



FCC TEST REPORT

for

47 CFR Part 22H, 24E

Equipment : WCDMA Quad-band/Mobile Phone with GPRS, WiFi, GPS, Bluetooth
Trade Name : glofiish
Model No. : X800/X800+
FCC ID : SPUX800
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) : 2.265 W
GSM850(EDGE) : 0.619 W
PCS1900(GSM) : 1.089 W
PCS1900(EDGE) : 0.439 W
WCDMA Band V : 0.197 W
WCDMA Band V(HSDPA) : 0.155 W
WCDMA Band II : 0.173 W
WCDMA Band II(HSDPA) : 0.174 W
Emission Designator : GSM : 300KGXW
EDGE : 300KG7W
WCDMA : 4M22F9W
Applicant : E-TEN Information Systems Co., Ltd.
9F, No. 256, Yangguang Street, Nela Chiu, Taipei, Taiwan114, R.O.C.

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- The data shown in this test report were carried out on Jul. 13, 2007 at **Sporton International Inc. LAB.**
- Report No.: FG761327B, Report Version: Rev. 01.

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Report Version: Rev. 01



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History of this test report

Report Issue Date: Jul. 18, 2007

Report No.	Description



1. General Information

1.1. Applicant

E-TEN Information Systems Co., Ltd.
9F, No. 256, Yangguang Street, Neihu Chiu, Taipei, Taiwan114, R.O.C.

1.2 Manufacturer

E-TEN Information Systems Co., Ltd.
9F, No. 256, Yangguang Street, Neihu Chiu, Taipei, Taiwan114, R.O.C.

1.3 Basic Description of Equipment under Test

Equipment	: WCDMA Quad-band/Mobile Phone with GPRS, WiFi, GPS, Bluetooth
Trade Name	: glofiish
Model No.	: X800/X800+
FCC ID	: SPUX800
Power Supply Type	: From battery 3.7V
AC Power Cord	: AC 120V, Wall-mount, 1.8 meter, 2 pin
Eearphone	: Marry, DD0EN5E004
Charger	: Phihong, PSC05R-050 PH
Battery	: Welldone, E4ET011K1002
USB Cable	: Golden Bridge, As52-07030013

**1.4 Feature of Equipment under Test**

DUT Type :	WCDMA Quad-band/Mobile Phone with GPRS, WiFi, GPS, Bluetooth
Trade Name :	glofiish
Model Name :	X800/X800+
FCC ID :	SPUX800
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
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
Maximum Output Power to Antenna :	GSM850 : 32.15 dBm (GSM) ; 27.10 dBm (EDGE) PCS1900 : 30.21 dBm (GSM) ; 26.40 dBm (EDGE) WCDMA : 24.96 dBm(12.2kbps) ; 24.95 dBm(64kbps) ; 24.96 dBm(144kbps) ; Band V 24.98 dBm(384kbps) ; 24.89 dBm(AMR) ; 23.78 dBm (HSDPA) WCDMA : 23.26 dBm(12.2kbps) ; 23.24 dBm(64kbps) ; 23.26 dBm(144kbps) ; Band II 23.34 dBm(384kbps) ; 23.31 dBm(AMR) ; 23.03 dBm (HSDPA) WLAN : 14.81 dBm (802.11b) ; 15.01 dBm (802.11g) Bluetooth : 3.14 dBm
Maximum ERP/EIRP :	GSM850(GSM) : 2.265 W (33.55 dBm) GSM850(EDGE) : 0.619 W (27.92 dBm) PCS1900(GSM) : 1.089 W (30.37 dBm) PCS1900(EDGE) : 0.439 W (26.42 dBm) WCDMA Band V : 0.197 W (22.95 dBm) WCDMA Band V(HSDPA) : 0.155 W (21.91 dBm) WCDMA Band II : 0.173 W (22.39 dBm) WCDMA Band II(HSDPA) : 0.174 W (22.41 dBm)
Antenna Type :	Bluetooth: Chip Antenna WLAN: PIFA Antenna
Power Rating (DC/AC , Voltage and Current of RF element or PA) :	DC 3.7V / 550mA
Digital Modulation Emission :	GSM : GMSK EDGE : 8PSK WCDMA / HSDPA : QPSK WLAN : DSSS / OFDM Bluetooth : GFSK
Type of Emission :	GSM : 300KGXW EDGE : 300KG7W WCDMA : 4M22F9W
Device Power Class :	GSM850 : 4 PCS1900 : 1 WCDMA Band V : 2 WCDMA Band II : 3
DUT Stage :	Production Unit



1.5 Report Date

EUT Received : Jun. 22, 2007

Report Date : Jul. 18, 2007

2 Test Configuration of Equipment under Test

2.1 Test Manner

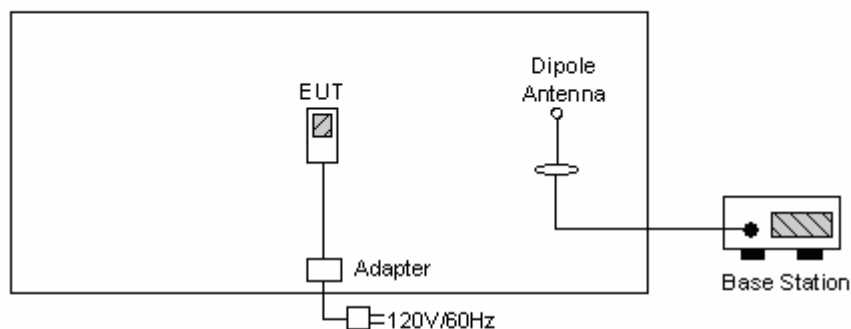
- The spurious emission measurements were carried out in semi-anechoic chamber with 3-meter test range.
- During all testings, EUT is in link mode with base station emulator at maximum power level.
- Frequency range investigated: radiated emission 30 MHz to 9000 MHz for GSM850 and WCDMA Band V; 30MHz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

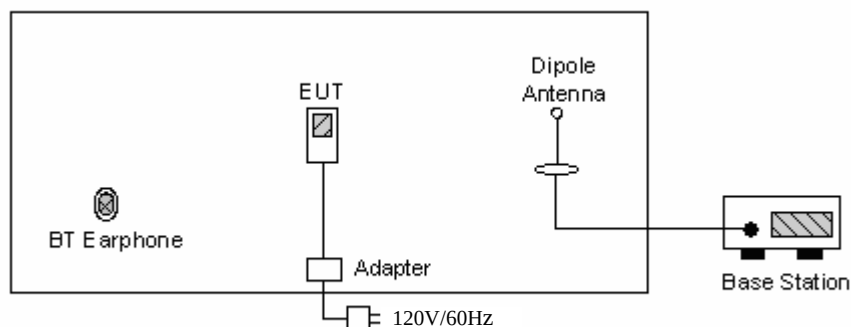
2.2 Test Mode

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			
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

<Phone Link mode>



<Phone with Bluetooth Link Mode>

2.4 Ancillary Equipment List

Item	Equipment	Trade Name	Model No.	FCC ID	Serial No.
1.	Base Station	R&S	CMU200	N/A	106656
2.	Bluetooth Earphone	Free Style	JD-100	PQY471087	N/A



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 in Compliance with

47 CFR Part 22H, 24E, Part 2

3.3 Frequency Range Investigated

- 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

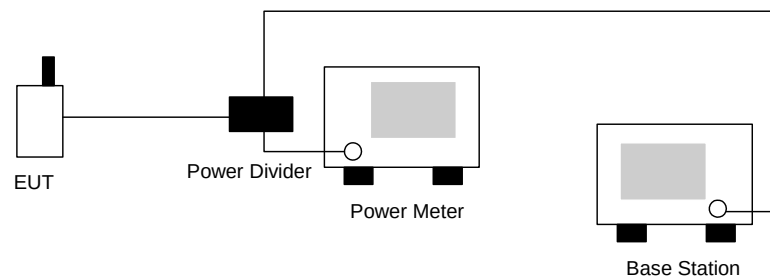
4.2.1 Measurement Instruments :

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)	32.07	1.611
	189	836.4 (Mid)	32.09	1.618
	251	848.8 (High)	32.15	1.641
GSM850 (EDGE)	128	824.2 (Low)	27.03	0.505
	189	836.4 (Mid)	27.03	0.505
	251	848.8 (High)	27.10	0.513
PCS1900 (GSM)	512	1850.2 (Low)	29.75	0.944
	661	1880.0 (Mid)	30.10	1.023
	810	1909.8 (High)	30.21	1.050
PCS1900 (EDGE)	512	1850.2 (Low)	25.92	0.391
	661	1880.0 (Mid)	26.02	0.400
	810	1909.8 (High)	26.40	0.437
WCDMA Band V (12.2k bps)	4132	826.4 (Low)	24.94	0.312
	4182	836.4 (Mid)	24.96	0.313
	4233	846.6 (High)	24.36	0.273
WCDMA Band V (64k bps)	4132	826.4 (Low)	24.94	0.312
	4182	836.4 (Mid)	24.95	0.313
	4233	846.6 (High)	24.37	0.274
WCDMA Band V (144k bps)	4132	826.4 (Low)	24.96	0.313
	4182	836.4 (Mid)	24.95	0.313
	4233	846.6 (High)	24.39	0.275
WCDMA Band V (384k bps)	4132	826.4 (Low)	24.98	0.315
	4182	836.4 (Mid)	24.96	0.313
	4233	846.6 (High)	24.40	0.275
WCDMA Band V (AMR)	4132	826.4 (Low)	24.59	0.288
	4182	836.4 (Mid)	24.89	0.308
	4233	846.6 (High)	24.29	0.269
WCDMA Band V (HSDPA)	4132	826.4 (Low)	23.78	0.239
	4182	836.4 (Mid)	23.76	0.238
	4233	846.6 (High)	23.20	0.209
WCDMA Band II (12.2k bps)	9262	1852.4 (Low)	23.17	0.207
	9400	1880.0 (Mid)	23.26	0.212



	9538	1907.6 (High)	23.57	0.228
WCDMA Band II (64k bps)	9262	1852.4 (Low)	22.40	0.174
	9400	1880.0 (Mid)	23.24	0.211
	9538	1907.6 (High)	23.15	0.207
WCDMA Band II (144k bps)	9262	1852.4 (Low)	22.41	0.174
	9400	1880.0 (Mid)	23.26	0.212
	9538	1907.6 (High)	23.16	0.207
WCDMA Band II (384k bps)	9262	1852.4 (Low)	23.34	0.216
	9400	1880.0 (Mid)	23.27	0.212
	9538	1907.6 (High)	23.16	0.207
WCDMA Band II (AMR)	9262	1852.4 (Low)	23.31	0.214
	9400	1880.0 (Mid)	23.11	0.205
	9538	1907.6 (High)	23.81	0.240
WCDMA Band II (HSDPA)	9262	1852.4 (Low)	21.24	0.133
	9400	1880.0 (Mid)	21.15	0.130
	9538	1907.6 (High)	23.03	0.201



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

P_s (dBm) : Input power to substitution antenna.

G_s (dBi or dBd) : Substitution antenna Gain.

$E_t = R_t + AF$

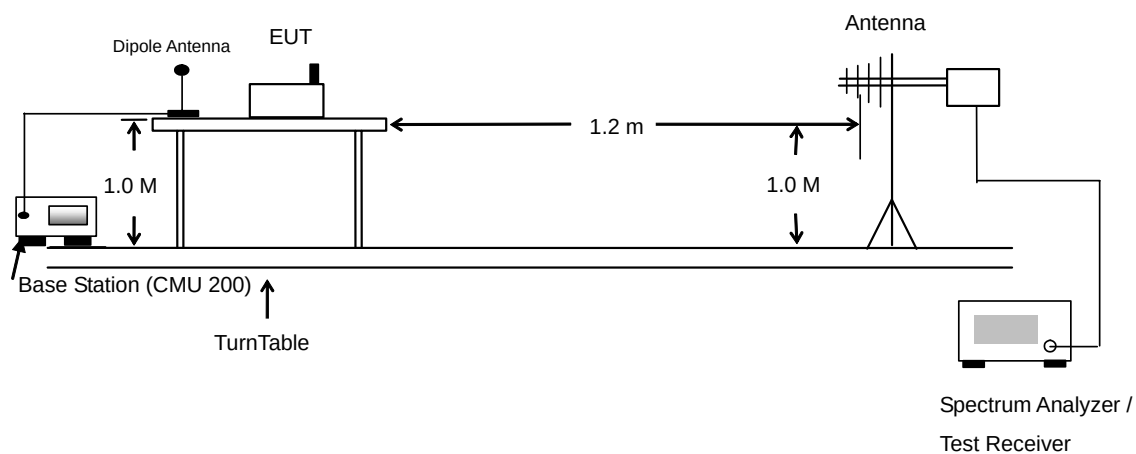
$E_s = R_s + AF$

AF (dB/m) : Receive antenna factor

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

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

4.3.3 Test Setup Layout of ERP/EIRP





4.3.4 Test Result

GSM850 (GSM) Radiated Power ERP						
Horizontal Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBd)	ERP (dBm)	ERP (W)
824.20	-32.81	-48.12	0.00	-1.08	14.23	0.03
836.40	-31.31	-48.28	0.00	-0.93	16.04	0.04
848.80	-29.57	-48.35	0.00	-0.76	18.02	0.06
Vertical Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBd)	ERP (dBm)	ERP (W)
824.20	-23.08	-47.97	0.00	-1.08	23.81	0.24
836.40	-21.19	-48.01	0.00	-0.93	25.89	0.39
848.80	-19.12	-48.05	0.00	-0.76	28.17	0.66

GSM850 (EDGE) Radiated Power ERP						
Horizontal Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBd)	ERP (dBm)	ERP (W)
824.20	-38.04	-48.12	0.00	-1.08	9.00	0.01
836.40	-36.72	-48.28	0.00	-0.93	10.63	0.01
848.80	-35.05	-48.35	0.00	-0.76	12.54	0.02
Vertical Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBd)	ERP (dBm)	ERP (W)
824.20	-27.88	-47.97	0.00	-1.08	19.01	0.08
836.40	-26.52	-48.01	0.00	-0.93	20.56	0.11
848.80	-24.44	-48.05	0.00	-0.76	22.85	0.19



PCS1900 (GSM) Radiated Power EIRP						
Horizontal Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBi)	EIRP (dBm)	EIRP (W)
1850.20	-21.51	-51.88	0.00	1.96	32.33	1.71
1880.00	-22.76	-52.99	0.00	2.00	32.23	1.67
1909.80	-25.16	-54.28	0.00	1.98	31.10	1.29
Vertical Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBi)	EIRP (dBm)	EIRP (W)
1850.20	-21.46	-52.13	0.00	1.96	32.63	1.83
1880.00	-22.77	-53.17	0.00	2.00	32.40	1.74
1909.80	-24.74	-54.13	0.00	1.98	31.37	1.37

PCS1900 (EDGE) Radiated Power EIRP						
Horizontal Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBi)	EIRP (dBm)	EIRP (W)
1850.20	-25.28	-51.88	0.00	1.96	28.56	0.72
1880.00	-27.74	-52.99	0.00	2.00	27.25	0.53
1909.80	-29.15	-54.28	0.00	1.98	27.11	0.51
Vertical Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBi)	EIRP (dBm)	EIRP (W)
1850.20	-24.73	-52.13	0.00	1.96	29.36	0.86
1880.00	-26.34	-53.17	0.00	2.00	28.83	0.76
1909.80	-27.81	-54.13	0.00	1.98	28.30	0.68



WCDMA Band V Radiated Power ERP						
Horizontal Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBd)	ERP (dBm)	ERP (W)
824.20	-40.63	-48.12	0.00	-1.08	6.41	0.00
836.40	-38.91	-48.28	0.00	-0.93	8.44	0.01
848.80	-39.90	-48.35	0.00	-0.76	7.69	0.01
Vertical Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBd)	ERP (dBm)	ERP (W)
824.20	-30.53	-47.97	0.00	-1.08	16.36	0.04
836.40	-28.39	-48.01	0.00	-0.93	18.69	0.07
848.80	-29.03	-48.05	0.00	-0.76	18.26	0.07

WCDMA Band V (HSDPA) Radiated Power ERP						
Horizontal Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBd)	ERP (dBm)	ERP (W)
824.20	-40.89	-48.12	0.00	-1.08	6.15	0.00
836.40	-39.34	-48.28	0.00	-0.93	8.01	0.01
848.80	-40.49	-48.35	0.00	-0.76	7.10	0.01
Vertical Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBd)	ERP (dBm)	ERP (W)
824.20	-31.13	-47.97	0.00	-1.08	15.76	0.04
836.40	-29.05	-48.01	0.00	-0.93	18.03	0.06
848.80	-29.63	-48.05	0.00	-0.76	17.66	0.06



WCDMA Band II Radiated Power EIRP						
Horizontal Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBi)	EIRP (dBm)	EIRP (W)
824.20	-25.50	-48.12	0.00	-1.08	21.54	0.14
836.40	-26.54	-48.28	0.00	-0.93	20.81	0.12
848.80	-26.16	-48.35	0.00	-0.76	21.43	0.14
Vertical Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBi)	EIRP (dBm)	EIRP (W)
824.20	-25.08	-47.97	0.00	-1.08	21.81	0.15
836.40	-25.96	-48.01	0.00	-0.93	21.12	0.13
848.80	-25.60	-48.05	0.00	-0.76	21.69	0.15

WCDMA Band II (HSDPA) Radiated Power EIRP						
Horizontal Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBi)	EIRP (dBm)	EIRP (W)
824.20	-26.07	-48.12	0.00	-1.08	20.97	0.13
836.40	-26.96	-48.28	0.00	-0.93	20.39	0.11
848.80	-26.73	-48.35	0.00	-0.76	20.86	0.12
Vertical Polarization						
Frequency (MHz)	Rt (dBm)	Rs (dBm)	Ps (dBm)	Gs (dBi)	EIRP (dBm)	EIRP (W)
824.20	-25.66	-47.97	0.00	-1.08	21.23	0.13
836.40	-26.57	-48.01	0.00	-0.93	20.51	0.11
848.80	-26.17	-48.05	0.00	-0.76	21.12	0.13

4.4 Occupied Bandwidth and Band Edge Measurement

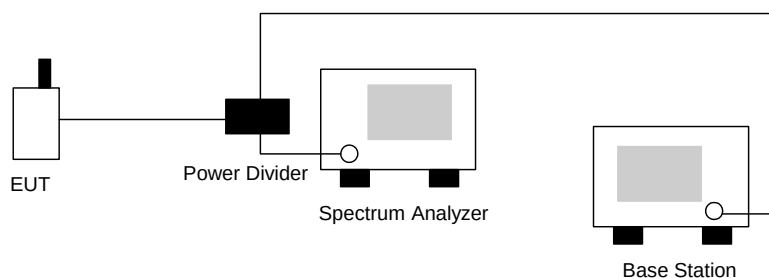
4.4.1 Measurement Instruments

As described in chapter 5 of this test report.

4.4.2 Test Procedure

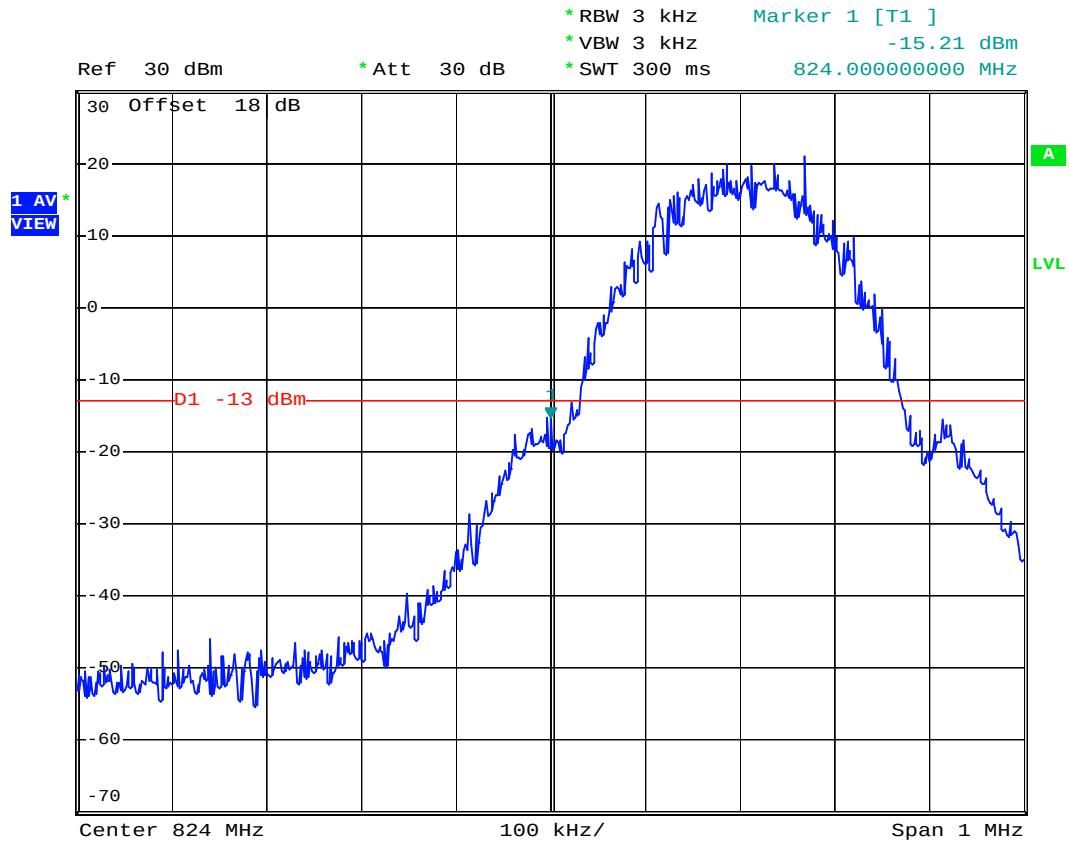
1. The EUT was connected to Spectrum Analyzer and Base Station via power divider.
2. The 99% occupied bandwidth of middle channel for the highest and lowest RF powers were measured.
3. The bandedge of low and high channels for the highest RF powers within the transmitting frequency band were measured.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



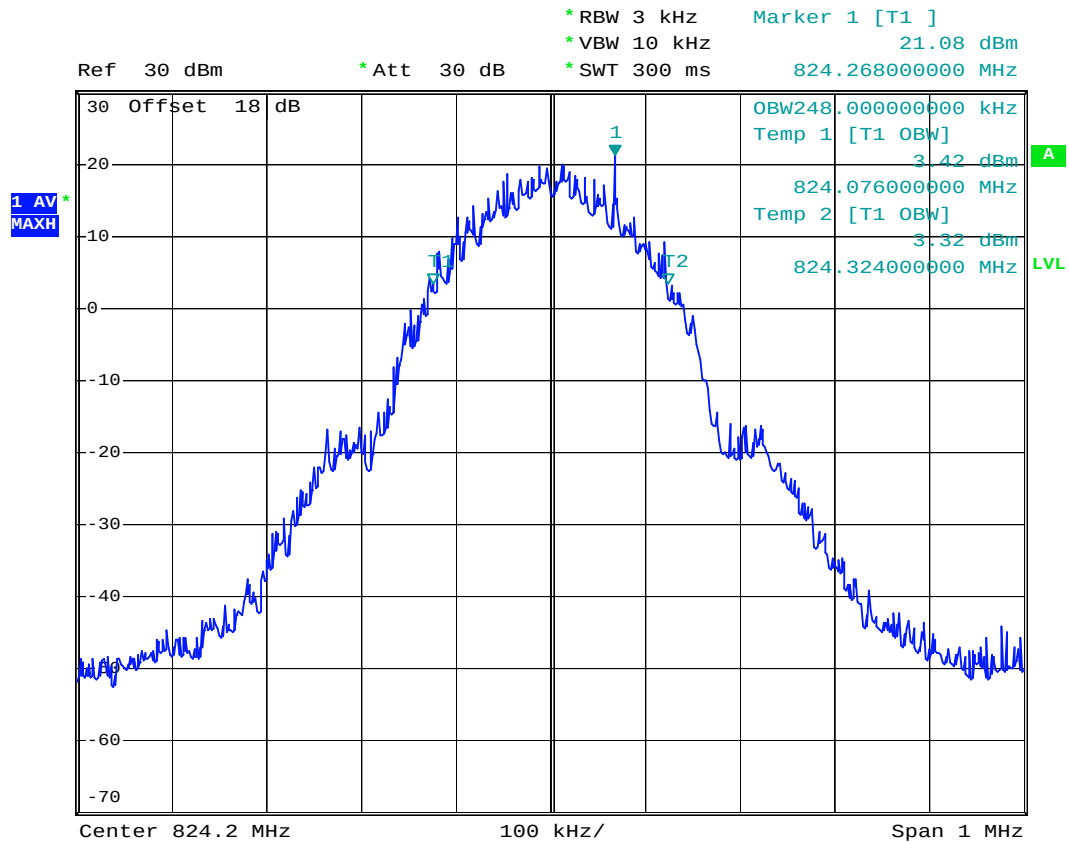
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FCC TEST REPORT

Report No. : FG761327B

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



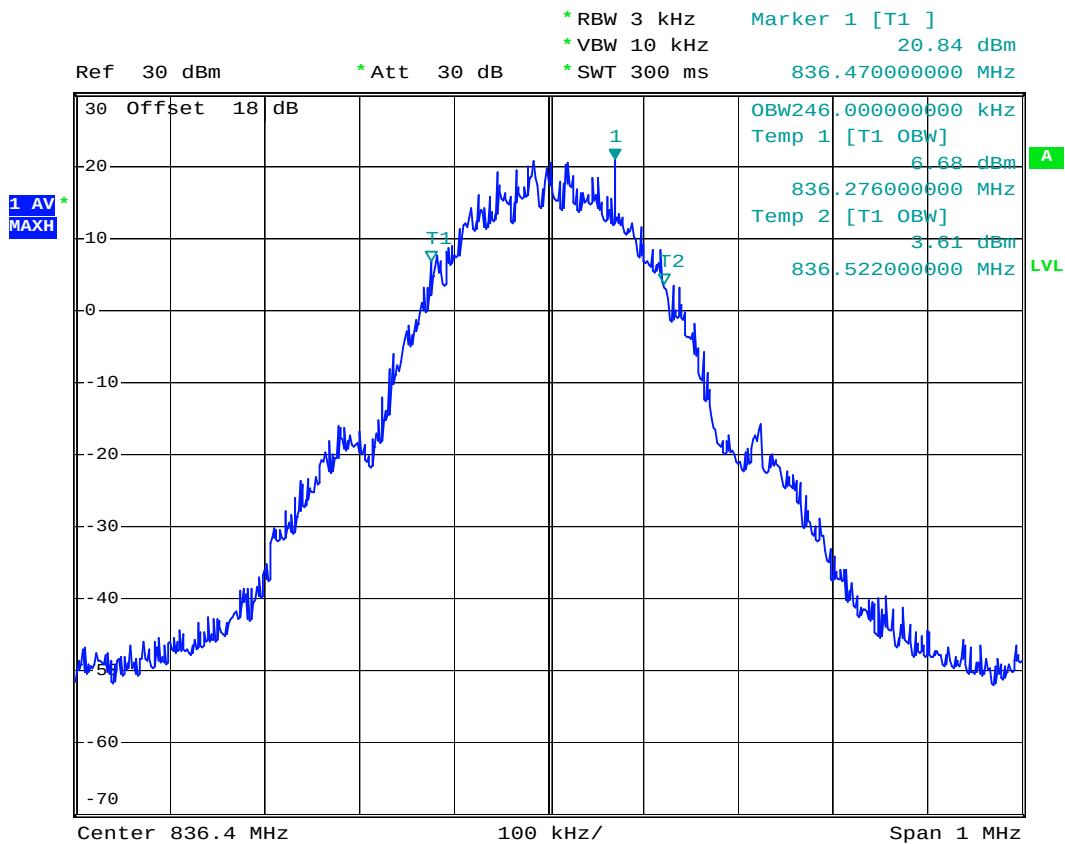
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FCC TEST REPORT

Report No. : FG761327B

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



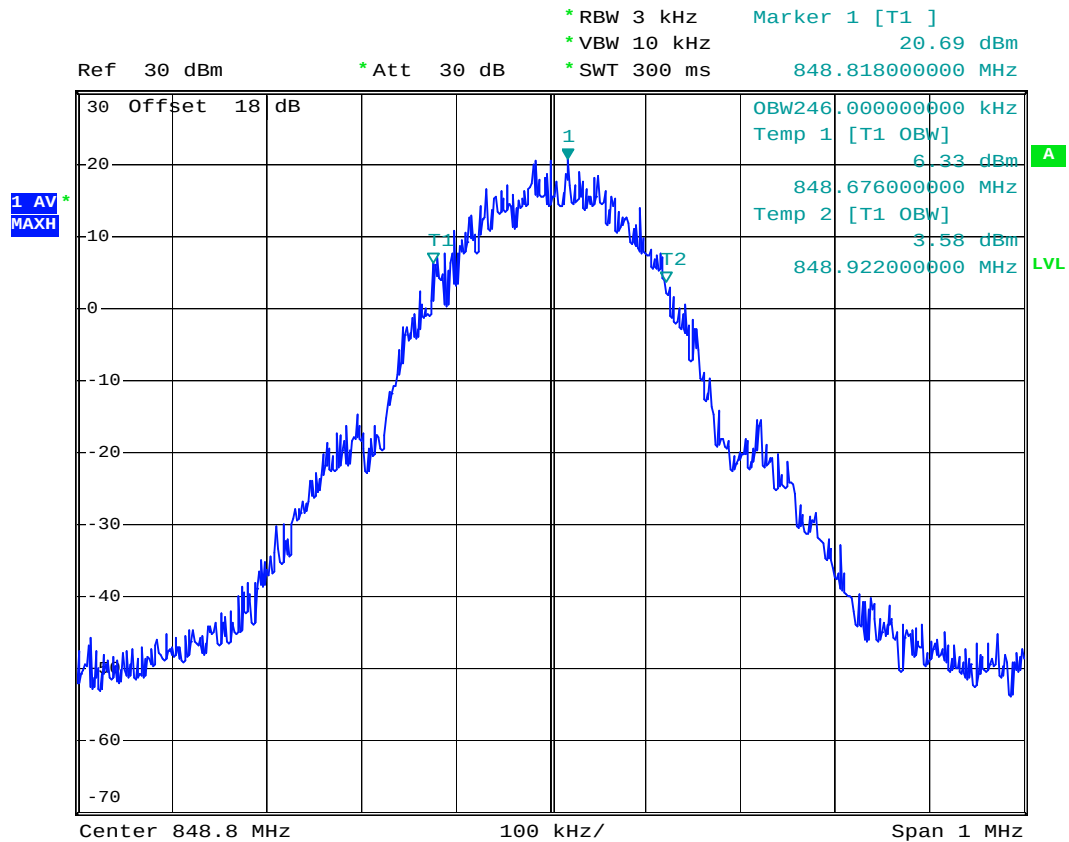
Date: 4.JUL.2007 01:19:12



FCC TEST REPORT

Report No. : FG761327B

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



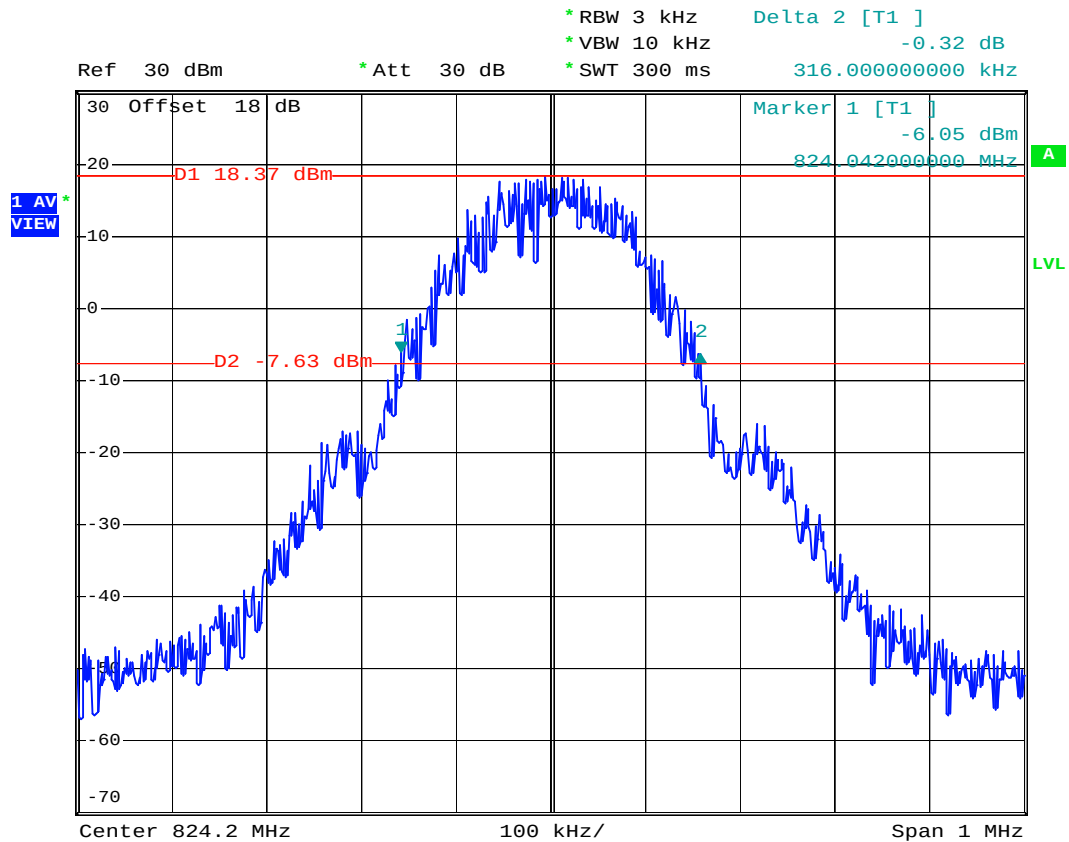
Date: 4.JUL.2007 01:19:45



FCC TEST REPORT

Report No. : FG761327B

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



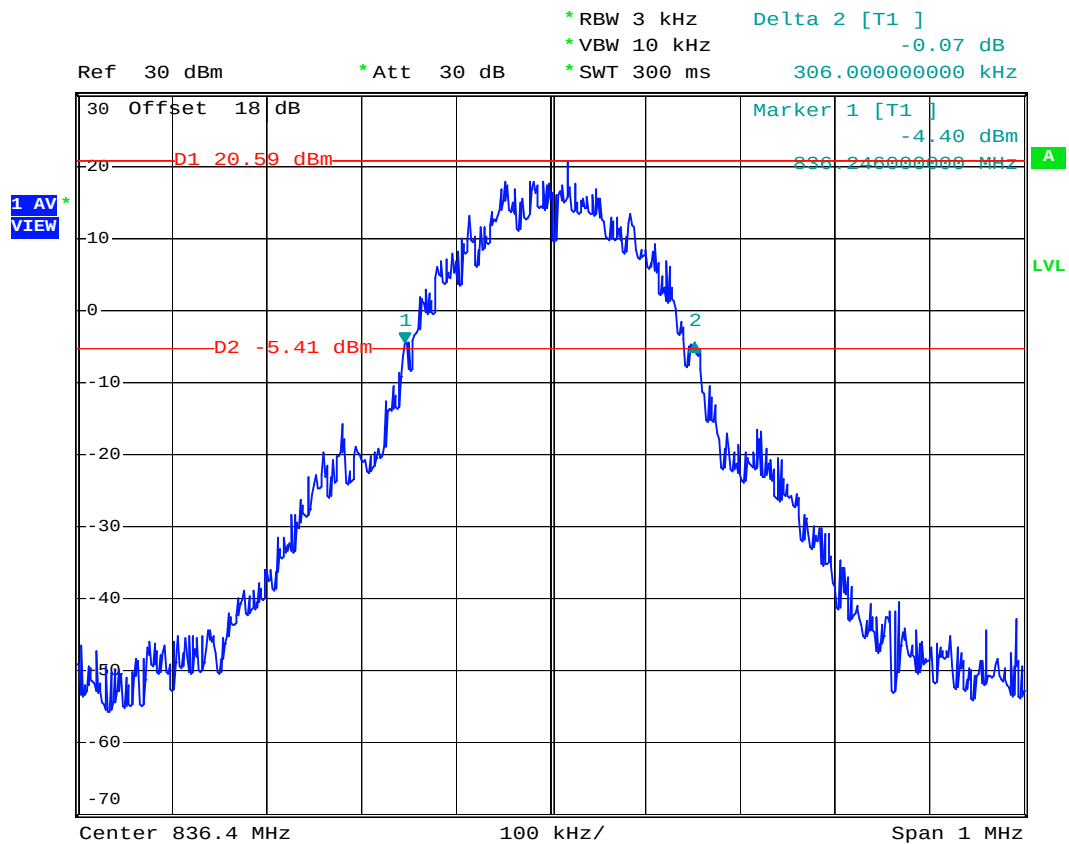
Date: 3.JUL.2007 23:07:45



FCC TEST REPORT

Report No. : FG761327B

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



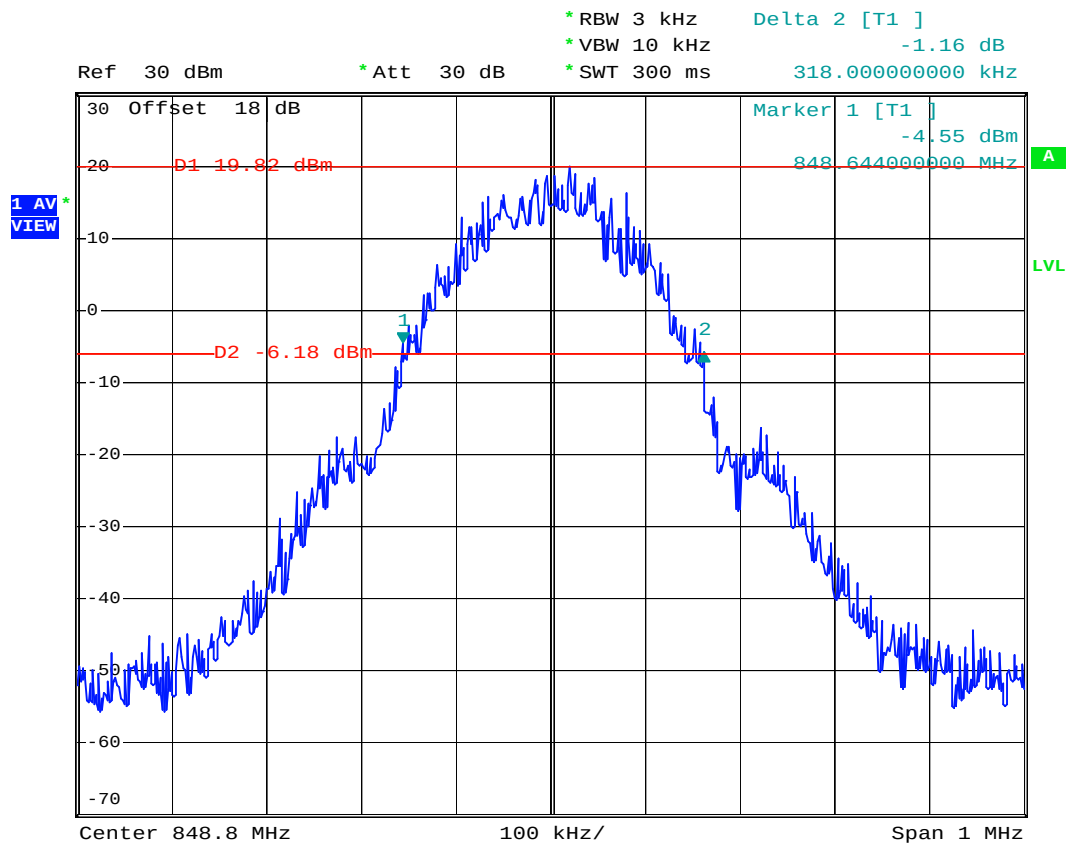
Date: 3.JUL.2007 23:08:43



FCC TEST REPORT

Report No. : FG761327B

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



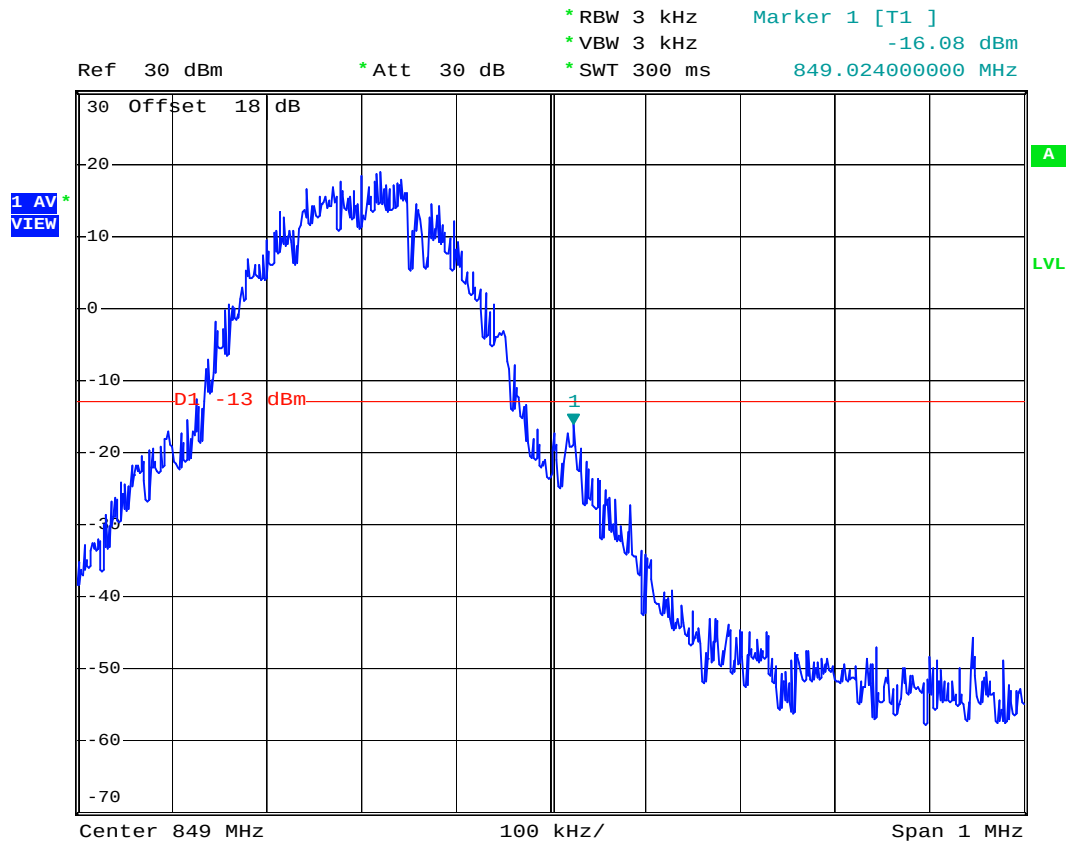
Date: 3.JUL.2007 23:09:31



FCC TEST REPORT

Report No. : FG761327B

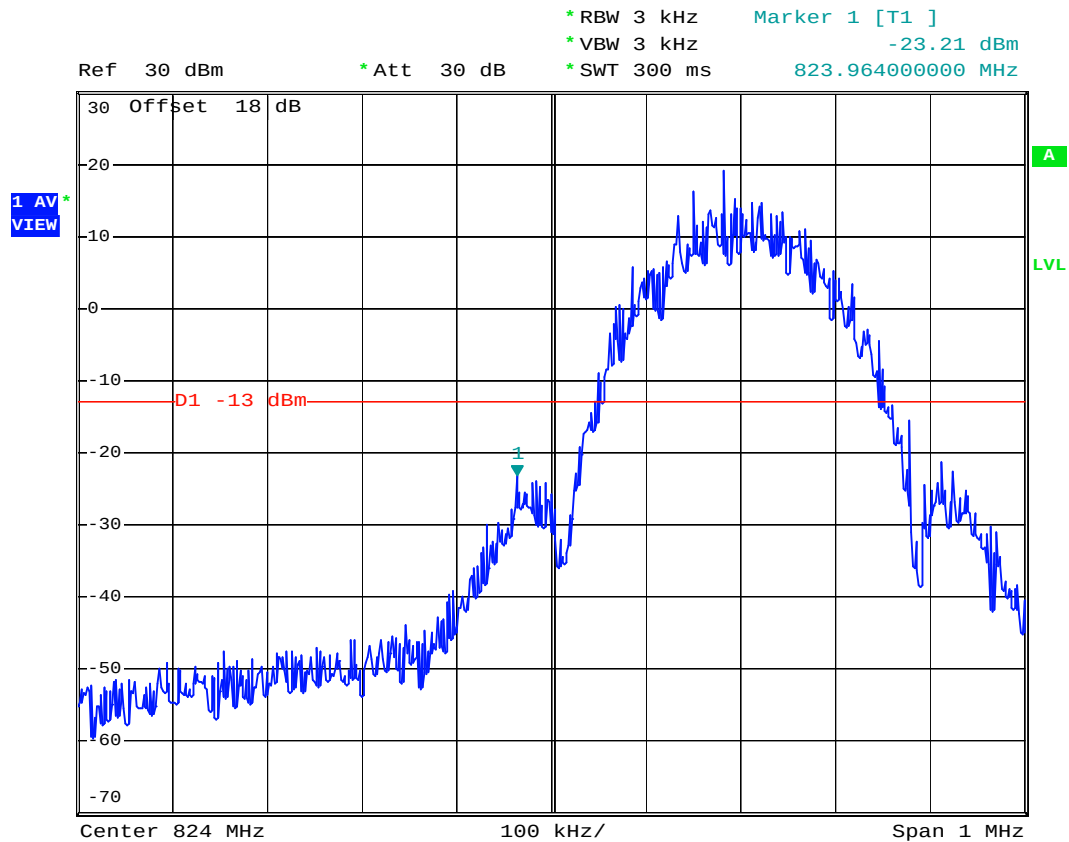
- Test Mode : GSM850 (GSM) CH251 Higher Band Edge
- Power State : High



