FCC TEST REPORT

for

47 CFR Part 22H, 24E

Equipment	:	**POCKET PC PHONE**
Model No.	:	**ATHE100**
FCC ID	:	**NM8ATHE100**
Tx Frequency Range	:	**GSM850 : 824~849 MHz** **PCS1900 : 1850~1910 MHz** **WCDMA Band V : 824~849 MHz** **WCDMA Band II : 1850~1910 MHz**
Max. ERP/EIRP Power	:	**GSM850(GSM) : 0.30 W** **PCS1900(GSM) : 0.86 W** **WCDMA Band V : 0.04 W** **WCDMA Band II : 0.11 W**
Emission Designator	:	**GSM : 300KGXW** **EDGE : 300KG7W** **WCDMA : 4M22F9W**
Applicant	:	**HIGH TECH COMPUTER CORP.** No.23, Xinghua Rd., Taoyuan City, Taoyuan County 330, Taiwan, R.O.C.

- The test result refers exclusively to the test presented test model / sample.
- Without written approval of SPORTON International Inc., the test report shall not be reproduced except in full.
- **Certificate or Test Report must not be used by the applicant to claim the product in this test report endorsement by NVLAP or any agency of U.S. government.**
- The data shown in this test report were carried out on Apr. 12, 2007 at **Sporton International Inc. LAB.**
- Report No.: FG731703, Report Version: Rev. 03.

Roy Wu
Deputy Manager

SPORTON International Inc.
6F, No.106, Sec. 1, Hsin Tai Wu Rd., Hsi Chih, Taipei Hsien, Taiwan, R.O.C.

Table of Contents

History of this test report ..... **ii**
1. General Information **1**
1.1. Applicant 1
1.2 Manufacturer 1
1.3 Basic Description of Equipment under Test 1
1.4 Feature of Equipment under Test 2
1.5 Report Date 3
2 Test Configuration of Equipment under Test **4**
2.1 Test Manner 4
2.2 Test Mode 4
2.3 Connection Diagram of Test System 4
2.4 Ancillary Equipment List 4
3. General Information of Test Site **5**
3.1 Test Voltage 5
3.2 Test in Compliance with 5
3.3 Frequency Range Investigated 5
3.4 Test Distance 5
4. Test Data and Test Result **6**
4.1 List of Measurements and Examinations 6
4.2 RF Output Power 7
4.3 ERP / EIRP Measurement 9
4.4 Occupied Bandwidth and Band Edge Measurement 13
4.5 Conducted Emission 50
4.6 Field Strength of Spurious Radiation 69
4.7 Frequency Stability (Temperature Variation) 145
4.8 Frequency Stability (Voltage Variation) 148
5 List of Measurement Equipments **150**
6 Uncertainty Evaluation **151**

Appendix A - External Photographs
Appendix B - Internal Photographs
Appendix C - Setup Photographs

History of this test report

Report Issue Date: Apr. 13, 2007

Report No.	Description

1. General Information

1.1. Applicant

HIGH TECH COMPUTER CORP.
No.23, Xinghua Rd., Taoyuan City, Taoyuan County 330, Taiwan, R.O.C.

1.2 Manufacturer

HIGH TECH COMPUTER CORP.
No.23, Xinghua Rd., Taoyuan City, Taoyuan County 330, Taiwan, R.O.C.

1.3 Basic Description of Equipment under Test

Equipment	: POCKET PC PHONE
Model No.	: ATHE100
FCC ID	: NM8ATHE100
Power Supply Type	: Switching, From Battery 3.7V
AC Power Cord	: AC 120V, Wall-mount, 1.8 meter, 2 pin
Adapter 1	: Phihong, PSAA05A-050
Adapter 2	: Delta, ADP-5FH B
Battery	: Sanyo, ATHE160
Earphone	: Cotron, CHM-60ST V07004
Holster	: Xigma, HTC-010

Remark: The ATHE100 have two models. One is with VT camera and the other is without it. Both models are with main cameras. ATHE100 with VT camera is worst model and used for testing.

1.4 Feature of Equipment under Test

DUT Type :	POCKET PC PHONE
Model Name :	ATHE100
FCC ID :	NM8ATHE100
Tx Frequency :	GSM850 : 824 ~ 849 MHz PCS1900 : 1850 ~1910 MHz WCDMA Band V : 824 ~ 849 MHz WCDMA Band II : 1850 ~ 1910 MHz WLAN / Bluetooth : 2400 ~ 2483.5
Rx Frequency :	GSM850 : 869 ~ 894 MHz PCS1900 : 1930 ~ 1990 MHz WCDMA Band V : 869 ~ 894 MHz WCDMA Band II : 1930 ~ 1990 MHz WLAN / Bluetooth : 2400 ~ 2483.5
Maximum Output Power to Antenna :	GSM850(GSM) : 33.74 dBm GSM850(EDGE) : 26.89 dBm PCS1900(GSM) : 30.88 dBm PCS1900(EDGE) : 26.05 dBm WCDMA Band V : 23.94 dBm (12.2Kbps) / 23.92 dBm (64Kbps) / 23.96 dBm (144Kbps) / 23.92 dBm (384Kbps) WCDMA Band V (HSDPA) : 23.80 dBm (12.2 Kbps) WCDMA Band II : 23.63 dBm (12.2Kbps) / 23.59 dBm (64Kbps) / 23.68 dBm (144Kbps) / 23.47 dBm (384Kbps) WCDMA Band II (HSDPA) : 23.41 dBm (12.2Kbps) Bluetooth : 1.54 dBm 802.11b : 15.78 dBm ; 802.11g : 21.23 dBm
Maximum ERP/EIRP :	GSM850(GSM) : 0.30 W (24.80 dBm) PCS1900(GSM) : 0.86 W (29.35 dBm) WCDMA Band V : 0.04 W (15.90 dBm) WCDMA Band II : 0.11 W (20.41 dBm)
Antenna Type :	Fixed Internal (Monpole & IFA)
Type of Antenna Connector	N/A
Antenna Gain	1 dBi
HW Version	A01
SW Version	5.1.461
Power Rating (DC/AC , Voltage and Current of RF element or PA) :	DC 3.7V / 2200mA
Digital Modulation Emission :	GSM : GMSK EDGE : 8PSK WCDMA / HSDPA : QPSK WLAN : DSSS / OFDM Bluetooth : GFSK
Type of Emission :	GSM : 300KGXW EDGE : 300KG7W WCDMA : 4M22F9W
Device Power Class :	GSM850 : 4 PCS1900 : 1 WCDMA Band V : 3 WCDMA Band II : 3
DUT Stage :	Identical Prototype

1.5 Report Date

EUT Received : Mar. 17, 2007

Report Date : Apr. 13, 2007

2 Test Configuration of Equipment under Test

2.1 Test Manner

a. The spurious emission measurements were carried out in semi-anechoic chamber with 3-meter test range.
b. During all testings, EUT is in link mode with base station emulator at maximum power level.
c. Frequency range investigated: radiated emission 30 MHz to 9000 MHz for GSM850 and WCDMA Band V; 30MHz to 19000 MHz for PCS1900 and WCDMA Band II.

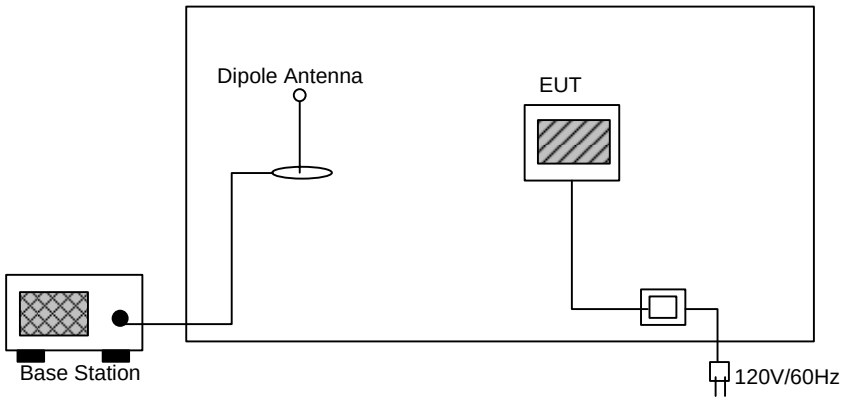
2.2 Test Mode

Application	GSM850	PCS1900	WCDMA Band V	WCDMA Band II
Radiated Emission	☒ Mode 1: GSM Link ☒ Mode 2: EDGE Link ☒ Mode 9: GSM Link + WLAN Link	☒ Mode 3: GSM Link ☒ Mode 4: EDGE Link	☒ Mode 5: WCDMA Link ☒ Mode 6: HSDPA Link	☒ Mode 7: WCDMA Link ☒ Mode 8: HSDPA Link
Conducted Measurement	☒ Mode 1: GSM Link ☒ Mode 2: EDGE Link	☒ Mode 3: GSM Link ☒ Mode 4: EDGE Link	☒ Mode 5: WCDMA Link a. 12.2Kbps b. 64Kbps c. 144Kbps d. 384Kbps ☒ Mode 6: HSDPA Link	☒ Mode 7: WCDMA Link a. 12.2Kbps b. 64Kbps c. 144Kbps d. 384Kbps ☒ Mode 8: HSDPA Link

Remark: The ATHE100 have two models. One is with VT camera and the other is without it. Both models are with main cameras.

ATHE100 with VT camera is worst model and used for testing.

2.3 Connection Diagram of Test System



2.4 Ancillary Equipment List

Item	Equipment	Model No.	Serial No.
1.	Base Station(R&S)	CMU200	106656

3. General Information of Test Site

Test Site Location : No. 52, Hwa Ya 1st Rd., Hwa Ya Technology Park,
Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C.
TEL : 886-3-327-3456
FAX : 886-3-318-0055
Test Site No : 03CH06-HY

The chamber meets the characteristics of ANSI C63.4-2003. This site is on file with the FCC.

3.1 Test Voltage

120V/ 60Hz

3.2 Test in Compliance with

47 CFR Part 22H, 24E, Part 2

3.3 Frequency Range Investigated

a. Radiation: from 30MHz to 9000MHz for GSM850 and WCDMA Band V.
b. Radiation: from 30 MHz to 19000 MHz for PCS1900 and WCDMA Band II.

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

FCC Rule	DESCRIPTION OF TEST	Result	Section
§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
§2.1053	Field Strength of Spurious Radiation	Passed	4.6
§2.1055, § 22.355, §24.235	Frequency Stability vs. Temperature	Passed	4.7
§2.1055, §22.355, §24.235	Frequency Stability vs. Voltage	Passed	4.8

4.2 RF Output Power

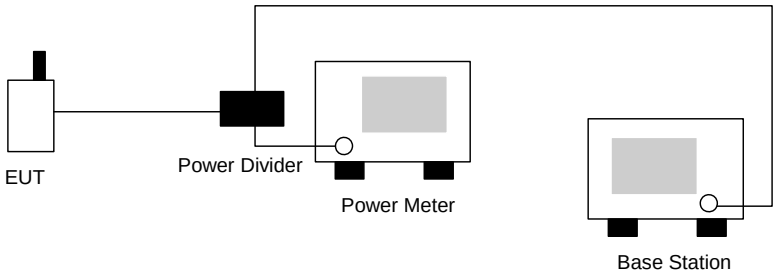
4.2.1 Measurement Instruments：

As described in chapter 5 of this test report.

4.2.2 Test Procedure：

1. The transmitter output was connected to power meter and base station through power divider.
2. Set EUT at PCL=5 for GSM850 and/or PCL=0 for PCS1900 and WCDMA maximum power through base station.
3. 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)
GSM850 (GSM)	128	824.2 (Low)	33.02	2.004
	189	836.4 (Mid)	33.51	2.244
	251	**848.8 (High)**	**33.74**	**2.366**
GSM850 (EDGE)	128	824.2 (Low)	26.73	0.471
	189	836.4 (Mid)	26.80	0.479
	251	**848.8 (High)**	**26.89**	**0.489**
PCS1900 (GSM)	512	1850.2 (Low)	30.32	1.076
	661	1880.0 (Mid)	30.49	1.119
	810	**1909.8 (High)**	**30.88**	**1.225**
PCS1900 (EDGE)	**512**	**1850.2 (Low)**	**26.05**	**0.403**
	661	1880.0 (Mid)	25.88	0.387
	810	1909.8 (High)	25.60	0.363
WCDMA Band V (RMC 12.2Kbps)	4132	826.4 (Low)	23.91	0.246
	4182	836.4 (Mid)	23.87	0.244
	4233	846.6 (High)	23.94	0.248
WCDMA Band V (RMC 64Kbps)	4132	826.4 (Low)	23.91	0.246
	4182	836.4 (Mid)	23.92	0.247
	4233	846.6 (High)	23.89	0.245
WCDMA Band V (RMC 144Kbps)	4132	826.4 (Low)	23.93	0.247
	4182	836.4 (Mid)	23.81	0.240
	4233	**846.6 (High)**	**23.96**	**0.249**
WCDMA Band V (RMC 384Kbps)	4132	826.4 (Low)	23.92	0.247
	4182	836.4 (Mid)	23.81	0.240
	4233	846.6 (High)	23.88	0.244
WCDMA Band V (RMC 12.2Kbps + HSDPA)	4132	826.4 (Low)	23.32	0.215
	4182	**836.4 (Mid)**	**23.80**	**0.240**
	4233	846.6 (High)	23.41	0.219
WCDMA Band II (RMC 12.2Kbps)	9262	1852.4 (Low)	23.12	0.205
	9400	1880.0 (Mid)	23.36	0.217
	9538	1907.6 (High)	23.63	0.231
WCDMA Band II (RMC 64Kbp)	9262	1852.4 (Low)	22.94	0.197
	9400	1880.0 (Mid)	23.49	0.223
	9538	1907.6 (High)	23.59	0.229
WCDMA Band II (RMC 144Kbps)	9262	1852.4 (Low)	23.10	0.204
	9400	1880.0 (Mid)	23.15	0.207
	9538	**1907.6 (High)**	**23.68**	**0.233**
WCDMA Band II (RMC 384Kbps)	9262	1852.4 (Low)	23.28	0.213
	9400	1880.0 (Mid)	23.13	0.206
	9538	1907.6 (High)	23.47	0.222
WCDMA Band II (RMC 12.2Kbps + HSDPA)	9262	1852.4 (Low)	23.16	0.207
	9400	1880.0 (Mid)	23.11	0.205
	9538	**1907.6 (High)**	**23.41**	**0.219**

4.3 ERP / EIRP Measurement

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

4.3.1 Measurement Instruments

As described in chapter 5 of this test report.

4.3.2 Test Procedure

1. The EUT was placed on a rotatable table with 1.0 meter height in an fully anechoic chamber.
2. The EUT was set 1.2 meters from the receiving antenna which was mounted on the antenna tower.
3. The table was rotated 360 degrees to determine the position of the highest radiated power.
4. The height of the receiving antenna is also kept at 1.0M height.
5. Taking the record of maximum ERP/EIRP.
6. A dipole antenna was substituted in place of the EUT and was driven by a signal generator.
7. The conducted power at the terminal of the dipole antenna is measured.
8. Repeat step 3 to step 5 to get the maximum ERP/EIRP of the substitution antenna.
9. ERP/EIRP = Ps + Et – Es + Gs = Ps + Rt – Rs + Gs

   Ps (dBm)：Input power to substitution antenna.

   Gs (dBi or dBd)：Substitution antenna Gain.

   Et = Rt + AF

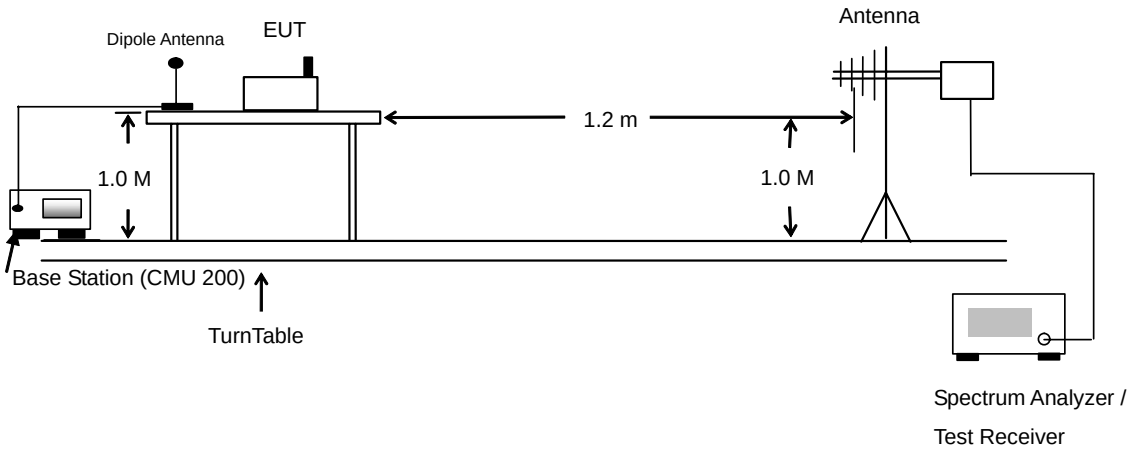
   Es = Rs + AF

   AF (dB/m)：Receive antenna factor

   Rt：The highest received signal in Spectrum Analyzer for EUT.

   Rs：The highest received signal in spectrum analyzer for substitution antenna.

4.3.3 Test Setup Layout of ERP/EIRP



4.3.4 Test Result

GSM850 (GSM) Radiated Power ERP						
Horizontal Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBd)	ERP (dBm)	ERP (W)
824.20	**-22.24**	**-48.12**	**0.00**	**-1.08**	**24.80**	**0.30**
836.40	-23.26	-48.28	0.00	-0.93	24.09	0.26
848.80	-23.41	-48.35	0.00	-0.76	24.18	0.26
Vertical Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBd)	ERP (dBm)	ERP (W)
824.20	-22.33	-47.97	0.00	-1.08	24.56	0.29
836.40	-23.08	-48.01	0.00	-0.93	24.00	0.25
848.80	-23.26	-48.05	0.00	-0.76	24.03	0.25

PCS1900 (GSM) Radiated Power EIRP						
Horizontal Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBi)	EIRP (dBm)	EIRP (W)
1850.20	-24.77	-51.88	0.00	1.96	29.07	0.81
1880.00	-27.18	-52.99	0.00	2.00	27.81	0.60
1909.80	-28.82	-54.28	0.00	1.98	27.44	0.55
Vertical Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBi)	EIRP (dBm)	EIRP (W)
1850.20	**-24.74**	**-52.13**	**0.00**	**1.96**	**29.35**	**0.86**
1880.00	-27.29	-53.17	0.00	2.00	27.88	0.61
1909.80	-28.82	-54.13	0.00	1.98	27.29	0.54

WCDMA Band V Radiated Power ERP						
Horizontal Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBd)	ERP (dBm)	ERP (W)
824.20	-35.86	-48.12	0.00	-1.08	11.18	0.01
836.40	-35.74	-48.28	0.00	-0.93	11.61	0.01
848.80	-36.87	-48.35	0.00	-0.76	10.72	0.01
Vertical Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBd)	ERP (dBm)	ERP (W)
824.20	-31.63	-47.97	0.00	-1.08	15.26	0.03
836.40	**-31.18**	**-48.01**	**0.00**	**-0.93**	**15.90**	**0.04**
848.80	-32.20	-48.05	0.00	-0.76	15.09	0.03

WCDMA Band II Radiated Power EIRP						
Horizontal Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBi)	EIRP (dBm)	EIRP (W)
1850.20	-34.70	-51.88	0.00	1.96	19.14	0.08
1880.00	-35.33	-52.99	0.00	2.00	19.66	0.09
1909.80	**-35.85**	**-54.28**	**0.00**	**1.98**	**20.41**	**0.11**
Vertical Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBi)	EIRP (dBm)	EIRP (W)
1850.20	-35.04	-52.13	0.00	1.96	19.05	0.08
1880.00	-36.60	-53.17	0.00	2.00	18.57	0.07
1909.80	-37.26	-54.13	0.00	1.98	18.85	0.08

4.4 Occupied Bandwidth and Band Edge Measurement

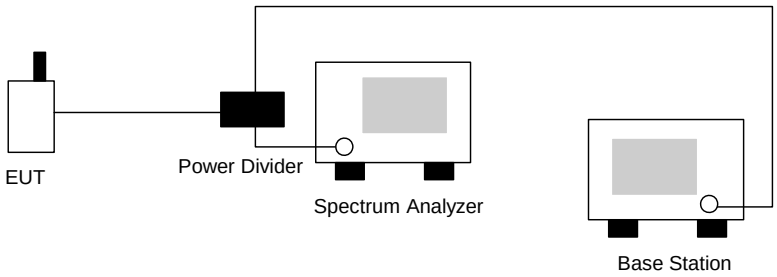
4.4.1 Measurement Instruments

As described in chapter 5 of this test report.

4.4.2 Test Procedure

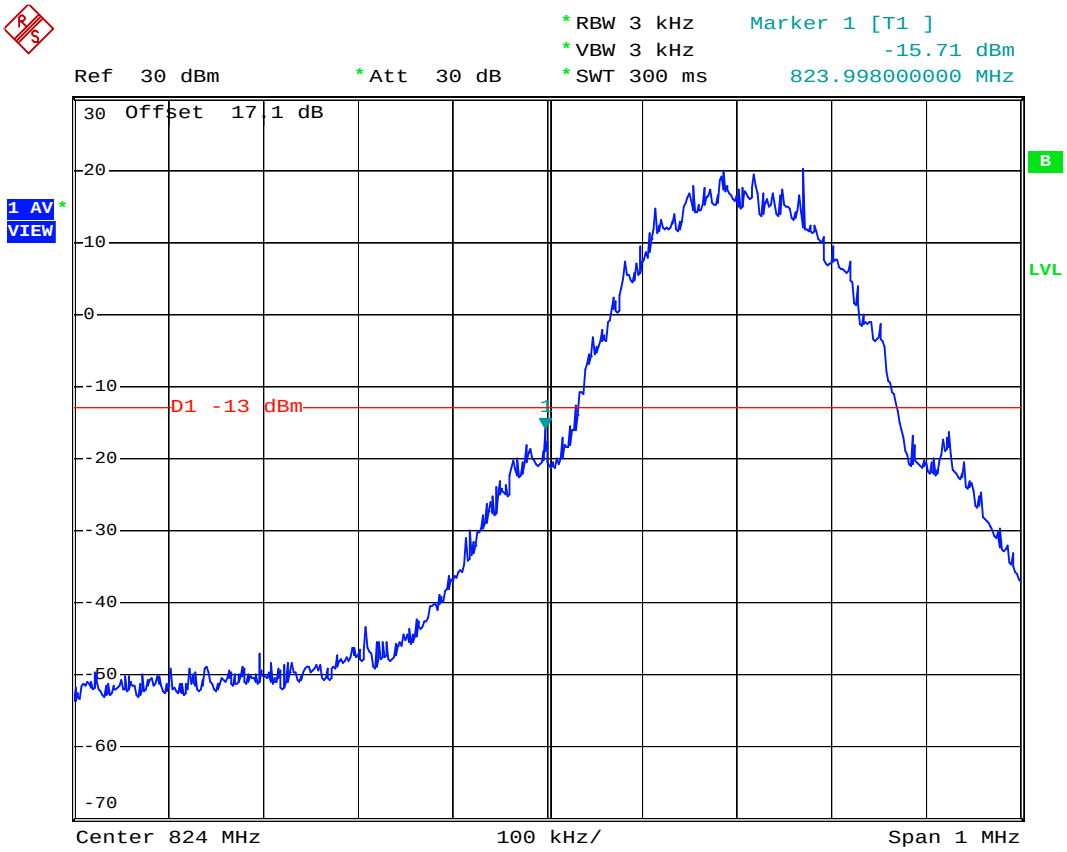
1. The EUT was connected to Spectrum Analyzer and Base Station via power divider.
2. The 99% occupied bandwidth of middle channel for the highest and lowest RF powers were measured.
3. The bandedge of low and high channels for the highest RF powers within the transmitting frequency band were measured. Setting RBW as roughly BW/100.

