



FCC TEST REPORT

for

47 CFR Part 22H, 24E

Equipment : CDMA 1xRTT IS2000 Mobile Phone
Trade Name : RH-108
FCC ID : QMNRH-108
Uplink Frequency Range : CDMA2000 Cellular 850 : 824.70~848.31 MHz
CDMA2000 PCS 1900 : 1851.25~1908.75 MHz
Max. ERP/EIRP Power : CDMA2000 Cellular 850 : 0.10 W
CDMA2000 PCS 1900 : 0.46 W
Emission Designator : 1M25F9W
Applicant : **Nokia Inc.**
12278 Scripps Summit Dr. San Diego CA 92131 USA

- The test result refers exclusively to the test presented test model / sample.
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- The data shown in this test report were carried out on Jul. 29, 2007 at **Sporton International Inc. LAB.**
- Report No.: FG772402, Report Version: Rev. 01.

Technical Reviewer
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Report Reviewer
Roy Wu / Manager

SPORTON International Inc.

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Table of Contents

History of this test report.....	ii
1. General Information	1
1.1. Applicant	1
1.2. Manufacturer	1
1.3. Basic Description of Equipment under Test.....	1
1.4. Feature of Equipment under Test	2
1.5. Report Date.....	2
2 Test Configuration of Equipment under Test.....	3
2.1. Test Manner	3
2.2. Test Mode	3
2.3. Connection Diagram of Test System	3
2.4. Ancillary Equipment List.....	3
3. General Information of Test Site	4
3.1. Test Voltage	4
3.2. Test Compliance	4
3.3. Frequency Range.....	4
3.4. Test Distance	4
4. Test Data and Test Result.....	5
4.1. List of Measurements and Examinations	5
4.2. RF Output Power	6
4.3. ERP / EIRP Measurement	8
4.4. Occupied Bandwidth and Band Edge Measurement	11
4.5. Conducted Emission	37
4.6. Field Strength of Spurious Radiation	65
4.7. Frequency Stability (Temperature Variation)	81
4.8. Frequency Stability (Voltage Variation).....	83
5 List of Measurement Equipments	84
6 Uncertainty Evaluation.....	85
 Appendix A – External Photographs of EUT	
Appendix B – Internal Photographs of EUT	
Appendix C – Setup Photographs	



History of this test report

Report Issue Date: Jul. 31, 2007

Report No.	Description



1. General Information

1.1. Applicant

Nokia Inc.

12278 Scripps Summit Dr. San Diego CA 92131 USA

1.2 Manufacturer

Foxconn International Holdings Limited

No. 2, 2nd DongHuan Road, 10th YouSong Industrial District, Longhua Town, Baoan, Shenzhen, Guangdong, China

1.3 Basic Description of Equipment under Test

Equipment		CDMA 1xRTT IS2000 Mobile Phone
Trade Name		RH-108
AC Adapter	Brand Name	Nokia
	Model Name	AC-3U
	Power Rating	I/P:100-240Vac,50-60Hz,65mA; O/P:5Vdc,350mA
	AC Power Cord Type	1.8 meter non-shielded cable without ferrite core
Battery	Brand Name	Nokia
	Model Name	BL-5B
	Rating	3.7Vdc, 860mA
	Type	Li-ion
Earphone	Brand Name	Nokia
	Model Name	HS-9
	Signal line Type	1.2 meter non-shielded cable without ferrite core

**1.4 Feature of Equipment under Test**

DUT Type :	CDMA 1xRTT IS2000 Mobile Phone
Trade Name :	RH-108
FCC ID :	QMNRH-108
MEID :	A00000011E6E51
Tx Frequency :	CDMA2000 Cellular 850 : 824 ~ 849 MHz CDMA2000 PCS 1900 : 1850 ~1910 MHz
Maximum Output Power :	CDMA2000 Cellular 850 RC1/SO2 : 24.49 dBm RC3/SO2 : 24.27 dBm RC3/SO55 : 24.56 dBm CDMA2000 PCS1900 RC1/SO2 : 23.22 dBm RC3/SO2 : 23.51 dBm RC3/SO55 : 23.54 dBm
Maximum ERP/EIRP :	CDMA2000 Cellular 850 : 0.10 W (19.79 dBm) CDMA2000 PCS1900 : 0.46 W (26.59 dBm)
Antenna Type :	Fixed Internal
Antenna Gain :	-3.0 dBi
HW ID :	2001
SW Version :	SH_0330B_GEN
Digital Modulation Emission :	QPSK
Type of Emission :	1M25F9W
Device Power Class :	CDMA2000 Cellular 850 : 3 CDMA2000 PCS1900 : 2
DUT Stage :	Identical Prototype

1.5 Report Date

EUT Received : Jul. 24, 2007

Report Date : Jul. 31, 2007

2 Test Configuration of Equipment under Test

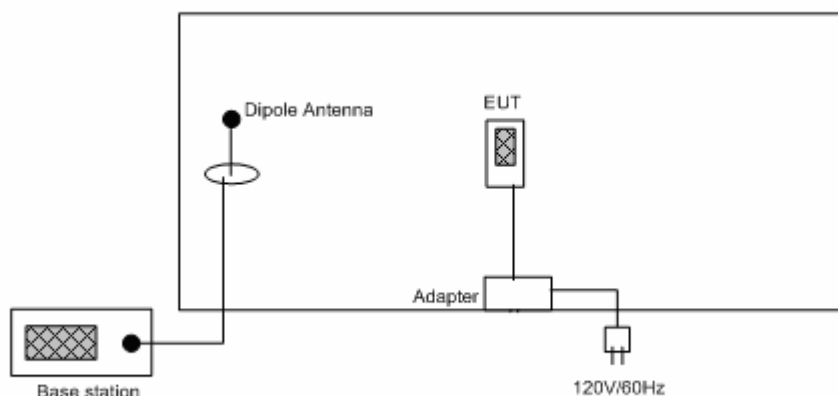
2.1 Test Manner

- 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.
- For radiated measurements, the results were the maximum of those obtained in 3 orthogonal axes and only showed the worst data in this report.

2.2 Test Mode

Application	CDMA2000 Cellular 850	CDMA2000 PCS 1900
Radiated Emission	☒ Mode 1: 1xRTT Link Mode_CH1013	☒ Mode 4: 1xRTT Link Mode_CH25
	☒ Mode 2: 1xRTT Link Mode_CH384	☒ Mode 5: 1xRTT Link Mode_CH600
	☒ Mode 3: 1xRTT Link Mode_CH777	☒ Mode 6: 1xRTT Link Mode_CH1175
Conducted Measurement	☒ Mode 1: CDMA2000 Link Mode	☒ Mode 2: CDMA2000 Link Mode

2.3 Connection Diagram of Test System



2.4 Ancillary Equipment List

Item	Equipment	Trade Name	Model No.	FCC ID	Serial No.
1.	Base Station	R & S	CMU 200	N/A	112402



3. General Information of Test Site

Test Site Location : No. 52, Hwa Ya 1st Rd., Hwa Ya Technology Park,
Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C.
TEL : 886-3-327-3456
FAX : 886-3-318-0055
Test Site No : 03CH06-HY
FCC Reg. Num. : 101377

The chamber meets the characteristics of ANSI C63.4-2003. This site is on file with the FCC. The Industry Canada file number for this site is IC 4088.

3.1 Test Voltage

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

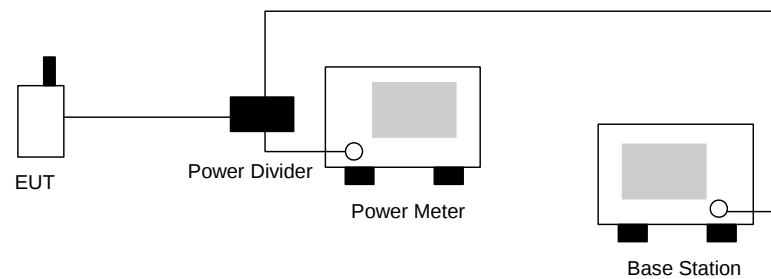
4.2.1 Measurement Instruments :

As described in chapter 5 of this test report.

4.2.2 Test Procedure :

1. The transmitter output was connected to power meter and base station through power divider.
2. Set EUT maximum power through base station.
3. Select lowest, middle, and highest channels for each band.

4.2.3 Test Setup Layout :



**4.2.4 Test Result :**

Bands	Test Mode	Test Status	Channel	Frequency (MHz)	Conducted Power (dBm)	Conducted Power (Watts)
CDMA2000 Cellular 850	CDMA 1xRTT	RC1/SO2	1013	824.70 (Low)	24.49	0.28
			384	836.52 (Mid)	24.19	0.26
			777	848.31 (High)	23.90	0.25
		RC3/SO2	1013	824.70 (Low)	24.27	0.27
			384	836.52 (Mid)	24.17	0.26
			777	848.31 (High)	23.84	0.24
		RC3/SO55	1013	824.70 (Low)	24.56	0.29
			384	836.52 (Mid)	24.21	0.26
			777	848.31 (High)	23.97	0.25
CDMA2000 PCS 1900	CDMA 1xRTT	RC1/SO2	25	1851.25 (Low)	23.13	0.21
			600	1880.00 (Mid)	23.20	0.21
			1175	1908.75 (High)	23.22	0.21
		RC3/SO2	25	1851.25 (Low)	23.25	0.21
			600	1880.00 (Mid)	23.51	0.22
			1175	1908.75 (High)	23.38	0.22
		RC3/SO55	25	1851.25 (Low)	23.34	0.22
			600	1880.00 (Mid)	23.54	0.23
			1175	1908.75 (High)	23.40	0.22

Note:

1. For cellular band 850, the worst case adopted as maximum output power 24.56 dBm, is at CDMA2000 1xRTT, RC3/SO55.
2. For PCS band 1900, the worst case adopted as maximum output power 23.54 dBm, is at CDMA2000 1xRTT, RC3/SO55.



4.3 ERP / EIRP Measurement

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

4.3.1 Measurement Instruments

As described in chapter 5 of this test report.

4.3.2 Test Procedure

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

P_s (dBm) : Input power to substitution antenna.

G_s (dBi or dBd) : Substitution antenna Gain.

$E_t = R_t + AF$

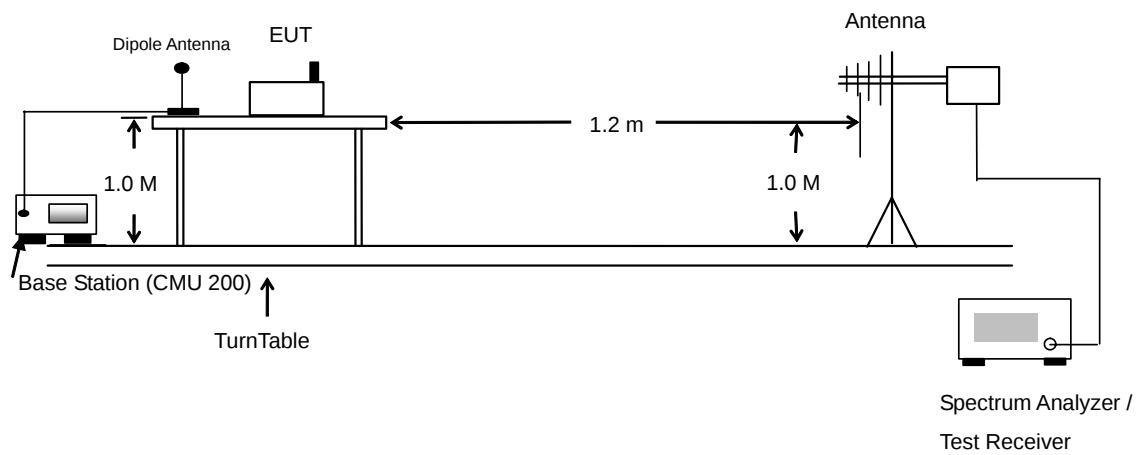
$E_s = R_s + AF$

AF (dB/m) : Receive antenna factor

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

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

4.3.3 Test Setup Layout of ERP/EIRP



**4.3.4 Test Result**

Temperature : 25~26°C

Relative Humidity : 60~61%

Test Engineer: James Huang

CDMA2000 Cellular 850 1xRTT RC3/SO55 Radiated Power ERP						
Horizontal Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBd)	ERP (dBm)	ERP (W)
824.70	-34.78	-48.12	0.00	-1.08	12.26	0.02
836.52	-35.28	-48.28	0.00	-0.93	12.07	0.02
848.31	-35.18	-48.35	0.00	-0.76	12.41	0.02
Vertical Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBd)	ERP (dBm)	ERP (W)
824.70	-27.64	-47.97	0.00	-1.08	19.25	0.08
836.52	-28.00	-48.01	0.00	-0.93	19.08	0.08
848.31	-27.50	-48.05	0.00	-0.76	19.79	0.10

CDMA2000 PCS1900 1xRTT RC3/SO55 Radiated Power EIRP						
Horizontal Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBi)	EIRP (dBm)	EIRP (W)
1851.25	-30.70	-51.88	0.00	1.96	23.14	0.21
1880.00	-31.88	-52.99	0.00	2.00	23.11	0.20
1908.75	-32.48	-54.28	0.00	1.98	23.78	0.24
Vertical Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBi)	EIRP (dBm)	EIRP (W)
1851.25	-27.90	-52.13	0.00	1.96	26.19	0.42
1880.00	-29.11	-53.17	0.00	2.00	26.06	0.40
1908.75	-29.52	-54.13	0.00	1.98	26.59	0.46

4.4 Occupied Bandwidth and Band Edge Measurement

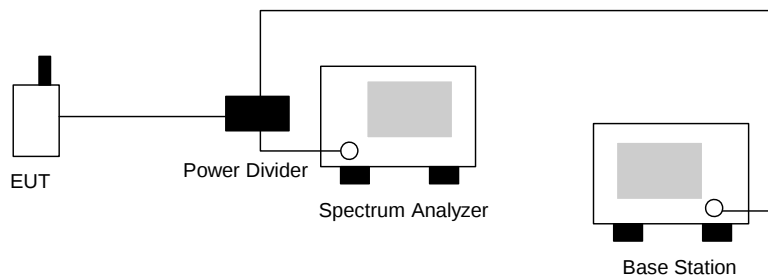
4.4.1 Measurement Instruments

As described in chapter 5 of this test report.

4.4.2 Test Procedure

1. The EUT was connected to Spectrum Analyzer and Base Station via power divider.
2. The 99% occupied bandwidth and 26 dB Bandwidth of middle channel for the highest RF powers were measured.
3. The bandedge of low and high channels for the highest RF powers within the transmitting frequency band were measured. Setting RBW as roughly BW/100.
4. 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

- Temperature : 25~26°C
- Relative Humidity : 60~61%
- Test Engineer: James Huang

Bands	Test Mode	Test Status	Channel	Frequency (MHz)	Measurement Value (dBm)	Correction Factor (dB)	Band Edge (dBm)
CDMA2000 Cellular 850	CDMA 1xRTT	RC1/SO2	1013	824.70 (Low)	-17.18	1.04	-16.14
			777	848.31 (High)	-15.28	1.04	-14.24
		RC3/SO2	1013	824.70 (Low)	-18.69	1.04	-17.65
			777	848.31 (High)	-15.64	1.04	-14.60
		RC3/SO55	1013	824.70 (Low)	-17.96	1.04	-16.92
			777	848.31 (High)	-17.94	1.04	-16.90

Note:

*Occupancy Bandwidth = 1272.00KHz

*Correction Factor = $10 \cdot \log(1\% \text{ Occupancy Bandwidth} / \text{Measurement RBW})$
 $= 10 \cdot \log[(0.01 \cdot 1272.00\text{KHz}) / 10\text{KHz}]$
 $= 1.04 \text{ dB}$

*Band Edge = Measurement Value + Correction Factor

Bands	Test Mode	Test Status	Channel	Frequency (MHz)	Measurement Value (dBm)	Correction Factor (dB)	Band Edge (dBm)
CDMA2000 PCS 1900	CDMA 1xRTT	RC1/SO2	25	1851.25 (Low)	-38.43	1.04	-37.39
			1175	1908.75 (High)	-35.28	1.04	-34.24
		RC3/SO2	25	1851.25 (Low)	-38.74	1.04	-37.70
			1175	1908.75 (High)	-35.03	1.04	-33.99
		RC3/SO55	25	1851.25 (Low)	-38.29	1.04	-37.25
			1175	1908.75 (High)	-34.73	1.04	-33.69

Note:

*Occupancy Bandwidth = 1272.00KHz

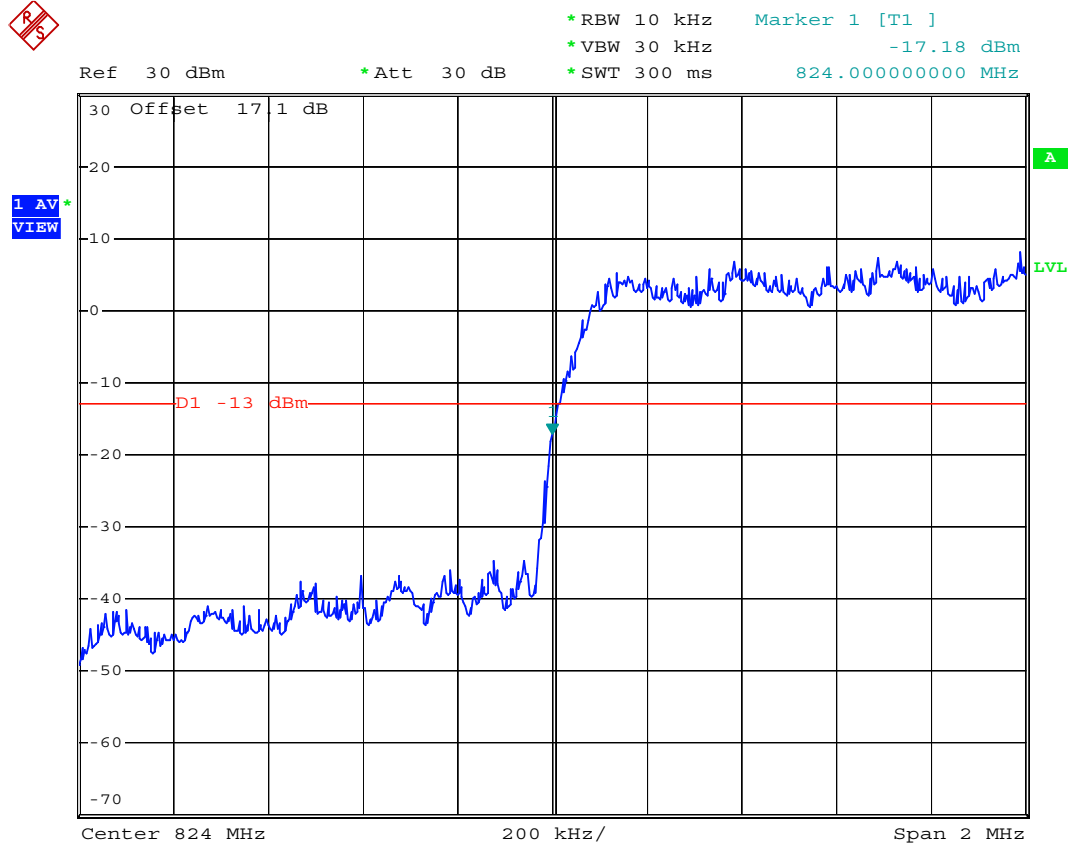
*Correction Factor = $10 \cdot \log(1\% \text{ Occupancy Bandwidth} / \text{Measurement RBW})$
 $= 10 \cdot \log[(0.01 \cdot 1272.00\text{KHz}) / 10\text{KHz}]$
 $= 1.04 \text{ dB}$

*Band Edge = Measurement Value + Correction Factor



4.4.5 Test Result

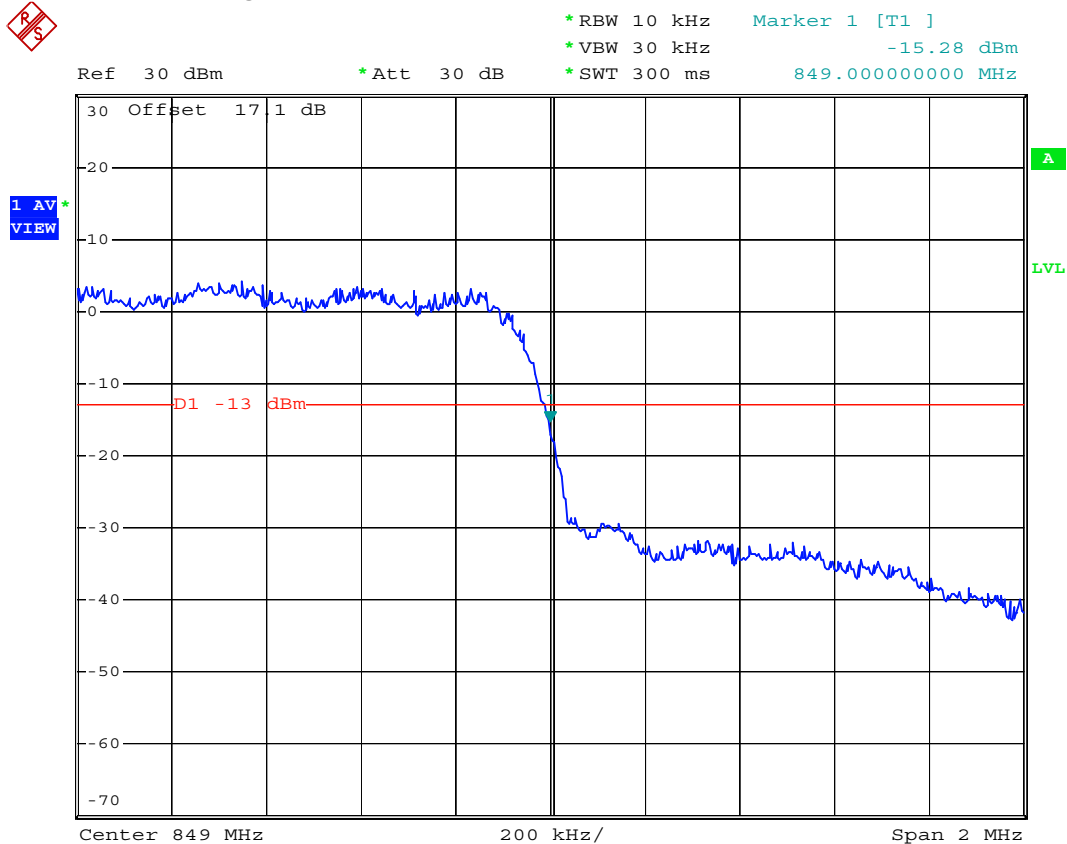
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- Power State : High



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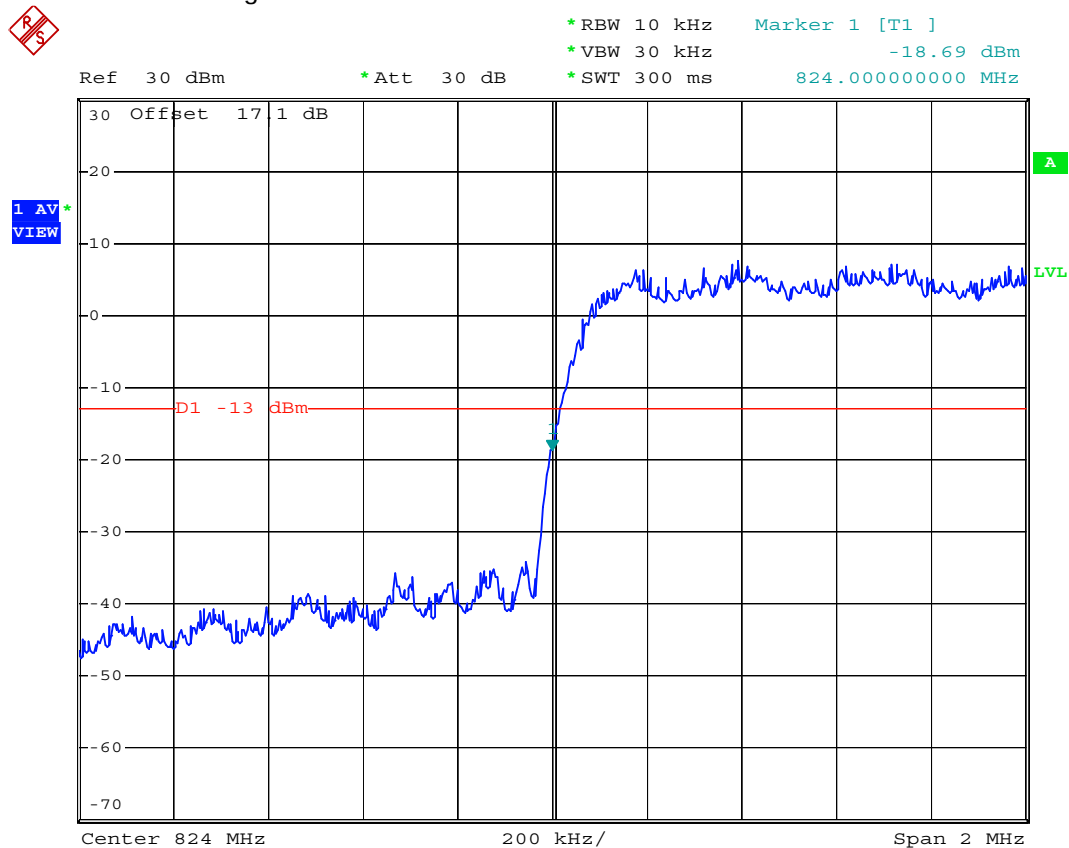
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- Power State : High



Date: 26.JUL.2007 07:33:39



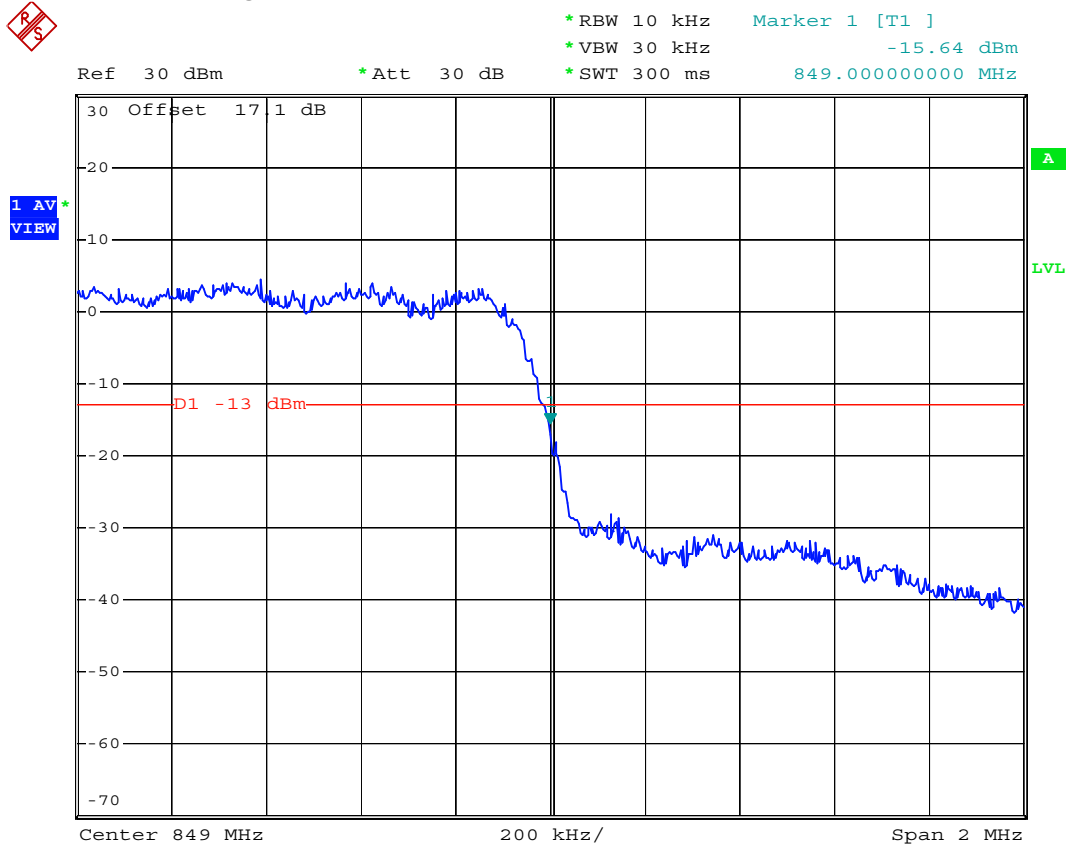
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- Power State : High



