

## **CERTIFICATE OF COMPLIANCE** **FCC PART 24 CERTIFICATION**

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### **Applicant Information:**

**VTECH MOBILE (ASIA) LIMITED**  
Block 1, 23/F, Tai Ping Industrial Center  
57 Ting Kok Road, Tai Po  
Hong Kong, China

<b>FCC Classification:</b>	<b>Part 24 Licensed Portable Transmitter Held to Ear (PCE)</b>
<b>FCC Rule Part(s):</b>	<b>§24(E), §2</b>
<b>FCC ID:</b>	<b>P5680-5196-00</b>
<b>Model(s):</b>	<b>A700</b>
<b>Equipment Type:</b>	<b>Single-Mode PCS GSM Phone</b>
<b>Tx Frequency Range:</b>	<b>1850.2 - 1909.8 MHz</b>
<b>Max. RF Output Power:</b>	<b>1.32 Watts (EIRP)</b>
<b>Emission Designator:</b>	<b>256KGXW</b>
<b>Frequency Tolerance:</b>	<b>150 Hz</b>
<b>Antenna Type:</b>	<b>Fixed Stubby (1/4l )</b>

This equipment has been shown to be capable of compliance with the applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures specified in §2.947.

I attest to the accuracy of data. All measurements reported herein were performed by me or were made under my supervision and are correct to the best of my knowledge and belief. I assume full responsibility for the completeness of these measurements and vouch for the qualifications of all persons taking them.

*This test report shall not be reproduced partially, or in full, without the prior written approval of Celltech Research Inc. The results and statements contained in this report pertain only to the device(s) evaluated.*



**Shawn McMillen**  
**General Manager**  
**Celltech Research Inc.**



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## **FCC PART 24 MEASUREMENT REPORT**

### **1.1 SCOPE**

Measurement and determination of electromagnetic emissions (EME) from radio frequency devices for compliance with the technical rules and regulations of the Federal Communications Commission.

### **1.2 GENERAL INFORMATION - §2.1033(a)**

#### **APPLICANT:**

**VTECH MOBILE (ASIA) LIMITED**  
Block 1, 23/F, Tai Ping Industrial Center  
57 Ting Kok Road, Tai Po  
Hong Kong, China

<b>FCC ID</b>	<b>P5680-5196-00</b>
<b>Model(s)</b>	<b>A700</b>
<b>EUT Type</b>	<b>Single-Mode PCS GSM Phone</b>
<b>Classification</b>	<b>Licensed Portable Transmitter Held to Ear (PCE)</b>
<b>Rule Part(s)</b>	<b>§24(E), §2</b>
<b>Max. RF Output Power</b>	<b>1.32 Watts (EIRP)</b>
<b>Tx Freq. Range</b>	<b>1850.2 - 1909.8 MHz</b>
<b>Emission Designator</b>	<b>256KGXW</b>
<b>Frequency Tolerance</b>	<b>± 150 Hz</b>
<b>Modulation</b>	<b>PCS GSM</b>
<b>Battery Type(s)</b>	<b>Lithium-Ion Battery Standard: 4.2V 540mAh Extended: 4.2V 700mAh</b>
<b>Antenna Type</b>	<b>Fixed Stubby (1/4l )</b>

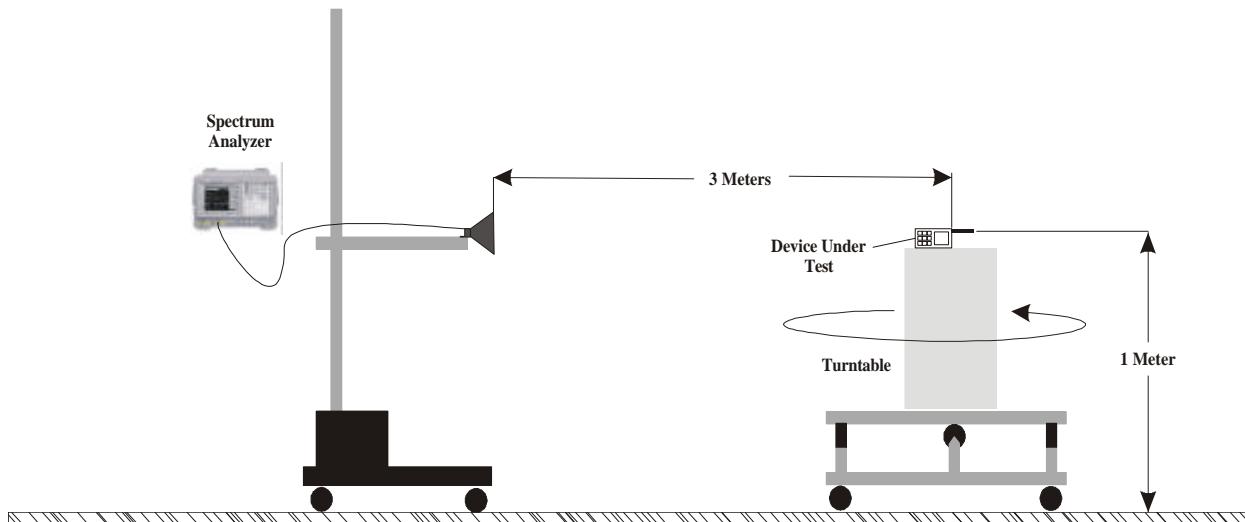
## **2.1 MEASUREMENT PROCEDURES**

### **2.2 RF OUTPUT POWER MEASUREMENT - §2.1046**

The conducted power was measured with a Gigatronics 8650A Universal Power Meter using modulated average power mode. An offset was entered into the power meter to correct for the losses of the attenuator and cable installed before the sensor input. The transmitter terminal was coupled to the power meter and the EUT was placed into test mode using a Rhode and Schwartz CMD55 base station simulator at a full data rate in the “always up” power control mode. All subsequent tests were performed using the same tune-up procedures.

### **2.3 FIELD STRENGTH OF SPURIOUS RADIATION - §2.1053**

The radiated and harmonic emissions were measured on a 3-meter outdoor site and performed in accordance with TIA/EIA-603 Section 2.212. The EUT was placed on the turntable with the transmitter transmitting into a non-radiating load. A receiving antenna located 3 meters from the turntable received any signal radiated from the transmitter and its operating accessories. The receiving antenna was varied in height from 1 to 4 meters and the polarization was varied (horizontal and vertical) to determine the worst-case emission level. All spurious emissions made from the lowest radio frequency generated in the equipment to the tenth harmonic of the carrier were investigated.



**Radiated Measurement Test Setup Diagram**

## **2.4 SPURIOUS EMISSIONS AT ANTENNA TERMINAL - §2.1051**

The EUT was placed into test mode using a Rhode and Schwartz CMU200 base station simulator. The level of the carrier and the various conducted spurious frequencies were measured by means of a calibrated spectrum analyzer. The resolution bandwidth and video bandwidth were set to 1MHz. The spectrum was scanned from 10MHz to 20GHz at the low, medium, and high channels. The radio transmitter was operating at maximum output power. The antenna output terminal of the EUT was connected to the input of a 50Ω spectrum analyzer through a matched 30dB attenuator and coaxial cable. The reported emissions were below the specified limit of -13dBm.

## **2.5 OCCUPIED BANDWIDTH EMISSION LIMITS - §2.1049(c), §24.238**

The EUT was placed into test mode using a Rhode and Schwartz CMU200 base station simulator. The antenna output terminal of the EUT was connected to the input of a 50Ω spectrum analyzer through a matched 30dB attenuator. The resolution bandwidth and video bandwidth were set to 3kHz. The radio transmitter was operating at maximum output power. 100% of the in-band modulation was below the specified mask per §24.238.

Specified Limits:

- (a) On any frequency removed from the assigned carrier frequency by more than 20kHz, up to and including 45kHz, the sideband was at least 26dB below the carrier.
- (b) On any frequency removed from the assigned carrier frequency by more than 45kHz, up to and including 90kHz, the sideband was at least 45dB below the carrier.
- (c) On any frequency removed from the assigned carrier frequency by more than 90kHz, up to the first multiple of the carrier frequency, the sideband was at least 60dB below the carrier of  $40 + \log_{10}(\text{mean power output in Watts})$  dB, whichever was the smaller attenuation.

## **2.6 FREQUENCY STABILITY / TEMPERATURE VARIATION - §24.235**

The minimum frequency stability shall be  $\pm 150\text{Hz}$  referenced to a received carrier frequency. This meets the requirement for operational accuracy of 0.00001%. A Rhode and Schwartz CMU200 base station simulator was used to measure the error in the frequency. The transmitter was set to maximum power at the center frequency of the band.

### **Measurement Method:**

The frequency stability of the transmitter was measured by:

1. Temperature: The temperature was varied from  $-30^\circ\text{C}$  to  $+60^\circ\text{C}$  at intervals no more than  $10^\circ\text{C}$  throughout the temperature range using an environmental chamber. A period of time sufficient to stabilize all of the components in the equipment was allowed prior to each frequency measurement.
2. Primary Supply Voltage: The primary supply voltage was set at the specified nominal rating and reduced to the battery operating endpoint specified by the manufacturer. The voltage was measured at the terminals of the power supply or at the input to the cable normally provided with the equipment.

