

ELECTROMAGNETIC EMISSION COMPLIANCE REPORT FOR LICENSED TRANSMITTER

Test Report No. : E115R-007

AGR No. : A114A-038 and A114A-039

Applicant : SOLiD Technologies, Inc.
Address : 18Fl, KINS Tower, 25-1 Jeongja-Dong, Bundang-Gu, Seongnam-Si, Gyeonggi-Do
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Manufacturer : SOLiD Technologies, Inc.
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Type of Equipment : REPEATER

FCC ID. : W6U19P85C70L21A
Model Name : SC-MRU1900850C-AC, SC-MRU1900850C-DC,
SC-ARU700LTEAWS-AC, SC-ARU700LTEAWS-DC

Serial number : N/A

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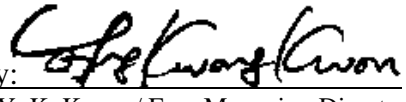
SUMMARY

The equipment complies with the regulation; **FCC Part 22 Subpart H, Part 24 Subpart E and Part 27 Subpart C.**

This test report only contains the result of a single test of the sample supplied for the examination.

It is not a generally valid assessment of the features of the respective products of the mass-production.

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Revision History

Issued Report No.	Issued Date	Revisions	Effect Section
E115R-007	May 11, 2011	Initial Issue	All

1. VERIFICATION OF COMPLIANCE

APPLICANT : SOLiD Technologies, Inc.
 ADDRESS : 18Fl, KINS Tower, 25-1 Jeongja-Dong, Bundang-Gu, Seongnam-Si, Gyeonggi-Do 463-847, Korea
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 TELEPHONE NO : +82-31-784-8557
 FCC ID : W6U19P85C70L21A
 MODEL NAME : SC-MRU1900850C-AC, SC-MRU1900850C-DC,
 SC-ARU700LTEAWS-AC, SC-ARU700LTEAWS-DC
 SERIAL NUMBER : N/A
 DATE : May 11, 2011

EQUIPMENT CLASS	PCB - PCS Licensed Transmitter
EQUIPMENT DESCRIPTION	REPEATER
THIS REPORT CONCERNS	Original Grant
MEASUREMENT PROCEDURES	ANSI C63.4: 2009, EIA/TIA-603-C
TYPE OF EQUIPMENT TESTED	Pre-Production
KIND OF EQUIPMENT AUTHORIZATION REQUESTED	Certification
EQUIPMENT WILL BE OPERATED UNDER FCC RULES PART(S)	FCC Part 22 Subpart H, Part 24 Subpart E and Part 27 Subpart C
MODIFICATIONS ON THE EQUIPMENT TO ACHIEVE COMPLIANCE	No
FINAL TEST WAS CONDUCTED ON	3 m open area test site

-. The above equipment was tested by ONETECH Corp. for compliance with the requirement set forth in the FCC Rules and Regulations. This said equipment in the configuration described in this report, shows the maximum emission levels emanating from equipment are within the compliance requirements.

2. TEST SUMMARY

2.1 Test items and results

SECTION	TEST ITEMS	RESULTS
2.1046(a), 22.913(a), 24.232, 27.50(c)	RF Power Output at Antenna Terminals	Met the Limit / PASS
2.1047	Modulation Characteristics	PASS (See Note 1)
2.1049, 24.238	Occupied Bandwidth, Bandwidth Limitation	Met the Limit / PASS
2.1049, 22.917	Band Edge	Met the Limit / PASS
2.1051, 22.917, 24.238(a), 27.53(c)	Spurious Emissions at Antenna Terminals	Met the Limit / PASS
2.1053, 22.917, 24.238(a), 27.53(c)	Field strength of Spurious Radiation	Met the Limit / PASS
2.1055, 22.355, 24.235, 27.54	Frequency Stability with Temperature variation	Met the requirement / PASS
2.1055, 22.355, 24.235, 27.54	Frequency stability with primary voltage variation	Met the requirement / PASS
2.1093	RF Exposure	See Note 2

Note 1: The Equipment under Test (EUT) is a repeater which reproduces the modulated input signal, so the EUT meets the requirement

Note 2: End users and installers must be provided with antenna installation instructions and transmitter operating conditions for satisfying RF exposure compliance, because the applicant does not provide an antenna for sale with the EUT

2.2 Additions, deviations, exclusions from standards

No additions, deviations or exclusions have been made from standard.

2.3 Related Submittal(s) / Grant(s)

Original Grant

2.4 Purpose of the test

To determine whether the equipment under test fulfills the requirements of the regulation stated in section 2.1.

2.5 Test Methodology

Radiated testing was performed according to the procedures in ANSI C63.4: 2009 and was performed at a distance of 10 m from EUT to the antenna.

2.6 Test Facility

The open area test site and conducted measurement facilities are located on at 307-51 Daessangryung-ri, Chowol-eup, Gwangju-si, Gyeonggi-do, 464-862, Korea. Description details of test facilities were submitted to the Commission on August 21, 2008. (Registration Number: 340658)

3. GENERAL INFORMATION

3.1 Product Description

The SOLiD Technologies, Inc., Models SC-MRU1900850C-AC, SC-MRU1900850C-DC, SC-ARU700LTEAWS-AC, SC-ARU700LTEAWS-DC (referred to as the EUT in this report) are REPEATER. The Model: SC-MRU1900850C-AC or SC-MRU1900850C-DC is called as MRU (Main Remote Unit) and the Model: SC-ARU700LTEAWS-AC or SC-ARU700LTEAWS-DC called ARU (Add on Remote Unit). The coverage frequency band for MRU is 850C and 1900PS and ARU covers 700 LTE and AWS-1 band. The combination of MRU and ARU is called as ROU (Remote Optic Unit), and MRU and ARU connected with cable each other, but the RF output antenna port is located on MRU.

MRU receives TX optical signals from ODU(Optic Distribution Unit) or OEU(Optic Expansion Unit) and converts them into RF signals. The converted RF signals are amplified through High Power Amp in a corresponding Remote Unit, combined with Multiplexer and then radiated to the antenna port.

When receiving RX signals through the antenna port, this unit filters out-of-band signals in a corresponding Remote Unit and sends the results to Remote Optic Module to make electronic-optical conversion of them. After converted, the signals are sent to a upper device of ODU or OEU. MRU and ARU are composed of maximal dual band. The most difference of MRU and ARU is whether existence of optical module and RF antenna port is in it or not

The product specification described herein was obtained from product data sheet or user’s manual.

DEVICE TYPE		REPEATER	
LIST OF EACH OSC. or CRY. FREQ.(FREQ. >= 1 MHz)		14.74 MHz	
EMISSION DESIGNATOR		F9W(CDMA, EVDO, WCDMA), DXW(TDMA), G7W(GSM, EDGE), G7D(QPSK),D7W(16QAM, 64QAM)	
OPERATING FREQUENCY	MRU	850C	869 MHz ~ 894 MHz
		1900P	1 930 MHz ~ 1 995 MHz
	ARU	700LTE	728 MHz ~ 757 MHz
		AWS-1	2 110 MHz ~ 2 155 MHz
CHANNEL SEPARATION		TDMA(30 kHz), GSM(200 kHz), EDGE(200 kHz), CDMA(1.25 MHz) EVDO(1.25 MHz), WCDMA(5 MHz)	
RF OUTPUT POWER		24 dBm (850C and 700LTE), 28 dBm (1900P and AWS-1)	
DC VOLTAGE & CURRENT INTO FINAL AMPLIFIER	MRU	850C	25 V, 0.33 A
		1900P	25 V, 0.75 A
	ARU	700LTE	25 V, 0.33 A
		AWS-1	25 V, 0.75 A
ELECTRICAL RATING		AC 120 V and DC -48 V	
OPERATING TEMPERATURE		-10 °C ~ 50 °C	

3.2 Alternative type(s)/model(s); also covered by this test report.

-. None

3.3 Peripheral equipment

Defined as equipment needed for correct operation of the EUT, but not considered as tested:

Model	Manufacturer	FCC ID	Description	Connected to
SC-MRU1900850C-AC, SC-MRU1900850C-DC, SC-ARU700LTEAWS-AC, SC-ARU700LTEAWS-DC	SOLiD Technologies	W6U19P85C70L21A	REPEATER (EUT)	Signal Generator
SMJ100A	Rohde & Schwarz	N/A	Vector Signal Generator	EUT
PAS60-12	KIKUSUI	N/A	DC Power Supply	EUT
PAD60-35LA	KIKUSUI	N/A	DC Power Supply	EUT

3.4 Mode of operation during the test

The EUT was received signal form signal generator and then each modulation was configured for maximum signal gain and bandwidth. Also the EUT supports dual band, Cellular, PCS, LTE, and AWS band, so the EUT was tested at each band. The EUT was operated in a manner representative of the typical usage of the equipment. During all testing, system components were manipulated within the confines of typical usage to maximize each emission. The applicant does not supply antenna(s) with the system, so the dummy loads were connected to the RF output ports on the EUT for radiated spurious emission testing.

4. EUT MODIFICATIONS

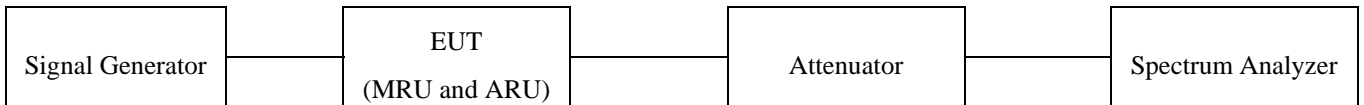
-. None

5. RF POWER OUTPUT at ANTENNA TERMINAL

5.1 Test set-up

The RF signal from the signal generator(s) was injected to the EUT and the amplified RF signal at the output of the EUT was connected to the power meter or spectrum analyzer. The test was performed at three frequencies (low, middle, and high channels) at each band using all applicable modulation.

RF output power was measured by channel power measurement function of the spectrum analyzer with rms detector mode.



5.2 Test equipment used

	Model Number	Manufacturer	Description	Serial Number	Last Cal. (Interval)
■ -	E4432B	HP	Signal Generator	US38440950	June 10, 2010 (1Y)
■ -	SMJ100A	R/S	Signal Generator	101038	Feb. 01, 2011 (1Y)
■ -	AMU200A	R/S	Baseband signal generator and fading simulator	100360	Aug. 28, 2010 (1Y)
■ -	FSP	R/S	Spectrum Analyzer	100017	Mar. 15, 2011 (1Y)
□ -	8564E	HP	Spectrum Analyzer	3650A00756	Jun. 10, 2010 (1Y)

All test equipment used is calibrated on a regular basis.

5.3 Test data

5.3.1 Test Result for Part 22 H (850C)

- . Test Date : April 15 ~ 18, 2011
- . Temperature : 24 °C
- . Relative humidity : 48 % R.H.
- . Measurement Function : Channel Power
- . Detector Mode : RMS detector
- . Test Result : Pass

Modulation	Channel	Frequency (MHz)	Input Power (dBm)	Output Power (dBm)	Output Power (W)	Limit (W)
TDMA	Low	869.03	-19.90	24.00	0.251 189	500.00
	Middle	881.50	-19.85	24.00		
	High	893.97	-19.80	24.00		
GSM	Low	869.20	-19.90	24.00	0.251 189	
	Middle	881.60	-19.90	24.00		
	High	893.80	-19.80	24.00		
EDGE	Low	869.20	-19.85	24.00	0.251 189	
	Middle	881.60	-19.80	24.00		
	High	893.80	-19.90	24.00		
CDMA	Low	870.25	-19.85	24.00	0.251 189	
	Middle	881.50	-19.85	24.00		
	High	892.75	-19.90	24.00		
1xEVDO	Low	870.25	-19.80	24.00	0.251 189	
	Middle	881.50	-19.85	24.00		
	High	892.75	-19.80	24.00		
WCDMA	Low	871.40	-19.90	24.00	0.251 189	
	Middle	881.00	-19.85	24.00		
	High	891.60	-19.90	24.00		

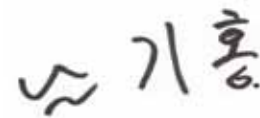
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Tested by: Ki-Hong, Nam / Senior Engineer

5.3.2 Test Result for Part 24 E (1900P)

- . Test Date : April 19 ~ 20, 2011
- . Temperature : 24 °C
- . Relative humidity : 48 % R.H.
- . Measurement Function : Channel Power
- . Detector Mode : RMS detector
- . Test Result : Pass

Modulation	Channel	Frequency (MHz)	Input Power (dBm)	Output Power (dBm)	Output Power (W)	Limit (W)
TDMA	Low	1 930.03	-19.90	28.00	0.630 957	500.00
	Middle	1 962.50	-19.85	28.00		
	High	1 994.97	-19.95	28.00		
GSM	Low	1 930.20	-19.85	28.00	0.630 957	
	Middle	1 962.60	-19.85	28.00		
	High	1 994.80	-19.90	28.00		
EDGE	Low	1 930.20	-19.95	28.00	0.630 957	
	Middle	1 962.60	-19.90	28.00		
	High	1 994.80	-19.90	28.00		
CDMA	Low	1 931.25	-19.85	28.00	0.630 957	
	Middle	1 967.50	-19.90	28.00		
	High	1 993.75	-19.85	28.00		
1xEVDO	Low	1 931.25	-19.85	28.00	0.630 957	
	Middle	1 967.50	-19.90	28.00		
	High	1 993.75	-19.80	28.00		
WCDMA	Low	1 932.40	-19.90	28.00	0.630 957	
	Middle	1 962.40	-19.85	28.00		
	High	1 992.60	-19.80	28.00		



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EMC-003 (Rev.1)

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EMC Testing Dept : 307-51 Daessangnyeong-ri, Chowol-eup, Gwangju-si, Gyeonggi-do 464-862 Korea. (TEL: +82-31-765-8289, FAX: +82-31-766-2904)

5.3.3 Test Result for Part 27 C (700LTE)

- . Test Date : April 11 ~ 12, 2011
- . Temperature : 24 °C
- . Relative humidity : 50 % R.H.
- . Measurement Function : Channel Power
- . Detector Mode : RMS detector
- . Test Result : Pass

Channel	Modulation	Frequency (MHz)	Input Power (dBm)	Output Power (dBm)	Output Power (W)	Limit (W)
Low	QPSK	733.00	-19.90	24.00	0.251 189	1 000.00
	16QAM	733.00	-19.95	24.00		
	64QAM	733.00	-19.90	24.00		
Middle	QPSK	743.00	-19.90	24.00	0.251 189	
	16QAM	743.00	-19.90	24.00		
	64QAM	743.00	-19.85	24.00		
High	QPSK	752.00	-19.95	24.00	0.251 189	
	16QAM	752.00	-19.90	24.00		
	64QAM	752.00	-19.85	24.00		

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Tested by: Ki-Hong, Nam / Senior Engineer

5.3.4 Test Result for Part 27 C (AWS-1)

- . Test Date : April 13 ~ 14, 2011
- . Temperature : 25 °C
- . Relative humidity : 50 % R.H.
- . Measurement Function : Channel Power
- . Detector Mode : RMS detector
- . Test Result : Pass

Modulation	Channel	Frequency (MHz)	Input Power (dBm)	Output Power (dBm)	Output Power (W)	Limit (W)
TDMA	Low	2 110.03	-19.90	28.00	0.630 957	1 000.00
	Middle	2 132.50	-19.95	28.00		
	High	2 154.97	-19.95	28.00		
GSM	Low	2 110.20	-19.90	28.00	0.630 957	
	Middle	2 132.60	-19.85	28.00		
	High	2 154.80	-19.90	28.00		
EDGE	Low	2 110.20	-19.95	28.00	0.630 957	
	Middle	2 132.60	-19.90	28.00		
	High	2 154.80	-19.95	28.00		
CDMA	Low	2 111.25	-19.90	28.00	0.630 957	
	Middle	2 132.50	-19.85	28.00		
	High	2 153.75	-19.95	28.00		
1xEVDO	Low	2 111.25	-19.90	28.00	0.630 957	
	Middle	2 132.50	-19.85	28.00		
	High	2 153.75	-19.95	28.00		
WCDMA	Low	2 112.40	-19.85	28.00	0.630 957	
	Middle	2 136.90	-19.90	28.00		
	High	2 152.60	-19.90	28.00		

Ki-Hong

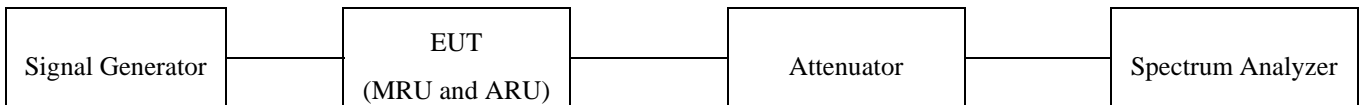
Tested by: Ki-Hong, Nam / Senior Engineer

6. OCCUPIED BANDWIDTH

6.1 Test set-up

The RF signal from the signal generator(s) was injected to the EUT and the amplified RF signal at the output of the EUT was connected to the power meter or spectrum analyzer. The test was performed at three frequencies (low, middle, and high channels) at each band using all applicable modulation.

For the testing, the RBW was set to 1 % to 3 % of the - 26 dB bandwidth. The VBW is set to 3 times the RBW and sweep time is coupled.



6.2 Test equipment used

	Model Number	Manufacturer	Description	Serial Number	Last Cal. (Interval)
■ -	8564E	HP	Spectrum Analyzer	3650A00756	Jun. 10, 2010 (1Y)
■ -	E4432B	HP	Signal Generator	US38440950	Jun. 10, 2010 (1Y)
■ -	SMJ100A	R/S	Signal Generator	101038	Feb. 01, 2011 (1Y)
■ -	AMU200A	R/S	Baseband signal generator and fading simulator	100360	Aug. 28, 2010 (1Y)
■ -	FSP	R/S	Spectrum Analyzer	100017	Mar. 15, 2011 (1Y)

All test equipment used is calibrated on a regular basis.

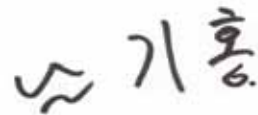
6.3 Test data

6.3.1 Test Result for Part 22 H (850C)

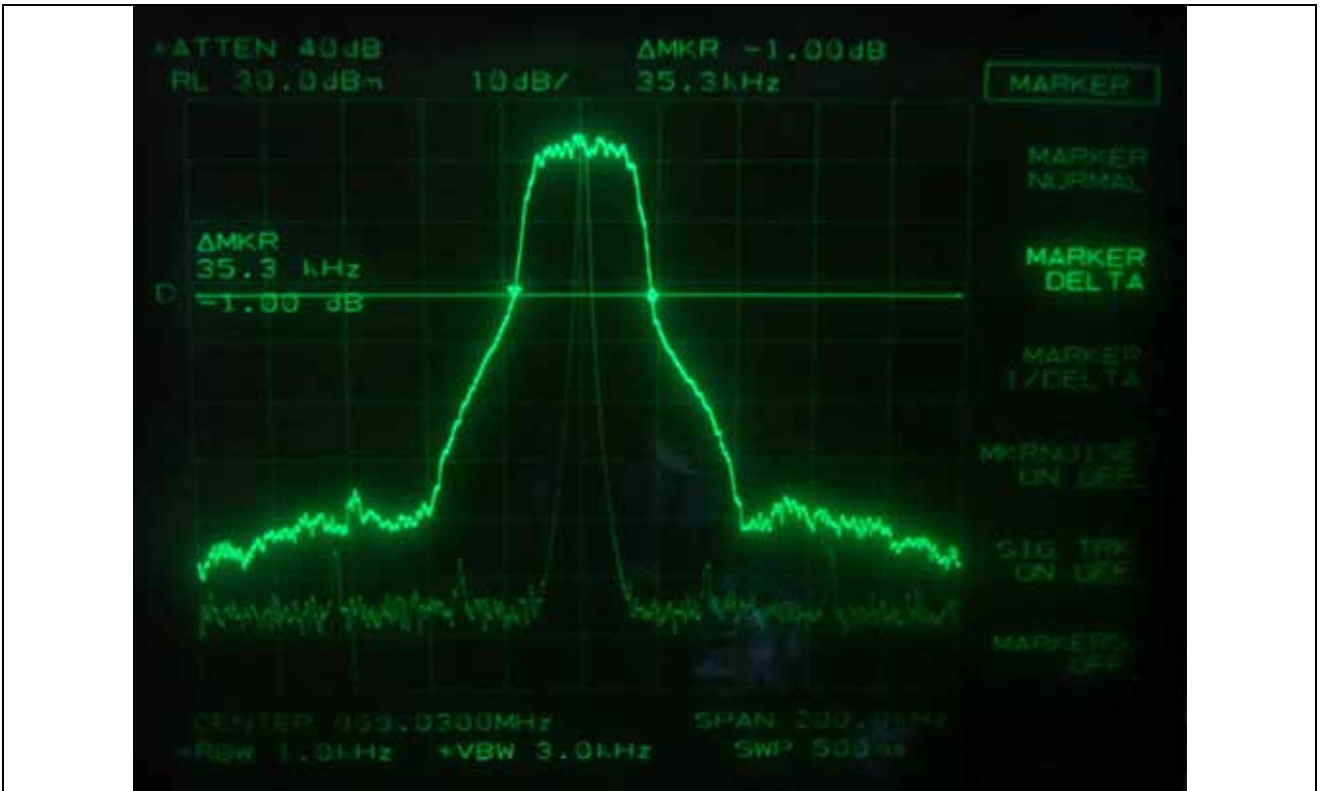
- . Test Date : April 15 ~ 18, 2011
- . Temperature : 24 °C
- . Relative humidity : 48 % R.H.
- . Test Result : Pass

Modulation	Channel	26 dB Bandwidth (kHz)	99 % Occupied Bandwidth (kHz)
TDMA	Low	35.30	29.33
	Middle	35.30	29.33
	High	35.30	29.00
GSM	Low	348.0	253.3
	Middle	348.0	253.3
	High	348.0	253.3
EDGE	Low	335.0	253.3
	Middle	335.0	253.3
	High	335.0	253.3
CDMA	Low	1 583	1 342
	Middle	1 583	1 350
	High	1 583	1 342
1xEVDO	Low	1 583	1 342
	Middle	1 583	1 333
	High	1 583	1 342
WCDMA	Low	4 700	4 167
	Middle	4 700	4 167
	High	4 700	4 167

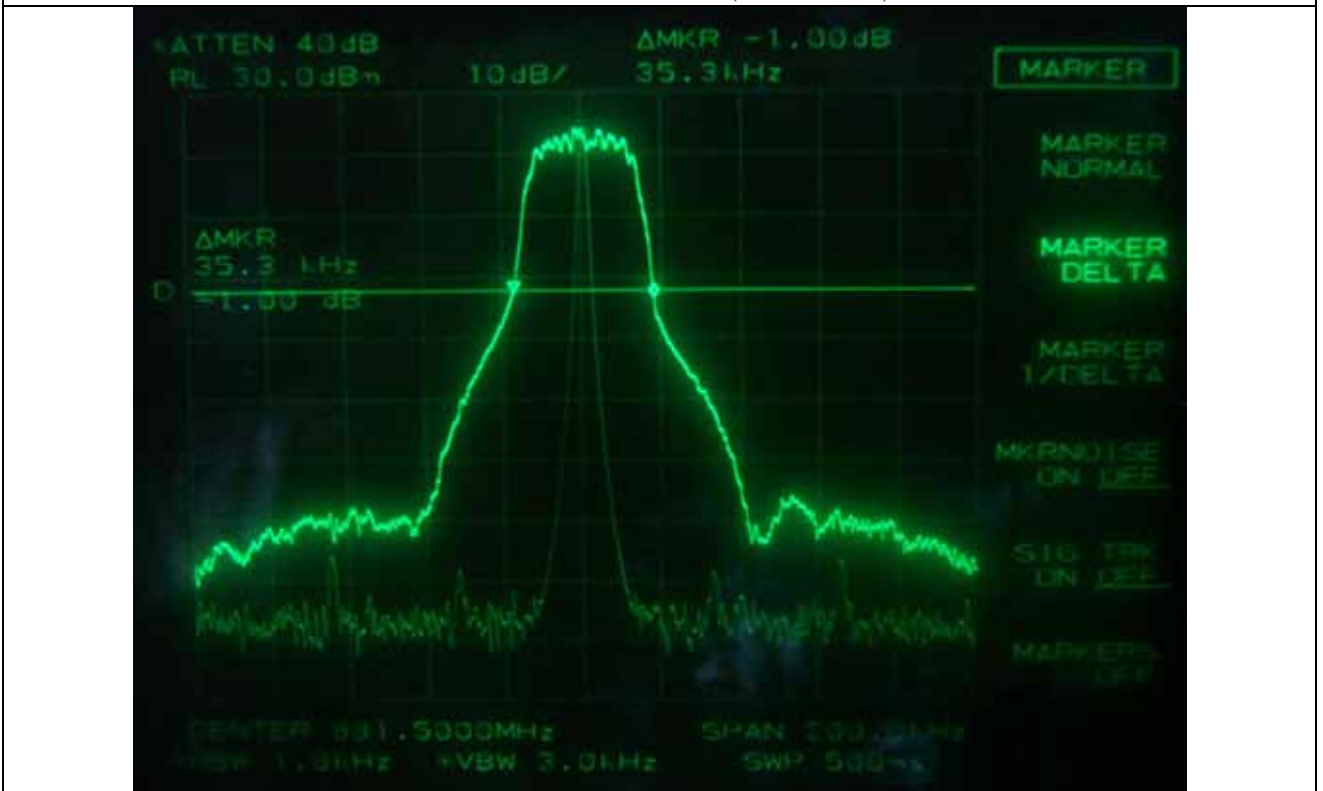
Remark: According to above result, the carrier frequency shall be within the frequency block edges.



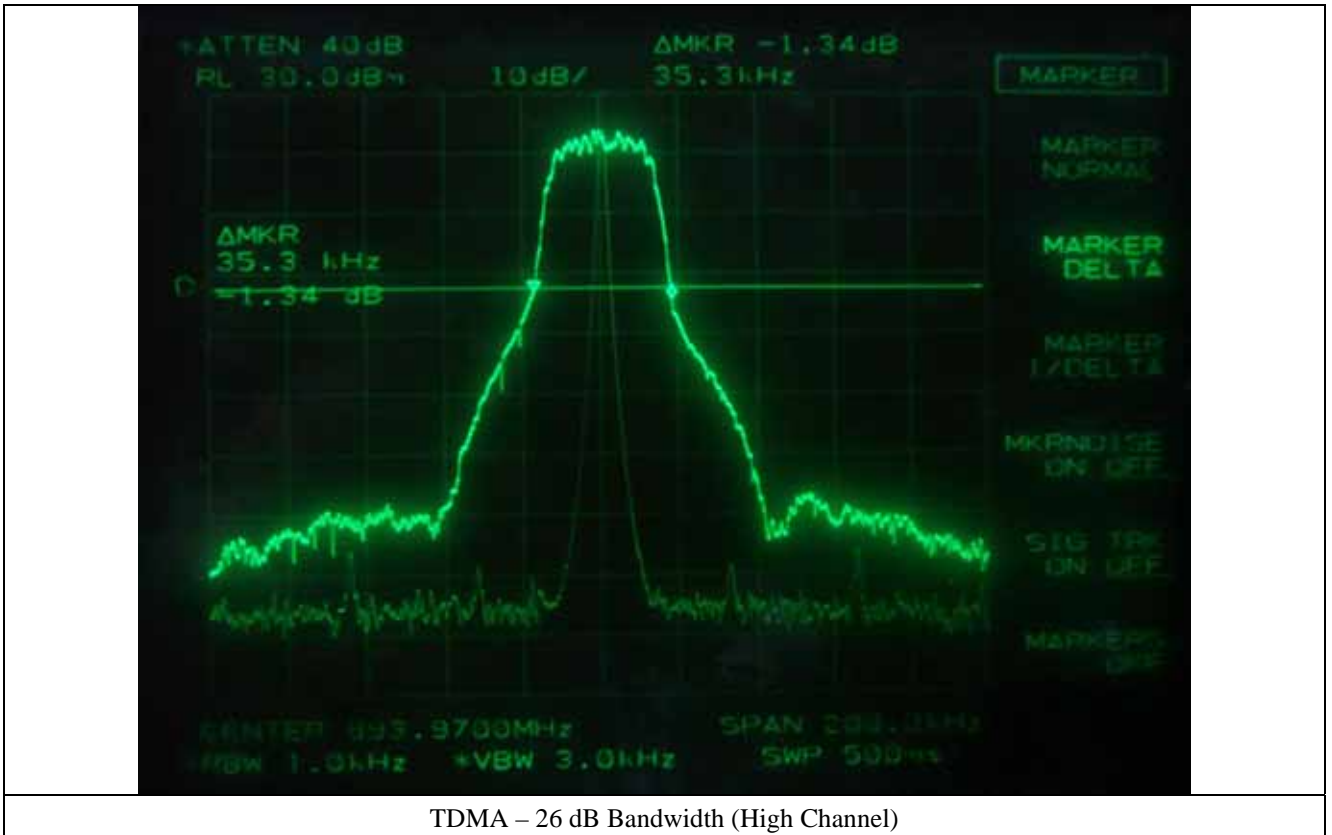
Tested by: Ki-Hong, Nam / Senior Engineer

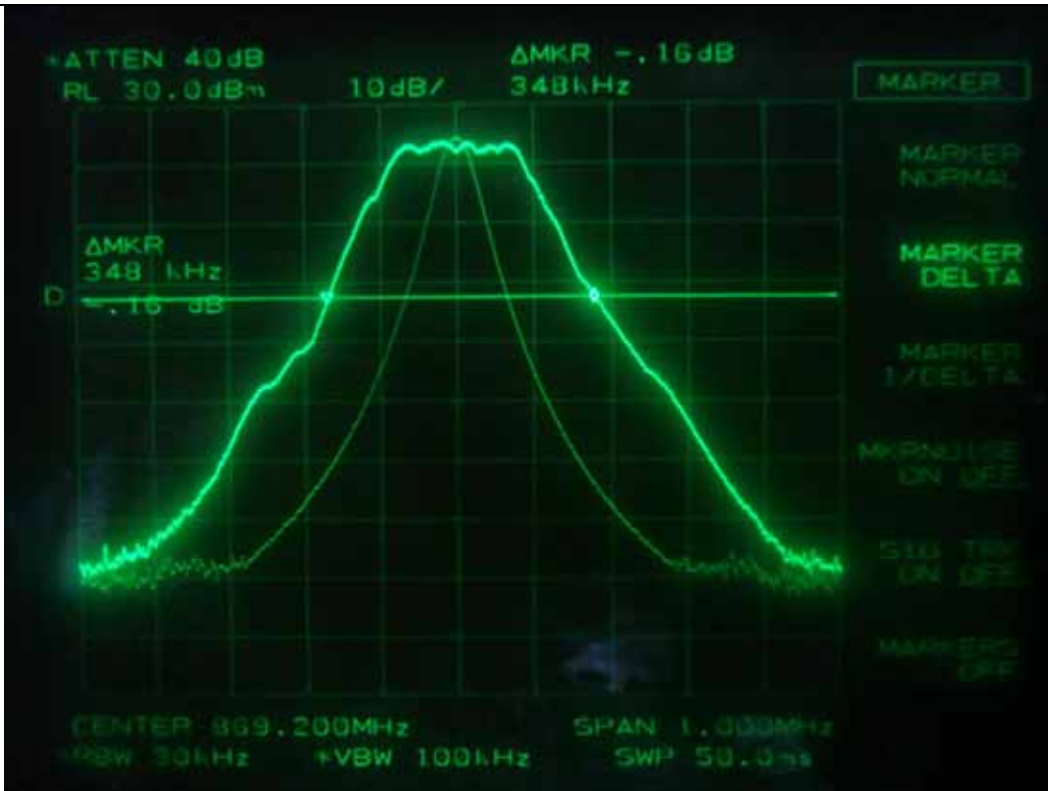


TDMA – 26 dB Bandwidth (Low Channel)

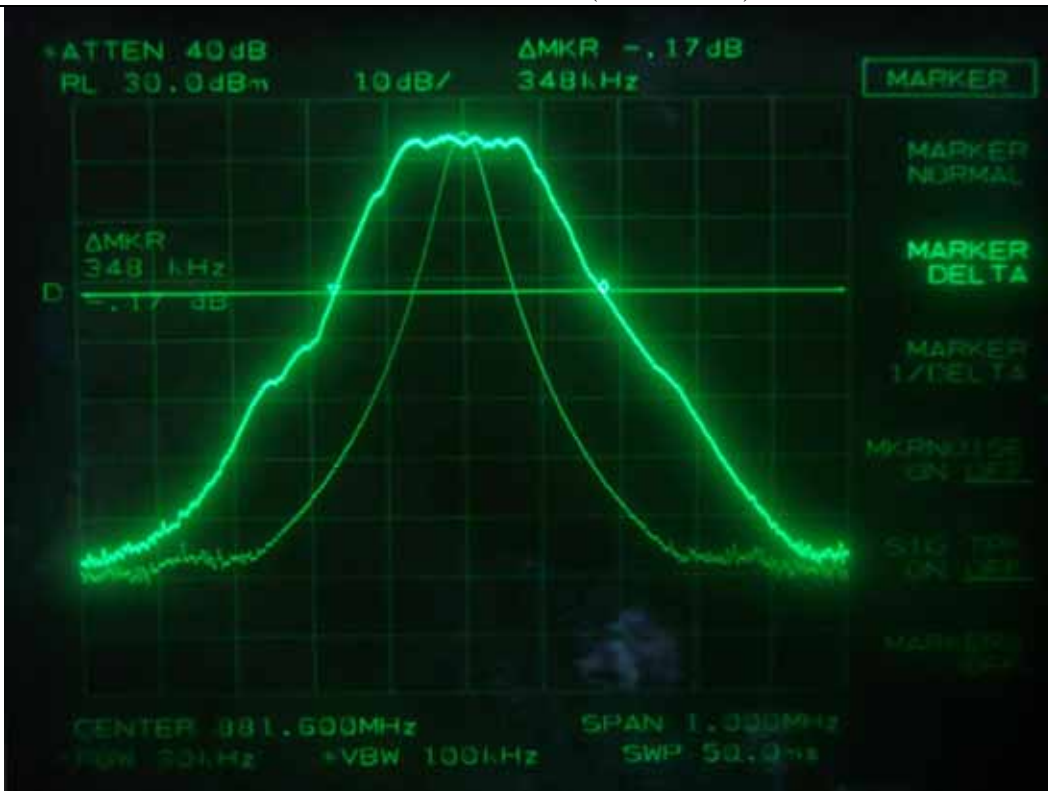


TDMA – 26 dB Bandwidth (Middle Channel)

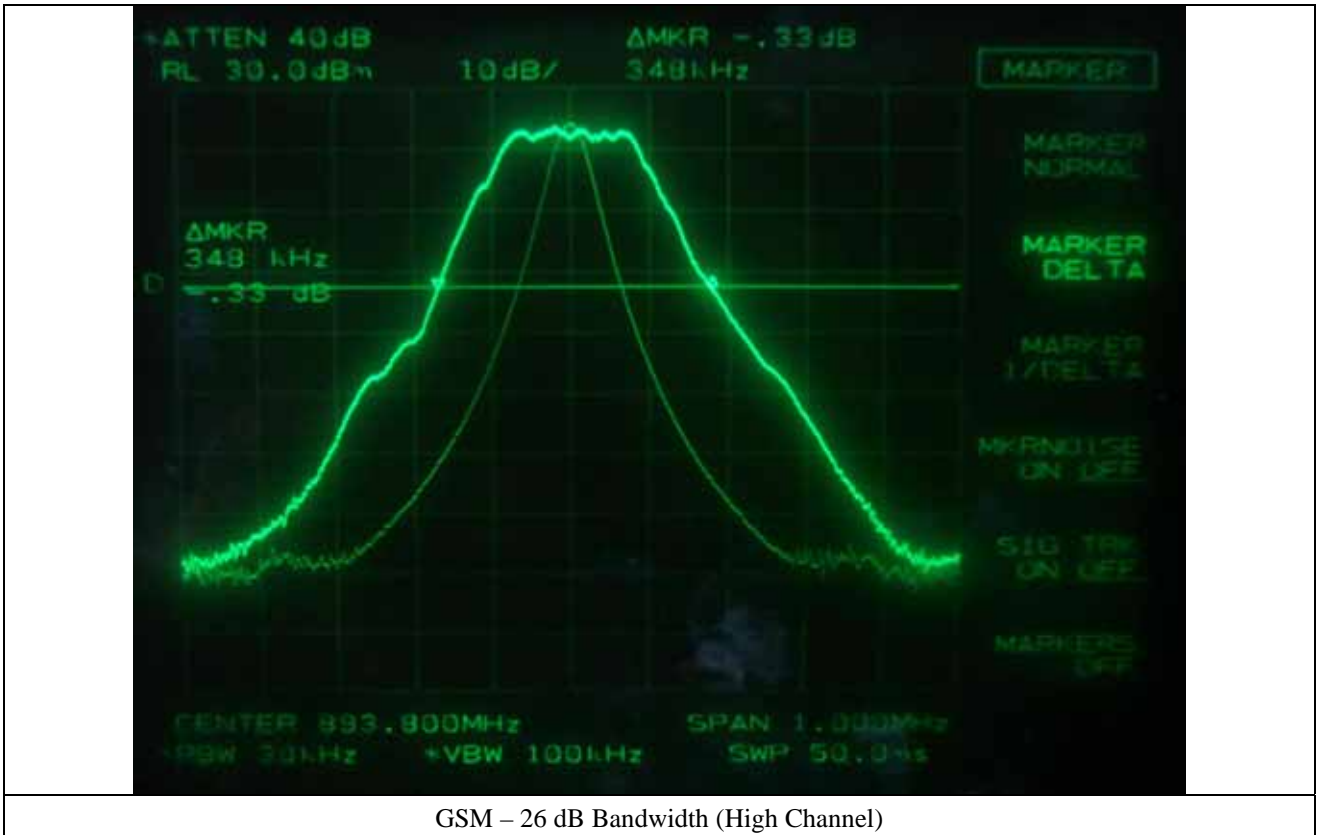


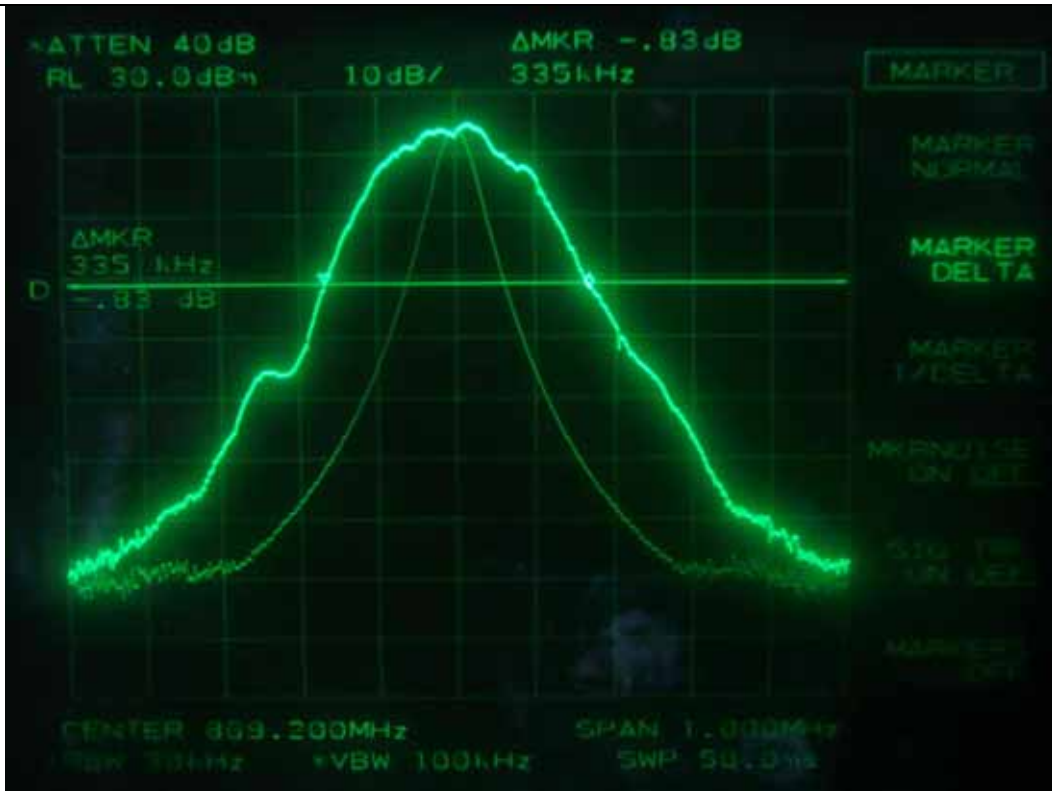


GSM – 26 dB Bandwidth (Low Channel)