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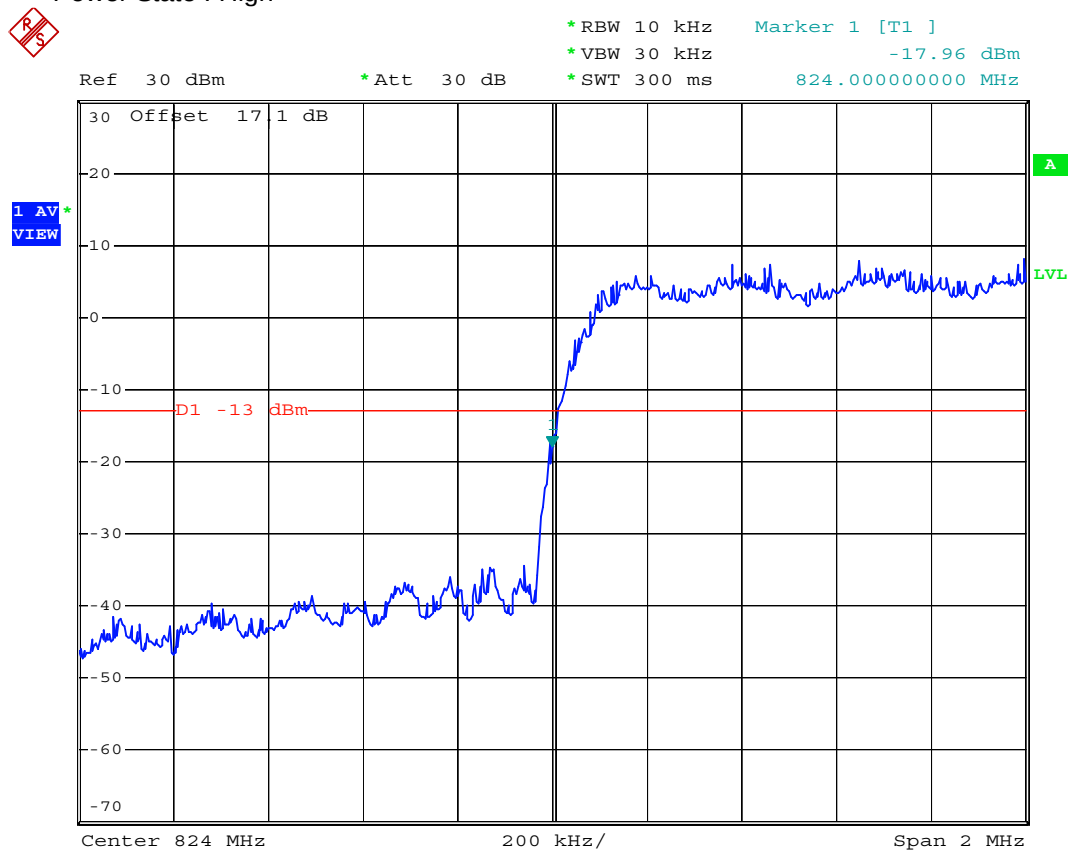


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- Power State : High



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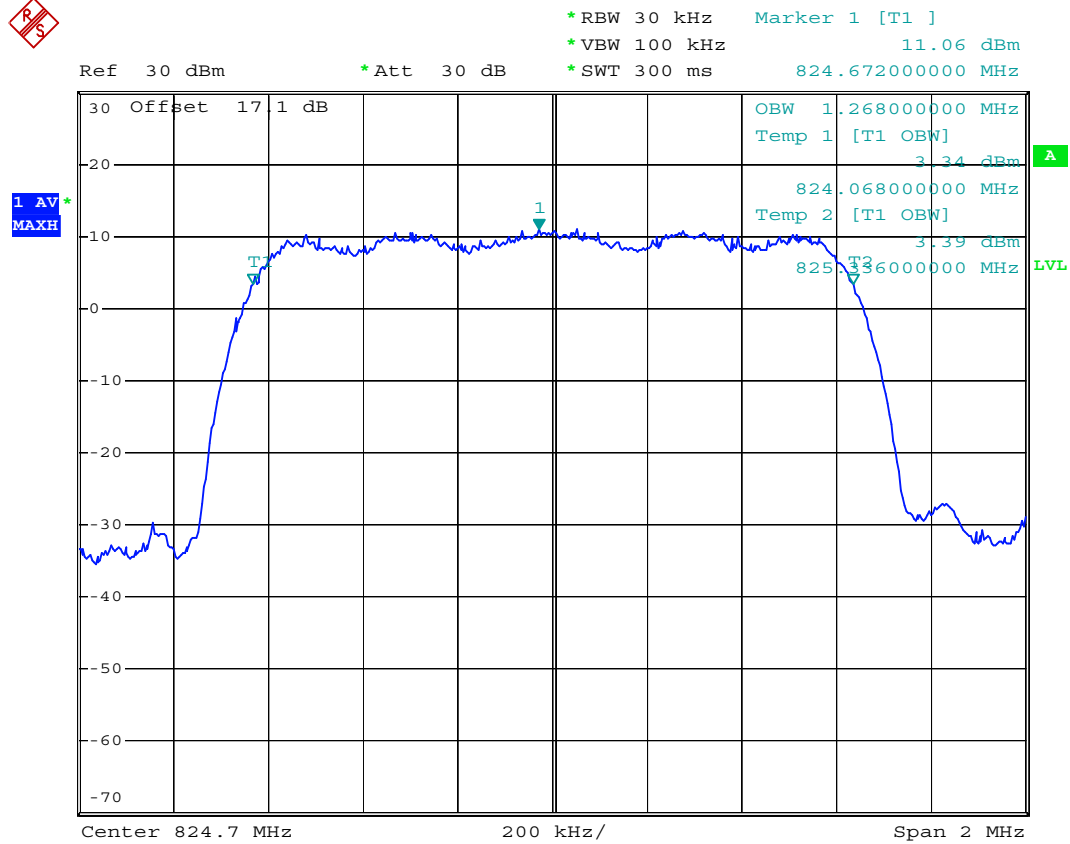
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- Power State : High



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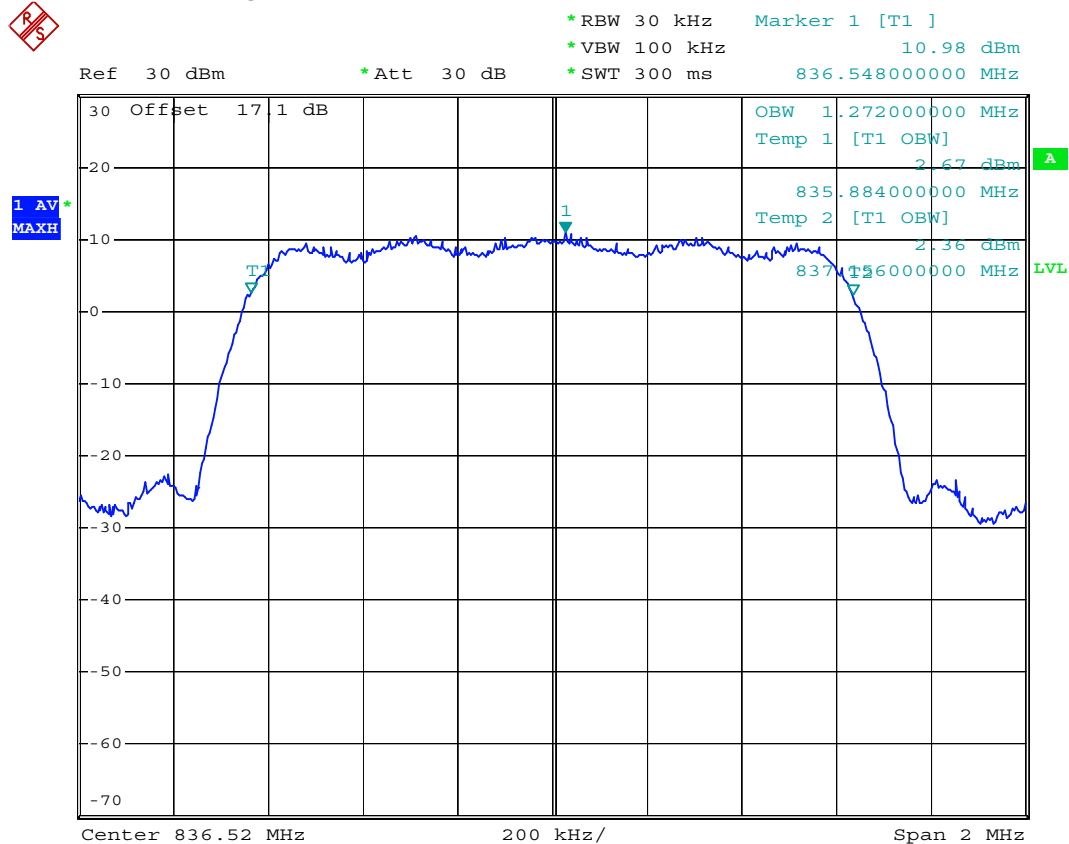
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- Power State : High



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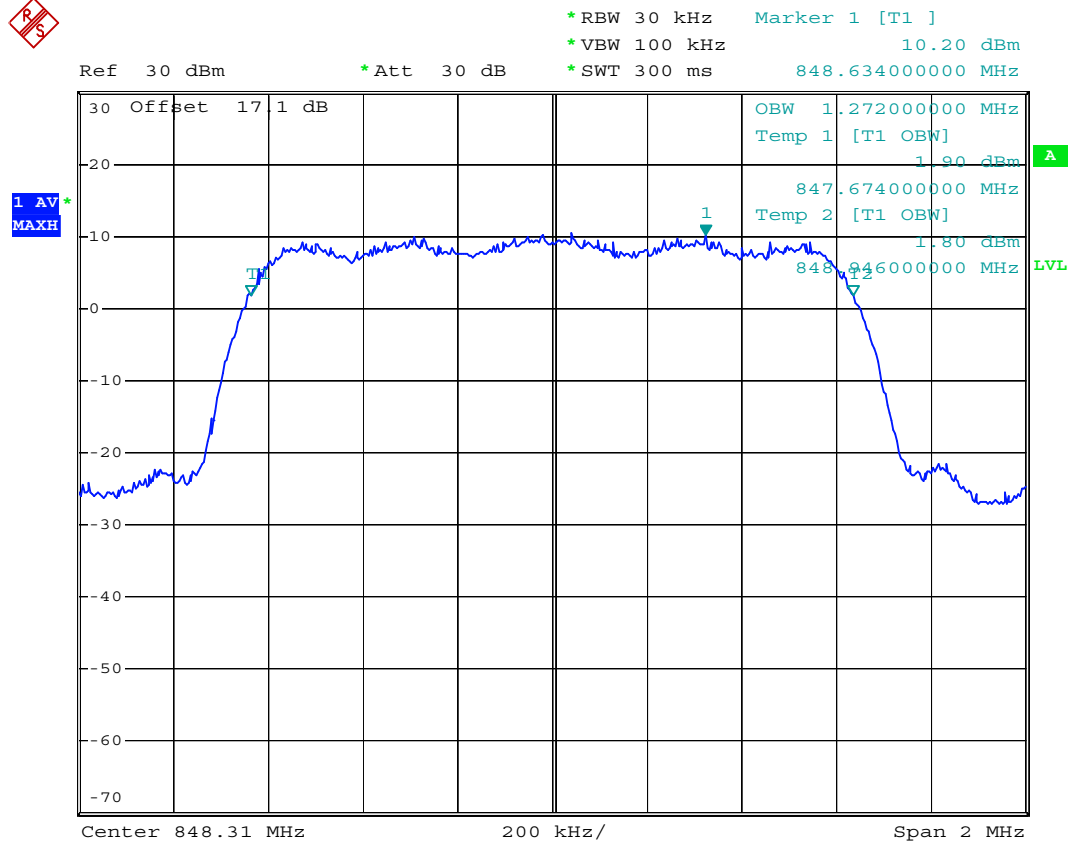
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- Power State : High



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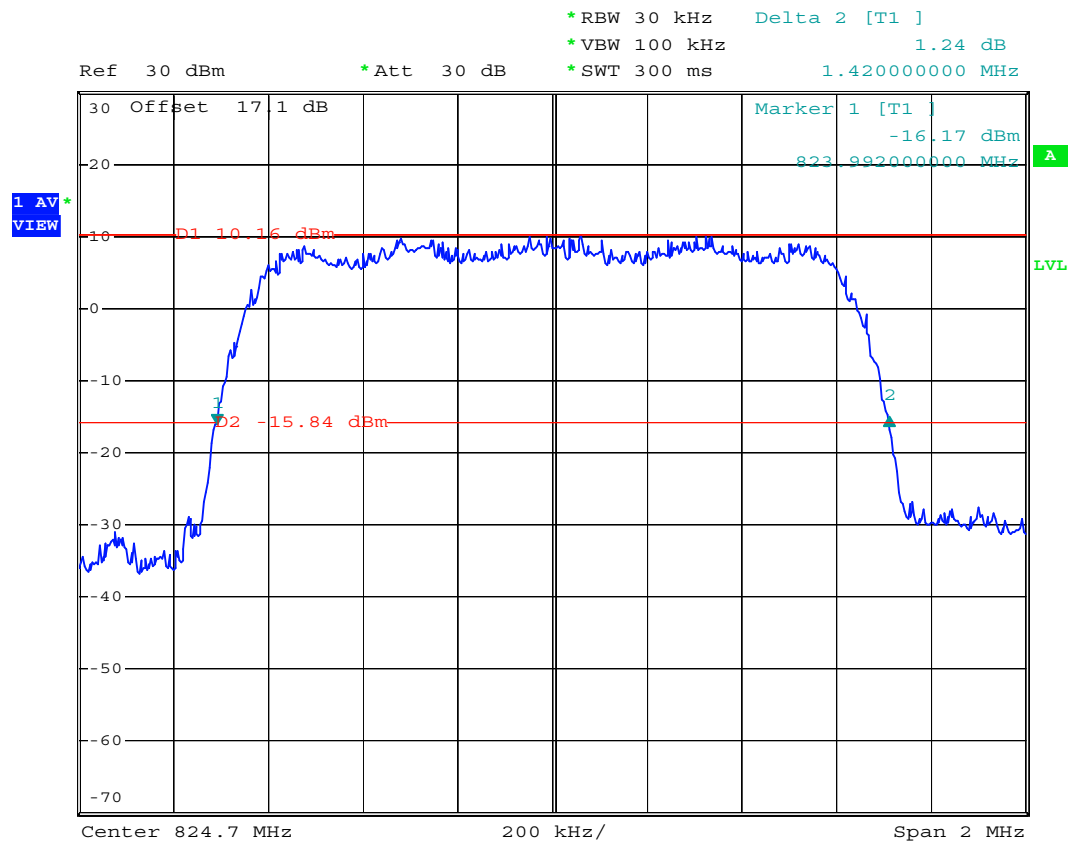
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- Power State : High



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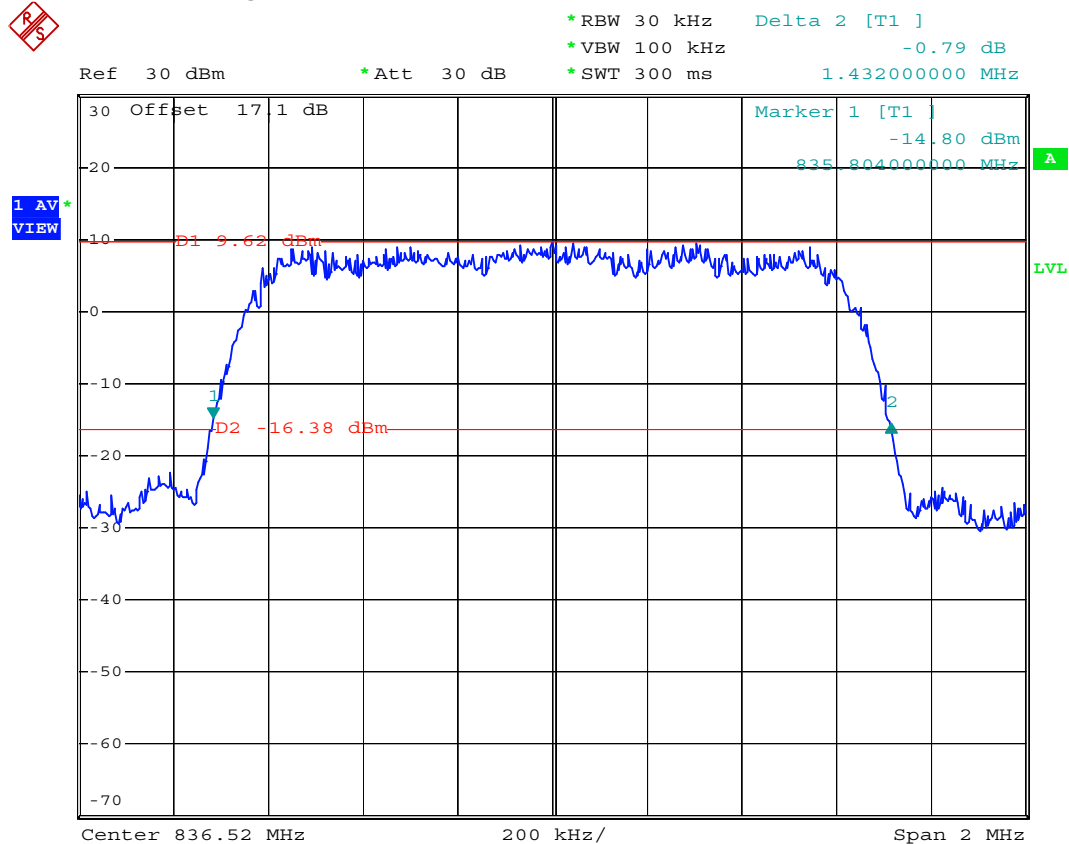
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- Power State : High



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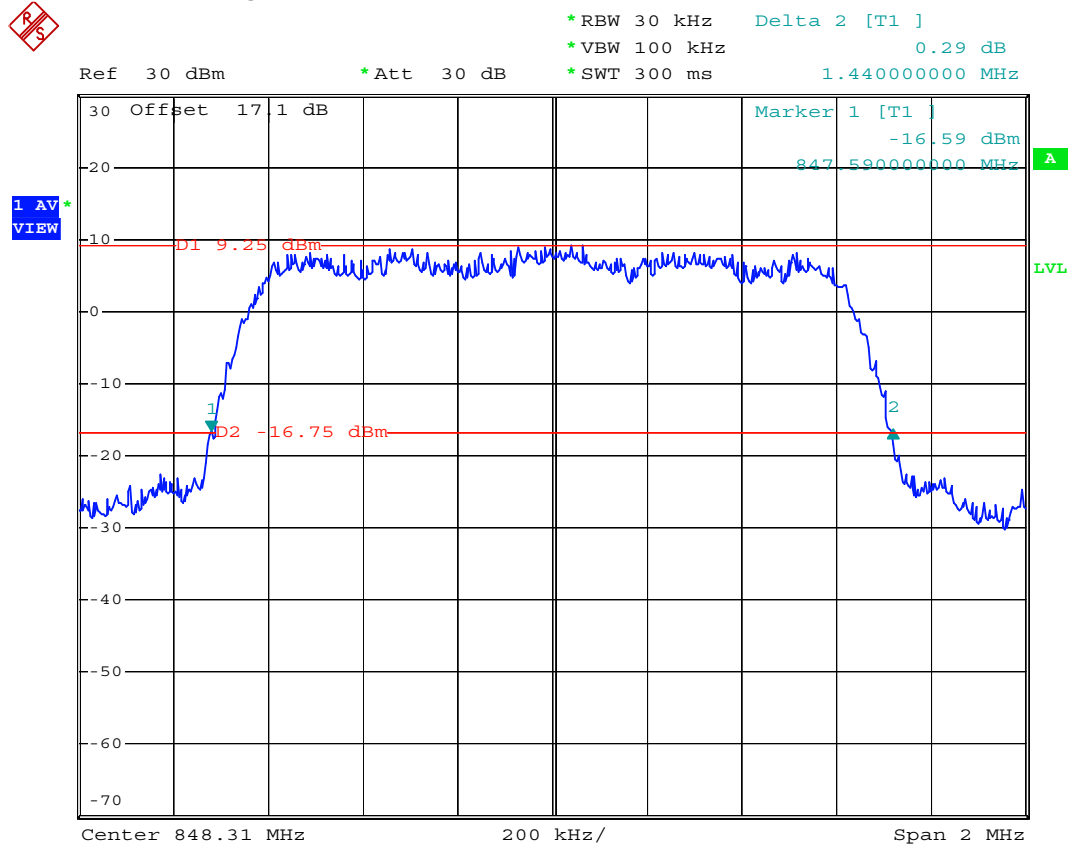
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- Power State : High



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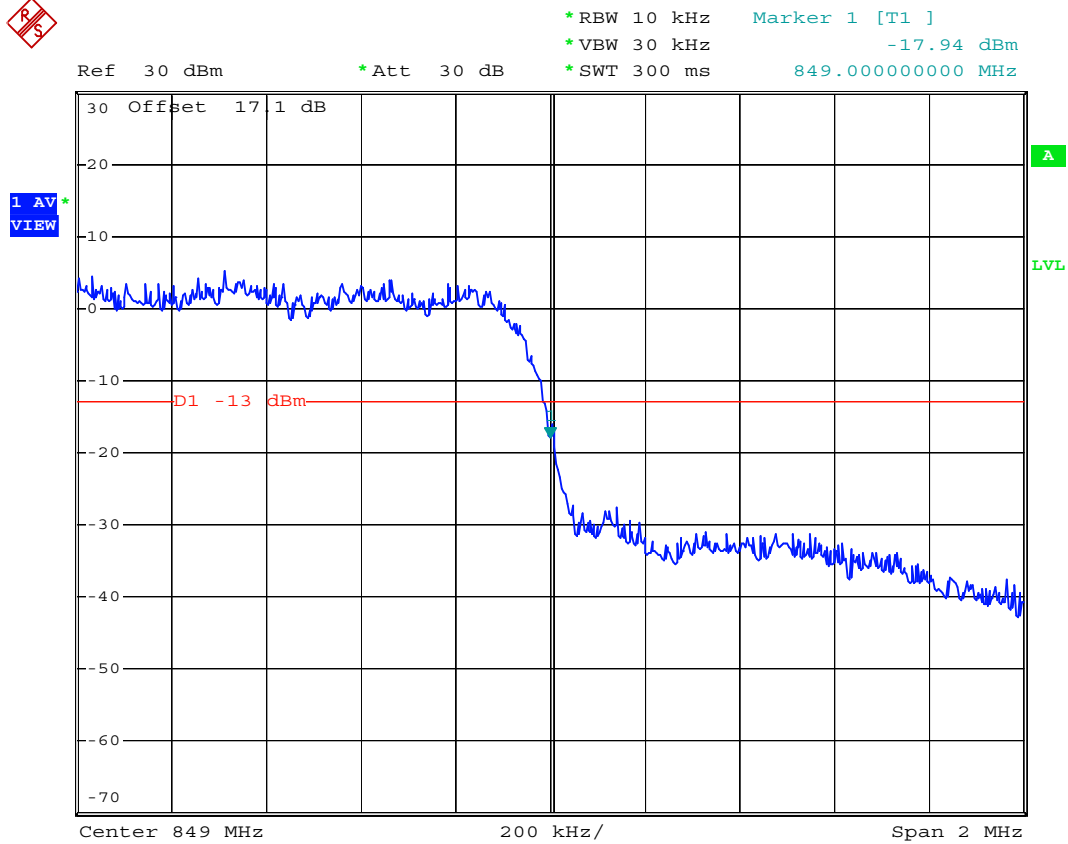
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- Power State : High



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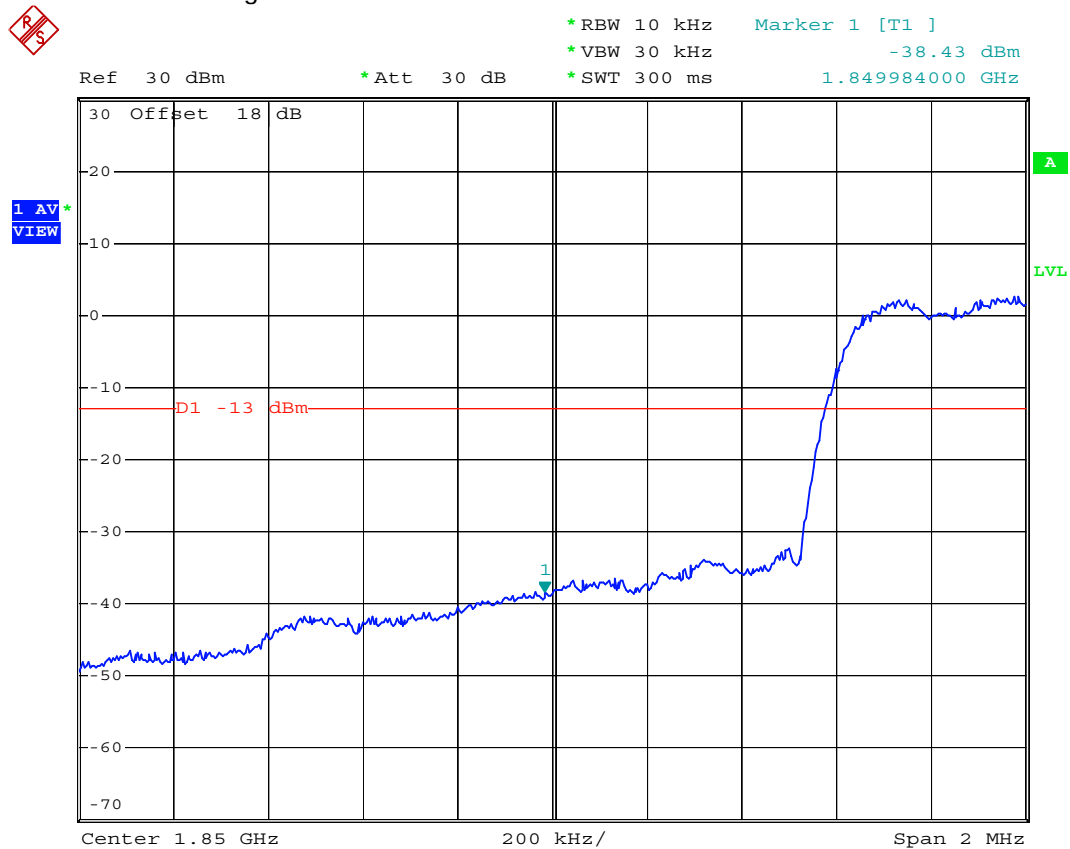
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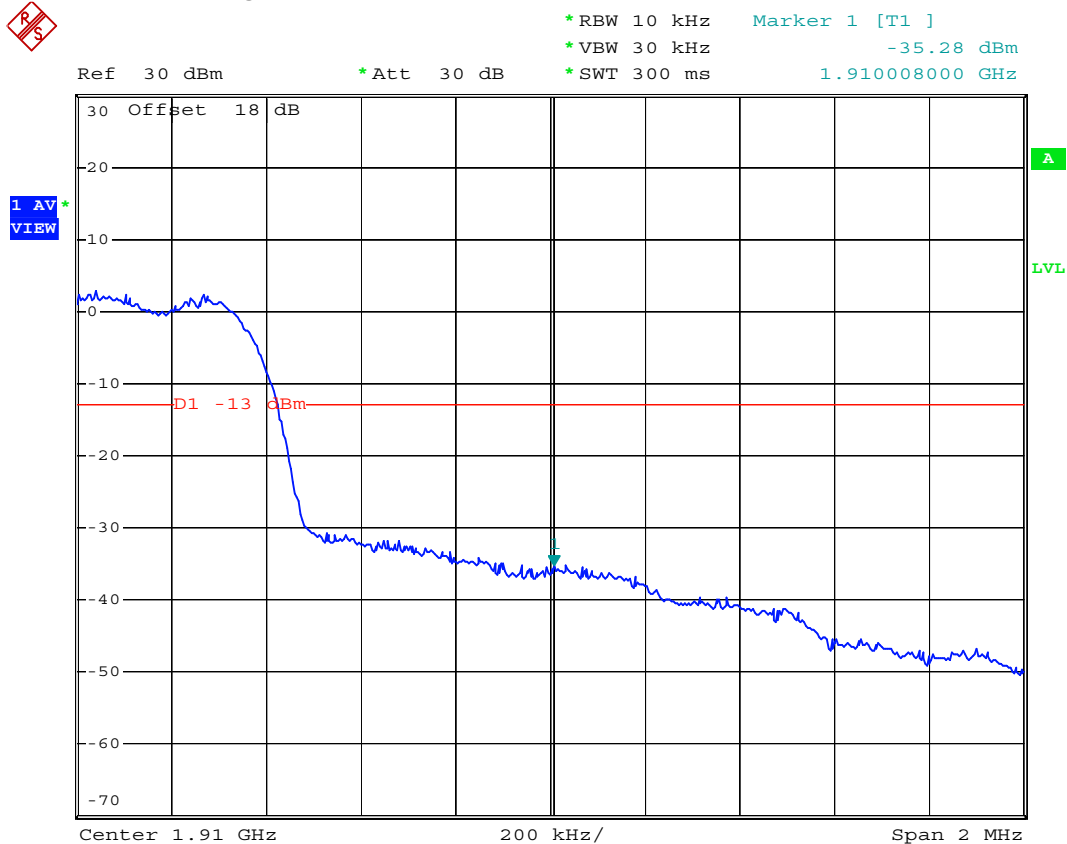
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- Power State : High



