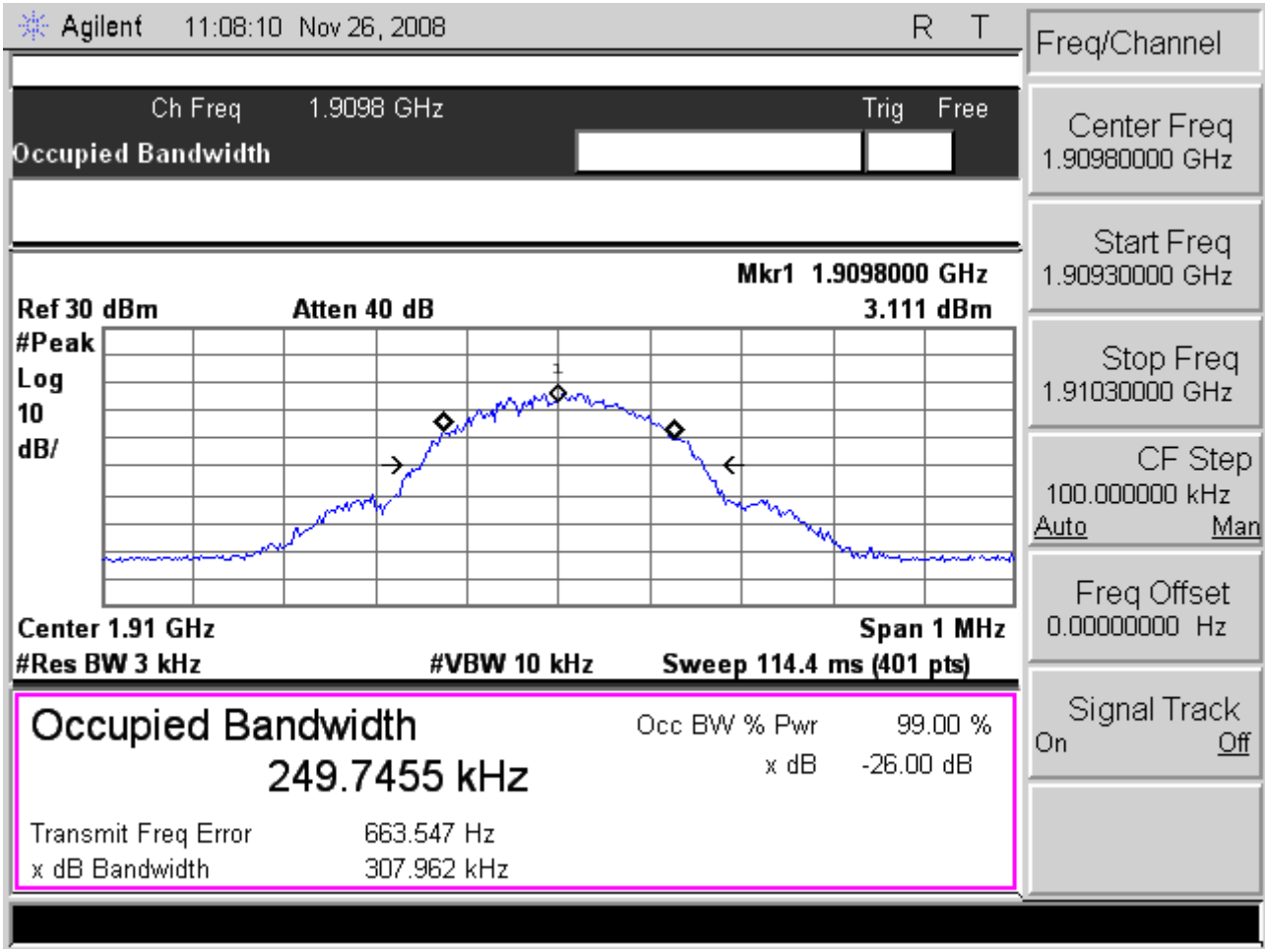
Test Mode: PCS 1900 CH512 99% Occupied Bandwidth



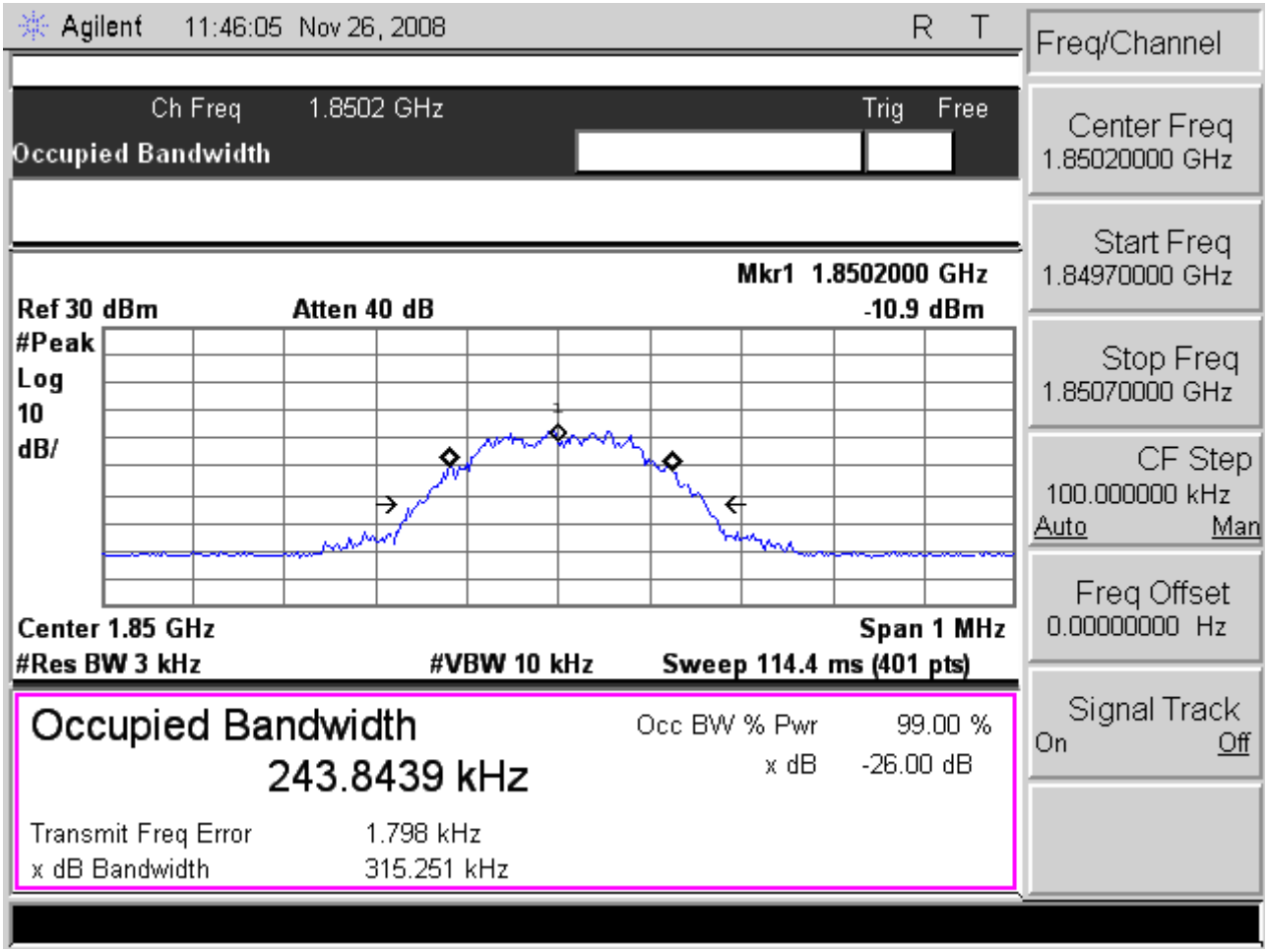
Test Mode: PCS 1900 CH661 99% Occupied Bandwidth



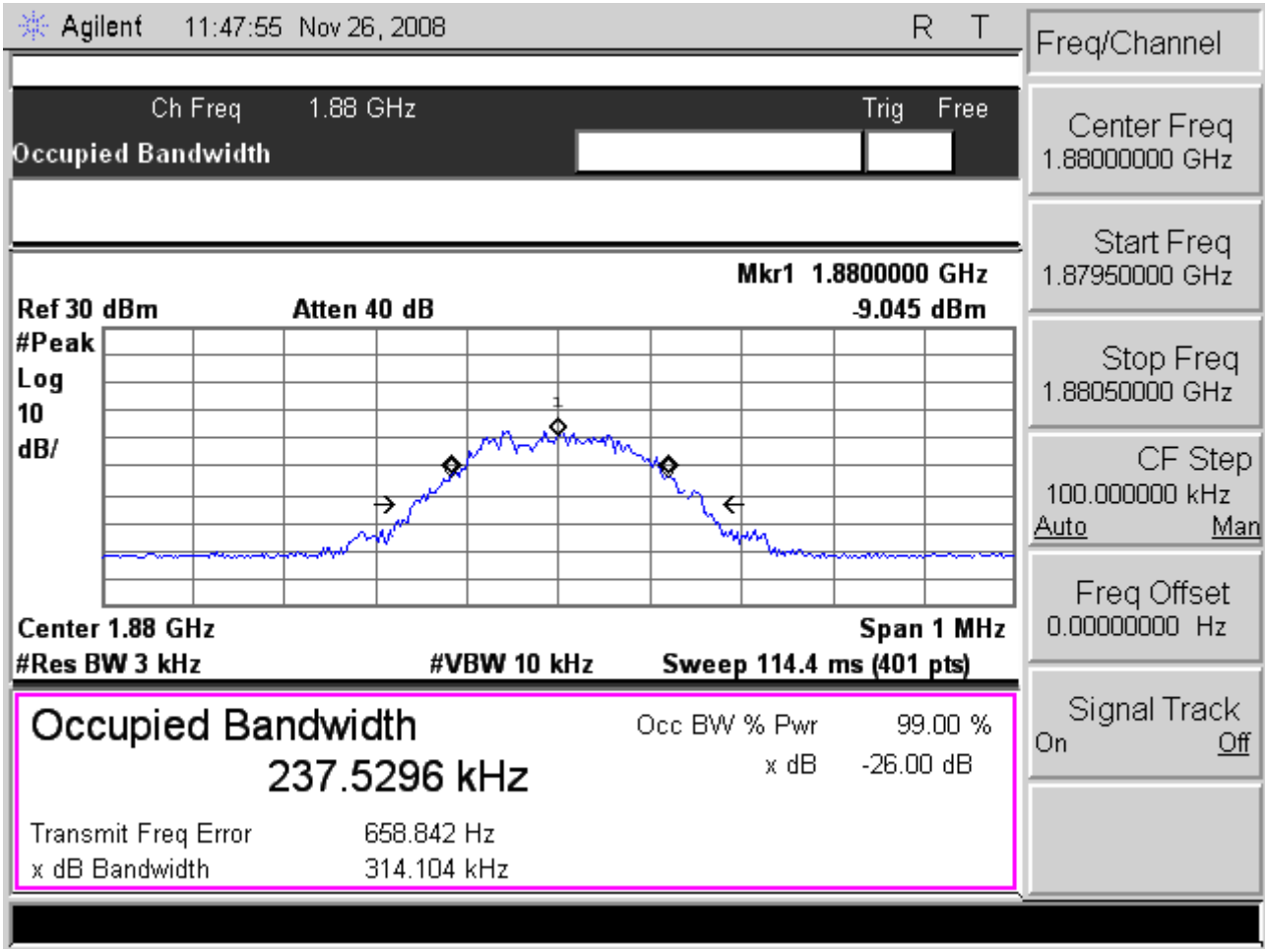
Test Mode: PCS 1900 CH810 99% Occupied Bandwidth



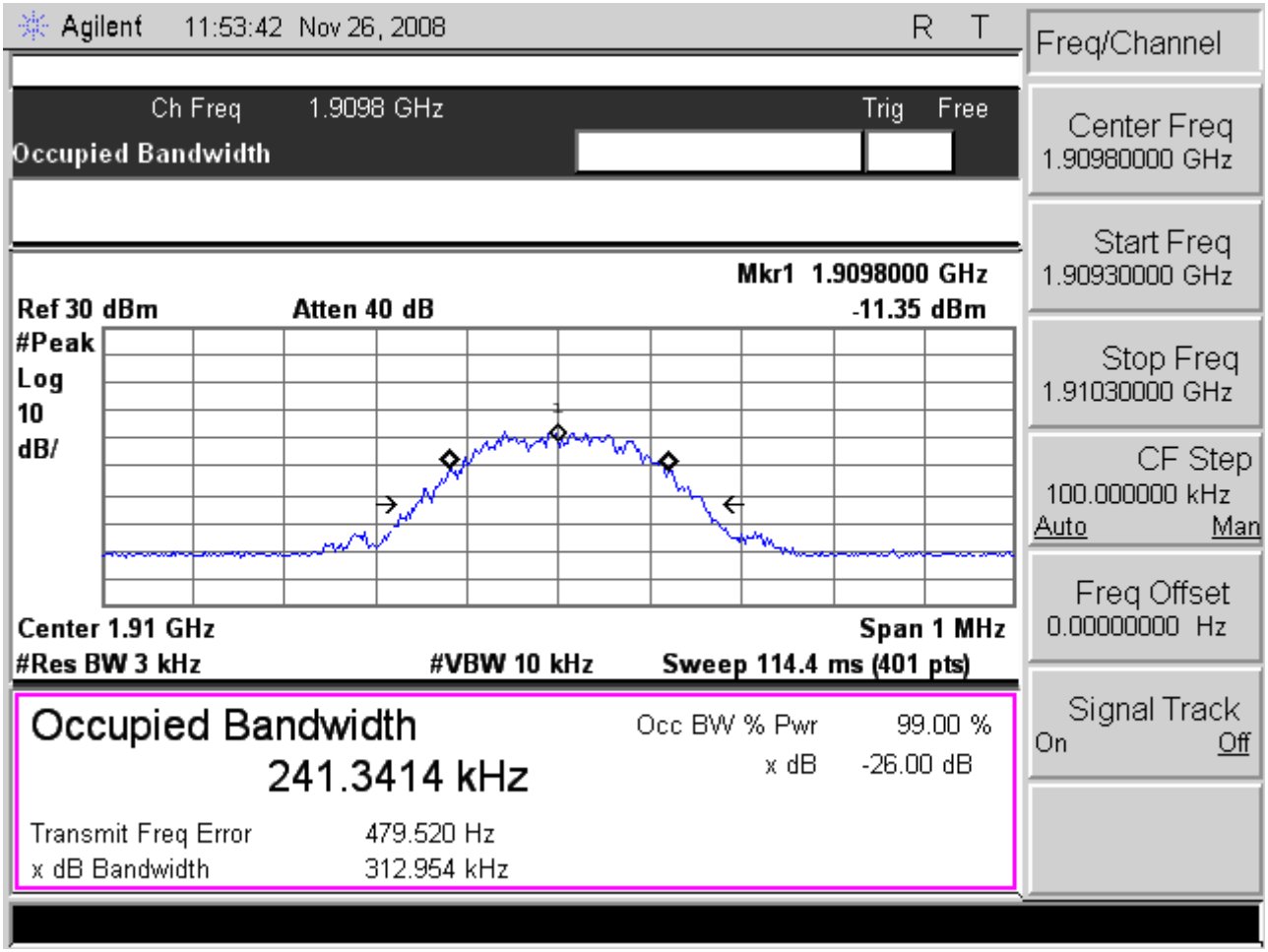
Test Mode: EGPRS 1900 CH512 99% Occupied Bandwidth



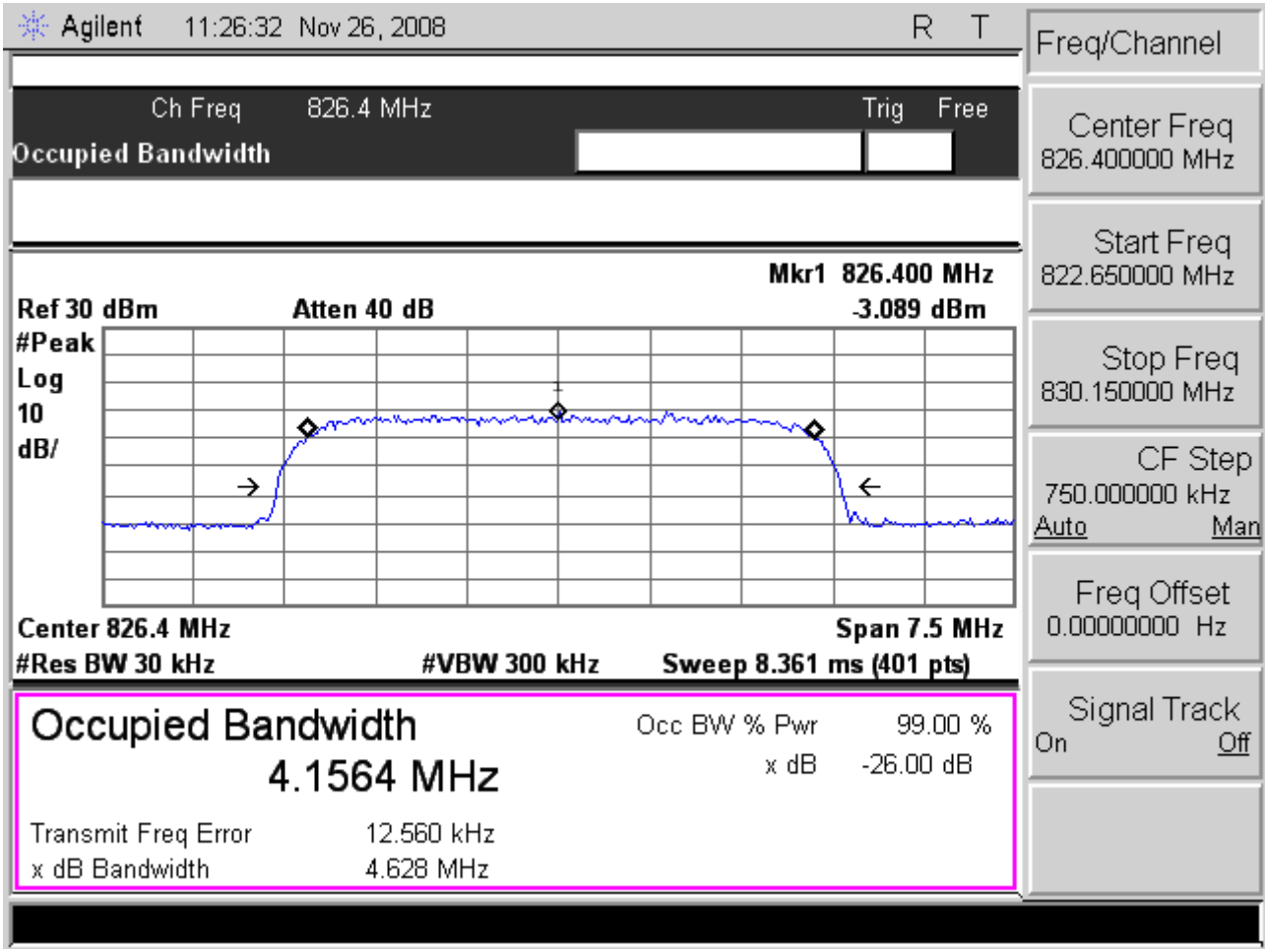
Test Mode: EGPRS 1900 CH661 99% Occupied Bandwidth



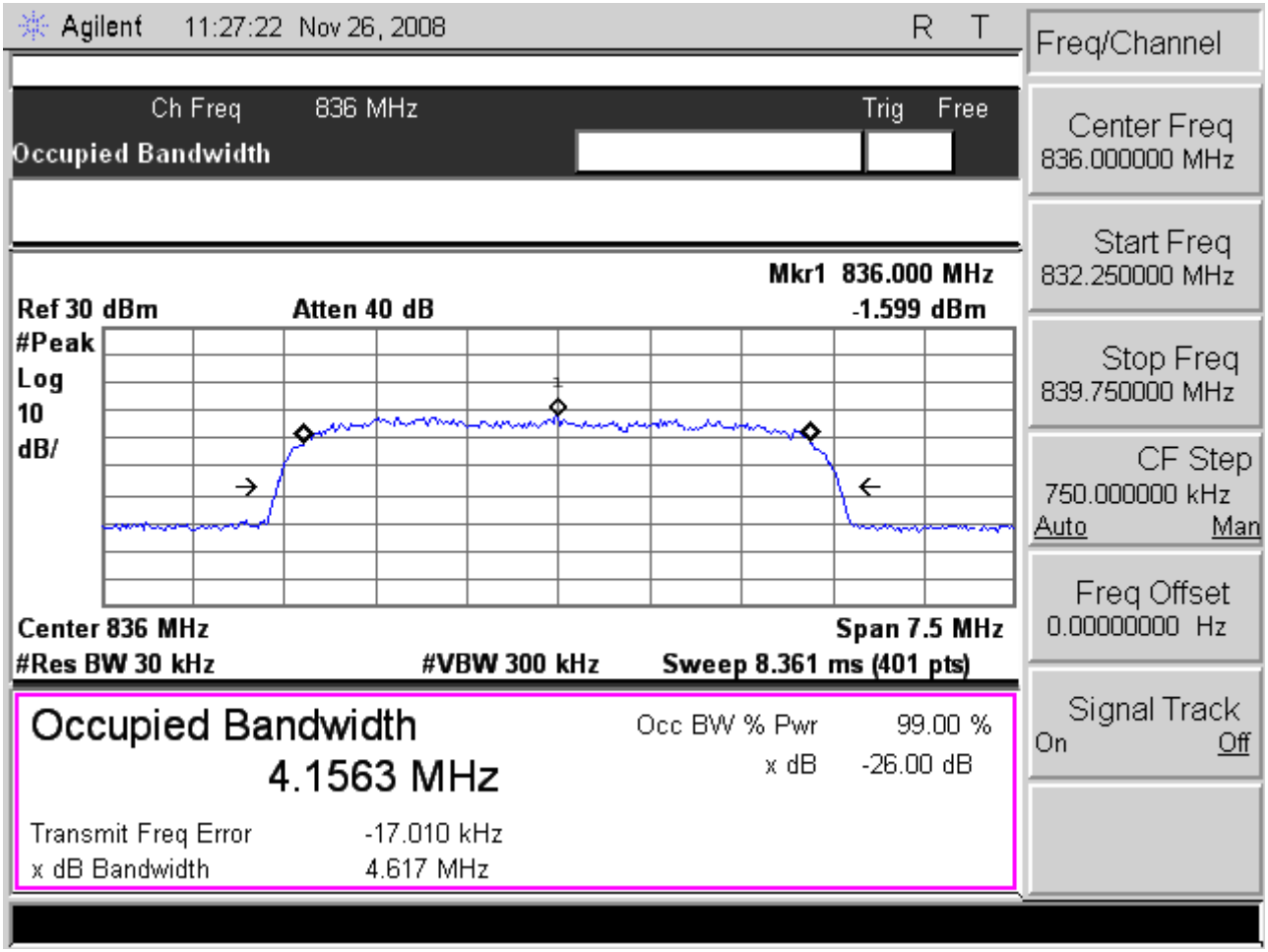
Test Mode: EGPRS 1900 CH810 99% Occupied Bandwidth



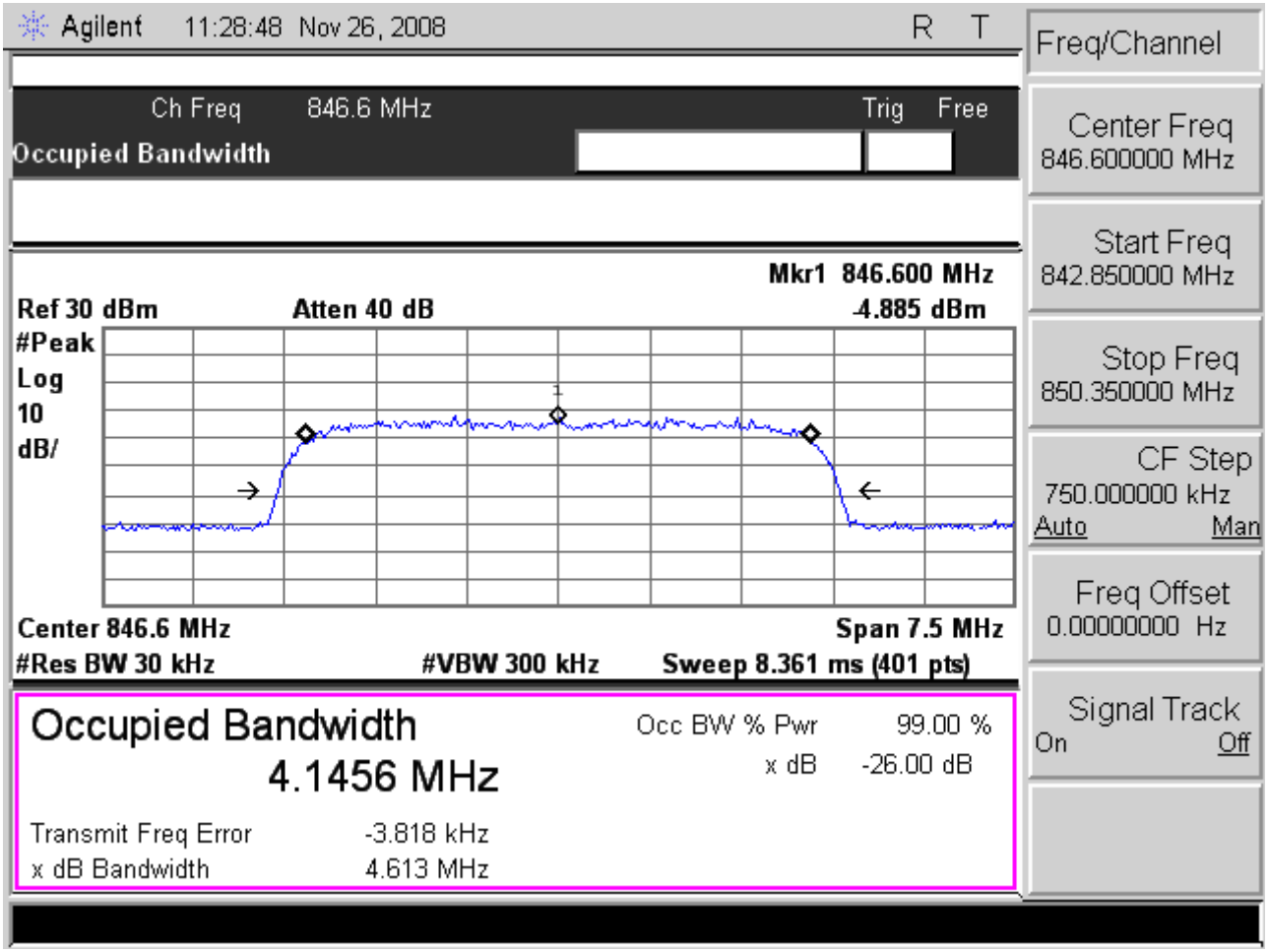
Test Mode: WCDMA Band V CH4132 99% Occupied Bandwidth



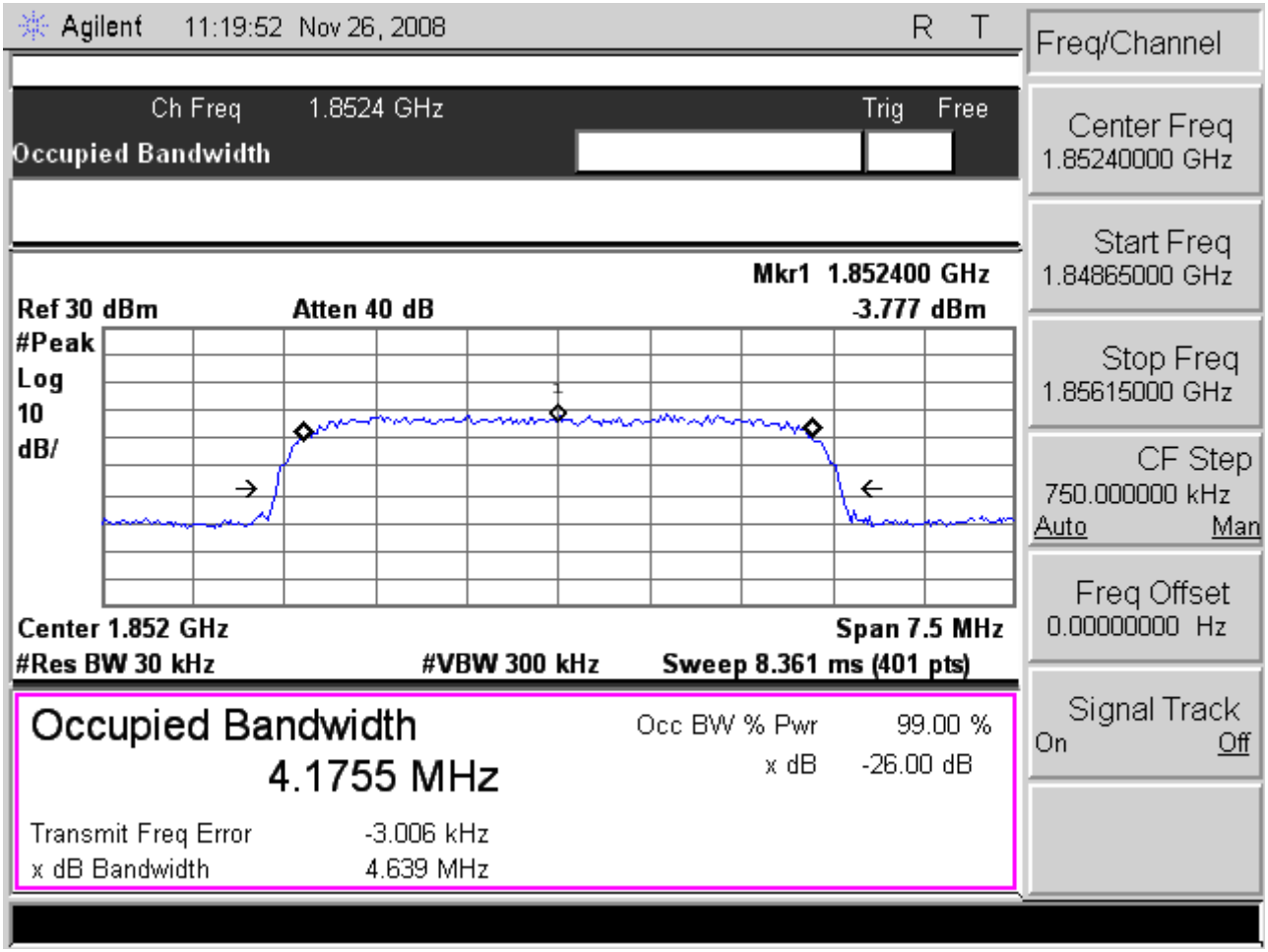
Test Mode: WCDMA Band V CH4182 99% Occupied Bandwidth



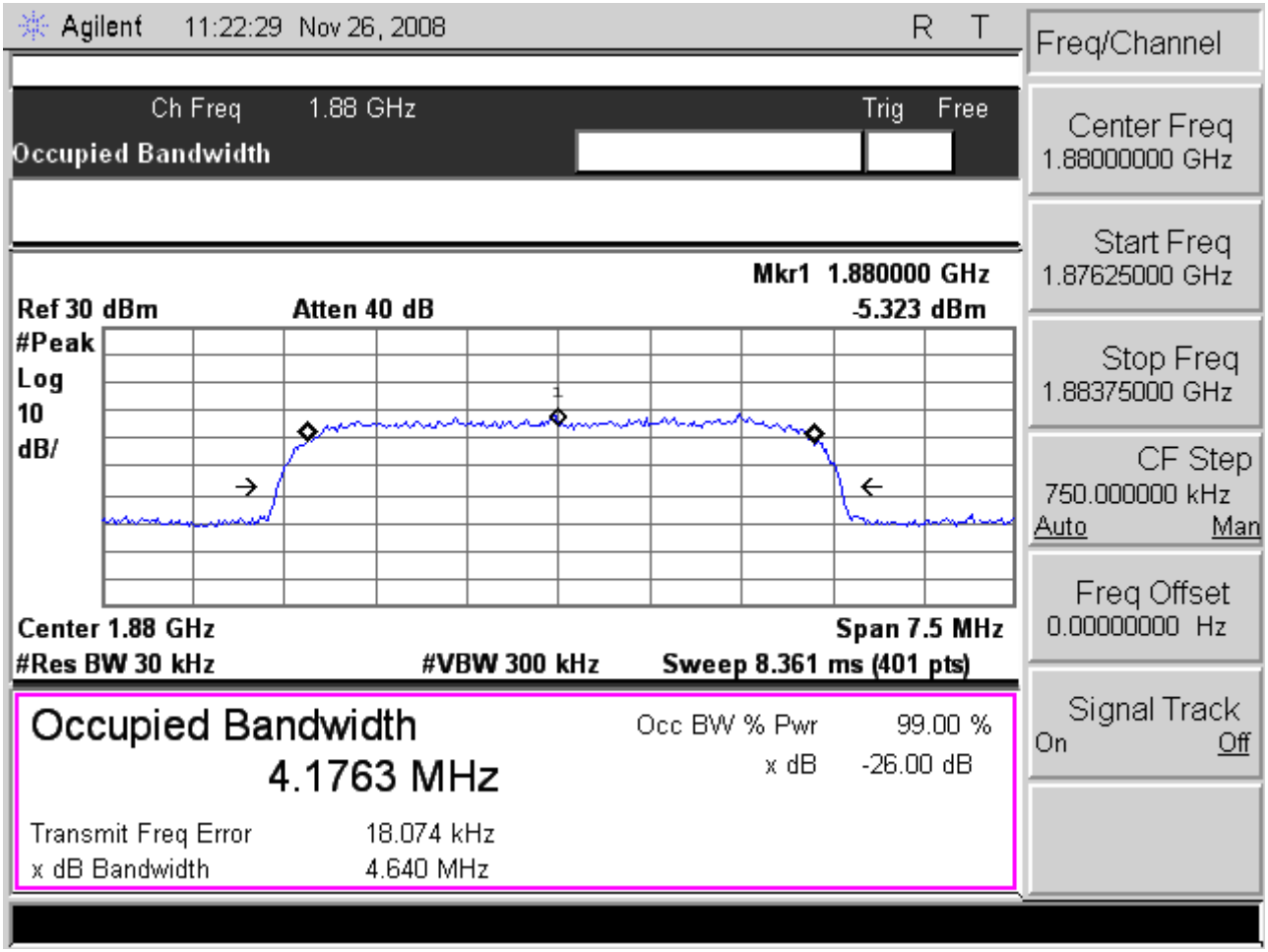
Test Mode: WCDMA Band V CH4233 99% Occupied Bandwidth



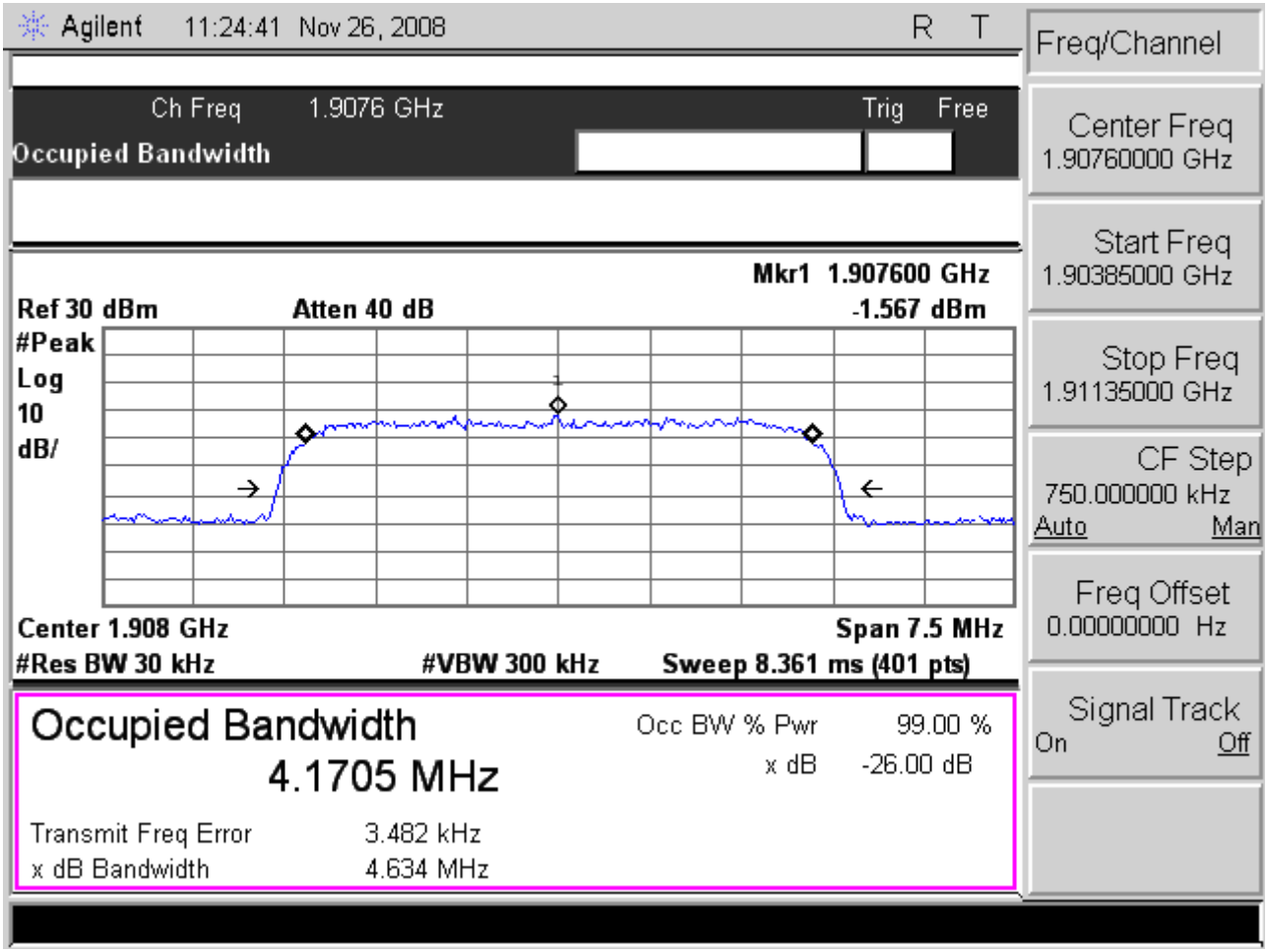
Test Mode: WCDMA Band II CH9262 99% Occupied Bandwidth



Test Mode: WCDMA Band II CH9400 99% Occupied Bandwidth



Test Mode: WCDMA Band II CH9538 99% Occupied Bandwidth

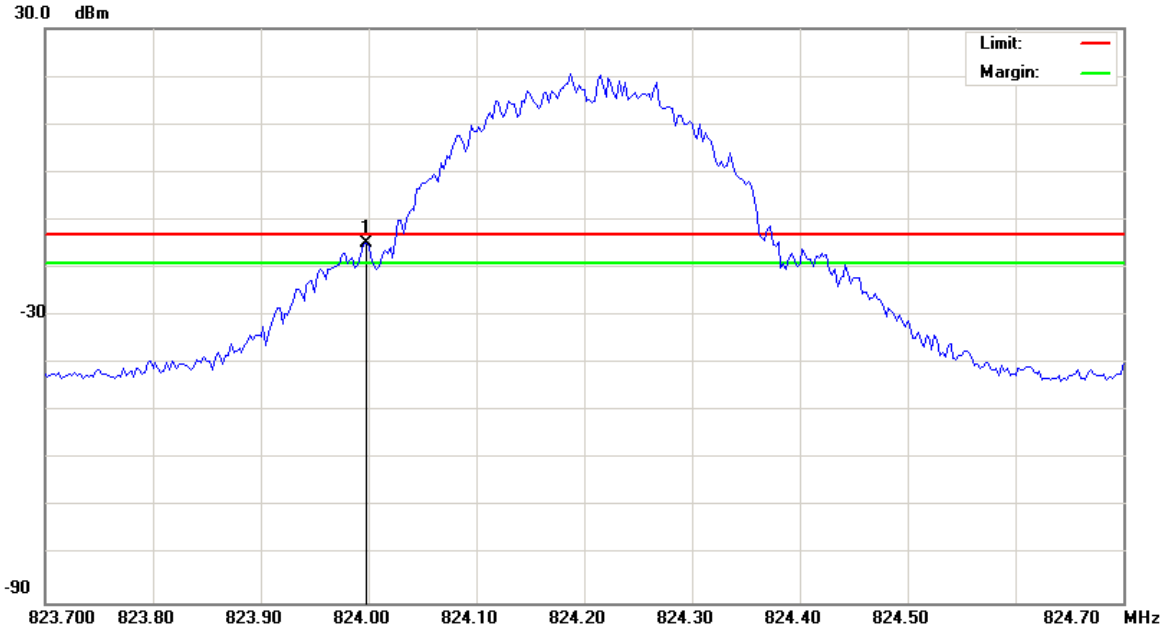


4.4.5 Band Edge Test Result

GSM 850				
Band	**Channel**	**Frequency (MHz)**	**Bandwidth (dBm)**	**Limit (dBm)**
Lower	128	823.9900	**-14.96**	-13
Higher	251	849.0175	**-15.84**	-13

Please refer to next pager of detail testing data.

File :Raymond103(GSM850) Data :#1 Date: 2008/4/28 Time: 下午 04:49:38

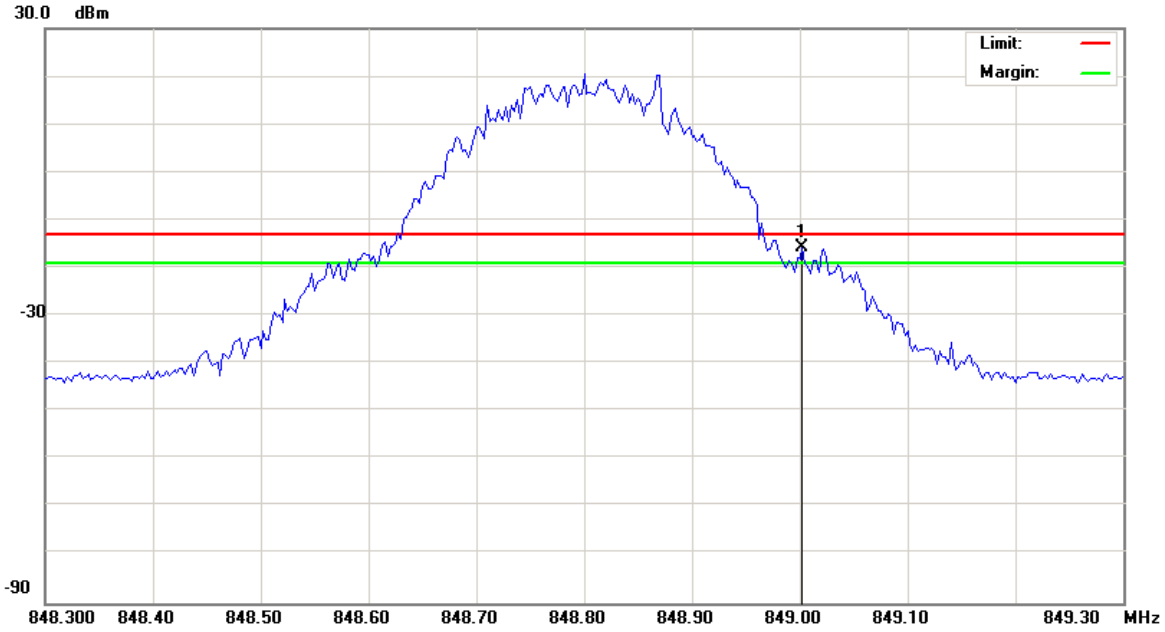


Site site#1	Polarization: ***Conducted po***	Temperature: 26 ℃
Limit: FCC Part 22 conducted(9k-12.75G)	Power: AC 110V/60Hz	Humidity: 55 %
EUT:	Distance: RBW: 3 KHz	
M/N: Raymond103	VBW: 3 KHz	Sweep Time: 200 ms
Mode:		
Note: CH128(824.2MHz)		
加10db衰减器		

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	823.9975	-28.14	13.18	-14.96	-13.00	-1.96	peak			

*:Maximum data x:Over limit !:over margin ●Reference Only

File :Raymond103(GSM850) Data :#2 Date: 2008/4/28 Time: 下午 05:00:10



Site site#1 Polarization: ***Conducted po*** Temperature: 26 ℃

Limit: FCC Part 22 conducted(9k-12.75G) Power: AC 110V/60Hz Humidity: 55 %

EUT: Distance: RBW: 3 KHz

M/N: Raymond103 VBW: 3 KHz Sweep Time: 200 ms

Mode:

Note: CH251(848.8MHz)

加10db衰减器

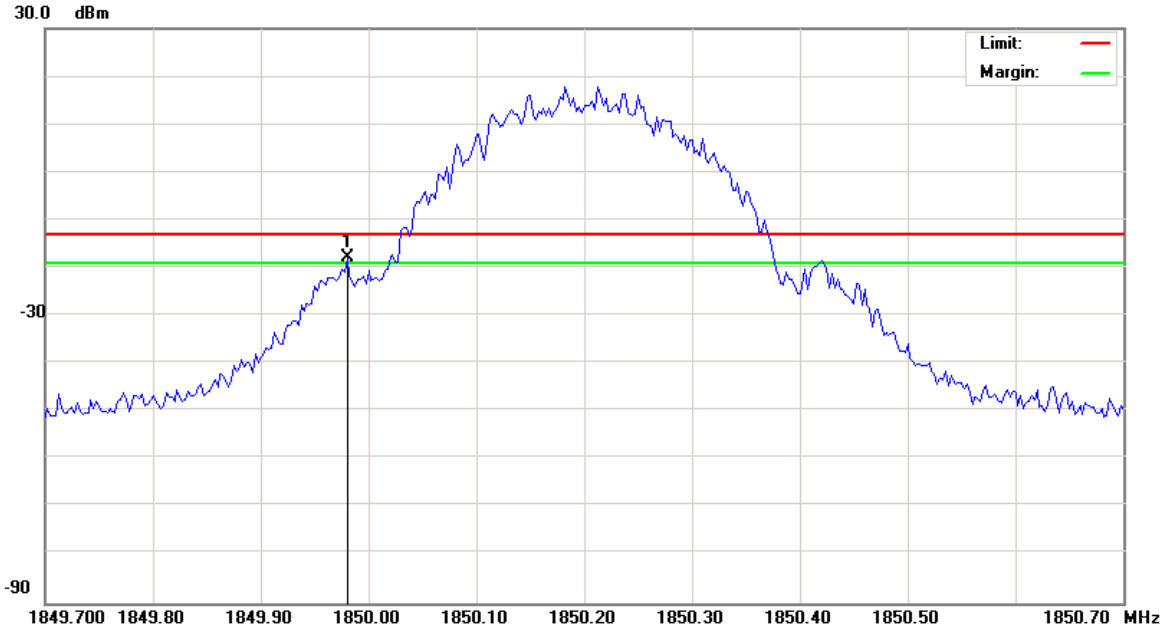
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	849.0025	-29.09	13.25	-15.84	-13.00	-2.84	peak			

*:Maximum data x:Over limit !:over margin ●Reference Only

PCS 1900				
Band	**Channel**	**Frequency (MHz)**	**Bandwidth (dBm)**	**Limit (dBm)**
Lower	512	1849.995	**-17.99**	-13
Higher	810	1910.015	**-18.90**	-13

Please refer to next pager of detail testing data.

File :Raymond103(PCS1900) Data :#1 Date: 2008/4/28 Time: 下午 05:23:36

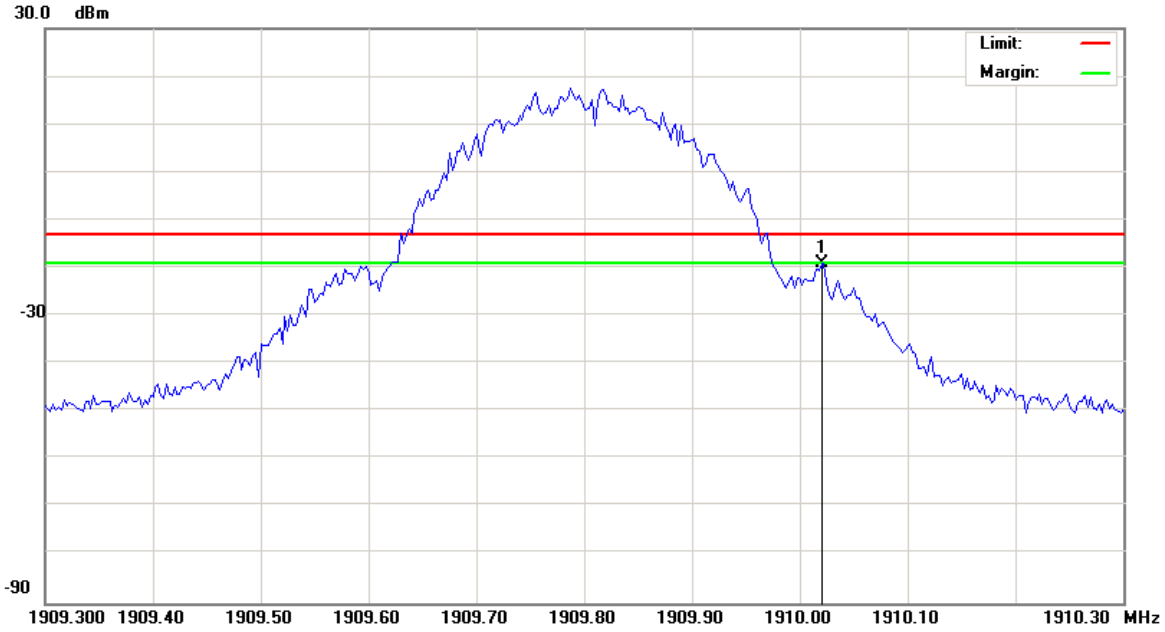


Site site#1	Polarization:	***Conducted po***	Temperature: 26 ℃
Limit: FCC Part 24 conducted(9k-12.75G)	Power:	AC 110V/60Hz	Humidity: 55 %
EUT:	Distance:	RBW: 3 KHz	
M/N: Raymond103		VBW: 3 KHz	Sweep Time: 200 ms
Mode:			
Note: CH512(1784.8MHz)			
加10db衰减器			

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	1849.980	-22.24	4.25	-17.99	-13.00	-4.99	peak			

*:Maximum data x:Over limit !:over margin ●Reference Only

File :Raymond103(PCS1900) Data :#2 Date: 2008/4/28 Time: 下午 05:26:35



Site site#1	Polarization:	***Conducted po***	Temperature: 26 ℃
Limit: FCC Part 24 conducted(9k-12.75G)	Power:	AC 110V/60Hz	Humidity: 55 %
EUT:	Distance:	RBW: 3 KHz	
M/N: Raymond103		VBW: 3 KHz	Sweep Time: 200 ms
Mode:			
Note: CH810(1909.8MHz)			
加10db衰减器			

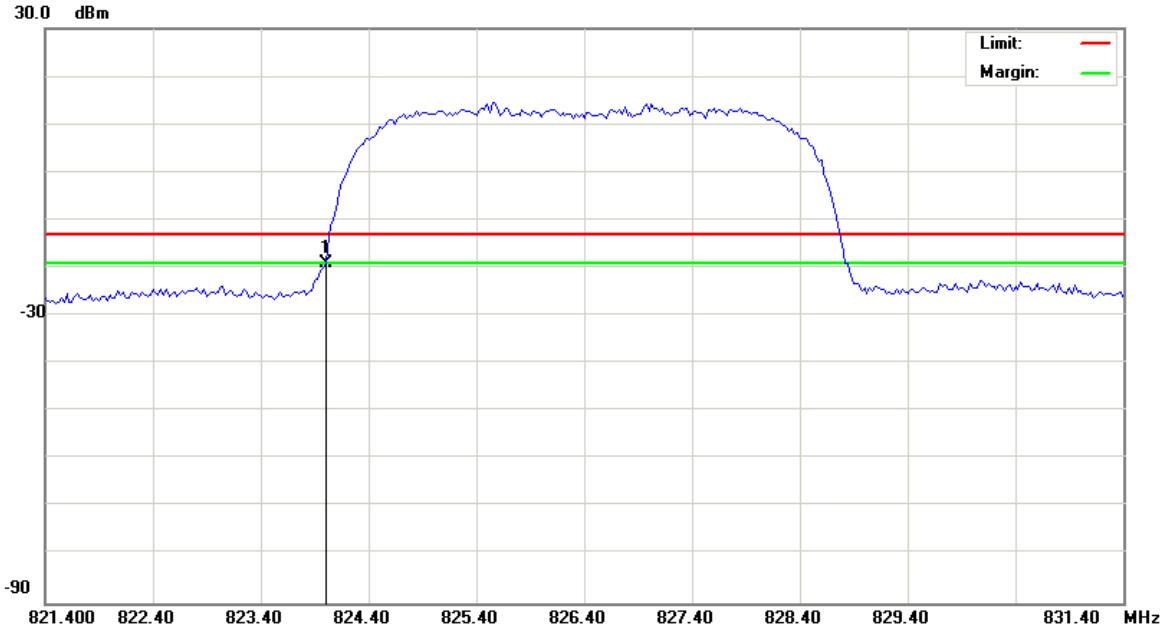
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	1910.020	-24.60	5.70	-18.90	-13.00	-5.90	peak			

*:Maximum data x:Over limit !:over margin ●Reference Only

WCDMA Band V				
Band	**Channel**	**Frequency (MHz)**	**Bandwidth (dBm)**	**Limit (dBm)**
Lower	4132	824.000	**-19.13**	-13
Higher	4233	849.000	**-16.96**	-13

Please refer to next pager of detail testing data.