4.4.3 Test Setup Layout



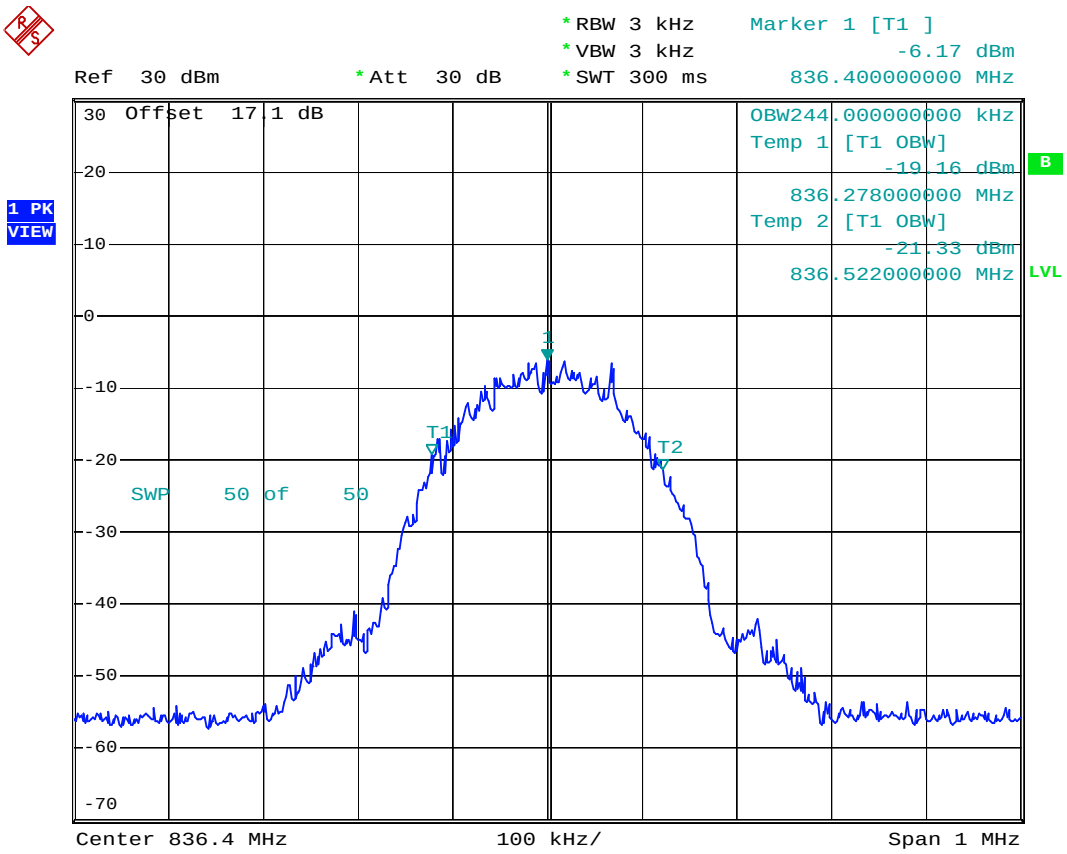
4.4.4 Test Result

- Mode 1
- Test Mode : GSM850 (GSM) CH128 Lower Band Edge
- Power State : High



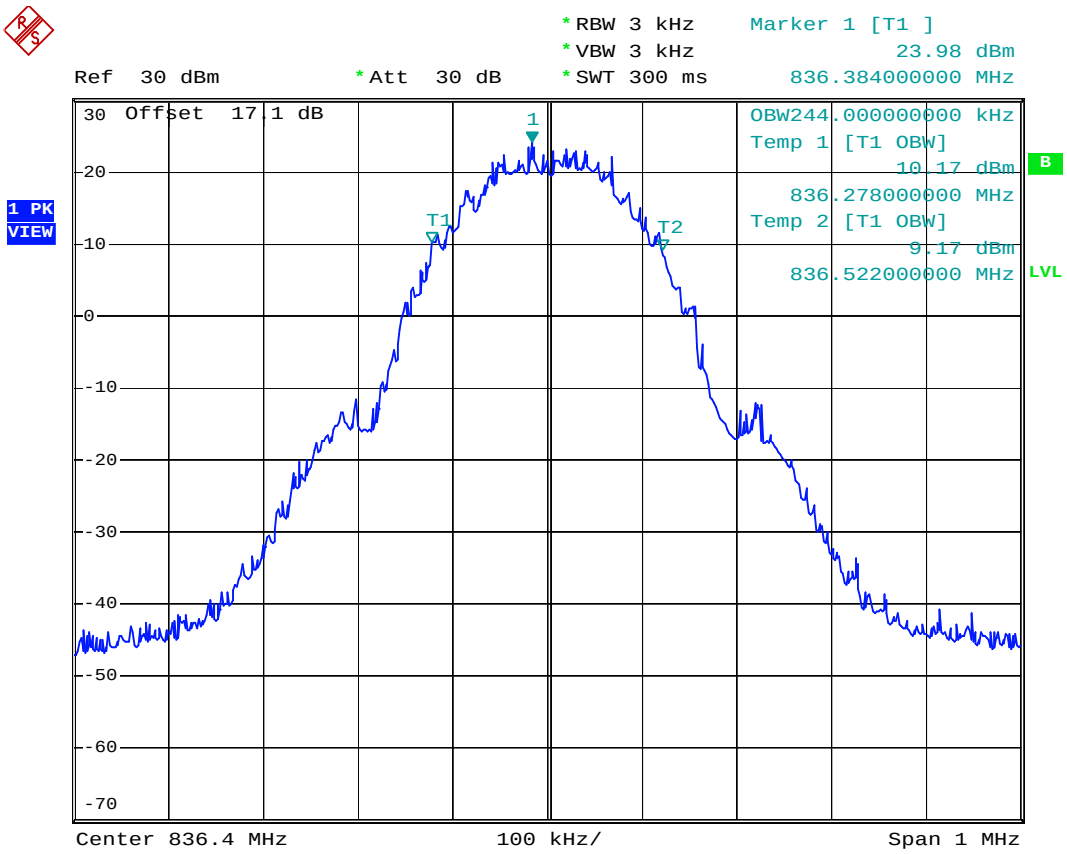
Date: 21.MAR.2007 04:32:32

- Test Mode : GSM850 (GSM) CH189 99% Occupid Bandwidth
- Power State : Low



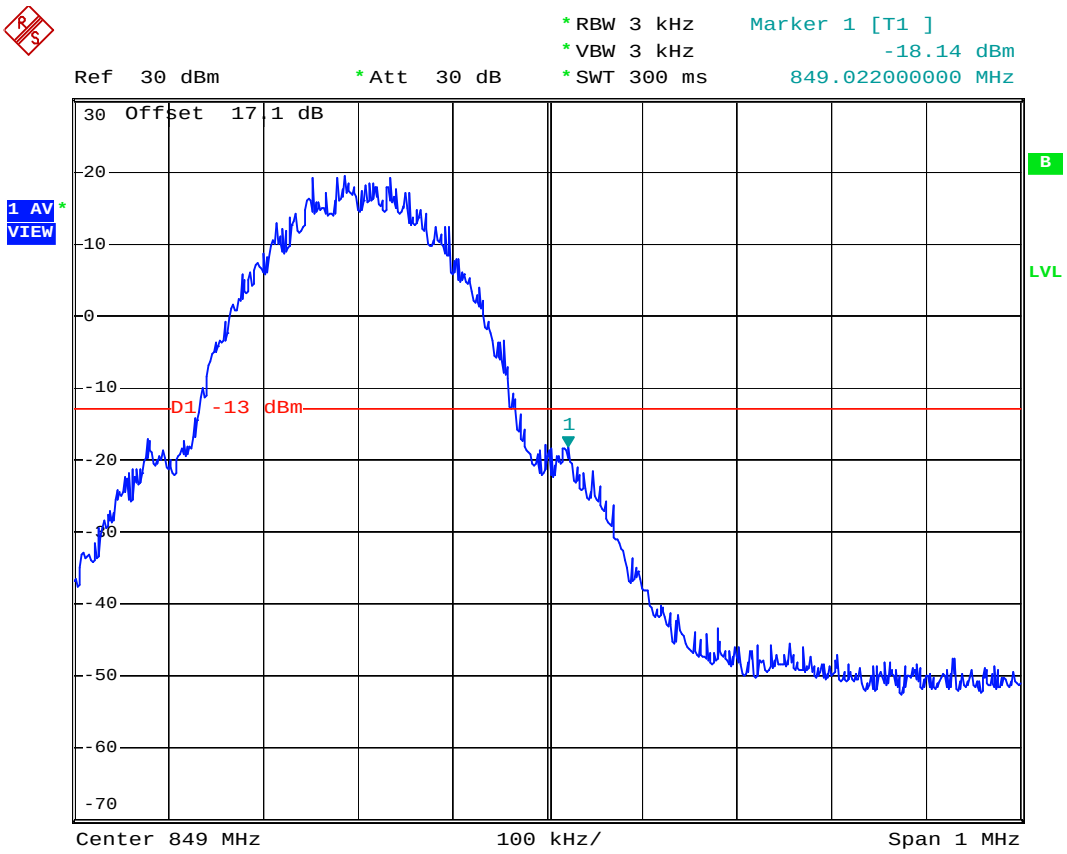
Date: 21.MAR.2007 04:53:28

- Test Mode : GSM850 (GSM) CH189 99% Occupid Bandwidth
- Power State : High



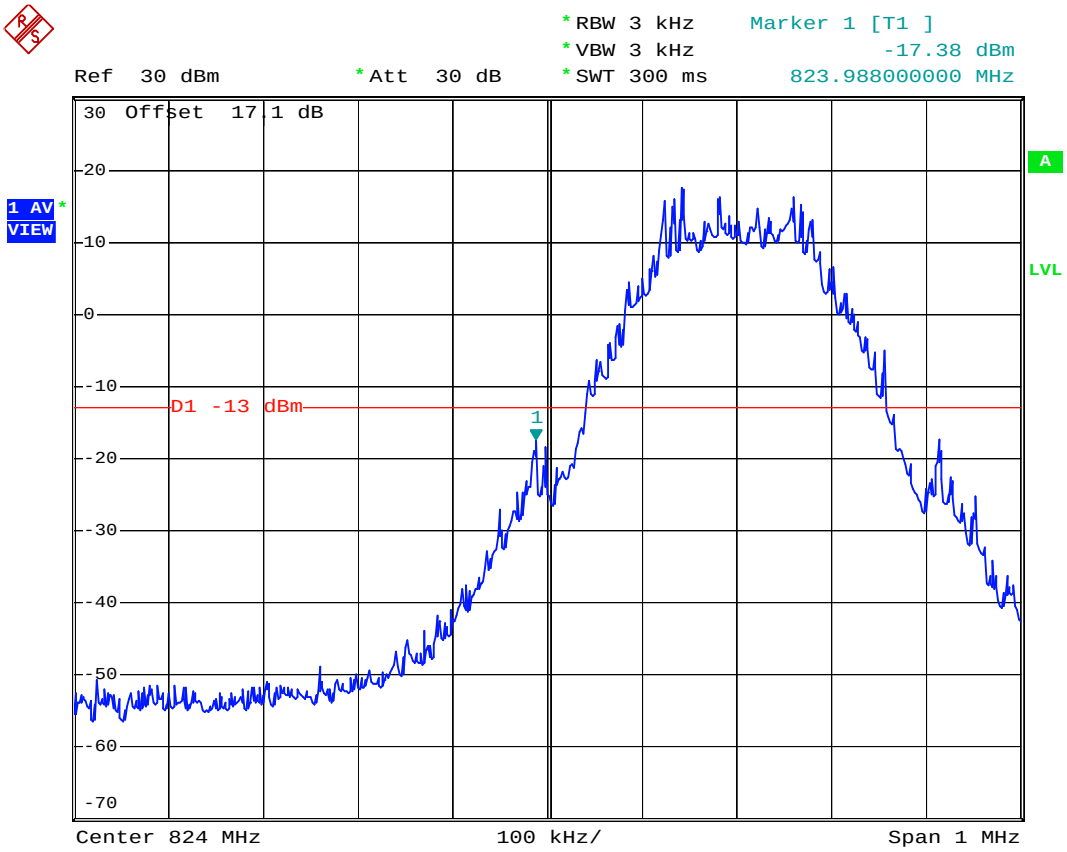
Date: 21.MAR.2007 04:41:01

- Test Mode : GSM850 (GSM) CH251 Higher Band Edge
- Power State : High



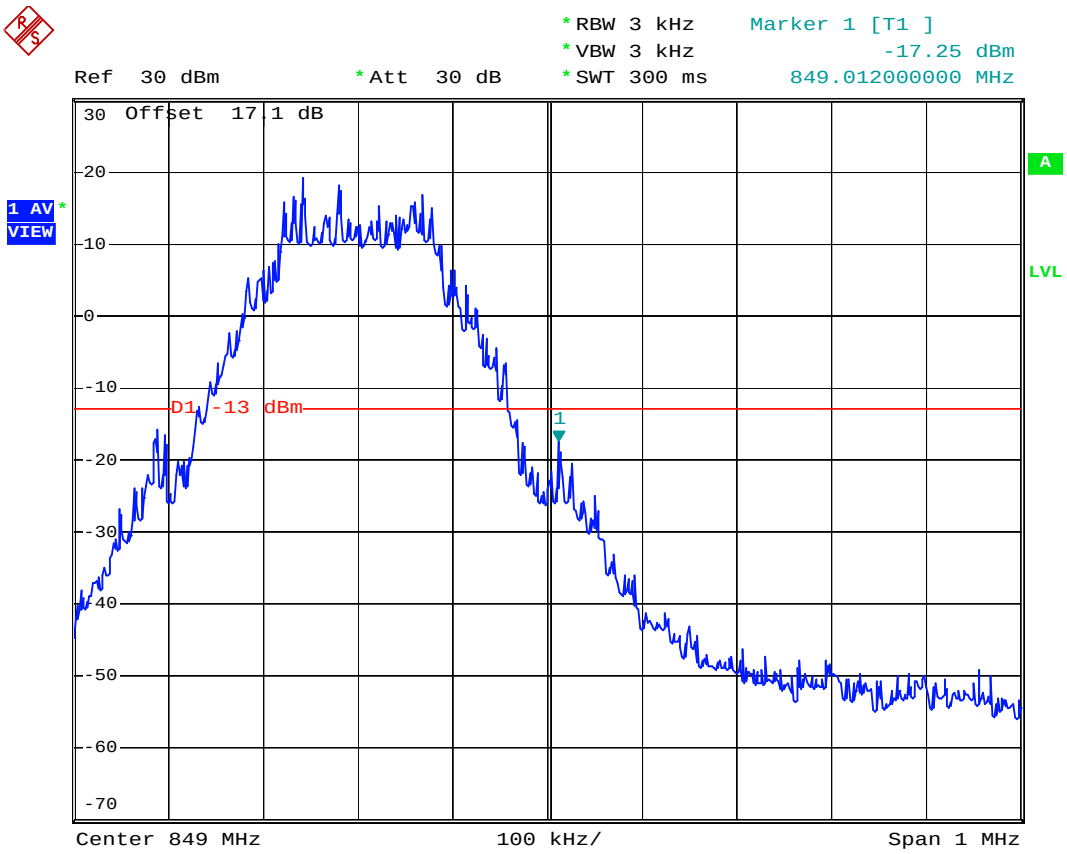
Date: 21.MAR.2007 04:33:46

- Mode 2
- Test Mode : GSM850 (EDGE) CH128 Lower Band Edge
- Power State : High



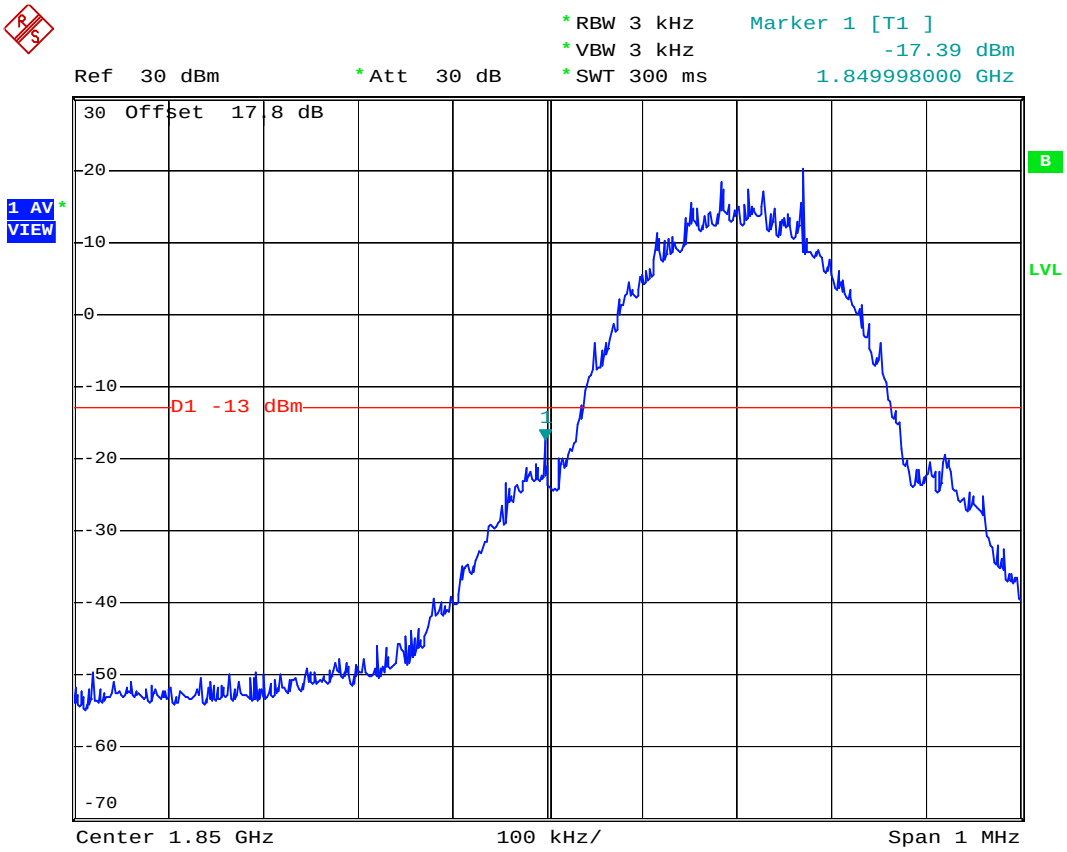
Date: 28.MAR.2007 21:57:01

- Test Mode : GSM850 (EDGE) CH251 Higher Band Edge
- Power State : High



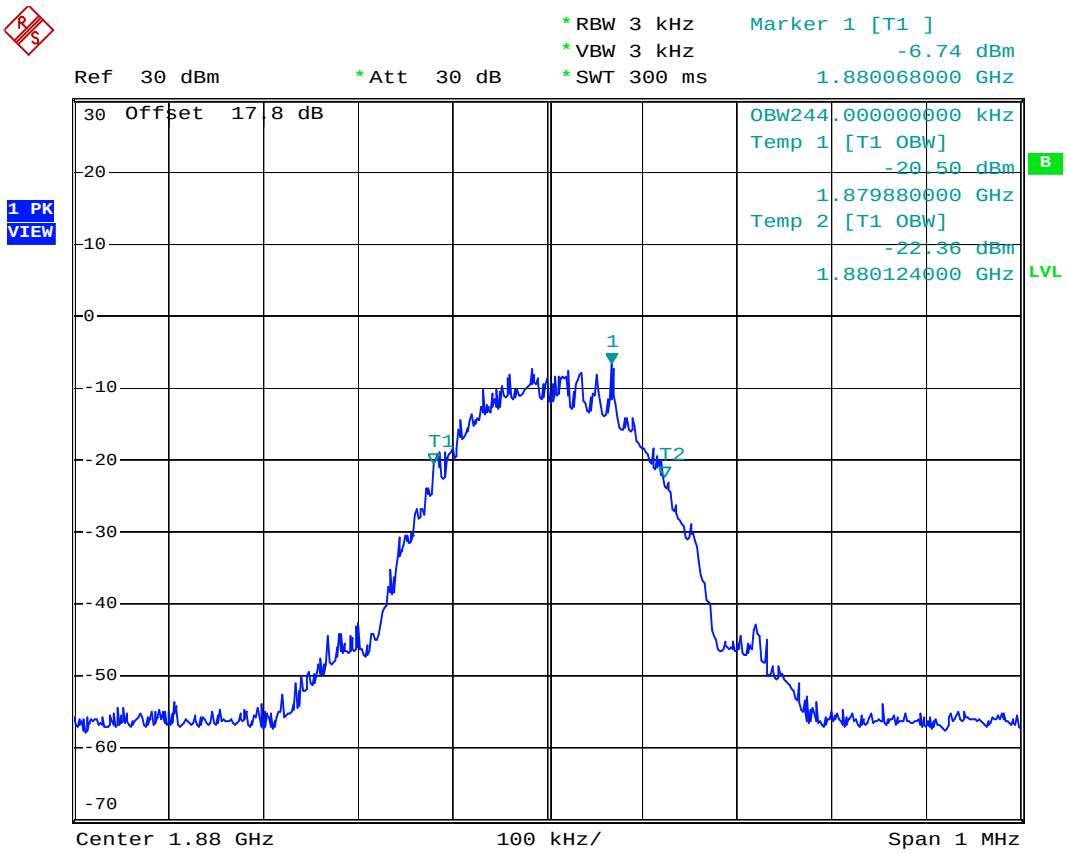
Date: 28.MAR.2007 21:55:00

- Mode 3
- Test Mode : PCS1900 (GSM) CH512 Lower Band Edge
- Power State : High



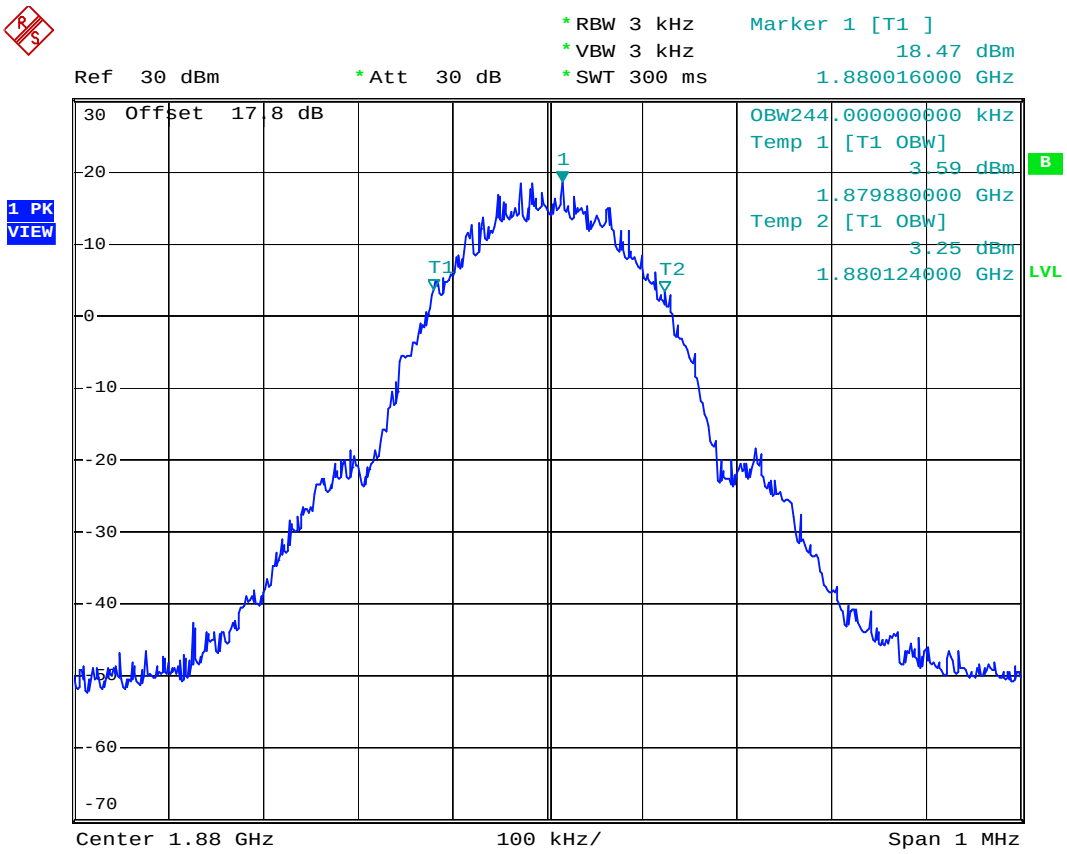
Date: 21.MAR.2007 05:06:32

- Test Mode : PCS1900 (GSM) CH661 99% Occupid Bandwidth
- Power State : Low



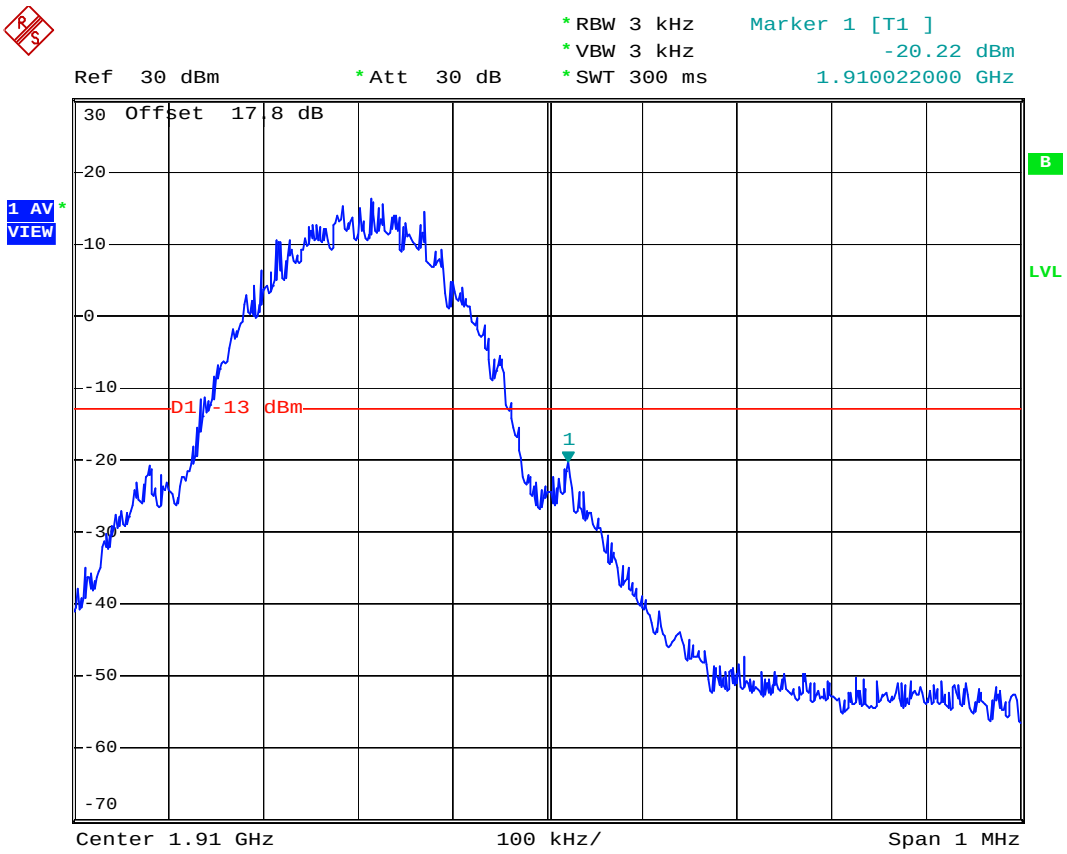
Date: 21.MAR.2007 05:02:15

- Test Mode : PCS1900 (GSM) CH661 99% Occupid Bandwidth
- Power State : High



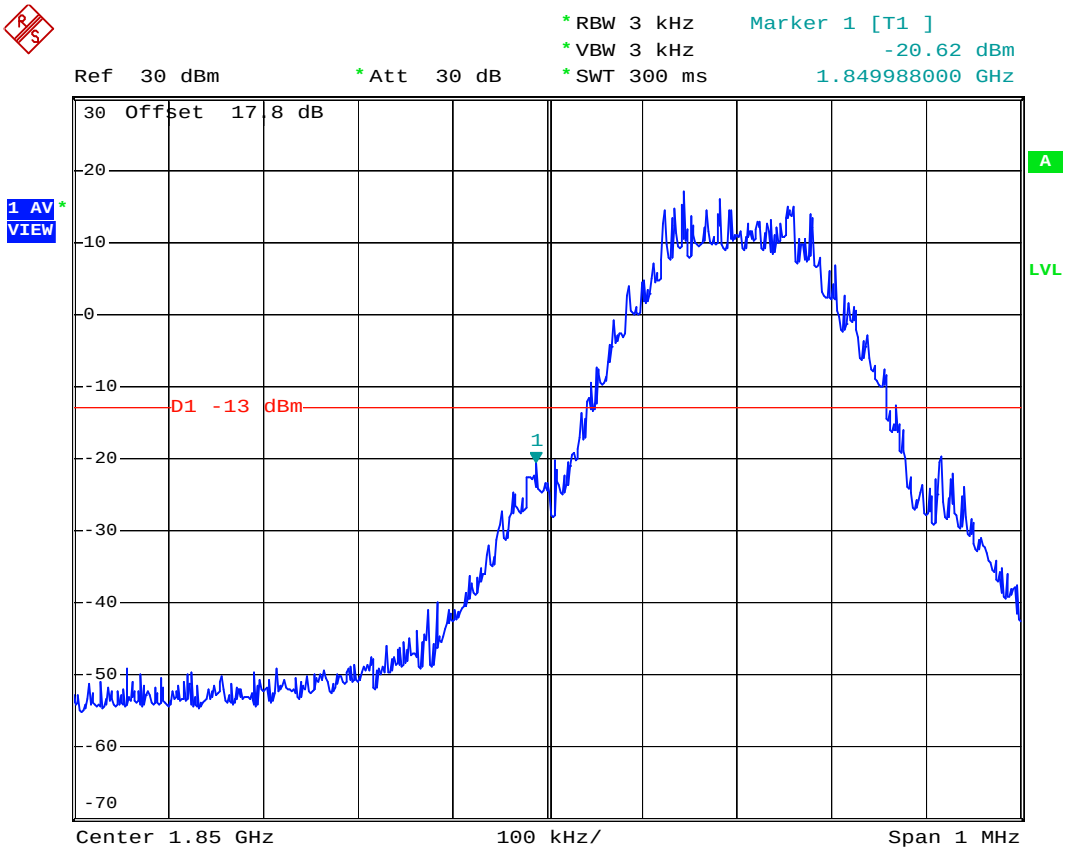
Date: 21.MAR.2007 04:58:00

- Test Mode : PCS1900 (GSM) CH810 Higher Band Edge
- Power State : High



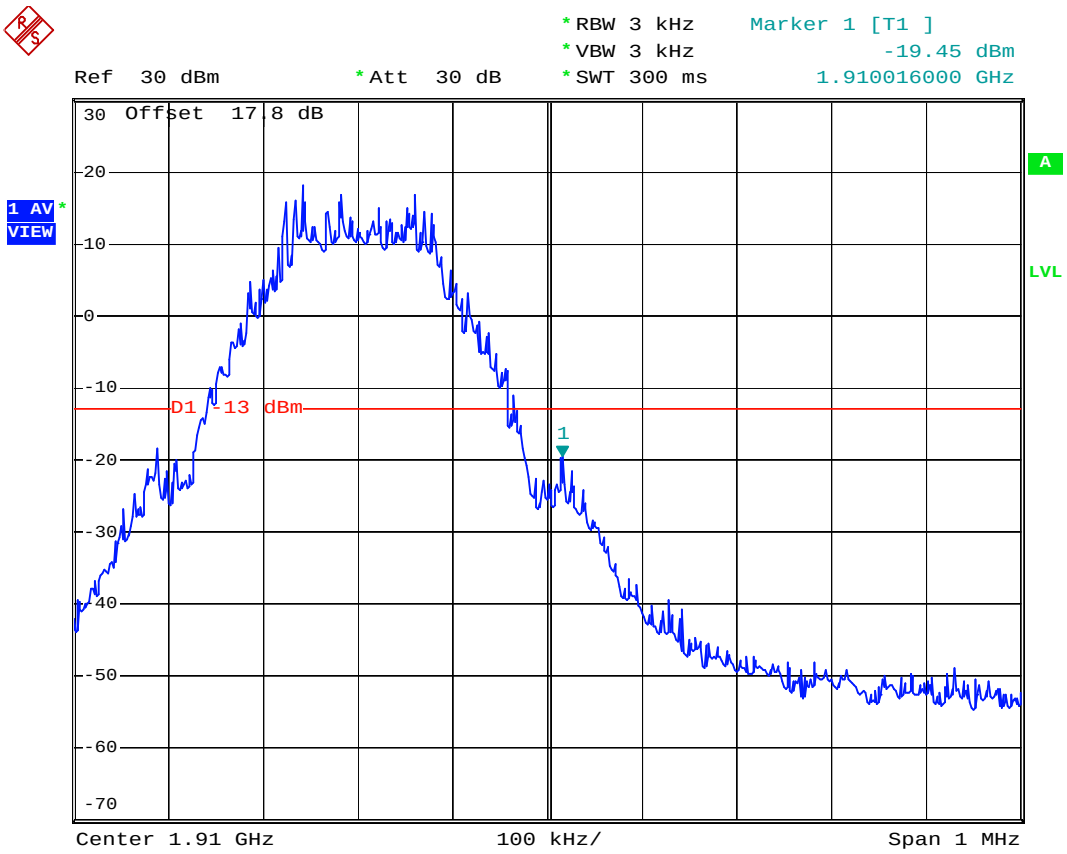
Date: 21.MAR.2007 05:08:14

- Mode 4
- Test Mode : PCS1900 (EDGE) CH512 Lower Band Edge
- Power State : High



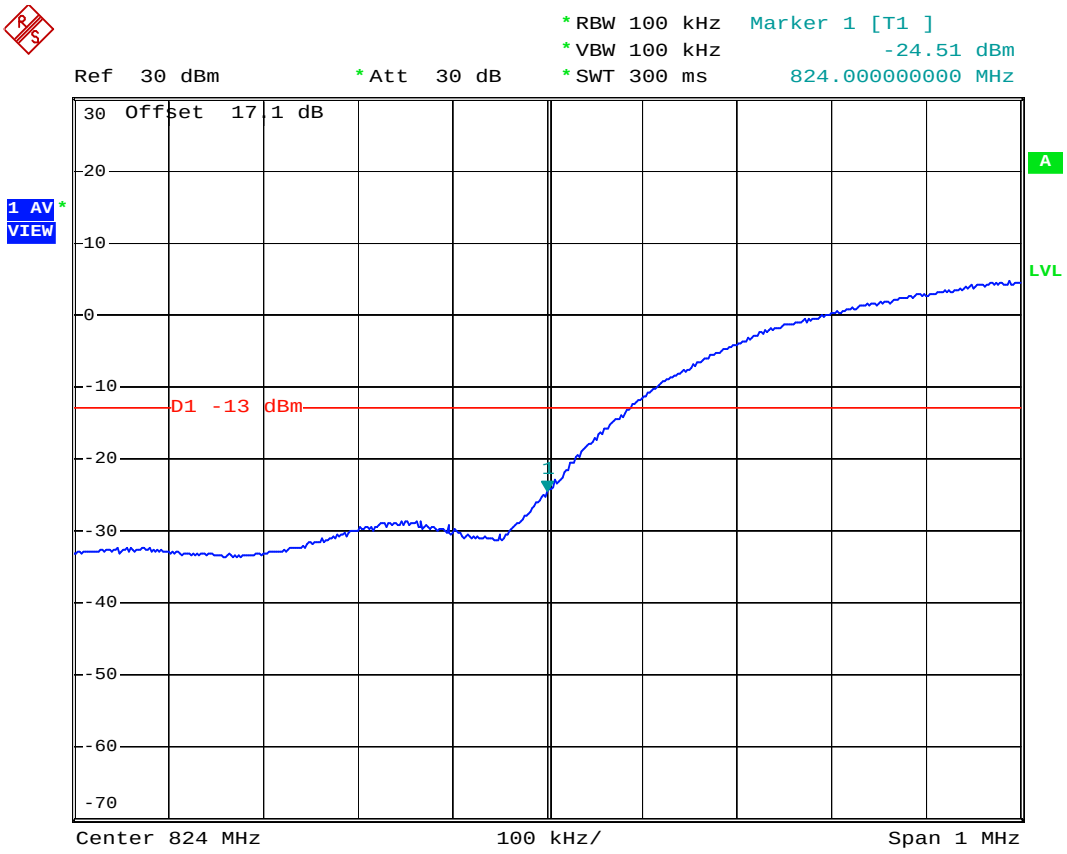
Date: 28.MAR.2007 22:12:20

- Test Mode : PCS1900(EDGE) CH810 Higher Band Edge
- Power State : High



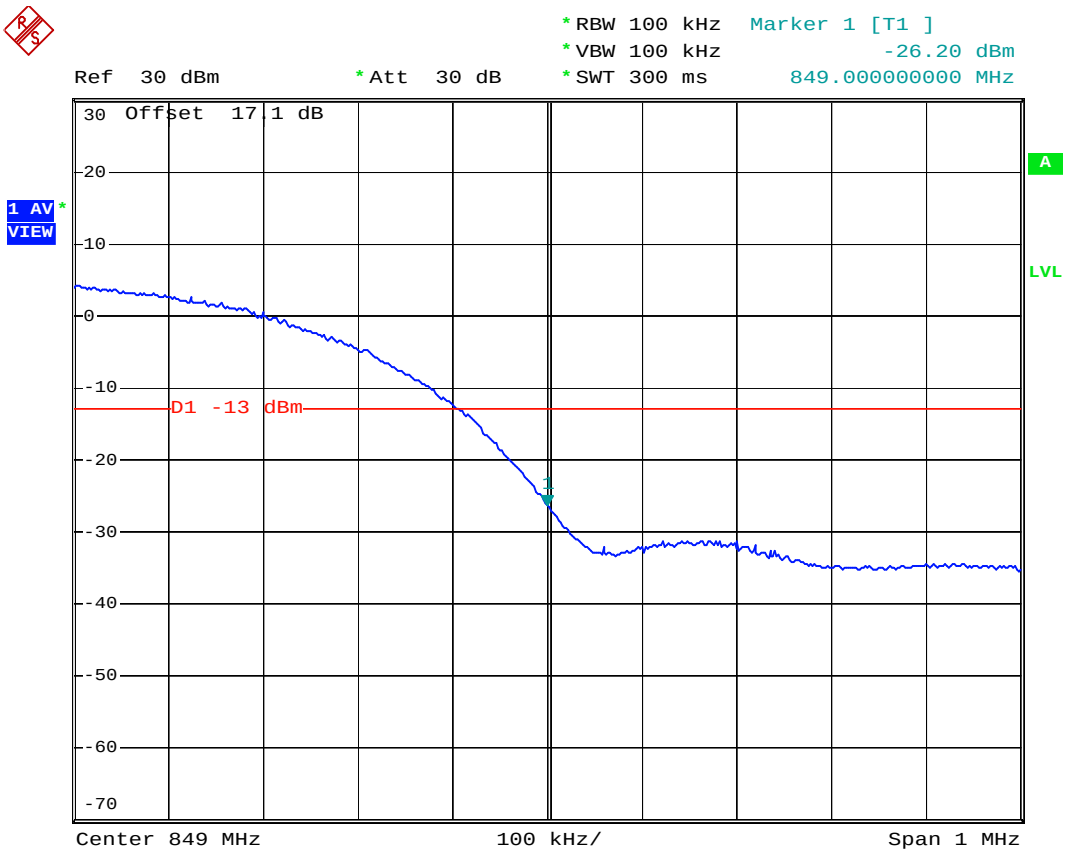
Date: 28.MAR.2007 22:11:13

- Mode 5
- Item a
- Test Mode : WCDMA Band V (RMC 12.2Kbps) CH4132 Lower Band Edge
- Power State : High



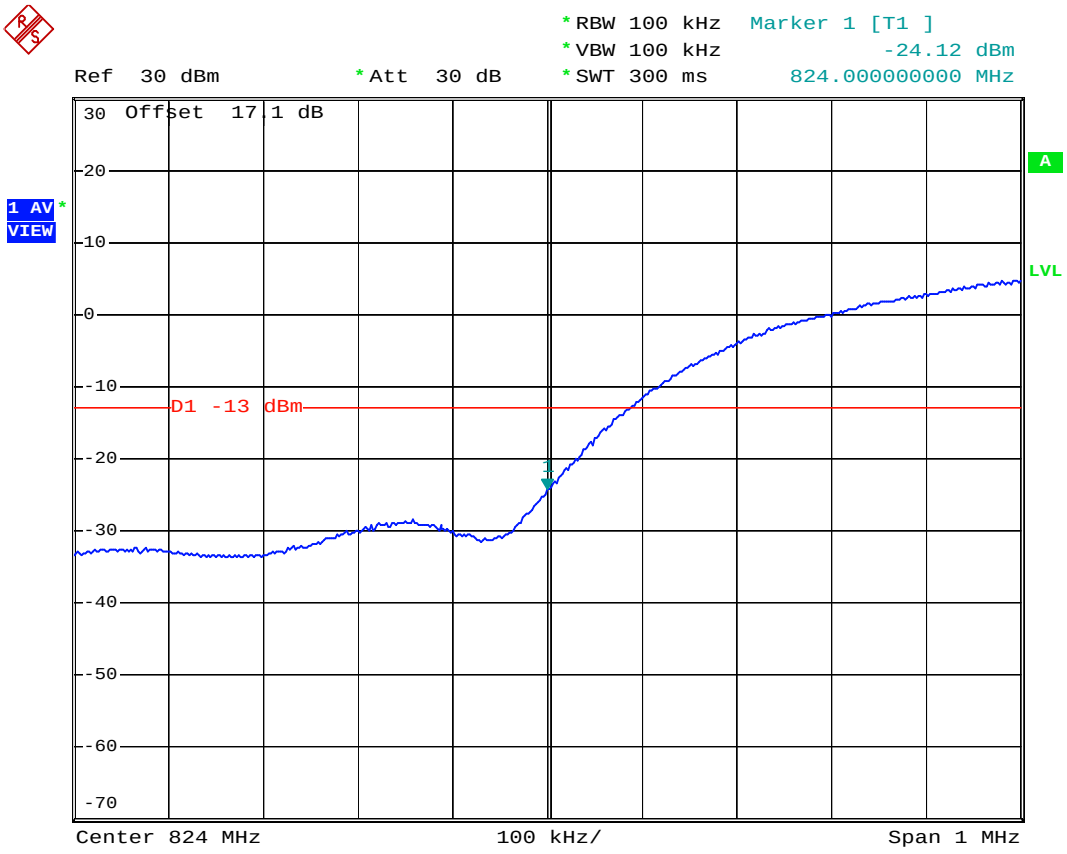
Date: 29.MAR.2007 03:24:03

- Test Mode : WCDMA Band V (RMC 12.2Kbps) CH4233 Higher Band Edge
- Power State : High



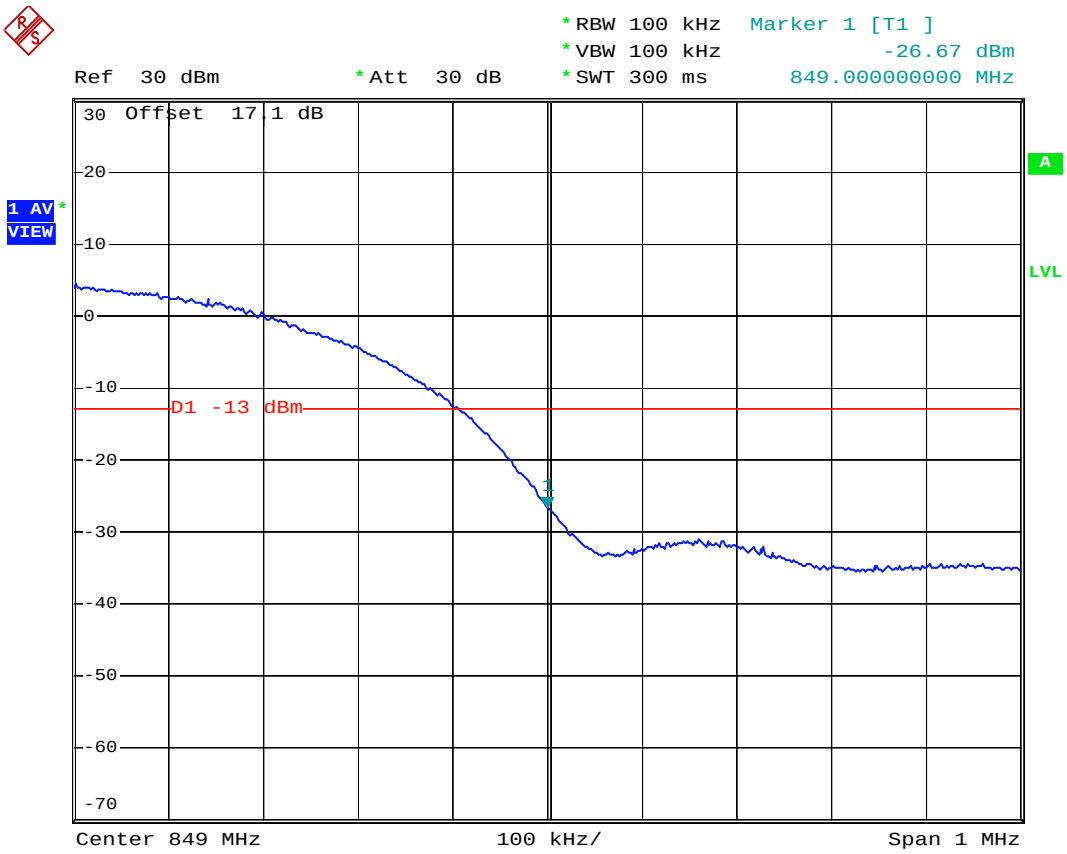
Date: 29.MAR.2007 03:23:08

- Item b
- Test Mode : WCDMA Band V (RMC 64Kbps) CH4132 Lower Band Edge
- Power State : High



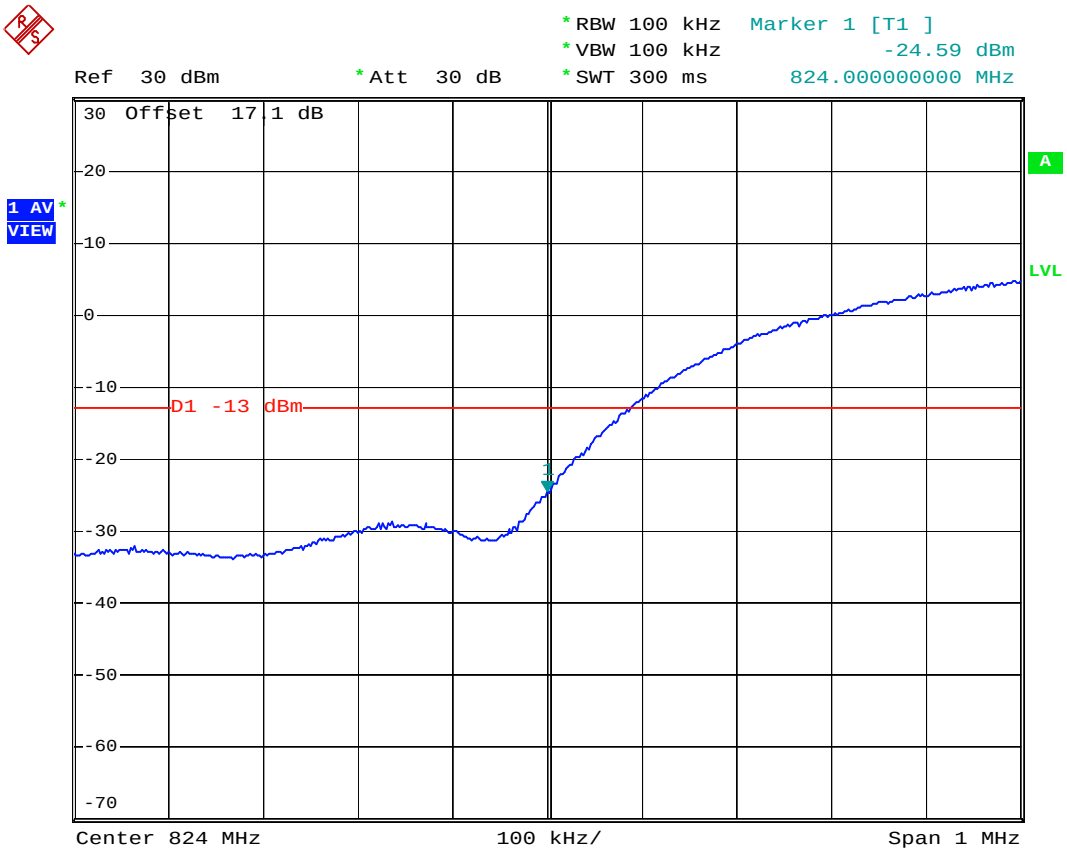
Date: 29.MAR.2007 03:30:51

- Test Mode : WCDMA Band V (RMC 64Kbps) CH4233 Higher Band Edge
- Power State : High



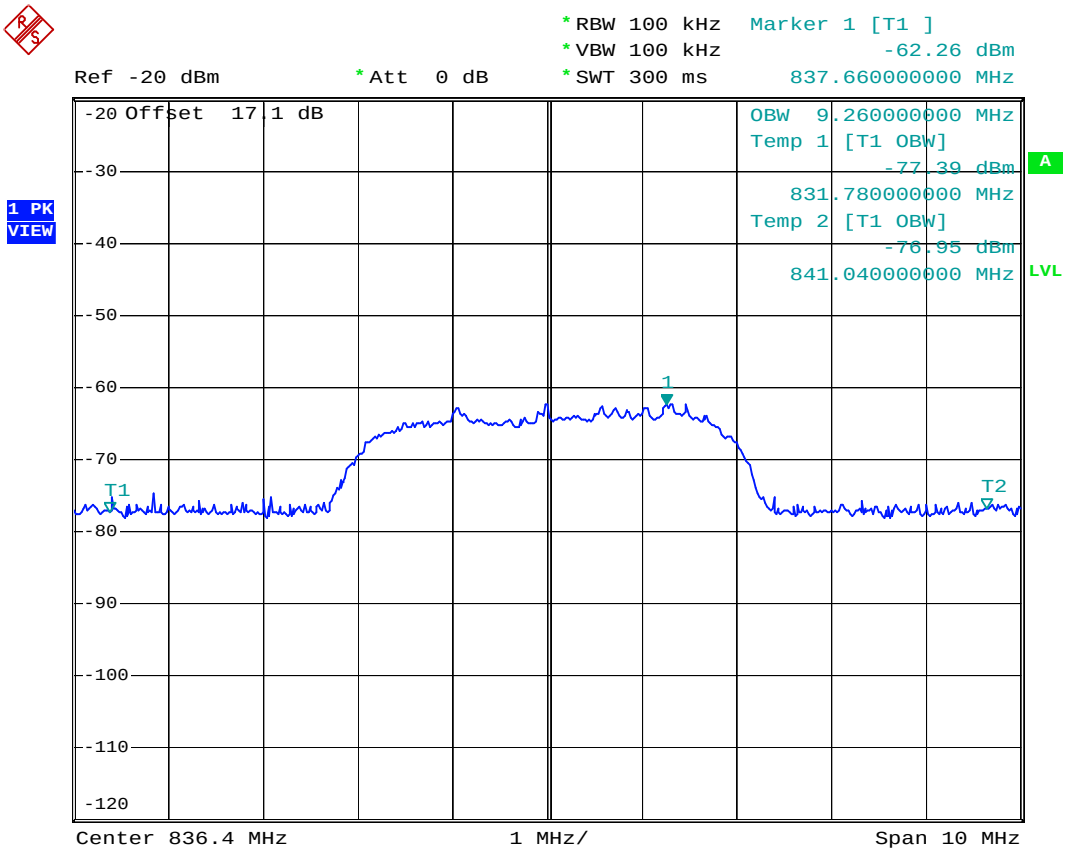
Date: 29.MAR.2007 03:31:30

- Item c
- Test Mode : WCDMA Band V (RMC 144Kbps) CH4132 Lower Band Edge
- Power State : High



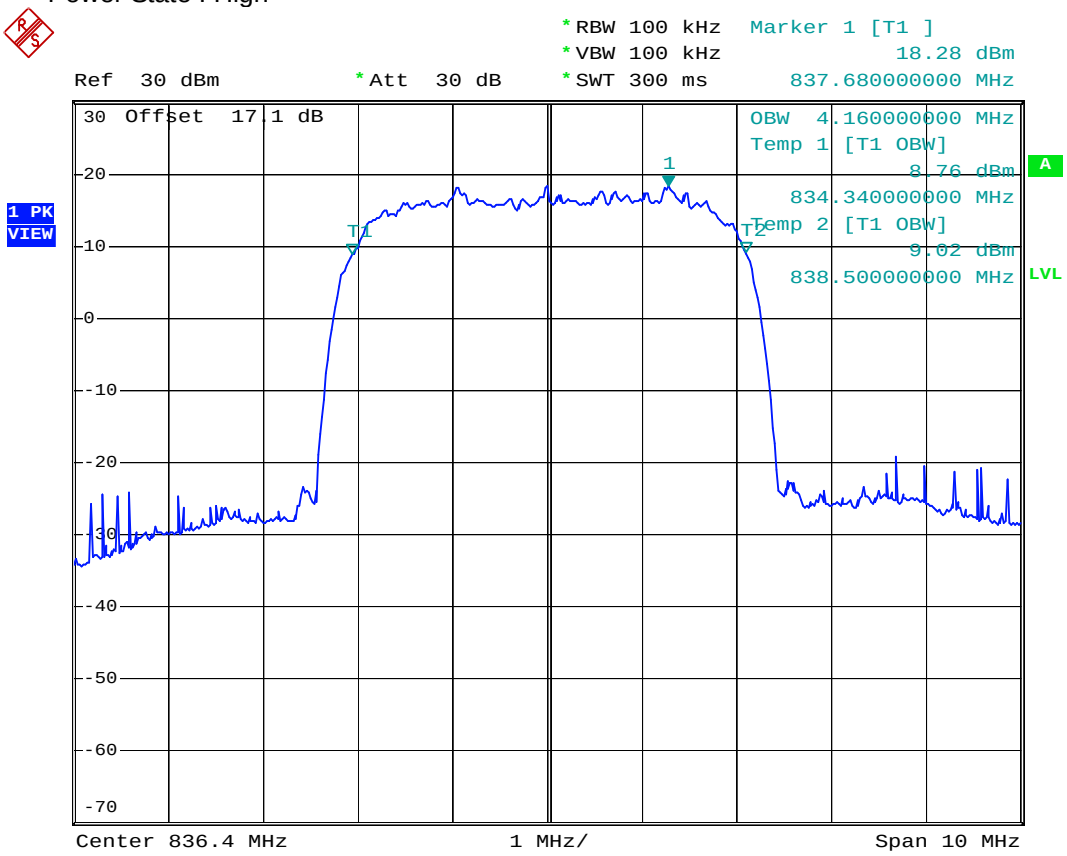
Date: 29.MAR.2007 03:18:19

- Test Mode : WCDMA Band V (RMC 144Kbps) CH4182 99% Occupid Bandwidth
- Power State : Low



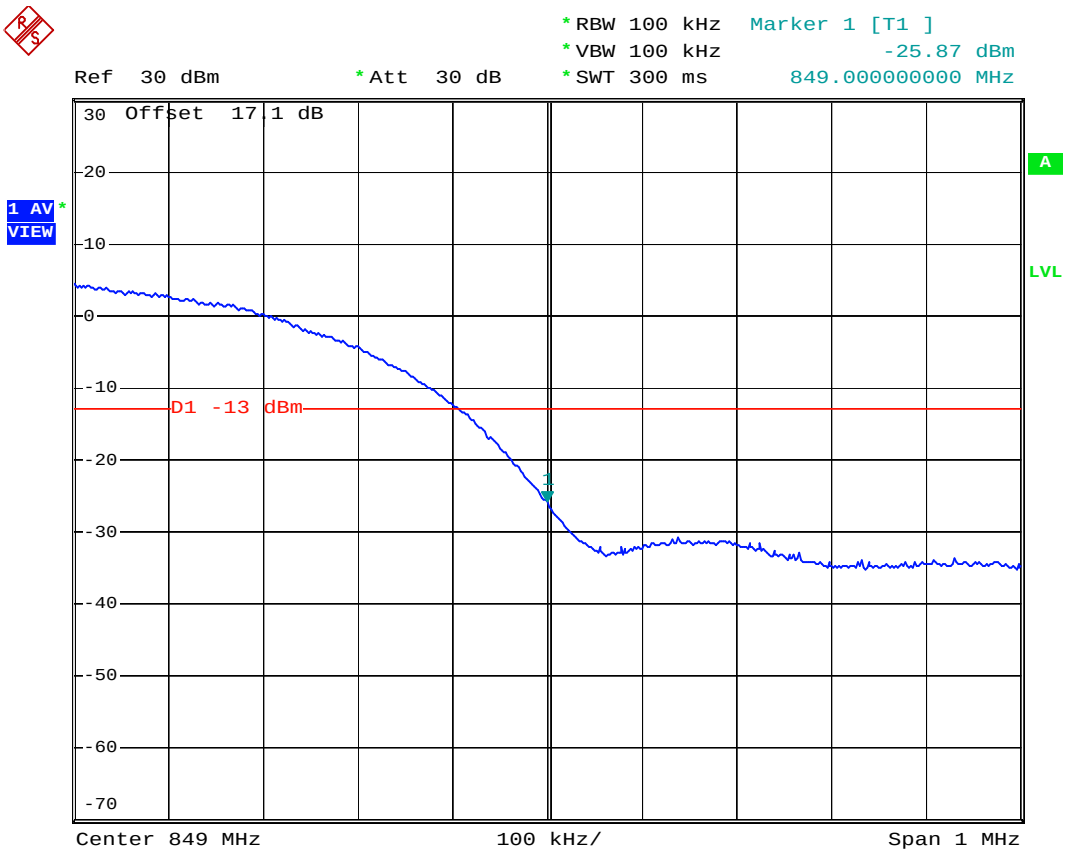
Date: 29.MAR.2007 03:45:27

- Test Mode : WCDMA Band V (RMC 144Kbps) CH4182 99% Occupid Bandwidth
- Power State : High



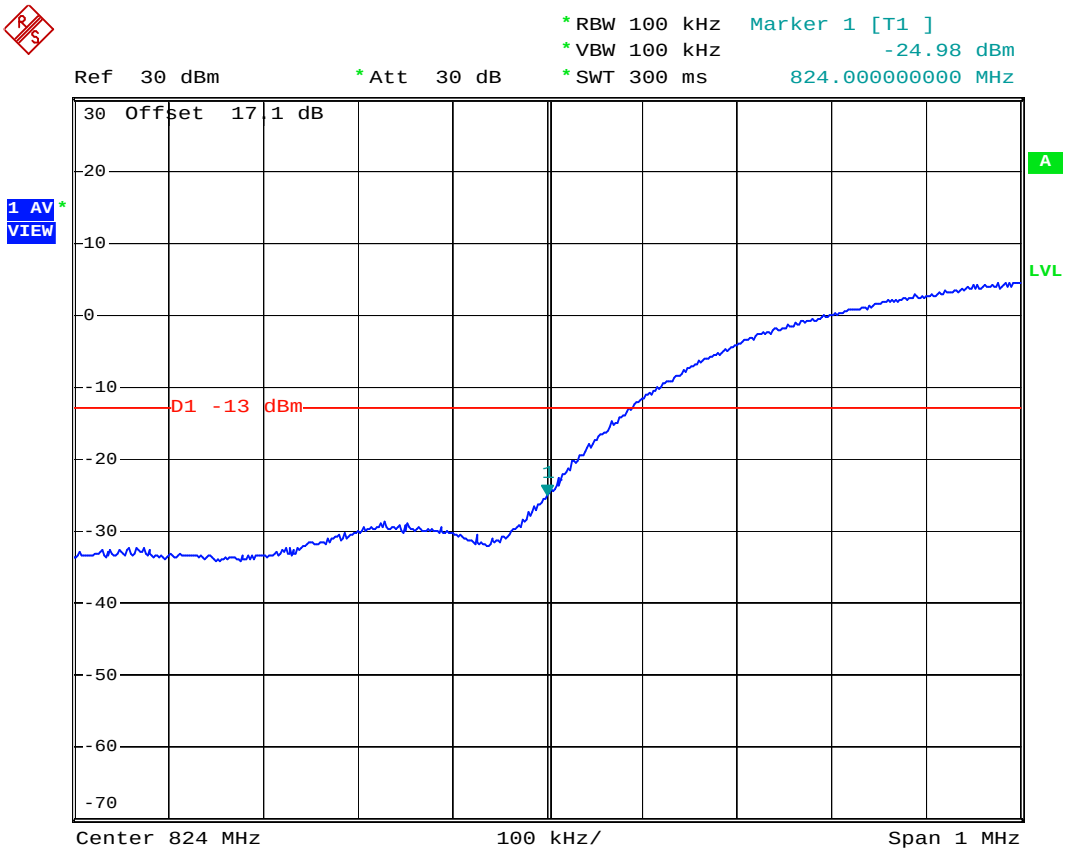
Date: 29.MAR.2007 03:43:47

- Test Mode : WCDMA Band V (RMC 144Kbps) CH4233 Higher Band Edge
- Power State : High



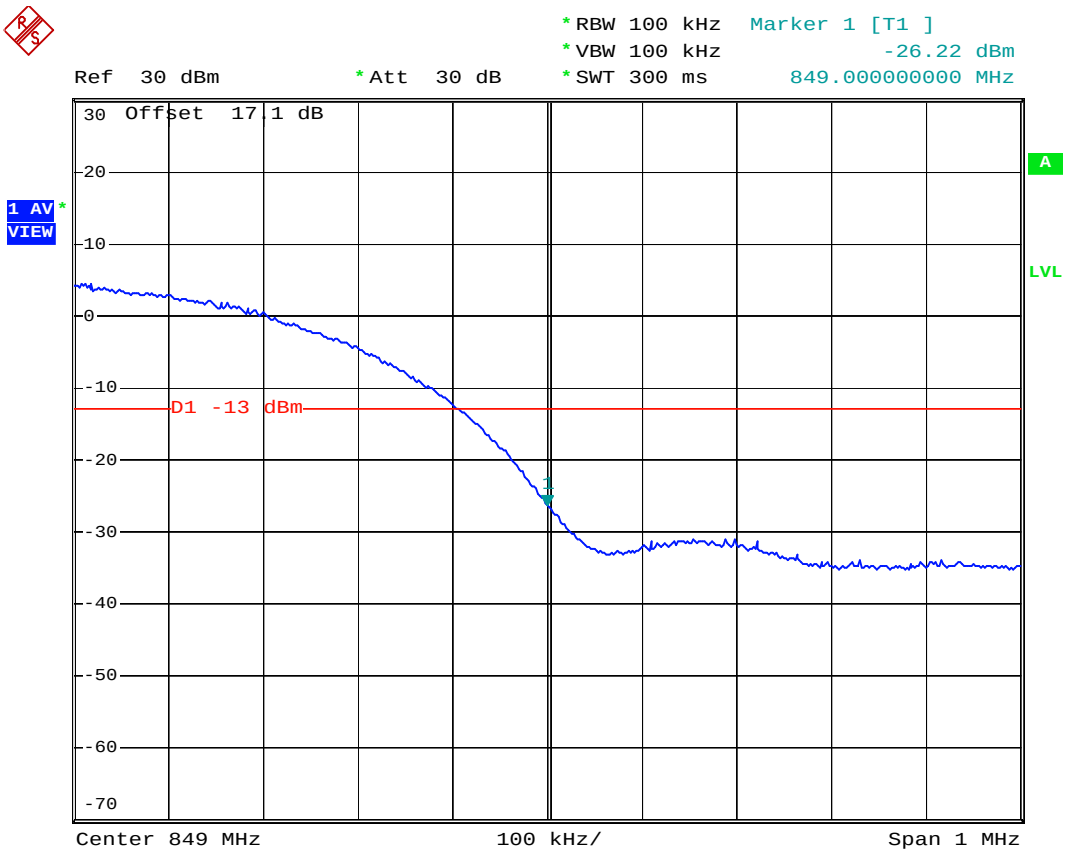
Date: 29.MAR.2007 03:19:14

- Item d
- Test Mode : WCDMA Band V (RMC 384Kbps) CH4132 Lower Band Edge
- Power State : High



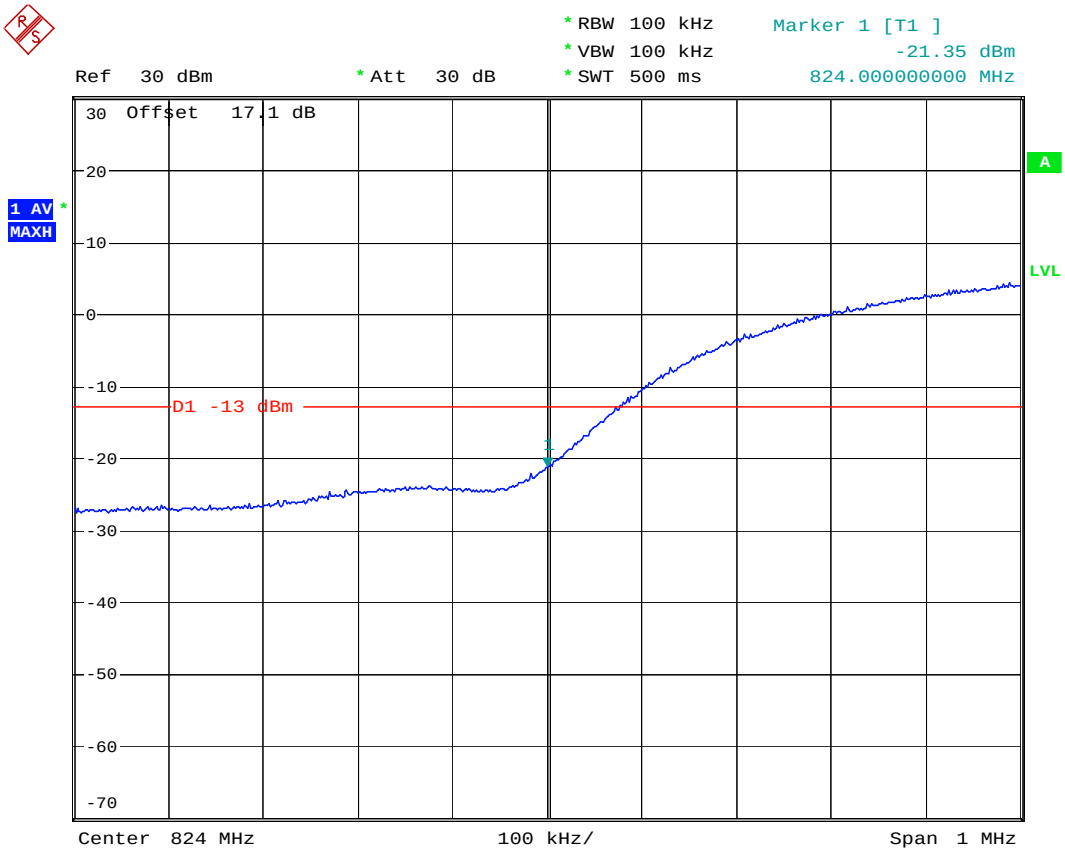
Date: 29.MAR.2007 03:35:48

- Test Mode : WCDMA Band V (RMC 384Kbps) CH4233 Higher Band Edge
- Power State : High



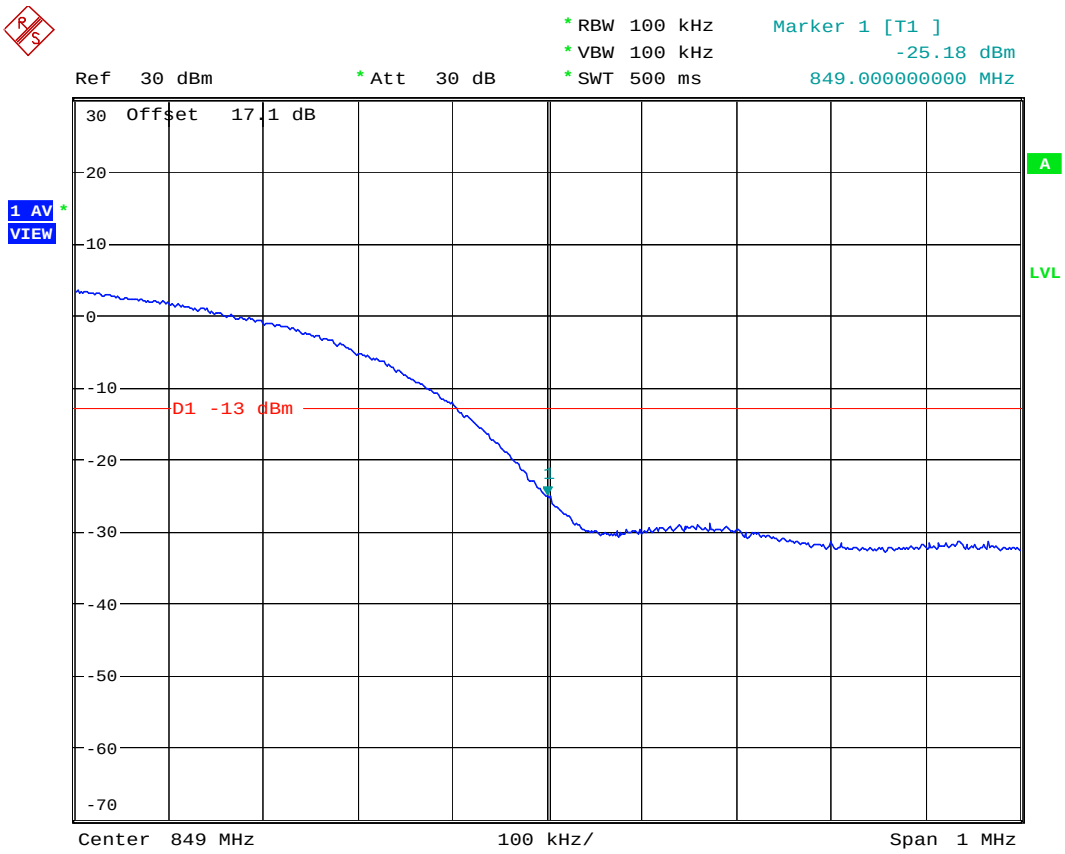
Date: 29.MAR.2007 03:35:01

- Mode 6
- Test Mode : WCDMA Band V (RMC 144Kbps+HSDPA) CH4132 Lower Band Edge
- Power State : High



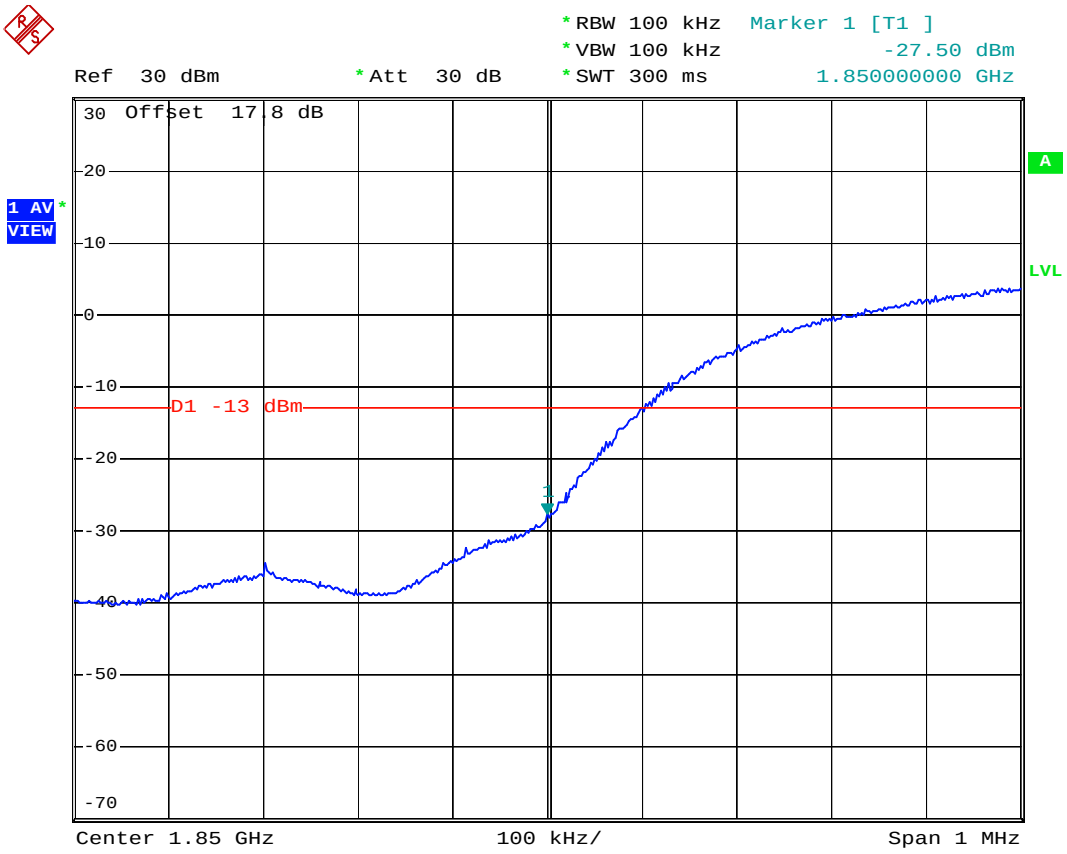
Date: 1.APR.2007 16:03:13

- Test Mode : WCDMA Band V (RMC 144Kbps+HSDPA) CH4233 Higher Band Edge
- Power State : High



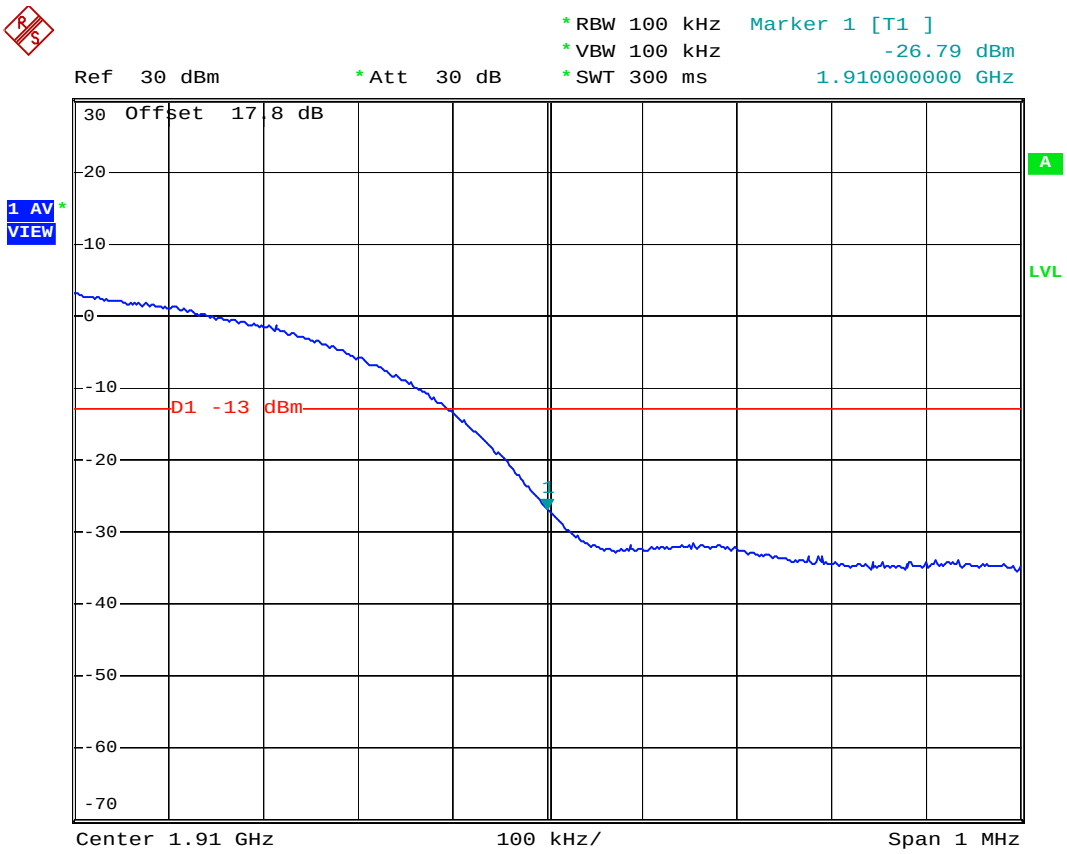
Date: 1.APR.2007 16:01:59

- Mode 7
- Item a
- Test Mode : WCDMA Band II (RMC 12.2Kbps) CH9262 Lower Band Edge
- Power State : High



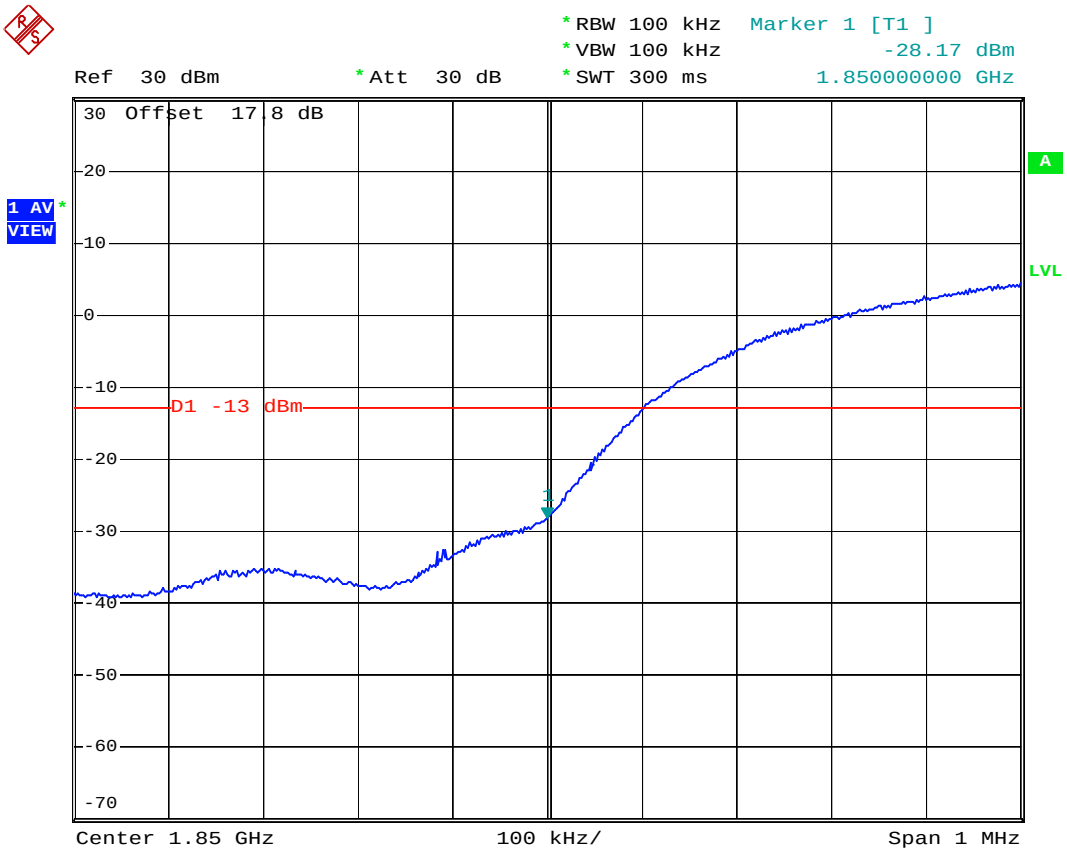
Date: 29.MAR.2007 01:01:00

- Test Mode : WCDMA Band II (RMC 12.2Kbps) CH9538 Higher Band Edge
- Power State : High



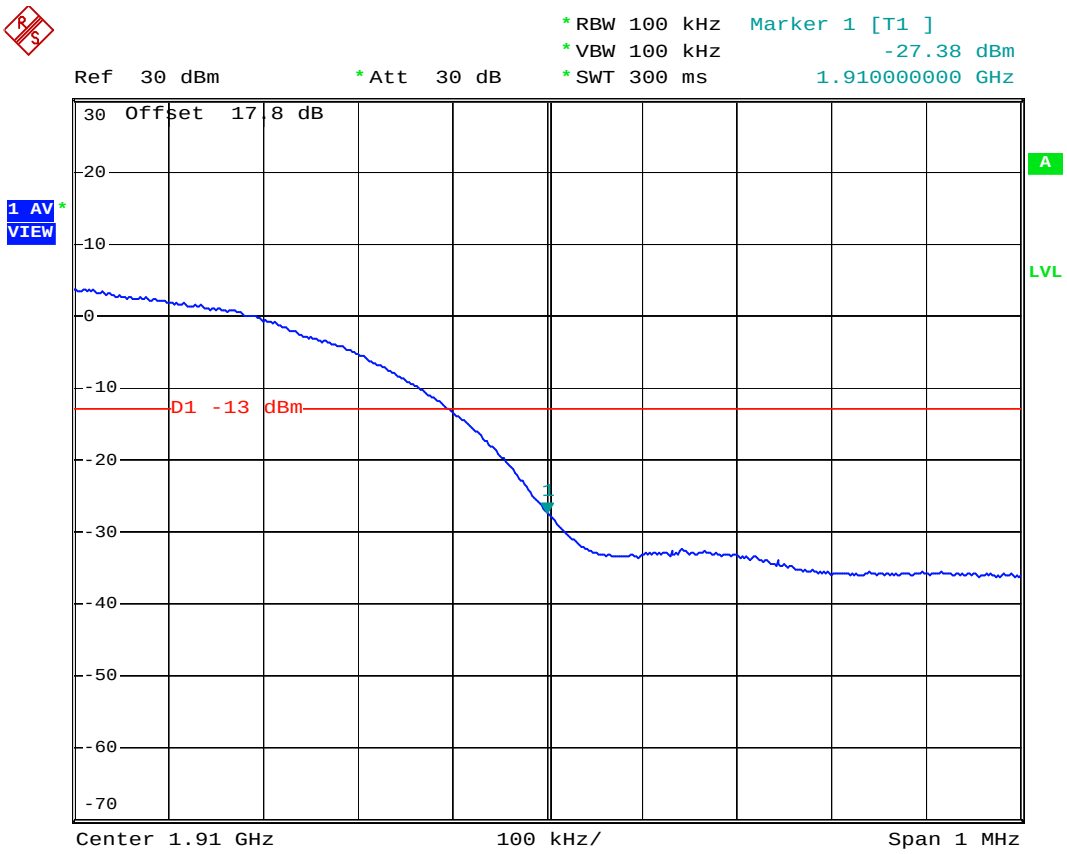
Date: 29.MAR.2007 01:02:17

- Item b
- Test Mode : WCDMA Band II (RMC 64Kbps) CH9262 Lower Band Edge
- Power State : High



