



FCC Test Report

According to

47 CFR Part 22H, 24E

Equipment : ZTE C79 CDMA1X Digital Mobile Phone
Trade Name : ZTE
Model No. : ZTE C79
FCC ID : Q78-ZTEC79
Uplink Frequency Range : CDMA2000 Cellular : 824.70~848.31 MHz
CDMA2000 PCS : 1851.25~1908.75 MHz
Downlink Frequency Range : CDMA2000 Cellular : 869.70~893.31 MHz
CDMA2000 PCS : 1931.25~1988.75 MHz
Max. ERP/EIRP Power : CDMA2000 Cellular : 0.18 W for 1xRTT
CDMA2000 PCS : 0.25 W for 1x1xRTT
Emission Designator : 1M25F9W
Applicant : **ZTE CORPORATION**
ZTE Plaza, Keji Road South, Hi-Tech Industrial
Park, Nanshan District, Shenzhen, Guangdong,
518057, P.R.China

- The test result refers exclusively to the test presented test model / sample.
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- **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 Jan. 31, 2008 at **Sporton International Inc. LAB.**
- Report No.: FG810601-A, Report Version: Rev. 01.

Roy Wu
Manager

SPORTON International Inc.
No. 3-2, PingXiang Road, Kunshan, Jiangsu Province, P.R.C.



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1. General Information

1.1. Applicant

ZTE CORPORATION

ZTE Plaza, Keji Road South, Hi-Tech Industrial Park, Nanshan District, Shenzhen, Guangdong, 518057, P.R.China

1.2 Manufacturer

ZTE CORPORATION

ZTE Plaza, Keji Road South, Hi-Tech Industrial Park, Nanshan District, Shenzhen, Guangdong, 518057, P.R.China

1.3 Basic Description of Equipment under Test

Equipment		ZTE C79 CDMA1X Digital Mobile Phone
Trade Name		ZTE
Model Name		ZTE C79
FCC ID		Q78-ZTEC79
AC Adapter	Brand Name	Shenzhen Ruide Electronic Industrial Co.,Ltd
	Model Name	STC-A22O50U8
	Power Rating	I/P:100-240Vac, 50-60Hz, 200mA; O/P: 5Vdc, 650mA
	AC Power Cord Type	1.9 meter shielded cable without ferrite core
Battery	Brand Name	BYD Company Limited
	Model Name	Li3710T42P3h553457
	Power Rating	3.7Vdc, 1000mA
	Type	Li-ion
Earphone	Brand Name	Full-Sound(Dongguan) Electrical Products Ltd
	Model Name	FS07-0026-1-A0//EE-564A-25EN
	Signal Line Type	1.5 meter non-shielded cable without ferrite core

Remark: 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

DUT Type :	ZTE C79 CDMA1X Digital Mobile Phone
Model Name :	ZTE C79
FCC ID :	Q78-ZTEC79
Tx Frequency :	CDMA2000 Cellular : 824 ~ 849 MHz CDMA2000 AWS : 1710 ~ 1755 MHz CDMA2000 PCS : 1850 ~1910 MHz Bluetooth : 2400 MHz ~ 2483.5 MHz
Rx Frequency :	CDMA2000 Cellular : 869 ~ 894 MHz CDMA2000 AWS : 2110 ~ 2155 MHz CDMA2000 PCS : 1930 ~ 1990 MHz Bluetooth : 2400 MHz ~ 2483.5 MHz
Maximum Output Power :	CDMA2000 Cellular FCH_RC1 : 23.75 dBm FCH_RC3 : 23.74 dBm FCH+SCH_RC3 : 23.11 dBm CDMA2000 AWS FCH_RC1 : 23.98 dBm FCH_RC3 : 23.86 dBm FCH+SCH_RC3 : 23.15 dBm CDMA2000 PCS FCH_RC1 : 23.55 dBm FCH_RC3 : 23.59 dBm FCH+SCH_RC3 : 22.86 dBm Bluetooth : 2.78 dBm (1Mbps) Bluetooth EDR : -0.92 dBm (2Mbps) / -0.48 dBm (3Mbps)
Maximum ERP/EIRP :	CDMA2000 Cellular : 0.18 W (22.56 dBm) for 1xRTT CDMA2000 PCS : 0.25 W (23.94 dBm) for 1xRTT
Antenna Type :	CDMA2000 : Fixed Internal Antenna Bluetooth : PIFA Antenna
HW Version	C67B
SW Version	ZTEC79V1.0.0.B02
Digital Modulation Emission :	CDMA2000 : QPSK Bluetooth (1Mbps) : GFSK Bluetooth EDR (2Mbps) : $\pi/4$ -DQPSK Bluetooth EDR (3Mbps) : 8-DPSK
Type of Emission :	1M25F9W
DUT Stage :	Production Unit

1.5 Report Date

EUT Received : Jan. 06, 2008

Report Date : Jan. 31, 2008

2 Test Configuration of Equipment under Test

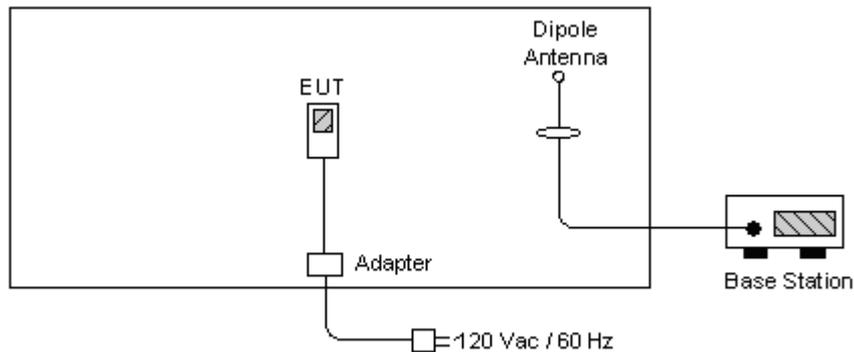
2.1 Test Manner

- 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 CDMA2000 Cellular; 30MHz to 19000 MHz for CDMA2000 PCS.

2.2 Test Mode

Application	CDMA2000 Cellular	CDMA2000 PCS
Radiated Emission	<input checked="" type="checkbox"/> Mode 1: 1xRTT Link Mode_CH384	<input checked="" type="checkbox"/> Mode 2: 1xRTT Link Mode_CH600
	Co-location	
Conducted Measurement	<input checked="" type="checkbox"/> Mode 3: 1xRTT Link Mode+BT Link	
	<input checked="" type="checkbox"/> Mode 1: 1xRTT Link Mode	<input checked="" type="checkbox"/> Mode 2: 1xRTT Link Mode

2.3 Connection Diagram of Test System



2.4 Ancillary Equipmnt 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. 3-2, PingXiang Road, Kunshan, Jiangsu Province, P.R.C.
TEL : 86-0512- 5790-0158
FAX : 86-0512- 5790-0958
Test Site No : 03CH01-KS, TH02-KS

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

3.3 Frequency Range

- a. Radiation: from 30MHz to 9000MHz for CDMA2000 Cellular.
- b. Radiation: from 30 MHz to 19000 MHz for CDMA2000 PCS.

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

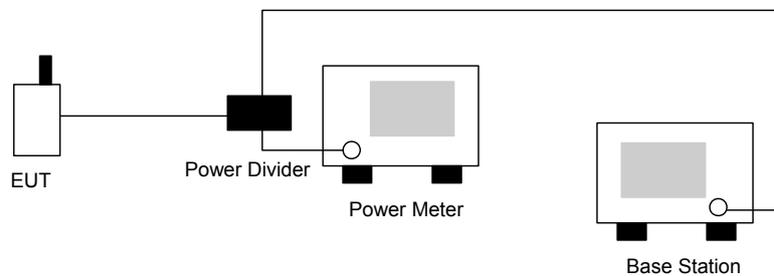
4.2.1 Measurement Instruments

As described in chapter 5 of this test report.

4.2.2 Test Procedure

- a. The transmitter output was connected to power meter and base station through power divider.
- b. Set EUT at maximum power through base station.
- c. Select lowest, middle, and highest channels for each band.

4.2.3 Test Setup Layout





4.2.4 Test Result

Bands	Test Mode	Test Status	Channel	Frequency (MHz)	Conducted Power (dBm)	Conducted Power (Watts)
CDMA2000 Cellular	1xRTT	FCH_RC1	1013	824.70 (Low)	23.49	0.223
			384	836.52 (Mid)	23.75	0.237
			777	848.31 (High)	23.32	0.215
		FCH_RC3	1013	824.70 (Low)	23.56	0.227
			384	836.52 (Mid)	23.74	0.237
			777	848.31 (High)	23.33	0.215
		FCH+SCH_RC3	1013	824.70 (Low)	22.86	0.193
			384	836.52 (Mid)	23.11	0.205
			777	848.31 (High)	22.68	0.185
CDMA2000 PCS	1xRTT	FCH_RC1	25	1851.25 (Low)	23.32	0.215
			600	1880.00 (Mid)	22.89	0.195
			1177	1908.75 (High)	23.55	0.226
		FCH_RC3	25	1851.25 (Low)	23.44	0.221
			600	1880.00 (Mid)	22.91	0.195
			1177	1908.75 (High)	23.59	0.229
		FCH+SCH_RC1	25	1851.25 (Low)	22.66	0.185
			600	1880.00 (Mid)	22.19	0.166
			1177	1908.75 (High)	22.86	0.193

Note:

1. For cellular band, the worst case adopted as maximum output power 23.75dBm, is at CDMA2000 1xRTT, FCH_RC1.
2. For PCS band 1900, the worst case adopted as maximum output power 23.59dBm, is at CDMA2000 1xRTT, FCH_RC3.



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

- a. The EUT was placed on a table with 1.0 meter height in an fully anechoic chamber.
- b. The EUT was set 1.2 meters from the receiving antenna which was mounted on the antenna tower.
- c. The table was rotated 360 degrees to determine the position of the highest radiated power.
- d. The height of the receiving antenna is also kept at 1.0M height.
- e. Taking the record of maximum ERP/EIRP.
- f. A dipole antenna was substituted in place of the EUT and was driven by a signal generator.
- g. The conducted power at the terminal of the dipole antenna is measured.
- h. Repeat step 3 to step 5 to get the maximum ERP/EIRP of the substitution antenna.
- i. $ERP/EIRP = P_s + E_t - E_s + G_s = P_s + R_t - R_s + G_s$

P_s (dBm) : Input power to substitution antenna.

G_s (dBi or dBd) : Substitution antenna Gain.

$E_t = R_t + AF$

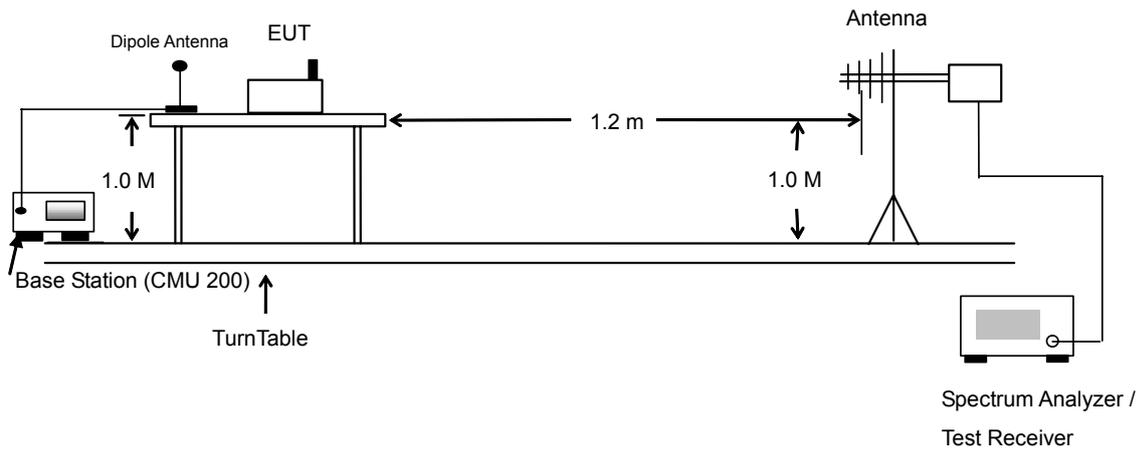
$E_s = R_s + AF$

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

CDMA2000 Cellular 850 1xRTT FCH_RC1 Radiated Power ERP						
Horizontal Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBd)	ERP (dBm)	ERP (W)
824.70	-24.48	-48.12	0.00	-1.08	22.56	0.18
836.52	-25.83	-48.28	0.00	-0.93	21.52	0.14
848.31	-25.63	-48.35	0.00	-0.76	21.96	0.16
Vertical Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBd)	ERP (dBm)	ERP (W)
824.70	-36.69	-47.97	0.00	-1.08	10.20	0.01
836.52	-37.10	-48.01	0.00	-0.93	9.98	0.01
848.31	-35.96	-48.05	0.00	-0.76	11.33	0.01

CDMA2000 PCS1900 1xRTT FCH_RC3 Radiated Power EIRP						
Horizontal Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBi)	EIRP (dBm)	EIRP (W)
1851.25	-30.92	-51.88	0.00	1.96	22.92	0.20
1880.00	-31.67	-52.99	0.00	2.00	23.32	0.21
1908.75	-32.32	-54.28	0.00	1.98	23.94	0.25
Vertical Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBi)	EIRP (dBm)	EIRP (W)
1851.25	-32.45	-52.13	0.00	1.96	21.64	0.15
1880.00	-33.81	-53.17	0.00	2.00	21.36	0.14
1908.75	-34.01	-54.13	0.00	1.98	22.10	0.16

4.4 Occupied Bandwidth and Band Edge Measurement

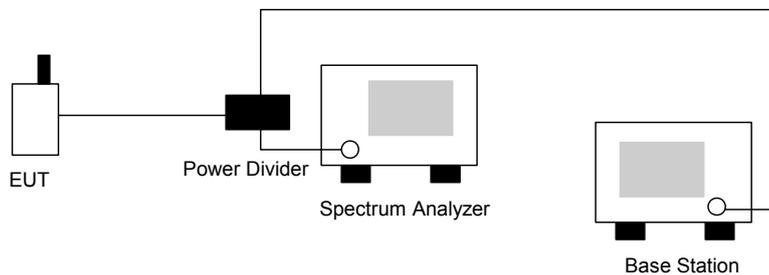
4.4.1 Measurement Instruments

As described in chapter 5 of this test report.

4.4.2 Test Procedure

- a. The EUT was connected to Spectrum Analyzer and Base Station via power divider.
- b. The 99% occupied bandwidth and 26 dB Bandwidth of middle channel for the highest RF powers were measured.
- c. The bandedge of low and high channels for the highest RF powers within the transmitting frequency band were measured. Setting RBW as roughly $BW/100$.
- d. The RBW was replaced 30KHz with 10KHz, due to the spectrum analyzer IF-Filter leading to an exceeding of the limit, a worst case correction factor of $10 \log (1\% \text{ Occupy Bandwidth} / \text{Measured RBW})$ was used.

4.4.3 Test Setup Layout





4.4.4 Test Data

• **Mode 1**

Bands	Test Mode	Test Status	Channel	Frequency (MHz)	Measurement Value (dBm)	Correction Factor (dB)	Band Edge (dBm)
CDMA2000 Cellular	1xRTT	FCH_RC1	1013	824.70 (Low)	-17.80	1.07	-16.73
			777	848.31 (High)	-16.14	1.07	-15.07
		FCH_RC3	1013	824.70 (Low)	-17.94	1.07	-16.87
			777	848.31 (High)	-16.26	1.07	-15.19
		FCH+SCH_RC3	1013	824.70 (Low)	-17.29	1.07	-16.22
			777	848.31 (High)	-15.21	1.07	-14.14

Note:

*Occupy Bandwidth = 1280.00KHz

*Correction Factor = $10 \cdot \log(1\% \text{ Occupy Bandwidth} / \text{Measurement RBW})$
 $= 10 \cdot \log[(0.01 \cdot 1280.00\text{KHz}) / 10\text{KHz}]$
 $= 1.07 \text{ dB}$

*Band Edge = Measurement Value + Correction Factor

• **Mode 2**

Bands	Test Mode	Test Status	Channel	Frequency (MHz)	Measurement Value (dBm)	Correction Factor (dB)	Band Edge (dBm)
CDMA2000 PCS	1xRTT	FCH_RC1	25	1851.25 (Low)	-33.61	1.10	-32.51
			1177	1908.75 (High)	-34.44	1.10	-33.34
		FCH_RC3	25	1851.25 (Low)	-36.02	1.10	-34.92
			1177	1908.75 (High)	-35.38	1.10	-34.28
		FCH+SCH_RC3	25	1851.25 (Low)	-35.38	1.10	-34.28
			1177	1908.75 (High)	-34.58	1.10	-33.48

Note:

*Occupy Bandwidth = 1288.00KHz

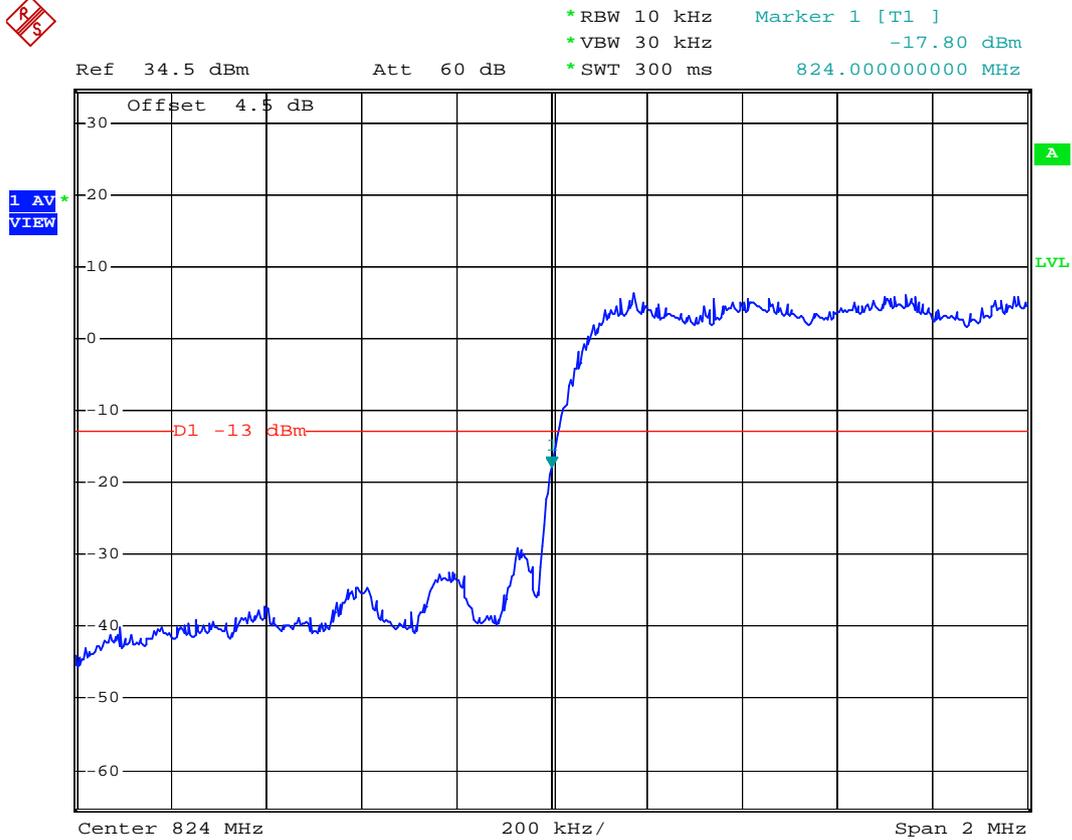
*Correction Factor = $10 \cdot \log(1\% \text{ Occupy Bandwidth} / \text{Measurement RBW})$
 $= 10 \cdot \log[(0.01 \cdot 1288.00\text{KHz}) / 10\text{KHz}]$
 $= 1.10 \text{ dB}$

*Band Edge = Measurement Value + Correction Factor



4.4.5 Test Result

- Mode 1
- Test Mode : CDMA2000 Cellular Band CH1013_FCH_RC1 Lower Band Edge for 1xRTT
- Power State : High



Date: 19.JAN.2008 09:48:22



- Test Mode : CDMA2000 Cellular CH1013_FCH_RC1 99% Occupied Bandwidth for 1xRTT
- Power State : High



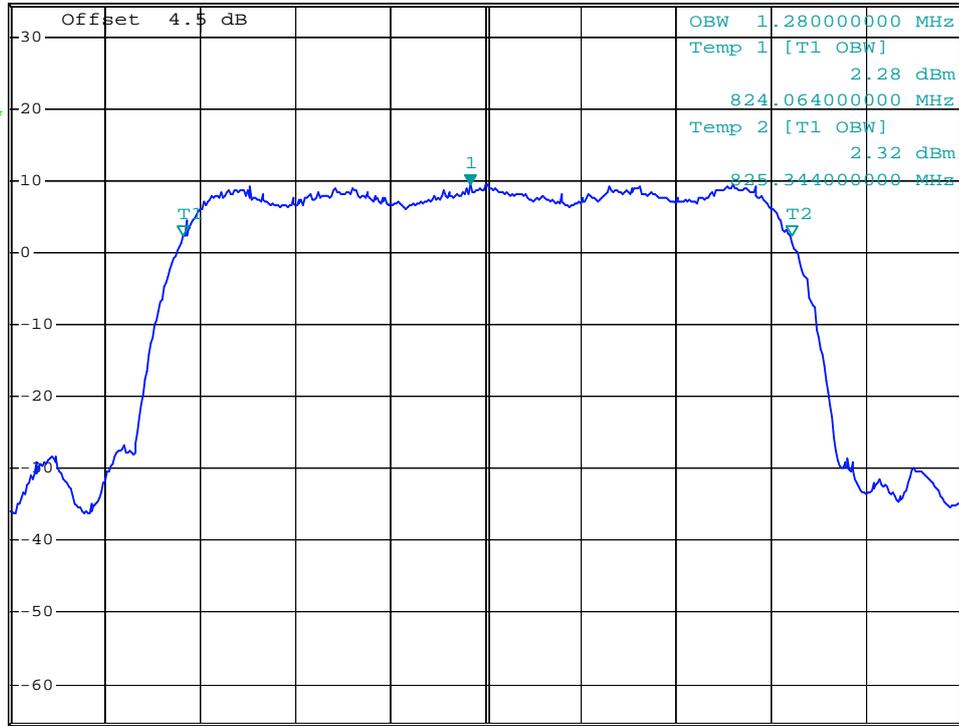
*RBW 30 kHz Marker 1 [T1]
 *VBW 100 kHz 9.48 dBm
 *SWT 300 ms 824.668000000 MHz