### **Time Period and Procedure:**

1. The carrier frequency of the transmitter was measured at room temperature ( $25^\circ\text{C}$  to  $27^\circ\text{C}$  to provide a reference).
2. The equipment was subjected to an overnight “soak” at  $-30^\circ\text{C}$  without any power applied.
3. After the overnight “soak” at  $-30^\circ\text{C}$ , the measurement of the carrier frequency of the transmitter was made within a three-minute interval after applying power to the transmitter.
4. Frequency measurements were made at  $10^\circ\text{C}$  intervals up to  $+60^\circ\text{C}$ , then back to room temperature. A minimum period of one hour was provided to allow stabilization of the equipment at each temperature level.

### 3.1 TEST DATA

### 3.2 EFFECTIVE ISOTROPIC RADIATED POWER OUTPUT - §24.232(b)

#### PCS GSM MODE

Freq. Tuned (MHz)	EUT Conducted Power (dBm)	Maximum Field Strength of EUT (Horiz. Pol.) (dBm)	Horn Gain (dBi)	Horn Forward Conducted Power (dBm)	EIRP of EUT Horn Gain + Horn Forward Conducted Power (dBm)	Watts
1850.2	29.17	- 7.362	6.55	24.49	31.04	1.27
1880.0	29.30	- 8.177	6.58	24.20	30.78	1.20
1909.8	29.49	- 8.395	6.61	24.60	31.21	1.32
1909.8	29.49	- 8.143	6.61	24.47	31.08	1.28*

#### EIRP Measurements by Substitution Method:

The EUT was placed on a turntable 3-meters from the receive antenna. The field of maximum intensity was found by rotating the EUT approximately 360 degrees and changing the height of the receive antenna from 1 to 4 meters. The field strength was recorded from a calibrated spectrum analyzer for each channel being tested, and for both EUT antenna polarizations and modes. A standard gain horn antenna was substituted in place of the EUT. The antenna was fed through a directional coupler and the power at the coupler port was monitored. A signal generator and power amplifier controlled the antenna, and the input level of the antenna was adjusted to the same field strength level as the EUT. The feed point for the antenna was then connected to a calibrated power meter and the power adjusted to read the same as the coupler port previously recorded, this is to account for any mismatch in impedance, which may occur at the horn antenna. The conducted power at the antenna feed point was recorded. The forward conducted power for the horn antenna was then determined and the EIRP level was determined by adding the horn forward conducted power and the antenna gain in dB.

#### Notes:

1. EIRP measurements were performed with the standard battery and \*extended battery.
2. EIRP measurements were performed for both horizontal and vertical antenna polarizations. The worst-case configuration is reported.

**3.3 FIELD STRENGTH OF SPURIOUS RADIATION - § 2.1053**

Operating Frequency (MHz): 1850.2  
 Channel: 512 (Low)  
 Measured Cond. Pwr. (dBm): 29.17  
 Measured EIRP (dBm): 31.04  
 Modulation: PCS GSM  
 Distance: 3 Meters  
 Limit:  $43 + 10 \log (W) = 44.04 \text{ dBc}$

Frequency (MHz)	Field Strength of Spurious Radiation (dBm)	Horn Forward Cond. Pwr. (dBm)	Standard Gain Horn Antenna Gain (dBi)	POL (H/V)	EIRP (dBm)	ERP (dBm)	dBc
3700.40	-92.43	-59.54	6.6	H	-52.94	-55.08	86.12
5550.60	-88.54	-50.74	7.8	H	-42.94	-45.08	76.12
7400.80	-90.85	-54.27	7.8	H	-46.47	-48.61	79.65
9251.00	-91.61	-53.59	7.6	H	-45.99	-48.13	79.17
11101.20	-94.88	-58.52	8.5	H	-50.02	-52.16	83.20
12951.40	-97.53	-59.65	8.8	H	-50.85	-52.99	84.03
14801.60	-98.32	-60.44	9.6	H	-50.84	-52.98	84.02
16651.80	-99.84	-62.01	9.0	H	-53.01	-55.15	86.19
18502.00	-101.57	-65.36	9.3	H	-56.06	-58.20	89.24

Radiated Measurements by Substitution Method:

The EUT was placed on a turntable 3-meters from the receive antenna. The field of maximum intensity was found by rotating the EUT approximately 360 degrees and changing the height of the receive antenna from 1 to 4 meters. The field strength was recorded from a calibrated spectrum analyzer for each channel being tested. A standard gain horn antenna was substituted in place of the EUT. The antenna was fed through a directional coupler and the power at the coupler port was monitored. A signal generator and power amplifier controlled the antenna, and the input level of the antenna was adjusted to the same field strength level as the EUT. The feed point for the antenna was then connected to a calibrated power meter and the power adjusted to read the same as the coupler port previously recorded, this is to account for any mismatch in impedance, which may occur at the horn antenna. The conducted power at the antenna feed point was recorded. The forward conducted power for the horn antenna was then determined and the EIRP level was determined by adding the horn forward conducted power and the antenna gain in dB.

Notes:

1. All other spurious emissions generated from the lowest frequency of the EUT to the tenth harmonic were investigated and found to be below the magnitude of each harmonic level.
2. Spurious emissions more than 20 dB below the limit are reported, even though not required per §2.1051.

**FIELD STRENGTH OF SPURIOUS RADIATION - § 2.1053**

Operating Frequency (MHz): 1880.0  
 Channel: 661 (Mid)  
 Measured Cond. Pwr. (dBm): 29.30  
 Measured EIRP (dBm): 30.78  
 Modulation: PCS GSM  
 Distance: 3 Meters  
 Limit:  $43 + 10 \log (W) = 43.79 \text{ dBc}$

Frequency (MHz)	Field Strength of Spurious Radiation (dBm)	Horn Forward Cond. Pwr. (dBm)	Standard Gain Horn Antenna Gain (dBi)	POL (H/V)	EIRP (dBm)	ERP (dBm)	dBc
3760.00	-90.46	-57.57	6.6	H	-50.97	-53.11	83.89
5640.00	-89.63	-51.83	7.8	H	-44.03	-46.17	76.95
7520.00	-91.12	-54.54	7.8	H	-46.74	-48.88	79.66
9400.00	-92.85	-54.83	7.6	H	-47.23	-49.37	80.15
11280.00	-94.06	-57.70	8.5	H	-49.20	-51.34	82.12
13160.00	-95.55	-57.67	8.8	H	-48.87	-51.01	81.79
15040.00	-97.33	-59.45	9.6	H	-49.85	-51.99	82.77
16920.00	-99.14	-61.31	9.0	H	-52.31	-54.45	85.23
18800.00	-101.61	-65.40	9.3	H	-56.10	-58.24	89.02

Radiated Measurements by Substitution Method:

The EUT was placed on a turntable 3-meters from the receive antenna. The field of maximum intensity was found by rotating the EUT approximately 360 degrees and changing the height of the receive antenna from 1 to 4 meters. The field strength was recorded from a calibrated spectrum analyzer for each channel being tested. A standard gain horn antenna was substituted in place of the EUT. The antenna was fed through a directional coupler and the power at the coupler port was monitored. A signal generator and power amplifier controlled the antenna, and the input level of the antenna was adjusted to the same field strength level as the EUT. The feed point for the antenna was then connected to a calibrated power meter and the power adjusted to read the same as the coupler port previously recorded, this is to account for any mismatch in impedance, which may occur at the horn antenna. The conducted power at the antenna feed point was recorded. The forward conducted power for the horn antenna was then determined and the EIRP level was determined by adding the horn forward conducted power and the antenna gain in dB.

Notes:

1. All other spurious emissions generated from the lowest frequency of the EUT to the tenth harmonic were investigated and found to be below the magnitude of each harmonic level.
2. Spurious emissions more than 20 dB below the limit are reported, even though not required per §2.1051.

