FCC / IC TEST REPORT

for

47 CFR Part 22H, 24E, RSS-132, and RSS-133

Equipment	:	**PDA Phone**
Trade Name	:	**palm**
Model No.	:	**Treo 750**
FCC ID	:	**O8F-KITT**
IC ID	:	**3905A-KITT**
Tx Frequency Range	:	**GSM850 : 824~849 MHz** **PCS : 1850~1910 MHz** **WCDMA Band 5 : 824~849 MHz** **WCDMA Band 2 : 1850~1910 MHz**
Max. ERP/EIRP Power	:	**GSM850 (GSM) : 0.37 W** **GSM850 (EDGE) : 0.22 W** **PCS (GSM) : 0.57 W** **PCS (EDGE) : 0.19 W** **WCDMA Band 5 : 0.07 W** **WCDMA Band 2 : 0.05 W**
Emission Designator	:	**GSM : 246KGXW** **EDGE : 244KG7W** **WCDMA : 4M22F9W**
Applicant	:	**Palm, Inc** 950 W Maude Avenue MS 22L02 Sunnyvale, CA 94085-2801

- 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 Jun. 29, 2006 at **Sporton International Inc. LAB.**
- Report No.: FG660618, Report Version: Rev. 03.

Dr. Daniel Lee
EMC/SAR Director

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

Report Issue Date: Jun. 29, 2006

Report No.	Description

1. General Information

1.1. Applicant

Palm, Inc
950 W Maude Avenue MS 22L02 Sunnyvale, CA 94085-2801

1.2 Manufacturer

Palm, Inc
950 W Maude Avenue MS 22L02 Sunnyvale, CA 94085-2801

1.3 Basic Description of Equipment under Test

Equipment	: PDA Phone
Trade Name	: palm
Model No.	: Treo 750
FCC ID	: O8F-KITT
IC ID	: 3905A-KITT
Power Supply Type	: Switching
AC Power Cord	: AC 120V, Non-shielded, Wall-mount, 1.8 meter, 2 pin
Adapter 1	: Netbit, DSC51F series
Adapter 2	: Leader, MU03-W052100-A1
Adapter 3	: MEI, SCPxxxyyyyP series
Adapter 4	: Pie, P005WA050J01200
Battery 1	: Tyco, B6177
Battery 2	: SAMSUNG, ICP653450U

Remark: Battery 1 and Battery 2 have the same circuit design, only battery 2 was used for testing.

1.4 Feature of Equipment under Test

DUT Type :	PDA Phone
Trade Name :	palm
Model Name :	Treo 750
FCC ID :	O8F-KITT
IC ID :	3905A-KITT
Tx Frequency :	GSM850 : 824 ~ 849 MHz PCS : 1850 ~1910 MHz WCDMA Band 5 : 824~849 MHz WCDMA Band 2 : 1850~1910 MHz Bluetooth : 2400~2483.5 MHz
Rx Frequency :	GSM 850 : 869 ~ 894 MHz PCS : 1930 ~ 1990 MHz WCDMA Band 5 : 869~894 MHz WCDMA Band 2 : 1930~1990 MHz Bluetooth : 2400~2483.5 MHz
Antenna Type :	Fixed Internal
Maximum Output Power to Antenna :	GSM850 (GSM) : 32.60 dBm GSM850 (EDGE) : 26.8 dBm PCS (GSM) : 29.70 dBm PCS (EDGE) : 25.4 dBm WCDMA Band 5 : 23.51 dBm WCDMA Band 2 : 23.76 dBm Bluetooth : 1.22 dBm
Maximum ERP/EIRP :	GSM850 (GSM) : 0.37 W (25.67 dBm) GSM850 (EDGE) : 0.22 W (23.46 dBm) PCS (GSM) : 0.57 W (27.57 dBm) PCS (EDGE) : 0.19 W (22.80 dBm) WCDMA Band 5 : 0.07 W (18.39 dBm) WCDMA Band 2 : 0.05 W (17.09 dBm)
HW Version :	DVT
SW Version :	0.85
Power Rating (DC/AC , Voltage and Current of RF element or PA) :	DC 3.7V
Digital Modulation Emission :	GSM850/PCS : GMSK EDGE : 8PSK WCDMA : QPSK Bluetooth : GFSK
Type of Emission :	GSM : 246KGXW EDGE : 244KG7W WCDMA : 4M22F9W
DUT Stage :	Identical Prototype

1.5 Report Date

EUT Received : Mar. 03, 2006

Report Date : Jun. 29, 2006

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 5; 30MHz to 19000 MHz for PCS and WCDMA Band 2.

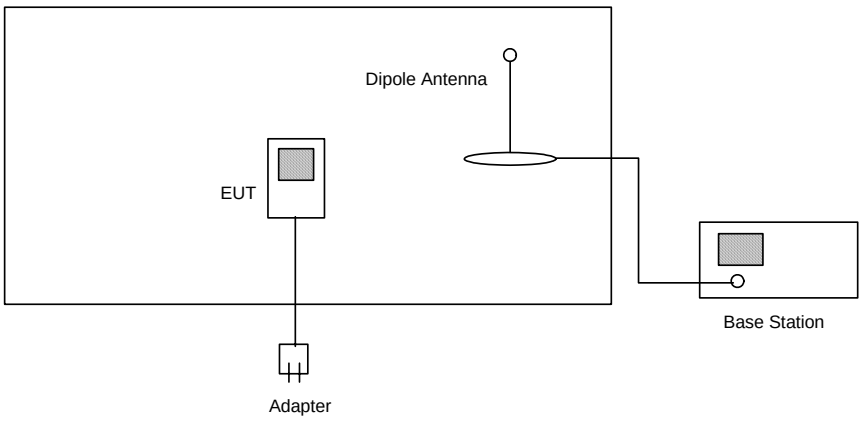
2.1.1 Testing Rationale

RMC 12.2 Kbps is the main test mode for WCDMA. From the appendix B, the conducted output power, the bandedge and the conducted spurious emissioin for all WCDMA modes have no obvious deviation. Therefore, RMC 12.2 Kbps can be used as the main test mode for all test items.

2.2 Test Mode

Application	GSM 850	PCS 1900	WCDMA Band 5	WCDMA Band 2
Radiated Emission	☒ Mode 1: GSM Link_CH 189 ☒ Mode 2: EDGE Link_CH 189 ☒ Mode 7: CH 189+Bluetooth CH00	☒ Mode 3: GSM Link_CH 661 ☒ Mode 4: EDGE Link_CH 661	☒ Mode 5: CH 4182	☒ Mode 6: CH 9400
Conducted Measurement	☒ Mode 1: GSM_CH 189 ☒ Mode 2: EDGE_CH 189	☒ Mode 3: GSM_CH 661 ☒ Mode 4: EDGE_CH 661	☒ Mode 5: CH 4182	☒ Mode 6: CH 9400

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. The Industry Canada file number for this site is IC 4088.

3.1 Test Voltage

120V/ 60Hz

3.2 Test in Compliance with

47 CFR Part 22H, 24E, Part 2, RSS-132 Issue 2, and RSS-133 Issue 3.

3.3 Frequency Range Investigated

a. Radiation: from 30MHz to 9000MHz for GSM850 and WCDMA Band 5.
b. Radiation: from 30 MHz to 19000 MHz for PCS and WCDMA Band 2.

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	IC Rule	DESCRIPTION OF TEST	Result	Section
§2.1046	RSS-132 §4.4 RSS-133 §6.4	RF Output Power	Passed	4.2
§ 22.913 §24.232	RSS-132 §4.4 RSS-133 §6.4	ERP / EIRP	Passed	4.3
§2.1049, § 22.917, § 24.238(b)	RSS-132 §4.5 RSS-133 §6.5	Occupied Bandwidth & Band Edge Measurement	Passed	4.4
§2.1051	RSS-132 §4.5 RSS-133 §6.5	Conducted Emission	Passed	4.5
§2.1053	RSS-132 §4.5 RSS-133 §6.5	Field Strength of Spurious Radiation	Passed	4.6
§2.1055, § 22.355, §24.235	RSS-132 §4.3 RSS-133 §6.3	Frequency Stability vs. Temperature	Passed	4.7
§2.1055, §22.355, §24.235	RSS-132 §4.3 RSS-133 §6.3	Frequency Stability vs. Voltage	Passed	4.8

4.2 RF Output Power

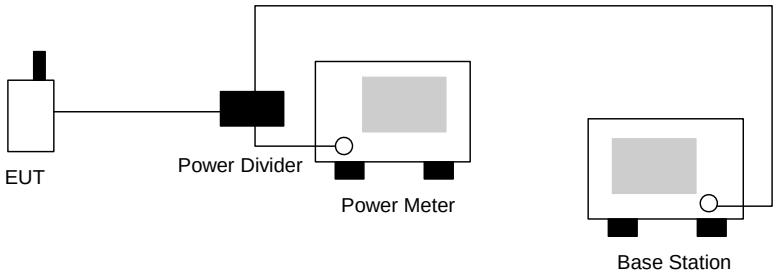
4.2.1 Measurement Instruments：

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 GSM 850 and/or PCL=0 for PCS 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)	32.60	1.820
	189	836.4 (Mid)	32.60	1.820
	251	848.8 (High)	32.60	1.820
PCS (GSM)	512	1850.2 (Low)	29.70	0.933
	661	1880.0 (Mid)	29.60	0.912
	810	1909.8 (High)	29.50	0.891
GSM850 (EDGE10)	128	824.2 (Low)	26.80	0.479
	189	836.4 (Mid)	26.80	0.479
	251	848.8 (High)	26.80	0.479
PCS (EDGE10)	512	1850.2 (Low)	25.30	0.339
	661	1880.0 (Mid)	25.40	0.347
	810	1909.8 (High)	25.20	0.331
WCDMA Band 5	4132	826.4 (Low)	23.38	0.218
	4182	836.4 (Mid)	23.51	0.224
	4233	846.6 (High)	23.25	0.211
WCDMA Band 2	9262	1852.4 (Low)	23.76	0.238
	9400	1880.0 (Mid)	23.74	0.237
	9538	1907.6 (High)	23.72	0.236

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

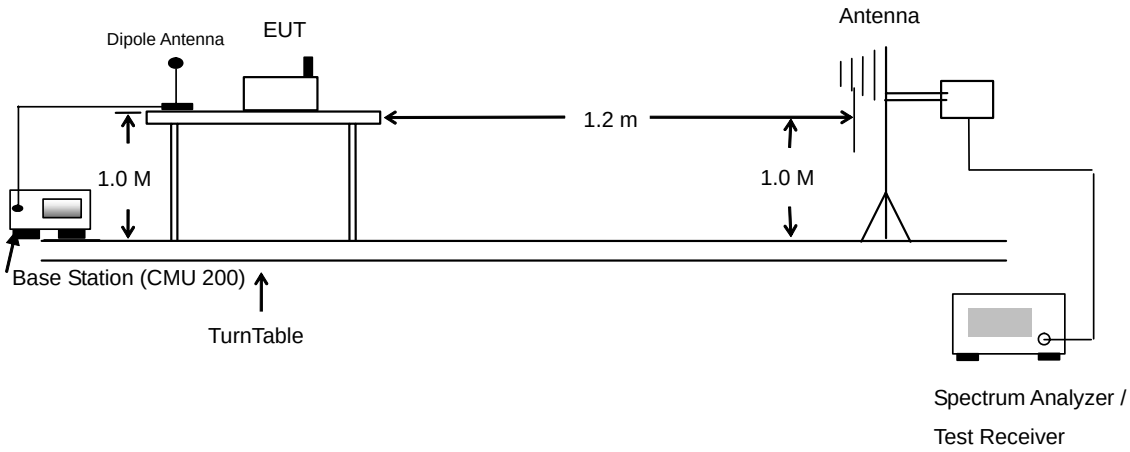
   Es = Rs + AF

   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)
824.2	-21.77	-48.12	0	-1.08	25.27	0.34
836.4	**-21.68**	**-48.28**	**0**	**-0.93**	**25.67**	**0.37**
848.8	-22.82	-48.35	0	-0.76	24.77	0.30
Vertical Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBd)	ERP (dBm)	ERP (W)
824.2	-24.78	-47.97	0	-1.08	22.11	0.16
836.4	-24.71	-48.01	0	-0.93	22.37	0.17
848.8	-25.92	-48.05	0	-0.76	21.37	0.14

PCS (GSM) Radiated Power EIRP						
Horizontal Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBi)	EIRP (dBm)	EIRP (W)
1850.2	-30.39	-51.88	0	1.96	23.45	0.22
1880.0	-29.13	-52.99	0	2.00	25.86	0.39
1909.8	**-28.69**	**-54.28**	**0**	**1.98**	**27.57**	**0.57**
Vertical Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBi)	EIRP (dBm)	EIRP (W)
1850.2	-41.10	-52.13	0	1.96	12.99	0.02
1880.0	-40.12	-53.17	0	2.00	15.05	0.03
1909.8	-40.26	-54.13	0	1.98	15.85	0.04

GSM850 (EDGE) Radiated Power ERP						
Horizontal Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBd)	ERP (dBm)	ERP (W)
824.2	-38.74	-48.12	0	-1.08	8.30	0.01
836.4	-38.58	-48.28	0	-0.93	8.77	0.01
848.8	-36.88	-48.35	0	-0.76	10.71	0.01
Vertical Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBd)	ERP (dBm)	ERP (W)
824.2	-26.33	-47.97	0	-1.08	20.56	0.11
836.4	-25.83	-48.01	0	-0.93	21.25	0.13
848.8	**-23.83**	**-48.05**	**0**	**-0.76**	**23.46**	**0.22**

PCS (EDGE) Radiated Power EIRP						
Horizontal Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBi)	EIRP (dBm)	EIRP (W)
1850.2	-33.32	-51.88	0	1.96	20.52	0.11
1880.0	-35.08	-52.99	0	2	19.91	0.10
1909.8	-37.00	-54.28	0	1.98	19.26	0.08
Vertical Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBi)	EIRP (dBm)	EIRP (W)
1850.2	**-31.29**	**-52.13**	**0**	**1.96**	**22.80**	**0.19**
1880.0	-33.35	-53.17	0	2	21.82	0.15
1909.8	-35.22	-54.13	0	1.98	20.89	0.12

WCDMA Band 5 Radiated Power ERP						
Horizontal Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBd)	ERP (dBm)	ERP (W)
826.4	-29.63	-48.12	0	-1.08	17.41	0.06
836.4	**-28.96**	**-48.28**	**0**	**-0.93**	**18.39**	**0.07**
846.6	-29.51	-48.35	0	-0.76	18.08	0.06
Vertical Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBd)	ERP (dBm)	ERP (W)
826.4	-31.85	-47.97	0	-1.08	15.04	0.03
836.4	-31.43	-48.01	0	-0.93	15.65	0.04
846.6	-31.97	-48.05	0	-0.76	15.32	0.03

WCDMA Band 2 Radiated Power EIRP						
Horizontal Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBi)	EIRP (dBm)	EIRP (W)
1852.4	-40.17	-51.88	0	1.96	13.67	0.02
1880.0	-38.98	-52.99	0	2.00	16.01	0.04
1907.6	**-39.17**	**-54.28**	**0**	**1.98**	**17.09**	**0.05**
Vertical Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBi)	EIRP (dBm)	EIRP (W)
1852.4	-49.53	-52.13	0	1.96	4.56	0.00
1880.0	-49.00	-53.17	0	2.00	6.17	0.00
1907.6	-49.05	-54.13	0	1.98	7.06	0.01

4.4 Occupied Bandwidth and Band Edge Measurement

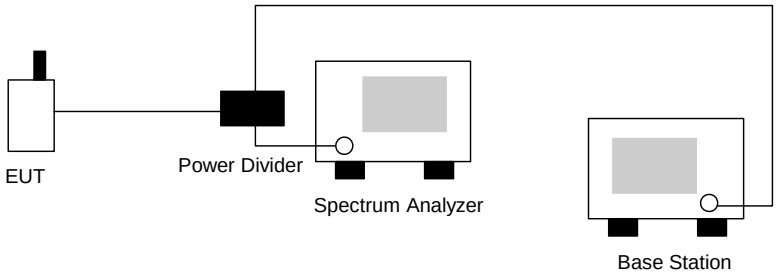
4.4.1 Measurement Instruments

As described in chapter 5 of this test report.

4.4.2 Test Procedure

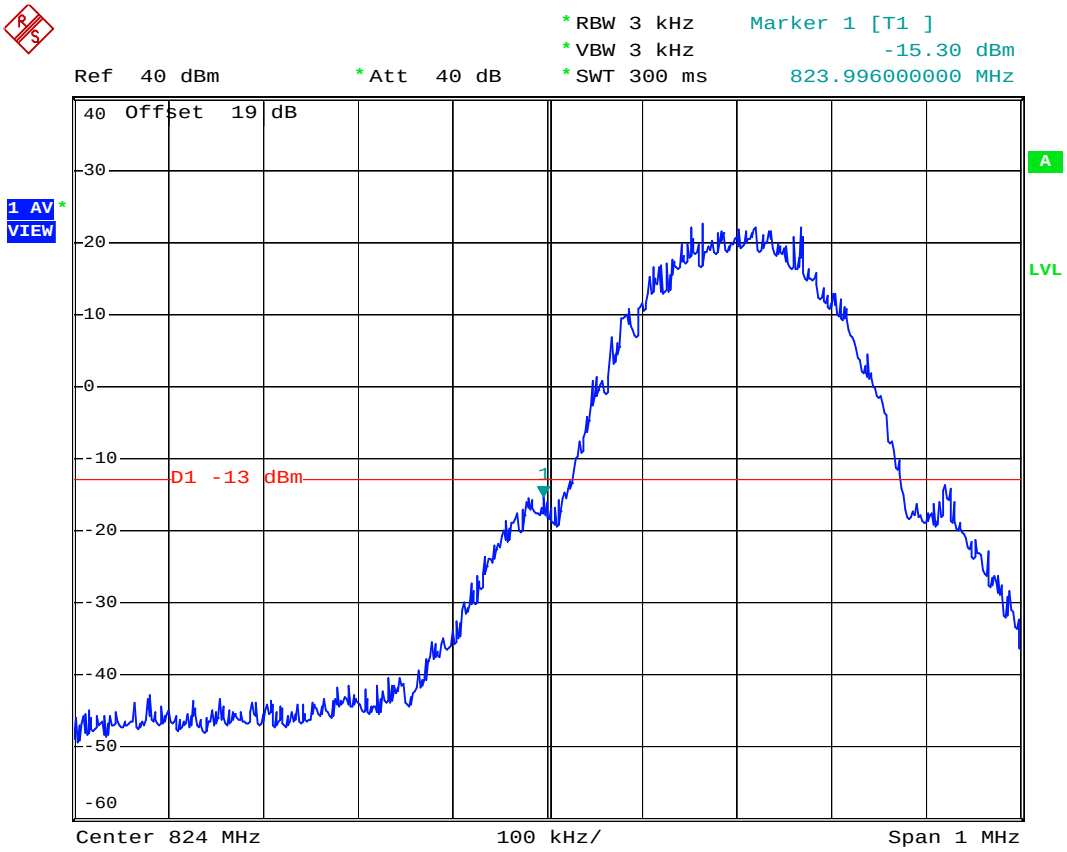
1. The EUT was connected to Spectrum Analyzer and Base Station via power divider.
2. The 99% occupied bandwidth of middle channel for the highest and lowest RF powers were measured.
3. The bandedge of low and high channels for the highest RF powers within the transmitting frequency band were measured.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