Ref 34.5 dBm

Att 50 dB

824.668000000 MHz

1 AV
MAXH



Center 824.7 MHz

200 kHz/

Span 2 MHz

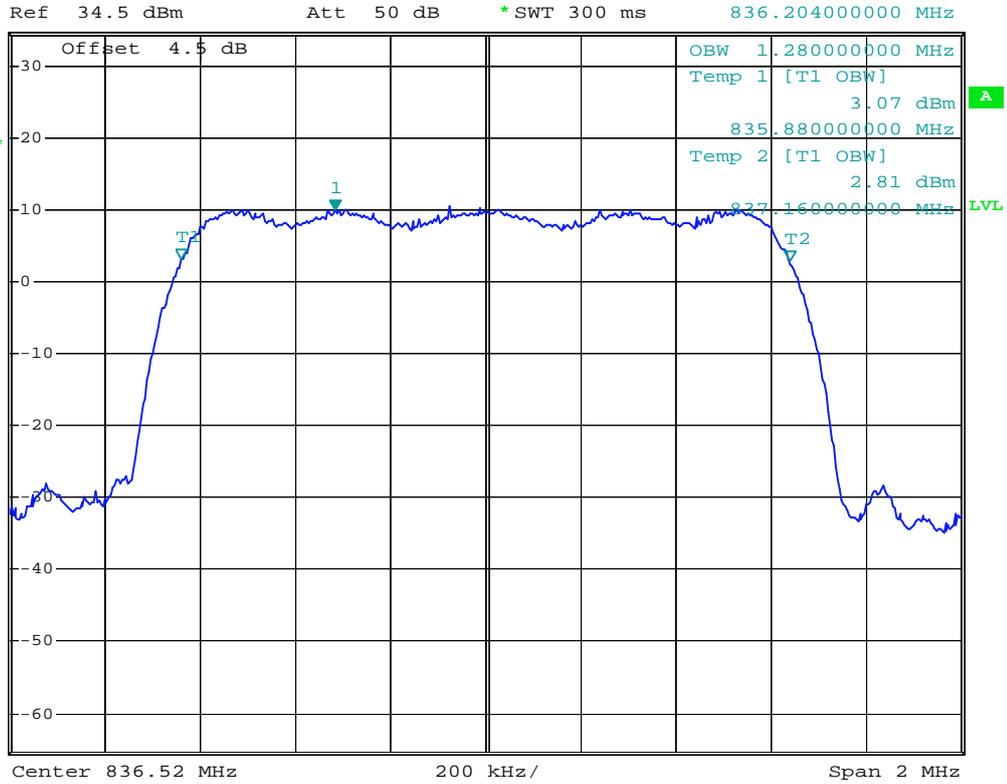
Date: 19.JAN.2008 09:59:41



- Test Mode : CDMA2000 Cellular CH384_FCH_RC1 99% Occupied Bandwidth for 1xRTT
- Power State : High



*RBW 30 kHz Marker 1 [T1]
 *VBW 100 kHz 10.07 dBm
 *SWT 300 ms 836.20400000 MHz



Date: 19.JAN.2008 09:58:15



- Test Mode : CDMA2000 Cellular CH777_FCH_RC1 99% Occupied Bandwidth for 1xRTT
- Power State : High



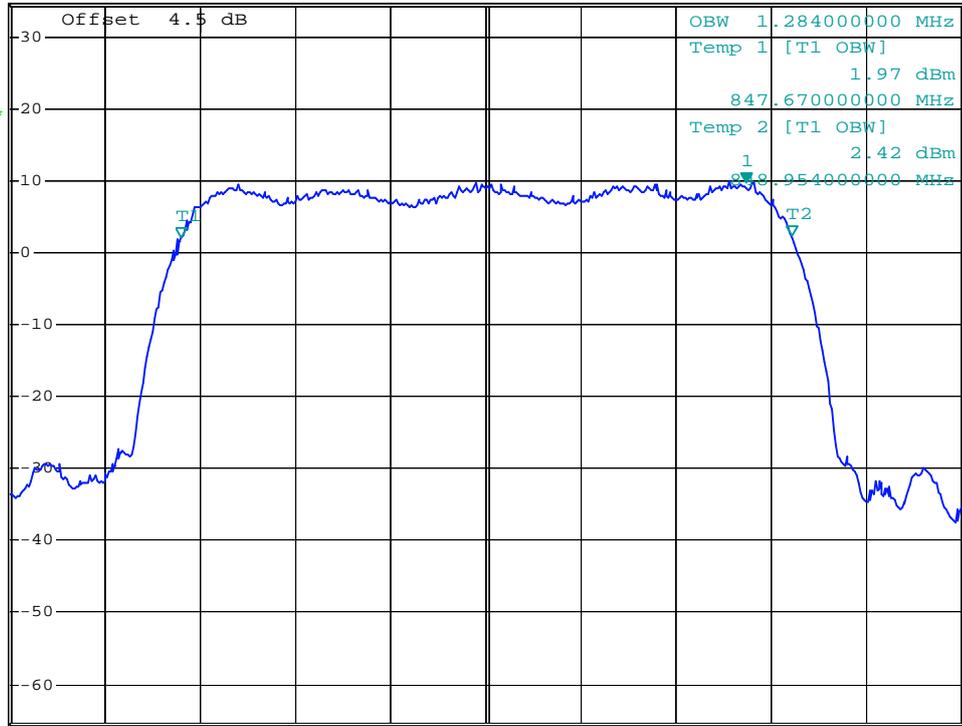
*RBW 30 kHz Marker 1 [T1]
 *VBW 100 kHz 9.67 dBm
 *SWT 300 ms 848.858000000 MHz

Ref 34.5 dBm

Att 50 dB

848.858000000 MHz

1 AV
MAXH



Center 848.31 MHz

200 kHz/

Span 2 MHz

Date: 19.JAN.2008 09:58:58



- Test Mode : CDMA2000 Cellular CH1013_FCH_RC1 26 dB Bandwidth for 1xRTT
- Power State : High

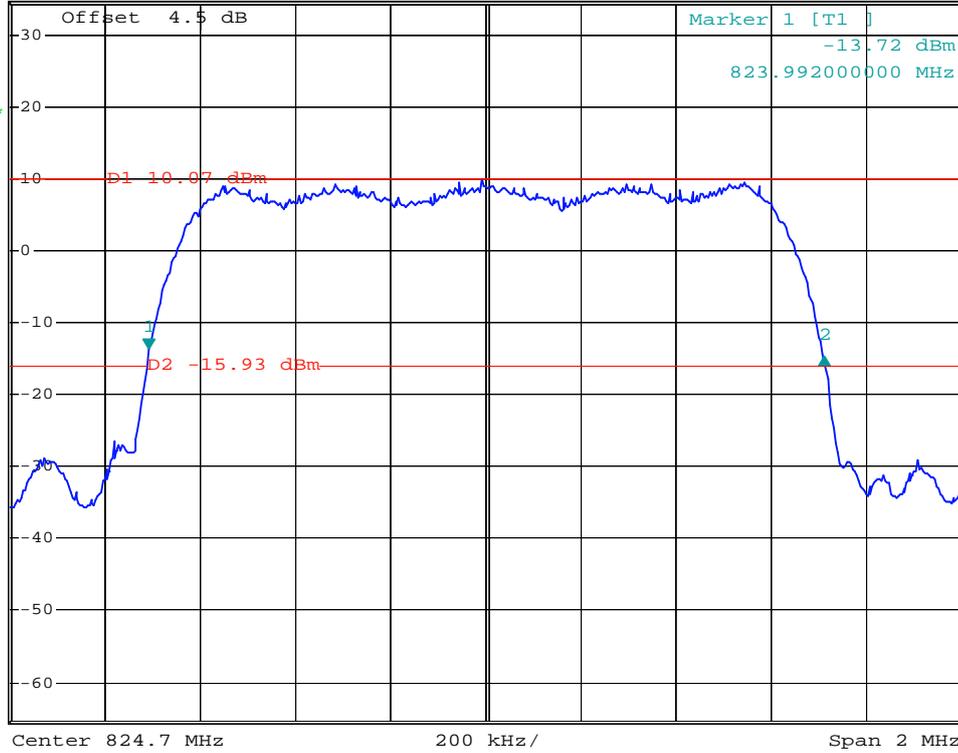


*RBW 30 kHz Delta 2 [T1]
 *VBW 100 kHz -1.01 dB
 *SWT 300 ms 1.42000000 MHz

Ref 34.5 dBm

Att 60 dB

1 AV VIEW



Date: 19.JAN.2008 09:44:26



- Test Mode : CDMA2000 Cellular CH384_FCH_RC1 26 dB Bandwidth for 1xRTT
- Power State : High

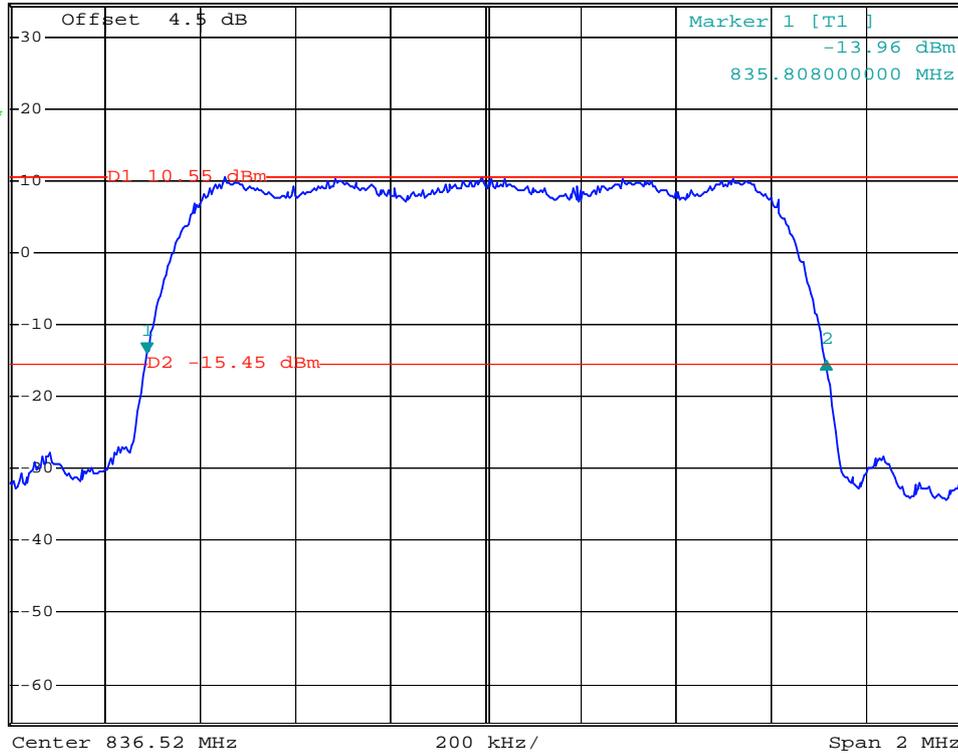


*RBW 30 kHz Delta 2 [T1]
*VBW 100 kHz -0.95 dB
*SWT 300 ms 1.428000000 MHz

Ref 34.5 dBm

Att 60 dB

1 AV
VIEW



Date: 19.JAN.2008 09:32:03



- Test Mode : CDMA2000 Cellular CH777_FCH_RC1 26 dB Bandwidth for 1xRTT
- Power State : High



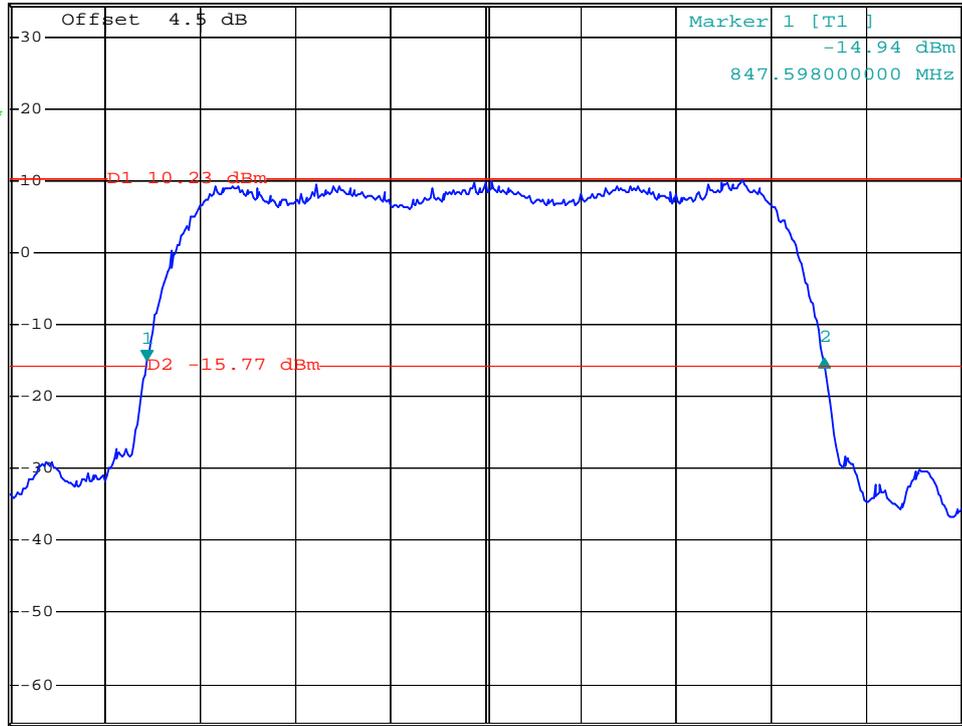
*RBW 30 kHz Delta 2 [T1]
 *VBW 100 kHz 0.31 dB
 *SWT 300 ms 1.424000000 MHz

Ref 34.5 dBm

Att 60 dB

Offset 4.5 dB
 Marker 1 [T1]
 -14.94 dBm
 847.598000000 MHz

1 AV VIEW



Center 848.31 MHz

200 kHz/

Span 2 MHz

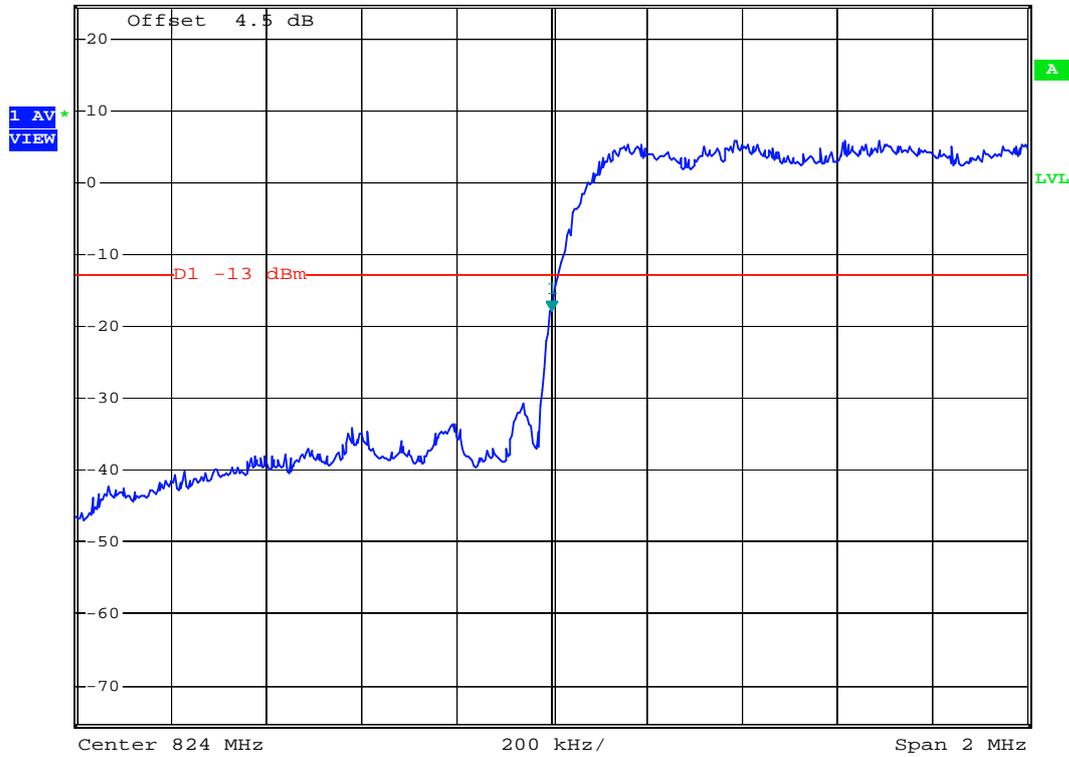
Date: 19.JAN.2008 09:43:10



- Test Mode : CDMA2000 Cellular Band CH1013_FCH_RC3 Lower Band Edge for 1xRTT
- Power State : High



Ref 24.5 dBm *Att 30 dB *RBW 10 kHz Marker 1 [T1]
*VBW 30 kHz -17.94 dBm
*SWT 300 ms 824.00000000 MHz



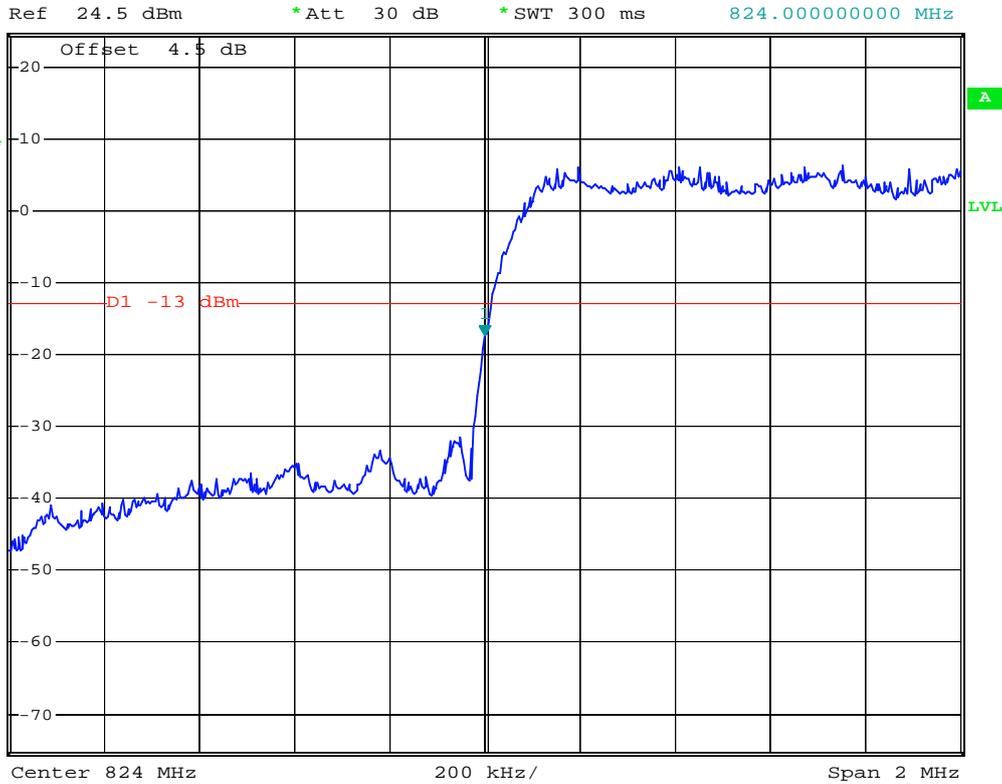
Date: 19.JAN.2008 10:35:06



- Test Mode : CDMA2000 Cellular Band CH1013_FCH+SCH_RC3 Lower Band Edge for 1xRTT
- Power State : High



*RBW 10 kHz Marker 1 [T1]
*VBW 30 kHz -17.29 dBm
*SWT 300 ms 824.00000000 MHz



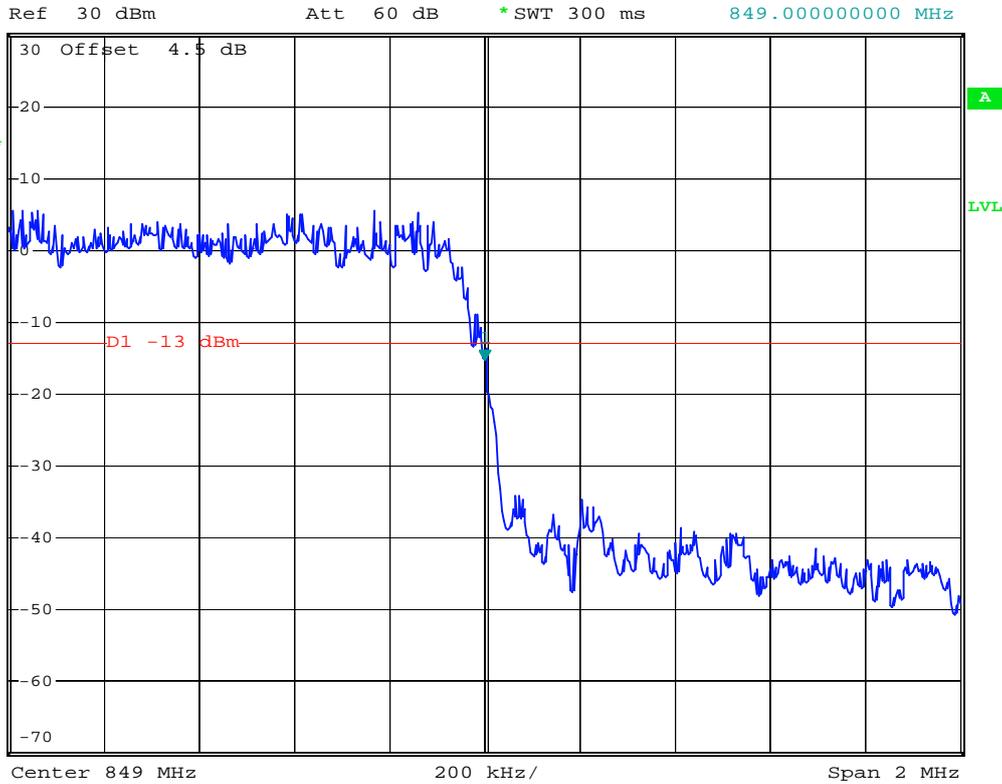
Date: 19.JAN.2008 10:38:54



- Test Mode : CDMA2000 Cellular CH777_FCH+SCH_RC3 Higher Band Edge for 1xRTT
- Power State : High



