

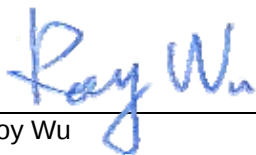


FCC Test Report

According to
47 CFR Part 22H, 24E

Equipment : PDA Phone
Trade Name : palm
Model No. : Treo 755p
FCC ID : O8F-895
Uplink Frequency Range : CDMA2000 Cellular 850 : 824.7~848.31 MHz
CDMA2000 PCS 1900 : 1851.25~1908.75 MHz
Downlink Frequency Range : CDMA2000 Cellular 850 : 869.7~893.31 MHz
CDMA2000 PCS 1900 : 1931.25~1988.75 MHz
Max. ERP/EIRP Power : CDMA2000 Cellular 850 : 0.19 W for 1xRTT
CDMA2000 Cellular 850 : 0.18 W for 1xEVDO
CDMA2000 PCS 1900 : 0.19 W for 1xRTT
CDMA2000 PCS 1900 : 0.18 W for 1xEVDO
Emission Designator : 1M25F9W
Applicant : Palm, Inc.
950 W Maude Avenue MS 22L02 Sunnyvale, CA 94085-2801

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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. 04, 2008 at **Sporton International Inc. LAB.**
- Report No.: FG7D2802, Report Version: Rev. 01.


Roy Wu
Manager

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



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Appendix A - External Photographs of EUT

Appendix B - Internal Photographs of EUT

Appendix C - Setup Photographs

Appendix D – CDMA2000 1xRTT and 1xEV-DO Test Modes



History of This Test Report

Report Issue Date: Jan. 10, 2008

Report No.	Description



1. General Information

1.1. Applicant

Palm, Inc.

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

1.2 Manufacturer

High Tech Computer Corp.

No. 23, Xinghua Rd., Taoyuan 330, Taiwan

1.3 Basic Description of Equipment under Test

Equipment		PDA Phone
Trade Name		palm
Model Name		Treo 755p
FCC ID		O8F-895
AC Adapter 1	Brand Name	Netbit
	Model Name	DSC-51FL-52P US
	Power Rating	I/P:100-240Vac, 50-60Hz, 0.2A; O/P: 5.2Vdc, 1.0A
	AC Power Cord Type	1.73 meter shielded cable with ferrite core
AC Adapter 2	Brand Name	PIE
	Model Name	P005WA05YY
	Power Rating	I/P:100-240Vac, 50-60Hz, 0.15A; O/P: 5.2Vdc, 1A
	AC Power Cord Type	1.79 meter shielded cable without ferrite core
Battery	Brand Name	Palm
	Model Name	Treo
	Power Rating	3.7Vdc, 1600mAh
	Type	Li-ion
Earphone	Brand Name	Merry
	Signal Line Type	1.71 meter non-shielded cable without ferrite core
USB Cable	Brand Name	Palm
	Signal Line Type	1.74 meter 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 :	PDA Phone
Model Name :	Treo 755p
FCC ID :	O8F-895
Tx Frequency :	CDMA2000 Cellular 850 : 824 ~ 849 MHz CDMA2000 PCS 1900 : 1850 ~ 1910 MHz Bluetooth : 2400 ~ 2483.5 MHz
Rx Frequency :	CDMA2000 Cellular 850 : 869 ~ 894 MHz CDMA2000 PCS 1900 : 1930 ~ 1990 MHz Bluetooth : 2400 ~ 2483.5 MHz
Number of Channels :	Bluetooth : 79
Carrier Frequency of Each Channel :	Bluetooth : 2402+n*1 MHz; n=0~78
Maximum Output Power :	CDMA2000 Cellular 850 (1xRTT) FCH_RC1 : 24.18 dBm FCH_RC3 : 24.13 dBm FCH+SCH_RC3 : 24.12 dBm CDMA2000 Cellular 850 (1xEV-DO) 9.6Kbps : 24.31 dBm 38.4Kbps : 24.30 dBm 153.6Kbps : 24.31 dBm CDMA2000 PCS1900 (1xRTT) FCH_RC1 : 23.57 dBm FCH_RC3 : 23.51 dBm FCH+SCH_RC3 : 23.50 dBm CDMA2000 PCS1900 (1xEV-DO) 9.6Kbps : 23.49 dBm 38.4Kbps : 23.51 dBm 153.6Kbps : 23.51 dBm
Maximum ERP/EIRP :	CDMA2000 Cellular 850 : 0.19 W (22.82 dBm) for 1xRTT 0.18 W (22.63 dBm) for 1xEV-DO CDMA2000 PCS1900 : 0.19 W (22.86 dBm) for 1xRTT 0.18 W (22.49 dBm) for 1xEV-DO
Type of Antenna Connector :	N/A
Antenna Type :	CDMA2000 : Fixed Internal Bluetooth : Fixed Internal
Antenna Gain :	Bluetooth : 1 dBi
Power Rating (DC/AC, Voltage and Current of RF element or PA) :	DC 3.4V / 430mA
Digital Modulation Emission :	CDMA2000 : QPSK Bluetooth : GFSK
Type of Emission :	CDMA2000 : 1M25F9W
Device Power Class :	CDMA2000 Cellular 850 : 3 CDMA2000 PCS1900 : 2
DUT Stage :	Production Unit



1.5 Report Date

EUT Received : Dec. 28, 2007

Report Date : Jan. 10, 2008

2 Test Configuration of Equipment under Test

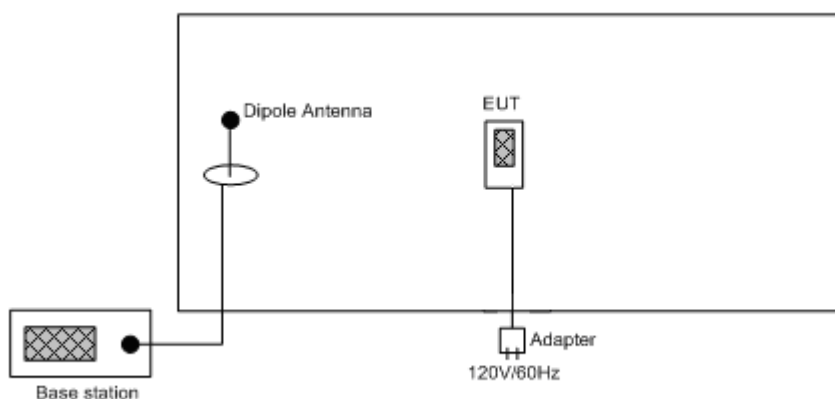
2.1 Test Manner

- The spurious emission measurements were carried out in semi-anechoic chamber with 3-meter test range.
- During all testings, EUT is in link mode with base station emulator at maximum power level.
- Frequency range investigated: radiated emission 30 MHz to 9000 MHz for CDMA2000 Cellular 850; 30MHz to 19000 MHz for CDMA2000 PCS 1900.

2.2 Test Mode

Application	CDMA2000 Cellular 850	CDMA2000 PCS 1900
Radiated Emission	☒ Mode 1: 1xRTT Link Mode	☒ Mode 3: 1xRTT Link Mode
	☒ Mode 2: 1xEV-DO Link Mode	☒ Mode 4: 1xEV-DO Link Mode
	☒ Mode 5: 1xRTT Link Mode + BT	
Conducted Measurement	☒ Mode 1: 1xRTT Link Mode	☒ Mode 3: 1xRTT Link Mode
	☒ Mode 2: 1xEV-DO Link Mode	☒ Mode 4: 1xEV-DO 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. 52, Hwa Ya 1st Rd., Hwa Ya Technology Park,
Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C.
TEL : 886-3-327-3456
FAX : 886-3-328-4978

Test Site No : 03CH06-HY, TH02-HY

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 850.
- b. Radiation: from 30 MHz to 19000 MHz for CDMA2000 PCS 1900.

3.4 Test Distance

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



4. Test Data and Test Result

4.1 List of Measurements and Examinations

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

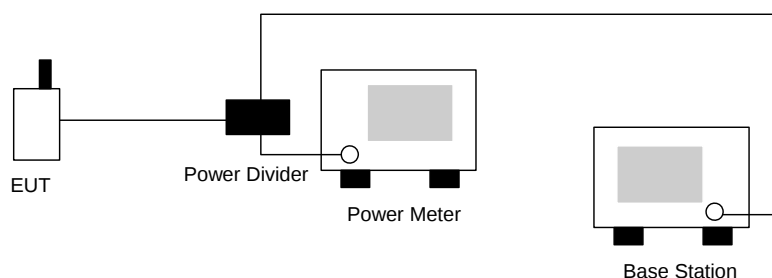
4.2.1 Measurement Instruments

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 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 850	1xRTT	FCH_RC1	1013	824.70 (Low)	24.08	0.26
			384	836.52 (Mid)	24.09	0.26
			777	848.31 (High)	24.18	0.26
		FCH_RC3	1013	824.70 (Low)	23.99	0.25
			384	836.52 (Mid)	24.11	0.26
			777	848.31 (High)	24.13	0.26
		FCH+SCH_RC3	1013	824.70 (Low)	23.97	0.25
			384	836.52 (Mid)	24.12	0.26
			777	848.31 (High)	24.10	0.26
	1xEV-DO	EVDO-UL: 9.6Kbps	1013	824.70 (Low)	24.08	0.26
			384	836.52 (Mid)	24.31	0.27
			777	848.31 (High)	24.28	0.27
		EVDO-UL: 38.4Kbps	1013	824.70 (Low)	24.11	0.26
			384	836.52 (Mid)	24.30	0.27
			777	848.31 (High)	24.26	0.27
		EVDO-UL: 153.6Kbps	1013	824.70 (Low)	24.09	0.26
			384	836.52 (Mid)	24.31	0.27
			777	848.31 (High)	24.24	0.27
CDMA2000 PCS 1900	1xRTT	FCH_RC1	25	1851.25 (Low)	23.51	0.22
			600	1880.00 (Mid)	23.44	0.22
			1177	1908.75 (High)	23.57	0.22
		FCH_RC3	25	1851.25 (Low)	23.42	0.22
			600	1880.00 (Mid)	23.36	0.22
			1177	1908.75 (High)	23.51	0.22
		FCH+SCH_RC1	25	1851.25 (Low)	23.45	0.22
			600	1880.00 (Mid)	23.40	0.22
			1177	1908.75 (High)	23.50	0.22
	1xEV-DO	EVDO-UL: 9.6Kbps	25	1851.25 (Low)	23.36	0.22
			600	1880.00 (Mid)	23.40	0.22
			1177	1908.75 (High)	23.49	0.22
		EVDO-UL: 38.4Kbps	25	1851.25 (Low)	23.34	0.22
			600	1880.00 (Mid)	23.42	0.22
			1177	1908.75 (High)	23.51	0.22
		EVDO-UL: 153.6Kbps	25	1851.25 (Low)	23.37	0.22
			600	1880.00 (Mid)	23.39	0.22
			1177	1908.75 (High)	23.51	0.22

Note:

1. For cellular 850 band, the worst case adopted as maximum output power 24.31dBm, is at CDMA2000 1xEV-DO, 153.6Kbps.
2. For PCS 1900 band, the worst case adopted as maximum output power 23.57dBm, is at CDMA2000 1xRTT, FCH_RC1.

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.

$E_t = R_t + AF$

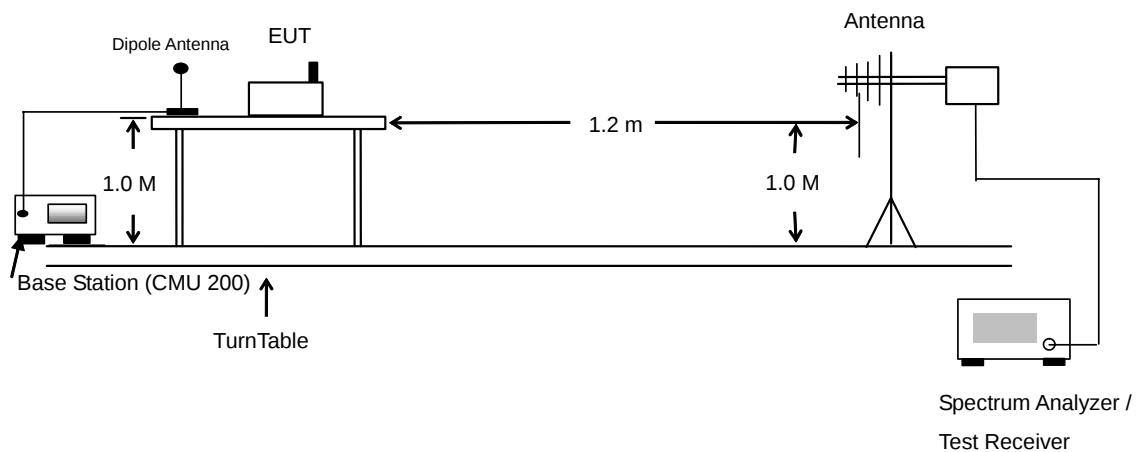
$E_s = R_s + AF$

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	-37.49	-48.12	0.00	-1.08	9.55	0.01
836.52	-36.17	-48.28	0.00	-0.93	11.18	0.01
848.31	-36.49	-48.35	0.00	-0.76	11.10	0.01
Vertical Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBd)	ERP (dBm)	ERP (W)
824.70	-26.27	-47.97	0.00	-1.08	20.62	0.12
836.52	-24.26	-48.01	0.00	-0.93	22.82	0.19
848.31	-24.72	-48.05	0.00	-0.76	22.57	0.18

CDMA2000 Cellular 850 1xEV-DO 153.6Kbps Radiated Power ERP						
Horizontal Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBd)	ERP (dBm)	ERP (W)
824.70	-37.98	-48.12	0.00	-1.08	9.06	0.01
836.52	-36.43	-48.28	0.00	-0.93	10.92	0.01
848.31	-36.92	-48.35	0.00	-0.76	10.67	0.01
Vertical Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBd)	ERP (dBm)	ERP (W)
824.70	-26.39	-47.97	0.00	-1.08	20.50	0.11
836.52	-24.45	-48.01	0.00	-0.93	22.63	0.18
848.31	-24.93	-48.05	0.00	-0.76	22.36	0.17

**CDMA2000 PCS1900 1xRTT FCH_RC1 Radiated Power EIRP****Horizontal Polarization**

Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBi)	EIRP (dBm)	EIRP (W)
1851.25	-31.84	-51.88	0.00	1.96	22.00	0.16
1880.00	-33.05	-52.99	0.00	2.00	21.94	0.16
1908.75	-35.59	-54.28	0.00	1.98	20.67	0.12

Vertical Polarization

Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBi)	EIRP (dBm)	EIRP (W)
1851.25	-31.91	-52.13	0.00	1.96	22.18	0.17
1880.00	-32.31	-53.17	0.00	2.00	22.86	0.19
1908.75	-35.21	-54.13	0.00	1.98	20.90	0.12

CDMA2000 PCS1900 1xEV-DO 153.6Kbps Radiated Power EIRP**Horizontal Polarization**

Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBi)	EIRP (dBm)	EIRP (W)
1851.25	-32.13	-51.88	0.00	1.96	21.71	0.15
1880.00	-33.54	-52.99	0.00	2.00	21.45	0.14
1908.75	-36.23	-54.28	0.00	1.98	20.03	0.10

Vertical Polarization

Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBi)	EIRP (dBm)	EIRP (W)
1851.25	-32.05	-52.13	0.00	1.96	22.04	0.16
1880.00	-32.68	-53.17	0.00	2.00	22.49	0.18
1908.75	-35.17	-54.13	0.00	1.98	20.94	0.12

4.4 Occupied Bandwidth and Band Edge Measurement

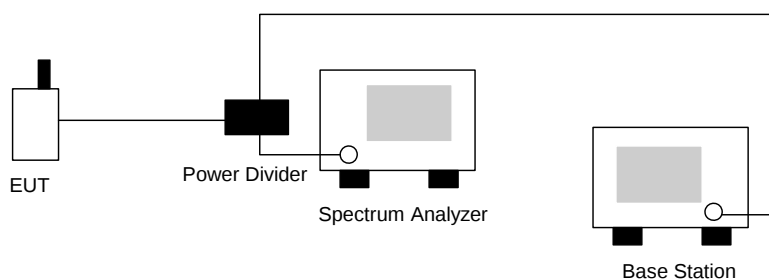
4.4.1 Measurement Instruments

As described in chapter 5 of this test report.

4.4.2 Test Procedure

- The EUT was connected to Spectrum Analyzer and Base Station via power divider.
- The 99% occupied bandwidth and 26 dB Bandwidth of middle channel for the highest RF powers were measured.
- 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.
- 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 1~2

Bands	Test Mode	Test Status	Channel	Frequency (MHz)	Measurement Value (dBm)	Correction Factor (dB)	Band Edge (dBm)
CDMA2000 Cellular 850	1xRTT	FCH_RC1	1013	824.70 (Low)	-20.09	1.06	-19.03
			777	848.31 (High)	-16.07	1.06	-15.01
		FCH_RC3	1013	824.70 (Low)	-19.99	1.06	-18.93
			777	848.31 (High)	-16.14	1.06	-15.08
		FCH+SCH_RC3	1013	824.70 (Low)	-20.42	1.06	-19.36
			777	848.31 (High)	-15.35	1.06	-14.29
	1xEV-DO	9.6Kbps	1013	824.70 (Low)	-19.23	1.06	-18.17
			777	848.31 (High)	-15.57	1.06	-14.51
		38.4Kbps	1013	824.70 (Low)	-18.64	1.06	-17.58
			777	848.31 (High)	-15.15	1.06	-14.09
		153.6Kbps	1013	824.70 (Low)	-18.76	1.06	-17.70
			777	848.31 (High)	-15.84	1.06	-14.78

Note:

*Occupancy Bandwidth = 1276.00KHz

*Correction Factor = $10 \cdot \log(1\% \text{ Occupancy Bandwidth} / \text{Measurement RBW})$
 $= 10 \cdot \log[(0.01 \cdot 1276.00\text{KHz}) / 10\text{KHz}]$
 $= 1.06 \text{ dB}$

*Band Edge = Measurement Value + Correction Factor

• Mode 3~4

Bands	Test Mode	Test Status	Channel	Frequency (MHz)	Measurement Value (dBm)	Correction Factor (dB)	Band Edge (dBm)
CDMA2000 PCS 1900	1xRTT	FCH_RC1	25	1851.25 (Low)	-29.86	1.06	-28.80
			1177	1908.75 (High)	-31.76	1.06	-30.70
		FCH_RC3	25	1851.25 (Low)	-30.15	1.06	-29.09
			1177	1908.75 (High)	-31.76	1.06	-30.70
		FCH+SCH_RC3	25	1851.25 (Low)	-30.50	1.06	-29.44
			1177	1908.75 (High)	-30.86	1.06	-29.80
	1xEV-DO	9.6Kbps	25	1851.25 (Low)	-31.71	1.06	-30.67
			1177	1908.75 (High)	-32.51	1.06	-31.47
		38.4Kbps	25	1851.25 (Low)	-31.65	1.06	-30.61
			1177	1908.75 (High)	-32.76	1.06	-31.72
		153.6Kbps	25	1851.25 (Low)	-32.01	1.06	-30.97
			1177	1908.75 (High)	-33.00	1.06	-31.96

Note:

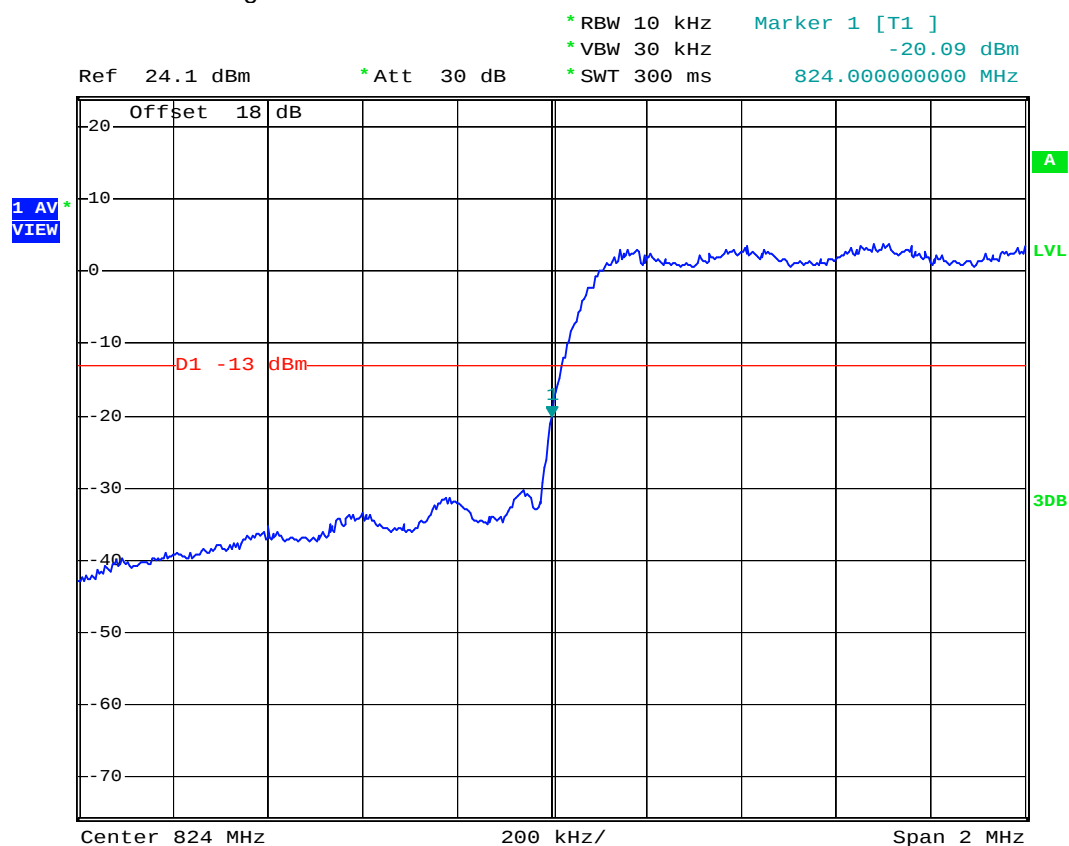
*Occupancy Bandwidth = 1276.00KHz

*Correction Factor = $10 \cdot \log(1\% \text{ Occupancy Bandwidth} / \text{Measurement RBW})$
 $= 10 \cdot \log[(0.01 \cdot 1276.00\text{KHz}) / 10\text{KHz}]$
 $= 1.06 \text{ dB}$

*Band Edge = Measurement Value + Correction Factor

**4.4.5 Test Result**

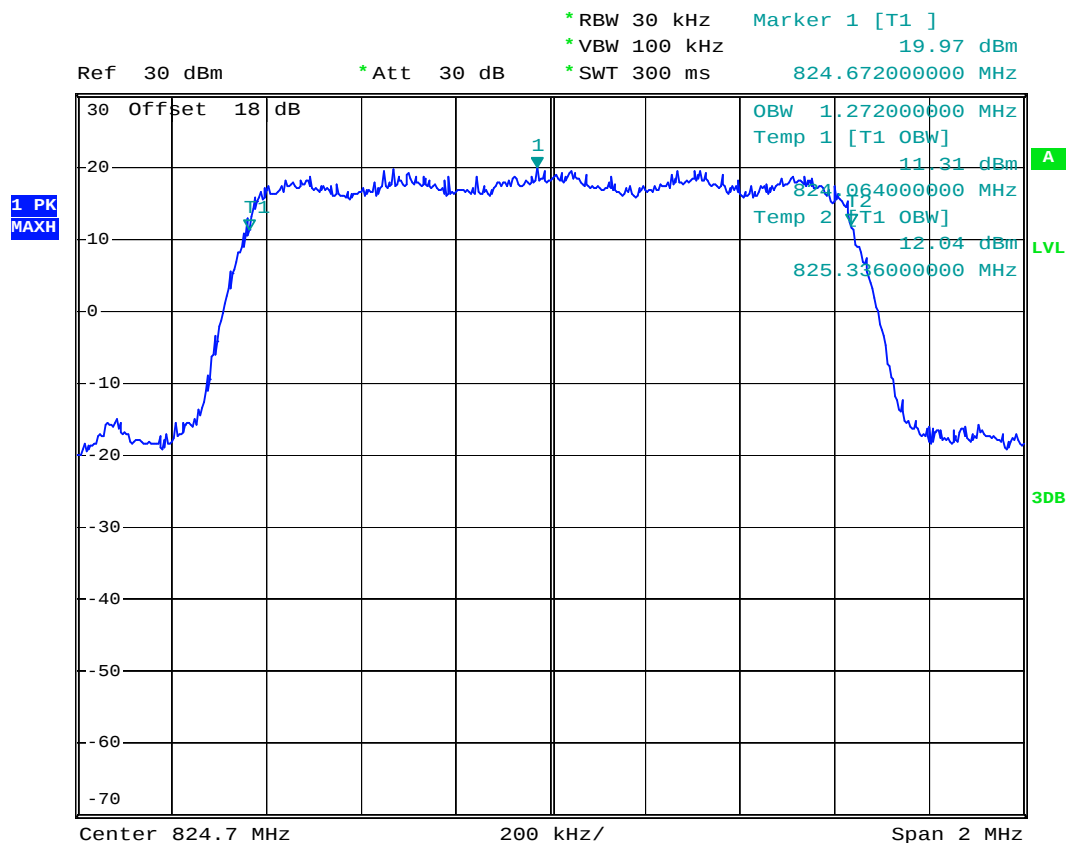
- Mode 1
- Test Mode : CDMA2000 Cellular 850 Band CH1013_FCH_RC1 Lower Band Edge for 1xRTT
- Power State : High



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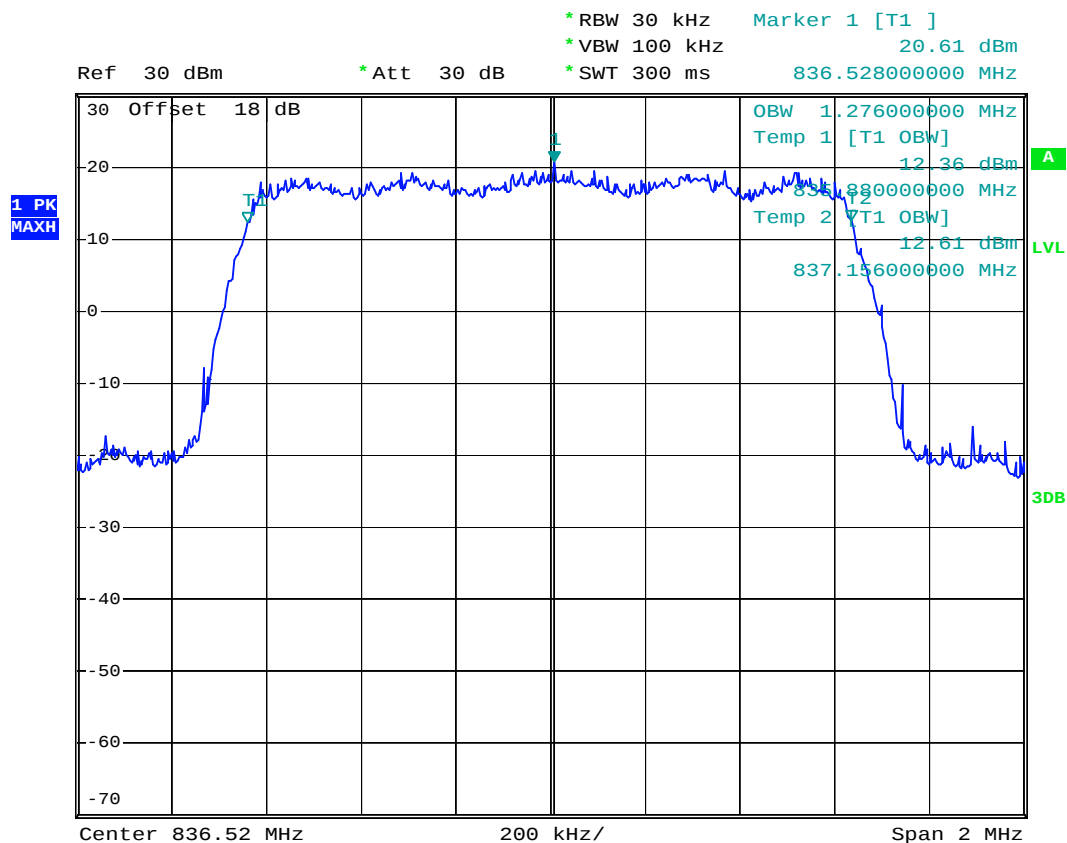
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- Power State : High



Date: 2.JAN.2008 23:34:50



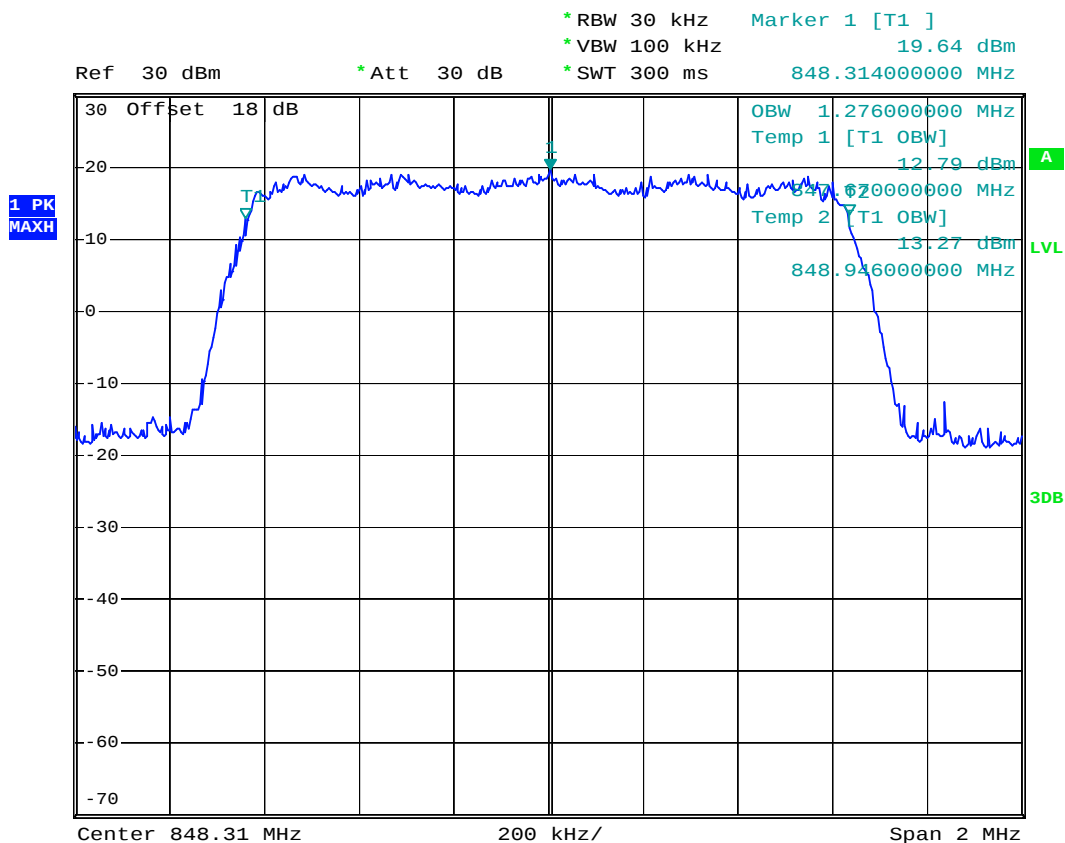
- Test Mode : CDMA2000 Cellular 850 CH384_FCH_RC1 99% Occupied Bandwidth for 1xRTT
- Power State : High



Date: 2.JAN.2008 23:37:36



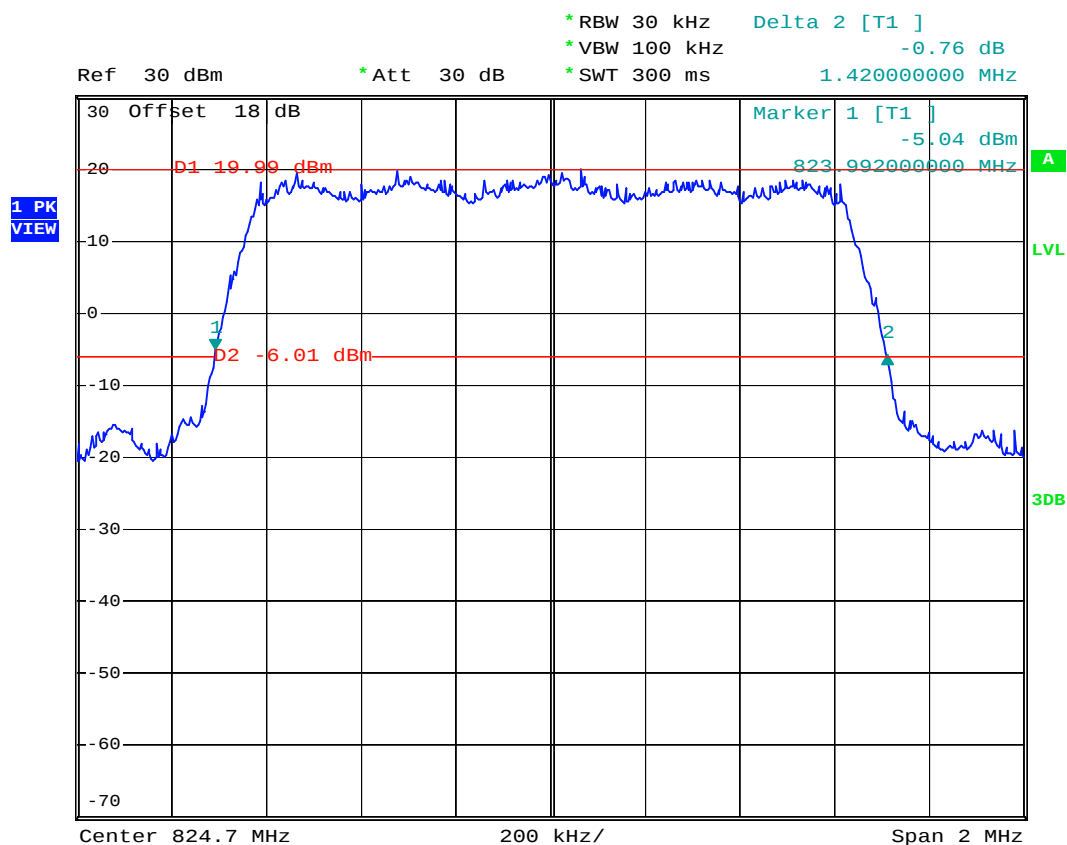
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- Power State : High