File :Raymond103(wcdma band5) Data :#1 Date: 2008/4/28 Time: 下午 05:05:00

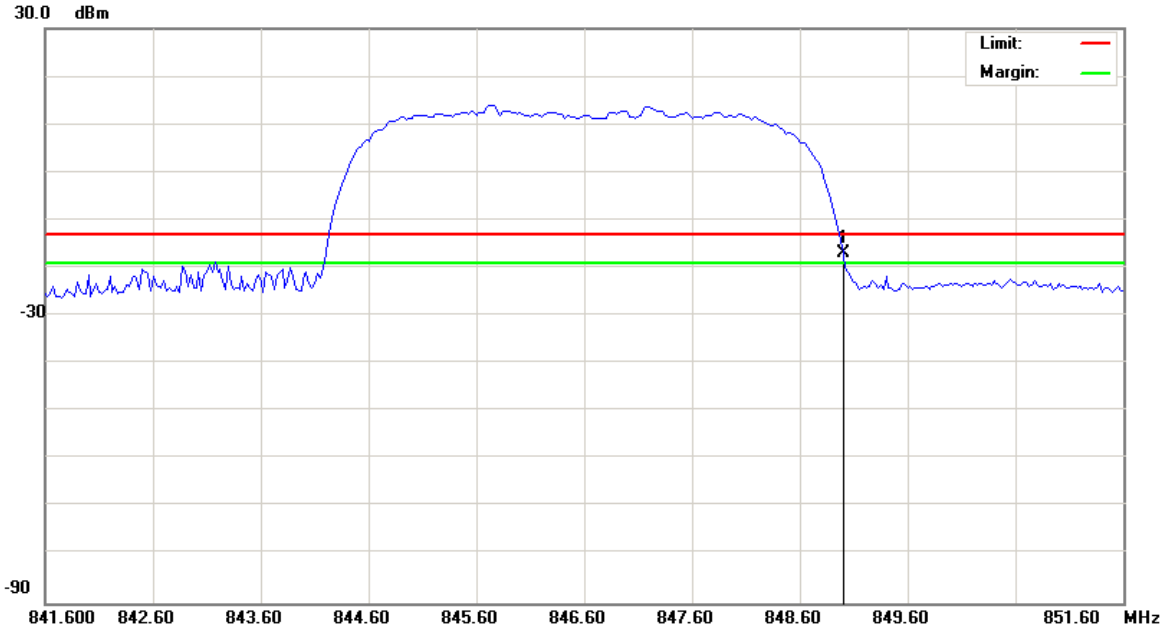


Site site#1	Polarization: ***Conducted po***	Temperature: 26 ℃
Limit: FCC Part 22 conducted(9k-12.75G)	Power: AC 110V/60Hz	Humidity: 55 %
EUT:	Distance: RBW: 100 KHz	
M/N: Raymond103	VBW: 100 KHz	Sweep Time: 200 ms
Mode:		
Note: CH4132(824MHz)		
加10db衰减器		

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	824.0000	-32.31	13.18	-19.13	-13.00	-6.13	peak			

*:Maximum data x:Over limit !:over margin ●Reference Only

File :Raymond103(wcdma band5) Data :#2 Date: 2008/4/28 Time: 下午 05:10:55



Site site#1	Polarization:	***Conducted po***	Temperature: 26 ℃
Limit: FCC Part 22 conducted(9k-12.75G)	Power:	AC 110V/60Hz	Humidity: 55 %
EUT:	Distance:	RBW: 100 KHz	
M/N: Raymond103		VBW: 100 KHz	Sweep Time: 200 ms
Mode:			
Note: CH4233(849MHz)			
加10db衰减器			

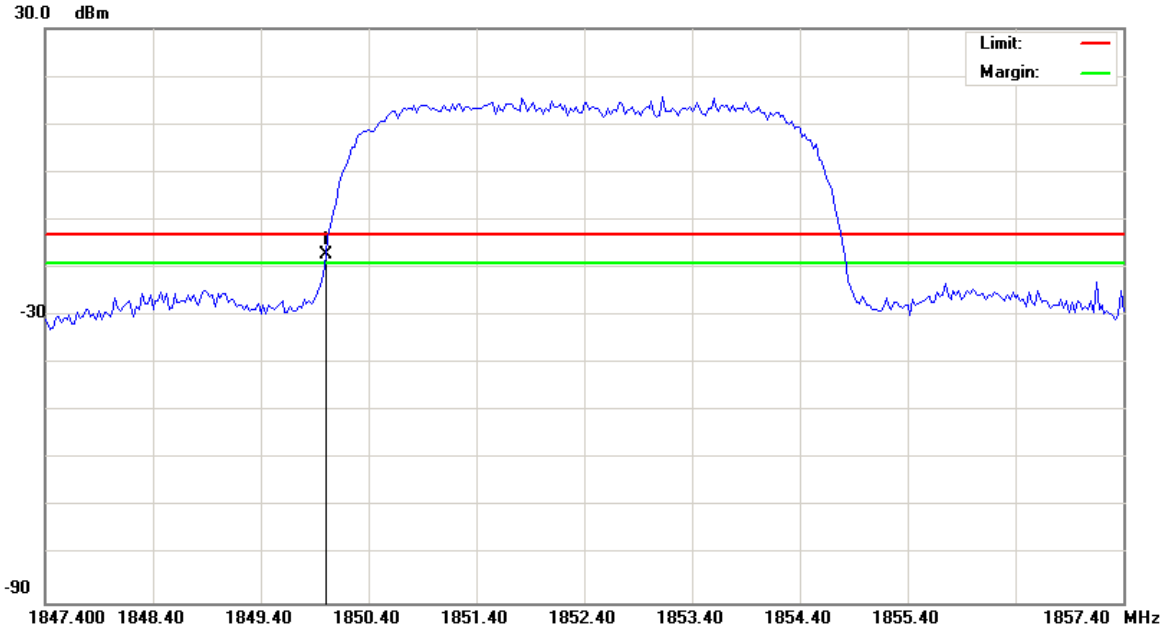
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	849.0000	-30.21	13.25	-16.96	-13.00	-3.96	peak			

*:Maximum data x:Over limit !:over margin ●Reference Only

WCDMA Band II				
Band	**Channel**	**Frequency (MHz)**	**Bandwidth (dBm)**	**Limit (dBm)**
Lower	9262	1850.000	**-17.11**	-13
Higher	9538	1910.000	**-16.64**	-13

Please refer to next pager of detail testing data.

File :Raymond103(wcdma band2) Data :#1 Date: 2008/4/28 Time: 下午 05:29:40

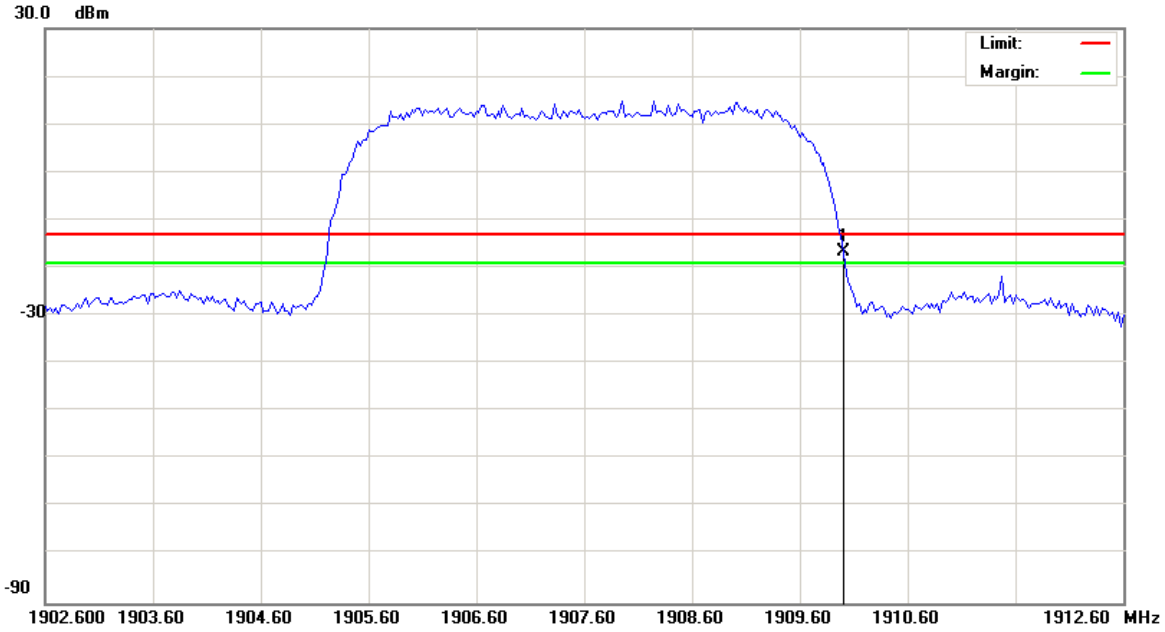


Site site#1	Polarization: ***Conducted po***	Temperature: 26 ℃
Limit: FCC Part 24 conducted(9k-12.75G)	Power: AC 110V/60Hz	Humidity: 55 %
EUT:	Distance: RBW: 100 KHz	
M/N: Raymond103	VBW: 100 KHz	Sweep Time: 200 ms
Mode:		
Note: 加10db衰减器		

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	1850.000	-21.37	4.26	-17.11	-13.00	-4.11	peak			

*:Maximum data x:Over limit !:over margin ●Reference Only

File :Raymond103(wcdma band2) Data :#2 Date: 2008/4/28 Time: 下午 05:30:22



Site site#1
Limit: FCC Part 24 conducted(9k-12.75G)
EUT:
M/N: Raymond103
Mode:
Note: 加10db衰减器

Polarization: ***Conducted po***
Power: AC 110V/60Hz
Distance:
RBW: 100 KHz
VBW: 100 KHz

Temperature: 26 ℃
Humidity: 55 %
Sweep Time: 200 ms

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	1910.000	-22.34	5.70	-16.64	-13.00	-3.64	peak			

*:Maximum data x:Over limit !:over margin ●Reference Only

4.5 Conducted Emission

4.5.1 Measurement Instruments

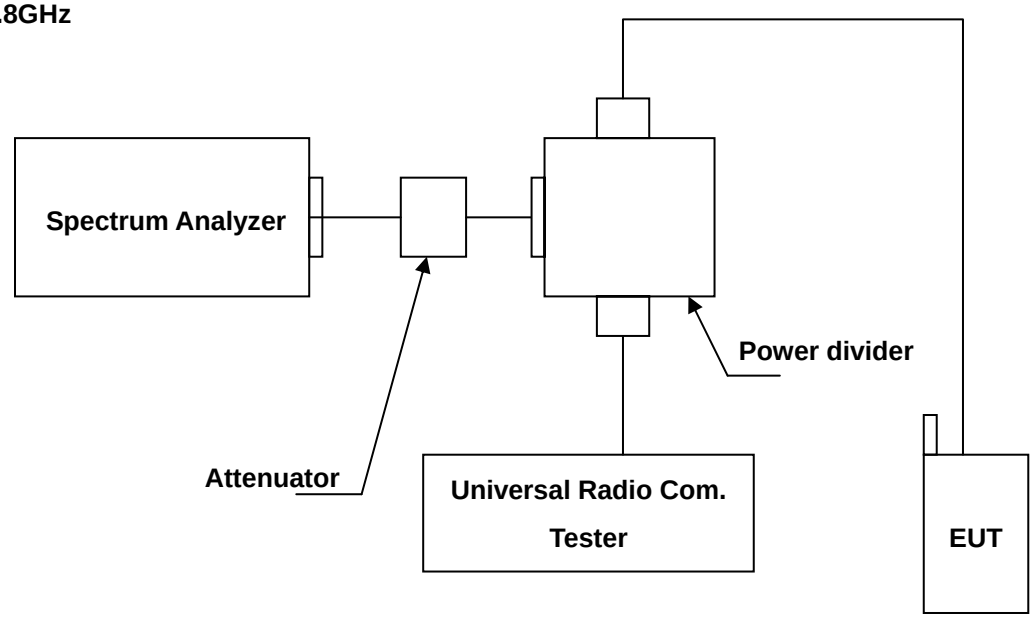
As described in chapter 5 of this test report.

4.5.2 Test Procedure

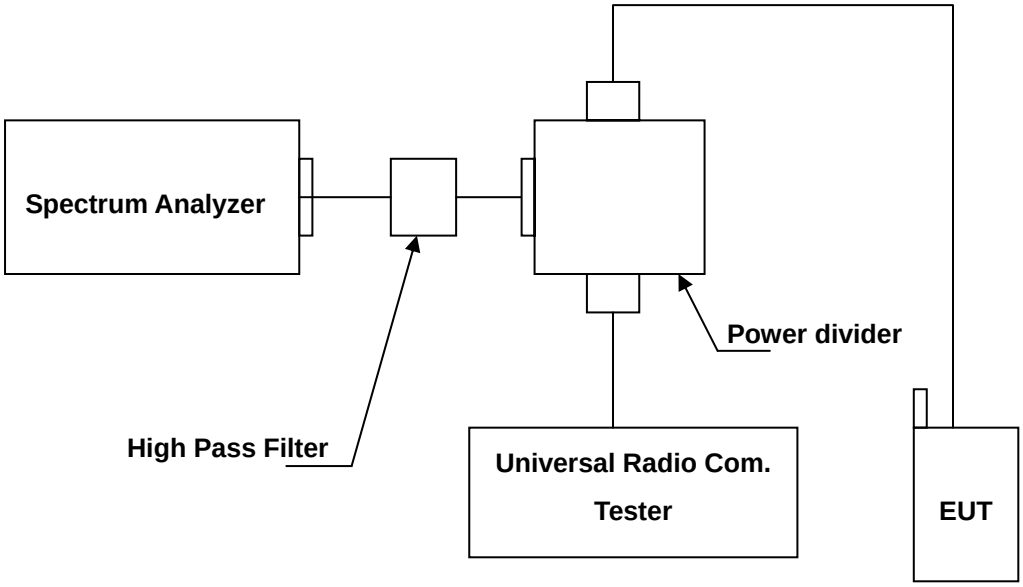
1. The EUT was connected to Spectrum Analyzer and Base Station via power divider.
2. The middle channel for the highest RF power within the transmitting frequency was measured.
3. The conducted spurious emission for the whole frequency range was taken.
4. Test setting at GSM 850 RB>100 kHz, VB>100 kHz;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

4.5.3 Test Setup Layout

Below 2.8GHz



Above 2.8GHz



4.5.4 Test Result

4.5.4.1 GSM 850 Test Result

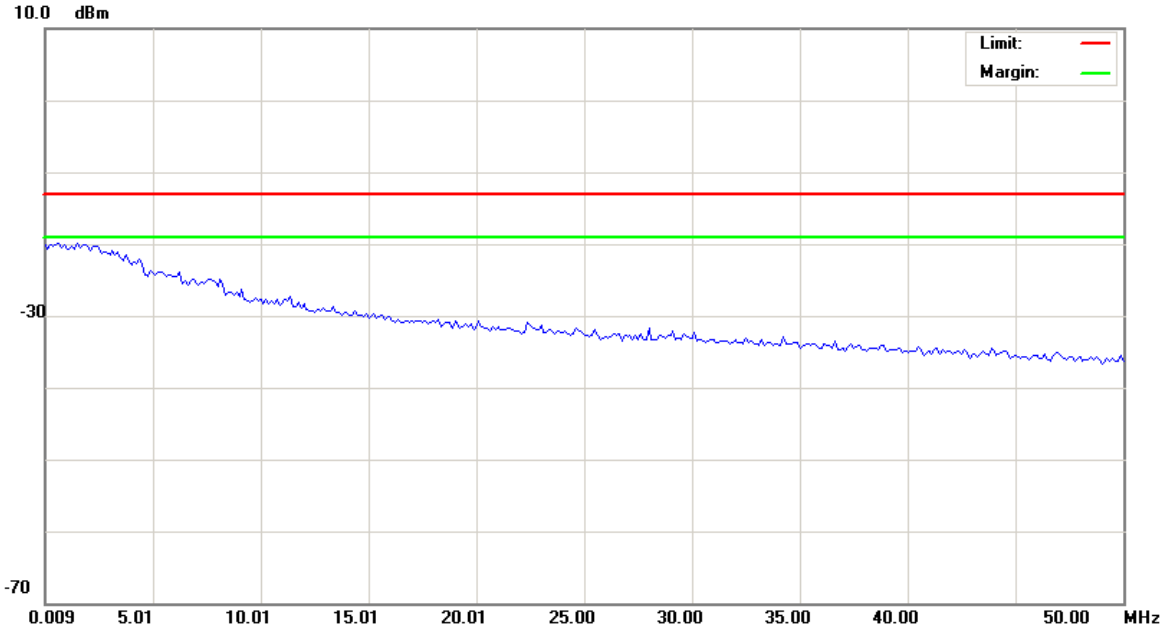
Applicant	: Inventec Corporation
Model No	: Pharos Traveler 117
EUT	: PDA PHONE
Test Mode	: GSM 850 (Low CH128 / Middle CH190 / High CH 251)
Test Date	: 04/28/2008

Please refer to next pager of detail testing data.

Note: Amplitude= Reading Amplitude + Factor (Cable loss + Filter Amplitude= Insertion loss)

(Auto calculate in spectrum analyzer)

File :Raymond103(CH128) Data :#1 Date: 2008/4/28 Time: 下午 12:17:35



Site site#1 Polarization: ***Conducted po*** Temperature: 26 ℃

Limit: FCC Part 22 conducted(9k-12.75G) Power: AC 110V/60Hz Humidity: 55 %

EUT: Distance:

M/N: Raymond103

Mode:

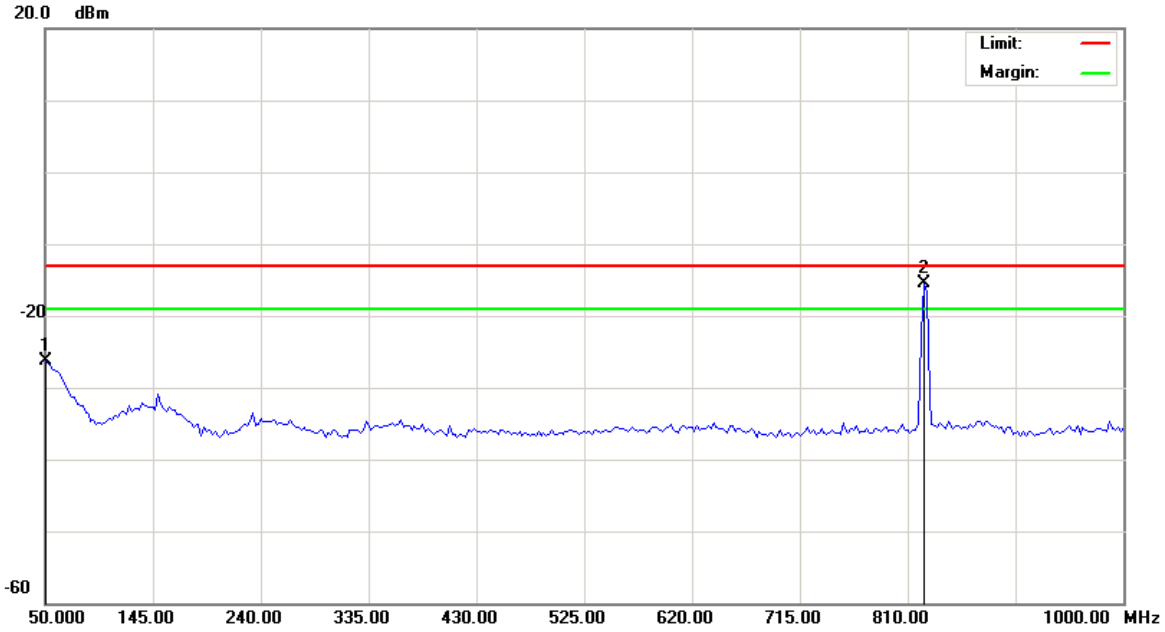
Note: CH128(824.2MHz)

加Notch(3TNF-800)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment

*:Maximum data x:Over limit !:over margin ●Reference Only

File :Raymond103(CH128) Data :#2 Date: 2008/4/28 Time: 下午 12:17:56



Site site#1 Polarization: ***Conducted po*** Temperature: 26 ℃

Limit: FCC Part 22 conducted(9k-12.75G) Power: AC 110V/60Hz Humidity: 55 %

EUT: Distance:

M/N: Raymond103

Mode:

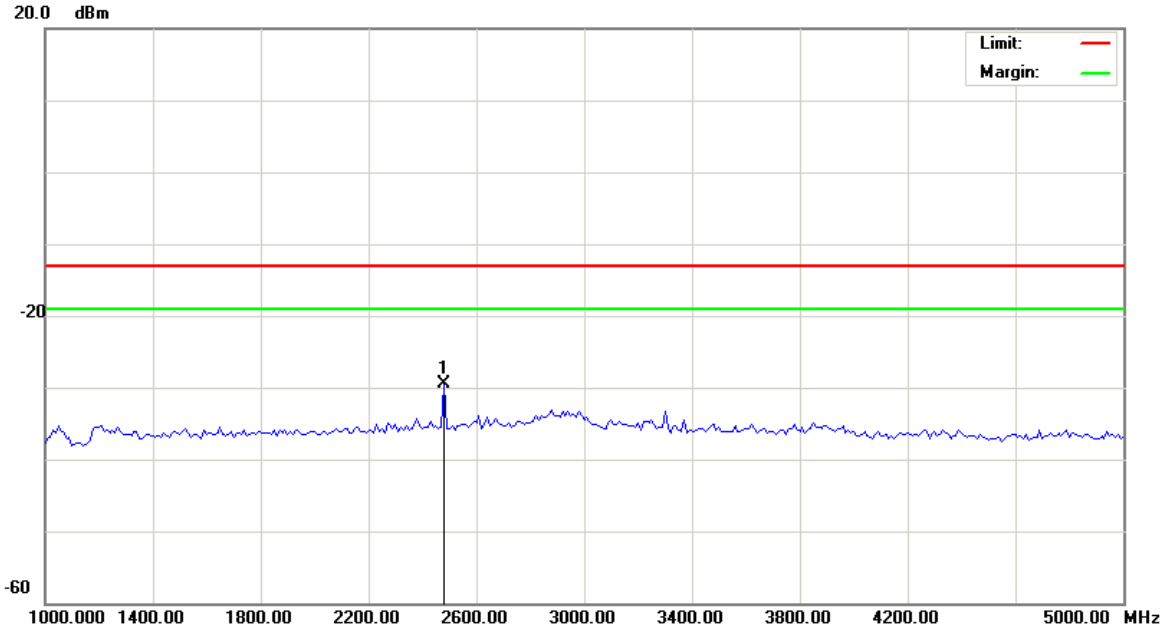
Note: CH128(824.2MHz)

加Notch(3TNF-800)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1		50.0000	-40.89	14.69	-26.20	-13.00	-13.20	peak			
2	*	824.2500	-19.30	3.84	-15.46	-13.00	-2.46	peak			Main frequency

*:Maximum data x:Over limit !:over margin ●Reference Only

File :Raymond103(CH128) Data :#3 Date: 2008/4/28 Time: 下午 02:50:10



Site site#1 Polarization: ***Conducted po*** Temperature: 26 ℃

Limit: FCC Part 22 conducted(9k-12.75G) Power: AC 110V/60Hz Humidity: 55 %

EUT: Distance:

M/N: Raymond103

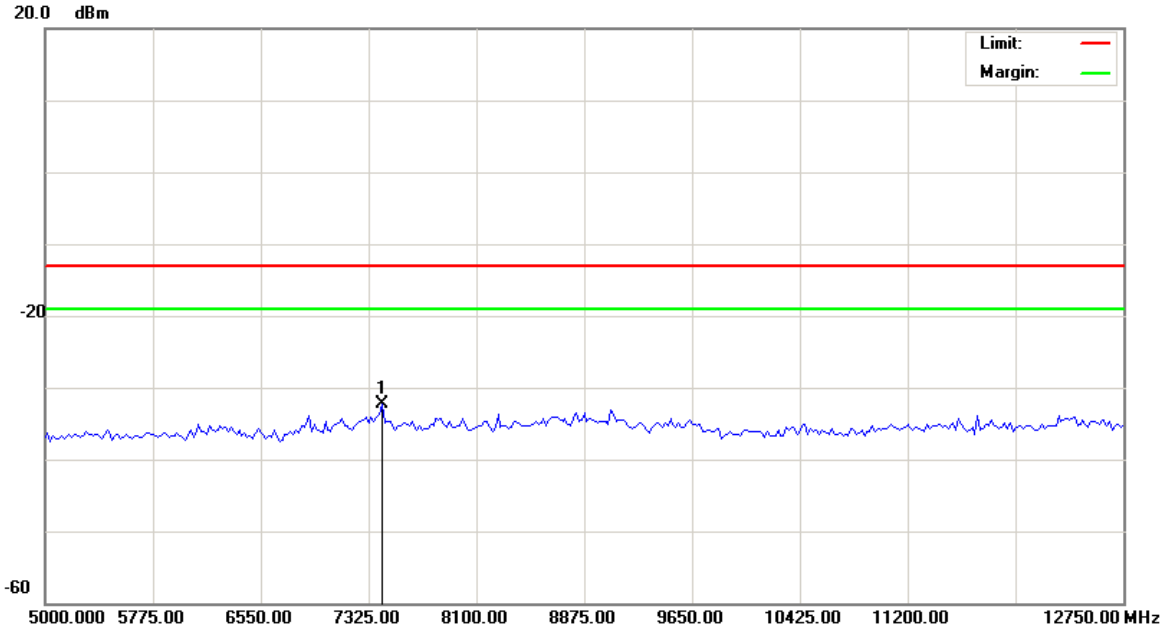
Mode:

Note: CH128(824.2MHz)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	2480.000	-34.00	4.43	-29.57	-13.00	-16.57	peak			

*:Maximum data x:Over limit !:over margin ●Reference Only

File :Raymond103(CH128) Data :#4 Date: 2008/4/28 Time: 下午 02:50:31



Site site#1
Limit: FCC Part 22 conducted(9k-12.75G)
EUT:
M/N: Raymond103
Mode:
Note: CH128(824.2MHz)

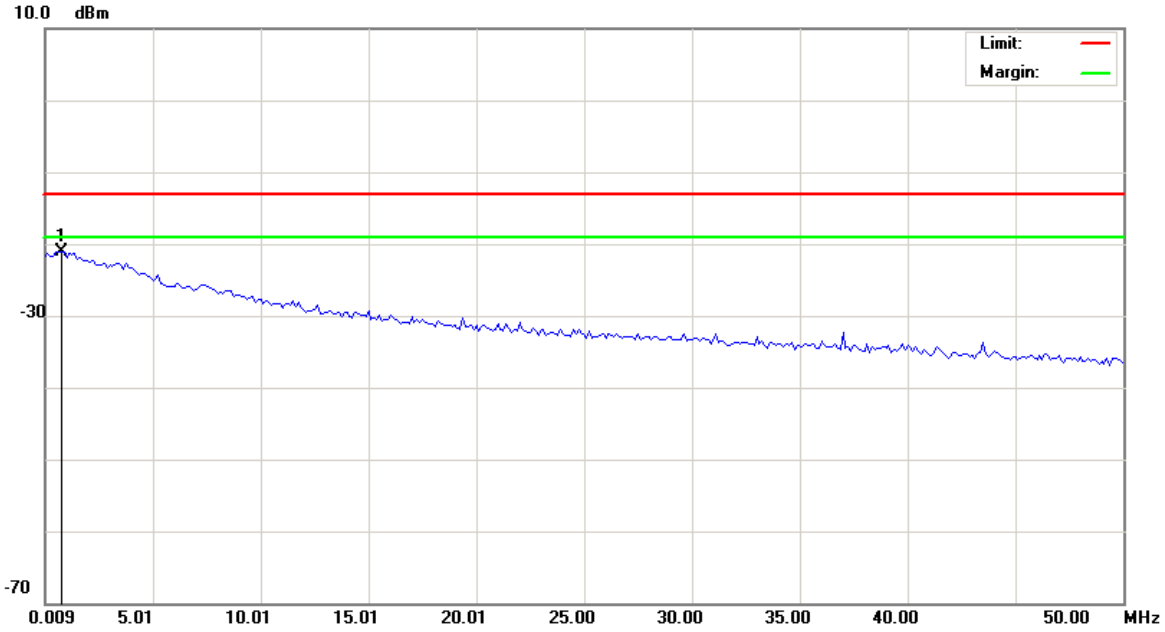
Polarization: ***Conducted po***
Power: AC 110V/60Hz
Distance:

Temperature: 26 ℃
Humidity: 55 %

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	7421.875	-37.53	5.21	-32.32	-13.00	-19.32	peak			

*:Maximum data x:Over limit !:over margin ●Reference Only

File :Raymond103(CH190) Data :#1 Date: 2008/4/28 Time: 下午 01:34:10



Site site#1 Polarization: ***Conducted po*** Temperature: 26 ℃

Limit: FCC Part 22 conducted(9k-12.75G) Power: AC 110V/60Hz Humidity: 55 %

EUT: Distance:

M/N: Raymond103

Mode:

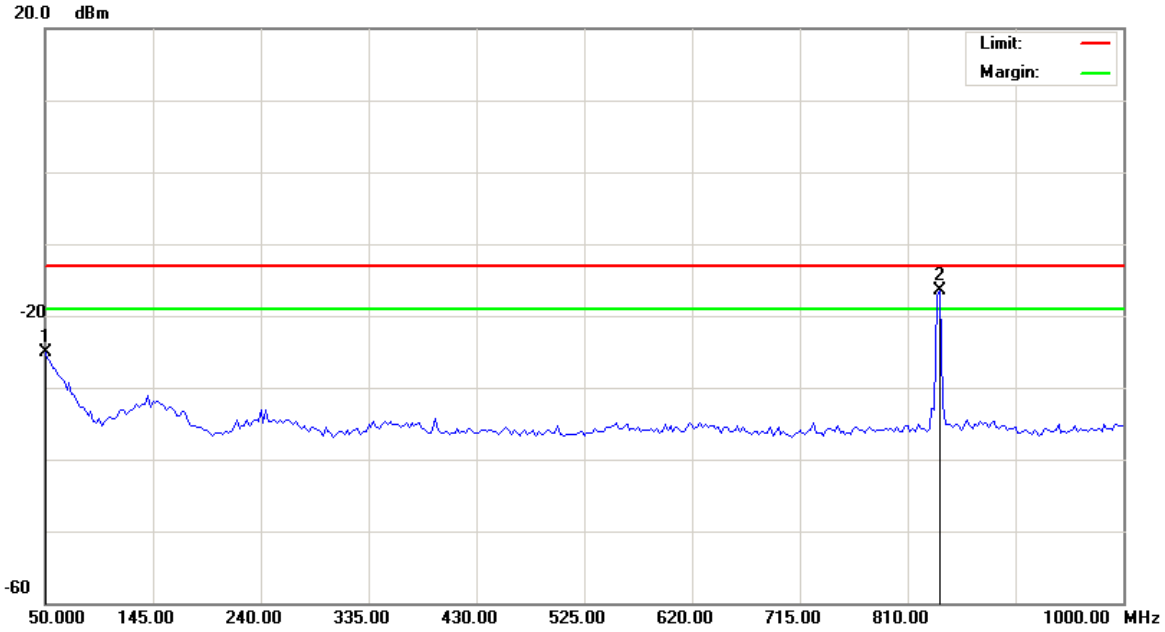
Note: CH190(836.6MHz)

加Notch(3TNF-800)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	0.7589	-52.95	31.89	-21.06	-13.00	-8.06	peak			

*:Maximum data x:Over limit !:over margin ●Reference Only

File :Raymond103(CH190) Data :#2 Date: 2008/4/28 Time: 下午 01:34:31



Site site#1 Polarization: ***Conducted po*** Temperature: 26 ℃

Limit: FCC Part 22 conducted(9k-12.75G) Power: AC 110V/60Hz Humidity: 55 %

EUT: Distance:

M/N: Raymond103

Mode:

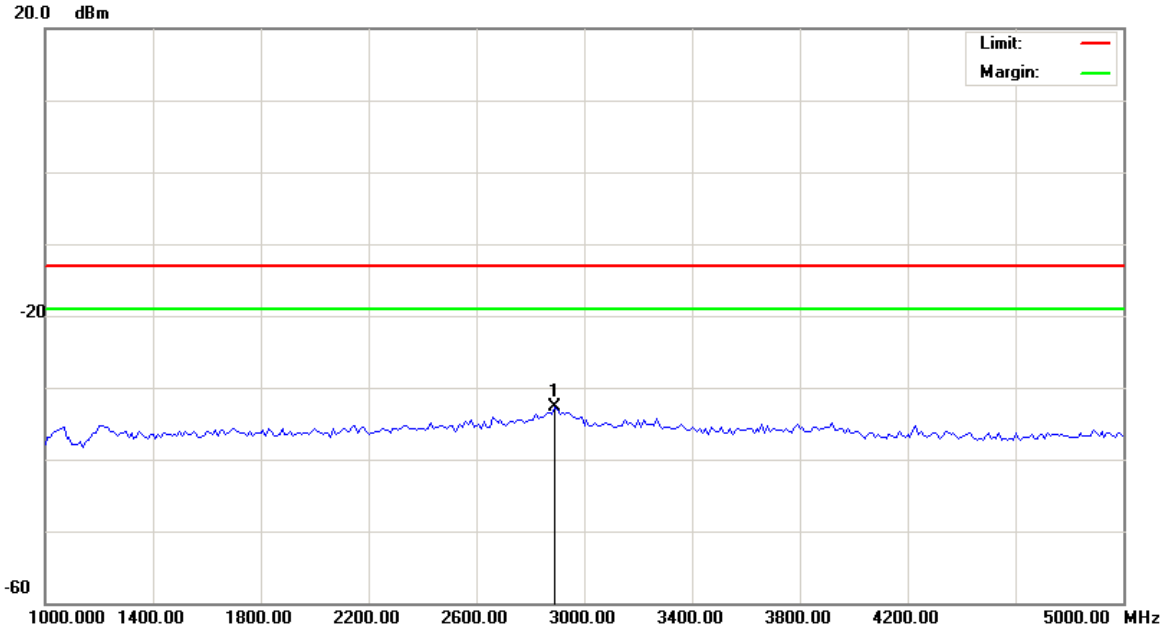
Note: CH190(836.6MHz)

加Notch(3TNF-800)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1		50.0000	-39.73	14.69	-25.04	-13.00	-12.04	peak			
2	*	838.5000	-20.53	3.97	-16.56	-13.00	-3.56	peak			Main frequency

*:Maximum data x:Over limit !:over margin ●Reference Only

File :Raymond103(CH190) Data :#3 Date: 2008/4/28 Time: 下午 02:51:09



Site site#1 Polarization: ***Conducted po*** Temperature: 26 ℃

Limit: FCC Part 22 conducted(9k-12.75G) Power: AC 110V/60Hz Humidity: 55 %

EUT: Distance:

M/N: Raymond103

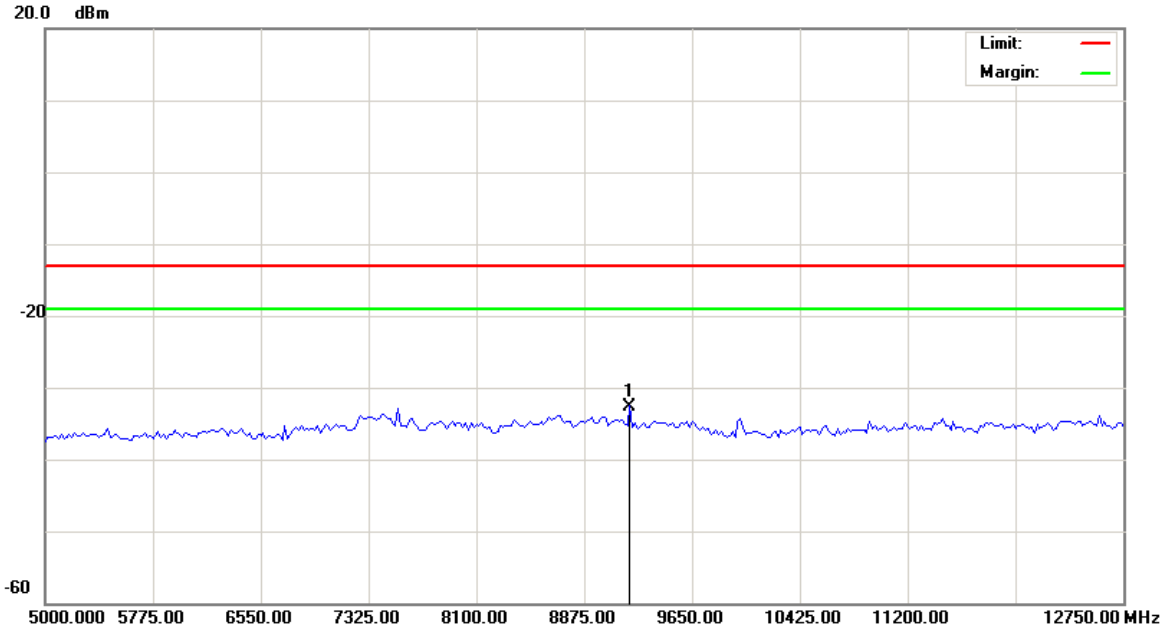
Mode:

Note: CH190(836.6MHz)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	2890.000	-37.46	4.71	-32.75	-13.00	-19.75	peak			

*:Maximum data x:Over limit !:over margin ●Reference Only

File :Raymond103(CH190) Data :#4 Date: 2008/4/28 Time: 下午 02:51:30



Site site#1 Polarization: ***Conducted po*** Temperature: 26 ℃

Limit: FCC Part 22 conducted(9k-12.75G) Power: AC 110V/60Hz Humidity: 55 %

EUT: Distance:

M/N: Raymond103

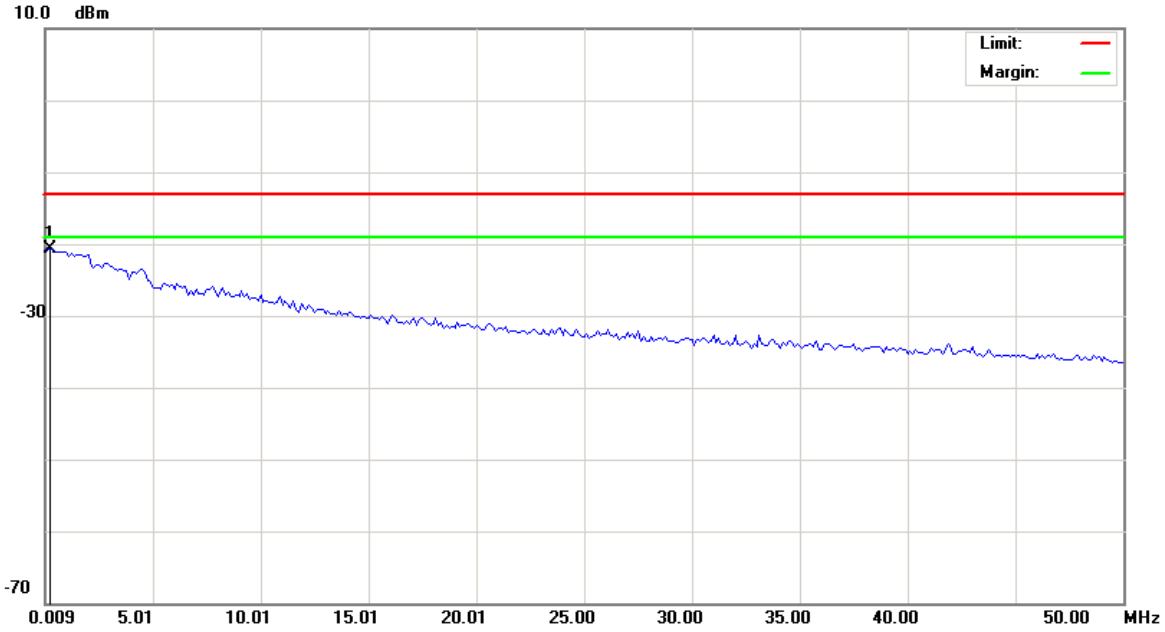
Mode:

Note: CH190(836.6MHz)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	9204.375	-38.10	5.50	-32.60	-13.00	-19.60	peak			

*:Maximum data x:Over limit !:over margin ●Reference Only

File :Raymond103(CH251) Data :#1 Date: 2008/4/28 Time: 下午 01:37:43



Site site#1 Polarization: ***Conducted po*** Temperature: 26 ℃

Limit: FCC Part 22 conducted(9k-12.75G) Power: AC 110V/60Hz Humidity: 55 %

EUT: Distance:

M/N: Raymond103

Mode:

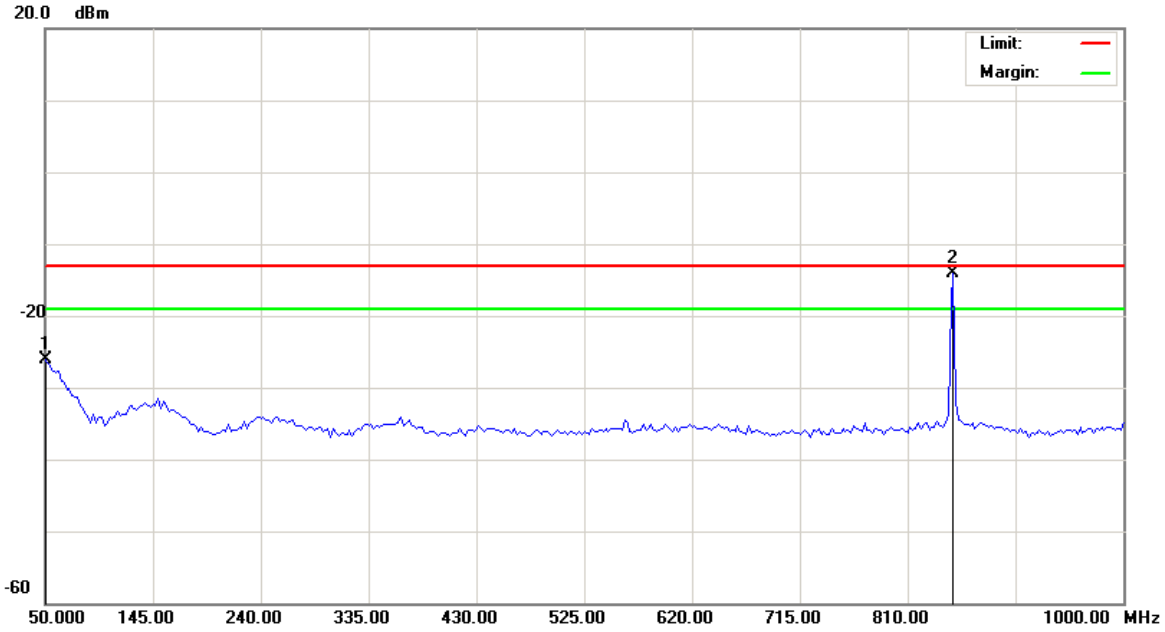
Note: CH251(848.8MHz)

加Notch(3TNF-800)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	0.2590	-52.07	31.40	-20.67	-13.00	-7.67	peak			

*:Maximum data x:Over limit !:over margin ●Reference Only

File :Raymond103(CH251) Data :#2 Date: 2008/4/28 Time: 下午 01:38:04



Site site#1 Polarization: ***Conducted po*** Temperature: 26 ℃

Limit: FCC Part 22 conducted(9k-12.75G) Power: AC 110V/60Hz Humidity: 55 %

EUT: Distance:

M/N: Raymond103

Mode:

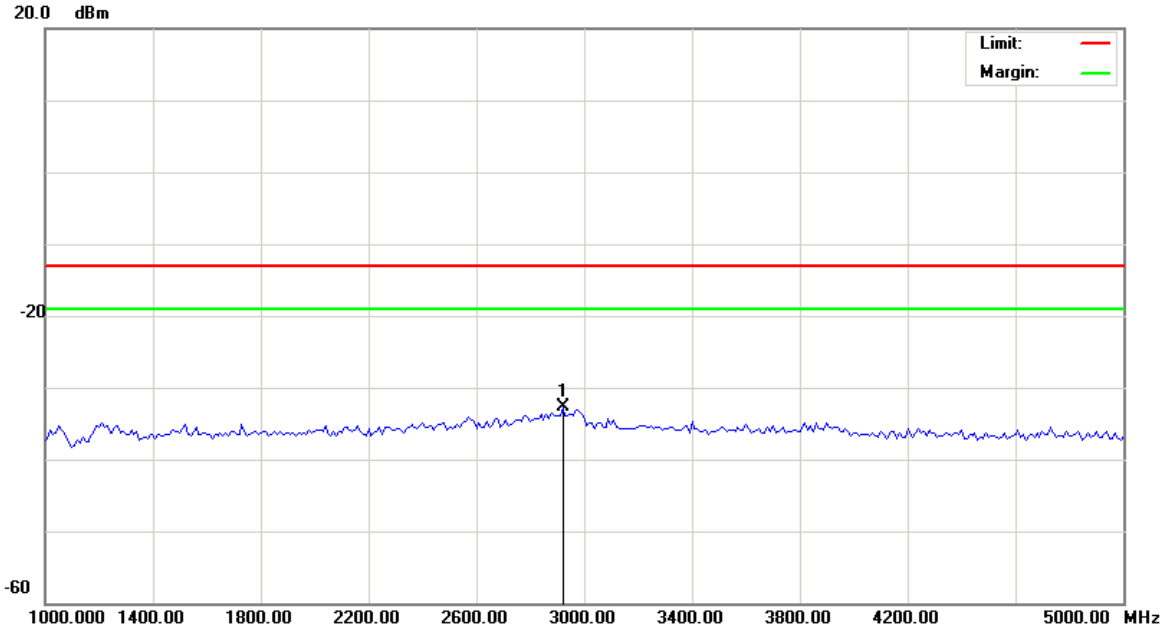
Note: CH251(848.8MHz)

加Notch(3TNF-800)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1		50.0000	-40.88	14.69	-26.19	-13.00	-13.19	peak			
2	*	850.3750	-18.08	3.98	-14.10	-13.00	-1.10	peak			Main frequency

*:Maximum data x:Over limit !:over margin ●Reference Only

File :Raymond103(CH251) Data :#3 Date: 2008/4/28 Time: 下午 02:52:31



Site site#1 Polarization: ***Conducted po*** Temperature: 26 ℃

Limit: FCC Part 22 conducted(9k-12.75G) Power: AC 110V/60Hz Humidity: 55 %

EUT: Distance:

M/N: Raymond103

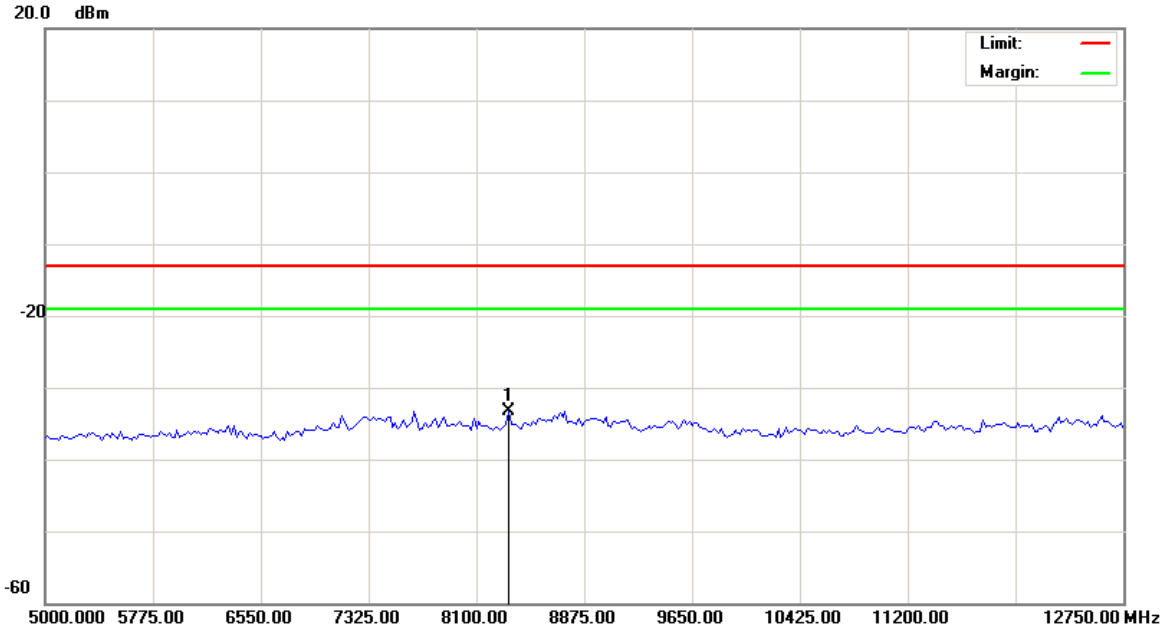
Mode:

Note: CH251(848.8MHz)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	2920.000	-37.45	4.69	-32.76	-13.00	-19.76	peak			

*:Maximum data x:Over limit !:over margin ●Reference Only

File :Raymond103(CH251) Data :#4 Date: 2008/4/28 Time: 下午 02:52:52



Site site#1
Limit: FCC Part 22 conducted(9k-12.75G)
EUT:
M/N: Raymond103
Mode:
Note: CH251(848.8MHz)

Polarization: ***Conducted po***
Power: AC 110V/60Hz
Distance:

Temperature: 26 ℃
Humidity: 55 %

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	8332.500	-38.30	5.06	-33.24	-13.00	-20.24	peak			

*:Maximum data x:Over limit !:over margin ●Reference Only

4.5.4.2 PCS 1900 Test Result

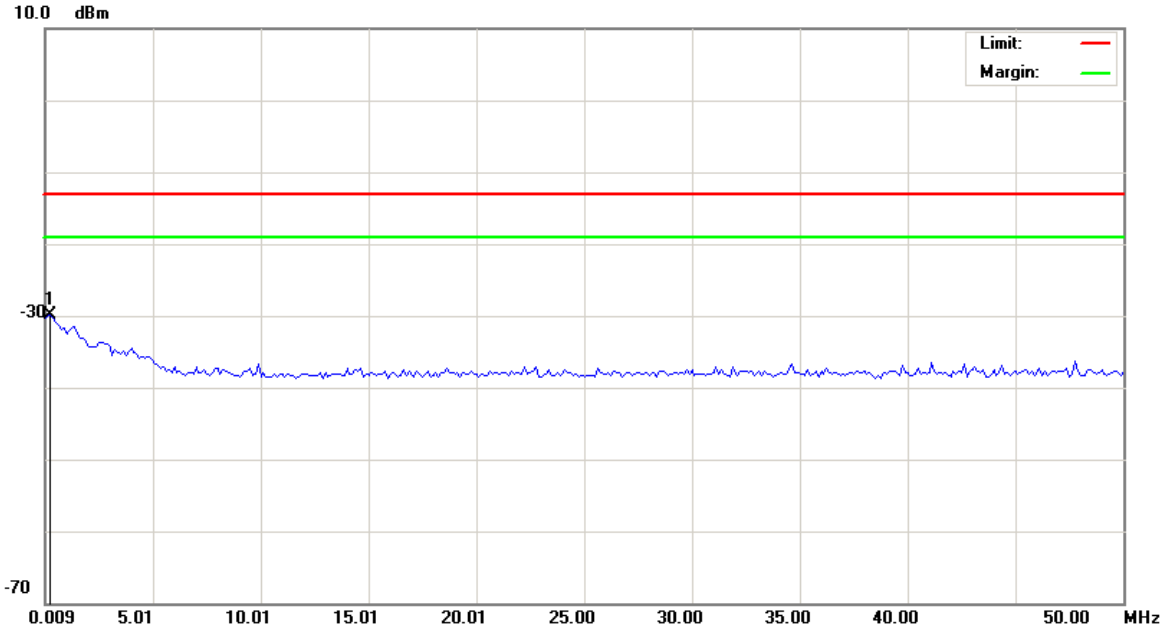
Applicant	: Inventec Corporation
Model No	: Pharos Traveler 117
EUT	: PDA PHONE
Test Mode	: PCS 1900 (Low CH512 / Middle CH661 / High CH 810)
Test Date	: 04/28/2008

Please refer to next pager of detail testing data.