* RBW 10 kHz Marker 1 [T1]
* VBW 30 kHz -15.21 dBm
* SWT 300 ms 849.00000000 MHz



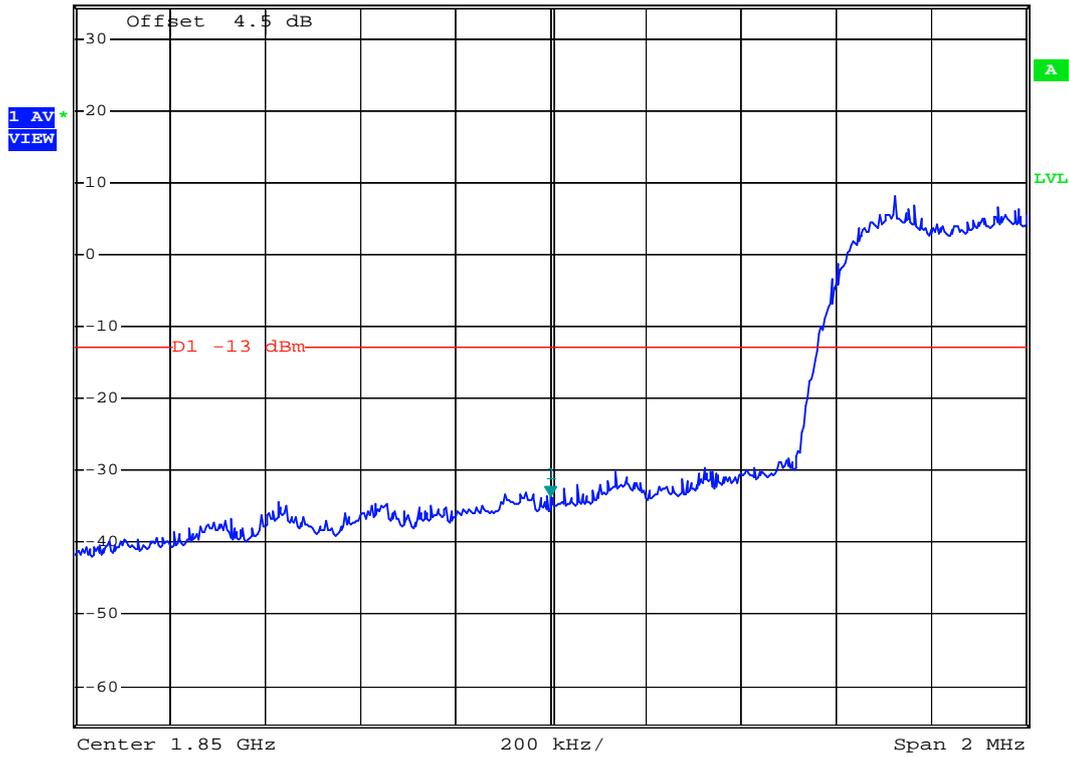
Date: 22.JAN.2008 14:35:13



- Mode 2
- Test Mode : CDMA2000 PCS Band CH25_FCH_RC1 Lower Band Edge for 1xRTT
- Power State : High



Ref 34.5 dBm Att 60 dB *RBW 10 kHz Marker 1 [T1]
*VBW 30 kHz -33.61 dBm
*SWT 300 ms 1.85000000 GHz



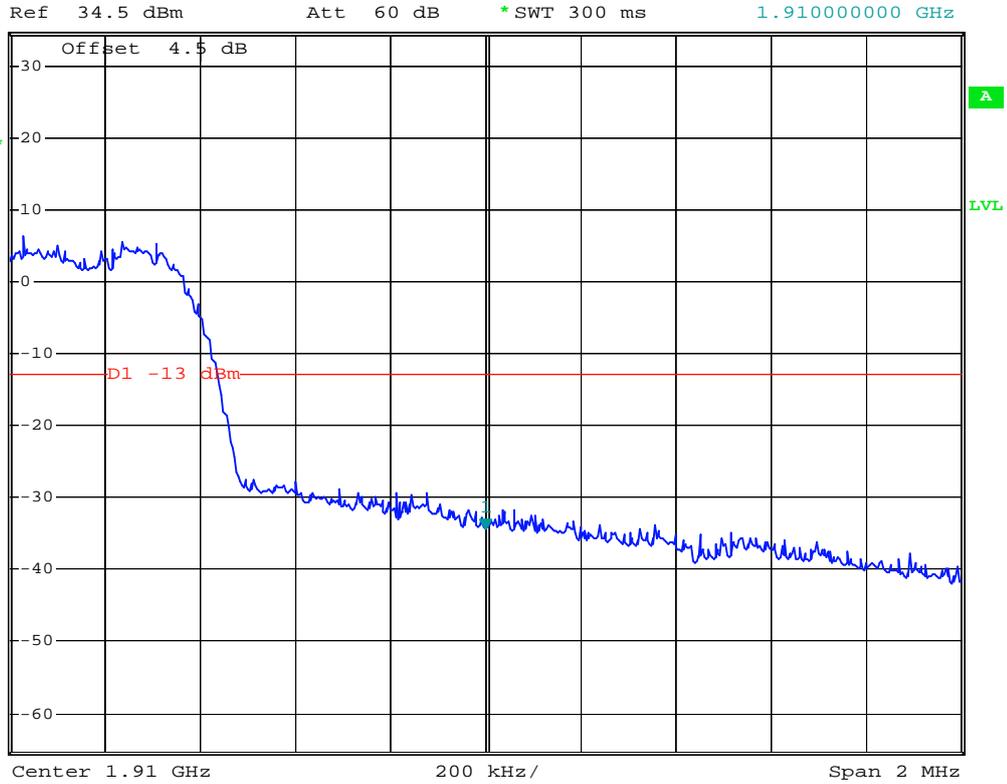
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- Test Mode : CDMA2000 PCS Band CH1175_FCH_RC1 Higher Band Edge for 1xRTT
- Power State : High



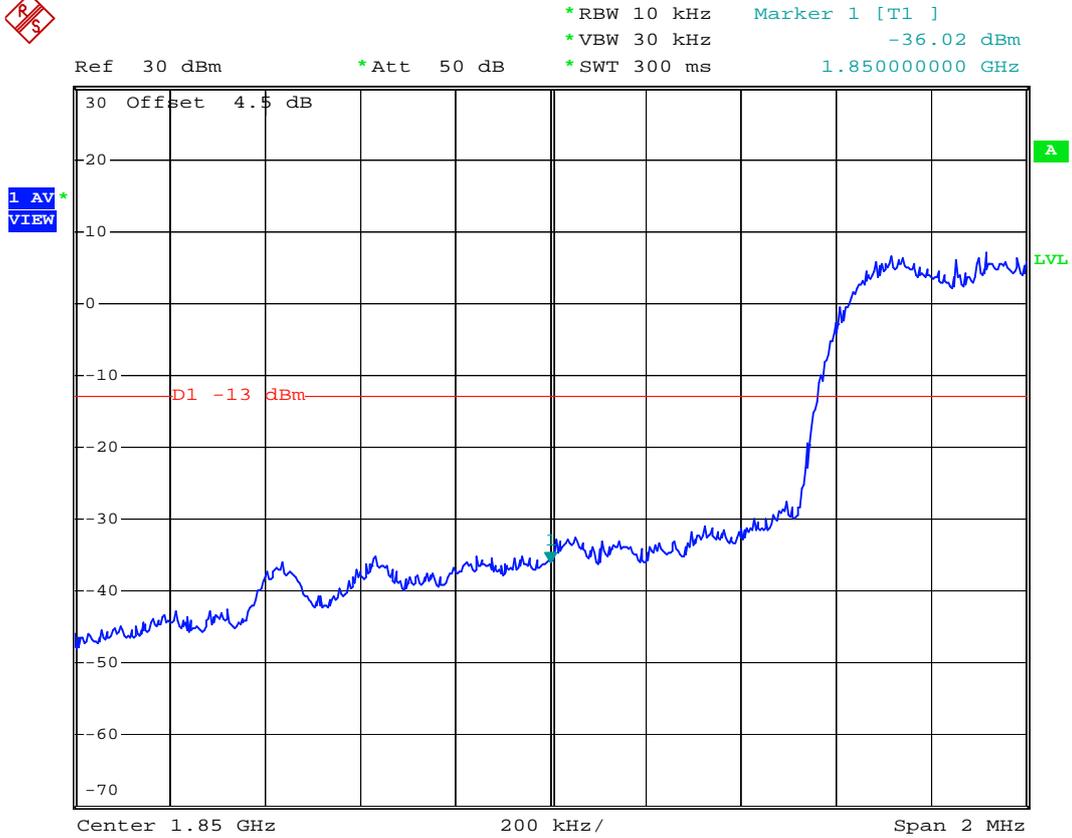
*RBW 10 kHz Marker 1 [T1]
*VBW 30 kHz -34.44 dBm
*SWT 300 ms 1.91000000 GHz



Date: 19.JAN.2008 11:13:42



- Test Mode : CDMA2000 PCS Band CH25_FCH_RC3 Lower Band Edge for 1xRTT
- Power State : High



Date: 19.JAN.2008 12:03:14



- Test Mode : CDMA2000 PCS Band CH1175_FCH_RC3 99% Occupied Bandwidth for 1xRTT
- Power State : High

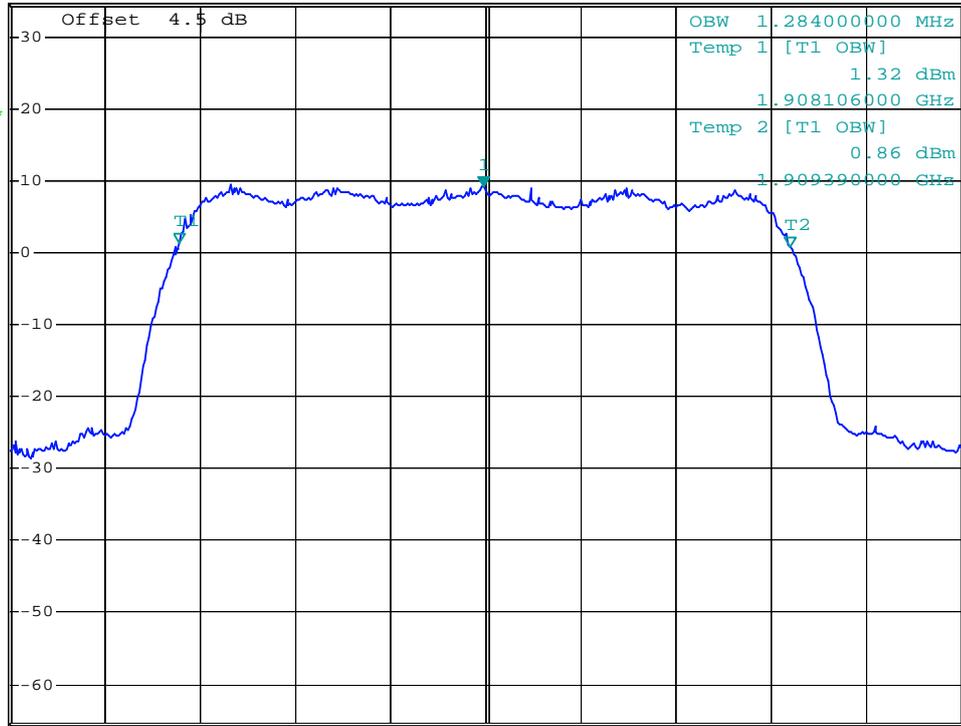


*RBW 30 kHz Marker 1 [T1]
 *VBW 100 kHz 9.15 dBm
 *SWT 300 ms 1.908746000 GHz

Ref 34.5 dBm

Att 50 dB

1 AV
MAXH



Center 1.90875 GHz

200 kHz/

Span 2 MHz

Date: 19.JAN.2008 11:18:22



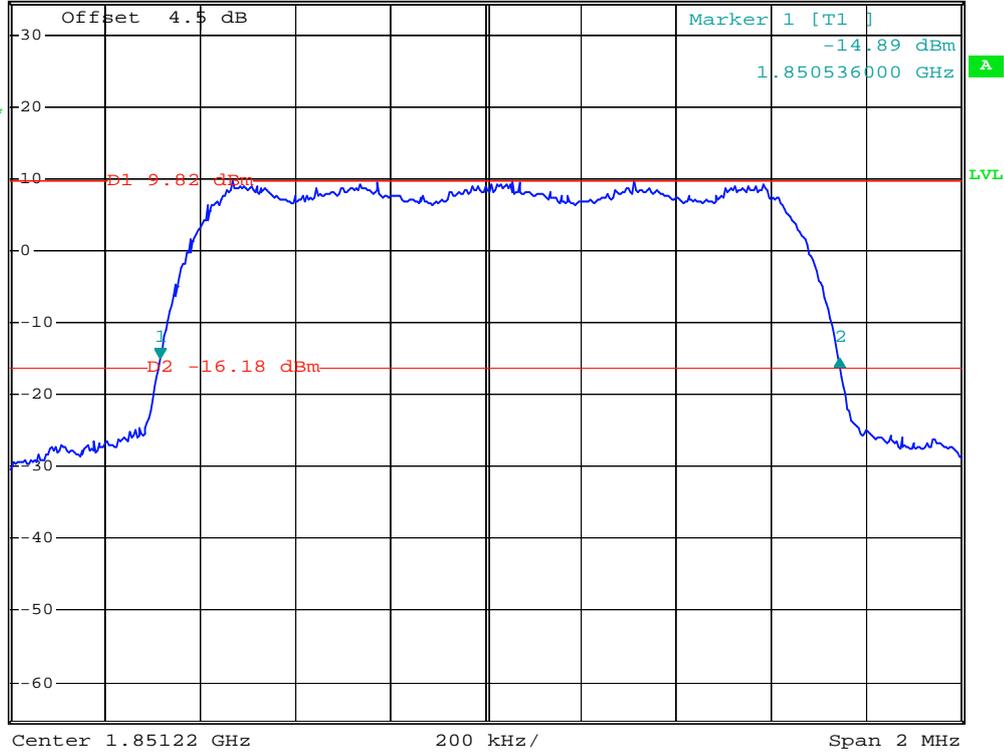
- Test Mode : CDMA2000 PCS Band CH25_FCH_RC3 26 dB Bandwidth for 1xRTT
- Power State : High



*RBW 30 kHz Delta 2 [T1]
 *VBW 100 kHz -0.00 dB
 *SWT 300 ms 1.42800000 MHz

Ref 34.5 dBm Att 60 dB

1 AV
 VIEW



Date: 19.JAN.2008 11:09:36



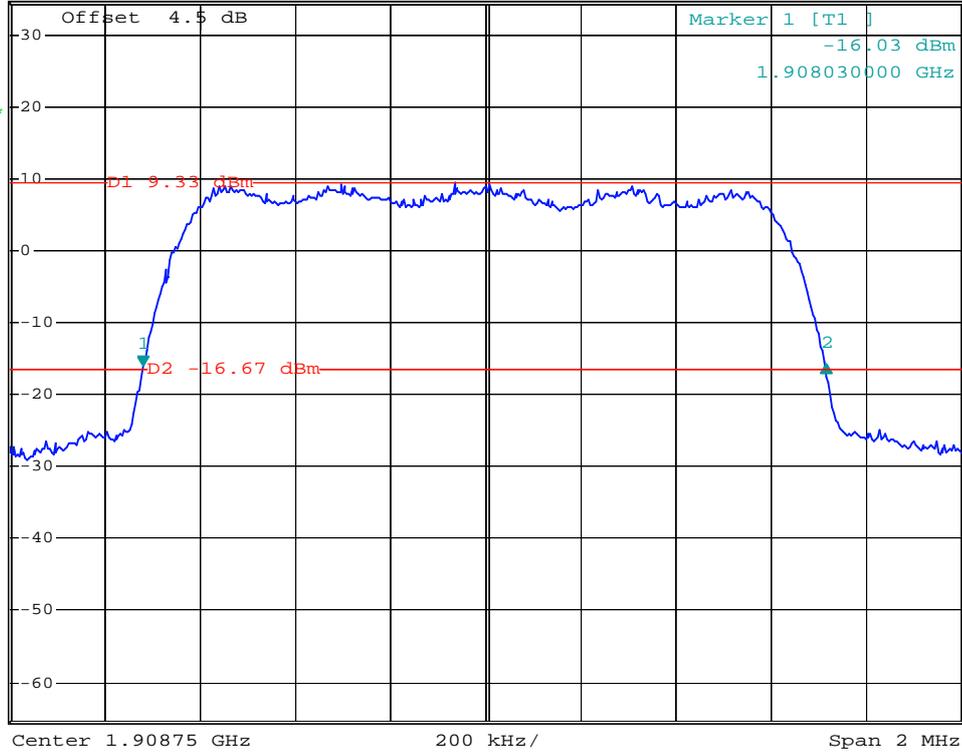
- Test Mode : CDMA2000 CS 1900 Band CH1175_FCH_RC3 26 dB Bandwidth for 1xRTT
- Power State : High



*RBW 30 kHz Delta 2 [T1]
 *VBW 100 kHz 0.15 dB
 *SWT 300 ms 1.436000000 MHz

Ref 34.5 dBm Att 60 dB

1 AV
 VIEW



Date: 19.JAN.2008 11:06:13



- Test Mode : CDMA2000 PCS Band CH1175_FCH_RC3 Higher Band Edge for 1xRTT
- Power State : High

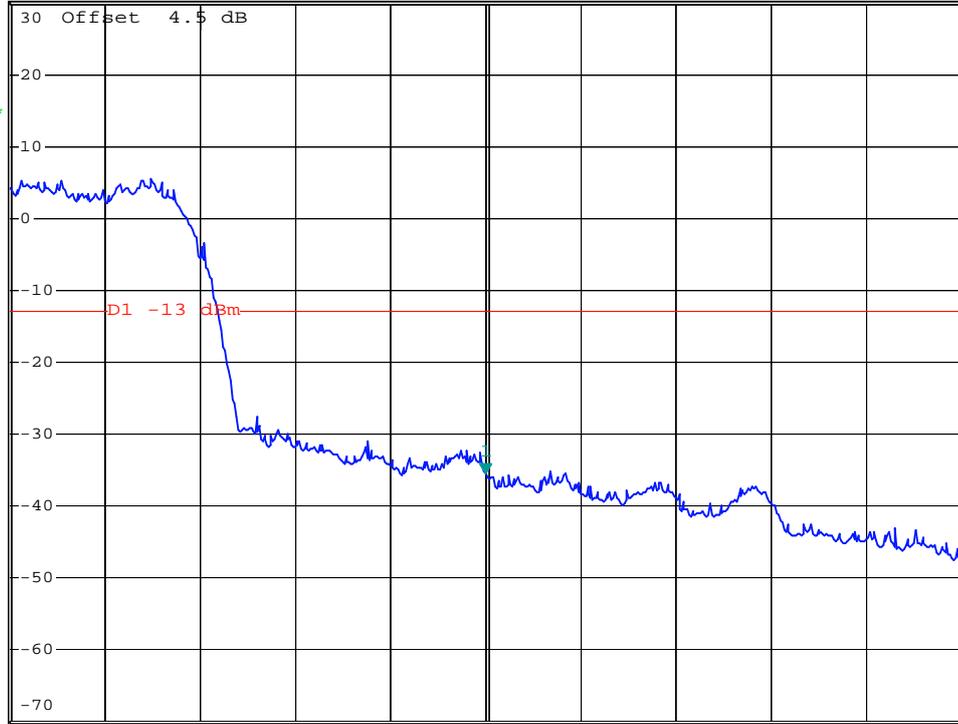


*RBW 10 kHz Marker 1 [T1]
 *VBW 30 kHz -35.38 dBm
 *SWT 300 ms 1.91000000 GHz

Ref 30 dBm

*Att 50 dB

1 AV*
VIEW



Center 1.91 GHz

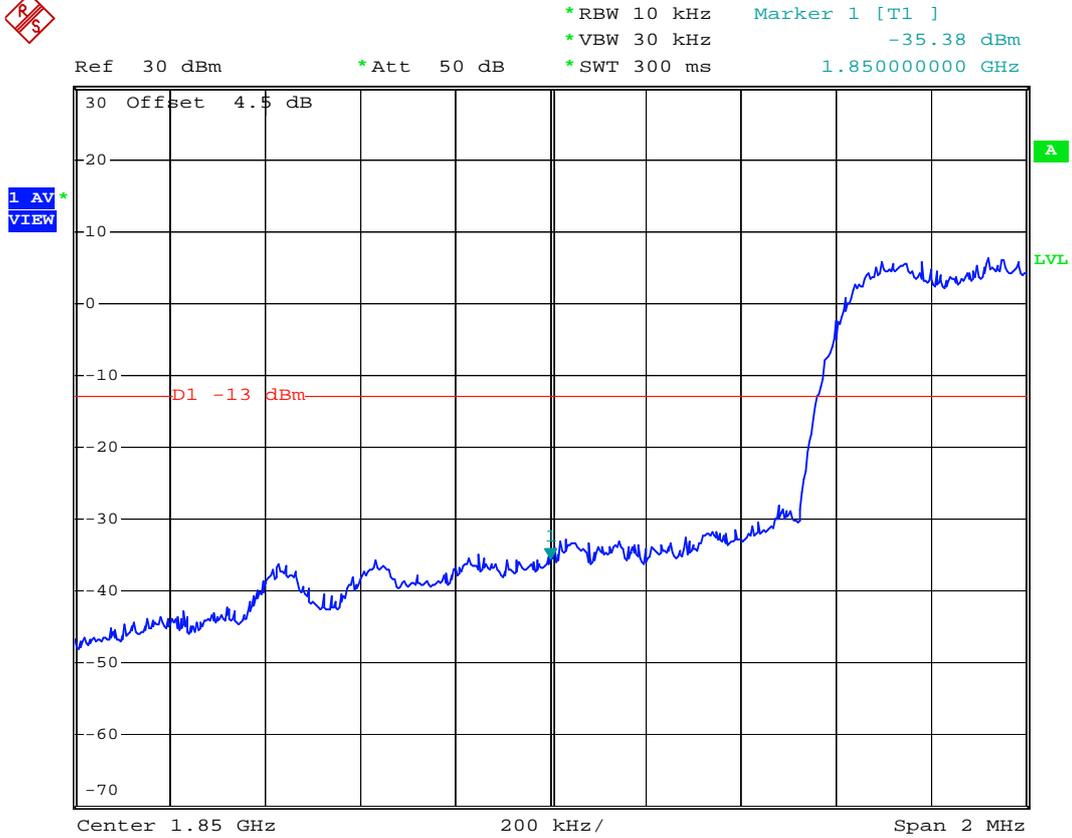
200 kHz/

Span 2 MHz

Date: 19.JAN.2008 12:01:22



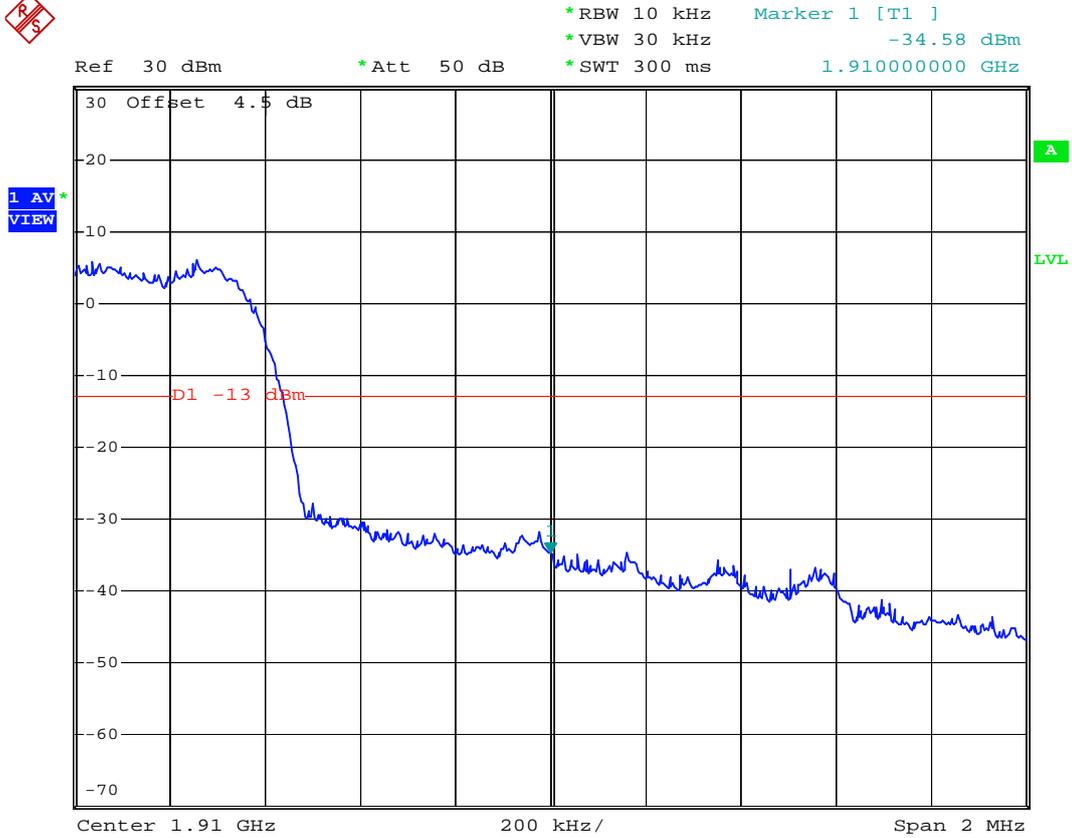
- Test Mode : CDMA2000 PCS Band CH25_FCH+SCH_RC3 Lower Band Edge for 1xRTT
- Power State : High



Date: 19.JAN.2008 12:04:17



- Test Mode : CDMA2000 PCS Band CH1175_FCH+SCH_RC3 Higher Band Edge for 1xRTT
- Power State : High



Date: 19.JAN.2008 12:05:28

4.5 Conducted Emission

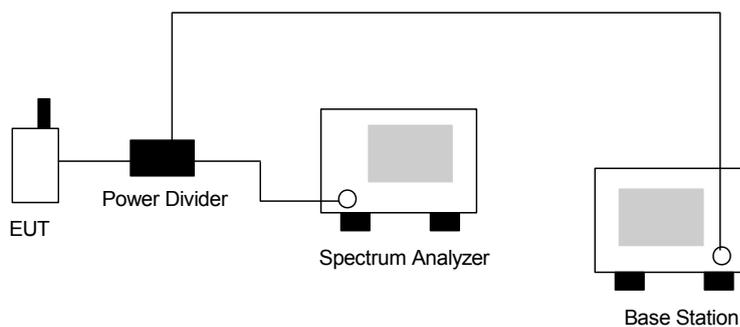
4.5.1 Measurement Instruments

As described in chapter 5 of this test report.