Date: 2.JAN.2008 23:33:49



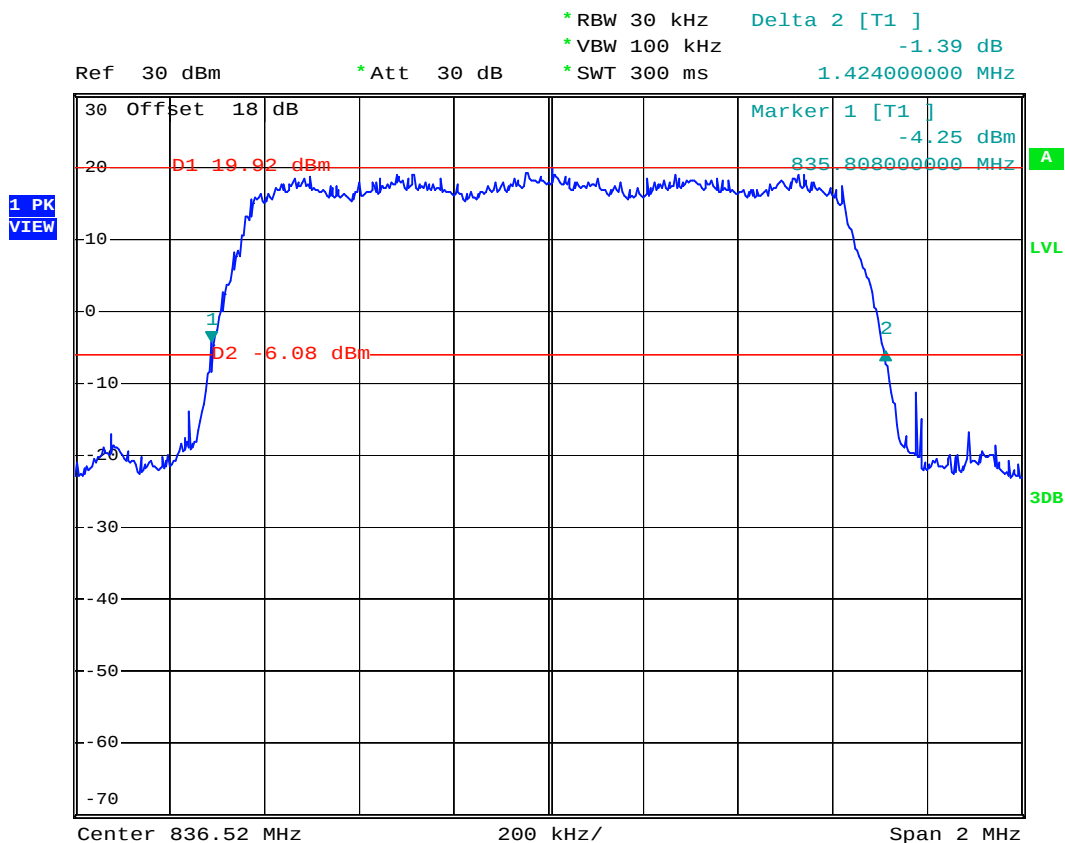
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- Power State : High



Date: 2.JAN.2008 23:15:59



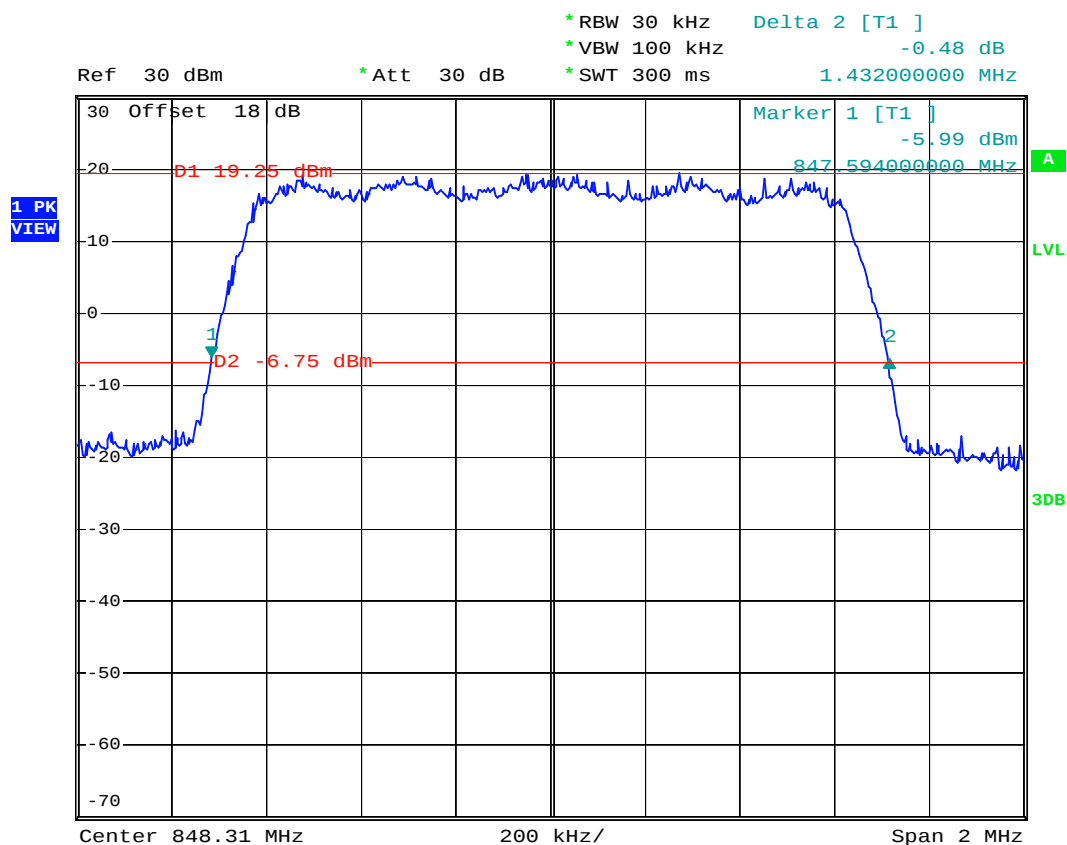
- Test Mode : CDMA2000 Cellular 850 CH384_FCH_RC1 26 dB Bandwidth for 1xRTT
- Power State : High



Date: 2.JAN.2008 23:19:33



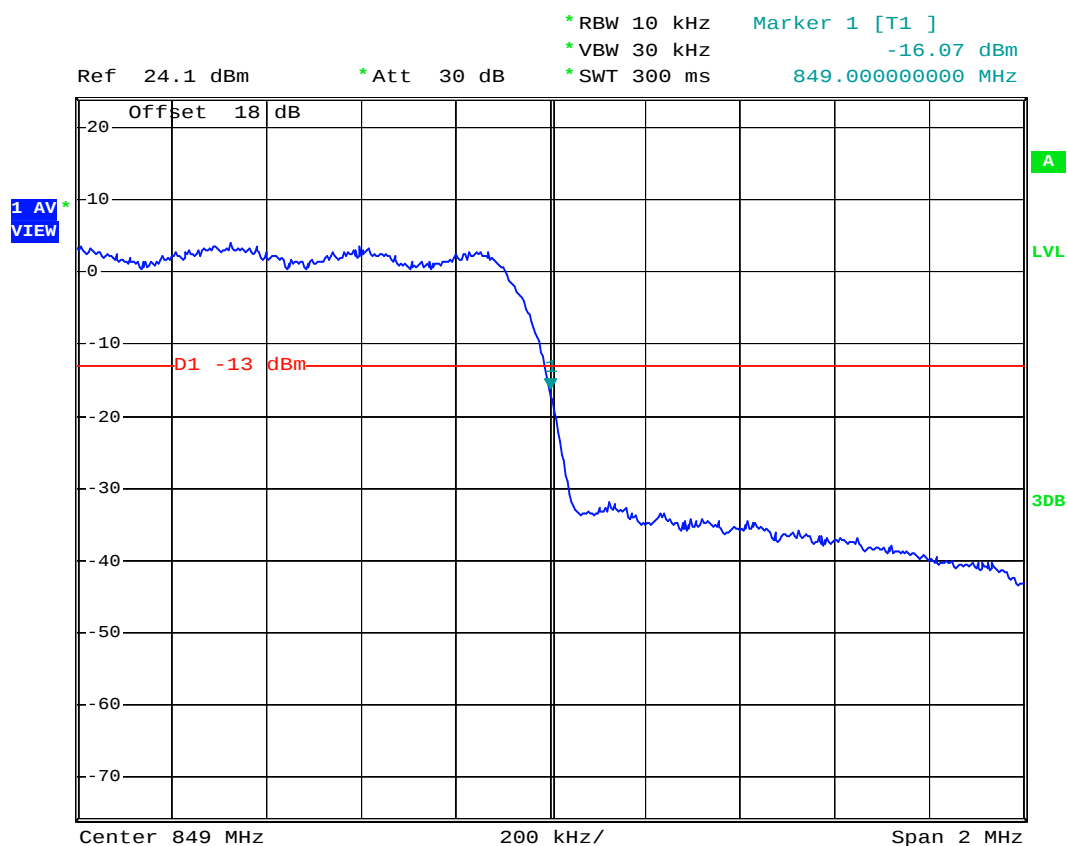
- Test Mode : CDMA2000 Cellular 850 CH777_FCH_RC1 26 dB Bandwidth for 1xRTT
- Power State : High



Date: 2.JAN.2008 23:18:16



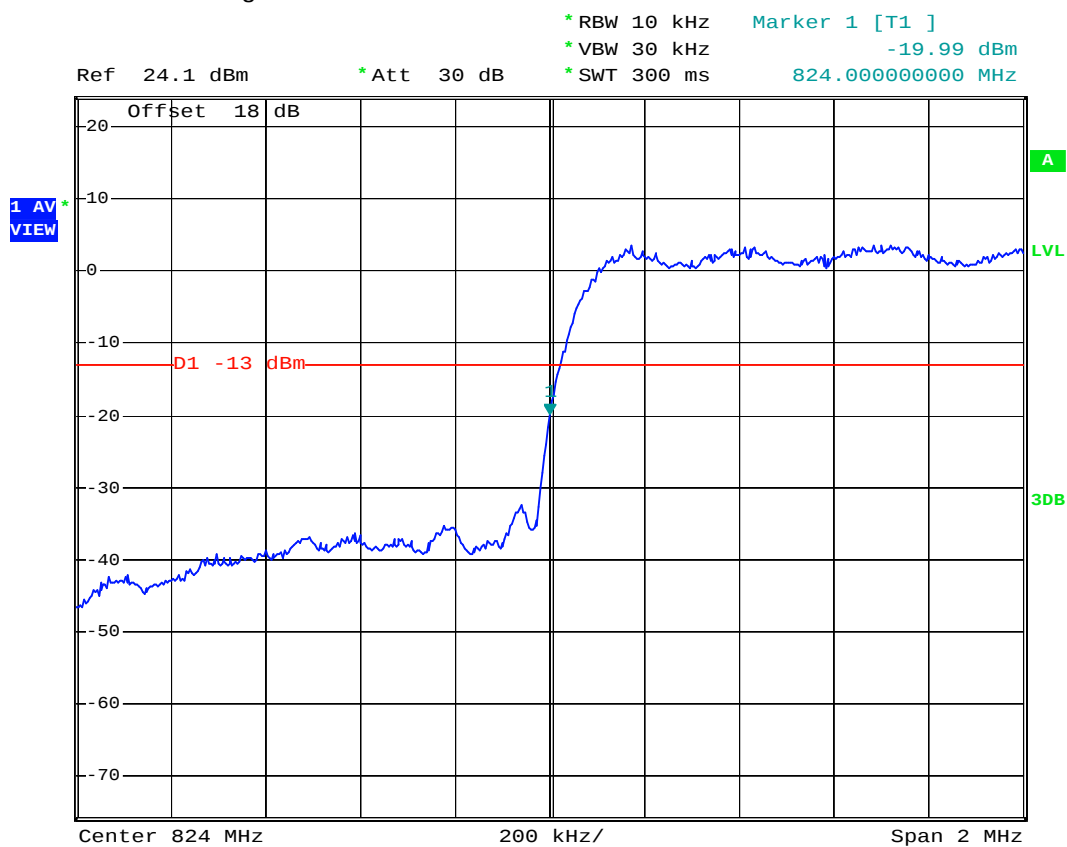
- Test Mode : CDMA2000 Cellular 850 CH777_FCH_RC1 Higher Band Edge for 1xRTT
- Power State : High



Date: 2.JAN.2008 23:45:03



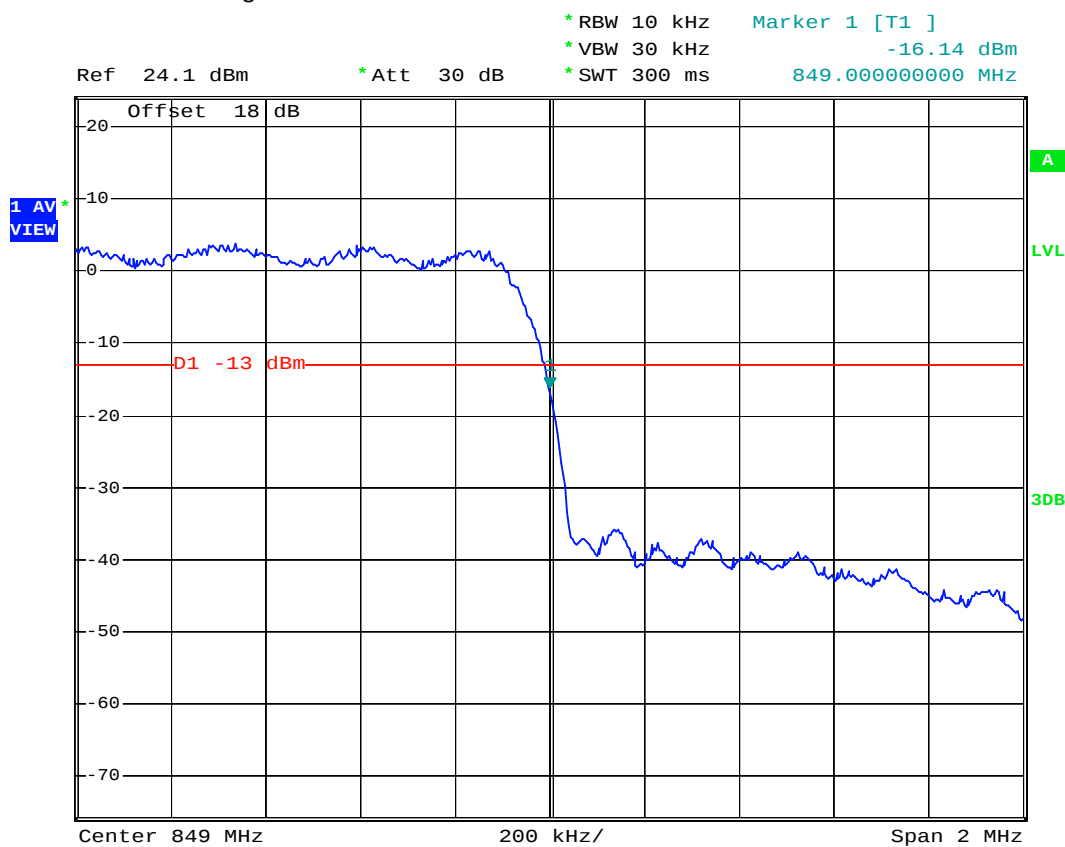
- Test Mode : CDMA2000 Cellular 850 Band CH1013_FCH_RC3 Lower Band Edge for 1xRTT
- Power State : High



Date: 2.JAN.2008 23:48:09



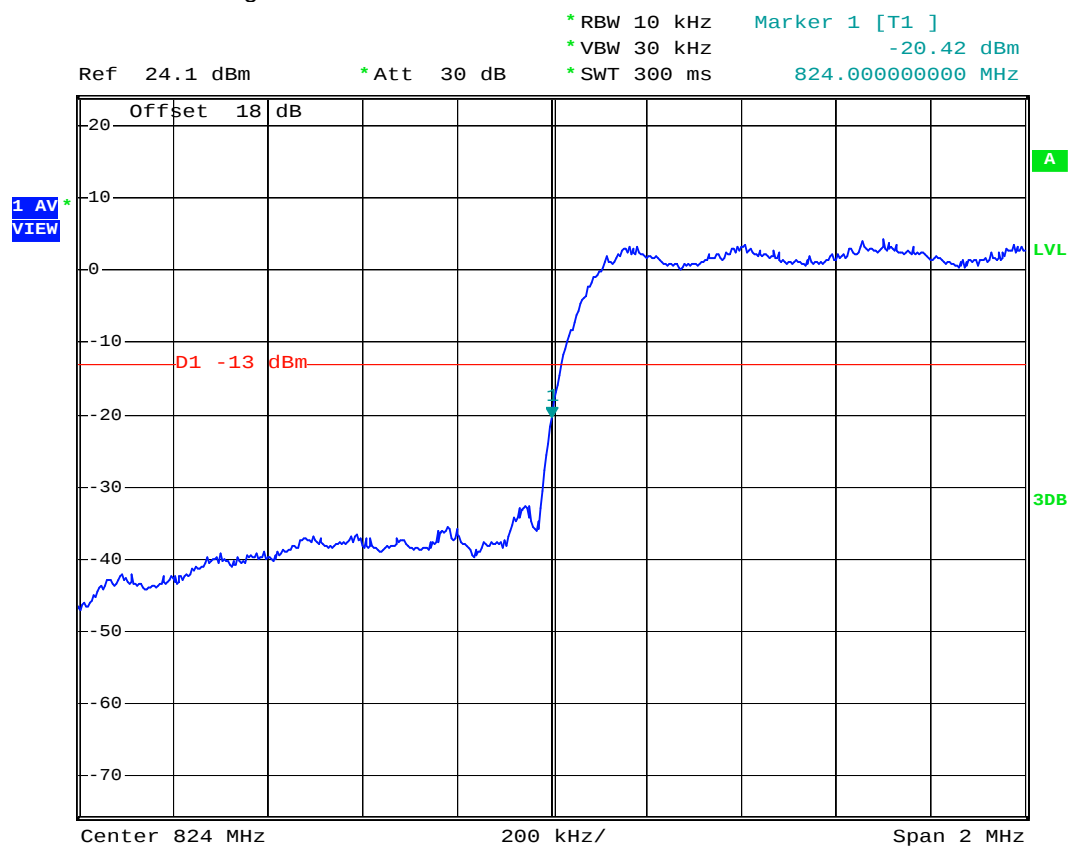
- Test Mode : CDMA2000 Cellular 850 CH777_FCH_RC3 Higher Band Edge for 1xRTT
- Power State : High



Date: 2.JAN.2008 23:46:36



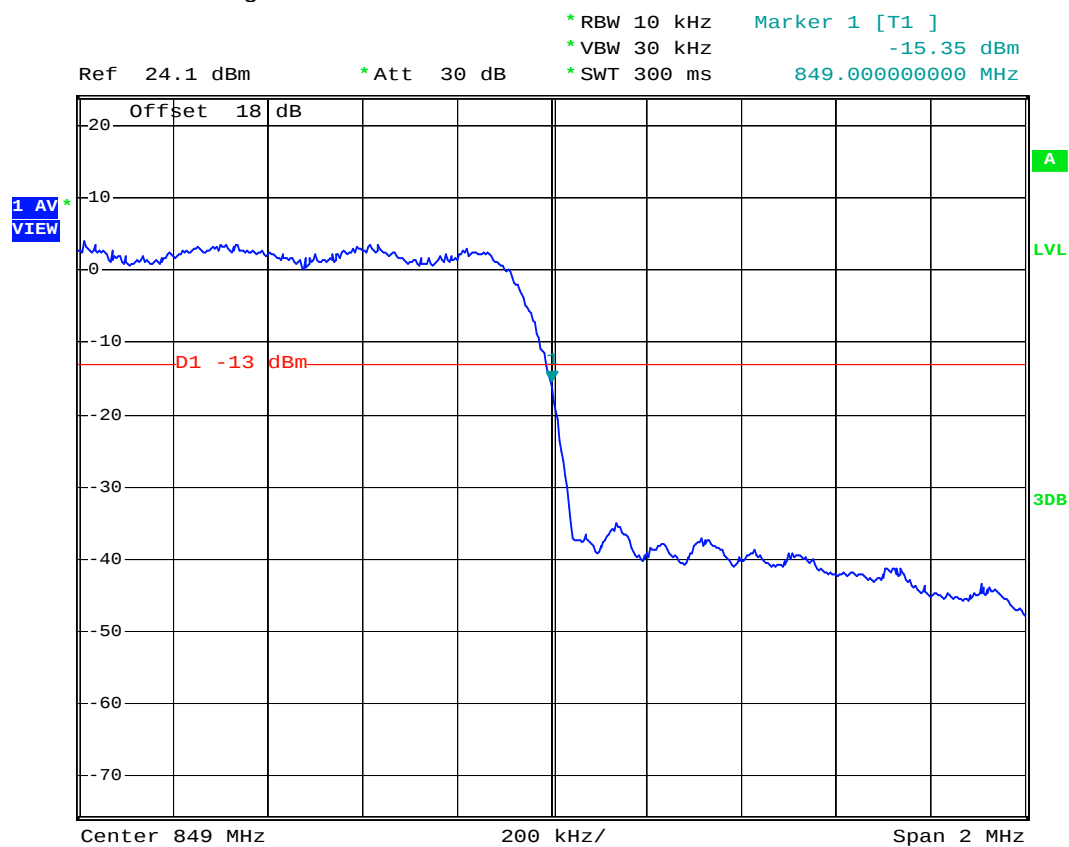
- Test Mode : CDMA2000 Cellular 850 Band CH1013_FCH+SCH_RC3 Lower Band Edge for 1xRTT
- Power State : High



Date: 2.JAN.2008 23:51:01



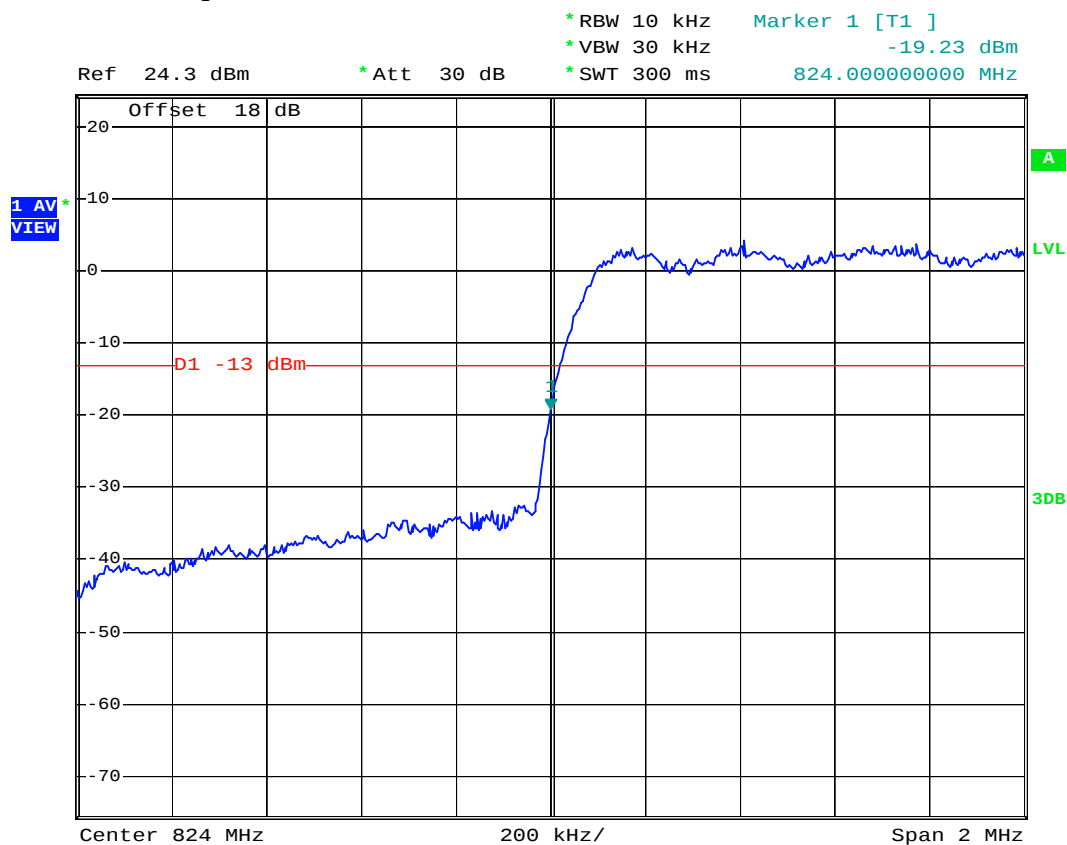
- Test Mode : CDMA2000 Cellular 850 CH777_FCH+SCH_RC3 Higher Band Edge for 1xRTT
- Power State : High



Date: 2.JAN.2008 23:52:34



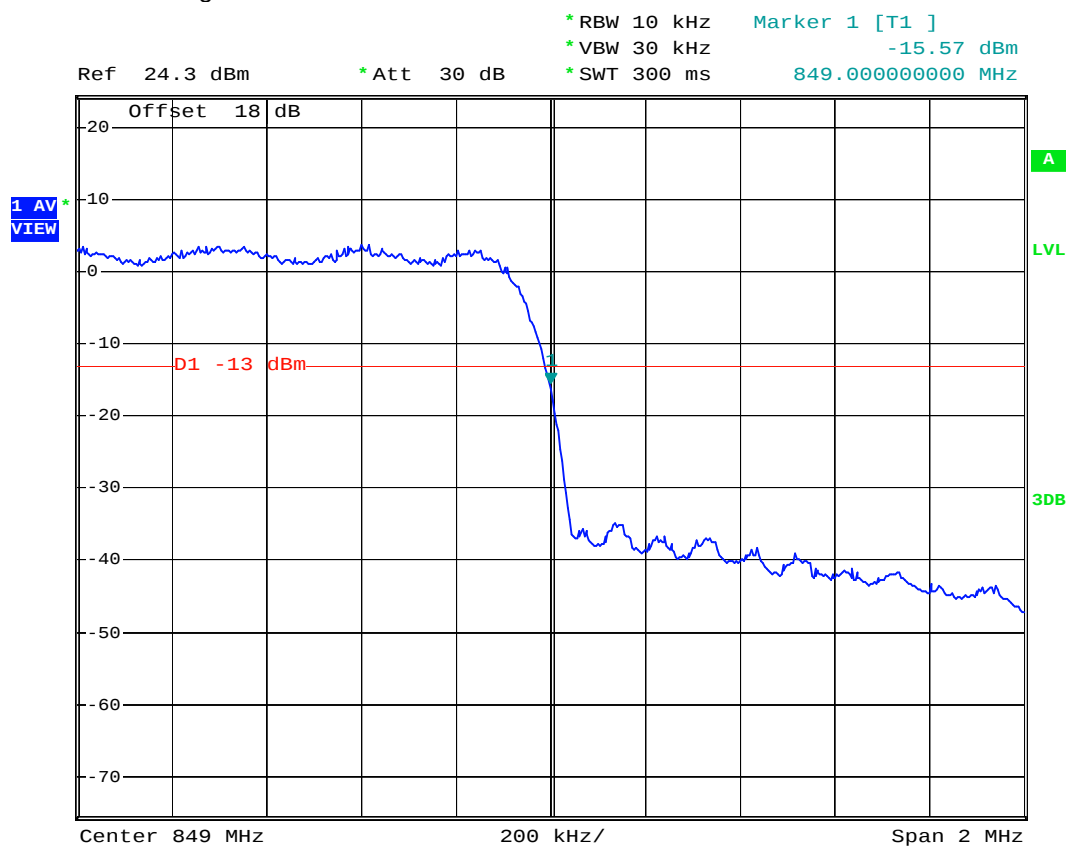
- Mode 2
- Test Mode : CDMA2000 Cellular 850 CH1013_9.6Kbps Lower Band Edge for 1xEV-DO
- Power State : High



Date: 3.JAN.2008 23:34:06



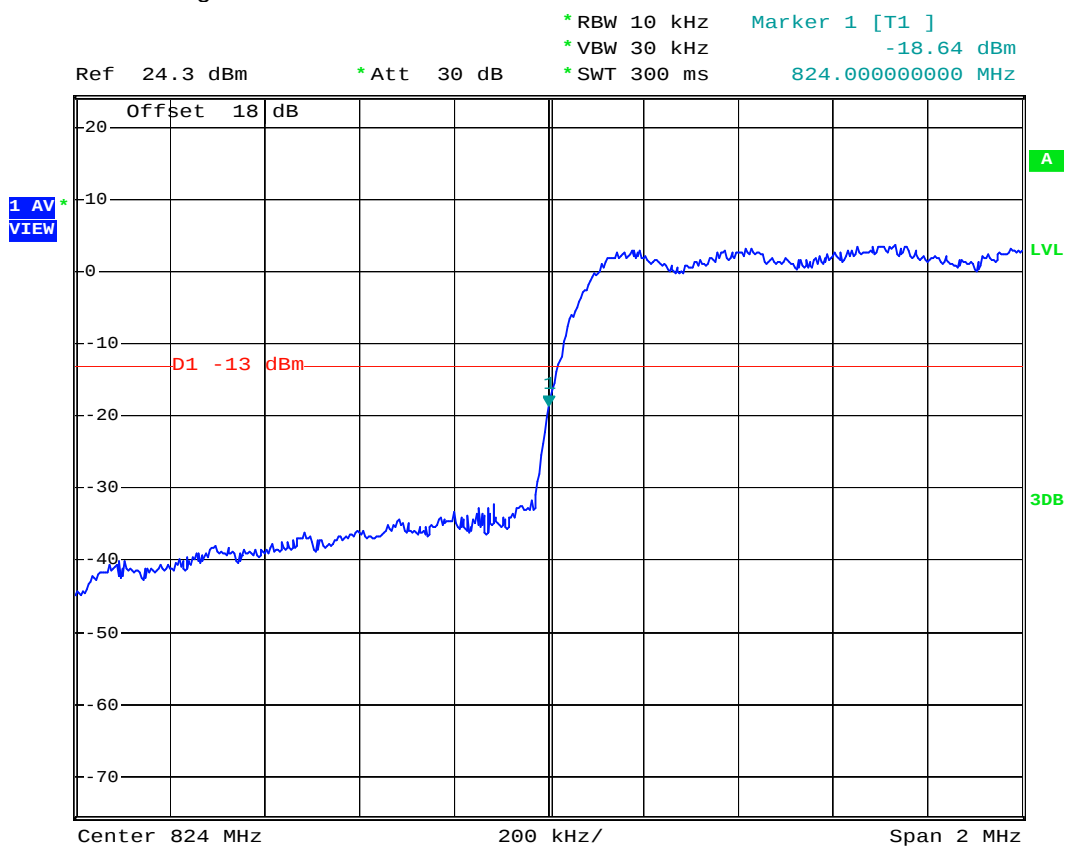
- Test Mode : CDMA2000 Cellular 850 CH777_9.6Kbps Higher Band Edge for 1xEV-DO
- Power State : High