4.4.3 Test Setup Layout



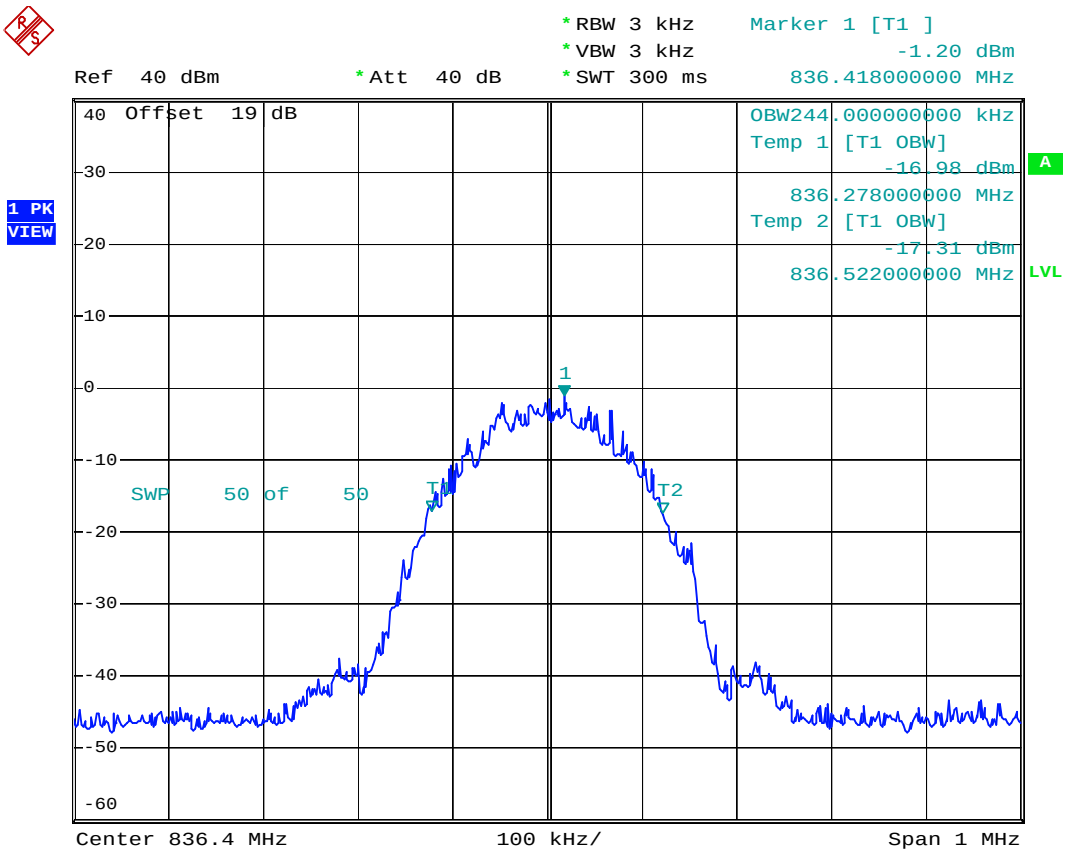
4.4.4 Test Result

- Mode 1
- Test Mode : GSM 850 (GSM) CH128 Lower Band Edge
- Power State : High



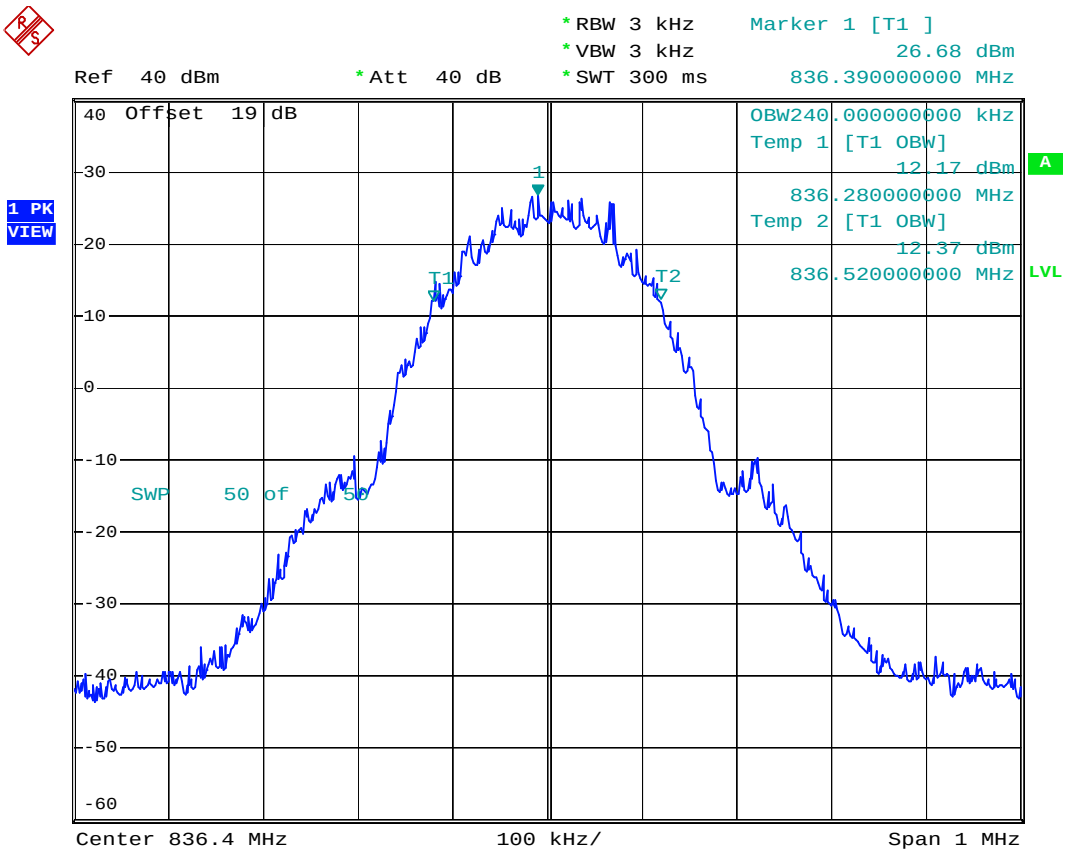
Date: 4.MAR.2006 21:24:17

- Test Mode : GSM 850 (GSM) CH189 99% Occupid Bandwidth
- Power State : Low



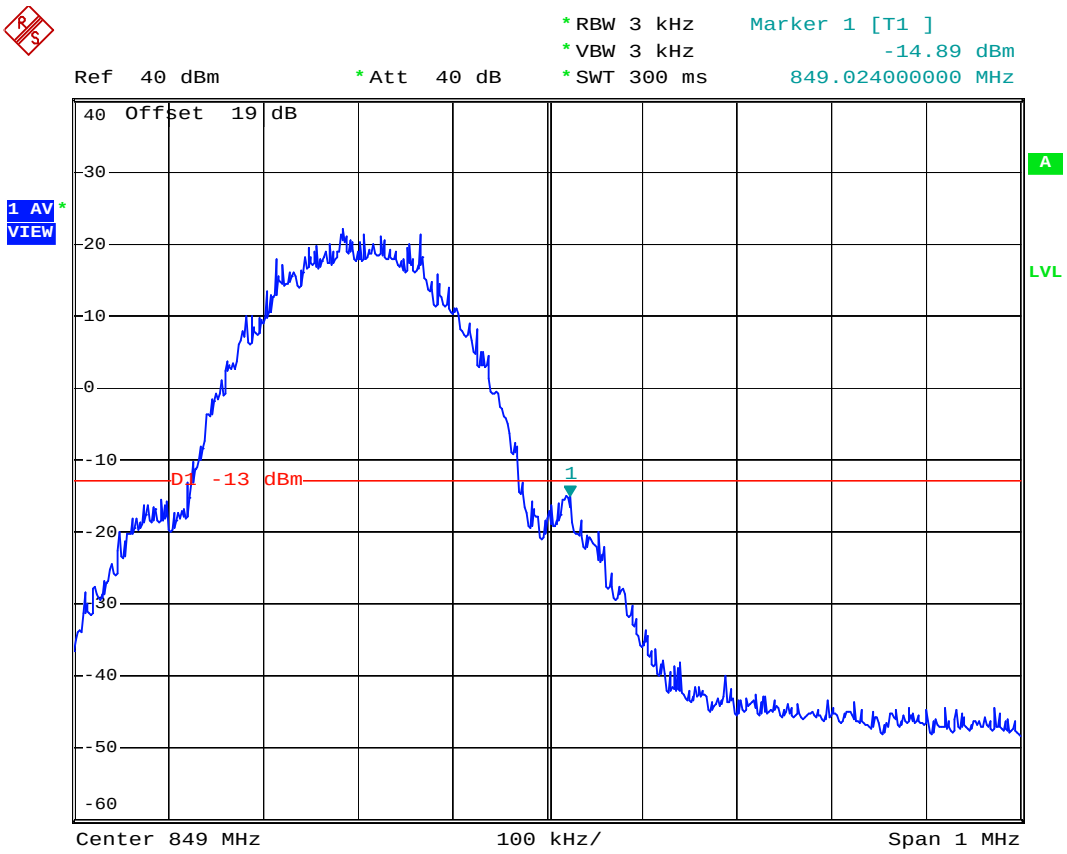
Date: 4.MAR.2006 22:26:19

- Test Mode : GSM 850 (GSM) CH189 99% Occupid Bandwidth
- Power State : High



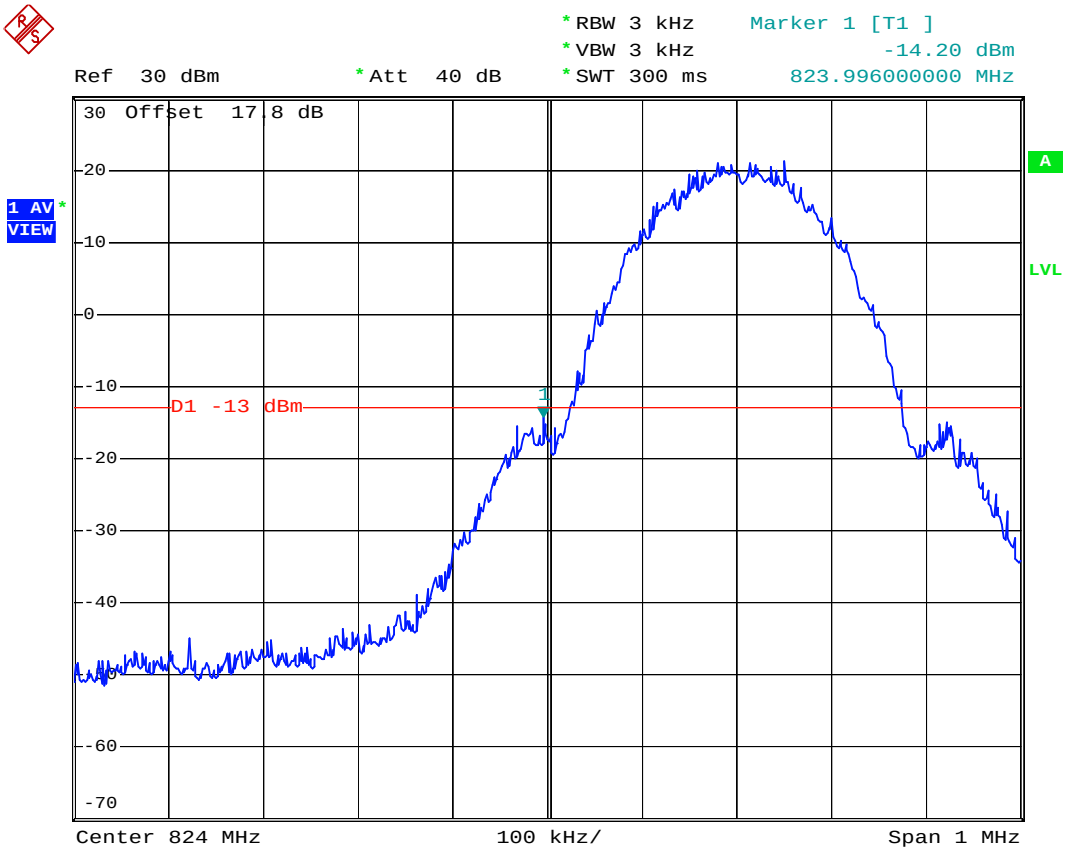
Date: 4.MAR.2006 22:25:12

- Test Mode : GSM 850 (GSM) CH251 Higher Band Edge
- Power State : High



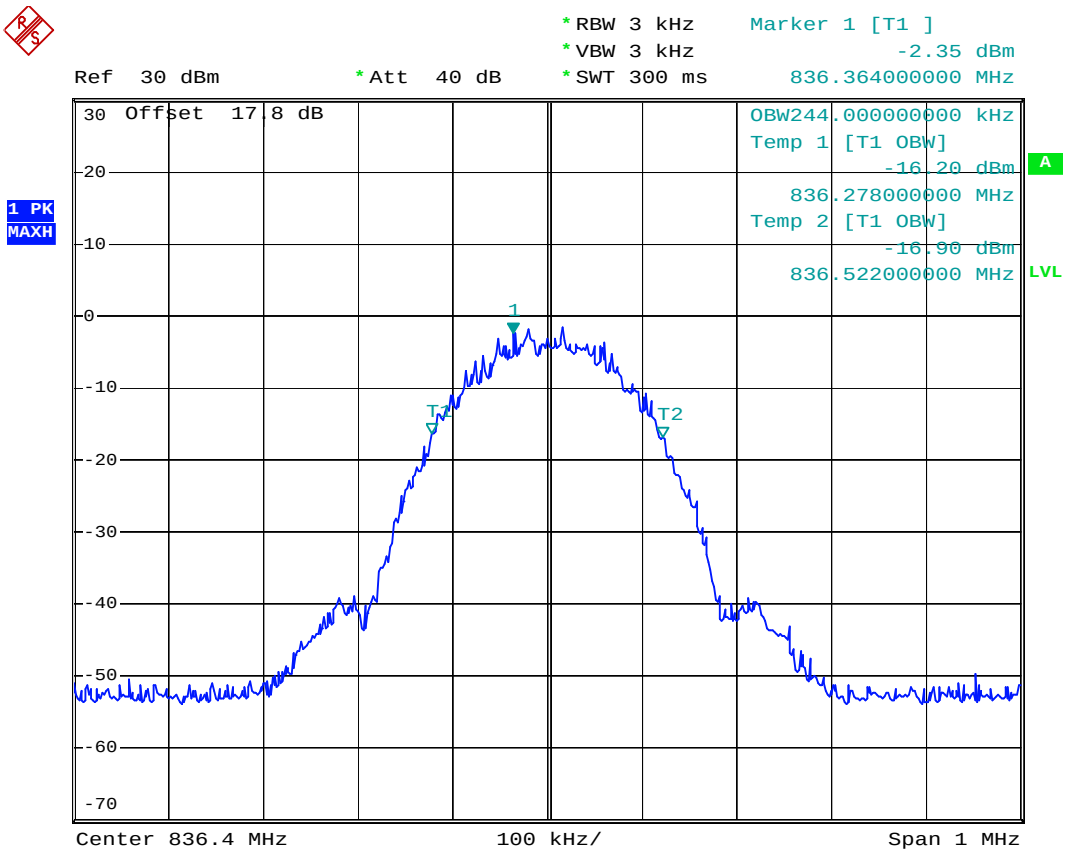
Date: 4.MAR.2006 21:26:42

- Mode 2
- Test Mode : GSM 850 (EDGE) CH128 Lower Band Edge
- Power State : High



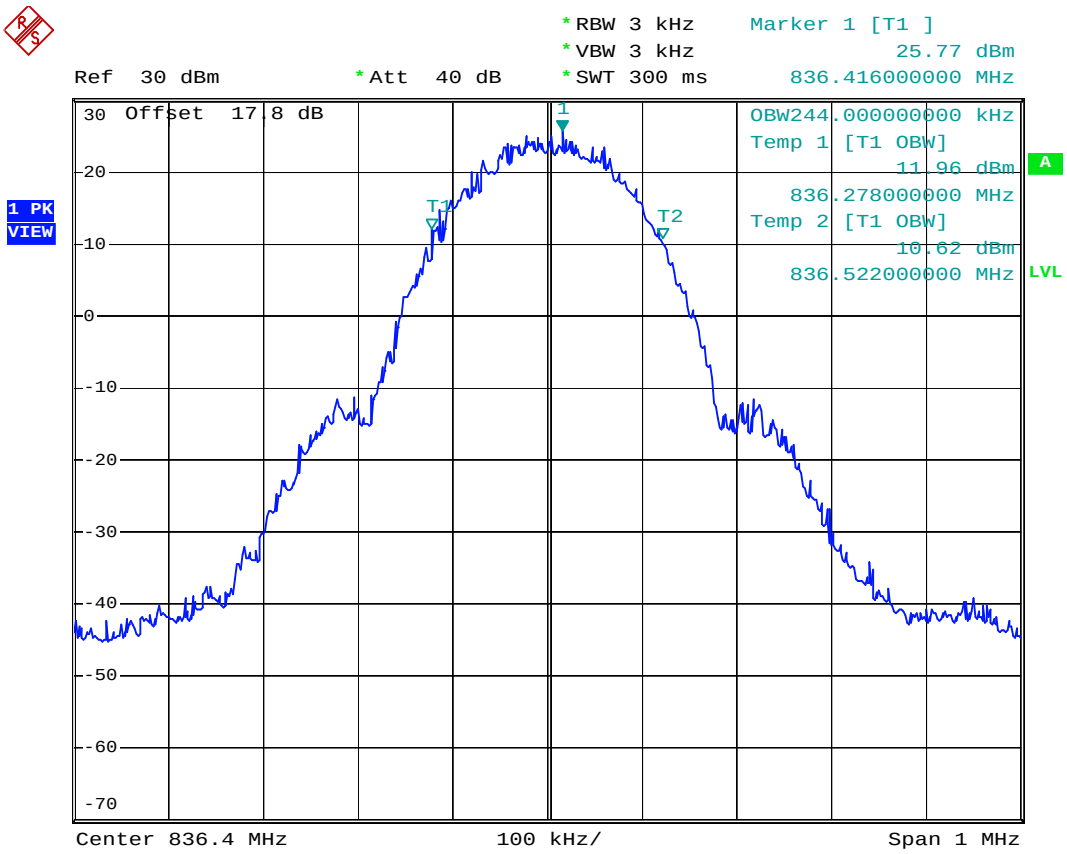
Date: 27.JUN.2006 18:43:43

- Test Mode : GSM 850 (EDGE) CH189 99% Occupid Bandwidth
- Power State : Low



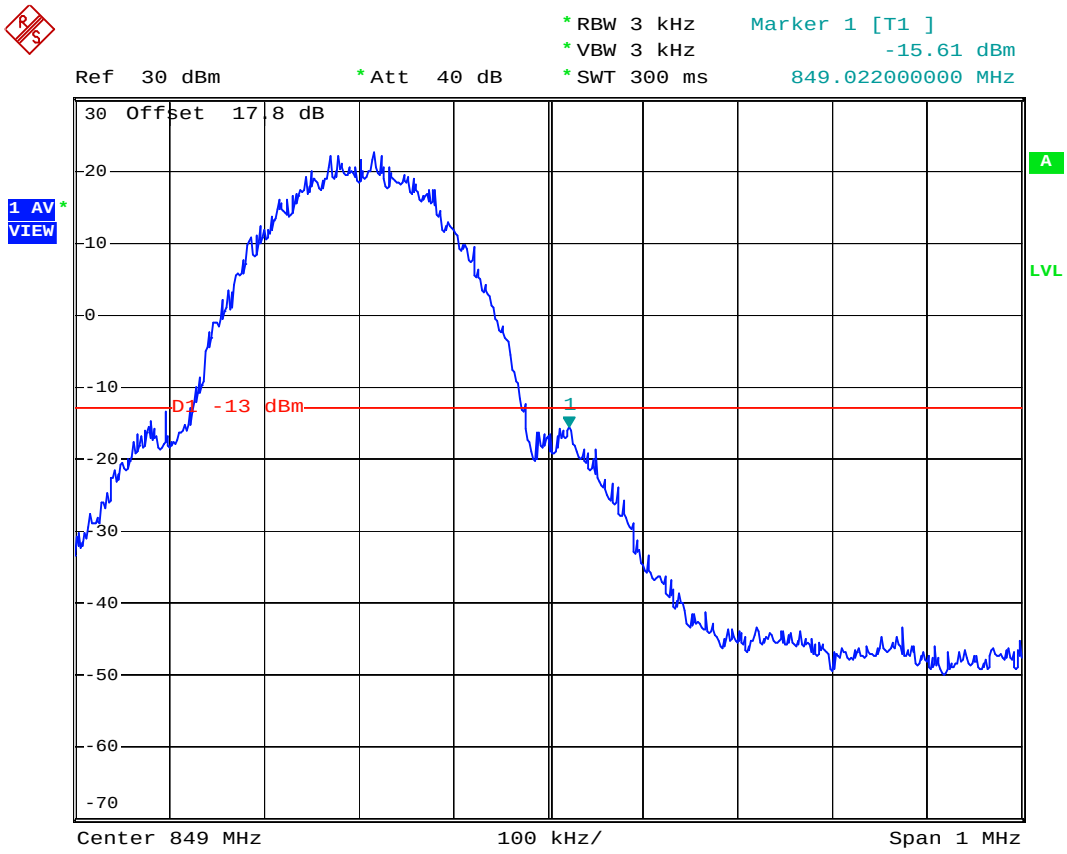
Date: 27.JUN.2006 18:38:56

- Test Mode : GSM 850 (EDGE) CH189 99% Occupid Bandwidth
- Power State : High



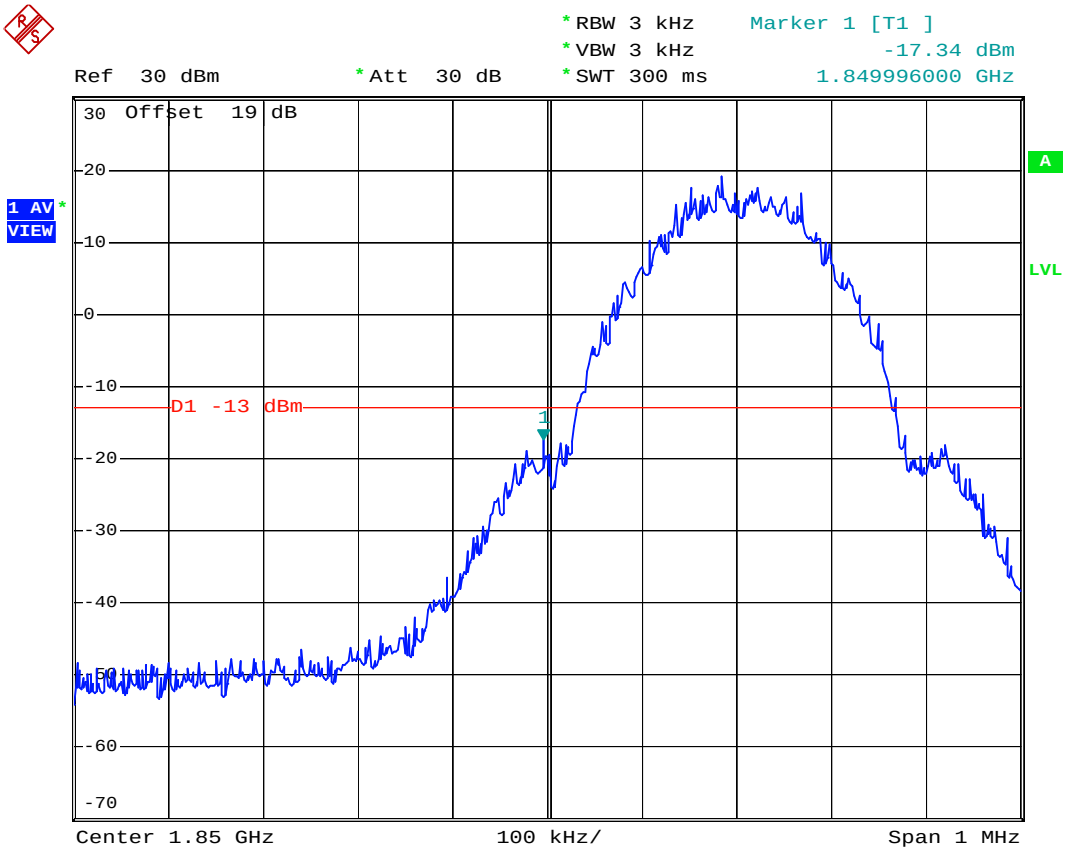
Date: 27.JUN.2006 18:37:18

- Test Mode : GSM 850 (EDGE) CH251 Higher Band Edge
- Power State : High



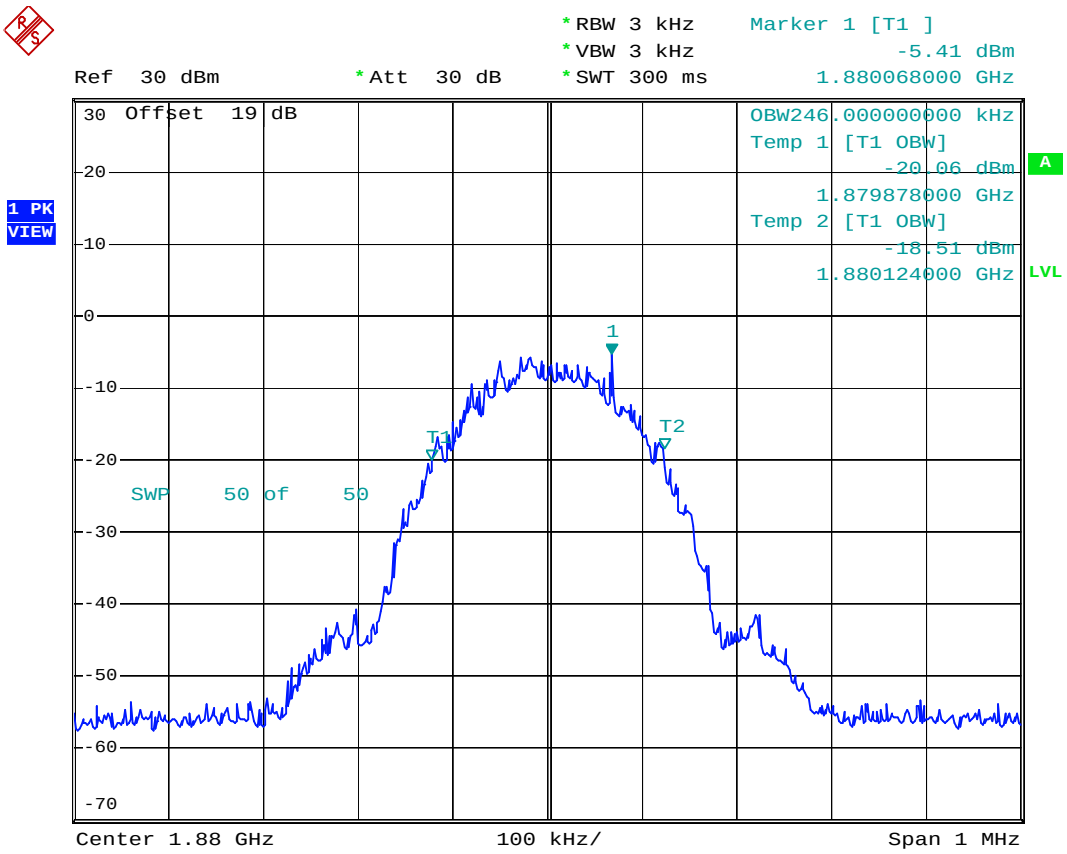
Date: 27.JUN.2006 18:45:34