Note: Amplitude= Reading Amplitude + Factor (Cable loss + Filter Amplitude= Insertion loss)

(Auto calculate in spectrum analyzer)

File :Raymond103(CH512) Data :#1 Date: 2008/4/28 Time: 上午 11:50:07



Site site#1 Polarization: ***Conducted po*** Temperature: 26 ℃

Limit: FCC Part 24 conducted(9k-12.75G) Power: AC 110V/60Hz Humidity: 55 %

EUT: Distance:

M/N: Raymond103

Mode:

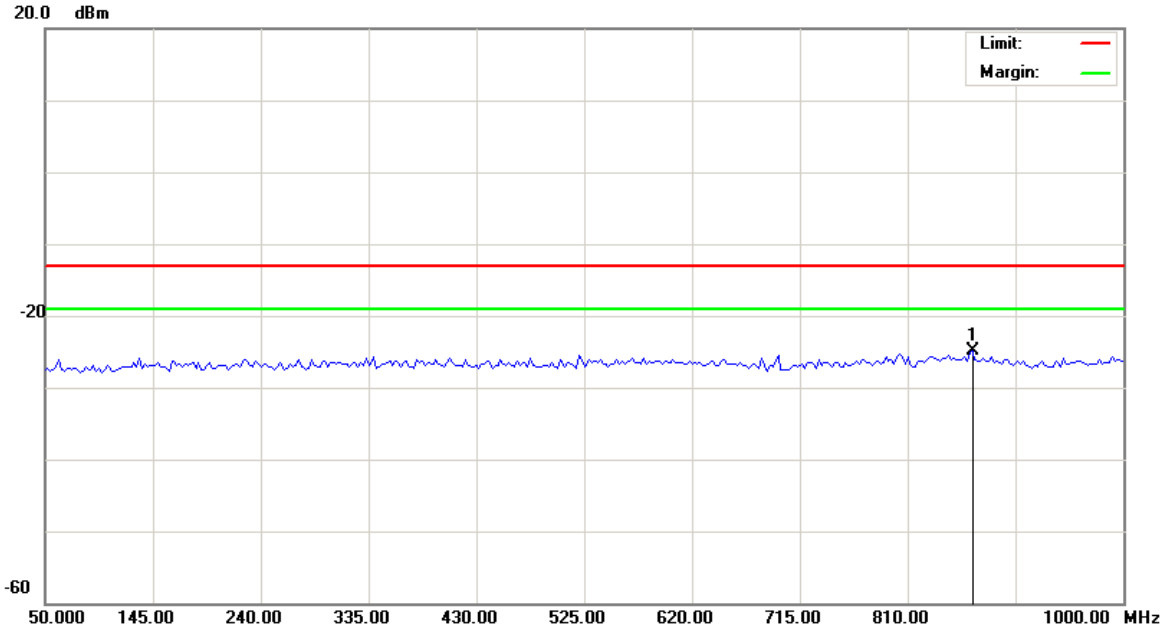
Note: CH512(1850.2MHz)

加10db衰减器

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	0.2590	-42.51	12.54	-29.97	-13.00	-16.97	peak			

*:Maximum data x:Over limit !:over margin ●Reference Only

File :Raymond103(CH512) Data :#2 Date: 2008/4/28 Time: 上午 11:50:28



Site site#1 Polarization: ***Conducted po*** Temperature: 26 ℃

Limit: FCC Part 24 conducted(9k-12.75G) Power: AC 110V/60Hz Humidity: 55 %

EUT: Distance:

M/N: Raymond103

Mode:

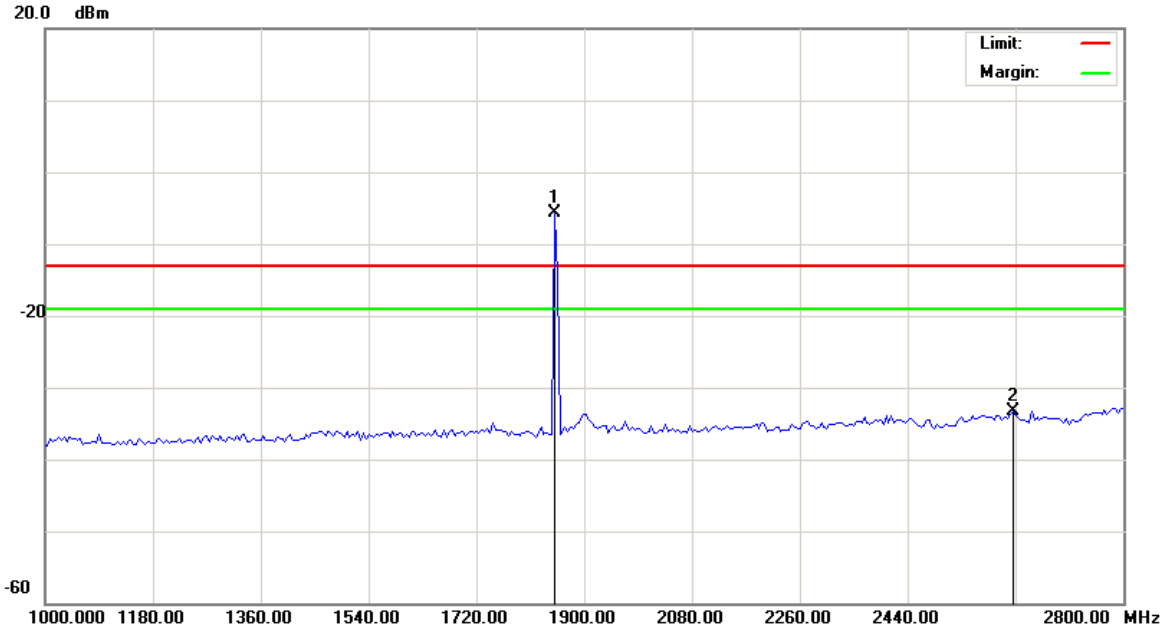
Note: CH512(1850.2MHz)

加10db衰减器

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	867.0000	-38.12	13.26	-24.86	-13.00	-11.86	peak			

*:Maximum data x:Over limit !:over margin ●Reference Only

File :Raymond103(CH512) Data :#3 Date: 2008/4/28 Time: 下午 02:07:10



Site site#1 Polarization: ***Conducted po*** Temperature: 26 ℃

Limit: FCC Part 24 conducted(9k-12.75G) Power: AC 110V/60Hz Humidity: 55 %

EUT: Distance:

M/N: Raymond103

Mode:

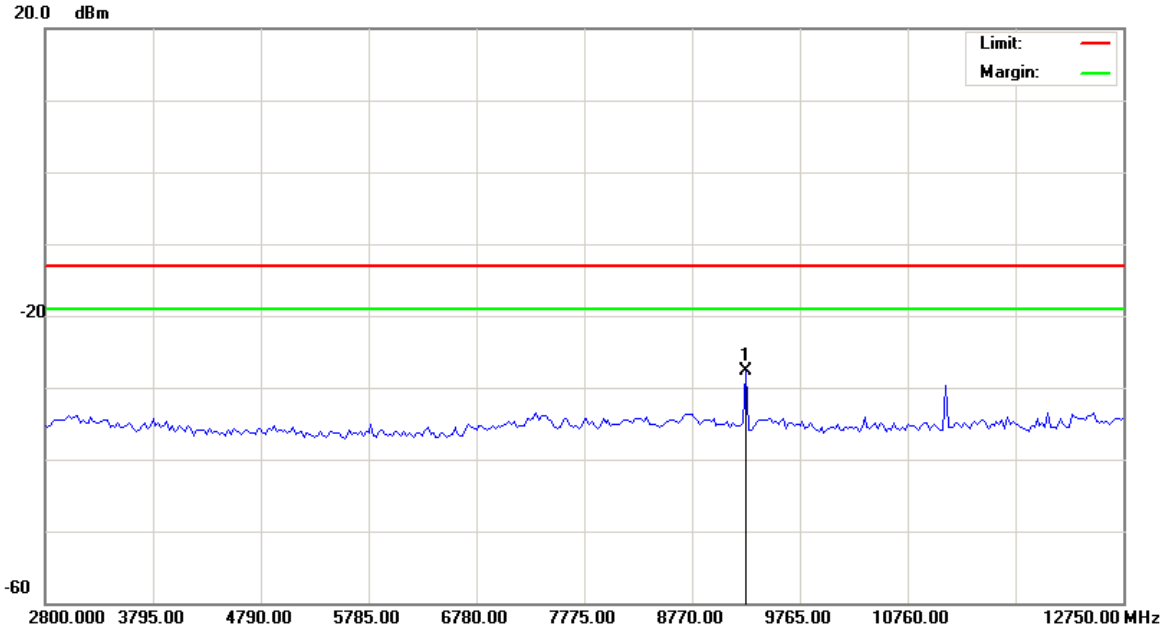
Note: CH512(1850.2MHz)

加Notch(5TNF-1700)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	1850.500	-9.98	4.26	-5.72	-13.00	7.28	peak			Main frequency
2		2615.500	-38.65	5.44	-33.21	-13.00	-20.21	peak			

*:Maximum data x:Over limit !:over margin ●Reference Only

File :Raymond103(CH512) Data :#4 Date: 2008/4/28 Time: 下午 02:57:47



Site site#1 Polarization: ***Conducted po*** Temperature: 26 ℃

Limit: FCC Part 24 conducted(9k-12.75G) Power: AC 110V/60Hz Humidity: 55 %

EUT: Distance:

M/N: Raymond103

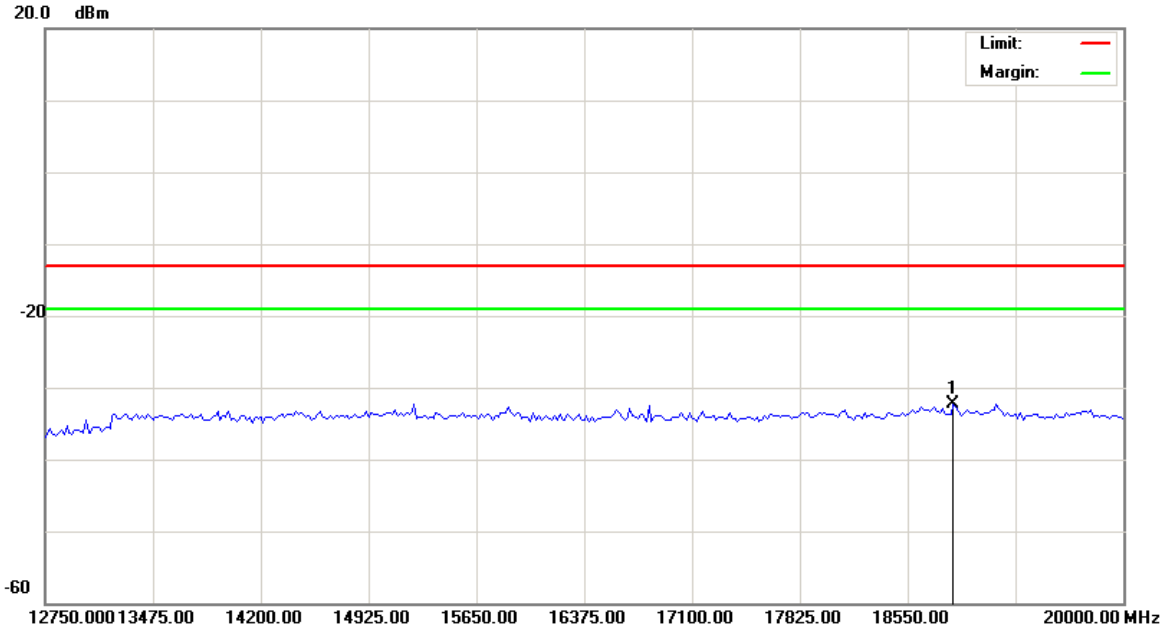
Mode:

Note: CH512(1850.2MHz)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	9267.500	-33.26	5.49	-27.77	-13.00	-14.77	peak			

*:Maximum data x:Over limit !:over margin ●Reference Only

File :Raymond103(CH512) Data :#5 Date: 2008/4/28 Time: 下午 02:58:08



Site site#1 Polarization: ***Conducted po*** Temperature: 26 ℃

Limit: FCC Part 24 conducted(9k-12.75G) Power: AC 110V/60Hz Humidity: 55 %

EUT: Distance:

M/N: Raymond103

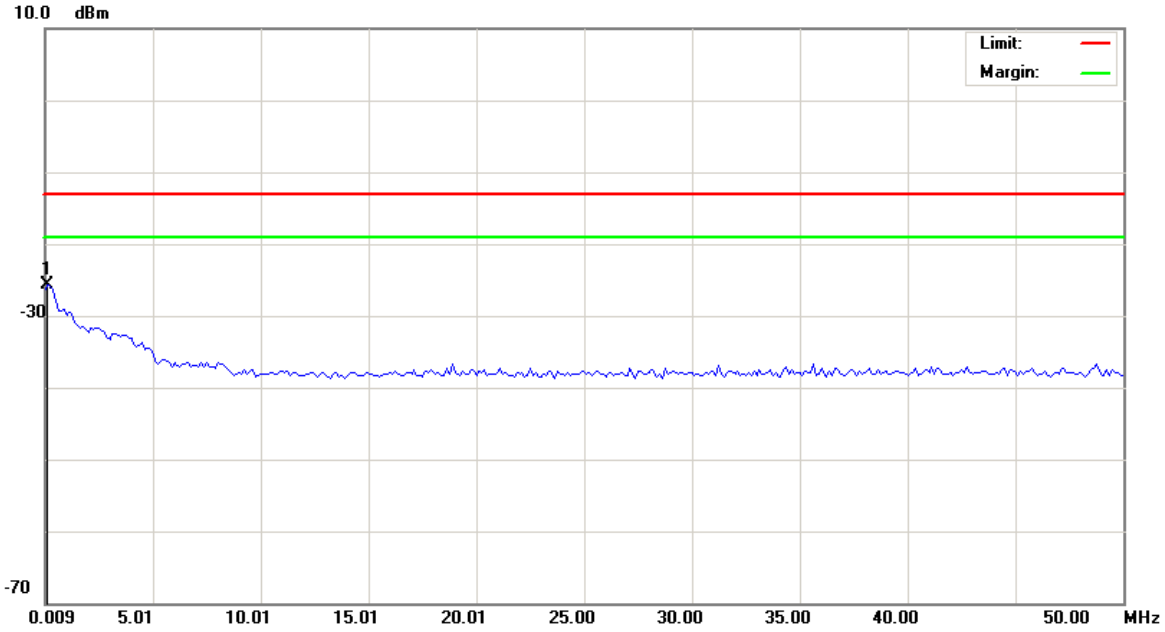
Mode:

Note: CH512(1850.2MHz)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	18858.12	-39.43	7.11	-32.32	-13.00	-19.32	peak			

*:Maximum data x:Over limit !:over margin ●Reference Only

File :Raymond103(CH661) Data :#1 Date: 2008/4/28 Time: 上午 11:53:36



Site site#1 Polarization: ***Conducted po*** Temperature: 26 ℃

Limit: FCC Part 24 conducted(9k-12.75G) Power: AC 110V/60Hz Humidity: 55 %

EUT: Distance:

M/N: Raymond103

Mode:

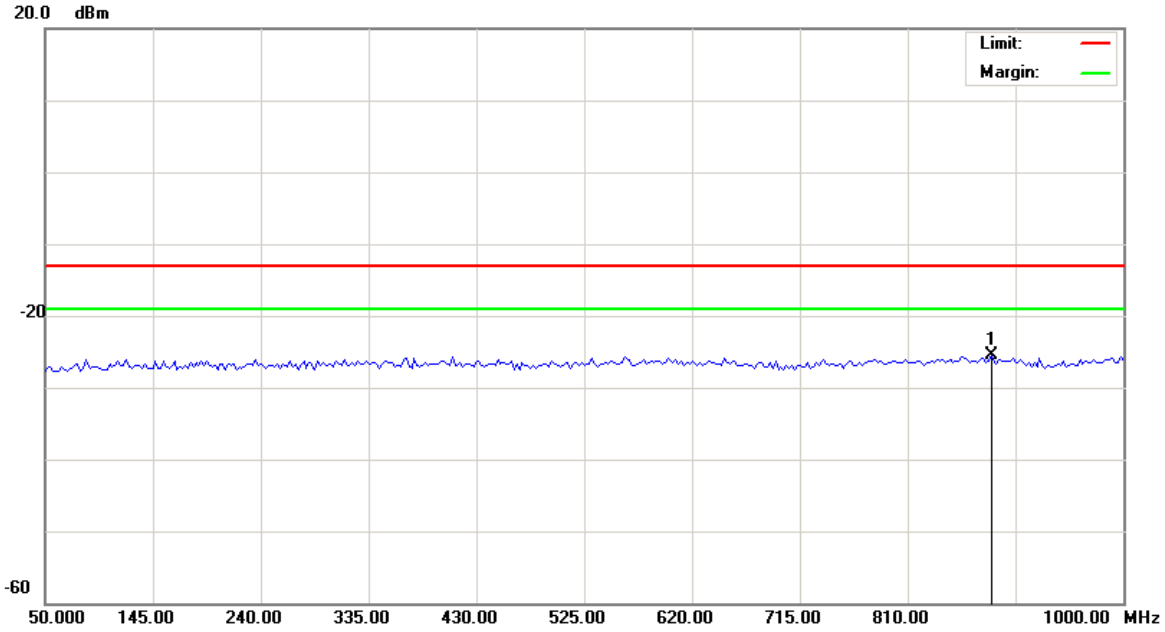
Note: CH661(1880MHz)

加10db衰减器

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	0.1340	-38.16	12.48	-25.68	-13.00	-12.68	peak			

*:Maximum data x:Over limit !:over margin ●Reference Only

File :Raymond103(CH661) Data :#2 Date: 2008/4/28 Time: 上午 11:53:57



Site site#1 Polarization: ***Conducted po*** Temperature: 26 ℃

Limit: FCC Part 24 conducted(9k-12.75G) Power: AC 110V/60Hz Humidity: 55 %

EUT: Distance:

M/N: Raymond103

Mode:

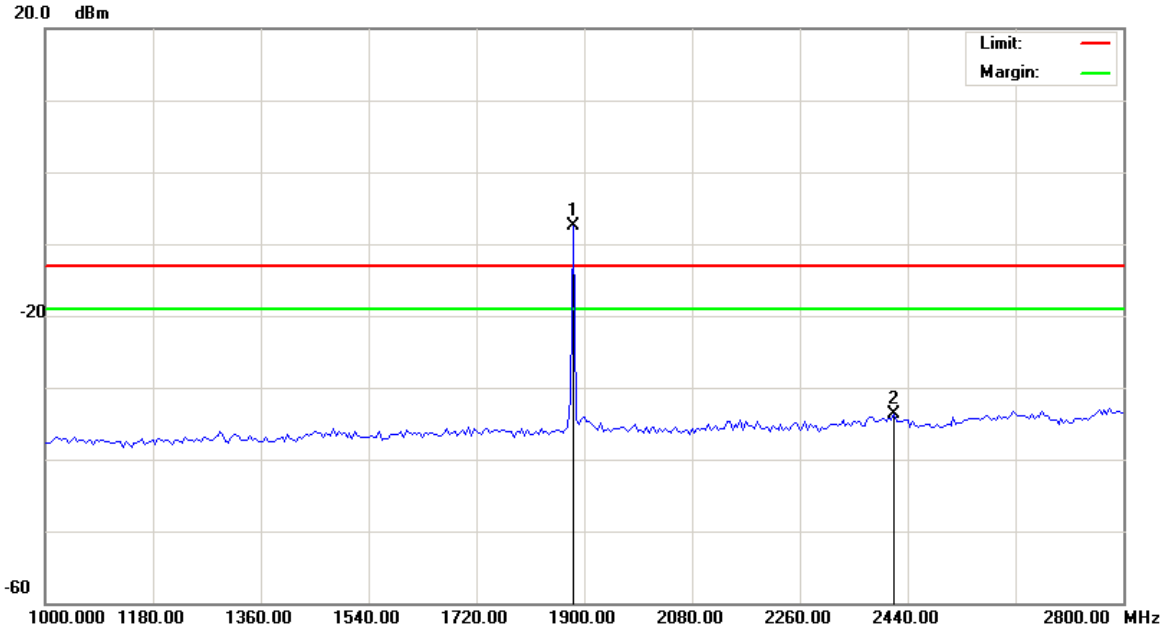
Note: CH661(1880MHz)

加10db衰减器

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	883.6250	-38.79	13.20	-25.59	-13.00	-12.59	peak			

*:Maximum data x:Over limit !:over margin ●Reference Only

File :Raymond103(CH661) Data :#3 Date: 2008/4/28 Time: 下午 02:10:41



Site site#1 Polarization: ***Conducted po*** Temperature: 26 ℃

Limit: FCC Part 24 conducted(9k-12.75G) Power: AC 110V/60Hz Humidity: 55 %

EUT: Distance:

M/N: Raymond103

Mode:

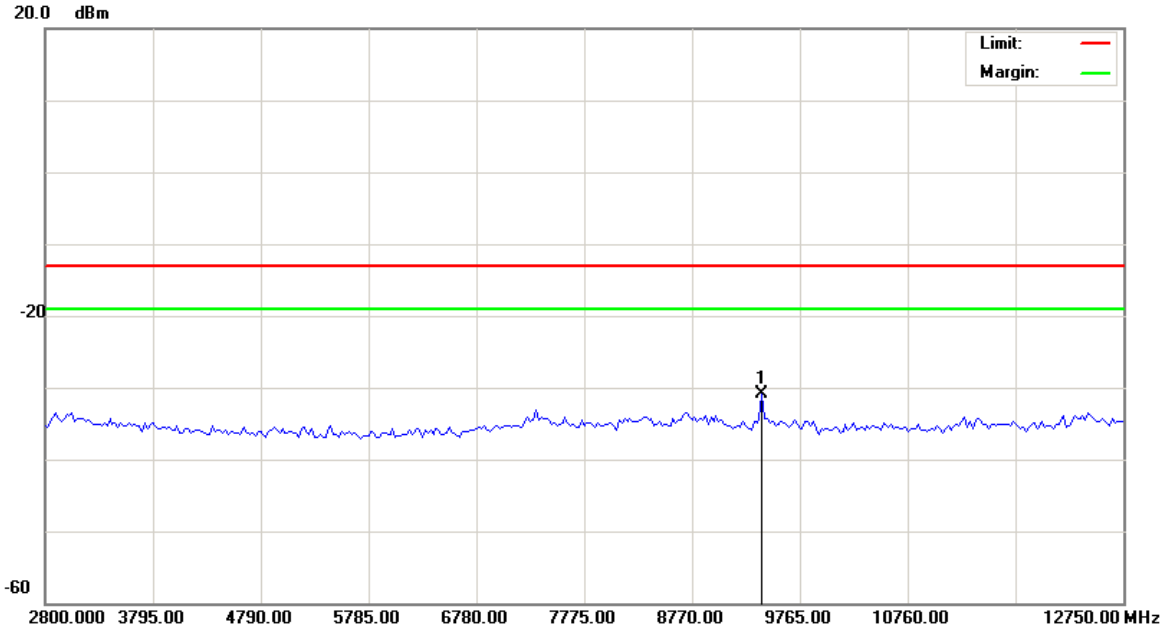
Note: CH661(1880MHz)

加Notch(5TNF-1700)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	1882.000	-12.26	4.83	-7.43	-13.00	5.57	peak			Main frequency
2		2417.500	-38.77	5.15	-33.62	-13.00	-20.62	peak			

*:Maximum data x:Over limit !:over margin ●Reference Only

File :Raymond103(CH661) Data :#4 Date: 2008/4/28 Time: 下午 02:58:59



Site site#1
Limit: FCC Part 24 conducted(9k-12.75G)
EUT:
M/N: Raymond103
Mode:
Note: CH661(1880MHz)

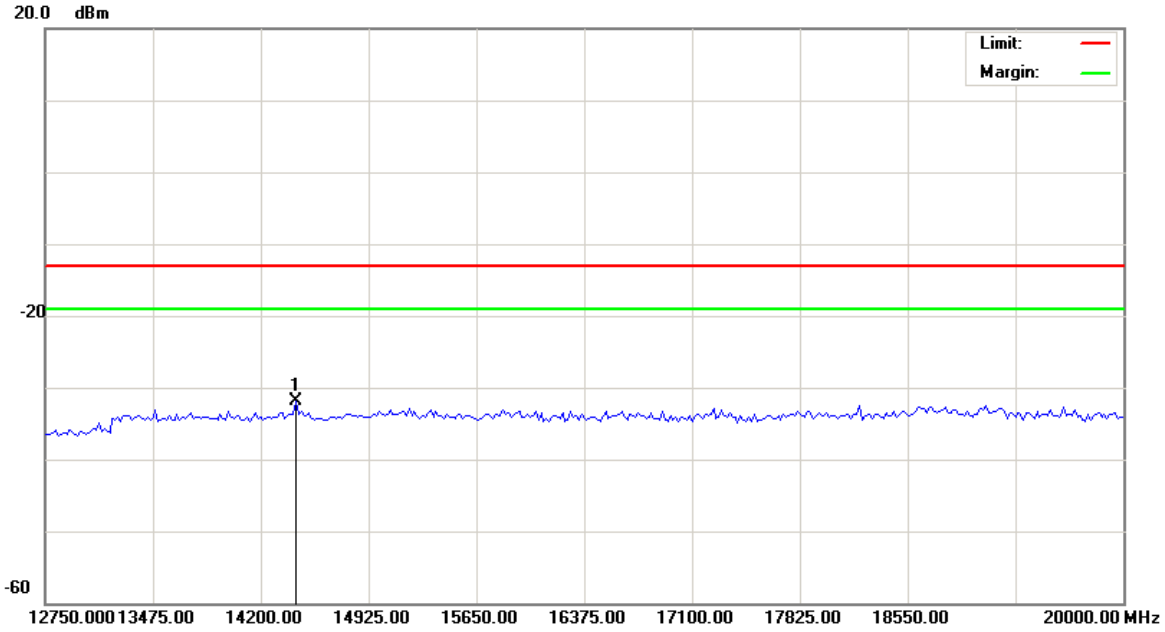
Polarization: ***Conducted po***
Power: AC 110V/60Hz
Distance:

Temperature: 26 ℃
Humidity: 55 %

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	9416.750	-36.59	5.67	-30.92	-13.00	-17.92	peak			

*:Maximum data x:Over limit !:over margin ●Reference Only

File :Raymond103(CH661) Data :#5 Date: 2008/4/28 Time: 下午 02:59:20



Site site#1 Polarization: ***Conducted po*** Temperature: 26 ℃

Limit: FCC Part 24 conducted(9k-12.75G) Power: AC 110V/60Hz Humidity: 55 %

EUT: Distance:

M/N: Raymond103

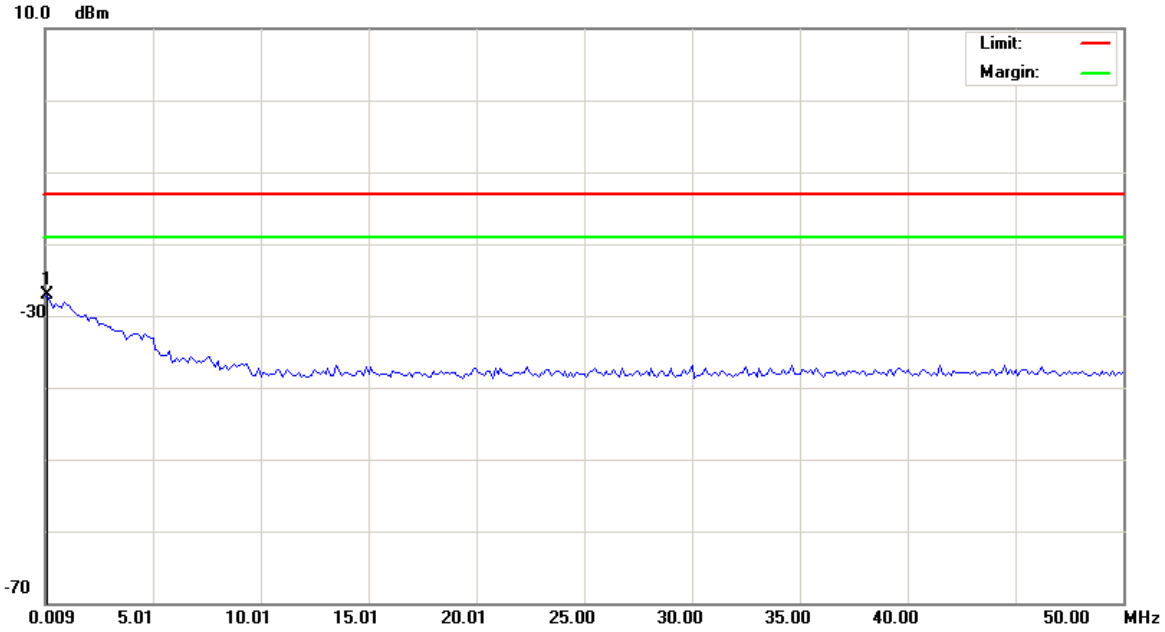
Mode:

Note: CH661(1880MHz)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	14435.62	-37.78	5.85	-31.93	-13.00	-18.93	peak			

*:Maximum data x:Over limit !:over margin ●Reference Only

File :Raymond103(CH810) Data :#1 Date: 2008/4/28 Time: 上午 11:54:49



Site site#1 Polarization: ***Conducted po*** Temperature: 26 ℃

Limit: FCC Part 24 conducted(9k-12.75G) Power: AC 110V/60Hz Humidity: 55 %

EUT: Distance:

M/N: Raymond103

Mode:

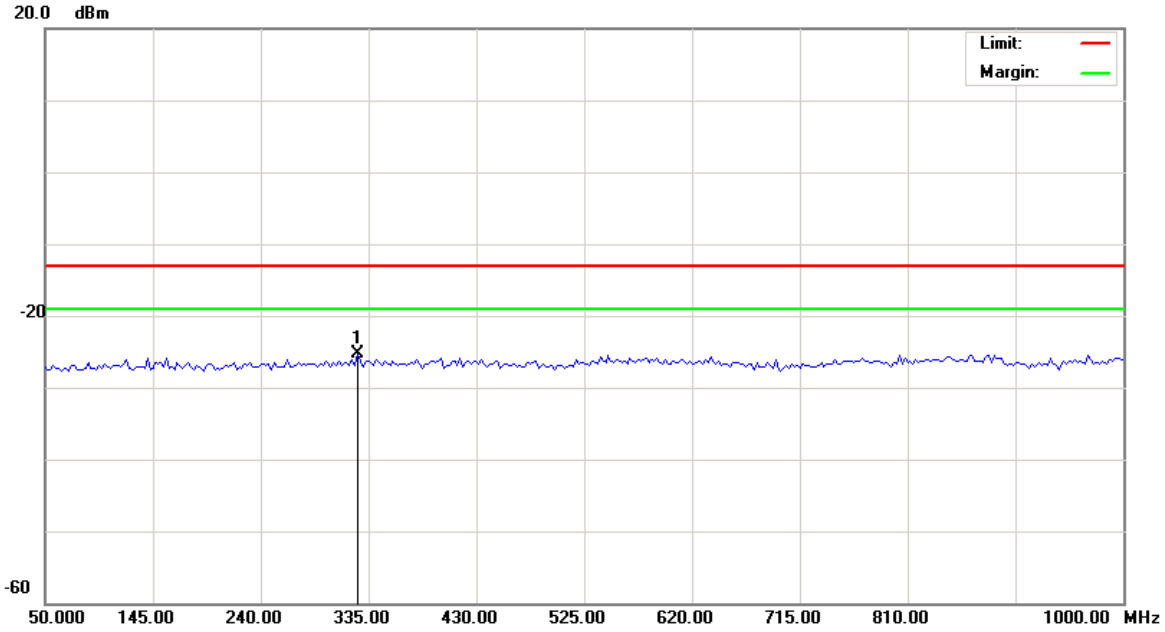
Note: CH810(1909.8MHz)

加10db衰减器

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	0.1340	-39.66	12.48	-27.18	-13.00	-14.18	peak			

*:Maximum data x:Over limit !:over margin ●Reference Only

File :Raymond103(CH810) Data :#2 Date: 2008/4/28 Time: 上午 11:55:09



Site site#1 Polarization: ***Conducted po*** Temperature: 26 ℃

Limit: FCC Part 24 conducted(9k-12.75G) Power: AC 110V/60Hz Humidity: 55 %

EUT: Distance:

M/N: Raymond103

Mode:

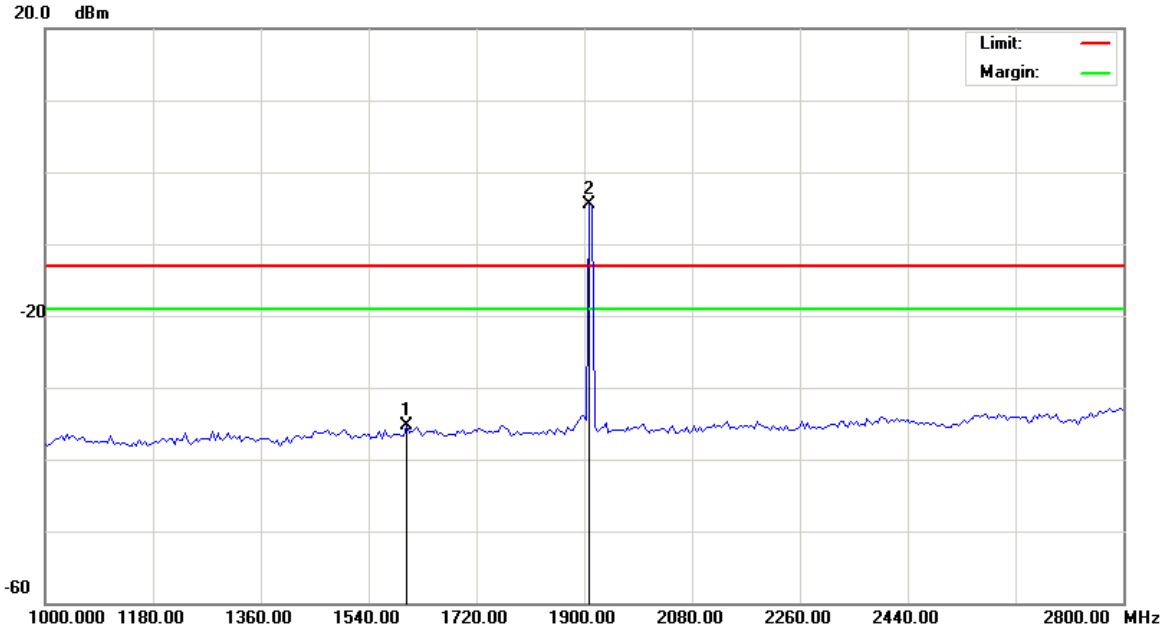
Note: CH810(1909.8MHz)

加10db衰减器

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	325.5000	-38.41	13.16	-25.25	-13.00	-12.25	peak			

*:Maximum data x:Over limit !:over margin ●Reference Only

File :Raymond103(CH810) Data :#3 Date: 2008/4/28 Time: 下午 02:13:51



Site site#1 Polarization: ***Conducted po*** Temperature: 26 ℃

Limit: FCC Part 24 conducted(9k-12.75G) Power: AC 110V/60Hz Humidity: 55 %

EUT: Distance:

M/N: Raymond103

Mode:

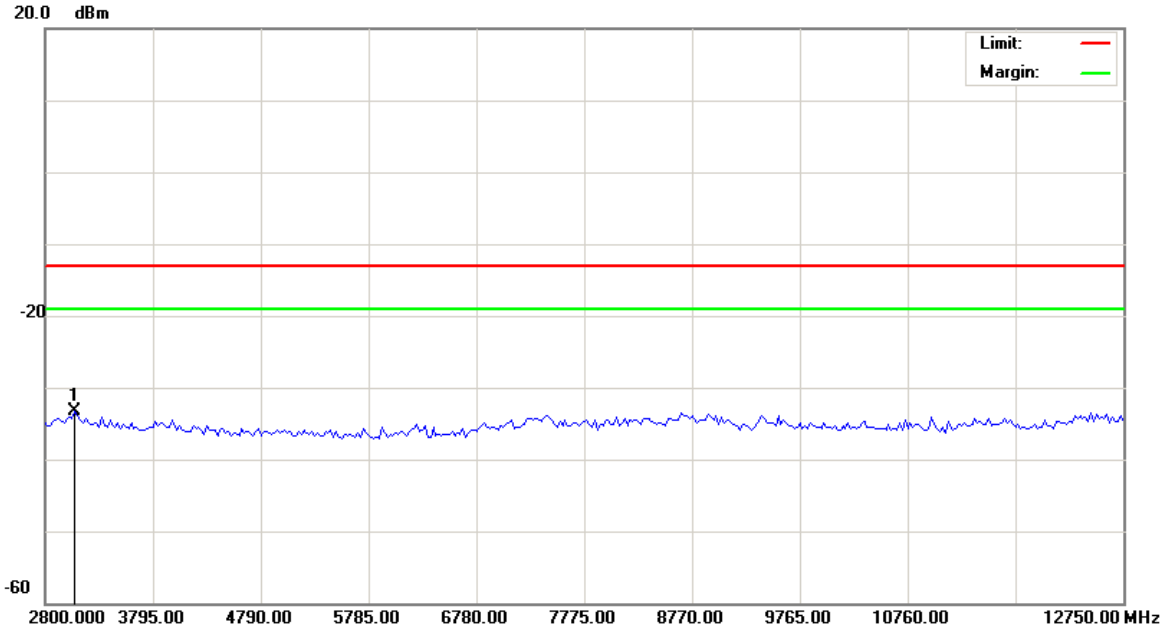
Note: CH810(1909.8MHz)

加Notch(5TNF-1700)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1		1603.000	-39.64	4.36	-35.28	-13.00	-22.28	peak			
2	*	1909.000	-10.34	5.80	-4.54	-13.00	8.46	peak			Main frequency

*:Maximum data x:Over limit !:over margin ●Reference Only

File :Raymond103(CH810) Data :#4 Date: 2008/4/28 Time: 下午 03:00:02



Site site#1 Polarization: ***Conducted po*** Temperature: 26 ℃

Limit: FCC Part 24 conducted(9k-12.75G) Power: AC 110V/60Hz Humidity: 55 %

EUT: Distance:

M/N: Raymond103

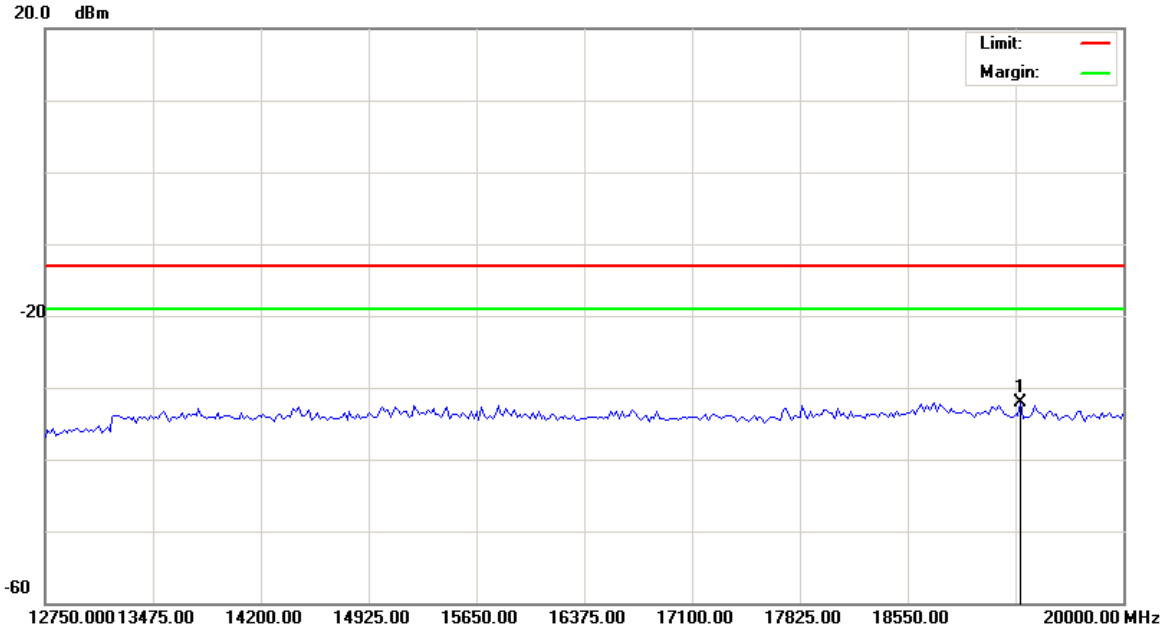
Mode:

Note: CH810(1909.8MHz)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	3073.625	-38.78	5.40	-33.38	-13.00	-20.38	peak			

*:Maximum data x:Over limit !:over margin ●Reference Only

File :Raymond103(CH810) Data :#5 Date: 2008/4/28 Time: 下午 03:00:23



Site site#1 Polarization: ***Conducted po*** Temperature: 26 ℃

Limit: FCC Part 24 conducted(9k-12.75G) Power: AC 110V/60Hz Humidity: 55 %

EUT: Distance:

M/N: Raymond103

Mode:

Note: CH810(1909.8MHz)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	19311.25	-39.36	7.24	-32.12	-13.00	-19.12	peak			

*:Maximum data x:Over limit !:over margin ●Reference Only

4.5.4.3 WCDMA Band V Test Result

Applicant : Inventec Corporation

Model No : Pharos Traveler 117

EUT : PDA PHONE

Test Mode : WCDMA Band V (Low CH4132 / Middle CH4182 / High CH 4233)

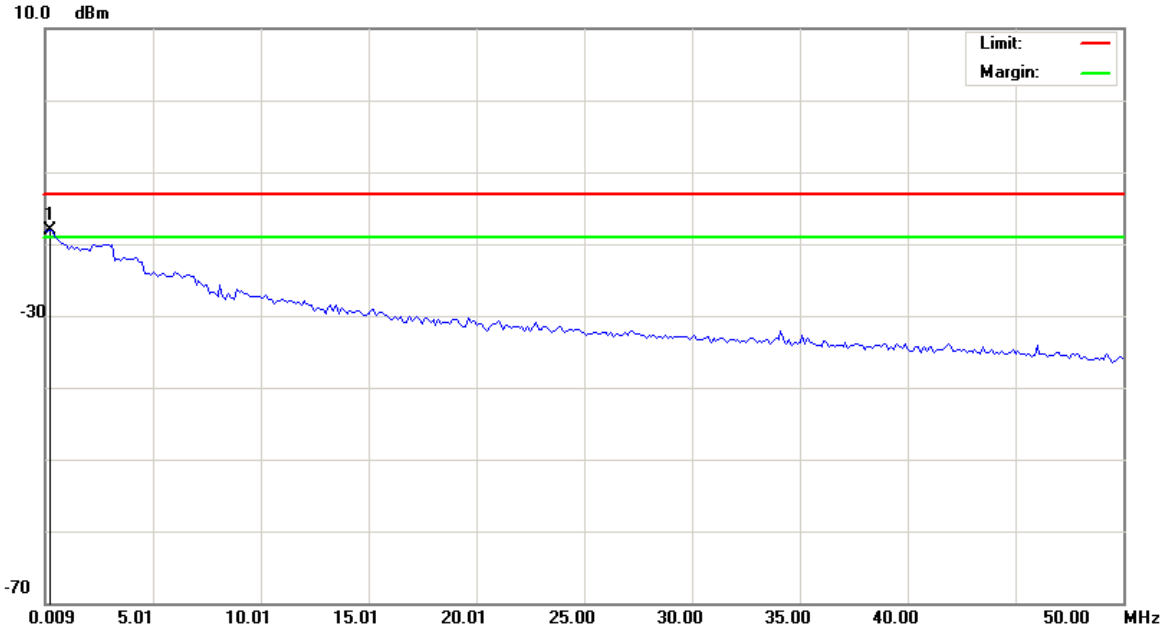
Test Date : 04/28/2008

Please refer to next pager of detail testing data.

Note: Amplitude= Reading Amplitude + Factor (Cable loss + Filter Amplitude= Insertion loss)

(Auto calculate in spectrum analyzer)

File :Raymond103(CH4132) Data :#1 Date: 2008/4/28 Time: 下午 01:49:32



Site site#1 Polarization: ***Conducted po*** Temperature: 26 ℃

Limit: FCC Part 22 conducted(9k-12.75G) Power: AC 110V/60Hz Humidity: 55 %

EUT: Distance:

M/N: Raymond103

Mode:

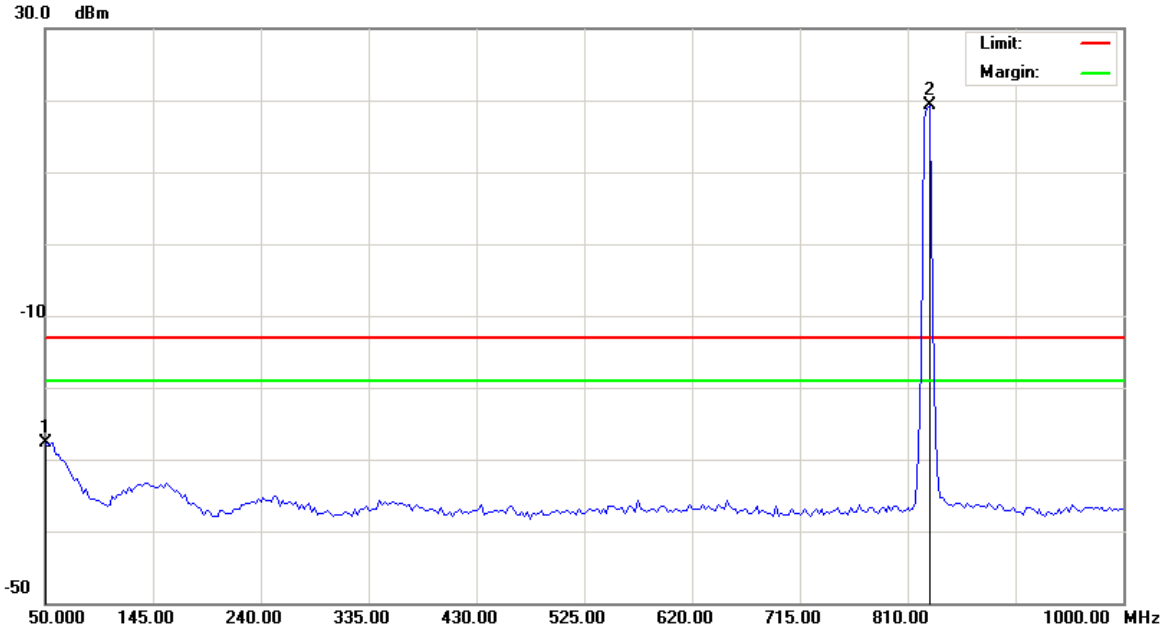
Note: CH128(824.2MHz)

加Notch(3TNF-800)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	0.2590	-49.52	31.40	-18.12	-13.00	-5.12	peak			

*:Maximum data x:Over limit !:over margin ●Reference Only

File :Raymond103(CH4132) Data :#2 Date: 2008/4/28 Time: 下午 01:49:53



Site site#1 Polarization: ***Conducted po*** Temperature: 26 ℃

Limit: FCC Part 22 conducted(9k-12.75G) Power: AC 110V/60Hz Humidity: 55 %

EUT: Distance:

M/N: Raymond103

Mode:

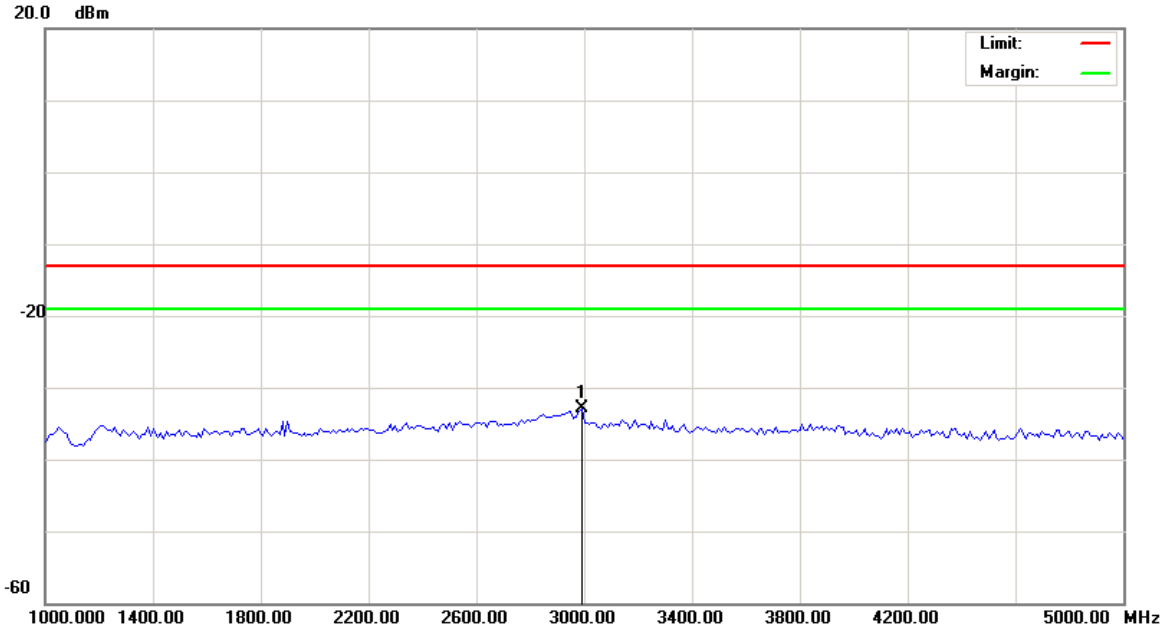
Note: CH4132(826.4MHz)

加Notch(3TNF-800)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1		50.0000	-42.30	14.69	-27.61	-13.00	-14.61	peak			
2	*	829.0000	15.45	3.89	19.34	-13.00	32.34	peak			Main frequency

*:Maximum data x:Over limit !:over margin ●Reference Only

File :Raymond103(CH4132) Data :#3 Date: 2008/4/28 Time: 下午 02:40:39



Site site#1
Limit: FCC Part 22 conducted(9k-12.75G)
EUT:
M/N: Raymond103
Mode:
Note: CH4132(826.4MHz)

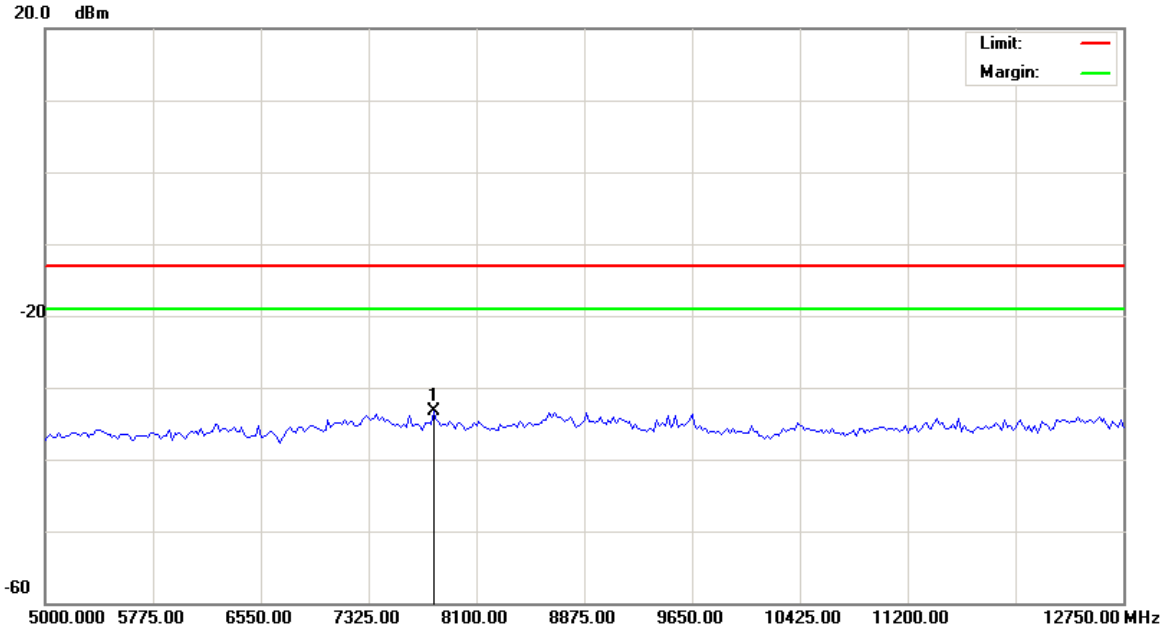
Polarization: ***Conducted po***
Power: AC 110V/60Hz
Distance:

Temperature: 26 ℃
Humidity: 55 %

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	2990.000	-37.42	4.53	-32.89	-13.00	-19.89	peak			

*:Maximum data x:Over limit !:over margin ●Reference Only

File :Raymond103(CH4132) Data :#4 Date: 2008/4/28 Time: 下午 02:41:00



Site site#1 Polarization: ***Conducted po*** Temperature: 26 ℃

Limit: FCC Part 22 conducted(9k-12.75G) Power: AC 110V/60Hz Humidity: 55 %

EUT: Distance:

M/N: Raymond103

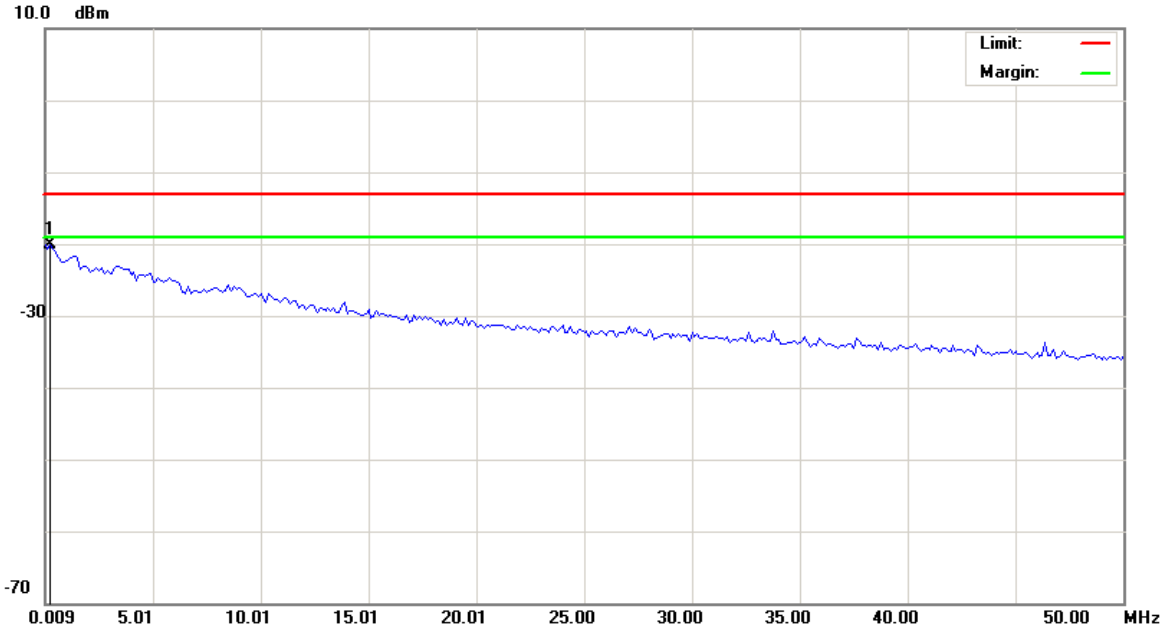
Mode:

