FCC TEST REPORT

for

47 CFR Part 22H, 24E

Equipment	:	**UMPC**
Trade Name	:	**HTC**
Model No.	:	**CLIO100**
FCC ID	:	**NM8CL**
Tx Frequency Range	:	**GSM850 : 824.2~848.8 MHz** **PCS1900 : 1850.2~1909.8 MHz** **WCDMA Band V : 826.4~846.6 MHz** **WCDMA Band II : 1852.4~1907.6 MHz**
Max. ERP/EIRP Power	:	**GSM850(GSM) : 0.89 W** **GSM850(EDGE) : 0.21 W** **PCS1900(GSM) : 1.33 W** **PCS1900(EDGE) : 0.55 W** **WCDMA Band V : 0.11 W** **WCDMA Band V(HSDPA) : 0.07 W** **WCDMA Band II : 0.32 W** **WCDMA Band II(HSDPA) : 0.26 W**
Emission Designator	:	**GSM : 300KGXW** **EDGE : 300KG7W** **WCDMA : 4M22F9W**
Applicant	:	**High Tech Computer Corp.** No. 23, Xinghua Rd., Taoyuan 330, Taiwan

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- The data shown in this test report were carried out on Sep. 17, 2007 at **Sporton International Inc. LAB.**
- Report No.: FG780709-01, Report Version: Rev. 03.

Jones Tsai
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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History of this test report

Report Issue Date: Oct. 17, 2007

Report No.	Description

1. General Information

1.2 Applicant

High Tech Computer Corp.
No. 23, Xinghua Rd., Taoyuan 330, Taiwan

1.3 Manufacturer

High Tech Computer Corp.
No. 23, Xinghua Rd., Taoyuan 330, Taiwan

1.4 Basic Description of Equipment under Test

Equipment		UMPC
Trade Name		HTC
Model No.		CLIO100
FCC ID		NM8CL
AC Adapter	**Brand Name**	Delta
	Model Name	ADP-36CH B
	Power Rating	I/P: 100-240Vac, 1.2A, 50-60Hz; O/P: 12Vdc, 3A
	AC Power Cord Type	1.8 meter, core shielded cable
Battery 1	**Brand Name**	Simplo
	Model Name	CLIO160
	Rating	7.4Vdc, 2700mAh
	Type	Li-ion
Battery 2	**Brand Name**	Dynapack
	Model Name	CLIO160
	Rating	7.4Vdc, 2800mAh
	Type	Li-ion
Earphone	**Brand Name**	Cotron
	Model Name	CHM-311STV08005
	Signal line Type	1.7 meter non-shielded cable without ferrite core
LCD Panel 1	**Brand Name**	CPT
	Model Name	CLAA070LA01AT
LCD Panel 2	**Brand Name**	Toppoly
	Model Name	TD070TTEA1
Camera 1	**Brand Name**	Liteon
	Model Name	06P049
Camera 2	**Brand Name**	PRIMAX
	Model Name	DS50-70506HTT8
HDD 1	**Brand Name**	Toshiba
	Model Name	MK4009GAL (40G)
HDD 2	**Brand Name**	Samsung
	Model Name	HS06THB (60G)

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.

1.5 Feature of Equipment under Test

DUT Type :	UMPC
Trade Name :	HTC
Model Name :	CLIO100
FCC ID :	NM8CL
Tx Frequency :	GSM850 : 824 ~ 849 MHz PCS1900 : 1850 ~1910 MHz WCDMA Band V : 824 ~ 849 MHz WCDMA Band II : 1850 ~ 1910 MHz WLAN / Bluetooth : 2400 ~ 2483.5 MHz
Rx Frequency :	GSM850 : 869 ~ 894 MHz PCS1900 : 1930 ~ 1990 MHz WCDMA Band V : 869 ~ 894 MHz WCDMA Band II : 1930 ~ 1990 MHz WLAN / Bluetooth : 2400 ~ 2483.5 MHz
Maximum Output Power to Antenna :	GSM850 : 32.44 dBm (GSM) 26.30 dBm (EDGE) PCS1900 : 28.86 dBm (GSM) 24.29 dBm (EDGE) WCDMA Band V : 23.70 dBm(384kbps) 23.01 dBm (HSDPA) WCDMA Band II : 22.03 dBm(144kbps) 21.60 dBm (HSDPA) WLAN : 17.51 dBm (802.11b) 15.96 dBm (802.11g) Bluetooth : 2.79 dBm (1M) 3.22 dBm (2M) 3.11 dBm (3M)
Maximum ERP/EIRP :	GSM850(GSM) : 0.89 W (29.50 dBm) GSM850(EDGE) : 0.21 W (23.22 dBm) PCS1900(GSM) : 1.33 W (31.25 dBm) PCS1900(EDGE) : 0.55 W (27.44 dBm) WCDMA Band V : 0.11 W (20.26 dBm) WCDMA Band V(HSDPA) : 0.07 W (18.15 dBm) WCDMA Band II : 0.32 W (25.03 dBm) WCDMA Band II(HSDPA) : 0.26 W (24.19 dBm)
Antenna Type :	Bluetooth: PIFA Antenna WLAN: PIFA Antenna
Type of Antenna Connector	N/A
Modulation Type :	GSM / GPRS : GMSK EDGE : 8PSK WCDMA / HSDPA : QPSK WLAN : DSSS / OFDM Bluetooth (1Mbps) : GFSK Bluetooth EDR (2Mbps) : π/4-DQPSK Bluetooth EDR (3Mbps) : 8-DPSK
Emission Designator :	GSM : 300KGXW EDGE : 300KG7W WCDMA : 4M22F9W
DUT Stage :	Identical Prototype

1.6 Report Date

EUT Received : Aug. 07, 2007

Report Date : Oct. 17, 2007

2. Test Configuration of Equipment under Test

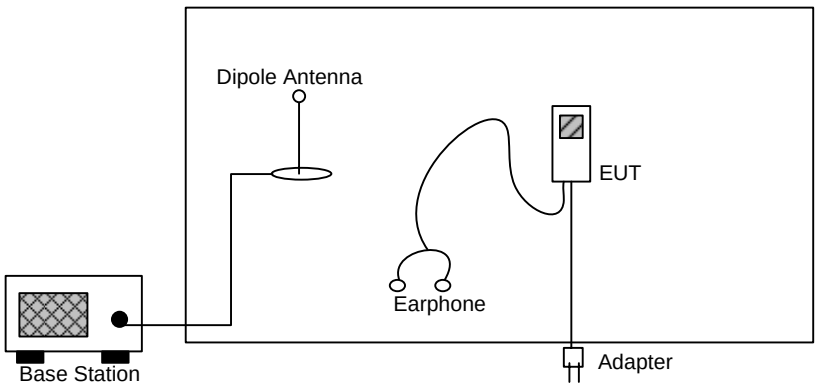
2.1 Test Manner

1. The spurious emission measurements were carried out in semi-anechoic chamber with 3-meter test range.
2. During all testings, EUT is in link mode with base station emulator at maximum power level.
3. Frequency range investigated: radiated emission 30 MHz to 9000 MHz for GSM850 and WCDMA Band V; 30MHz to 19000 MHz for PCS1900 and WCDMA Band II.

2.2 Test Mode

Application	GSM850	PCS1900	WCDMA Band V	WCDMA Band II
Radiated Emission	☒ Mode 1: GSM Link	☒ Mode 3: GSM Link	☒ Mode 5: WCDMA Link	☒ Mode 7: WCDMA Link
	☒ Mode 2: EDGE Link	☒ Mode 4: EDGE Link	☒ Mode 6: HSDPA Link	☒ Mode 8: HSDPA Link
	☒ Mode 9: GSM Link + BT Link			
	☒ Mode 10: GSM Link + WLAN Link			
Conducted Measurement	☒ Mode 1: GSM Link	☒ Mode 3: GSM Link	☒ Mode 5: WCDMA Link	☒ Mode 7: WCDMA Link
	☒ Mode 2: EDGE Link	☒ Mode 4: EDGE Link	☒ Mode 6: HSDPA Link	☒ Mode 8: HSDPA Link

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	CMU200	N/A	106656

3. General Information of Test Site

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

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

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 GSM850 and WCDMA Band V.
b. Radiation: from 30 MHz to 19000 MHz for PCS1900 and WCDMA Band II.

3.4 Test Distance

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

4. Test Data and Test Result

4.1 List of Measurements and Examinations

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

4.2 RF Output Power

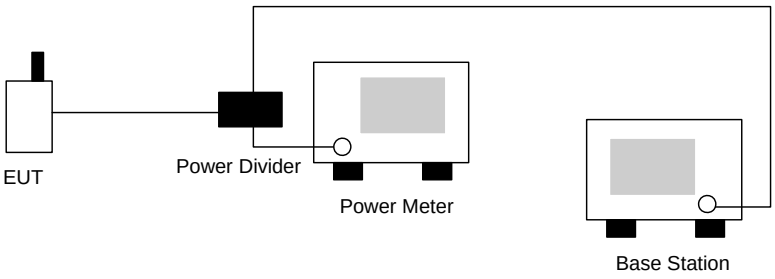
4.2.1 Measurement Instruments：

As described in chapter 5 of this test report.

4.2.2 Test Procedure：

1. The transmitter output was connected to power meter and base station through power divider.
2. Set EUT at PCL=5 for GSM850 and/or PCL=0 for PCS1900 maximum power through base station.
3. Select lowest, middle, and highest channels for each band.

4.2.3 Test Setup Layout：



4.2.4 Test Result：

Bands	Channel	Frequency (MHz)	Conducted Power (dBm)	Conducted Power (Watts)
GSM850 (GSM)	128	824.2 (Low)	32.44	1.754
	189	836.4 (Mid)	32.33	1.710
	251	848.8 (High)	32.04	1.600
GSM850 (EDGE)	128	824.2 (Low)	26.30	0.427
	189	836.4 (Mid)	26.27	0.424
	251	848.8 (High)	26.14	0.411
PCS1900 (GSM)	512	1850.2 (Low)	28.38	0.689
	661	1880.0 (Mid)	28.12	0.649
	810	1909.8 (High)	28.86	0.769
PCS1900 (EDGE)	512	1850.2 (Low)	24.23	0.265
	661	1880.0 (Mid)	24.17	0.261
	810	1909.8 (High)	24.29	0.269
WCDMA Band V (12.2k bps)	4132	826.4 (Low)	23.66	0.232
	4182	836.4 (Mid)	23.45	0.221
	4233	846.6 (High)	23.38	0.218
WCDMA Band V (64k bps)	4132	826.4 (Low)	23.65	0.232
	4182	836.4 (Mid)	23.42	0.220
	4233	846.6 (High)	23.40	0.219
WCDMA Band V (144k bps)	4132	826.4 (Low)	23.68	0.233
	4182	836.4 (Mid)	23.39	0.218
	4233	846.6 (High)	23.37	0.217
WCDMA Band V (384k bps)	4132	826.4 (Low)	23.70	0.234
	4182	836.4 (Mid)	23.46	0.222
	4233	846.6 (High)	23.39	0.218
WCDMA Band V (HSDPA)	4132	826.4 (Low)	22.74	0.188
	4182	836.4 (Mid)	23.01	0.200
	4233	846.6 (High)	22.99	0.199

WCDMA Band II (12.2k bps)	9262	1852.4 (Low)	21.35	0.136
	9400	1880.0 (Mid)	21.89	0.155
	9538	1907.6 (High)	22.00	0.158
WCDMA Band II (64k bps)	9262	1852.4 (Low)	21.24	0.133
	9400	1880.0 (Mid)	21.78	0.151
	9538	1907.6 (High)	21.90	0.155
WCDMA Band II (144k bps)	9262	1852.4 (Low)	21.28	0.134
	9400	1880.0 (Mid)	21.83	0.152
	9538	1907.6 (High)	22.03	0.160
WCDMA Band II (384k bps)	9262	1852.4 (Low)	21.25	0.133
	9400	1880.0 (Mid)	21.81	0.152
	9538	1907.6 (High)	21.92	0.156
WCDMA Band II (HSDPA)	9262	1852.4 (Low)	21.09	0.129
	9400	1880.0 (Mid)	21.60	0.145
	9538	1907.6 (High)	20.40	0.110

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 tutntable with 1.0 meter height in an fully anechoic chamber.
2. The EUT was set 1.2 meters from the receiving antenna which was mounted on the antenna tower.
3. The table was rotated 360 degrees to determine the position of the highest radiated power.
4. The height of the receiving antenna is also kept at 1.0M height.
5. Taking the record of maximum ERP/EIRP.
6. A dipole antenna was substituted in place of the EUT and was driven by a signal generator.
7. The conducted power at the terminal of the dipole antenna is measured.
8. Repeat step 3 to step 5 to get the maximum ERP/EIRP of the substitution antenna.
9. ERP/EIRP = Ps + Et – Es + Gs = Ps + Rt – Rs + Gs

   Ps (dBm)：Input power to substitution antenna.

   Gs (dBi or dBd)：Substitution antenna Gain.

   Et = Rt + AF

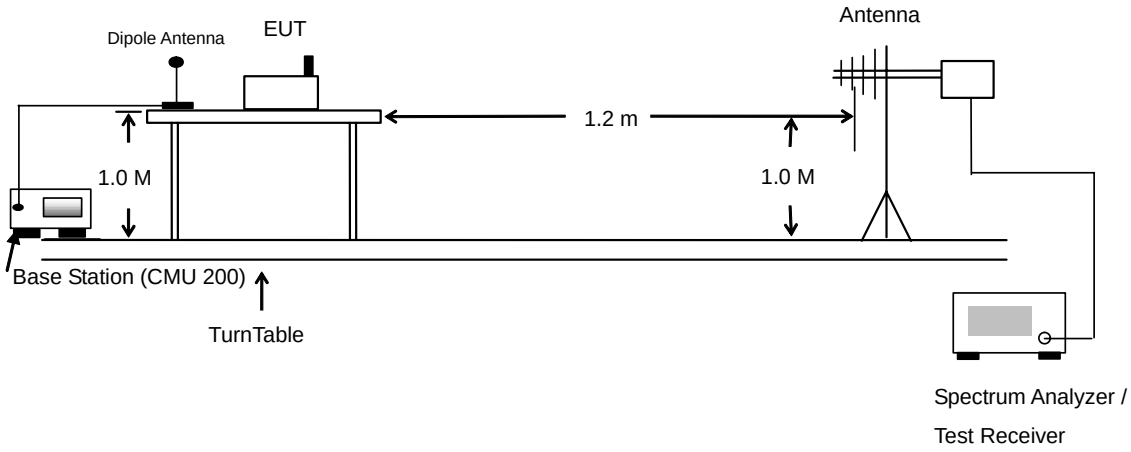
   Es = Rs + AF

   AF (dB/m)：Receive antenna factor

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

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

4.3.3 Test Setup Layout of ERP/EIRP



4.3.4 Test Result

GSM850 (GSM) Radiated Power ERP						
Horizontal Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBd)	ERP (dBm)	ERP (W)
824.20	-19.84	-48.12	0.00	-1.08	27.20	0.52
836.40	-20.68	-48.28	0.00	-0.93	26.67	0.46
848.80	-21.16	-48.35	0.00	-0.76	26.43	0.44
Vertical Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBd)	ERP (dBm)	ERP (W)
824.20	-17.39	-47.97	0.00	-1.08	29.50	0.89
836.40	-18.03	-48.01	0.00	-0.93	29.05	0.80
848.80	-18.40	-48.05	0.00	-0.76	28.89	0.77

GSM850 (EDGE) Radiated Power ERP						
Horizontal Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBd)	ERP (dBm)	ERP (W)
824.20	-26.18	-48.12	0.00	-1.08	20.86	0.12
836.40	-26.76	-48.28	0.00	-0.93	20.59	0.11
848.80	-26.94	-48.35	0.00	-0.76	20.65	0.12
Vertical Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBd)	ERP (dBm)	ERP (W)
824.20	-23.95	-47.97	0.00	-1.08	22.94	0.20
836.40	-24.22	-48.01	0.00	-0.93	22.86	0.19
848.80	-24.07	-48.05	0.00	-0.76	23.22	0.21

PCS1900 (GSM) Radiated Power EIRP						
Horizontal Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBi)	EIRP (dBm)	EIRP (W)
1850.20	-23.57	-51.88	0.00	1.96	30.27	1.06
1880.00	-24.38	-52.99	0.00	2.00	30.61	1.15
1909.80	-25.31	-54.28	0.00	1.98	30.95	1.24
Vertical Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBi)	EIRP (dBm)	EIRP (W)
1850.20	-22.94	-52.13	0.00	1.96	31.15	1.30
1880.00	-23.92	-53.17	0.00	2.00	31.25	1.33
1909.80	-25.30	-54.13	0.00	1.98	30.81	1.21

PCS1900 (EDGE) Radiated Power EIRP						
Horizontal Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBi)	EIRP (dBm)	EIRP (W)
1850.20	-27.38	-51.88	0.00	1.96	26.46	0.44
1880.00	-28.37	-52.99	0.00	2.00	26.62	0.46
1909.80	-29.28	-54.28	0.00	1.98	26.98	0.50
Vertical Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBi)	EIRP (dBm)	EIRP (W)
1850.20	-26.65	-52.13	0.00	1.96	27.44	0.55
1880.00	-27.87	-53.17	0.00	2.00	27.30	0.54
1909.80	-29.24	-54.13	0.00	1.98	26.87	0.49

WCDMA Band V Radiated Power ERP						
Horizontal Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBd)	ERP (dBm)	ERP (W)
826.40	-29.62	-48.12	0.00	-1.08	17.42	0.06
836.60	-29.04	-48.28	0.00	-0.93	18.31	0.07
846.60	-29.52	-48.35	0.00	-0.76	18.07	0.06
Vertical Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBd)	ERP (dBm)	ERP (W)
826.40	-27.49	-47.97	0.00	-1.08	19.40	0.09
836.60	-26.82	-48.01	0.00	-0.93	20.26	0.11
846.60	-27.23	-48.05	0.00	-0.76	20.06	0.10

WCDMA Band V (HSDPA) Radiated Power ERP						
Horizontal Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBd)	ERP (dBm)	ERP (W)
826.40	-32.35	-48.12	0.00	-1.08	14.69	0.03
836.60	-31.20	-48.28	0.00	-0.93	16.15	0.04
846.60	-31.51	-48.35	0.00	-0.76	16.08	0.04
Vertical Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBd)	ERP (dBm)	ERP (W)
826.40	-30.00	-47.97	0.00	-1.08	16.89	0.05
836.60	-28.93	-48.01	0.00	-0.93	18.15	0.07
846.60	-29.23	-48.05	0.00	-0.76	18.06	0.06

WCDMA Band II Radiated Power EIRP						
Horizontal Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBi)	EIRP (dBm)	EIRP (W)
1852.40	-30.01	-51.88	0.00	1.96	23.83	0.24
1880.00	-30.77	-52.99	0.00	2.00	24.22	0.26
1907.60	-31.80	-54.28	0.00	1.98	24.46	0.28
Vertical Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBi)	EIRP (dBm)	EIRP (W)
1852.40	-29.25	-52.13	0.00	1.96	24.84	0.30
1880.00	-30.14	-53.17	0.00	2.00	25.03	0.32
1907.60	-31.84	-54.13	0.00	1.98	24.27	0.27

WCDMA Band II (HSDPA) Radiated Power EIRP						
Horizontal Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBi)	EIRP (dBm)	EIRP (W)
1852.40	-30.50	-51.88	0.00	1.96	23.34	0.22
1880.00	-31.23	-52.99	0.00	2.00	23.76	0.24
1907.60	-32.96	-54.28	0.00	1.98	23.30	0.21
Vertical Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBi)	EIRP (dBm)	EIRP (W)
1852.40	-29.92	-52.13	0.00	1.96	24.17	0.26
1880.00	-30.98	-53.17	0.00	2.00	24.19	0.26
1907.60	-32.80	-54.13	0.00	1.98	23.31	0.21

4.4 Occupied Bandwidth and Band Edge Measurement

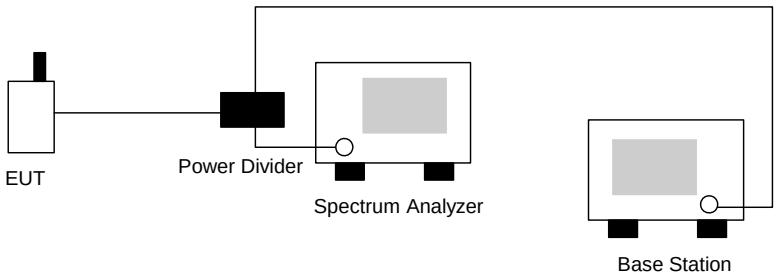
4.4.1 Measurement Instruments

As described in chapter 5 of this test report.

4.4.2 Test Procedure

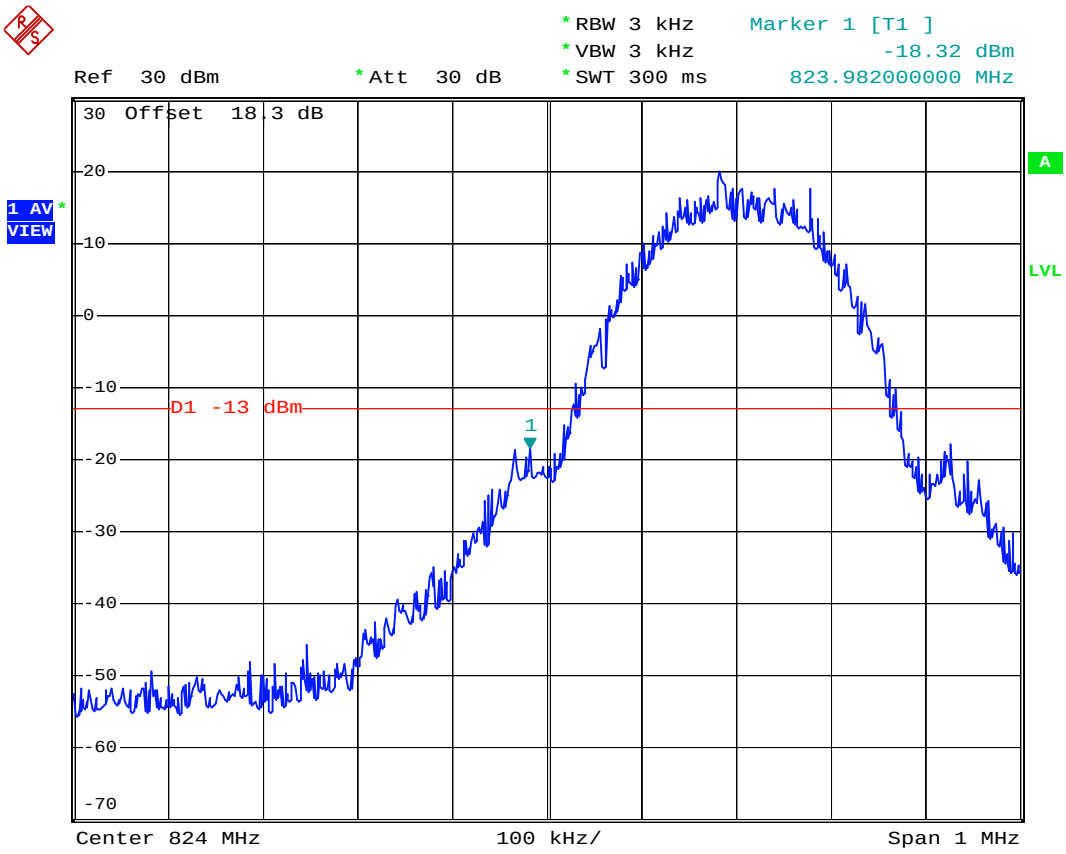
1. The EUT was connected to Spectrum Analyzer and Base Station via power divider.
2. The 99% occupied bandwidth of middle channel for the highest and lowest RF powers were measured.
3. The bandedge of low and high channels for the highest RF powers within the transmitting frequency band were measured.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

4.4.3 Test Setup Layout



4.4.4 Test Result

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



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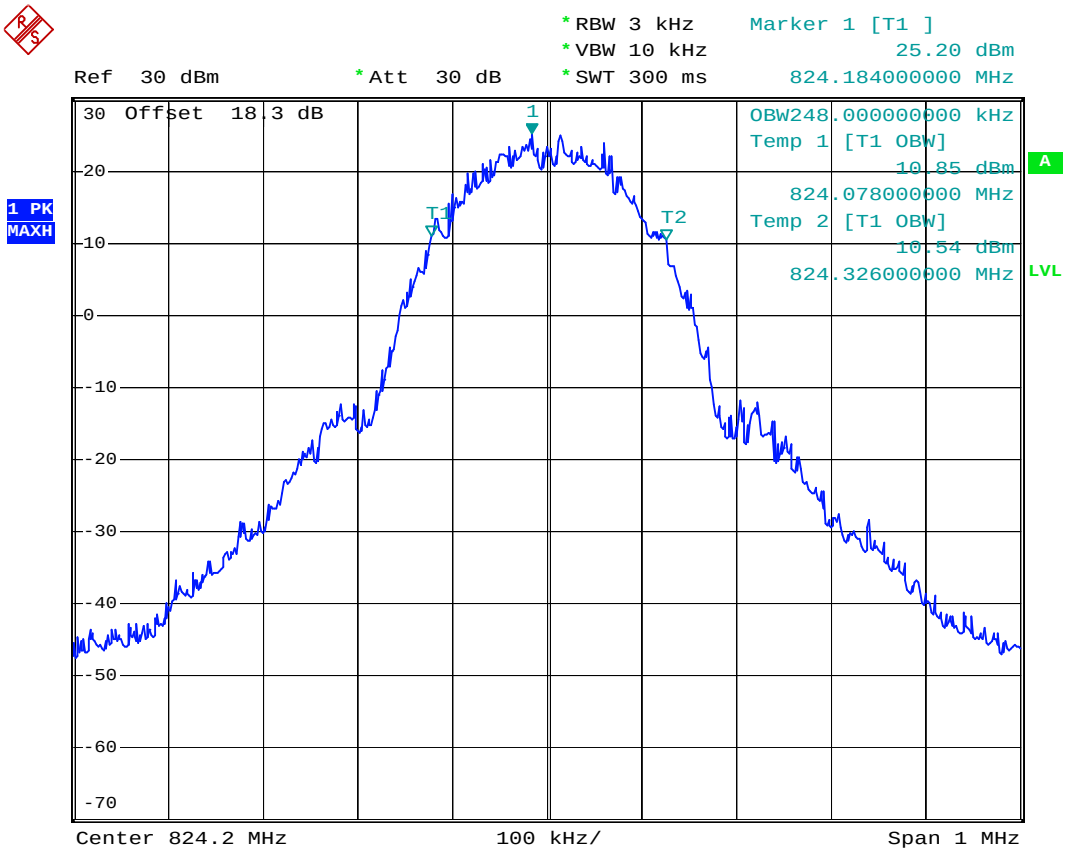
- Test Mode : GSM850 (GSM) CH128 99% Occupid Bandwidth
- Power State : High



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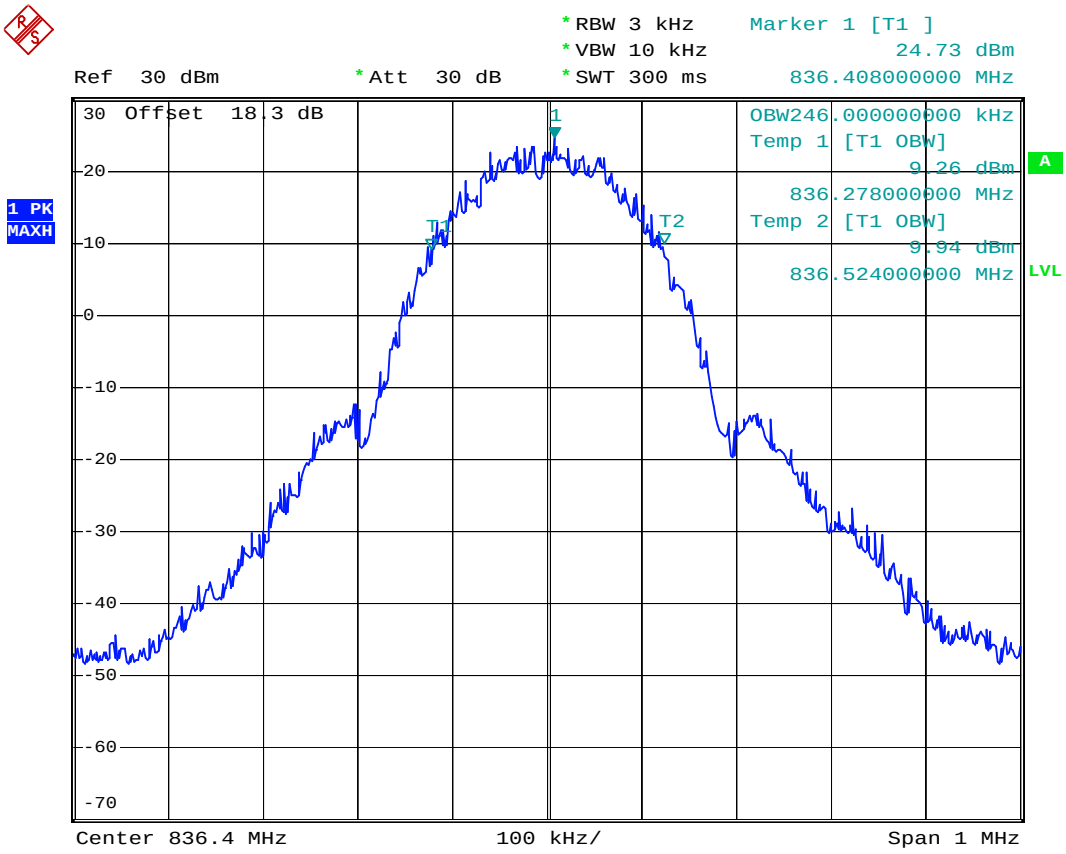
- Test Mode : GSM850 (GSM) CH189 99% Occupid Bandwidth
- Power State : High



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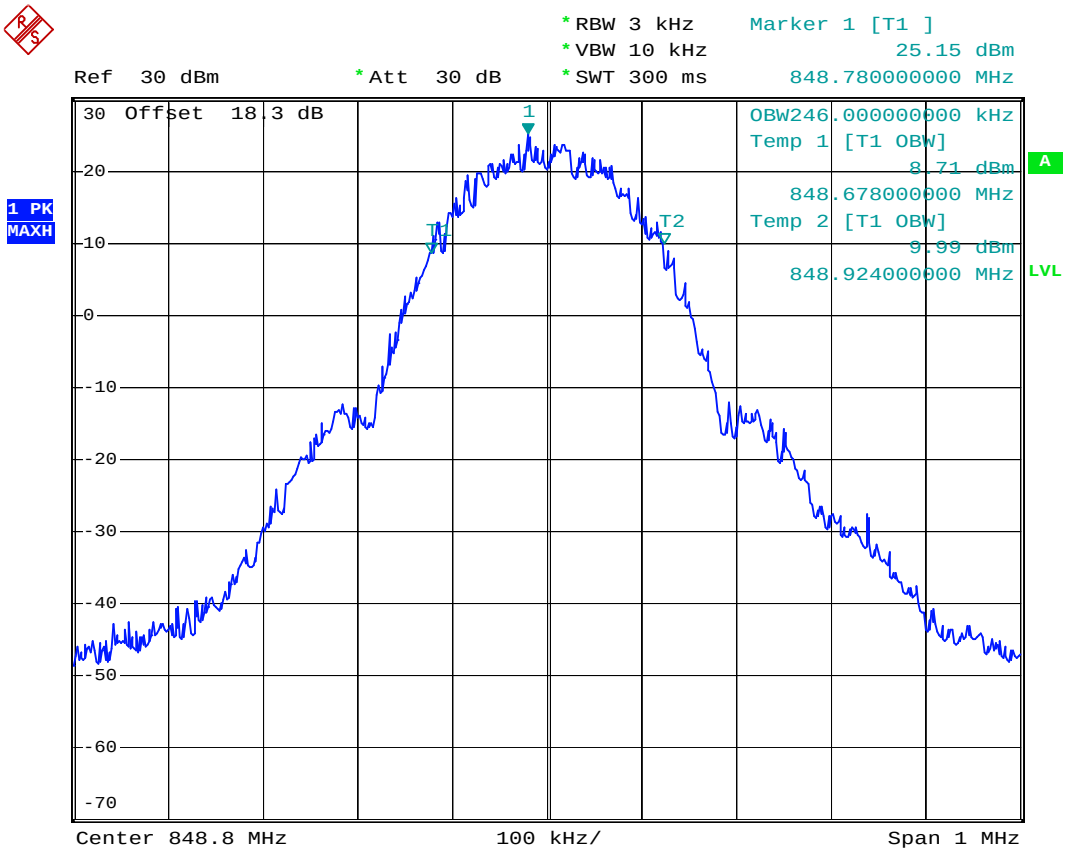
- Test Mode : GSM850 (GSM) CH 251 99% Occupid Bandwidth
- Power State : High



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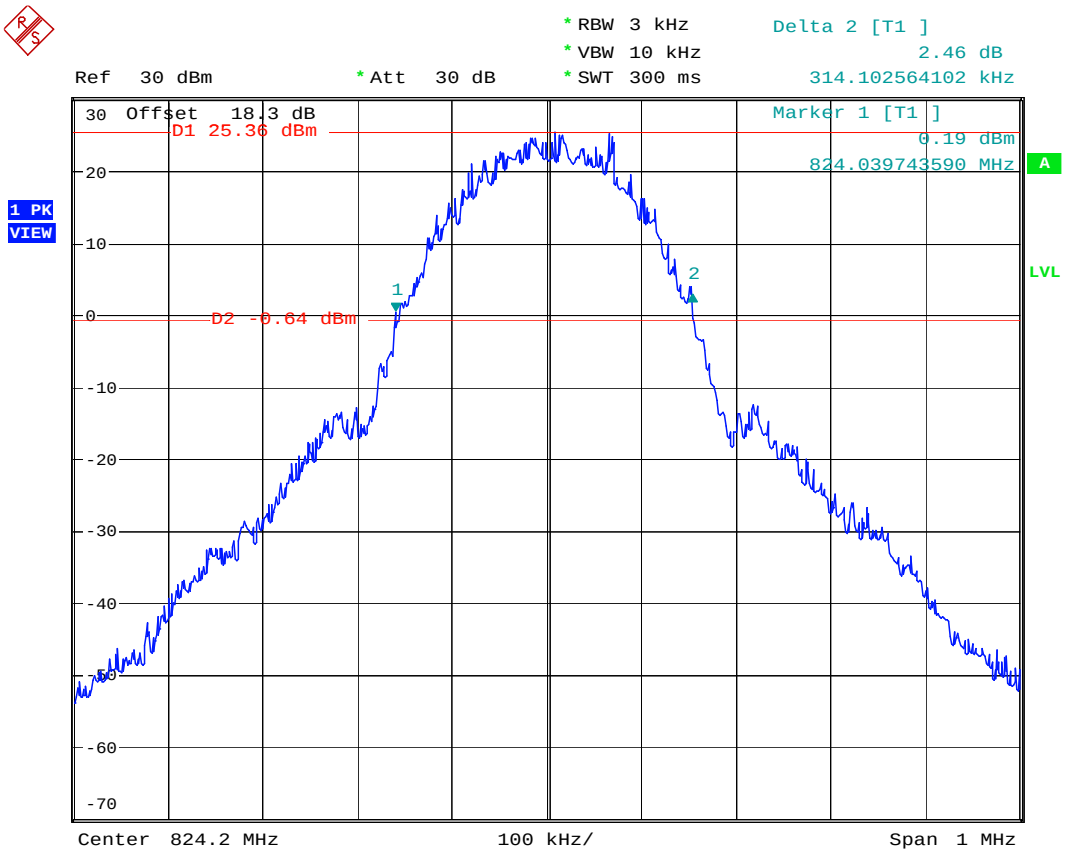
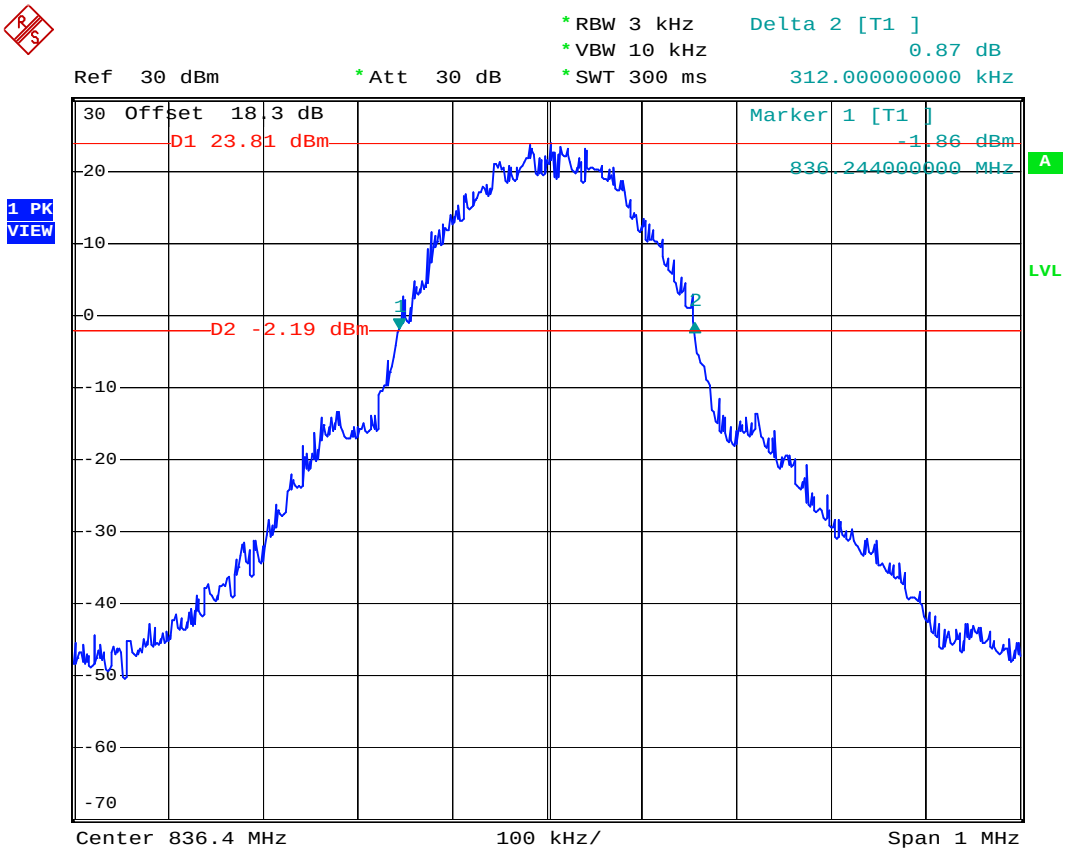
- Test Mode : GSM850 (GSM) CH128 26dB Bandwidth
- Power State : High



