



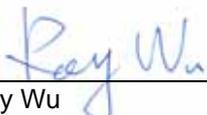
# FCC Test Report

According to

## 47 CFR Part 22H, 24E

Equipment : PDA Phone  
 Trade Name : ASUS  
 Model No. : ZX1 / P560  
 FCC ID : MSQGALAXY3  
 Tx Frequency Range : GSM850 : 824.2 ~ 848.8MHz  
 GSM1900 : 1850.2 ~1909.8 MHz  
 WCDMA Band V : 826.4 ~ 846.6 MHz  
 WCDMA Band II : 1852.4 ~1907.6 MHz  
 Max. ERP/EIRP Power : <Model : ZX1> <Model : P560>  
 GSM850(GSM) : 0.89 W GSM850(GSM) : 0.64 W  
 GSM850(EDGE) : 0.33 W GSM850(EDGE) : 0.25 W  
 GSM1900(GSM) : 1.20 W GSM1900(GSM) : 1.00 W  
 GSM1900(EDGE) : 0.47 W GSM1900(EDGE) : 0.47 W  
 WCDMA Band V : 0.08 W WCDMA Band V : 0.06 W  
 WCDMA Band V(HSDPA) : 0.07 W WCDMA Band V(HSDPA) : 0.05 W  
 WCDMA Band II : 0.15 W WCDMA Band II : 0.17 W  
 WCDMA Band II(HSDPA) : 0.15 W WCDMA Band II(HSDPA) : 0.13 W  
 Emission Designator : GSM : 300KGXW  
 EDGE : 300KG7W  
 WCDMA : 4M22F9W  
 Applicant : ASUSTek COMPUTER INC.  
 4F., No. 150, Li-Te Rd., Peitou, Taipei, Taiwan

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- The data shown in this test report were carried out on Mar. 26, 2008 at **Sporton International Inc. LAB.**
- Report No.: FG830315B, Report Version: Rev. 01.

  
 Roy Wu  
 Manager

**SPORTON International Inc.**

No. 52, Hwa Ya 1<sup>st</sup> Rd., Hwa Ya Technology Park, Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C.



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## **1. General Information**

### **1.1 Applicant**

**ASUSTek COMPUTER INC.**

4F., No. 150, Li-Te Rd., Peitou, Taipei, Taiwan

### **1.2 Manufacturer**

#### **1. Pegatron Corporation Taoyuan Mfg.**

No. 5, Shing Yeh Street, 333 Kwei Shan Hsiang, Taoyuan Hsien, Taiwan

#### **2. ProTek (Shanghai) Ltd.**

No.3768, Xiu Yan Road, Nanhui District, 201315 Shanghai, People's Republic of China

#### **3. MainTek Computer (Suzhou) Co., Ltd.**

No. 233 Jing Feng Road , 215011 Suzhou New District, Jiangsu, People ' s Republic of China

**1.3 Basic Description of Equipment under Test**

<b>Equipment</b>		PDA Phone
<b>Trade Name</b>		ASUS
<b>Model No.</b>		ZX1 / P560
<b>FCC ID</b>		MSQGALAXY3
<b>AC Adapter 1</b>	<b>Brand Name</b>	TAMURA
	<b>Model Name</b>	JSP050090UU
	<b>Power Rating</b>	I/P: AC 100-240V, 50-60Hz, 0.3A; O/P: DC 5V, 0.9A, 4.5 W
	<b>AC Power Cord Type</b>	1.5 meter shielded cable without ferrite core
<b>AC Adapter 2</b>	<b>Brand Name</b>	DELTA
	<b>Model Name</b>	EADP-5HB B
	<b>Power Rating</b>	I/P: AC 100-240V, 50-60Hz, 0.4A; O/P: DC 5V, 0.8A
	<b>AC Power Cord Type</b>	1.8 meter non-shielded cable without ferrite core
<b>Car Charger</b>	<b>Brand Name</b>	L&K
	<b>Part Number</b>	04G267011910
	<b>Power Rating</b>	I/P: DC 12V/24V; O/P: DC 5V, 900mA
	<b>Power Cord Type</b>	1.6 meter shielded cable without ferrite core
<b>Battery 1</b>	<b>Brand Name</b>	ASUS
	<b>Model Name</b>	SBP-15
	<b>Part Number</b>	07G0166J3450
	<b>Power Rating</b>	DC 3.7V, 1100mAh
	<b>Type</b>	Li-ion
<b>Battery 2</b>	<b>Brand Name</b>	ASUS
	<b>Model Name</b>	SBP-15
	<b>Part Number</b>	07G0166Y3450
	<b>Power Rating</b>	DC 3.7V, 1150mAh
	<b>Type</b>	Li-ion
<b>Earphone</b>	<b>Brand Name</b>	ASUS
	<b>Part Number</b>	04G171301270
	<b>Signal Line Type</b>	1.5 meter non-shielded cable without ferrite core
<b>USB Cable</b>	<b>Brand Name</b>	ACON
	<b>Part Number</b>	14G000511900
	<b>Signal Line Type</b>	1.2 meter non-shielded cable without ferrite core

**Remark:**

1. P560 is the serial model of ZX1. They have the same RF chipset, the same block diagram and main board PCB. The differences between them are ID design, keypad PCB, antenna and antenna matching.
2. Above EUT's information was declared by manufacturer. Please refer to the specifications of manufacturer or User's Manual for more detailed features description.



1.4 Feature of Equipment under Test

Product Feature & Specification	
DUT Type :	PDA Phone
Trade Name :	ASUS
Model No. :	ZX1 / P560
FCC ID :	MSQGALAXY3
Tx Frequency :	GSM850 : 824 MHz ~ 849 MHz GSM1900 : 1850 MHz ~1910 MHz WCDMA Band V : 824 MHz ~ 849 MHz WCDMA Band II : 1850 MHz ~ 1910 MHz
Rx Frequency :	GSM850 : 869 MHz ~ 894 MHz GSM1900 : 1930 MHz ~ 1990 MHz WCDMA Band V : 869 MHz ~ 894 MHz WCDMA Band II : 1930 MHz ~ 1990 MHz
Maximum Output Power to Antenna :	<p><b>&lt;Model : ZX1&gt;</b></p> <p>GSM850 : 32.68 dBm (GSM) / 31.24 dBm (GPRS8) / 31.22 dBm (GPRS10) / 27.42 dBm (EDGE8) / 27.39 dBm (EDGE10)</p> <p>GSM1900 : 29.62 dBm (GSM) / 29.59 dBm (GPRS8) / 29.58 dBm (GPRS10) / 26.27 dBm (EDGE8) / 26.23 dBm (EDGE10)</p> <p>WCDMA Band V : 22.82 dBm(12.2kbps) / 22.81 dBm(64kbps) / 22.80 dBm(144kbps) / 22.81 dBm(384kbps) / 21.78 dBm (12.2kbps+HSDPA)</p> <p>WCDMA Band II : 22.93 dBm(12.2kbps) / 22.94 dBm(64kbps) / 22.94 dBm(144kbps) / 22.95 dBm(384kbps) / 21.72 dBm (12.2kbps+HSDPA)</p> <p><b>&lt;Model : P560&gt;</b></p> <p>GSM850 : 32.65 dBm (GSM) / 31.15 dBm (GPRS8) / 31.16 dBm (GPRS10) / 27.25 dBm (EDGE8) / 27.26 dBm (EDGE10)</p> <p>GSM1900 : 29.40 dBm (GSM) / 29.39 dBm (GPRS8) / 29.36 dBm (GPRS10) / 26.16 dBm (EDGE8) / 26.13 dBm (EDGE10)</p> <p>WCDMA Band V : 22.81 dBm(12.2kbps) / 22.81 dBm(64kbps) / 22.80 dBm(144kbps) / 22.80 dBm(384kbps) / 21.70 dBm (12.2kbps+HSDPA)</p> <p>WCDMA Band II : 22.69 dBm(12.2kbps) / 22.71 dBm(64kbps) / 22.68 dBm(144kbps) / 22.72 dBm(384kbps) / 21.49 dBm (12.2kbps+HSDPA)</p>



<b>Maximum ERP/EIRP :</b>	<p><b>&lt;Model : ZX1&gt;</b>                  GSM850(GSM) : 0.89 W (29.48 dBm)                  GSM850(EDGE) : 0.33 W (25.22 dBm)                  GSM1900(GSM) : 1.20 W (30.80 dBm)                  GSM1900(EDGE) : 0.47 W (26.71 dBm)                  WCDMA Band V : 0.08 W (18.90 dBm)                  WCDMA Band V(HSDPA) : 0.07 W (18.37 dBm)                  WCDMA Band II : 0.15 W (21.90 dBm)                  WCDMA Band II(HSDPA) : 0.15 W (21.87 dBm)</p>
	<p><b>&lt;Model : P560&gt;</b>                  GSM850(GSM) : 0.64 W (28.07 dBm)                  GSM850(EDGE) : 0.25 W (23.94 dBm)                  GSM1900(GSM) : 1.00 W (30.02 dBm)                  GSM1900(EDGE) : 0.47 W (26.71 dBm)                  WCDMA Band V : 0.06 W (17.85 dBm)                  WCDMA Band V(HSDPA) : 0.05 W (17.11 dBm)                  WCDMA Band II : 0.17 W (22.18 dBm)                  WCDMA Band II(HSDPA) : 0.13 W (21.15 dBm)</p>
<b>Antenna Type :</b>	WWAN : PIFA Antenna
<b>HW Version :</b>	SR2
<b>SW Version :</b>	ROM version : V3.8.3_WWE Radio version : V2.1.4-G3
<b>Power Rating (DC/AC , Voltage and Current of RF element or PA) :</b>	GSM : DC 4.8V / 2.5A WCDMA : DC 4.6V / 1A
<b>GPRS / EGPRS Multislot class :</b>	10
<b>Type of Modulation :</b>	GSM / GPRS : GMSK EDGE : 8PSK WCDMA / HSDPA : QPSK
<b>Type of Emission :</b>	GSM : 300KGXW EDGE : 300KG7W WCDMA : 4M22F9W
<b>DUT Stage :</b>	Identical Prototype

**1.5 Report Date**

EUT Received : Mar. 03, 2008

Report Date : Mar. 31, 2008



## 2. Test Configuration of Equipment under Test

### 2.1 Test Manner

1. The spurious emission measurements were carried out in semi-anechoic chamber with 3-meter test range.
2. During all testings, EUT is in link mode with base station emulator at maximum power level.
3. Frequency range investigated: radiated emission 30 MHz to 9000 MHz for GSM850 and WCDMA Band V; 30 MHz to 19000 MHz for GSM1900 and WCDMA Band II.
4. All the test cases were tested on model ZX1, and conducted power, ERP/EIRP, and RSE were tested on P560.

### 2.2 Test Mode

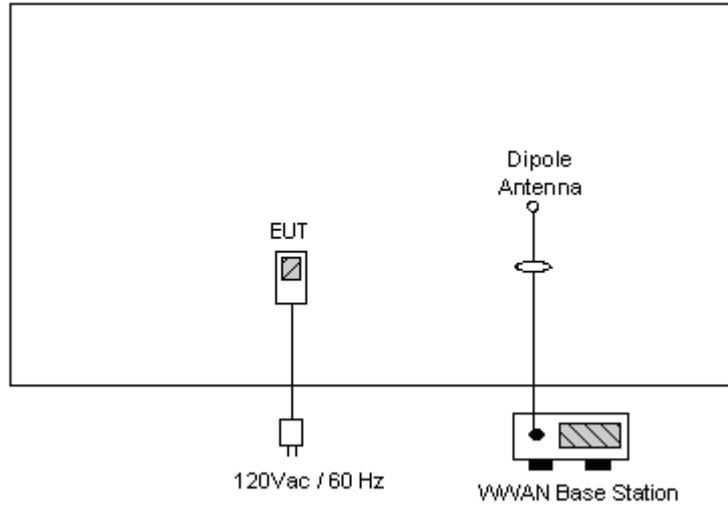
#### <Model : ZX1>

Application	GSM850	GSM1900	WCDMA Band V	WCDMA Band II
Radiated Emission	<input checked="" type="checkbox"/> Mode 1: GSM Link	<input checked="" type="checkbox"/> Mode 3: GSM Link	<input checked="" type="checkbox"/> Mode 5: WCDMA Link	<input checked="" type="checkbox"/> Mode 7: WCDMA Link
	<input checked="" type="checkbox"/> Mode 2: EDGE Link	<input checked="" type="checkbox"/> Mode 4: EDGE Link	<input checked="" type="checkbox"/> Mode 6: HSDPA Link	<input checked="" type="checkbox"/> Mode 8: HSDPA Link
	<input checked="" type="checkbox"/> Mode 9: GSM Link + WLAN Link			
Conducted Measurement	<input checked="" type="checkbox"/> Mode 1: GSM Link	<input checked="" type="checkbox"/> Mode 3: GSM Link	<input checked="" type="checkbox"/> Mode 5: WCDMA Link	<input checked="" type="checkbox"/> Mode 7: WCDMA Link
	<input checked="" type="checkbox"/> Mode 2: EDGE Link	<input checked="" type="checkbox"/> Mode 4: EDGE Link	<input checked="" type="checkbox"/> Mode 6: HSDPA Link	<input checked="" type="checkbox"/> Mode 8: HSDPA Link

#### <Model : P560>

Application	GSM850	GSM1900	WCDMA Band V	WCDMA Band II
Radiated Emission	<input checked="" type="checkbox"/> Mode 1: GSM Link	<input checked="" type="checkbox"/> Mode 3: GSM Link	<input checked="" type="checkbox"/> Mode 5: WCDMA Link	<input checked="" type="checkbox"/> Mode 7: WCDMA Link
	<input checked="" type="checkbox"/> Mode 2: EDGE Link	<input checked="" type="checkbox"/> Mode 4: EDGE Link	<input checked="" type="checkbox"/> Mode 6: HSDPA Link	<input checked="" type="checkbox"/> Mode 8: HSDPA Link
	<input checked="" type="checkbox"/> Mode 9: GSM Link + WLAN Link			
Conducted Measurement	<input checked="" type="checkbox"/> Mode 1: GSM Link	<input checked="" type="checkbox"/> Mode 3: GSM Link	<input checked="" type="checkbox"/> Mode 5: WCDMA Link	<input checked="" type="checkbox"/> Mode 7: WCDMA Link
	<input checked="" type="checkbox"/> Mode 2: EDGE Link	<input checked="" type="checkbox"/> Mode 4: EDGE Link	<input checked="" type="checkbox"/> Mode 6: HSDPA Link	<input checked="" type="checkbox"/> Mode 8: HSDPA Link

### 2.3 Connection Diagram of Test System



### 2.4 Ancillary Equipment List

Item	Equipment	Trade Name	Model No.	FCC ID	Data Cable/ Power Code
1.	Base Station	R&S	CMU200	N/A	Unshielded, 1.8m



### **3. General Information of Test Site**

Test Site Location : No. 52, Hwa Ya 1<sup>st</sup> Rd., Hwa Ya Technology Park,  
Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C.  
TEL : 886-3-327-3456  
FAX : 886-3-328-4978  
Test Site No : 03CH06-HY, TH02-HY  
FCC Designation No.: TW1022

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

#### **3.1 Test Voltage**

AC 120V / 60Hz

#### **3.2 Test Compliance**

47 CFR Part 22H, 24E, Part 2

Preliminary Guidance for Receiving Applications for Certification of 3G Device. May 9, 2006.

#### **3.3 Frequency Range**

- a. Radiation: from 30MHz to 9000MHz for GSM850 and WCDMA Band V.
- b. Radiation: from 30 MHz to 19000 MHz for GSM1900 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 base station.
2. Set the EUT at maximum power through base station by using below setting.
  - a. PCL=5 for GSM850, PCL=0 for PCS1900.
  - b. TPC with All Up Bits for WCDMA.
3. Select lowest, middle, and highest channels for each band.

### 4.2.3 Test Setup Layout





4.2.4 Test Result  
 <Model : ZX1>

Bands	Channel	Frequency (MHz)	Conducted Power (dBm)	Conducted Power (Watts)
GSM850 (GSM)	128	824.2 (Low)	32.62	1.828
	189	836.4 (Mid)	32.65	1.841
	251	848.8 (High)	32.68	1.854
GSM850 (EDGE)	128	824.2 (Low)	27.35	0.543
	189	836.4 (Mid)	27.38	0.547
	251	848.8 (High)	27.42	0.552
GSM1900 (GSM)	512	1850.2 (Low)	29.62	0.916
	661	1880.0 (Mid)	29.37	0.865
	810	1909.8 (High)	29.16	0.824
GSM1900 (EDGE)	512	1850.2 (Low)	26.27	0.424
	661	1880.0 (Mid)	26.24	0.421
	810	1909.8 (High)	26.03	0.401
WCDMA Band V ( 12.2k bps )	4132	826.4 (Low)	22.75	0.188
	4182	836.4 (Mid)	22.54	0.179
	4233	846.6 (High)	22.71	0.187
WCDMA Band V ( 64k bps )	4132	826.4 (Low)	22.80	0.191
	4182	836.4 (Mid)	22.63	0.183
	4233	846.6 (High)	22.81	0.191
WCDMA Band V ( 144k bps )	4132	826.4 (Low)	22.76	0.189
	4182	836.4 (Mid)	22.52	0.179
	4233	846.6 (High)	22.73	0.187
WCDMA Band V ( 384k bps )	4132	826.4 (Low)	22.76	0.189
	4182	836.4 (Mid)	22.53	0.179
	4233	846.6 (High)	22.73	0.187
WCDMA Band V ( AMR )	4132	826.4 (Low)	22.73	0.187
	4182	836.4 (Mid)	22.50	0.178
	4233	846.6 (High)	22.72	0.187
WCDMA Band V (HSDPA)	4132	826.4 (Low)	21.78	0.151
	4182	836.4 (Mid)	21.61	0.145
	4233	846.6 (High)	21.67	0.147
WCDMA Band II ( 12.2k bps )	9262	1852.4 (Low)	22.35	0.172
	9400	1880.0 (Mid)	22.20	0.166
	9538	1907.6 (High)	22.27	0.169
WCDMA Band II ( 64k bps )	9262	1852.4 (Low)	22.67	0.185
	9400	1880.0 (Mid)	22.94	0.197
	9538	1907.6 (High)	22.78	0.190
WCDMA Band II ( 144k bps )	9262	1852.4 (Low)	22.26	0.168
	9400	1880.0 (Mid)	22.21	0.166
	9538	1907.6 (High)	22.22	0.167
WCDMA Band II ( 384k bps )	9262	1852.4 (Low)	22.23	0.167
	9400	1880.0 (Mid)	22.19	0.166
	9538	1907.6 (High)	22.24	0.167
WCDMA Band II ( AMR )	9262	1852.4 (Low)	22.29	0.169
	9400	1880.0 (Mid)	22.21	0.166
	9538	1907.6 (High)	22.19	0.166
WCDMA Band II (HSDPA)	9262	1852.4 (Low)	21.50	0.141
	9400	1880.0 (Mid)	21.72	0.149
	9538	1907.6 (High)	21.39	0.138



<Model : P560>

Bands	Channel	Frequency (MHz)	Conducted Power (dBm)	Conducted Power (Watts)
GSM850 (GSM)	128	824.2 (Low)	32.57	1.807
	189	836.4 (Mid)	32.61	1.824
	251	848.8 (High)	32.65	1.841
GSM850 (EDGE)	128	824.2 (Low)	27.11	0.514
	189	836.4 (Mid)	27.19	0.524
	251	848.8 (High)	27.25	0.531
GSM1900 (GSM)	512	1850.2 (Low)	29.40	0.871
	661	1880.0 (Mid)	29.35	0.861
	810	1909.8 (High)	29.20	0.832
GSM1900 (EDGE)	512	1850.2 (Low)	26.16	0.413
	661	1880.0 (Mid)	26.10	0.407
	810	1909.8 (High)	26.00	0.398
WCDMA Band V ( 12.2k bps )	4132	826.4 (Low)	22.81	0.191
	4182	836.4 (Mid)	22.80	0.191
	4233	846.6 (High)	22.72	0.187
WCDMA Band V ( 64k bps )	4132	826.4 (Low)	22.77	0.189
	4182	836.4 (Mid)	22.81	0.191
	4233	846.6 (High)	22.70	0.186
WCDMA Band V ( 144k bps )	4132	826.4 (Low)	22.79	0.190
	4182	836.4 (Mid)	22.80	0.191
	4233	846.6 (High)	22.69	0.186
WCDMA Band V ( 384k bps )	4132	826.4 (Low)	22.80	0.191
	4182	836.4 (Mid)	22.78	0.190
	4233	846.6 (High)	22.69	0.186
WCDMA Band V (HSDPA)	4132	826.4 (Low)	21.70	0.148
	4182	836.4 (Mid)	21.64	0.146
	4233	846.6 (High)	21.68	0.147
WCDMA Band II ( 12.2k bps )	9262	1852.4 (Low)	22.24	0.167
	9400	1880.0 (Mid)	22.69	0.186
	9538	1907.6 (High)	22.60	0.182
WCDMA Band II ( 64k bps )	9262	1852.4 (Low)	22.27	0.169
	9400	1880.0 (Mid)	22.71	0.187
	9538	1907.6 (High)	22.57	0.181
WCDMA Band II ( 144k bps )	9262	1852.4 (Low)	22.25	0.168
	9400	1880.0 (Mid)	22.68	0.185
	9538	1907.6 (High)	22.61	0.182
WCDMA Band II ( 384k bps )	9262	1852.4 (Low)	22.30	0.170
	9400	1880.0 (Mid)	22.72	0.187
	9538	1907.6 (High)	22.58	0.181
WCDMA Band II (HSDPA)	9262	1852.4 (Low)	21.16	0.131
	9400	1880.0 (Mid)	21.49	0.141
	9538	1907.6 (High)	21.23	0.133



### 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 tutable 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.  $ERP/EIRP = P_s + E_t - E_s + G_s = P_s + R_t - R_s + G_s$

$P_s$  (dBm) : Input power to substitution antenna.

$G_s$  (dBi or dBd) : Substitution antenna Gain.

$E_t = R_t + AF$

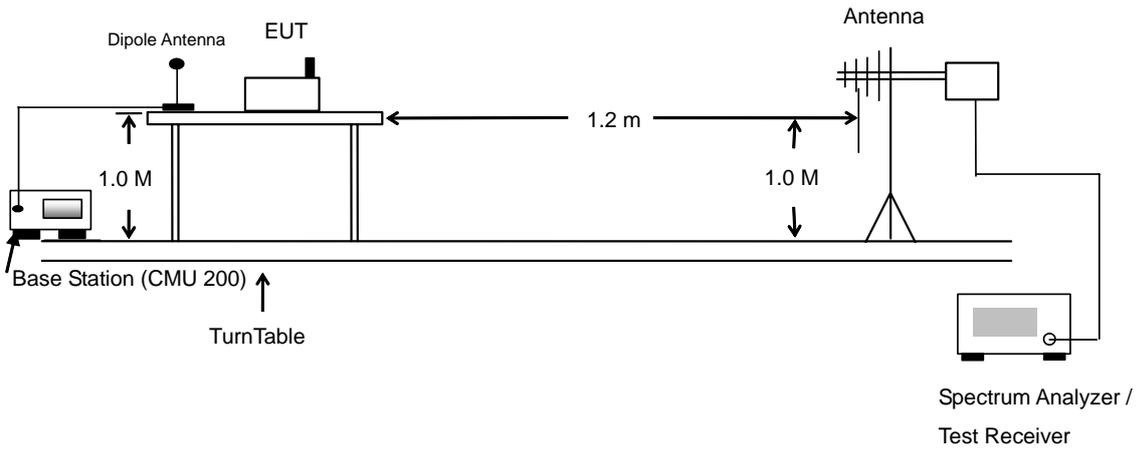
$E_s = R_s + AF$

$AF$  (dB/m) : Receive antenna factor

$R_t$  : The highest received signal in Spectrum Analyzer for EUT.

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

4.3.3 Test Setup Layout of ERP/EIRP





4.3.4 Test Result

<Model : ZX1>

GSM850 (GSM) Radiated Power ERP						
Horizontal Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBd)	ERP (dBm)	ERP (W)
824.20	-30.92	-48.12	0.00	-1.08	16.12	0.04
836.40	-29.86	-48.28	0.00	-0.93	17.49	0.06
848.80	-28.47	-48.35	0.00	-0.76	19.12	0.08
Vertical Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBd)	ERP (dBm)	ERP (W)
824.20	-20.39	-47.97	0.00	-1.08	26.50	0.45
836.40	-18.93	-48.01	0.00	-0.93	28.15	0.65
848.80	-17.81	-48.05	0.00	-0.76	29.48	0.89

<Model : ZX1>

GSM850 (EDGE) Radiated Power ERP						
Horizontal Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBd)	ERP (dBm)	ERP (W)
824.20	-35.62	-48.12	0.00	-1.08	11.42	0.01
836.40	-35.34	-48.28	0.00	-0.93	12.01	0.02
848.80	-33.56	-48.35	0.00	-0.76	14.03	0.03
Vertical Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBd)	ERP (dBm)	ERP (W)
824.20	-26.06	-47.97	0.00	-1.08	20.83	0.12
836.40	-24.12	-48.01	0.00	-0.93	22.96	0.20
848.80	-22.07	-48.05	0.00	-0.76	25.22	0.33



**<Model : ZX1>**

<b>GSM1900 (GSM) Radiated Power EIRP</b>						
Horizontal Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBi)	EIRP (dBm)	EIRP (W)
1850.20	-23.04	-51.88	0.00	1.96	30.80	1.20
1880.00	-25.67	-52.99	0.00	2.00	29.32	0.86
1909.80	-28.77	-54.28	0.00	1.98	27.49	0.56
Vertical Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBi)	EIRP (dBm)	EIRP (W)
1850.20	-23.53	-52.13	0.00	1.96	30.56	1.14
1880.00	-25.86	-53.17	0.00	2.00	29.31	0.85
1909.80	-28.32	-54.13	0.00	1.98	27.79	0.60

**<Model : ZX1>**

<b>GSM1900 (EDGE) Radiated Power EIRP</b>						
Horizontal Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBi)	EIRP (dBm)	EIRP (W)
1850.20	-27.13	-51.88	0.00	1.96	26.71	0.47
1880.00	-29.28	-52.99	0.00	2.00	25.71	0.37
1909.80	-32.41	-54.28	0.00	1.98	23.85	0.24
Vertical Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBi)	EIRP (dBm)	EIRP (W)
1850.20	-28.04	-52.13	0.00	1.96	26.05	0.40
1880.00	-29.48	-53.17	0.00	2.00	25.69	0.37
1909.80	-31.71	-54.13	0.00	1.98	24.40	0.28



<Model : ZX1>

WCDMA Band V Radiated Power ERP						
Horizontal Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBd)	ERP (dBm)	ERP (W)
826.40	-39.46	-48.12	0.00	-1.08	7.58	0.01
836.40	-39.73	-48.28	0.00	-0.93	7.62	0.01
846.60	-39.06	-48.35	0.00	-0.76	8.53	0.01
Vertical Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBd)	ERP (dBm)	ERP (W)
826.40	-29.38	-47.97	0.00	-1.08	17.51	0.06
836.40	-29.11	-48.01	0.00	-0.93	17.97	0.06
846.60	-28.39	-48.05	0.00	-0.76	18.90	0.08

<Model : ZX1>

WCDMA Band V (HSDPA) Radiated Power ERP						
Horizontal Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBd)	ERP (dBm)	ERP (W)
826.40	-40.54	-48.12	0.00	-1.08	6.50	0.00
836.40	-40.56	-48.28	0.00	-0.93	6.79	0.00
846.60	-39.63	-48.35	0.00	-0.76	7.96	0.01
Vertical Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBd)	ERP (dBm)	ERP (W)
826.40	-30.22	-47.97	0.00	-1.08	16.67	0.05
836.40	-29.82	-48.01	0.00	-0.93	17.26	0.05
846.60	-28.92	-48.05	0.00	-0.76	18.37	0.07



<Model : ZX1>

WCDMA Band II Radiated Power EIRP						
Horizontal Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBi)	EIRP (dBm)	EIRP (W)
1852.40	-31.94	-51.88	0.00	1.96	21.90	0.15
1880.00	-33.27	-52.99	0.00	2.00	21.72	0.15
1907.60	-34.58	-54.28	0.00	1.98	21.68	0.15
Vertical Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBi)	EIRP (dBm)	EIRP (W)
1852.40	-32.80	-52.13	0.00	1.96	21.29	0.13
1880.00	-33.49	-53.17	0.00	2.00	21.68	0.15
1907.60	-34.54	-54.13	0.00	1.98	21.57	0.14

<Model : ZX1>

WCDMA Band II (HSDPA) Radiated Power EIRP						
Horizontal Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBi)	EIRP (dBm)	EIRP (W)
1852.40	-31.97	-51.88	0.00	1.96	21.87	0.15
1880.00	-33.36	-52.99	0.00	2.00	21.63	0.15
1907.60	-35.13	-54.28	0.00	1.98	21.13	0.13
Vertical Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBi)	EIRP (dBm)	EIRP (W)
1852.40	-32.82	-52.13	0.00	1.96	21.27	0.13
1880.00	-33.67	-53.17	0.00	2.00	21.50	0.14
1907.60	-34.93	-54.13	0.00	1.98	21.18	0.13