Date: 3.JAN.2008 23:37:35



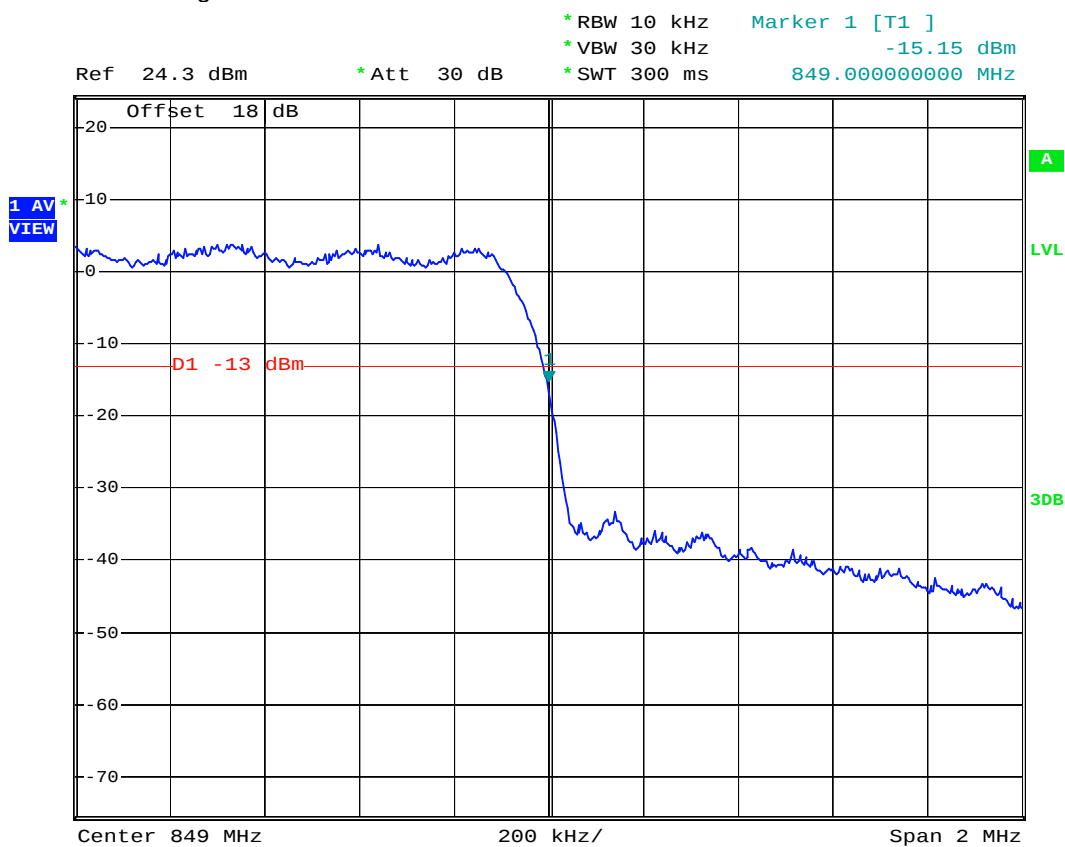
- Test Mode : CDMA2000 Cellular 850 CH1013_38.4Kbps Lower Band Edge for 1xEV-DO
- Power State : High



Date: 3.JAN.2008 23:33:03



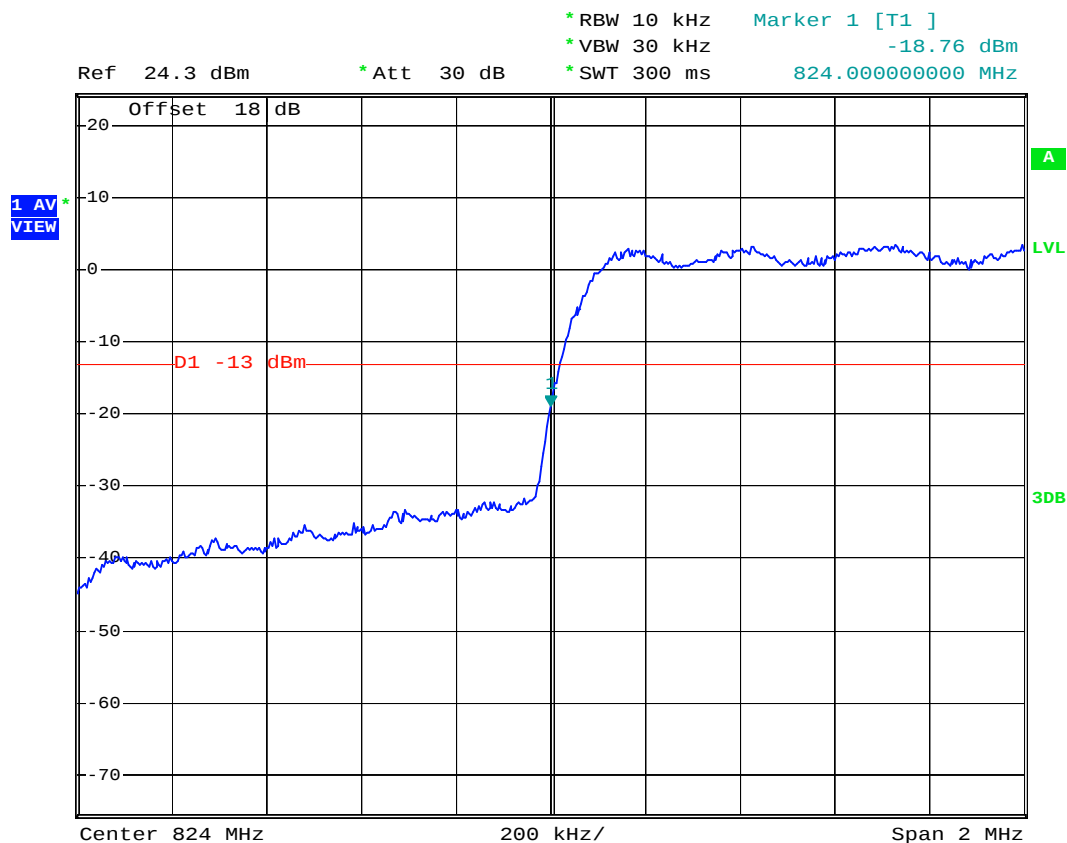
- Test Mode : CDMA2000 Cellular 850 CH777_38.4Kbps Higher Band Edge for 1xEV-DO
- Power State : High



Date: 3.JAN.2008 23:30:32



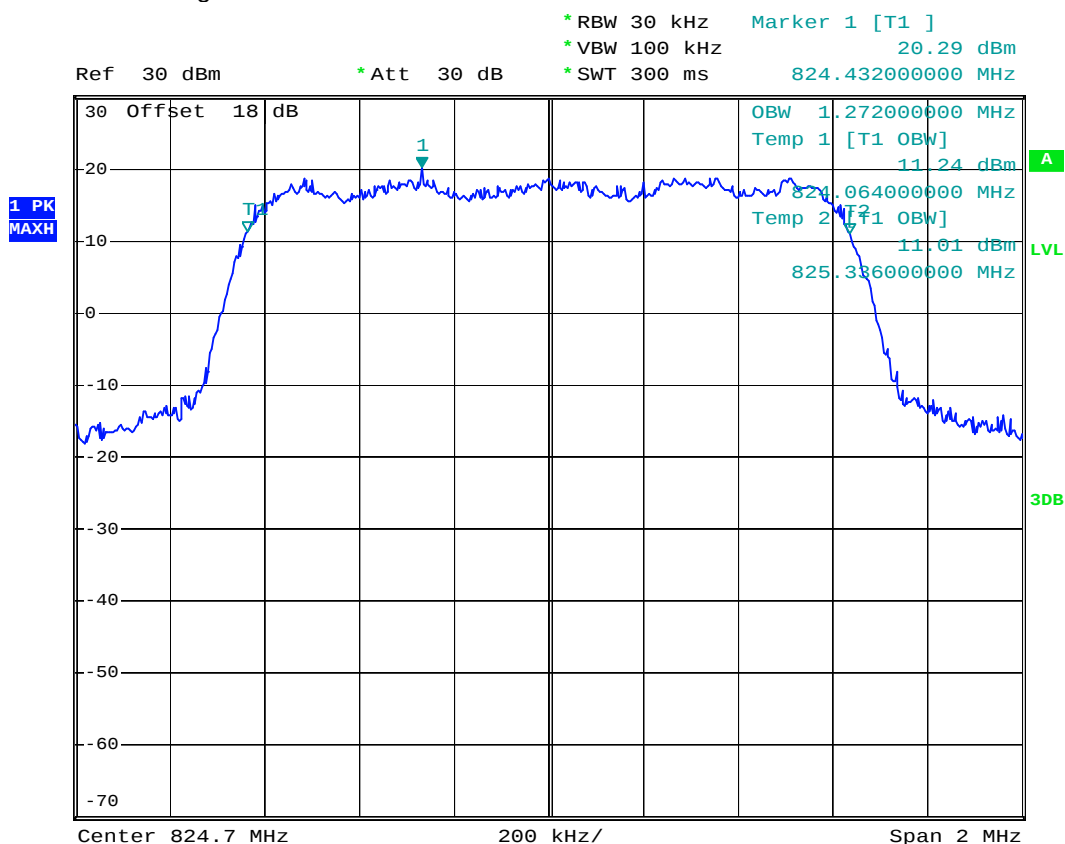
- Test Mode : CDMA2000 Cellular 850 CH1013_153.6Kbps Lower Band Edge for 1xEV-DO
- Power State : High



Date: 3.JAN.2008 23:25:51



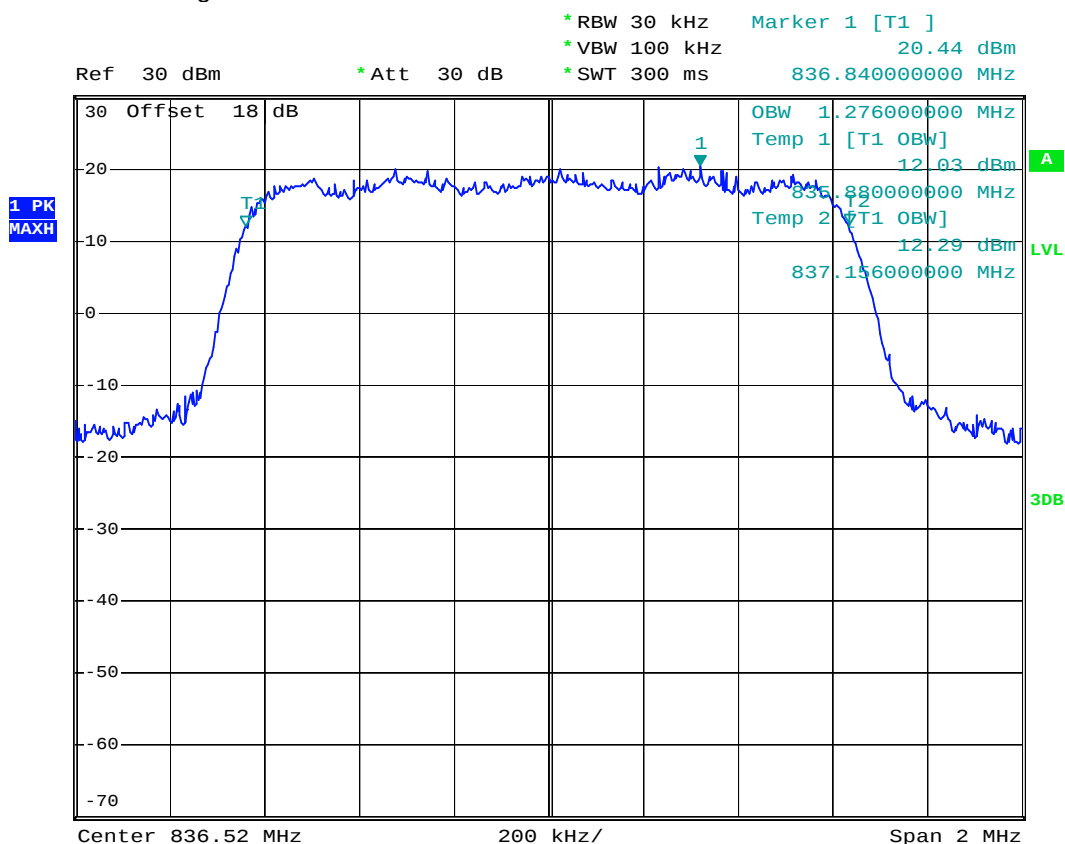
- Test Mode : CDMA2000 Cellular 850 CH1013_153.6Kbps 99% Occupied Bandwidth for 1xEV-DO
- Power State : High



Date: 3.JAN.2008 23:04:09



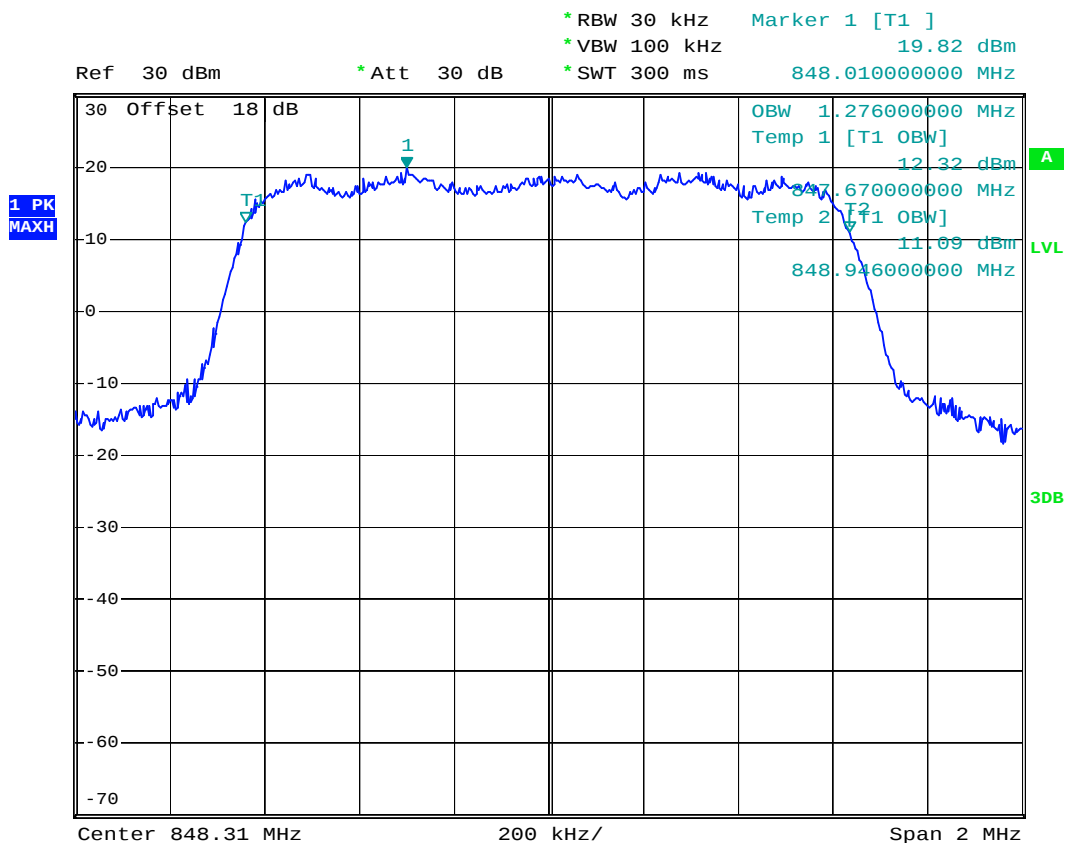
- Test Mode : CDMA2000 Cellular 850 CH384_153.6Kbps 99% Occupied Bandwidth for 1xEV-DO
- Power State : High



Date: 3.JAN.2008 23:06:08



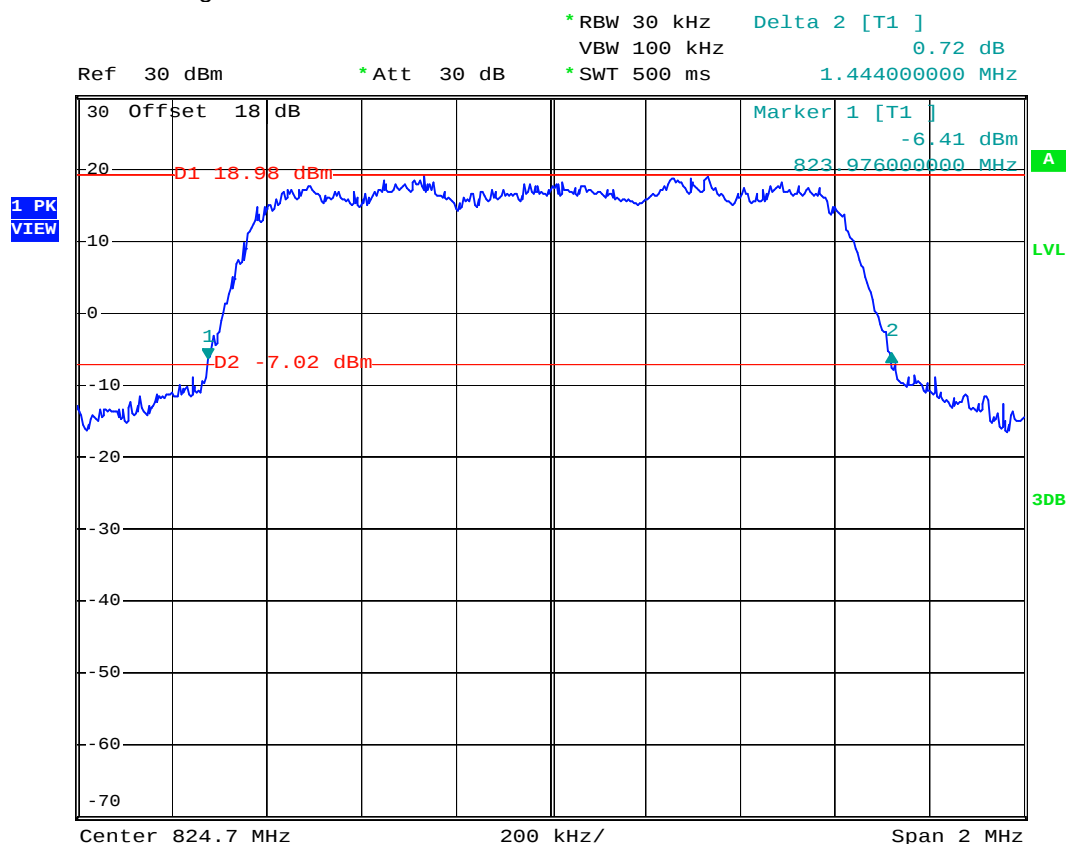
- Test Mode : CDMA2000 Cellular 850 CH777_153.6Kbps 99% Occupied Bandwidth for 1xEV-DO
- Power State : High



Date: 3.JAN.2008 23:05:08



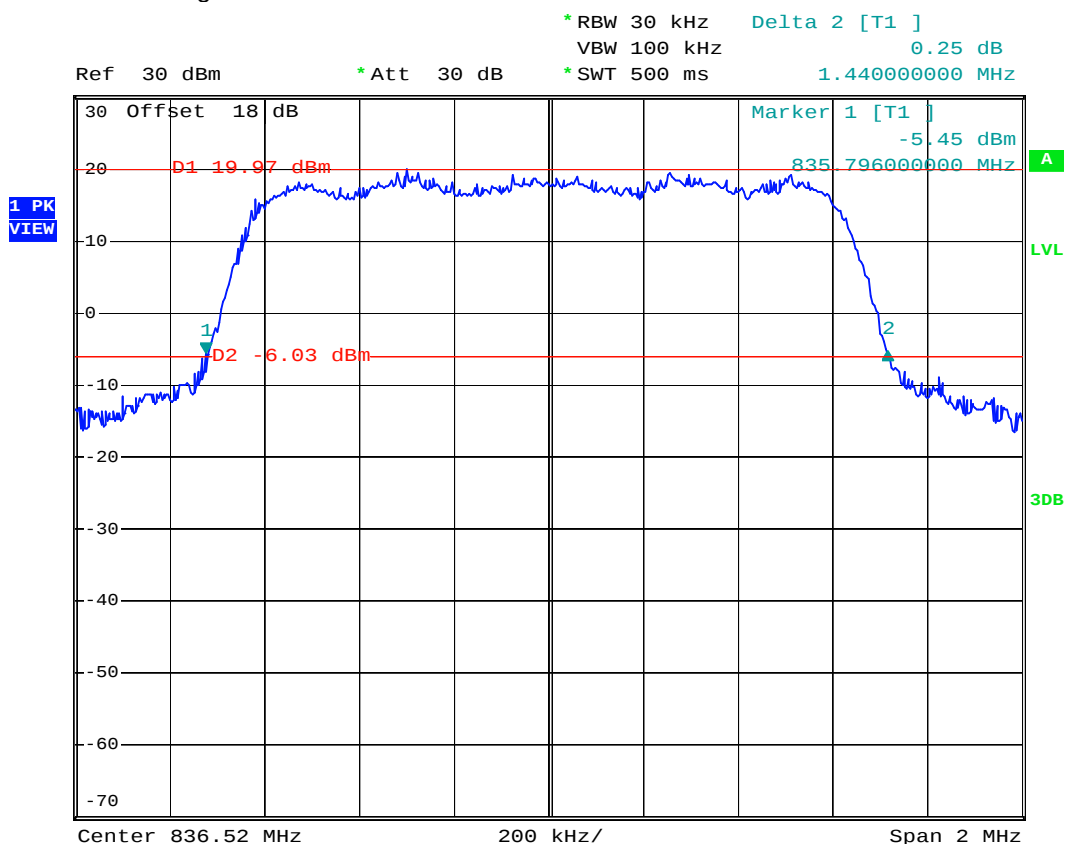
- Test Mode : CDMA2000 Cellular 850 CH1013_153.6Kbps 26 dB Bandwidth for 1xEV-DO
- Power State : High



Date: 3.JAN.2008 22:54:36



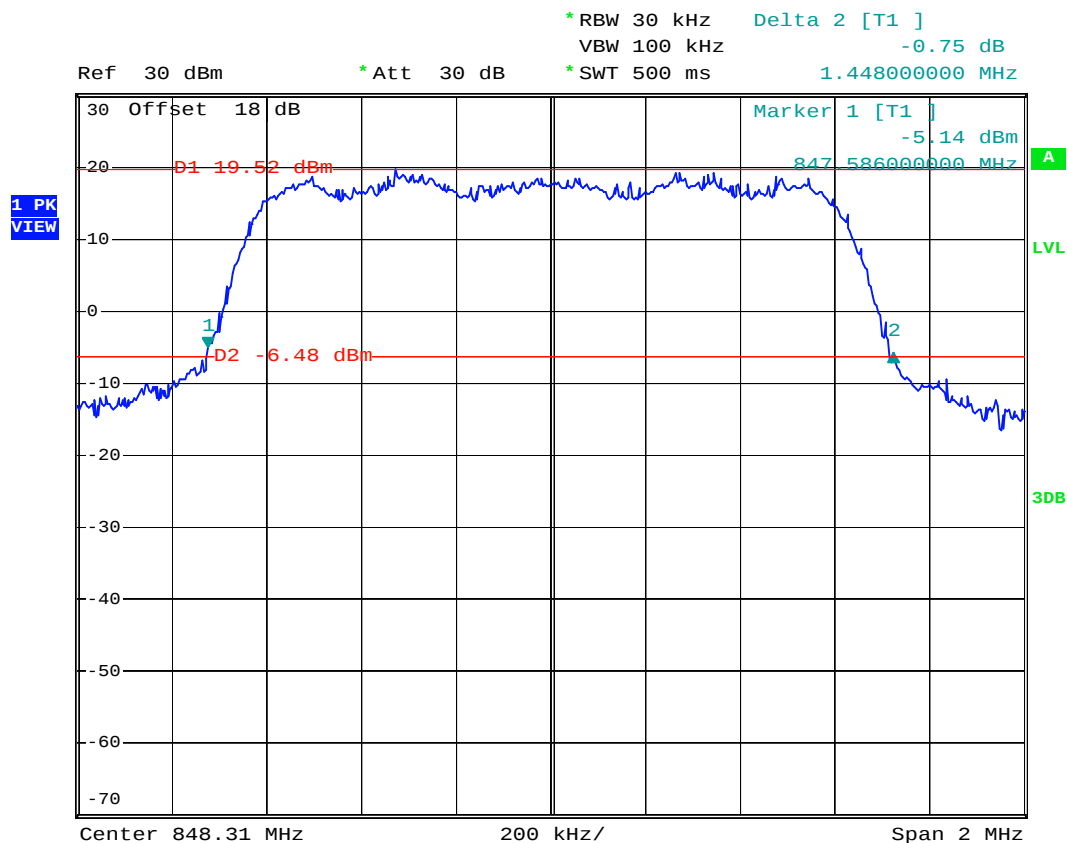
- Test Mode : CDMA2000 Cellular 850 CH384_153.6Kbps 26 dB Bandwidth for 1xEV-DO
- Power State : High



Date: 3.JAN.2008 22:56:42



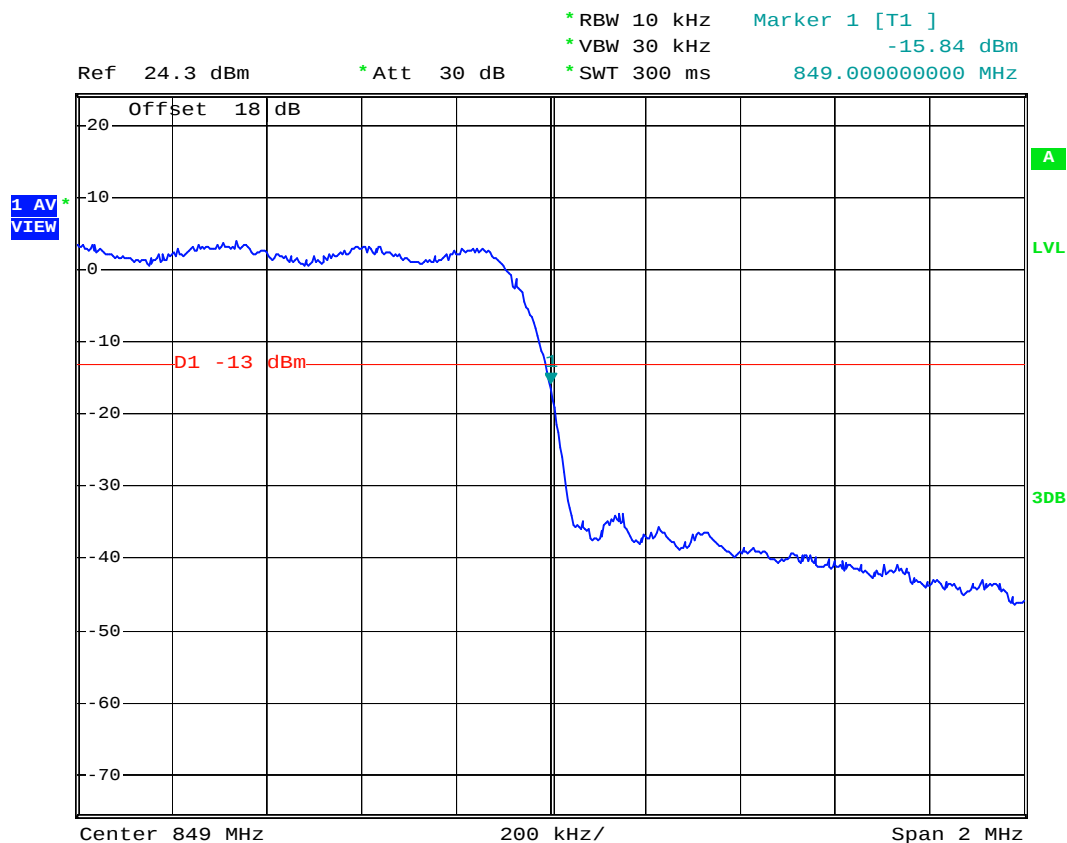
- Test Mode : CDMA2000 Cellular 850 CH777_153.6Kbps 26 dB Bandwidth for 1xEV-DO
- Power State : High



Date: 3.JAN.2008 22:59:26



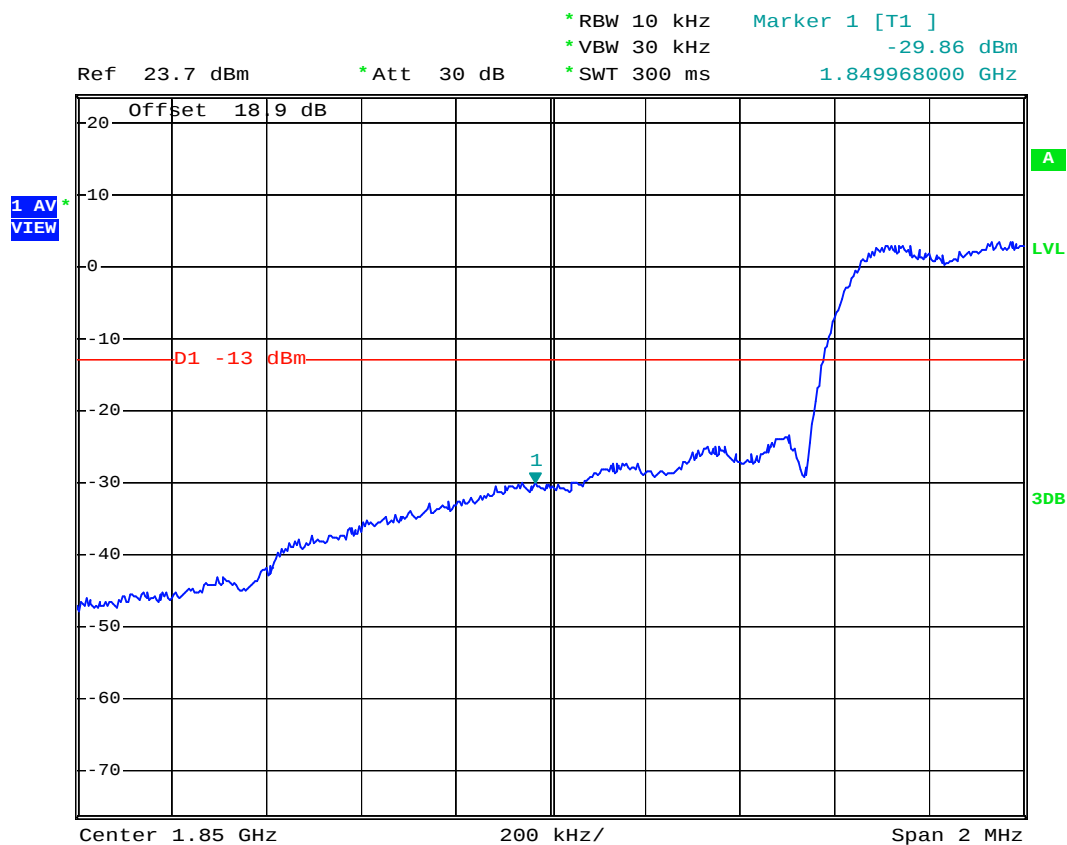
- Test Mode : CDMA2000 Cellular 850 CH777_153.6Kbps Higher Band Edge for 1xEV-DO
- Power State : High



Date: 3.JAN.2008 23:28:52



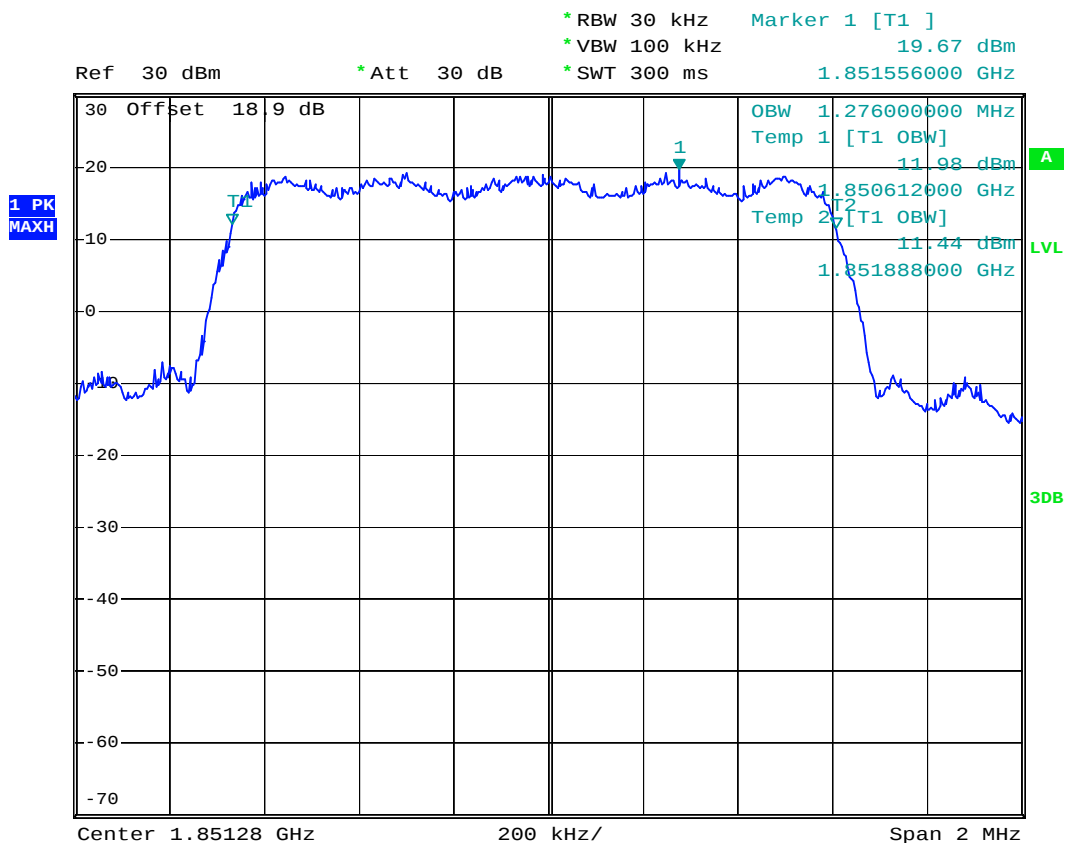
- Mode 3
- Test Mode : CDMA2000 PCS 1900 Band CH25_FCH_RC1 Lower Band Edge for 1xRTT
- Power State : High