444

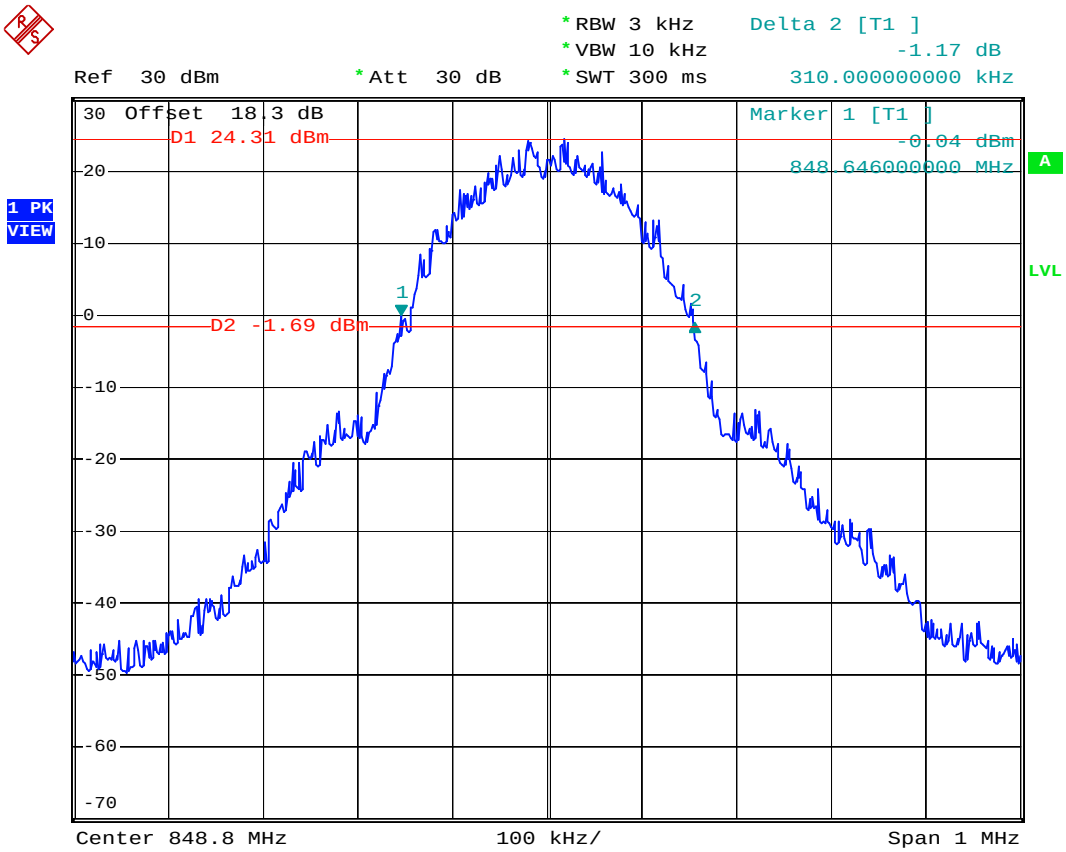
Date: 17.SEP.2007 21:31:30

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



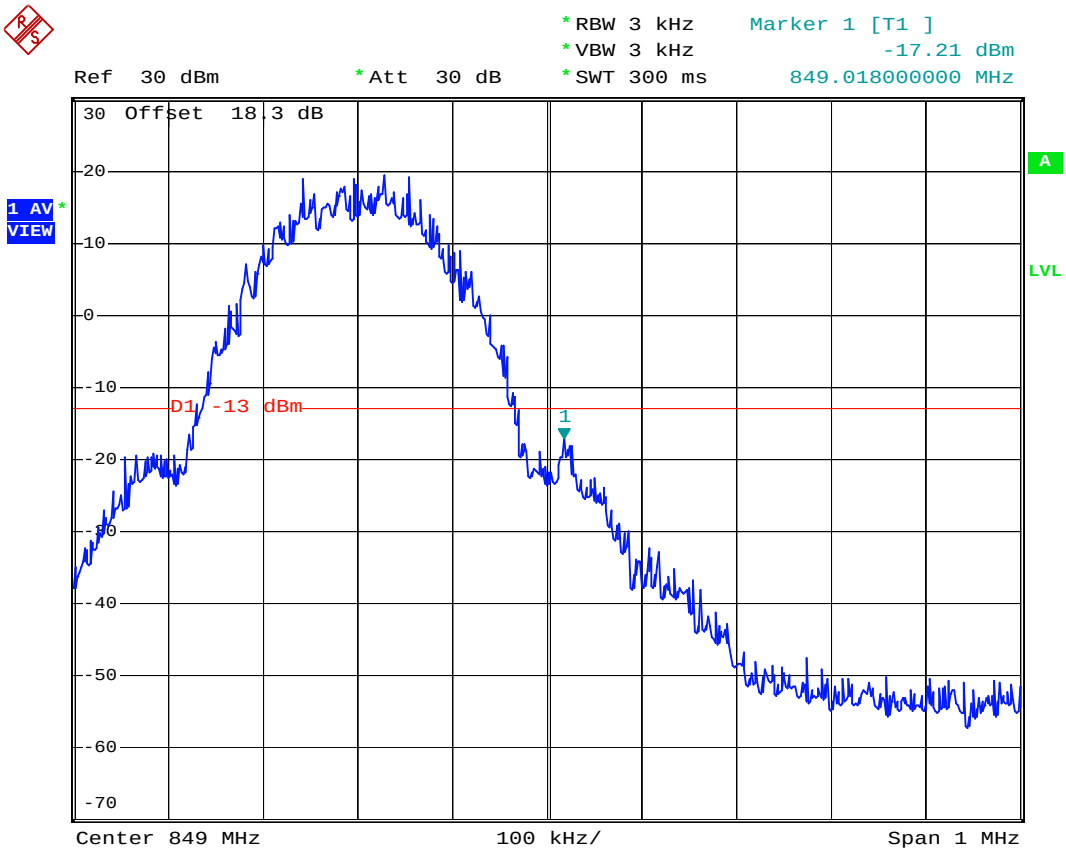
Date: 9.SEP.2007 05:20:34

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



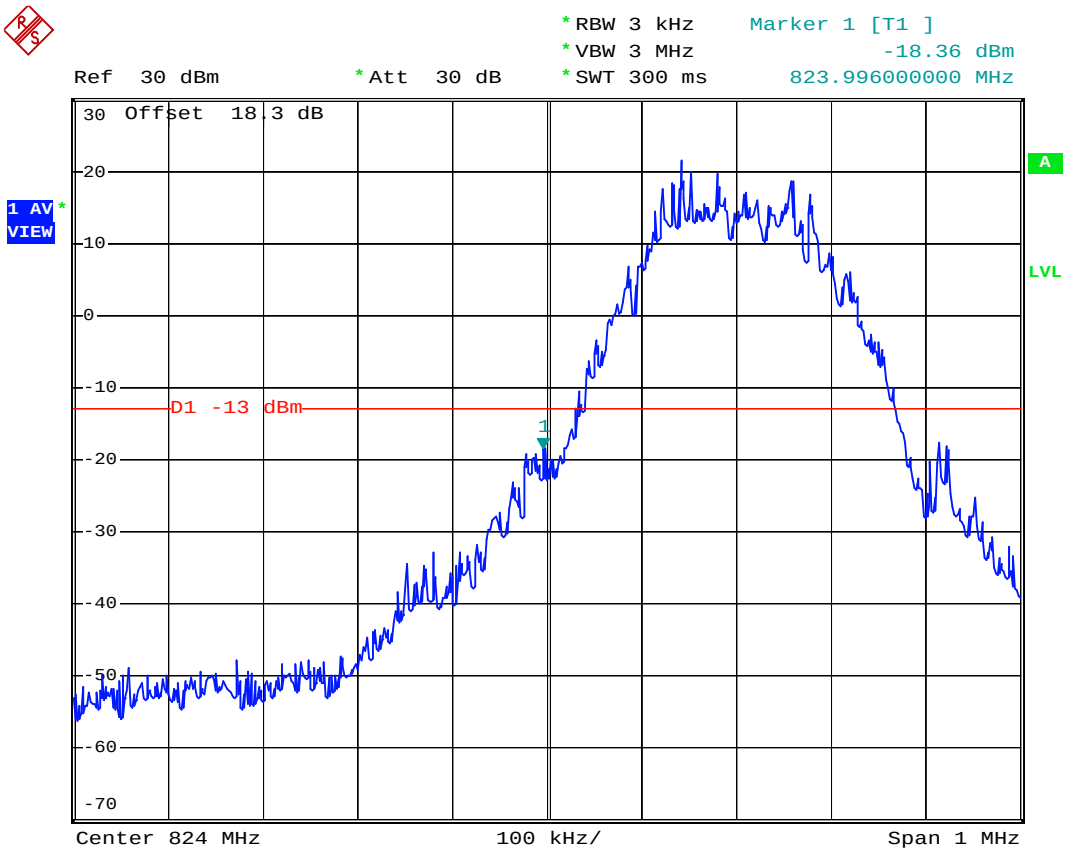
Date: 9.SEP.2007 05:24:22

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



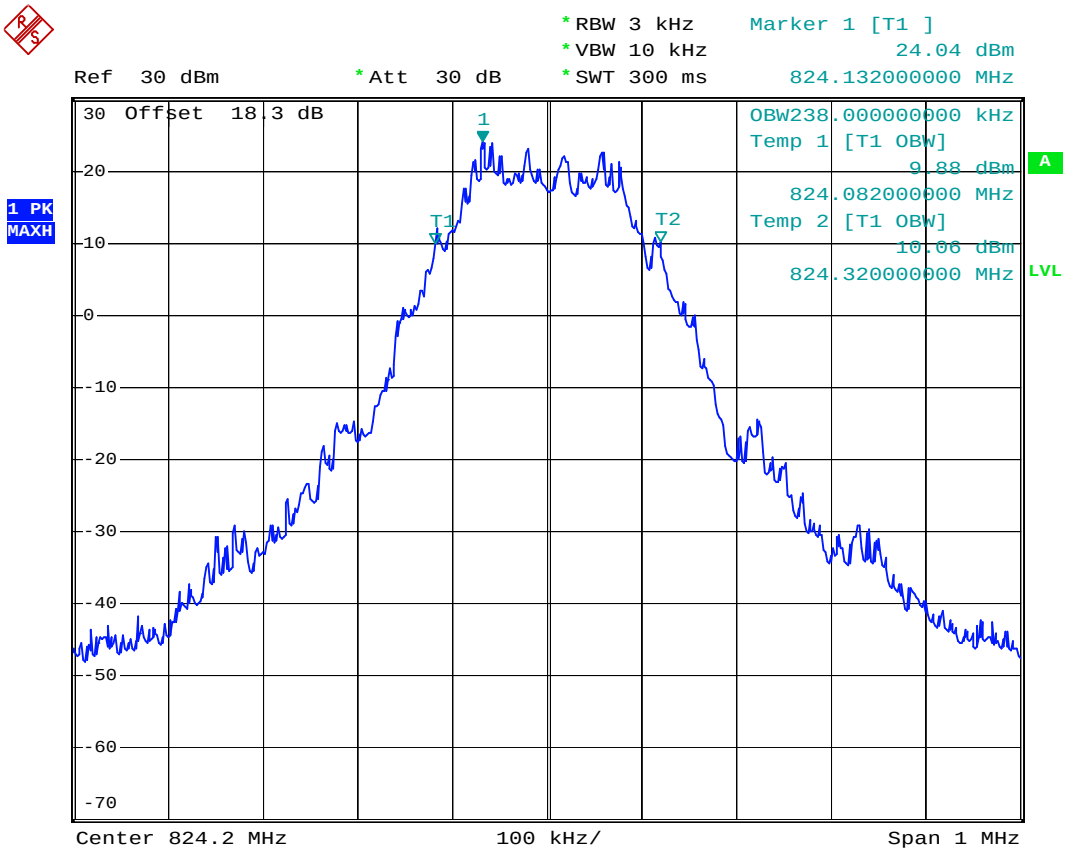
Date: 9.SEP.2007 05:36:04

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



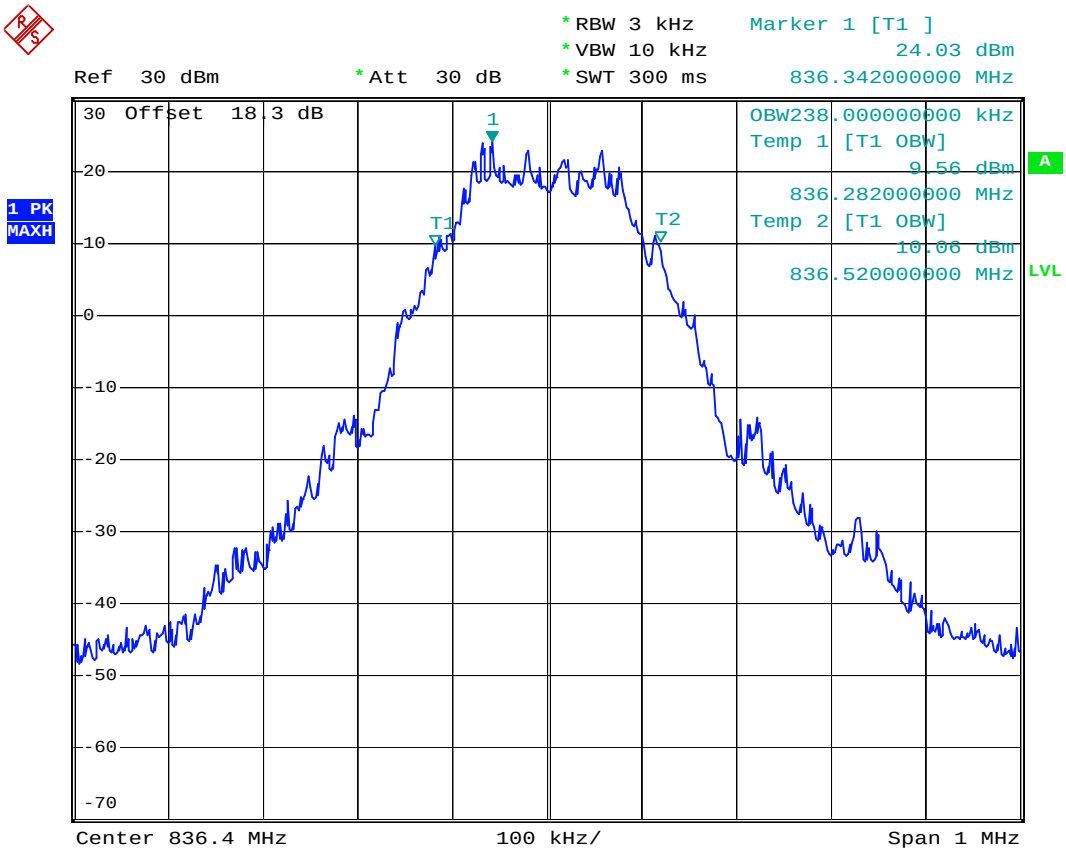
Date: 9.SEP.2007 06:25:32

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



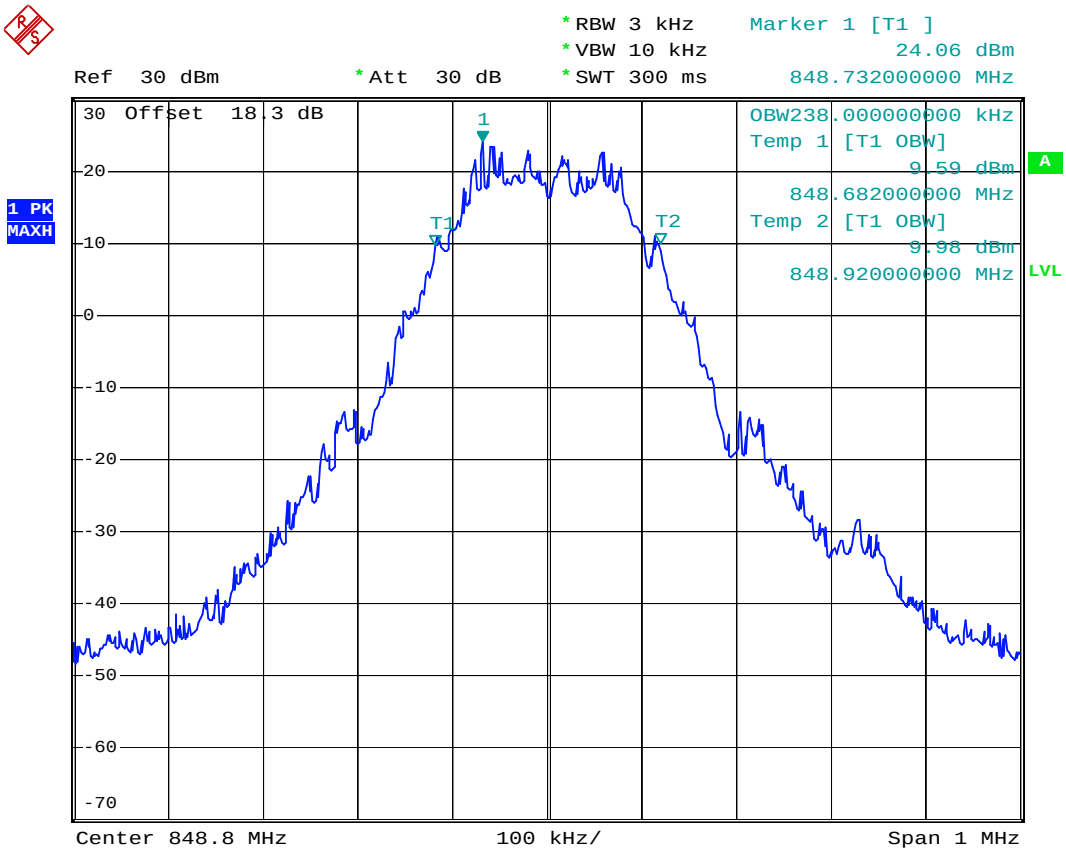
Date: 9.SEP.2007 06:35:55

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



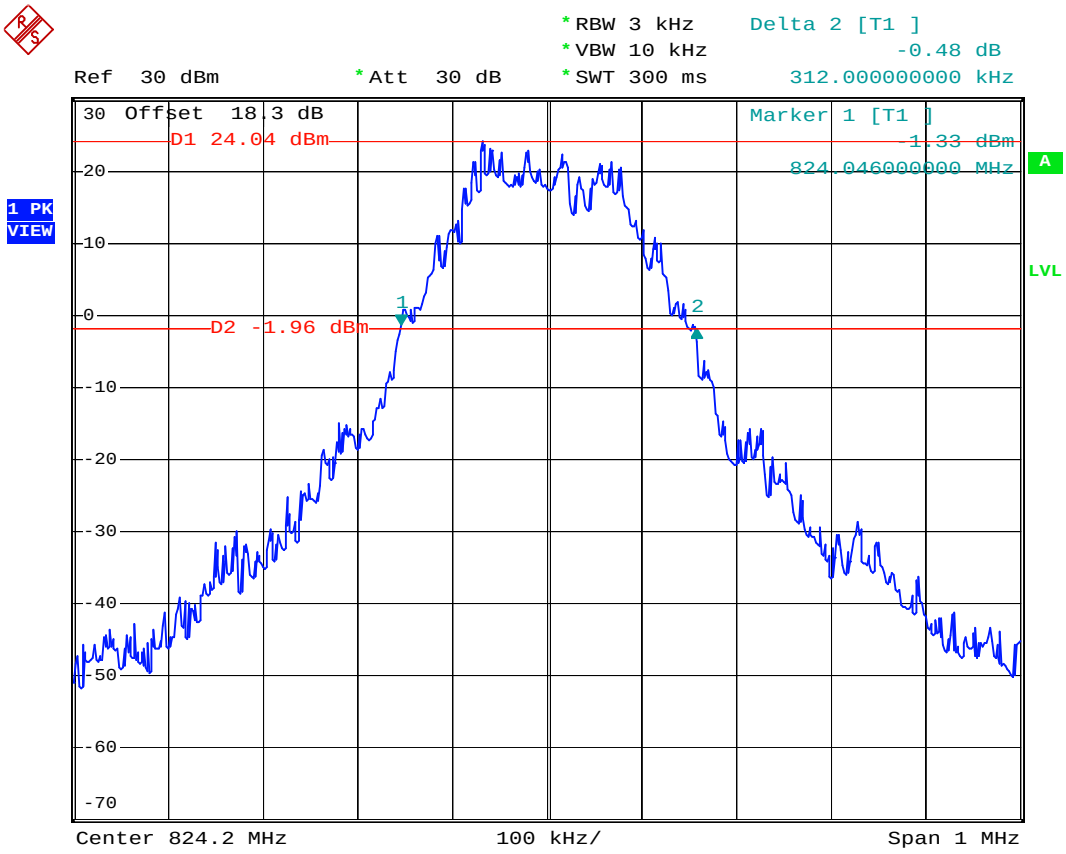
Date: 9.SEP.2007 06:33:08

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



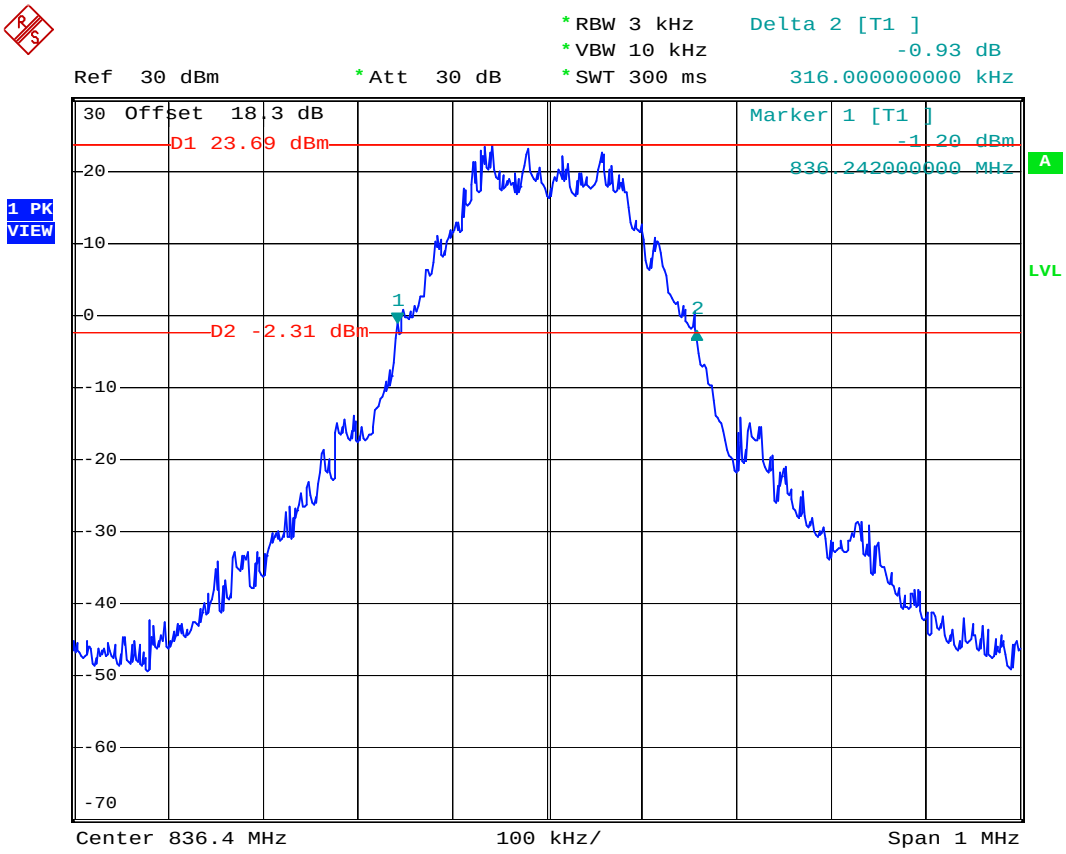
Date: 9.SEP.2007 06:36:55

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



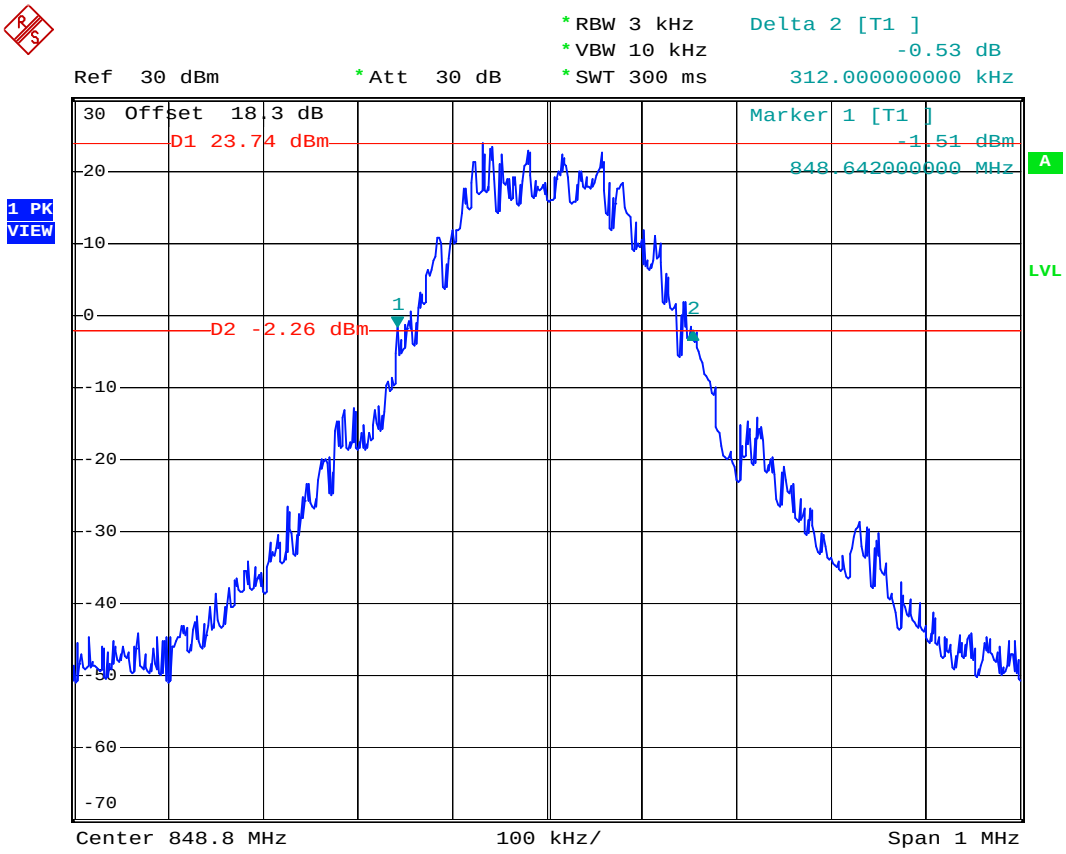
Date: 9.SEP.2007 06:22:48

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



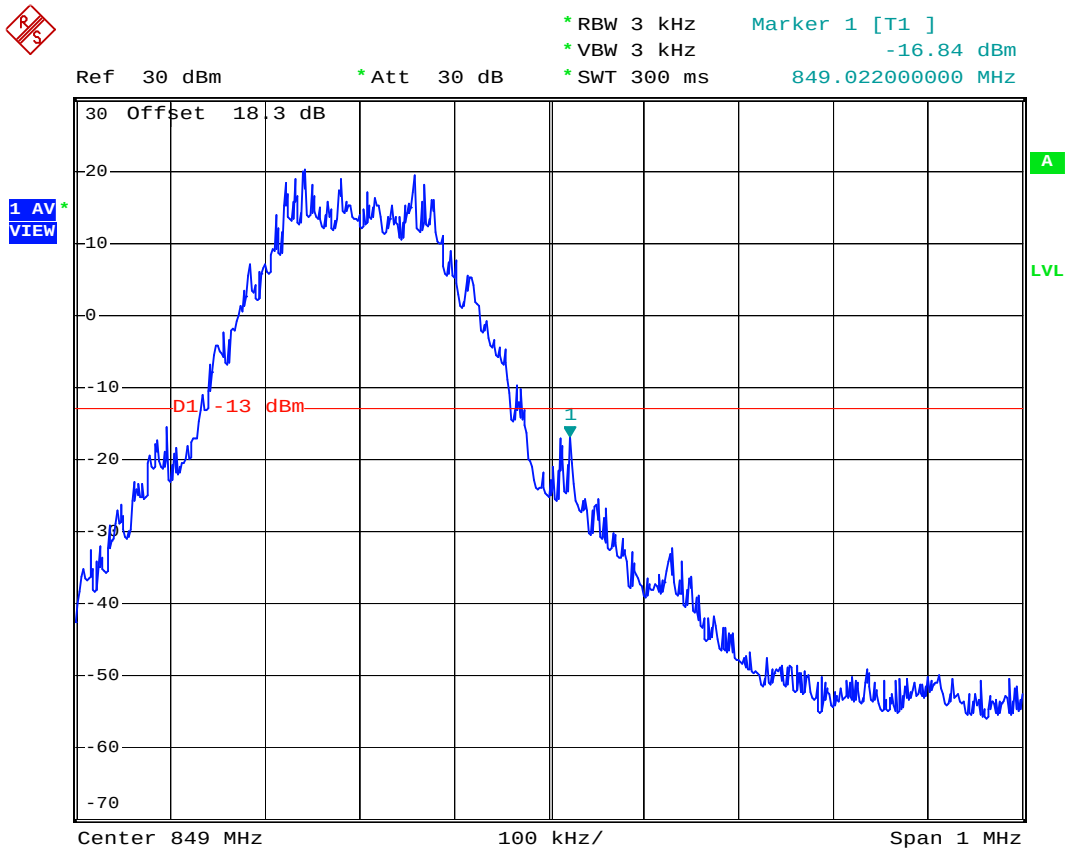
Date: 9.SEP.2007 06:21:42

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



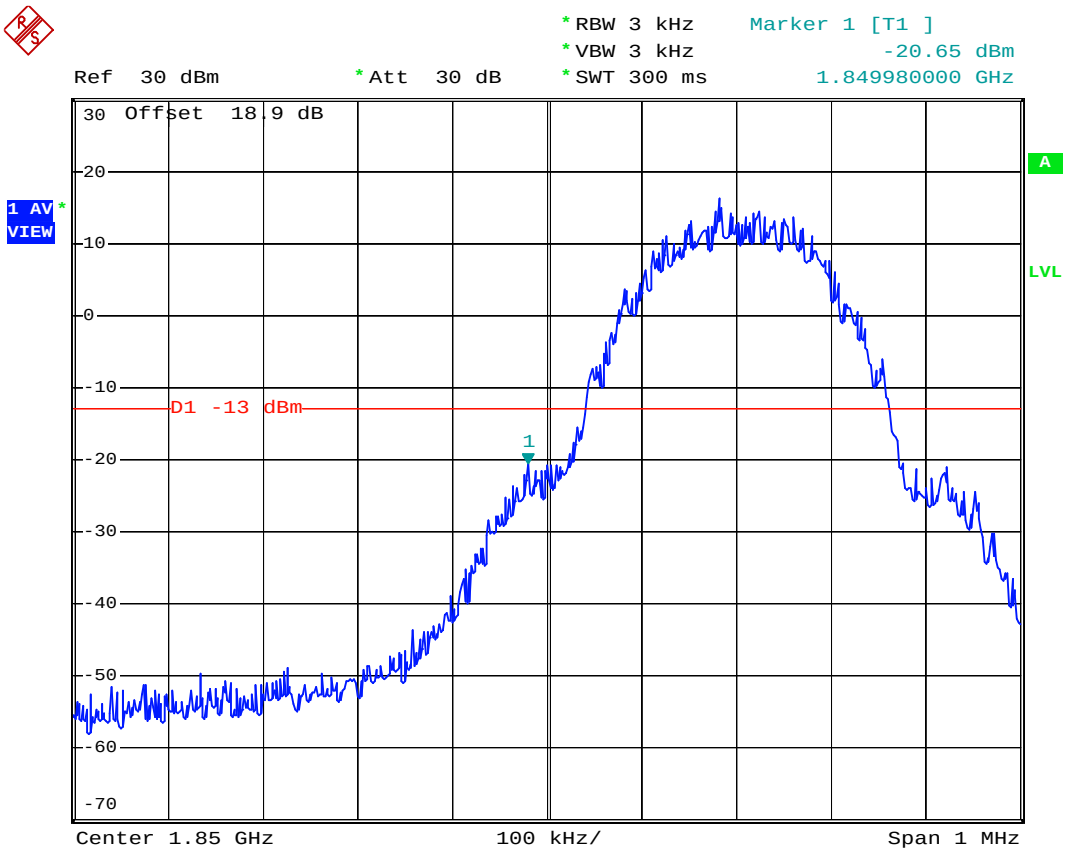
Date: 9.SEP.2007 06:19:58

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



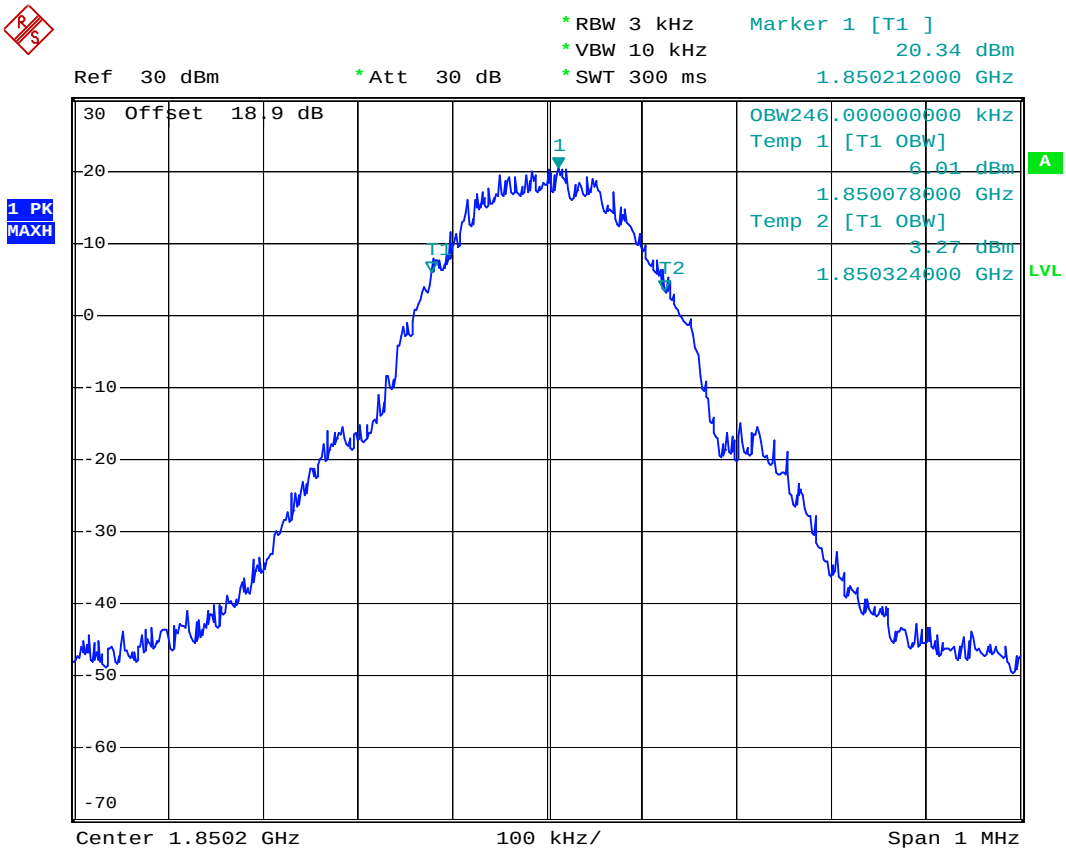
Date: 9.SEP.2007 06:29:21

- Mode 3
- Test Mode : PCS1900 (GSM) CH512 Lower Band Edge
- Power State : High



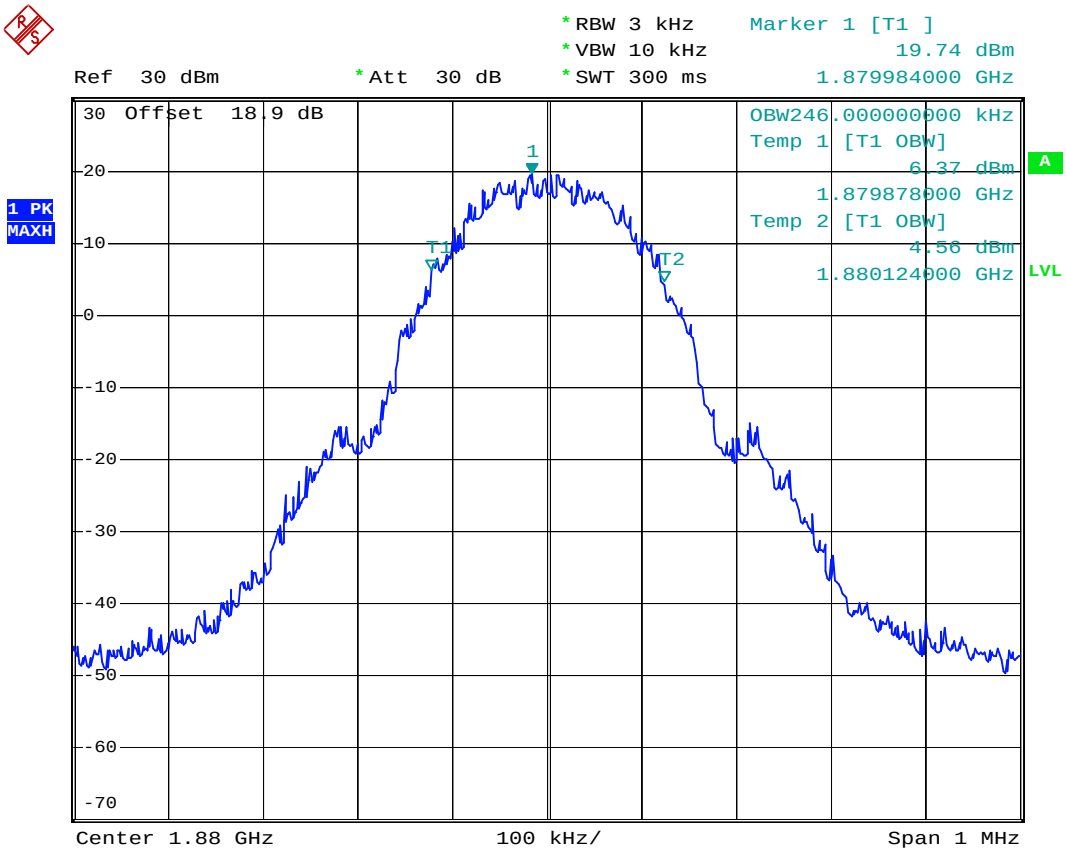
Date: 9.SEP.2007 07:19:24

- Test Mode : PCS1900 (GSM) CH512 99% Occupid Bandwidth
- Power State : High



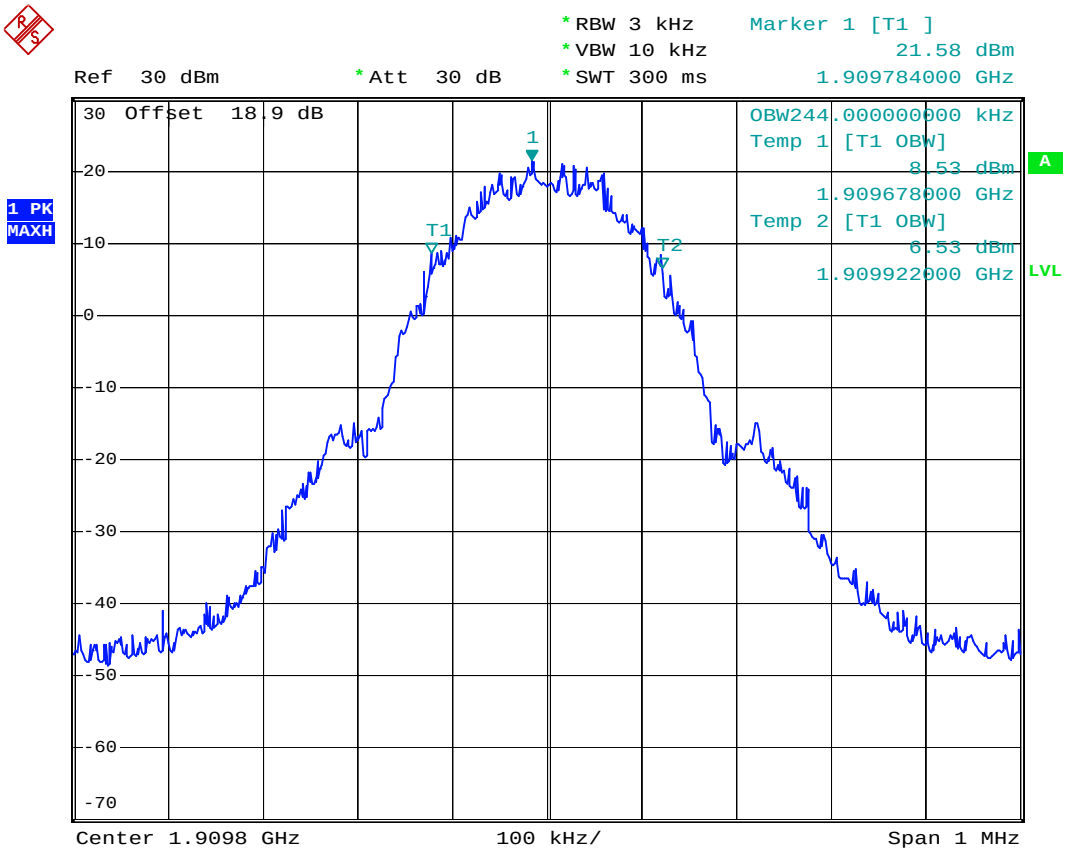
Date: 9.SEP.2007 07:14:57

- Test Mode : PCS1900 (GSM) CH661 99% Occupid Bandwidth
- Power State : High



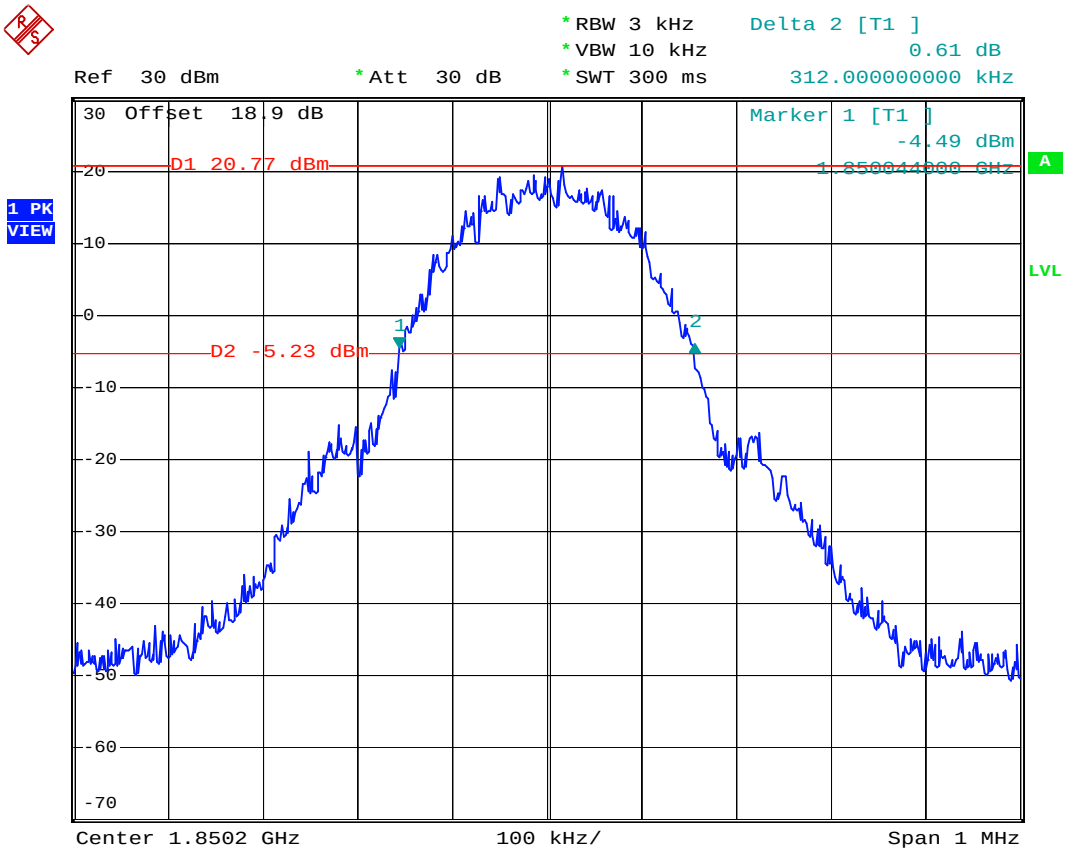
Date: 9.SEP.2007 07:15:50

- Test Mode : PCS1900 (GSM) CH810 99% Occupid Bandwidth
- Power State : High



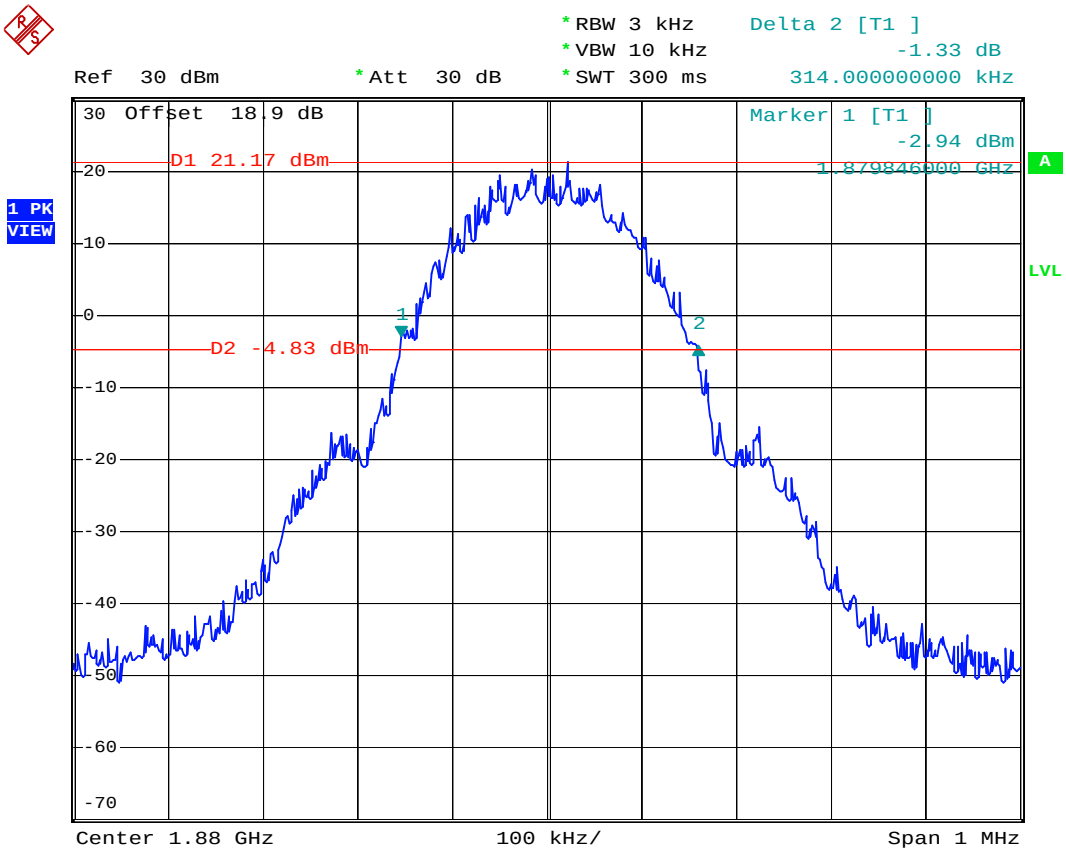
Date: 9.SEP.2007 07:13:54

- Test Mode : PCS1900 (GSM) CH512 26dB Bandwidth
- Power State : High



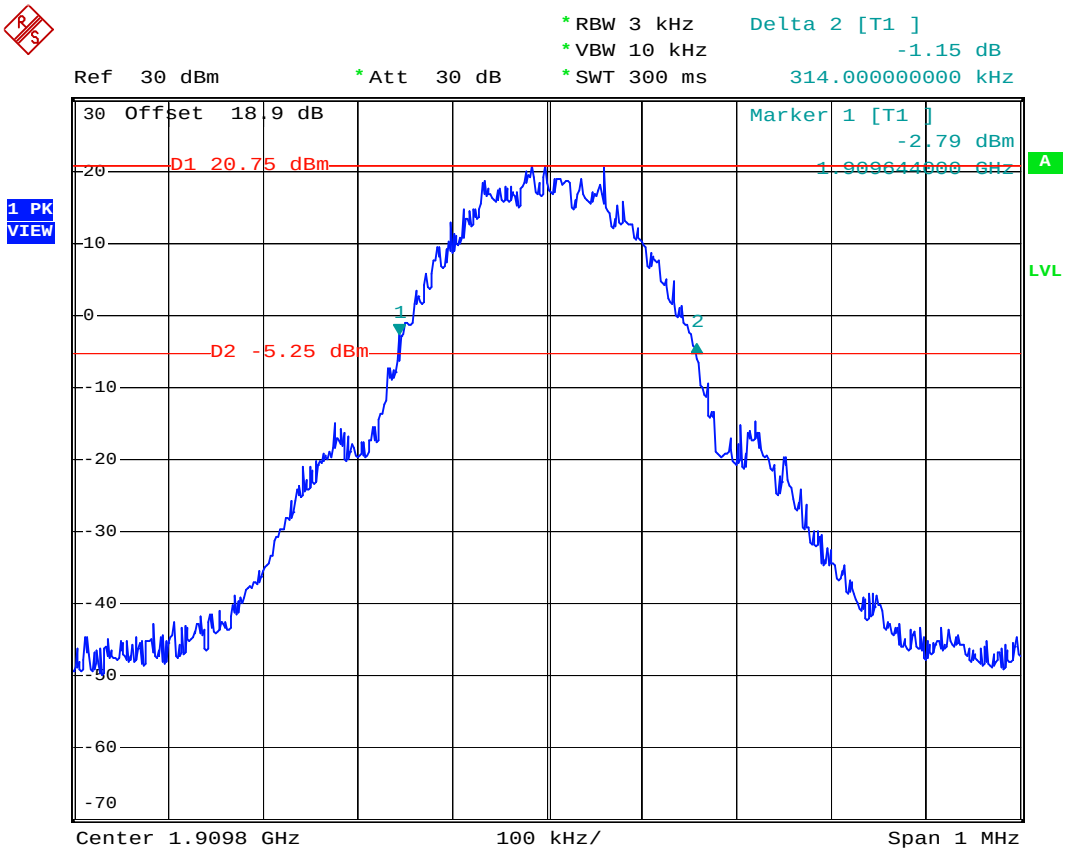
Date: 9.SEP.2007 07:10:02

- Test Mode : PCS1900 (GSM) CH661 26dB Bandwidth
- Power State : High



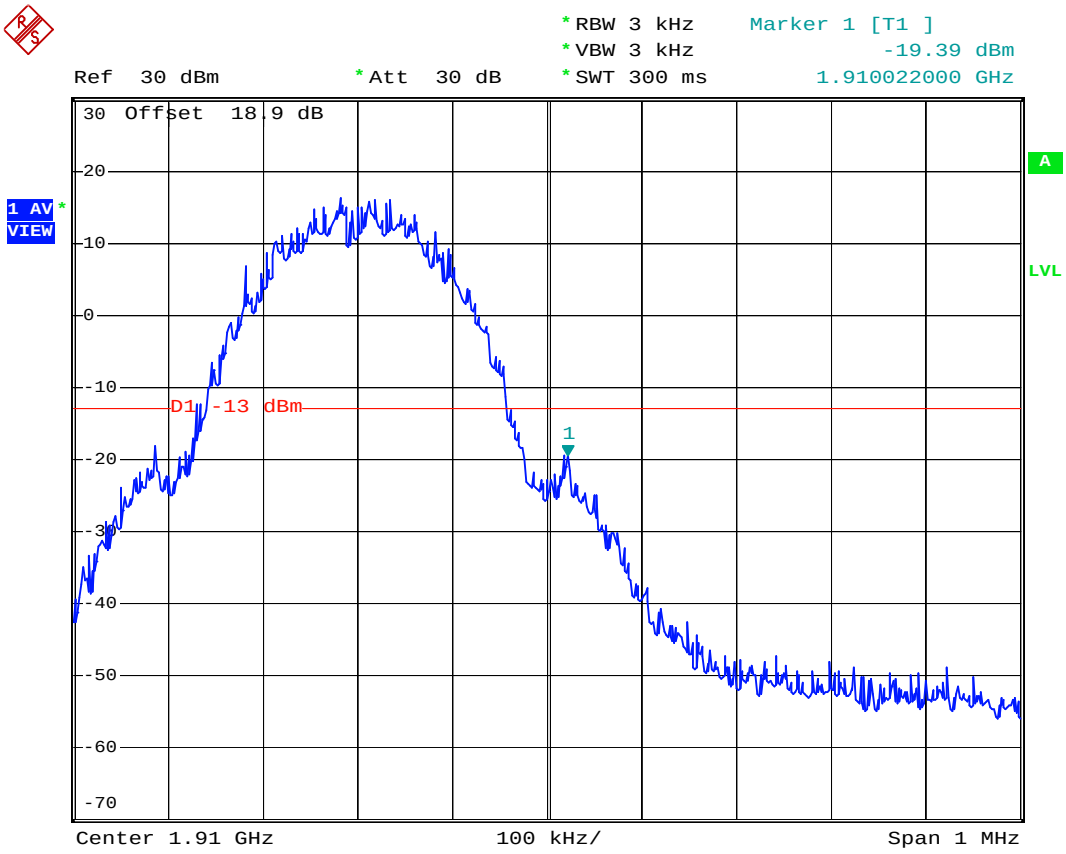
Date: 9.SEP.2007 07:11:25

- Test Mode : PCS1900 (GSM) CH810 26dB Bandwidth
- Power State : High



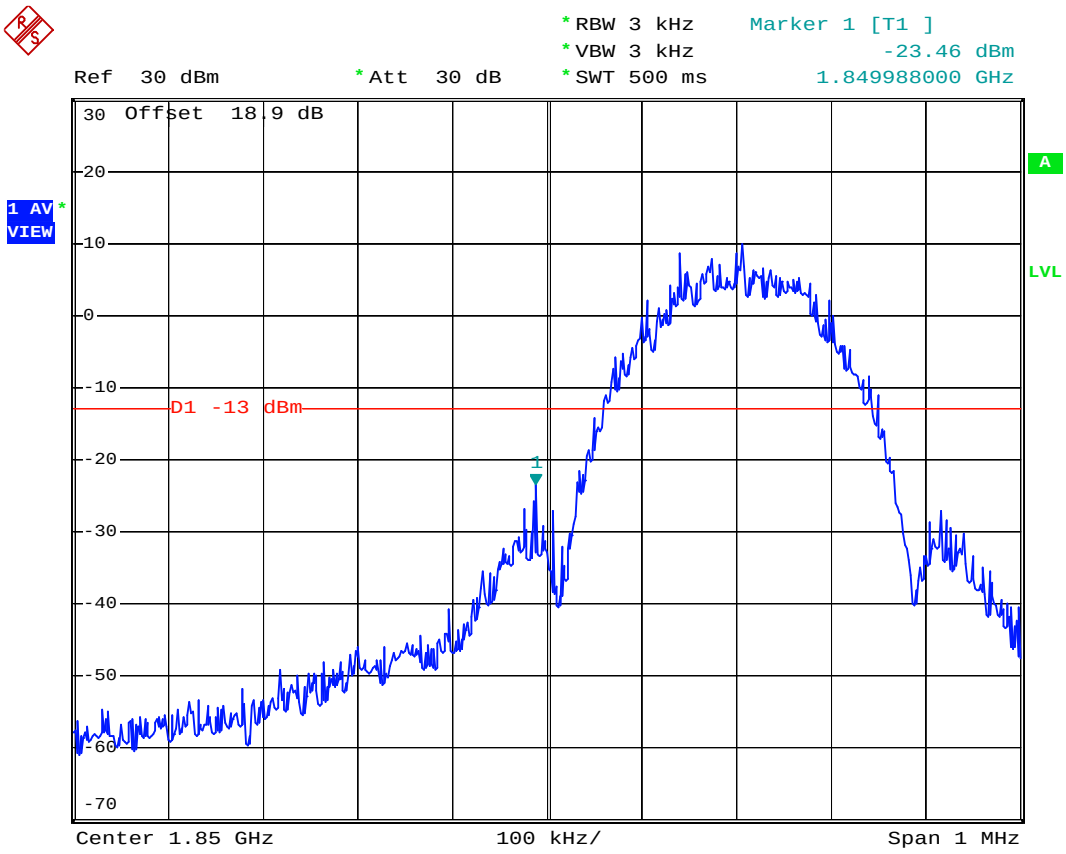
Date: 9.SEP.2007 07:12:45

- Test Mode : PCS1900 (GSM) CH810 Higher Band Edge
- Power State : High



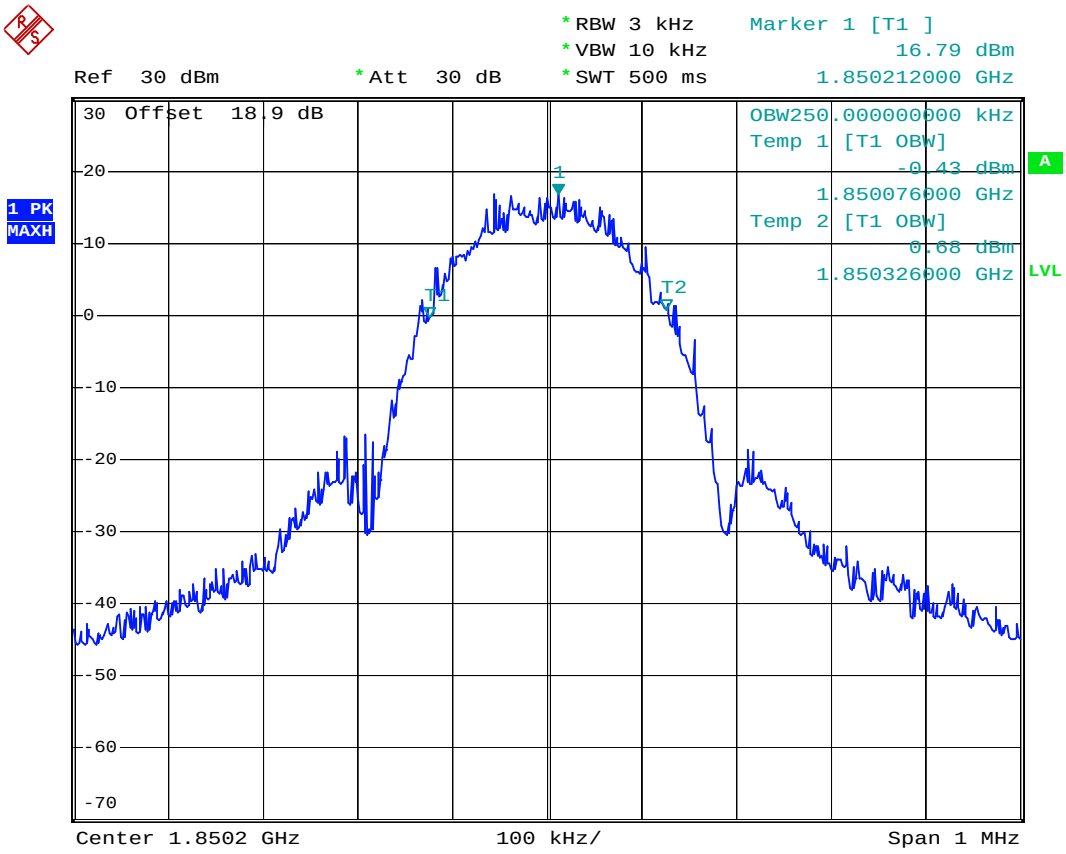
Date: 9.SEP.2007 07:23:18

- Mode 4
- Test Mode : PCS1900 (EDGE) CH512 Lower Band Edge
- Power State : High



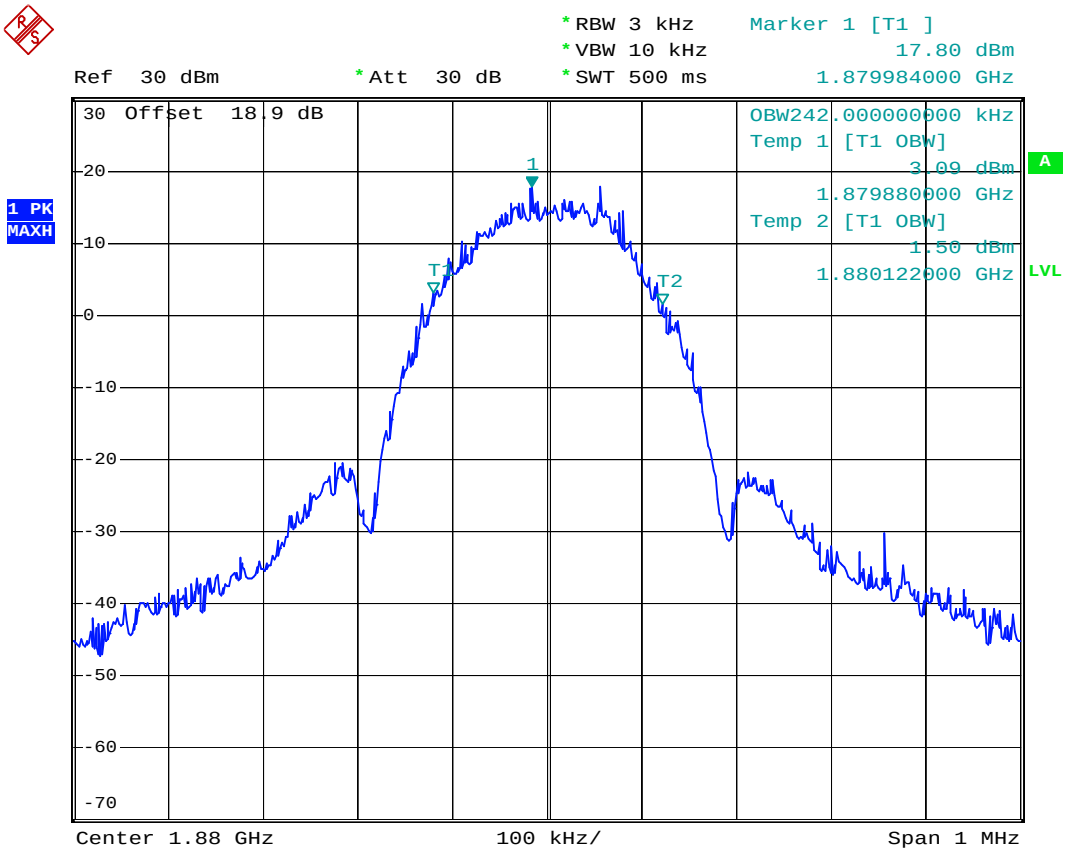
