



ADDENDUM TO POWERWAVE TECHNOLOGIES, INC. TEST REPORT FC06-030

FOR THE

FIBER-FED REPEATER/RADIO HEAD, RH300000/100

FCC PART 24 SUBPART E AND RSS-131

COMPLIANCE

DATE OF ISSUE: SEPTEMBER 1, 2006

PREPARED FOR:

Powerwave Technologies, Inc.
1801 E. St. Andrew Place
Santa Ana, CA 92705

P.O. No.: 106623
W.O. No.: 85071

PREPARED BY:

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CKC Laboratories, Inc.
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Date of test: April 13 – August 30, 2006

Report No.: FC06-030A

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ADMINISTRATIVE INFORMATION

DATE OF TEST: April 13 – August 30, 2006

DATE OF RECEIPT: April 13, 2006

FREQUENCY RANGE TESTED: 9 kHz-20 GHz

MANUFACTURER: Powerwave Technologies, Inc.
1801 E. St. Andrew Place
Santa Ana, CA 92705

REPRESENTATIVE: Jeffrey Dale

TEST LOCATION: CKC Laboratories, Inc.
110 Olinda Place
Brea, CA 92823

TEST METHOD: FCC Part 24, RSS-131 and RSS-GEN

PURPOSE OF TEST: To demonstrate the compliance of the Fiber-Fed Repeater/Radio Head, RH300000/100 with the requirements for FCC Part 24 and RSS-131 devices.
Addendum A adds RF power and gain linearity for RSS-131 with new testing.

FCC TO CANADA STANDARD CORRELATION MATRIX

Canadian Standard	Canadian Section	FCC Standard	FCC Section	Test Description
RSS 131	5.4	N/A	N/A	External Controls
RSS 131	5.5	47 CFR	1.1307	RF Exposure
RSS 131	6.1	N/A	N/A	Passband Gain and Bandwidth
RSS 131	6.2	47 CFR	24.232	RF Power Output
RSS 131	6.3	TIA/EIA	603	Non-Linearity (Intermodulation Attenuation)
RSS 131	6.4	47 CFR	24.238	Spurious Emissions Limitations
RSS 131	6.5	N/A	N/A	Frequency Stability (Band Translators)
	IC 3172-A		90473	Site File No.

CONDITIONS FOR COMPLIANCE

No modifications to the EUT were necessary to comply.

APPROVALS

Steve Behm, Director of Engineering Services

QUALITY ASSURANCE:

TEST PERSONNEL:




Joyce Walker, Quality Assurance Administrative Manager

Eddie Wong, EMC Engineer



EQUIPMENT UNDER TEST (EUT) DESCRIPTION

The customer declares the EUT tested by CKC Laboratories was representative of a production unit.

EQUIPMENT UNDER TEST

Fiber-Fed Repeater/Radio Head

Manuf: Powerwave Technologies, Inc.
Model: RH300000/100
Serial: NA
FCC ID: pending

PERIPHERAL DEVICES

The EUT was tested with the following peripheral device(s):

Optical Converter Module

Manuf: Powerwave Technologies, Inc.
Model: NA
Serial: NA

Power Meter

Manuf: Agilent
Model: E4419A
Serial: US38260914

ESG

Manuf: Agilent
Model: E4432B
Serial: US40051459

ESG

Manuf: Agilent
Model: E4433B
Serial: US40051477

ESG

Manuf: Agilent
Model: E4433B
Serial: US40051853

TEMPERATURE AND HUMIDITY DURING TESTING

The temperature during testing was within +15°C and + 35°C.
The relative humidity was between 20% and 75%.

FCC 2.1033(c)(3) USER'S MANUAL

The necessary information is contained in a separate document.

FCC 2.1033 (c)(4) TYPE OF EMISSIONS

DXW, GXW, G7W, F9W.

FCC 2.1033 (c)(5) FREQUENCY RANGE

1930-1990 MHz.

FCC 2.1033 (c)(6) OPERATING POWER

1 Watt.

FCC 2.1033 (c)(7) MAXIMUM POWER RATING

100 Watts.

FCC 2.1033 (c)(8) DC VOLTAGES

The necessary information is contained in a separate document.

FCC 2.1033 (c)(9) TUNE-UP PROCEDURE

The necessary information is contained in a separate document.

FCC 2.1033(c)(10) SCHEMATICS AND CIRCUITRY DESCRIPTION

The necessary information is contained in a separate document.

FCC 2.1033(c)(11) LABEL AND PLACEMENT

The necessary information is contained in a separate document.

FCC 2.1033(c)(12) SUBMITTAL PHOTOS

The necessary information is contained in a separate document.

FCC 2.1033 (c)(13) MODULATION INFORMATION

CDMA, EDGE, GSM, TDMA/NACD, WCDMA

FCC 2.1033(c)(14)/2.104624.232/ - RF POWER OUTPUT

§24.232 Power and antenna height limits.

(a) Base stations are limited to 1640 watts peak equivalent isotropically radiated power (e.i.r.p.) with an antenna height up to 300 meters HAAT. See 24.53 for HAAT calculation method. Base station antenna heights may exceed 300 meters with a corresponding reduction in power; see Table 1 of this section. **In no case may the peak output power of a base station transmitter exceed 100 watts.** The service area boundary limit and microwave protection criteria specified in §§24.236 and 24.237 apply.

Table 1: Reduced Power for Base Station Antenna Heights Over 300 Meters

<i>HAAT in meters</i>	<i>Maximum E.I.R.P. (watts)</i>
6300	1640
6500	1070
61000	490
61500	270
62000	160

The EUT is a RF amplifier. The manufacture does not provide an antenna for sale with the product, hence EIRP is not measured nor calculated. The end user of this product is to exercise proper engineering judgement to select the appropriate antenna to comply with the EIRP limitation set forth by FCC24.23a (a).

The RF power of the EUT was measured at the antenna port. The measurement satisfies the above requirement by demonstrating the measured power is below 100 watts.

Test setup: EUT is a remote radio head with multichannel capability and may otherwise be classified as a repeater/extender. EUT operates on 1930-1990 MHz. Support equipment is used to convert RF from signal generator to fiber for input to the EUT. The RF output port of the EUT is terminated in a connected to a RF Power meter for the measurement of RF Output power.

Frequency	Modulation	RF Output Power
1930MHz	EDGE	1 Watt
1960MHz	EDGE	1 Watt
1990MHz	EDGE	1 Watt

Frequency	Modulation	RF Output Power
1930MHz	GSM	1 Watt
1960MHz	GSM	1 Watt
1990MHz	GSM	1 Watt

Frequency	Modulation	RF Output Power
1930MHz	TDMA/NACD	1 Watt
1960MHz	TDMA/NACD	1 Watt
1990MHz	TDMA/NACD	1 Watt

Frequency	Modulation	RF Output Power
1930MHz	CDMA	1 Watt
1960MHz	CDMA	1 Watt
1990MHz	CDMA	1 Watt

Frequency	Modulation	RF Output Power
1930MHz	WCDMA	1 Watt
1960MHz	WCDMA	1 Watt
1990MHz	WCDMA	1 Watt

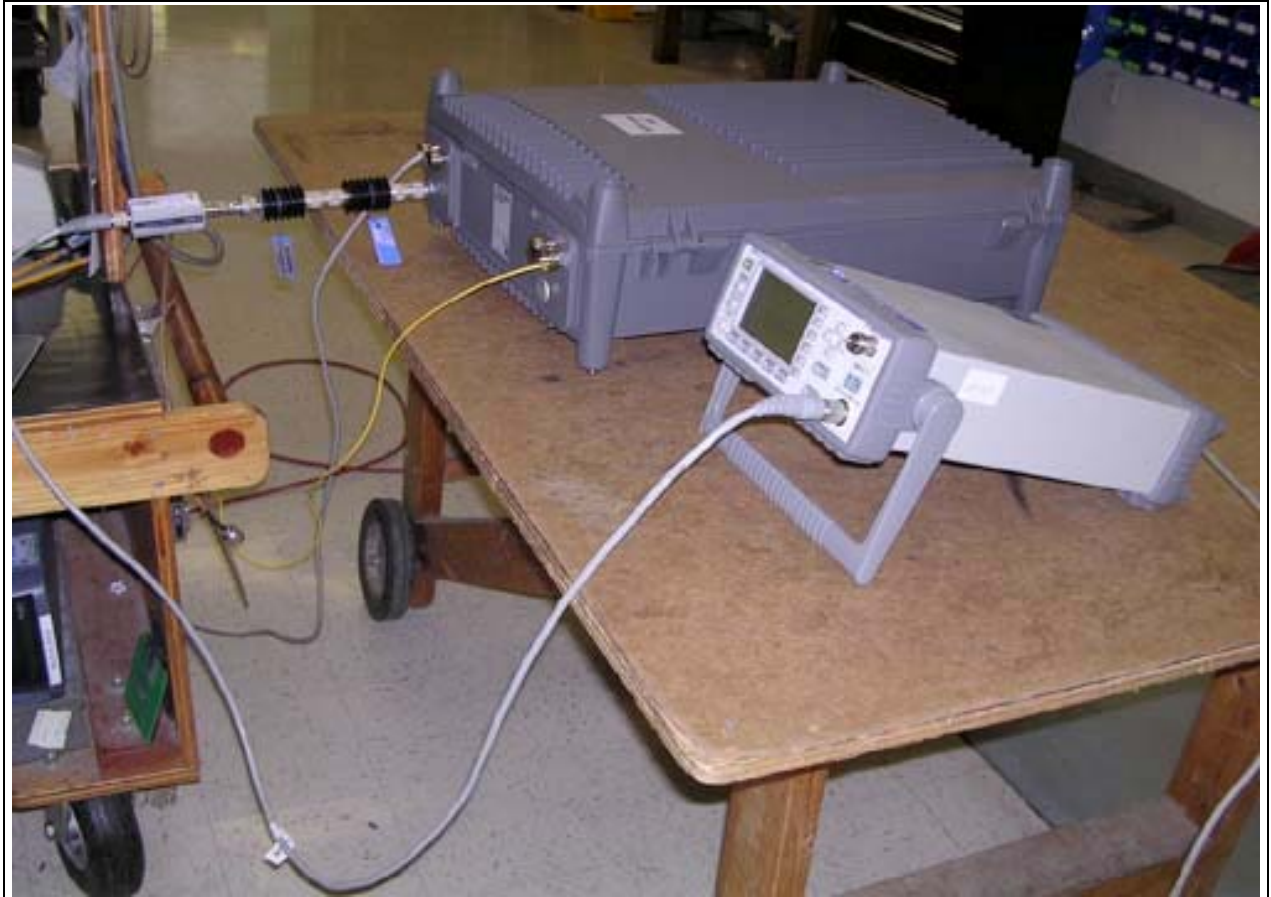
Conclusion

As indicated above, each single channel does not exceed the 100 Watt peak power limit.

Test Equipment

Equipment	Asset #	Manufacturer	Model #	Serial #	Cal Date	Cal Due
RF Power meter	02778	HP	EPM-441A	GB37170458	012706	012708
Power Sensor	02777	HP	E4412A	MY41499662	012706	012708

PHOTOGRAPH SHOWING RF OUTPUT POWER

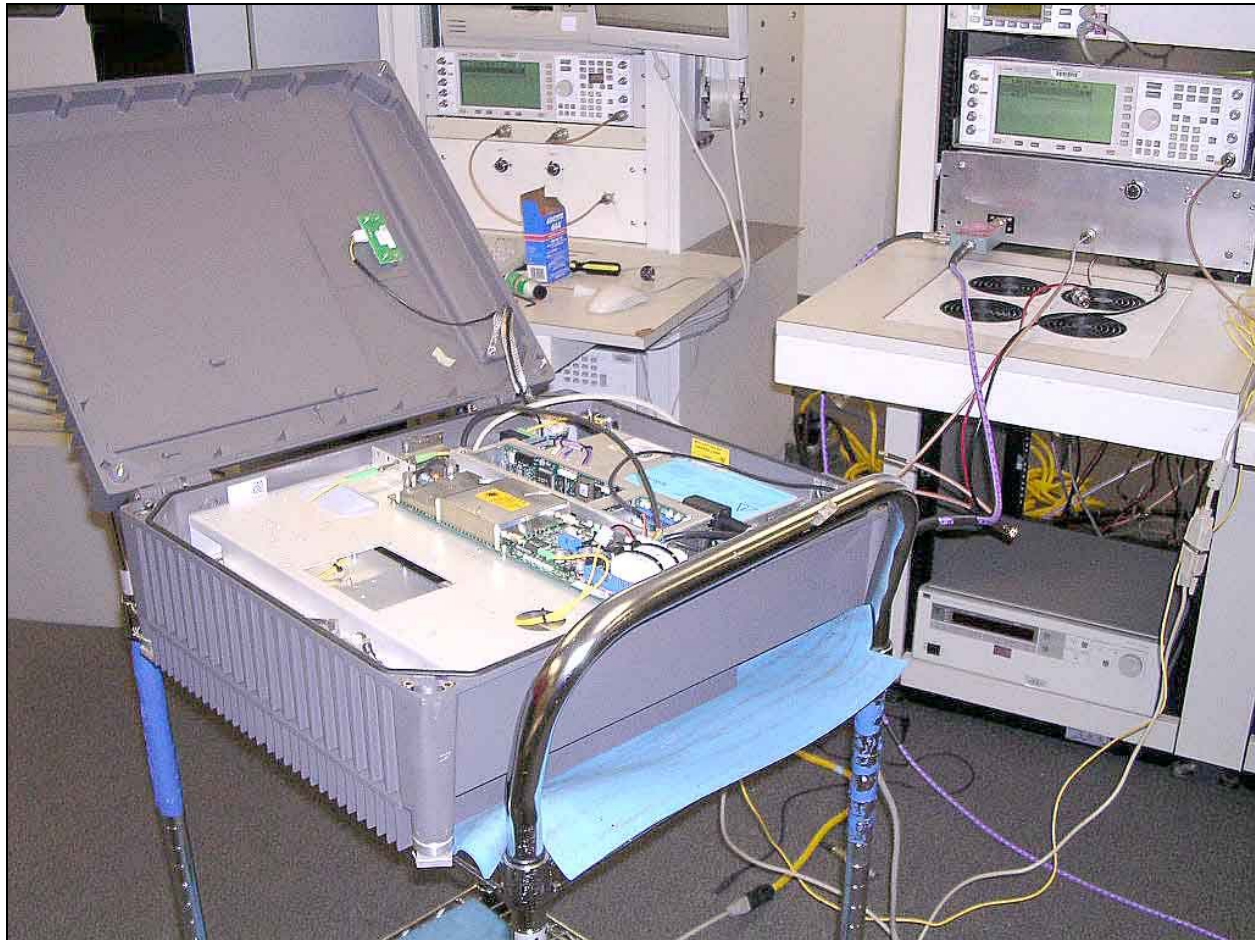


RSS-131 - RF POWER OUTPUT

Test setup: Two CW signals from two signal generators were combined and injected into the RF input port of the EUT. A spectrum analyzer was utilized for Output power measurement at the RF Output port. The Output power was determined when third or Forth order modulation reached -43dB within the passband of the EUT.

P_1 (at $p_3 = -13\text{dBm}$) = 26.8 dBm
 $P_{\text{mean}} = P_1 + 3 = 26.8 + 3 = 29.8 \text{ dBm (0.95W)}$

PHOTOGRAPH SHOWING RF POWER OUTPUT



Test Equipment

Equipment	Asset #	Manufacturer	Model #	Serial #	Cal Date	Cal Due
Spectrum Analyzer	02467	Agilent	E7405A	US40240225	032205	032207

FCC 2.1033(c)(14)/2.1051/24.238 - SPURIOUS EMISSIONS AT ANTENNA TERMINAL

Test Conditions: The EUT is placed on the wooden table. The EUT is a remote radio head with multichannel capability and may otherwise be classified as a repeater/extender. EUT operates on 1930-1990 MHz. Support equipment is used to convert RF from signal generator to fiber for input to the EUT. The RF output port of the EUT is terminated in a shielded 50 ohm load. EUT does not demodulate the input signal. RF signal measured at the antenna port. Modulation: GSM, CDMA, WCDMA, TDMA, EDGE. Power: 1 Watt. Frequency: 1930, 1960, 1990 MHz. Frequency range of measurement = 9 kHz - 20 GHz. Frequency 9 kHz - 150 kHz RBW=200 Hz, VBW=200 Hz; 150 kHz - 30 MHz RBW=9 kHz, VBW=9 kHz; 30 MHz - 1000 MHz RBW=120 kHz, VBW=120 kHz; 1000 MHz - 20000 MHz RBW=1 MHz, VBW=1 MHz. Detection was performed with reduced resolution bandwidth or with at the aid of High Pass Filter at the required resolution bandwidth. **No Emissions found.**

Test Equipment

Equipment	Asset #	Manufacturer	Model #	Serial #	Cal Date	Cal Due
Spectrum Analyzer	02672	Agilent	E4446A	US44300438	011405	011407





FCC 2.1033(c)(14)/2.1053/24.238 - FIELD STRENGTH OF SPURIOUS RADIATION

Test Location: CKC Laboratories, Inc. • 110. N. Olinda Place. • Brea, CA 92821 • (714) 993-6112

Customer: **Powerwave Technologies, Inc.**
 Specification: **FCC 24.238 Radiated Spurious Emission**
 Work Order #: **85071** Date: 4/24/2006
 Test Type: **Radiated Scan** Time: 13:37:36
 Equipment: **Fiber-Fed Repeater/Radio Head** Sequence#: 1
 Manufacturer: Powerwave Technologies, Inc. Tested By: E. Wong
 Model: RH300000/100
 S/N: NA

Equipment Under Test (* = EUT):

Function	Manufacturer	Model #	S/N
Fiber-Fed Repeater/Radio Head*	Powerwave Technologies, Inc.	RH300000/100	NA

Support Devices:

Function	Manufacturer	Model #	S/N
Optical Converter Module	Powerwave Technologies, Inc.	NA	NA
Power Meter	Agilent	E4419A	US38260914
ESG	Agilent	E4432B	US40051459
ESG	Agilent	E4433B	US40051477
ESG	Agilent	E4433B	US40051853

Test Conditions / Notes:

The EUT is placed on the wooden table, the EUT is a remote radio head with multichannel capability and may otherwise be classified as a repeater/extender. EUT operates on 1930-1990 MHz. Support equipment is used to convert RF from signal generator to fiber for input to the EUT. The RF output port of the EUT is terminated in a shielded 50 ohm load. EUT does not demodulate the input signal. Modulation: EDGE. Power: 1 Watt. Frequency: 1930 MHz, 1960 MHz and 1990 MHz. Test data represents the worst case of all modulation types. **No EUT signals detected within 20 dB of the limit.** Frequency range of measurement = 9 kHz - 20 GHz. Frequency 9 kHz - 150 kHz RBW=200 Hz, VBW=200 Hz; 150 kHz - 30 MHz RBW=9 kHz, VBW=9 kHz; 30 MHz - 1000 MHz RBW=120 kHz, VBW=120 kHz; 1000 MHz - 20000 MHz RBW=1 MHz, VBW=1 MHz.

Operating Frequency: 1930 MHz -19906 MHz
 Channels: Low, Mid and High
 Highest Measured Output Power: 30.00 dBm = 1 Watts
 Distance: 3 meters
 Limit: $43+10\text{Log}(P)$ 43.00 dBc

Freq. (MHz)	Reference Level (dBm)	Antenna Polarity (H/V)	dBc
3,860.00	-44.7	Vert	74.70
3,860.00	-51.7	Horiz	81.70
5,790.00	-54.4	Vert	84.40
5,790.00	-55	Horiz	85.00
3,920.00	-44.7	Vert	74.70
3,920.00	-47.1	Horiz	77.10
5,880.00	-53.7	Horiz	83.70
5,880.00	-54	Vert	84.00
3,979.97	-41.3	Vert	71.30
3,980.00	-44.9	Horiz	74.90
5,741.27	-48.7	Vert	78.70
5,970.00	-53.3	Horiz	83.30

Test Equipment

Equipment	Asset #	Manufacturer	Model #	Serial #	Cal Date	Cal Due
Spectrum Analyzer	02672	Agilent	E4446A	US44300438	011405	011407
9kHz-30MHz						
Loop Antenna	00314	EMCO	6502	2014	062804	062806
30 – 1000MHz						
Bilog Antenna	01995	Chase	CBL6111C	2451	020206	020208
Pre-amp	00309	HP	8447D	1937A02548	071404	071406
Antenna cable	P05198	Belden	8268 (RG-214)	Cable#15	010305	010307
Pre-amp to SA cable	P05050	Pasternack	RG223/U	Cable#10	051605	051607
1 GHz- 18 GHz						
Horn Antenna	00849	EMCO	3115	6246	072204	072206
Microwave Pre-amp	00786	HP	83017A	3123A00281	081204	081206
Heliacx Antenna cable	P04384	Andrew	LDF1-50	Cable#20	091604	091606
24" SMA Cable (White)	P05204	Pasterneck	35591-48	1-40GHz_white	020805	020807
18-20 GHz						
18-26.5 GHz Horn Antenna	02112	HP	84125- 80008	3643A00027	110504	110506



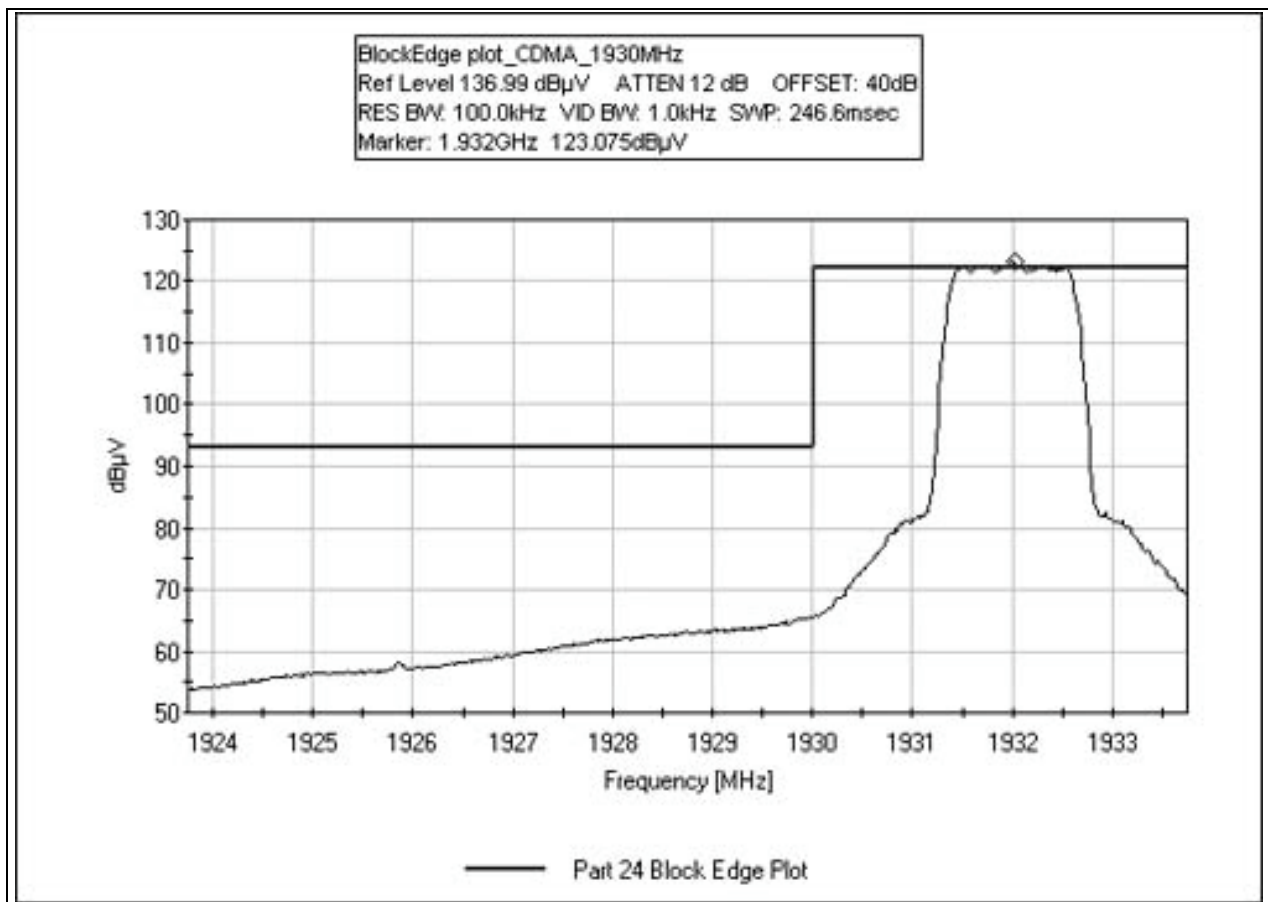
Radiated Emissions - Front View



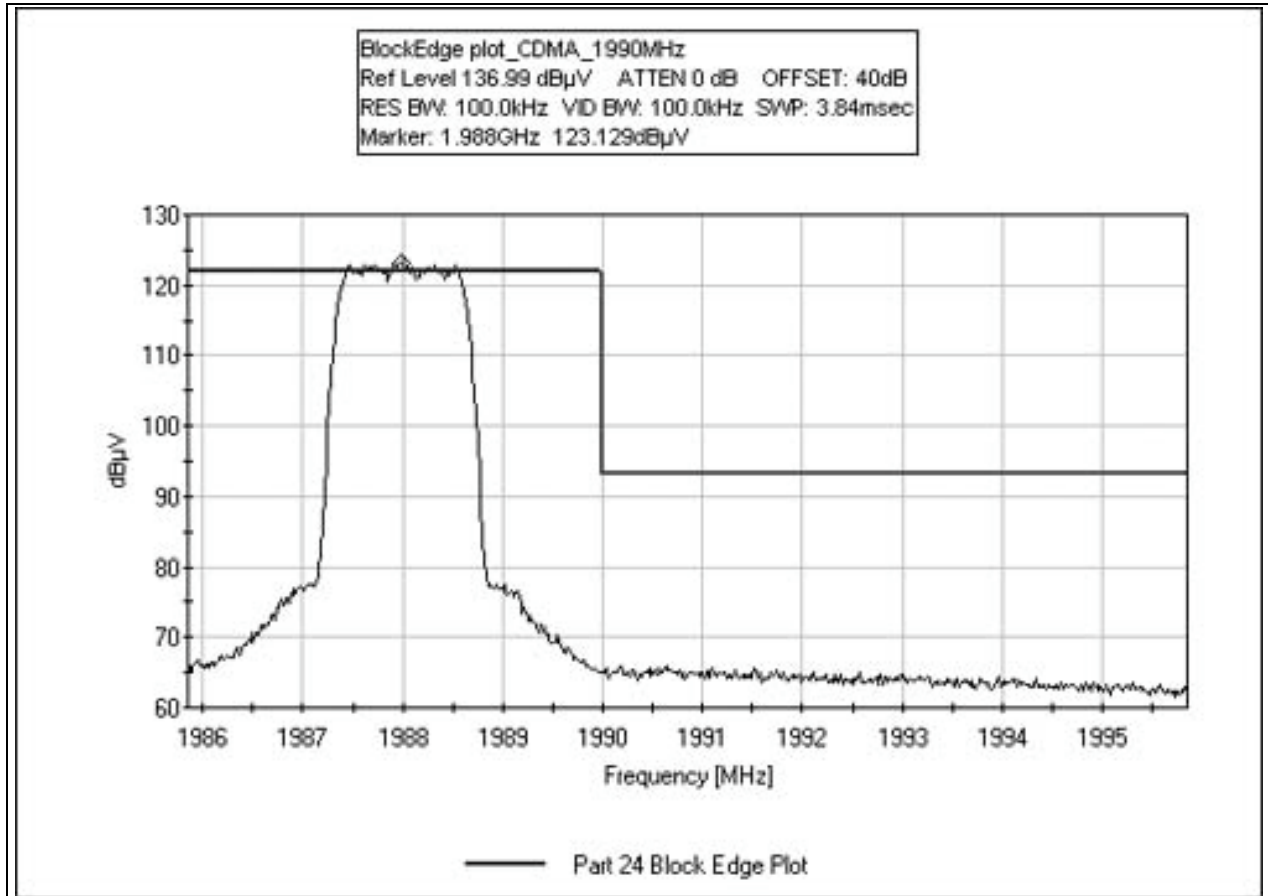
Radiated Emissions - Back View

BLOCKEDGE PLOT - CDMA 1930MHz

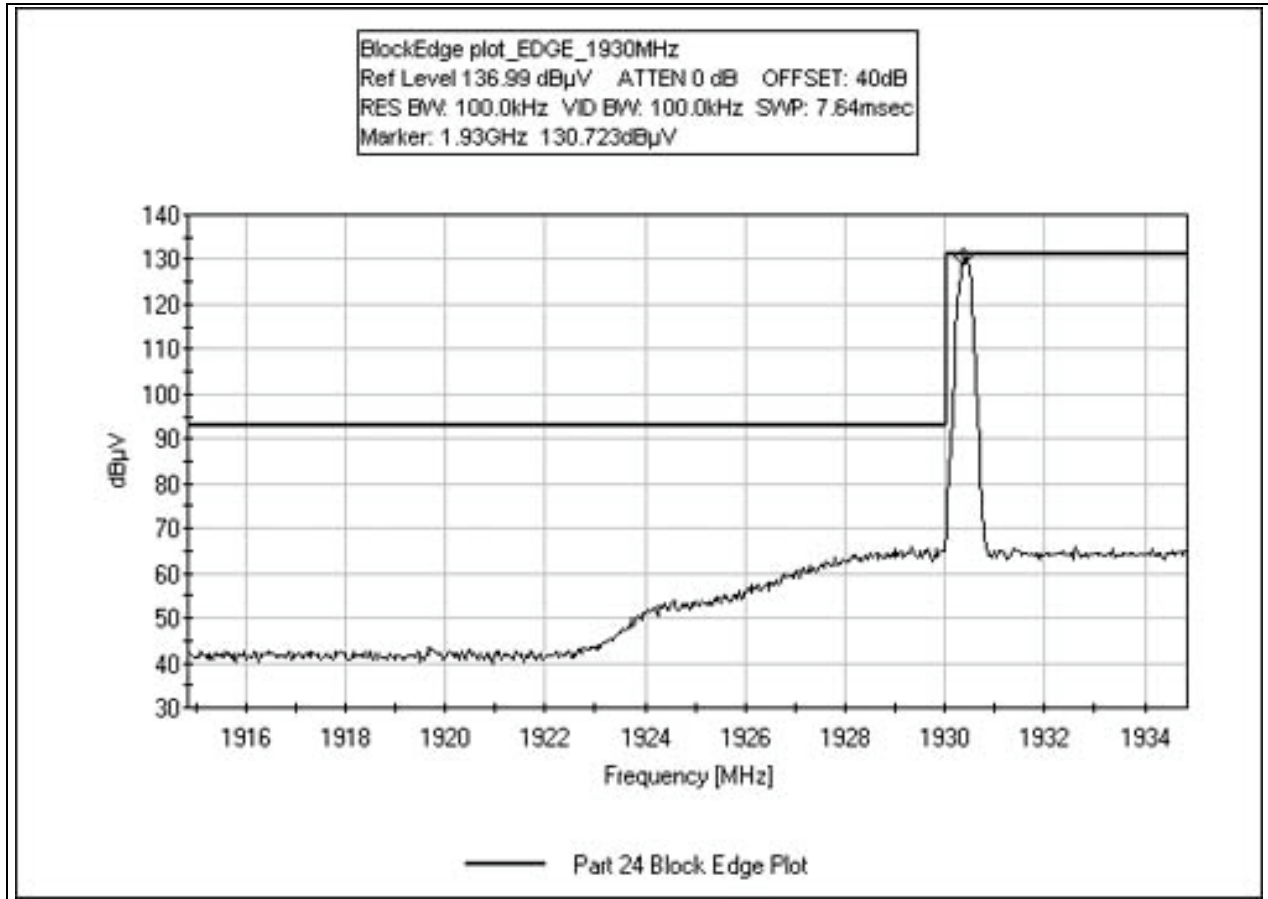
Test Conditions: The EUT is placed on the wooden table, the EUT is a remote radio head with multichannel capability and may otherwise be classified as a repeater/extender. EUT operates on 1930-1990 MHz. Support equipment is used to convert RF from signal generator to fiber for input to the EUT. The RF output port of the EUT is terminated in a shielded 50 ohm load. EUT does not demodulate the input signal. RF signal measured at the antenna port. Modulation: GSM, CDMA, WCDMA, TDMA, EDGE. Power: 1 Watt. Frequency: 1930, 1960, 1990 MHz.