Date: 3.JUL.2007 23:00:03



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



Date: 4.JUL.2007 01:46:38

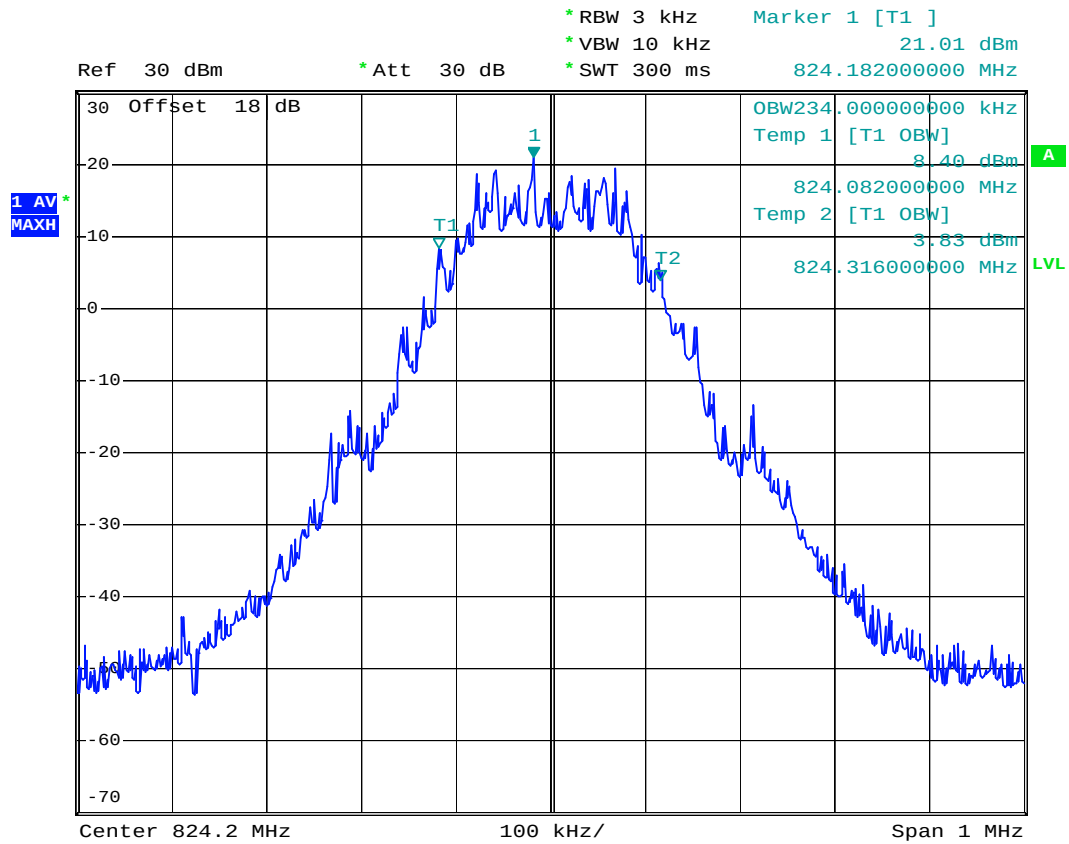


FCC TEST REPORT

Report No. : FG761327B

Test Mode : GSM850 (EDGE) CH128 99% Occupied Bandwidth

- Power State : High



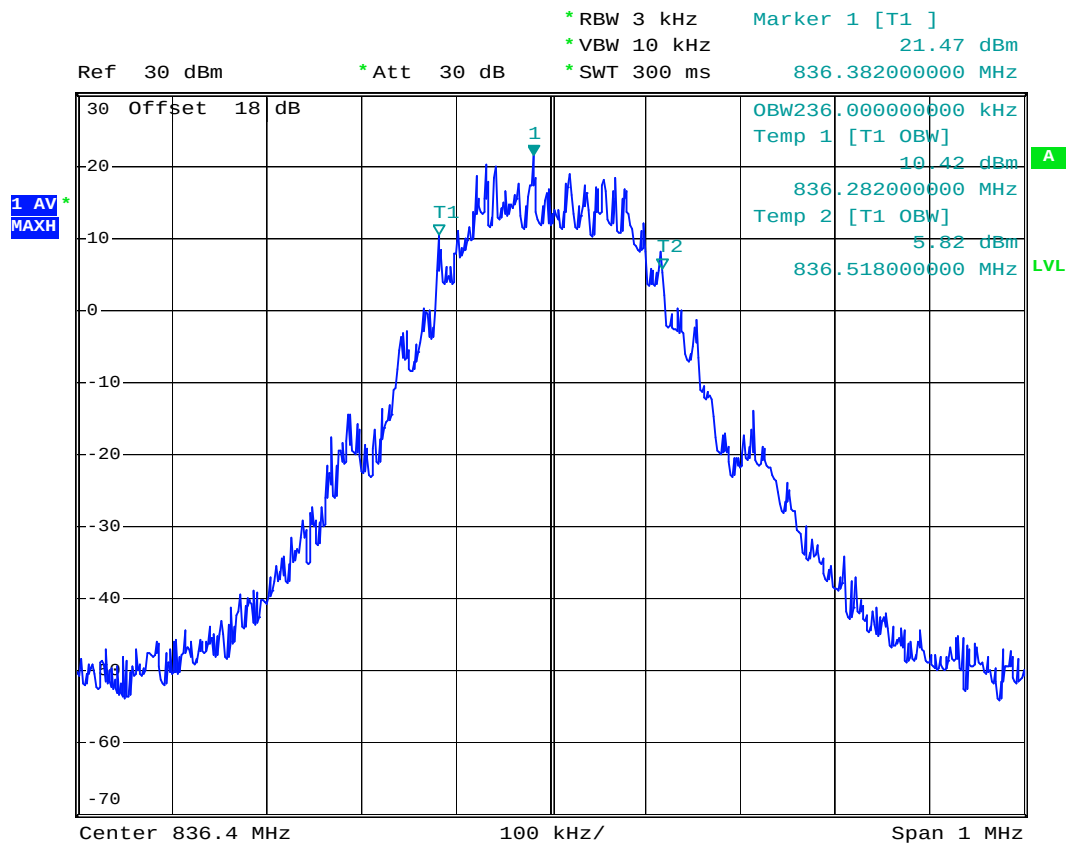
Date: 4.JUL.2007 02:15:15



FCC TEST REPORT

Report No. : FG761327B

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



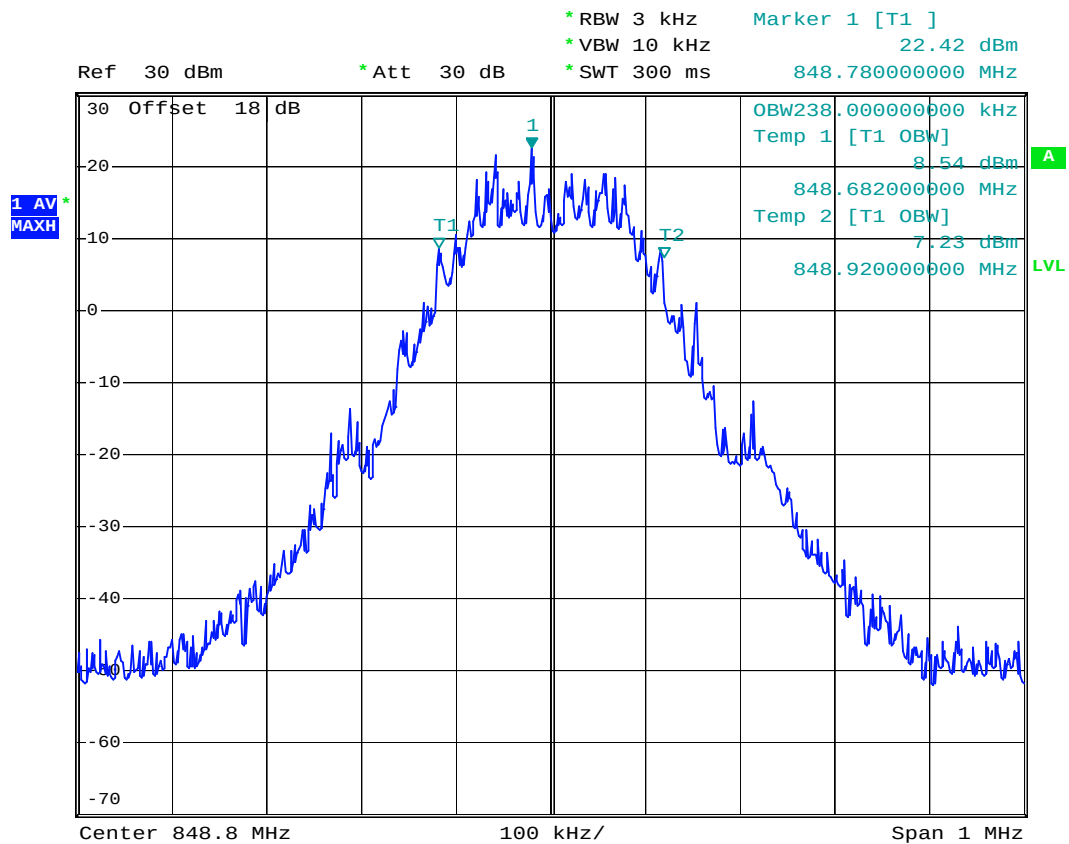
Date: 4.JUL.2007 02:14:54



FCC TEST REPORT

Report No. : FG761327B

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



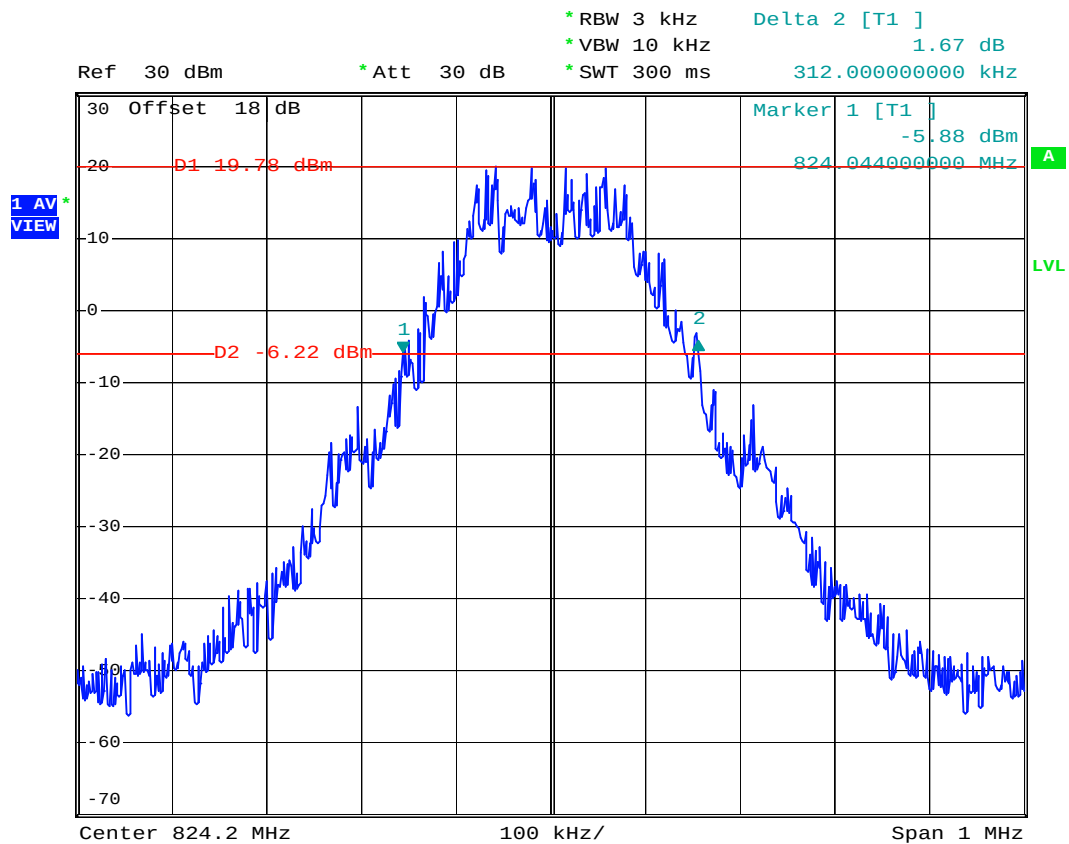
Date: 4.JUL.2007 02:14:27



FCC TEST REPORT

Report No. : FG761327B

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



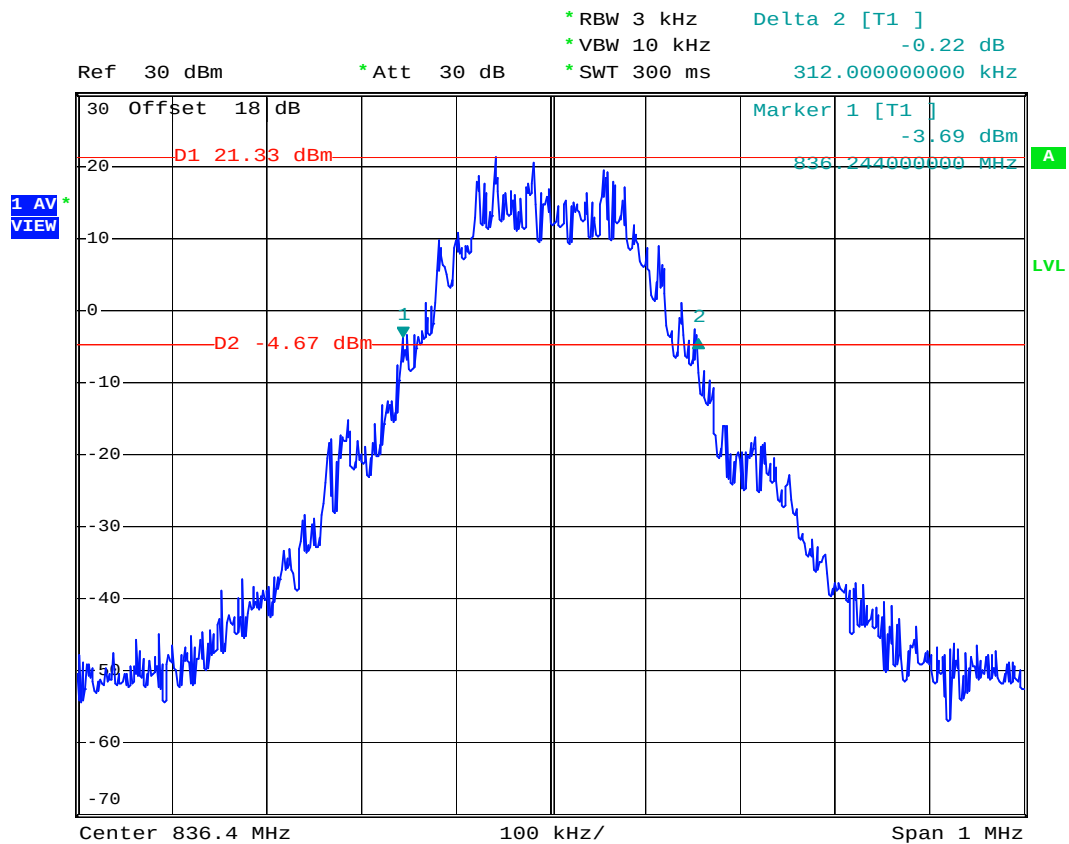
Date: 4.JUL.2007 02:05:35



FCC TEST REPORT

Report No. : FG761327B

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



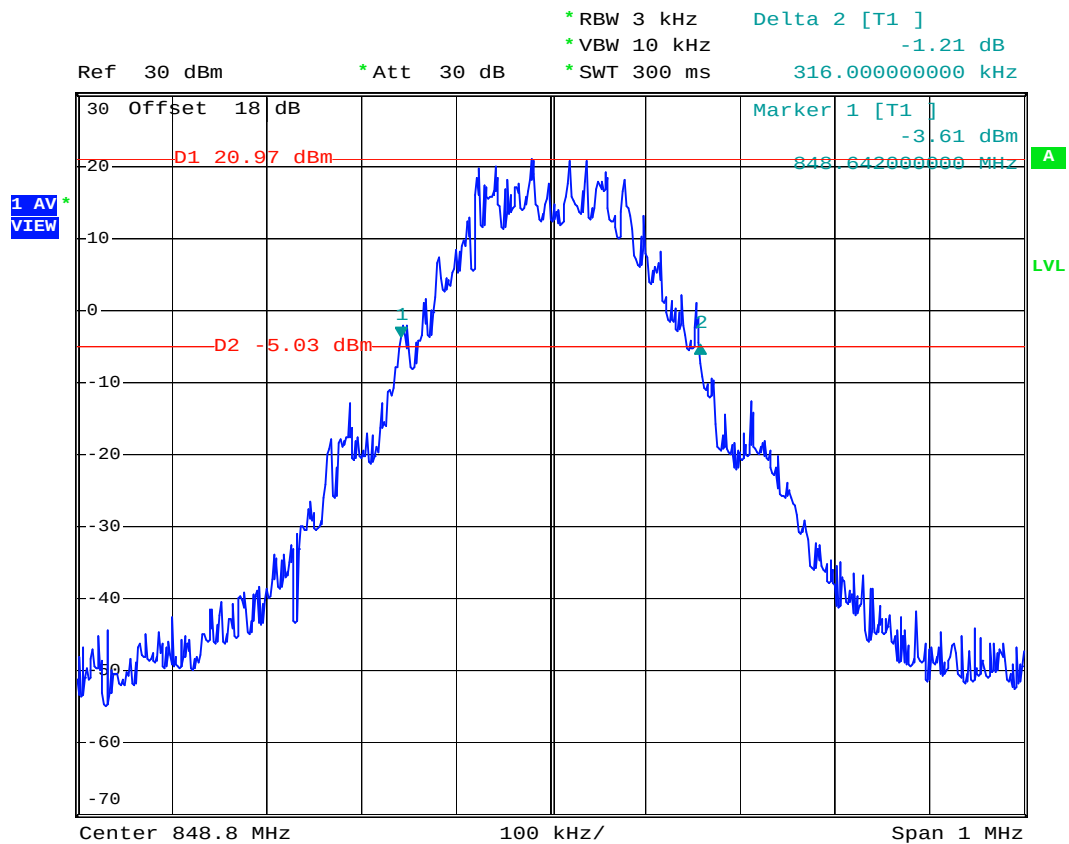
Date: 4.JUL.2007 02:04:06



FCC TEST REPORT

Report No. : FG761327B

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



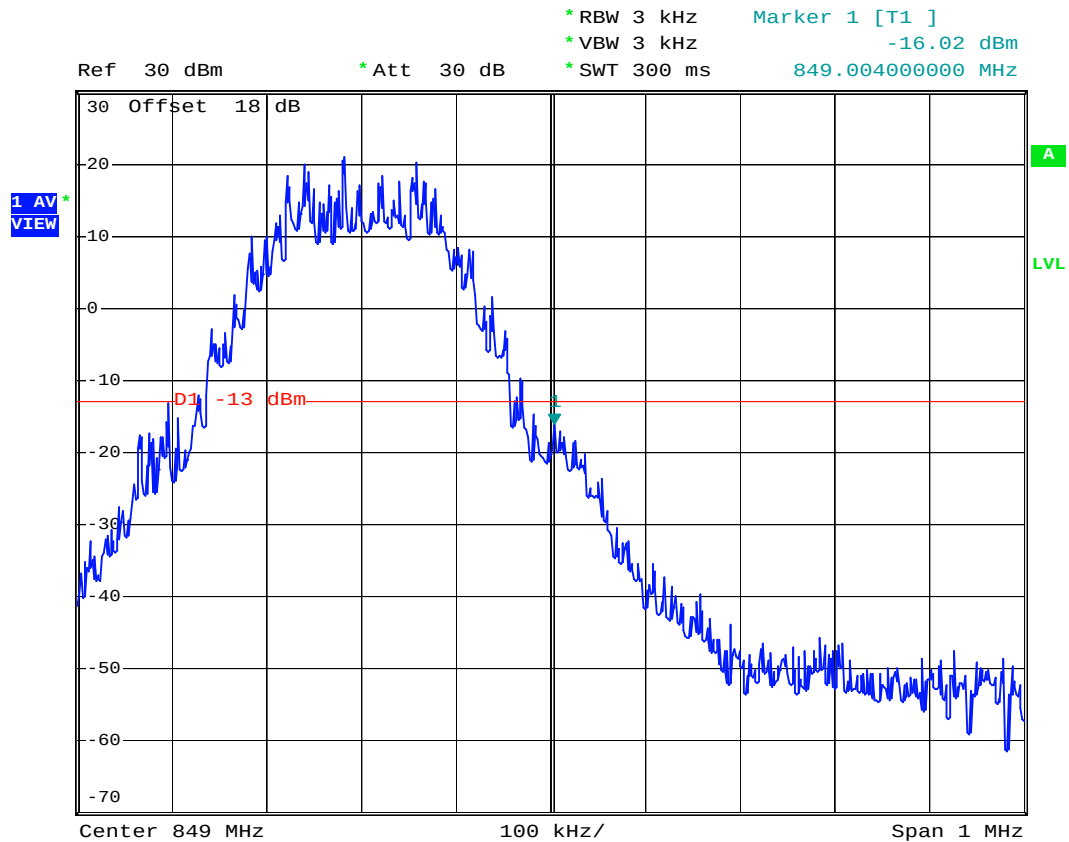
Date: 4.JUL.2007 02:03:09



FCC TEST REPORT

Report No. : FG761327B

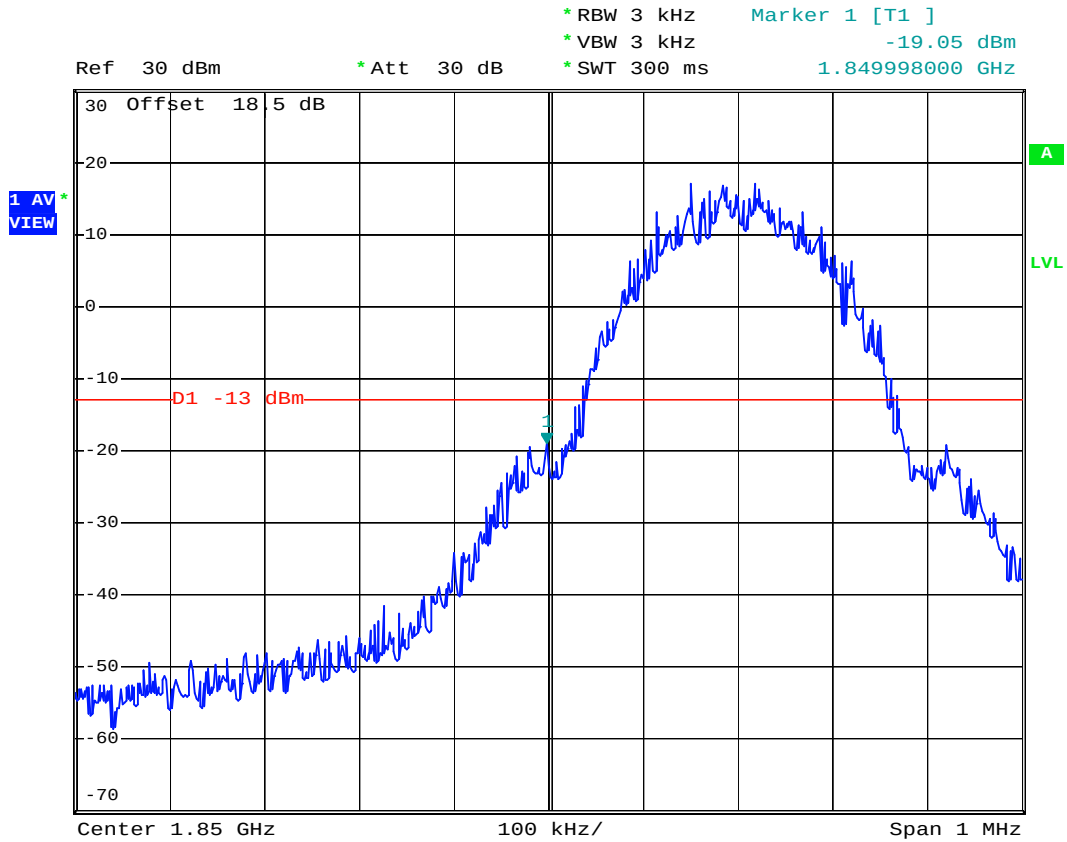
- Test Mode : GSM850 (EDGE) CH251 Higher Band Edge
- Power State : High



Date: 4.JUL.2007 01:59:00



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



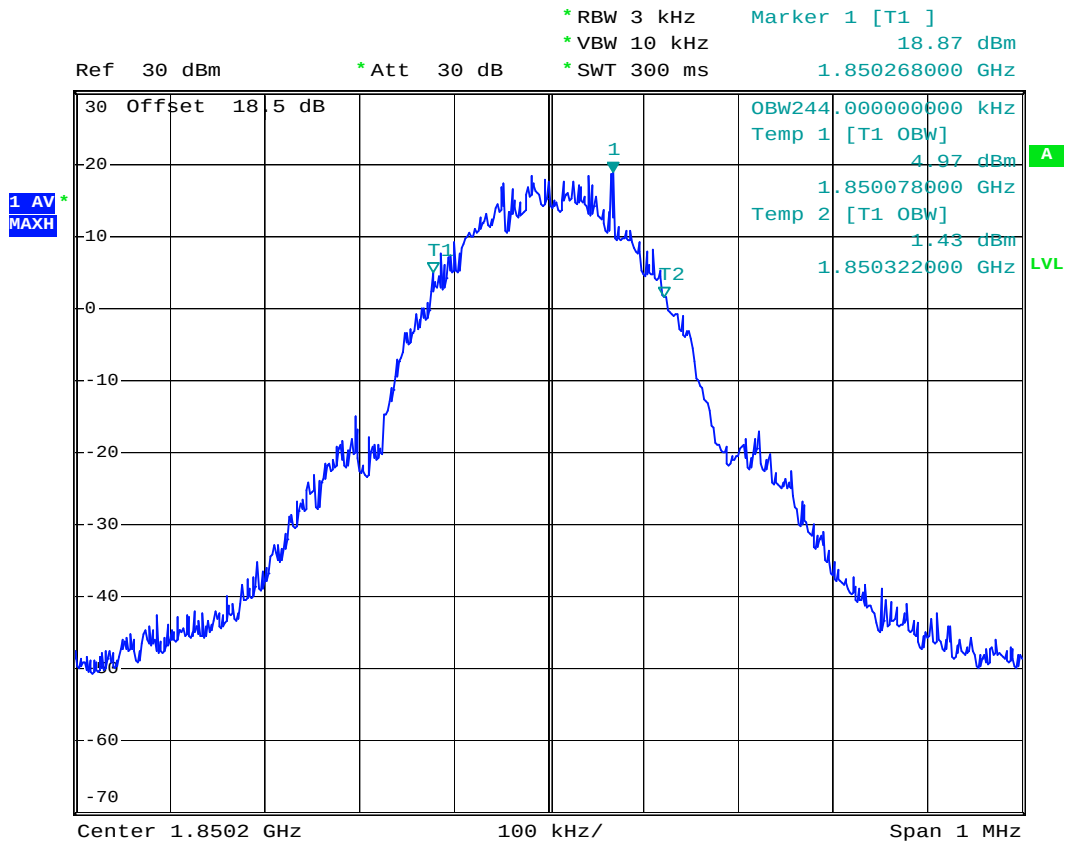
Date: 4.JUL.2007 00:19:01



FCC TEST REPORT

Report No. : FG761327B

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



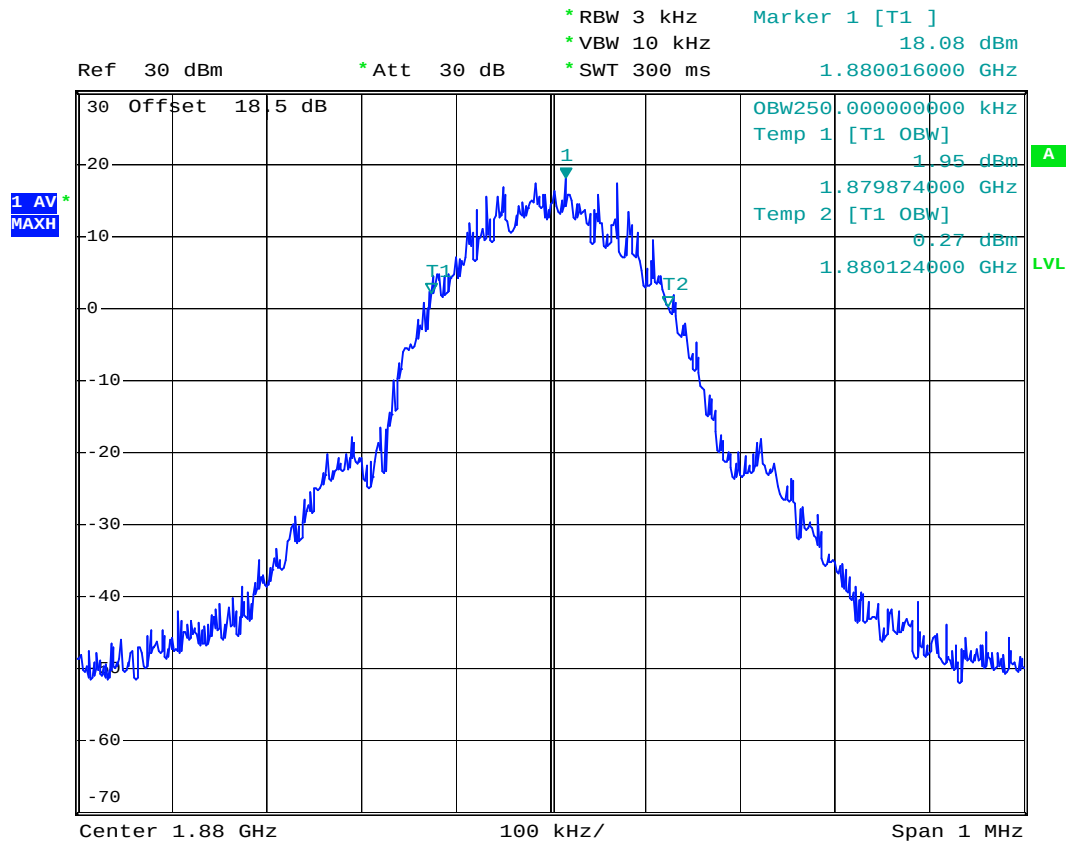
Date: 4.JUL.2007 00:25:09



FCC TEST REPORT

Report No. : FG761327B

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



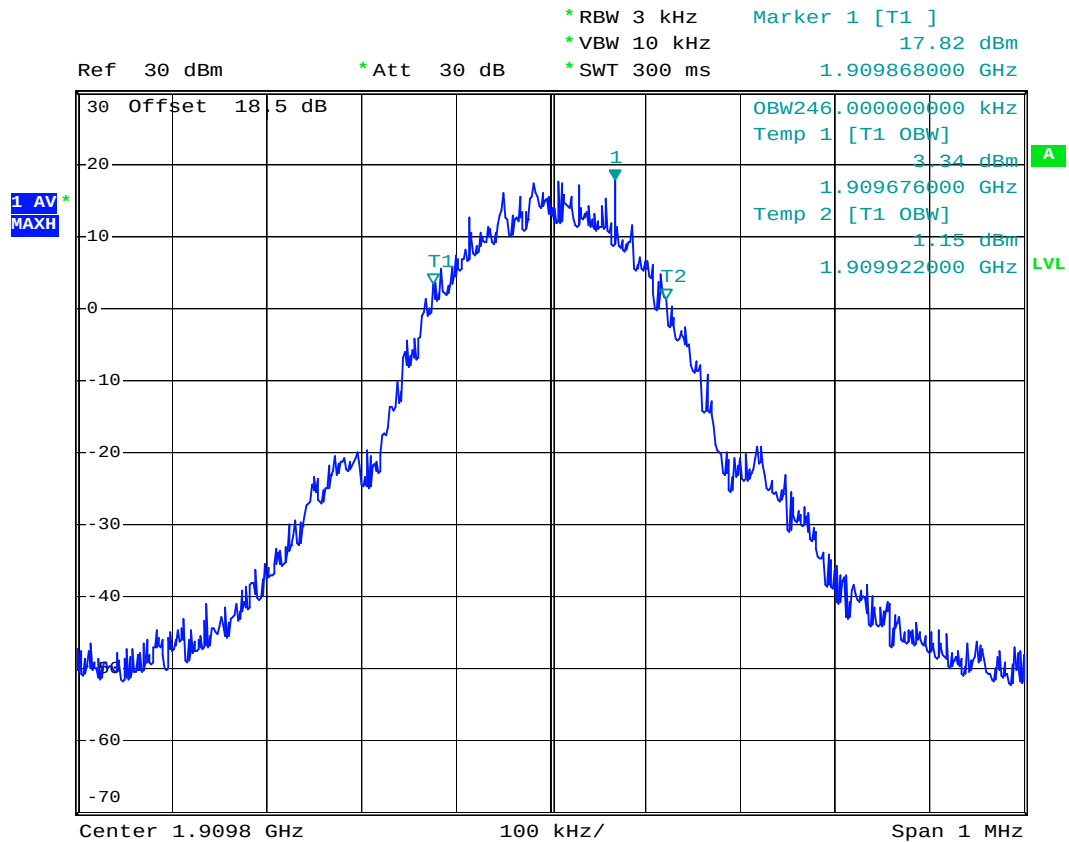
Date: 4.JUL.2007 00:25:47



FCC TEST REPORT

Report No. : FG761327B

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



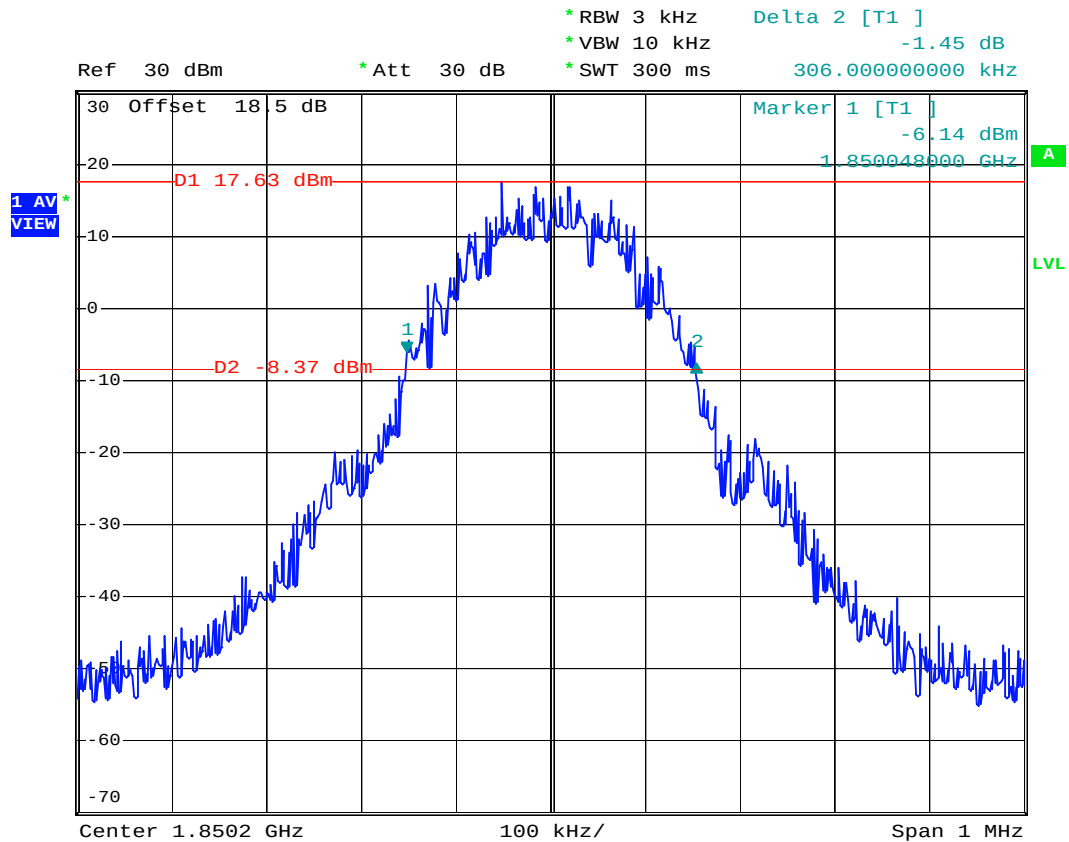
Date: 4.JUL.2007 00:26:36



FCC TEST REPORT

Report No. : FG761327B

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



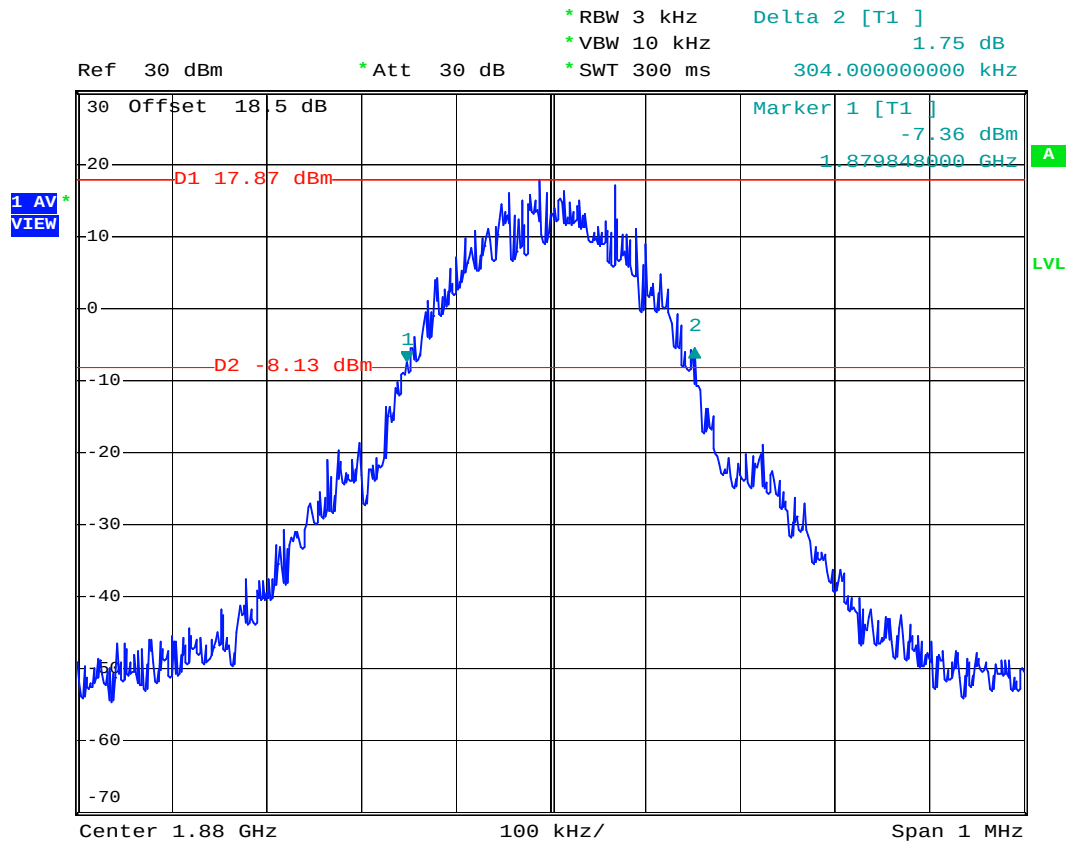
Date: 4.JUL.2007 00:33:34



FCC TEST REPORT

Report No. : FG761327B

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



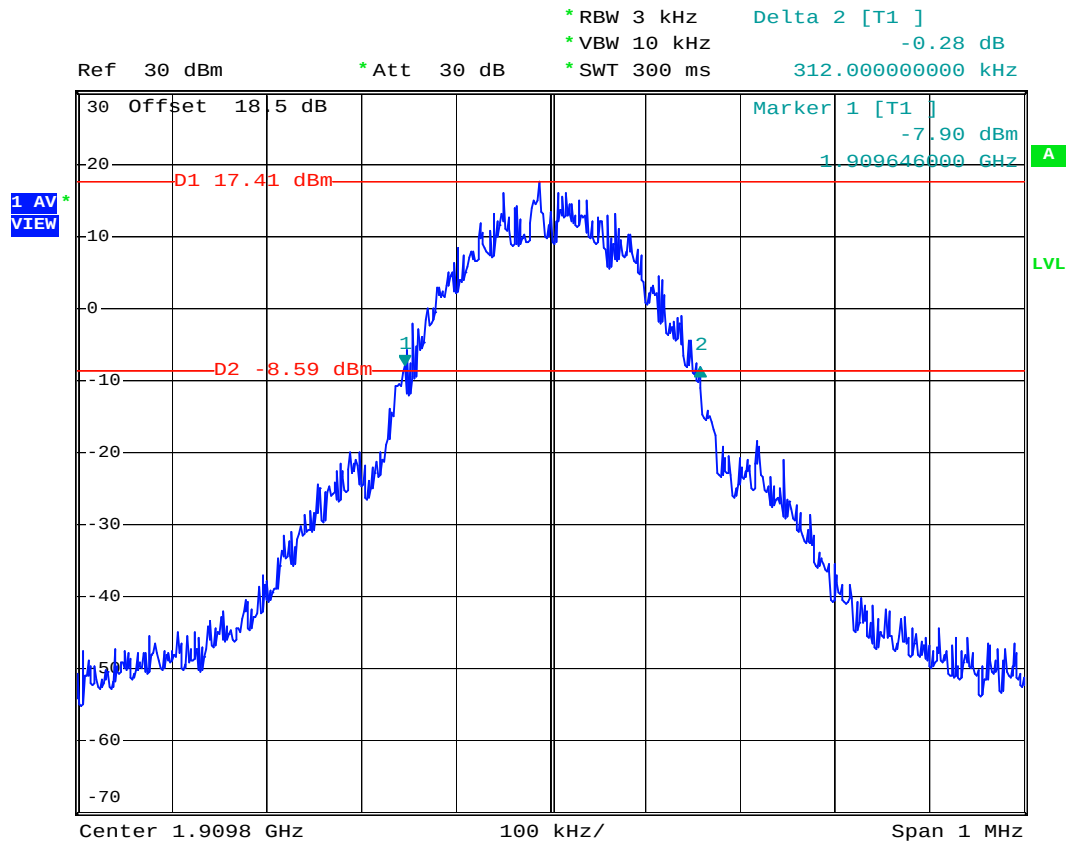
Date: 4.JUL.2007 00:35:39



FCC TEST REPORT

Report No. : FG761327B

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



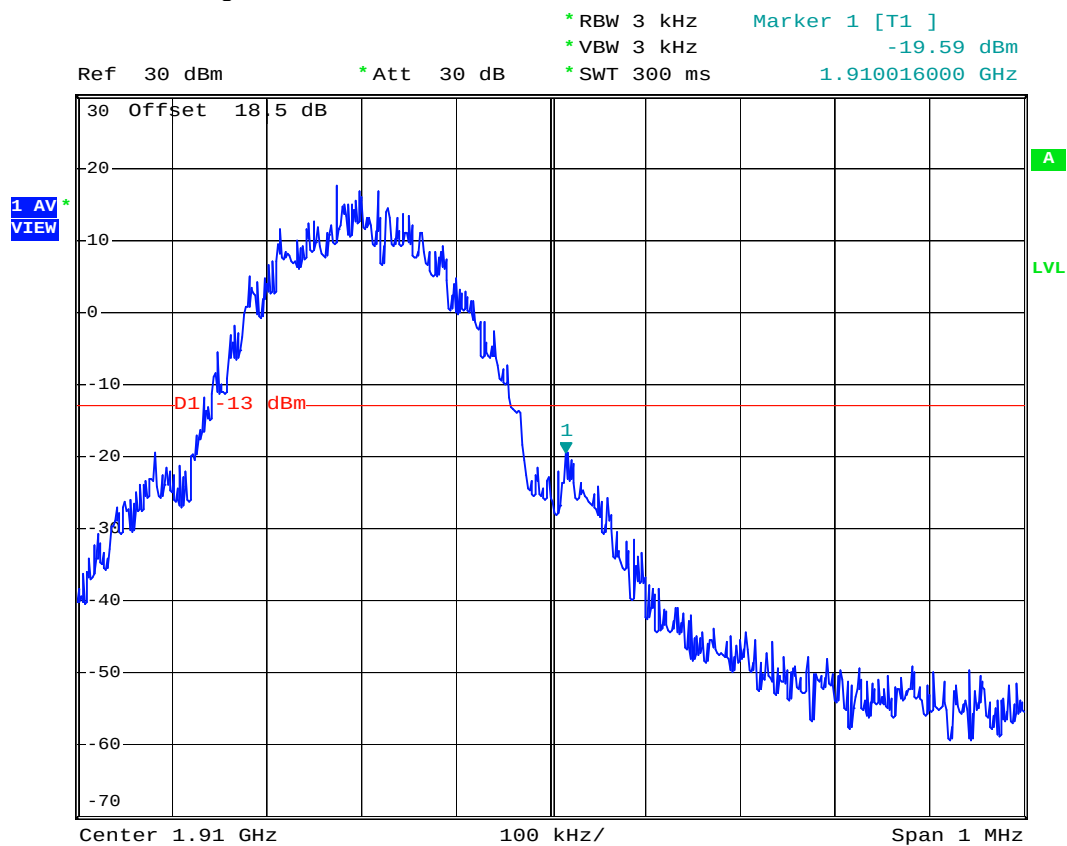
Date: 4.JUL.2007 00:36:40



FCC TEST REPORT

Report No. : FG761327B

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



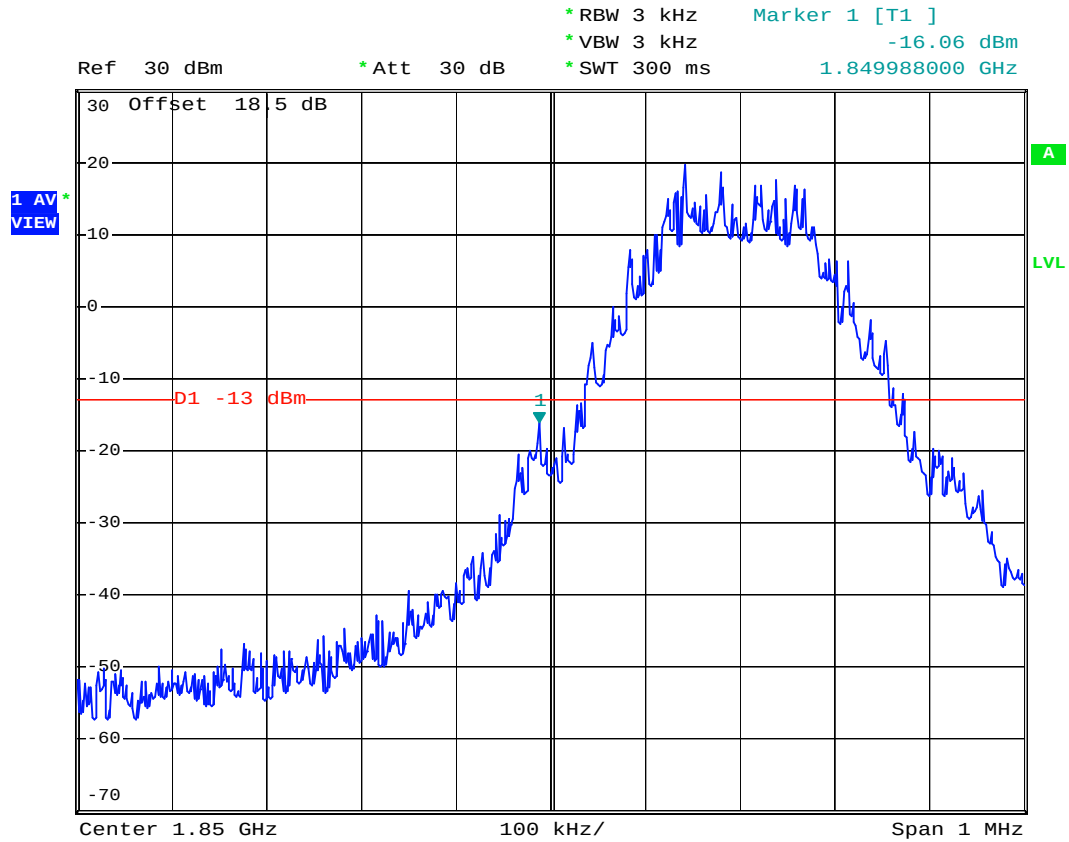
Date: 4.JUL.2007 00:20:46



FCC TEST REPORT

Report No. : FG761327B

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



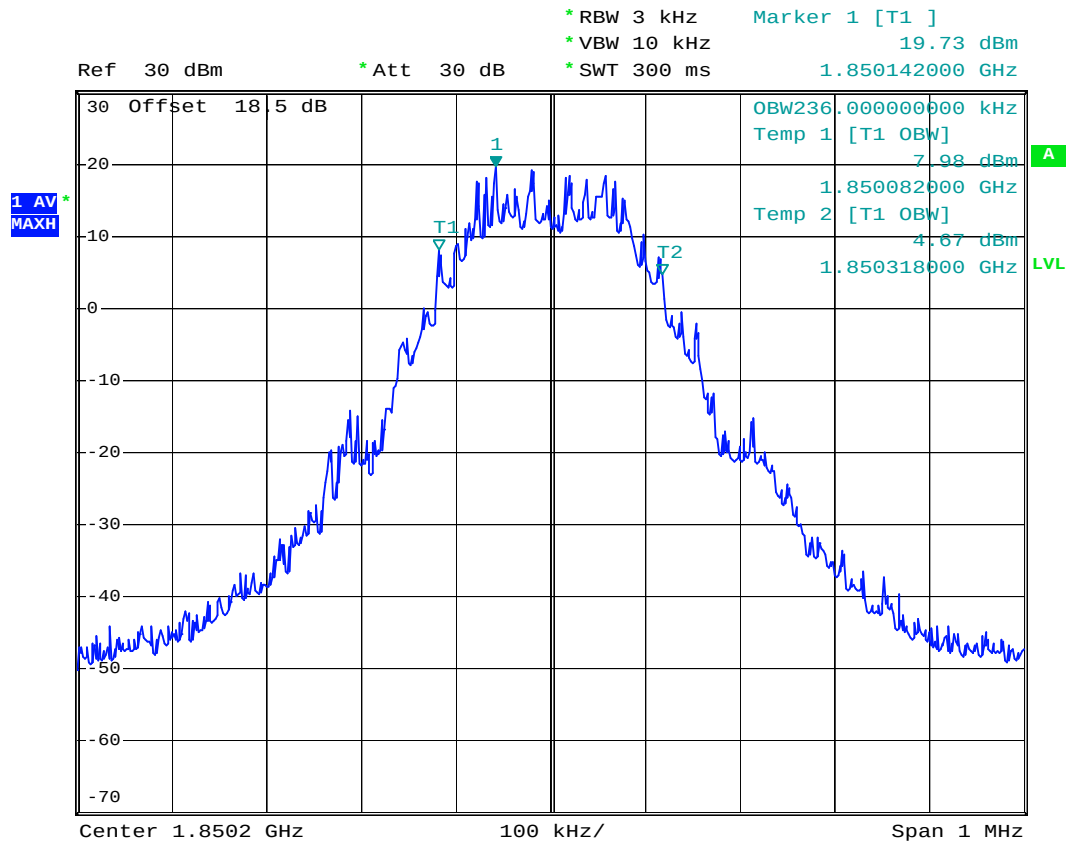
Date: 4.JUL.2007 02:29:41



FCC TEST REPORT

Report No. : FG761327B

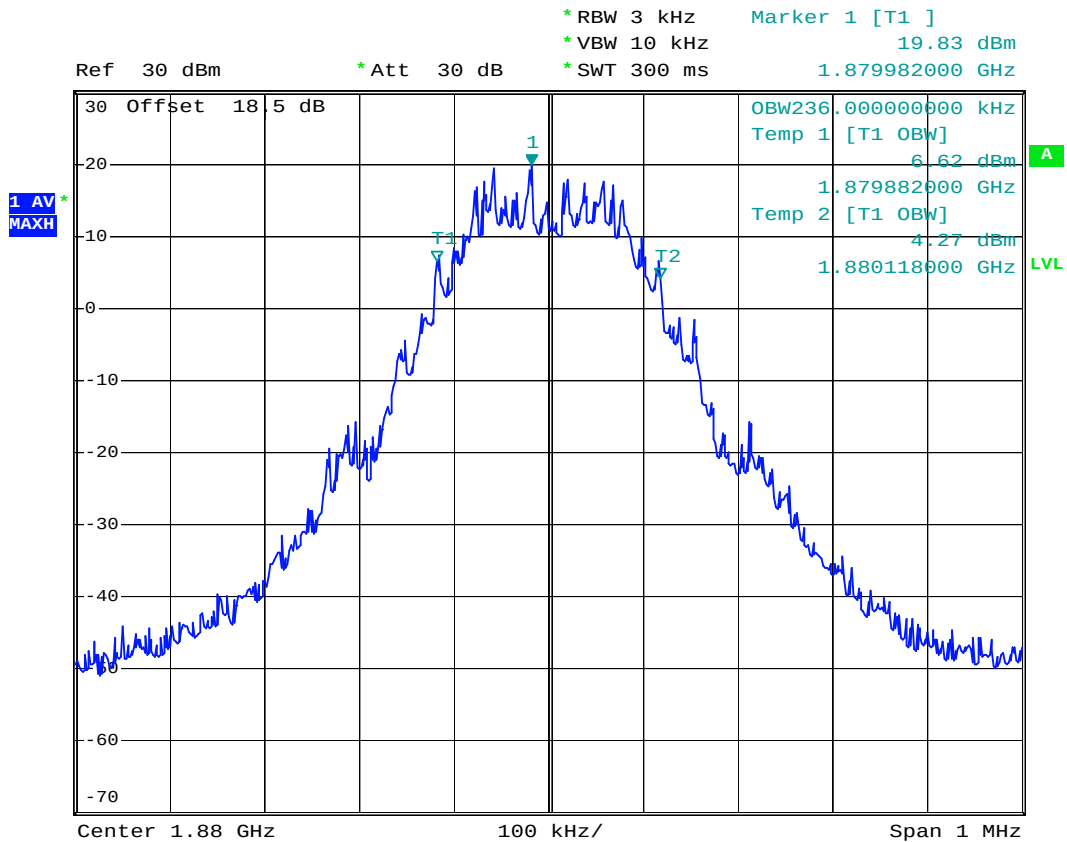
- Test Mode : PCS1900 (EDGE) CH512 99% Occupied Bandwidth
- Power State : High