4.5.2 Test Procedure

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

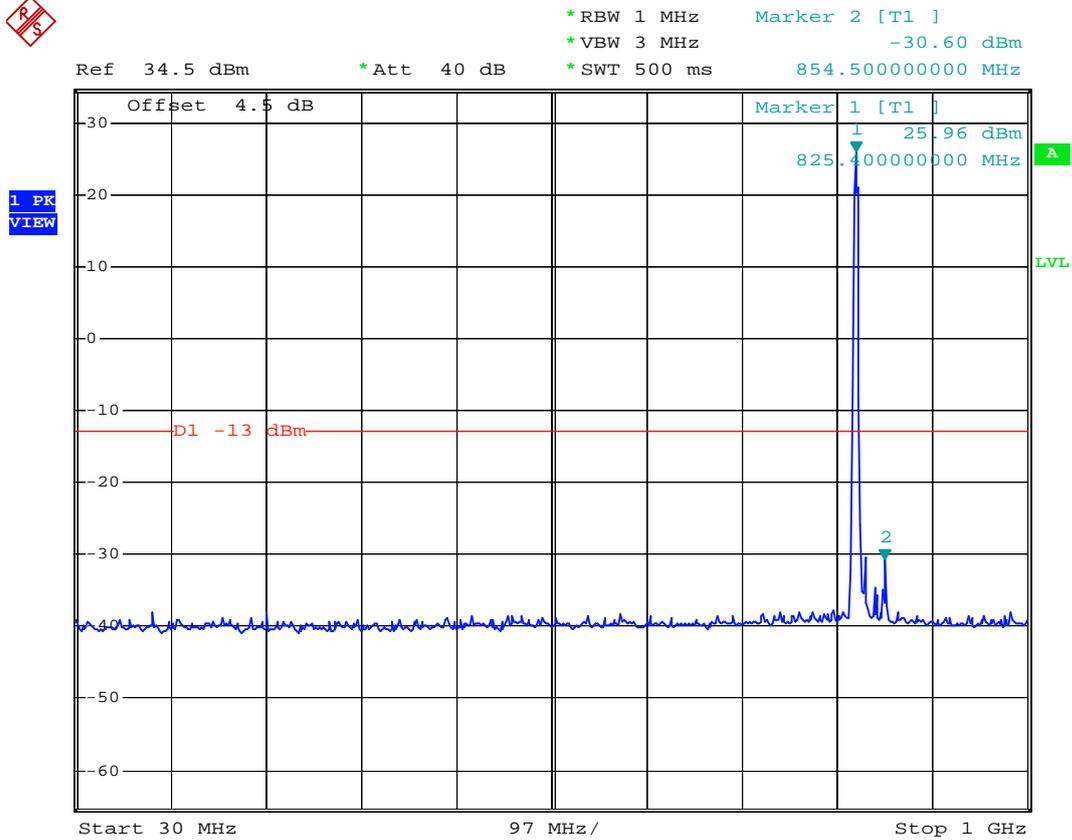
4.5.3 Test Setup Layout





4.5.4 Test Result

- Mode 1
- Test Mode : CDMA2000 Cellular CH1013 for 1xRTT
- Frequency Range : 30M-1G



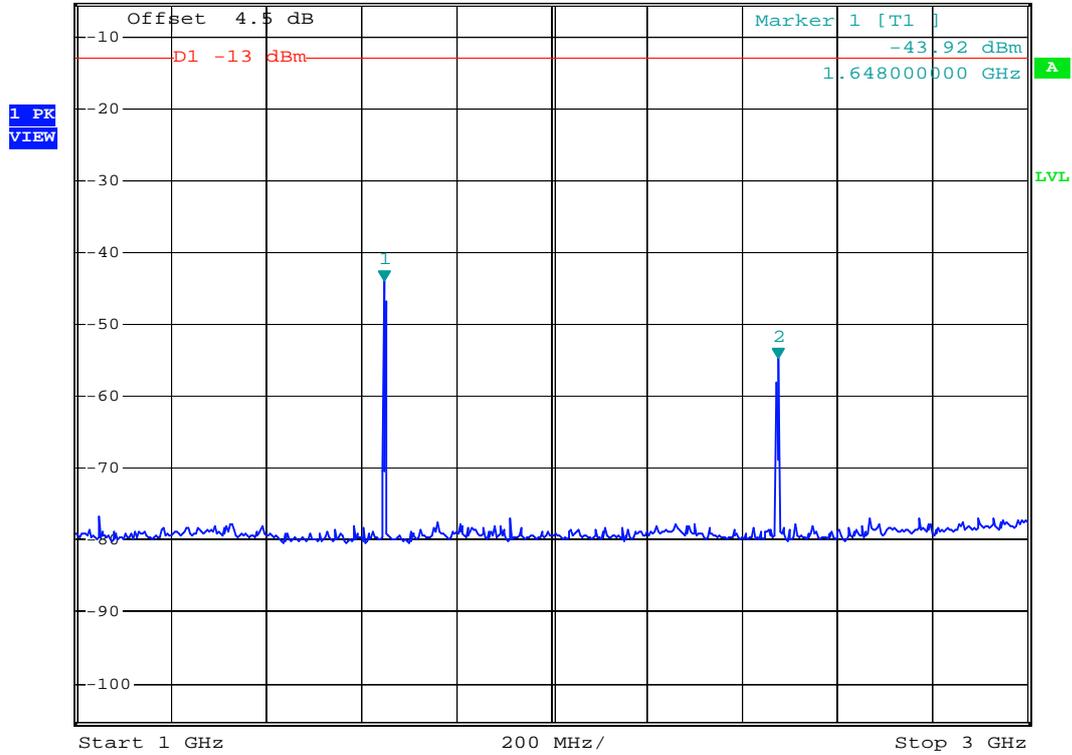
Date: 22.JAN.2008 15:05:56



- Test Mode : CDMA2000 Cellular CH1013 for 1xRTT
- Frequency Range : 1G-3G



Ref -5.5 dBm *Att 0 dB *RBW 1 MHz Marker 2 [T1]
 *VBW 3 MHz -54.81 dBm
 *SWT 500 ms 2.476000000 GHz



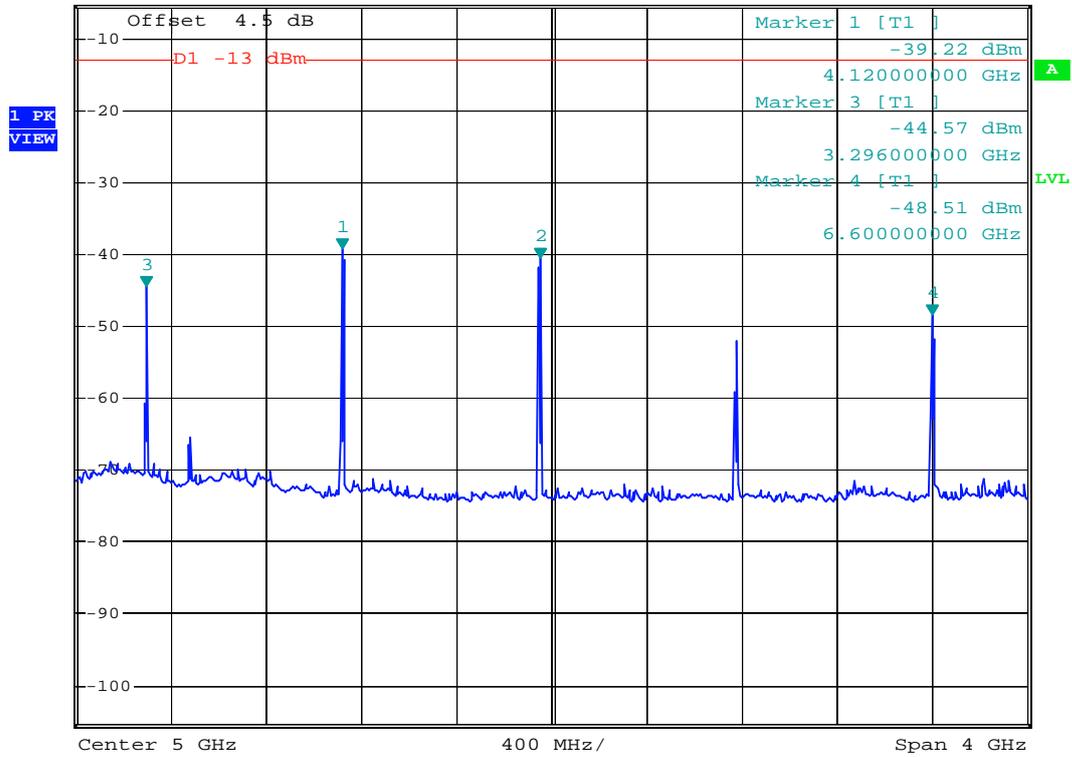
Date: 22.JAN.2008 15:10:38



- Test Mode : CDMA2000 Cellular CH1013 for 1xRTT
- Frequency Range : 3G-7G



Ref -5.5 dBm *Att 0 dB *RBW 1 MHz Marker 2 [T1]
 *VBW 3 MHz -40.47 dBm
 *SWT 500 ms 4.952000000 GHz



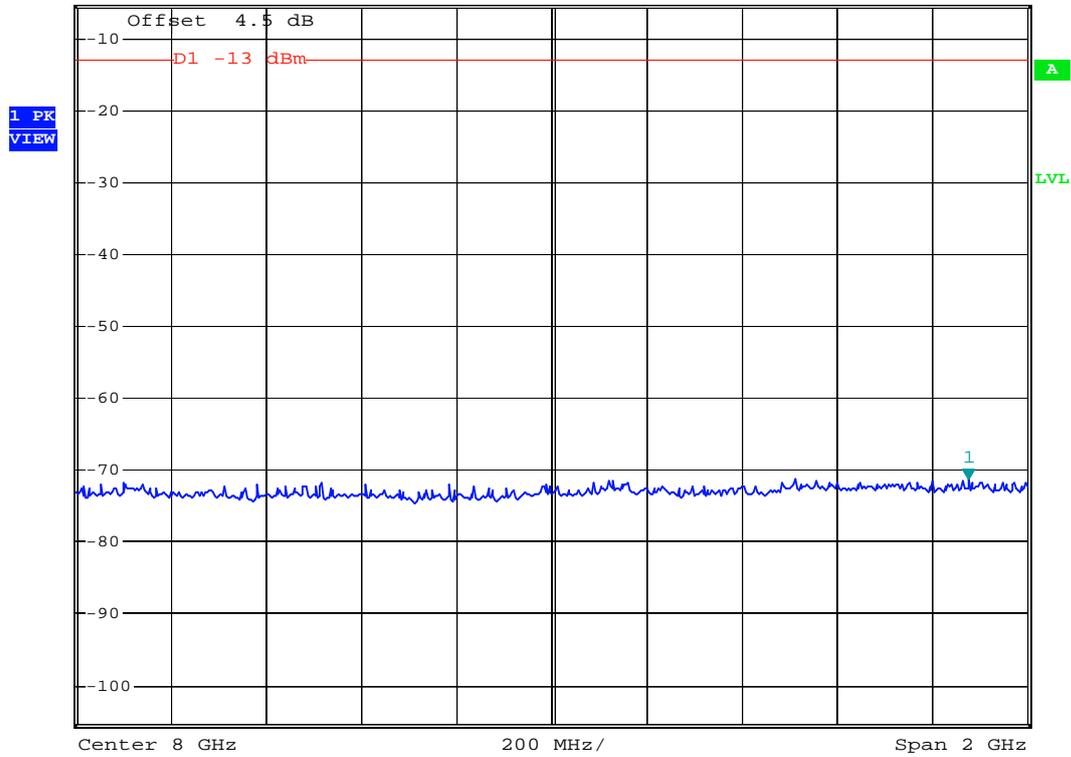
Date: 22.JAN.2008 15:22:00



- Test Mode : CDMA2000 Cellular CH1013 for 1xRTT
- Frequency Range : 7G-9G



Ref -5.5 dBm *Att 0 dB *RBW 1 MHz Marker 1 [T1]
*VBW 3 MHz -71.25 dBm
*SWT 500 ms 8.876000000 GHz



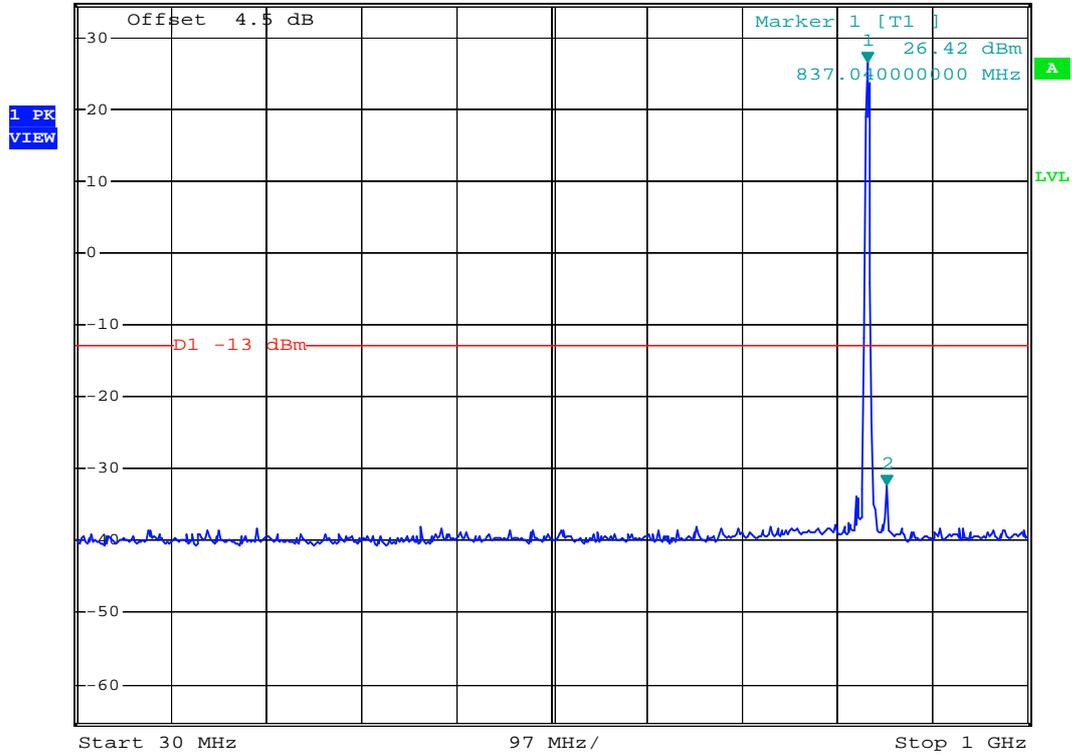
Date: 22.JAN.2008 15:27:40



- Mode 2
- Test Mode : CDMA2000 Cellular CH384 for 1xRTT
- Frequency Range : 30M-1G



Ref 34.5 dBm *Att 40 dB *RBW 1 MHz Marker 2 [T1]
*VBW 3 MHz -32.32 dBm
*SWT 500 ms 856.44000000 MHz



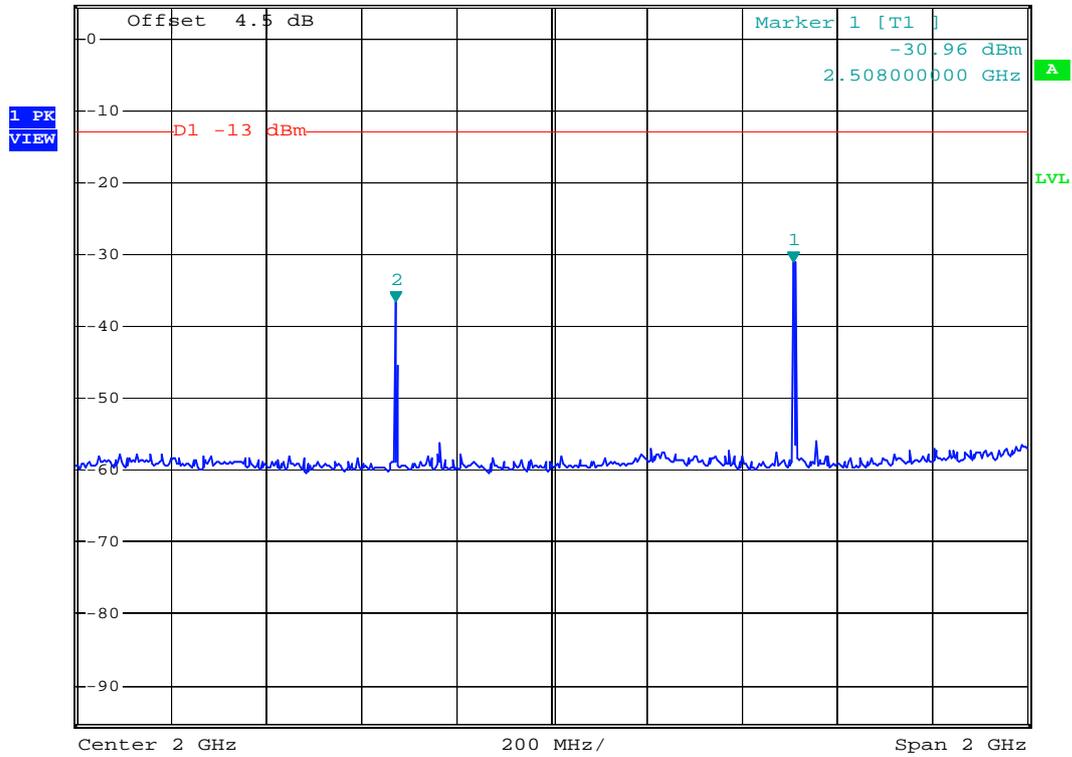
Date: 22.JAN.2008 15:04:55



- Test Mode : CDMA2000 Cellular CH384 for 1xRTT
- Frequency Range : 1G-3G



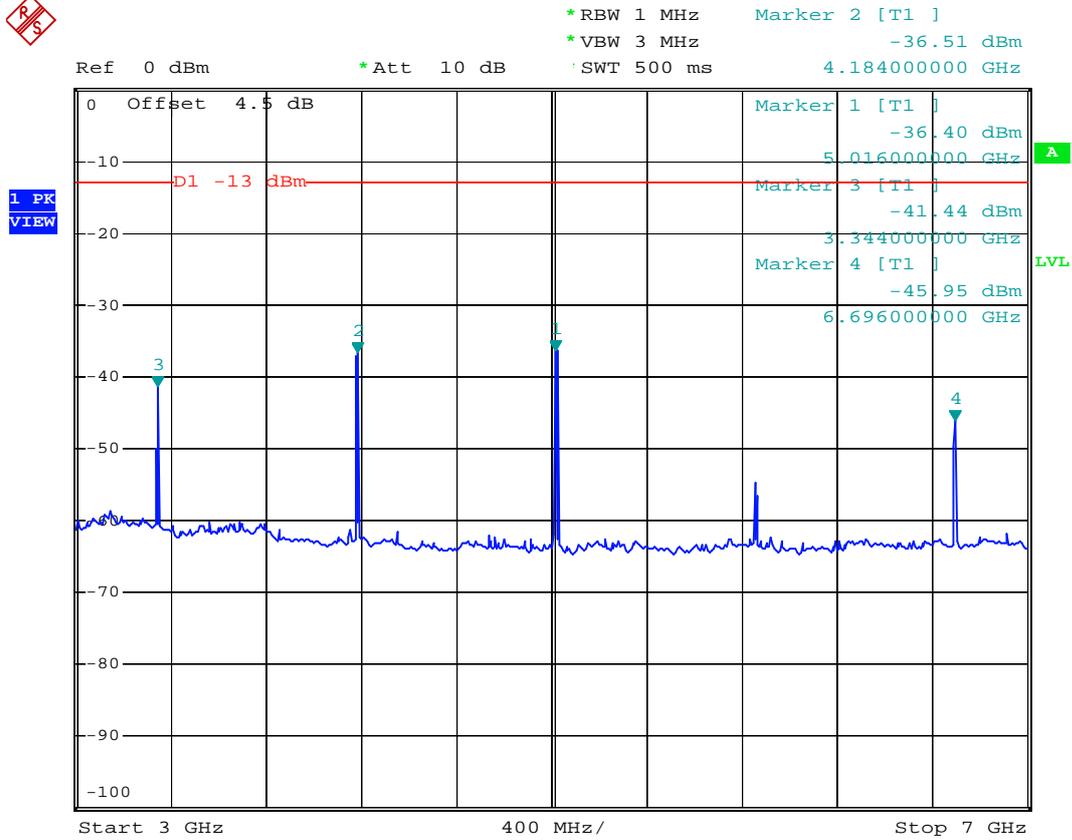
Ref 4.5 dBm *Att 20 dB *RBW 1 MHz Marker 2 [T1]
 *VBW 3 MHz -36.61 dBm
 *SWT 500 ms 1.672000000 GHz