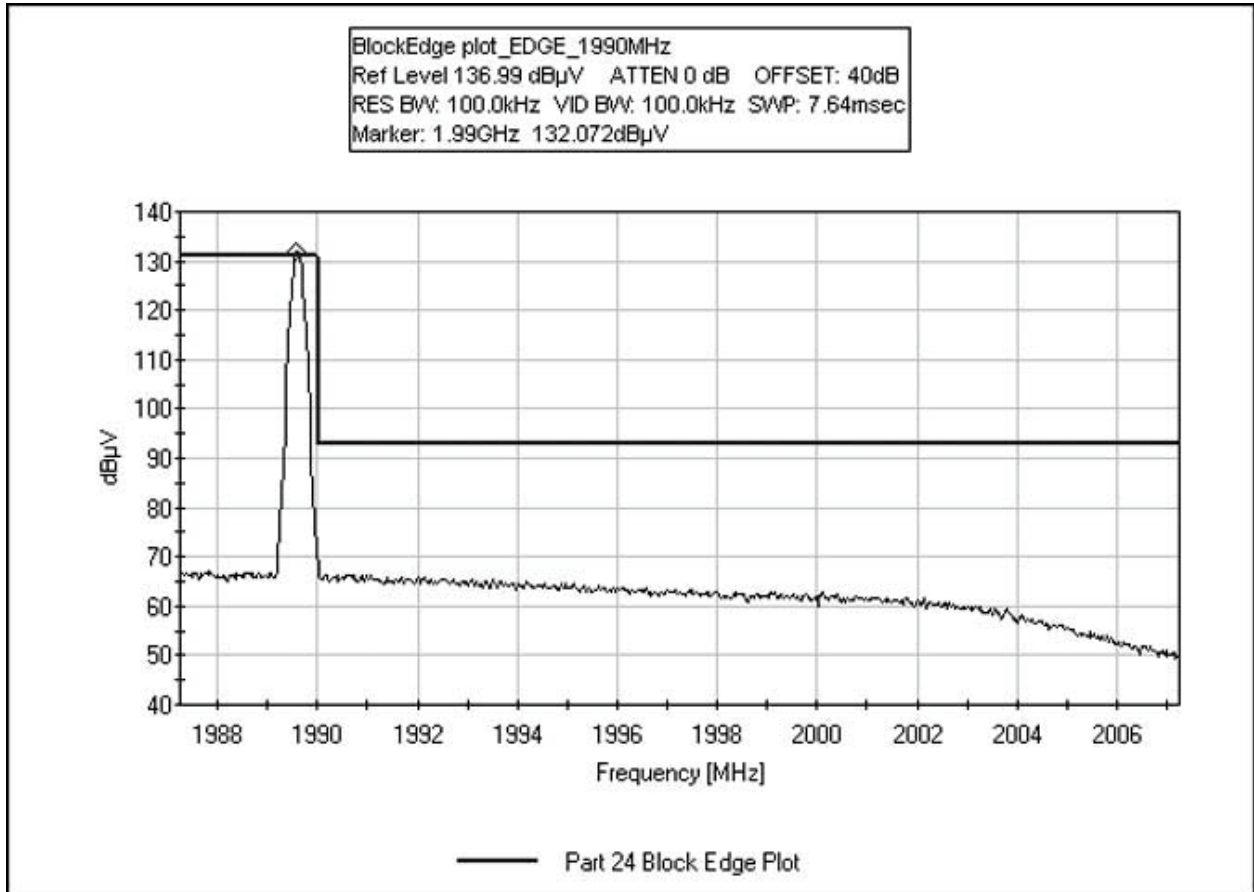
BLOCKEDGE PLOT - CDMA 1990MHz



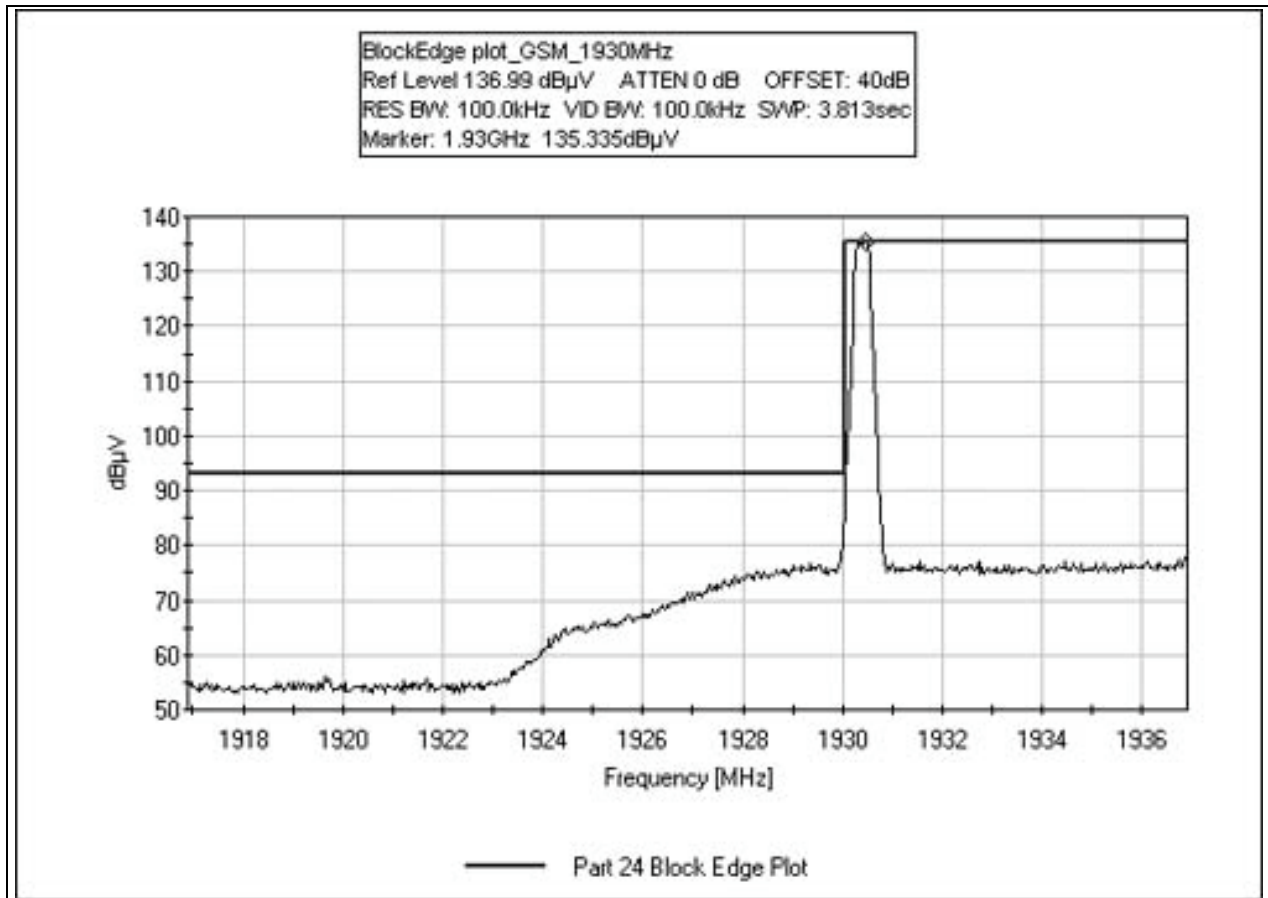
BLOCKEDGE PLOT - EDGE 1930MHz



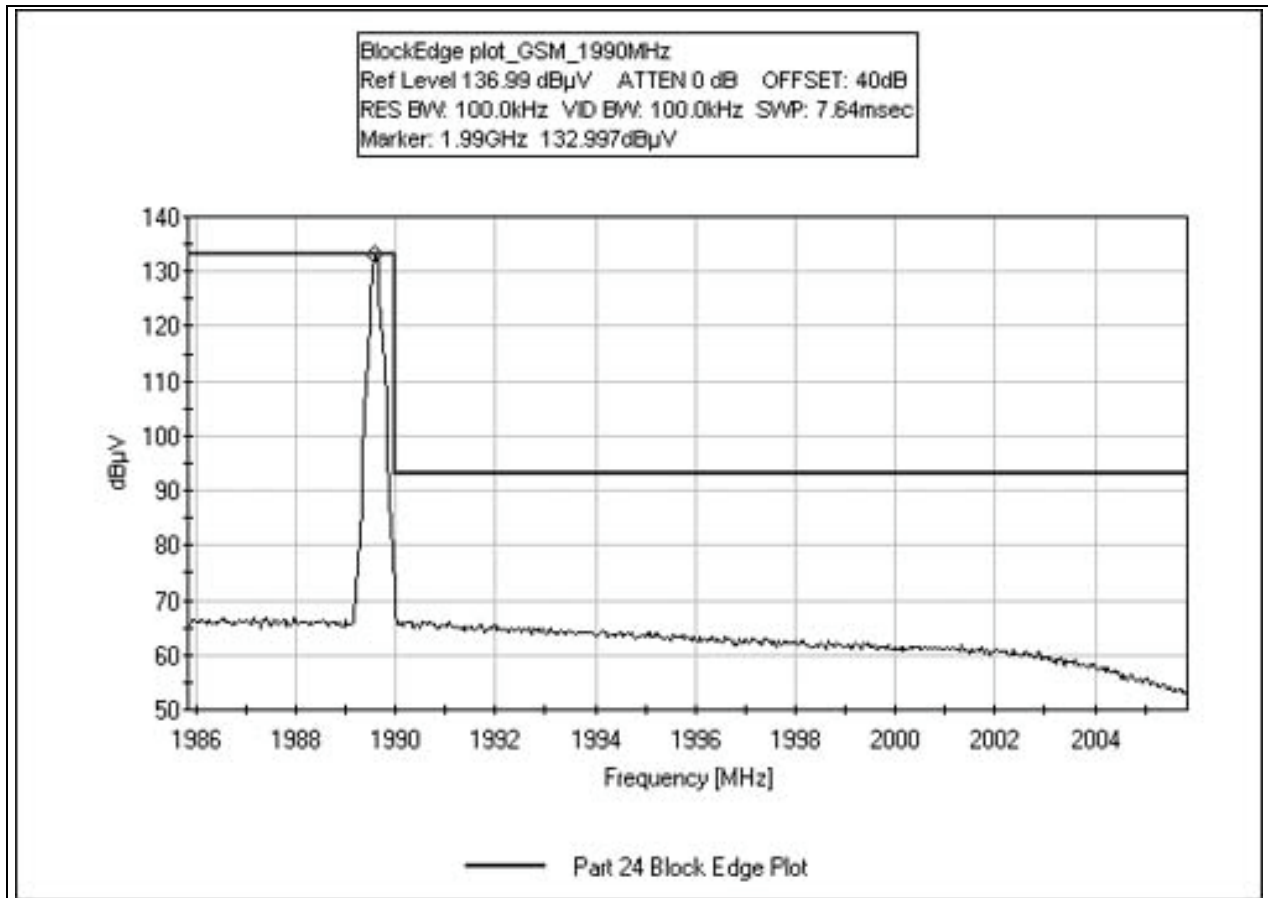
BLOCKEDGE PLOT - EDGE 1990MHz



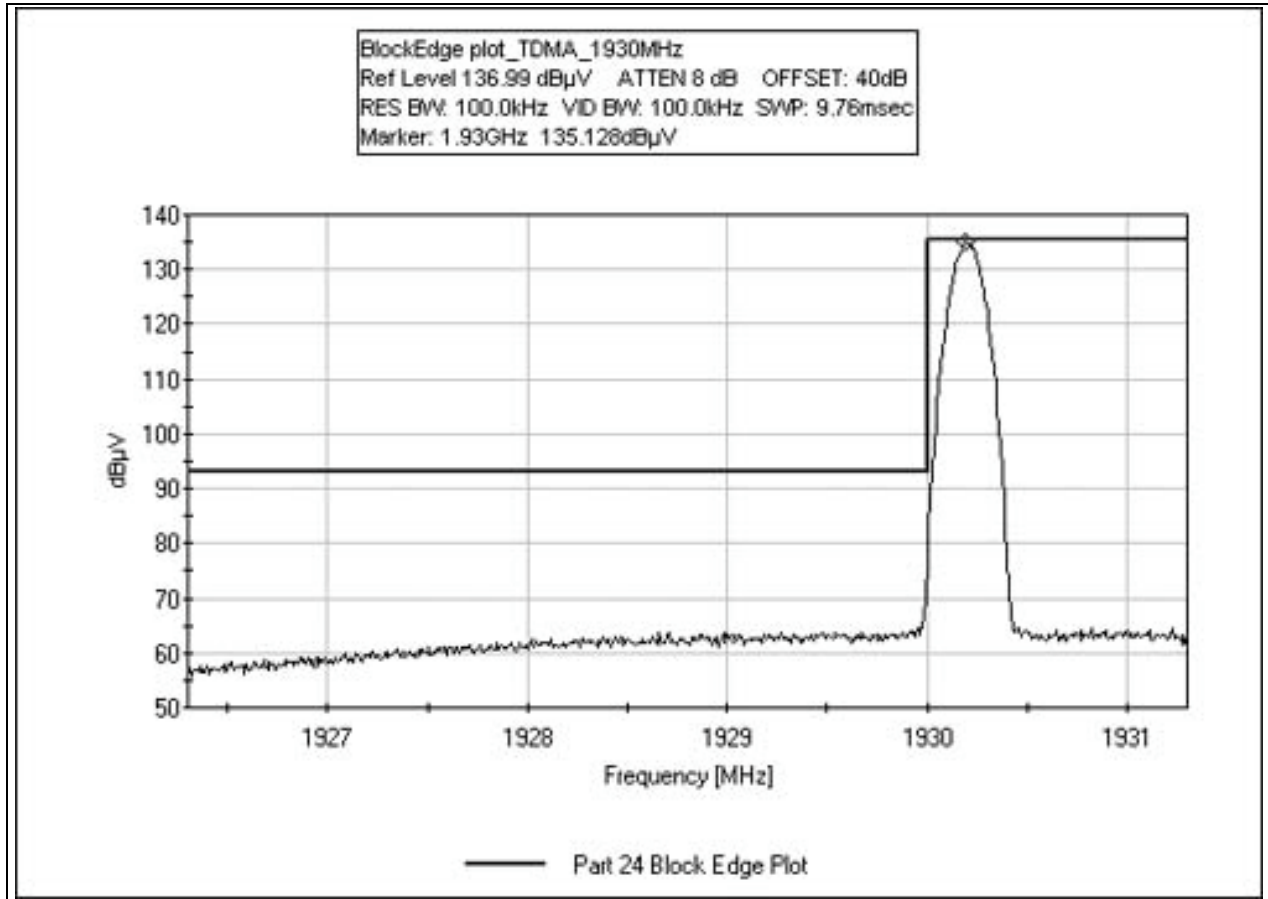
BLOCKEDGE PLOT - GSM 1930MHz



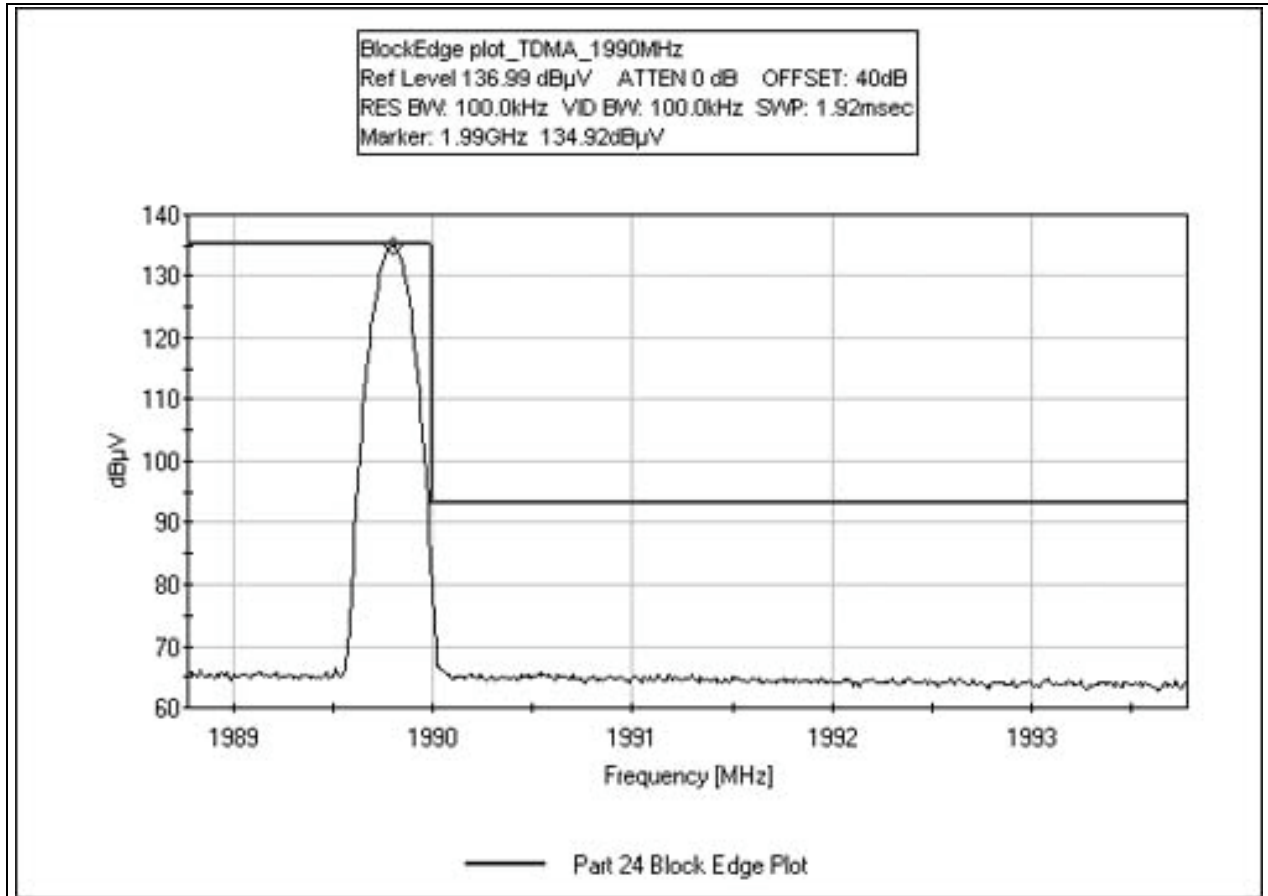
BLOCKEDGE PLOT - GSM 1990MHz



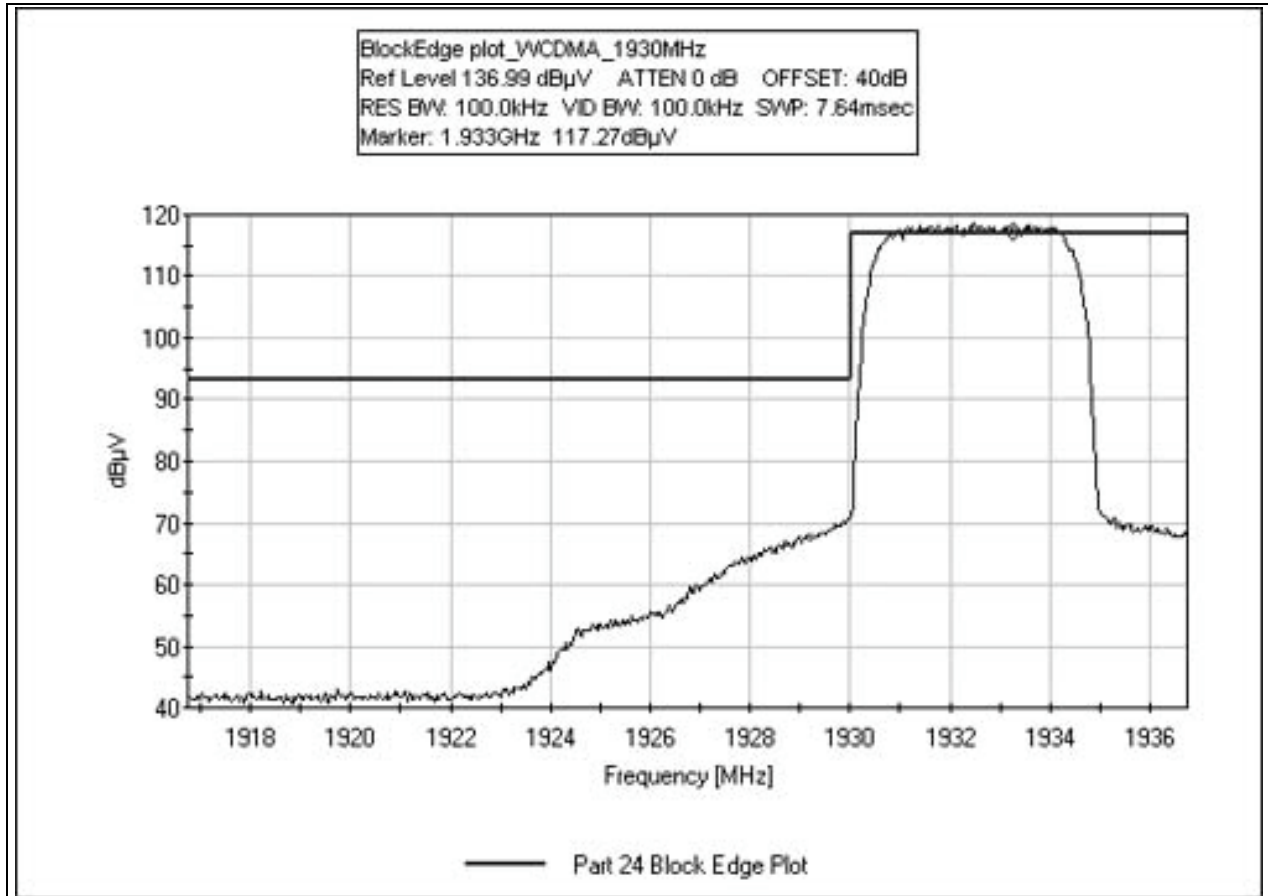
BLOCKEDGE PLOT - TDMA 1930MHz



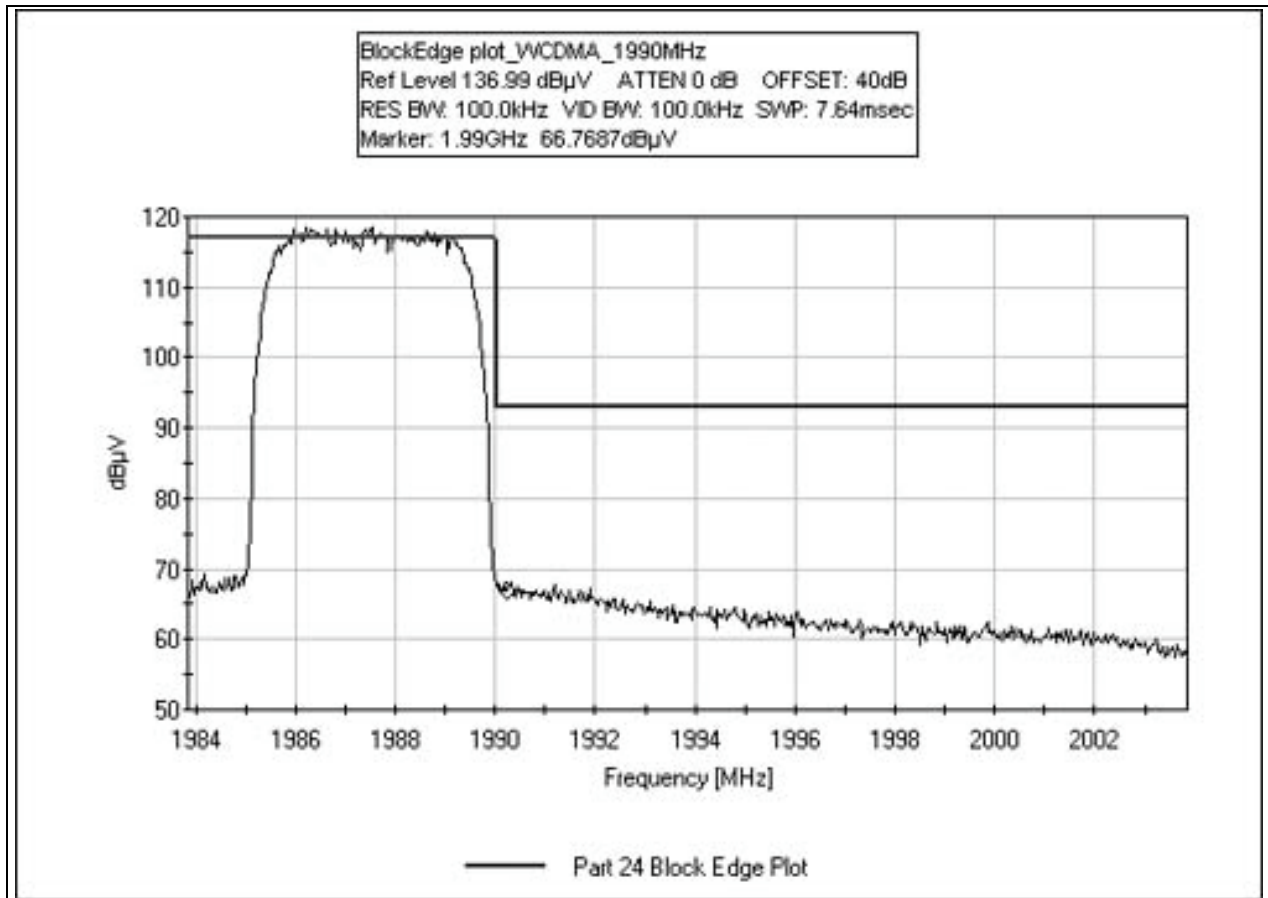
BLOCKEDGE PLOT - TDMA 1990MHz



BLOCKEDGE PLOT - WCDMA 1930MHz



BLOCKEDGE PLOT - WCDMA 1990MHz



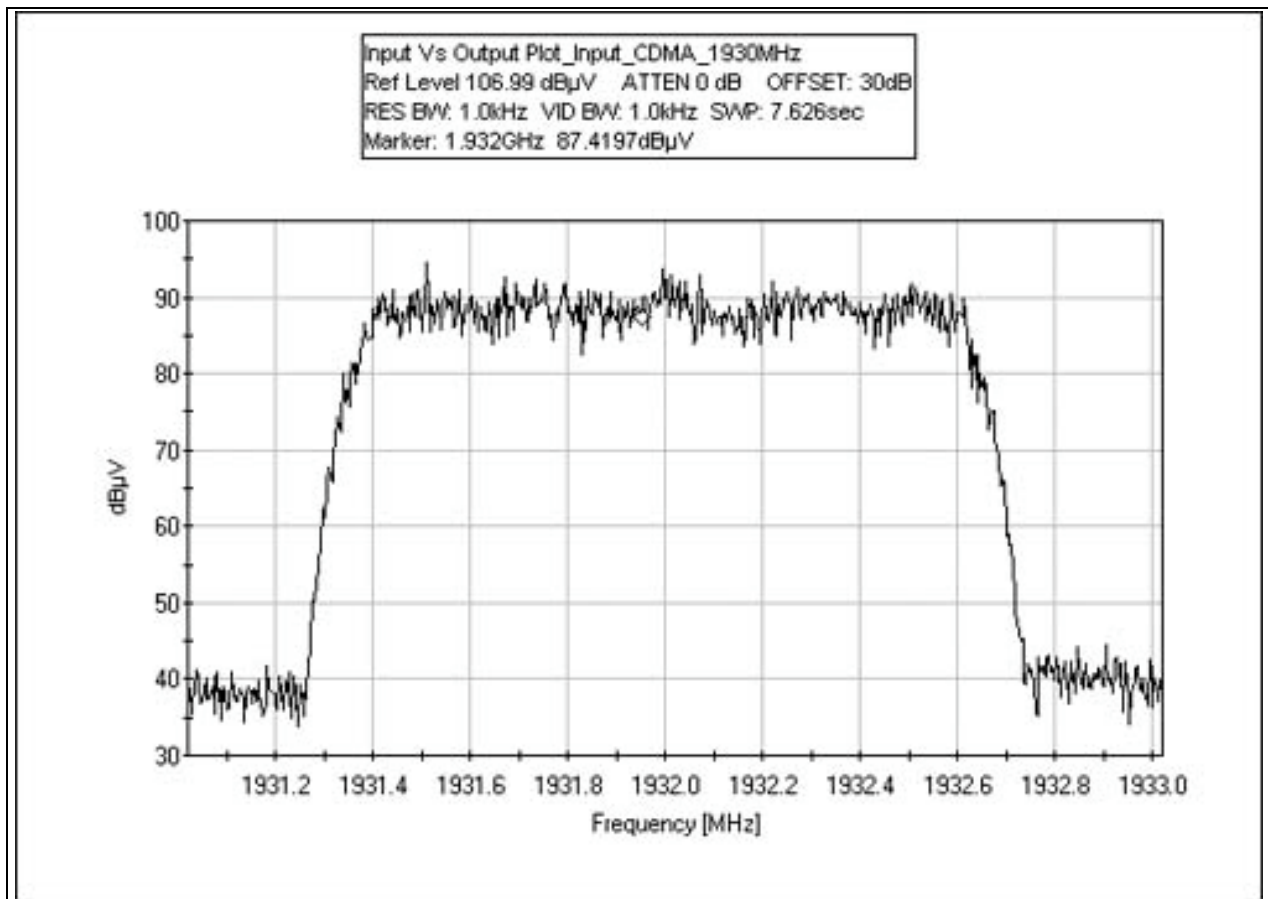
Test Equipment

Equipment	Asset #	Manufacturer	Model #	Serial #	Cal Date	Cal Due
Spectrum Analyzer	02672	Agilent	E4446A	US44300438	011405	011407

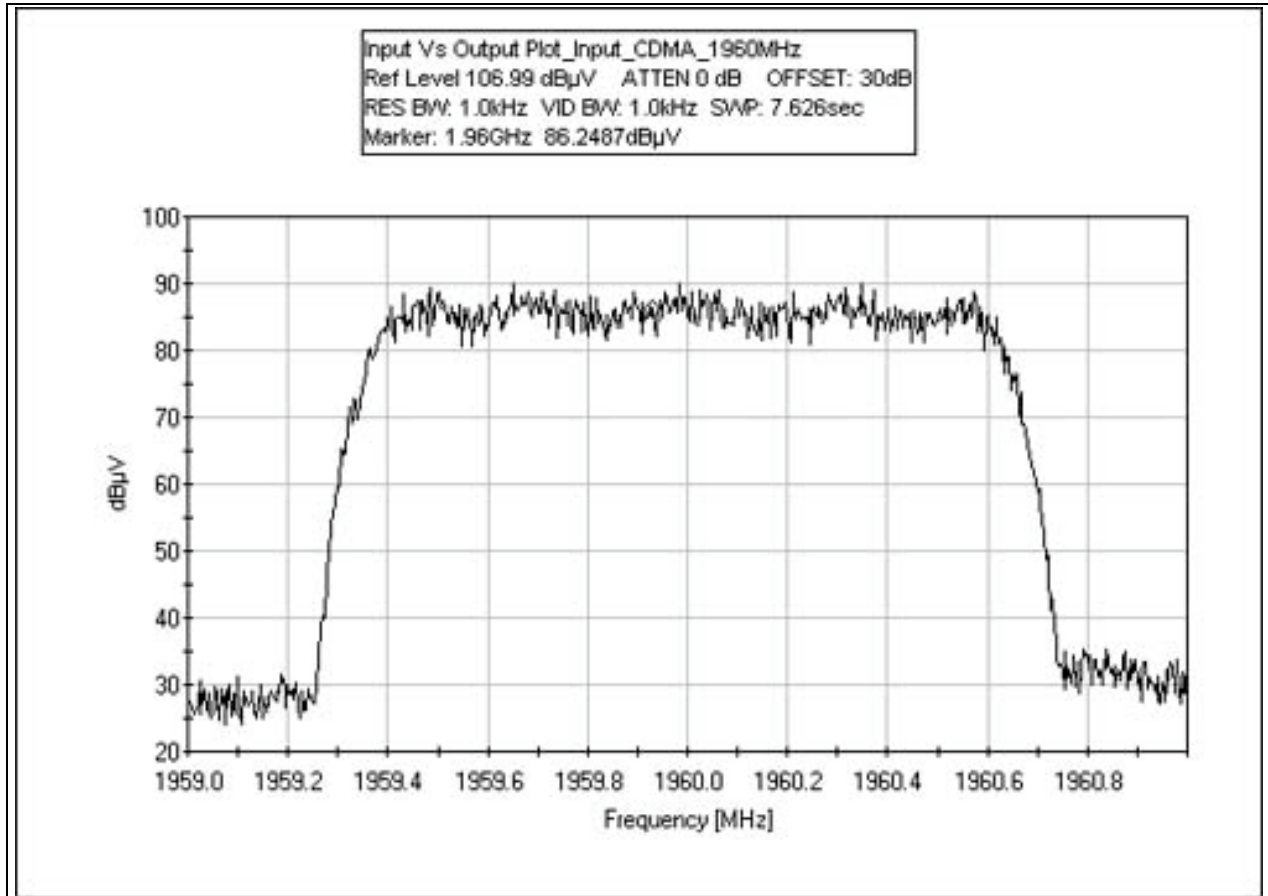


INPUT PLOT - CDMA 1930MHz

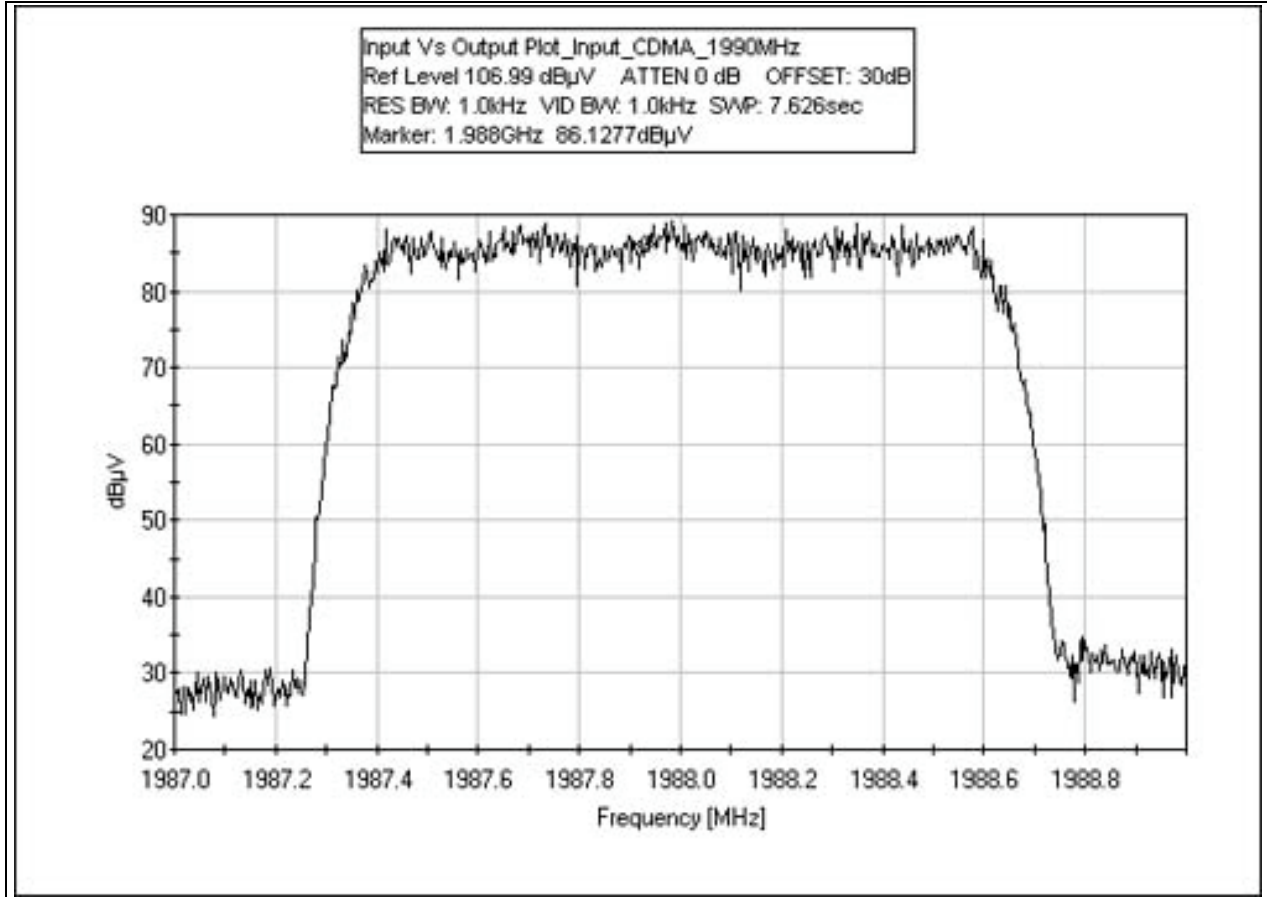
Test Conditions: The EUT is placed on the wooden table, the EUT is a remote radio head with multichannel capability and may otherwise be classified as a repeater/extender. EUT operates on 1930-1990 MHz. Support equipment is used to convert RF from signal generator to fiber for input to the EUT. The RF output port of the EUT is terminated in a shielded 50 ohm load. EUT does not demodulate the input signal. RF signal measured at the antenna port. Modulation: GSM, CDMA, WCDMA, TDMA, EDGE. Power: 1 Watt. Frequency: 1930, 1960, 1990 MHz.