<Model : P560>

GSM850 (GSM) Radiated Power ERP						
Horizontal Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBd)	ERP (dBm)	ERP (W)
824.20	-31.63	-48.12	0.00	-1.08	15.41	0.03
836.40	-30.90	-48.28	0.00	-0.93	16.45	0.04
848.80	-29.85	-48.35	0.00	-0.76	17.74	0.06
Vertical Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBd)	ERP (dBm)	ERP (W)
824.20	-21.17	-47.97	0.00	-1.08	25.72	0.37
836.40	-20.41	-48.01	0.00	-0.93	26.67	0.46
848.80	-19.22	-48.05	0.00	-0.76	28.07	0.64

<Model : P560>

GSM850 (EDGE) Radiated Power ERP						
Horizontal Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBd)	ERP (dBm)	ERP (W)
824.20	-34.89	-48.12	0.00	-1.08	12.15	0.02
836.40	-35.35	-48.28	0.00	-0.93	12.00	0.02
848.80	-33.71	-48.35	0.00	-0.76	13.88	0.02
Vertical Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBd)	ERP (dBm)	ERP (W)
824.20	-26.21	-47.97	0.00	-1.08	20.68	0.12
836.40	-23.93	-48.01	0.00	-0.93	23.15	0.21
848.80	-23.35	-48.05	0.00	-0.76	23.94	0.25



<Model : P560>

GSM1900 (GSM) Radiated Power EIRP						
Horizontal Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBi)	EIRP (dBm)	EIRP (W)
1850.20	-24.11	-51.88	0.00	1.96	29.73	0.94
1880.00	-25.41	-52.99	0.00	2.00	29.58	0.91
1909.80	-27.49	-54.28	0.00	1.98	28.77	0.75
Vertical Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBi)	EIRP (dBm)	EIRP (W)
1850.20	-24.51	-52.13	0.00	1.96	29.58	0.91
1880.00	-25.15	-53.17	0.00	2.00	30.02	1.00
1909.80	-26.70	-54.13	0.00	1.98	29.41	0.87

<Model : P560>

GSM1900 (EDGE) Radiated Power EIRP						
Horizontal Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBi)	EIRP (dBm)	EIRP (W)
1850.20	-27.13	-51.88	0.00	1.96	26.71	0.47
1880.00	-28.61	-52.99	0.00	2.00	26.38	0.43
1909.80	-30.38	-54.28	0.00	1.98	25.88	0.39
Vertical Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBi)	EIRP (dBm)	EIRP (W)
1850.20	-27.88	-52.13	0.00	1.96	26.21	0.42
1880.00	-28.79	-53.17	0.00	2.00	26.38	0.43
1909.80	-29.71	-54.13	0.00	1.98	26.40	0.44



<Model : P560>

WCDMA Band V Radiated Power ERP						
Horizontal Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBd)	ERP (dBm)	ERP (W)
826.40	-43.23	-48.12	0.00	-1.08	3.81	0.00
836.40	-42.38	-48.28	0.00	-0.93	4.97	0.00
846.60	-42.06	-48.35	0.00	-0.76	5.53	0.00
Vertical Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBd)	ERP (dBm)	ERP (W)
826.40	-31.23	-47.97	0.00	-1.08	15.66	0.04
836.40	-29.92	-48.01	0.00	-0.93	17.16	0.05
846.60	-29.44	-48.05	0.00	-0.76	17.85	0.06

<Model : P560>

WCDMA Band V (HSDPA) Radiated Power ERP						
Horizontal Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBd)	ERP (dBm)	ERP (W)
826.40	-43.48	-48.12	0.00	-1.08	3.56	0.00
836.40	-43.32	-48.28	0.00	-0.93	4.03	0.00
846.60	-42.82	-48.35	0.00	-0.76	4.77	0.00
Vertical Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBd)	ERP (dBm)	ERP (W)
826.40	-31.36	-47.97	0.00	-1.08	15.53	0.04
836.40	-30.89	-48.01	0.00	-0.93	16.19	0.04
846.60	-30.18	-48.05	0.00	-0.76	17.11	0.05



<Model : P560>

WCDMA Band II Radiated Power EIRP						
Horizontal Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBi)	EIRP (dBm)	EIRP (W)
1852.40	-32.06	-51.88	0.00	1.96	21.78	0.15
1880.00	-33.19	-52.99	0.00	2.00	21.80	0.15
1907.60	-35.39	-54.28	0.00	1.98	20.87	0.12
Vertical Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBi)	EIRP (dBm)	EIRP (W)
1852.40	-32.20	-52.13	0.00	1.96	21.89	0.15
1880.00	-32.99	-53.17	0.00	2.00	22.18	0.17
1907.60	-34.26	-54.13	0.00	1.98	21.85	0.15

<Model : P560>

WCDMA Band II (HSDPA) Radiated Power EIRP						
Horizontal Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBi)	EIRP (dBm)	EIRP (W)
1852.40	-33.26	-51.88	0.00	1.96	20.58	0.11
1880.00	-34.17	-52.99	0.00	2.00	20.82	0.12
1907.60	-36.11	-54.28	0.00	1.98	20.15	0.10
Vertical Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBi)	EIRP (dBm)	EIRP (W)
1852.40	-33.51	-52.13	0.00	1.96	20.58	0.11
1880.00	-34.02	-53.17	0.00	2.00	21.15	0.13
1907.60	-35.22	-54.13	0.00	1.98	20.89	0.12

## 4.4 Occupied Bandwidth and Band Edge Measurement

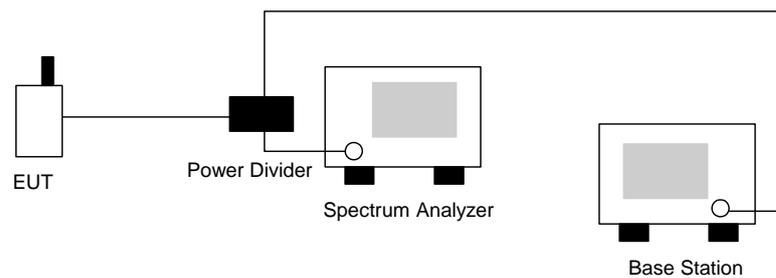
### 4.4.1 Measurement Instruments

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

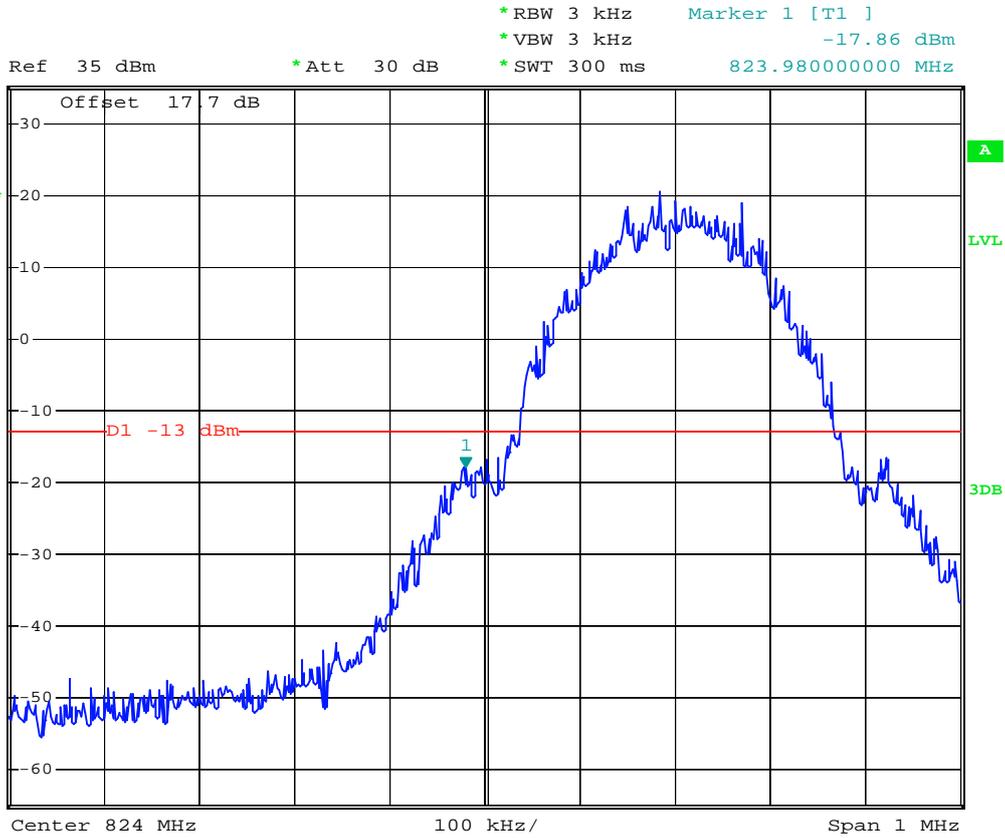




4.4.4 Test Result

<Model : ZX1>

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



Date: 9.MAR.2008 22:56:12





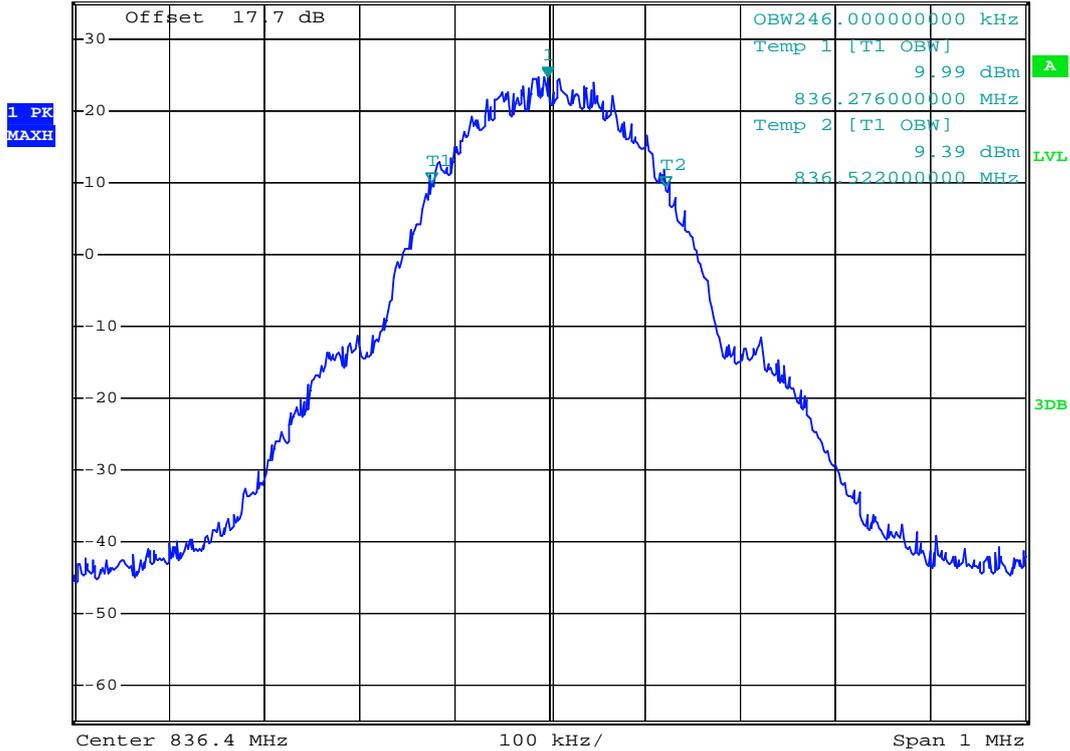
- Test Mode : GSM850 (GSM) CH189 99% Occupied Bandwidth
- Power State : High



\*RBW 3 kHz      Marker 1 [T1 ]  
 \*VBW 10 kHz      24.74 dBm  
 \*SWT 300 ms      836.398000000 MHz

Ref 35 dBm

\*Att 30 dB



Date: 9.MAR.2008 22:40:10



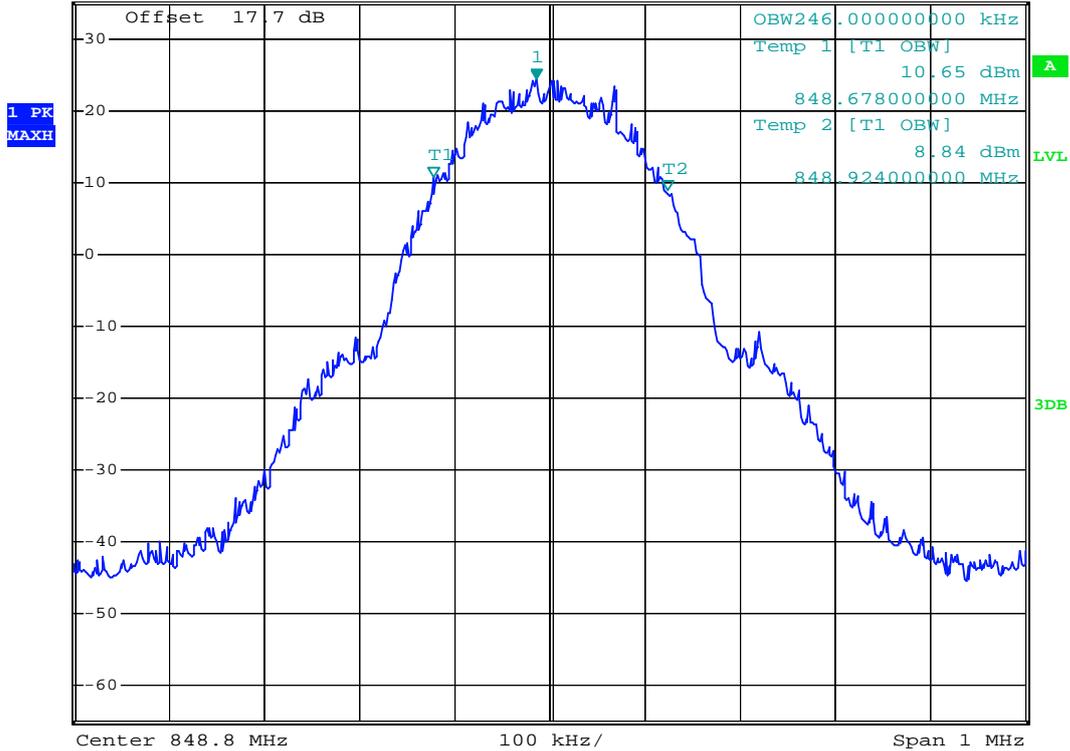
- Test Mode : GSM850 (GSM) CH 251 99% Occupied Bandwidth
- Power State : High



\*RBW 3 kHz      Marker 1 [T1 ]  
 \*VBW 10 kHz      24.46 dBm  
 \*SWT 300 ms      848.786000000 MHz

Ref 35 dBm

\*Att 30 dB



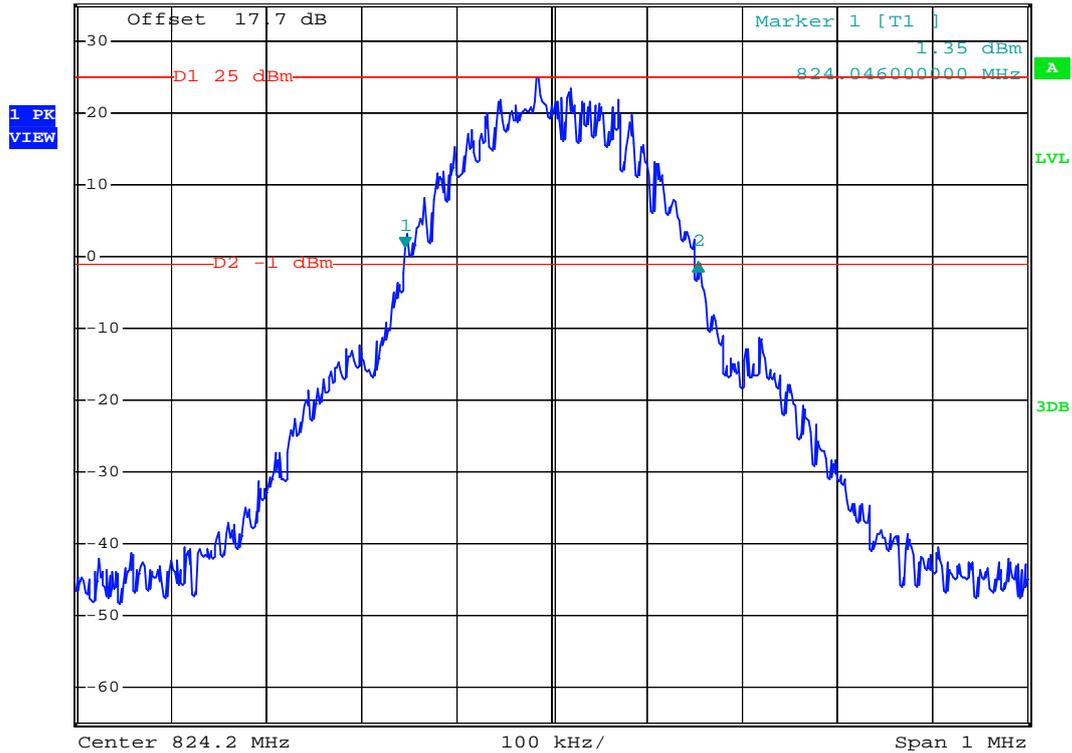
Date: 9.MAR.2008 22:41:27



- Test Mode : GSM850 (GSM) CH128 26dB Bandwidth
- Power State : High



Ref 35 dBm      \*Att 30 dB      \*RBW 3 kHz      Delta 2 [T1 ]  
 \*VBW 10 kHz      -2.12 dB  
 \*SWT 300 ms      308.000000000 kHz



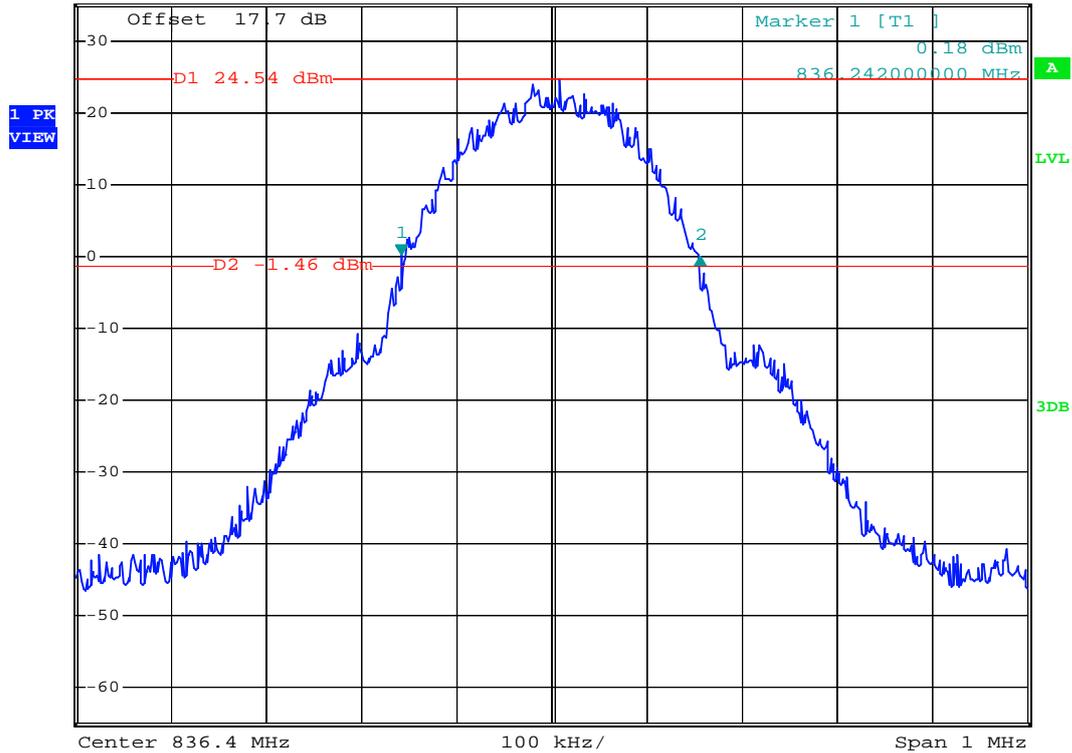
Date: 9.MAR.2008 22:37:21



- Test Mode : GSM850 (GSM) CH189 26dB Bandwidth
- Power State : High



Ref 35 dBm      \*Att 30 dB      \*RBW 3 kHz      Delta 2 [T1 ]  
 \*VBW 10 kHz      -0.32 dB  
 \*SWT 300 ms      314.000000000 kHz



Date: 9.MAR.2008 22:33:37



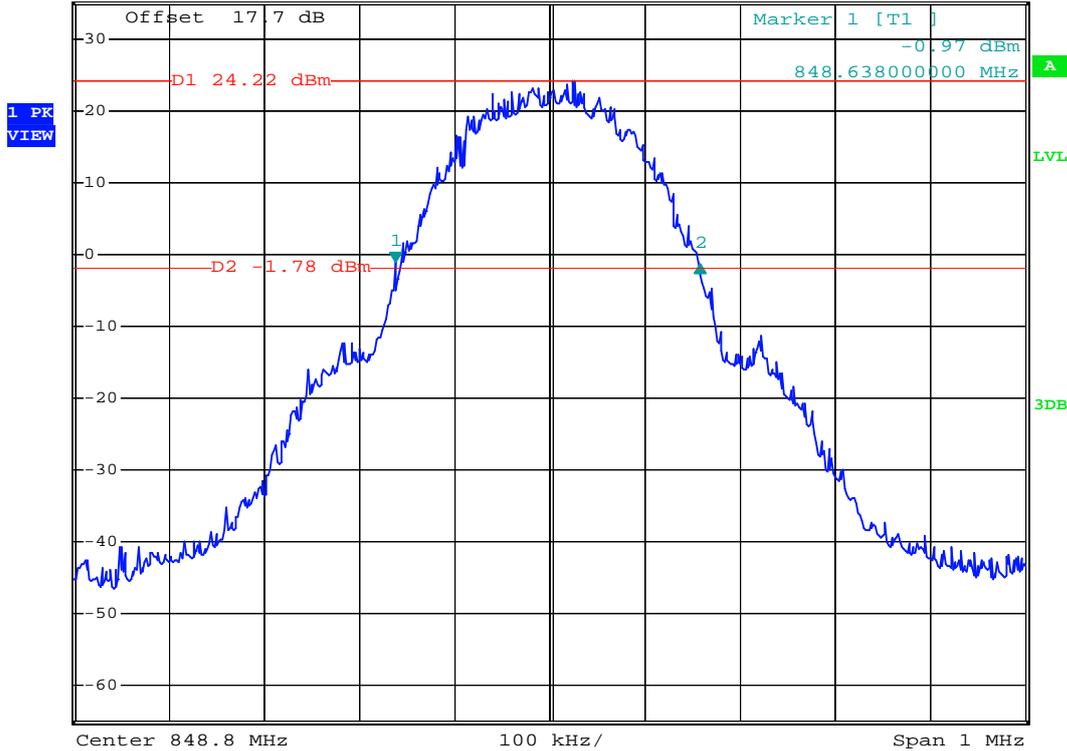
- Test Mode : GSM850 (GSM) CH 251 26dB Bandwidth
- Power State : High



\*RBW 3 kHz      Delta 2 [T1 ]  
 \*VBW 10 kHz      -0.31 dB  
 \*SWT 300 ms      320.000000000 kHz

Ref 35 dBm

\*Att 30 dB



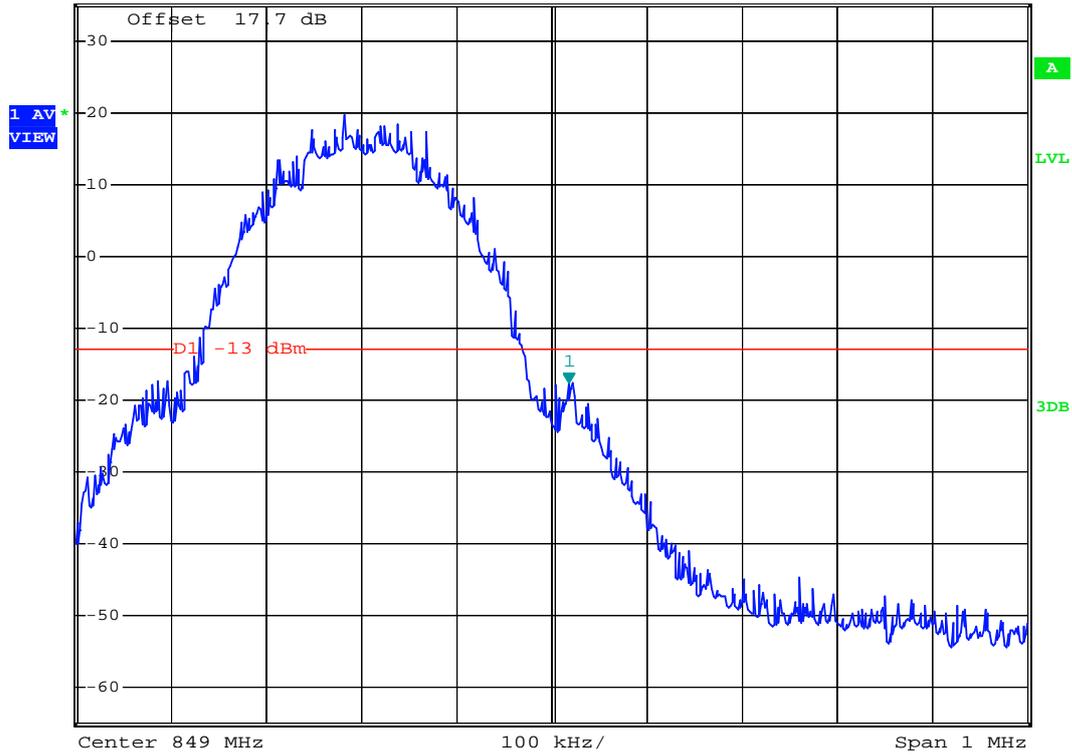
Date: 9.MAR.2008 22:36:18



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



Ref 35 dBm      \*Att 30 dB      \*RBW 3 kHz      Marker 1 [T1 ]  
 \*VBW 3 kHz      -17.51 dBm  
 \*SWT 300 ms      849.018000000 MHz



Date: 9.MAR.2008 22:57:18

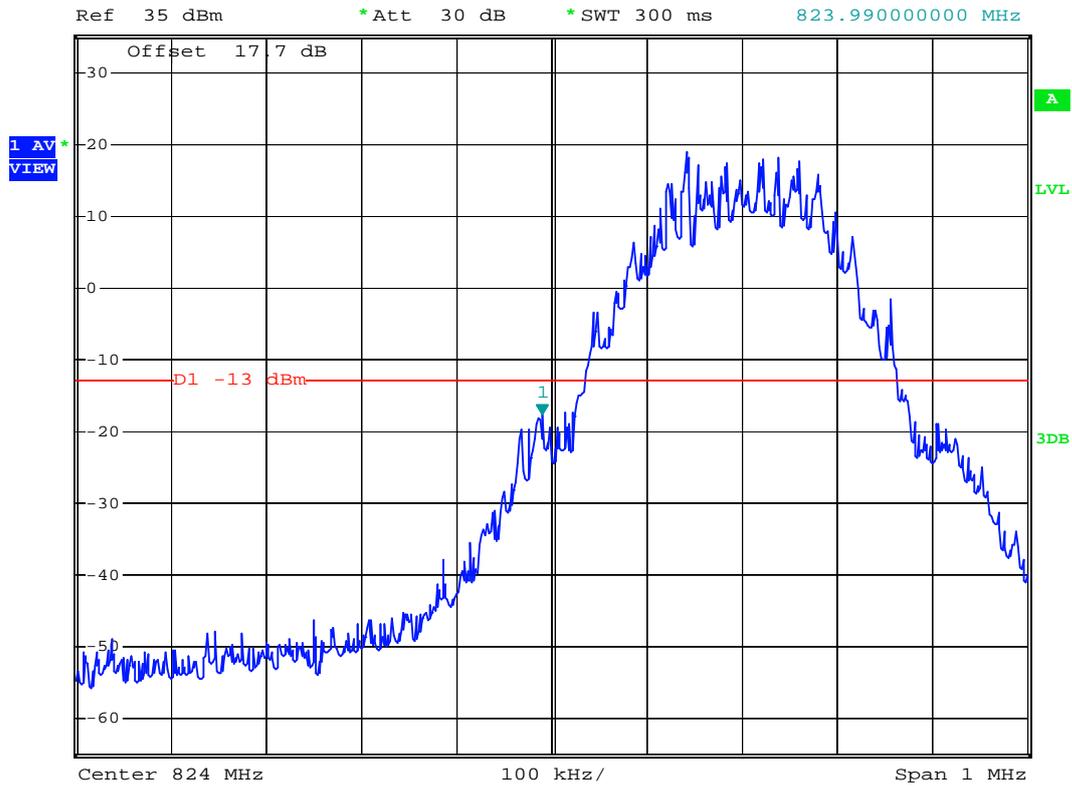


<Model : ZX1>

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



\*RBW 3 kHz      Marker 1 [T1 ]  
 \*VBW 3 kHz      -17.75 dBm  
 \*SWT 300 ms      823.99000000 MHz