Date: 9.SEP.2007 09:04:49

- Test Mode : PCS1900 (EDGE) CH512 99% Occupid Bandwidth
- Power State : High



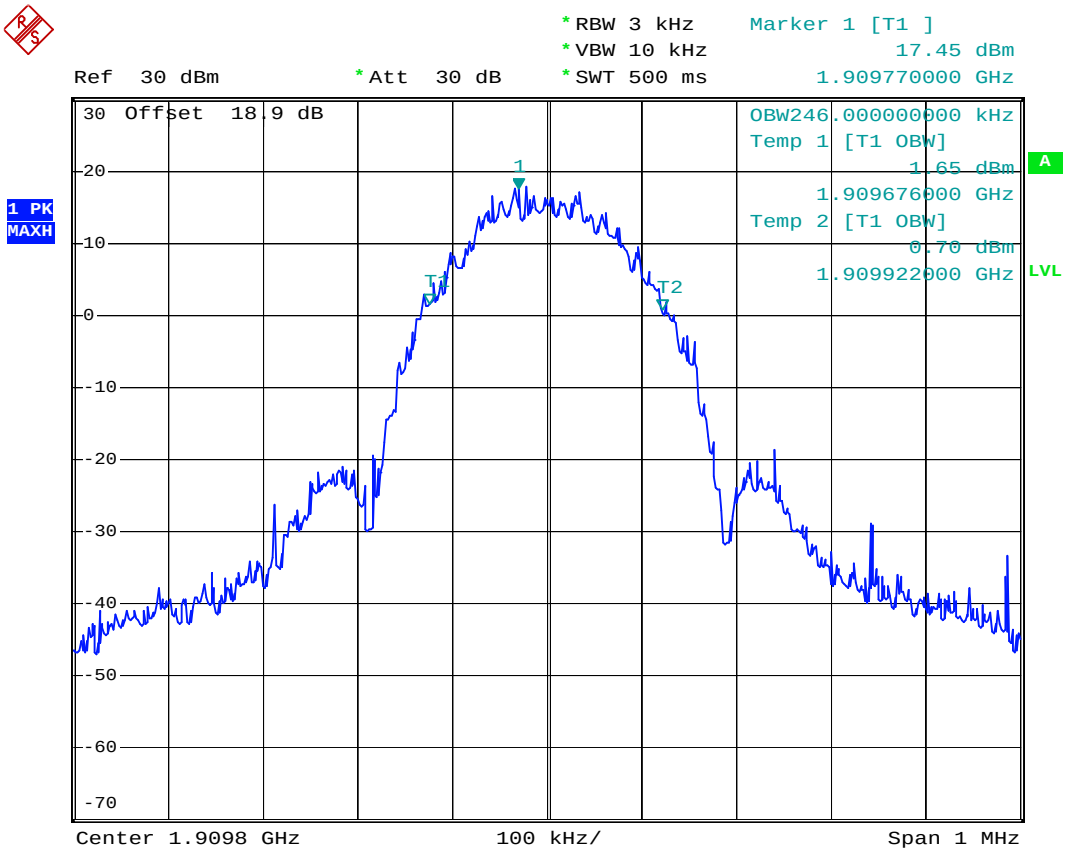
Date: 9.SEP.2007 09:03:26

- Test Mode : PCS1900 (EDGE) CH661 99% Occupid Bandwidth
- Power State : High



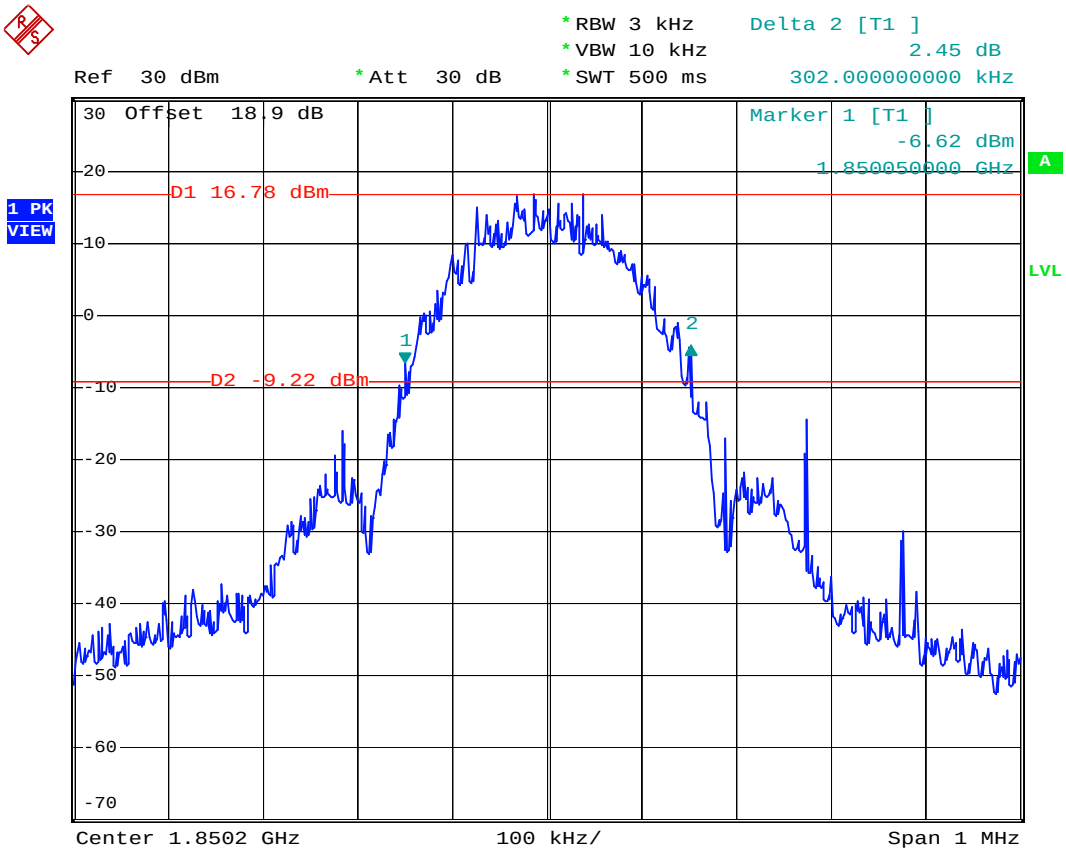
Date: 9.SEP.2007 09:02:31

- Test Mode : PCS1900 (EDGE) CH810 99% Occupid Bandwidth
- Power State : High



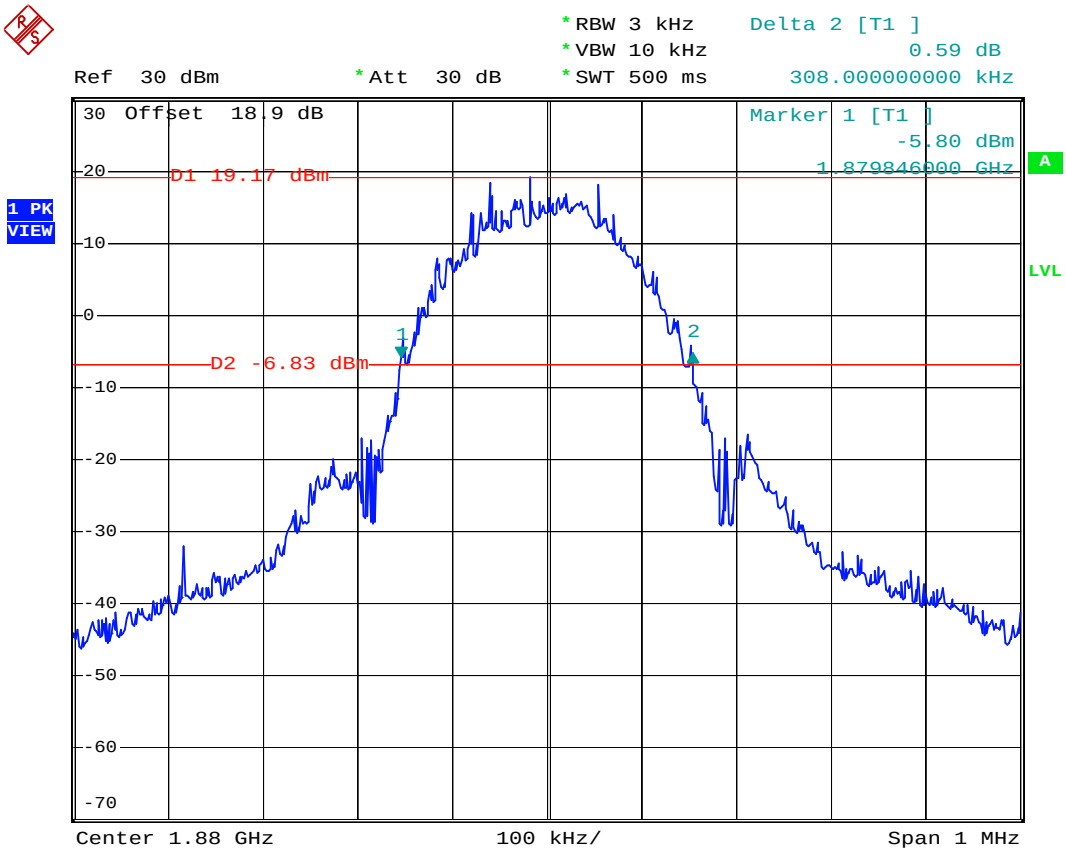
Date: 9.SEP.2007 09:01:37

- Test Mode : PCS1900 (EDGE) CH512 26dB Bandwidth
- Power State : High



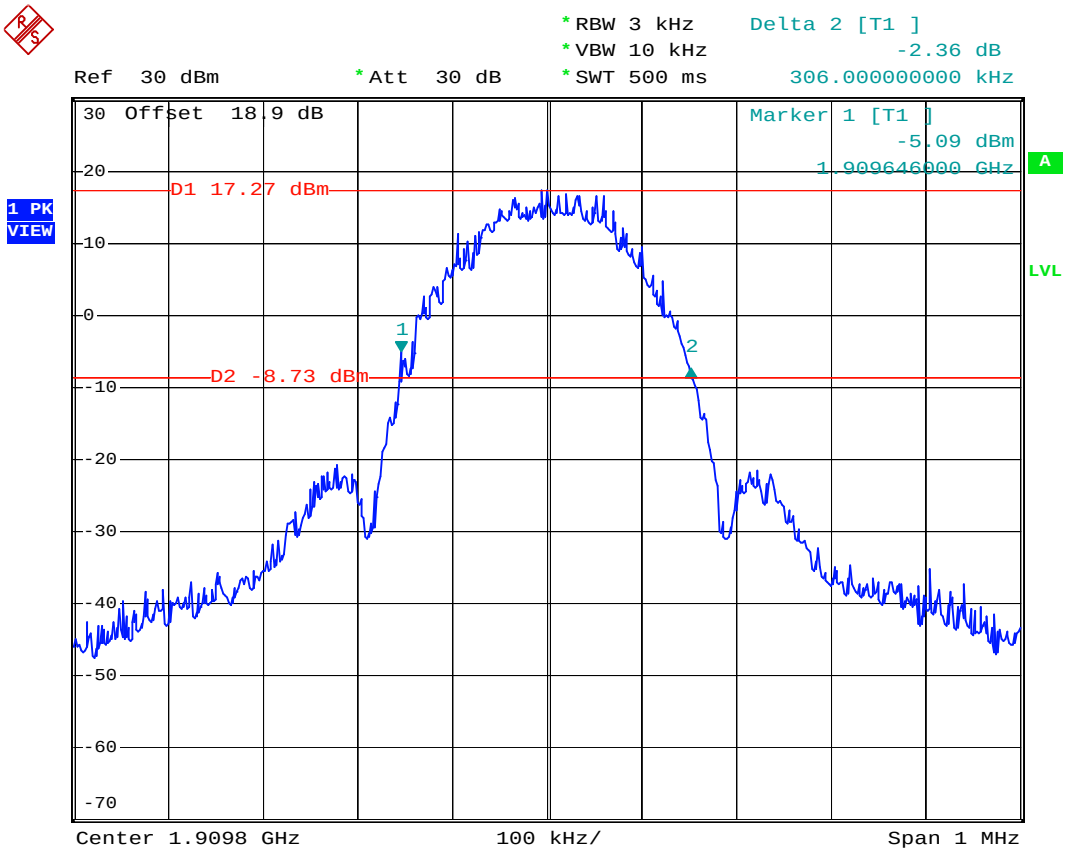
Date: 13.SEP.2007 05:31:26

- Test Mode : PCS1900 (EDGE) CH661 26dB Bandwidth
- Power State : High



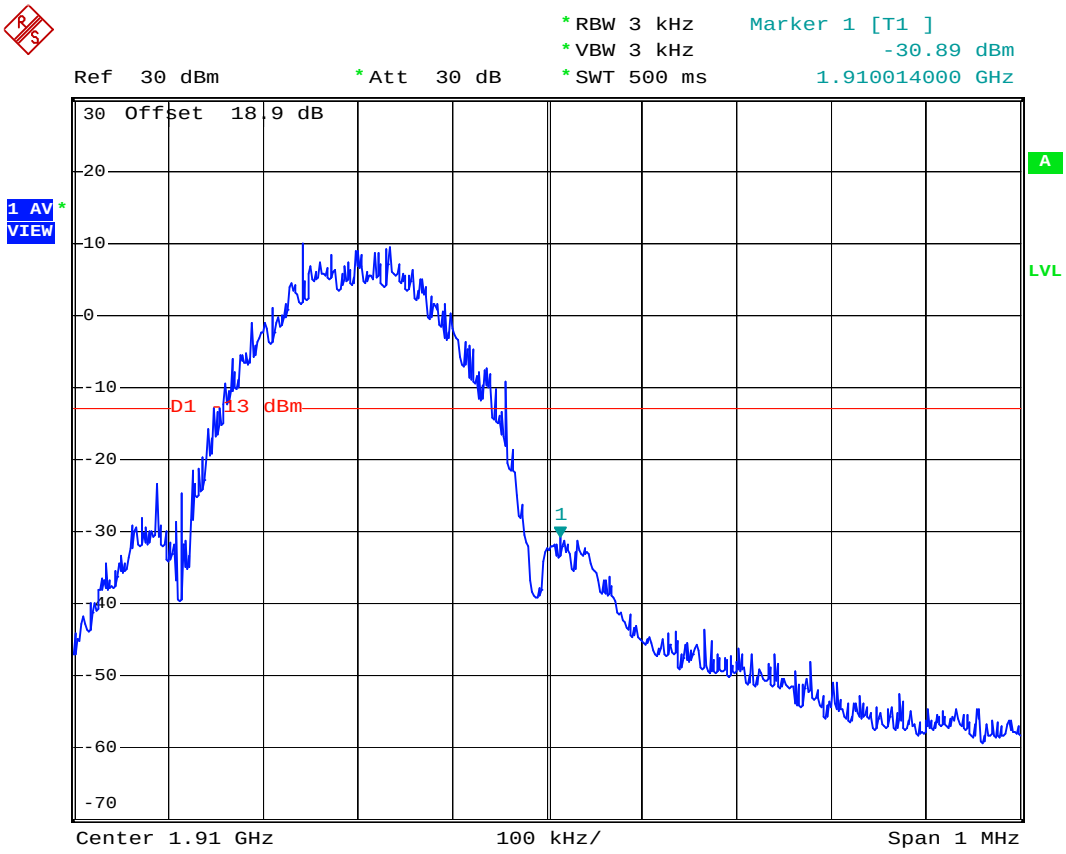
Date: 9.SEP.2007 08:59:02

- Test Mode : PCS1900 (EDGE) CH810 26dB Bandwidth
- Power State : High



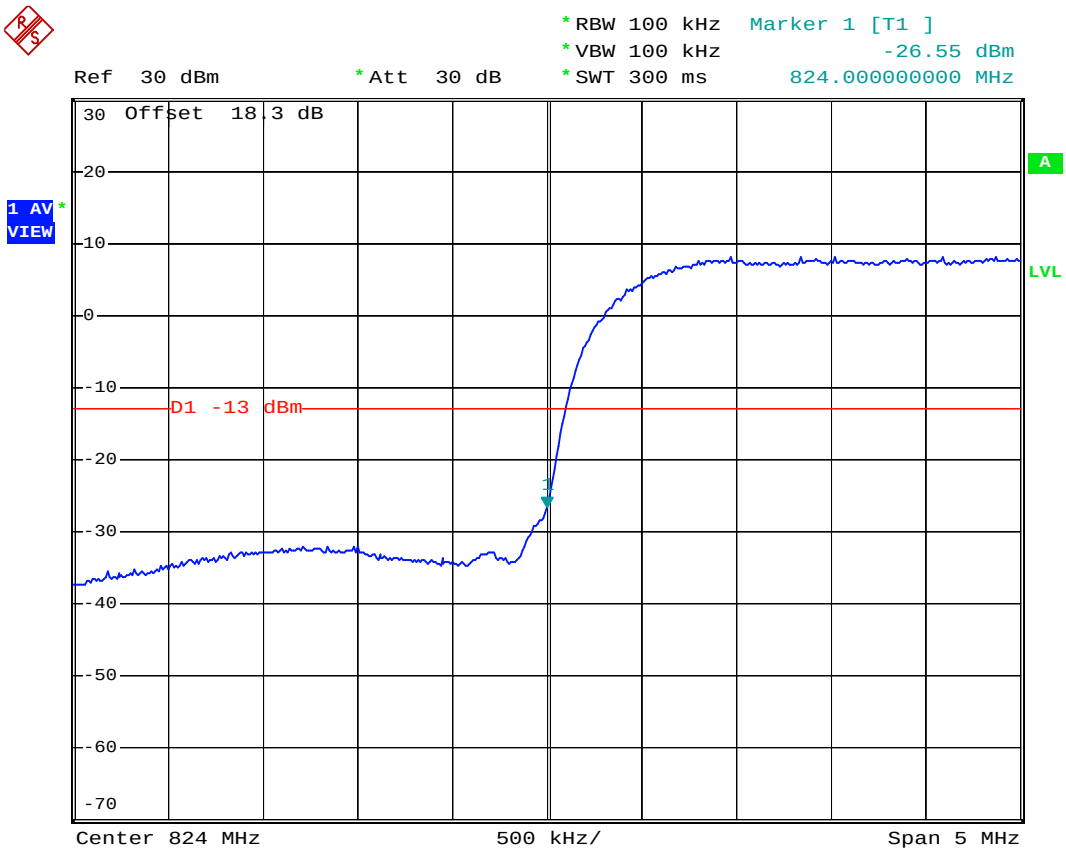
Date: 9.SEP.2007 09:00:43

- Test Mode : PCS1900(EDGE) CH810 Higher Band Edge
- Power State : High



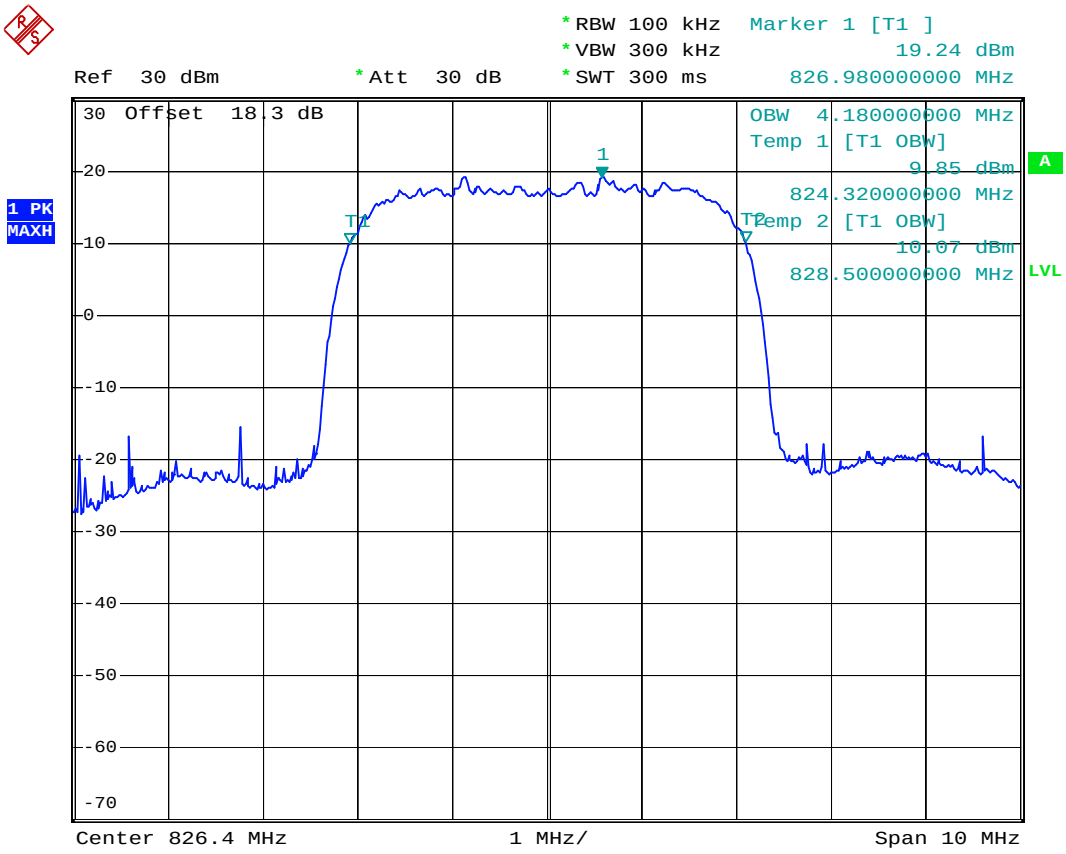
Date: 9.SEP.2007 09:08:00

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



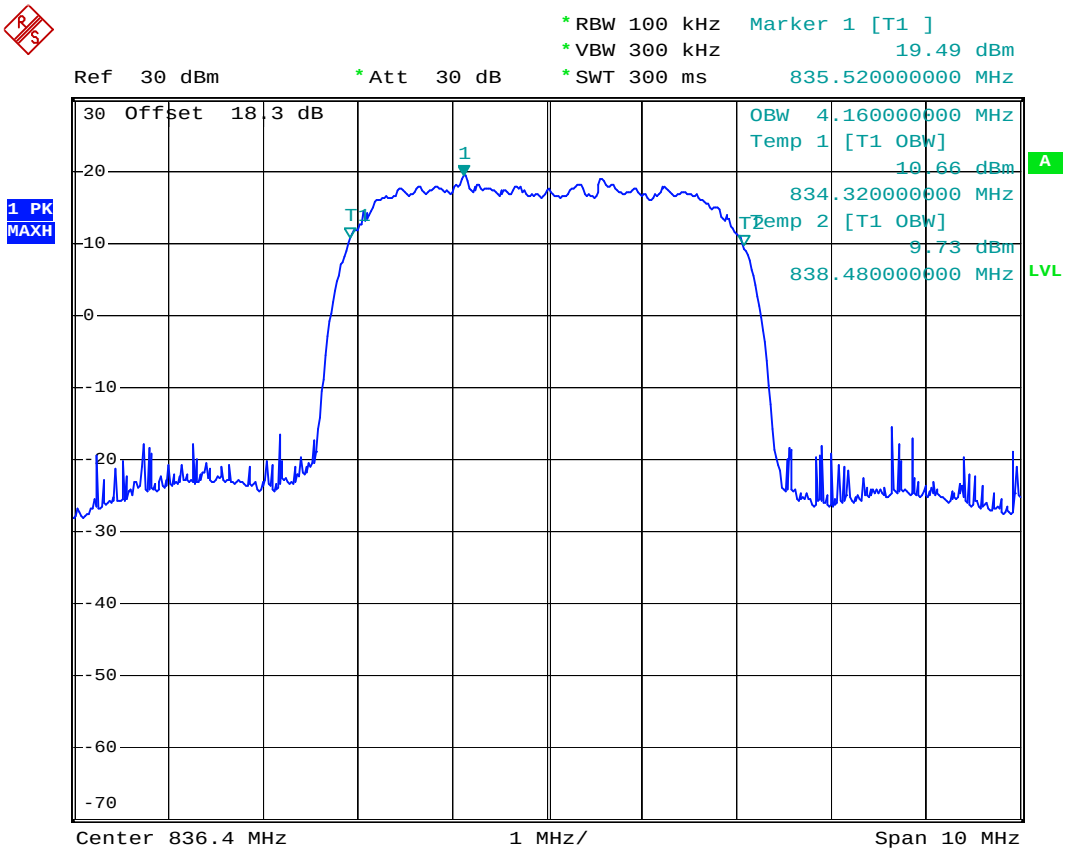
Date: 10.SEP.2007 00:53:01

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



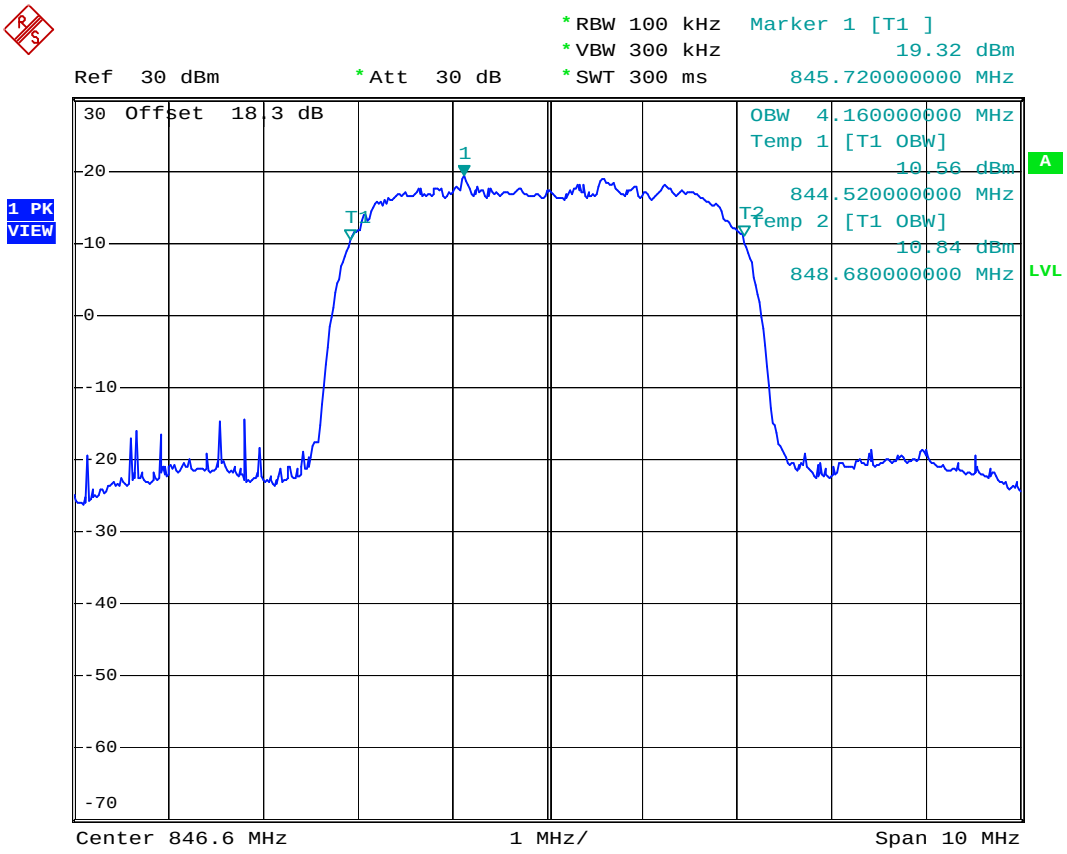
Date: 10.SEP.2007 00:40:33

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



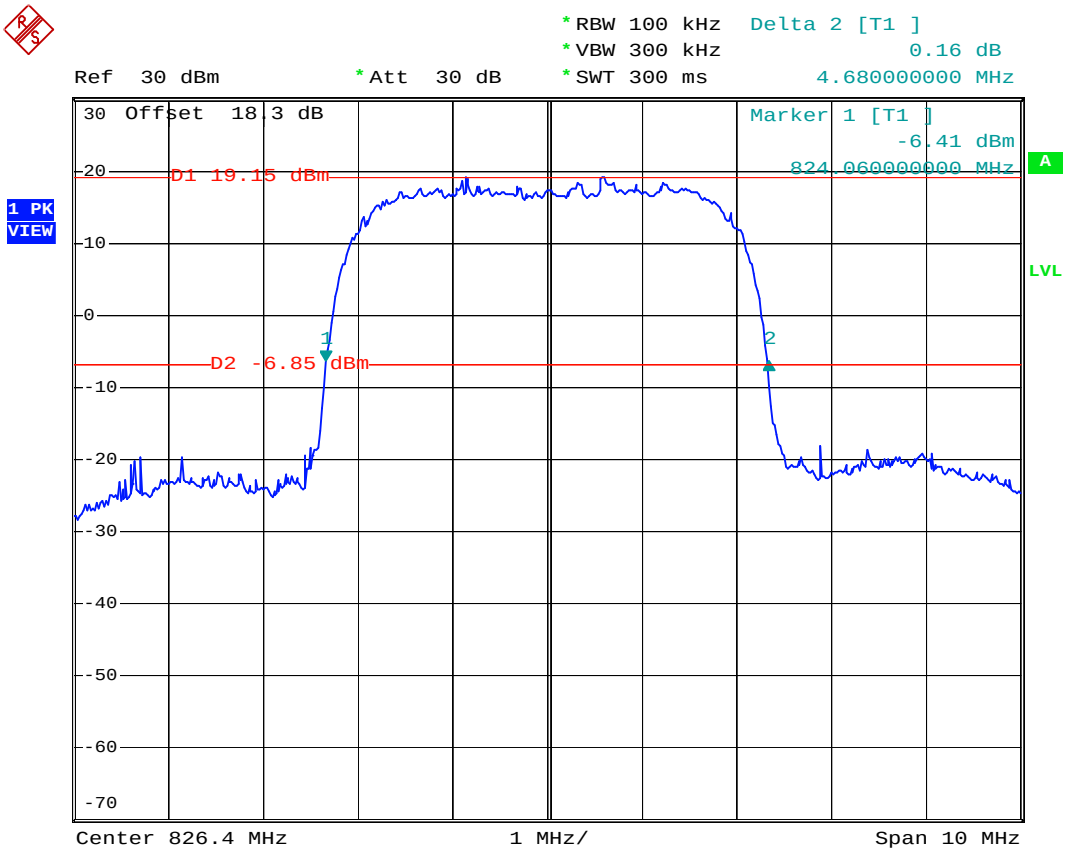
Date: 10.SEP.2007 00:39:16

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



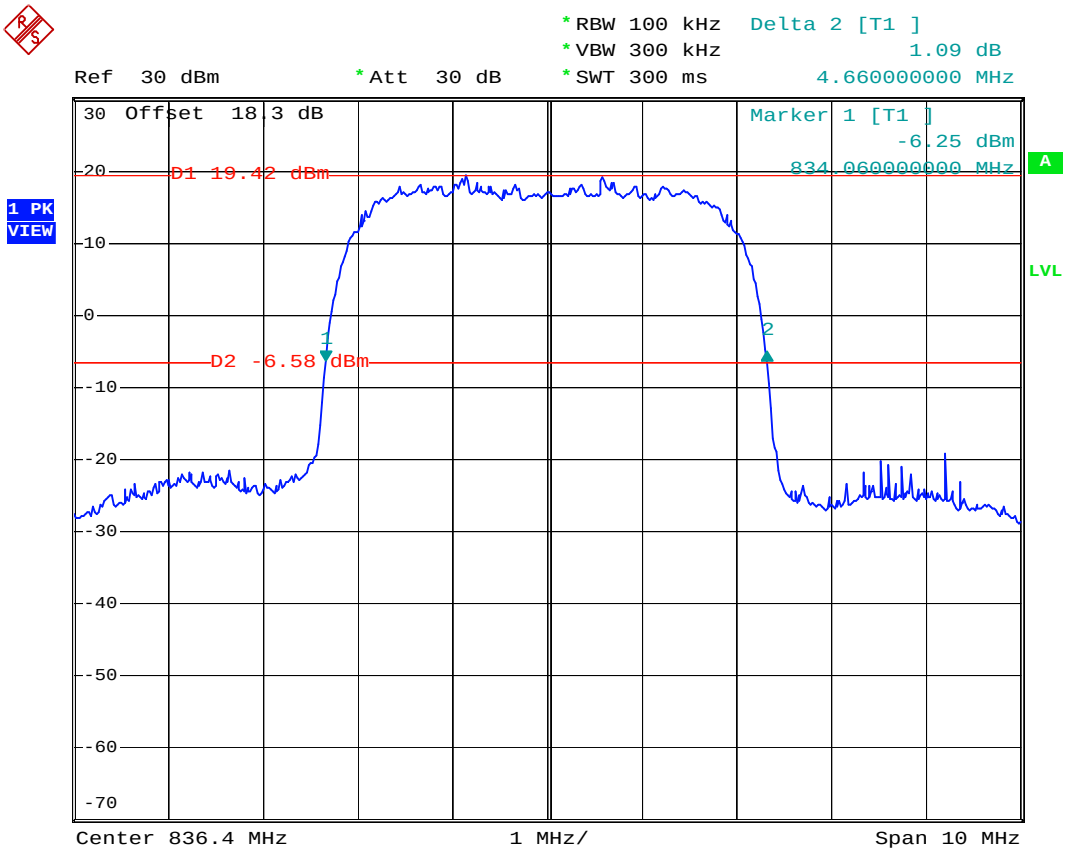
Date: 10.SEP.2007 00:38:20

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



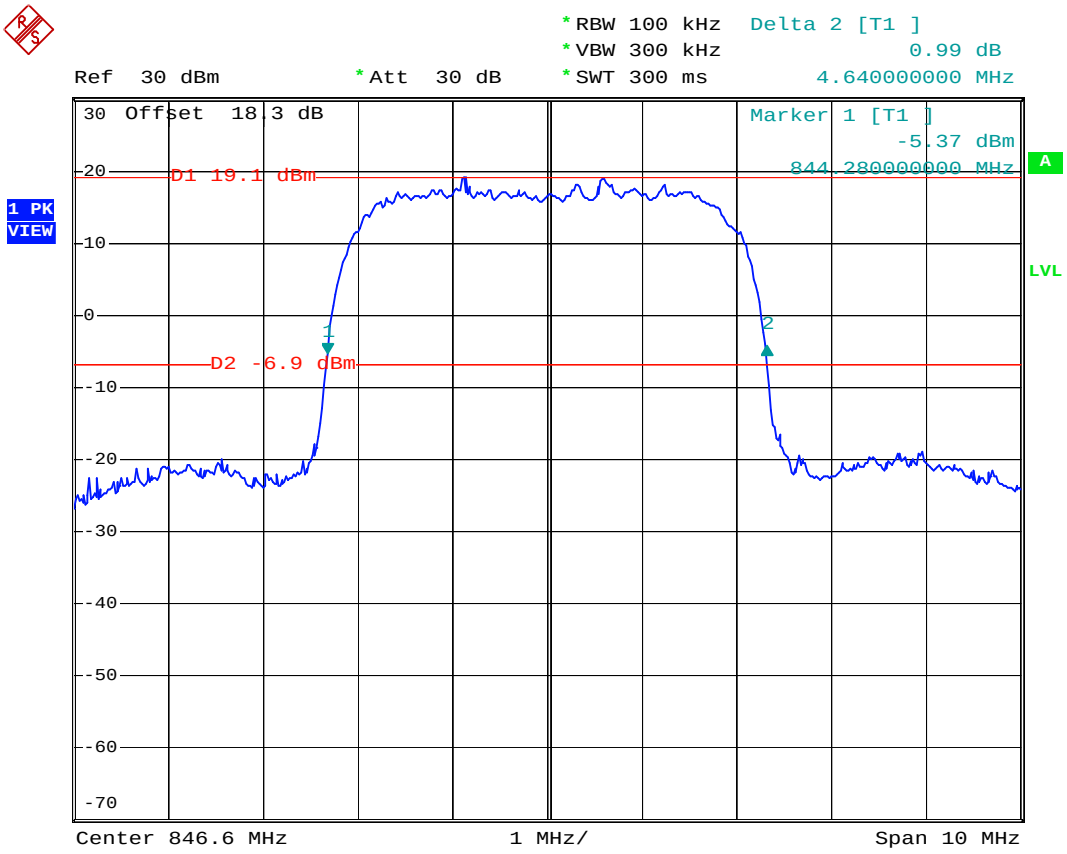
Date: 10.SEP.2007 00:27:41

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



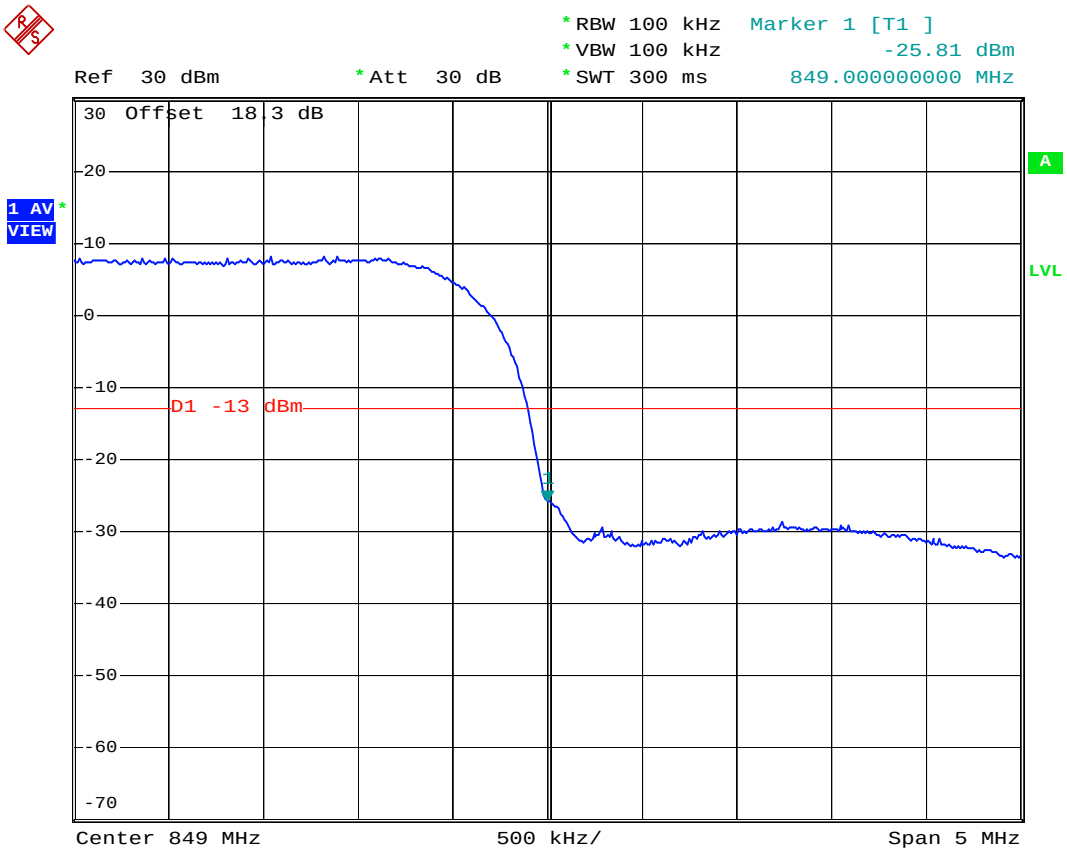
Date: 10.SEP.2007 00:26:10

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



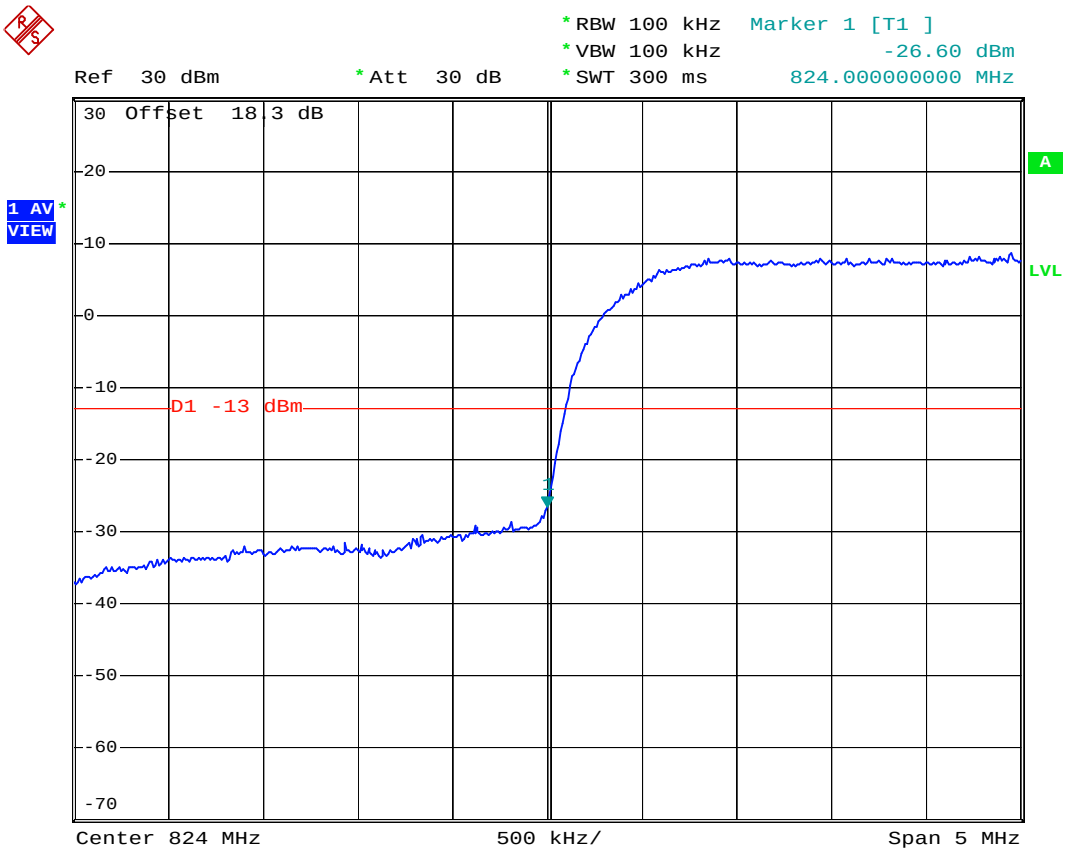
Date: 10.SEP.2007 00:29:04

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



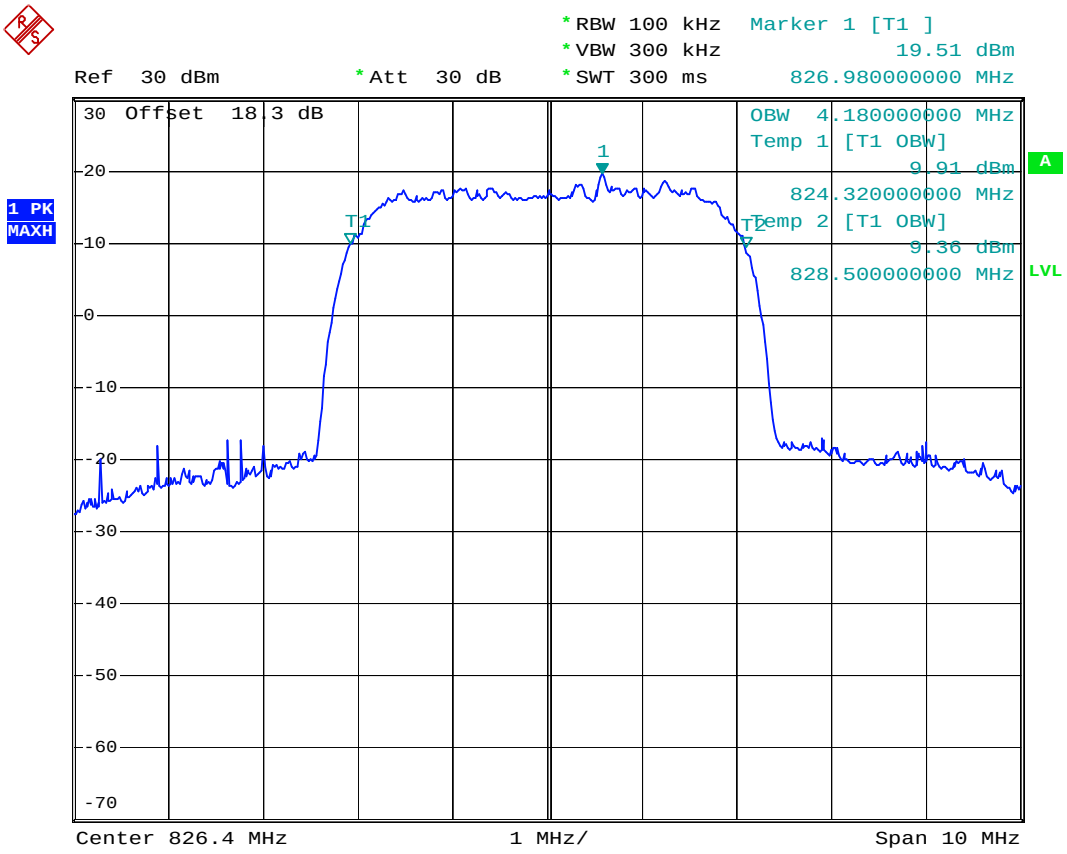
Date: 10.SEP.2007 00:52:25

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



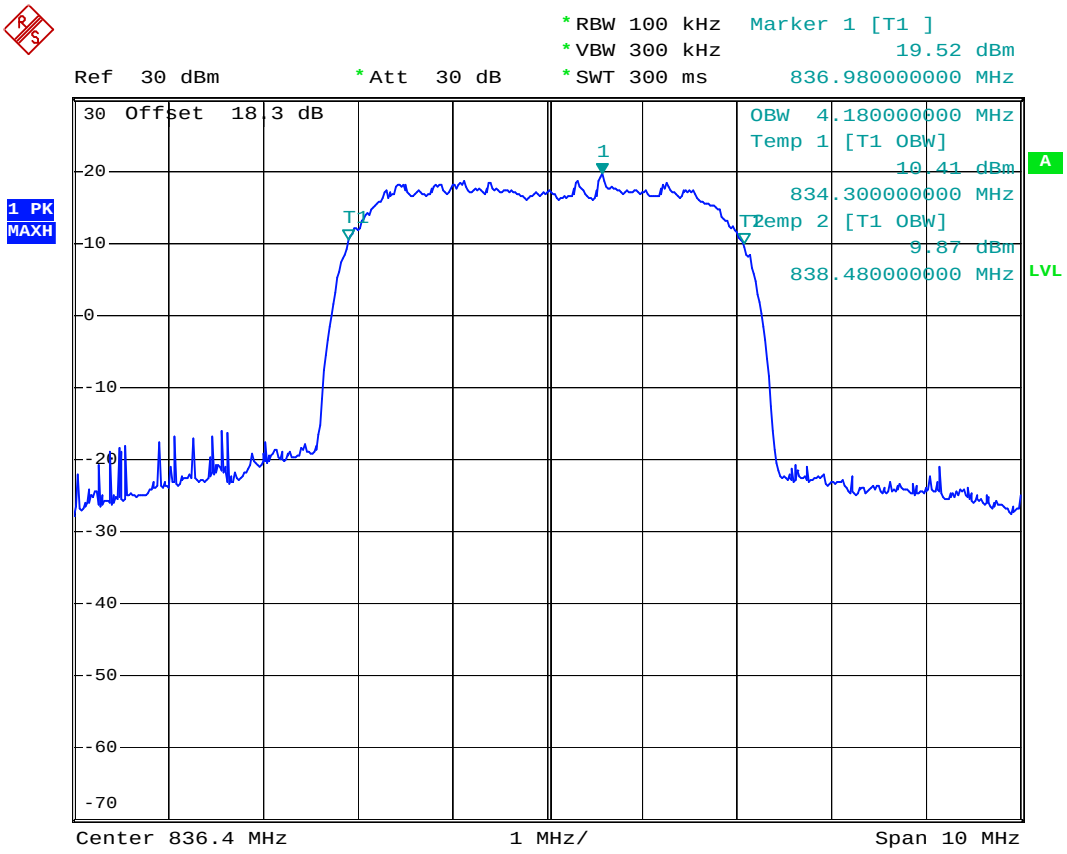
Date: 10.SEP.2007 00:48:39

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



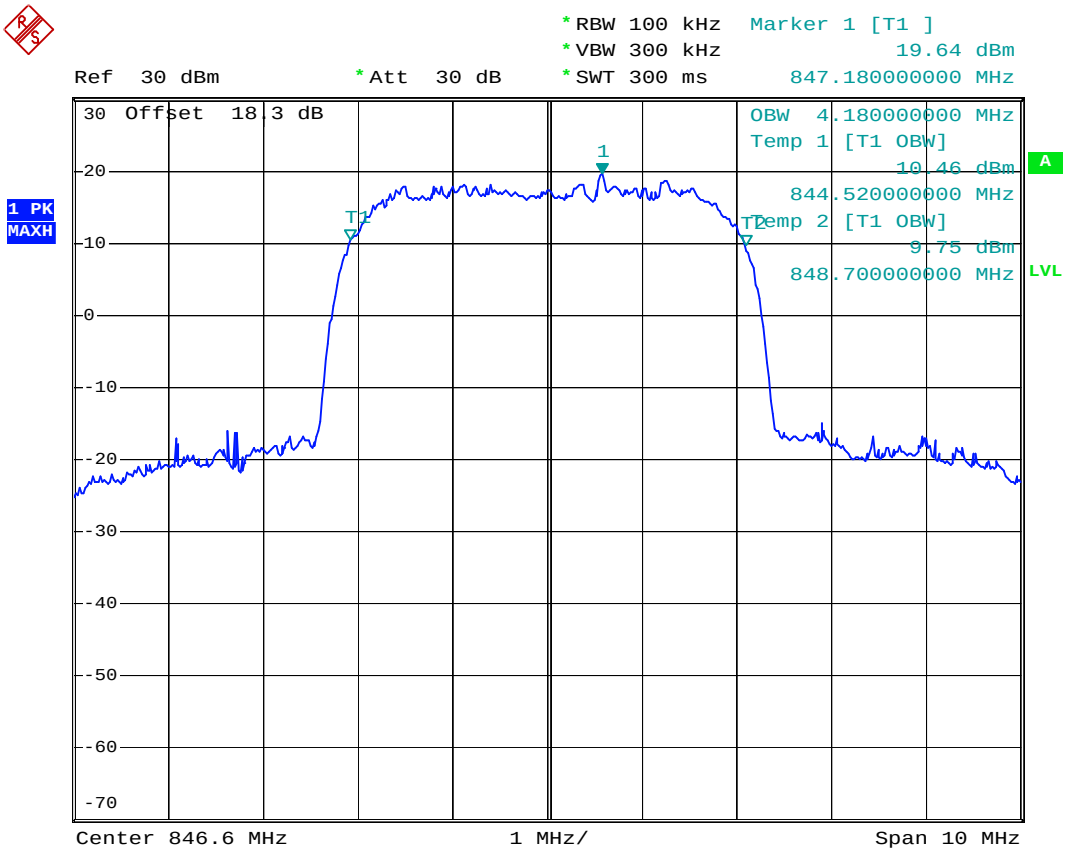
Date: 10.SEP.2007 00:35:27

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



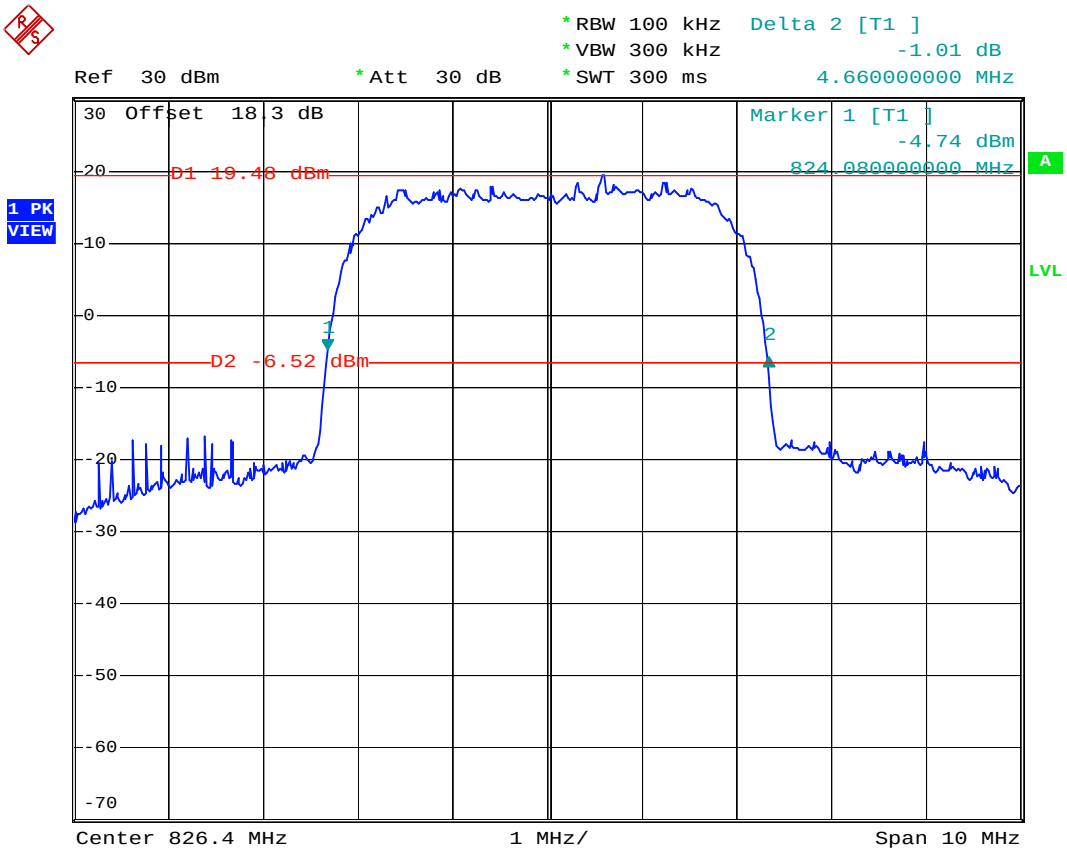
Date: 10.SEP.2007 00:36:41

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



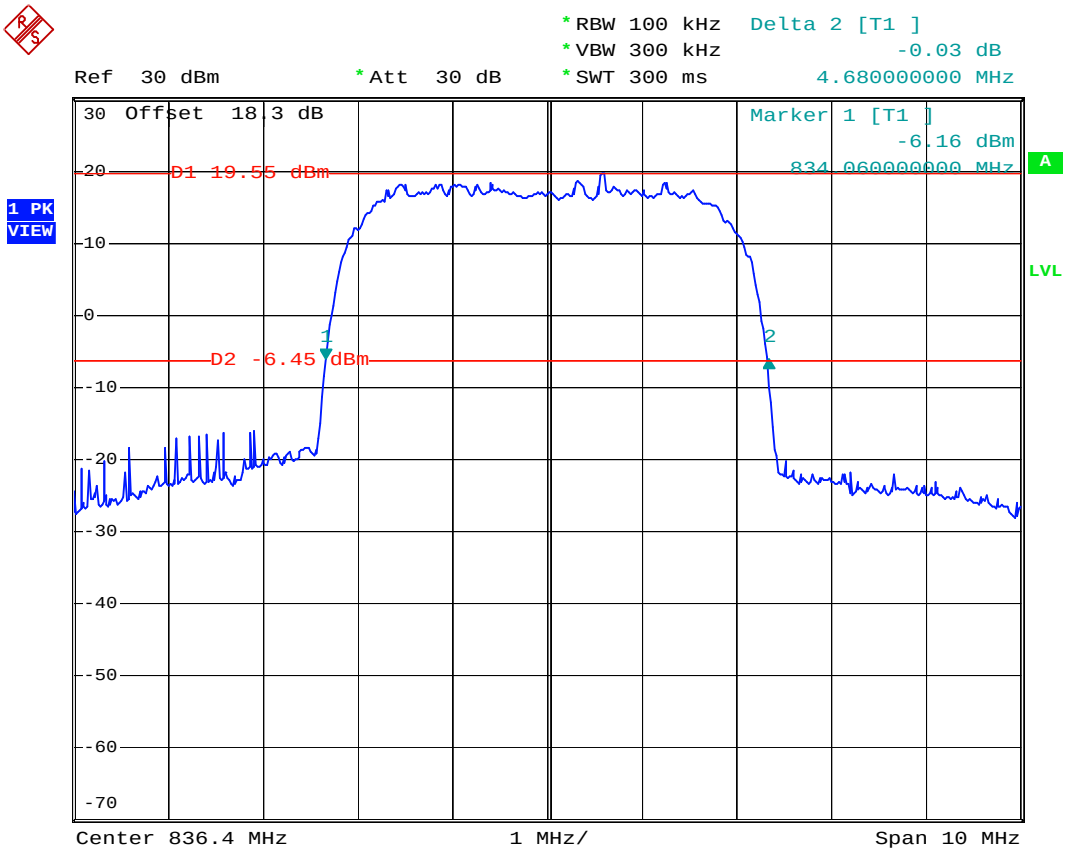
Date: 10.SEP.2007 00:37:25

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



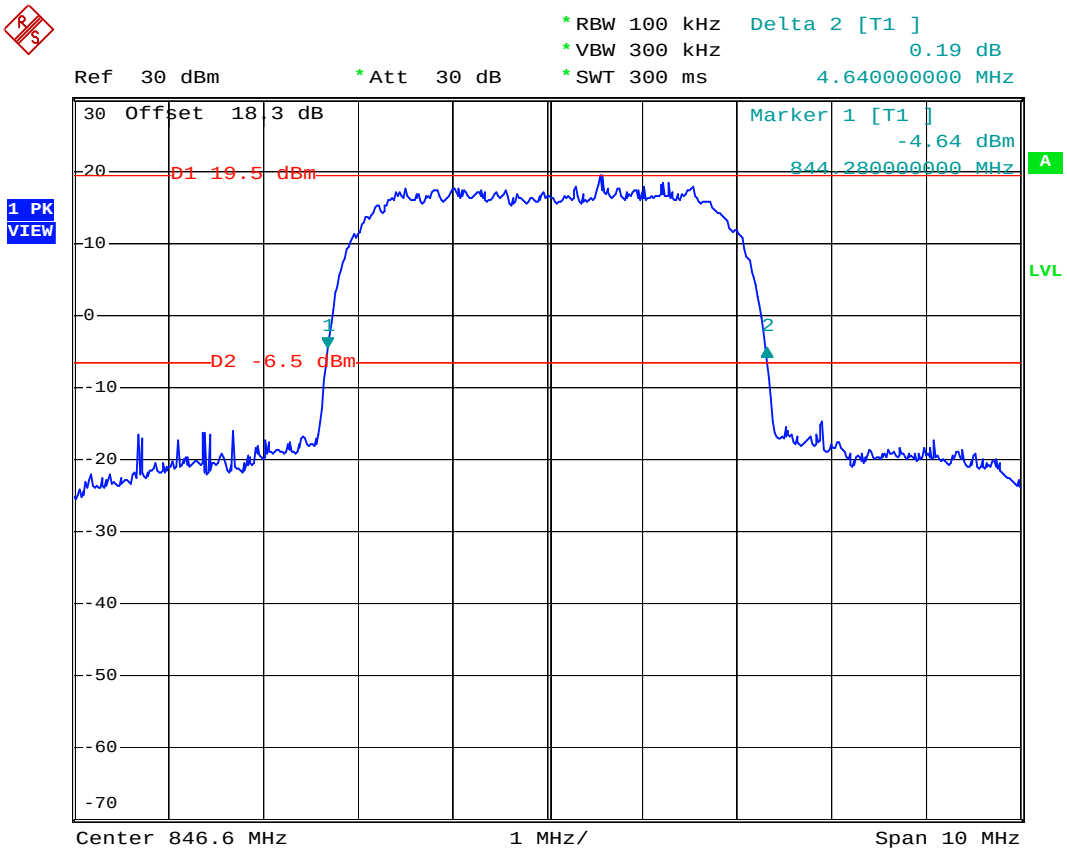
Date: 10.SEP.2007 00:34:23

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