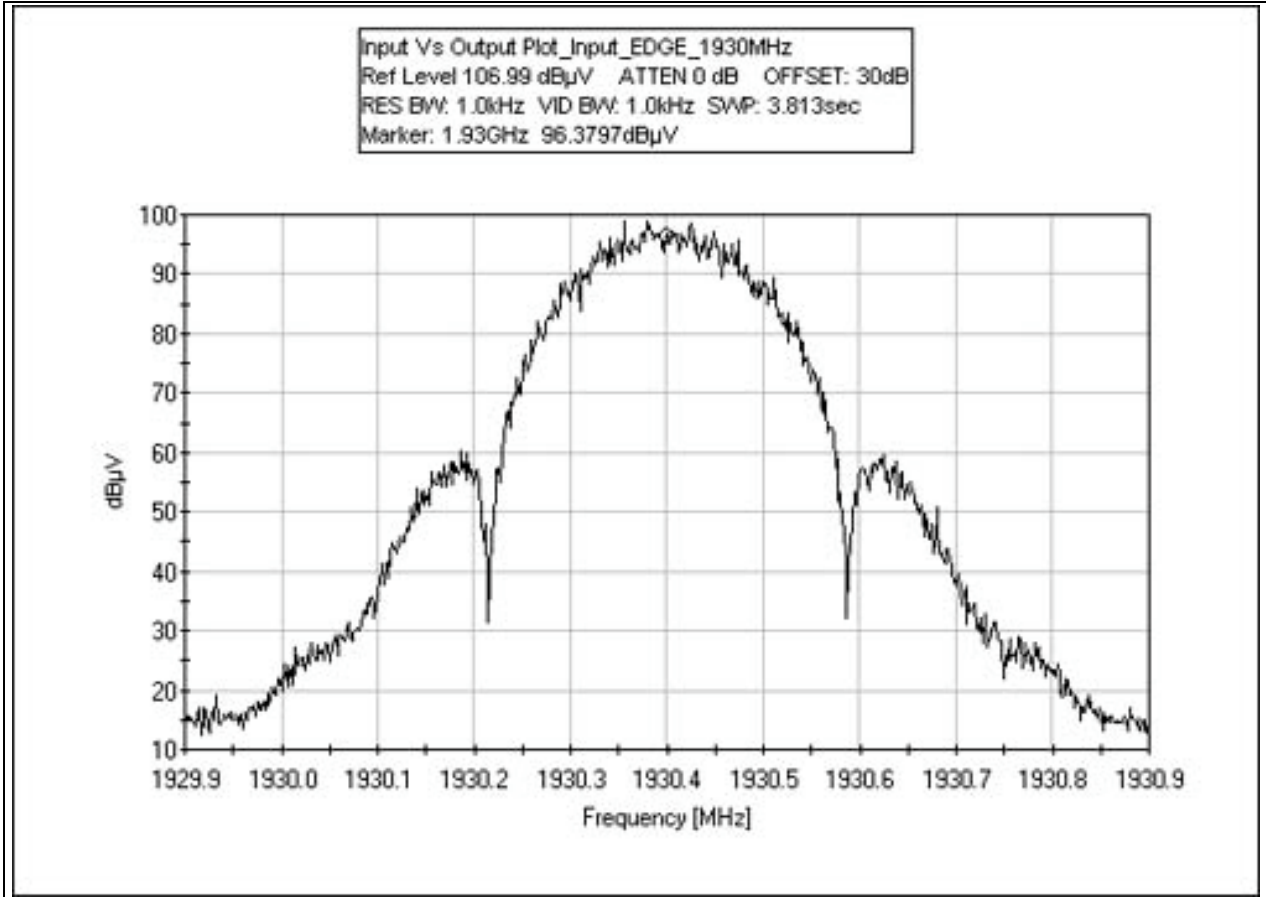
INPUT PLOT - CDMA 1960MHz



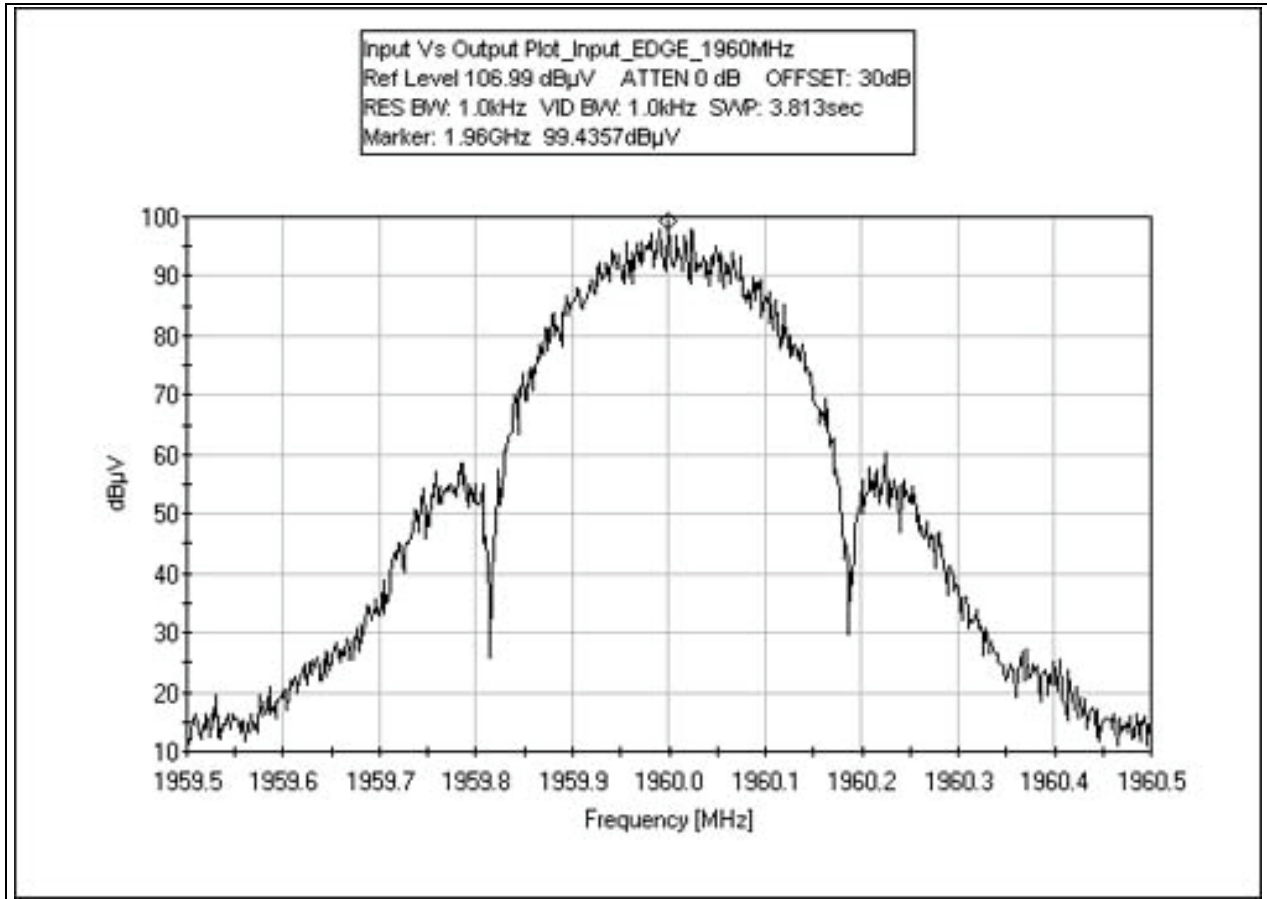
INPUT PLOT - CDMA 1990MHz



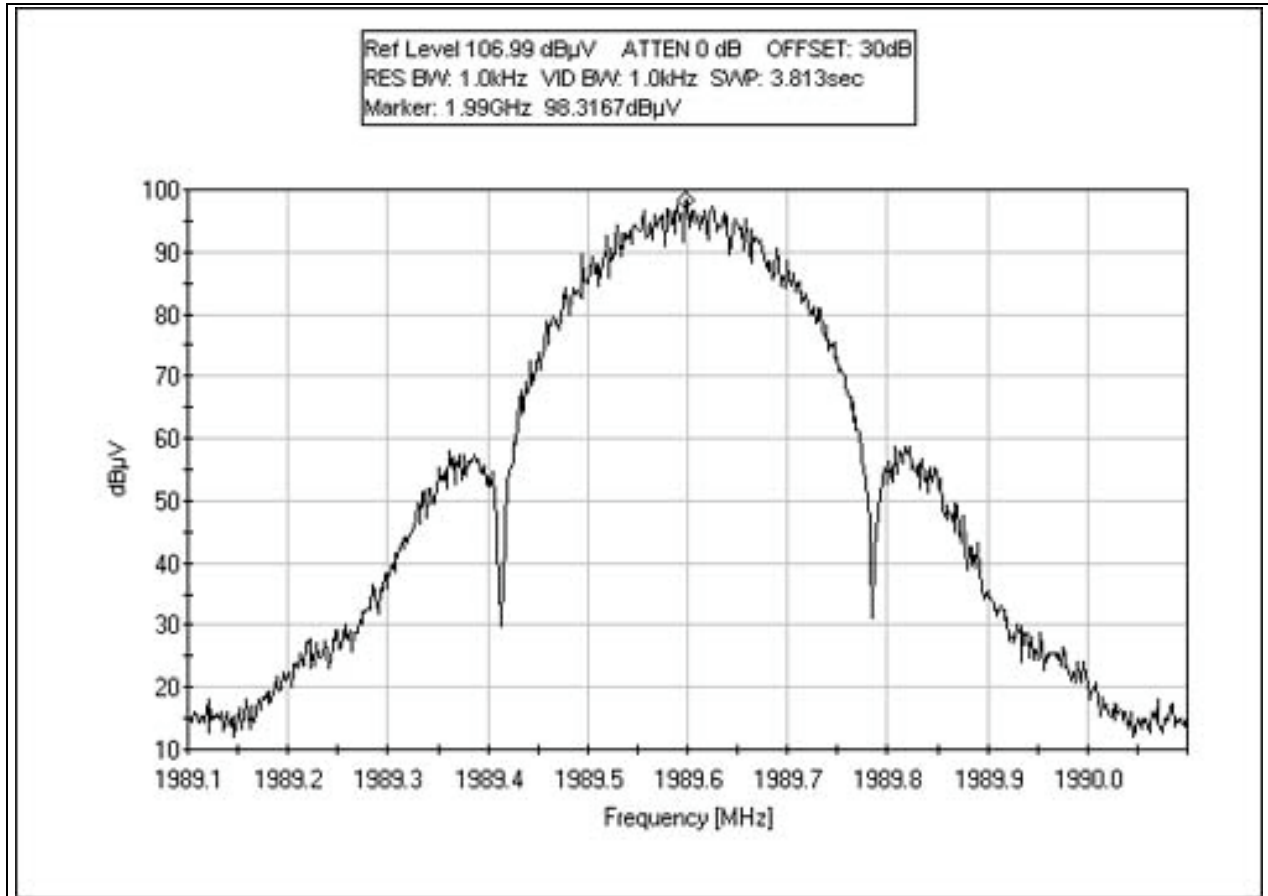
INPUT PLOT - EDGE 1930MHz



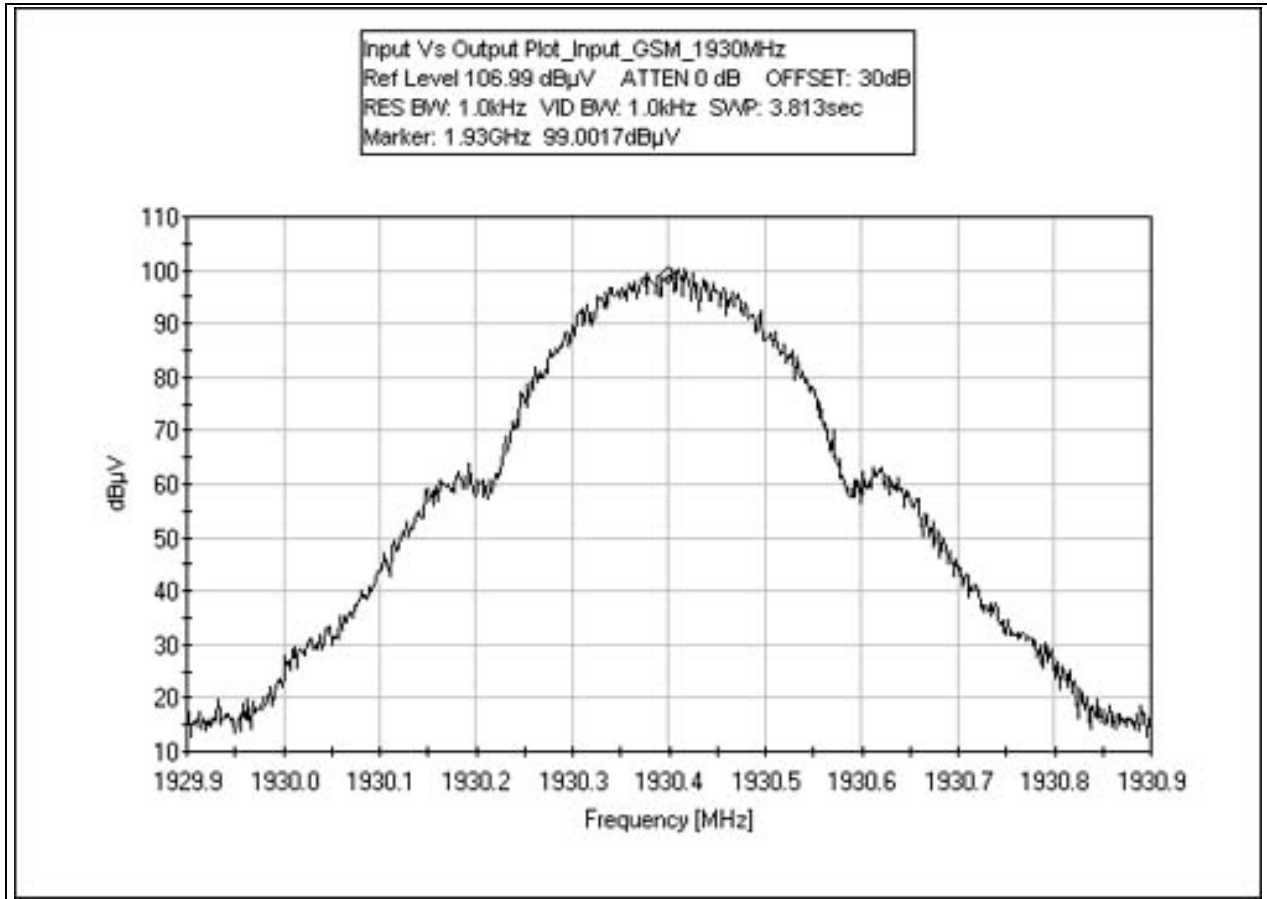
INPUT PLOT - EDGE 1960MHz



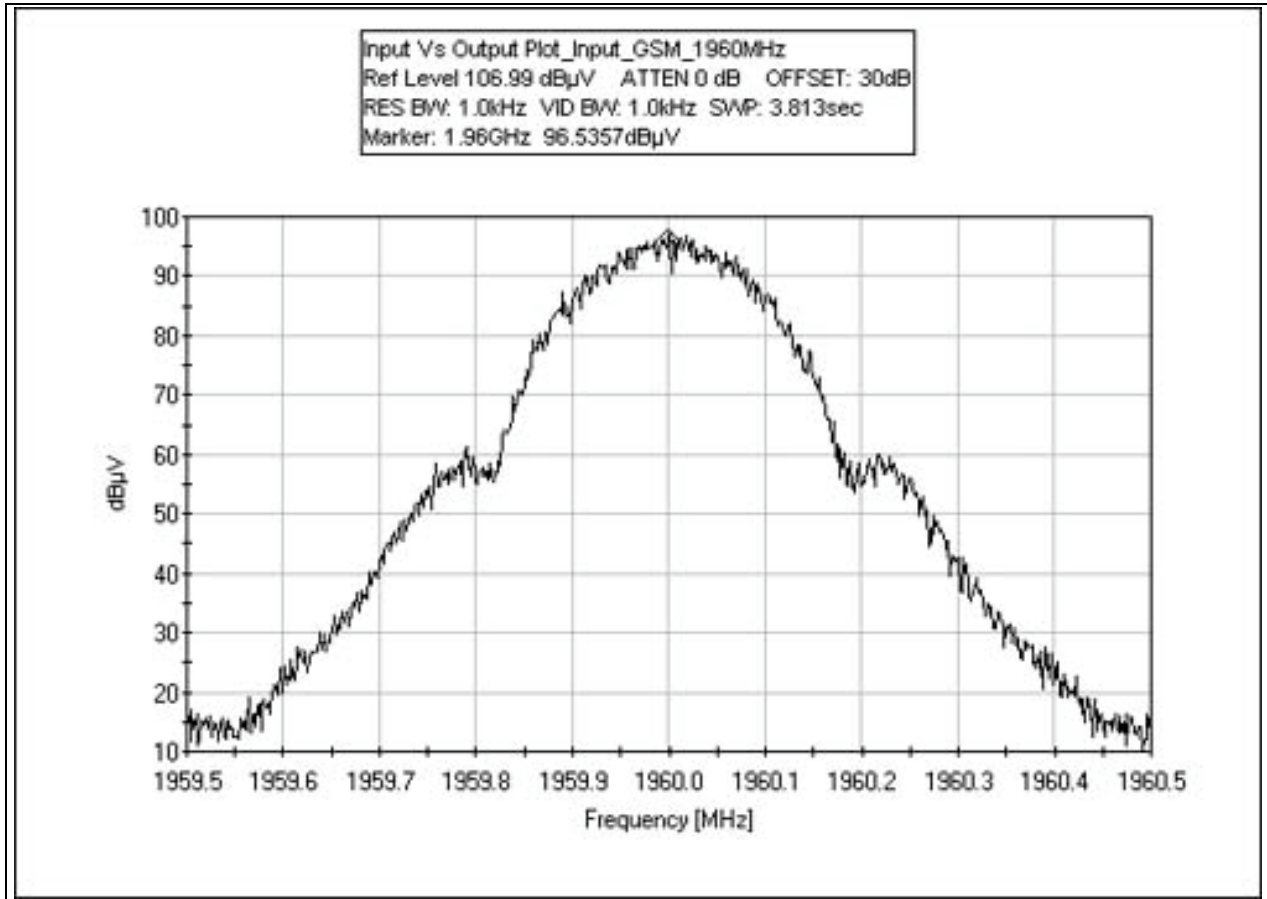
INPUT PLOT - EDGE 1990MHz



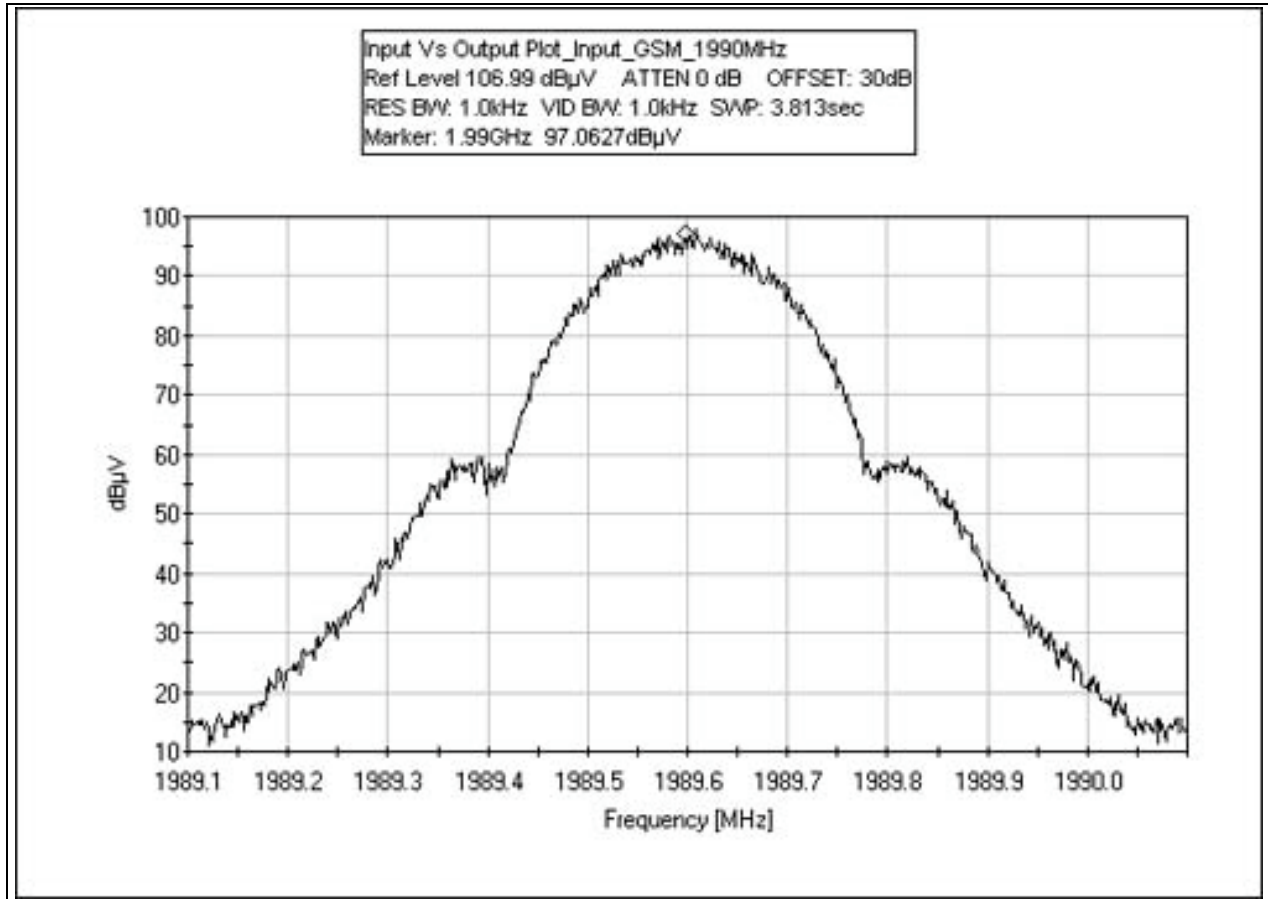
INPUT PLOT - GSM 1930MHz



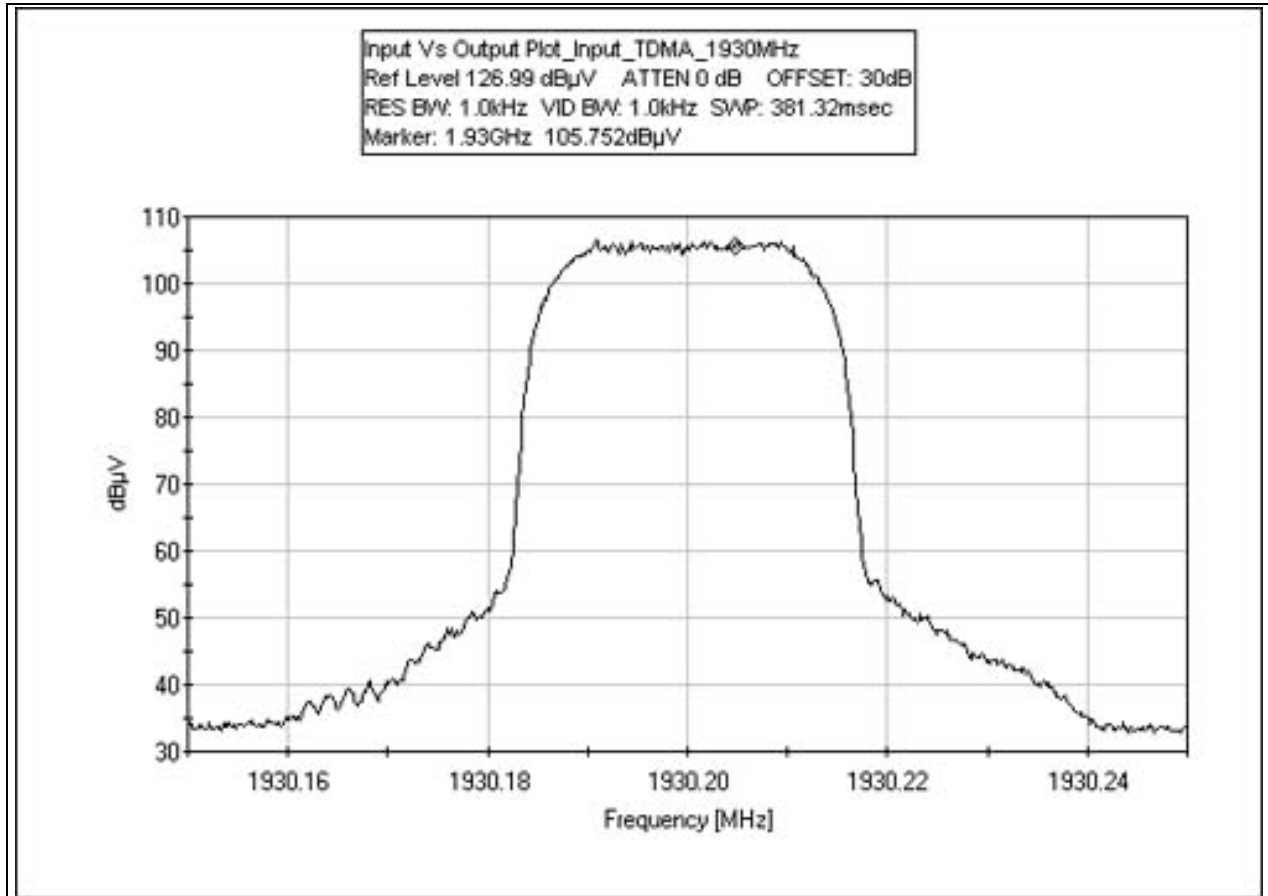
INPUT PLOT - GSM 1960MHz



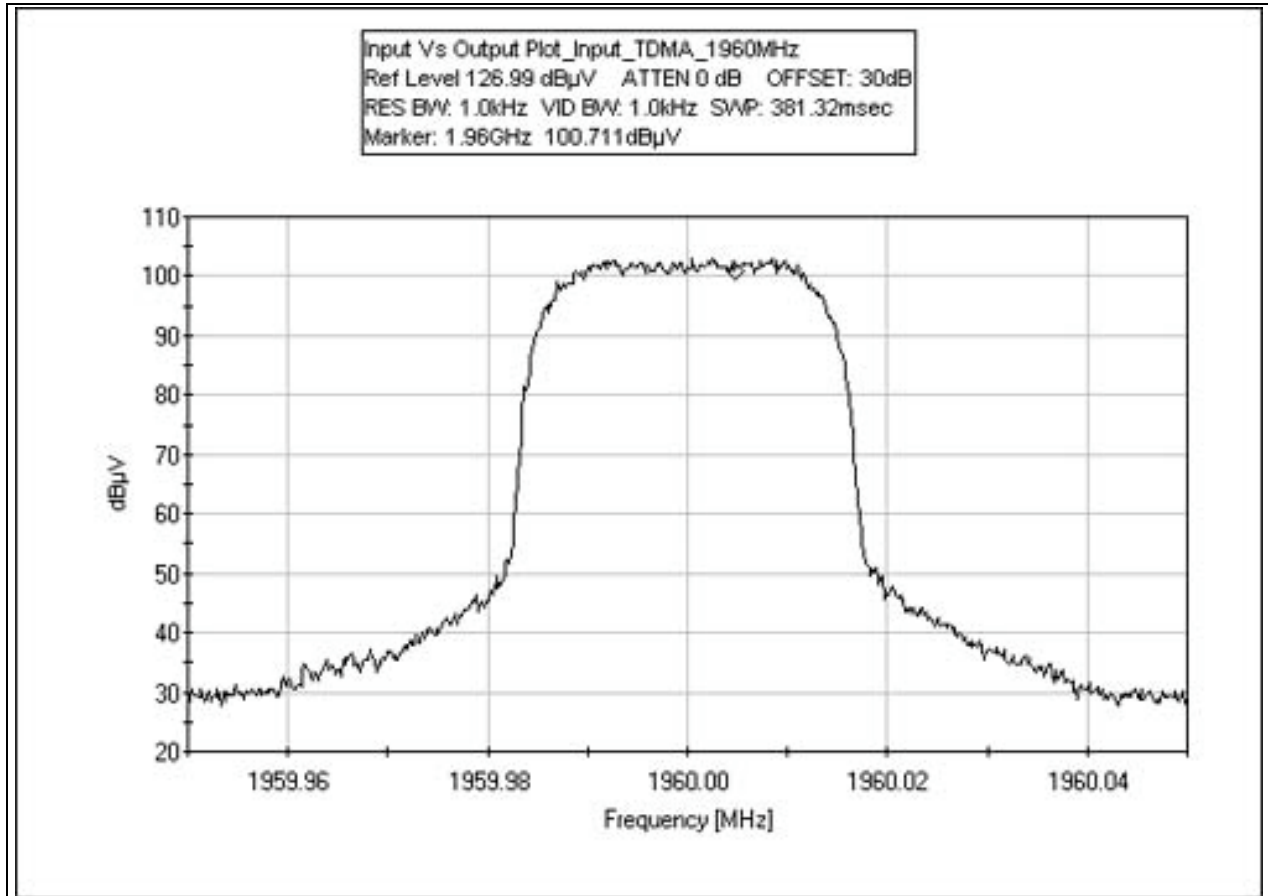
INPUT PLOT - GSM 1990MHz



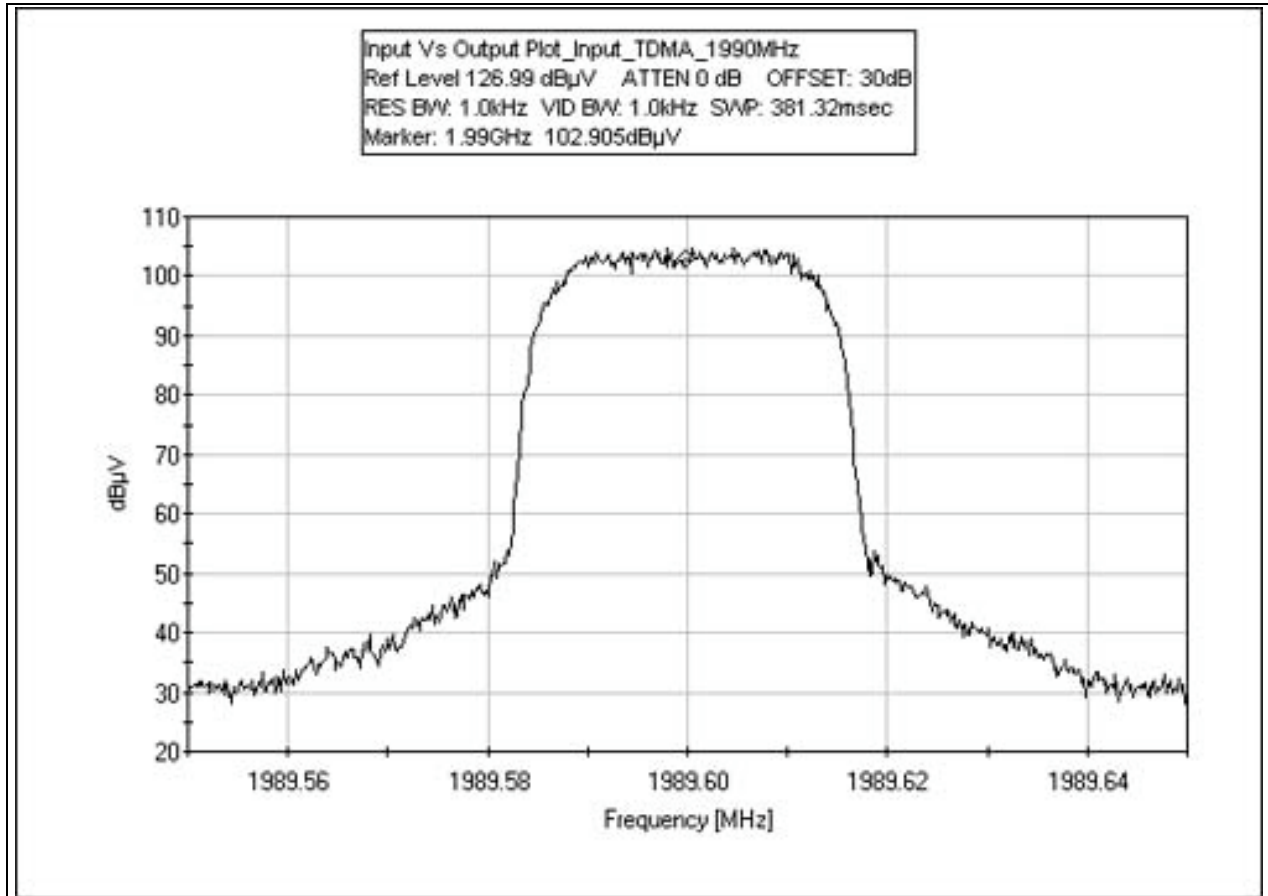
INPUT PLOT - TDMA 1930MHz



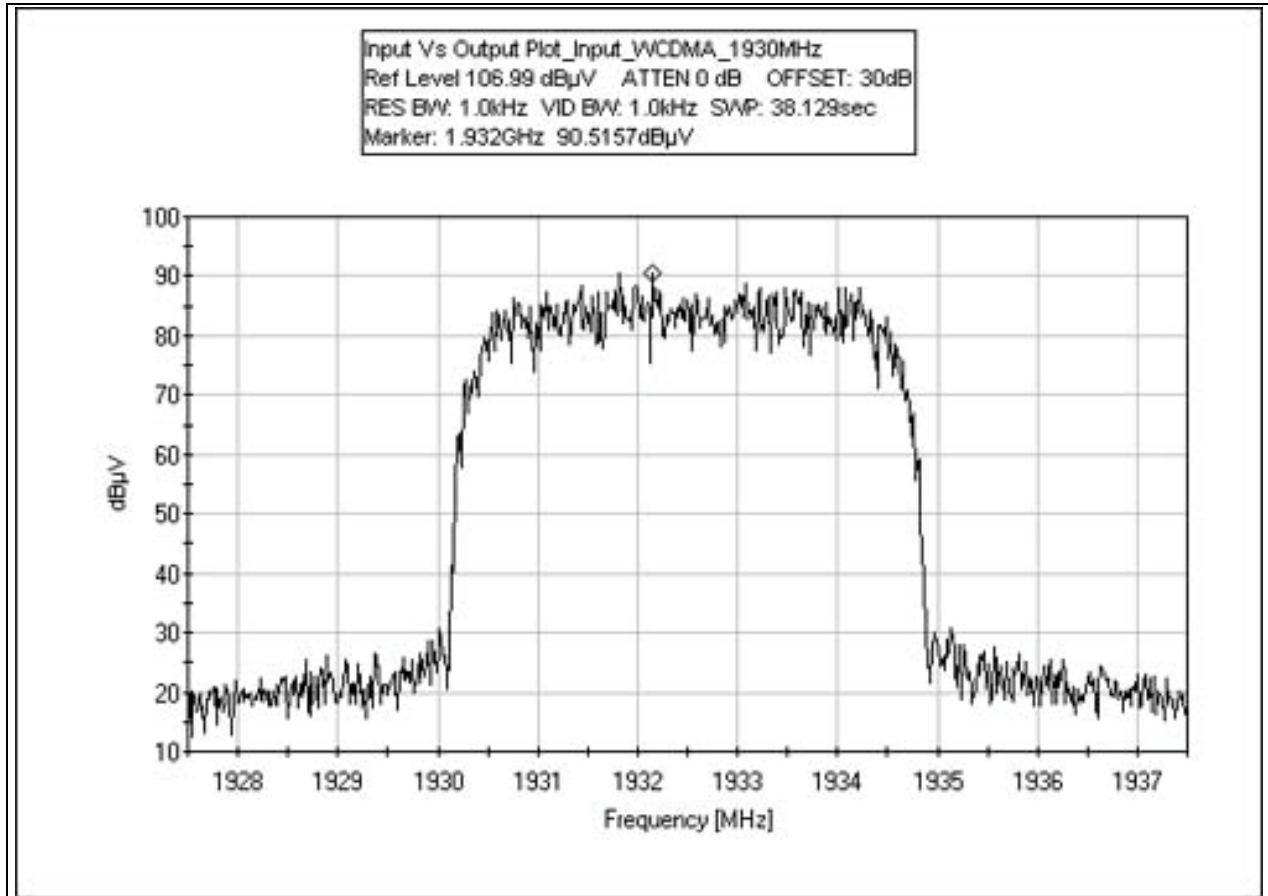