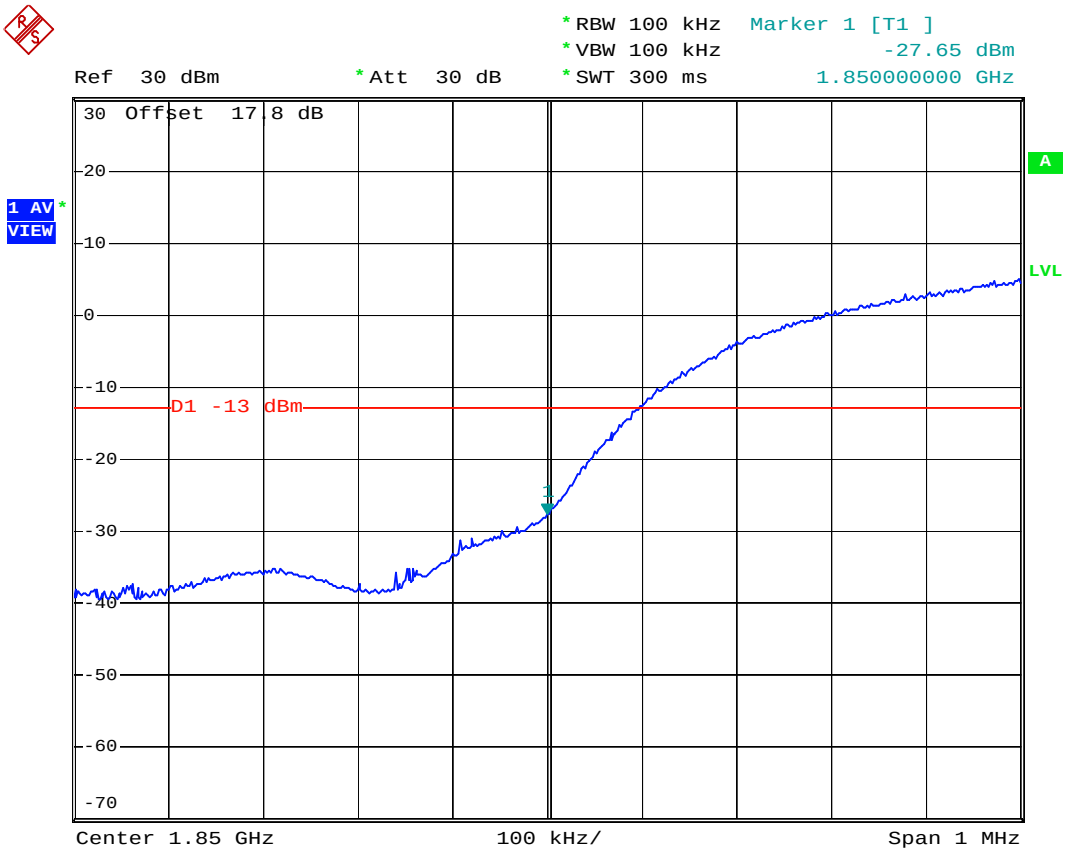
Date: 29.MAR.2007 02:05:33

- Test Mode : WCDMA Band II (RMC 64Kbps) CH9538 Higher Band Edge
- Power State : High



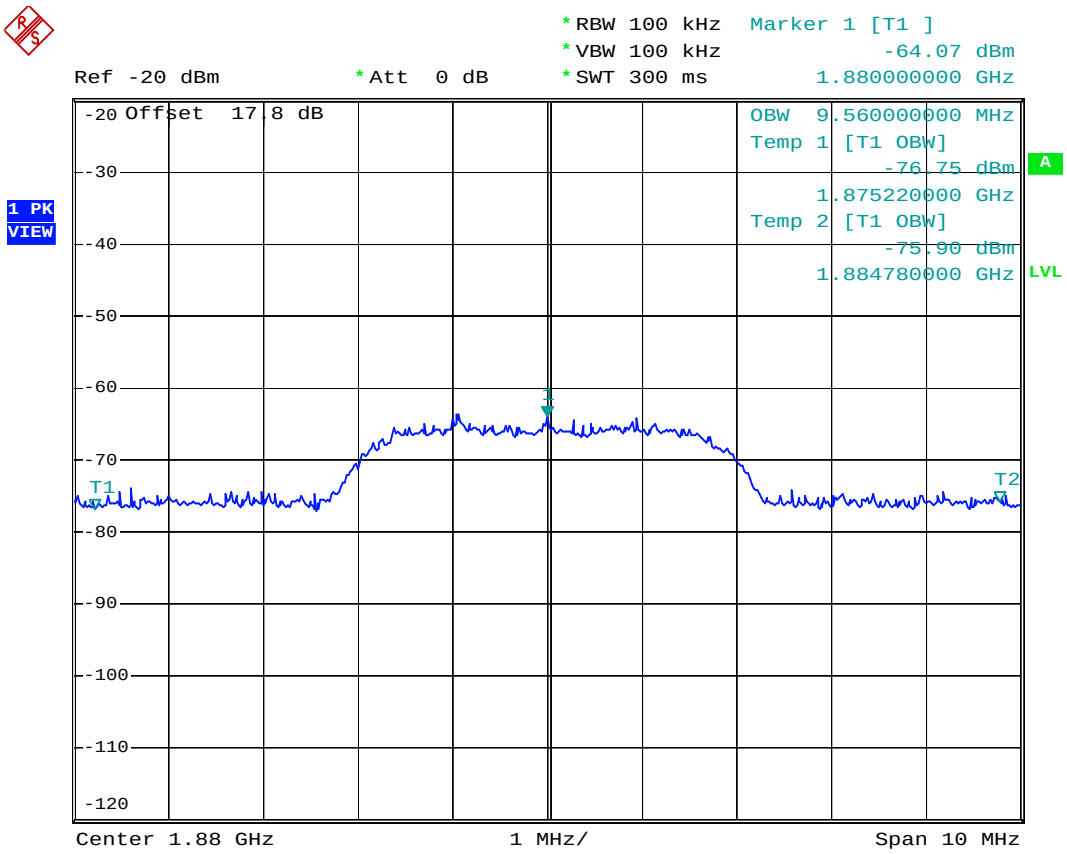
Date: 29.MAR.2007 02:11:03

- Item c
- Test Mode : WCDMA Band II (RMC 144Kbps) CH9262 Lower Band Edge
- Power State : High



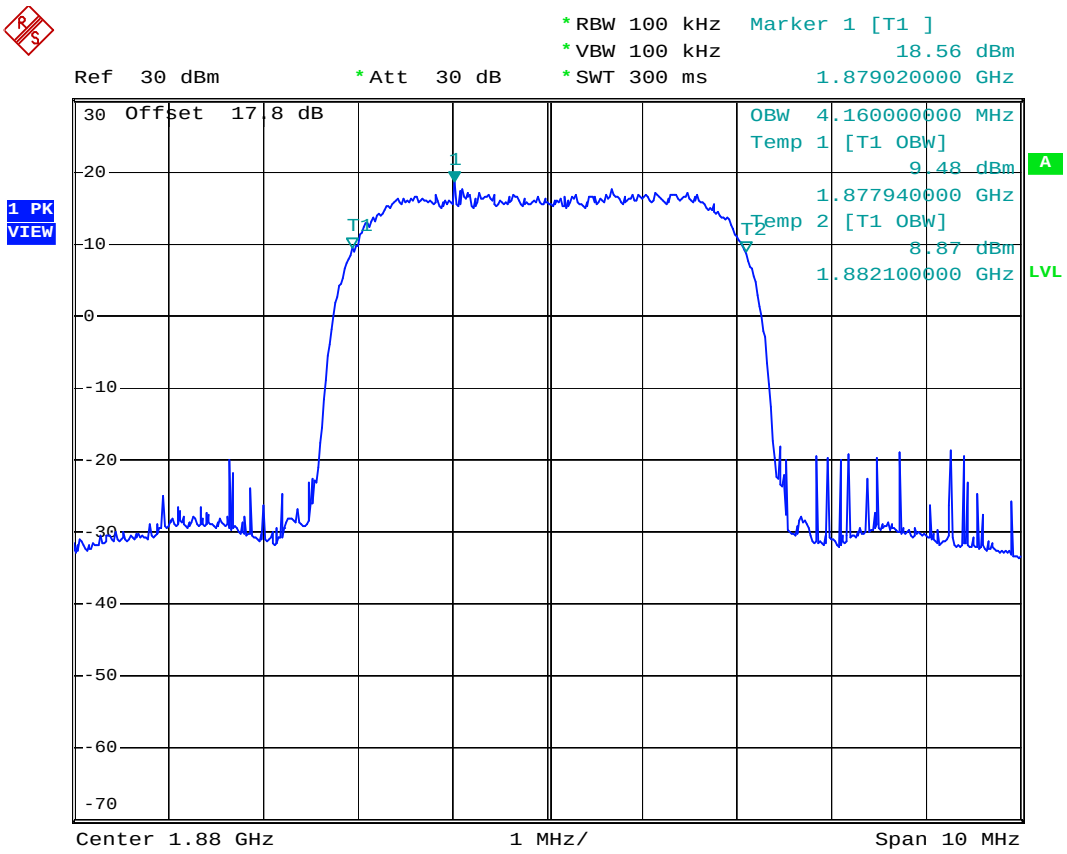
Date: 29.MAR.2007 00:17:37

- Test Mode : WCDMA Band II (RMC 144Kbps) CH9400 99% Occupid Bandwidth
- Power State : Low



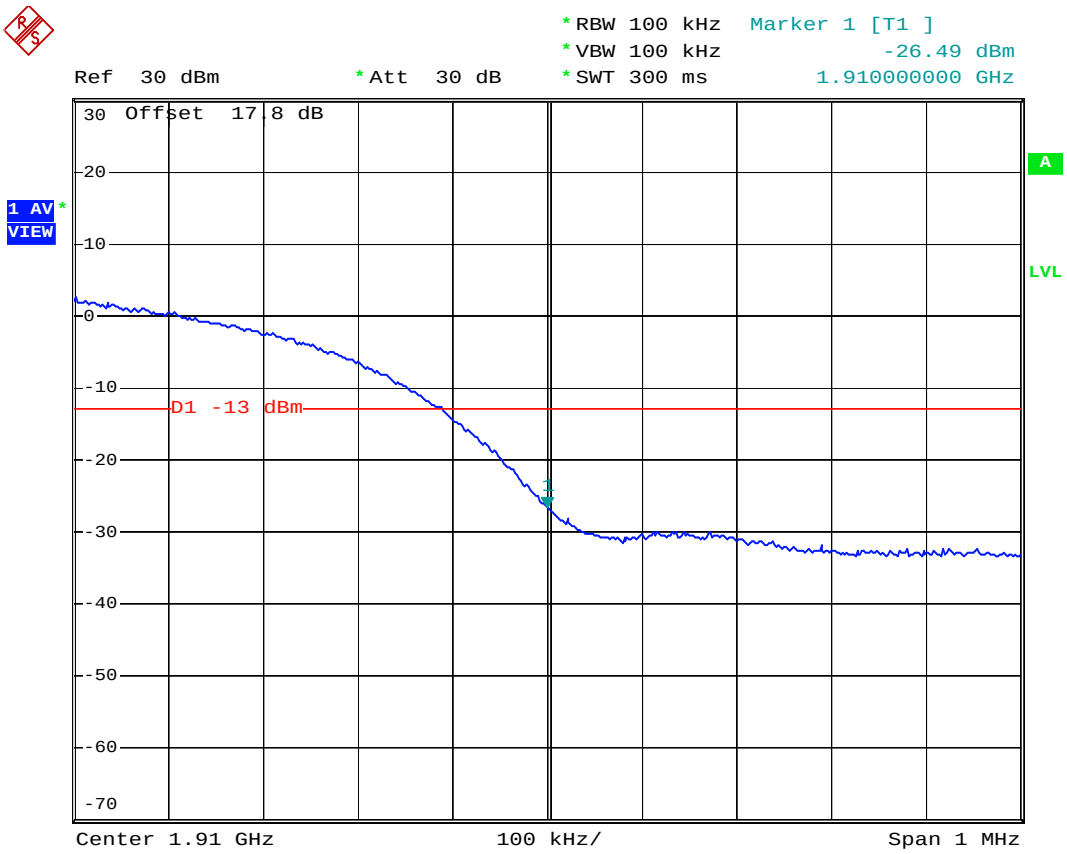
Date: 29.MAR.2007 00:30:32

- Test Mode : WCDMA Band II (RMC 144Kbps) CH9400 99% Occupid Bandwidth
- Power State : High



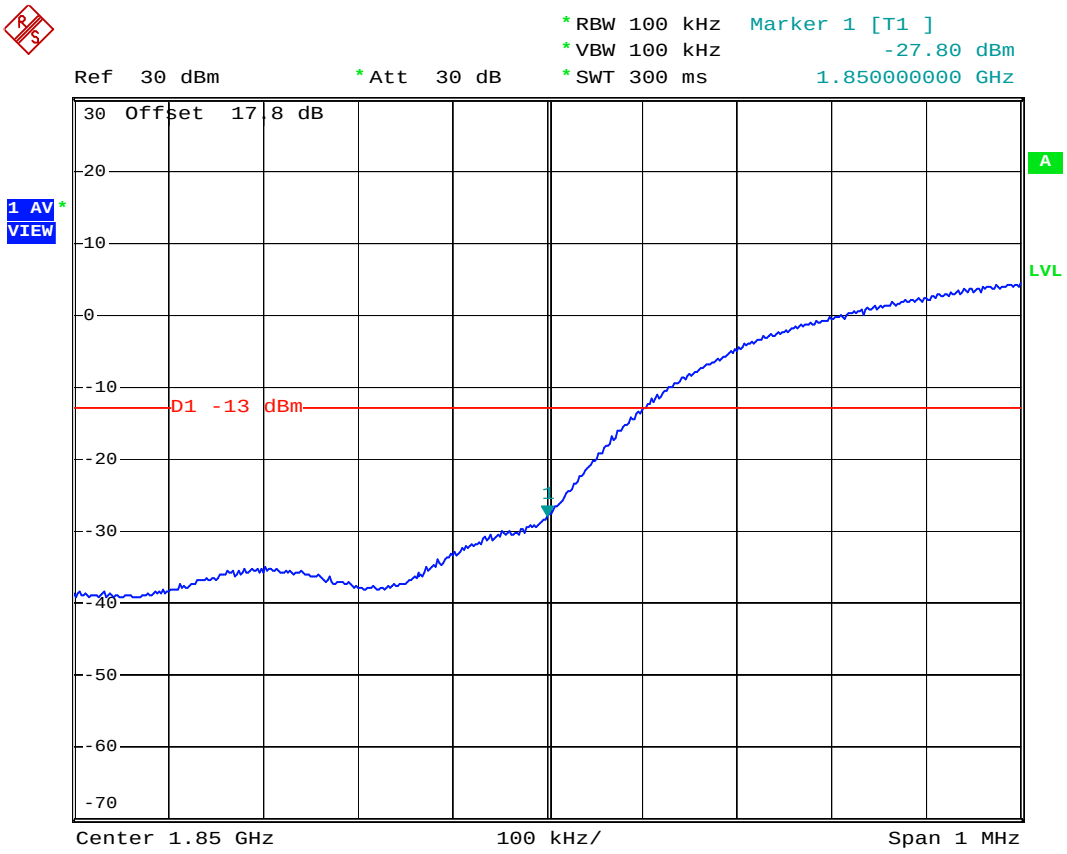
Date: 29.MAR.2007 00:28:43

- Test Mode : WCDMA Band II (RMC 144Kbps) CH9538 Higher Band Edge
- Power State : High



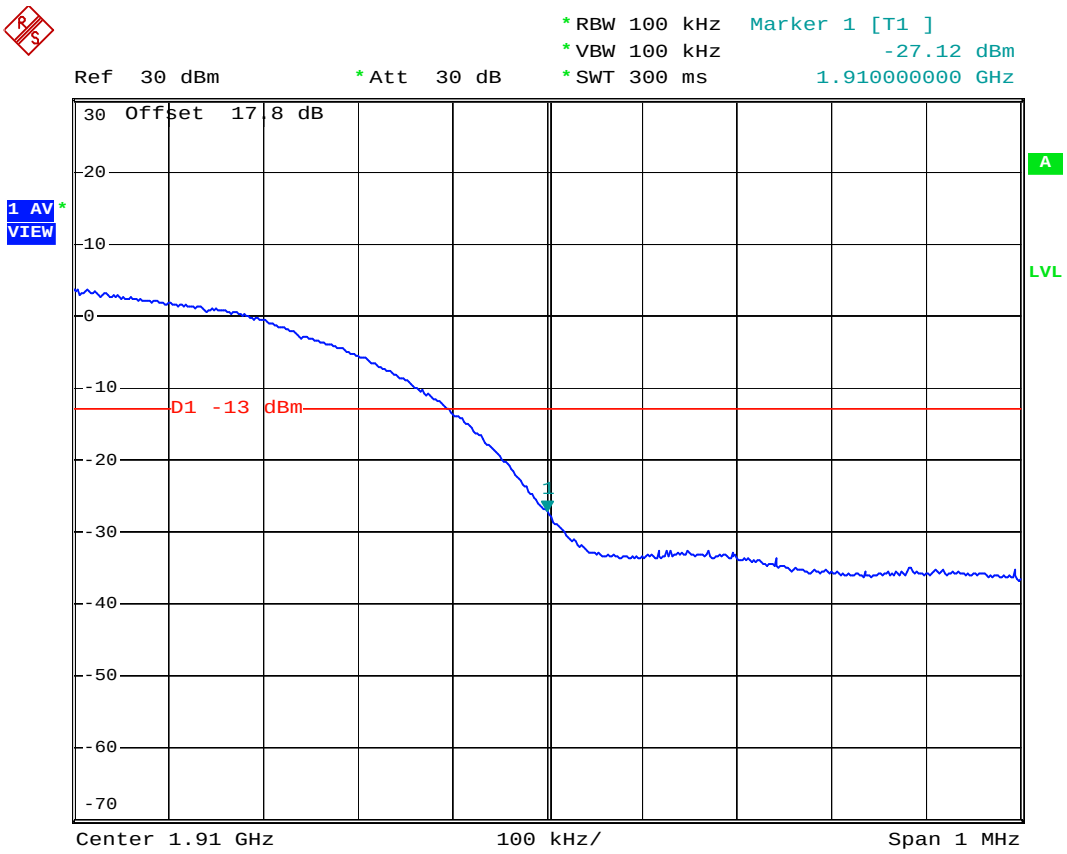
Date: 29.MAR.2007 00:18:55

- Item d
- Test Mode : WCDMA Band II (RMC 384Kbps) CH9262 Lower Band Edge
- Power State : High



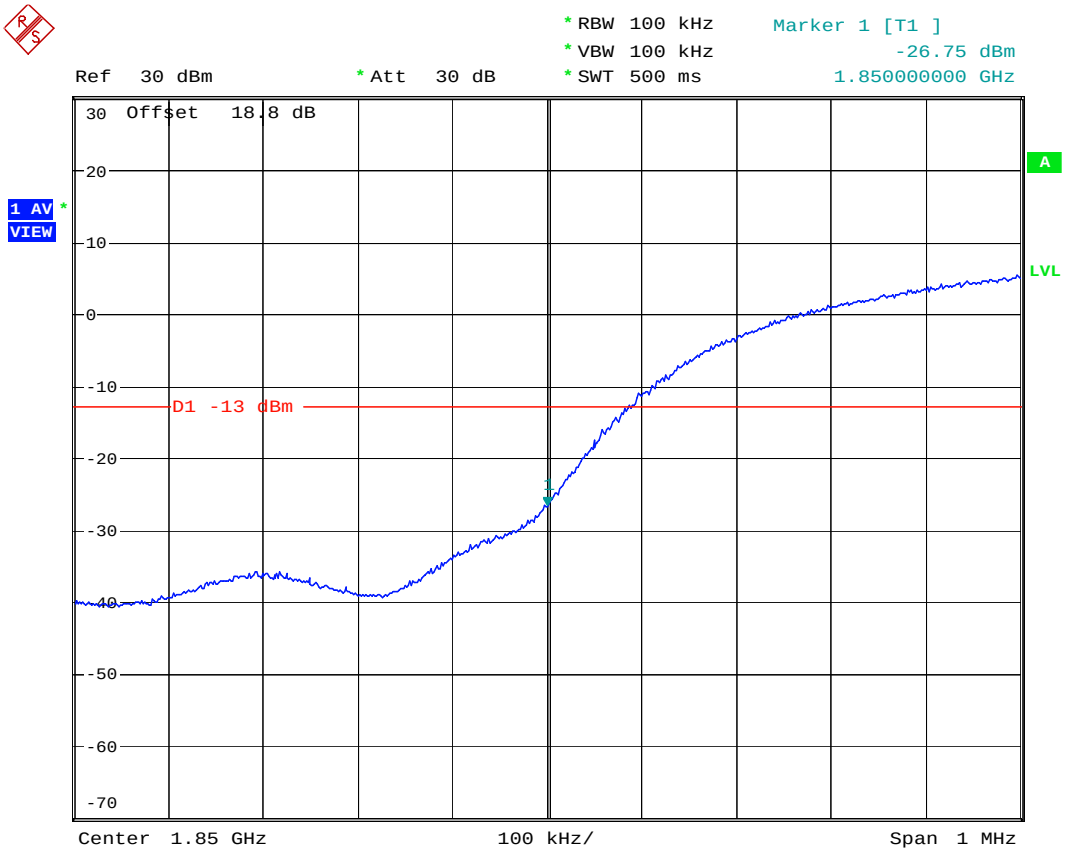
Date: 29.MAR.2007 02:19:28

- Test Mode : WCDMA Band II (RMC 384Kbps) CH9538 Higher Band Edge
- Power State : High

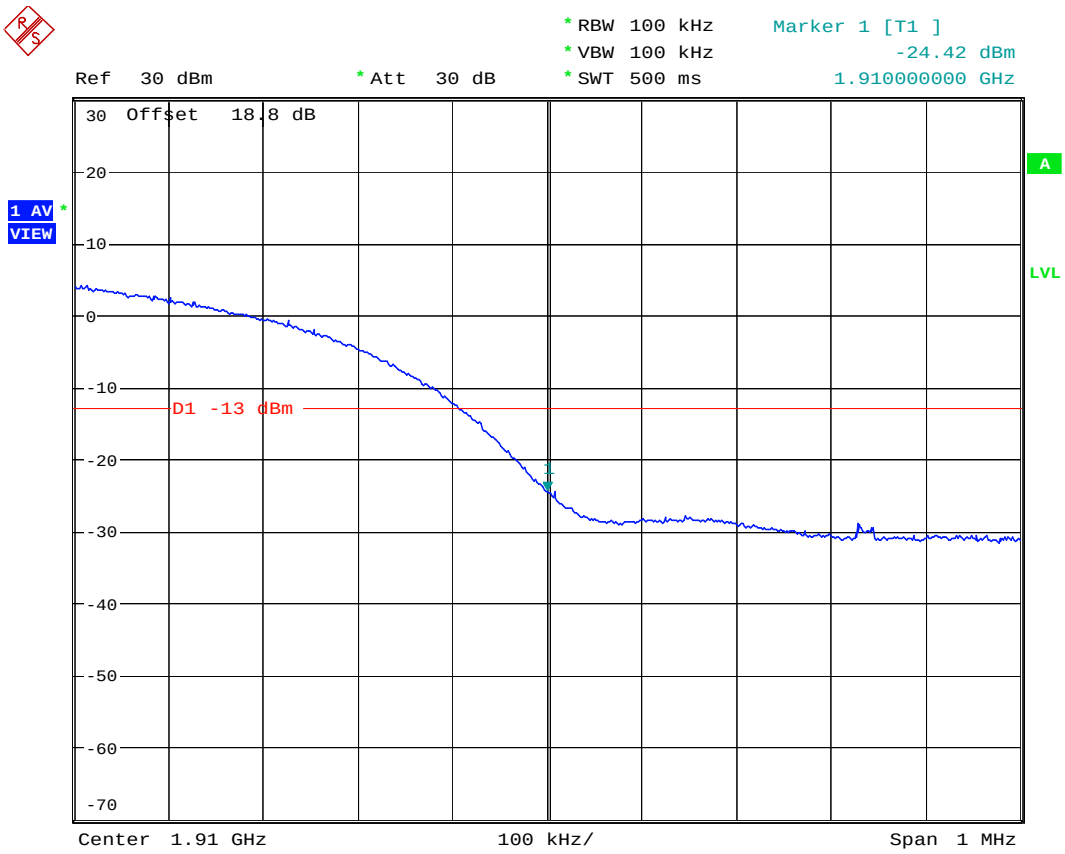


Date: 29.MAR.2007 02:16:28

- Mode 8
- Test Mode : WCDMA Band II (RMC 144Kbps+HSDPA) CH9262 Lower Band Edge
- Power State : High



- Test Mode : WCDMA Band II (RMC 144Kbps+HSDPA) CH9538 Higher Band Edge
- Power State : High



Date: 1.APR.2007 16:14:05

4.5 Conducted Emission

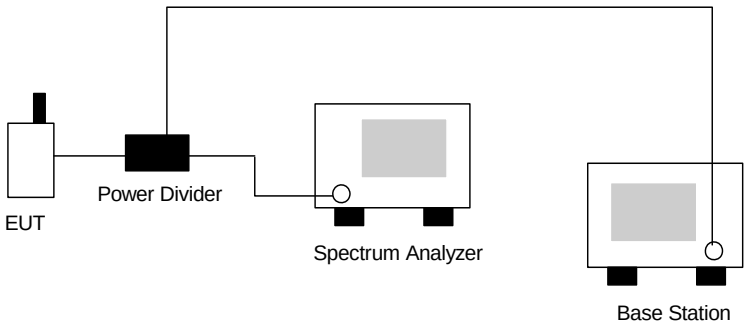
4.5.1 Measurement Instruments

As described in chapter 5 of this test report.

4.5.2 Test Procedure

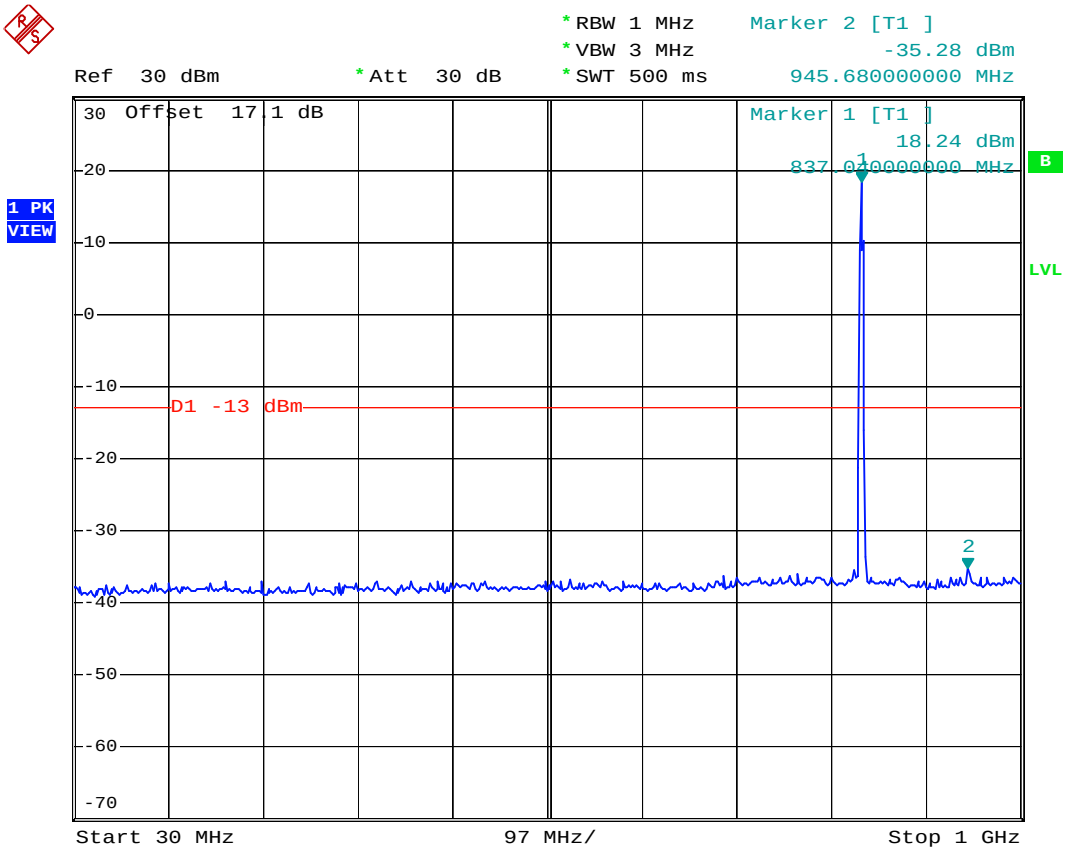
1. The EUT was connected to Spectrum Analyzer and Base Station via power divider.
2. The middle channel for the highest RF power within the transmitting frequency was measured.
3. The conducted spurious emission for the whole frequency range was taken.

4.5.3 Test Setup Layout



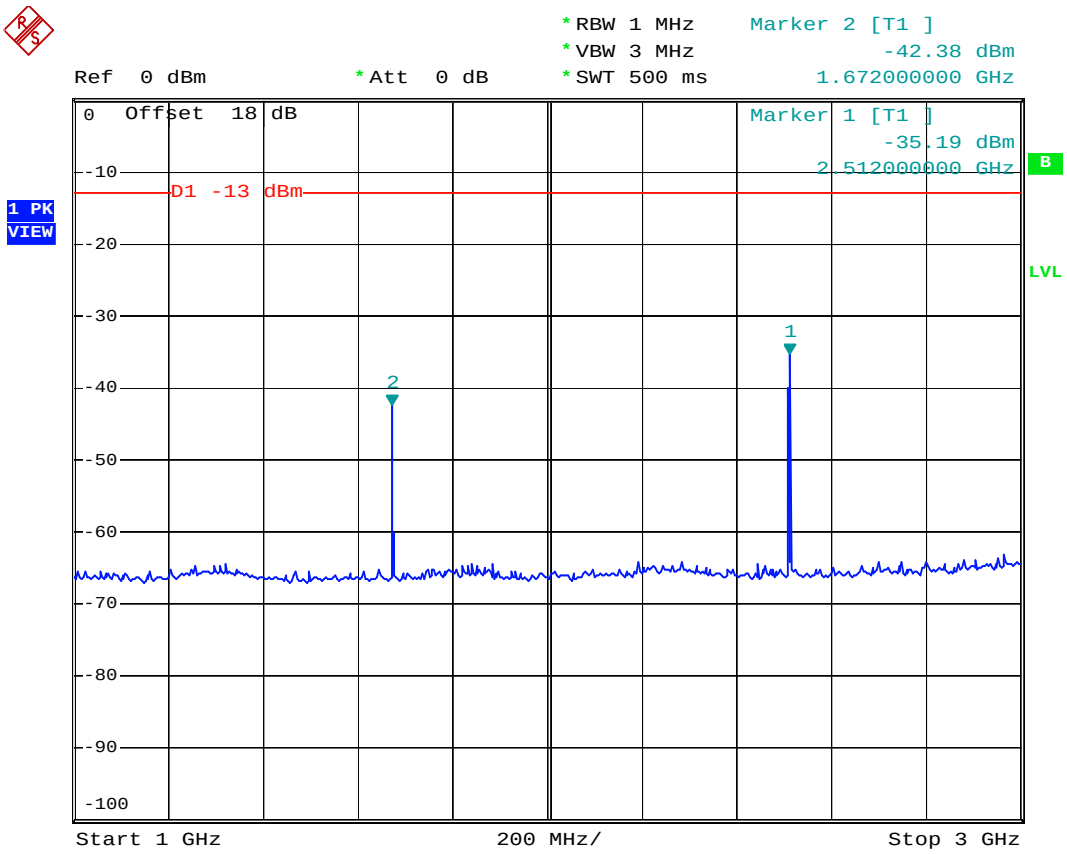
4.5.4 Test Result

- Mode 1
- Test Mode : GSM850 (GSM) CH189
- Frequency Range : 30M-1G



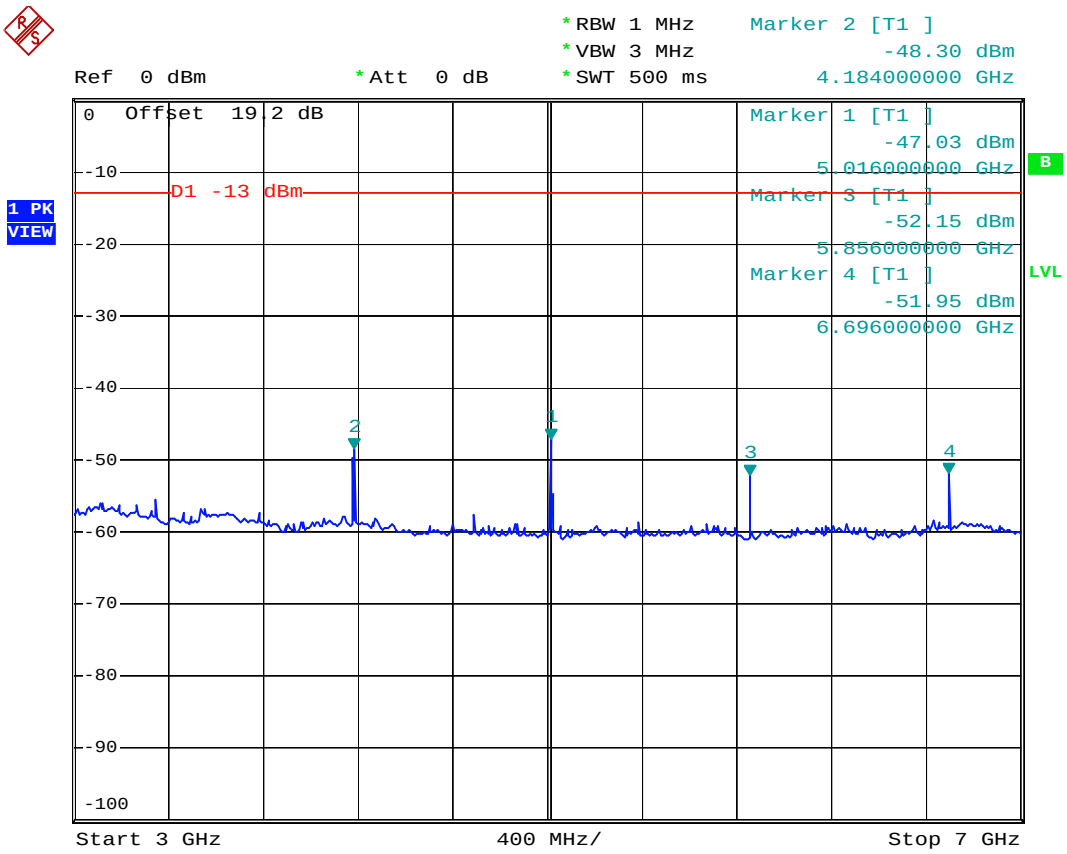
Date: 21.MAR.2007 05:39:52

- Test Mode : GSM850 (GSM) CH189
- Frequency Range : 1G-3G



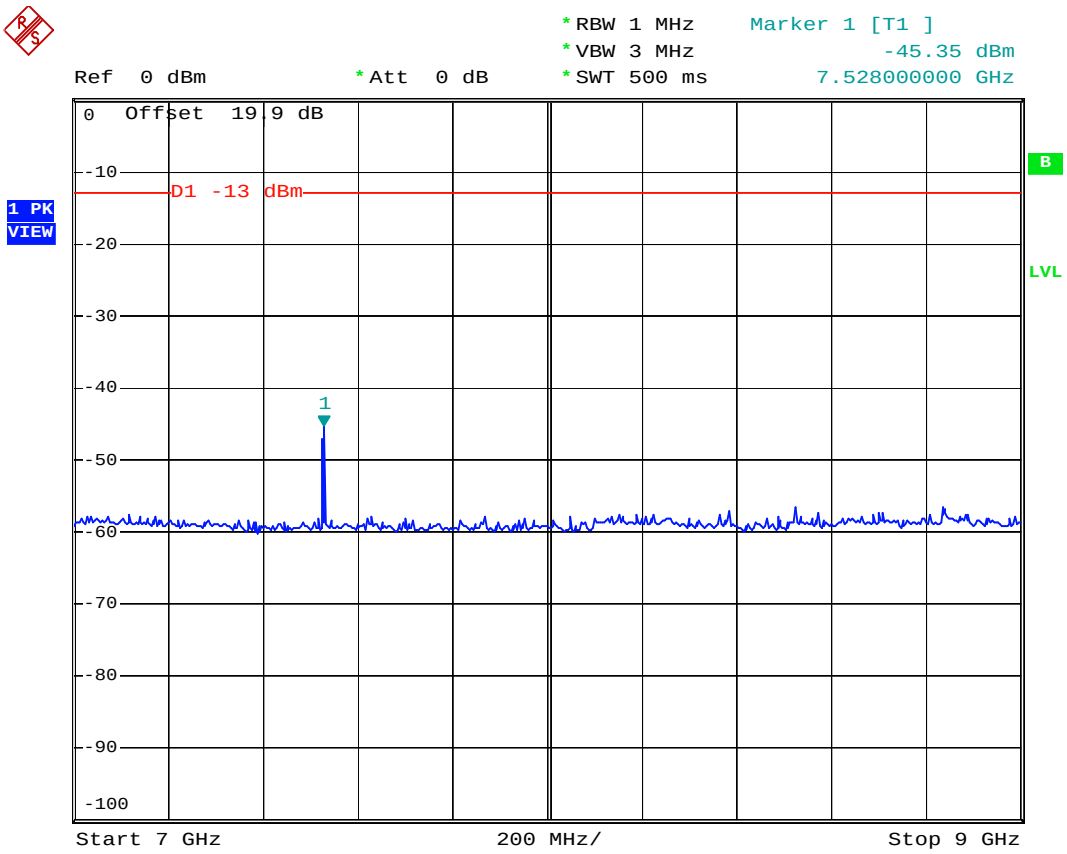
Date: 21.MAR.2007 05:43:02

- Test Mode : GSM850 (GSM) CH189
- Frequency Range : 3G-7G



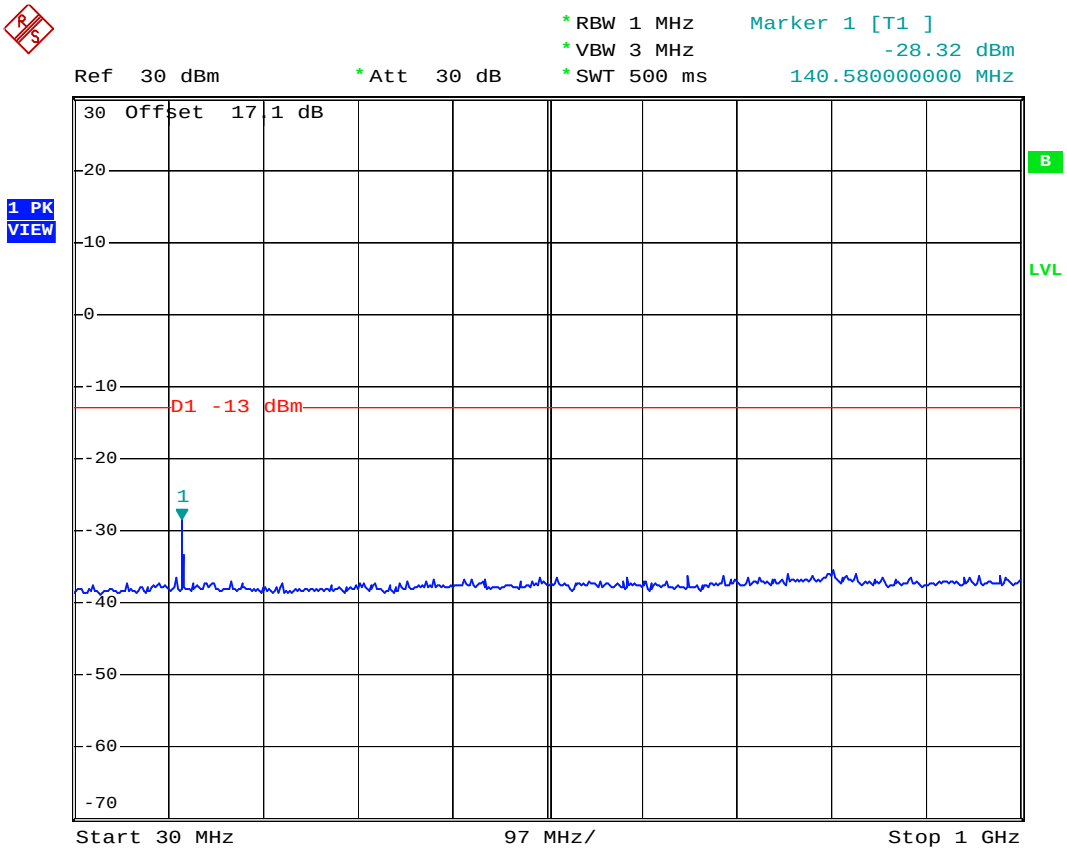
Date: 21.MAR.2007 05:45:02

- Test Mode : GSM850 (GSM) CH189
- Frequency Range : 7G-9G



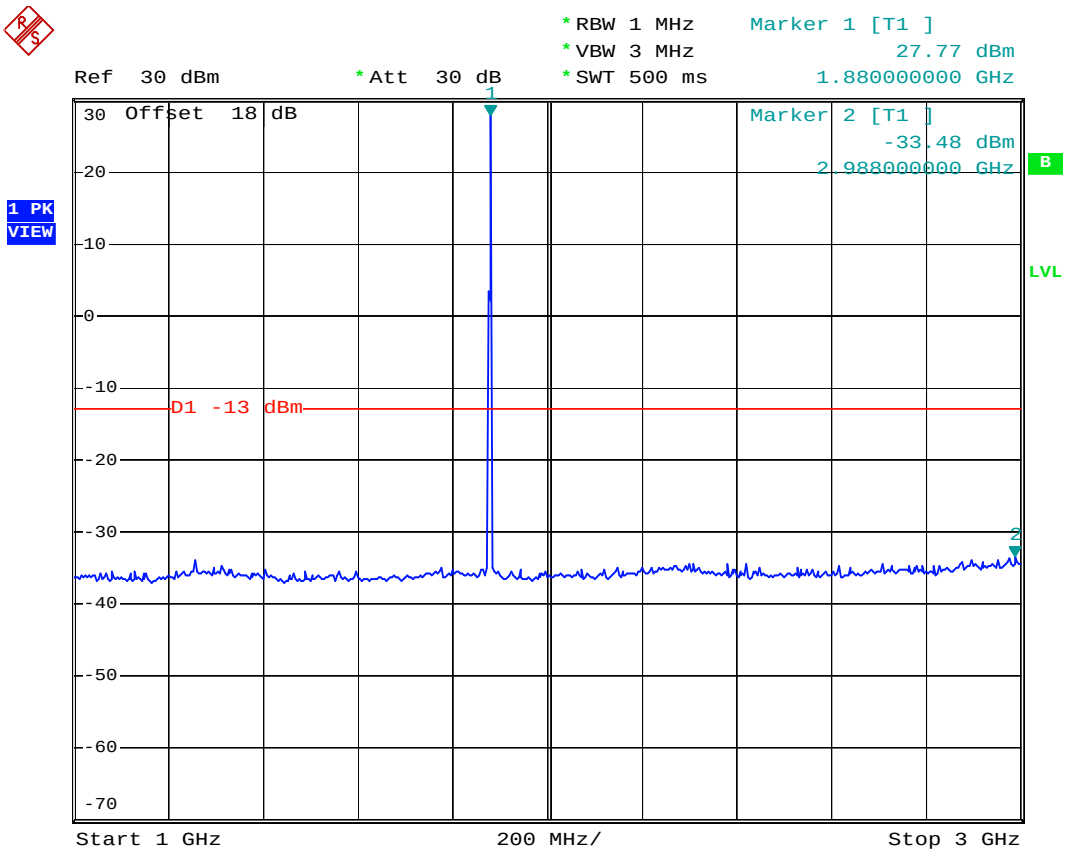
Date: 21.MAR.2007 05:46:10

- Mode 3
- Test Mode : PCS1900 (GSM) CH661
- Frequency Range : 30M-1G



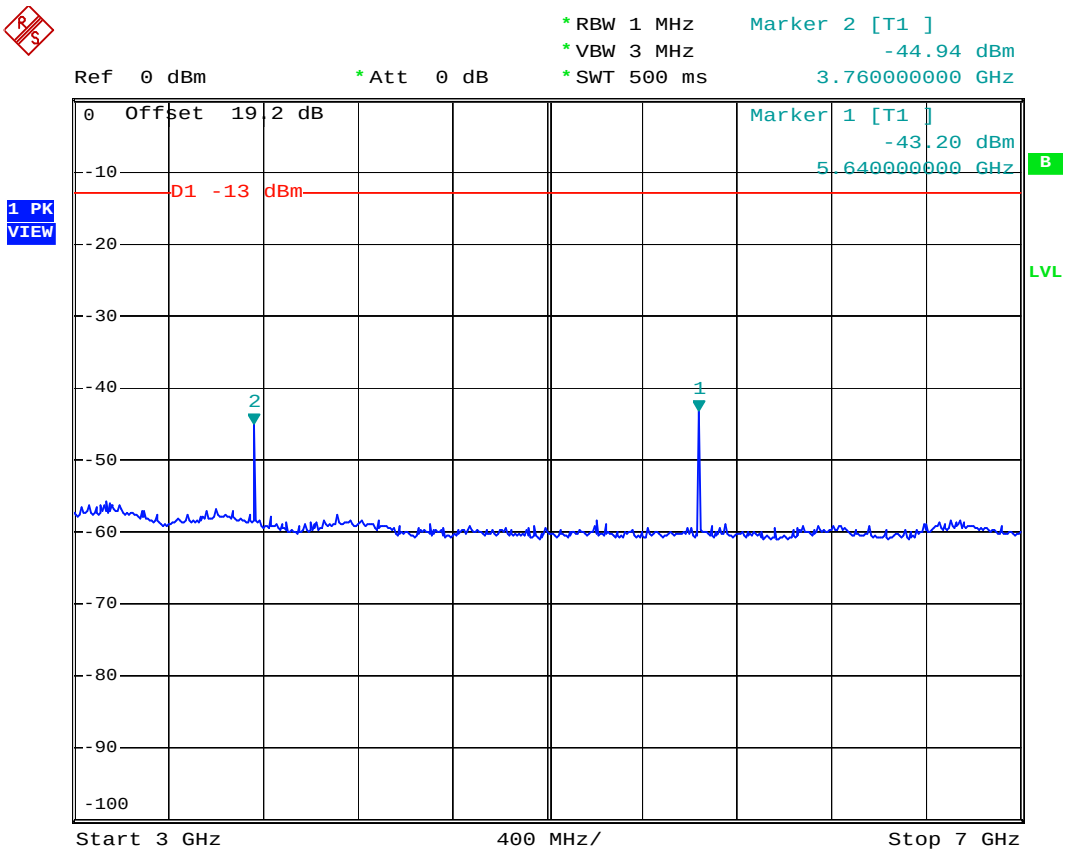
Date: 21.MAR.2007 05:24:14

- Test Mode : PCS1900 (GSM) CH661
- Frequency Range : 1G-3G



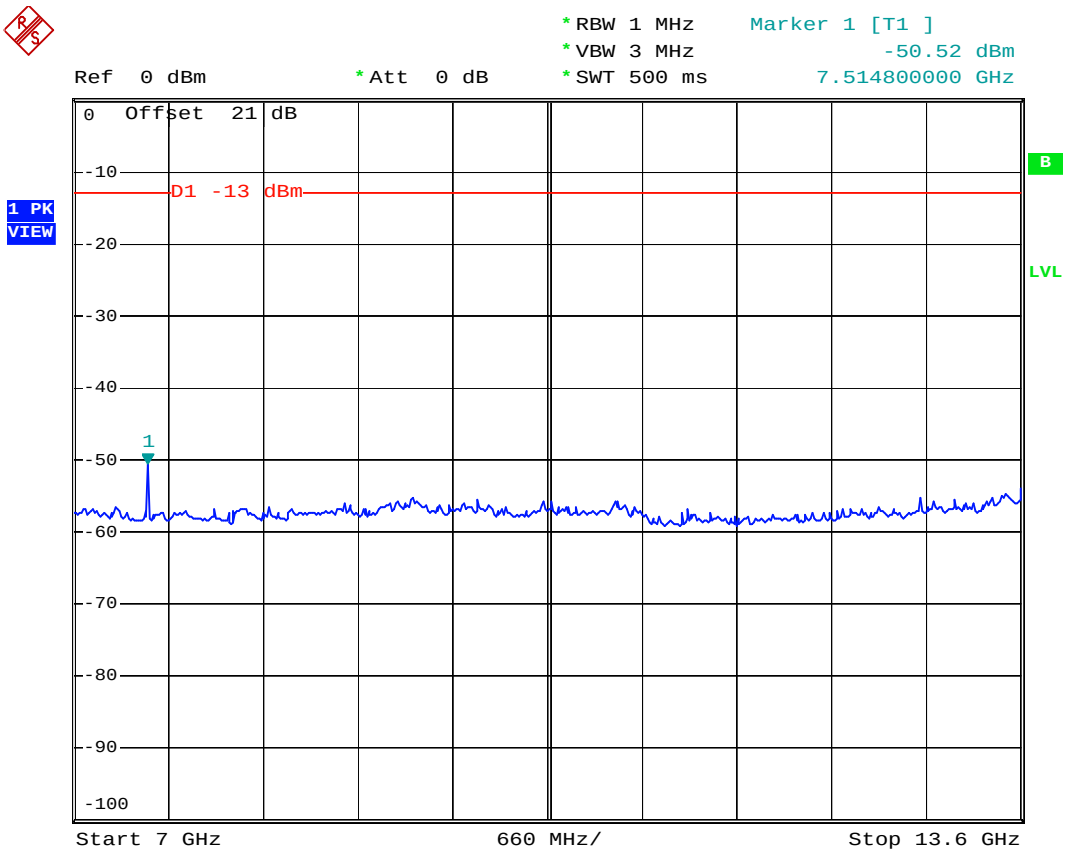
Date: 21.MAR.2007 05:26:33

- Test Mode : PCS1900 (GSM) CH661
- Frequency Range : 3G-7G



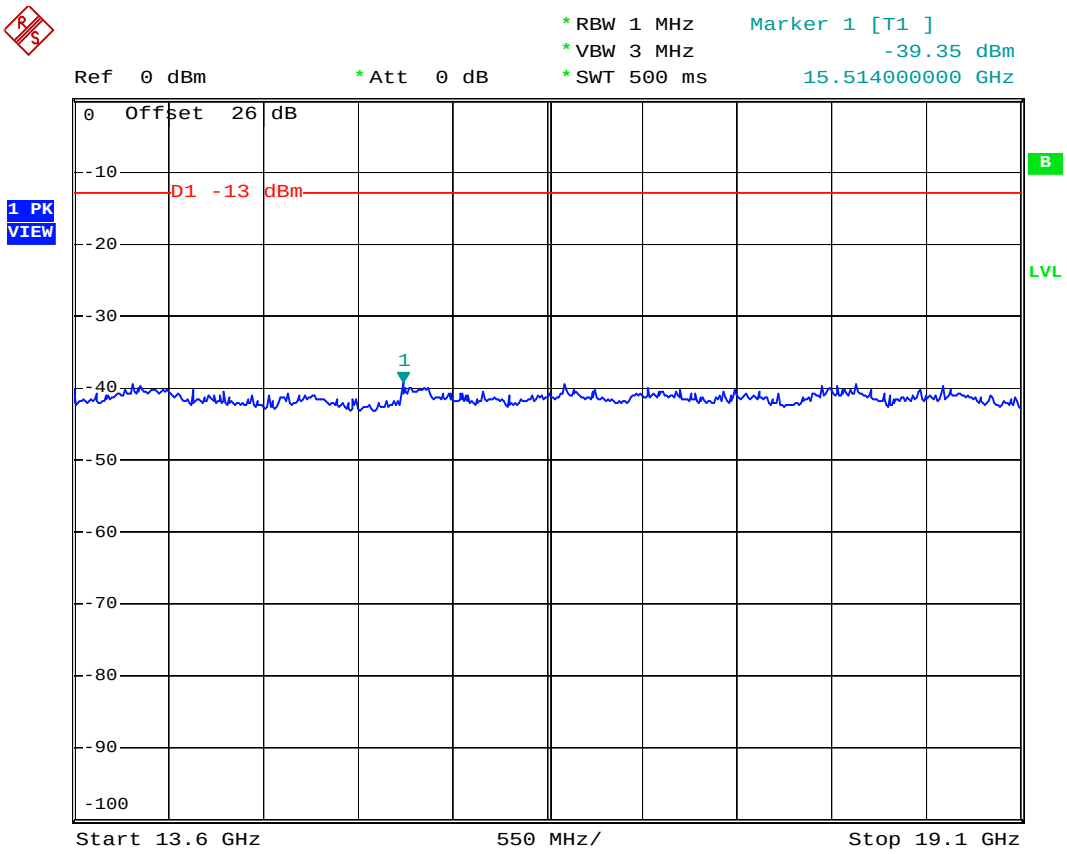
Date: 21.MAR.2007 05:31:21

- Test Mode : PCS1900 (GSM) CH661
- Frequency Range : 7G-13.6G



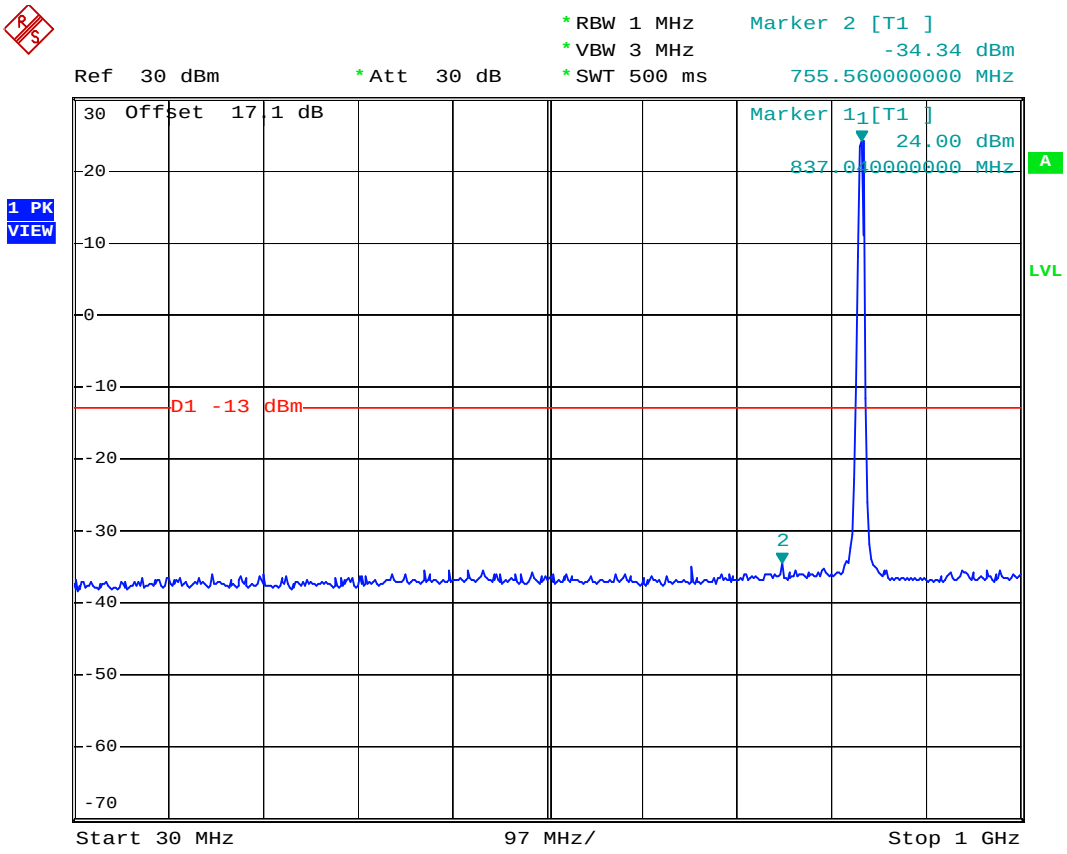
Date: 21.MAR.2007 05:34:27

- Test Mode : PCS1900 (GSM) CH661
- Frequency Range : 13.6G-19.1G



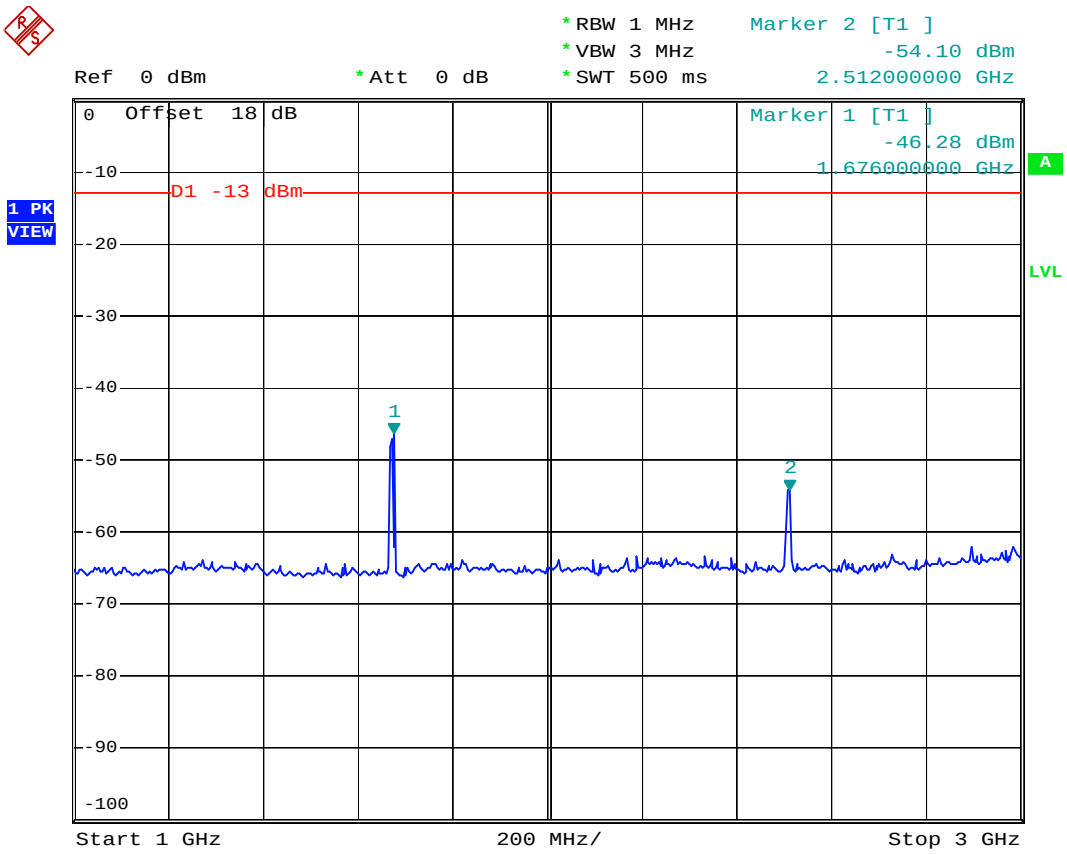
Date: 21.MAR.2007 05:35:52

- Mode 5
- Item c
- Test Mode : WCDMA Band V (RMC 144Kbps) CH4182
- Frequency Range : 30M-1G