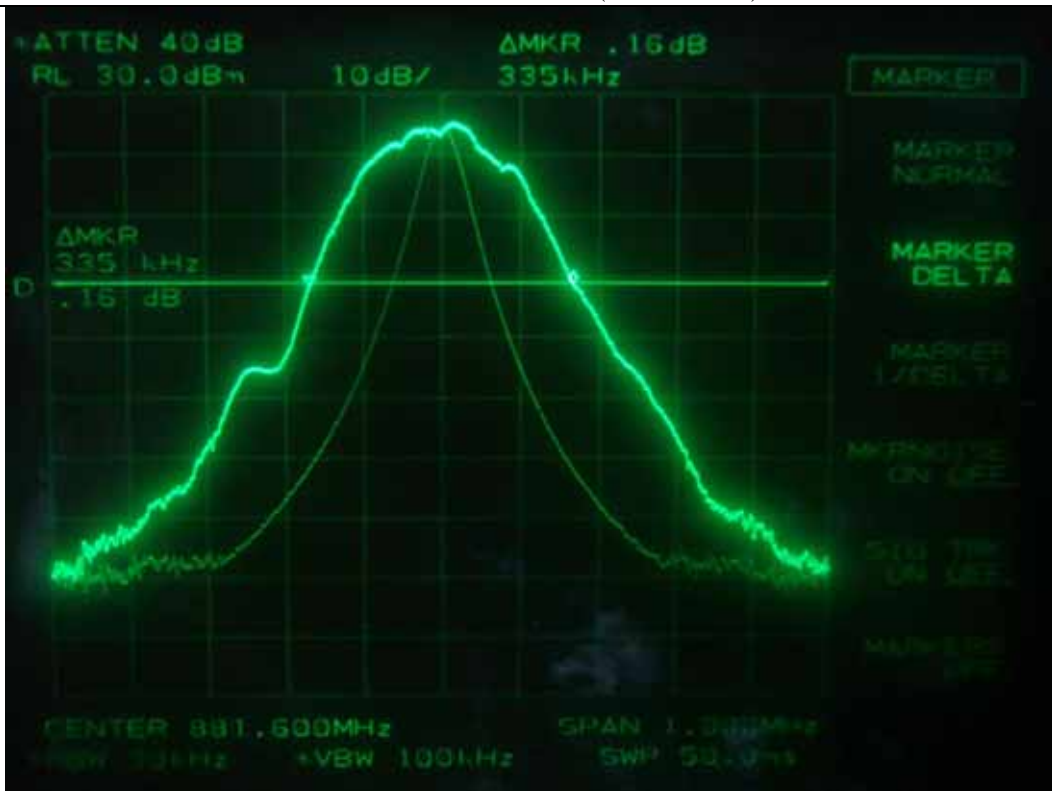


GSM – 26 dB Bandwidth (Middle Channel)

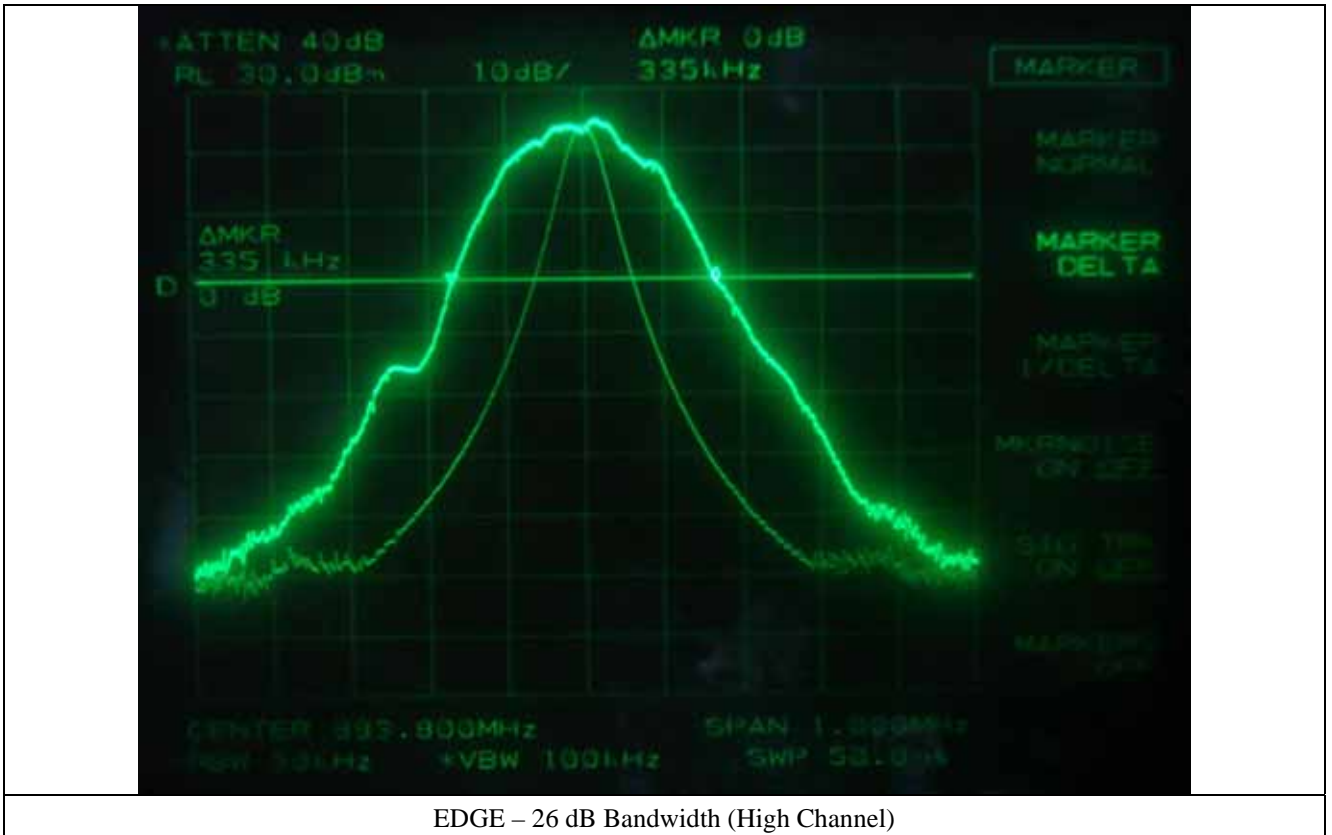


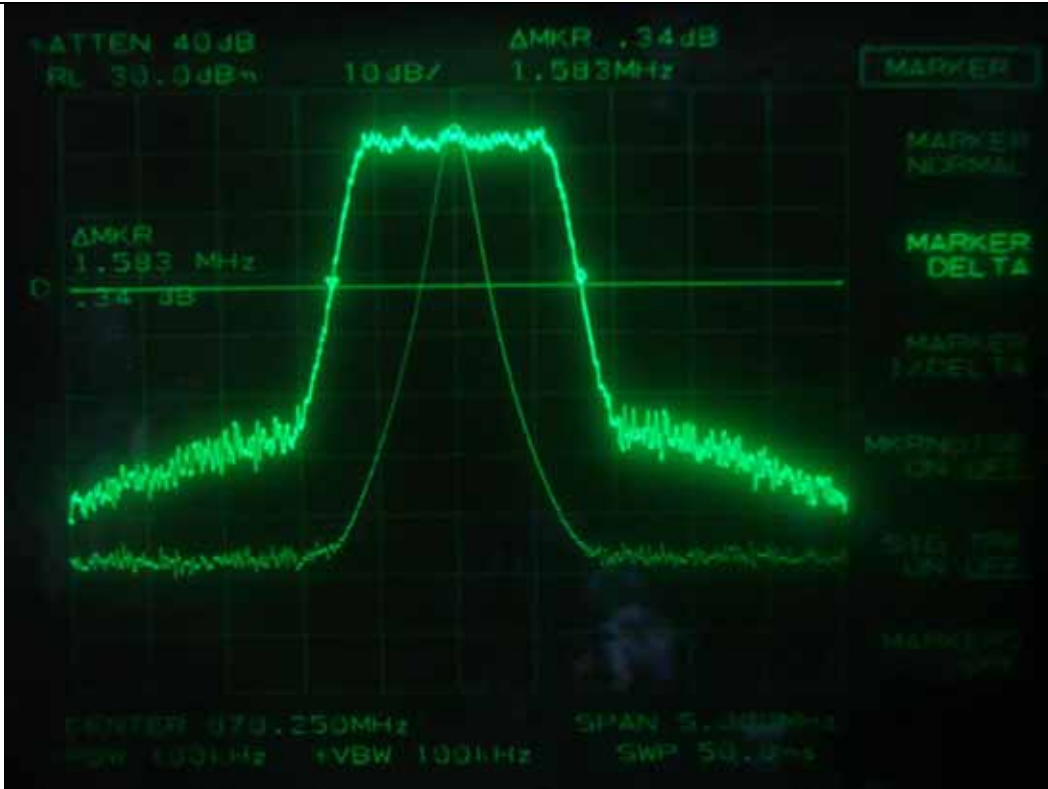


EDGE – 26 dB Bandwidth (Low Channel)

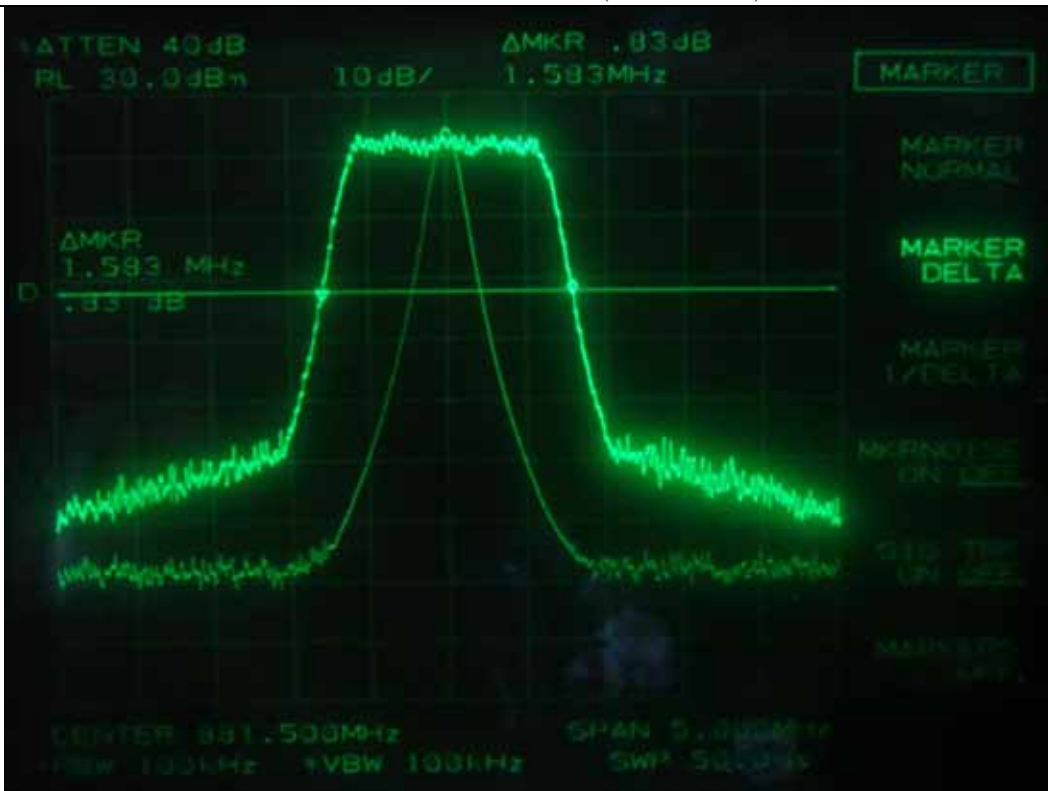


EDGE – 26 dB Bandwidth (Middle Channel)

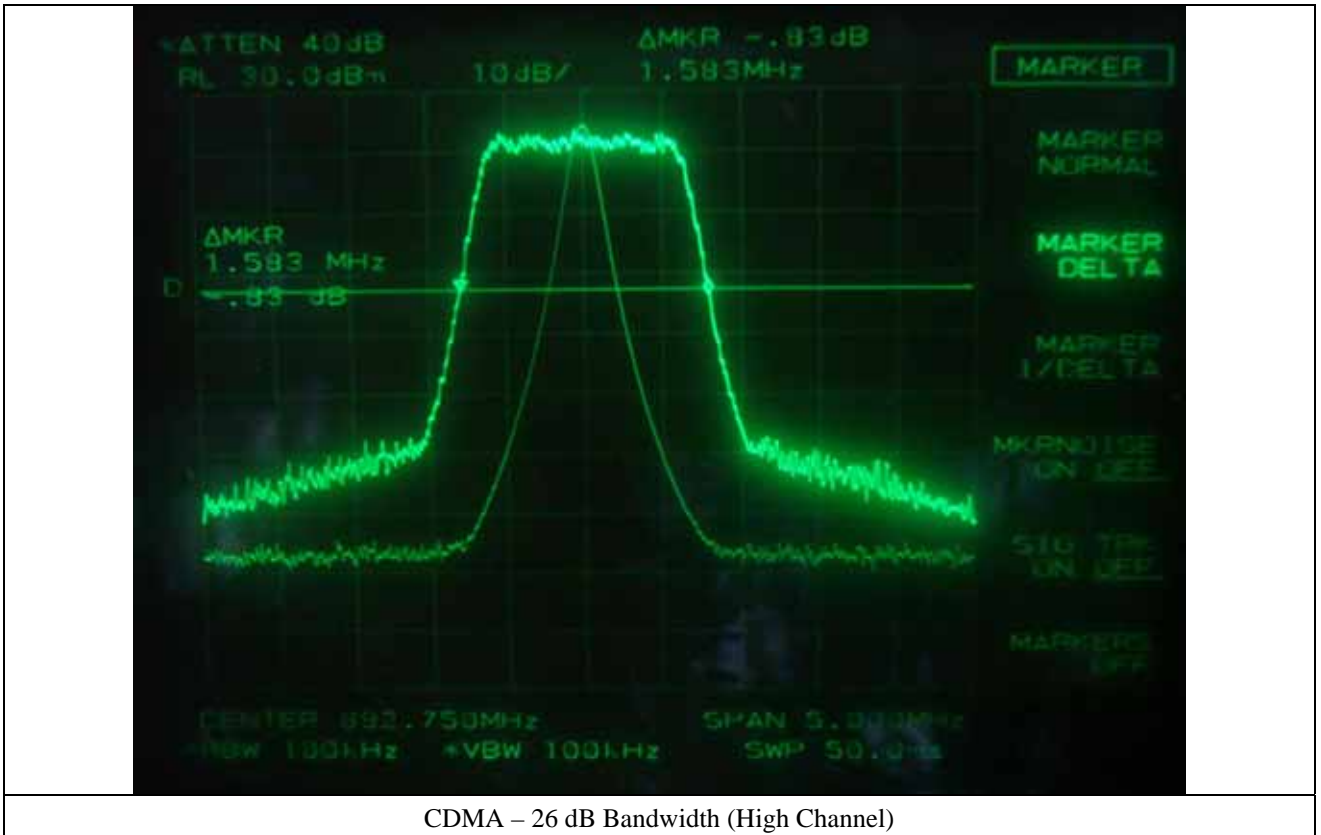


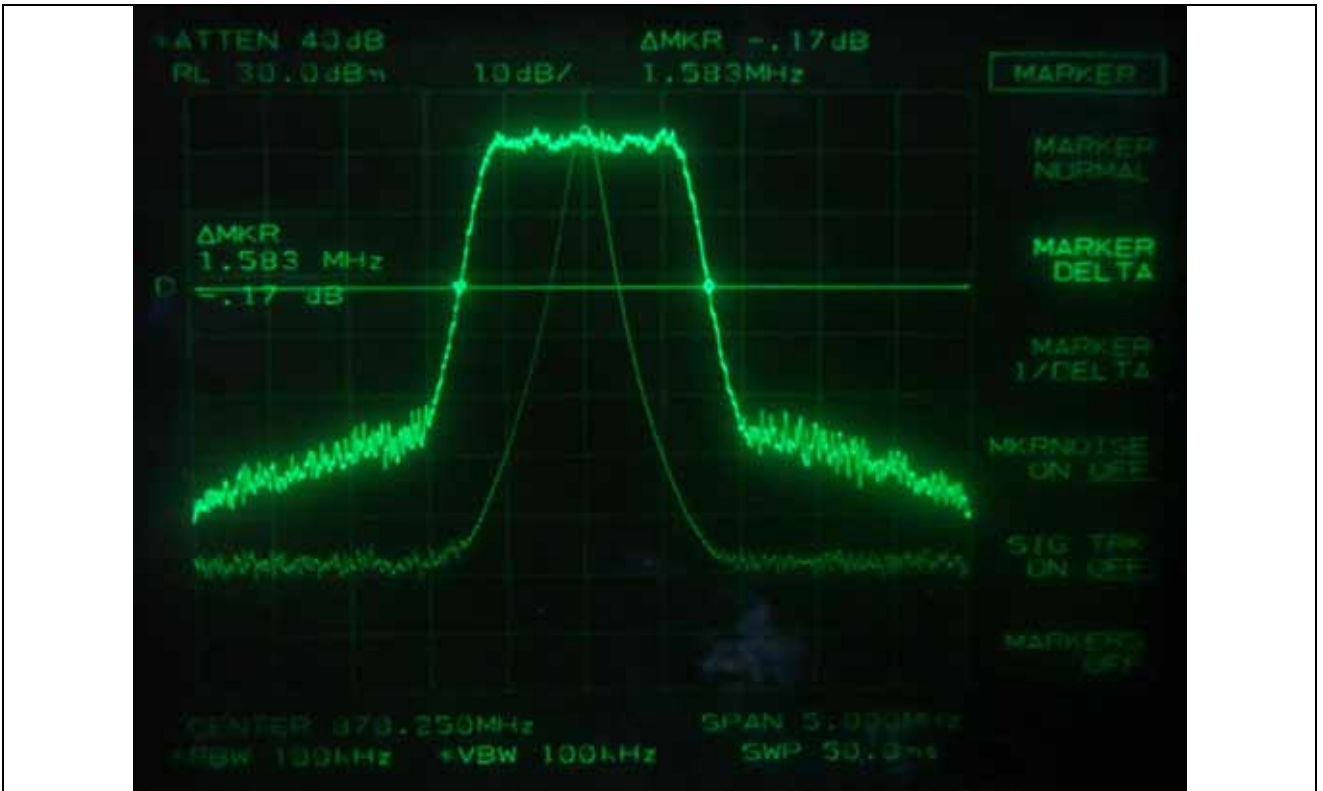


CDMA – 26 dB Bandwidth (Low Channel)

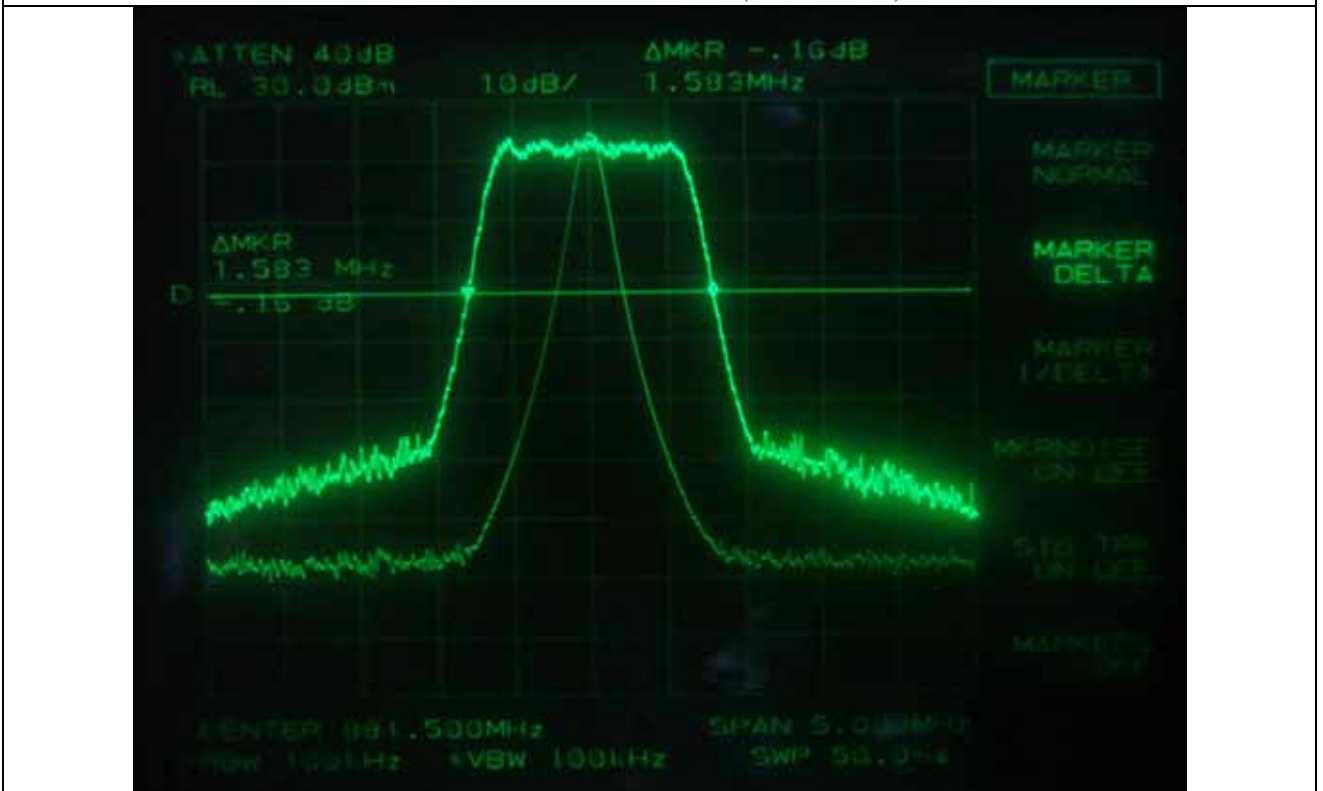


CDMA – 26 dB Bandwidth (Middle Channel)

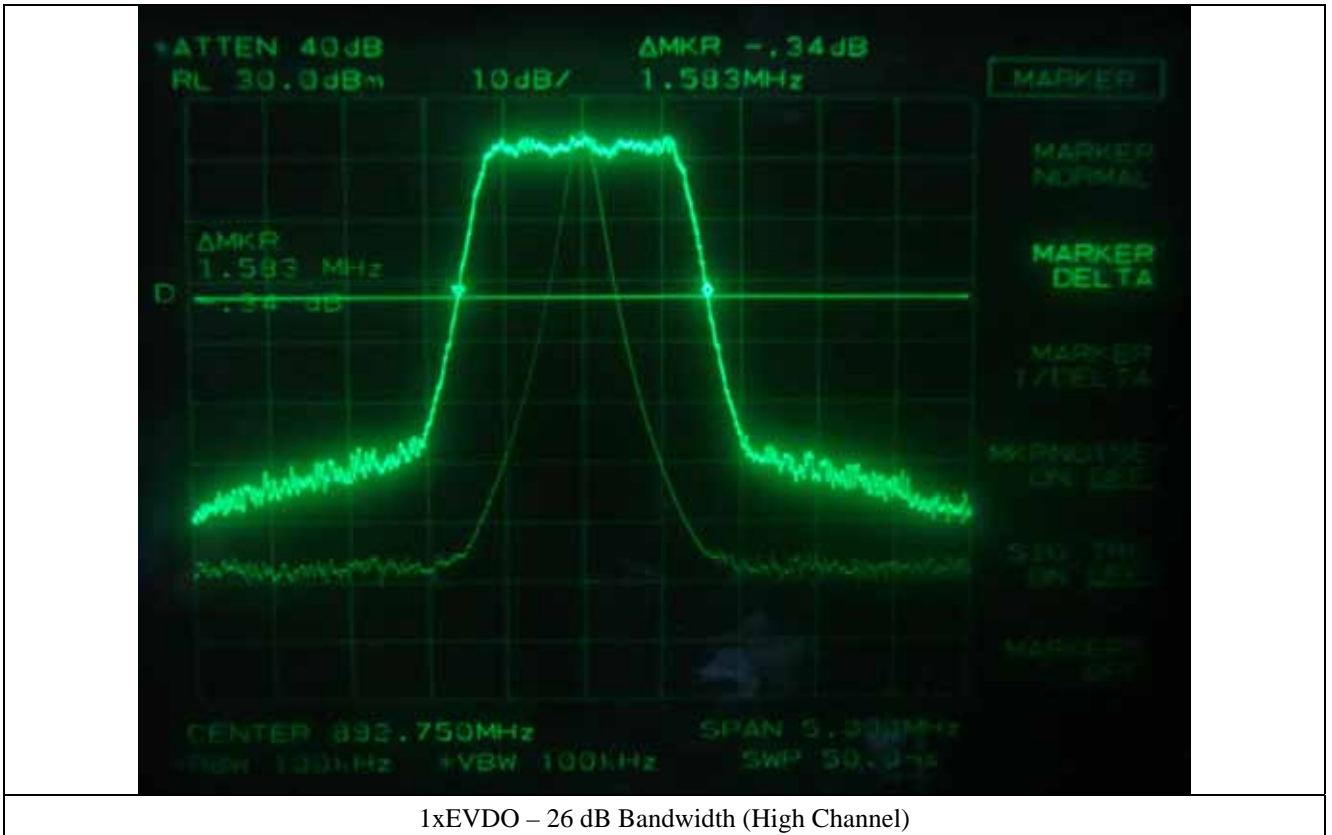


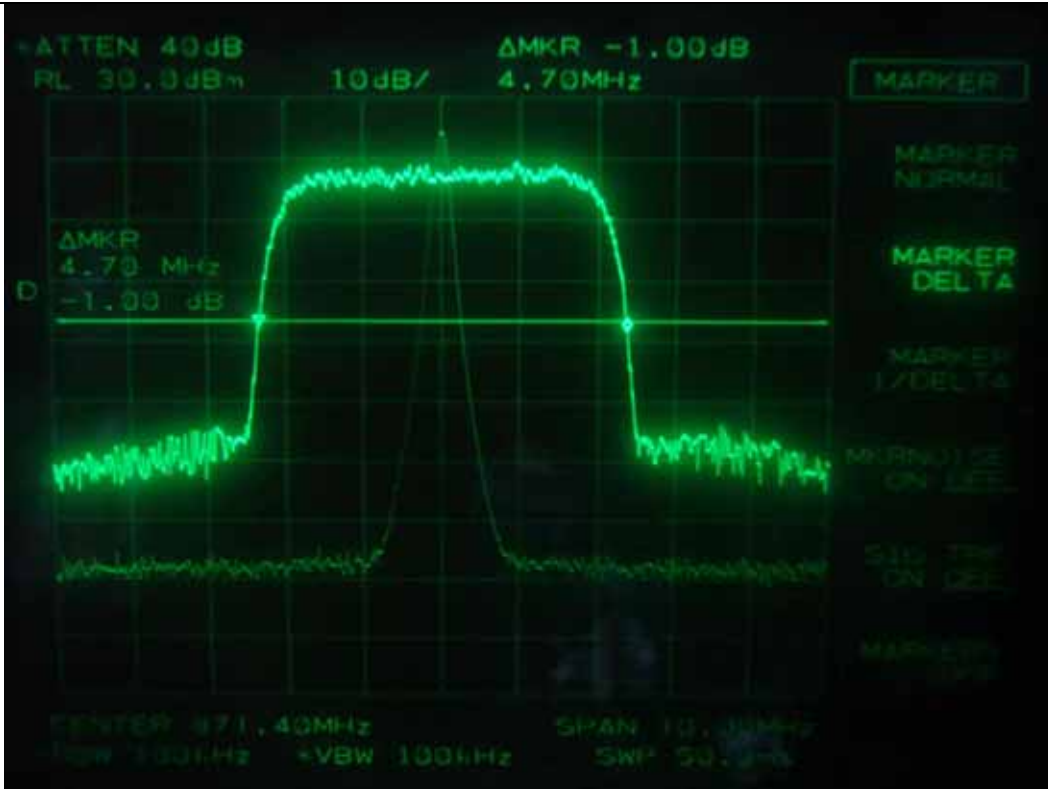


1xEVDO – 26 dB Bandwidth (Low Channel)

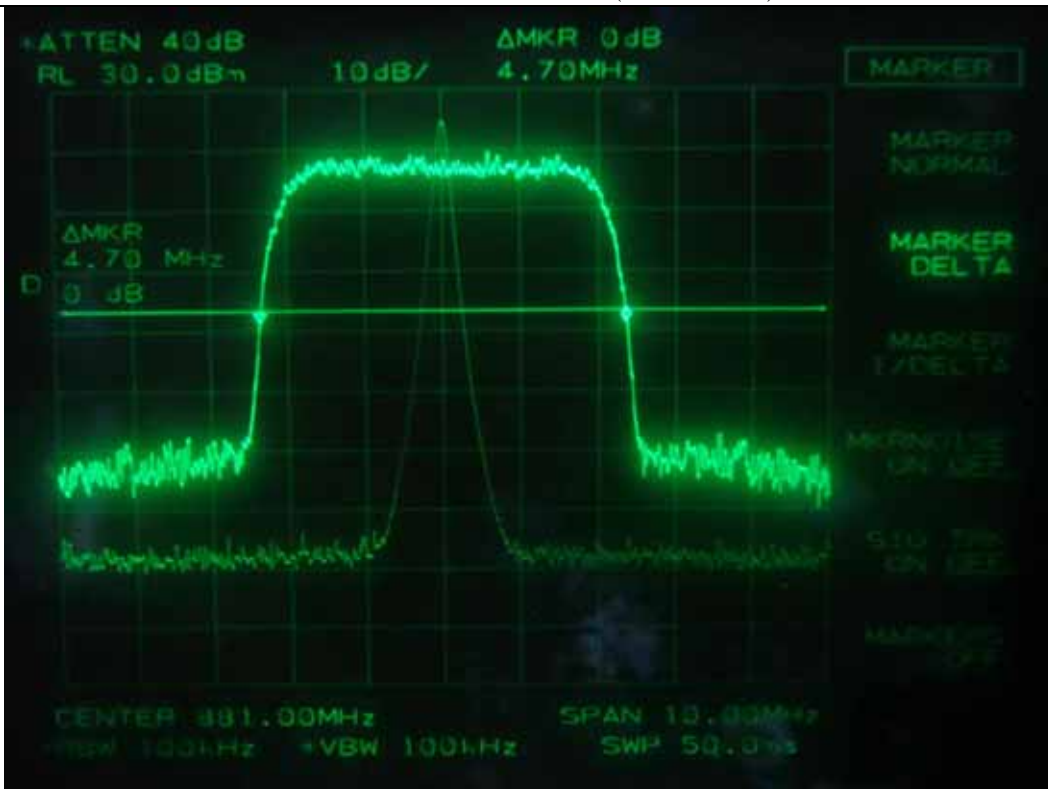


1xEVDO – 26 dB Bandwidth (Middle Channel)

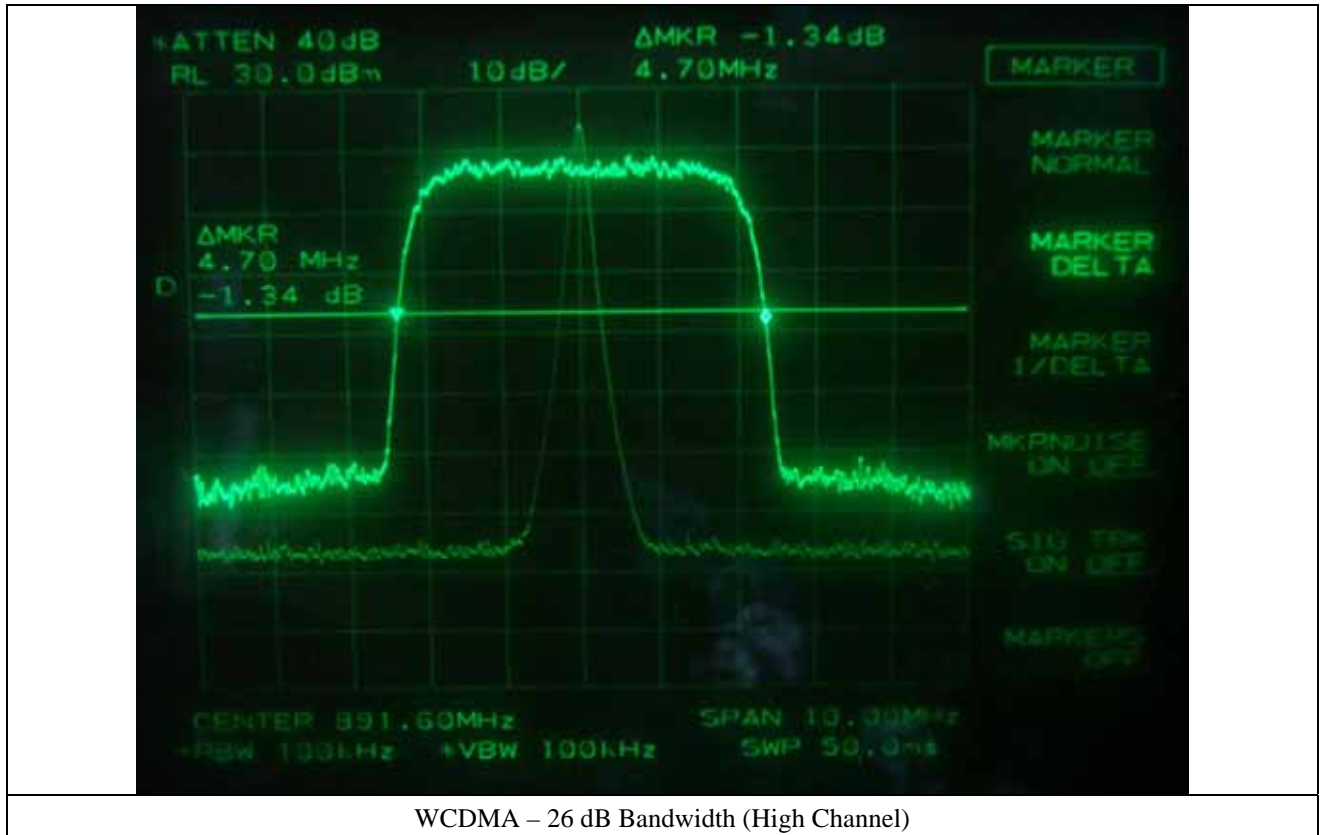


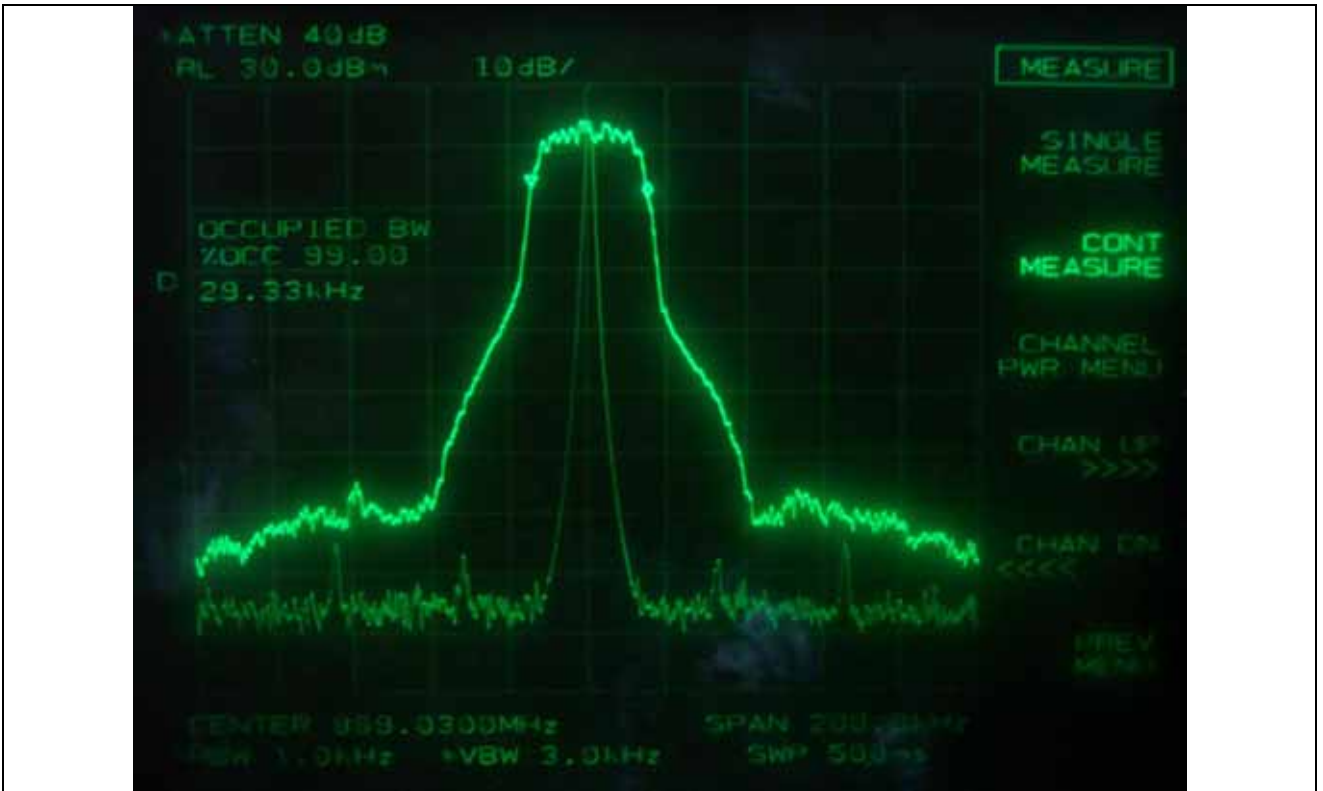


WCDMA – 26 dB Bandwidth (Low Channel)