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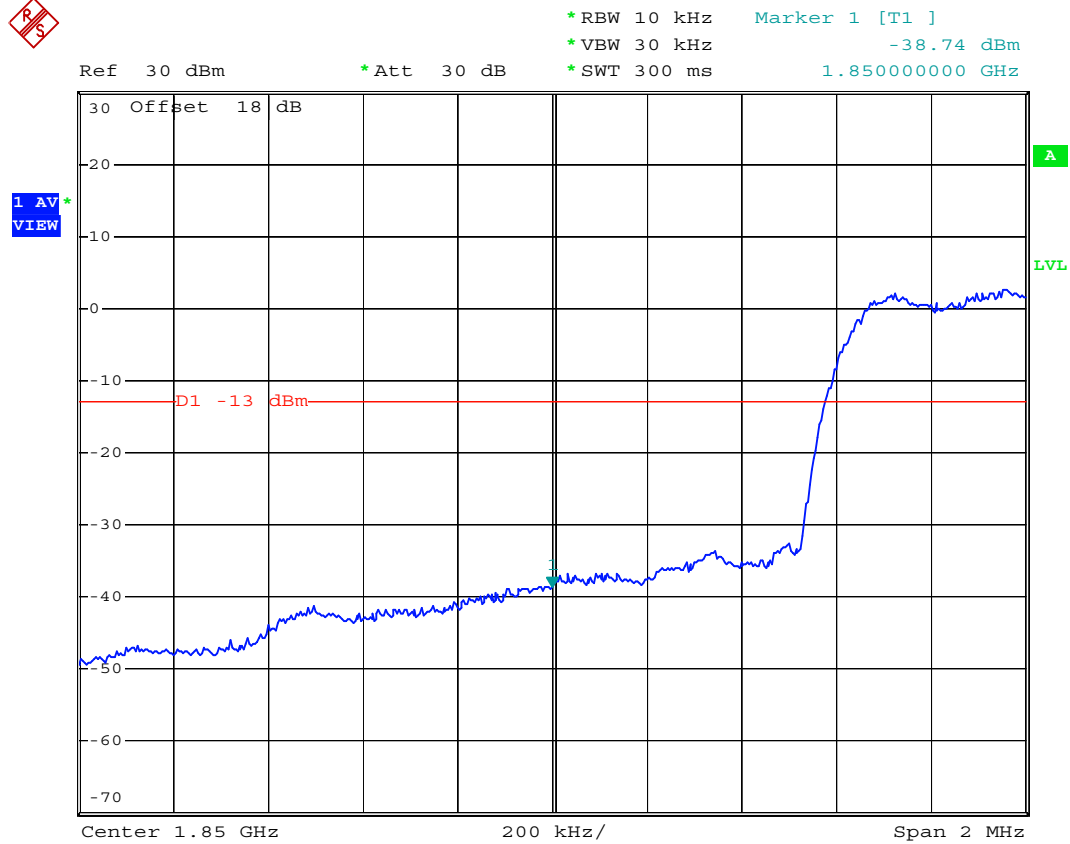
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- Power State : High



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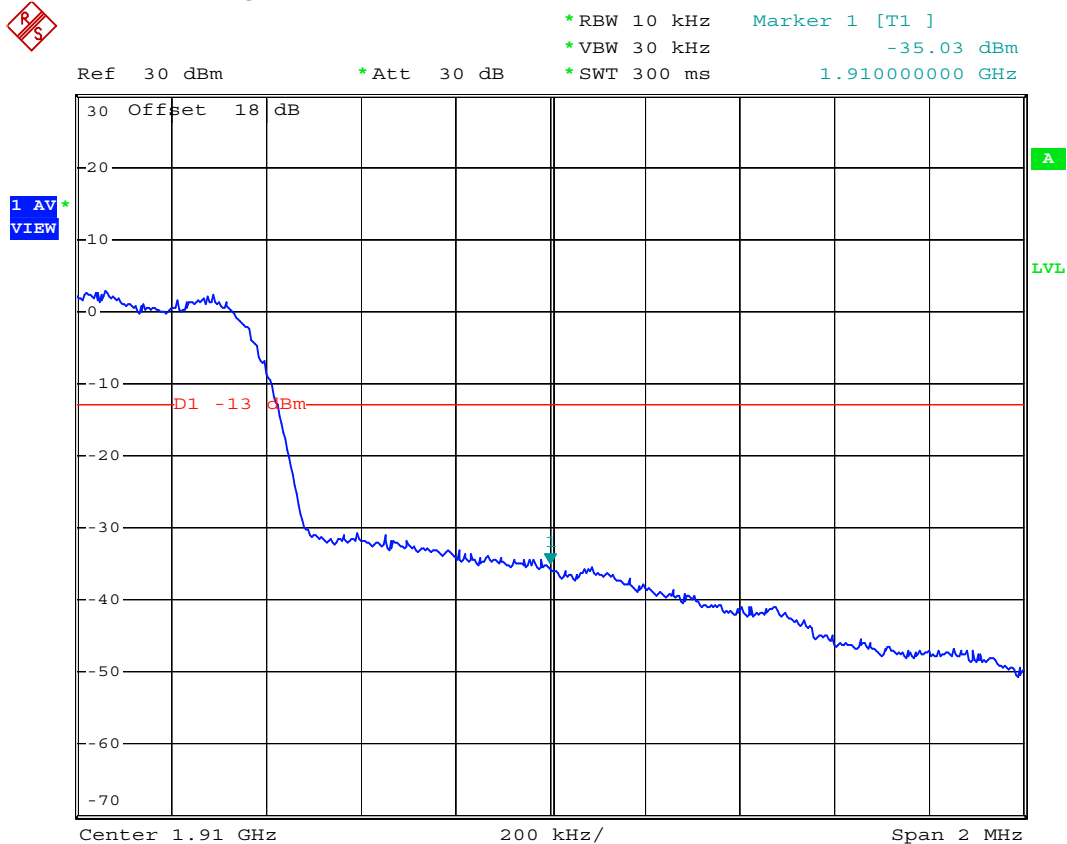
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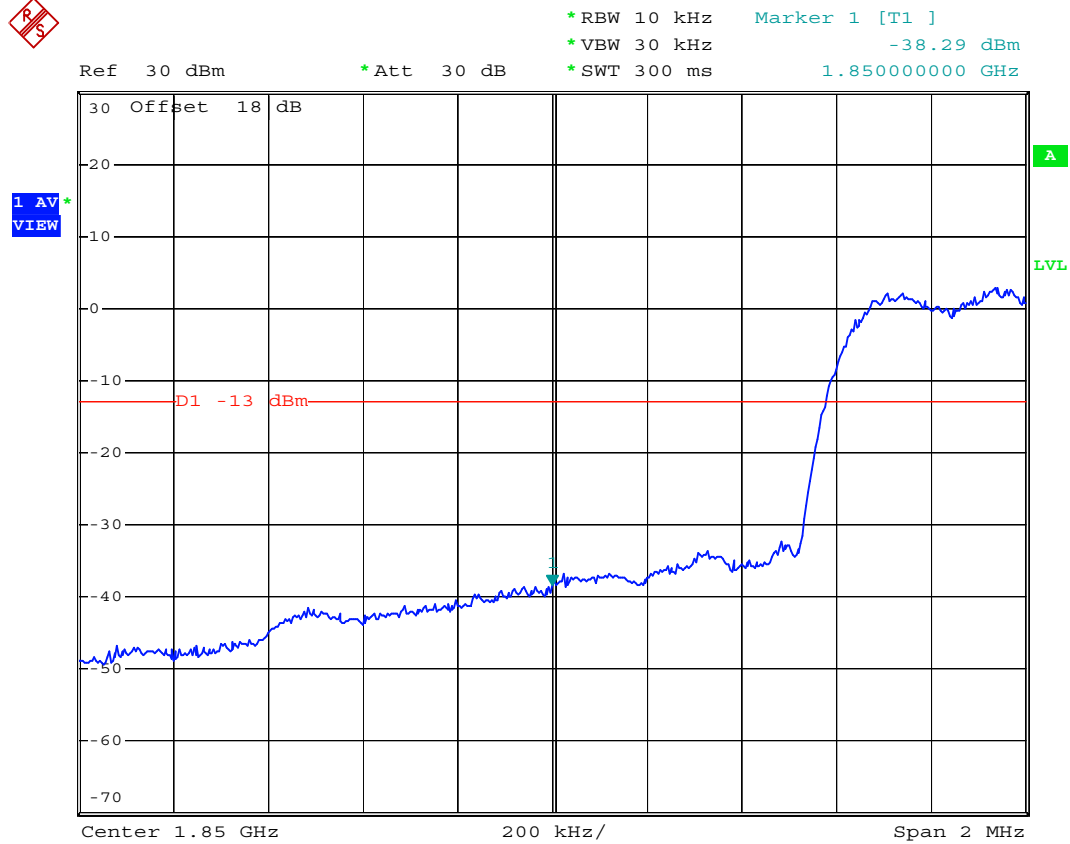
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- Power State : High



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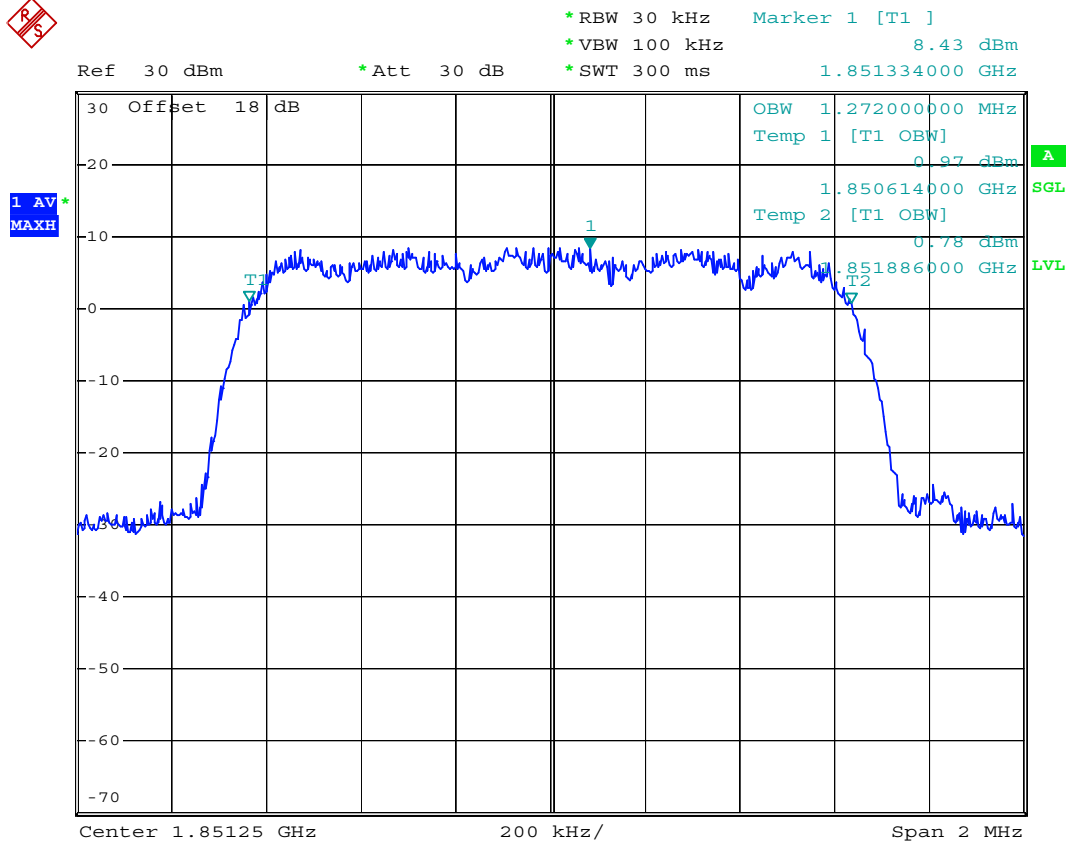
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- Power State : High



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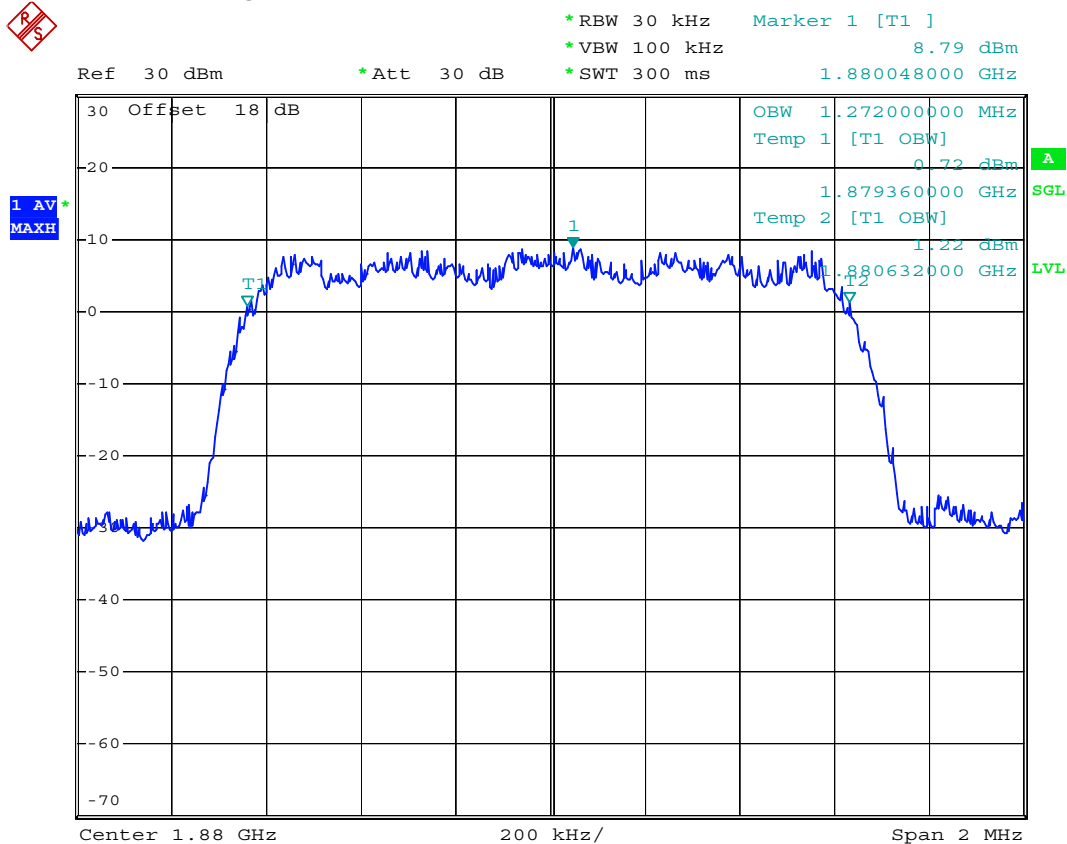
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- Power State : High



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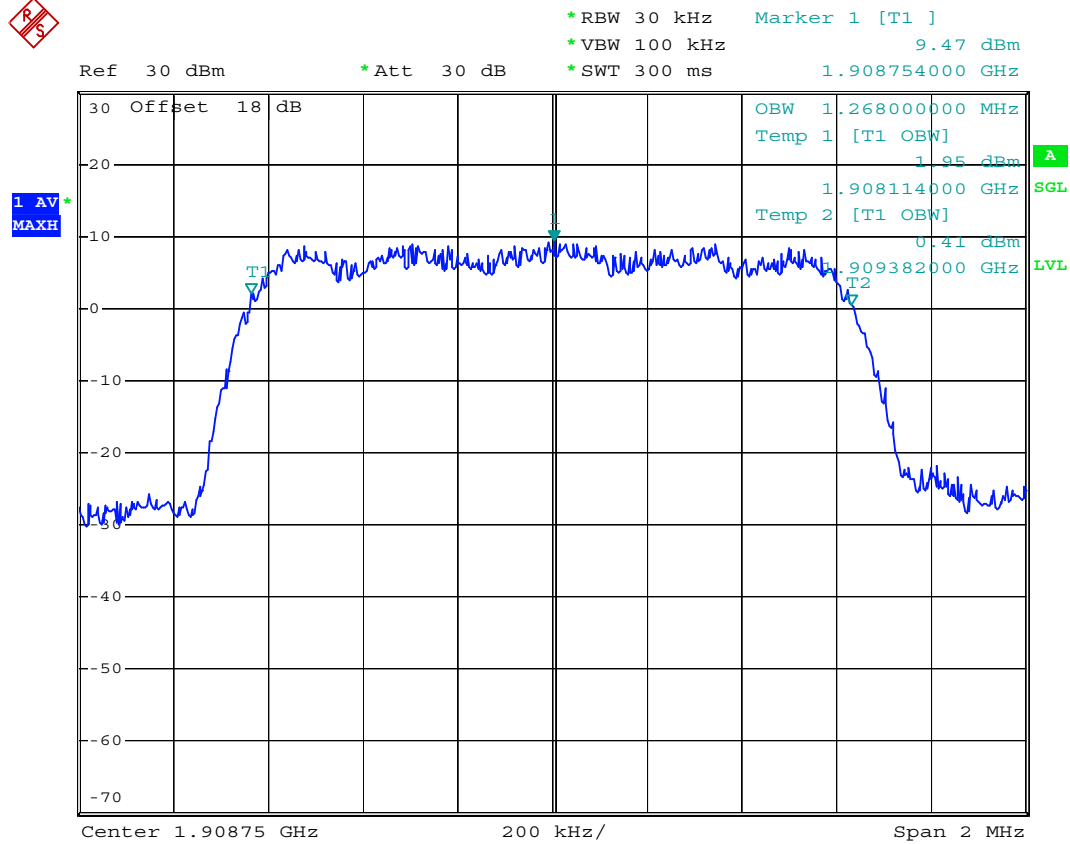
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- Power State : High



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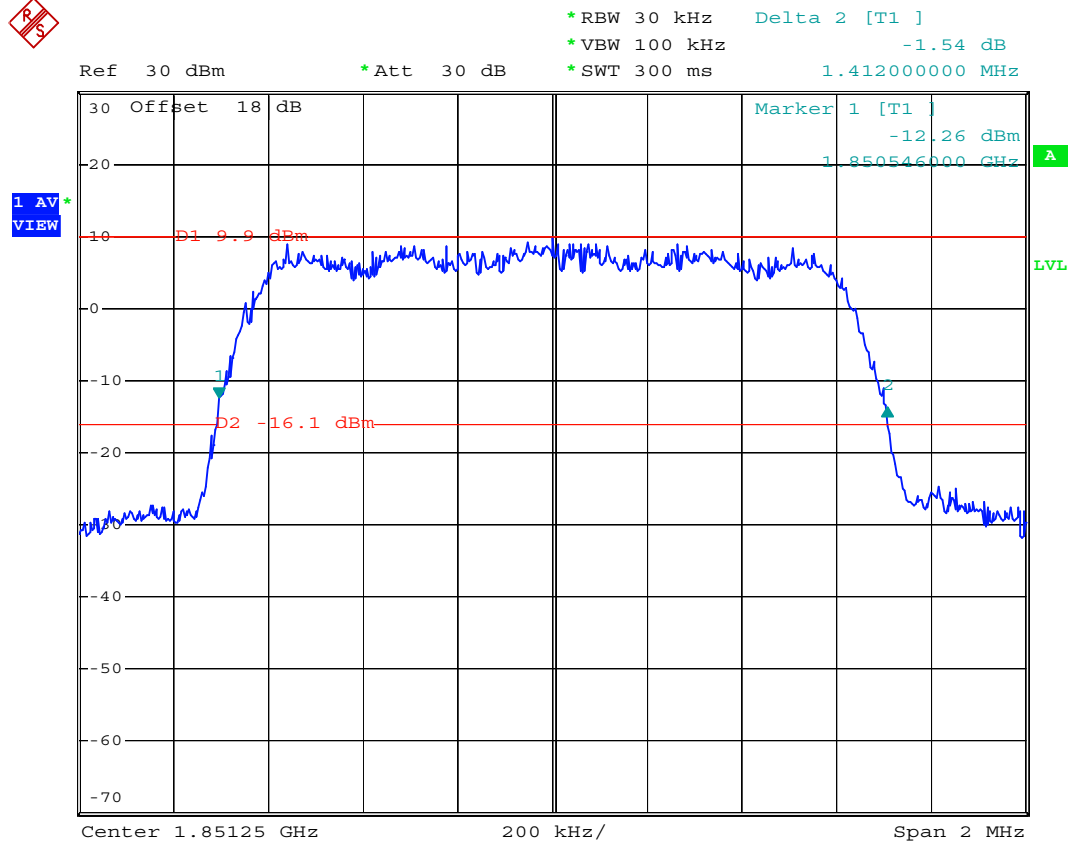
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- Power State : High



Date: 26.JUL.2007 12:24:15



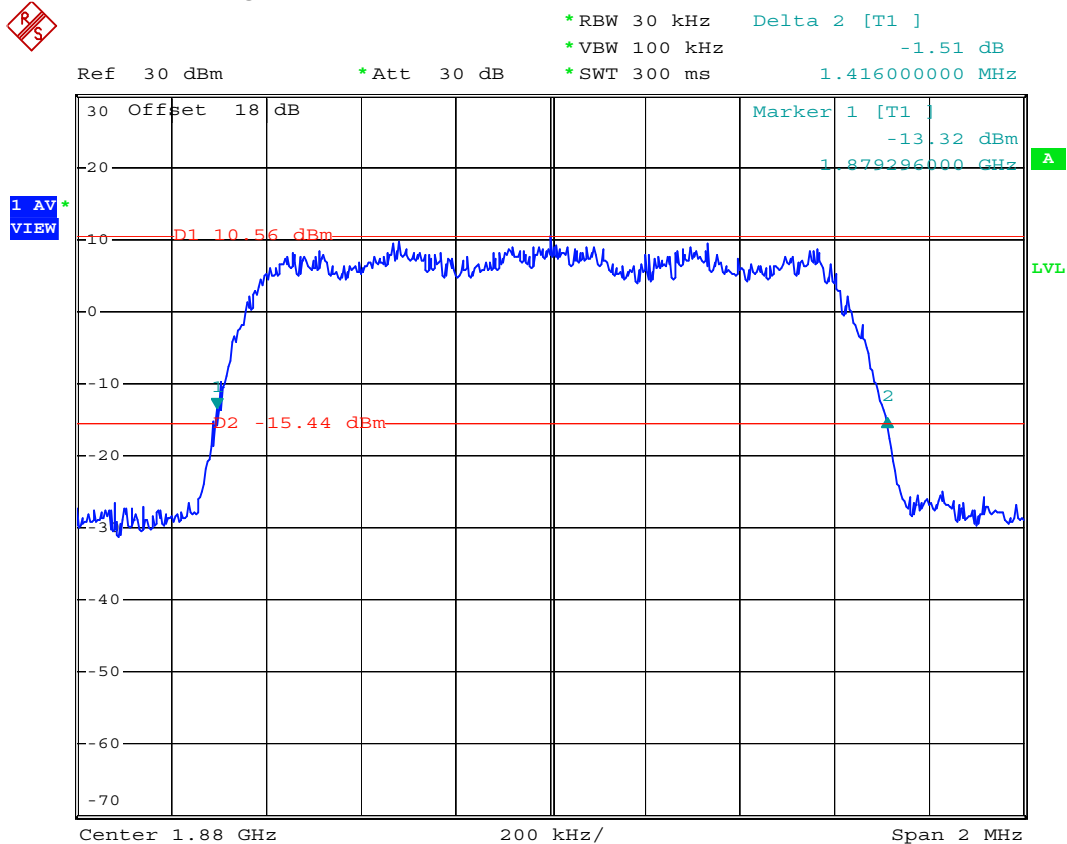
- Test Mode : CDMA2000 PCS 1900 Band CH25_RC3/SO55 26 dB Bandwidth for 1xRTT
- Power State : High



Date: 26.JUL.2007 13:30:04



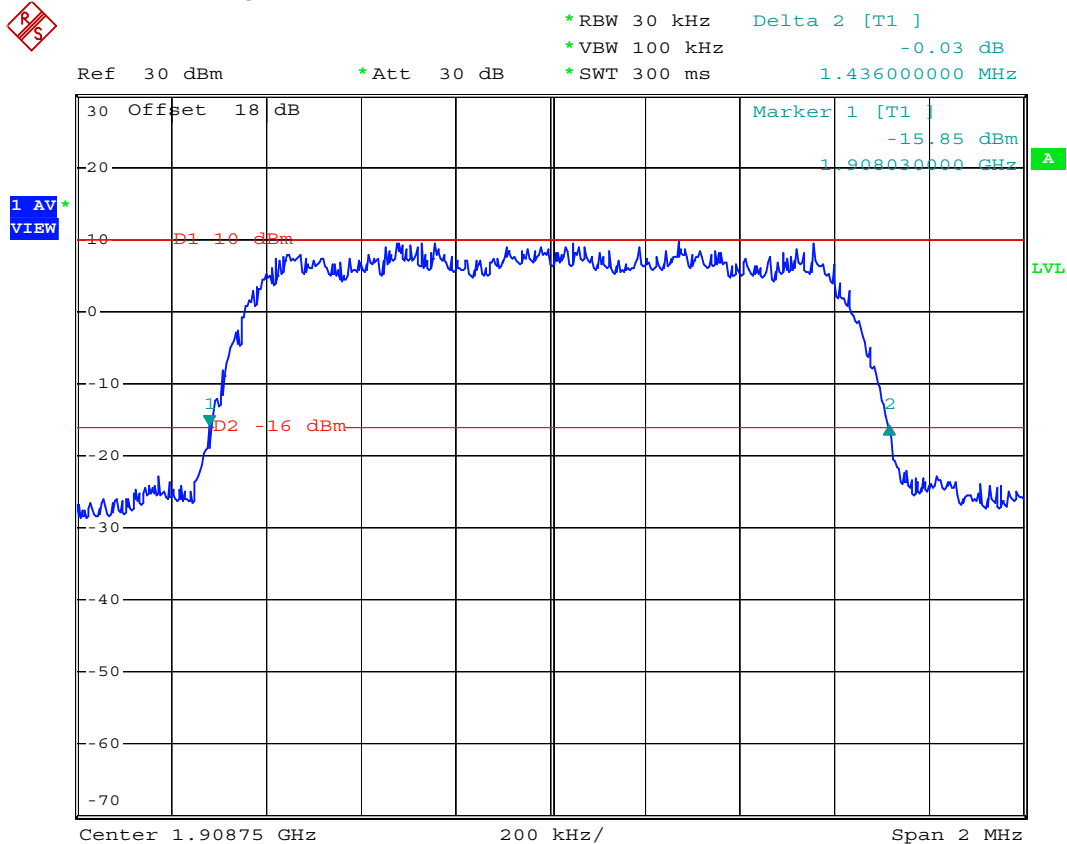
- Test Mode : CDMA2000 PCS 1900 Band CH600_RC3/SO55 26 dB Bandwidth for 1xRTT
- Power State : High