Date: 4.JUL.2007 02:41:00



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



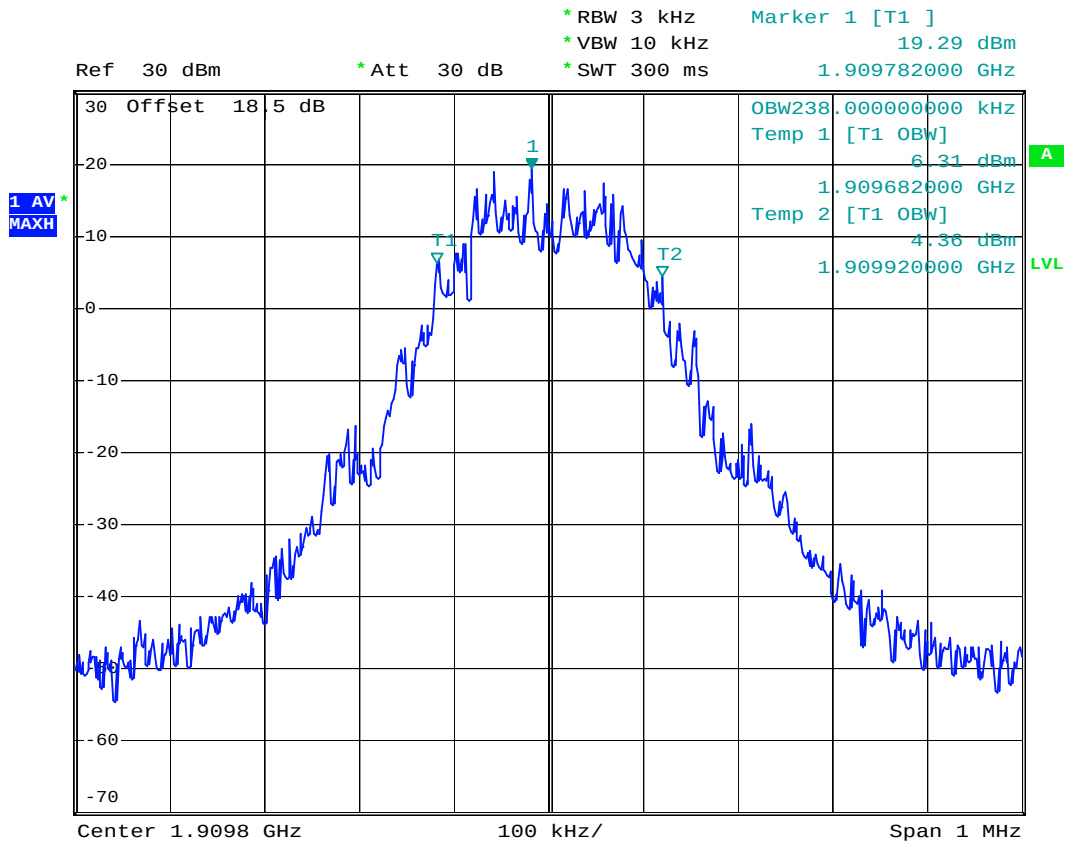
Date: 4.JUL.2007 02:41:26



FCC TEST REPORT

Report No. : FG761327B

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



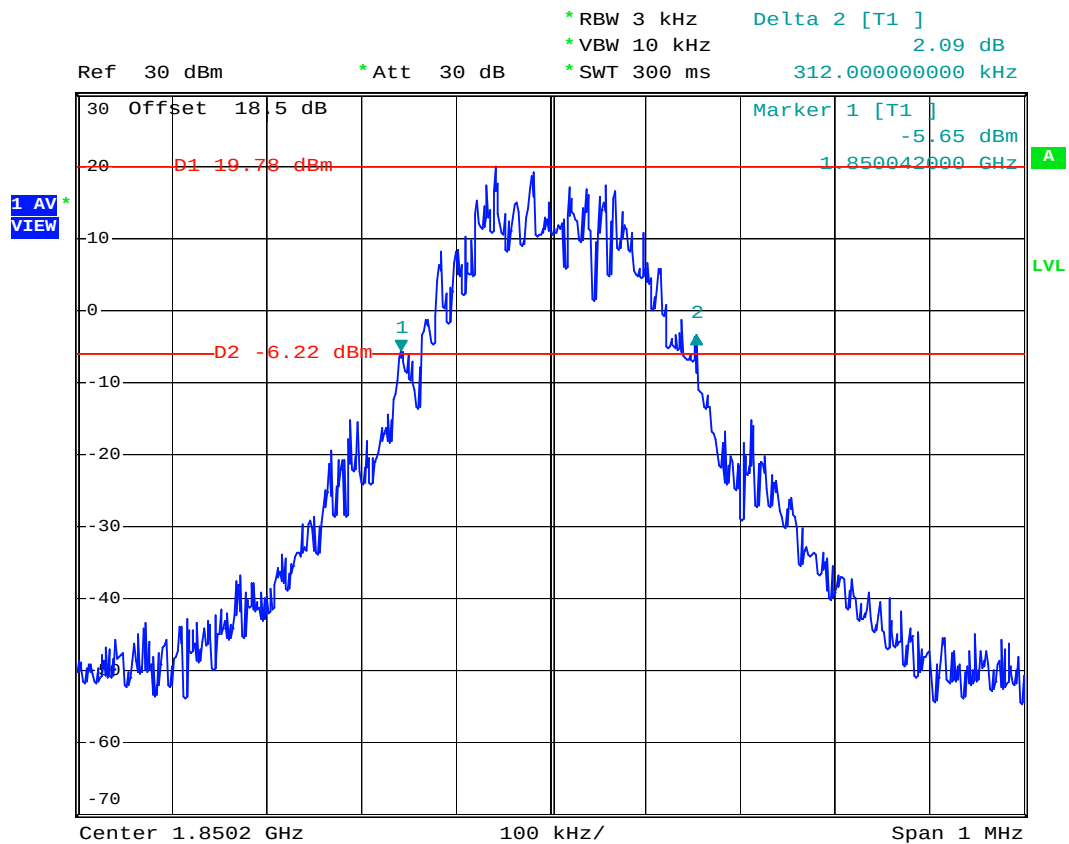
Date: 4.JUL.2007 02:41:54



FCC TEST REPORT

Report No. : FG761327B

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



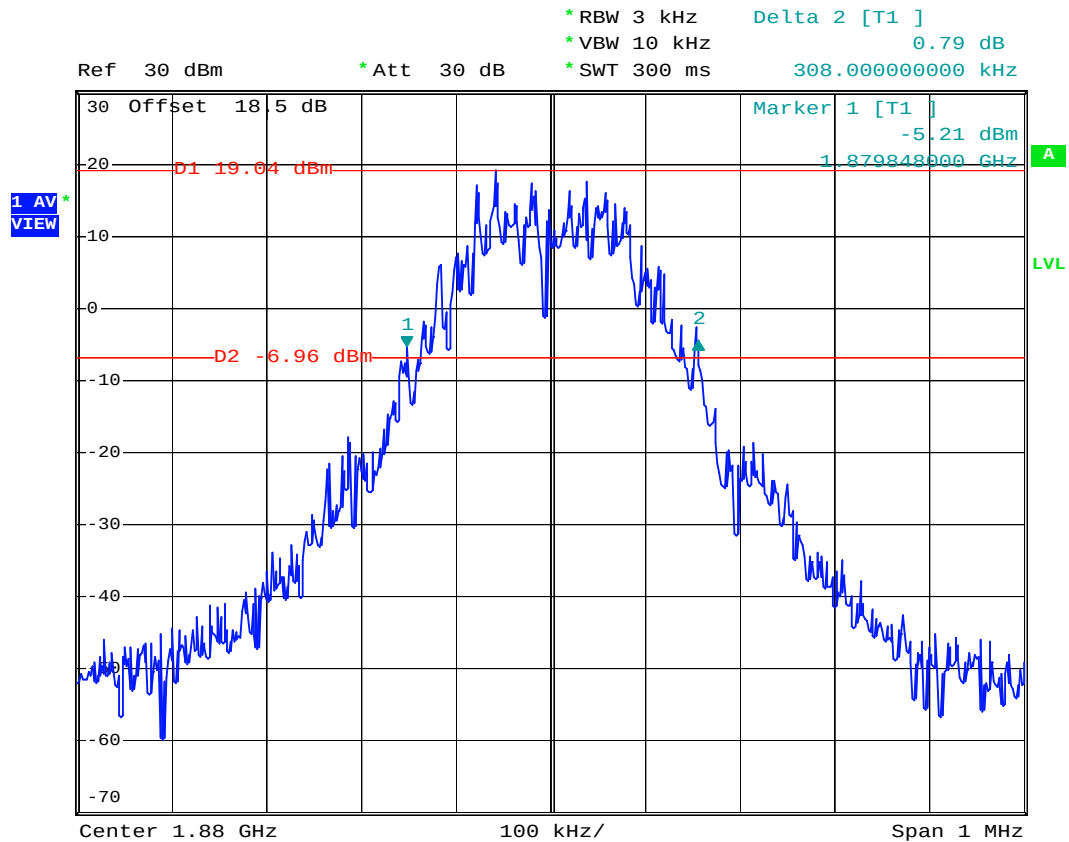
Date: 4.JUL.2007 02:44:06



FCC TEST REPORT

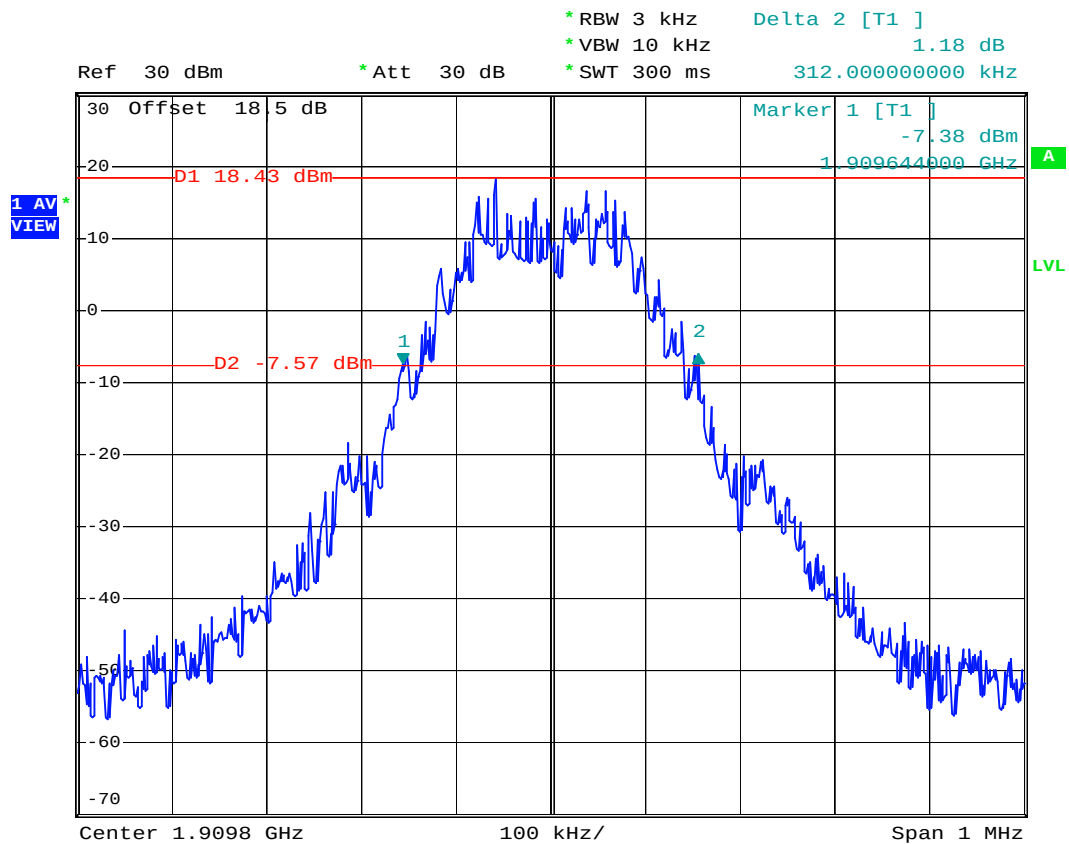
Report No. : FG761327B

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



Date: 4.JUL.2007 02:43:23

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



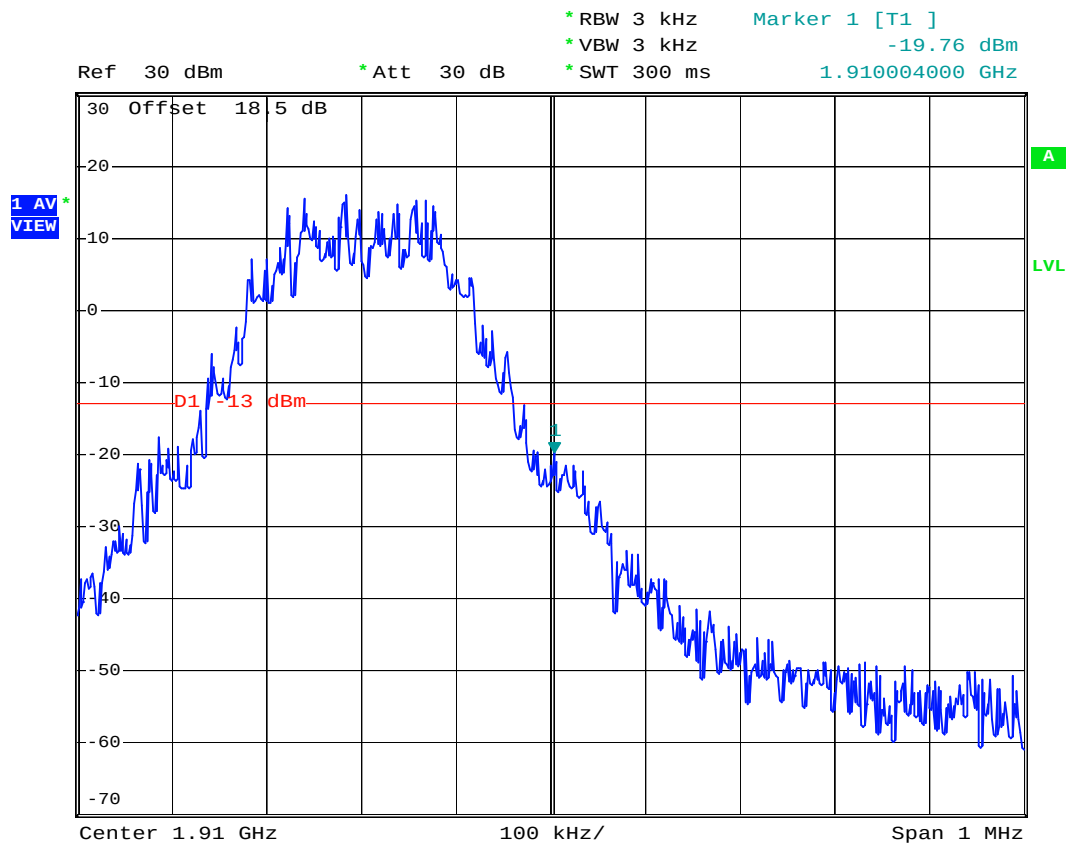
Date: 4.JUL.2007 02:42:39



FCC TEST REPORT

Report No. : FG761327B

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



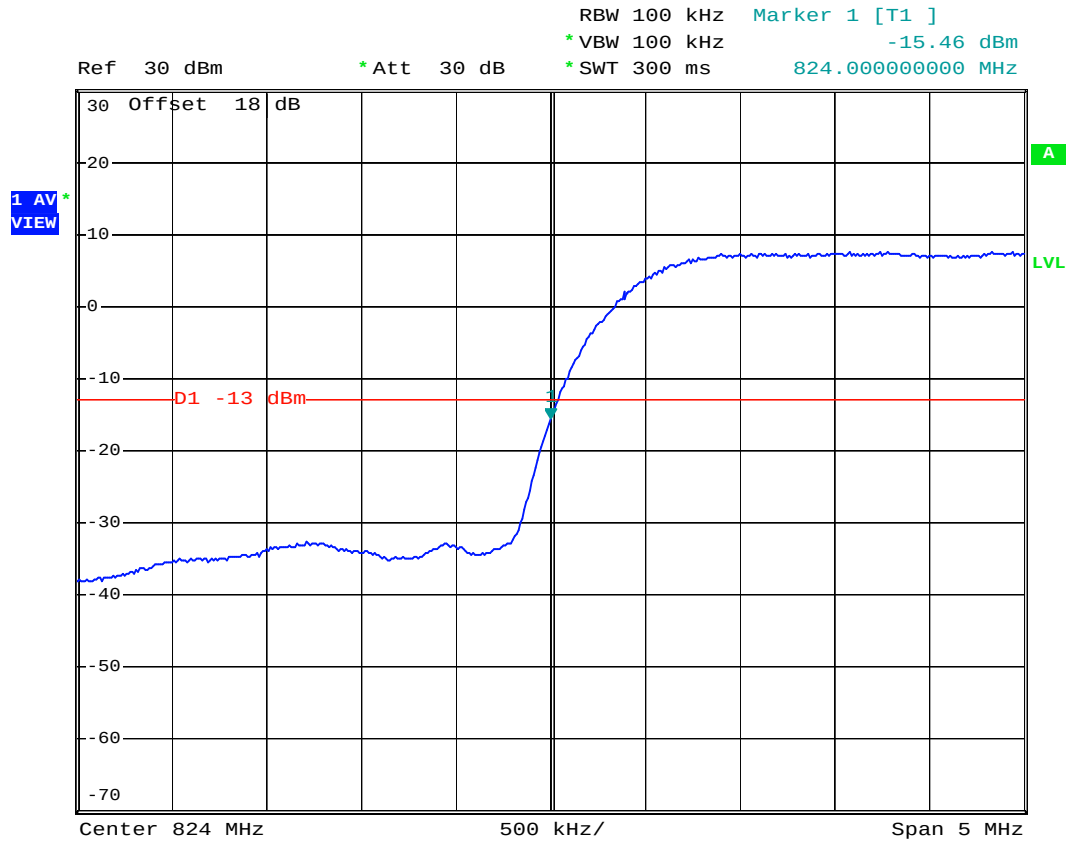
Date: 4.JUL.2007 02:33:03



FCC TEST REPORT

Report No. : FG761327B

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



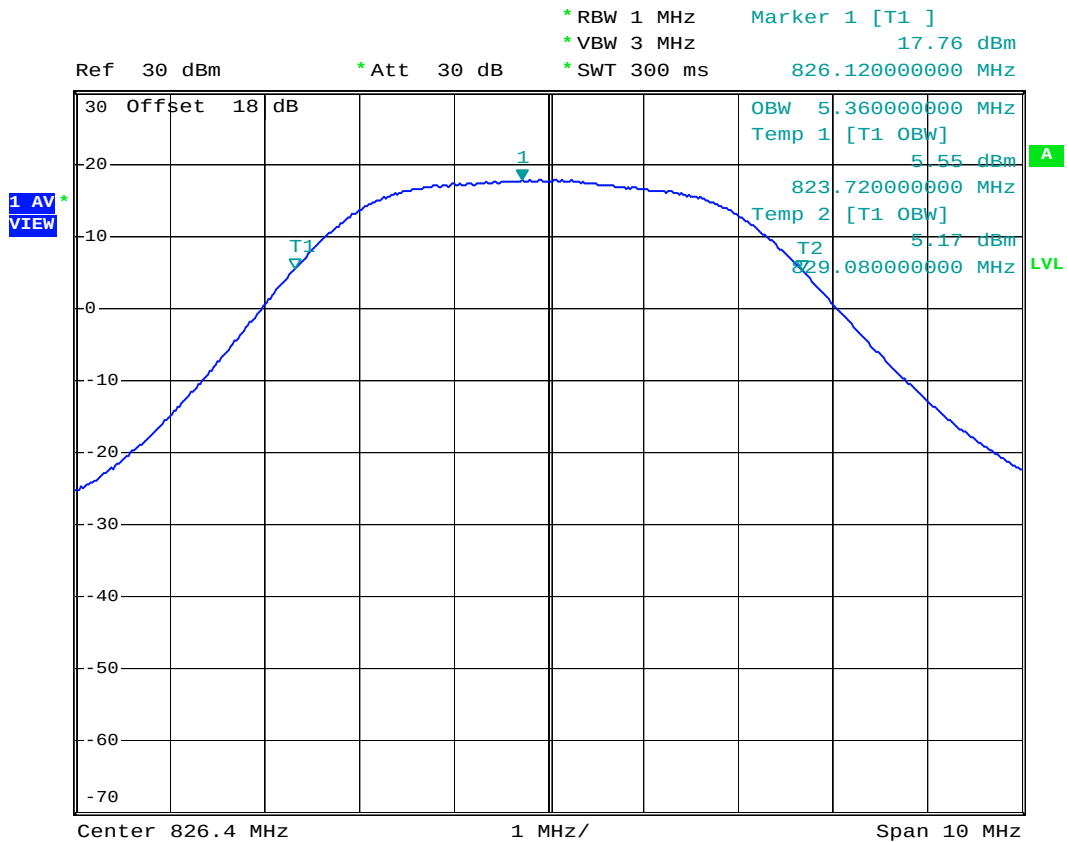
Date: 4.JUL.2007 03:28:42



FCC TEST REPORT

Report No. : FG761327B

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



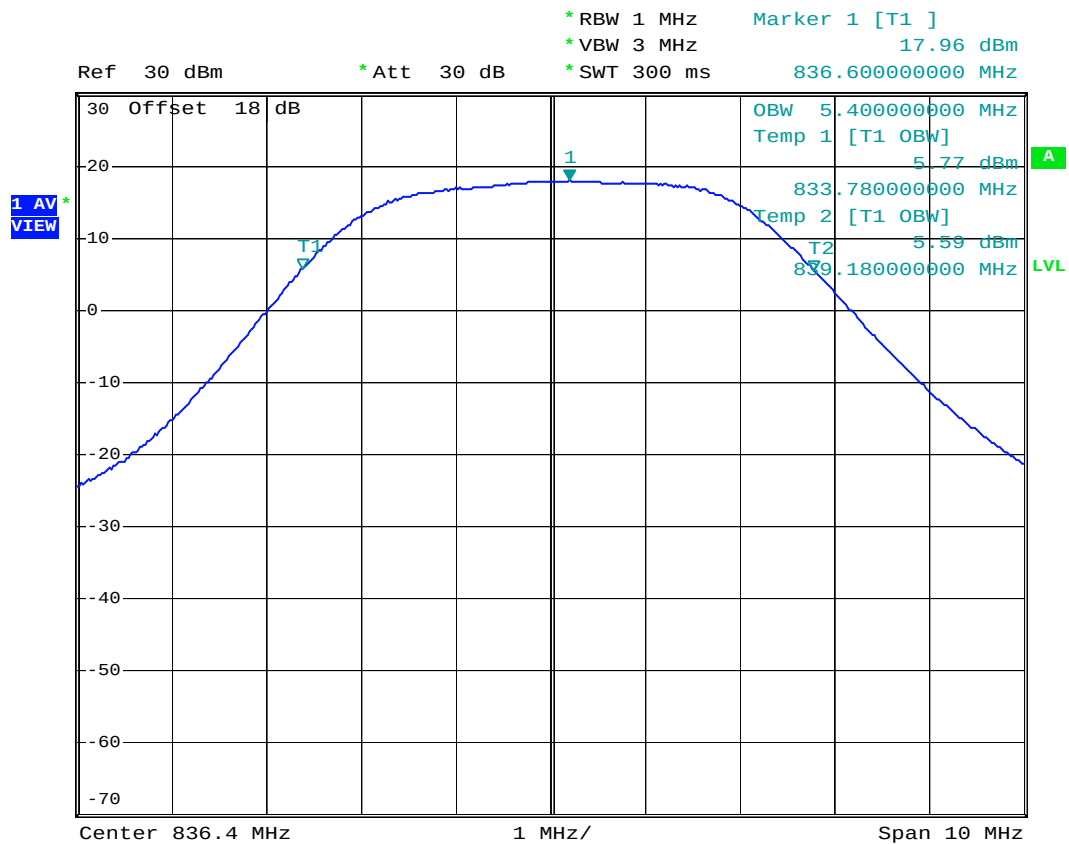
Date: 17.JUL.2007 03:17:38



FCC TEST REPORT

Report No. : FG761327B

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



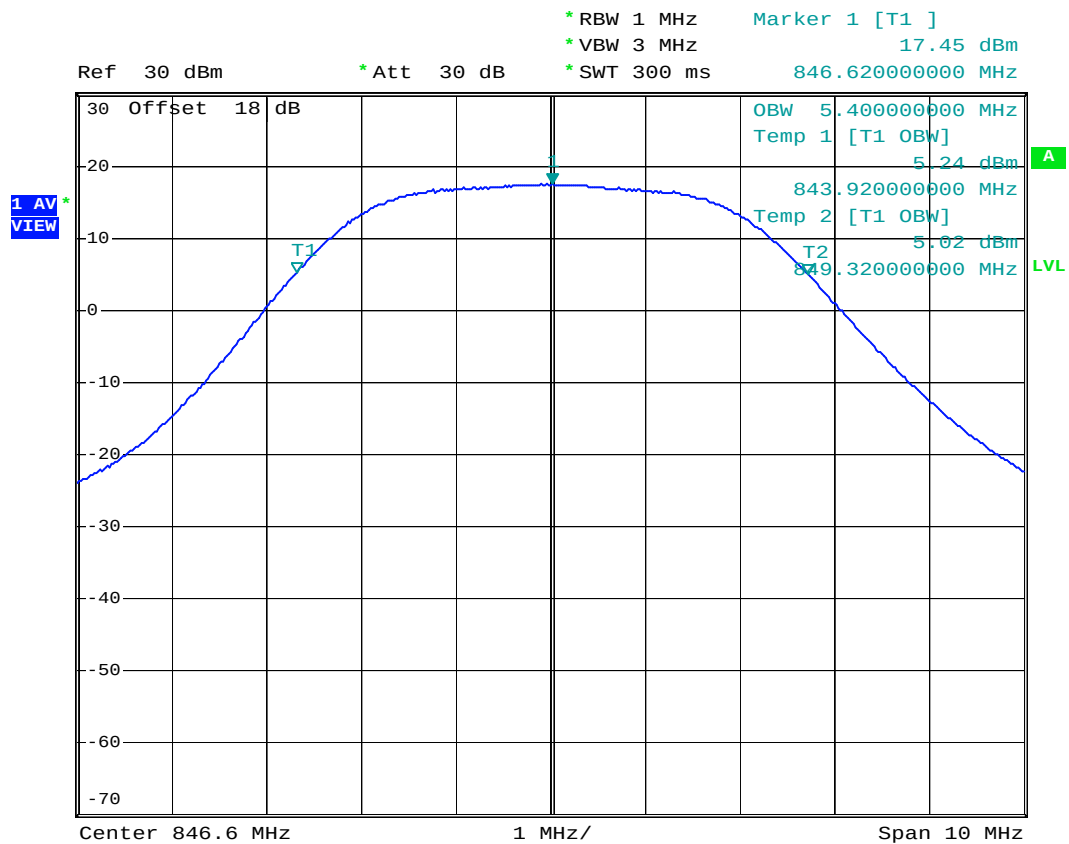
Date: 17.JUL.2007 03:18:18



FCC TEST REPORT

Report No. : FG761327B

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



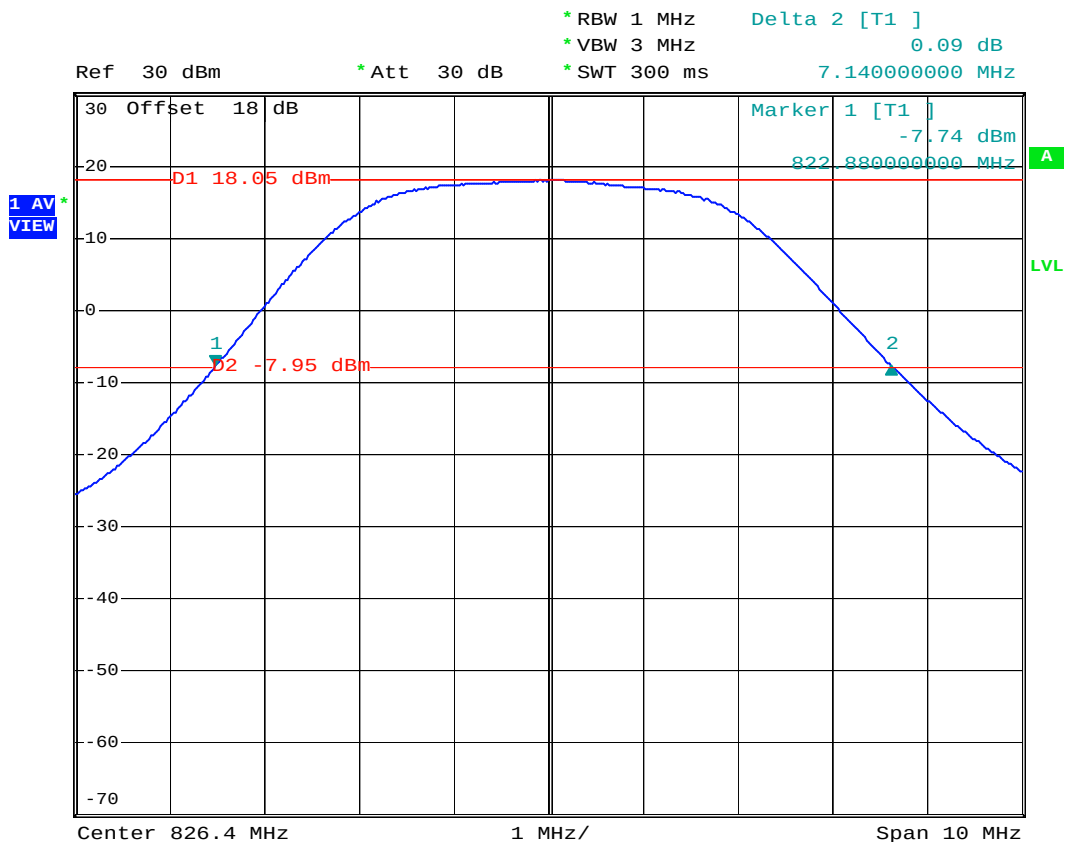
Date: 17.JUL.2007 03:19:11



FCC TEST REPORT

Report No. : FG761327B

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



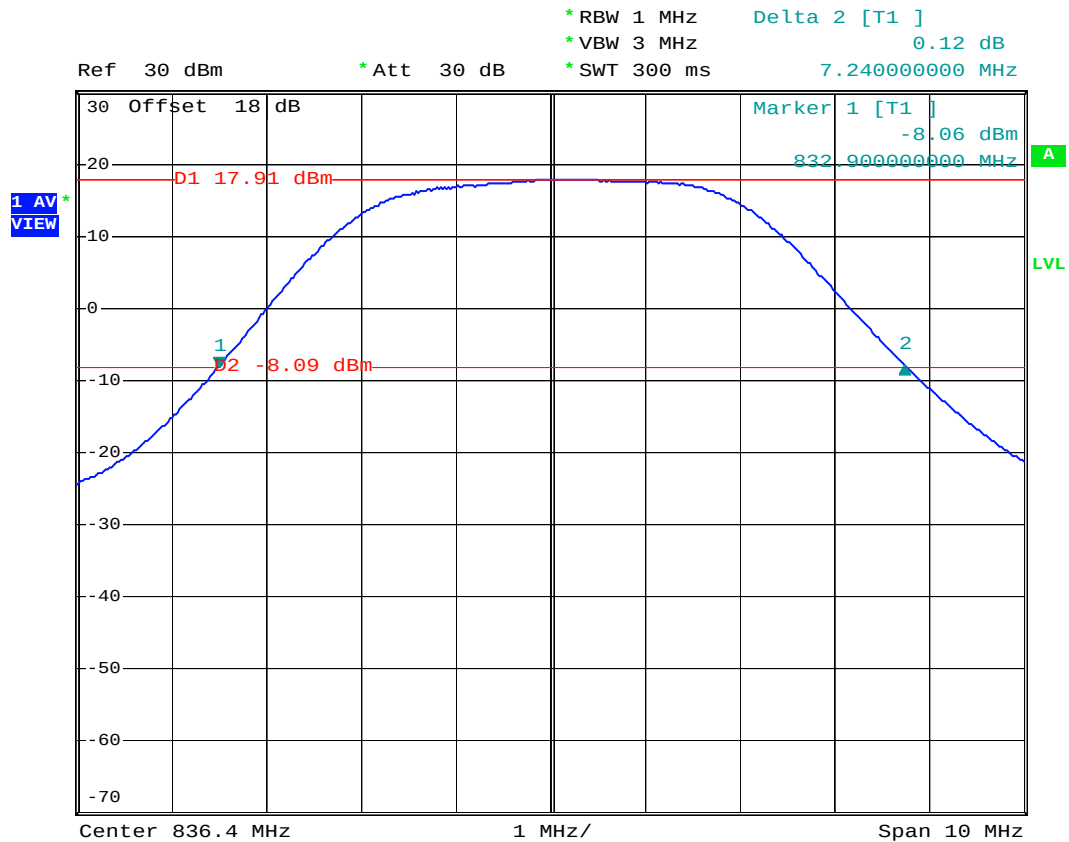
Date: 17.JUL.2007 09:18:22



FCC TEST REPORT

Report No. : FG761327B

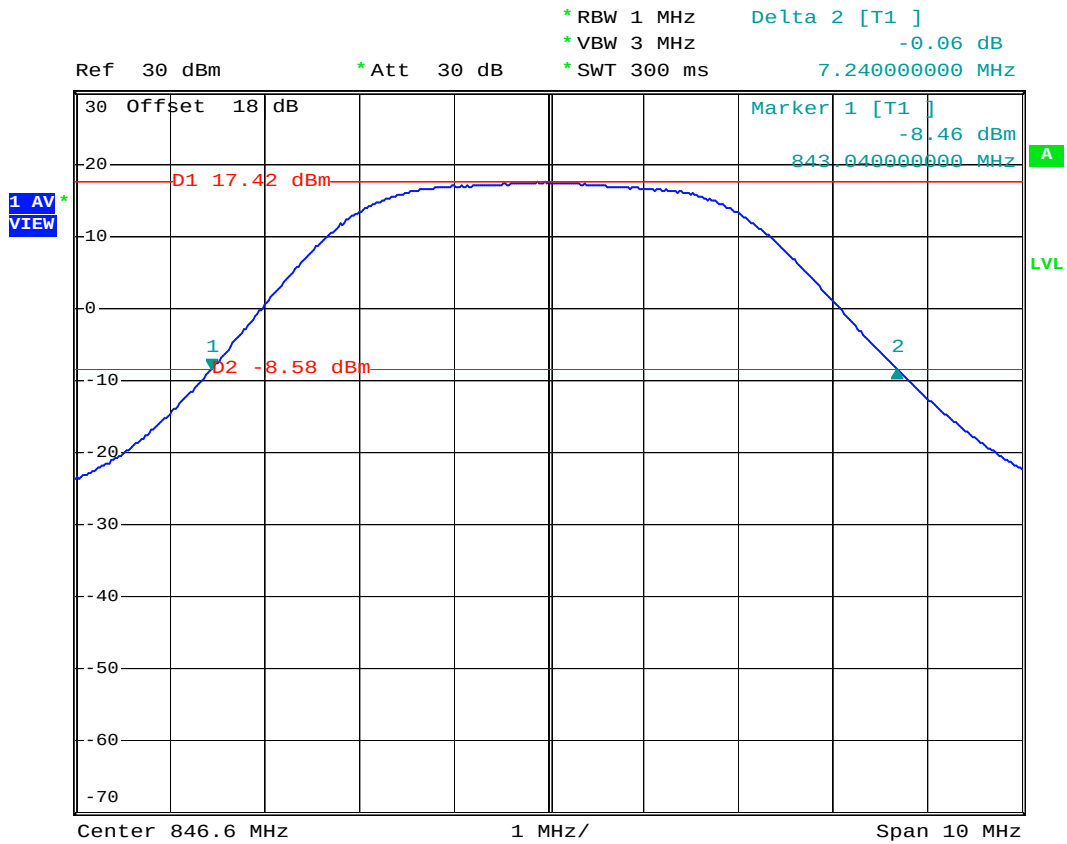
- Test Mode : WCDMA Band V CH4182 26dB Bandwidth
- Power State : High



Date: 17.JUL.2007 02:35:17



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



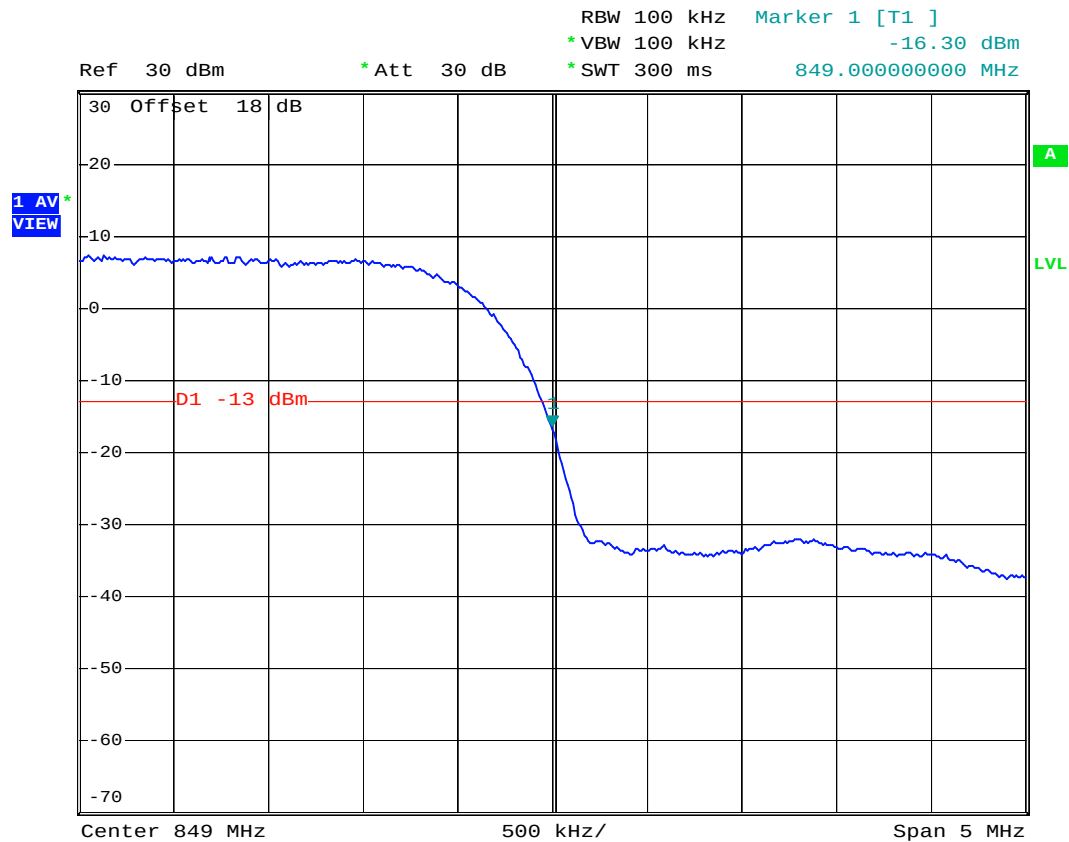
Date: 17.JUL.2007 02:59:44



FCC TEST REPORT

Report No. : FG761327B

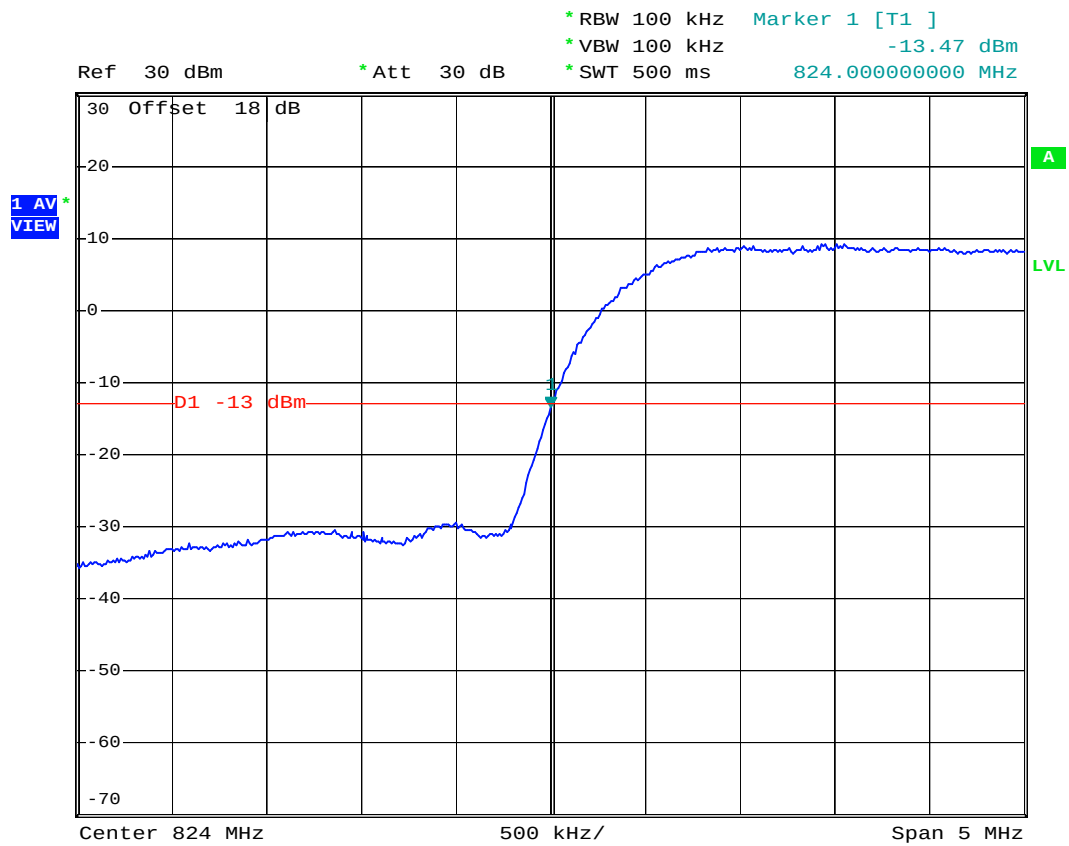
- Test Mode : WCDMA Band V CH4233 Higher Band Edge
- Power State : High