Date: 9.MAR.2008 23:48:35



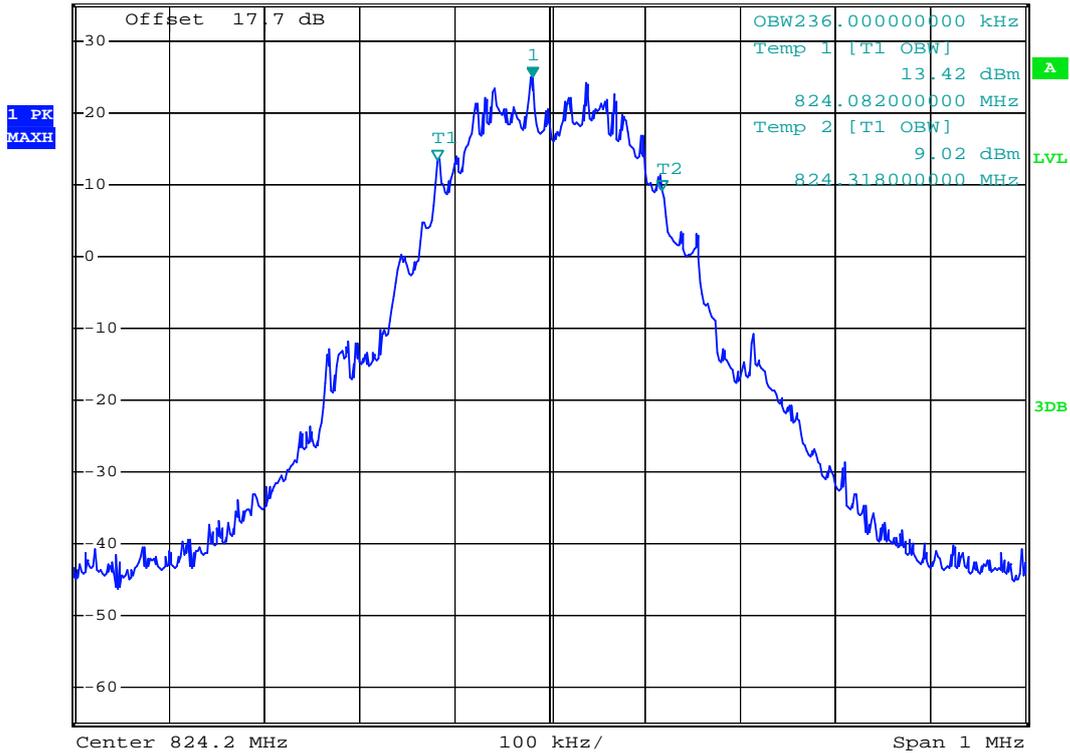
- Test Mode : GSM850 (EDGE) CH128 99% Occupied Bandwidth
- Power State : High



\*RBW 3 kHz      Marker 1 [T1 ]  
 \*VBW 10 kHz      25.00 dBm  
 \*SWT 300 ms      824.182000000 MHz

Ref 35 dBm

\*Att 30 dB



Date: 9.MAR.2008 23:39:47



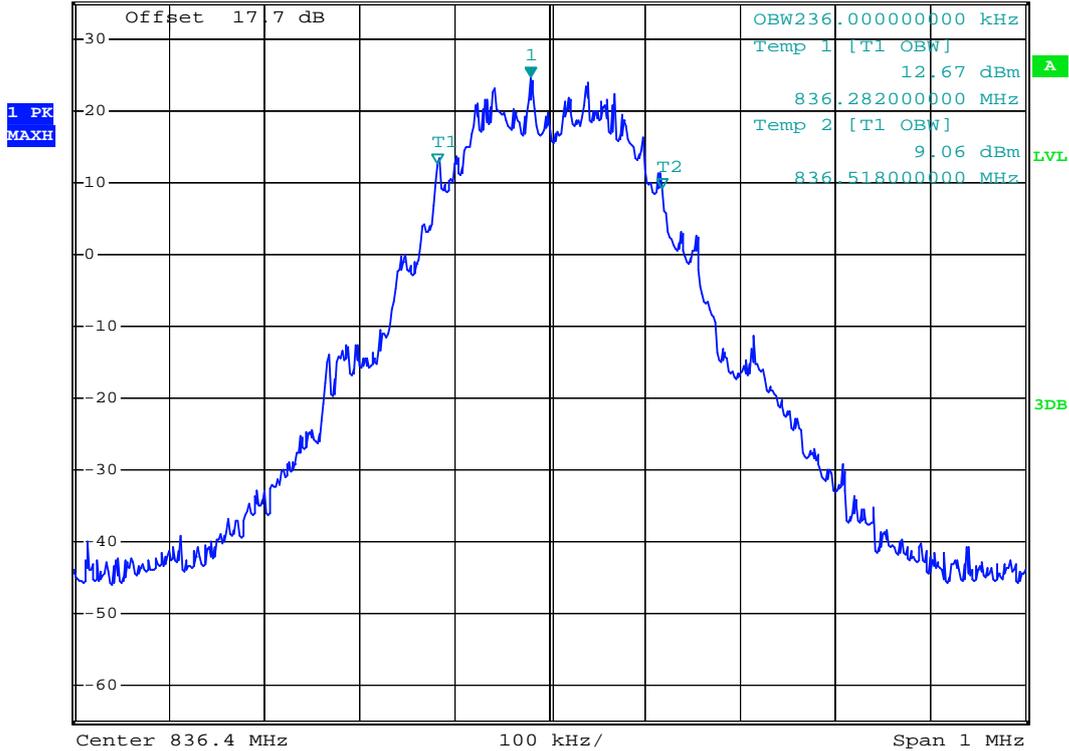
- Test Mode : GSM850 (EDGE) CH189 99% Occupied Bandwidth
- Power State : High



\*RBW 3 kHz      Marker 1 [T1 ]  
 \*VBW 10 kHz      24.55 dBm  
 \*SWT 300 ms      836.380000000 MHz

Ref 35 dBm

\*Att 30 dB



Date: 9.MAR.2008 23:38:48



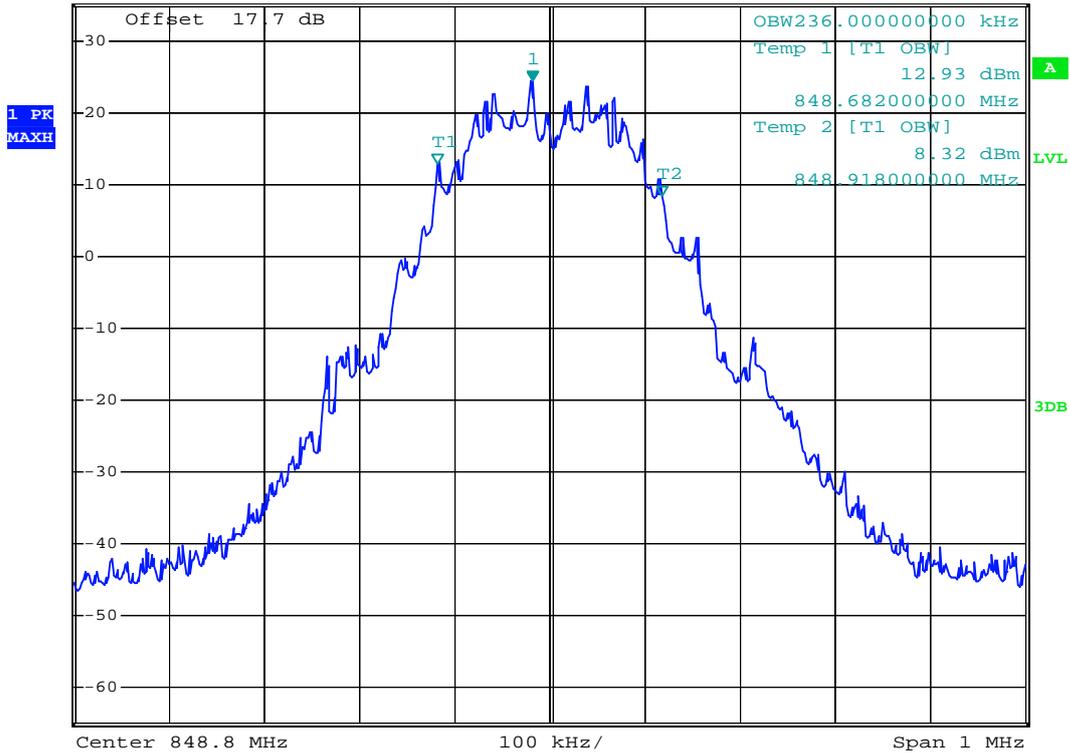
- Test Mode : GSM850 (EDGE) CH 251 99% Occupied Bandwidth
- Power State : High



\*RBW 3 kHz      Marker 1 [T1 ]  
 \*VBW 10 kHz      24.46 dBm  
 \*SWT 300 ms      848.782000000 MHz

Ref 35 dBm

\*Att 30 dB



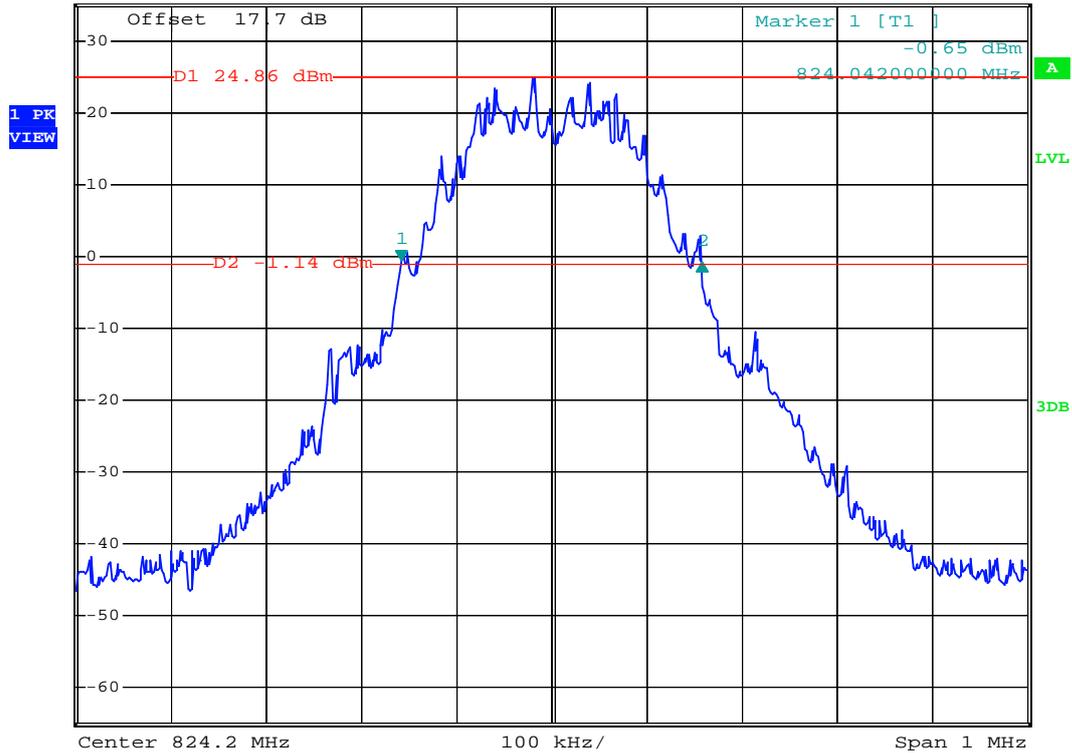
Date: 9.MAR.2008 23:37:55



- Test Mode : GSM850 (EDGE) CH128 26dB Bandwidth
- Power State : High



Ref 35 dBm      \*Att 30 dB      \*RBW 3 kHz      Delta 2 [T1 ]  
 \*VBW 10 kHz      -0.07 dB  
 \*SWT 300 ms      316.000000000 kHz



Date: 9.MAR.2008 23:42:32



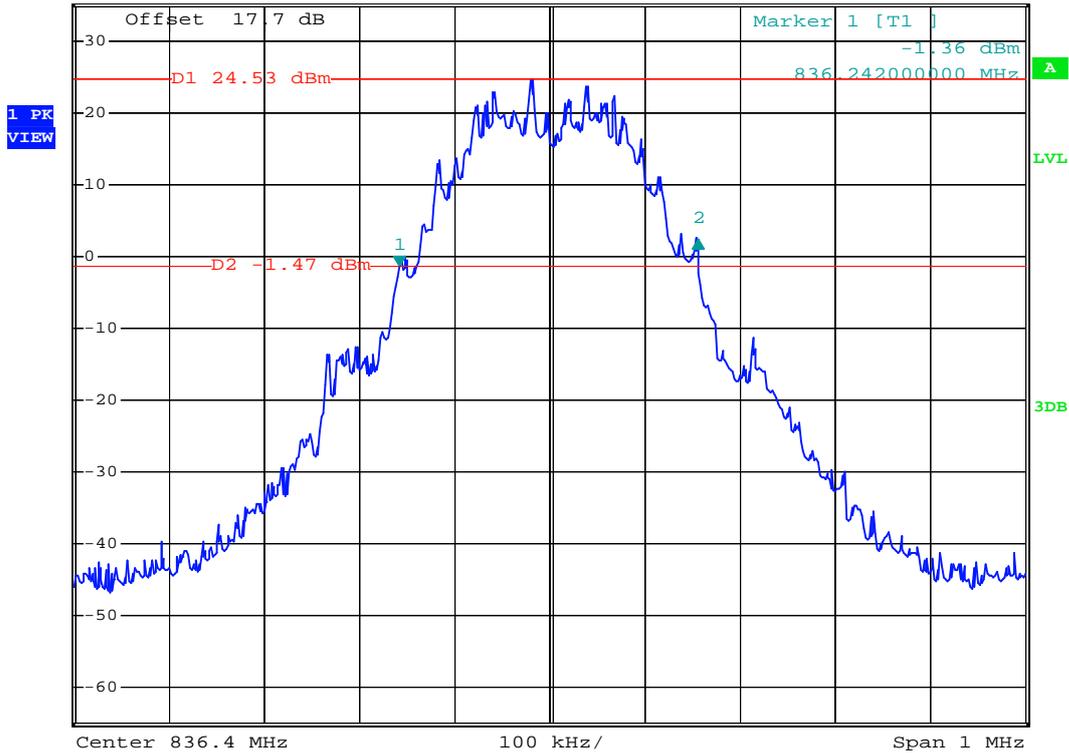
- Test Mode : GSM850 (EDGE) CH189 26dB Bandwidth
- Power State : High



\*RBW 3 kHz      Delta 2 [T1 ]  
 \*VBW 10 kHz      3.66 dB  
 \*SWT 300 ms      314.000000000 kHz

Ref 35 dBm

\*Att 30 dB



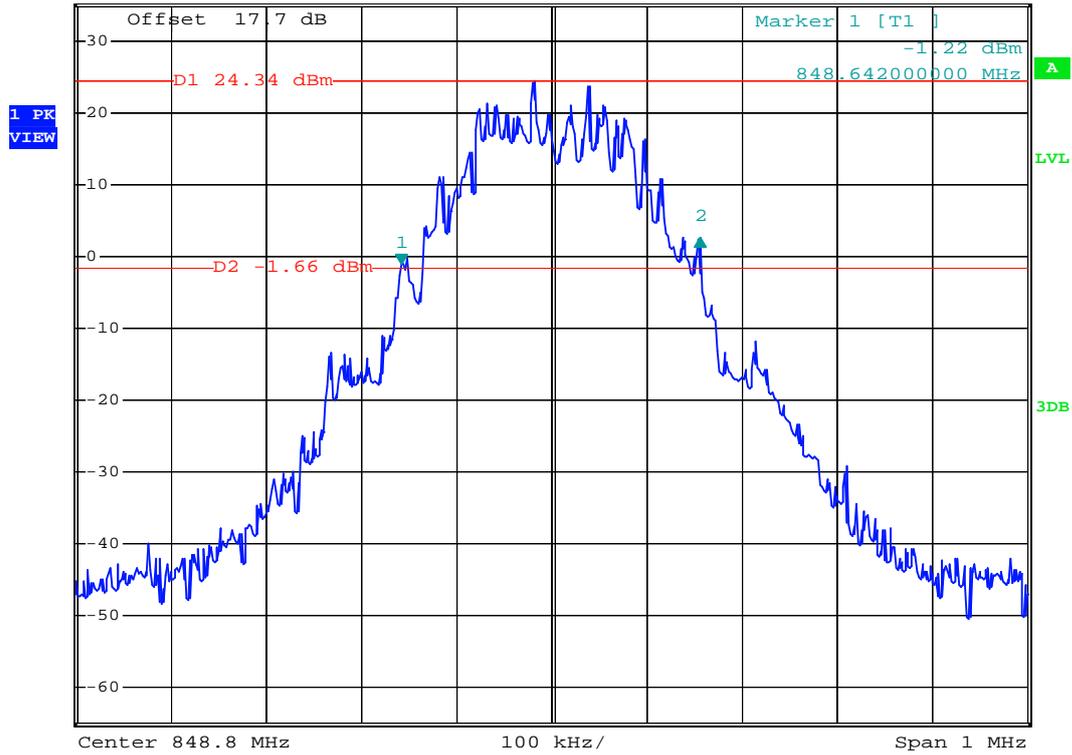
Date: 9.MAR.2008 23:44:36



- Test Mode : GSM850 (EDGE) CH 251 26dB Bandwidth
- Power State : High



Ref 35 dBm      \*Att 30 dB      \*RBW 3 kHz      Delta 2 [T1 ]  
 \*VBW 10 kHz      3.70 dB  
 \*SWT 300 ms      314.000000000 kHz



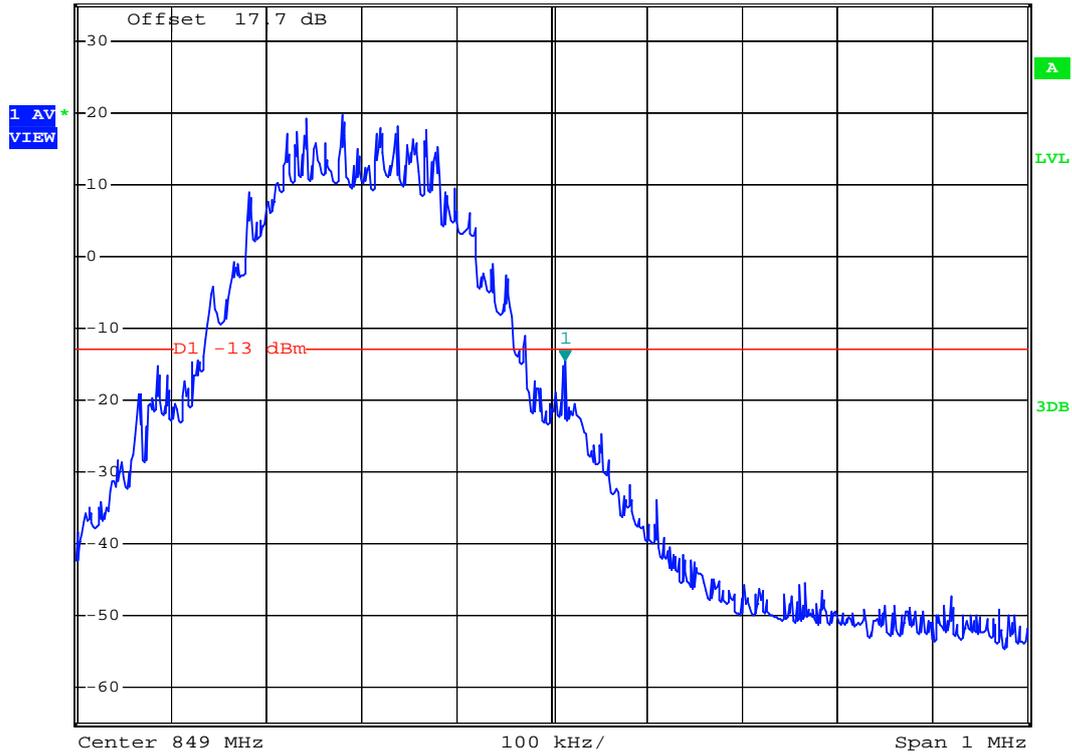
Date: 9.MAR.2008 23:46:22



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



Ref 35 dBm      \*Att 30 dB      \*RBW 3 kHz      Marker 1 [T1 ]  
\*VBW 3 kHz      -14.42 dBm  
\*SWT 300 ms      849.014000000 MHz



Date: 9.MAR.2008 23:47:35



<Model : ZX1>

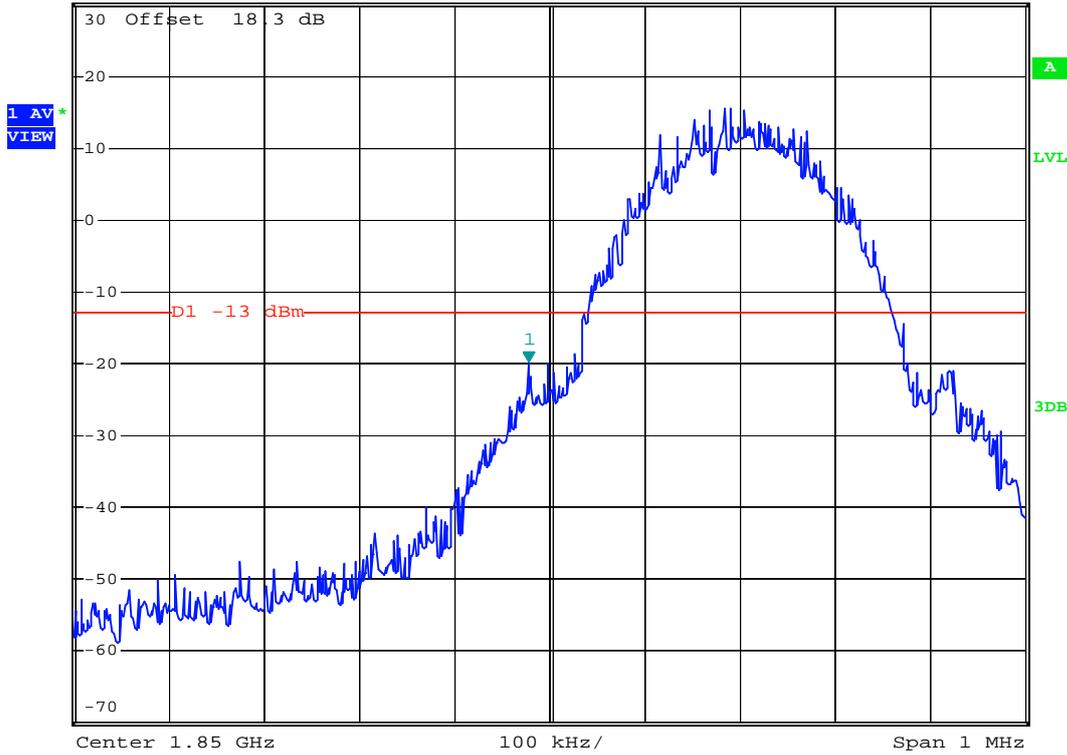
- Mode 3
- Test Mode : GSM1900 (GSM) CH512 Lower Band Edge
- Power State : High



\*RBW 3 kHz      Marker 1 [T1 ]  
 \*VBW 3 kHz      -19.67 dBm  
 \*SWT 300 ms      1.849978000 GHz

Ref 30 dBm

\*Att 30 dB



Date: 10.MAR.2008 02:05:51

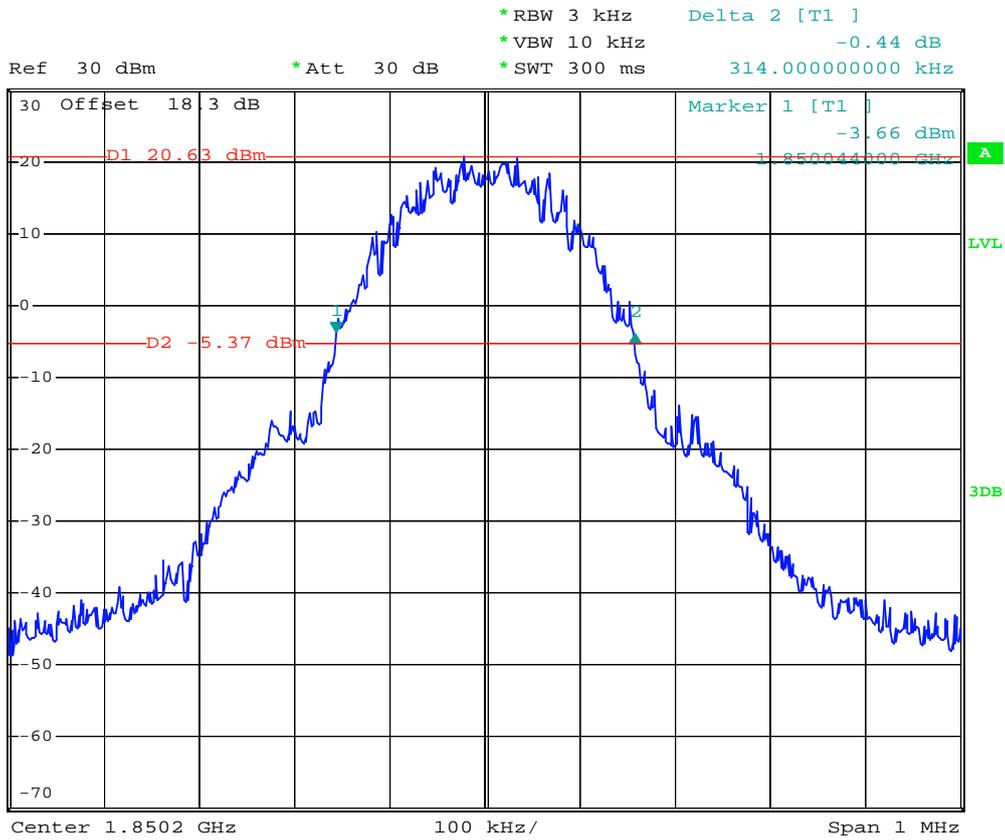








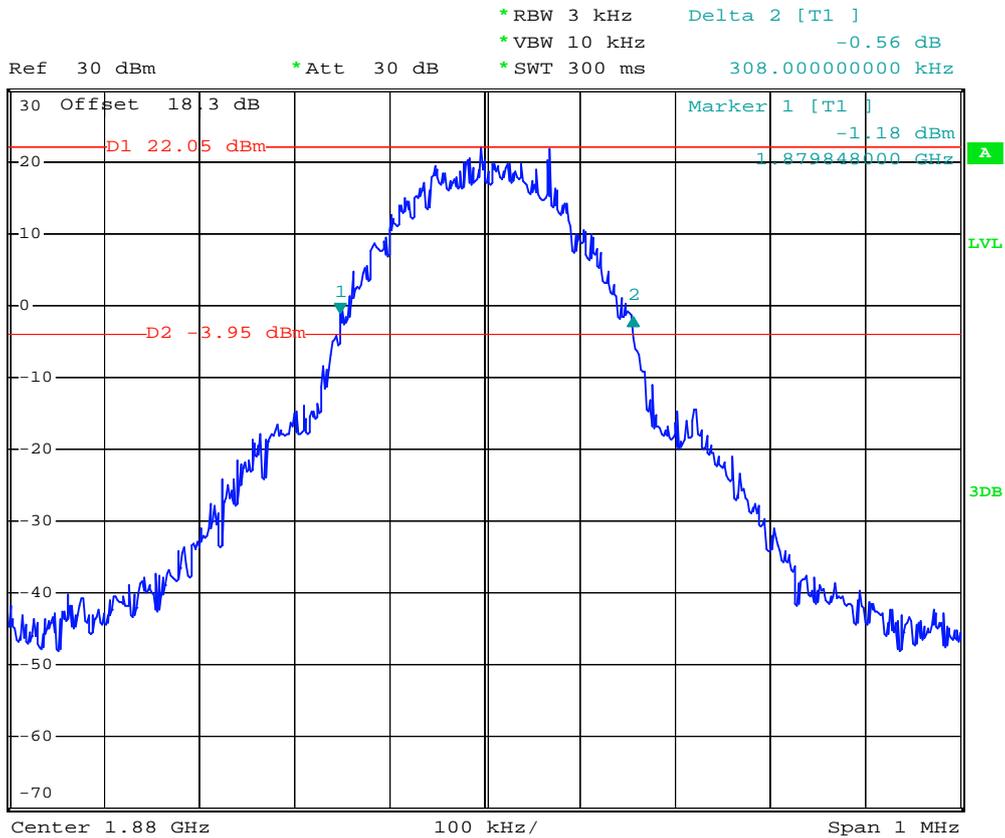
- Test Mode : GSM1900 (GSM) CH512 26dB Bandwidth
- Power State : High



Date: 10.MAR.2008 02:02:13



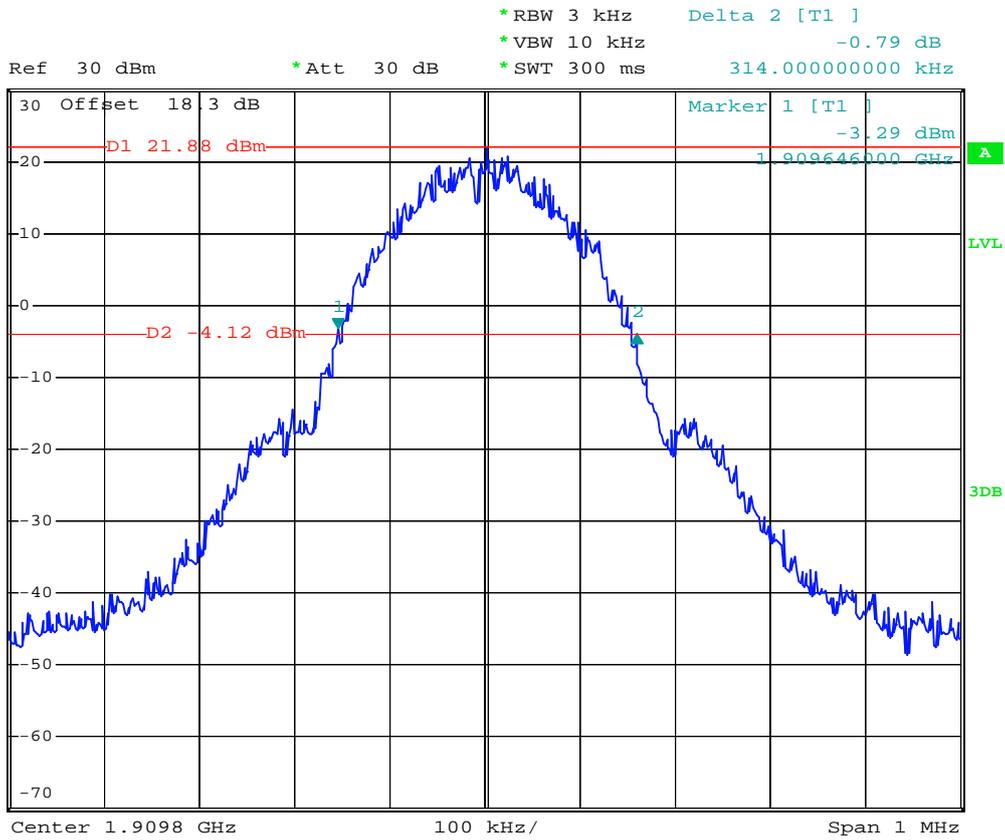
- Test Mode : GSM1900 (GSM) CH661 26dB Bandwidth
- Power State : High