Date: 3.JAN.2008 00:18:24



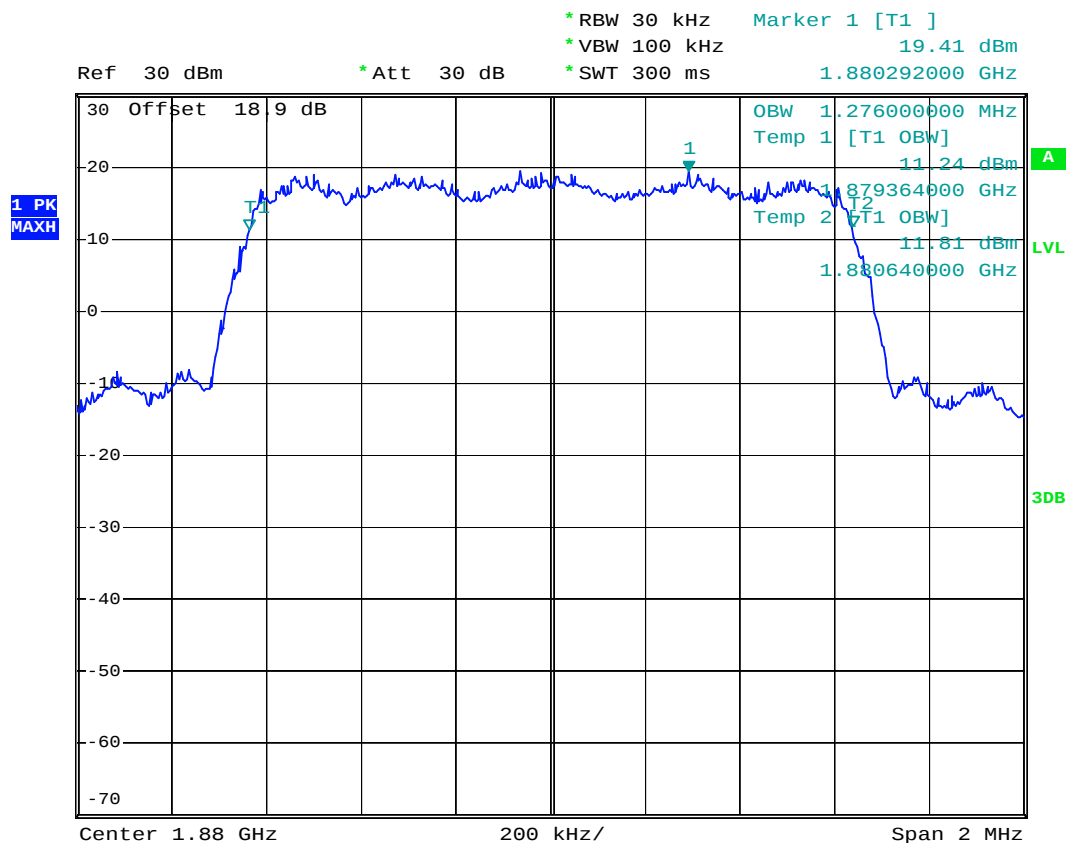
- Test Mode : CDMA2000 PCS 1900 Band CH25_FCH_RC1 99% Occupied Bandwidth for 1xRTT
- Power State : High



Date: 3.JAN.2008 00:11:34



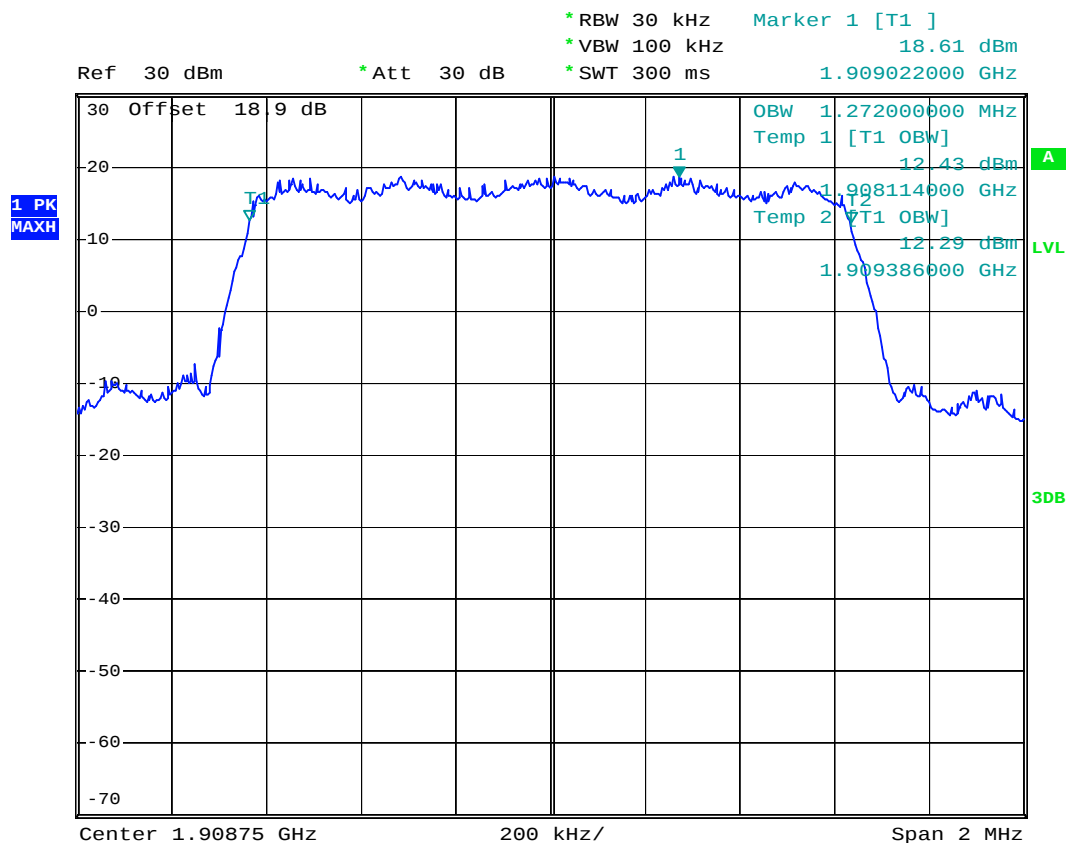
- Test Mode : CDMA2000 PCS 1900 Band CH600_FCH_RC1 99% Occupied Bandwidth for 1xRTT
- Power State : High



Date: 3.JAN.2008 00:12:01



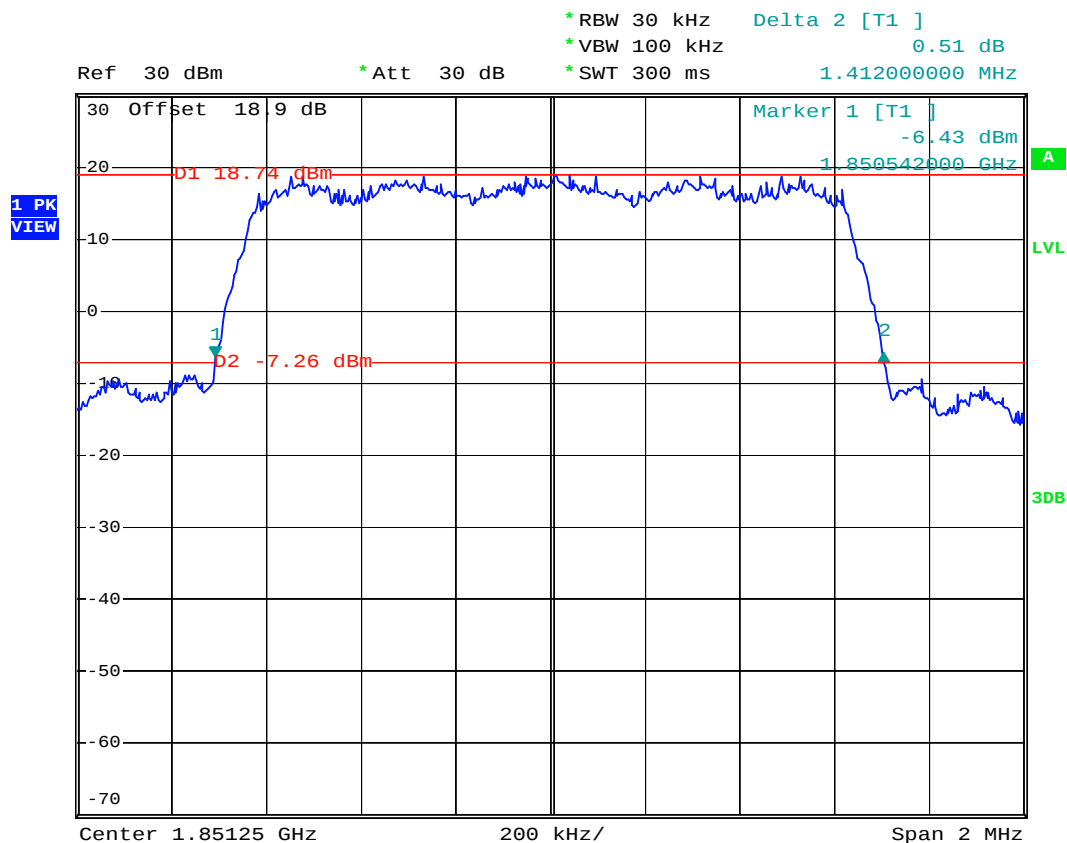
- Test Mode : CDMA2000 PCS 1900 Band CH1175_FCH_RC1 99% Occupied Bandwidth for 1xRTT
- Power State : High



Date: 3.JAN.2008 00:10:36



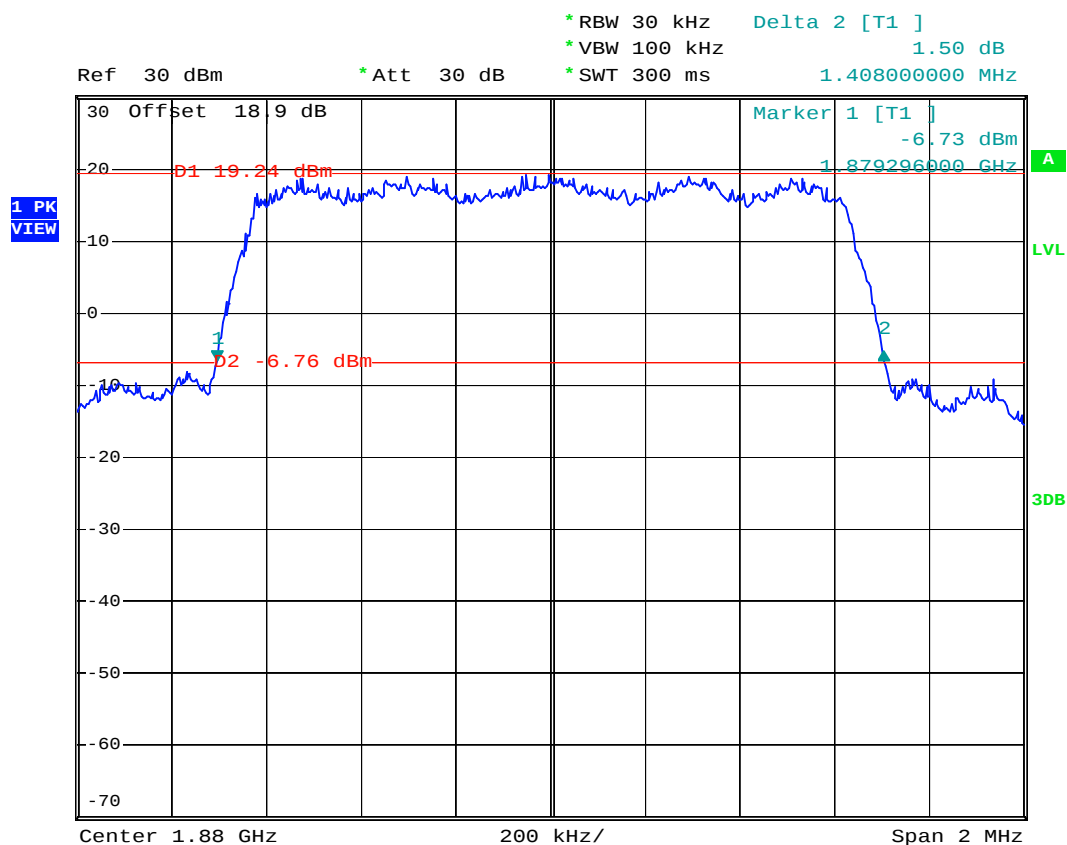
- Test Mode : CDMA2000 PCS 1900 Band CH25_FCH_RC1 26 dB Bandwidth for 1xRTT
- Power State : High



Date: 3.JAN.2008 00:03:42



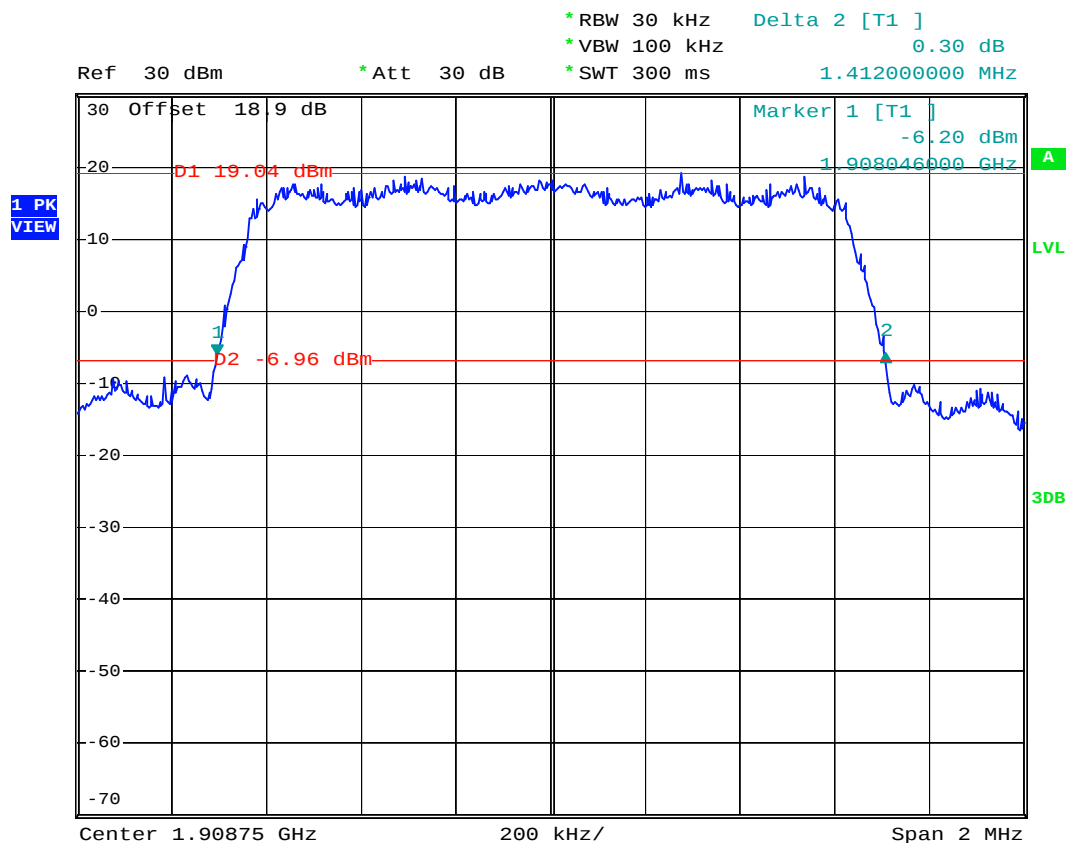
- Test Mode : CDMA2000 PCS 1900 Band CH600_FCH_RC1 26 dB Bandwidth for 1xRTT
- Power State : High



Date: 3.JAN.2008 00:04:48



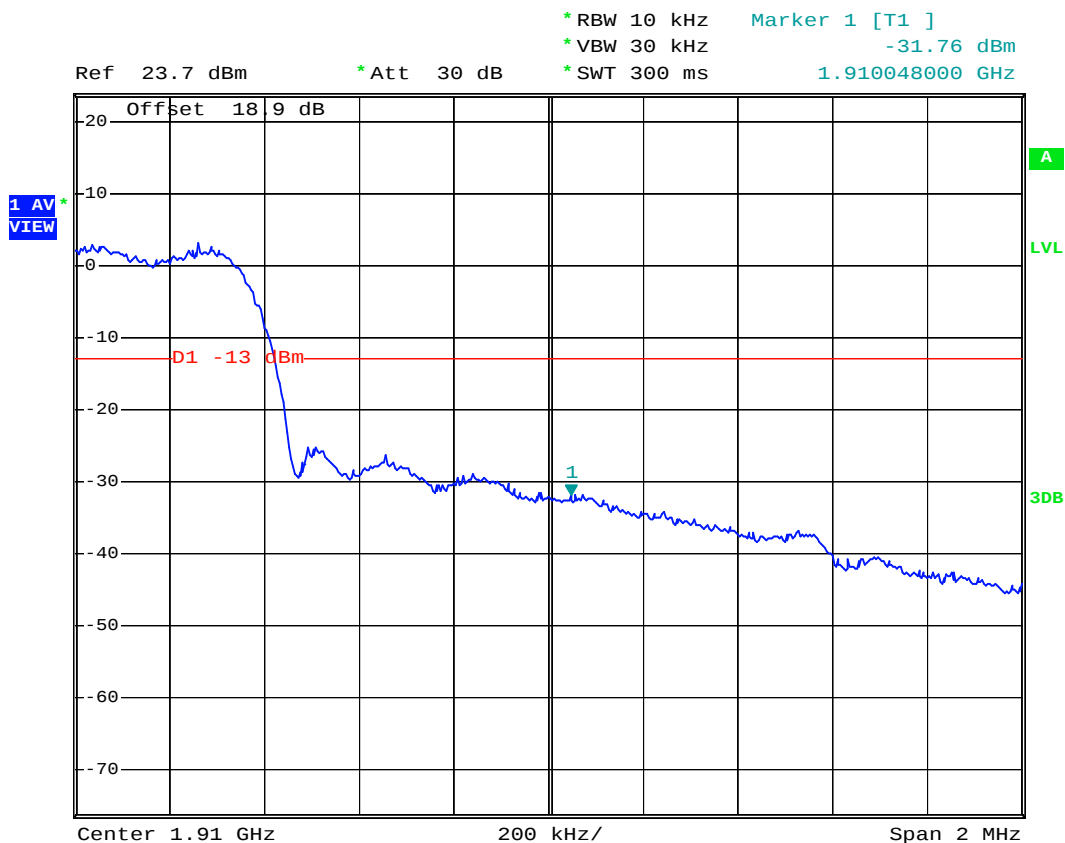
- Test Mode : CDMA2000 CS 1900 Band CH1175_FCH_RC1 26 dB Bandwidth for 1xRTT
- Power State : High



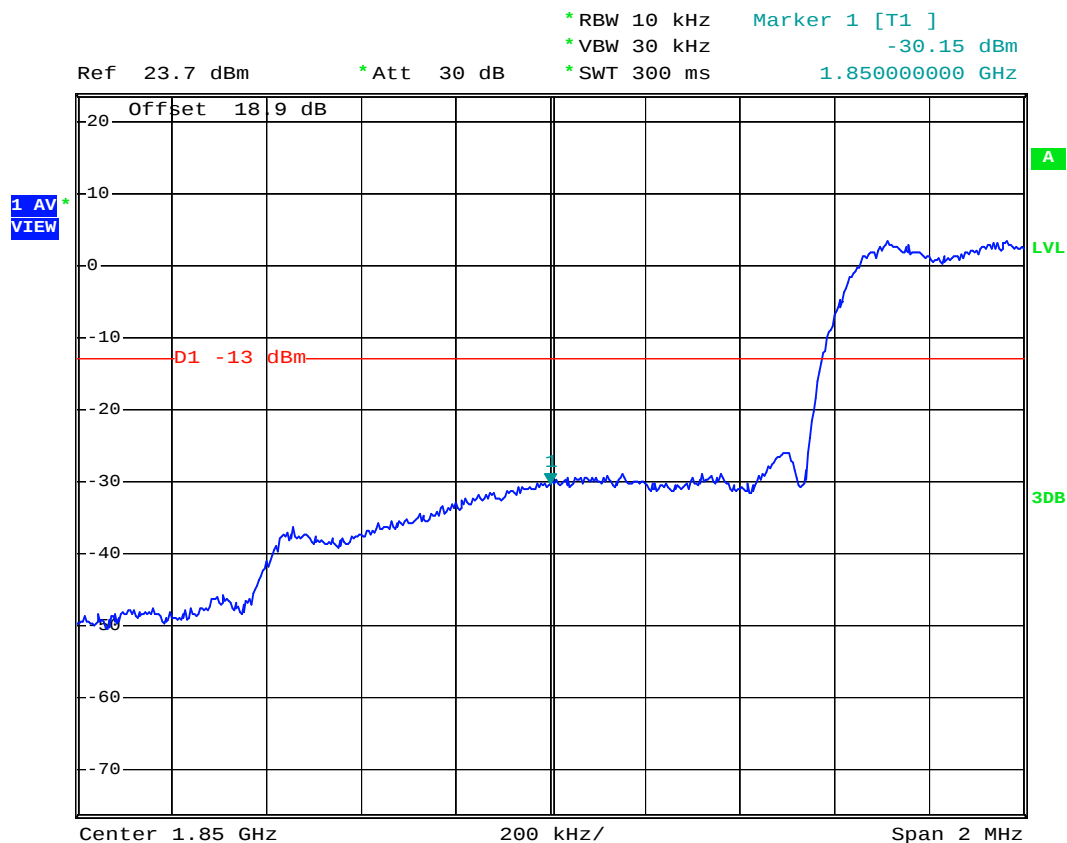
Date: 3.JAN.2008 00:02:33



- Test Mode : CDMA2000 PCS 1900 Band CH1175_FCH_RC1 Higher Band Edge for 1xRTT
- Power State : High



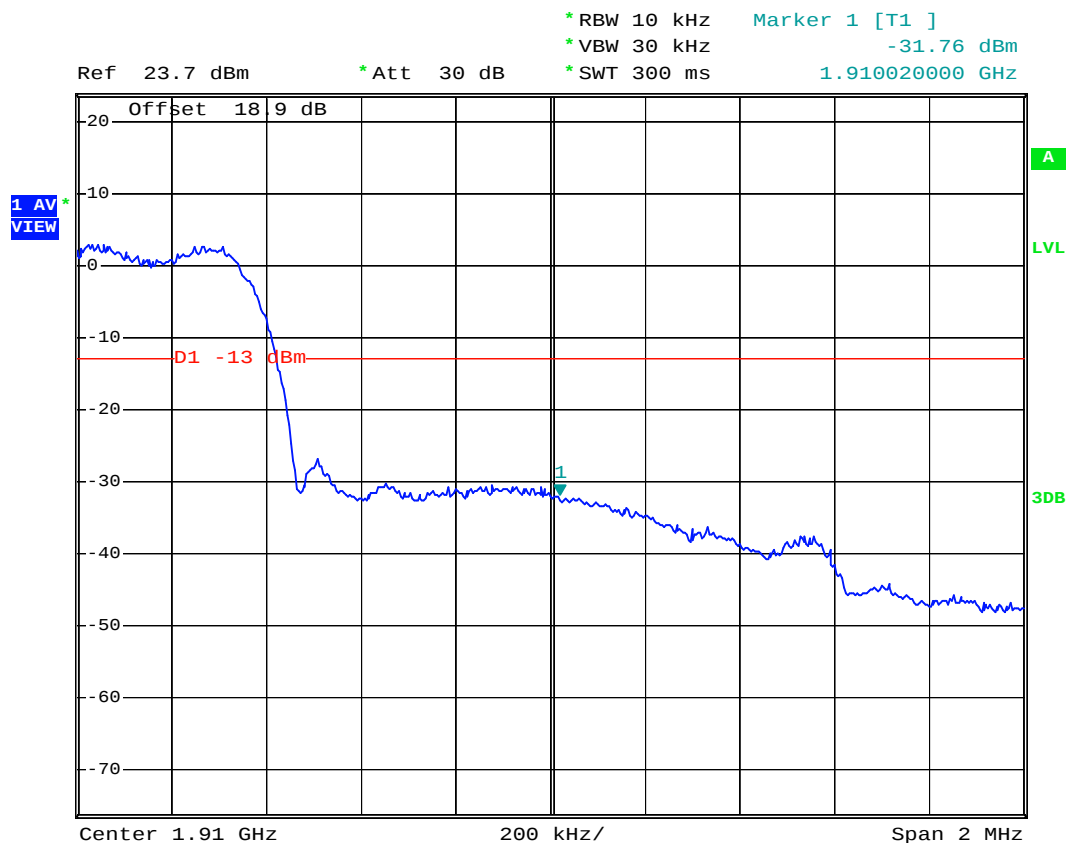
Date: 3.JAN.2008 00:15:20



Date: 3.JAN.2008 00:19:54



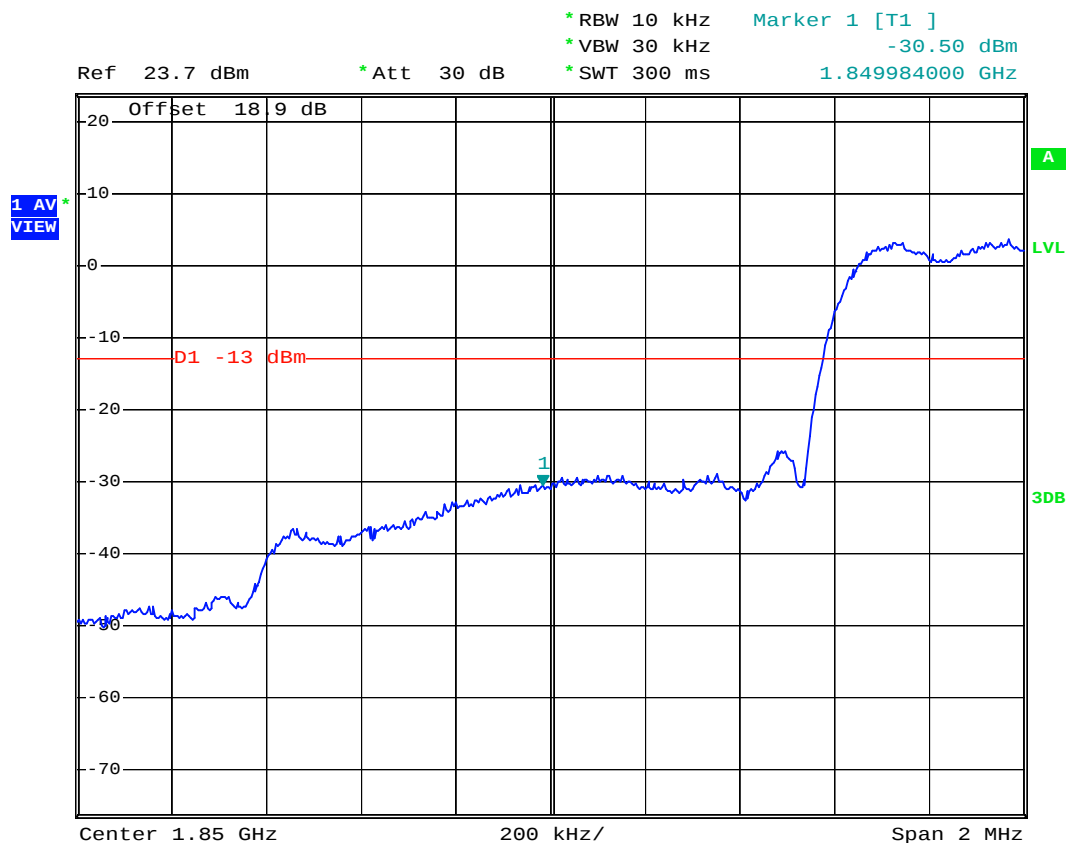
- Test Mode : CDMA2000 PCS 1900 Band CH1175_FCH_RC3 Higher Band Edge for 1xRTT
- Power State : High



Date: 3.JAN.2008 00:21:53



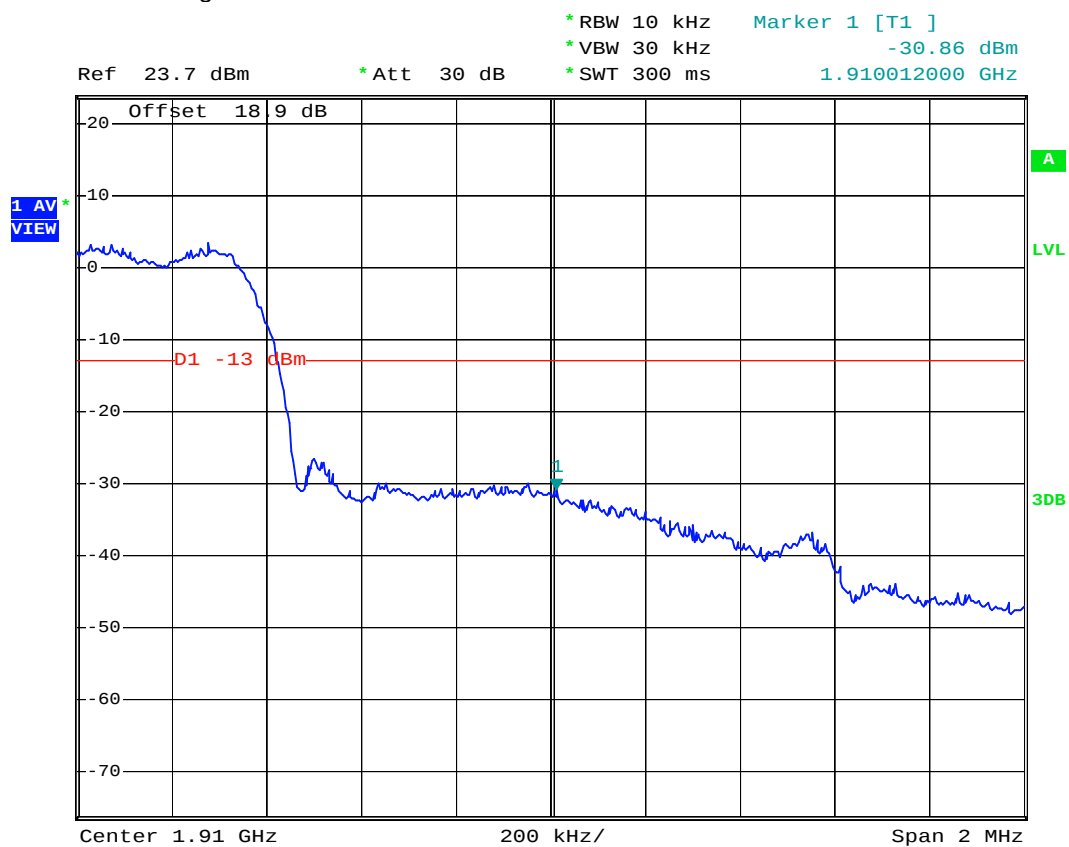
- Test Mode : CDMA2000 PCS 1900 Band CH25_FCH+SCH_RC3 Lower Band Edge for 1xRTT
- Power State : High



Date: 3.JAN.2008 00:25:32



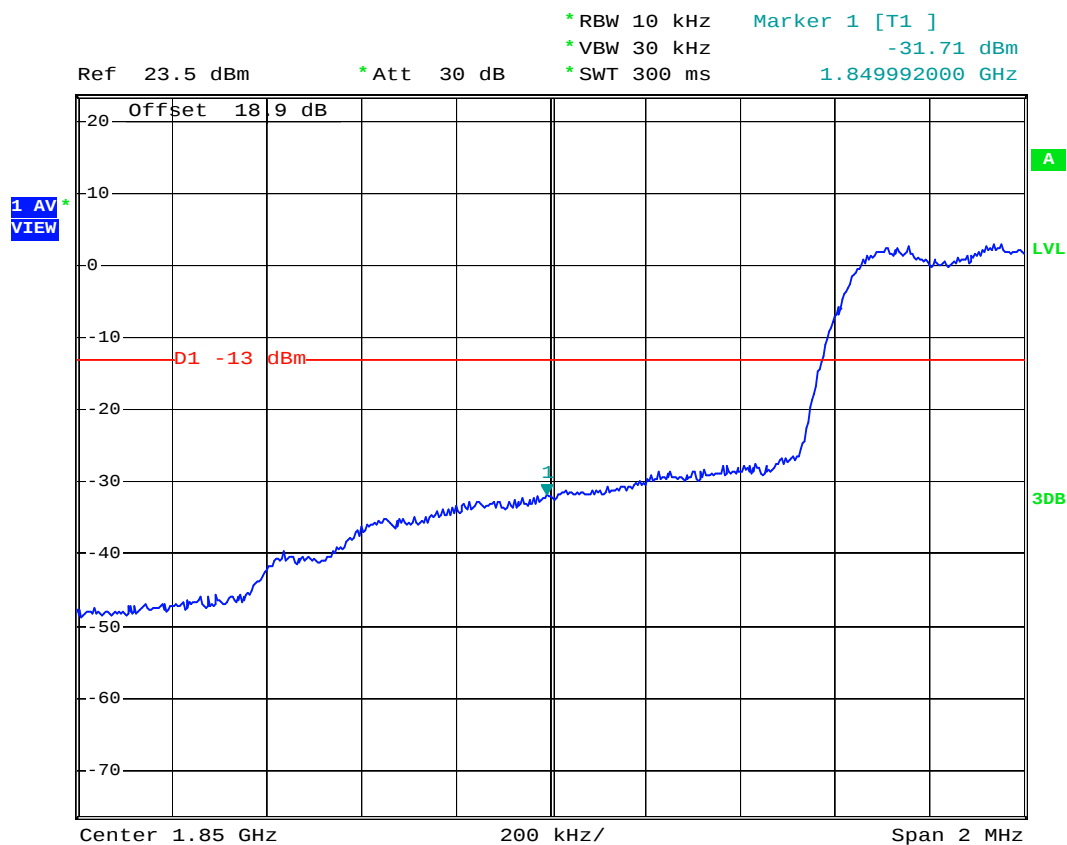
- Test Mode : CDMA2000 PCS 1900 Band CH1175_FCH+SCH_RC3 Higher Band Edge for 1xRTT
- Power State : High