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



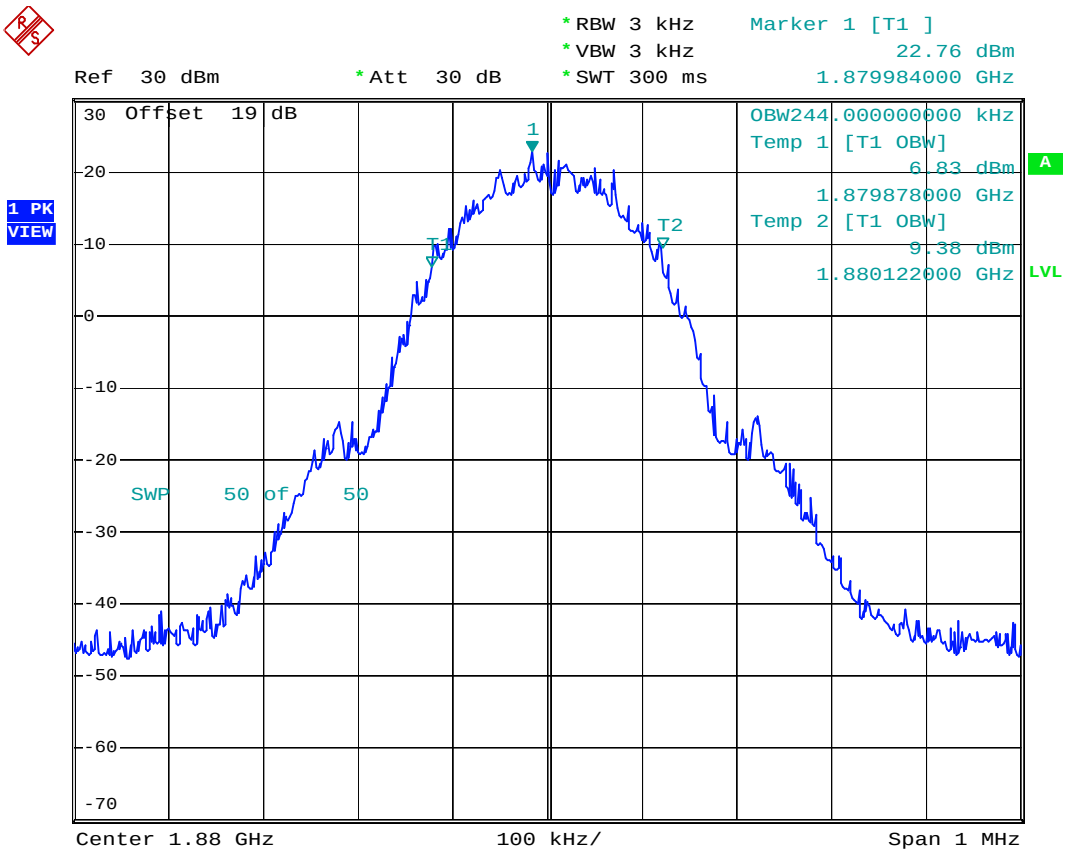
Date: 4.MAR.2006 22:38:34

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



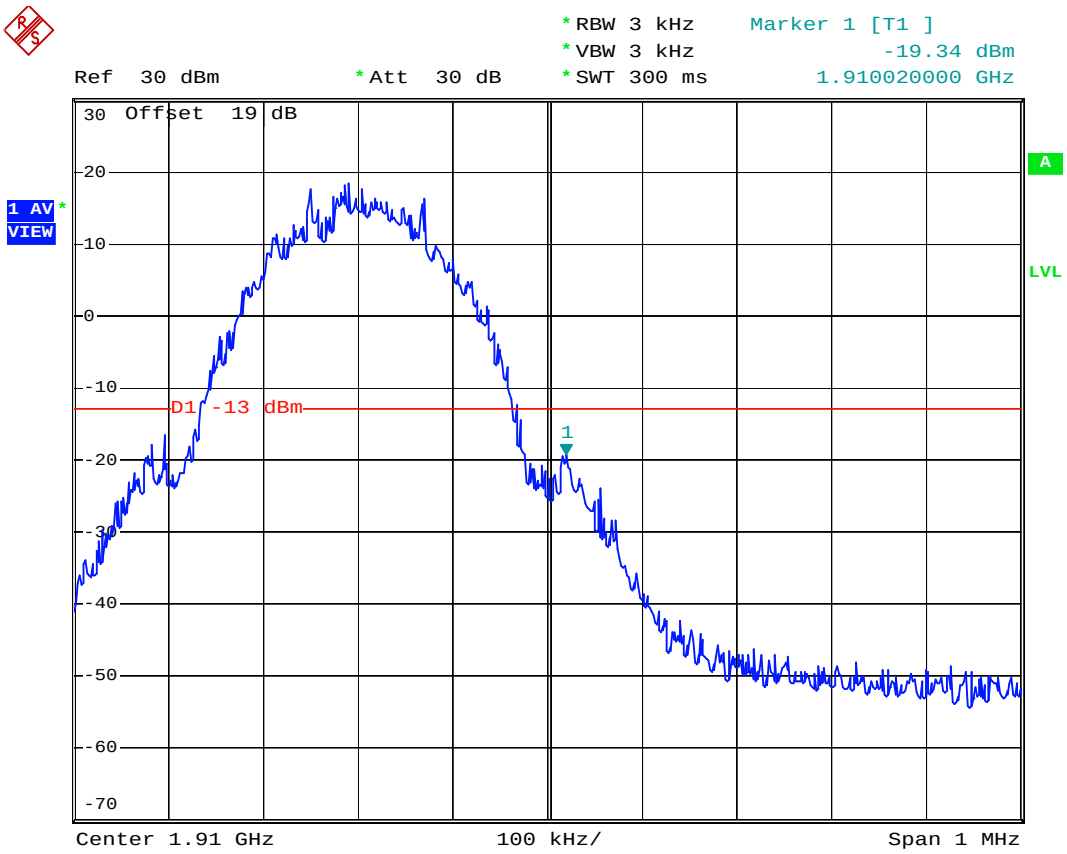
Date: 4.MAR.2006 22:35:10

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



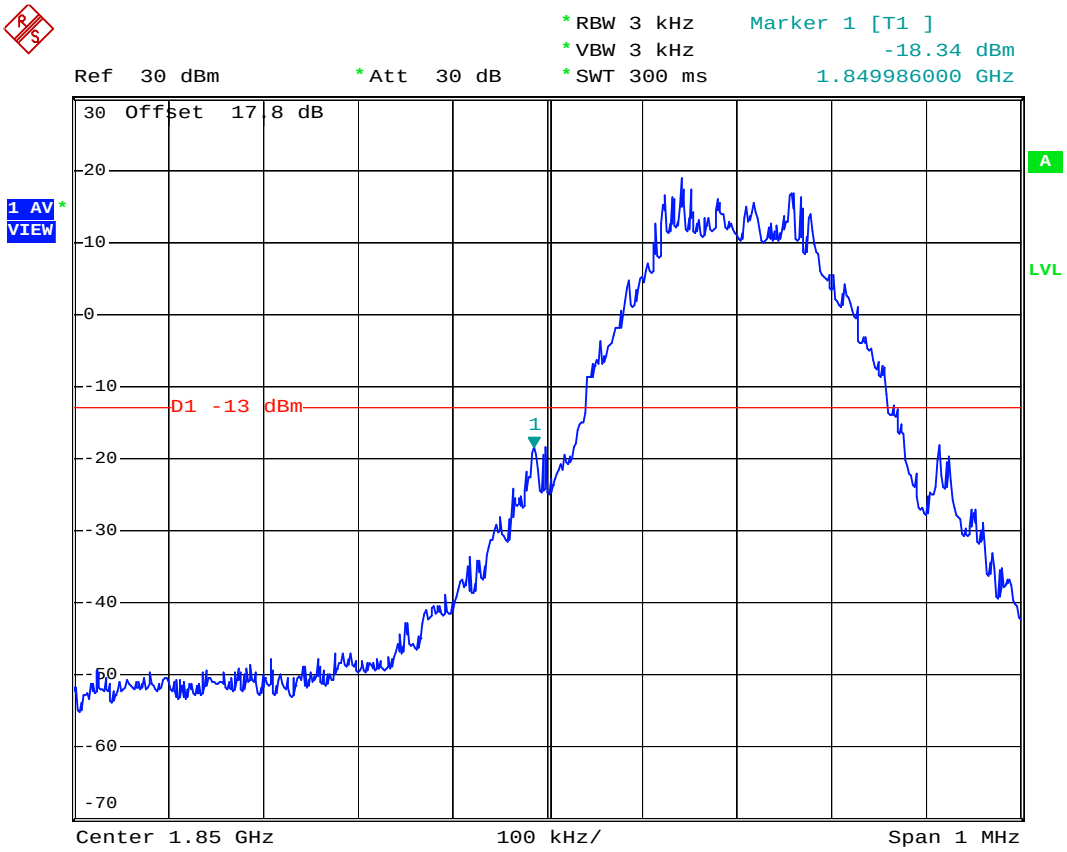
Date: 4.MAR.2006 22:34:09

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



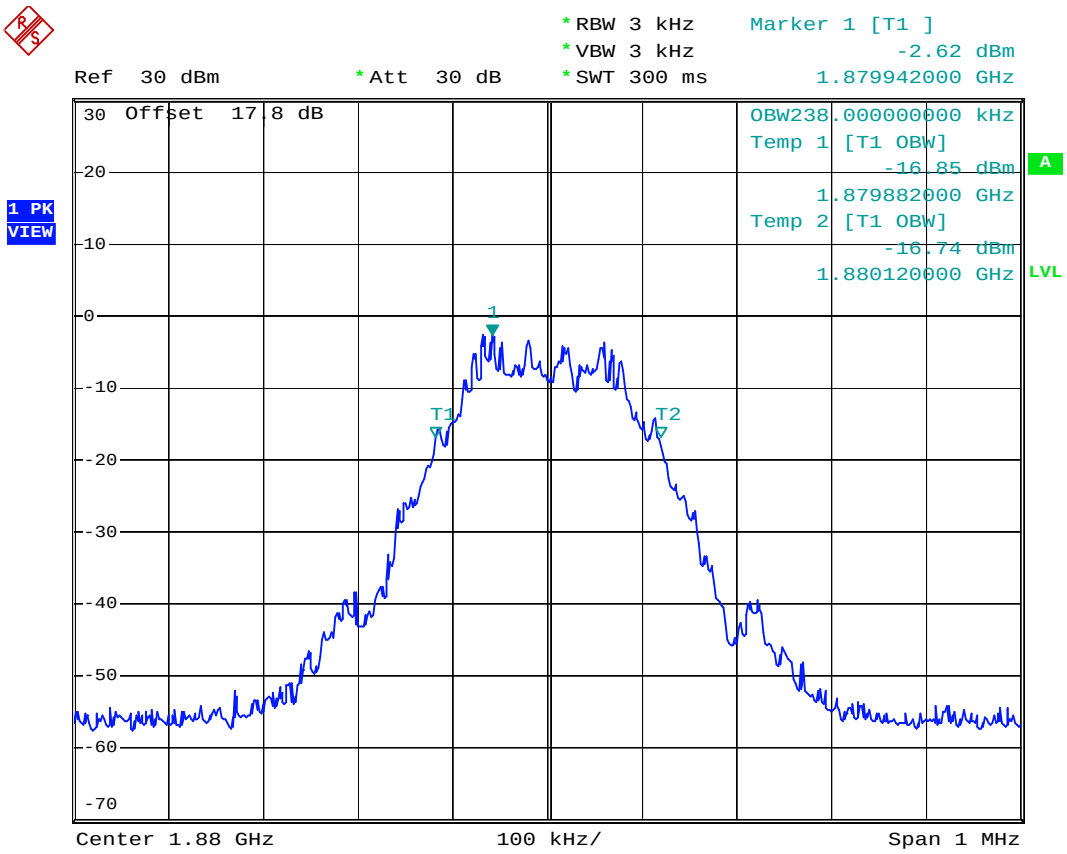
Date: 4.MAR.2006 22:40:08

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



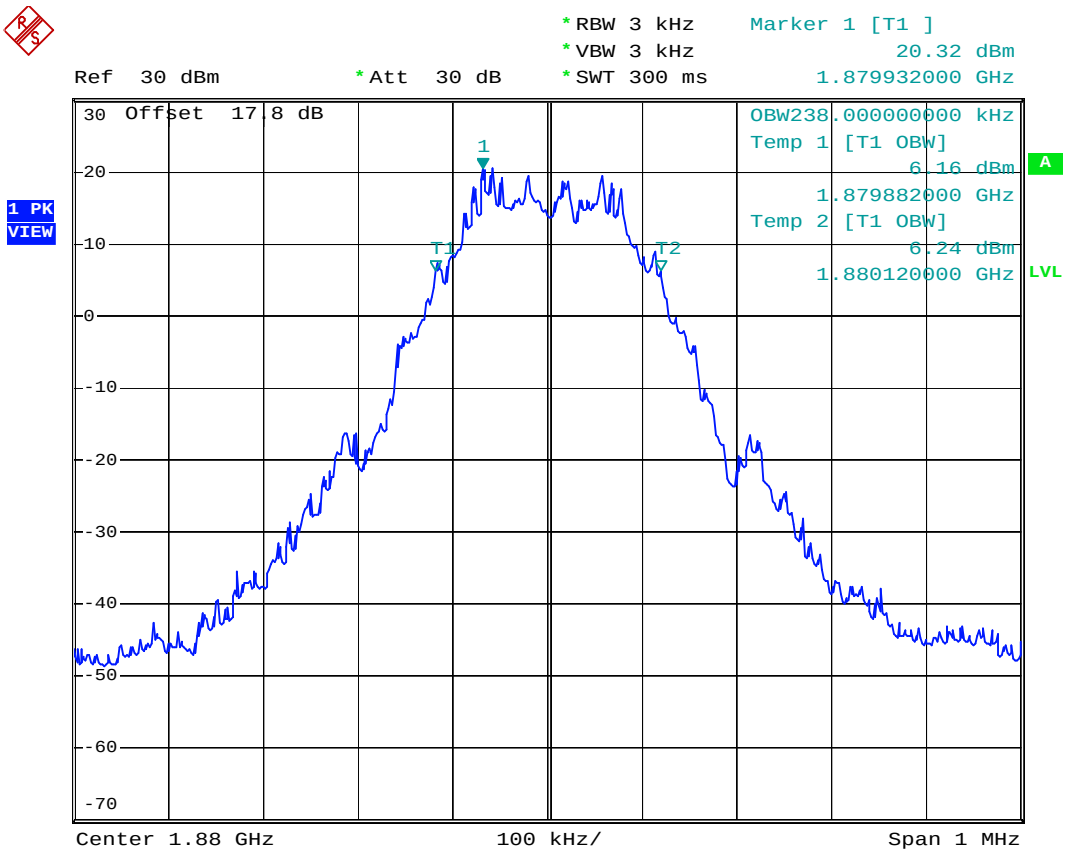
Date: 27.JUN.2006 19:43:22

- Test Mode : PCS (EDGE) CH661 99% Occupid Bandwidth
- Power State : Low



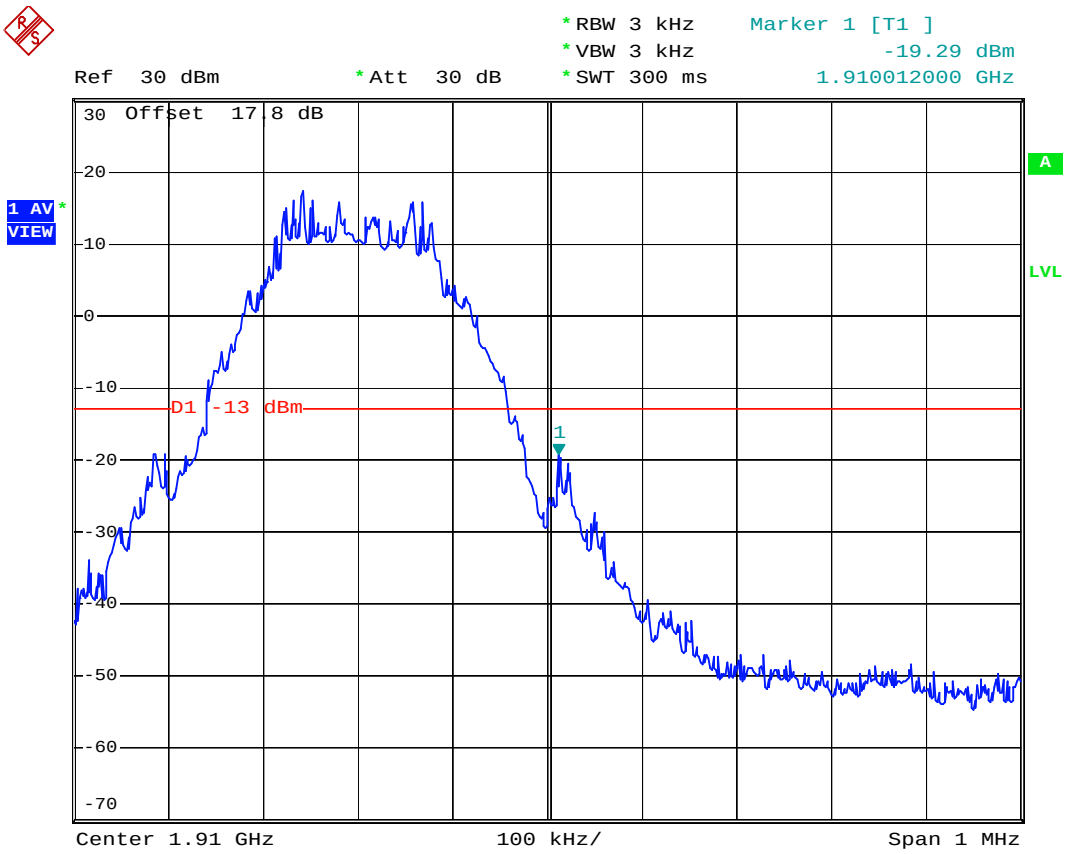
Date: 27.JUN.2006 19:29:50

- Test Mode : PCS (EDGE) CH661 99% Occupid Bandwidth
- Power State : High



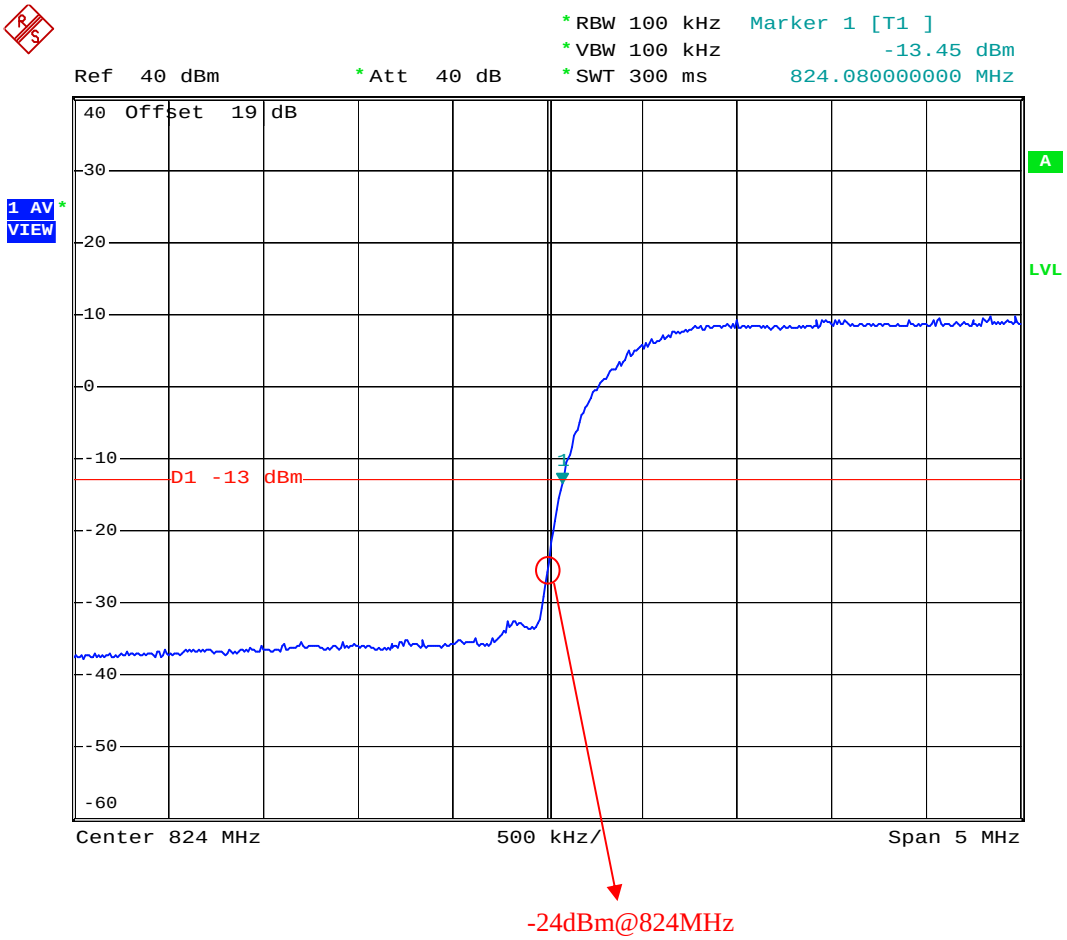
Date: 27.JUN.2006 19:27:20

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



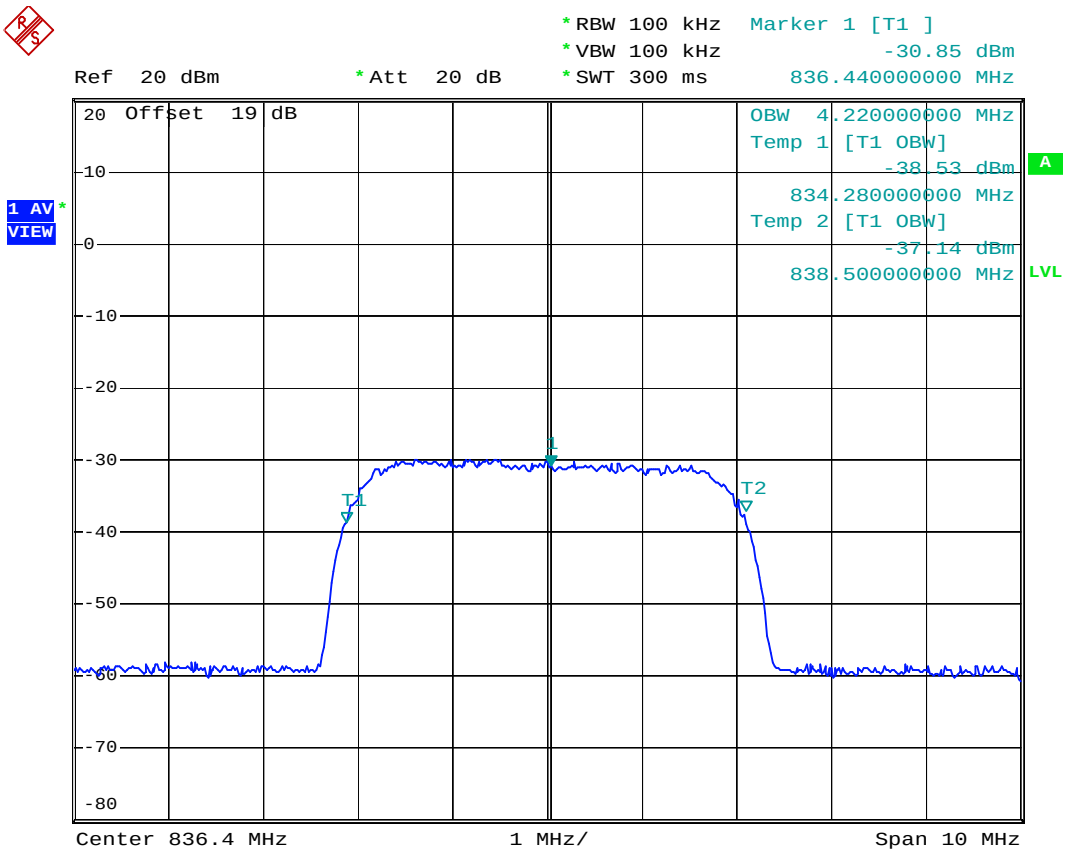
Date: 27.JUN.2006 19:41:32

- Mode 5
- Test Mode : WCDMA Band 5 CH4132 Lower Band Edge
- Power State : High



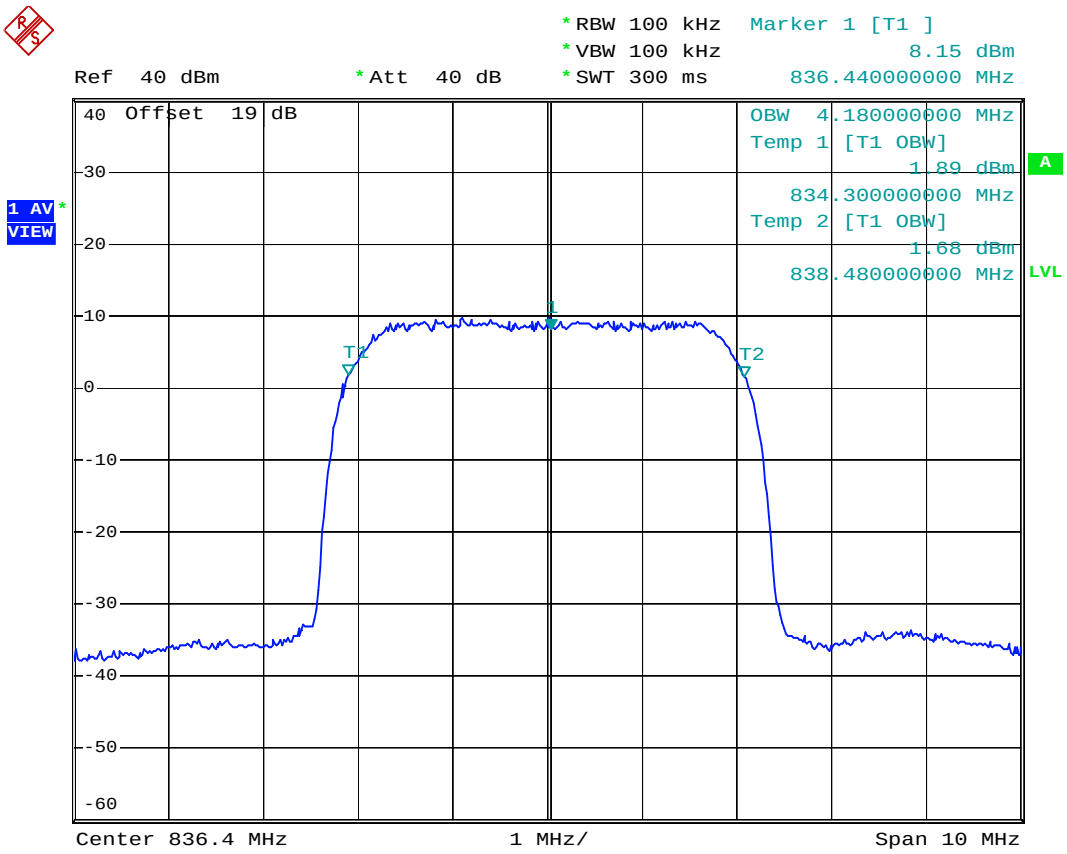
Date: 6.MAR.2006 14:14:16

- Test Mode : WCDMA Band 5 CH4182 99% Occupid Bandwidth
- Power State : Low