**FIELD STRENGTH OF SPURIOUS RADIATION - § 2.1053**

Operating Frequency (MHz): 1908.8  
 Channel: 810 (High)  
 Measured Cond. Pwr. (dBm): 29.49  
 Measured EIRP (dBm): 31.21  
 Modulation: PCS GSM  
 Distance: 3 Meters  
 Limit:  $43 + 10 \log (W) = 44.21 \text{ dBc}$

Frequency (MHz)	Field Strength of Spurious Radiation (dBm)	Horn Forward Cond. Pwr. (dBm)	Standard Gain Horn Antenna Gain (dBi)	POL (H/V)	EIRP (dBm)	ERP (dBm)	dBc
3817.60	-92.08	-59.19	6.6	H	-52.59	-54.73	85.94
5726.40	-90.37	-52.57	7.8	H	-44.77	-46.91	78.12
7635.20	-91.41	-54.83	7.8	H	-47.03	-49.17	80.38
9544.00	-92.36	-54.34	7.6	H	-46.74	-48.88	80.09
11452.80	-94.26	-57.90	8.5	H	-49.40	-51.54	82.75
13361.60	-96.02	-58.14	8.8	H	-49.34	-51.48	82.69
15270.40	-98.94	-61.06	9.6	H	-51.46	-53.60	84.81
17179.20	-100.43	-62.60	9.0	H	-53.60	-55.74	86.95
19088.00	-102.11	-65.90	9.3	H	-56.60	-58.74	89.95

Radiated Measurements by Substitution Method:

The EUT was placed on a turntable 3-meters from the receive antenna. The field of maximum intensity was found by rotating the EUT approximately 360 degrees and changing the height of the receive antenna from 1 to 4 meters. The field strength was recorded from a calibrated spectrum analyzer for each channel being tested. A standard gain horn antenna was substituted in place of the EUT. The antenna was fed through a directional coupler and the power at the coupler port was monitored. A signal generator and power amplifier controlled the antenna, and the input level of the antenna was adjusted to the same field strength level as the EUT. The feed point for the antenna was then connected to a calibrated power meter and the power adjusted to read the same as the coupler port previously recorded, this is to account for any mismatch in impedance, which may occur at the horn antenna. The conducted power at the antenna feed point was recorded. The forward conducted power for the horn antenna was then determined and the EIRP level was determined by adding the horn forward conducted power and the antenna gain in dB.

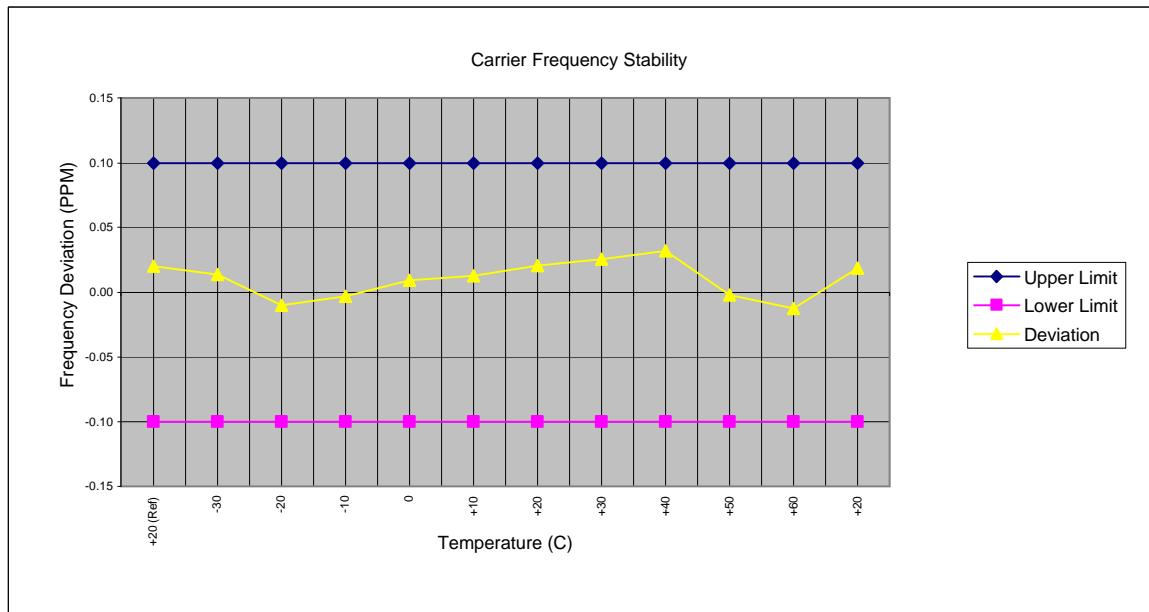
Notes:

1. All other spurious emissions generated from the lowest frequency of the EUT to the tenth harmonic were investigated and found to be below the magnitude of each harmonic level.
2. Spurious emissions more than 20 dB below the limit are reported, even though not required per §2.1051.

### 3.4 FREQUENCY STABILITY - § 24.235

Carrier Frequency (GHz): 1.88  
Channel: 661  
Mode: PCS GSM  
Deviation Limit (PPM): 0.1

Temperature (C)	Voltage (%)	Power (VDC)	Carrier Frequency Deviation		Specification	
			(Hz)	(PPM)	Lower Limit (PPM)	Upper Limit (PPM)
+20 (Ref)	100	3.7	38.00	0.020	0.1	-0.1
-30	100	3.7	26.00	0.014	0.1	-0.1
-20	100	3.7	-19.00	-0.010	0.1	-0.1
-10	100	3.7	-6.00	-0.003	0.1	-0.1
0	100	3.7	18.00	0.010	0.1	-0.1
+10	100	3.7	24.00	0.013	0.1	-0.1
+20	100	3.7	39.00	0.021	0.1	-0.1
+30	100	3.7	48.00	0.026	0.1	-0.1
+40	100	3.7	60.00	0.032	0.1	-0.1
+50	100	3.7	-4.00	-0.002	0.1	-0.1
+60	100	3.7	-24.00	-0.013	0.1	-0.1
+20	Battery Endpoint	3.4	35.00	0.019	0.1	-0.1



#### 4.1 TEST EQUIPMENT

Type	Model	Calibration Due Date	Serial No.
HP Signal Generator	8648D (9kHz-4.0GHz)	Nov 2002	3847A00611
Rohde & Schwarz Signal Generator	SMR40 (10MHz-40GHz)	Nov 2002	835537/022
Gigatronics Power Meter	8652A	Oct 2002	1835272
Gigatronics Power Sensor	80701A (0.05-18GHz)	Sept 2002	1833535
Gigatronics Power Sensor	80701A (0.05-18GHz)	Sept 2002	1833542
Amplifier Research Power Amp.	5S1G4 (5W, 800MHz-4.2GHz)	N/A	26235
Microwave System Amplifier	HP 83017A (0.5-26.5GHz)	N/A	3123A00587
Network Analyzer	HP 8753E (30kHz-3GHz)	Nov 2002	US38433013
Audio Analyzer	HP 8903B	Nov 2002	3729A18691
Modulation Analyzer	HP 8901A	July 2002	3749A07154
Frequency Counter	HP 53181A (3GHz)	May 2002	3736A05175
DC Power Supply	HP E3611A	N/A	KR83015294
GSM Base Station Simulator	Rohde & Schwarz CMD55	May 2002	832474/043
GSM Base Station Simulator	Rohde & Schwarz CMU200	Mar 2003	100162
Multi-Device Controller	EMCO 2090	N/A	9912-1484
Mini Mast	EMCO 2075	N/A	0001-2277
Turntable	EMCO 2080-1.2/1.5	N/A	0002-1002
Double Ridged Horn Antenna	ETS 3115 (1-18GHz)	Oct. 2002	6267
Double Ridged Horn Antenna	ETS 3115 (1-18GHz)	Oct. 2002	6276
Horn Antenna	Chase BBHA 9120-A (0.7-4.8GHz)	Sept 2002	9120A-239
Horn Antenna	Chase BBHA 9120-A (0.7-4.8GHz)	Sept 2002	9120A-240
Roberts Dipoles	Compliance Design (2 sets) 3121C	June 2002	
Spectrum Analyzer	HP 8594E	March 2003	3543A02721
Spectrum Analyzer	HP E4408B	Nov 2002	US39240170
Shielded Screen Room	Lindgren R.F. 18W-2/2-0	N/A	16297
Environmental Chamber	ESPEC ECT-2 (Temperature/Humidity)	Feb 2003	0510154-B

### **5.1 CONCLUSION**

The data in this measurement report shows that the VTECH Mobile (Asia) Limited Model: A700 Single-Mode PCS GSM Phone FCC ID: P5680-5196-00 complies with the requirements of FCC Rule Parts 2 and 24 referenced in this report.