Note: CH4132(826.4MHz)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	7790.000	-38.54	5.18	-33.36	-13.00	-20.36	peak			

*:Maximum data x:Over limit !:over margin ●Reference Only

File :Raymond103(CH4182) Data :#1 Date: 2008/4/28 Time: 下午 01:53:43



Site site#1 Polarization: ***Conducted po*** Temperature: 26 ℃

Limit: FCC Part 22 conducted(9k-12.75G) Power: AC 110V/60Hz Humidity: 55 %

EUT: Distance:

M/N: Raymond103

Mode:

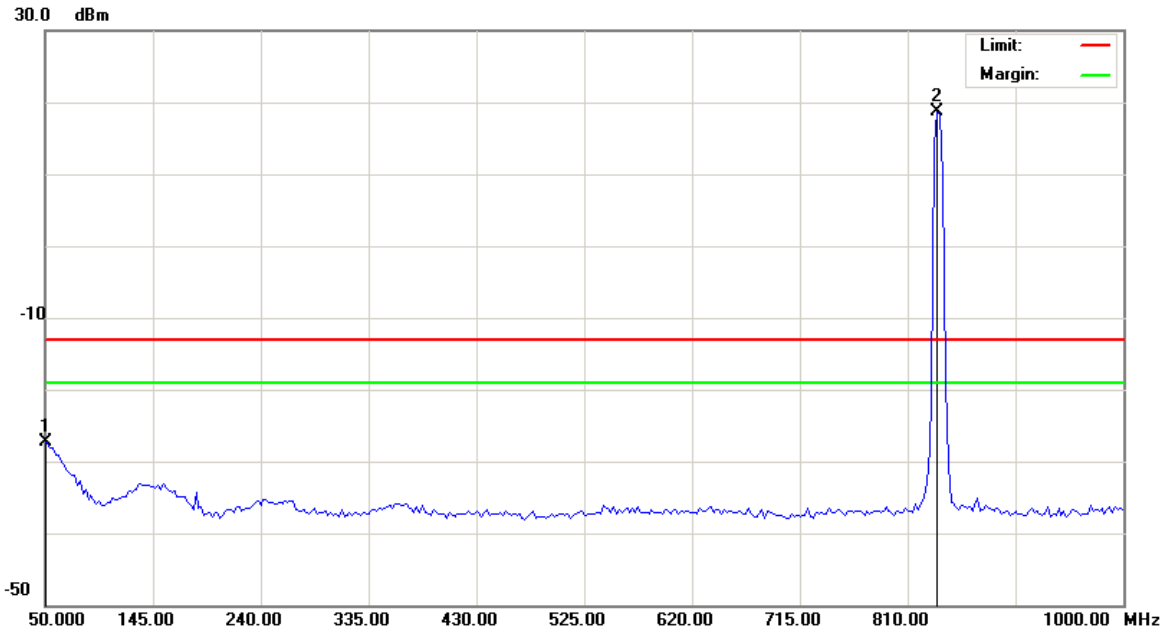
Note: CH4182(836.4MHz)

加Notch(3TNF-800)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	0.2590	-51.52	31.40	-20.12	-13.00	-7.12	peak			

*:Maximum data x:Over limit !:over margin ●Reference Only

File :Raymond103(CH4182) Data :#2 Date: 2008/4/28 Time: 下午 01:54:04



Site site#1 Polarization: ***Conducted po*** Temperature: 26 ℃

Limit: FCC Part 22 conducted(9k-12.75G) Power: AC 110V/60Hz Humidity: 55 %

EUT: Distance:

M/N: Raymond103

Mode:

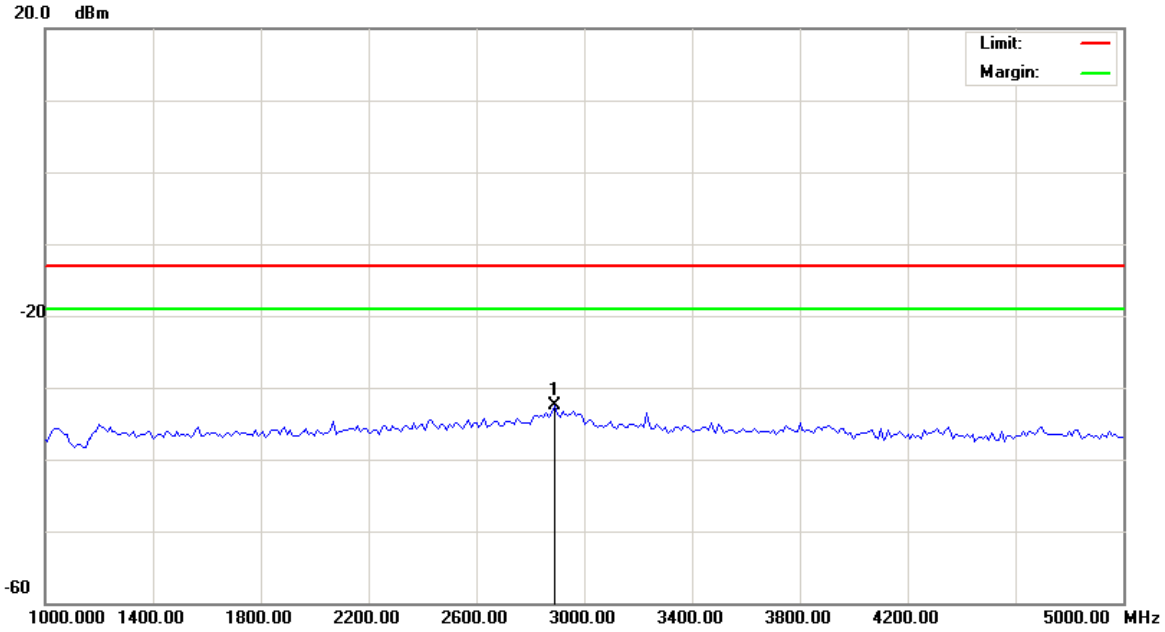
Note: CH4182(836.4MHz)

加Notch(3TNF-800)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1		50.0000	-41.94	14.69	-27.25	-13.00	-14.25	peak			
2	*	836.1250	14.79	3.96	18.75	-13.00	31.75	peak			Main frequency

*:Maximum data x:Over limit !:over margin ●Reference Only

File :Raymond103(CH4182) Data :#3 Date: 2008/4/28 Time: 下午 02:43:37



Site site#1 Polarization: ***Conducted po*** Temperature: 26 ℃

Limit: FCC Part 22 conducted(9k-12.75G) Power: AC 110V/60Hz Humidity: 55 %

EUT: Distance:

M/N: Raymond103

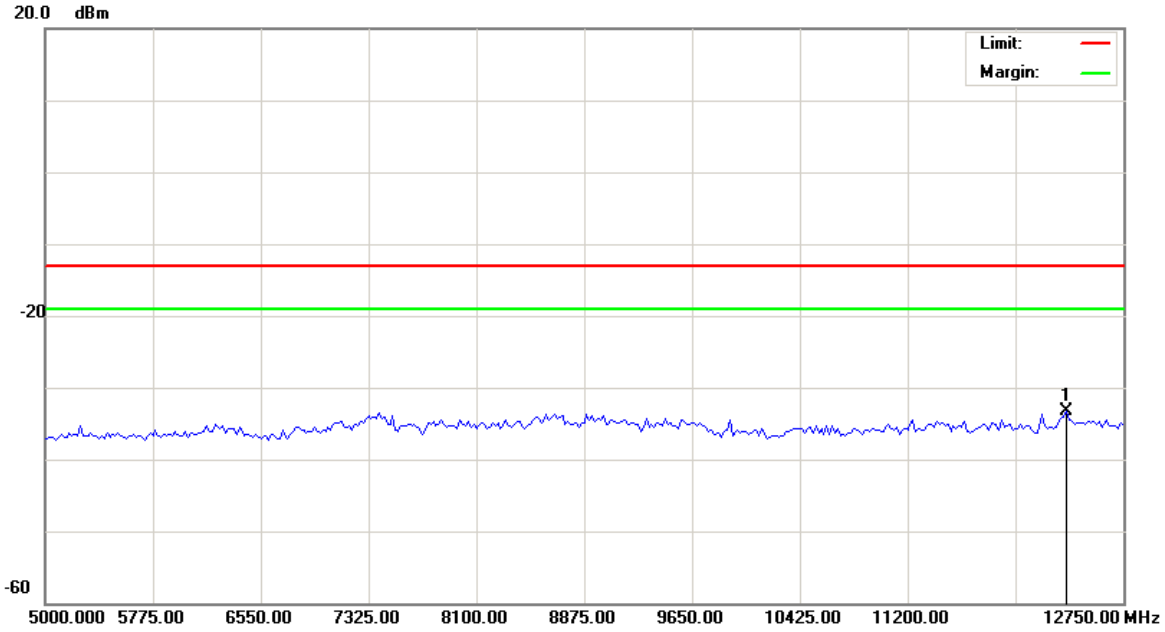
Mode:

Note: CH4182(836.4MHz)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	2890.000	-37.28	4.71	-32.57	-13.00	-19.57	peak			

*:Maximum data x:Over limit !:over margin ●Reference Only

File :Raymond103(CH4182) Data :#4 Date: 2008/4/28 Time: 下午 02:43:58



Site site#1 Polarization: ***Conducted po*** Temperature: 26 ℃

Limit: FCC Part 22 conducted(9k-12.75G) Power: AC 110V/60Hz Humidity: 55 %

EUT: Distance:

M/N: Raymond103

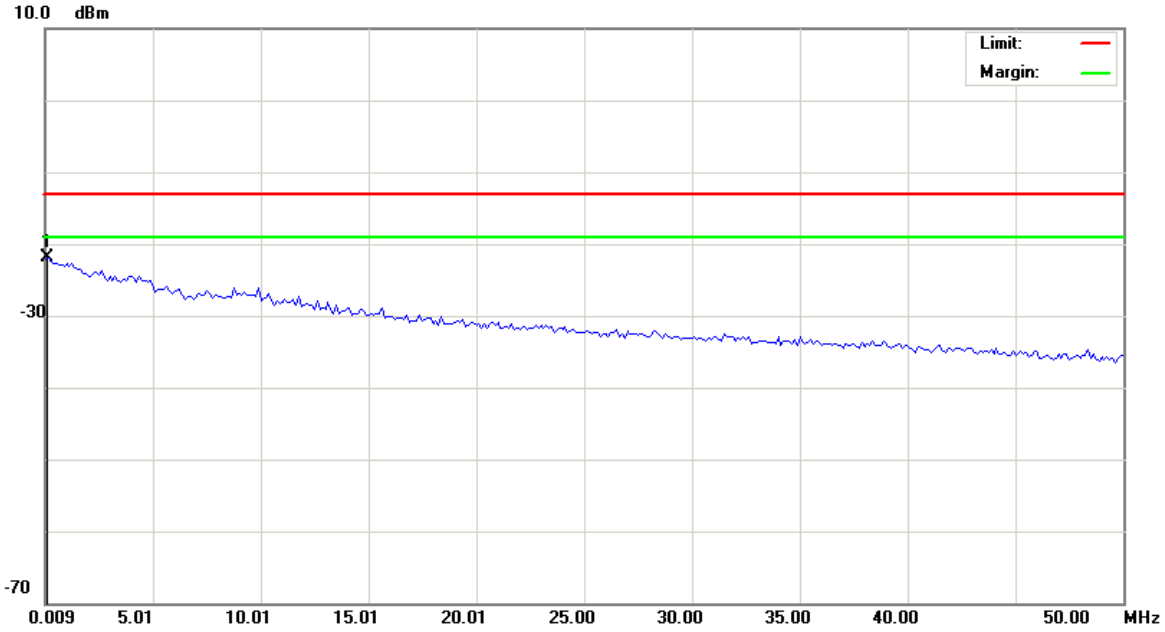
Mode:

Note: CH4182(836.4MHz)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	12343.12	-38.12	4.76	-33.36	-13.00	-20.36	peak			

*:Maximum data x:Over limit !:over margin ●Reference Only

File :Raymond103(CH4233) Data :#1 Date: 2008/4/28 Time: 下午 01:56:03



Site site#1 Polarization: ***Conducted po*** Temperature: 26 ℃

Limit: FCC Part 22 conducted(9k-12.75G) Power: AC 110V/60Hz Humidity: 55 %

EUT: Distance:

M/N: Raymond103

Mode:

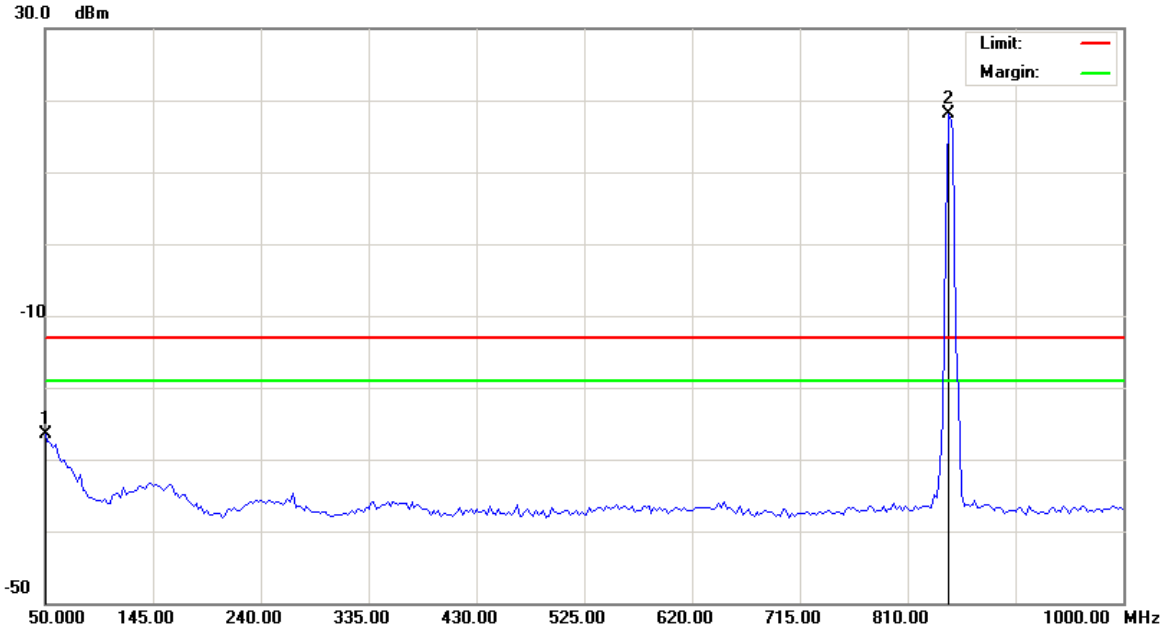
Note: CH4233(846.5MHz)

加Notch(3TNF-800)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	0.1340	-52.18	30.38	-21.80	-13.00	-8.80	peak			

*:Maximum data x:Over limit !:over margin ●Reference Only

File :Raymond103(CH4233) Data :#2 Date: 2008/4/28 Time: 下午 01:56:24



Site site#1 Polarization: ***Conducted po*** Temperature: 26 ℃

Limit: FCC Part 22 conducted(9k-12.75G) Power: AC 110V/60Hz Humidity: 55 %

EUT: Distance:

M/N: Raymond103

Mode:

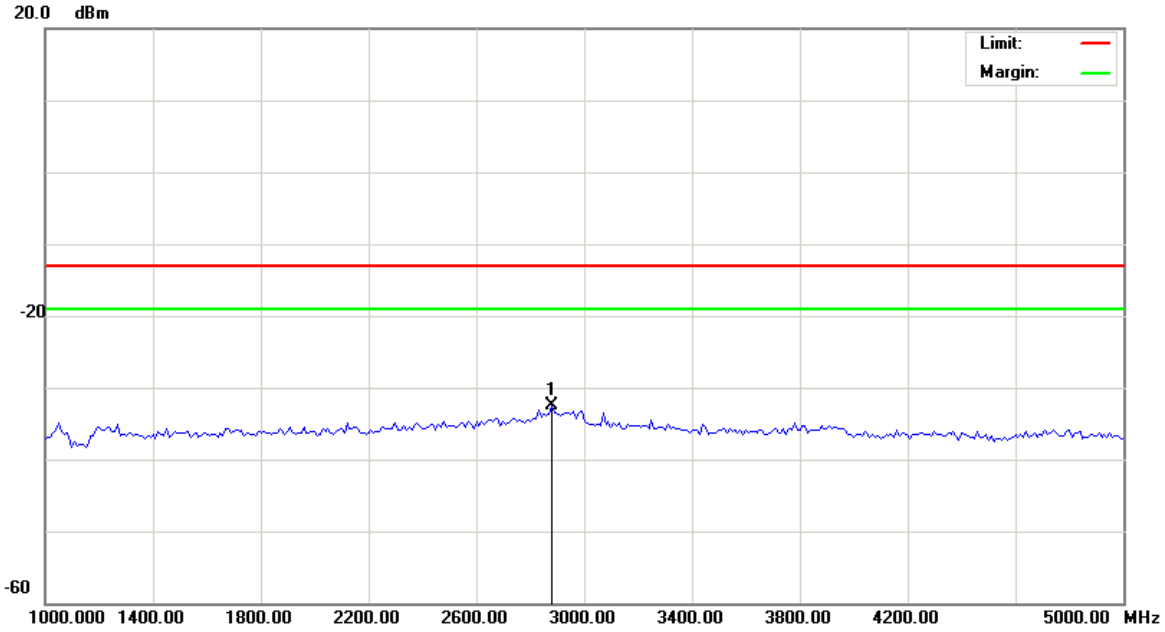
Note: CH4233(846.5MHz)

加Notch(3TNF-800)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1		50.0000	-41.28	14.69	-26.59	-13.00	-13.59	peak			
2	*	845.6250	14.20	3.99	18.19	-13.00	31.19	peak			Main frequency

*:Maximum data x:Over limit !:over margin ●Reference Only

File :Raymond103(CH4233) Data :#3 Date: 2008/4/28 Time: 下午 02:46:48



Site site#1 Polarization: ***Conducted po*** Temperature: 26 ℃

Limit: FCC Part 22 conducted(9k-12.75G) Power: AC 110V/60Hz Humidity: 55 %

EUT: Distance:

M/N: Raymond103

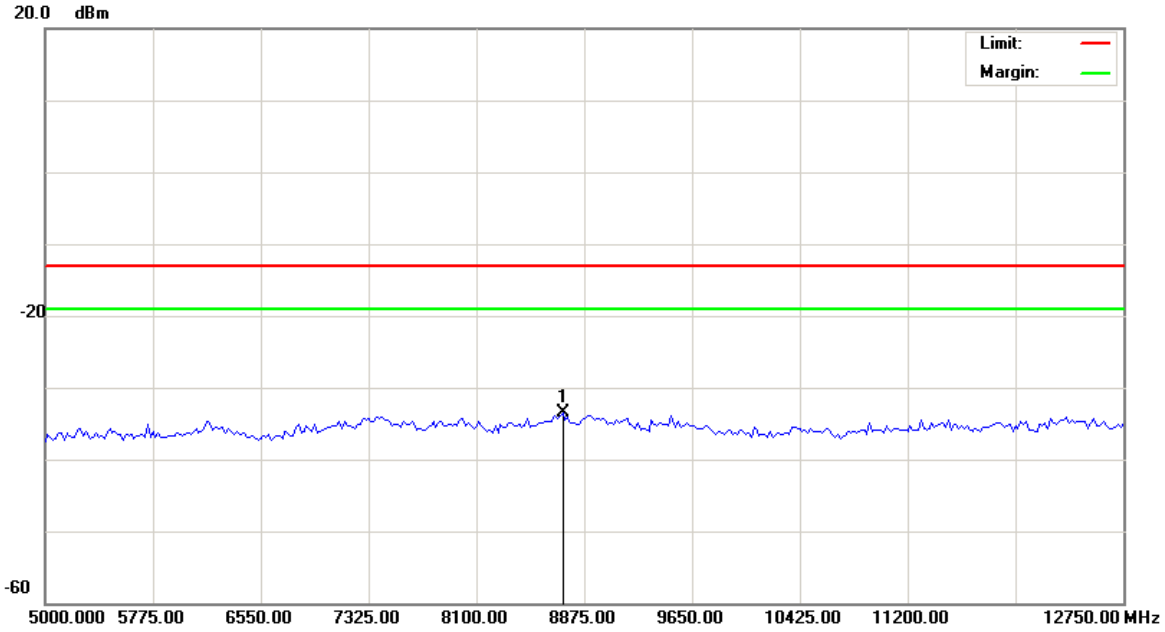
Mode:

Note: CH4233(846.5MHz)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	2880.000	-37.25	4.66	-32.59	-13.00	-19.59	peak			

*:Maximum data x:Over limit !:over margin ●Reference Only

File :Raymond103(CH4233) Data :#4 Date: 2008/4/28 Time: 下午 02:47:09



Site site#1
Limit: FCC Part 22 conducted(9k-12.75G)
EUT:
M/N: Raymond103
Mode:
Note: CH4233(846.5MHz)

Polarization: ***Conducted po***
Power: AC 110V/60Hz
Distance:

Temperature: 26 ℃
Humidity: 55 %

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	8720.000	-38.75	5.18	-33.57	-13.00	-20.57	peak			

*:Maximum data x:Over limit !:over margin ●Reference Only

4.5.4.4 WCDMA Band II Test Result

Applicant : Inventec Corporation

Model No : Pharos Traveler 117

EUT : PDA PHONE

Test Mode : WCDMA Band II (Low CH9262 / Middle CH9400 / High CH 9536)

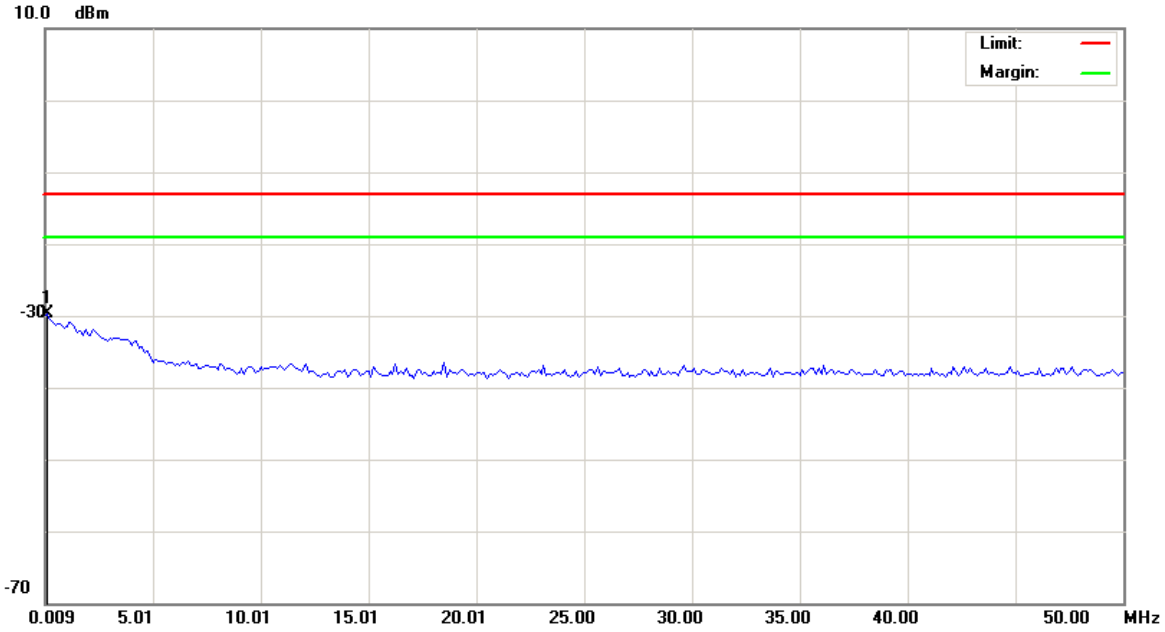
Test Date : 04/28/2008

Please refer to next pager of detail testing data.

Note: Amplitude= Reading Amplitude + Factor (Cable loss + Filter Amplitude= Insertion loss)

(Auto calculate in spectrum analyzer)

File :Raymond103(CH9262) Data :#1 Date: 2008/4/28 Time: 上午 11:57:53



Site site#1 Polarization: ***Conducted po*** Temperature: 26 ℃

Limit: FCC Part 24 conducted(9k-12.75G) Power: AC 110V/60Hz Humidity: 55 %

EUT: Distance:

M/N: Raymond103

Mode:

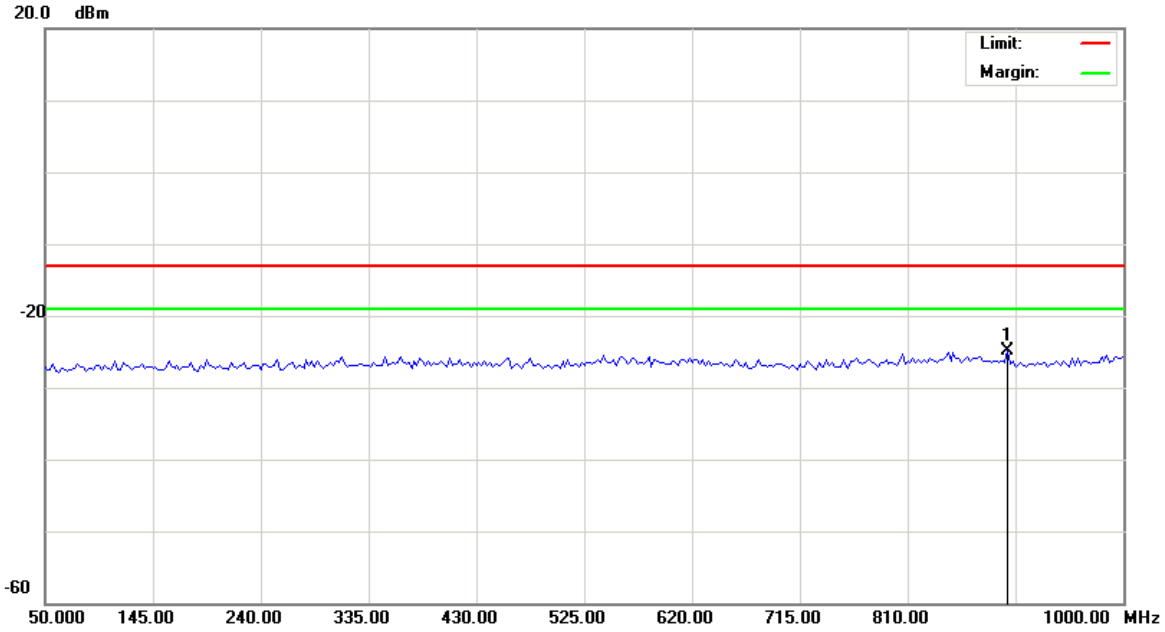
Note: CH9262(9662MHz)

加10db衰减器

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	0.1340	-42.15	12.48	-29.67	-13.00	-16.67	peak			

*:Maximum data x:Over limit !:over margin ●Reference Only

File :Raymond103(CH9262) Data :#2 Date: 2008/4/28 Time: 上午 11:58:14



Site site#1 Polarization: ***Conducted po*** Temperature: 26 ℃

Limit: FCC Part 24 conducted(9k-12.75G) Power: AC 110V/60Hz Humidity: 55 %

EUT: Distance:

M/N: Raymond103

Mode:

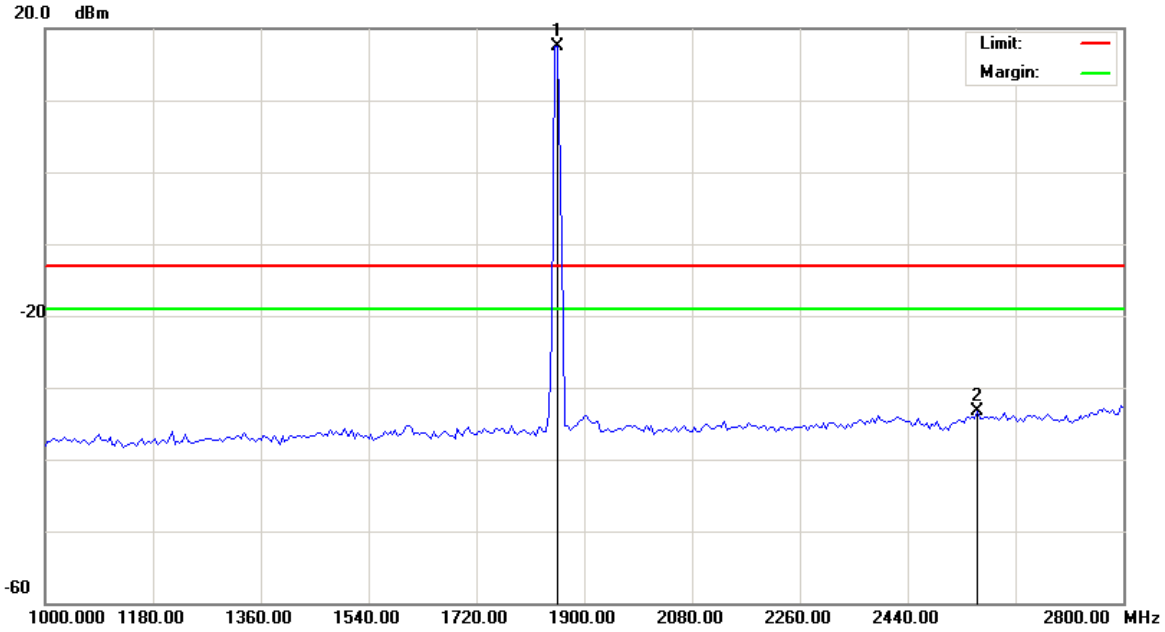
Note: CH9262(9662MHz)

加10db衰减器

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	897.8750	-38.18	13.25	-24.93	-13.00	-11.93	peak			

*:Maximum data x:Over limit !:over margin ●Reference Only

File :Raymond103(CH9262) Data :#3 Date: 2008/4/28 Time: 下午 02:20:10



Site site#1 Polarization: ***Conducted po*** Temperature: 26 ℃

Limit: FCC Part 24 conducted(9k-12.75G) Power: AC 110V/60Hz Humidity: 55 %

EUT: Distance:

M/N: Raymond103

Mode:

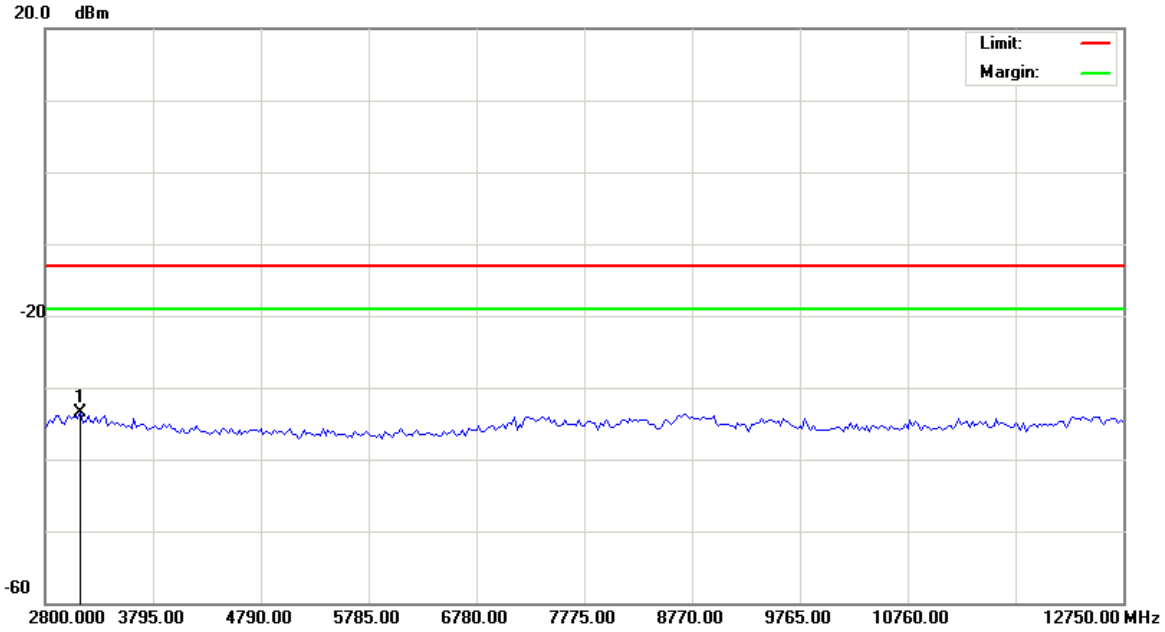
Note: CH9262(9662MHz)

加Notch(5TNF-1700)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	1855.000	13.27	4.29	17.56	-13.00	30.56	peak			Main frequency
2		2557.000	-38.60	5.27	-33.33	-13.00	-20.33	peak			

*:Maximum data x:Over limit !:over margin ●Reference Only

File :Raymond103(CH9262) Data :#4 Date: 2008/4/28 Time: 下午 03:02:23



Site site#1
Limit: FCC Part 24 conducted(9k-12.75G)
EUT:
M/N: Raymond103
Mode:
Note: CH9262(9662MHz)

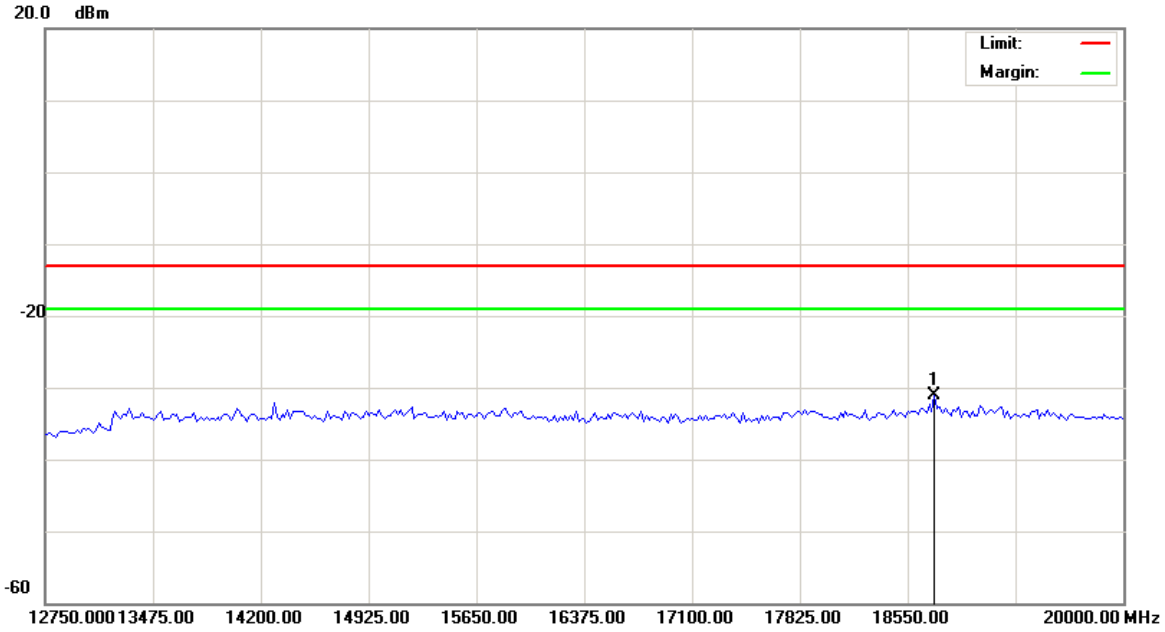
Polarization: ***Conducted po***
Power: AC 110V/60Hz
Distance:

Temperature: 26 ℃
Humidity: 55 %

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	3123.375	-38.82	5.30	-33.52	-13.00	-20.52	peak			

*:Maximum data x:Over limit !:over margin ●Reference Only

File :Raymond103(CH9262) Data :#5 Date: 2008/4/28 Time: 下午 03:02:44



Site site#1 Polarization: ***Conducted po*** Temperature: 26 ℃

Limit: FCC Part 24 conducted(9k-12.75G) Power: AC 110V/60Hz Humidity: 55 %

EUT: Distance:

M/N: Raymond103

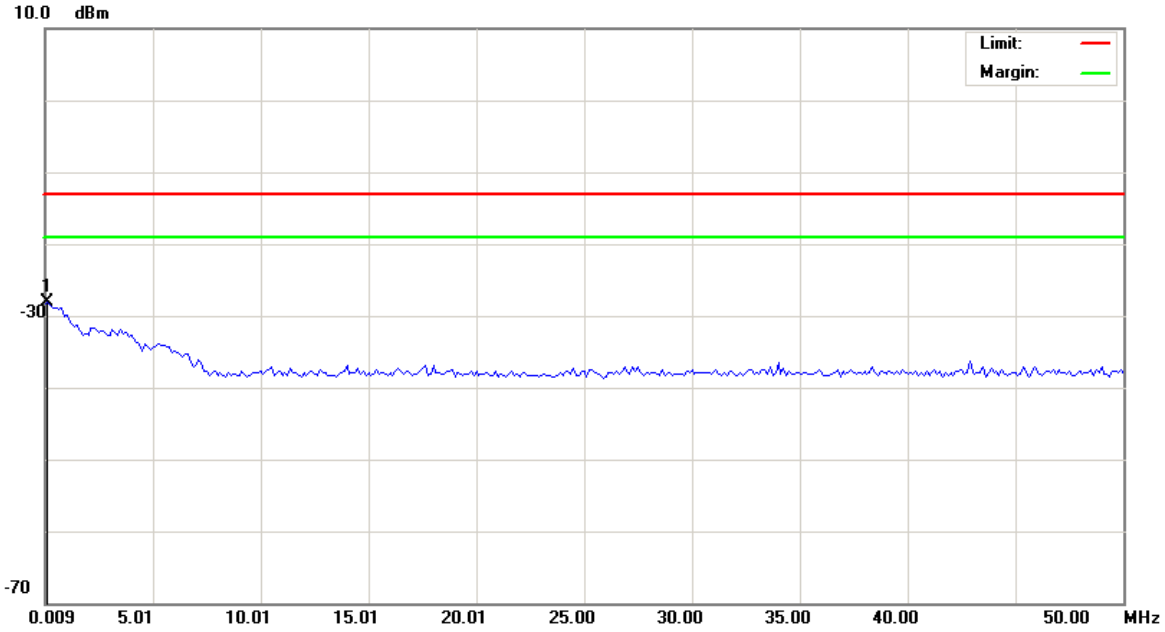
Mode:

Note: CH9262(9662MHz)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	18731.25	-38.25	7.08	-31.17	-13.00	-18.17	peak			

*:Maximum data x:Over limit !:over margin ●Reference Only

File :Raymond103(CH9400) Data :#1 Date: 2008/4/28 Time: 下午 12:00:04



Site site#1 Polarization: ***Conducted po*** Temperature: 26 ℃

Limit: FCC Part 24 conducted(9k-12.75G) Power: AC 110V/60Hz Humidity: 55 %

EUT: Distance:

M/N: Raymond103

Mode:

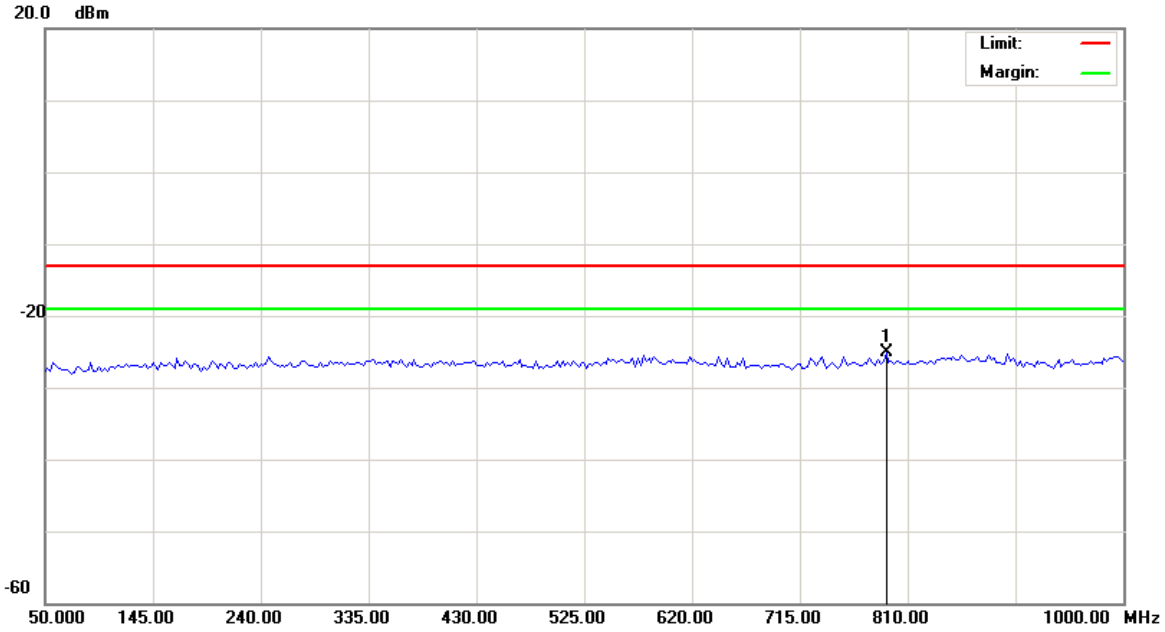
Note: CH9400(9800MHz)

加10db衰减器

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	0.1340	-40.65	12.48	-28.17	-13.00	-15.17	peak			

*:Maximum data x:Over limit !:over margin ●Reference Only

File :Raymond103(CH9400) Data :#2 Date: 2008/4/28 Time: 下午 12:00:25



Site site#1 Polarization: ***Conducted po*** Temperature: 26 ℃

Limit: FCC Part 24 conducted(9k-12.75G) Power: AC 110V/60Hz Humidity: 55 %

EUT: Distance:

M/N: Raymond103

Mode:

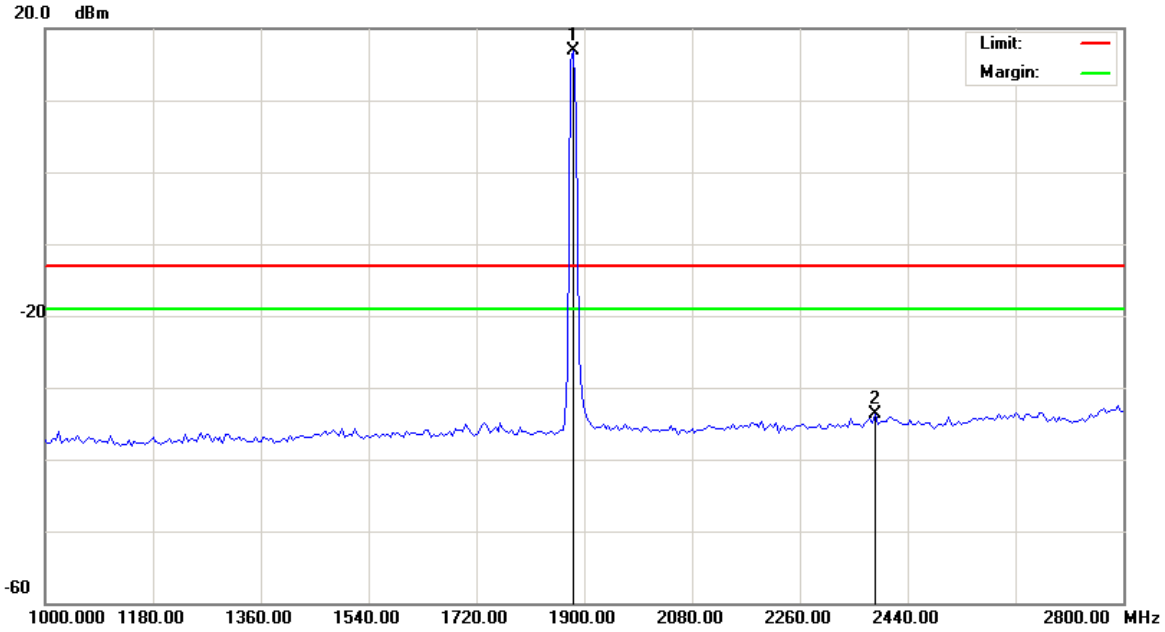
Note: CH9400(9800MHz)

加10db衰减器

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	791.0000	-38.34	13.15	-25.19	-13.00	-12.19	peak			

*:Maximum data x:Over limit !:over margin ●Reference Only

File :Raymond103(CH9400) Data :#3 Date: 2008/4/28 Time: 下午 02:22:48



Site site#1 Polarization: ***Conducted po*** Temperature: 26 ℃

Limit: FCC Part 24 conducted(9k-12.75G) Power: AC 110V/60Hz Humidity: 55 %

EUT: Distance:

M/N: Raymond103

Mode:

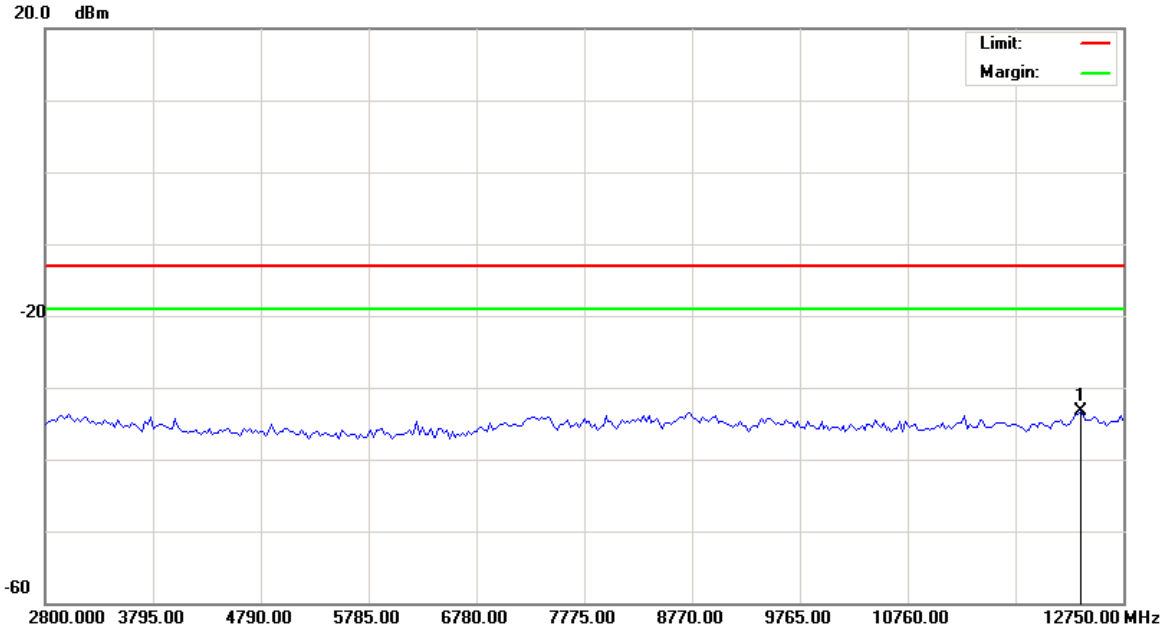
Note: CH9400(9800MHz)

加Notch(5TNF-1700)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	1882.000	12.17	4.83	17.00	-13.00	30.00	peak			Main frequency
2		2386.000	-38.76	4.99	-33.77	-13.00	-20.77	peak			

*:Maximum data x:Over limit !:over margin ●Reference Only

File :Raymond103(CH9400) Data :#4 Date: 2008/4/28 Time: 下午 03:04:38



Site site#1 Polarization: ***Conducted po*** Temperature: 26 ℃

Limit: FCC Part 24 conducted(9k-12.75G) Power: AC 110V/60Hz Humidity: 55 %

EUT: Distance:

M/N: Raymond103

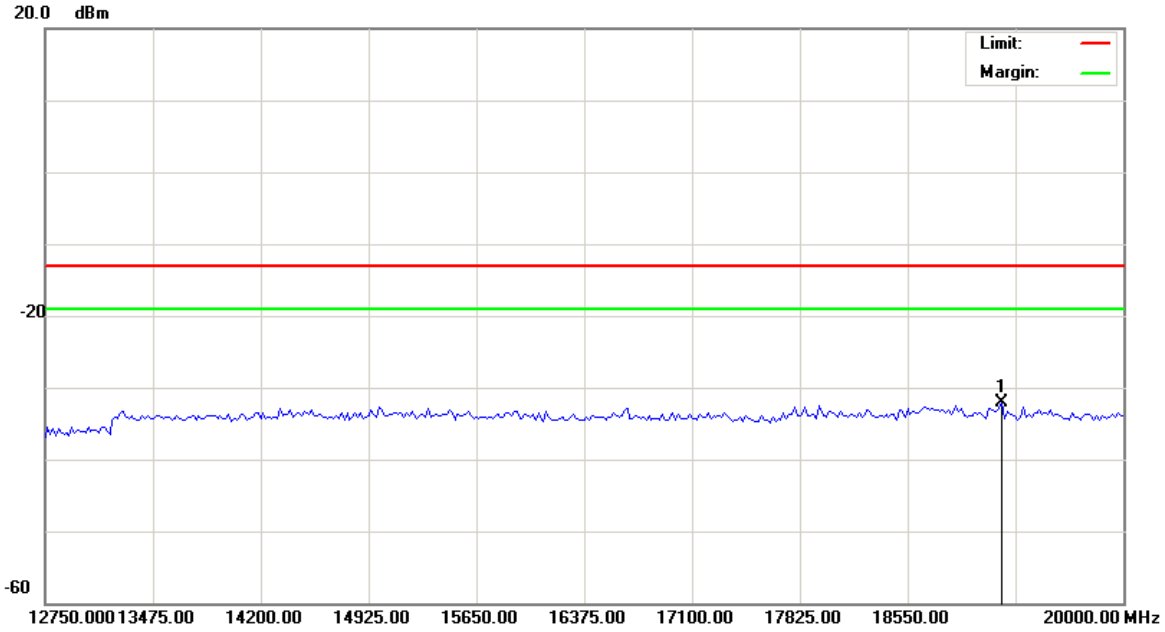
Mode:

Note: CH9400(9800MHz)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	12352.00	-38.43	5.17	-33.26	-13.00	-20.26	peak			

*:Maximum data x:Over limit !:over margin ●Reference Only

File :Raymond103(CH9400) Data :#5 Date: 2008/4/28 Time: 下午 03:04:59



Site site#1 Polarization: ***Conducted po*** Temperature: 26 ℃

Limit: FCC Part 24 conducted(9k-12.75G) Power: AC 110V/60Hz Humidity: 55 %

EUT: Distance:

M/N: Raymond103

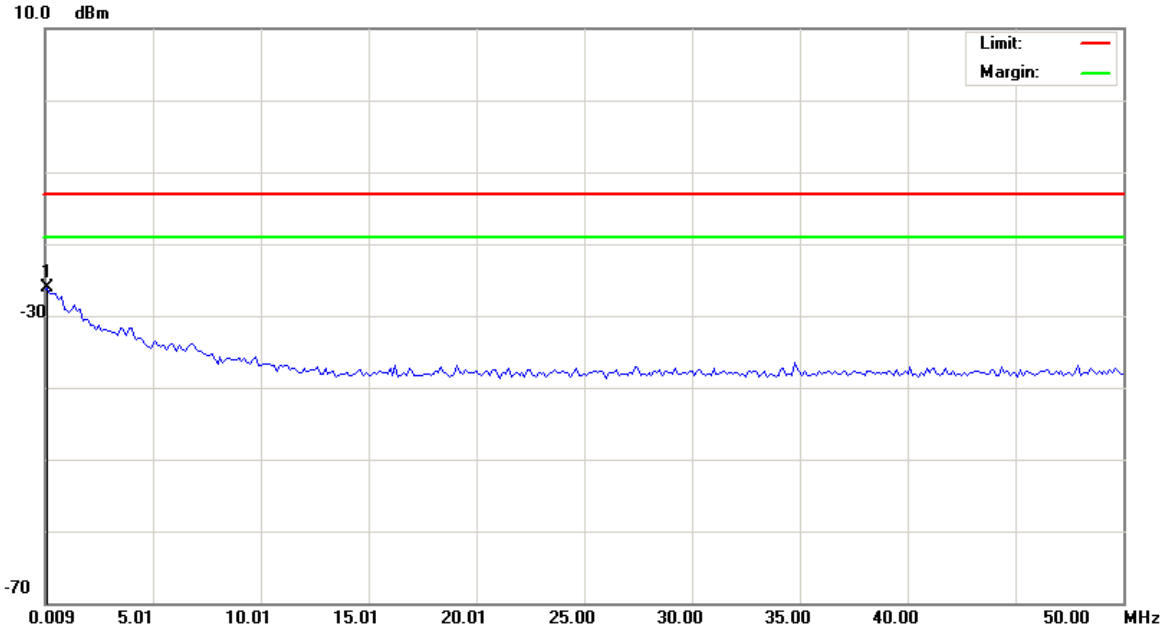
Mode:

Note: CH9400(9800MHz)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	19184.37	-39.40	7.21	-32.19	-13.00	-19.19	peak			

*:Maximum data x:Over limit !:over margin ●Reference Only

File :Raymond103(CH9538) Data :#1 Date: 2008/4/28 Time: 下午 12:03:31



Site site#1 Polarization: ***Conducted po*** Temperature: 26 ℃

Limit: FCC Part 24 conducted(9k-12.75G) Power: AC 110V/60Hz Humidity: 55 %

EUT: Distance:

M/N: Raymond103

Mode:

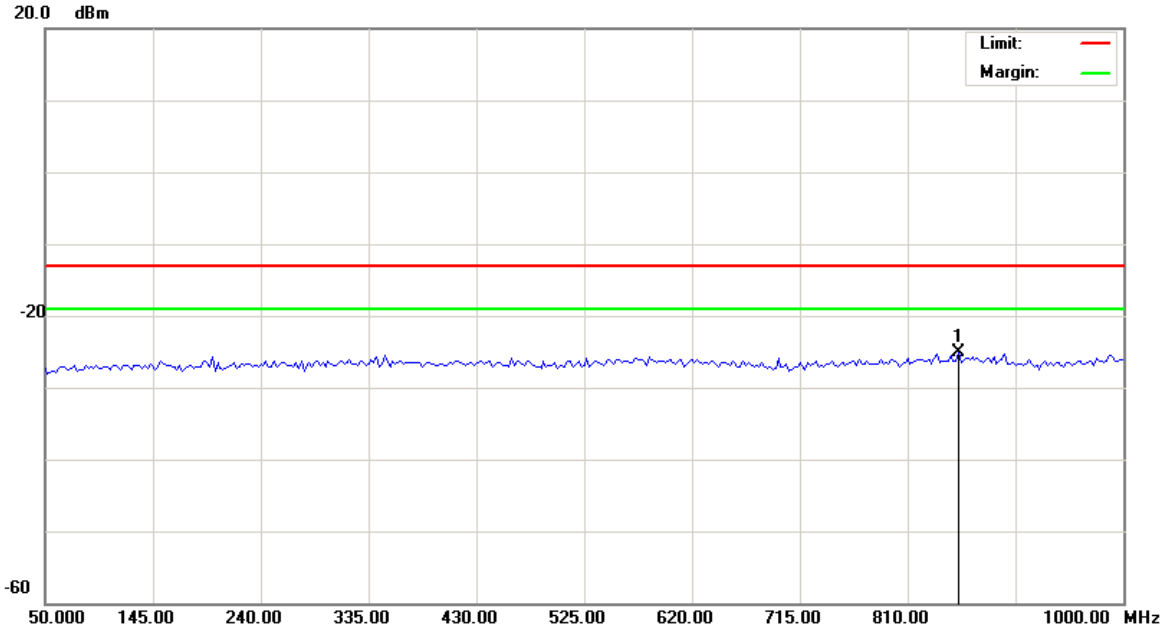
Note: CH9538(1907.6MHz)

加10db衰减器

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	0.1340	-38.65	12.48	-26.17	-13.00	-13.17	peak			

*:Maximum data x:Over limit !:over margin ●Reference Only

File :Raymond103(CH9538) Data :#2 Date: 2008/4/28 Time: 下午 12:03:52



Site site#1 Polarization: ***Conducted po*** Temperature: 26 ℃

Limit: FCC Part 24 conducted(9k-12.75G) Power: AC 110V/60Hz Humidity: 55 %

EUT: Distance:

M/N: Raymond103

Mode:

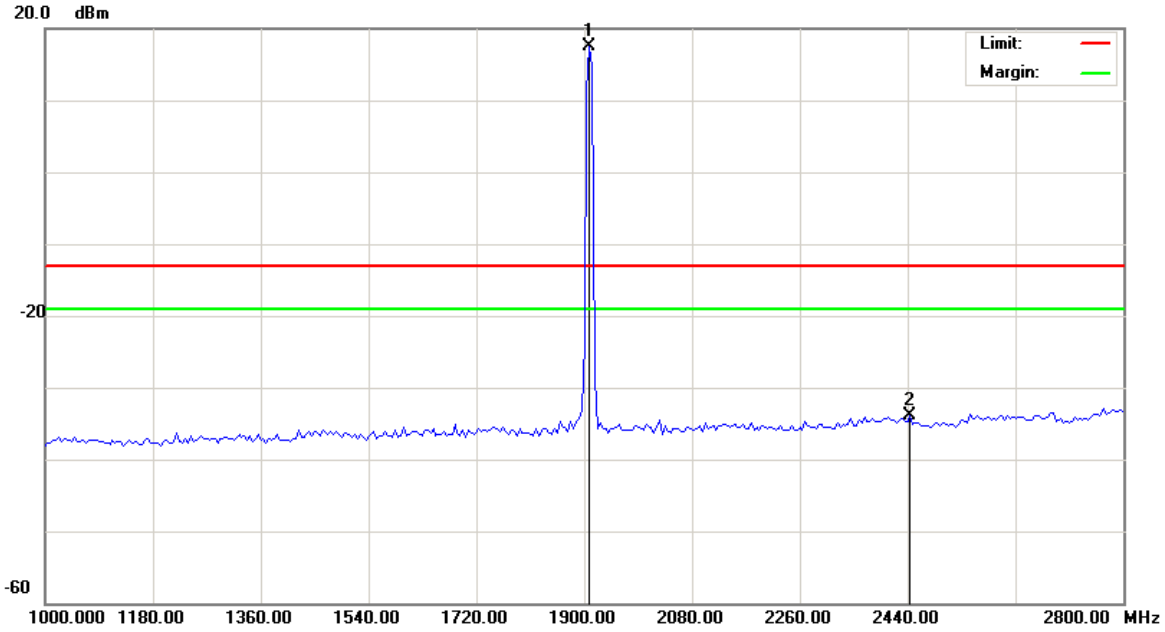
Note: CH9538(1907.6MHz)

加10db衰减器

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	855.1250	-38.42	13.23	-25.19	-13.00	-12.19	peak			

*:Maximum data x:Over limit !:over margin ●Reference Only

File :Raymond103(CH9538) Data :#3 Date: 2008/4/28 Time: 下午 02:25:33



Site site#1 Polarization: ***Conducted po*** Temperature: 26 ℃

Limit: FCC Part 24 conducted(9k-12.75G) Power: AC 110V/60Hz Humidity: 55 %

EUT: Distance:

M/N: Raymond103

Mode:

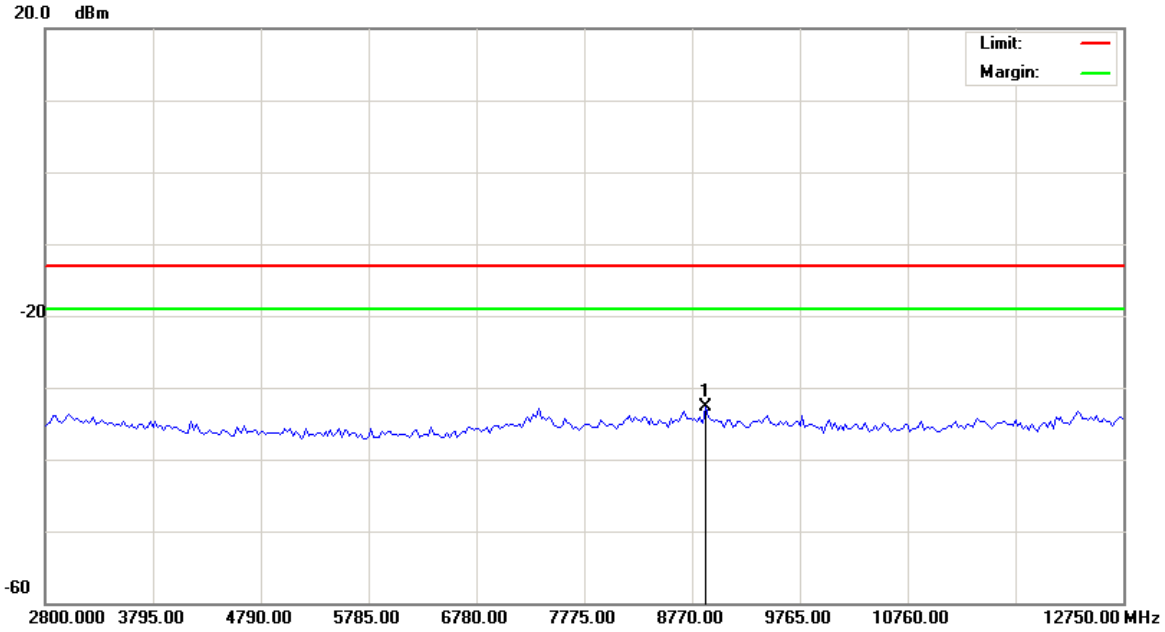
Note: CH9538(1907.6MHz)

加Notch(5TNF-1700)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	1909.000	11.71	5.80	17.51	-13.00	30.51	peak			Main frequency
2		2444.500	-38.87	4.97	-33.90	-13.00	-20.90	peak			

*:Maximum data x:Over limit !:over margin ●Reference Only

File :Raymond103(CH9538) Data :#4 Date: 2008/4/28 Time: 下午 03:05:41



Site site#1 Polarization: ***Conducted po*** Temperature: 26 ℃

Limit: FCC Part 24 conducted(9k-12.75G) Power: AC 110V/60Hz Humidity: 55 %

EUT: Distance:

M/N: Raymond103

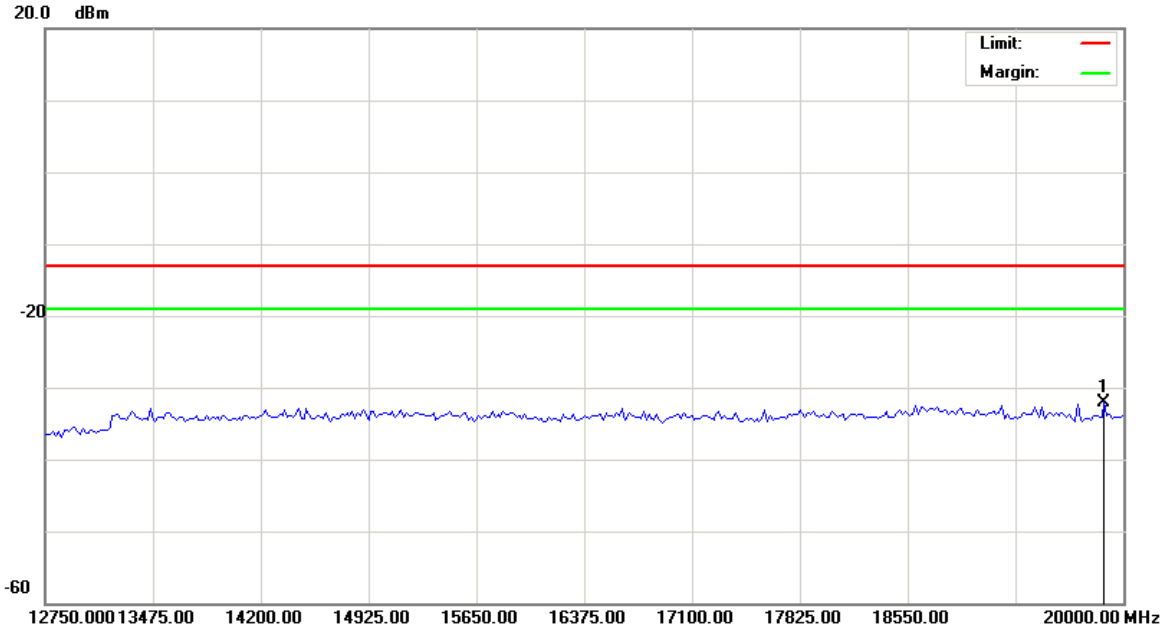
Mode:

Note: CH9538(1907.6MHz)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	8894.375	-38.15	5.46	-32.69	-13.00	-19.69	peak			

*:Maximum data x:Over limit !:over margin ●Reference Only

File :Raymond103(CH9538) Data :#5 Date: 2008/4/28 Time: 下午 03:06:03



Site site#1 Polarization: ***Conducted po*** Temperature: 26 ℃

Limit: FCC Part 24 conducted(9k-12.75G) Power: AC 110V/60Hz Humidity: 55 %

EUT: Distance:

M/N: Raymond103

Mode:

Note: CH9538(1907.6MHz)

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		Antenna Height	Table Degree	
		MHz	dBm	dB	dBm	dBm	dB	Detector	cm	degree	Comment
1	*	19873.12	-39.40	7.40	-32.00	-13.00	-19.00	peak			

*:Maximum data x:Over limit !:over margin ●Reference Only

4.6 Field Strength of Spurious Radiation

Equivalent isotropic radiated Power Measurements by substitution method according to ANSI/TIA/EIA-603-A .

4.6.1 Measurement Instruments

As described in chapter 5 of this test report.

4.6.2 Test Procedure

The measurement is made according to ANSI/TIA-603-C-2004 as follows:
The equipment under test is placed inside the semi-anechoic chamber on a wooden table at the turntable center. For each spurious frequency, the antenna mast is raised and lowered from 1 to 4 meters and the turntable is rotated 360 degrees to obtain a maximum reading on the spectrum analyzer. This is repeated for both horizontal and vertical polarizations of the receive antenna.

The equipment under test is then replaced with a substitution antenna fed by a signal generator. With the signal generator tuned to a particular spurious frequency, the antenna mast is raised and lowered from 1 to 4 meters to obtain a maximum reading at the spectrum analyzer. The output of the signal generator is then adjusted until a reading identical to that obtained with the actual transmitter is achieved.

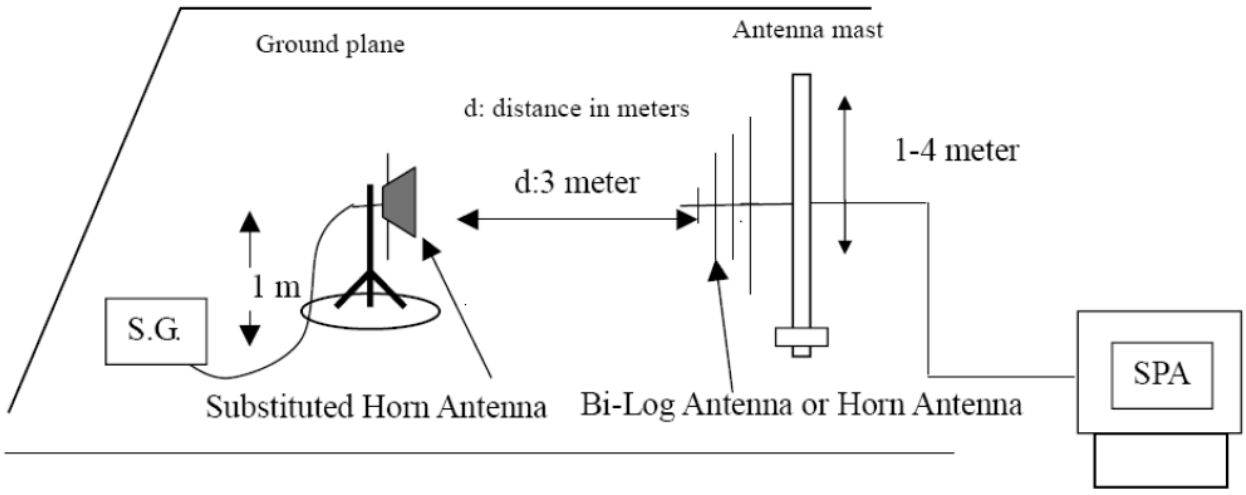
The power in dBm of each spurious emission is calculated by correcting the signal generator level for cable loss and gain of the substitution antenna referenced to a dipole. A fully charged battery was used for the supply voltage.

The settings of the receiver were as follows:

Units	dBm
Resolution Bandwidth	1 MHz
Video Bandwidth	Auto
Sweep Time	Auto

4.6.3 Test Setup Layout

Substituted Method Test Set-up



4.6.4 Test Result

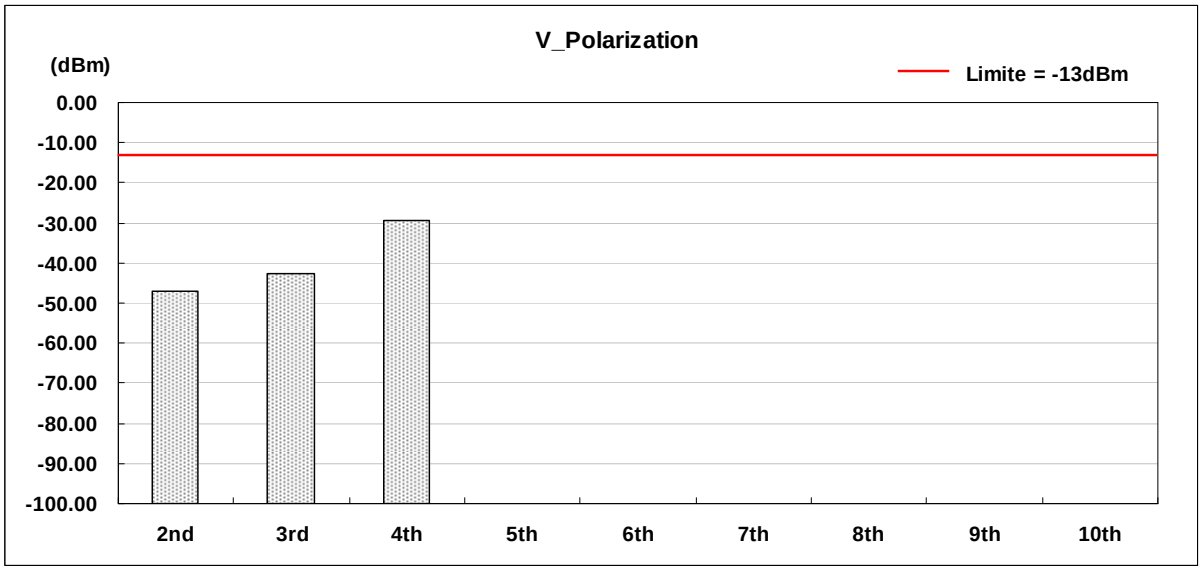
4.6.4.1 GSM 850 Test Result

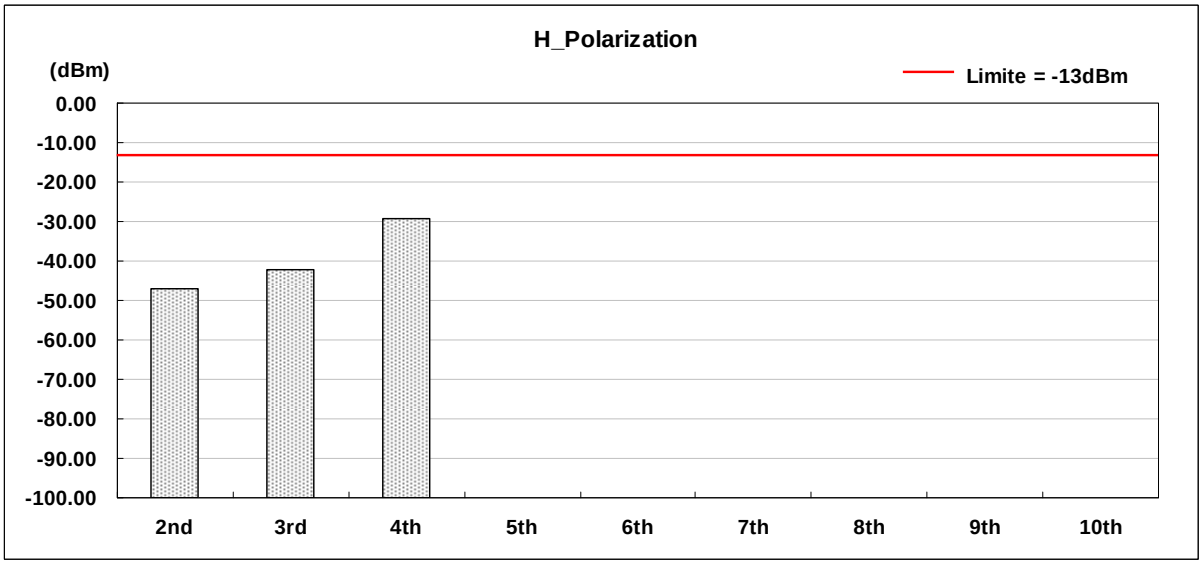
Applicant : Inventec Corporation
Model No : Pharos Traveler 117
EUT : PDA PHONE
Test Mode : GSM 850 (Low CH128)
Test Date : 11/22/2008

Harmonic	Frequency (MHz)	Polarization	FCC Max. Limit	S.G Power	Substitution Antenna Gain	Cable Loss	Peak Output Power
			(dBm)	(dBm)	(dBi)	(dBm)	(dBm)
2nd	1648.8	V	-13	-57.27	10.72	0.56	-47.11
3rd	2473.2	V	-13	-52.58	10.66	0.62	-42.54
4th	3297.6	V	-13	-39.31	10.78	0.74	-29.27
5th	4122.0	V	-13	*	*	*	*
6th	4946.4	V	-13	*	*	*	*
7th	5770.8	V	-13	*	*	*	*
8th	6595.2	V	-13	*	*	*	*
9th	7419.6	V	-13	*	*	*	*
10th	8244.0	V	-13	*	*	*	*
2nd	1648.8	H	-13	-57.30	10.72	0.56	-47.14
3rd	2473.2	H	-13	-52.15	10.66	0.62	-42.11
4th	3297.6	H	-13	-39.47	10.78	0.74	-29.43
5th	4122.0	H	-13	*	*	*	*
6th	4946.4	H	-13	*	*	*	*
7th	5770.8	H	-13	*	*	*	*
8th	6595.2	H	-13	*	*	*	*
9th	7419.6	H	-13	*	*	*	*
10th	8244.0	H	-13	*	*	*	*

Notes:

1. * Indicates the spurious emission could not be detected due to noise limitations or ambients.
2. Each emission reported reflects the highest absolute level at the specific harmonic for the low, mid, and high channels at maximum power.
3. The Spectrum was investigated from 30 MHz to the tenth harmonic of the fundamental.
4. ERP = S.G Power (dBm) + Substitution Antenna Gain (dBd) - Cable Loss (dB)
   ERP = S.G Power (dBm) + Substitution Antenna Gain (dBi) - Cable Loss (dB)





Applicant : Inventec Corporation

Model No : Pharos Traveler 117

EUT : PDA PHONE

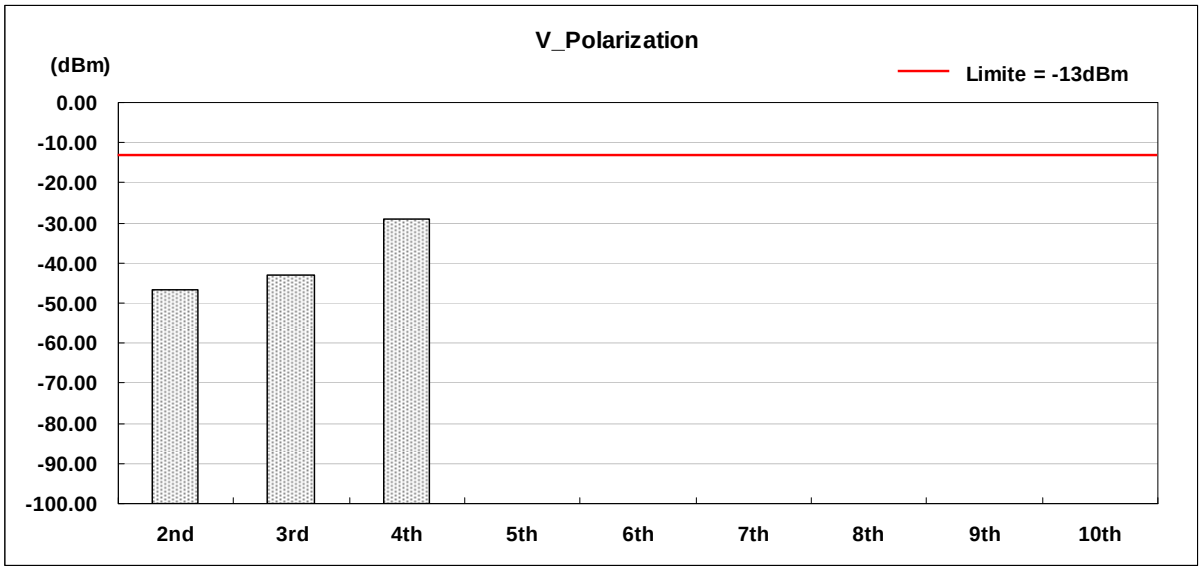
Test Mode : GSM 850 (Middle CH190)

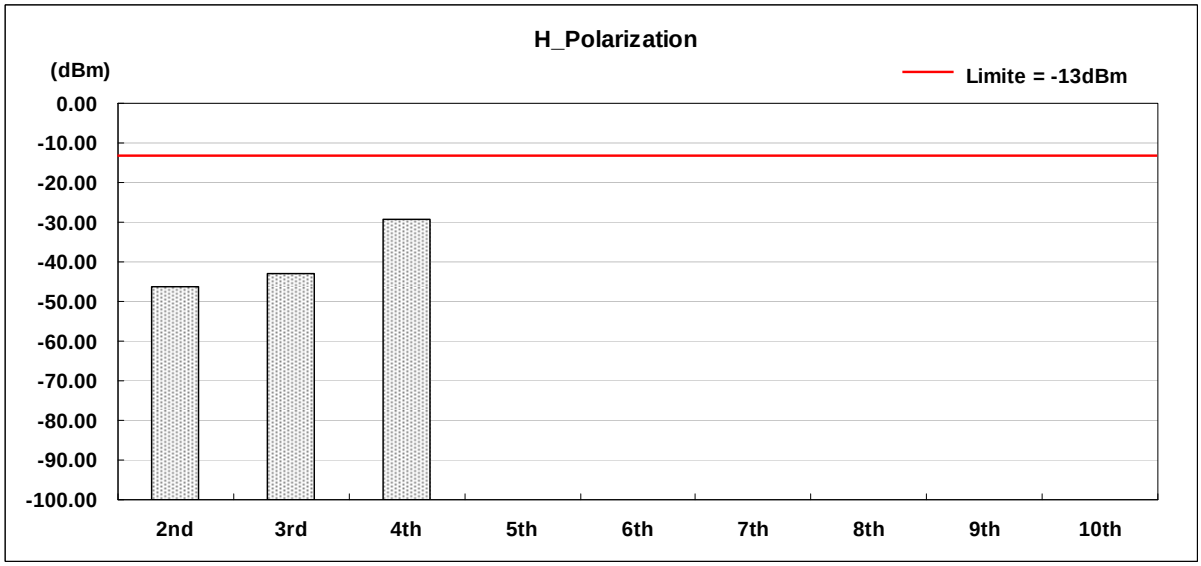
Test Date : 11/22/2008

Harmonic	Frequency (MHz)	Polarization	FCC Max. Limit	S.G Power	Substitution Antenna Gain	Cable Loss	Peak Output Power
			(dBm)	(dBm)	(dBi)	(dBm)	(dBm)
2nd	1673.2	V	-13	-56.73	10.72	0.56	-46.57
3rd	2509.8	V	-13	-53.22	10.66	0.62	-43.18
4th	3346.4	V	-13	-39.22	10.78	0.74	-29.18
5th	4183.0	V	-13	*	*	*	*
6th	5019.6	V	-13	*	*	*	*
7th	5856.2	V	-13	*	*	*	*
8th	6692.8	V	-13	*	*	*	*
9th	7529.4	V	-13	*	*	*	*
10th	8366.0	V	-13	*	*	*	*
2nd	1673.2	H	-13	-56.51	10.72	0.56	-46.35
3rd	2509.8	H	-13	-53.15	10.66	0.62	-43.11
4th	3346.4	H	-13	-39.46	10.78	0.74	-29.42
5th	4183.0	H	-13	*	*	*	*
6th	5019.6	H	-13	*	*	*	*
7th	5856.2	H	-13	*	*	*	*
8th	6692.8	H	-13	*	*	*	*
9th	7529.4	H	-13	*	*	*	*
10th	8366.0	H	-13	*	*	*	*

Notes:

1. * Indicates the spurious emission could not be detected due to noise limitations or ambients.
2. Each emission reported reflects the highest absolute level at the specific harmonic for the low, mid, and high channels at maximum power.
3. The Spectrum was investigated from 30 MHz to the tenth harmonic of the fundamental.
4. ERP = S.G Power (dBm) + Substitution Antenna Gain (dBd) - Cable Loss (dB)
   ERP = S.G Power (dBm) + Substitution Antenna Gain (dBi) - Cable Loss (dB)





Applicant : Inventec Corporation

Model No : Pharos Traveler 117

EUT : PDA PHONE

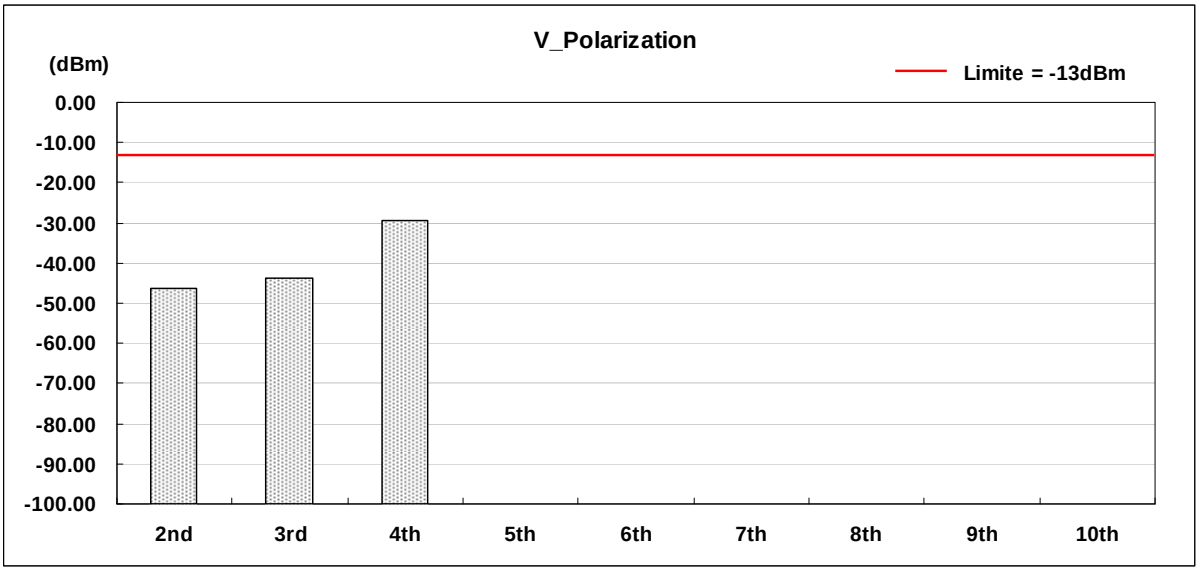
Test Mode : GSM 850 (High CH 251)

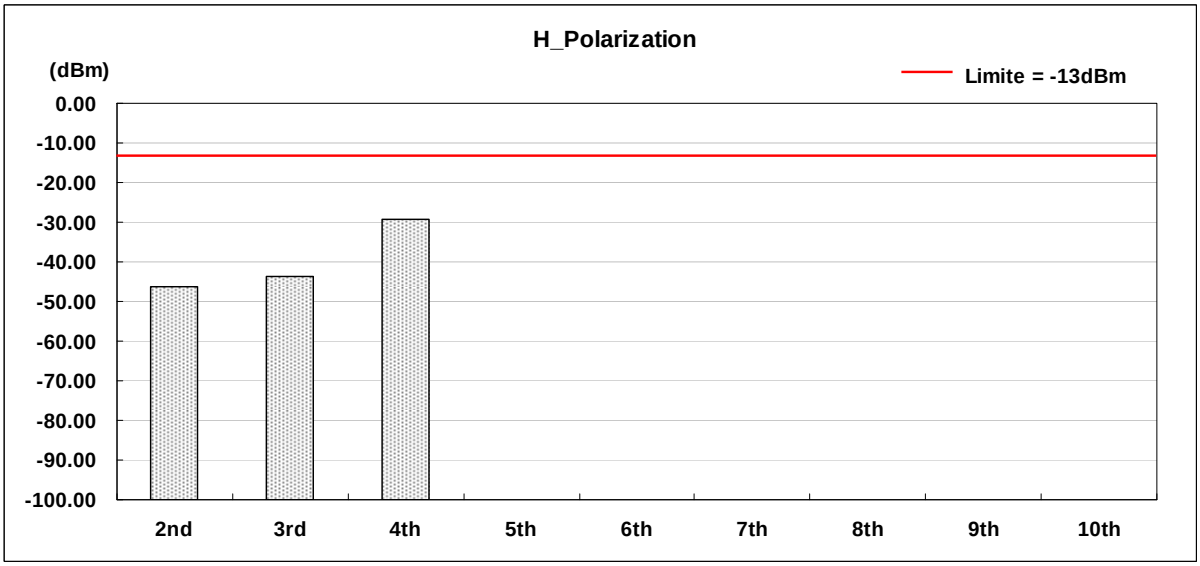
Test Date : 11/22/2008

Harmonic	Frequency (MHz)	Polarization	FCC Max. Limit	S.G Power	Substitution Antenna Gain	Cable Loss	Peak Output Power
			(dBm)	(dBm)	(dBi)	(dBm)	(dBm)
2nd	1697.6	V	-13	-56.61	10.72	0.56	-46.45
3rd	2546.4	V	-13	-53.75	10.66	0.62	-43.71
4th	3395.2	V	-13	-39.51	10.78	0.74	-29.47
5th	4244.0	V	-13	*	*	*	*
6th	5092.8	V	-13	*	*	*	*
7th	5941.6	V	-13	*	*	*	*
8th	6790.4	V	-13	*	*	*	*
9th	7639.2	V	-13	*	*	*	*
10th	8488.0	V	-13	*	*	*	*
2nd	1697.6	H	-13	-56.62	10.72	0.56	-46.46
3rd	2546.4	H	-13	-53.59	10.66	0.62	-43.55
4th	3395.2	H	-13	-39.48	10.78	0.74	-29.44
5th	4244.0	H	-13	*	*	*	*
6th	5092.8	H	-13	*	*	*	*
7th	5941.6	H	-13	*	*	*	*
8th	6790.4	H	-13	*	*	*	*
9th	7639.2	H	-13	*	*	*	*
10th	8488.0	H	-13	*	*	*	*

Notes:

1. * Indicates the spurious emission could not be detected due to noise limitations or ambients.
2. Each emission reported reflects the highest absolute level at the specific harmonic for the low, mid, and high channels at maximum power.
3. The Spectrum was investigated from 30 MHz to the tenth harmonic of the fundamental.
4. ERP = S.G Power (dBm) + Substitution Antenna Gain (dBd) - Cable Loss (dB)
   ERP = S.G Power (dBm) + Substitution Antenna Gain (dBi) - Cable Loss (dB)





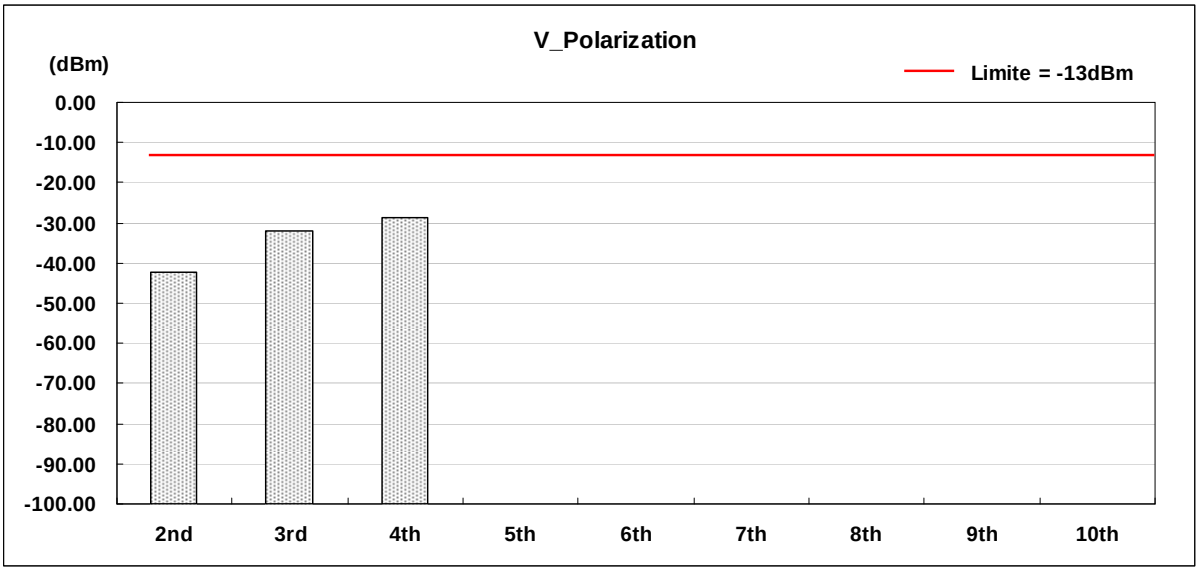
4.6.4.2 PCS 1900 Test Result

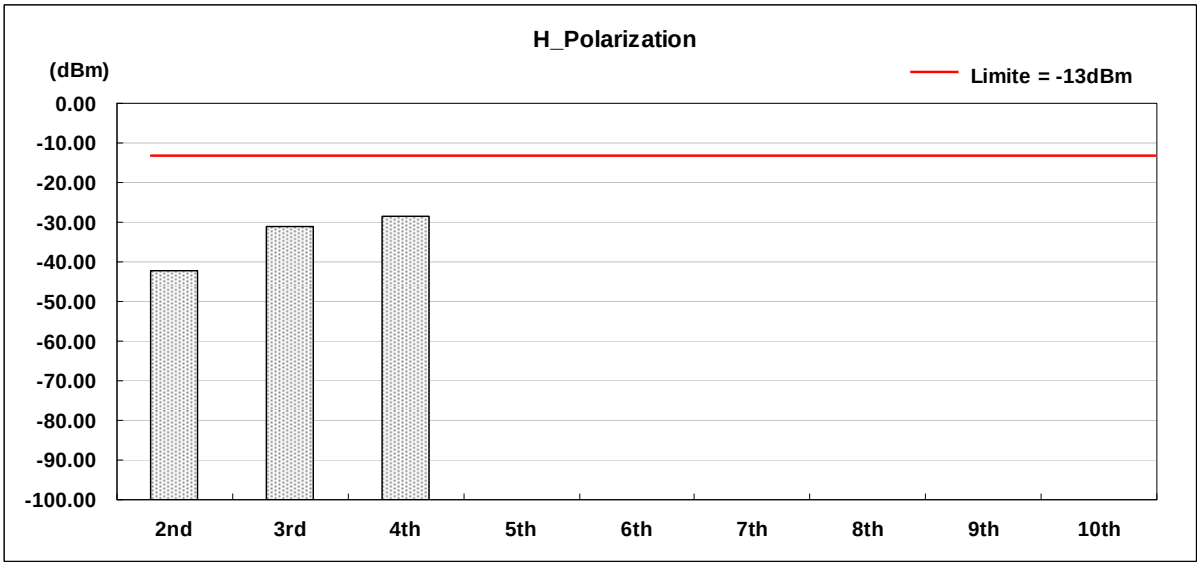
Applicant : Inventec Corporation
Model No : Pharos Traveler 117
EUT : PDA PHONE
Test Mode : PCS 1900 (Low CH512)
Test Date : 11/22/2008

Harmonic	Frequency (MHz)	Polarization	FCC Max. Limit	S.G Power	Substitution Antenna Gain	Cable Loss	Peak Output Power
			(dBm)	(dBm)	(dBi)	(dBm)	(dBm)
2nd	3700.4	V	-13	-52.52	10.72	0.56	-42.36
3rd	5550.6	V	-13	-41.90	10.66	0.62	-31.86
4th	7400.8	V	-13	-38.73	10.78	0.74	-28.69
5th	9251.0	V	-13	*	*	*	*
6th	11101.2	V	-13	*	*	*	*
7th	12951.4	V	-13	*	*	*	*
8th	14801.6	V	-13	*	*	*	*
9th	16651.8	V	-13	*	*	*	*
10th	18502.0	V	-13	*	*	*	*
2nd	3700.4	H	-13	-52.48	10.72	0.56	-42.32
3rd	5550.6	H	-13	-41.08	10.66	0.62	-31.04
4th	7400.8	H	-13	-38.57	10.78	0.74	-28.53
5th	9251.0	H	-13	*	*	*	*
6th	11101.2	H	-13	*	*	*	*
7th	12951.4	H	-13	*	*	*	*
8th	14801.6	H	-13	*	*	*	*
9th	16651.8	H	-13	*	*	*	*
10th	18502.0	H	-13	*	*	*	*

Notes:

1. * Indicates the spurious emission could not be detected due to noise limitations or ambients.
2. Each emission reported reflects the highest absolute level at the specific harmonic for the low, mid, and high channels at maximum power.
3. The Spectrum was investigated from 30 MHz to the tenth harmonic of the fundamental.
4. ERP = S.G Power (dBm) + Substitution Antenna Gain (dBd) - Cable Loss (dB)
   ERP = S.G Power (dBm) + Substitution Antenna Gain (dBi) - Cable Loss (dB)





Applicant : Inventec Corporation

Model No : Pharos Traveler 117

EUT : PDA PHONE

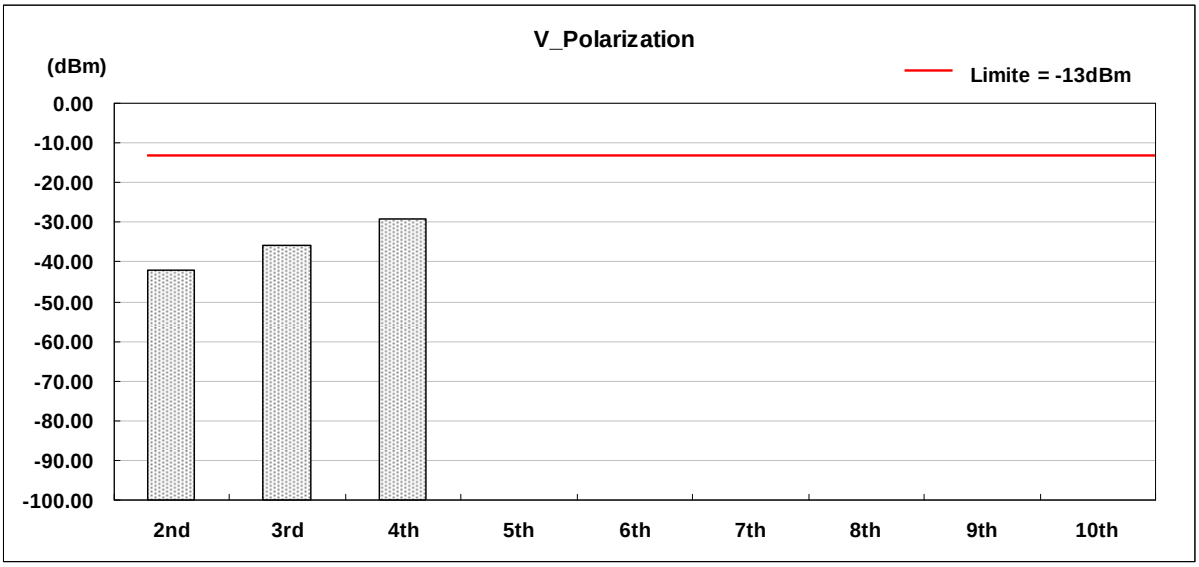
Test Mode : PCS 1900 (Middle CH661)

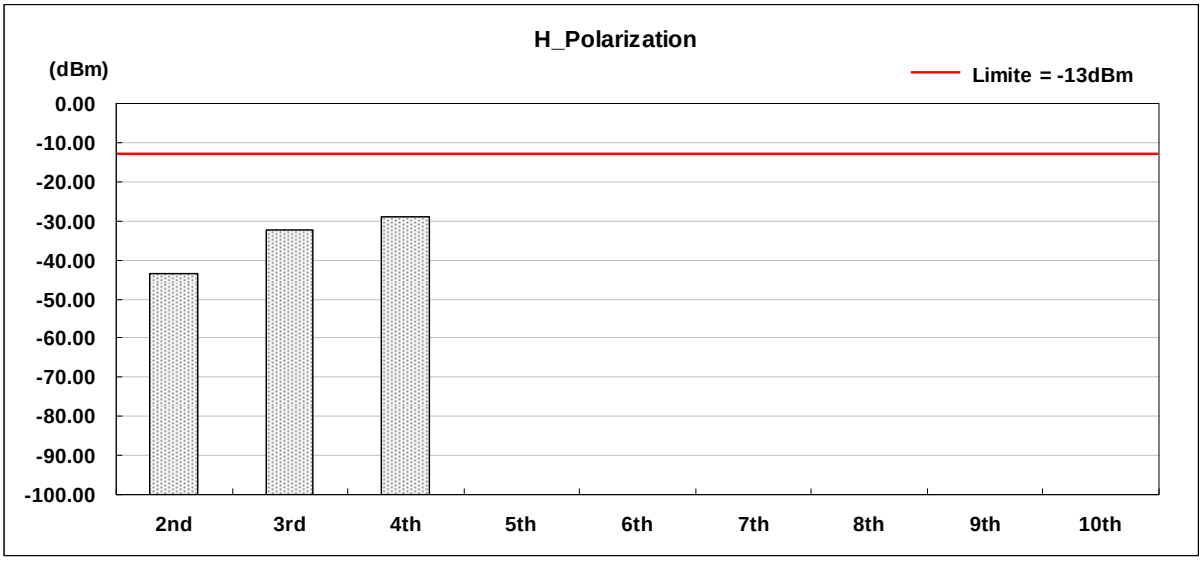
Test Date : 11/22/2008

Harmonic	Frequency (MHz)	Polarization	FCC Max. Limit	S.G Power	Substitution Antenna Gain	Cable Loss	Peak Output Power
			(dBm)	(dBm)	(dBi)	(dBm)	(dBm)
2nd	3760.0	V	-13	-52.10	10.72	0.56	-41.94
3rd	5640.0	V	-13	-45.81	10.66	0.62	-35.77
4th	7520.0	V	-13	-39.01	10.78	0.74	-28.97
5th	9400.0	V	-13	*	*	*	*
6th	11280.0	V	-13	*	*	*	*
7th	13160.0	V	-13	*	*	*	*
8th	15040.0	V	-13	*	*	*	*
9th	16920.0	V	-13	*	*	*	*
10th	18800.0	V	-13	*	*	*	*
2nd	3760.0	H	-13	-53.57	10.72	0.56	-43.41
3rd	5640.0	H	-13	-42.29	10.66	0.62	-32.25
4th	7520.0	H	-13	-39.09	10.78	0.74	-29.05
5th	9400.0	H	-13	*	*	*	*
6th	11280.0	H	-13	*	*	*	*
7th	13160.0	H	-13	*	*	*	*
8th	15040.0	H	-13	*	*	*	*
9th	16920.0	H	-13	*	*	*	*
10th	18800.0	H	-13	*	*	*	*

Notes:

1. * Indicates the spurious emission could not be detected due to noise limitations or ambients.
2. Each emission reported reflects the highest absolute level at the specific harmonic for the low, mid, and high channels at maximum power.
3. The Spectrum was investigated from 30 MHz to the tenth harmonic of the fundamental.
4. ERP = S.G Power (dBm) + Substitution Antenna Gain (dBd) - Cable Loss (dB)
   ERP = S.G Power (dBm) + Substitution Antenna Gain (dBi) - Cable Loss (dB)





Applicant : Inventec Corporation

Model No : Pharos Traveler 117

EUT : PDA PHONE

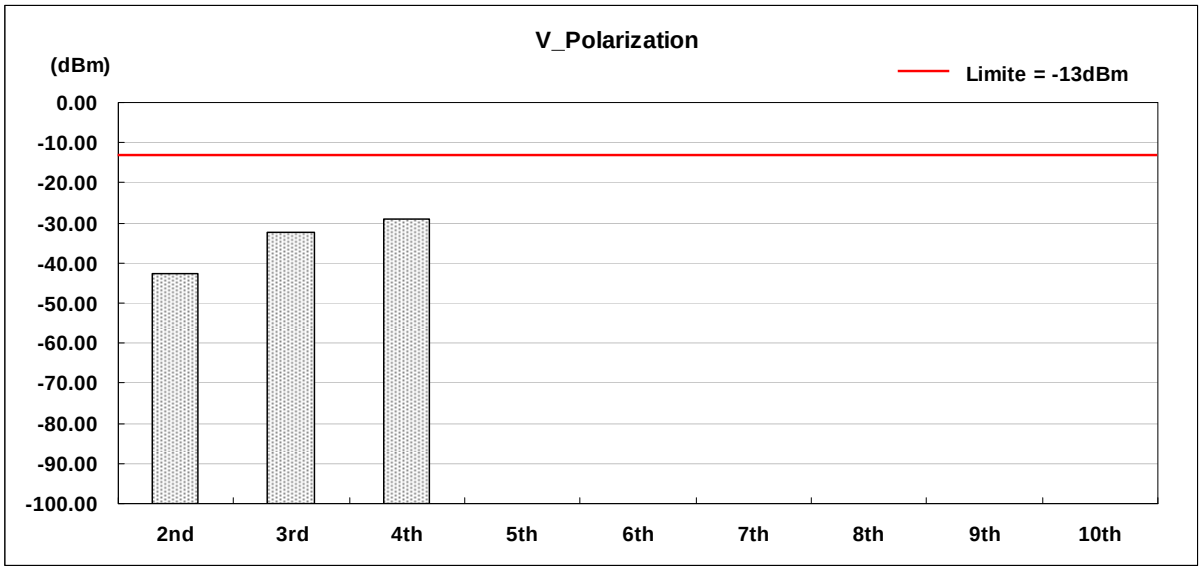
Test Mode : PCS 1900 (High CH 810)

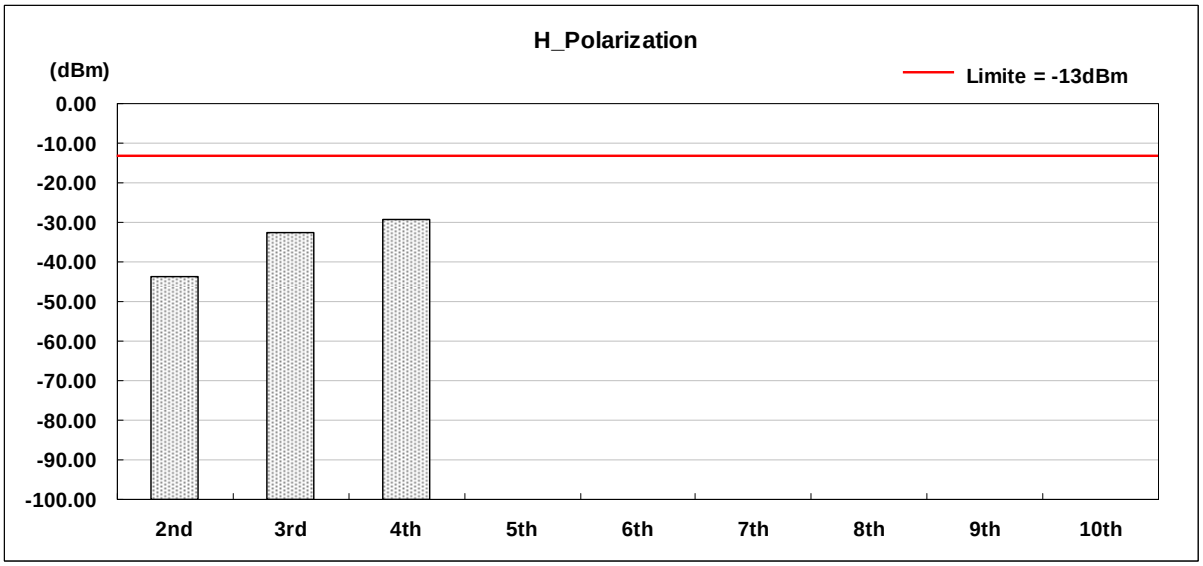
Test Date : 11/22/2008

Harmonic	Frequency (MHz)	Polarization	FCC Max. Limit	S.G Power	Substitution Antenna Gain	Cable Loss	Peak Output Power
			(dBm)	(dBm)	(dBi)	(dBm)	(dBm)
2nd	3819.6	V	-13	-52.74	10.72	0.56	-42.58
3rd	5729.4	V	-13	-42.52	10.66	0.62	-32.48
4th	7639.2	V	-13	-39.00	10.78	0.74	-28.96
5th	9549.0	V	-13	*	*	*	*
6th	11458.8	V	-13	*	*	*	*
7th	13368.6	V	-13	*	*	*	*
8th	15278.4	V	-13	*	*	*	*
9th	17188.2	V	-13	*	*	*	*
10th	19098.0	V	-13	*	*	*	*
2nd	3819.6	H	-13	-53.69	10.72	0.56	-43.53
3rd	5729.4	H	-13	-42.60	10.66	0.62	-32.56
4th	7639.2	H	-13	-39.21	10.78	0.74	-29.17
5th	9549.0	H	-13	*	*	*	*
6th	11458.8	H	-13	*	*	*	*
7th	13368.6	H	-13	*	*	*	*
8th	15278.4	H	-13	*	*	*	*
9th	17188.2	H	-13	*	*	*	*
10th	19098.0	H	-13	*	*	*	*

Notes:

1. * Indicates the spurious emission could not be detected due to noise limitations or ambients.
2. Each emission reported reflects the highest absolute level at the specific harmonic for the low, mid, and high channels at maximum power.
3. The Spectrum was investigated from 30 MHz to the tenth harmonic of the fundamental.
4. ERP = S.G Power (dBm) + Substitution Antenna Gain (dBd) - Cable Loss (dB)
   ERP = S.G Power (dBm) + Substitution Antenna Gain (dBi) - Cable Loss (dB)