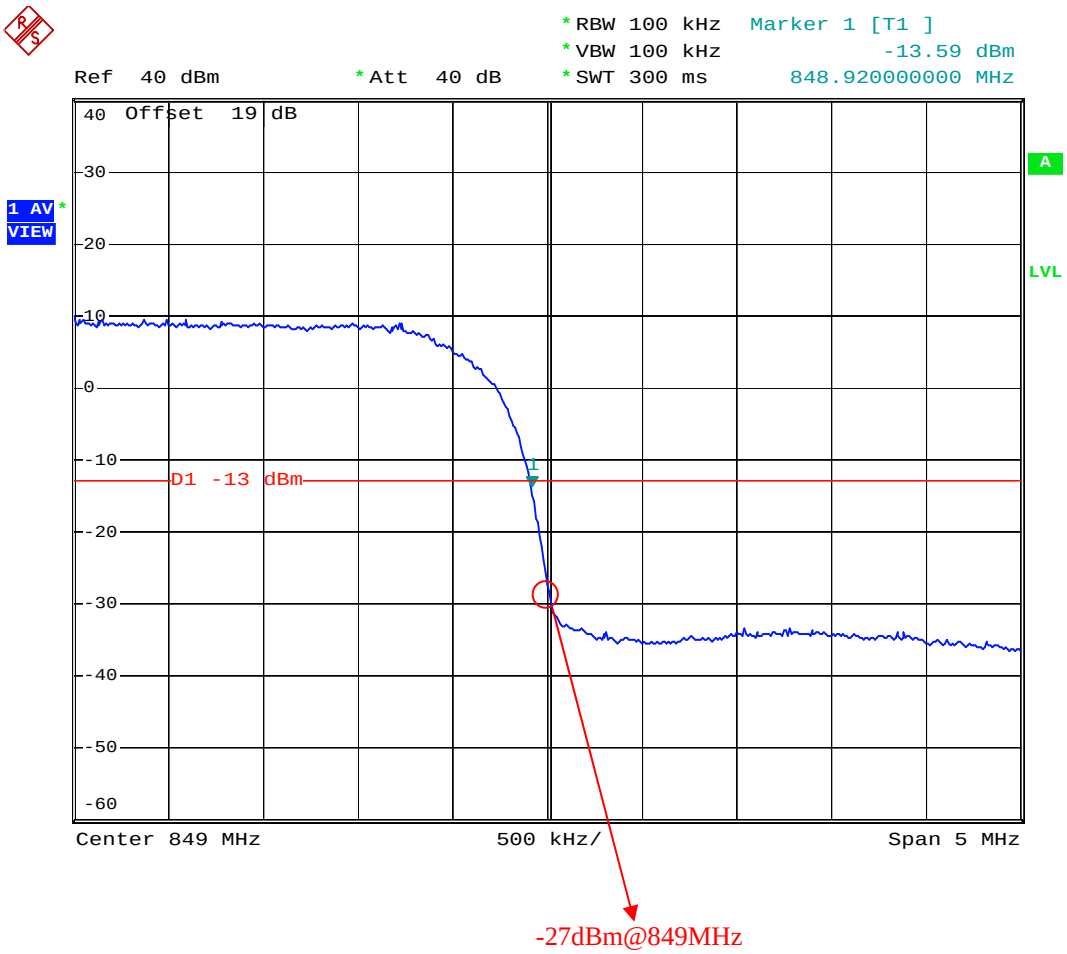


Date: 6.MAR.2006 13:56:50

- Test Mode : WCDMA Band 5 CH4182 99% Occupid Bandwidth
- Power State : High

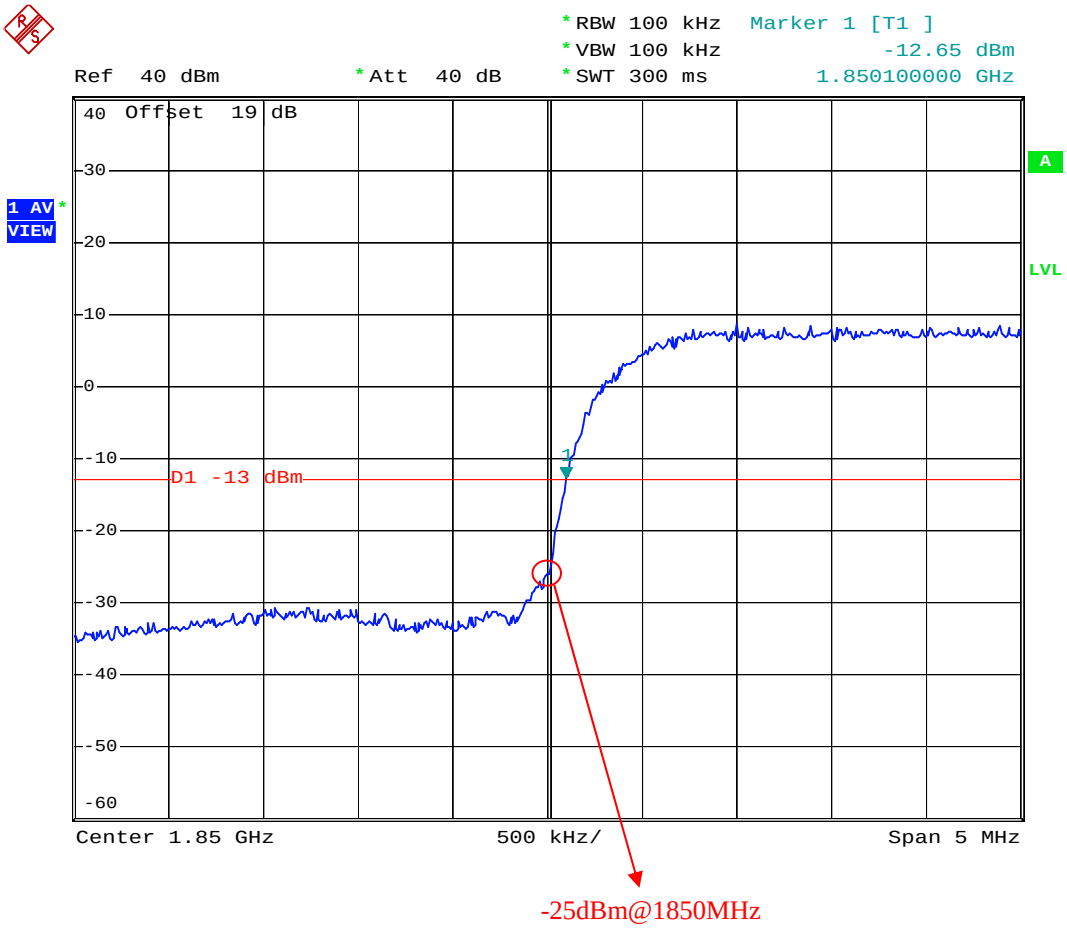


- Test Mode : WCDMA Band 5 CH4233 Higher Band Edge
- Power State : High



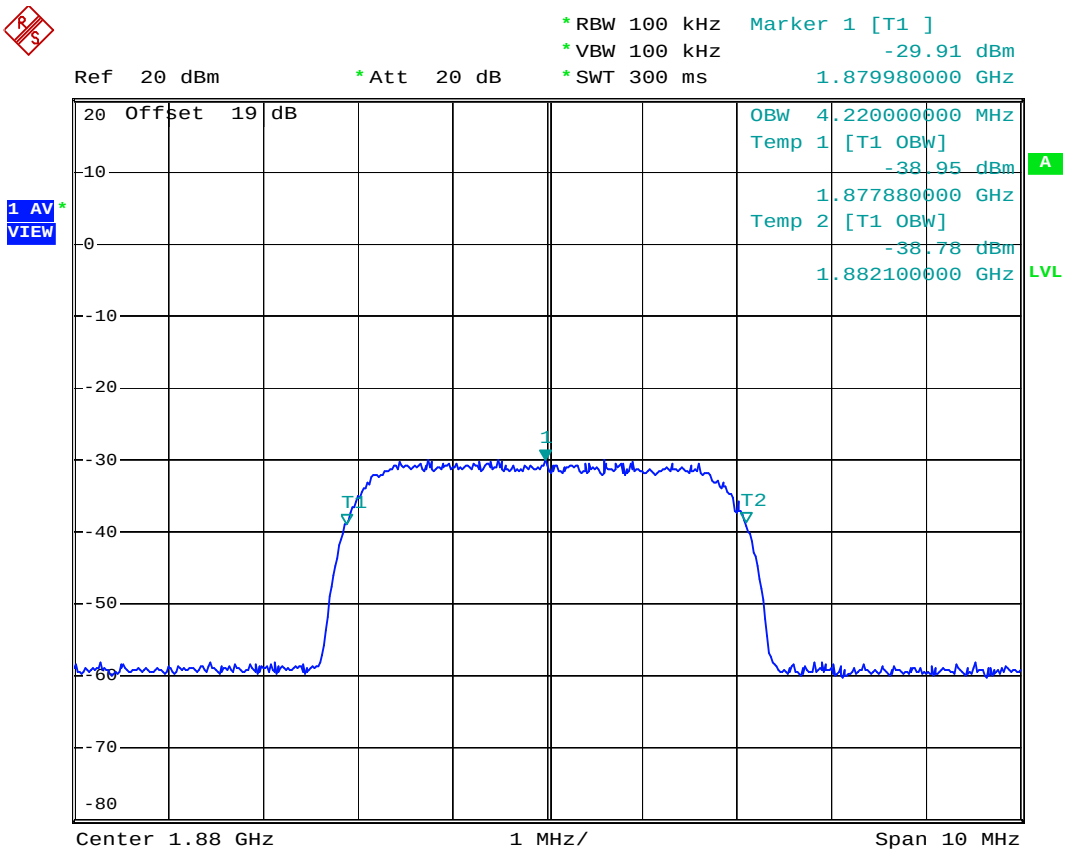
Date: 6.MAR.2006 14:15:12

- Mode 6
- Test Mode : WCDMA Band 2 CH9262 Lower Band Edge
- Power State : High



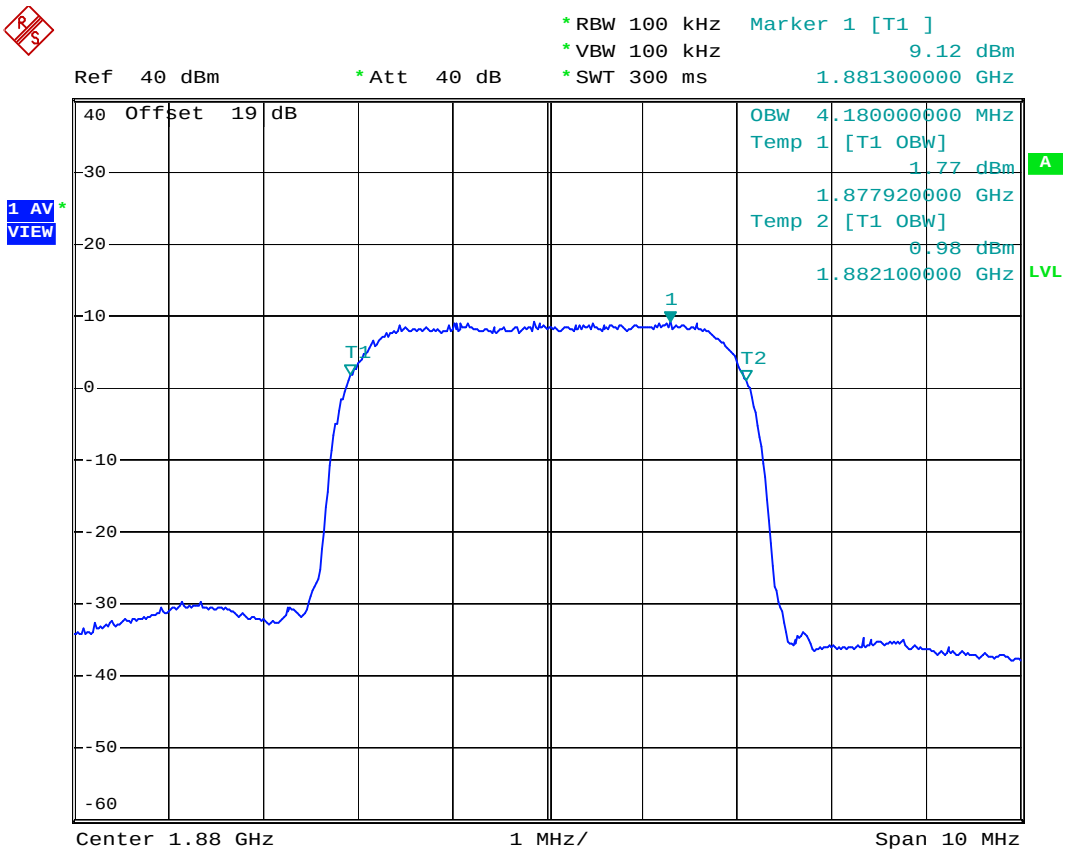
Date: 6.MAR.2006 14:28:18

- Test Mode : WCDMA Band 2 CH9400 99% Occupid Bandwidth
- Power State : Low



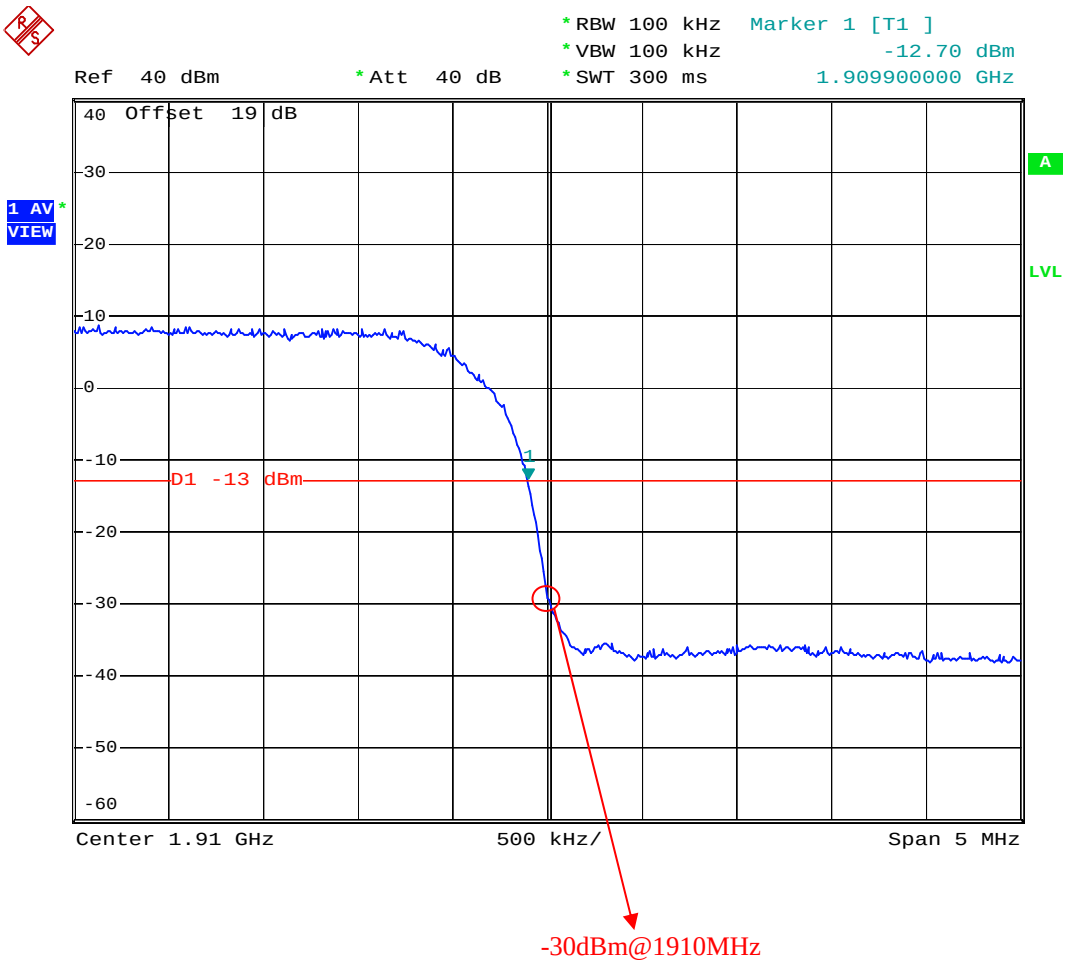
Date: 6.MAR.2006 14:25:57

- Test Mode : WCDMA Band 2 CH9400 99% Occupid Bandwidth
- Power State : High



Date: 6.MAR.2006 14:23:48

- Test Mode : WCDMA Band 2 CH9538 Higher Band Edge
- Power State : High



Date: 6.MAR.2006 14:29:07

4.5 Conducted Emission

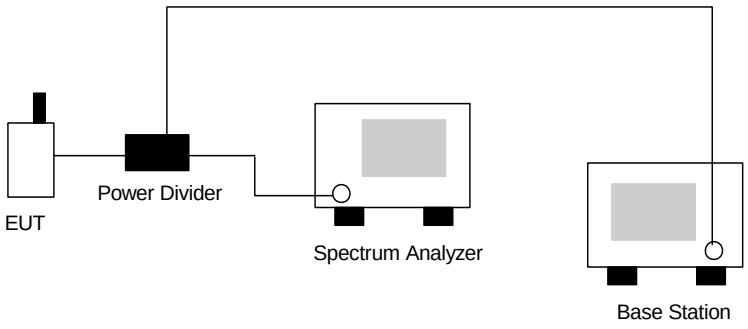
4.5.1 Measurement Instruments

As described in chapter 5 of this test report.

4.5.2 Test Procedure

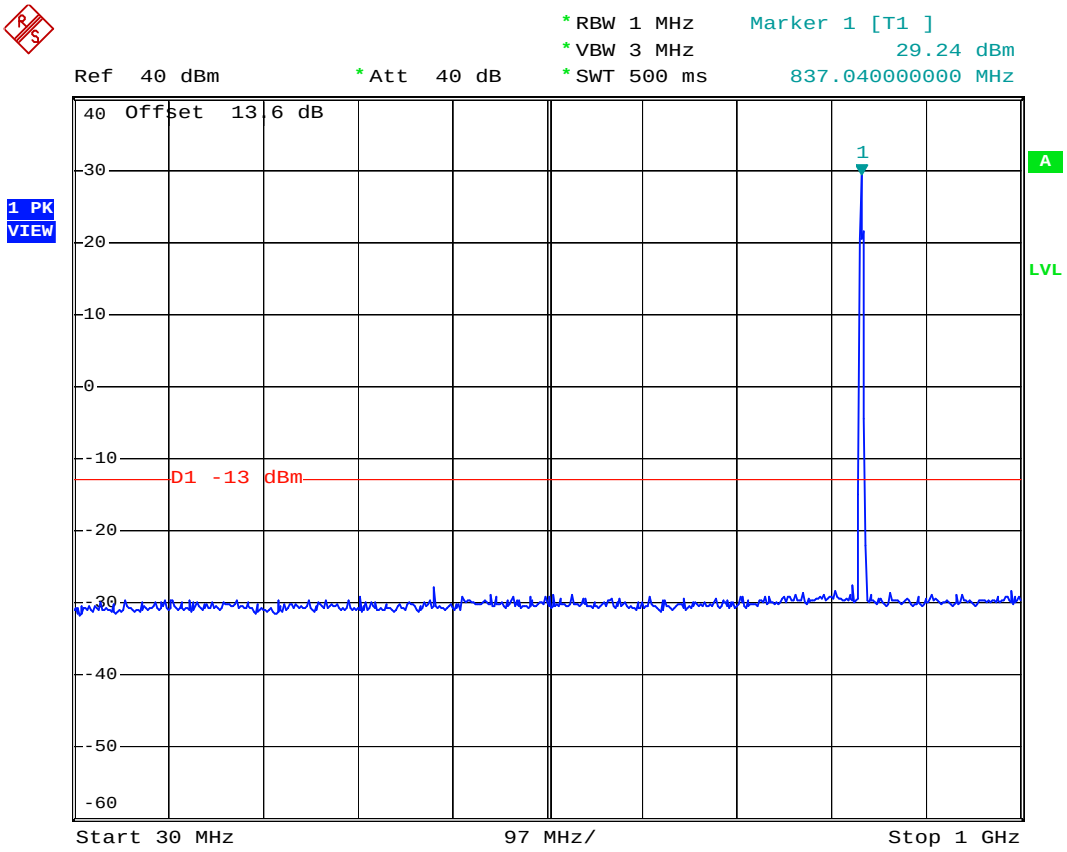
1. The EUT was connected to Spectrum Analyzer and Base Station via power divider.
2. The middle channel for the highest RF power within the transmitting frequency was measured.
3. The conducted spurious emission for the whole frequency range was taken.