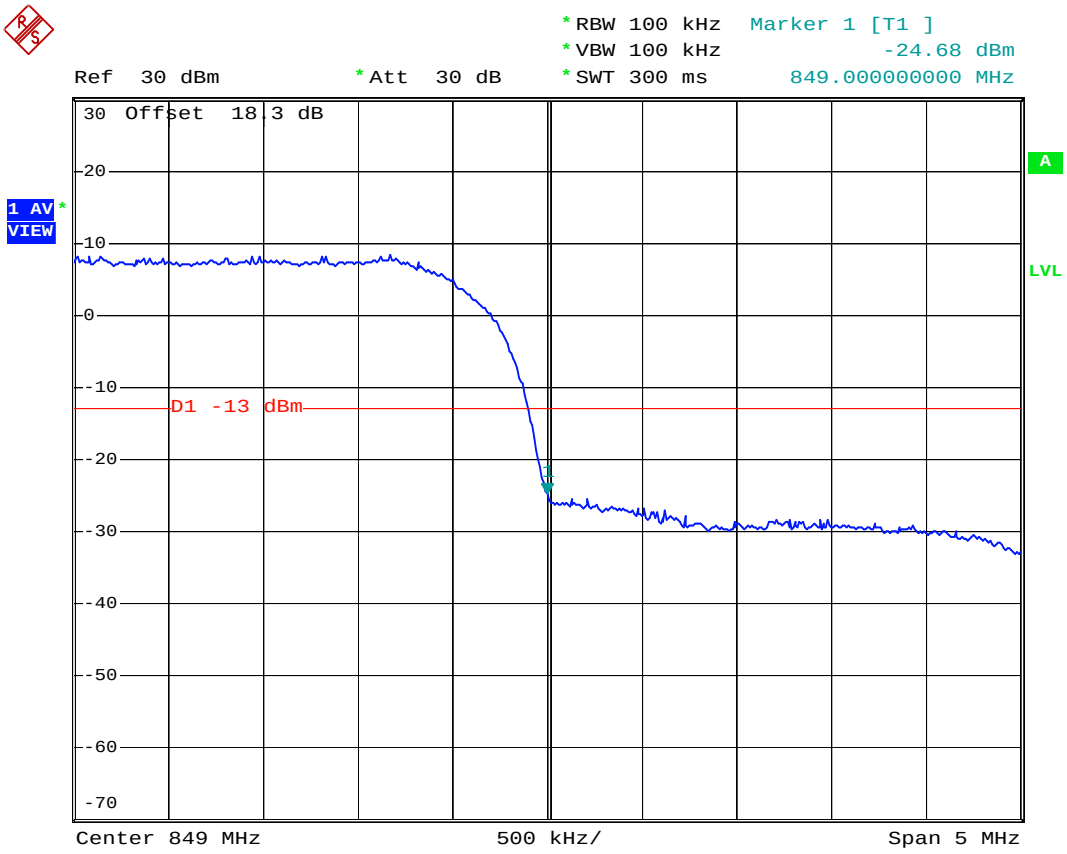
Date: 10.SEP.2007 00:32:54

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



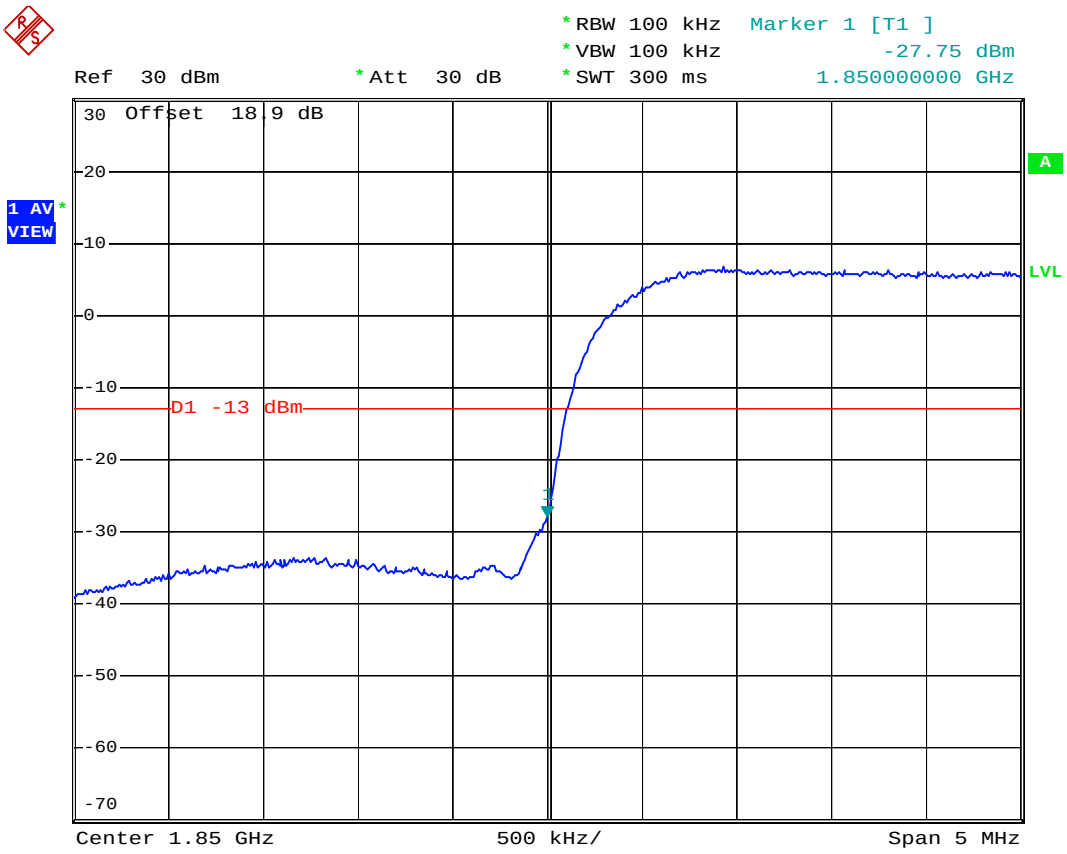
Date: 10.SEP.2007 00:31:12

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



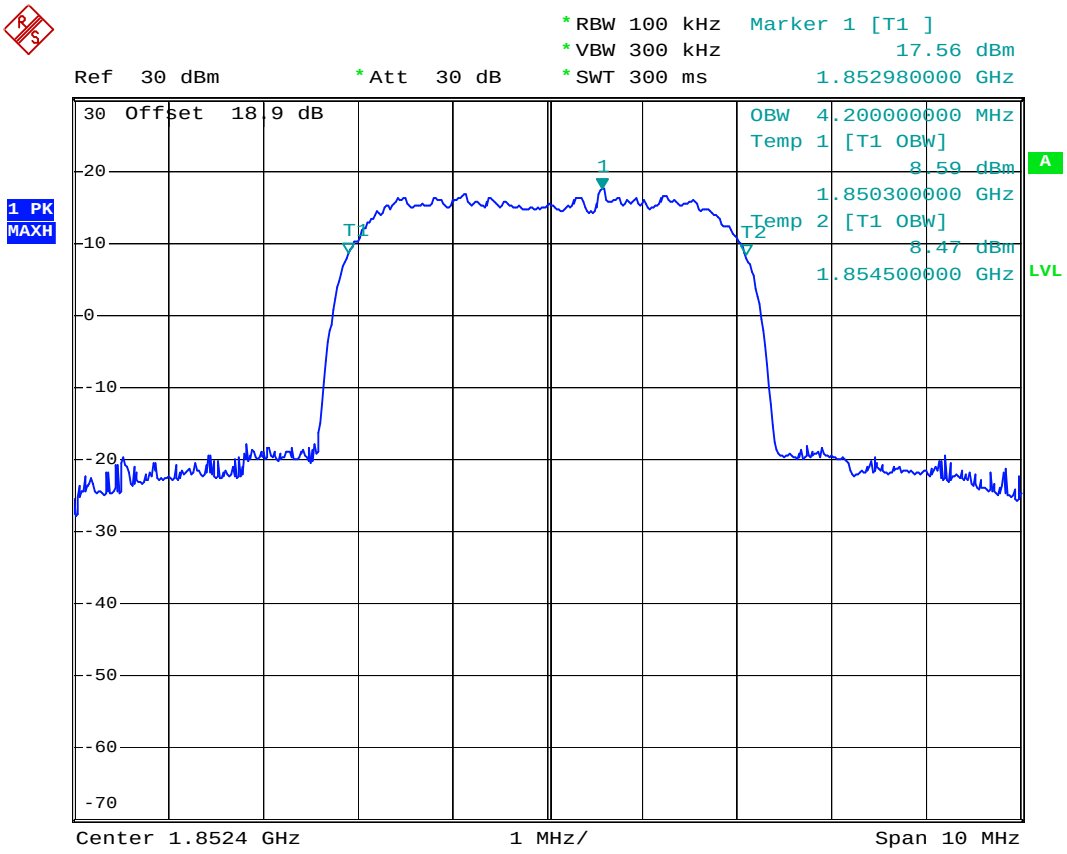
Date: 10.SEP.2007 00:49:17

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



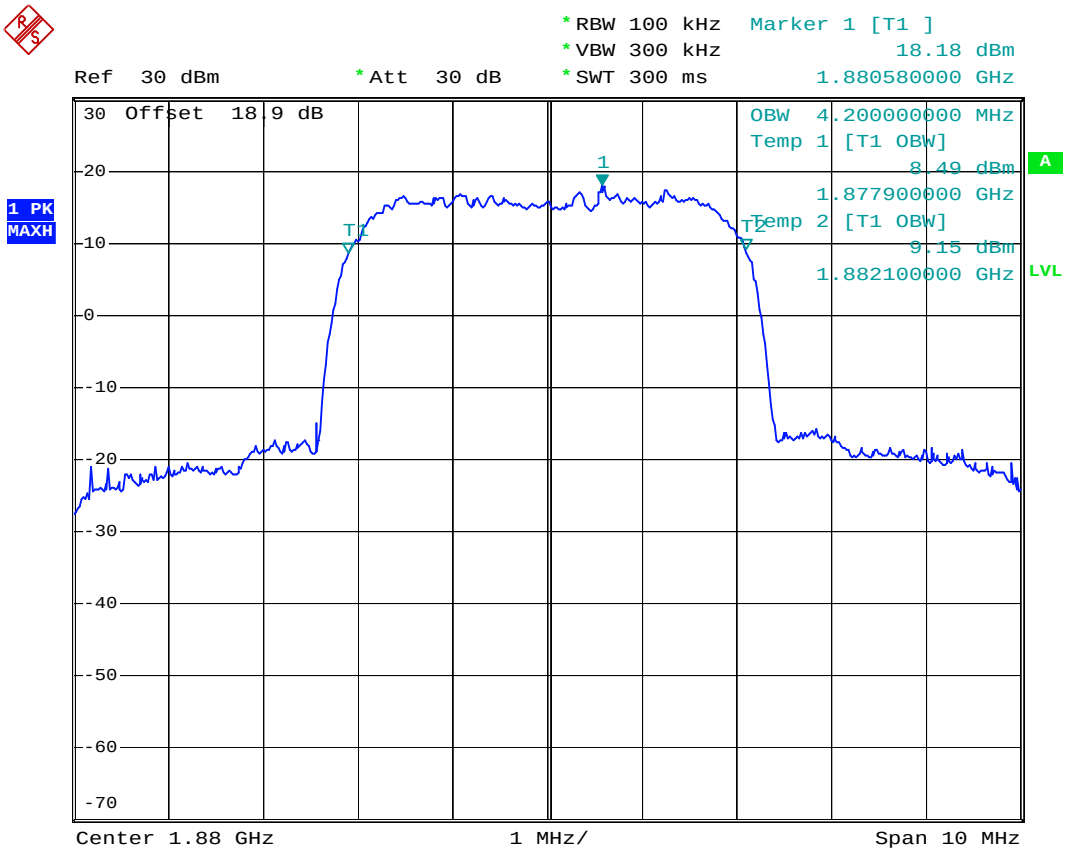
Date: 10.SEP.2007 02:39:05

- Test Mode : WCDMA Band II CH9262 99% Occupid Bandwidth
- Power State : High



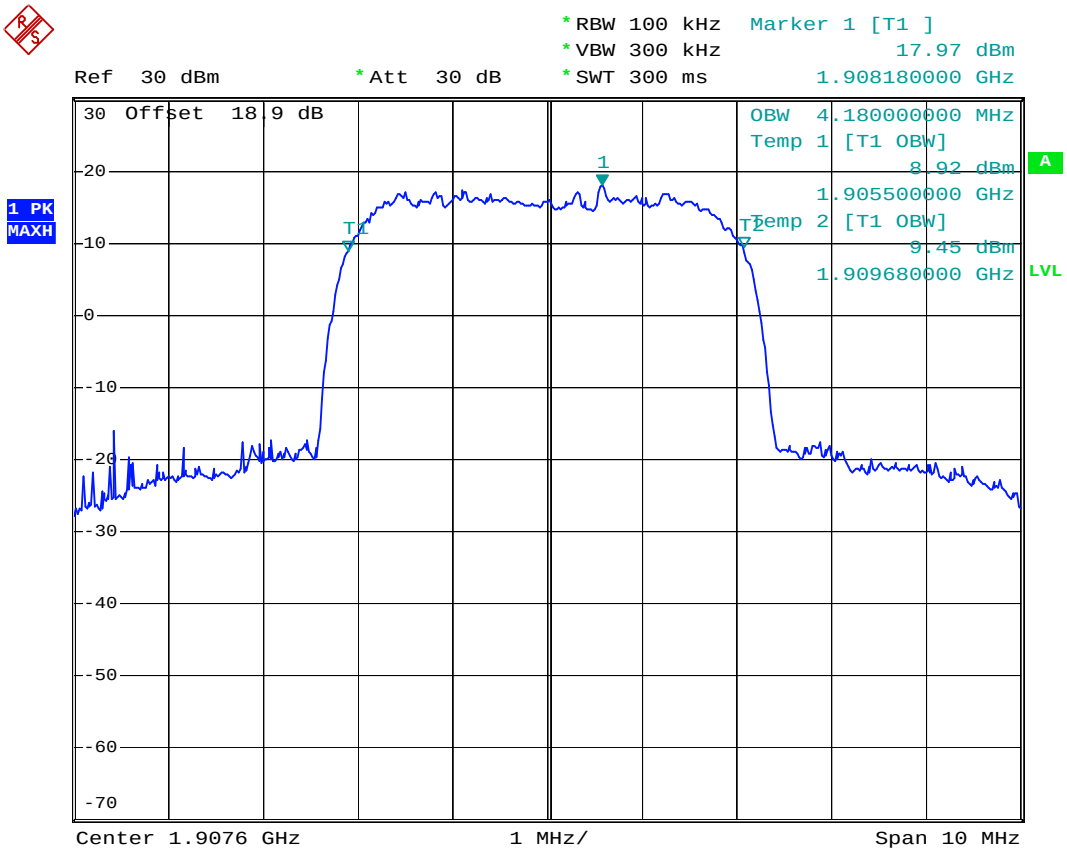
Date: 10.SEP.2007 00:07:35

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



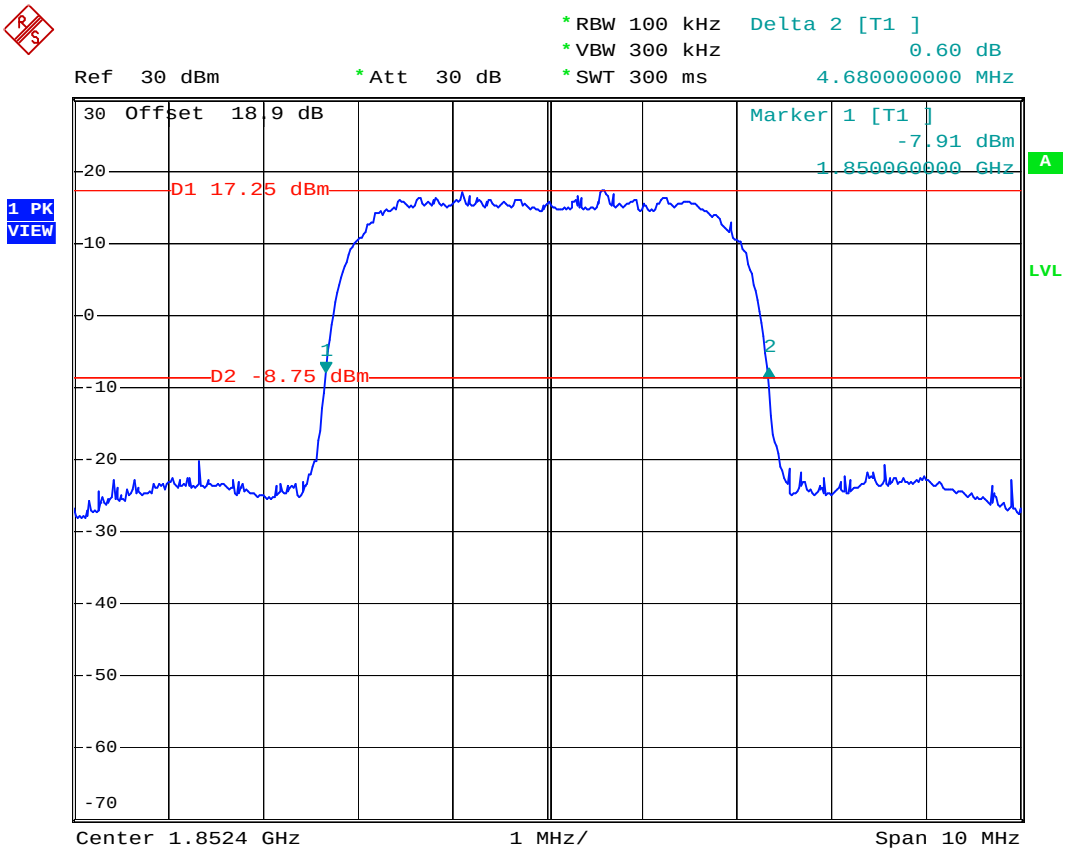
Date: 10.SEP.2007 00:03:15

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



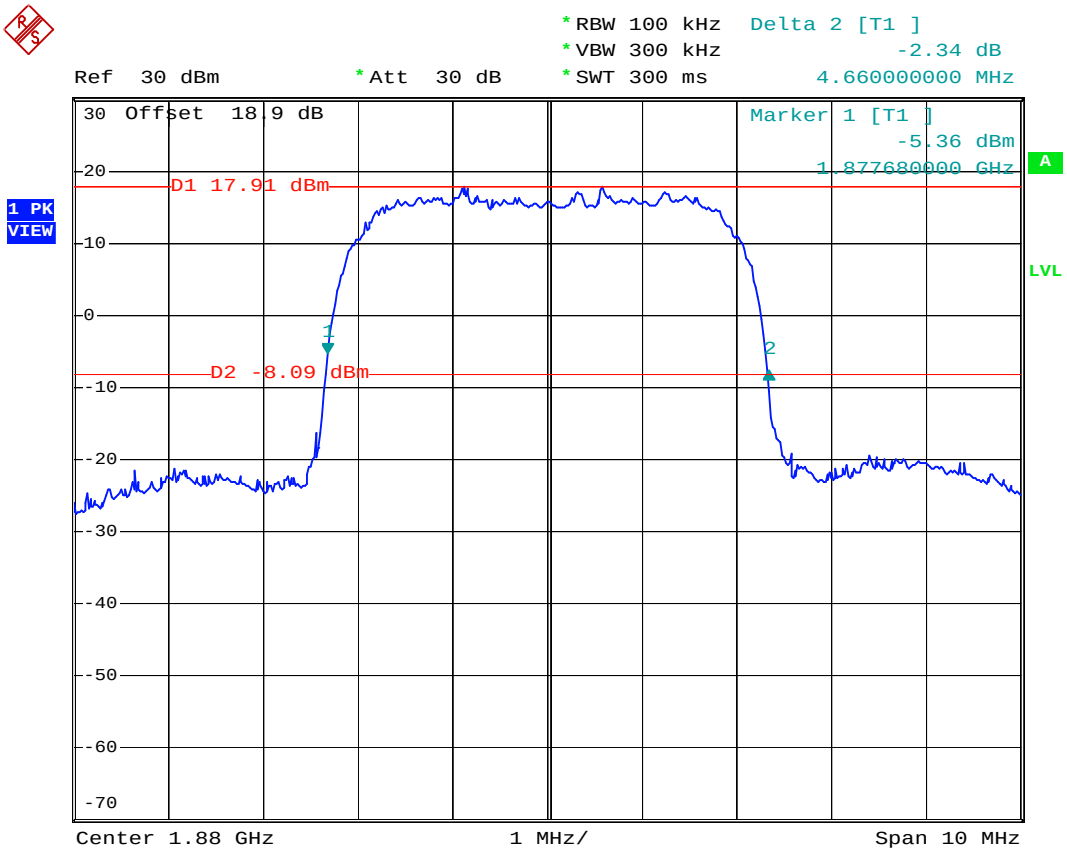
Date: 10.SEP.2007 00:08:37

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



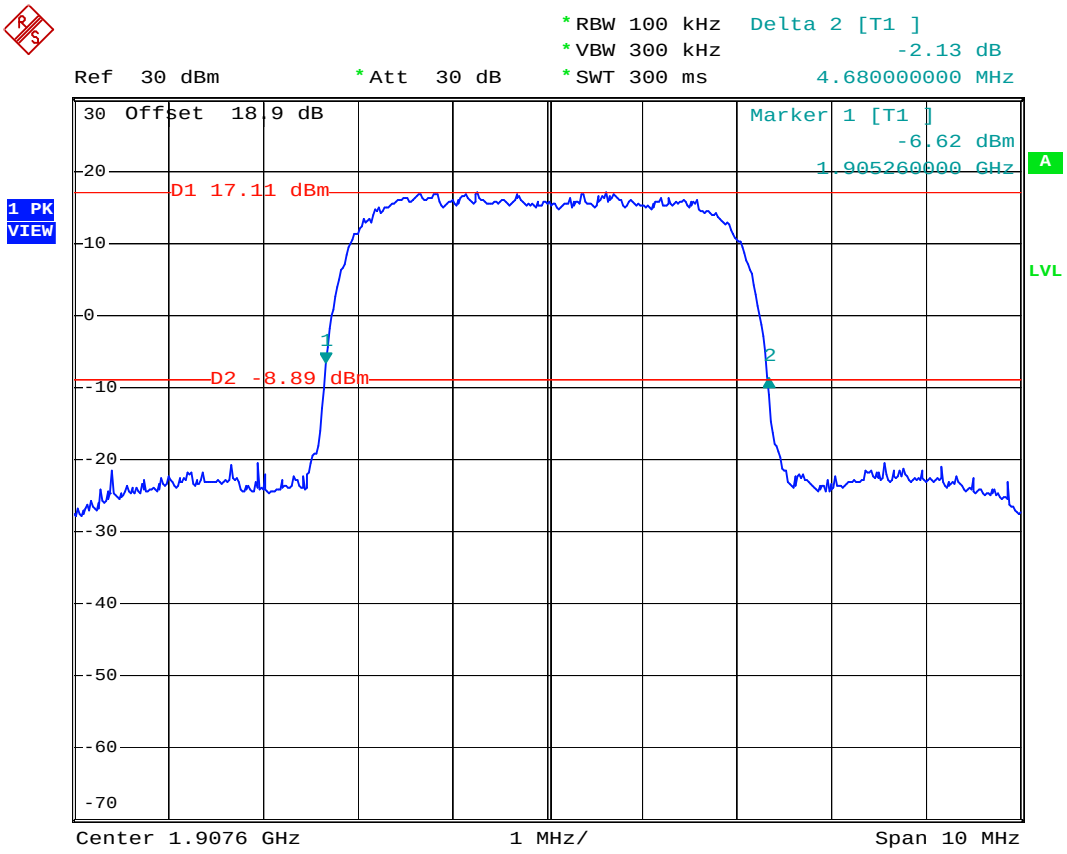
Date: 10.SEP.2007 00:20:05

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



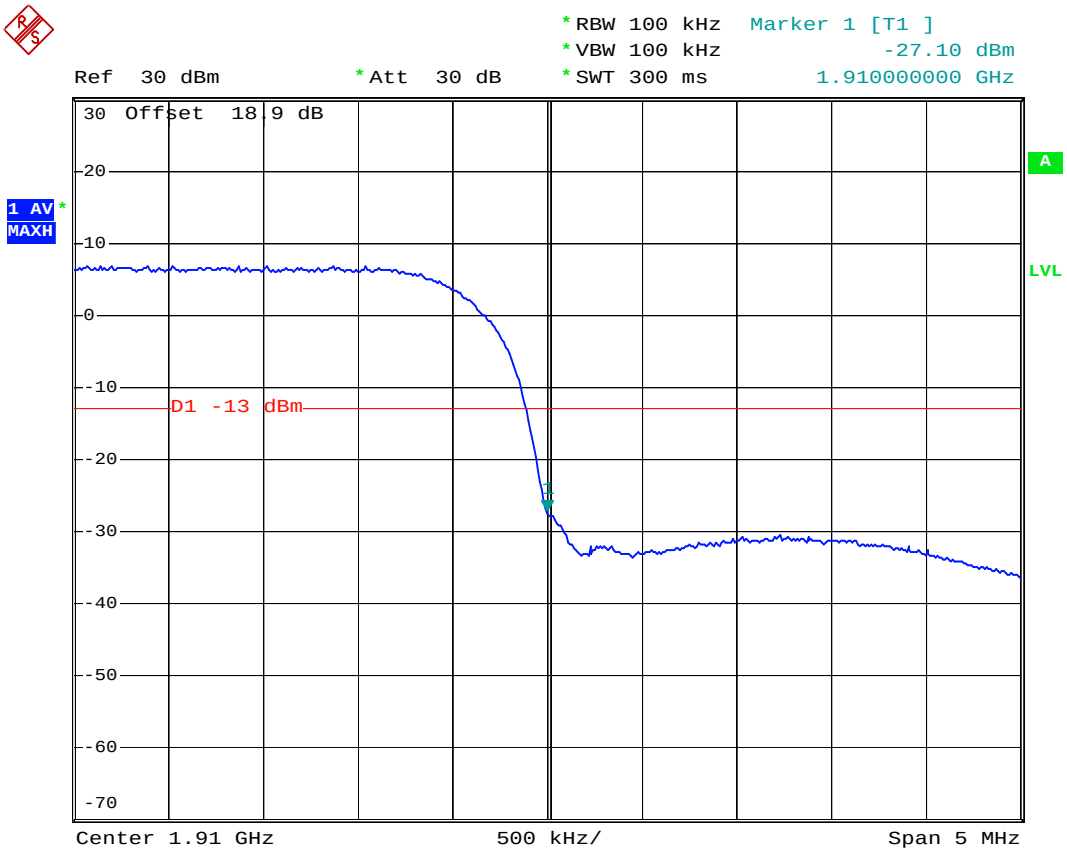
Date: 10.SEP.2007 00:21:18

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



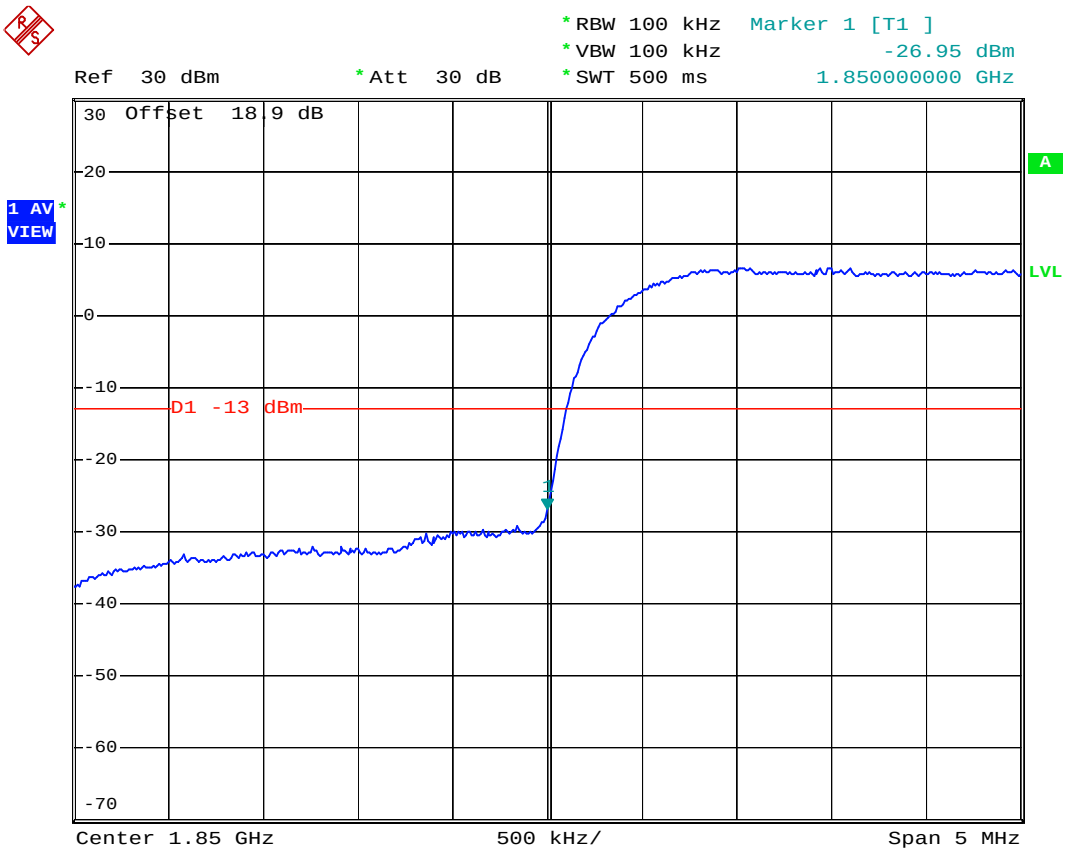
Date: 10.SEP.2007 00:23:27

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



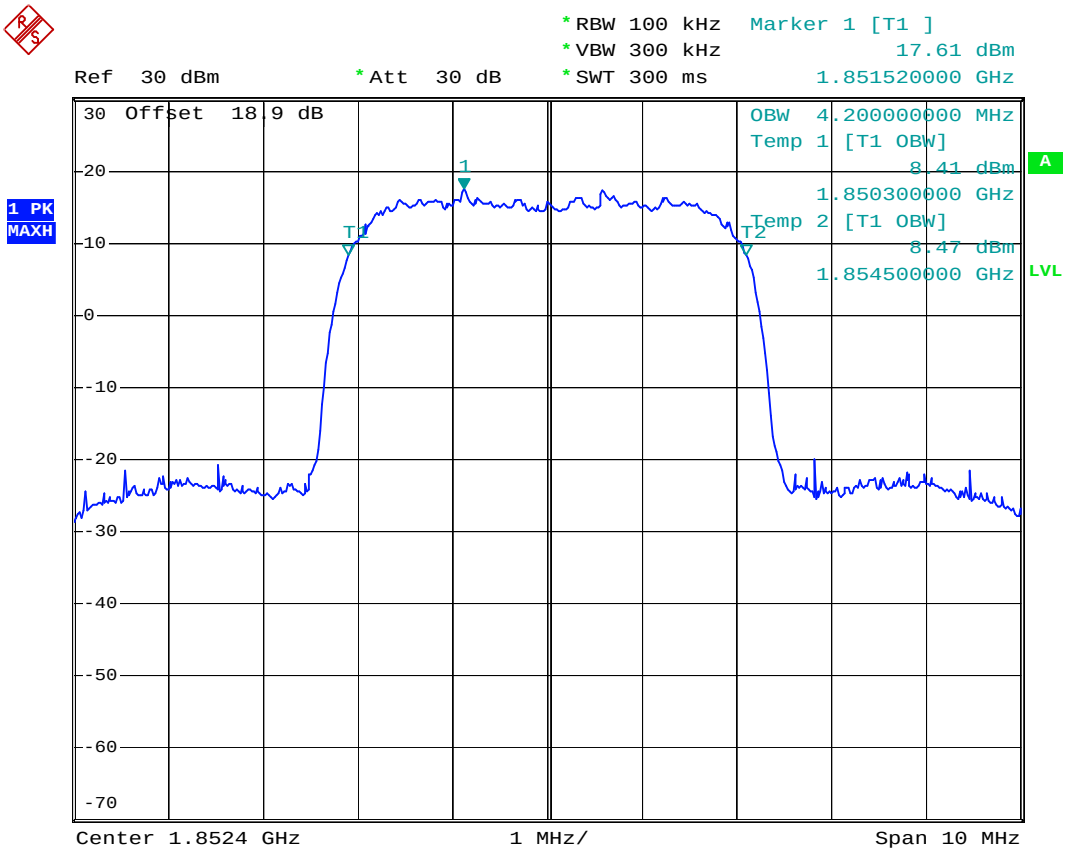
Date: 10.SEP.2007 02:38:20

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



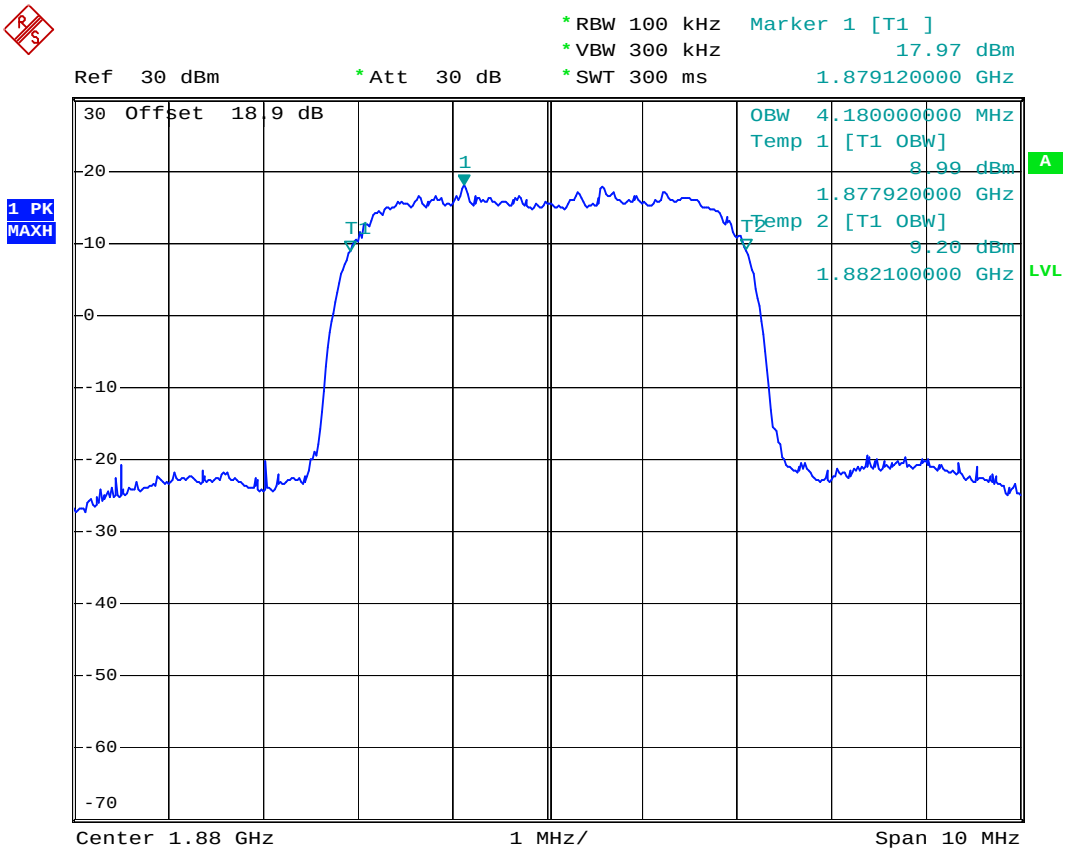
Date: 9.SEP.2007 11:23:53

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



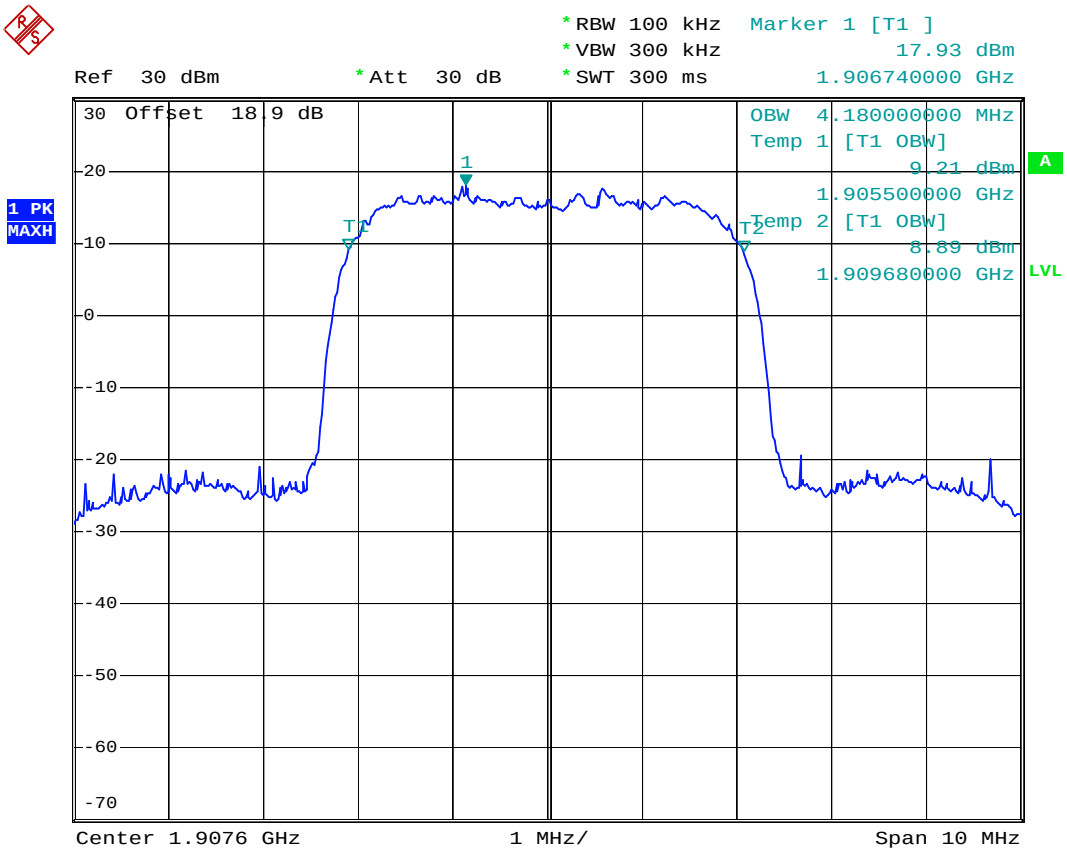
Date: 10.SEP.2007 00:11:07

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



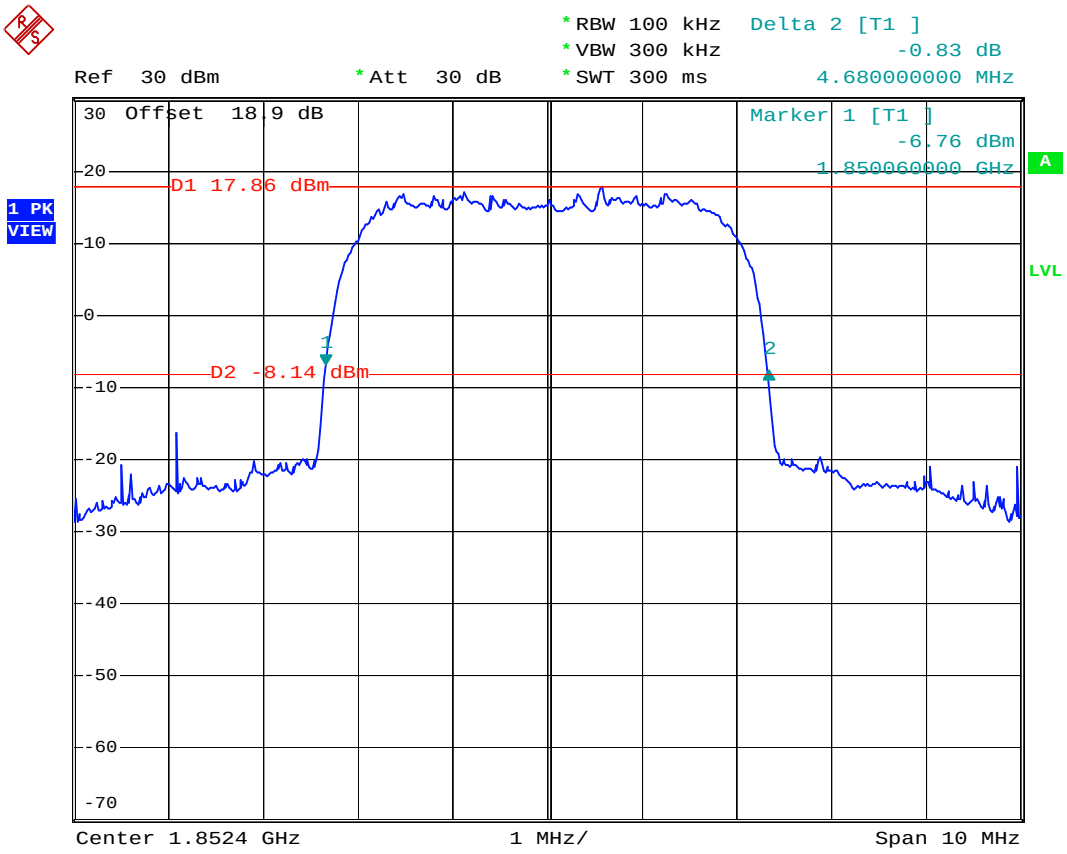
Date: 10.SEP.2007 00:12:13

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



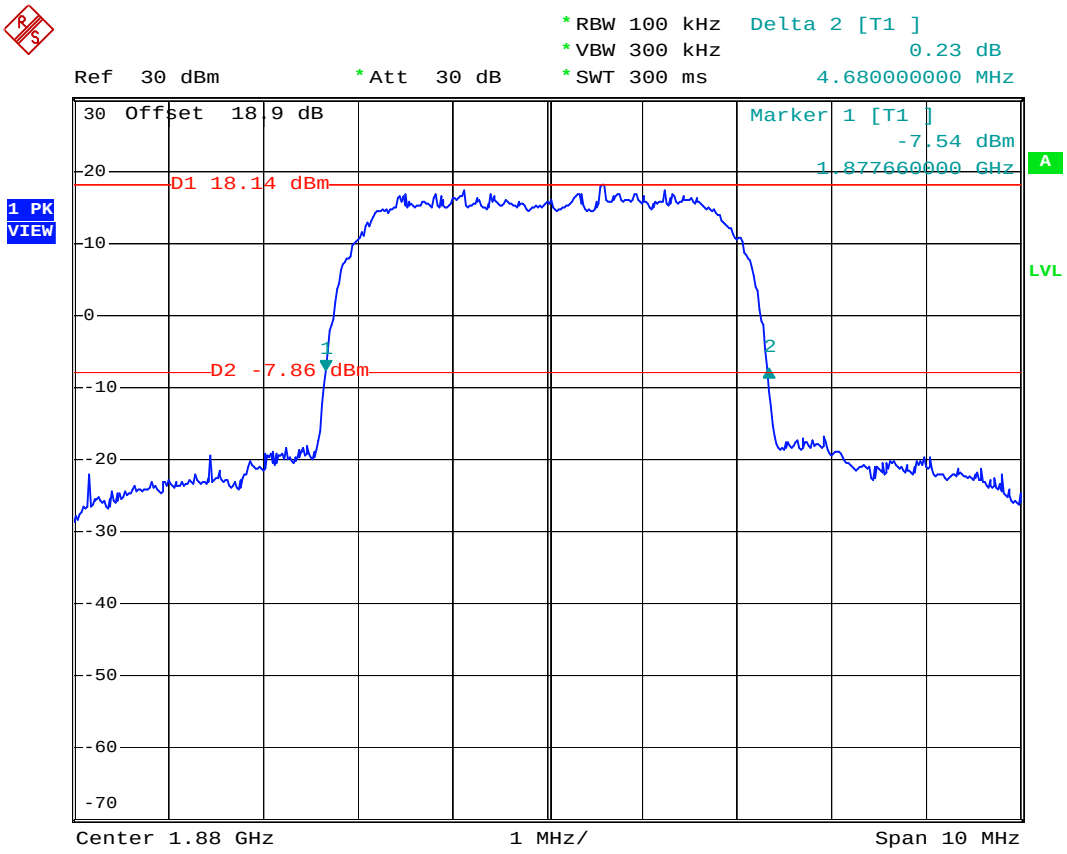
Date: 10.SEP.2007 00:10:15

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

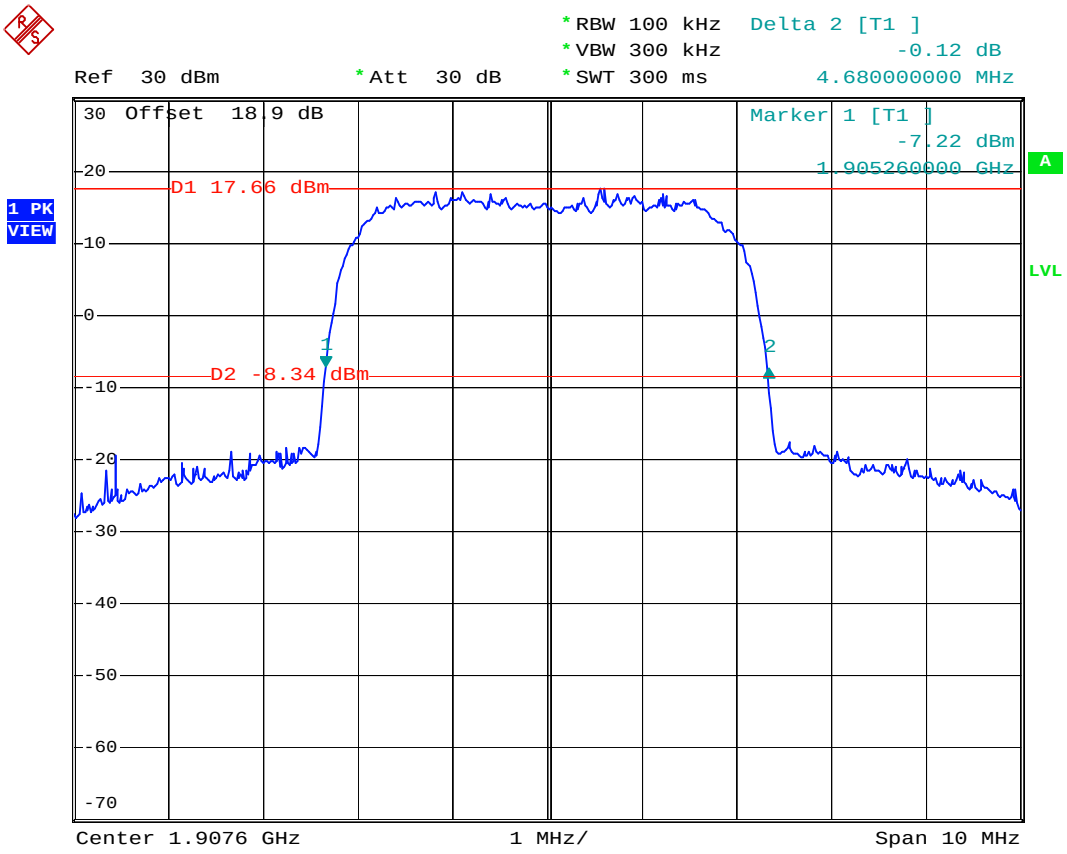


Date: 10.SEP.2007 00:18:44

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

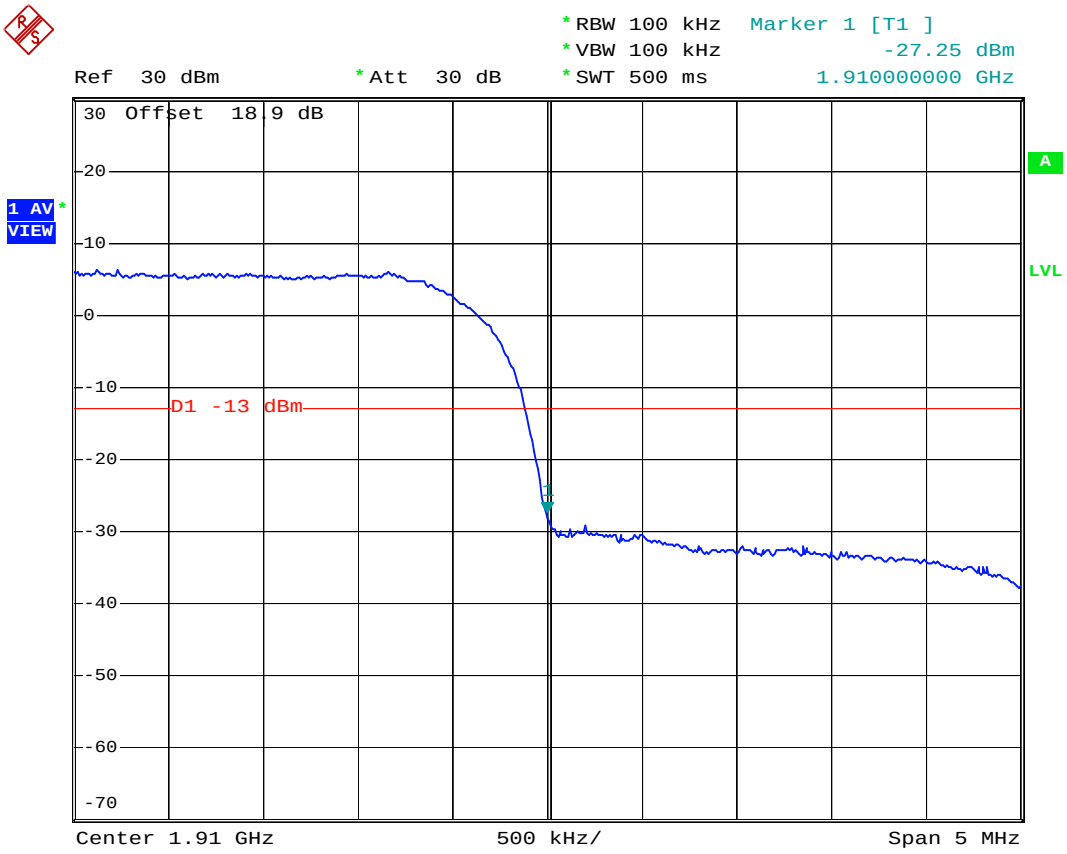


- Test Mode : WCDMA Band II (HSDPA) CH9538 26dB Bandwidth
- Power State : High



Date: 10.SEP.2007 00:17:23

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



Date: 9.SEP.2007 11:17:28

4.5 Conducted Emission

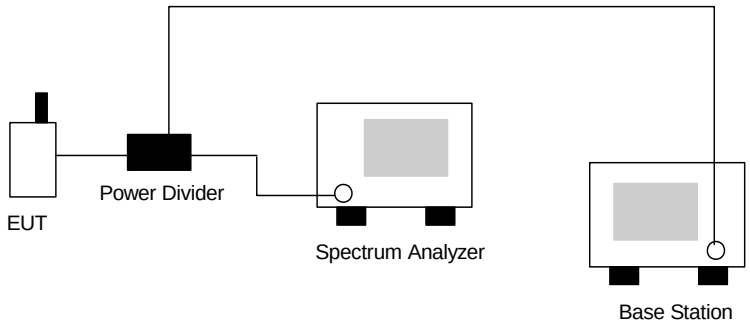
4.5.1 Measurement Instruments

As described in chapter 5 of this test report.

4.5.2 Test Procedure

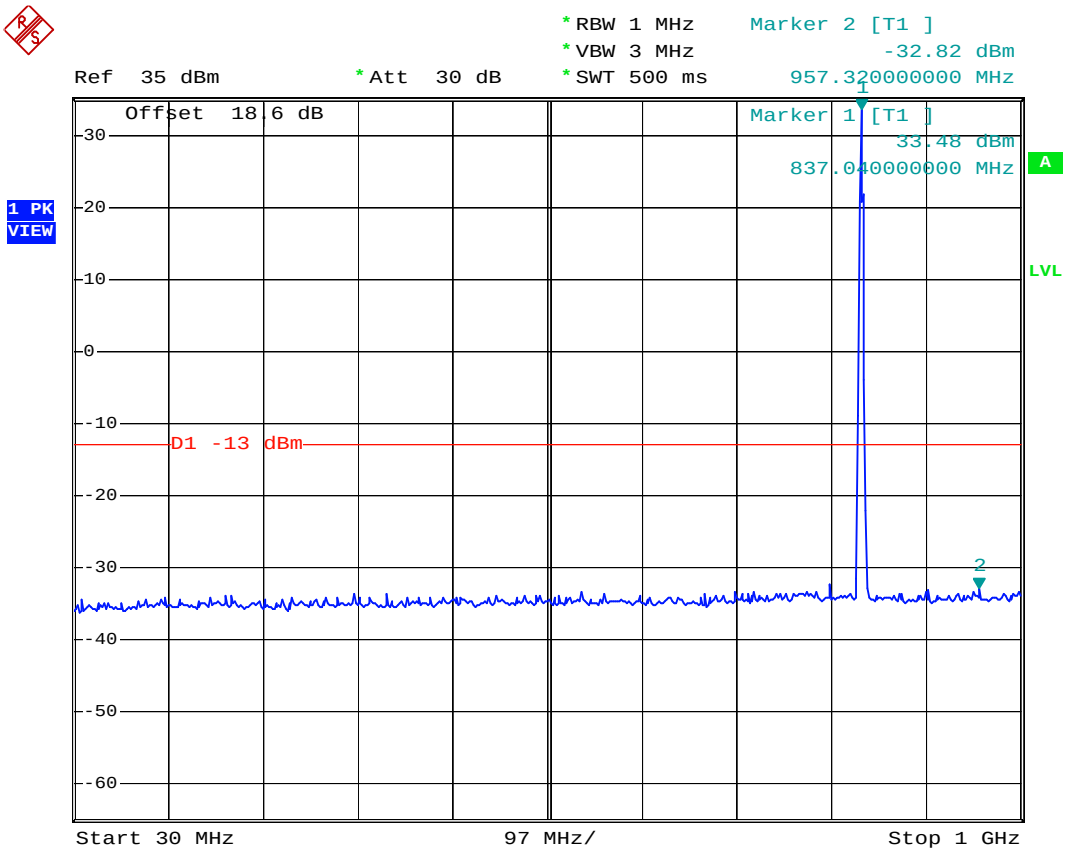
1. The EUT was connected to Spectrum Analyzer and Base Station via power divider.
2. The middle channel for the highest RF power within the transmitting frequency was measured.
3. The conducted spurious emission for the whole frequency range was taken.