Date: 4.JUL.2007 03:28:13



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



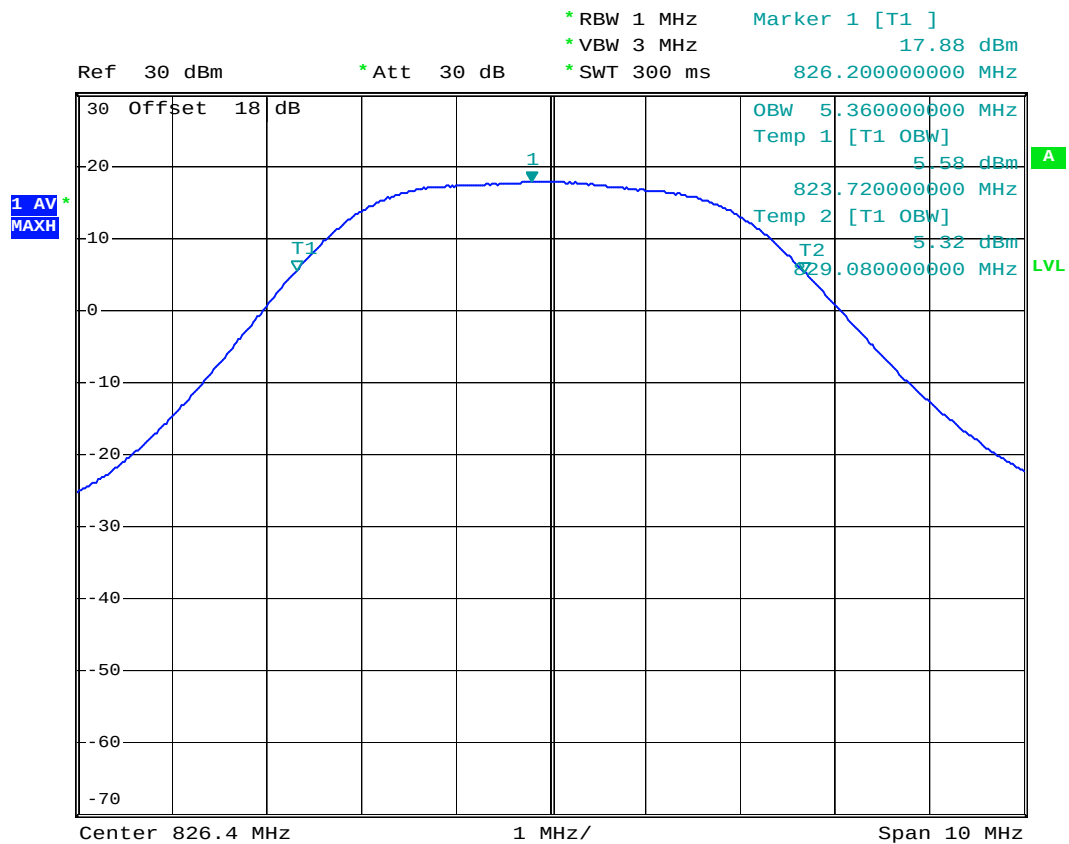
Date: 8.JUL.2007 00:47:05



FCC TEST REPORT

Report No. : FG761327B

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



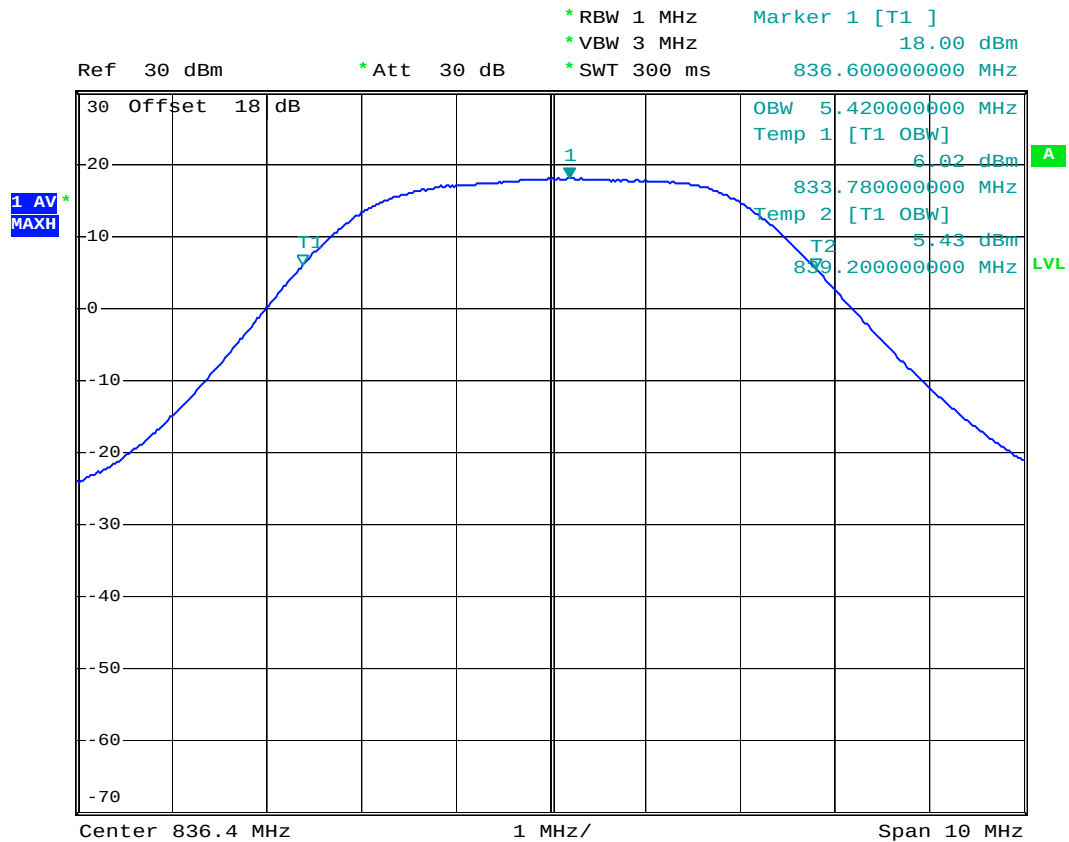
Date: 17.JUL.2007 03:16:49



FCC TEST REPORT

Report No. : FG761327B

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



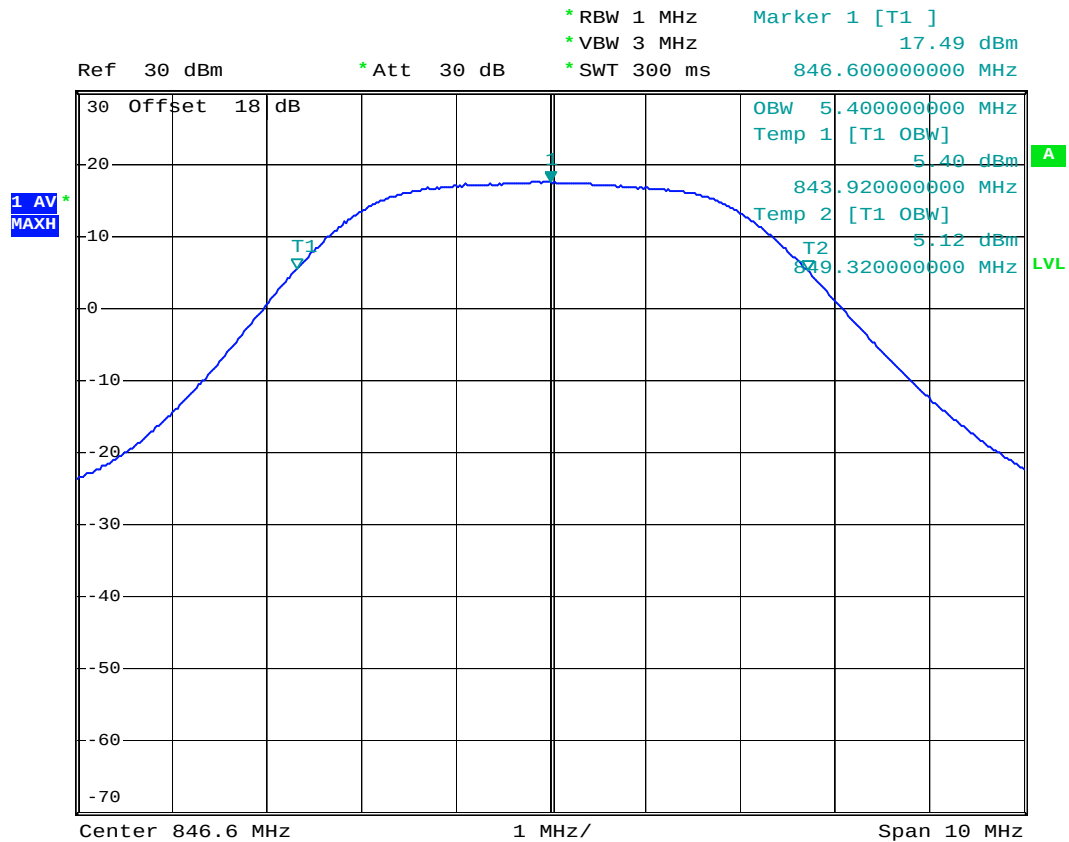
Date: 17.JUL.2007 03:15:58



FCC TEST REPORT

Report No. : FG761327B

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



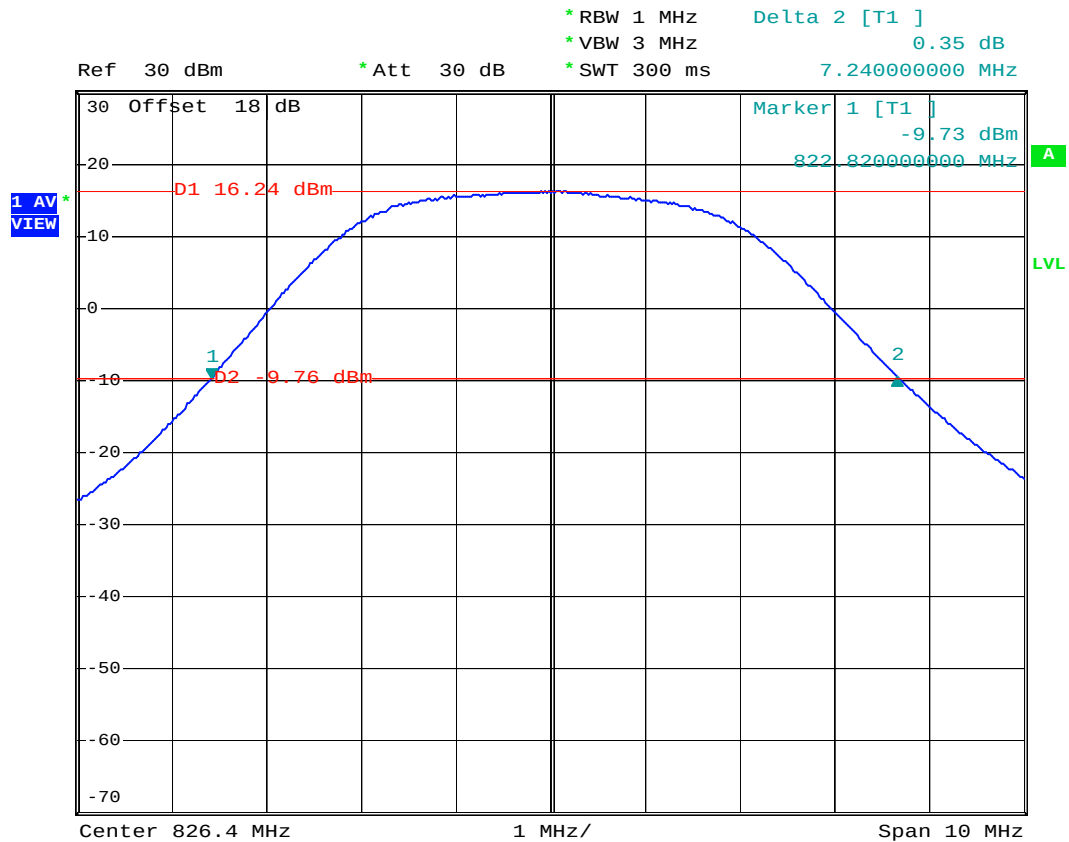
Date: 17.JUL.2007 03:14:52



FCC TEST REPORT

Report No. : FG761327B

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



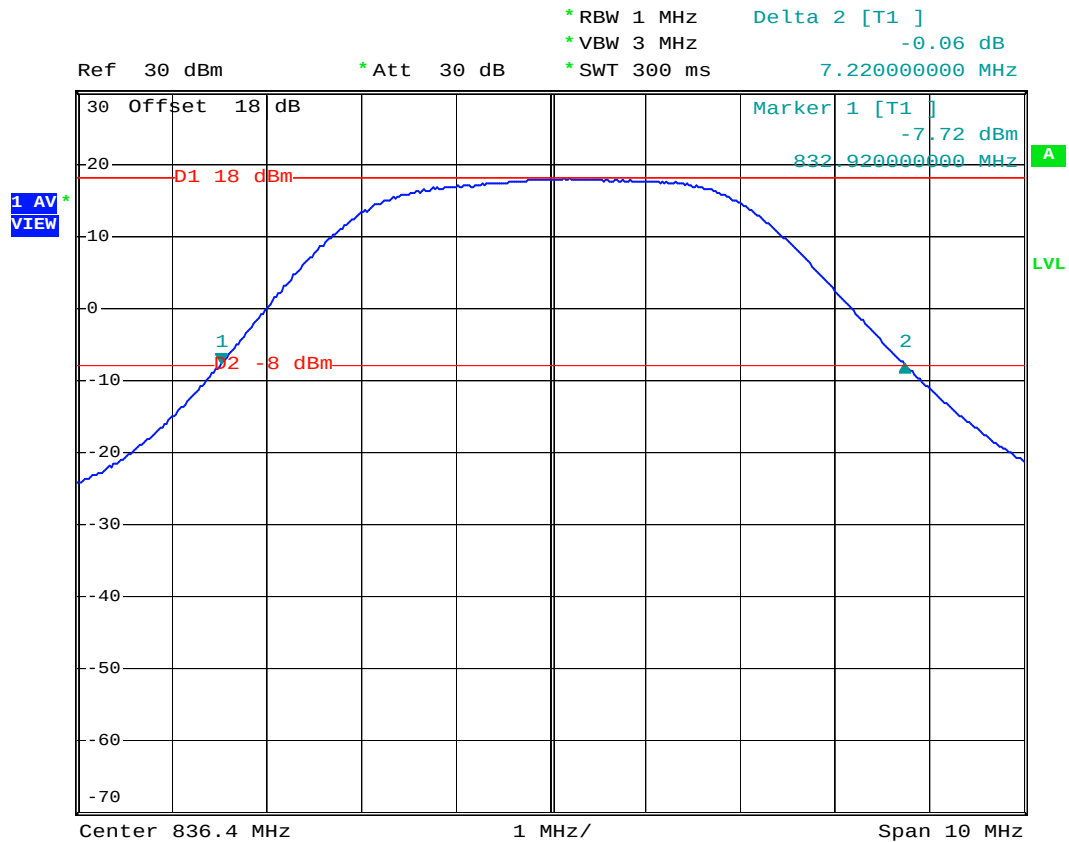
Date: 17.JUL.2007 16:02:38



FCC TEST REPORT

Report No. : FG761327B

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



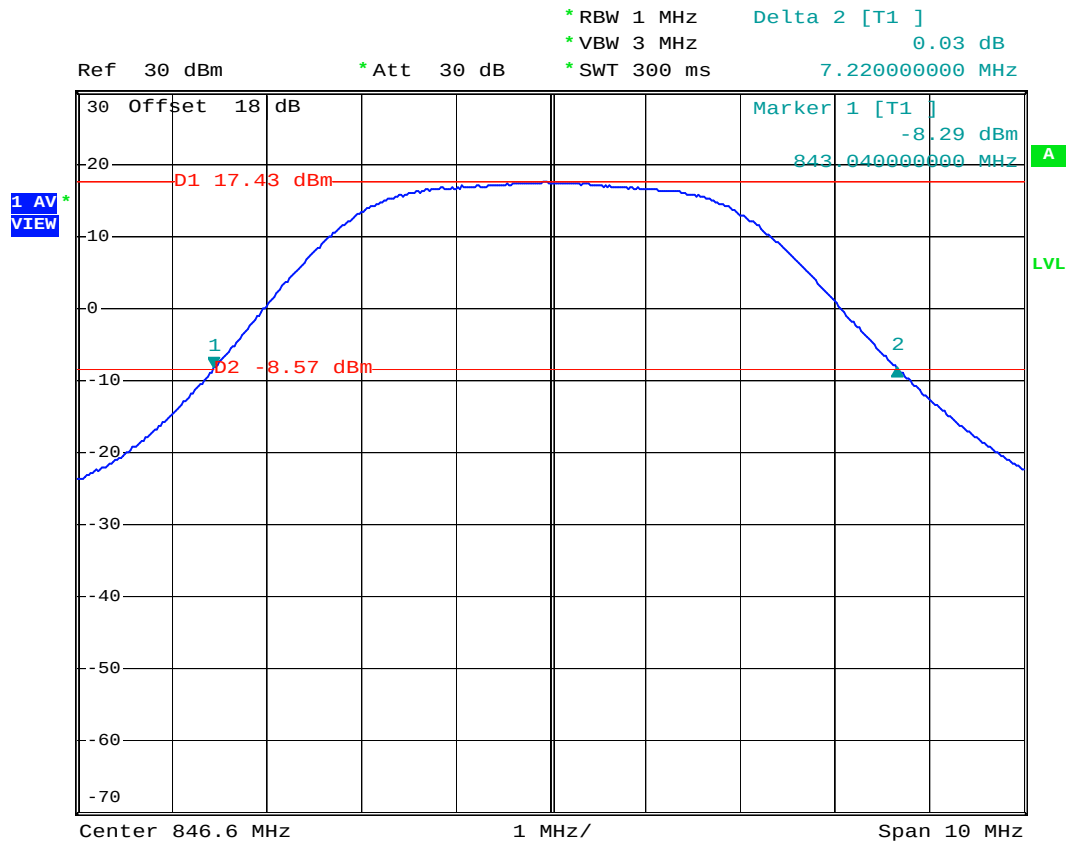
Date: 17.JUL.2007 03:02:31



FCC TEST REPORT

Report No. : FG761327B

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



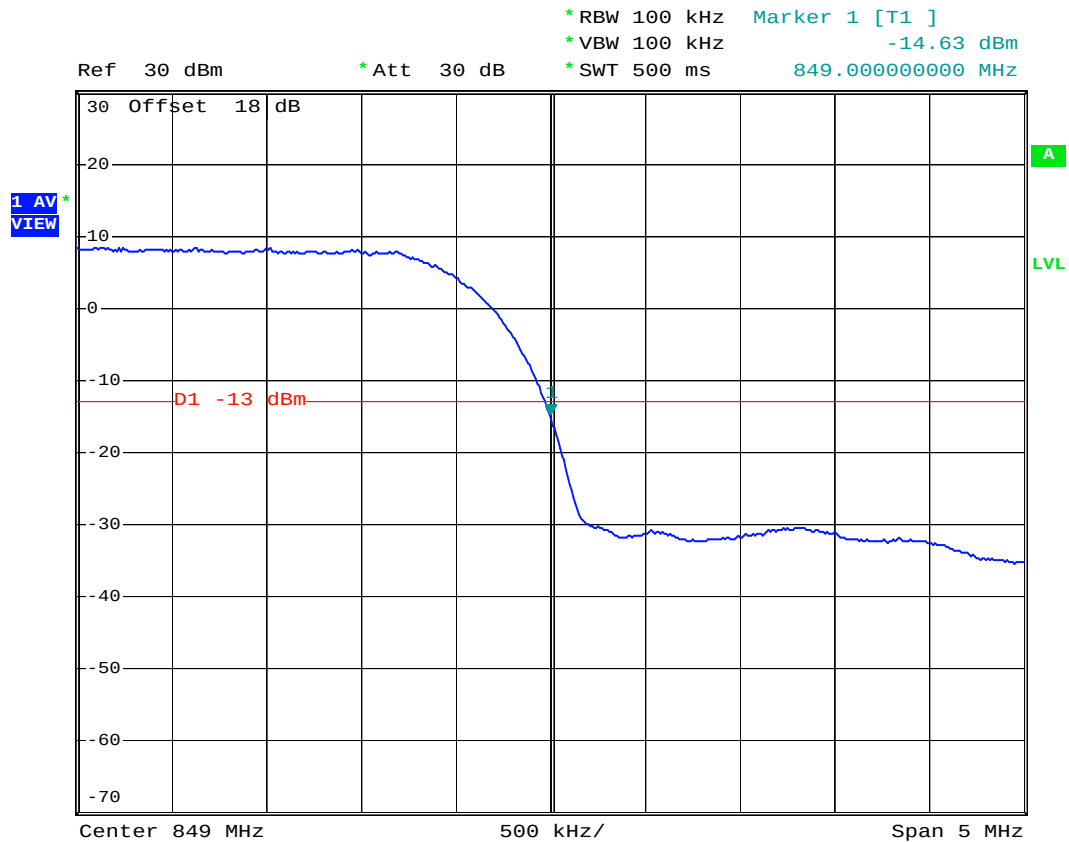
Date: 17.JUL.2007 03:13:44



FCC TEST REPORT

Report No. : FG761327B

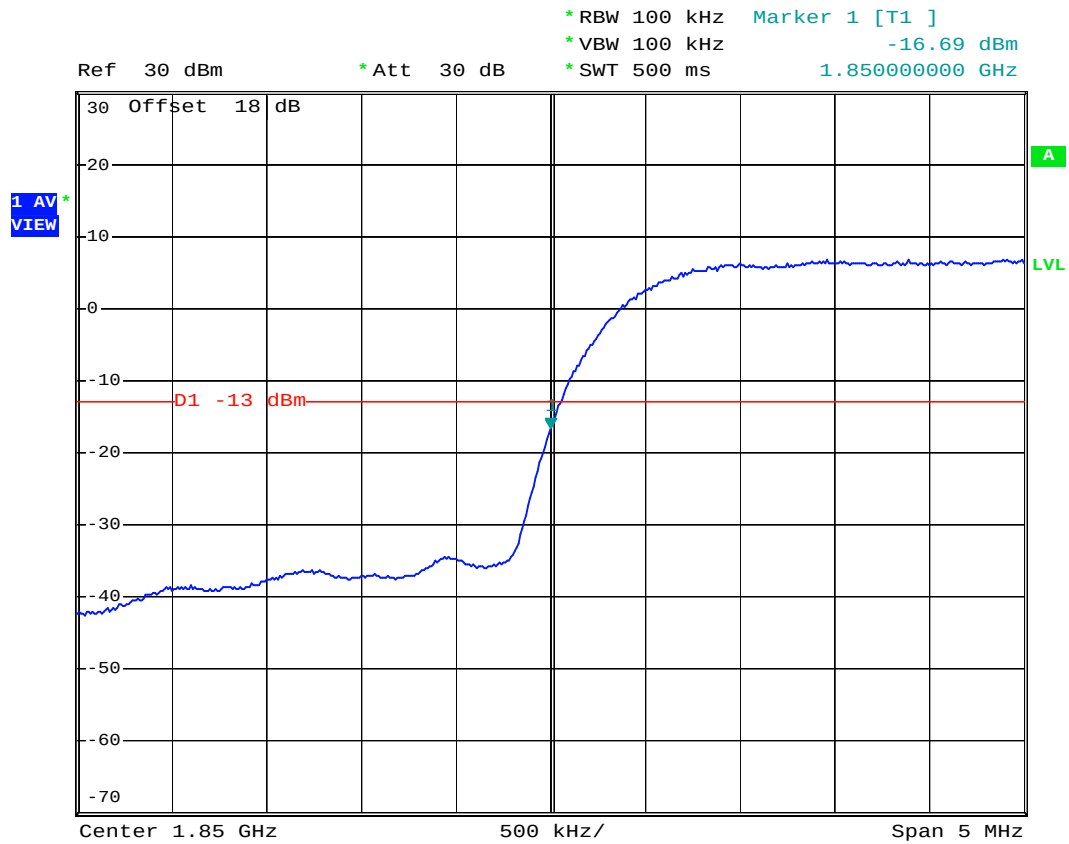
- Test Mode : WCDMA Band V (HSDPA) CH4233 Higher Band Edge
- Power State : High



Date: 8.JUL.2007 00:45:22



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



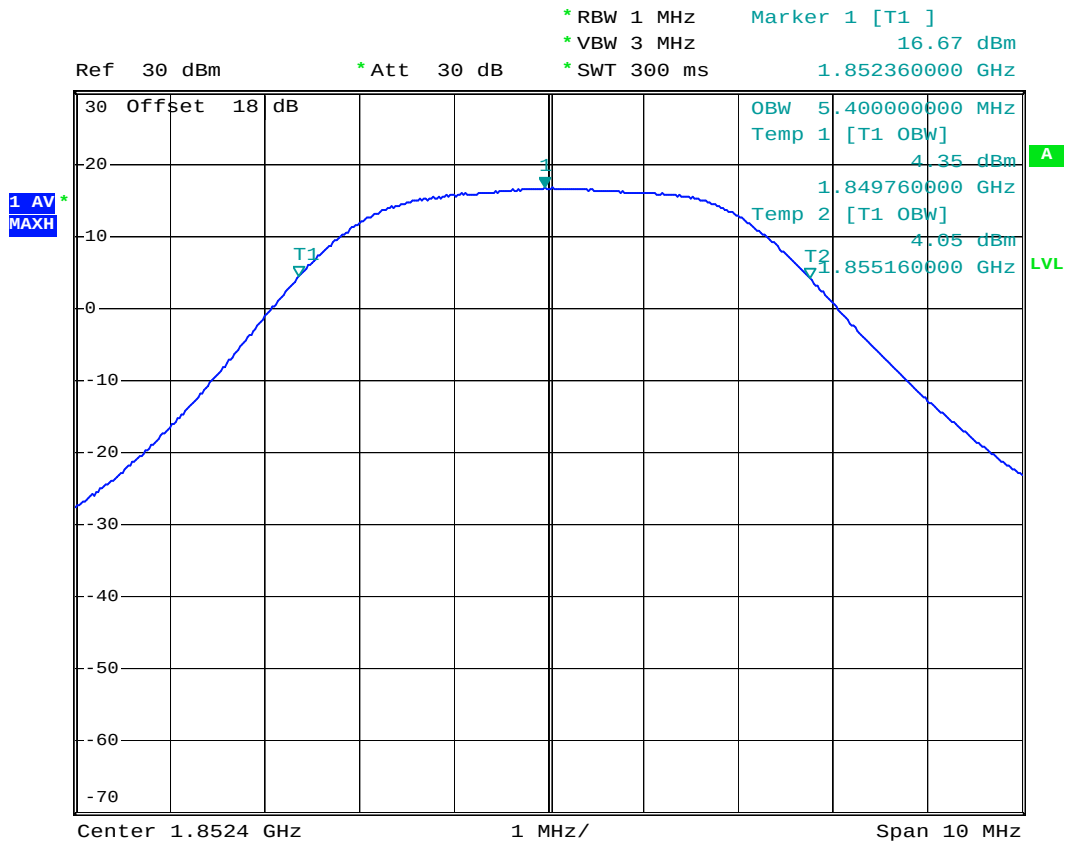
Date: 7.JUL.2007 23:37:06



FCC TEST REPORT

Report No. : FG761327B

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



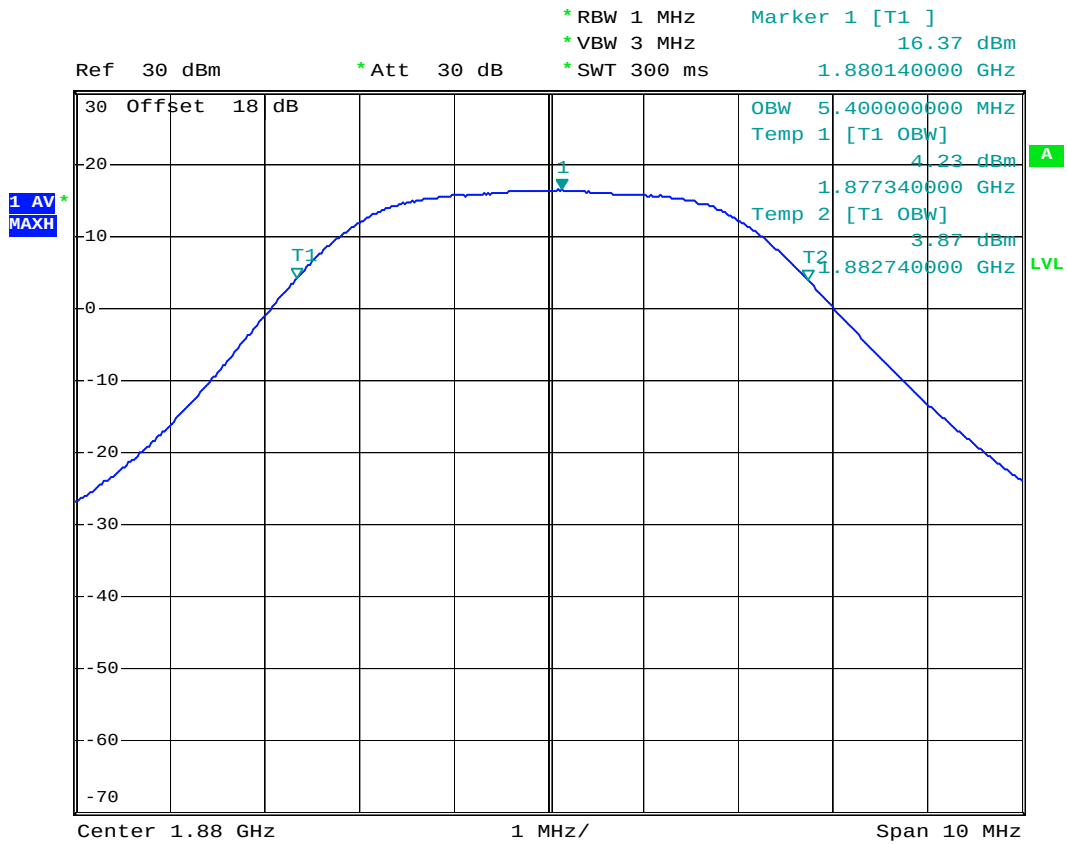
Date: 17.JUL.2007 02:00:58



FCC TEST REPORT

Report No. : FG761327B

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



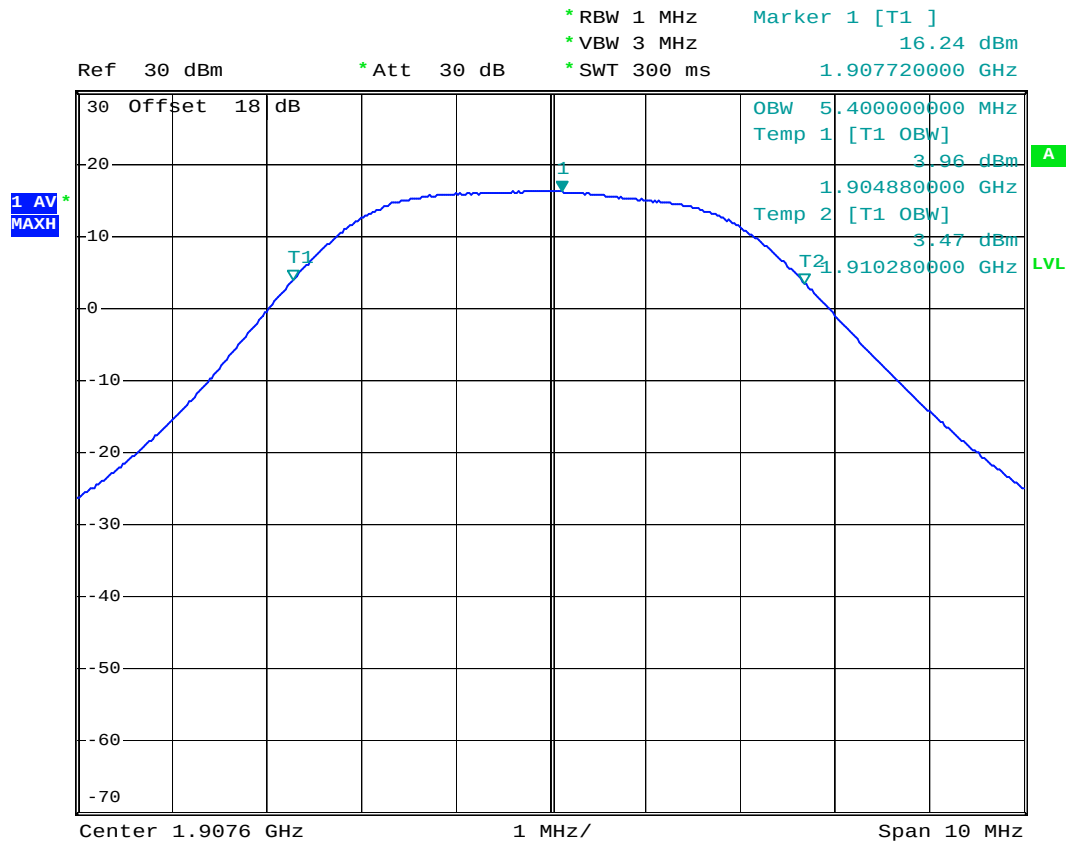
Date: 17.JUL.2007 02:00:09



FCC TEST REPORT

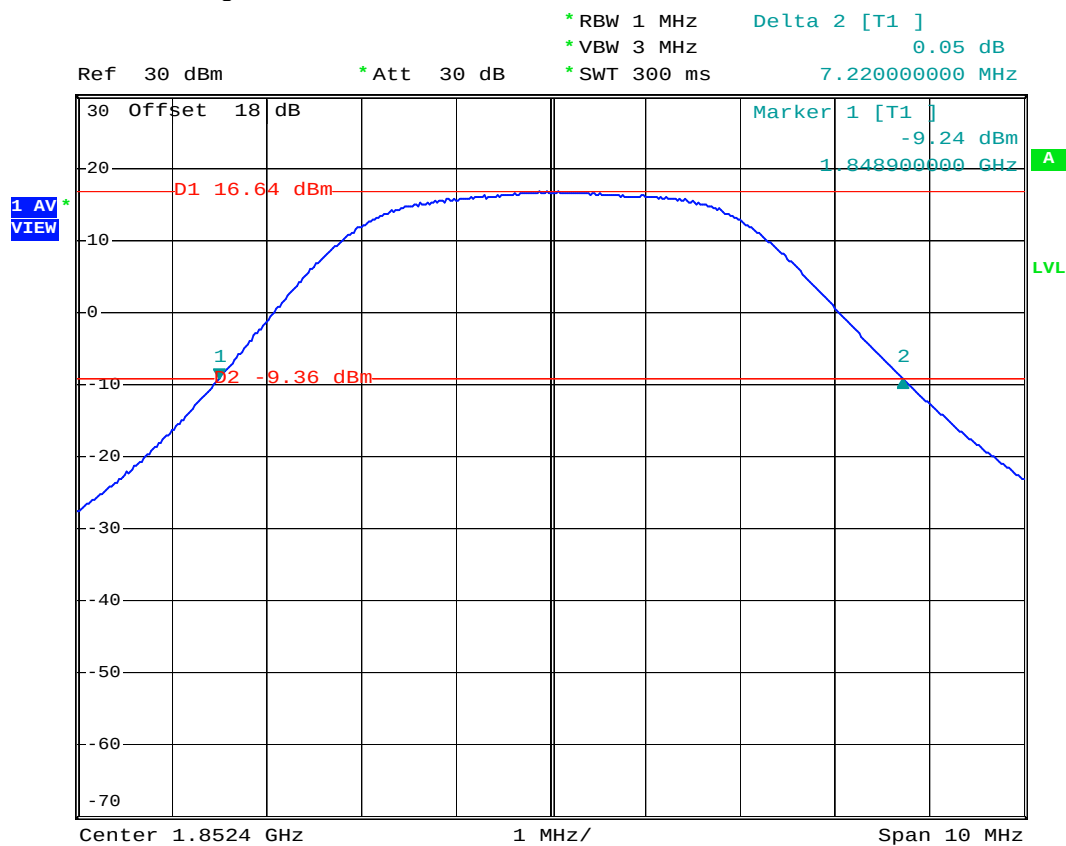
Report No. : FG761327B

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



Date: 17.JUL.2007 02:01:43

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



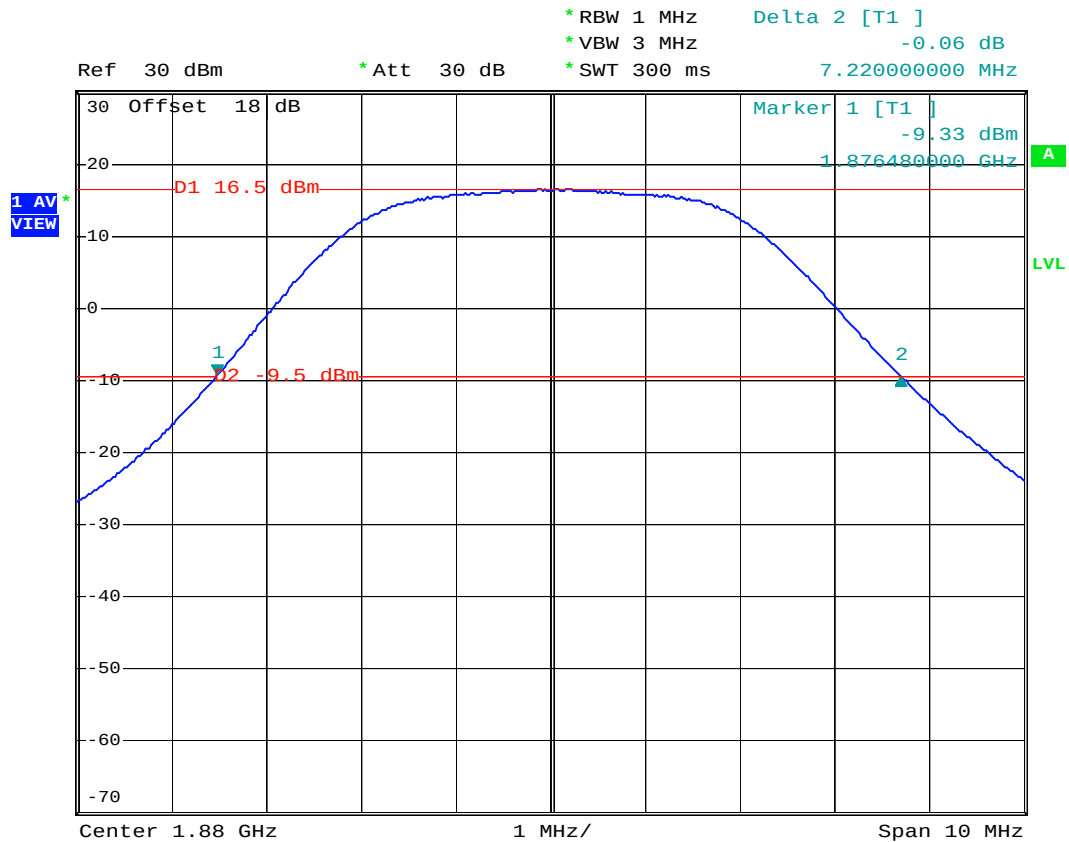
Date: 17.JUL.2007 02:16:04



FCC TEST REPORT

Report No. : FG761327B

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



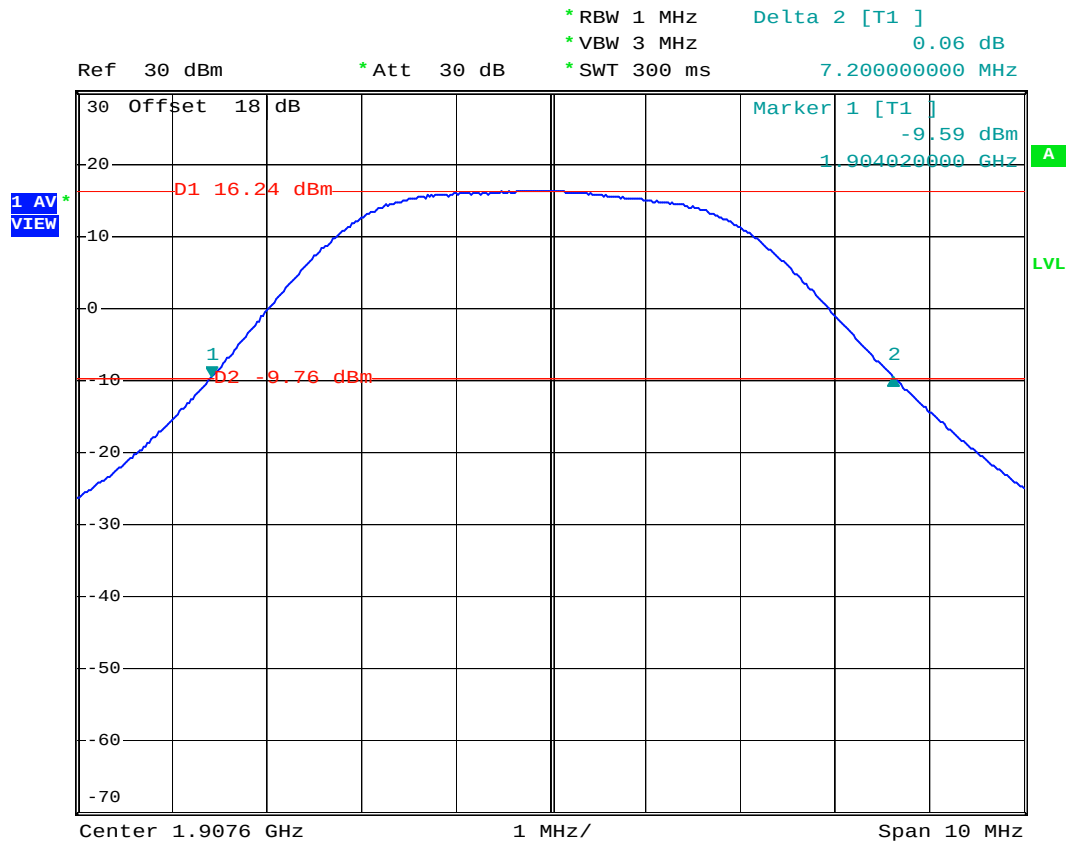
Date: 17.JUL.2007 02:14:01



FCC TEST REPORT

Report No. : FG761327B

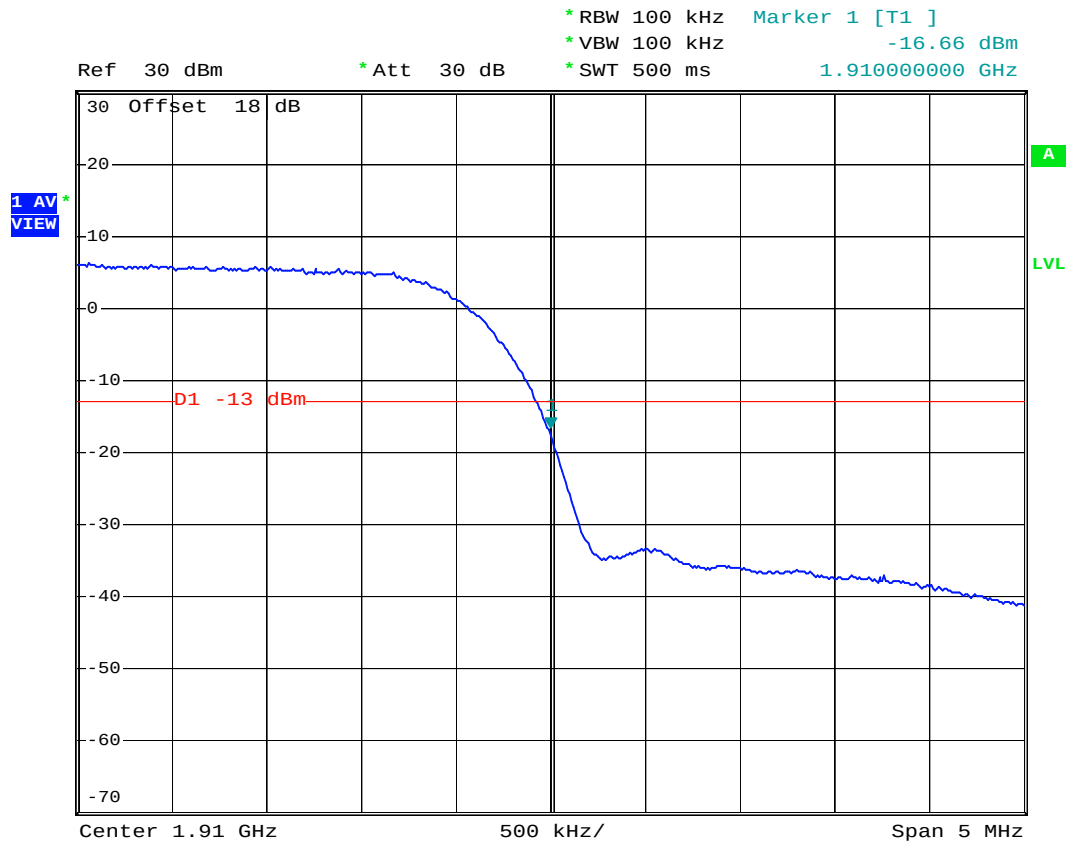
- Test Mode : WCDMA Band II CH9538 26dB Bandwidth
- Power State : High



Date: 17.JUL.2007 02:12:53



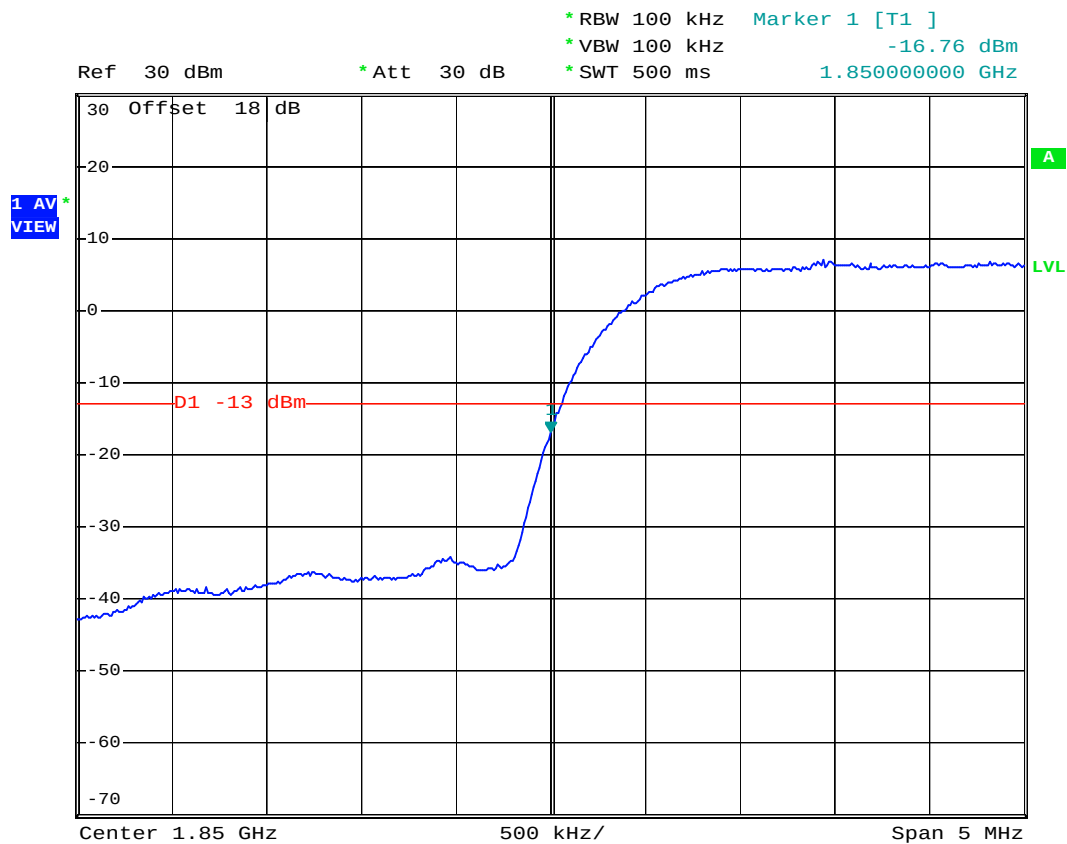
- Test Mode : WCDMA Band II CH9538 Higher Band Edge
- Power State : High



Date: 7.JUL.2007 23:35:52



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



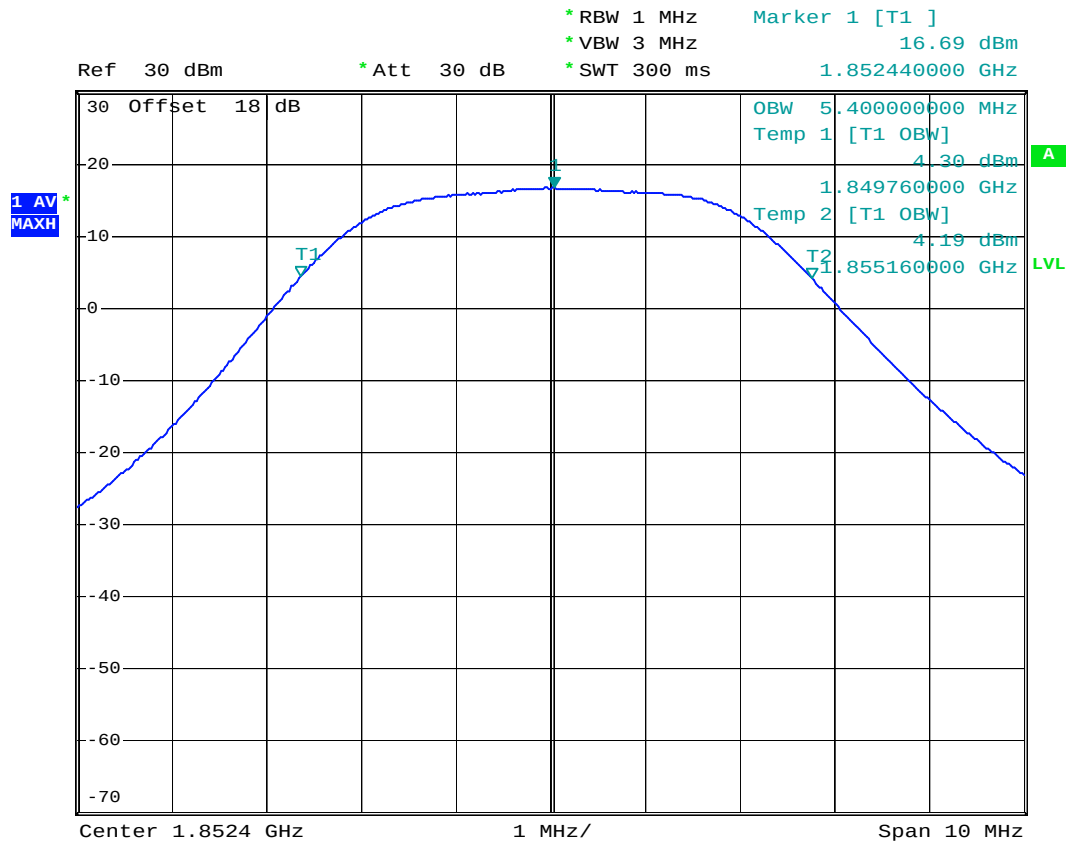
Date: 8.JUL.2007 00:05:50



FCC TEST REPORT

Report No. : FG761327B

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



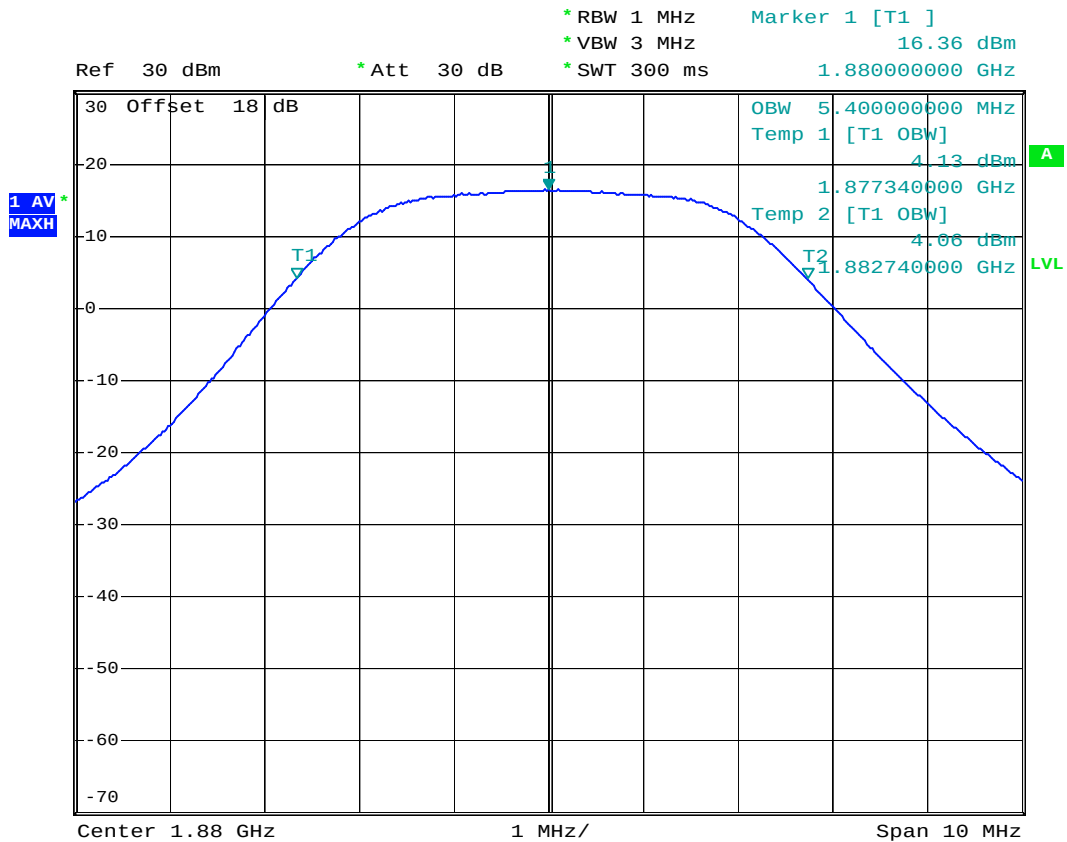
Date: 17.JUL.2007 02:02:50



FCC TEST REPORT

Report No. : FG761327B

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



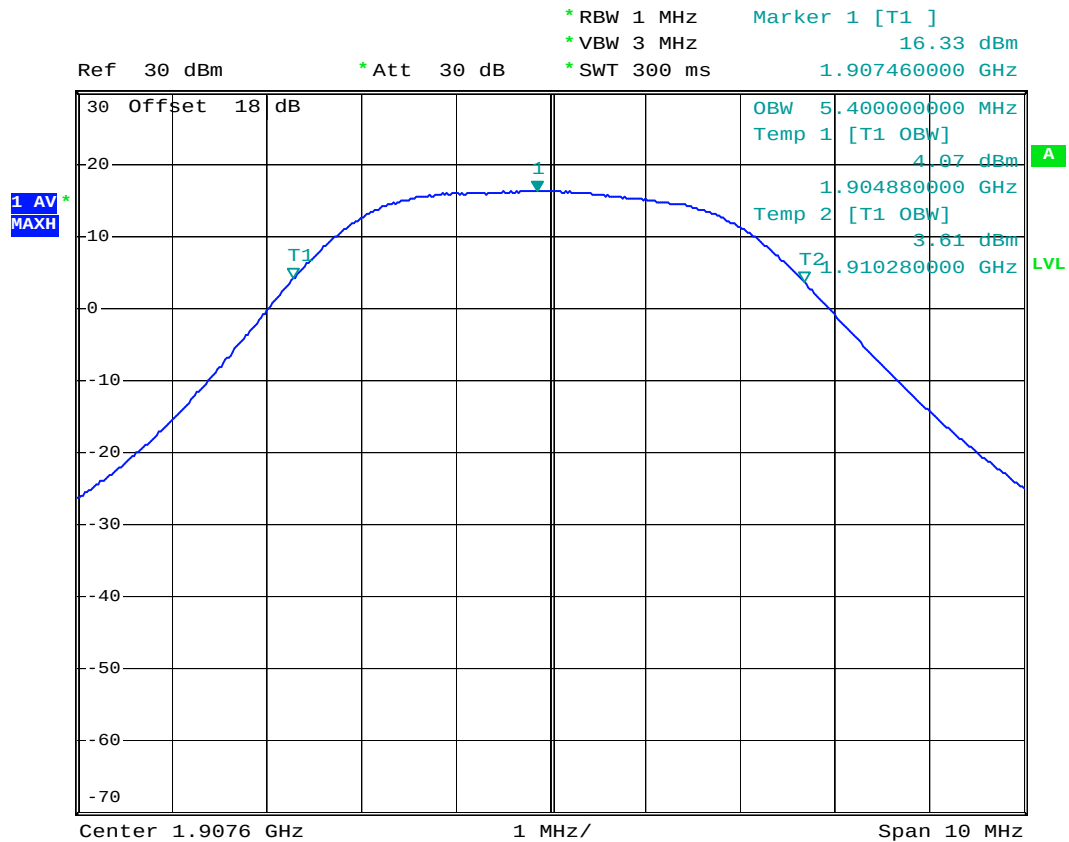
Date: 17.JUL.2007 02:03:26



FCC TEST REPORT

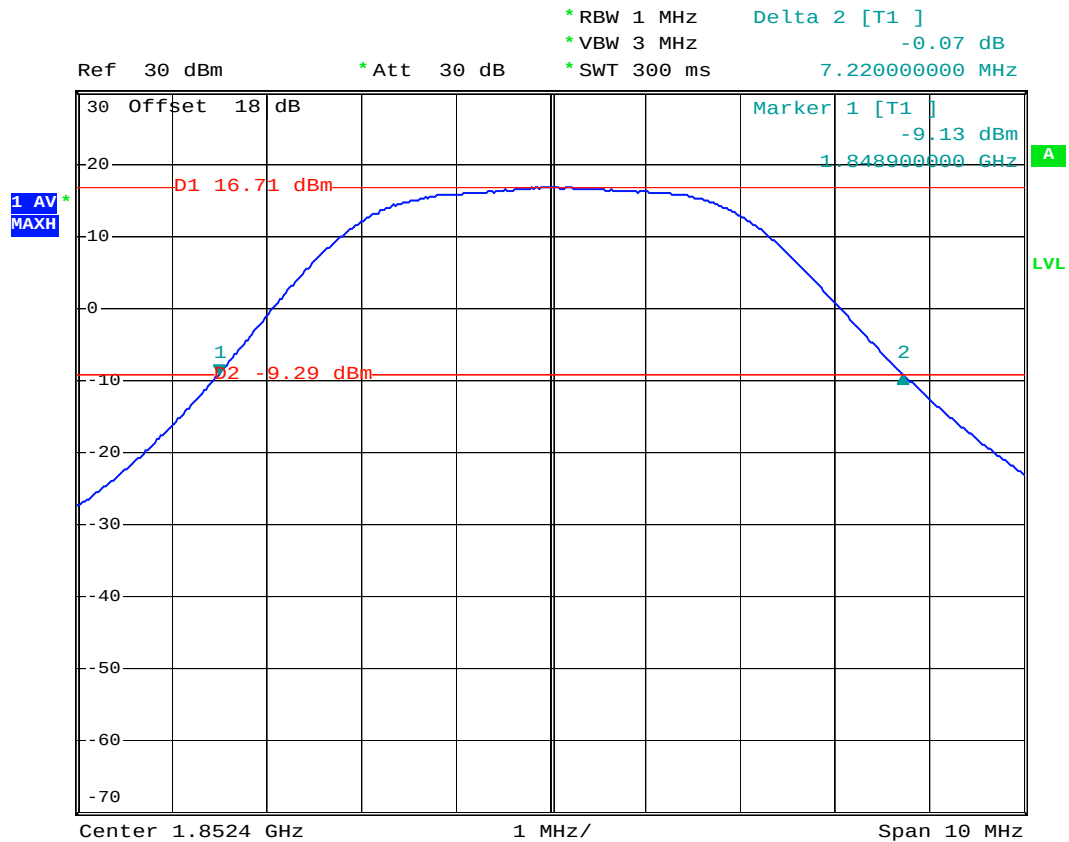
Report No. : FG761327B

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



Date: 17.JUL.2007 02:04:33

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



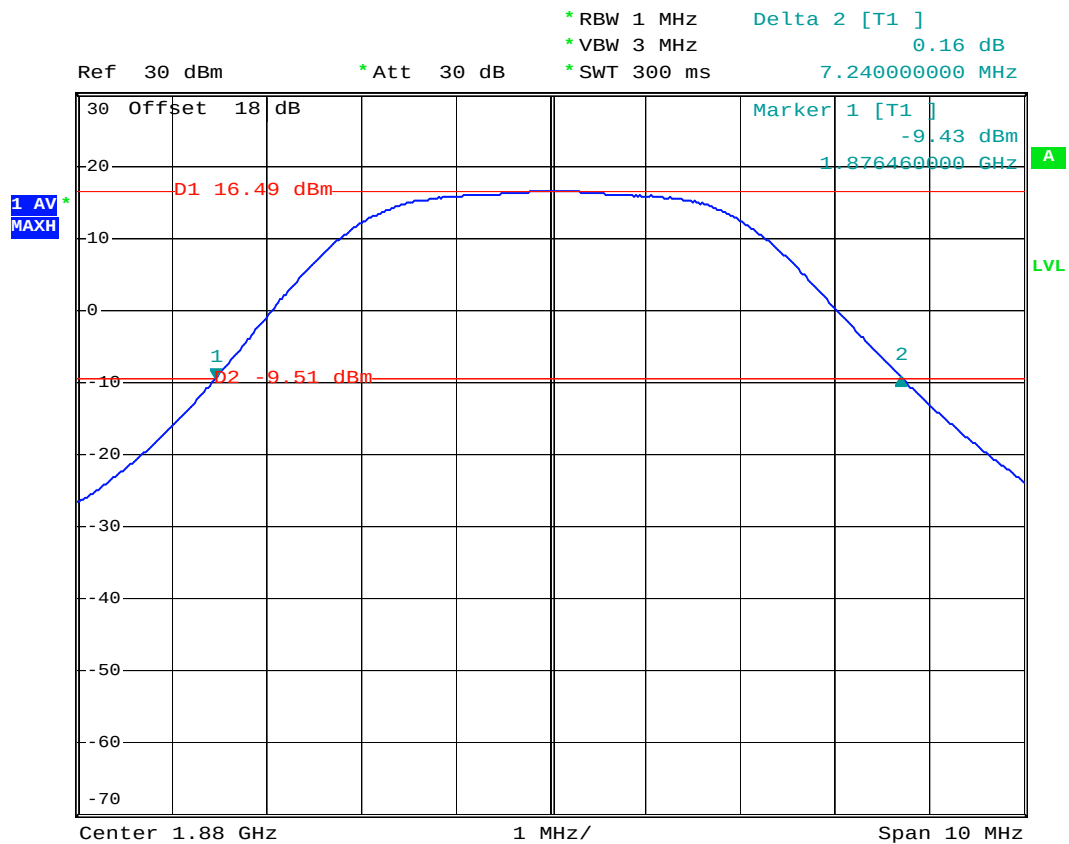
Date: 17.JUL.2007 02:11:20



FCC TEST REPORT

Report No. : FG761327B

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



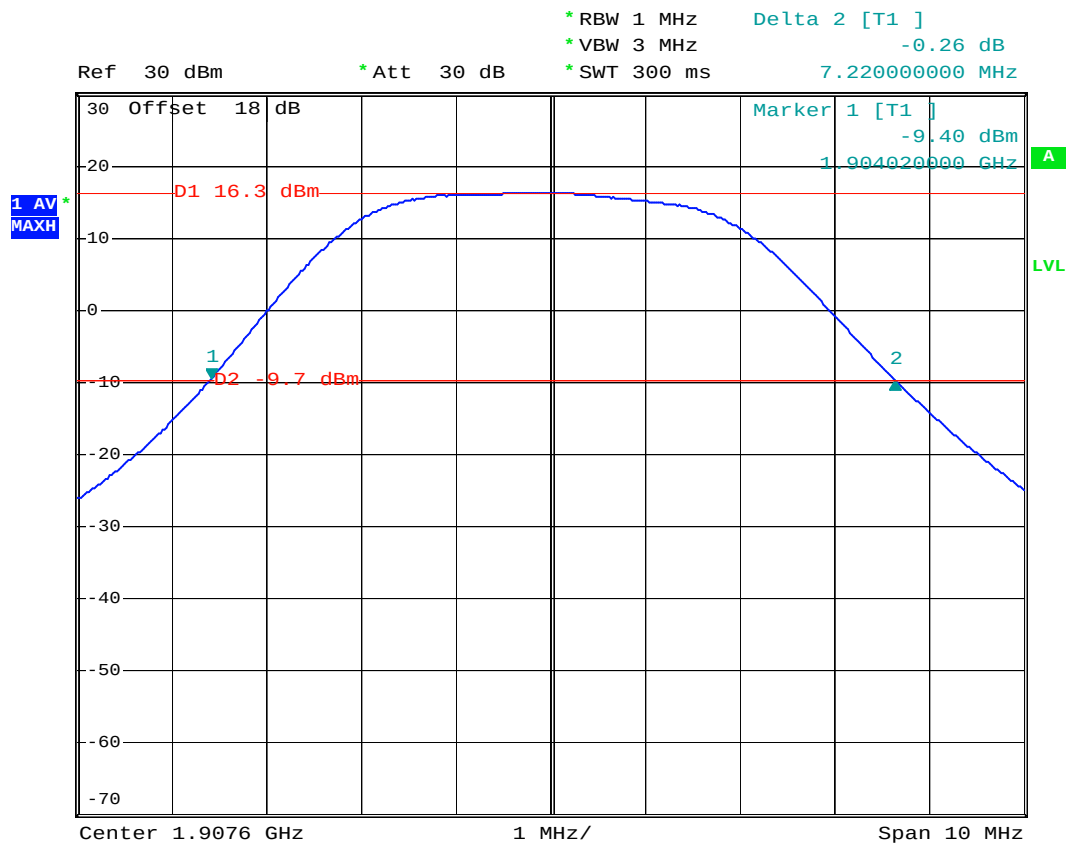
Date: 17.JUL.2007 02:09:42



FCC TEST REPORT

Report No. : FG761327B

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



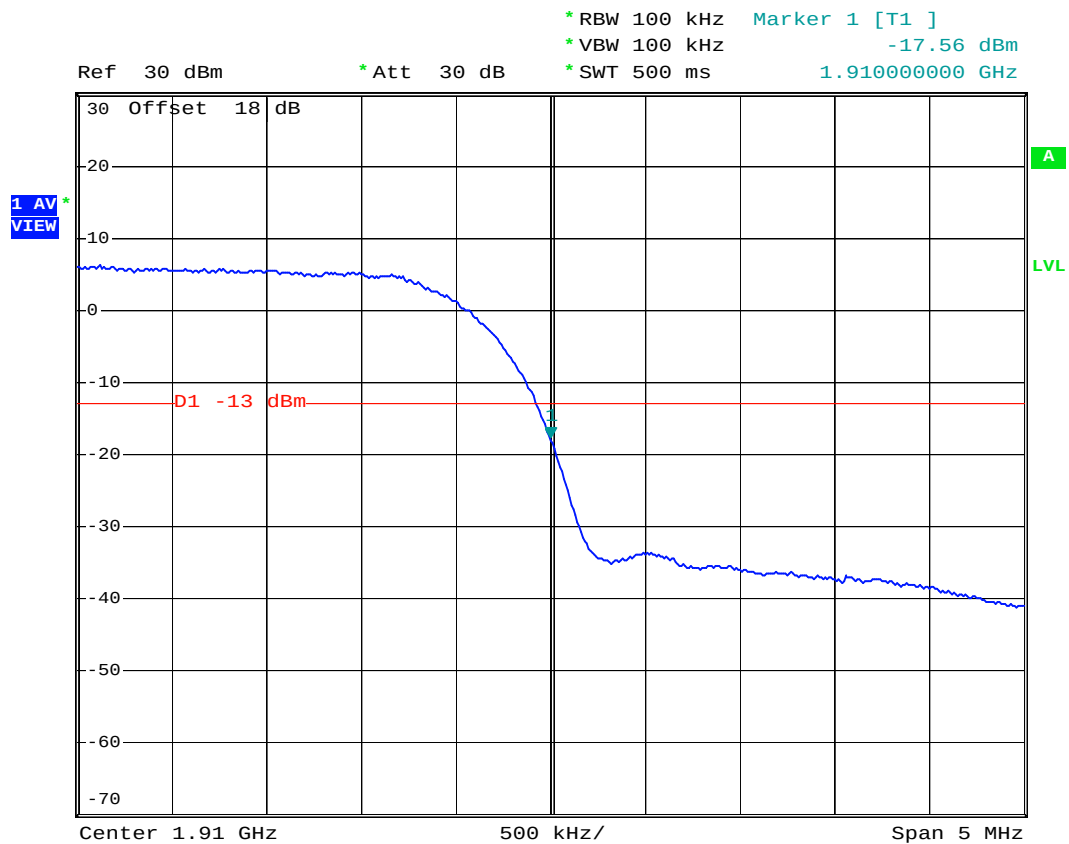
Date: 17.JUL.2007 02:07:51



FCC TEST REPORT

Report No. : FG761327B

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



Date: 7.JUL.2007 23:56:06

4.5 Conducted Emission

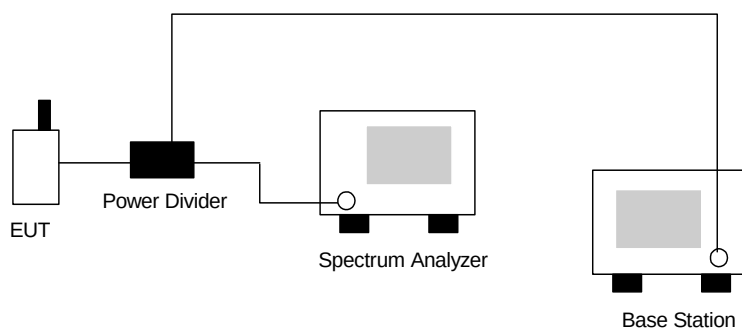
4.5.1 Measurement Instruments

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.