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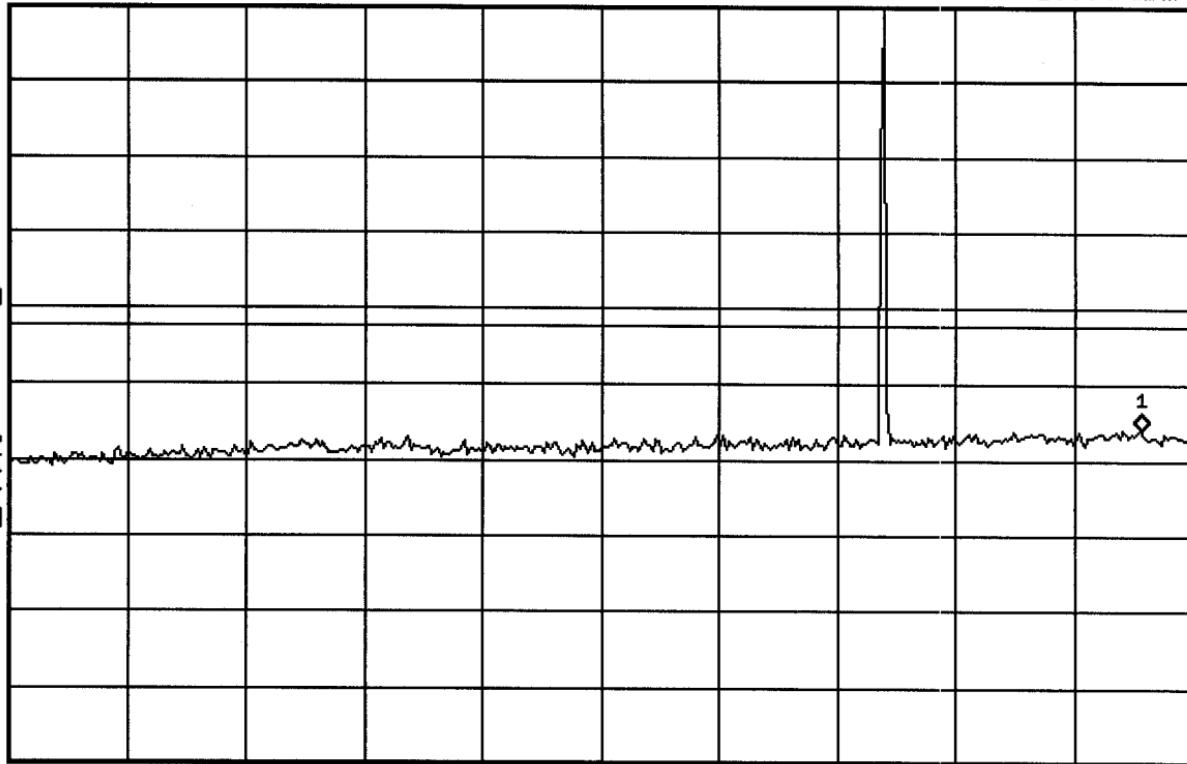
***APPENDIX A - TEST PLOTS***