Date: 26.JUL.2007 13:34:57



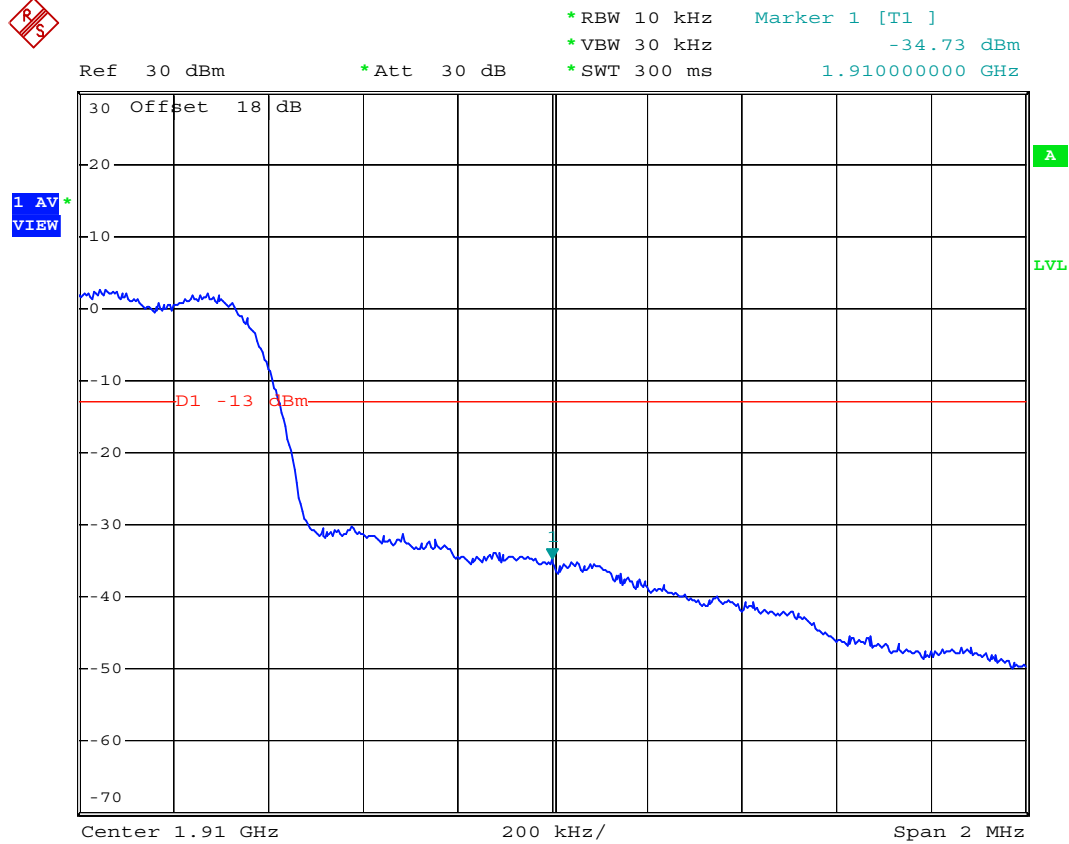
- Test Mode : CDMA2000 PCS 1900 Band CH1175_RC3/SO55 26 dB Bandwidth for 1xRTT
- Power State : High



Date: 26.JUL.2007 13:43:48



- Test Mode : CDMA2000 PCS 1900 CH1175_RC3/SO55 Higher Band Edge for 1xRTT
- Power State : High



Date: 26.JUL.2007 09:59:34

4.5 Conducted Emission

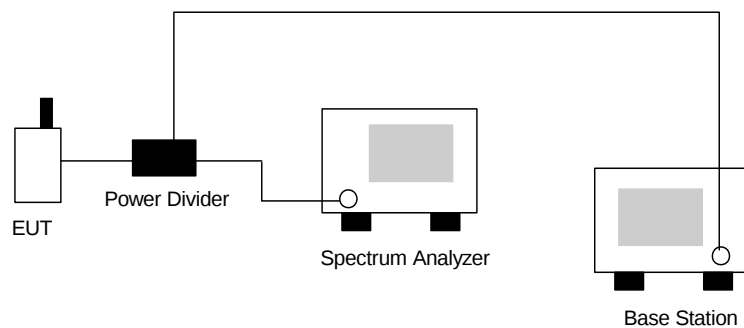
4.5.1 Measurement Instruments

As described in chapter 5 of this test report.

4.5.2 Test Procedure

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

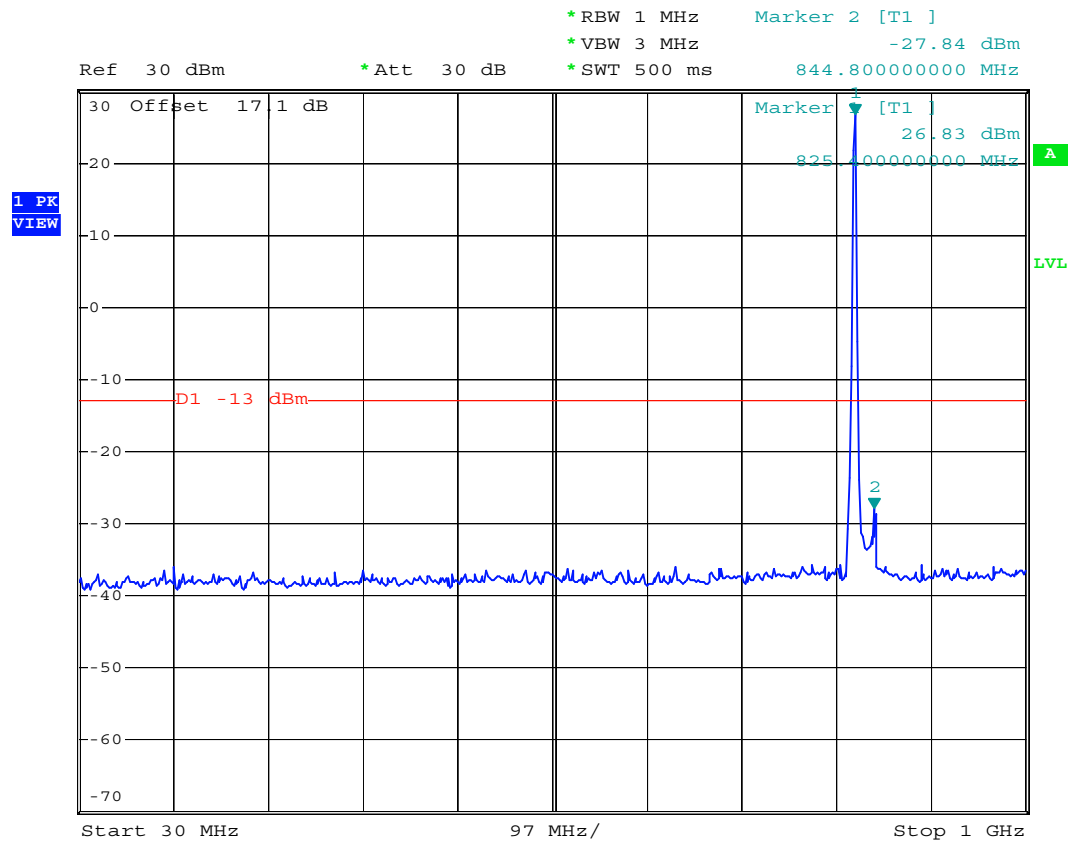
4.5.3 Test Setup Layout





4.5.4 Test Result

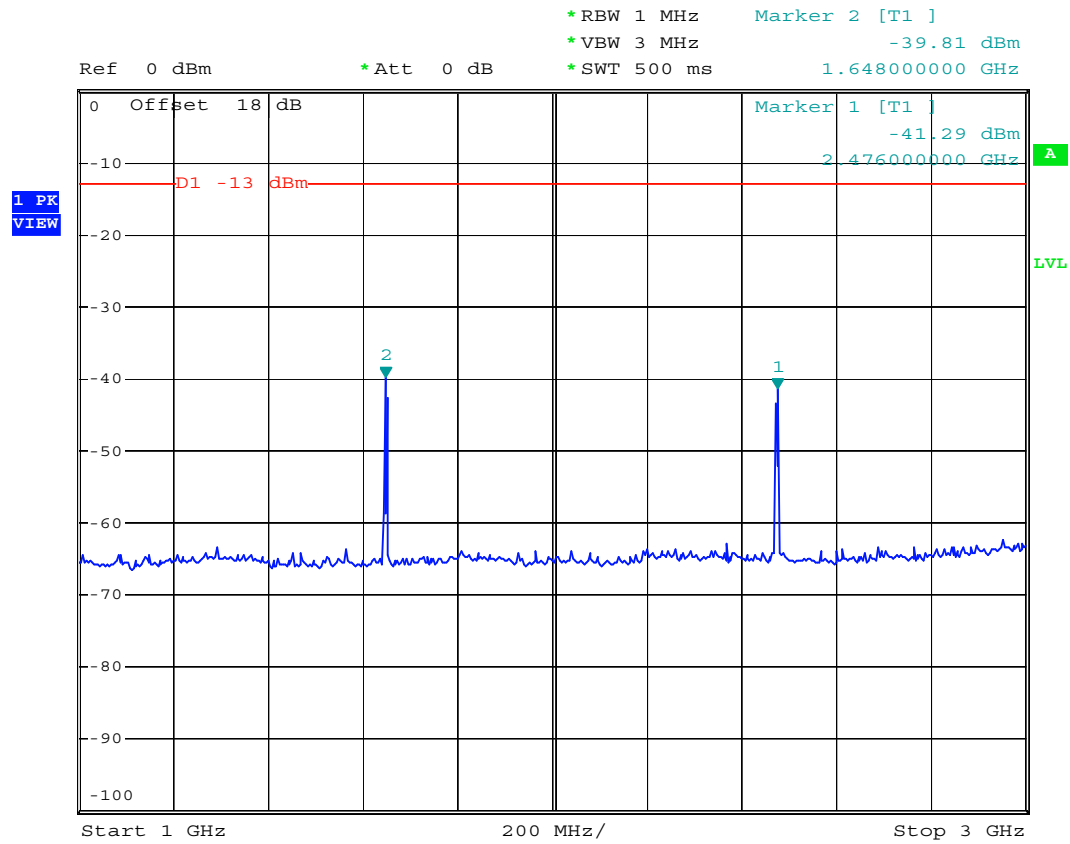
- Mode 1
- Temperature : 25~26°C
- Relative Humidity : 60~61%
- Test Engineer: James Huang
- Test Mode : CDMA2000 Cellular 850 CH1013 for 1xRTT
- Frequency Range : 30M-1G



Date: 29.JUL.2007 16:44:07



- Test Mode : CDMA2000 Cellular 850 CH1013 for 1xRTT
- Frequency Range : 1G-3G



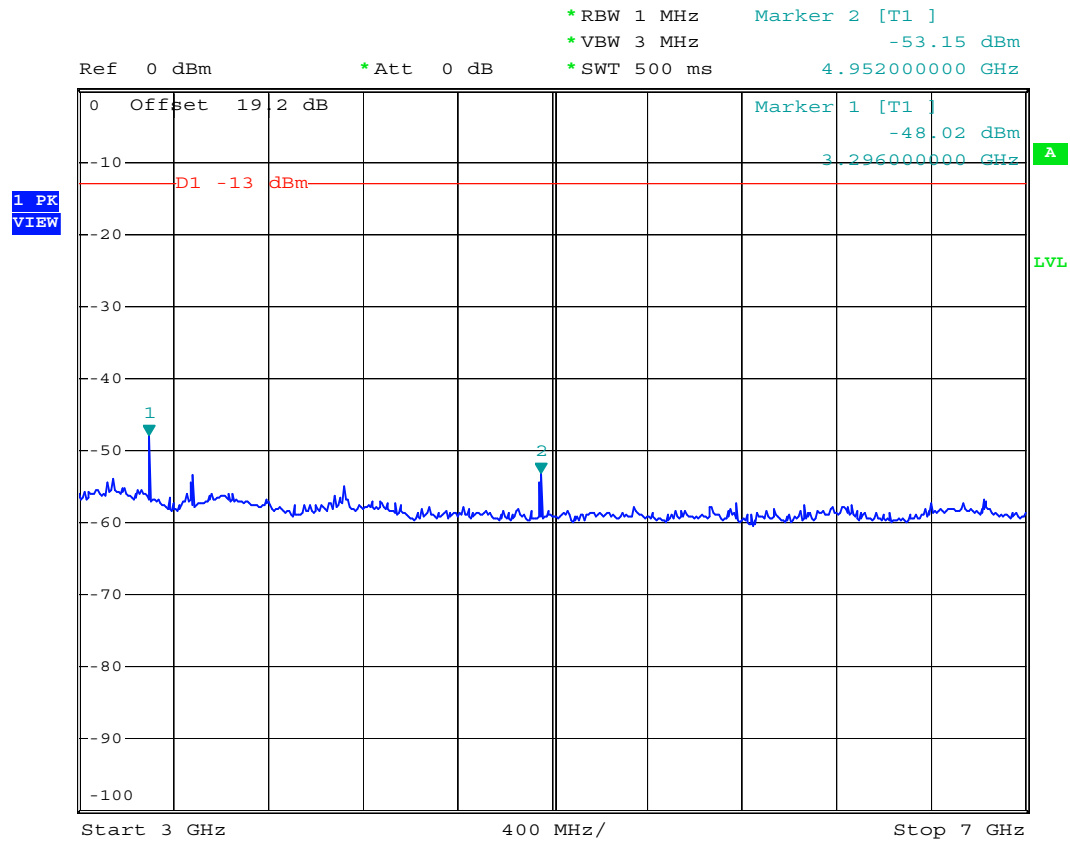
Date: 29.JUL.2007 16:45:19



FCC TEST REPORT

Report No. : FG772402

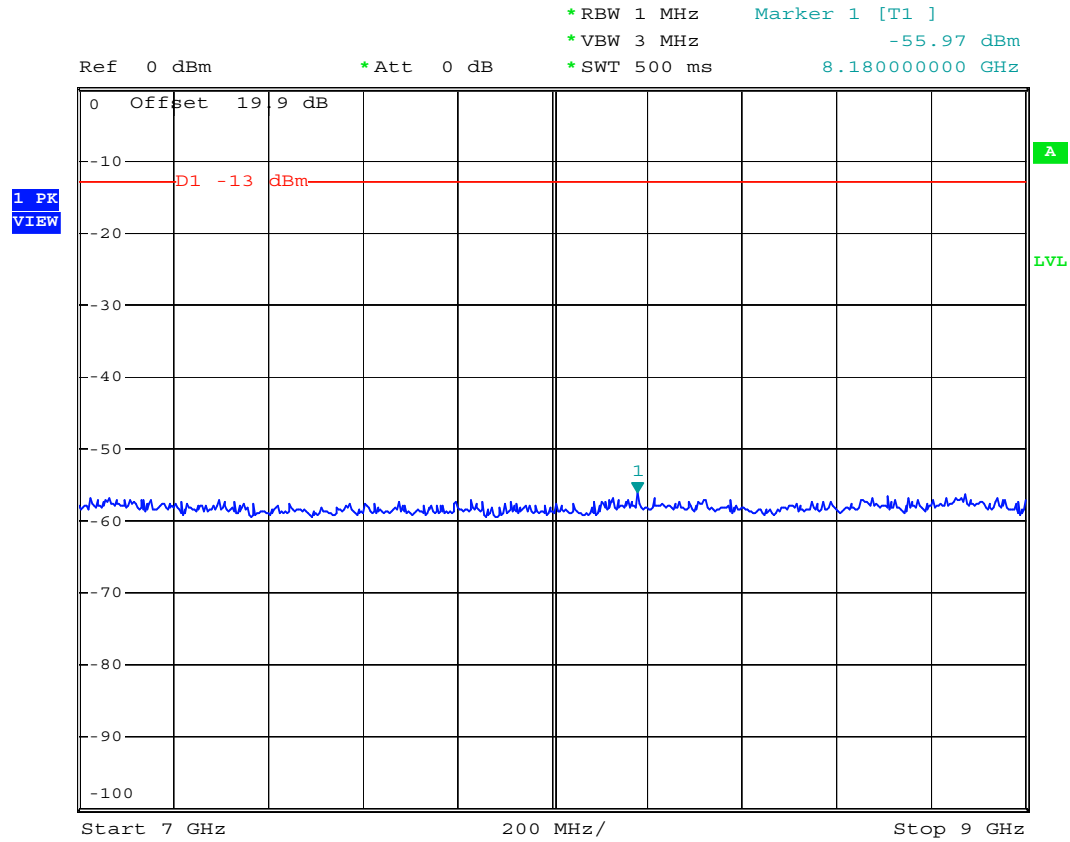
- Test Mode : CDMA2000 Cellular 850 CH1013 for 1xRTT
- Frequency Range : 3G-7G



Date: 29.JUL.2007 16:45:59



- Test Mode : CDMA2000 Cellular 850 CH1013 for 1xRTT
- Frequency Range : 7G-9G



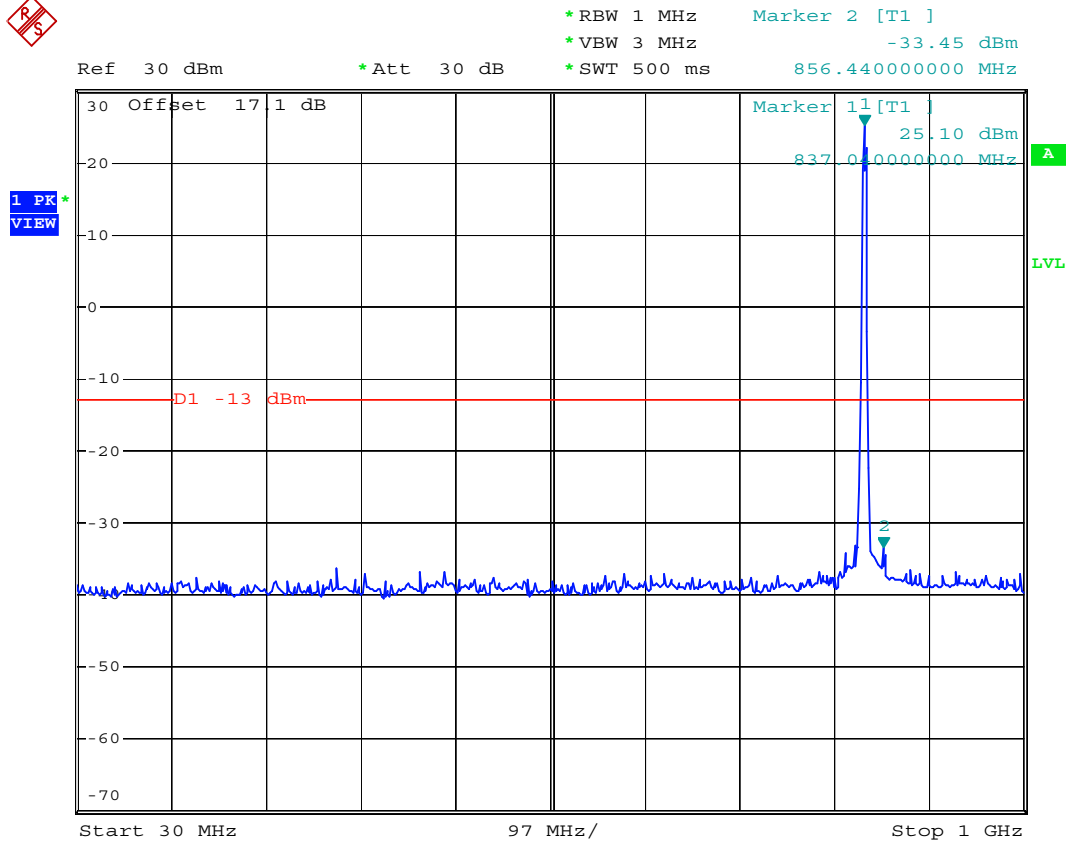
Date: 29.JUL.2007 16:46:32



FCC TEST REPORT

Report No. : FG772402

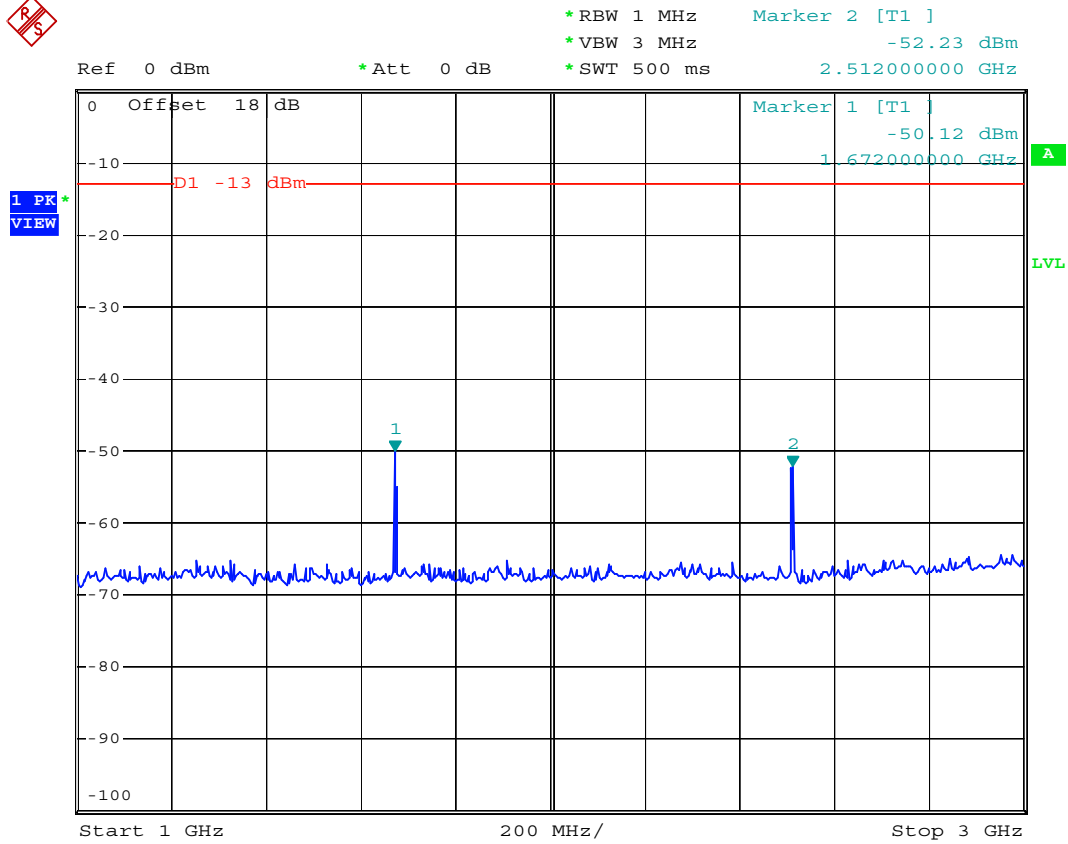
- Test Mode : CDMA2000 Cellular 850 CH384 for 1xRTT
- Frequency Range : 30M-1G



Date: 26.JUL.2007 08:52:53



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



Date: 26.JUL.2007 08:54:13



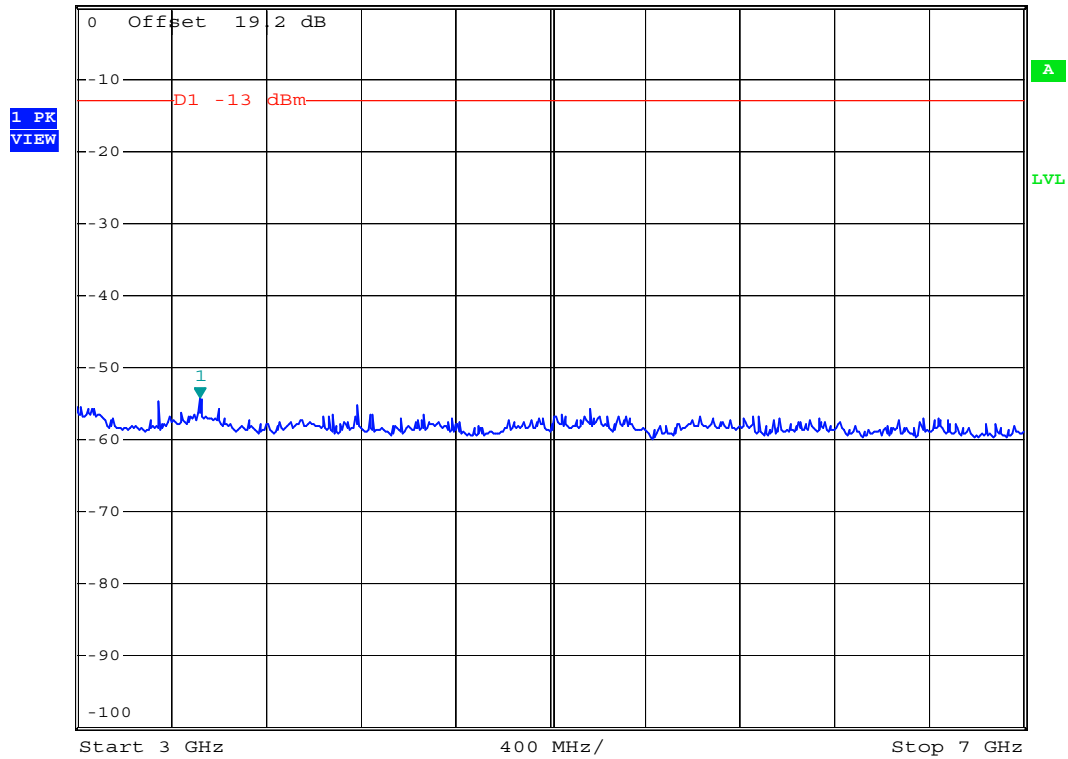
FCC TEST REPORT

Report No. : FG772402

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



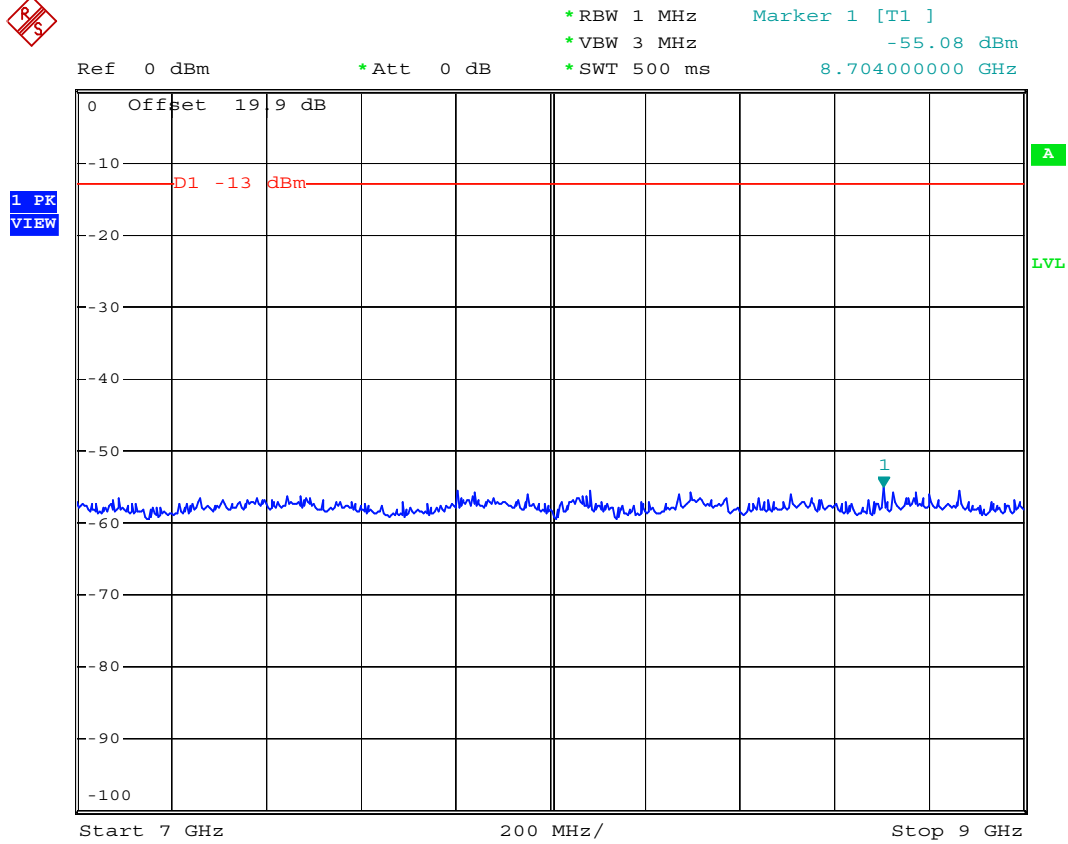
Ref 0 dBm * Att 0 dB * RBW 1 MHz Marker 1 [T1]
* VBW 3 MHz -54.12 dBm
* SWT 500 ms 3.520000000 GHz