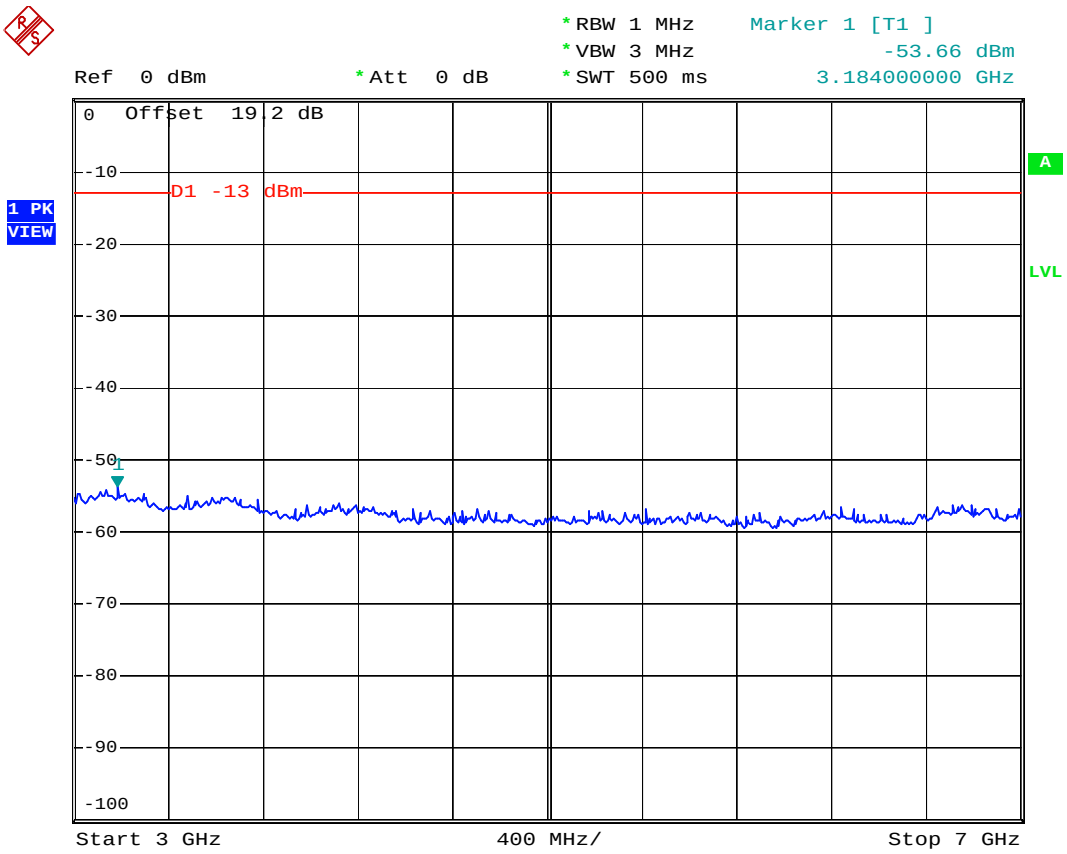
Date: 29.MAR.2007 03:48:04

- Test Mode : WCDMA Band V (RMC 144Kbps) CH4182
- Frequency Range : 1G-3G



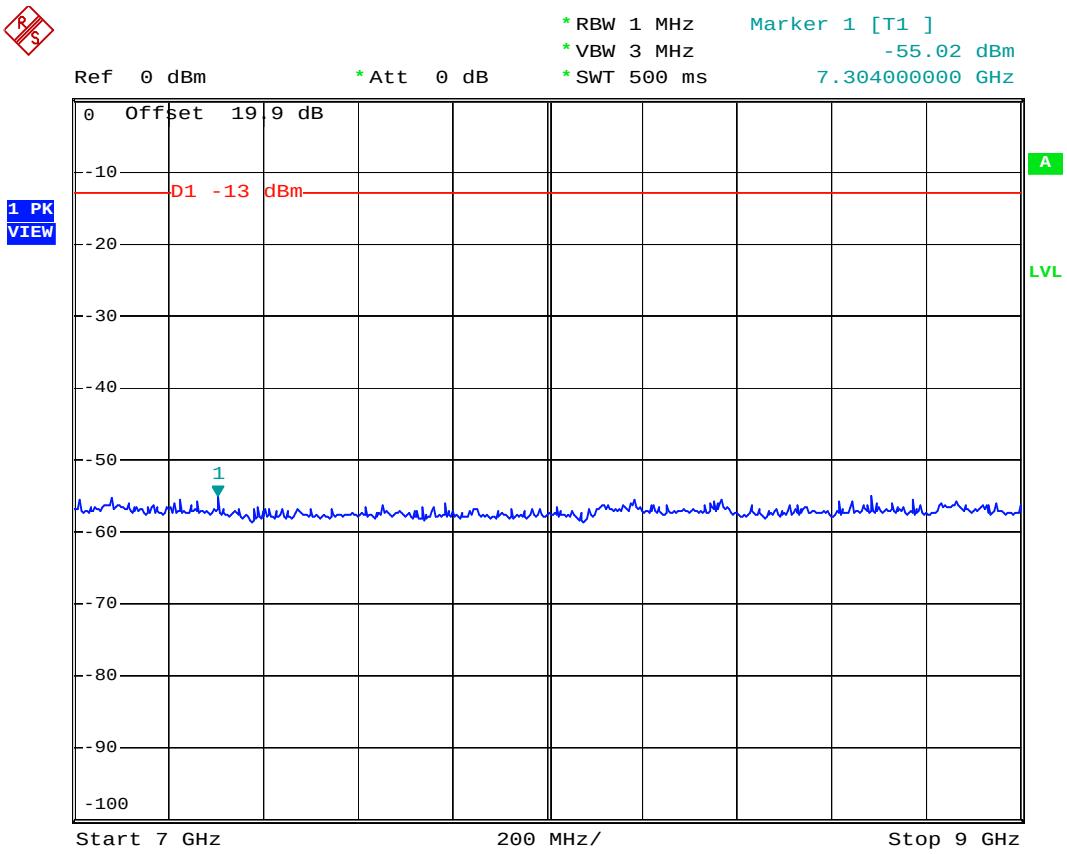
Date: 29.MAR.2007 03:49:36

- Test Mode : WCDMA Band V (RMC 144Kbps) CH4182
- Frequency Range : 3G-7G



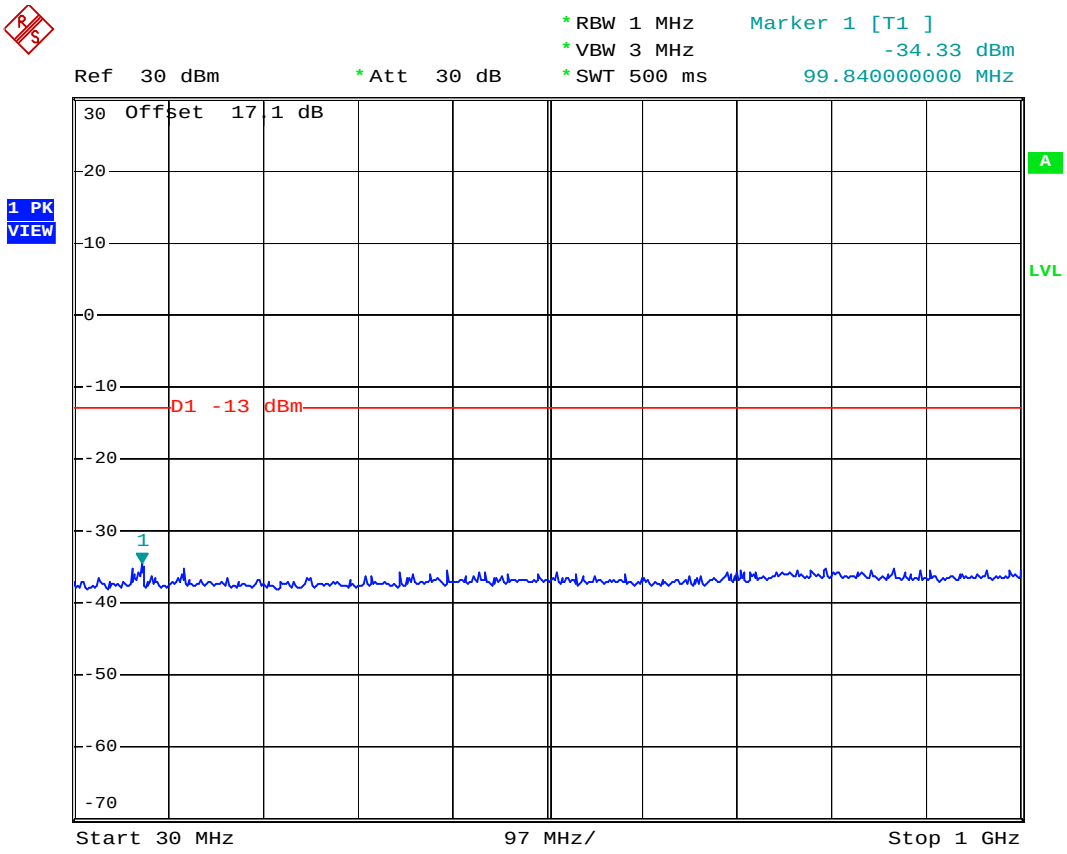
Date: 29.MAR.2007 03:51:23

- Test Mode : WCDMA Band V (RMC 144Kbps) CH4182
- Frequency Range : 7G-9G



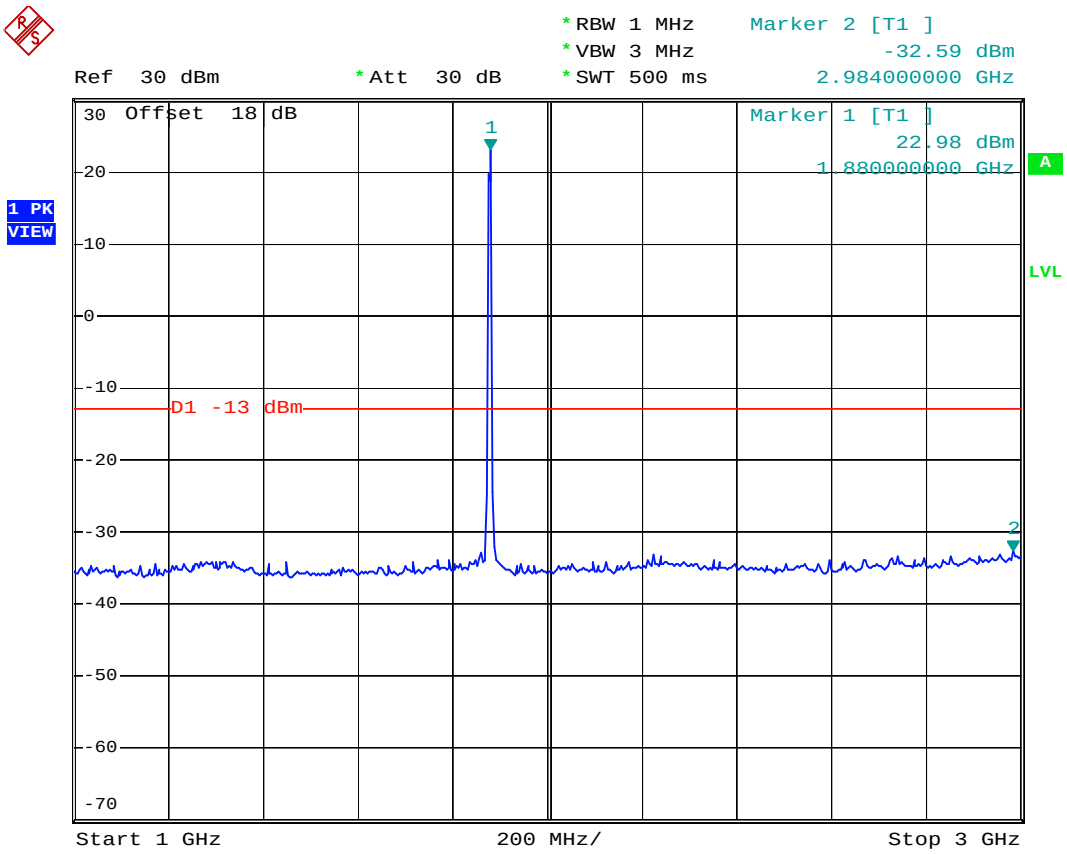
Date: 29.MAR.2007 03:52:16

- Mode 7
- Item c
- Test Mode : WCDMA Band II (RMC 144Kbps) CH9400
- Frequency Range : 30M-1G



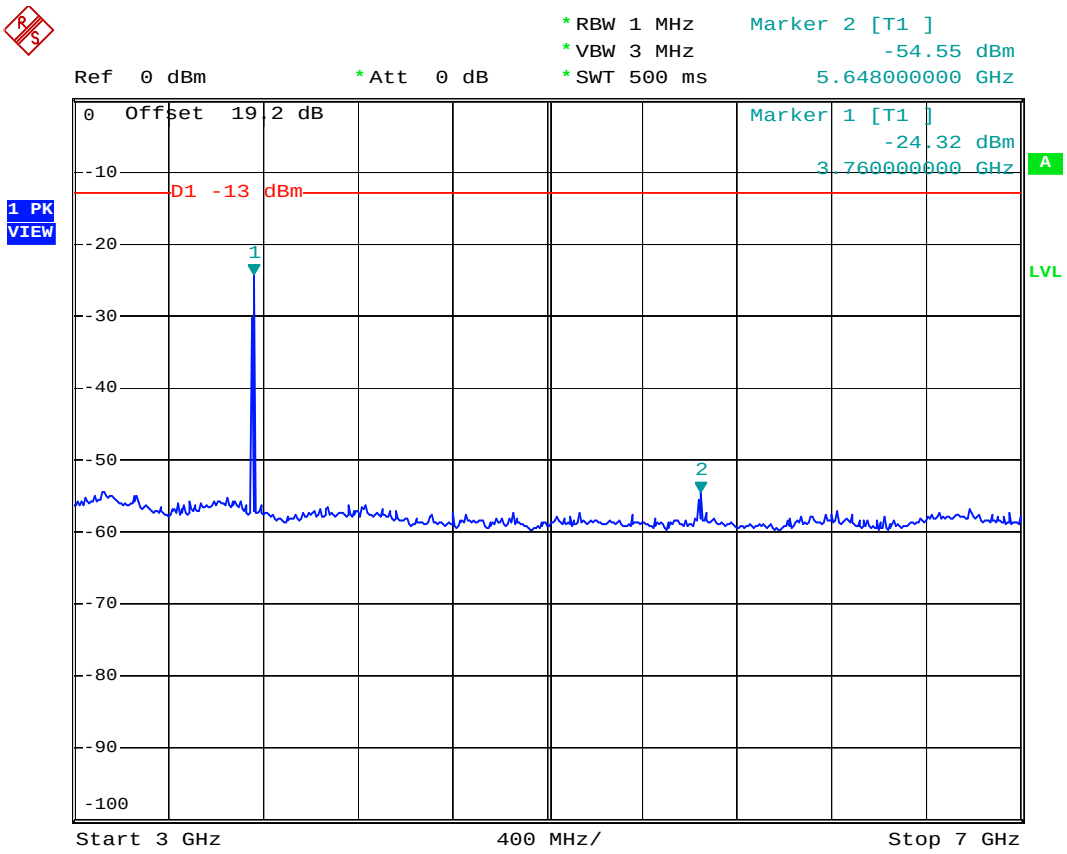
Date: 29.MAR.2007 00:37:14

- Test Mode : WCDMA Band II (RMC 144Kbps) CH9400
- Frequency Range : 1G-3G



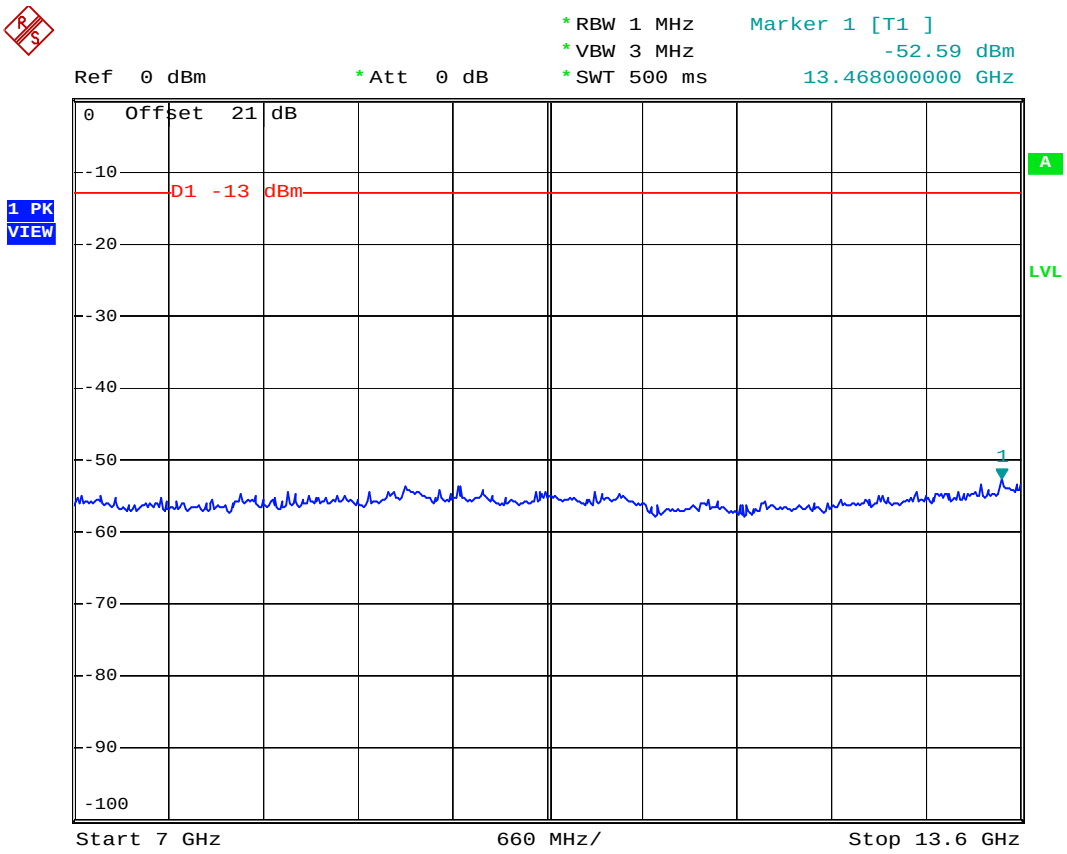
Date: 29.MAR.2007 00:56:02

- Test Mode : WCDMA Band II (RMC 144Kbps) CH9400
- Frequency Range : 3G-7G



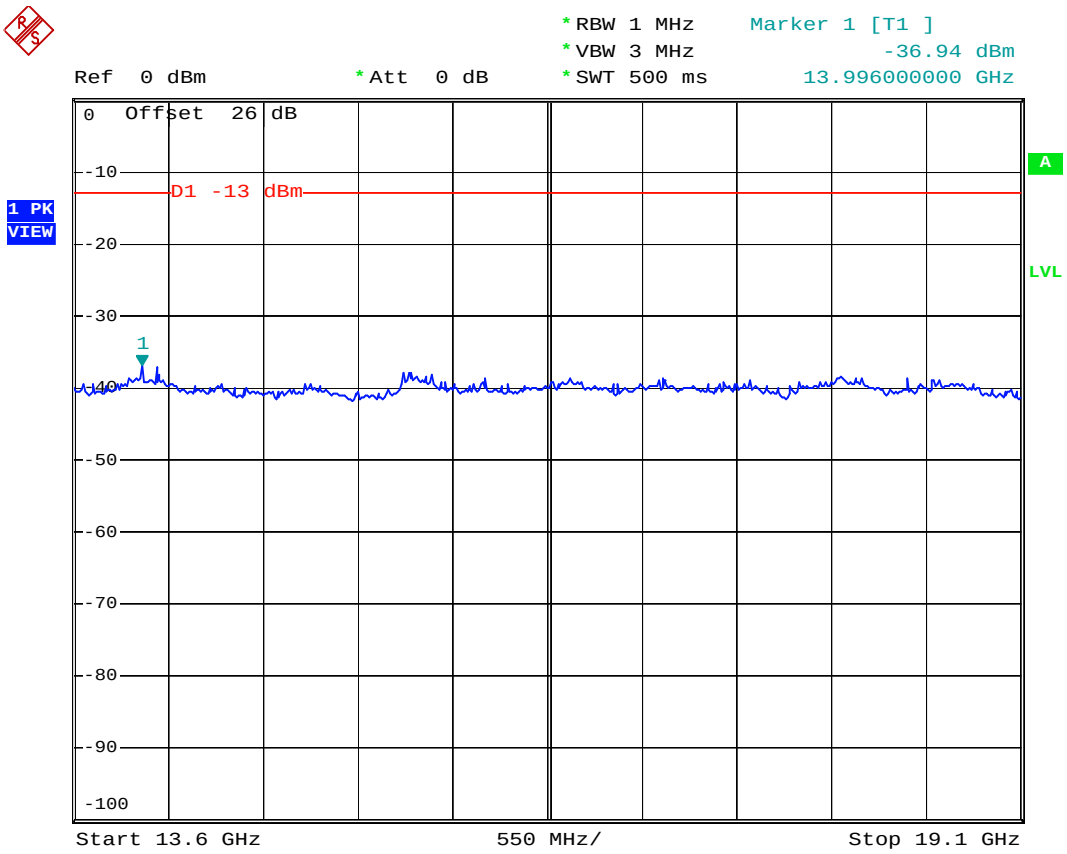
Date: 29.MAR.2007 00:45:37

- Test Mode : WCDMA Band II (RMC 144Kbps) CH9400
- Frequency Range : 7G-13.6G



Date: 29.MAR.2007 00:47:56

- Test Mode : WCDMA Band II (RMC 144Kbps) CH9400
- Frequency Range : 13.6G-19.1G



Date: 29.MAR.2007 00:49:14

4.6 Field Strength of Spurious Radiation

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

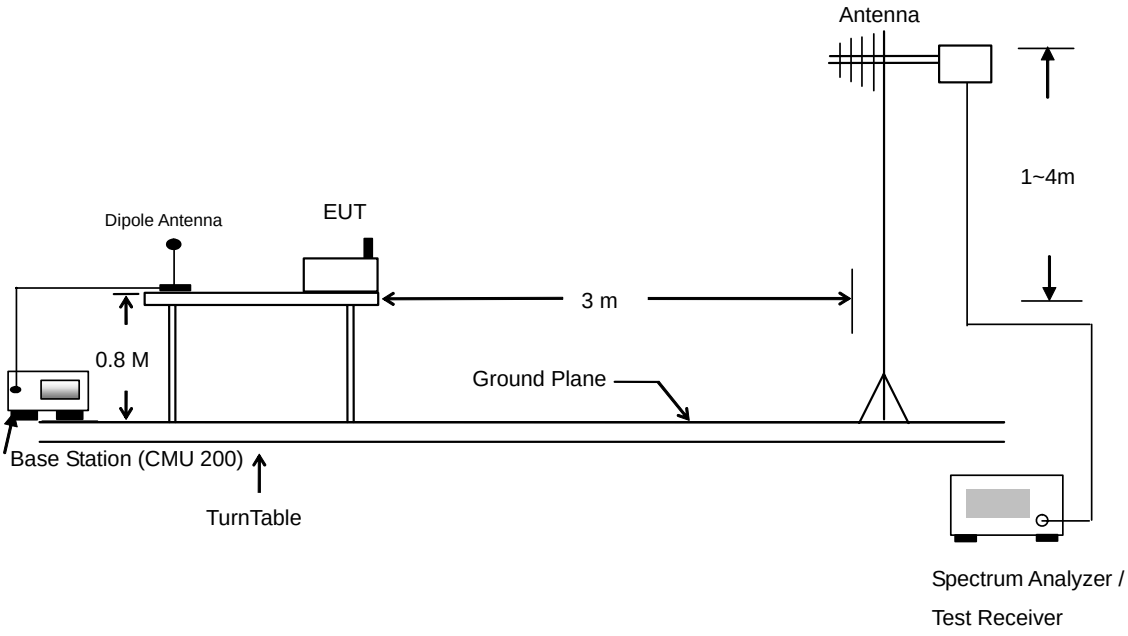
4.6.1 Measurement Instruments

As described in chapter 5 of this test report.

4.6.2 Test Procedure

1. The EUT was placed on a rotatable wooden table with 0.8 meter about ground.
2. The EUT was set 3 meters from the receiving antenna which was mounted on the antenna tower.
3. The table was rotated 360 degrees to determine the position of the highest spurious emission.
4. The height of the receiving antenna is varied between one meter and four meters to reach the maximum spurious emission for both horizontal and vertical polarizations.
5. Taking the record of maximum spurious emission.
6. A Horn antenna was substituted in place of the EUT and was driven by a signal generator.
7. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
8. Taking the recored of output power at antenna port.
9. Repeat step 7 to step 8 for another polariztion.
10. Emission level (dBm) = output power + substituion Gain.

4.6.3 Test Setup Layout



4.6.4 Test Result

- Test Mode : Mode 1

GSM850 (GSM) Radiated Spurious ERP							
H Polarization				V Polarization			
Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)
30.000	-63.900	-13	-50.90	39.990	-57.980	-13	-44.98
130.980	-55.350	-13	-42.35	130.980	-55.870	-13	-42.87
153.390	-57.420	-13	-44.42	197.130	-59.000	-13	-46.00
406.400	-65.830	-13	-52.83	448.400	-63.840	-13	-50.84
1674.000	**-38.970**	**-13**	**-25.97**	1674.000	-49.940	-13	-36.94
2508.000	-47.120	-13	-34.12	2508.000	-40.320	-13	-27.32

- Test Mode : Mode 2

GSM850 (EDGE) Radiated Spurious ERP							
H Polarization				V Polarization			
Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)
30.000	-66.470	-13	-53.47	130.980	-71.040	-13	-58.04
197.130	-71.490	-13	-58.49	197.130	-69.410	-13	-56.41
219.540	-70.020	-13	-57.02	218.730	-65.860	-13	-52.86
981.800	-65.670	-13	-52.67	976.900	-63.540	-13	-50.54
1674.000	**-44.320**	**-13**	**-31.32**	1674.000	-51.930	-13	-38.93
2508.000	-50.460	-13	-37.46	2508.000	-50.060	-13	-37.06

- Test Mode : Mode 3

PCS1900 (GSM) Radiated Spurious EIRP							
H Polarization				V Polarization			
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)
30.000	-62.290	-13	-49.29	41.340	-55.650	-13	-42.65
130.980	-55.360	-13	-42.36	85.350	-54.680	-13	-41.68
153.390	-57.310	-13	-44.31	131.790	-53.350	-13	-40.35
402.900	-63.990	-13	-50.99	313.300	-63.180	-13	-50.18
456.800	-64.900	-13	-51.90	456.800	-63.580	-13	-50.58
997.900	-63.620	-13	-50.62	1000.000	-60.780	-13	-47.78
5638.000	-49.680	-13	-36.68	3758.000	-52.280	-13	-39.28
				5638.000	**-45.990**	**-13**	**-32.99**

- Test Mode : Mode 4

PCS1900 (EDGE) Radiated Spurious EIRP							
H Polarization				V Polarization			
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)
30.000	-61.430	-13	-48.43	30.000	-54.850	-13	-41.85
130.980	-55.550	-13	-42.55	131.790	-52.210	-13	-39.21
153.390	-57.800	-13	-44.80	153.390	-56.860	-13	-43.86
316.800	-66.300	-13	-53.30	318.900	-62.740	-13	-49.74
406.400	-64.780	-13	-51.78	792.800	-62.630	-13	-49.63
948.900	-64.000	-13	-51.00	987.400	-61.420	-13	-48.42
				5638.000	**-50.490**	**-13**	**-37.49**

- Test Mode : Mode 5

WCDMA Band V Radiated Spurious ERP							
H Polarization				V Polarization			
Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)
72.930	-60.460	-13	-47.46	30.000	-54.180	-13	-41.18
122.340	-59.200	-13	-46.20	197.130	-56.460	-13	-43.46
197.130	-58.600	-13	-45.60	219.540	-56.550	-13	-43.55
385.400	-65.890	-13	-52.89	959.400	-63.860	-13	-50.86
1668.000	**-49.130**	**-13**	**-36.13**	1668.000	-55.980	-13	-42.98
2514.000	-50.540	-13	-37.54	2514.000	-49.960	-13	-36.96
				4184.000	-55.350	-13	-42.35

- Test Mode : Mode 6

WCDMA Band V (HSDPA) Radiated Spurious ERP							
H Polarization				V Polarization			
Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)
123.690	-60.450	-13	-47.45	30.000	-54.690	-13	-41.69
196.590	-60.090	-13	-47.09	40.530	-55.880	-13	-42.88
220.080	-61.030	-13	-48.03	218.730	-56.400	-13	-43.40
985.300	-65.770	-13	-52.77	386.800	-65.480	-13	-52.48
1668.000	**-49.780**	**-13**	**-36.78**	1668.000	-57.490	-13	-44.49
2514.000	-50.180	-13	-37.18	2514.000	-50.160	-13	-37.16

- Test Mode : Mode 7

WCDMA Band II Radiated Spurious EIRP							
H Polarization				V Polarization			
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)
72.390	-57.860	-13	-44.86	30.000	-55.530	-13	-42.53
131.790	-57.370	-13	-44.37	197.130	-55.790	-13	-42.79
218.730	-56.490	-13	-43.49	218.730	-53.400	-13	-40.40
379.800	-64.900	-13	-51.90	379.800	-63.690	-13	-50.69
887.300	-65.040	-13	-52.04	848.800	-62.260	-13	-49.26
976.900	-63.460	-13	-50.46	983.900	-60.920	-13	-47.92
3758.000	-41.930	-13	-28.93	**3764.000**	**-39.440**	**-13**	**-26.44**

- Test Mode : Mode 8

WCDMA Band II (HSDPA) Radiated Spurious EIRP							
H Polarization				V Polarization			
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)
72.930	-56.660	-13	-43.66	30.000	-51.560	-13	-38.56
130.980	-55.400	-13	-42.40	187.140	-54.870	-13	-41.87
219.540	-56.250	-13	-43.25	218.730	-52.800	-13	-39.80
323.800	-59.210	-13	-46.21	383.300	-65.100	-13	-52.10
383.300	-63.340	-13	-50.34	822.900	-62.270	-13	-49.27
1000.000	-64.110	-13	-51.11	980.400	-61.670	-13	-48.67
3764.000	-43.150	-13	-30.15	**3764.000**	**-40.410**	**-13**	**-27.41**

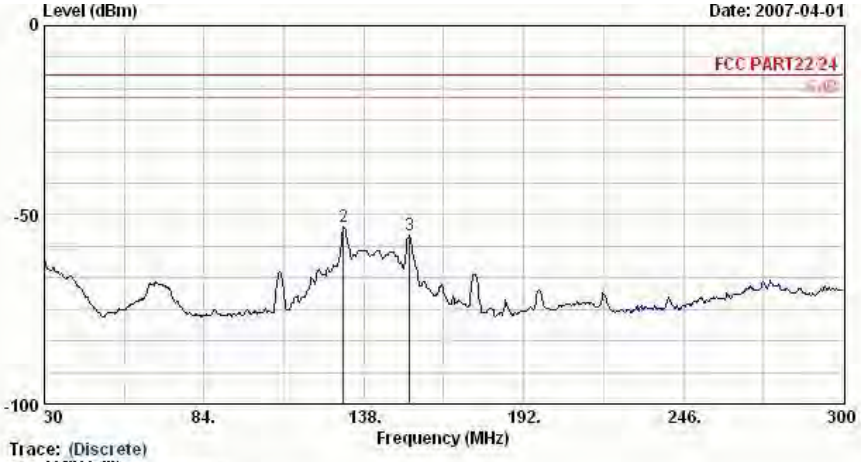
- Test Mode : Mode 9

GSM850 (GSM) with WLAN Co-location Radiated Spurious ERP							
H Polarization				V Polarization			
Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)
66.180	-56.150	-13	-43.15	35.130	-53.420	-13	-40.42
125.580	-62.770	-13	-49.77	65.640	-55.010	-13	-42.01
184.980	-54.900	-13	-41.90	269.490	-58.660	-13	-45.66
644.400	-50.480	-13	-37.48	399.400	-62.490	-13	-49.49
1674.000	**-35.810**	**-13**	**-22.81**	1284.000	-49.390	-13	-36.39
2508.000	-43.010	-13	-30.01	1674.000	-43.950	-13	-30.95
3344.000	-52.490	-13	-39.49	2508.000	-41.250	-13	-28.25
4184.000	-48.250	-13	-35.25	3344.000	-46.680	-13	-33.68
5018.000	-52.890	-13	-39.89	3778.000	-52.760	-13	-39.76
				4184.000	-41.130	-13	-28.13
				5018.000	-54.390	-13	-41.39
				6688.000	-50.970	-13	-37.97

4.6.5 Test Data

4.6.5.1 Mode 1

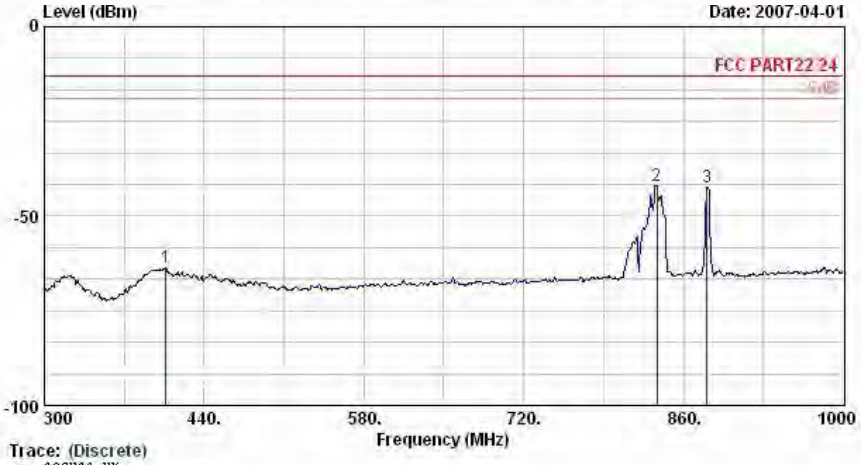
Horizontal Polarization



Trace: (Discrete)

Site : 03CH06-HY
Condition : LF-SPURIOUS HORIZONTAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : GSM850 Link+Adaptor
Plane : E2

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	30.00	-61.75	-48.75	-13.00	-62.11	0.36	Peak
2 @	130.98	-53.20	-40.20	-13.00	-40.60	-12.60	Peak
3 @	153.39	-55.27	-42.27	-13.00	-42.42	-12.85	Peak



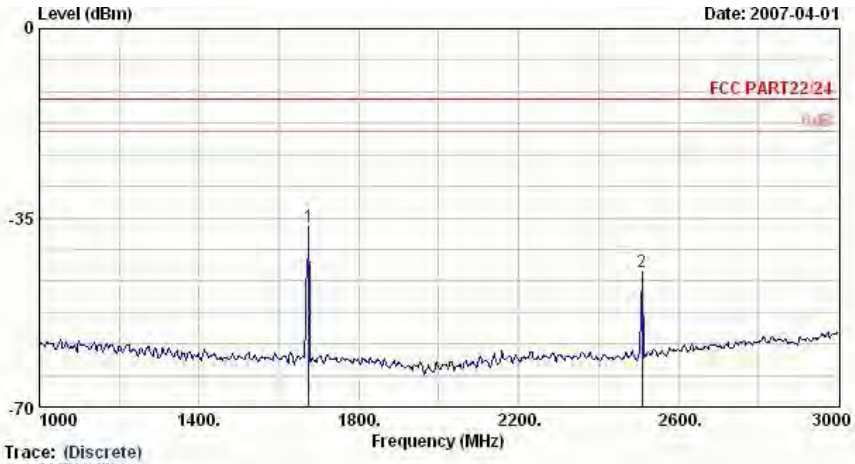
Trace: (Discrete)

Site : 03CH06-HY
Condition : LF-SPURIOUS HORIZONTAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : GSM850 Link+Adaptor
Plane : E2

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	406.40	-63.68	-50.68	-13.00	-57.28	-6.41	Peak
2 @	836.90	-41.96			-40.62	-1.33	Peak
3 @	880.30	-42.25			-41.34	-0.91	Peak

Remark:

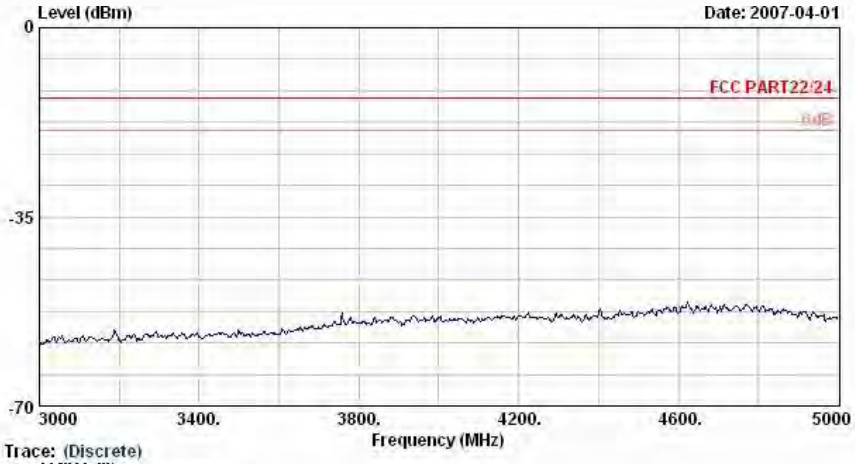
1. #2: MS Signal
2. #3: BS Signal



Trace: (Discrete)

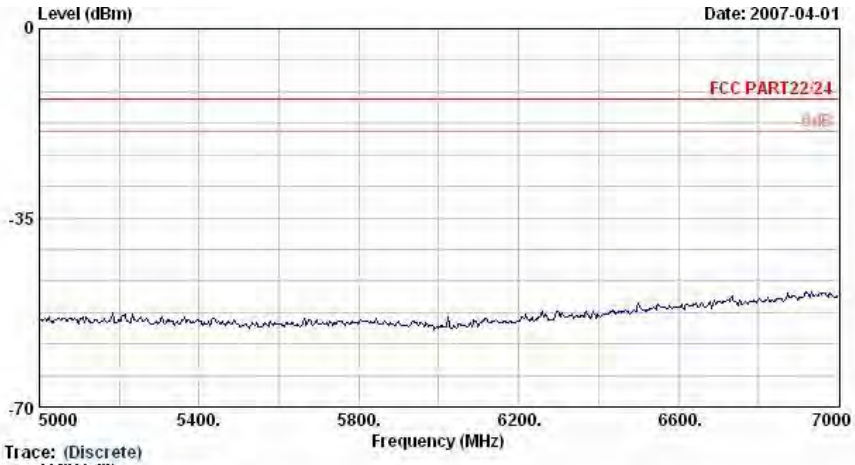
Site : 03CH06-HY
Condition : HF-SPURIOUS HORIZONTAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : GSM850 Link+Adaptor
Plane : E2

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	1674.00	-36.82	-23.82	-13.00	-37.04	0.22	Peak
2 @	2508.00	-44.97	-31.97	-13.00	-46.17	1.20	Peak



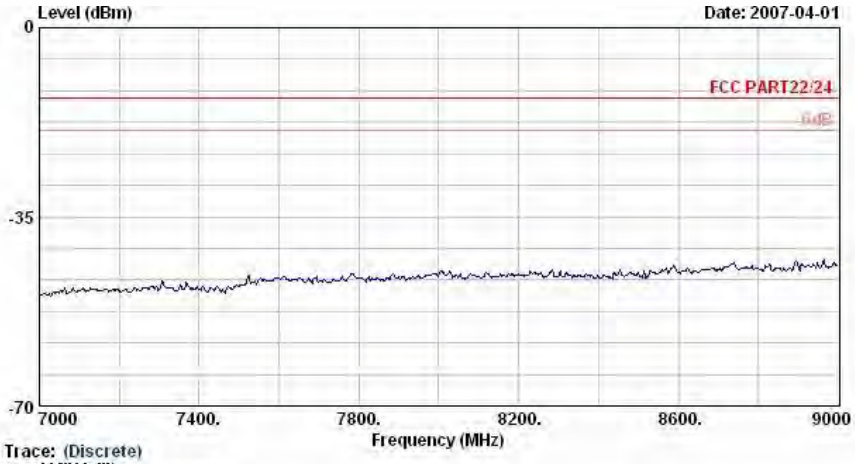
Trace: (Discrete)

Site : 03CH06-HY
Condition : HF-SPURIOUS HORIZONTAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : GSM850 Link+Adaptor
Plane : E2



Trace: (Discrete)

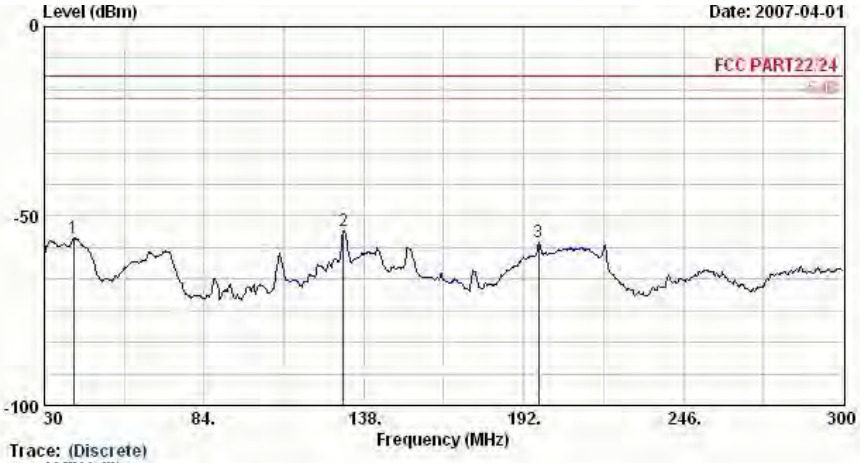
Site	:	03CH06-HY
Condition	:	HF-SPURIOUS HORIZONTAL
EUT	:	Pocket PC phone For FCC
Power	:	120Vac/60Hz
Model	:	FG 731703
Mode	:	GSM850 Link+Adaptor
Plane	:	E2



Trace: (Discrete)

Site	:	03CH06-HY
Condition	:	HF-SPURIOUS HORIZONTAL
EUT	:	Pocket PC phone For FCC
Power	:	120Vac/60Hz
Model	:	FG 731703
Mode	:	GSM850 Link+Adaptor
Plane	:	E2

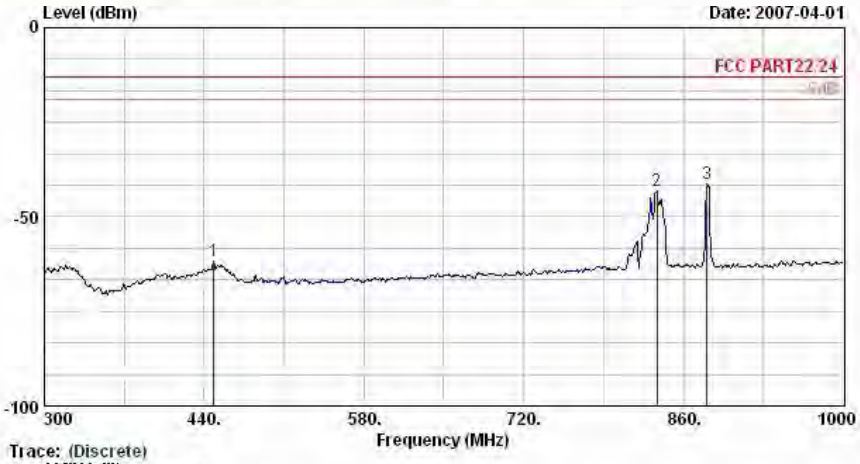
Vertical Polarization



Trace: (Discrete)

Site : 03CH06-HY
Condition : LF-SPURIOUS VERTICAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : GSM850 Link+Adaptor
Plane : E2

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	39.99	-55.83	-42.83	-13.00	-44.02	-11.81	Peak
2 @	130.98	-53.72	-40.72	-13.00	-45.75	-7.97	Peak
3 @	197.13	-56.85	-43.85	-13.00	-48.29	-8.56	Peak

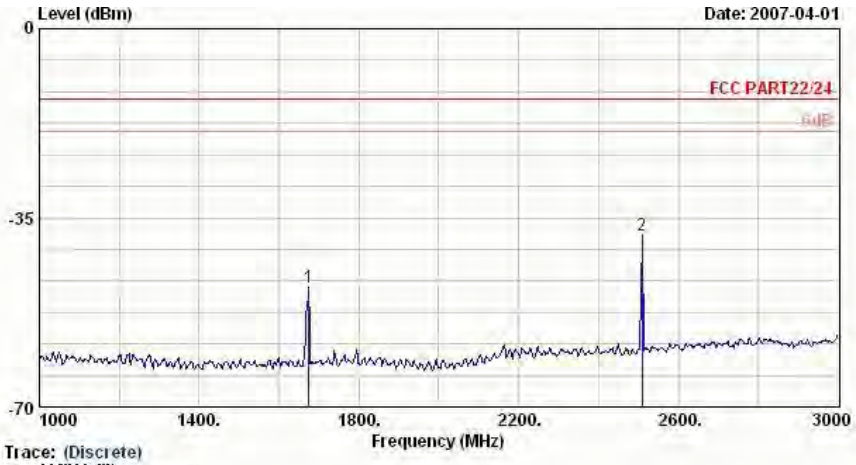


Trace: (Discrete)

Site : 03CH06-HY
Condition : LF-SPURIOUS VERTICAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : GSM850 Link+Adaptor
Plane : E2

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	448.40	-61.69	-48.69	-13.00	-57.94	-3.75	Peak
2 @	836.90	-43.26			-44.62	1.36	Peak
3 @	880.30	-41.38			-43.10	1.71	Peak

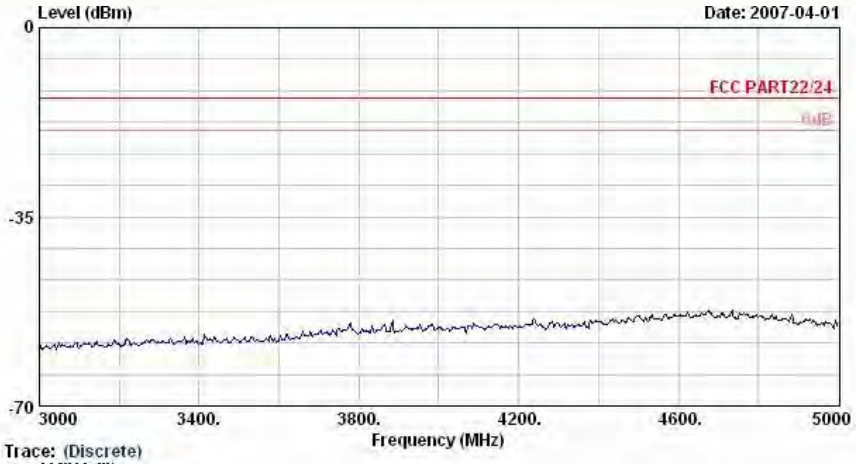
Remark:
1. #2: MS Signal
2. #3: BS Signal



Trace: (Discrete)

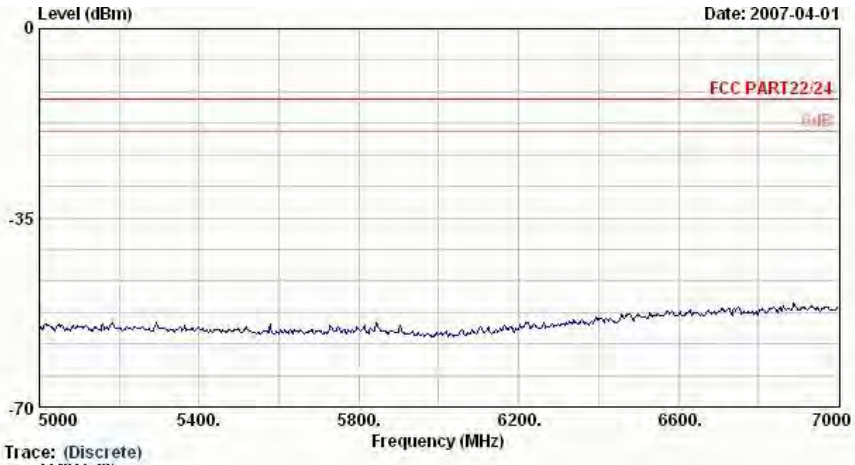
Site : 03CH06-HY
Condition : HF-SPURIOUS VERTICAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : GSM850 Link+Adaptor
Plane : E2

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	1674.00	-47.79	-34.79	-13.00	-47.31	-0.48	Peak
2 @	2508.00	-38.17	-25.17	-13.00	-40.44	2.27	Peak

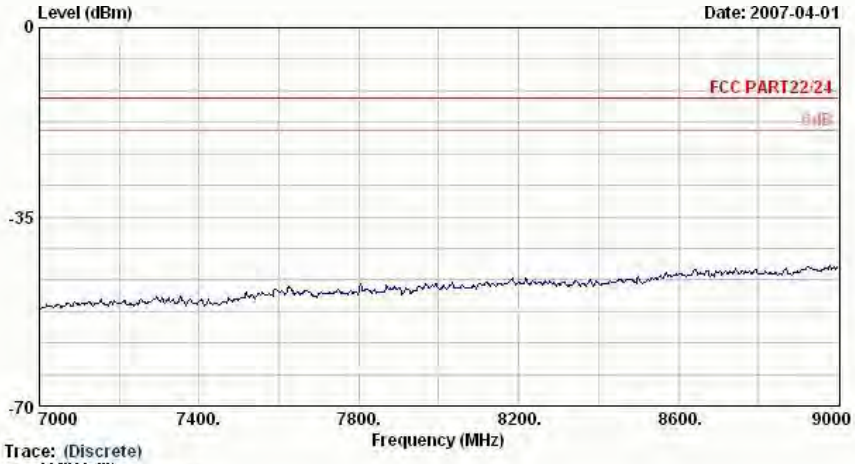


Trace: (Discrete)

Site : 03CH06-HY
Condition : HF-SPURIOUS VERTICAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : GSM850 Link+Adaptor
Plane : E2



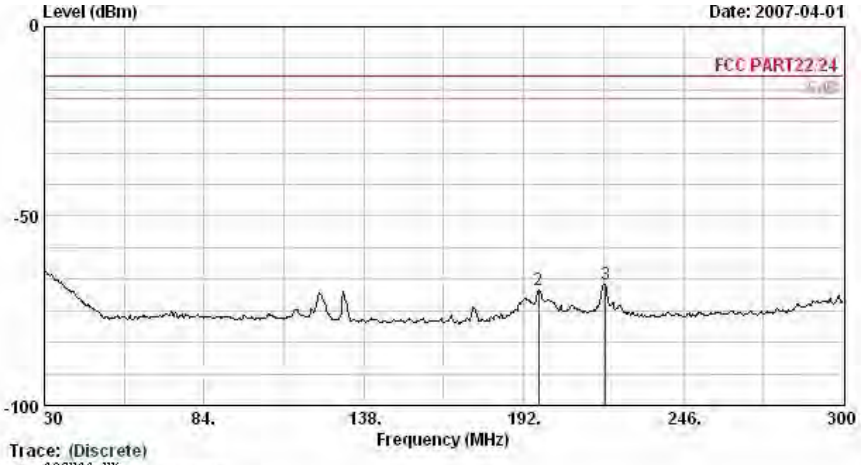
Site : 03CH06-HY
Condition : HF-SPURIOUS VERTICAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : GSM850 Link+Adaptor
Plane : E2



Site : 03CH06-HY
Condition : HF-SPURIOUS VERTICAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : GSM850 Link+Adaptor
Plane : E2

Remark：There is no more obvious emission except the listings above.