4.5.3 Test Setup Layout



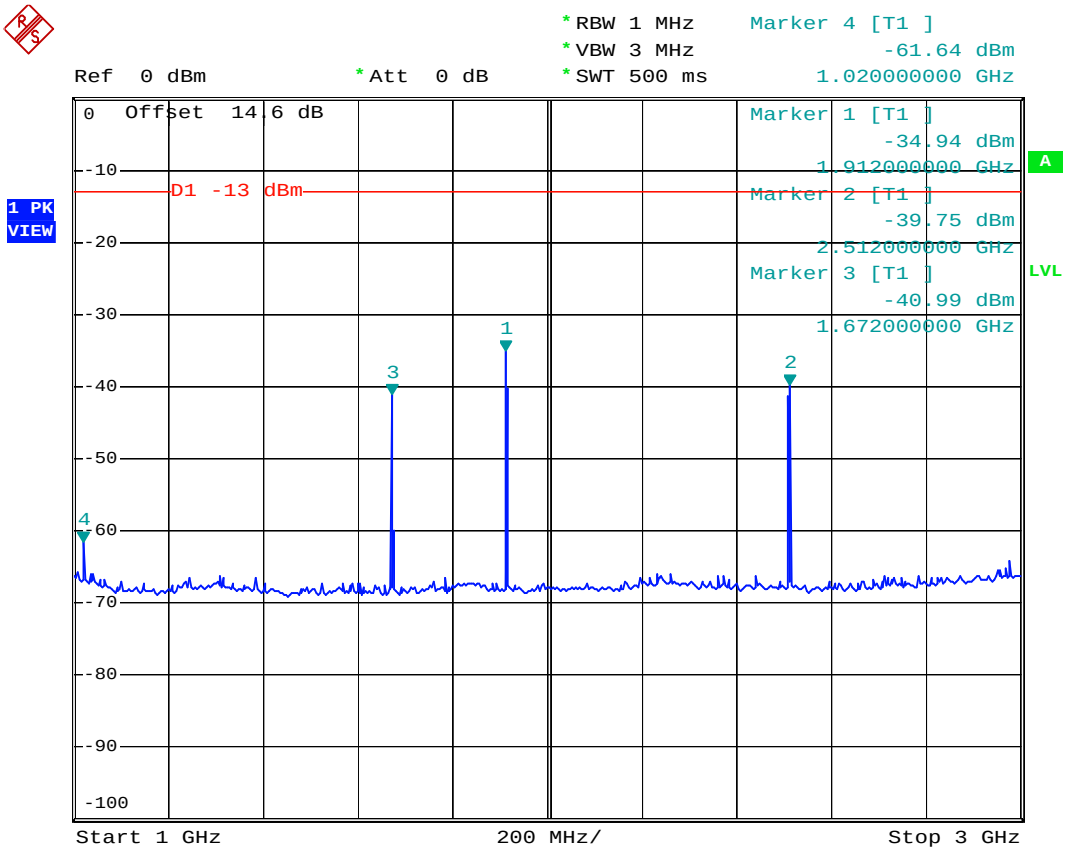
4.5.4 Test Result

- Mode 1
- Test Mode : GSM 850 (GSM) CH189
- Frequency Range : 30M-1G



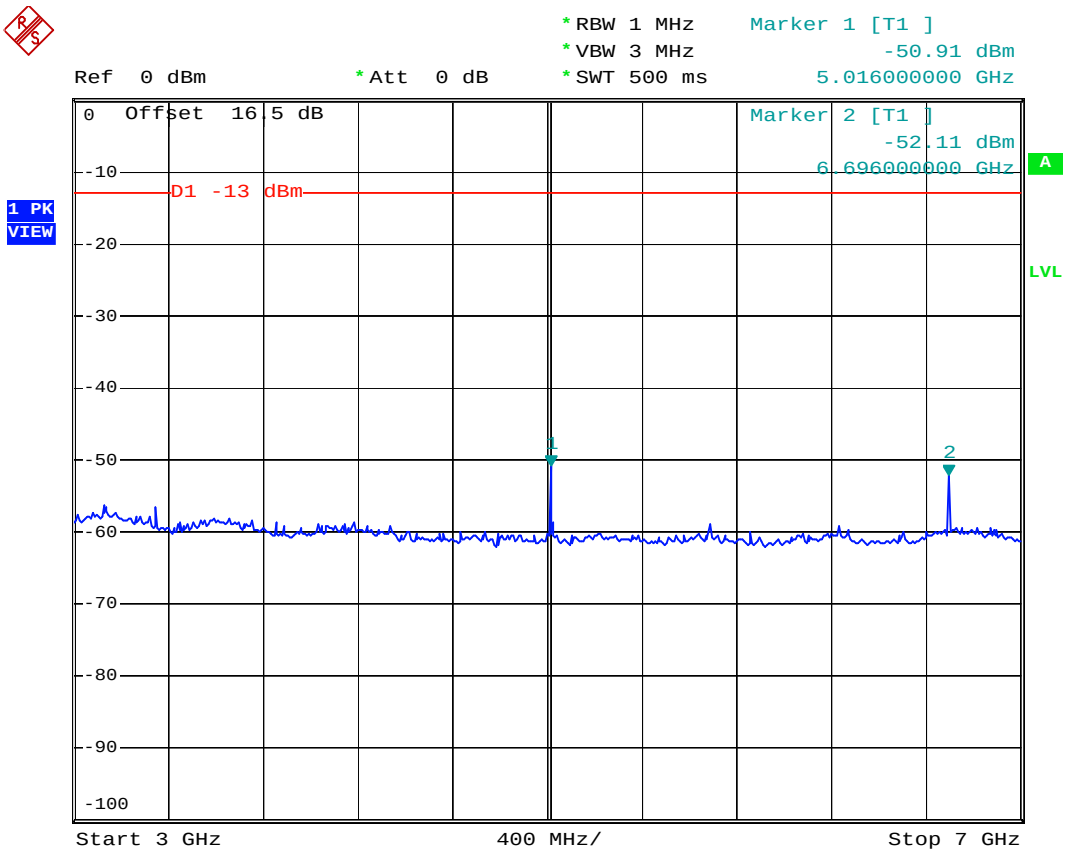
Date: 5.MAR.2006 10:52:20

- Test Mode : GSM 850 (GSM) CH189
- Frequency Range : 1G-3G



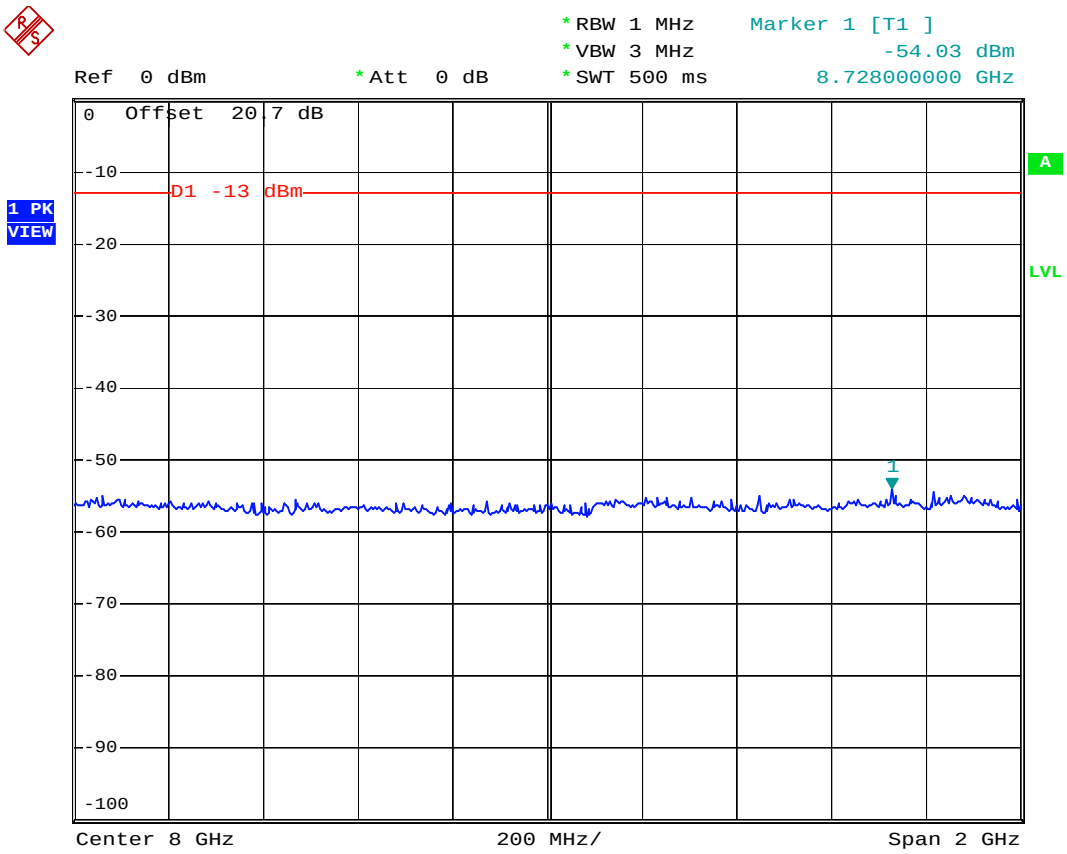
Date: 5.MAR.2006 10:56:13

- Test Mode : GSM 850 (GSM) CH189
- Frequency Range : 3G-7G



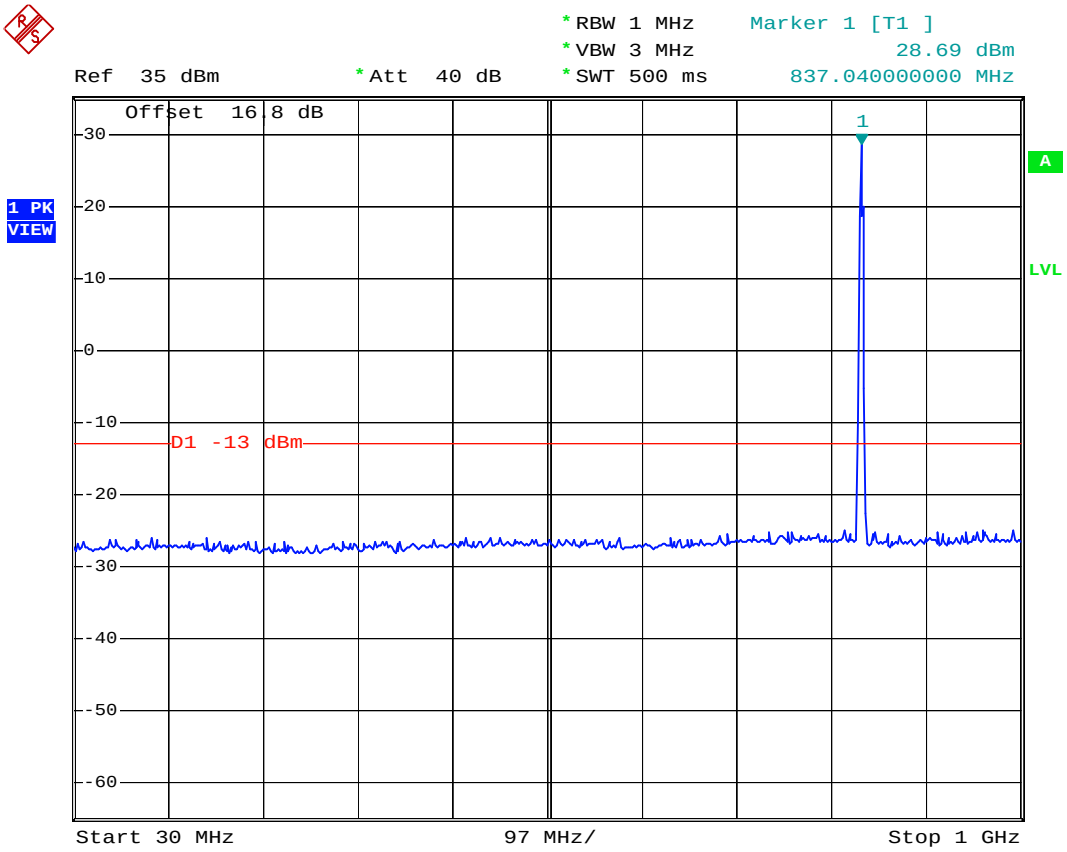
Date: 5.MAR.2006 11:05:48

- Test Mode : GSM 850 (GSM) CH189
- Frequency Range : 7G-9G



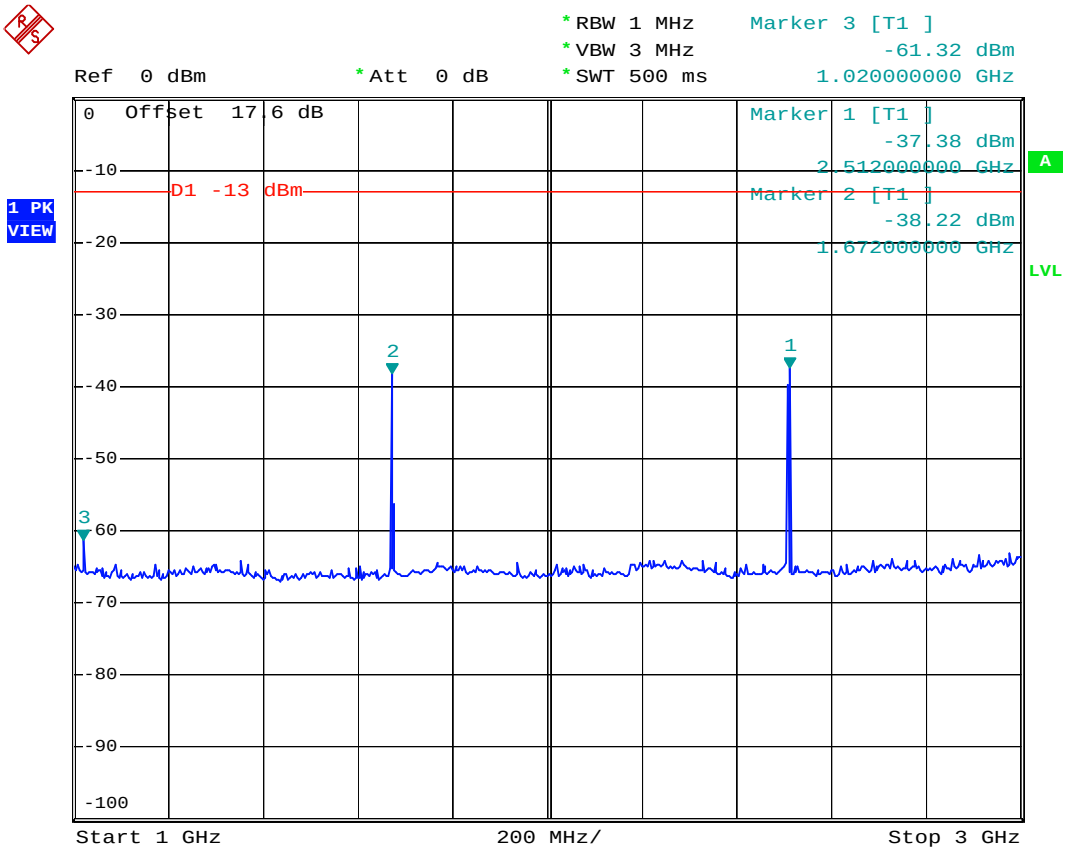
Date: 5.MAR.2006 11:01:28

- Mode 2
- Test Mode : GSM 850 (EDGE) CH189
- Frequency Range : 30M-1G



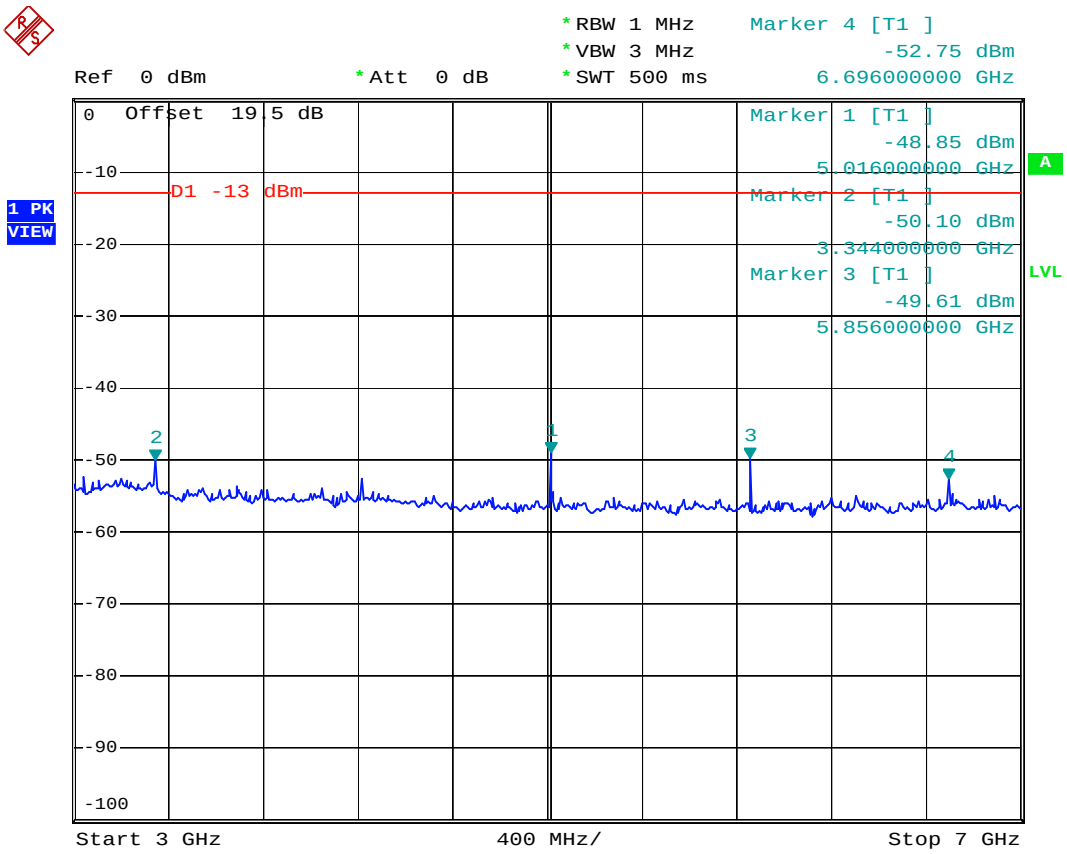
Date: 27.JUN.2006 18:53:05

- Test Mode : GSM 850 (EDGE) CH189
- Frequency Range : 1G-3G



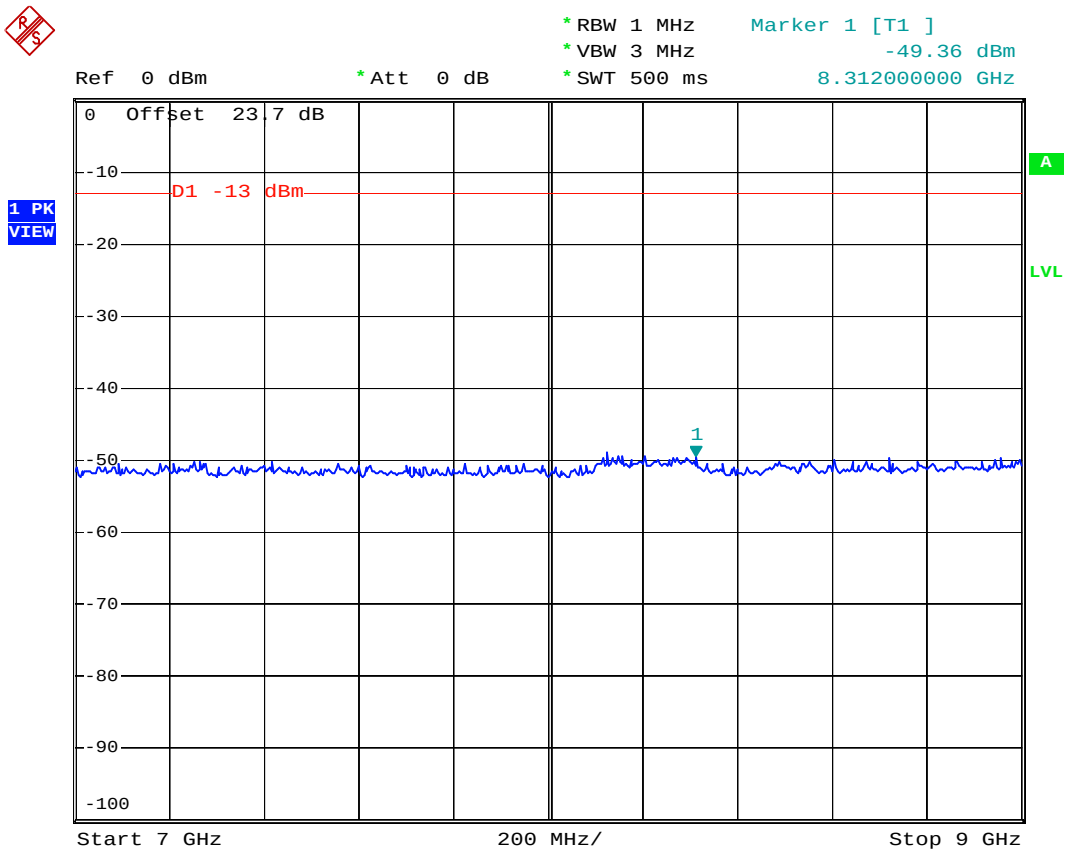
Date: 27.JUN.2006 19:06:03

- Test Mode : GSM 850 (EDGE) CH189
- Frequency Range : 3G-7G



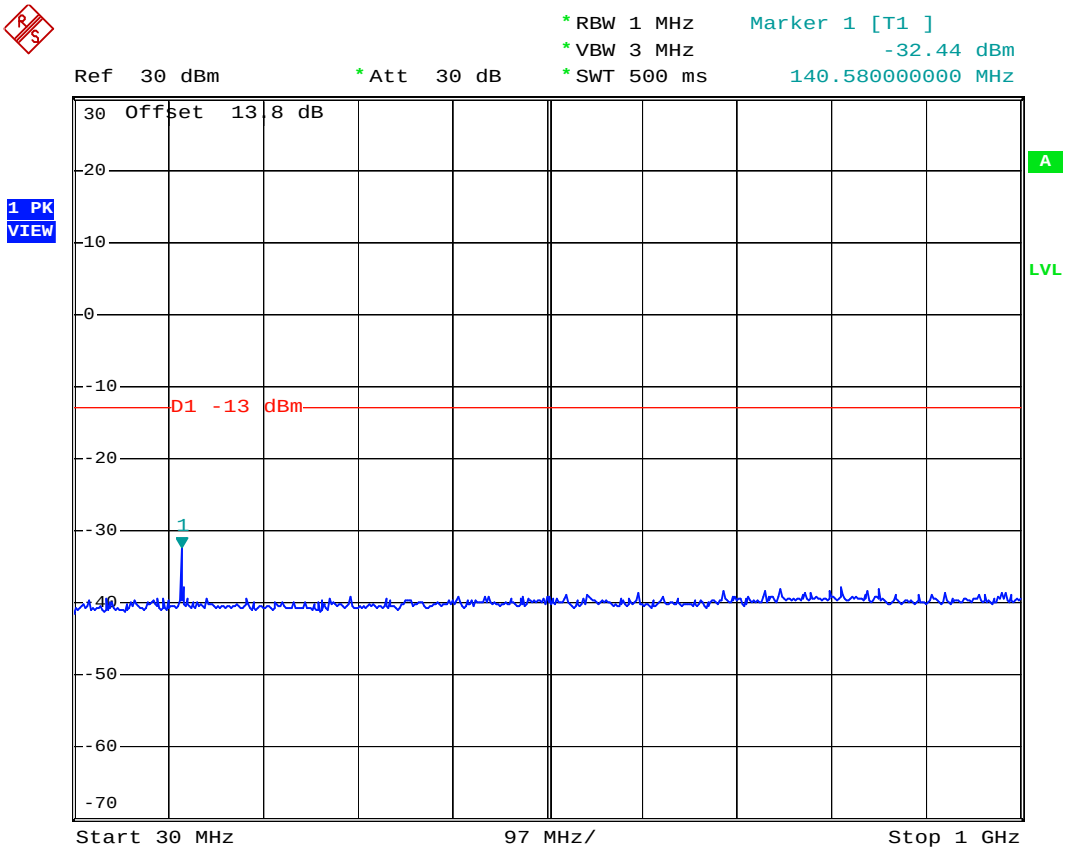
Date: 27.JUN.2006 19:11:34

- Test Mode : GSM 850 (EDGE) CH189
- Frequency Range : 7G-9G



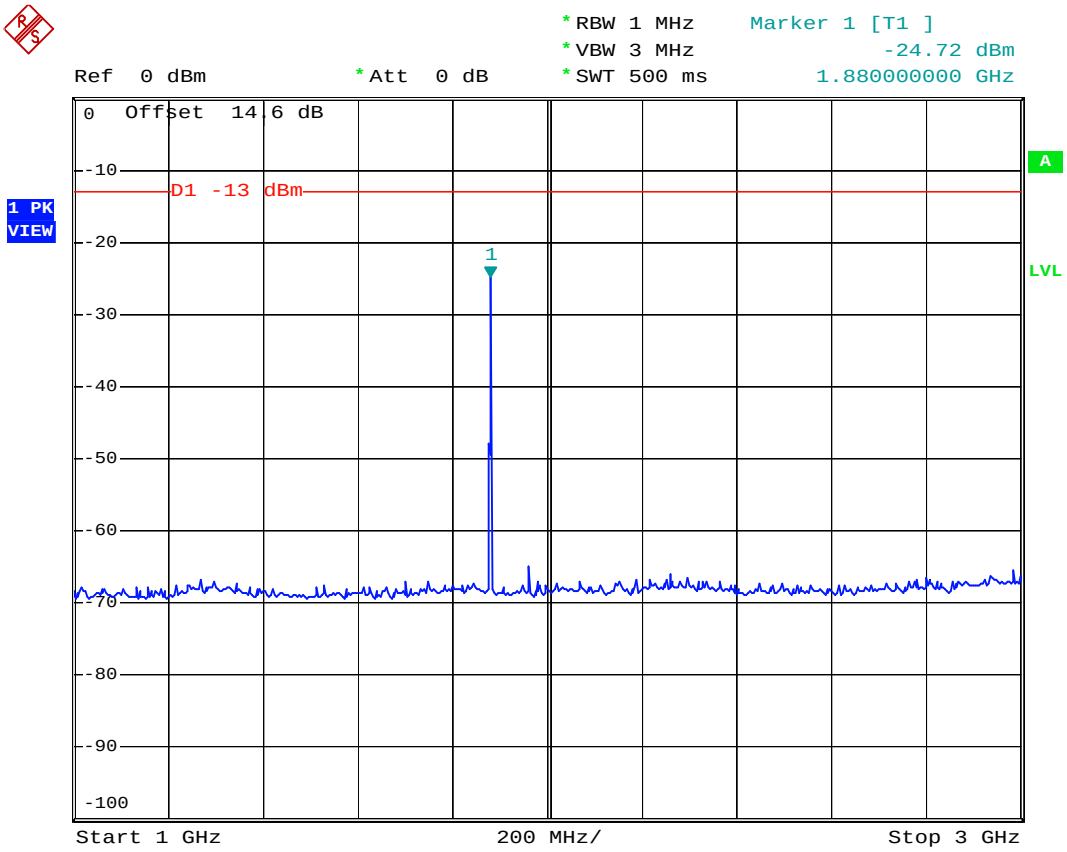
Date: 27.JUN.2006 19:07:56

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



Date: 5.MAR.2006 11:12:20

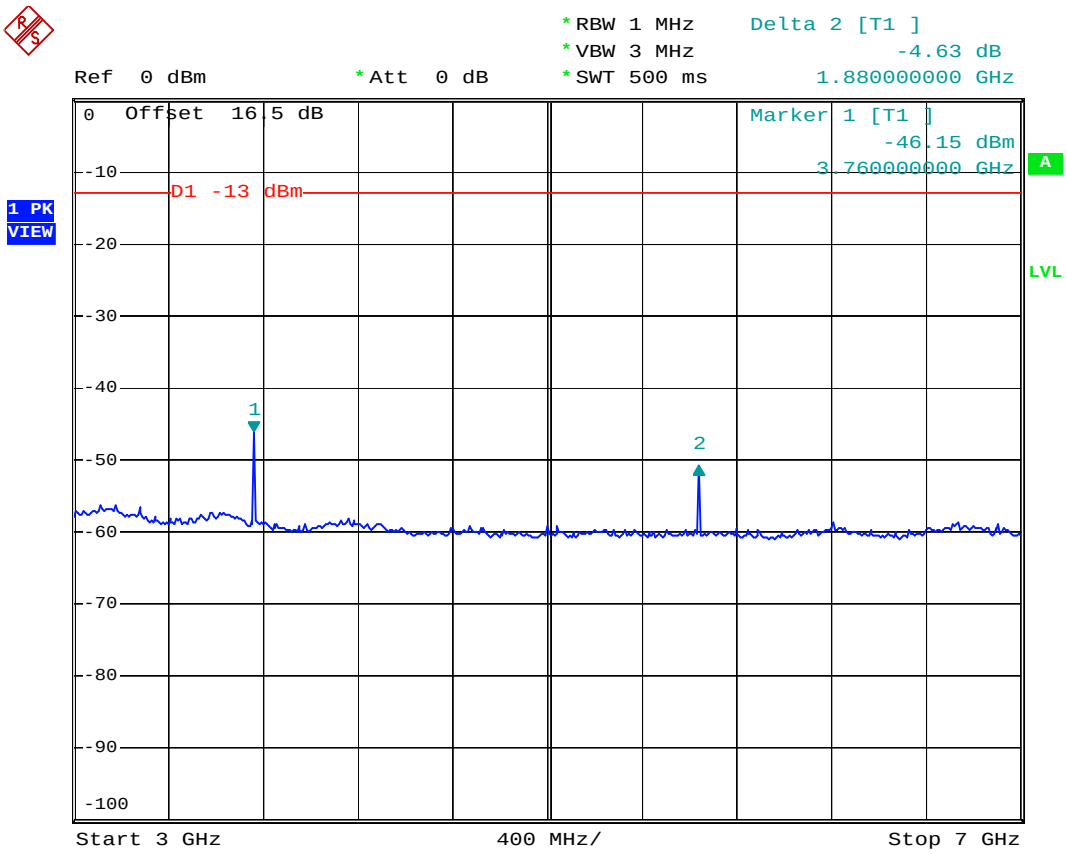
- Test Mode : PCS (GSM) CH661
- Frequency Range : 1G-3G



Date: 5.MAR.2006 11:19:18

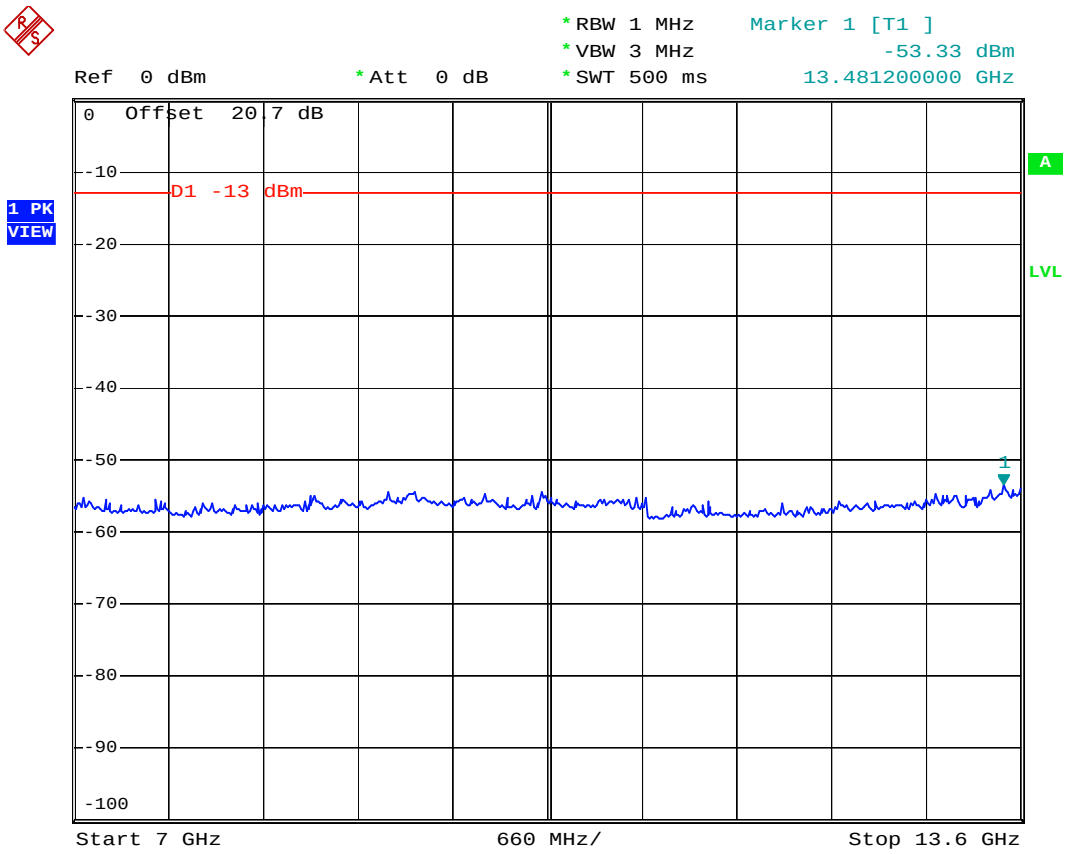
Remark : The PCS fundamental signal was filtered by notch filter.