Date: 26.JUL.2007 08:55:01



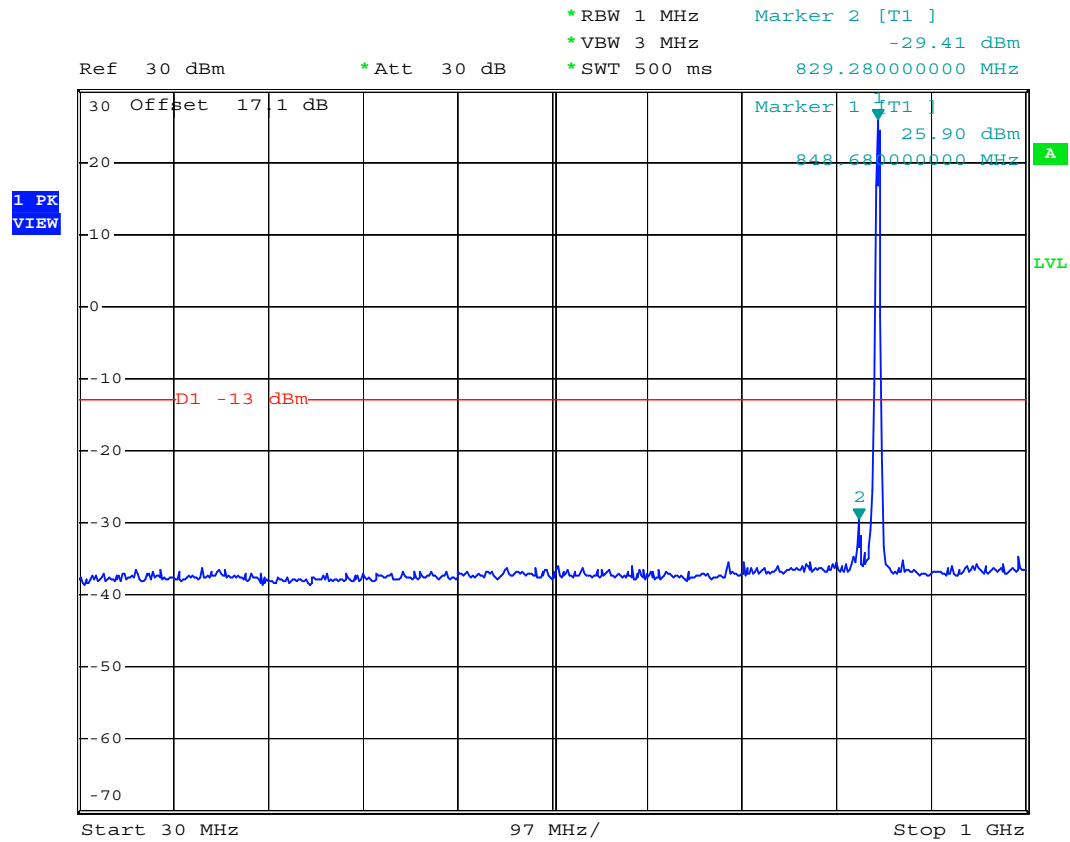
- Test Mode : CDMA2000 Cellular 850 CH384 for 1xRTT
- Frequency Range : 7G-9G



Date: 26.JUL.2007 08:55:35



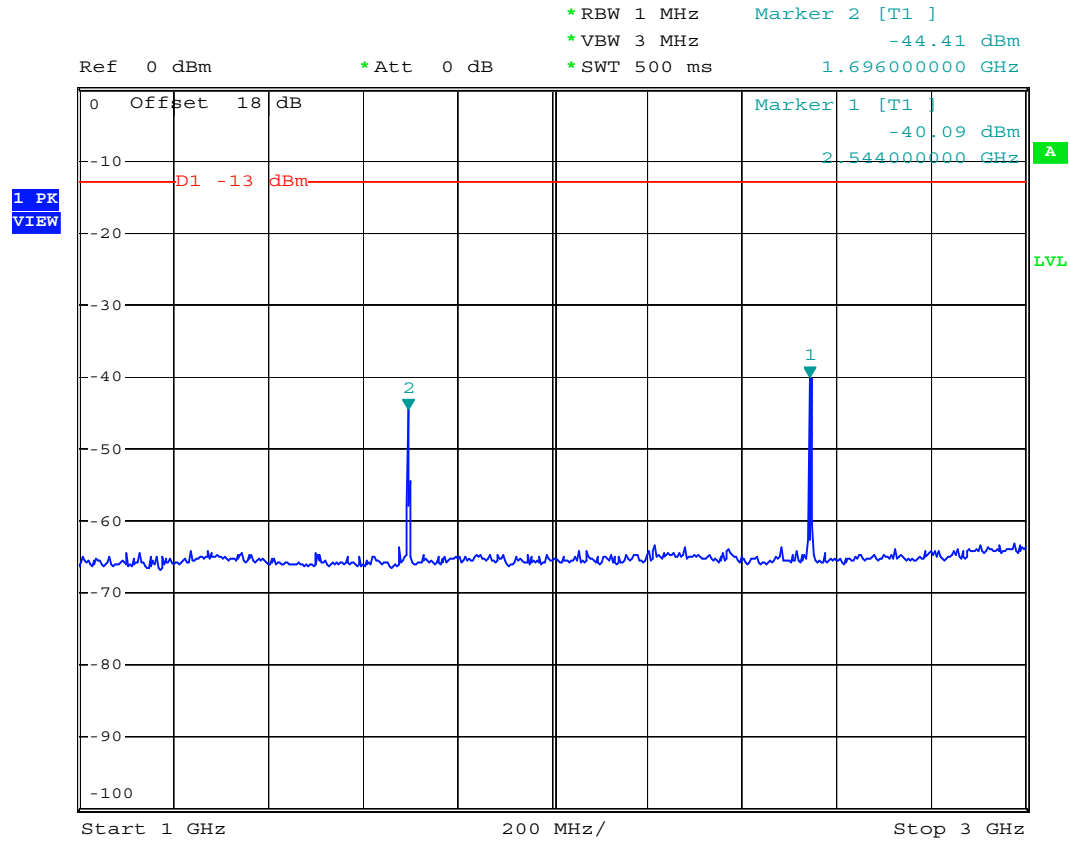
- Test Mode : CDMA2000 Cellular 850 CH777 for 1xRTT
- Frequency Range : 30M-1G



Date: 29.JUL.2007 16:37:34



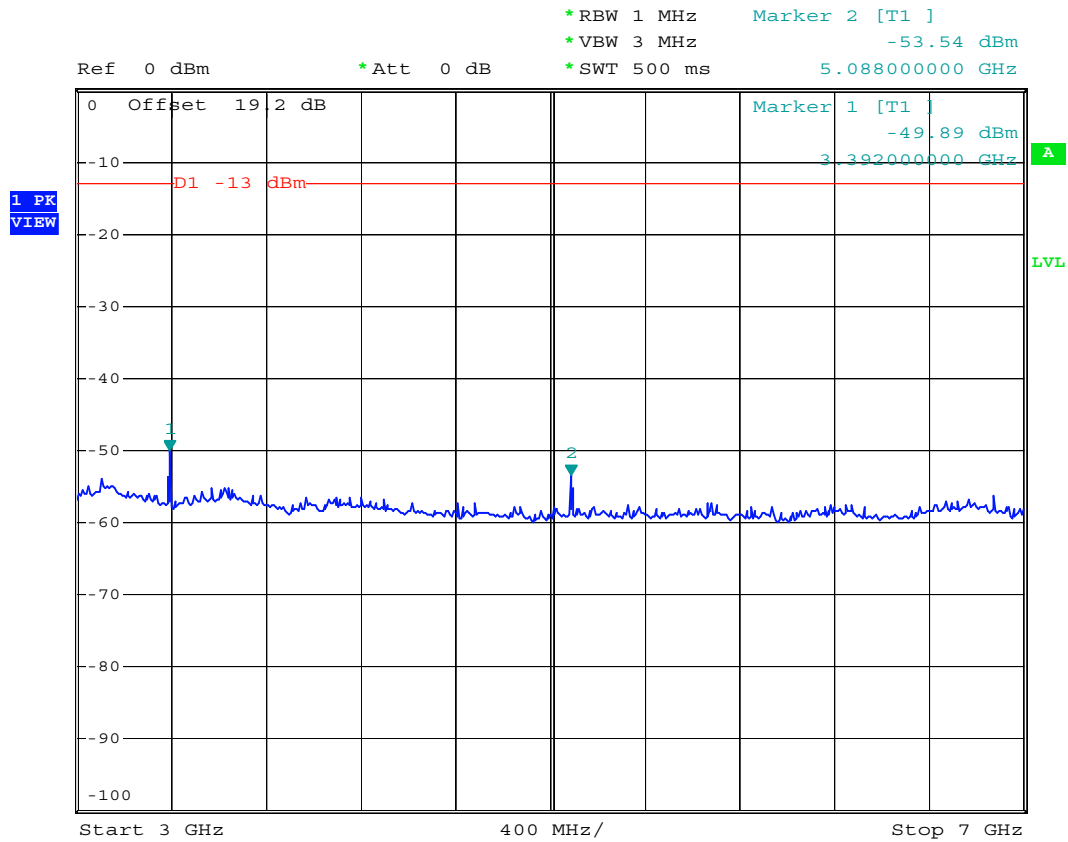
- Test Mode : CDMA2000 Cellular 850 CH777 for 1xRTT
- Frequency Range : 1G-3G



Date: 29.JUL.2007 16:42:29



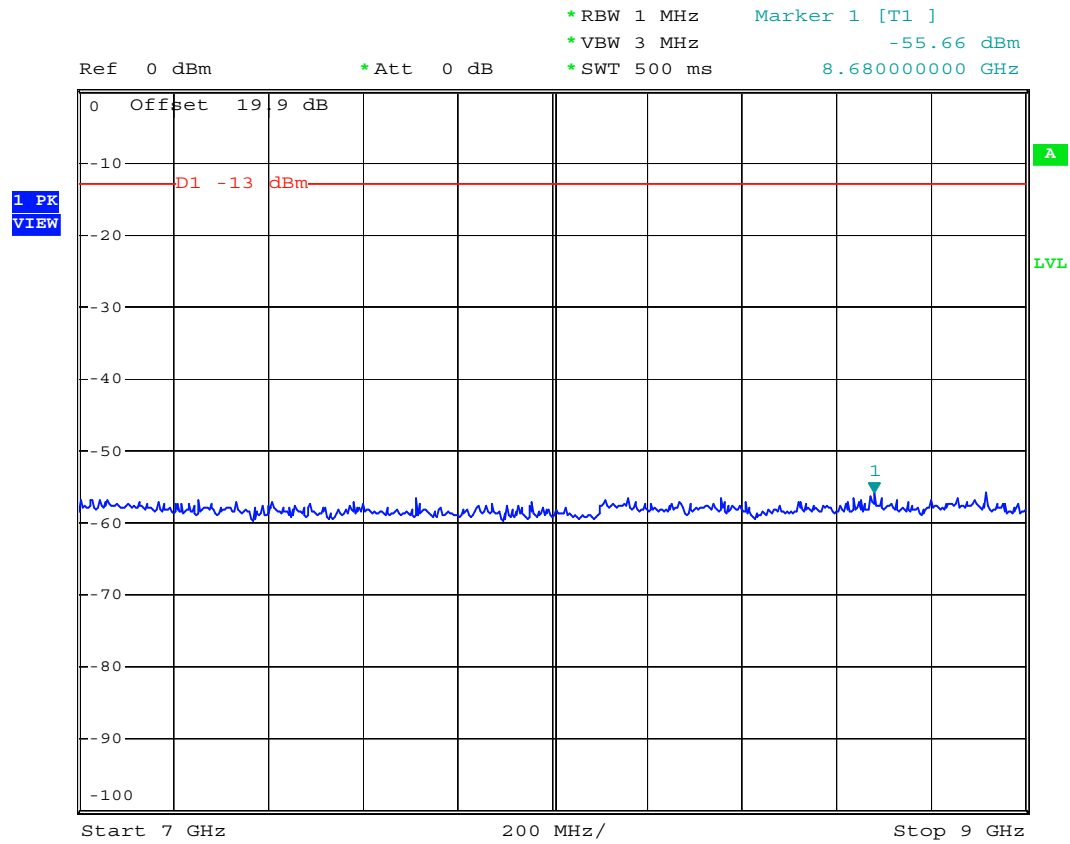
- Test Mode : CDMA2000 Cellular 850 CH777 for 1xRTT
- Frequency Range : 3G-7G



Date: 29.JUL.2007 16:39:31



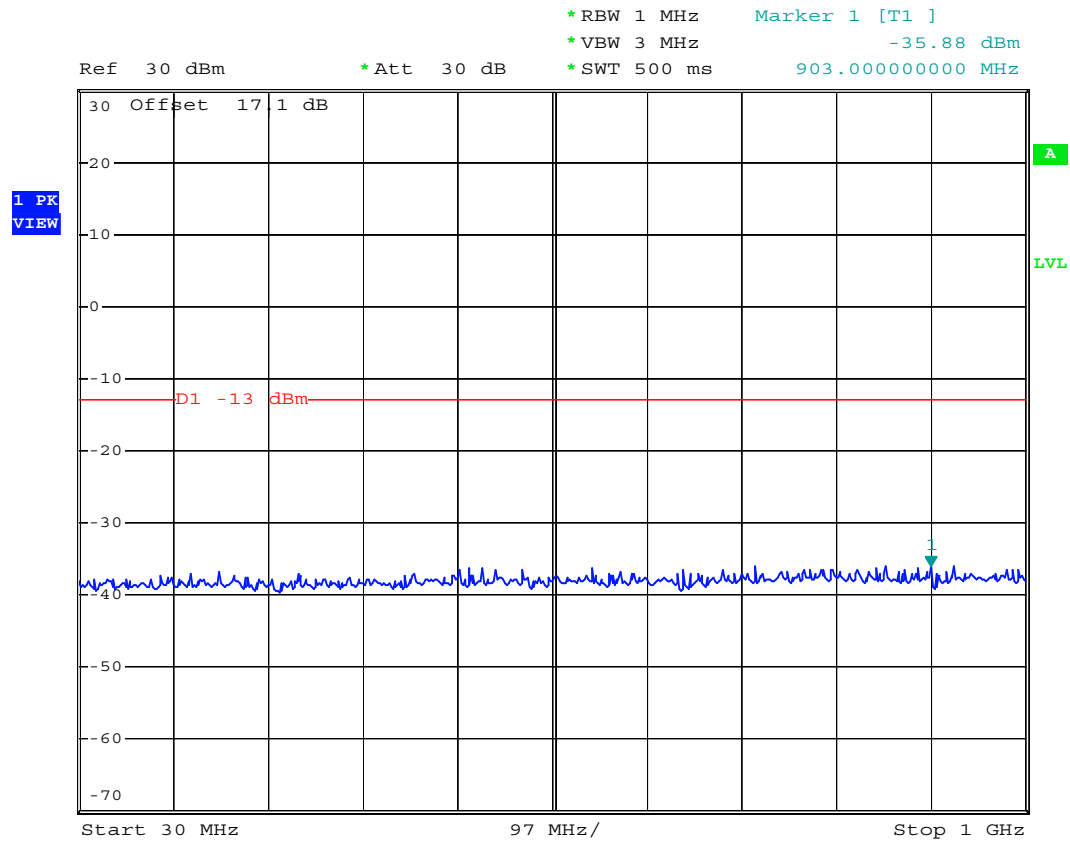
- Test Mode : CDMA2000 Cellular 850 CH777 for 1xRTT
- Frequency Range : 7G-9G



Date: 29.JUL.2007 16:40:05



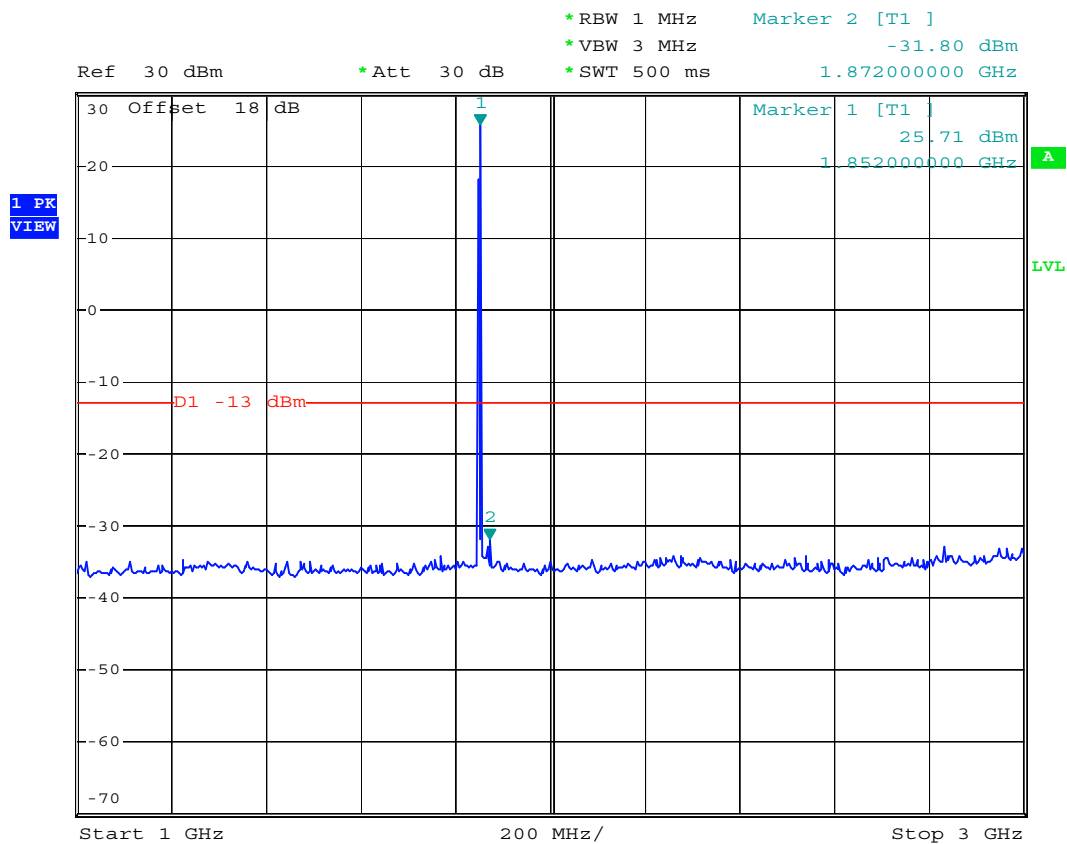
- Mode 2
- Test Mode : CDMA2000 PCS 1900 CH25 for 1xRTT
- Frequency Range : 30M-1G



Date: 29.JUL.2007 16:53:28



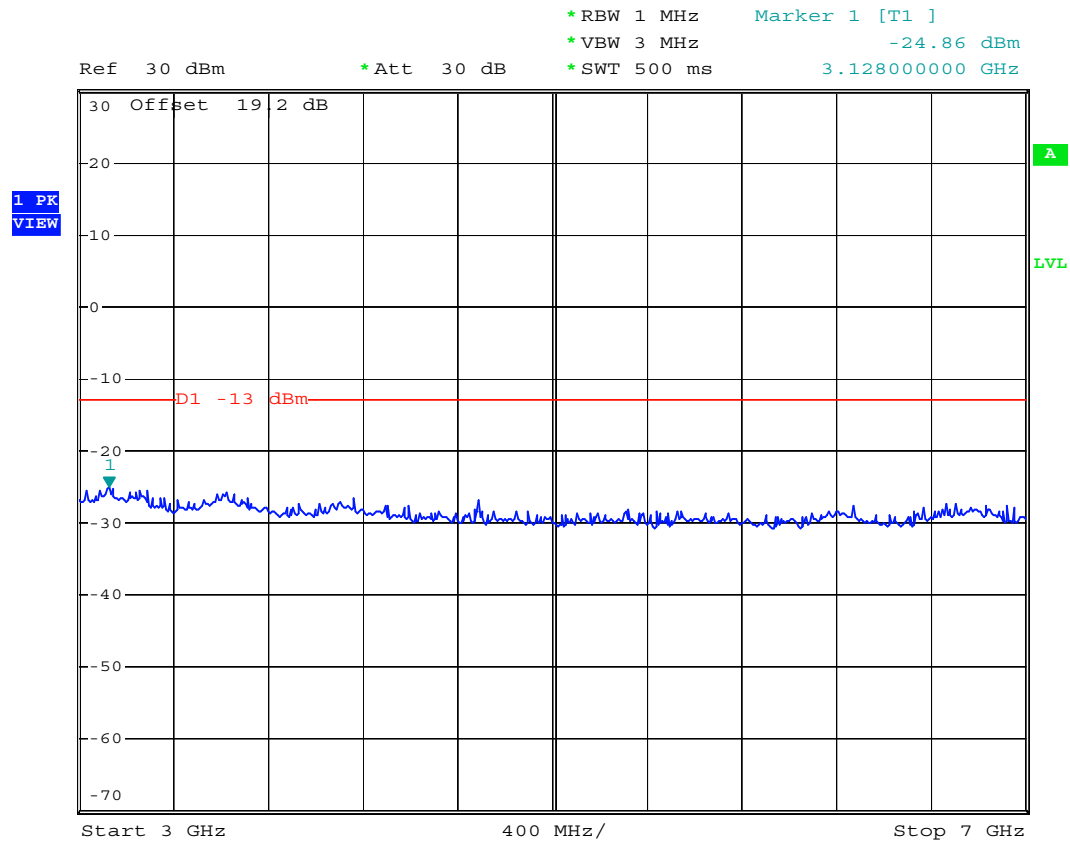
- Test Mode : CDMA2000 PCS 1900 CH25 for 1xRTT
- Frequency Range : 1G-3G



Date: 29.JUL.2007 16:54:40



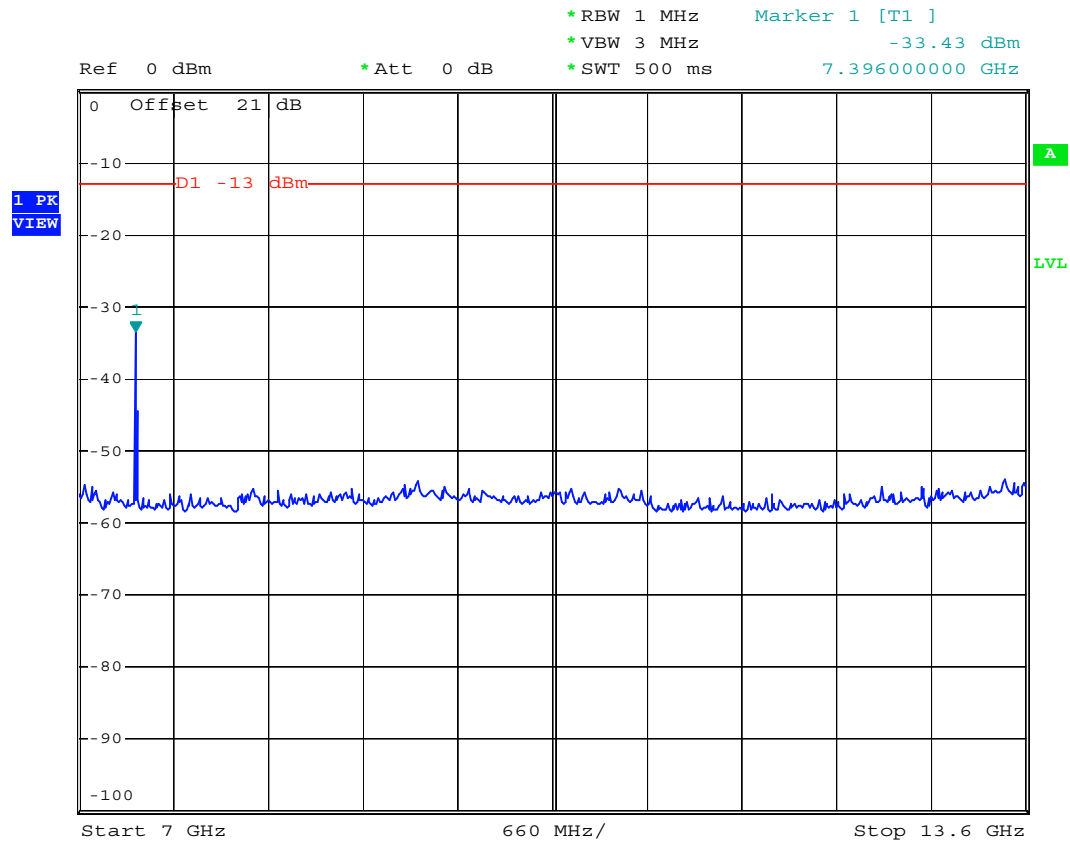
- Test Mode : CDMA2000 PCS 1900 CH25 for 1xRTT
- Frequency Range : 3G-7G