**hp** 09:02:08 Apr 18, 2002  
VTECH A700 COND SPURS CH 512  
Ref 29.17 dBm Atten 10 dB

Mkr1 2.394 GHz  
-26.64 dBm

Peak  
Log  
10  
dB/  
Offst  
30  
dB  
DI  
-13.0  
dBm

M1 S2  
S3 FC  
AA



Start 10 MHz

#Res BW 1 MHz

VBW 1 MHz

Stop 2.5 GHz

Sweep 6.225 ms



09:02:43 Apr 18, 2002

VTECH A700 COND SPURS CH 512

Ref 29.17 dBm

Atten 10 dB

Mkr1 2.988 GHz

-26.72 dBm

Peak

Log

10

dB/

Offset

30

dB

DI

-13.0

dBm

M1 S2

1

S3 FC

AA

Start 2.5 GHz

#Res BW 1 MHz

VBW 1 MHz

Stop 10 GHz

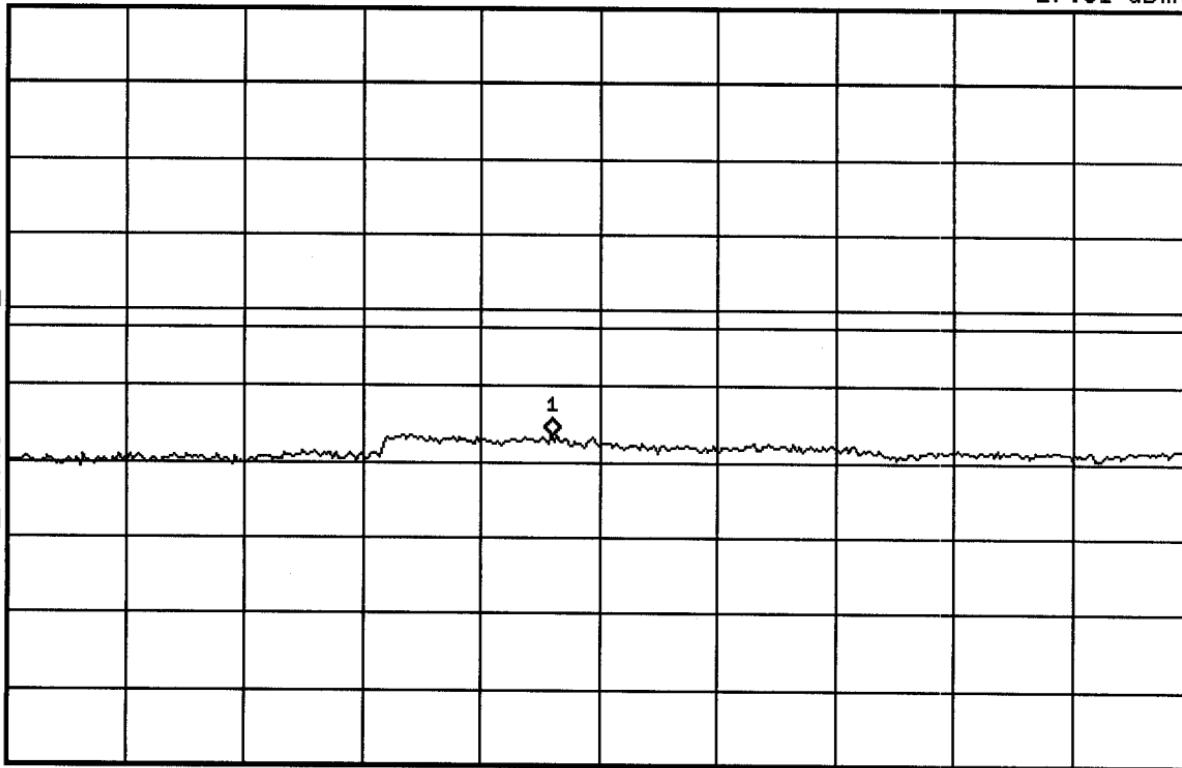
Sweep 18.75 ms

**hp** 09:04:06 Apr 18, 2002  
VTECH A700 COND SPURS CH 512  
Ref 29.17 dBm Atten 10 dB

Mkr1 14.60 GHz  
-27.31 dBm

Peak  
Log  
10  
dB/  
Offst  
30  
dB  
DI  
-13.0  
dBm

M1 S2  
S3 FC  
AA



Start 10 GHz  
\*Res BW 1 MHz

VBW 1 MHz

Stop 20 GHz  
Sweep 100 ms



08:56:23 Apr 18, 2002

VTECH A700 COND SPURS CH 661

Ref 29.3 dBm

Atten 10 dB

Mkr1 2.326 GHz  
-26.49 dBm

Peak

Log

10

dB/

Offst

30

dB

DI

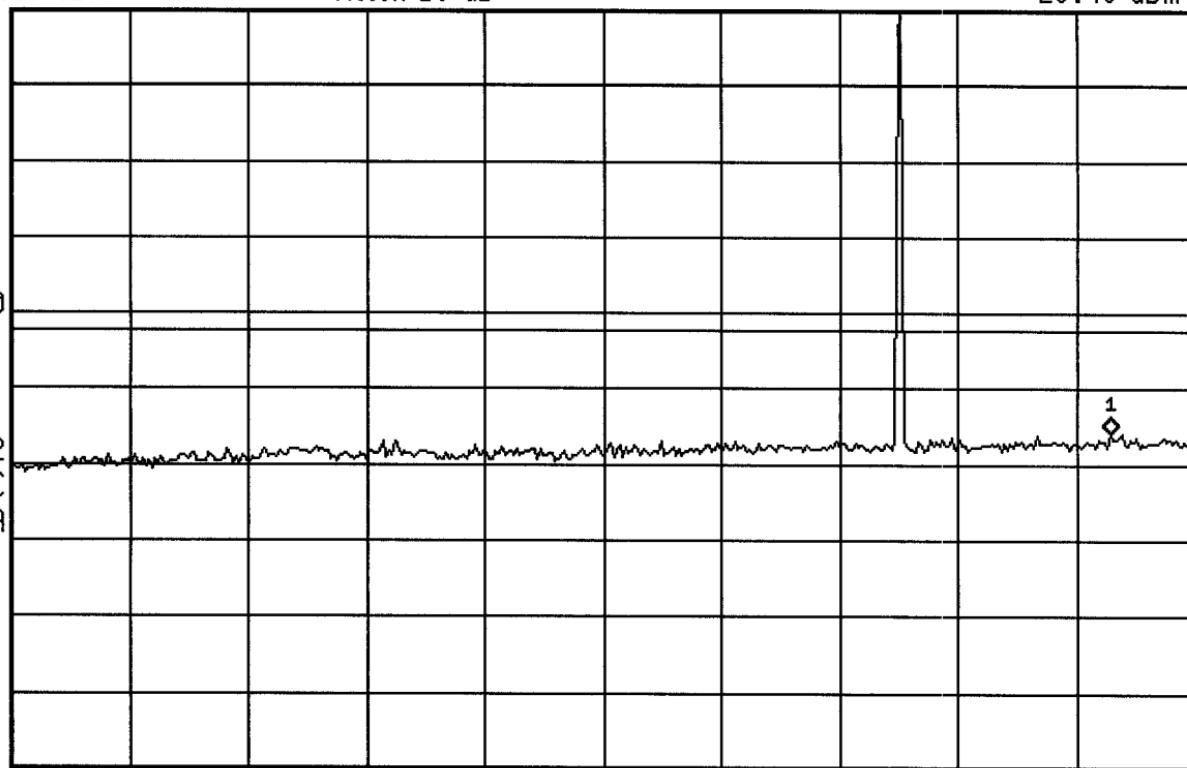
-13.0

dBm

M1 S2

S3 FC

AA



Start 10 MHz

#Res BW 1 MHz

VBW 1 MHz

Stop 2.5 GHz

Sweep 6.225 ms



08:55:08 Apr 18, 2002

VTECH A700 COND SPURS CH 661

Ref 29.3 dBm

Atten 10 dB

Mkr1 2.988 GHz

-26.95 dBm

Peak

Log

10