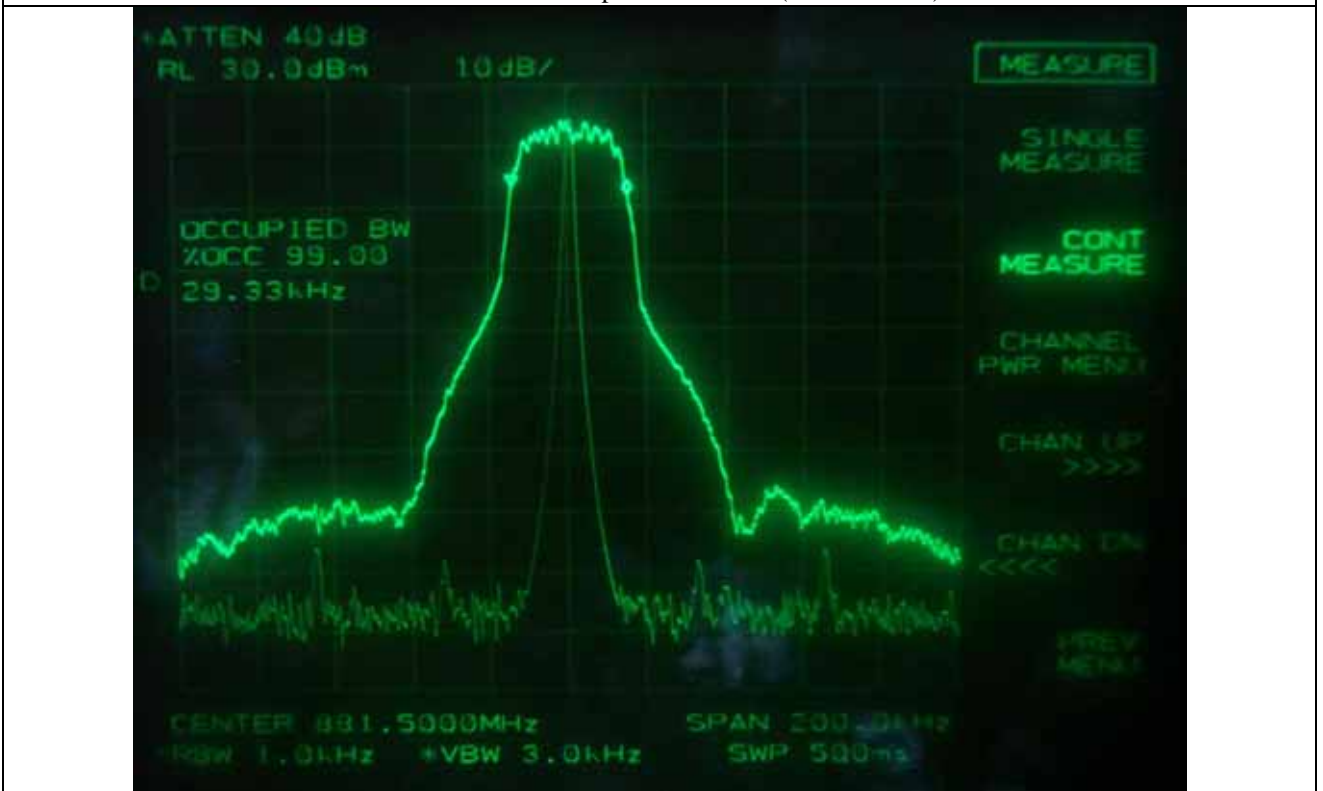


WCDMA – 26 dB Bandwidth (Middle Channel)

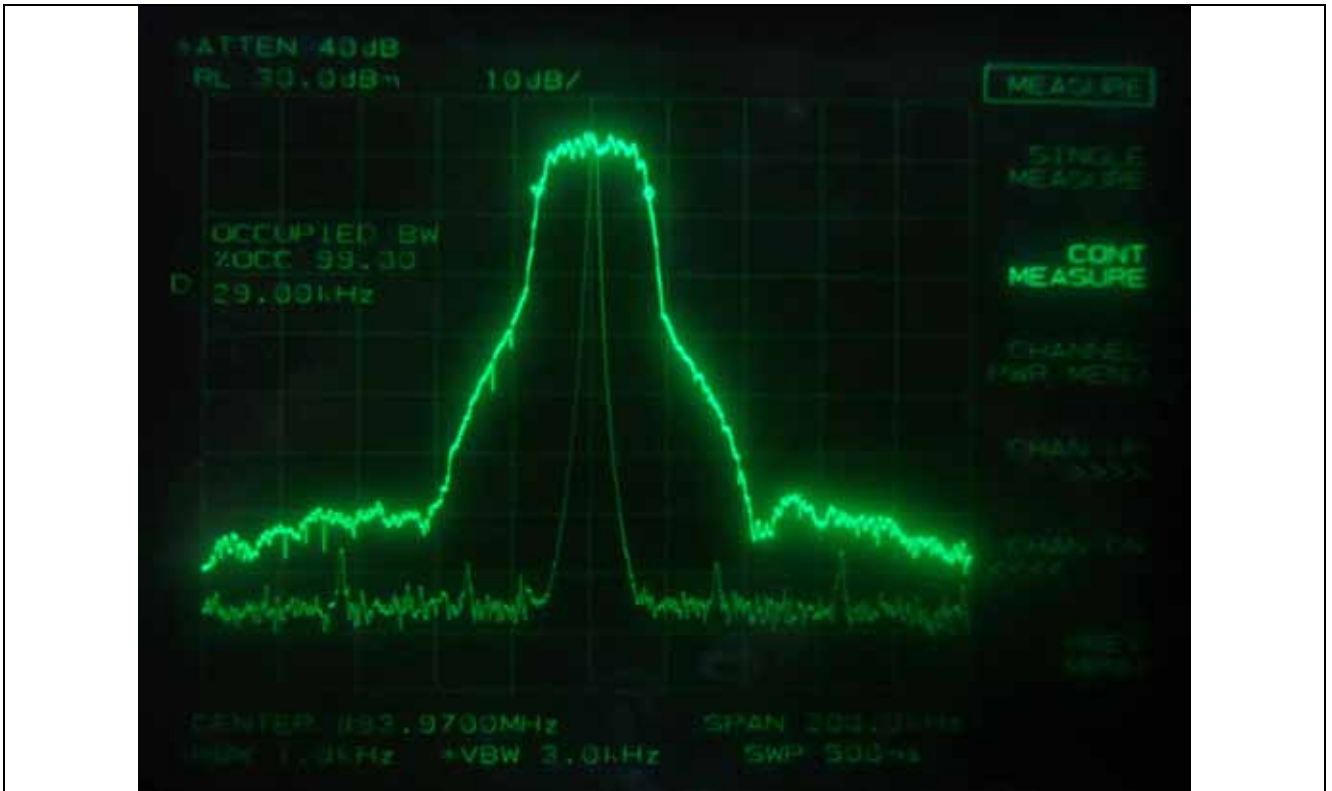




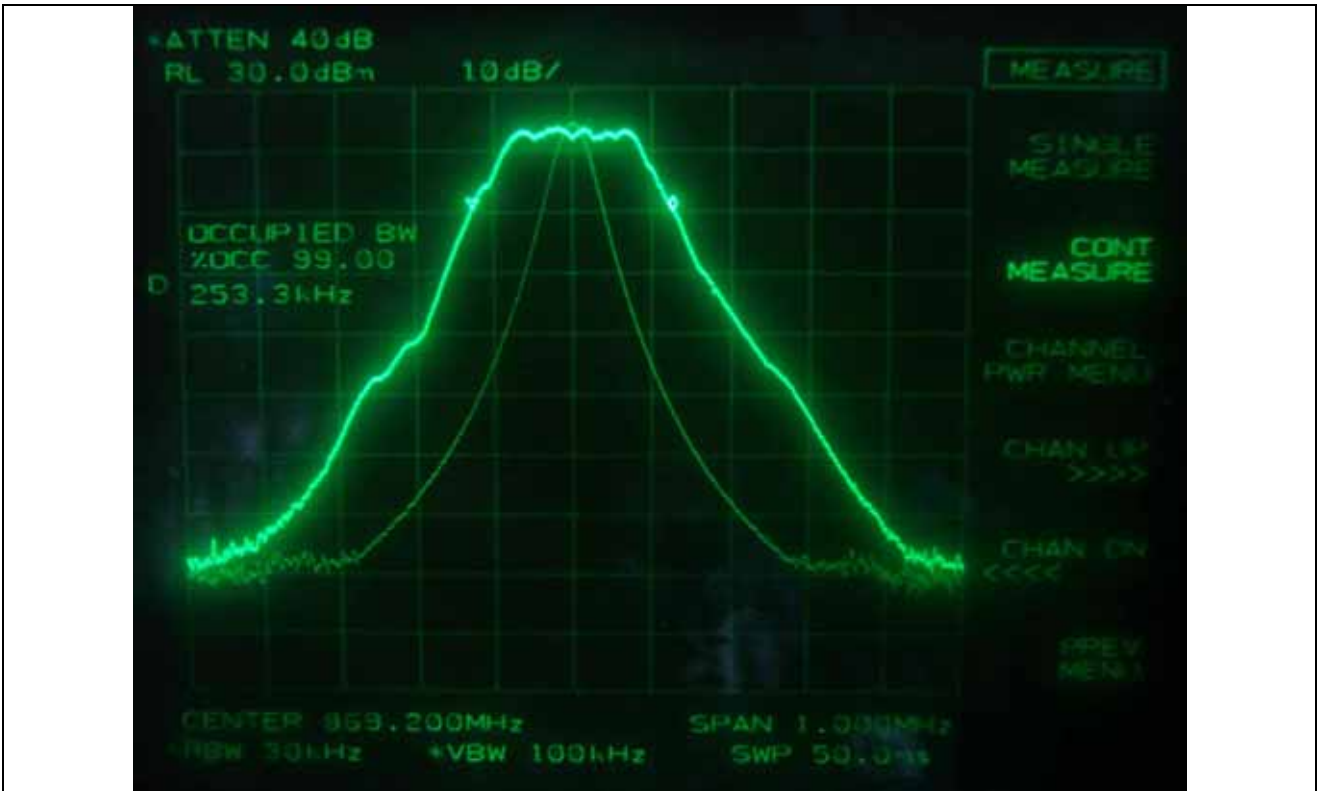
TDMA – 99 % Occupied Bandwidth (Low Channel)



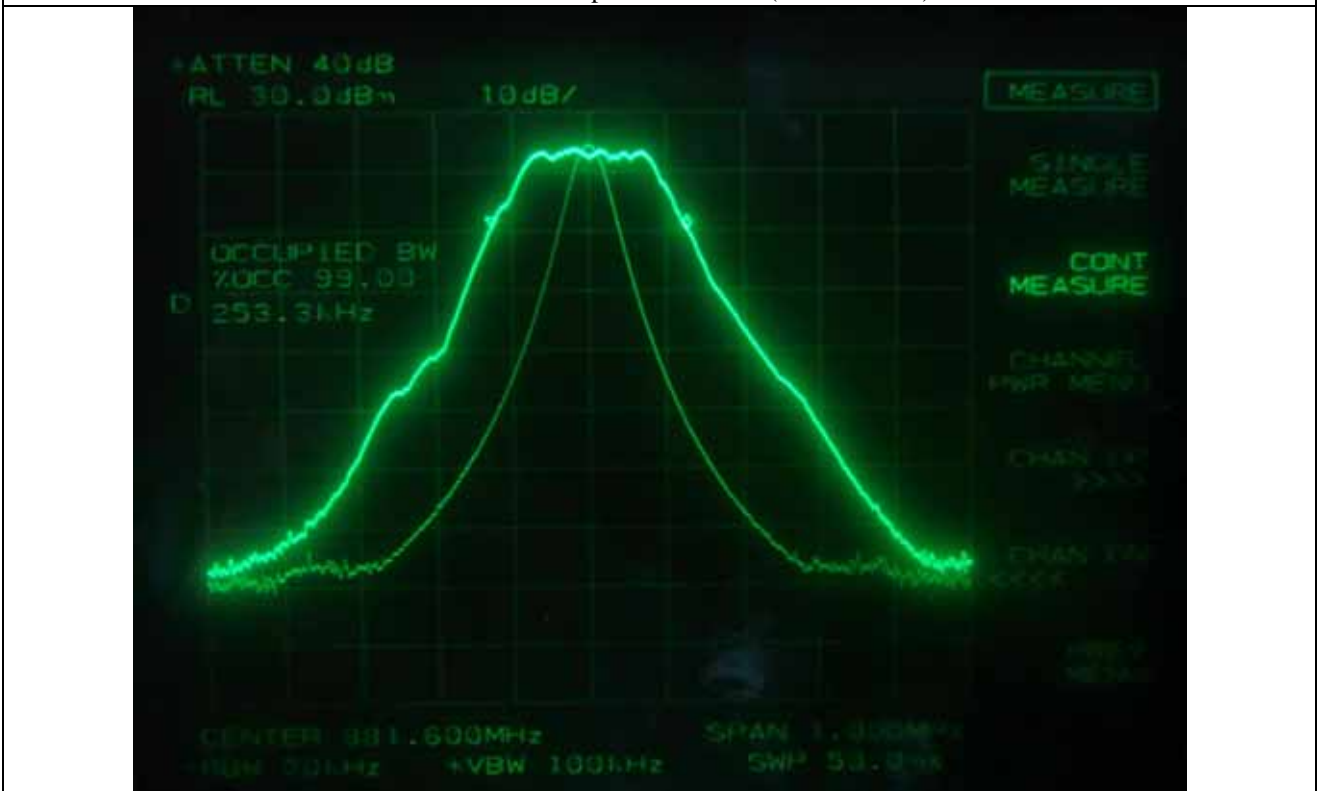
TDMA – 99 % Occupied Bandwidth (Middle Channel)



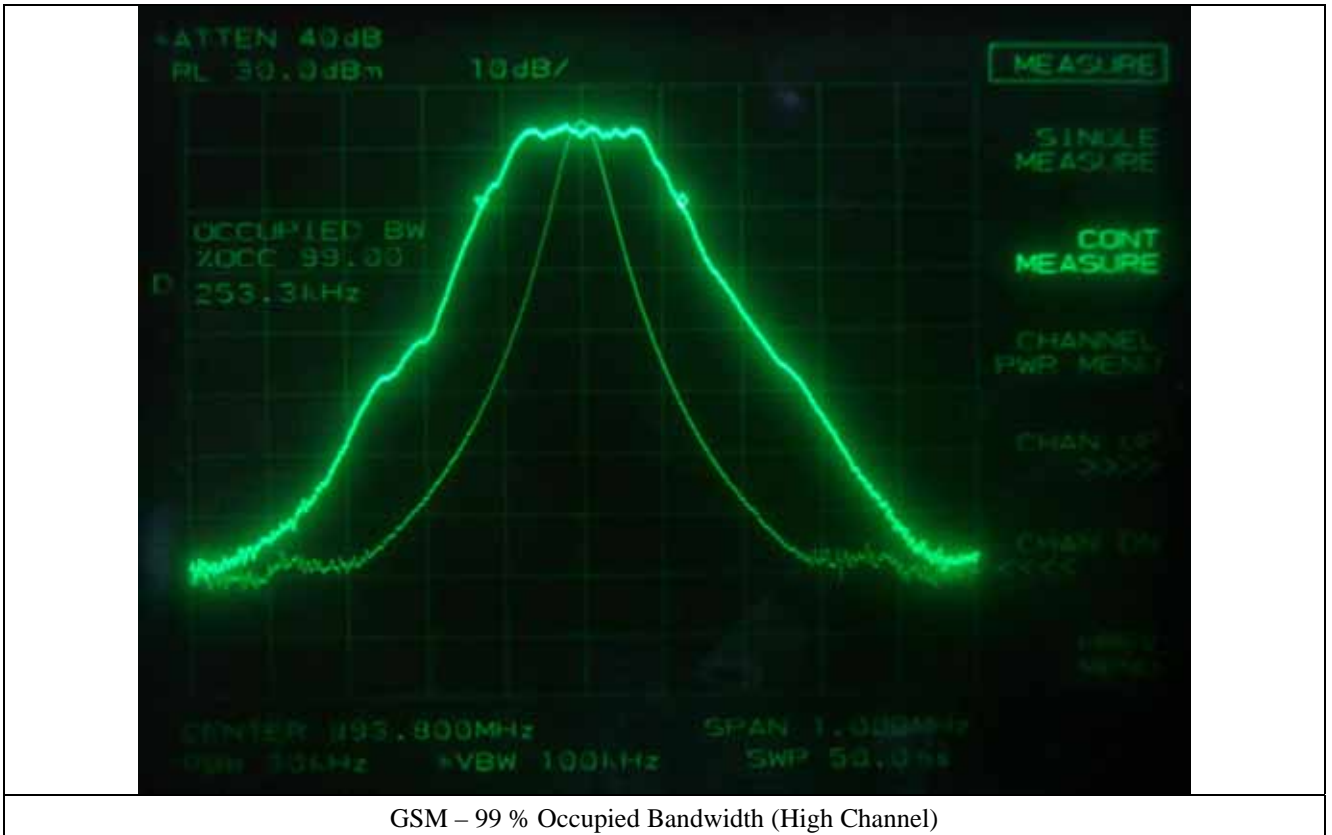
TDMA – 99 % Occupied Bandwidth (High Channel)

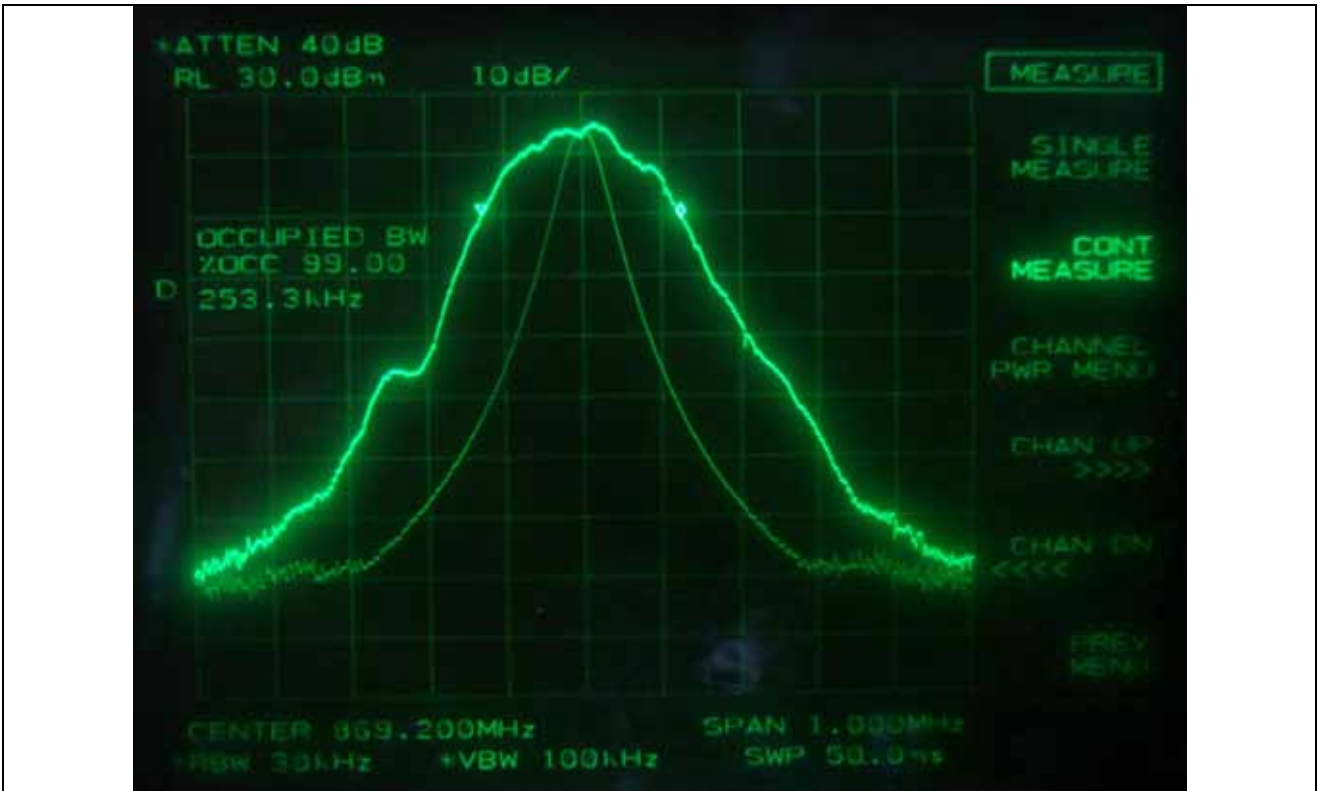


GSM – 99 % Occupied Bandwidth (Low Channel)

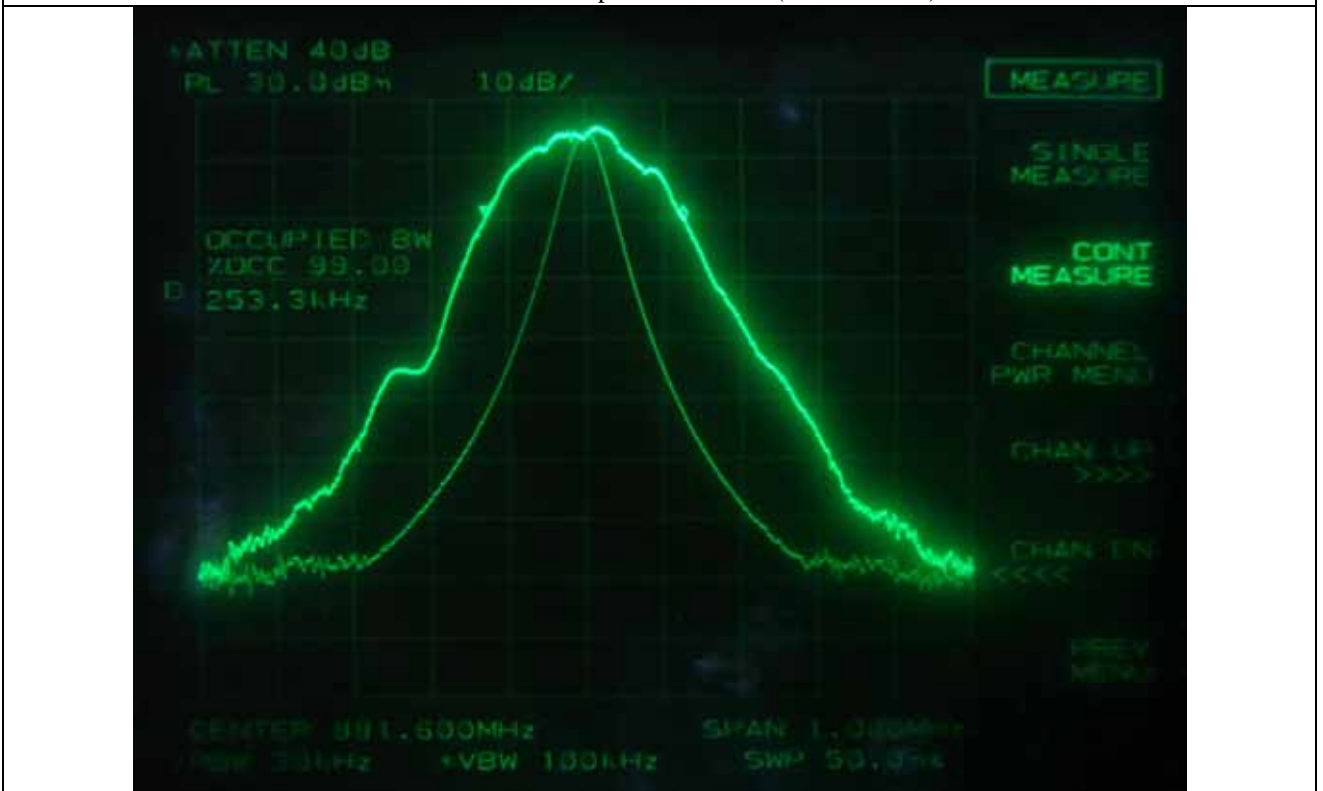


GSM – 99 % Occupied Bandwidth (Middle Channel)

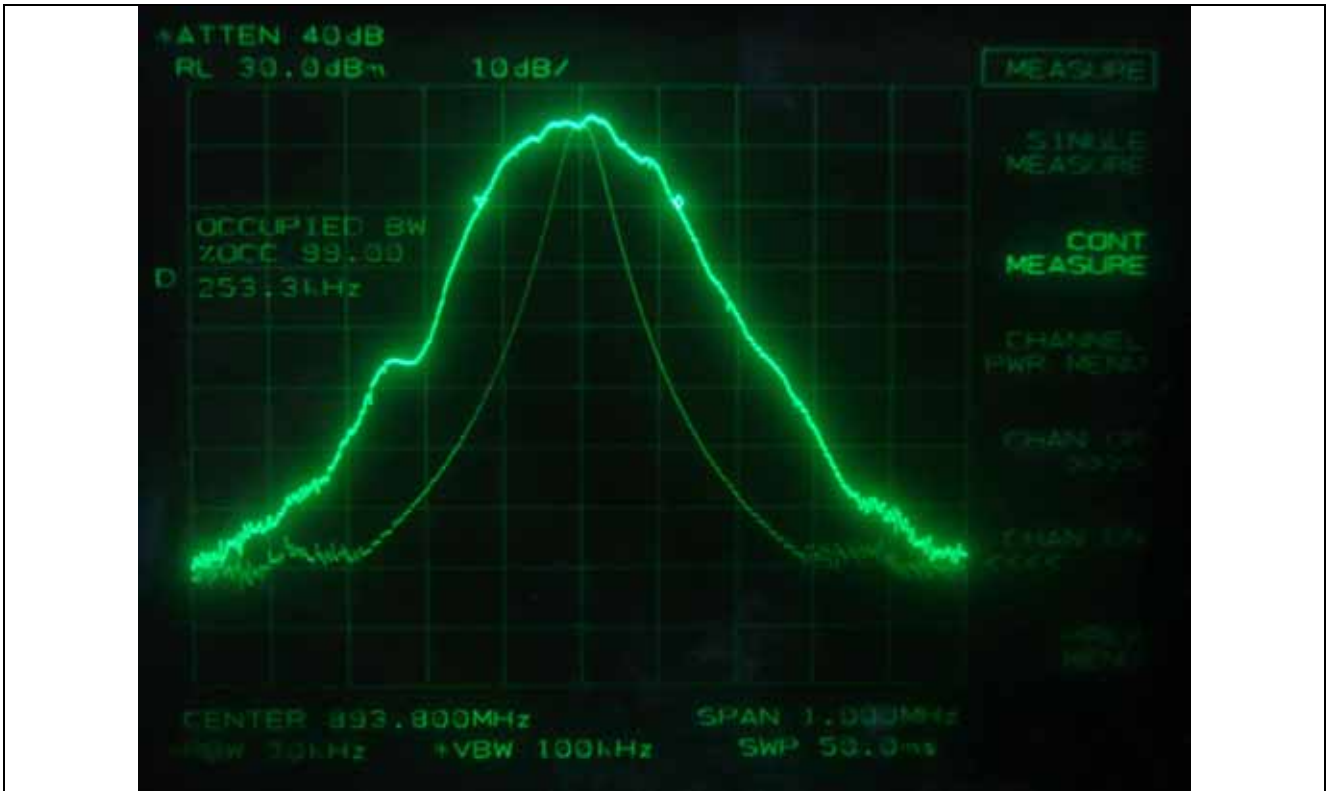




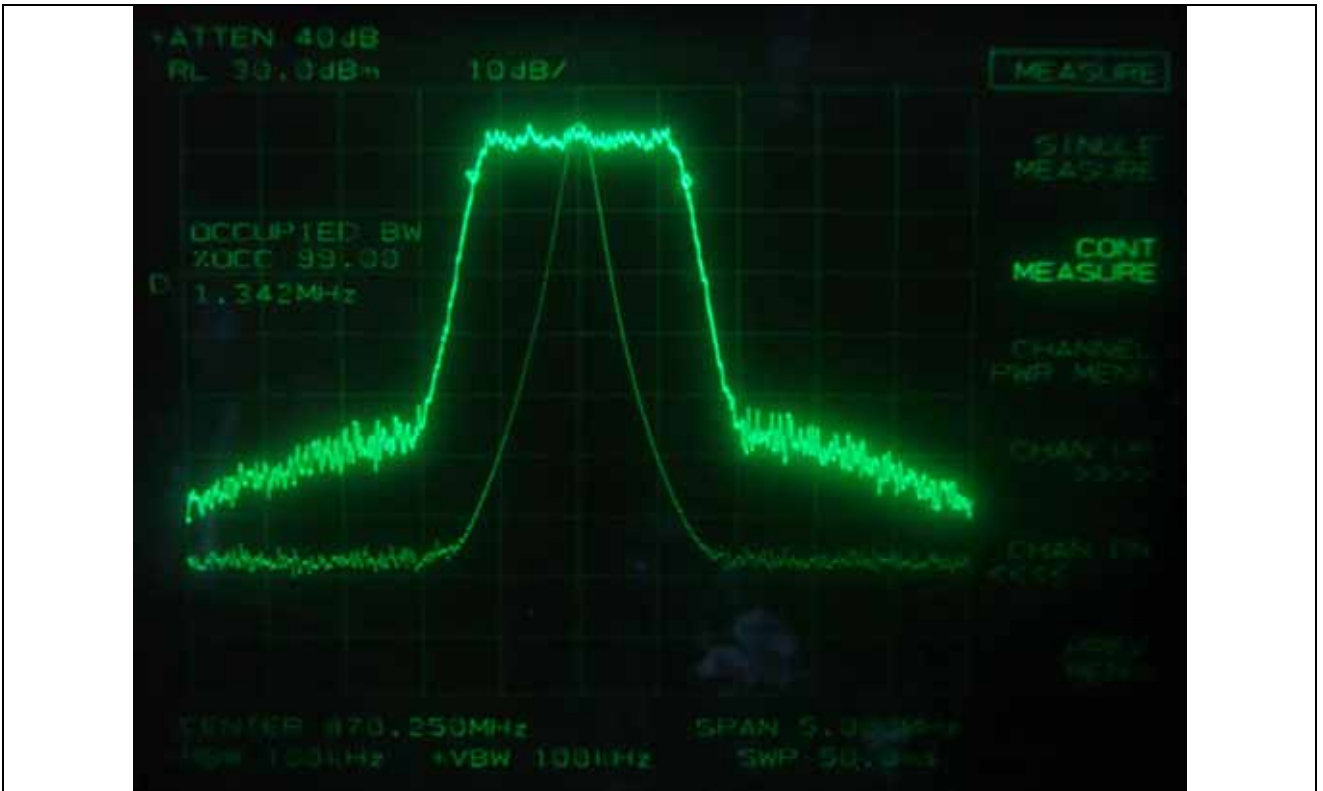
EDGE – 99 % Occupied Bandwidth (Low Channel)



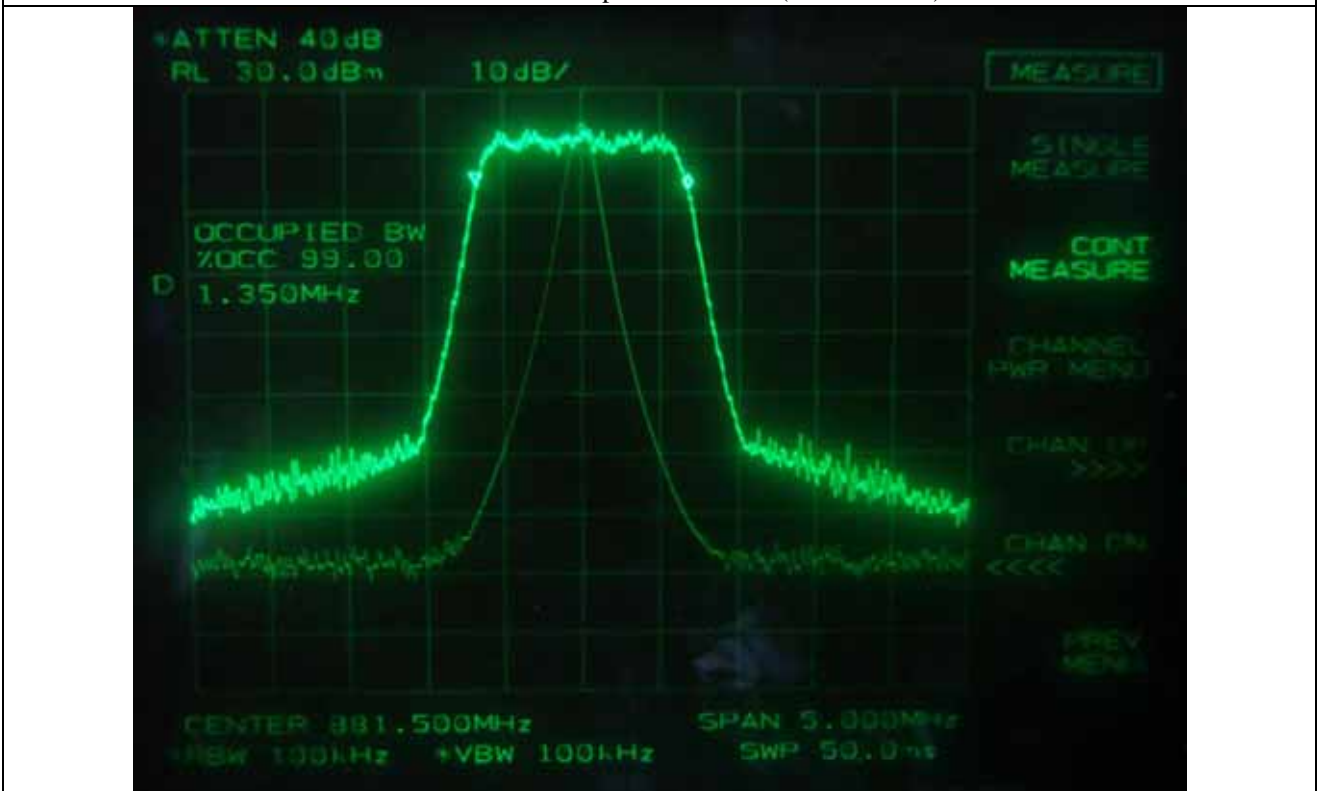
EDGE – 99 % Occupied Bandwidth (Middle Channel)



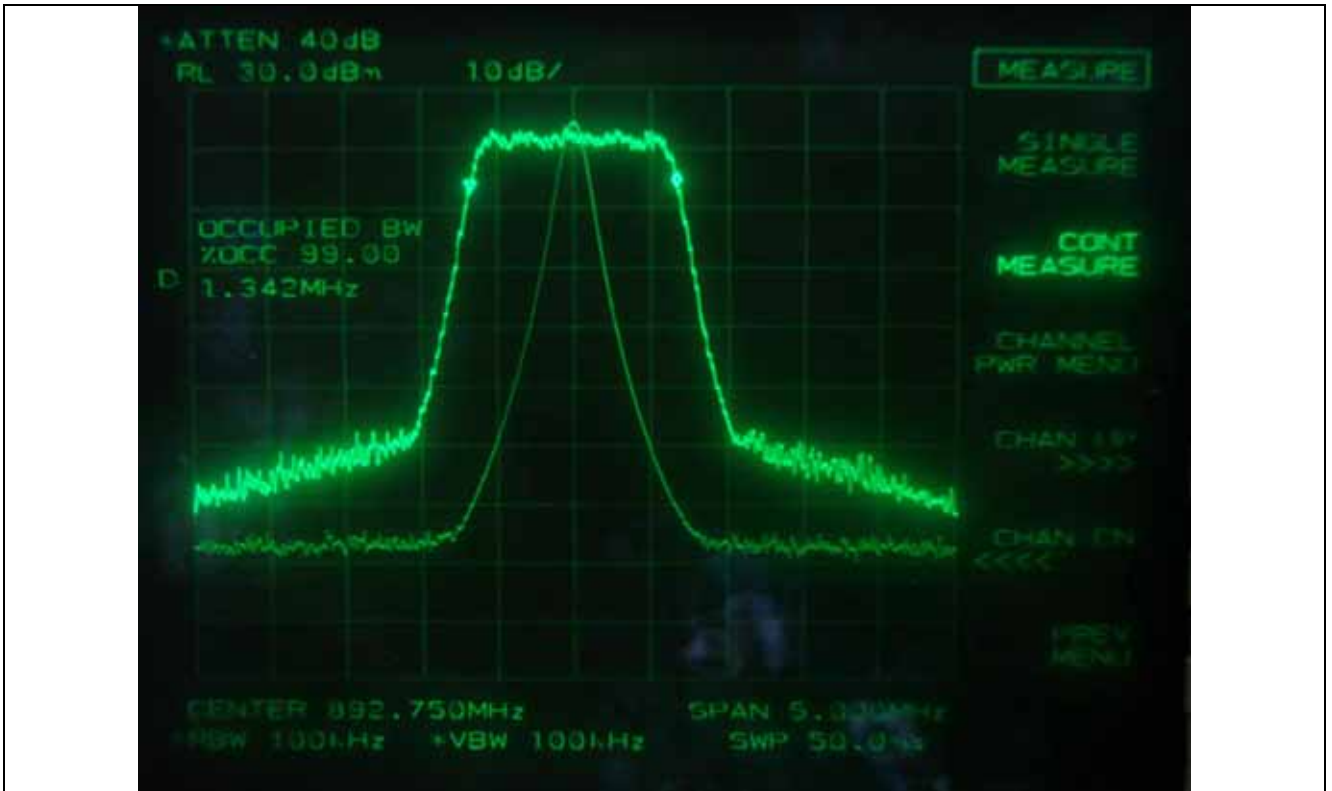
EDGE – 99 % Occupied Bandwidth (High Channel)