4.6.4.3 WCDMA Band V Test Result

Applicant : Inventec Corporation

Model No : Pharos Traveler 117

EUT : PDA PHONE

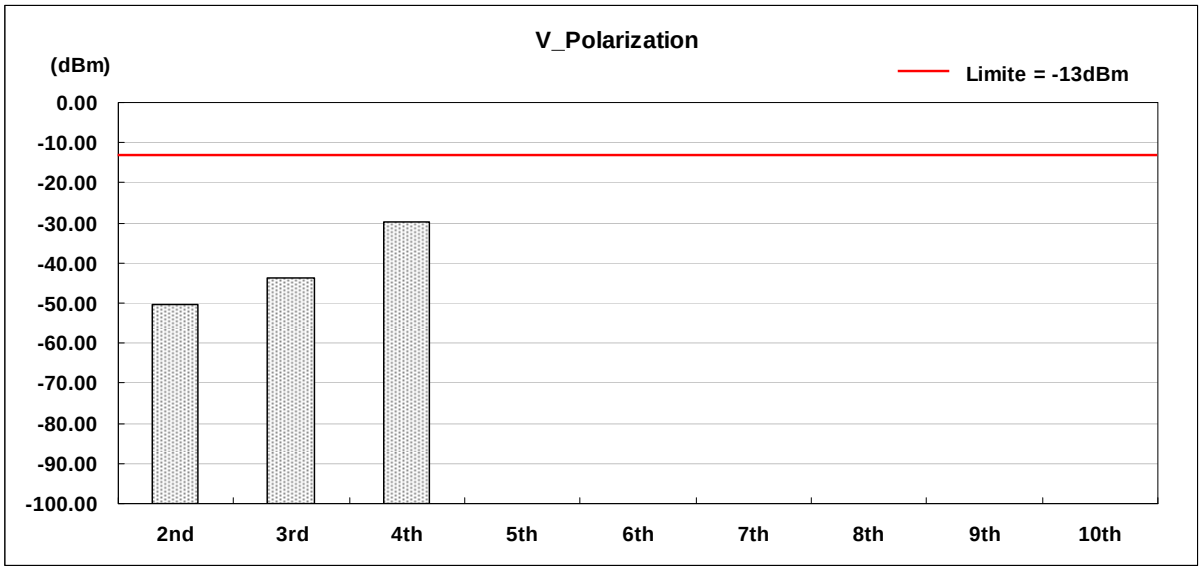
Test Mode : WCMDA Band V (Low CH4132)

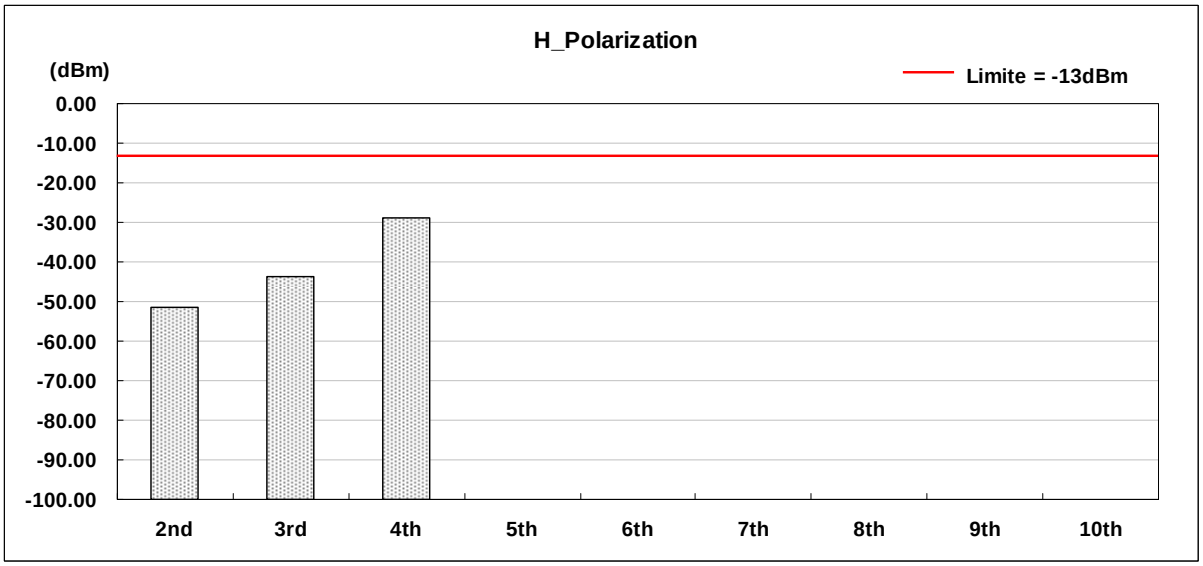
Test Date : 11/22/2008

Harmonic	Frequency (MHz)	Polarization	FCC Max. Limit	S.G Power	Substitution Antenna Gain	Cable Loss	Peak Output Power
			(dBm)	(dBm)	(dBi)	(dBm)	(dBm)
2nd	1652.8	V	-13	-60.43	10.74	0.59	-50.28
3rd	2479.2	V	-13	-53.78	10.68	0.63	-43.73
4th	3305.6	V	-13	-39.74	10.80	0.78	-29.72
5th	4132.0	V	-13	*	*	*	*
6th	4958.4	V	-13	*	*	*	*
7th	5784.8	V	-13	*	*	*	*
8th	6611.2	V	-13	*	*	*	*
9th	7437.6	V	-13	*	*	*	*
10th	8264.0	V	-13	*	*	*	*
2nd	1652.8	H	-13	-61.47	10.74	0.59	-51.32
3rd	2479.2	H	-13	-53.69	10.68	0.63	-43.64
4th	3305.6	H	-13	-39.09	10.80	0.78	-29.07
5th	4132.0	H	-13	*	*	*	*
6th	4958.4	H	-13	*	*	*	*
7th	5784.8	H	-13	*	*	*	*
8th	6611.2	H	-13	*	*	*	*
9th	7437.6	H	-13	*	*	*	*
10th	8264.0	H	-13	*	*	*	*

Notes:

1. * Indicates the spurious emission could not be detected due to noise limitations or ambients.
2. Each emission reported reflects the highest absolute level at the specific harmonic for the low, mid, and high channels at maximum power.
3. The Spectrum was investigated from 30 MHz to the tenth harmonic of the fundamental.
4. ERP = S.G Power (dBm) + Substitution Antenna Gain (dBd) - Cable Loss (dB)
   ERP = S.G Power (dBm) + Substitution Antenna Gain (dBi) - Cable Loss (dB)





Applicant : Inventec Corporation

Model No : Pharos Traveler 117

EUT : PDA PHONE

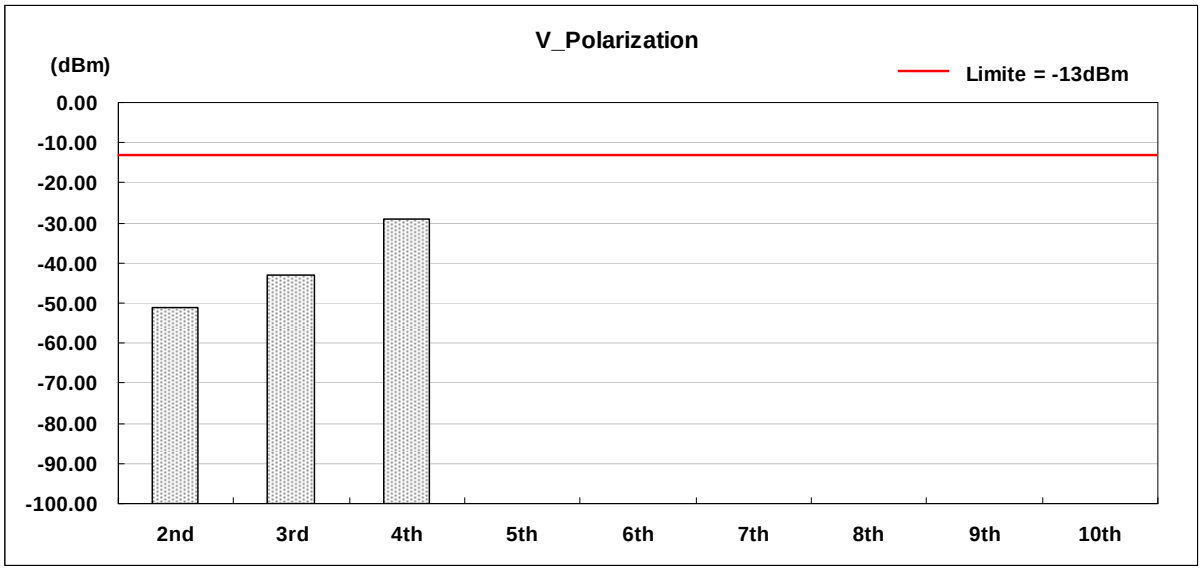
Test Mode : WCDMA Band V (Middle CH4182)

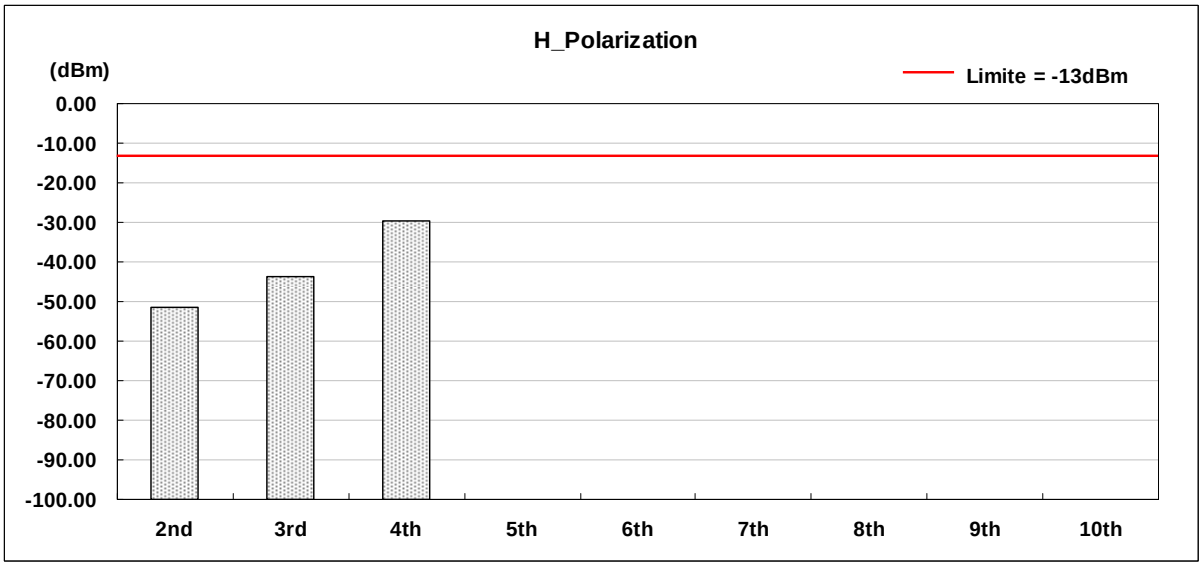
Test Date : 11/22/2008

Harmonic	Frequency (MHz)	Polarization	FCC Max. Limit	S.G Power	Substitution Antenna Gain	Cable Loss	Peak Output Power
			(dBm)	(dBm)	(dBi)	(dBm)	(dBm)
2nd	1693.2	V	-13	-61.28	10.74	0.59	-51.13
3rd	2539.8	V	-13	-53.22	10.68	0.63	-43.17
4th	3386.4	V	-13	-39.17	10.80	0.78	-29.15
5th	4233.0	V	-13	*	*	*	*
6th	5079.6	V	-13	*	*	*	*
7th	5926.2	V	-13	*	*	*	*
8th	6772.8	V	-13	*	*	*	*
9th	7619.4	V	-13	*	*	*	*
10th	8466.0	V	-13	*	*	*	*
2nd	1693.2	H	-13	-61.46	10.74	0.59	-51.31
3rd	2539.8	H	-13	-53.82	10.68	0.63	-43.77
4th	3386.4	H	-13	-39.53	10.80	0.78	-29.51
5th	4233.0	H	-13	*	*	*	*
6th	5079.6	H	-13	*	*	*	*
7th	5926.2	H	-13	*	*	*	*
8th	6772.8	H	-13	*	*	*	*
9th	7619.4	H	-13	*	*	*	*
10th	8466.0	H	-13	*	*	*	*

Notes:

1. * Indicates the spurious emission could not be detected due to noise limitations or ambients.
2. Each emission reported reflects the highest absolute level at the specific harmonic for the low, mid, and high channels at maximum power.
3. The Spectrum was investigated from 30 MHz to the tenth harmonic of the fundamental.
4. ERP = S.G Power (dBm) + Substitution Antenna Gain (dBd) - Cable Loss (dB)
   ERP = S.G Power (dBm) + Substitution Antenna Gain (dBi) - Cable Loss (dB)





Applicant : Inventec Corporation

Model No : Pharos Traveler 117

EUT : PDA PHONE

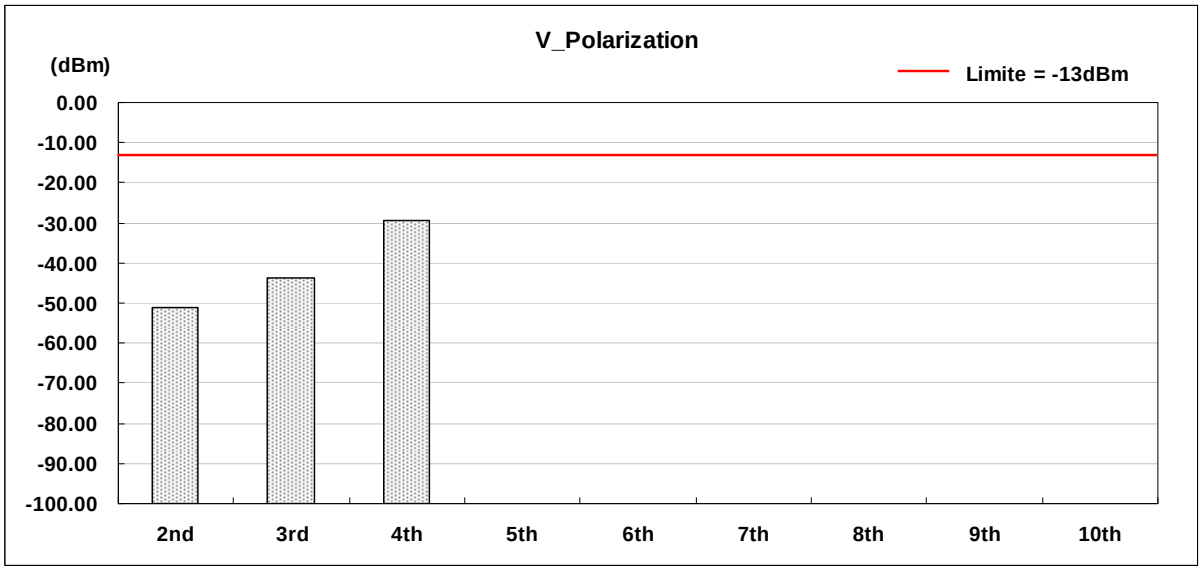
Test Mode : WCDMA Band V (High CH 4233)

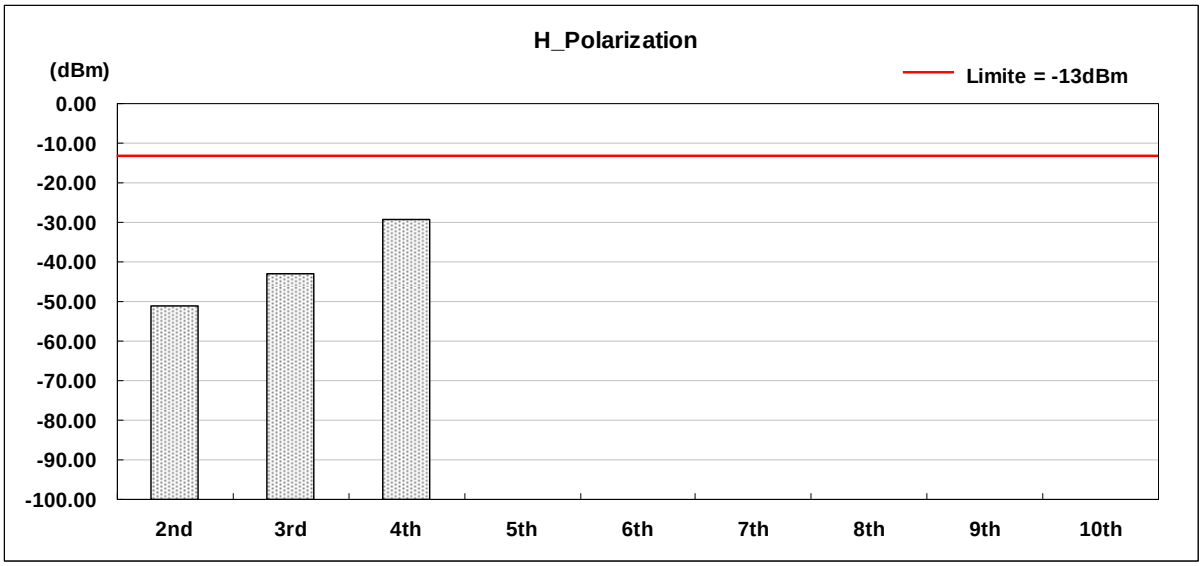
Test Date : 11/22/2008

Harmonic	Frequency (MHz)	Polarization	FCC Max. Limit	S.G Power	Substitution Antenna Gain	Cable Loss	Peak Output Power
			(dBm)	(dBm)	(dBi)	(dBm)	(dBm)
2nd	1693.2	V	-13	-61.40	10.74	0.59	-51.25
3rd	2539.8	V	-13	-53.85	10.68	0.63	-43.80
4th	3386.4	V	-13	-39.44	10.80	0.78	-29.42
5th	4233.0	V	-13	*	*	*	*
6th	5079.6	V	-13	*	*	*	*
7th	5926.2	V	-13	*	*	*	*
8th	6772.8	V	-13	*	*	*	*
9th	7619.4	V	-13	*	*	*	*
10th	8466.0	V	-13	*	*	*	*
2nd	1693.2	H	-13	-61.13	10.74	0.59	-50.98
3rd	2539.8	H	-13	-53.02	10.68	0.63	-42.97
4th	3386.4	H	-13	-39.12	10.80	0.78	-29.10
5th	4233.0	H	-13	*	*	*	*
6th	5079.6	H	-13	*	*	*	*
7th	5926.2	H	-13	*	*	*	*
8th	6772.8	H	-13	*	*	*	*
9th	7619.4	H	-13	*	*	*	*
10th	8466.0	H	-13	*	*	*	*

Notes:

1. * Indicates the spurious emission could not be detected due to noise limitations or ambients.
2. Each emission reported reflects the highest absolute level at the specific harmonic for the low, mid, and high channels at maximum power.
3. The Spectrum was investigated from 30 MHz to the tenth harmonic of the fundamental.
4. ERP = S.G Power (dBm) + Substitution Antenna Gain (dBd) - Cable Loss (dB)
   ERP = S.G Power (dBm) + Substitution Antenna Gain (dBi) - Cable Loss (dB)





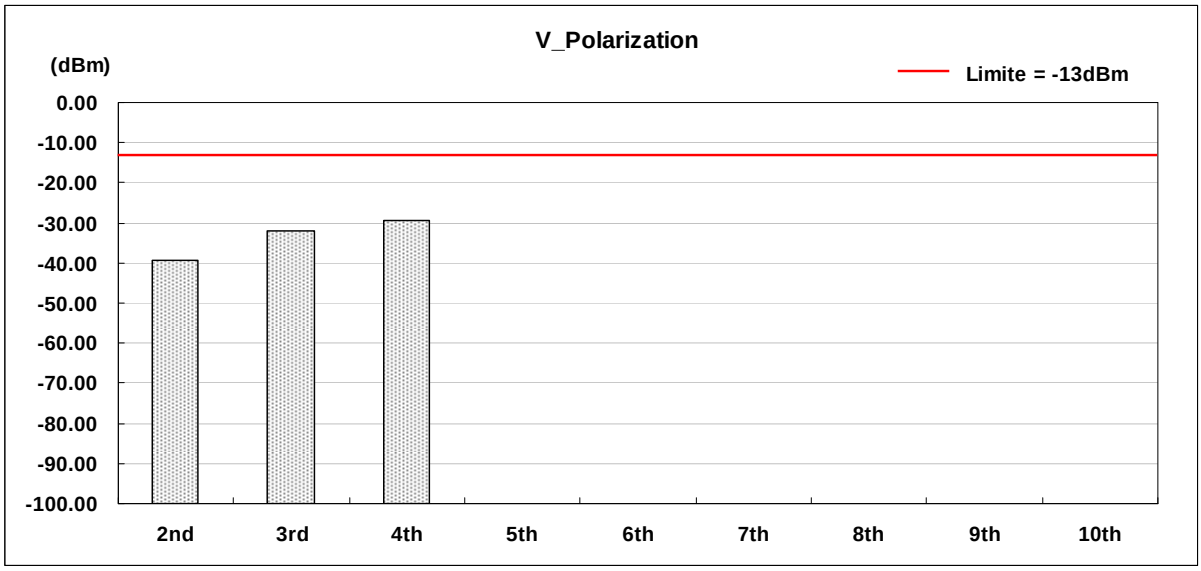
4.6.4.4 WCDMA Band II Test Result

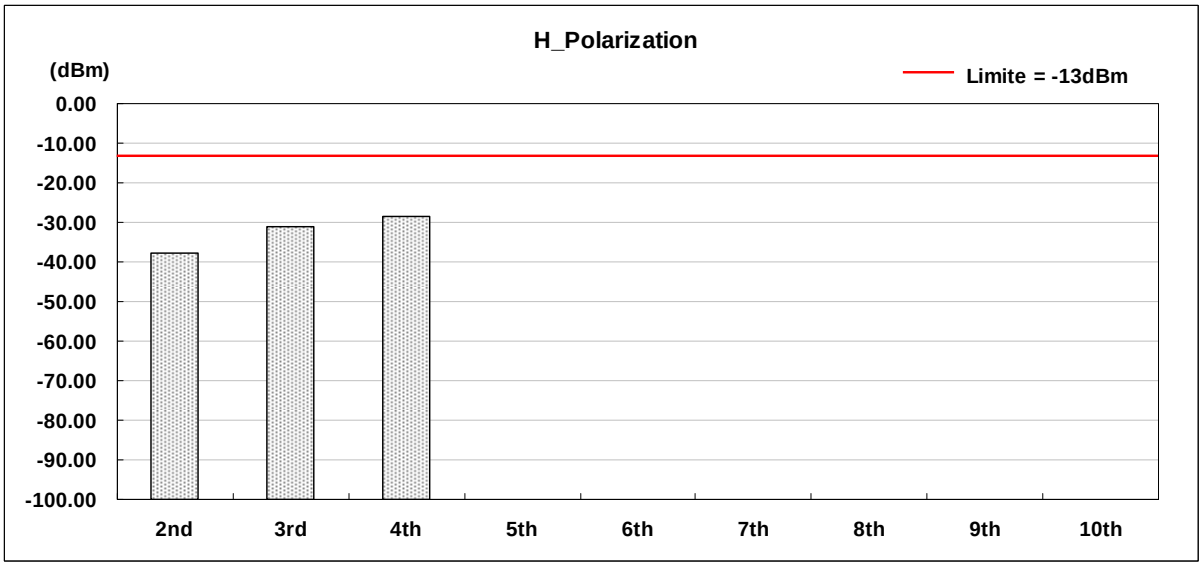
Applicant : Inventec Corporation
Model No : Pharos Traveler 117
EUT : PDA PHONE
Test Mode : WCMDA Band II (Low CH9262)
Test Date : 11/22/2008

Harmonic	Frequency (MHz)	Polarization	FCC Max. Limit	S.G Power	Substitution Antenna Gain	Cable Loss	Peak Output Power
			(dBm)	(dBm)	(dBi)	(dBm)	(dBm)
2nd	3704.8	V	-13	-49.52	10.79	0.58	-39.31
3rd	5557.2	V	-13	-42.09	10.71	0.63	-32.01
4th	7409.6	V	-13	-39.59	10.81	0.78	-29.56
5th	9262.0	V	-13	*	*	*	*
6th	11114.4	V	-13	*	*	*	*
7th	12966.8	V	-13	*	*	*	*
8th	14819.2	V	-13	*	*	*	*
9th	16671.6	V	-13	*	*	*	*
10th	18524.0	V	-13	*	*	*	*
2nd	3704.8	H	-13	-47.96	10.79	0.58	-37.75
3rd	5557.2	H	-13	-41.35	10.71	0.63	-31.27
4th	7409.6	H	-13	-38.69	10.81	0.78	-28.66
5th	9262.0	H	-13	*	*	*	*
6th	11114.4	H	-13	*	*	*	*
7th	12966.8	H	-13	*	*	*	*
8th	14819.2	H	-13	*	*	*	*
9th	16671.6	H	-13	*	*	*	*
10th	18524.0	H	-13	*	*	*	*

Notes:

1. * Indicates the spurious emission could not be detected due to noise limitations or ambients.
2. Each emission reported reflects the highest absolute level at the specific harmonic for the low, mid, and high channels at maximum power.
3. The Spectrum was investigated from 30 MHz to the tenth harmonic of the fundamental.
4. ERP = S.G Power (dBm) + Substitution Antenna Gain (dBd) - Cable Loss (dB)
   ERP = S.G Power (dBm) + Substitution Antenna Gain (dBi) - Cable Loss (dB)





Applicant : Inventec Corporation

Model No : Pharos Traveler 117

EUT : PDA PHONE

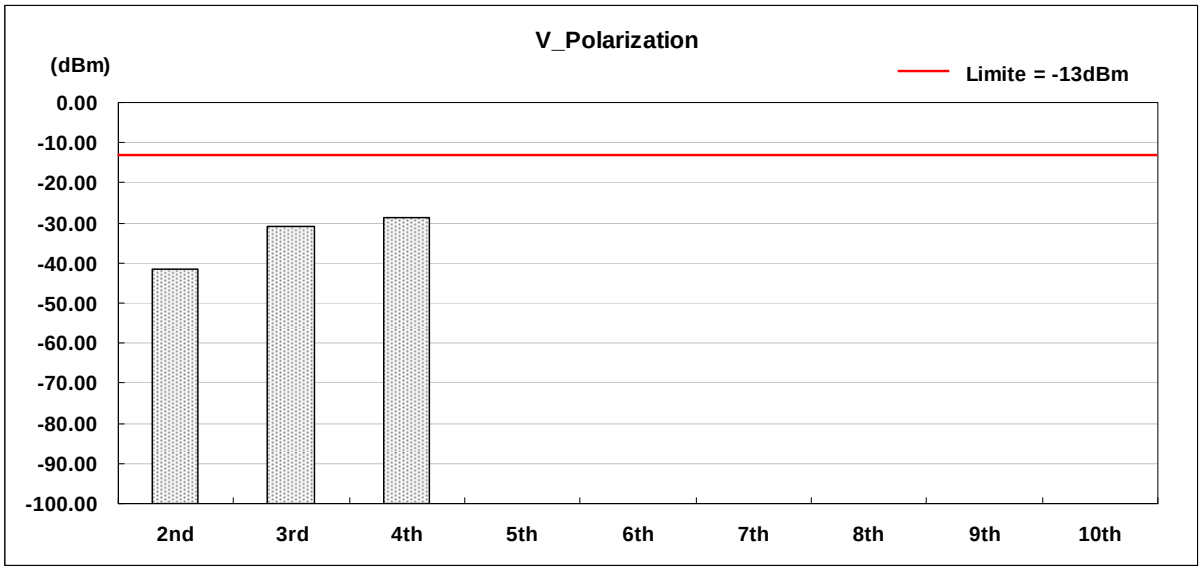
Test Mode : WCDMA Band II (Middle CH9400)

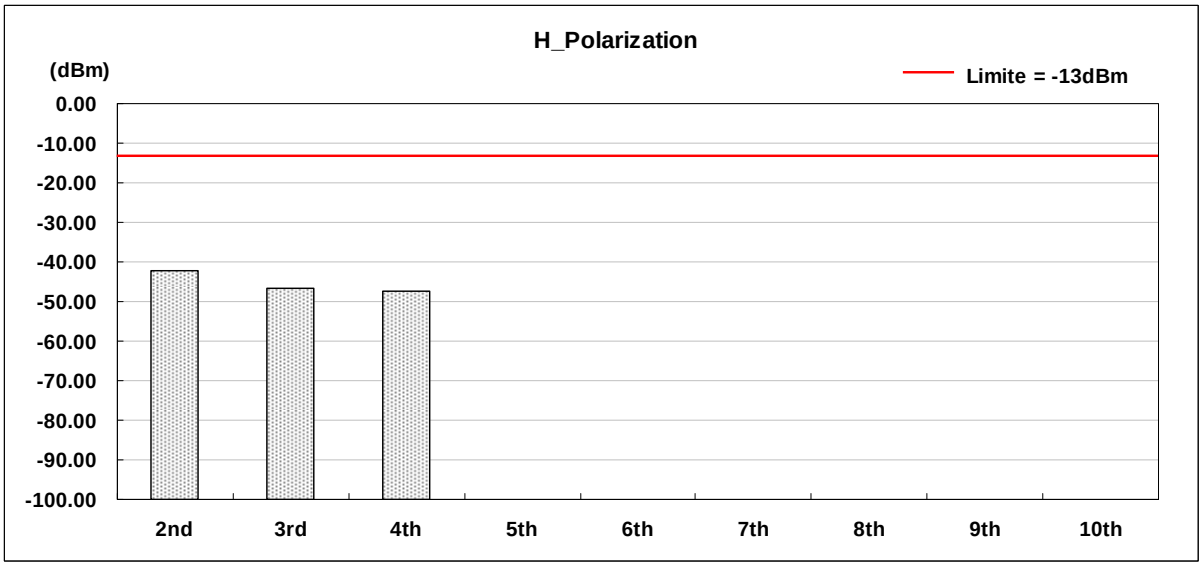
Test Date : 11/22/2008

Harmonic	Frequency (MHz)	Polarization	FCC Max. Limit	S.G Power	Substitution Antenna Gain	Cable Loss	Peak Output Power
			(dBm)	(dBm)	(dBi)	(dBm)	(dBm)
2nd	3760.0	V	-13	-51.76	10.79	0.58	-41.55
3rd	5640.0	V	-13	-40.88	10.71	0.63	-30.80
4th	7520.0	V	-13	-38.55	10.81	0.78	-28.52
5th	9400.0	V	-13	*	*	*	*
6th	11280.0	V	-13	*	*	*	*
7th	13160.0	V	-13	*	*	*	*
8th	15040.0	V	-13	*	*	*	*
9th	16920.0	V	-13	*	*	*	*
10th	18800.0	V	-13	*	*	*	*
2nd	3760.0	H	-13	-52.25	10.79	0.58	-42.04
3rd	5640.0	H	-13	-56.62	10.71	0.63	-46.54
4th	7520.0	H	-13	-57.49	10.81	0.78	-47.46
5th	9400.0	H	-13	*	*	*	*
6th	11280.0	H	-13	*	*	*	*
7th	13160.0	H	-13	*	*	*	*
8th	15040.0	H	-13	*	*	*	*
9th	16920.0	H	-13	*	*	*	*
10th	18800.0	H	-13	*	*	*	*

Notes:

5. * Indicates the spurious emission could not be detected due to noise limitations or ambients.
6. Each emission reported reflects the highest absolute level at the specific harmonic for the low, mid, and high channels at maximum power.
7. The Spectrum was investigated from 30 MHz to the tenth harmonic of the fundamental.
8. ERP = S.G Power (dBm) + Substitution Antenna Gain (dBd) - Cable Loss (dB)
   ERP = S.G Power (dBm) + Substitution Antenna Gain (dBi) - Cable Loss (dB)





Applicant : Inventec Corporation

Model No : Pharos Traveler 117

EUT : PDA PHONE

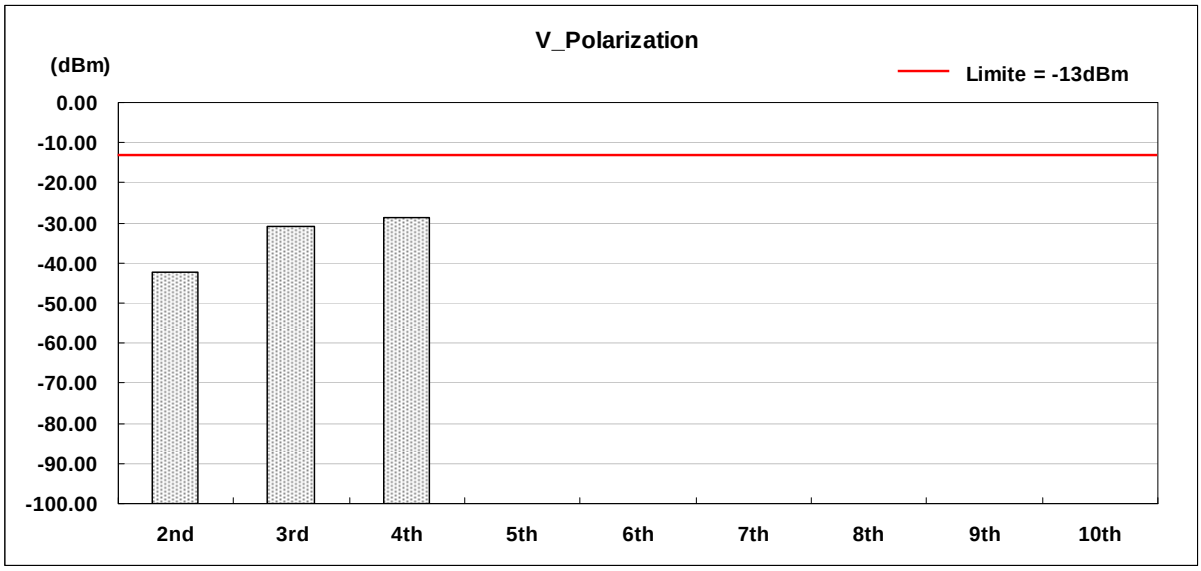
Test Mode : WCDMA Band II (High CH 9538)

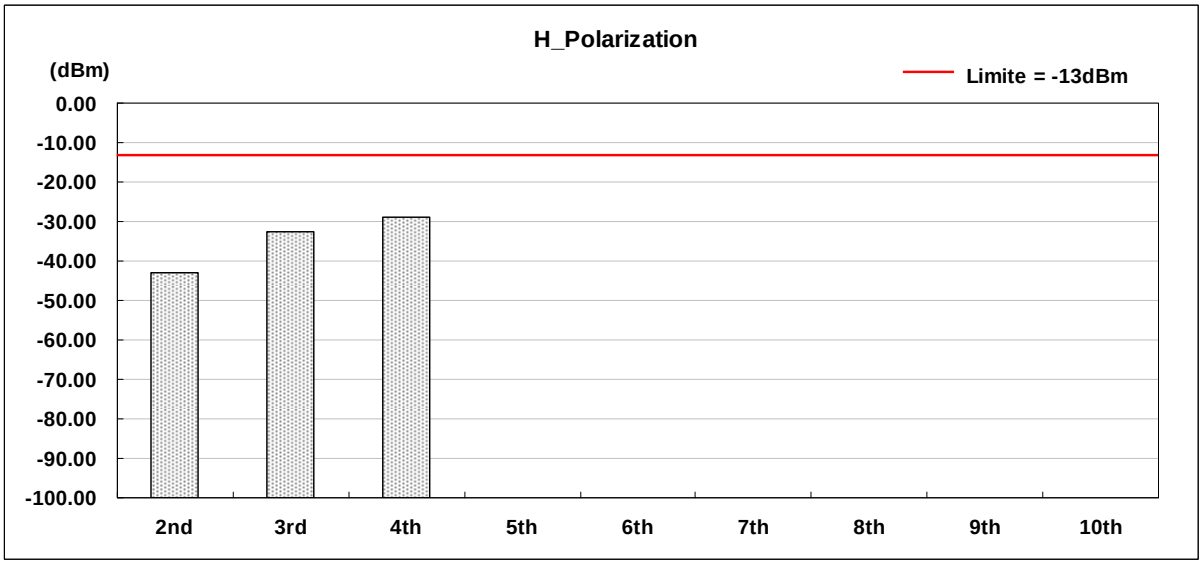
Test Date : 11/22/2008

Harmonic	Frequency (MHz)	Polarization	FCC Max. Limit	S.G Power	Substitution Antenna Gain	Cable Loss	Peak Output Power
			(dBm)	(dBm)	(dBi)	(dBm)	(dBm)
2nd	3815.2	V	-13	-52.36	10.79	0.58	-42.15
3rd	5722.8	V	-13	-40.94	10.71	0.63	-30.86
4th	7630.4	V	-13	-38.76	10.81	0.78	-28.73
5th	9538.0	V	-13	*	*	*	*
6th	11445.6	V	-13	*	*	*	*
7th	13353.2	V	-13	*	*	*	*
8th	15260.8	V	-13	*	*	*	*
9th	17168.4	V	-13	*	*	*	*
10th	19076.0	V	-13	*	*	*	*
2nd	3815.2	H	-13	-53.18	10.79	0.58	-42.97
3rd	5722.8	H	-13	-42.51	10.71	0.63	-32.43
4th	7630.4	H	-13	-39.08	10.81	0.78	-29.05
5th	9538.0	H	-13	*	*	*	*
6th	11445.6	H	-13	*	*	*	*
7th	13353.2	H	-13	*	*	*	*
8th	15260.8	H	-13	*	*	*	*
9th	17168.4	H	-13	*	*	*	*
10th	19076.0	H	-13	*	*	*	*

Notes:

5. * Indicates the spurious emission could not be detected due to noise limitations or ambients.
6. Each emission reported reflects the highest absolute level at the specific harmonic for the low, mid, and high channels at maximum power.
7. The Spectrum was investigated from 30 MHz to the tenth harmonic of the fundamental.
8. ERP = S.G Power (dBm) + Substitution Antenna Gain (dBd) - Cable Loss (dB)
   ERP = S.G Power (dBm) + Substitution Antenna Gain (dBi) - Cable Loss (dB)





4.7 Frequency Stability (Temperature Variation)

4.7.1 Measurement Instrument

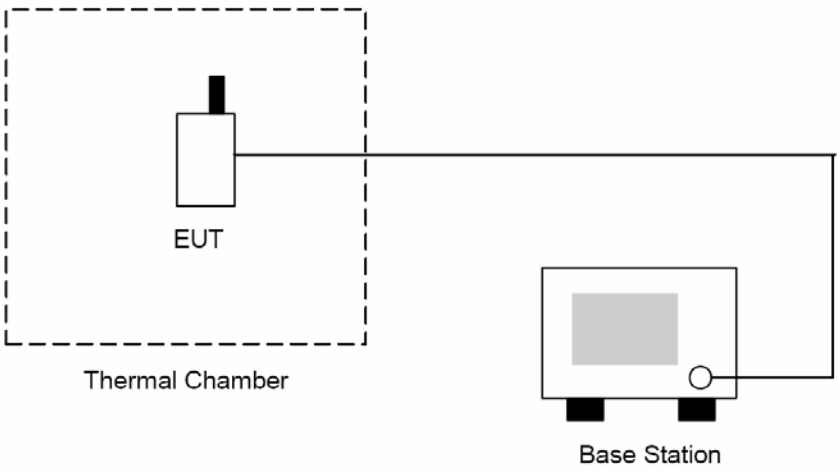
As described in chapter 5 of this test report.

4.7.2 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℃ 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℃ 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 temperature tests were performed for the worst case.
5. Test data was recorded.

4.7.3 Test Setup Layout



4.7.4 Test Result

Test Mode: GSM 850 CH190

Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)
-30	**34.72**	**0.042**	0.1
-20	**36.12**	**0.043**	0.1
-10	**33.71**	**0.040**	0.1
0	**30.16**	**0.036**	0.1
10	**31.31**	**0.037**	0.1
20	**31.54**	**0.038**	0.1
30	**29.59**	**0.035**	0.1
40	**24.78**	**0.030**	0.1
50	**30.75**	**0.037**	0.1

Test Mode: PCS 1900 CH661

Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)
-30	**43.72**	**0.023**	1
-20	**40.85**	**0.022**	1
-10	**41.59**	**0.022**	1
0	**39.57**	**0.021**	1
10	**36.98**	**0.020**	1
20	**42.42**	**0.023**	1
30	**47.18**	**0.025**	1
40	**44.61**	**0.024**	1
50	**40.18**	**0.021**	1

Test Mode: WCDMA Band V CH4182

Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)
-30	**20.99**	**0.025**	0.1
-20	**28.46**	**0.034**	0.1
-10	**24.51**	**0.029**	0.1
0	**33.19**	**0.040**	0.1
10	**30.62**	**0.037**	0.1
20	**29.51**	**0.035**	0.1
30	**22.71**	**0.027**	0.1
40	**26.26**	**0.031**	0.1
50	**28.47**	**0.034**	0.1

Test Mode: WCDMA Band II CH9400

Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)
-30	**41.41**	**0.022**	1
-20	**42.63**	**0.023**	1
-10	**39.75**	**0.021**	1
0	**40.18**	**0.021**	1
10	**38.72**	**0.021**	1
20	**41.55**	**0.022**	1
30	**43.43**	**0.023**	1
40	**42.56**	**0.023**	1
50	**37.59**	**0.020**	1

4.8 Frequency Stability (Voltage Variation)

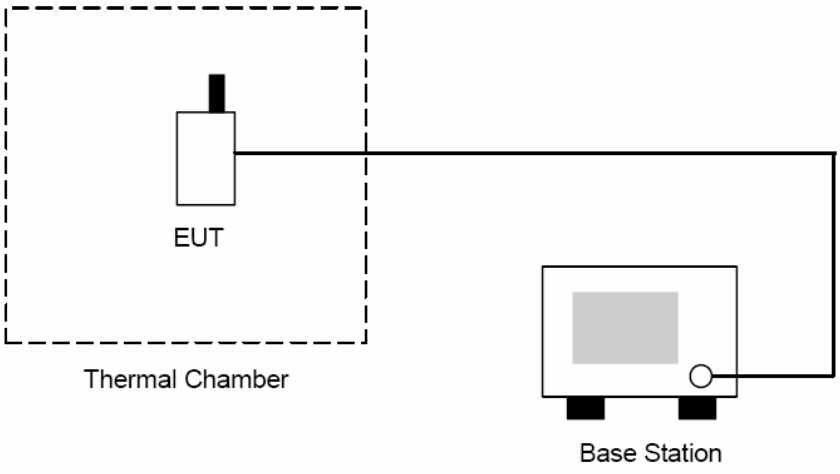
4.8.1 Measurement Instrument

As described in chapter 5 of this test report.

4.8.2 Test Procedure

1. The EUT was placed in a temperature chamber at 25±5 ℃ and connected as the following section.
2. The power supply voltage to the EUT was varied from BEP to 115% of the nominal value measured at the input to the EUT.
3. The variation in frequency was measured for the worst case.

4.8.3 Test Setup Layout



4.8.4 Test Result

Test Mode: GSM 850 CH190

Level	Voltage [V]	Deviation [Hz]	Deviation [ppm]	Limit [ppm]
Battery full point	4.20	**22.78**	**0.027**	0.1
Normal	3.70	**24.91**	**0.030**	0.1
Battery cut-off point	3.45	**31.55**	**0.038**	0.1

Test Mode: PCS 1900 CH661

Level	Voltage [V]	Deviation [Hz]	Deviation [ppm]	Limit [ppm]
Battery full point	4.20	**24.78**	**0.013**	1
Normal	3.70	**29.63**	**0.016**	1
Battery cut-off point	3.45	**33.84**	**0.018**	1

Test Mode: WCDMA Band V CH4182

Level	Voltage [V]	Deviation [Hz]	Deviation [ppm]	Limit [ppm]
Battery full point	4.20	**30.18**	**0.036**	0.1
Normal	3.70	**39.57**	**0.047**	0.1
Battery cut-off point	3.45	**28.66**	**0.034**	0.1

Test Mode: WCDMA Band II CH9400

Level	Voltage [V]	Deviation [Hz]	Deviation [ppm]	Limit [ppm]
Battery full point	4.20	**45.69**	**0.024**	1
Normal	3.70	**43.96**	**0.023**	1
Battery cut-off point	3.45	**44.78**	**0.024**	1

4.9 AC Power Conducted Emissions Requirements

4.9.1 Measurement Instrument

As described in chapter 5 of this test report.

4.9.2 Test Procedure

The measurement is made according to FCC rules15.207:

The power line conducted emission measurements were performed in a shielded enclosure. The EUT was assembled on a wooden table which is 80 centimeters high, was placed 40 centimeters from the back wall and at least 1 meter from the sidewall.

Power was fed to the EUT from the public utility power grid through a line filter and EMCO Model 3162/2 SH Line Impedance Stabilization Networks (LISN). The LISN housing, measuring instrumentation case, ground plane, etc., were electrically bonded together at the same RF potential. The Spectrum analyzer was connected to the AC line through an isolation transformer. The 50-ohm output of the LISN was connected to the spectrum analyzer directly. Conducted emission levels were in the CISPR quasi-peak detection mode. The analyzer's 6 dB bandwidth was set to 9 KHz. No post-detector video filter was used.

The spectrum was scanned from 150 KHz to 30 MHz. The physical arrangement of the test system and associated cabling was varied (within the scope of arrangements likely to be encountered in actual use) to determine the effect on the unit's emanations in amplitude and frequency. All spurious emission frequencies were observed. The highest emission amplitudes relative to the appropriate limit were measured and have been recorded in paragraph 2.6.

4.9.3 Test Configuration:

Figure 1. Front View of the Test Configuration

Figure 2. Rear View of the Test Configuration

4.9.4 Test condition:

EUT tested in accordance with the specifications given by the Manufacturer, and exercised in the most unfavorable manner.

4.9.5 Conducted Emissions Limits:

Frequency range (MHz)	Limits (dBuV)	
	Quasi-peak	Average
0.15 to 0.50	66 to 56	56 to 46
0.50 to 5.0	56	46
5.0 to 30	60	50

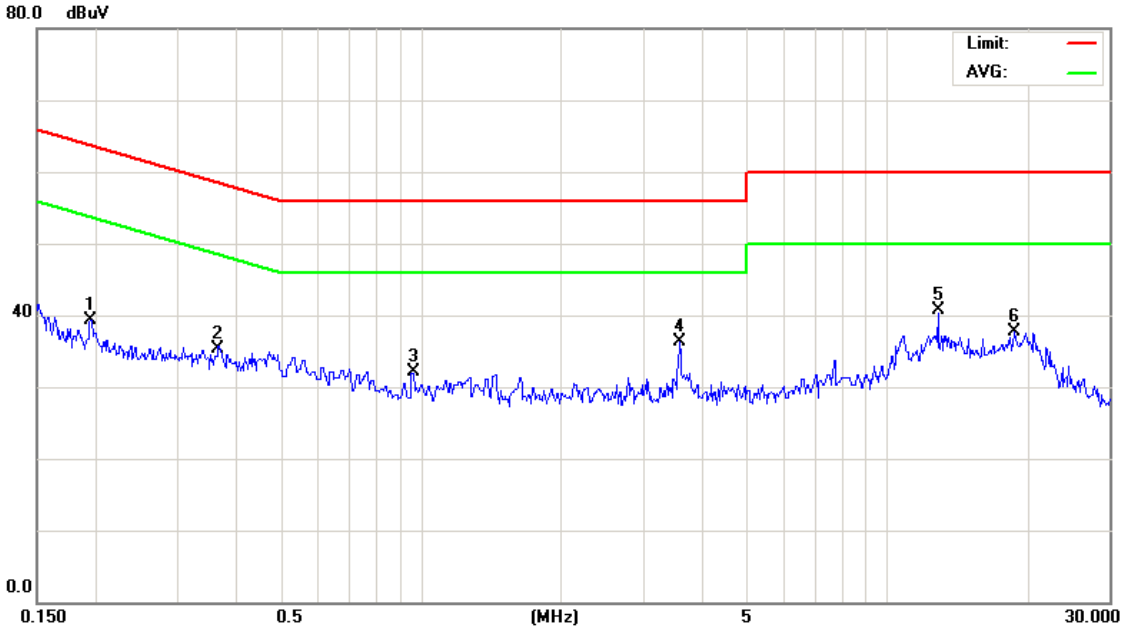
4.9.6 Test Result

4.9.6.1 GSM 850 Test Result

Applicant	: Inventec Corporation
Model No	: Pharos Traveler 117
EUT	: PDA PHONE
Test Mode	: GSM 850 (Low CH128 / Middle CH190 / High CH 251)
Test Date	: 11/21/2008

Please refer to next pager of detail testing data.