Date: 25.JAN.2008 17:55:47



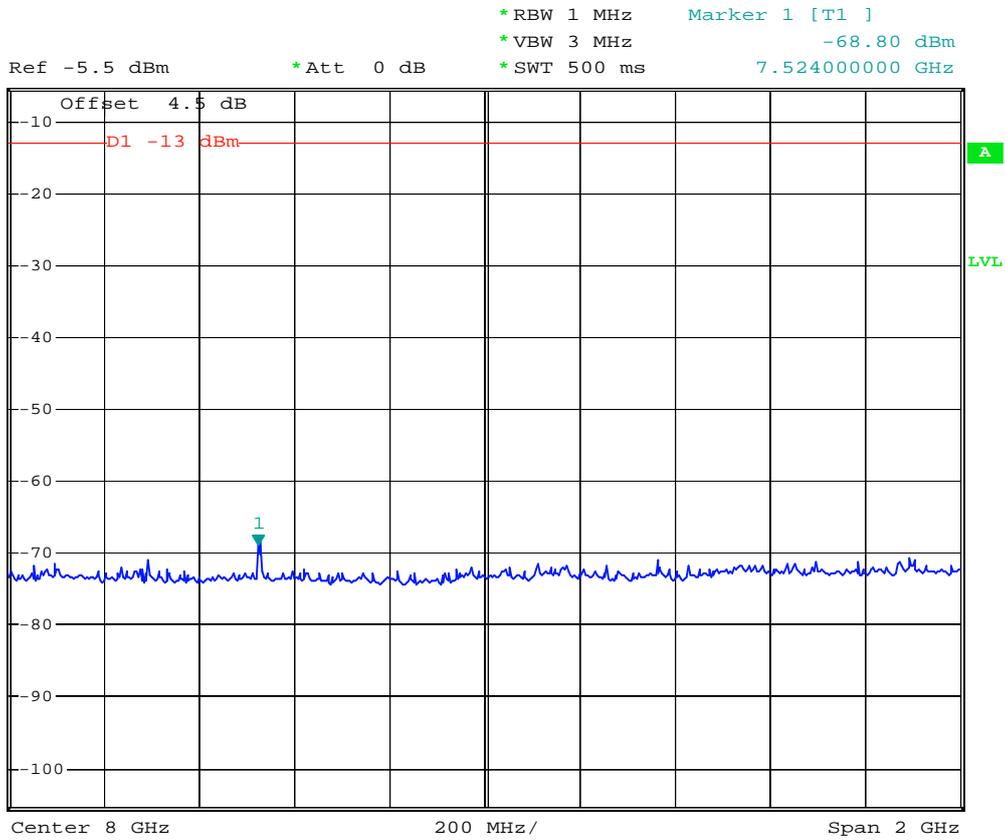
- Test Mode : CDMA2000 Cellular CH384 for 1xRTT
- Frequency Range : 3G-7G



Date: 22.JAN.2008 16:31:31



- Test Mode : CDMA2000 Cellular CH384 for 1xRTT
- Frequency Range : 7G-9G



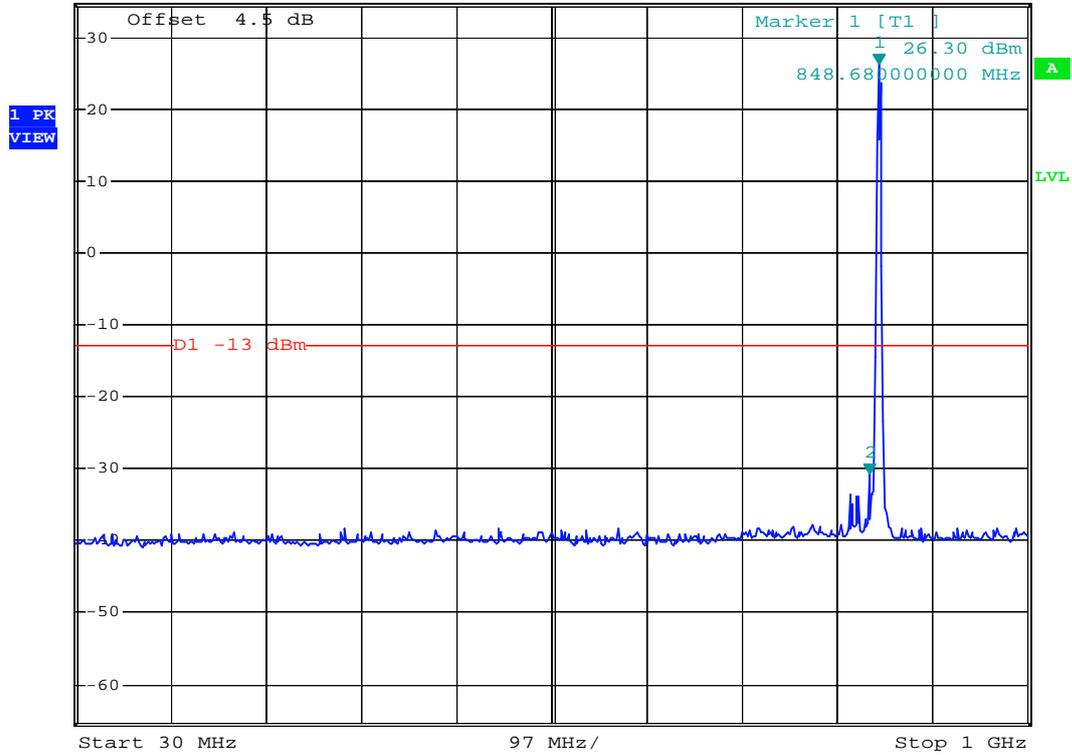
Date: 22.JAN.2008 15:24:13



- Mode 3
- Test Mode : CDMA2000 Cellular CH777 for 1xRTT
- Frequency Range : 30M-1G



Ref 34.5 dBm *Att 40 dB *RBW 1 MHz Marker 2 [T1]
*VBW 3 MHz -30.79 dBm
*SWT 500 ms 838.98000000 MHz



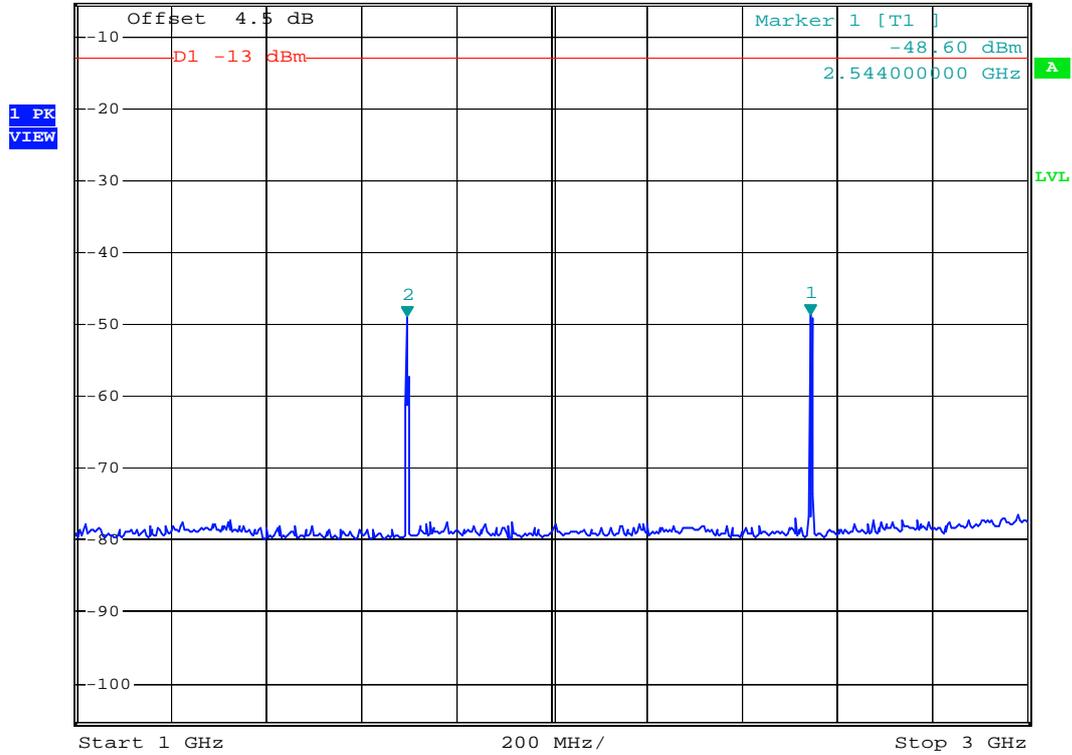
Date: 22.JAN.2008 15:05:29



- Test Mode : CDMA2000 Cellular CH777 for 1xRTT
- Frequency Range : 1G-3G



Ref -5.5 dBm *Att 0 dB *RBW 1 MHz Marker 2 [T1]
 *VBW 3 MHz -48.99 dBm
 *SWT 500 ms 1.696000000 GHz



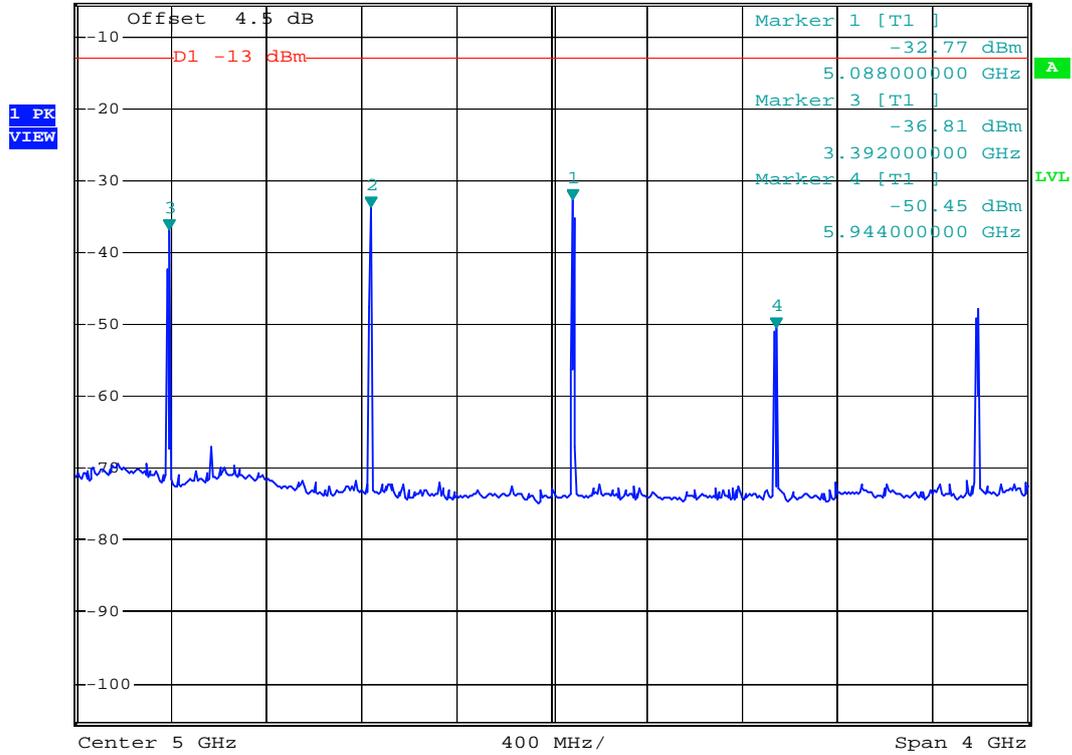
Date: 22.JAN.2008 15:11:25



- Test Mode : CDMA2000 Cellular CH777 for 1xRTT
- Frequency Range : 3G-7G



Ref -5.5 dBm *Att 0 dB *RBW 1 MHz Marker 2 [T1]
 *VBW 3 MHz -33.61 dBm
 *SWT 500 ms 4.240000000 GHz



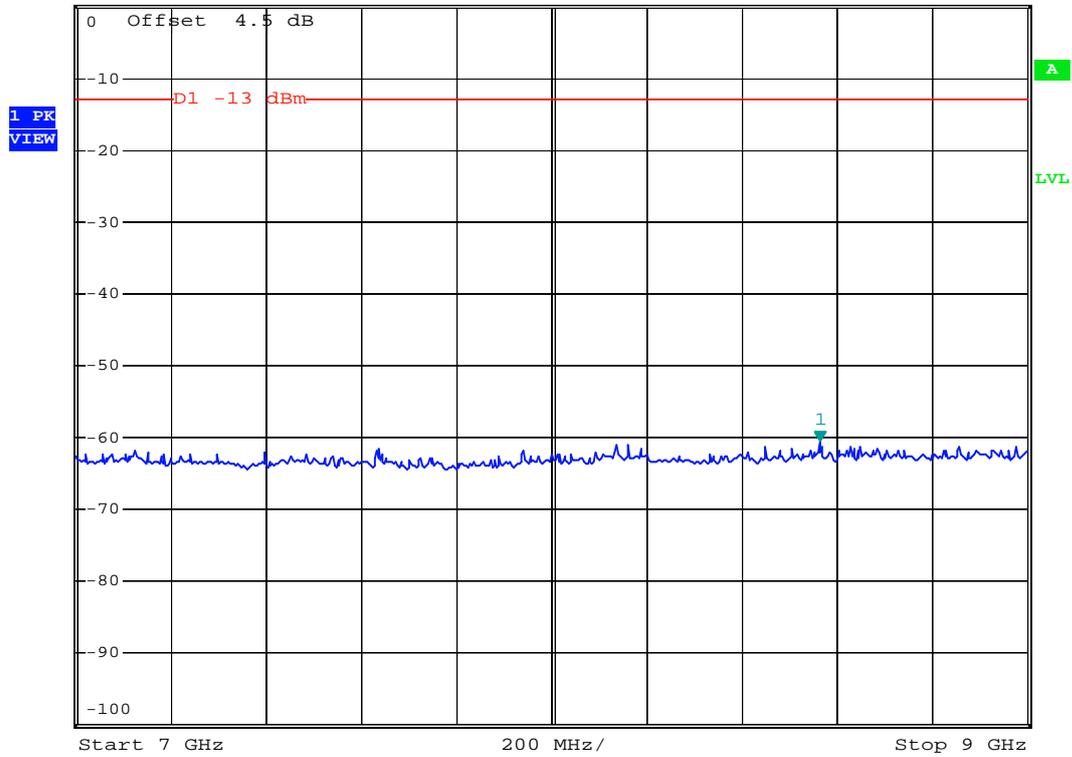
Date: 22.JAN.2008 15:21:06



- Test Mode : CDMA2000 Cellular CH777 for 1xRTT
- Frequency Range : 7G-9G



Ref 0 dBm *Att 10 dB *RBW 1 MHz Marker 1 [T1]
*VBW 3 MHz -60.42 dBm
*SWT 500 ms 8.564000000 GHz



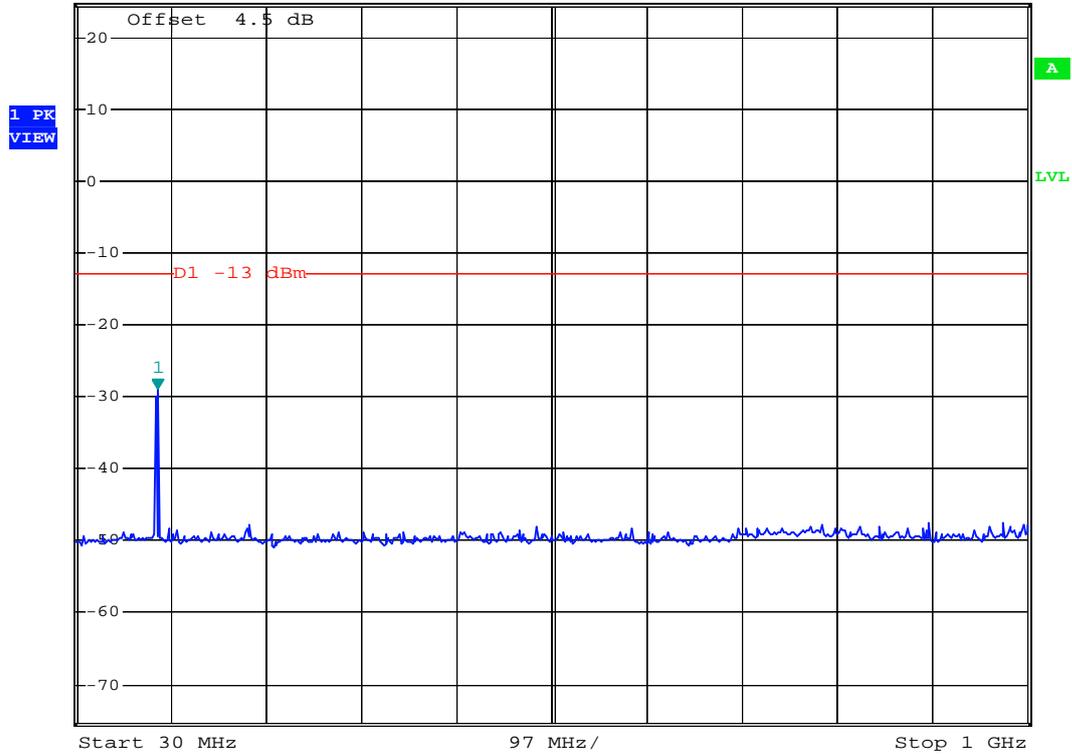
Date: 22.JAN.2008 16:36:02



- Mode 4
- Test Mode : CDMA2000 PCS CH25 for 1xRTT
- Frequency Range : 30M-1G



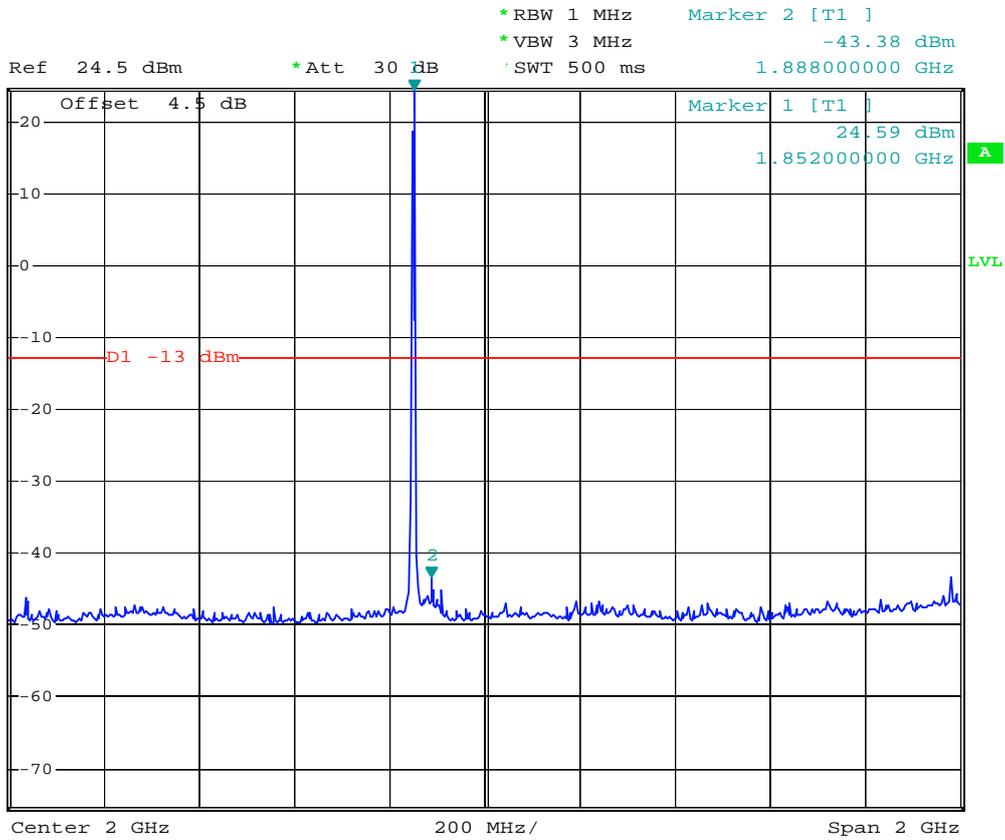
Ref 24.5 dBm *Att 30 dB *RBW 1 MHz Marker 1 [T1]
*VBW 3 MHz -29.02 dBm
*SWT 500 ms 113.42000000 MHz



Date: 22.JAN.2008 16:15:30



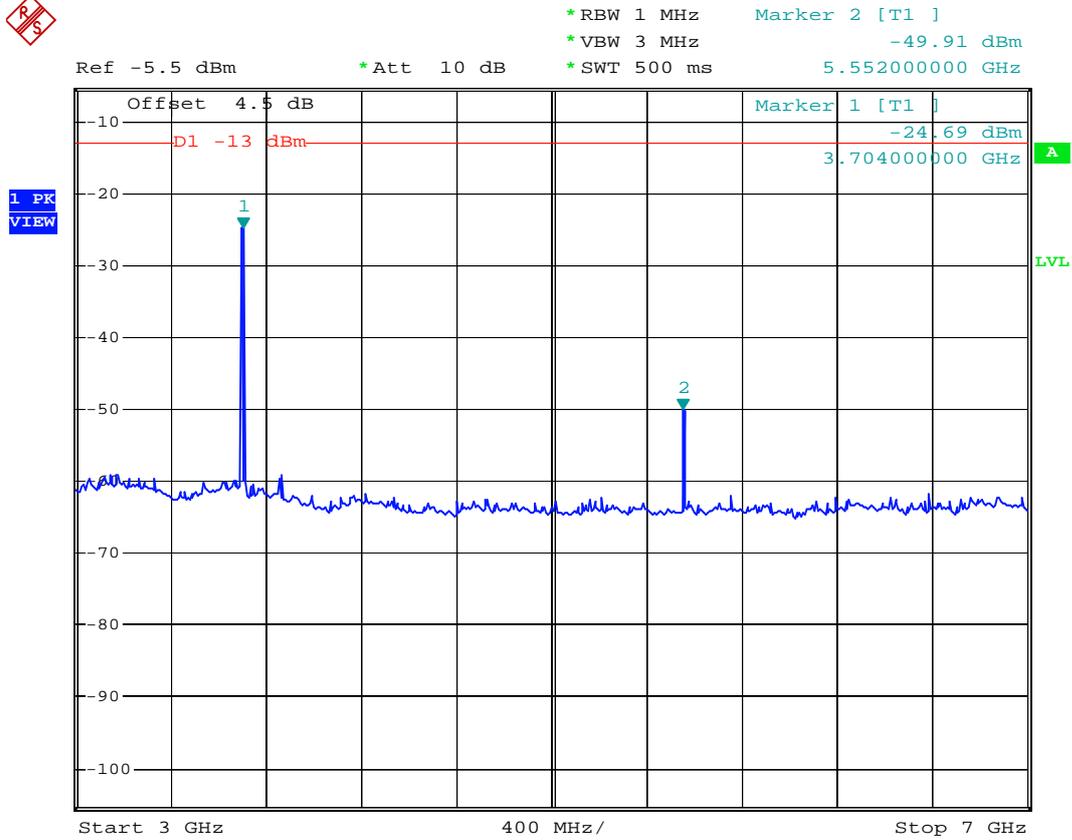
- Test Mode : CDMA2000 PCS CH25 for 1xRTT
- Frequency Range : 1G-3G