Date: 3.JAN.2008 00:23:07



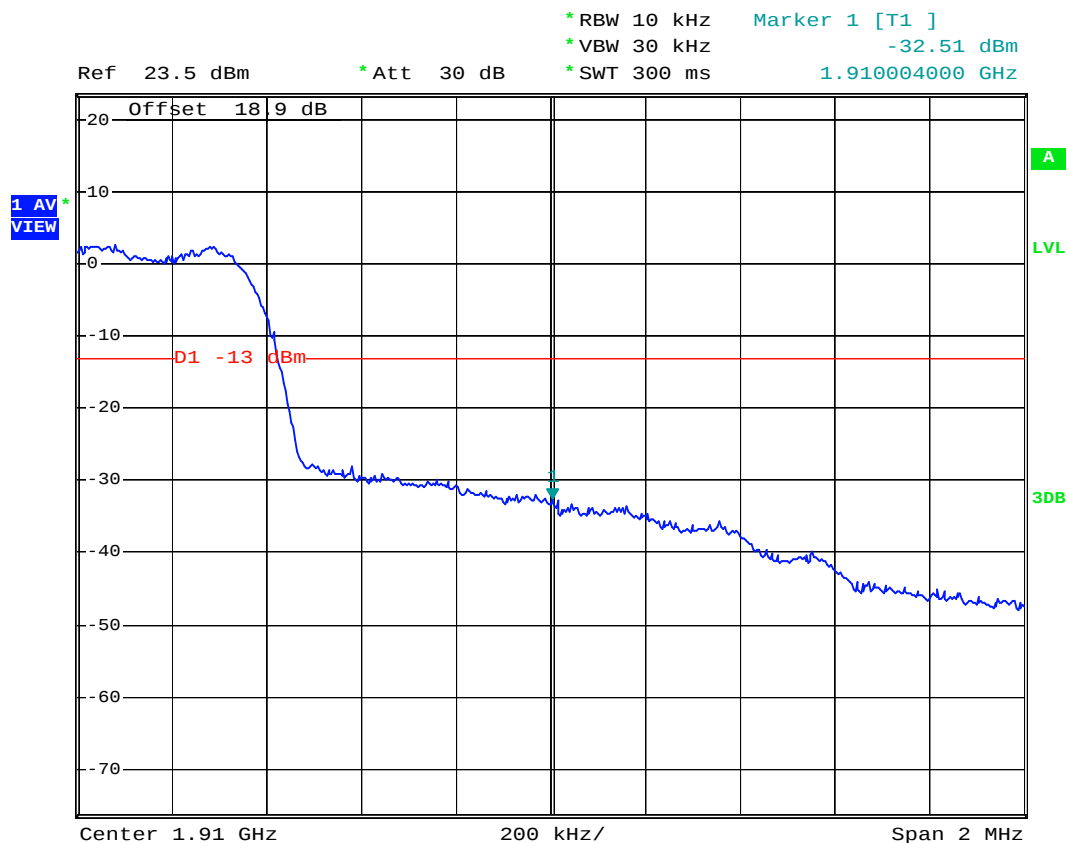
- Mode 4
- T Test Mode : CDMA2000 PCS 1900 CH25_9.6Kbps Lower Band Edge for 1xEV-DO
- Power State : High



Date: 3.JAN.2008 23:55:12



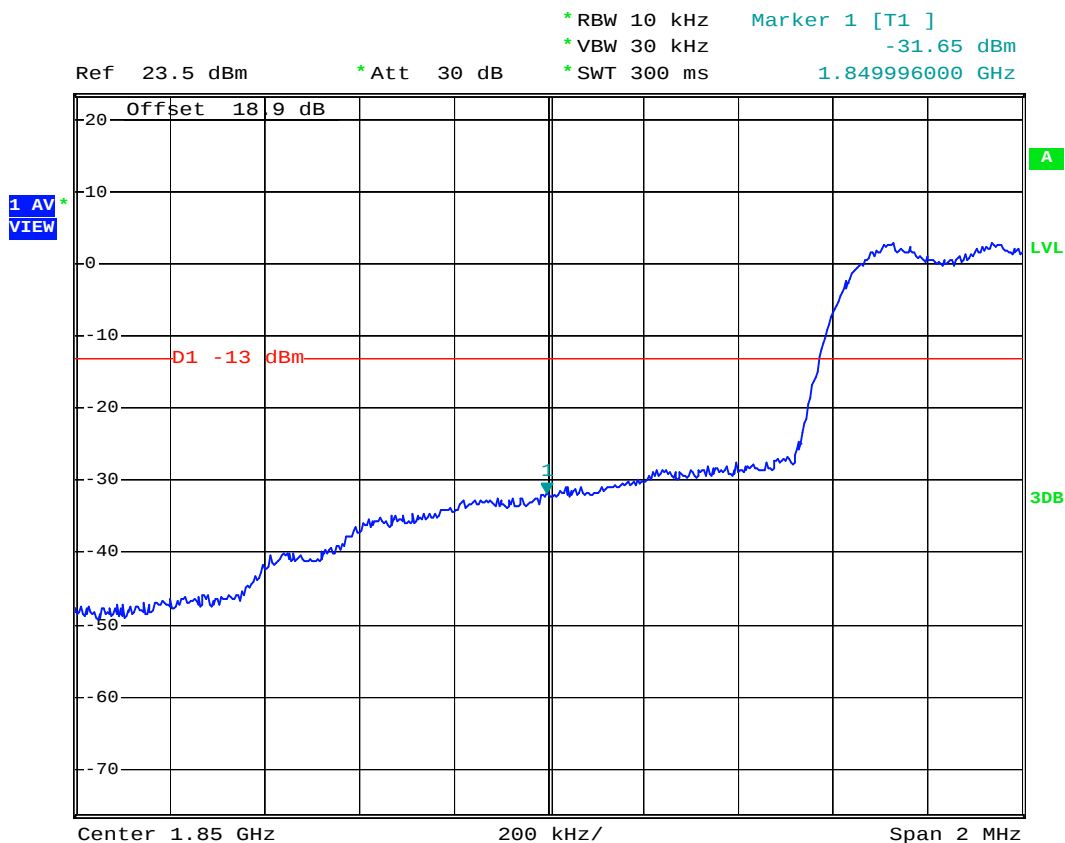
- Test Mode : CDMA2000 PCS 1900 CH1175_9.6Kbps Higher Band Edge for 1xEV-DO
- Power State : High



Date: 4.JAN.2008 00:05:38



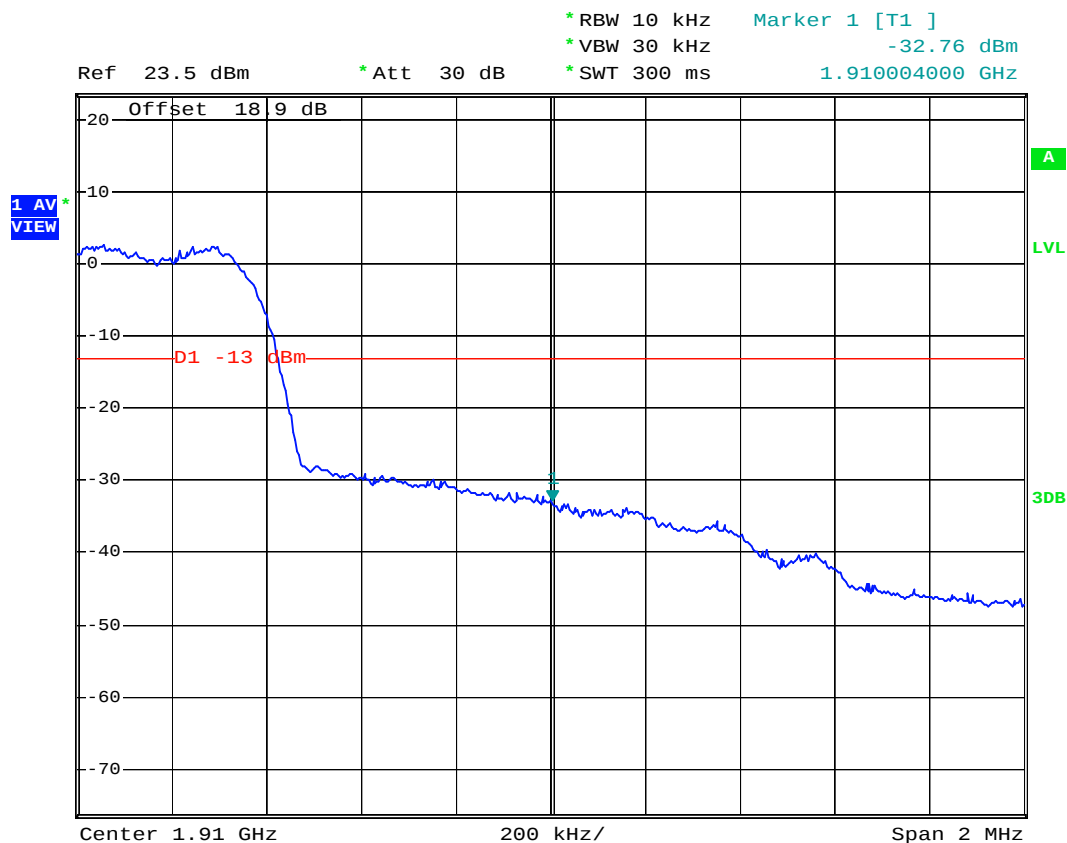
- Test Mode : CDMA2000 PCS 1900 CH25_38.4Kbps Lower Band Edge for 1xEV-DO
- Power State : High



Date: 4.JAN.2008 00:10:27



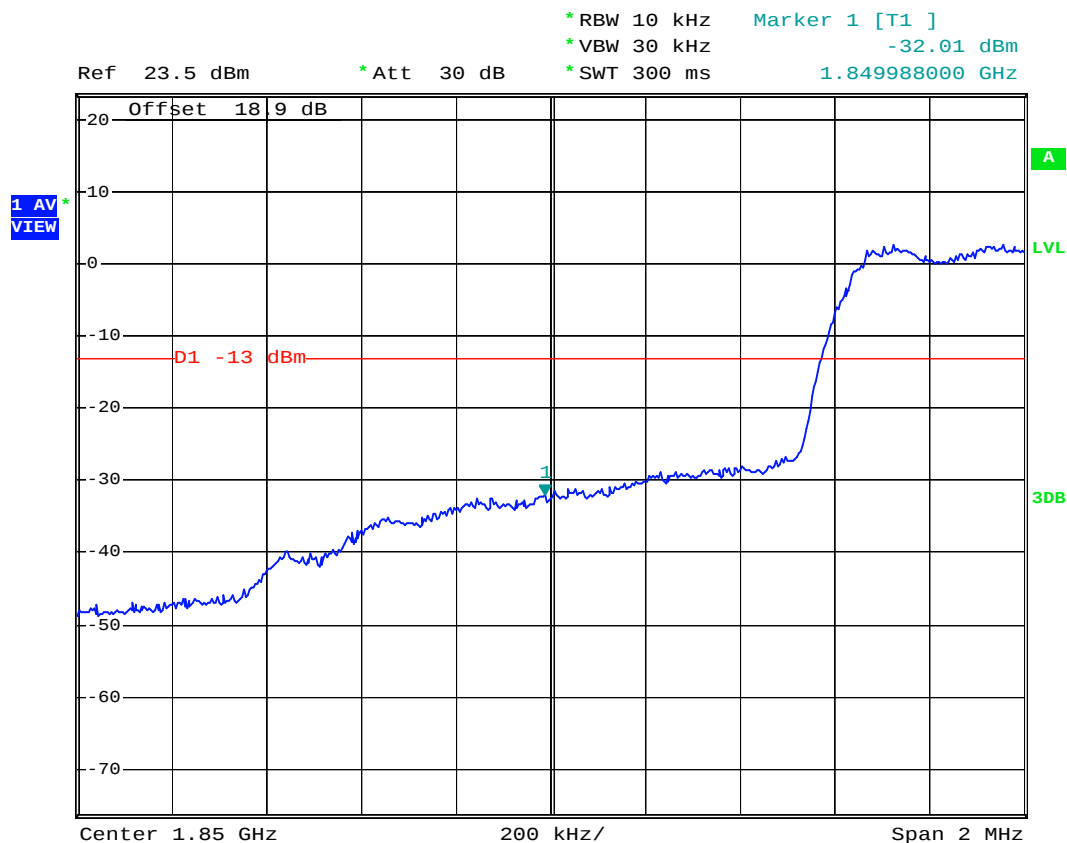
- Test Mode : CDMA2000 PCS 1900 CH1175_38.4Kbps Higher Band Edge for 1xEV-DO
- Power State : High



Date: 4.JAN.2008 00:07:08



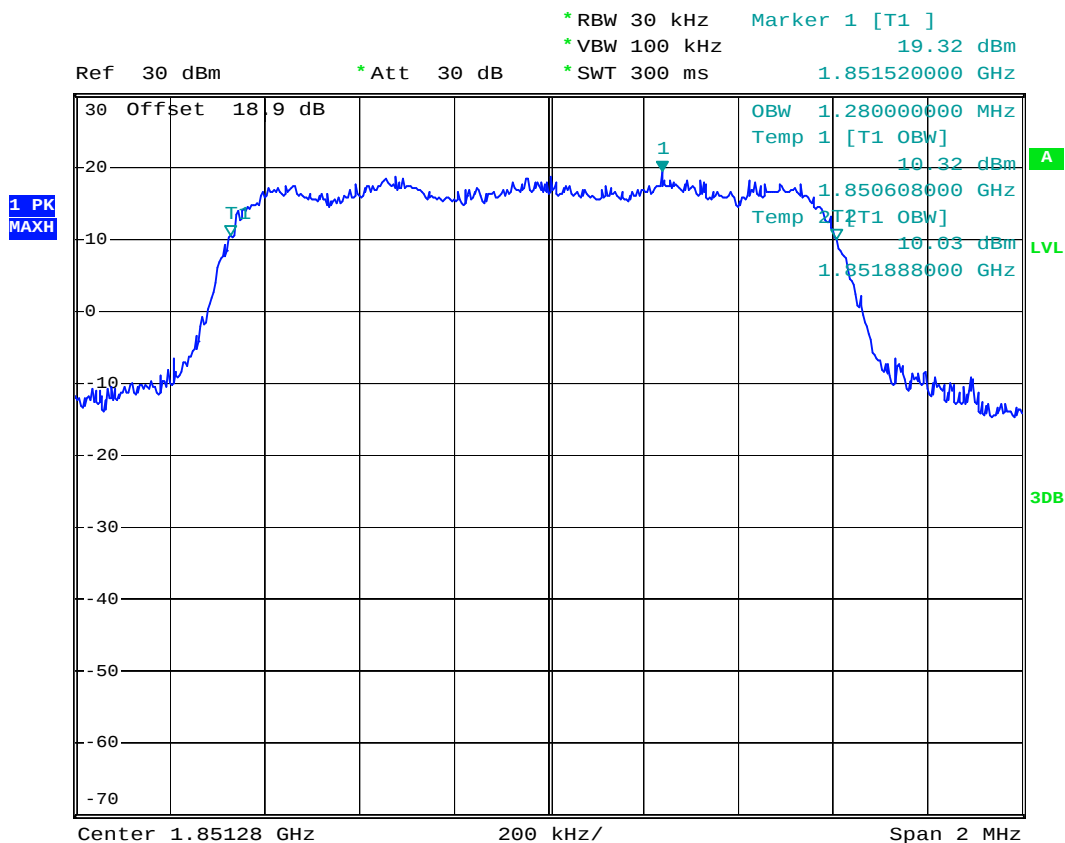
- Test Mode : CDMA2000 PCS 1900 CH25_153.6Kbps Lower Band Edge for 1xEV-DO
- Power State : High



Date: 4.JAN.2008 00:13:03



- Test Mode : CDMA2000 PCS 1900 CH25_153.6Kbps 99% Occupied Bandwidth for 1xEV-DO
- Power State : High



Date: 4.JAN.2008 00:38:41

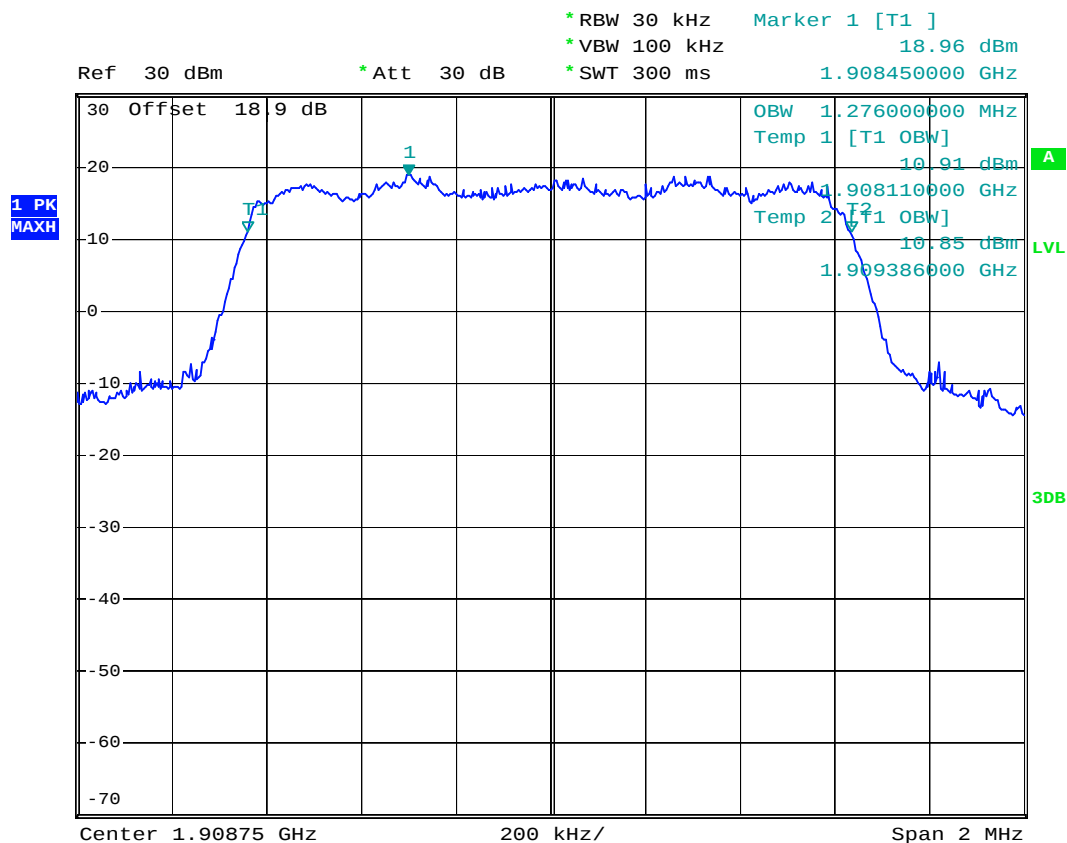


-
- Ref 30 dBm * Att 30 dB * RBW 30 kHz * VBW 100 kHz * SWT 300 ms Marker 1 [T1] 19.28 dBm
- Offset 18.9 dB
- OBW 1.272000000 MHz Temp 1 [T1 OBW] 11.77 dBm
- OBW 1.879364900 GHz Temp 2 [T2 OBW] 11.32 dBm
- 1.880636900 GHz
- Center 1.88 GHz 200 kHz/ Span 2 MHz
- 3dB

Date: 4.JAN.2008 00:39:24



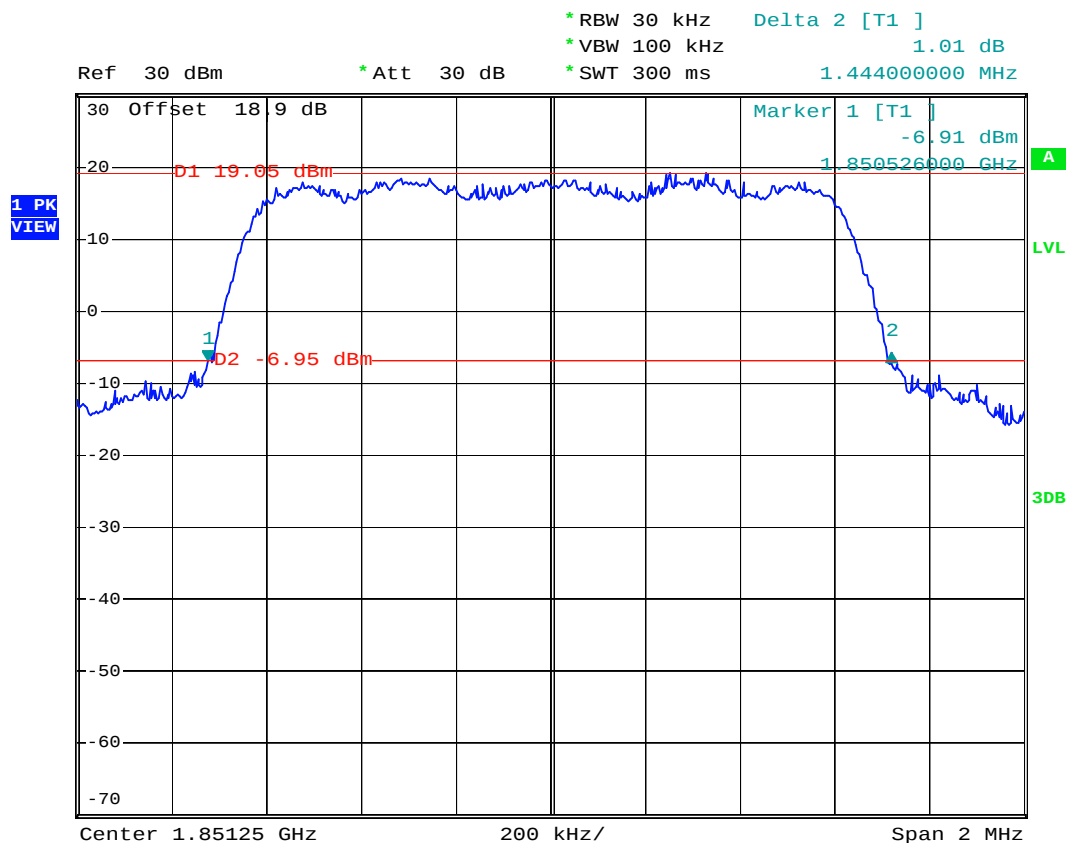
- Test Mode : CDMA2000 PCS 1900 CH1175_153.6Kbps 99% Occupied Bandwidth for 1xEV-DO
- Power State : High



Date: 4.JAN.2008 00:37:54



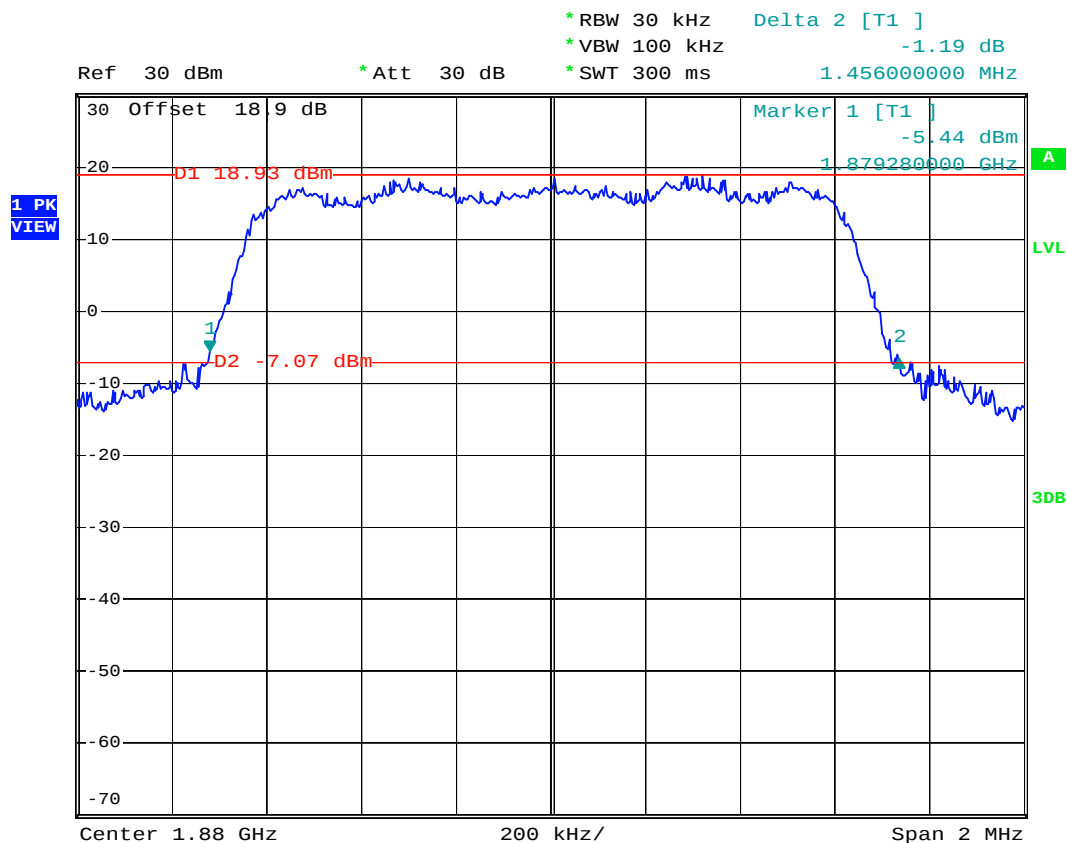
- Test Mode : CDMA2000 PCS 1900 CH25_153.6Kbps 26 dB Bandwidth for 1xEV-DO
- Power State : High



Date: 4.JAN.2008 00:24:46



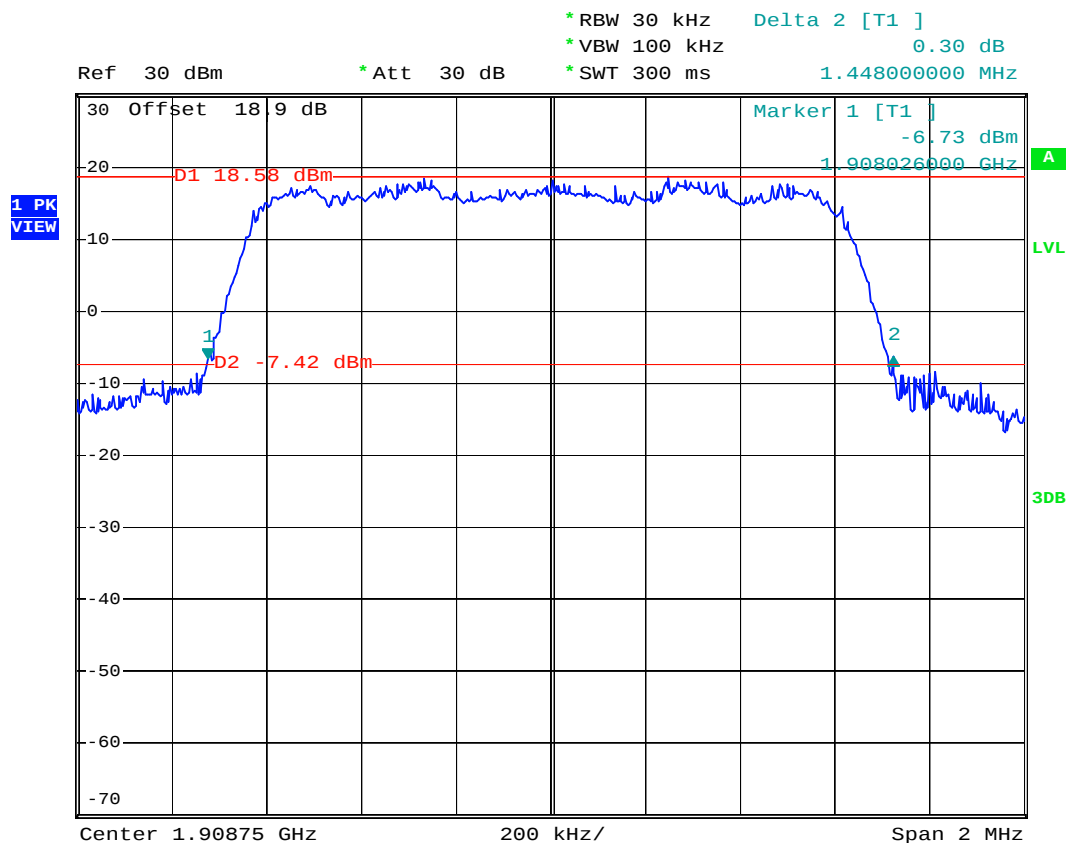
- Test Mode : CDMA2000 PCS 1900 CH600_153.6Kbps 26 dB Bandwidth for 1xEV-DO
- Power State : High



Date: 4.JAN.2008 00:30:00



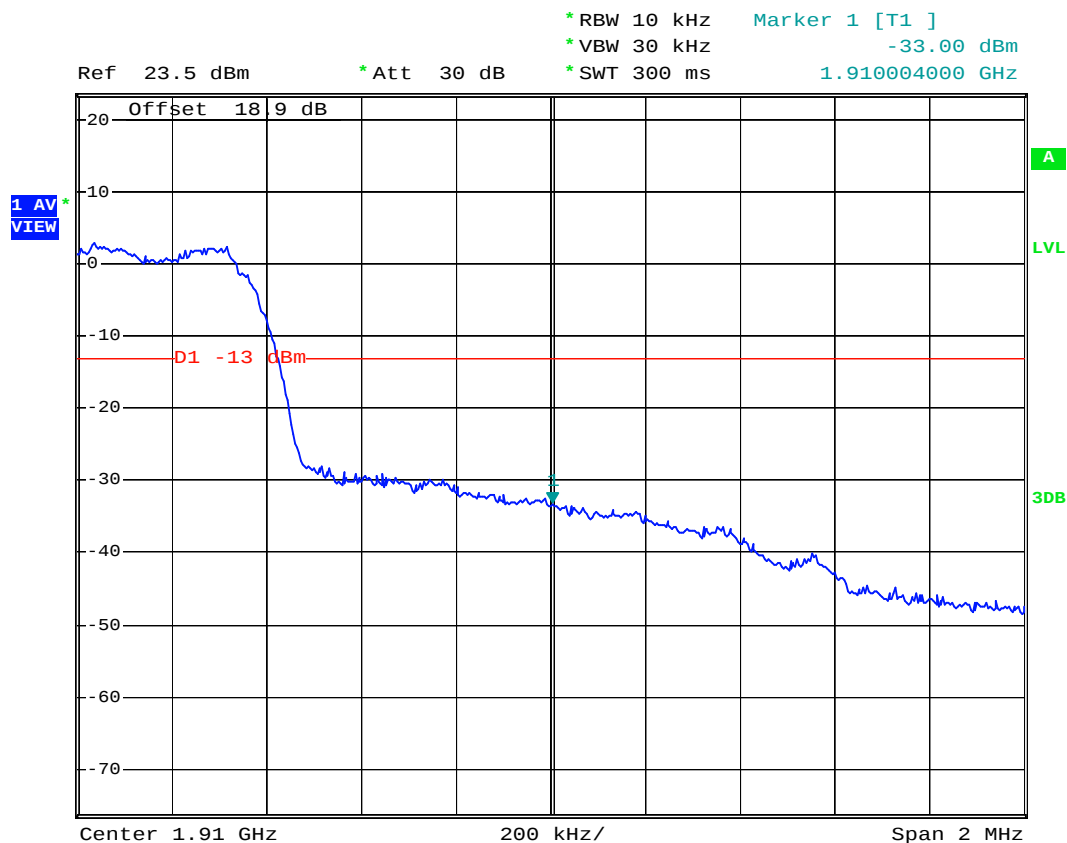
- Test Mode : CDMA2000 PCS 1900 CH1175_153.6Kbps 26 dB Bandwidth for 1xEV-DO
- Power State : High



Date: 4.JAN.2008 00:21:59



- Test Mode : CDMA2000 PCS 1900 CH1175_153.6Kbps Higher Band Edge for 1xEV-DO
- Power State : High



Date: 4.JAN.2008 00:17:47

4.5 Conducted Emission

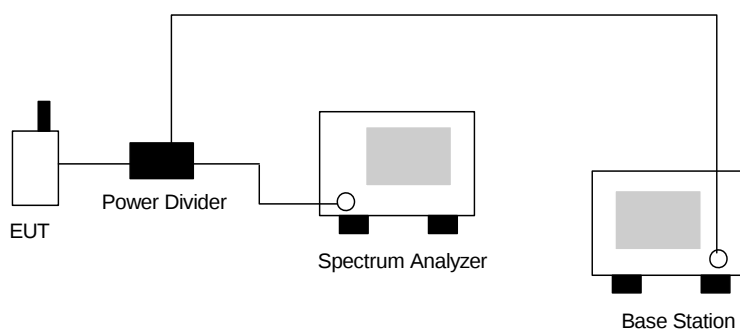
4.5.1 Measurement Instruments

As described in chapter 5 of this test report.