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



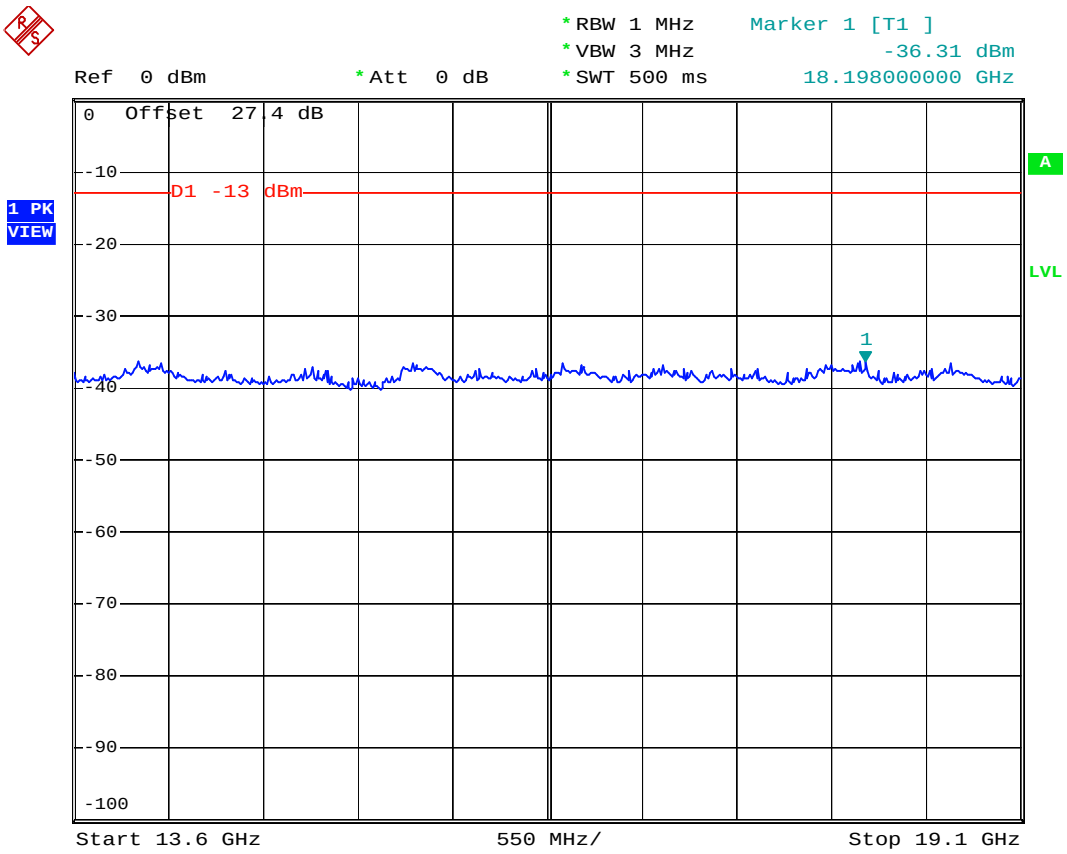
Date: 5.MAR.2006 11:43:27

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



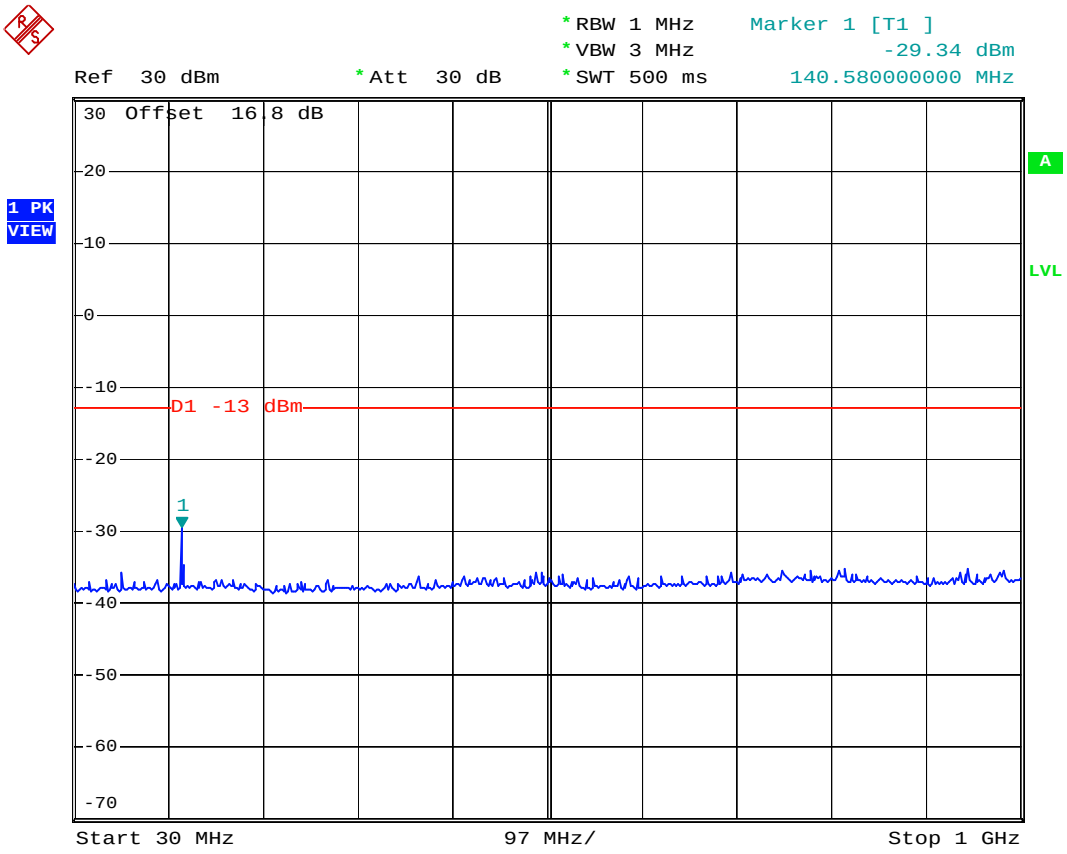
Date: 5.MAR.2006 11:45:43

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



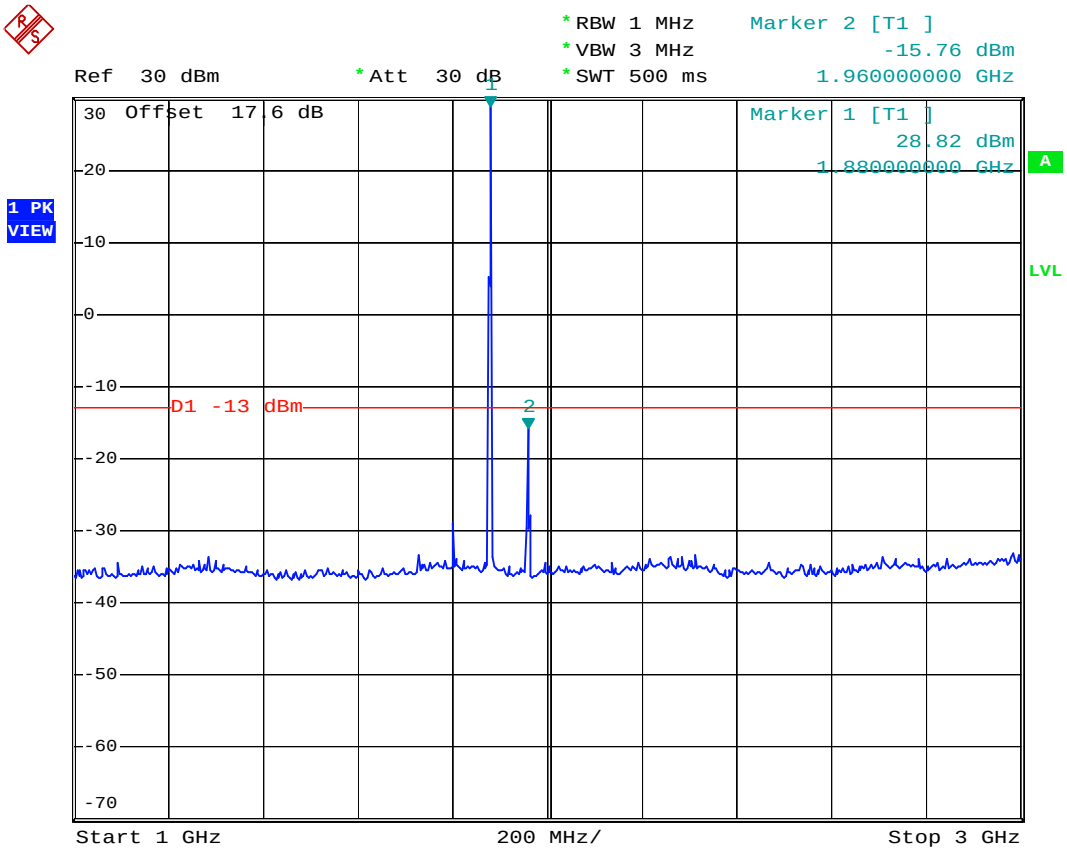
Date: 5.MAR.2006 11:48:34

- Mode 4
- Test Mode : PCS (EDGE) CH661
- Frequency Range : 30M-1G



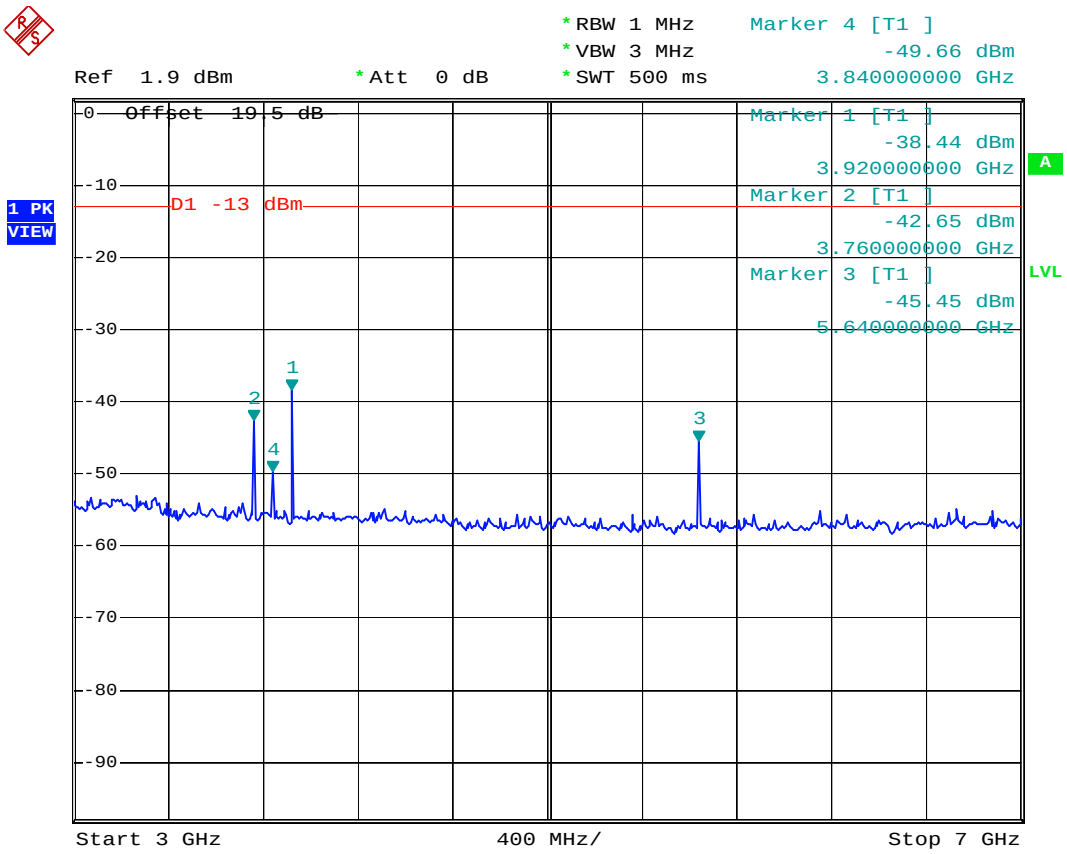
Date: 27.JUN.2006 19:49:12

- Test Mode : PCS (EDGE) CH661
- Frequency Range : 1G-3G



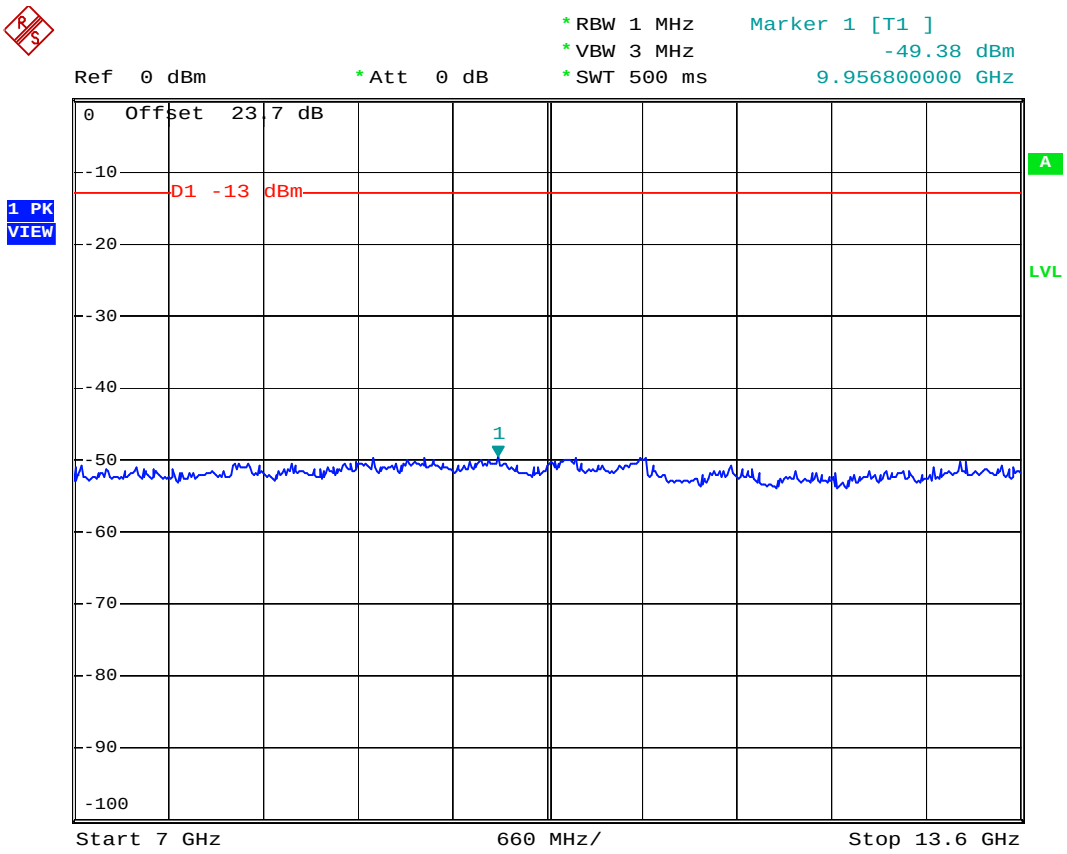
Date: 27.JUN.2006 19:59:35

- Test Mode : PCS (EDGE) CH661
- Frequency Range : 3G-7G



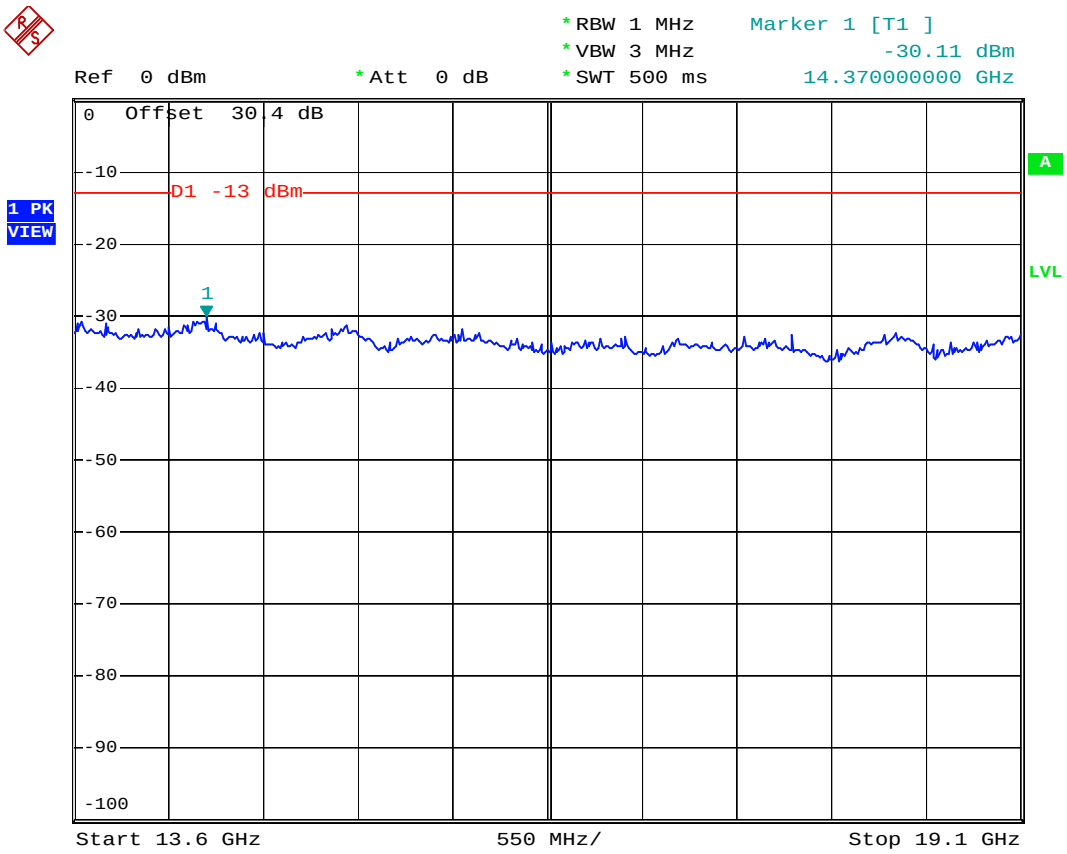
Date: 27.JUN.2006 20:03:46

- Test Mode : PCS (EDGE) CH661
- Frequency Range : 7G-13.6G



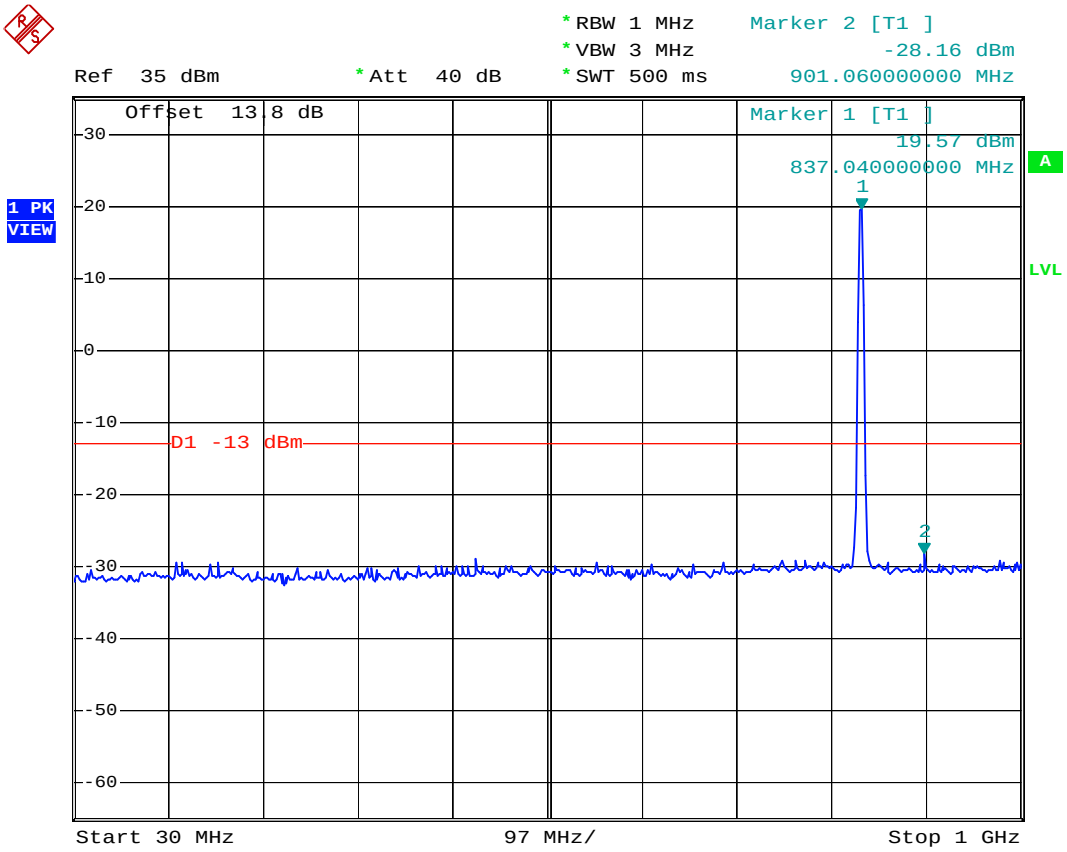
Date: 27.JUN.2006 20:05:42

- Test Mode : PCS (EDGE) CH661
- Frequency Range : 13.6G-19.1G



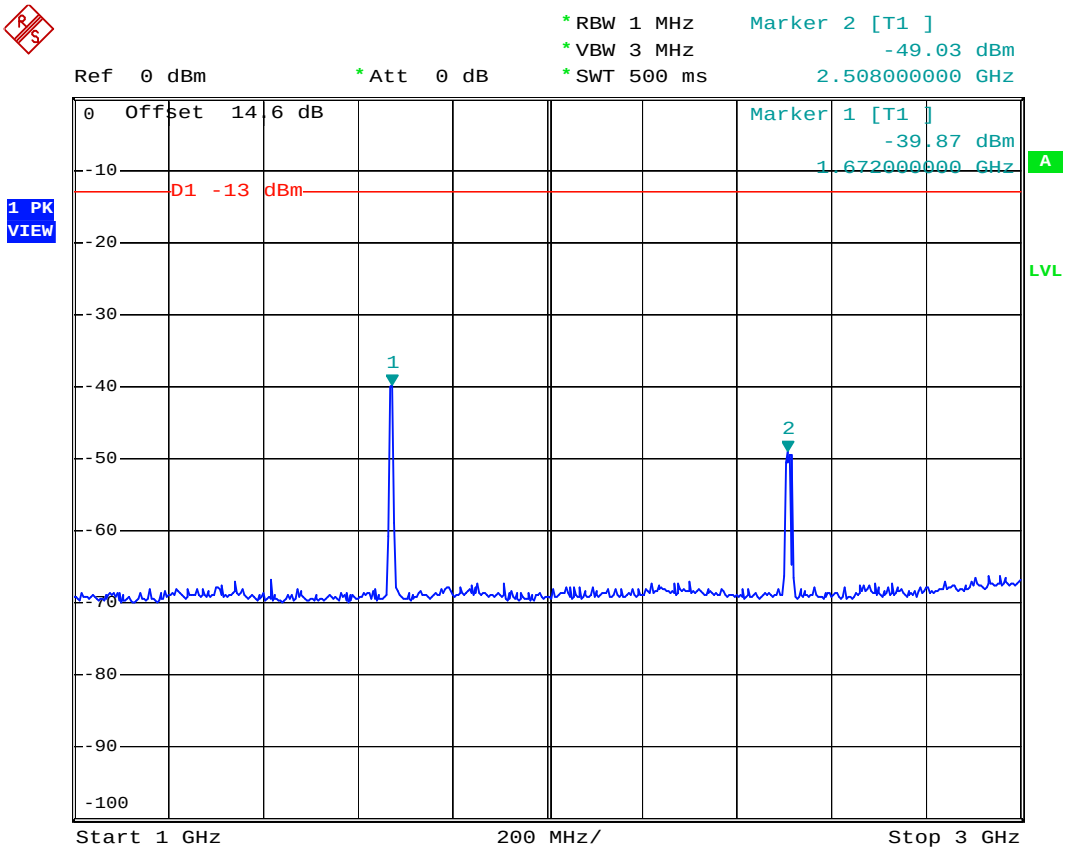
Date: 27.JUN.2006 20:07:37

- Mode 5
- Test Mode : WCDMA Band 5 CH4182
- Frequency Range : 30M-1G



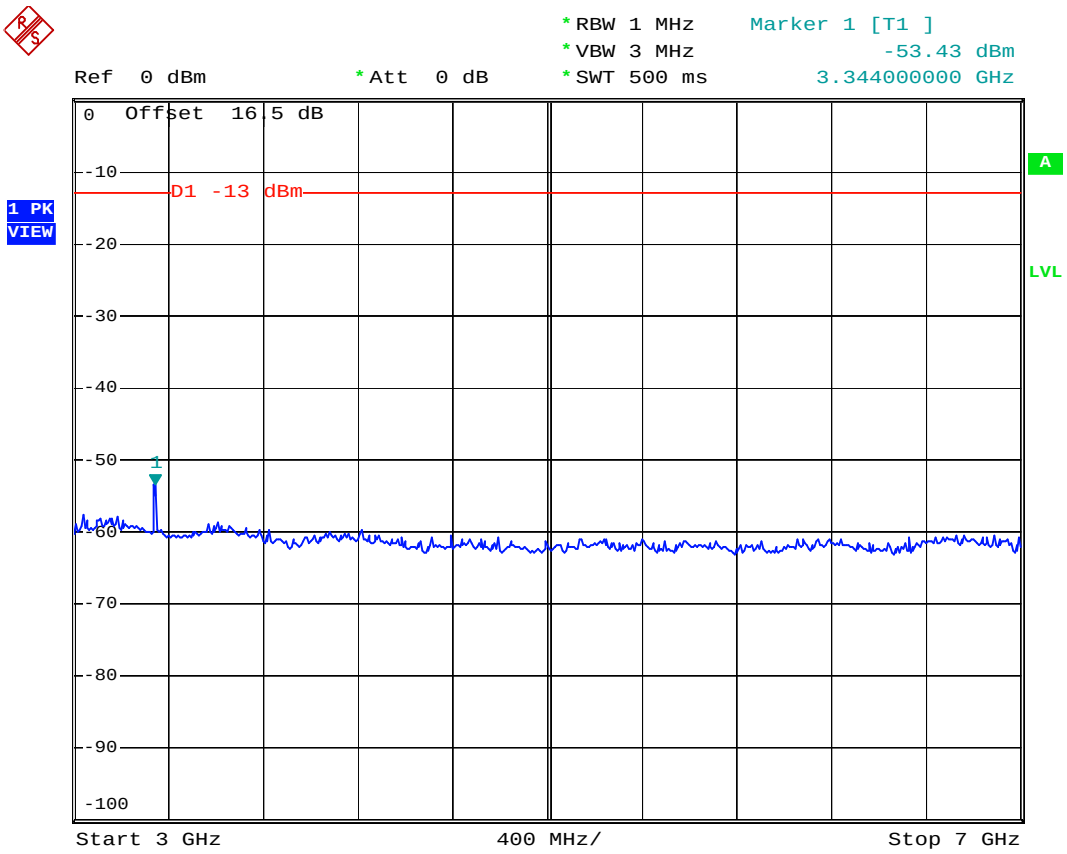
Date: 6.MAR.2006 15:06:45

- Test Mode : WCDMA Band 5 CH4182
- Frequency Range : 1G-3G



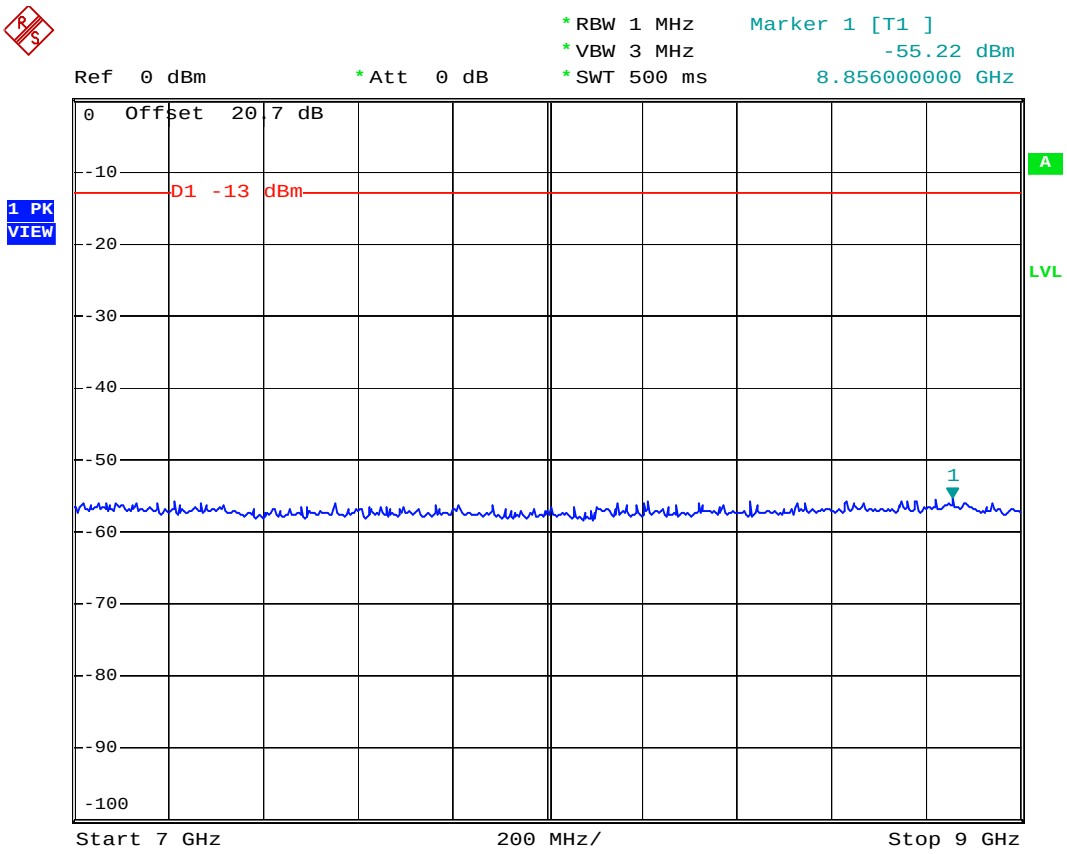
Date: 6.MAR.2006 15:15:55

- Test Mode : WCDMA Band 5 CH4182
- Frequency Range : 3G-7G



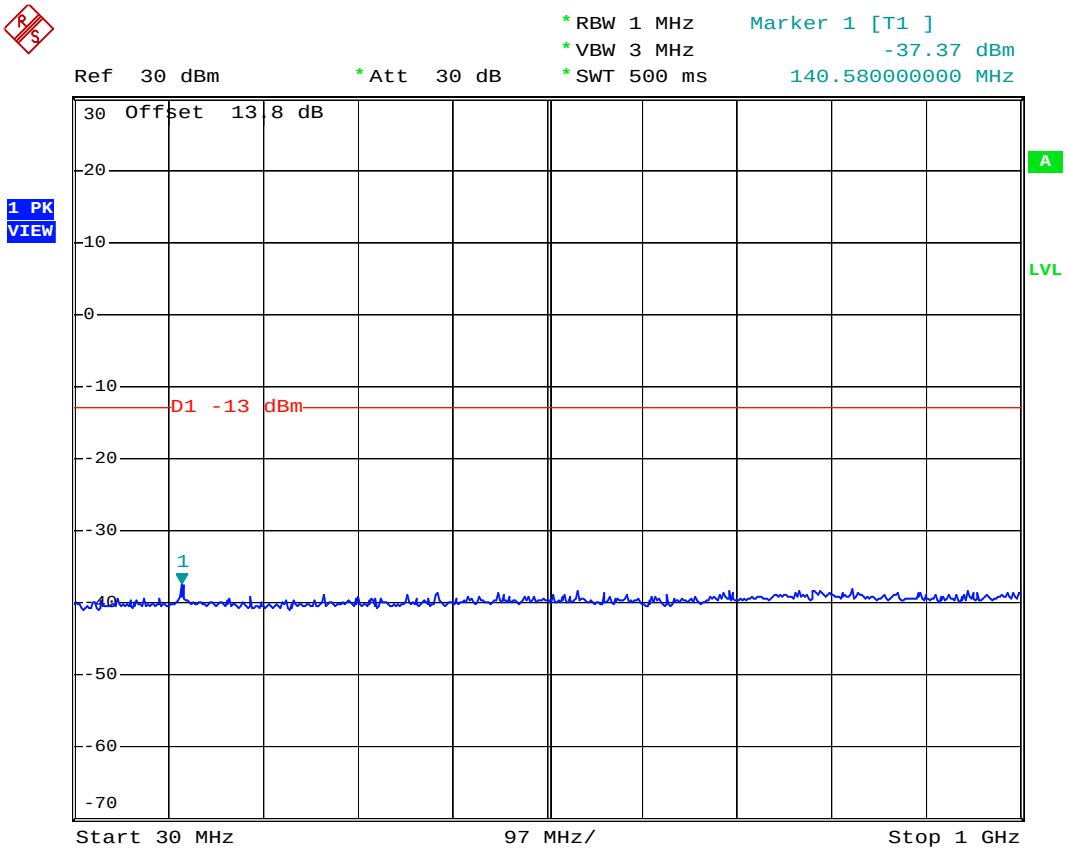
Date: 6.MAR.2006 15:17:23

- Test Mode : WCDMA Band 5 CH4182
- Frequency Range : 7G-9G



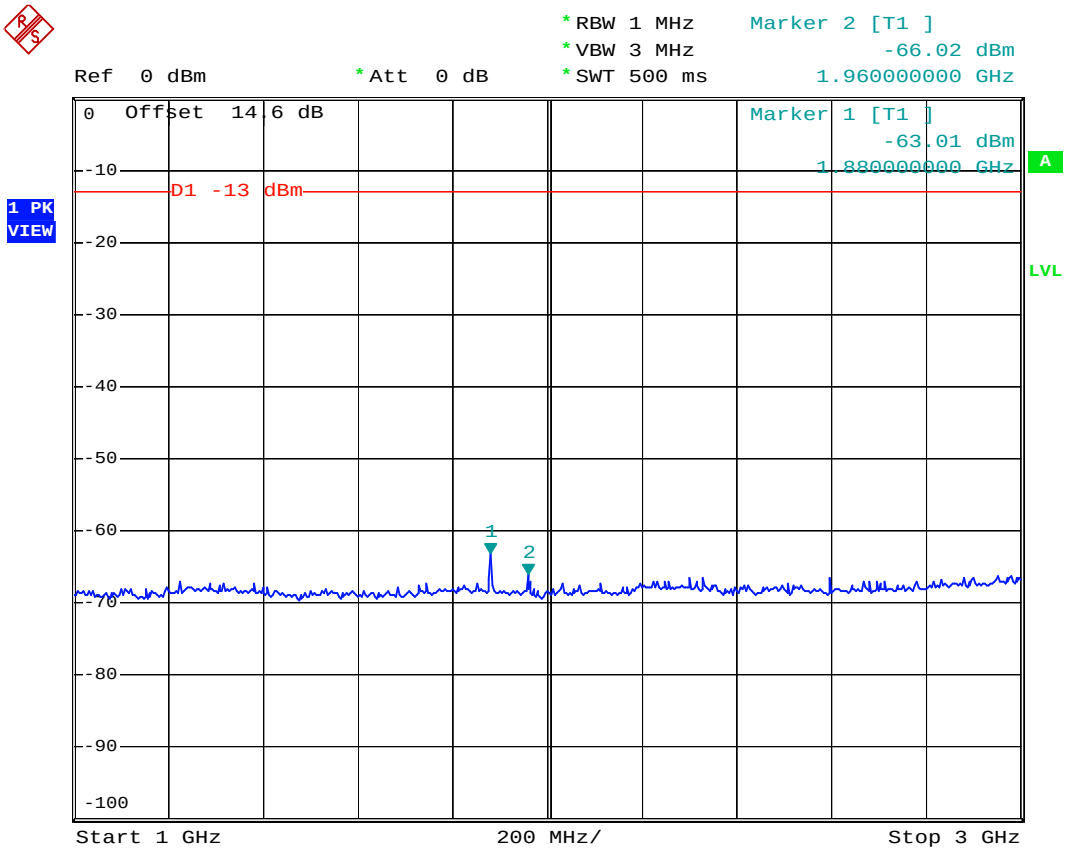
Date: 6.MAR.2006 15:19:07

- Mode 6
- Test Mode : WCDMA Band 2 CH9400
- Frequency Range : 30M-1G



Date: 6.MAR.2006 14:45:38

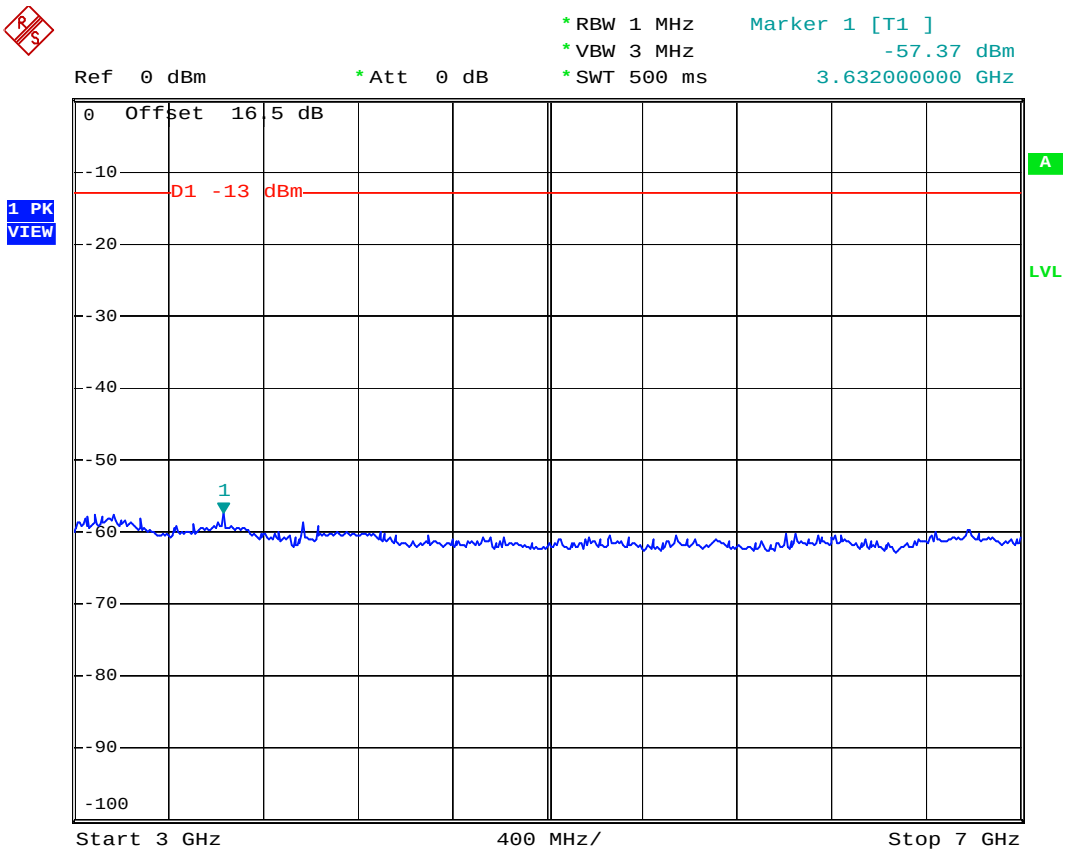
- Test Mode : WCDMA Band 2 CH9400
- Frequency Range : 1G-3G



Date: 6.MAR.2006 14:53:54

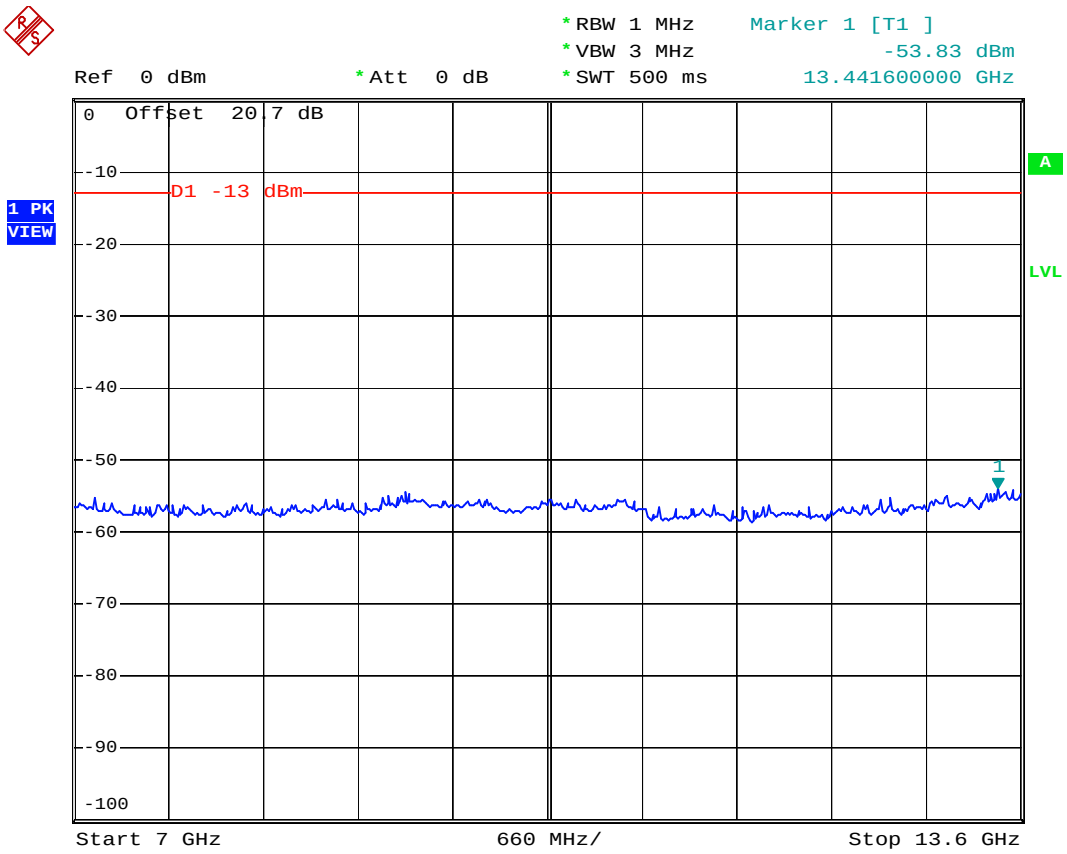
Remark : The WCDMA fundamental signal was filtered by notch filter.

- Test Mode : WCDMA Band 2 CH9400
- Frequency Range : 3G-7G



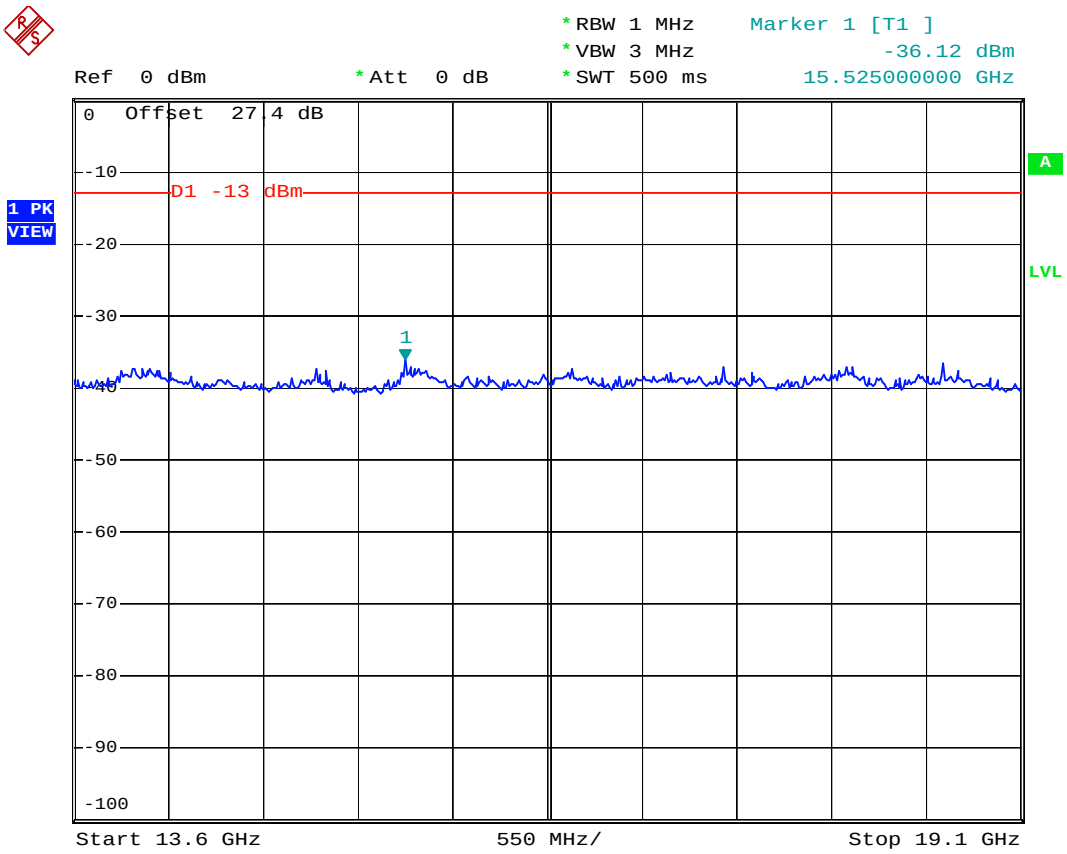
Date: 6.MAR.2006 14:56:20

- Test Mode : WCDMA Band 2 CH9400
- Frequency Range : 7G-13.6G



Date: 6.MAR.2006 15:00:20

- Test Mode : WCDMA Band 2 CH9400
- Frequency Range : 13.6G-19.1G



Date: 6.MAR.2006 15:01:50

4.6 Field Strength of Spurious Radiation

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

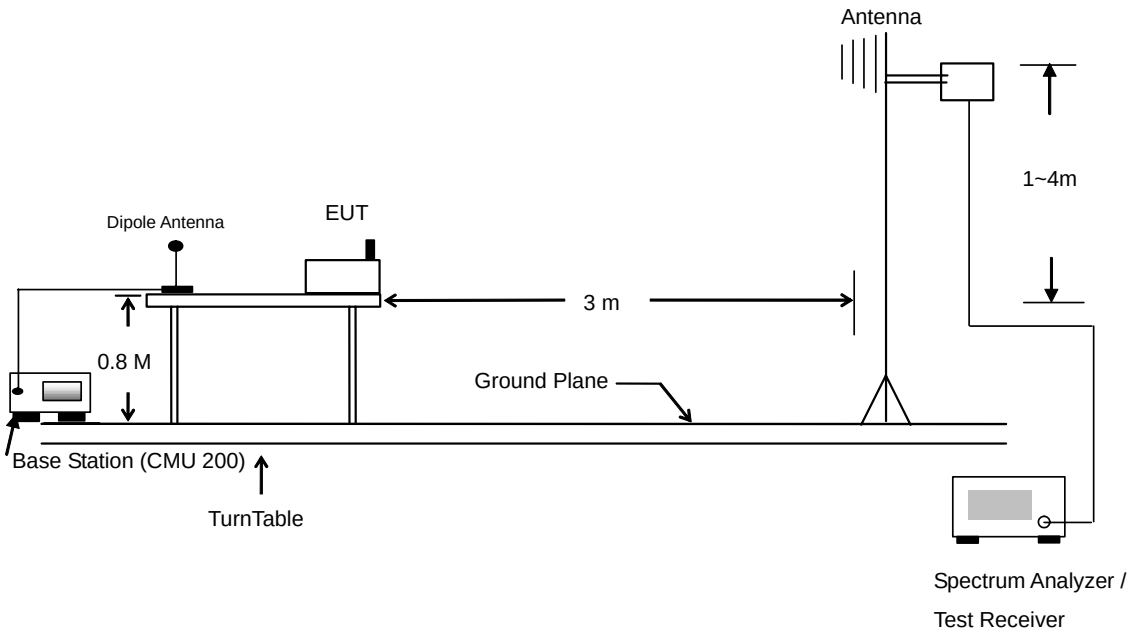
4.6.1 Measurement Instruments

As described in chapter 5 of this test report.

4.6.2 Test Procedure

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)
32.4	-49.7	-13	-36.7	31.9	-42.4	-13	-29.4
99.4	-56.8	-13	-43.8	66.2	-49.4	-13	-36.4
143.1	-54.9	-13	-41.9	152.0	-51.2	-13	-38.2
194.4	-59.9	-13	-46.9	183.6	-53.9	-13	-40.9
1674.0	-35.2	-13	-22.2	1674.0	-39.7	-13	-26.7
2508.0	-33.7	-13	-20.7	2508.0	-34.8	-13	-21.8
3344.0	-37.2	-13	-24.2	**3344.0**	**-31.4**	**-13**	**-18.4**
4184.0	-50.8	-13	-37.8	4184.0	-46.4	-13	-33.4
5018.0	-46.0	-13	-33.0	5018.0	-43.6	-13	-30.6
5854.0	-49.3	-13	-36.3	5444.0	-51.6	-13	-38.6
6688.0	-45.9	-13	-32.9	5668.0	-51.6	-13	-38.6
				5854.0	-46.8	-13	-33.8
				6688.0	-42.4	-13	-29.4

- 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)
39.180	-56.05	-13	-43.05	40.530	-43.30	-13	-30.30
71.040	-57.03	-13	-44.03	56.730	-53.010	-13	-40.01
102.090	-60.85	-13	-47.85	76.980	-49.690	-13	-36.69
901.300	-64.68	-13	-51.68	925.800	-63.860	-13	-50.86
1674.000	**-38.84**	**-13**	**-25.84**	1674.000	-43.520	-13	-30.52
2508.000	-46.68	-13	-33.68	2508.000	-50.420	-13	-37.42
				5018.000	-52.450	-13	-39.45

- Test Mode : Mode 3

PCS (GSM) Radiated Spurious EIRP							
H Polarization				V Polarization			
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)
33.2	-45.0	-13	-32.0	32.4	-39.8	-13	-26.8
68.3	-46.8	-13	-33.8	75.1	-46.0	-13	-33.0
148.5	-51.8	-13	-38.8	149.3	-47.8	-13	-34.8
2008.0	-55.5	-13	-42.5	2008.0	-54.8	-13	-41.8
3758.0	-33.8	-13	-20.8	**3758.0**	**-29.6**	**-13**	**-16.6**
5638.0	-36.4	-13	-23.4	4018.0	-51.4	-13	-38.4
6374.0	-48.9	-13	-35.9	4778.0	-48.1	-13	-35.1
9398.0	-41.2	-13	-28.2	5638.0	-31.9	-13	-18.9
11278.0	-37.2	-13	-24.2	6028.0	-48.8	-13	-35.8
				6374.0	-46.9	-13	-33.9
				7518.0	-43.7	-13	-30.7
				11278.0	-35.8	-13	-22.8
				13158.0	-44.3	-13	-31.3

- Test Mode : Mode 4

PCS (EDGE) Radiated Spurious EIRP							
H Polarization				V Polarization			
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)
34.590	-52.840	-13	-39.84	**40.530**	**-42.010**	**-13**	**-29.01**
39.180	-56.380	-13	-43.38	57.540	-47.880	-13	-34.88