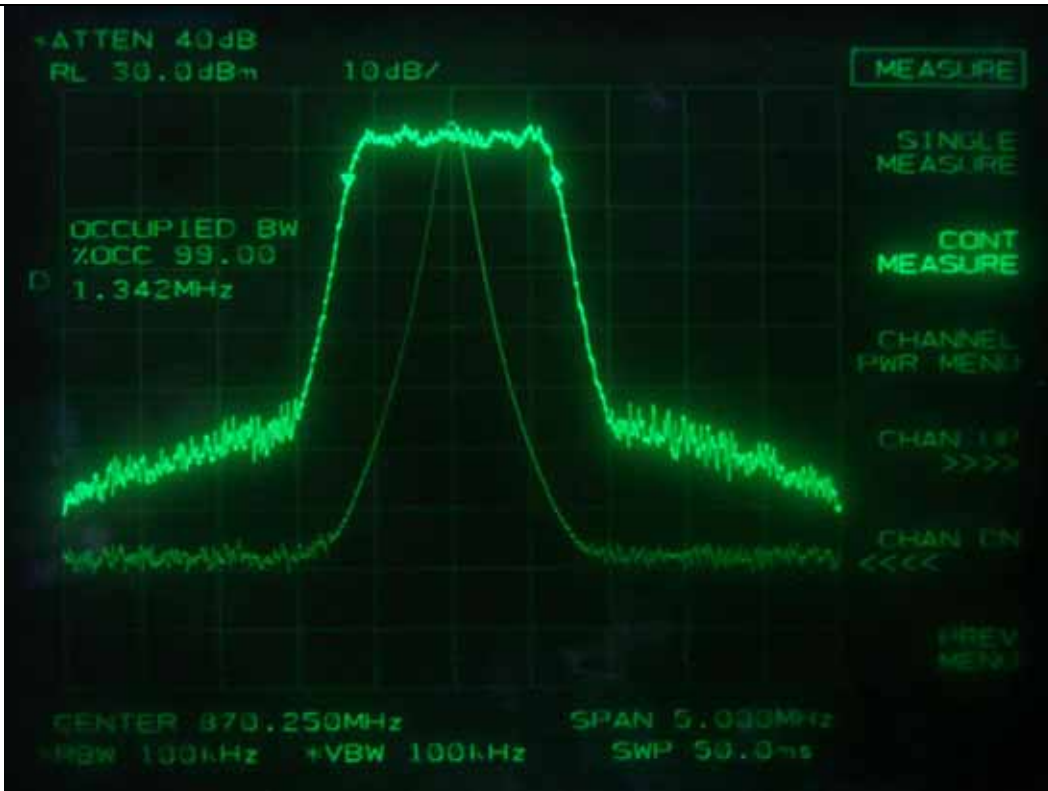
CDMA – 99 % Occupied Bandwidth (Low Channel)



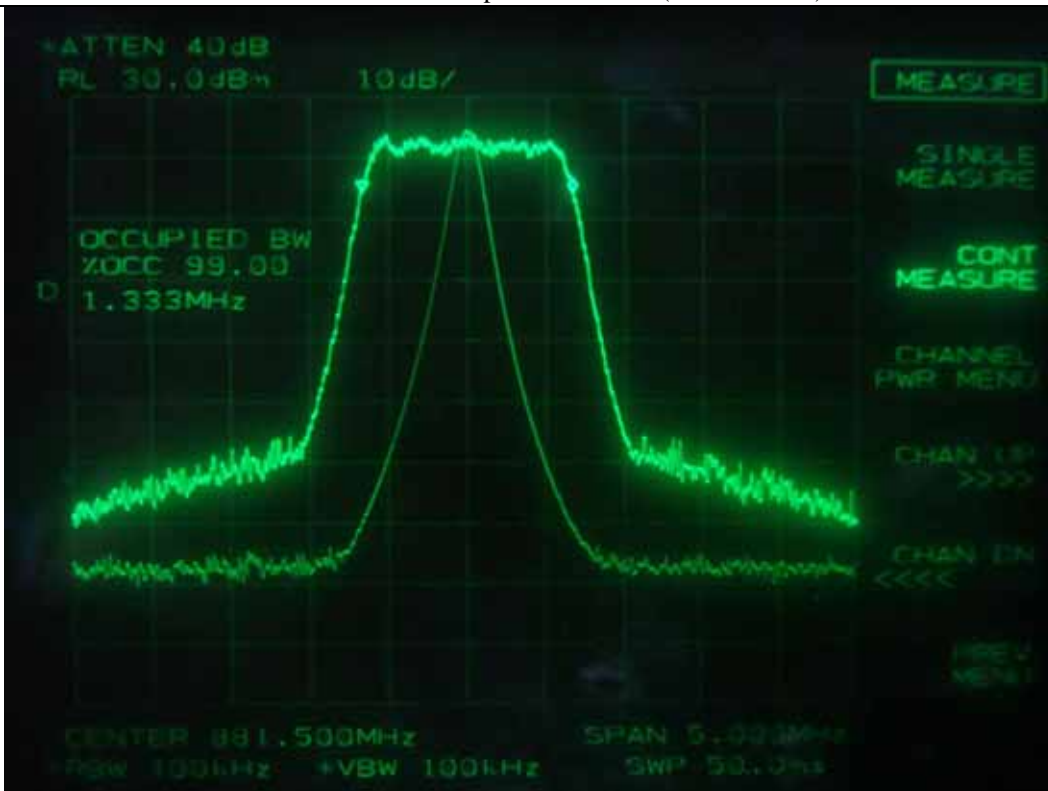
CDMA – 99 % Occupied Bandwidth (Middle Channel)



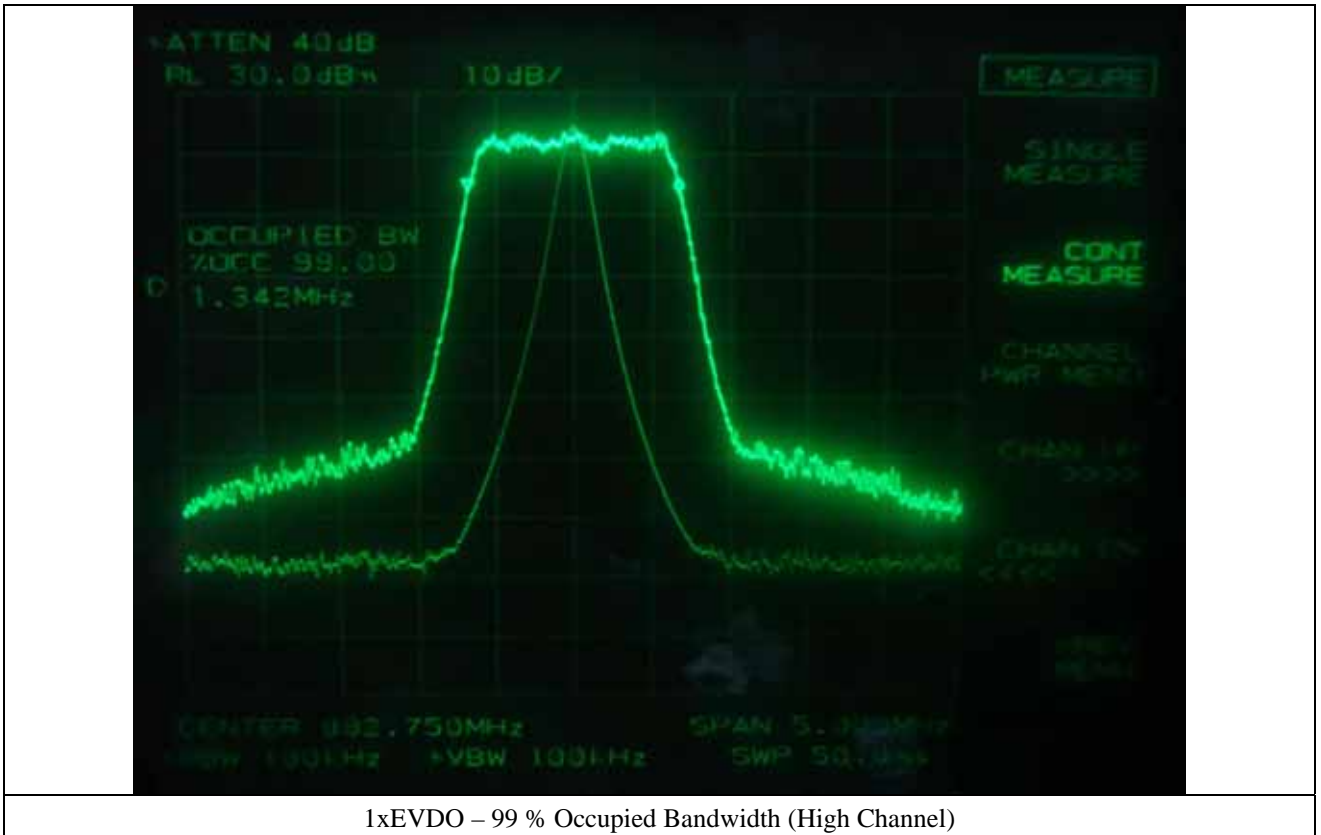
CDMA – 99 % Occupied Bandwidth (High Channel)

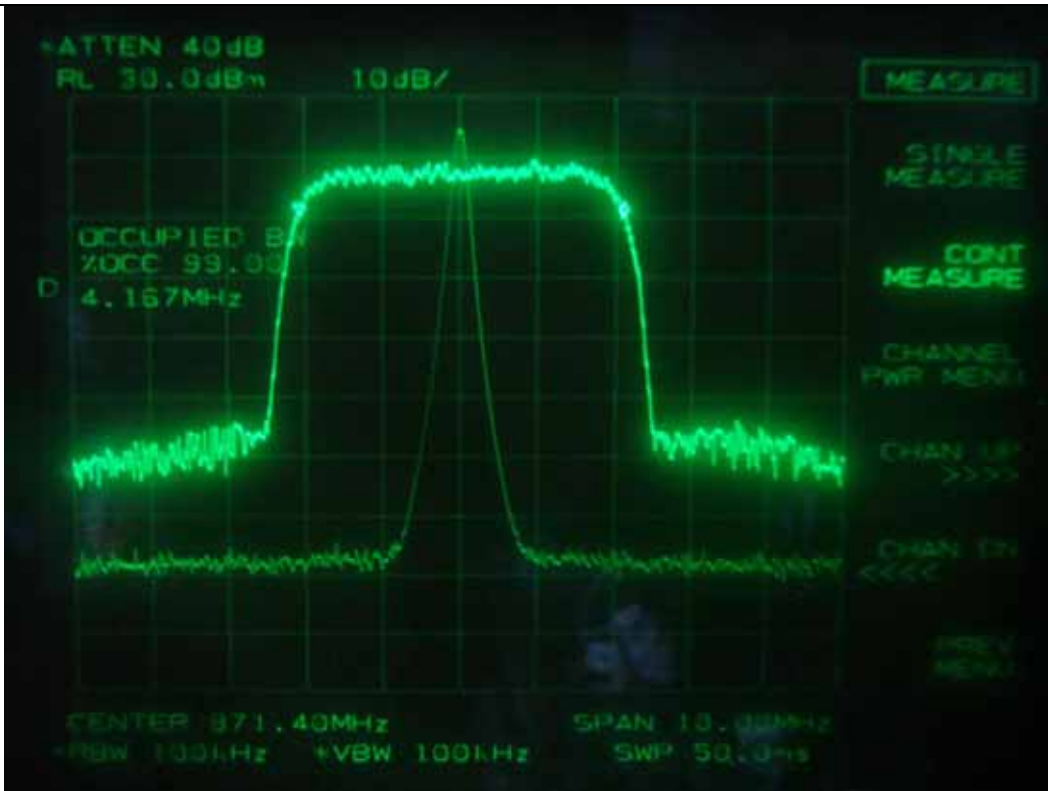


1xEVDO – 99 % Occupied Bandwidth (Low Channel)

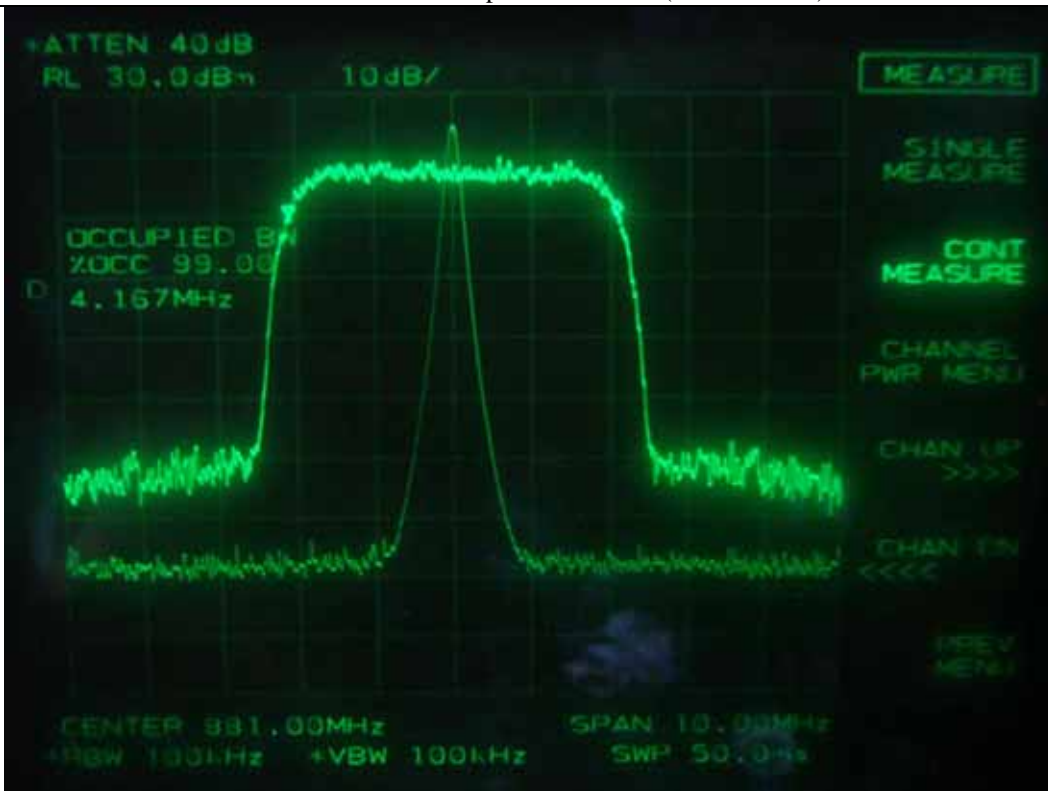


1xEVDO – 99 % Occupied Bandwidth (Middle Channel)

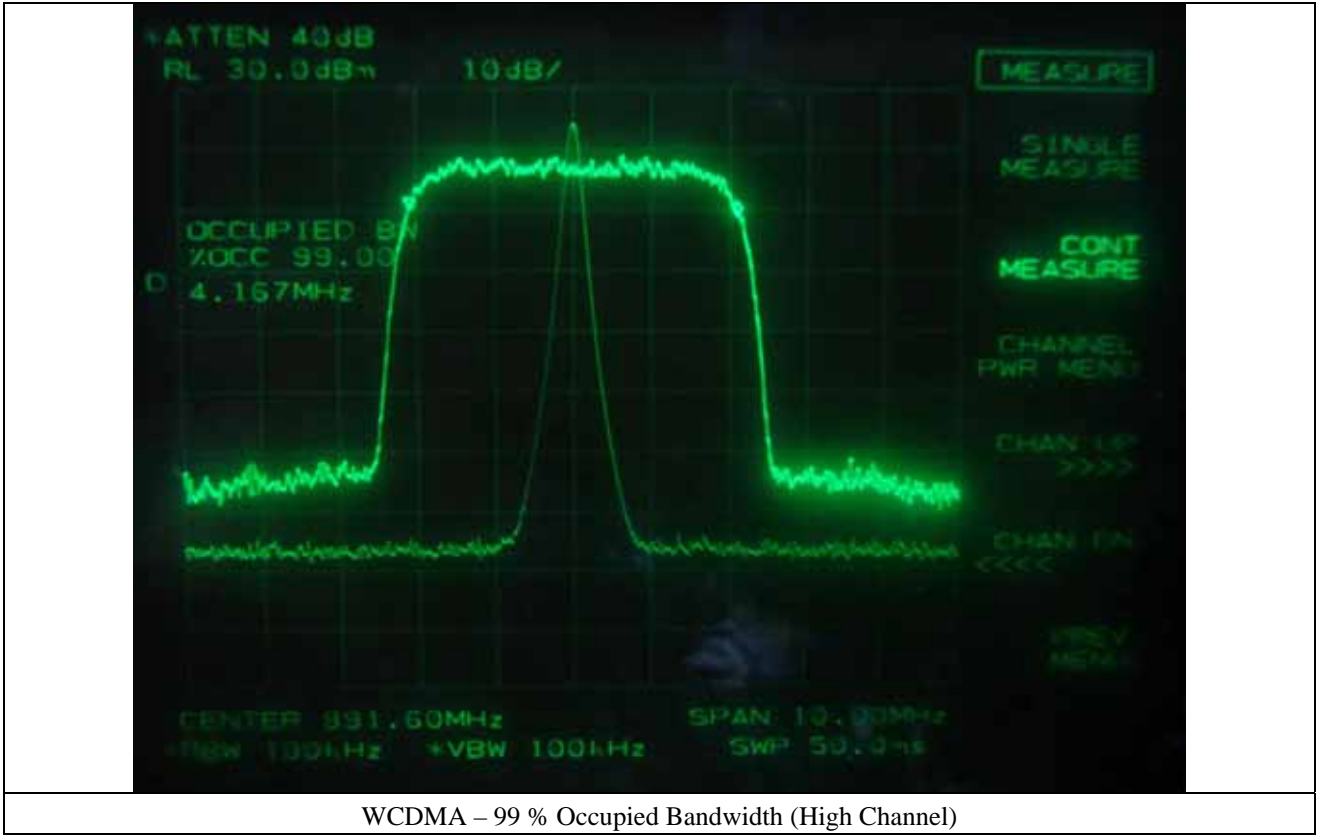


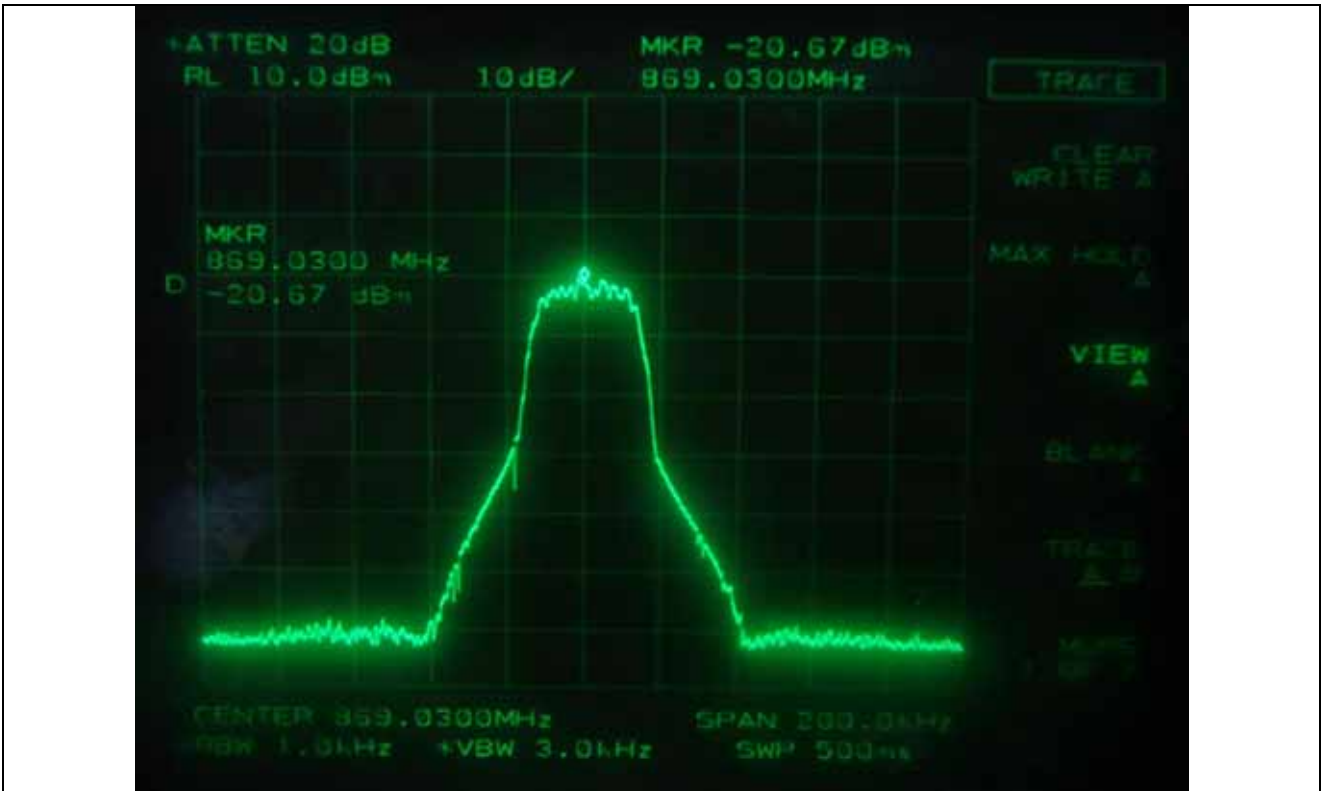


WCDMA – 99 % Occupied Bandwidth (Low Channel)

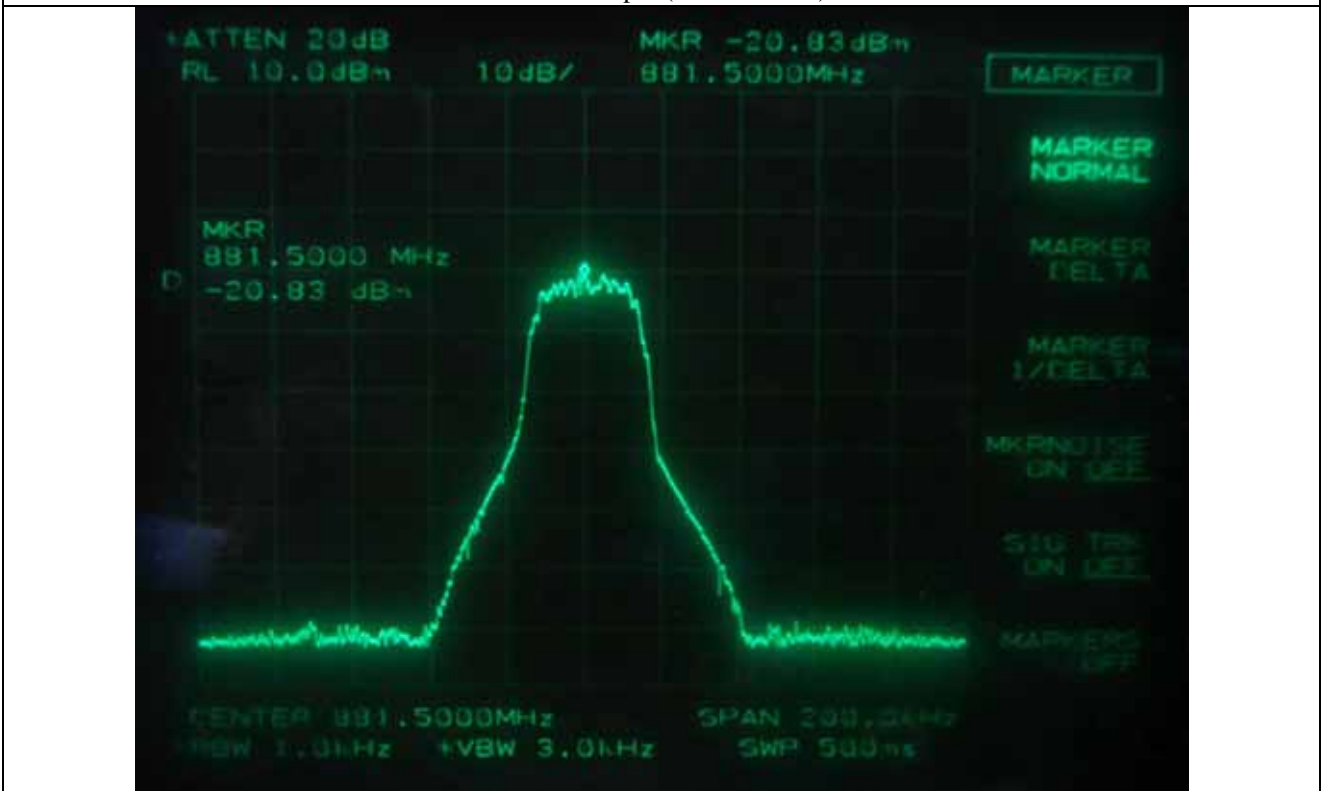


WCDMA – 99 % Occupied Bandwidth (Middle Channel)

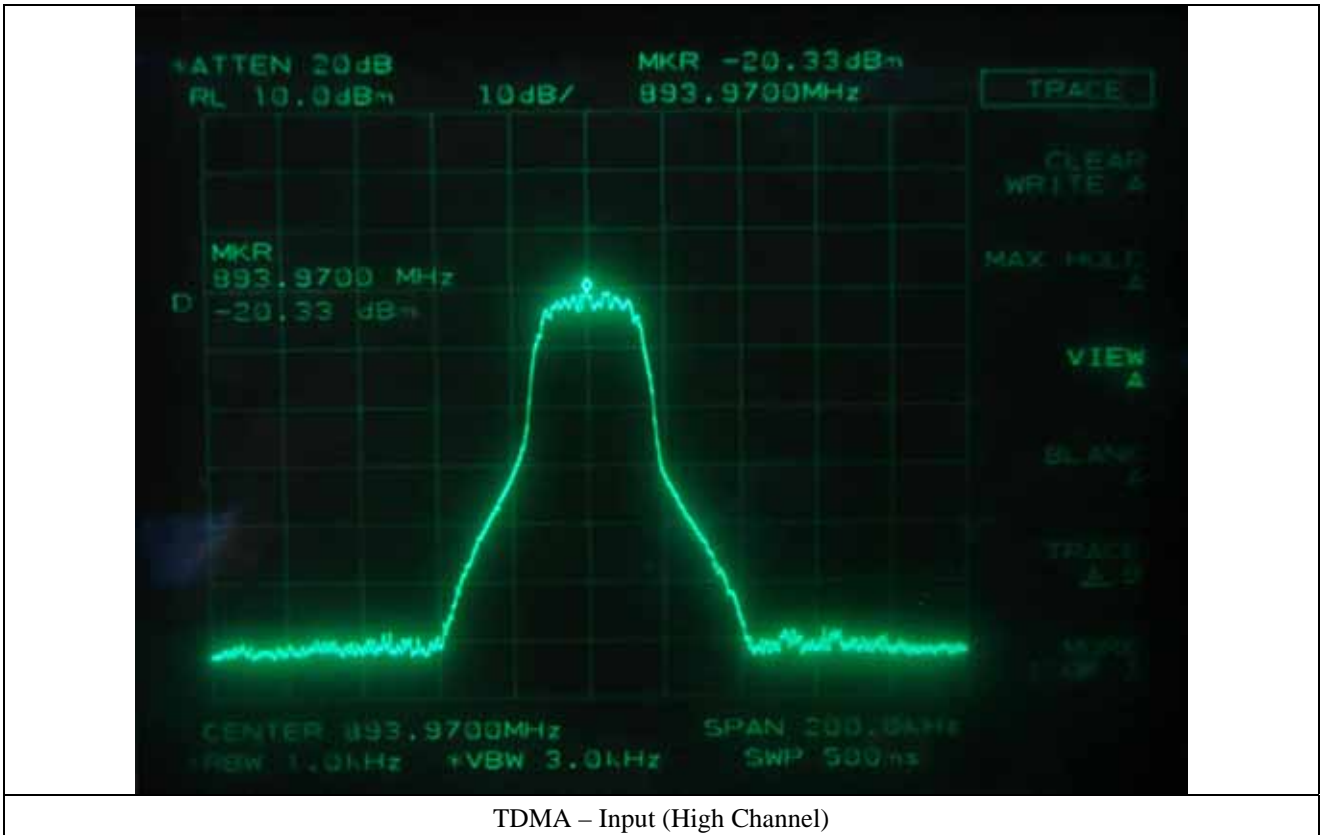


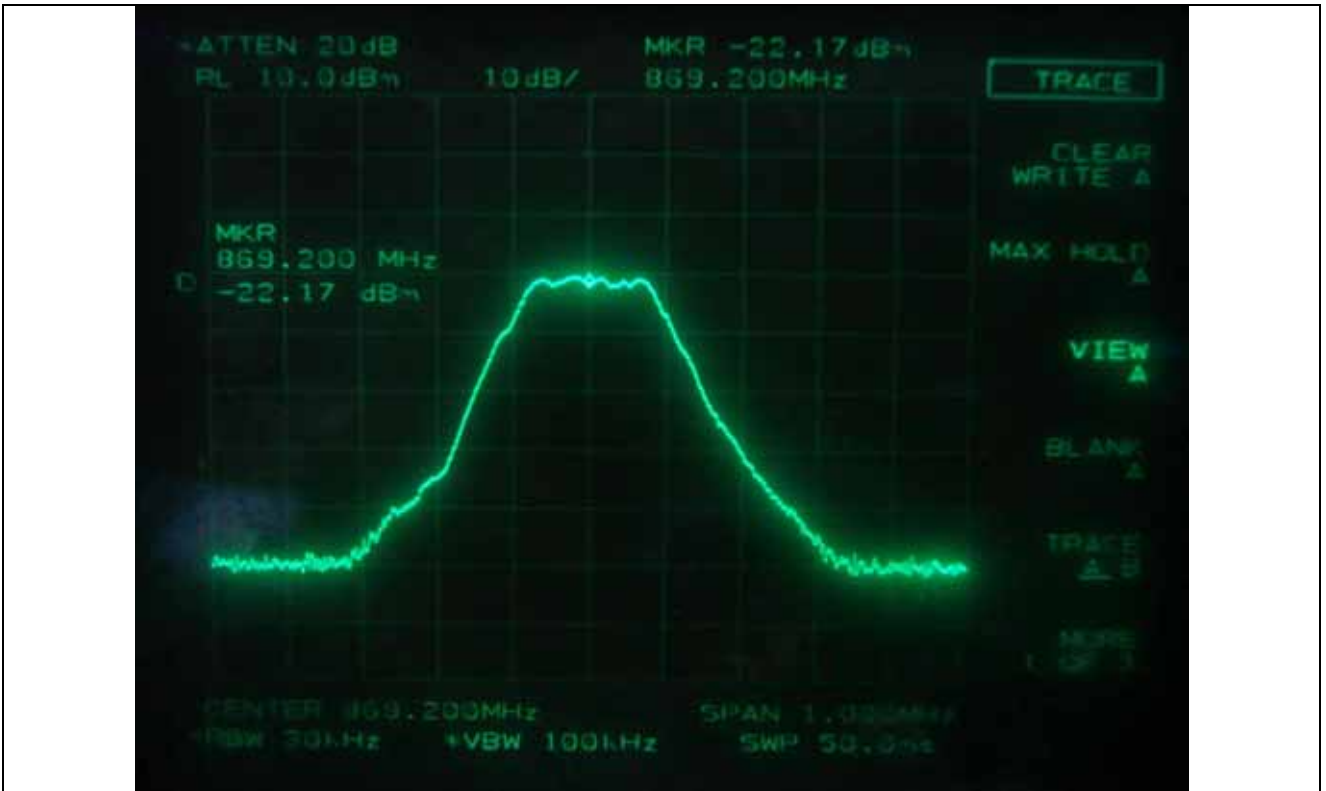


TDMA – Input (Low Channel)

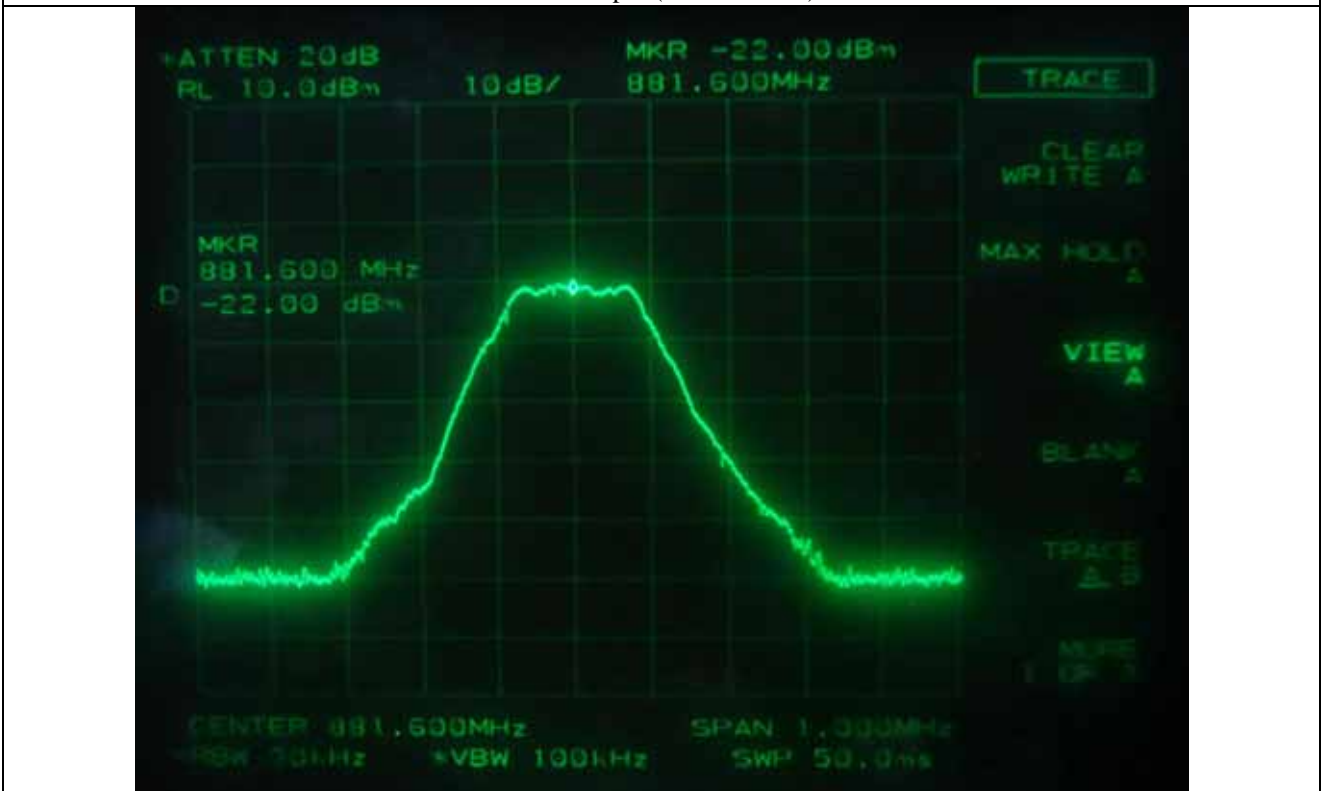


TDMA – Input (Middle Channel)