4.5.2 Test Procedure

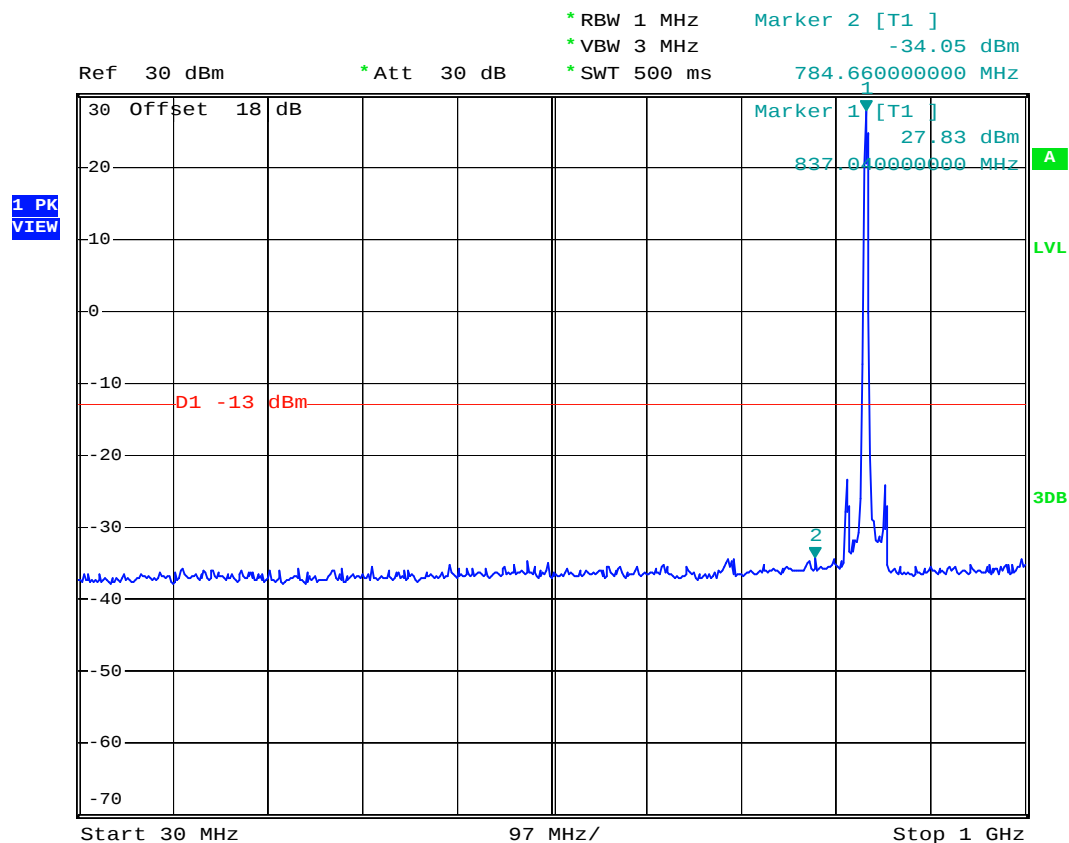
- The EUT was connected to Spectrum Analyzer and Base Station via power divider.
- The middle channel for the highest RF power within the transmitting frequency was measured.
- The conducted spurious emission for the whole frequency range was taken.

4.5.3 Test Setup Layout



**4.5.4 Test Result**

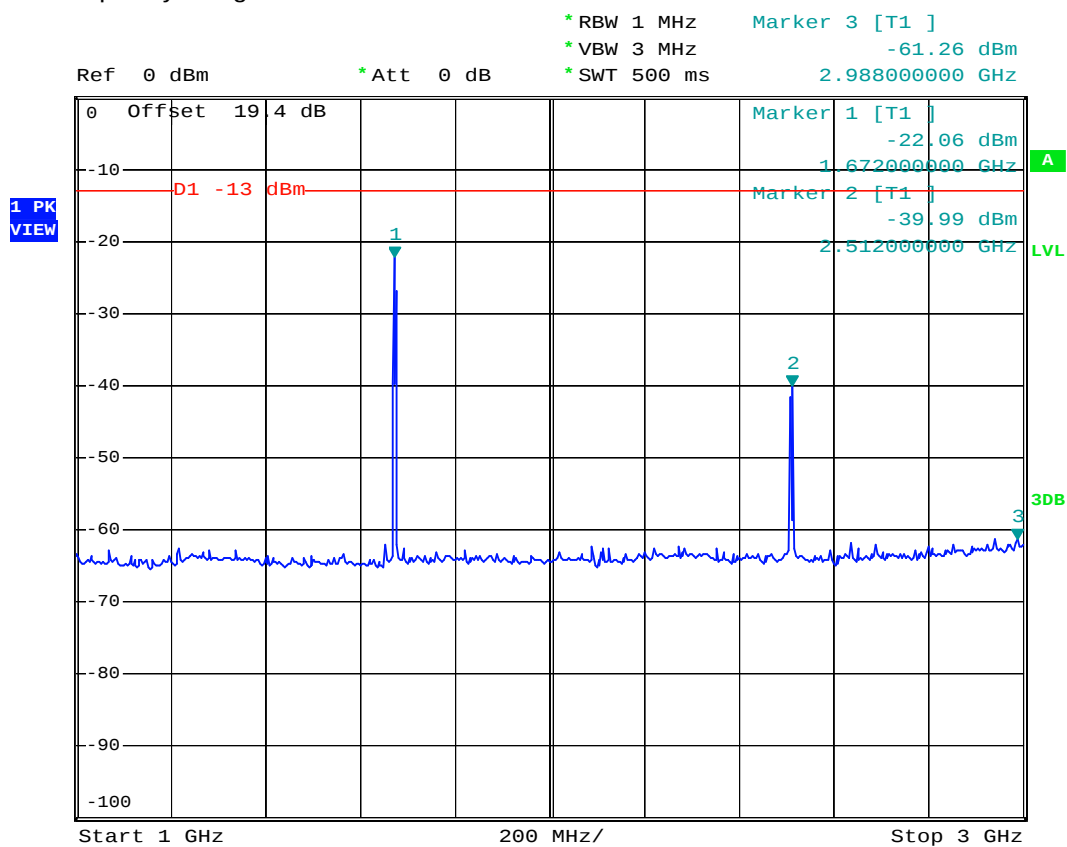
- Mode 1
- Test Mode : CDMA2000 Cellular 850 CH384 for 1xRTT
- Frequency Range : 30M-1G



Date: 3.JAN.2008 00:38:57



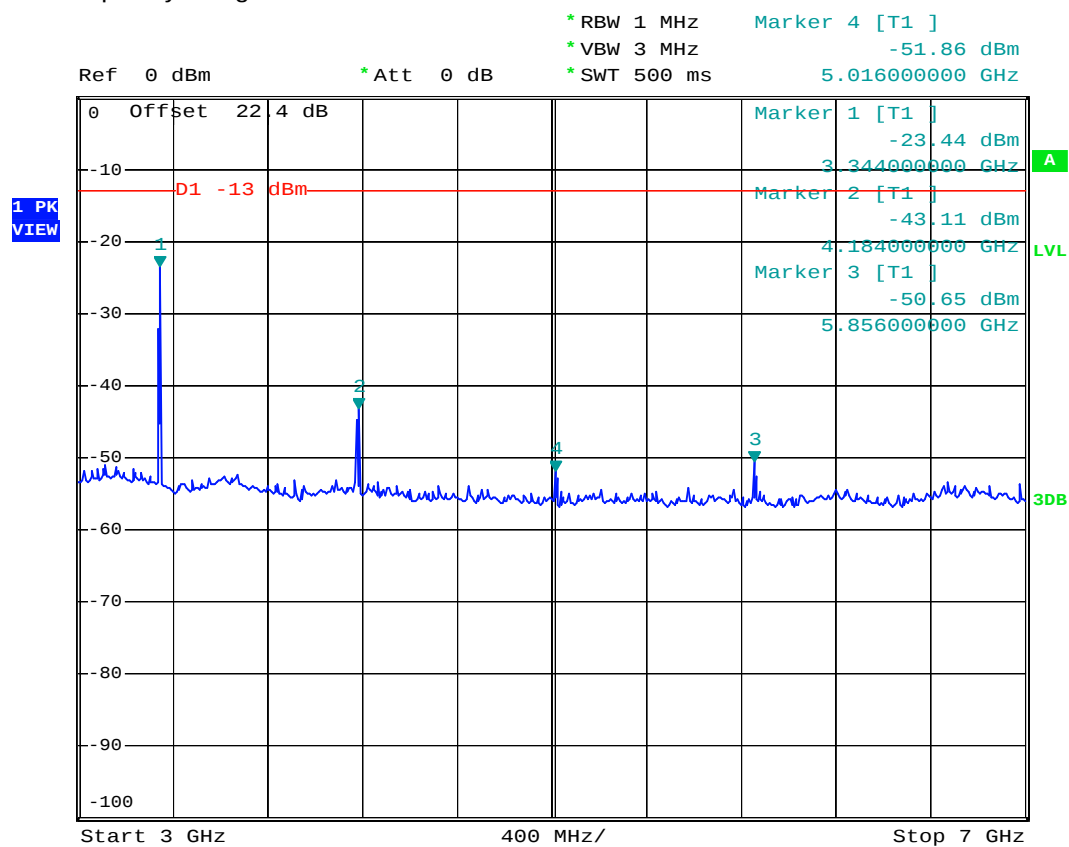
- Test Mode : CDMA2000 Cellular 850 CH384 for 1xRTT
- Frequency Range : 1G-3G



Date: 3.JAN.2008 00:43:28



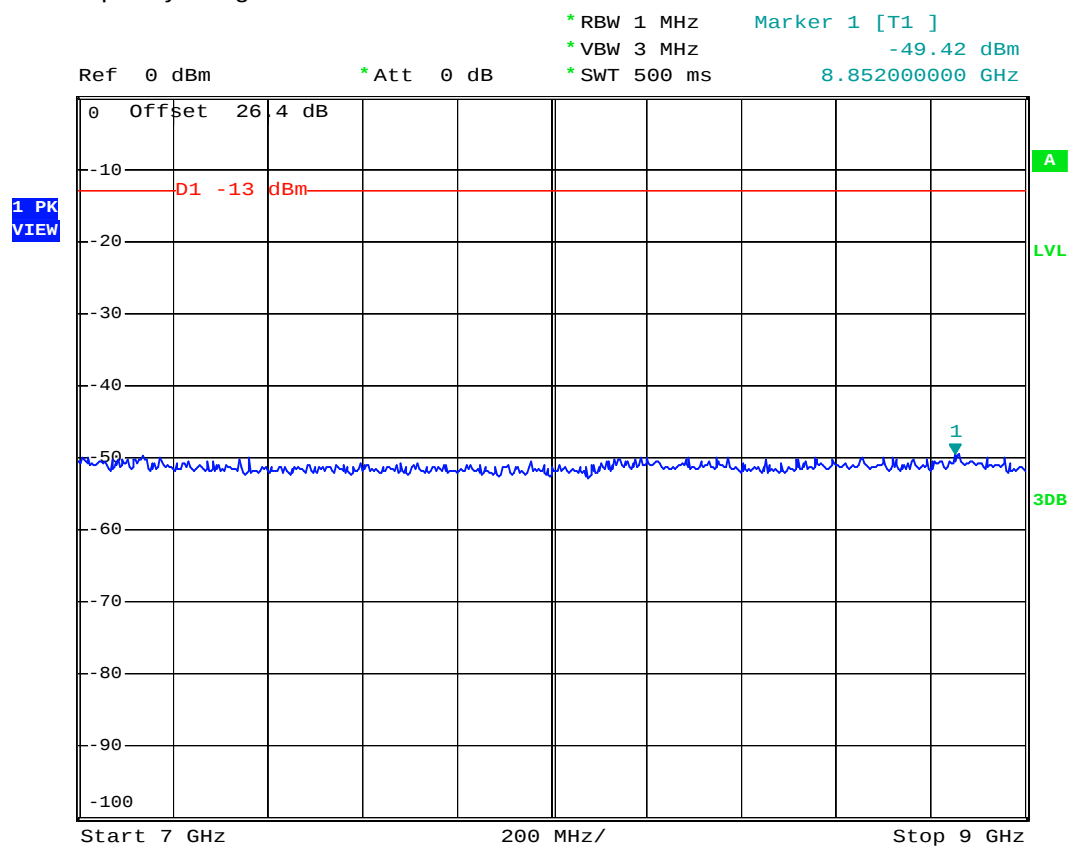
- Test Mode : CDMA2000 Cellular 850 CH384 for 1xRTT
- Frequency Range : 3G-7G



Date: 3.JAN.2008 00:45:01



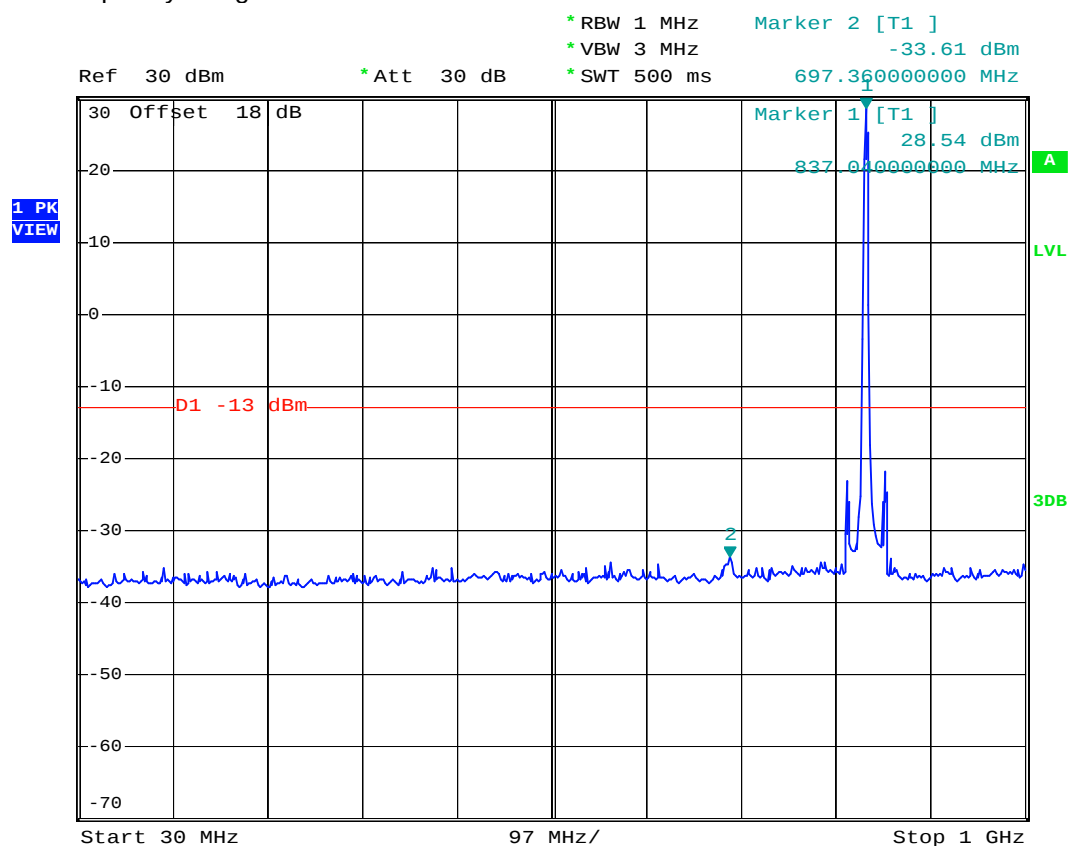
- Test Mode : CDMA2000 Cellular 850 CH384 for 1xRTT
- Frequency Range : 7G-9G



Date: 3.JAN.2008 00:46:13



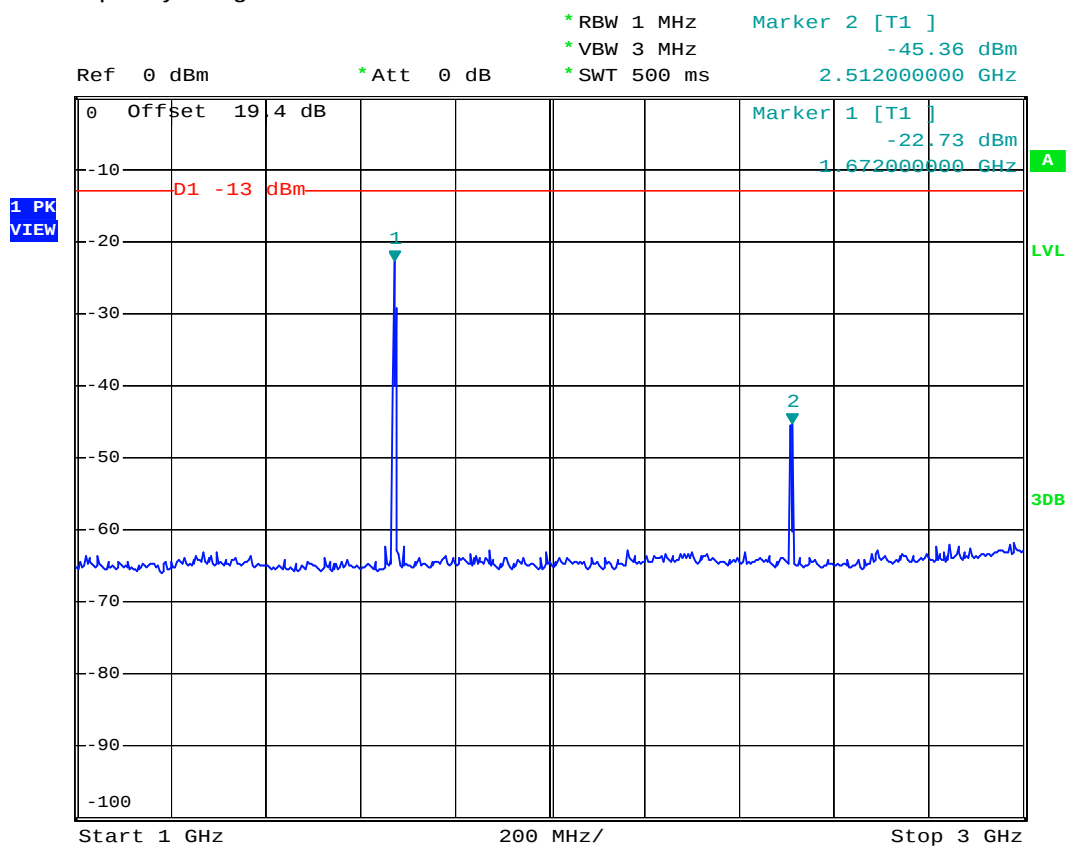
- Mode 2
- Test Mode : CDMA2000 Cellular 850 CH384 for 1xEVDO
- Frequency Range : 30M-1G



Date: 4.JAN.2008 01:01:22



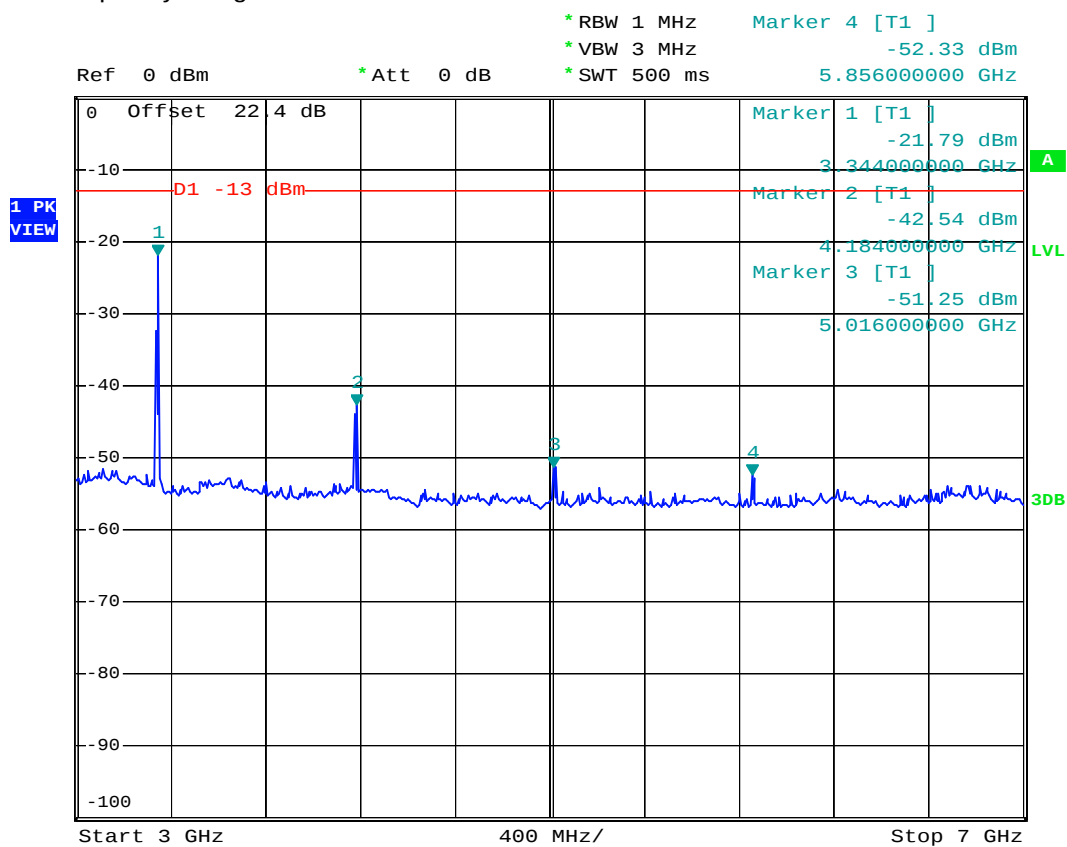
- Test Mode : CDMA2000 Cellular 850 CH384 for 1xEVDO
- Frequency Range : 1G-3G



Date: 4.JAN.2008 01:21:33



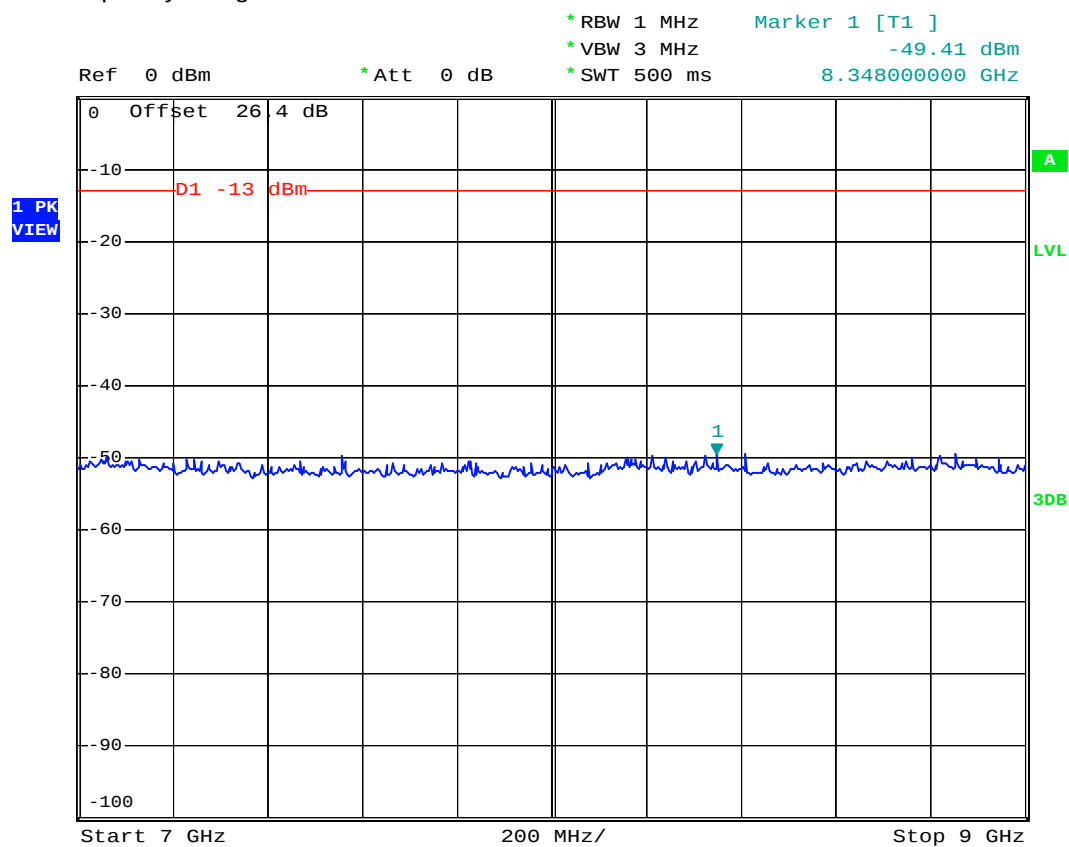
- Test Mode : CDMA2000 Cellular 850 CH384 for 1xEVDO
- Frequency Range : 3G-7G



Date: 4.JAN.2008 01:22:57



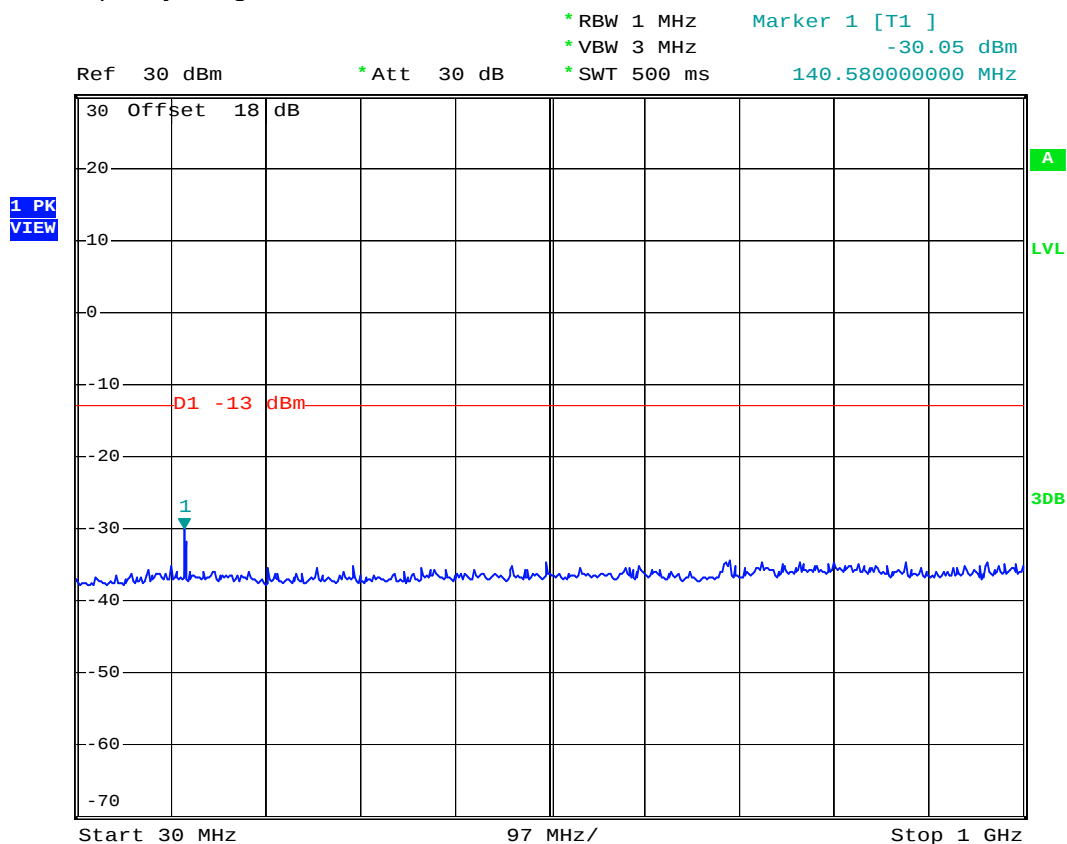
- Test Mode : CDMA2000 Cellular 850 CH384 for 1xEVDO
- Frequency Range : 7G-9G



Date: 4.JAN.2008 01:23:56



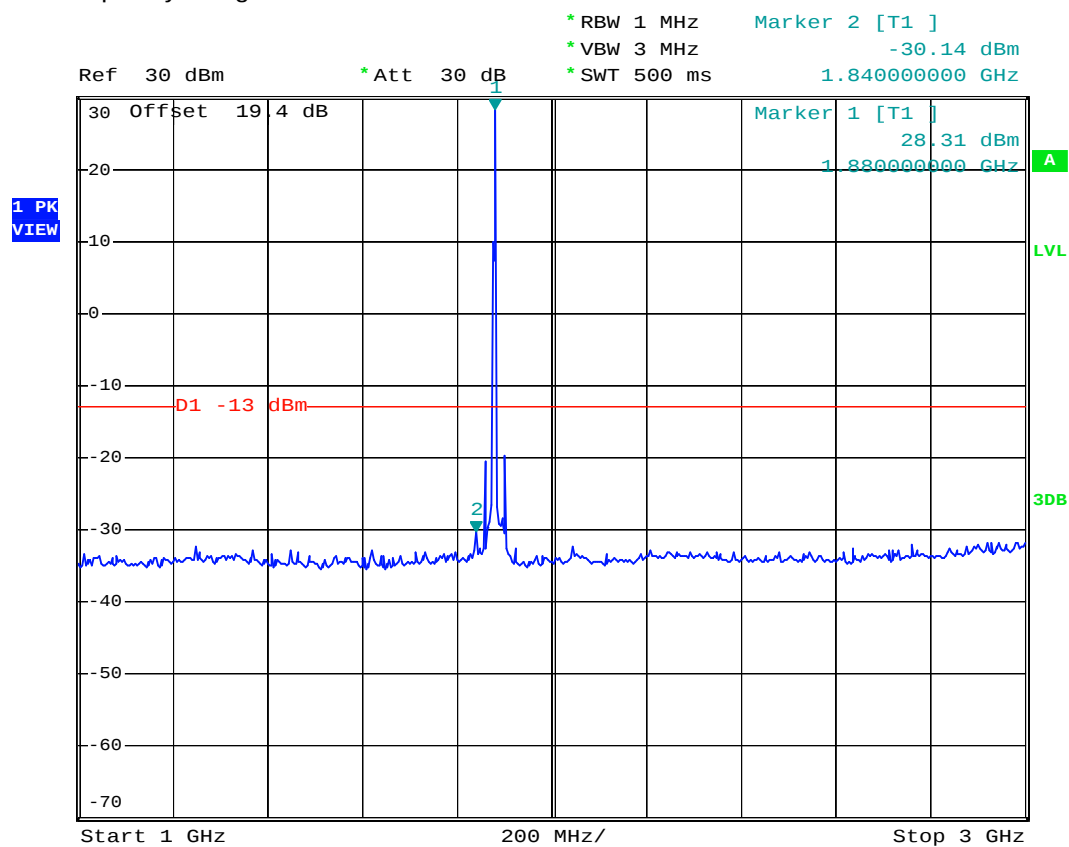
- Mode 3
- Test Mode : CDMA2000 PCS 1900 CH600 for 1xRTT
- Frequency Range : 30M-1G