4.5.3 Test Setup Layout



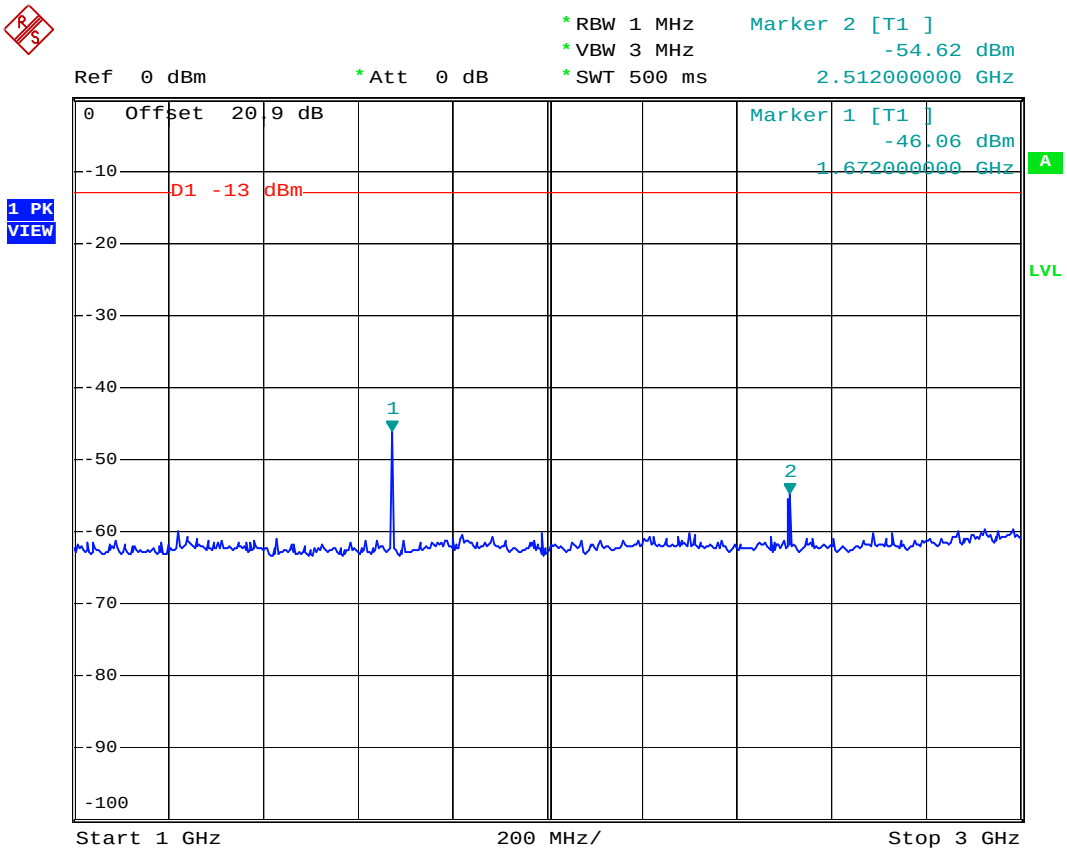
4.5.4 Test Result

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



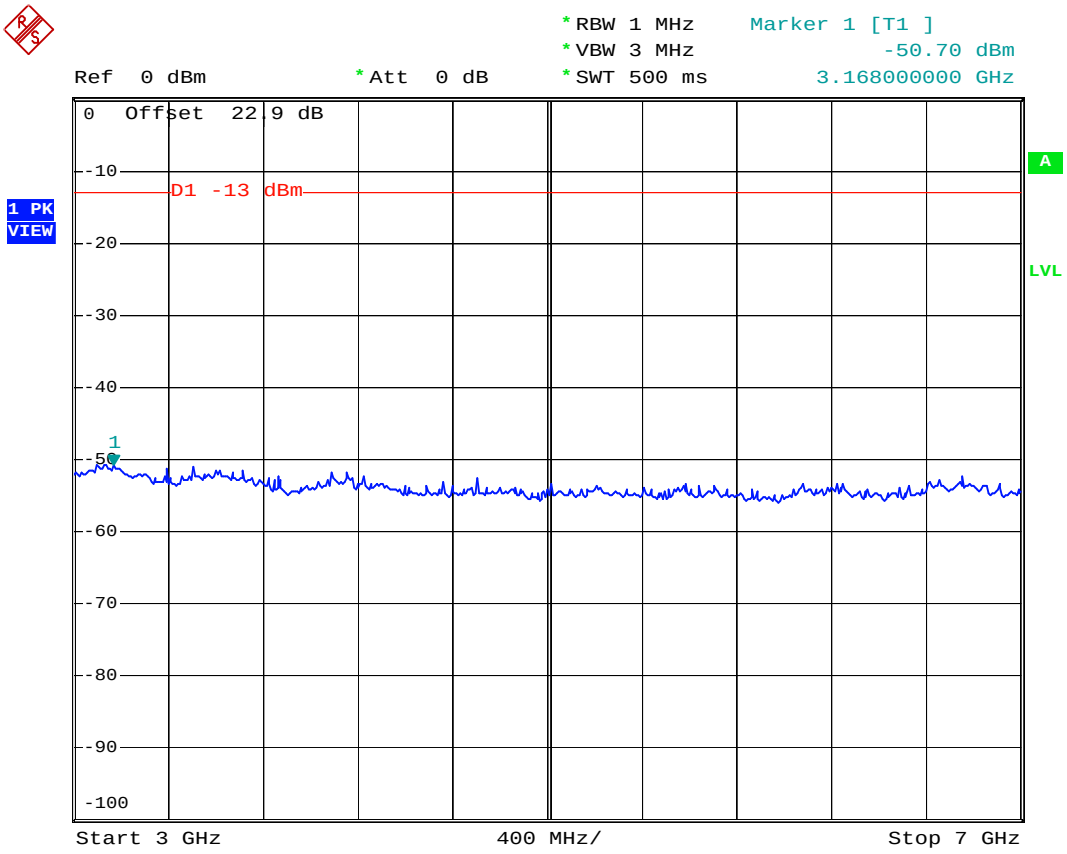
Date: 10.SEP.2007 04:02:42

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



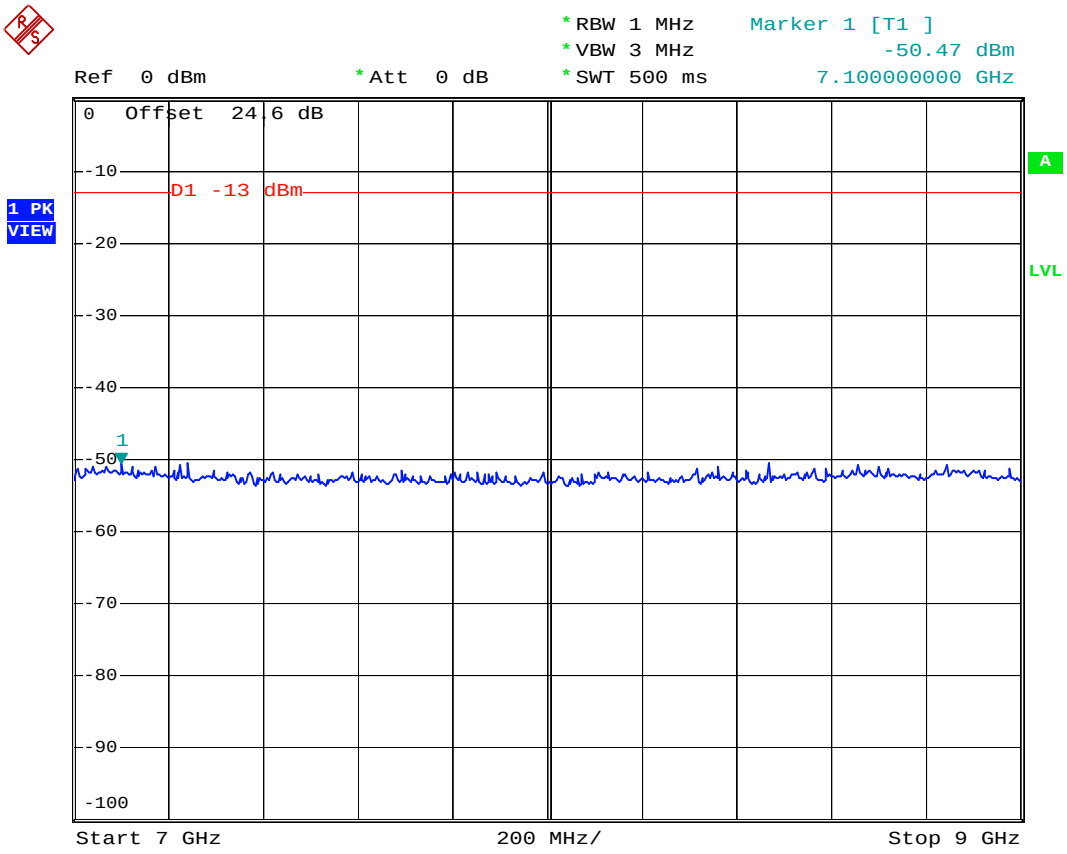
Date: 10.SEP.2007 03:54:27

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



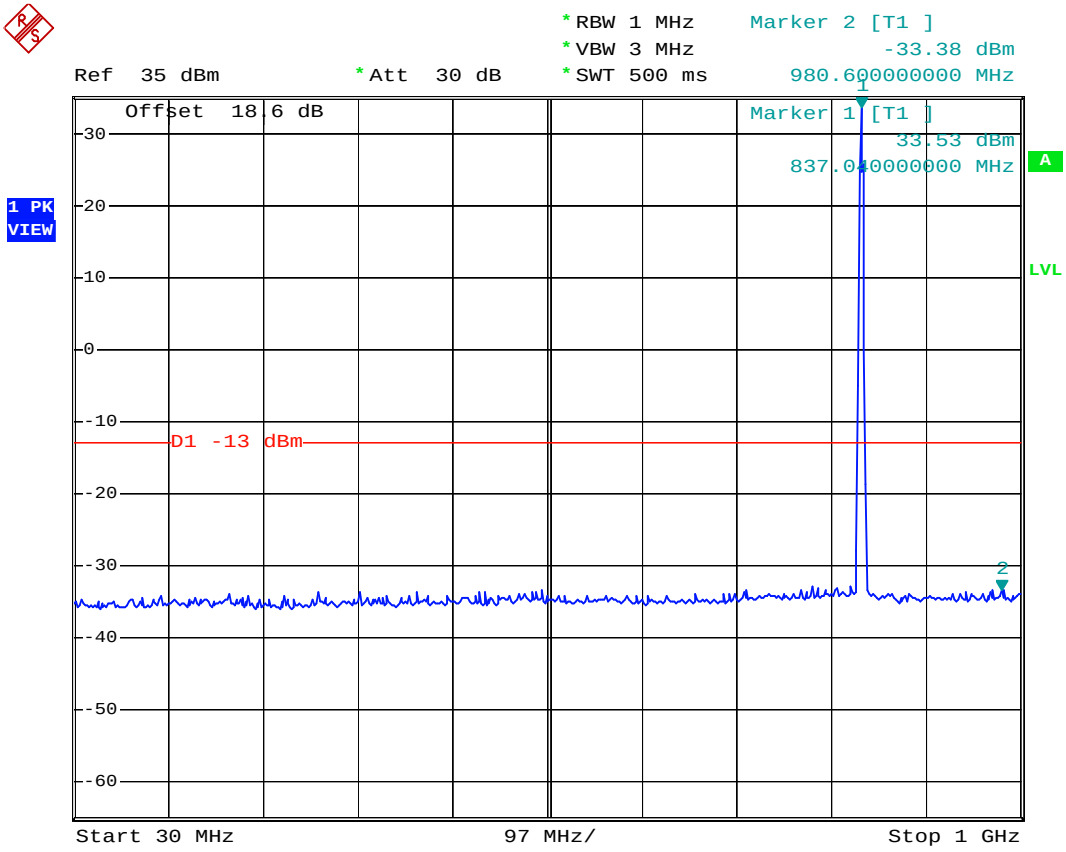
Date: 10.SEP.2007 03:47:47

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



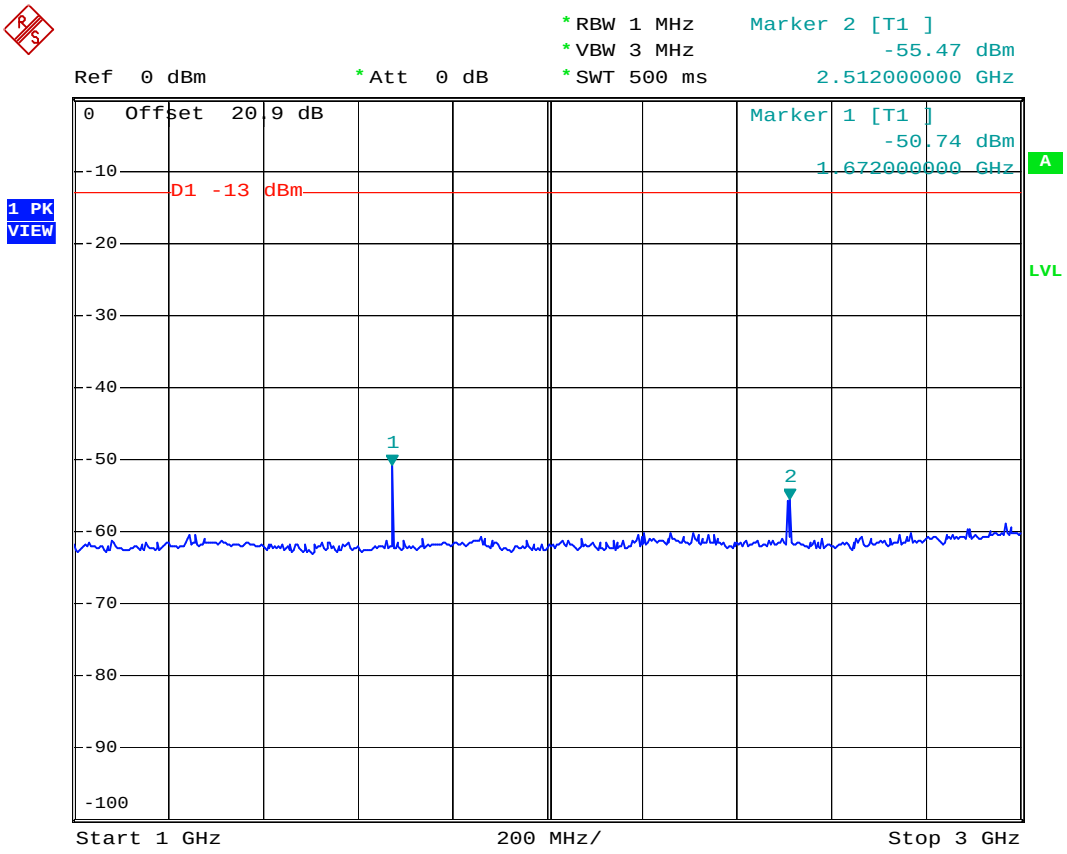
Date: 10.SEP.2007 03:34:57

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



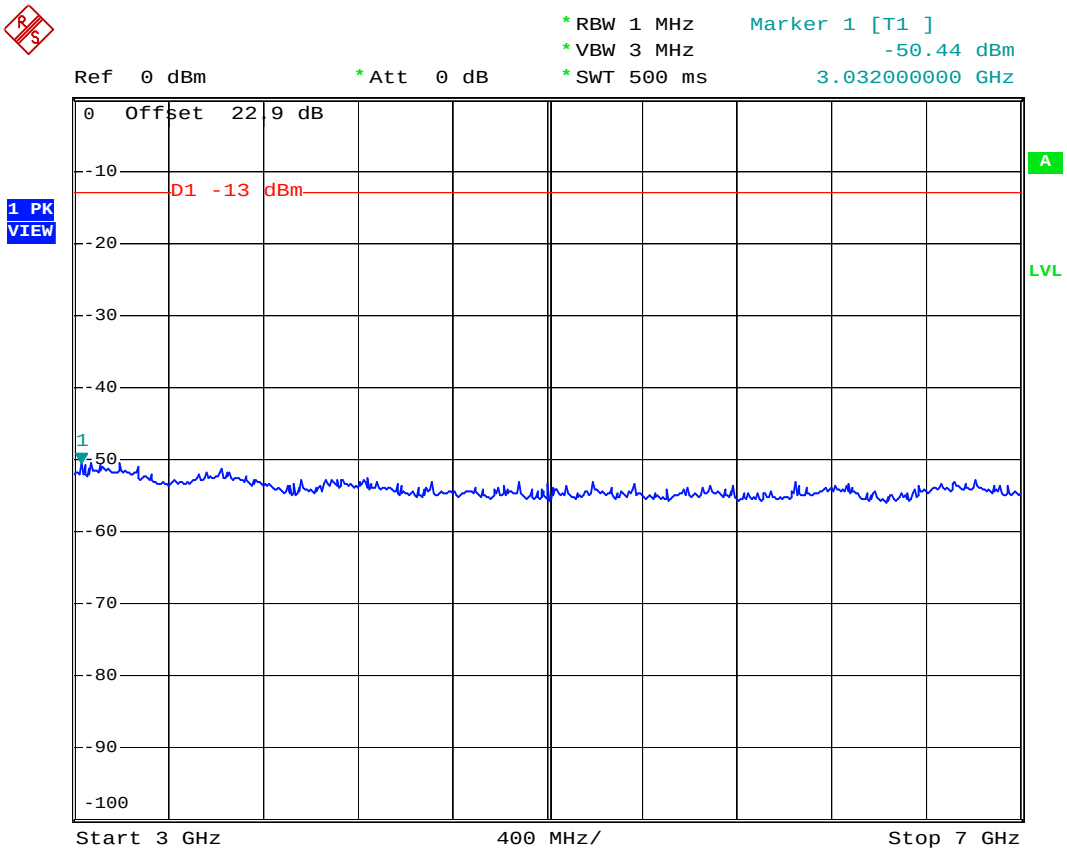
Date: 10.SEP.2007 04:01:18

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



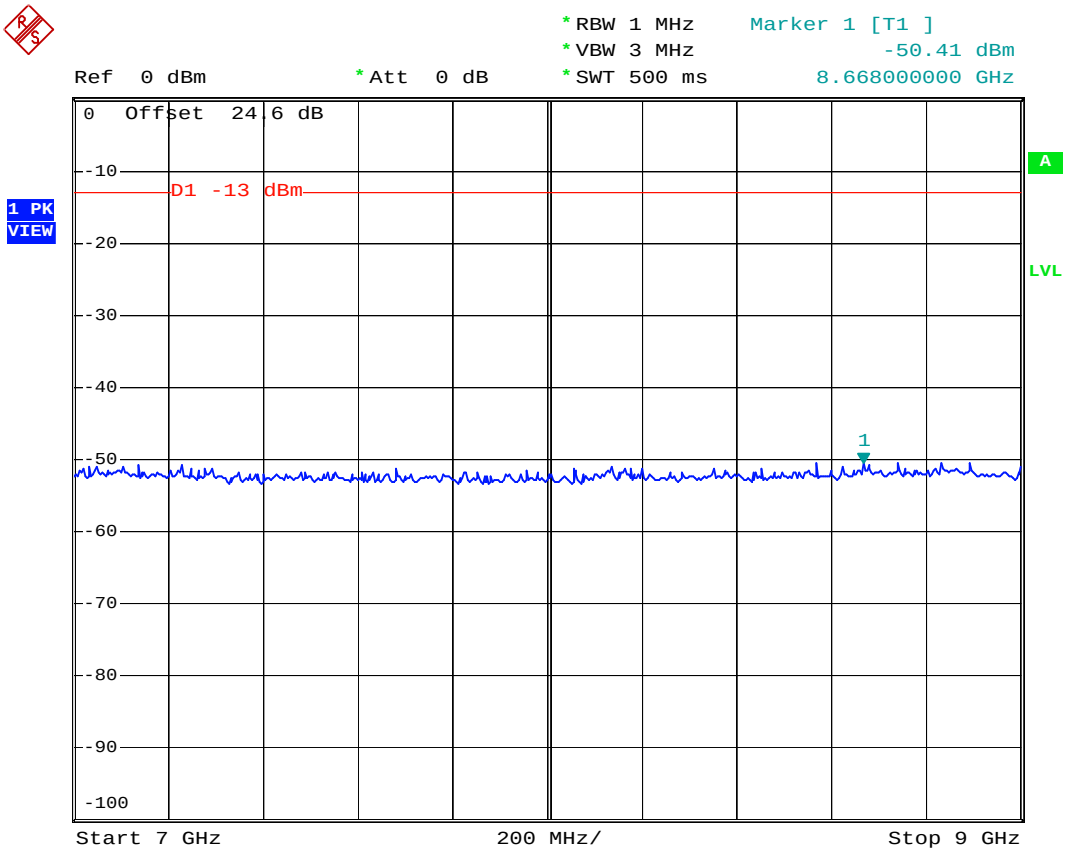
Date: 10.SEP.2007 03:53:11

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



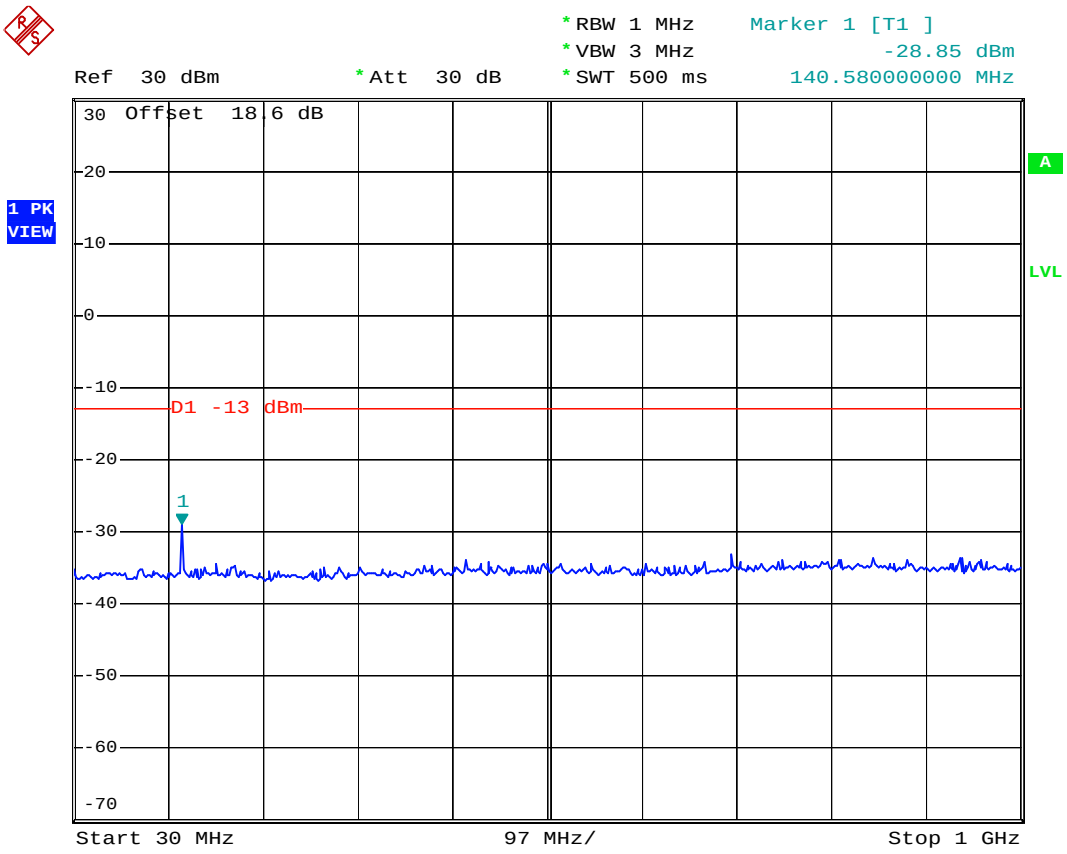
Date: 10.SEP.2007 03:48:50

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



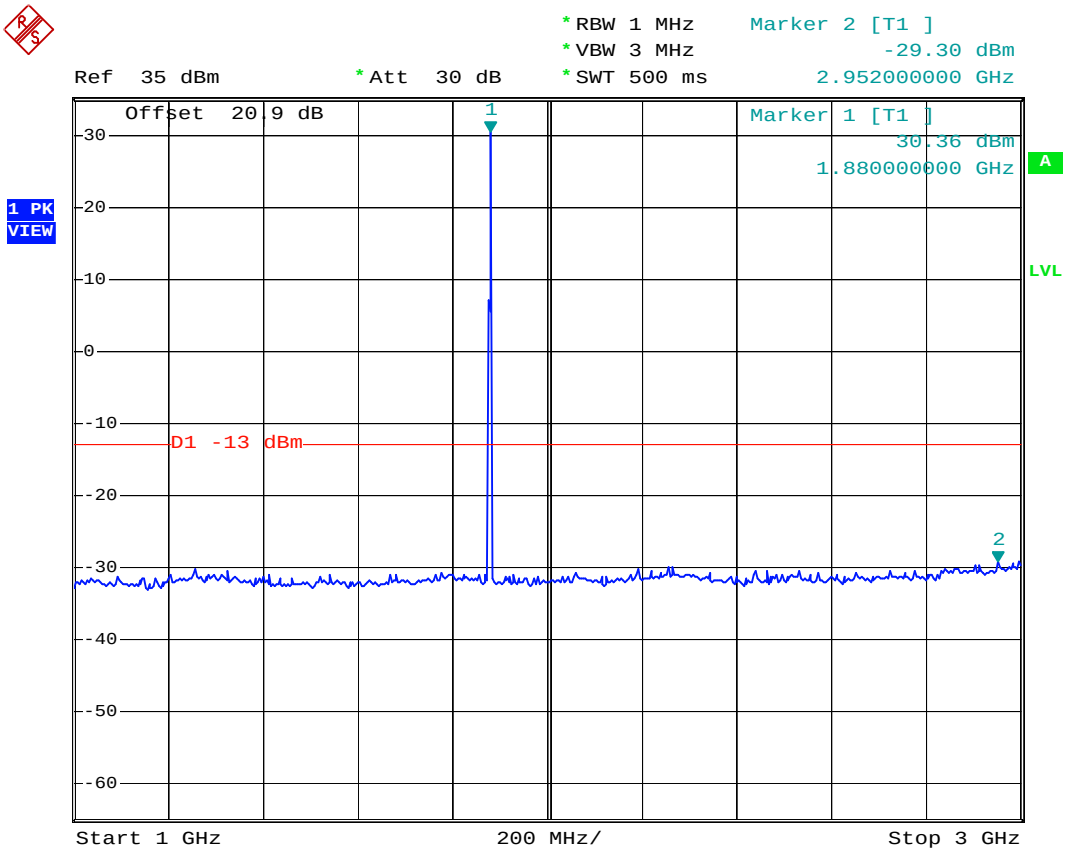
Date: 10.SEP.2007 03:34:04

- Mode 3
- Test Mode : PCS1900 (GSM) CH661
- Frequency Range : 30M-1G



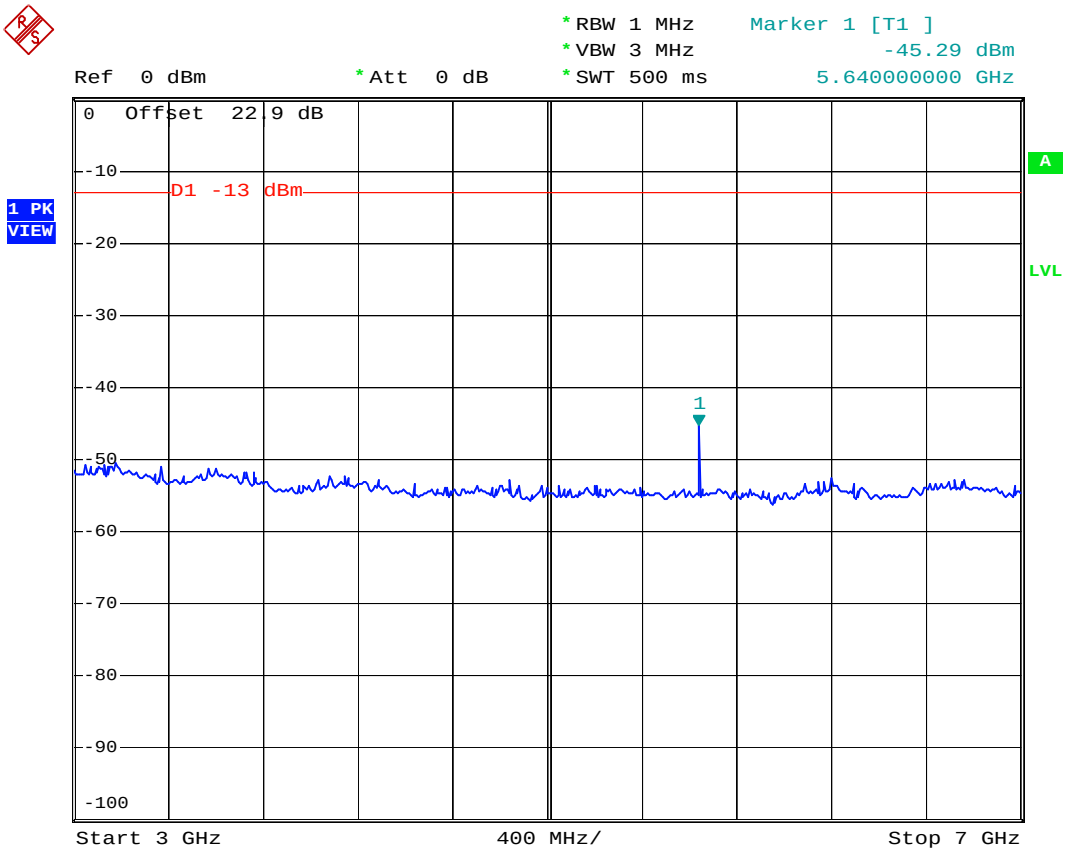
Date: 10.SEP.2007 03:59:52

- Test Mode : PCS1900 (GSM) CH661
- Frequency Range : 1G-3G



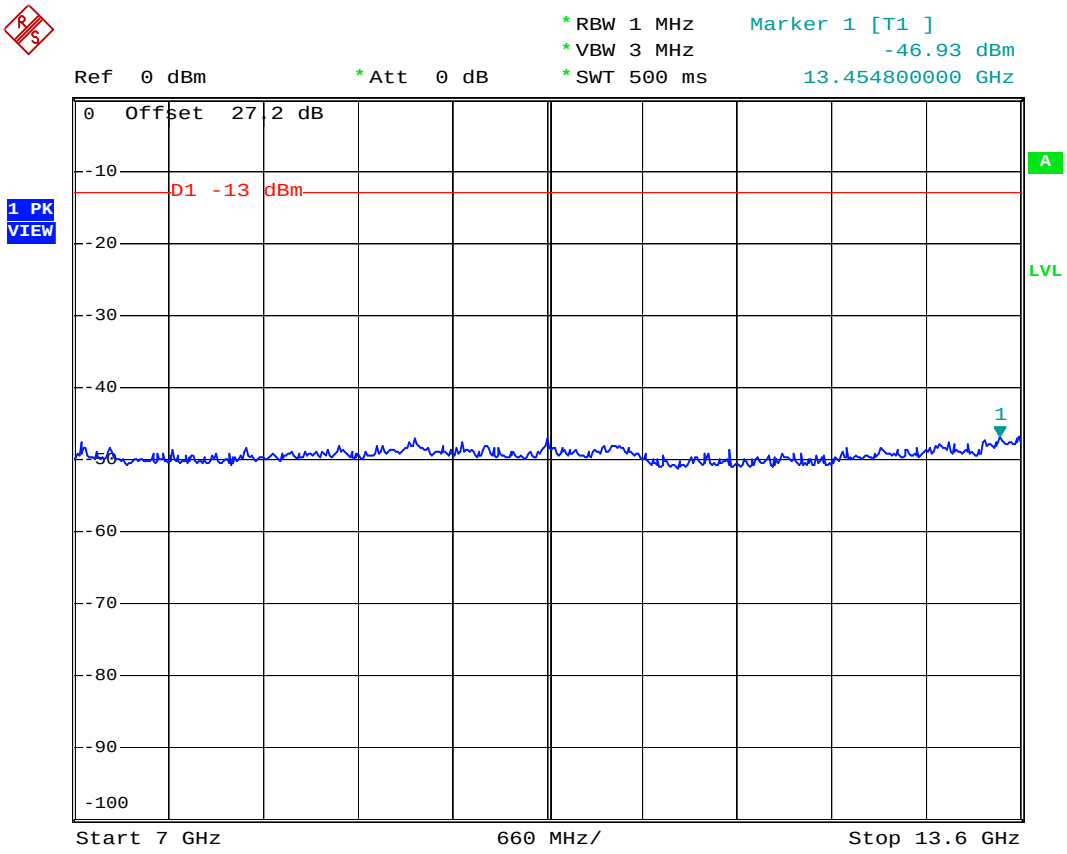
Date: 10.SEP.2007 03:56:32

- Test Mode : PCS1900 (GSM) CH661
- Frequency Range : 3G-7G



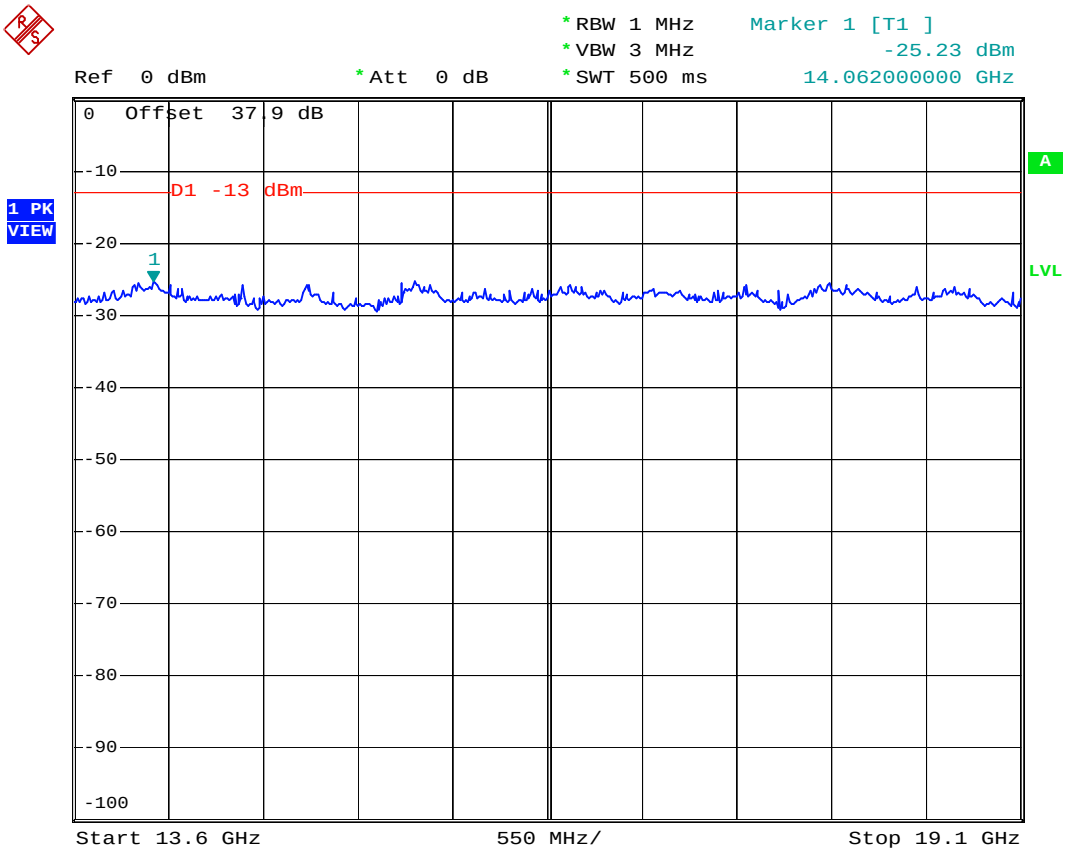
Date: 10.SEP.2007 03:46:23

- Test Mode : PCS1900 (GSM) CH661
- Frequency Range : 7G-13.6G



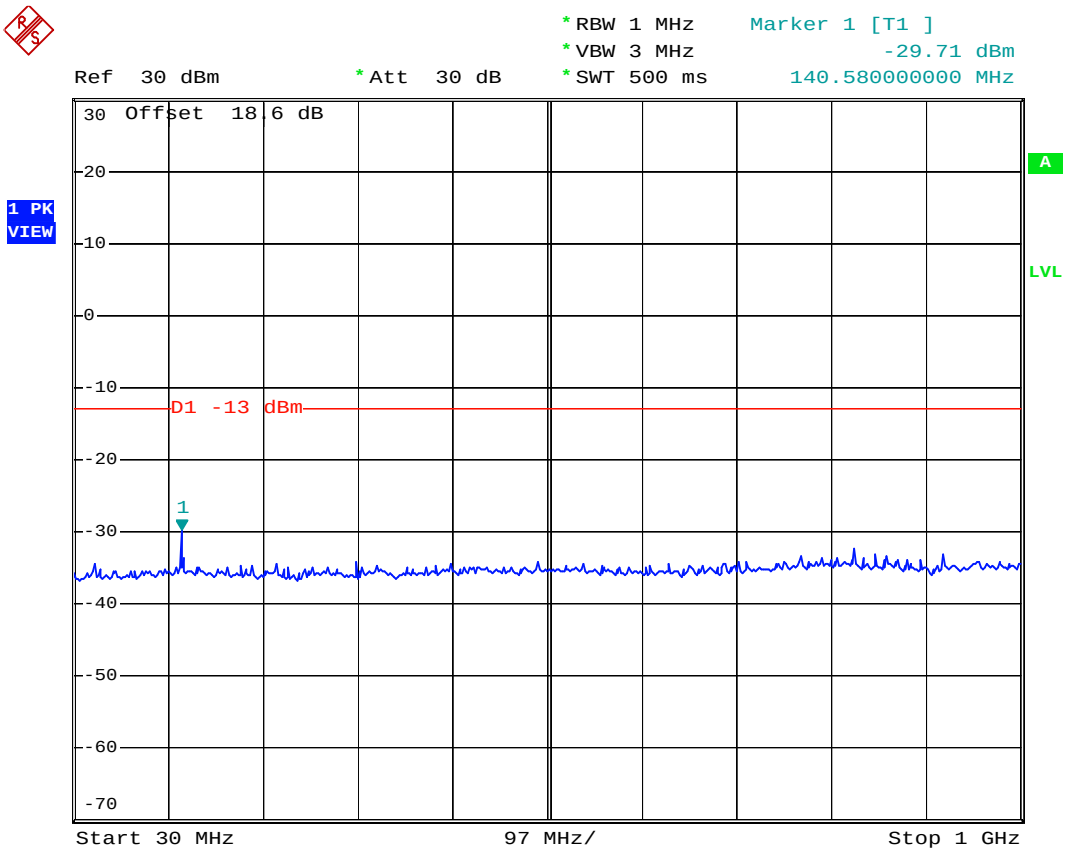
Date: 10.SEP.2007 03:43:11

- Test Mode : PCS1900 (GSM) CH661
- Frequency Range : 13.6G-19.1G



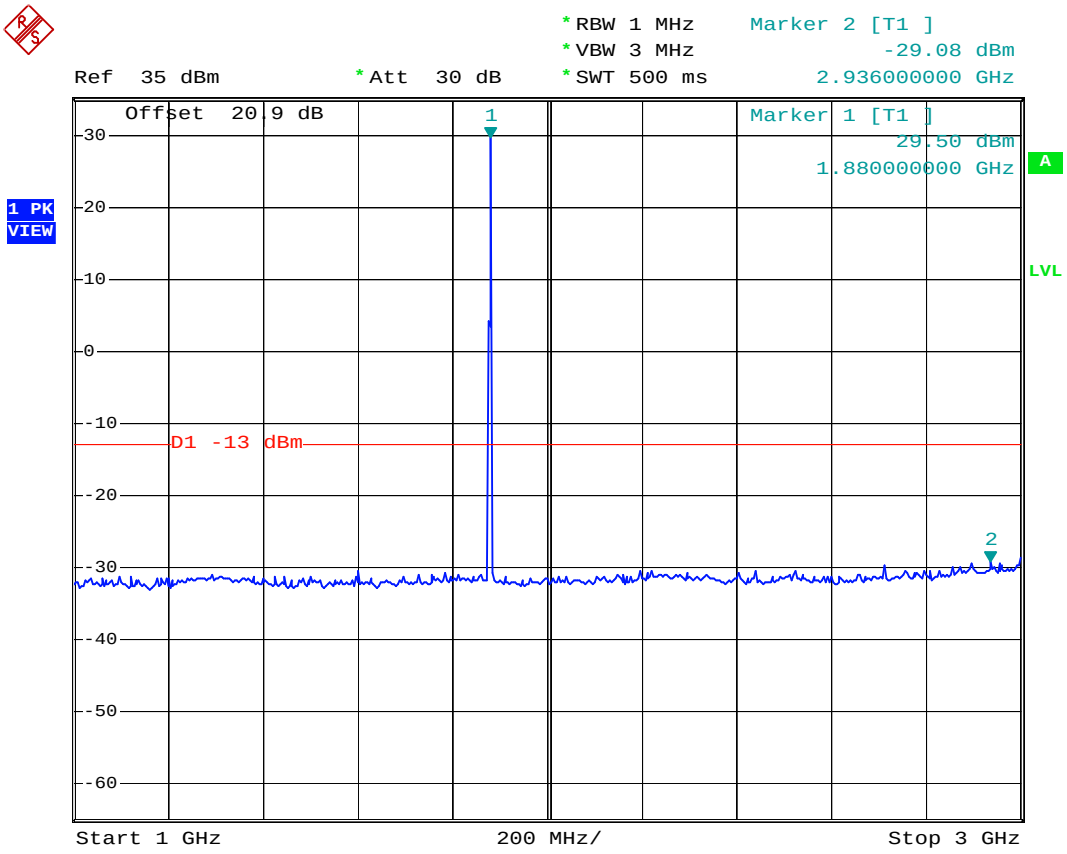
Date: 10.SEP.2007 03:26:50

- Mode 4
- Test Mode : PCS1900 (EDGE) CH661
- Frequency Range : 30M-1G



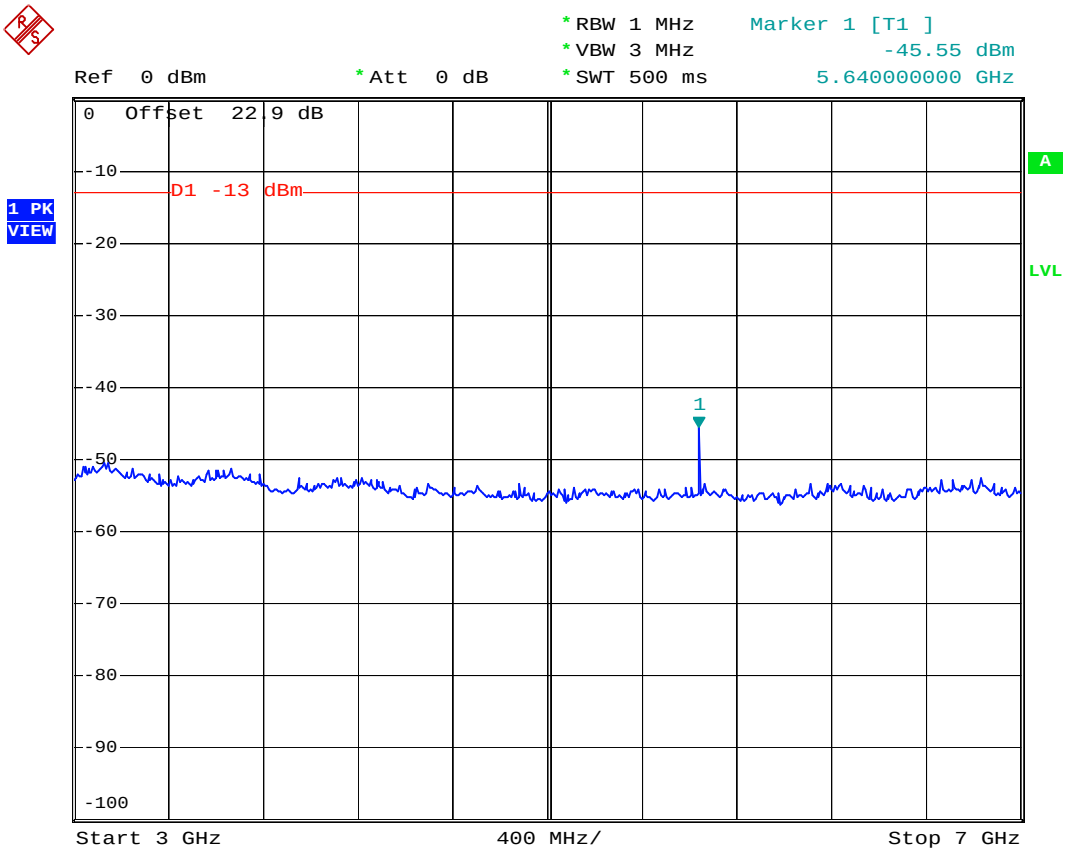
Date: 10.SEP.2007 03:59:05

- Test Mode : PCS1900 (EDGE) CH661
- Frequency Range : 1G-3G



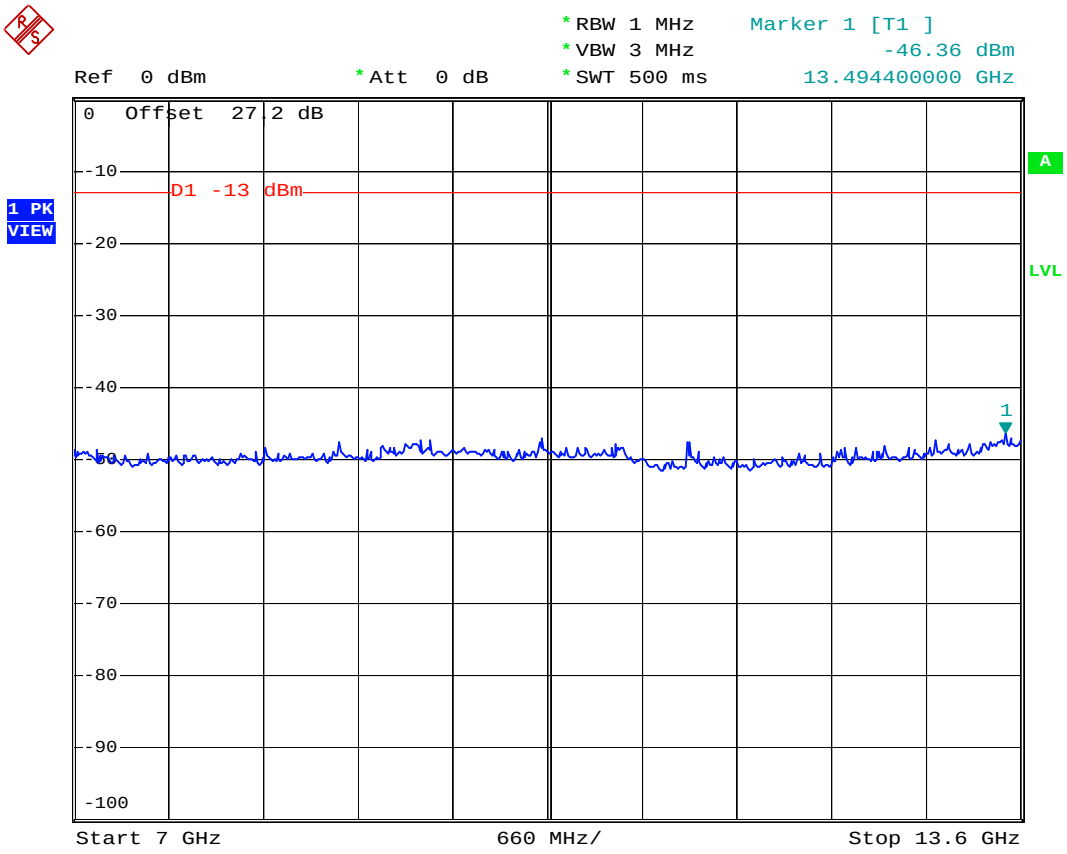
Date: 10.SEP.2007 03:57:28

- Test Mode : PCS1900 (EDGE) CH661
- Frequency Range : 3G-7G



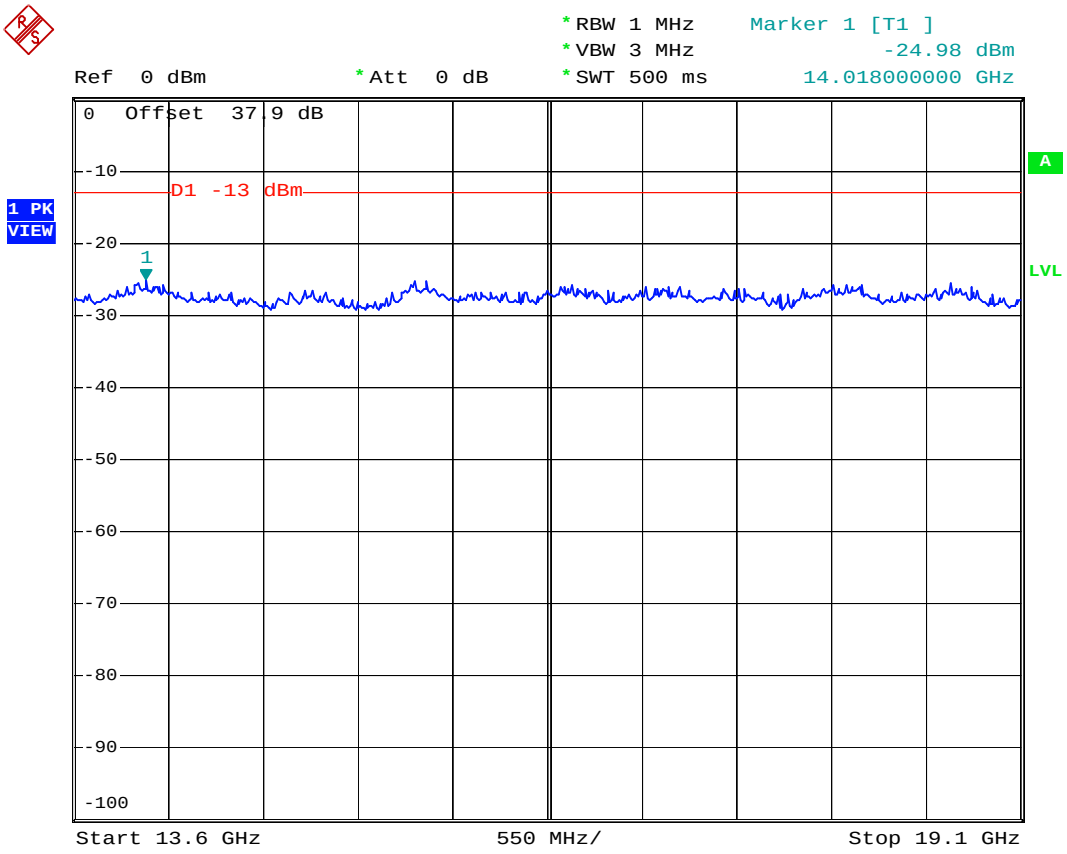
Date: 10.SEP.2007 03:44:49

- Test Mode : PCS1900 (EDGE) CH661
- Frequency Range : 7G-13.6G



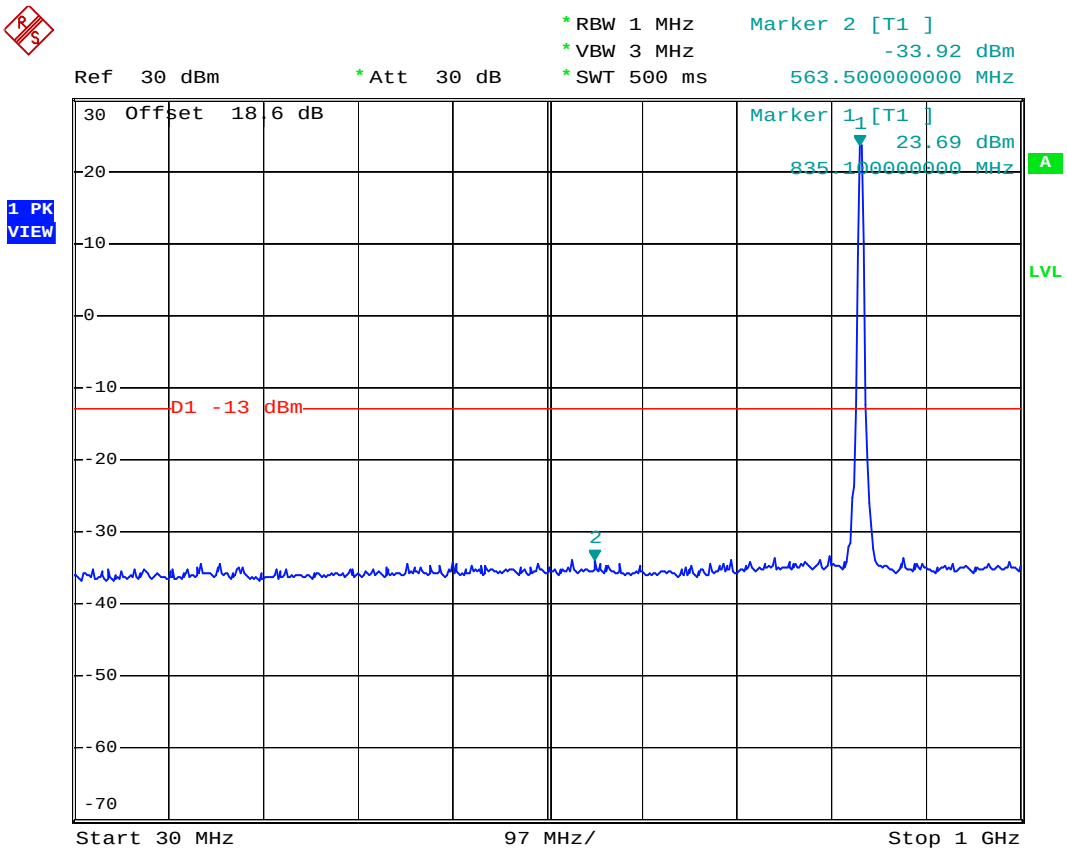
Date: 10.SEP.2007 03:42:16

- Test Mode : PCS1900 (EDGE) CH661
- Frequency Range : 13.6G-19.1G



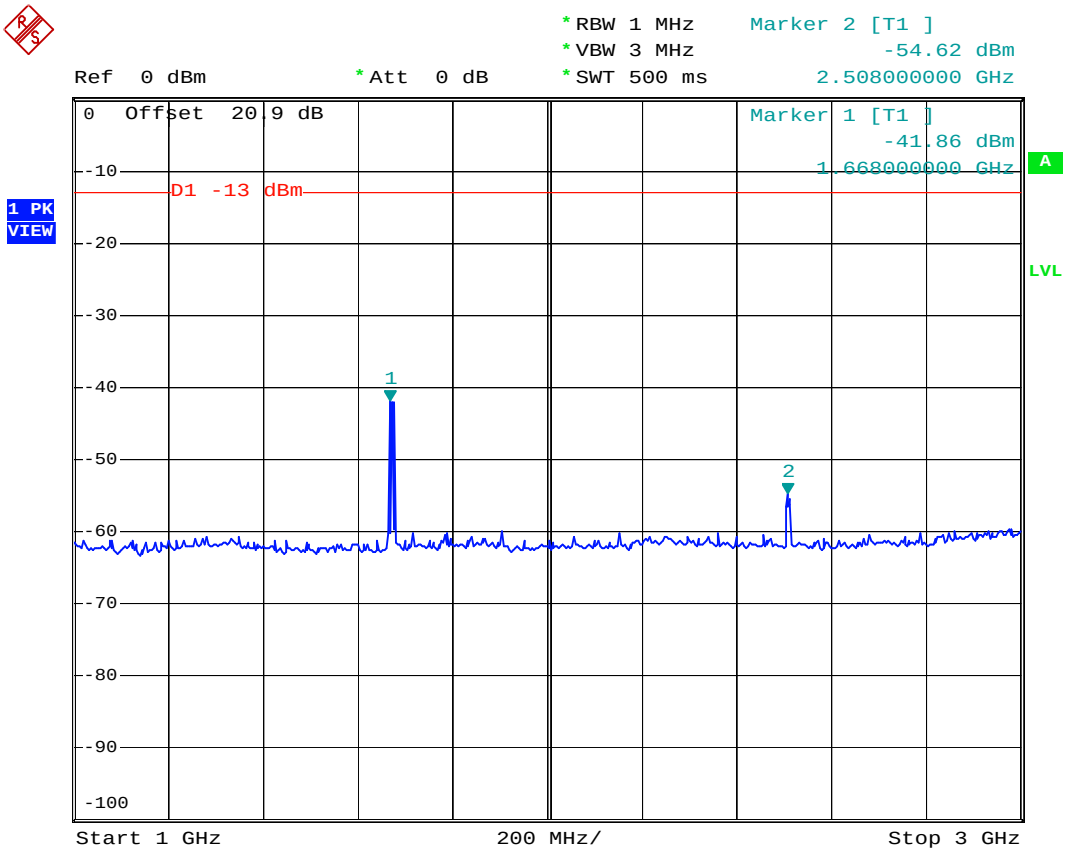
Date: 10.SEP.2007 03:27:36

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



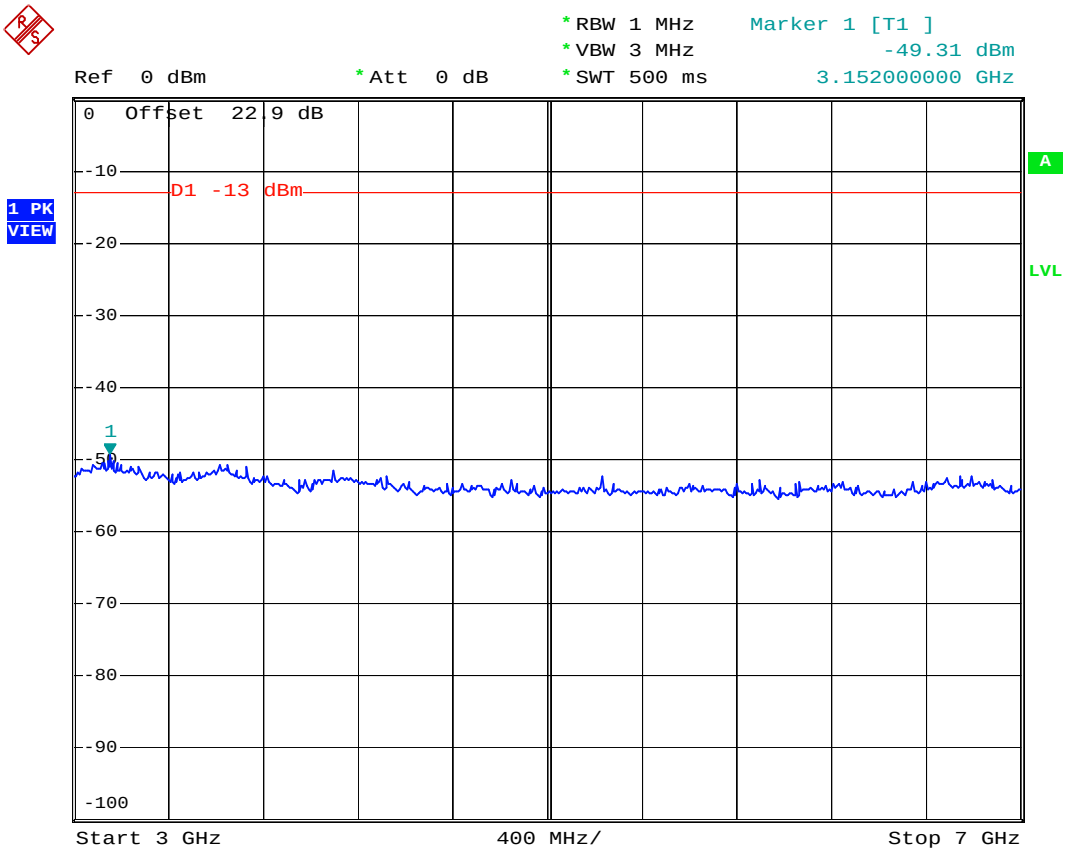
Date: 9.SEP.2007 12:22:02

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



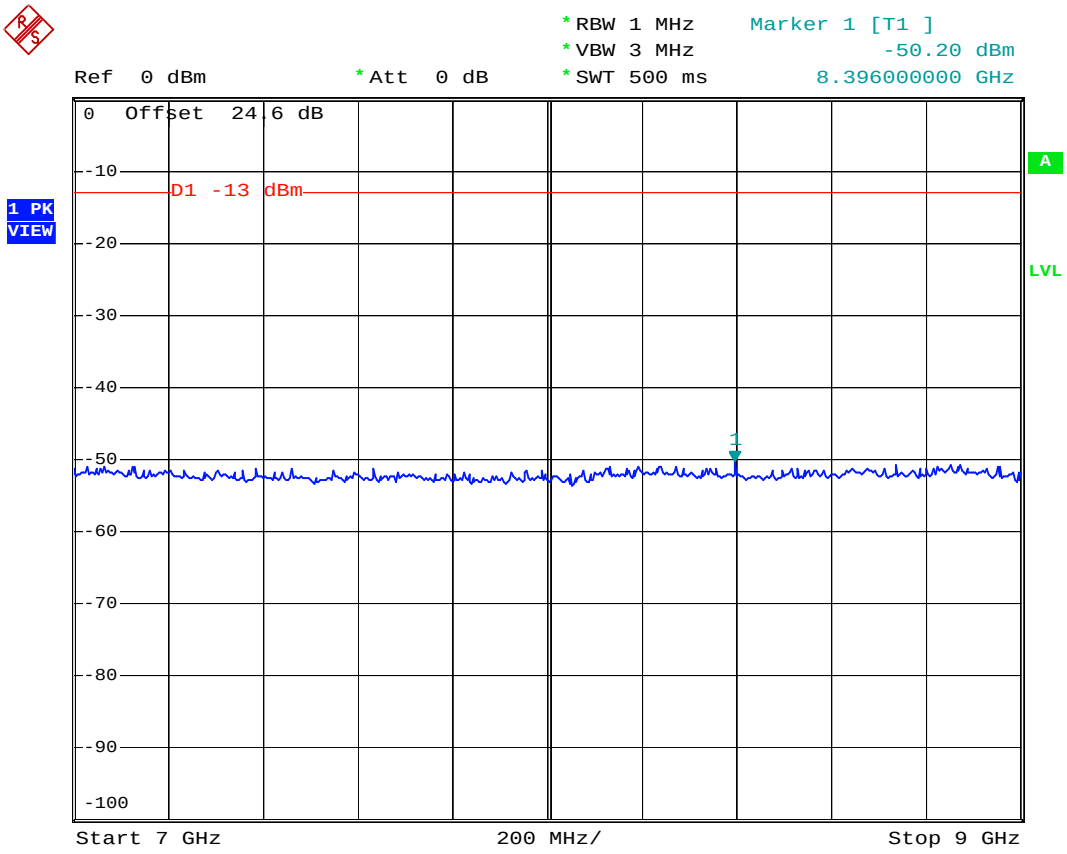
Date: 9.SEP.2007 12:27:21

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



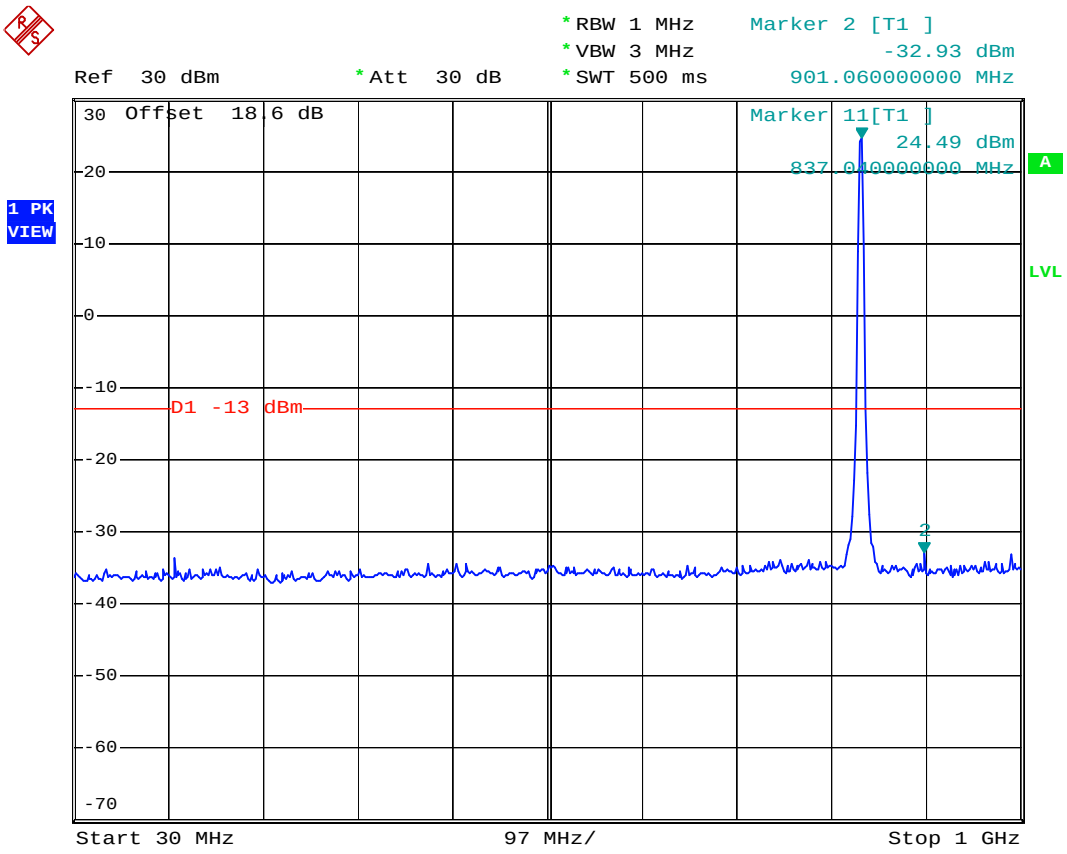
Date: 10.SEP.2007 03:04:46

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



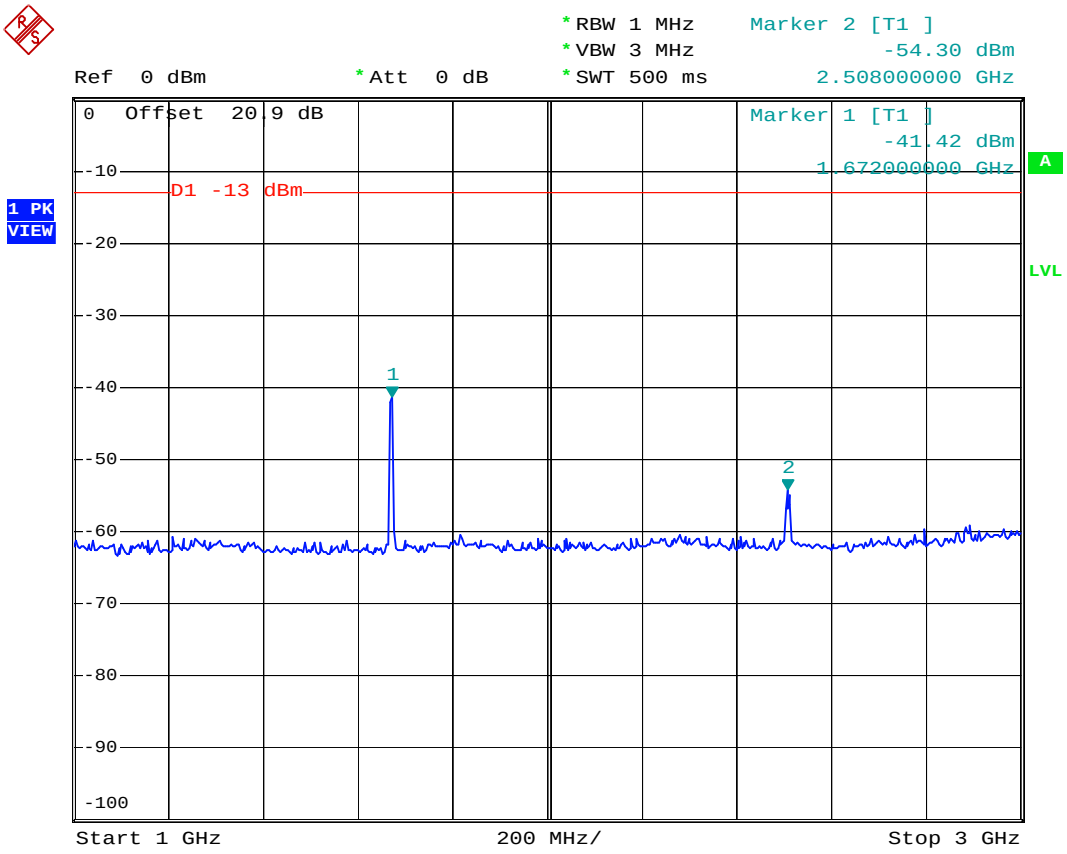
Date: 10.SEP.2007 03:08:42

- Mode 6
- Test Mode : WCDMA Band V (HSDPA) CH4182
- Frequency Range : 30M-1G



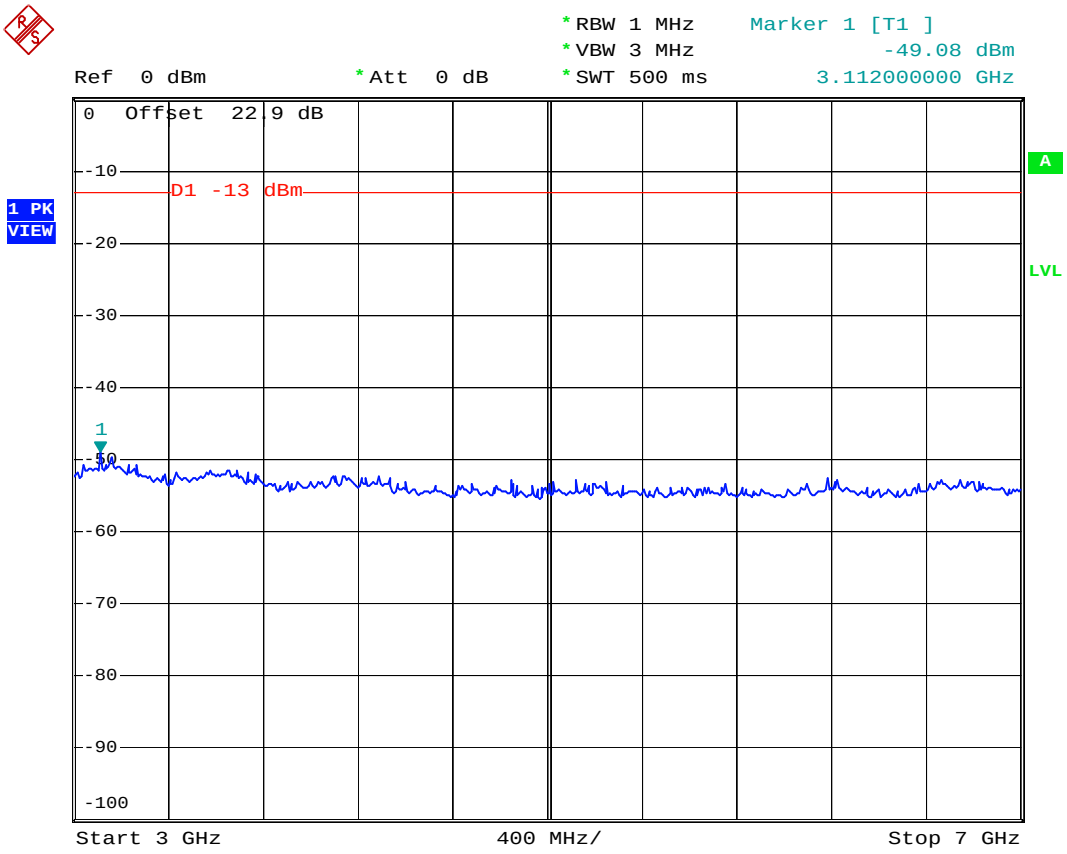
Date: 9.SEP.2007 12:23:01

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



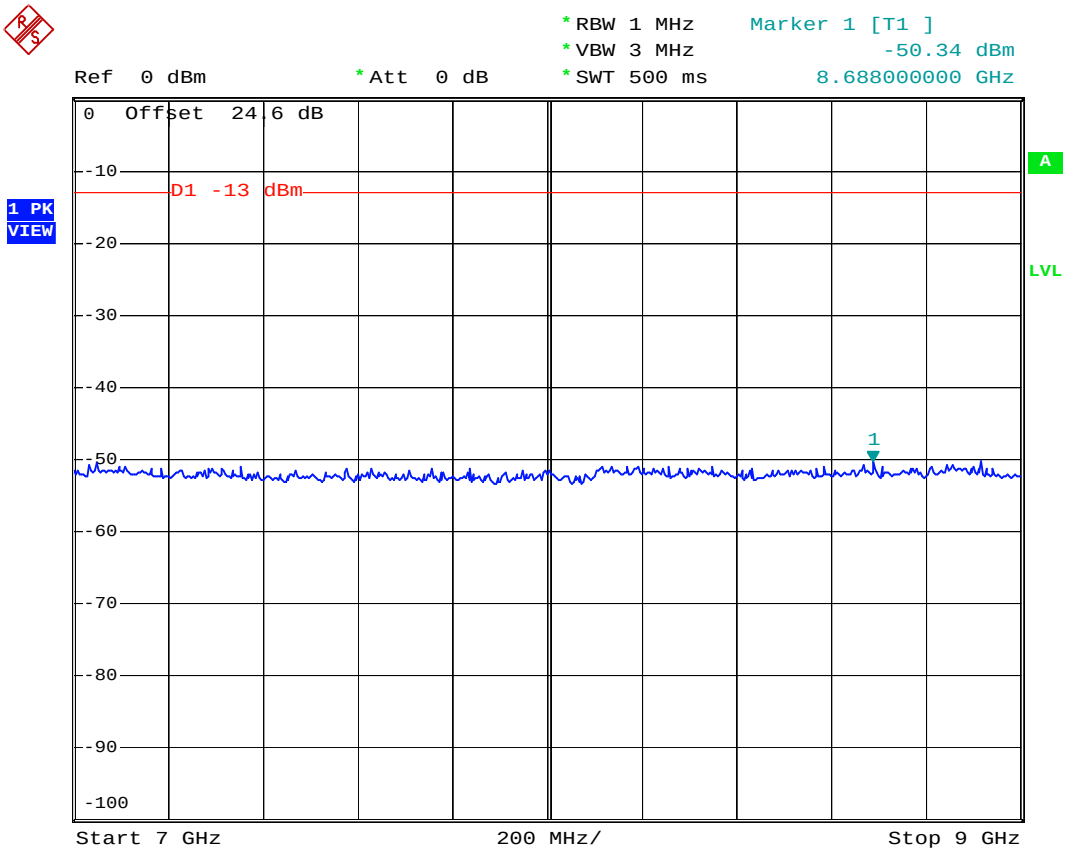
Date: 9.SEP.2007 12:28:02

- Test Mode : WCDMA Band V (HSDPA) CH4182
- Frequency Range : 3G-7G



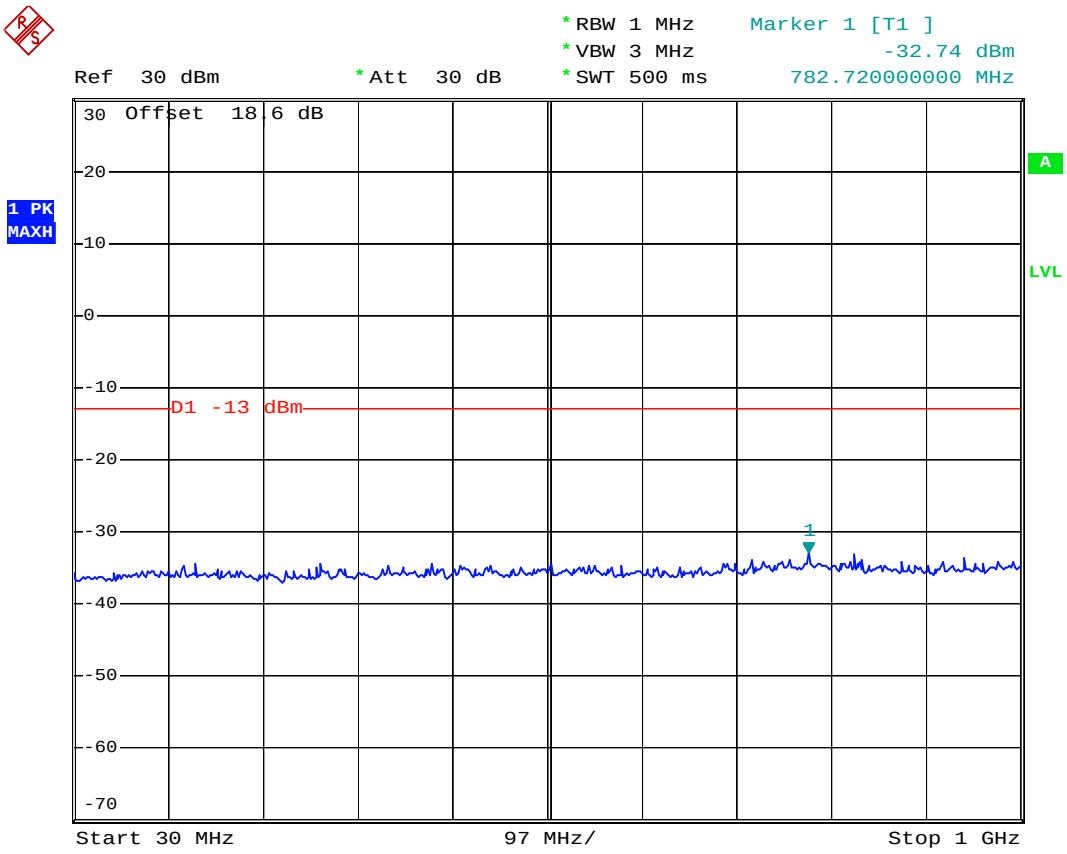
Date: 10.SEP.2007 03:05:35

- Test Mode : WCDMA Band V (HSDPA) CH4182
- Frequency Range : 7G-9G



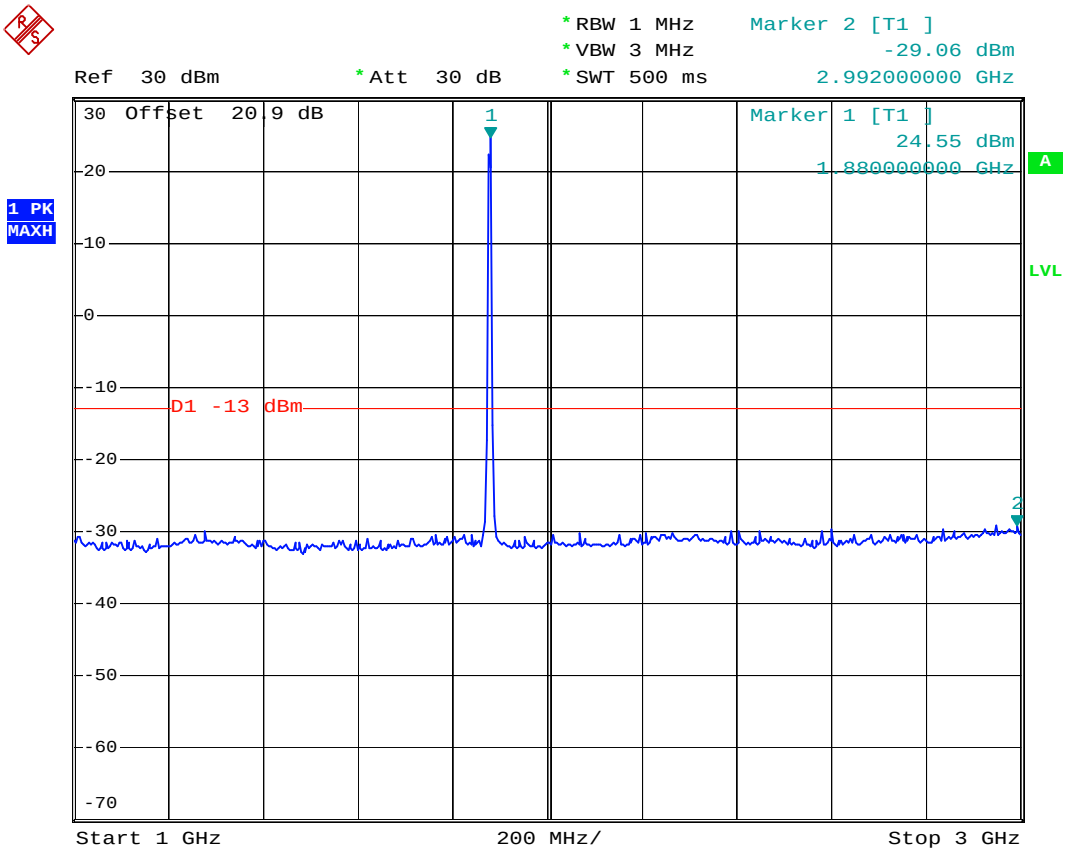
Date: 10.SEP.2007 03:07:28

- Mode 7
- Test Mode : WCDMA Band II CH9400
- Frequency Range : 30M-1G



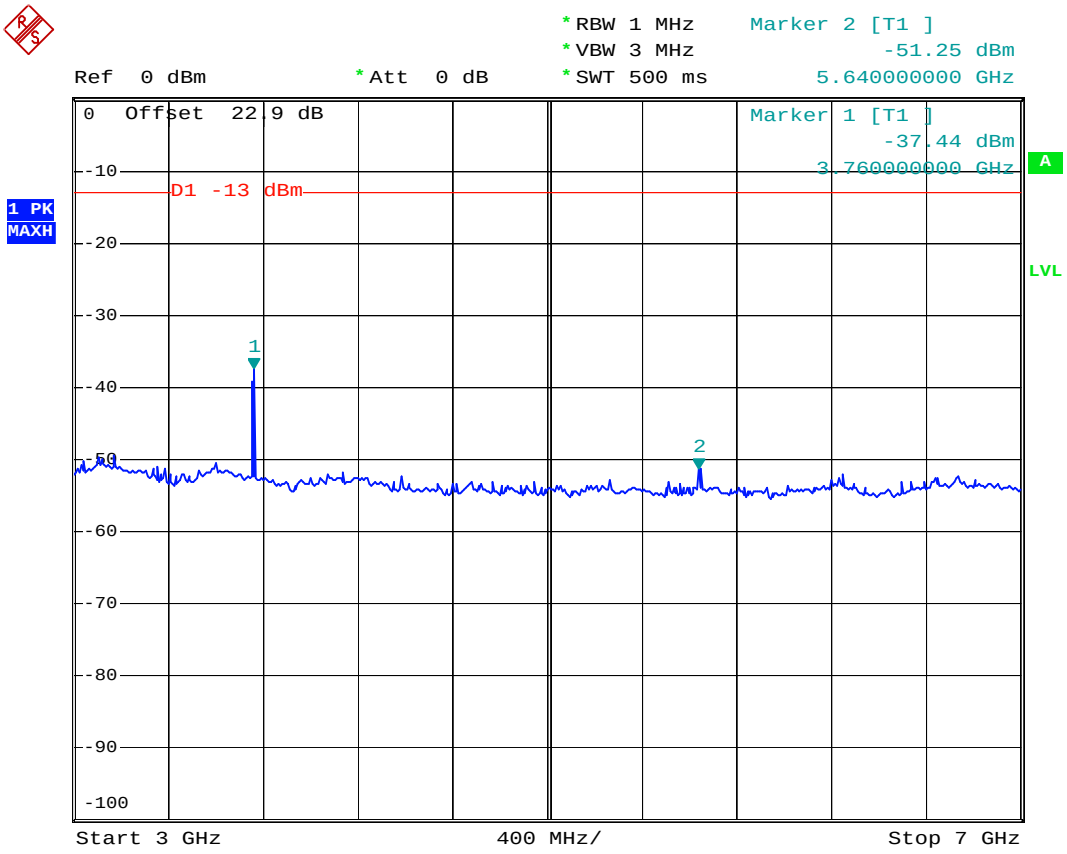
Date: 9.SEP.2007 12:17:50

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



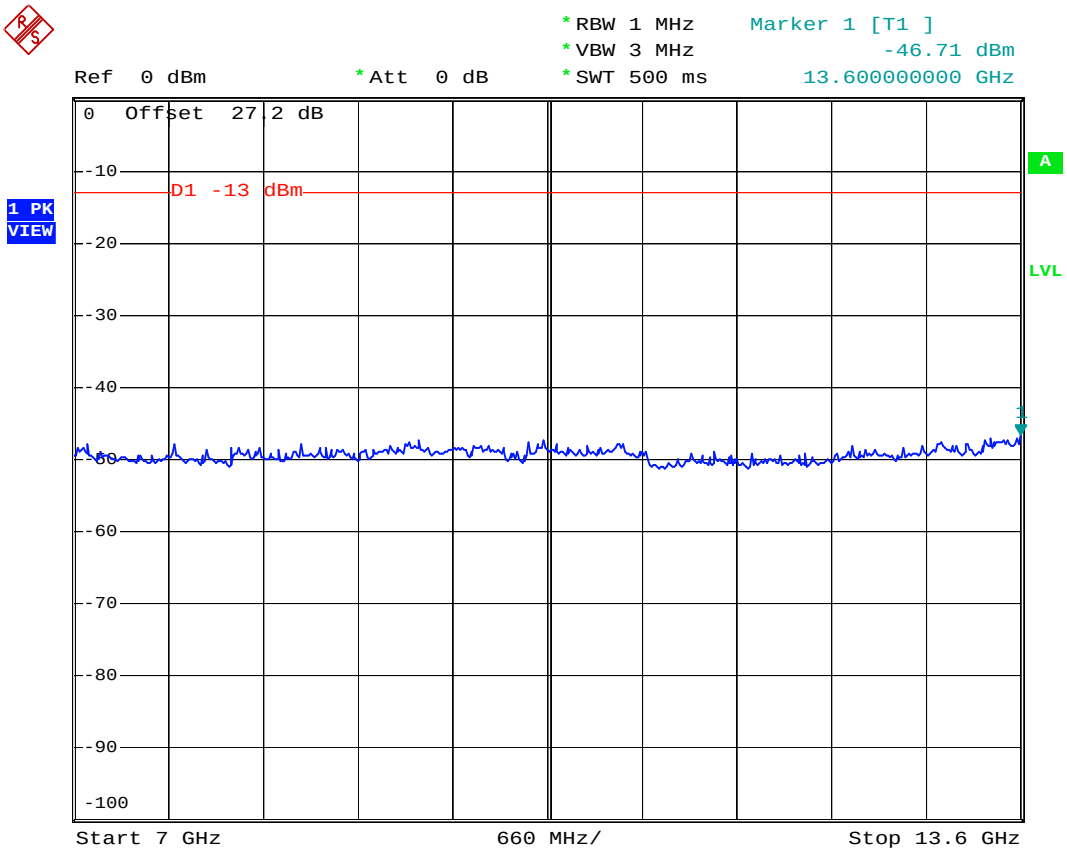
Date: 9.SEP.2007 12:24:56

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



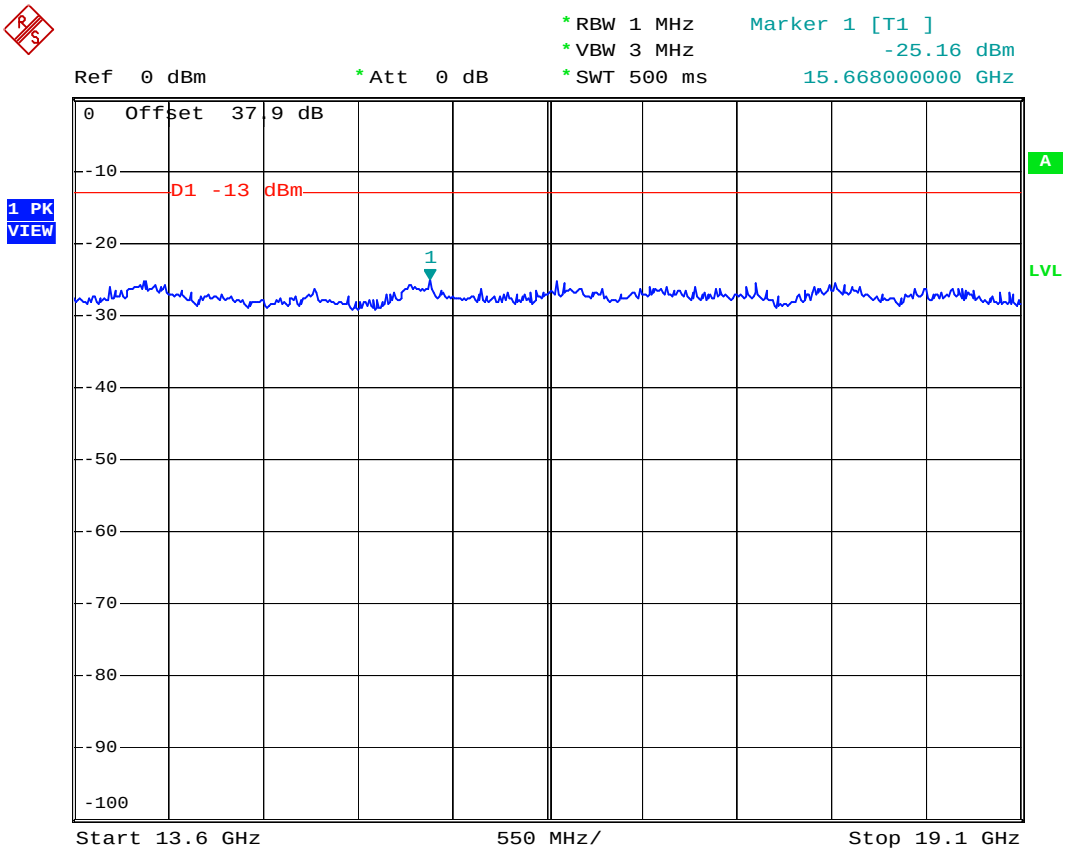
Date: 10.SEP.2007 03:03:26

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



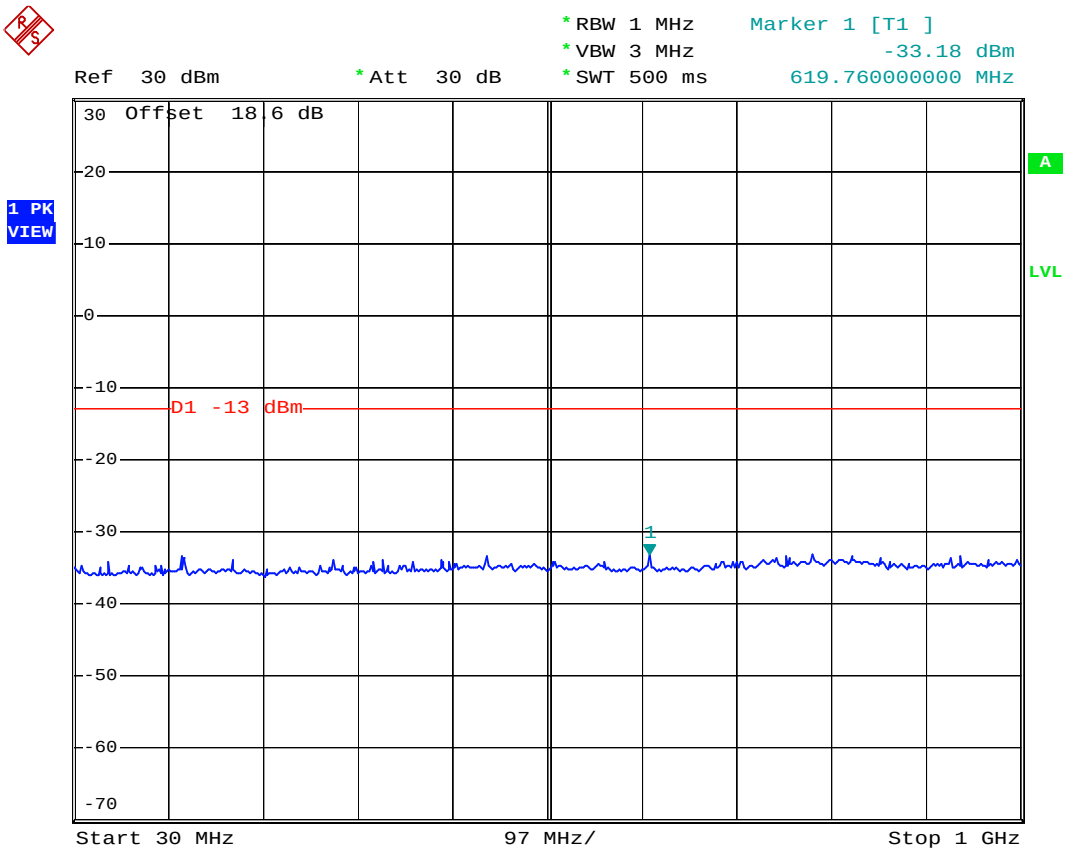
Date: 10.SEP.2007 03:11:06

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



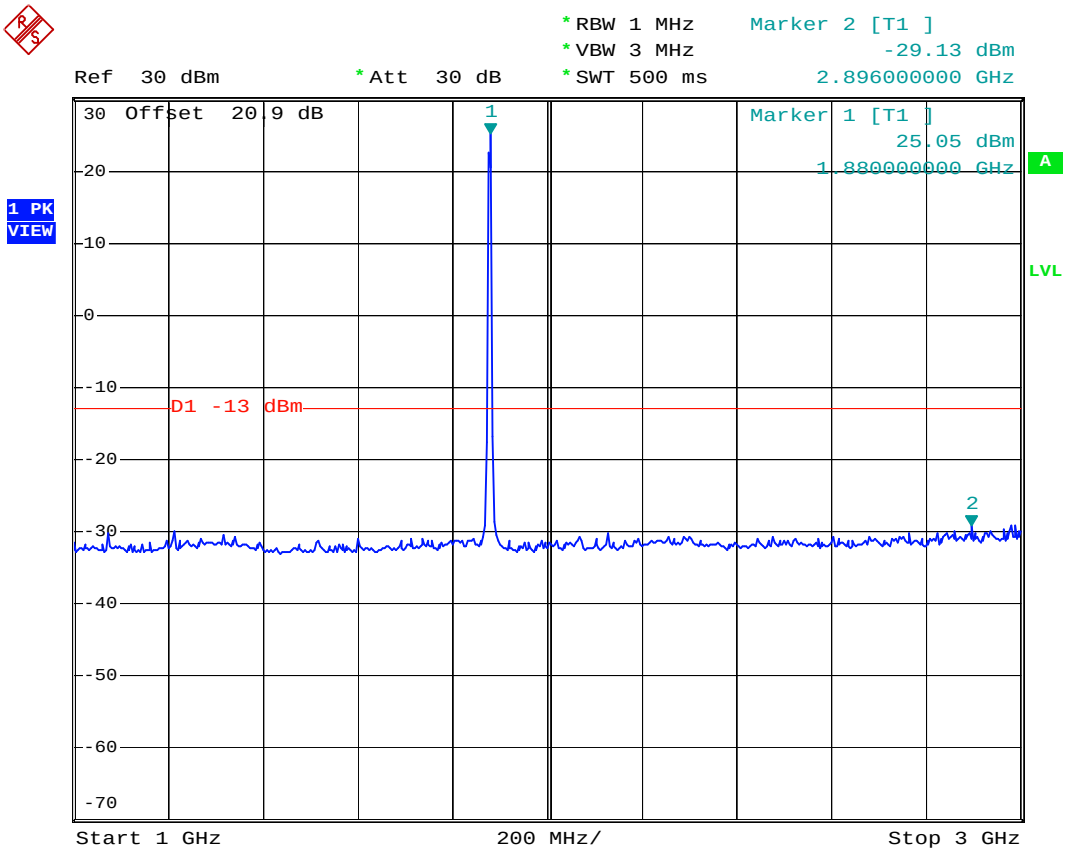
Date: 10.SEP.2007 03:14:44

- Mode 8
- Test Mode : WCDMA Band II (HSDPA) CH9400
- Frequency Range : 30M-1G



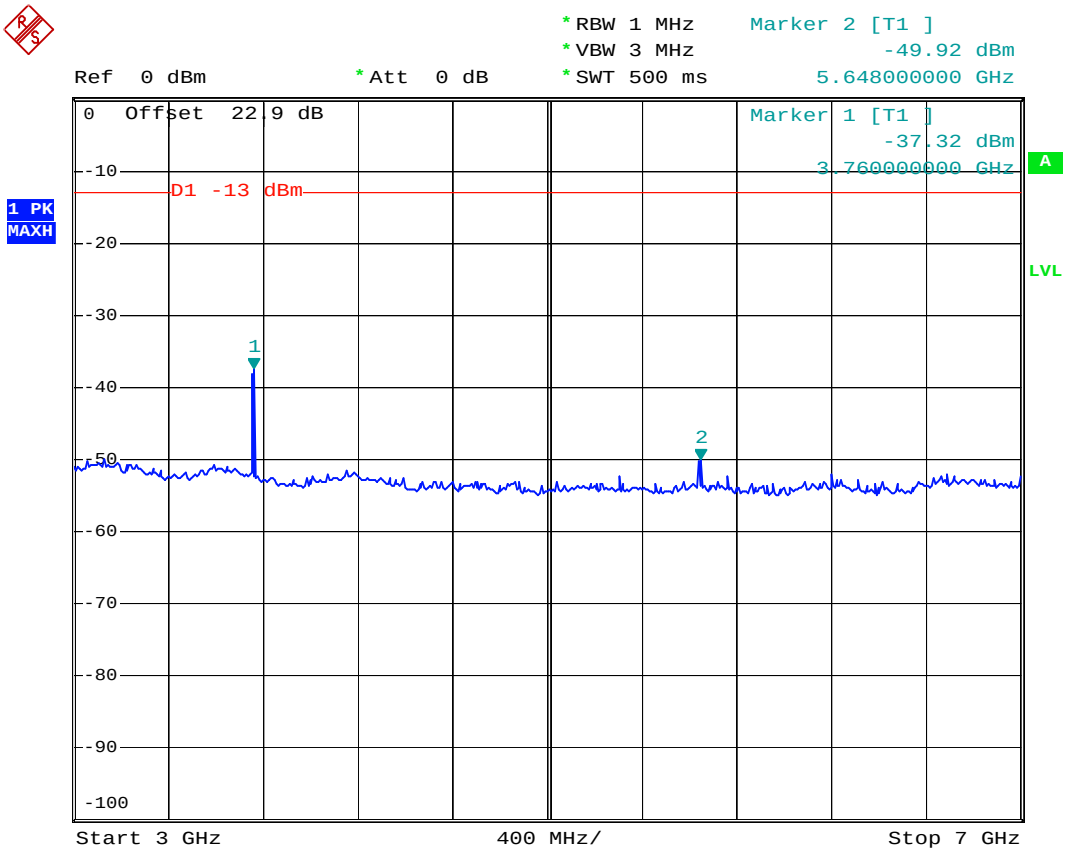
Date: 9.SEP.2007 12:17:25

- Test Mode : WCDMA Band II (HSDPA) CH9400
- Frequency Range : 1G-3G



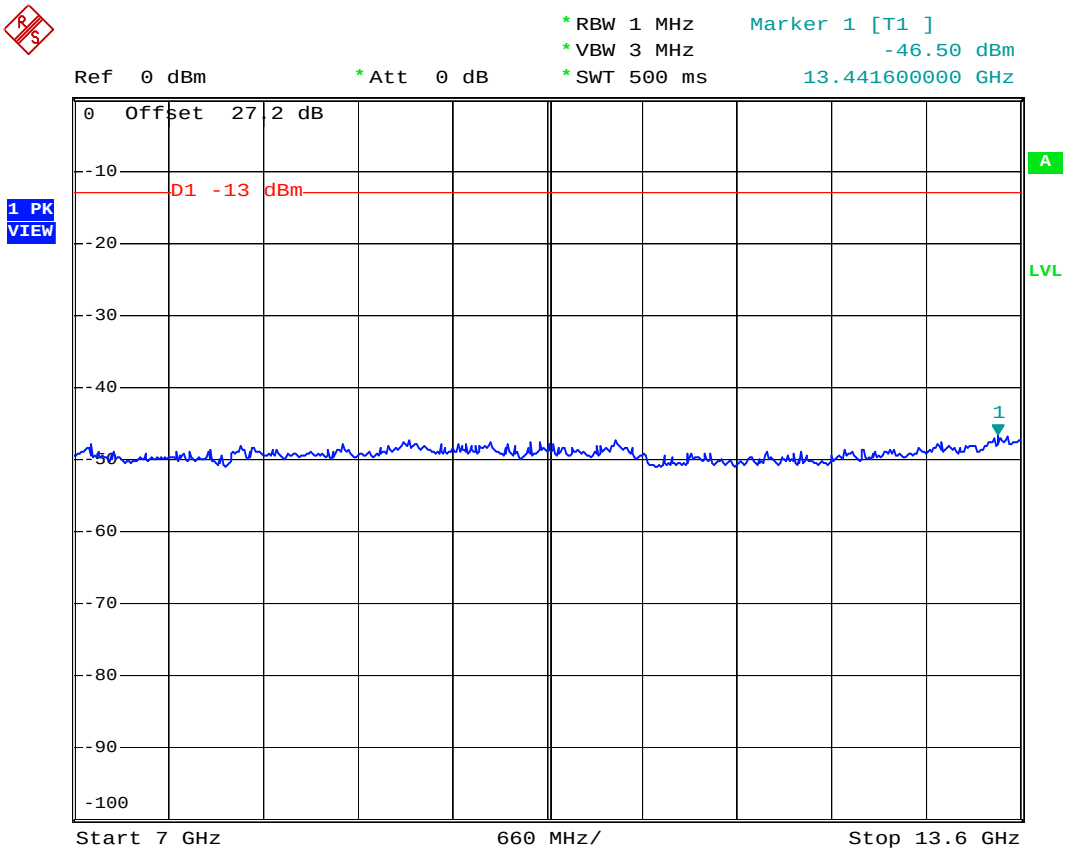
Date: 9.SEP.2007 12:25:37

- Test Mode : WCDMA Band II (HSDPA) CH9400
- Frequency Range : 3G-7G



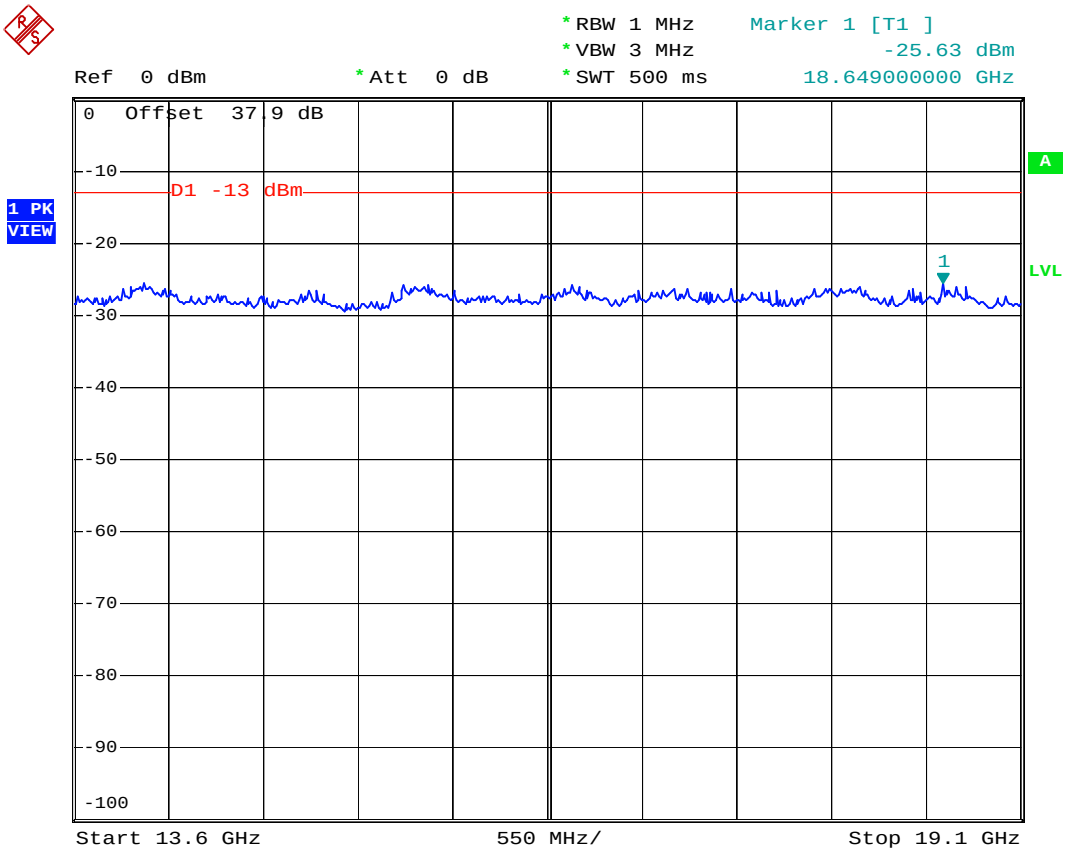
Date: 10.SEP.2007 03:02:36

- Test Mode : WCDMA Band II (HSDPA) CH9400
- Frequency Range : 7G-13.6G



Date: 10.SEP.2007 03:12:14

- Test Mode : WCDMA Band II (HSDPA) CH9400
- Frequency Range : 13.6G-19.1G



Date: 10.SEP.2007 03:13:49

4.6 Field Strength of Spurious Radiation

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

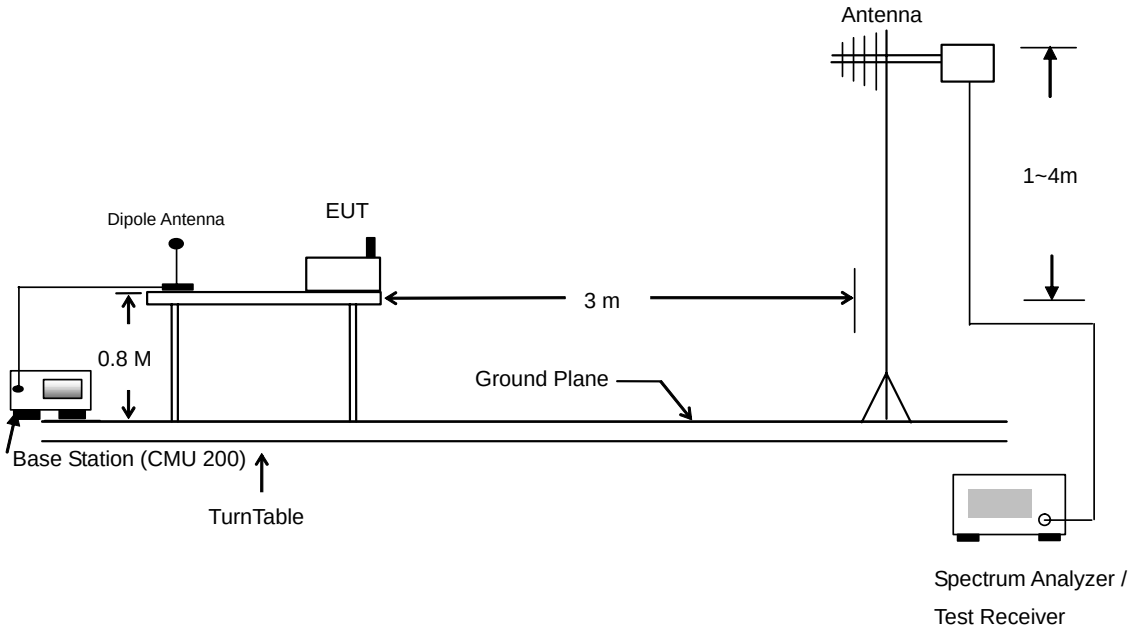
4.6.1 Measurement Instruments

As described in chapter 5 of this test report.

4.6.2 Test Procedure

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

4.6.3 Test Setup Layout



4.6.4 Test Result

- Test Mode : Mode 1

GSM850 (GSM) Radiated Spurious ERP							
H Polarization				V Polarization			
Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)
30.000	-64.050	-13	-51.05	37.830	-60.840	-13	-47.84
63.480	-59.100	-13	-46.10	64.290	-56.710	-13	-43.71