Date: 29.JUL.2007 16:55:17



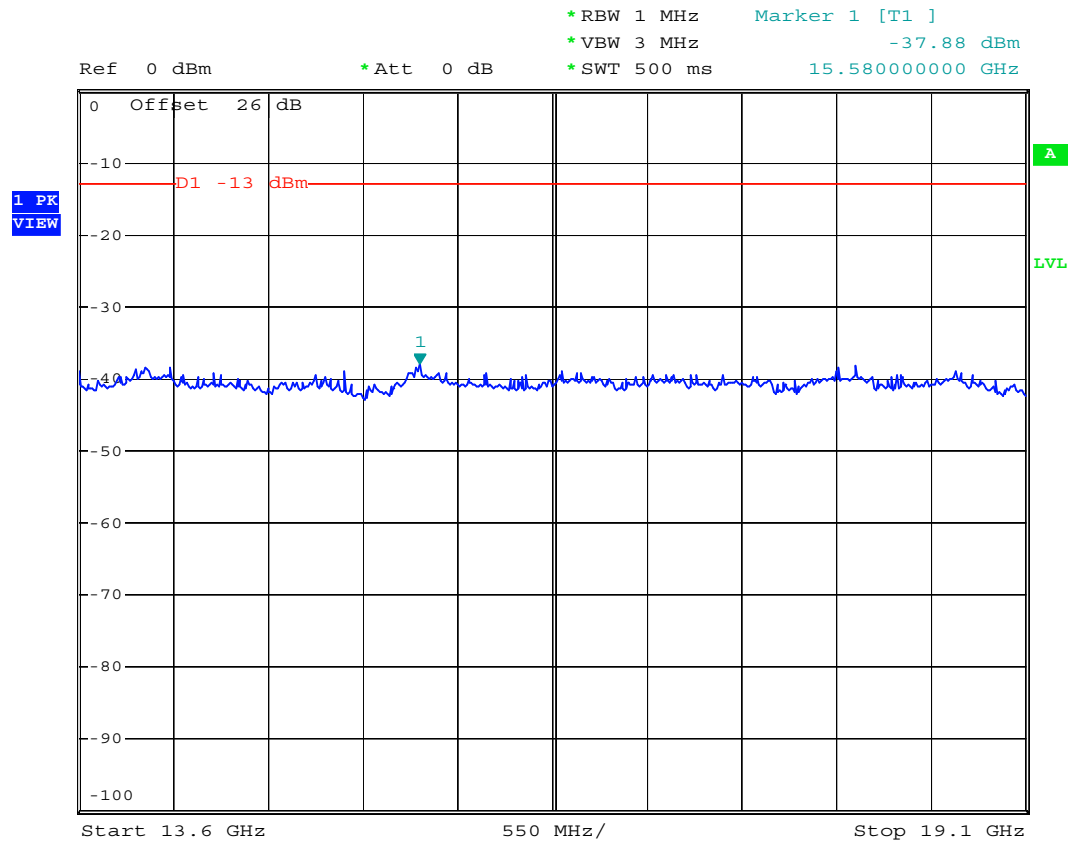
- Test Mode : CDMA2000 PCS 1900 CH25 for 1xRTT
- Frequency Range : 7G-13.6G



Date: 29.JUL.2007 16:56:03



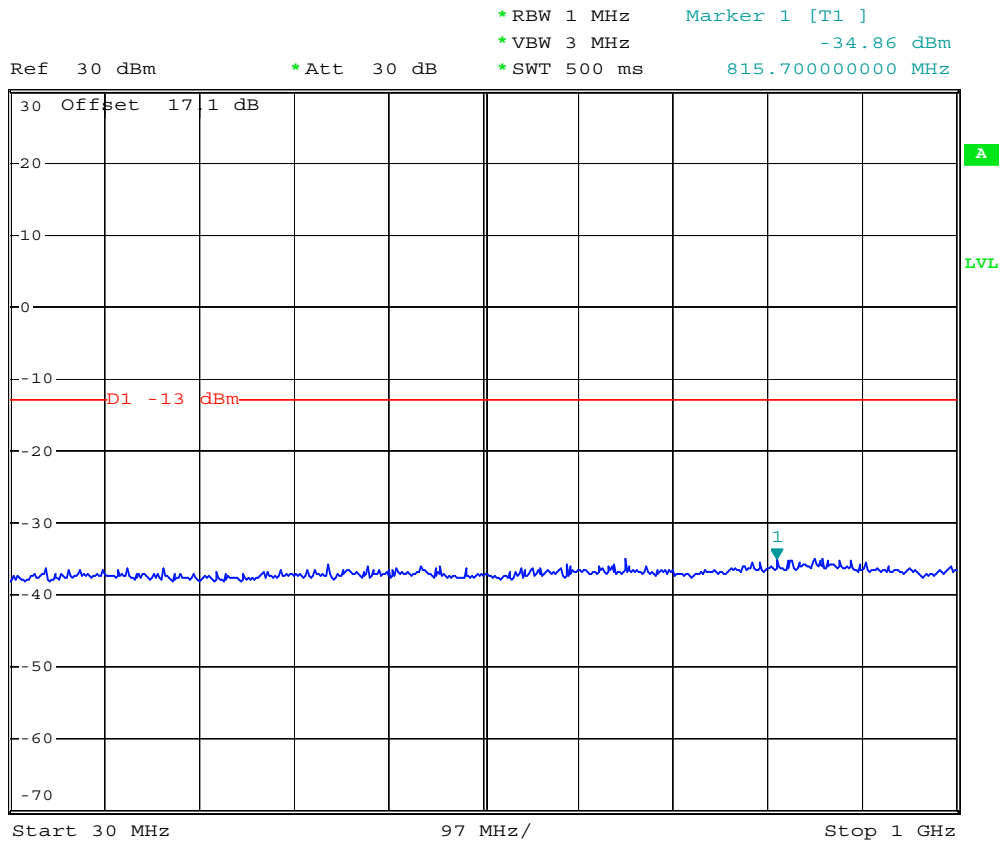
- Test Mode : CDMA2000 PCS 1900 CH25 for 1xRTT
- Frequency Range : 13.6G-19.1G



Date: 29.JUL.2007 16:56:37



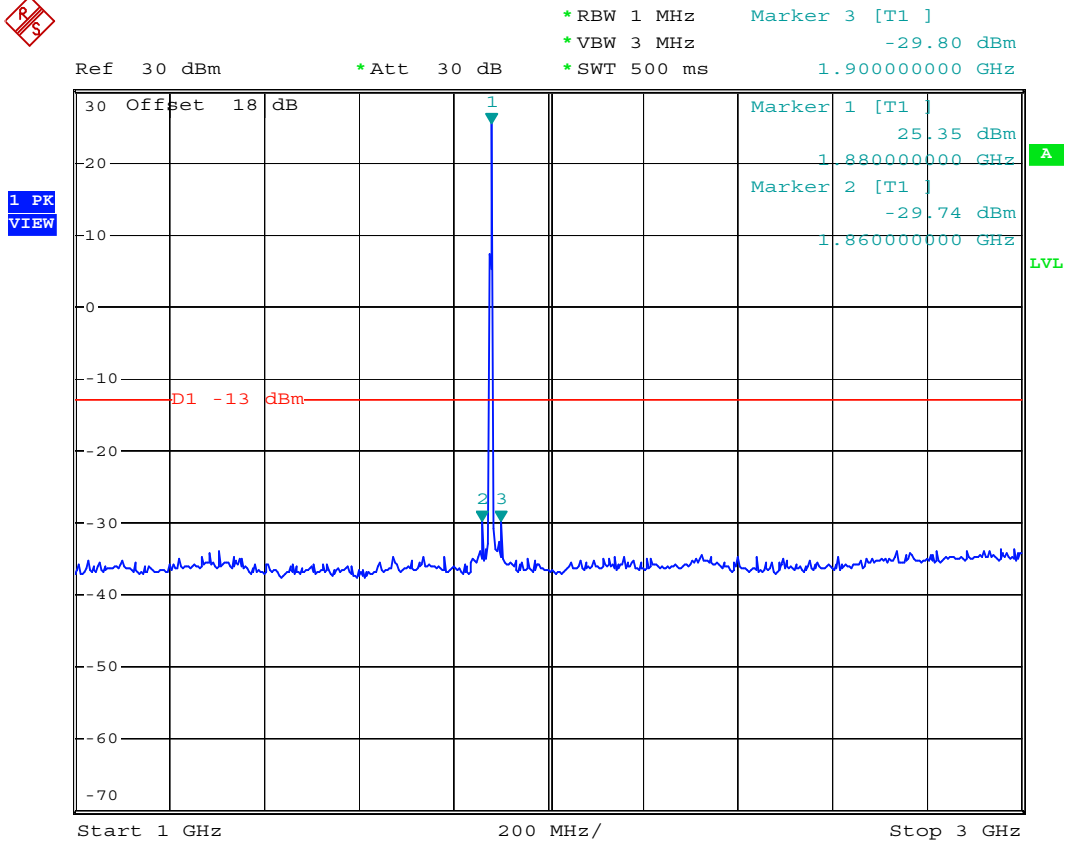
- Test Mode : CDMA2000 PCS 1900 CH600 for 1xRTT
- Frequency Range : 30M-1G



Date: 26.JUL.2007 13:55:49



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



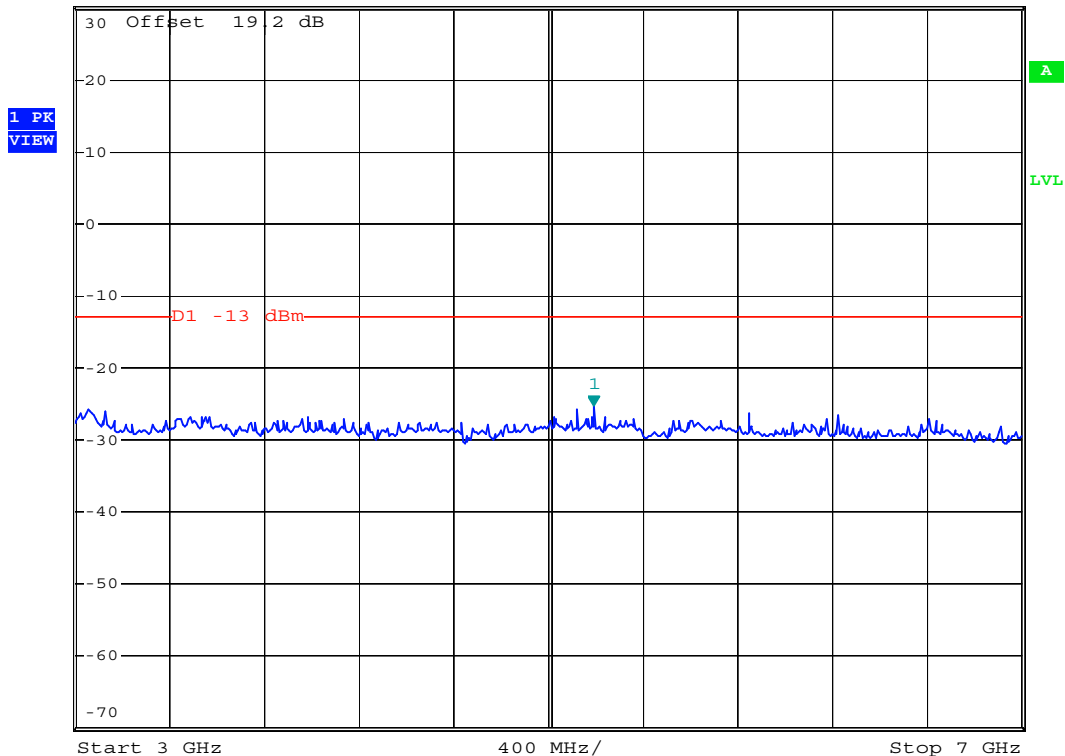
Date: 26.JUL.2007 14:03:50



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



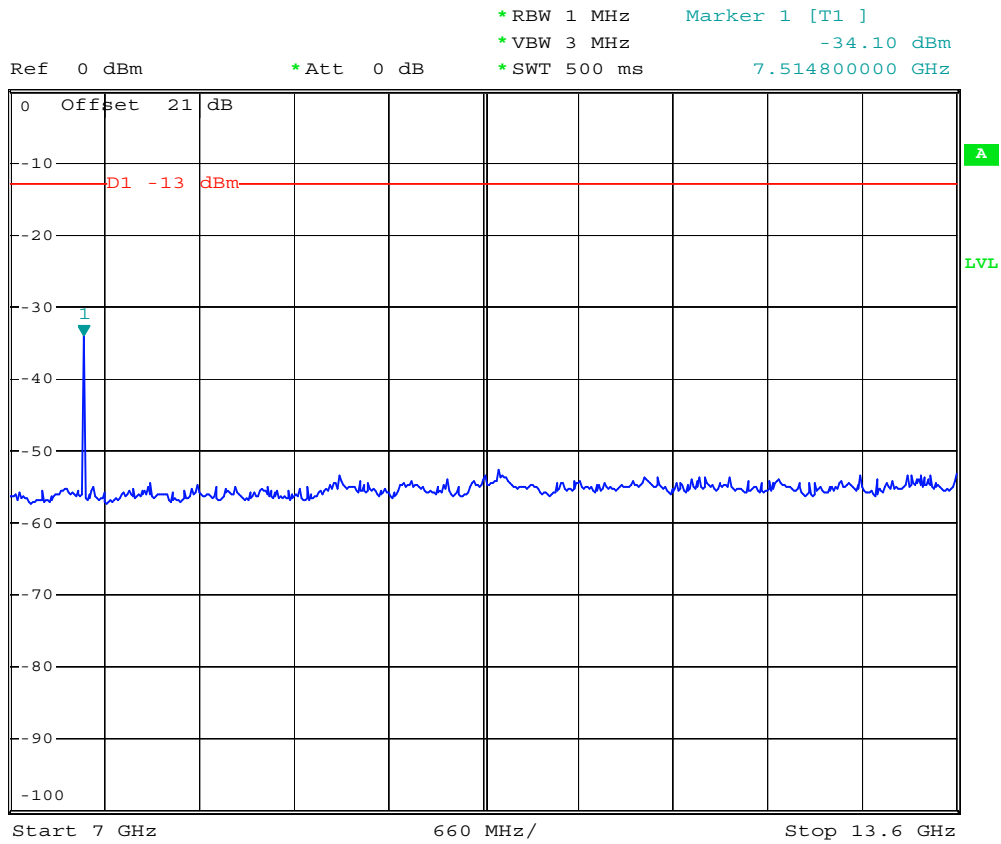
Ref 30 dBm * Att 30 dB * RBW 1 MHz Marker 1 [T1]
* VBW 3 MHz -25.21 dBm
* SWT 500 ms 5.192000000 GHz



Date: 26.JUL.2007 14:04:32



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



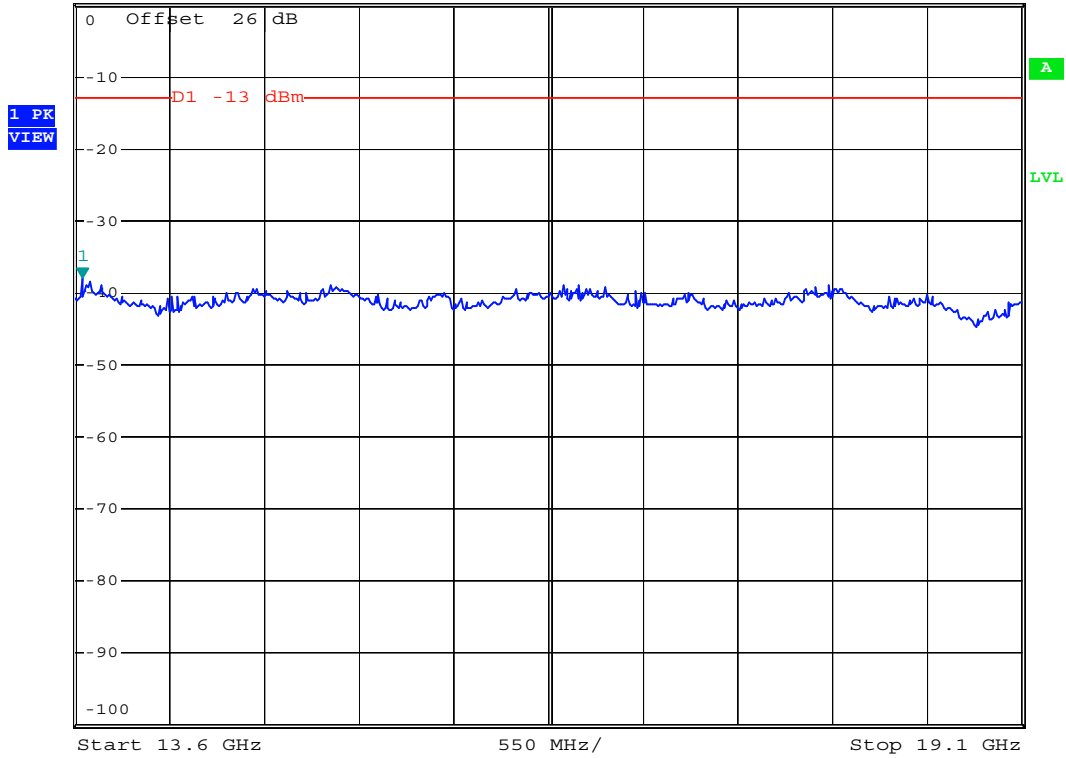
Date: 26.JUL.2007 14:05:15



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



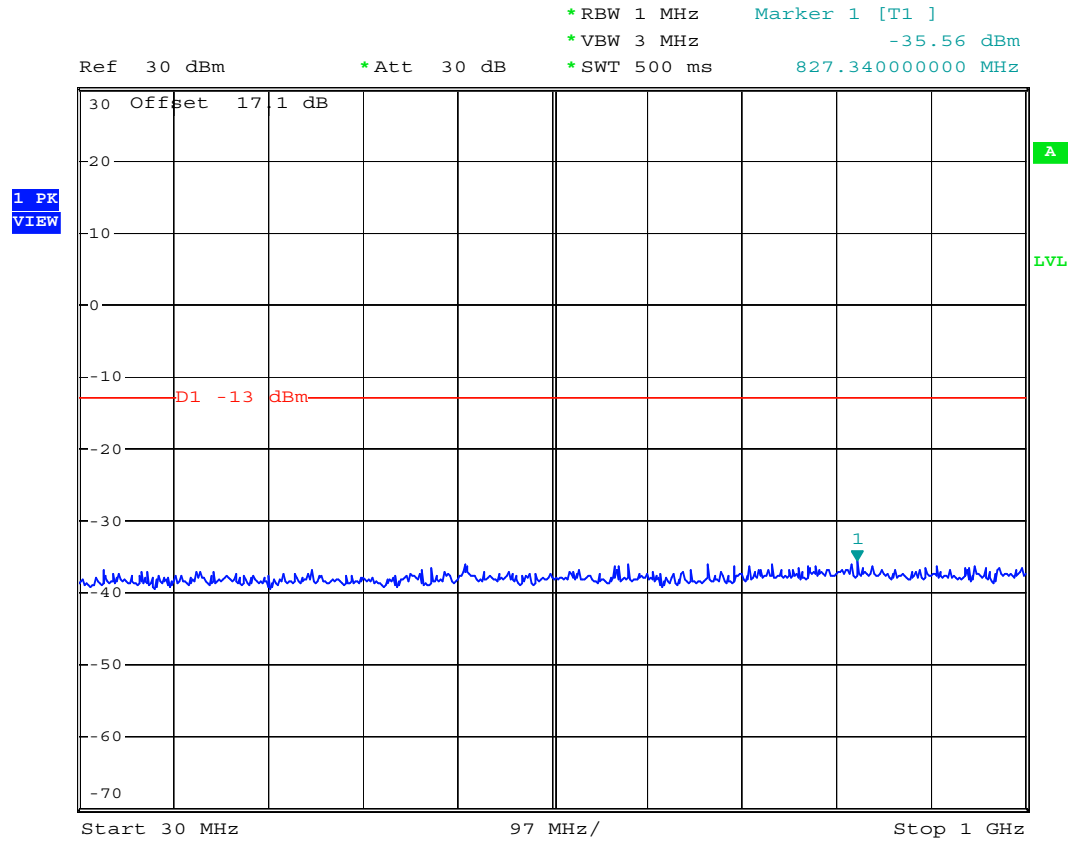
Ref 0 dBm * Att 0 dB * RBW 1 MHz Marker 1 [T1]
* VBW 3 MHz -37.81 dBm
* SWT 500 ms 13.644000000 GHz



Date: 26.JUL.2007 14:05:50



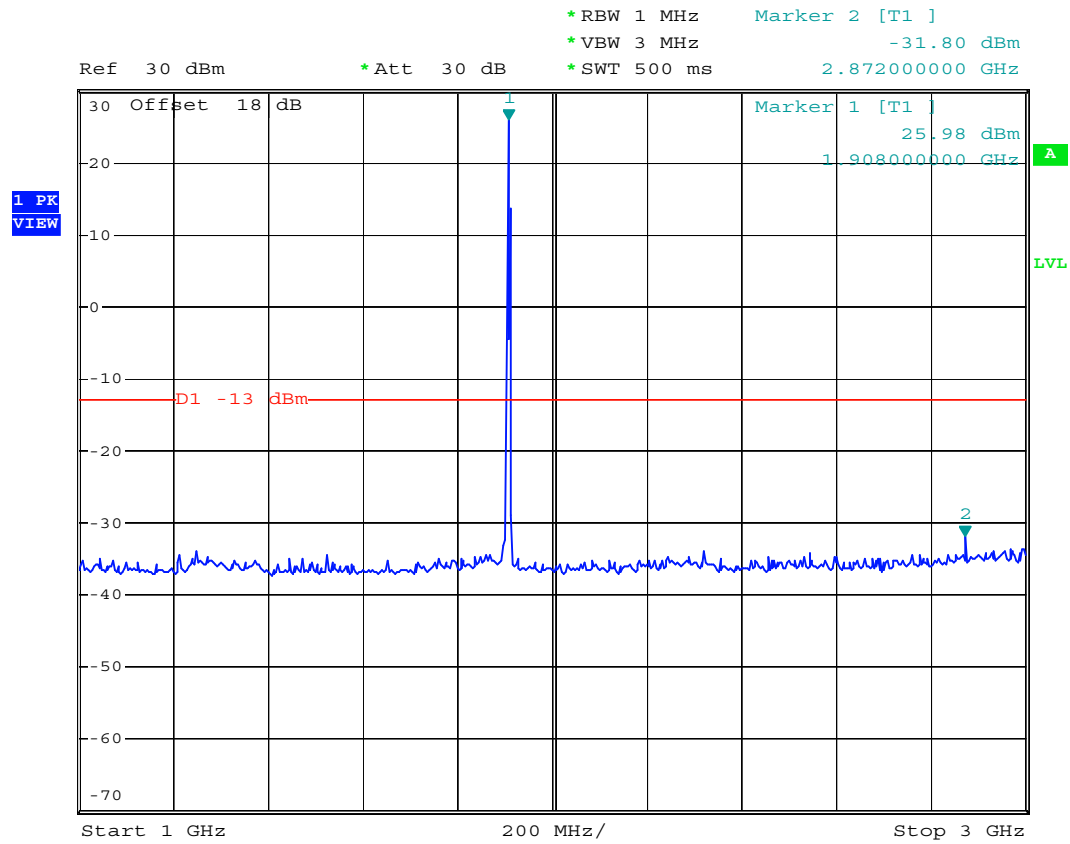
- Test Mode : CDMA2000 PCS 1900 CH1175 for 1xRTT
- Frequency Range : 30M-1G



Date: 29.JUL.2007 17:03:11



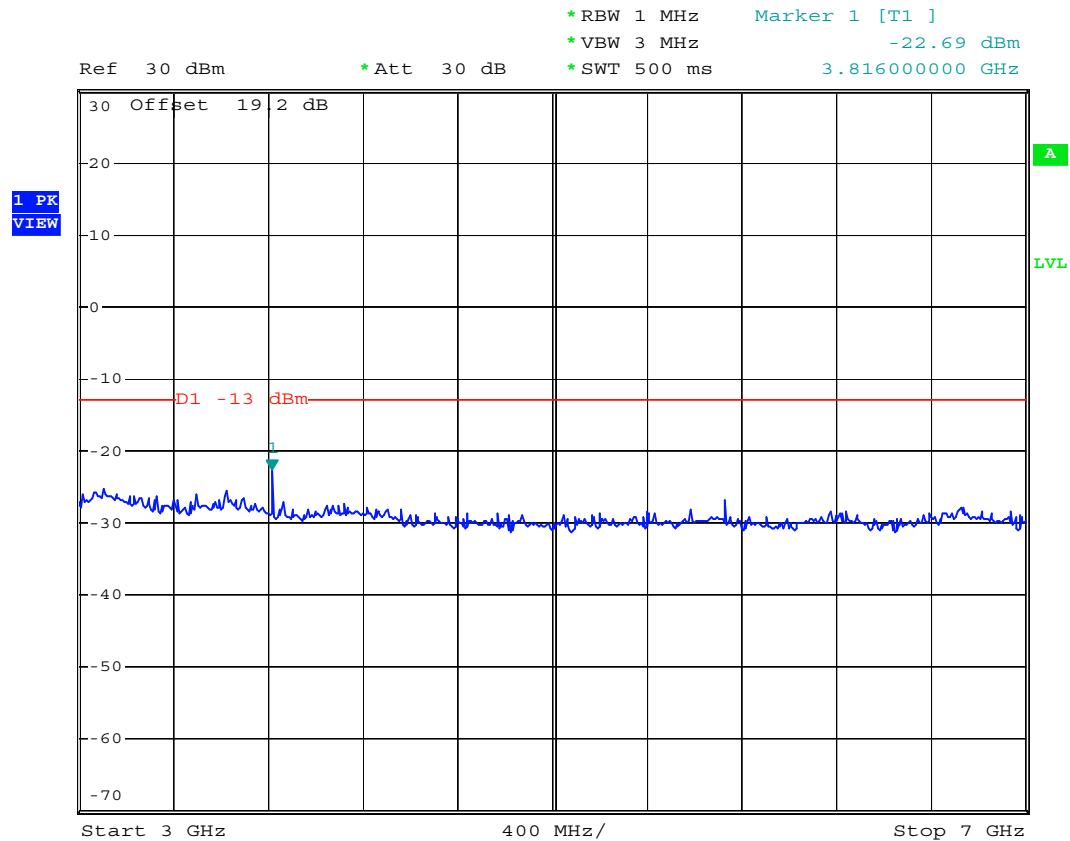
- Test Mode : CDMA2000 PCS 1900 CH1175 for 1xRTT
- Frequency Range : 1G-3G



Date: 29.JUL.2007 17:04:16



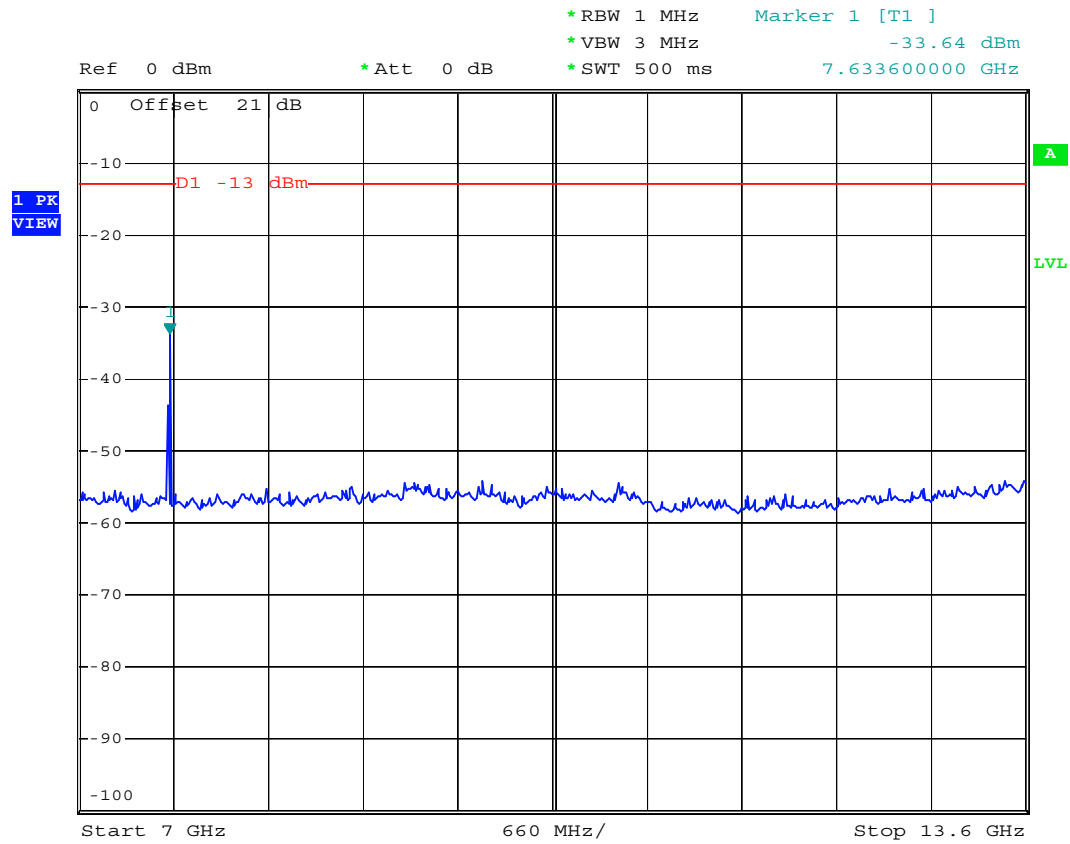
- Test Mode : CDMA2000 PCS 1900 CH1175 for 1xRTT
- Frequency Range : 3G-7G