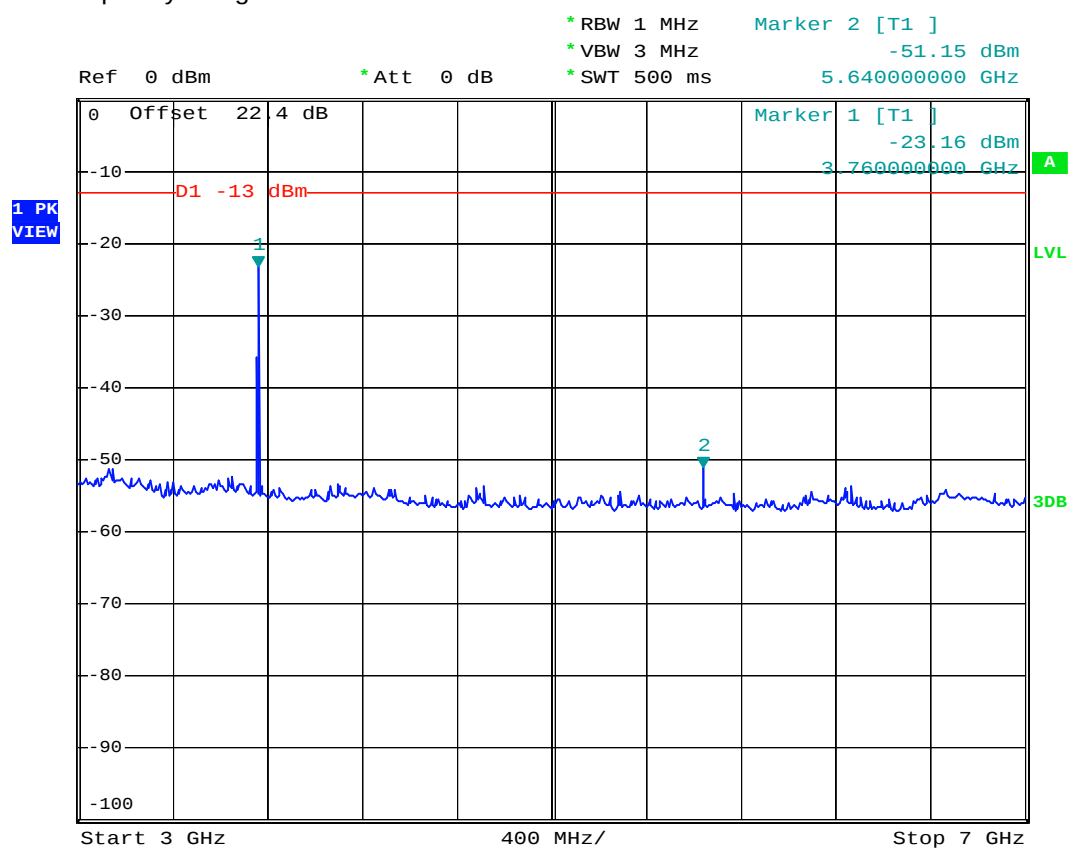
Date: 3.JAN.2008 00:51:42



- Test Mode : CDMA2000 PCS 1900 CH600 for 1xRTT
- Frequency Range : 1G-3G



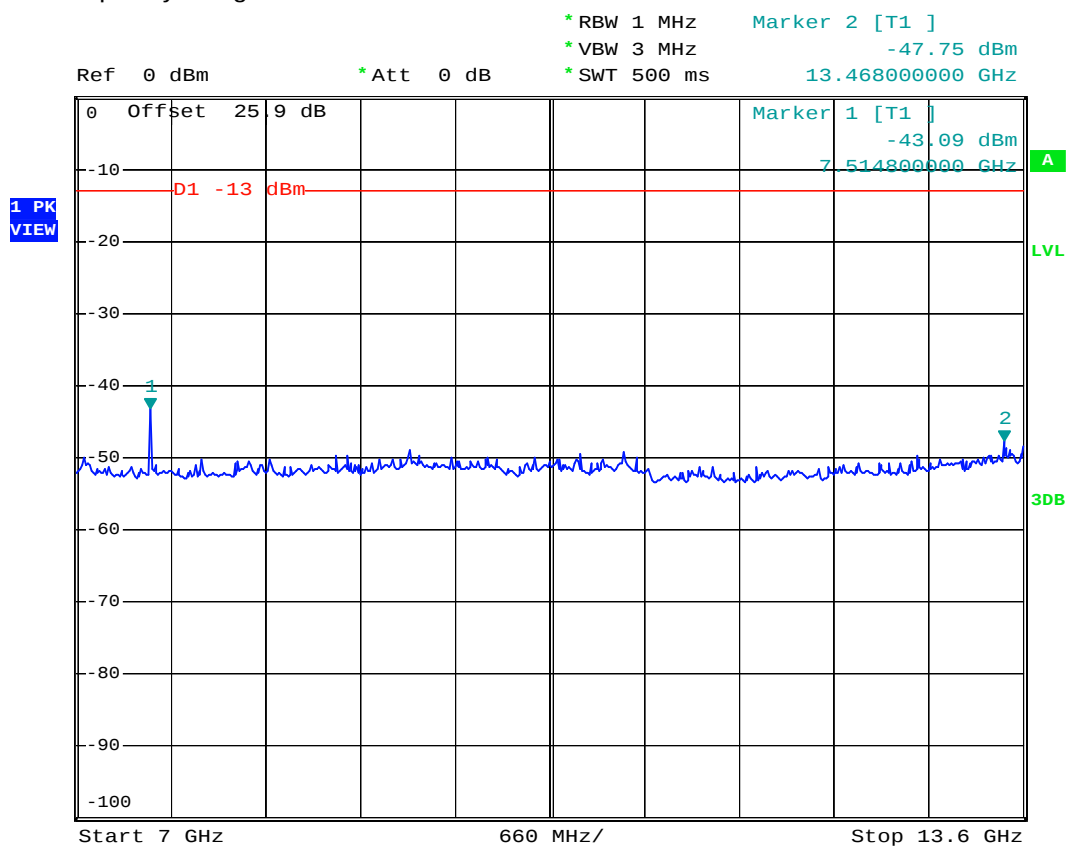
Date: 3.JAN.2008 00:52:59



Date: 3.JAN.2008 00:56:24



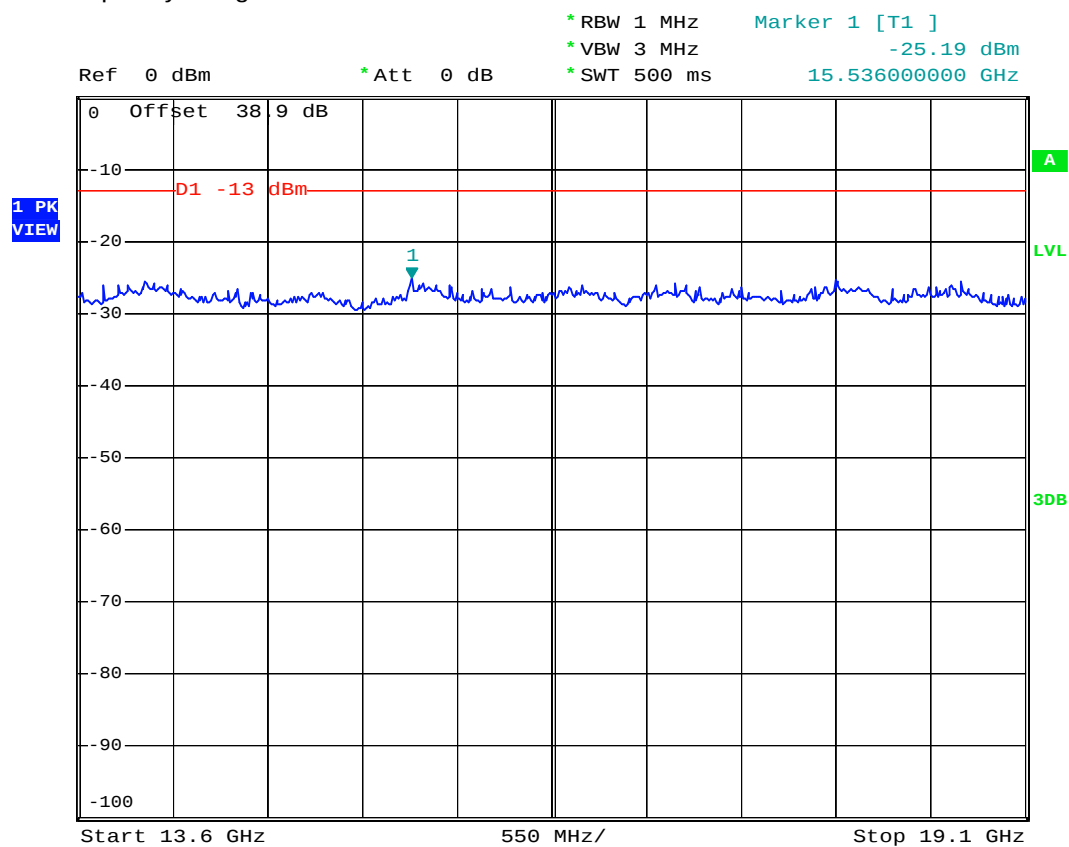
- Test Mode : CDMA2000 PCS 1900 CH600 for 1xRTT
- Frequency Range : 7G-13.6G



Date: 3.JAN.2008 00:59:24



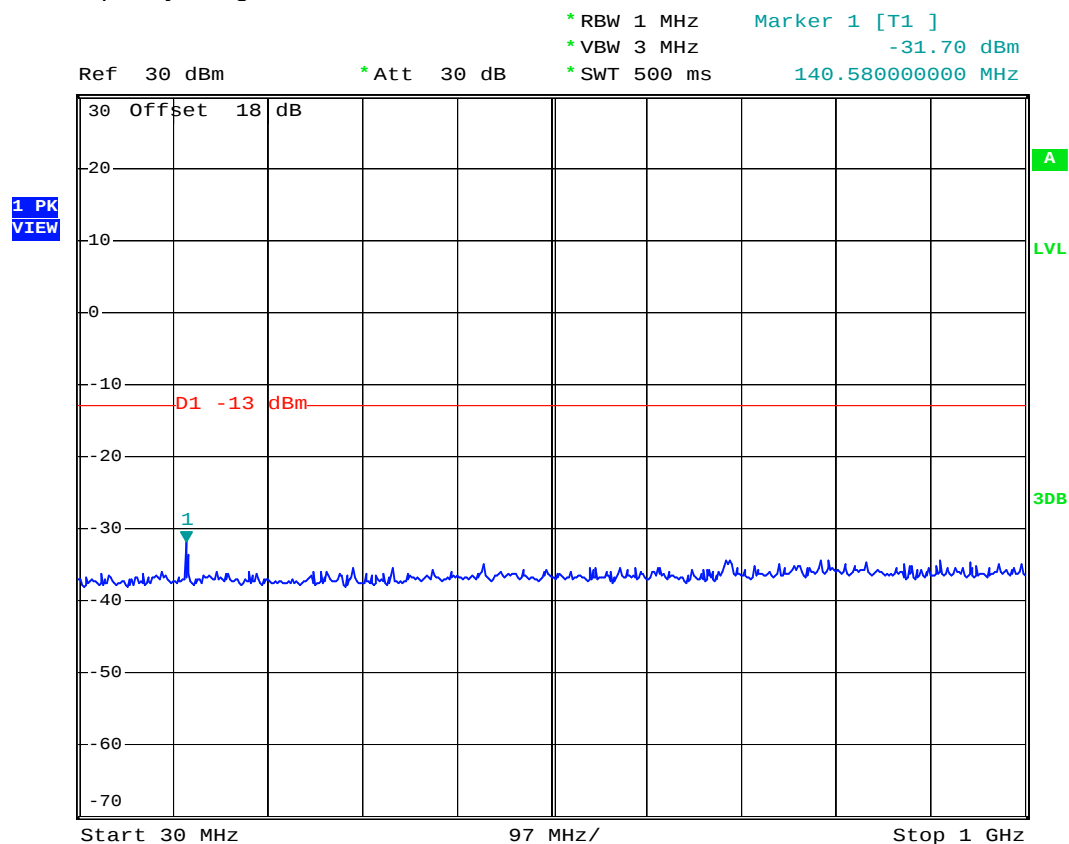
- Test Mode : CDMA2000 PCS 1900 CH600 for 1xRTT
- Frequency Range : 13.6G-19.1G



Date: 3.JAN.2008 01:00:24



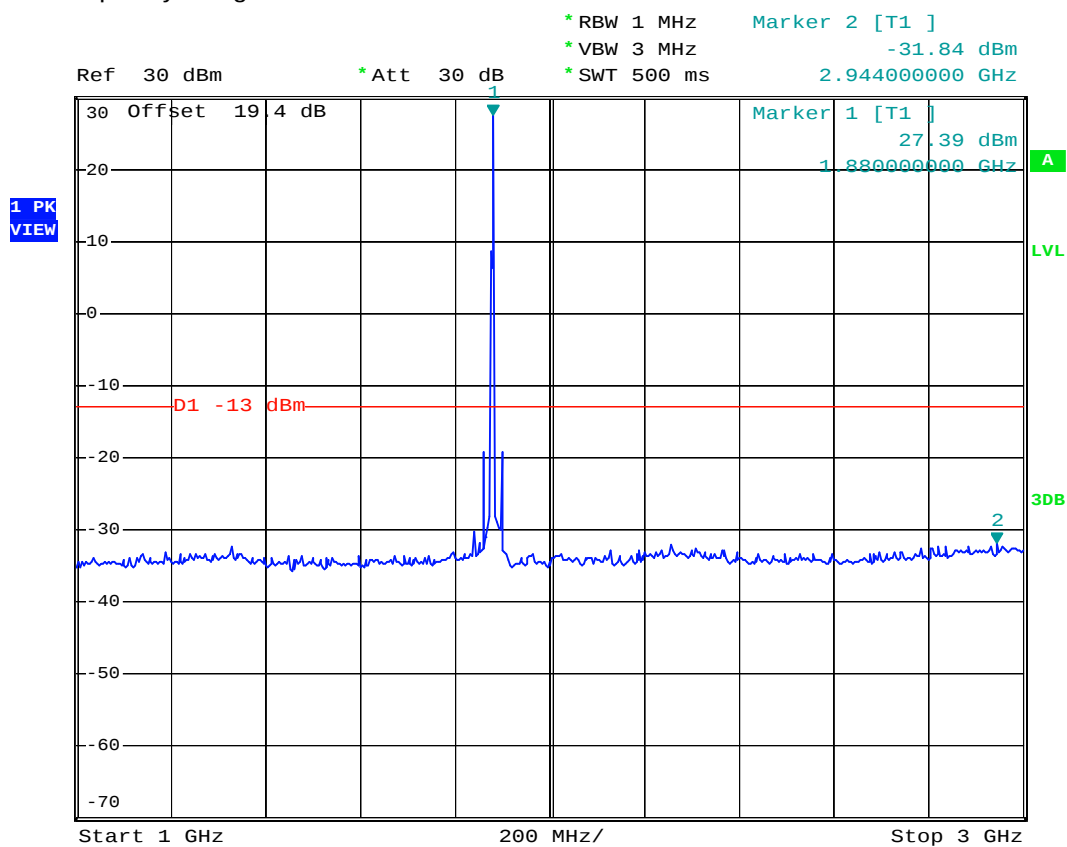
- Mode 4
- Test Mode : CDMA2000 PCS 1900 CH600 for 1xEVDO
- Frequency Range : 30M-1G



Date: 4.JAN.2008 00:48:20



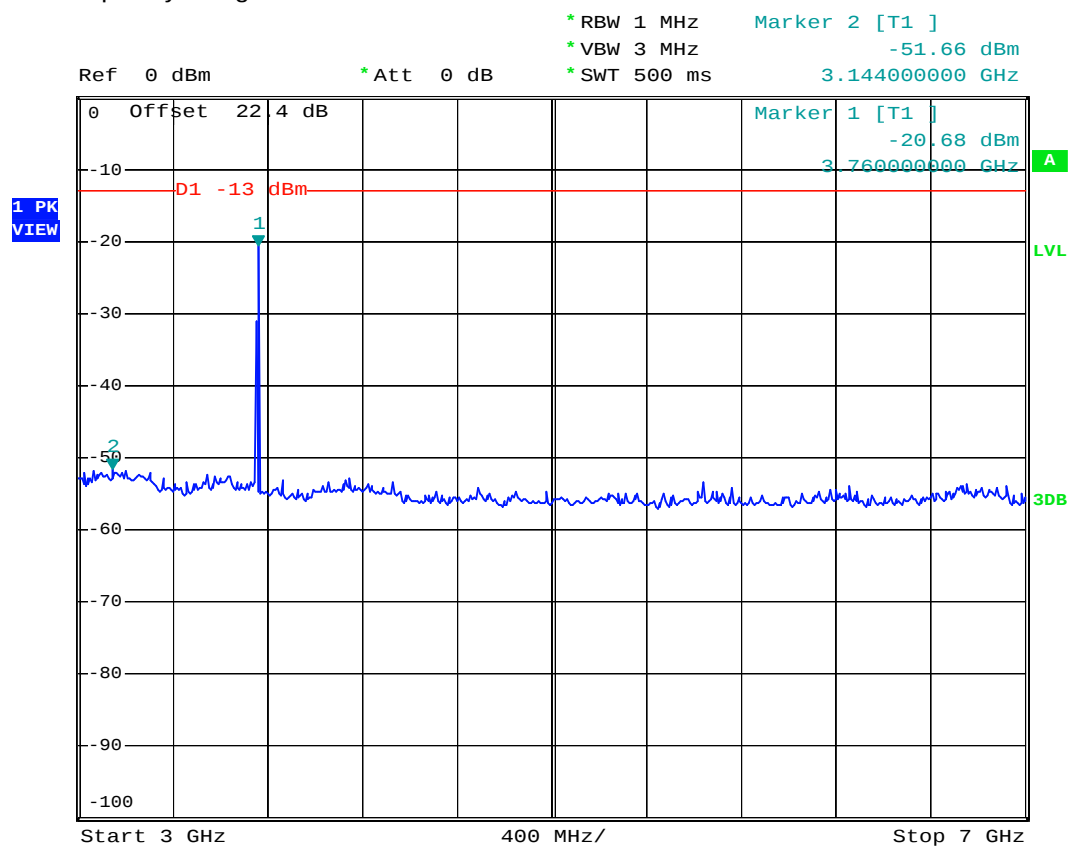
- Test Mode : CDMA2000 PCS 1900 CH600 for 1xEVDO
- Frequency Range : 1G-3G



Date: 4.JAN.2008 00:50:58



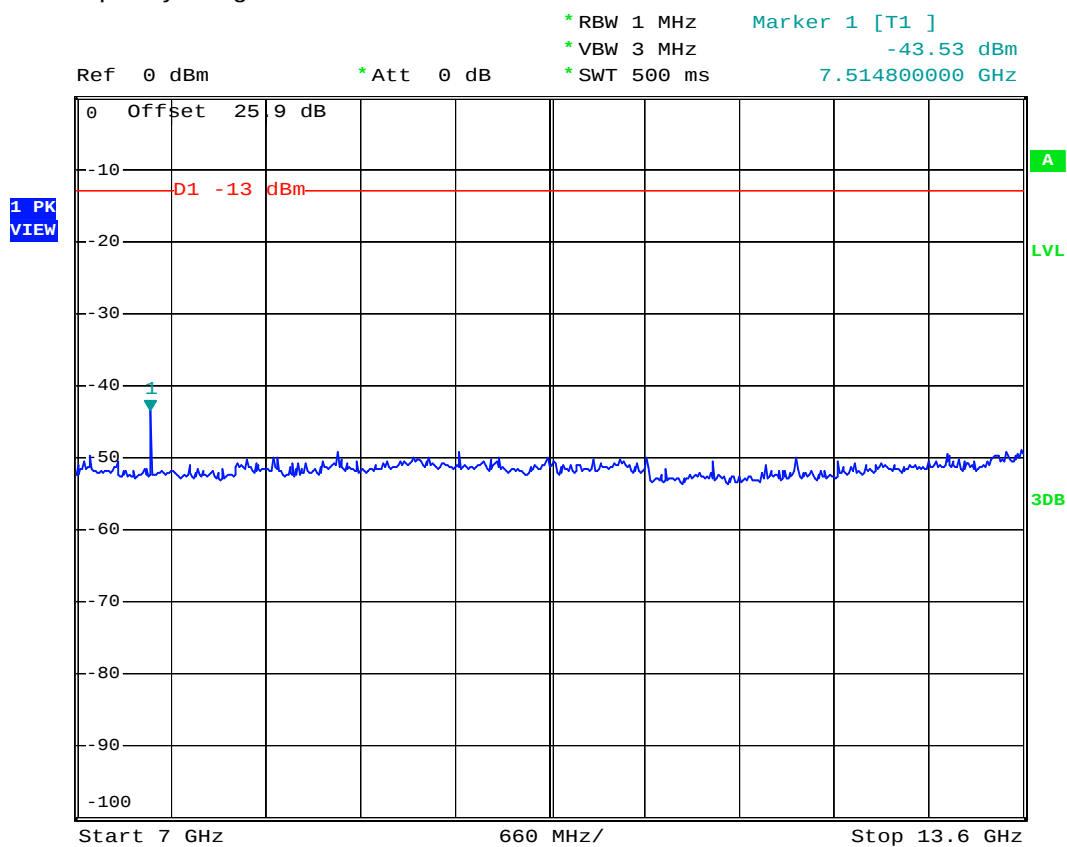
- Test Mode : CDMA2000 PCS 1900 CH600 for 1xEVDO
- Frequency Range : 3G-7G



Date: 4.JAN.2008 00:53:12



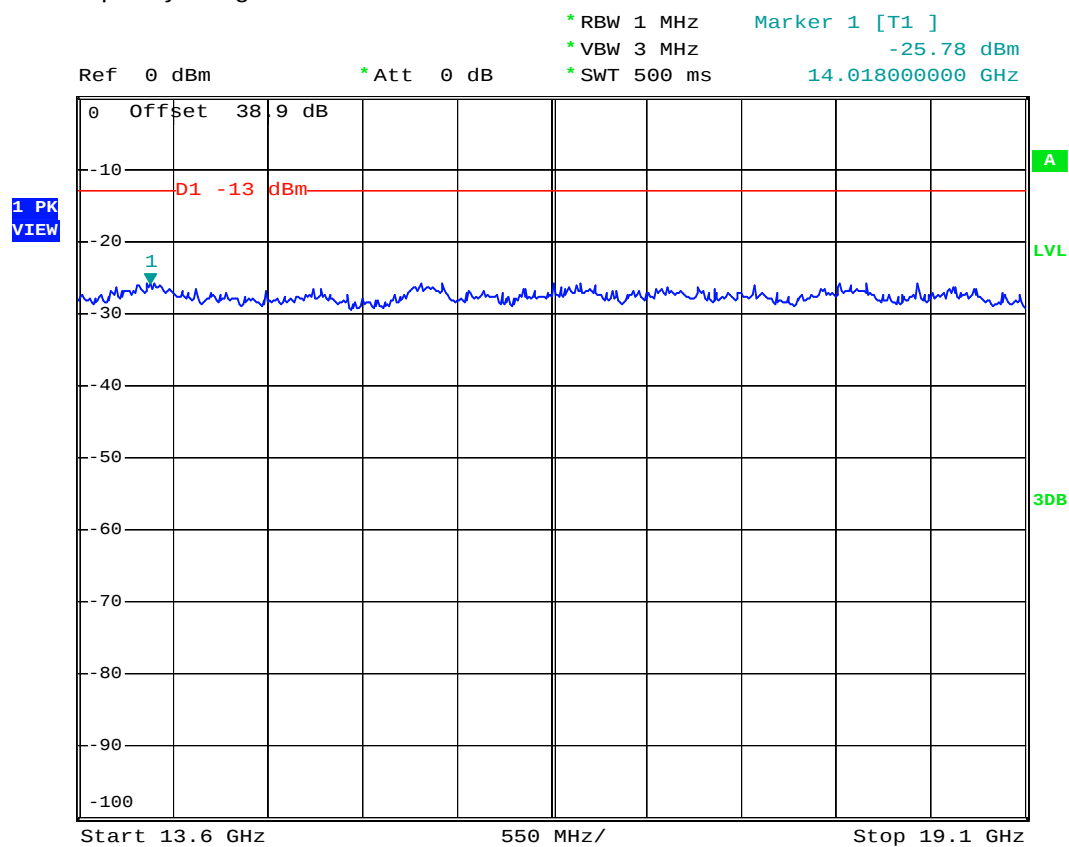
- Test Mode : CDMA2000 PCS 1900 CH600 for 1xEVDO
- Frequency Range : 7G-13.6G



Date: 4.JAN.2008 00:54:04



- Test Mode : CDMA2000 PCS 1900 CH600 for 1xEVDO
- Frequency Range : 13.6G-19.1G



Date: 4.JAN.2008 00:54:55

4.6 Field Strength of Spurious Radiation

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

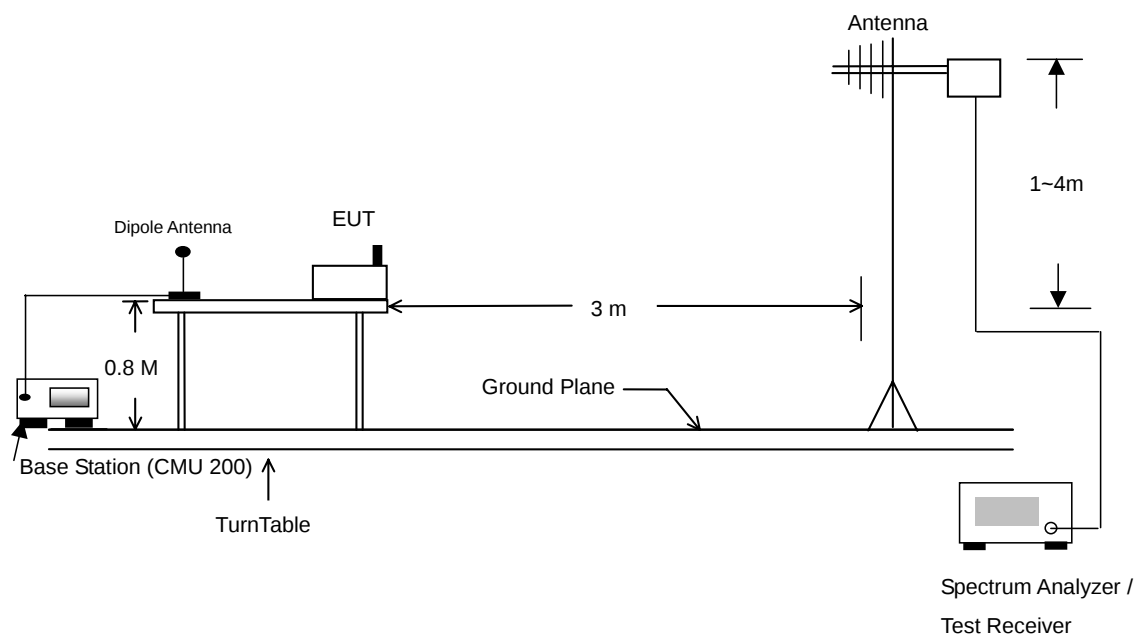
4.6.1 Measurement Instruments

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 Result

• Test Mode : Mode 1

CDMA2000 Cellular 850 1xRTT FCH_RC1 Radiated Spurious ERP							
H Polarization				V Polarization			
Frequency	ERP (dBm)	Limit	Margin	Frequency	ERP (dBm)	Limit	Margin
(MHz)		(dBm)	(dB)	(MHz)		(dBm)	(dB)
37.290	-59.490	-13	-46.49	38.640	-50.550	-13	-37.55
54.030	-60.620	-13	-47.62	54.840	-55.890	-13	-42.89
70.230	-60.910	-13	-47.91	72.390	-49.250	-13	-36.25
971.300	-66.190	-13	-53.19	971.300	-63.930	-13	-50.93
1672.000	-32.510	-13	-19.51	1672.000	-37.620	-13	-24.62
3346.000	-30.090	-13	-17.09	3346.000	-31.410	-13	-18.41

• Test Mode : Mode 2

CDMA2000 Cellular 850 1xEVDO 153.6Kbps Radiated Spurious ERP							
H Polarization				V Polarization			
Frequency	ERP (dBm)	Limit	Margin	Frequency	ERP (dBm)	Limit	Margin
(MHz)		(dBm)	(dB)	(MHz)		(dBm)	(dB)
37.830	-57.820	-13	-44.82	37.830	-57.360	-13	-44.36
55.380	-58.950	-13	-45.95	54.030	-59.410	-13	-46.41
68.880	-59.500	-13	-46.50	68.880	-54.380	-13	-41.38
969.900	-66.500	-13	-53.50	969.900	-64.350	-13	-51.35
1672.000	-28.060	-13	-15.06	1672.000	-31.790	-13	-18.79
2506.000	-46.630	-13	-33.63	2506.000	-45.690	-13	-32.69
3346.000	-30.430	-13	-17.43	3346.000	-29.660	-13	-16.66



- Test Mode : Mode 3

CDMA2000 PCS 1900 1xRTT FCH_RC1 Radiated Spurious EIRP							
H Polarization				V Polarization			
Frequency	ERP (dBm)	Limit	Margin	Frequency	ERP (dBm)	Limit	Margin
(MHz)		(dBm)	(dB)	(MHz)		(dBm)	(dB)
36.480	-57.730	-13	-44.73	37.290	-48.480	-13	-35.48
54.030	-57.990	-13	-44.99	55.380	-52.650	-13	-39.65
69.690	-57.950	-13	-44.95	72.390	-47.270	-13	-34.27
729.800	-67.410	-13	-54.41	764.800	-64.020	-13	-51.02
875.400	-65.550	-13	-52.55	875.400	-62.970	-13	-49.97
978.300	-64.690	-13	-51.69	978.300	-62.120	-13	-49.12
3756.000	-33.380	-13	-20.38	3756.000	-39.800	-13	-26.80
				15042.000	-32.710	-13	-19.71
				16917.000	-31.390	-13	-18.39

- Test Mode : Mode 4

CDMA2000 PCS 1900 1xEVDO 153.6Kbps Radiated Spurious EIRP							
H Polarization				V Polarization			
Frequency	ERP (dBm)	Limit	Margin	Frequency	ERP (dBm)	Limit	Margin
(MHz)		(dBm)	(dB)	(MHz)		(dBm)	(dB)
33.780	-63.130	-13	-50.13	54.030	-59.900	-13	-46.90
54.030	-64.270	-13	-51.27	67.530	-54.050	-13	-41.05
64.830	-63.180	-13	-50.18	79.680	-59.230	-13	-46.23
680.800	-67.090	-13	-54.09	658.400	-65.790	-13	-52.79
799.800	-66.300	-13	-53.30	803.300	-63.530	-13	-50.53
945.400	-65.050	-13	-52.05	924.400	-62.650	-13	-49.65
3756.000	-32.020	-13	-19.02	3756.000	-37.480	-13	-24.48
				5636.000	-38.840	-13	-25.84
				9396.000	-37.960	-13	-24.96
				15036.000	-33.230	-13	-20.23
				16917.000	-31.470	-13	-18.47



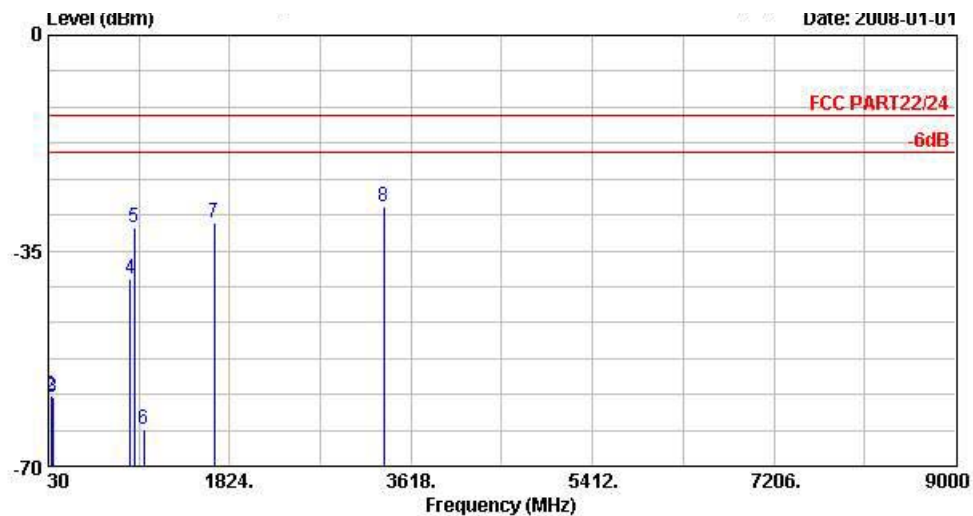
- Test Mode : Mode 5

CDMA2000 Cellular 850 1xRTT FCH_RC1 with Bluetooth Radiated Spurious ERP							
H Polarization				V Polarization			
Frequency	ERP (dBm)	Limit	Margin	Frequency	ERP (dBm)	Limit	Margin
(MHz)		(dBm)	(dB)	(MHz)		(dBm)	(dB)
37.290	-42.610	-13	-29.61	35.940	-49.290	-13	-36.29
68.340	-53.620	-13	-40.62	68.340	-54.120	-13	-41.12
81.030	-58.260	-13	-45.26	81.840	-50.640	-13	-37.64
1618.000	-50.270	-13	-37.27	1654.000	-52.240	-13	-39.24
1648.000	-47.950	-13	-34.95	1674.000	-38.970	-13	-25.97
1674.000	-31.510	-13	-18.51	3344.000	-32.170	-13	-19.17
3344.000	-30.160	-13	-17.16	4818.000	-37.500	-13	-24.50
4814.000	-40.280	-13	-27.28				
4908.000	-40.070	-13	-27.07				



4.6.5 Test Data

4.6.5.1 Mode 1

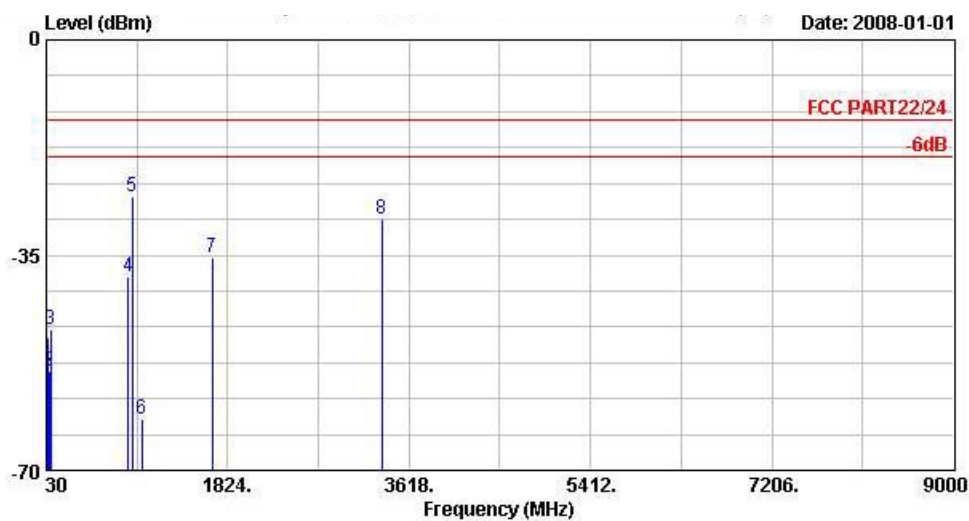


Site : 03CH06-HY
 Condition : FCC PART22/24 EIRP-071107 HORIZONTAL
 EUT : Smart Phone
 POWER : 120Vac/60Hz
 MODEL : FG 7D2802
 MEMO : CDMA 650 Link ; CH384+Earphone+Adaptor
 Plane : E2

	Freq	Level	Over	Limit	Read		
	MHz	dBm	Limit	Line	Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1	37.29	-57.34	-44.34	-13.00	-52.83	-4.51	Peak
2	54.03	-58.47	-45.47	-13.00	-46.06	-12.42	Peak
3	70.23	-58.76	-45.76	-13.00	-46.40	-12.36	Peak
4	841.80	-39.63			-38.34	-1.29	Peak
5	882.40	-31.19			-30.30	-0.89	Peak
6	971.30	-64.04	-51.04	-13.00	-64.00	-0.04	Peak
7	1672.00	-30.36	-17.36	-13.00	-35.80	5.43	Peak
8	3346.00	-27.94	-14.94	-13.00	-40.13	12.19	Peak

Remark:

1. #4: MS Signal
2. #5: BS Signal
3. There's no more obvious spurious emission except the listings above.