90.480	-57.400	-13	-44.40	71.580	-47.980	-13	-34.98
763.400	-66.160	-13	-53.16	687.800	-64.540	-13	-51.54
864.900	-65.210	-13	-52.21	878.900	-62.340	-13	-49.34
1000.000	-64.060	-13	-51.06	983.900	-62.050	-13	-49.05
3758.000	-46.750	-13	-33.75	3758.000	-50.430	-13	-37.43
5638.000	-49.470	-13	-36.47	5638.000	-43.170	-13	-30.17
				9398.000	-42.800	-13	-29.80

- Test Mode : Mode 5

WCDMA Band 5 Radiated Spurious ERP							
H Polarization				V Polarization			
Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)
32.4	-51.2	-13	-38.2	**32.4**	**-47.3**	**-13**	**-34.3**
68.3	-54.7	-13	-41.7	72.4	-52.6	-13	-39.6
1668.0	-50.4	-13	-37.4	264.6	-62.7	-13	-49.7
				1668.0	-60.2	-13	-47.2
				3338.0	-55.8	-13	-42.8

- Test Mode : Mode 6

WCDMA Band 2 Radiated Spurious EIRP							
H Polarization				V Polarization			
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)
32.4	-48.6	-13	-35.6	33.2	-44.9	-13	-31.9
67.5	-51.7	-13	-38.7	67.0	-49.2	-13	-36.2
147.2	-56.1	-13	-43.1	146.6	-53.6	-13	-40.6
3764.0	-44.4	-13	-31.4	3758.0	-46.5	-13	-33.5
5638.0	-50.2	-13	-37.2	5634.0	-49.9	-13	-36.9
				9394.0	**-41.8**	**-13**	**-28.8**

- Test Mode : Mode 7

GSM850 with Bluetooth Co-location Radiated Spurious ERP							
H Polarization				V Polarization			
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)
32.4	-48.1	-13	-35.1	33.2	-42.8	-13	-29.8
100.7	-49.2	-13	-36.2	74.3	-49.1	-13	-36.1
143.1	-53.8	-13	-40.8	152.0	-52.3	-13	-39.3
1674.0	-34.4	-13	-21.4	1674.0	-40.0	-13	-27.0
2508.0	-33.8	-13	-20.8	2508.0	-33.6	-13	-20.6
3344.0	-36.8	-13	-23.8	**3344.0**	**-33.6**	**-13**	**-20.6**
4184.0	-47.6	-13	-34.6	4184.0	-43.0	-13	-30.0
5018.0	-46.5	-13	-33.5	5018.0	-45.3	-13	-32.3
5854.0	-47.9	-13	-34.9	5684.0	-51.1	-13	-38.1
6688.0	-46.2	-13	-33.2	5854.0	-46.9	-13	-33.9
10874.0	-39.4	-13	-26.4	6688.0	-42.6	-13	-29.6
				10874.0	-41.7	-13	-28.7

4.6.5 Test Data

4.6.5.1 Mode 1

Horizontal Polarization

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Ant Pos	Table Pos	Remark
	MHz	dBm	dB	dBm	dBm	dB	dB	dB	cm	deg	
1 @	32.43	-47.57	-34.57	-13.00	-46.11	-1.47	0.00	0.00	400	0	Peak
2 @	99.39	-54.66	-41.66	-13.00	-42.42	-12.24	0.00	0.00	400	0	Peak
3 @	143.13	-52.75	-39.75	-13.00	-40.01	-12.74	0.00	0.00	400	0	Peak
4 @	194.43	-57.79	-44.79	-13.00	-44.45	-13.33	0.00	0.00	400	0	Peak

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Ant Pos	Table Pos	Remark
	MHz	dBm	dB	dBm	dBm	dB	dB	dB	cm	deg	
1 @	836.90	-34.35	-21.35	-13.00	-33.02	-1.33	0.00	0.00	100	0	Peak
2 @	875.40	-43.29	-30.29	-13.00	-42.33	-0.96	0.00	0.00	100	0	Peak

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Ant Pos	Table Pos	Remark
	MHz	dBm	dB	dBm	dBm	dB	dB	dB	cm	deg	
1 @	1674.00	-33.08	-20.08	-13.00	-33.30	0.22	0.00	0.00	300	133	Peak
2 @	2508.00	-31.57	-18.57	-13.00	-32.77	1.20	0.00	0.00	300	133	Peak

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Ant Pos	Table Pos	Remark
	MHz	dBm	dB	dBm	dBm	dB	dB	dB	cm	deg	
1 @	3344.00	-35.01	-22.01	-13.00	-40.42	5.41	0.00	0.00	100	0	Peak
2 @	4184.00	-48.61	-35.61	-13.00	-58.40	9.79	0.00	0.00	100	0	Peak

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Ant Pos	Table Pos	Remark
	MHz	dBm	dB	dBm	dBm	dB	dB	dB	cm	deg	
1 @	5018.00	-43.83	-30.83	-13.00	-54.07	10.24	0.00	0.00	200	0	Peak
2 @	5854.00	-47.12	-34.12	-13.00	-57.34	10.22	0.00	0.00	200	0	Peak
3 @	6688.00	-43.72	-30.72	-13.00	-56.86	13.14	0.00	0.00	200	0	Peak

Vertical Polarization

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Ant Pos	Table Pos	Remark
	MHz	dBm	dB	dBm	dBm	dB	dB	dB	cm	deg	
1 @	31.89	-40.25	-27.25	-13.00	-30.63	-9.62	0.00	0.00	400	0	Peak
2 @	66.18	-47.26	-34.26	-13.00	-34.67	-12.58	0.00	0.00	400	0	Peak
3 @	152.04	-49.00	-36.00	-13.00	-40.83	-8.16	0.00	0.00	400	0	Peak
4 @	183.63	-51.72	-38.72	-13.00	-43.28	-8.44	0.00	0.00	400	0	Peak

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Ant Pos	Table Pos	Remark
	MHz	dBm	dB	dBm	dBm	dB	dB	dB	cm	deg	
1 @	836.90	-33.37	-20.37	-13.00	-34.73	1.36	0.00	0.00	100	0	Peak
2 @	875.40	-39.72	-26.72	-13.00	-41.39	1.67	0.00	0.00	100	0	Peak

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Ant Pos	Table Pos	Remark
	MHz	dBm	dB	dBm	dBm	dB	dB	dB	cm	deg	
1 @	1674.00	-37.52	-24.52	-13.00	-37.04	-0.48	0.00	0.00	300	360	Peak
2 @	2508.00	-32.66	-19.66	-13.00	-34.93	2.27	0.00	0.00	300	360	Peak

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Ant Pos	Table Pos	Remark
	MHz	dBm	dB	dBm	dBm	dB	dB	dB	cm	deg	
1 @	3344.00	-29.28	-16.28	-13.00	-33.75	4.47	0.00	0.00	100	0	Peak
2 @	4184.00	-44.27	-31.27	-13.00	-52.63	8.36	0.00	0.00	100	0	Peak