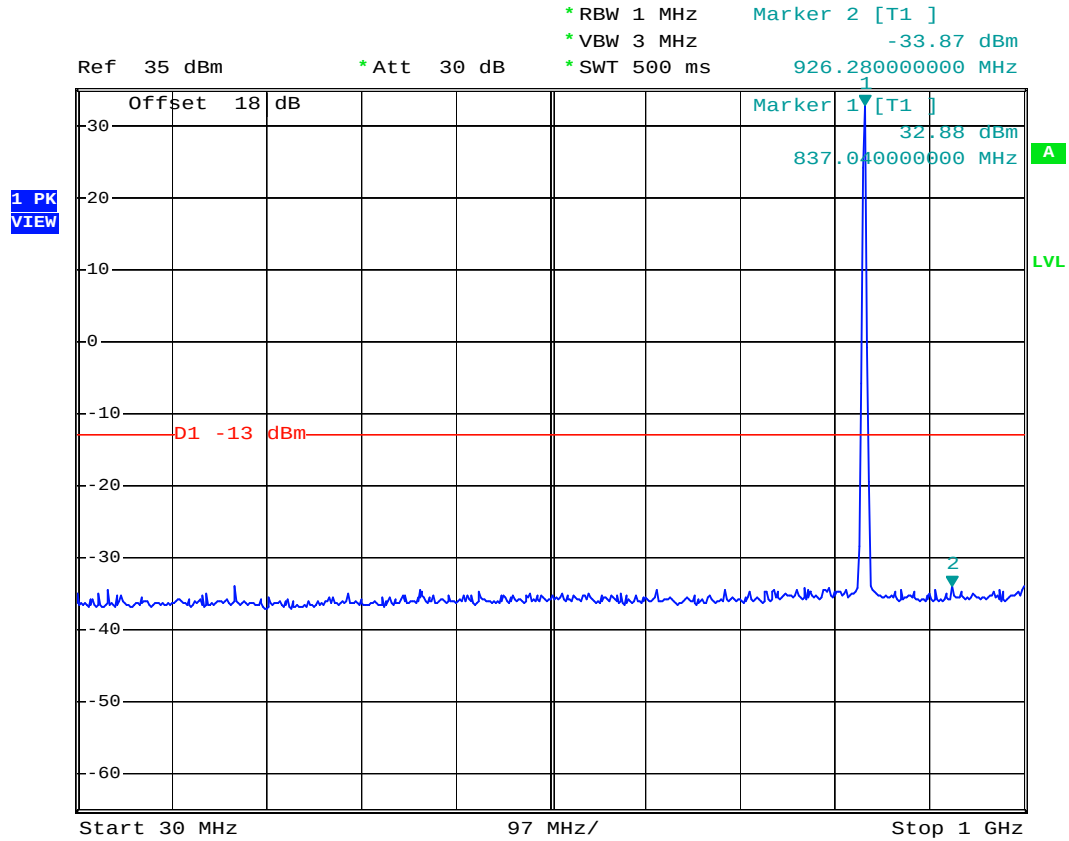
4.5.3 Test Setup Layout





4.5.4 Test Result

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



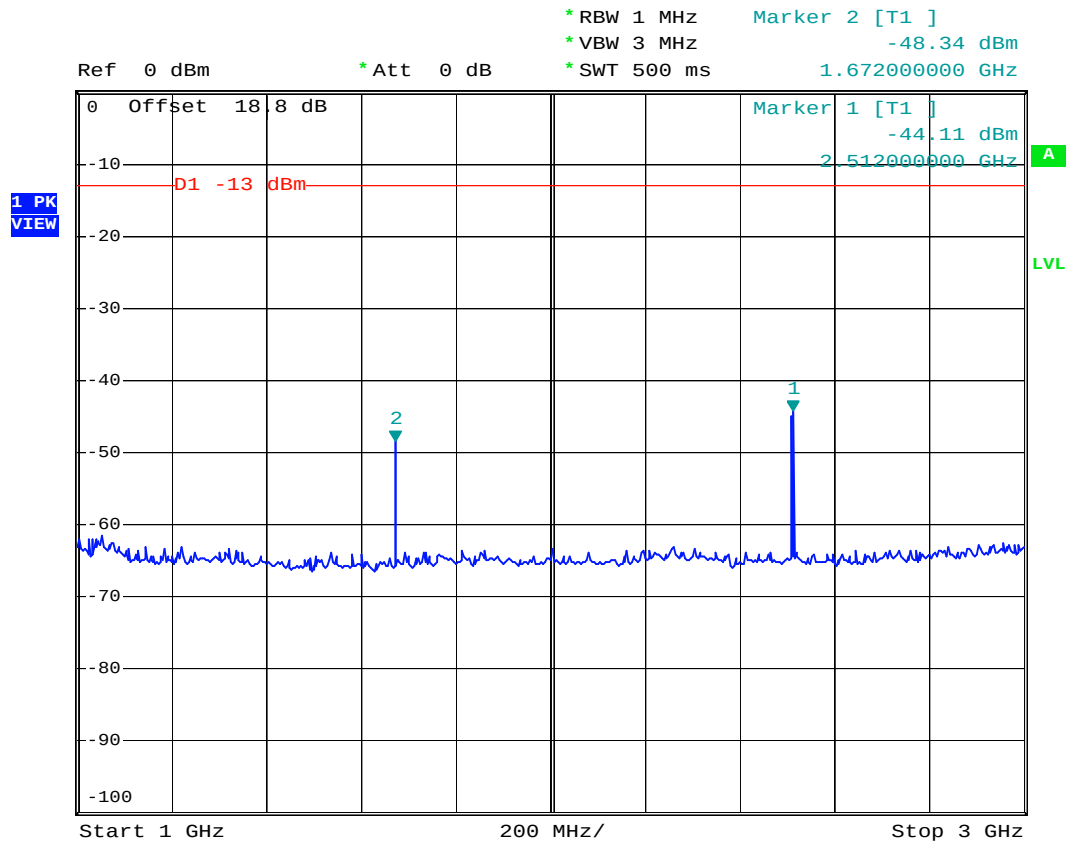
Date: 4.JUL.2007 00:02:26



FCC TEST REPORT

Report No. : FG761327B

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



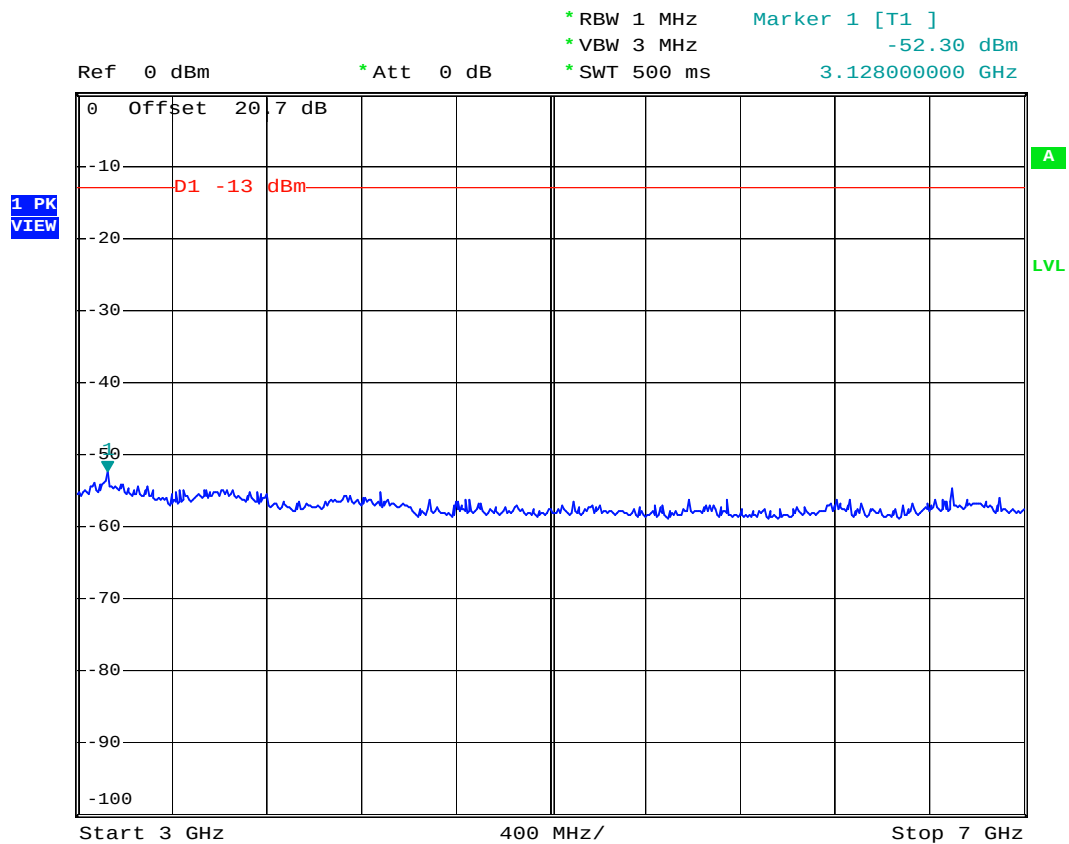
Date: 4.JUL.2007 00:09:52



FCC TEST REPORT

Report No. : FG761327B

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



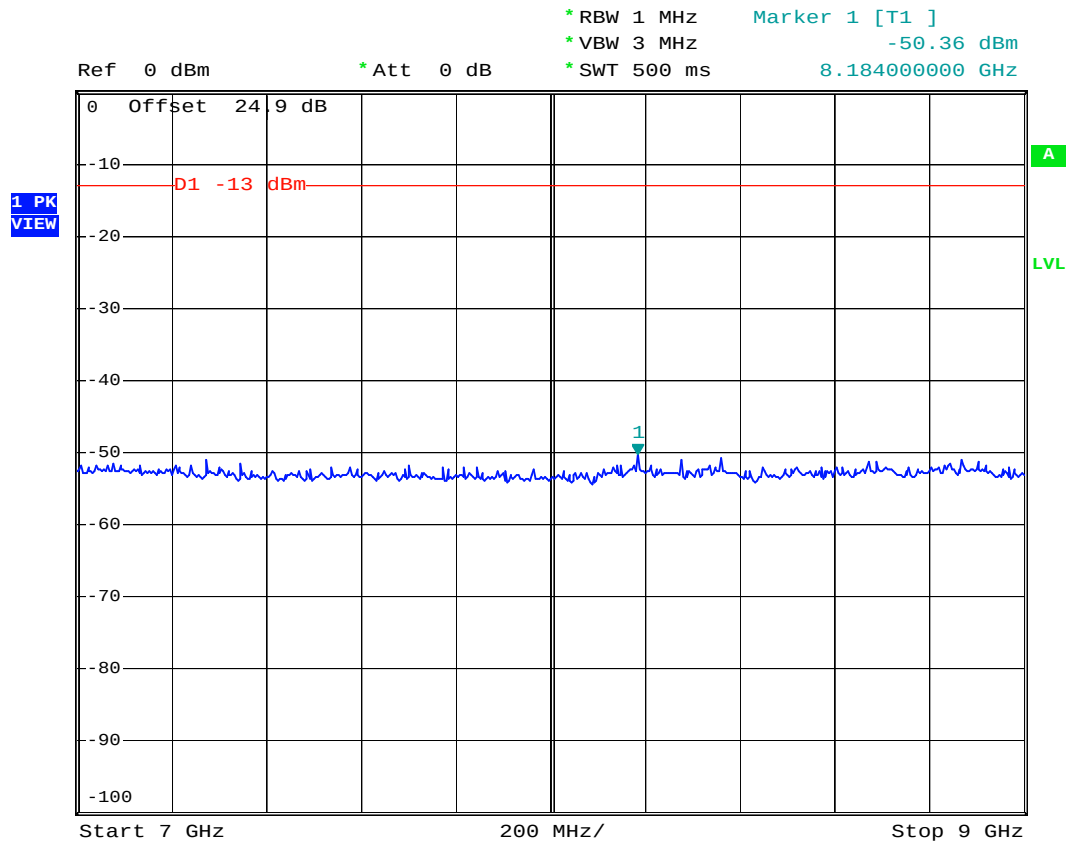
Date: 4.JUL.2007 00:11:54



FCC TEST REPORT

Report No. : FG761327B

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



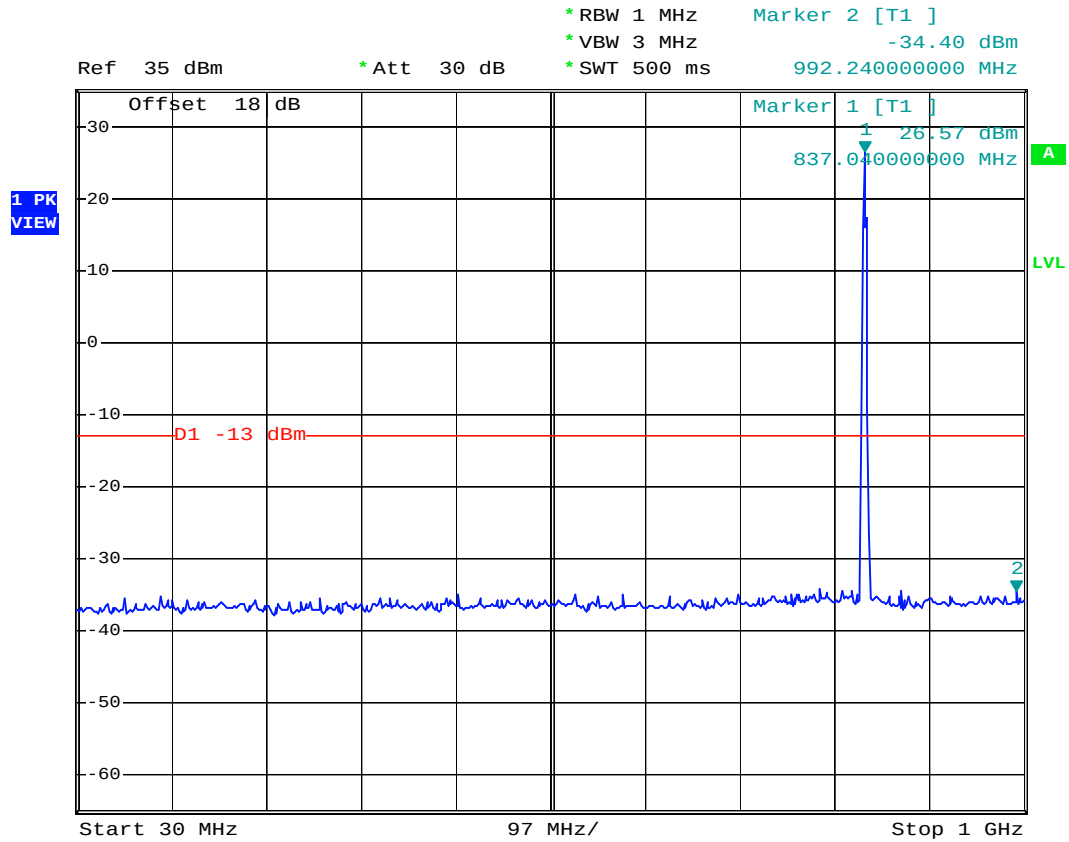
Date: 4.JUL.2007 00:12:26



FCC TEST REPORT

Report No. : FG761327B

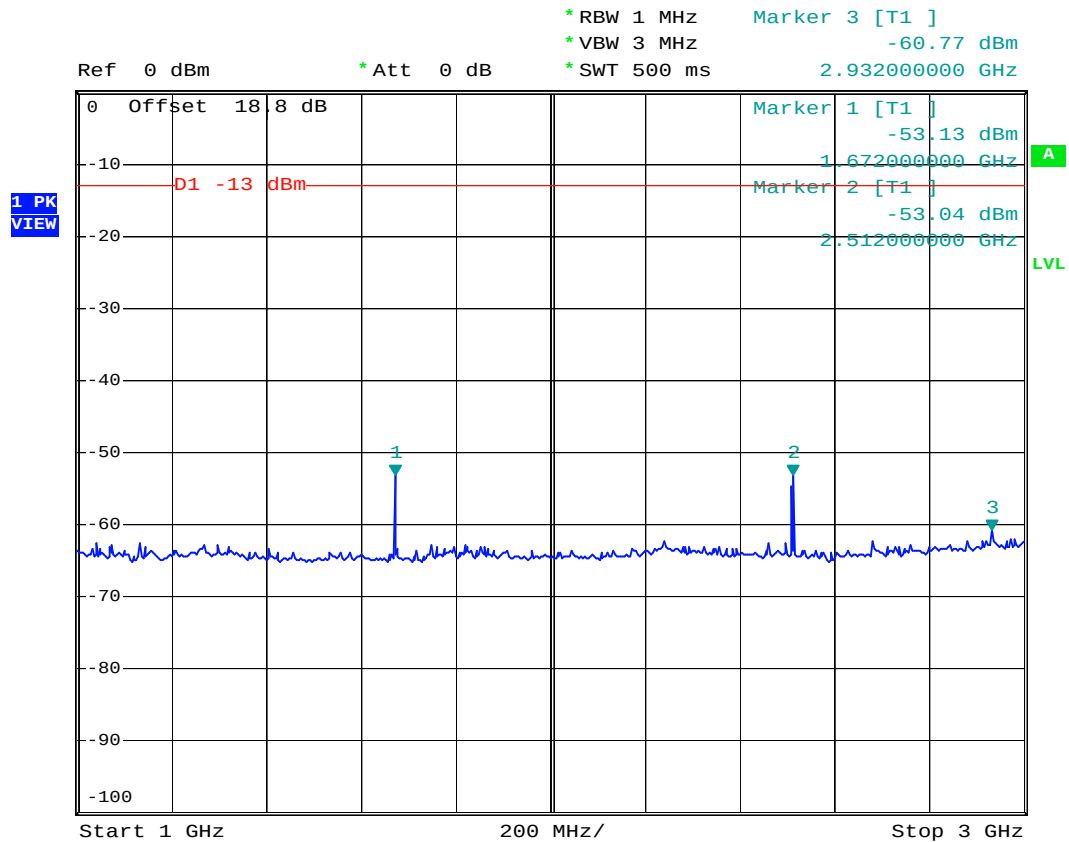
- Mode 2
- Test Mode : GSM850 (EDGE) CH189
- Frequency Range : 30M-1G



Date: 16.JUL.2007 23:03:32



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



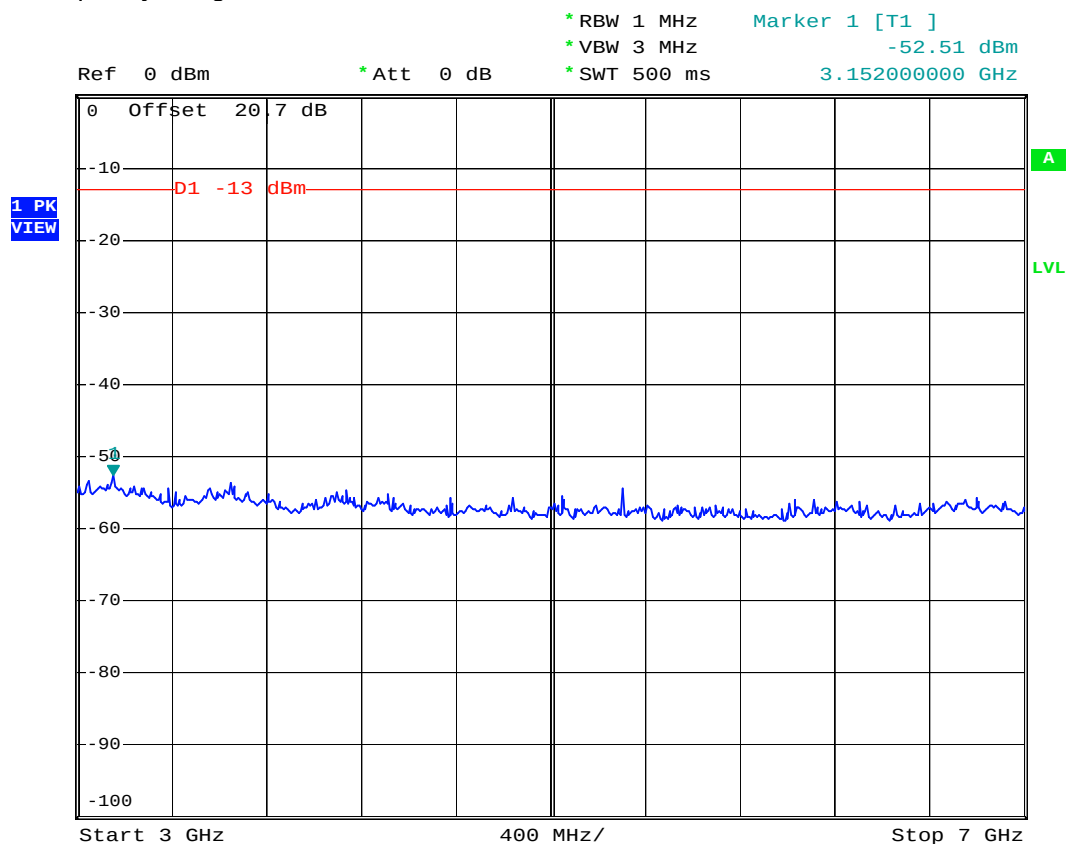
Date: 16.JUL.2007 22:16:01



FCC TEST REPORT

Report No. : FG761327B

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



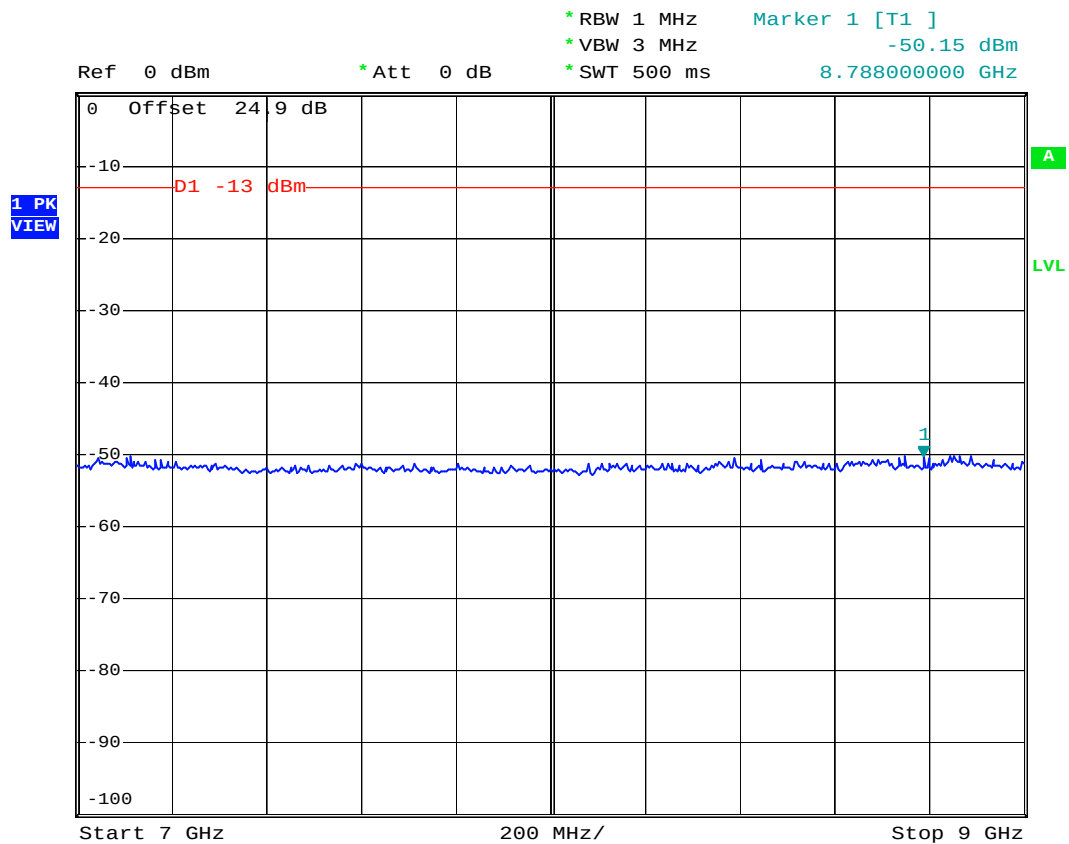
Date: 16.JUL.2007 22:23:23



FCC TEST REPORT

Report No. : FG761327B

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



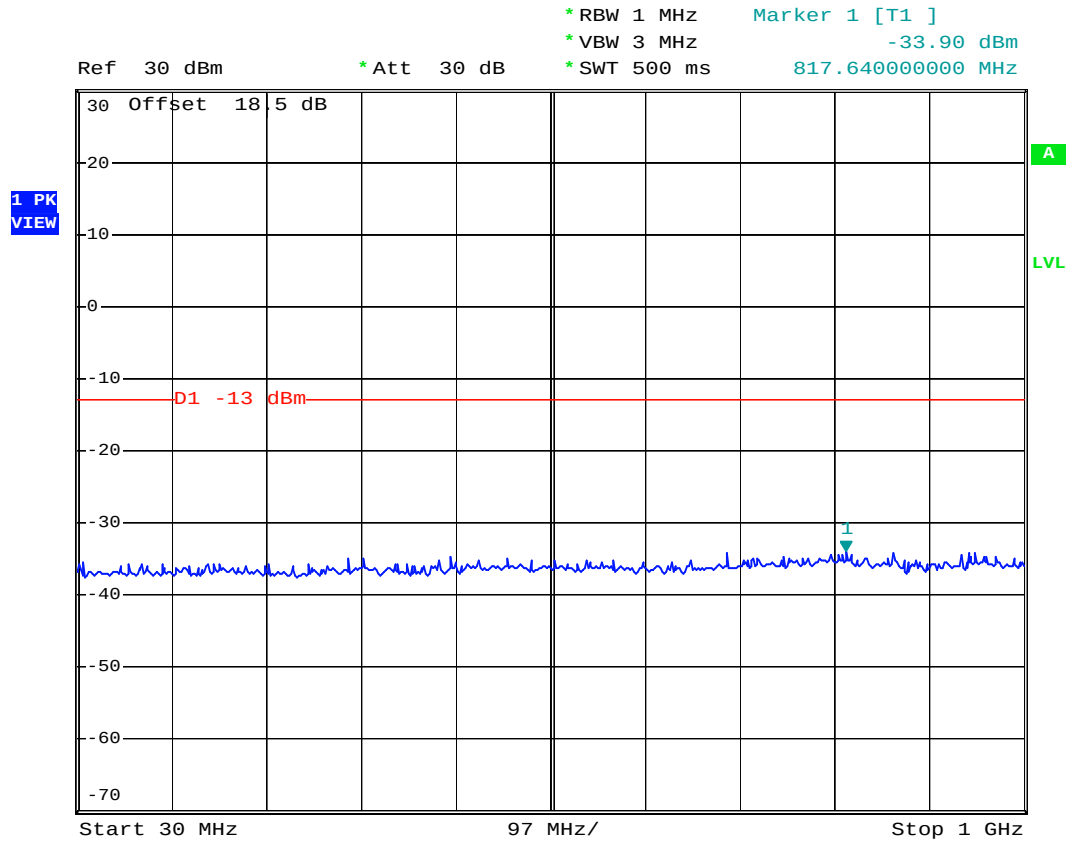
Date: 16.JUL.2007 22:27:33



FCC TEST REPORT

Report No. : FG761327B

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



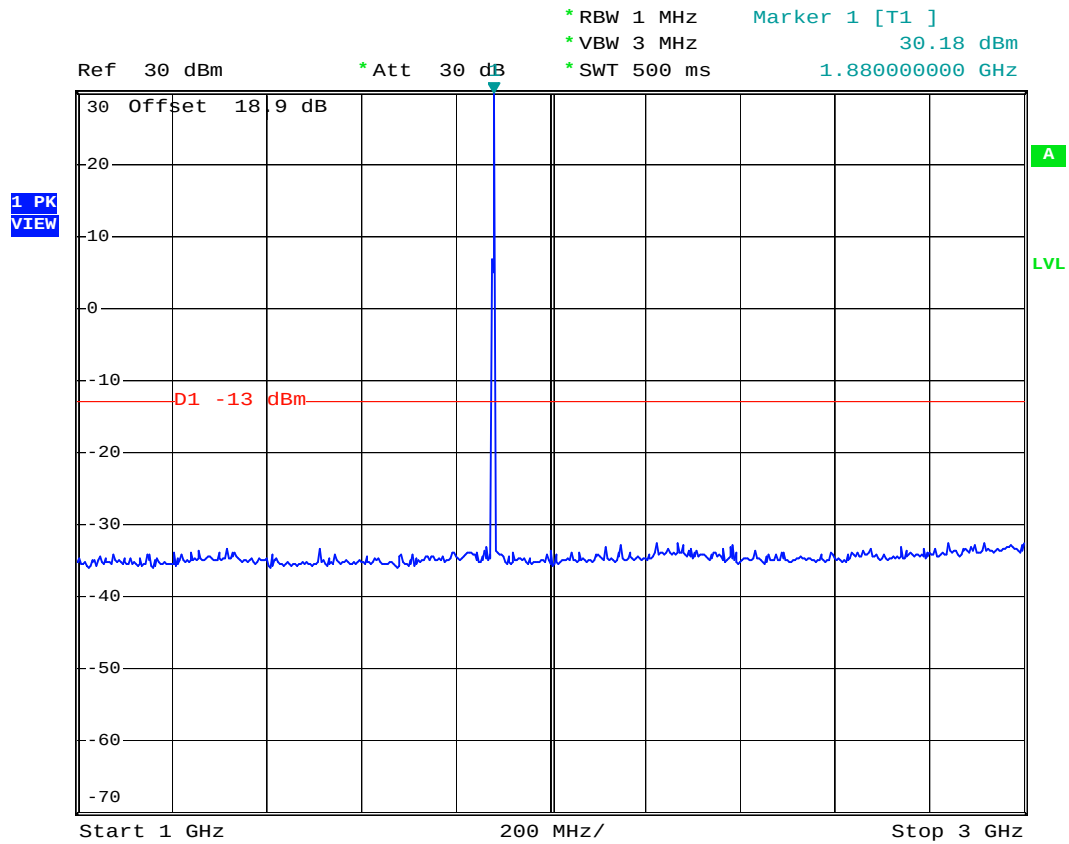
Date: 4.JUL.2007 01:03:34



FCC TEST REPORT

Report No. : FG761327B

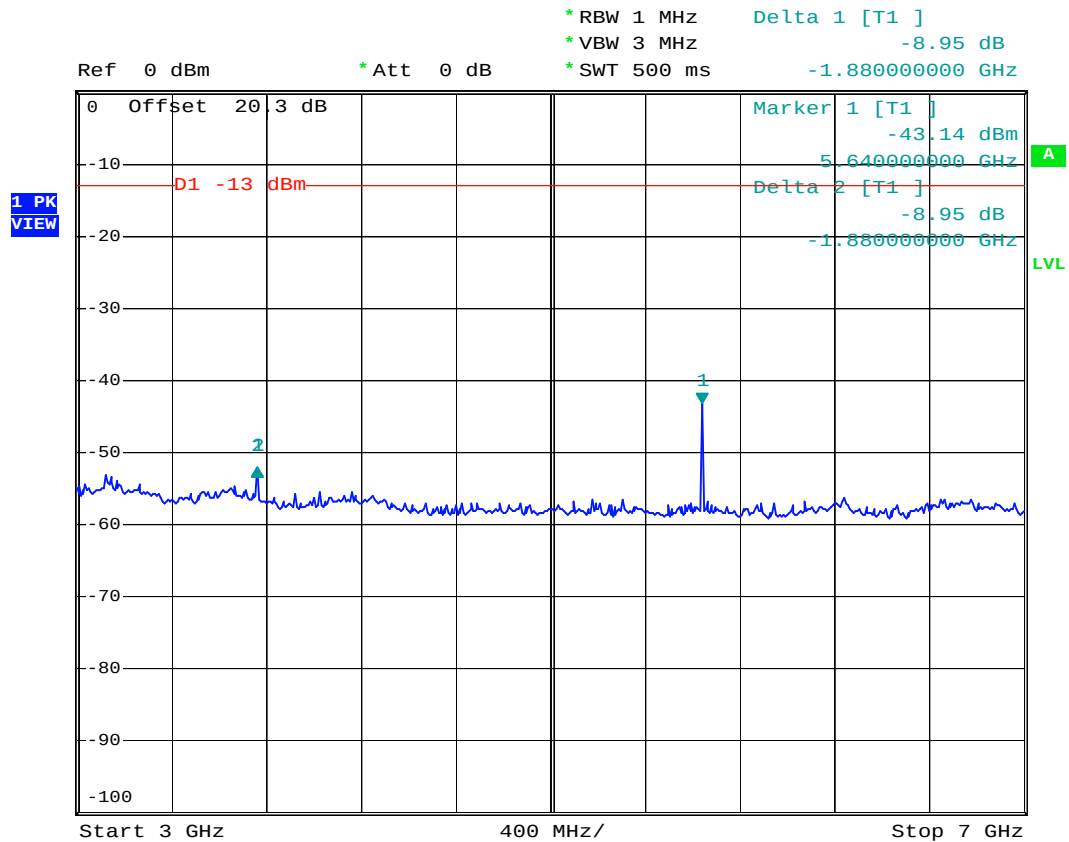
- Test Mode : PCS1900 (GSM) CH661
- Frequency Range : 1G-3G



Date: 4.JUL.2007 01:05:14



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



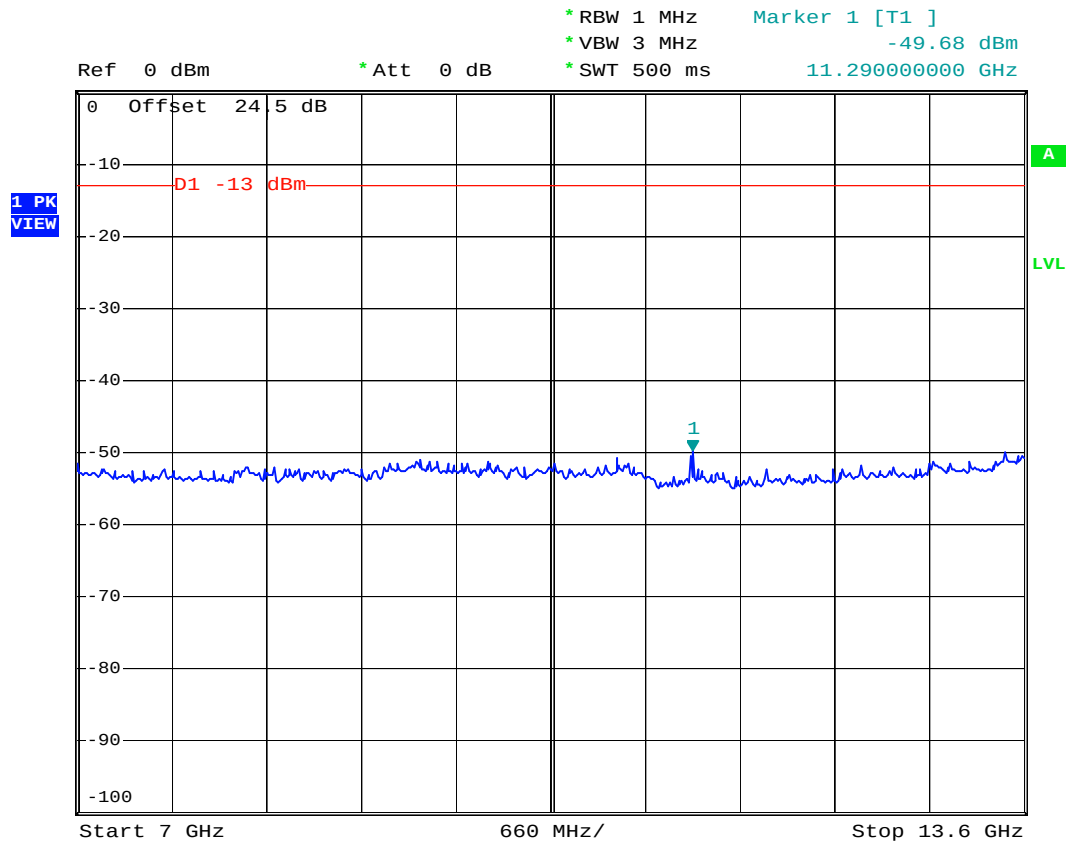
Date: 4.JUL.2007 01:06:18



FCC TEST REPORT

Report No. : FG761327B

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



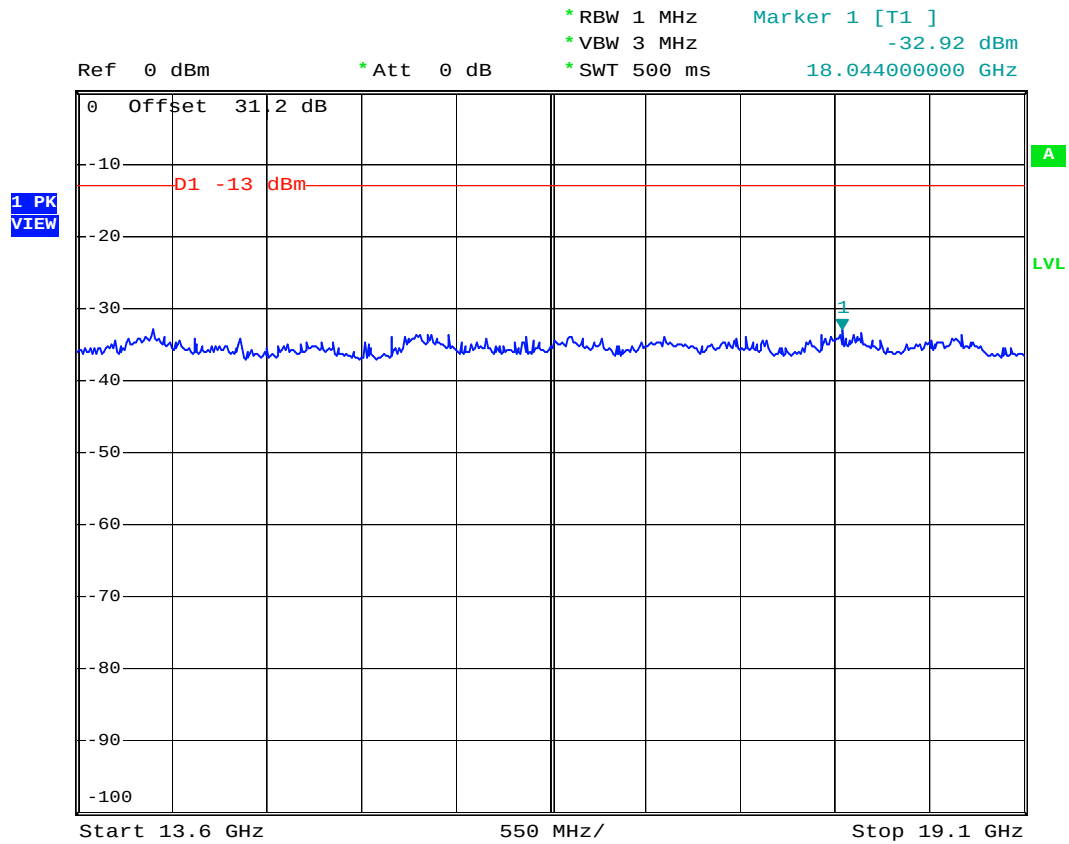
Date: 4.JUL.2007 01:07:15



FCC TEST REPORT

Report No. : FG761327B

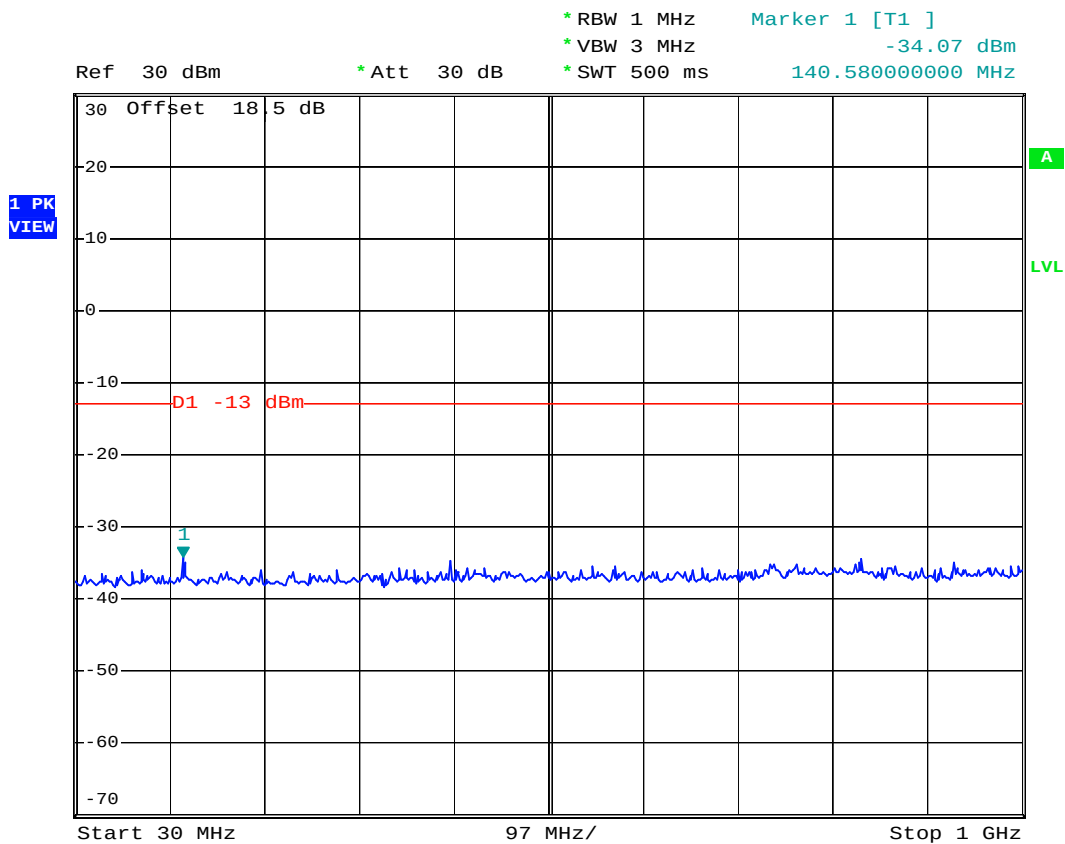
- Test Mode : PCS1900 (GSM) CH661
- Frequency Range : 13.6G-19.1G