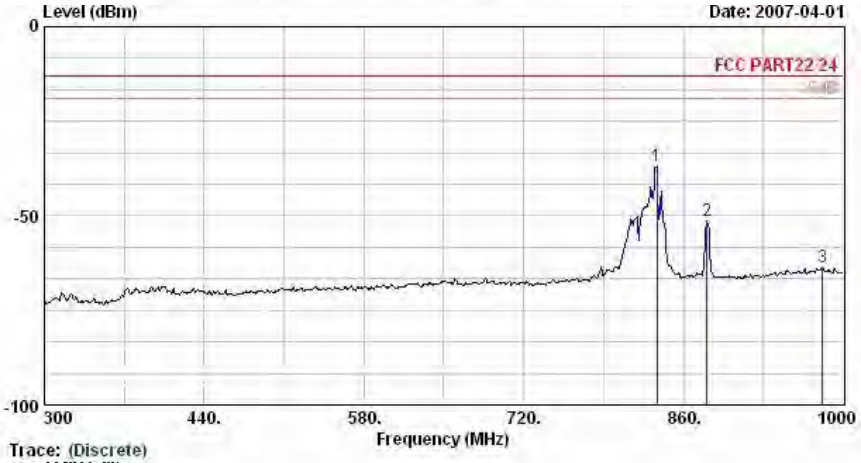
4.6.5.2 Mode 2
Horizontal Polarization



Trace: (Discrete)

Site : 03CH06-HV
Condition : LF-SPURIOUS HORIZONTAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : EDGE Link+Adaptor
Plane : E2

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	30.00	-64.32	-51.32	-13.00	-64.68	0.36	Peak
2 @	197.13	-69.34	-56.34	-13.00	-55.99	-13.36	Peak
3 @	219.54	-67.87	-54.87	-13.00	-55.15	-12.72	Peak

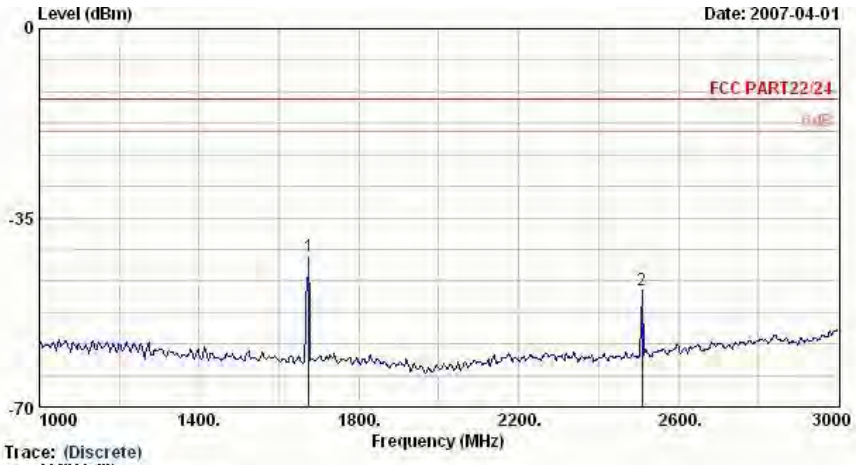


Trace: (Discrete)

Site : 03CH06-HV
Condition : LF-SPURIOUS HORIZONTAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : EDGE Link+Adaptor
Plane : E2

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	836.90	-36.90			-35.57	-1.33	Peak
2 @	880.30	-51.48			-50.57	-0.91	Peak
3 @	981.80	-63.52	-50.52	-13.00	-63.58	0.06	Peak

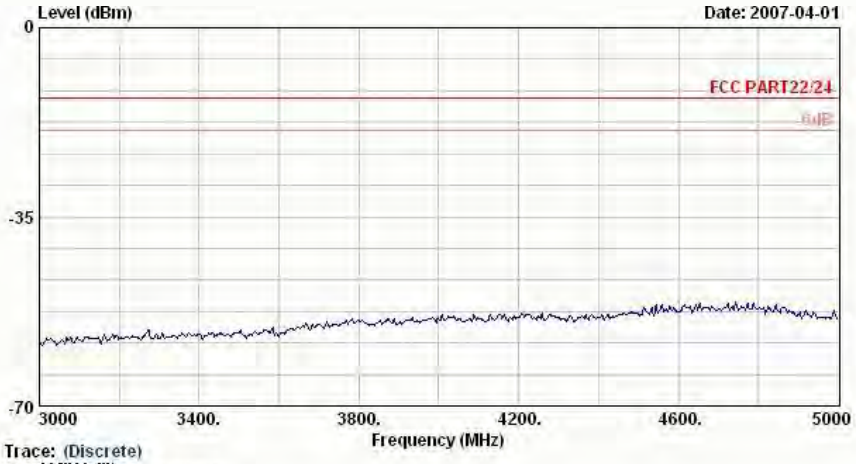
Remark:
1. #1: MS Signal
2. #2: BS Signal



Trace: (Discrete)

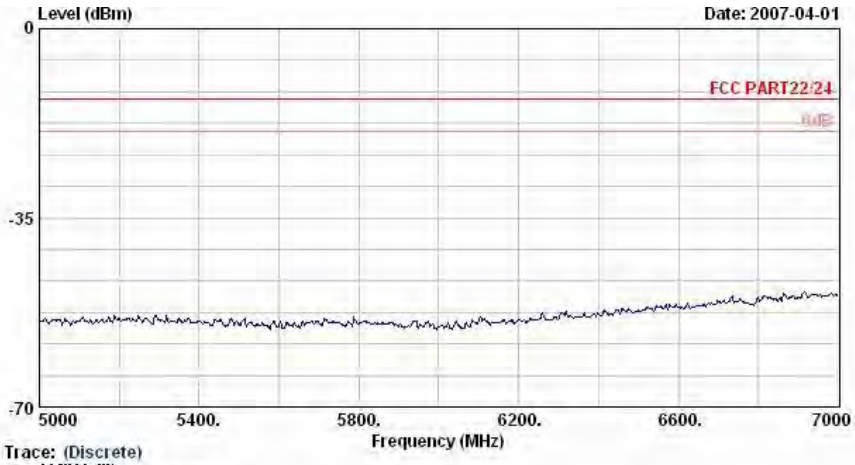
Site : 03CH06-HY
Condition : HF-SPURIOUS HORIZONTAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : EDGE Link+Adaptor
Plane : E2

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	1674.00	-42.17	-29.17	-13.00	-42.39	0.22	Peak
2 @	2508.00	-48.31	-35.31	-13.00	-49.51	1.20	Peak



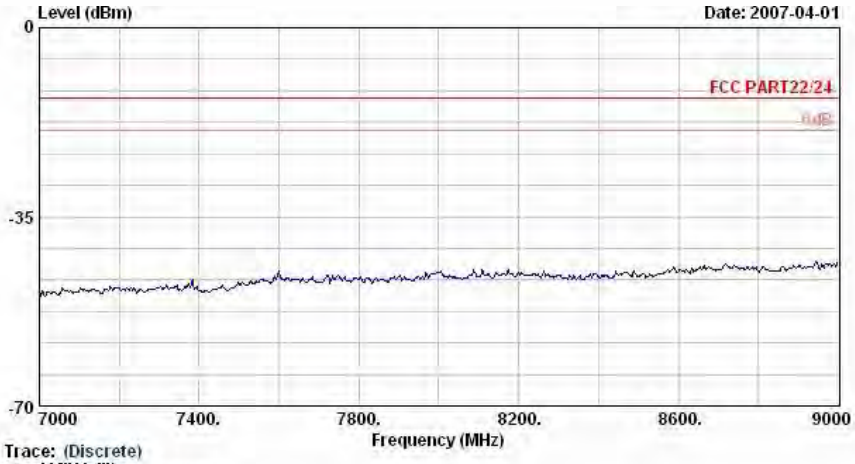
Trace: (Discrete)

Site : 03CH06-HY
Condition : HF-SPURIOUS HORIZONTAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : EDGE Link+Adaptor
Plane : E2



Trace: (Discrete)

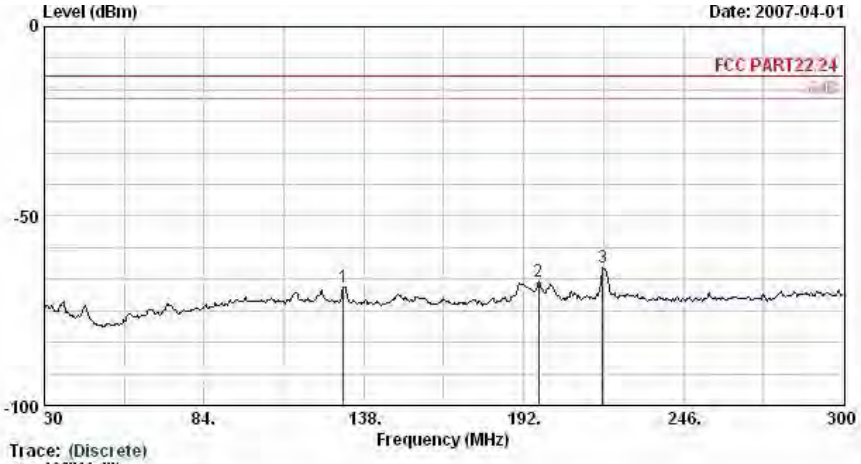
Site	:	03CH06-HY
Condition	:	HF-SPURIOUS HORIZONTAL
EUT	:	Pocket PC phone For FCC
Power	:	120Vac/60Hz
Model	:	FG 731703
Mode	:	EDGE Link+Adaptor
Plane	:	E2



Trace: (Discrete)

Site	:	03CH06-HY
Condition	:	HF-SPURIOUS HORIZONTAL
EUT	:	Pocket PC phone For FCC
Power	:	120Vac/60Hz
Model	:	FG 731703
Mode	:	EDGE Link+Adaptor
Plane	:	E2

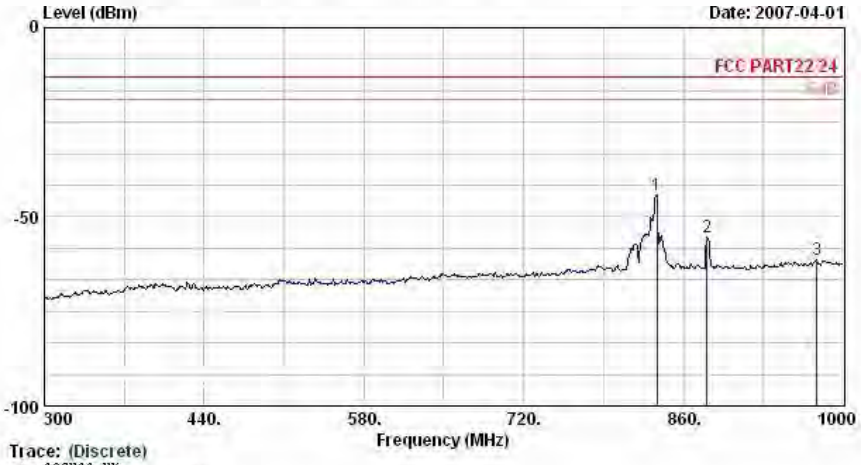
Vertical Polarization



Trace: (Discrete)

Site	:	03CH06-HY
Condition	:	LF-SPURIOUS VERTICAL
EUT	:	Pocket PC phone For FCC
Power	:	120Vac/60Hz
Model	:	FG 731703
Mode	:	EDGE Link+Adaptor
Plane	:	E2

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	130.98	-68.89	-55.89	-13.00	-60.92	-7.97	Peak
2 @	197.13	-67.26	-54.26	-13.00	-58.69	-8.56	Peak
3 @	218.73	-63.71	-50.71	-13.00	-55.54	-8.18	Peak

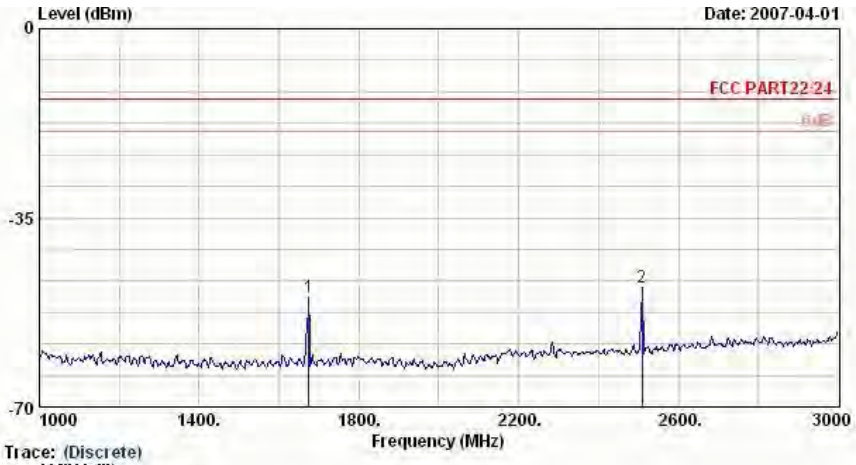


Trace: (Discrete)

Site	:	03CH06-HY
Condition	:	LF-SPURIOUS VERTICAL
EUT	:	Pocket PC phone For FCC
Power	:	120Vac/60Hz
Model	:	FG 731703
Mode	:	EDGE Link+Adaptor
Plane	:	E2

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	836.90	-44.09			-45.46	1.36	Peak
2 @	880.30	-55.57			-57.28	1.71	Peak
3 @	976.90	-61.39	-48.39	-13.00	-63.87	2.47	Peak

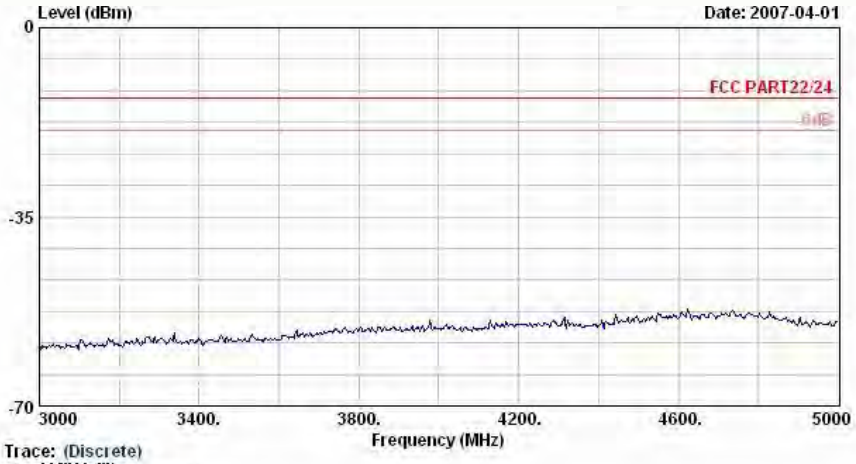
Remark:
1. #1: MS Signal
2. #2: BS Signal



Trace: (Discrete)

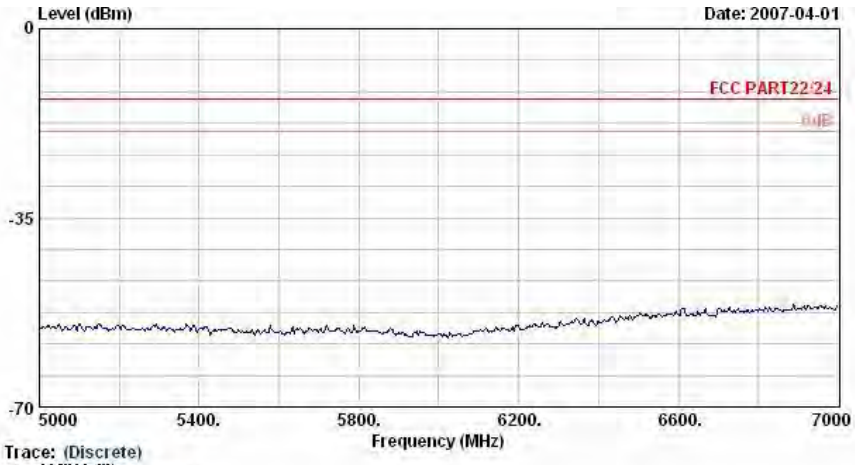
Site : 03CH06-HY
Condition : HF-SPURIOUS VERTICAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : EDGE Link+Adaptor
Plane : E2

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	1674.00	-49.78	-36.78	-13.00	-49.30	-0.48	Peak
2 @	2508.00	-47.91	-34.91	-13.00	-50.18	2.27	Peak

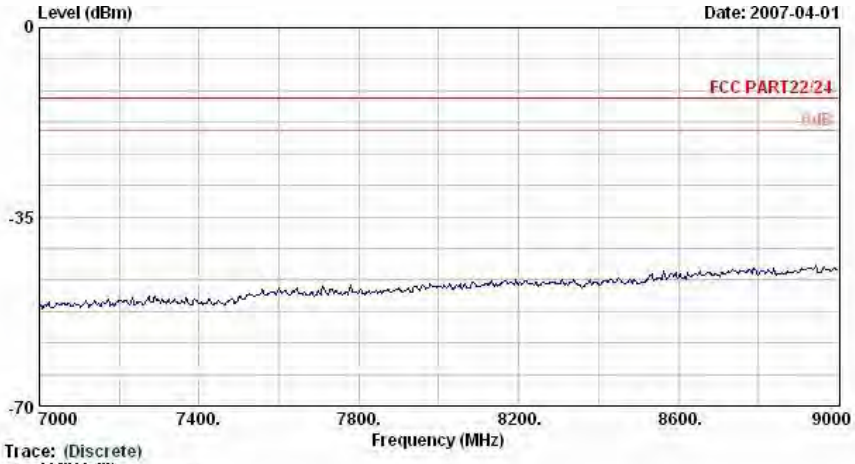


Trace: (Discrete)

Site : 03CH06-HY
Condition : HF-SPURIOUS VERTICAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : EDGE Link+Adaptor
Plane : E2



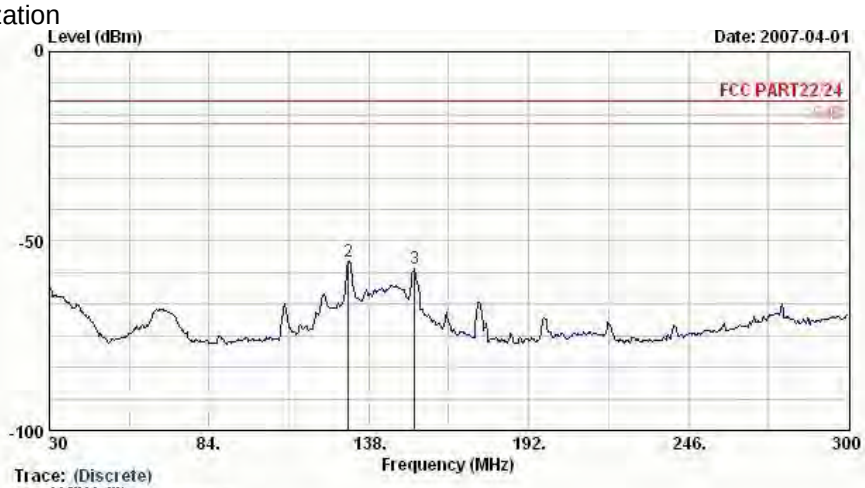
Site : 03CH06-HY
Condition : HF-SPURIOUS VERTICAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : EDGE Link+Adaptor
Plane : E2



Site : 03CH06-HY
Condition : HF-SPURIOUS VERTICAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : EDGE Link+Adaptor
Plane : E2

Remark：There is no more obvious emission except the listings above.

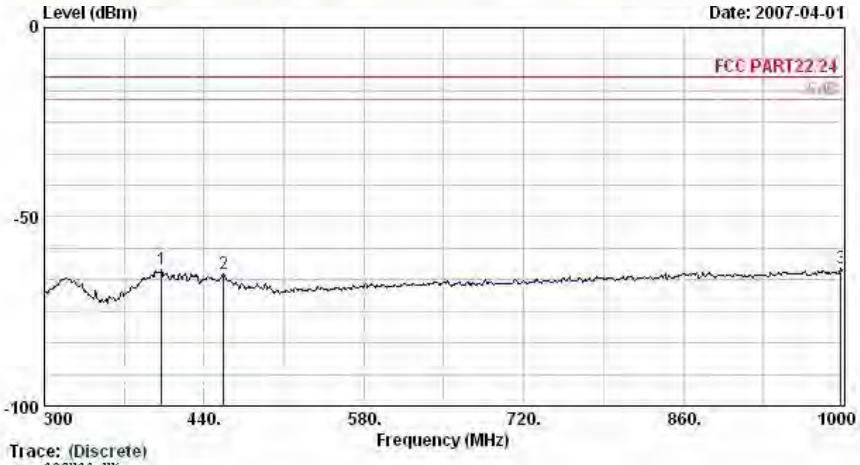
4.6.5.3 Mode 3
Horizontal Polarization



Trace: (Discrete)

Site : 03CH06-HY
Condition : LF-SPURIOUS HORIZONTAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : PCS1900 Link+Adaptor
Plane : E2

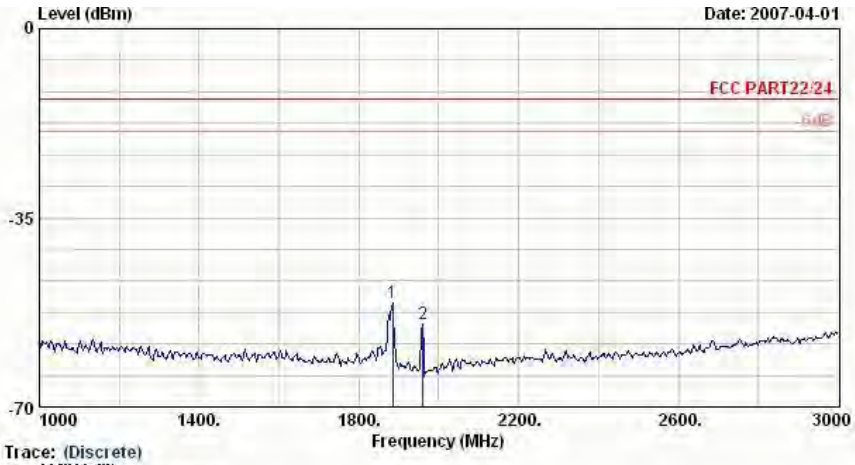
	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	30.00	-62.29	-49.29	-13.00	-62.65	0.36	Peak
2 @	130.98	-55.36	-42.36	-13.00	-42.76	-12.60	Peak
3 @	153.39	-57.31	-44.31	-13.00	-44.46	-12.85	Peak



Trace: (Discrete)

Site : 03CH06-HY
Condition : LF-SPURIOUS HORIZONTAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : PCS1900 Link+Adaptor
Plane : E2

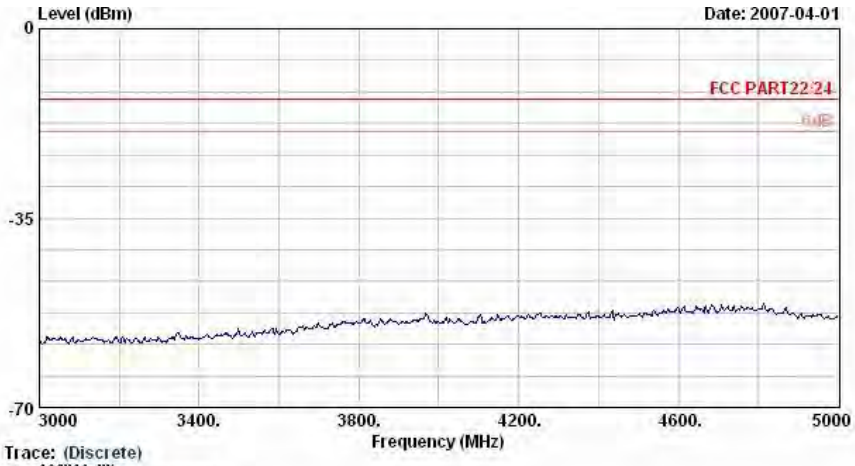
	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	402.90	-63.99	-50.99	-13.00	-57.53	-6.46	Peak
2 @	456.80	-64.90	-51.90	-13.00	-59.19	-5.71	Peak
3 @	997.90	-63.62	-50.62	-13.00	-63.84	0.22	Peak



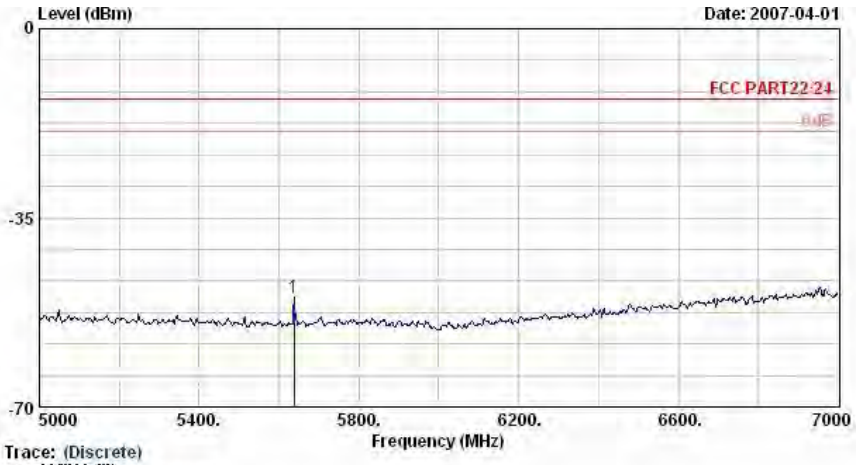
Site : 03CH06-HY
Condition : HF-SPURIOUS HORIZONTAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : PCS1900 Link+Adaptor
Plane : E2

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	1884.00	-50.68			-50.00	-0.68	Peak
2 @	1960.00	-54.52			-53.41	-1.11	Peak

Remark:
1. #1: MS Signal
2. #2: BS Signal



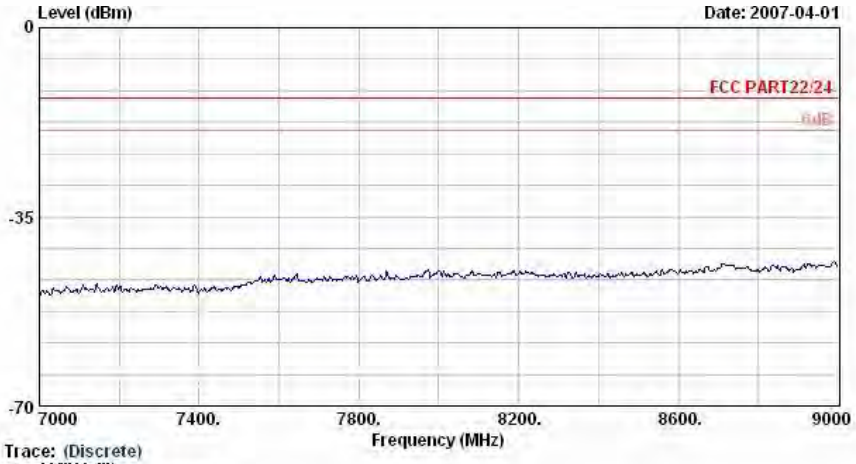
Site : 03CH06-HY
Condition : HF-SPURIOUS HORIZONTAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : PCS1900 Link+Adaptor
Plane : E2



Trace: (Discrete)

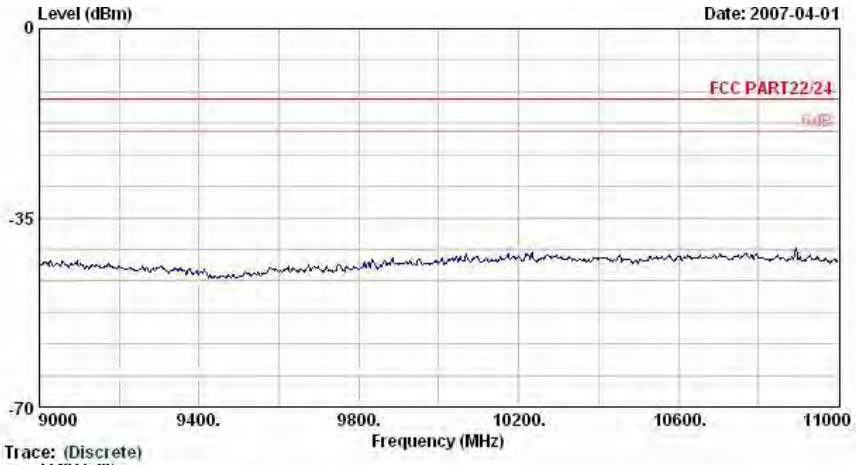
Site : 03CH06-HY
Condition : HF-SPURIOUS HORIZONTAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : PCS1900 Link+Adaptor
Plane : E2

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	5638.00	-49.68	-36.68	-13.00	-59.64	9.97	Peak



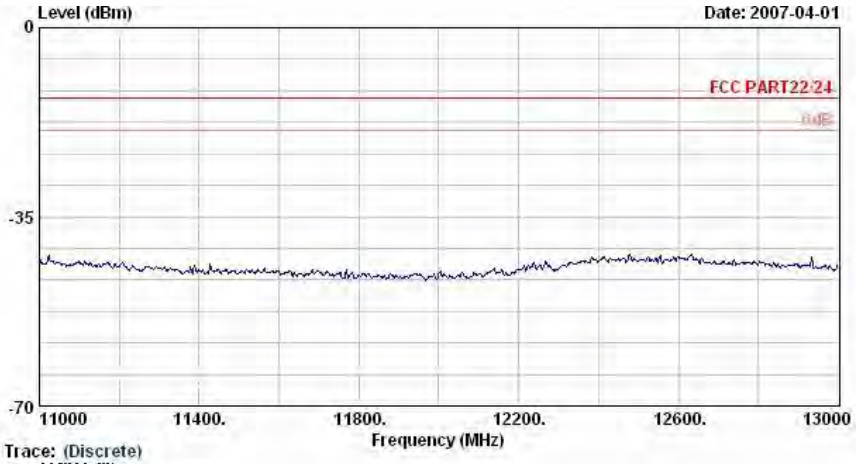
Trace: (Discrete)

Site : 03CH06-HY
Condition : HF-SPURIOUS HORIZONTAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : PCS1900 Link+Adaptor
Plane : E2



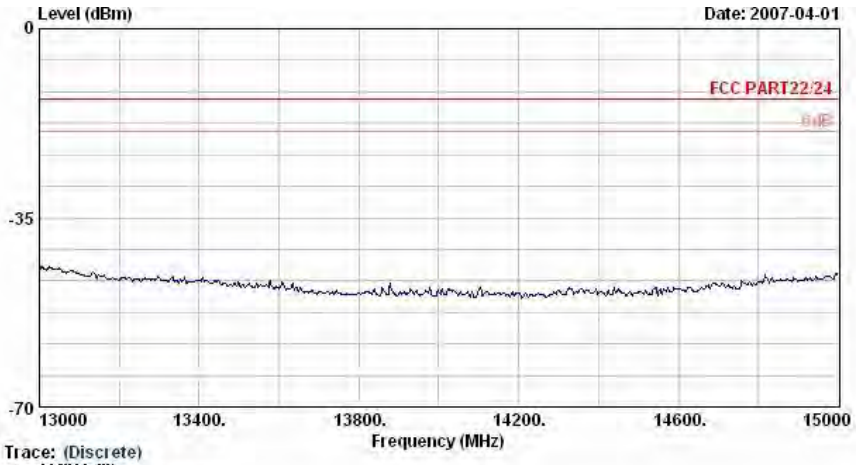
Trace: (Discrete)

Site	:	03CH06-HY
Condition	:	HF-SPURIOUS HORIZONTAL
EUT	:	Pocket PC phone For FCC
Power	:	120Vac/60Hz
Model	:	FG 731703
Mode	:	PCS1900 Link+Adaptor
Plane	:	E2



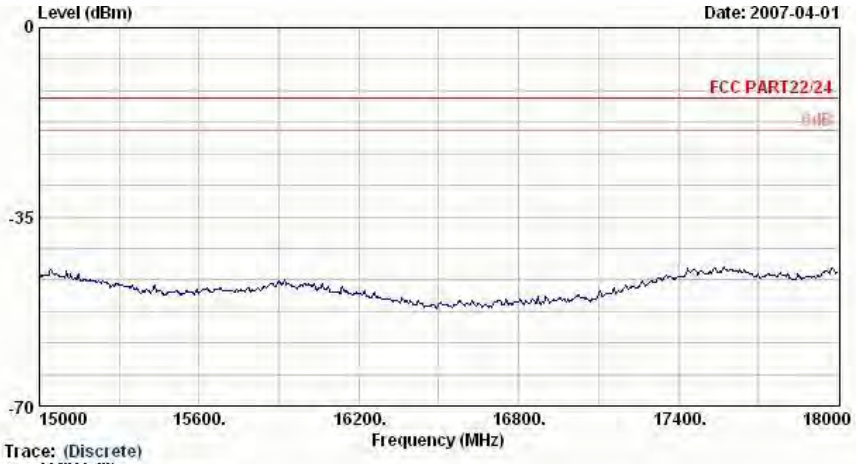
Trace: (Discrete)

Site	:	03CH06-HY
Condition	:	HF-SPURIOUS HORIZONTAL
EUT	:	Pocket PC phone For FCC
Power	:	120Vac/60Hz
Model	:	FG 731703
Mode	:	PCS1900 Link+Adaptor
Plane	:	E2



Trace: (Discrete)

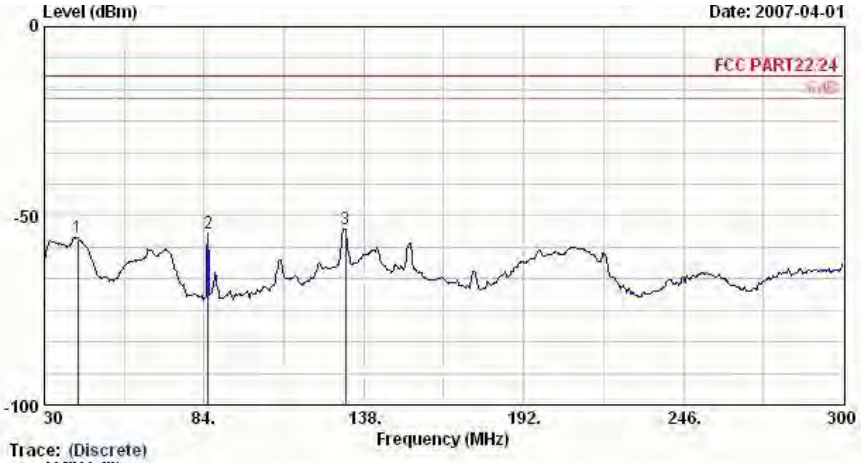
Site	:	03CH06-HY
Condition	:	HF-SPURIOUS HORIZONTAL
EUT	:	Pocket PC phone For FCC
Power	:	120Vac/60Hz
Model	:	FG 731703
Mode	:	PCS1900 Link+Adaptor
Plane	:	E2



Trace: (Discrete)

Site	:	03CH06-HY
Condition	:	HF-SPURIOUS HORIZONTAL
EUT	:	Pocket PC phone For FCC
Power	:	120Vac/60Hz
Model	:	FG 731703
Mode	:	PCS1900 Link+Adaptor
Plane	:	E2

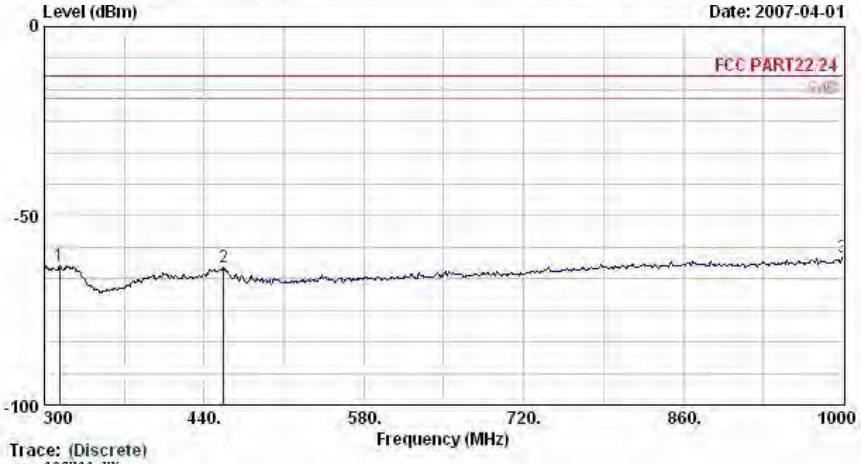
Vertical Polarization



Trace: (Discrete)

Site : 03CH06-HY
Condition : LF-SPURIOUS VERTICAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : PCS1900 Link+Adaptor
Plane : E2

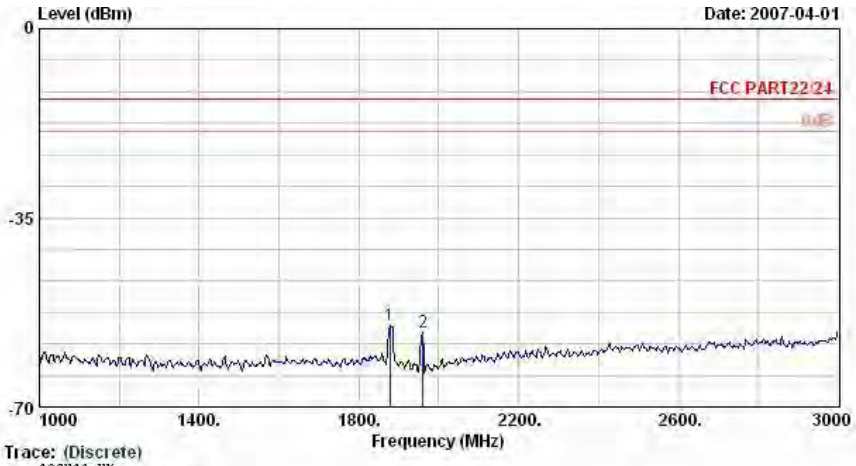
	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	41.34	-55.65	-42.65	-13.00	-43.30	-12.36	Peak
2 @	85.35	-54.68	-41.68	-13.00	-44.89	-9.79	Peak
3 @	131.79	-53.35	-40.35	-13.00	-45.37	-7.98	Peak



Trace: (Discrete)

Site : 03CH06-HY
Condition : LF-SPURIOUS VERTICAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : PCS1900 Link+Adaptor
Plane : E2

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	313.30	-63.18	-50.18	-13.00	-57.01	-6.17	Peak
2 @	456.80	-63.58	-50.58	-13.00	-59.93	-3.65	Peak
3 @	1000.00	-60.78	-47.78	-13.00	-63.44	2.66	Peak

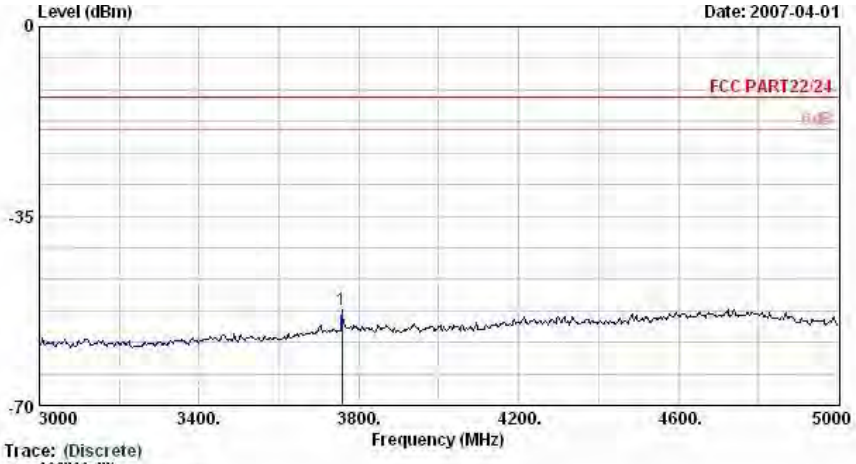


Trace: (Discrete)

Site : 03CH06-HY
Condition : HF-SPURIOUS VERTICAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : PCS1900 Link+Adaptor
Plane : E2

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	1878.00	-54.86			-54.46	-0.40	Peak
2 @	1960.00	-56.29			-55.69	-0.60	Peak

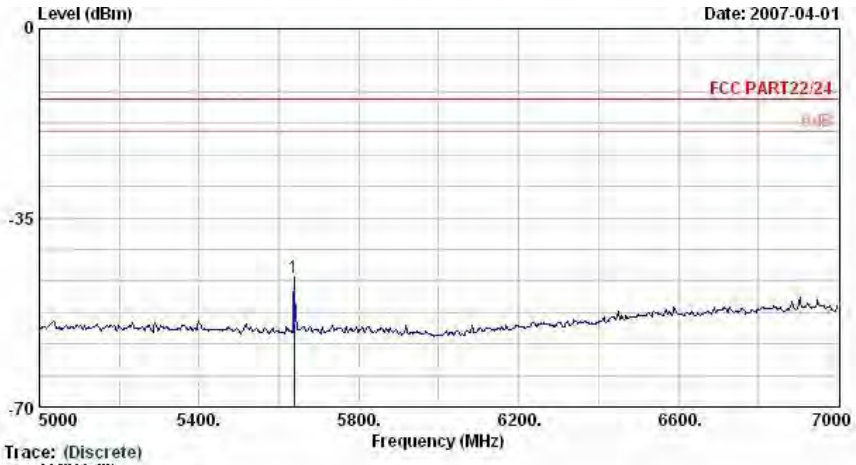
Remark:
1. #1: MS Signal
2. #2: BS Signal



Trace: (Discrete)

Site : 03CH06-HY
Condition : HF-SPURIOUS VERTICAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : PCS1900 Link+Adaptor
Plane : E2

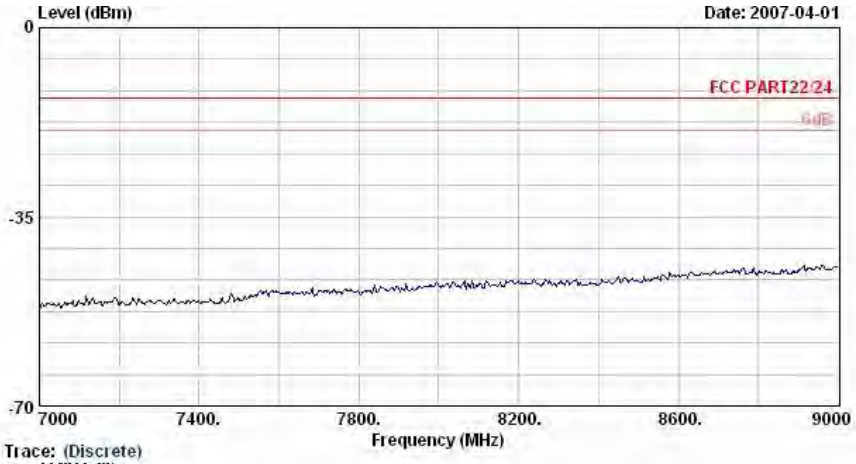
	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	3758.00	-52.28	-39.28	-13.00	-58.92	6.64	Peak



Trace: (Discrete)

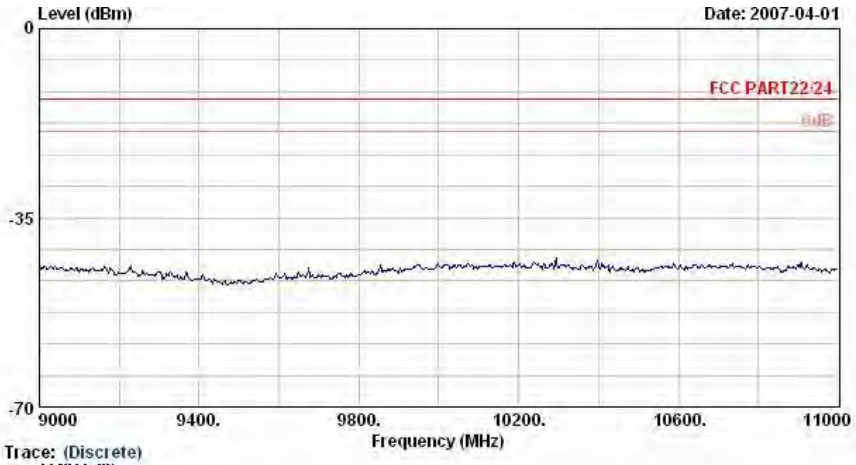
Site	:	03CH06-HY
Condition	:	HF-SPURIOUS VERTICAL
EUT	:	Pocket PC phone For FCC
Power	:	120Vac/60Hz
Model	:	FG 731703
Mode	:	PCS1900 Link+Adaptor
Plane	:	E2

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	5638.00	-45.99	-32.99	-13.00	-54.64	8.65	Peak



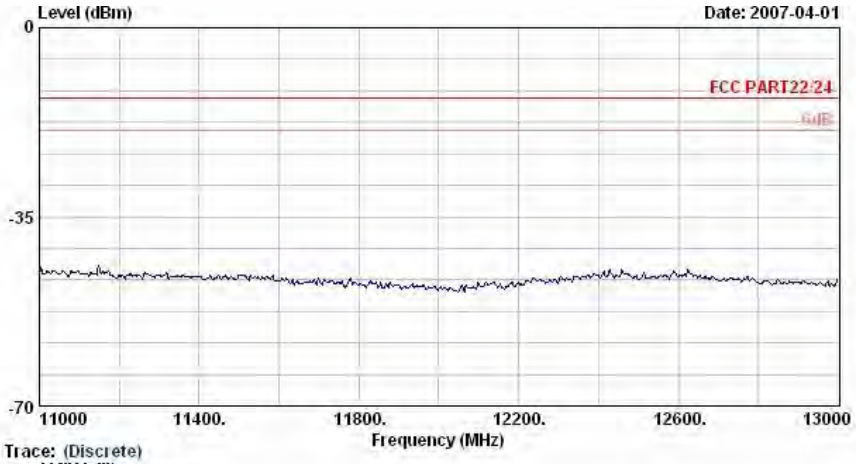
Trace: (Discrete)

Site	:	03CH06-HY
Condition	:	HF-SPURIOUS VERTICAL
EUT	:	Pocket PC phone For FCC
Power	:	120Vac/60Hz
Model	:	FG 731703
Mode	:	PCS1900 Link+Adaptor
Plane	:	E2



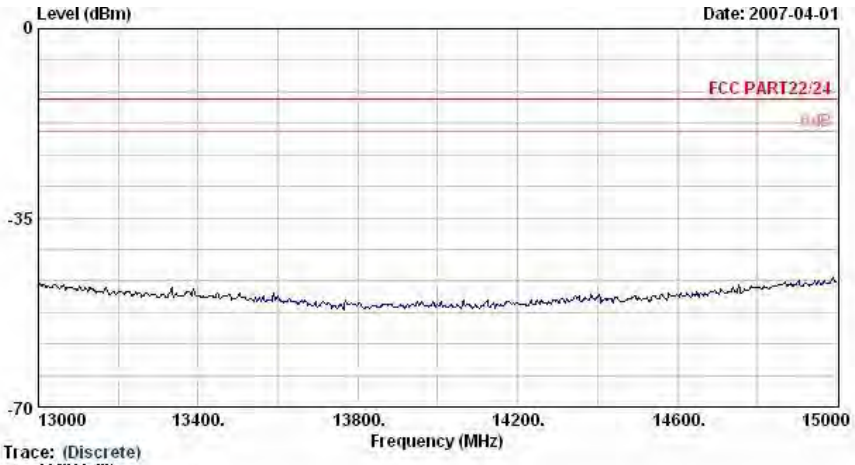
Trace: (Discrete)

Site	:	03CH06-HY
Condition	:	HF-SPURIOUS VERTICAL
EUT	:	Pocket PC phone For FCC
Power	:	120Vac/60Hz
Model	:	FG 731703
Mode	:	PCS1900 Link+Adaptor
Plane	:	E2

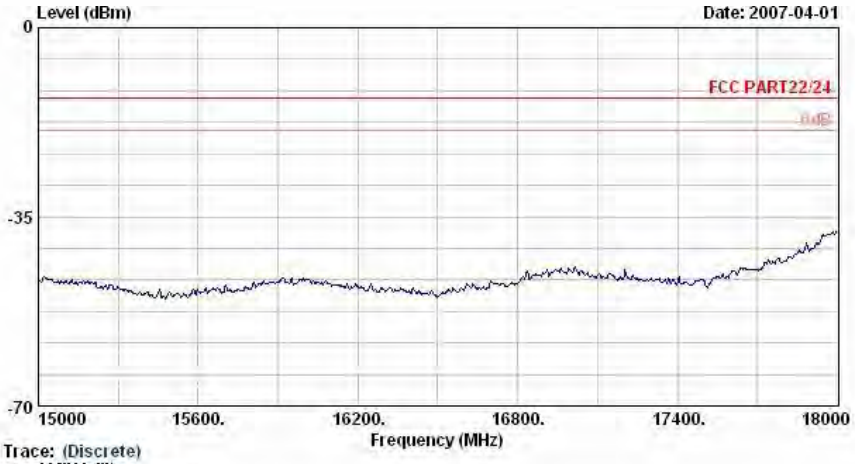


Trace: (Discrete)

Site	:	03CH06-HY
Condition	:	HF-SPURIOUS VERTICAL
EUT	:	Pocket PC phone For FCC
Power	:	120Vac/60Hz
Model	:	FG 731703
Mode	:	PCS1900 Link+Adaptor
Plane	:	E2



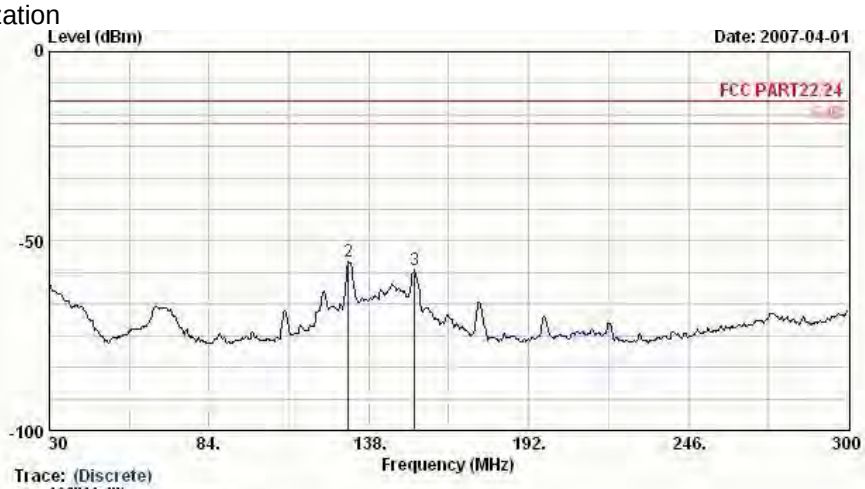
Site : 03CH06-HY
Condition : HF-SPURIOUS VERTICAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : PCS1900 Link+Adaptor
Plane : E2



Site : 03CH06-HY
Condition : HF-SPURIOUS VERTICAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : PCS1900 Link+Adaptor
Plane : E2

Remark：There is no more obvious emission except the listings above.