INPUT PLOT - TDMA 1960MHz



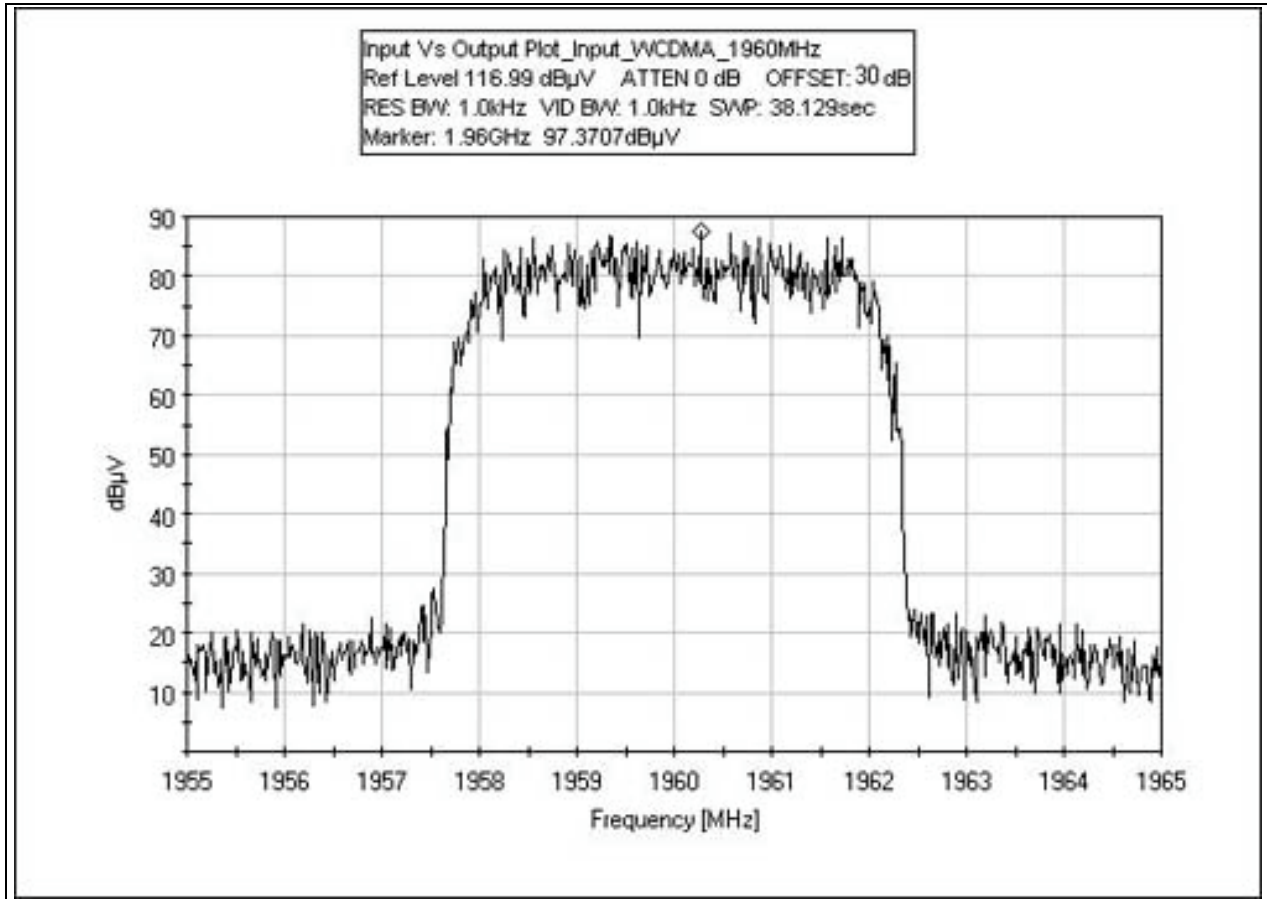
INPUT PLOT - TDMA 1990MHz



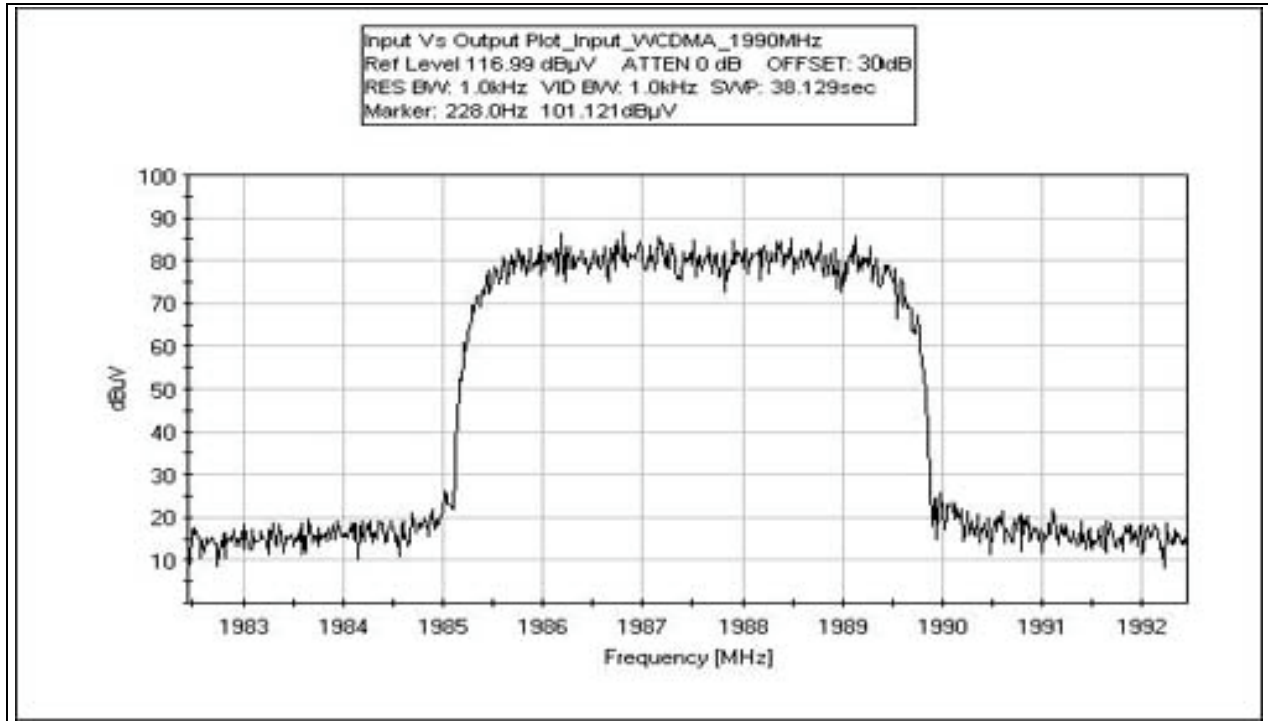
INPUT PLOT - WCDMA 1930MHz



INPUT PLOT - WCDMA 1960MHz



INPUT PLOT - WCDMA 1990MHz



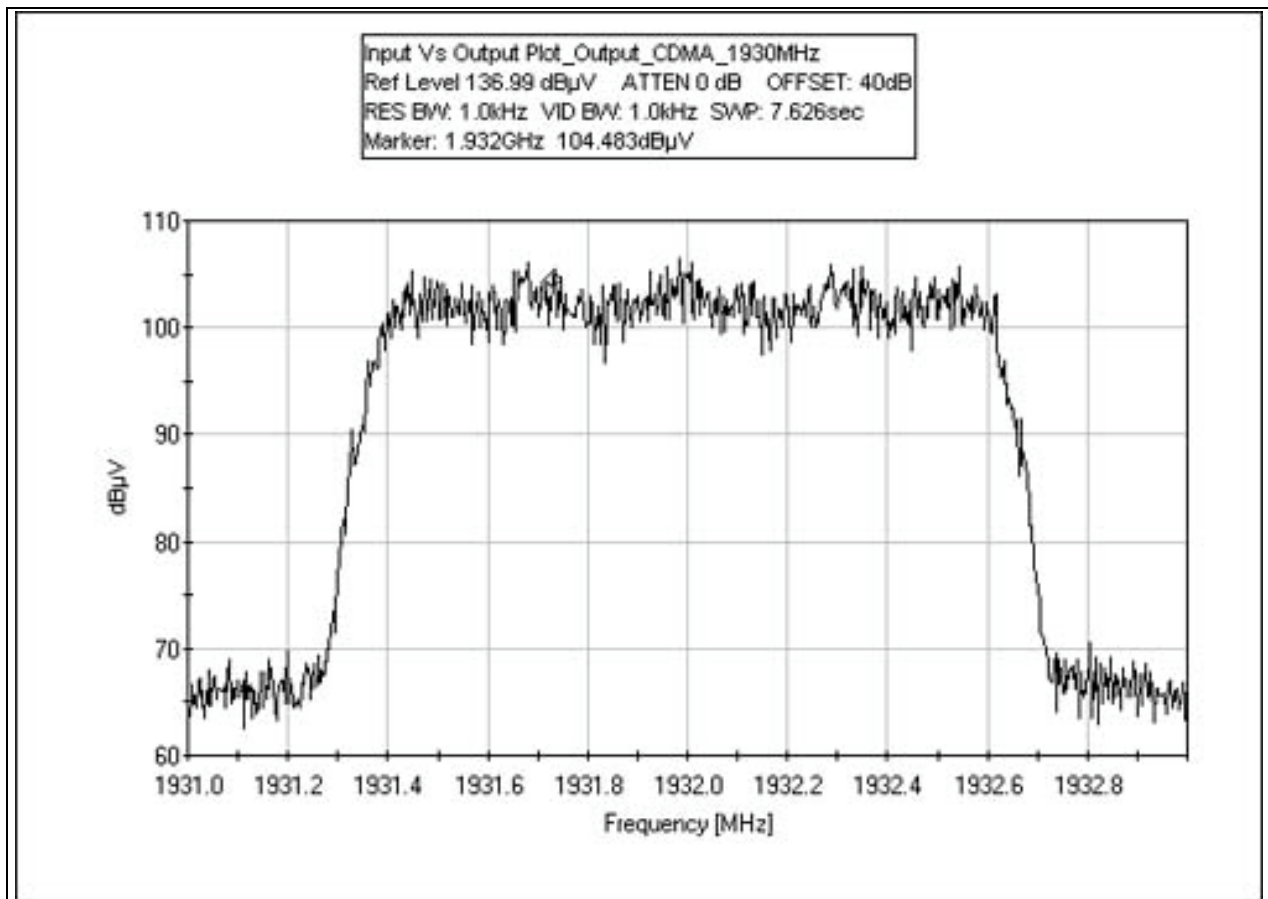
Test Equipment

Equipment	Asset #	Manufacturer	Model #	Serial #	Cal Date	Cal Due
Spectrum Analyzer	02672	Agilent	E4446A	US44300438	011405	011407

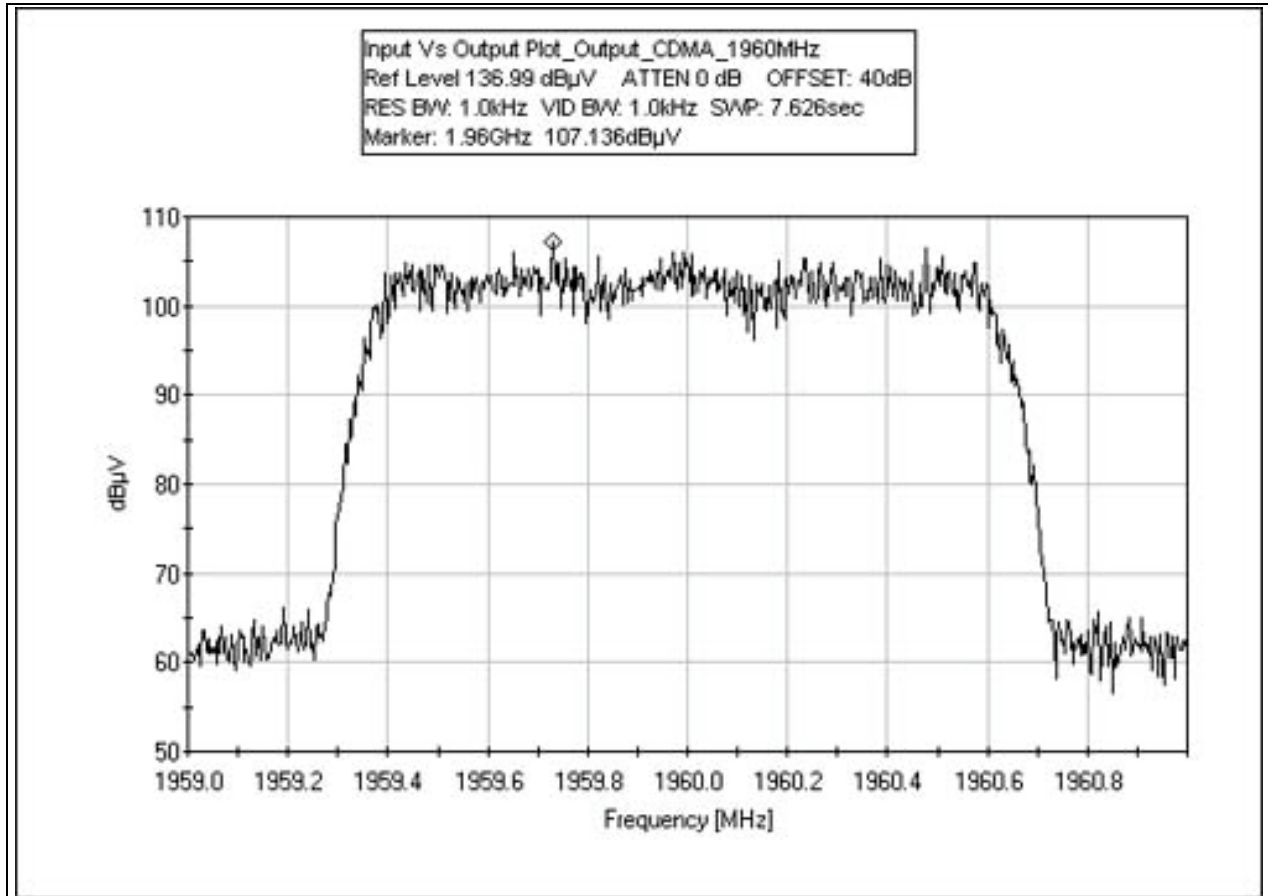


OUTPUT PLOT - CDMA 1930MHz

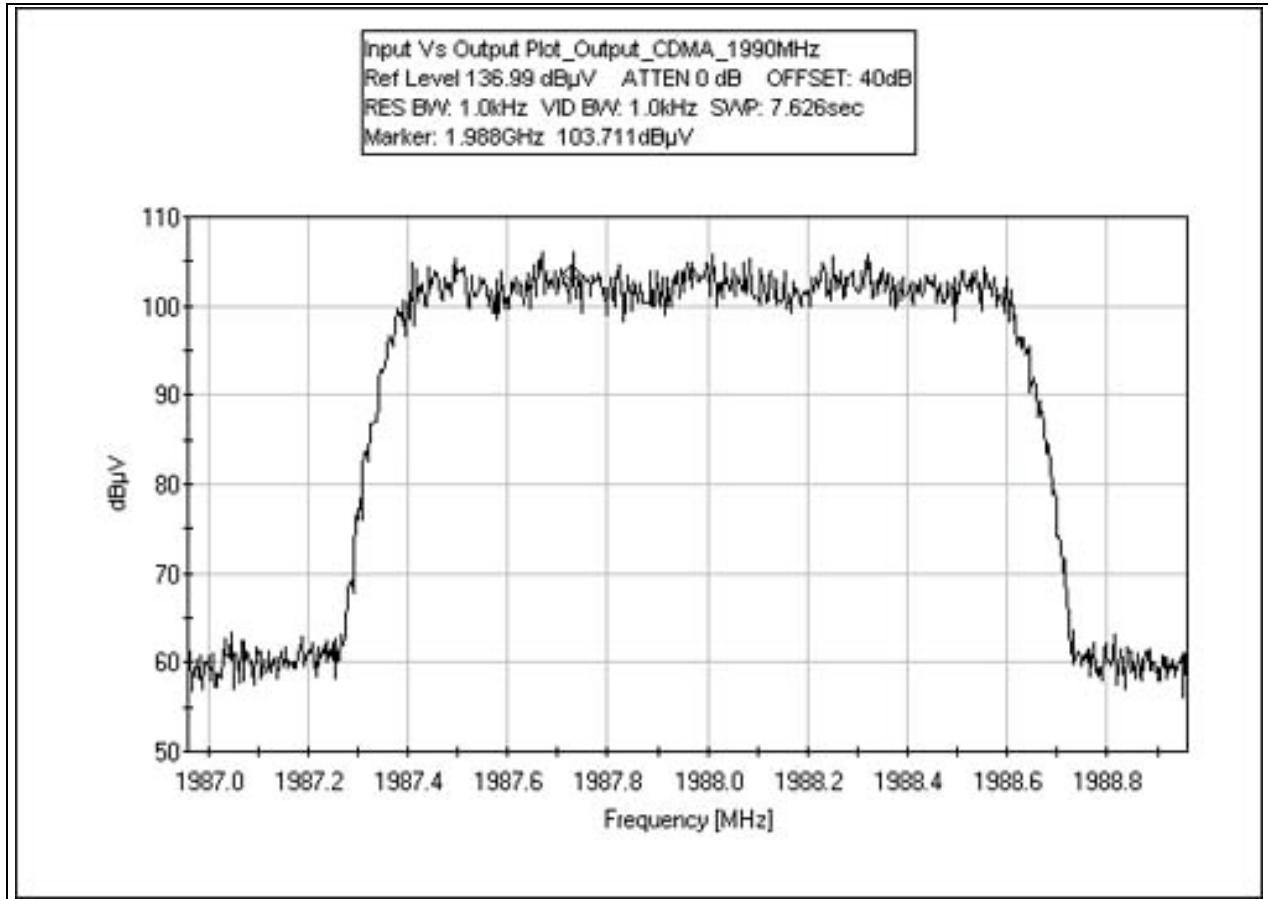
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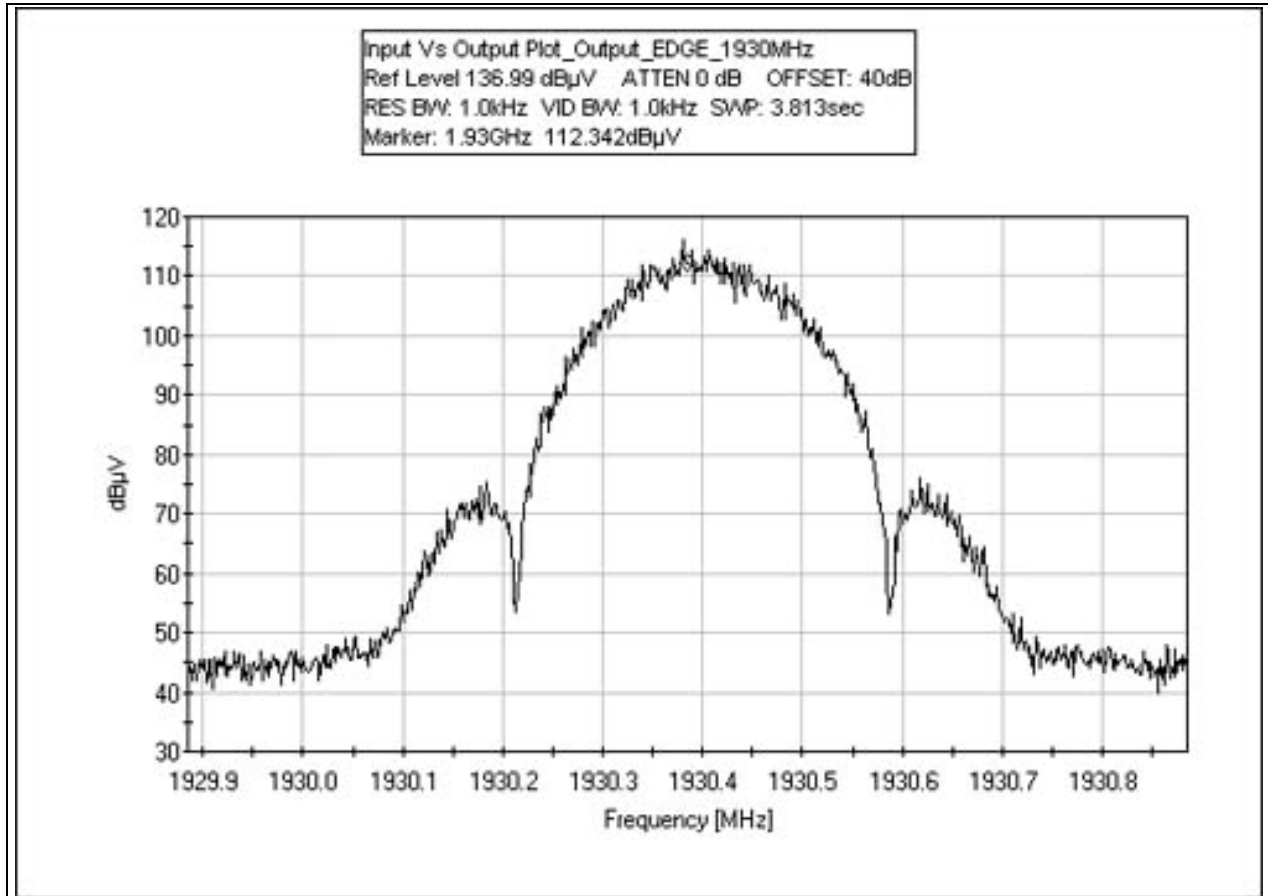
OUTPUT PLOT - CDMA 1960MHz