Date: 4.JUL.2007 01:08:23



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



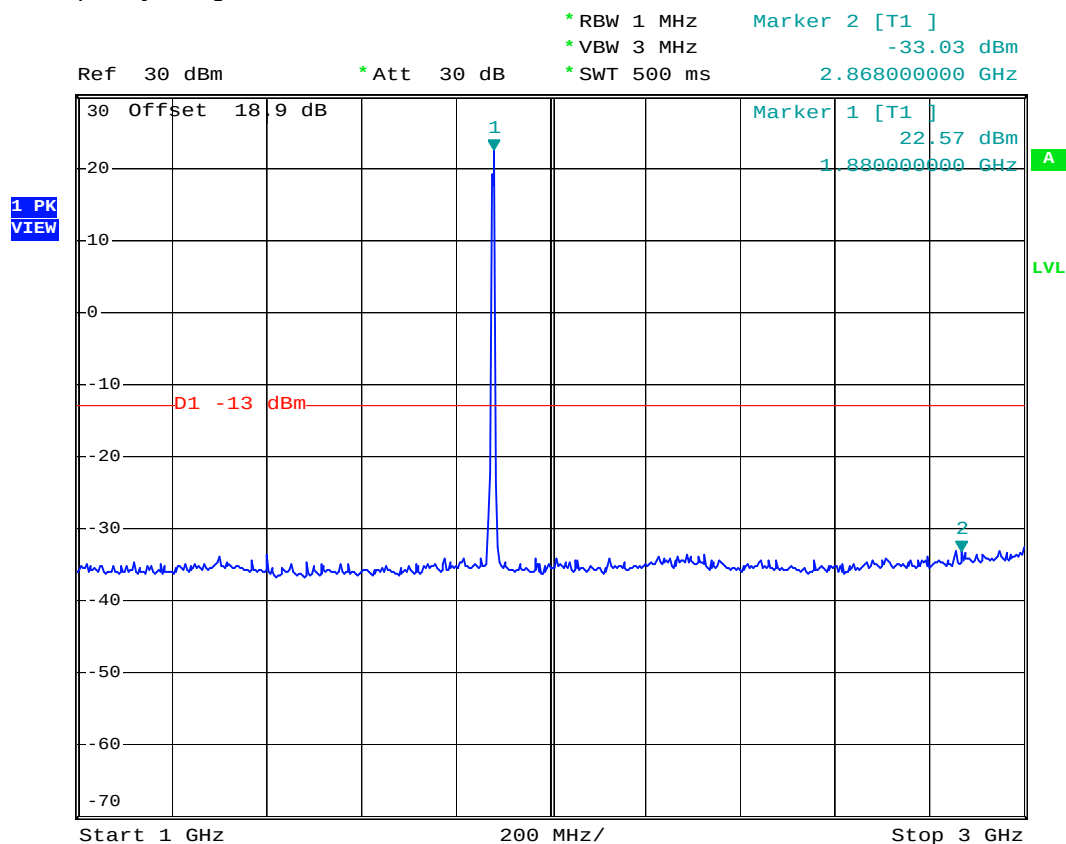
Date: 8.JUL.2007 02:24:04



FCC TEST REPORT

Report No. : FG761327B

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



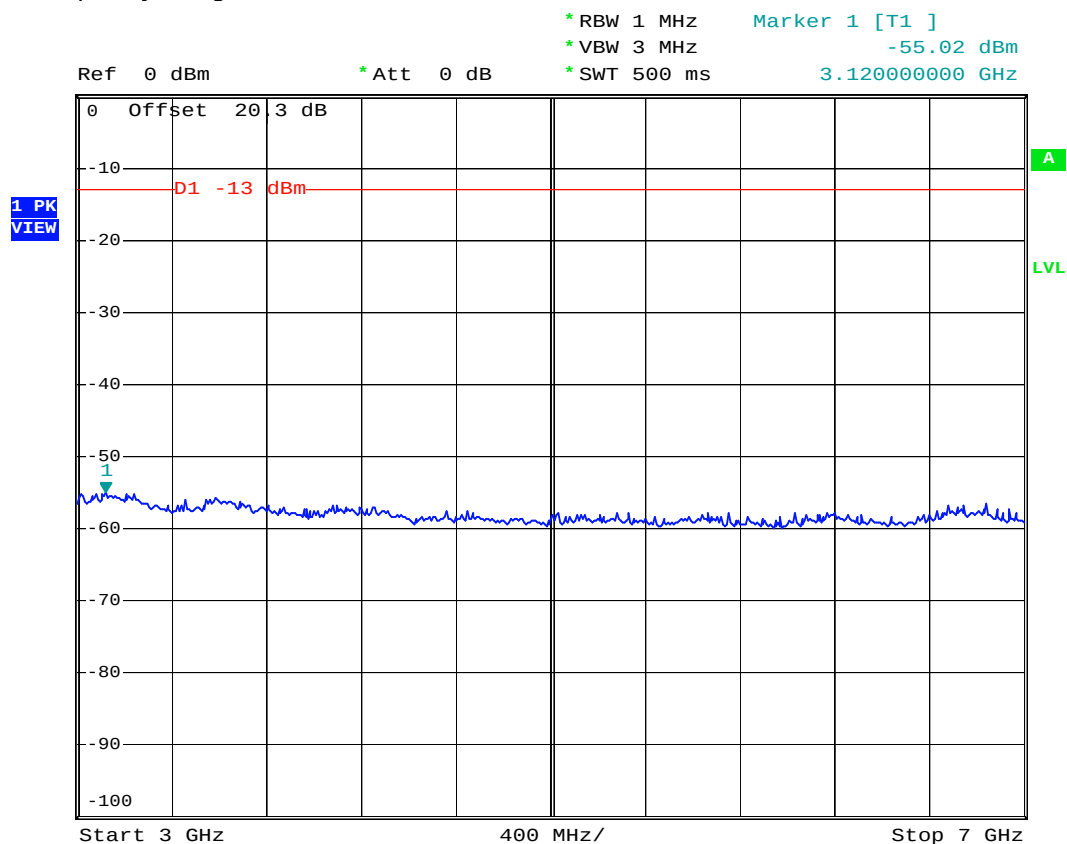
Date: 8.JUL.2007 02:26:52



FCC TEST REPORT

Report No. : FG761327B

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



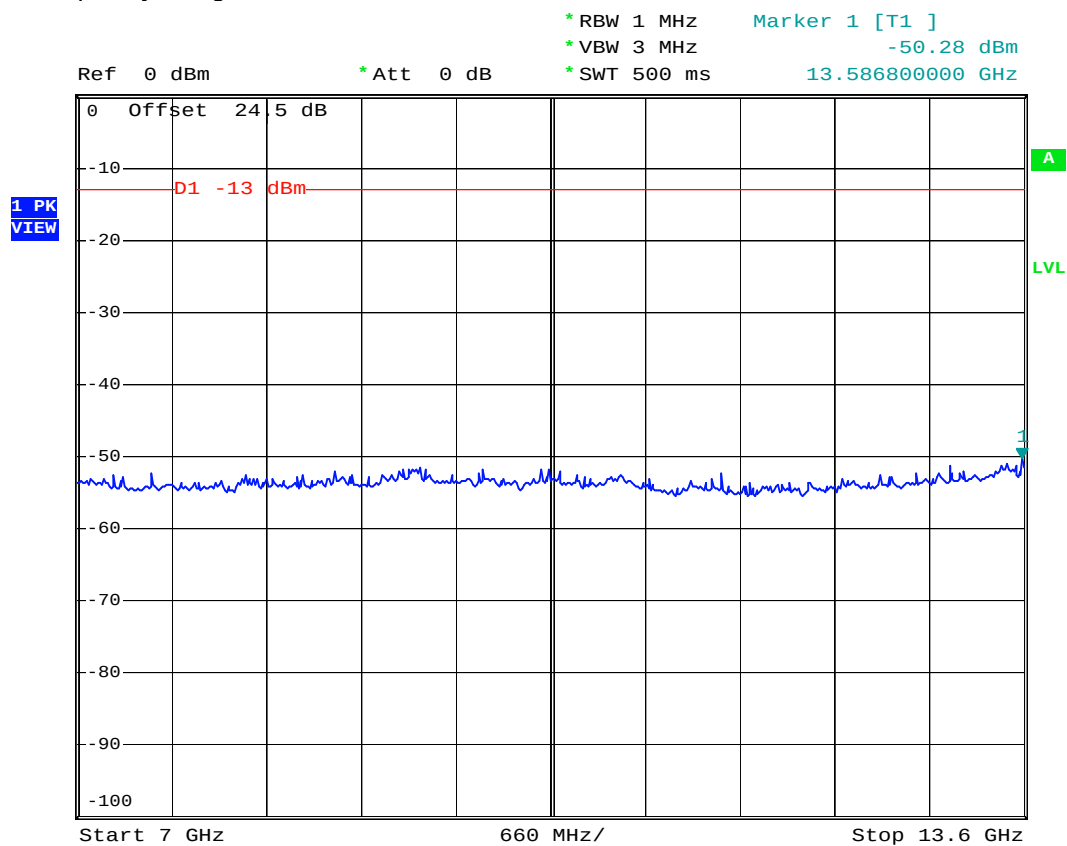
Date: 8.JUL.2007 02:30:25



FCC TEST REPORT

Report No. : FG761327B

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



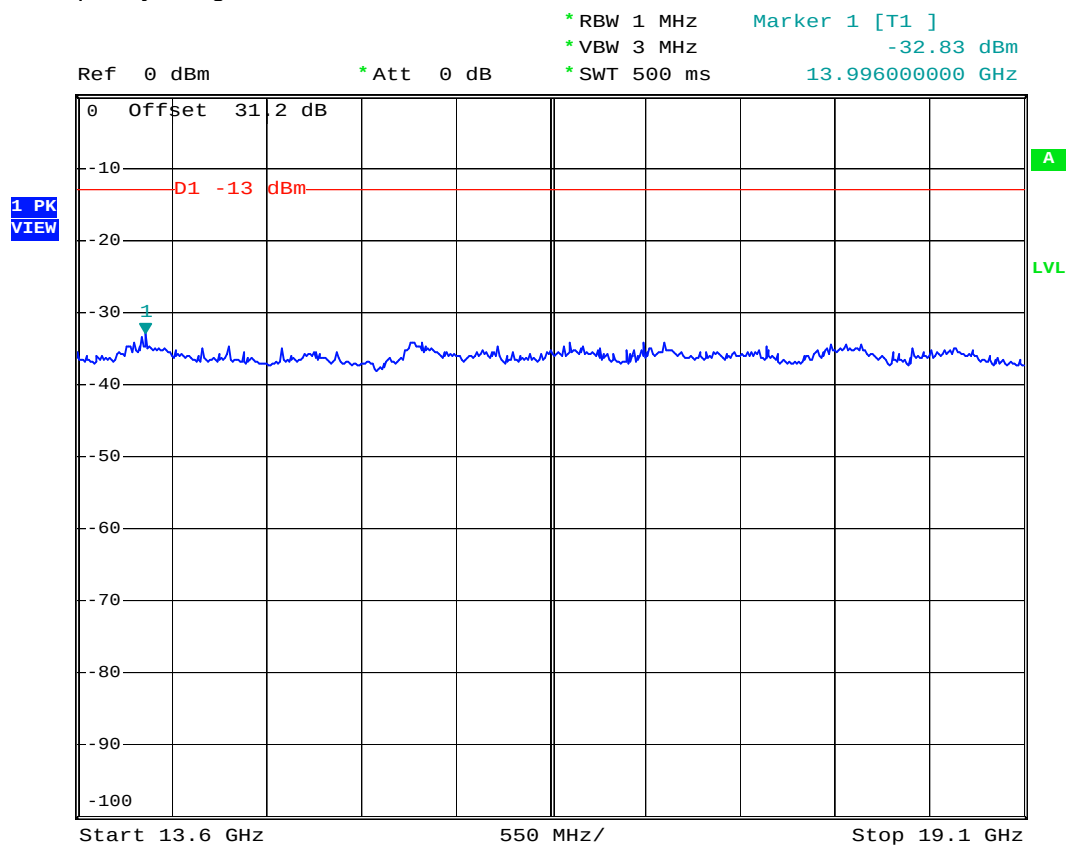
Date: 8.JUL.2007 02:32:28



FCC TEST REPORT

Report No. : FG761327B

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



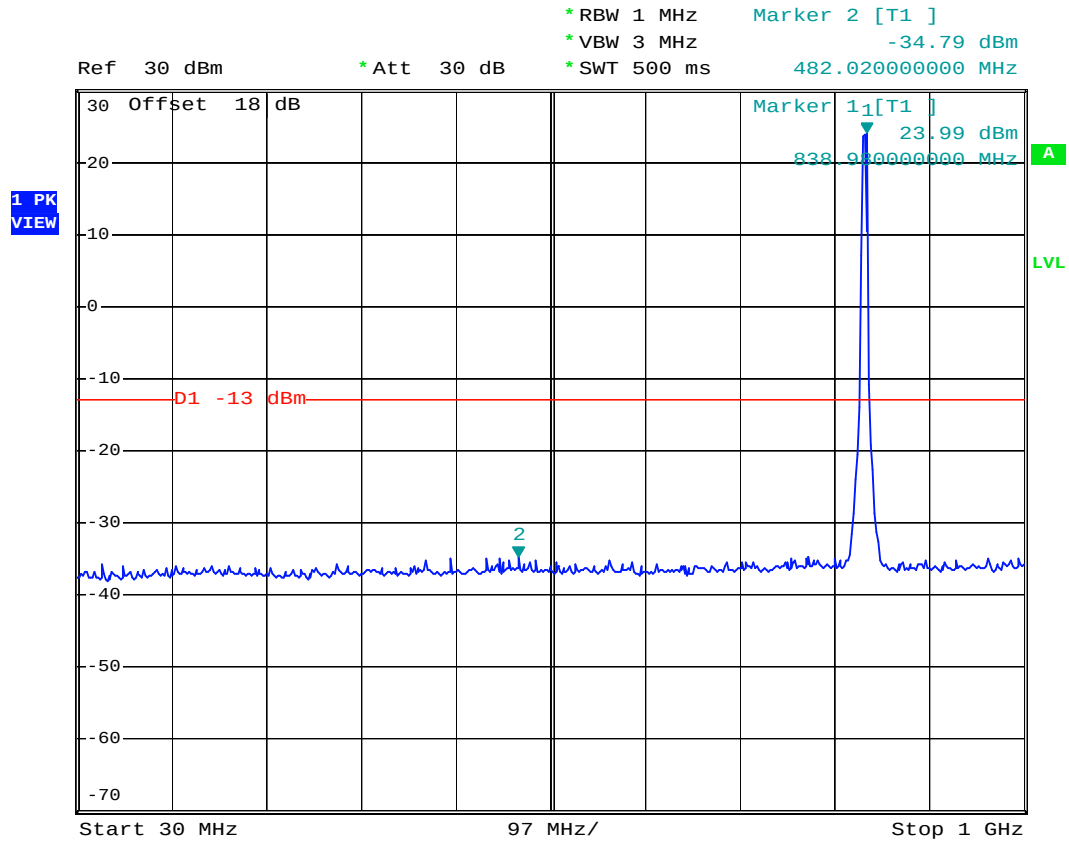
Date: 8.JUL.2007 02:34:34



FCC TEST REPORT

Report No. : FG761327B

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



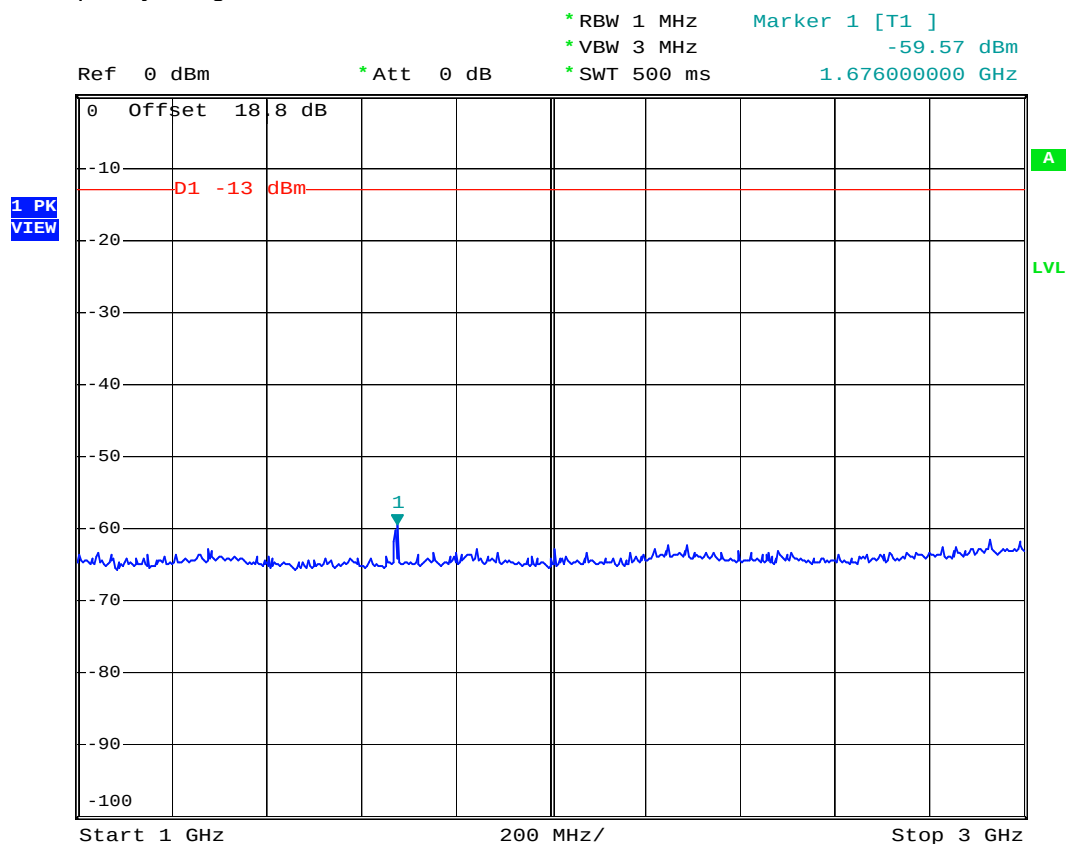
Date: 4.JUL.2007 04:04:16



FCC TEST REPORT

Report No. : FG761327B

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



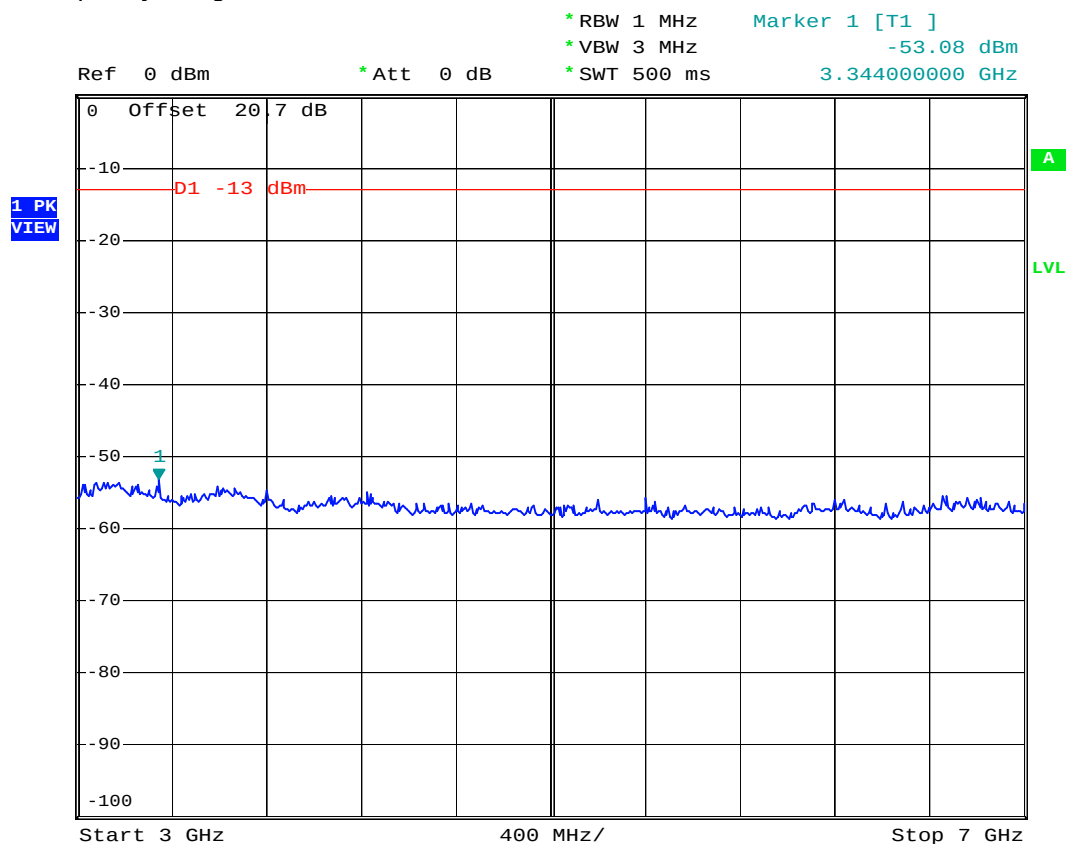
Date: 4.JUL.2007 04:08:40



FCC TEST REPORT

Report No. : FG761327B

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



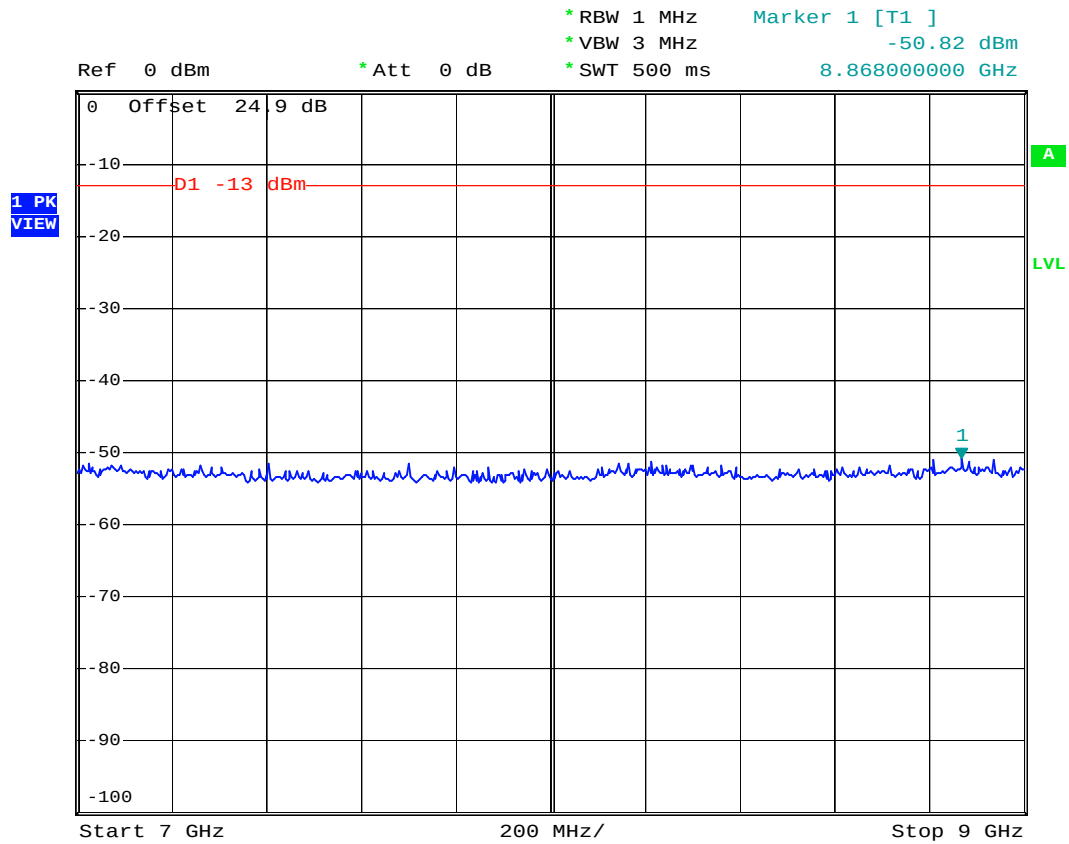
Date: 4.JUL.2007 04:09:44



FCC TEST REPORT

Report No. : FG761327B

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



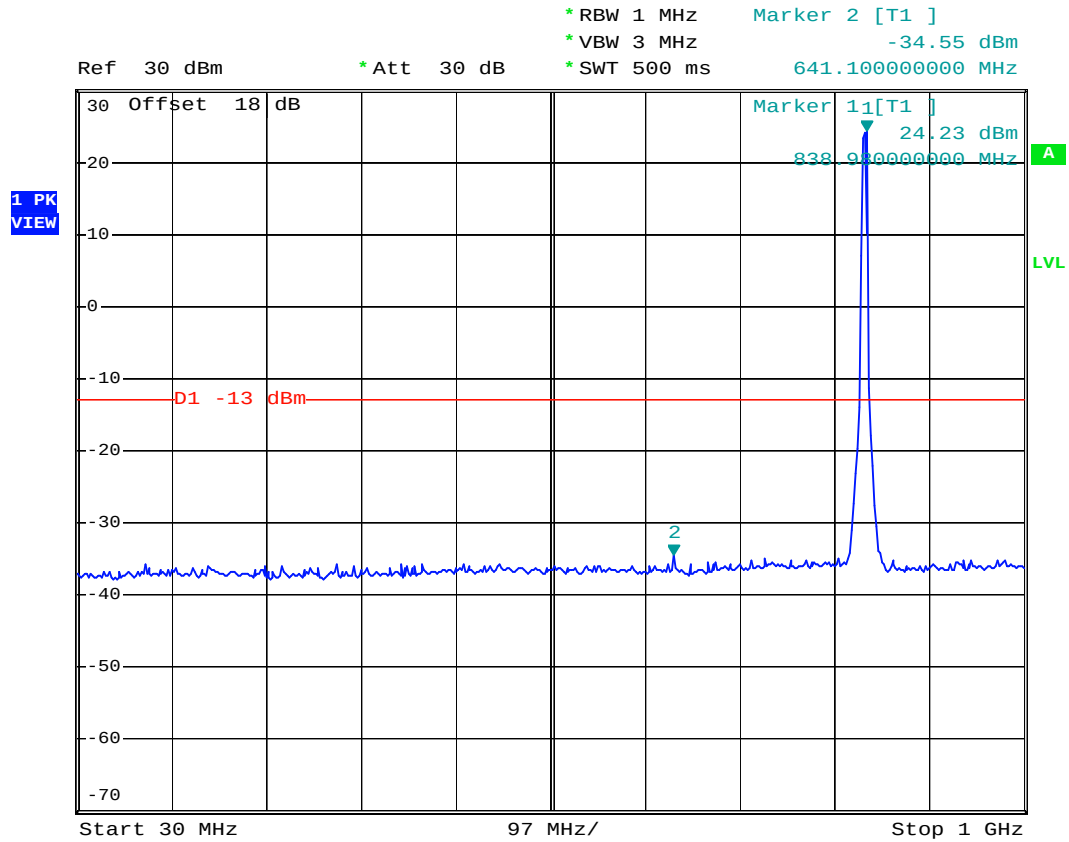
Date: 4.JUL.2007 04:10:28



FCC TEST REPORT

Report No. : FG761327B

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



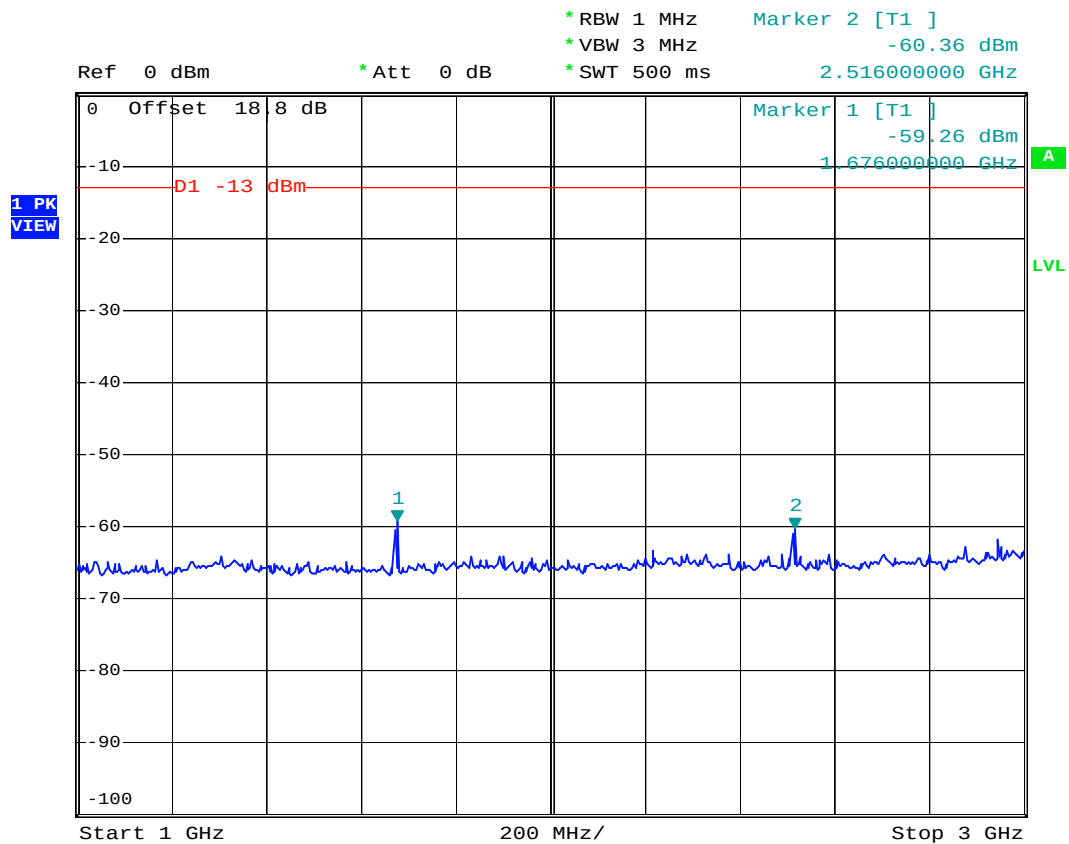
Date: 8.JUL.2007 02:39:03



FCC TEST REPORT

Report No. : FG761327B

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



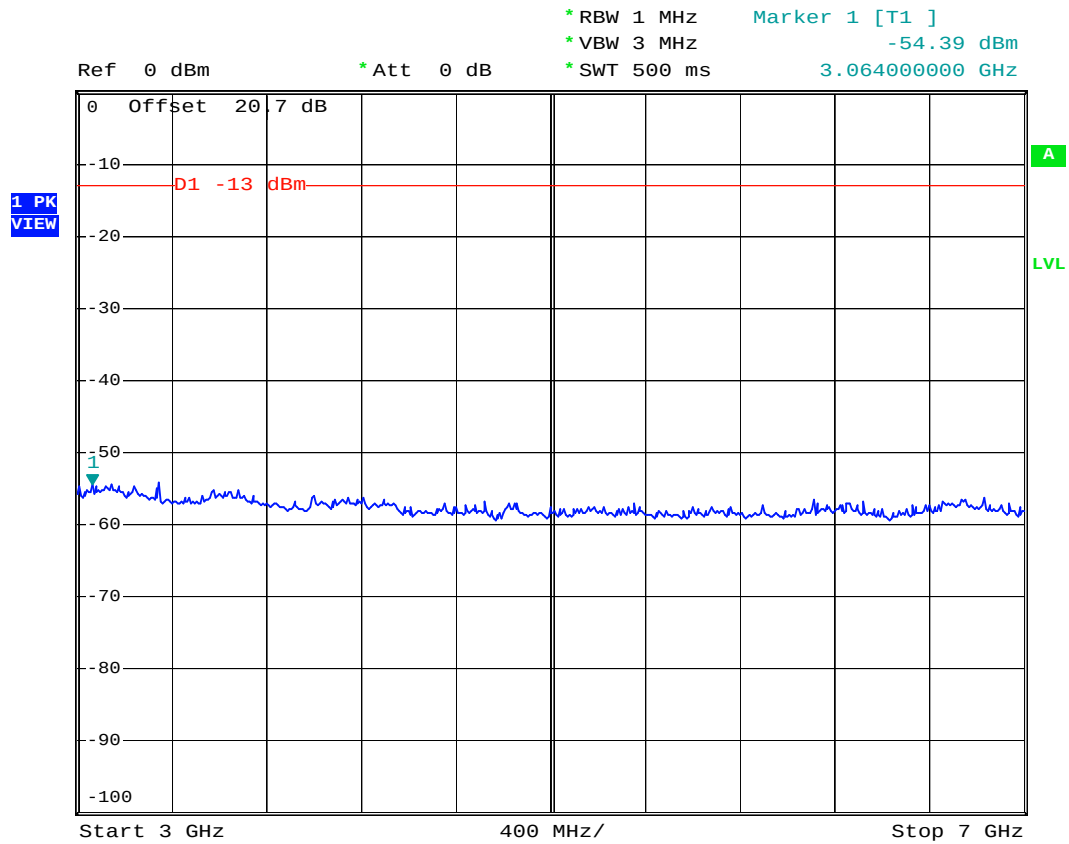
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FCC TEST REPORT

Report No. : FG761327B

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



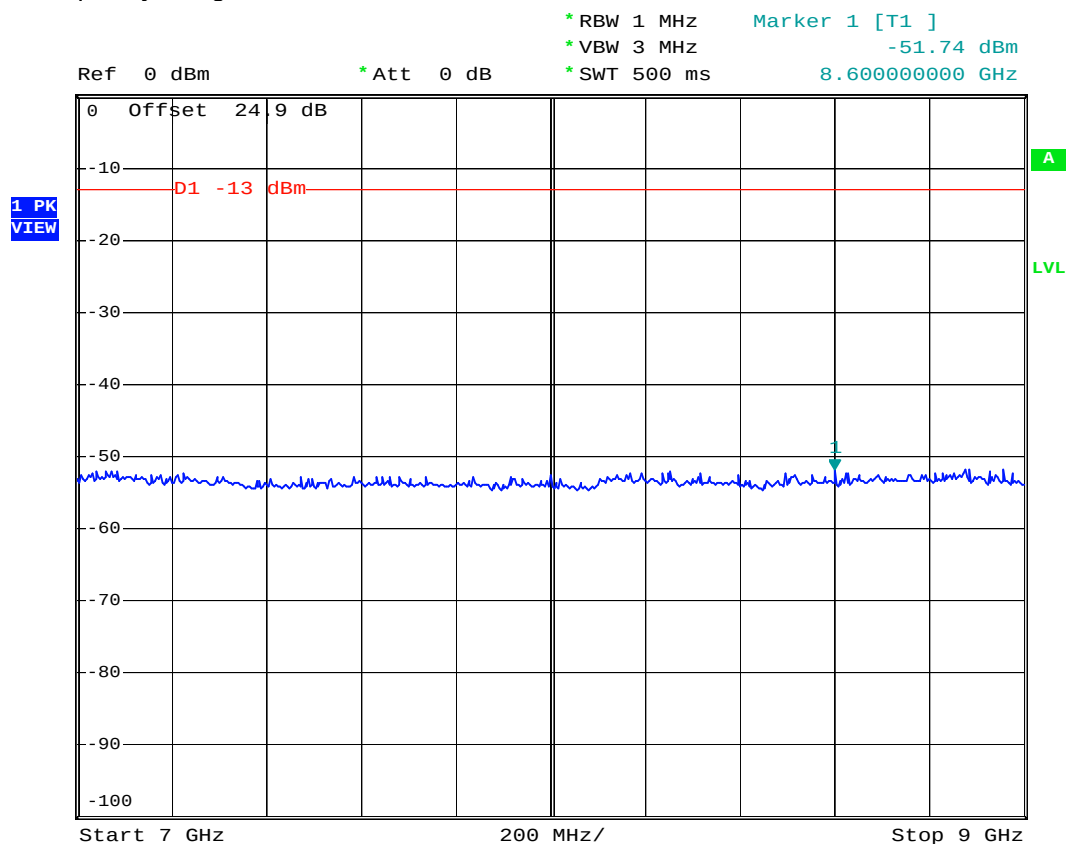
Date: 8.JUL.2007 02:49:50



FCC TEST REPORT

Report No. : FG761327B

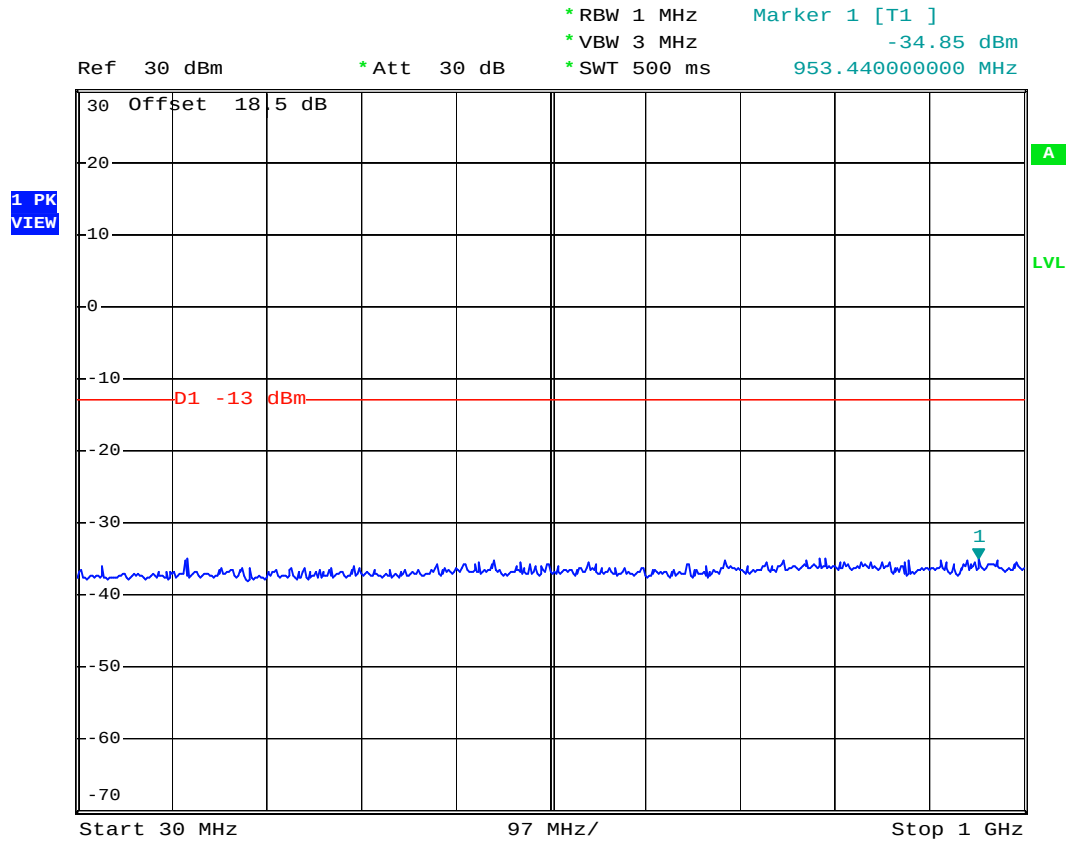
- Test Mode : WCDMA Band V (HSDPA) CH4182
- Frequency Range : 7G-9G