dB/

Offst

30

dB

DI

-13.0

dBm

M1 S2

1

S3 FC

AA

Start 2.5 GHz

#Res BW 1 MHz

VBW 1 MHz

Stop 10 GHz

Sweep 18.75 ms

**hp**

08:53:42 Apr 18, 2002

VTECH A700 COND SPURS CH 661

Ref 29.3 dBm

Atten 10 dB

Mkr1 13.48 GHz  
-27.77 dBm

Peak

Log

10

dB/

Offst

30

dB

DI

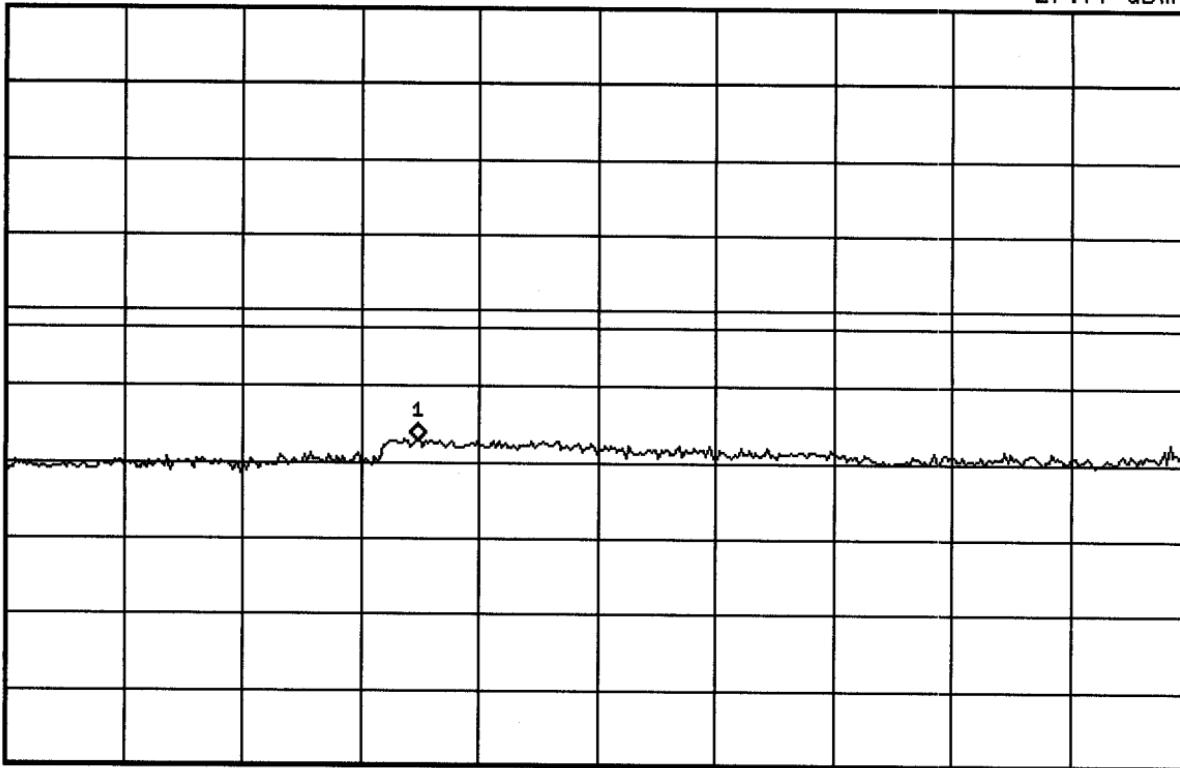
-13.0

dBm

M1 S2

S3 FC

AA



Start 10 GHz

#Res BW 1 MHz

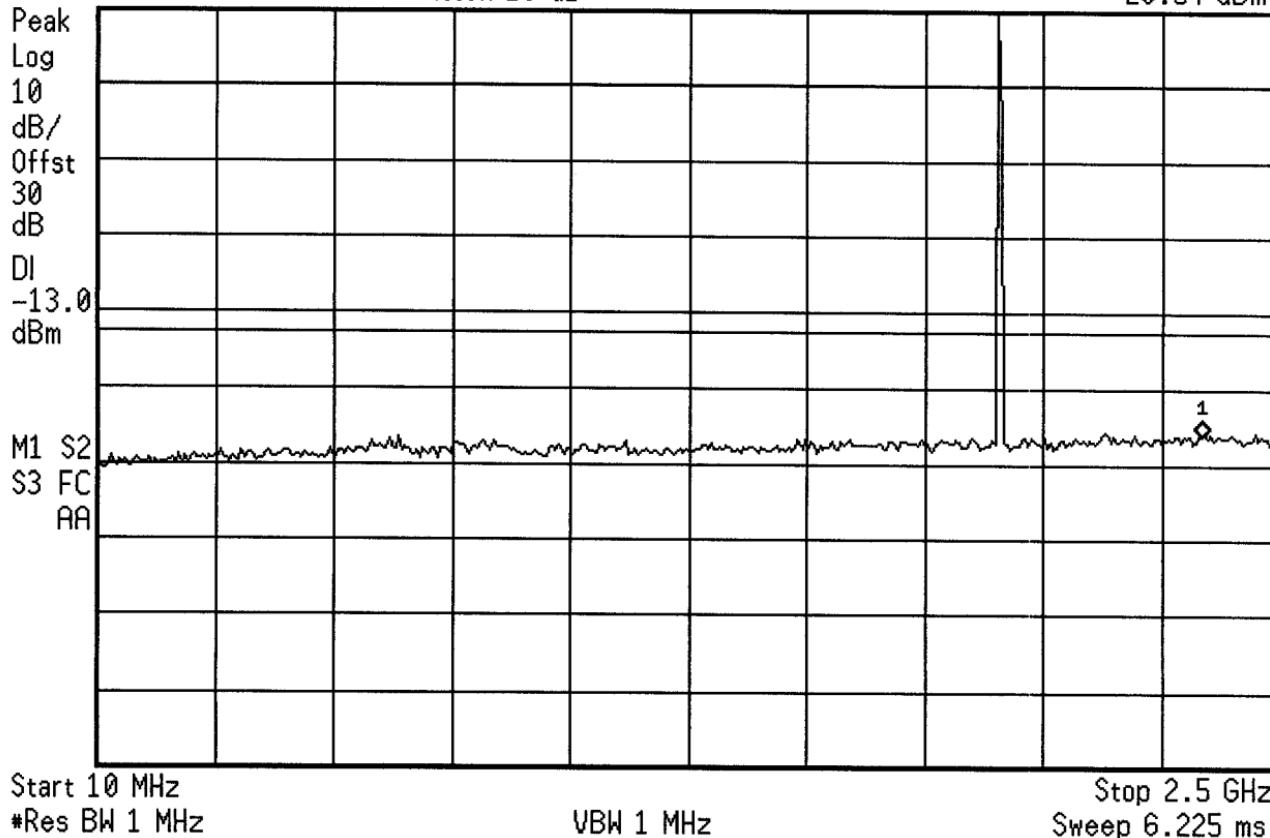
VBW 1 MHz

Stop 20 GHz

Sweep 100 ms

**hp** 08:49:44 Apr 18, 2002  
VTECH A700 COND SPURS CH 810  
Ref 29.49 dBm Atten 10 dB

Mkr1 2.338 GHz  
-26.54 dBm



**[hp]**

08:50:43 Apr 18, 2002

VTECH A700 COND SPURS CH 810

Ref 29.49 dBm

Atten 10 dB

Mkr1 2.988 GHz

-27.53 dBm

Peak

Log

10

dB/

Offst

30

dB

DI

-13.0

dBm

M1 S2

1

S3 FC

AA

Start 2.5 GHz

#Res BW 1 MHz

VBW 1 MHz

Stop 10 GHz

Sweep 18.75 ms

**hp**

08:51:34 Apr 18, 2002

VTECH A700 COND SPURS CH 810

Ref 29.49 dBm

Atten 10 dB

Mkr1 13.58 GHz

-27.28 dBm

Peak

Log

10

dB/

Offst

30

dB

DI

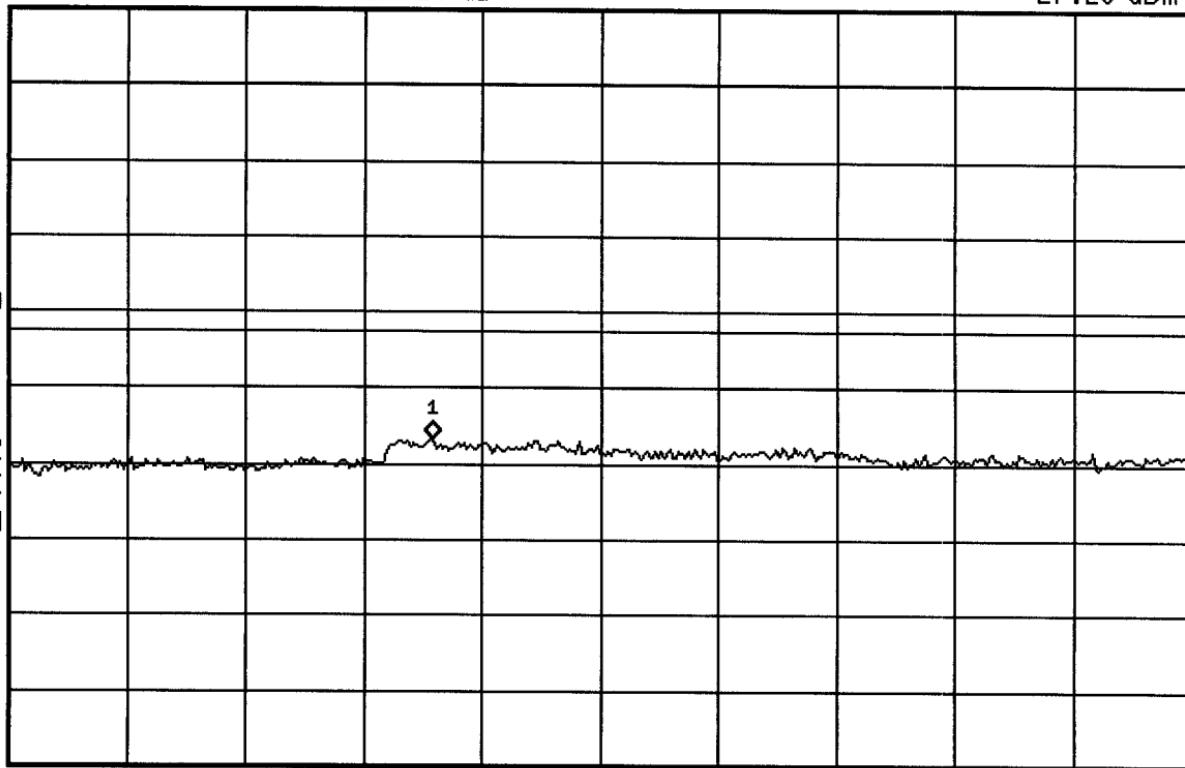
-13.0

dBm

M1 S2

S3 FC

AA



Start 10 GHz

#Res BW 1 MHz

VBW 1 MHz

Stop 20 GHz

Sweep 100 ms

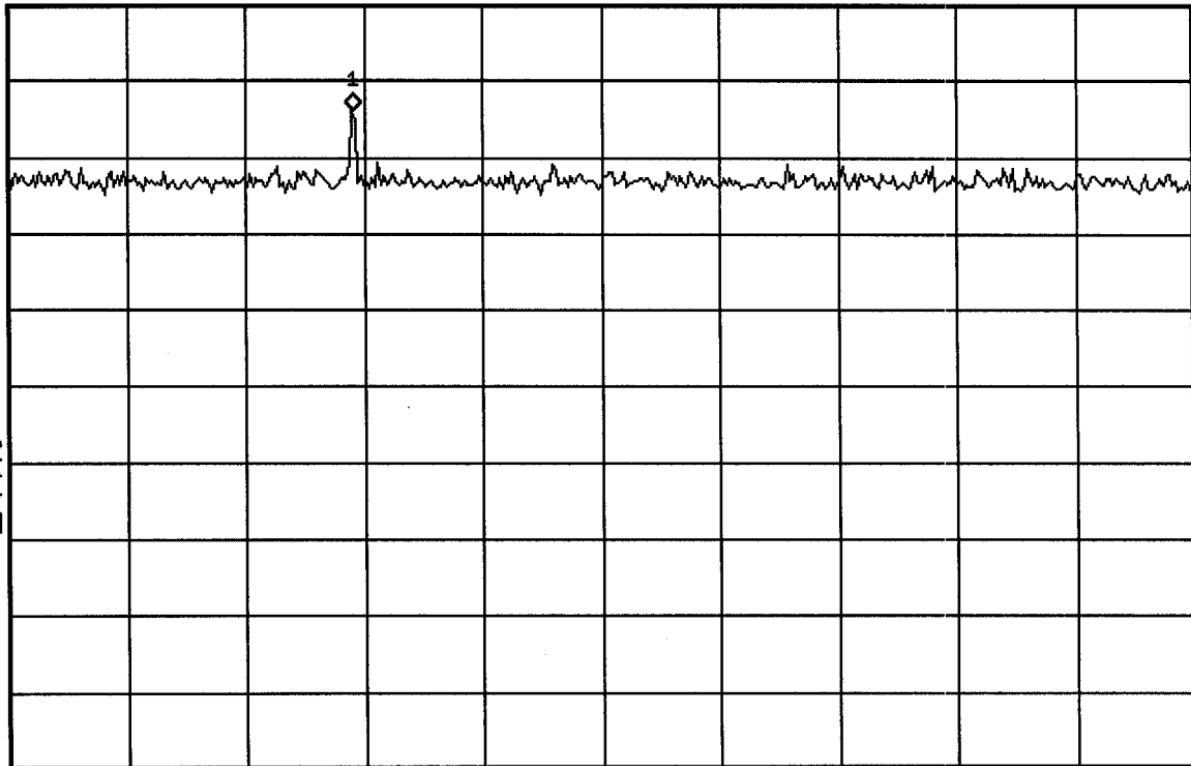
**[hp]** 16:57:06 Apr 18, 2002  
VTECH A700 RECEIVER SPURS  
Ref -66.9 dBm