Date: 10.MAR.2008 02:00:56



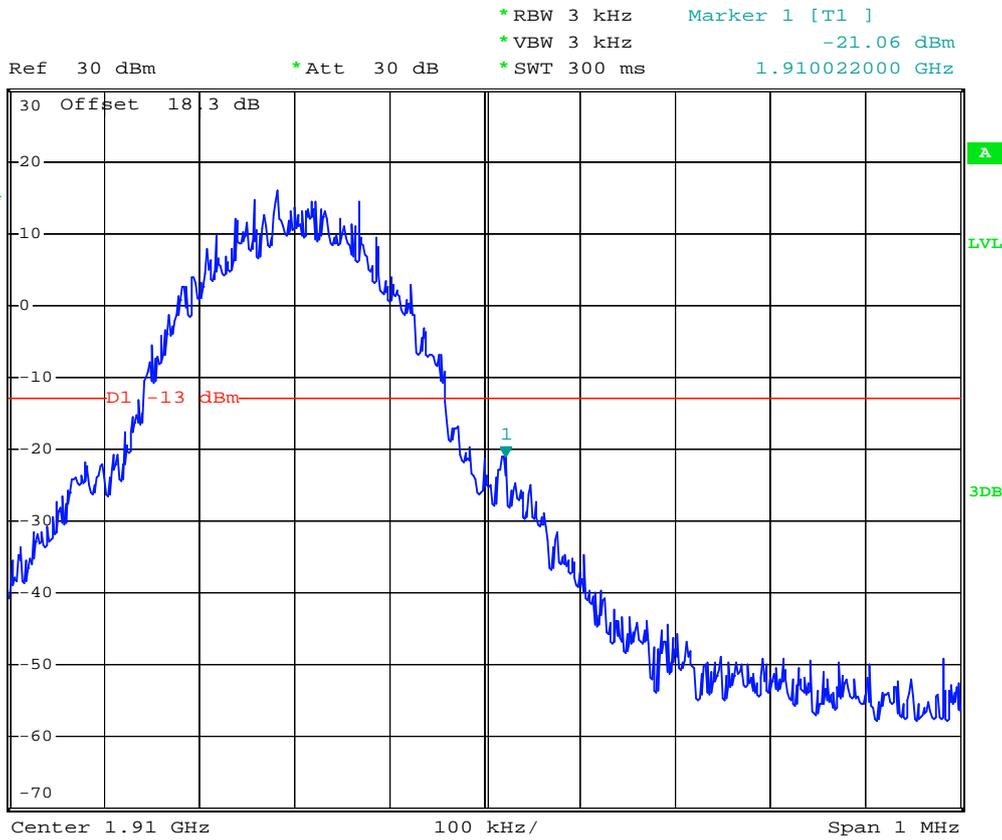
- Test Mode : GSM1900 (GSM) CH810 26dB Bandwidth
- Power State : High



Date: 10.MAR.2008 01:58:58



- Test Mode : GSM1900 (GSM) CH810 Higher Band Edge
- Power State : High

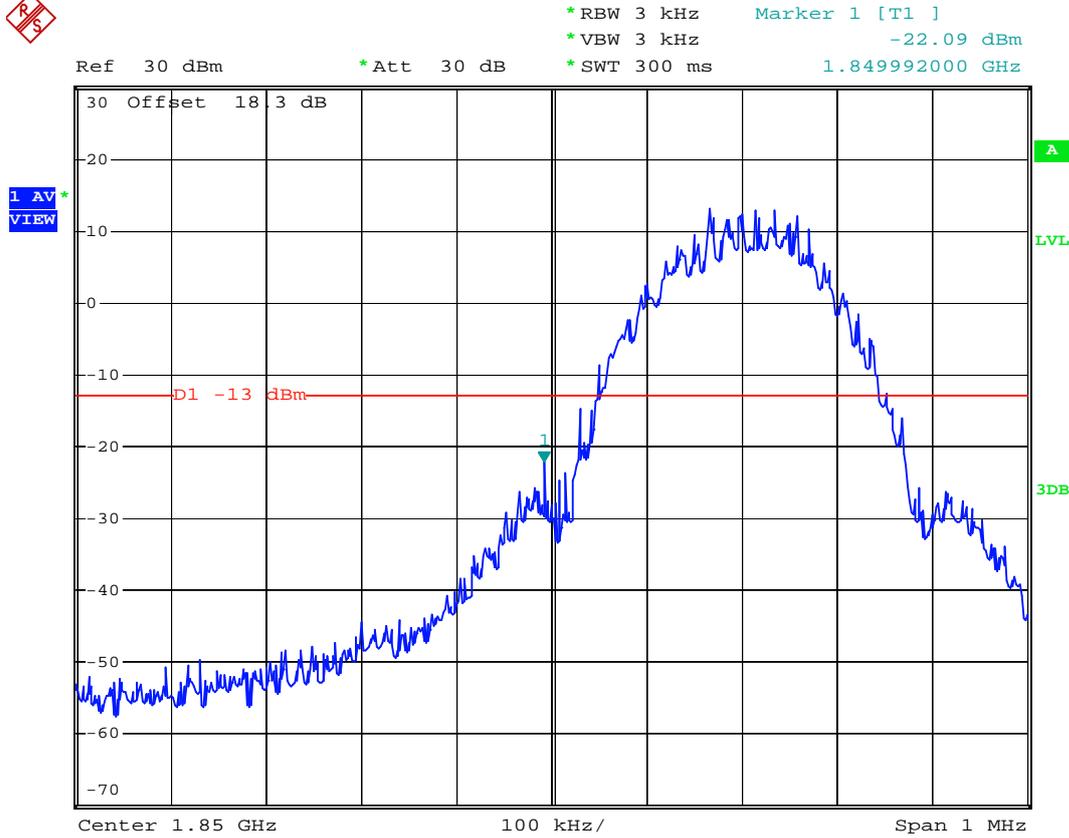


Date: 10.MAR.2008 02:05:20



<Model : ZX1>

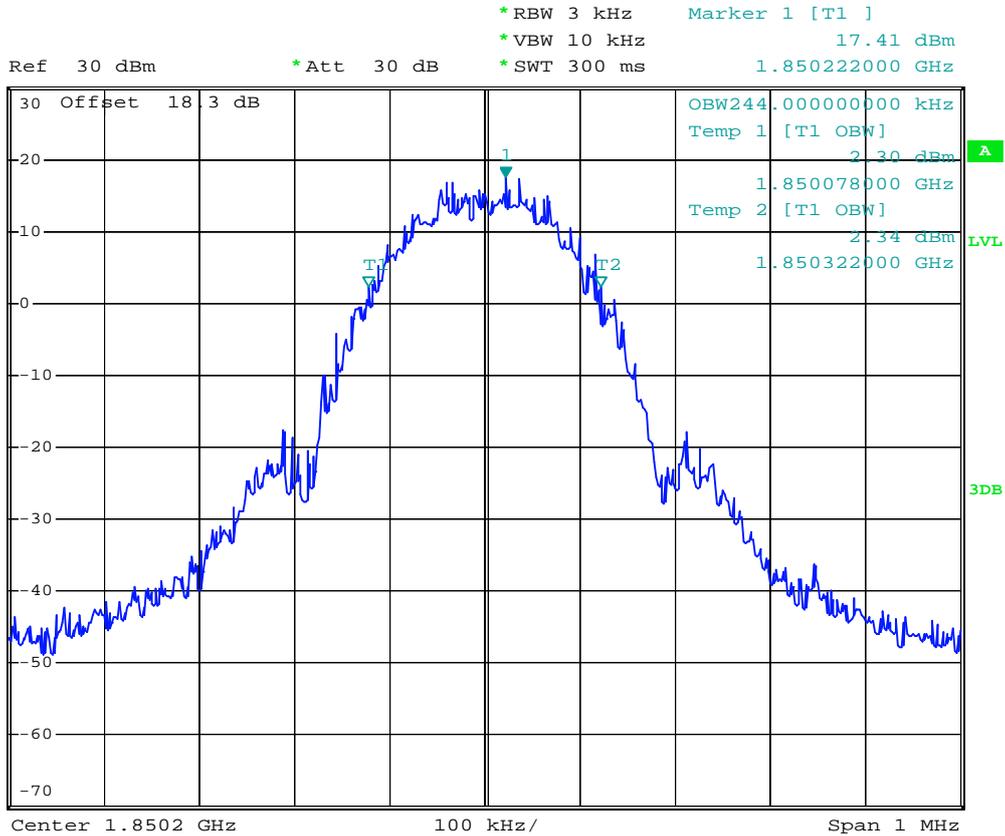
- Mode 4
- Test Mode : GSM1900 (EDGE) CH512 Lower Band Edge
- Power State : High



Date: 10.MAR.2008 01:32:12



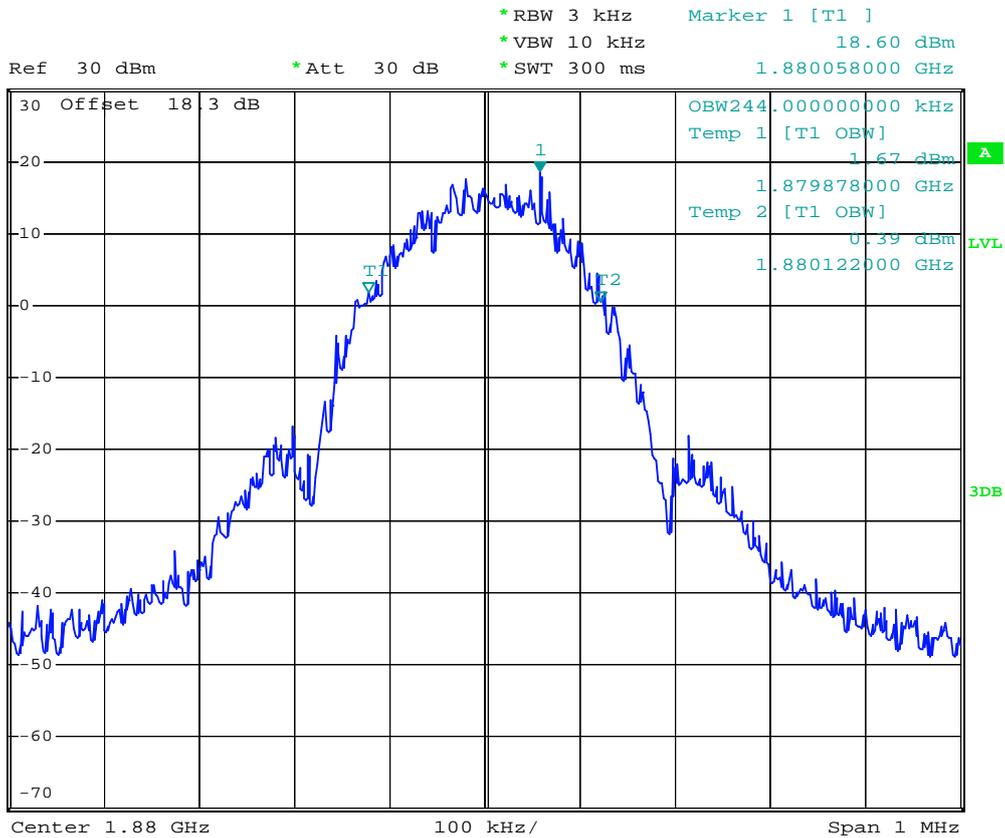
- Test Mode : GSM1900 (EDGE) CH512 99% Occupied Bandwidth
- Power State : High



Date: 10.MAR.2008 01:19:39



- Test Mode : GSM1900 (EDGE) CH661 99% Occupied Bandwidth
- Power State : High



Date: 10.MAR.2008 01:19:02

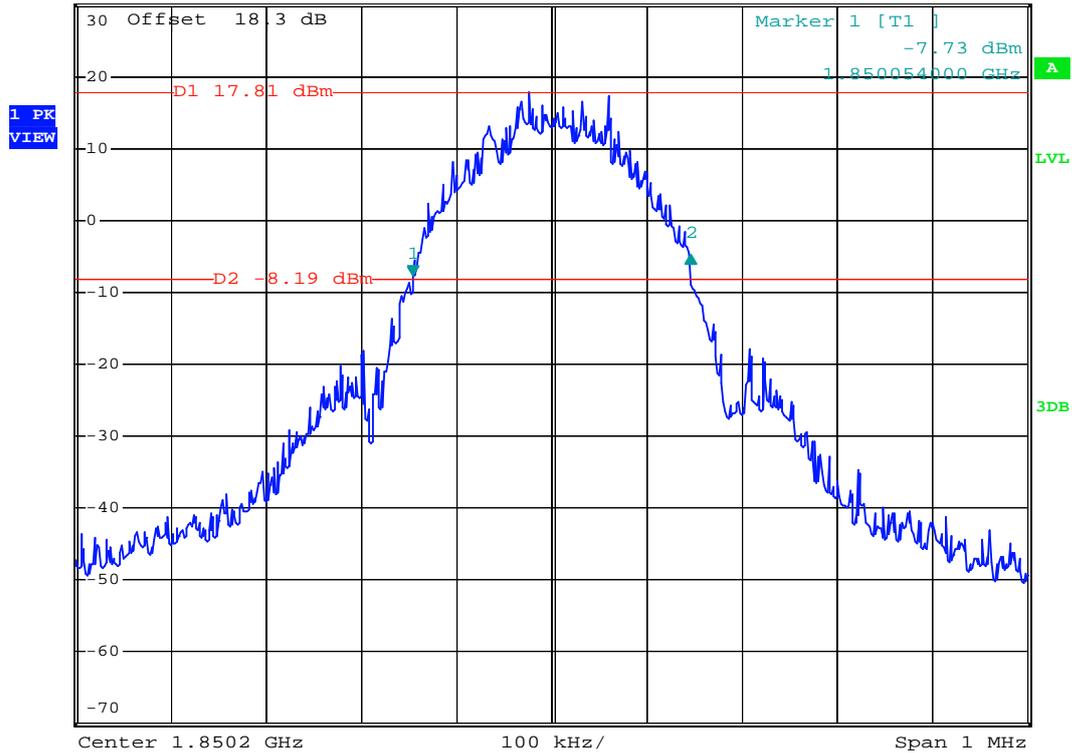




- Test Mode : GSM1900 (EDGE) CH512 26dB Bandwidth
- Power State : High



Ref 30 dBm      \*Att 30 dB      \*RBW 3 kHz      Delta 2 [T1 ]  
 \*VBW 10 kHz      2.90 dB  
 \*SWT 300 ms      292.000000000 kHz



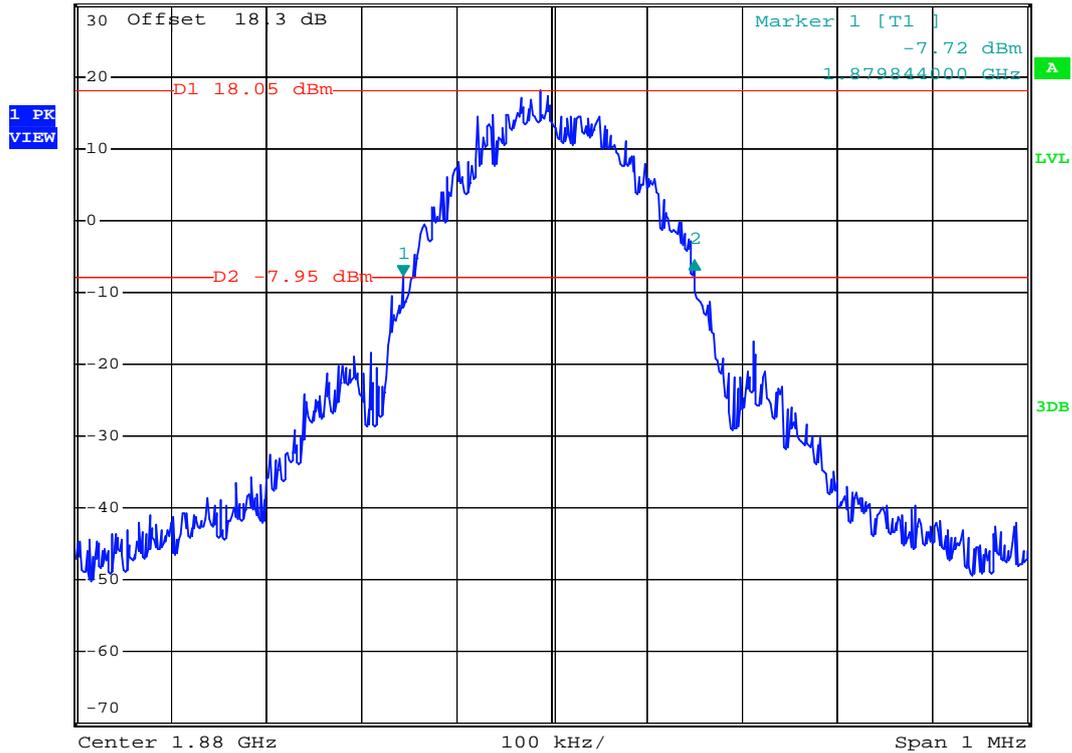
Date: 10.MAR.2008 01:21:21



- Test Mode : GSM1900 (EDGE) CH661 26dB Bandwidth
- Power State : High



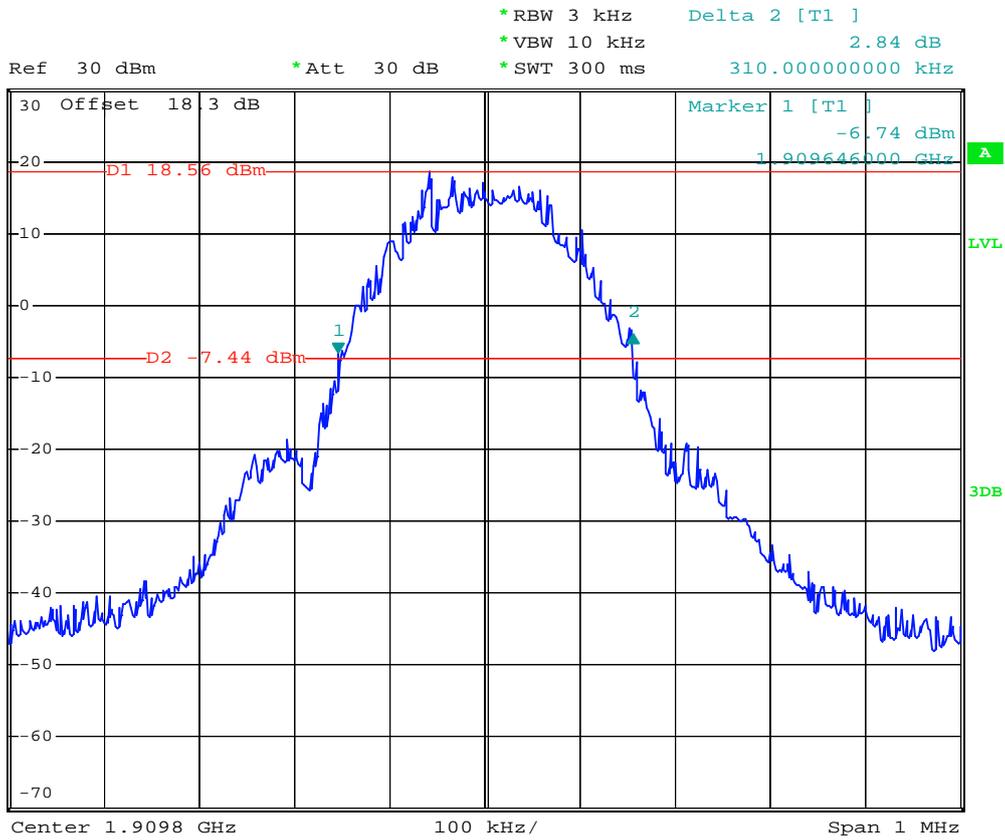
Ref 30 dBm      \*Att 30 dB      \*RBW 3 kHz      Delta 2 [T1 ]  
 \*VBW 10 kHz      2.21 dB  
 \*SWT 300 ms      306.000000000 kHz



Date: 10.MAR.2008 01:22:25



- Test Mode : GSM1900 (EDGE) CH810 26dB Bandwidth
- Power State : High



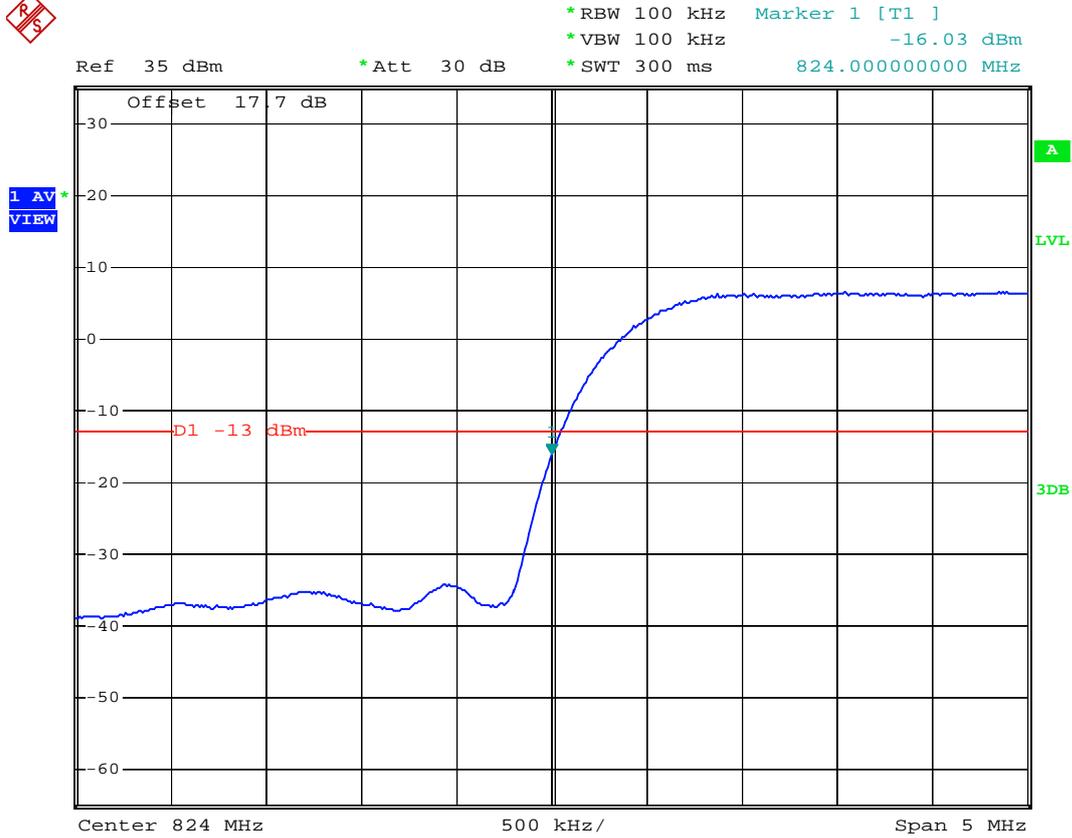
Date: 10.MAR.2008 01:24:24





<Model : ZX1>

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



Date: 10.MAR.2008 06:07:32



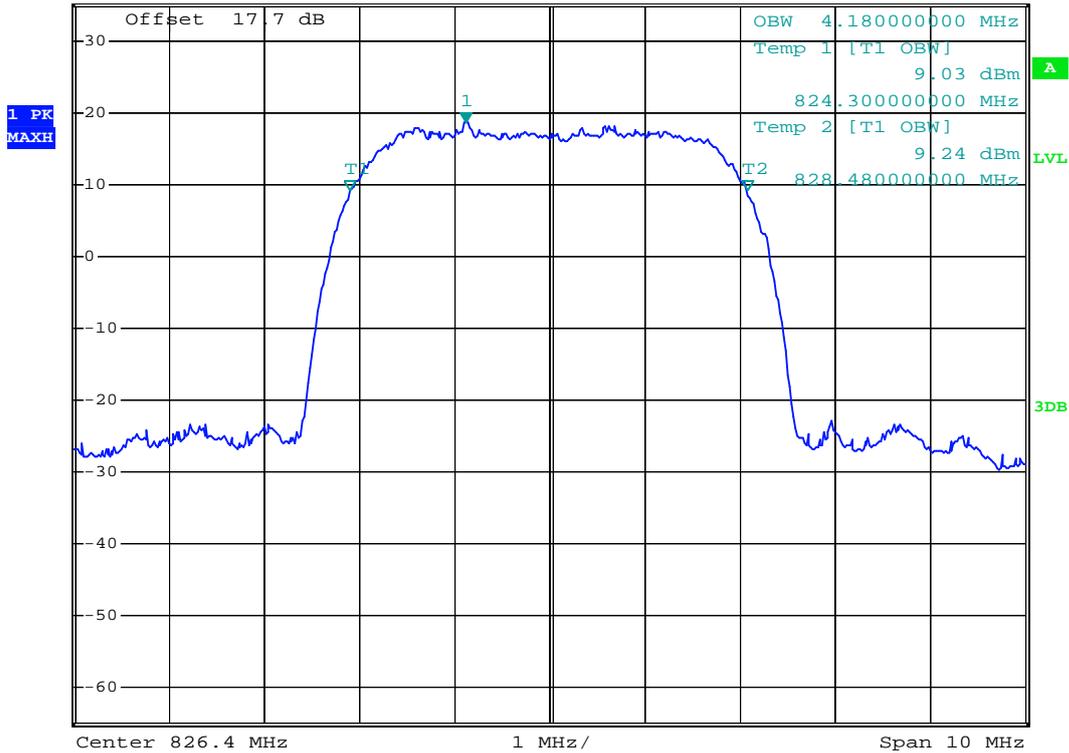
- Test Mode : WCDMA Band V CH4132 99% Occupied Bandwidth
- Power State : High



\*RBW 100 kHz    Marker 1 [T1 ]  
 \*VBW 300 kHz                    18.63 dBm  
 \*SWT 300 ms                    825.520000000 MHz

Ref 35 dBm

\*Att 30 dB



Date: 10.MAR.2008 05:44:06



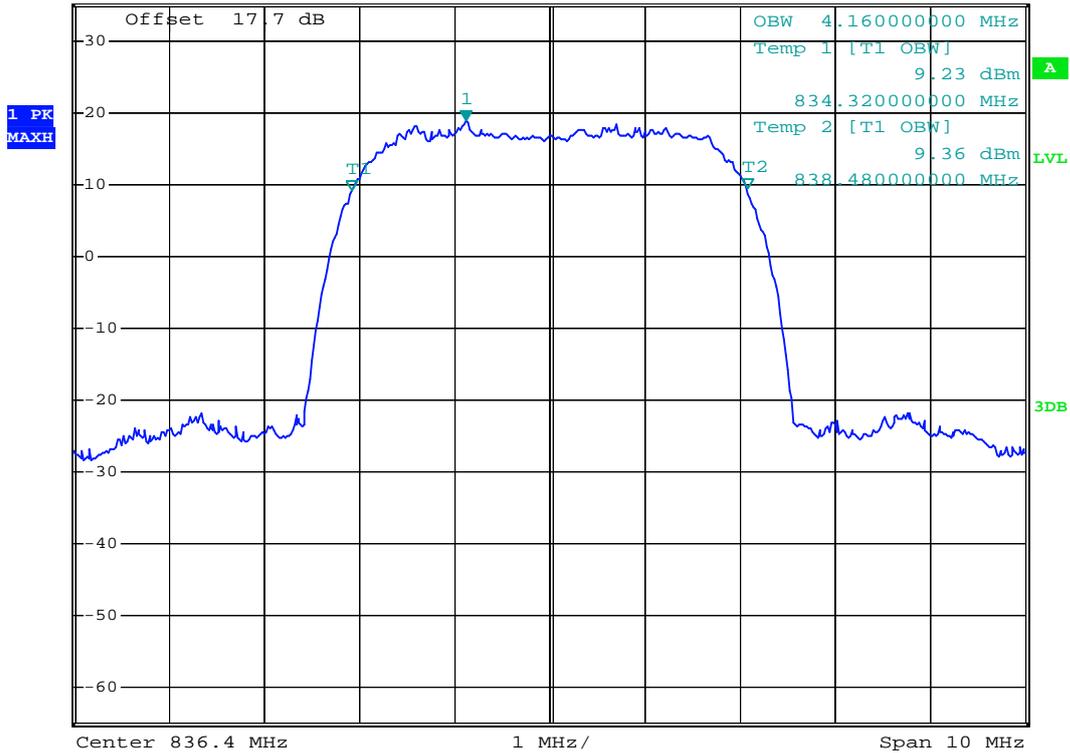
- Test Mode : WCDMA Band V CH4182 99% Occupied Bandwidth
- Power State : High