File :PHAROS TRAVELER 117(GSM8 Data :#1 Date: 2008/11/21 Time: 上午 09:03:24



Site Phase: *L1* Temperature: 26 ℃

Limit: CISPR22 Class B Conduction(QP) Power: AC 110V/60Hz Humidity: 55 %

EUT:

M/N: 08-0266-SEO

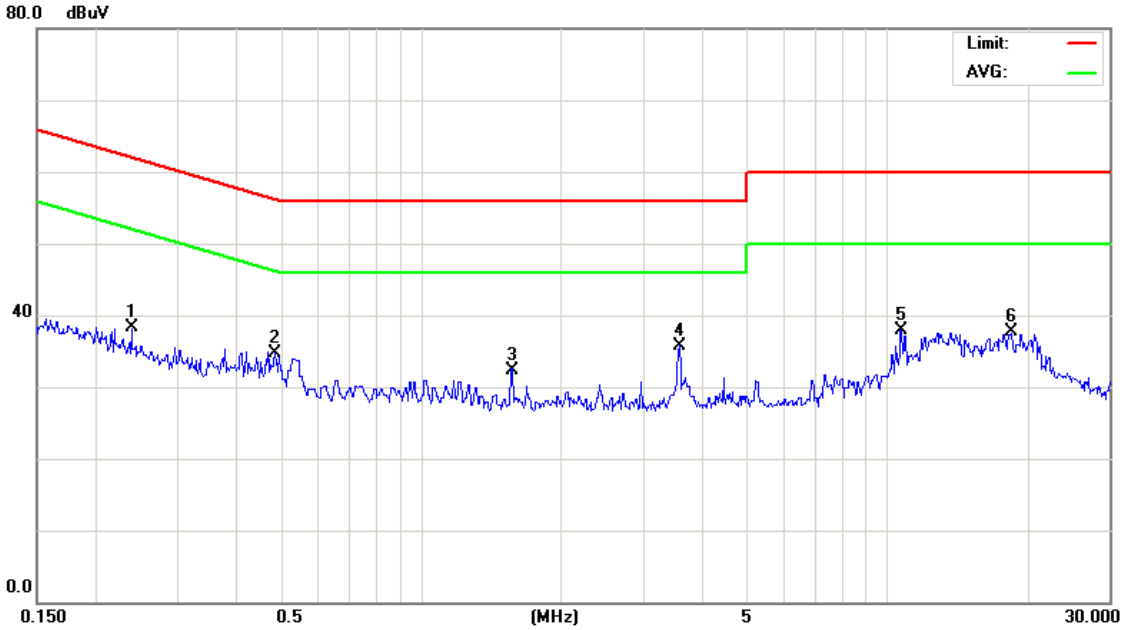
Mode: GSM850

Note: CH128

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1955	29.47	9.74	39.21	63.80	-24.59	peak	
2		0.3673	25.54	9.78	35.32	58.56	-23.24	peak	
3		0.9586	22.35	9.81	32.16	56.00	-23.84	peak	
4		3.5779	26.32	9.94	36.26	56.00	-19.74	peak	
5	*	12.8500	30.53	10.18	40.71	60.00	-19.29	peak	
6		18.7000	27.34	10.27	37.61	60.00	-22.39	peak	

*:Maximum data x:Over limit !:over margin ●Reference Only

File :PHAROS TRAVELER 117(GSM8 Data :#2 Date: 2008/11/21 Time: 上午 09:05:46



Site Phase: *L2* Temperature: 26 ℃

Limit: CISPR22 Class B Conduction(QP) Power: AC 110V/60Hz Humidity: 55 %

EUT:

M/N: 08-0266-SEO

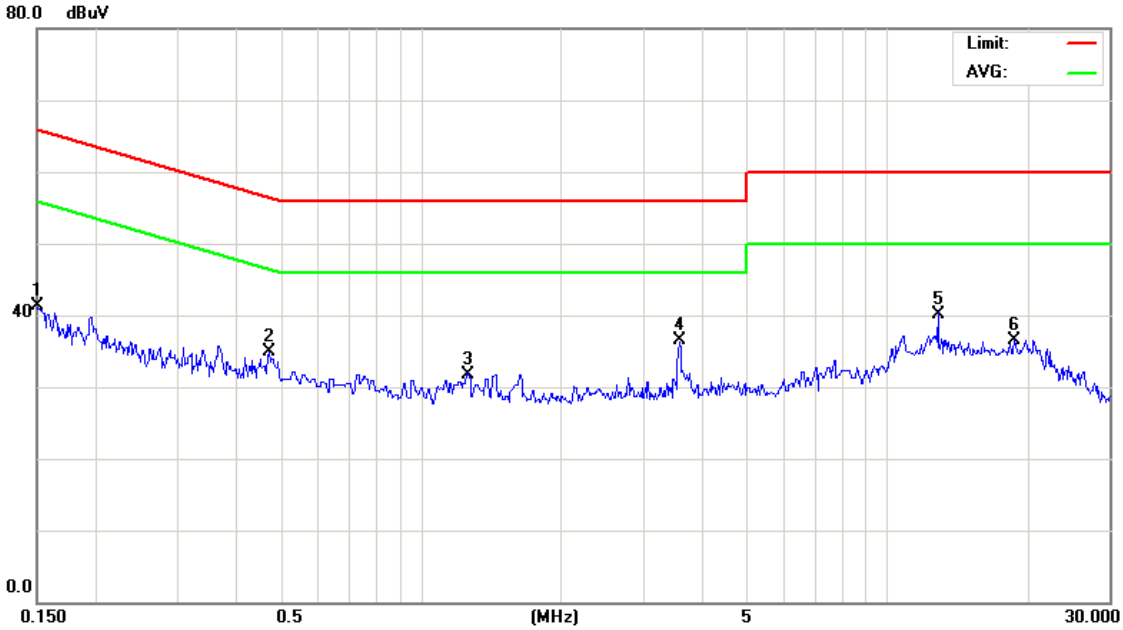
Mode: GSM850

Note: CH128

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.2389	28.59	9.75	38.34	62.13	-23.79	peak	
2		0.4858	24.89	9.78	34.67	56.24	-21.57	peak	
3		1.5619	22.42	9.81	32.23	56.00	-23.77	peak	
4	*	3.5779	25.73	9.94	35.67	56.00	-20.33	peak	
5		10.7000	27.77	10.06	37.83	60.00	-22.17	peak	
6		18.4500	27.45	10.27	37.72	60.00	-22.28	peak	

*:Maximum data x:Over limit !:over margin ●Reference Only

File :PHAROS TRAVELER 117(GSM8 Data :#3 Date: 2008/11/21 Time: 上午 09:08:32



Site Phase: *L1* Temperature: 26 ℃

Limit: CISPR22 Class B Conduction(QP) Power: AC 110V/60Hz Humidity: 55 %

EUT:

M/N: 08-0266-SEO

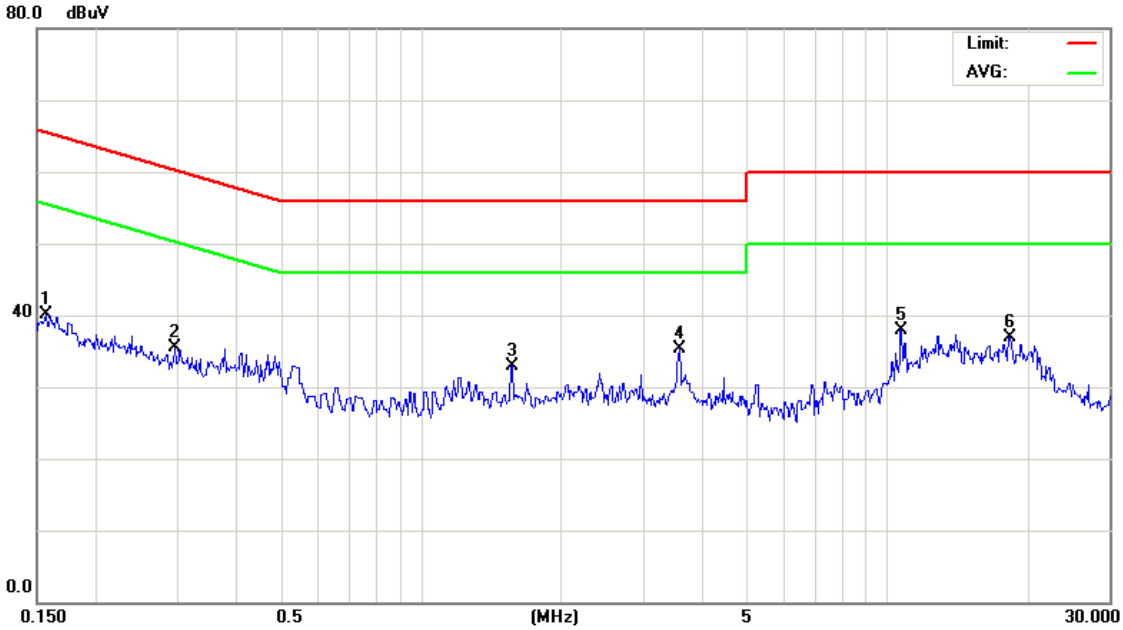
Mode: GSM850

Note: CH190

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1500	31.50	9.73	41.23	65.99	-24.76	peak	
2		0.4726	25.07	9.78	34.85	56.47	-21.62	peak	
3		1.2559	21.91	9.81	31.72	56.00	-24.28	peak	
4	*	3.5779	26.59	9.94	36.53	56.00	-19.47	peak	
5		12.8500	29.98	10.18	40.16	60.00	-19.84	peak	
6		18.7000	26.30	10.27	36.57	60.00	-23.43	peak	

*:Maximum data x:Over limit !:over margin ●Reference Only

File :PHAROS TRAVELER 117(GSM8 Data :#4 Date: 2008/11/21 Time: 上午 09:11:26



Site Phase: *L2* Temperature: 26 ℃

Limit: CISPR22 Class B Conduction(QP) Power: AC 110V/60Hz Humidity: 55 %

EUT:

M/N: 08-0266-SEO

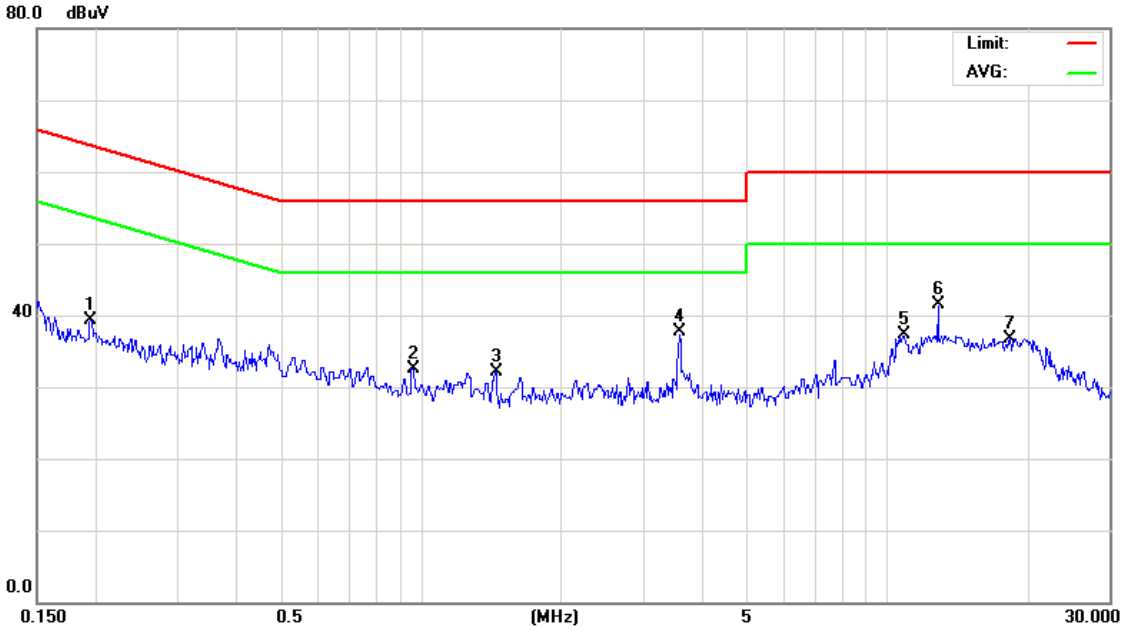
Mode: GSM850

Note: CH190

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1570	30.36	9.73	40.09	65.62	-25.53	peak	
2		0.2968	25.66	9.76	35.42	60.33	-24.91	peak	
3		1.5619	23.09	9.81	32.90	56.00	-23.10	peak	
4	*	3.5779	25.38	9.94	35.32	56.00	-20.68	peak	
5		10.7000	27.93	10.06	37.99	60.00	-22.01	peak	
6		18.2500	26.59	10.28	36.87	60.00	-23.13	peak	

*:Maximum data x:Over limit !:over margin ●Reference Only

File :PHAROS TRAVELER 117(GSM8 Data :#5 Date: 2008/11/21 Time: 上午 09:14:55



Site Phase: *L1* Temperature: 26 ℃

Limit: CISPR22 Class B Conduction(QP) Power: AC 110V/60Hz Humidity: 55 %

EUT:

M/N: 08-0266-SEO

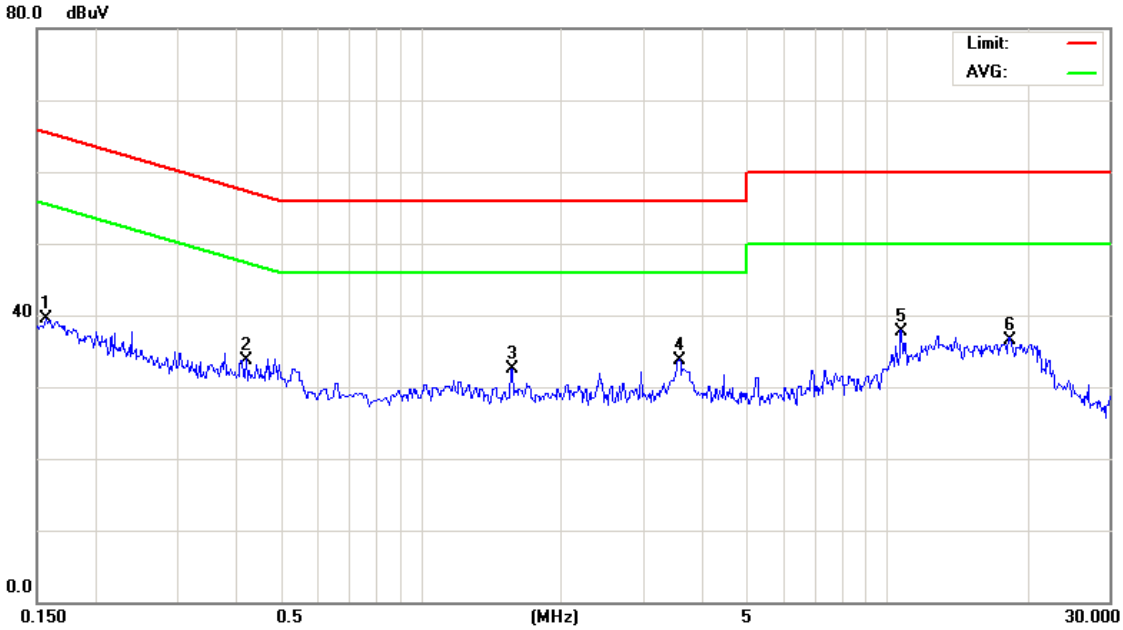
Mode: GSM850

Note: CH251

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1955	29.47	9.74	39.21	63.80	-24.59	peak	
2		0.9586	22.72	9.81	32.53	56.00	-23.47	peak	
3		1.4449	22.33	9.81	32.14	56.00	-23.86	peak	
4	*	3.5779	27.70	9.94	37.64	56.00	-18.36	peak	
5		10.8000	27.16	10.07	37.23	60.00	-22.77	peak	
6		12.8500	31.36	10.18	41.54	60.00	-18.46	peak	
7		18.3000	26.35	10.27	36.62	60.00	-23.38	peak	

*:Maximum data x:Over limit !:over margin ●Reference Only

File :PHAROS TRAVELER 117(GSM8 Data :#6 Date: 2008/11/21 Time: 上午 09:16:14



Site Phase: *L2* Temperature: 26 ℃

Limit: CISPR22 Class B Conduction(QP) Power: AC 110V/60Hz Humidity: 55 %

EUT:

M/N: 08-0266-SEO

Mode: GSM850

Note: CH251

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1570	29.80	9.73	39.53	65.62	-26.09	peak	
2		0.4200	23.97	9.78	33.75	57.45	-23.70	peak	
3		1.5619	22.72	9.81	32.53	56.00	-23.47	peak	
4		3.5779	23.70	9.94	33.64	56.00	-22.36	peak	
5	*	10.7000	27.66	10.06	37.72	60.00	-22.28	peak	
6		18.2500	26.18	10.28	36.46	60.00	-23.54	peak	

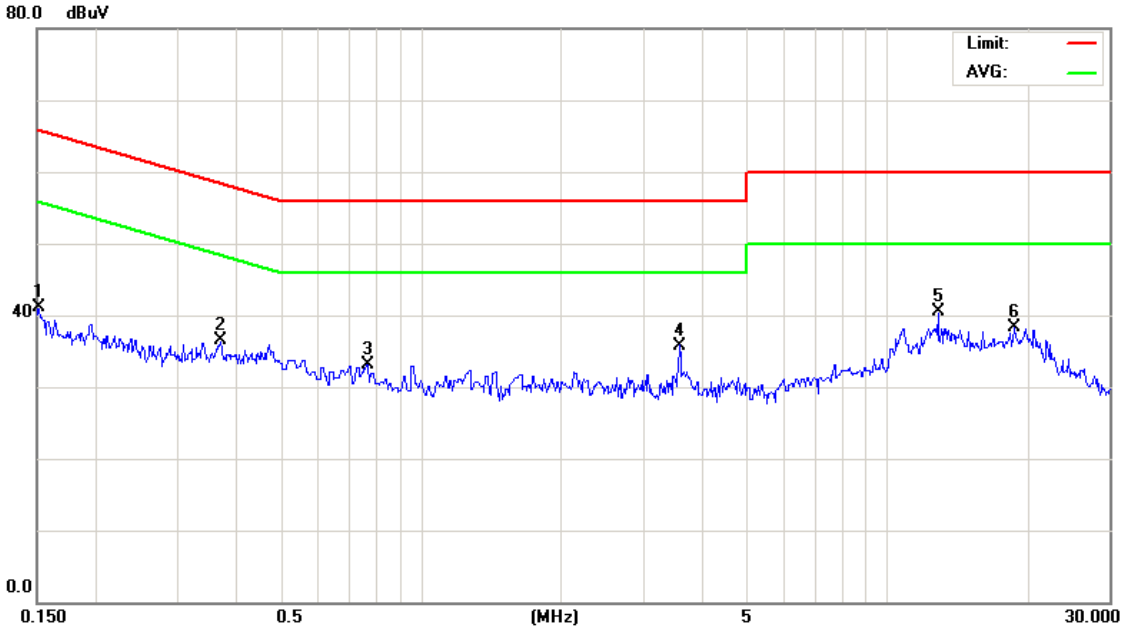
*:Maximum data x:Over limit !:over margin ●Reference Only

4.9.6.2 PCS 1900 Test Result

Applicant	: Inventec Corporation
Model No	: Pharos Traveler 117
EUT	: PDA PHONE
Test Mode	: PCS 1900 (Low CH512 / Middle CH661 / High CH 810)
Test Date	: 11/21/2008

Please refer to next pager of detail testing data.

File :PHAROS TRAVELER 117(PCS1 Data :#1 Date: 2008/11/21 Time: 上午 09:20:19



Site Phase: *L1* Temperature: 26 ℃

Limit: CISPR22 Class B Conduction(QP) Power: AC 110V/60Hz Humidity: 55 %

EUT:

M/N: 08-0266-SEO

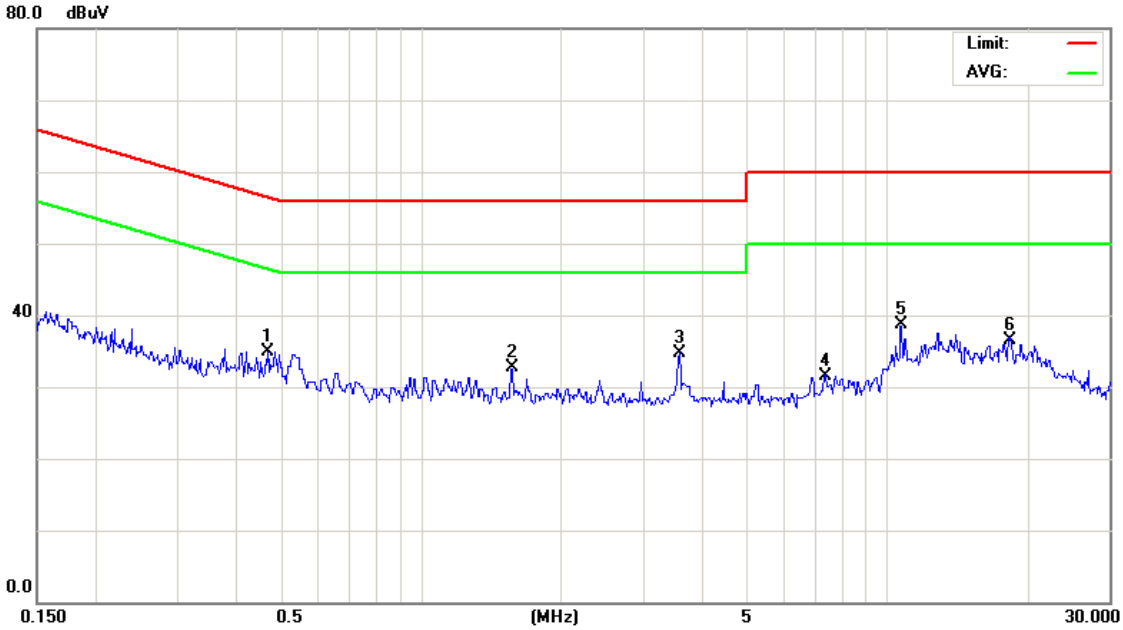
Mode: PCS1900

Note: CH512

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1514	31.40	9.73	41.13	65.92	-24.79	peak	
2		0.3694	26.75	9.78	36.53	58.51	-21.98	peak	
3		0.7700	23.23	9.80	33.03	56.00	-22.97	peak	
4		3.5779	25.73	9.94	35.67	56.00	-20.33	peak	
5	*	12.8500	30.35	10.18	40.53	60.00	-19.47	peak	
6		18.7000	27.95	10.27	38.22	60.00	-21.78	peak	

*:Maximum data x:Over limit !:over margin ●Reference Only

File :PHAROS TRAVELER 117(PCS1 Data :#2 Date: 2008/11/21 Time: 上午 09:22:34



Site Phase: *L2* Temperature: 26 ℃

Limit: CISPR22 Class B Conduction(QP) Power: AC 110V/60Hz Humidity: 55 %

EUT:

M/N: 08-0266-SEO

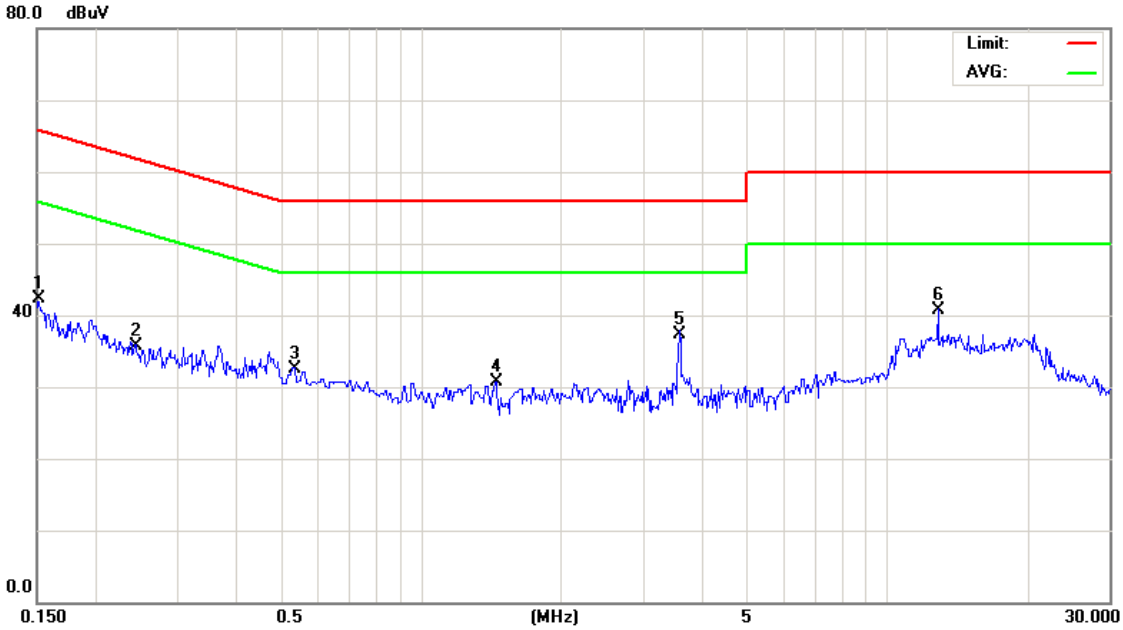
Mode: PCS1900

Note: CH512

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.4682	25.09	9.78	34.87	56.55	-21.68	peak	
2		1.5619	22.84	9.81	32.65	56.00	-23.35	peak	
3	*	3.5779	24.78	9.94	34.72	56.00	-21.28	peak	
4		7.3500	21.37	10.09	31.46	60.00	-28.54	peak	
5		10.7000	28.61	10.06	38.67	60.00	-21.33	peak	
6		18.2500	26.24	10.28	36.52	60.00	-23.48	peak	

*:Maximum data x:Over limit !:over margin ●Reference Only

File :PHAROS TRAVELER 117(PCS1 Data :#3 Date: 2008/11/21 Time: 上午 09:26:56



Site Phase: *L1* Temperature: 26 ℃

Limit: CISPR22 Class B Conduction(QP) Power: AC 110V/60Hz Humidity: 55 %

EUT:

M/N: 08-0266-SEO

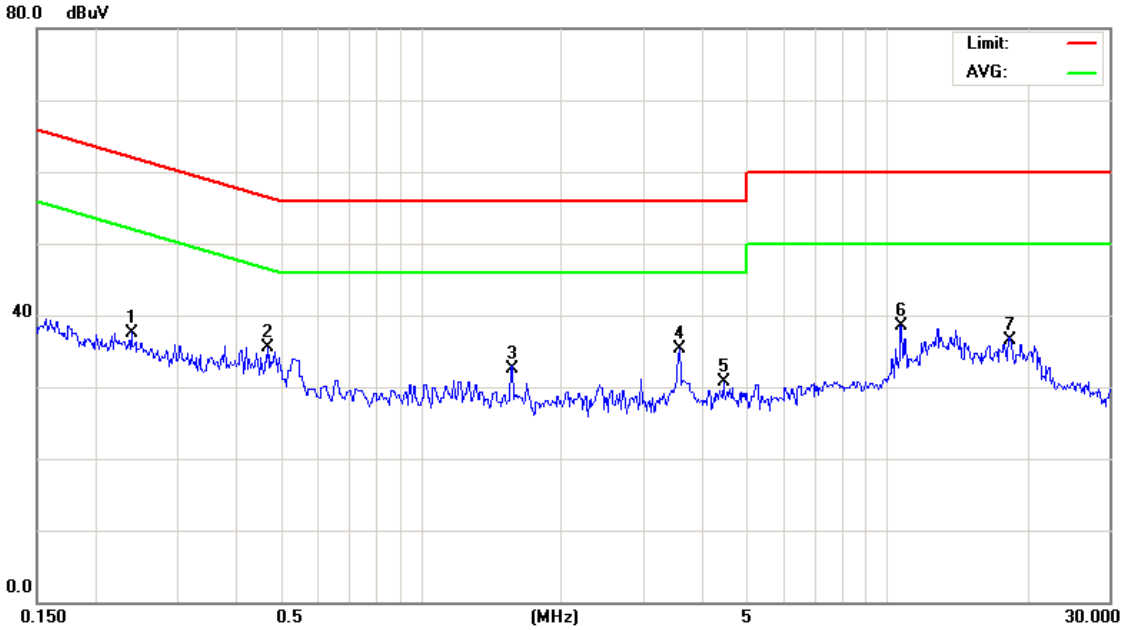
Mode: PCS1900

Note: CH661

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1514	32.50	9.73	42.23	65.92	-23.69	peak	
2		0.2431	26.01	9.75	35.76	61.99	-26.23	peak	
3		0.5360	22.73	9.79	32.52	56.00	-23.48	peak	
4		1.4449	20.87	9.81	30.68	56.00	-25.32	peak	
5	*	3.5779	27.40	9.94	37.34	56.00	-18.66	peak	
6		12.8500	30.51	10.18	40.69	60.00	-19.31	peak	

*:Maximum data x:Over limit !:over margin ●Reference Only

File :PHAROS TRAVELER 117(PCS1 Data :#4 Date: 2008/11/21 Time: 上午 09:29:32



Site Phase: *L2* Temperature: 26 ℃

Limit: CISPR22 Class B Conduction(QP) Power: AC 110V/60Hz Humidity: 55 %

EUT:

M/N: 08-0266-SEO

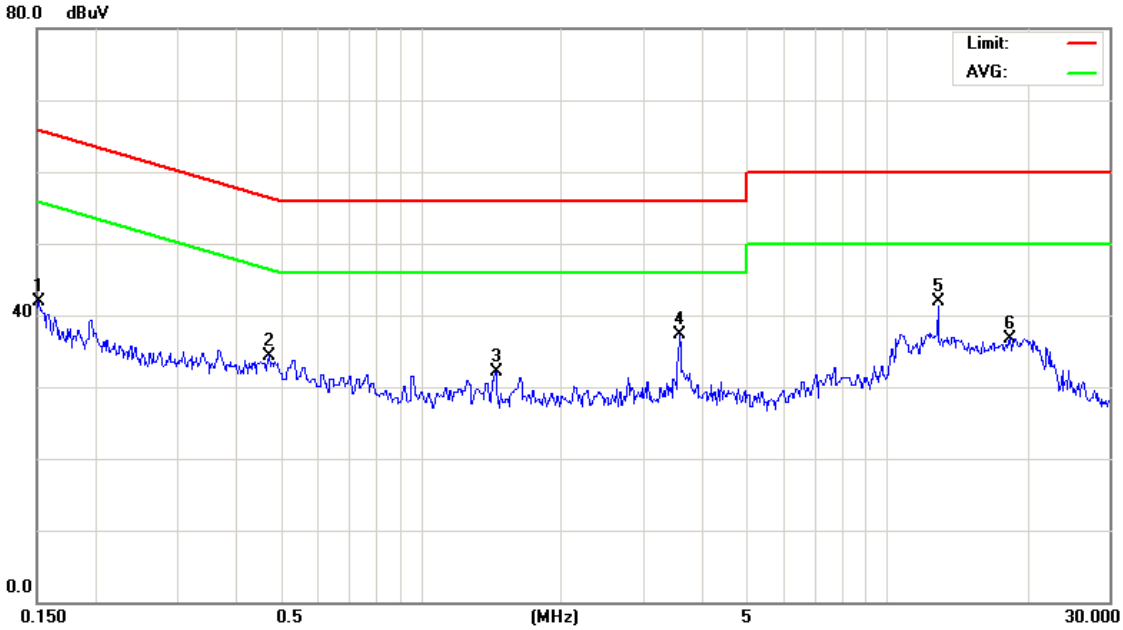
Mode: PCS1900

Note: CH661

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.2389	27.78	9.75	37.53	62.13	-24.60	peak	
2		0.4682	25.64	9.78	35.42	56.55	-21.13	peak	
3		1.5619	22.76	9.81	32.57	56.00	-23.43	peak	
4	*	3.5779	25.38	9.94	35.32	56.00	-20.68	peak	
5		4.4508	20.71	10.02	30.73	56.00	-25.27	peak	
6		10.7000	28.43	10.06	38.49	60.00	-21.51	peak	
7		18.2500	26.25	10.28	36.53	60.00	-23.47	peak	

*:Maximum data x:Over limit !:over margin ●Reference Only

File :PHAROS TRAVELER 117(PCS1 Data :#5 Date: 2008/11/21 Time: 上午 09:31:42



Site Phase: *L1* Temperature: 26 ℃

Limit: CISPR22 Class B Conduction(QP) Power: AC 110V/60Hz Humidity: 55 %

EUT:

M/N: 08-0266-SEO

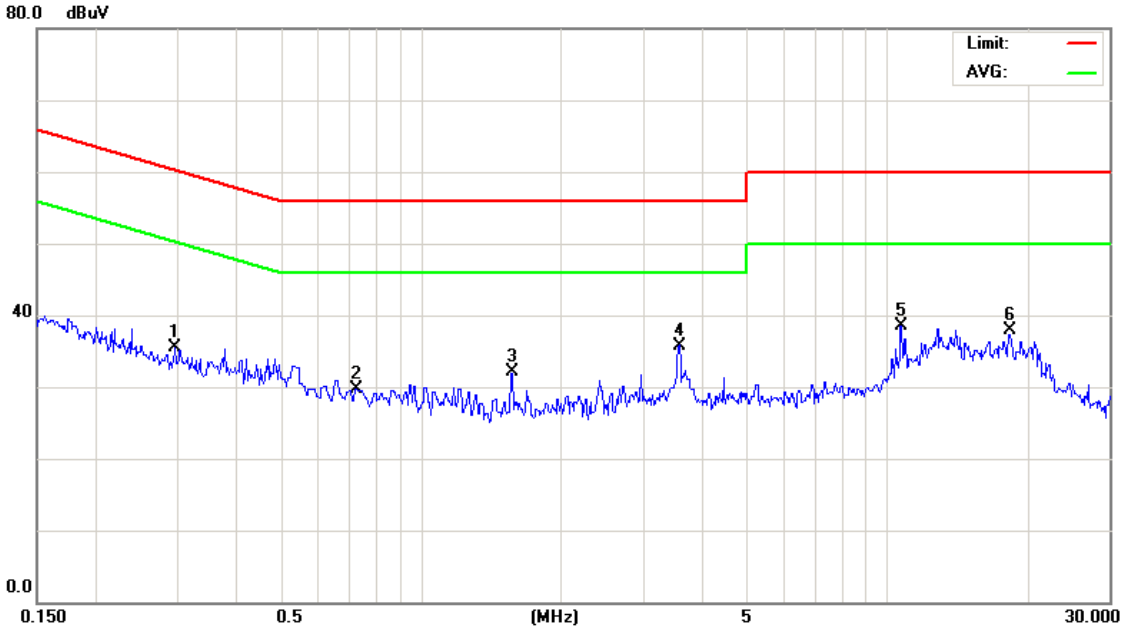
Mode: PCS1900

Note: CH810

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1514	32.24	9.73	41.97	65.92	-23.95	peak	
2		0.4726	24.61	9.78	34.39	56.47	-22.08	peak	
3		1.4449	22.35	9.81	32.16	56.00	-23.84	peak	
4		3.5779	27.32	9.94	37.26	56.00	-18.74	peak	
5	*	12.8500	31.76	10.18	41.94	60.00	-18.06	peak	
6		18.3000	26.53	10.27	36.80	60.00	-23.20	peak	

*:Maximum data x:Over limit !:over margin ●Reference Only

File :PHAROS TRAVELER 117(PCS1 Data :#6 Date: 2008/11/21 Time: 上午 09:34:13



Site Phase: *L2* Temperature: 26 ℃

Limit: CISPR22 Class B Conduction(QP) Power: AC 110V/60Hz Humidity: 55 %

EUT:

M/N: 08-0266-SEO

Mode: PCS1900

Note: CH810

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.2968	25.69	9.76	35.45	60.33	-24.88	peak	
2		0.7247	19.82	9.80	29.62	56.00	-26.38	peak	
3		1.5619	22.24	9.81	32.05	56.00	-23.95	peak	
4	*	3.5779	25.75	9.94	35.69	56.00	-20.31	peak	
5		10.7000	28.49	10.06	38.55	60.00	-21.45	peak	
6		18.2500	27.53	10.28	37.81	60.00	-22.19	peak	

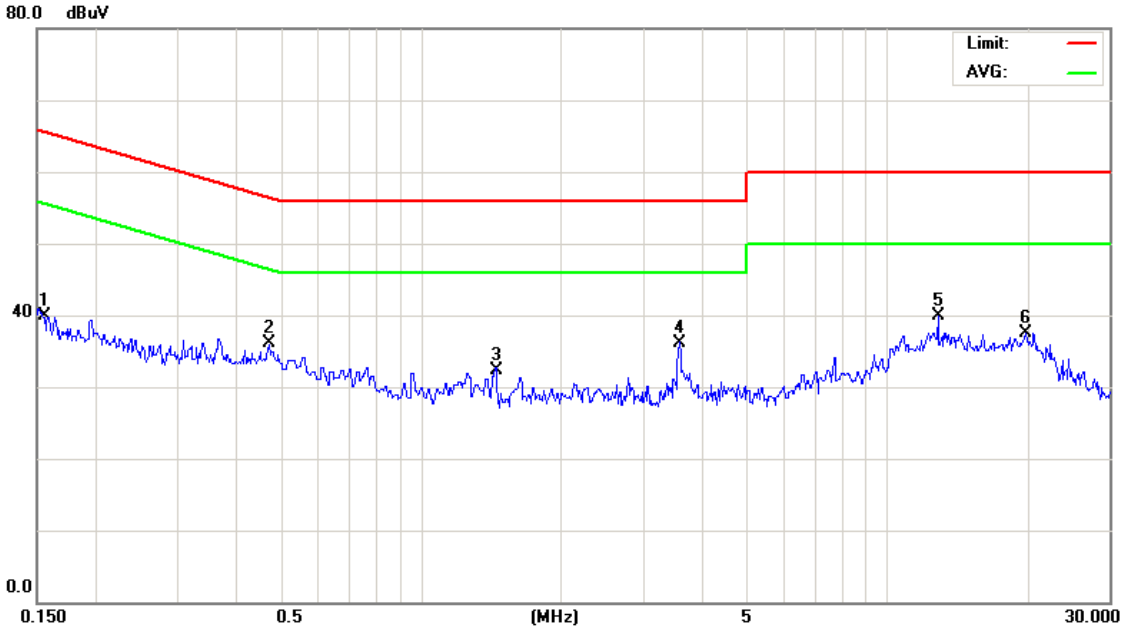
*:Maximum data x:Over limit !:over margin ●Reference Only

4.9.6.3 WCDMA Band V Test Result

Applicant	: Inventec Corporation
Model No	: Pharos Traveler 117
EUT	: PDA PHONE
Test Mode	: WCDMA Band V (Low CH4132 / Middle CH4182 / High CH 4233)
Test Date	: 11/21/2008

Please refer to next pager of detail testing data.

File :PHAROS TRAVELER 117(WCDM Data :#1 Date: 2008/11/21 Time: 上午 09:41:35



Site Phase: *L1* Temperature: 26 ℃

Limit: CISPR22 Class B Conduction(QP) Power: AC 110V/60Hz Humidity: 55 %

EUT:

M/N: 08-0266-SEO

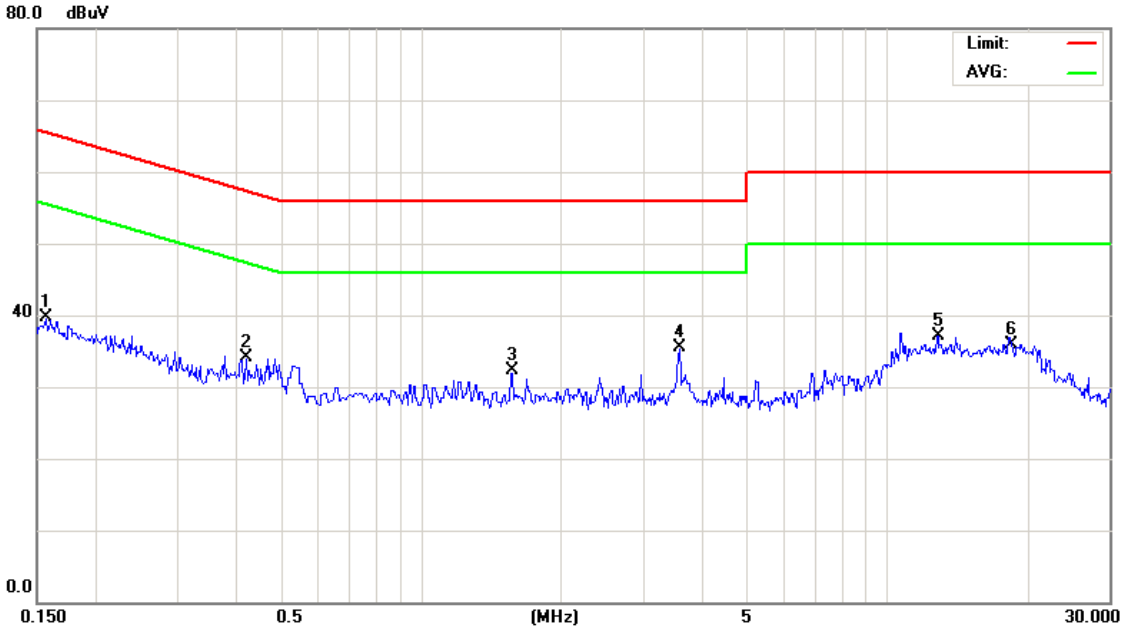
Mode: WCDMA(BAND V)

Note: CH4132

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1549	30.14	9.73	39.87	65.73	-25.86	peak	
2		0.4726	26.23	9.78	36.01	56.47	-20.46	peak	
3		1.4449	22.56	9.81	32.37	56.00	-23.63	peak	
4	*	3.5779	26.17	9.94	36.11	56.00	-19.89	peak	
5		12.8500	29.72	10.18	39.90	60.00	-20.10	peak	
6		19.8000	27.31	10.25	37.56	60.00	-22.44	peak	

*:Maximum data x:Over limit !:over margin ●Reference Only

File :PHAROS TRAVELER 117(WCDM Data :#2 Date: 2008/11/21 Time: 上午 09:43:14



Site Phase: *L2* Temperature: 26 ℃

Limit: CISPR22 Class B Conduction(QP) Power: AC 110V/60Hz Humidity: 55 %

EUT:

M/N: 08-0266-SEO

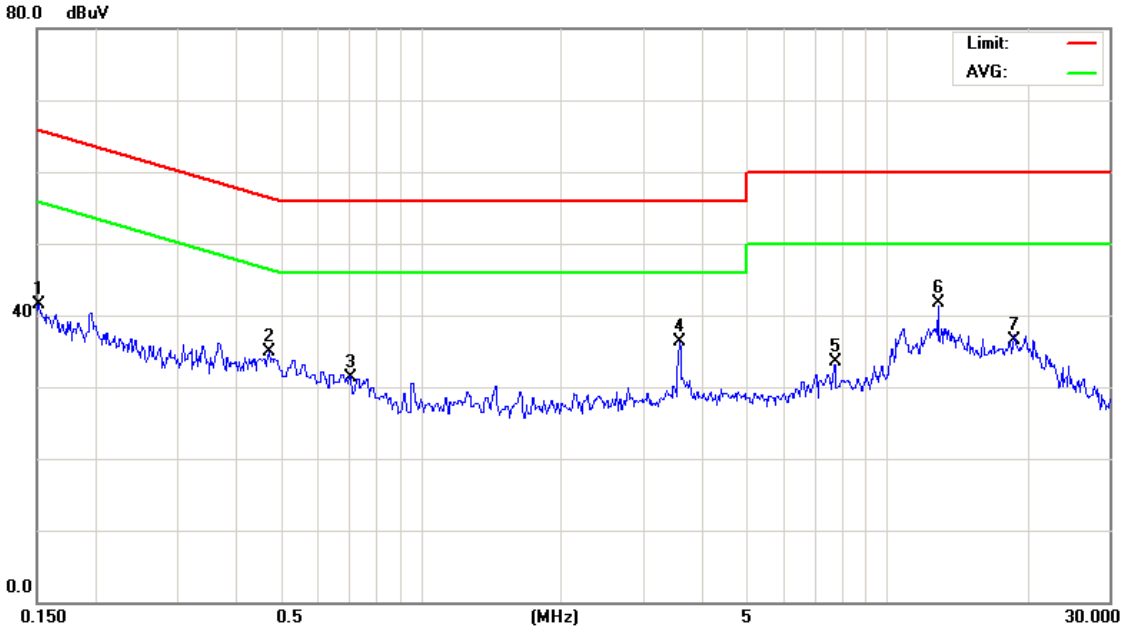
Mode: WCDMA(BAND V)

Note: CH4132

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1570	29.89	9.73	39.62	65.62	-26.00	peak	
2		0.4200	24.36	9.78	34.14	57.45	-23.31	peak	
3		1.5619	22.41	9.81	32.22	56.00	-23.78	peak	
4	*	3.5779	25.57	9.94	35.51	56.00	-20.49	peak	
5		12.8000	26.83	10.18	37.01	60.00	-22.99	peak	
6		18.4500	25.72	10.27	35.99	60.00	-24.01	peak	

*:Maximum data x:Over limit !:over margin ●Reference Only

File :PHAROS TRAVELER 117(WCDM Data :#3 Date: 2008/11/21 Time: 上午 09:46:35



Site Phase: *L1* Temperature: 26 ℃

Limit: CISPR22 Class B Conduction(QP) Power: AC 110V/60Hz Humidity: 55 %

EUT:

M/N: 08-0266-SEO

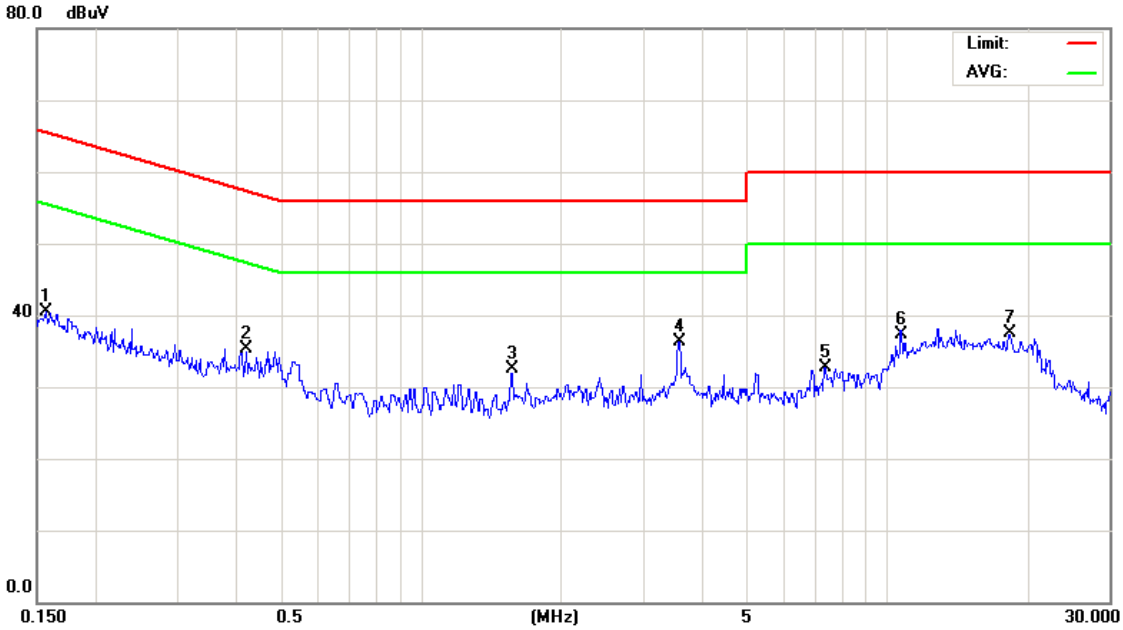
Mode: WCDMA(BAND V)

Note: CH4180

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1514	31.72	9.73	41.45	65.92	-24.47	peak	
2		0.4726	25.19	9.78	34.97	56.47	-21.50	peak	
3		0.7066	21.56	9.80	31.36	56.00	-24.64	peak	
4		3.5779	26.41	9.94	36.35	56.00	-19.65	peak	
5		7.7000	23.38	10.09	33.47	60.00	-26.53	peak	
6	*	12.8500	31.52	10.18	41.70	60.00	-18.30	peak	
7		18.7000	26.26	10.27	36.53	60.00	-23.47	peak	

*:Maximum data x:Over limit !:over margin ●Reference Only

File :PHAROS TRAVELER 117(WCDM Data :#4 Date: 2008/11/21 Time: 上午 09:49:13



Site Phase: *L2* Temperature: 26 ℃

Limit: CISPR22 Class B Conduction(QP) Power: AC 110V/60Hz Humidity: 55 %

EUT:

M/N: 08-0266-SEO

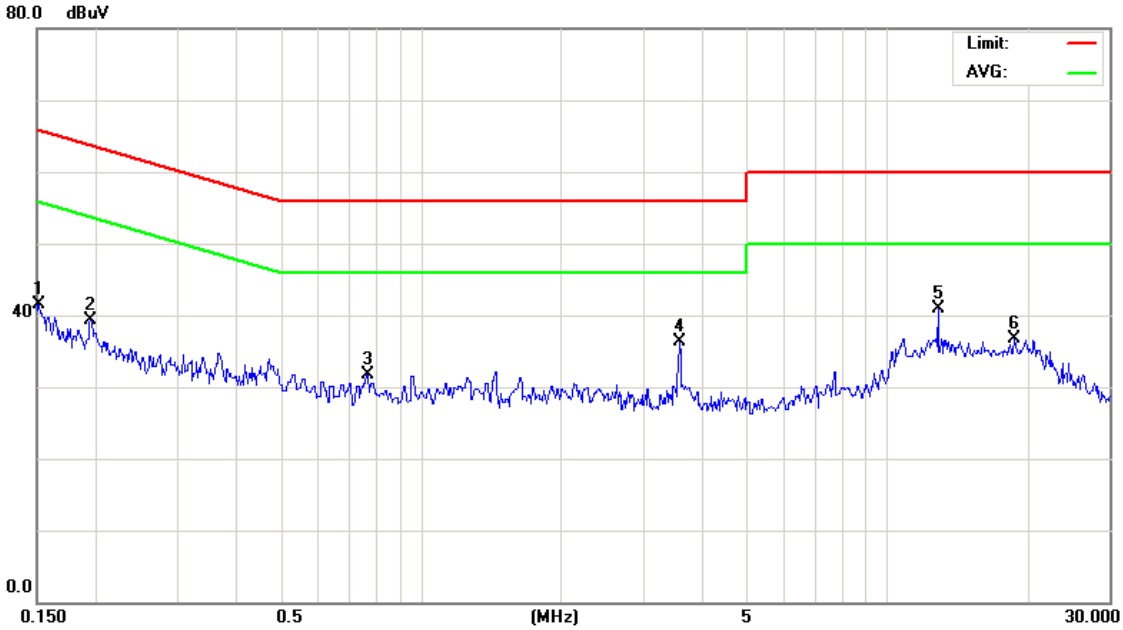
Mode: WCDMA(BAND V)

Note: CH4180

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1570	30.81	9.73	40.54	65.62	-25.08	peak	
2		0.4200	25.46	9.78	35.24	57.45	-22.21	peak	
3		1.5619	22.68	9.81	32.49	56.00	-23.51	peak	
4	*	3.5779	26.35	9.94	36.29	56.00	-19.71	peak	
5		7.3500	22.56	10.09	32.65	60.00	-27.35	peak	
6		10.7000	27.24	10.06	37.30	60.00	-22.70	peak	
7		18.2500	27.19	10.28	37.47	60.00	-22.53	peak	

*:Maximum data x:Over limit !:over margin ●Reference Only

File :PHAROS TRAVELER 117(WCDM Data :#5 Date: 2008/11/21 Time: 上午 09:52:35



Site Phase: *L1* Temperature: 26 ℃

Limit: CISPR22 Class B Conduction(QP) Power: AC 110V/60Hz Humidity: 55 %

EUT:

M/N: 08-0266-SEO

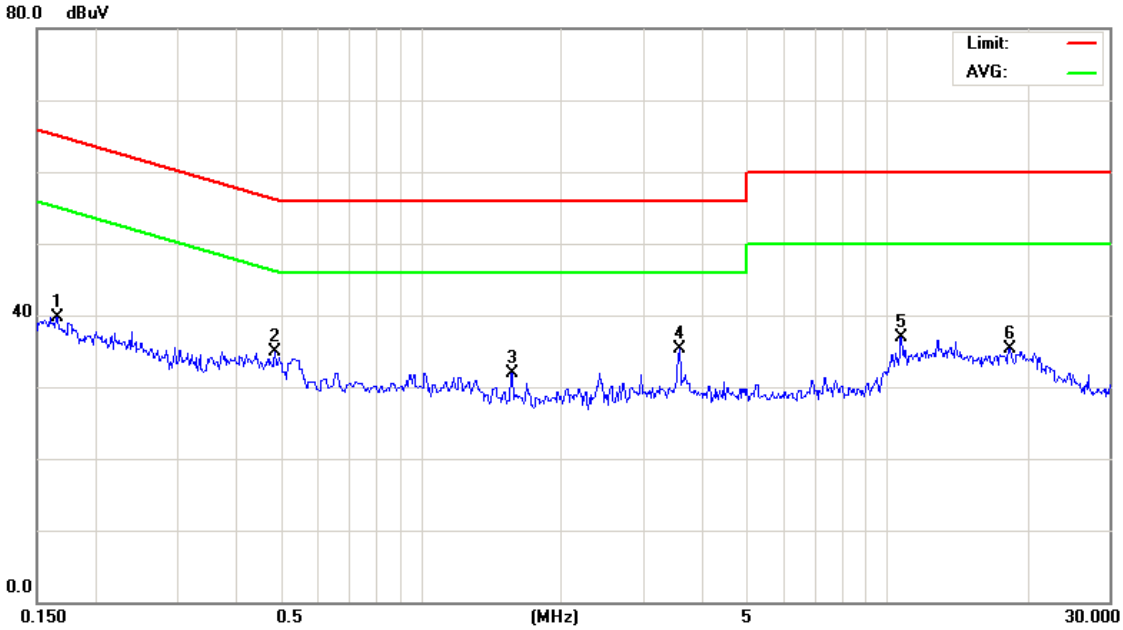
Mode: WCDMA(BAND V)

Note: CH4233

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1514	31.77	9.73	41.50	65.92	-24.42	peak	
2		0.1955	29.51	9.74	39.25	63.80	-24.55	peak	
3		0.7700	21.85	9.80	31.65	56.00	-24.35	peak	
4		3.5779	26.38	9.94	36.32	56.00	-19.68	peak	
5	*	12.8500	30.70	10.18	40.88	60.00	-19.12	peak	
6		18.7000	26.49	10.27	36.76	60.00	-23.24	peak	

*:Maximum data x:Over limit !:over margin ●Reference Only

File :PHAROS TRAVELER 117(WCDM Data :#6 Date: 2008/11/21 Time: 上午 09:55:43



Site Phase: *L2* Temperature: 26 ℃

Limit: CISPR22 Class B Conduction(QP) Power: AC 110V/60Hz Humidity: 55 %

EUT:

M/N: 08-0266-SEO

Mode: WCDMA(BAND V)

Note: CH4233

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1652	29.91	9.73	39.64	65.19	-25.55	peak	
2		0.4858	25.09	9.78	34.87	56.24	-21.37	peak	
3		1.5619	22.09	9.81	31.90	56.00	-24.10	peak	
4	*	3.5779	25.38	9.94	35.32	56.00	-20.68	peak	
5		10.7000	26.93	10.06	36.99	60.00	-23.01	peak	
6		18.2500	25.09	10.28	35.37	60.00	-24.63	peak	

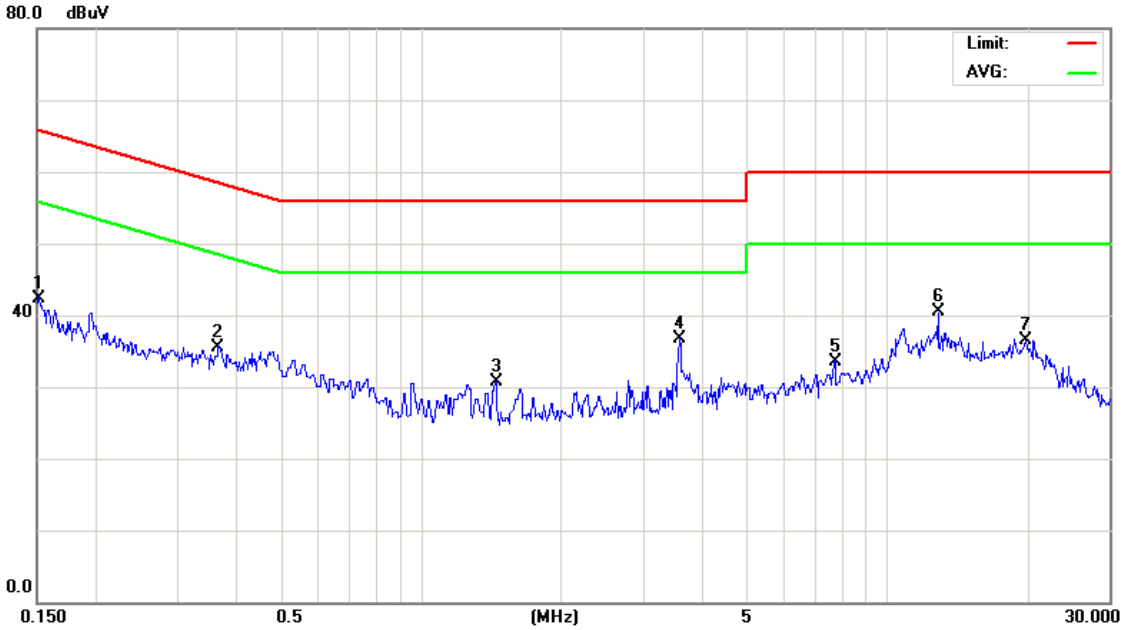
*:Maximum data x:Over limit !:over margin ●Reference Only

4.9.6.4 WCDMA Band II Test Result

Applicant	: Inventec Corporation
Model No	: Pharos Traveler 117
EUT	: PDA PHONE
Test Mode	: WCDMA Band II (Low CH9262 / Middle CH9400 / High CH 9536)
Test Date	: 11/21/2008

Please refer to next pager of detail testing data.