Mkr1 1.94782 GHz  
-80.77 dBm

#Atten 5 dB

Peak  
Log  
10  
dB/

M1 S2  
S3 FC  
AA



Start 1.931 GHz  
#Res BW 30 kHz

VBW 30 kHz

Stop 1.989 GHz  
Sweep 161.1 ms

**[hp]** 09:14:27 Apr 19, 2002  
VTECH A700 OCCUPIED BANDWIDTH  
Ref 29.3 dBm

Atten 10 dB

▲ Mkr1 250 kHz  
-0.317 dB

Peak

Log

10

dB/

Offst

30

dB

DI

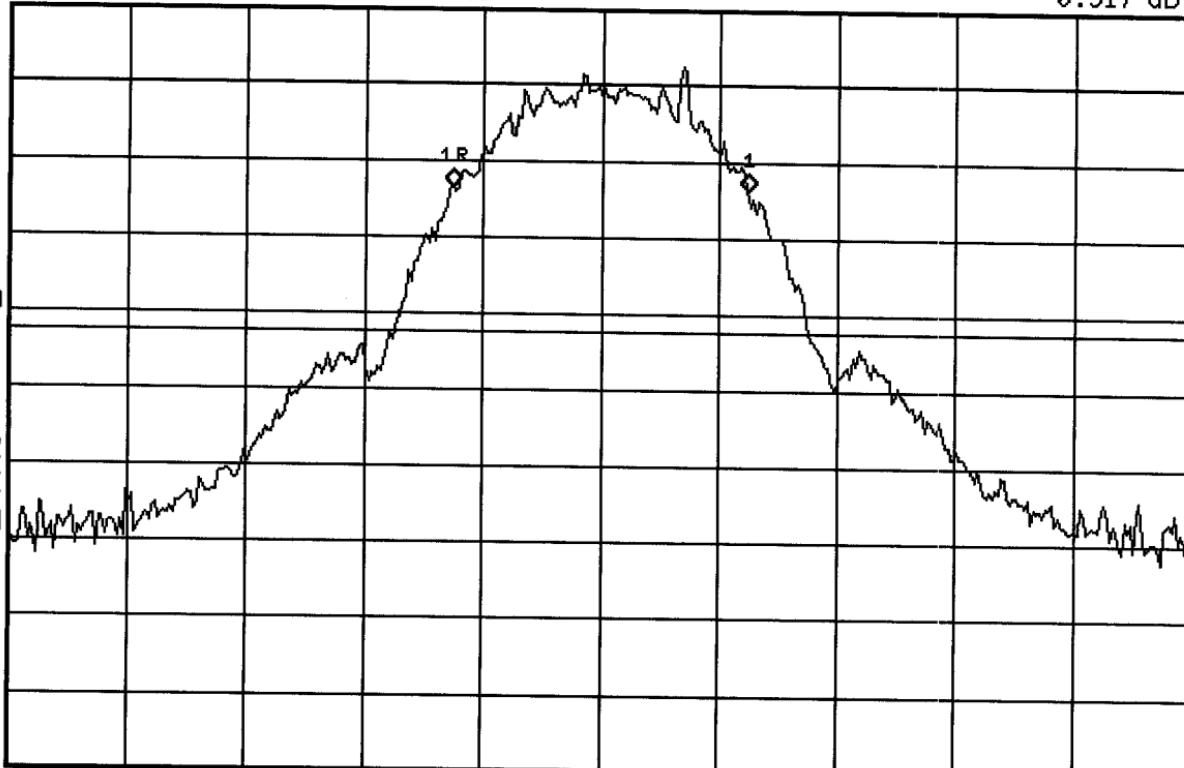
-13.0

dBm

M1 S2

S3 FC

AA



Center 1.88 GHz

#Res BW 3 kHz

VBW 3 kHz

Span 1 MHz

Sweep 277.8 ms



09:19:56 Apr 19, 2002

VTECH A700 PCS GSM MODE CH 512

Ref 29.17 dBm

Atten 10 dB

Peak

Log

10

dB/

Offst

30

dB

DI

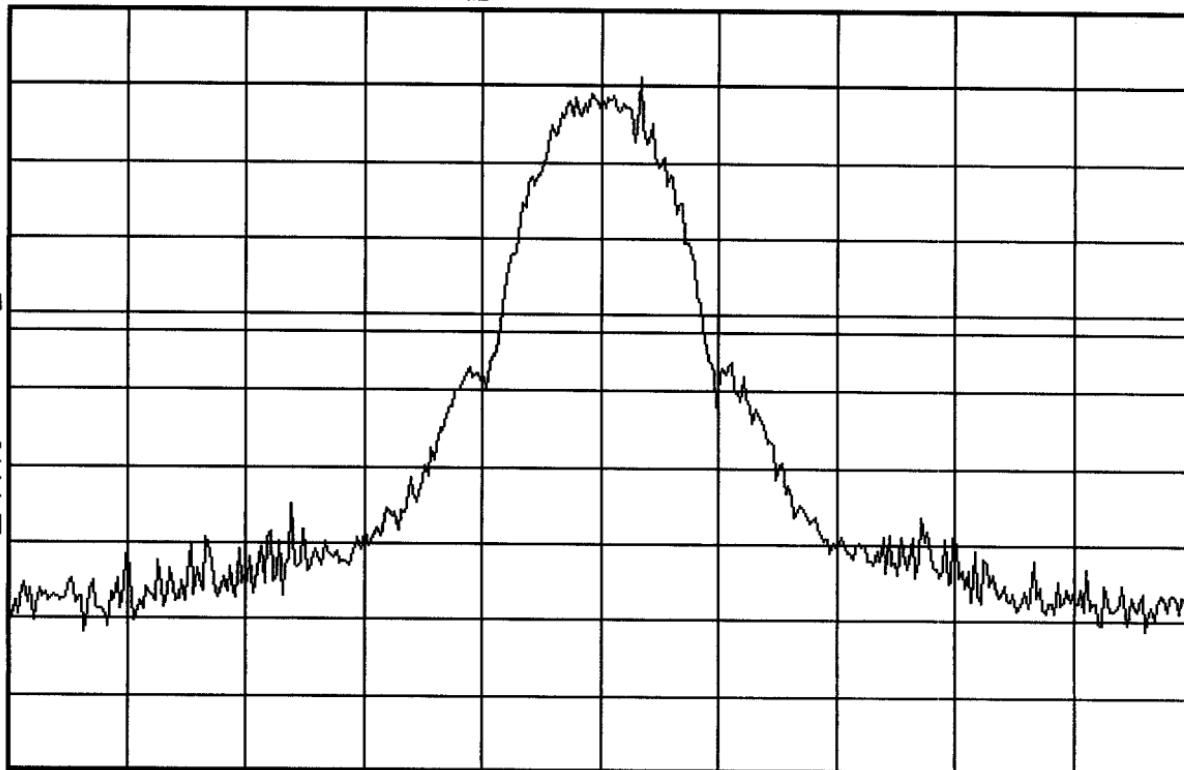
-13.0

dBm

M1 S2

S3 FC

AA



Center 1.85 GHz

\*Res BW 3 kHz

VBW 3 kHz

Span 2 MHz

Sweep 555.6 ms

**hp**

09:18:20 Apr 19, 2002

VTECH A700 PCS GSM MODE CH 661

Ref 29.3 dBm

Atten 10 dB

Peak

Log

10

dB/

0ffst

30

dB

DI

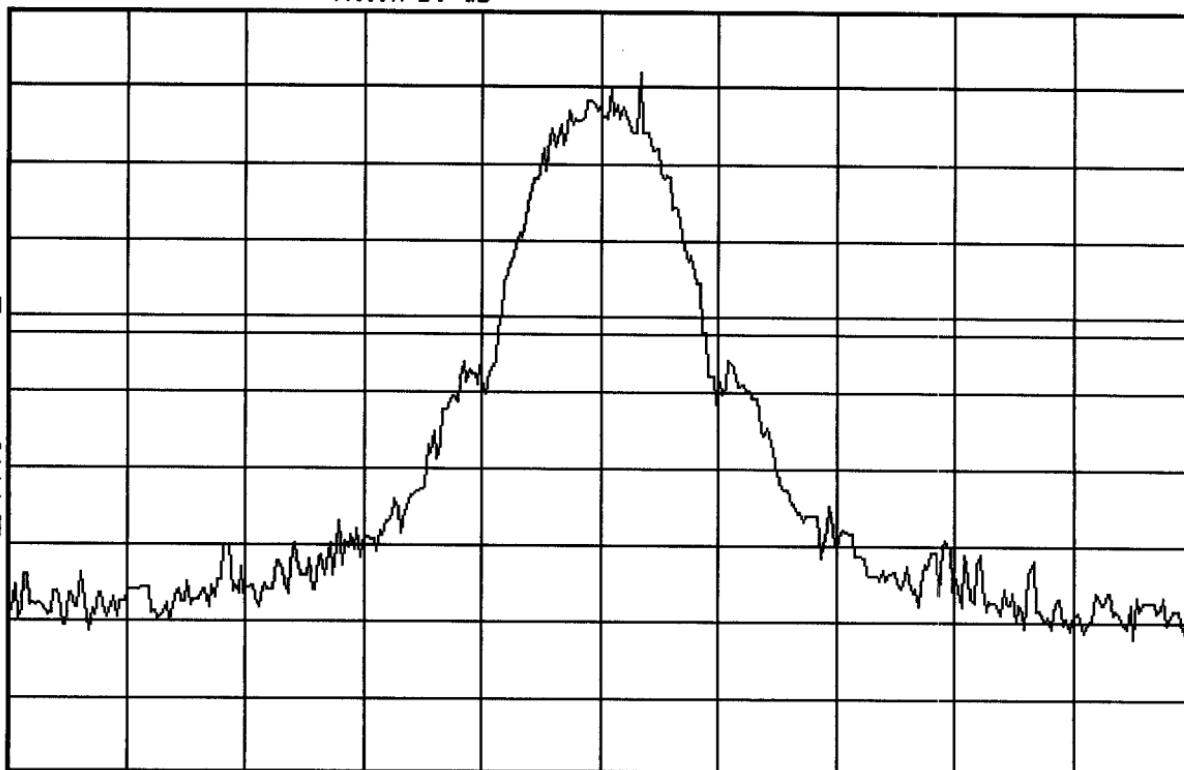
-13.0

dBm

M1 S2

S3 FC

AA