\*RBW 100 kHz    Marker 1 [T1 ]  
 \*VBW 300 kHz                    18.82 dBm  
 \*SWT 300 ms                    835.520000000 MHz

Ref 35 dBm

\*Att 30 dB



Date: 10.MAR.2008 05:43:01



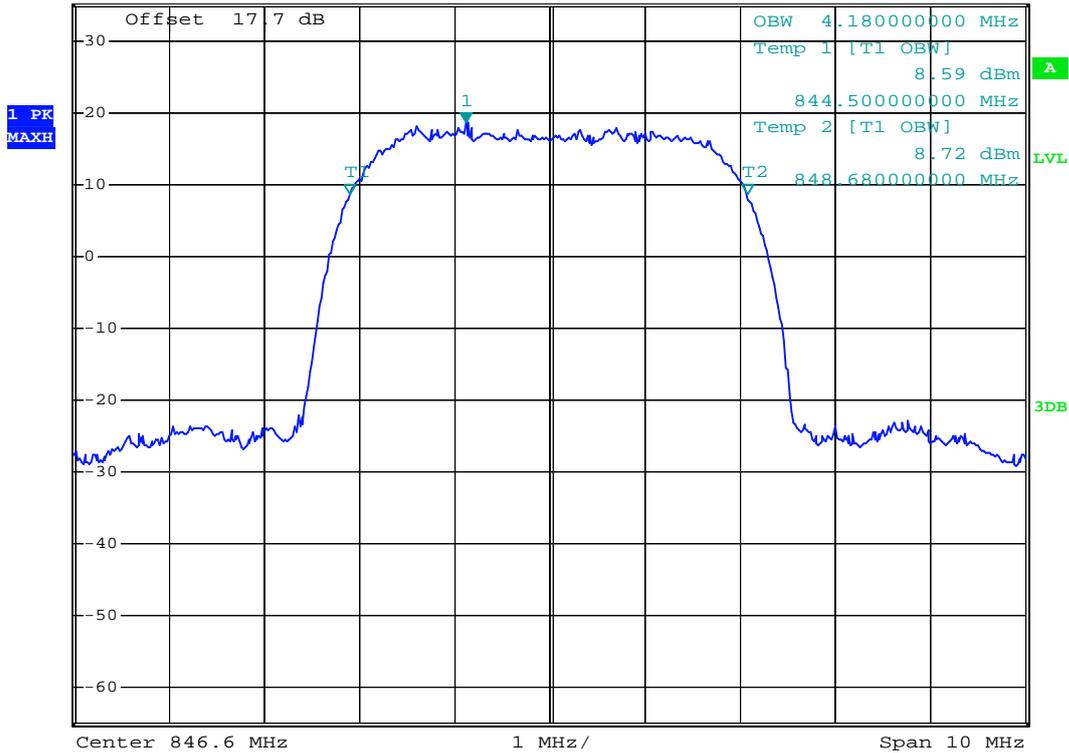
- Test Mode : WCDMA Band V CH4233 99% Occupied Bandwidth
- Power State : High



\*RBW 100 kHz    Marker 1 [T1 ]  
 \*VBW 300 kHz                    18.65 dBm  
 \*SWT 300 ms                    845.720000000 MHz

Ref 35 dBm

\*Att 30 dB



Date: 10.MAR.2008 05:42:09





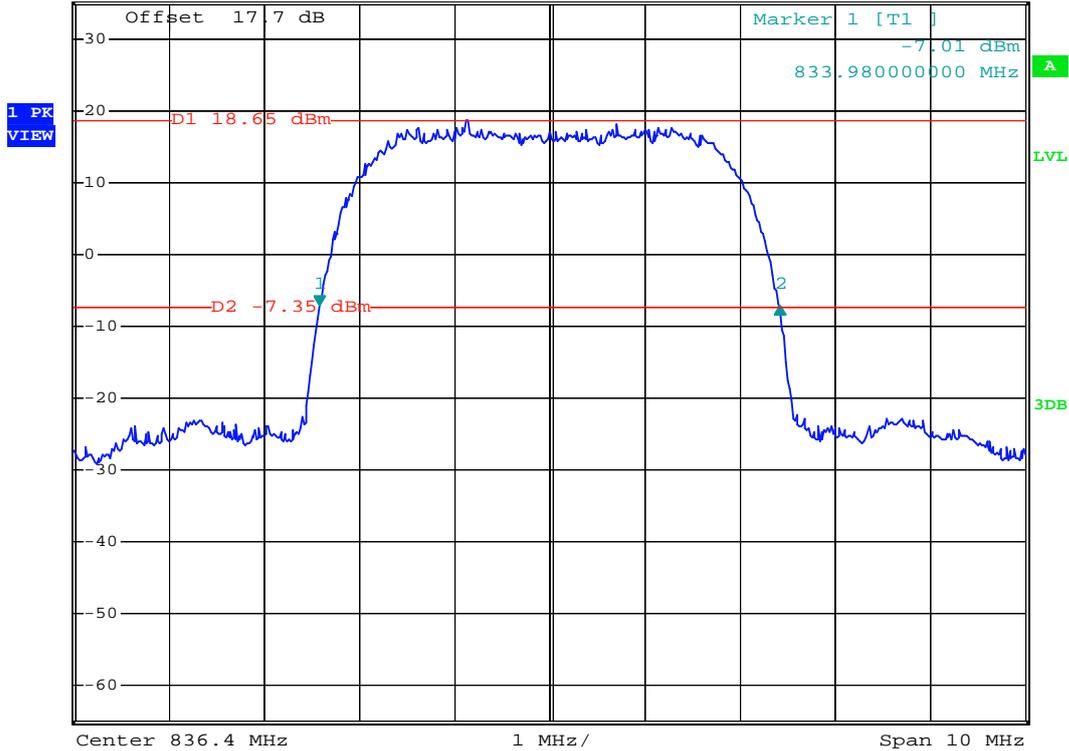
- Test Mode : WCDMA Band V CH4182 26dB Bandwidth
- Power State : High



\*RBW 100 kHz    Delta 2 [T1 ]  
 \*VBW 300 kHz    -0.13 dB  
 \*SWT 300 ms    4.840000000 MHz

Ref 35 dBm

\*Att 30 dB



Date: 10.MAR.2008 05:45:57



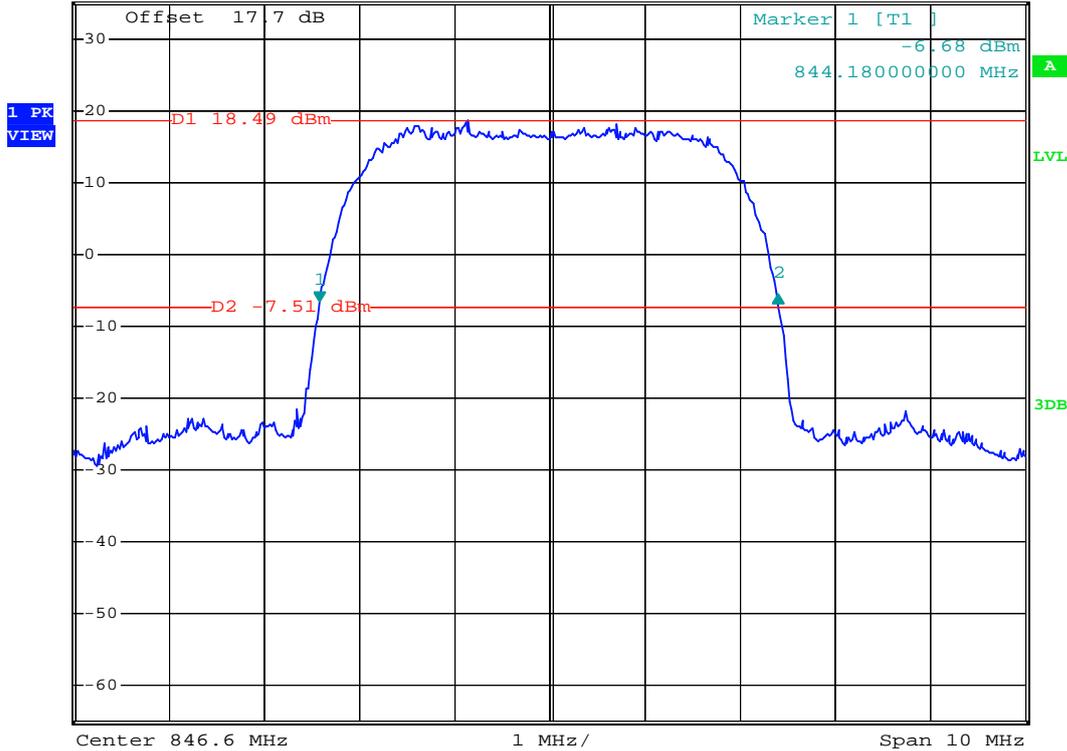
- Test Mode : WCDMA Band V CH4233 26dB Bandwidth
- Power State : High



\*RBW 100 kHz    Delta 2 [T1 ]  
 \*VBW 300 kHz                    1.07 dB  
 \*SWT 300 ms                      4.820000000 MHz

Ref 35 dBm

\*Att 30 dB



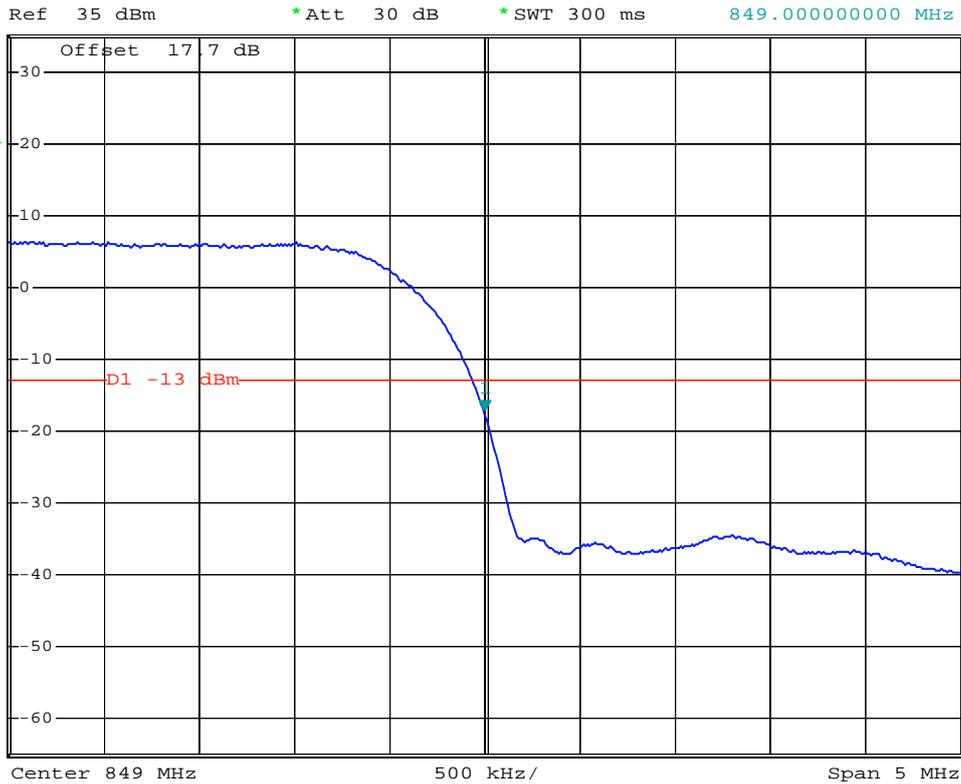
Date: 10.MAR.2008 05:47:49



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



\*RBW 100 kHz    Marker 1 [T1 ]  
 \*VBW 100 kHz    -17.09 dBm  
 \*SWT 300 ms    849.000000000 MHz

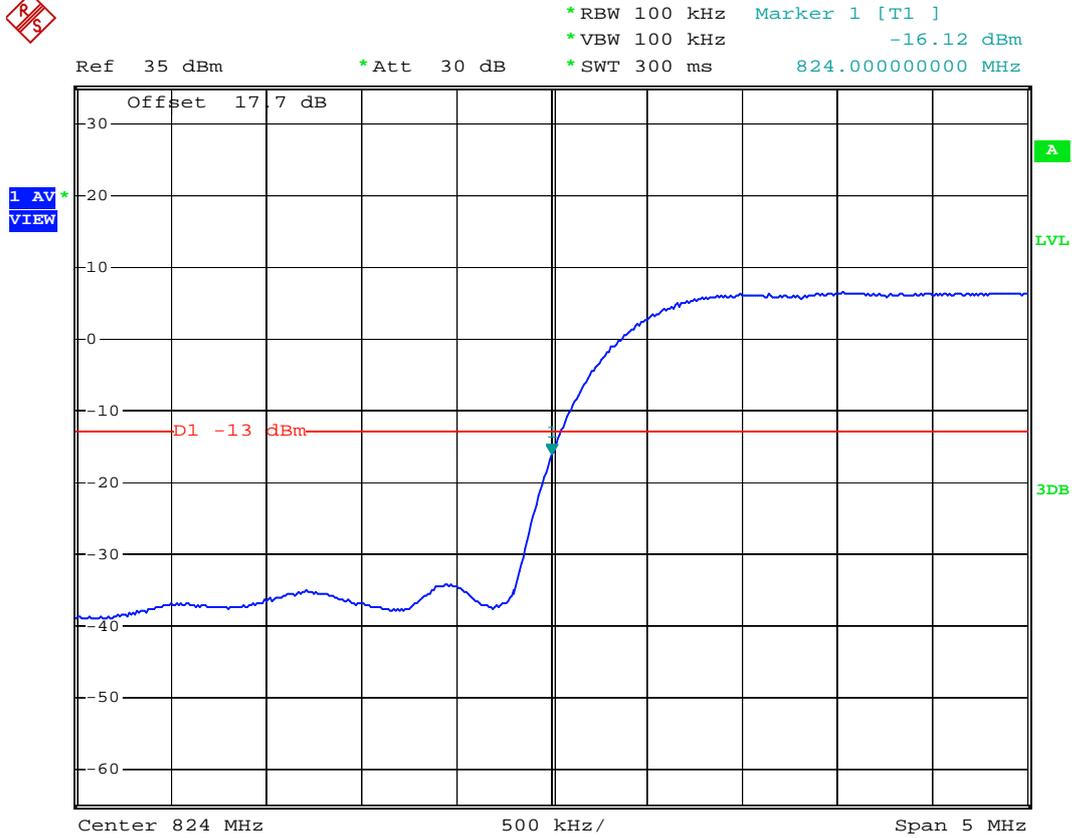


Date: 10.MAR.2008 06:09:47



<Model : ZX1>

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



Date: 10.MAR.2008 06:08:28



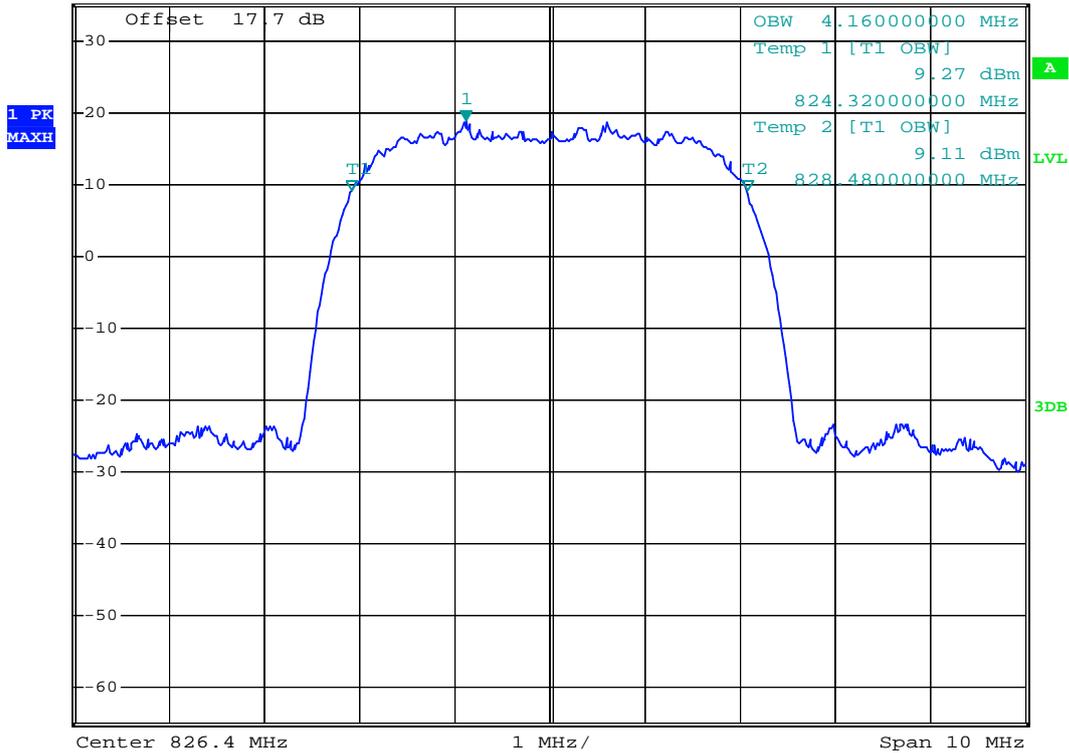
- Test Mode : WCDMA Band V (HSDPA) CH4132 99% Occupied Bandwidth
- Power State : High



\*RBW 100 kHz    Marker 1 [T1 ]  
 \*VBW 300 kHz                    18.83 dBm  
 \*SWT 300 ms                    825.520000000 MHz

Ref 35 dBm

\*Att 30 dB



Date: 10.MAR.2008 06:01:32



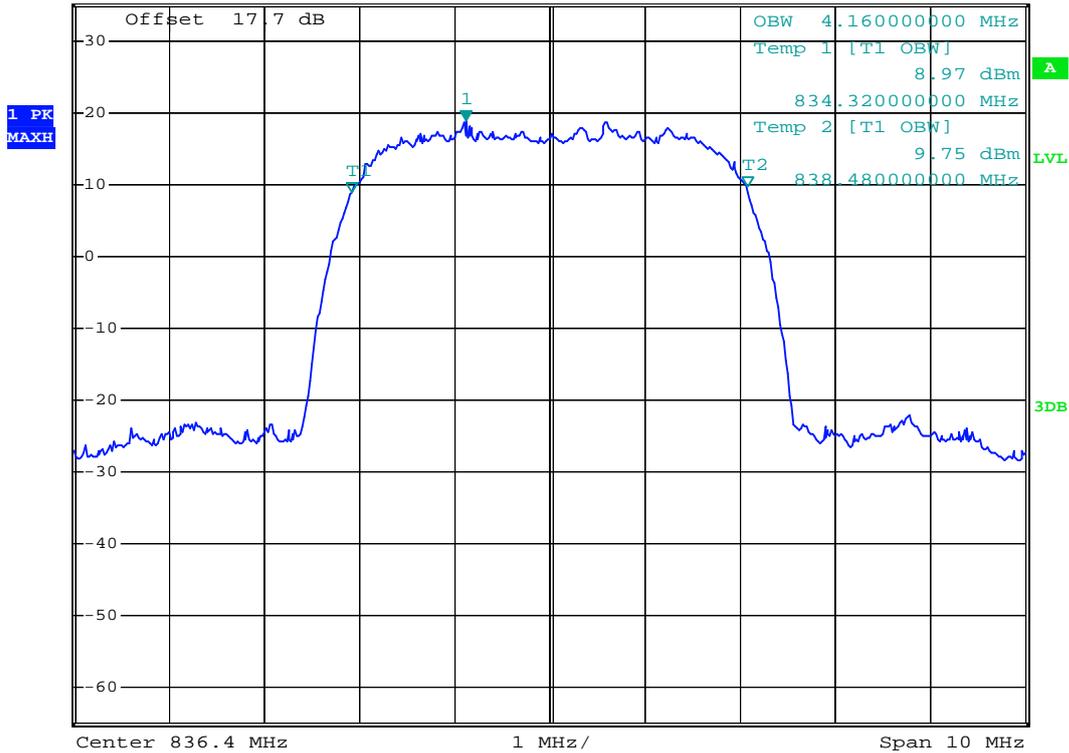
- Test Mode : WCDMA Band V (HSDPA) CH4182 99% Occupied Bandwidth
- Power State : High



\*RBW 100 kHz    Marker 1 [T1 ]  
 \*VBW 300 kHz                    18.97 dBm  
 \*SWT 300 ms                    835.520000000 MHz

Ref 35 dBm

\*Att 30 dB



Date: 10.MAR.2008 06:02:03



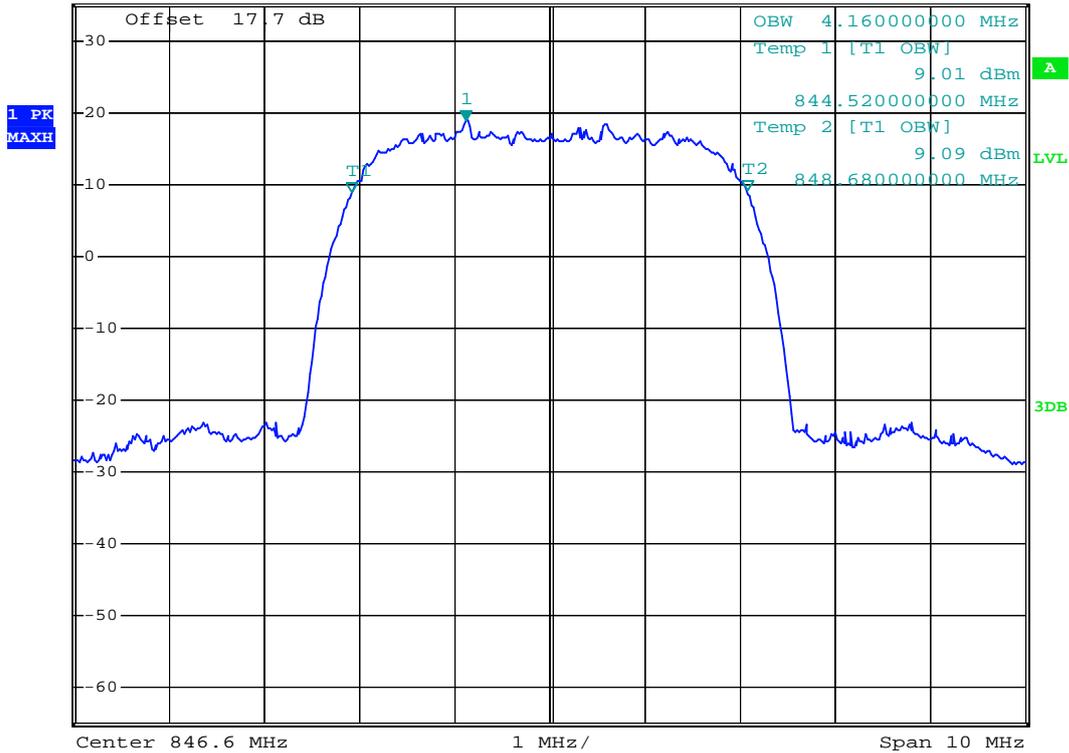
- Test Mode : WCDMA Band V (HSDPA) CH4233 99% Occupied Bandwidth
- Power State : High



\*RBW 100 kHz    Marker 1 [T1 ]  
 \*VBW 300 kHz                    18.85 dBm  
 \*SWT 300 ms                    845.720000000 MHz

Ref 35 dBm

\*Att 30 dB



Date: 10.MAR.2008 06:02:35



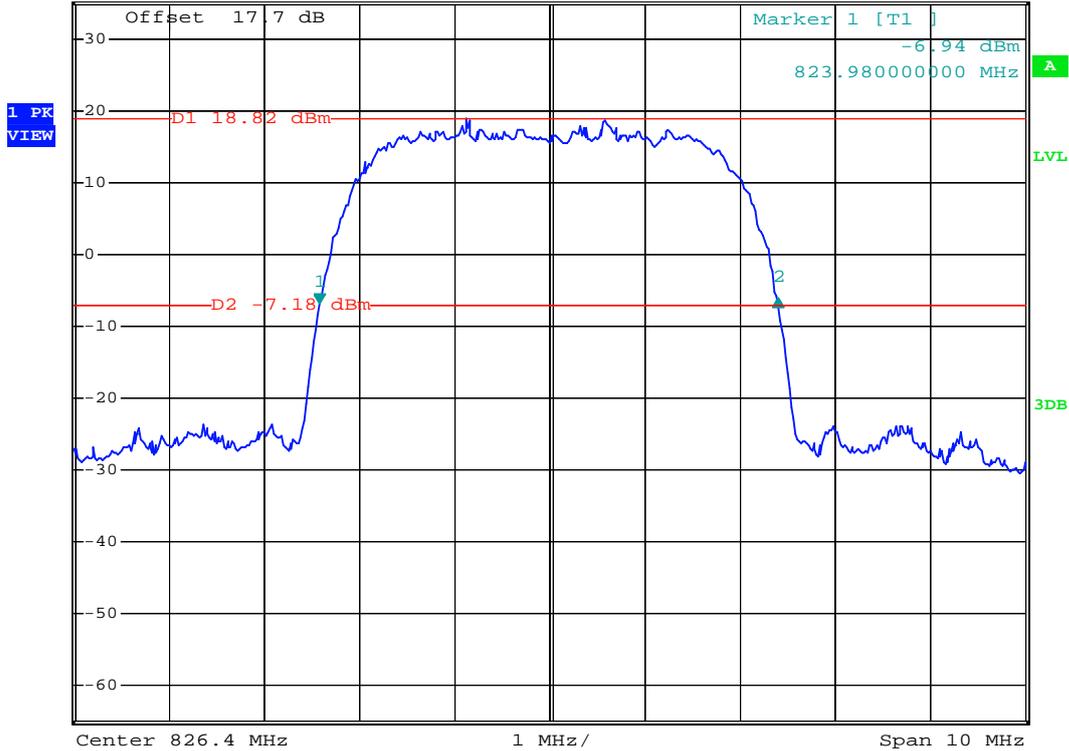
- Test Mode : WCDMA Band V (HSDPA) CH4132 26dB Bandwidth
- Power State : High



\*RBW 100 kHz    Delta 2 [T1 ]  
 \*VBW 300 kHz                    0.87 dB  
 \*SWT 300 ms                    4.820000000 MHz

Ref 35 dBm

\*Att 30 dB



Date: 10.MAR.2008 06:00:55



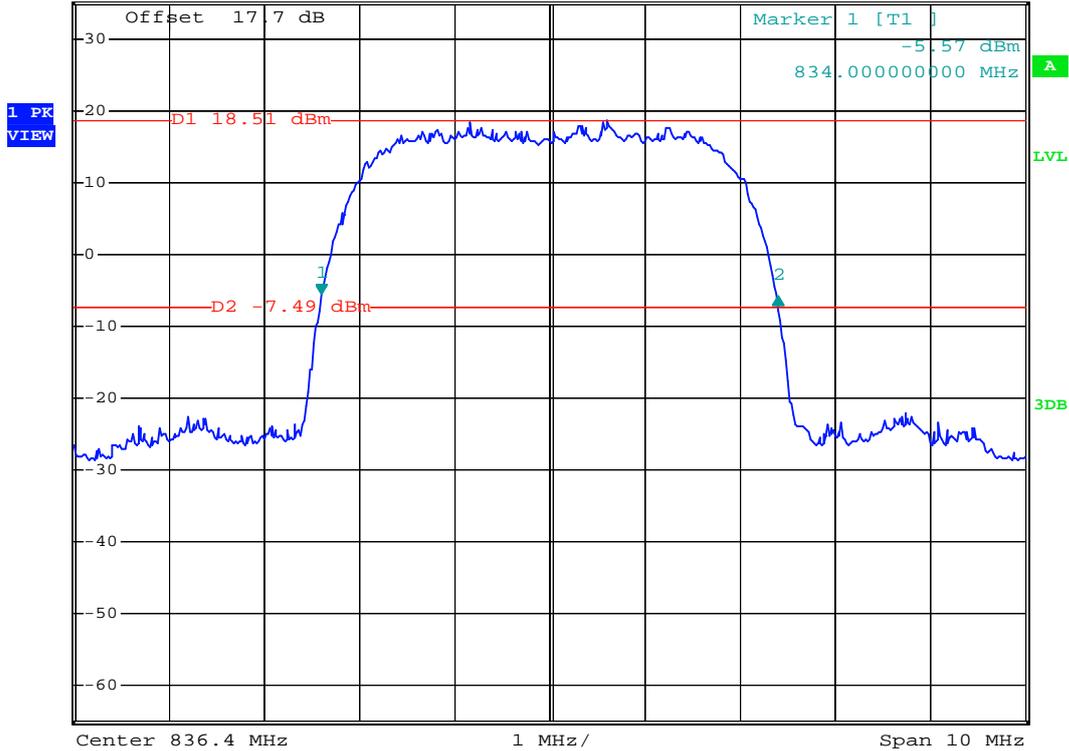
- Test Mode : WCDMA Band V (HSDPA) CH4182 26dB Bandwidth
- Power State : High



\*RBW 100 kHz    Delta 2 [T1 ]  
 \*VBW 300 kHz                    -0.14 dB  
 \*SWT 300 ms                      4.800000000 MHz