Date: 8.JUL.2007 02:52:00



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



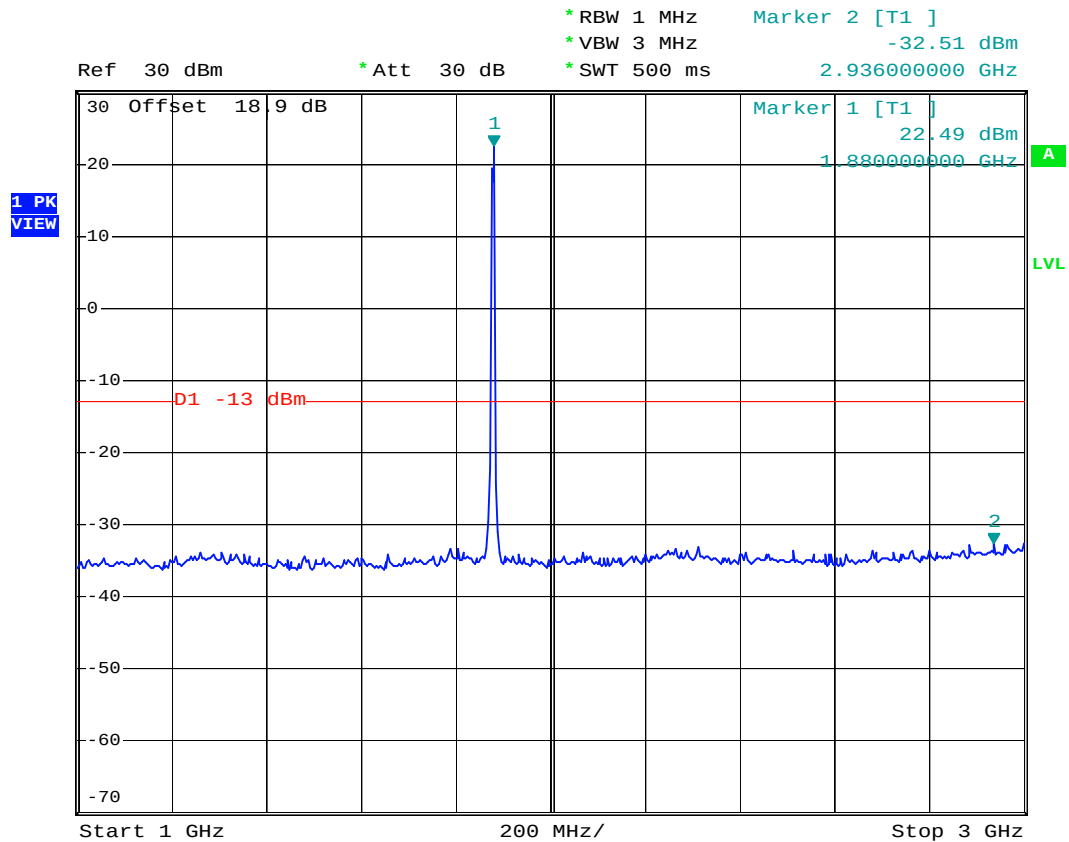
Date: 8.JUL.2007 02:23:42



FCC TEST REPORT

Report No. : FG761327B

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



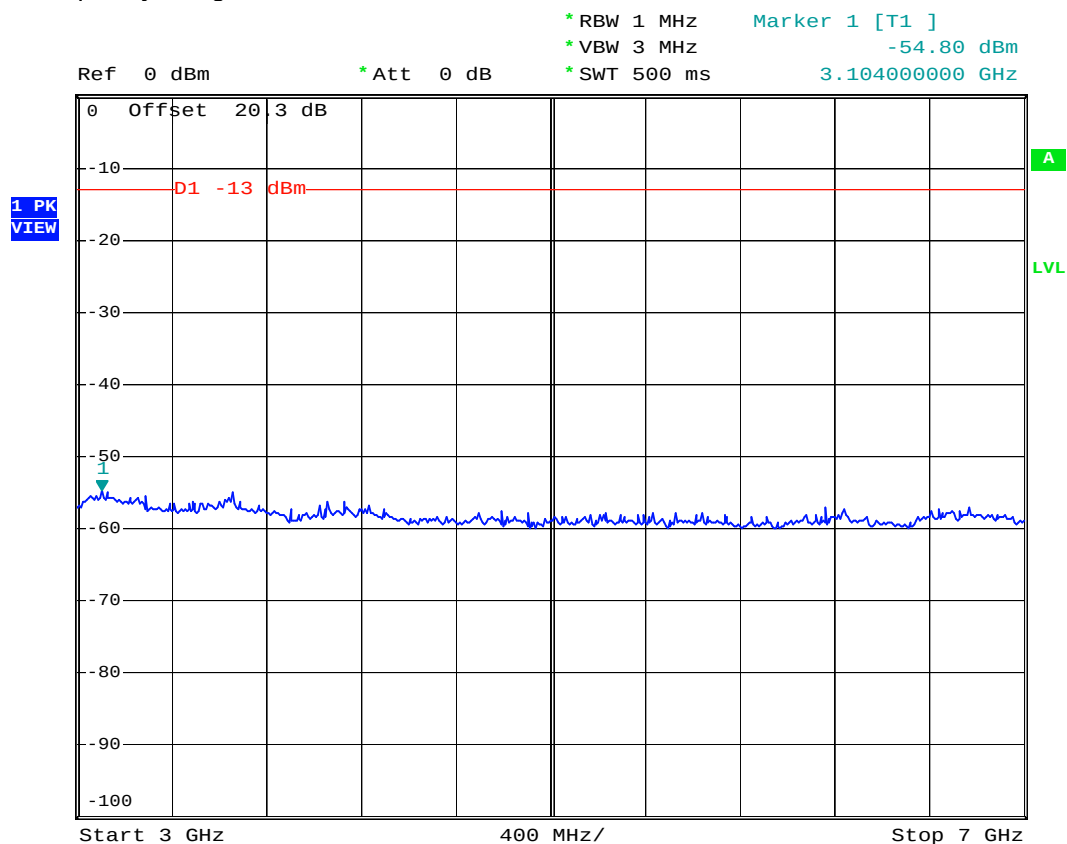
Date: 8.JUL.2007 02:25:47



FCC TEST REPORT

Report No. : FG761327B

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



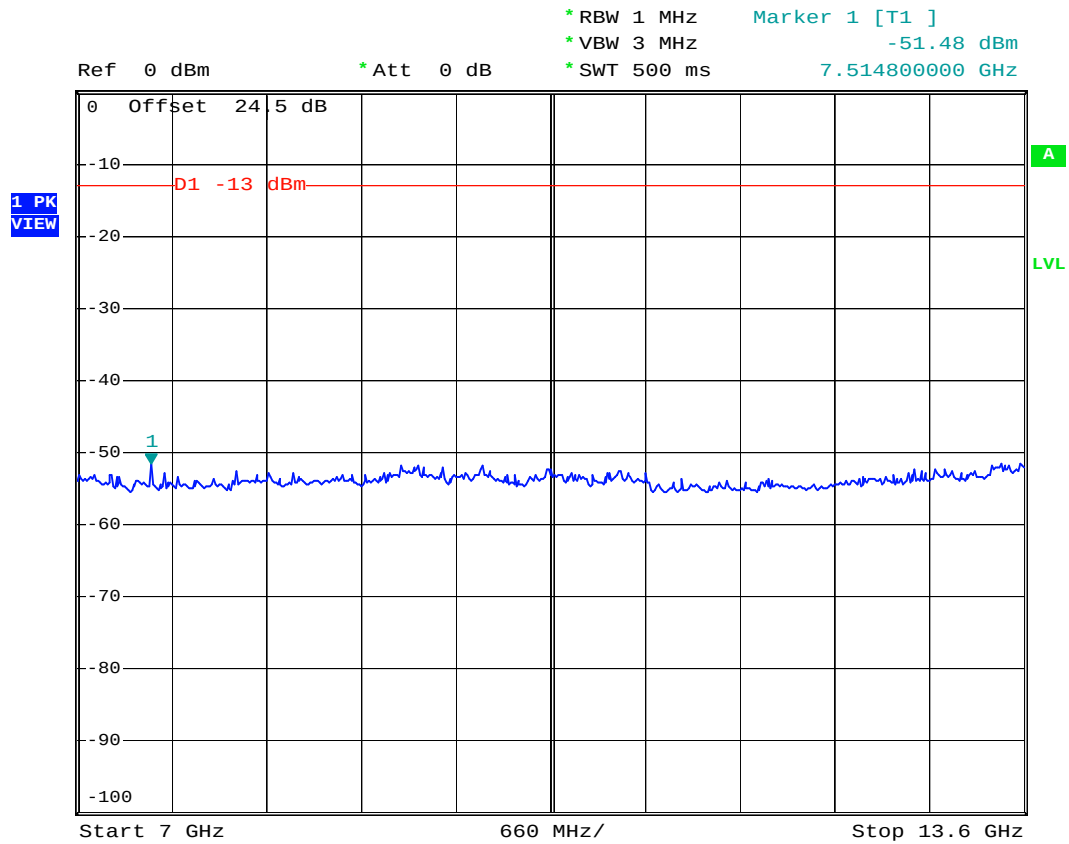
Date: 8.JUL.2007 02:31:01



FCC TEST REPORT

Report No. : FG761327B

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



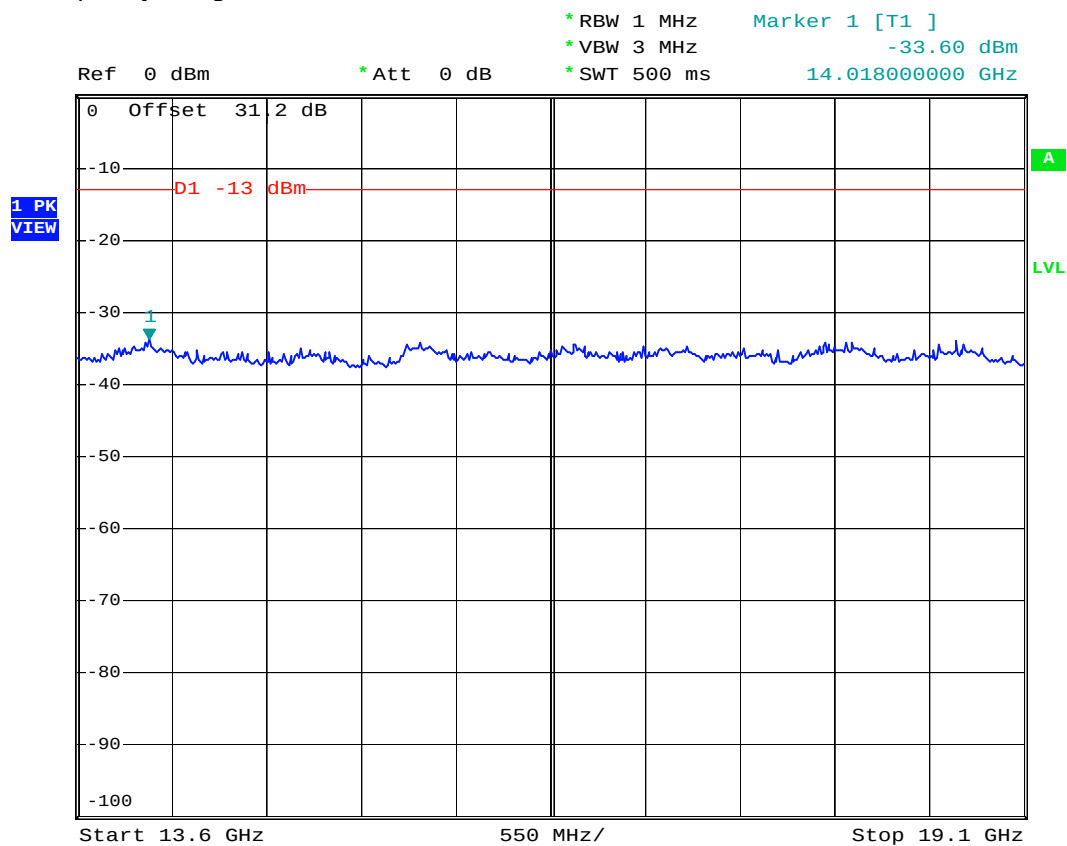
Date: 8.JUL.2007 02:33:12



FCC TEST REPORT

Report No. : FG761327B

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



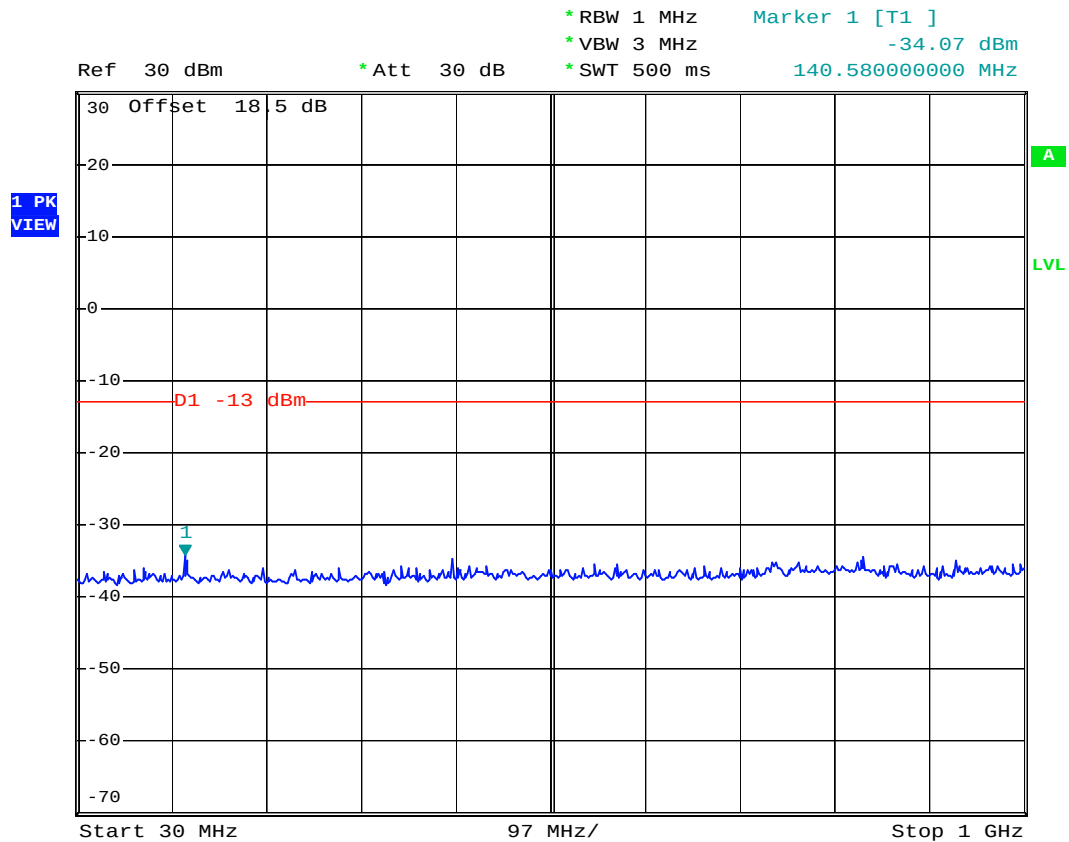
Date: 8.JUL.2007 02:35:15



FCC TEST REPORT

Report No. : FG761327B

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



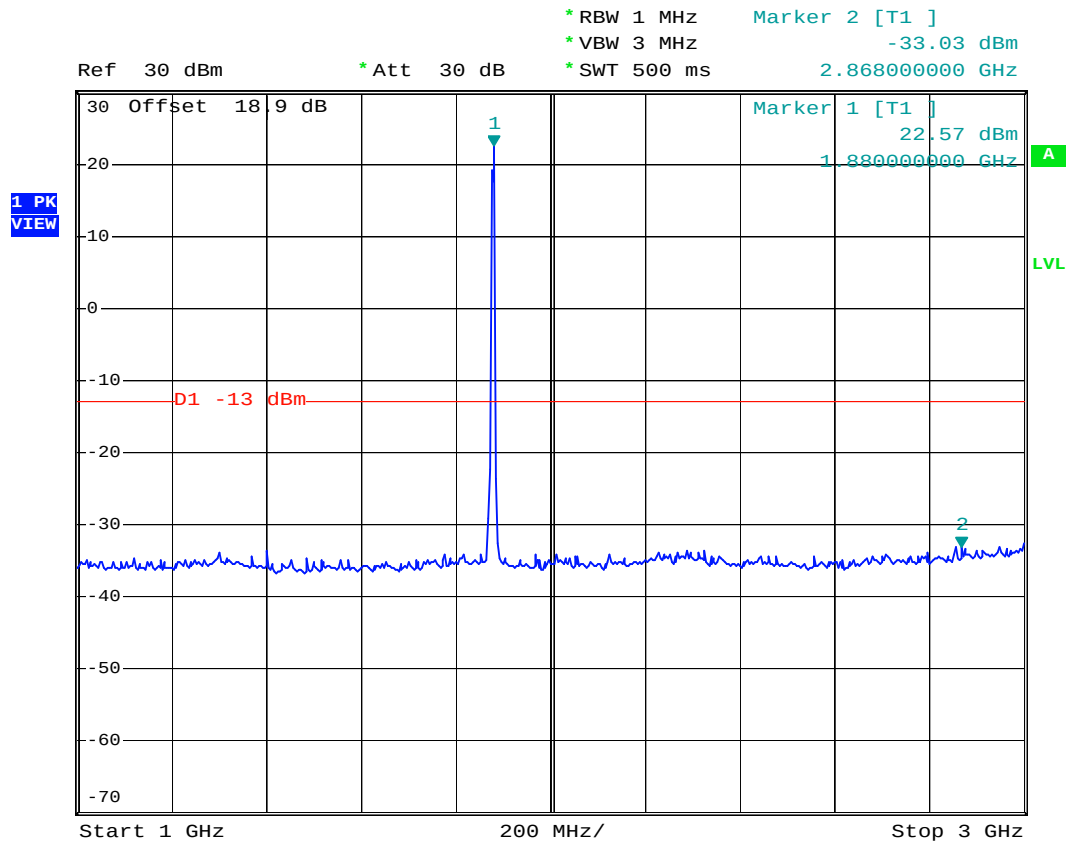
Date: 8.JUL.2007 02:24:04



FCC TEST REPORT

Report No. : FG761327B

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



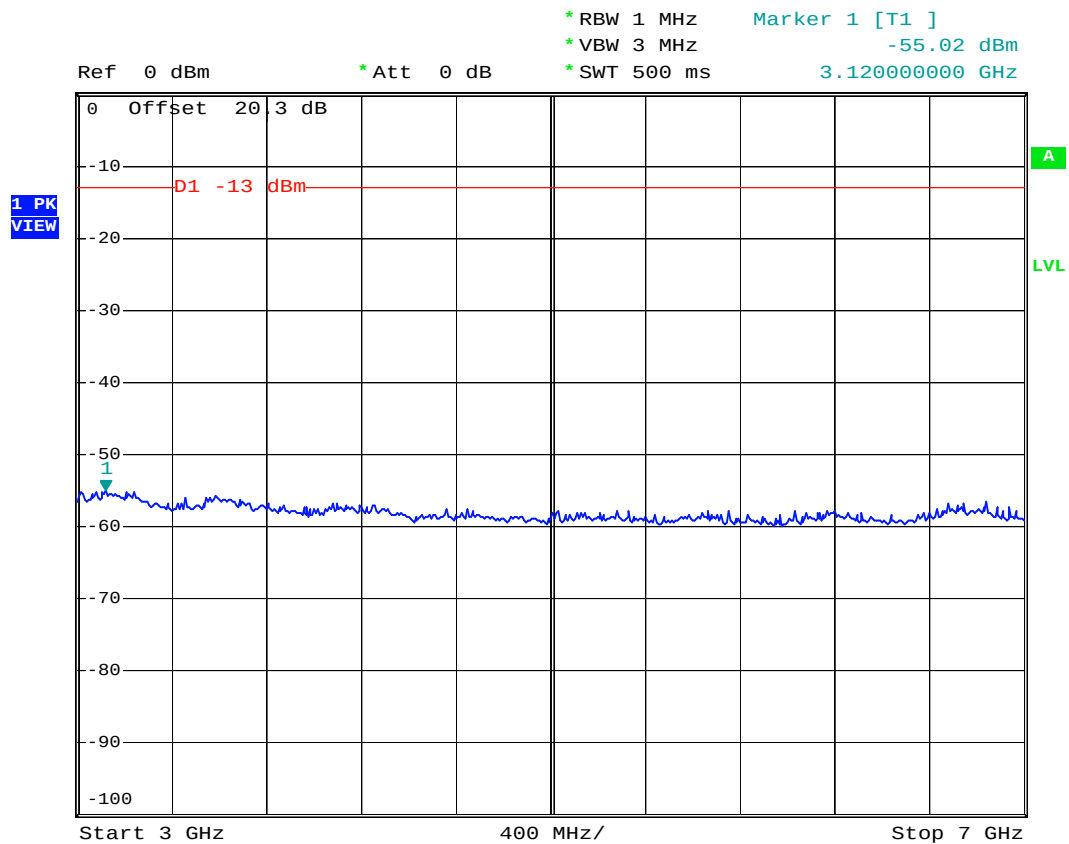
Date: 8.JUL.2007 02:26:52



FCC TEST REPORT

Report No. : FG761327B

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



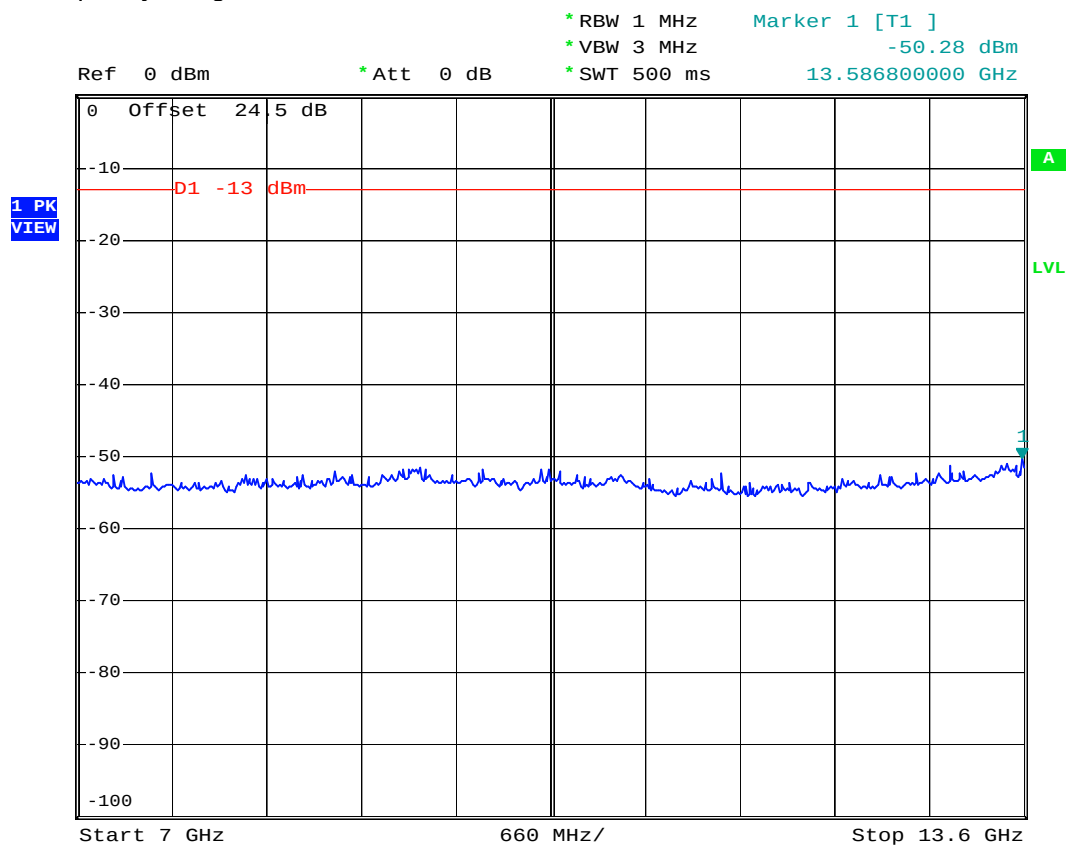
Date: 8.JUL.2007 02:30:25



FCC TEST REPORT

Report No. : FG761327B

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



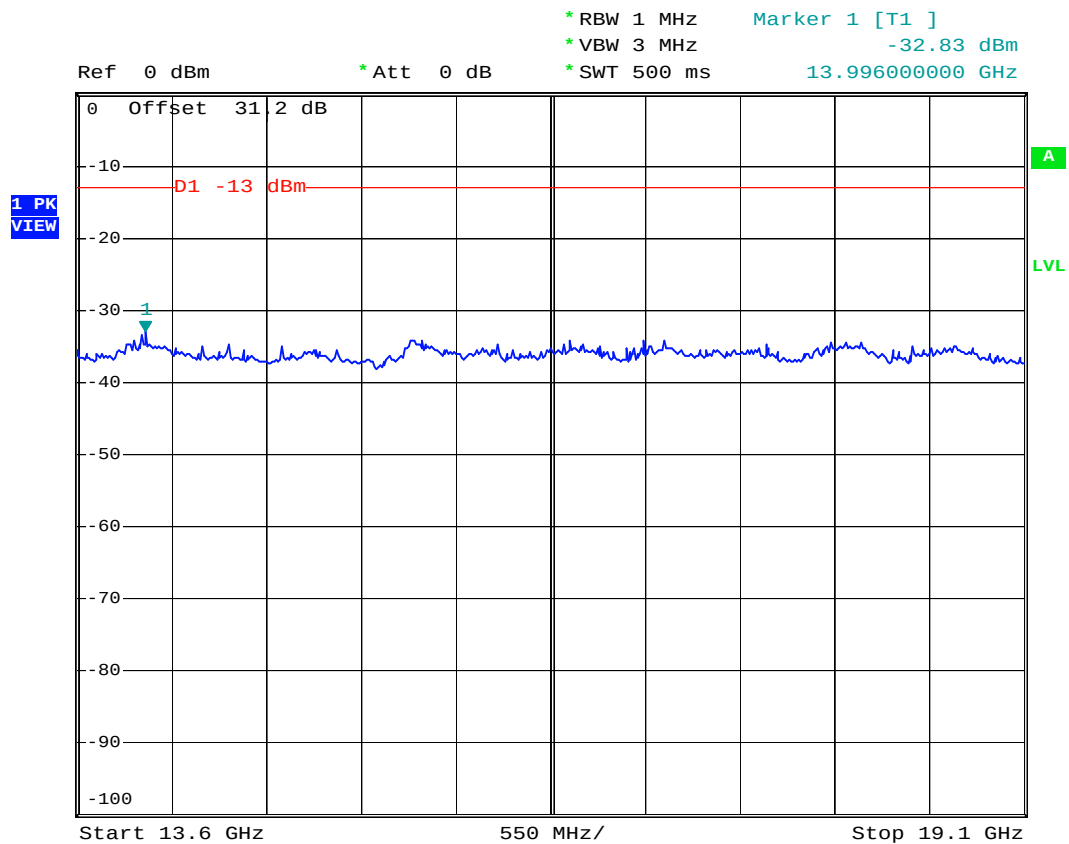
Date: 8.JUL.2007 02:32:28



FCC TEST REPORT

Report No. : FG761327B

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



Date: 8.JUL.2007 02:34:34

4.6 Field Strength of Spurious Radiation

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

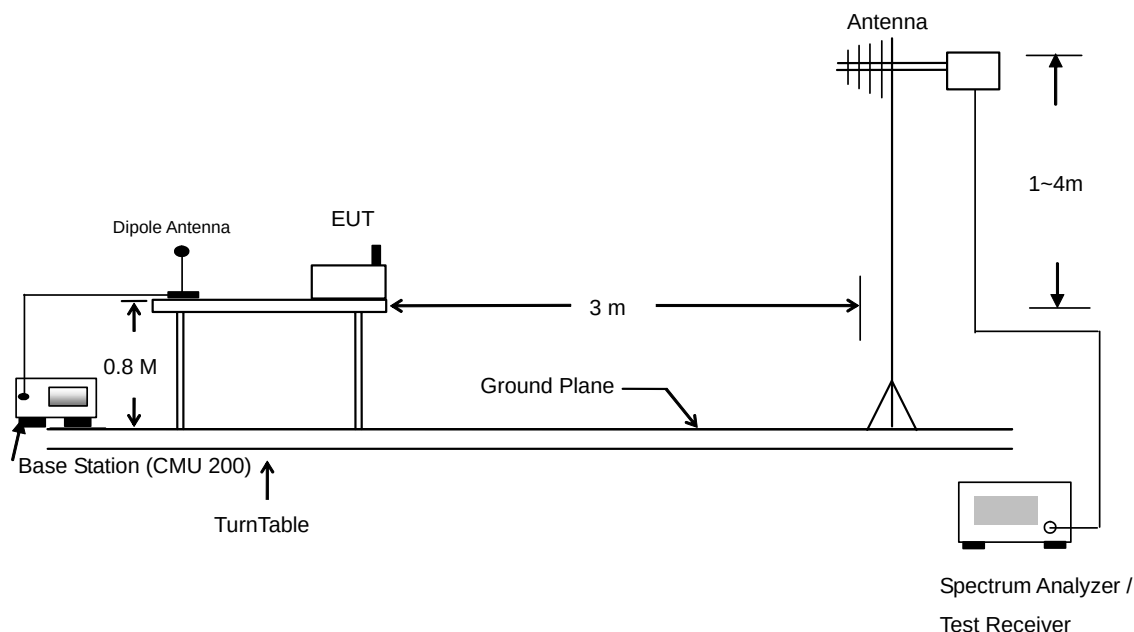
4.6.1 Measurement Instruments

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 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
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)
66.180	-58.850	-13	-45.85	64.830	-54.200	-13	-41.20
176.340	-58.400	-13	-45.40	92.640	-56.870	-13	-43.87
268.680	-62.280	-13	-49.28	186.330	-51.790	-13	-38.79
306.300	-64.390	-13	-51.39	332.900	-67.550	-13	-54.55
1674.000	-48.000	-13	-35.00	1674.000	-53.350	-13	-40.35
2508.000	-56.830	-13	-43.83	2508.000	-53.250	-13	-40.25

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)
66.180	-59.050	-13	-46.05	66.180	-61.980	-13	-48.98
175.530	-57.550	-13	-44.55	91.290	-63.130	-13	-50.13
220.080	-60.540	-13	-47.54	189.030	-64.400	-13	-51.40
901.300	-57.730	-13	-44.73	901.300	-60.520	-13	-47.52
1676.000	-55.360	-13	-42.36	1674.000	-55.970	-13	-42.97



▪ Test Mode : Mode 3

PCS1900 (GSM) Radiated Spurious EIRP							
H Polarization				V Polarization			
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)
31.080	-60.680	-13	-47.68	58.890	-57.950	-13	-44.95
61.590	-66.190	-13	-53.19	72.390	-55.100	-13	-42.10
193.080	-65.720	-13	-52.72	181.740	-59.220	-13	-46.22
866.300	-64.890	-13	-51.89	318.900	-64.860	-13	-51.86
929.300	-64.050	-13	-51.05	890.800	-61.900	-13	-48.90
980.400	-64.000	-13	-51.00	992.300	-61.430	-13	-48.43
3758.000	-50.170	-13	-37.17	3758.000	-42.840	-13	-29.84
5638.000	-49.270	-13	-36.27	5638.000	-48.730	-13	-35.73

▪ Test Mode : Mode 4

PCS1900 (EDGE) Radiated Spurious EIRP							
H Polarization				V Polarization			
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)
32.430	-60.130	-13	-47.13	59.430	-58.150	-13	-45.15
65.640	-59.900	-13	-46.90	71.580	-60.660	-13	-47.66
187.680	-57.280	-13	-44.28	188.490	-59.100	-13	-46.10
822.900	-64.370	-13	-51.37	316.800	-64.200	-13	-51.20
885.900	-64.250	-13	-51.25	899.900	-61.650	-13	-48.65
962.900	-63.680	-13	-50.68	971.300	-61.570	-13	-48.57
3758.000	-47.000	-13	-34.00				
5638.000	-48.990	-13	-35.99				

▪ 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	-62.780	-13	-49.78	58.080	-61.630	-13	-48.63
64.290	-65.060	-13	-52.06	91.290	-65.320	-13	-52.32
191.730	-66.180	-13	-53.18	193.890	-62.530	-13	-49.53
964.300	-65.570	-13	-52.57	960.800	-63.330	-13	-50.33
1674.000	-53.890	-13	-40.89	1674.000	-55.760	-13	-42.76

▪ 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)
65.640	-59.510	-13	-46.51	64.290	-54.140	-13	-41.14
167.430	-59.500	-13	-46.50	91.290	-56.990	-13	-43.99
185.790	-59.370	-13	-46.37	183.630	-52.860	-13	-39.86
322.400	-66.440	-13	-53.44	325.900	-60.520	-13	-47.52
1674.000	-48.640	-13	-35.64	1674.000	-54.770	-13	-41.77



▪ Test Mode : Mode 7

WCDMA Band II Radiated Spurious EIRP							
H Polarization				V Polarization			
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)
31.080	-61.020	-13	-48.02	58.080	-59.580	-13	-46.58
66.990	-65.960	-13	-52.96	87.780	-60.240	-13	-47.24
191.190	-65.740	-13	-52.74	196.590	-60.830	-13	-47.83
829.900	-65.210	-13	-52.21	792.800	-62.740	-13	-49.74
924.400	-64.420	-13	-51.42	878.900	-61.860	-13	-48.86
978.300	-64.160	-13	-51.16	966.400	-61.620	-13	-48.62

▪ Test Mode : Mode 8

WCDMA Band II (HSDPA) Radiated Spurious EIRP							
H Polarization				V Polarization			
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)
31.890	-60.750	-13	-47.75	58.080	-59.630	-13	-46.63
195.240	-66.820	-13	-53.82	92.640	-64.280	-13	-51.28
270.030	-63.750	-13	-50.75	195.240	-60.980	-13	-47.98
360.900	-65.150	-13	-52.15	826.400	-62.740	-13	-49.74
871.900	-64.410	-13	-51.41	899.900	-62.270	-13	-49.27
994.400	-63.810	-13	-50.81	980.400	-61.110	-13	-48.11



- Test Mode : Mode 9

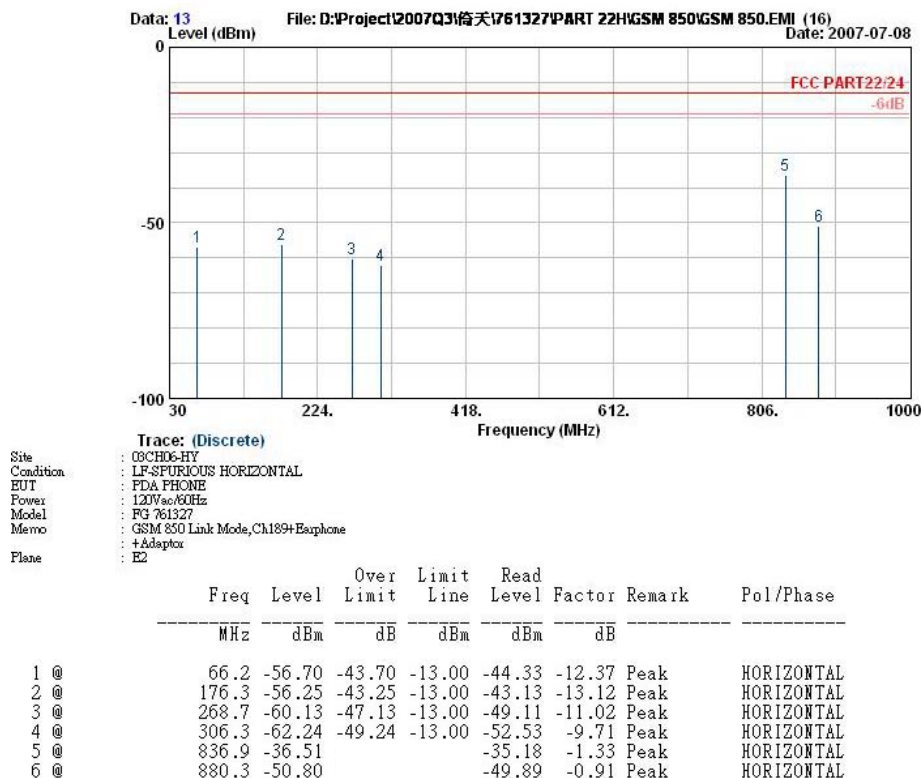
GSM850 (GSM) with BT Co-location Radiated Spurious ERP							
H Polarization				V Polarization			
Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)
66.990	-59.210	-13	-46.21	69.690	-55.520	-13	-42.52
186.330	-58.600	-13	-45.60	184.440	-53.490	-13	-40.49
295.680	-62.940	-13	-49.94	295.140	-63.380	-13	-50.38
322.400	-65.270	-13	-52.27	300.000	-63.620	-13	-50.62
1674.000	-44.540	-13	-31.54	1674.000	-52.410	-13	-39.41
2158.000	-46.260	-13	-33.26	2454.000	-12.090	-13	0.91
2444.000	-10.940	-13	2.06	3344.000	-56.460	-13	-43.46
7528.000	-42.630	-13	-29.63	4178.000	-49.800	-13	-36.80
				4868.000	-50.330	-13	-37.33
				5854.000	-55.730	-13	-42.73
				7528.000	-48.770	-13	-35.77



4.6.5 Test Data

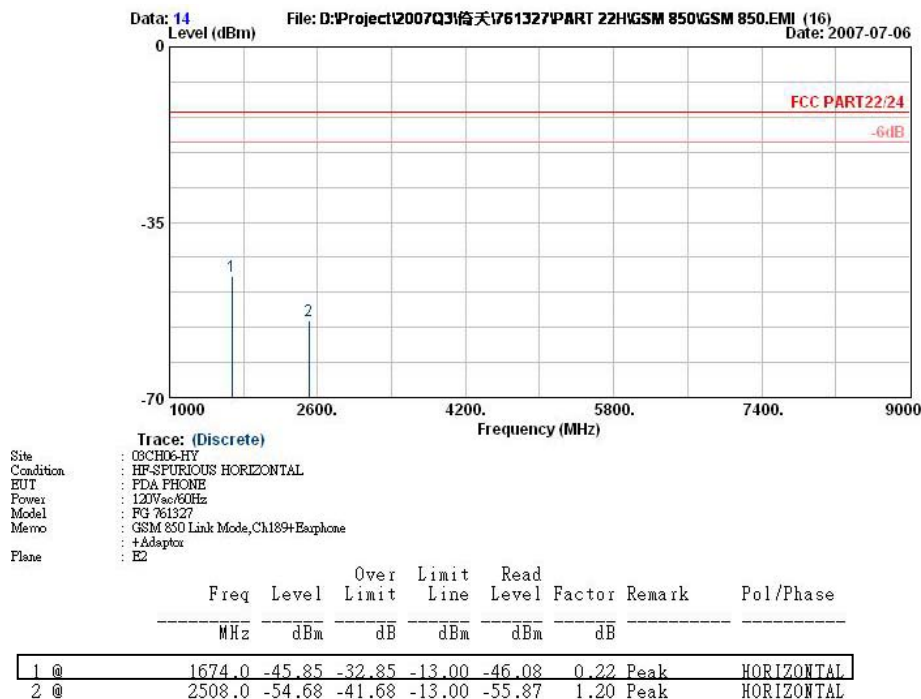
4.6.5.1 Mode 1

Horizontal Polarization



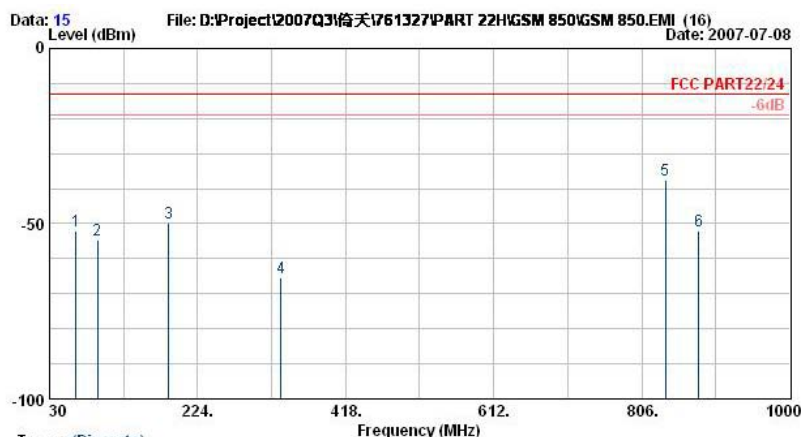
Remark:

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





Vertical Polarization

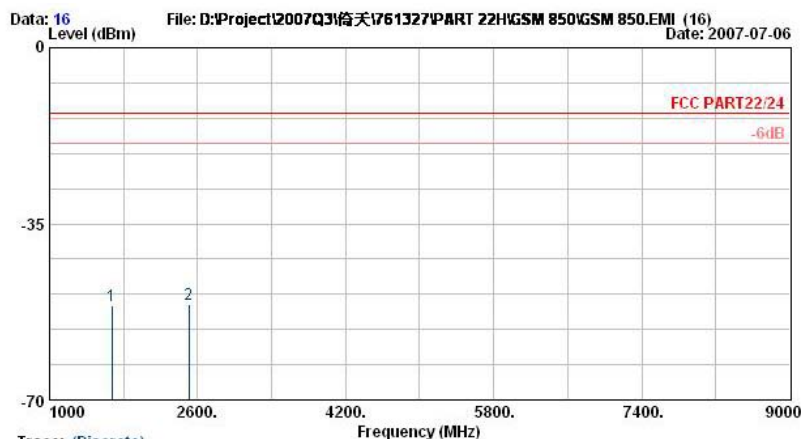


Site : 03CH06-HY
Condition : LF-SFURIOUS VERTICAL
EUT : PDA PHONE
Power : 120Wac/60Hz
Model : FG 761327
Memo : GSM 850 Link Mode, CH189+Earphone
+Adaptor
Plane : E2

	Freq	Level	Over	Limit	Read	Factor	Remark	Pol/Phase
	MHz	dBm	dB	dBm	dBm	dB		
1 @	64.8	-52.05	-39.05	-13.00	-39.33	-12.72	Peak	VERTICAL
2 @	92.6	-54.72	-41.72	-13.00	-46.05	-8.67	Peak	VERTICAL
3 @	186.3	-49.64	-36.64	-13.00	-41.18	-8.47	Peak	VERTICAL
4 @	332.9	-65.40	-52.40	-13.00	-59.64	-5.76	Peak	VERTICAL
5 @	836.9	-37.68			-39.04	1.36	Peak	VERTICAL
6 @	880.3	-52.11			-53.82	1.71	Peak	VERTICAL

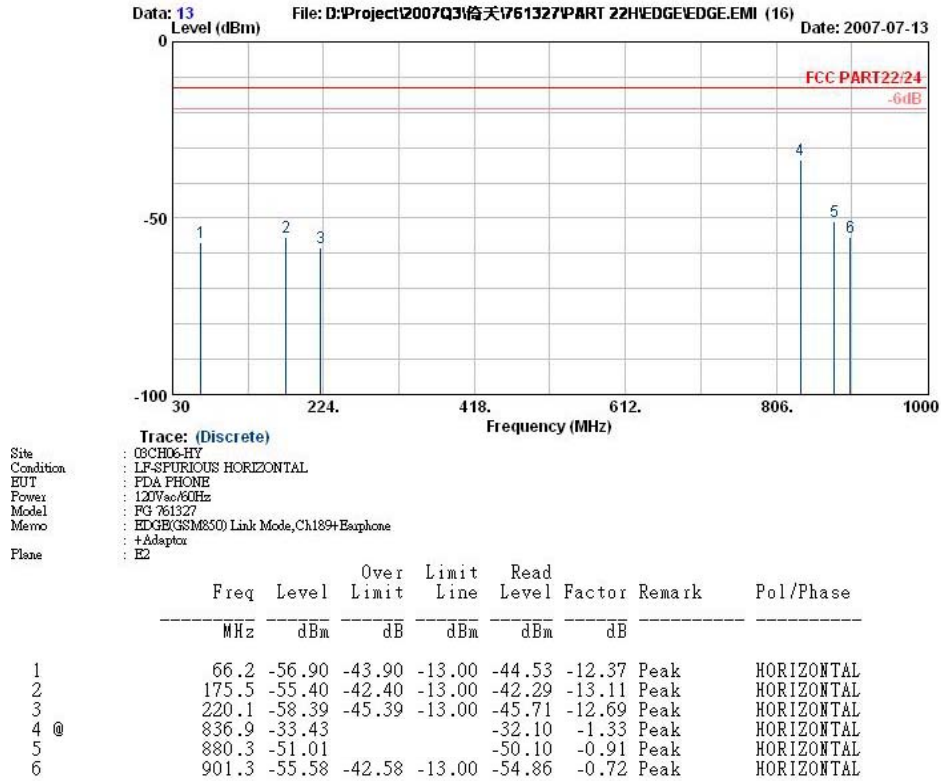
Remark:

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



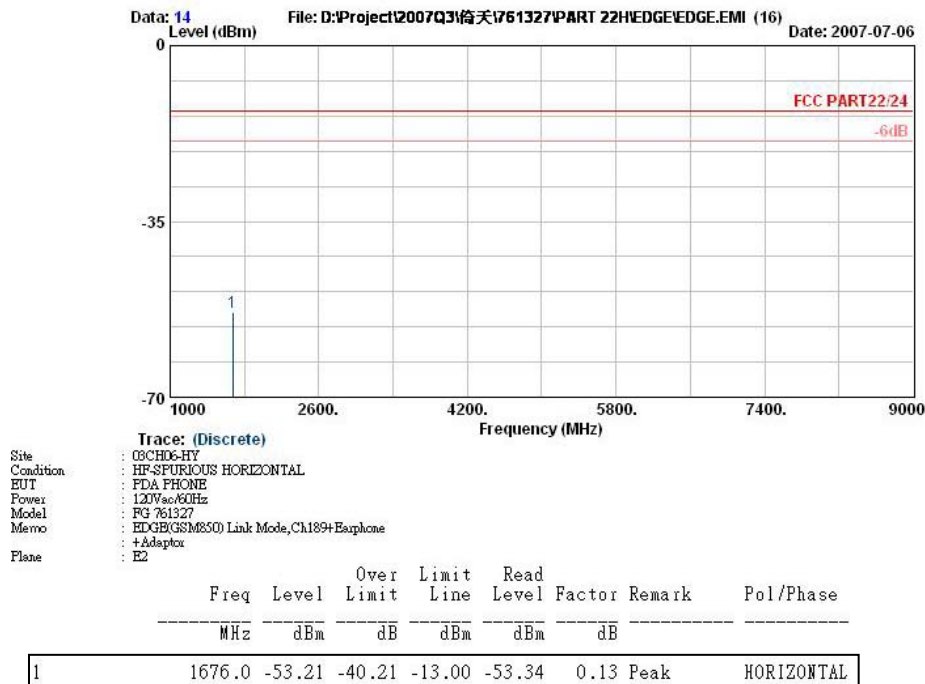
Site : 03CH06-HY
Condition : HF-SFURIOUS VERTICAL
EUT : PDA PHONE
Power : 120Wac/60Hz
Model : FG 761327
Memo : GSM 850 Link Mode, CH189+Earphone
+Adaptor
Plane : E2

	Freq	Level	Over	Limit	Read	Factor	Remark	Pol/Phase
	MHz	dBm	dB	dBm	dBm	dB		
1 @	1674.0	-51.20	-38.20	-13.00	-50.72	-0.48	Peak	VERTICAL
2 @	2508.0	-51.10	-38.10	-13.00	-53.37	2.27	Peak	VERTICAL

4.6.5.2 Mode 2
Horizontal Polarization

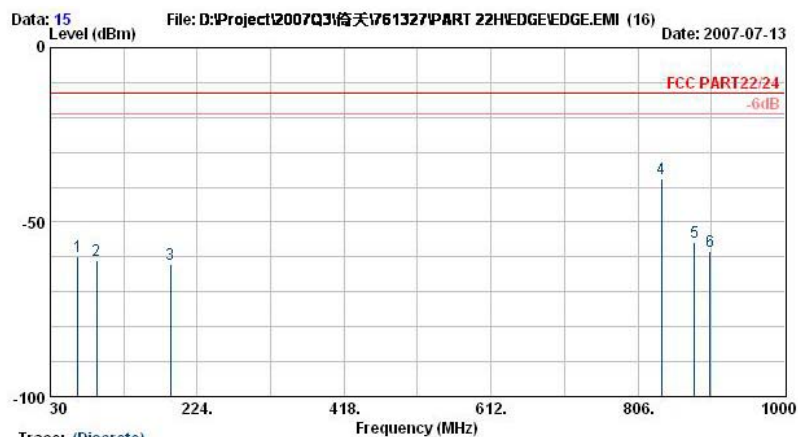
Remark:

1. #4: MS Signal
2. #5: BS Signal





Vertical Polarization



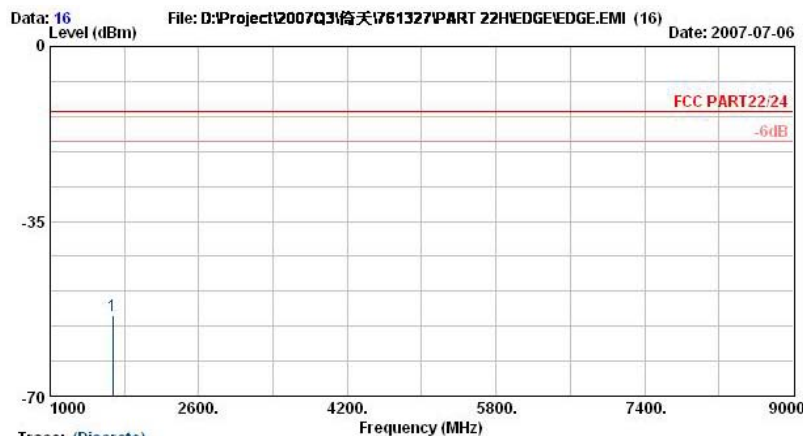
Trace: (Discrete)

Site : 03CH06-HY
Condition : LF-SPURIOUS VERTICAL
EUT : PDA PHONE
Power : 120Vac/60Hz
Model : FG 761327
Memo : EDGE(GSM250) Link Mode, Ch189+Earphone
+Adaptor
Plane : E2

	Freq	Level	Over	Limit	Read			
	MHz	dBm	Limit	Line	Level	Factor	Remark	Pol/Phase
			dB	dBm	dBm	dB		
1	66.2	-59.83	-46.83	-13.00	-47.25	-12.58	Peak	VERTICAL
2	91.3	-60.98	-47.98	-13.00	-52.04	-8.95	Peak	VERTICAL
3	189.0	-62.25	-49.25	-13.00	-53.75	-8.49	Peak	VERTICAL
4 @	836.9	-37.57			-38.93	1.36	Peak	VERTICAL
5	880.3	-55.65			-57.36	1.71	Peak	VERTICAL
6	901.3	-58.37	-45.37	-13.00	-60.24	1.87	Peak	VERTICAL

Remark:

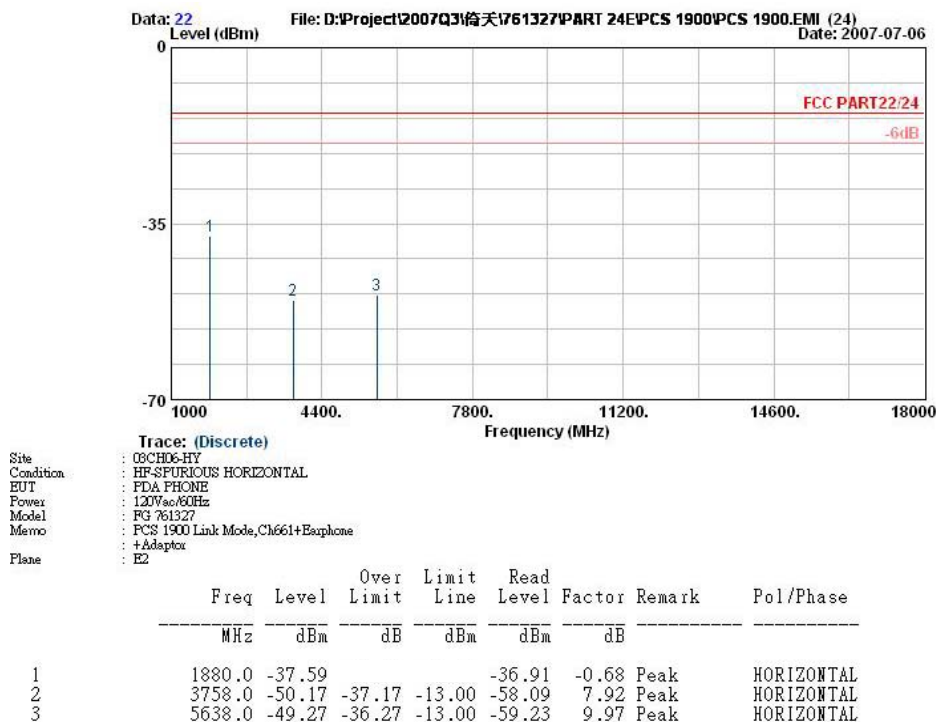
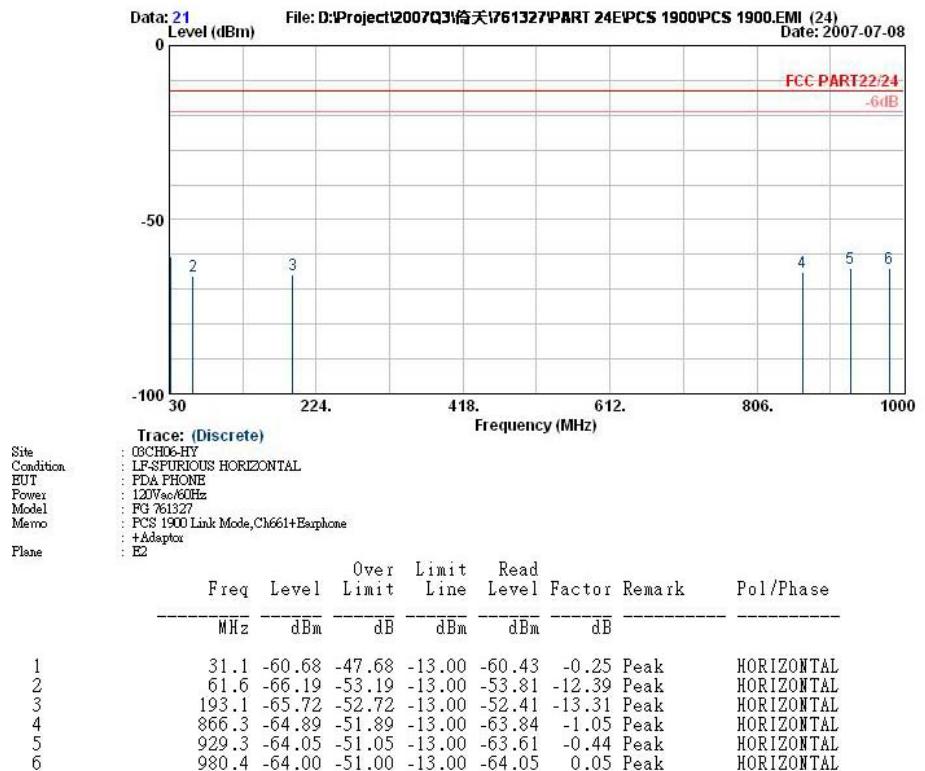
- #4: MS Signal
- #5: BS Signal



Trace: (Discrete)

Site : 03CH06-HY
Condition : HF-SPURIOUS VERTICAL
EUT : PDA PHONE
Power : 120Vac/60Hz
Model : FG 761327
Memo : EDGE(GSM250) Link Mode, Ch189+Earphone
+Adaptor
Plane : E2

	Freq	Level	Over	Limit	Read			
	MHz	dBm	Limit	Line	Level	Factor	Remark	Pol/Phase
			dB	dBm	dBm	dB		
1	1674.0	-53.82	-40.82	-13.00	-53.34	-0.48	Peak	VERTICAL

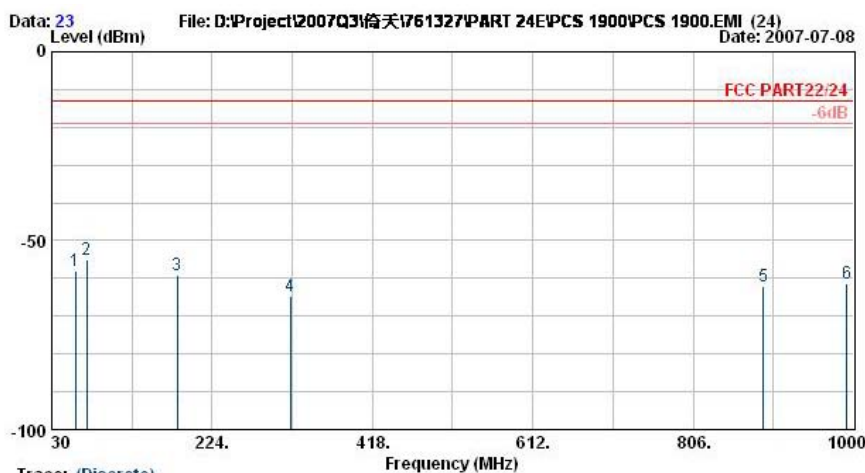
4.6.5.3 Mode 3
Horizontal Polarization

Remark:

1. #1: MS Signal



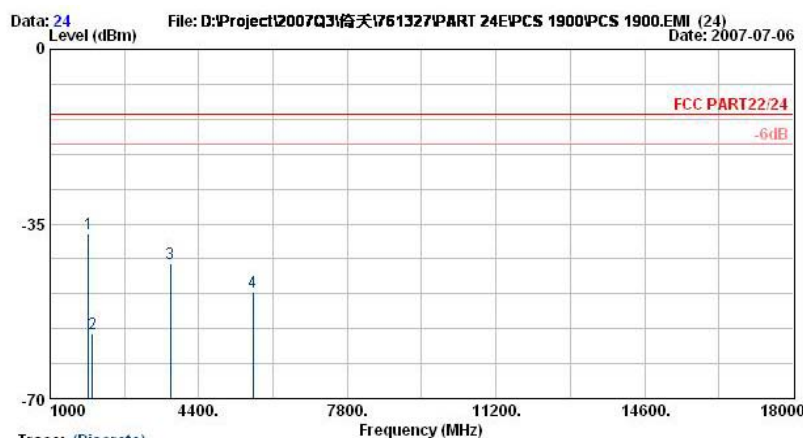
Vertical Polarization



Trace: (Discrete)

Site : 03CH06-HY
Condition : LF-SPURIOUS VERTICAL
EUT : PDA PHONE
Power : 120Vac/60Hz
Model : FG 761327
Memo : PCS 1900 Link Mode, Ch661+Earphone
+Adaptor
Plane : E2

	Freq	Level	Over	Limit	Read			
	MHz	dBm	Limit	Line	Level	Factor	Remark	Pol/Phase
			dB	dBm	dBm	dB		
1	58.9	-57.95	-44.95	-13.00	-44.39	-13.56	Peak	VERTICAL
2	72.4	-55.10	-42.10	-13.00	-43.50	-11.60	Peak	VERTICAL
3	181.7	-59.22	-46.22	-13.00	-50.79	-8.42	Peak	VERTICAL
4	318.9	-64.86	-51.86	-13.00	-58.82	-6.05	Peak	VERTICAL
5	890.8	-61.90	-48.90	-13.00	-63.68	1.79	Peak	VERTICAL
6	992.3	-61.43	-48.43	-13.00	-64.03	2.60	Peak	VERTICAL



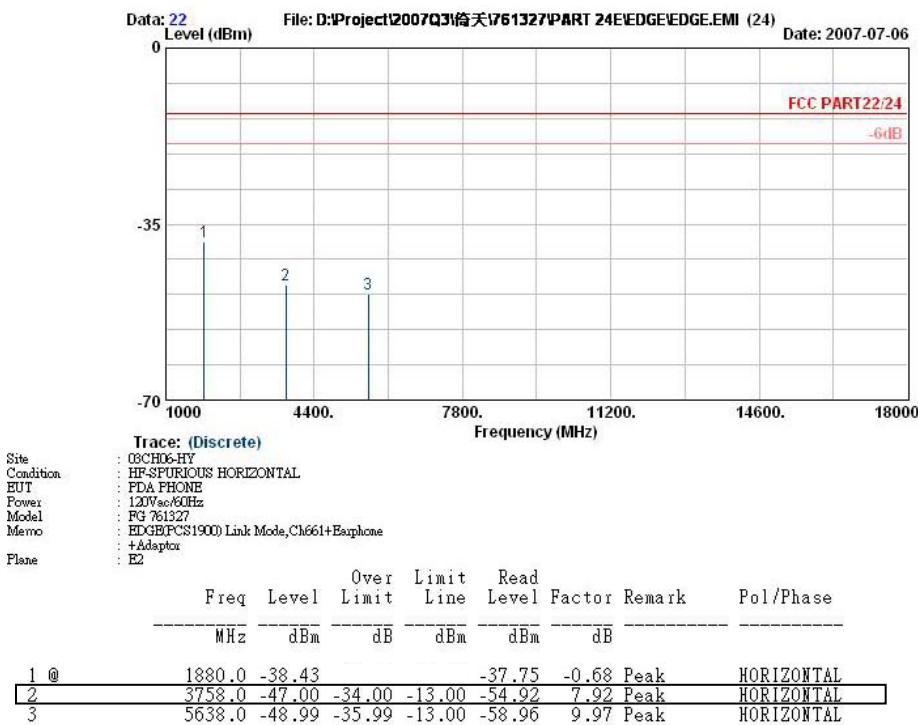
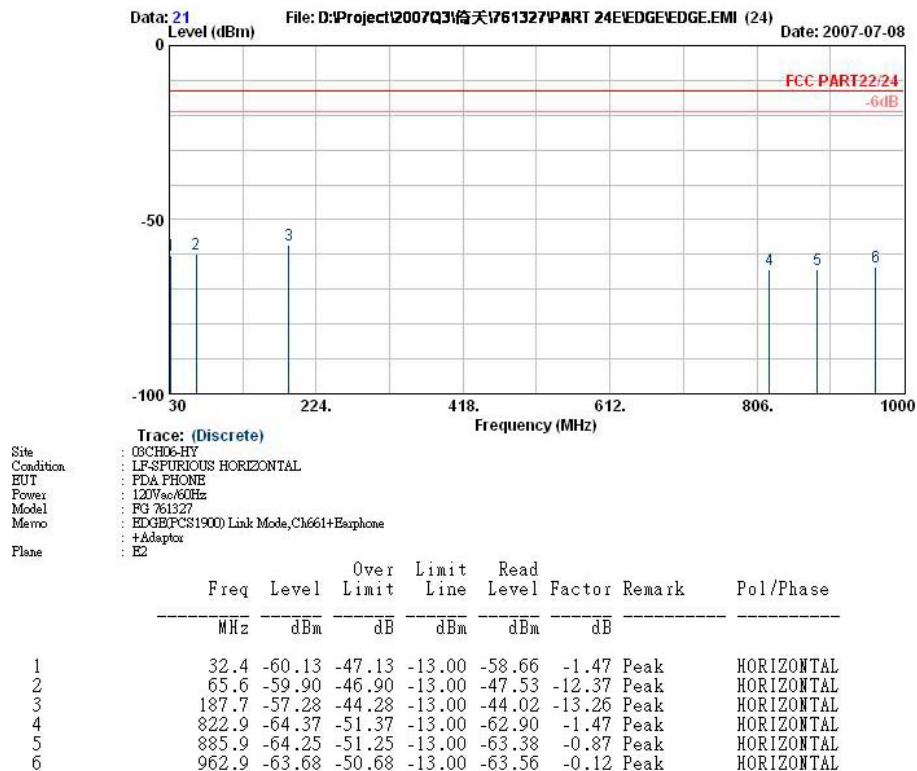
Trace: (Discrete)

Site : 03CH06-HY
Condition : HF-SPURIOUS VERTICAL
EUT : PDA PHONE
Power : 120Vac/60Hz
Model : FG 761327
Memo : PCS 1900 Link Mode, Ch661+Earphone
+Adaptor
Plane : E2

	Freq	Level	Over	Limit	Read			
	MHz	dBm	Limit	Line	Level	Factor	Remark	Pol/Phase
			dB	dBm	dBm	dB		
1 @	1878.0	-37.06			-36.66	-0.40	Peak	VERTICAL
2	1960.0	-56.88			-56.28	-0.60	Peak	VERTICAL
3	3758.0	-42.84	-29.84	-13.00	-49.48	6.64	Peak	VERTICAL
4	5638.0	-48.73	-35.73	-13.00	-57.38	8.65	Peak	VERTICAL

Remark:

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

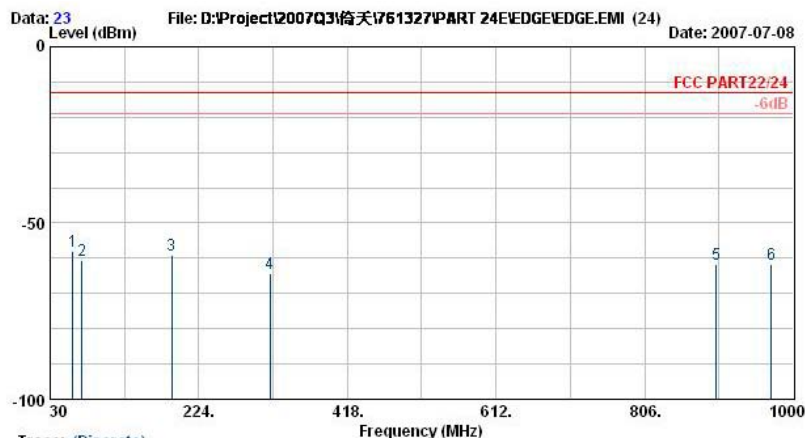
4.6.5.4 Mode 4
Horizontal Polarization

Remark:

1. #1: MS Signal

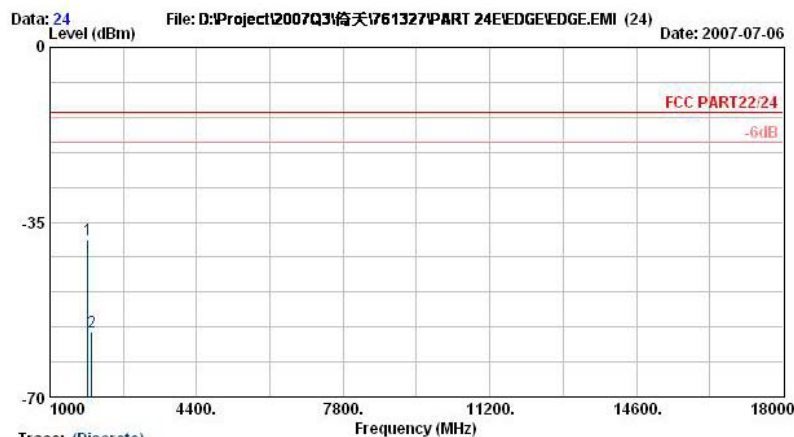


Vertical Polarization



Trace: (Discrete)
Site : 03CH06-HY
Condition : LF-SPURIOUS VERTICAL
EUT : PDA PHONE
Power : 120Vac/60Hz
Model : FG 761327
Memo : EDGB(FCS1900) Link Mode,Ch661+Earphone
Plane : +Adaptor
E2

	Freq	Level	Over	Limit	Read	Factor	Remark	Pol/Phase
	MHz	dBm	dB	dBm	dBm	dB		
1	59.4	-58.15	-45.15	-13.00	-44.59	-13.56	Peak	VERTICAL
2	71.6	-60.66	-47.66	-13.00	-48.92	-11.74	Peak	VERTICAL
3	188.5	-59.10	-46.10	-13.00	-50.62	-8.49	Peak	VERTICAL
4	316.8	-64.20	-51.20	-13.00	-58.11	-6.09	Peak	VERTICAL
5	899.9	-61.65	-48.65	-13.00	-63.51	1.87	Peak	VERTICAL
6	971.3	-61.57	-48.57	-13.00	-64.00	2.43	Peak	VERTICAL

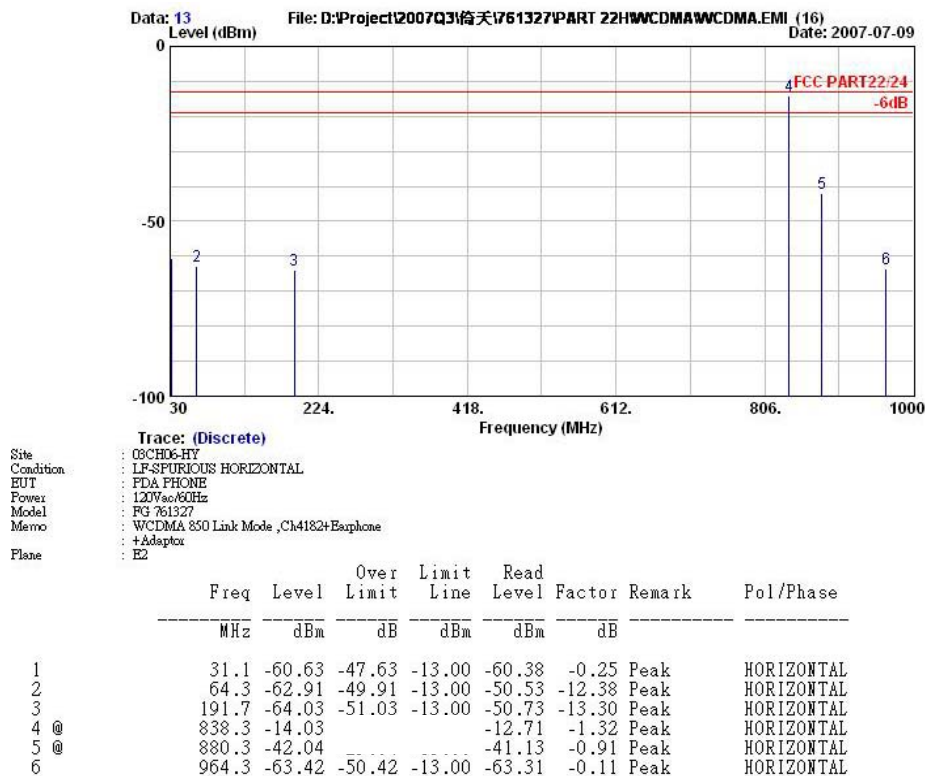


Trace: (Discrete)
Site : 03CH06-HY
Condition : HF-SPURIOUS VERTICAL
EUT : PDA PHONE
Power : 120Vac/60Hz
Model : FG 761327
Memo : EDGB(FCS1900) Link Mode,Ch661+Earphone
Plane : +Adaptor
E2

	Freq	Level	Over	Limit	Read	Factor	Remark	Pol/Phase
	MHz	dBm	dB	dBm	dBm	dB		
1 @	1880.0	-38.50			-37.99	-0.50	Peak	VERTICAL
2	1960.0	-57.10			-56.51	-0.60	Peak	VERTICAL

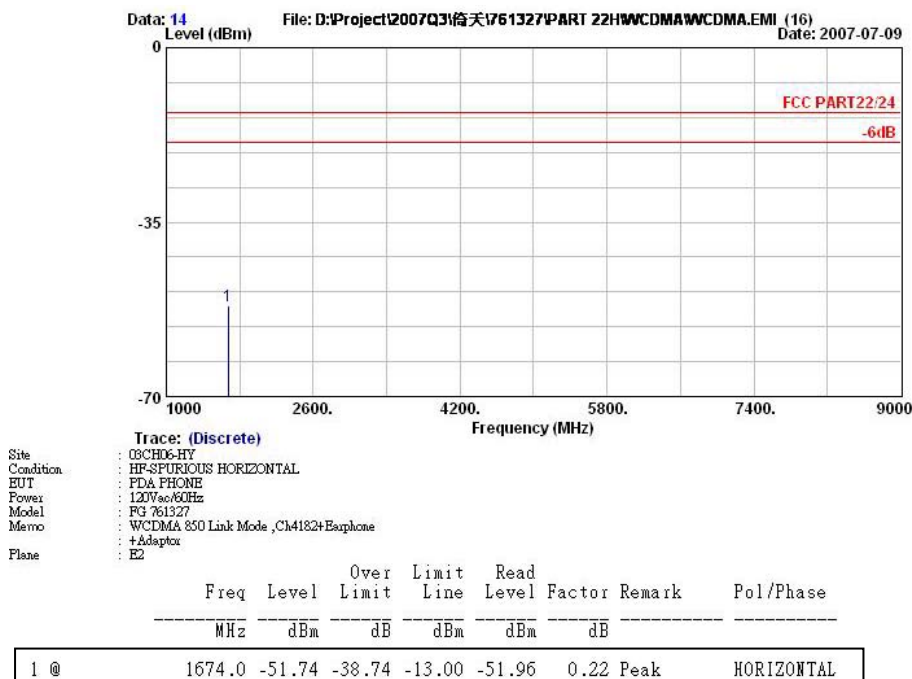
Remark:

- #1: MS Signal
- #2: BS Signal

4.6.5.5 Mode 5
Horizontal Polarization

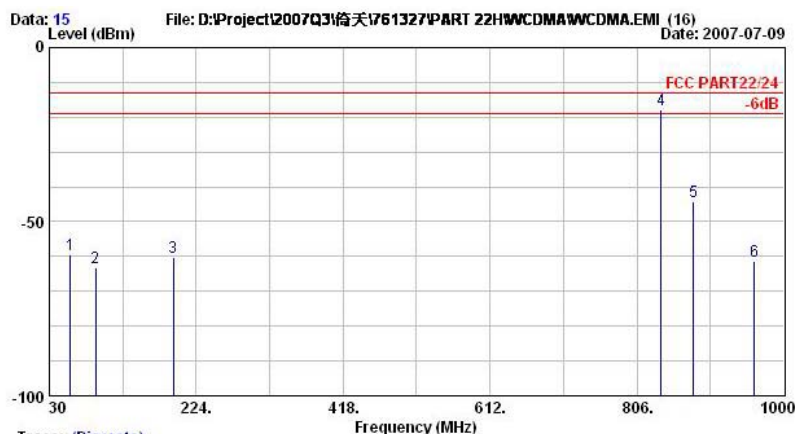
Remark:

1. #4: MS Signal
2. #5: BS Signal





Vertical Polarization



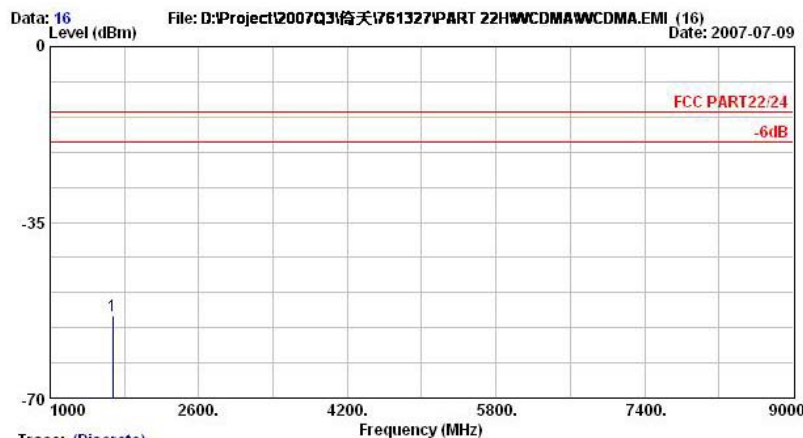
Trace: (Discrete)

Site : 03CH06-HY
Condition : LF-SPURIOUS VERTICAL
EUT : PDA PHONE
Power : 120V ac/60Hz
Model : FG 761327
Memo : WCDMA 850 Link Mode ,Ch4182+Earphone
Plane : +Adaptor
E2

	Freq	Level	Over	Limit	Read			
	MHz	dBm	dB	dBm	dBm	dB	Remark	Pol/Phase
1	58.1	-59.48	-46.48	-13.00	-45.78	-13.70	Peak	VERTICAL
2	91.3	-63.17	-50.17	-13.00	-54.22	-8.95	Peak	VERTICAL
3	193.9	-60.38	-47.38	-13.00	-51.84	-8.54	Peak	VERTICAL
4 @	838.3	-17.93			-19.30	1.37	Peak	VERTICAL
5 @	880.3	-44.32			-46.03	1.71	Peak	VERTICAL
6	960.8	-61.18	-48.18	-13.00	-63.53	2.35	Peak	VERTICAL

Remark:

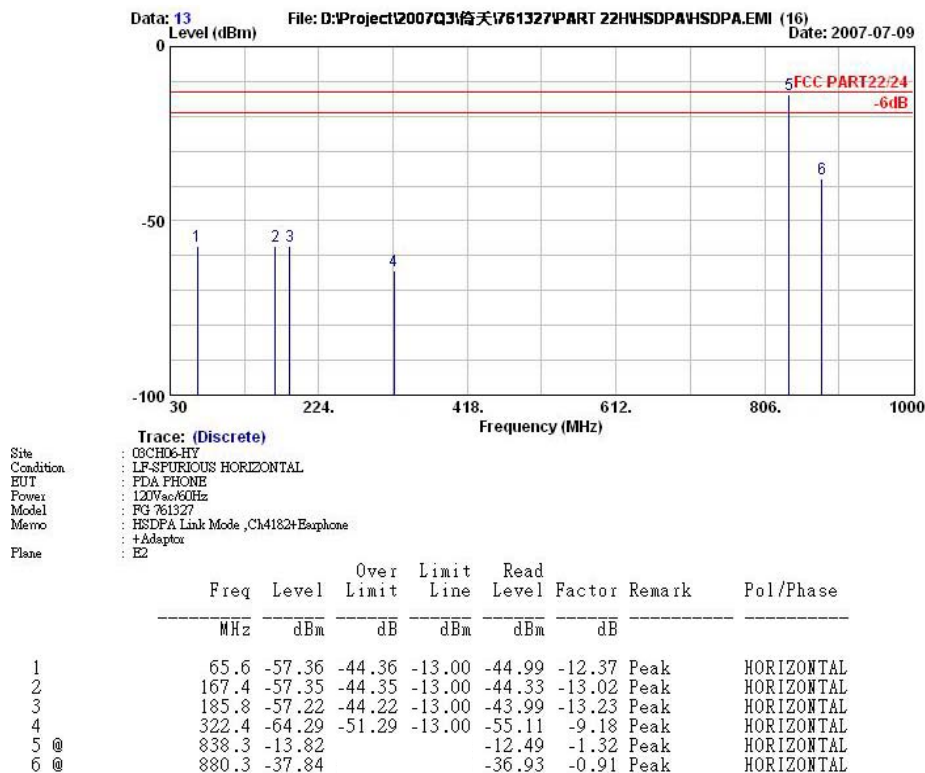
1. #4: MS Signal
2. #5: BS Signal



Trace: (Discrete)

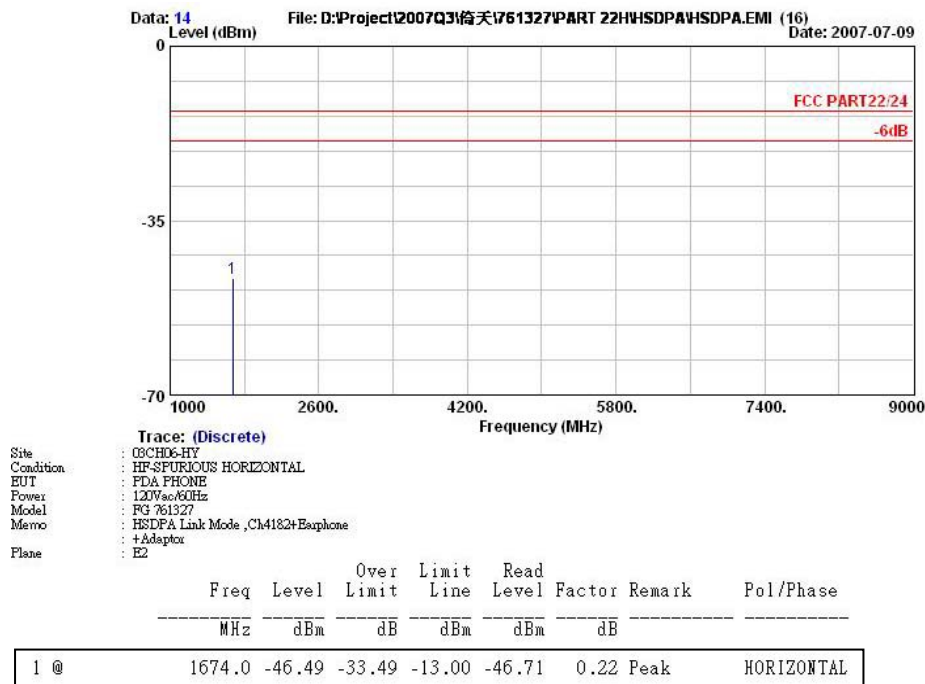
Site : 03CH06-HY
Condition : HF-SPURIOUS VERTICAL
EUT : PDA PHONE
Power : 120V ac/60Hz
Model : FG 761327
Memo : WCDMA 850 Link Mode ,Ch4182+Earphone
Plane : +Adaptor
E2

	Freq	Level	Over	Limit	Read			
	MHz	dBm	dB	dBm	dBm	dB	Remark	Pol/Phase
1 @	1674.0	-53.61	-40.61	-13.00	-53.13	-0.48	Peak	VERTICAL

4.6.5.6 Mode 6
Horizontal Polarization

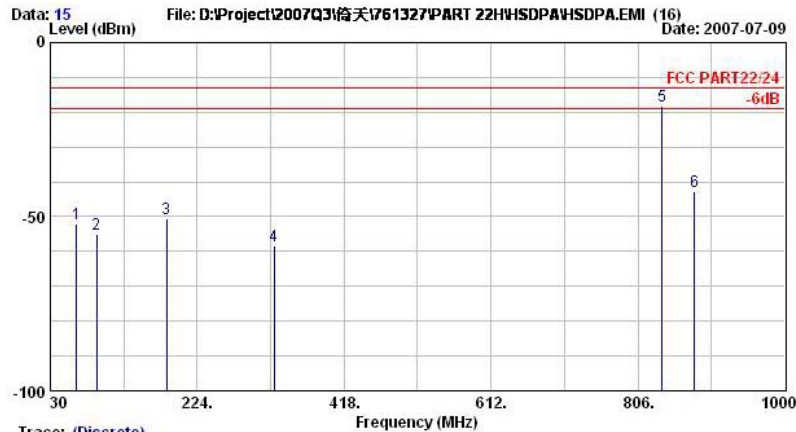
Remark:

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





Vertical Polarization



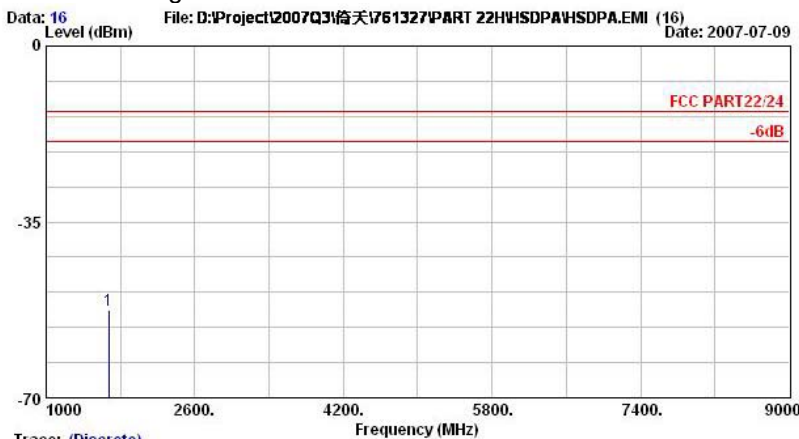
Trace: (Discrete)

Site : 03CH06-HY
Condition : LF-SPURIOUS VERTICAL
EUT : PDA PHONE
Power : 120V ac/60Hz
Model : FG 761327
Memo : HSDPA Link Mode , Ck4182+Earphone
Plane : +Adaptor
E2

	Freq	Level	Over	Limit	Read			
	MHz	dBm	dB	dBm	dBm	Factor	Remark	Pol/Phase
1 @	64.3	-51.99	-38.99	-13.00	-39.13	-12.86	Peak	VERTICAL
2	91.3	-54.84	-41.84	-13.00	-45.89	-8.95	Peak	VERTICAL
3 @	183.6	-50.71	-37.71	-13.00	-42.27	-8.44	Peak	VERTICAL
4	325.9	-58.37	-45.37	-13.00	-52.47	-5.90	Peak	VERTICAL
5 @	838.3	-18.06			-19.43	1.37	Peak	VERTICAL
6 @	880.3	-42.60			-44.31	1.71	Peak	VERTICAL

Remark:

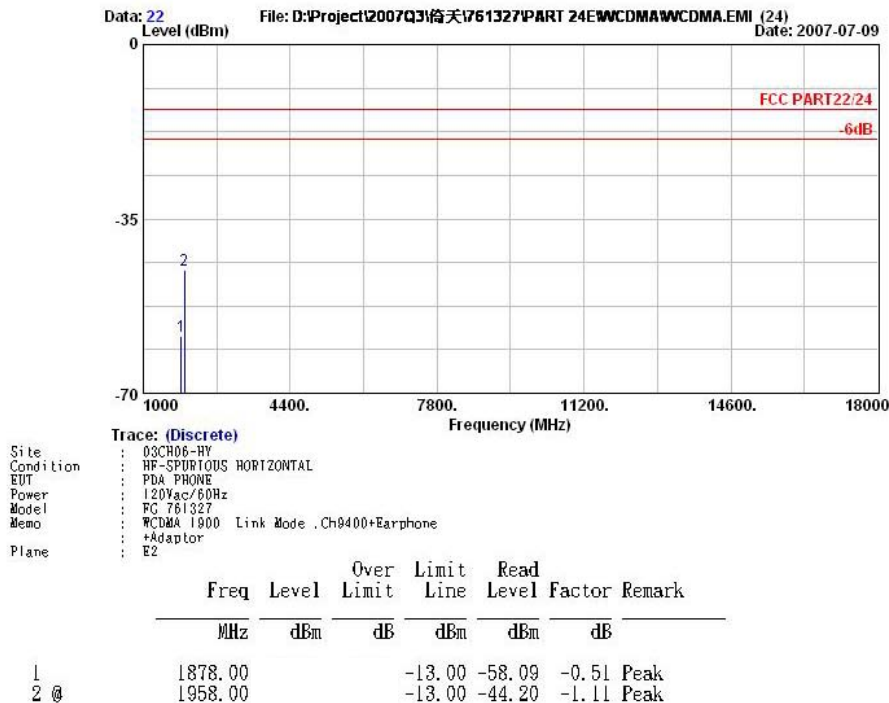
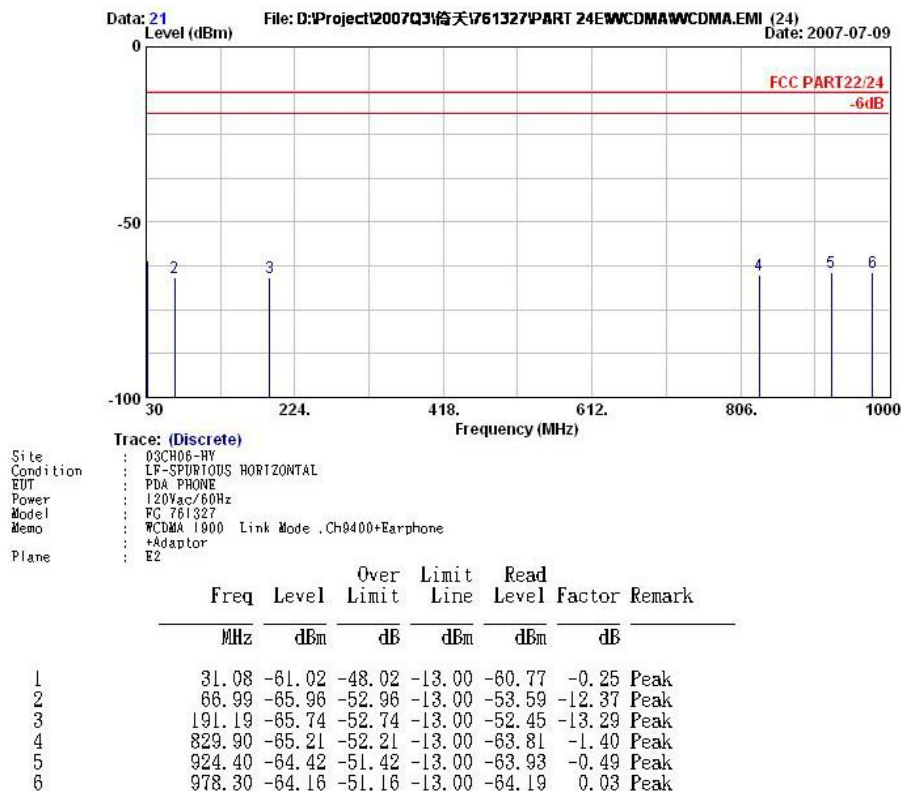
1. #5: MS Signal
2. #6: BS Signal



Trace: (Discrete)

Site : 03CH06-HY
Condition : HF-SPURIOUS VERTICAL
EUT : PDA PHONE
Power : 120V ac/60Hz
Model : FG 761327
Memo : HSDPA Link Mode , Ck4182+Earphone
Plane : +Adaptor
E2

	Freq	Level	Over	Limit	Read			
	MHz	dBm	dB	dBm	dBm	Factor	Remark	Pol/Phase
1 @	1674.0	-52.62	-39.62	-13.00	-52.14	-0.48	Peak	VERTICAL

4.6.5.7 Mode 7
Horizontal Polarization

Remark:

- #1: MS Signal
- #2: BS Signal



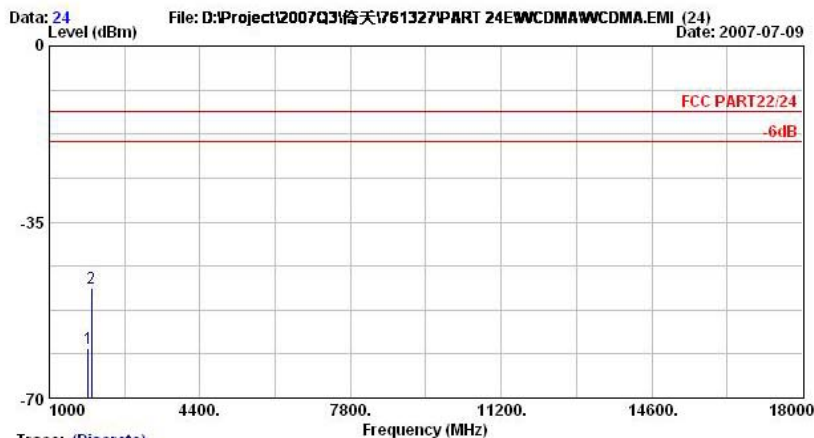
Vertical Polarization



Trace: (Discrete)

Site : 03CH06-RY
Condition : LF-SPORTIOUS VERTICAL
EUT : PDA PHONE
Power : 120Vac/60Hz
Model : FG 761327
Memo : WCDMA 1900 Link Mode ,Ch9400+Earphone
Plane : +Adaptor
E2

	Freq	Level	Over	Limit	Read		
	MHz	dBm	dB	dBm	dBm	dB	Remark
1	58.08	-59.58	-46.58	-13.00	-45.88	-13.70	Peak
2	87.78	-60.24	-47.24	-13.00	-50.87	-9.37	Peak
3	196.59	-60.83	-47.83	-13.00	-52.26	-8.56	Peak
4	792.80	-62.74	-49.74	-13.00	-63.70	0.95	Peak
5	878.90	-61.86	-48.86	-13.00	-63.56	1.70	Peak
6	966.40	-61.62	-48.62	-13.00	-64.01	2.39	Peak



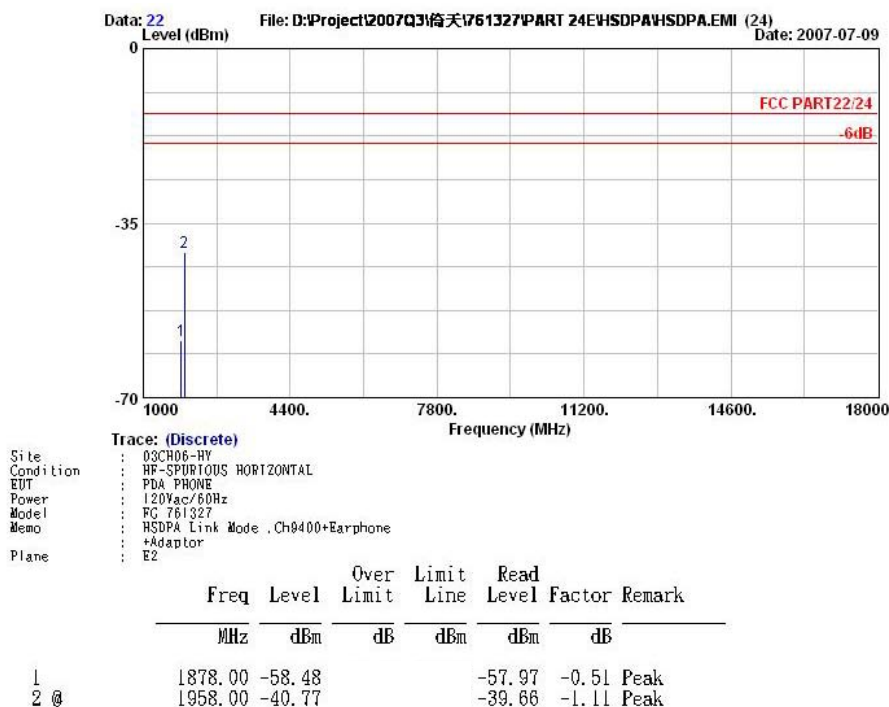
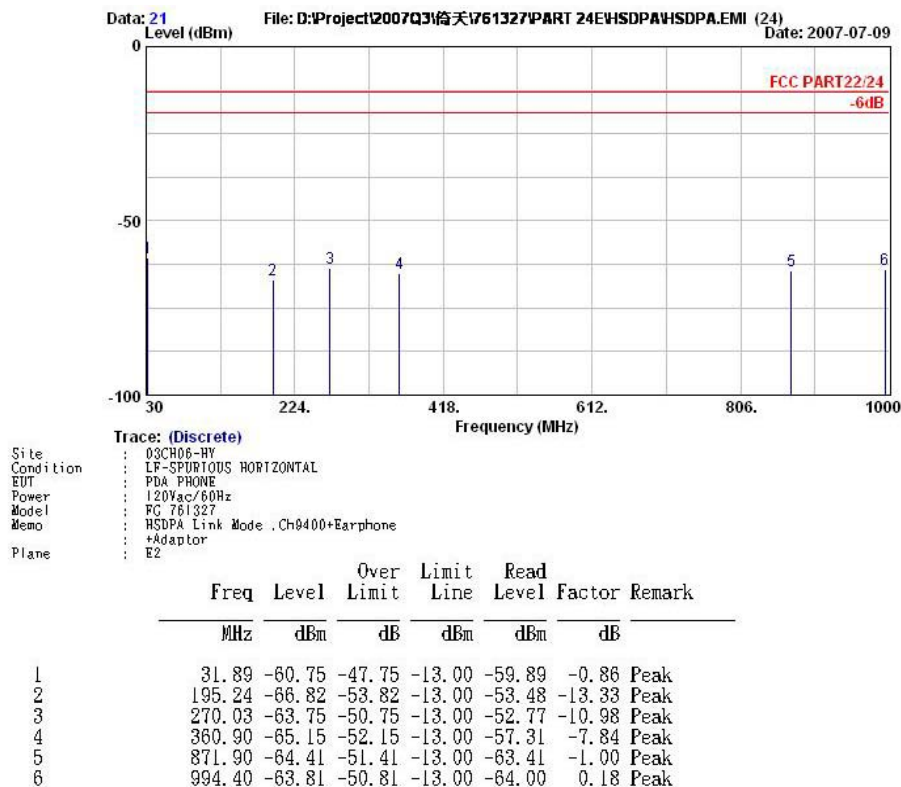
Trace: (Discrete)

Site : 03CH06-RY
Condition : HF-SPORTIOUS VERTICAL
EUT : PDA PHONE
Power : 120Vac/60Hz
Model : FG 761327
Memo : WCDMA 1900 Link Mode ,Ch9400+Earphone
Plane : +Adaptor
E2

	Freq	Level	Over	Limit	Read		
	MHz	dBm	dB	dBm	dBm	dB	Remark
1	1878.00	-60.01			-59.61	-0.40	Peak
2 @	1958.00	-48.14			-47.55	-0.60	Peak

Remark:

- #1: MS Signal
- #2: BS Signal

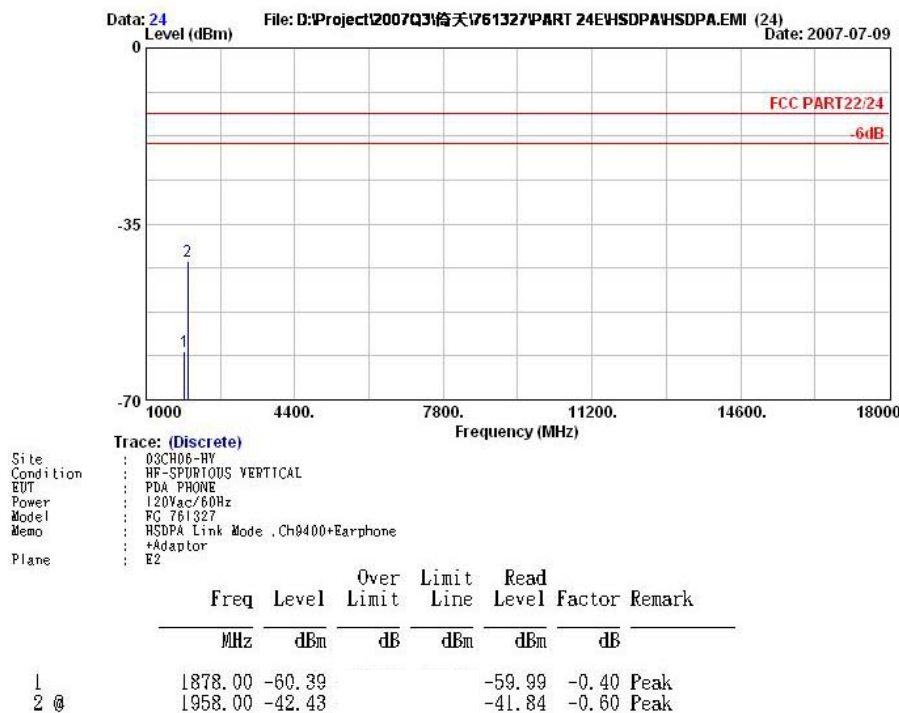
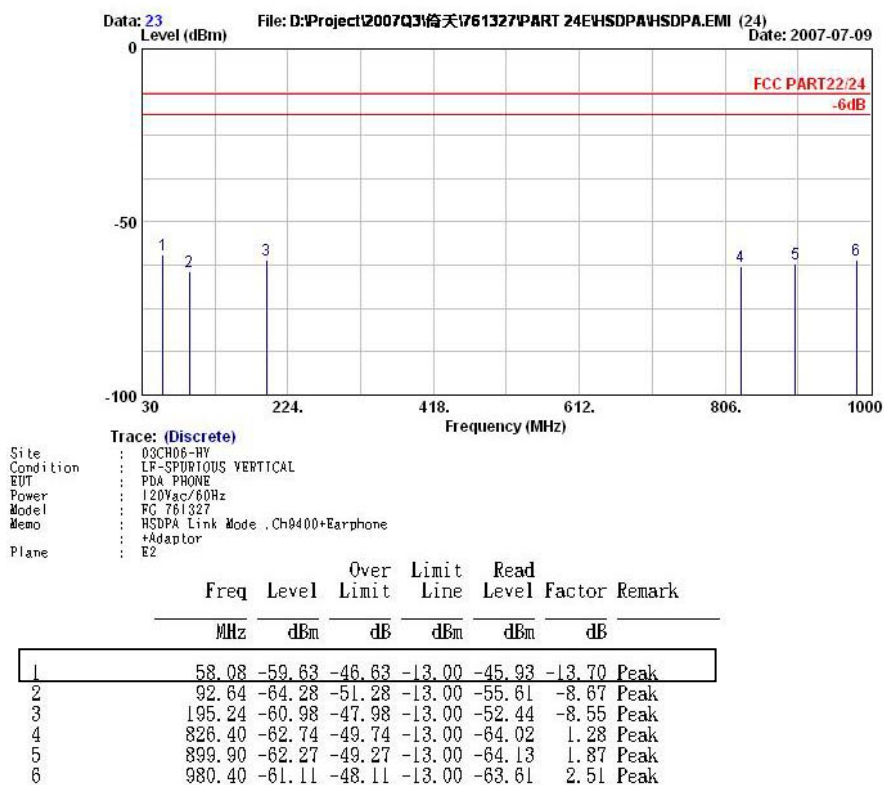
4.6.5.8 Mode 8
Horizontal Polarization

Remark:

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

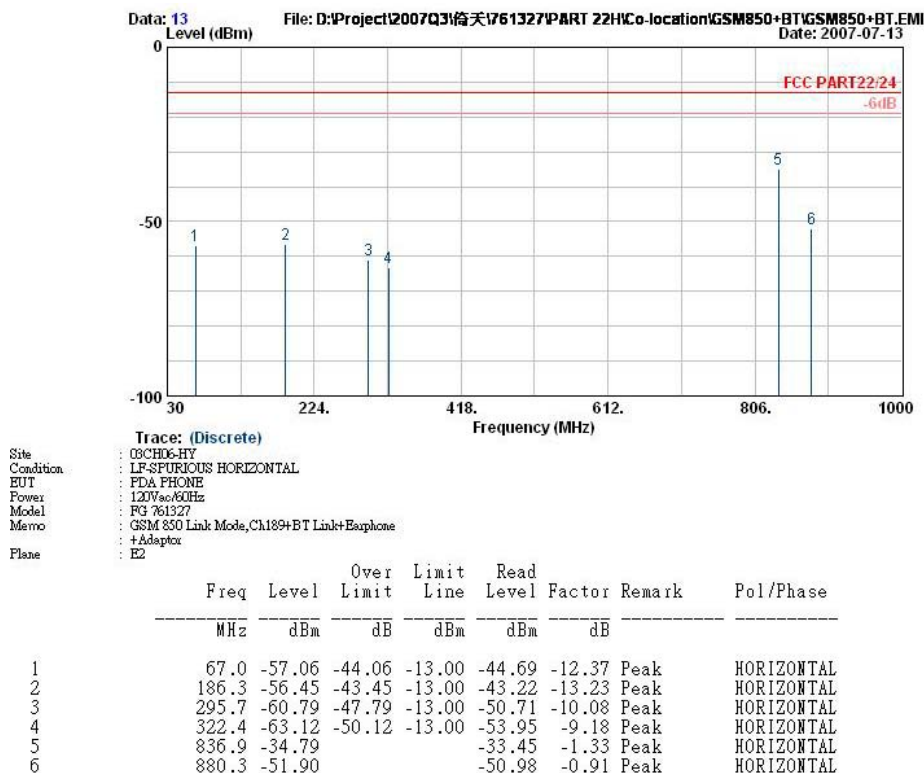


Vertical Polarization



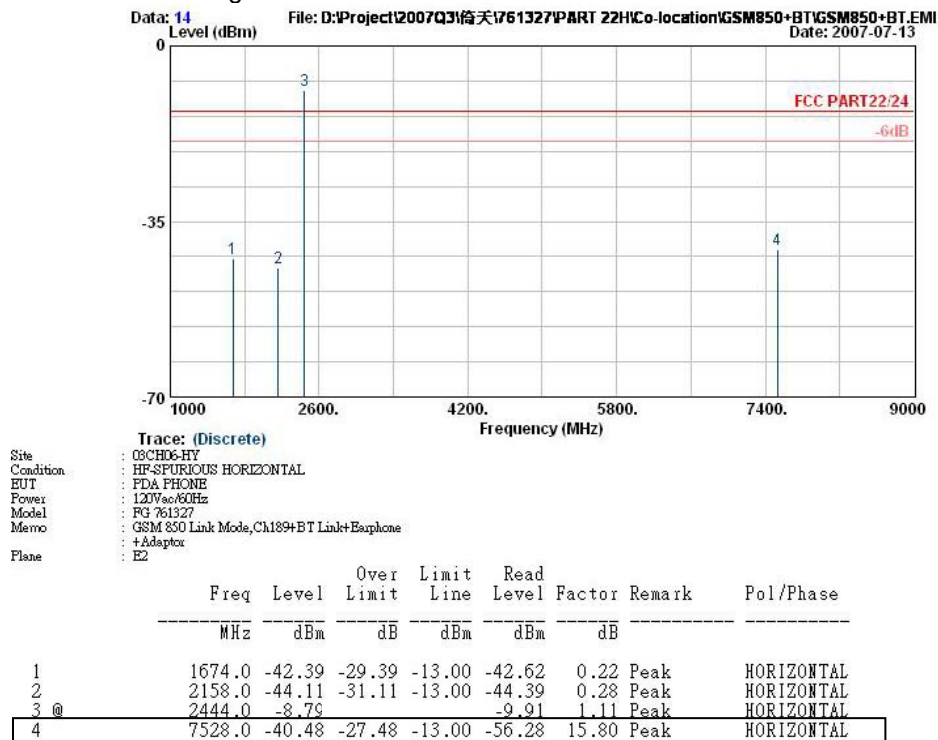
Remark:

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

4.6.5.9 Mode 9
Horizontal Polarization

Remark:

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

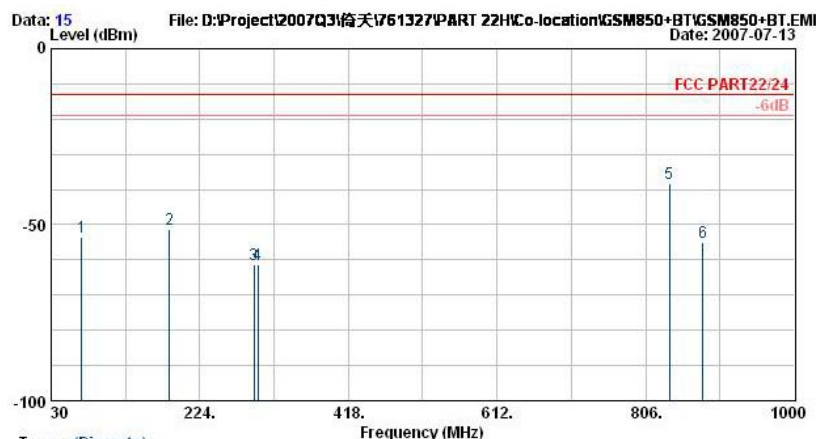


Remark:

1. #3: BT Signal



Vertical Polarization

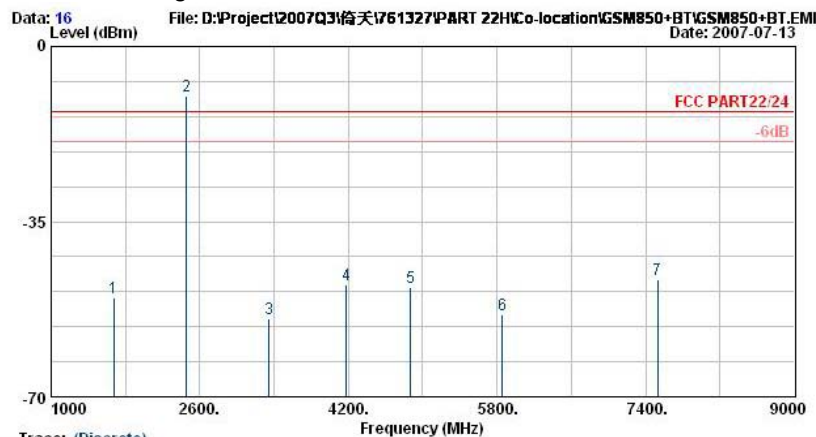


Site : 08CH06-HY
Condition : LF-SPURIOUS VERTICAL
EUT : PDA PHONE
Power : 120Vac/60Hz
Model : FG 761327
Memo : GSM 850 Link Mode, CH189+BT Link+Earphone
+Adaptor
Plane : E2

	Freq	Level	Over	Limit	Read	Factor	Remark	Pol/Phase
	MHz	dBm	Limit	Line	Level	dB		
1	69.7	-53.37	-40.37	-13.00	-41.34	-12.02	Peak	VERTICAL
2	184.4	-51.34	-38.34	-13.00	-42.89	-8.45	Peak	VERTICAL
3	295.1	-61.23	-48.23	-13.00	-54.67	-6.56	Peak	VERTICAL
4	300.0	-61.47	-48.47	-13.00	-55.01	-6.46	Peak	VERTICAL
5	836.9	-38.12			-39.48	1.36	Peak	VERTICAL
6	880.3	-55.17			-56.88	1.71	Peak	VERTICAL

Remark:

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



Site : 08CH06-HY
Condition : HF-SPURIOUS VERTICAL
EUT : PDA PHONE
Power : 120Vac/60Hz
Model : FG 761327
Memo : GSM 850 Link Mode, CH189+BT Link+Earphone
+Adaptor
Plane : E2

	Freq	Level	Over	Limit	Read	Factor	Remark	Pol/Phase
	MHz	dBm	Limit	Line	Level	dB		
1	1674.0	-50.26	-37.26	-13.00	-49.78	-0.48	Peak	VERTICAL
2 @	2454.0	-9.94			-12.09	2.16	Peak	VERTICAL
3	3344.0	-54.31	-41.31	-13.00	-58.78	4.47	Peak	VERTICAL
4	4178.0	-47.65	-34.65	-13.00	-56.00	8.36	Peak	VERTICAL
5	4868.0	-48.18	-35.18	-13.00	-58.02	9.85	Peak	VERTICAL
6	5854.0	-53.58	-40.58	-13.00	-62.39	8.81	Peak	VERTICAL
7	7528.0	-46.62	-33.62	-13.00	-59.99	13.37	Peak	VERTICAL

Remark:

- #2: BT Signal

4.7 Frequency Stability (Temperature Variation)

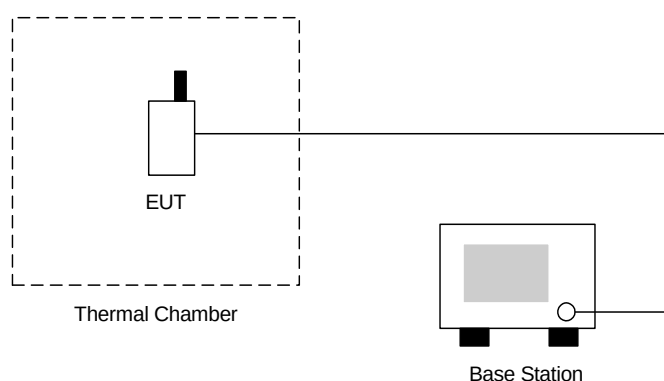
4.7.1 Measurement Instrument

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

▪ Test Mode : GSM850 (GSM) CH189

Temperature(°C)	Change (Hz)	Change (ppm)	Limit (ppm)	Result
-30	-48	-0.03	2.5	Passed
-20	-35	-0.04		
-10	-18	-0.02		
0	14	0.02		
10	8	0.01		
20	-8	-0.01		
30	21	0.02		
40	16	0.02		
50	10	0.01		

▪ Test Mode : GSM850 (EDGE) CH189

Temperature(°C)	Change (Hz)	Change (ppm)	Limit (ppm)	Result
-30	-52	-0.03	2.5	Passed
-20	-42	-0.05		
-10	-34	-0.04		
0	-8	-0.01		
10	24	0.03		
20	15	0.02		
30	20	0.02		
40	-11	-0.01		
50	20	0.02		

▪ Test Mode : PCS1900 (GSM) CH661

Temperature(°C)	Change (Hz)	Change (ppm)	Limit (ppm)	Result
-30	-75	-0.04	2.5	Passed
-20	-54	-0.03		
-10	-31	-0.02		
0	-8	0.00		
10	10	0.01		
20	-9	0.00		
30	12	0.01		
40	-18	-0.01		
50	20	0.01		



▪ Test Mode : PCS1900 (EDGE) CH661

Temperature(°C)	Change (Hz)	Change (ppm)	Limit (ppm)	Result
-30	-84	-0.04	2.5	Passed
-20	-62	-0.03		
-10	-44	-0.02		
0	-34	-0.02		
10	-21	-0.01		
20	-11	-0.01		
30	18	0.01		
40	6	0.00		
50	20	0.01		

▪ Test Mode : WCDMA Band V CH4182

Temperature(°C)	Change (Hz)	Change (ppm)	Limit (ppm)	Result
-30	68	0.08	2.5	Passed
-20	44	0.05		
-10	30	0.04		
0	21	0.02		
10	18	0.02		
20	14	0.02		
30	10	0.01		
40	20	0.02		
50	18	0.02		

▪ Test Mode : WCDMA Band V (HSDPA) CH4182

Temperature(°C)	Change (Hz)	Change (ppm)	Limit (ppm)	Result
-30	75	0.09	2.5	Passed
-20	62	0.07		
-10	31	0.04		
0	24	0.03		
10	18	0.02		
20	9	0.01		
30	14	0.02		
40	19	0.02		
50	24	0.03		

▪ Test Mode : WCDMA Band II CH9400

Temperature(°C)	Change (Hz)	Change (ppm)	Limit (ppm)	Result
-30	83	0.04	2.5	Passed
-20	49	0.03		
-10	38	0.02		
0	24	0.01		
10	18	0.01		
20	16	0.01		
30	24	0.01		
40	30	0.02		
50	19	0.01		

▪ Test Mode : WCDMA Band II (HSDPA) CH9400

Temperature(°C)	Change (Hz)	Change (ppm)	Limit (ppm)	Result
-30	88	0.05	2.5	Passed
-20	64	0.03		
-10	42	0.02		
0	35	0.02		
10	18	0.01		
20	17	0.01		
30	20	0.01		
40	18	0.01		
50	14	0.01		

4.8 Frequency Stability (Voltage Variation)

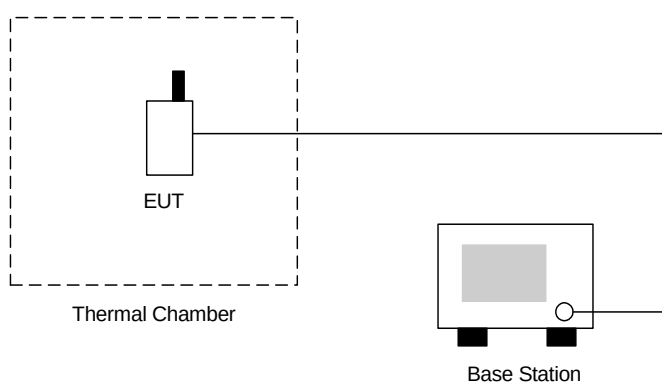
4.8.1 Measurement Instrument

As described in chapter 5 of this test report.

4.8.2 Test Procedure

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

- Test Mode : GSM850 (GSM) CH189

Voltage(Volt)	Change (Hz)	Change (ppm)	Limit (ppm)	Result
3.7	-8.0	-0.01	2.5	Passed
BEP	24.0	0.03		
4.2	16.0	0.02		

- Test Mode : GSM850 (EDGE) CH189

Voltage(Volt)	Change (Hz)	Change (ppm)	Limit (ppm)	Result
3.7	21.0	0.02	2.5	Passed
BEP	18.0	0.02		
4.2	38.0	0.04		

- Test Mode : PCS1900 (GSM) CH661

Voltage(Volt)	Change (Hz)	Change (ppm)	Limit (ppm)	Result
3.7	24.0	0.01	2.5	Passed
BEP	30.0	0.02		
4.2	48.0	0.03		

- Test Mode : PCS1900 (EDGE) CH661

Voltage(Volt)	Change (Hz)	Change (ppm)	Limit (ppm)	Result
3.7	20.0	0.01	2.5	Passed
BEP	44.0	0.02		
4.2	38.0	0.02		

- Test Mode : WCDMA Band V CH4182

Voltage(Volt)	Change (Hz)	Change (ppm)	Limit (ppm)	Result
3.7	18	0.02	2.5	Passed
BEP	34	0.04		
4.2	40	0.05		

- Test Mode : WCDMA Band V (HSDPA) CH4182

Voltage(Volt)	Change (Hz)	Change (ppm)	Limit (ppm)	Result
3.7	16	0.02	2.5	Passed
BEP	24	0.03		
4.2	30	0.04		

- Test Mode : WCDMA Band II CH9400

Voltage(Volt)	Change (Hz)	Change (ppm)	Limit (ppm)	Result
3.7	18	0.01	2.5	Passed
BEP	28	0.01		
4.2	38	0.02		

- Test Mode : WCDMA Band II (HSDPA) CH9400

Voltage(Volt)	Change (Hz)	Change (ppm)	Limit (ppm)	Result
3.7	24	0.01	2.5	Passed
BEP	19	0.01		
4.2	35	0.02		

Remark:

1. Normal Voltage=3.7V.
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)
Thermal Chamber	Tenxi technology	TTH-D35P	TBN-930701	N/A	Jul. 24, 2006	Jul. 23, 2007	TH02-HY
Spectrum	R&S	FSP40	100055	9KHz~40GHz	Jun. 25, 2007	Jun. 24, 2008	TH02-HY
Bluetooth Test	ANRITSU	MT8852A	6K00003939	N/A	N/A	N/A	TH02-HY
POWER DIVIDER	ARRA	5200-1	3871	N/A	Oct. 07, 2006	Oct. 06, 2007	TH02-HY
DC POWER SUPPLY	TOPWARD	3303D	740889	N/A	May 25, 2005	May 24, 2009	TH02-HY
Power Meter	Agilent	E4416A	GB41292344	N/A	Feb. 08, 2007	Feb. 07, 2008	TH02-HY
Power Sensor	Agilent	E9327A	US40441548	N/A	Feb. 08, 2007	Feb. 07, 2008	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