Center 1.88 GHz

#Res BW 3 kHz

VBW 3 kHz

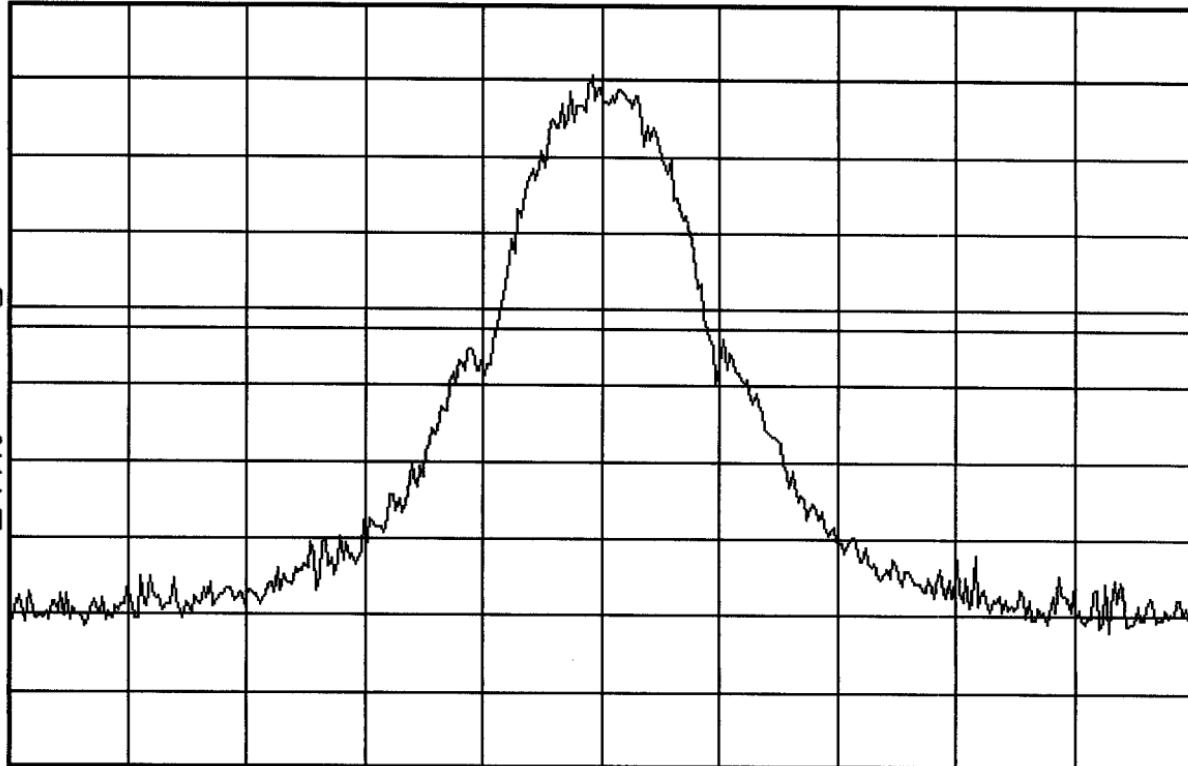
Span 2 MHz

Sweep 555.6 ms

**hp** 09:22:08 Apr 19, 2002  
VTECH A700 PCS GSM MODE CH 810  
Ref 29.49 dBm Atten 10 dB

Peak  
Log  
10  
dB/  
Offst  
30  
dB  
DI  
-13.0  
dBm

M1 S2  
S3 FC  
AA



Center 1.91 GHz  
#Res BW 3 kHz

VBW 3 kHz

Span 2 MHz  
Sweep 555.6 ms



11:19:33 Apr 18, 2002

VTECH A700 BAND EDGE LOW CH

Ref 29.17 dBm

Atten 10 dB

Mkr1 1.850000 GHz

-15.79 dBm

Peak

Log

10

dB/

0ffst

30

dB

DI

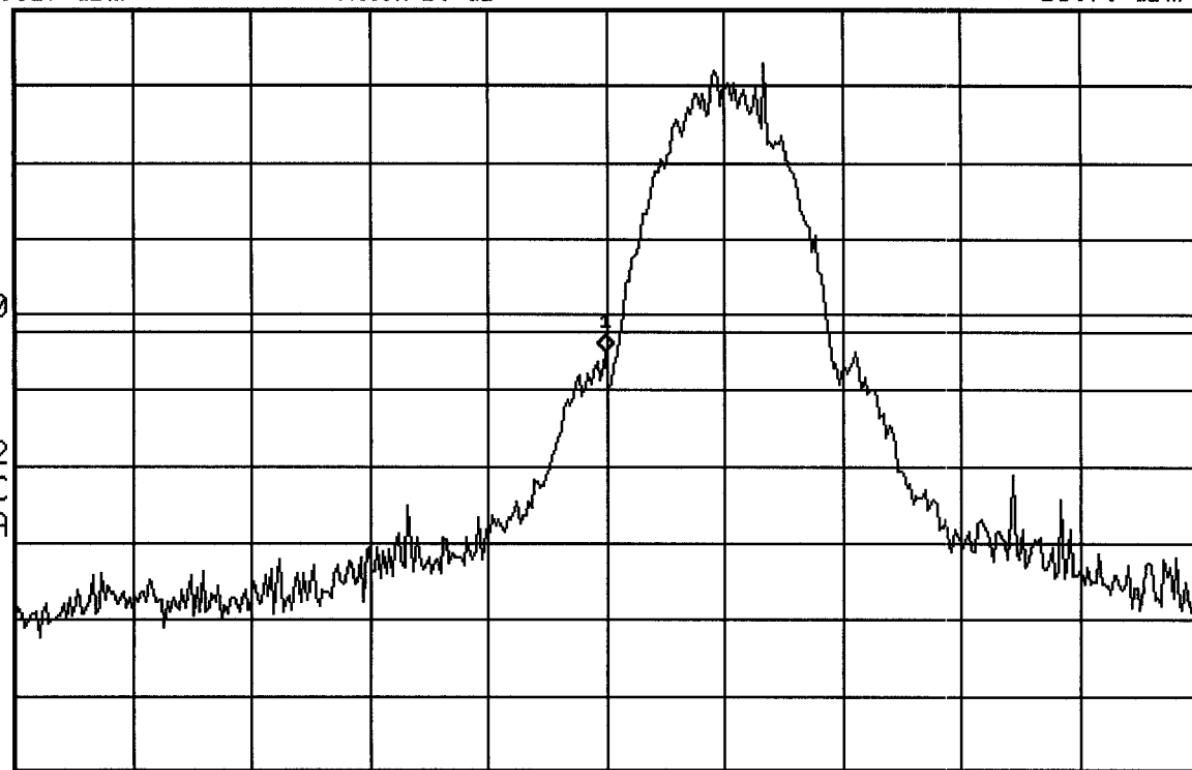
-13.0

dBm

M1 S2

S3 FC

AA



Center 1.85 GHz

#Res BW 3 kHz

VBW 3 kHz

Span 2 MHz

Sweep 555.6 ms

**hp**

11:24:43 Apr 18, 2002

VTECH A700 BAND EDGE HIGH CH

Ref 29.49 dBm

Atten 10 dB

Mkr1 1.910035 GHz

-14.69 dBm

Peak

Log

10

dB/

Offset

30

dB

DI

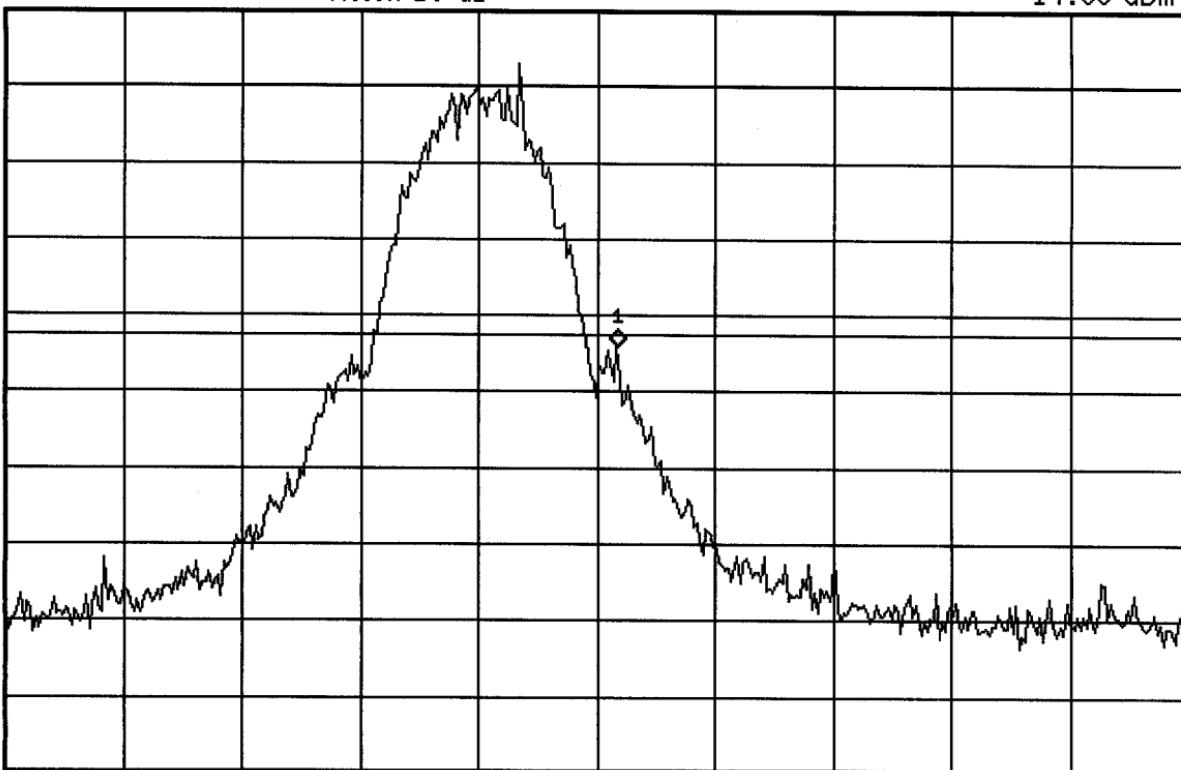
-13.0

dBm

M1 S2

S3 FC

AA



Center 1.91 GHz

#Res BW 3 kHz

VBW 3 kHz

Span 2 MHz

Sweep 555.6 ms