Ref 35 dBm

\*Att 30 dB



Date: 10.MAR.2008 05:59:41



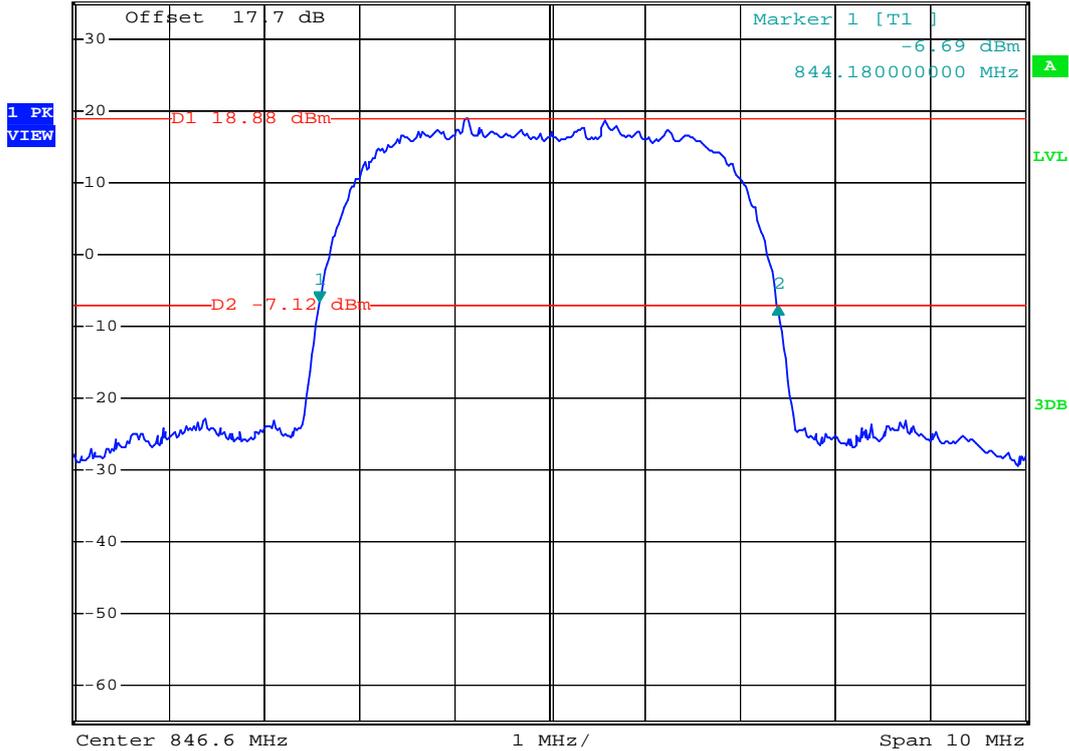
- Test Mode : WCDMA Band V (HSDPA) CH4233 26dB Bandwidth
- Power State : High



\*RBW 100 kHz    Delta 2 [T1 ]  
 \*VBW 300 kHz                    -0.38 dB  
 \*SWT 300 ms                      4.820000000 MHz

Ref 35 dBm

\*Att 30 dB



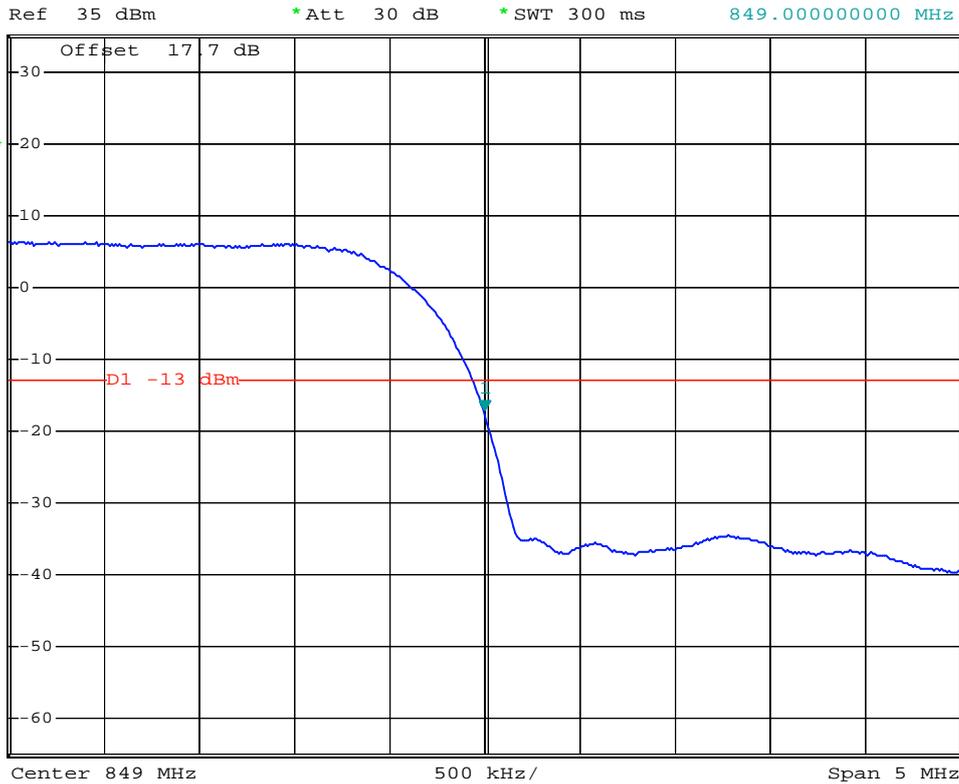
Date: 10.MAR.2008 05:58:50



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



\*RBW 100 kHz    Marker 1 [T1 ]  
 \*VBW 100 kHz    -17.22 dBm  
 \*SWT 300 ms    849.000000000 MHz

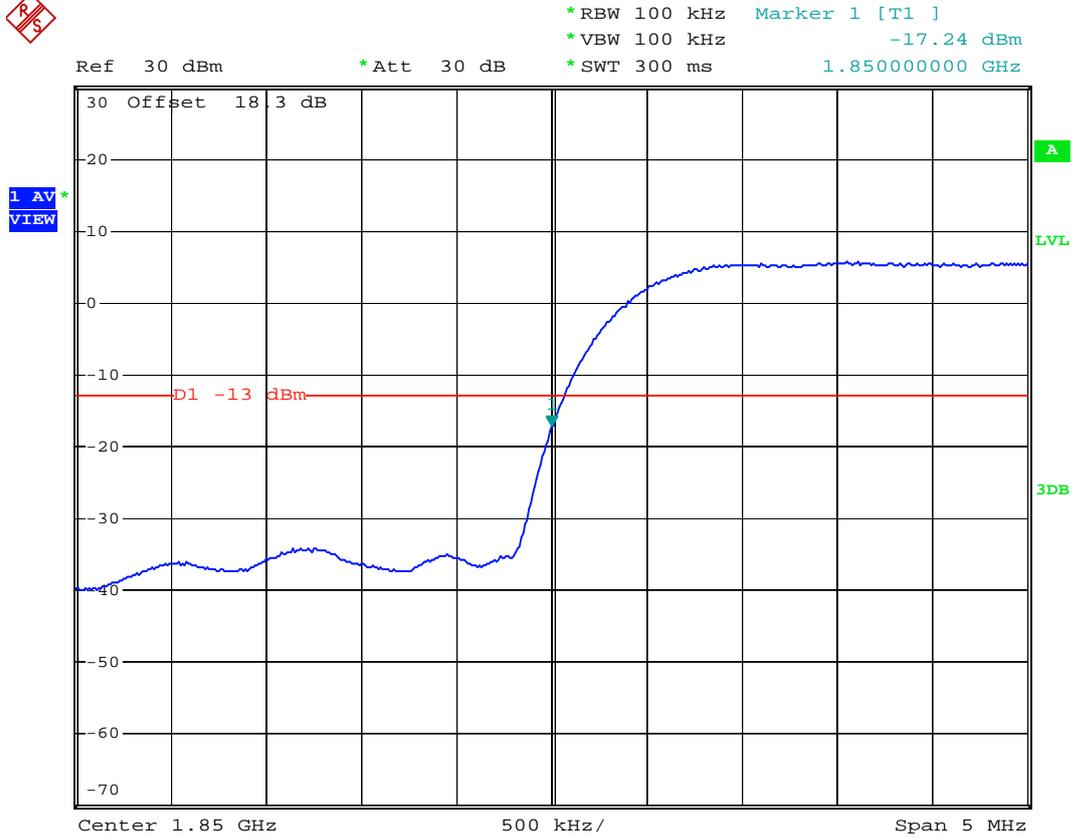


Date: 10.MAR.2008 06:09:20



<Model : ZX1>

- Mode 7
- Test Mode : WCDMA Band II CH9262 Lower Band Edge
- Power State : High

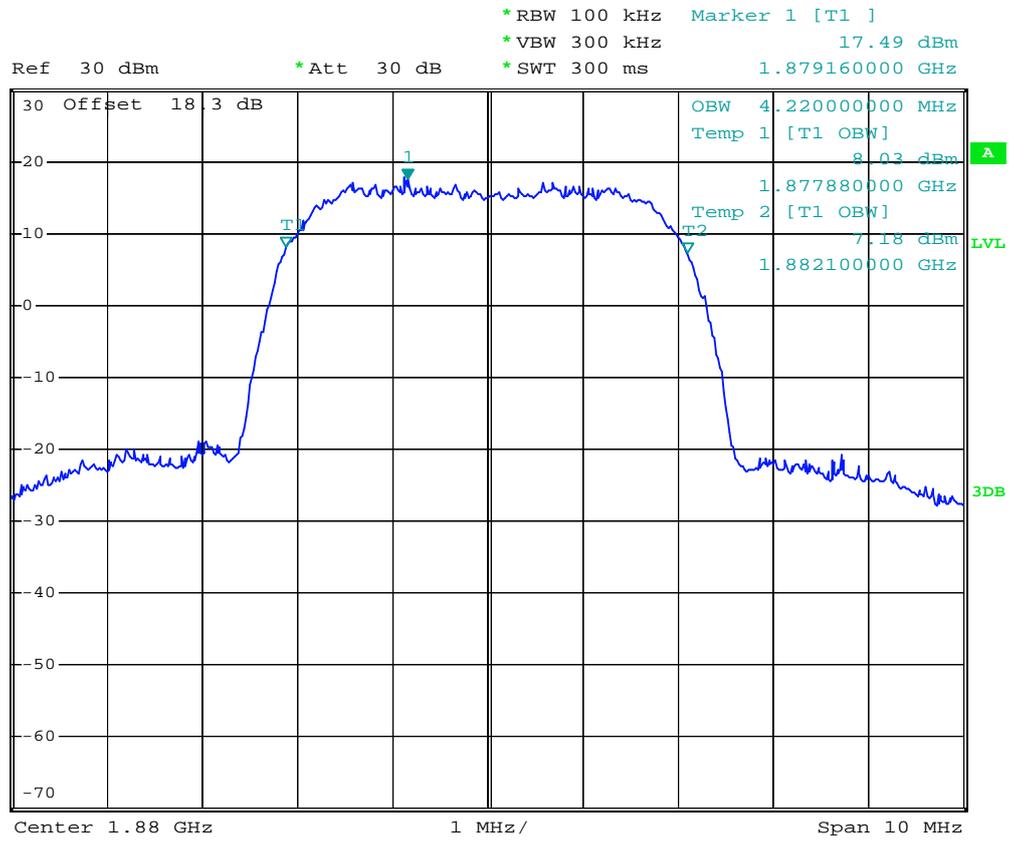


Date: 10.MAR.2008 04:09:31





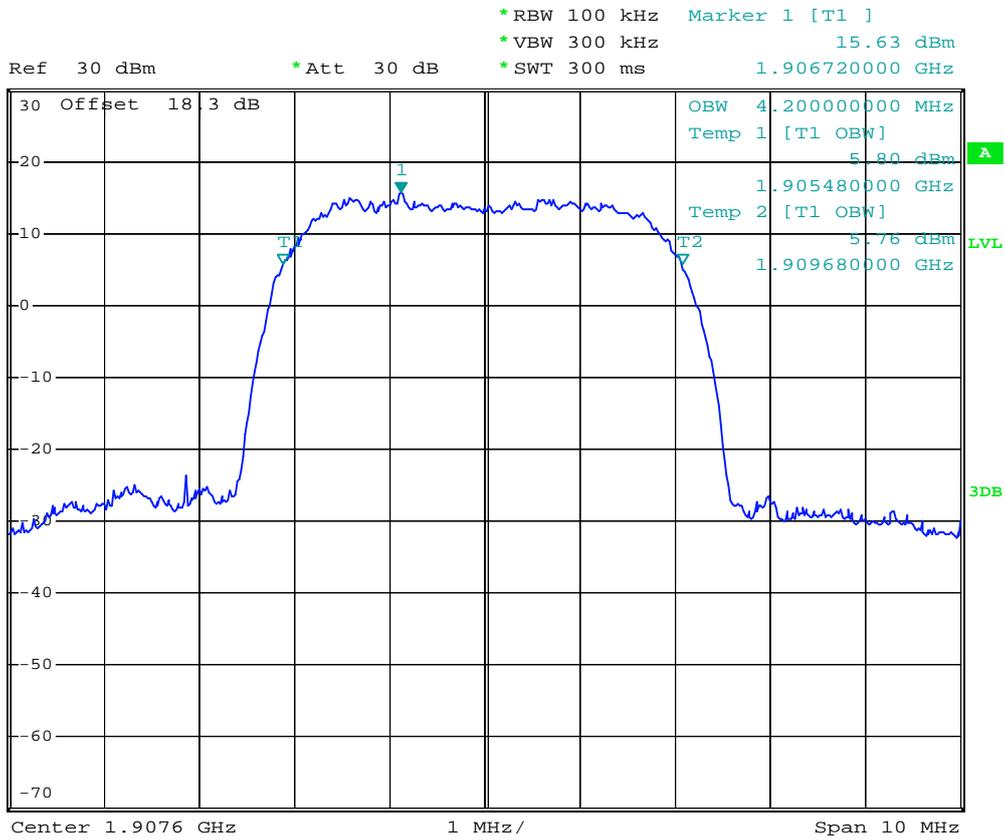
- Test Mode : WCDMA Band II CH9400 99% Occupied Bandwidth
- Power State : High



Date: 10.MAR.2008 03:53:25



- Test Mode : WCDMA Band II CH9538 99% Occupied Bandwidth
- Power State : High



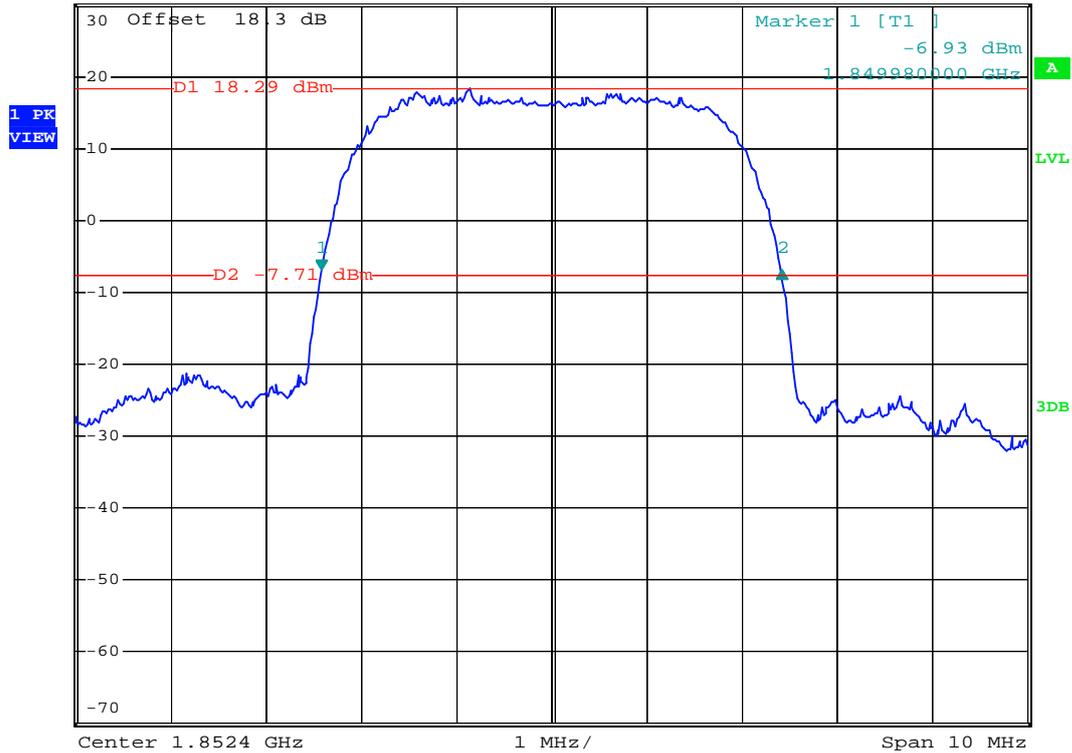
Date: 10.MAR.2008 03:52:42



- Test Mode : WCDMA Band II CH9262 26dB Bandwidth
- Power State : High



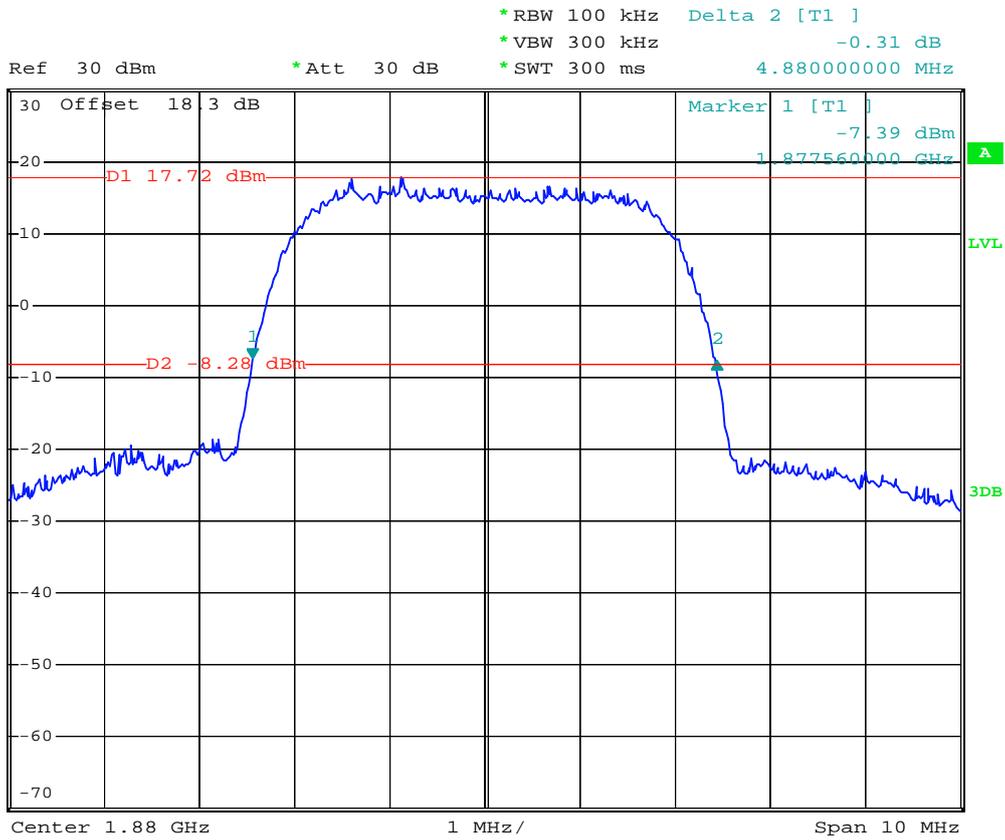
Ref 30 dBm      \*Att 30 dB      \*RBW 100 kHz      Delta 2 [T1 ]  
 \*VBW 300 kHz      0.06 dB  
 \*SWT 300 ms      4.840000000 MHz



Date: 10.MAR.2008 03:48:19



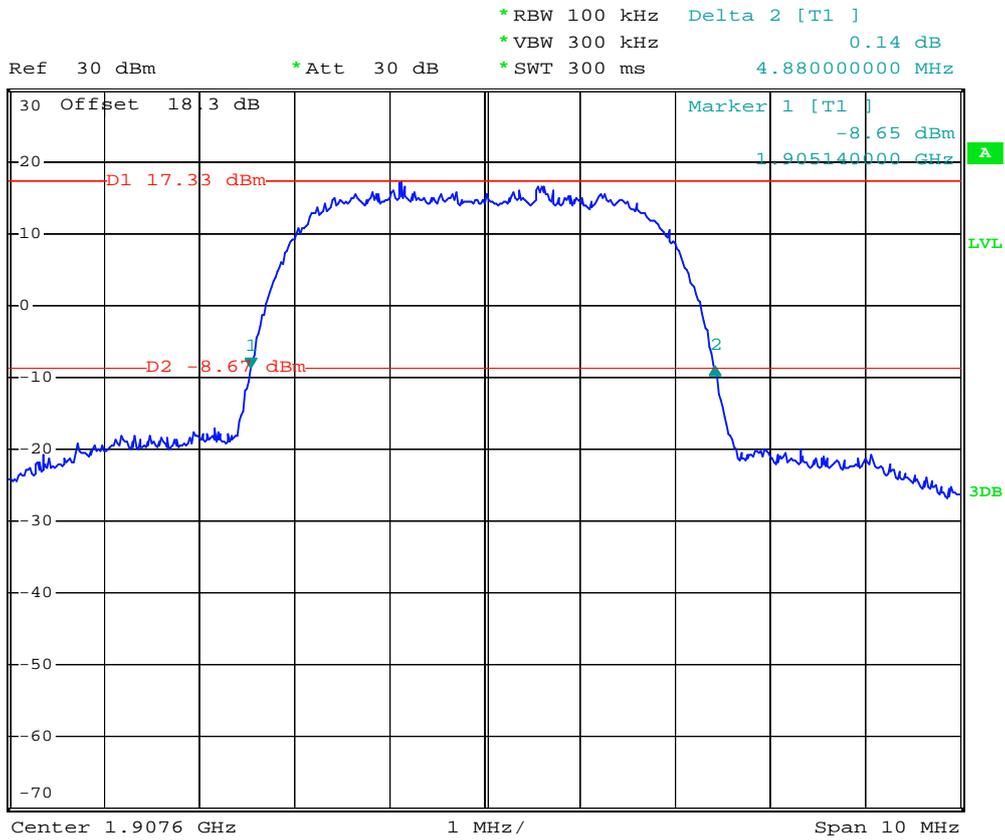
- Test Mode : WCDMA Band II CH9400 26dB Bandwidth
- Power State : High



Date: 10.MAR.2008 03:50:00



- Test Mode : WCDMA Band II CH9538 26dB Bandwidth
- Power State : High



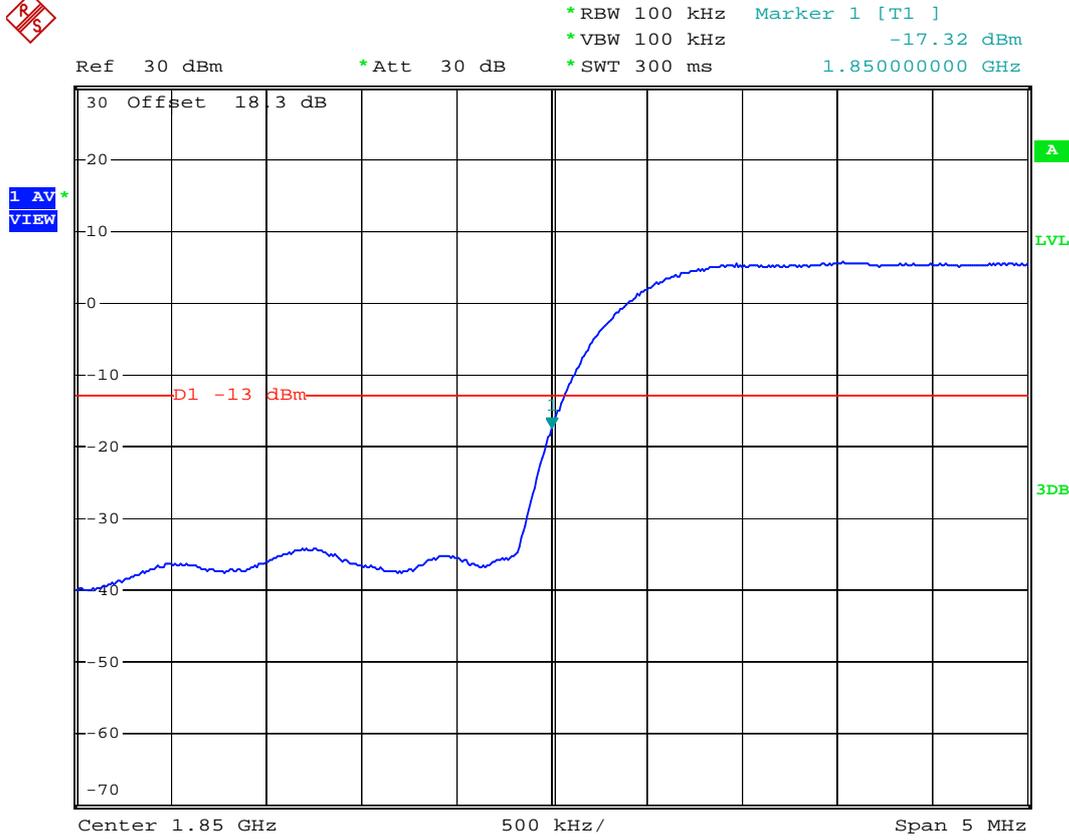
Date: 15.MAR.2008 18:47:21





<Model : ZX1>

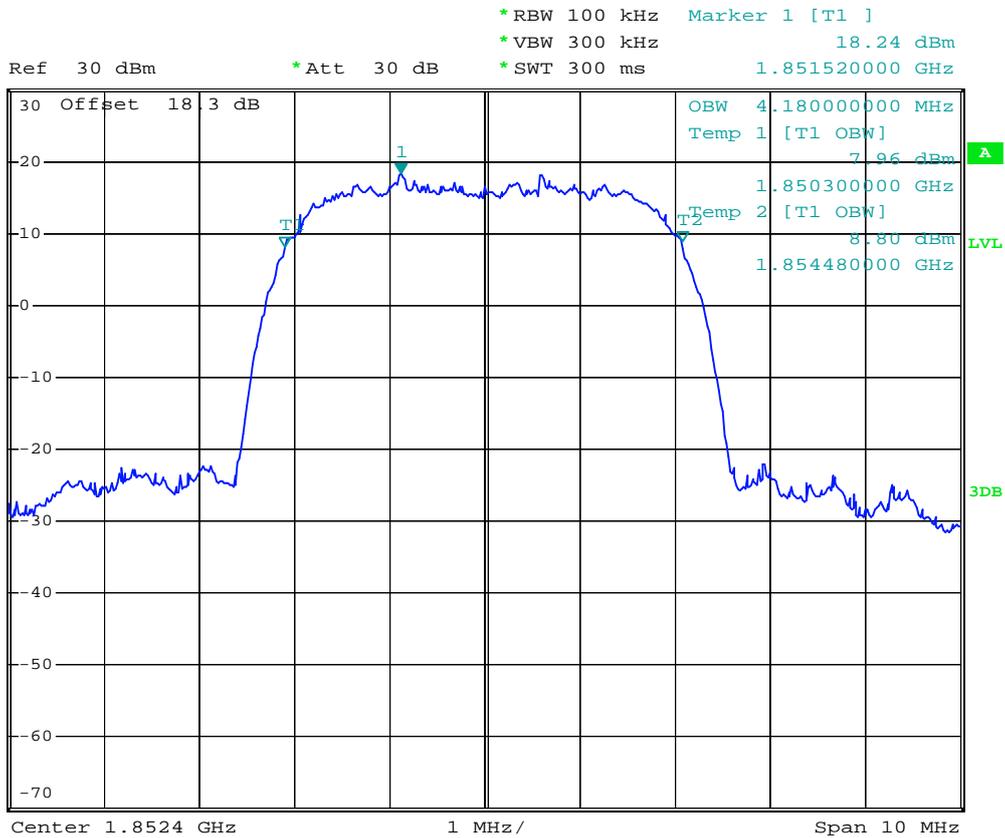
- Mode 8
- Test Mode : WCDMA Band II (HSDPA) CH9262 Lower Band Edge
- Power State : High



Date: 10.MAR.2008 04:21:30



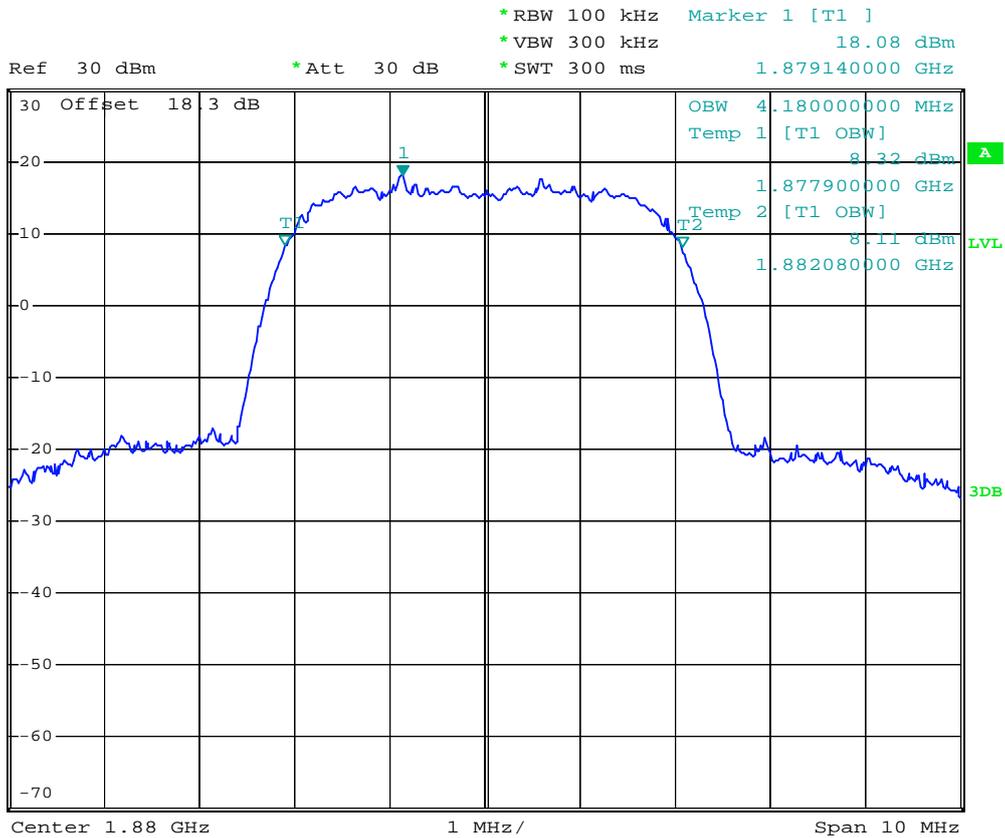
- Test Mode : WCDMA Band II (HSDPA) CH9262 99% Occupied Bandwidth
- Power State : High