118.290	-66.160	-13	-53.16	145.290	-62.230	-13	-49.23
798.400	-64.690	-13	-51.69	700.400	-65.920	-13	-52.92
1674.000	-48.790	-13	-35.79	1674.000	-47.900	-13	-34.90
2508.000	-35.270	-13	-22.27	2508.000	-30.100	-13	-17.10
				4184.000	-51.690	-13	-38.69

- Test Mode : Mode 2

GSM850 (EDGE) Radiated Spurious ERP							
H Polarization				V Polarization			
Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)
31.080	-64.050	-13	-51.05	37.290	-59.620	-13	-46.62
63.480	-65.390	-13	-52.39	43.230	-60.310	-13	-47.31
68.610	-65.590	-13	-52.59	130.440	-61.090	-13	-48.09
798.400	-64.930	-13	-51.93	757.800	-66.110	-13	-53.11
1674.000	-54.280	-13	-41.28	1674.000	-52.570	-13	-39.57
2508.000	-44.800	-13	-31.80	2508.000	-36.540	-13	-23.54

- Test Mode : Mode 3

PCS1900 (GSM) 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	-60.630	-13	-47.63	37.290	-58.670	-13	-45.67
63.480	-60.010	-13	-47.01	62.940	-56.170	-13	-43.17
122.880	-69.340	-13	-56.34	75.090	-60.200	-13	-47.20
300.000	-67.350	-13	-54.35	311.900	-64.610	-13	-51.61
798.400	-64.070	-13	-51.07	700.400	-63.760	-13	-50.76
990.900	-63.890	-13	-50.89	983.900	-61.890	-13	-48.89
1164.000	-54.640	-13	-41.64	1138.000	-57.500	-13	-44.50
9398.000	-40.500	-13	-27.50	1238.000	-59.520	-13	-46.52
11278.000	-34.400	-13	-21.40	3758.000	-50.010	-13	-37.01
				9398.000	-37.130	-13	-24.13
				11278.000	-35.080	-13	-22.08

- Test Mode : Mode 4

PCS1900 (EDGE) Radiated Spurious EIRP							
H Polarization				V Polarization			
Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)
35.130	-42.990	-13	-29.99	61.590	-52.430	-13	-39.43
62.130	-55.400	-13	-42.40	75.090	-56.460	-13	-43.46
73.740	-61.420	-13	-48.42	125.040	-62.970	-13	-49.97
300.000	-68.990	-13	-55.99	500.900	-65.390	-13	-52.39
698.300	-63.720	-13	-50.72	700.400	-63.320	-13	-50.32
798.400	-61.830	-13	-48.83	950.300	-62.080	-13	-49.08
1098.000	-59.880	-13	-46.88	1138.000	-59.200	-13	-46.20
1174.000	-59.280	-13	-46.28	1154.000	-59.310	-13	-46.31
1258.000	-57.500	-13	-44.50	3758.000	-48.680	-13	-35.68
				9398.000	-31.790	-13	-18.79
				11278.000	-35.020	-13	-22.02

- Test Mode : Mode 5

WCDMA Band V Radiated Spurious ERP							
H Polarization				V Polarization			
Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)
31.080	-63.320	-13	-50.32	37.290	-59.930	-13	-46.93
38.640	-68.110	-13	-55.11	43.230	-61.200	-13	-48.20
65.640	-64.680	-13	-51.68	73.740	-63.550	-13	-50.55
798.400	-64.870	-13	-51.87	649.300	-66.800	-13	-53.80
1674.000	-45.770	-13	-32.77	1124.000	-61.000	-13	-48.00
2504.000	-49.430	-13	-36.43	1158.000	-60.780	-13	-47.78
				1248.000	-60.910	-13	-47.91
				1598.000	-58.190	-13	-45.19
				1674.000	-44.640	-13	-31.64
				1764.000	-57.150	-13	-44.15
				2504.000	-47.380	-13	-34.38

- Test Mode : Mode 6

WCDMA Band V (HSDPA) Radiated Spurious ERP							
H Polarization				V Polarization			
Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)
31.620	-62.140	-13	-49.14	37.290	-59.300	-13	-46.30
58.890	-63.040	-13	-50.04	43.230	-61.130	-13	-48.13
226.290	-71.230	-13	-58.23	62.130	-63.630	-13	-50.63
798.400	-64.210	-13	-51.21	700.400	-66.230	-13	-53.23
1168.000	-60.560	-13	-47.56	1224.000	-61.170	-13	-48.17
1218.000	-60.030	-13	-47.03	1674.000	-46.450	-13	-33.45
1674.000	-48.990	-13	-35.99	1764.000	-57.380	-13	-44.38
2068.000	-56.390	-13	-43.39	2504.000	-54.180	-13	-41.18

- Test Mode : Mode 7

WCDMA Band II 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	-61.430	-13	-48.43	30.000	-47.250	-13	-34.25
62.940	-60.310	-13	-47.31	62.130	-57.240	-13	-44.24
73.740	-63.890	-13	-50.89	73.740	-56.380	-13	-43.38
300.000	-68.050	-13	-55.05	311.900	-66.520	-13	-53.52
700.400	-62.910	-13	-49.91	700.400	-63.710	-13	-50.71
799.800	-61.900	-13	-48.90	957.300	-61.850	-13	-48.85
1164.000	-57.920	-13	-44.92	1138.000	-58.250	-13	-45.25
3758.000	-43.240	-13	-30.24	3758.000	-43.020	-13	-30.02
				9404.000	-37.290	-13	-24.29

- Test Mode : Mode 8

WCDMA Band II (HSDPA) Radiated Spurious EIRP							
H Polarization				V Polarization			
Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)
31.080	-60.510	-13	-47.51	62.130	-59.040	-13	-46.04
62.130	-60.710	-13	-47.71	73.740	-56.460	-13	-43.46
73.740	-63.770	-13	-50.77	79.680	-53.270	-13	-40.27
301.400	-68.060	-13	-55.06	300.000	-66.610	-13	-53.61
698.300	-65.010	-13	-52.01	700.400	-63.470	-13	-50.47
798.400	-61.560	-13	-48.56	798.400	-62.480	-13	-49.48
3758.000	-42.880	-13	-29.88	1158.000	-58.270	-13	-45.27
				3464.000	-50.760	-13	-37.76
				3758.000	-43.920	-13	-30.92
				9394.000	-37.110	-13	-24.11

- Test Mode : Mode 9

GSM850 (GSM) with BT Co-location Radiated Spurious ERP							
H Polarization				V Polarization			
Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)
31.080	-62.700	-13	-49.70	73.740	-63.070	-13	-50.07
67.530	-69.620	-13	-56.62	91.290	-61.380	-13	-48.38
135.030	-69.020	-13	-56.02	123.690	-57.530	-13	-44.53
300.700	-71.920	-13	-58.92	300.700	-68.960	-13	-55.96
360.900	-71.440	-13	-58.44	698.300	-66.800	-13	-53.80
1674.000	-46.810	-13	-33.81	1674.000	-49.820	-13	-36.82
2508.000	-32.940	-13	-19.94	2508.000	-25.250	-13	-12.25
4178.000	-50.520	-13	-37.52				

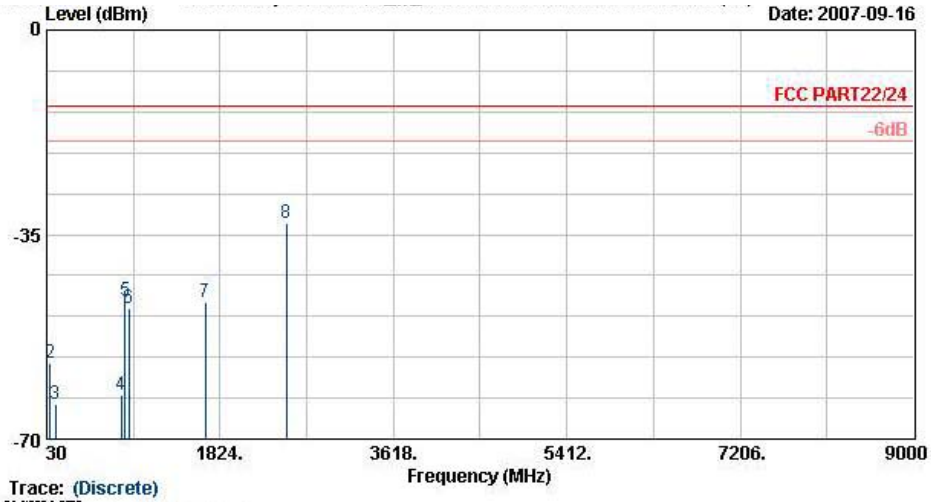
- Test Mode : Mode 10

GSM850 (GSM) with WLAN Co-location Radiated Spurious ERP							
H Polarization				V Polarization			
Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)
51.330	-67.510	-13	-54.51	61.590	-53.760	-13	-40.76
133.140	-67.680	-13	-54.68	90.480	-62.000	-13	-49.00