Date: 22.JAN.2008 15:32:44



- Test Mode : CDMA2000 PCS CH25 for 1xRTT
- Frequency Range : 3G-7G



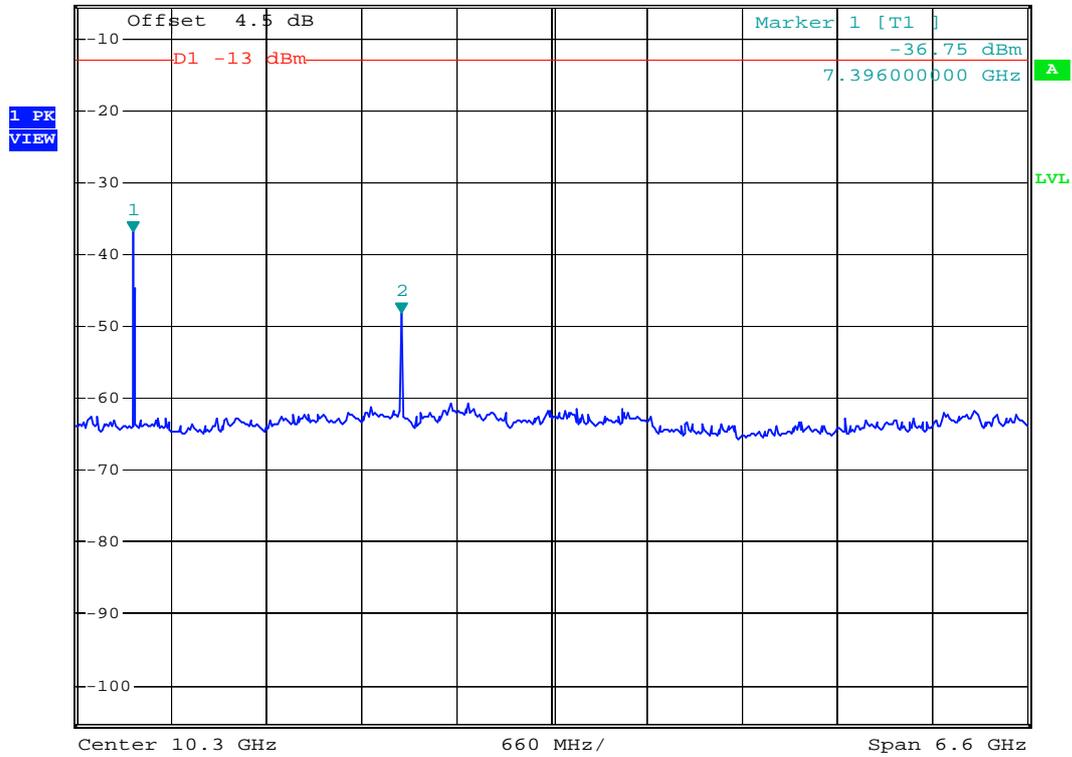
Date: 22.JAN.2008 16:01:36



- Test Mode : CDMA2000 PCS CH25 for 1xRTT
- Frequency Range : 7G-13.6G



Ref -5.5 dBm *Att 10 dB *RBW 1 MHz Marker 2 [T1]
 *VBW 3 MHz -48.06 dBm
 *SWT 500 ms 9.257200000 GHz



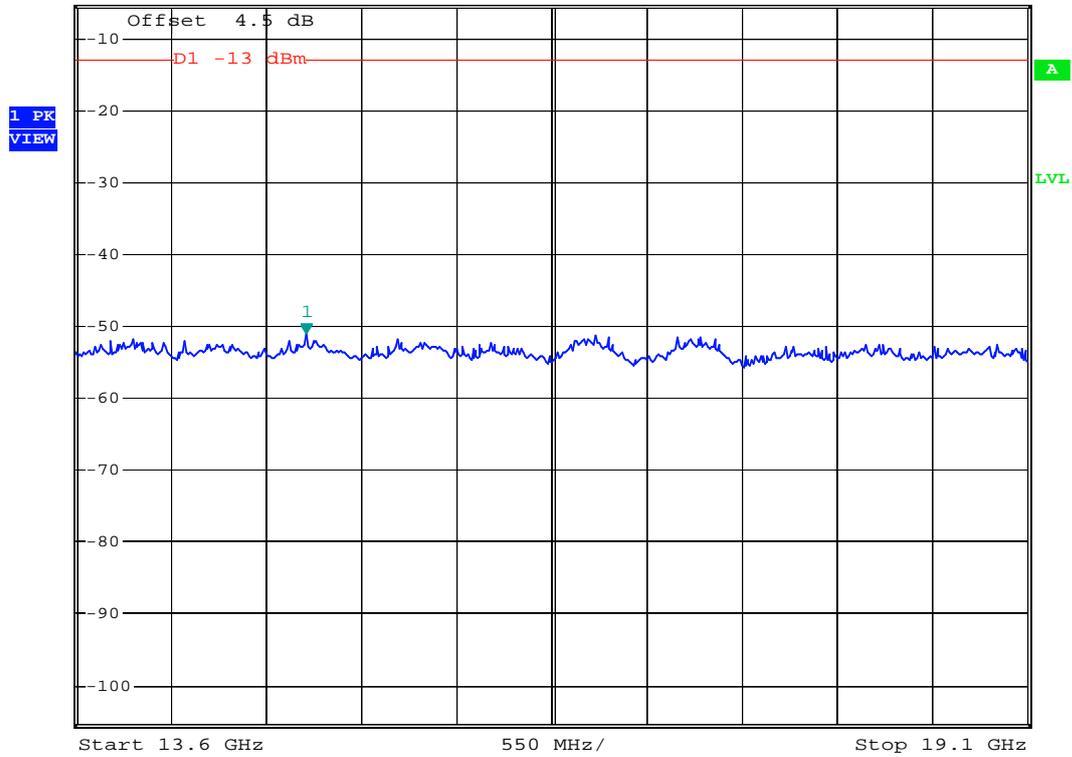
Date: 22.JAN.2008 16:03:17



- Test Mode : CDMA2000 PCS CH25 for 1xRTT
- Frequency Range : 13.6G-19.1G



Ref -5.5 dBm *Att 10 dB *RBW 1 MHz Marker 1 [T1]
*VBW 3 MHz -51.08 dBm
*SWT 500 ms 14.931000000 GHz



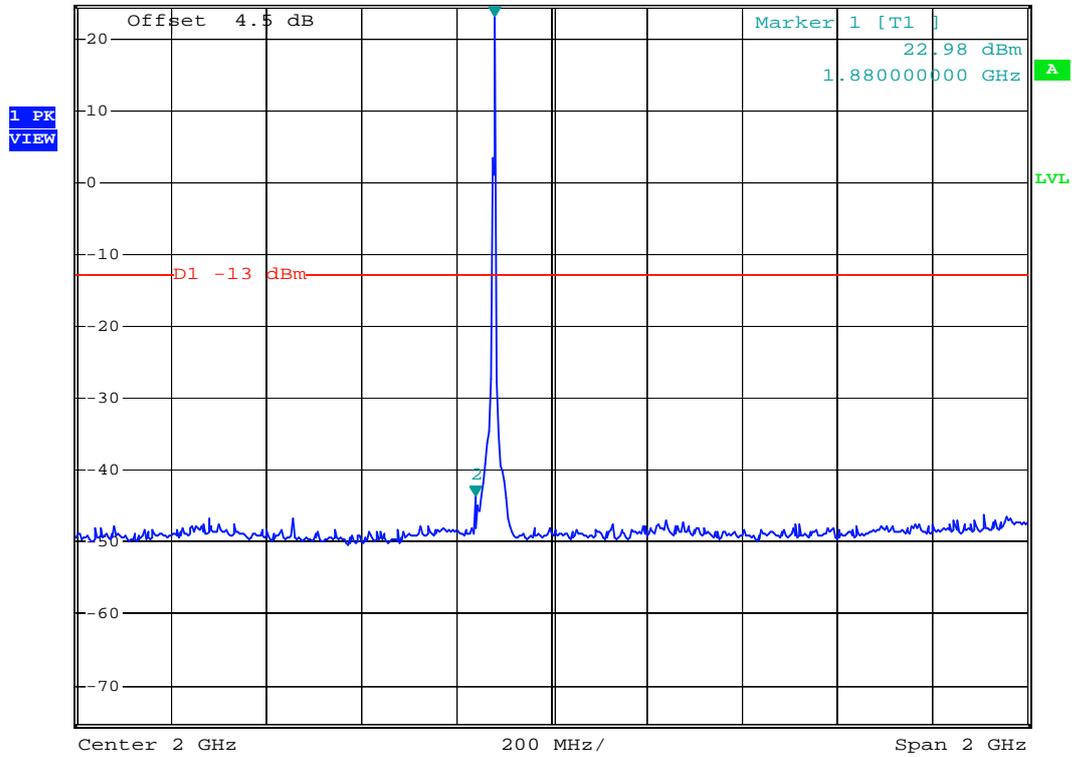
Date: 22.JAN.2008 16:07:15



- Test Mode : CDMA2000 PCS CH600 for 1xRTT
- Frequency Range : 1G-3G



Ref 24.5 dBm *Att 30 dB *RBW 1 MHz Marker 2 [T1]
 *VBW 3 MHz -43.54 dBm
 *SWT 500 ms 1.840000000 GHz



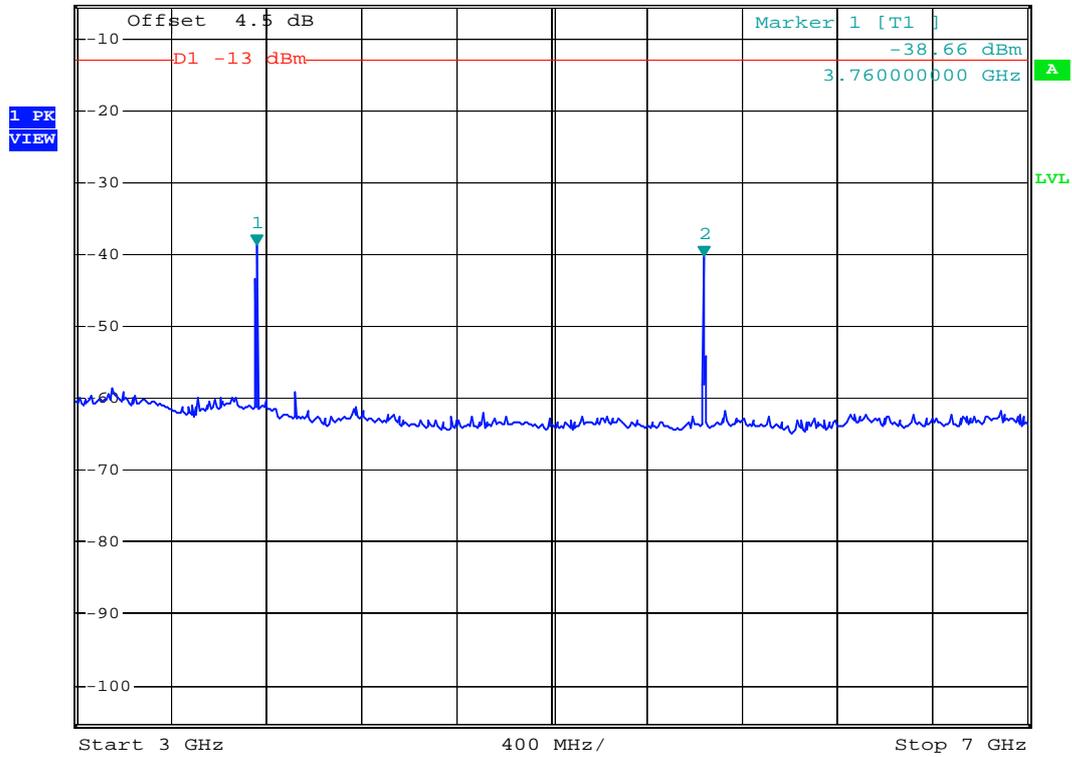
Date: 22.JAN.2008 15:33:43



- Test Mode : CDMA2000 PCS CH600 for 1xRTT
- Frequency Range : 3G-7G



Ref -5.5 dBm *Att 10 dB *RBW 1 MHz Marker 2 [T1]
 *VBW 3 MHz -40.35 dBm
 *SWT 500 ms 5.640000000 GHz



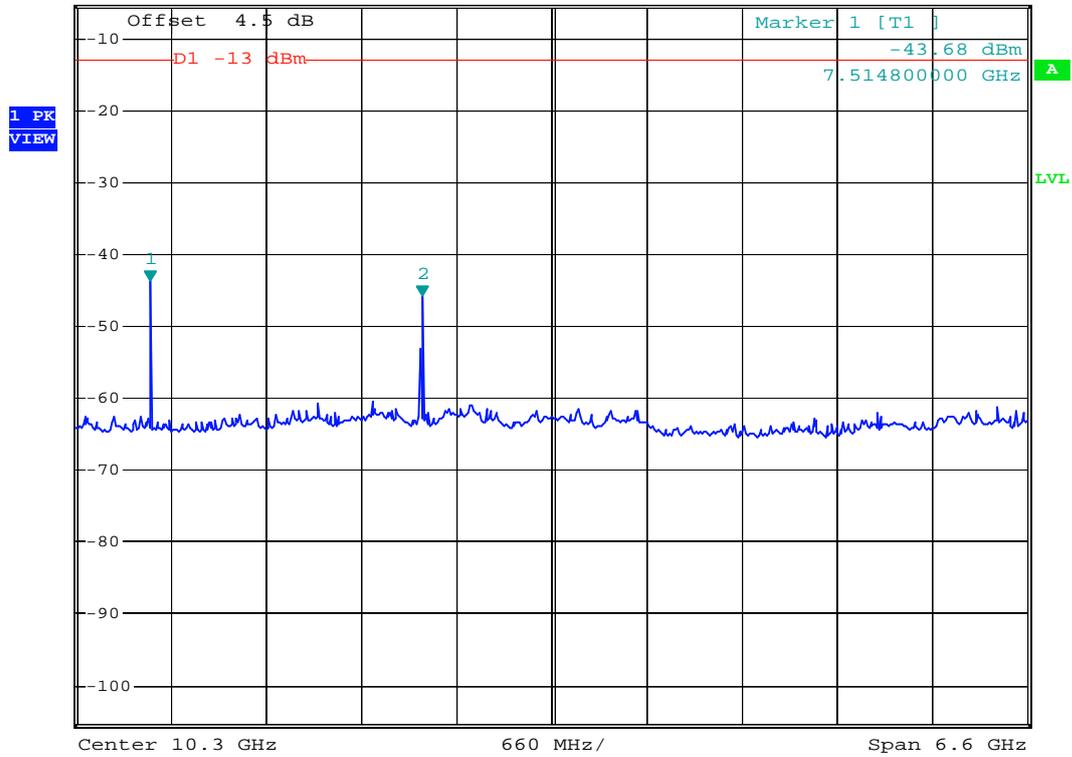
Date: 22.JAN.2008 16:00:46



- Test Mode : CDMA2000 PCS CH600 for 1xRTT
- Frequency Range : 7G-13.6G



Ref -5.5 dBm *Att 10 dB *RBW 1 MHz Marker 2 [T1]
 *VBW 3 MHz -45.86 dBm
 *SWT 500 ms 9.402400000 GHz



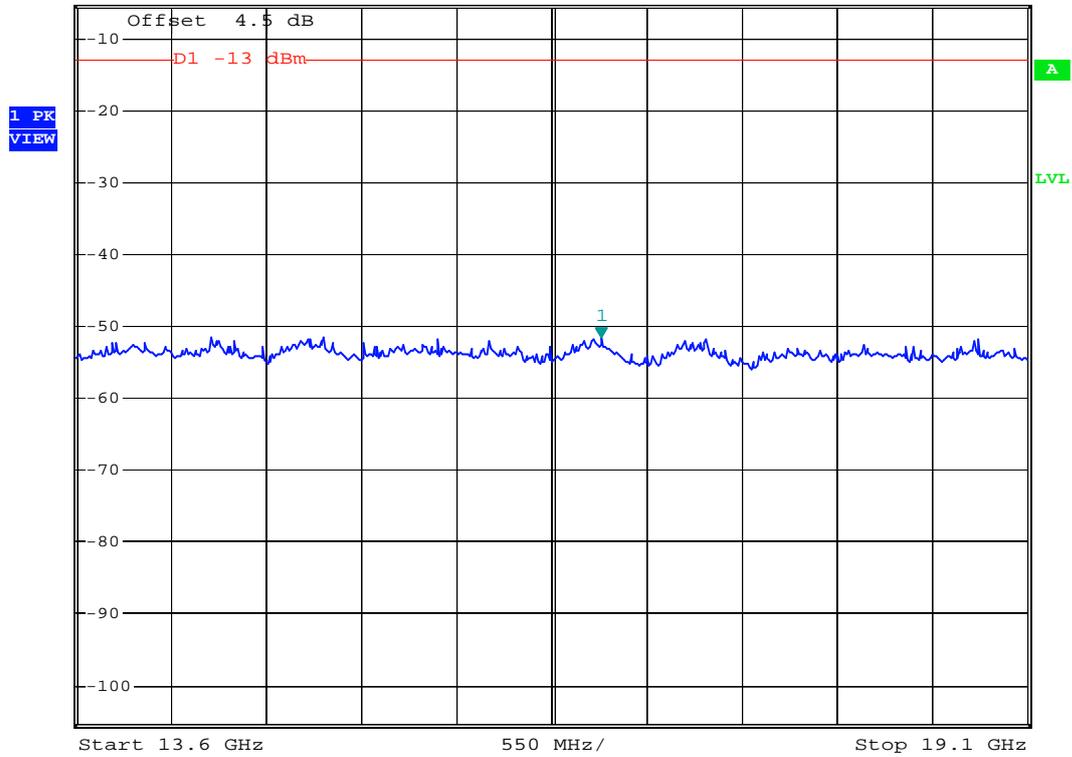
Date: 22.JAN.2008 16:04:04



- Test Mode : CDMA2000 PCS CH600 for 1xRTT
- Frequency Range : 13.6G-19.1G



Ref -5.5 dBm *Att 10 dB *RBW 1 MHz Marker 1 [T1]
*VBW 3 MHz -51.64 dBm
*SWT 500 ms 16.636000000 GHz



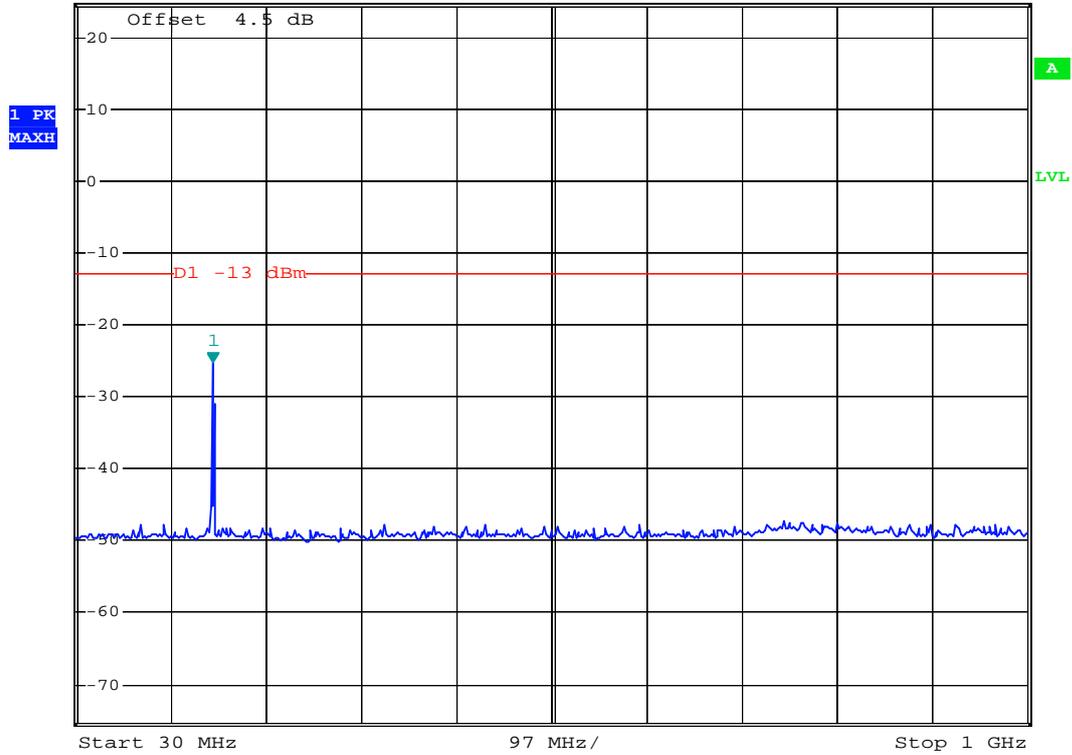
Date: 22.JAN.2008 16:06:38



- Mode 6
- Test Mode : CDMA2000 PCS CH1175 for 1xRTT
- Frequency Range : 30M-1G



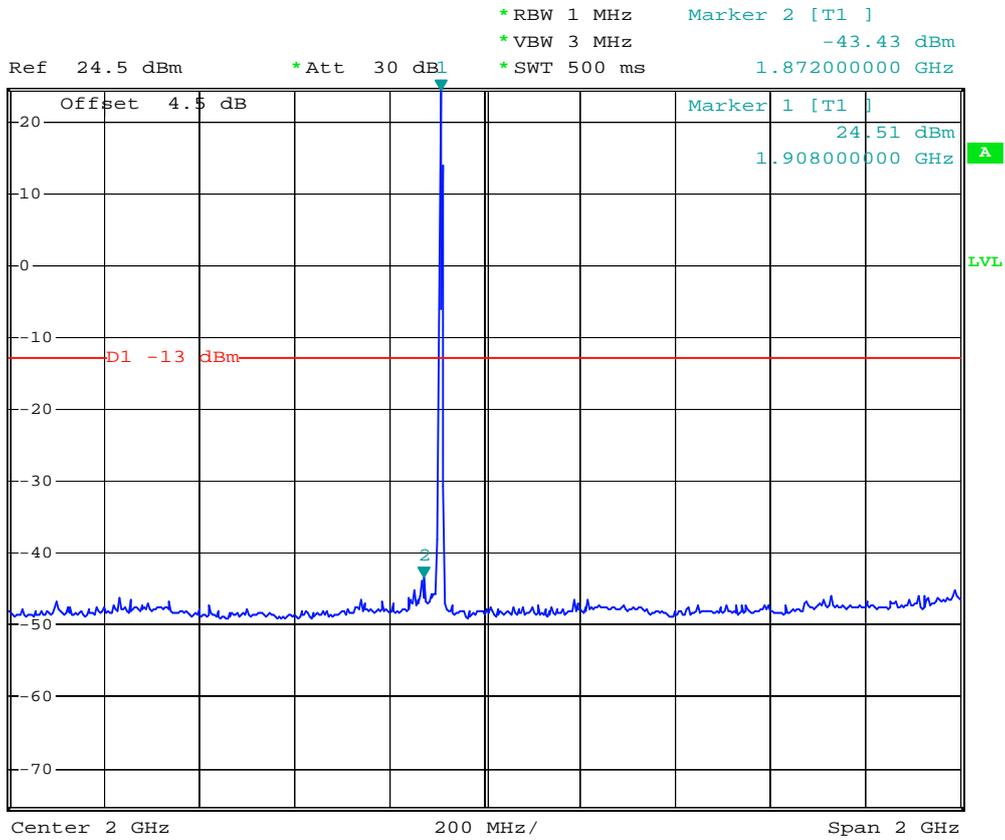
Ref 24.5 dBm *Att 30 dB *RBW 1 MHz Marker 1 [T1]
*VBW 3 MHz -25.11 dBm
*SWT 500 ms 169.68000000 MHz