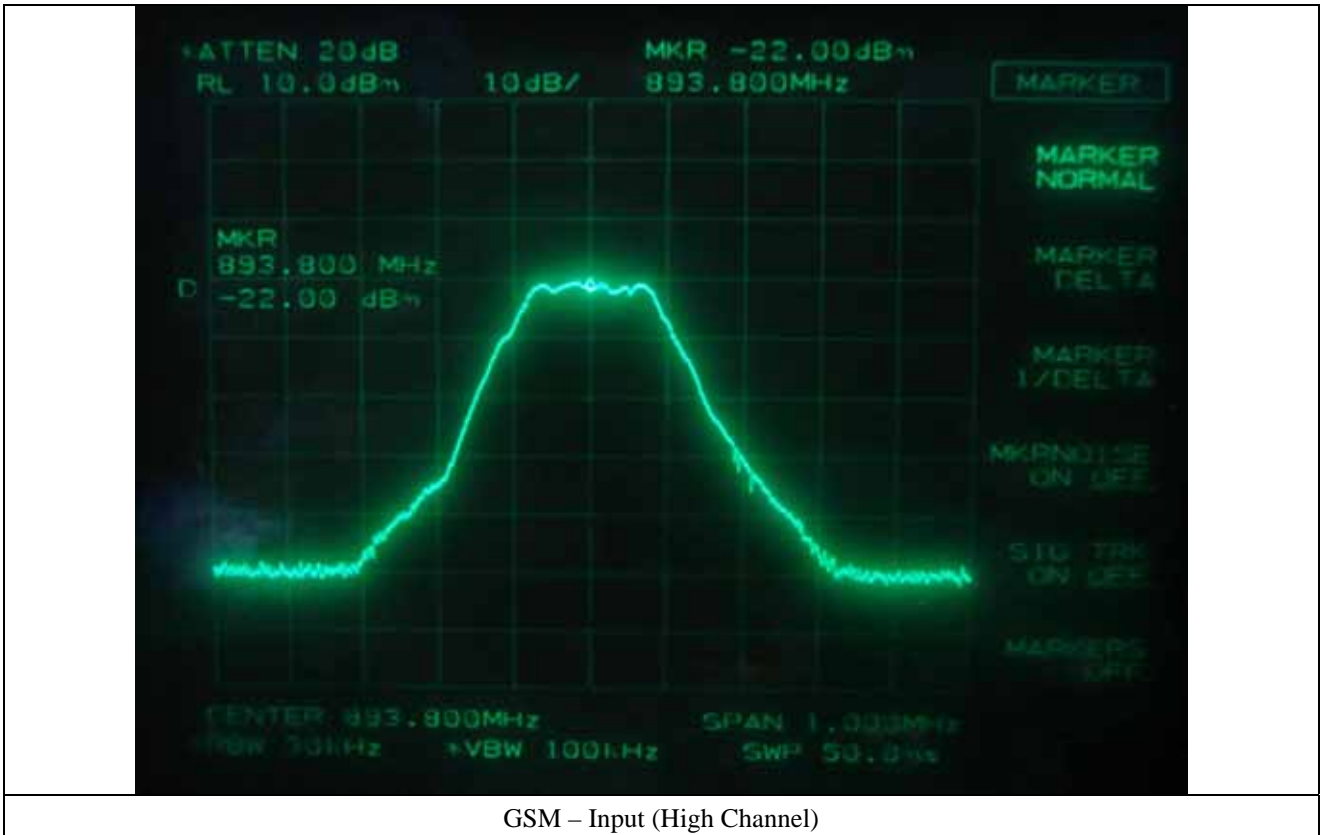


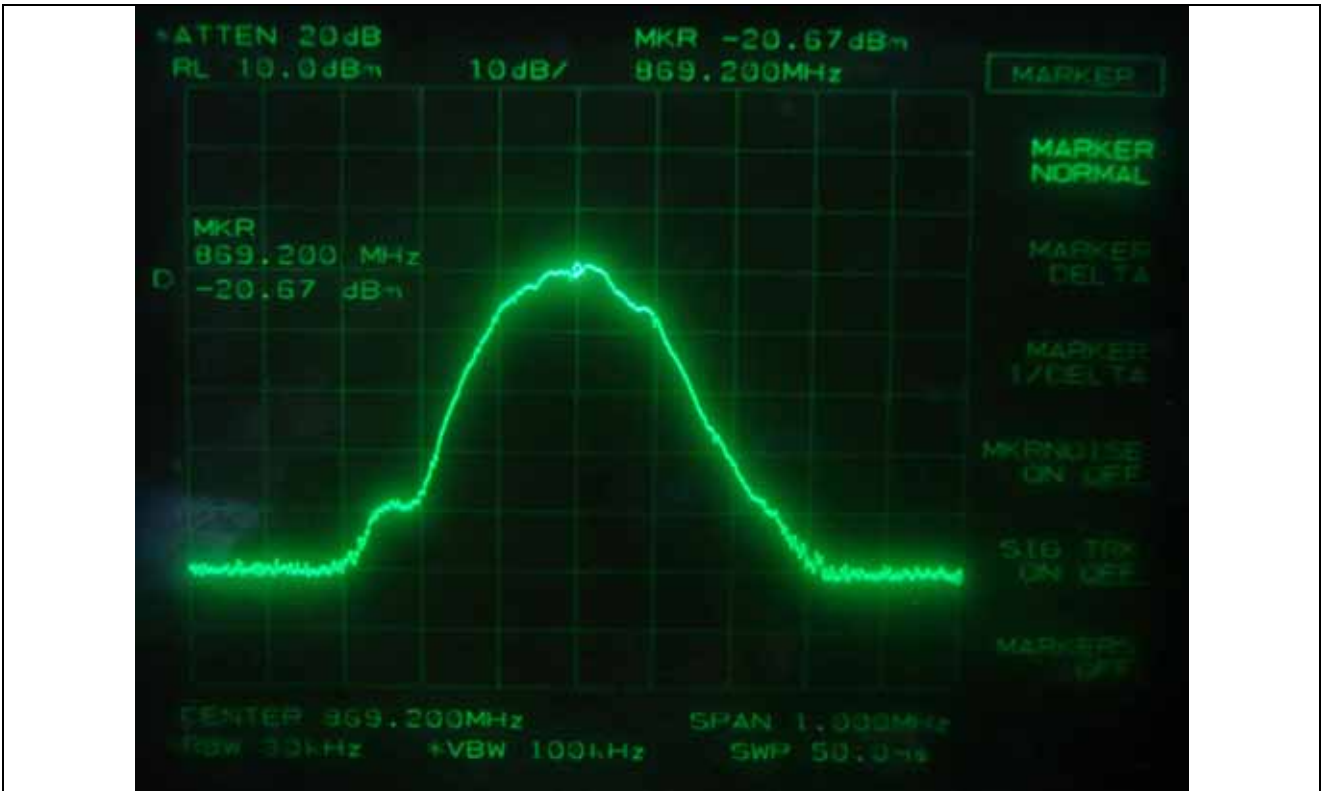


GSM – Input (Low Channel)

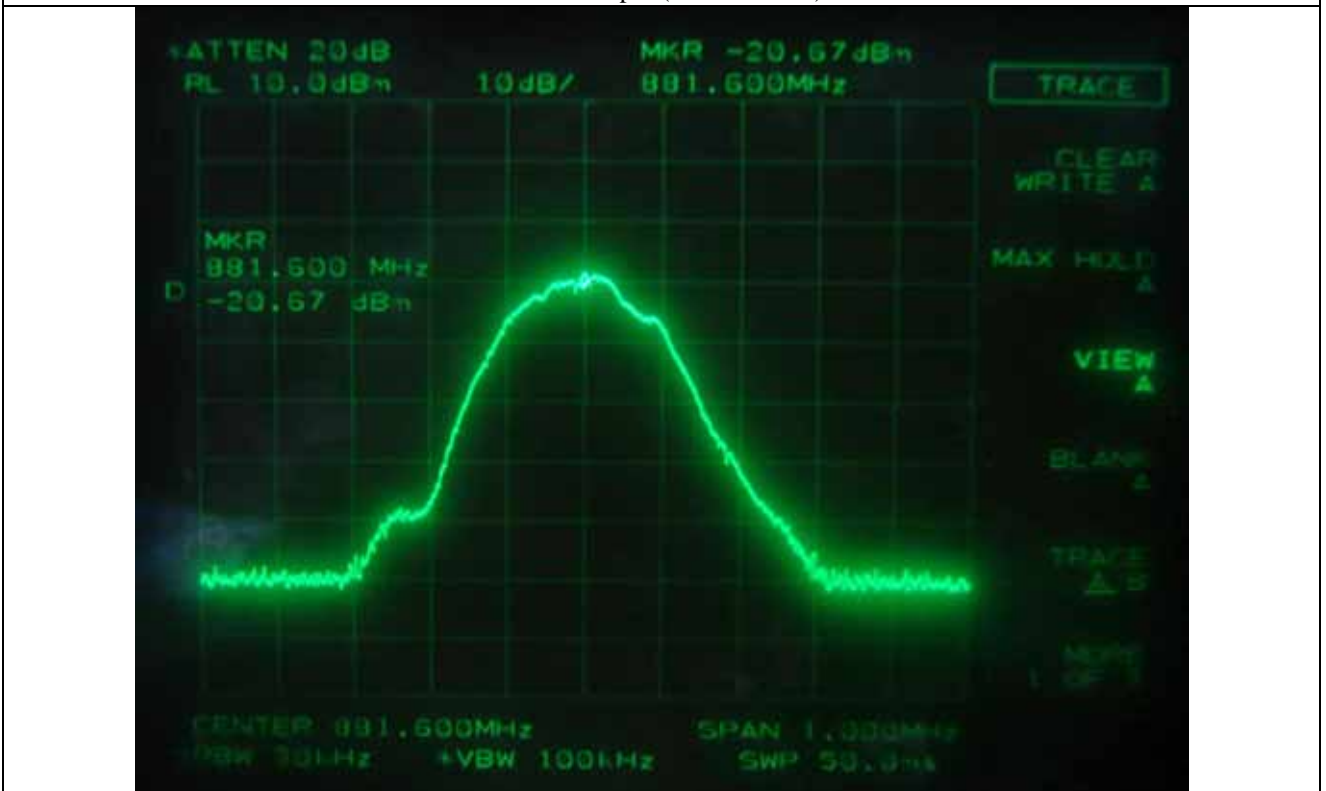


GSM – Input (Middle Channel)

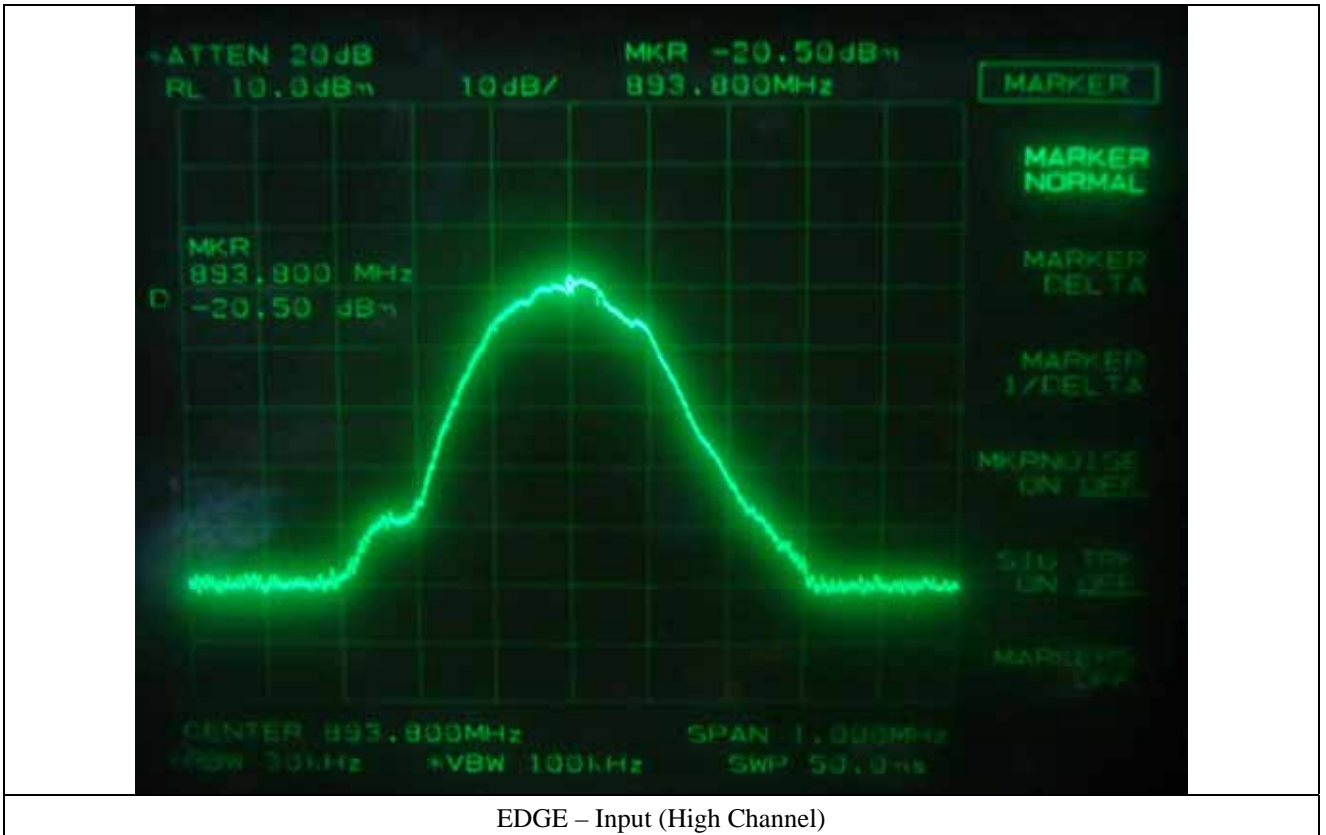




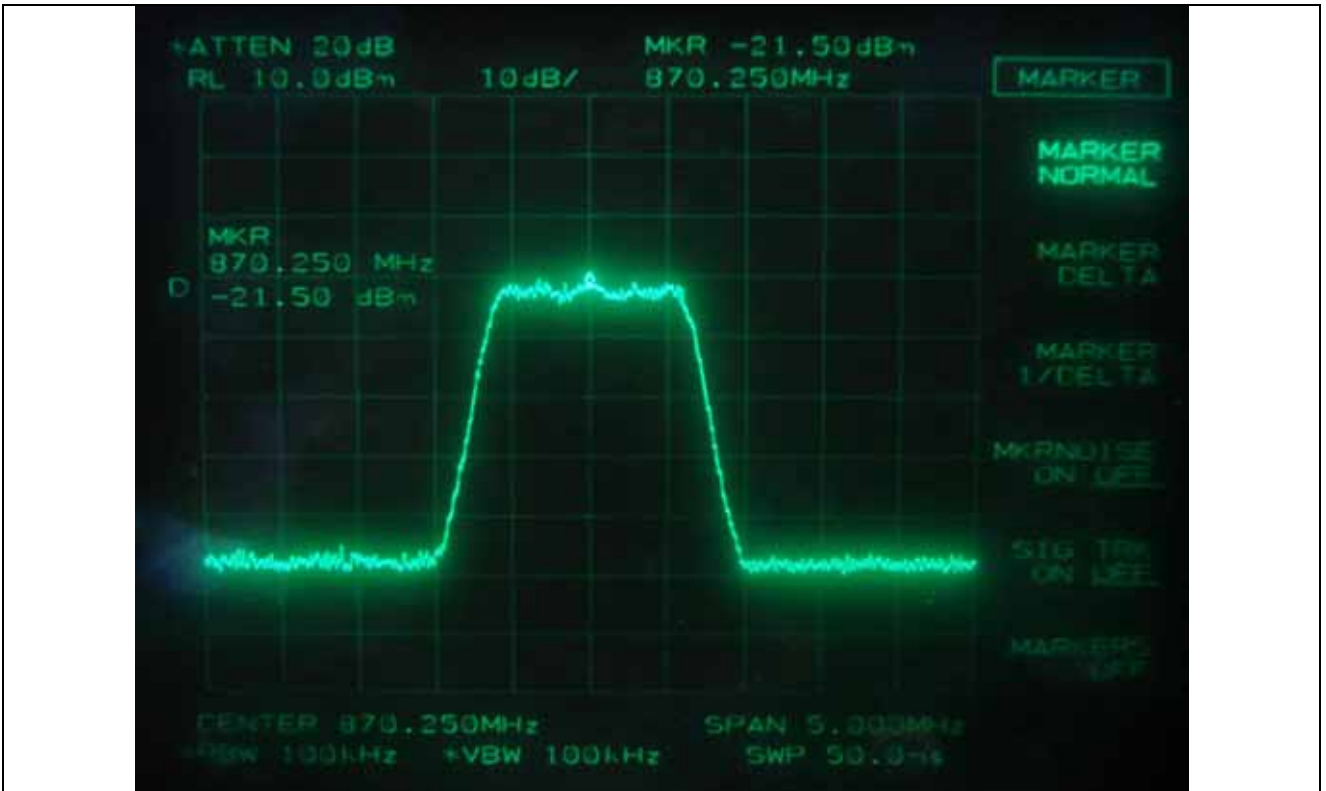
EDGE – Input (Low Channel)



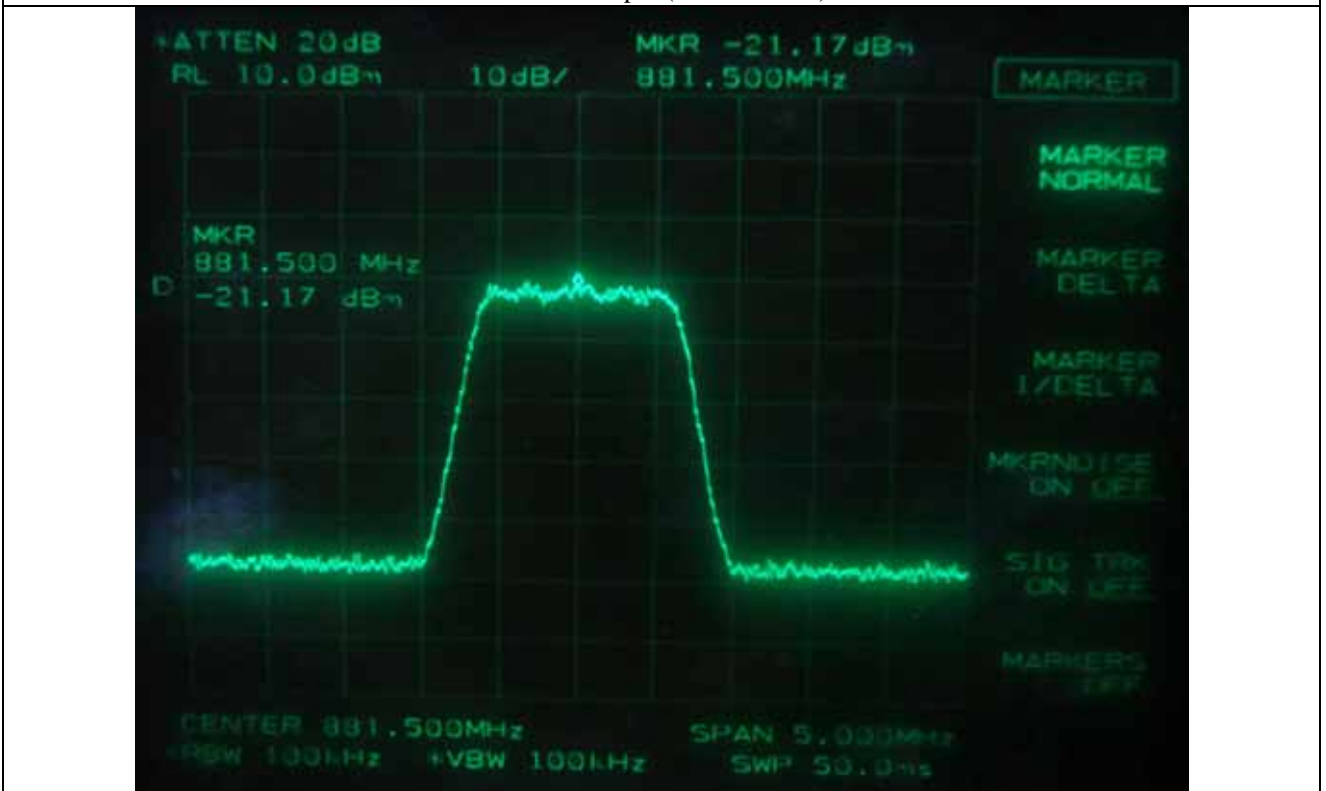
EDGE – Input (Middle Channel)



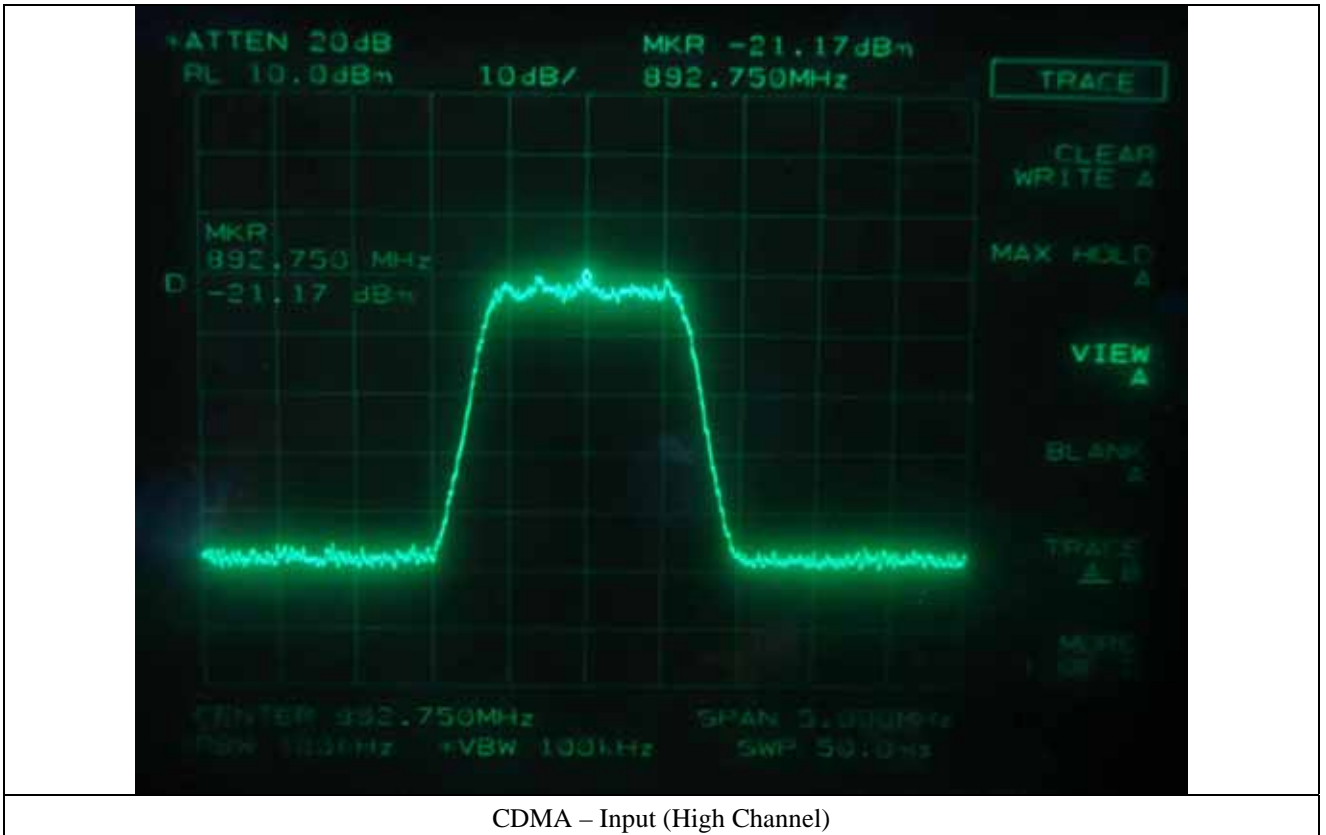
EDGE – Input (High Channel)

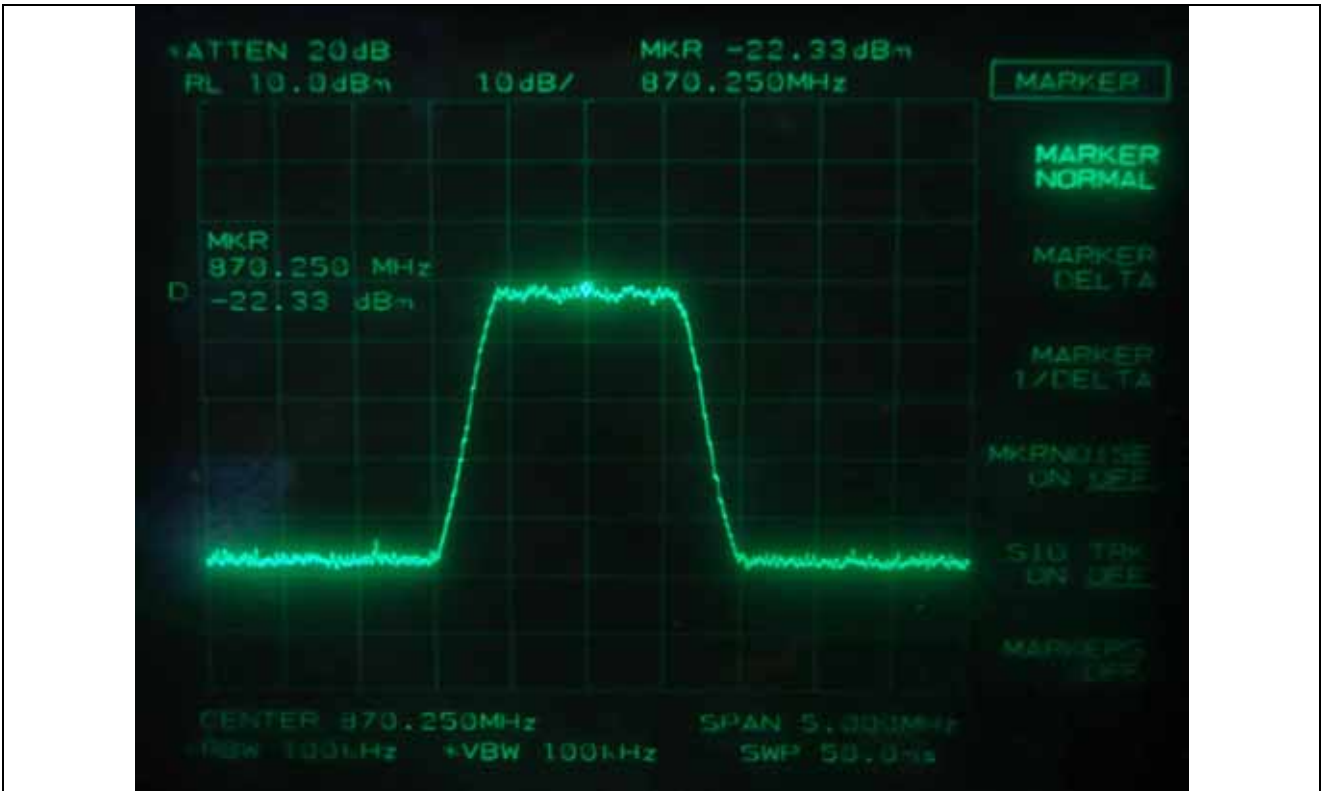


CDMA – Input (Low Channel)

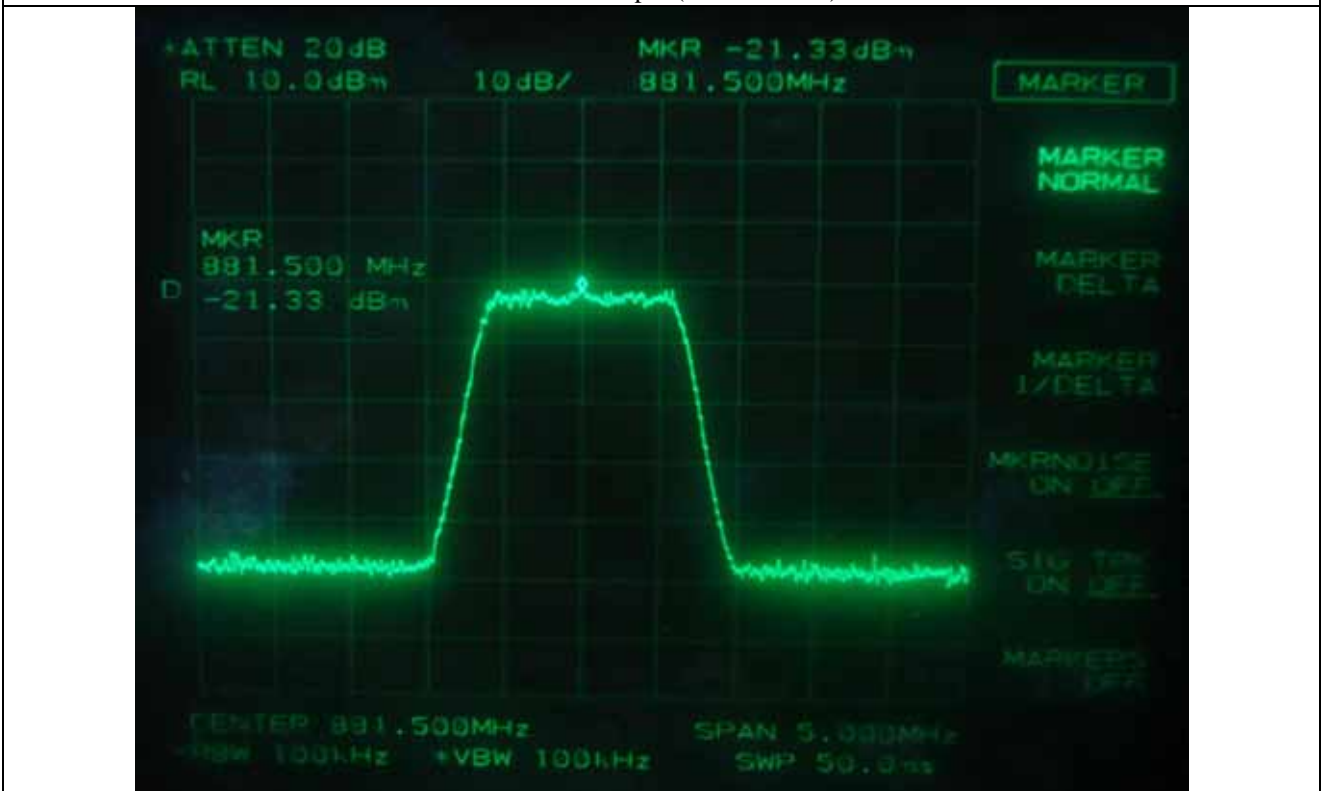


CDMA – Input (Middle Channel)

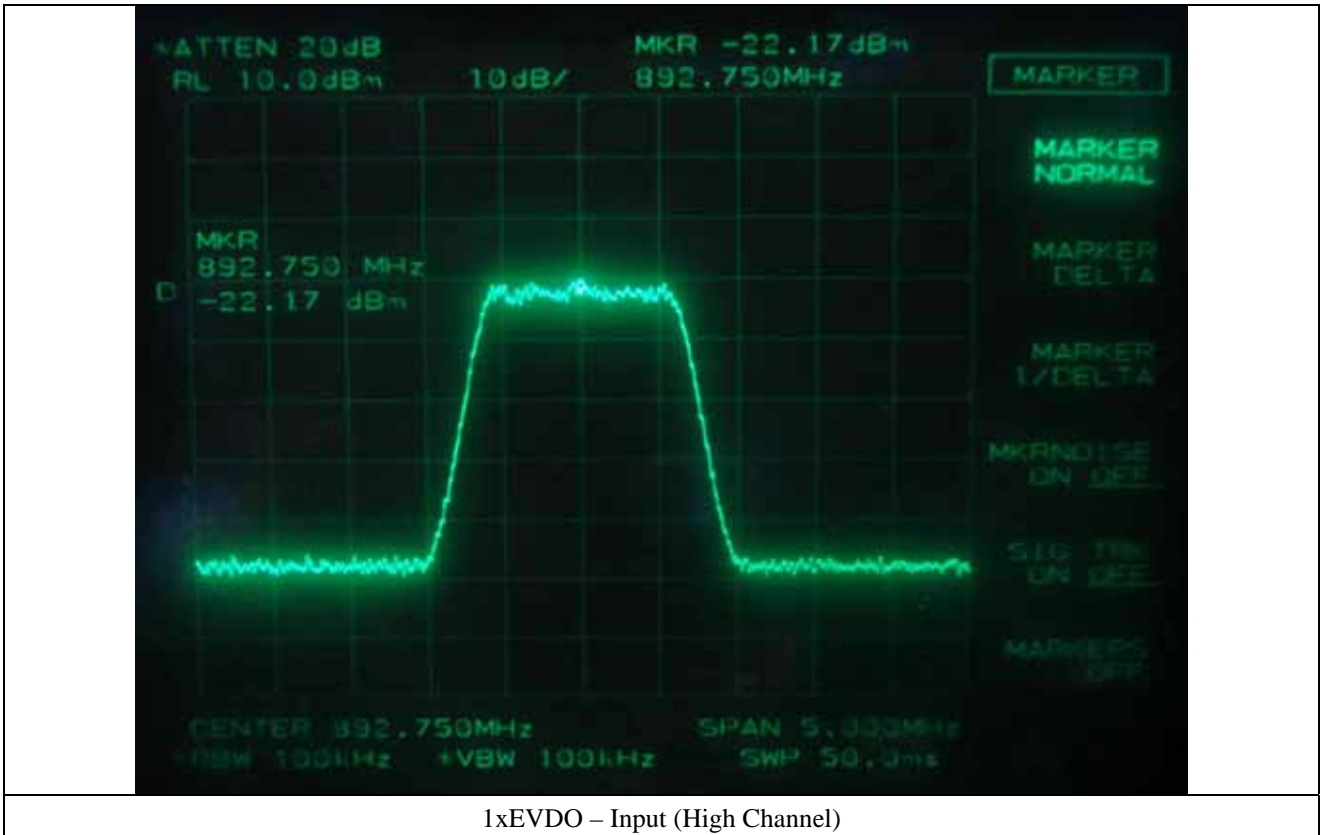




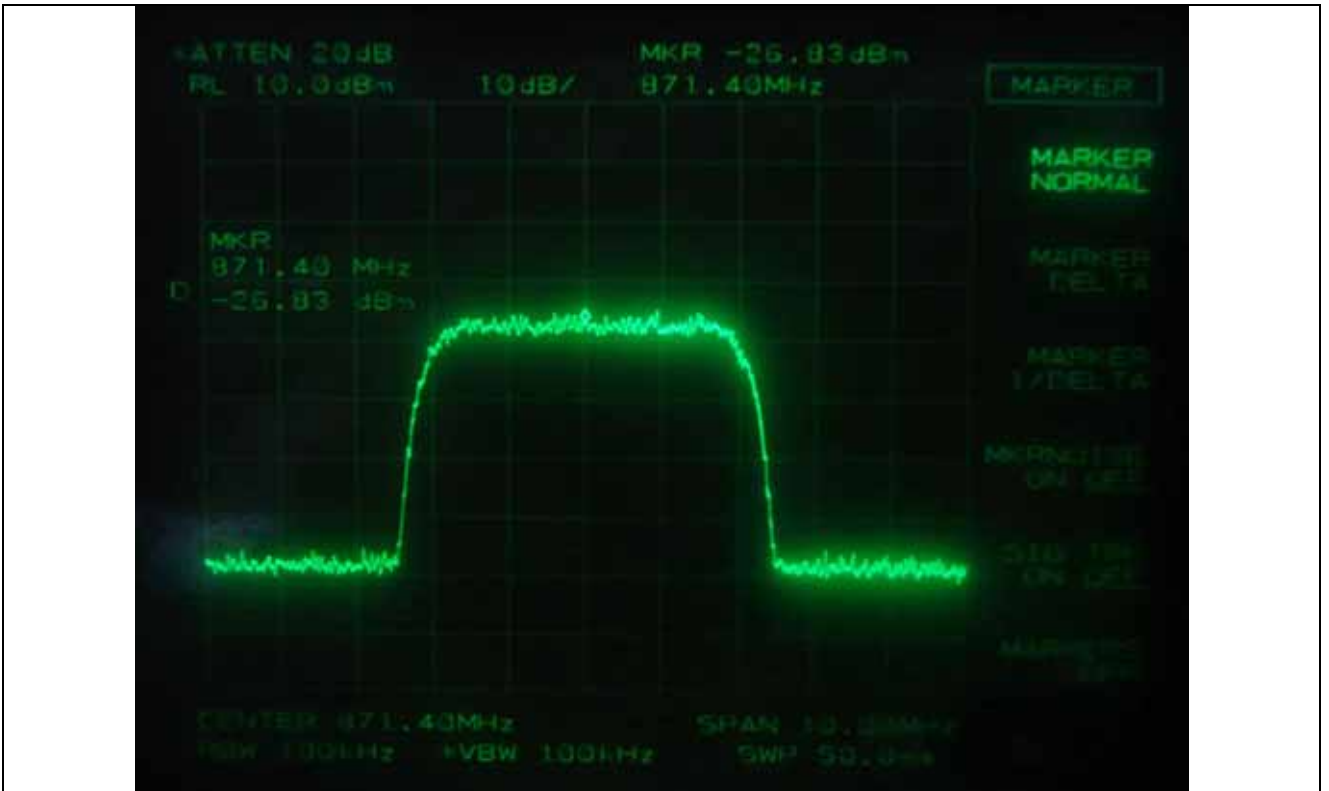
1xEVDO – Input (Low Channel)



1xEVDO – Input (Middle Channel)



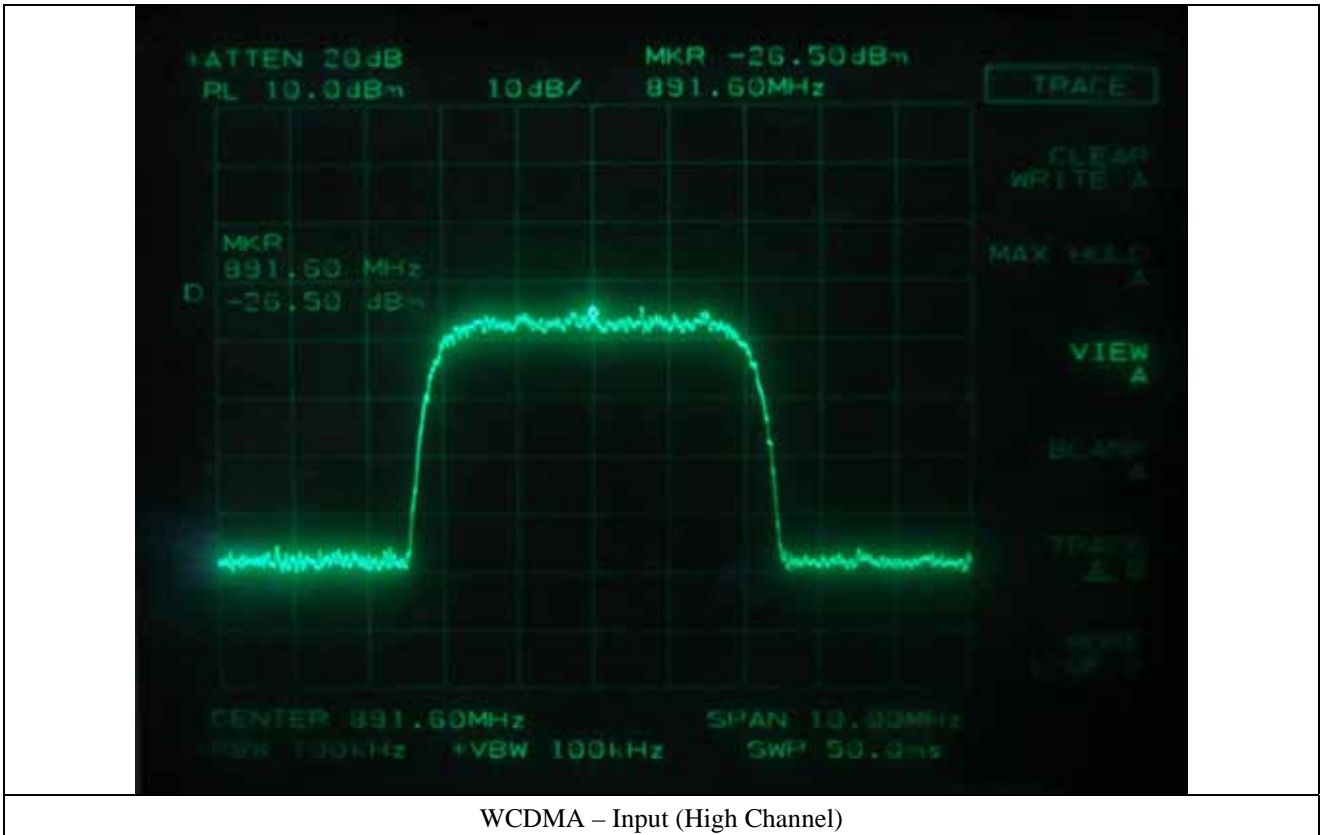
1xEVDO – Input (High Channel)