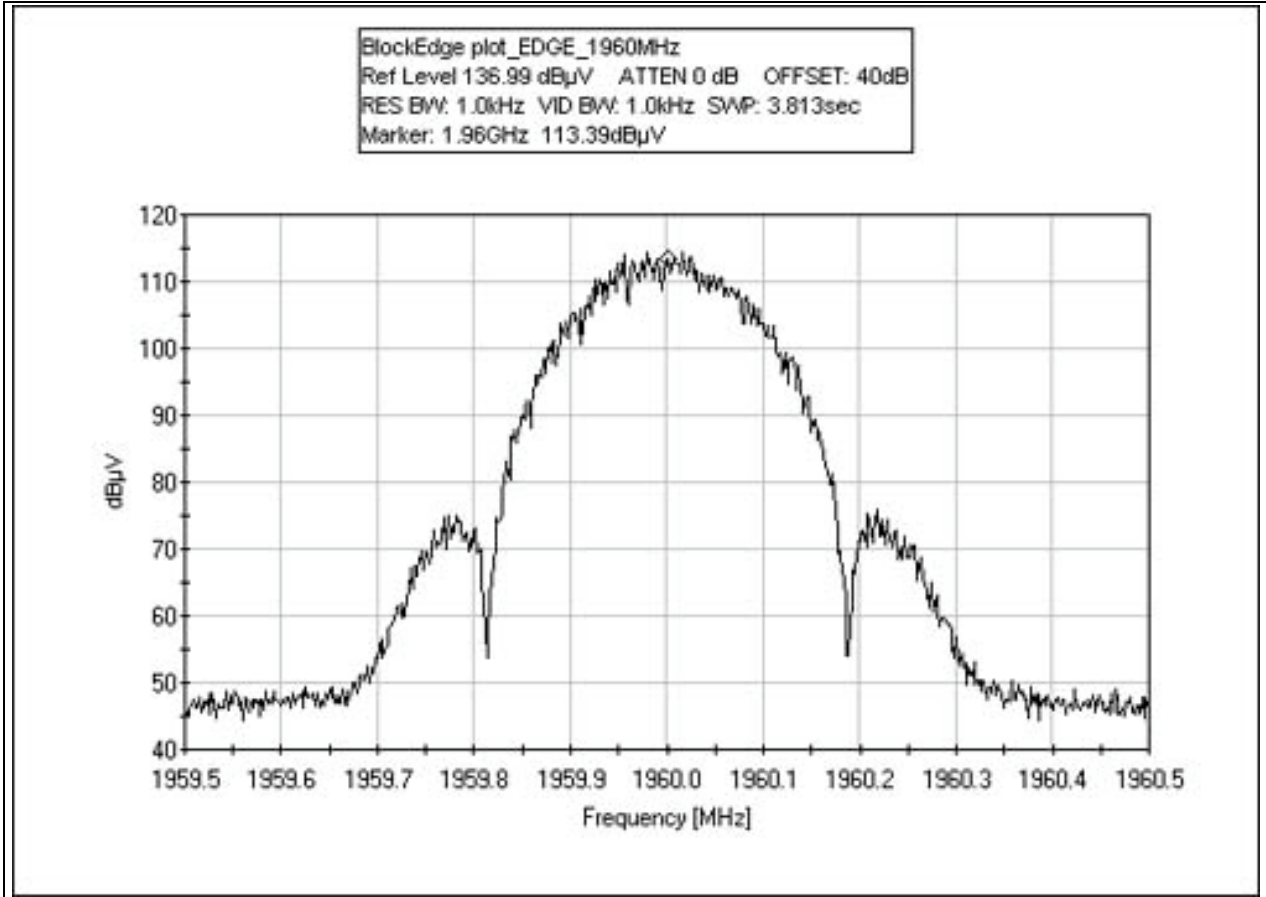
OUTPUT PLOT - CDMA 1990MHz



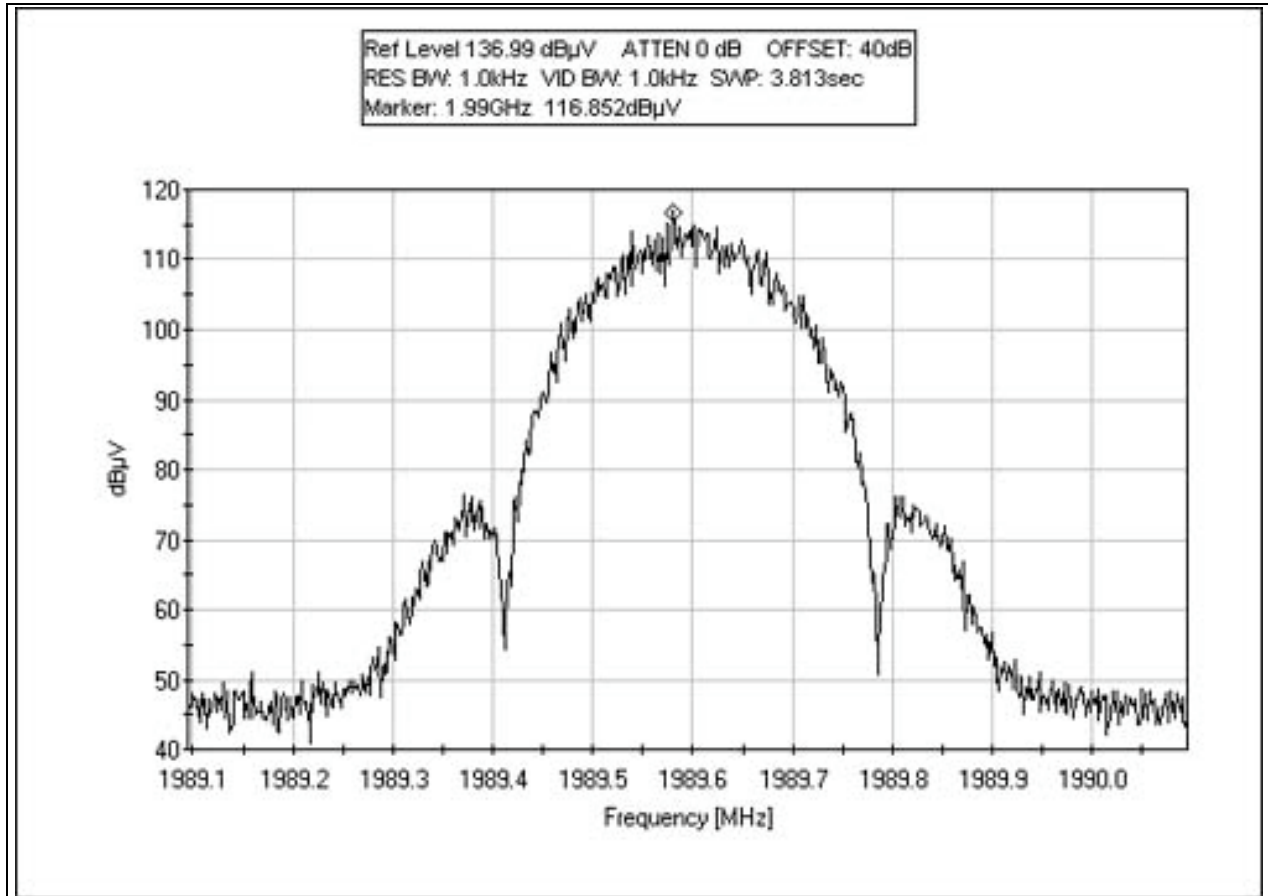
OUTPUT PLOT - EDGE 1930MHz



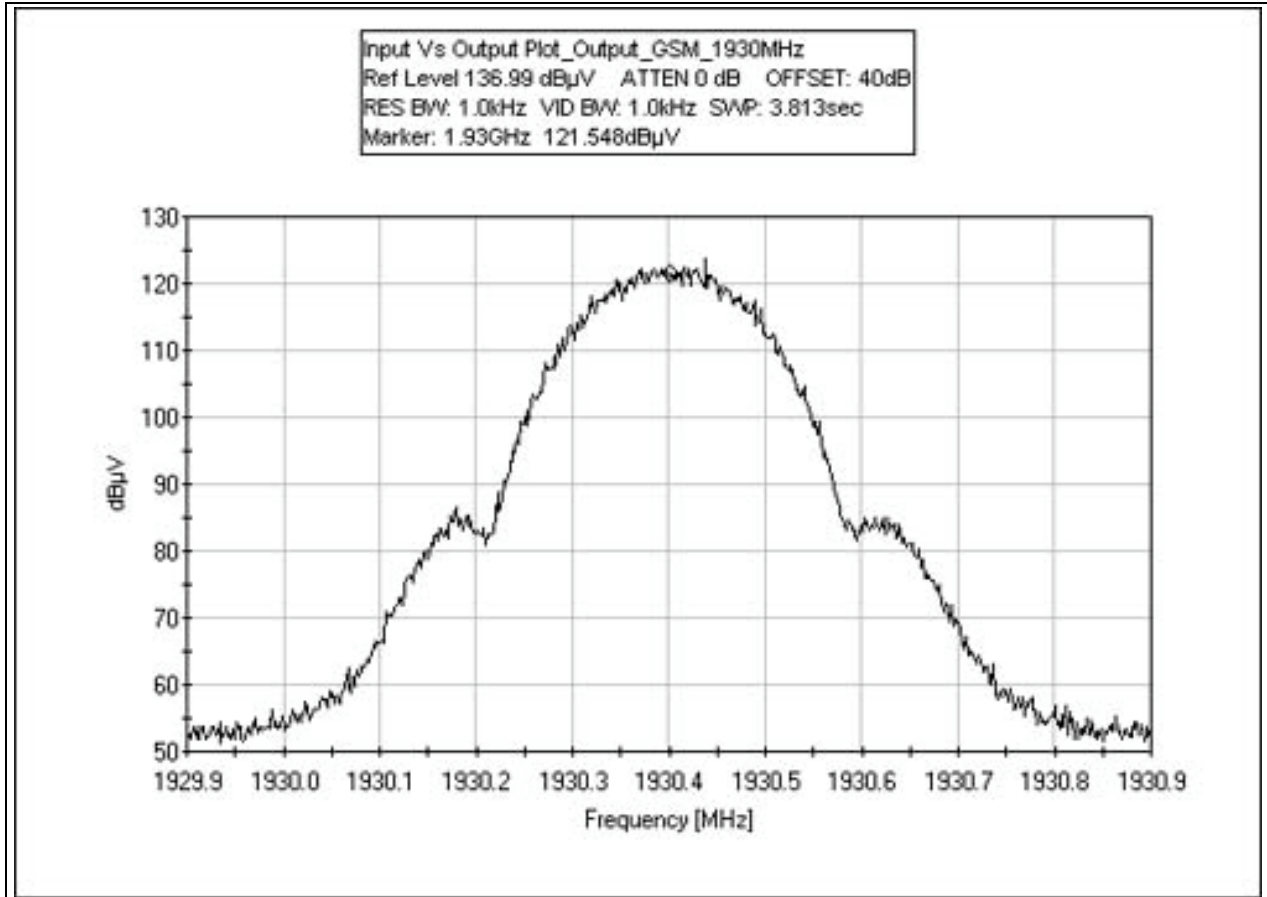
OUTPUT PLOT - EDGE 1960MHz



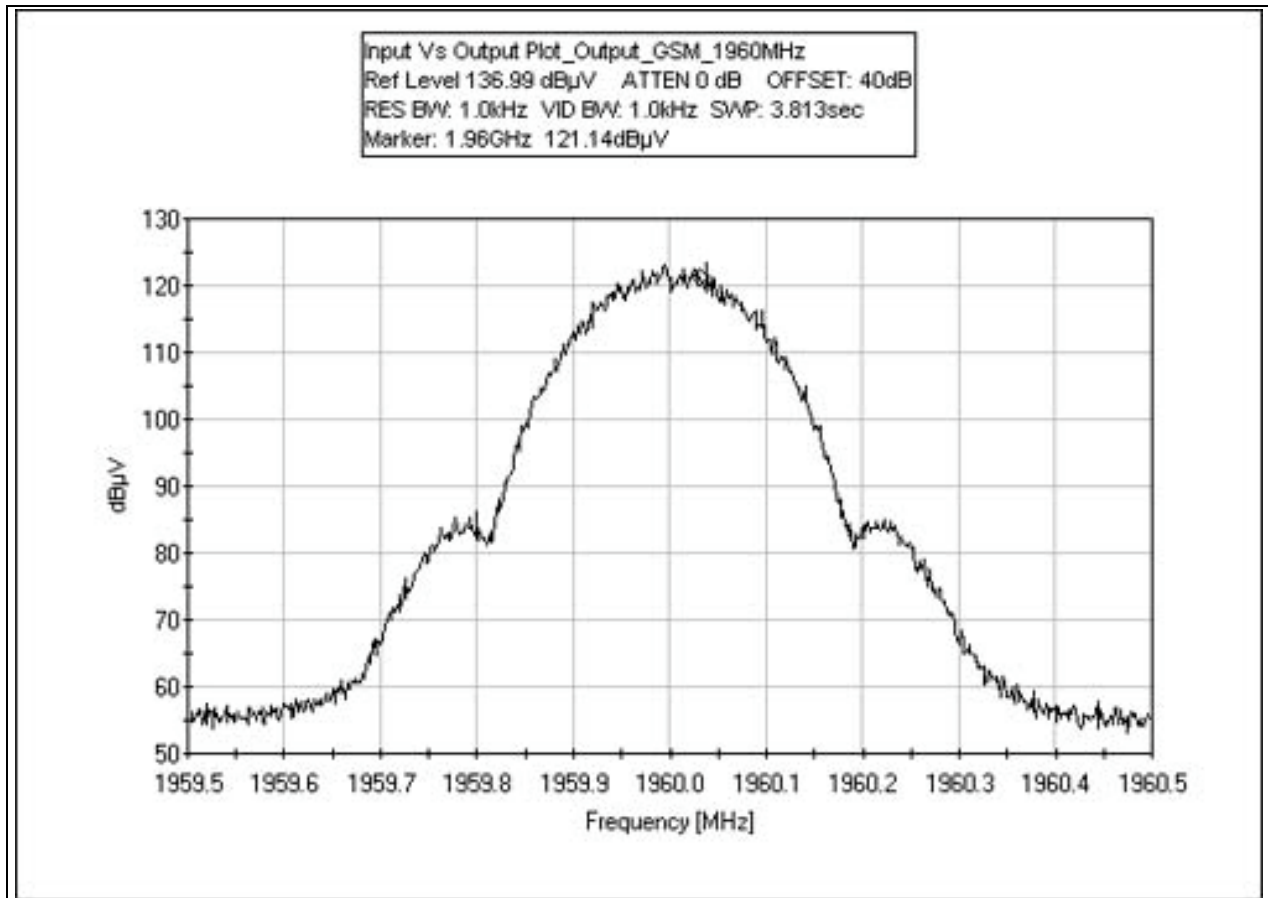
OUTPUT PLOT - EDGE 1990MHz



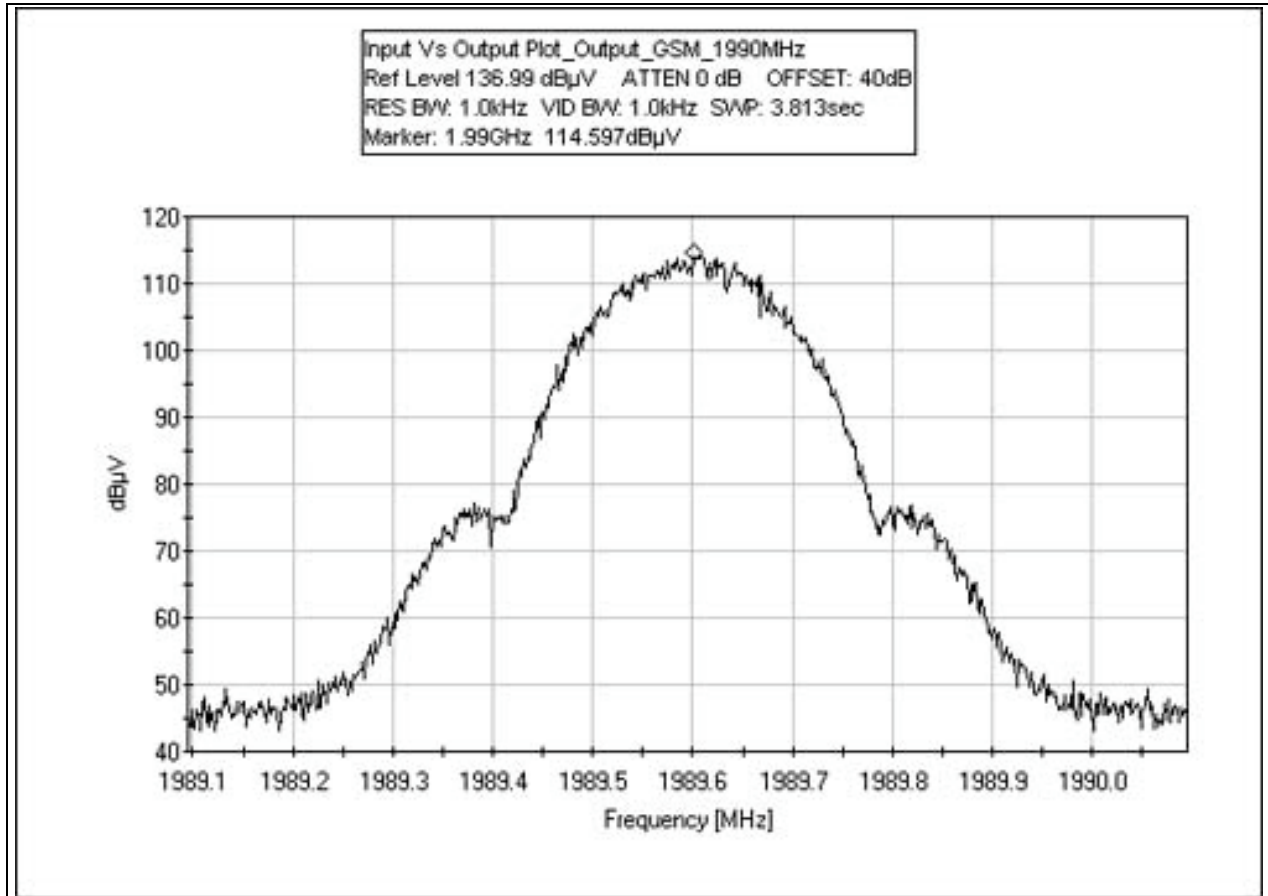
OUTPUT PLOT - GSM 1930MHz



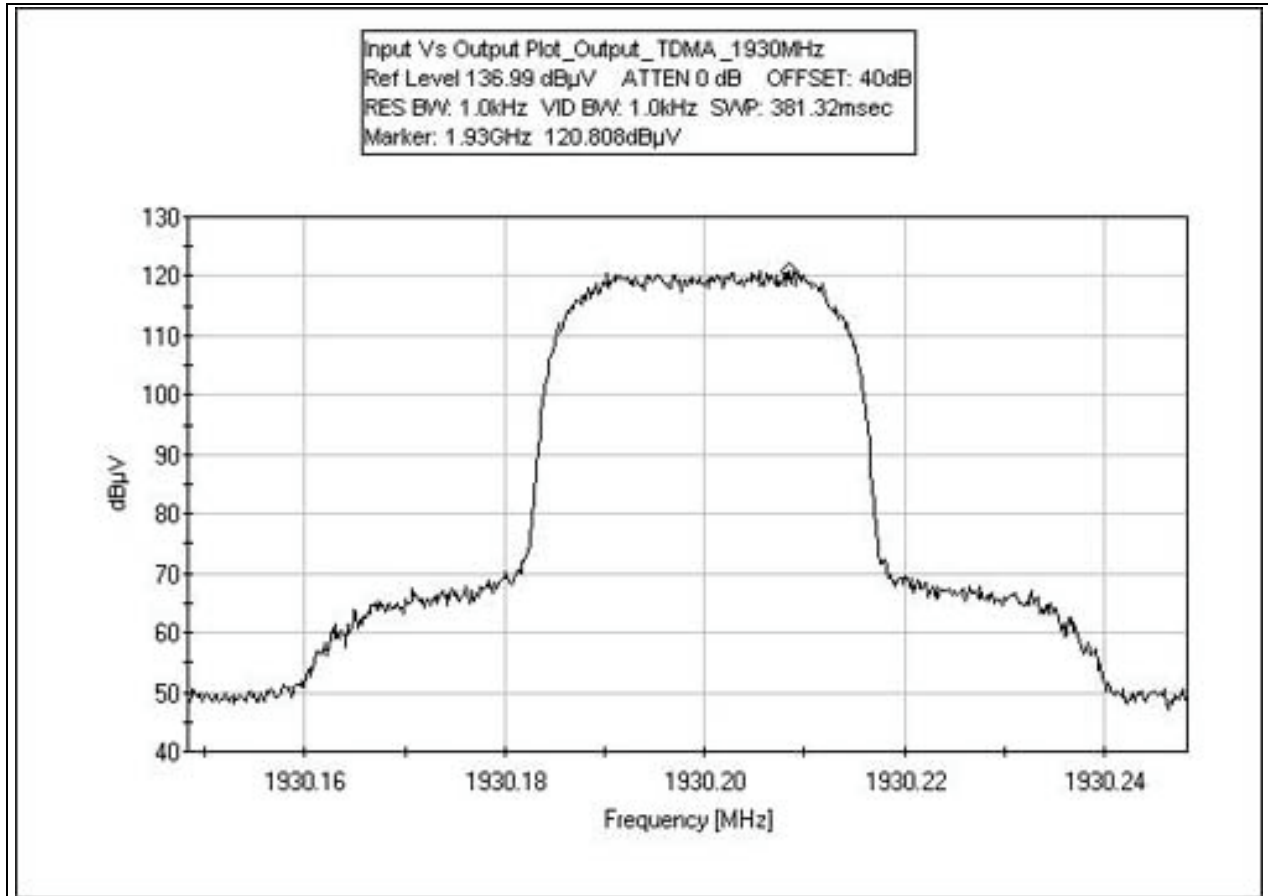
OUTPUT PLOT - GSM 1960MHz



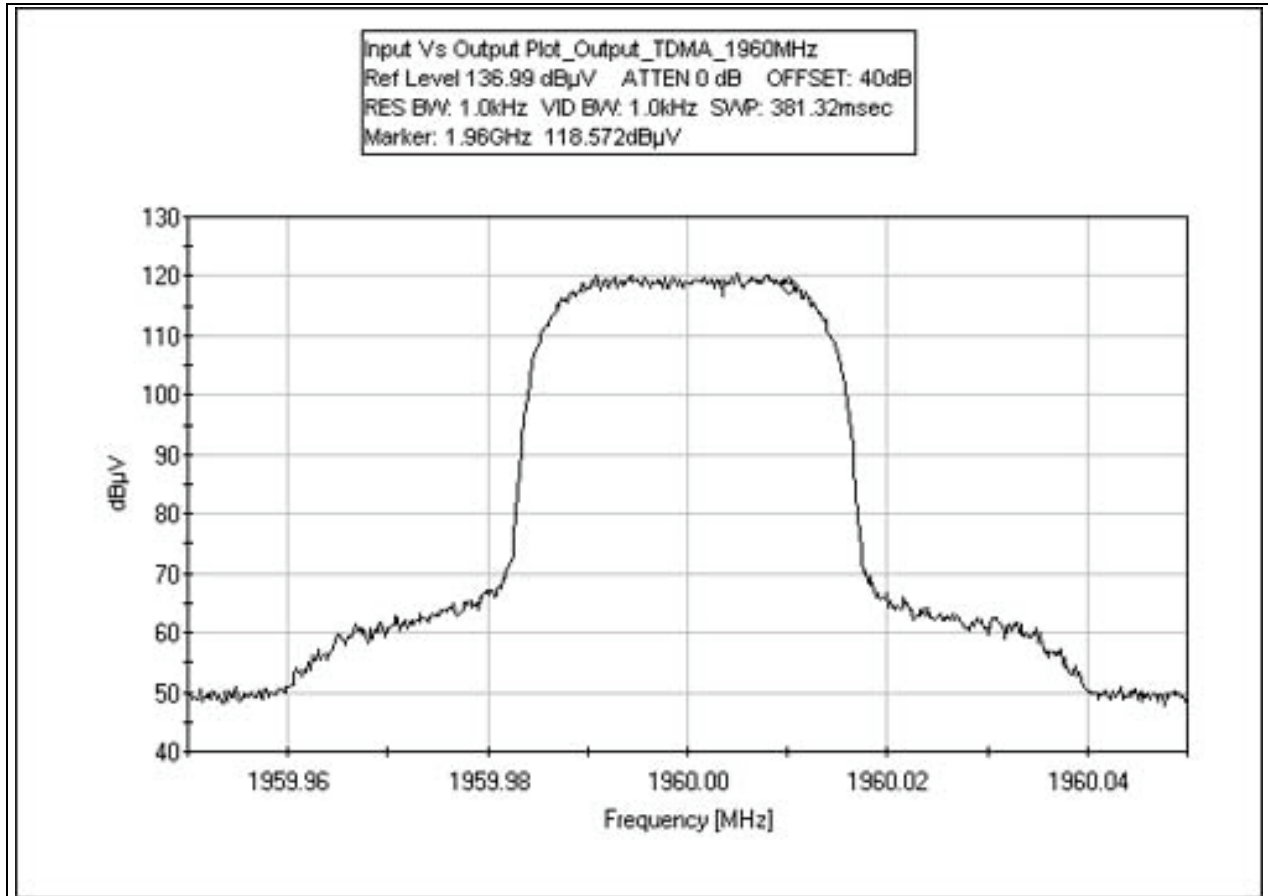
OUTPUT PLOT - GSM 1990MHz



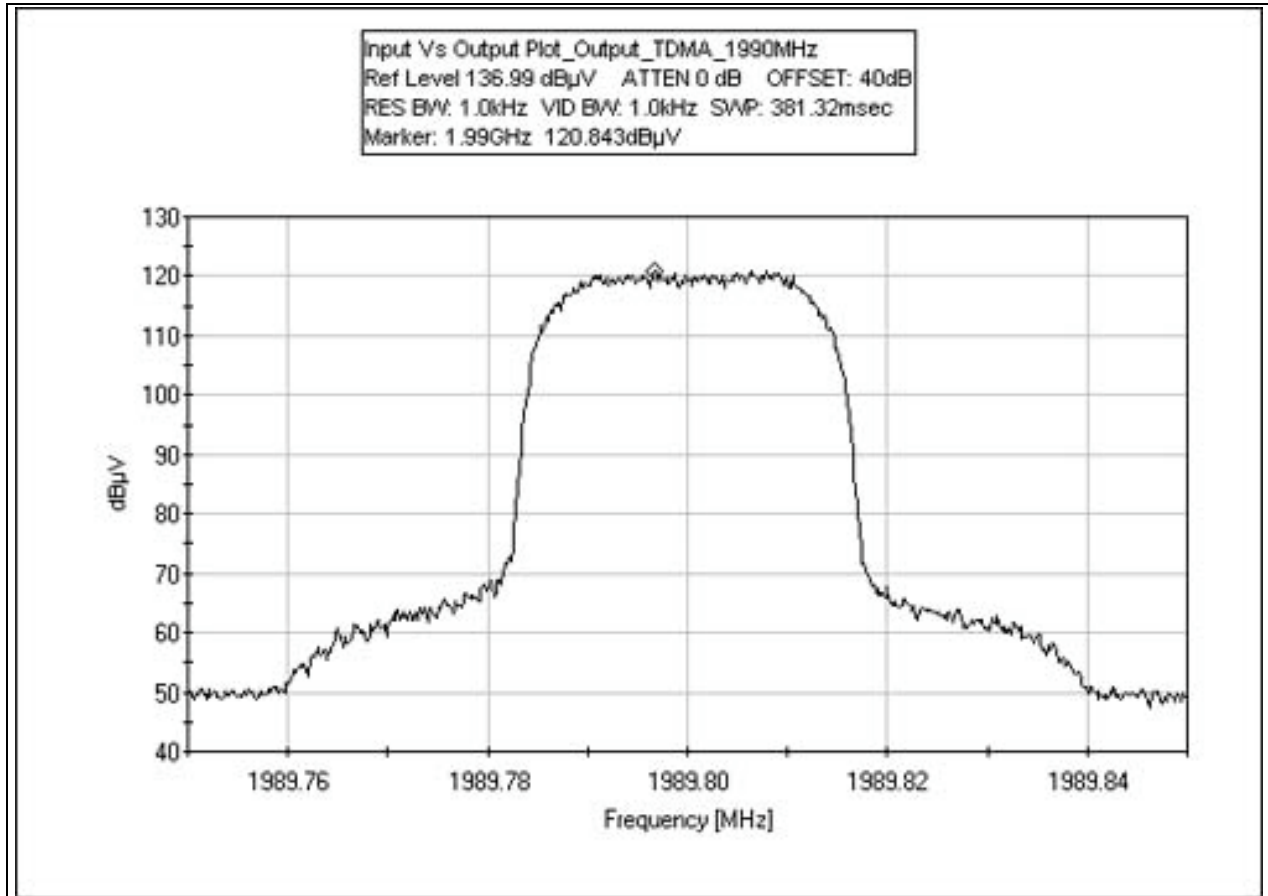
OUTPUT PLOT - TDMA 1930MHz



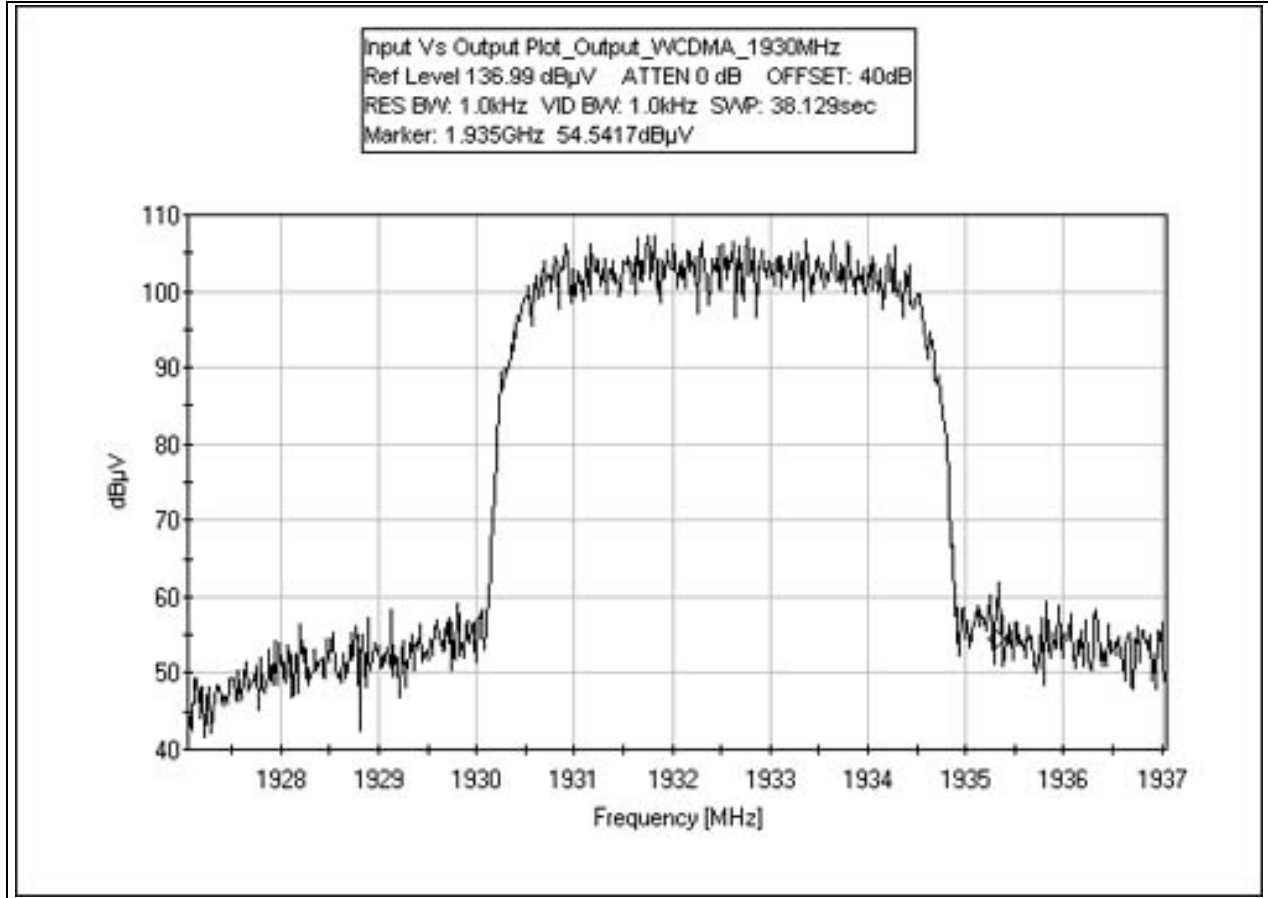
OUTPUT PLOT - TDMA 1960MHz



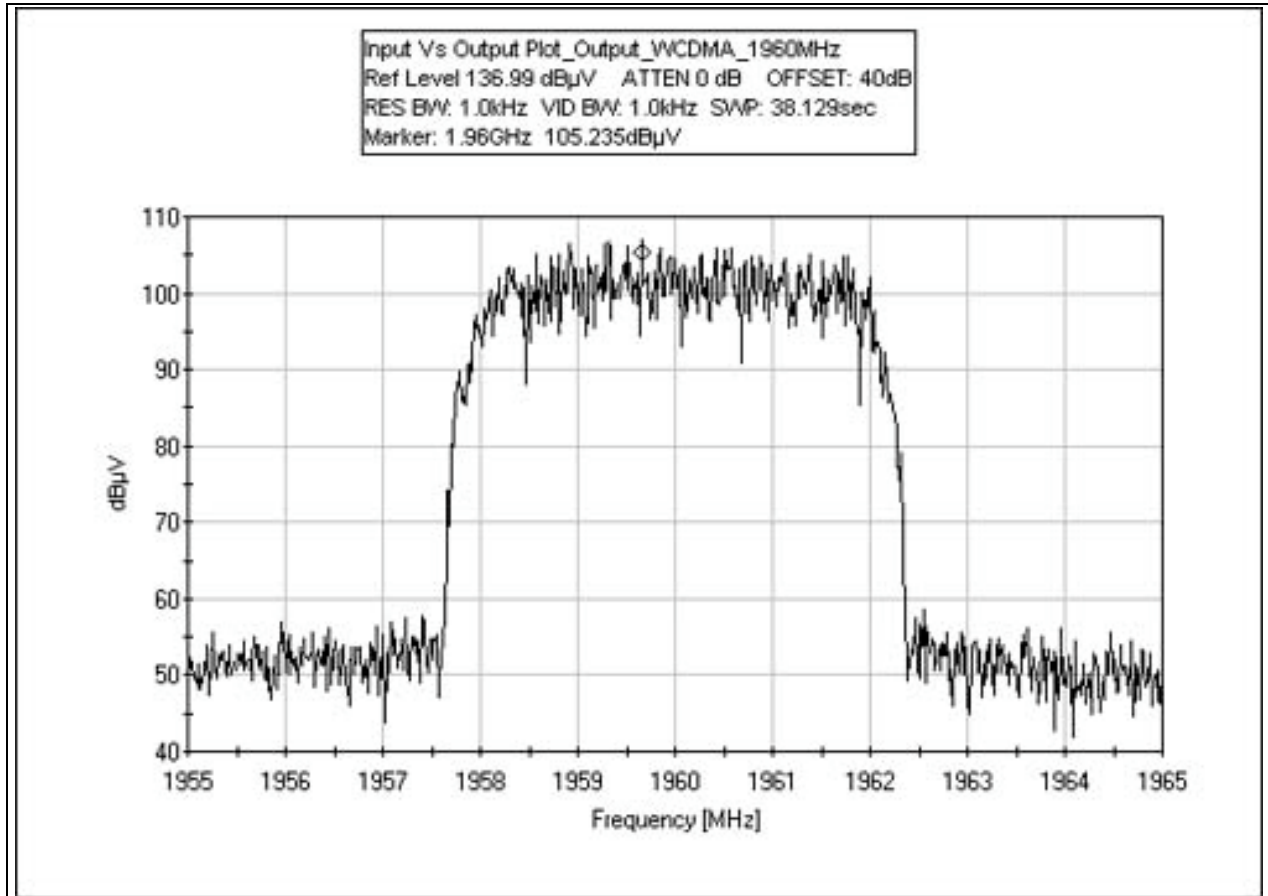
OUTPUT PLOT - TDMA 1990MHz



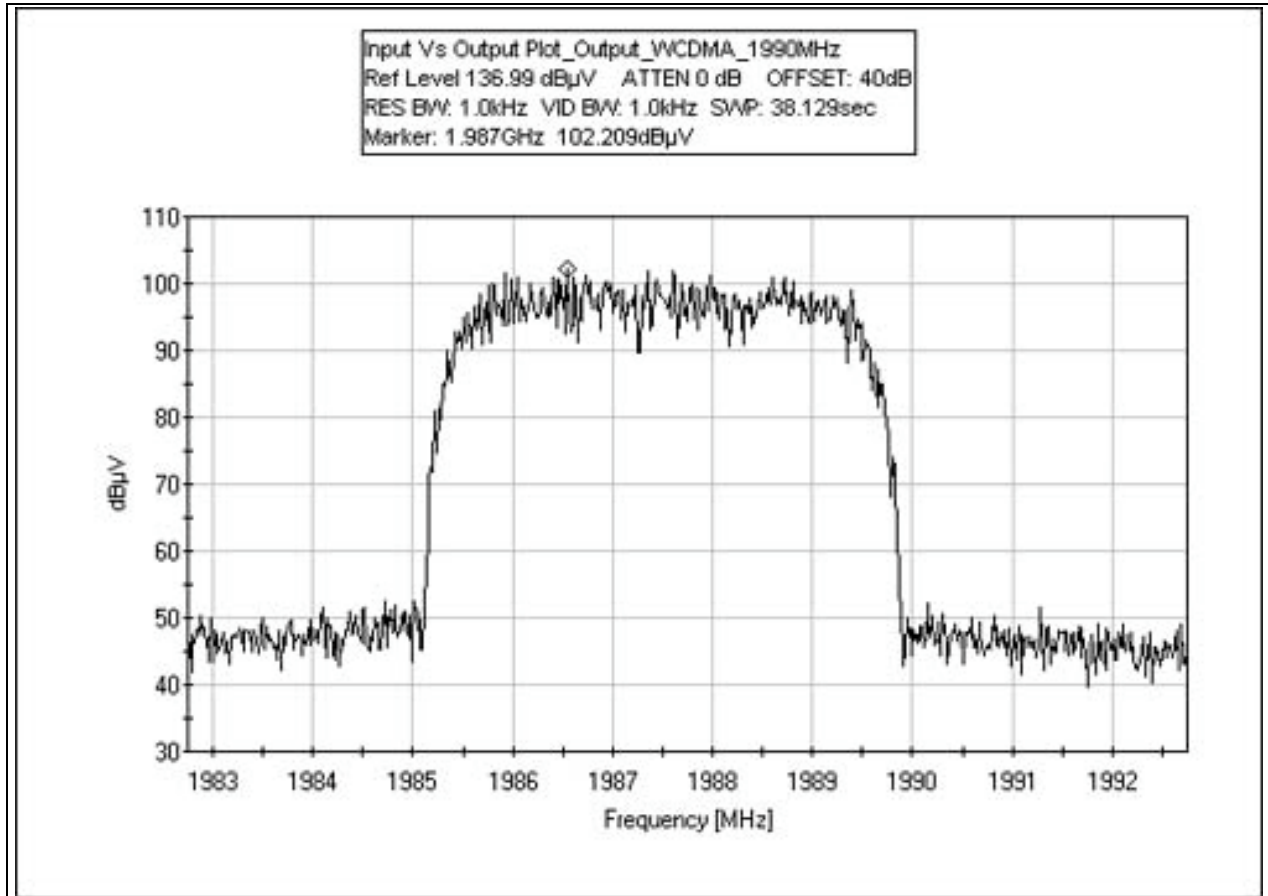
OUTPUT PLOT - WCDMA 1930MHz



OUTPUT PLOT - WCDMA 1960MHz



OUTPUT PLOT - WCDMA 1990MHz



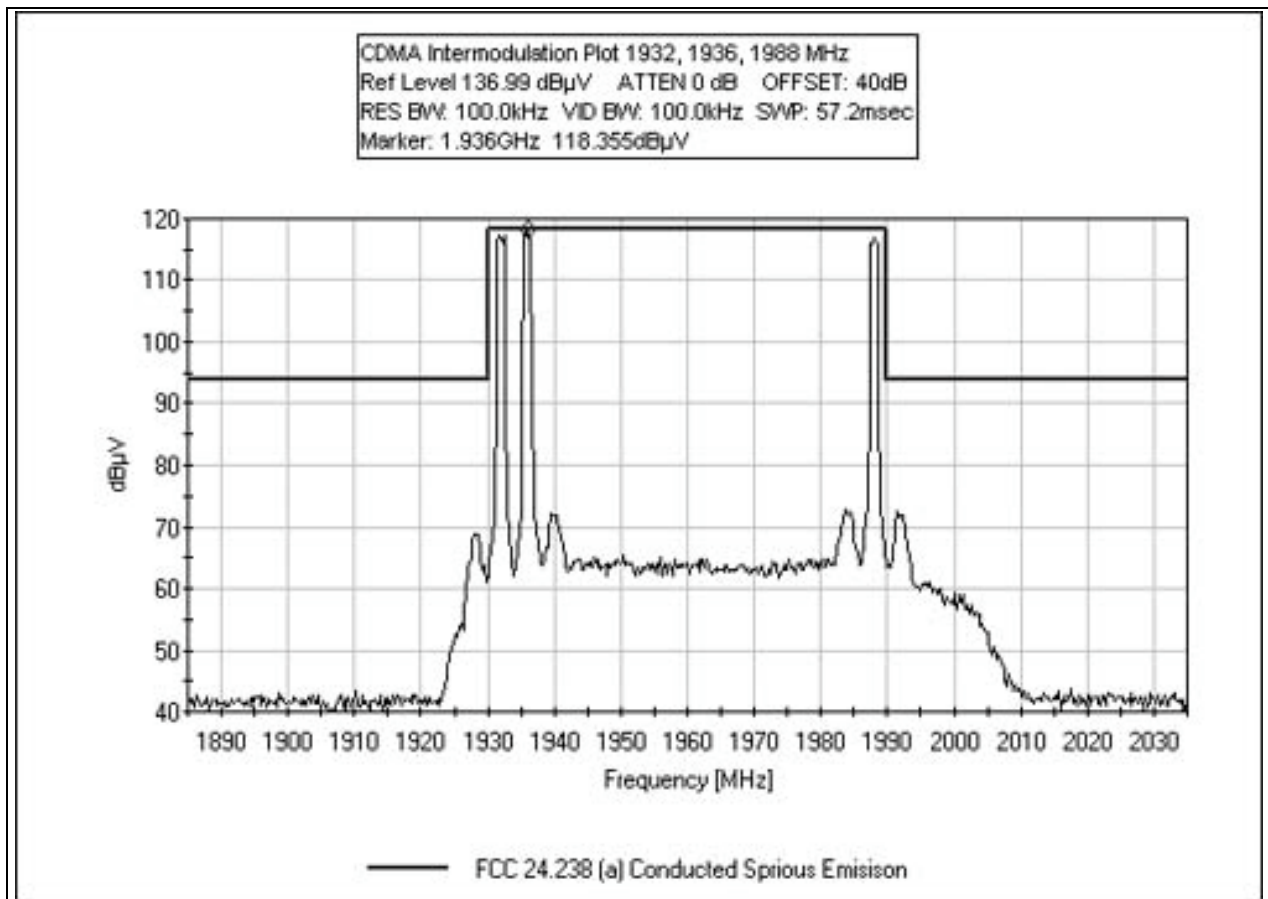
Test Equipment

Equipment	Asset #	Manufacturer	Model #	Serial #	Cal Date	Cal Due
Spectrum Analyzer	02672	Agilent	E4446A	US44300438	011405	011407

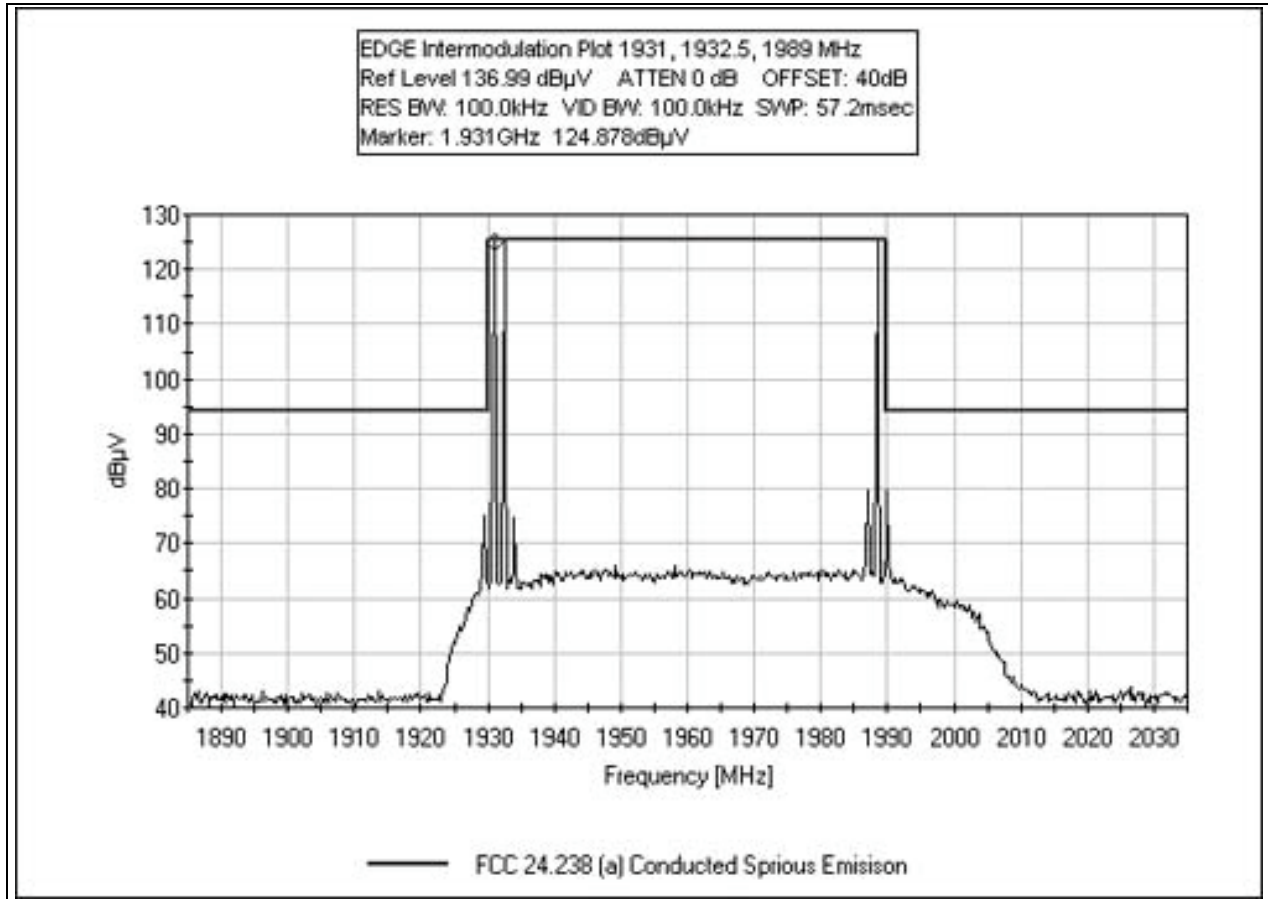


INTERMODULATION PLOT - CDMA

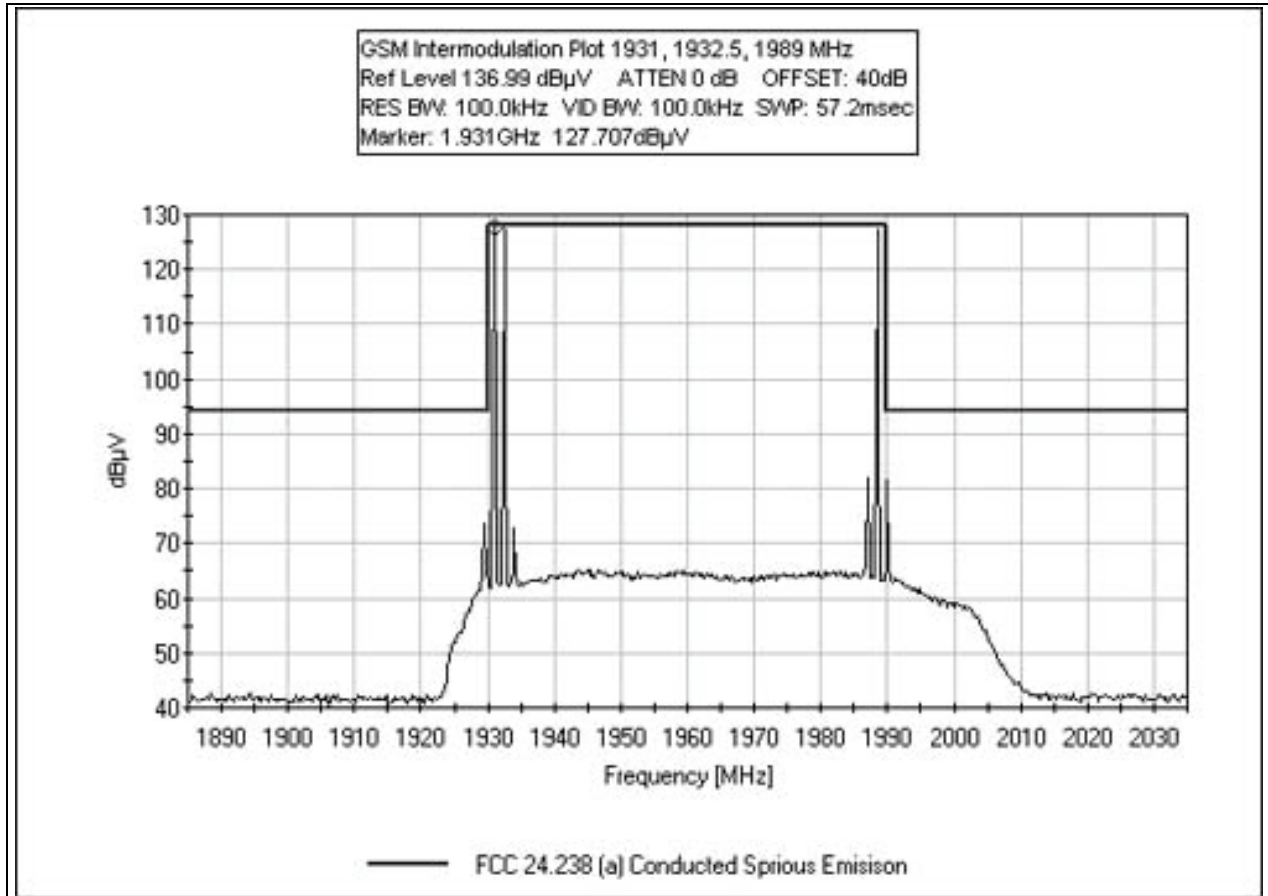
Test Conditions: The EUT is placed on the wooden table, the EUT is a remote radio head with multichannel capability and may otherwise be classified as a repeater/extender. EUT operates on 1930-1990 MHz. Support equipment is used to convert RF from signal generator to fiber for input to the EUT. The RF output port of the EUT is terminated in a shielded 50 ohm load. EUT does not demodulate the input signal. RF signal measured at the antenna port. Modulation: GSM, CDMA, WCDMA, TDMA, EDGE. Power: 1 Watt. Frequency: 1930, 1960, 1990 MHz.