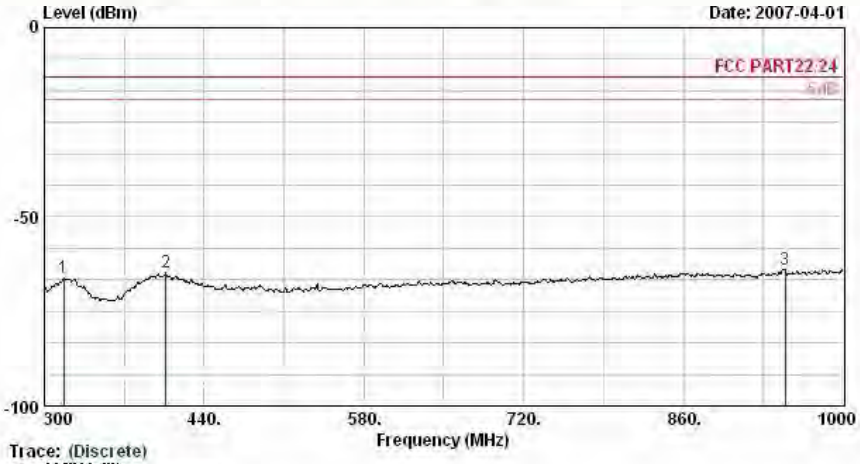
4.6.5.4 Mode 4
Horizontal Polarization



Trace: (Discrete)

Site : 03CH06-HY
Condition : LF-SPURIOUS HORIZONTAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : EDGE Link+Adaptor
Plane : E2

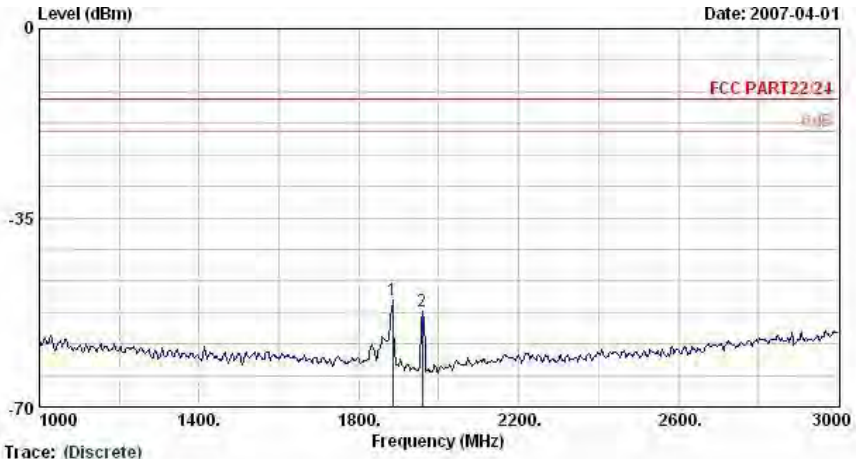
	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1	30.00	-61.43	-48.43	-13.00	-61.79	0.36	Peak
2	130.98	-55.55	-42.55	-13.00	-42.95	-12.60	Peak
3	153.39	-57.80	-44.80	-13.00	-44.95	-12.85	Peak



Trace: (Discrete)

Site : 03CH06-HY
Condition : LF-SPURIOUS HORIZONTAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : EDGE Link+Adaptor
Plane : E2

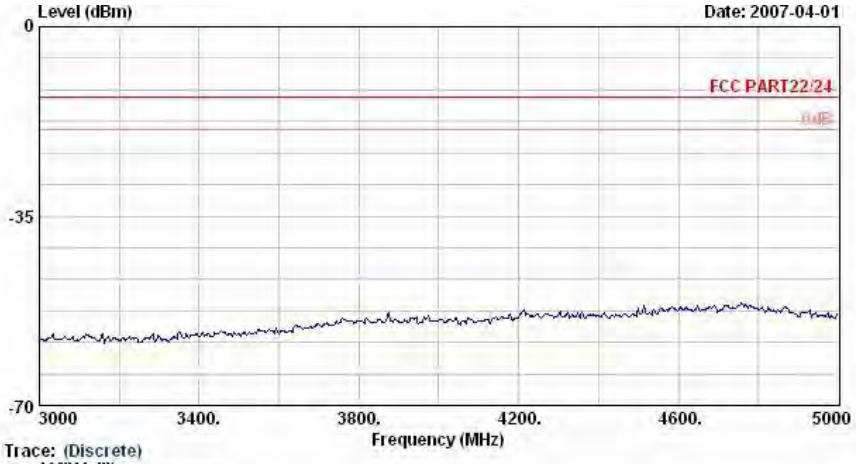
	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1	316.80	-66.30	-53.30	-13.00	-56.95	-9.34	Peak
2	406.40	-64.78	-51.78	-13.00	-58.37	-6.41	Peak
3	948.90	-64.00	-51.00	-13.00	-63.74	-0.26	Peak



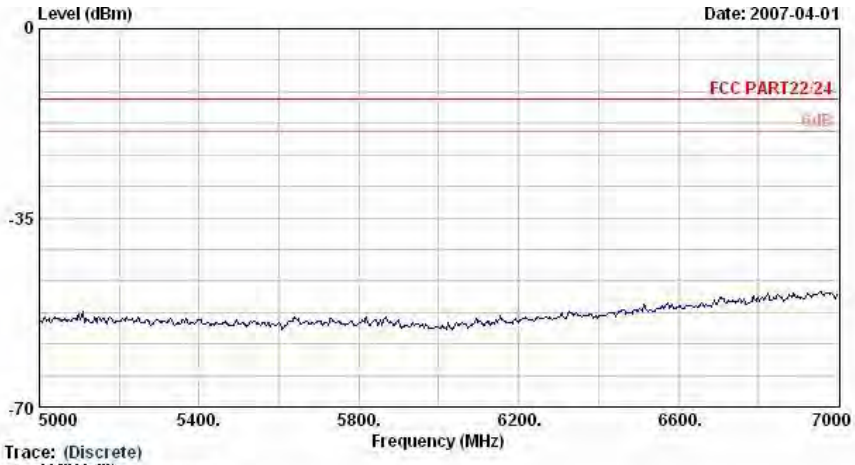
Site : 03CH06-HY
Condition : HF-SPURIOUS HORIZONTAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : EDGE Link+Adaptor
Plane : E2

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	1884.00	-50.33			-49.65	-0.68	Peak
2	1958.00	-52.36			-51.25	-1.11	Peak

Remark:
1. #1: MS Signal
2. #2: BS Signal

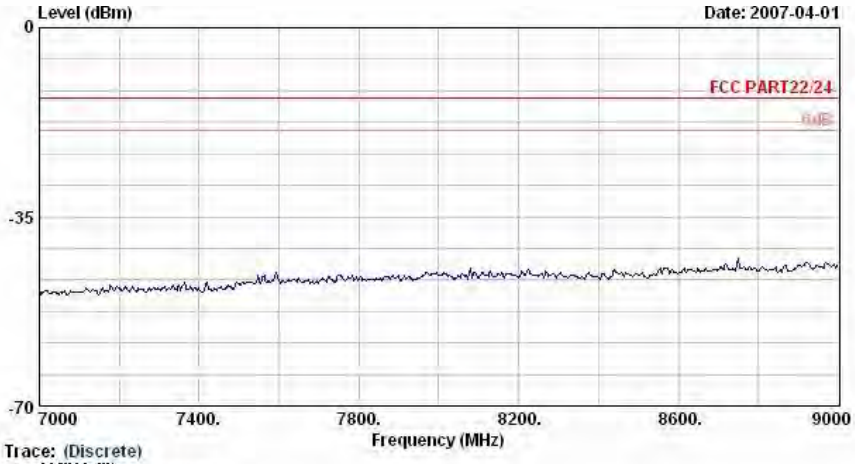


Site : 03CH06-HY
Condition : HF-SPURIOUS HORIZONTAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : EDGE Link+Adaptor
Plane : E2



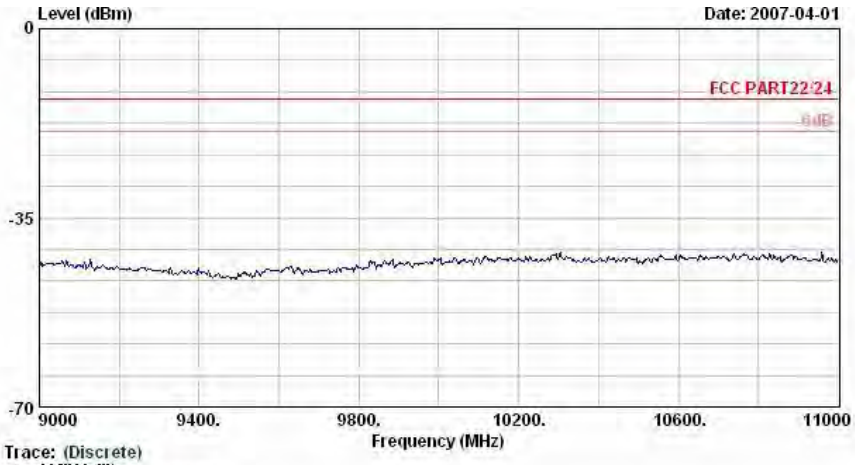
Trace: (Discrete)

Site	:	03CH06-HY
Condition	:	HF-SPURIOUS HORIZONTAL
EUT	:	Pocket PC phone For FCC
Power	:	120Vac/60Hz
Model	:	FG 731703
Mode	:	EDGE Link+Adaptor
Plane	:	E2



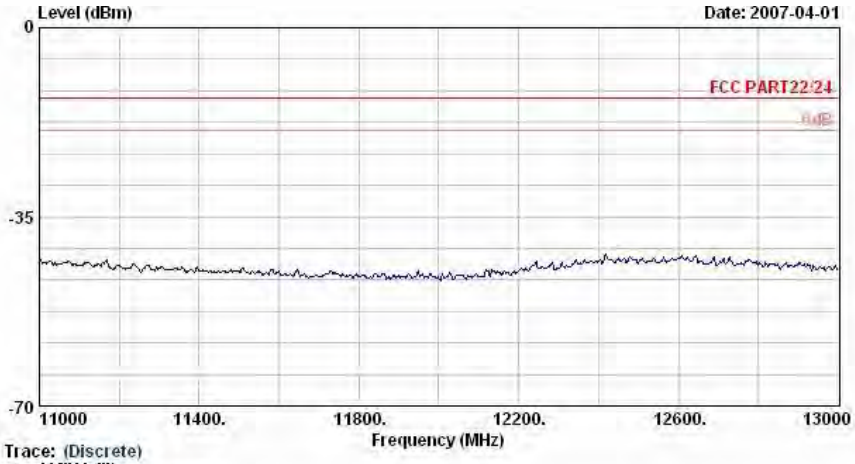
Trace: (Discrete)

Site	:	03CH06-HY
Condition	:	HF-SPURIOUS HORIZONTAL
EUT	:	Pocket PC phone For FCC
Power	:	120Vac/60Hz
Model	:	FG 731703
Mode	:	EDGE Link+Adaptor
Plane	:	E2



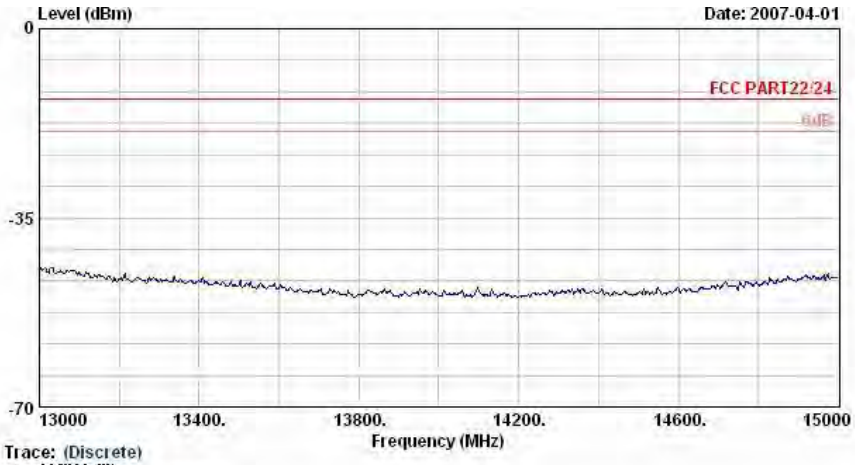
Trace: (Discrete)

Site	:	03CH06-HY
Condition	:	HF-SPURIOUS HORIZONTAL
EUT	:	Pocket PC phone For FCC
Power	:	120Vac/60Hz
Model	:	FG 731703
Mode	:	EDGE Link+Adaptor
Plane	:	E2

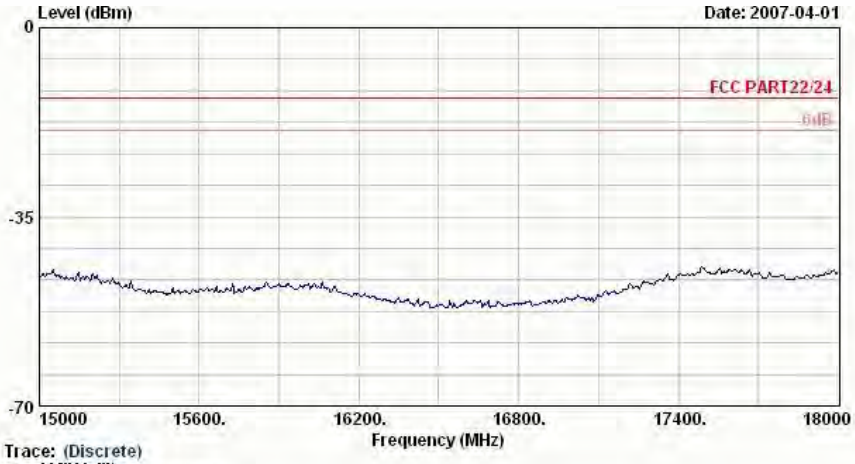


Trace: (Discrete)

Site	:	03CH06-HY
Condition	:	HF-SPURIOUS HORIZONTAL
EUT	:	Pocket PC phone For FCC
Power	:	120Vac/60Hz
Model	:	FG 731703
Mode	:	EDGE Link+Adaptor
Plane	:	E2

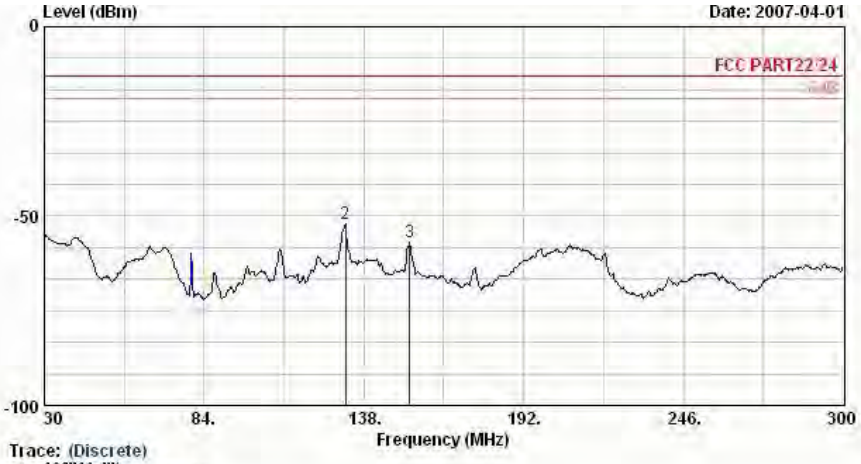


Site : 03CH06-HY
Condition : HF-SPURIOUS HORIZONTAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : EDGE Link+Adaptor
Plane : E2



Site : 03CH06-HY
Condition : HF-SPURIOUS HORIZONTAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : EDGE Link+Adaptor
Plane : E2

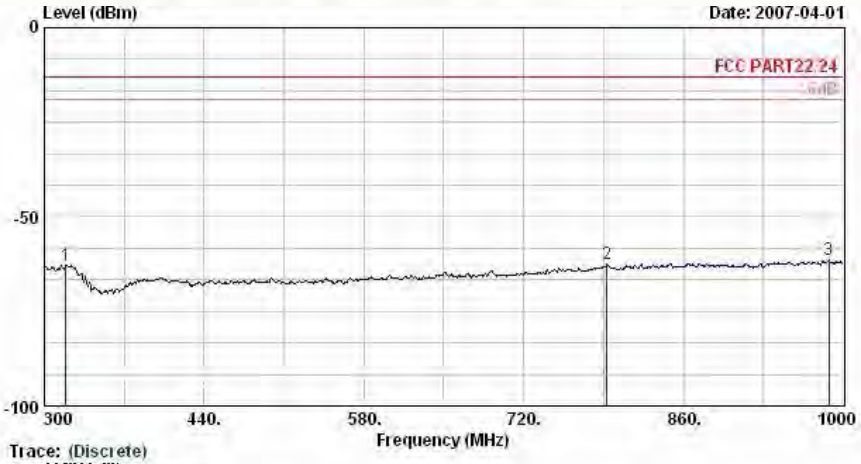
Vertical Polarization



Trace: (Discrete)

Site : 03CH06-HV
Condition : LF-SPURIOUS VERTICAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : EDGE Link+Adaptor
Plane : E2

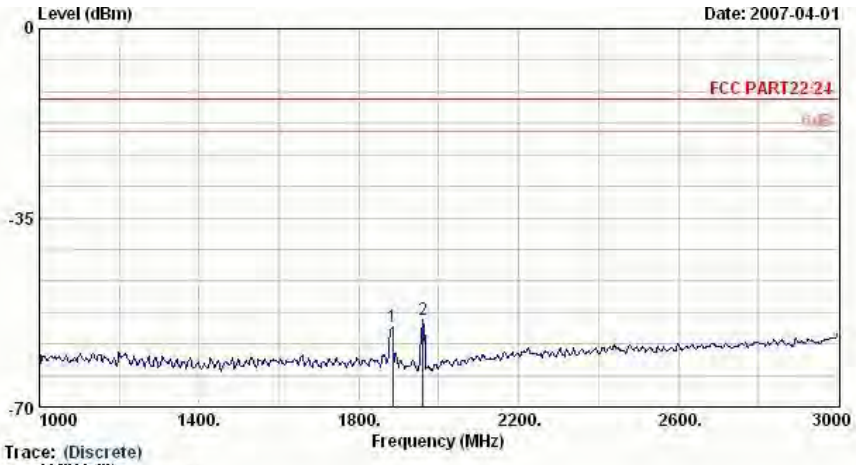
	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1	30.00	-54.85	-41.85	-13.00	-45.78	-9.07	Peak
2	131.79	-52.21	-39.21	-13.00	-44.24	-7.98	Peak
3	153.39	-56.86	-43.86	-13.00	-48.69	-8.17	Peak



Trace: (Discrete)

Site : 03CH06-HV
Condition : LF-SPURIOUS VERTICAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : EDGE Link+Adaptor
Plane : E2

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1	318.90	-62.74	-49.74	-13.00	-56.69	-6.05	Peak
2	792.80	-62.63	-49.63	-13.00	-63.59	0.95	Peak
3	987.40	-61.42	-48.42	-13.00	-63.98	2.56	Peak

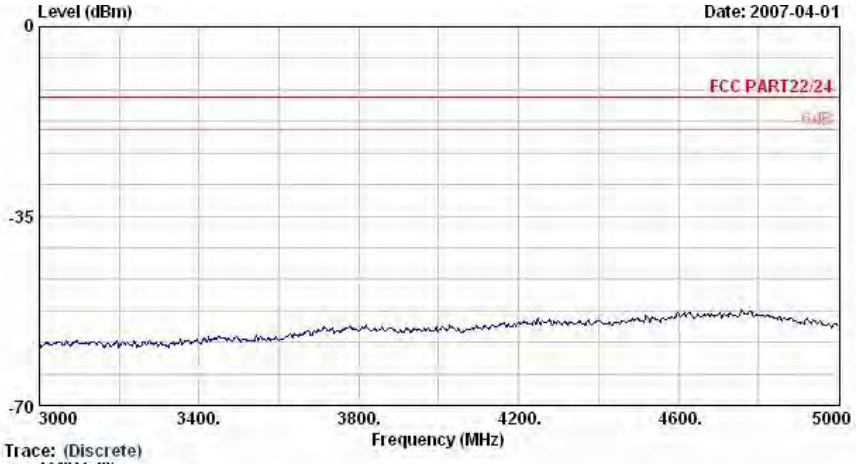


Trace: (Discrete)

Site : 03CH06-HY
Condition : HF-SPURIOUS VERTICAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : EDGE Link+Adaptor
Plane : E2

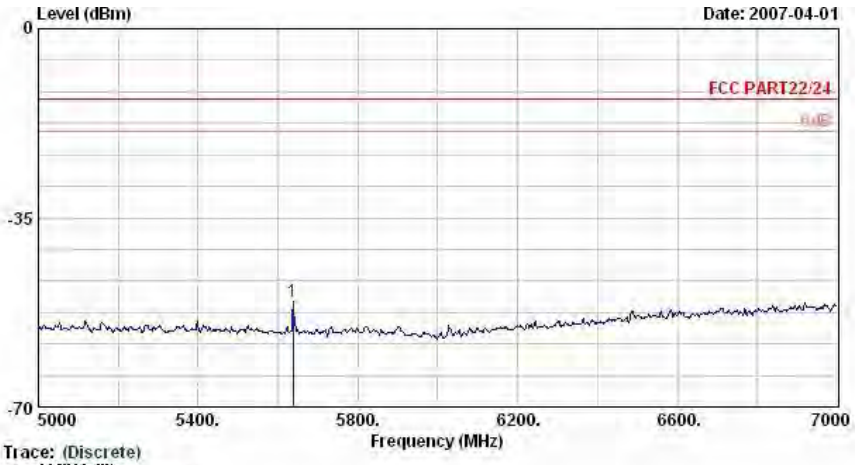
	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1	1884.00	-55.06			-54.56	-0.50	Peak
2	1960.00	-53.81			-53.21	-0.60	Peak

Remark:
1. #1: MS Signal
2. #2: BS Signal



Trace: (Discrete)

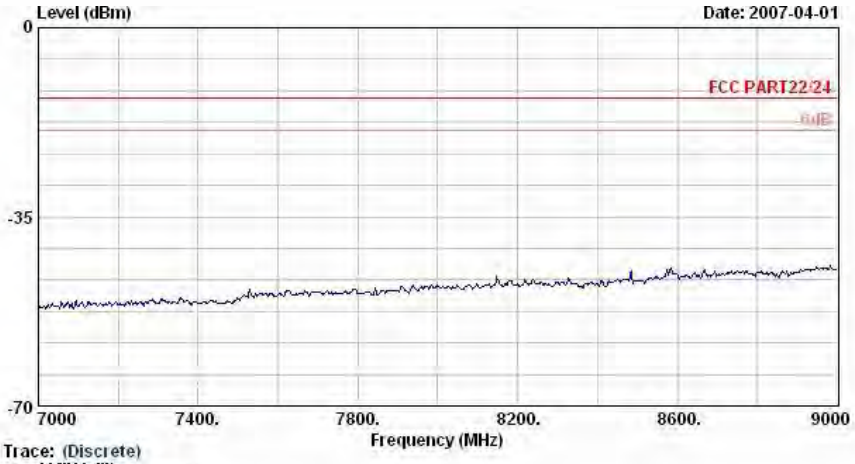
Site : 03CH06-HY
Condition : HF-SPURIOUS VERTICAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : EDGE Link+Adaptor
Plane : E2



Trace: (Discrete)

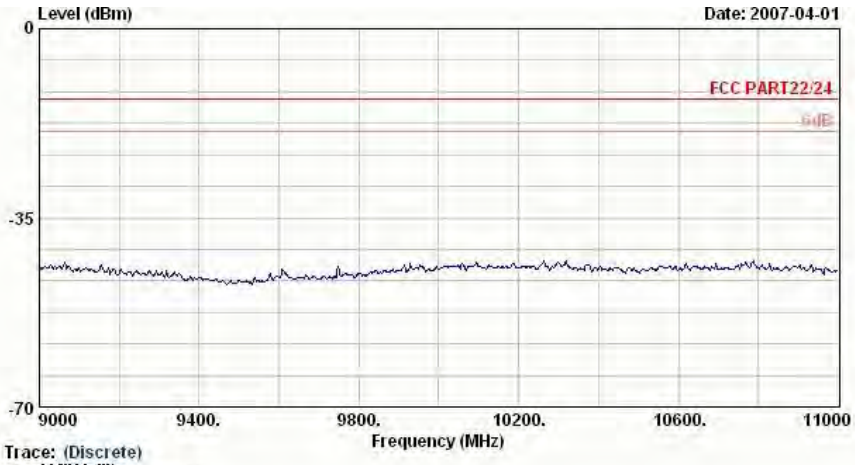
Site : 03CH06-HY
Condition : HF-SPURIOUS VERTICAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : EDGE Link+Adaptor
Plane : E2

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1	5638.00	-50.49	-37.49	-13.00	-59.15	8.65	Peak



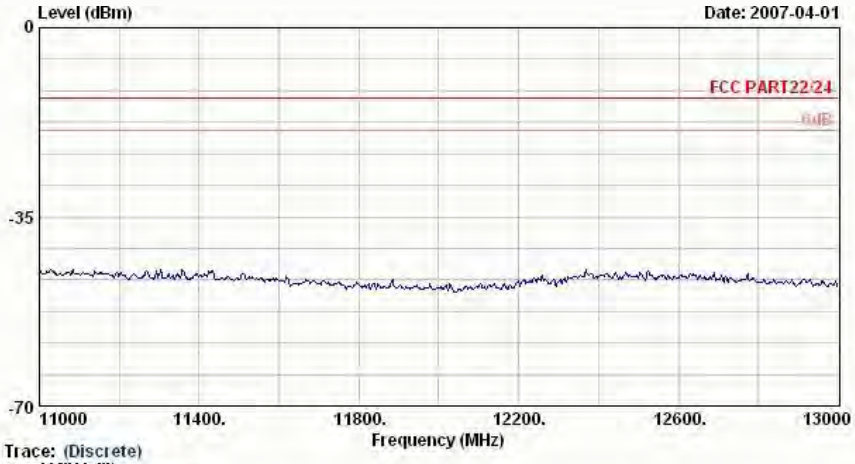
Trace: (Discrete)

Site : 03CH06-HY
Condition : HF-SPURIOUS VERTICAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : EDGE Link+Adaptor
Plane : E2



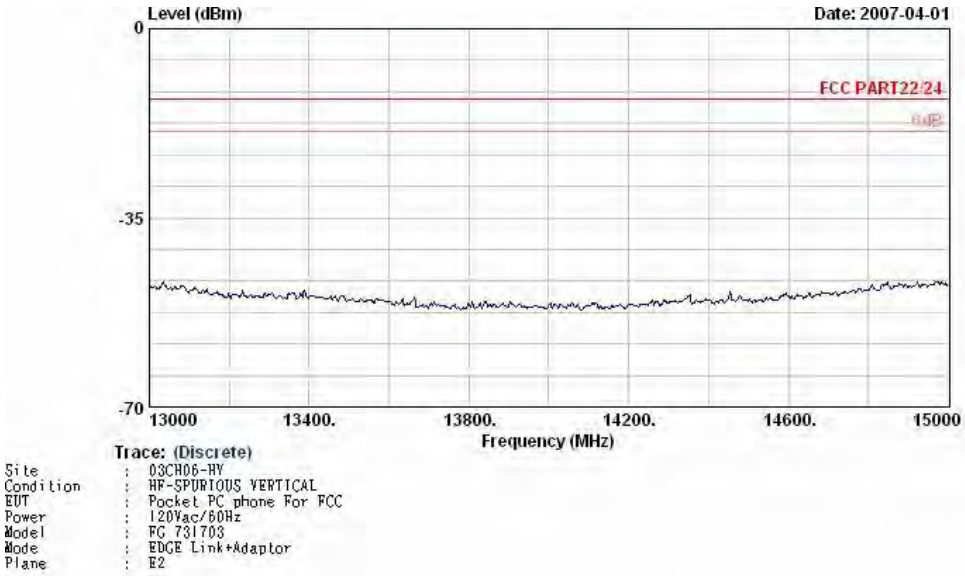
Trace: (Discrete)

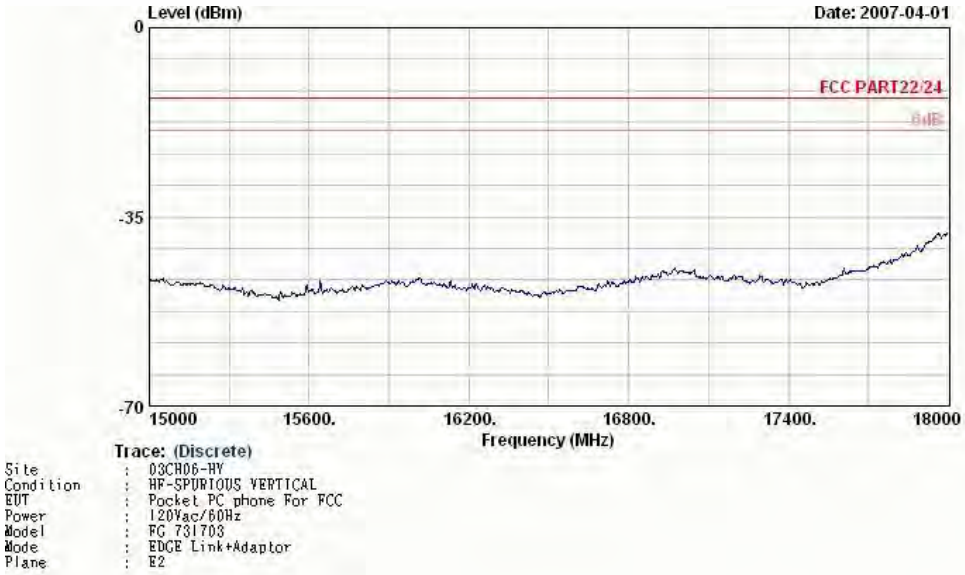
Site	:	03CH06-HY
Condition	:	HF-SPURIOUS VERTICAL
EUT	:	Pocket PC phone For FCC
Power	:	120Vac/60Hz
Model	:	FG 731703
Mode	:	EDGE Link+Adaptor
Plane	:	E2



Trace: (Discrete)

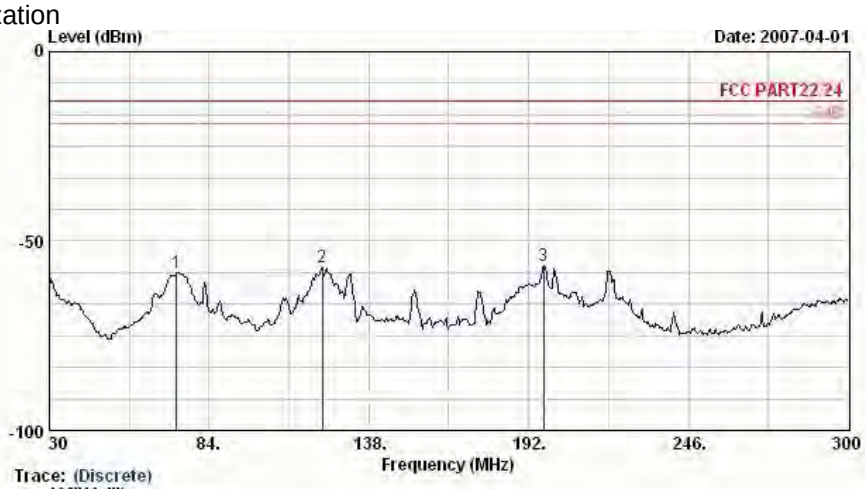
Site	:	03CH06-HY
Condition	:	HF-SPURIOUS VERTICAL
EUT	:	Pocket PC phone For FCC
Power	:	120Vac/60Hz
Model	:	FG 731703
Mode	:	EDGE Link+Adaptor
Plane	:	E2





Remark：There is no more obvious emission except the listings above.

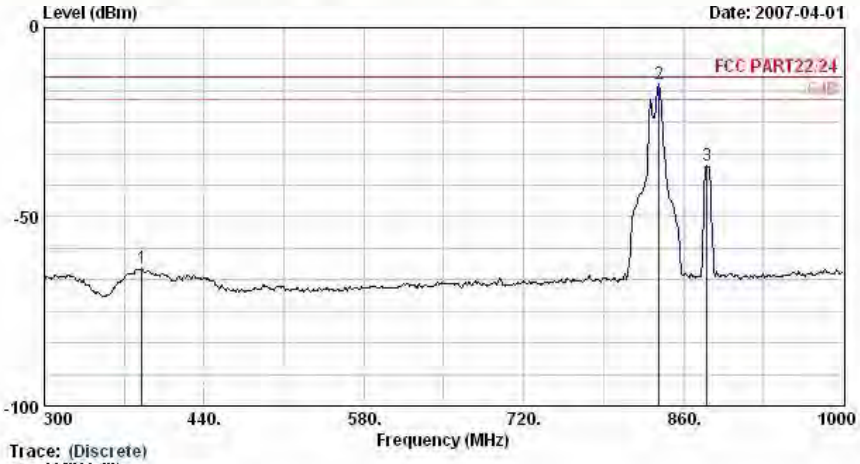
4.6.5.5 Mode 5
Horizontal Polarization



Trace: (Discrete)

Site : 03CH06-HY
Condition : LF-SPURIOUS HORIZONTAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : WCDMA V Link+Adaptor
Plane : E2

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1	72.93	-58.31	-45.31	-13.00	-45.96	-12.34	Peak
2	122.34	-57.05	-44.05	-13.00	-44.55	-12.50	Peak
3 @	197.13	-56.45	-43.45	-13.00	-43.10	-13.36	Peak

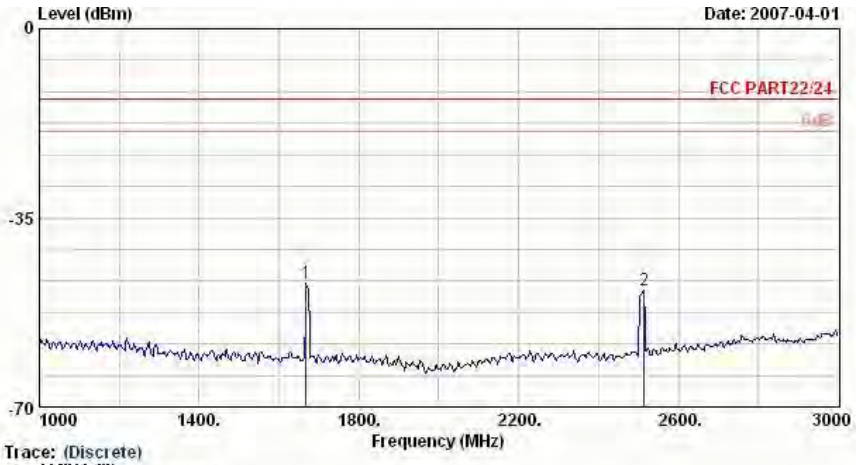


Trace: (Discrete)

Site : 03CH06-HY
Condition : LF-SPURIOUS HORIZONTAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : WCDMA V Link+Adaptor
Plane : E2

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1	385.40	-63.74	-50.74	-13.00	-56.74	-7.00	Peak
2 @	838.30	-14.86			-13.54	-1.32	Peak
3 @	880.30	-36.58			-35.67	-0.91	Peak

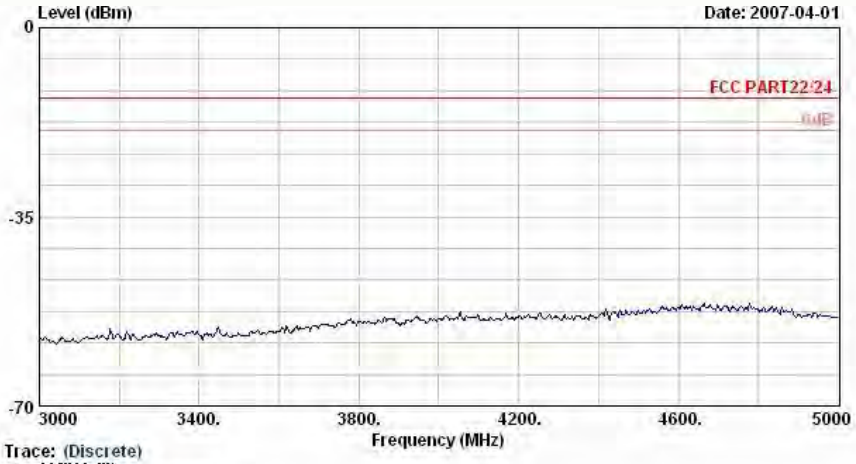
Remark:
1. #2: MS Signal
2. #3: BS Signal



Trace: (Discrete)

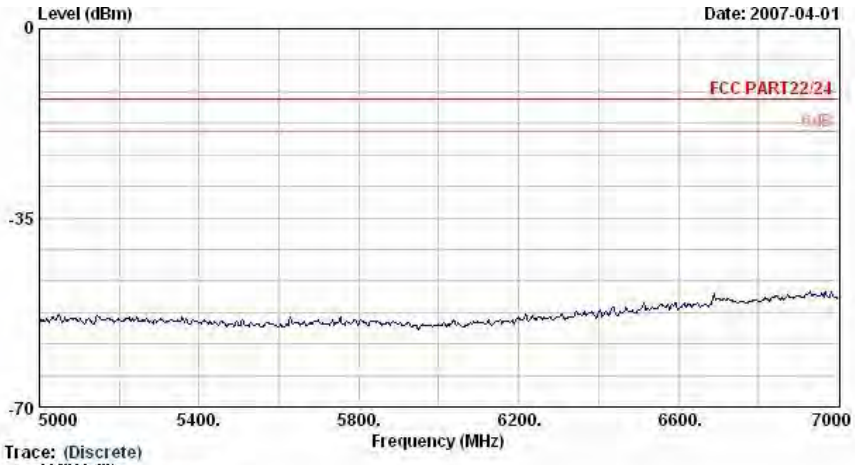
Site : 03CH06-HY
Condition : HF-SPURIOUS HORIZONTAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : WCDMA V Link+Adaptor
Plane : E2

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	1668.00	-46.98	-33.98	-13.00	-47.20	0.22	Peak
2 @	2514.00	-48.39	-35.39	-13.00	-49.59	1.20	Peak



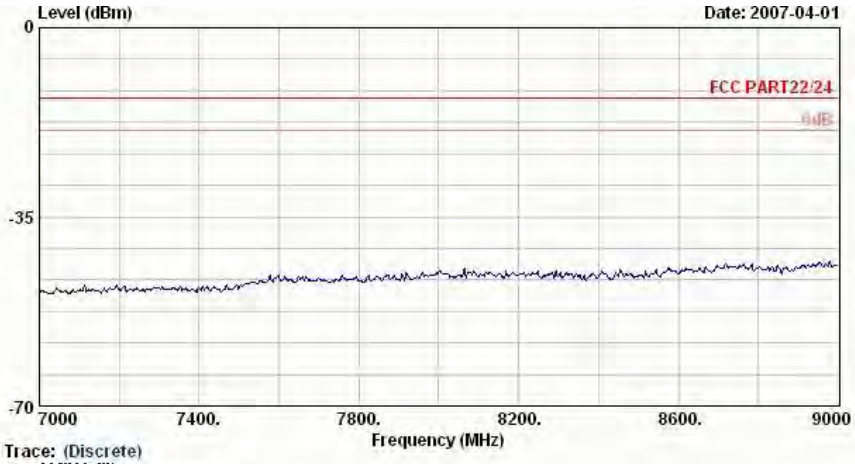
Trace: (Discrete)

Site : 03CH06-HY
Condition : HF-SPURIOUS HORIZONTAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : WCDMA V Link+Adaptor
Plane : E2



Trace: (Discrete)

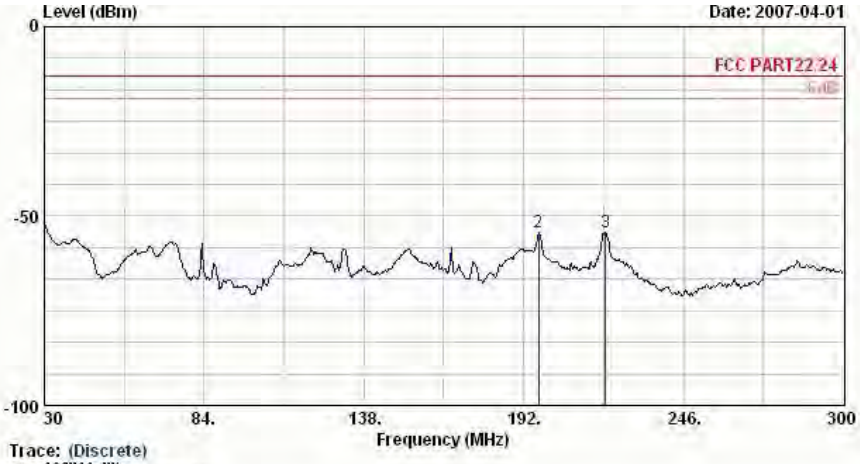
Site	:	03CH06-HY
Condition	:	HF-SPURIOUS HORIZONTAL
EUT	:	Pocket PC phone For FCC
Power	:	120Vac/60Hz
Model	:	FG 731703
Mode	:	WCDMA V Link+Adaptor
Plane	:	E2



Trace: (Discrete)

Site	:	03CH06-HY
Condition	:	HF-SPURIOUS HORIZONTAL
EUT	:	Pocket PC phone For FCC
Power	:	120Vac/60Hz
Model	:	FG 731703
Mode	:	WCDMA V Link+Adaptor
Plane	:	E2

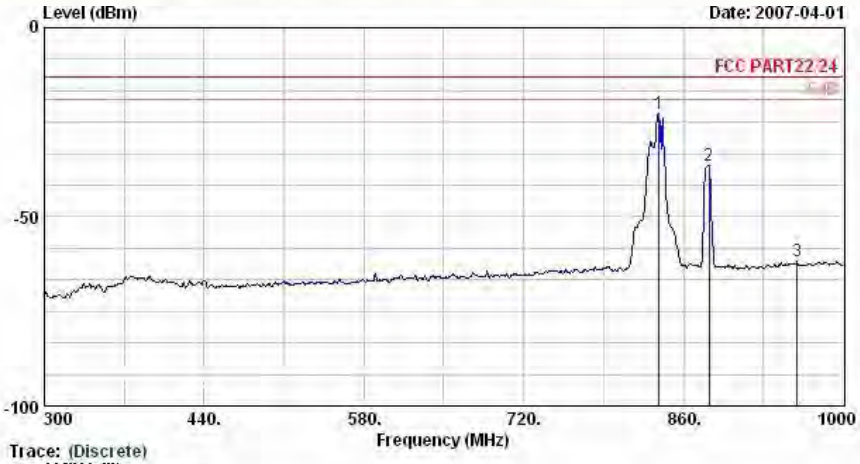
Vertical Polarization



Trace: (Discrete)

Site : 03CH06-HY
Condition : LF-SPURIOUS VERTICAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : WCDMA V Link+Adaptor
Plane : E2

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	30.00	-52.03	-39.03	-13.00	-42.96	-9.07	Peak
2 @	197.13	-54.31	-41.31	-13.00	-45.74	-8.56	Peak
3 @	219.54	-54.40	-41.40	-13.00	-46.22	-8.18	Peak

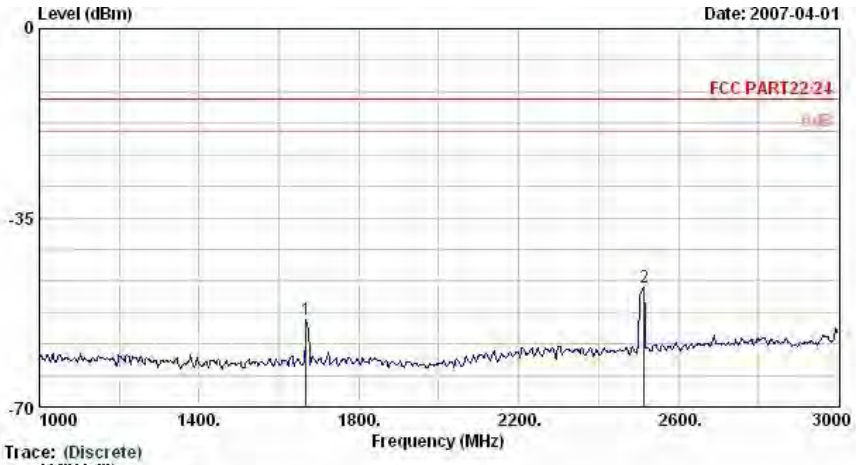


Trace: (Discrete)

Site : 03CH06-HY
Condition : LF-SPURIOUS VERTICAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : WCDMA V Link+Adaptor
Plane : E2

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	838.30	-22.56			-23.93	1.37	Peak
2 @	882.40	-36.34			-38.07	1.73	Peak
3	959.40	-61.71	-48.71	-13.00	-64.04	2.34	Peak

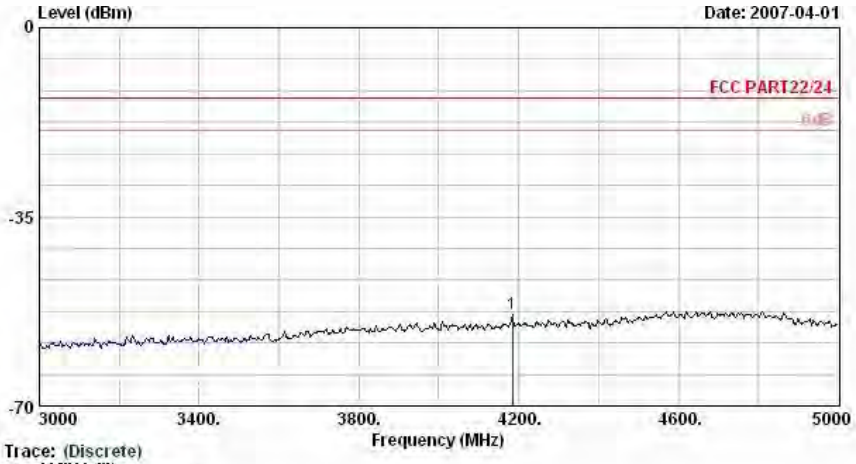
Remark:
1. #1: MS Signal
2. #2: BS Signal



Trace: (Discrete)

Site : 03CH06-HY
Condition : HF-SPURIOUS VERTICAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : WCDMA V Link+Adaptor
Plane : E2

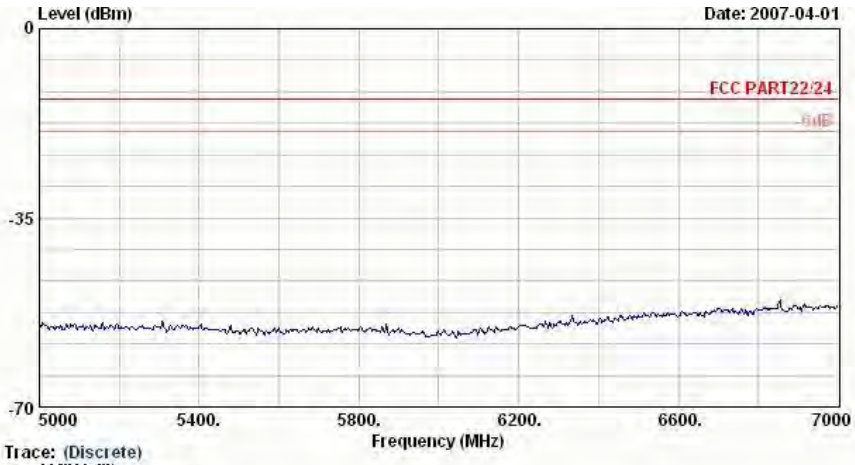
	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	1668.00	-53.83	-40.83	-13.00	-53.35	-0.48	Peak
2 @	2514.00	-47.81	-34.81	-13.00	-50.08	2.27	Peak



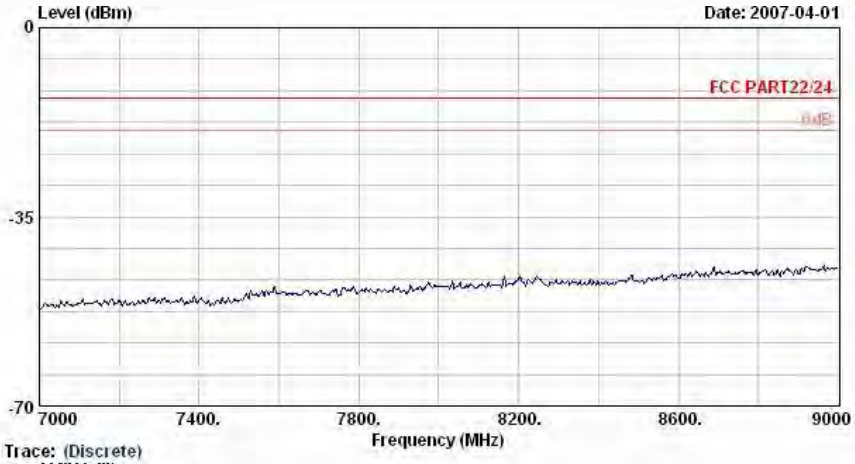
Trace: (Discrete)

Site : 03CH06-HY
Condition : HF-SPURIOUS VERTICAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : WCDMA V Link+Adaptor
Plane : E2

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	4184.00	-53.20	-40.20	-13.00	-61.56	8.36	Peak



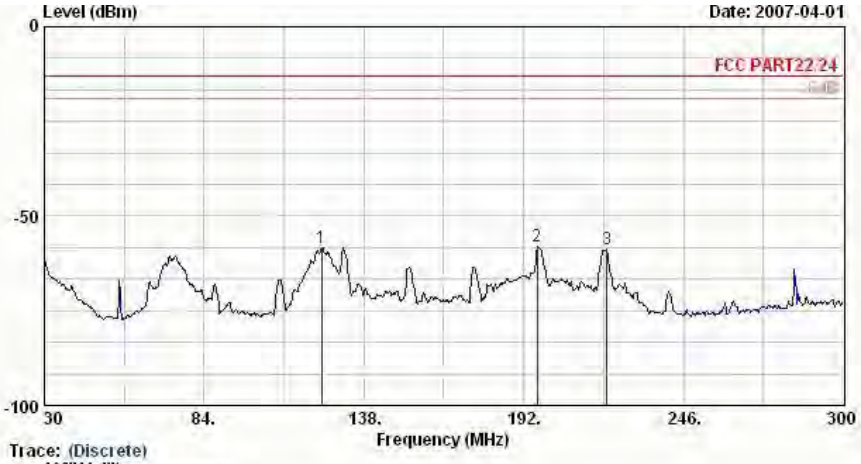
Site : 03CH06-HY
Condition : HF-SPURIOUS VERTICAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : WCDMA V Link+Adaptor
Plane : E2



Site : 03CH06-HY
Condition : HF-SPURIOUS VERTICAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : WCDMA V Link+Adaptor
Plane : E2

Remark：There is no more obvious emission except the listings above.