WCDMA – Input (Low Channel)



WCDMA – Input (Middle Channel)



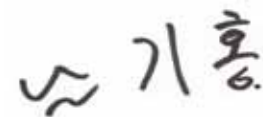
WCDMA – Input (High Channel)

6.3.2 Test Result for Part 24 E (1900P)

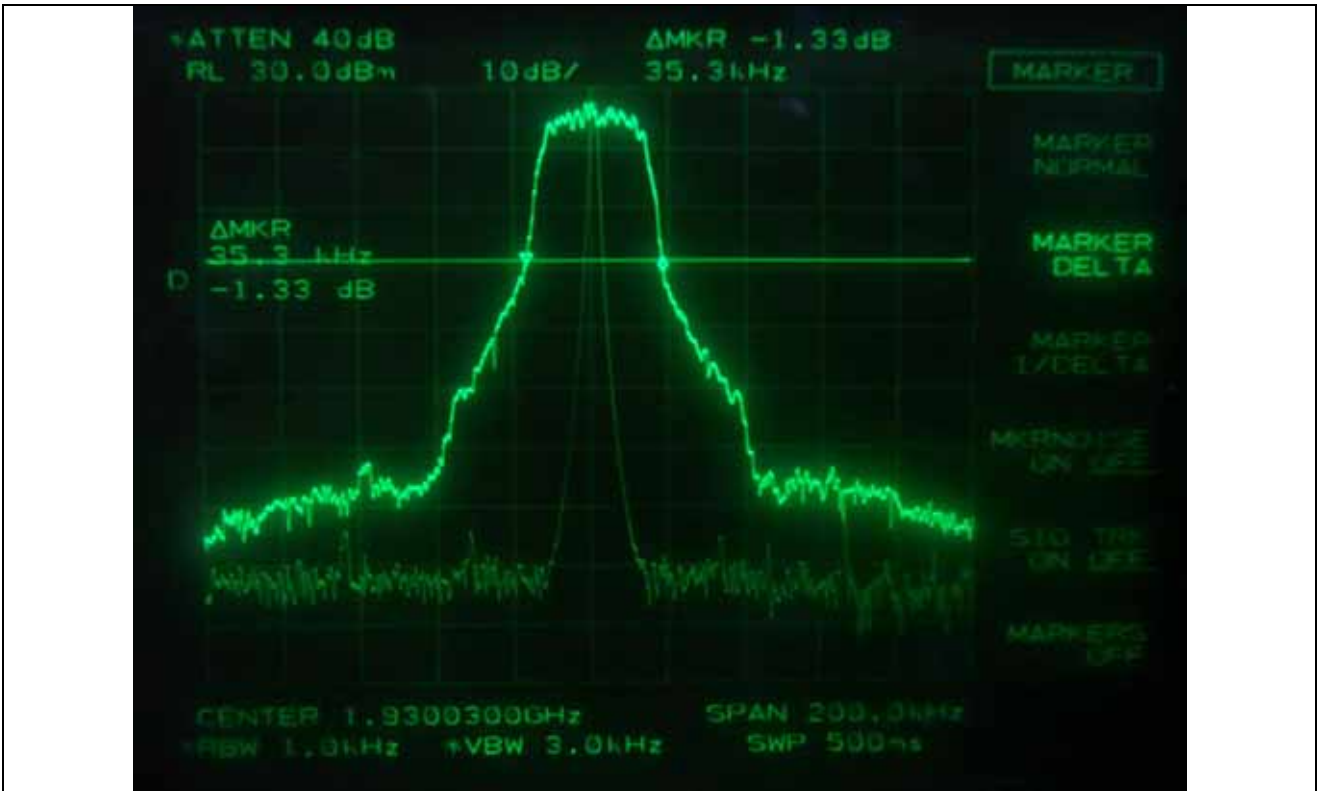
- . Test Date : April 19 ~ 20, 2011
- . Temperature : 24 °C
- . Relative humidity : 48 % R.H.
- . Test Result : Pass

Modulation	Channel	26 dB Bandwidth (kHz)	99 % Occupied Bandwidth (kHz)
TDMA	Low	35.3	29.33
	Middle	35.3	29.33
	High	35.3	29.33
GSM	Low	348	255
	Middle	348	255
	High	348	255
EDGE	Low	335	255
	Middle	335	255
	High	335	253.3
CDMA	Low	1 600	1 342
	Middle	1 583	1 342
	High	1 583	1 342
1xEVDO	Low	1 592	1 350
	Middle	1 600	1 350
	High	1 583	1 342
WCDMA	Low	4 700	4 183
	Middle	4 680	4 183
	High	4 700	4 183

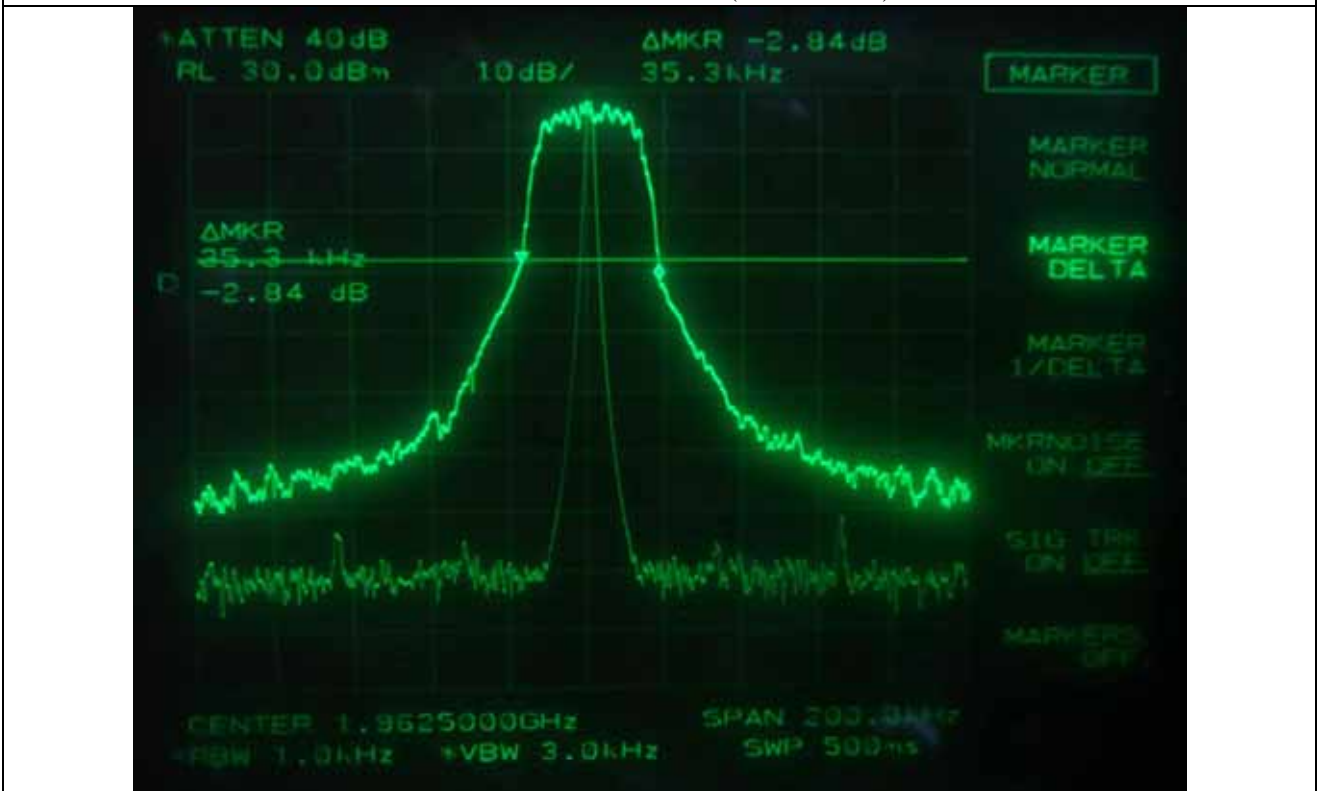
Remark: According to above result, the carrier frequency shall be within the frequency block edges.



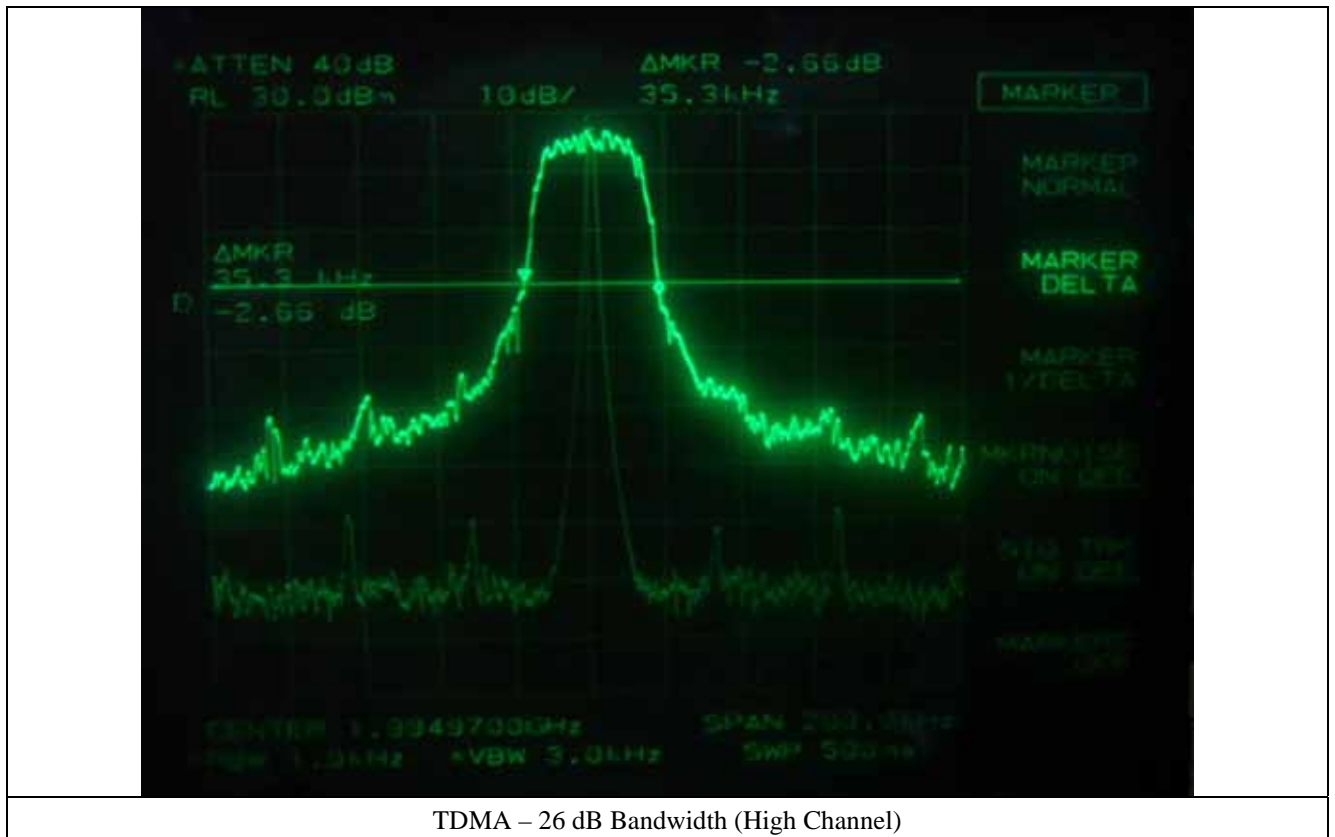
Tested by: Ki-Hong, Nam / Senior Engineer

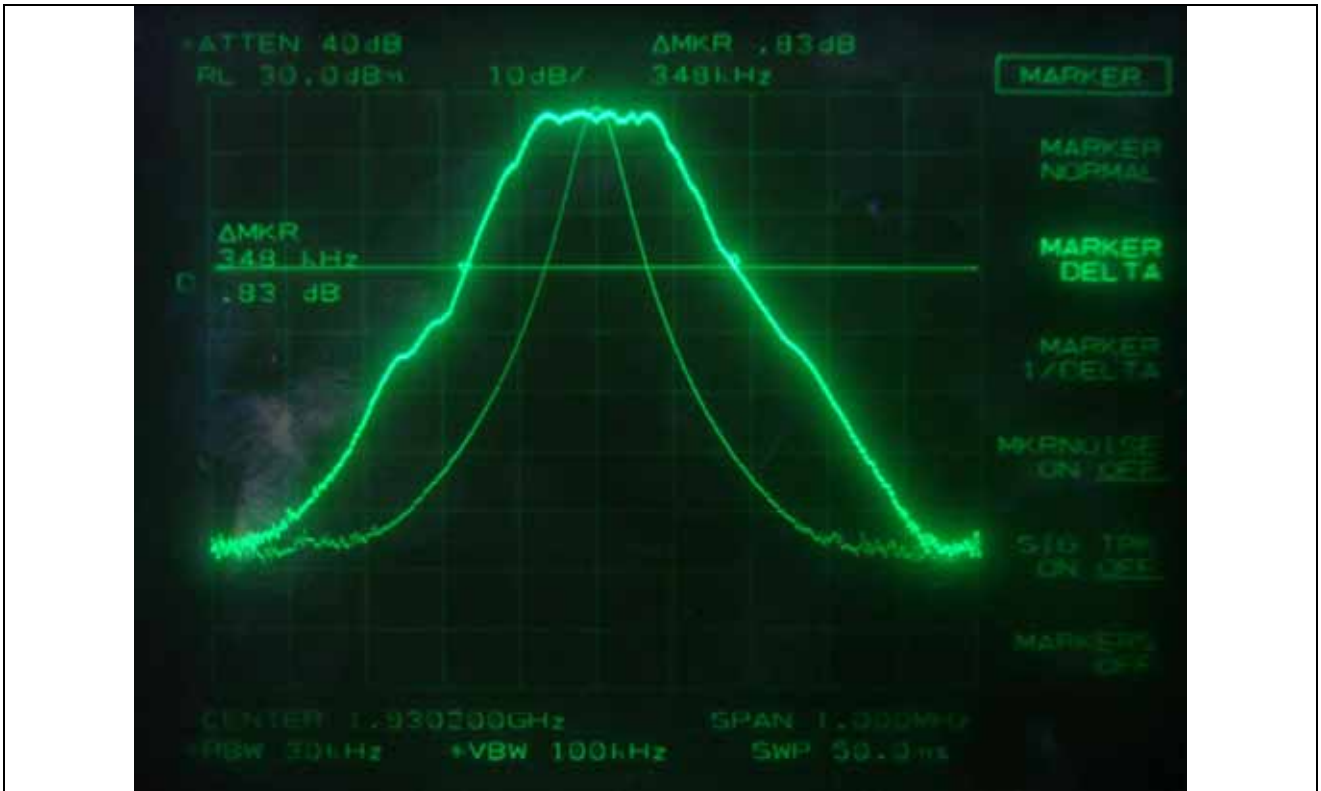


TDMA – 26 dB Bandwidth (Low Channel)

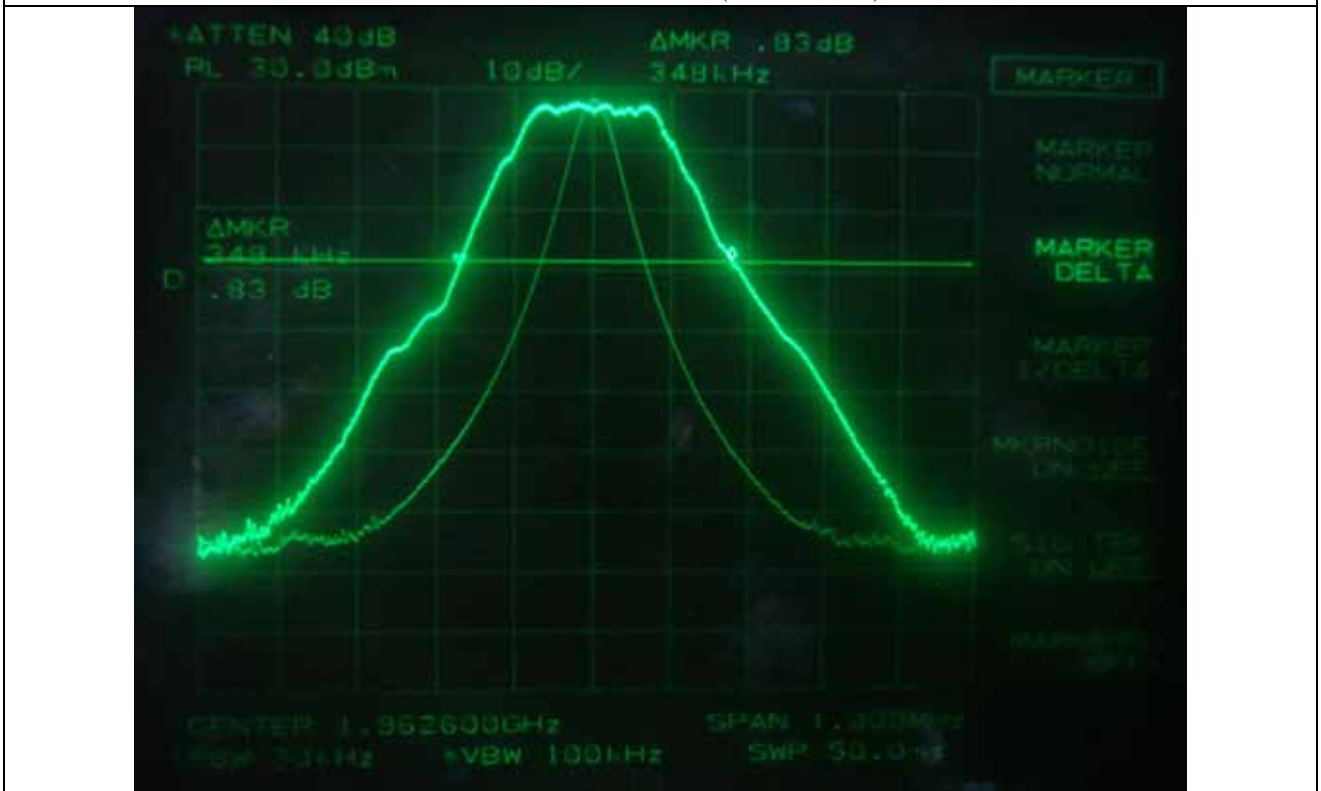


TDMA – 26 dB Bandwidth (Middle Channel)

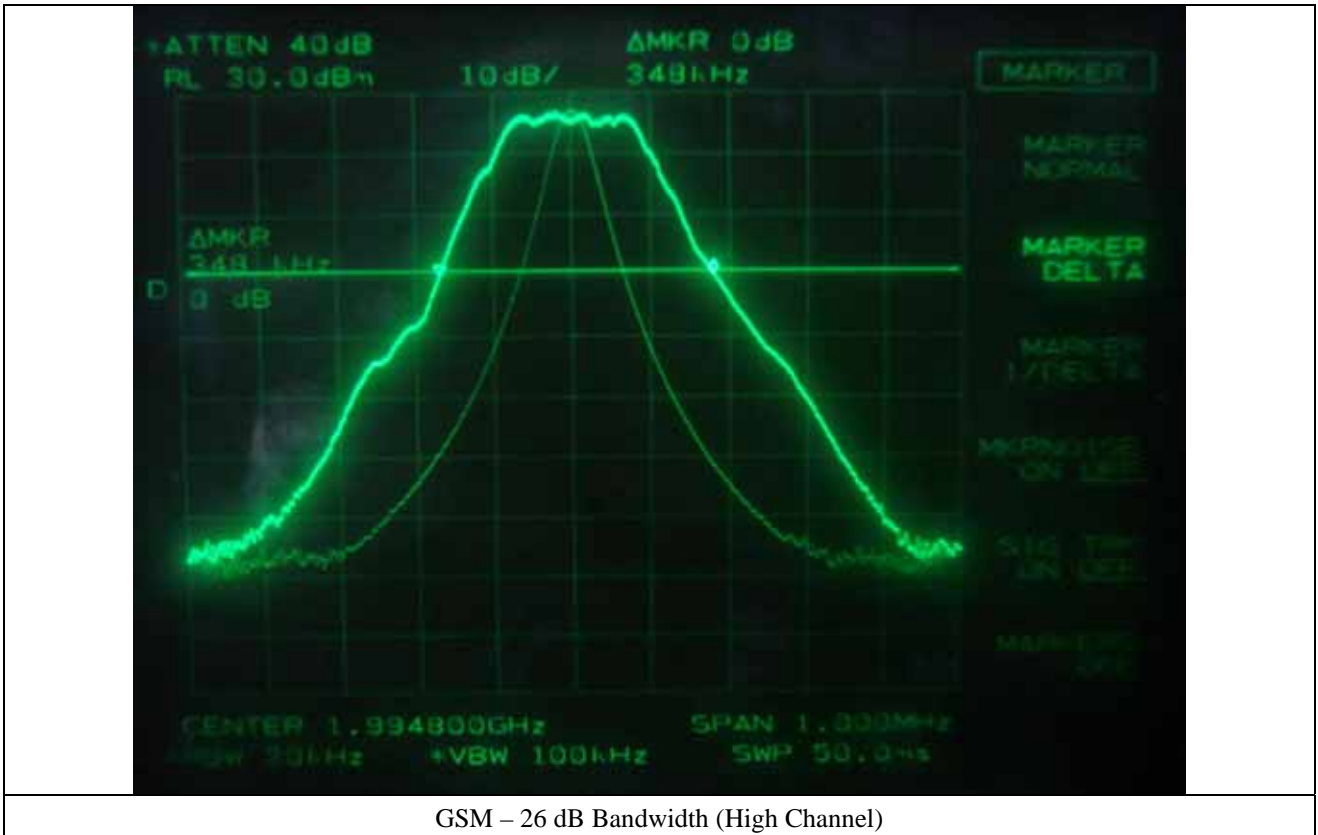


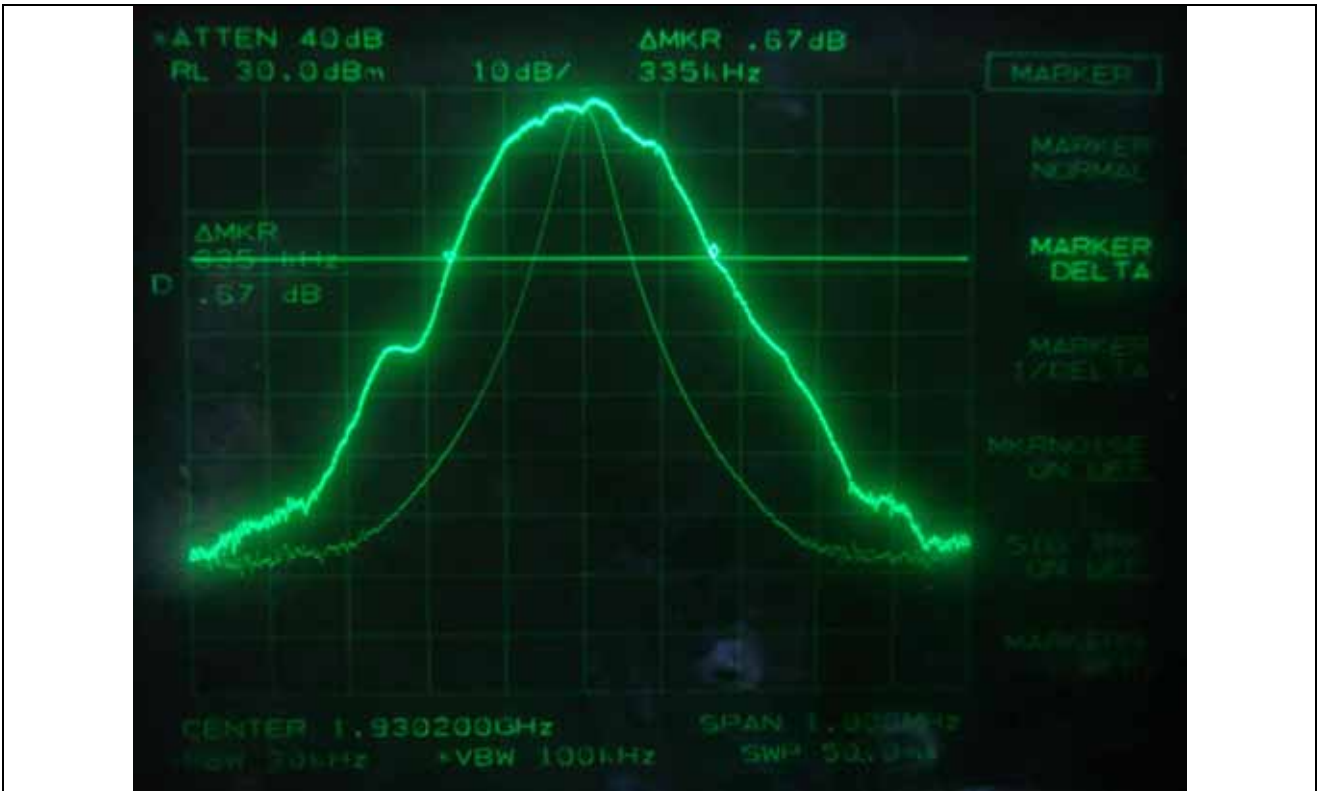


GSM – 26 dB Bandwidth (Low Channel)

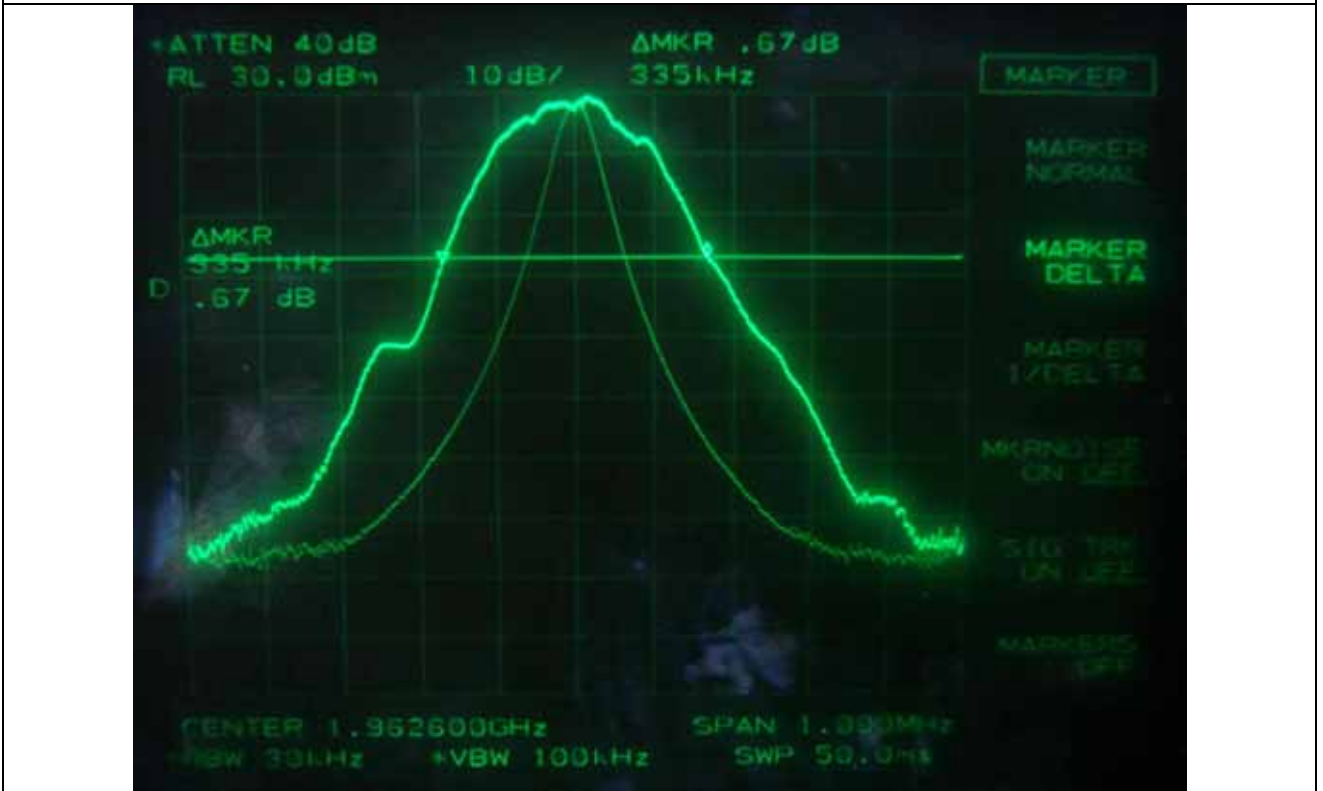


GSM – 26 dB Bandwidth (Middle Channel)

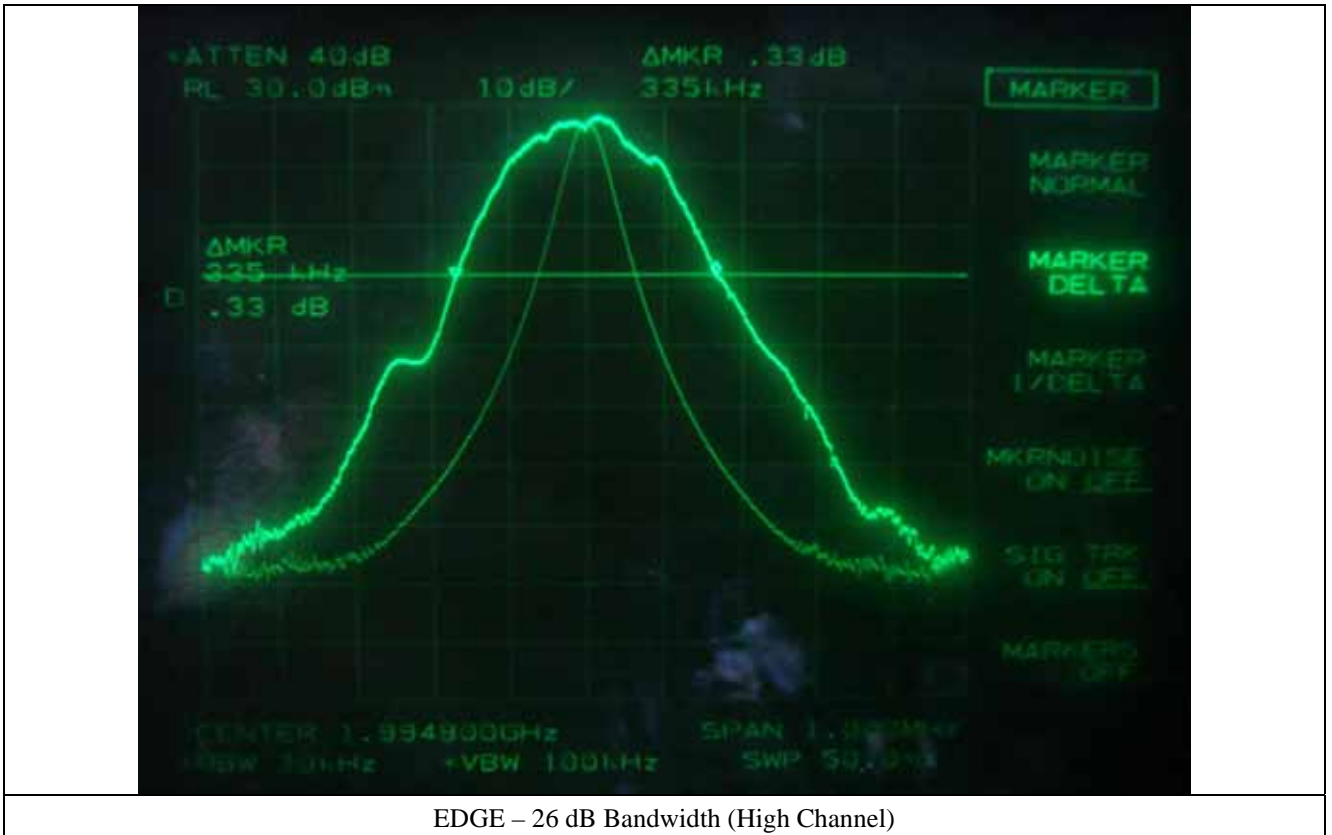


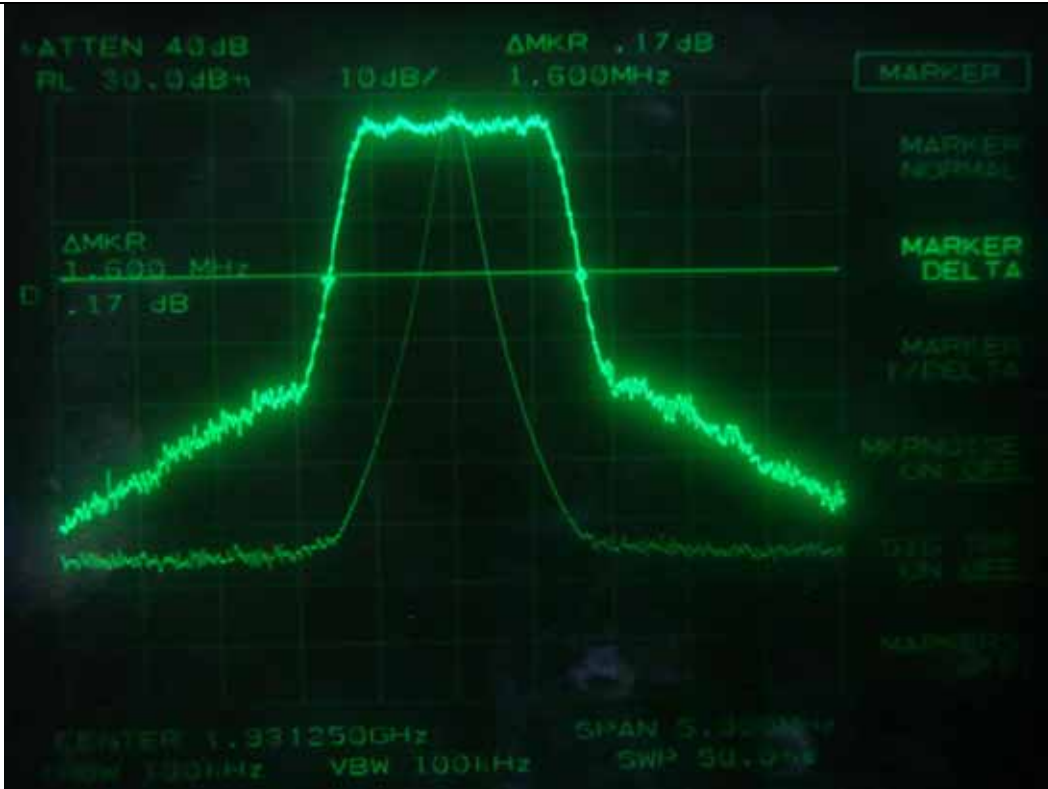


EDGE – 26 dB Bandwidth (Low Channel)

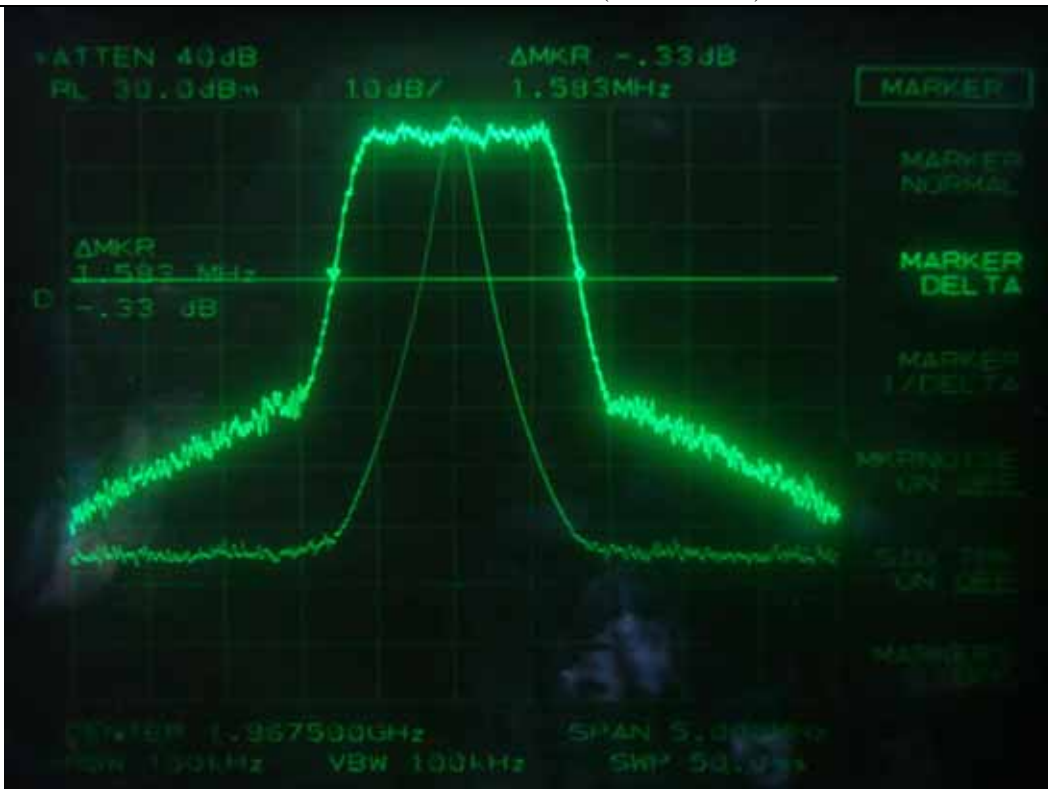


EDGE – 26 dB Bandwidth (Middle Channel)