Site : 03CH06-HY
 Condition : FCC PART 22/24 ETRP-071107 VERTICAL
 EUT : Smart Phone
 POWER : 120Vac/60Hz
 MODEL : FG 7D2802
 MEMO : CDMA 850 Link ; CH384+Earphone+Adaptor
 Plane : E2

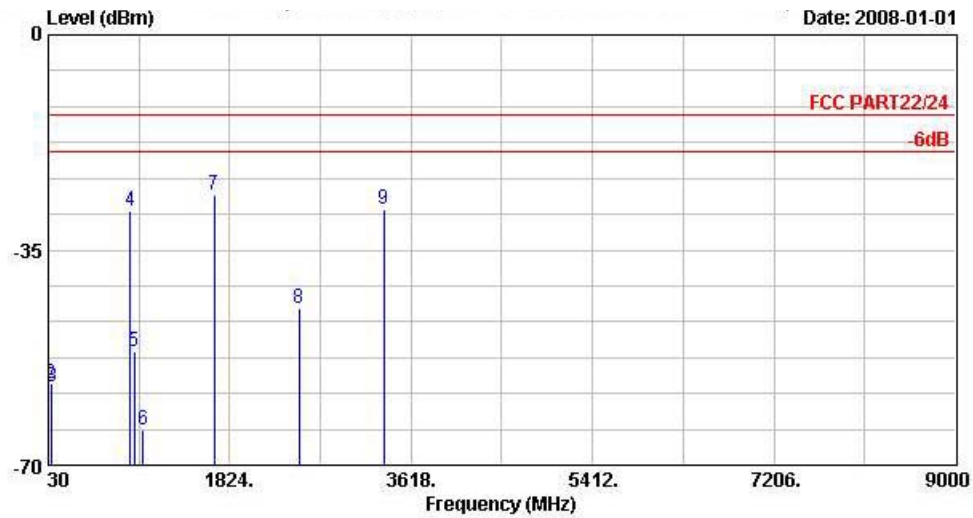
	Freq	Level	Over	Limit	Read		
	MHz	dBm	Limit	Line	Level	Factor	Remark
			dB	dBm	dBm	dB	
1	38.64	-48.40	-35.40	-13.00	-36.86	-11.53	Peak
2	54.84	-53.74	-40.74	-13.00	-39.62	-14.12	Peak
3	72.39	-47.10	-34.10	-13.00	-35.50	-11.60	Peak
4	840.40	-38.63			-40.02	1.39	Peak
5 @	880.30	-25.47			-27.18	1.71	Peak
6	971.30	-61.78	-48.78	-13.00	-64.20	2.43	Peak
7	1672.00	-35.47	-22.47	-13.00	-40.90	5.43	Peak
8	3346.00	-29.26	-16.26	-13.00	-41.45	12.19	Peak

Remark:

- #4: MS Signal
- #5: BS Signal
- There's no more obvious spurious emission except the listings above.



4.6.5.2 Mode 2

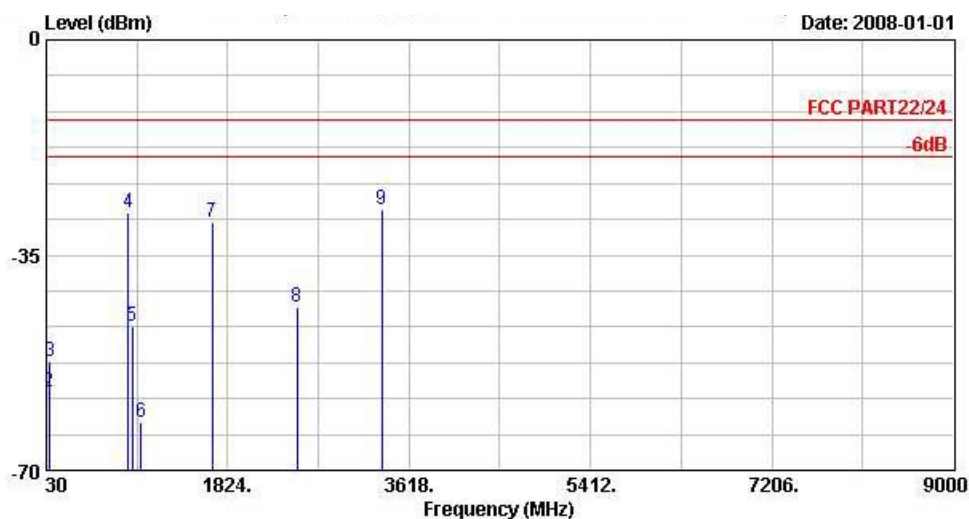


Site : 03CH06-HY
 Condition : FCC PART 22/24 ETRP-071107 HORIZONTAL
 EUT : Smart Phone
 POWER : 120Vac/60Hz
 MODEL : FG 7D2802
 MEMO : CDMA1xEVDO Link ; CH384+Earphone+Adaptor
 Plane : E2

	Freq	Level	Over	Limit	Read		
	MHz	dBm	Limit	Line	Level	Factor	Remark
			dB	dBm	dBm	dB	
1	37.83	-55.67	-42.67	-13.00	-51.16	-4.51	Peak
2	55.38	-56.80	-43.80	-13.00	-44.39	-12.41	Peak
3	68.88	-57.35	-44.35	-13.00	-44.99	-12.36	Peak
4	838.30	-28.62			-27.29	-1.32	Peak
5	882.40	-51.48			-50.59	-0.89	Peak
6	969.90	-64.35	-51.35	-13.00	-64.30	-0.05	Peak
7 @	1672.00	-25.91	-12.91	-13.00	-31.34	5.43	Peak
8	2506.00	-44.48	-31.48	-13.00	-54.72	10.23	Peak
9	3346.00	-28.28	-15.28	-13.00	-40.48	12.19	Peak

Remark:

- #4: MS Signal
- #5: BS Signal
- There is no more obvious emission except the listings above.



Site : 03CH06-HY
 Condition : FCC PART 22/24 ETRP-071107 VERTICAL
 EUT : Smart Phone
 POWER : 120Vac/60Hz
 MODEL : FG 7D2802
 MEMO : CDMA1xEVDO Link ; CH384+Earphone+Adaptor
 Plane : E2

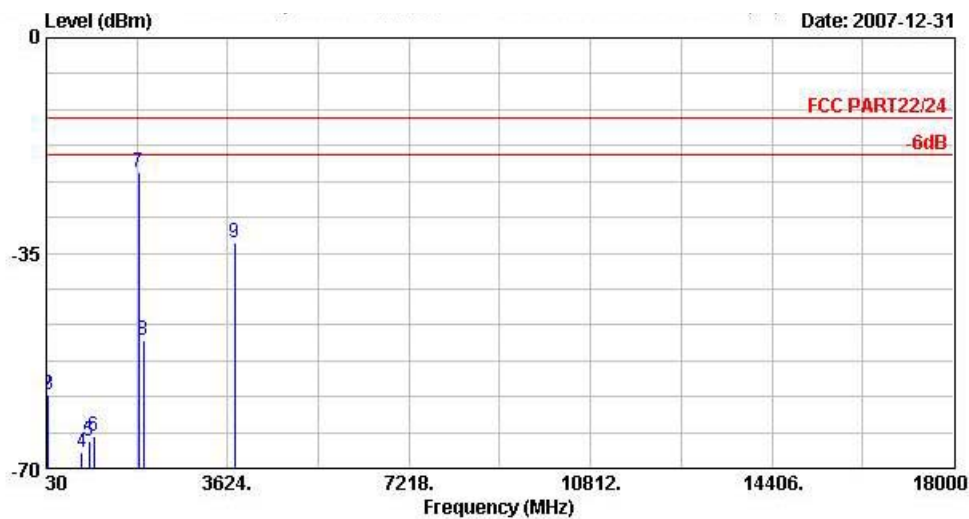
	Freq	Level	Over	Limit	Read		
	MHz	dBm	Limit	Line	Level	Factor	Remark
			dB	dBm	dBm	dB	
1	37.83	-55.21	-42.21	-13.00	-43.95	-11.26	Peak
2	54.03	-57.26	-44.26	-13.00	-43.00	-14.26	Peak
3	68.88	-52.23	-39.23	-13.00	-40.06	-12.16	Peak
4	838.30	-28.18			-29.56	1.37	Peak
5	880.30	-46.47			-48.18	1.71	Peak
6	969.90	-62.20	-49.20	-13.00	-64.62	2.42	Peak
7	1672.00	-29.64	-16.64	-13.00	-35.07	5.43	Peak
8	2506.00	-43.54	-30.54	-13.00	-53.77	10.23	Peak
9	3346.00	-27.51	-14.51	-13.00	-39.70	12.19	Peak

Remark:

- #4: MS Signal
- #5: BS Signal
- There is no more obvious emission except the listings above.



4.6.5.3 Mode 3

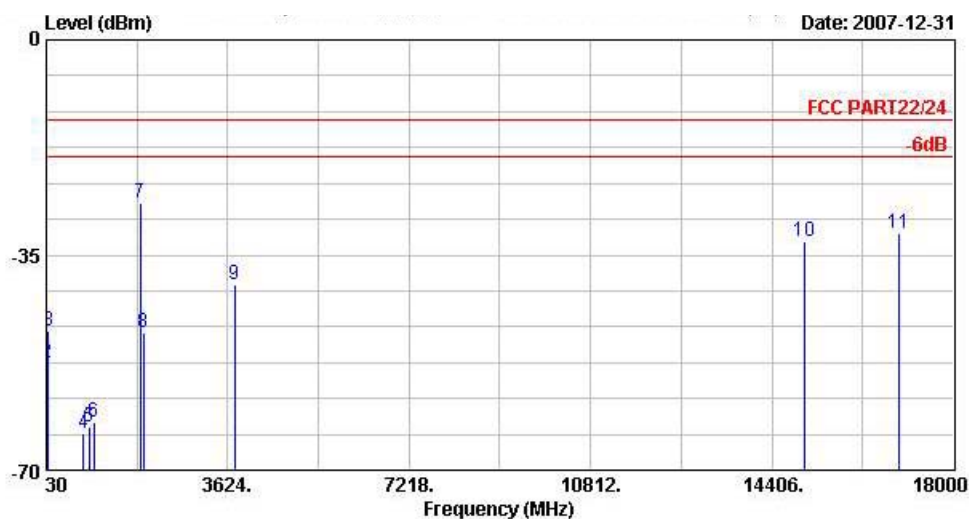


Site : 03CH06-HY
 Condition : FCC PART 22/24 ETRP-071107 HORIZONTAL
 EUT : Smart Phone
 POWER : 120Vac/60Hz
 MODEL : FG 7D2802
 MEMO : CDMA1900 Link ; CH600+Earphone+Adaptor
 Plane : E2

	Freq	Level	Over	Limit	Read		
	MHz	dBm	Limit	Line	Level	Factor	Remark
			dB	dBm	dBm	dB	
1	36.48	-57.73	-44.73	-13.00	-53.82	-3.90	Peak
2	54.03	-57.99	-44.99	-13.00	-45.58	-12.42	Peak
3	69.69	-57.95	-44.95	-13.00	-45.60	-12.36	Peak
4	729.80	-67.41	-54.41	-13.00	-64.99	-2.42	Peak
5	875.40	-65.55	-52.55	-13.00	-64.59	-0.96	Peak
6	978.30	-64.69	-51.69	-13.00	-64.72	0.03	Peak
7 @	1858.00	-21.95			-28.70	6.75	Peak
8	1958.00	-49.13			-56.66	7.54	Peak
9	3756.00	-33.38	-20.38	-13.00	-46.69	13.32	Peak

Remark:

- #7: MS Signal
- #8: BS Signal
- Remark: There's no more obvious spurious emission except the listings above.



Site : 03CH06-HY
 Condition : FCC PART22/24 EIRP-071107 VERTICAL
 EUT : Smart Phone
 POWER : 120Vac/60Hz
 MODEL : FG 7D2802
 MEMO : CDMA1900 Link ; CH600+Earphone+Adaptor
 Plane : E2

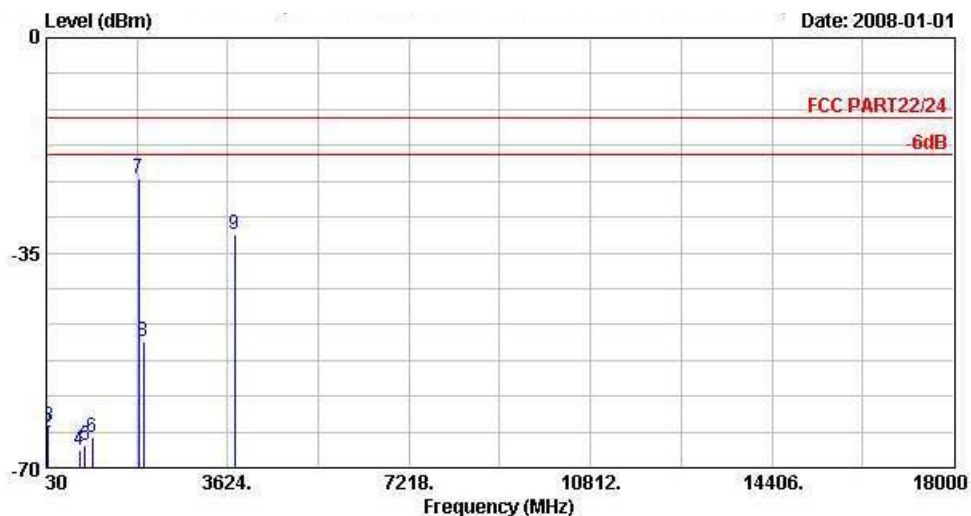
	Freq	Level	Over	Limit	Read	Factor	Remark
	MHz	dBm	Limit	Line	Level	dB	
1	37.29	-48.48	-35.48	-13.00	-37.22	-11.26	Peak
2	55.38	-52.65	-39.65	-13.00	-38.53	-14.12	Peak
3	72.39	-47.27	-34.27	-13.00	-35.67	-11.60	Peak
4	764.80	-64.02	-51.02	-13.00	-64.57	0.55	Peak
5	875.40	-62.97	-49.97	-13.00	-64.64	1.67	Peak
6	978.30	-62.12	-49.12	-13.00	-64.61	2.49	Peak
7	1898.00	-26.66			-33.80	7.14	Peak
8	1958.00	-47.51			-55.05	7.54	Peak
9	3756.00	-39.80	-26.80	-13.00	-53.11	13.32	Peak
10	15042.00	-32.71	-19.71	-13.00	-58.49	25.79	Peak
11	16917.00	-31.39	-18.39	-13.00	-59.94	28.55	Peak

Remark:

1. #7: MS Signal
2. #8: BS Signal
3. There is no more obvious emission except the listings above.



4.6.5.4 Mode 4

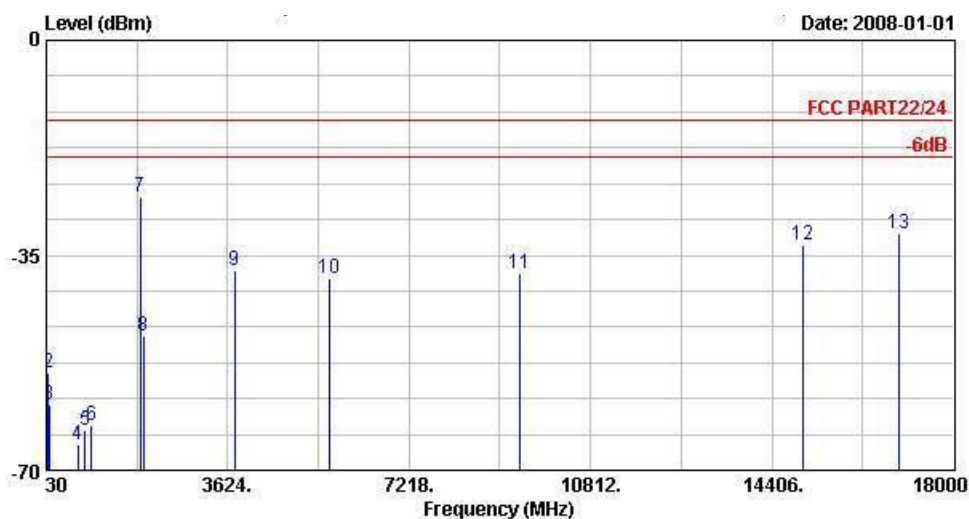


Site : 03CH06-HY
 Condition : FCC PART22/24 ETRP-071107 HORIZONTAL
 EUT : Smart Phone
 POWER : 120Vac/60Hz
 MODEL : FG 7D2802
 MIMO : CDMA1xEVDO Link ; CH600+Earphone+Adaptor
 Plane : E2

	Freq	Level	Over	Limit	Read		
	MHz	dBm	Limit	Line	Level	Factor	Remark
			dB	dBm	dBm	dB	
1	33.78	-63.13	-50.13	-13.00	-61.06	-2.08	Peak
2	54.03	-64.27	-51.27	-13.00	-51.85	-12.42	Peak
3	64.83	-63.18	-50.18	-13.00	-50.80	-12.37	Peak
4	680.80	-67.09	-54.09	-13.00	-64.18	-2.91	Peak
5	799.80	-66.30	-53.30	-13.00	-64.61	-1.69	Peak
6	945.40	-65.05	-52.05	-13.00	-64.77	-0.28	Peak
7 @	1858.00	-22.91			-29.66	6.75	Peak
8	1958.00	-49.48			-57.01	7.54	Peak
9	3756.00	-32.02	-19.02	-13.00	-45.34	13.32	Peak

Remark:

1. #7: MS Signal
2. #8: BS Signal
3. There is no more obvious emission except the listings above.



Site : 03CH06-HY
 Condition : FCC PART 22/24 EIRP-071107 VERTICAL
 EUT : Smart Phone
 POWER : 120Vac/60Hz
 MODEL : FG 7D2802
 MEMO : CDMA1xEVDO Link ; CH600+Earphone+Adaptor
 Plane : E2

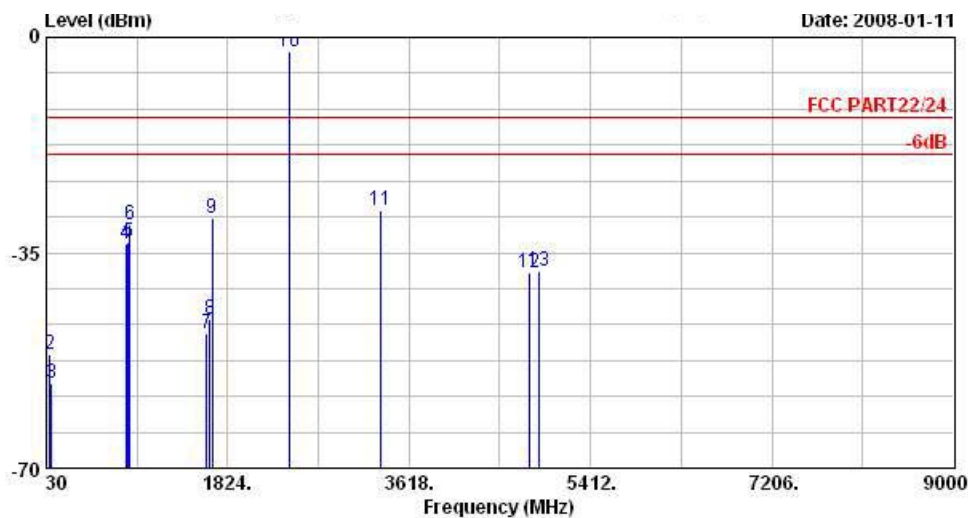
	Freq	Level	Over	Limit	Read		
	MHz	dBm	Limit	Line	Level	Factor	Remark
			dB	dBm	dBm	dB	
1	54.03	-59.90	-46.90	-13.00	-45.64	-14.26	Peak
2	67.53	-54.05	-41.05	-13.00	-41.75	-12.30	Peak
3	79.68	-59.23	-46.23	-13.00	-48.60	-10.63	Peak
4	658.40	-65.79	-52.79	-13.00	-64.74	-1.06	Peak
5	803.30	-63.53	-50.53	-13.00	-64.62	1.09	Peak
6	924.40	-62.65	-49.65	-13.00	-64.70	2.06	Peak
7 @	1898.00	-25.48			-32.63	7.14	Peak
8	1958.00	-48.16			-55.69	7.54	Peak
9	3756.00	-37.48	-24.48	-13.00	-50.79	13.32	Peak
10	5636.00	-38.84	-25.84	-13.00	-55.87	17.03	Peak
11	9396.00	-37.96	-24.96	-13.00	-56.75	18.79	Peak
12	15036.00	-33.23	-20.23	-13.00	-59.01	25.79	Peak
13	16917.00	-31.47	-18.47	-13.00	-60.03	28.55	Peak

Remark:

1. #7: MS Signal
2. #8: BS Signal
3. There is no more obvious emission except the listings above.



4.6.5.5 Mode 5

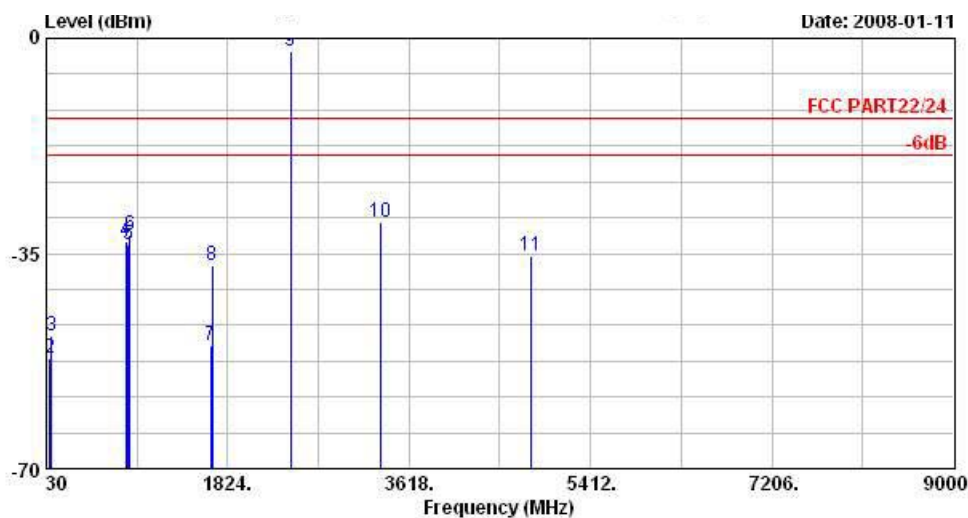


Site : 03CH06-HY
 Condition : FCC PART22/24 ETRP-071107 HORIZONTAL
 EUT : Smart Phone
 POWER : 120Vac/60Hz
 MODEL : FG 7D2802
 MEMO : CDMA 650 Link ; CH384 + Earphone +
 Adaptor + BT Link
 Plane : E2

	Freq	Level	Over	Limit	Read		
	MHz	dBm	Limit	Line	Level	Factor	Remark
			dB	dBm	dBm	dB	
1	37.29	-40.46	-27.46	-13.00	-35.95	-4.51	Peak
2	68.34	-51.47	-38.47	-13.00	-39.11	-12.36	Peak
3	81.03	-56.11	-43.11	-13.00	-43.80	-12.31	Peak
4	817.30	-33.56			-32.04	-1.52	Peak
5	840.40	-33.21	-20.21	-13.00	-31.90	-1.31	Peak
6	855.80	-30.54	-17.54	-13.00	-29.39	-1.16	Peak
7	1618.00	-48.12	-35.12	-13.00	-53.03	4.91	Peak
8	1648.00	-45.80	-32.80	-13.00	-50.97	5.17	Peak
9	1674.00	-29.36	-16.36	-13.00	-34.79	5.43	Peak
10 X	2428.00	-2.44			-12.32	9.88	Peak
11	3344.00	-28.01	-15.01	-13.00	-40.20	12.19	Peak
12	4814.00	-38.13	-25.13	-13.00	-53.72	15.59	Peak
13	4908.00	-37.92	-24.92	-13.00	-53.65	15.72	Peak

Remark:

1. #4: MS Signal
2. #10: BT Signal
3. There is no more obvious emission except the listings above.



Site : 03CH06-HY
 Condition : FCC PART22/24 ETRP-071107 VERTICAL
 EUT : Smart Phone
 POWER : 120Vac/60Hz
 MODEL : FG 7D2802
 MEMO : CDMA 650 Link ; CH384 + Earphone +
 : Adaptor + BT Link
 Plane : E2

	Freq	Level	Over	Limit	Read		
	MHz	dBm	Limit	Line	Level	Factor	Remark
			dB	dBm	dBm	dB	
1	35.94	-47.14	-34.14	-13.00	-36.42	-10.71	Peak
2	68.34	-51.97	-38.97	-13.00	-39.80	-12.16	Peak
3	81.84	-48.49	-35.49	-13.00	-38.14	-10.35	Peak
4	817.30	-33.12	-20.12	-13.00	-34.32	1.21	Peak
5	840.40	-33.45			-34.84	1.39	Peak
6	855.80	-31.99	-18.99	-13.00	-33.50	1.51	Peak
7	1654.00	-50.09	-37.09	-13.00	-55.26	5.17	Peak
8	1674.00	-36.82	-23.82	-13.00	-42.26	5.43	Peak
9 @	2448.00	-2.12			-12.08	9.96	Peak
10	3344.00	-30.02	-17.02	-13.00	-42.21	12.19	Peak
11	4818.00	-35.35	-22.35	-13.00	-50.96	15.62	Peak

Remark:

1. #5: MS Signal
2. #9: BT Signal
3. There is no more obvious emission except the listings above.

4.7 Frequency Stability (Temperature Variation)

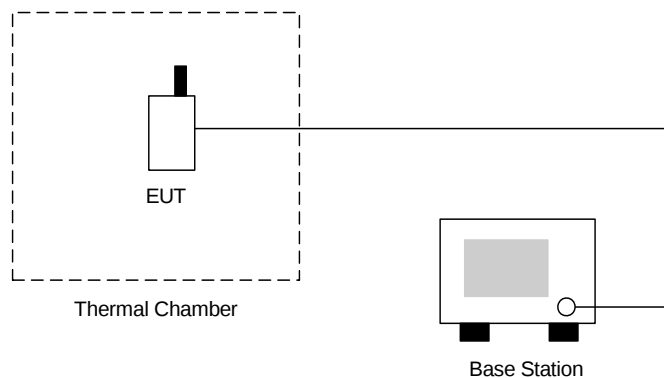
4.7.1 Measurement Instrument

As described in chapter 5 of this test report.

4.7.2 Test Procedure

- The EUT and test equipment were set up as shown on the following section.
- 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.
- 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.
- The temperature tests were performed for the worst case.
- Test data was recorded.

4.7.3 Test Setup Layout



**4.7.4 Test Result**

- Test Mode : CDMA2000 Cellular 850 1xRTT CH384

Temperature()	Change (Hz)	Change (ppm)	Limit (ppm)	Result
-30	N/A	N/A	2.5	Passed
-20	12	0.01		
-10	-21	-0.02		
0	27	0.03		
10	15	0.02		
20	-16	-0.02		
30	20	0.02		
40	18	0.02		
50	-16	-0.02		

Remark : The EUT can not be turned on at -30 °C.

- Test Mode : CDMA2000 Cellular 850 1xEV-DO CH384

Temperature()	Change (Hz)	Change (ppm)	Limit (ppm)	Result
-30	N/A	N/A	2.5	Passed
-20	-52	-0.06		
-10	-53	-0.06		
0	-54	-0.06		
10	-52	-0.06		
20	-51	-0.06		
30	-52	-0.06		
40	-50	-0.06		
50	-53	-0.06		

Remark : The EUT can not be turned on at -30 °C.

- Test Mode : CDMA2000 PCS 1900 1xRTT CH600

Temperature()	Change (Hz)	Change (ppm)	Limit (ppm)	Result
-30	N/A	N/A	2.5	Passed
-20	-53	-0.03		
-10	62	0.03		
0	-51	-0.03		
10	46	0.02		
20	-49	-0.03		
30	-56	-0.03		
40	-83	-0.04		
50	147	0.08		

Remark : The EUT can not be turned on at -30 °C.

- Test Mode : CDMA2000 PCS 1900 1xEV-DO CH600

Temperature()	Change (Hz)	Change (ppm)	Limit (ppm)	Result
-30	N/A	N/A	2.5	Passed
-20	-42	-0.02		
-10	-41	-0.02		
0	-40	-0.02		
10	-42	-0.02		
20	-40	-0.02		
30	-39	-0.02		
40	-40	-0.02		
50	-39	-0.02		

Remark : The EUT can not be turned on at -30 °C.

4.8 Frequency Stability (Voltage Variation)

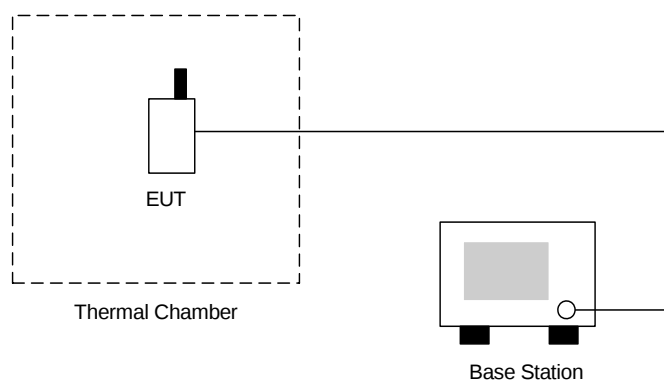
4.8.1 Measurement Instrument

As described in chapter 5 of this test report.

4.8.2 Test Procedure

- The EUT was placed in a temperature chamber at $25 \pm 5^{\circ}\text{C}$ and connected as the following section.
- The power supply voltage to the EUT was varied from BEP to 115% of the nominal value measured at the input to the EUT.
- 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 850 1xRTT CH384

Voltage(Volt)	Change (Hz)	Change (ppm)	Limit (ppm)	Result
3.7	-56.0	-0.07	2.5	Passed
BEP	-59.0	-0.07		
4.2	-58.0	-0.07		

- Test Mode : CDMA2000 Cellular 850 1xEV-DO CH384

Voltage(Volt)	Change (Hz)	Change (ppm)	Limit (ppm)	Result
3.7	-52.0	-0.06	2.5	Passed
BEP	-52.0	-0.06		
4.2	-51.0	-0.06		

- Test Mode : CDMA2000 PCS 1900 1xRTT CH600

Voltage(Volt)	Change (Hz)	Change (ppm)	Limit (ppm)	Result
3.7	-56.0	-0.03	2.5	Passed
BEP	-57.0	-0.03		
4.2	-58.0	-0.03		

- Test Mode : CDMA2000 PCS 1900 1xEV-DO CH600

Voltage(Volt)	Change (Hz)	Change (ppm)	Limit (ppm)	Result
3.7	-40.0	-0.02	2.5	Passed
BEP	-39.0	-0.02		
4.2	-42.0	-0.02		

Remark:

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

5 List of Measurement Equipments

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Due Date	Remark
Spectrum Analyzer	Agilent	E4408B	MY44211028	9KHz-26.5GHz	Oct. 17, 2007	Oct. 16, 2008	Radiation (03CH06-HY)
EMI Test Receiver	R&S	ESCS30	100356	9KHz-2.75GHz	Jul. 26, 2007	Jul. 25, 2008	Radiation (03CH06-HY)
Bilog Antenna	SCHAFFNER	CBL6112B	2885	30MHz -2GHz	Dec. 01, 2007	Nov. 30, 2008	Radiation (03CH06-HY)
Double Ridge Horn Antenna	Com-Power	AH118	071025	1G~18G	Jun. 04, 2007	Jun. 03, 2008	Radiation (03CH06-HY)
SHF-EHF Horn	SCHWARZBECK	BBHA 9170	9170-251	14G - 40G	Oct. 17, 2007	Oct. 16, 2008	Radiation (03CH06-HY)
Pre Amplifier	Agilent	8449B	3008A01917	1G - 26.5G	Nov. 22, 2007	Nov. 21, 2008	Radiation (03CH06-HY)
PreAmplifier	EMEC	PA303	PA303-SMA-	100K~3GHz	Nov. 26, 2007	Nov. 25, 2008	Radiation (03CH06-HY)
Base Station Simulator	R & S	CMU200	103937	Third-Band	Oct. 19, 2007	Oct. 18, 2008	Radiation (03CH06-HY)
Controller	INN-CO	CO2000	N/A	N/A	N/A	N/A	Radiation (03CH06-HY)
Turn Table	INN-CO	DS2000	420/650/00	0 ~ 360 degree	N/A	N/A	Radiation (03CH06-HY)
Antenna Mast	INN-CO	MM3000	114/8000604/L	1 m - 4 m	N/A	N/A	Radiation (03CH06-HY)
Thermal Chamber	Tenyi technology	TTH-D35P	TBN-930701	N/A	Aug. 02, 2007	Aug. 01, 2008	Conduction (TH02-HY)
Spectrum	R&S	FSP40	100055	9KHz~40GHz	Jun. 25, 2007	Jun. 24, 2008	Conduction (TH02-HY)
Bluetooth Test	ANRITSU	MT8852A	6K00003939	N/A	N/A	N/A	Conduction (TH02-HY)
Power Divider	ARRA	5200-1	3871	N/A	Oct. 01, 2007	Sep. 30, 2008	Conduction (TH02-HY)
DC Power Supply	TOPWARD	3303D	740889	N/A	May 25, 2007	May 24, 2009	Conduction (TH02-HY)
Power Meter	Agilent	E4416A	GB41292344	N/A	Feb. 08, 2007	Feb. 07, 2008	Conduction (TH02-HY)
Power Sensor	Agilent	E9327A	US40441548	N/A	Feb. 08, 2007	Feb. 07, 2008	Conduction (TH02-HY)

6 Uncertainty Evaluation

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

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

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

Contribution	Uncertainty of x_i		$u(x_i)$	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