164.730	-68.160	-13	-55.16	183.630	-58.140	-13	-45.14
367.900	-68.270	-13	-55.27	733.300	-65.010	-13	-52.01
939.800	-63.740	-13	-50.74	880.300	-57.670	-13	-44.67
1674.000	-46.180	-13	-33.18	1674.000	-52.530	-13	-39.53
2508.000	-40.030	-13	-27.03	6688.000	-44.020	-13	-31.02

4.6.5 Test Data

4.6.5.1 Mode 1

Horizontal Polarization

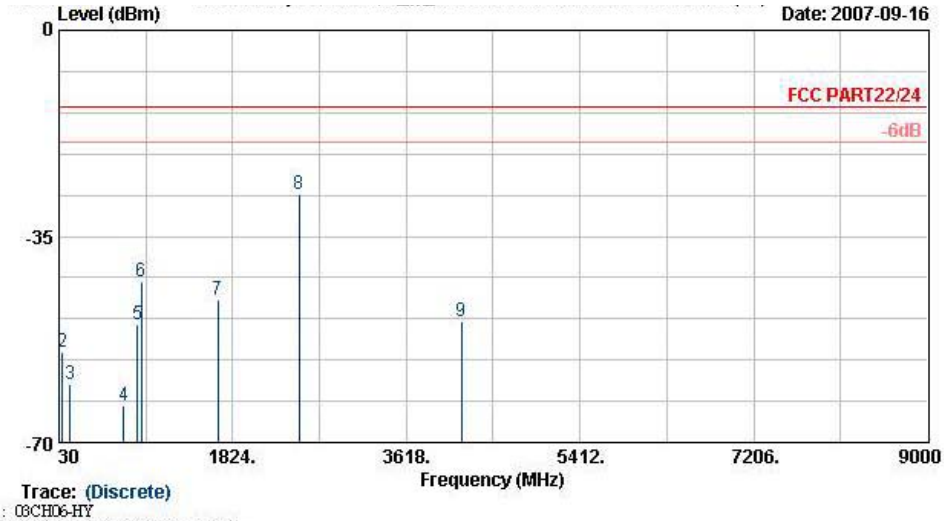


Site : 03CH06-HY
Condition : HF-SPURIOUS-060929 HORIZONTAL
EUT : UMPC (GSM/GPRS/EDGE 900/1800)UMTS/HSDPA
Power : 120Vac/60Hz
Model : FG 780709-01
Memo : GSM 850 Link +Adaptor + Earphone
Plane : 上蓋直立

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1	30.0	-61.90	-48.90	-13.00	-62.26	0.36	Peak
2	63.5	-56.95	-43.95	-13.00	-44.57	-12.38	Peak
3	118.3	-64.01	-51.01	-13.00	-51.55	-12.45	Peak
4	798.4	-62.54	-49.54	-13.00	-60.83	-1.71	Peak
5	836.9	-46.32			-44.99	-1.33	Peak
6	880.3	-47.51			-46.60	-0.91	Peak
7	1674.0	-46.64	-33.64	-13.00	-48.99	2.36	Peak
8 @	2508.0	-33.12	-20.12	-13.00	-39.80	6.69	Peak

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

Vertical Polarization



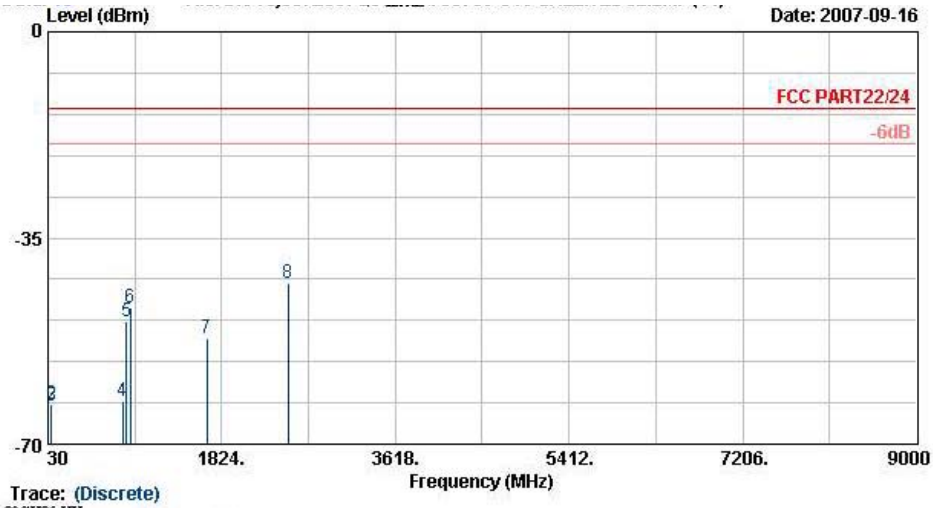
Site : 03CH06-HY
Condition : HF-SPURIOUS-060929 VERTICAL
EUT : UMPC (GSM/GPRS/EDGE 900/1800)UMTS/HSDPA
Power : 120Vac/60Hz
Model : FG 780709-01
Memo : GSM 850 Link +Adaptor + Earphone
Plane : 上蓋直立

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1	37.8	-58.69	-45.69	-13.00	-47.43	-11.26	Peak
2	64.3	-54.56	-41.56	-13.00	-41.70	-12.86	Peak
3	145.3	-60.08	-47.08	-13.00	-51.98	-8.10	Peak
4	700.4	-63.77	-50.77	-13.00	-63.34	-0.43	Peak
5	836.9	-49.93			-51.29	1.36	Peak
6	880.3	-42.70			-44.41	1.71	Peak
7	1674.0	-45.75	-32.75	-13.00	-47.91	2.16	Peak
8 @	2508.0	-27.95	-14.95	-13.00	-35.13	7.18	Peak
9	4184.0	-49.54	-36.54	-13.00	-60.90	11.36	Peak

Remark:
1. #5: MS Signal
2. #6: BS Signal
3. There is no more obvious emission except the listings above.

4.6.5.2 Mode 2

Horizontal Polarization

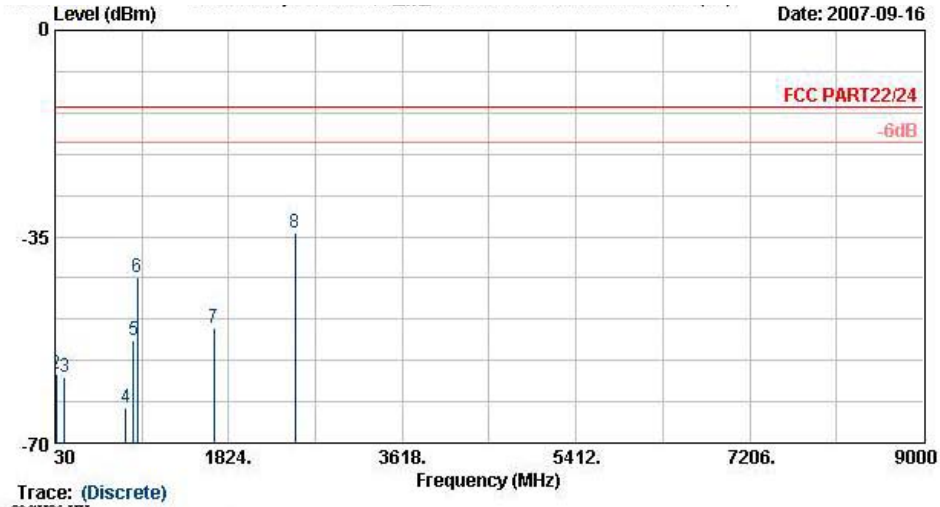


Site : 03CH06-HY
Condition : HF-SPURIOUS-060929 HORIZONTAL
EUT : UMPC (GSM/GPRS/EDGE 900/1800)UMTS/HSDPA
Power : 120Vac/60Hz
Model : FG 780709-01
Memo : EDGE Link Mode +Adaptor + Earphone
Plane : 上蓋直立

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1	31.1	-61.90	-48.90	-13.00	-61.66	-0.25	Peak
2	63.5	-63.24	-50.24	-13.00	-50.86	-12.38	Peak
3	68.6	-63.44	-50.44	-13.00	-51.08	-12.36	Peak
4	798.4	-62.78	-49.78	-13.00	-61.07	-1.71	Peak
5	836.9	-49.17			-47.84	-1.33	Peak
6	880.3	-46.89			-45.98	-0.91	Peak
7	1674.0	-52.13	-39.13	-13.00	-54.48	2.36	Peak
8 @	2508.0	-42.65	-29.65	-13.00	-49.34	6.69	Peak

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

Vertical Polarization



Trace: (Discrete)

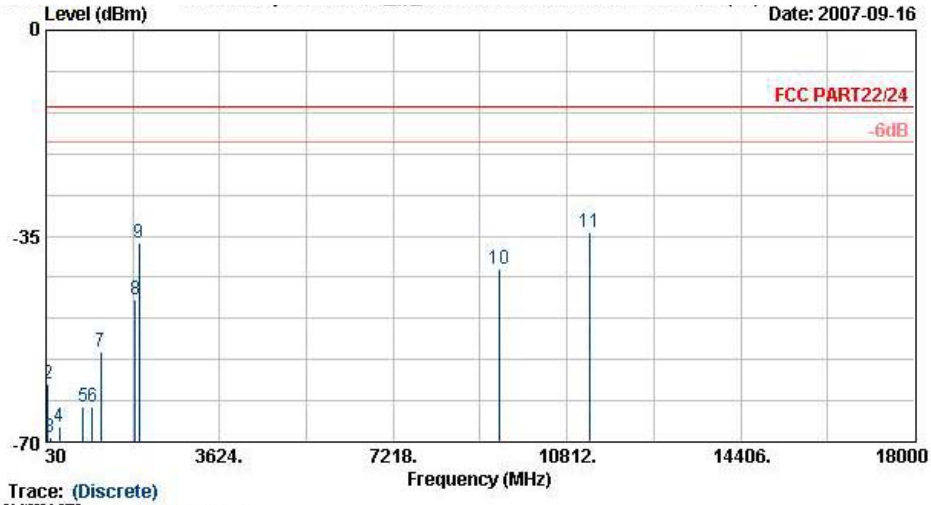
Site	: 08CH06-HY
Condition	: HF-SPURIOUS-060929 VERTICAL
EUT	: UMPC (GSM/GPRS/EDGE 900/1800)UMTS/HSDPA
Power	: 120Vac/60Hz
Model	: FG 780709-01
Memo	: EDGE Link Mode +Adaptor + Earphone
Plane	: 上蓋直立

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1	37.3	-57.47	-44.47	-13.00	-46.21	-11.26	Peak
2	43.2	-58.16	-45.16	-13.00	-45.26	-12.90	Peak
3	130.4	-58.94	-45.94	-13.00	-50.97	-7.97	Peak
4	757.8	-63.96	-50.96	-13.00	-64.39	0.43	Peak
5	836.9	-52.56			-53.92	1.36	Peak
6 @	880.3	-41.86			-43.57	1.71	Peak
7	1674.0	-50.42	-37.42	-13.00	-52.58	2.16	Peak
8 @	2508.0	-34.39	-21.39	-13.00	-41.57	7.18	Peak

Remark:
1. #5: MS Signal
2. #6: BS Signal
3. There is no more obvious emission except the listings above.

4.6.5.3 Mode 3

Horizontal Polarization

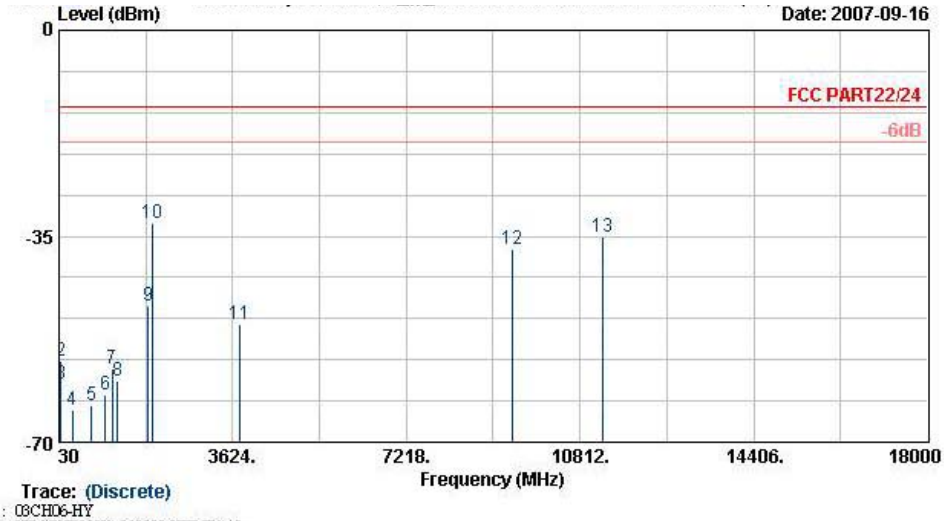


Site : 03CH06-HY
Condition : HF-SPURIOUS-060929 HORIZONTAL
EUT : UMPC (GSM/GPRS/EDGE 900/1800)UMTS/HSDPA
Power : 120Vac/60Hz
Model : FG 780709-01
Memo : PCS 1900 Link Mode + Adaptor + Earphone
Plane : 上蓋直立

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1	31.9	-60.63	-47.63	-13.00	-59.78	-0.86	Peak
2	63.5	-60.01	-47.01	-13.00	-47.63	-12.38	Peak
3	122.9	-69.34	-56.34	-13.00	-56.83	-12.51	Peak
4	300.0	-67.35	-54.35	-13.00	-57.40	-9.95	Peak
5	798.4	-64.07	-51.07	-13.00	-62.36	-1.71	Peak
6	990.9	-63.89	-50.89	-13.00	-64.05	0.16	Peak
7	1164.0	-54.64	-41.64	-13.00	-53.16	-1.48	Peak
8	1878.0	-45.80			-49.70	3.90	Peak
9	1958.0	-36.23			-40.65	4.41	Peak
10	9398.0	-40.50	-27.50	-13.00	-61.90	21.40	Peak
11	11278.0	-34.40	-21.40	-13.00	-59.13	24.72	Peak

Remark:
1. #8: MS Signal
2. #9: BS Signal

Vertical Polarization



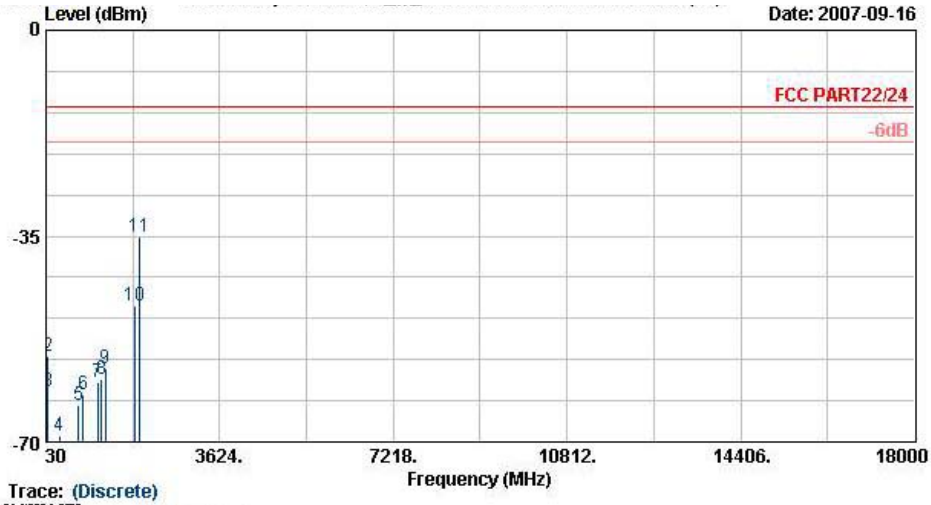
Site : 03CH06-HY
Condition : HF-SPURIOUS-060929 VERTICAL
EUT : UMPC (GSM/GPRS/EDGE 900/1800)UMTS/HSDPA
Power : 120Vac/60Hz
Model : FG 780709-01
Memo : PCS 1900 Link Mode + Adaptor + Earphone
Plane : 上蓋直立

		Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
		MHz	dBm	dB	dBm	dBm	dB	
1		37.3	-58.67	-45.67	-13.00	-47.41	-11.26	Peak
2		62.9	-56.17	-43.17	-13.00	-43.17	-13.00	Peak
3		75.1	-60.20	-47.20	-13.00	-48.88	-11.32	Peak
4		311.9	-64.61	-51.61	-13.00	-58.42	-6.19	Peak
5		700.4	-63.76	-50.76	-13.00	-63.33	-0.43	Peak
6		983.9	-61.89	-48.89	-13.00	-64.42	2.53	Peak
7		1138.0	-57.50	-44.50	-13.00	-54.63	-2.88	Peak
8		1238.0	-59.52	-46.52	-13.00	-57.53	-2.00	Peak
9		1878.0	-46.97			-51.26	4.29	Peak
10	@	1958.0	-32.76			-37.76	5.01	Peak
11		3758.0	-50.01	-37.01	-13.00	-59.90	9.89	Peak
12		9398.0	-37.13	-24.13	-13.00	-57.01	19.89	Peak
13		11278.0	-35.08	-22.08	-13.00	-58.51	23.44	Peak

Remark:
1. #9: MS Signal
2. #10: BS Signal
3. There is no more obvious emission except the listings above.