Date: 29.JUL.2007 17:05:01



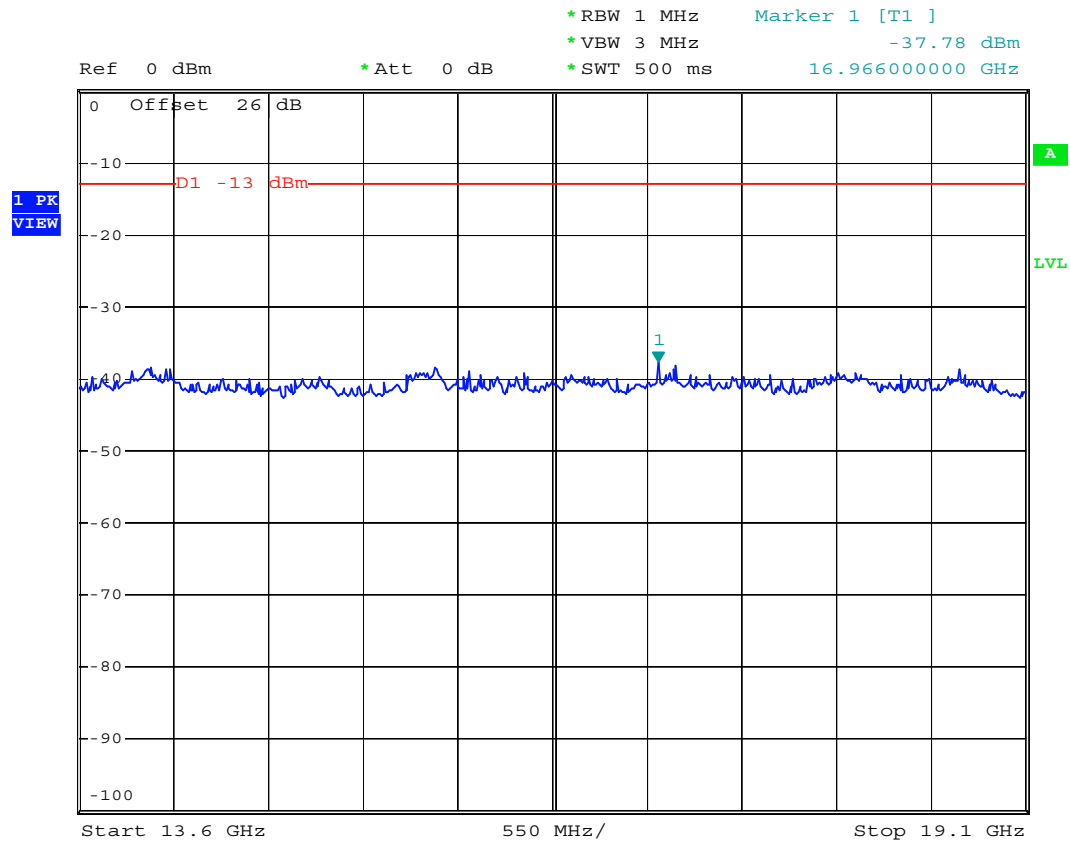
- Test Mode : CDMA2000 PCS 1900 CH1175 for 1xRTT
- Frequency Range : 7G-13.6G



Date: 29.JUL.2007 17:05:33



- Test Mode : CDMA2000 PCS 1900 CH1175 for 1xRTT
- Frequency Range : 13.6G-19.1G



Date: 29.JUL.2007 17:06:01

4.6 Field Strength of Spurious Radiation

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

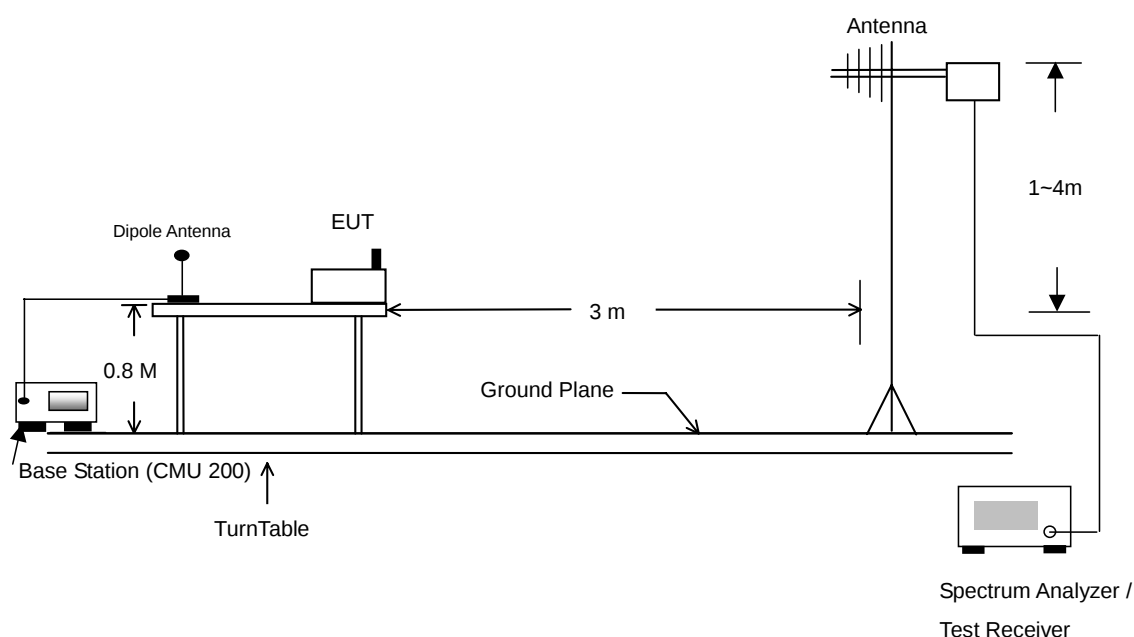
4.6.1 Measurement Instruments

As described in chapter 5 of this test report.

4.6.2 Test Procedure

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

4.6.3 Test Setup Layout



4.6.4 Test Result

- Temperature : 25~26°C
- Relative Humidity : 60~61%
- Test Engineer: James Huang
- Test Mode : Mode 1

CDMA2000 Cellular 850 1xRTT_RC3/SO55_CH1013 Radiated Spurious ERP							
H Polarization				V Polarization			
Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)
34.050	-62.320	-13	-49.32	32.700	-64.730	-13	-51.73
80.490	-66.840	-13	-53.84	92.370	-65.390	-13	-52.39
278.130	-72.490	-13	-59.49	97.770	-61.500	-13	-48.50
366.500	-71.280	-13	-58.28	372.100	-71.500	-13	-58.50
1646.000	-36.920	-13	-23.92	1646.000	-47.710	-13	-34.71
2476.000	-52.030	-13	-39.03	2476.000	-53.140	-13	-40.14
3300.000	-56.930	-13	-43.93	3300.000	-56.960	-13	-43.96
3476.000	-57.100	-13	-44.10	3476.000	-56.910	-13	-43.91

- Test Mode : Mode 2

CDMA2000 Cellular 850 1xRTT_RC3/SO55_CH384 Radiated Spurious ERP							
H Polarization				V Polarization			
Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)
30.810	-63.220	-13	-50.22	32.700	-64.130	-13	-51.13
81.300	-69.300	-13	-56.30	91.020	-65.250	-13	-52.25
244.650	-74.930	-13	-61.93	143.130	-64.460	-13	-51.46
421.800	-69.300	-13	-56.30	632.500	-67.590	-13	-54.59
1670.000	-51.930	-13	-38.93	1670.000	-60.140	-13	-47.14

▪ Test Mode : Mode 3

CDMA2000 Cellular 850 1xRTT_RC3/SO55_CH777 Radiated Spurious ERP							
H Polarization				V Polarization			
Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)
30.540	-63.070	-13	-50.07	32.700	-63.930	-13	-50.93
37.290	-68.550	-13	-55.55	80.220	-66.560	-13	-53.56
80.220	-64.080	-13	-51.08	91.290	-65.840	-13	-52.84
365.800	-71.510	-13	-58.51	505.800	-58.250	-13	-45.25
1694.000	-46.840	-13	-33.84	1694.000	-53.620	-13	-40.62
2544.000	-50.060	-13	-37.06	2542.000	-49.140	-13	-36.14
3390.000	-56.330	-13	-43.33	3390.000	-57.880	-13	-44.88

▪ Test Mode : Mode 4

CDMA2000 PCS 1900 1xRTT_RC3/SO55_CH25 Radiated Spurious EIRP							
H Polarization				V Polarization			
Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)
31.890	-61.000	-13	-48.00	31.890	-62.030	-13	-49.03
38.100	-66.940	-13	-53.94	80.220	-64.260	-13	-51.26
80.220	-62.030	-13	-49.03	92.370	-61.690	-13	-48.69
743.800	-69.060	-13	-56.06	332.900	-67.090	-13	-54.09
892.200	-68.080	-13	-55.08	397.300	-66.760	-13	-53.76
968.500	-67.320	-13	-54.32	547.800	-67.370	-13	-54.37
3702.000	-44.210	-13	-31.21	3700.000	-42.700	-13	-29.70
5550.000	-42.020	-13	-29.02	5550.000	-40.000	-13	-27.00
				7404.000	-49.010	-13	-36.01

- Test Mode : Mode 5

CDMA2000 PCS 1900 1xRTT_RC3/SO55_CH600 Radiated Spurious EIRP							
H Polarization				V Polarization			
Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)
30.810	-61.270	-13	-48.27	31.620	-62.660	-13	-49.66
49.170	-62.650	-13	-49.65	80.220	-66.730	-13	-53.73
80.490	-63.610	-13	-50.61	91.020	-62.070	-13	-49.07
363.700	-68.510	-13	-55.51	365.800	-67.420	-13	-54.42
393.800	-66.280	-13	-53.28	397.300	-66.540	-13	-53.54
913.200	-67.030	-13	-54.03	976.900	-64.320	-13	-51.32
3758.000	-45.410	-13	-32.41	3758.000	-37.630	-13	-24.63
5638.000	-42.220	-13	-29.22	5638.000	-42.590	-13	-29.59
7516.000	-46.160	-13	-33.16	7516.000	-47.300	-13	-34.30

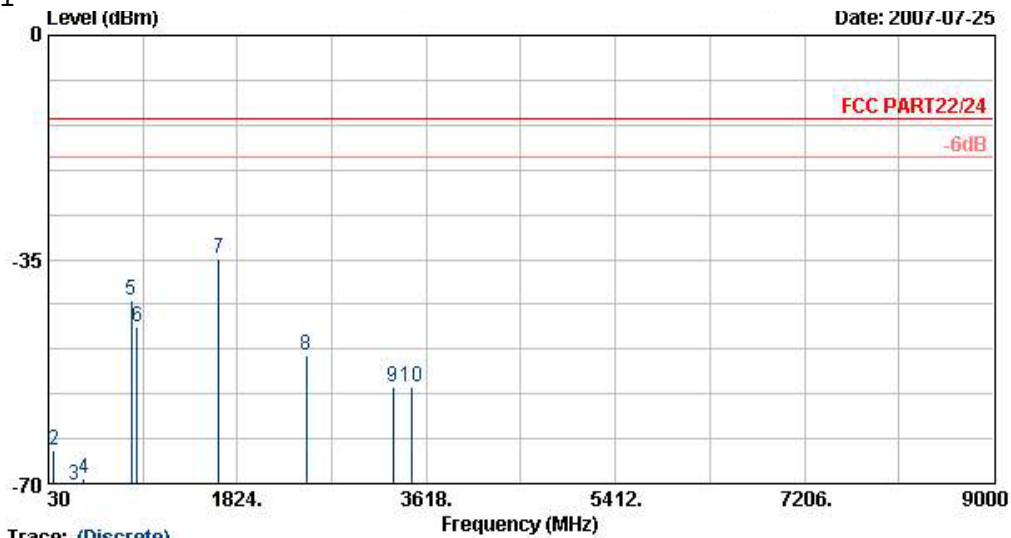
- Test Mode : Mode 6

CDMA2000 PCS 1900 1xRTT_RC3/SO55_CH1175 Radiated Spurious EIRP							
H Polarization				V Polarization			
Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)
31.620	-61.930	-13	-48.93	32.700	-61.800	-13	-48.80
39.450	-66.530	-13	-53.53	79.140	-64.440	-13	-51.44
80.490	-61.860	-13	-48.86	91.020	-61.910	-13	-48.91
763.400	-68.560	-13	-55.56	651.400	-67.980	-13	-54.98
831.300	-68.560	-13	-55.56	816.600	-66.340	-13	-53.34
946.100	-67.630	-13	-54.63	909.000	-64.740	-13	-51.74
3814.000	-35.050	-13	-22.05	3814.000	-31.100	-13	-18.10
5724.000	-39.840	-13	-26.84	5724.000	-39.730	-13	-26.73
				9542.000	-44.590	-13	-31.59



4.6.5 Test Data

4.6.5.1 Mode 1



Trace: (Discrete)

Site : 03CH06-HY
 Condition : HF-SPURIOUS HORIZONTAL
 EUT : CDMA 2000 MOBILE PHONE
 Power : 120Wac/60Hz
 Model : FG 772402
 Memo : CDMA Cellular Link Mode,Ch1013+Adaptor
 Memo : +Earphone
 Plane : E2

	Freq	Level	Over	Limit	Read			
	MHz	dBm	Limit	Line	Level	Factor	Remark	Pol/Phase
			dB	dBm	dBm	dB		
1	34.1	-60.17	-47.17	-13.00	-58.10	-2.08	Peak	HORIZONTAL
2	80.5	-64.69	-51.69	-13.00	-52.38	-12.31	Peak	HORIZONTAL
3	278.1	-70.34	-57.34	-13.00	-59.66	-10.68	Peak	HORIZONTAL
4	366.5	-69.13	-56.13	-13.00	-61.49	-7.64	Peak	HORIZONTAL
5	817.3	-41.47			-39.95	-1.52	Peak	HORIZONTAL
6	870.5	-45.61			-44.59	-1.02	Peak	HORIZONTAL
7	1646.0	-34.77	-21.77	-13.00	-35.09	0.31	Peak	HORIZONTAL
8	2476.0	-49.88	-36.88	-13.00	-51.03	1.16	Peak	HORIZONTAL
9	3300.0	-54.78	-41.78	-13.00	-59.98	5.20	Peak	HORIZONTAL
10	3476.0	-54.95	-41.95	-13.00	-60.74	5.79	Peak	HORIZONTAL

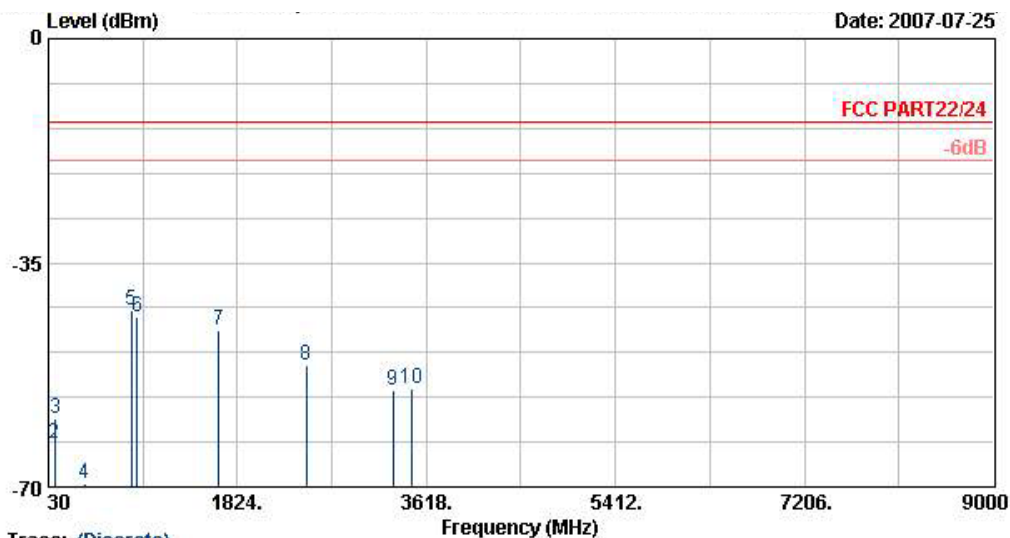
Remark:

1. #5: MS Signal
2. #6: BS Signal



FCC TEST REPORT

Report No. : FG772402



Trace: (Discrete)

Site : 08CH06-HY
Condition : HF-SPURIOUS VERTICAL
EUT : CDMA 2000 MOBILE PHONE
Power : 120V_{ac}/60Hz
Model : FG 772402
Memo : CDMA Cellular Link Mode;Ch1013+Adaptor
Memo : +Baophone
Plane : E2

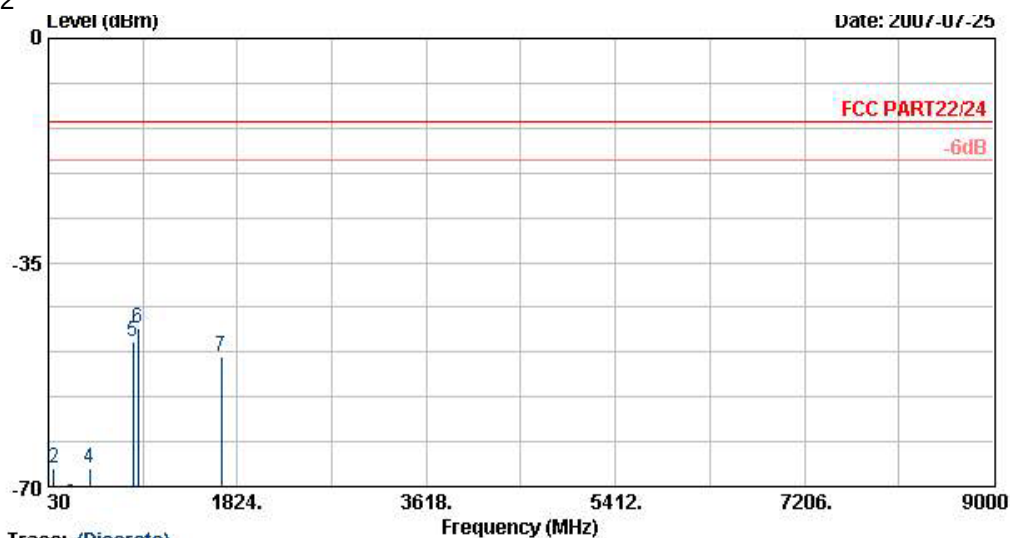
	Freq	Level	Over	Limit	Read			
	MHz	dBm	Limit	Line	Level	Factor	Remark	Pol/Phase
	MHz	dBm	dB	dBm	dBm	dB		
1	32.7	-62.58	-49.58	-13.00	-52.69	-9.89	Peak	VERTICAL
2	92.4	-63.24	-50.24	-13.00	-54.44	-8.81	Peak	VERTICAL
3	97.8	-59.35	-46.35	-13.00	-51.38	-7.97	Peak	VERTICAL
4	372.1	-69.35	-56.35	-13.00	-64.45	-4.91	Peak	VERTICAL
5	817.3	-42.54			-43.75	1.21	Peak	VERTICAL
6	869.8	-43.53			-45.16	1.63	Peak	VERTICAL
7	1646.0	-45.56	-32.56	-13.00	-45.10	-0.46	Peak	VERTICAL
8	2476.0	-50.99	-37.99	-13.00	-53.20	2.21	Peak	VERTICAL
9	3300.0	-54.81	-41.81	-13.00	-59.07	4.26	Peak	VERTICAL
10	3476.0	-54.76	-41.76	-13.00	-59.61	4.85	Peak	VERTICAL

Remark:

1. #5: MS Signal
2. #6: BS Signal



4.6.5.2 Mode 2



Site : 08CH06-HY
Condition : HF-SPURIOUS HORIZONTAL
EUT : CDMA 2000 MOBILE PHONE
Power : 120Vac/60Hz
Model : FG 772402
Memo : CDMA Cellular Link Mode,Ch384+Adaptor
Memo : +Earphone
Plane : E2

	Freq	Level	Over	Limit	Read			
	MHz	dBm	Limit	Line	Level	Factor	Remark	Pol/Phase
			dB	dBm	dBm	dB		
1	30.8	-61.07	-48.07	-13.00	-60.82	-0.25	Peak	HORIZONTAL
2	81.3	-67.15	-54.15	-13.00	-54.84	-12.31	Peak	HORIZONTAL
3	244.7	-72.78	-59.78	-13.00	-60.93	-11.85	Peak	HORIZONTAL
4	421.8	-67.15	-54.15	-13.00	-60.96	-6.19	Peak	HORIZONTAL
5	836.2	-47.41			-46.06	-1.34	Peak	HORIZONTAL
6	881.7	-45.32			-44.42	-0.90	Peak	HORIZONTAL
7	1670.0	-49.78	-36.78	-13.00	-50.01	0.22	Peak	HORIZONTAL

Remark:

1. #5: MS Signal
2. #6: BS Signal



FCC TEST REPORT

Report No. : FG772402



Site : 08CH06-HY
Condition : HF-SPURIOUS VERTICAL
EUT : CDMA 2000 MOBILE PHONE
Power : 120V_{ac}/60Hz
Model : FG 772402
Memo : CDMA Cellular Link Mode;Ch384+Adaptor
Plane : +Easphone
E2

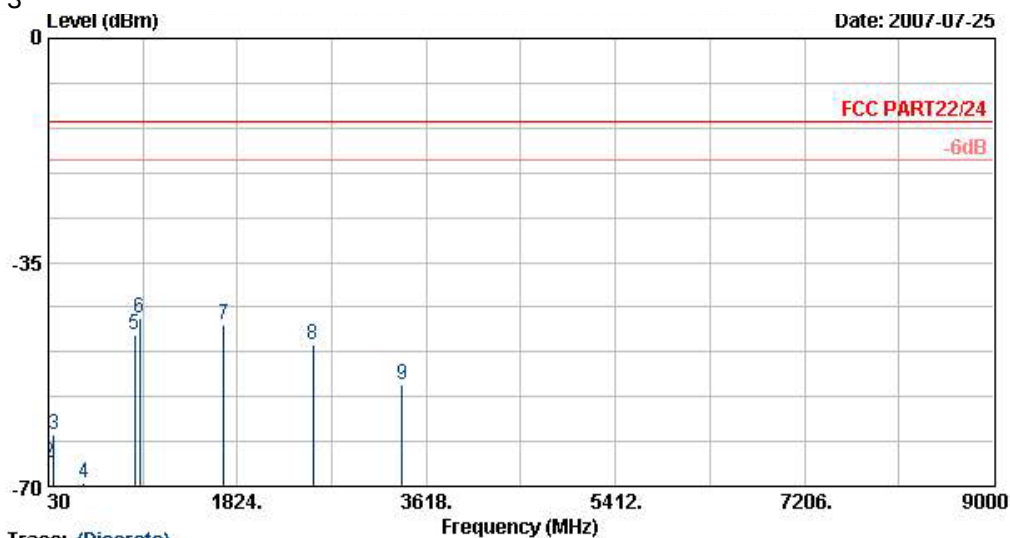
	Freq	Level	Over	Limit	Read			
	MHz	dBm	Limit	Line	Level	Factor	Remark	Pol/Phase
			dB	dBm	dBm	dB		
1	32.7	-61.98	-48.98	-13.00	-52.08	-9.89	Peak	VERTICAL
2	91.0	-63.10	-50.10	-13.00	-54.15	-8.95	Peak	VERTICAL
3	143.1	-62.31	-49.31	-13.00	-54.23	-8.08	Peak	VERTICAL
4	632.5	-65.44	-52.44	-13.00	-63.99	-1.45	Peak	VERTICAL
5	836.2	-47.61			-48.97	1.36	Peak	VERTICAL
6	881.7	-44.21			-45.93	1.72	Peak	VERTICAL
7	1670.0	-57.99	-44.99	-13.00	-57.51	-0.48	Peak	VERTICAL

Remark:

- 3. #5: MS Signal
- 4. #6: BS Signal



4.6.5.3 Mode 3



Site : 08CH06-HY
Condition : HF-SPURIOUS HORIZONTAL
EUT : CDMA 2000 MOBILE PHONE
Power : 120Wac/60Hz
Model : FG
Memo : CDMA Cellular Link Mode;Ch.777+Adaptor
Memo : +Earphone
Plane : E2

	Freq	Level	Over	Limit	Read			
	MHz	dBm	Limit	Line	Level	Factor	Remark	Pol/Phase
			dB	dBm	dBm	dB		
1	30.5	-60.92	-47.92	-13.00	-60.67	-0.25	Peak	HORIZONTAL
2	37.3	-66.40	-53.40	-13.00	-61.89	-4.51	Peak	HORIZONTAL
3	80.2	-61.93	-48.93	-13.00	-49.61	-12.31	Peak	HORIZONTAL
4	365.8	-69.36	-56.36	-13.00	-61.69	-7.67	Peak	HORIZONTAL
5	848.1	-46.27			-45.04	-1.23	Peak	HORIZONTAL
6	892.9	-43.67			-42.87	-0.79	Peak	HORIZONTAL
7	1694.0	-44.69	-31.69	-13.00	-44.82	0.13	Peak	HORIZONTAL
8	2544.0	-47.91	-34.91	-13.00	-49.52	1.61	Peak	HORIZONTAL
9	3390.0	-54.18	-41.18	-13.00	-59.79	5.61	Peak	HORIZONTAL

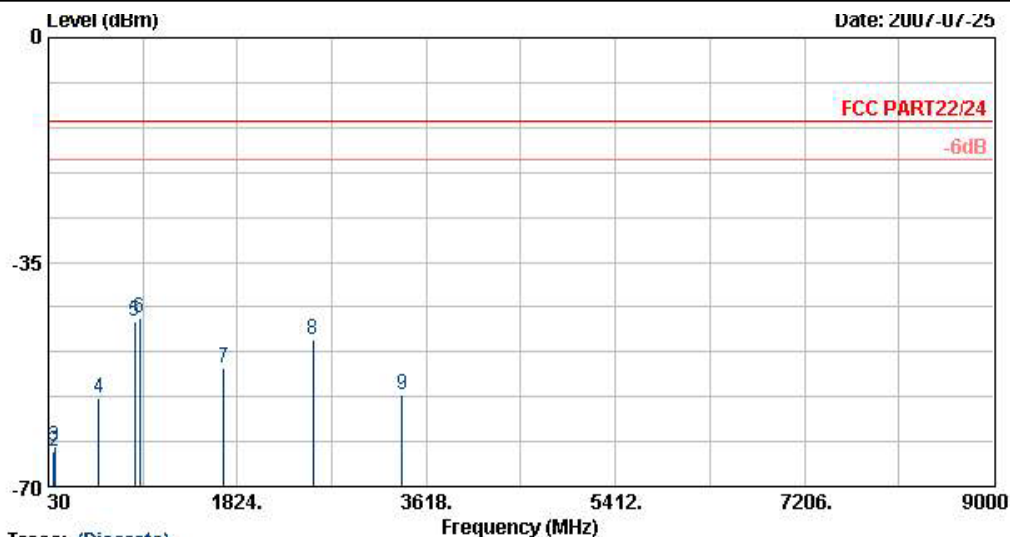
Remark:

1. #5: MS Signal
2. #6: BS Signal



FCC TEST REPORT

Report No. : FG772402



Trace: (Discrete)

Site : 08CH06-HY
Condition : HF-SPURIOUS VERTICAL
EUT : CDMA 2000 MOBILE PHONE
Power : 120V_{ac}/60Hz
Model : FG 772402
Memo : CDMA Cellular Link Mode;Ch777+Adaptor
Plane : +Easphone
E2