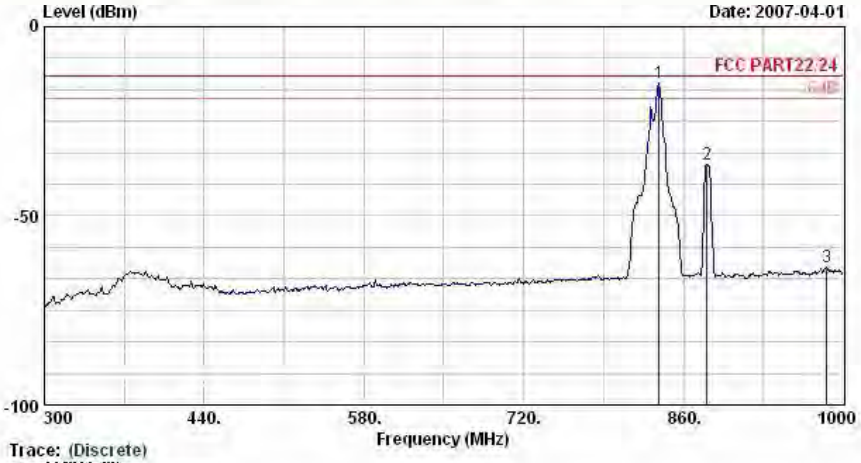
4.6.5.6 Mode 6
Horizontal Polarization



Trace: (Discrete)

Site : 03CH06-HV
Condition : LF-SPURIOUS HORIZONTAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : HSDPA Link+Adaptor
Plane : E2

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	123.69	-58.30	-45.30	-13.00	-45.78	-12.52	Peak
2 @	196.59	-57.94	-44.94	-13.00	-44.59	-13.36	Peak
3 @	220.08	-58.88	-45.88	-13.00	-46.19	-12.69	Peak

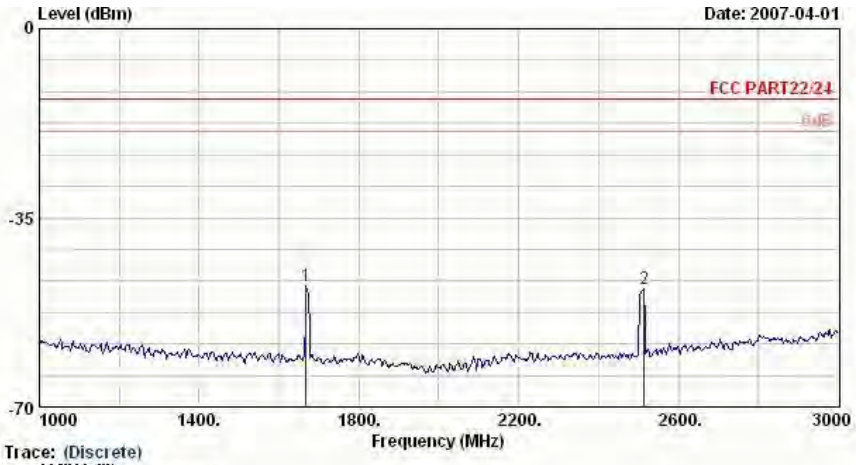


Trace: (Discrete)

Site : 03CH06-HV
Condition : LF-SPURIOUS HORIZONTAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : HSDPA Link+Adaptor
Plane : E2

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	838.30	-14.80			-13.47	-1.32	Peak
2 @	880.30	-36.30			-35.39	-0.91	Peak
3 @	985.30	-63.62	-50.62	-13.00	-63.72	0.10	Peak

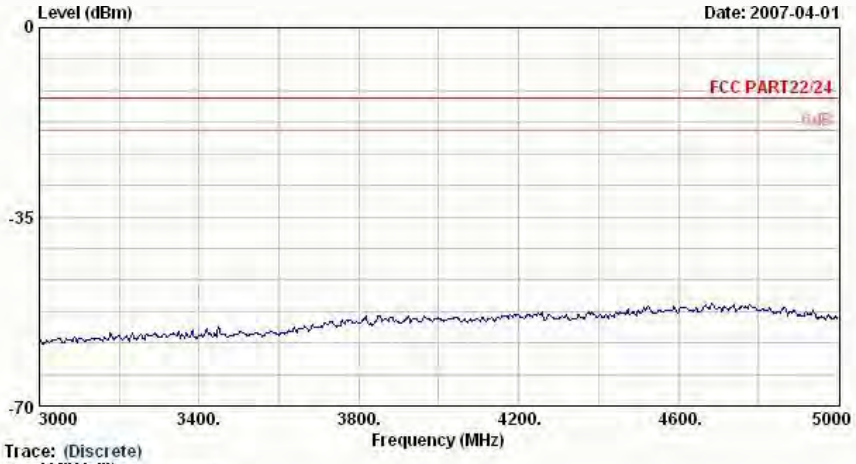
Remark:
1. #1: MS Signal
2. #2: BS Signal



Trace: (Discrete)

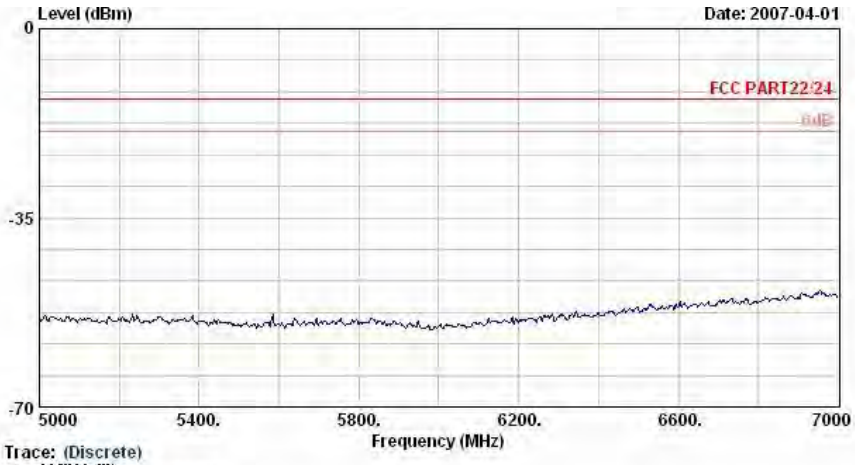
Site : 03CH06-HY
Condition : HF-SPURIOUS HORIZONTAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : HSDPA Link+Adaptor
Plane : E2

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	1668.00	-47.63	-34.63	-13.00	-47.85	0.22	Peak
2 @	2514.00	-48.03	-35.03	-13.00	-49.23	1.20	Peak



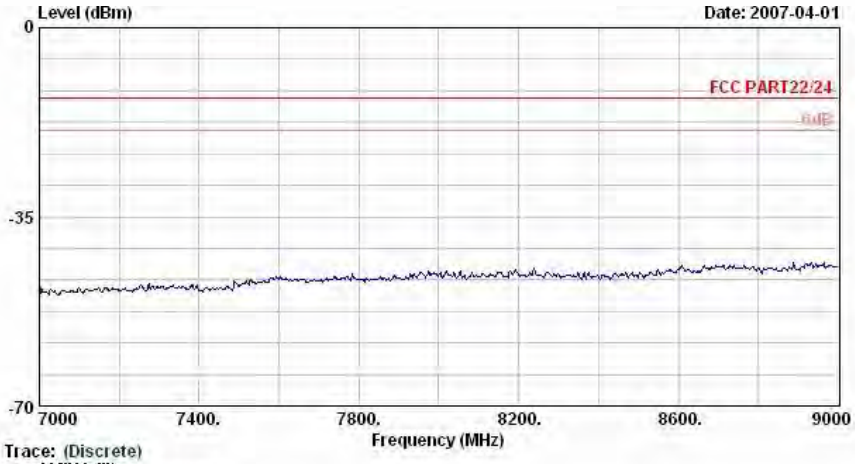
Trace: (Discrete)

Site : 03CH06-HY
Condition : HF-SPURIOUS HORIZONTAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : HSDPA Link+Adaptor
Plane : E2



Trace: (Discrete)

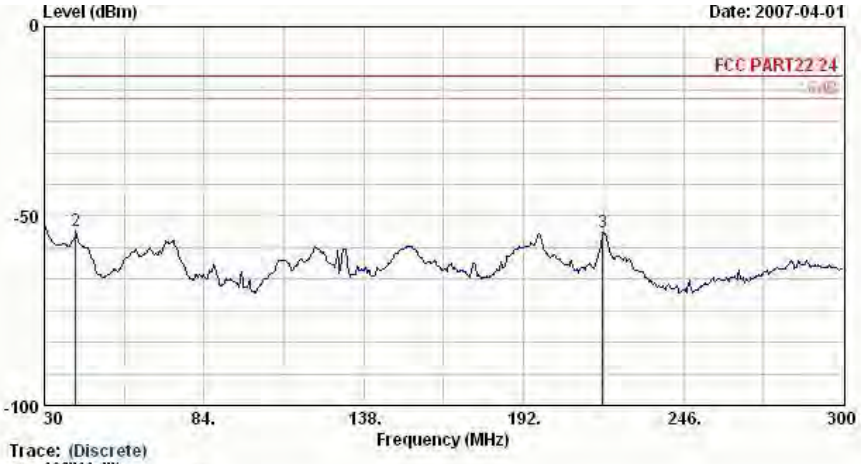
Site	:	03CH06-HY
Condition	:	HF-SPURIOUS HORIZONTAL
EUT	:	Pocket PC phone For FCC
Power	:	120Vac/60Hz
Model	:	FG 731703
Mode	:	HSDPA Link+Adaptor
Plane	:	E2



Trace: (Discrete)

Site	:	03CH06-HY
Condition	:	HF-SPURIOUS HORIZONTAL
EUT	:	Pocket PC phone For FCC
Power	:	120Vac/60Hz
Model	:	FG 731703
Mode	:	HSDPA Link+Adaptor
Plane	:	E2

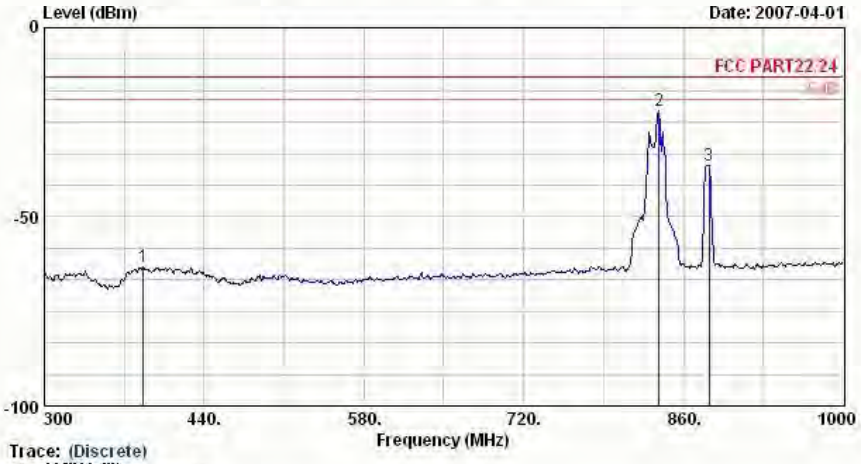
Vertical Polarization



Trace: (Discrete)

Site : 03CH06-HY
Condition : LF-SPURIOUS VERTICAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : HSDPA Link+Adaptor
Plane : E2

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	30.00	-52.54	-39.54	-13.00	-43.47	-9.07	Peak
2 @	40.53	-53.73	-40.73	-13.00	-41.65	-12.08	Peak
3 @	218.73	-54.25	-41.25	-13.00	-46.07	-8.18	Peak

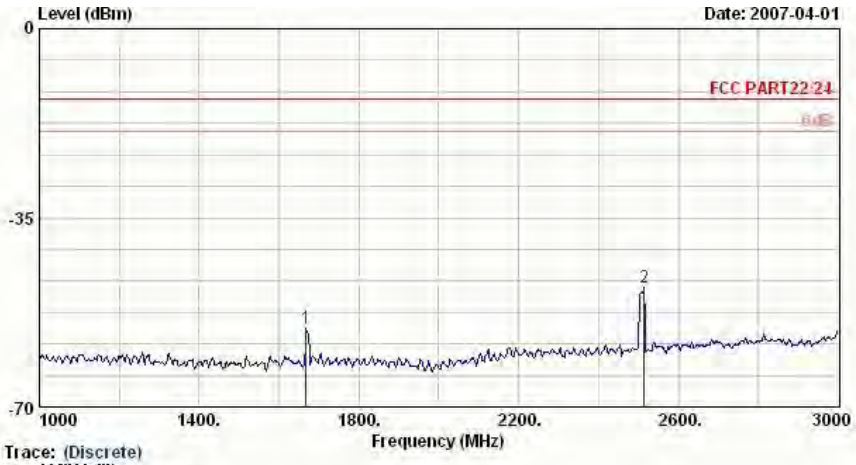


Trace: (Discrete)

Site : 03CH06-HY
Condition : LF-SPURIOUS VERTICAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : HSDPA Link+Adaptor
Plane : E2

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	386.80	-63.33	-50.33	-13.00	-58.73	-4.60	Peak
2 @	838.30	-22.05			-23.43	1.37	Peak
3 @	882.40	-36.30			-38.03	1.73	Peak

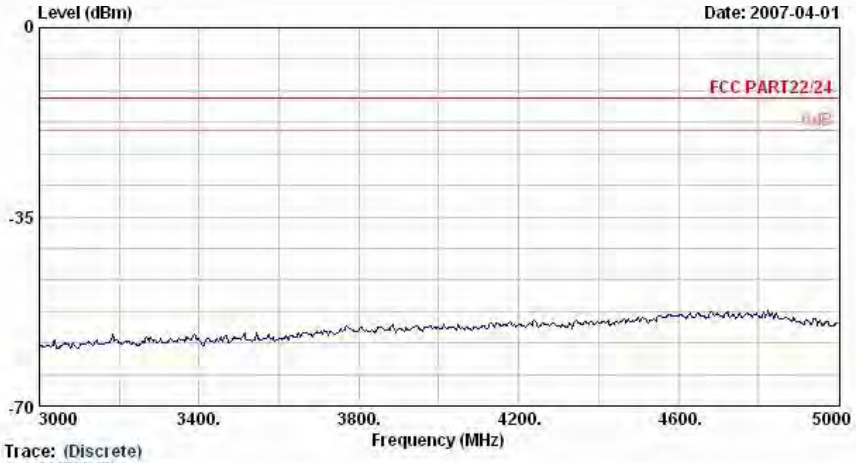
Remark:
1. #2: MS Signal
2. #3: BS Signal



Trace: (Discrete)

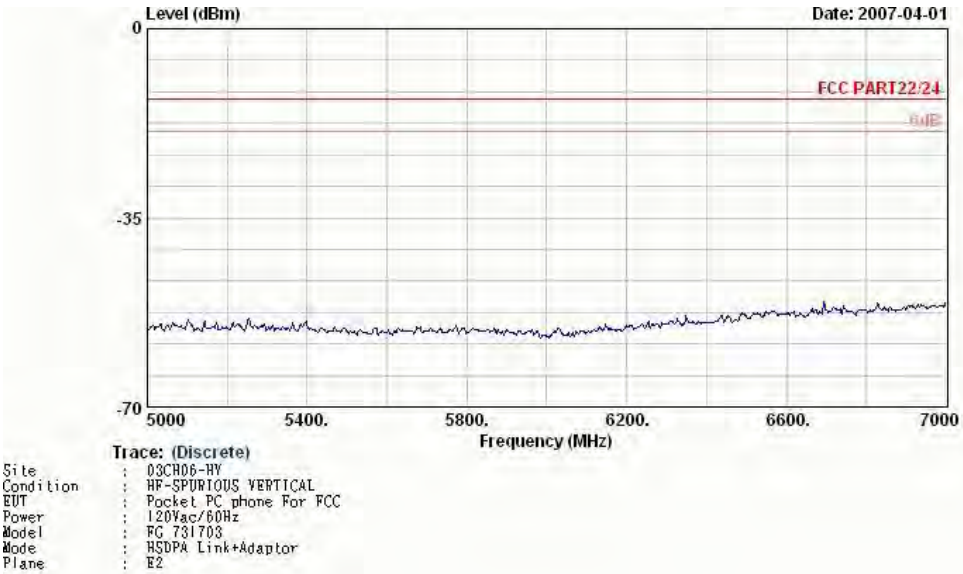
Site : 03CH06-HY
Condition : HF-SPURIOUS VERTICAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : HSDPA Link+Adaptor
Plane : E2

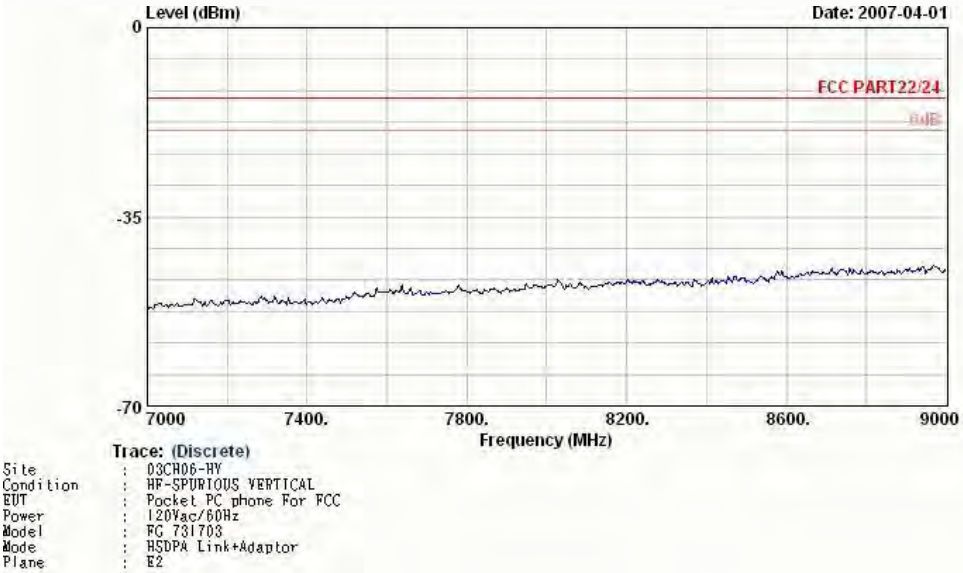
	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	1668.00	-55.34	-42.34	-13.00	-54.86	-0.48	Peak
2 @	2514.00	-48.01	-35.01	-13.00	-50.28	2.27	Peak



Trace: (Discrete)

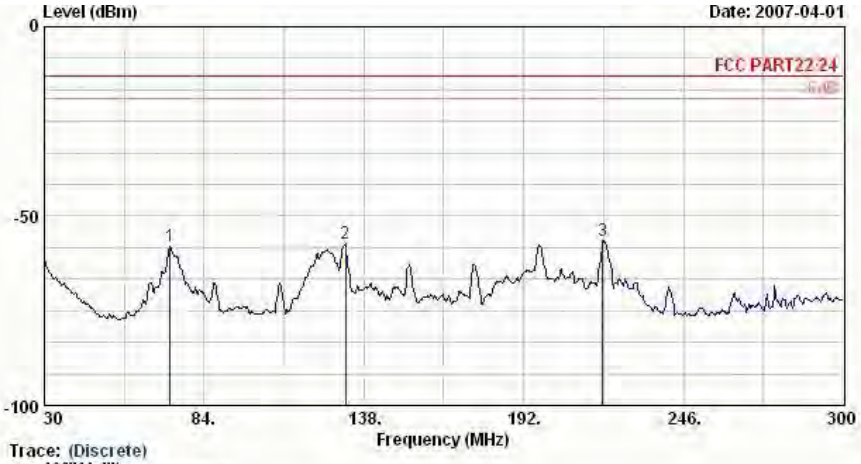
Site : 03CH06-HY
Condition : HF-SPURIOUS VERTICAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : HSDPA Link+Adaptor
Plane : E2





Remark：There is no more obvious emission except the listings above.

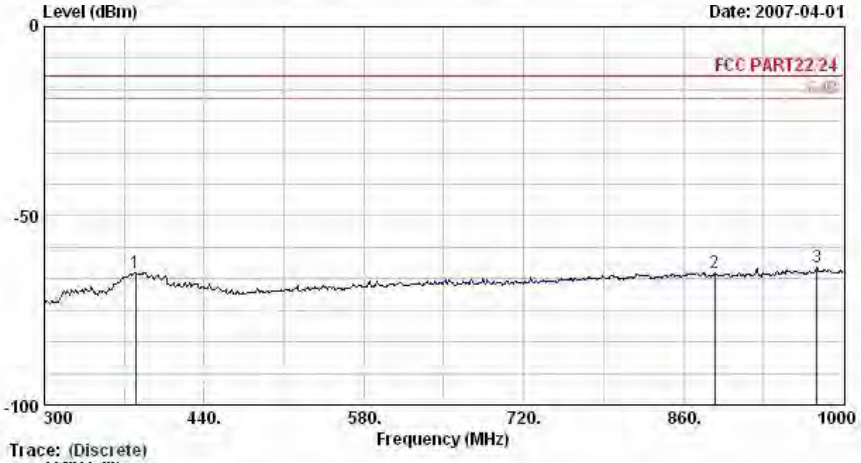
4.6.5.7 Mode 7
Horizontal Polarization



Trace: (Discrete)

Site : 03CH06-HY
Condition : LF-SPURIOUS HORIZONTAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : WCDMA II Link+Adaptor
Plane : E2

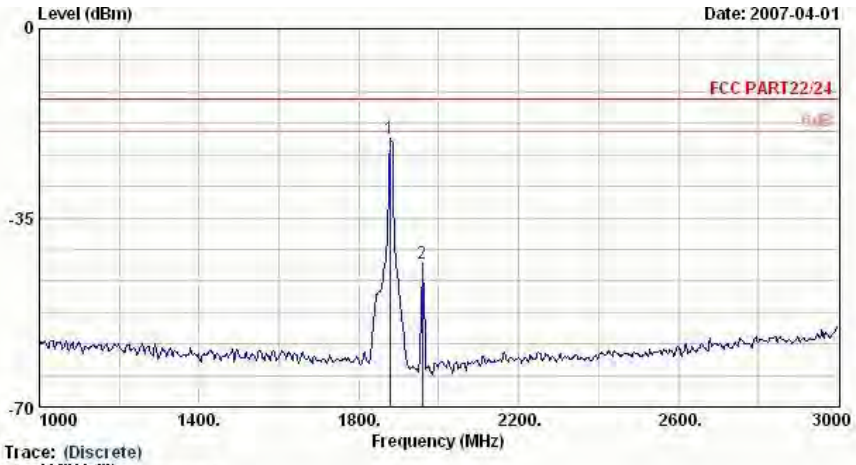
	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1	72.39	-57.86	-44.86	-13.00	-45.52	-12.34	Peak
2	131.79	-57.37	-44.37	-13.00	-44.76	-12.61	Peak
3 @	218.73	-56.49	-43.49	-13.00	-43.77	-12.72	Peak



Trace: (Discrete)

Site : 03CH06-HY
Condition : LF-SPURIOUS HORIZONTAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : WCDMA II Link+Adaptor
Plane : E2

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1	379.80	-64.90	-51.90	-13.00	-57.73	-7.17	Peak
2	887.30	-65.04	-52.04	-13.00	-64.19	-0.85	Peak
3	976.90	-63.46	-50.46	-13.00	-63.48	0.02	Peak

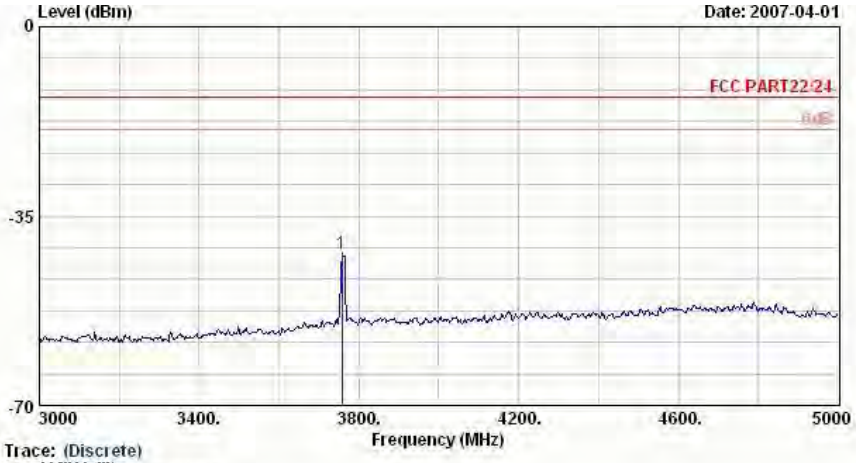


Trace: (Discrete)

Site : 03CH06-HY
Condition : HF-SPURIOUS HORIZONTAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : WCDMA II Link+Adaptor
Plane : E2

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	1878.00	-20.22			-19.71	-0.51	Peak
2 @	1958.00	-43.35			-42.24	-1.11	Peak

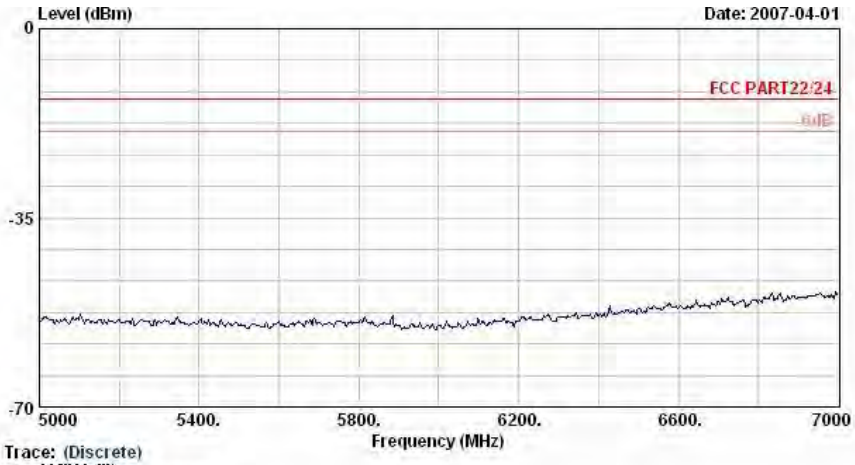
Remark:
1. #1: MS Signal
2. #2: BS Signal



Trace: (Discrete)

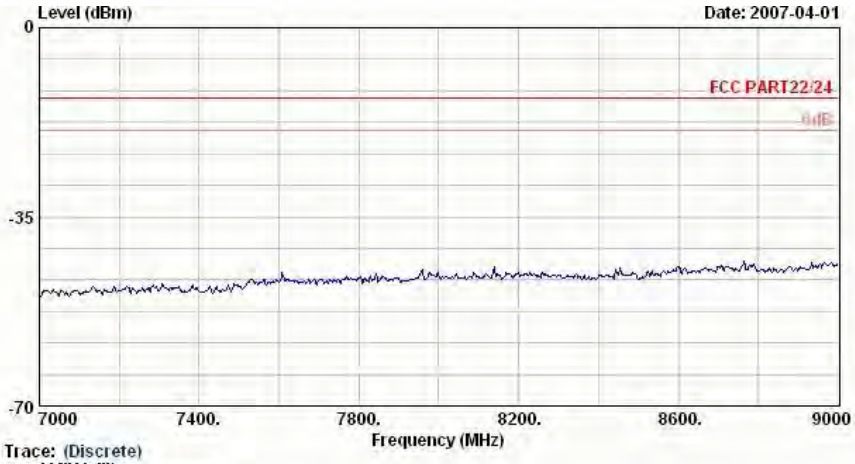
Site : 03CH06-HY
Condition : HF-SPURIOUS HORIZONTAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : WCDMA II Link+Adaptor
Plane : E2

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	3758.00	-41.93	-28.93	-13.00	-49.86	7.92	Peak



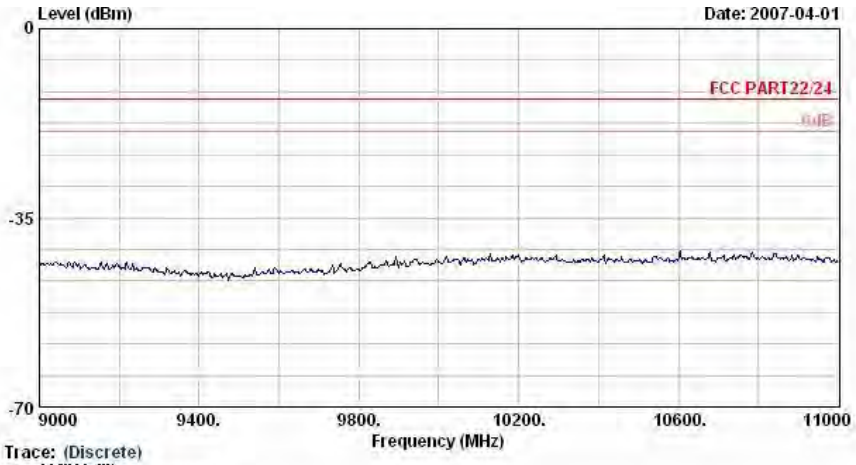
Trace: (Discrete)

Site	:	03CH06-HY
Condition	:	HF-SPURIOUS HORIZONTAL
EUT	:	Pocket PC phone For FCC
Power	:	120Vac/60Hz
Model	:	FG 731703
Mode	:	WCDMA II Link+Adaptor
Plane	:	E2



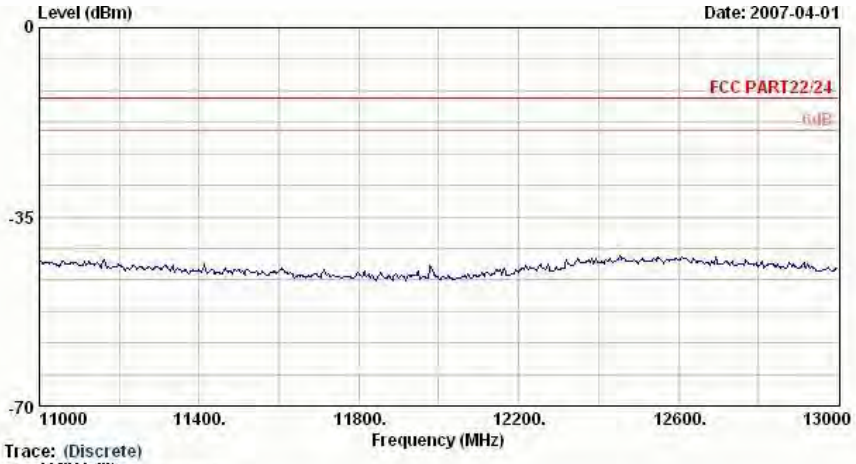
Trace: (Discrete)

Site	:	03CH06-HY
Condition	:	HF-SPURIOUS HORIZONTAL
EUT	:	Pocket PC phone For FCC
Power	:	120Vac/60Hz
Model	:	FG 731703
Mode	:	WCDMA II Link+Adaptor
Plane	:	E2



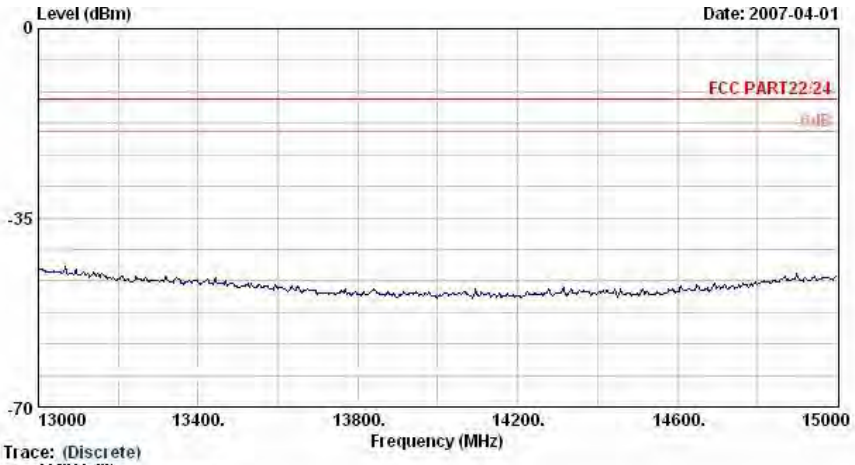
Trace: (Discrete)

Site	:	03CH06-HY
Condition	:	HF-SPURIOUS HORIZONTAL
EUT	:	Pocket PC phone For FCC
Power	:	120Vac/60Hz
Model	:	FG 731703
Mode	:	WCDMA II Link+Adaptor
Plane	:	E2



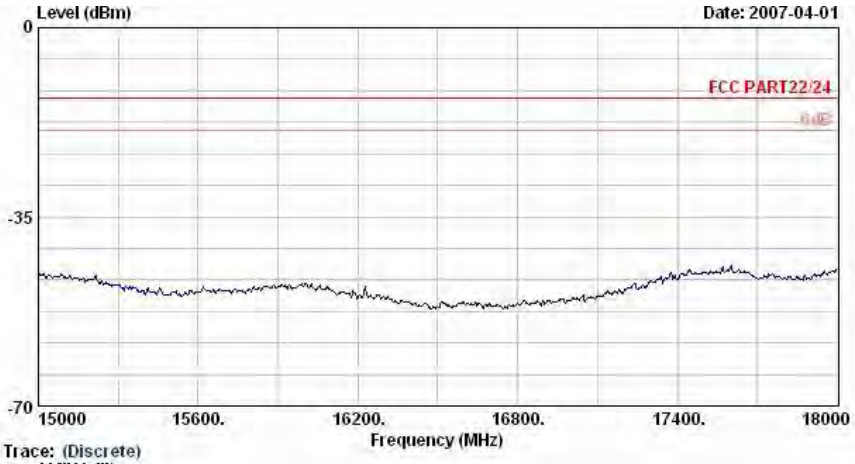
Trace: (Discrete)

Site	:	03CH06-HY
Condition	:	HF-SPURIOUS HORIZONTAL
EUT	:	Pocket PC phone For FCC
Power	:	120Vac/60Hz
Model	:	FG 731703
Mode	:	WCDMA II Link+Adaptor
Plane	:	E2



Trace: (Discrete)

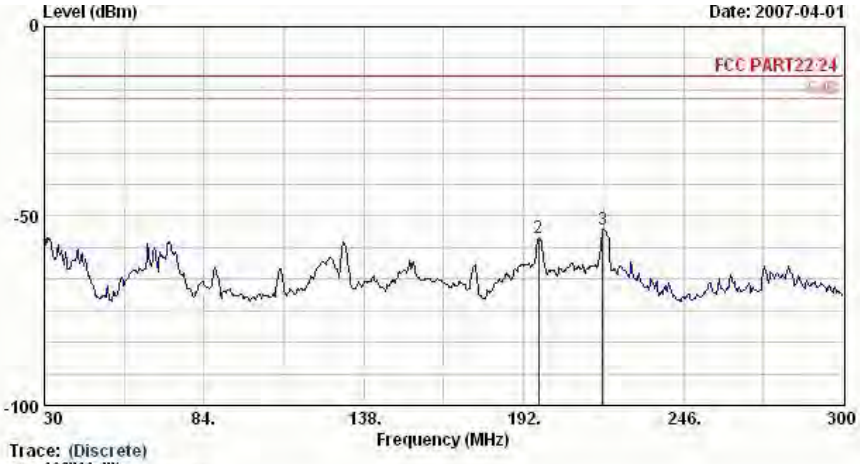
Site : 03CH06-HY
Condition : HF-SPURIOUS HORIZONTAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : WCDMA II Link+Adaptor
Plane : E2



Trace: (Discrete)

Site : 03CH06-HY
Condition : HF-SPURIOUS HORIZONTAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : WCDMA II Link+Adaptor
Plane : E2

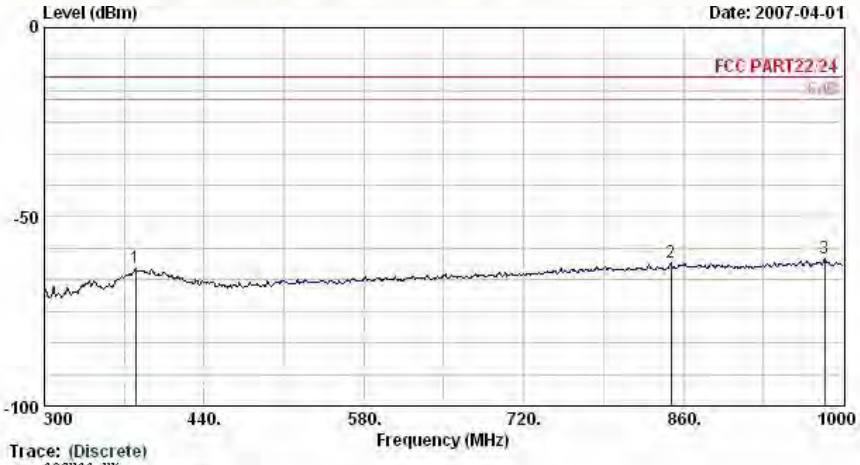
Vertical Polarization



Trace: (Discrete)

Site : 03CH06-HY
Condition : LF-SPURIOUS VERTICAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : WCDMA II Link+Adaptor
Plane : E2

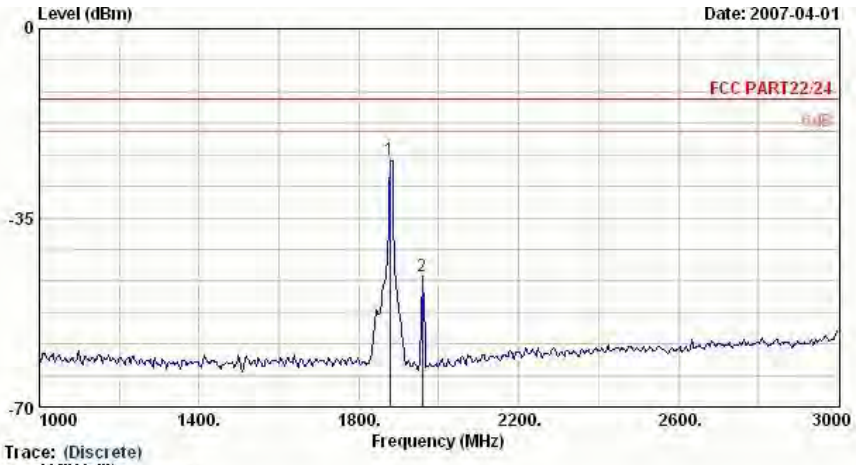
	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	30.00	-55.53	-42.53	-13.00	-46.46	-9.07	Peak
2 @	197.13	-55.79	-42.79	-13.00	-47.22	-8.56	Peak
3 @	218.73	-53.40	-40.40	-13.00	-45.23	-8.18	Peak



Trace: (Discrete)

Site : 03CH06-HY
Condition : LF-SPURIOUS VERTICAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : WCDMA II Link+Adaptor
Plane : E2

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1	379.80	-63.69	-50.69	-13.00	-58.94	-4.74	Peak
2	848.80	-62.26	-49.26	-13.00	-63.71	1.46	Peak
3	983.90	-60.92	-47.92	-13.00	-63.45	2.53	Peak

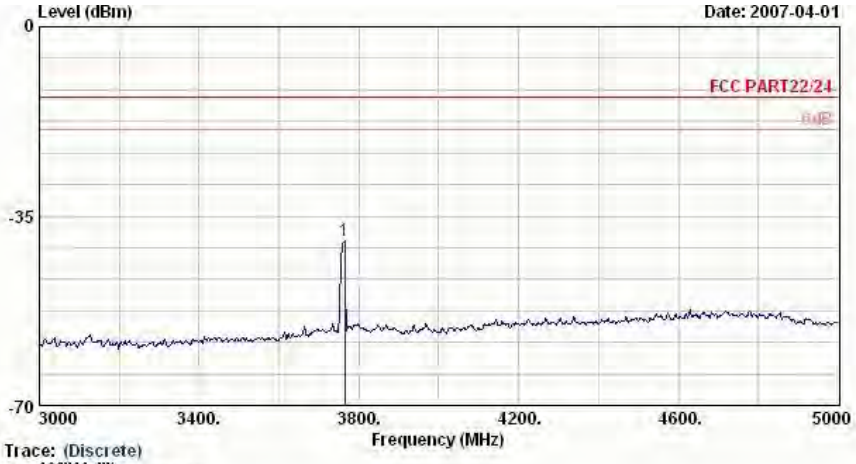


Trace: (Discrete)

Site : 03CH06-HY
Condition : HF-SPURIOUS VERTICAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : WCDMA II Link+Adaptor
Plane : E2

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	1878.00	-24.23			-23.83	-0.40	Peak
2 @	1958.00	-45.70			-45.10	-0.60	Peak

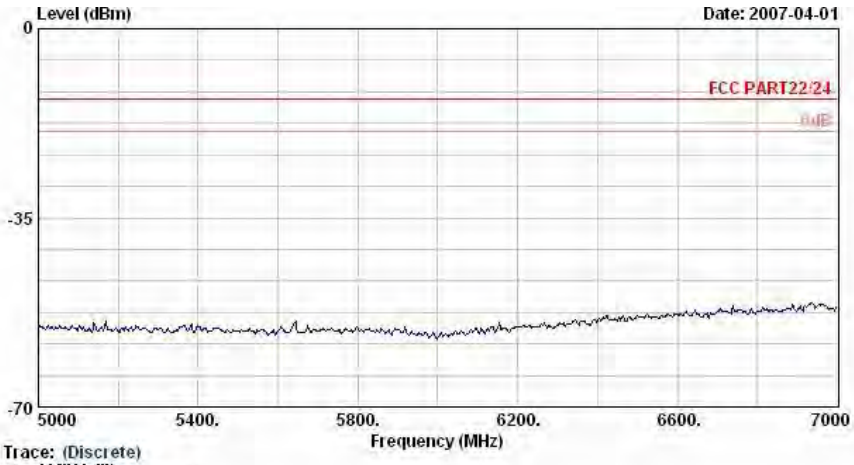
Remark:
1. #1: MS Signal
2. #2: BS Signal



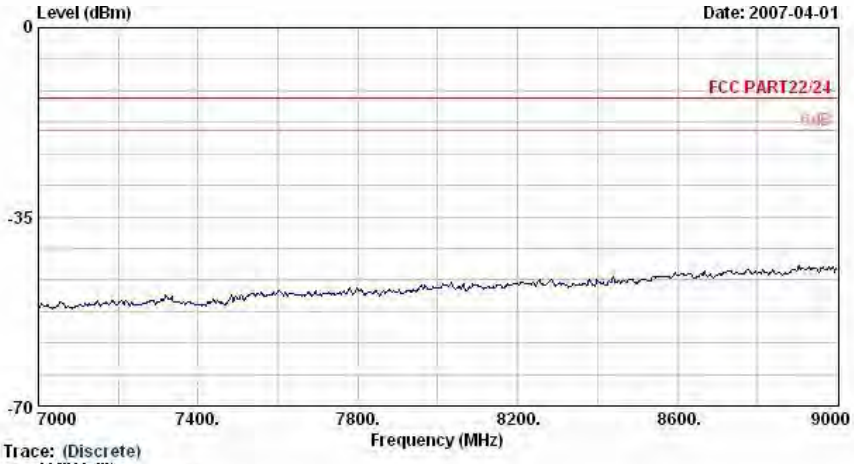
Trace: (Discrete)

Site : 03CH06-HY
Condition : HF-SPURIOUS VERTICAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : WCDMA II Link+Adaptor
Plane : E2

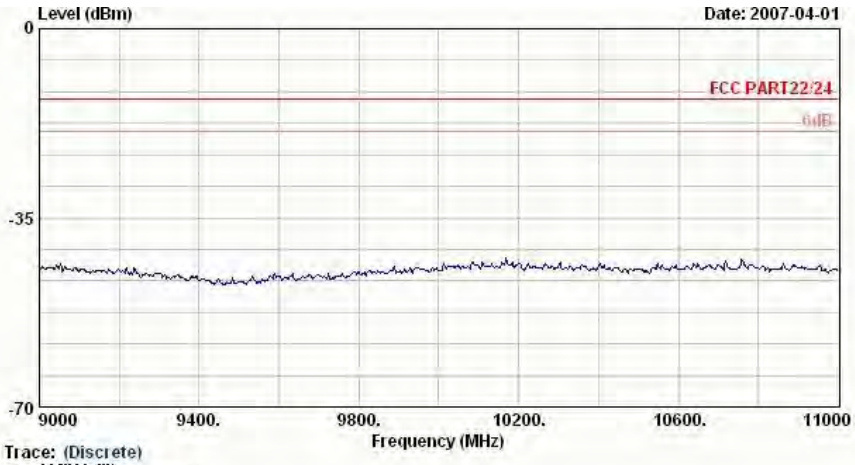
	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	3764.00	-39.44	-26.44	-13.00	-46.08	6.64	Peak



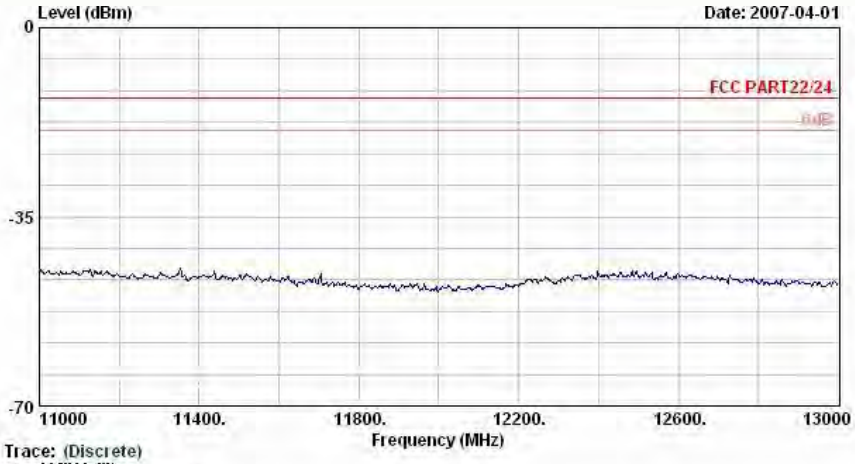
Site : 03CH06-HY
Condition : HF-SPURIOUS VERTICAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : WCDMA II Link+Adaptor
Plane : E2



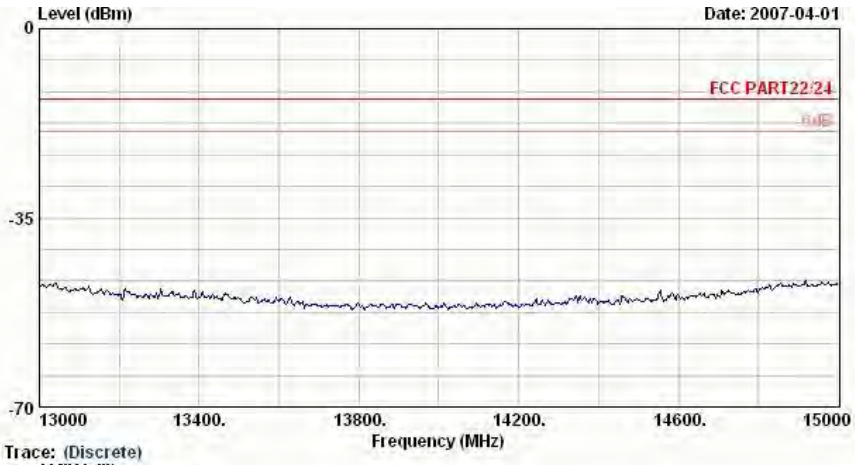
Site : 03CH06-HY
Condition : HF-SPURIOUS VERTICAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : WCDMA II Link+Adaptor
Plane : E2



Site : 03CH06-HY
Condition : HF-SPURIOUS VERTICAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : WCDMA II Link+Adaptor
Plane : E2

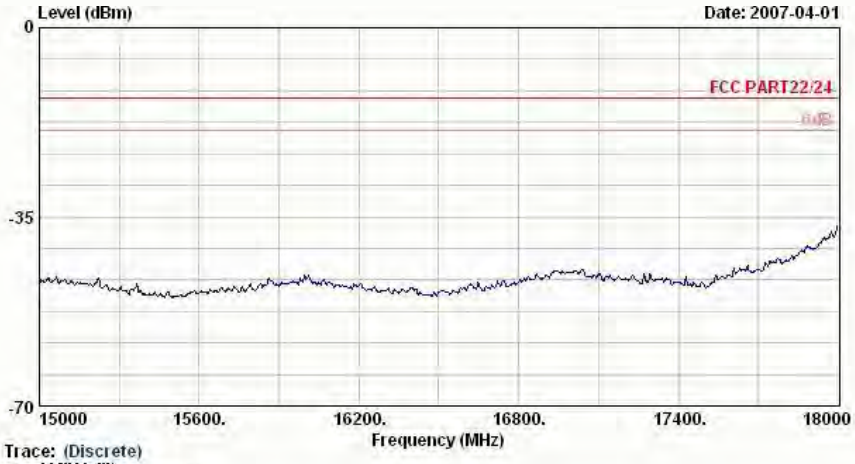


Site : 03CH06-HY
Condition : HF-SPURIOUS VERTICAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : WCDMA II Link+Adaptor
Plane : E2



Trace: (Discrete)

Site	:	03CH06-HY
Condition	:	HF-SPURIOUS VERTICAL
EUT	:	Pocket PC phone For FCC
Power	:	120Vac/60Hz
Model	:	FG 731703
Mode	:	WCDMA II Link+Adaptor
Plane	:	E2

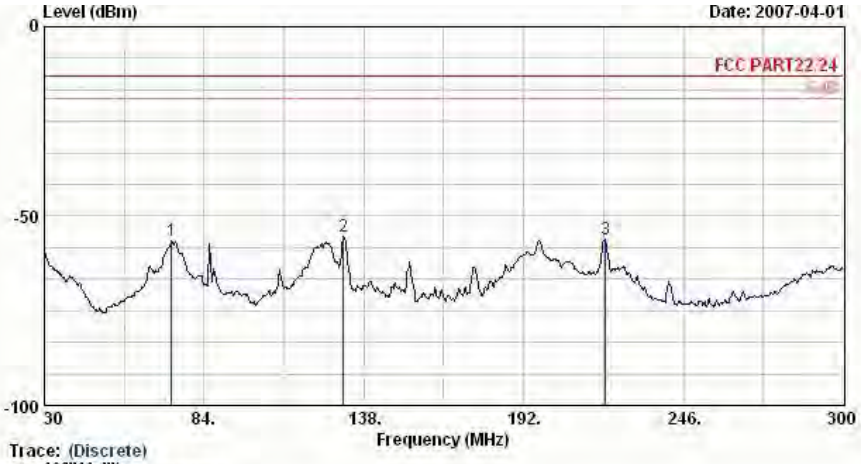


Trace: (Discrete)

Site	:	03CH06-HY
Condition	:	HF-SPURIOUS VERTICAL
EUT	:	Pocket PC phone For FCC
Power	:	120Vac/60Hz
Model	:	FG 731703
Mode	:	WCDMA II Link+Adaptor
Plane	:	E2

Remark：There is no more obvious emission except the listings above.