File :PHAROS TRAVELER 117(WCDM Data :#1 Date: 2008/11/21 Time: 上午 10:13:26



Site Phase: *L1* Temperature: 26 ℃

Limit: CISPR22 Class B Conduction(QP) Power: AC 110V/60Hz Humidity: 55 %

EUT:

M/N: 08-0266-SEO

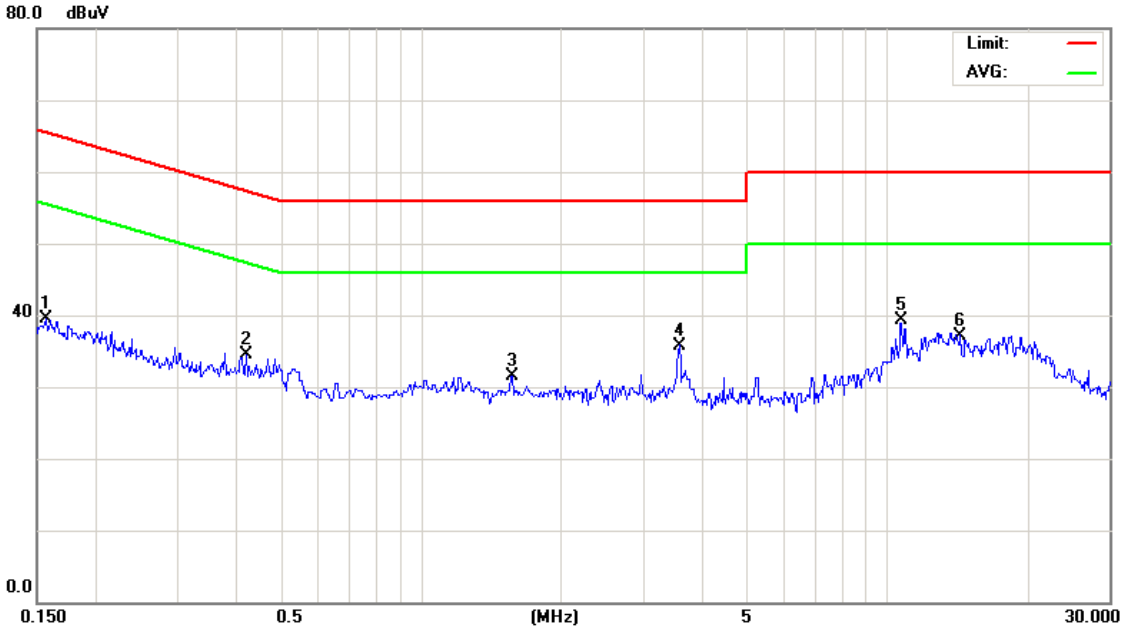
Mode: BANDII

Note: CH9262

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1514	32.58	9.73	42.31	65.92	-23.61	peak	
2		0.3673	25.81	9.78	35.59	58.56	-22.97	peak	
3		1.4449	20.81	9.81	30.62	56.00	-25.38	peak	
4	*	3.5779	26.74	9.94	36.68	56.00	-19.32	peak	
5		7.7000	23.42	10.09	33.51	60.00	-26.49	peak	
6		12.8500	30.24	10.18	40.42	60.00	-19.58	peak	
7		19.8000	26.34	10.25	36.59	60.00	-23.41	peak	

*:Maximum data x:Over limit !:over margin ●Reference Only

File :PHAROS TRAVELER 117(WCDM Data :#2 Date: 2008/11/21 Time: 上午 10:15:29



Site Phase: *L2* Temperature: 26 ℃

Limit: CISPR22 Class B Conduction(QP) Power: AC 110V/60Hz Humidity: 55 %

EUT:

M/N: 08-0266-SEO

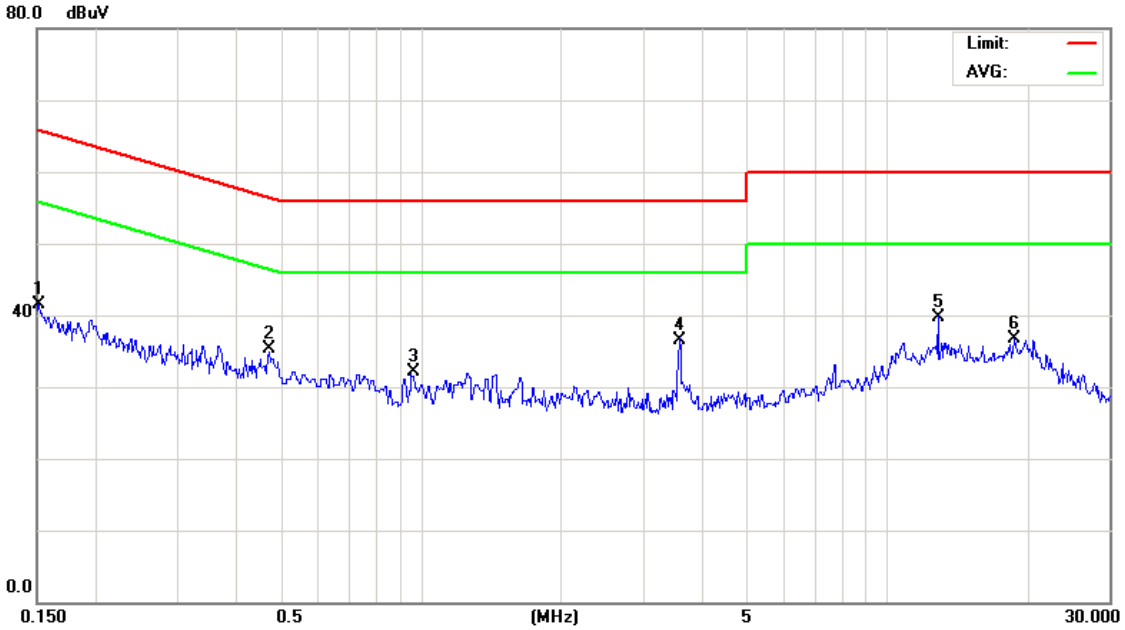
Mode: BANDII

Note: CH9262

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1570	29.80	9.73	39.53	65.62	-26.09	peak	
2		0.4200	24.64	9.78	34.42	57.45	-23.03	peak	
3		1.5619	21.77	9.81	31.58	56.00	-24.42	peak	
4	*	3.5779	25.77	9.94	35.71	56.00	-20.29	peak	
5		10.7000	29.32	10.06	39.38	60.00	-20.62	peak	
6		14.3500	26.93	10.20	37.13	60.00	-22.87	peak	

*:Maximum data x:Over limit !:over margin ●Reference Only

File :PHAROS TRAVELER 117(WCDM Data :#3 Date: 2008/11/21 Time: 上午 10:19:12



Site Phase: *L1* Temperature: 26 ℃

Limit: CISPR22 Class B Conduction(QP) Power: AC 110V/60Hz Humidity: 55 %

EUT:

M/N: 08-0266-SEO

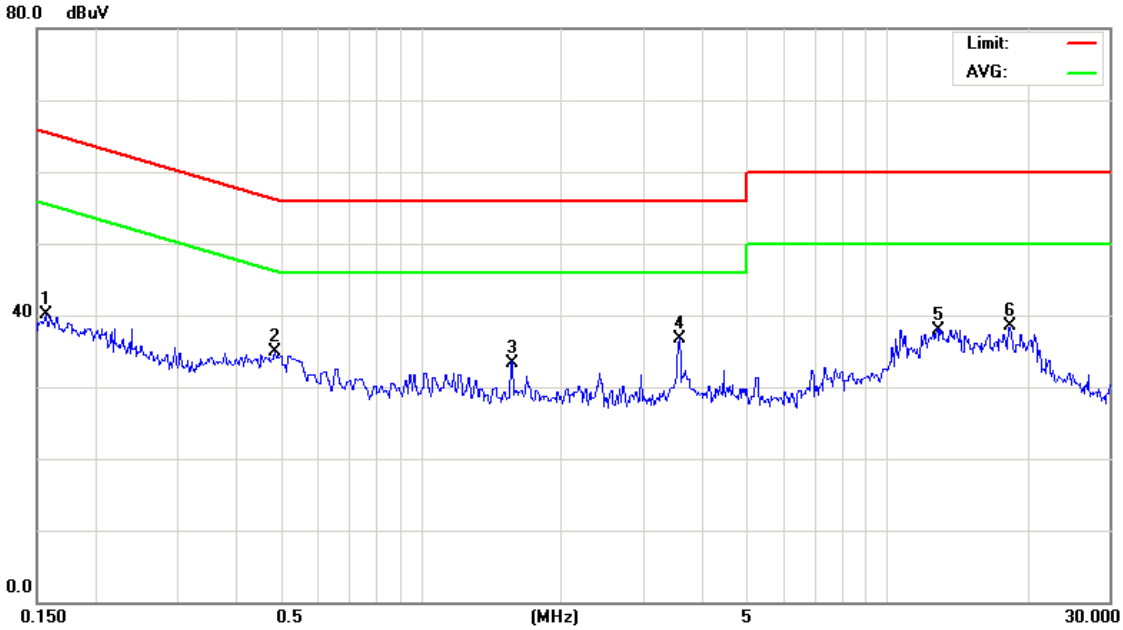
Mode: BANDII

Note: CH9400

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1514	31.72	9.73	41.45	65.92	-24.47	peak	
2		0.4726	25.45	9.78	35.23	56.47	-21.24	peak	
3		0.9586	22.24	9.81	32.05	56.00	-23.95	peak	
4	*	3.5779	26.63	9.94	36.57	56.00	-19.43	peak	
5		12.8500	29.56	10.18	39.74	60.00	-20.26	peak	
6		18.7000	26.42	10.27	36.69	60.00	-23.31	peak	

*:Maximum data x:Over limit !:over margin ●Reference Only

File :PHAROS TRAVELER 117(WCDM Data :#4 Date: 2008/11/21 Time: 上午 10:21:39



Site Phase: *L2* Temperature: 26 ℃

Limit: CISPR22 Class B Conduction(QP) Power: AC 110V/60Hz Humidity: 55 %

EUT:

M/N: 08-0266-SEO

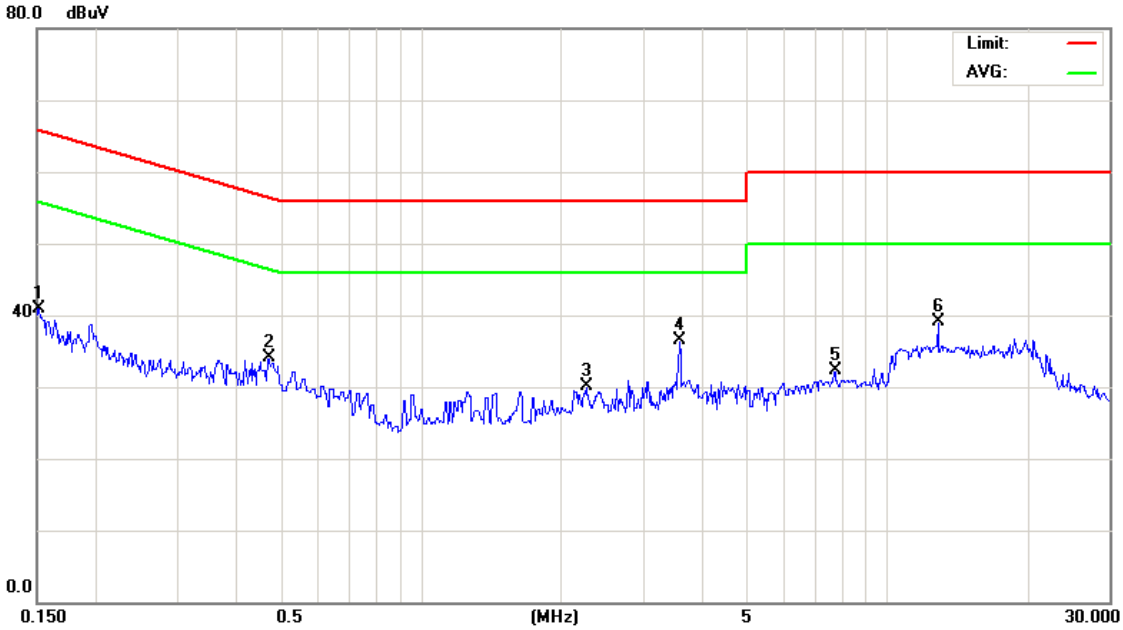
Mode: BANDII

Note: CH9400

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1570	30.32	9.73	40.05	65.62	-25.57	peak	
2		0.4858	25.22	9.78	35.00	56.24	-21.24	peak	
3		1.5619	23.45	9.81	33.26	56.00	-22.74	peak	
4	*	3.5779	26.84	9.94	36.78	56.00	-19.22	peak	
5		12.8000	27.82	10.18	38.00	60.00	-22.00	peak	
6		18.2500	28.27	10.28	38.55	60.00	-21.45	peak	

*:Maximum data x:Over limit !:over margin ●Reference Only

File :PHAROS TRAVELER 117(WCDM Data :#5 Date: 2008/11/21 Time: 上午 10:23:51



Site Phase: *L1* Temperature: 26 ℃

Limit: CISPR22 Class B Conduction(QP) Power: AC 110V/60Hz Humidity: 55 %

EUT:

M/N: 08-0266-SEO

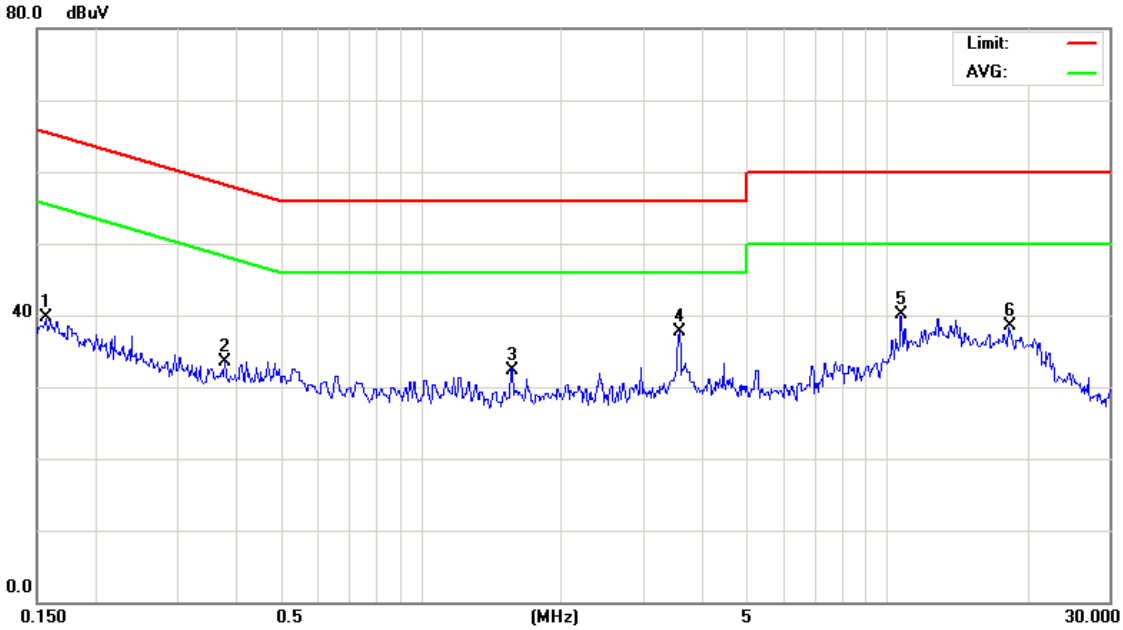
Mode: BANDII

Note: CH9538

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1514	31.24	9.73	40.97	65.92	-24.95	peak	
2		0.4691	24.29	9.78	34.07	56.53	-22.46	peak	
3		2.2639	20.24	9.87	30.11	56.00	-25.89	peak	
4	*	3.5779	26.47	9.94	36.41	56.00	-19.59	peak	
5		7.7000	22.21	10.09	32.30	60.00	-27.70	peak	
6		12.8500	28.86	10.18	39.04	60.00	-20.96	peak	

*:Maximum data x:Over limit !:over margin ●Reference Only

File :PHAROS TRAVELER 117(WCDM Data :#6 Date: 2008/11/21 Time: 上午 10:25:13



Site Phase: *L2* Temperature: 26 ℃

Limit: CISPR22 Class B Conduction(QP) Power: AC 110V/60Hz Humidity: 55 %

EUT:

M/N: 08-0266-SEO

Mode: BANDII

Note: CH9538

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.1570	29.89	9.73	39.62	65.62	-26.00	peak	
2		0.3780	23.75	9.78	33.53	58.32	-24.79	peak	
3		1.5619	22.52	9.81	32.33	56.00	-23.67	peak	
4	*	3.5779	27.84	9.94	37.78	56.00	-18.22	peak	
5		10.7000	29.99	10.06	40.05	60.00	-19.95	peak	
6		18.2500	28.14	10.28	38.42	60.00	-21.58	peak	

*:Maximum data x:Over limit !:over margin ●Reference Only

5. List of Measurement Equipments

Manufacturer	Name of Equipment	Type/Model	Serial Number	Calibration	
				Last Cal.	Due Date
Agilent	Spectrum analyzer	E4408B	MY45107753	Jun. 05, 2008	Jun. 05, 2009
R&S	Receiver	ESCI	100367	Jun. 05, 2008	Jun. 05, 2009
SCHWARZBECK	Trilog Broadband Antenna	VULB 9163	9163-270	Jun. 26, 2008	Jun. 26, 2009
SCHWARZBECK	Broadband Horn Antenna	BBHA 9120D	9120D-550	Jun. 26, 2008	Jun. 26, 2009
SCHWARZBECK	Broadband Horn Antenna	BBHA 9170	9170-320	Jun. 09, 2008	Aug. 07, 2009
Agilent	Amplifier	8447D	2944A10961	Jun. 10, 2008	Jun. 10, 2009
Universal Radio Communication Tester	ROHDE & SCHWARZ	CMU200	112387	Oct. 31, 2008	Oct. 31, 2009
Universal Radio Communication Tester	Agilent	E5515C (8960)	GB47020167	Apr. 17, 2008	Apr. 17, 2009
Spectrum Analyzer	Agilent	E4445A	MY45300744	Apr. 17, 2008	Apr. 17, 2009
Loop Dipole	ETS-Lindgren	3127-1880	00052640	Nov. 29, 2007	Nov. 29, 2008
Loop Dipole	ETS-Lindgren	3127-836	00055272	Jul. 02, 2008	Jul. 02, 2009
Sleeve Dipole	ETS-Lindgren	3126-1845	00056670	Jun. 29, 2008	Jun. 29, 2009
Sleeve Dipole	ETS-Lindgren	3126-880	00052705	Jun. 29, 2008	Jun. 29, 2009
Anechoic Chamber	ETS-Lindgren	AMS 8500	S/N 102165	NA	
High Pass Filter	MICRO-TRONICS	HPM50108	020	NA	
High Pass Filter	MICRO-TRONICS	HPM50111	021	NA	
Circularly Polarized Communication Antennas	EMCO	3102	00051714	NA	
Pattern Measurement Software	ETS-Lindgren	EMQuest™ EMQ-100	NA	NA	
Desktop Computer with Windows XP		Dell Computers	NA	NA	
Antenna Positioner Controller	EMCO	2090	00052447	NA	
MAPS Positioner	EMCO	2010/2015	NA	NA	
Filter	K&L	5TNF-1700/ 2000-0.1N/N	166	NA	
Filter	K&L	3TNF-800/ 1000-0.2N/N	274	NA	
Attenuator	RADIALL	R41572000	0603033073	NA	
Splitter	Powercom	SGR-GFQ-2-D	41106609	NA	
Power divider	Agilent	87302C	3239A00760	NA	

6. Uncertainty Evaluation

Uncertainty of Radiated Emission Measurement (30MHz ~ 1000MHz)

Contribution	Uncertainty of Xi		$U(Xi)$
	dB	Probability Distribution	
Receiver reading	0.41	Normal(k=2)	0.21
Antenna factor calibration	0.83	Normal(k=2)	0.42
Cable loss calibration	0.25	Normal(k=2)	0.13
Pre Amplifier Gain calibration	0.27	Normal(k=2)	0.14
RCV/SPA specification	2.50	Rectangular	0.72
Antenna Factor Interpolation for Frequency	1.00	Rectangular	0.29
Site imperfection	1.43	Rectangular	0.83
Mismatch	+0.39/-0.41	U-shaped	0.28
combined standard uncertainty Uc(y)	**1.27**		
Measuring uncertainty for a level of confidence of 95% U=2Uc(y)	**2.54**		

Uncertainty of Radiated Emission Measurement (1GHz ~ 40GHz)

Contribution	Uncertainty of Xi		$U(Xi)$	Ci	$Ci * U(Xi)$
	dB	Probability Distributio			
Receiver reading	±0.10	Normal(k=1)	0.10	1	0.10
Antenna factor calibration	±1.70	Normal(k=2)	0.85	1	0.85
Cable loss calibration	±0.50	Normal(k=2)	0.25	1	0.25
Receiver Correction	±2.00	Rectangular	1.15	1	1.15
Antenna Factor Directional	±1.50	Rectangular	0.87	1	0.87
Site imperfection	±2.80	Triangular	1.14	1	1.14
Mismatch Receiver VSWR $\sqrt{1}$ = 0.197 Antenna VSWR $\sqrt{2}$ = 0.194 Uncertainty=20log(1-$\sqrt{1} * \sqrt{2} * \sqrt{3}$)	+0.34/-0.35	U-shaped	0.244	1	0.244
Combined standard uncertainty Uc(y)	**2.36**				
Measuring uncertainty for a level of confidence of 95% U=2Ue(y)	**4.72**				

Appendix A - 3G Measurement Procedures

See following Attached Pages.

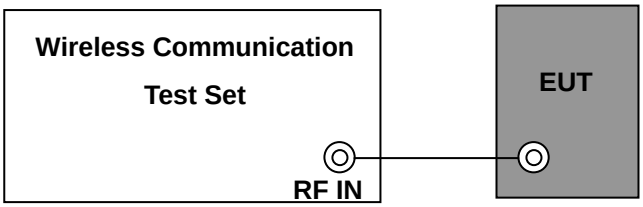
3G Measurement Procedures

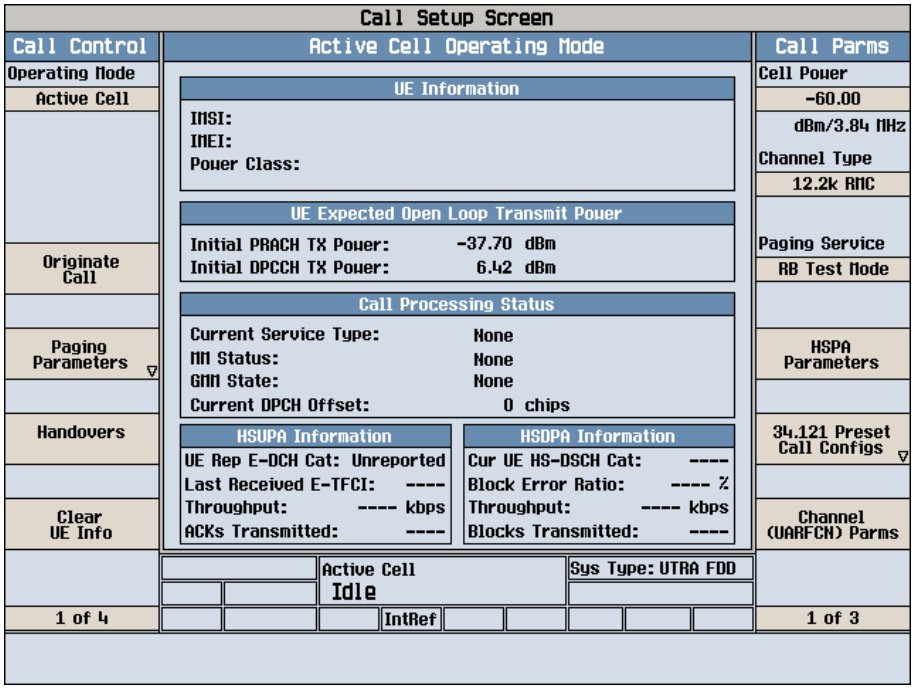
Conducted Output Power

The EUT was tested according to the requirements of the FCC 3G procedures and the TS 34.121. The EUT's WCDMA and HSPA function is Release6 version supporting HSDPA and HSUPA. A detailed analysis of the output power for all WCDDMA, HSDPA and HSUPA mode is provided in the table below. According to the FCC 3G procedures, handsets with both HSDPA and HSUPA should be tested according to release 6 HSPA test procedures, and EUT dose not support VOIP function over the HSPA function. The HSPA output levels are less than 1/4dB higher than the basic 12.2kbps RMC configurations in WCDMA, as required by FCC 3G procedures and the PBA is fulfilled.

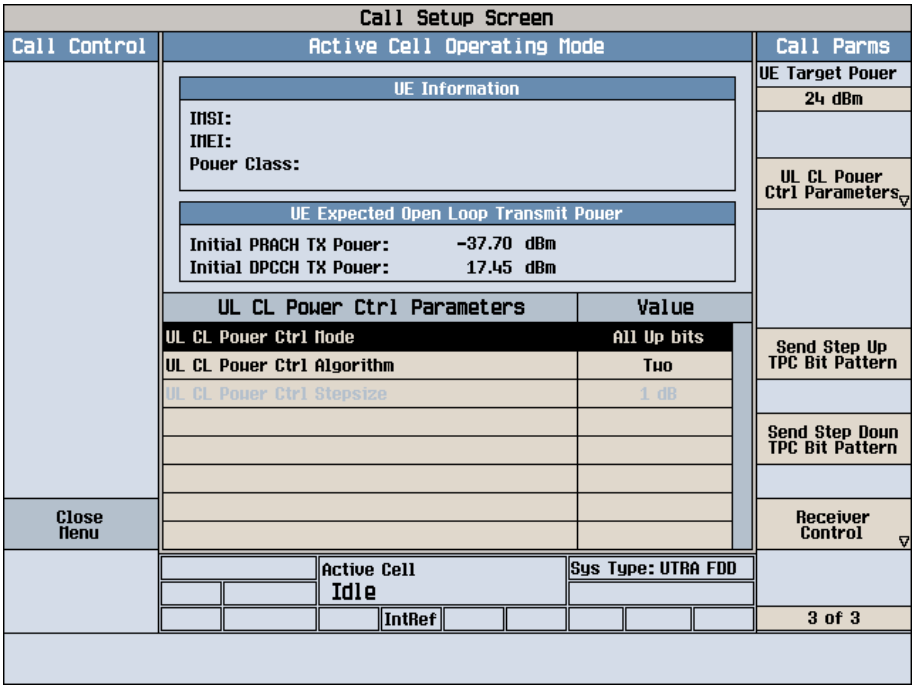
WCDMA Setup Configuration

1. The EUT was connected to Base Station referred to the drawing of Setup Configuration.
2. The RF path losses were compensated into measurements.
3. A call was established between EUT and Base Station with following setting
   a、 set Cell Power = -60dBm
   b、 set RMC 12.2K
   c、 set UE Target Power = 24dBm
   d、 set Power Ctrl Mode = All Up bit
4. The transmitted maximum output power was recorded.





WCDMA Setup Configuration : Step 3 – a & b



WCDMA Setup Configuration : Step 3 – c & d

HSDPA Setup Configuration

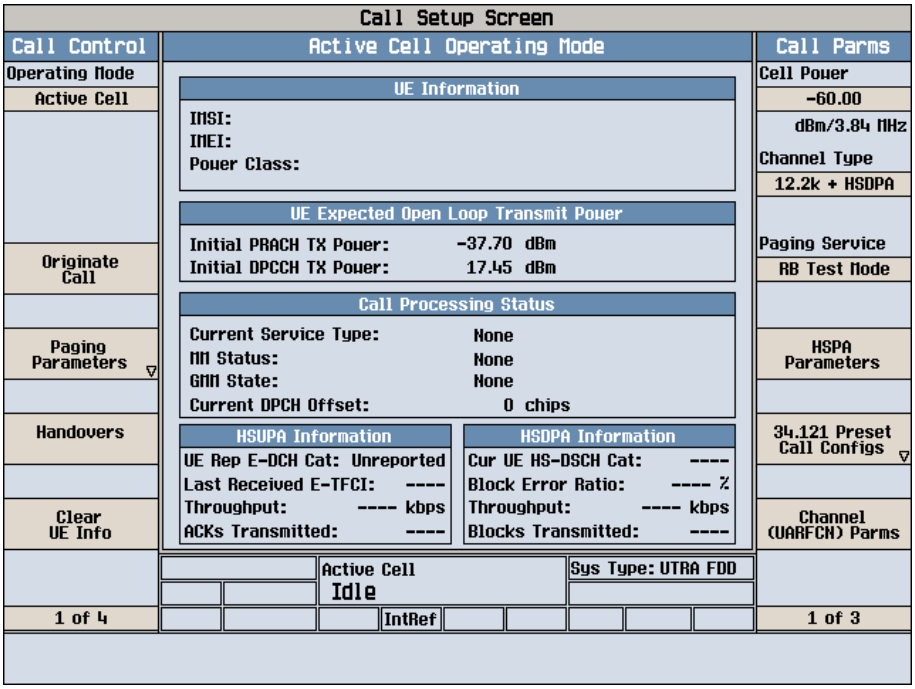
1. The EUT was connected to Base Station referred to the drawing of Setup Configuration.
2. The RF path losses were compensated into measurements.
3. A call was established between EUT and Base Station with following setting
   a、 Set Gain Factors (βc and βd) and parameters were set according to each specific sub-test in the following table quoted from the TS 34.121.
   b、 Set Cell Power = -60dBm
   c、 Set RMC 12.2K+HSDPA
   d、 Set HS-DSCH Configuration Type to FRC(H-set 1,QPSK)
   e、 Set UE Target Power = 24dBm
   f、 Set Power Ctrl Mode = All Up bit
   g、 Select Uplink Parameter
   h、 Set Gain Factor(β c and β d) Parameters were set according to each
   i、 Ex. Sub-test 1 : β c=2, β d=15
   j、 Set PS Domain
4. The transmitted maximum output power was recorded.

Sub-test	βc	βd	βd (SF)	βc/βd	βhs(1,2)	CM (dB)(3)	MRP (dB)(3)
1	2/15	15/15	64	2/15	4/15	0.0	0.0
2	12/15(4)	15/15(4)	64	12/15(4)	24/15	1.0	0.0
3	15/15	8/15	64	15/8	30/15	1.5	0.5
4	15/15	4/15	64	15/4	30/15	1.5	0.5

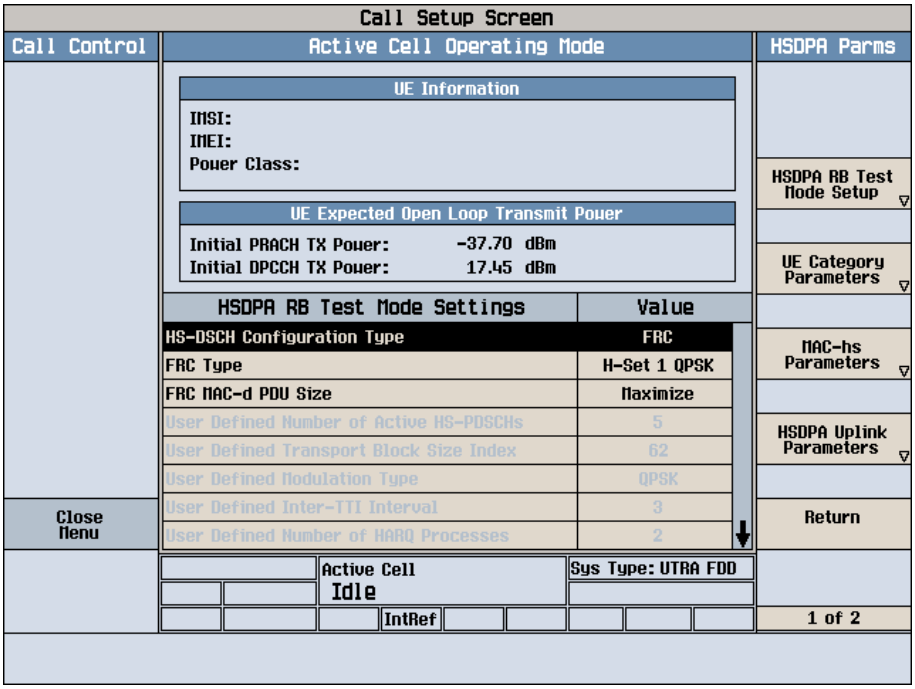
Note

1. Δ_{ACK}, Δ_{NACK} and Δ_{CQI} = 8 ⇔ Ahs = βhs/βc = 30/15 ⇔ βhs= 30/15 *βc
2. For theHS-DPCCH power mask requirement test in clause 5.2C, 5.7A, and the Error Vector Magnitude(EVM) with HS-DPCCH test in clause 5.13.1A and HSDPA EVM with phase discontinuity in clause 5.13.1AA, Δ_{ACK} and Δ_{NACK} = 30/15 with βhs = 30/15 *βc and Δ_{CQI} = 24/15 with βhs = 24/15*βc
3. CM = 1 for βc/βd =12/15, βhs/βc=24/15. For all other combinations of DPDCH, DPCCH and HS-DPCCH the MPR is based on the relative CM difference. This is applicable for only UEs that support HSDPA in release 6 and later releases.
4. For subtest 2 the βc/βd ratio of 12/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signaled gain factors for the reference TFC (TF1, TF1) to βc = 11/15 and βd = 15/15.

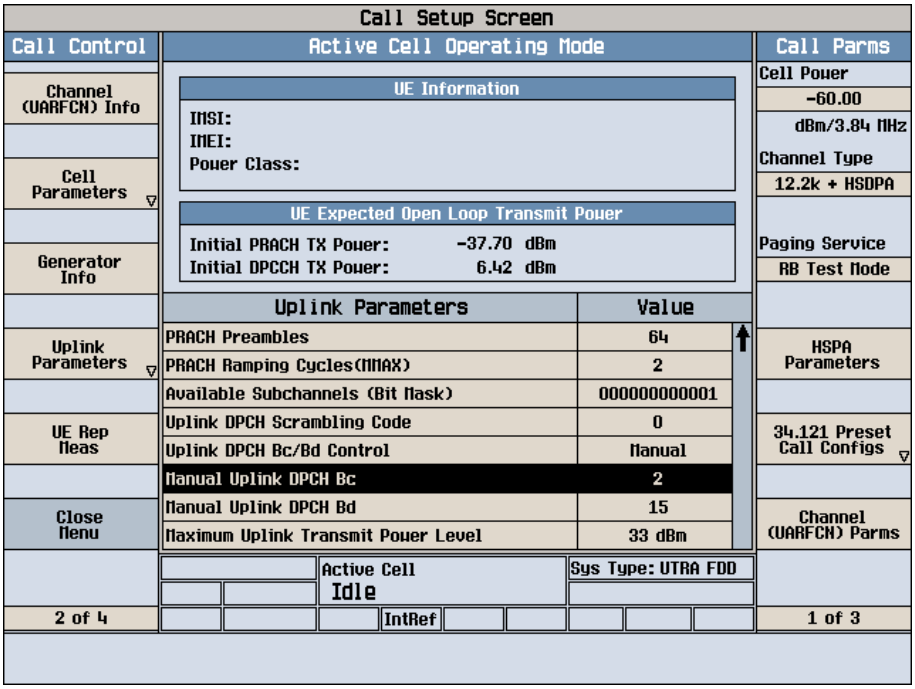
Table 1. Setup for Release 5 HSDPA



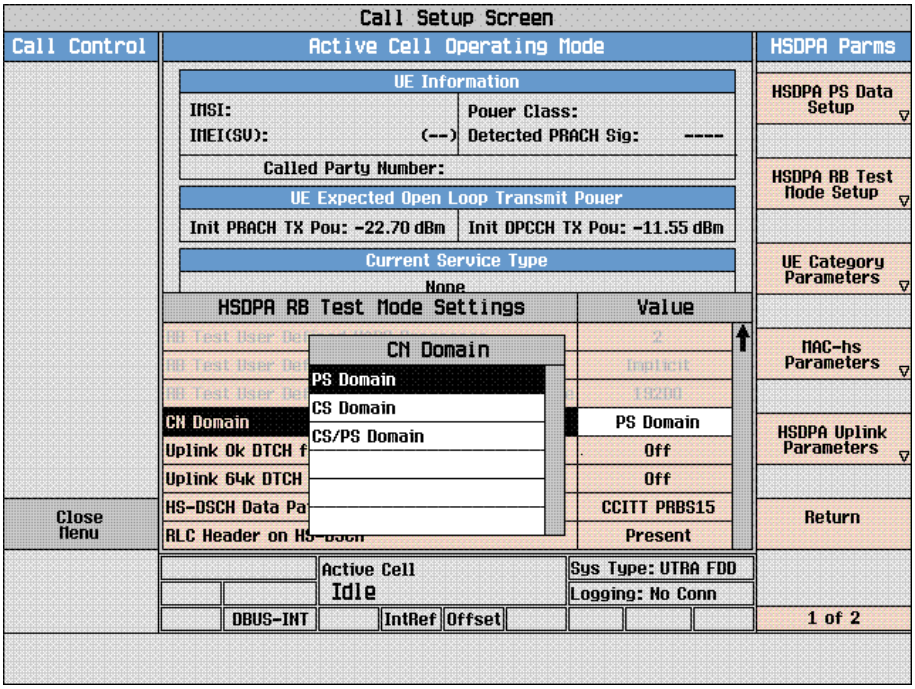
HSDPA Setup Configuration : Step 3 – b & c



HSDPA Setup Configuration : Step 3 - d



HSDPA Setup Configuration : Step 3 – i



HSDPA Setup Configuration : Step 3 - j

HSUPA Setup Configuration

1. The EUT was connected to Base Station referred to the drawing of Setup Configuration.
2. The RF path losses were compensated into measurements.
3. A call was established between EUT and Base Station with following setting
   a、 Set the Gain Factors (βc and βd) and parameters (AG Index) were set according to each specific sub-test in the following table quoted from the TS 34.121.
   b、 Set Cell Power = -75dBm
   c、 Set RMC 12.2K+HSPA
   d、 Set HS-DSCH Configuration Type to FRC(H-set 1,QPSK)
   e、 Set UE Target Power = 24dBm
   f、 Set Power Ctrl Mode = Alternating bits
   g、 Select Uplink Parameter
   h、 Set Gain Factor(β c,and β d) Parameters were set according to each
   i、 Ex. Sub-test 1 : β c=11, β d=15
   j、 Set AG Ex. Sub-test 1 :AG =20
   k、 Set E-TFCI Ex. Sub-test 1 : 75
   l、 Set PS Domain
4. The transmitted maximum output power was recorded.

Sub-test	βc	βd	βd (SF)	βc/βd	βhs[1]	βec	βed	Bed (SF)	Bed (codes)	CM[2] (dB)	MPR (dB)	AG[4] Index	E-TFCI
1	11/15[3]	15/15[3]	64	11/15[3]	22/15	209/225	1039/225	4	1	1.0	0.0	20	75
2	6/15	15/15	64	6/15	12/15	12/15	94/75	4	1	3.0	2.0	12	67
3	15/15	9/15	64	15/9	30/15	30/15	βed1: 47/15 βed2: 47/15	4	2	2.0	1.0	15	92
4	2/15	15/15	64	2/15	4/15	2/15	56/75	4	1	3.0	2.0	17	71
5	15/15[4]	15/15[4]	64	15/15[4]	30/15	24/15	134/15	4	1	1.0	0.0	21	81

Note 1: ΔACK, ΔNACK and ΔCQI = 8 ⇔ Ahs = βhs/βc = 30/15 ⇔ βhs= 30/15 *βc.

Note 2: CM = 1 for βc/βd =12/15, βhs/βc=24/15. For all other combinations of DPDCH, DPCCH, HS- DPCCH, E-DPDCH and E-DPCCH the MPR is based on the relative CM difference.

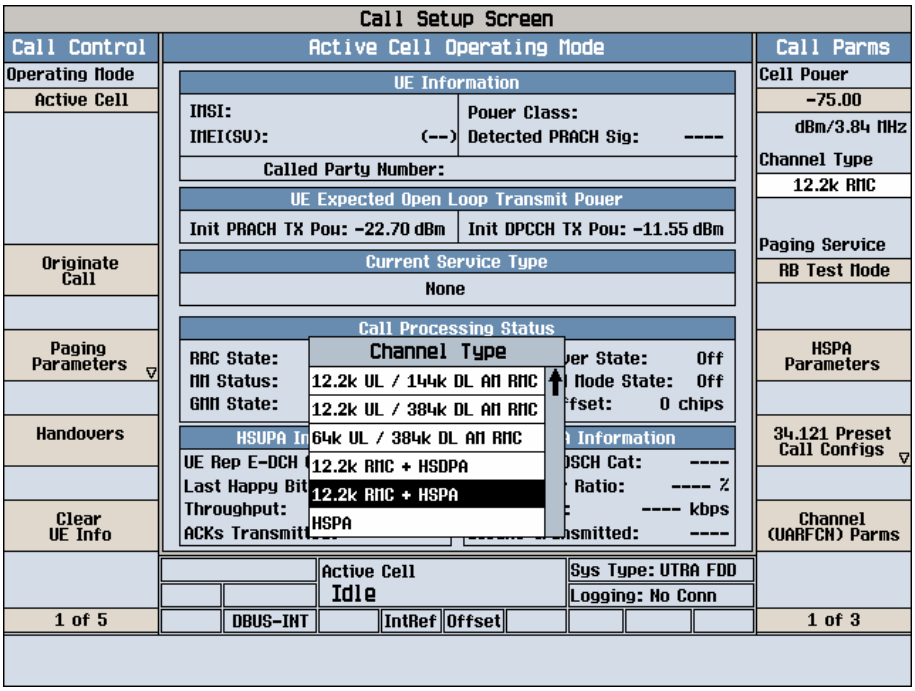
Note 3: For subtest 1 the βc/βd ratio of 11/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signaled gain factors for the reference TFC (TF1, TF1) to βc = 10/15 and βd = 15/15.

Note 4: For subtest 5 the βc/βd ratio of 15/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signaled gain factors for the reference TFC (TF1, TF1) to βc = 14/15 and βd = 15/15.

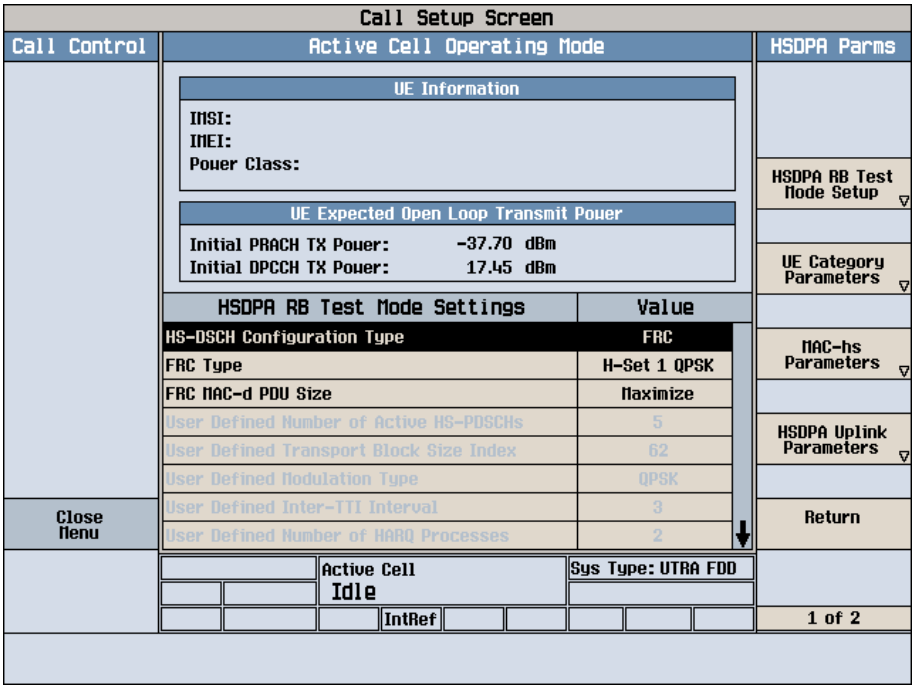
Note 5: Testing UE using E-DPDCH Physical Layer category 1 Sub-test 3 is not required according to TS 25.306 Table 5.1g.

Note 6: βed can not be set directly; it is set by Absolute Grant Value.

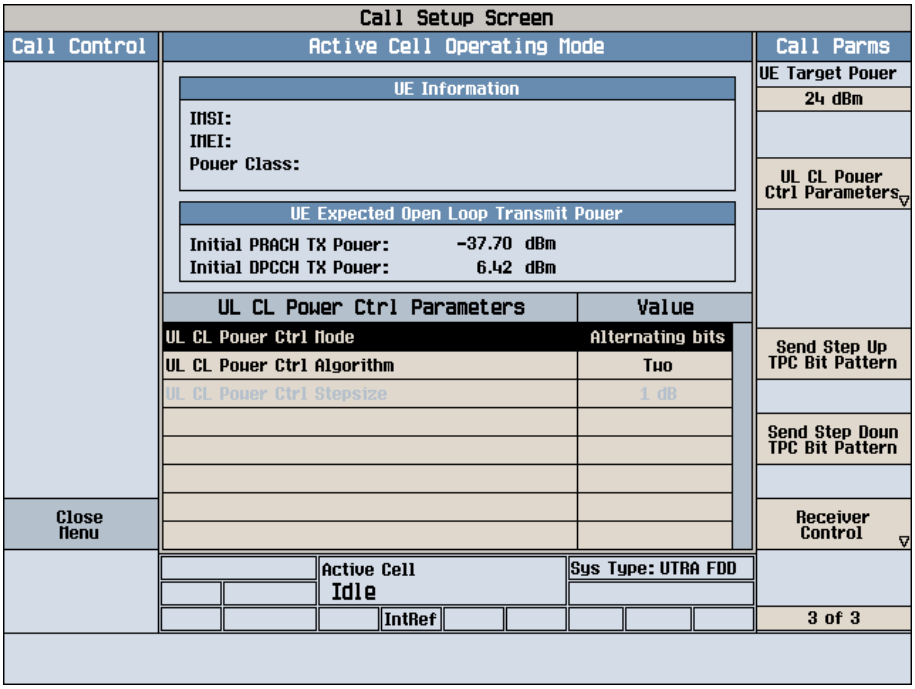
Table 2. Setup for Release 6 HSUPA



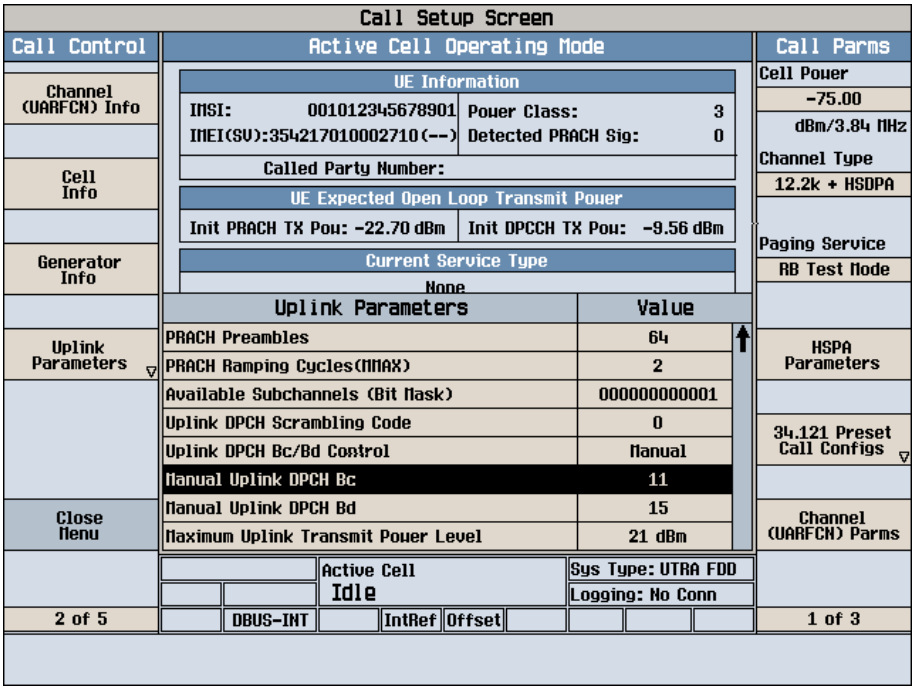
HSUPA Setup Configuration : Step 3 – b & c



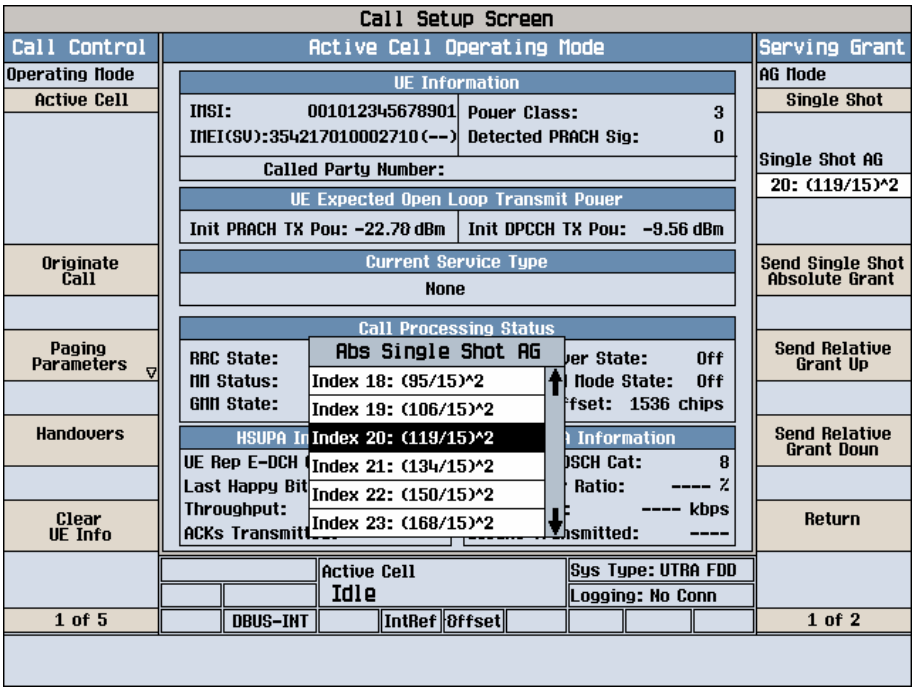
HSUPA Setup Configuration : Step 3 - d



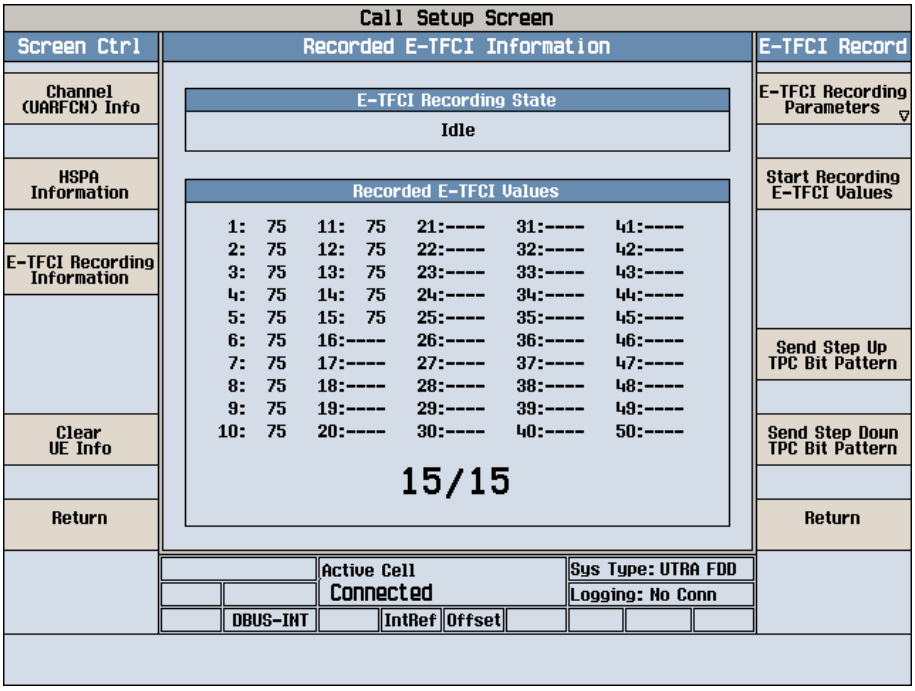
HSUPA Setup Configuration : Step 3 – e & f



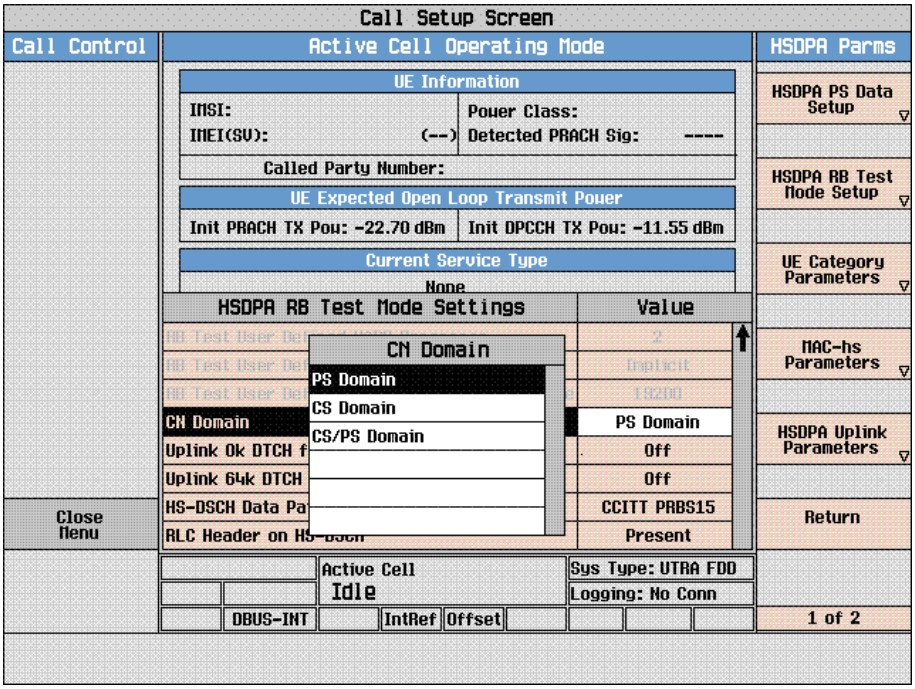
HSUPA Setup Configuration : Step 3 – i



HSUPA Setup Configuration : Step 3 – j



HSUPA Setup Configuration : Step 3 – k



HSUPA Setup Configuration : Step 3 – l