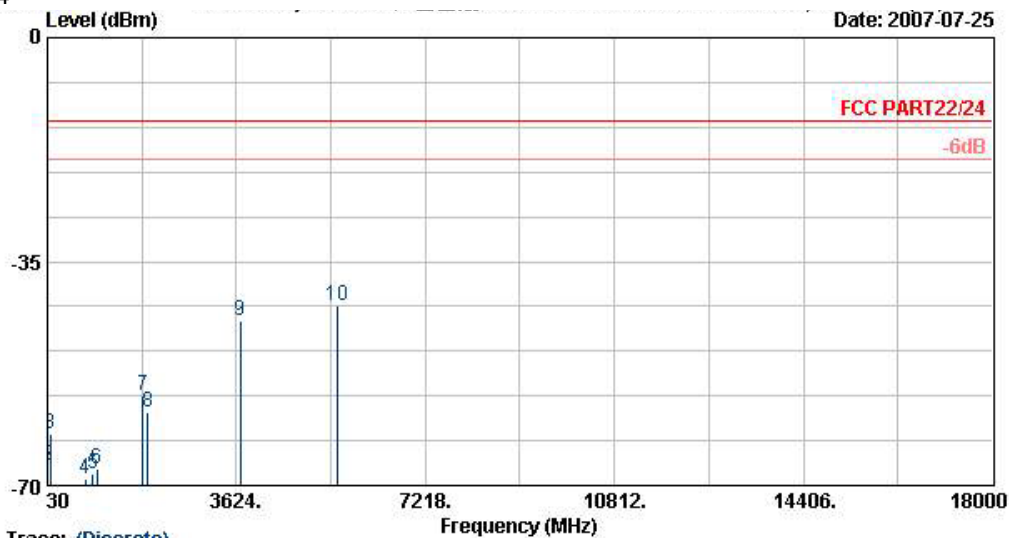
	Freq	Level	Over	Limit	Read			
	MHz	dBm	Limit	Line	Level	Factor	Remark	Pol/Phase
			dB	dBm	dBm	dB		
1	32.7	-61.78	-48.78	-13.00	-51.89	-9.89	Peak	VERTICAL
2	80.2	-64.41	-51.41	-13.00	-53.92	-10.49	Peak	VERTICAL
3	91.3	-63.69	-50.69	-13.00	-54.75	-8.95	Peak	VERTICAL
4	505.8	-56.10	-43.10	-13.00	-53.04	-3.05	Peak	VERTICAL
5	848.1	-44.17			-45.62	1.45	Peak	VERTICAL
6 @	892.9	-43.65			-45.47	1.81	Peak	VERTICAL
7	1694.0	-51.47	-38.47	-13.00	-50.97	-0.50	Peak	VERTICAL
8	2542.0	-46.99	-33.99	-13.00	-49.33	2.34	Peak	VERTICAL
9	3390.0	-55.73	-42.73	-13.00	-60.40	4.67	Peak	VERTICAL

Remark:

- #5: MS Signal
- #6: BS Signal



4.6.5.4 Mode 4



Trace: (Discrete)

Site : 08CH06-HY
Condition : HF-SPURIOUS HORIZONTAL
EUT : CDMA 2000 MOBILE PHONE
Power : 120Vac/60Hz
Model : FG 772402
Memo : CDMA PCS Link Mode;CH25+Adaptor
Plane : +Earphone
E2

	Freq	Level	Over	Limit	Read	Factor	Remark	Pol/Phase
	MHz	dBm	dB	dBm	dBm	dB		
1	31.9	-61.00	-48.00	-13.00	-60.14	-0.86	Peak	HORIZONTAL
2	38.1	-66.94	-53.94	-13.00	-62.43	-4.51	Peak	HORIZONTAL
3	80.2	-62.03	-49.03	-13.00	-49.71	-12.31	Peak	HORIZONTAL
4	743.8	-69.06	-56.06	-13.00	-66.80	-2.27	Peak	HORIZONTAL
5	892.2	-68.08	-55.08	-13.00	-67.28	-0.80	Peak	HORIZONTAL
6	968.5	-67.32	-54.32	-13.00	-67.26	-0.06	Peak	HORIZONTAL
7	1852.0	-55.82			-55.48	-0.34	Peak	HORIZONTAL
8	1932.0	-58.56			-57.62	-0.94	Peak	HORIZONTAL
9	3702.0	-44.21	-31.21	-13.00	-51.63	7.42	Peak	HORIZONTAL
10	5550.0	-42.02	-29.02	-13.00	-51.89	9.87	Peak	HORIZONTAL

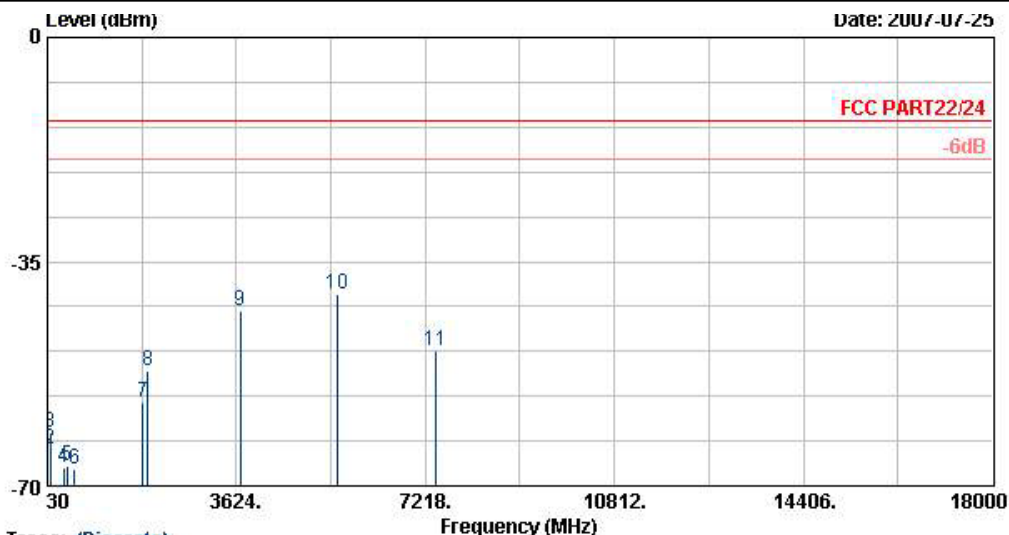
Remark:

1. #7: MS Signal
2. #8: BS Signal



FCC TEST REPORT

Report No. : FG772402



Trace: (Discrete)

Site : 08CH06-HY
Condition : HP-SPURIOUS VERTICAL
EUT : CDMA 2000 MOBILE PHONE
Power : 120Vac/60Hz
Model : FG 772402
Memo : CDMA FCS Link Mode;Ch25+Adaptor
Plane : +Earphone
E2

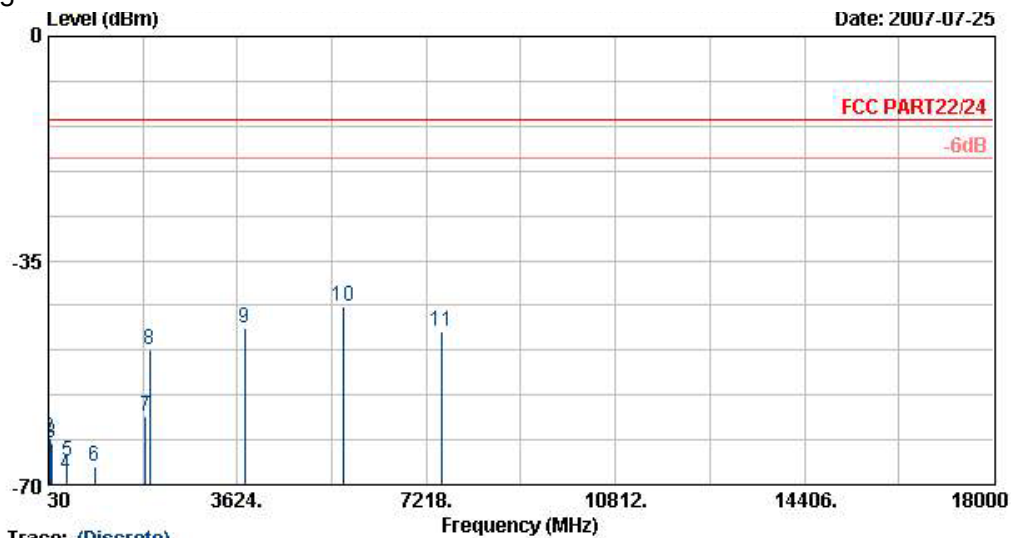
	Freq	Level	Over	Limit	Read	Factor	Remark	Pol/Phase
	MHz	dBm	Limit	Line	Level	dB		
1	31.9	-62.03	-49.03	-13.00	-52.41	-9.62	Peak	VERTICAL
2	80.2	-64.26	-51.26	-13.00	-53.77	-10.49	Peak	VERTICAL
3	92.4	-61.69	-48.69	-13.00	-52.88	-8.81	Peak	VERTICAL
4	332.9	-67.09	-54.09	-13.00	-61.33	-5.76	Peak	VERTICAL
5	397.3	-66.76	-53.76	-13.00	-62.39	-4.37	Peak	VERTICAL
6	547.8	-67.37	-54.37	-13.00	-64.82	-2.56	Peak	VERTICAL
7	1852.0	-56.96			-56.65	-0.30	Peak	VERTICAL
8	1932.0	-51.94			-51.44	-0.50	Peak	VERTICAL
9	3700.0	-42.70	-29.70	-13.00	-48.90	6.20	Peak	VERTICAL
10 @	5550.0	-40.00	-27.00	-13.00	-48.60	8.60	Peak	VERTICAL
11	7404.0	-49.01	-36.01	-13.00	-61.30	12.28	Peak	VERTICAL

Remark:

1. #7: MS Signal
2. #8: BS Signal



4.6.5.5 Mode 5

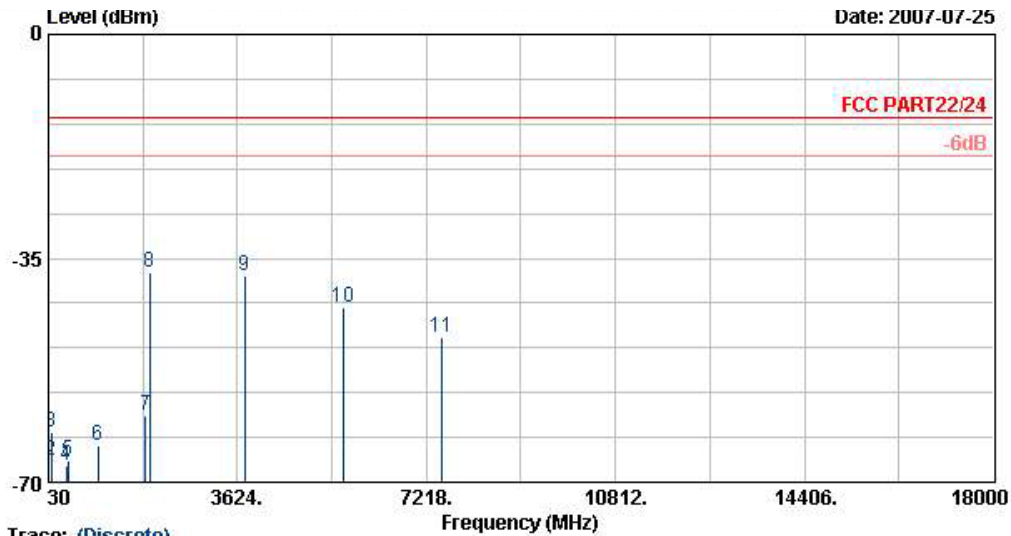


Site : 08CHD6-HY
Condition : HF-SPURIOUS HORIZONTAL
EUT : CDMA 2000 MOBILE PHONE
Power : 120Wac/60Hz
Model : FG 772402
Memo : CDMA PCS Link Mode;Ch600+Adaptor
+Earphone
Plane : E2

	Freq	Level	Over	Limit	Read			
	MHz	dBm	Limit	Line	Level	Factor	Remark	Pol/Phase
			dB	dBm	dBm	dB		
1	30.8	-61.27	-48.27	-13.00	-61.02	-0.25	Peak	HORIZONTAL
2	49.2	-62.65	-49.65	-13.00	-50.83	-11.82	Peak	HORIZONTAL
3	80.5	-63.61	-50.61	-13.00	-51.30	-12.31	Peak	HORIZONTAL
4	363.7	-68.51	-55.51	-13.00	-60.77	-7.74	Peak	HORIZONTAL
5	393.8	-66.28	-53.28	-13.00	-59.58	-6.70	Peak	HORIZONTAL
6	913.2	-67.03	-54.03	-13.00	-66.44	-0.59	Peak	HORIZONTAL
7	1878.0	-59.36			-58.85	-0.51	Peak	HORIZONTAL
8	1958.0	-49.02			-47.91	-1.11	Peak	HORIZONTAL
9	3758.0	-45.41	-32.41	-13.00	-53.33	7.92	Peak	HORIZONTAL
10	5638.0	-42.22	-29.22	-13.00	-52.18	9.97	Peak	HORIZONTAL
11	7516.0	-46.16	-33.16	-13.00	-61.97	15.80	Peak	HORIZONTAL

Remark:

1. #7: MS Signal
2. #8: MS Signal



Trace: (Discrete)

Site : 08CHD6-HY
 Condition : HF-SPURIOUS VERTICAL
 EUT : CDMA 2000 MOBILE PHONE
 Power : 120Vac/60Hz
 Model : FG
 Memo : CDMA PCS Link Mode;Ch600+Adaptor
 +Earphone
 Plane : E2

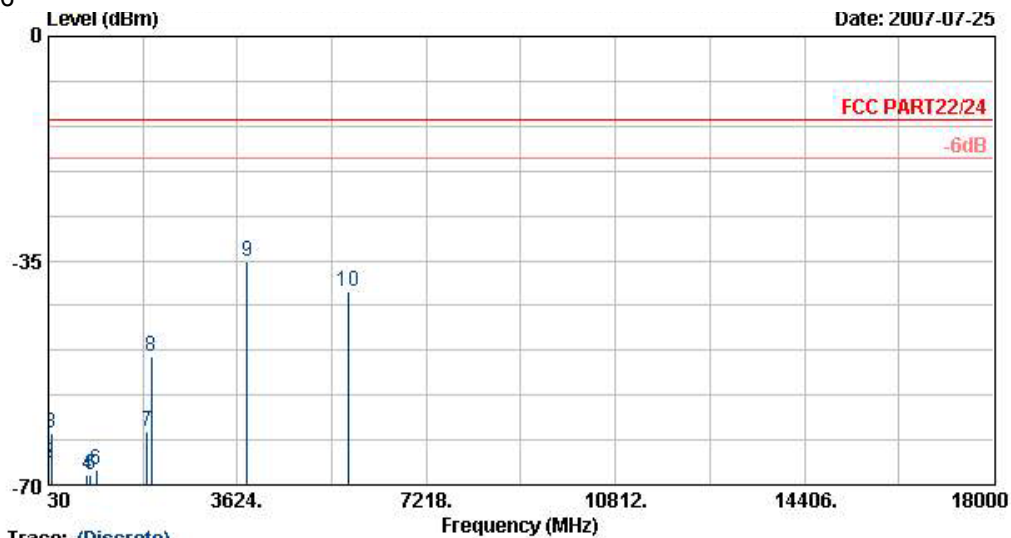
	Freq	Level	Over	Limit	Read			
	MHz	dBm	Limit	Line	Level	Factor	Remark	Pol/Phase
			dB	dBm	dBm	dB		
1	31.6	-62.66	-49.66	-13.00	-53.04	-9.62	Peak	VERTICAL
2	80.2	-66.73	-53.73	-13.00	-56.25	-10.49	Peak	VERTICAL
3	91.0	-62.07	-49.07	-13.00	-53.13	-8.95	Peak	VERTICAL
4	365.8	-67.42	-54.42	-13.00	-62.37	-5.05	Peak	VERTICAL
5	397.3	-66.54	-53.54	-13.00	-62.17	-4.37	Peak	VERTICAL
6	976.9	-64.32	-51.32	-13.00	-66.80	2.47	Peak	VERTICAL
7	1878.0	-59.51			-59.11	-0.40	Peak	VERTICAL
8 @	1960.0	-37.19			-36.60	-0.60	Peak	VERTICAL
9	3758.0	-37.63	-24.63	-13.00	-44.27	6.64	Peak	VERTICAL
10	5638.0	-42.59	-29.59	-13.00	-51.24	8.65	Peak	VERTICAL
11	7516.0	-47.30	-34.30	-13.00	-60.67	13.37	Peak	VERTICAL

Remark:

- #7: MS Signal
- #8: BS Signal



4.6.5.6 Mode 6



Site : 08CH06-HY
Condition : HF-SPURIOUS HORIZONTAL
EUT : CDMA 2000 MOBILE PHONE
Power : 120Wac/60Hz
Model : FG 772402
Memo : CDMA FCS Link Mode;Ch1175+Adaptor
Memo : +Eaophone
Plane : E2

	Freq	Level	Over	Limit	Read			
	MHz	dBm	Limit	Line	Level	Factor	Remark	Pol/Phase
			dB	dBm	dBm	dB		
1	31.6	-61.93	-48.93	-13.00	-61.07	-0.86	Peak	HORIZONTAL
2	39.5	-66.53	-53.53	-13.00	-60.80	-5.73	Peak	HORIZONTAL
3	80.5	-61.86	-48.86	-13.00	-49.55	-12.31	Peak	HORIZONTAL
4	763.4	-68.56	-55.56	-13.00	-66.49	-2.07	Peak	HORIZONTAL
5	831.3	-68.56	-55.56	-13.00	-67.17	-1.39	Peak	HORIZONTAL
6	946.1	-67.63	-54.63	-13.00	-67.34	-0.28	Peak	HORIZONTAL
7	1908.0	-61.61			-60.80	-0.81	Peak	HORIZONTAL
8	1988.0	-49.86			-48.59	-1.28	Peak	HORIZONTAL
9 @	3814.0	-35.05	-22.05	-13.00	-43.34	8.28	Peak	HORIZONTAL
10 @	5724.0	-39.84	-26.84	-13.00	-49.96	10.12	Peak	HORIZONTAL

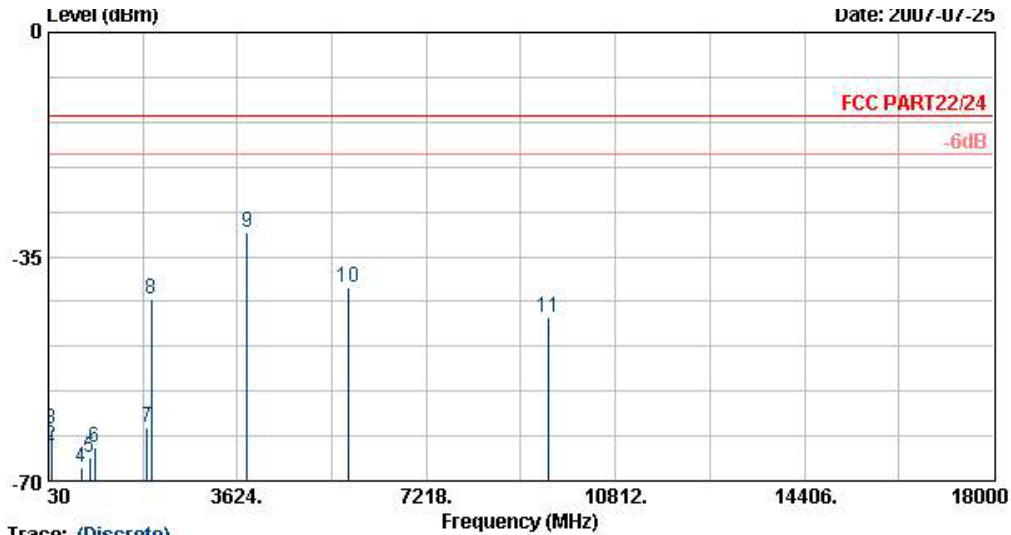
Remark:

1. #7: MS Signal
2. #8: BS Signal



FCC TEST REPORT

Report No. : FG772402



Trace: (Discrete)

Site : 08CH06-HY
Condition : HF-SPURIOUS VERTICAL
EUT : CDMA 2000 MOBILE PHONE
Power : 120V_{ac}/60Hz
Model : FG 772402
Memo : CDMA PCS Link Mode;CH1175+Adaptor
Plane : +Easphone
E2

	Freq	Level	Over	Limit	Read			
	MHz	dBm	Limit	Line	Level	Factor	Remark	Pol/Phase
			dB	dBm	dBm	dB		
1	32.7	-61.80	-48.80	-13.00	-51.91	-9.89	Peak	VERTICAL
2	79.1	-64.44	-51.44	-13.00	-53.82	-10.63	Peak	VERTICAL
3	91.0	-61.91	-48.91	-13.00	-52.97	-8.95	Peak	VERTICAL
4	651.4	-67.98	-54.98	-13.00	-66.82	-1.16	Peak	VERTICAL
5	816.6	-66.34	-53.34	-13.00	-67.54	1.20	Peak	VERTICAL
6	909.0	-64.74	-51.74	-13.00	-66.68	1.93	Peak	VERTICAL
7	1908.0	-61.65			-61.15	-0.50	Peak	VERTICAL
8	1988.0	-41.67			-40.98	-0.69	Peak	VERTICAL
9 @	3814.0	-31.10	-18.10	-13.00	-38.02	6.93	Peak	VERTICAL
10 @	5724.0	-39.73	-26.73	-13.00	-48.50	8.77	Peak	VERTICAL
11	9542.0	-44.59	-31.59	-13.00	-61.49	16.90	Peak	VERTICAL

Remark:

- #7: MS Signal
- #8: BS Signal

4.7 Frequency Stability (Temperature Variation)

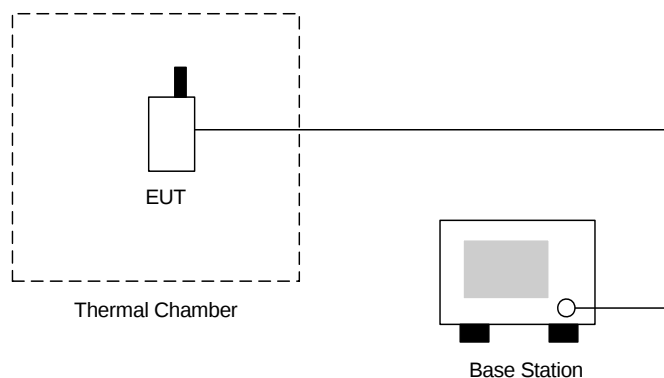
4.7.1 Measurement Instrument

As described in chapter 5 of this test report.

4.7.2 Test Procedure

1. The EUT and test equipment were set up as shown on the following section.
2. With all power removed, the temperature was decreased to -30°C and permitted to stabilize for three hours. Power was applied and the maximum change in frequency was noted within one minute.
3. With power OFF, the temperature was raised in 10°C steps. The sample was permitted to stabilize at each step for at least one-half hour. Power was applied and the maximum frequency change was noted within one minute.
4. The temperature tests were performed for the worst case.
5. Test data was recorded.

4.7.3 Test Setup Layout



**4.7.4 Test Result**

- Temperature : 25~26°C
- Relative Humidity : 60~61%
- Test Engineer: James Huang
- Test Mode : CDMA2000 Cellular 850 1xRTT_RC3/SO55 CH384

Temperature(°C)	Change (Hz)	Change (ppm)	Limit (ppm)	Result
-30	-35	-0.04	2.5	Passed
-20	-53	-0.06		
-10	-48	-0.06		
0	-22	-0.03		
10	39	0.05		
20	28	0.03		
30	41	0.05		
40	-22	-0.03		
50	-13	-0.02		

- Test Mode : CDMA2000 PCS 1900 1xRTT_RC3/SO55 CH600

Temperature(°C)	Change (Hz)	Change (ppm)	Limit (ppm)	Result
-30	-44	-0.02	2.5	Passed
-20	-59	-0.03		
-10	-40	-0.02		
0	33	0.02		
10	48	0.03		
20	28	0.01		
30	-43	-0.02		
40	28	0.01		
50	-33	-0.02		

4.8 Frequency Stability (Voltage Variation)

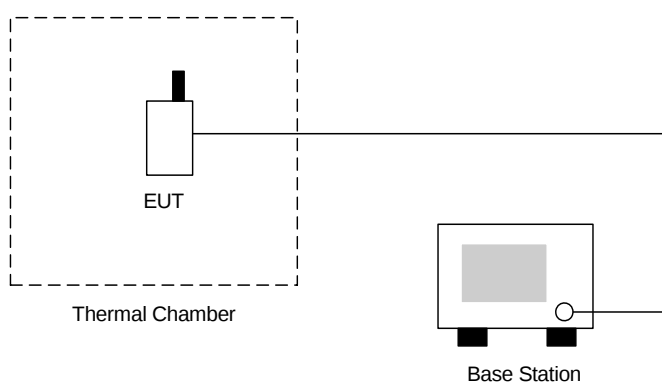
4.8.1 Measurement Instrument

As described in chapter 5 of this test report.

4.8.2 Test Procedure

1. The EUT was placed in a temperature chamber at $25 \pm 5^{\circ}\text{C}$ and connected as the following section.
2. The power supply voltage to the EUT was varied from BEP to 115% of the nominal value measured at the input to the EUT.
3. The variation in frequency was measured for the worst case.

4.8.3 Test Setup Layout



4.8.4 Test Result

- Temperature : $25 \sim 26^{\circ}\text{C}$
- Relative Humidity : 60~61%
- Test Engineer: James Huang
- Test Mode : CDMA2000 Cellular 850 1xRTT RC3/SO55 CH384

Voltage(Volt)	Change (Hz)	Change (ppm)	Limit (ppm)	Result
3.7	25.0	0.03	2.5	Passed
BEP	-46.0	-0.05		
4.2	-39.0	-0.05		

- Test Mode : CDMA2000 PCS 1900 1xRTT RC3/SO55 CH600

Voltage(Volt)	Change (Hz)	Change (ppm)	Limit (ppm)	Result
3.7	38.0	0.02	2.5	Passed
BEP	-66.0	-0.03		
4.2	-50.0	-0.03		

Remark:

1. Normal Voltage=3.7 V.
2. Battery End Point (BEP)=3.2 V.

5 List of Measurement Equipments

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Due Date	Remark
Spectrum analyzer	Agilent	E4408B	MY44211030	9KHz-26.5GHz	Oct. 05, 2006	Oct. 04, 2007	Radiation (03CH06-HY)
EMI Test Receiver	R&S	ESCS30	100356	9KHz-2.75GHz	Jul. 13, 2007	Jul. 12, 2008	Radiation (03CH06-HY)
Bilog Antenna	SCHAFFNER	CBL6112B	2885	30MHz -2GHz	Nov. 20, 2006	Nov. 19, 2007	Radiation (03CH06-HY)
Double Ridge Horn Antenna	Com-Power	AH118	071025	1G~18G	Jun. 04, 2007	Jun. 03, 2008	Radiation (03CH06-HY)
SHF-EHF Horn	SCHWARZBECK	BBHA 9170	9170-249	14G - 40G	Nov. 20, 2006	Nov. 19, 2008	Radiation (03CH06-HY)
Pre Amplifier	Agilent	8449B	3008A01917	1G - 26.5G	Nov. 15, 2006	Nov. 14, 2007	Radiation (03CH06-HY)
Pre Amplifier	Mini Circuits	ZKL-2	D092004-1	10~2500MHz	Nov. 15, 2006	Nov. 14, 2007	Radiation (03CH06-HY)
Base Station Simulator	R & S	CMU200	106656	WCDMA	Nov. 20, 2006	Nov. 19, 2007	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	Ten Billion	TTH-D35P	TBN-930701	N/A	Jul. 24, 2007	Jul. 23, 2008	Conducted (TH02-HY)
Spectrum Analyzer	R&S	FSP40	100055	9KHz~40GHz	Jun. 25, 2007	Jun. 24, 2008	Conducted (TH02-HY)
Power Supply	TOPWARD	3303D	740889	N/A	May 25, 2007	May 24, 2008	Conducted (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