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Ant Pos	Table Pos	Remark
	MHz	dBm	dB	dBm	dBm	dB	dB	dB	cm	deg	
1 @	5018.00	-41.44	-28.44	-13.00	-50.29	8.85	0.00	0.00	200	0	Peak
2 @	5444.00	-49.49	-36.49	-13.00	-58.18	8.69	0.00	0.00	200	0	Peak
3 @	5668.00	-49.41	-36.41	-13.00	-58.09	8.68	0.00	0.00	200	0	Peak
4 @	5854.00	-44.67	-31.67	-13.00	-53.48	8.81	0.00	0.00	200	0	Peak
5 @	6688.00	-40.26	-27.26	-13.00	-51.79	11.53	0.00	0.00	200	0	Peak

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

4.6.5.2 Mode 2
Horizontal Polarization

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	39.18	-53.90	-40.90	-13.00	-48.78	-5.12	Peak
2 @	71.04	-54.88	-41.88	-13.00	-42.53	-12.35	Peak
3 @	102.09	-58.70	-45.70	-13.00	-46.44	-12.26	Peak

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	840.40	-39.32			-38.02	-1.31	Peak
2 @	880.30	-42.37			-41.46	-0.91	Peak
3 @	901.30	-62.53	-49.53	-13.00	-61.82	-0.72	Peak

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

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	1674.00	-36.69	-23.69	-13.00	-36.91	0.22	Peak
2 @	2508.00	-44.53	-31.53	-13.00	-45.73	1.20	Peak

Vertical Polarization

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	40.53	-41.15	-28.15	-13.00	-29.07	-12.08	Peak
2 @	56.73	-50.86	-37.86	-13.00	-37.02	-13.84	Peak
3 @	76.98	-47.54	-34.54	-13.00	-36.50	-11.05	Peak

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	827.80	-41.55			-42.83	1.29	Peak
2 @	880.30	-47.18			-48.90	1.71	Peak
3 @	925.80	-61.71	-48.71	-13.00	-63.78	2.07	Peak

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

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	1674.00	-41.37	-28.37	-13.00	-40.89	-0.48	Peak
2 @	2508.00	-48.27	-35.27	-13.00	-50.54	2.27	Peak

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	5018.00	-50.30	-37.30	-13.00	-59.15	8.85	Peak

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

4.6.5.3 Mode 3
Horizontal Polarization

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Ant Pos	Table Pos	Remark
	MHz	dBm	dB	dBm	dBm	dB	dB	dB	cm	deg	
1 @	33.24	-44.97	-31.97	-13.00	-43.50	-1.47	0.00	0.00	400	0	Peak
2 @	68.34	-46.80	-33.80	-13.00	-34.44	-12.36	0.00	0.00	400	0	Peak
3 @	148.53	-51.82	-38.82	-13.00	-39.02	-12.80	0.00	0.00	400	0	Peak

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Ant Pos	Table Pos	Remark
	MHz	dBm	dB	dBm	dBm	dB	dB	dB	cm	deg	
1 @	1884.00	-46.21	-33.21	-13.00	-45.53	-0.68	0.00	0.00	200	0	Peak
2 @	1958.00	-52.97	-39.97	-13.00	-51.86	-1.11	0.00	0.00	200	0	Peak
3 @	2008.00	-55.51	-42.51	-13.00	-54.48	-1.02	0.00	0.00	200	0	Peak

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Ant Pos	Table Pos	Remark
	MHz	dBm	dB	dBm	dBm	dB	dB	dB	cm	deg	
1 @	3758.00	-33.78	-20.78	-13.00	-41.70	7.92	0.00	0.00	300	360	Peak

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Ant Pos	Table Pos	Remark
	MHz	dBm	dB	dBm	dBm	dB	dB	dB	cm	deg	
1 @	5638.00	-36.37	-23.37	-13.00	-46.34	9.97	0.00	0.00	100	0	Peak
2 @	6374.00	-48.94	-35.94	-13.00	-60.44	11.50	0.00	0.00	100	0	Peak

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Ant Pos	Table Pos	Remark
	MHz	dBm	dB	dBm	dBm	dB	dB	dB	cm	deg	
1 @	9398.00	-41.22	-28.22	-13.00	-59.44	18.22	0.00	0.00	100	0	Peak

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Ant Pos	Table Pos	Remark
	MHz	dBm	dB	dBm	dBm	dB	dB	dB	cm	deg	
1 @	11278.00	-37.23	-24.23	-13.00	-57.53	20.30	0.00	0.00	200	0	Peak

Vertical Polarization

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Ant Pos	Table Pos	Remark
	MHz	dBm	dB	dBm	dBm	dB	dB	dB	cm	deg	
1 @	32.43	-39.82	-26.82	-13.00	-29.93	-9.89	0.00	0.00	400	0	Peak
2 @	75.09	-46.01	-33.01	-13.00	-34.69	-11.32	0.00	0.00	400	0	Peak
3 @	149.34	-47.80	-34.80	-13.00	-39.66	-8.14	0.00	0.00	400	0	Peak

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Ant Pos	Table Pos	Remark
	MHz	dBm	dB	dBm	dBm	dB	dB	dB	cm	deg	
1 @	1884.00	-51.62	-38.62	-13.00	-51.12	-0.50	0.00	0.00	100	0	Peak
2 @	1958.00	-49.98	-36.98	-13.00	-49.38	-0.60	0.00	0.00	100	0	Peak
3 @	2008.00	-54.82	-41.82	-13.00	-54.46	-0.36	0.00	0.00	100	0	Peak

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Ant Pos	Table Pos	Remark
	MHz	dBm	dB	dBm	dBm	dB	dB	dB	cm	deg	
1 @	3758.00	-29.63	-16.63	-13.00	-36.27	6.64	0.00	0.00	300	360	Peak
2 @	4018.00	-51.36	-38.36	-13.00	-58.96	7.60	0.00	0.00	300	360	Peak
3 @	4778.00	-48.14	-35.14	-13.00	-58.53	10.39	0.00	0.00	300	360	Peak

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Ant Pos	Table Pos	Remark
	MHz	dBm	dB	dBm	dBm	dB	dB	dB	cm	deg	
1 @	5638.00	-31.90	-18.90	-13.00	-40.55	8.65	0.00	0.00	100	0	Peak
2 @	6028.00	-48.78	-35.78	-13.00	-57.08	8.29	0.00	0.00	100	0	Peak
3 @	6374.00	-46.92	-33.92	-13.00	-57.13	10.21	0.00	0.00	100	0	Peak

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Ant Pos	Table Pos	Remark
	MHz	dBm	dB	dBm	dBm	dB	dB	dB	cm	deg	
1 @	7518.00	-43.71	-30.71	-13.00	-57.08	13.37	0.00	0.00	200	0	Peak

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Ant Pos	Table Pos	Remark
	MHz	dBm	dB	dBm	dBm	dB	dB	dB	cm	deg	
1 @	11278.00	-35.83	-22.83	-13.00	-54.70	18.87	0.00	0.00	200	0	Peak

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Ant Pos	Table Pos	Remark
	MHz	dBm	dB	dBm	dBm	dB	dB	dB	cm	deg	
1 @	13158.00	-44.31	-31.31	-13.00	-60.10	15.79	0.00	0.00	100	0	Peak

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

4.6.5.4 Mode 4
Horizontal Polarization

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	34.59	-52.84	-39.84	-13.00	-50.16	-2.69	Peak
2	39.18	-56.38	-43.38	-13.00	-51.26	-5.12	Peak
3	90.48	-57.40	-44.40	-13.00	-45.12	-12.28	Peak

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1	763.40	-66.16	-53.16	-13.00	-64.09	-2.07	Peak
2	864.90	-65.21	-52.21	-13.00	-64.15	-1.06	Peak
3	1000.00	-64.06	-51.06	-13.00	-64.30	0.24	Peak

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	1884.00	-48.63			-47.96	-0.68	Peak
2 @	1958.00	-49.94			-48.83	-1.11	Peak

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

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	3758.00	-46.75	-33.75	-13.00	-54.67	7.92	Peak

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	5638.00	-49.47	-36.47	-13.00	-59.44	9.97	Peak

Vertical Polarization

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	40.53	-42.01	-29.01	-13.00	-29.93	-12.08	Peak
2 @	57.54	-47.88	-34.88	-13.00	-34.04	-13.84	Peak
3 @	71.58	-47.98	-34.98	-13.00	-36.24	-11.74	Peak

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1	687.80	-64.54	-51.54	-13.00	-63.92	-0.62	Peak
2	878.90	-62.34	-49.34	-13.00	-64.04	1.70	Peak
3	983.90	-62.05	-49.05	-13.00	-64.58	2.53	Peak

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1	1884.00	-54.20			-53.70	-0.50	Peak
2	1958.00	-54.95			-54.36	-0.60	Peak

Remark:

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

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	3758.00	-50.43	-37.43	-13.00	-57.07	6.64	Peak

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	5638.00	-43.17	-30.17	-13.00	-51.82	8.65	Peak

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1 @	9398.00	-42.80	-29.80	-13.00	-60.00	17.20	Peak

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

4.6.5.5 Mode 5
Horizontal Polarization

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Ant Pos	Table Pos	Remark
	MHz	dBm	dB	dBm	dBm	dB	dB	dB	cm	deg	
1 @	32.43	-49.07	-36.07	-13.00	-47.60	-1.47	0.00	0.00	400	0	Peak
2 @	68.34	-52.55	-39.55	-13.00	-40.20	-12.36	0.00	0.00	400	0	Peak

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Ant Pos	Table Pos	Remark
	MHz	dBm	dB	dBm	dBm	dB	dB	dB	cm	deg	
1 @	831.30	-25.87	-12.87	-13.00	-24.48	-1.39	0.00	0.00	100	0	Peak

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Ant Pos	Table Pos	Remark
	MHz	dBm	dB	dBm	dBm	dB	dB	dB	cm	deg	
1 @	1668.00	-48.25	-35.25	-13.00	-48.47	0.22	0.00	0.00	300	360	Peak

Vertical Polarization

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Ant Pos	Table Pos	Remark
	MHz	dBm	dB	dBm	dBm	dB	dB	dB	cm	deg	
1 @	32.43	-45.14	-32.14	-13.00	-35.25	-9.89	0.00	0.00	400	0	Peak
2 @	72.39	-50.43	-37.43	-13.00	-38.83	-11.60	0.00	0.00	400	0	Peak
3 @	264.63	-60.53	-47.53	-13.00	-53.33	-7.20	0.00	0.00	400	0	Peak

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Ant Pos	Table Pos	Remark
	MHz	dBm	dB	dBm	dBm	dB	dB	dB	cm	deg	
1 @	841.80	-30.32	-17.32	-13.00	-31.73	1.40	0.00	0.00	100	0	Peak
2 @	880.30	-54.61	-41.61	-13.00	-56.32	1.71	0.00	0.00	100	0	Peak

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Ant Pos	Table Pos	Remark
	MHz	dBm	dB	dBm	dBm	dB	dB	dB	cm	deg	
1 @	1668.00	-58.02	-45.02	-13.00	-57.54	-0.48	0.00	0.00	300	360	Peak

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Ant Pos	Table Pos	Remark
	MHz	dBm	dB	dBm	dBm	dB	dB	dB	cm	deg	
1 @	3338.00	-53.69	-40.69	-13.00	-58.15	4.47	0.00	0.00	100	0	Peak

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

4.6.5.6 Mode 6
Horizontal Polarization

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Ant Pos	Table Pos	Remark
	MHz	dBm	dB	dBm	dBm	dB	dB	dB	cm	deg	
1 @	32.43	-48.61	-35.61	-13.00	-47.14	-1.47	0.00	0.00	400	0	Peak
2 @	67.53	-51.65	-38.65	-13.00	-39.29	-12.36	0.00	0.00	400	0	Peak
3 @	147.18	-56.05	-43.05	-13.00	-43.26	-12.79	0.00	0.00	400	0	Peak

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Ant Pos	Table Pos	Remark
	MHz	dBm	dB	dBm	dBm	dB	dB	dB	cm	deg	
1 @	1878.00	-24.32	-11.32	-13.00	-23.80	-0.51	0.00	0.00	200	54	Peak
2 @	1958.00	-51.02	-38.02	-13.00	-49.91	-1.11	0.00	0.00	200	54	Peak

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Ant Pos	Table Pos	Remark
	MHz	dBm	dB	dBm	dBm	dB	dB	dB	cm	deg	
1 @	3764.00	-44.37	-31.37	-13.00	-52.29	7.92	0.00	0.00	300	360	Peak

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Ant Pos	Table Pos	Remark
	MHz	dBm	dB	dBm	dBm	dB	dB	dB	cm	deg	
1 @	5638.00	-50.17	-37.17	-13.00	-60.14	9.97	0.00	0.00	100	0	Peak

Vertical Polarization

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Ant Pos	Table Pos	Remark
	MHz	dBm	dB	dBm	dBm	dB	dB	dB	cm	deg	
1 @	33.24	-44.91	-31.91	-13.00	-35.02	-9.89	0.00	0.00	400	0	Peak
2 @	66.99	-49.17	-36.17	-13.00	-36.73	-12.44	0.00	0.00	400	0	Peak
3 @	146.64	-53.62	-40.62	-13.00	-45.51	-8.11	0.00	0.00	400	0	Peak

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Ant Pos	Table Pos	Remark
	MHz	dBm	dB	dBm	dBm	dB	dB	dB	cm	deg	
1 @	1884.00	-25.54	-12.54	-13.00	-25.04	-0.50	0.00	0.00	100	54	Peak
2 @	1958.00	-46.06	-33.06	-13.00	-45.46	-0.60	0.00	0.00	100	54	Peak

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Ant Pos	Table Pos	Remark
	MHz	dBm	dB	dBm	dBm	dB	dB	dB	cm	deg	
1 @	3758.00	-46.53	-33.53	-13.00	-53.17	6.64	0.00	0.00	300	360	Peak

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Ant Pos	Table Pos	Remark
	MHz	dBm	dB	dBm	dBm	dB	dB	dB	cm	deg	
1 @	5634.00	-49.94	-36.94	-13.00	-58.60	8.65	0.00	0.00	100	0	Peak

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Ant Pos	Table Pos	Remark
	MHz	dBm	dB	dBm	dBm	dB	dB	dB	cm	deg	
1 @	9394.00	-41.75	-28.75	-13.00	-58.95	17.20	0.00	0.00	100	0	Peak

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

4.6.5.7 Mode 7
Horizontal Polarization

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Ant Pos	Table Pos	Remark
	MHz	dBm	dB	dBm	dBm	dB	dB	dB	cm	deg	
1 @	32.43	-45.99	-32.99	-13.00	-44.52	-1.47	0.00	0.00	400	0	Peak
2 @	100.74	-47.07	-34.07	-13.00	-34.82	-12.25	0.00	0.00	400	0	Peak
3 @	143.13	-51.61	-38.61	-13.00	-38.87	-12.74	0.00	0.00	400	0	Peak

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Ant Pos	Table Pos	Remark
	MHz	dBm	dB	dBm	dBm	dB	dB	dB	cm	deg	
1 @	836.90	-34.60	-21.60	-13.00	-33.27	-1.33	0.00	0.00	100	0	Peak
2 @	875.40	-44.39	-31.39	-13.00	-43.43	-0.96	0.00	0.00	100	0	Peak

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Ant Pos	Table Pos	Remark
	MHz	dBm	dB	dBm	dBm	dB	dB	dB	cm	deg	
1 @	1674.00	-32.23	-19.23	-13.00	-32.46	0.22	0.00	0.00	200	0	Peak
2 @	2398.00	-6.12			-7.01	0.89	0.00	0.00	200	0	Peak
3 @	2508.00	-31.63	-18.63	-13.00	-32.83	1.20	0.00	0.00	200	0	Peak

Remark:
1. #2: BT Signal

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Ant Pos	Table Pos	Remark
	MHz	dBm	dB	dBm	dBm	dB	dB	dB	cm	deg	
1 @	3344.00	-34.61	-21.61	-13.00	-40.01	5.41	0.00	0.00	300	360	Peak
2 @	4184.00	-45.42	-32.42	-13.00	-55.21	9.79	0.00	0.00	300	360	Peak

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Ant Pos	Table Pos	Remark
	MHz	dBm	dB	dBm	dBm	dB	dB	dB	cm	deg	
1 @	5018.00	-44.33	-31.33	-13.00	-54.57	10.24	0.00	0.00	100	0	Peak
2 @	5854.00	-45.72	-32.72	-13.00	-55.94	10.22	0.00	0.00	100	0	Peak
3 @	6688.00	-44.03	-31.03	-13.00	-57.16	13.14	0.00	0.00	100	0	Peak

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Ant Pos	Table Pos	Remark
	MHz	dBm	dB	dBm	dBm	dB	dB	dB	cm	deg	
1 @	10874.00	-37.25	-24.25	-13.00	-58.91	21.66	0.00	0.00	100	0	Peak

Vertical Polarization

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Ant Pos	Table Pos	Remark
	MHz	dBm	dB	dBm	dBm	dB	dB	dB	cm	deg	
1 @	33.24	-40.63	-27.63	-13.00	-30.73	-9.89	0.00	0.00	400	0	Peak
2 @	74.28	-46.94	-33.94	-13.00	-35.61	-11.32	0.00	0.00	400	0	Peak
3 @	152.04	-50.13	-37.13	-13.00	-41.96	-8.16	0.00	0.00	400	0	Peak

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Ant Pos	Table Pos	Remark
	MHz	dBm	dB	dBm	dBm	dB	dB	dB	cm	deg	
1 @	836.90	-33.28	-20.28	-13.00	-34.64	1.36	0.00	0.00	100	0	Peak
2 @	875.40	-38.78	-25.78	-13.00	-40.45	1.67	0.00	0.00	100	0	Peak

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Ant Pos	Table Pos	Remark
	MHz	dBm	dB	dBm	dBm	dB	dB	dB	cm	deg	
1 @	1674.00	-37.88	-24.88	-13.00	-37.40	-0.48	0.00	0.00	100	0	Peak
2 @	2404.00	-12.18			-14.06	1.87	0.00	0.00	100	0	Peak
3 @	2508.00	-31.43	-18.43	-13.00	-33.70	2.27	0.00	0.00	100	0	Peak

Remark:
1. #2 BT Signal

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Ant Pos	Table Pos	Remark
	MHz	dBm	dB	dBm	dBm	dB	dB	dB	cm	deg	
1 @	3344.00	-31.42	-18.42	-13.00	-35.89	4.47	0.00	0.00	300	360	Peak
2 @	4184.00	-40.87	-27.87	-13.00	-49.23	8.36	0.00	0.00	300	360	Peak

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Ant Pos	Table Pos	Remark
	MHz	dBm	dB	dBm	dBm	dB	dB	dB	cm	deg	
1 @	5018.00	-43.15	-30.15	-13.00	-51.99	8.85	0.00	0.00	100	0	Peak
2 @	5684.00	-48.96	-35.96	-13.00	-57.68	8.72	0.00	0.00	100	0	Peak
3 @	5854.00	-44.76	-31.76	-13.00	-53.57	8.81	0.00	0.00	100	0	Peak
4 @	6688.00	-40.44	-27.44	-13.00	-51.97	11.53	0.00	0.00	100	0	Peak

	Freq	Level	Over Limit	Limit Line	Read Level	Antenna Factor	Preamp Factor	Cable Loss	Ant Pos	Table Pos	Remark
	MHz	dBm	dB	dBm	dBm	dB	dB	dB	cm	deg	
1 @	10874.00	-39.52	-26.52	-13.00	-59.38	19.86	0.00	0.00	100	0	Peak

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

4.7 Frequency Stability (Temperature Variation)

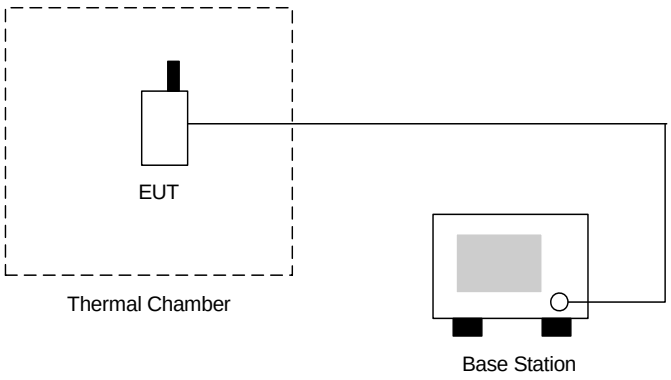
4.7.1 Measurement Instrument

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 : GSM 850 (GSM) CH189

Temperature(°C)	Change (Hz)	Change (ppm)	Limit (ppm)	Result
-30	-35	-0.02	2.5	Passed
-20	-32	-0.02		
-10	-12	-0.01		
0	16	0.01		
10	19	0.01		
20	-22	-0.01		
30	-16	-0.01		
40	-15	-0.01		
50	-26	-0.01		

- Test Mode : PCS (GSM) CH661

Temperature(°C)	Change (Hz)	Change (ppm)	Limit (ppm)	Result
-30	37	0.02	2.5	Passed
-20	33	0.02		
-10	24	0.01		
0	38	0.02		
10	22	0.01		
20	38	0.02		
30	38	0.02		
40	-27	-0.01		
50	-22	-0.01		

- Test Mode : GSM 850 (EDGE) CH189

Temperature(°C)	Change (Hz)	Change (ppm)	Limit (ppm)	Result
-30	-37	-0.02	2.5	Passed
-20	-31	-0.02		
-10	-19	-0.01		
0	-14	-0.01		
10	22	0.01		
20	-17	-0.01		
30	-19	-0.01		
40	-16	-0.01		
50	-28	-0.01		

- Test Mode : PCS (EDGE) CH661

Temperature(°C)	Change (Hz)	Change (ppm)	Limit (ppm)	Result
-30	35	0.02	2.5	Passed
-20	31	0.02		
-10	26	0.01		
0	39	0.02		
10	26	0.01		
20	35	0.02		
30	33	0.02		
40	-26	-0.01		
50	-24	-0.01		

- Test Mode : WCDMA Band 5 CH4182

Temperature(°C)	Change (Hz)	Change (ppm)	Limit (ppm)	Result
-30	-24	-0.01	2.5	Passed
-20	-26	-0.01		
-10	-22	-0.01		
0	-24	-0.01		
10	-19	-0.01		
20	-20	-0.01		
30	-16	-0.01		
40	-17	-0.01		
50	-20	-0.01		

- Test Mode : WCDMA Band 2 CH9400

Temperature(°C)	Change (Hz)	Change (ppm)	Limit (ppm)	Result
-30	-43	-0.02	2.5	Passed
-20	-45	-0.02		
-10	-38	-0.02		
0	-42	-0.02		
10	-40	-0.02		
20	-34	-0.02		
30	-42	-0.02		
40	-43	-0.02		
50	-44	-0.02		

4.8 Frequency Stability (Voltage Variation)

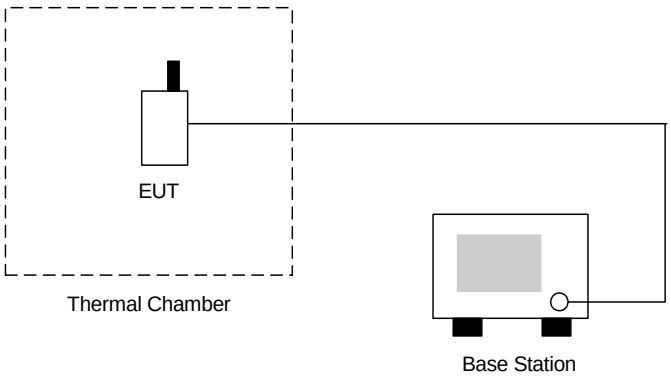
4.8.1 Measurement Instrument

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 : GSM 850 (GSM) CH189

Voltage(Volt)	Change (Hz)	Change (ppm)	Limit (ppm)	Result
3.7	-18	-0.01	2.5	Passed
BEP	-20	-0.01		
4.2	-16	-0.01		

- Test Mode : PCS (GSM) CH661

Voltage(Volt)	Change (Hz)	Change (ppm)	Limit (ppm)	Result
3.7	35	0.02	2.5	Passed
BEP	31	0.02		
4.2	33	0.02		

- Test Mode : GSM 850 (EDGE) CH189

Voltage(Volt)	Change (Hz)	Change (ppm)	Limit (ppm)	Result
3.7	-23.0	-0.01	2.5	Passed
BEP	-18.0	-0.01		
4.2	-19.0	-0.01		

- Test Mode : PCS (EDGE) CH661

Voltage(Volt)	Change (Hz)	Change (ppm)	Limit (ppm)	Result
3.7	36.0	0.02	2.5	Passed
BEP	29.0	0.02		
4.2	32.0	0.02		

- Test Mode : WCDMA Band 5 CH4182

Voltage(Volt)	Change (Hz)	Change (ppm)	Limit (ppm)	Result
3.7	-18	-0.01	2.5	Passed
BEP	-20	-0.01		
4.2	-17	-0.01		

- Test Mode : WCDMA Band 2 CH9400

Voltage(Volt)	Change (Hz)	Change (ppm)	Limit (ppm)	Result
3.7	-35	-0.02	2.5	Passed
BEP	-38	-0.02		
4.2	-37	-0.02		

Remark:
1. Normal Voltage=3.7V.
2. Battery End Point (BEP)=3.5 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	Jul. 25, 2005	Jul. 24, 2006	Radiation (03CH06-HY)
Receiver	R&S	ESCS30	100356	9KHz-2.75GHz	Jun. 28, 2005	Jun. 27, 2006	Radiation (03CH06-HY)
Controller	CT	SC100	N/A	N/A	N/A	N/A	Radiation (03CH06-HY)
Bilog Antenna	SCHAFFNER	CBL6112B	2885	30MHz -2GHz	Nov. 21, 2004	Nov. 20, 2006	Radiation (03CH06-HY)
Horn Antenna	Com-Power	AH118	071025	1G-18G	Feb. 1, 2005	Jan. 31, 2007	Radiation (03CH06-HY)
SHF-EHF Horn	SCHWARZBECK	BBHA 9170	9170-249	14G - 40G	Jul. 21, 2004	Jul. 20, 2006	Radiation (03CH06-HY)
HF Amplifier	MITEQ	AFS44	973248	0.1G - 26.5G	Dec. 17, 2005	Dec. 17, 2006	Radiation (03CH06-HY)
Amplifier	MITEQ	AMF-6F	997165	26G - 40G	Jul. 21, 2005	Jul. 20, 2006	Radiation (03CH06-HY)
Turn Table	HD	DS 420	420/650/00	0 ~ 360 degree	N/A	N/A	Radiation (03CH06-HY)
Antenna Mast	HD	MA 240	240/560/00	1 m - 4 m	N/A	N/A	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