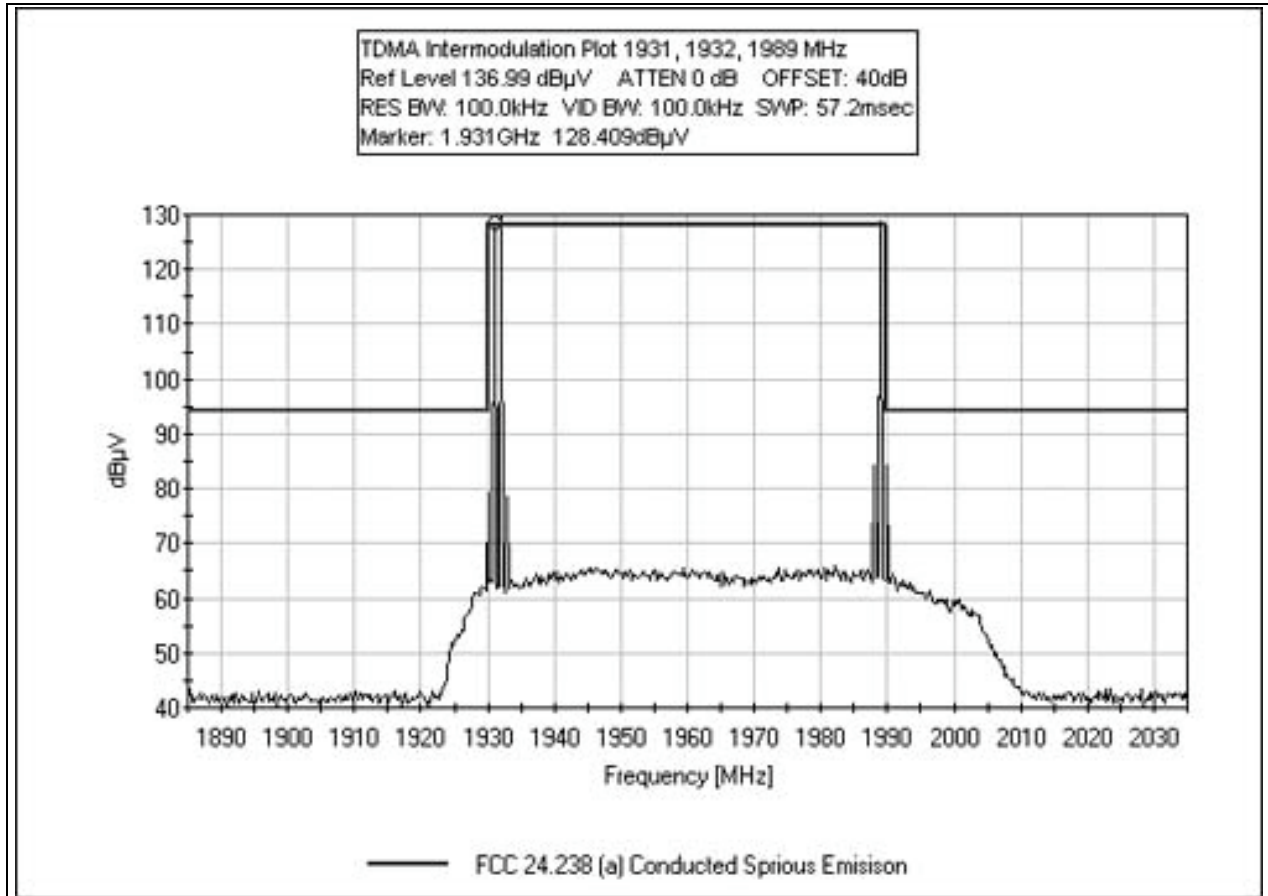
INTERMODULATION PLOT - EDGE



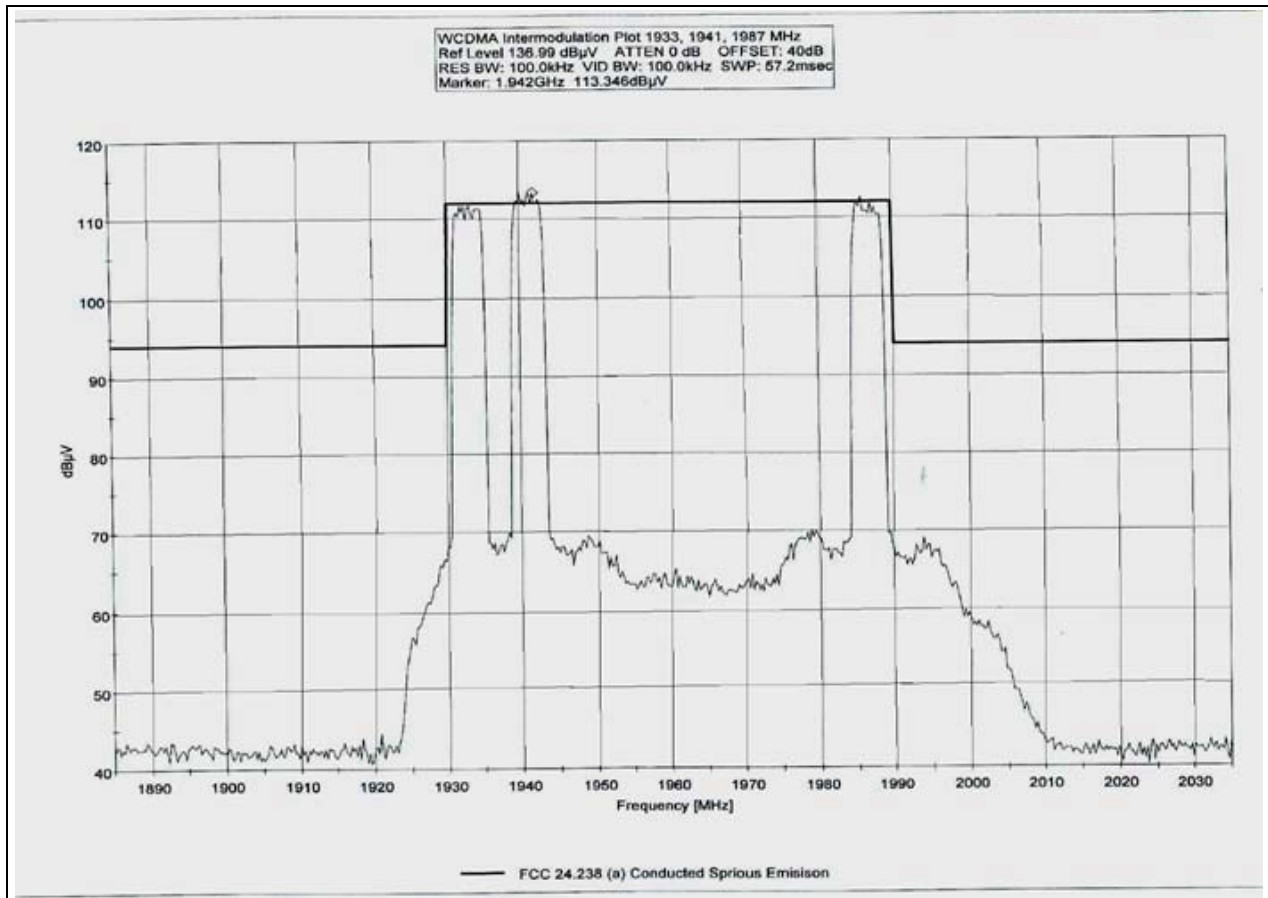
INTERMODULATION PLOT - GSM



INTERMODULATION PLOT – TDMA



INTERMODULATION PLOT - WCDMA



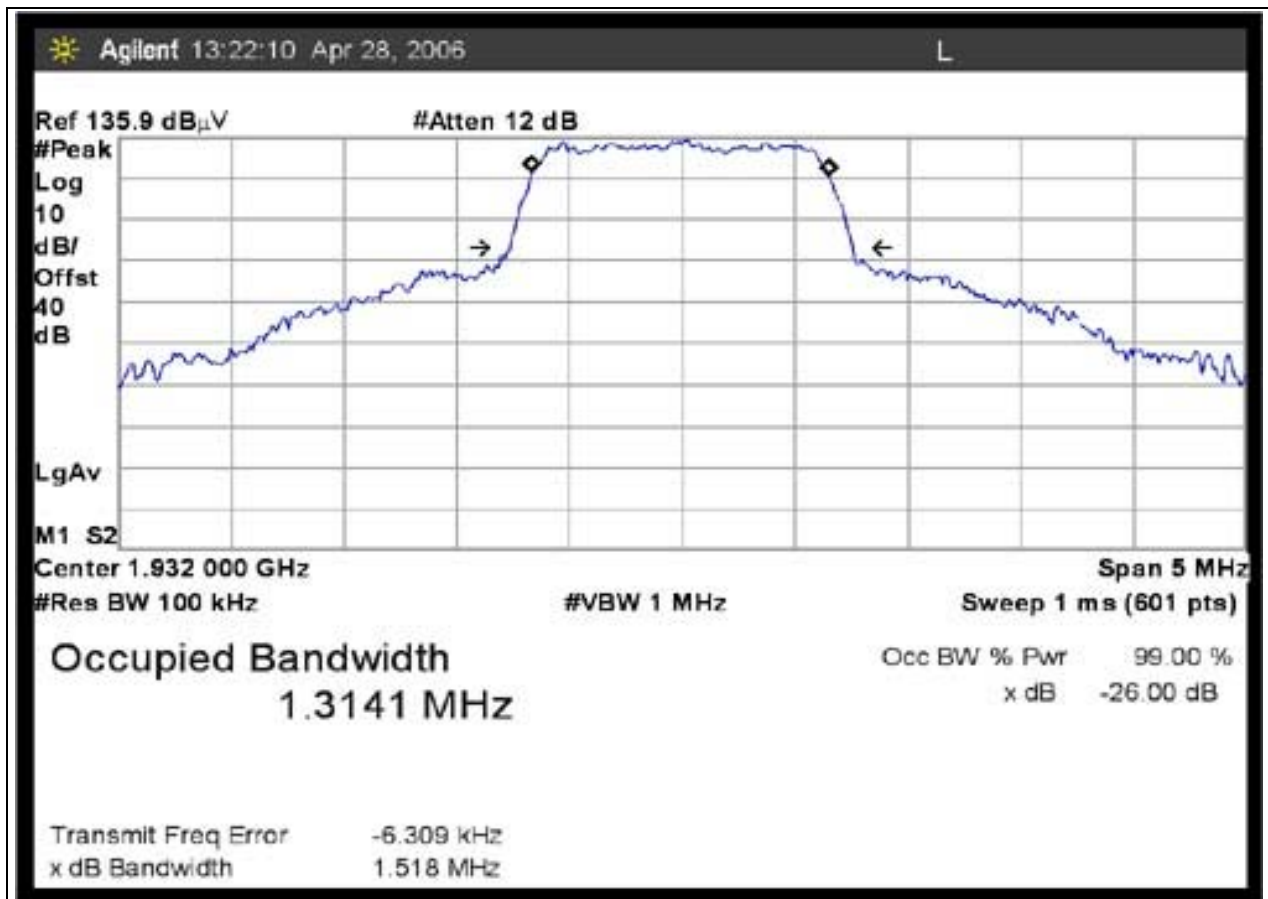
Test Equipment

Equipment	Asset #	Manufacturer	Model #	Serial #	Cal Date	Cal Due
Spectrum Analyzer	02672	Agilent	E4446A	US44300438	011405	011407

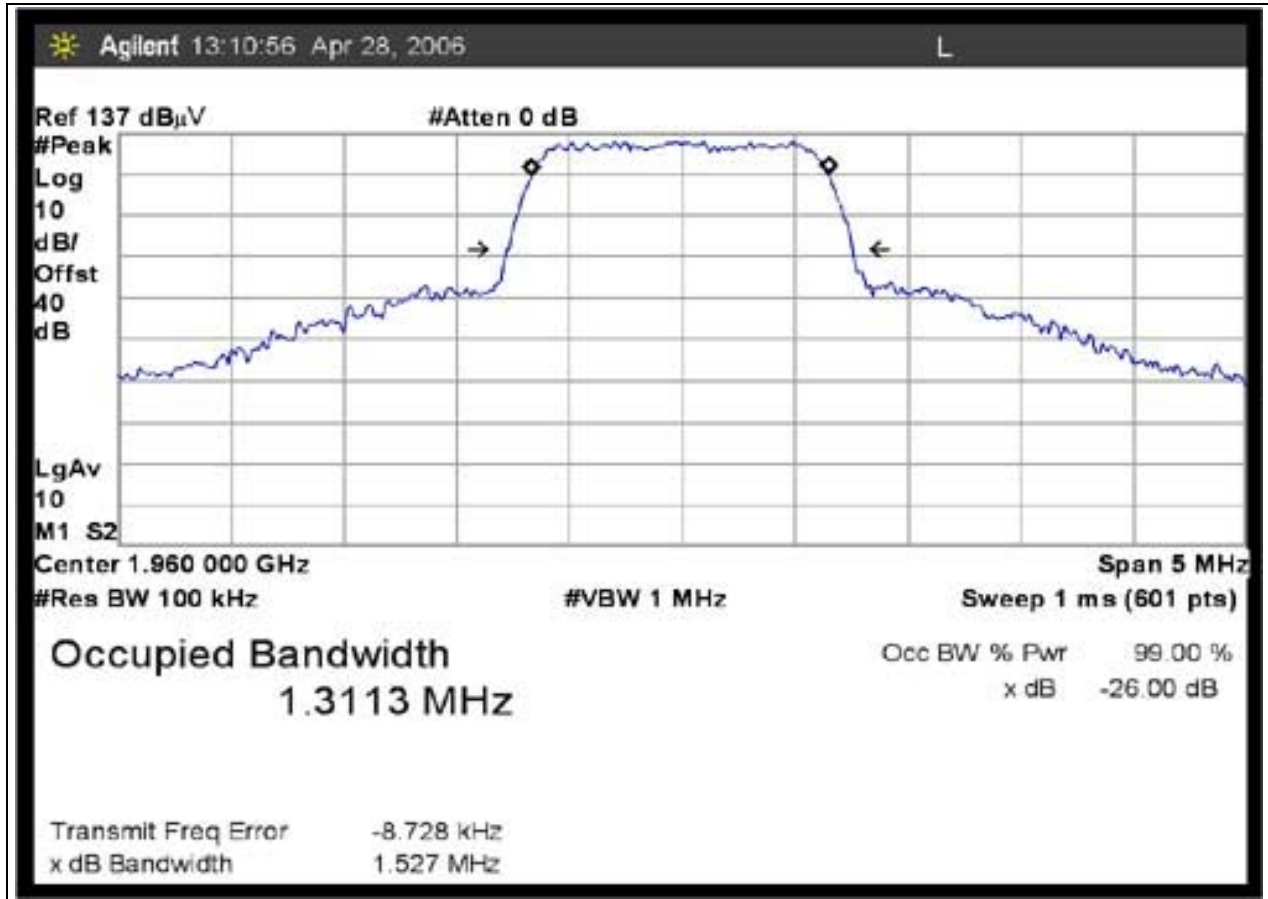


RSS-131 99% BANDWIDTH - CDMA 1930MHz

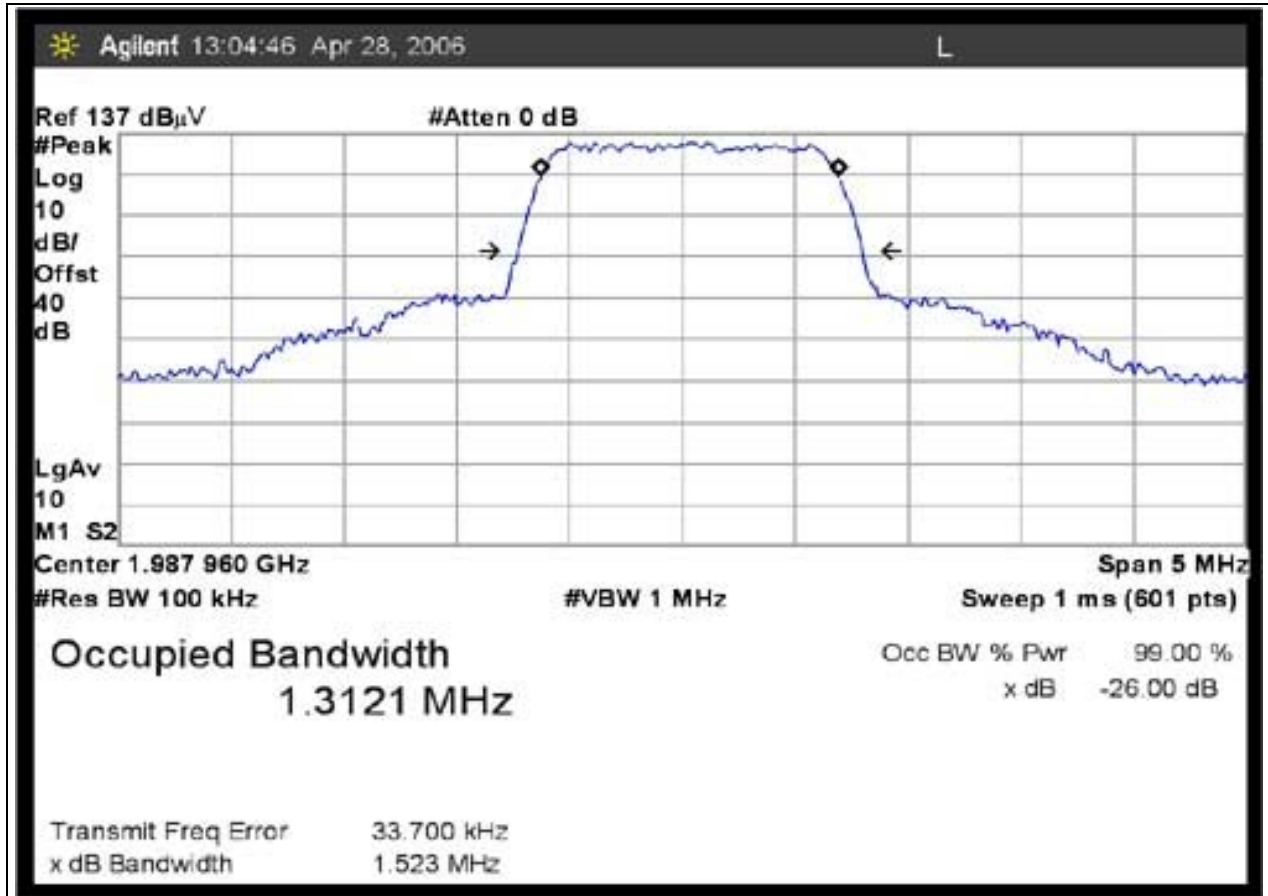
Test Conditions: The EUT is placed on the wooden table, the EUT is a remote radio head with multichannel capability and may otherwise be classified as a repeater/extender. EUT operates on 1930-1990 MHz. Support equipment is used to convert RF from signal generator to fiber for input to the EUT. The RF output port of the EUT is terminated in a shielded 50 ohm load. EUT does not demodulate the input signal. RF signal measured at the antenna port. Modulation: GSM, CDMA, WCDMA, TDMA, EDGE. Power: 1 Watt. Frequency: 1930, 1960, 1990 MHz.