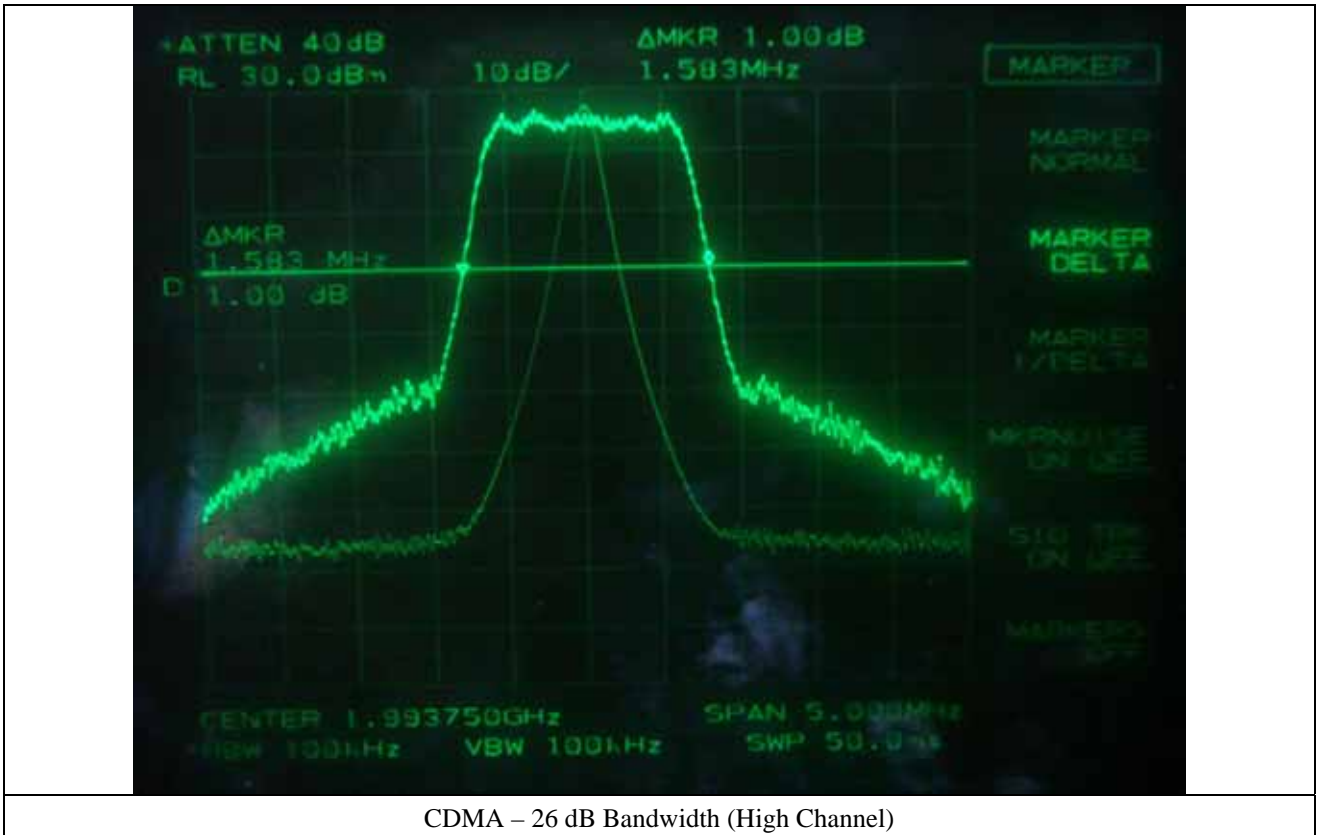


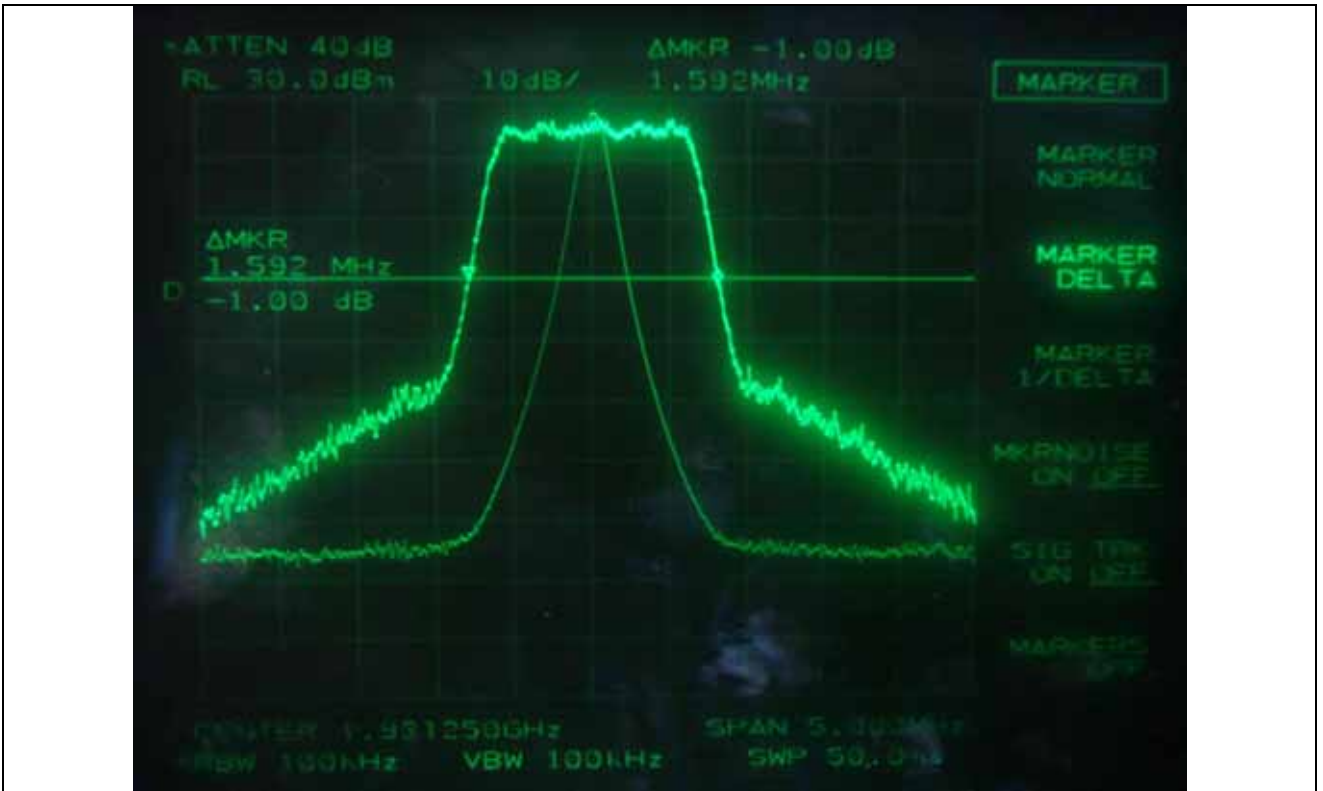


CDMA – 26 dB Bandwidth (Low Channel)

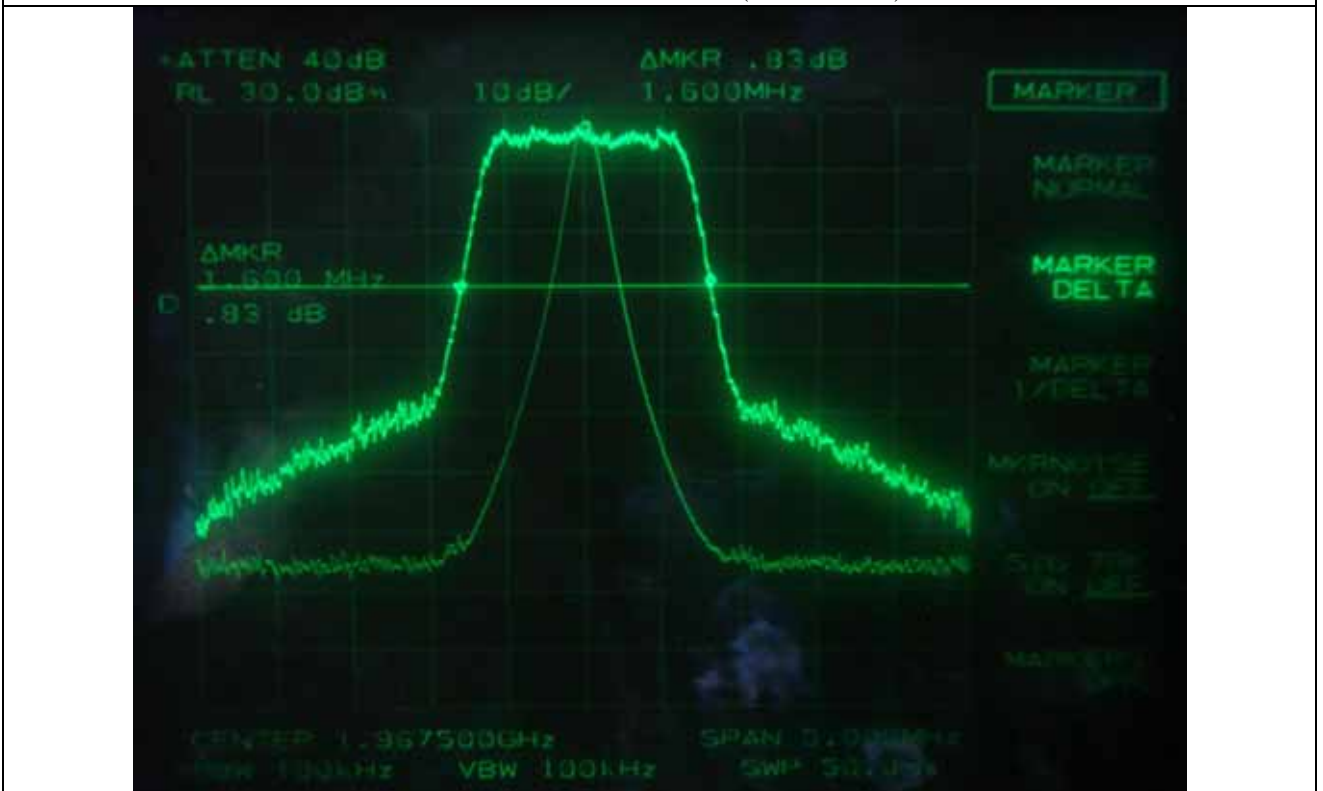


CDMA – 26 dB Bandwidth (Middle Channel)

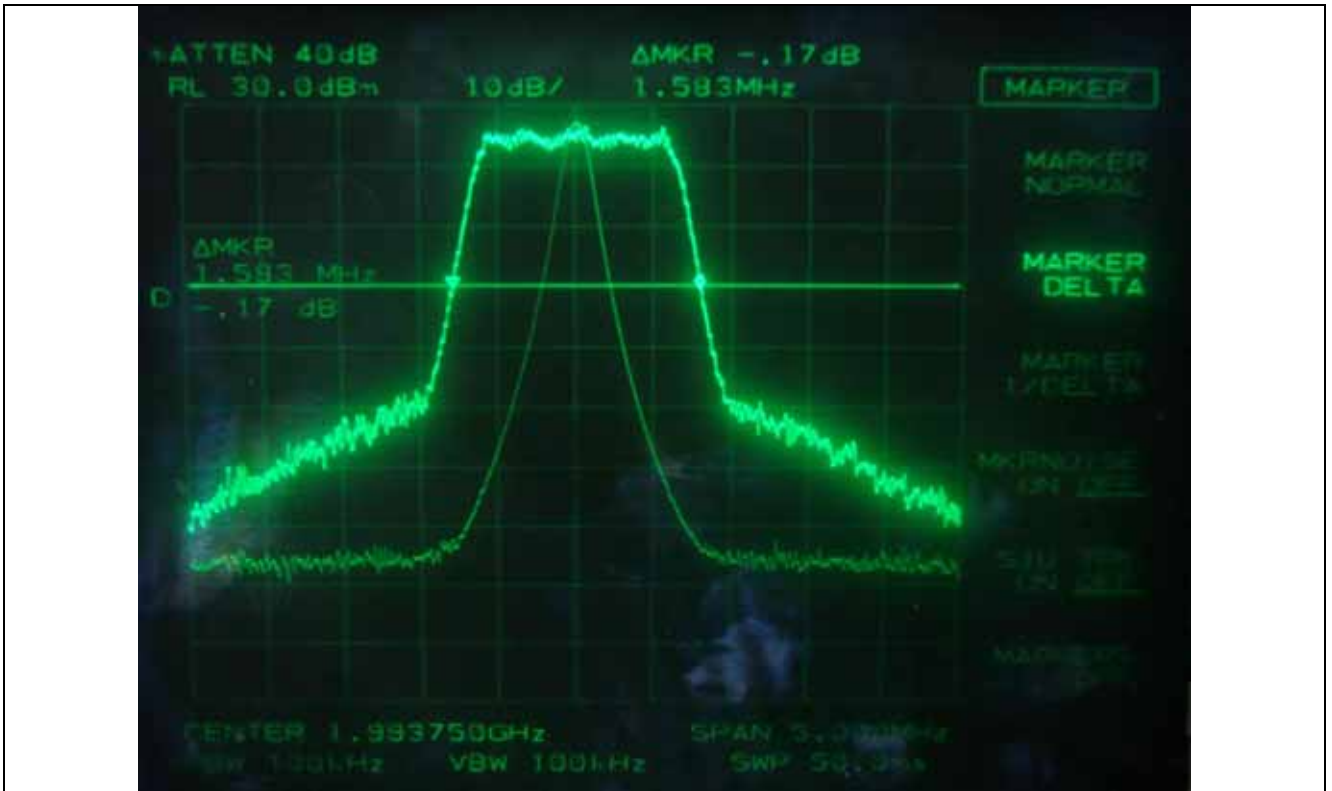




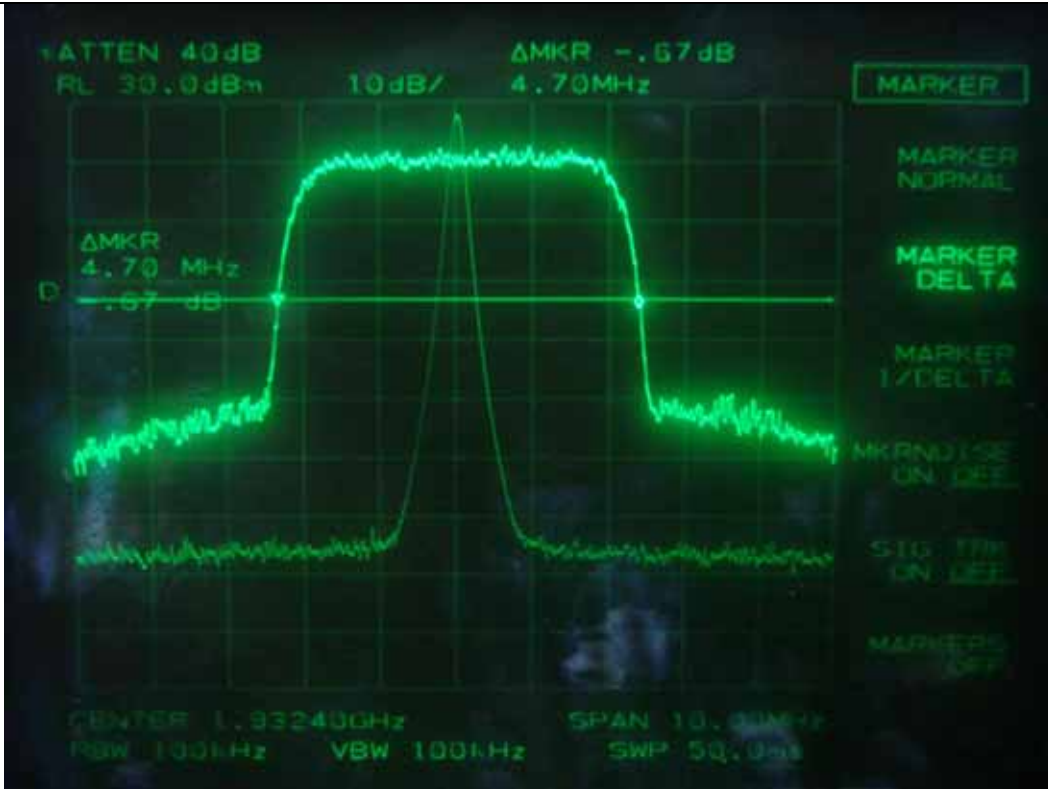
1xEVDO – 26 dB Bandwidth (Low Channel)



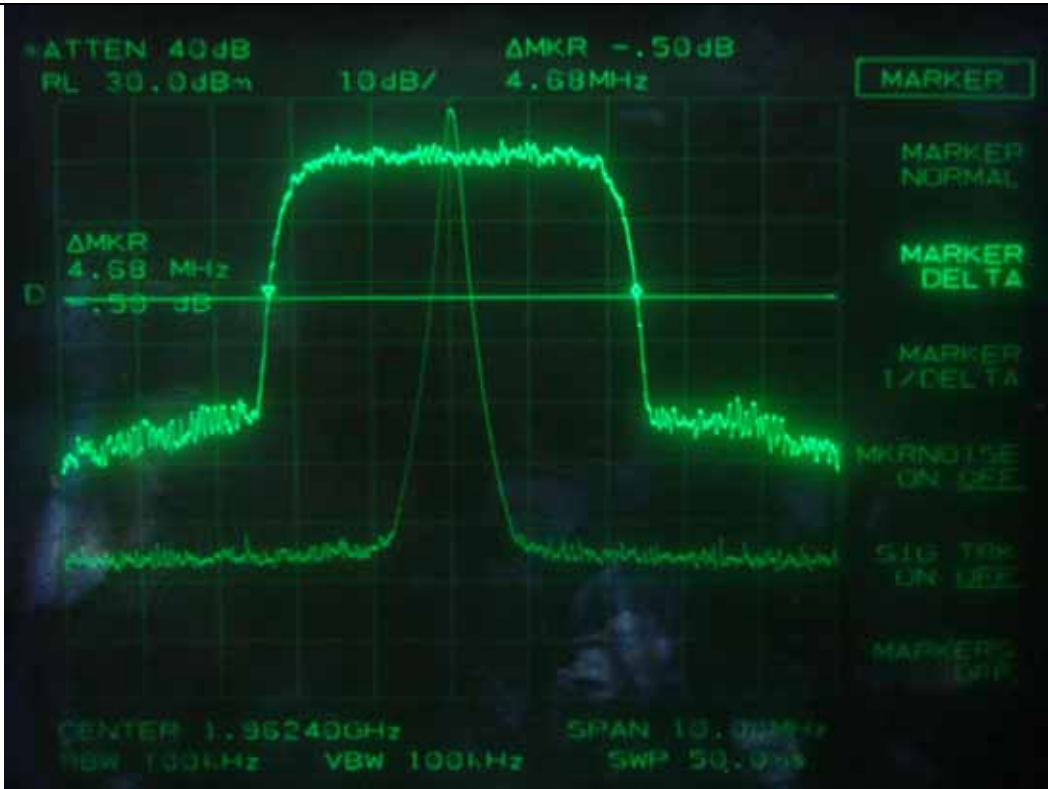
1xEVDO – 26 dB Bandwidth (Middle Channel)



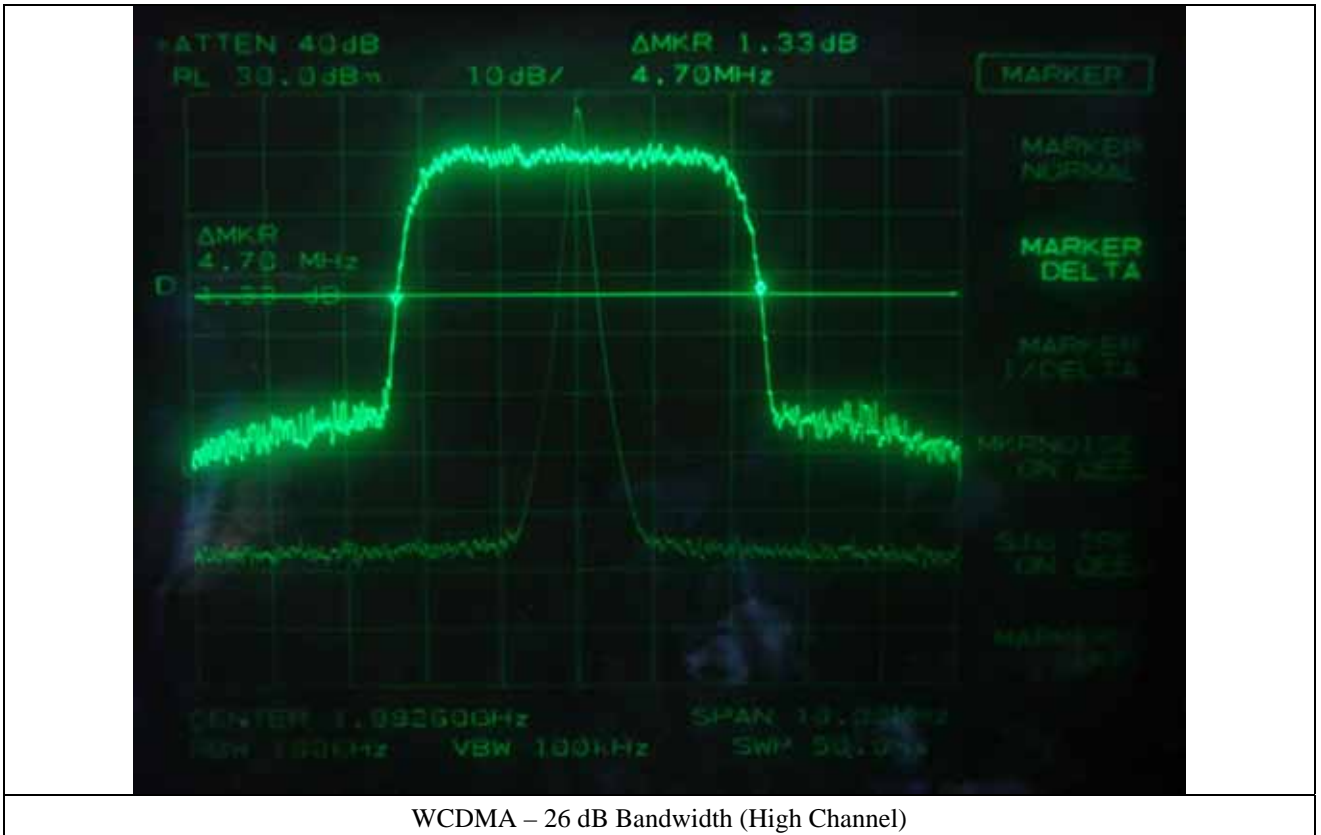
1xEVDO – 26 dB Bandwidth (High Channel)

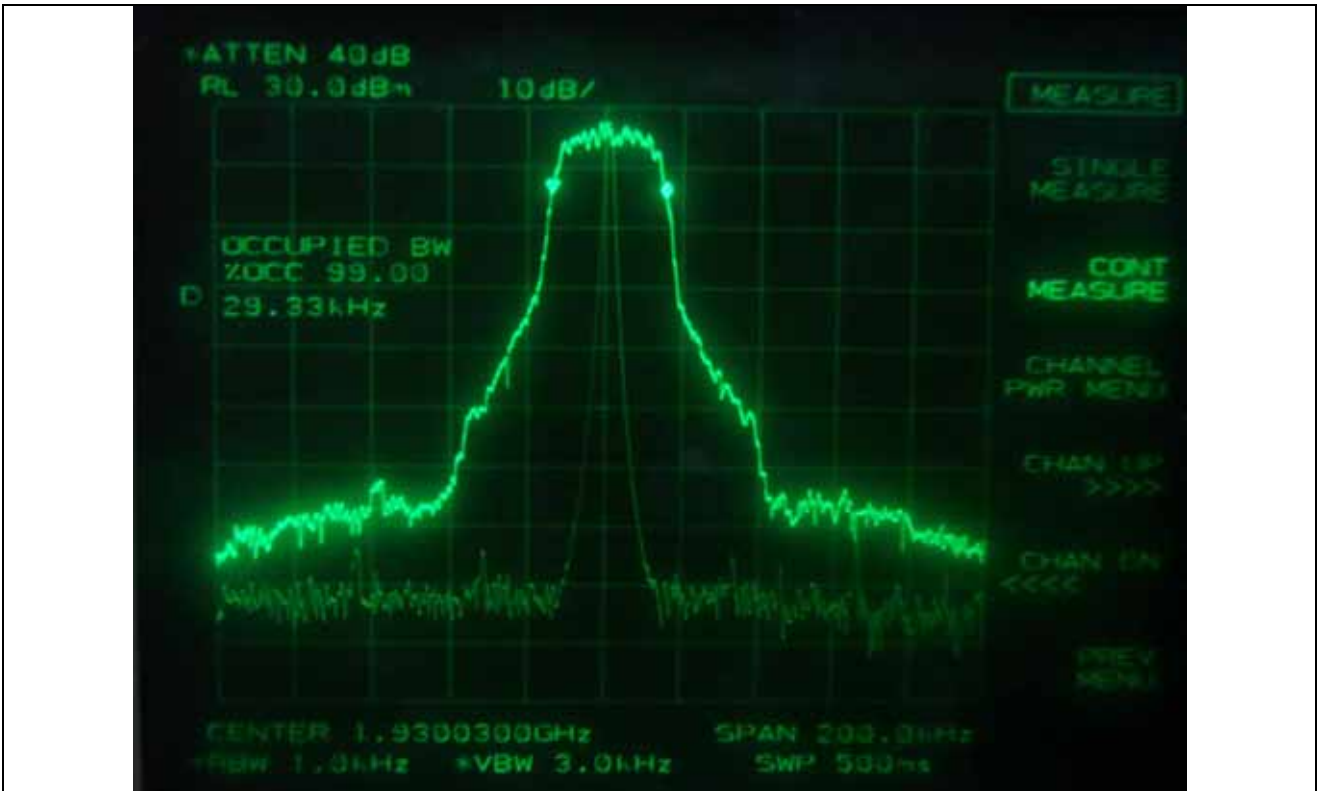


WCDMA – 26 dB Bandwidth (Low Channel)

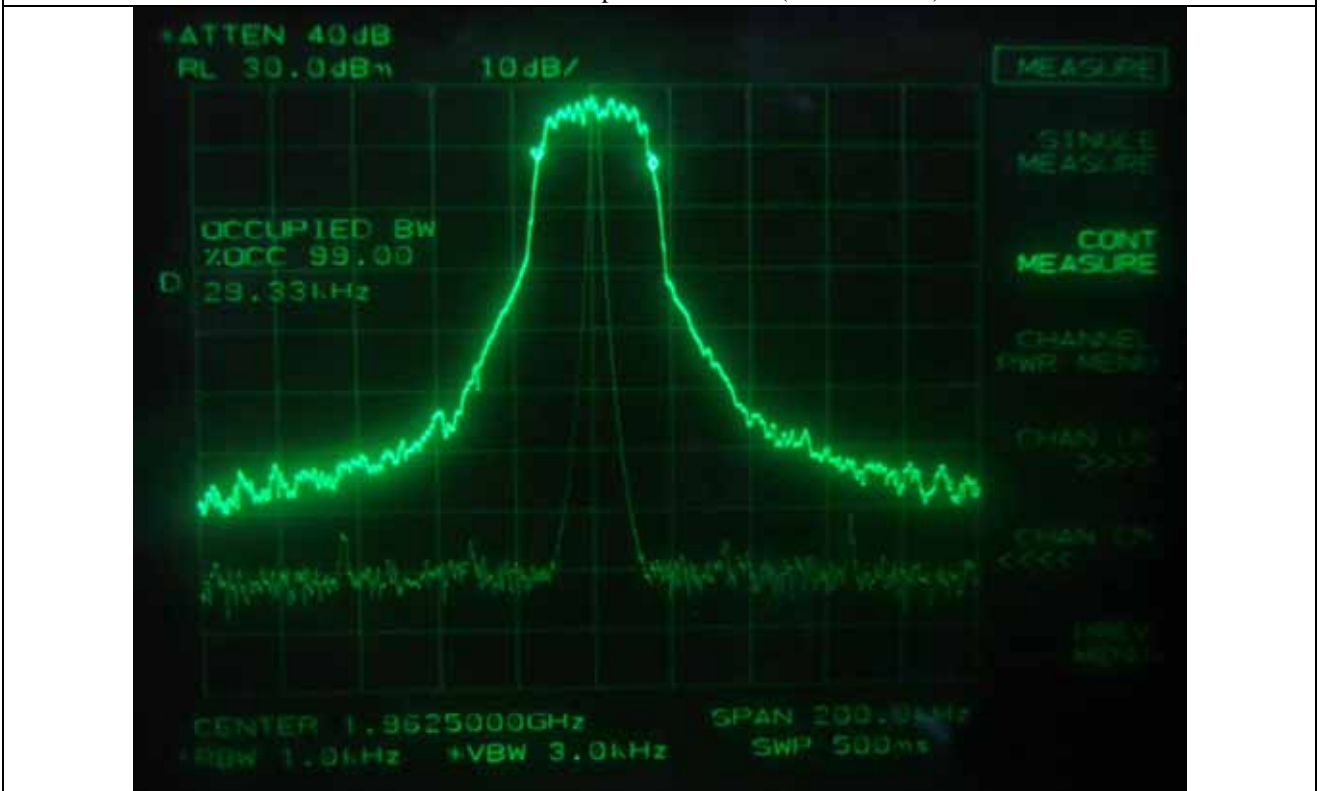


WCDMA – 26 dB Bandwidth (Middle Channel)

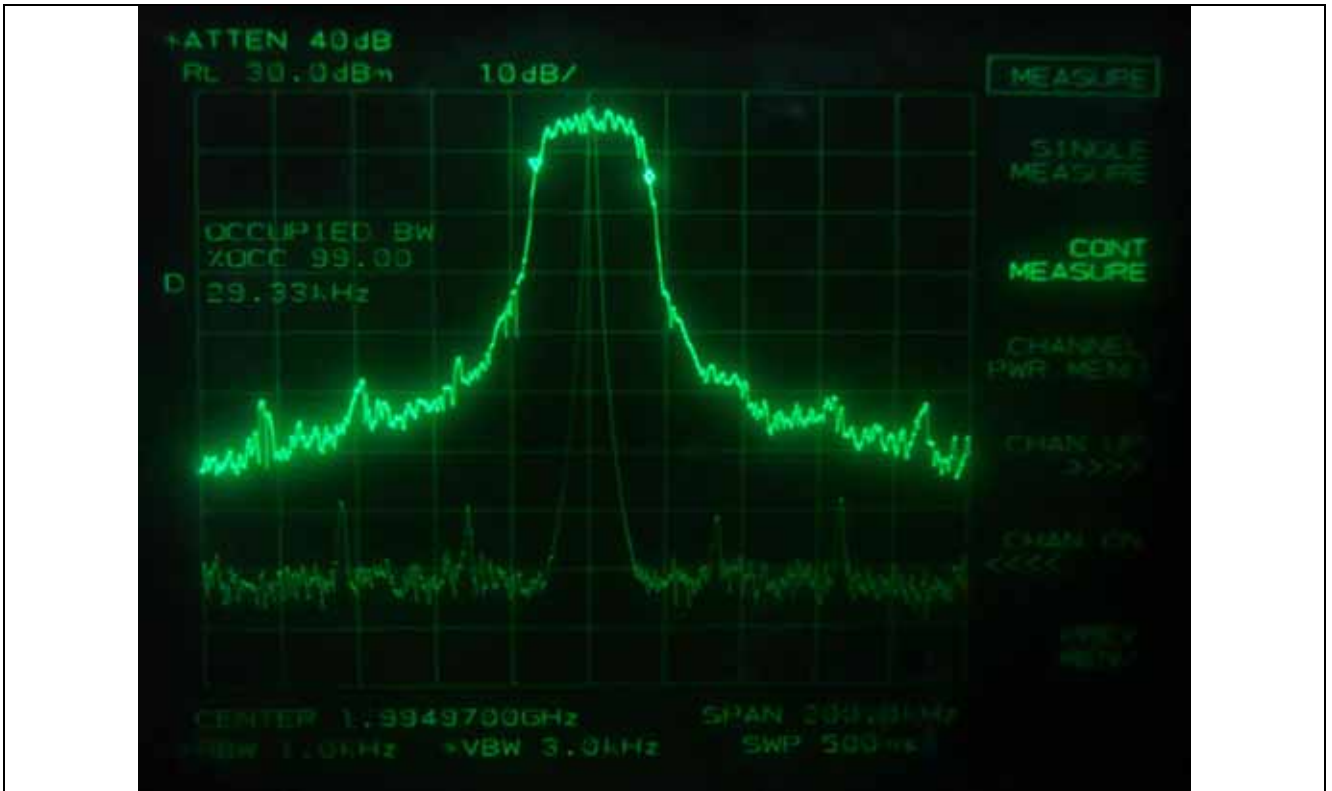




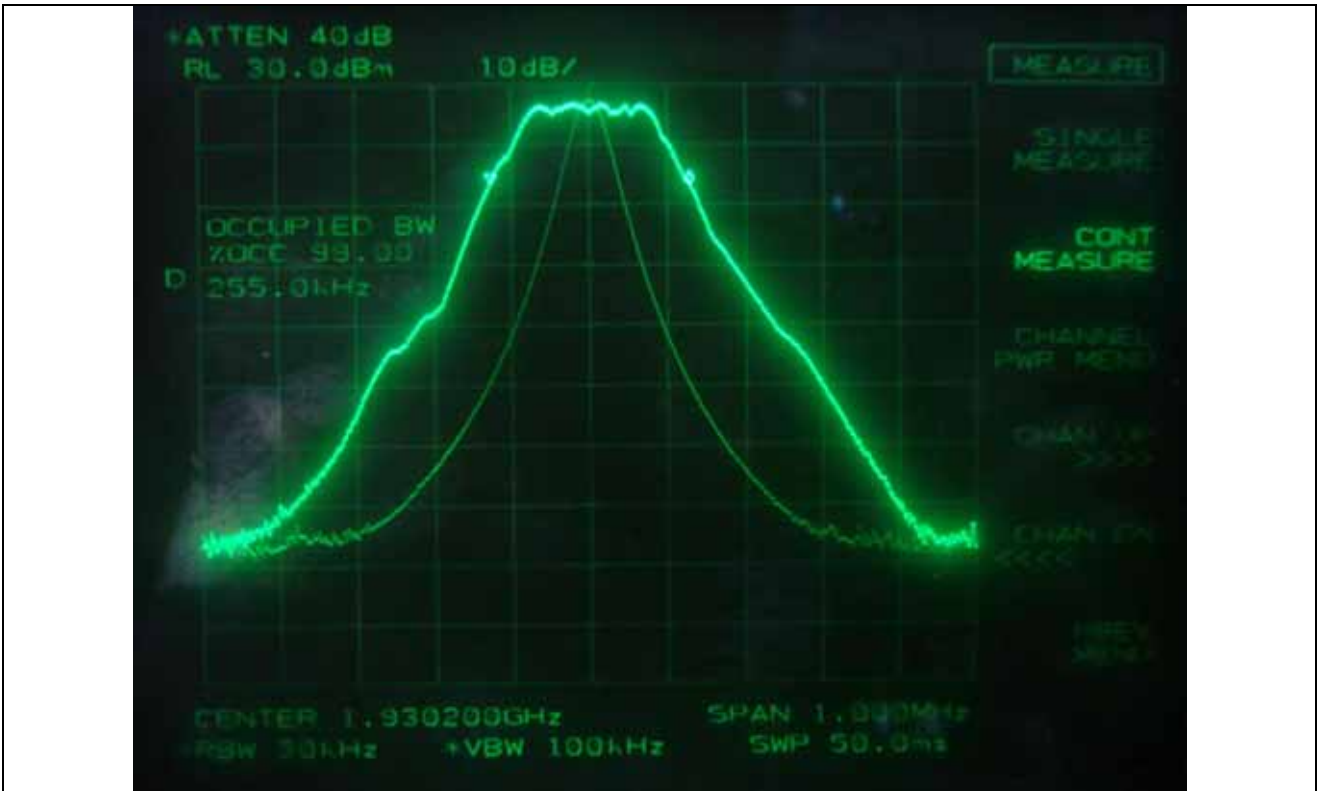
TDMA – 99 % Occupied Bandwidth (Low Channel)