Date: 10.MAR.2008 05:11:51



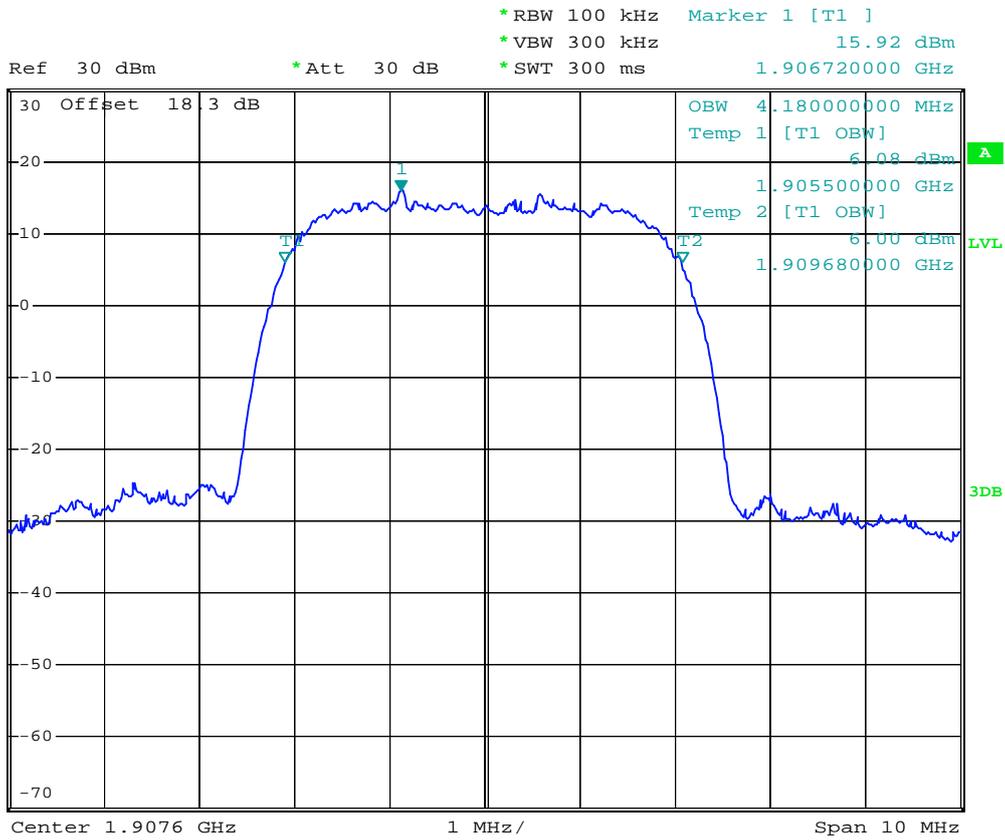
- Test Mode : WCDMA Band II (HSDPA) CH9400 99% Occupied Bandwidth
- Power State : High



Date: 10.MAR.2008 05:11:16



- Test Mode : WCDMA Band II (HSDPA) CH9538 99% Occupied Bandwidth
- Power State : High



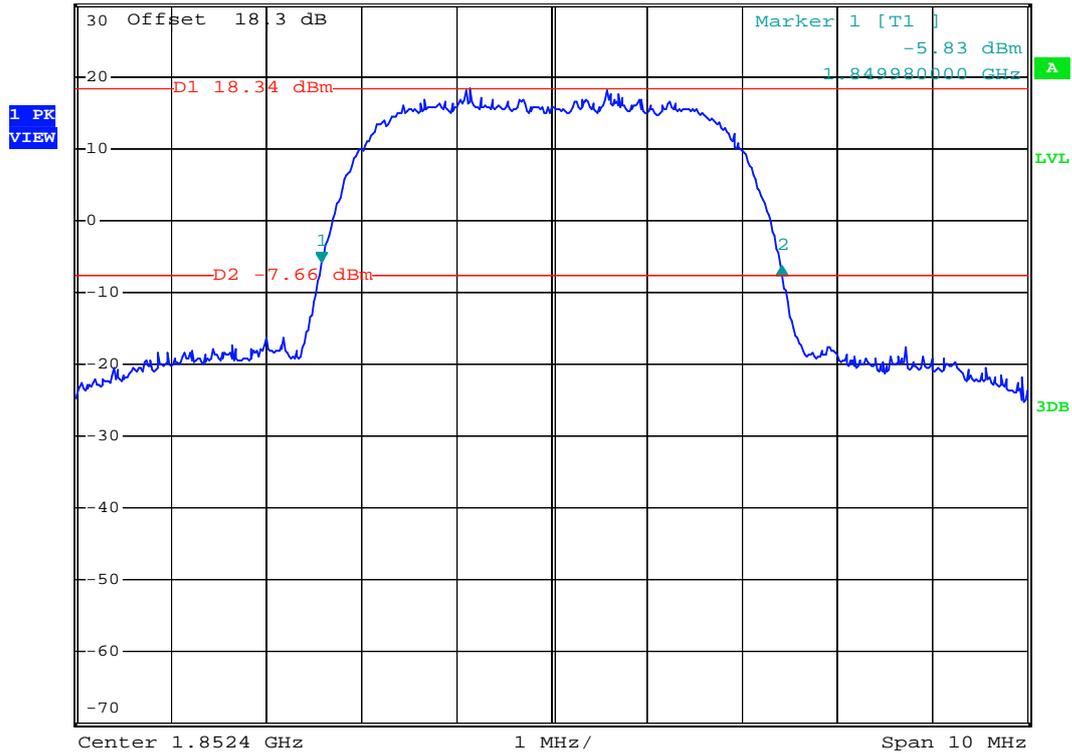
Date: 10.MAR.2008 05:12:31



- Test Mode : WCDMA Band II (HSDPA) CH9262 26dB Bandwidth
- Power State : High



Ref 30 dBm      \*Att 30 dB      \*RBW 100 kHz      Delta 2 [T1 ]  
 \*VBW 300 kHz      -0.50 dB  
 \*SWT 300 ms      4.840000000 MHz



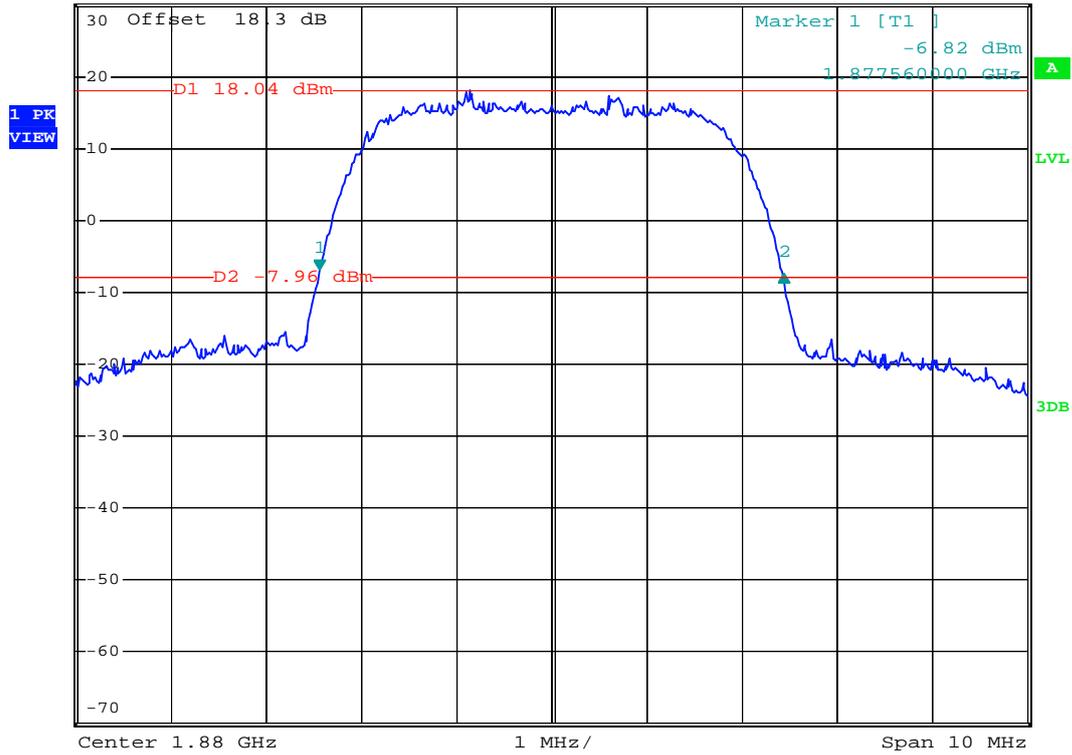
Date: 10.MAR.2008 05:16:12



- Test Mode : WCDMA Band II (HSDPA) CH9400 26dB Bandwidth
- Power State : High



Ref 30 dBm      \*Att 30 dB      \*RBW 100 kHz      Delta 2 [T1 ]  
 \*VBW 300 kHz      -0.55 dB  
 \*SWT 300 ms      4.880000000 MHz



Date: 10.MAR.2008 05:14:58

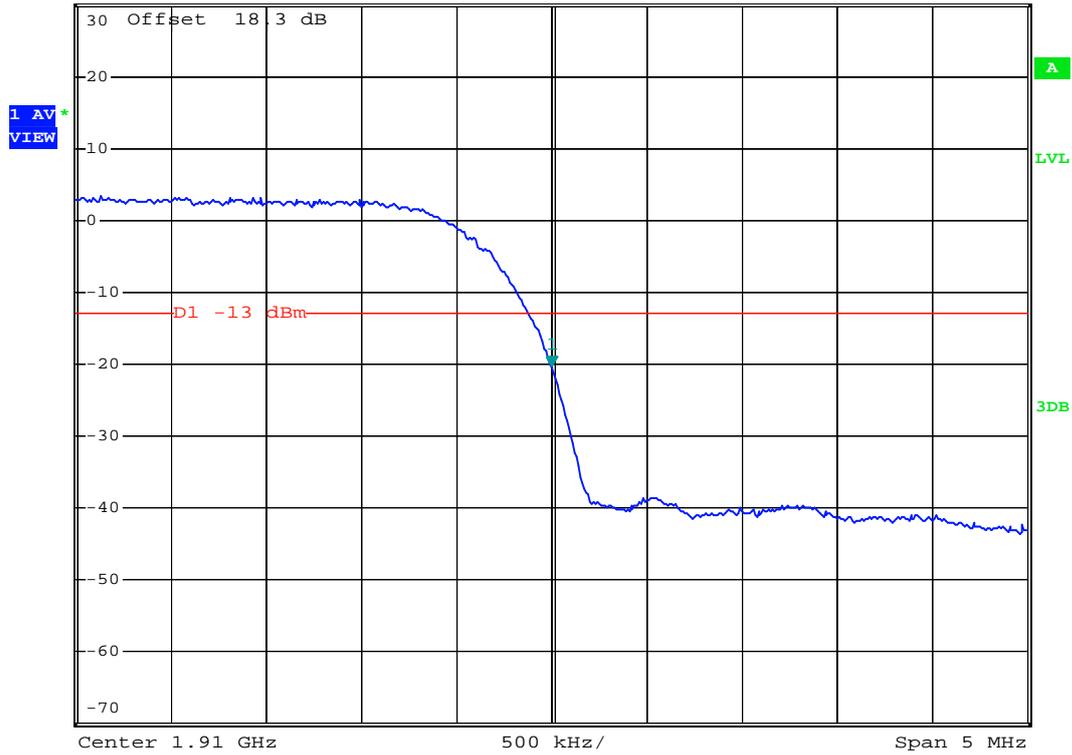




- Test Mode : WCDMA Band II (HSDPA) CH9538 Higher Band Edge
- Power State : High



Ref 30 dBm      \*Att 30 dB      \*RBW 100 kHz      Marker 1 [T1 ]  
\*VBW 100 kHz      -20.23 dBm  
\*SWT 300 ms      1.910000000 GHz



Date: 10.MAR.2008 04:34:31

## 4.5 Conducted Emission

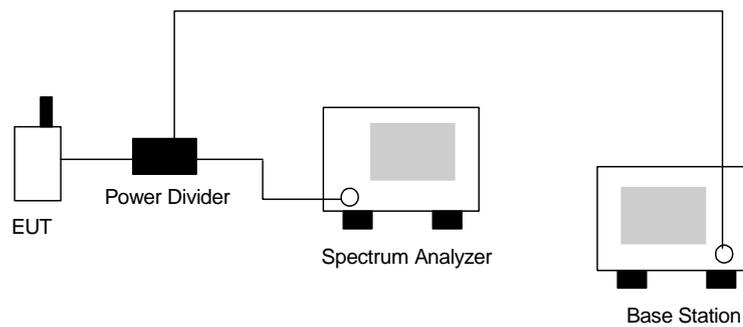
### 4.5.1 Measurement Instruments

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.

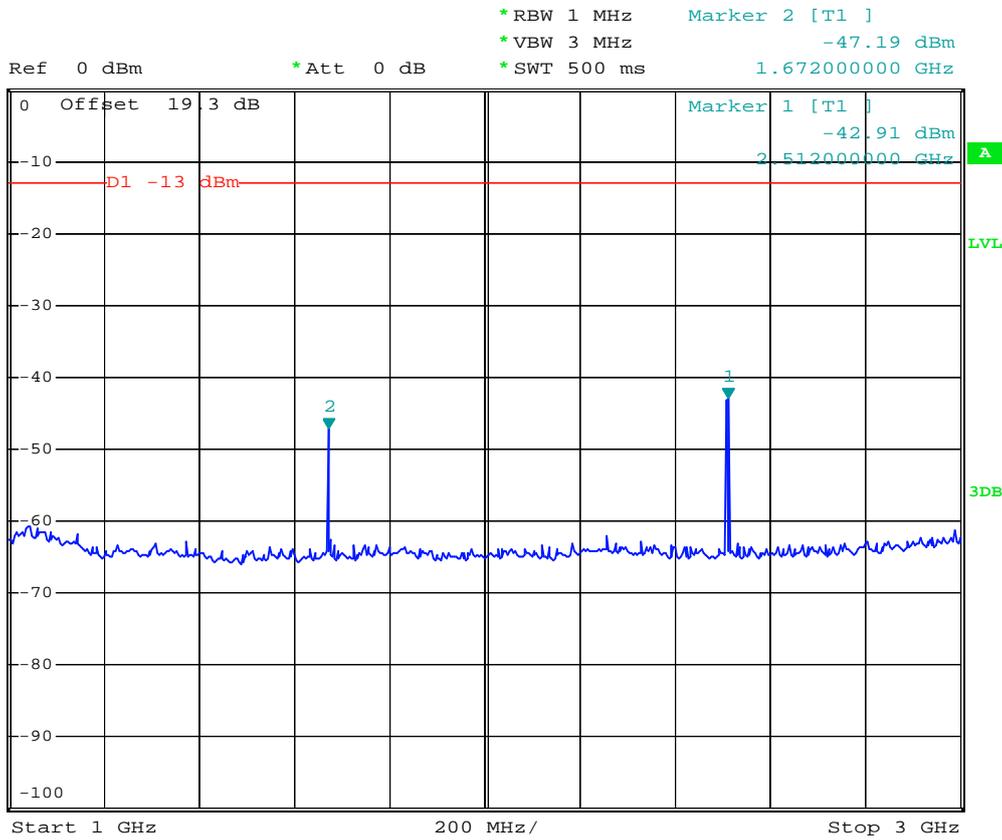
### 4.5.3 Test Setup Layout







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



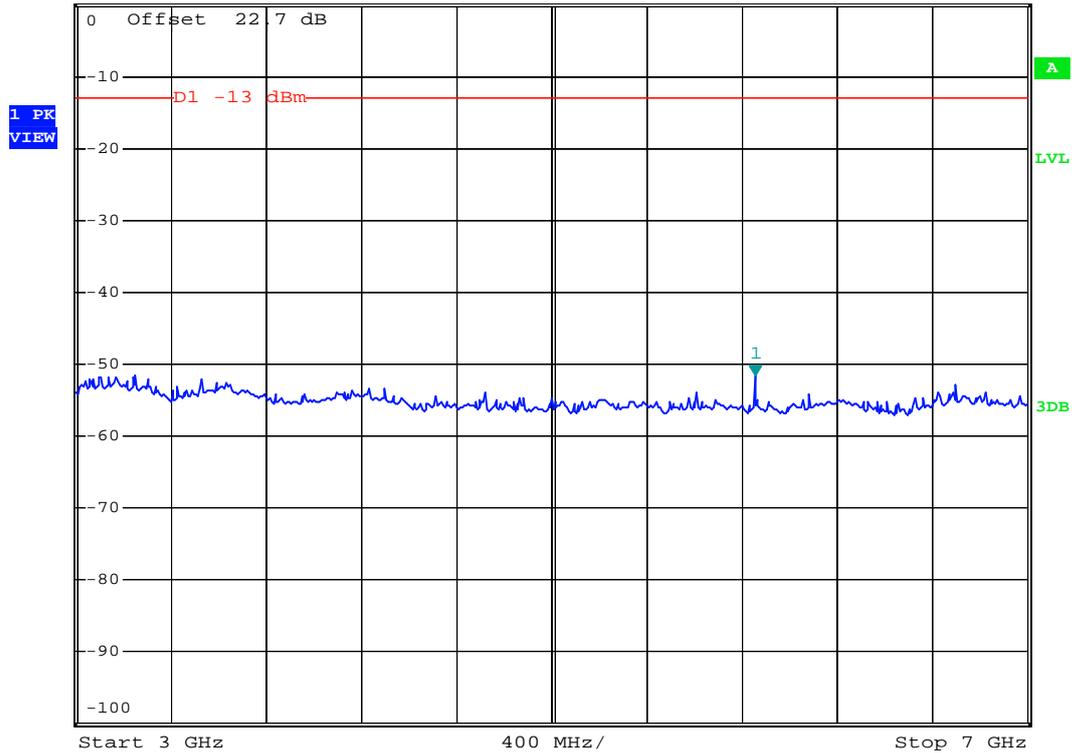
Date: 10.MAR.2008 00:12:09



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



Ref 0 dBm      \*Att 0 dB      \*RBW 1 MHz      Marker 1 [T1 ]  
 \*VBW 3 MHz      -51.69 dBm  
 \*SWT 500 ms      5.856000000 GHz



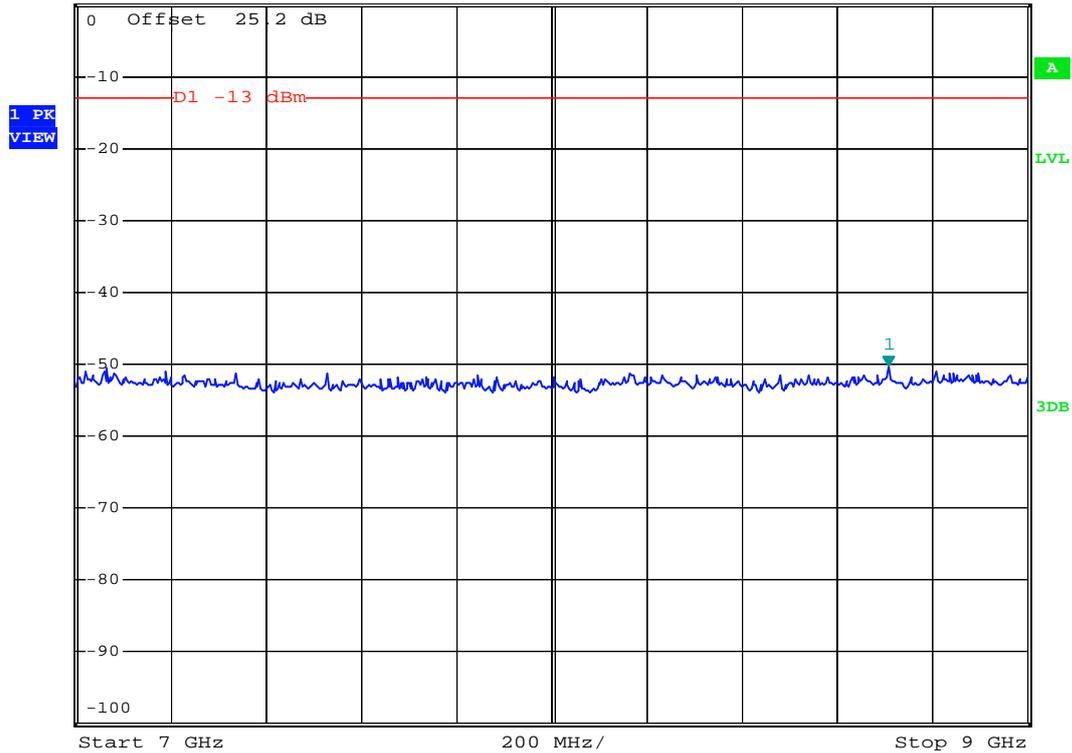
Date: 10.MAR.2008 00:11:36



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



Ref 0 dBm      \*Att 0 dB      \*RBW 1 MHz      Marker 1 [T1 ]  
\*VBW 3 MHz      -50.28 dBm  
\*SWT 500 ms      8.708000000 GHz



Date: 10.MAR.2008 00:11:07

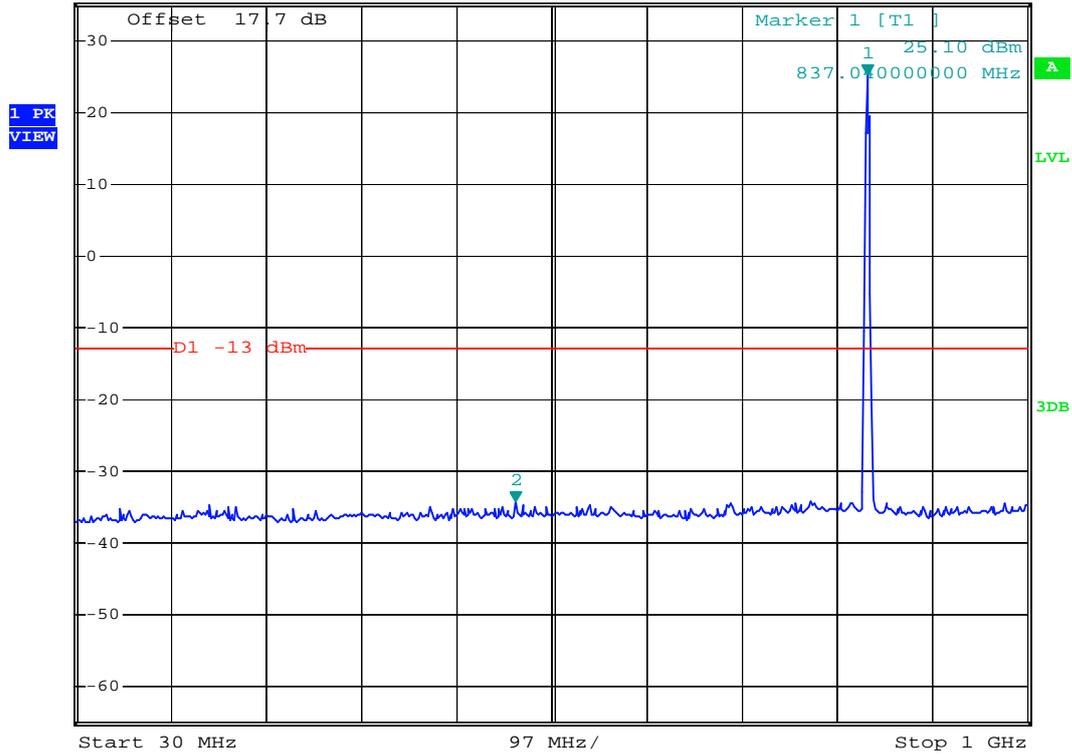


<Model : ZX1>

- Mode 2
- Test Mode : GSM850 (EDGE) CH189
- Frequency Range : 30M-1G



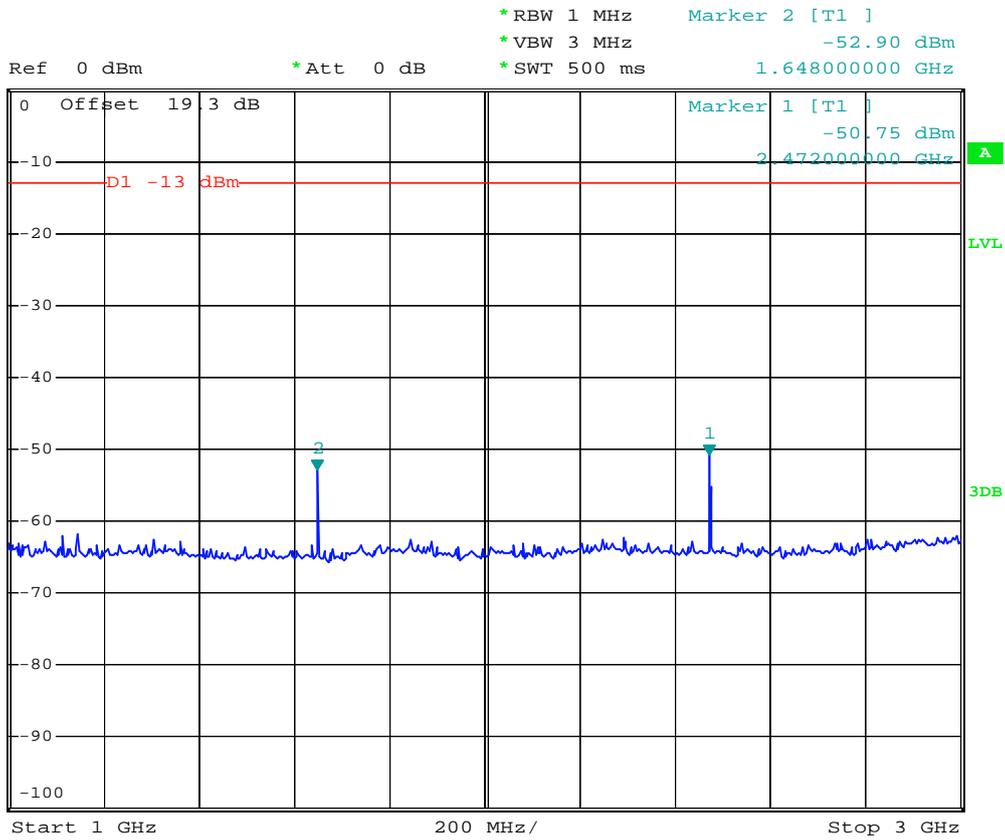
Ref 35 dBm      \*Att 30 dB      \*RBW 1 MHz      Marker 2 [T1 ]  
 \*VBW 3 MHz      -34.15 dBm  
 \*SWT 500 ms      478.14000000 MHz



Date: 10.MAR.2008 00:01:42



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



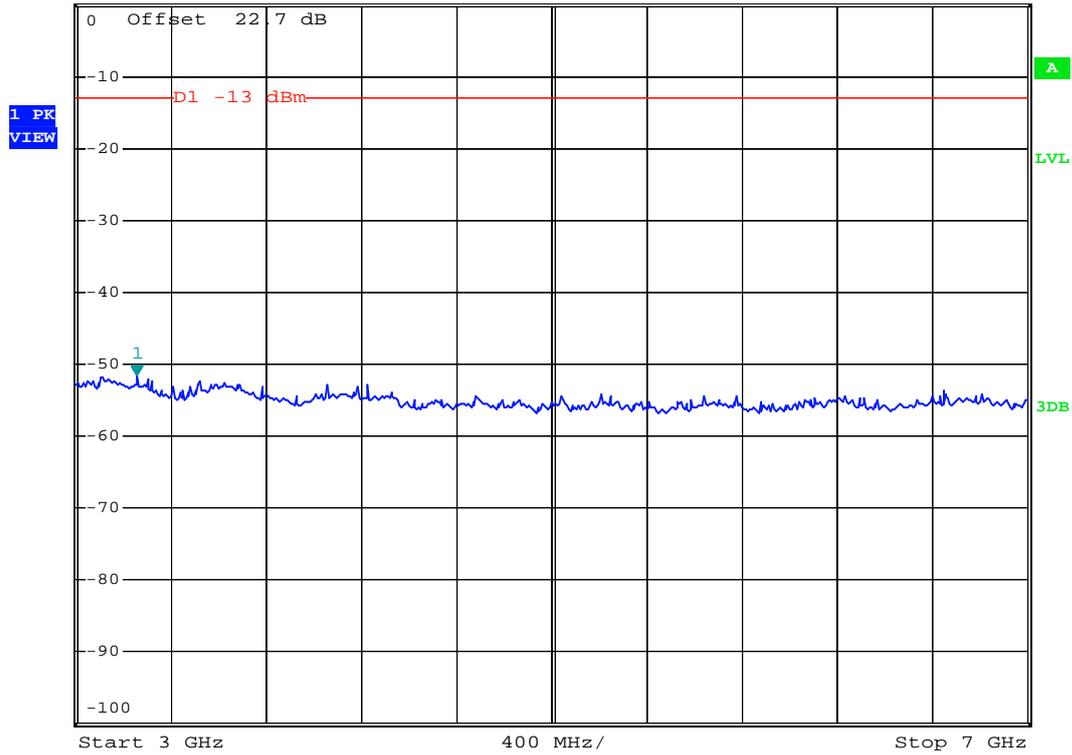
Date: 10.MAR.2008 00:06:41



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



Ref 0 dBm      \*Att 0 dB      \*RBW 1 MHz      Marker 1 [T1 ]  
 \*VBW 3 MHz      -51.49 dBm  
 \*SWT 500 ms      3.256000000 GHz