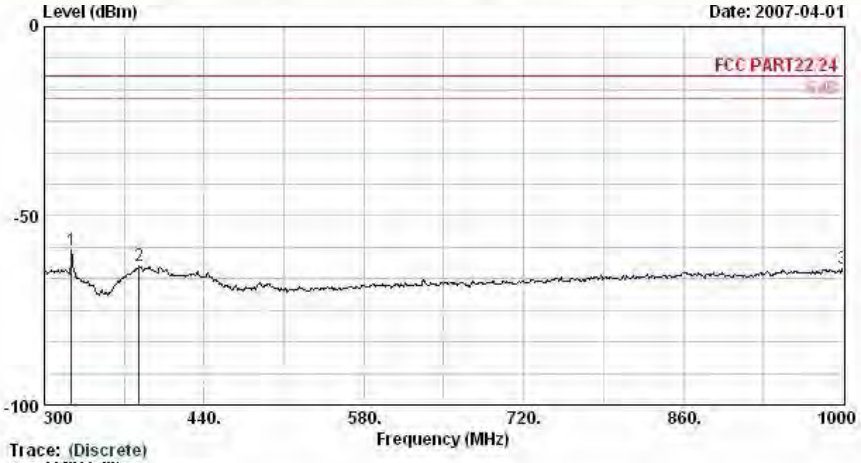
4.6.5.8 Mode 8
Horizontal Polarization



Trace: (Discrete)

Site : 03CH06-HY
Condition : LF-SPURIOUS HORIZONTAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : HSDPA Link+Adaptor
Plane : E2

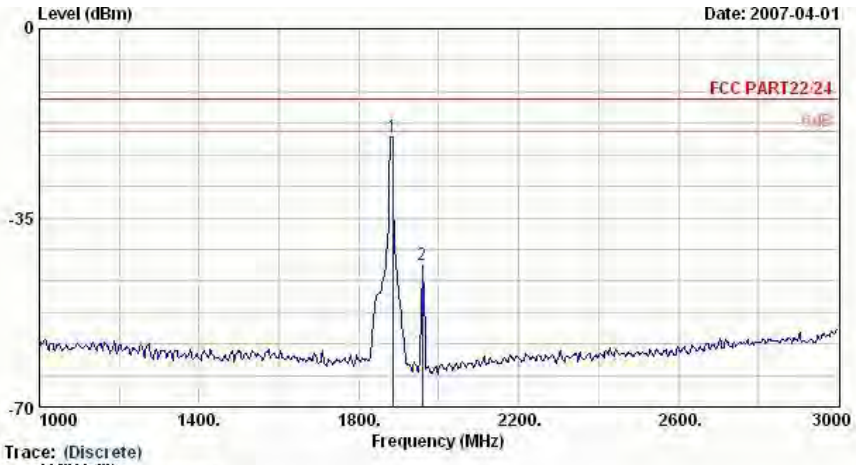
	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	72.93	-56.66	-43.66	-13.00	-44.31	-12.34	Peak
2 @	130.98	-55.40	-42.40	-13.00	-42.80	-12.60	Peak
3 @	219.54	-56.25	-43.25	-13.00	-43.53	-12.72	Peak



Trace: (Discrete)

Site : 03CH06-HY
Condition : LF-SPURIOUS HORIZONTAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : HSDPA Link+Adaptor
Plane : E2

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	323.80	-59.21	-46.21	-13.00	-50.10	-9.11	Peak
2 @	383.30	-63.34	-50.34	-13.00	-56.27	-7.07	Peak
3 @	1000.00	-64.11	-51.11	-13.00	-64.35	0.24	Peak

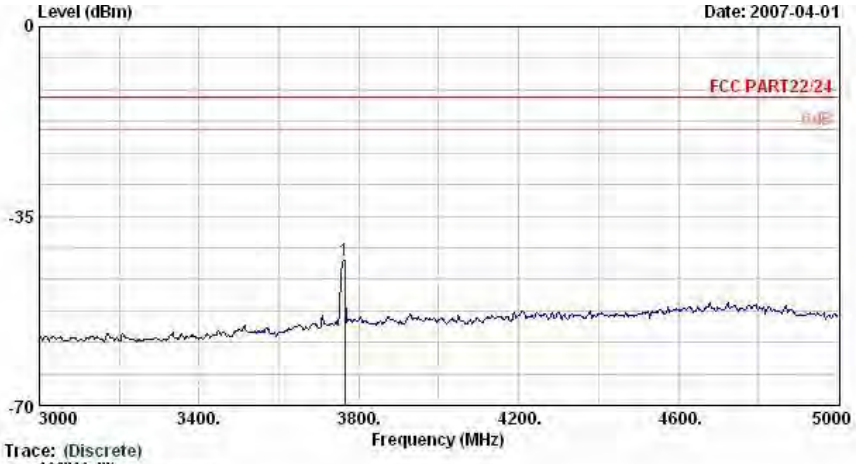


Trace: (Discrete)

Site : 03CH06-HY
Condition : HF-SPURIOUS HORIZONTAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : HSDPA Link+Adaptor
Plane : E2

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	1884.00	-19.95			-19.27	-0.68	Peak
2 @	1958.00	-43.68			-42.57	-1.11	Peak

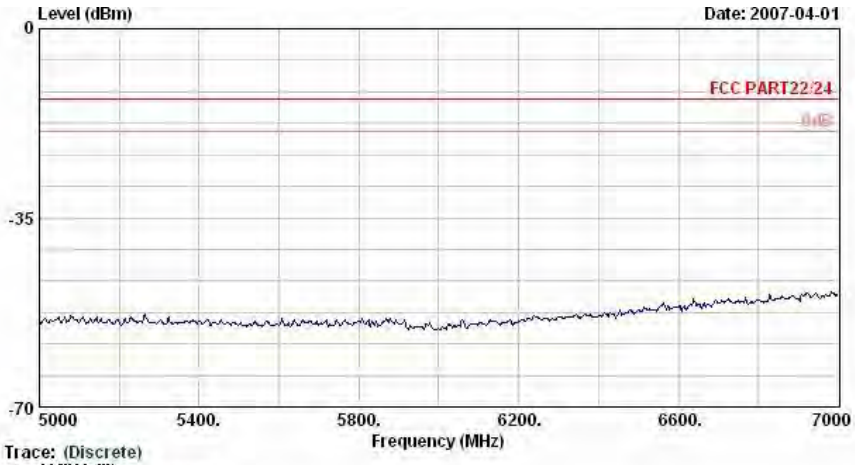
Remark:
1. #1: MS Signal
2. #2: BS Signal



Trace: (Discrete)

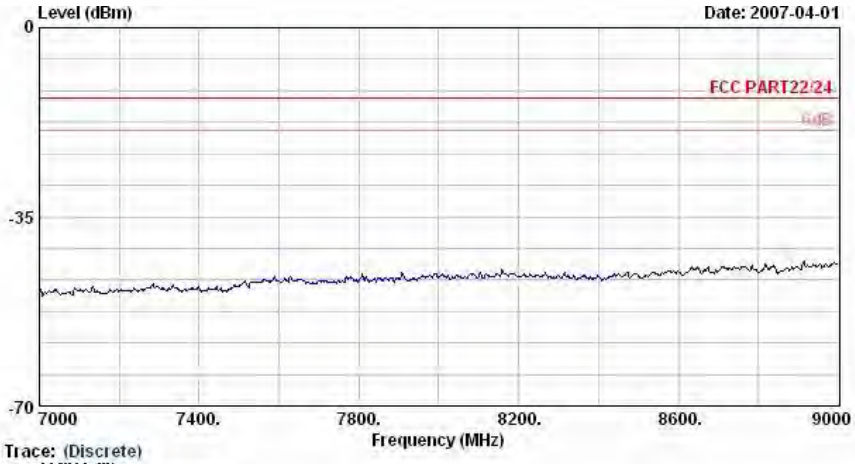
Site : 03CH06-HY
Condition : HF-SPURIOUS HORIZONTAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : HSDPA Link+Adaptor
Plane : E2

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	3764.00	-43.15	-30.15	-13.00	-51.08	7.92	Peak



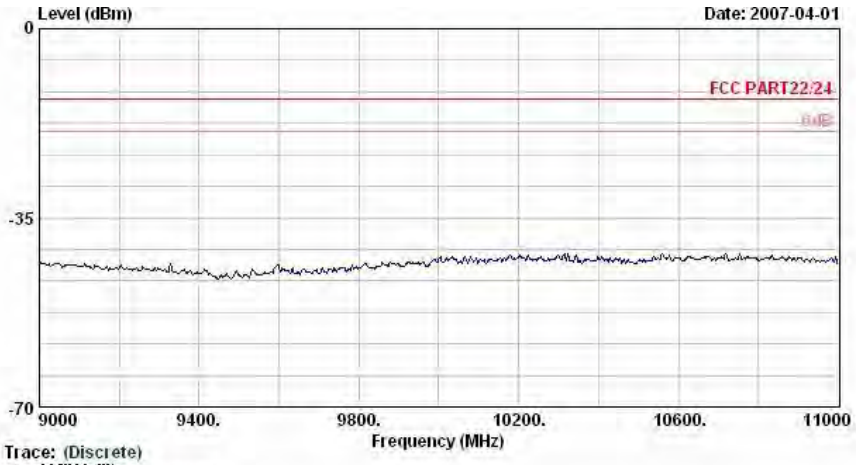
Trace: (Discrete)

Site	:	03CH06-HY
Condition	:	HF-SPURIOUS HORIZONTAL
EUT	:	Pocket PC phone For FCC
Power	:	120Vac/60Hz
Model	:	FG 731703
Mode	:	HSDPA Link+Adaptor
Plane	:	E2

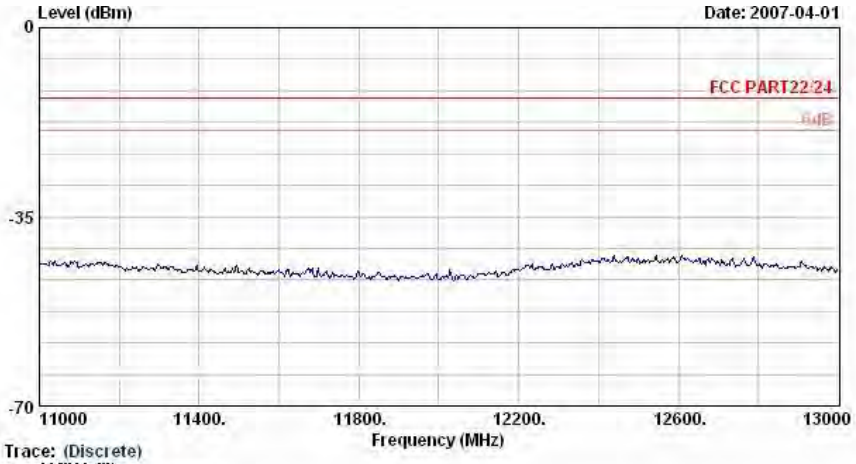


Trace: (Discrete)

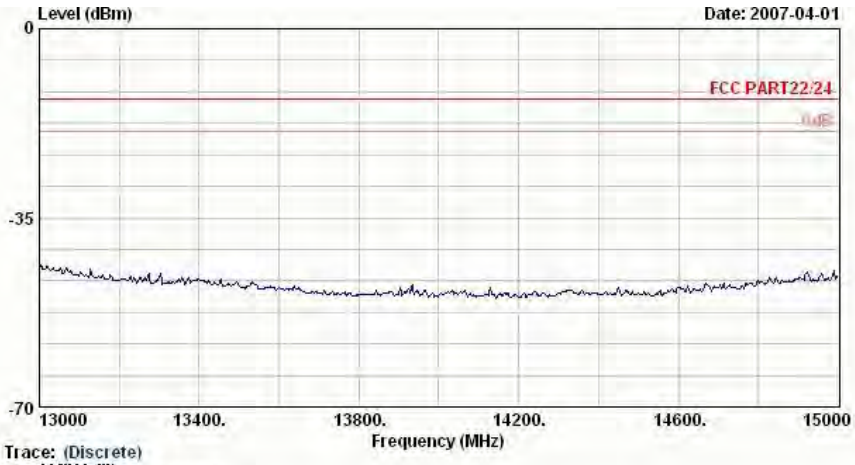
Site	:	03CH06-HY
Condition	:	HF-SPURIOUS HORIZONTAL
EUT	:	Pocket PC phone For FCC
Power	:	120Vac/60Hz
Model	:	FG 731703
Mode	:	HSDPA Link+Adaptor
Plane	:	E2



Site : 03CH06-HY
Condition : HF-SPURIOUS HORIZONTAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : HSDPA Link+Adaptor
Plane : E2

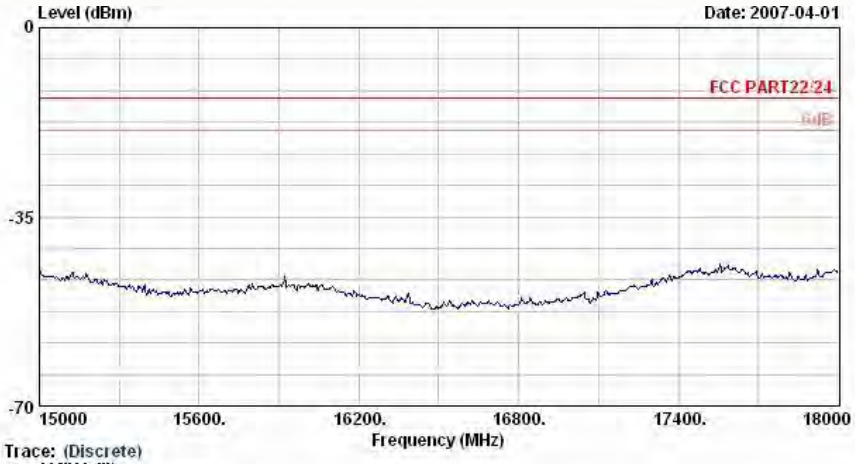


Site : 03CH06-HY
Condition : HF-SPURIOUS HORIZONTAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : HSDPA Link+Adaptor
Plane : E2



Trace: (Discrete)

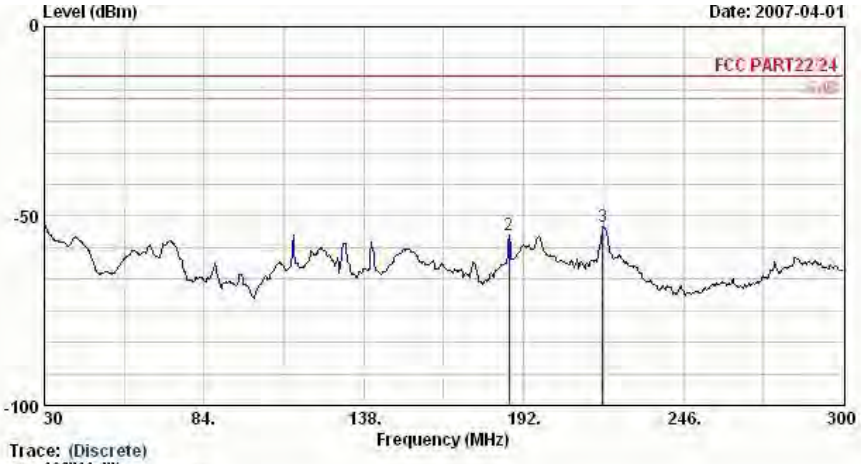
Site	:	03CH06-HY
Condition	:	HF-SPURIOUS HORIZONTAL
EUT	:	Pocket PC phone For FCC
Power	:	120Vac/60Hz
Model	:	FG 731703
Mode	:	HSDPA Link+Adaptor
Plane	:	E2



Trace: (Discrete)

Site	:	03CH06-HY
Condition	:	HF-SPURIOUS HORIZONTAL
EUT	:	Pocket PC phone For FCC
Power	:	120Vac/60Hz
Model	:	FG 731703
Mode	:	HSDPA Link+Adaptor
Plane	:	E2

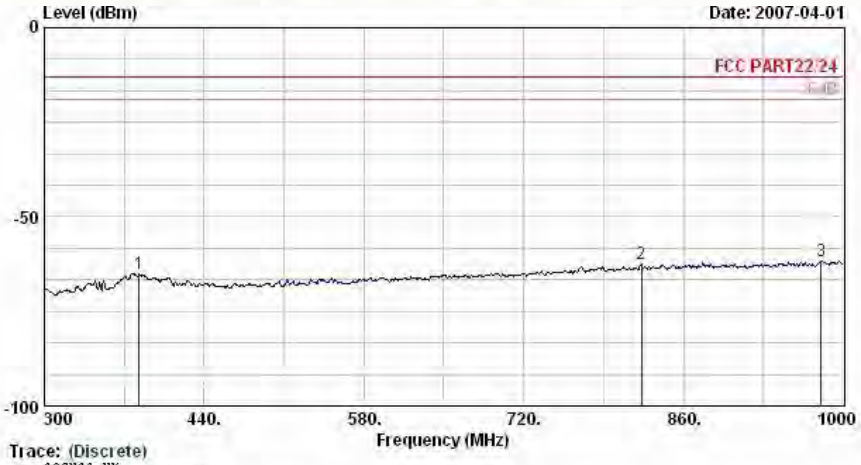
Vertical Polarization



Trace: (Discrete)

Site : 03CH06-HV
Condition : LF-SPURIOUS VERTICAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : HSDPA Link+Adaptor
Plane : E2

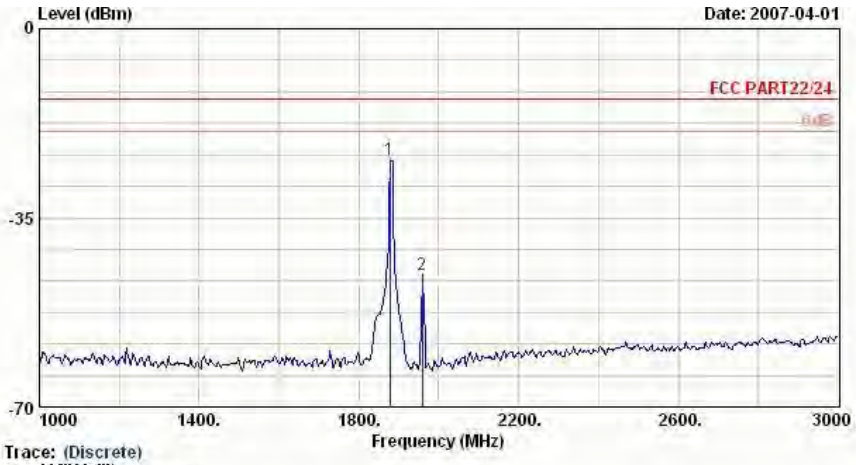
	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	30.00	-51.56	-38.56	-13.00	-42.49	-9.07	Peak
2 @	187.14	-54.87	-41.87	-13.00	-46.39	-8.48	Peak
3 @	218.73	-52.80	-39.80	-13.00	-44.63	-8.18	Peak



Trace: (Discrete)

Site : 03CH06-HV
Condition : LF-SPURIOUS VERTICAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : HSDPA Link+Adaptor
Plane : E2

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	383.30	-65.10	-52.10	-13.00	-60.42	-4.68	Peak
2 @	822.90	-62.27	-49.27	-13.00	-63.52	1.25	Peak
3 @	980.40	-61.67	-48.67	-13.00	-64.18	2.51	Peak

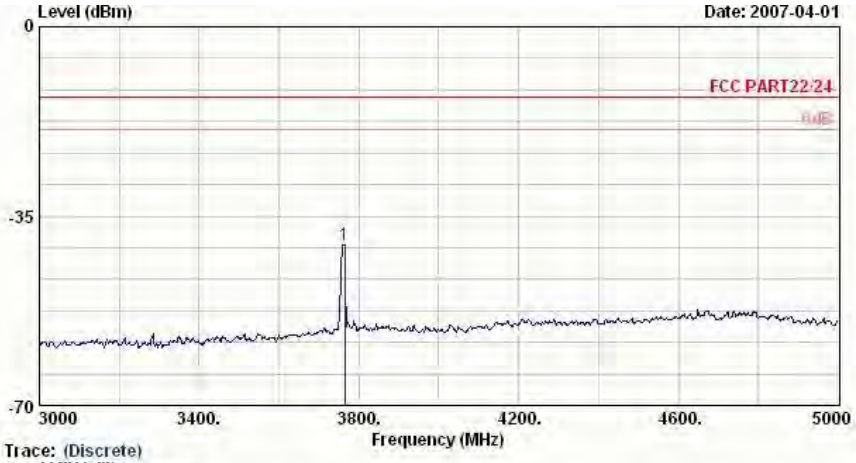


Trace: (Discrete)

Site : 03CH06-HY
Condition : HF-SPURIOUS VERTICAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : HSDPA Link+Adaptor
Plane : E2

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	1878.00	-24.24			-23.84	-0.40	Peak
2 @	1958.00	-45.64			-45.05	-0.60	Peak

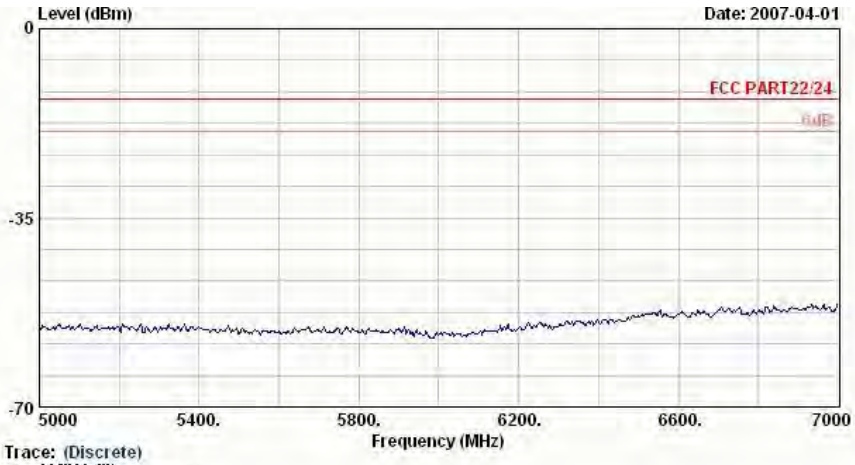
Remark:
1. #1: MS Signal
2. #2: BS Signal



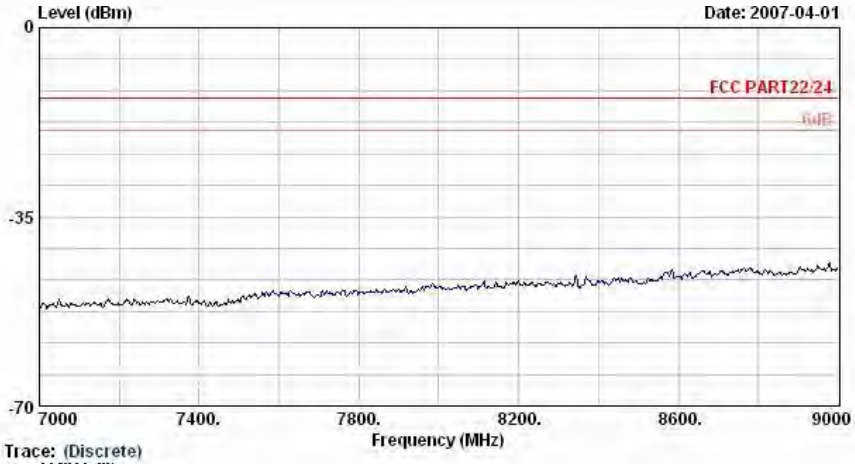
Trace: (Discrete)

Site : 03CH06-HY
Condition : HF-SPURIOUS VERTICAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : HSDPA Link+Adaptor
Plane : E2

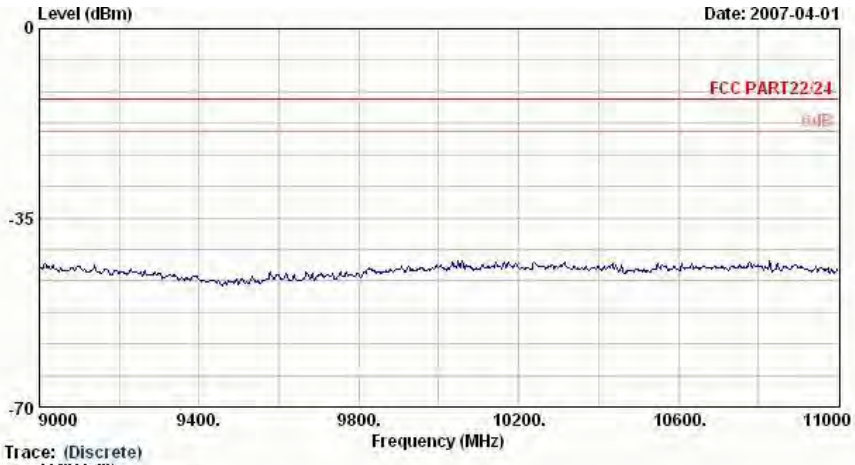
	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	3764.00	-40.41	-27.41	-13.00	-47.05	6.64	Peak



Site : 03CH06-HY
Condition : HF-SPURIOUS VERTICAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : HSDPA Link+Adaptor
Plane : E2

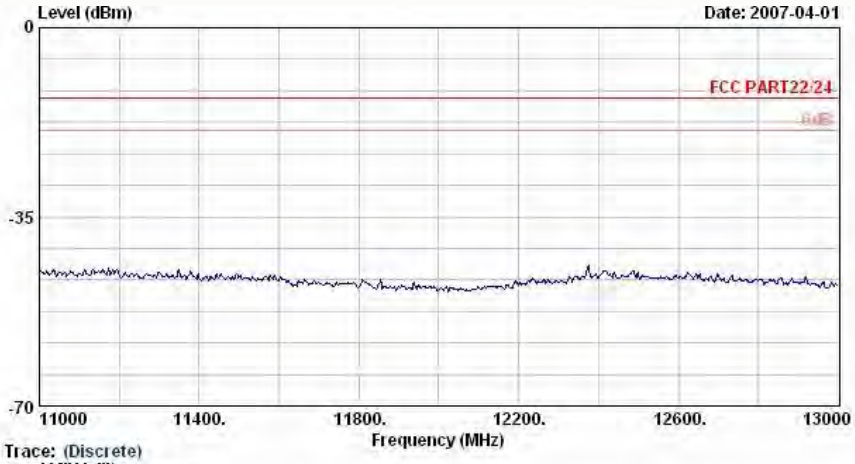


Site : 03CH06-HY
Condition : HF-SPURIOUS VERTICAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : HSDPA Link+Adaptor
Plane : E2



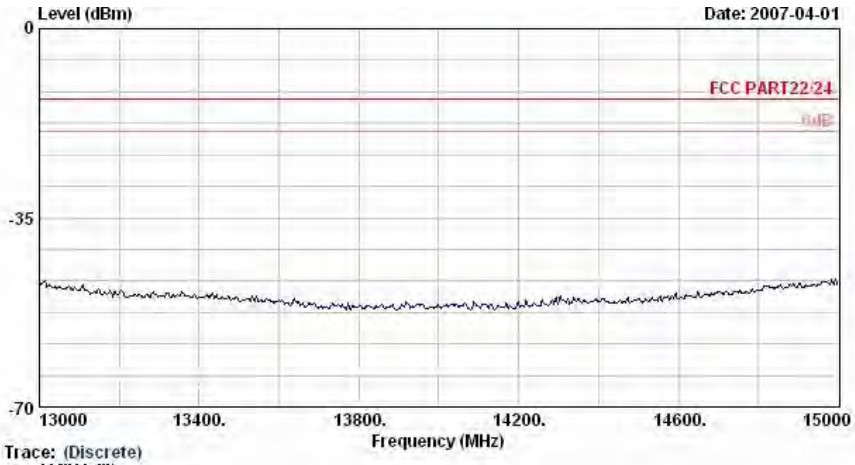
Trace: (Discrete)

Site : 03CH06-HY
Condition : HF-SPURIOUS VERTICAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : HSDPA Link+Adaptor
Plane : E2



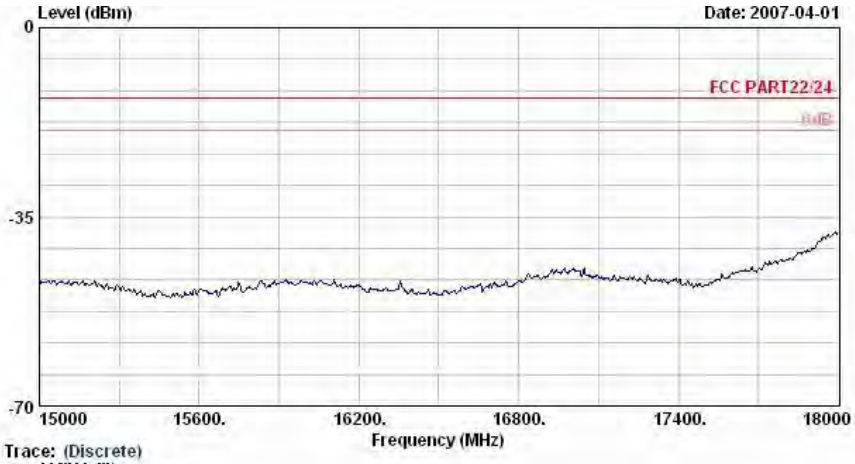
Trace: (Discrete)

Site : 03CH06-HY
Condition : HF-SPURIOUS VERTICAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : HSDPA Link+Adaptor
Plane : E2



Trace: (Discrete)

Site	:	03CH06-HY
Condition	:	HF-SPURIOUS VERTICAL
EUT	:	Pocket PC phone For FCC
Power	:	120Vac/60Hz
Model	:	FG 731703
Mode	:	HSDPA Link+Adaptor
Plane	:	E2

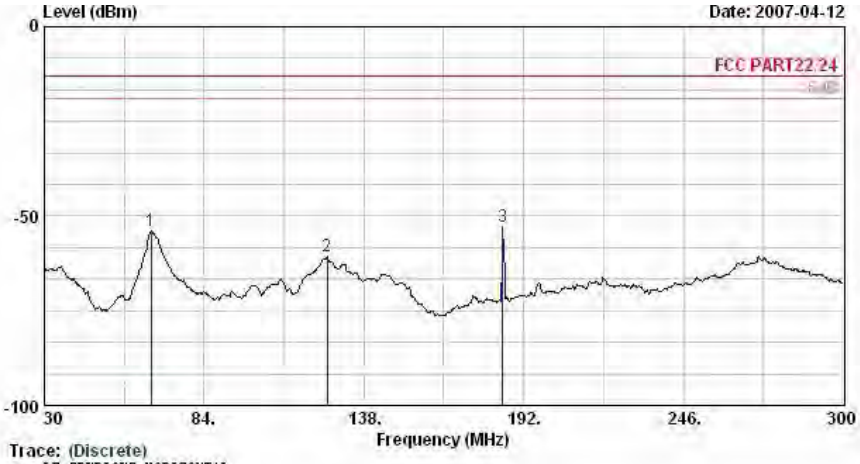


Trace: (Discrete)

Site	:	03CH06-HY
Condition	:	HF-SPURIOUS VERTICAL
EUT	:	Pocket PC phone For FCC
Power	:	120Vac/60Hz
Model	:	FG 731703
Mode	:	HSDPA Link+Adaptor
Plane	:	E2

Remark：There is no more obvious emission except the listings above.

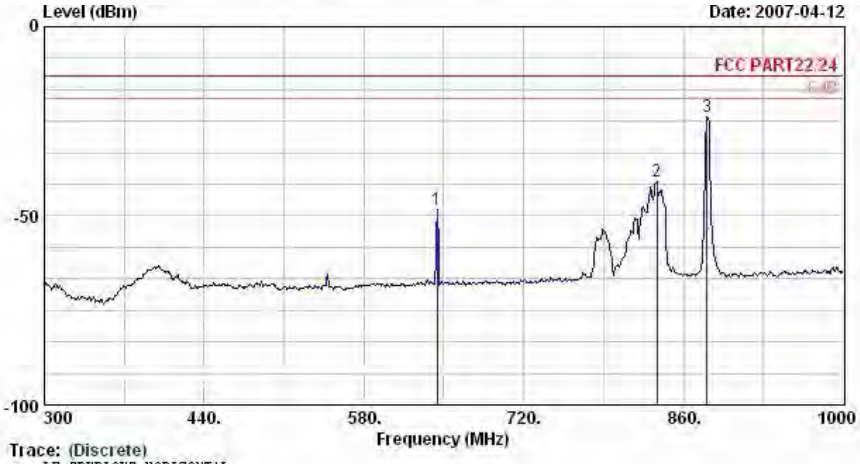
4.6.5.90 Mode 9
Horizontal Polarization



Trace: (Discrete)

Condition : LF-SPURIOUS HORTZONTAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : GSM850 Link;Ch189+WLAN 11b_Tx_Ch11
: +Adaptor
Plane : E2

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1	66.18	-54.00	-41.00	-13.00	-41.63	-12.37	Peak
2	125.58	-60.62	-47.62	-13.00	-48.08	-12.54	Peak
3 @	184.98	-52.75	-39.75	-13.00	-39.53	-13.22	Peak

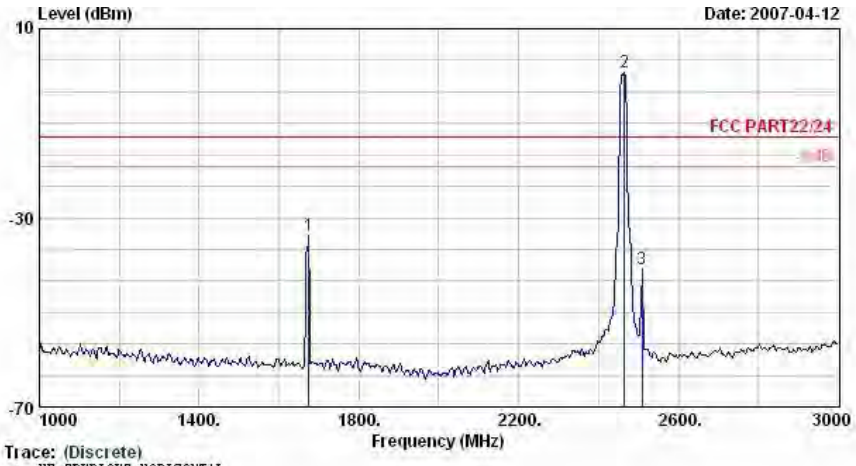


Trace: (Discrete)

Condition : LF-SPURIOUS HORTZONTAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : GSM850 Link;Ch189+WLAN 11b_Tx_Ch11
: +Adaptor
Plane : E2

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	644.40	-48.33	-35.33	-13.00	-45.04	-3.29	Peak
2 @	836.90	-40.88			-39.54	-1.33	Peak
3 @	880.30	-23.98			-23.06	-0.91	Peak

Remark:
1. #2: MS Signal
2. #3: BS Signal

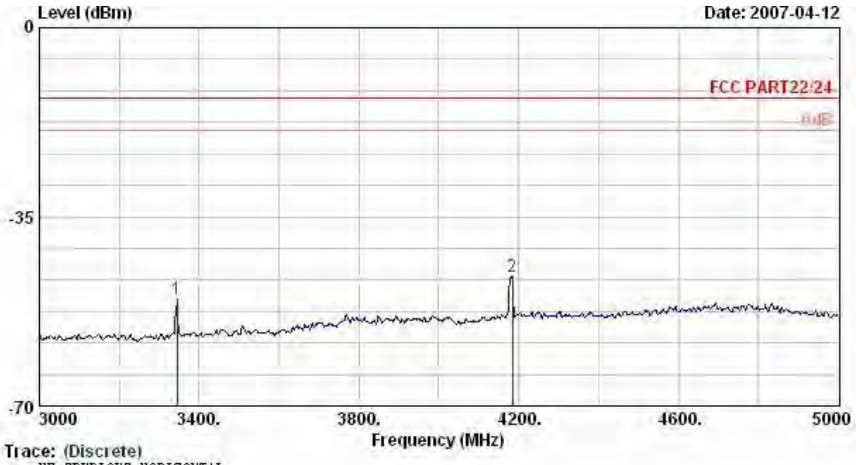


Trace: (Discrete)

Condition	: HF-SPURIOUS HORTZONTAL
EUT	: Pocket PC phone For FCC
Power	: 120Vac/60Hz
Model	: FG 731703
Mode	: GSM850 Link;Ch189+WLAN 11b_Tx_Ch11
	: +Adaptor
Plane	: E2

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	1674.00	-33.66	-20.66	-13.00	-33.89	0.22	Peak
2 @	2464.00	0.87			-0.24	1.11	Peak
3 @	2508.00	-40.86	-27.86	-13.00	-42.06	1.20	Peak

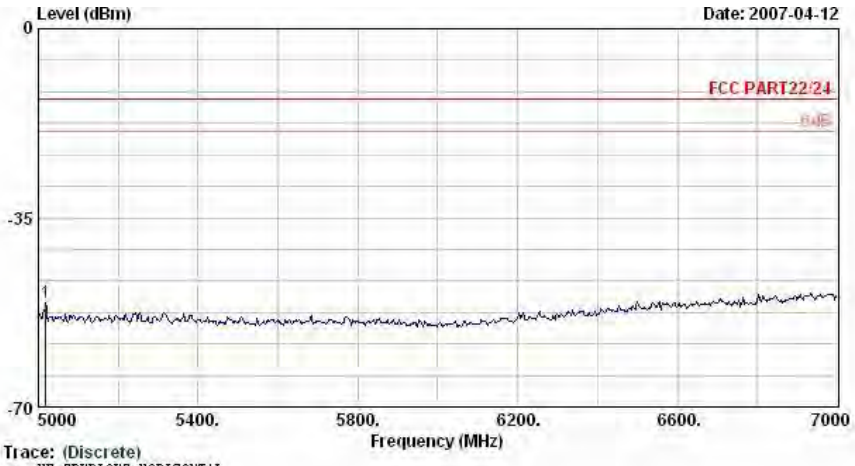
Remark:
1. #2: WLAN Signal



Trace: (Discrete)

Condition	: HF-SPURIOUS HORTZONTAL
EUT	: Pocket PC phone For FCC
Power	: 120Vac/60Hz
Model	: FG 731703
Mode	: GSM850 Link;Ch189+WLAN 11b_Tx_Ch11
	: +Adaptor
Plane	: E2

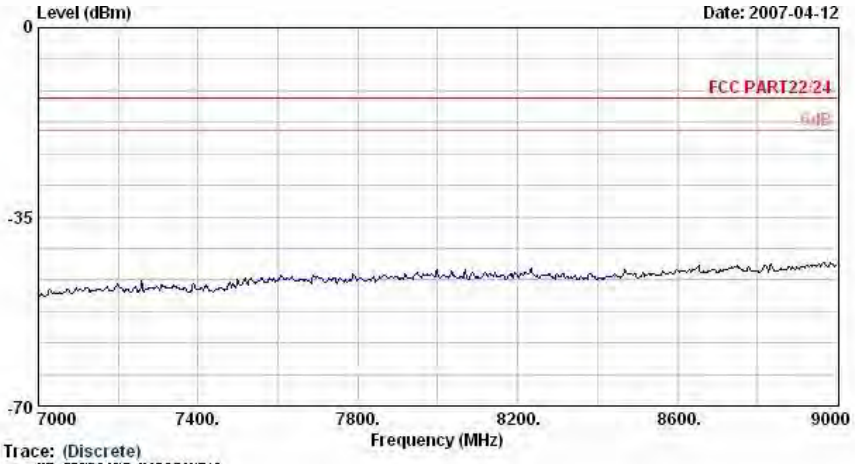
	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	3344.00	-50.34	-37.34	-13.00	-55.75	5.41	Peak
2 @	4184.00	-46.10	-33.10	-13.00	-55.88	9.79	Peak



Trace: (Discrete)

Condition : HF-SPURIOUS HORTZONTAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : GSM850 Link;Ch189+WLAN 11b_Tx_Ch11
: +Adaptor
Plane : E2

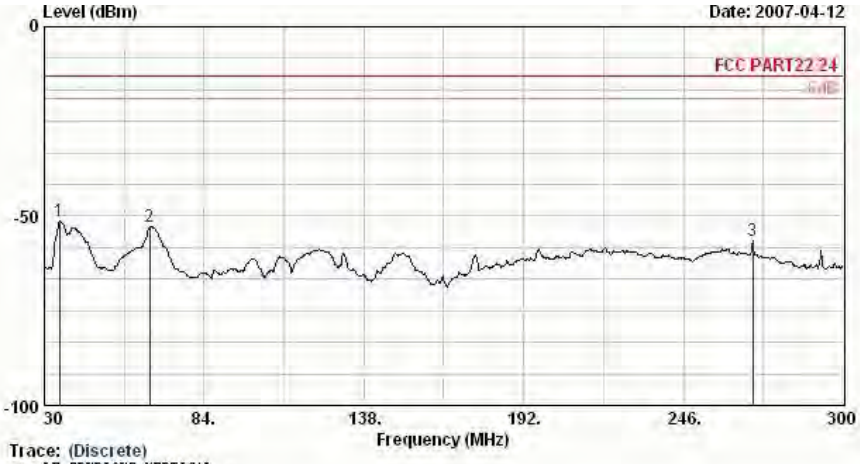
	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	5018.00	-50.74	-37.74	-13.00	-60.98	10.24	Peak



Trace: (Discrete)

Condition : HF-SPURIOUS HORTZONTAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : GSM850 Link;Ch189+WLAN 11b_Tx_Ch11
: +Adaptor
Plane : E2

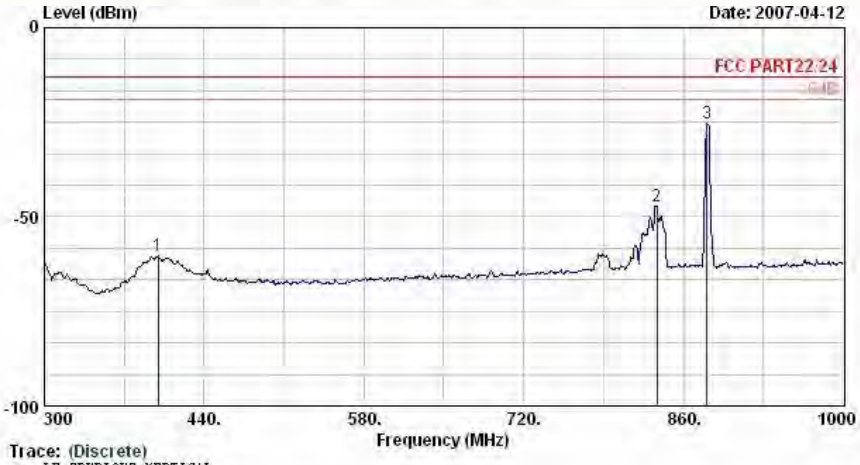
Vertical Polarization



Trace: (Discrete)

Condition : LF-SPURIOUS VERTICAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : GSM850 Link;Ch189+WLAN 11b_Tx_Ch11
: +Adaptor
Plane : E2

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	35.13	-51.27	-38.27	-13.00	-40.83	-10.44	Peak
2	65.64	-52.86	-39.86	-13.00	-40.28	-12.58	Peak
3	269.49	-56.51	-43.51	-13.00	-49.41	-7.10	Peak

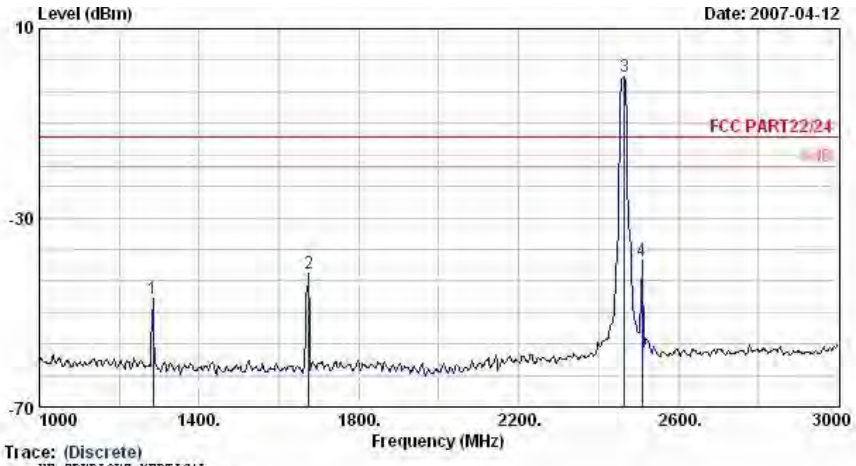


Trace: (Discrete)

Condition : LF-SPURIOUS VERTICAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : GSM850 Link;Ch189+WLAN 11b_Tx_Ch11
: +Adaptor
Plane : E2

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1	399.40	-60.34	-47.34	-13.00	-56.01	-4.33	Peak
2 @	836.90	-47.30			-48.67	1.36	Peak
3 @	880.30	-25.19			-26.90	1.71	Peak

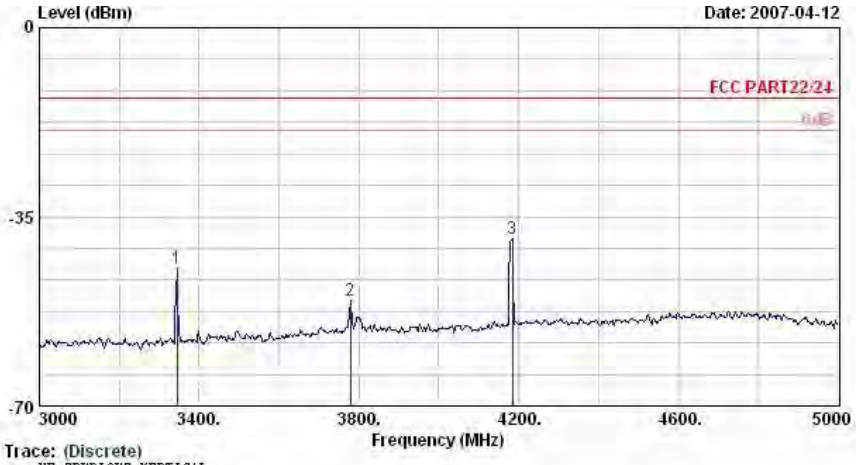
Remark:
1. #2: MS Signal
2. #3: BS Signal



Condition : HF-SPURIOUS VERTICAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : GSM850 Link;Ch189+WLAN 11b_Tx_Ch11
: +Adaptor
Plane : E2

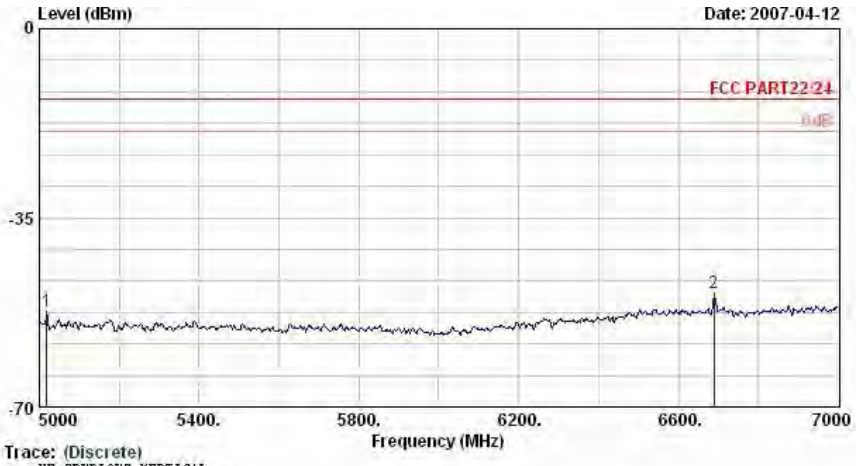
	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	1284.00	-47.24	-34.24	-13.00	-46.41	-0.83	Peak
2 @	1674.00	-41.80	-28.80	-13.00	-41.32	-0.48	Peak
3 @	2464.00	-0.15			-2.30	2.16	Peak
4 @	2508.00	-39.10	-26.10	-13.00	-41.37	2.27	Peak

Remark:
1. #3: WLAN Signal



Condition : HF-SPURIOUS VERTICAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : GSM850 Link;Ch189+WLAN 11b_Tx_Ch11
: +Adaptor
Plane : E2

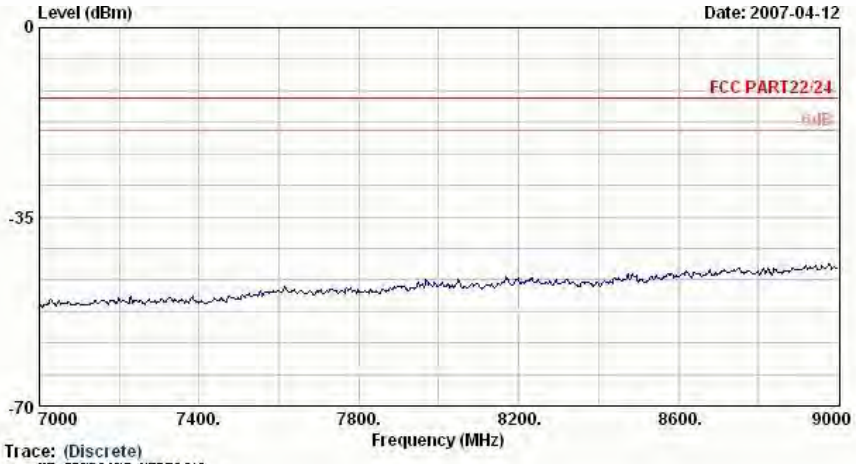
	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	3344.00	-44.53	-31.53	-13.00	-48.99	4.47	Peak
2 @	3778.00	-50.61	-37.61	-13.00	-57.52	6.91	Peak
3 @	4184.00	-38.98	-25.98	-13.00	-47.33	8.36	Peak



Trace: (Discrete)

Condition : HF-SPURIOUS VERTICAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : GSM850 Link;Ch189+WLAN 11b_Tx_Ch11
: +Adaptor
Plane : E2

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	5018.00	-52.24	-39.24	-13.00	-61.09	8.85	Peak
2 @	6688.00	-48.82	-35.82	-13.00	-60.35	11.53	Peak



Trace: (Discrete)

Condition : HF-SPURIOUS VERTICAL
EUT : Pocket PC phone For FCC
Power : 120Vac/60Hz
Model : FG 731703
Mode : GSM850 Link;Ch189+WLAN 11b_Tx_Ch11
: +Adaptor
Plane : E2

Remark：There is no more obvious emission except the listings above.

4.7 Frequency Stability (Temperature Variation)

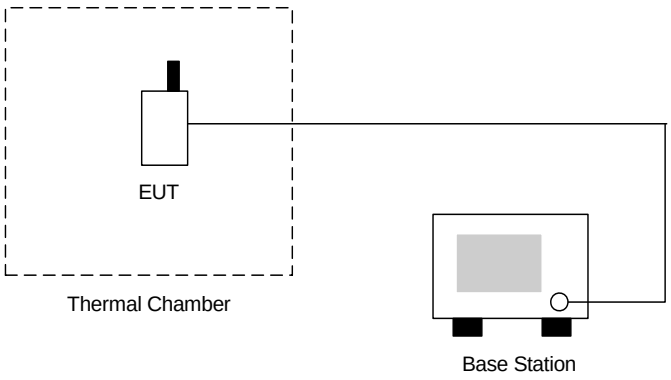
4.7.1 Measurement Instrument

As decribed in chapter 5 of this test report.

4.7.2 Test Procedure

1. The EUT and test equipment were set up as shown on the following section.
2. With all power removed, the temperature was decreased to -30°C and permitted to stabilize for three hours. Power was applied and the maximum change in frequency was note within one minute.
3. With power OFF, the temperature was raised in 10°C steps. The sample was permitted to stabilize at each step for at least one-half hour. Power was applied and the maximum frequency change ws 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 : GSM850 (GSM) CH189

Temperature(°C)	Change (Hz)	Change (ppm)	Limit (ppm)	Result
-30	15	0.01	2.5	Passed
-20	-17	-0.01		
-10	-2	0.00		
0	33	0.02		
10	21	0.01		
20	-5	0.00		
30	19	0.01		
40	42	0.02		
50	25	0.01		

- Test Mode : PCS1900 (GSM) CH661

Temperature(°C)	Change (Hz)	Change (ppm)	Limit (ppm)	Result
-30	32	0.02	2.5	Passed
-20	18	0.01		
-10	-3	0.00		
0	22	0.01		
10	7	0.00		
20	14	0.01		
30	-25	-0.01		
40	19	0.01		
50	21	0.01		

- Test Mode : WCDMA Band V (RMC 144Kbps) CH4182

Temperature(°C)	Change (Hz)	Change (ppm)	Limit (ppm)	Result
-30	18	0.01	2.5	Passed
-20	-22	-0.01		
-10	31	0.02		
0	15	0.01		
10	9	0.00		
20	-3	0.00		
30	27	0.01		
40	4	0.00		
50	15	0.01		

- Test Mode : WCDMA Band II (RMC 144Kbps) CH9400

Temperature(°C)	Change (Hz)	Change (ppm)	Limit (ppm)	Result
-30	19	0.01	2.5	Passed
-20	7	0.00		
-10	22	0.01		
0	-13	-0.01		
10	5	0.00		
20	12	0.01		
30	-8	0.00		
40	14	0.01		
50	24	0.01		

4.8 Frequency Stability (Voltage Variation)

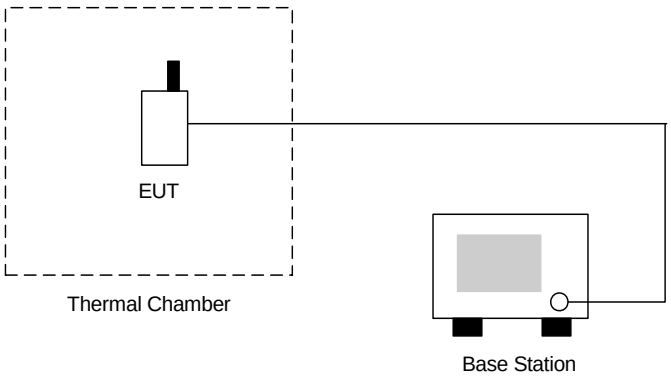
4.8.1 Measurement Instrument

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 °C 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 : GSM850 (GSM) CH189

Voltage(Volt)	Change (Hz)	Change (ppm)	Limit (ppm)	Result
3.7	25.0	0.01	2.5	Passed
BEP	-12.0	-0.01		
4.3	-1.0	0.00		

- Test Mode : PCS1900 (GSM) CH661

Voltage(Volt)	Change (Hz)	Change (ppm)	Limit (ppm)	Result
3.7	-9.0	0.00	2.5	Passed
BEP	18.0	0.01		
4.3	7.0	0.00		

- Test Mode : WCDMA Band V (RMC 144Kbps) CH4182

Voltage(Volt)	Change (Hz)	Change (ppm)	Limit (ppm)	Result
3.7	23.0	0.01	2.5	Passed
BEP	8.0	0.00		
4.3	12.0	0.01		

- Test Mode : WCDMA Band II (RMC 144Kbps) CH9400

Voltage(Volt)	Change (Hz)	Change (ppm)	Limit (ppm)	Result
3.7	14.00	0.01	2.5	Passed
BEP	2.00	0.00		
4.3	9.00	0.00		

Remark:
1. Normal Voltage=3.7V.
2. Battery End Point (BEP)=3.4 V.

5 List of Measurement Equipments

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Due Date	Remark
Spectrum analyzer	Agilent	E4408B	MY44211030	9KHz-26.5GHz	Oct. 05, 2006	Oct. 04, 2007	Radiation (03CH06-HY)
EMI Test Receiver	R&S	ESCS30	100356	9KHz-2.75GHz	Jul. 13, 2006	Jul. 12, 2007	Radiation (03CH06-HY)
Controller	INN-CO	CO2000	N/A	N/A	N/A	N/A	Radiation (03CH06-HY)
Bilog Antenna	SCHAFFNER	CBL6112B	2885	30MHz -2GHz	Nov. 20, 2006	Nov. 19, 2007	Radiation (03CH06-HY)
Double Ridge Horn Antenna	Com-Power	AH118	10094	1G~18G	Dec. 26, 2006	Dec. 25, 2007	Radiation (03CH06-HY)
SHF-EHF Horn	SCHWARZBECK	BBHA 9170	9170-249	14G - 40G	Nov. 20, 2006	Nov. 19, 2008	Radiation (03CH06-HY)
Pre Amplifier	Agilent	8449B	3008A01917	1G - 26.5G	Nov. 15, 2006	Nov. 14, 2007	Radiation (03CH06-HY)
Pre Amplifier	Mini Circuits	ZKL-2	D092004-1	10~2500MHz	Nov. 15, 2006	Nov. 14, 2007	Radiation (03CH06-HY)
Turn Table	INN-CO	DS2000	420/650/00	0 ~ 360 degree	N/A	N/A	Radiation (03CH06-HY)
Antenna Mast	INN-CO	MM3000	114/8000604/L	1 m - 4 m	N/A	N/A	Radiation (03CH06-HY)
Base Station Simulator	R & S	CMU200	106656	WCDMA	Nov. 20, 2006	Nov. 19, 2007	Radiation (03CH06-HY)

6 Uncertainty Evaluation

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

Contribution	Uncertainty of x_i		$u(x_i)$
	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 x_i		$u(x_i)$	Ci	$Ci*u(x_i)$
	dB	Probability Distribution			
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 Γ1= 0.197 Antenna VSWR Γ2= 0.194 Uncertainty=20log(1-Γ1*Γ2*Γ3)	+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**				

END OF TEST REPORT