Date: 22.JAN.2008 16:16:51



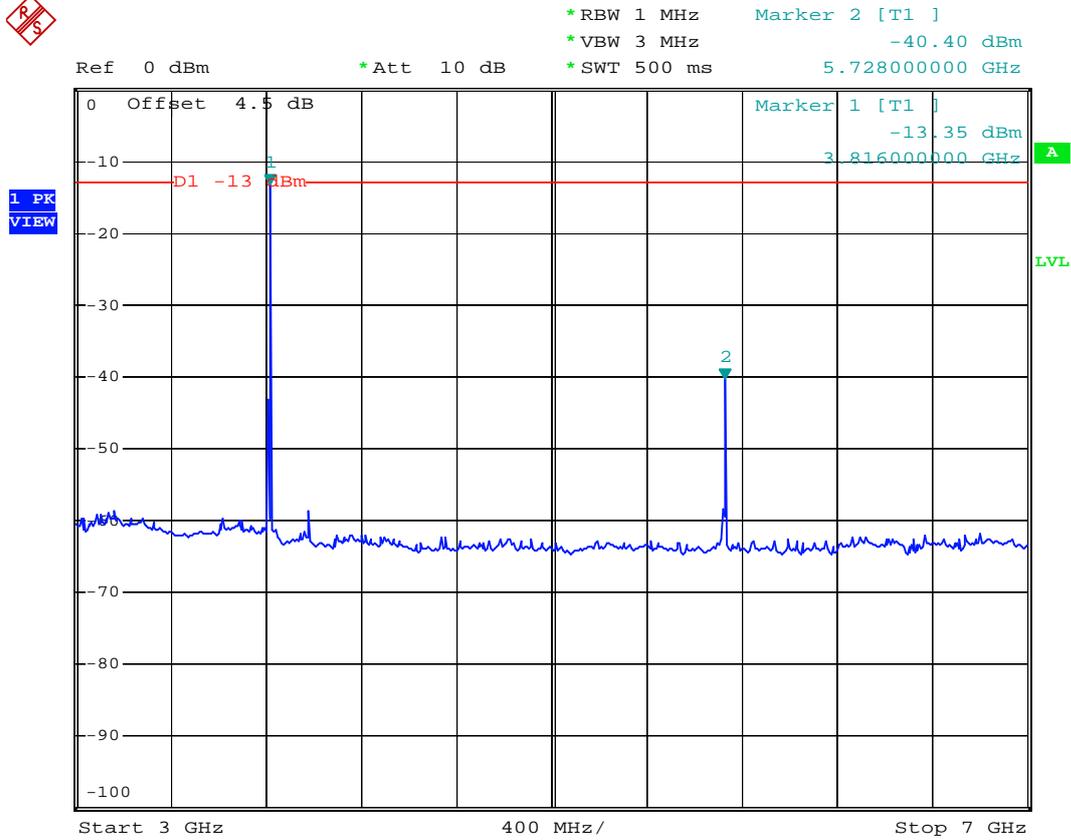
- Test Mode : CDMA2000 PCS CH1175 for 1xRTT
- Frequency Range : 1G-3G



Date: 22.JAN.2008 15:34:53



- Test Mode : CDMA2000 PCS CH1175 for 1xRTT
- Frequency Range : 3G-7G



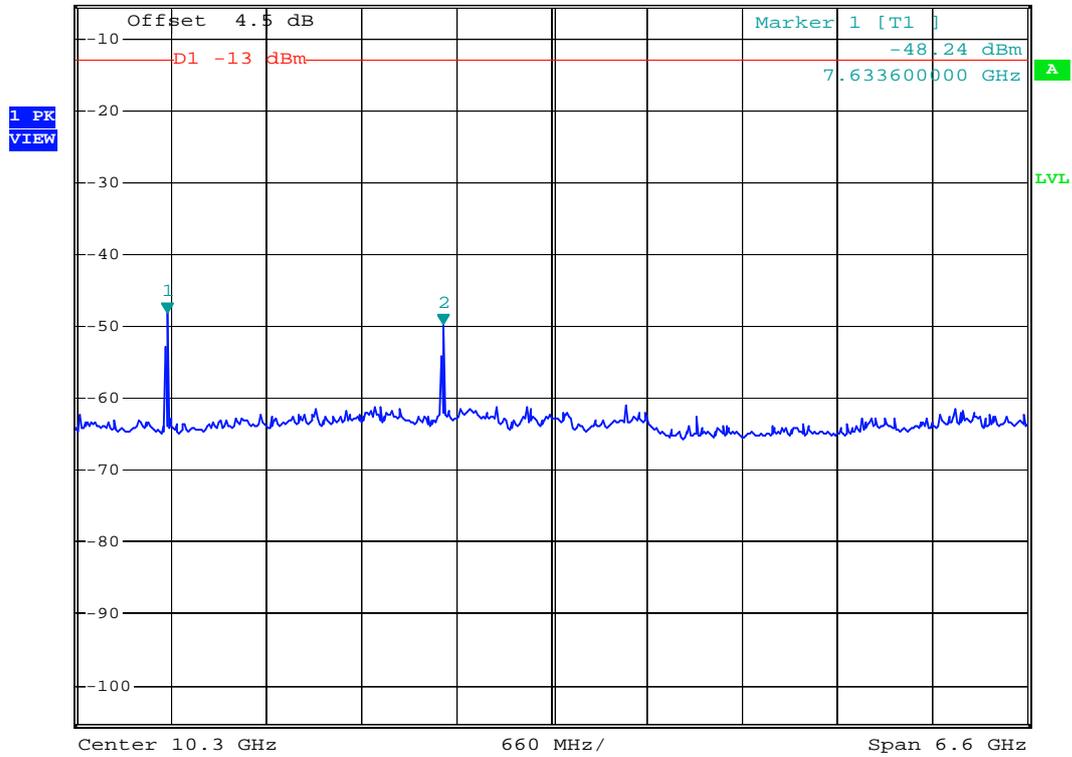
Date: 22.JAN.2008 16:34:25



- Test Mode : CDMA2000 PCS CH1175 for 1xRTT
- Frequency Range : 7G-13.6G



Ref -5.5 dBm *Att 10 dB *RBW 1 MHz Marker 2 [T1]
 *VBW 3 MHz -49.84 dBm
 *SWT 500 ms 9.547600000 GHz



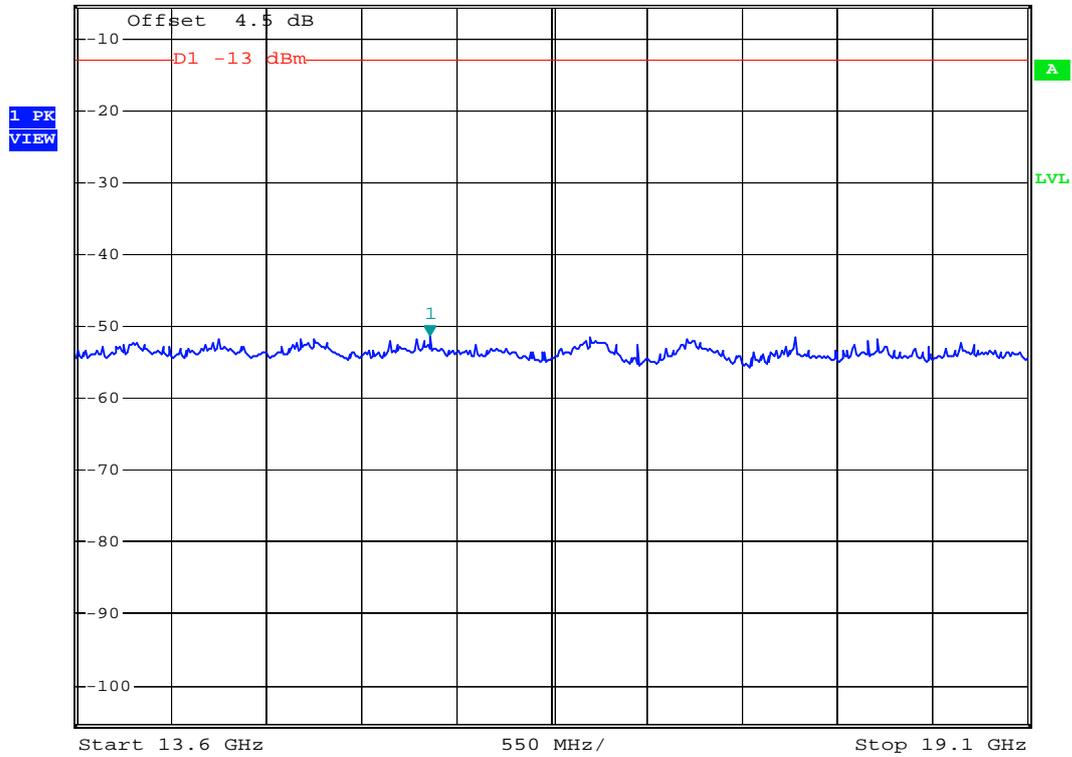
Date: 22.JAN.2008 16:04:57



- Test Mode : CDMA2000 PCS CH1175 for 1xRTT
- Frequency Range : 13.6G-19.1G



Ref -5.5 dBm *Att 10 dB *RBW 1 MHz Marker 1 [T1]
*VBW 3 MHz -51.21 dBm
*SWT 500 ms 15.64600000 GHz



Date: 22.JAN.2008 16:05:59



4.6 Field Strength of Spurious Radiation

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

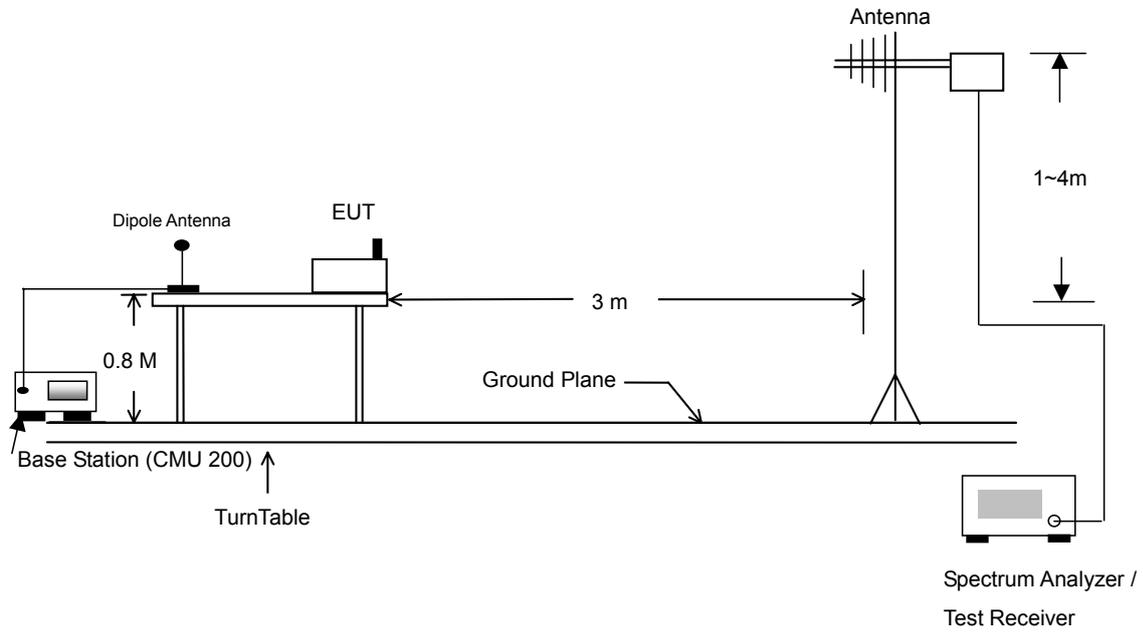
4.6.1 Measurement Instruments

As described in chapter 5 of this test report.

4.6.2 Test Procedure

- a. The EUT was placed on a rotatable wooden table with 0.8 meter about ground.
- b. The EUT was set 3 meters from the receiving antenna which was mounted on the antenna tower.
- c. The table was rotated 360 degrees to determine the position of the highest spurious emission.
- d. 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.
- e. Taking the record of maximum spurious emission.
- f. A Horn antenna was substituted in place of the EUT and was driven by a signal generator.
- g. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
- h. Taking the record of output power at antenna port.
- i. Repeat step 7 to step 8 for another polarization.
- j. Emission level (dBm) = output power + substitution Gain.

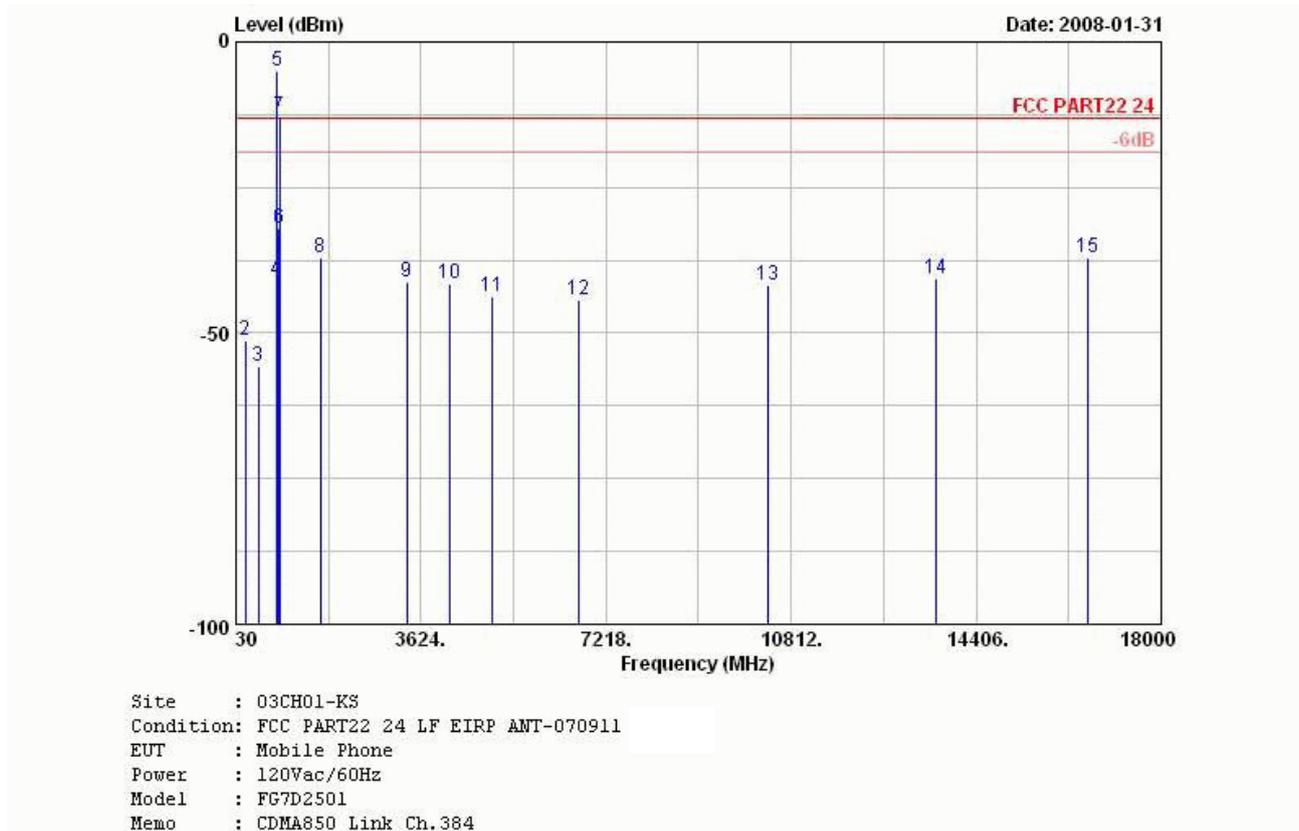
4.6.3 Test Setup Layout





4.6.4 Test Data

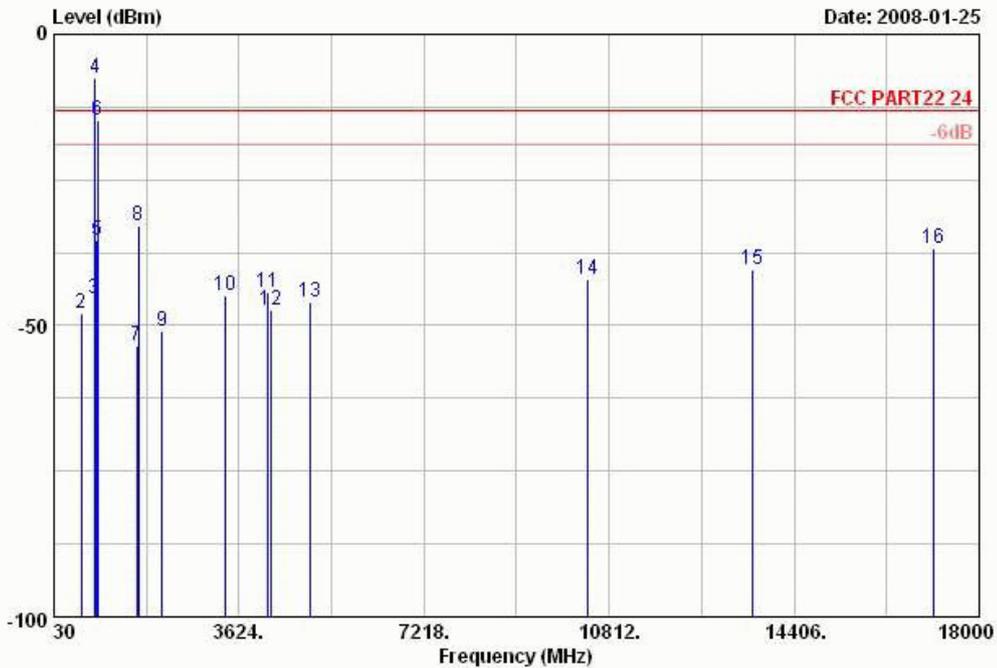
4.6.4.1 Mode 1



Frequency (MHz)	ERP (dBm)	Limit (dBm)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
32.7	-47.44	-13	-34.44	-59.43	-28.94	-0.29	-16.06	H
216.3	-53.28	-13	-40.28	-53.12	-58.48	-0.71	8.06	H
461.7	-57.96	-13	-44.96	444.19	-61.67	-0.98	6.84	H
817.3	-43.02	-13	-30.02	459.13	-48.10	-1.26	8.49	H
836.9	-7.18	-13	-21.29	494.97	-12.39	-1.24	8.60	H
855.8	-34.29	-13	-21.29	467.86	-39.56	-1.24	8.66	H
881.7	-14.87	-13	-21.29	487.28	-20.25	-1.25	8.78	H
1674	-39.17	-13	-26.17	-41.49	-44.17	-1.79	8.94	H
3346	-43.45	-13	-30.45	-51.7	-49.06	-2.47	10.23	H
4182	-43.75	-13	-30.75	-54.53	-49.82	-2.94	11.16	H
5018	-45.93	-13	-32.93	-58.09	-51.52	-3.27	11.01	H
6692	-46.41	-13	-33.41	-62.34	-52.62	-3.83	12.19	H
10358	-43.95	-13	-30.95	-63.86	-50.90	-4.37	13.47	H
13619	-42.76	-13	-29.76	-63.78	-47.80	-5.91	13.1	H
16568	-39.11	-13	-26.11	-60.86	-45.66	-5.26	13.96	H

Remark :

- 836.9MHz is mobile phone signal
- 881.7MHz is base station signal



Site : 03CH01-KS
 Condition: FCC PART22 24 LF EIRP ANT-070911
 EUT : Mobile Phone
 Power : 120Vac/60Hz
 Model : FG7D2501
 Memo : CDMA850 Link Ch.384