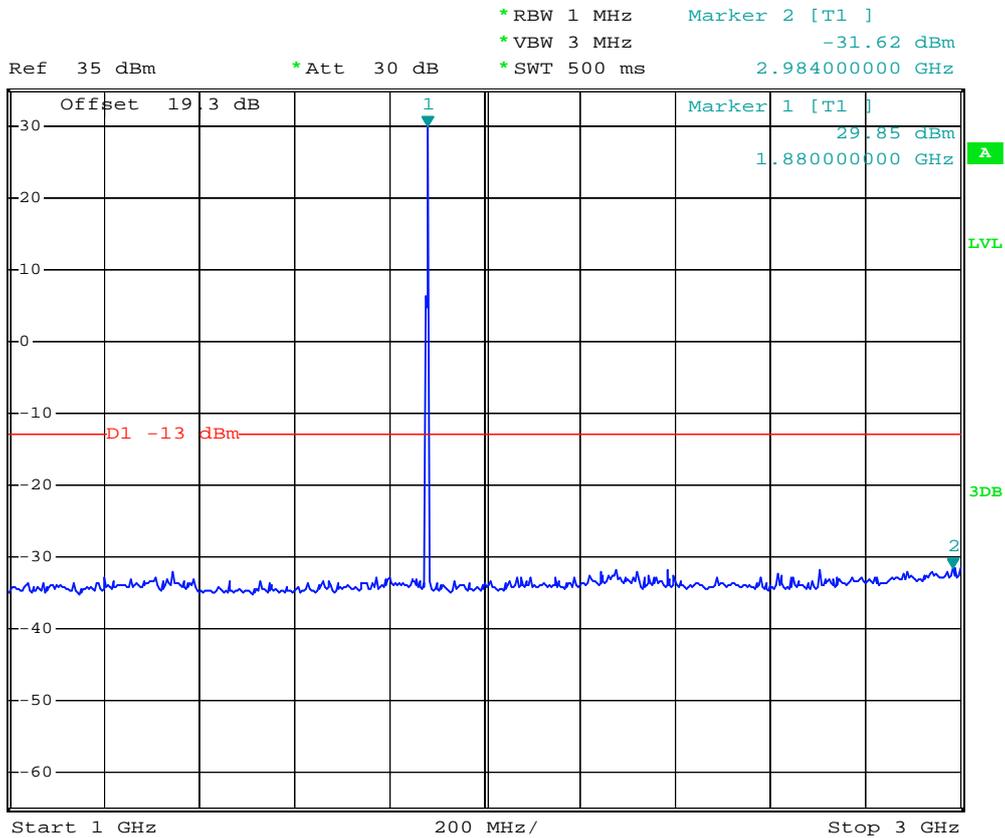
Date: 10.MAR.2008 00:08:18







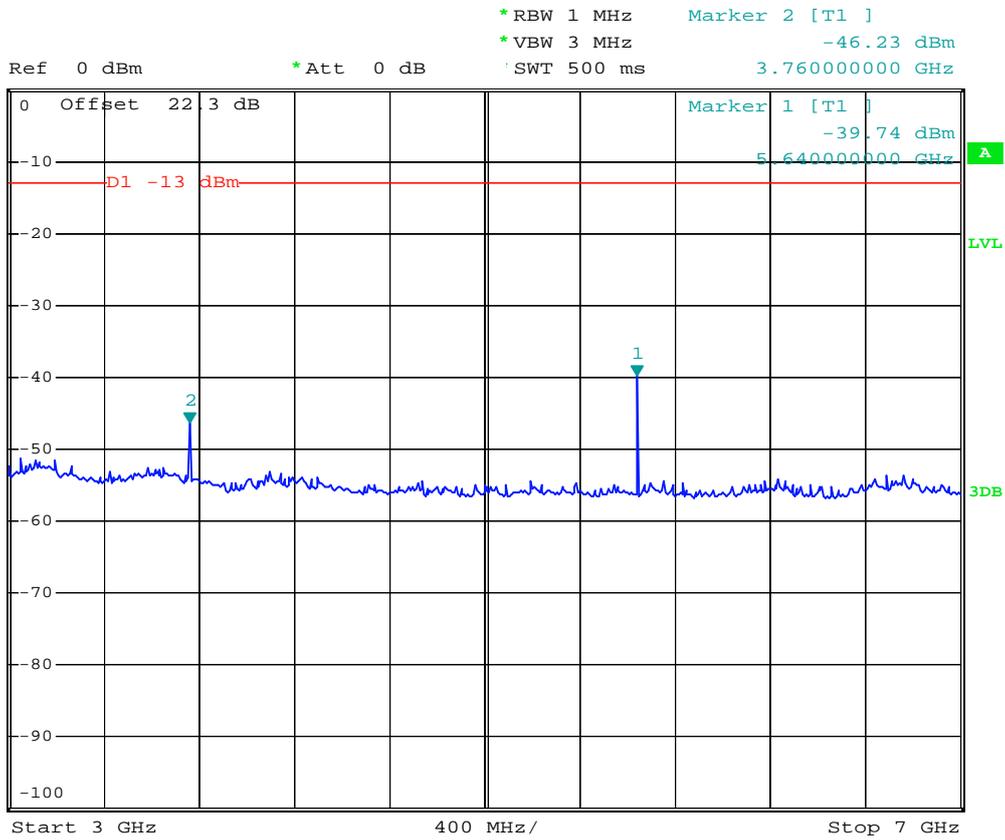
- Test Mode : GSM1900 (GSM) CH661
- Frequency Range : 1G-3G



Date: 10.MAR.2008 00:32:15



- Test Mode : GSM1900 (GSM) CH661
- Frequency Range : 3G-7G



Date: 10.MAR.2008 00:36:53



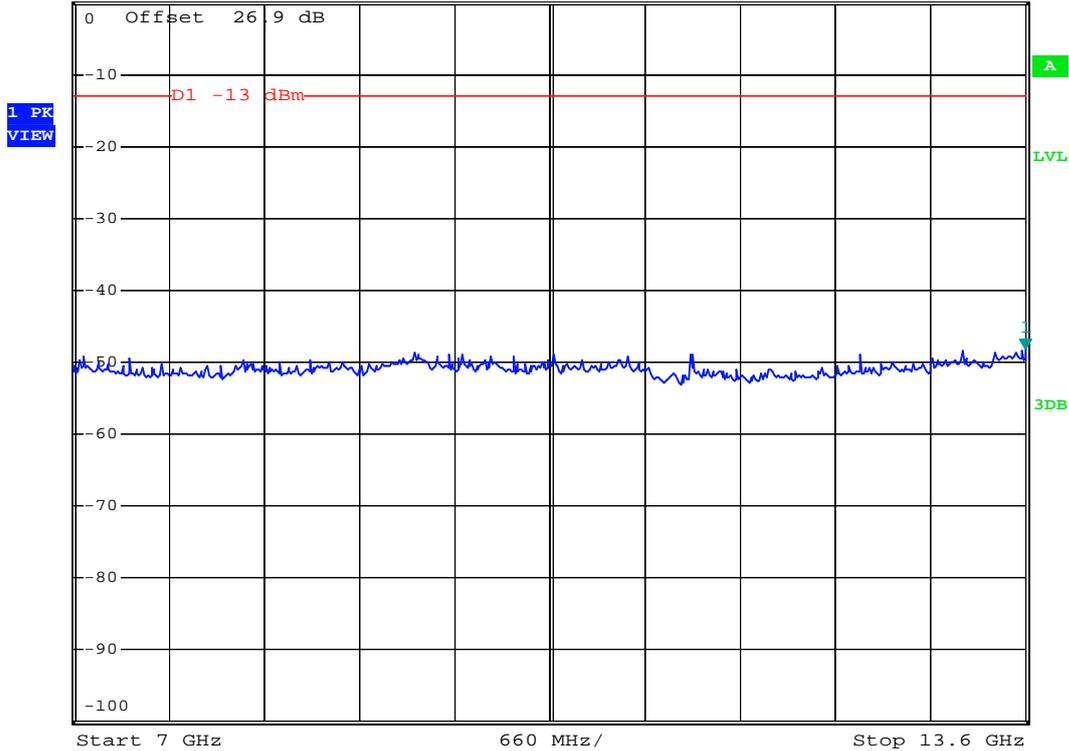
- Test Mode : GSM1900 (GSM) CH661
- Frequency Range : 7G-13.6G



\*RBW 1 MHz      Marker 1 [T1 ]  
 \*VBW 3 MHz      -48.05 dBm  
 \*SWT 500 ms      13.600000000 GHz

Ref 0 dBm

\*Att 0 dB



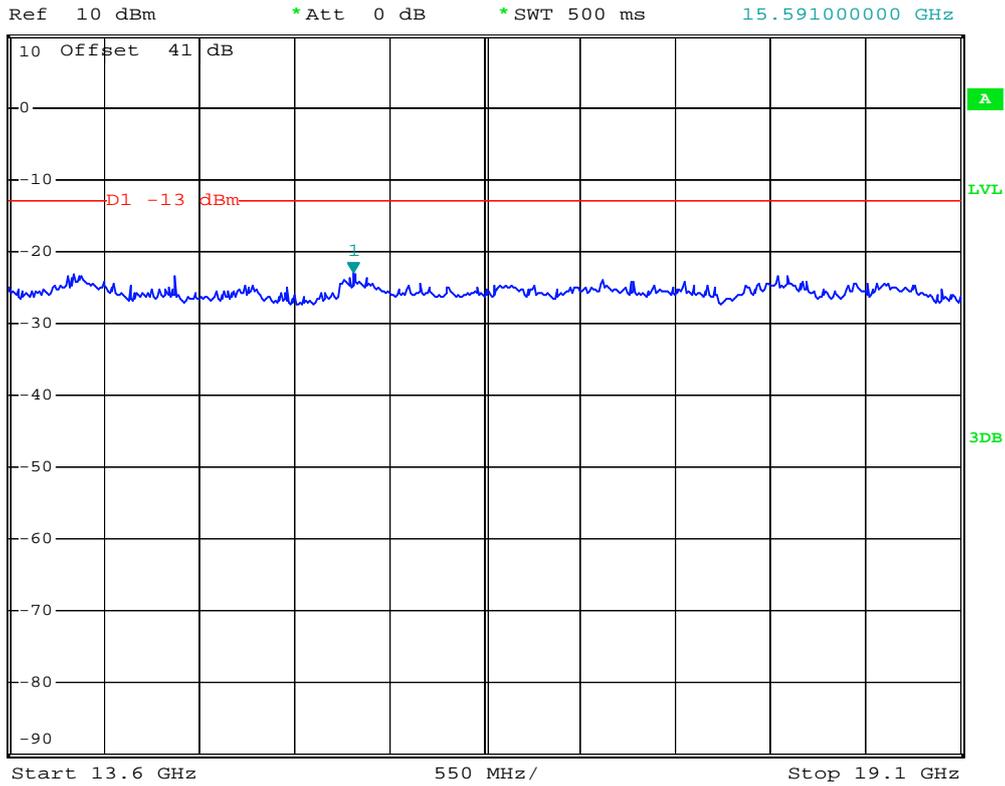
Date: 10.MAR.2008 00:37:48



- Test Mode : GSM1900 (GSM) CH661
- Frequency Range : 13.6G-19.1G



\*RBW 1 MHz      Marker 1 [T1 ]  
\*VBW 3 MHz      -23.02 dBm  
\*SWT 500 ms      15.591000000 GHz

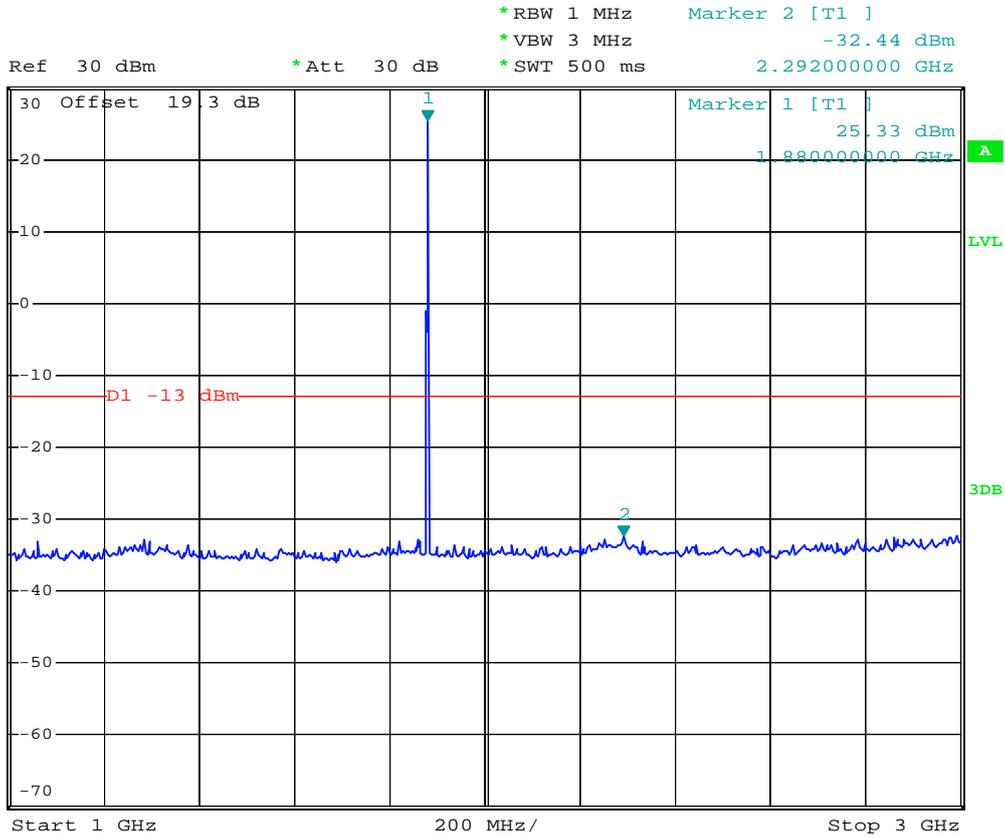


Date: 10.MAR.2008 00:39:02





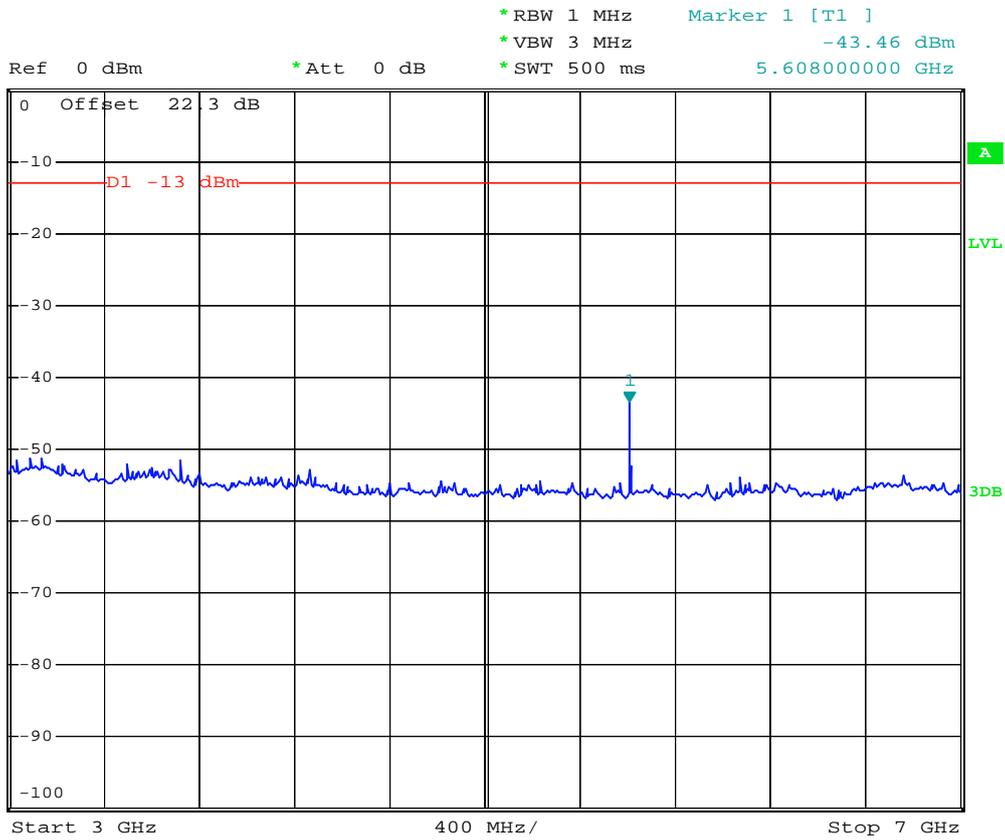
- Test Mode : GSM1900 (EDGE) CH661
- Frequency Range : 1G-3G



Date: 15.MAR.2008 17:44:10



- Test Mode : GSM1900 (EDGE) CH661
- Frequency Range : 3G-7G



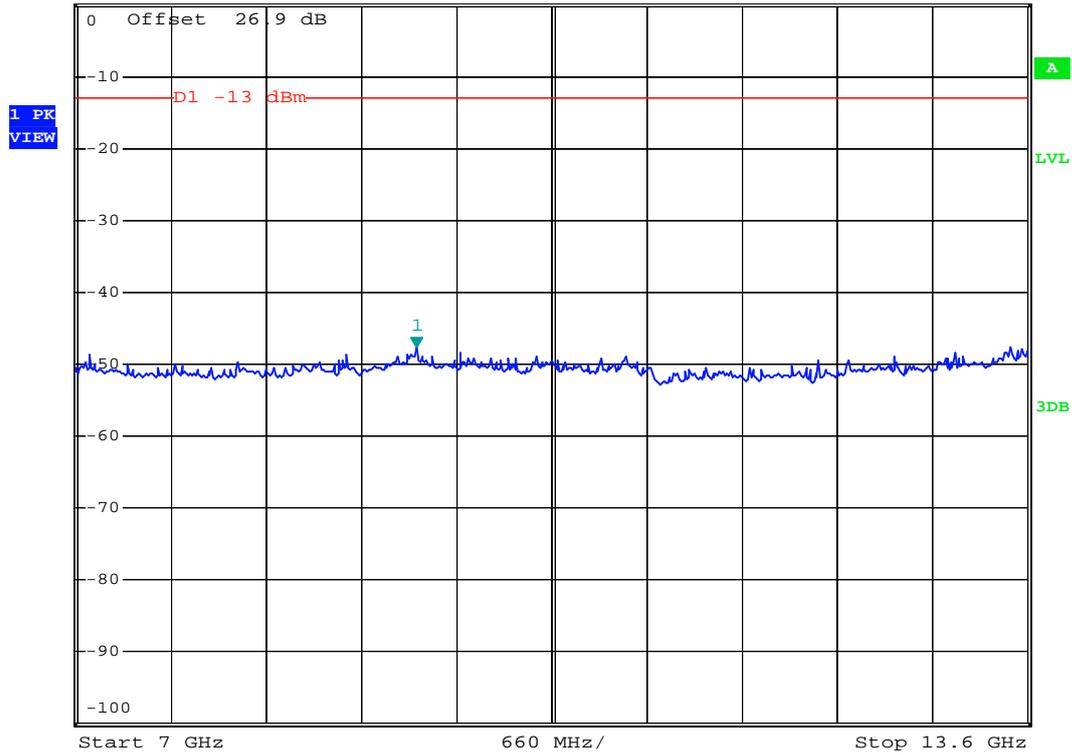
Date: 10.MAR.2008 00:47:33



- Test Mode : GSM1900 (EDGE) CH661
- Frequency Range : 7G-13.6G



Ref 0 dBm      \*Att 0 dB      \*RBW 1 MHz      Marker 1 [T1 ]  
 \*VBW 3 MHz      -47.67 dBm  
 \*SWT 500 ms      9.362800000 GHz



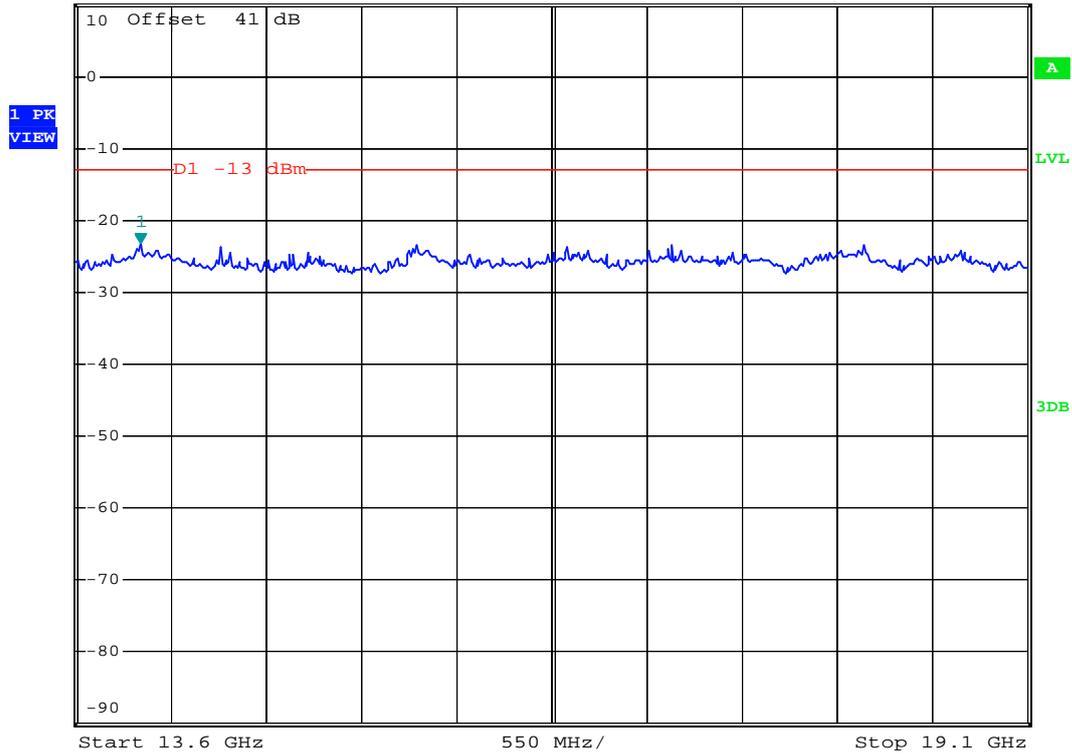
Date: 10.MAR.2008 00:46:45



- Test Mode : GSM1900 (EDGE) CH661
- Frequency Range : 13.6G-19.1G



Ref 10 dBm      \*Att 0 dB      \*RBW 1 MHz      Marker 1 [T1 ]  
\*VBW 3 MHz      -23.21 dBm  
\*SWT 500 ms      13.974000000 GHz



Date: 10.MAR.2008 00:45:52

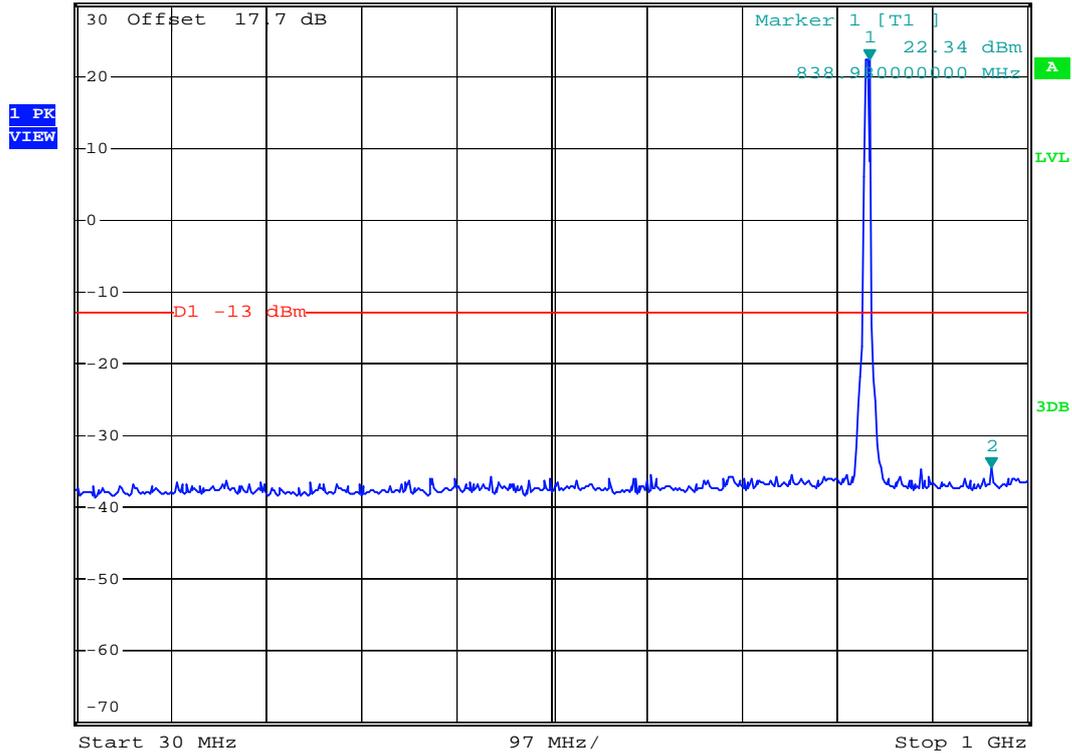


<Model : ZX1>

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



Ref 30 dBm      \*Att 30 dB      \*RBW 1 MHz      Marker 2 [T1 ]  
 \*VBW 3 MHz      -34.39 dBm  
 \*SWT 500 ms      963.140000000 MHz



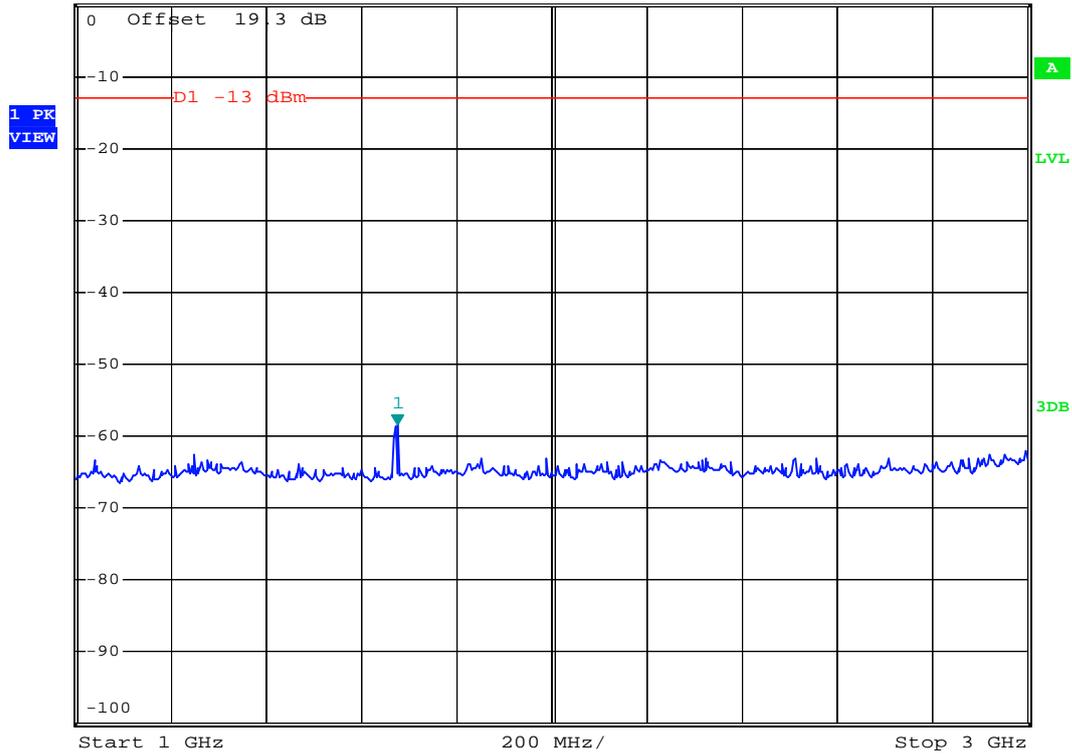
Date: 15.MAR.2008 18:55:47



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



Ref 0 dBm      \*Att 0 dB      \*RBW 1 MHz      Marker 1 [T1 ]  
\*VBW 3 MHz      -58.40 dBm  
\*SWT 500 ms      1.676000000 GHz



Date: 10.MAR.2008 15:16:33