4.6.5.4 Mode 4

Horizontal Polarization

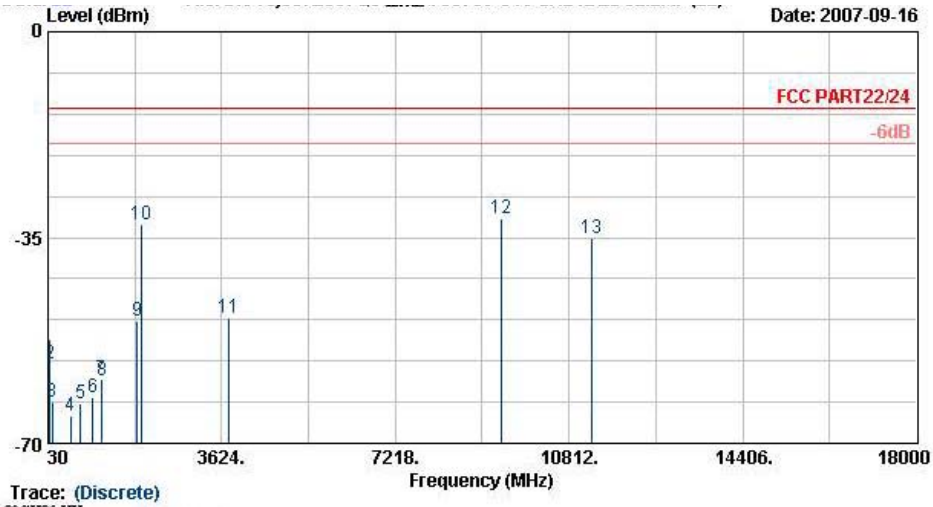


Site : 03CH06-HY
Condition : HF-SPURIOUS-060929 HORIZONTAL
EUT : UMPC (GSM/GPRS/EDGE 900/1800)UMTS/HSDPA
Power : 120Vac/60Hz
Model : FG 780709-01
Memo : EDGE Link Mode + Adaptor + Earphone
Plane : 上蓋直立

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1	35.1	-42.99	-29.99	-13.00	-40.31	-2.69	Peak
2	62.1	-55.40	-42.40	-13.00	-43.02	-12.39	Peak
3	73.7	-61.42	-48.42	-13.00	-49.08	-12.34	Peak
4	300.0	-68.99	-55.99	-13.00	-59.05	-9.95	Peak
5	698.3	-63.72	-50.72	-13.00	-60.99	-2.73	Peak
6	798.4	-61.83	-48.83	-13.00	-60.12	-1.71	Peak
7	1098.0	-59.88	-46.88	-13.00	-57.89	-1.99	Peak
8	1174.0	-59.28	-46.28	-13.00	-57.80	-1.48	Peak
9	1258.0	-57.50	-44.50	-13.00	-56.66	-0.84	Peak
10	1878.0	-46.81			-50.71	3.90	Peak
11	1958.0	-35.03			-39.45	4.41	Peak

Remark:
1. #10: MS Signal
2. #11: BS Signal

Vertical Polarization



Trace: (Discrete)

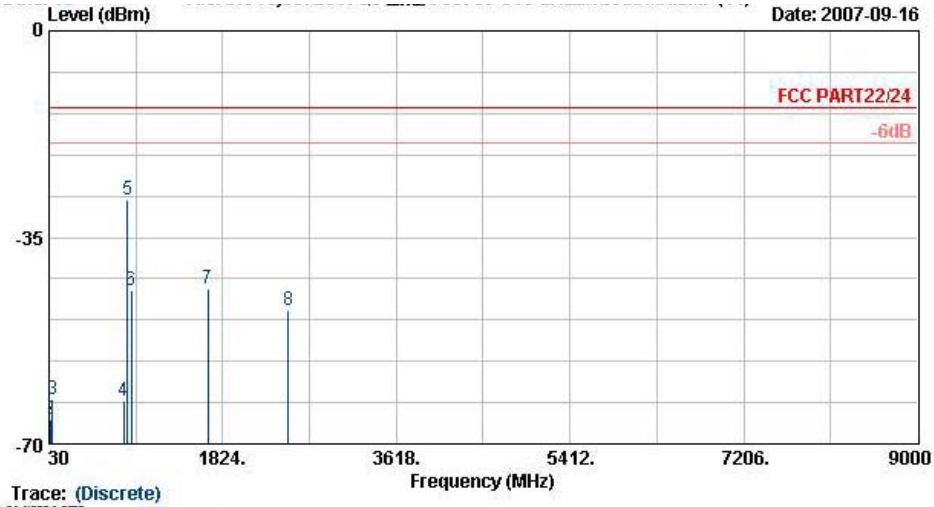
Site : 08CH06-HY
Condition : HF-SPURIOUS-060929 VERTICAL
EUT : UMPC (GSM/GPRS/EDGE 900/1800)UMTS/HSDPA
Power : 120Vac/60Hz
Model : FG 780709-01
Memo : EDGE Link Mode + Adaptor + Earphone
Plane : 上蓋直立

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1	61.6	-52.43	-39.43	-13.00	-39.29	-13.14	Peak
2	75.1	-56.46	-43.46	-13.00	-45.13	-11.32	Peak
3	125.0	-62.97	-49.97	-13.00	-55.06	-7.92	Peak
4	500.9	-65.39	-52.39	-13.00	-62.27	-3.12	Peak
5	700.4	-63.32	-50.32	-13.00	-62.89	-0.43	Peak
6	950.3	-62.08	-49.08	-13.00	-64.35	2.27	Peak
7	1138.0	-59.20	-46.20	-13.00	-56.32	-2.88	Peak
8	1154.0	-59.31	-46.31	-13.00	-56.58	-2.73	Peak
9	1884.0	-49.11			-53.40	4.29	Peak
10	1958.0	-32.89			-37.90	5.01	Peak
11	3758.0	-48.68	-35.68	-13.00	-58.57	9.89	Peak
12 @	9398.0	-31.79	-18.79	-13.00	-51.67	19.89	Peak
13	11278.0	-35.02	-22.02	-13.00	-58.46	23.44	Peak

Remark:
1. #9: MS Signal
2. #10: BS Signal
3. There is no more obvious emission except the listings above.

4.6.5.5 Mode 5

Horizontal Polarization

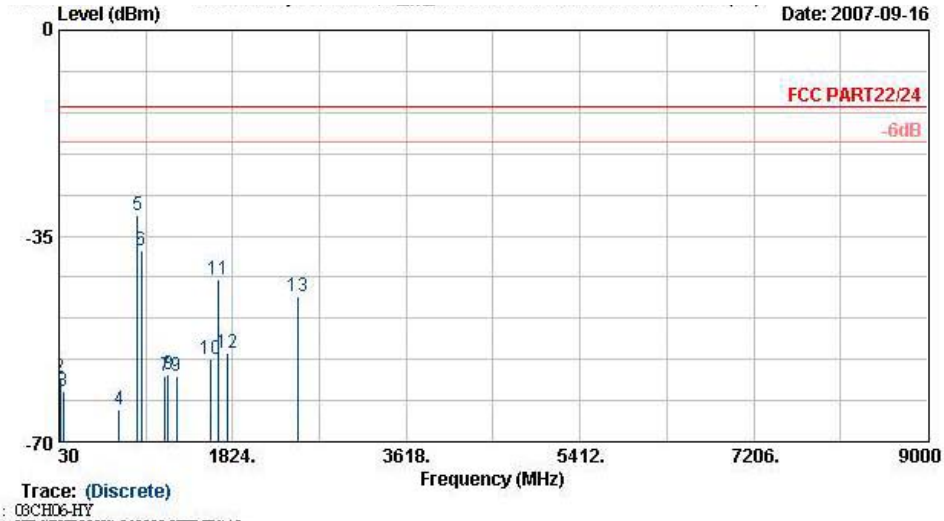


Site : 03CH06-HY
Condition : HF-SPURIOUS-060929 HORIZONTAL
EUT : UMPC (GSM/GPRS/EDGE 900/1800/UMTS/HSDPA
Power : 120Vac/60Hz
Model : FG 780709-01
Memo : WCDMA Link Mode + Adaptor + Earphone
Plane : 上蓋直立

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1	31.1	-61.17	-48.17	-13.00	-60.92	-0.25	Peak
2	38.6	-65.96	-52.96	-13.00	-60.84	-5.12	Peak
3	65.6	-62.53	-49.53	-13.00	-50.16	-12.37	Peak
4	798.4	-62.72	-49.72	-13.00	-61.01	-1.71	Peak
5 @	838.3	-28.69			-27.36	-1.32	Peak
6	880.3	-43.85	-----	-----	-42.94	-0.91	Peak
7	1674.0	-43.62	-30.62	-13.00	-45.98	2.36	Peak
8	2504.0	-47.28	-34.28	-13.00	-53.91	6.63	Peak

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

Vertical Polarization



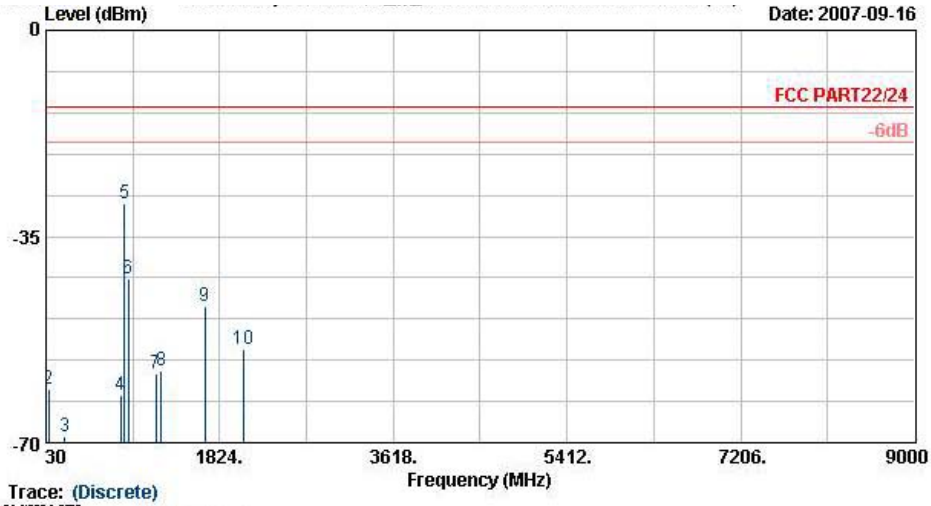
Site : 03CH06-HY
Condition : HF-SPURIOUS-060929 VERTICAL
EUT : UMPC (GSM/GPRS/EDGE 900/1800)UMTS/HSDPA
Power : 120Vac/60Hz
Model : FG 780709-01
Memo : WCDMA Link Mode + Adaptor + Earphone
Plane : 上蓋直立

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1	37.3	-57.78	-44.78	-13.00	-46.52	-11.26	Peak
2	43.2	-59.05	-46.05	-13.00	-46.14	-12.90	Peak
3	73.7	-61.40	-48.40	-13.00	-49.93	-11.46	Peak
4	649.3	-64.65	-51.65	-13.00	-63.45	-1.20	Peak
5	838.3	-31.56			-32.93	1.37	Peak
6	880.3	-37.60			-39.31	1.71	Peak
7	1124.0	-58.85	-45.85	-13.00	-55.82	-3.02	Peak
8	1158.0	-58.63	-45.63	-13.00	-55.90	-2.73	Peak
9	1248.0	-58.76	-45.76	-13.00	-56.91	-1.85	Peak
10	1598.0	-56.04	-43.04	-13.00	-57.31	1.27	Peak
11	1674.0	-42.49	-29.49	-13.00	-44.65	2.16	Peak
12	1764.0	-55.00	-42.00	-13.00	-58.05	3.05	Peak
13	2504.0	-45.23	-32.23	-13.00	-52.40	7.17	Peak

Remark:
1. #5: MS Signal
2. #6: BS Signal
3. There is no more obvious emission except the listings above.

4.6.5.6 Mode 6

Horizontal Polarization

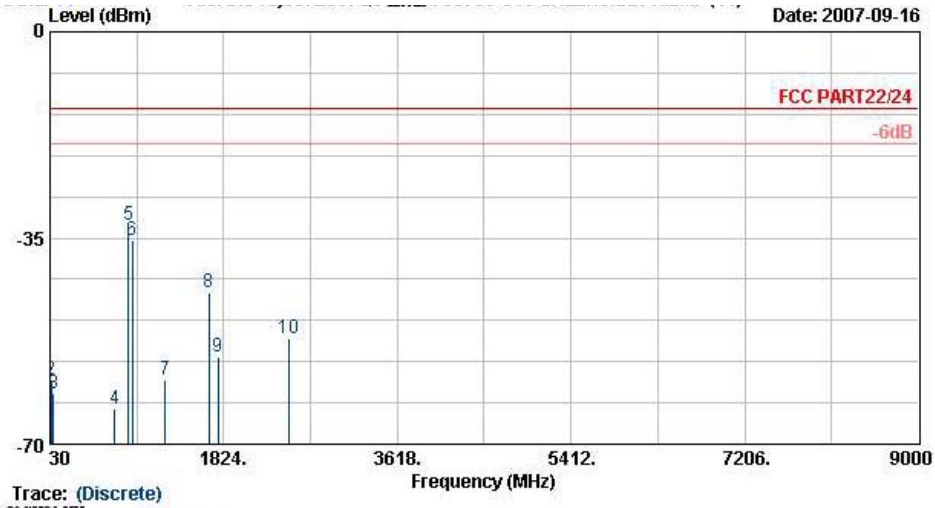


Site : 03CH06-HY
Condition : HF-SPURIOUS-060929 HORIZONTAL
EUT : UMPC (GSM/GPRS/EDGE 900/1800)UMTS/HSDPA
Power : 120Vac/60Hz
Model : FG 780709-01
Memo : HSDPA Link Mode + Adaptor + Earphone
Plane : 上蓋直立

		Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
		MHz	dBm	dB	dBm	dBm	dB	
1		31.6	-59.99	-46.99	-13.00	-59.13	-0.86	Peak
2		58.9	-60.89	-47.89	-13.00	-48.49	-12.40	Peak
3		226.3	-69.08	-56.08	-13.00	-56.59	-12.49	Peak
4		798.4	-62.06	-49.06	-13.00	-60.35	-1.71	Peak
5	@	838.3	-29.49			-28.17	-1.32	Peak
6		880.3	-42.23			-41.32	-0.91	Peak
7		1168.0	-58.41	-45.41	-13.00	-56.93	-1.48	Peak
8		1218.0	-57.88	-44.88	-13.00	-56.78	-1.10	Peak
9		1674.0	-46.84	-33.84	-13.00	-49.19	2.36	Peak
10		2068.0	-54.24	-41.24	-13.00	-59.29	5.05	Peak

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

Vertical Polarization



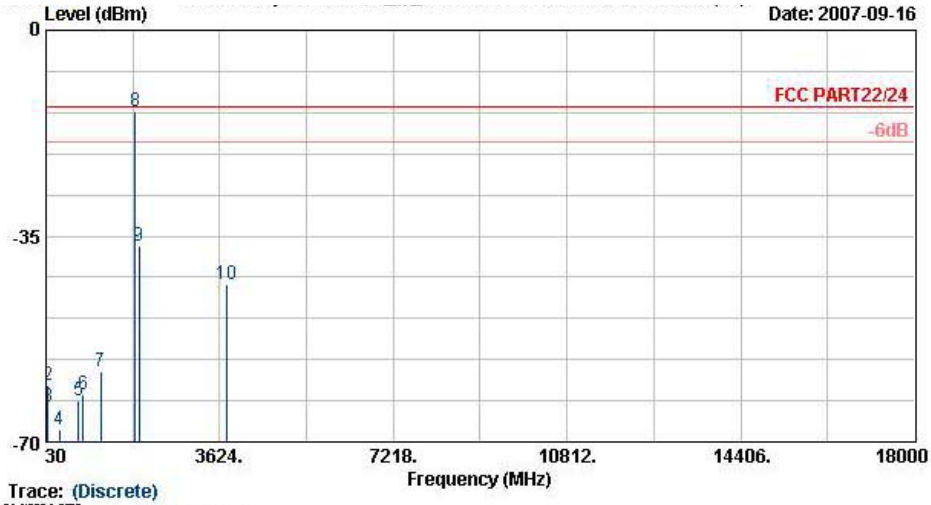
Site : 08CH06-HY
Condition : HF-SPURIOUS-060929 VERTICAL
EUT : UMPC (GSM/GPRS/EDGE 900/1800)UMTS/HSDPA
Power : 120Vac/60Hz
Model : FG 780709-01
Memo : HSDPA Link Mode + Adaptor + Earphone
Plane : 上蓋直立

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1	37.3	-57.15	-44.15	-13.00	-45.89	-11.26	Peak
2	43.2	-58.98	-45.98	-13.00	-46.07	-12.90	Peak
3	62.1	-61.48	-48.48	-13.00	-48.34	-13.14	Peak
4	700.4	-64.08	-51.08	-13.00	-63.65	-0.43	Peak
5 @	838.3	-32.82			-34.20	1.37	Peak
6	880.3	-35.44			-37.15	1.71	Peak
7	1224.0	-59.02	-46.02	-13.00	-56.87	-2.14	Peak
8	1674.0	-44.30	-31.30	-13.00	-46.46	2.16	Peak
9	1764.0	-55.23	-42.23	-13.00	-58.28	3.05	Peak
10	2504.0	-52.03	-39.03	-13.00	-59.20	7.17	Peak

Remark:
1. #5: MS Signal
2. #6: BS Signal
3. There is no more obvious emission except the listings above.

4.6.5.7 Mode 7

Horizontal Polarization

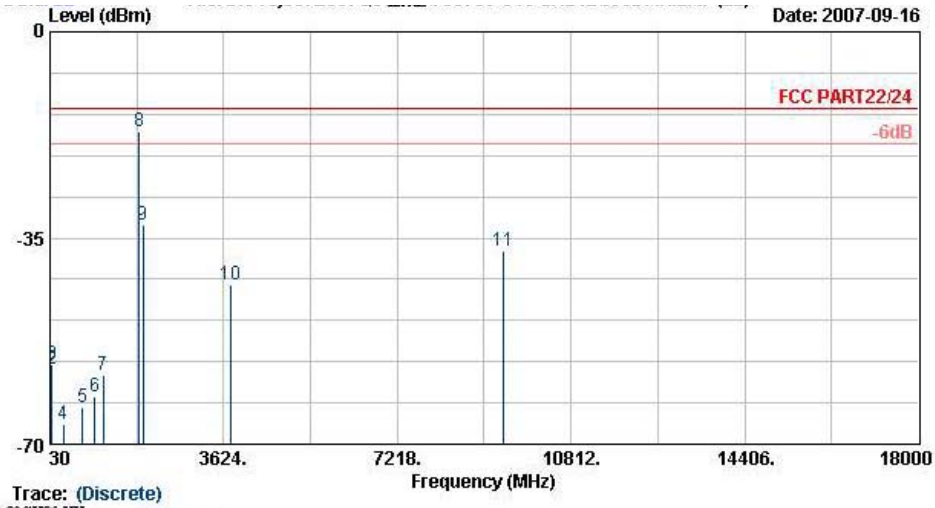


Site : 03CH06-HY
Condition : HF-SPURIOUS-060929 HORIZONTAL
EUT : UMPC (GSM/GPRS/EDGE 900/1800)UMTS/HSDPA
Power : 120Vac/60Hz
Model : FG 780709-01
Memo : WCDMA Link Mode + Adaptor + Earphone
Plane : 上蓋直立

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1	31.6	-61.43	-48.43	-13.00	-60.57	-0.86	Peak
2	62.9	-60.31	-47.31	-13.00	-47.93	-12.38	Peak
3	73.7	-63.89	-50.89	-13.00	-51.55	-12.34	Peak
4	300.0	-68.05	-55.05	-13.00	-58.10	-9.95	Peak
5	700.4	-62.91	-49.91	-13.00	-60.19	-2.72	Peak
6	799.8	-61.90	-48.90	-13.00	-60.21	-1.69	Peak
7	1164.0	-57.92	-44.92	-13.00	-56.44	-1.48	Peak
8 @	1878.0	-13.78			-17.68	3.90	Peak
9	1958.0	-36.60			-41.01	4.41	Peak
10	3758.0	-43.24	-30.24	-13.00	-53.65	10.41	Peak

Remark:
1. #8: MS Signal
2. #9: BS Signal

Vertical Polarization



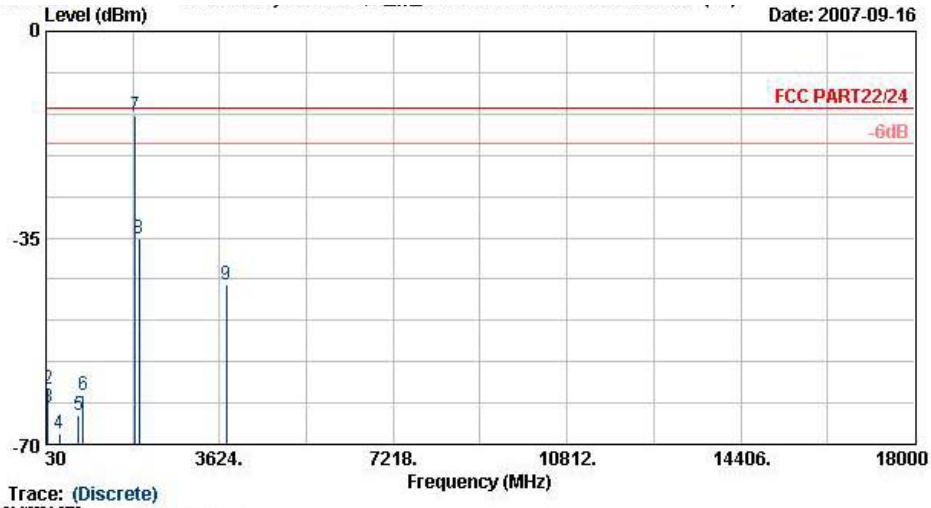
Site : 03CH06-HY
Condition : HF-SPURIOUS-060929 VERTICAL
EUT : UMPC (GSM/GPRS/EDGE 900/1800)UMTS/HSDPA
Power : 120Vac/60Hz
Model : FG 780709-01
Memo : WCDMA Link Mode + Adaptor + Earphone
Plane : 上蓋直立

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1	30.0	-47.25	-34.25	-13.00	-38.18	-9.07	Peak
2	62.1	-57.24	-44.24	-13.00	-44.09	-13.14	Peak
3	73.7	-56.38	-43.38	-13.00	-44.92	-11.46	Peak
4	311.9	-66.52	-53.52	-13.00	-60.33	-6.19	Peak
5	700.4	-63.71	-50.71	-13.00	-63.28	-0.43	Peak
6	957.3	-61.85	-48.85	-13.00	-64.17	2.32	Peak
7	1138.0	-58.25	-45.25	-13.00	-55.37	-2.88	Peak
8 @	1878.0	-16.87			-21.17	4.29	Peak
9	1958.0	-32.70			-37.71	5.01	Peak
10	3758.0	-43.02	-30.02	-13.00	-52.91	9.89	Peak
11	9404.0	-37.29	-24.29	-13.00	-57.18	19.89	Peak

Remark:
1. #8: MS Signal
2. #9: BS Signa
3. There is no more obvious emission except the listings above.

4.6.5.8 Mode 8

Horizontal Polarization

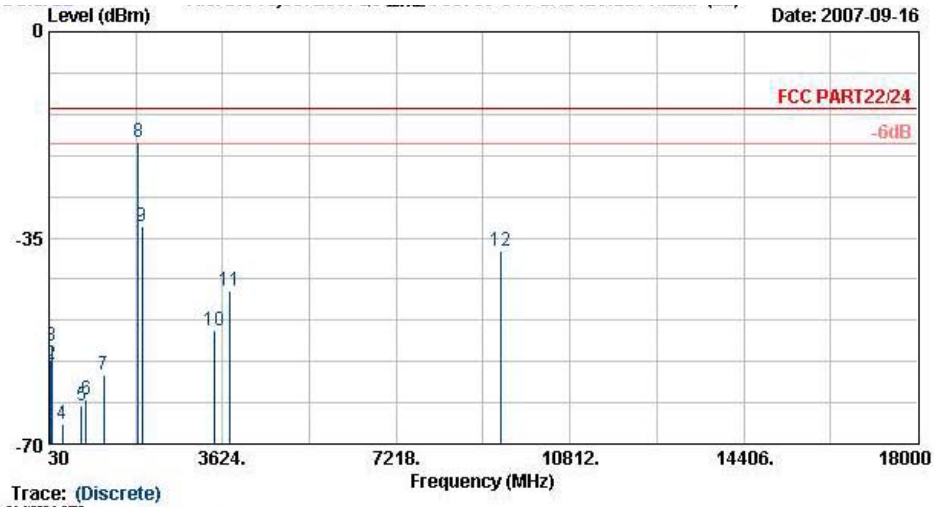


Site : 03CH06-HY
Condition : HF-SPURIOUS-060929 HORIZONTAL
EUT : UMPC (GSM/GPRS/EDGE 900/1800)UMTS/HSDPA
Power : 120Vac/60Hz
Model : FG 780709-01
Memo : HSDPA Link Mode + Adaptor + Earphone
Plane : 上蓋直立

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1	31.1	-60.51	-47.51	-13.00	-60.26	-0.25	Peak
2	62.1	-60.71	-47.71	-13.00	-48.32	-12.39	Peak
3	73.7	-63.77	-50.77	-13.00	-51.43	-12.34	Peak
4	301.4	-68.06	-55.06	-13.00	-58.18	-9.88	Peak
5	698.3	-65.01	-52.01	-13.00	-62.27	-2.73	Peak
6	798.4	-61.56	-48.56	-13.00	-59.85	-1.71	Peak
7 @	1884.0	-14.23			-18.13	3.90	Peak
8	1958.0	-35.02			-39.43	4.41	Peak
9	3758.0	-42.88	-29.88	-13.00	-53.29	10.41	Peak

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

Vertical Polarization



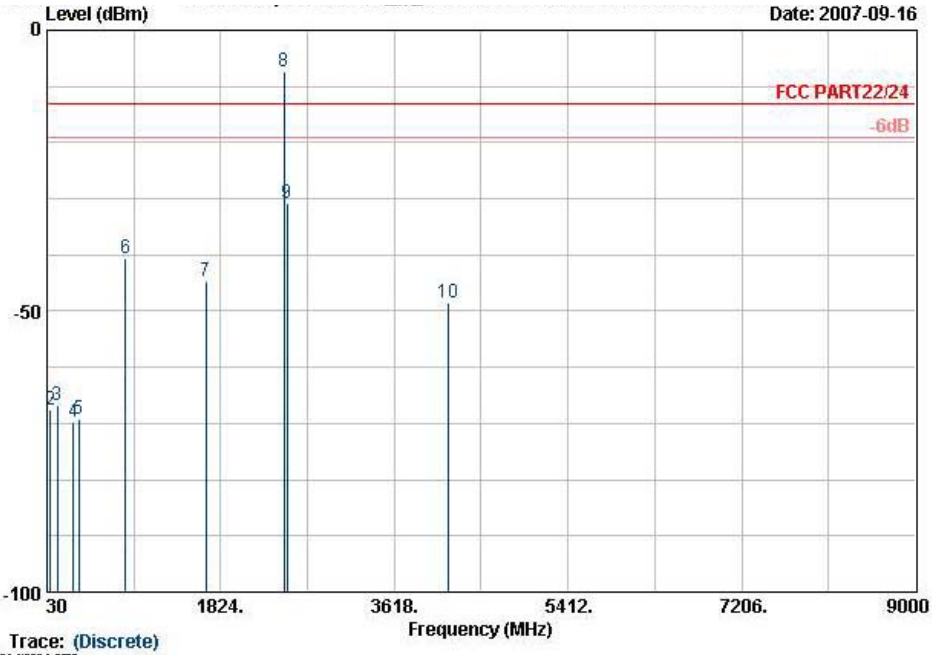
Site : 08CH06-HY
Condition : HF-SPURIOUS-060929 VERTICAL
EUT : UMPC (GSM/GPRS/EDGE 900/1800)UMTS/HSDPA
Power : 120Vac/60Hz
Model : FG 780709-01
Memo : HSDPA Link Mode + Adaptor + Earphone
Plane : 上蓋直立

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark
	MHz	dBm	dB	dBm	dBm	dB	
1	62.1	-59.04	-46.04	-13.00	-45.89	-13.14	Peak
2	73.7	-56.46	-43.46	-13.00	-45.00	-11.46	Peak
3	79.7	-53.27	-40.27	-13.00	-42.64	-10.63	Peak
4	300.0	-66.61	-53.61	-13.00	-60.15	-6.46	Peak
5	700.4	-63.47	-50.47	-13.00	-63.04	-0.43	Peak
6	798.4	-62.48	-49.48	-13.00	-63.52	1.04	Peak
7	1158.0	-58.27	-45.27	-13.00	-55.54	-2.73	Peak
8 @	1878.0	-18.76			-23.06	4.29	Peak
9	1958.0	-33.02			-38.02	5.01	Peak
10	3464.0	-50.76	-37.76	-13.00	-59.67	8.91	Peak
11	3758.0	-43.92	-30.92	-13.00	-53.81	9.89	Peak
12	9394.0	-37.11	-24.11	-13.00	-57.00	19.89	Peak

Remark:
1. #8: MS Signal
2. #9: BS Signal
3. There is no more obvious emission except the listings above.

4.6.5.9 Mode 9

Horizontal Polarization

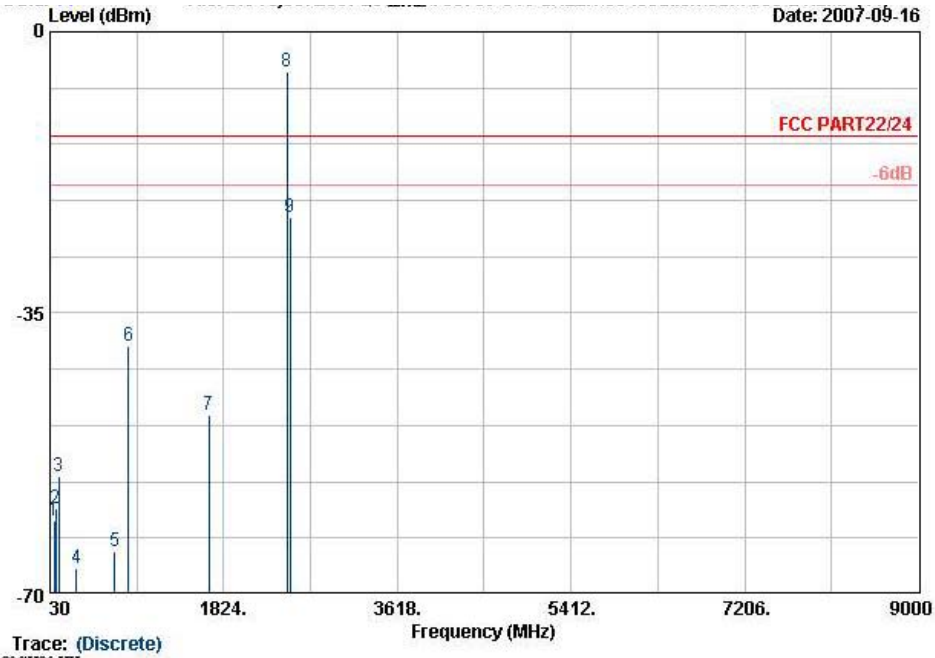


Site : 03CH06-HY
Condition : HF-SPURIOUS-060929 HORIZONTAL
EUT : UMPC (GSM/GPRS/EDGE 900/1800)UMTS/HSDPA
Power : 120Vac/60Hz
Model : FG 780709-01
Memo : GSM 850 Link+BT 2DH5_Tx_Ch78+Adaptor
: + Earphone
Plane : 上蓋直立

		Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark	Pol/Phase
		MHz	dBm	dB	dBm	dBm	dB		
1		31.1	-60.55	-47.55	-13.00	-60.30	-0.25	Peak	HORIZONTAL
2		67.5	-67.47	-54.47	-13.00	-55.11	-12.36	Peak	HORIZONTAL
3		135.0	-66.87	-53.87	-13.00	-54.23	-12.64	Peak	HORIZONTAL
4		300.7	-69.77	-56.77	-13.00	-59.86	-9.91	Peak	HORIZONTAL
5		360.9	-69.29	-56.29	-13.00	-61.45	-7.84	Peak	HORIZONTAL
6		836.9	-40.63			-39.30	-1.33	Peak	HORIZONTAL
7		1674.0	-44.66	-31.66	-13.00	-47.01	2.36	Peak	HORIZONTAL
8	X	2478.0	-7.42			-13.99	6.57	Peak	HORIZONTAL
9		2508.0	-30.79	-17.79	-13.00	-37.48	6.69	Peak	HORIZONTAL
10		4178.0	-48.37	-35.37	-13.00	-60.36	11.98	Peak	HORIZONTAL

Remark:
1. #6: MS Signal
2. #8: BT Signal

Vertical Polarization



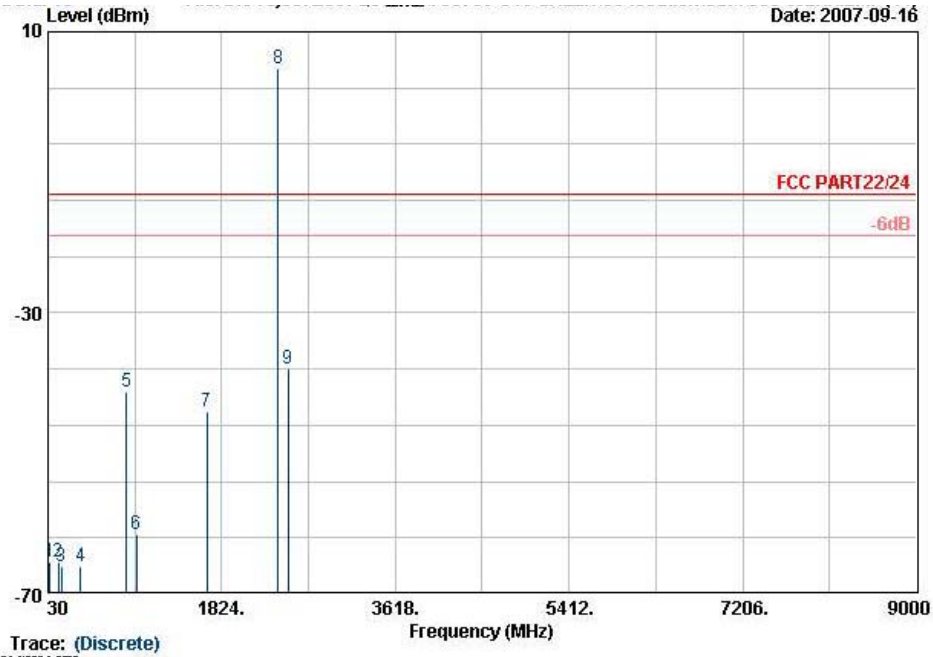
Site : 03CH06-HY
Condition : HF-SPURIOUS-060929 VERTICAL
EUT : UMPC (GSM/GPRS/EDGE 900/1800)UMTS/HSDPA
Power : 120Vac/60Hz
Model : FG 780709-01
Memo : GSM 850 Link+BT 2DH5_Tx_Ch78+Adaptor
: + Earphone
Plane : 上蓋直立

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark	Pol/Phase
	MHz	dBm	dB	dBm	dBm	dB		
1	73.7	-60.92	-47.92	-13.00	-49.46	-11.46	Peak	VERTICAL
2	91.3	-59.23	-46.23	-13.00	-50.28	-8.95	Peak	VERTICAL
3	123.7	-55.38	-42.38	-13.00	-47.47	-7.91	Peak	VERTICAL
4	300.7	-66.81	-53.81	-13.00	-60.37	-6.44	Peak	VERTICAL
5	698.3	-64.65	-51.65	-13.00	-64.19	-0.46	Peak	VERTICAL
6	836.9	-39.10			-40.46	1.36	Peak	VERTICAL
7	1674.0	-47.67	-34.67	-13.00	-49.83	2.16	Peak	VERTICAL
8 @	2478.0	-4.90			-12.01	7.11	Peak	VERTICAL
9	2508.0	-23.10	-10.10	-13.00	-30.28	7.18	Peak	VERTICAL

Remark:
1. #6: MS Signal
2. #8: BT Signal
3. There is no more obvious emission except the listings above.

4.6.5.10 Mode 10

Horizontal Polarization

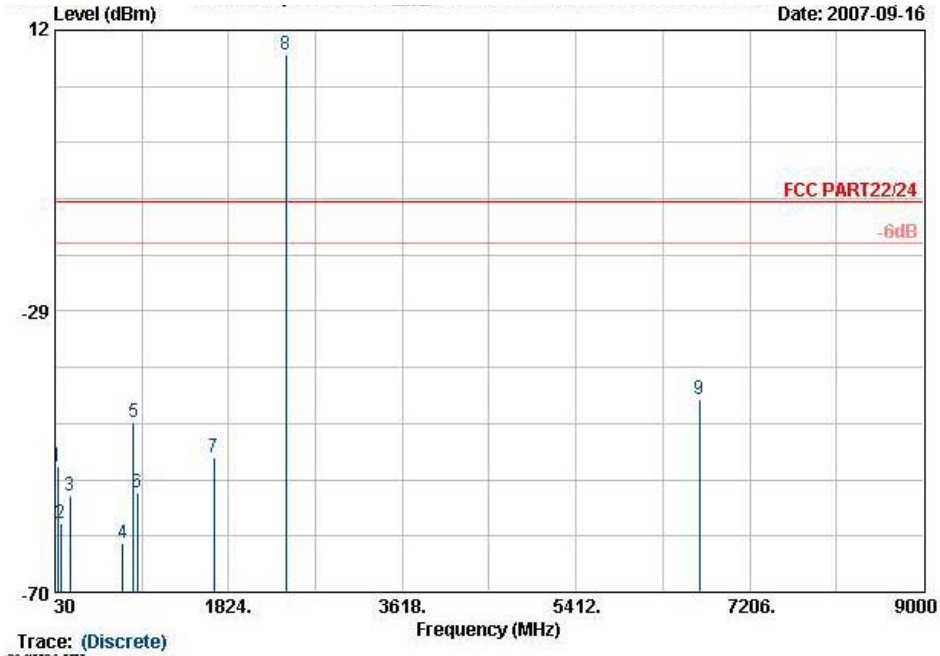


Site : 03CH06-HY
Condition : HF-SPURIOUS-060929 HORIZONTAL
EUT : UMPC (GSM/GPRS/EDGE 900/1800)UMTS/HSDPA
Power : 120Vac/60Hz
Model : FG 780709-01
Memo : GSM 850 Link +WLAN_11G_Ch01+Adaptor
: + Earphone
Plane : 上蓋直立

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark	Pol/Phase
	MHz	dBm	dB	dBm	dBm	dB		
1 @	51.3	-65.36	-52.36	-13.00	-52.93	-12.43	Peak	HORIZONTAL
2 @	133.1	-65.53	-52.53	-13.00	-52.91	-12.62	Peak	HORIZONTAL
3 @	164.7	-66.01	-53.01	-13.00	-53.03	-12.99	Peak	HORIZONTAL
4 @	367.9	-66.12	-53.12	-13.00	-58.51	-7.60	Peak	HORIZONTAL
5 @	836.9	-41.26			-39.93	-1.33	Peak	HORIZONTAL
6 @	939.8	-61.59			-61.25	-0.34	Peak	HORIZONTAL
7 @	1674.0	-44.03	-31.03	-13.00	-46.39	2.36	Peak	HORIZONTAL
8 @	2408.0	4.78			-1.53	6.31	Peak	HORIZONTAL
9 @	2508.0	-37.88	-24.88	-13.00	-44.57	6.69	Peak	HORIZONTAL

Remark:
1. #5: MS Signal
2. #6: BS Signal
3. #8: WLAN Signal

Vertical Polarization



Site : 03CH06-HY
Condition : HF-SPURIOUS-060929 VERTICAL
EUT : UMPC (GSM/GPRS/EDGE 900/1800)UMTS/HSDPA
Power : 120Vac/60Hz
Model : FG 780709-01
Memo : GSM 850 Link +WLAN_11G_Ch01+Adaptor
: + Earphone
Plane : 上蓋直立

	Freq	Level	Over Limit	Limit Line	Read Level	Factor	Remark	Pol/Phase
	MHz	dBm	dB	dBm	dBm	dB		
1 @	61.6	-51.61	-38.61	-13.00	-38.47	-13.14	Peak	VERTICAL
2 @	90.5	-59.85	-46.85	-13.00	-50.76	-9.09	Peak	VERTICAL
3 @	183.6	-55.99	-42.99	-13.00	-47.55	-8.44	Peak	VERTICAL
4 @	733.3	-62.86	-49.86	-13.00	-62.92	0.07	Peak	VERTICAL
5 @	836.9	-45.24			-46.60	1.36	Peak	VERTICAL
6 @	880.3	-55.52			-57.23	1.71	Peak	VERTICAL
7 @	1674.0	-50.38	-37.38	-13.00	-52.54	2.16	Peak	VERTICAL
8 @	2414.0	8.53			1.64	6.89	Peak	VERTICAL
9 @	6688.0	-41.87	-28.87	-13.00	-60.55	18.68	Peak	VERTICAL

Remark:
1. #5: MS Signal
2. #6: BS Signal
3. #8: WLAN Signal
4. There is no more obvious emission except the listings above.

4.7 Frequency Stability (Temperature Variation)

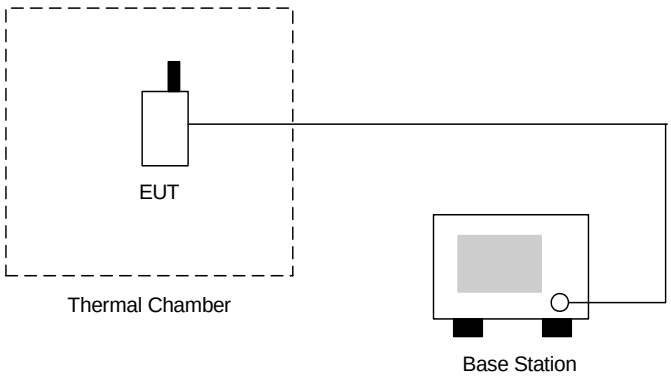
4.7.1 Measurement Instrument

As decribed in chapter 5 of this test report.

4.7.2 Test Procedure

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

4.7.3 Test Setup Layout



4.7.4 Test Result

- Test Mode : GSM850 (GSM) CH189

Temperature(℃)	Change (Hz)	Change (ppm)	Limit (ppm)	Result
-30	-67	-0.04	2.5	Passed
-20	64	0.08		
-10	57	0.07		
0	-32	-0.04		
10	45	0.05		
20	36	0.04		
30	48	0.06		
40	-27	-0.03		
50	35	0.04		

- Test Mode : GSM850 (EDGE) CH189

Temperature(℃)	Change (Hz)	Change (ppm)	Limit (ppm)	Result
-30	86	0.05	2.5	Passed
-20	-55	-0.06		
-10	-26	-0.03		
0	-30	-0.04		
10	57	0.07		
20	-23	-0.03		
30	46	0.05		
40	-34	-0.04		
50	-55	-0.06		

- Test Mode : PCS1900 (GSM) CH661

Temperature(℃)	Change (Hz)	Change (ppm)	Limit (ppm)	Result
-30	-64	-0.03	2.5	Passed
-20	-47	-0.02		
-10	39	0.02		
0	25	0.01		
10	-40	-0.02		
20	26	0.01		
30	67	0.04		
40	39	0.02		
50	-26	-0.01		

- Test Mode : PCS1900 (EDGE) CH661

Temperature(℃)	Change (Hz)	Change (ppm)	Limit (ppm)	Result
-30	-71	-0.04	2.5	Passed
-20	-62	-0.03		
-10	56	0.03		
0	-36	-0.02		
10	-37	-0.02		
20	-28	-0.01		
30	39	0.02		
40	-35	-0.02		
50	-47	-0.02		

- Test Mode : WCDMA Band V CH4182

Temperature(℃)	Change (Hz)	Change (ppm)	Limit (ppm)	Result
-30	-23	-0.03	2.5	Passed
-20	41	0.05		
-10	-37	-0.04		
0	39	0.05		
10	-49	-0.06		
20	26	0.03		
30	37	0.04		
40	22	0.03		
50	46	0.05		

- Test Mode : WCDMA Band V (HSDPA) CH4182

Temperature(℃)	Change (Hz)	Change (ppm)	Limit (ppm)	Result
-30	-65	-0.08	2.5	Passed
-20	45	0.05		
-10	36	0.04		
0	-28	-0.03		
10	40	0.05		
20	-39	-0.05		
30	-45	-0.05		
40	-41	-0.05		
50	32	0.04		

- Test Mode : WCDMA Band II CH9400

Temperature(℃)	Change (Hz)	Change (ppm)	Limit (ppm)	Result
-30	-34	-0.02	2.5	Passed
-20	-67	-0.04		
-10	46	0.02		
0	17	0.01		
10	40	0.02		
20	-42	-0.02		
30	57	0.03		
40	-24	-0.01		
50	45	0.02		

- Test Mode : WCDMA Band II (HSDPA) CH9400

Temperature(℃)	Change (Hz)	Change (ppm)	Limit (ppm)	Result
-30	50	0.03	2.5	Passed
-20	-41	-0.02		
-10	28	0.01		
0	36	0.02		
10	27	0.01		
20	54	0.03		
30	16	0.01		
40	-21	-0.01		
50	36	0.02		

4.8 Frequency Stability (Voltage Variation)

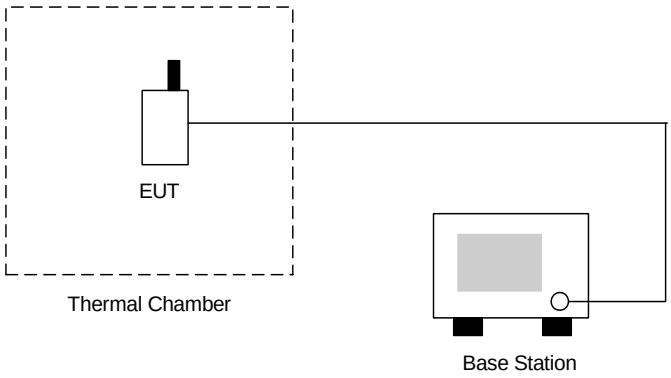
4.8.1 Measurement Instrument

As described in chapter 5 of this test report.

4.8.2 Test Procedure

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

4.8.3 Test Setup Layout



4.8.4 Test Result

- Test Mode : GSM850 (GSM) CH189

Voltage(Volt)	Change (Hz)	Change (ppm)	Limit (ppm)	Result
7.4	43.0	0.05	2.5	Passed
BEP	-38.0	-0.04		
8.5	36.0	0.04		

- Test Mode : GSM850 (EDGE) CH189

Voltage(Volt)	Change (Hz)	Change (ppm)	Limit (ppm)	Result
7.4	-52.0	-0.06	2.5	Passed
BEP	-41.0	-0.05		
8.5	-23.0	-0.03		

- Test Mode : PCS1900 (GSM) CH661

Voltage(Volt)	Change (Hz)	Change (ppm)	Limit (ppm)	Result
7.4	54.0	0.03	2.5	Passed
BEP	36.0	0.02		
8.5	-61.0	-0.03		

- Test Mode : PCS1900 (EDGE) CH661

Voltage(Volt)	Change (Hz)	Change (ppm)	Limit (ppm)	Result
7.4	-47.0	-0.02	2.5	Passed
BEP	-41.0	-0.02		
8.5	-51.0	-0.03		

- Test Mode : WCDMA Band V CH4182

Voltage(Volt)	Change (Hz)	Change (ppm)	Limit (ppm)	Result
7.4	-57	-0.07	2.5	Passed
BEP	-35	-0.04		
8.5	33	0.04		

- Test Mode : WCDMA Band V (HSDPA) CH4182

Voltage(Volt)	Change (Hz)	Change (ppm)	Limit (ppm)	Result
7.4	-53	-0.06	2.5	Passed
BEP	-31	-0.04		
8.5	44	0.05		

- Test Mode : WCDMA Band II CH9400

Voltage(Volt)	Change (Hz)	Change (ppm)	Limit (ppm)	Result
7.4	38	0.02	2.5	Passed
BEP	-52	-0.03		
8.5	22	0.01		

- Test Mode : WCDMA Band II (HSDPA) CH9400

Voltage(Volt)	Change (Hz)	Change (ppm)	Limit (ppm)	Result
7.4	25	0.01	2.5	Passed
BEP	36	0.02		
8.5	-48	-0.03		

Remark:
1. Normal Voltage=7.4V.
2. Battery End Point (BEP)= 6.3 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. 26, 2007	Jul. 25, 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)
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. 07, 2006	Oct. 06, 2007	Conduction (TH02-HY)
Dc Power Supply	TOPWARD	3303D	740889	N/A	May 25, 2005	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		$u(x_i)$	Ci	$Ci*u(x_i)$
	dB	Probability Distribution			
Receiver reading	±0.10	Normal(k=1)	0.10	1	0.10
Antenna factor calibration	±1.70	Normal(k=2)	0.85	1	0.85
Cable loss calibration	±0.50	Normal(k=2)	0.25	1	0.25
Receiver Correction	±2.00	Rectangular	1.15	1	1.15
Antenna Factor Directional	±1.50	Rectangular	0.87	1	0.87
Site imperfection	±2.80	Triangular	1.14	1	1.14
Mismatch Receiver VSWR Γ1= 0.197 Antenna VSWR Γ2= 0.194 Uncertainty=20log(1-Γ1*Γ2*Γ3)	+0.34/-0.35	U-shaped	0.244	1	0.244
Combined standard uncertainty Uc(y)	**2.36**				
Measuring uncertainty for a level of confidence of 95% U=2Ue(y)	**4.72**				

END OF TEST REPORT