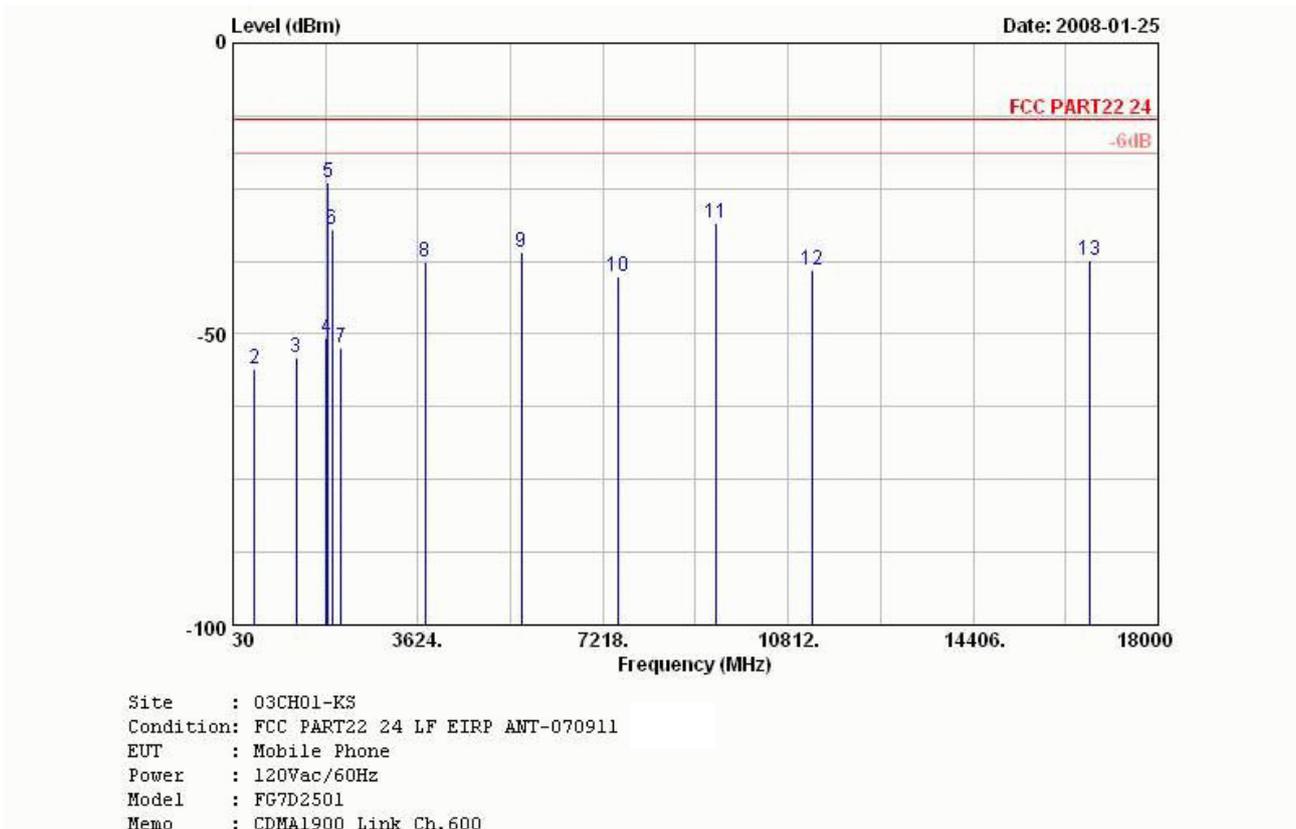
Frequency (MHz)	ERP (dBm)	Limit (dBm)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
33.24	-33.02	-13	-20.02	-45.01	-14.52	-0.29	-16.06	V
558.3	-50.19	-13	-37.19	-53.58	-53.59	-1.06	6.61	V
817.3	-47.57	-13	-34.57	-56.6	-52.65	-1.26	8.49	V
836.9	-9.61			-20.17	-14.82	-1.24	8.60	V
855.8	-37.51	-13	-24.51	-48.4	-42.78	-1.24	8.66	V
881.7	-16.97			-25.8	-22.35	-1.25	8.78	V
1640	-55.50	-13	-42.50	-57.55	-60.47	-1.77	8.89	V
1674	-35.04	-13	-22.04	-37.36	-40.04	-1.79	8.94	V
2122	-53.00	-13	-40.00	-58.54	-58.42	-2.01	9.58	V
3346	-46.97	-13	-33.97	-55.22	-52.58	-2.47	10.23	V
4184	-46.42	-13	-33.42	-57.2	-52.49	-2.94	11.16	V
4242	-49.57	-13	-36.57	-60.49	-55.73	-2.94	11.25	V
5015	-47.98	-13	-34.98	-60.14	-53.57	-3.27	11.01	V
10400	-44.26	-13	-31.26	-64.27	-51.25	-4.38	13.52	V
13607	-42.49	-13	-29.49	-63.51	-47.53	-5.91	13.1	V
17112	-38.88	-13	-25.88	-61.66	-44.80	-5.51	13.58	V

Remark :

- 836.9MHz is mobile phone signal
- 881.7MHz is base station signal



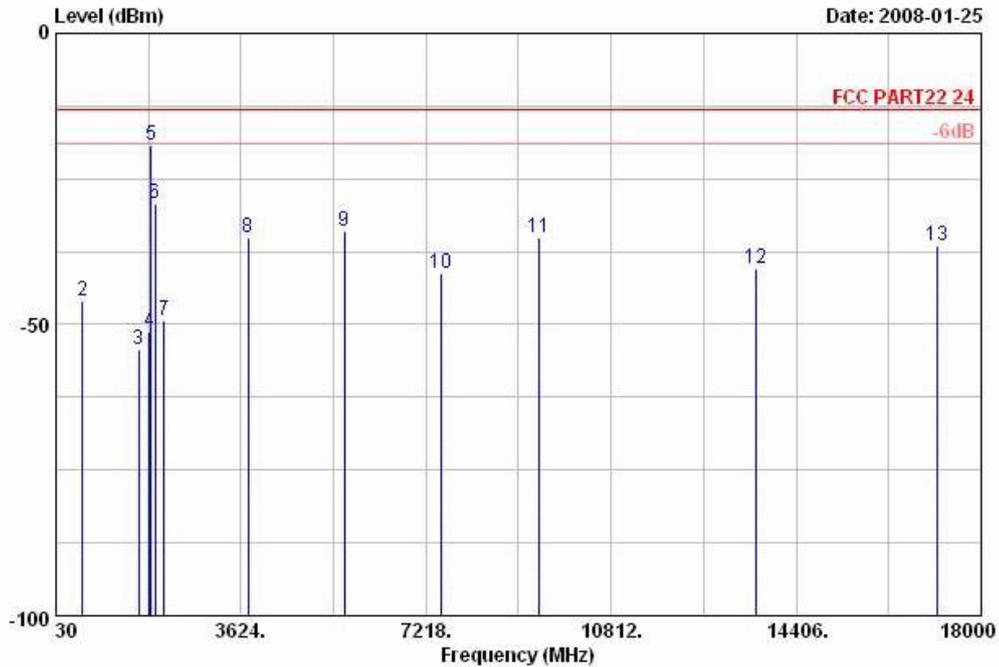
4.6.4.2 Mode 2



Site : 03CH01-KS
 Condition: FCC PART22 24 LF EIRP ANT-070911
 EUT : Mobile Phone
 Power : 120Vac/60Hz
 Model : FG7D2501
 Memo : CDMA1900 Link Ch.600

Frequency (MHz)	ERP (dBm)	Limit (dBm)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
33.51	-43.31	-13	-30.31	-57.17	-28.03	-0.30	-14.98	H
449.8	-56.07	-13	-43.07	-69.18	-62.06	-0.98	6.97	H
1260	-53.99	-13	-40.99	-56.3	-60.53	-1.57	8.11	H
1842	-50.71	-13	-37.71	-56.69	-58.02	-1.90	9.21	H
1880	-23.87			-30.1	-31.21	-1.92	9.26	H
1960	-32.17			-38.86	-39.56	-1.95	9.34	H
2122	-52.33	-13	-39.33	-60.02	-59.90	-2.01	9.58	H
3760	-37.57	-13	-24.57	-49.16	-45.32	-2.72	10.47	H
5639	-35.92	-13	-22.92	-52.16	-44.04	-3.35	11.47	H
7520	-39.99	-13	-26.99	-57.41	-47.92	-3.91	11.84	H
9401	-30.97	-13	-17.97	-50.98	-39.58	-4.37	12.98	H
11279	-39.08	-13	-26.08	-61.88	-47.36	-5.42	13.70	H
16672	-37.41	-13	-24.41	-61.6	-46.01	-5.3	13.9	H

Remark :
 1. 1880.0MHz is mobile phone signal
 2. 1960.0MHz is base station signal



Site : 03CH01-KS
 Condition: FCC PART22 24 LF EIRP ANT-070911
 EUT : Mobile Phone
 Power : 120Vac/60Hz
 Model : FG7D2501
 Memo : CDMA1900 Link Ch.600

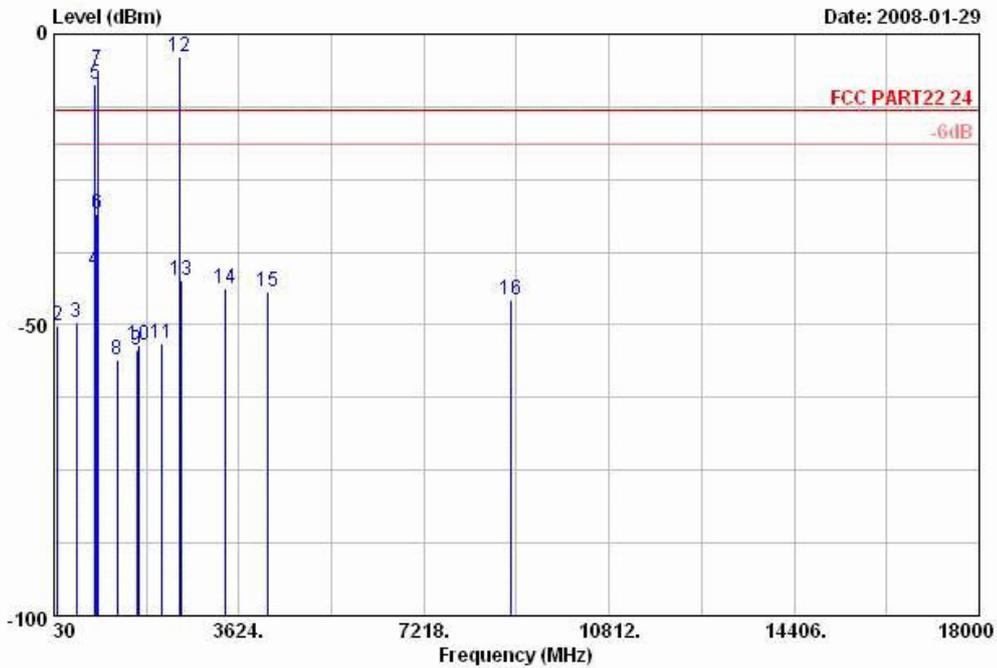
Frequency (MHz)	ERP (dBm)	Limit (dBm)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
32.97	-27.61	-13	-14.61	-41.75	-11.26	-0.29	-16.06	V
552	-45.88	-13	-32.88	-51.17	-51.37	-1.06	6.55	V
1636	-54.34	-13	-41.34	-58.41	-61.44	-1.76	8.86	V
1840	-51.26	-13	-38.26	-57.11	-58.56	-1.89	9.19	V
1880	-19.23			-25.46	-26.57	-1.92	9.26	V
1960	-29.18			-35.87	-36.57	-1.95	9.34	V
2122	-49.25	-13	-36.25	-56.94	-56.82	-2.01	9.58	V
3760	-35.21	-13	-22.21	-46.8	-42.96	-2.72	10.47	V
5639	-34.05	-13	-21.05	-50.29	-42.17	-3.35	11.47	V
7520	-41.11	-13	-28.11	-58.53	-49.04	-3.91	11.84	V
9398	-34.97	-13	-21.97	-54.98	-43.58	-4.37	12.98	V
13616	-40.42	-13	-27.42	-63.59	-47.61	-5.91	13.10	V
17132	-36.44	-13	-23.44	-61.34	-44.48	-5.52	13.56	V

Remark :

1. 1880.0MHz is mobile phone signal
2. 1960.0MHz is base station signal



4.6.4.3 Mode 3

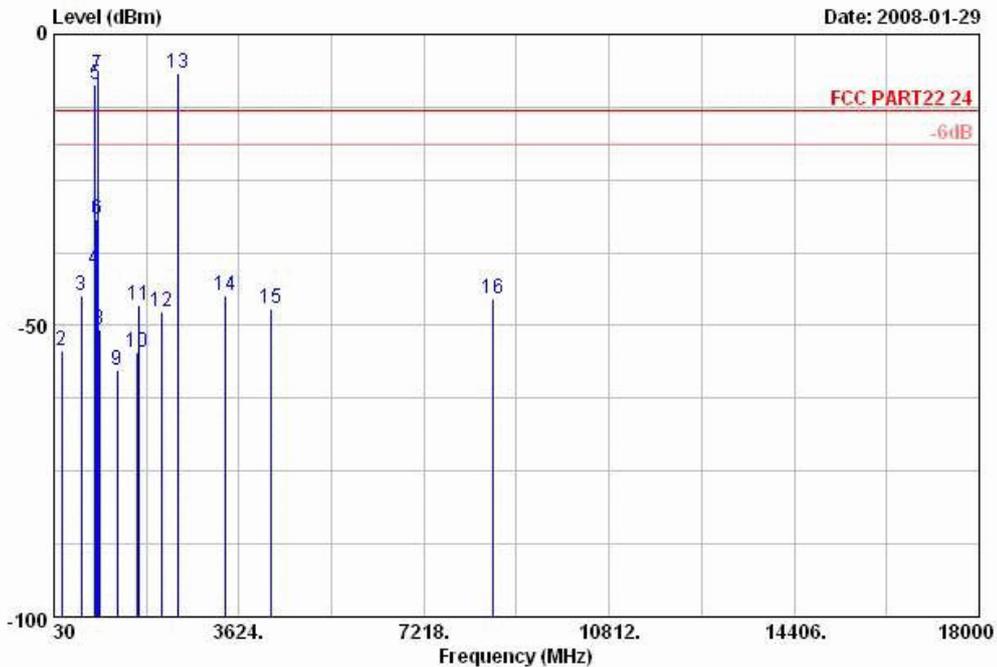


Site : 03CH01-KS
 Condition: FCC PART22 24 LF EIRP ANT-070911
 EUT : Mobile Phone
 Power : 120Vac/60Hz
 Model : C79
 Memo : BT Link +CDMA850 Link Ch.384

Frequency (MHz)	ERP (dBm)	Limit (dBm)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
31.62	-44.06	-13	-31.06	-56.23	-24.83	-0.29	-16.79	H
109.11	-52.26	-13	-39.26	-49.11	-49.28	-0.55	-0.28	H
468	-51.79	-13	-38.79	-60.23	-55.42	-0.99	6.77	H
817.3	-42.79	-13	-29.79	-51.82	-47.87	-1.26	8.49	H
836.9	-10.84			-21.4	-16.05	-1.24	8.60	H
855.8	-33.07	-13	-20.07	-43.96	-38.34	-1.24	8.66	H
881.7	-8.25			-17.08	-13.63	-1.25	8.78	H
1258	-58.19	-13	-45.19	-58.35	-62.58	-1.57	8.11	H
1636	-56.50	-13	-43.50	-58.42	-61.45	-1.76	8.86	H
1674	-55.59	-13	-42.59	-57.91	-60.59	-1.79	8.94	H
2122	-55.21	-13	-42.21	-60.75	-60.63	-2.01	9.58	H
2472	-6.10			-14.3	-12.04	-2.18	10.27	H
2510	-44.53	-13	-31.53	-52.81	-50.49	-2.19	10.3	H
3345	-45.82	-13	-32.82	-54.07	-51.43	-2.47	10.23	H
4182	-46.34	-13	-33.34	-57.12	-52.41	-2.94	11.16	H
8904	-47.96	-13	-34.96	-71.71	-60.88	-4.31	19.38	H

Remark :

1. 836.9MHz is mobile phone signal
2. 881.7MHz is base station signal
3. 2472MHz is bluetooth signal



Date: 2008-01-29

Site : 03CH01-KS
 Condition: FCC PART22 24 LF EIRP ANT-070911
 EUT : Mobile Phone
 Power : 120Vac/60Hz
 Model : C79
 Memo : BT Link +CDMA850 Link Ch.384

Frequency (MHz)	ERP (dBm)	Limit (dBm)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)	Result
31.89	-29.36	-13	-16.36	-41.82	-10.13	-0.29	-16.79	V
173.64	-56.45	-13	-43.45	-53.79	-59.86	-0.55	6.11	V
558.3	-47.05	-13	-34.05	-50.44	-50.45	-1.06	6.61	V
817.3	-42.56	-13	-29.56	-51.59	-47.64	-1.26	8.49	V
836.9	-10.71	-13	-21.03	-21.27	-15.92	-1.24	8.60	V
855.8	-34.03	-13	-21.03	-44.92	-39.30	-1.24	8.66	V
881.7	-9.09	-13	-39.89	-17.92	-14.47	-1.25	8.78	V
904.8	-52.89	-13	-39.89	-60.66	-58.34	-1.26	8.86	V
1260	-59.73	-13	-46.73	-59.89	-64.12	-1.57	8.11	V
1638	-56.65	-13	-43.65	-58.7	-61.62	-1.77	8.89	V
1674	-48.73	-13	-35.73	-51.05	-53.73	-1.79	8.94	V
2122	-49.65	-13	-36.65	-55.19	-55.07	-2.01	9.58	V
2454	-8.83	-13	-16.93	-16.93	-14.75	-2.18	10.25	V
3345	-47.07	-13	-34.07	-55.32	-52.68	-2.47	10.23	V
4245	-49.25	-13	-36.25	-60.17	-55.41	-2.94	11.25	V
8562	-47.66	-13	-34.66	-64.13	-54.11	-4.12	12.72	V

Remark :

1. 836.9MHz is mobile phone signal
2. 881.7MHz is base station signal
3. 2454MHz is bluetooth signal

4.7 Frequency Stability (Temperature Variation)

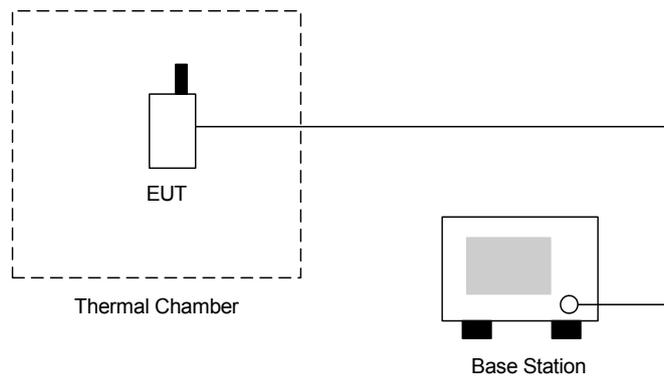
4.7.1 Measurement Instrument

As described in chapter 5 of this test report.

4.7.2 Test Procedure

- a. The EUT and test equipment were set up as shown on the following section.
- b. 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 noted within one minute.
- c. With power OFF, the temperature was raised in 10°C steps. The sample was permitted to stabilize at each step for at least one-half hour. Power was applied and the maximum frequency change was noted within one minute.
- d. The temperature tests were performed for the worst case.
- e. Test data was recorded.

4.7.3 Test Setup Layout





4.7.4 Test Result

• Test Mode : CDMA2000 Cellular 1xRTT

Temperature(°C)	Change (Hz)	Change (ppm)	Limit (ppm)	Result
-30	10	0.01	2.5	Passed
-20	-24	-0.03		
-10	-12	-0.01		
0	-13	-0.02		
10	-12	-0.01		
20	23	0.03		
30	16	0.02		
40	-14	-0.02		
50	-21	-0.02		

• Test Mode : CDMA2000 PCS 1xRTT

Temperature(°C)	Change (Hz)	Change (ppm)	Limit (ppm)	Result
-30	12	0.01	2.5	Passed
-20	20	0.01		
-10	13	0.01		
0	40	0.02		
10	14	0.01		
20	-2	0.00		
30	19	0.01		
40	12	0.01		
50	-13	-0.01		

4.8 Frequency Stability (Voltage Variation)

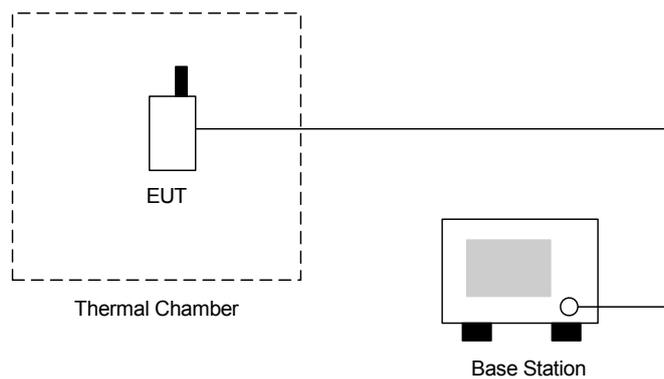
4.8.1 Measurement Instrument

As described in chapter 5 of this test report.

4.8.2 Test Procedure

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

4.8.3 Test Setup Layout





4.8.4 Test Result

- Test Mode : CDMA2000 Cellular 1xRTT

Voltage(Volt)	Change (Hz)	Change (ppm)	Limit (ppm)	Result
3.7	-17.0	-0.02	2.5	Passed
BEP	-14.0	-0.02		
4.2	15.0	0.02		

- Test Mode : CDMA2000 PCS 1xRTT

Voltage(Volt)	Change (Hz)	Change (ppm)	Limit (ppm)	Result
3.7	0	0.00	2.5	Passed
BEP	7	0.00		
4.2	-3	0.00		

Remark:

1. Normal Voltage = 3.7 V.
2. Battery End Point (BEP) = 3.5 V.



5 List of Measurement Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Due Date	Remark
Spectrum Analyzer	R&S	FSP40	100319	9K~40GHz	Mar. 13, 2007	Mar. 12, 2008	Radiation (03CH01-KS)
EMI Test Receiver	R&S	ESCI	100534	9KHz~2.75GHz	Mar. 15, 2007	Mar. 14, 2008	Radiation (03CH01-KS)
Bilog Antenna	Schaffner	CBL6112D	23182	25MHz~2000MHz	May 22, 2007	May 21, 2008	Radiation (03CH01-KS)
Preamplifier	Agilent	8449B	3008A02370	1G~26.5GHz	Jun. 04, 2007	Jun. 03, 2008	Radiation (03CH01-KS)
Preamplifier	Wireless	FPA6592G	60006	30M~2000MHz	Jul. 24, 2007	Jul. 23, 2008	Radiation (03CH01-KS)
High Pass filter (3GHz)	Microwave Circuits	H3G018G	N/A	N/A	N/A	N/A	Radiation (03CH01-KS)
High Pass filter (7GHz)	Microwave Circuits	H07G18G3	N/A	N/A	N/A	N/A	Radiation (03CH01-KS)
High Pass filter	N/A	WHKX1.5/15 G-10SS	23	N/A	N/A	N/A	Radiation (03CH01-KS)
High Pass filter	N/A	WHKX2.2-18 G-10SS	8	N/A	N/A	N/A	Radiation (03CH01-KS)
Band Reject Filter	WI	WRCG2400/2483-2390/2493-35/10SS	14	N/A	N/A	N/A	Radiation (03CH01-KS)
Band Reject Filter	WI	WRCG 1850/1910-1835/1925-40/8SS	15	N/A	N/A	N/A	Radiation (03CH01-KS)
Band Reject Filter	WI	WRCG 824/849-814/859-40/8SS	34	N/A	N/A	N/A	Radiation (03CH01-KS)
Low pass filter (1.2GHz)	N/A	WLKS 1200-8SS	2	N/A	N/A	N/A	Radiation (03CH01-KS)
DRG Horn(Medium)	EMCO	3117	75959	1GHz ~ 18GHz	Aug. 17, 2007	Aug. 16, 2008	Radiation (03CH01-KS)
Power Meter	Agilent	E4416A	MY45101555	N/A	Jun. 18, 2007	Jun. 17, 2008	Conduction (TH01-KS)
Power Sensor	Agilent	E9327A	MY44421198	50MHz~18GHz	Jun. 12, 2007	Jun. 11, 2008	Conduction (TH01-KS)
Thermal Chamber	Rten Billion	TTC-B3S	TBN-960502	-40~150C	Jun. 27, 2007	Jun. 26, 2008	Conduction (TH01-KS)
Power Divider	ARRA	A3200-2	N/A	DC~18GHz	Sep. 01, 2007	Aug. 31, 2008	Conduction (TH01-KS)

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		$u(x_i)$	C_i	$C_i * u(x_i)$
	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 $\Gamma_1 = 0.197$ Antenna VSWR $\Gamma_2 = 0.194$ Uncertainty = $20 \log(1 - \Gamma_1 * \Gamma_2 * \Gamma_3)$	+0.34/-0.35	U-shaped	0.244	1	0.244
Combined standard uncertainty Uc(y)	2.36				
Measuring uncertainty for a level of confidence of 95% U=2Uc(y)	4.72				

END OF TEST REPORT