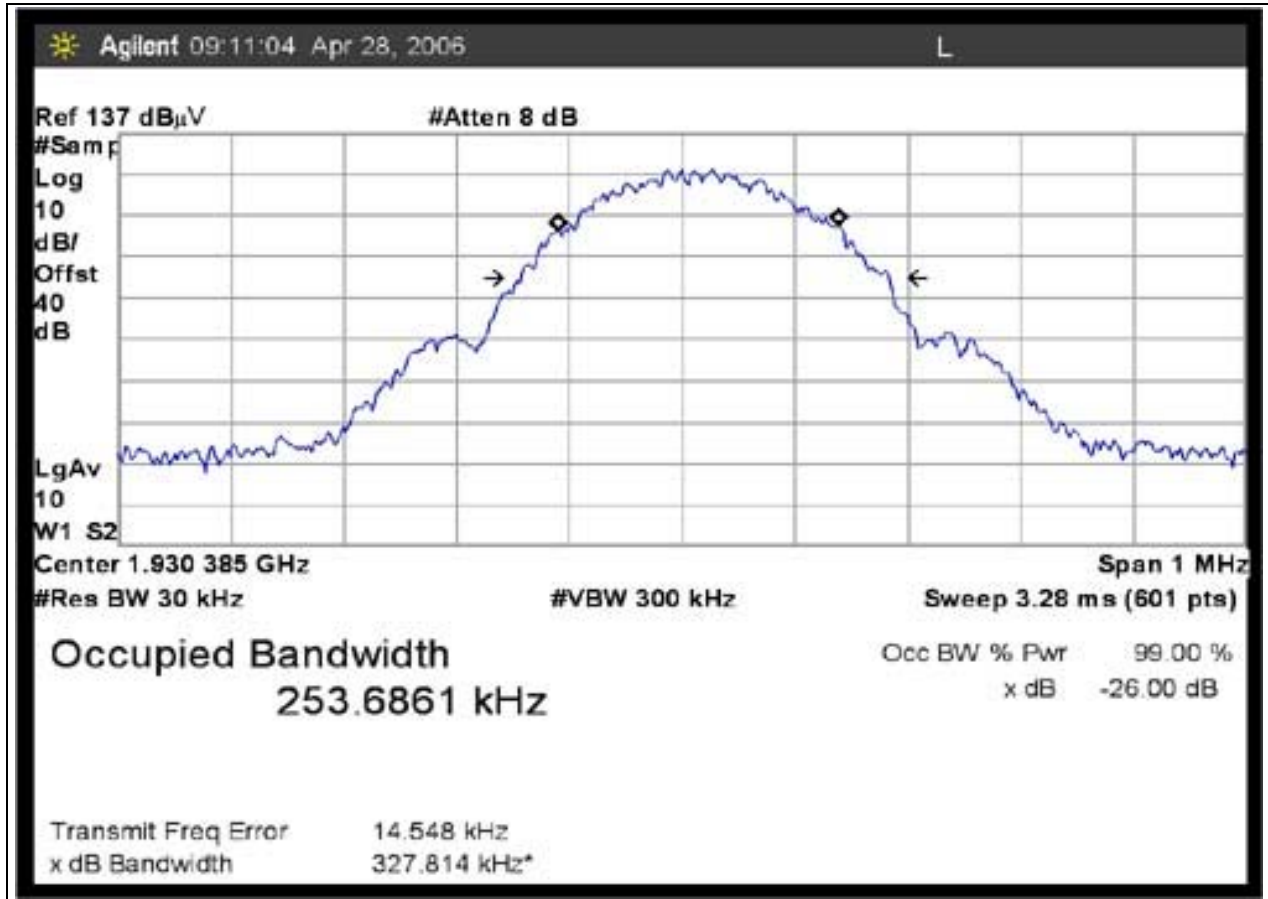
RSS-131 99% BANDWIDTH - CDMA 1960MHz



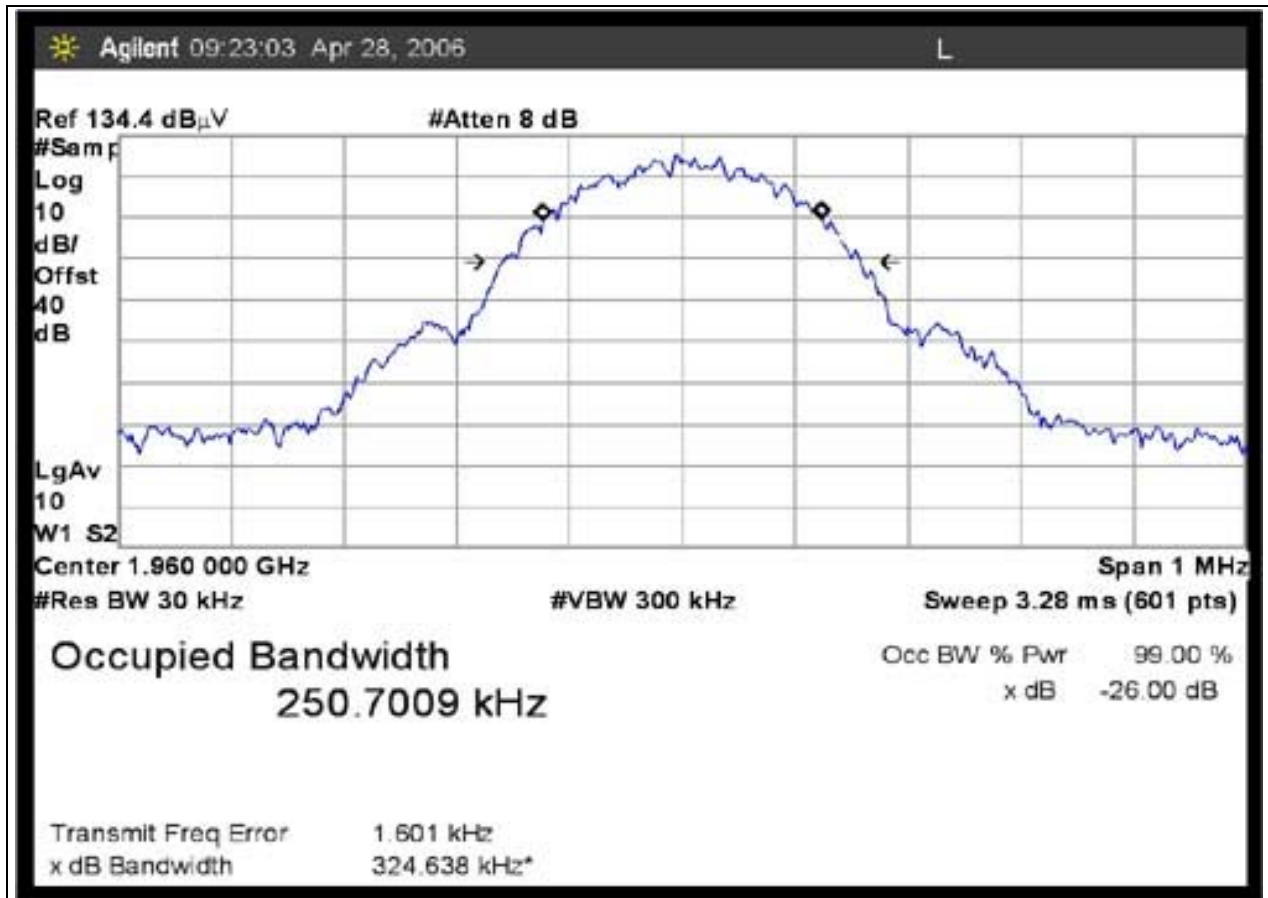
RSS-131 99% BANDWIDTH - CDMA 1990MHz



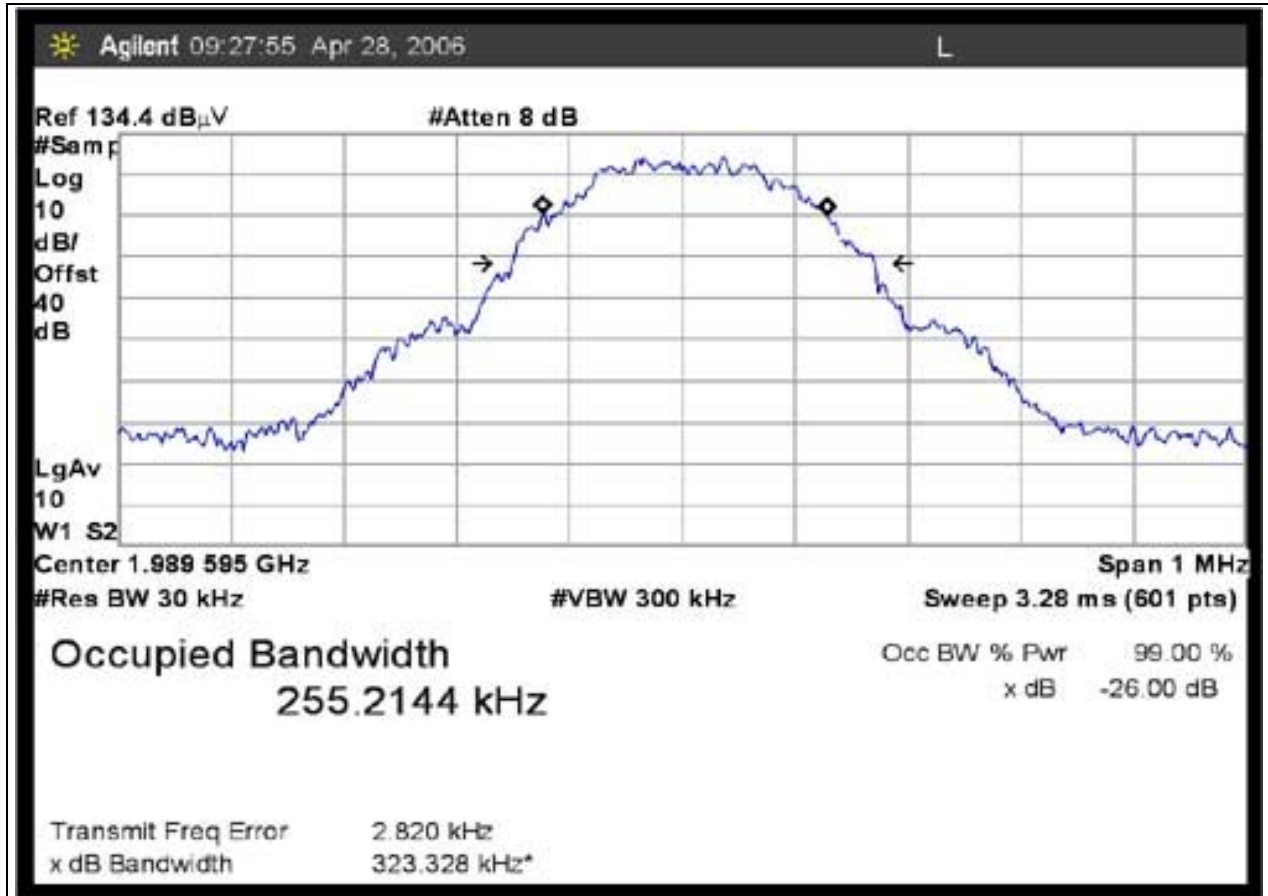
RSS-131 99% BANDWIDTH - EDGE 1930MHz



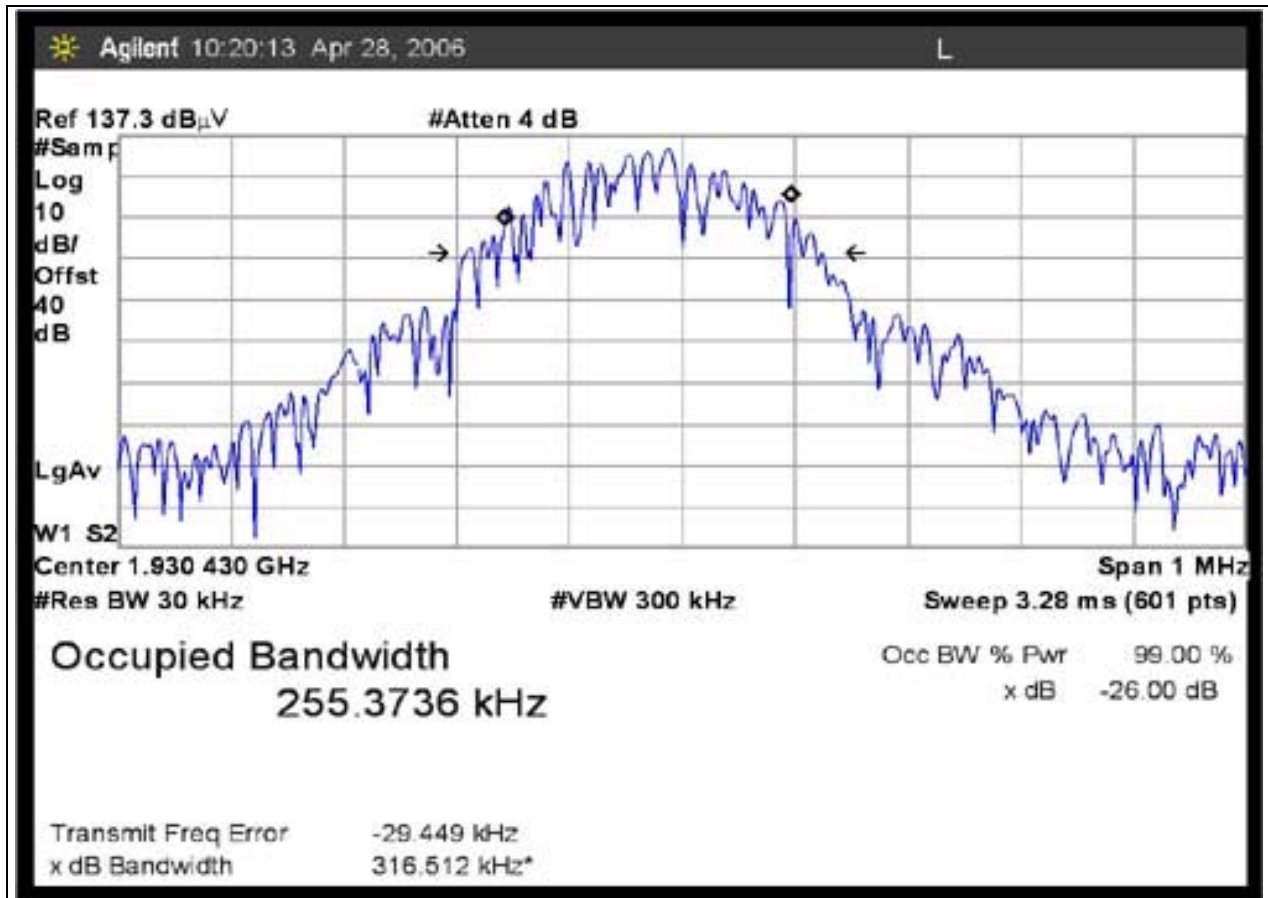
RSS-131 99% BANDWIDTH - EDGE 1960MHz



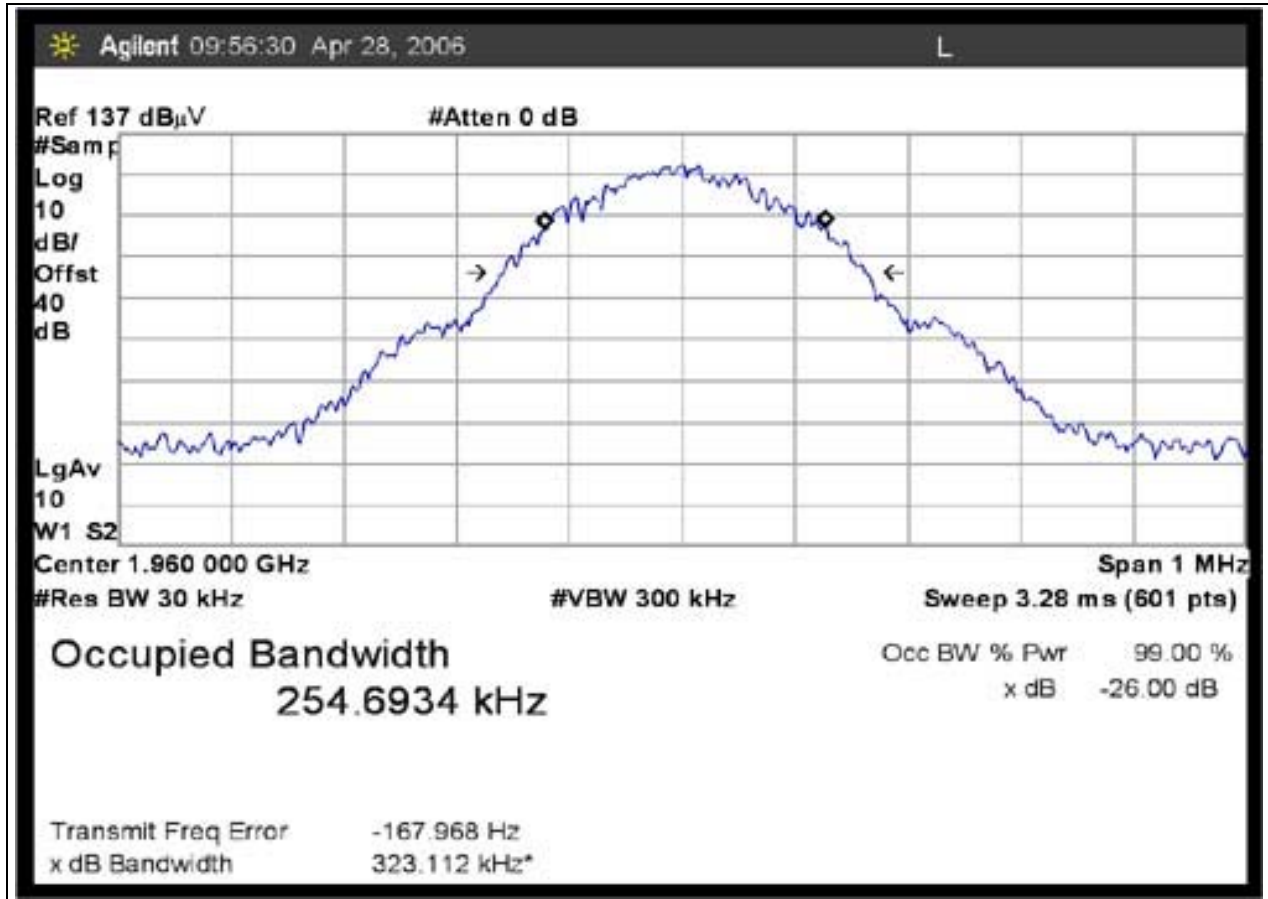
RSS-131 99% BANDWIDTH - EDGE 1990MHz



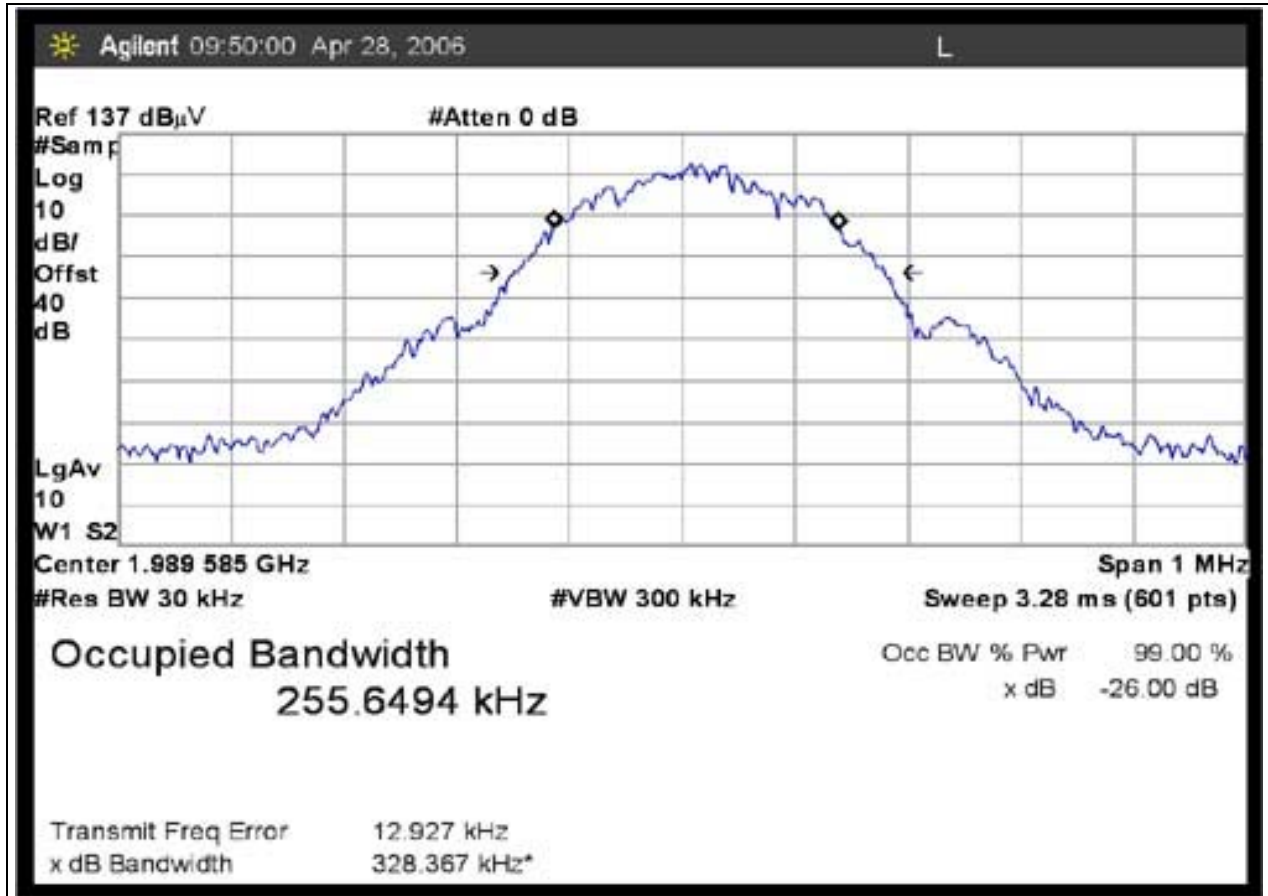
RSS-131 99% BANDWIDTH - GSM 1930MHz



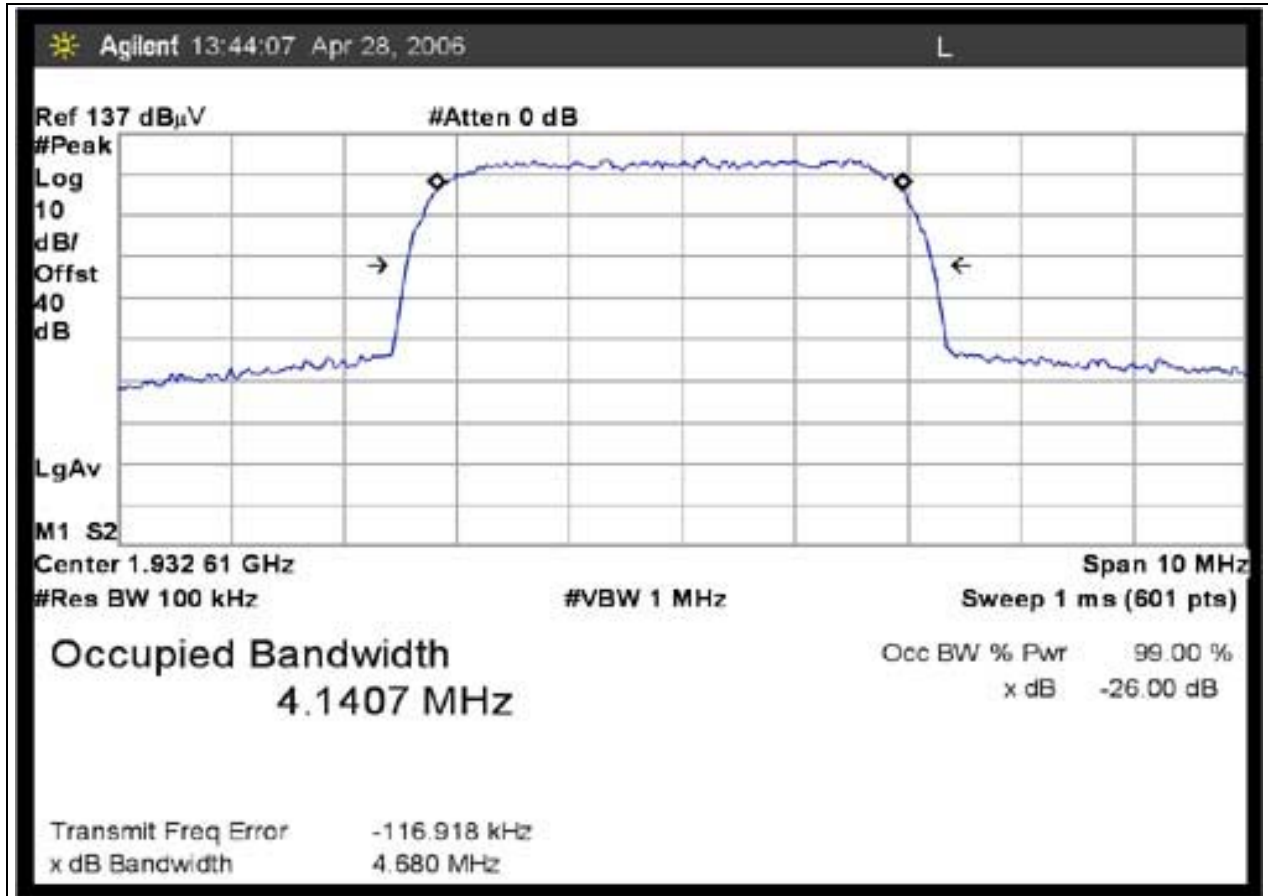
RSS-131 99% BANDWIDTH - GSM 1960MHz



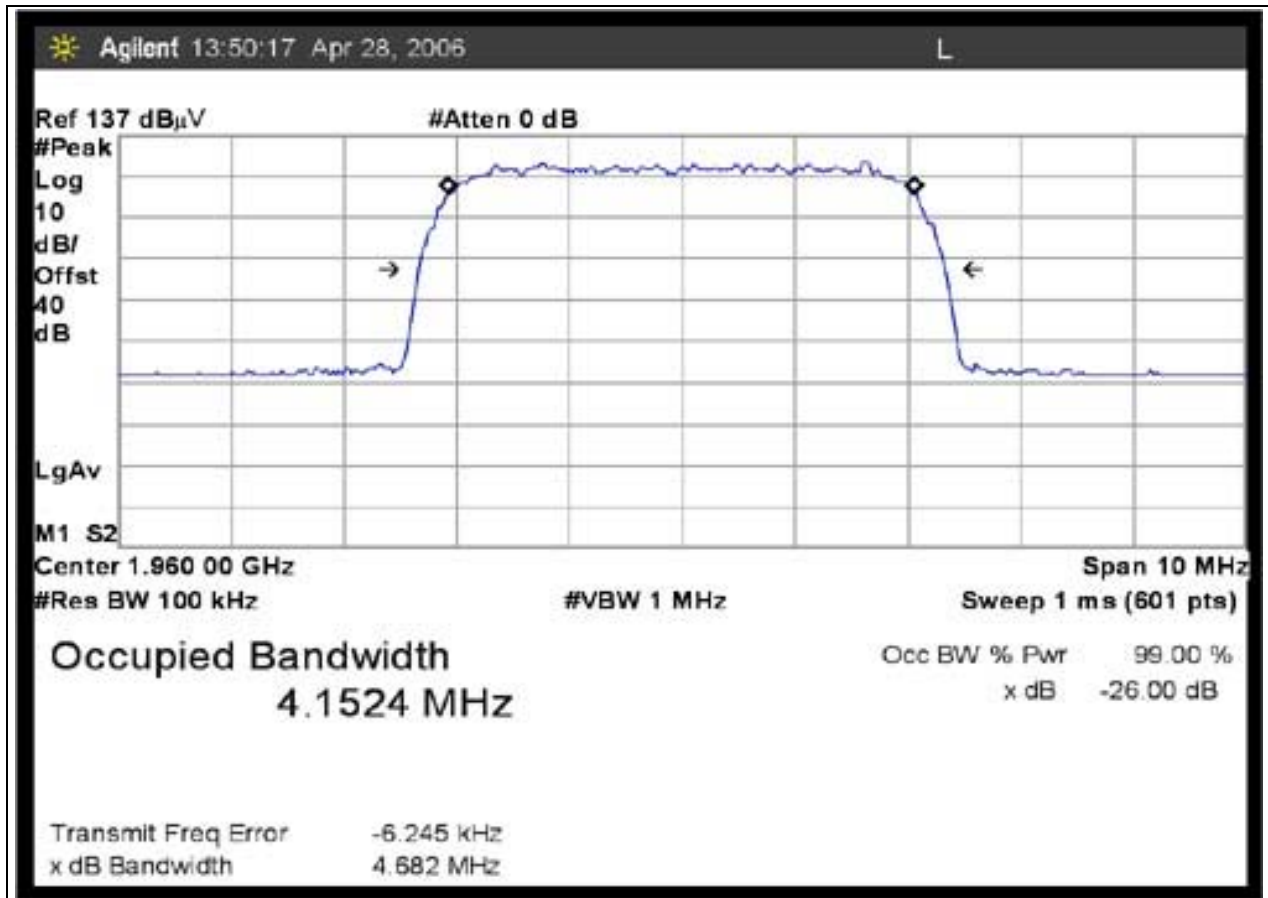
RSS-131 99% BANDWIDTH - GSM 1990MHz



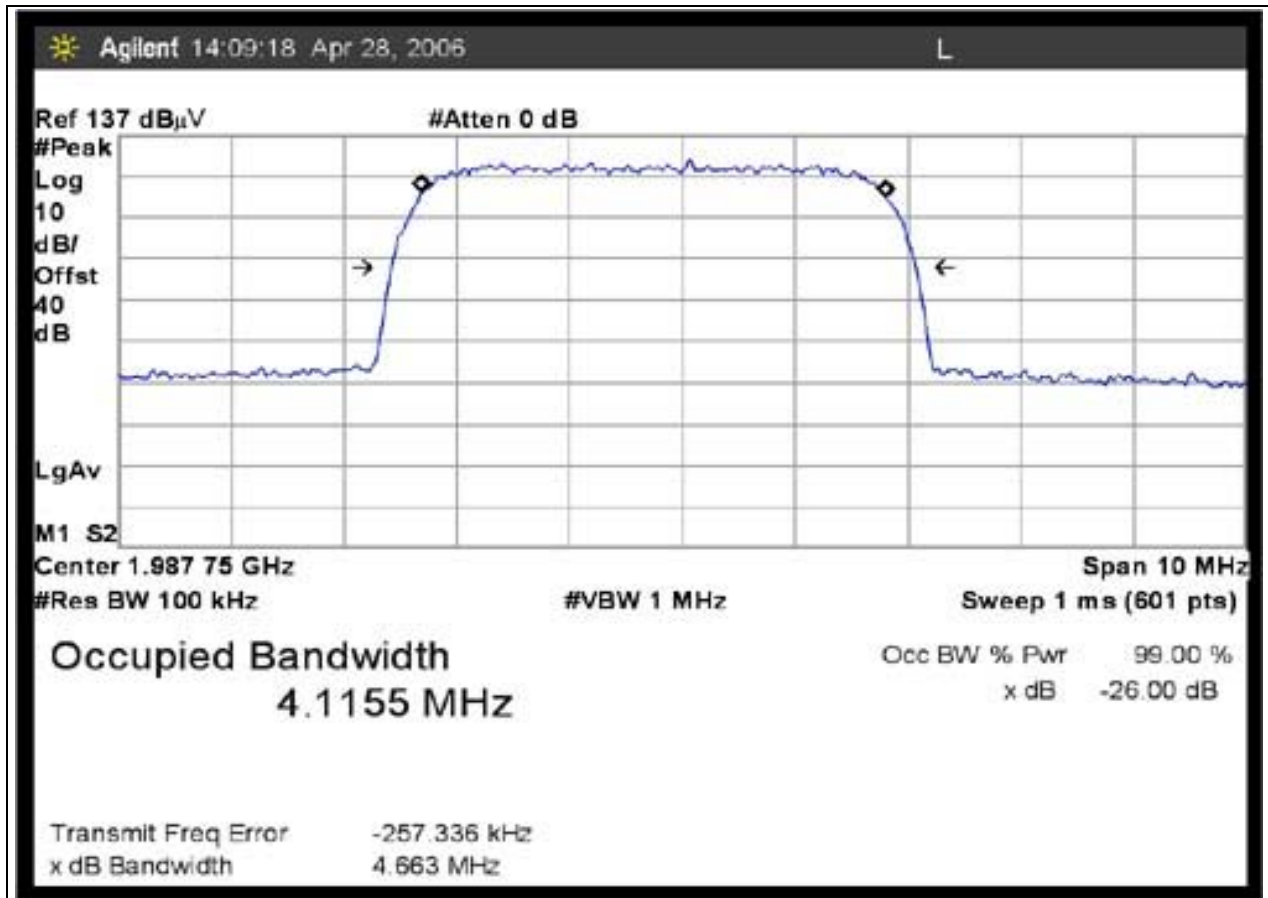
RSS-131 99% BANDWIDTH - WCDMA 1930MHz



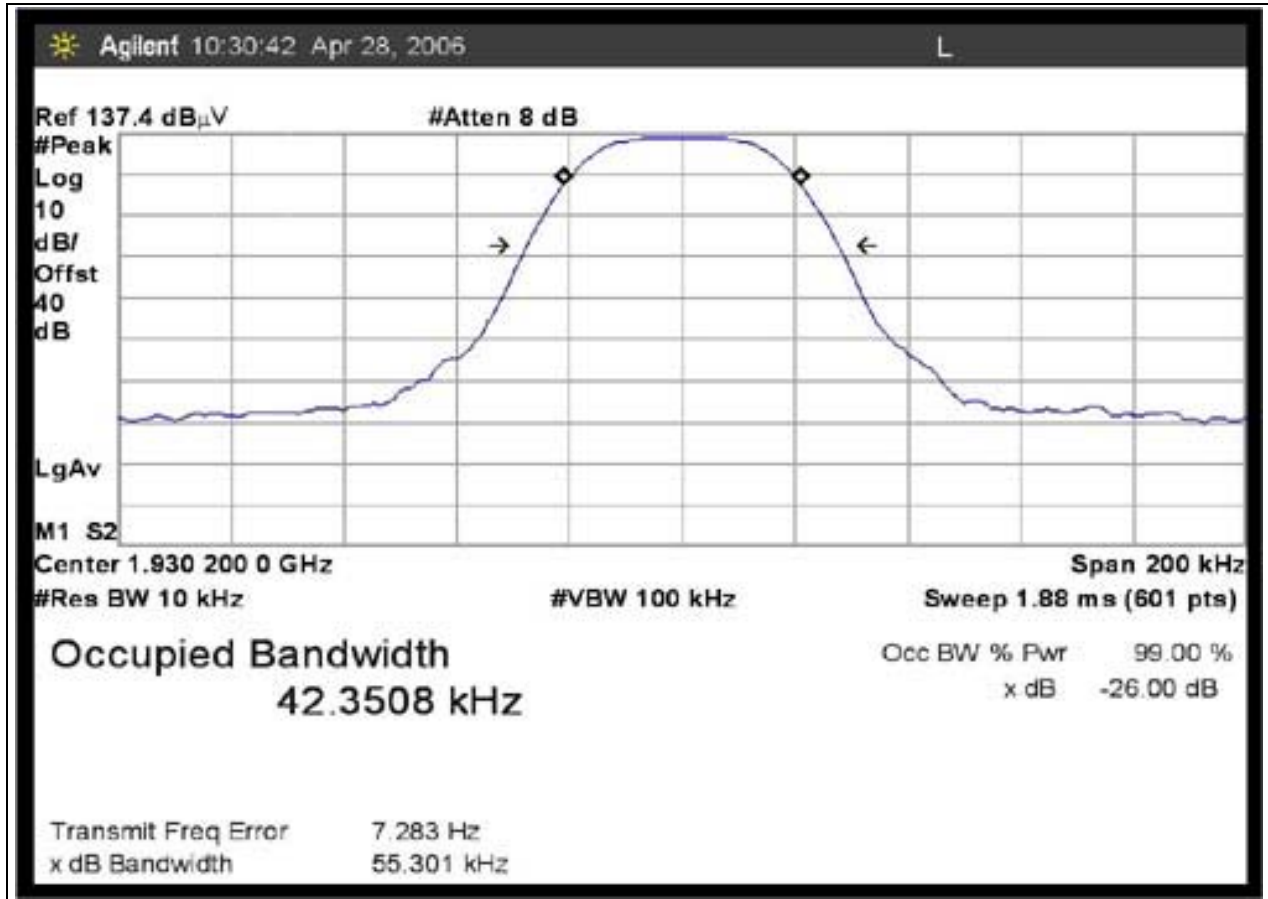
RSS-131 99% BANDWIDTH - WCDMA 1960MHz



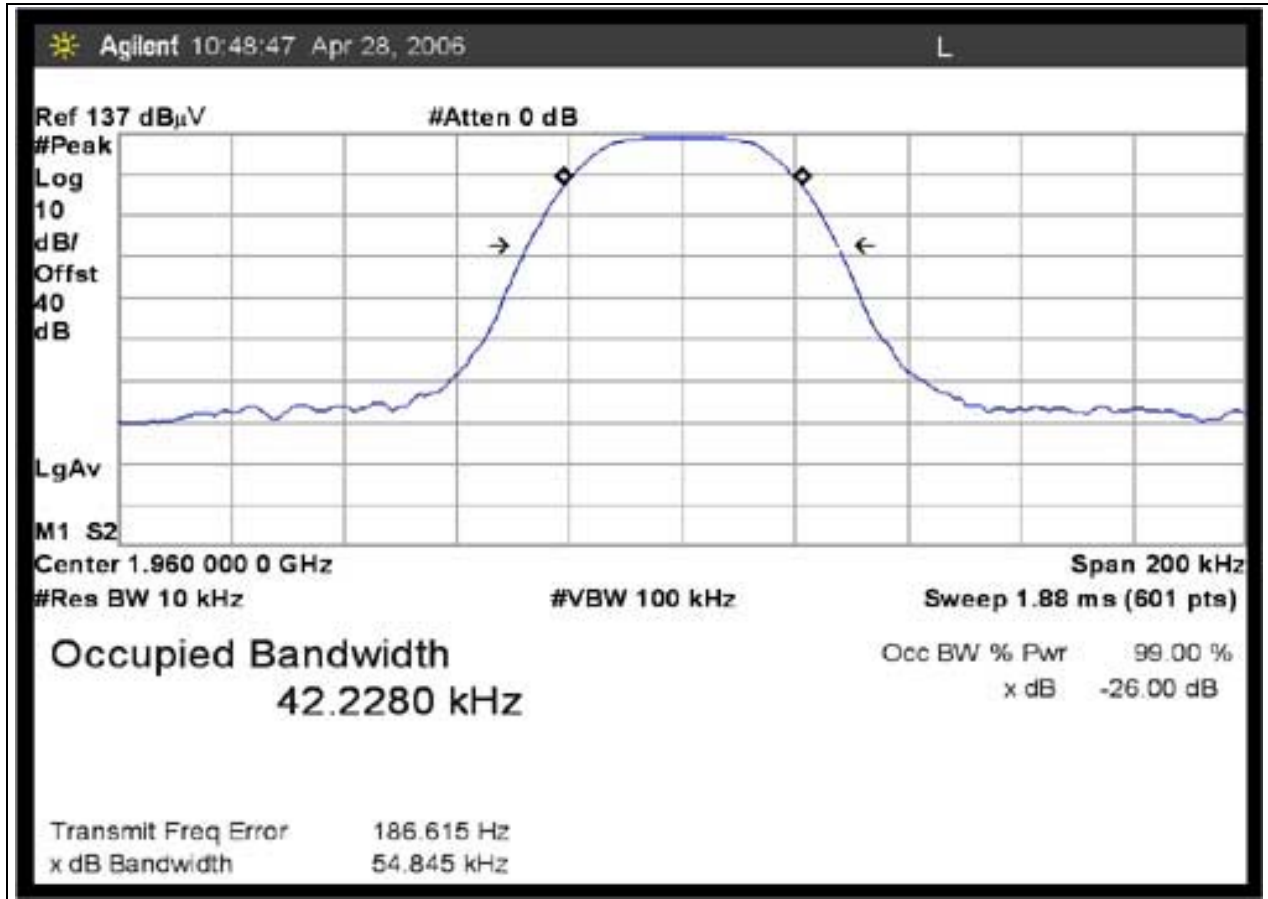
RSS-131 99% BANDWIDTH - WCDMA 1990MHz



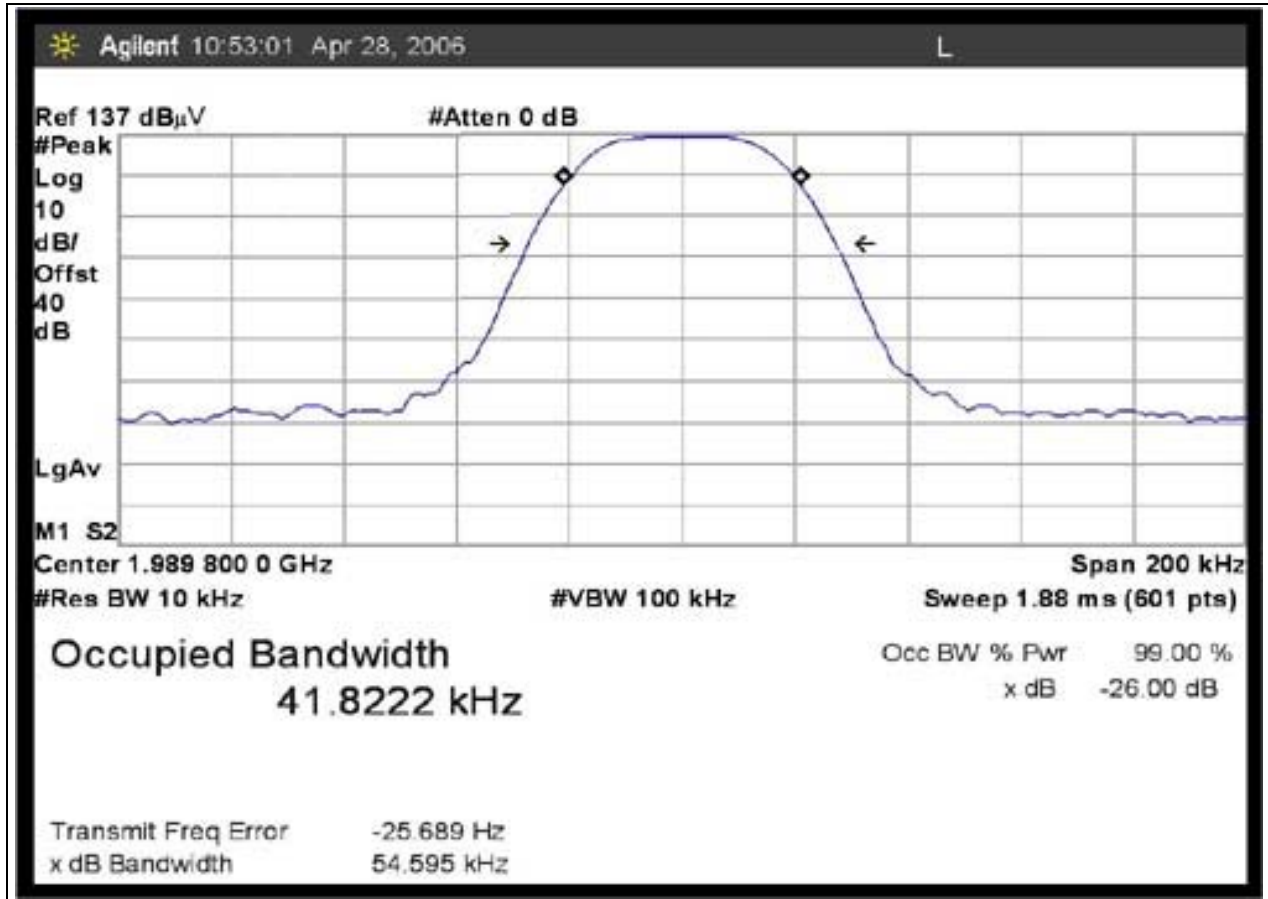
RSS-131 99% BANDWIDTH - TDMA 1930MHz



RSS-131 99% BANDWIDTH - TDMA 1960MHz



RSS-131 99% BANDWIDTH - TDMA 1990MHz



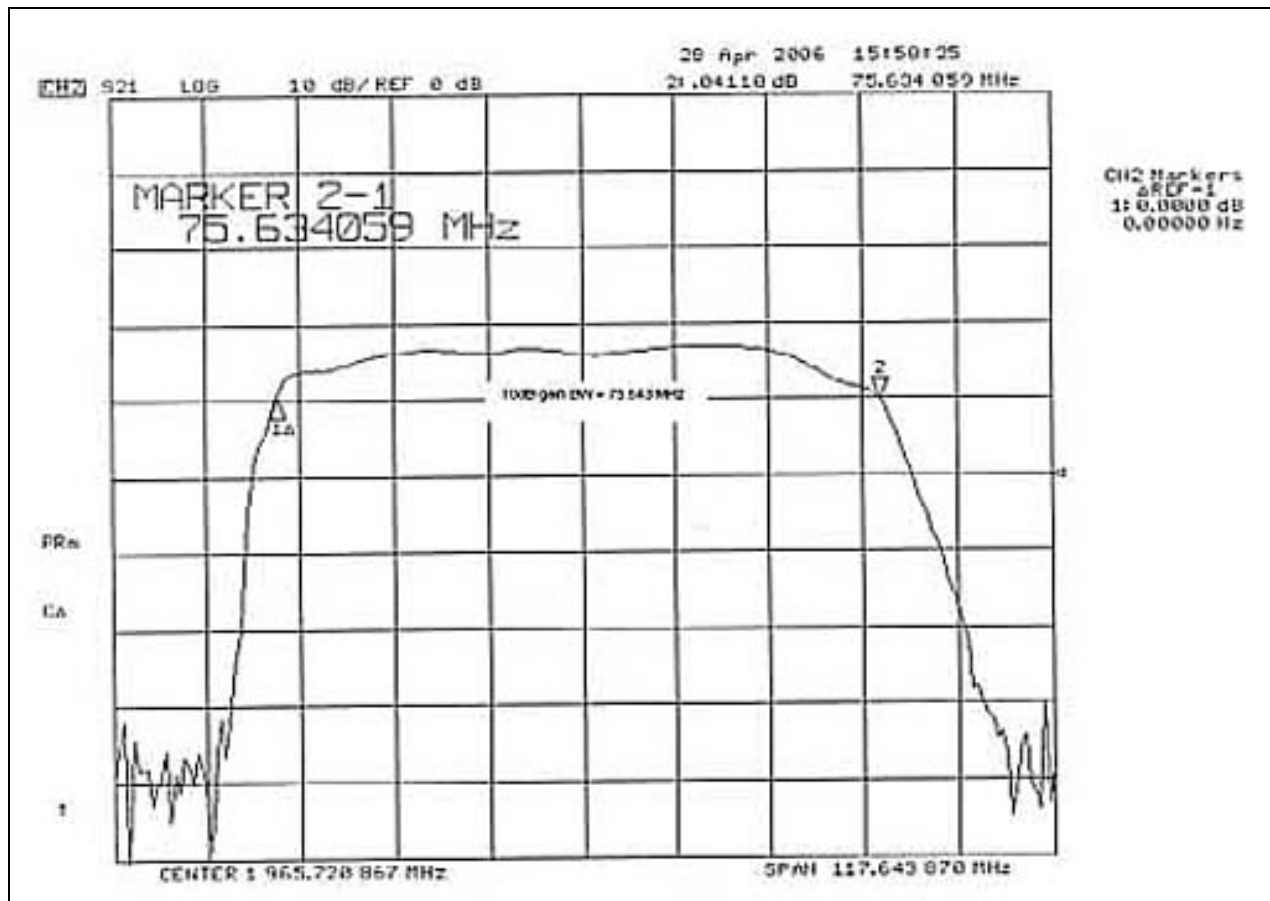
Test Equipment

Equipment	Asset #	Manufacturer	Model #	Serial #	Cal Date	Cal Due
Spectrum Analyzer	02672	Agilent	E4446A	US44300438	011405	011407



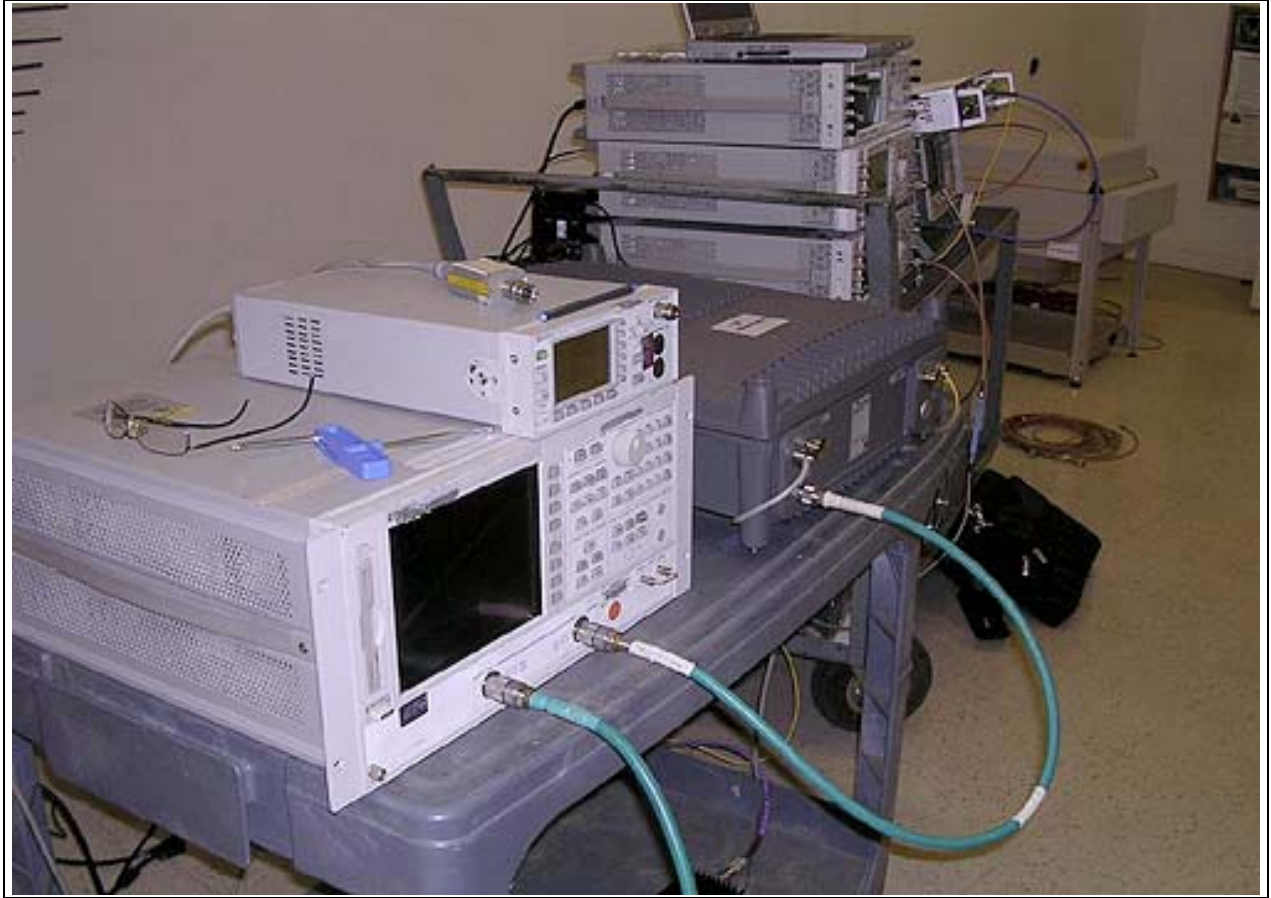
RSS-131 10 dB GAIN BANDWIDTH

Test Conditions: The EUT is placed on the wooden table, the EUT is a remote radio head with multichannel capability and may otherwise be classified as a repeater/extender. EUT operates on 1930-1990 MHz. Support equipment is used to convert RF from signal generator to fiber for input to the EUT. The RF output port of the EUT is terminated in a shielded 50 ohm load. EUT does not demodulate the input signal. RF signal measured at the antenna port. Modulation: GSM, CDMA, WCDMA, TDMA, EDGE. Power: 1 Watt. Frequency: 1930, 1960, 1990 MHz.

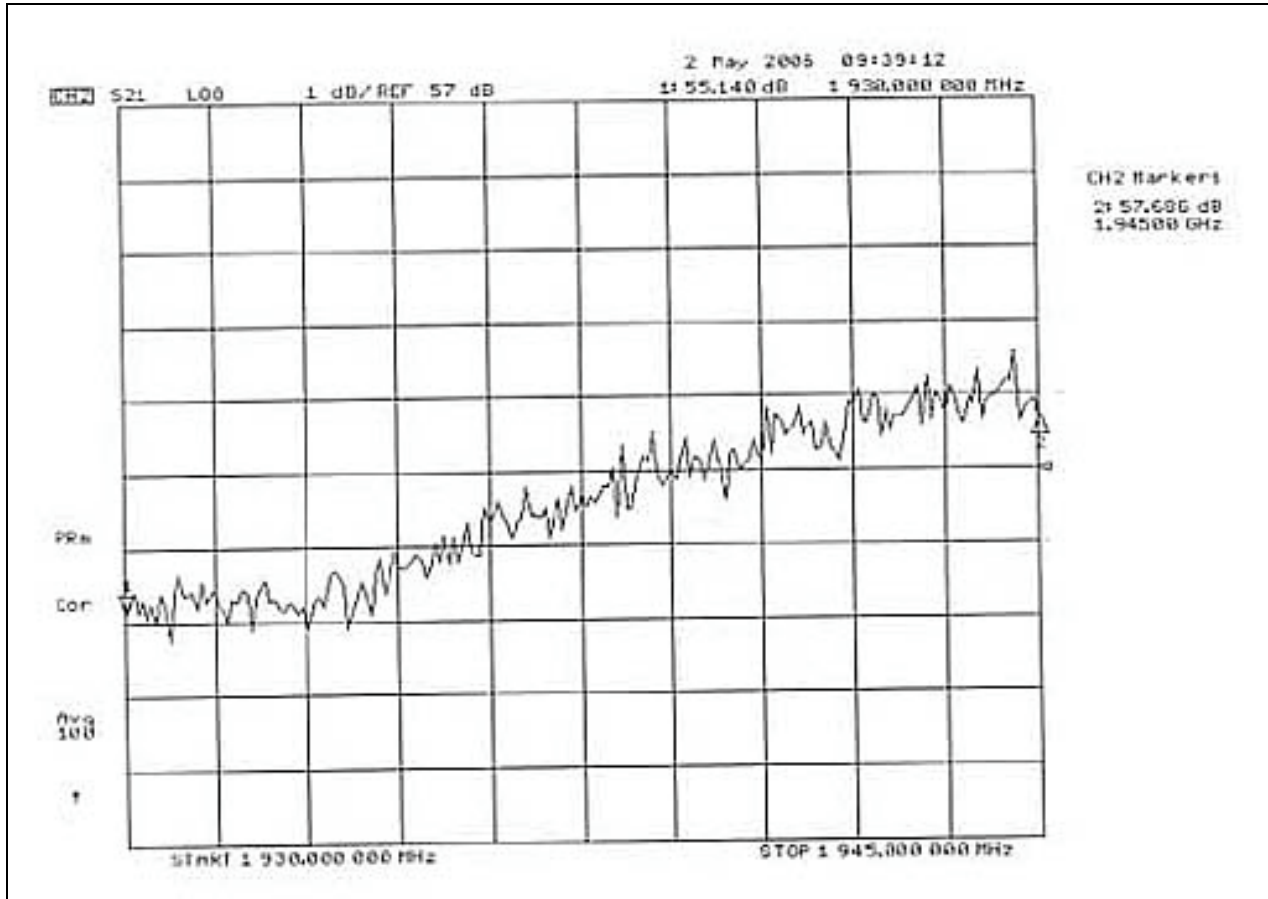


Test Equipment

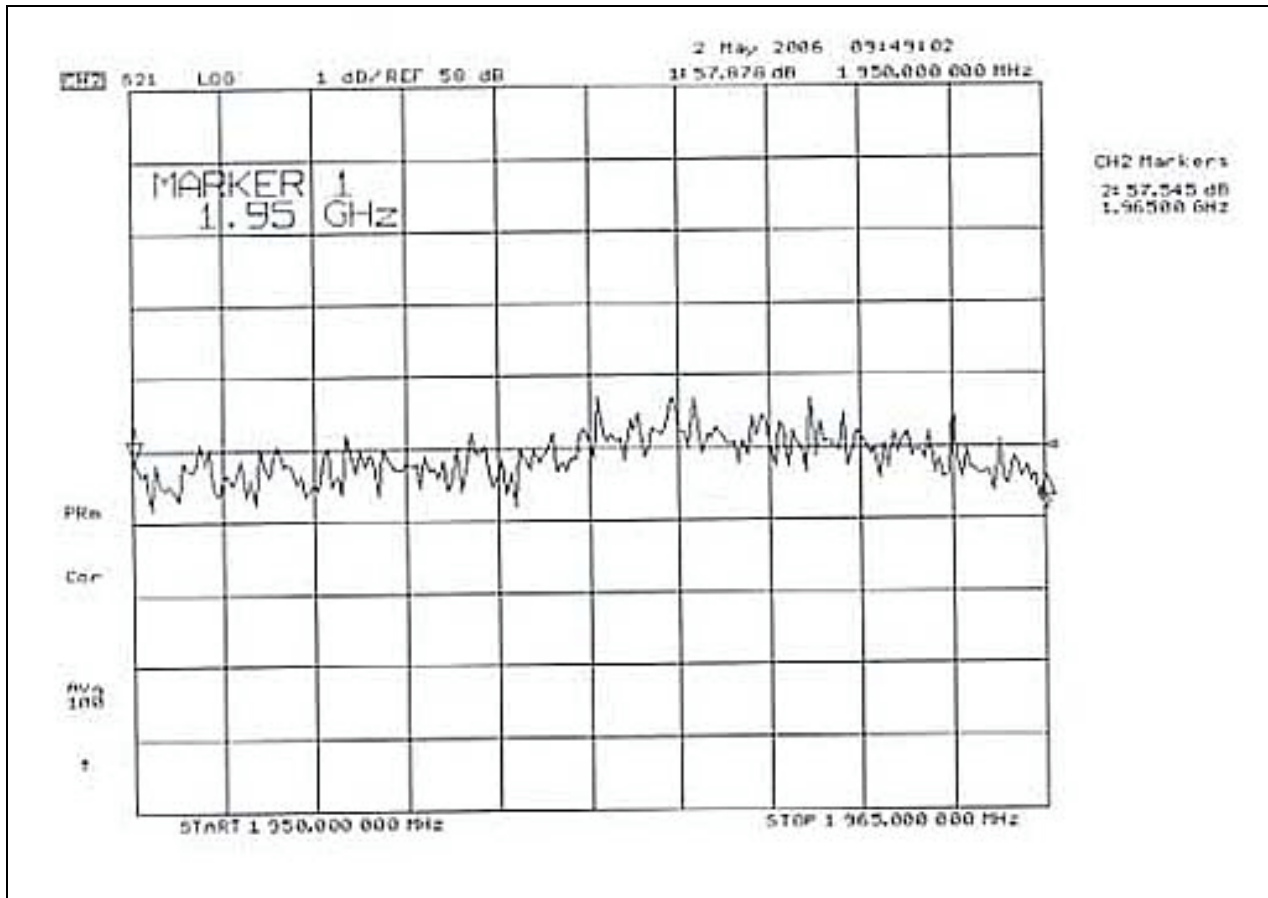
Equipment	Asset #	Manufacturer	Model #	Serial #	Cal Date	Cal Due
Network analyzer	PWAV	HP	8753E	Us38432770	072204	072206



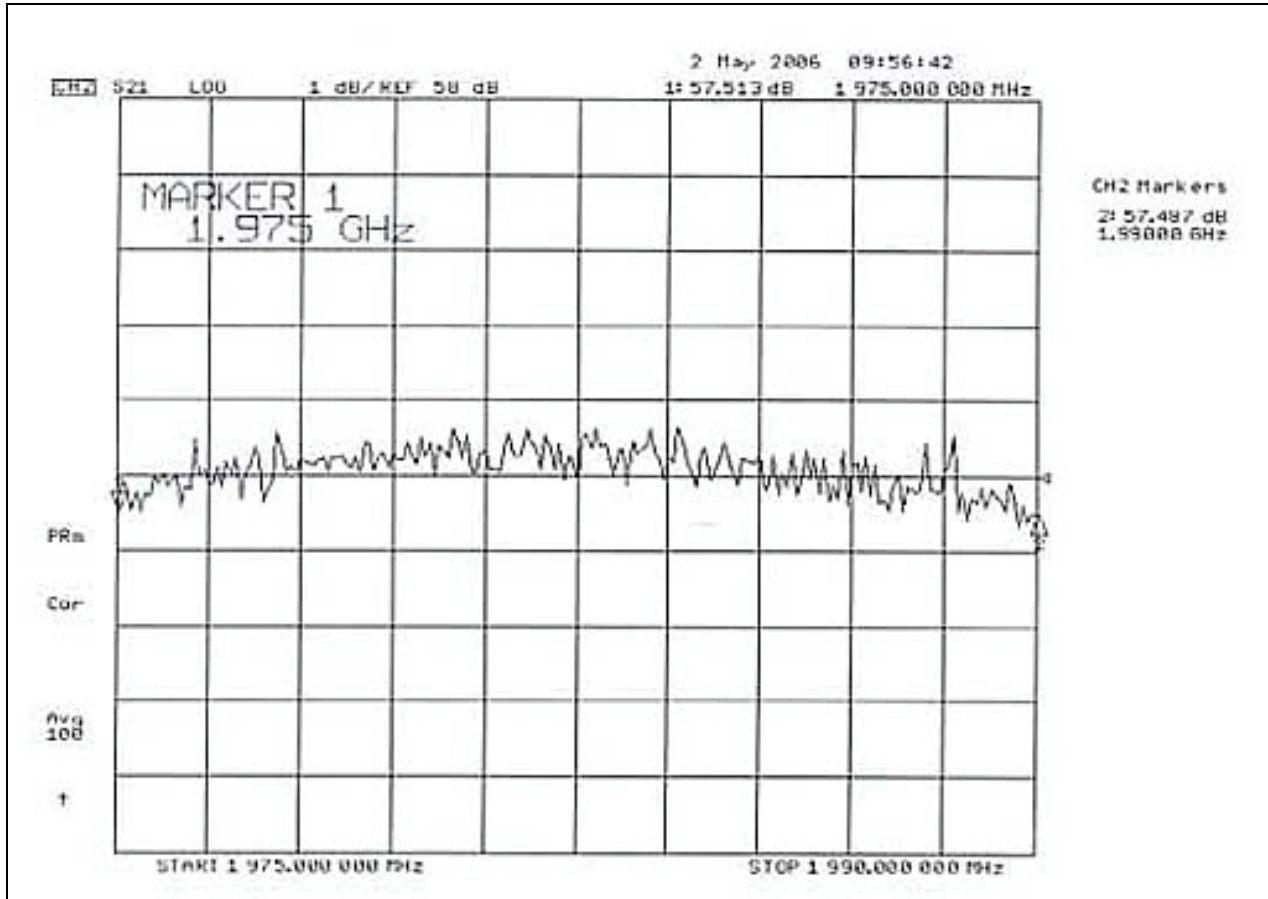
RSS-131 GAIN BLOCK A



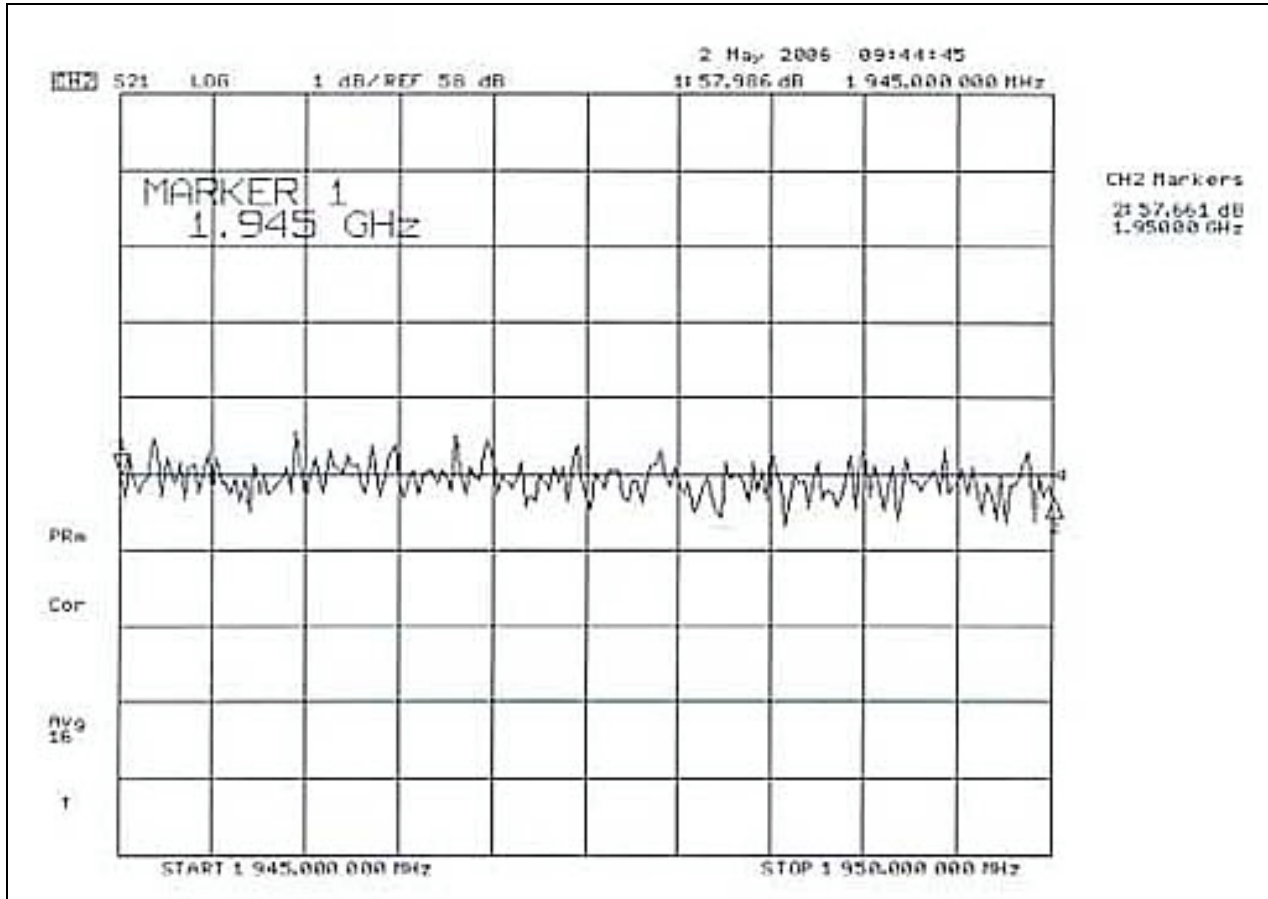
RSS-131 GAIN BLOCK B



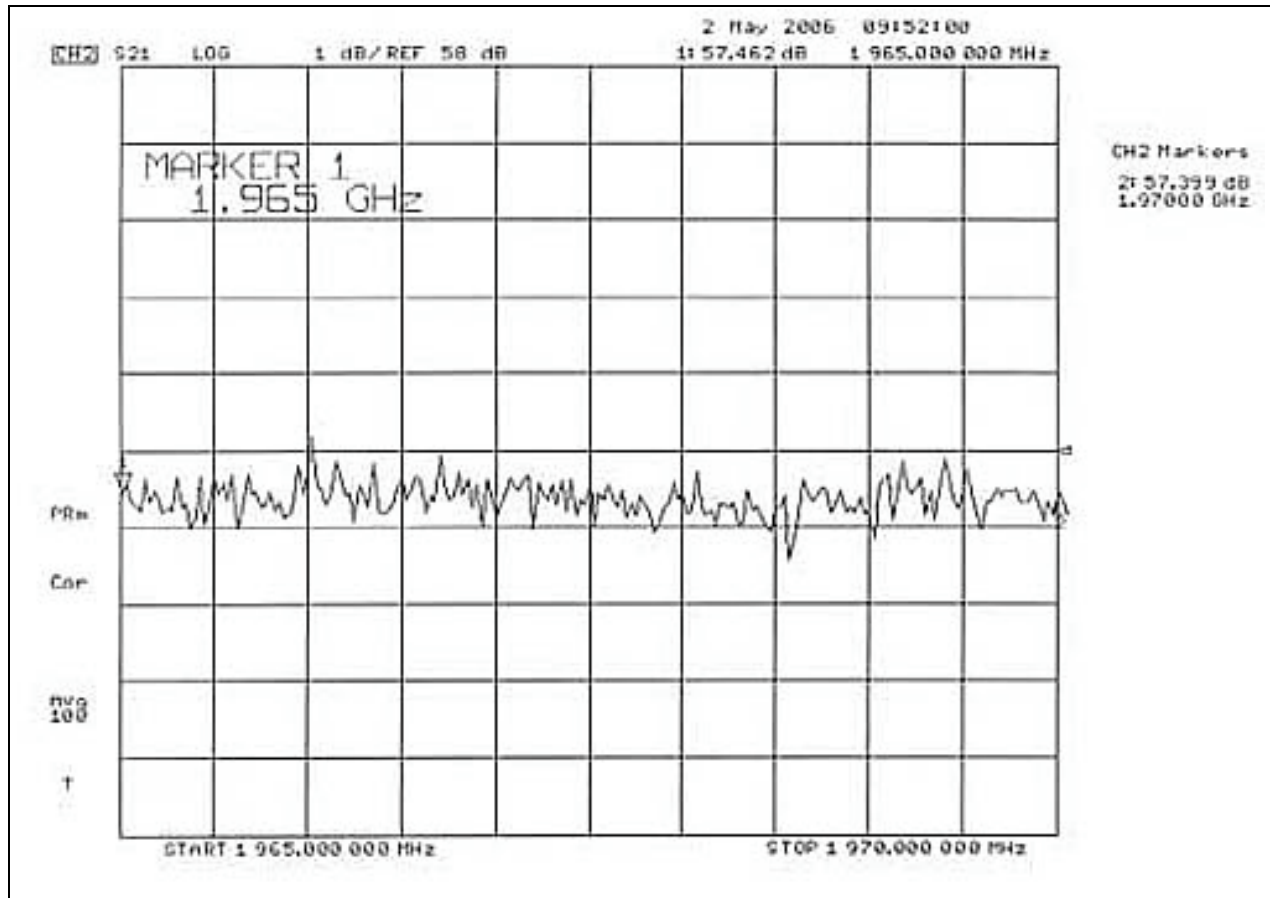
RSS-131 GAIN BLOCK C



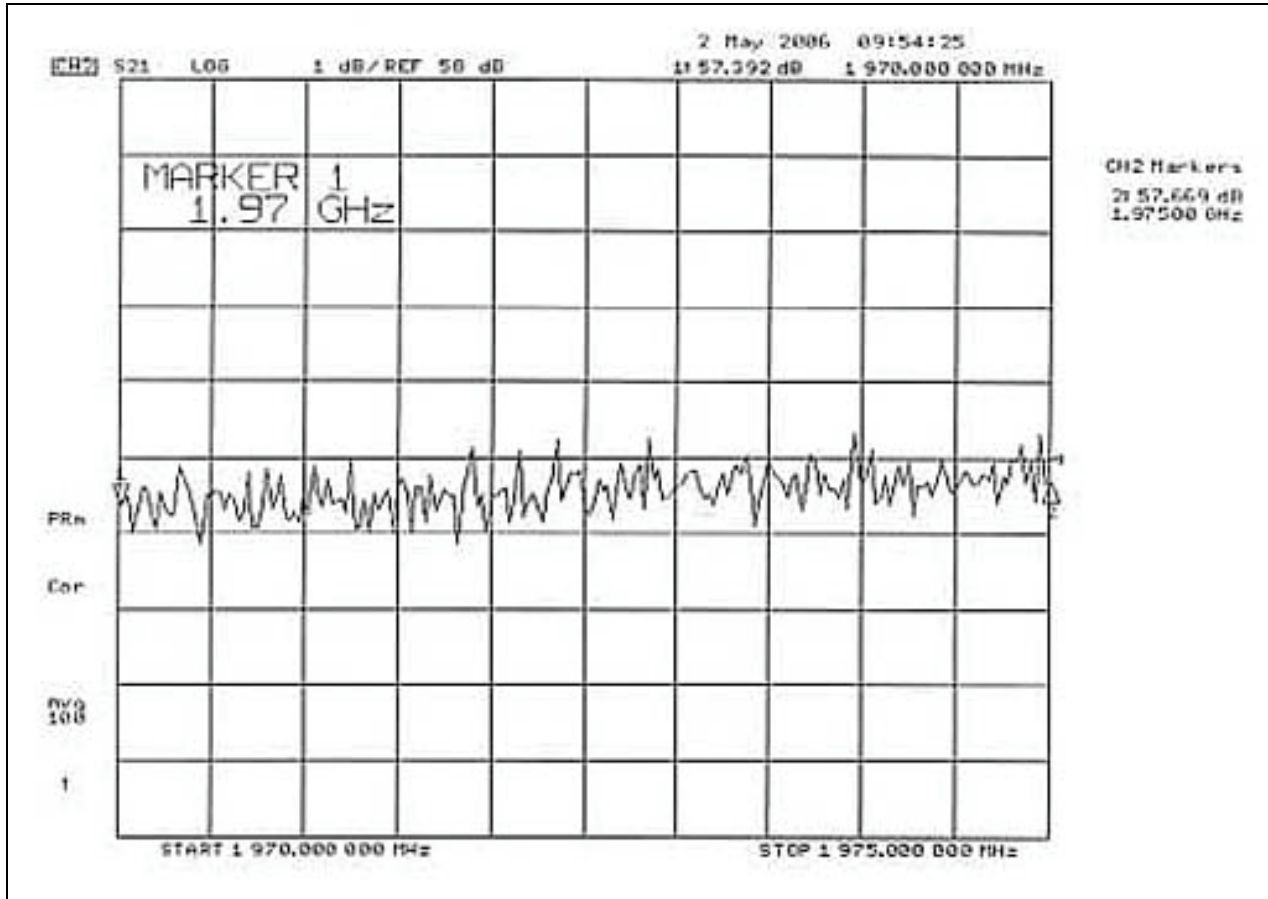
RSS-131 GAIN BLOCK D



RSS-131 GAIN BLOCK E

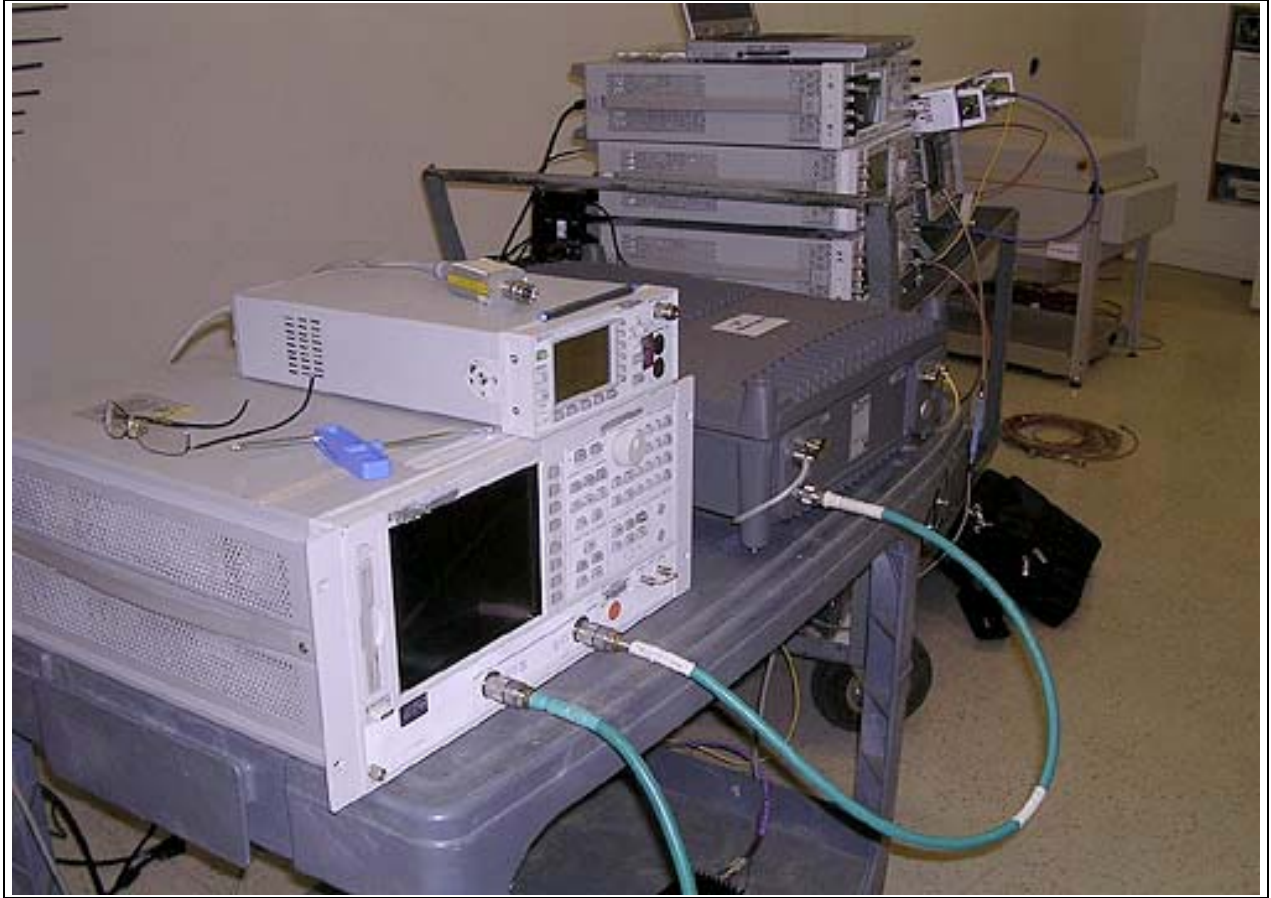


RSS-131 GAIN BLOCK F



Test Equipment

Equipment	Asset #	Manufacturer	Model #	Serial #	Cal Date	Cal Due
Network analyzer	PWAV	HP	8753E	Us38432770	072204	070026

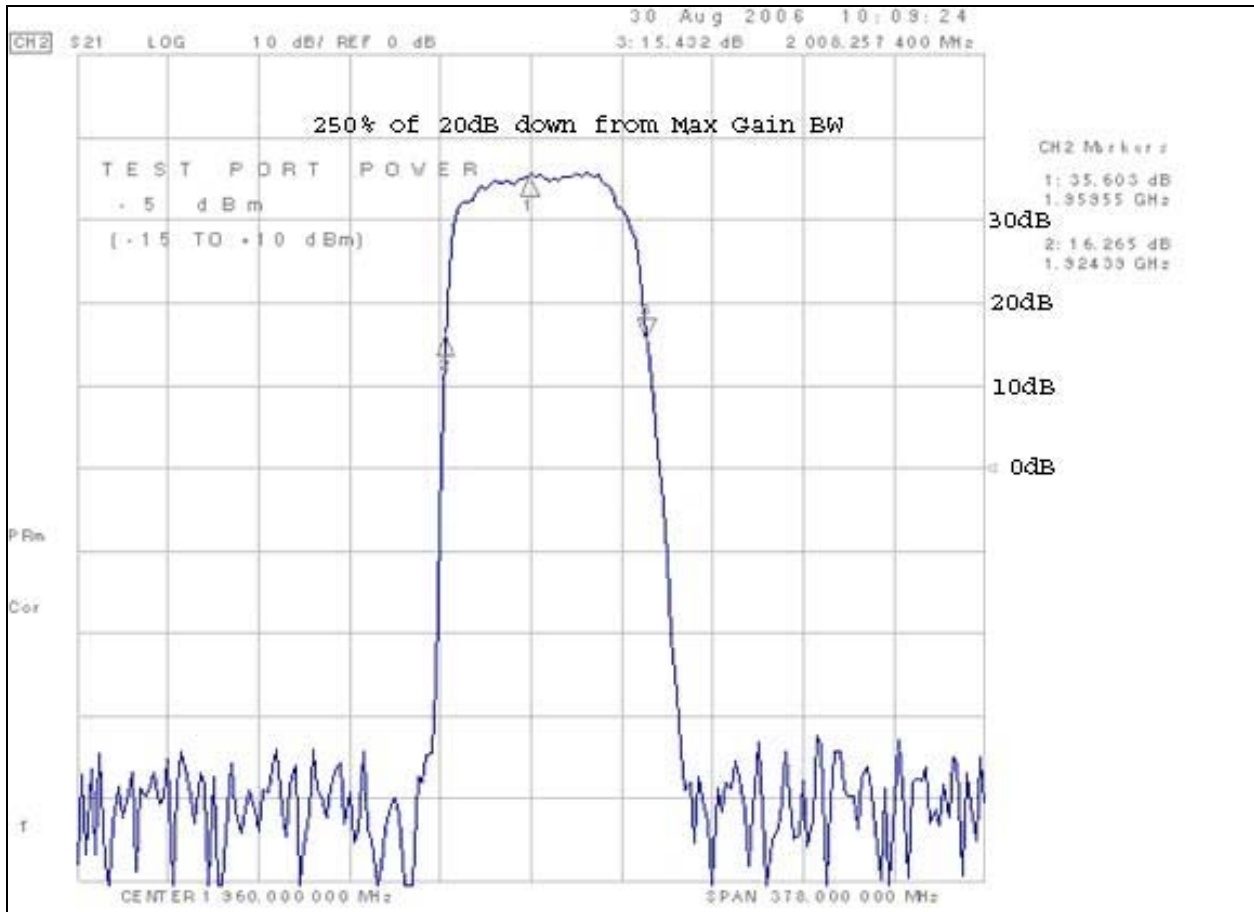


RSS-131 GAIN LINEARITY 1

Test Conditions: The EUT is placed on the wooden table, the EUT is a remote radio head with multichannel capability and may otherwise be classified as a repeater/extender. EUT operates on 1930-1990 MHz. Support equipment is used to convert RF from signal generator to fiber for input to the EUT. The RF output port of the EUT is terminated in a shielded 50 ohm load. EUT does not demodulate the input signal. RF signal measured at the antenna port. Modulation: GSM, CDMA, WCDMA, TDMA, EDGE. Power: 1 Watt. Frequency: 1930, 1960, 1990 MHz.







Test Equipment

Equipment	Asset #	Manufacturer	Model #	Serial #	Cal Date	Cal Due
Network analyzer	PWAV	HP	8753E	Us38432770	NCR	NCR
Crossed calibrated to						
Spectrum Analyzer	02672	Agilent	E4446A	US44300438	011405	011407
Signal Generator	02227	Marconi	2024	112282/515	081805	081807

NCR = No Cal Required