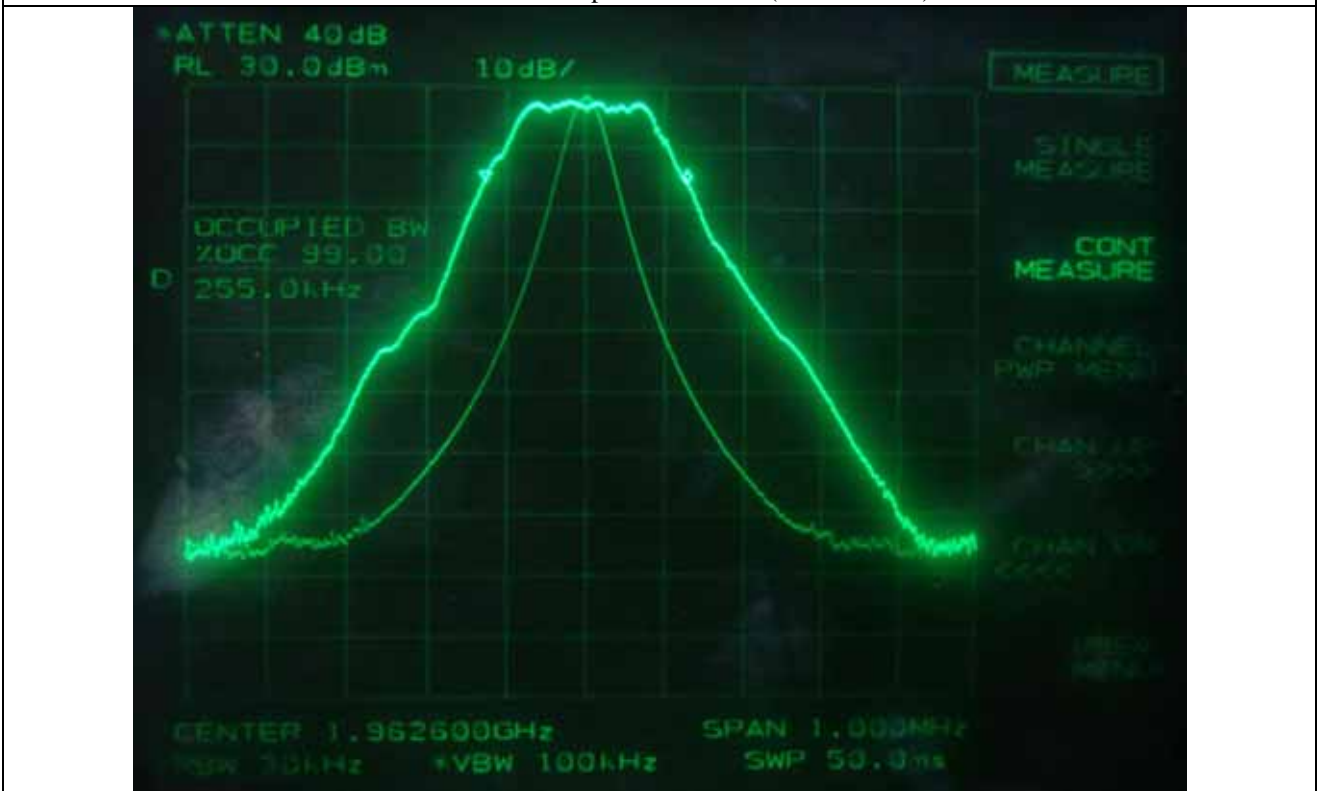
TDMA – 99 % Occupied Bandwidth (Middle Channel)



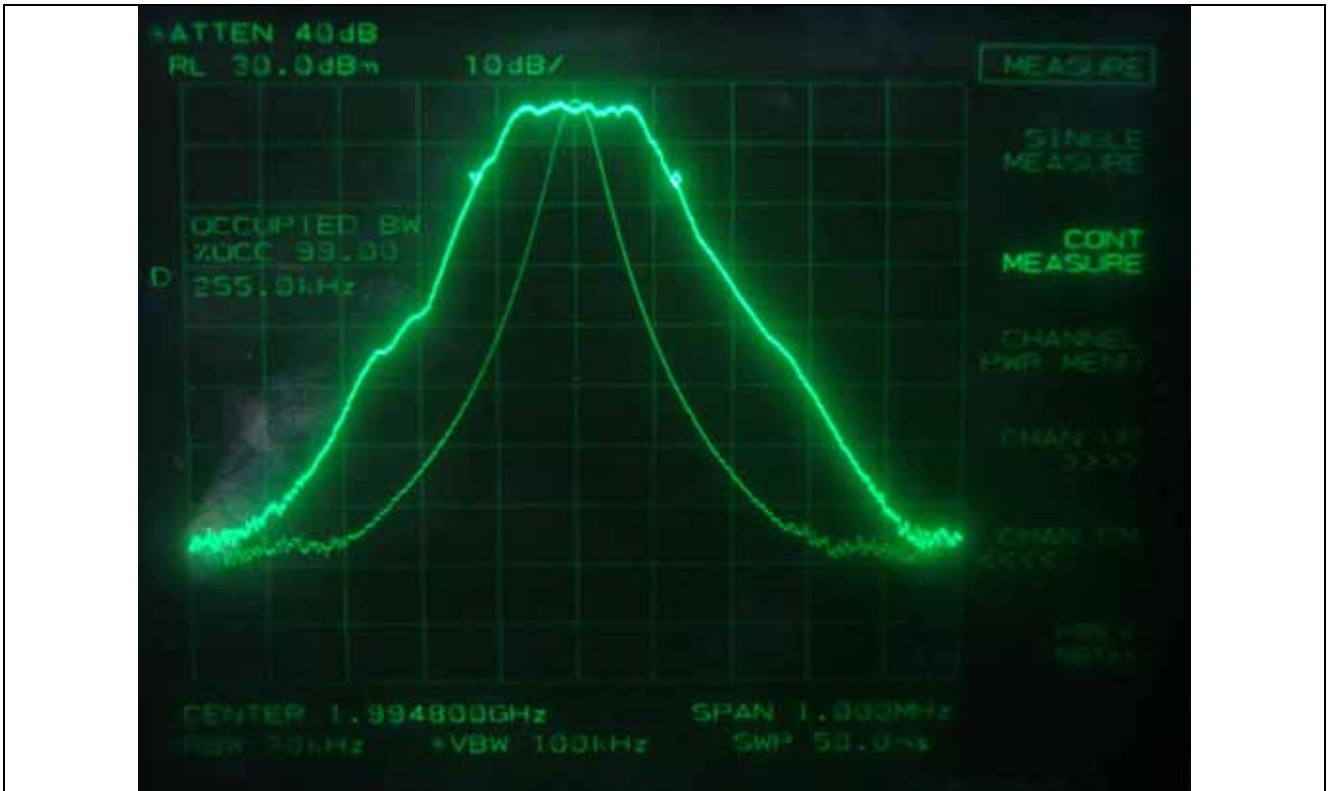
TDMA – 99 % Occupied Bandwidth (High Channel)



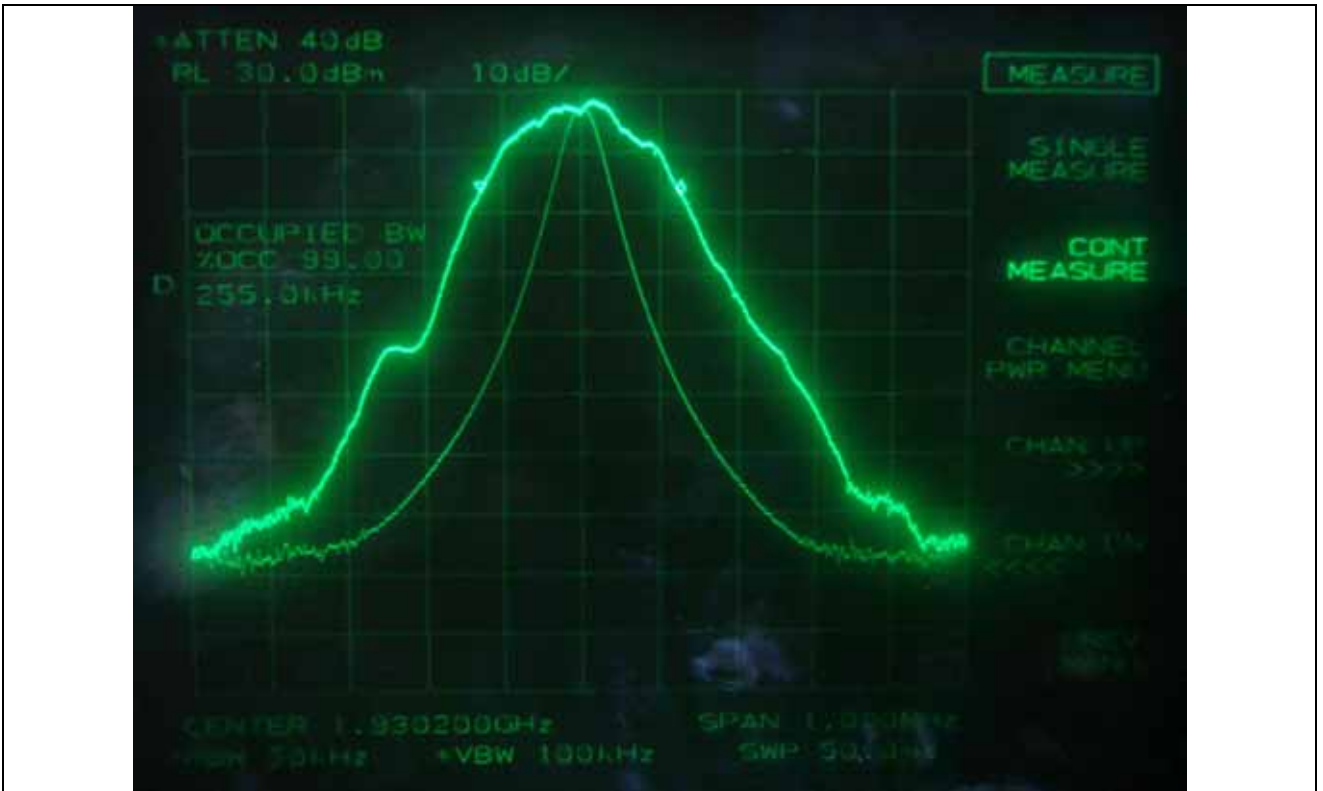
GSM – 99 % Occupied Bandwidth (Low Channel)



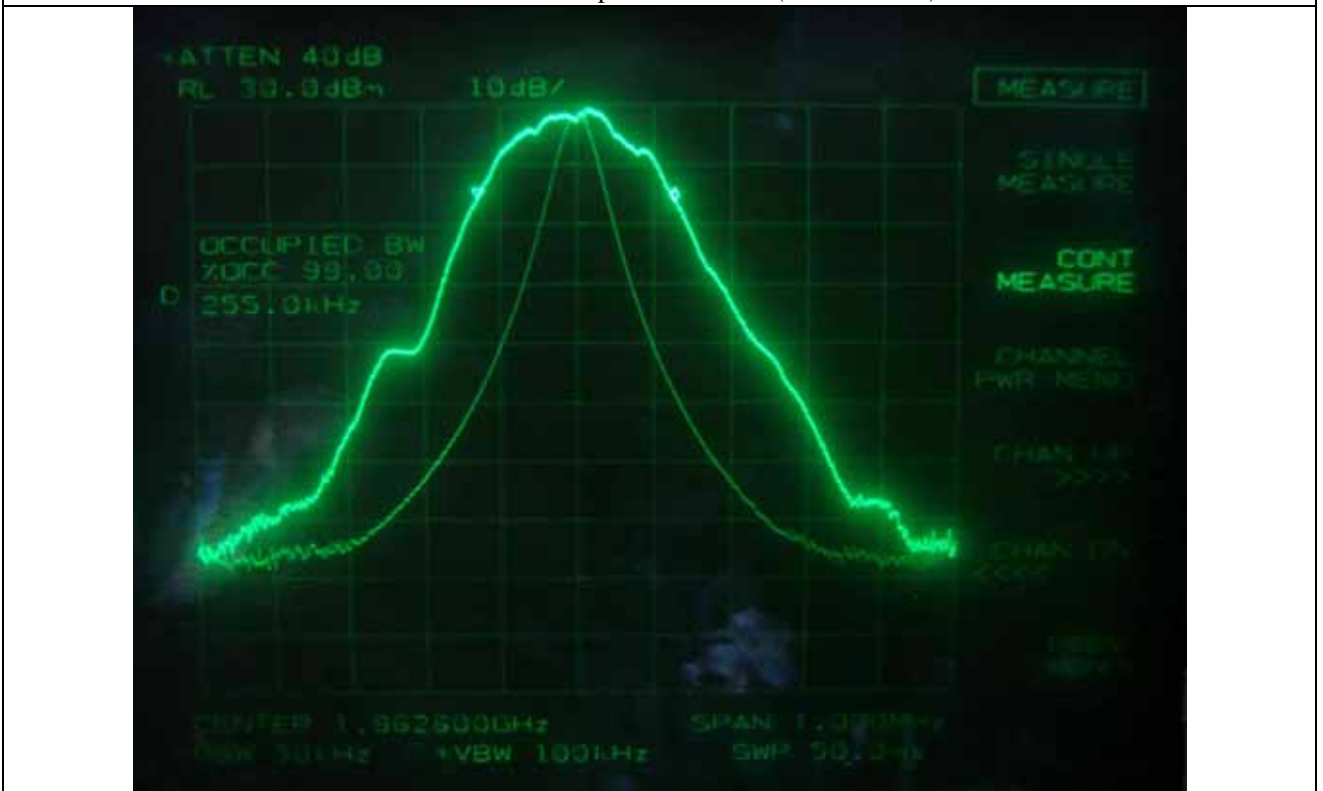
GSM – 99 % Occupied Bandwidth (Middle Channel)



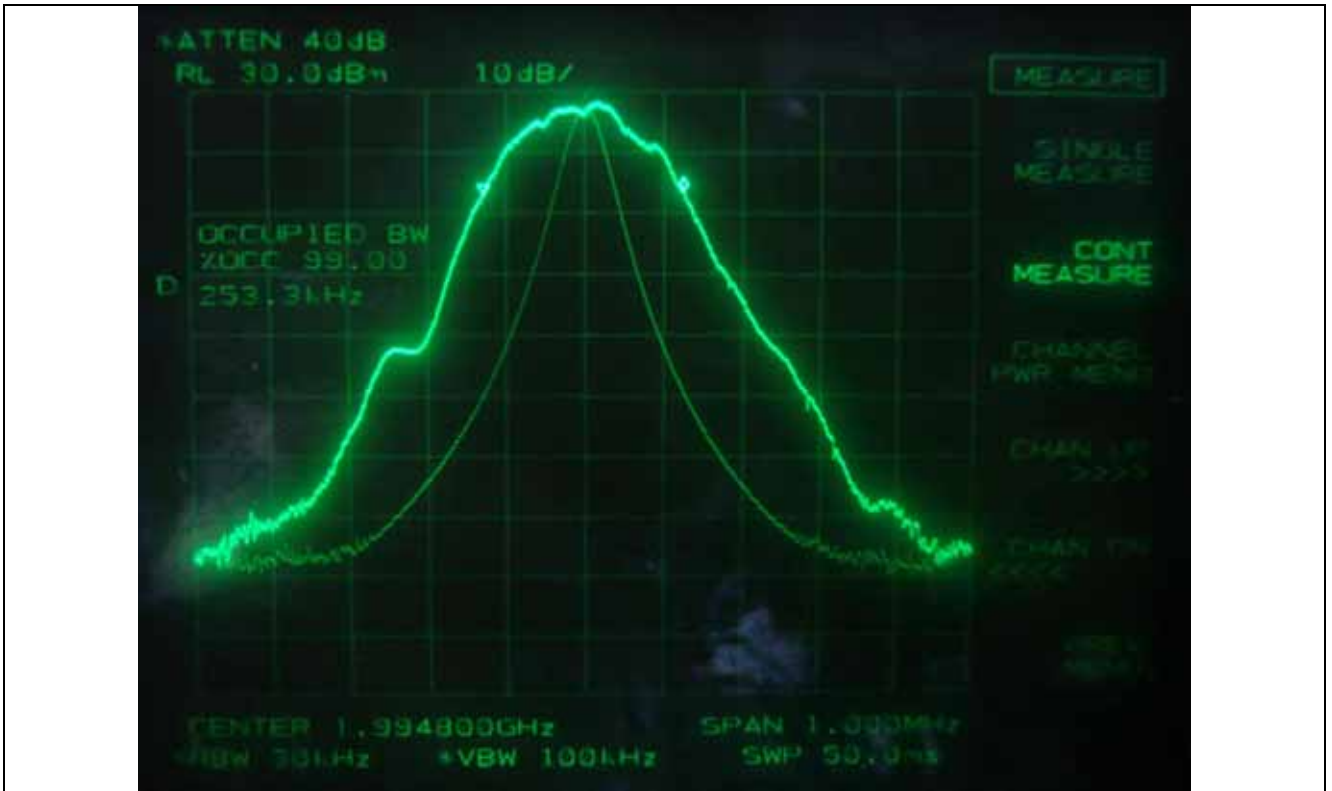
GSM – 99 % Occupied Bandwidth (High Channel)



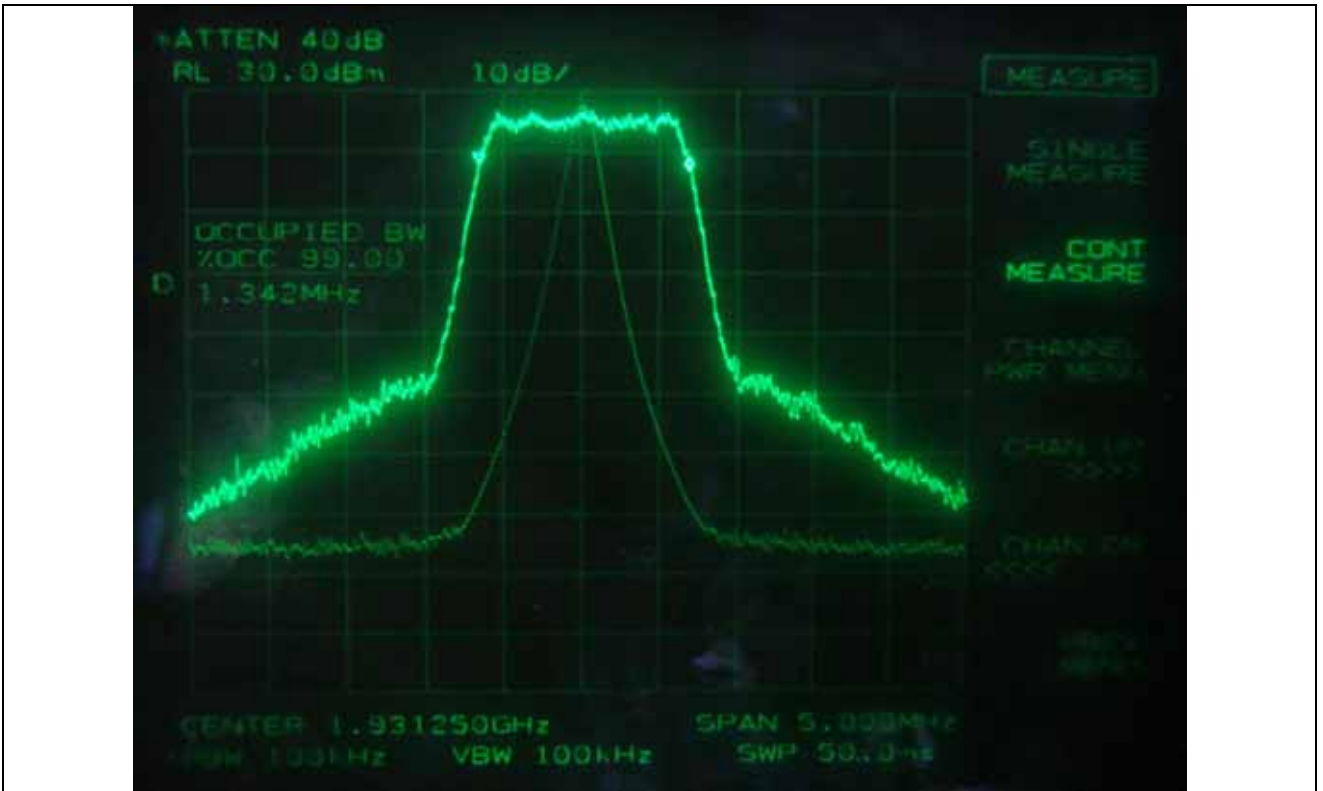
EDGE – 99 % Occupied Bandwidth (Low Channel)



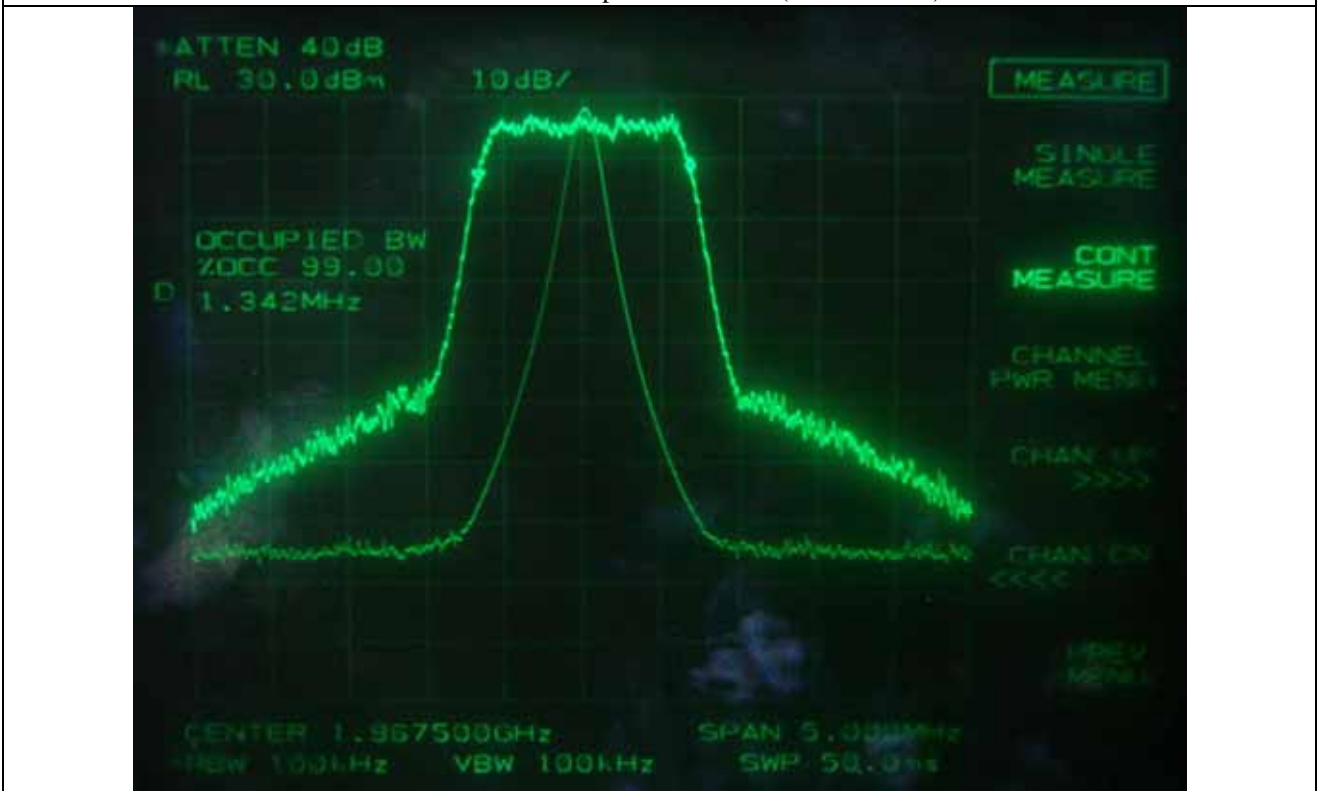
EDGE – 99 % Occupied Bandwidth (Middle Channel)



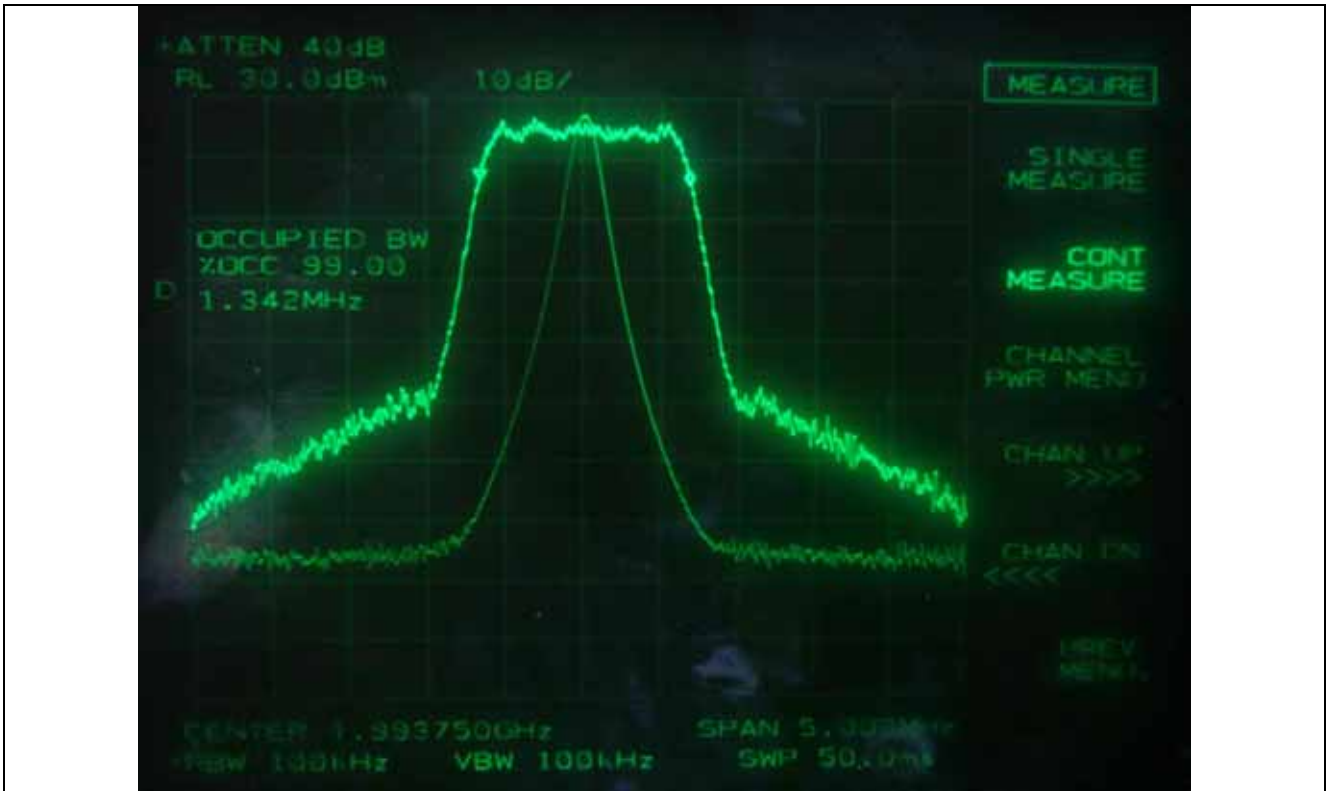
EDGE – 99 % Occupied Bandwidth (High Channel)



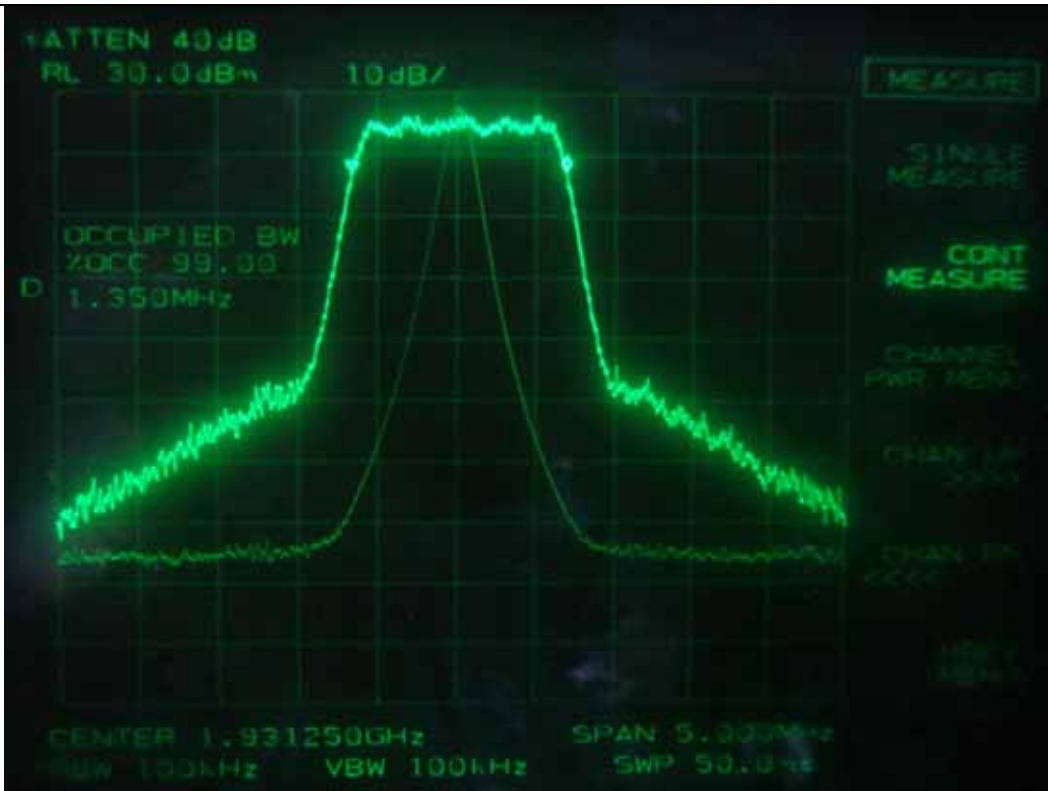
CDMA – 99 % Occupied Bandwidth (Low Channel)



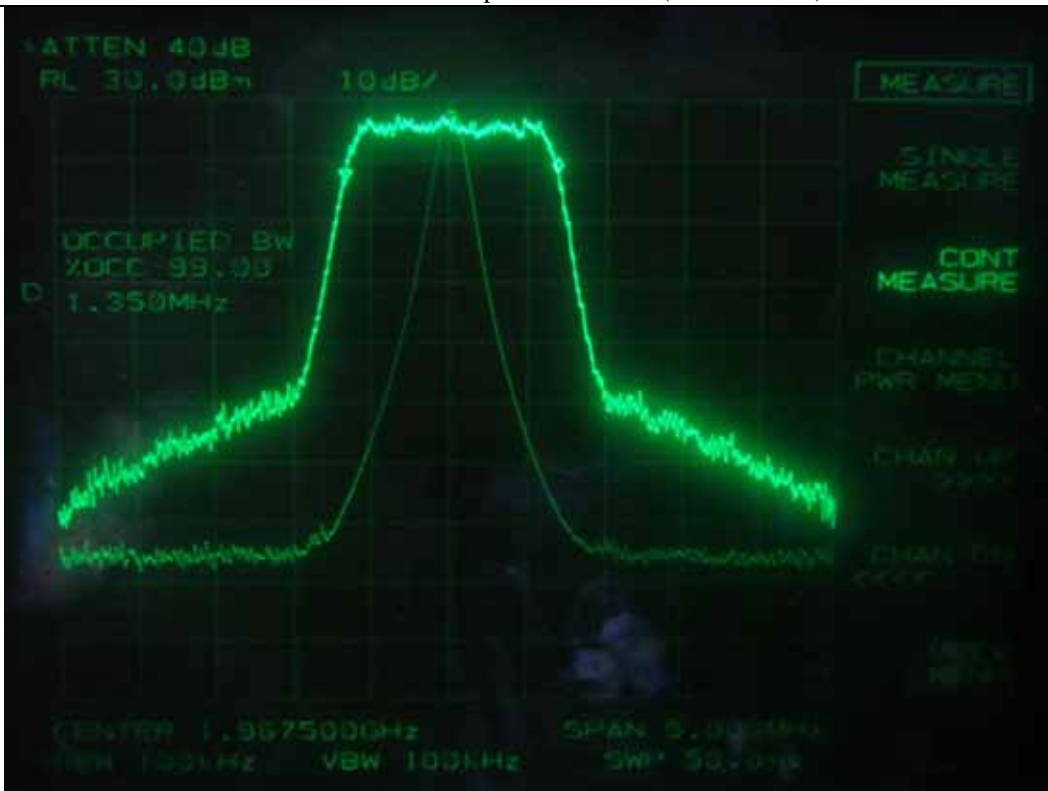
CDMA – 99 % Occupied Bandwidth (Middle Channel)



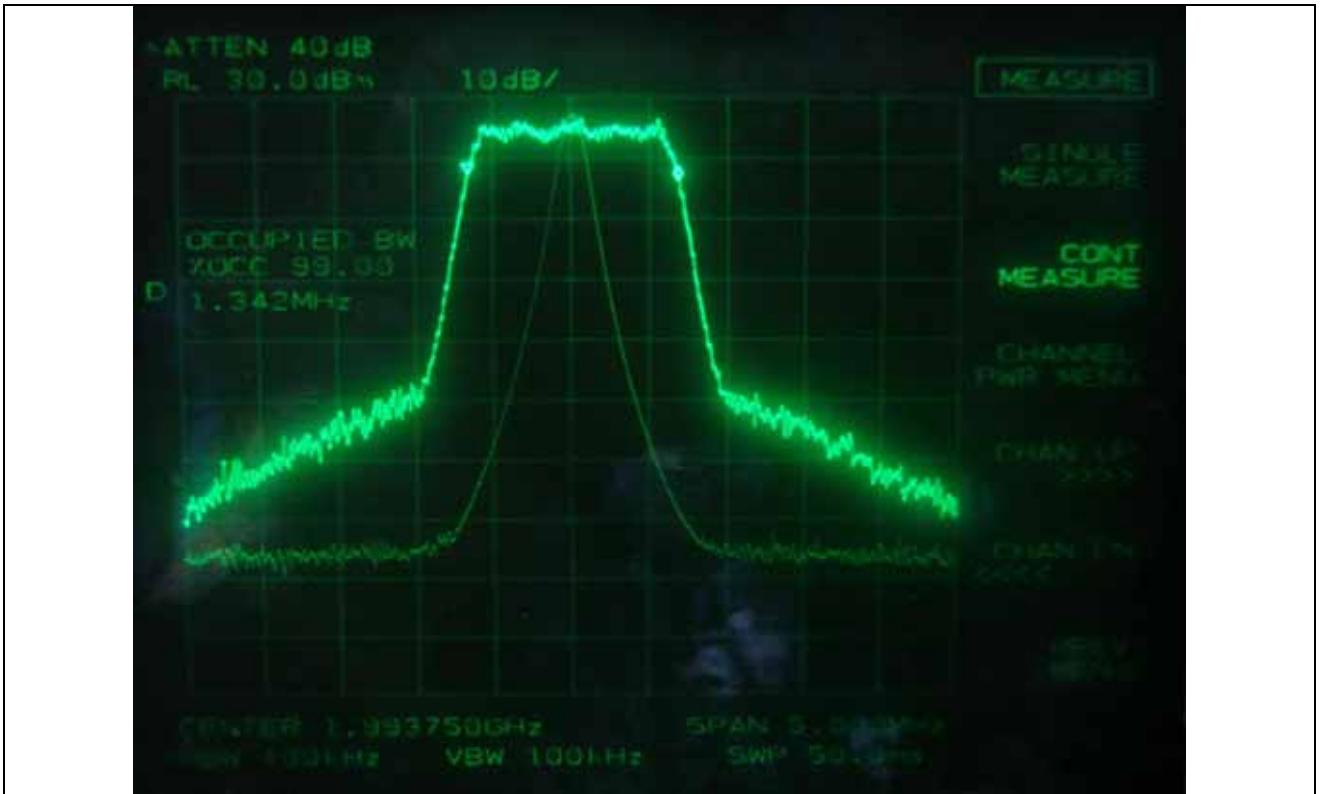
CDMA – 99 % Occupied Bandwidth (High Channel)



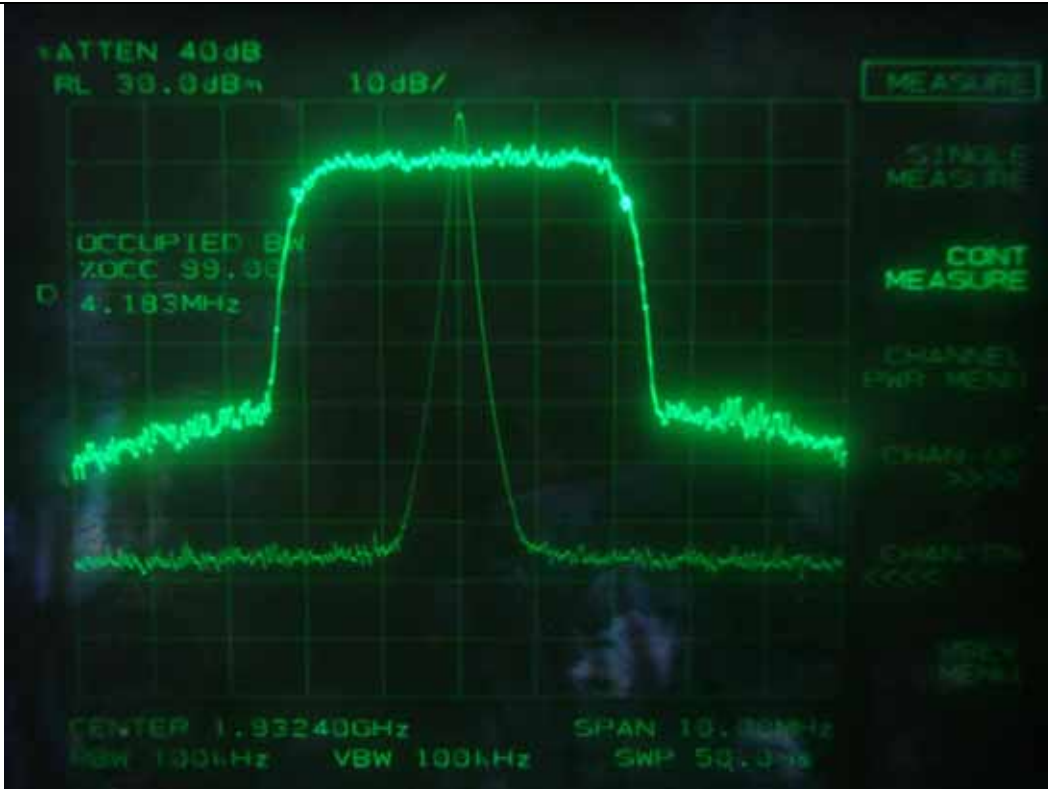
1xEVDO – 99 % Occupied Bandwidth (Low Channel)



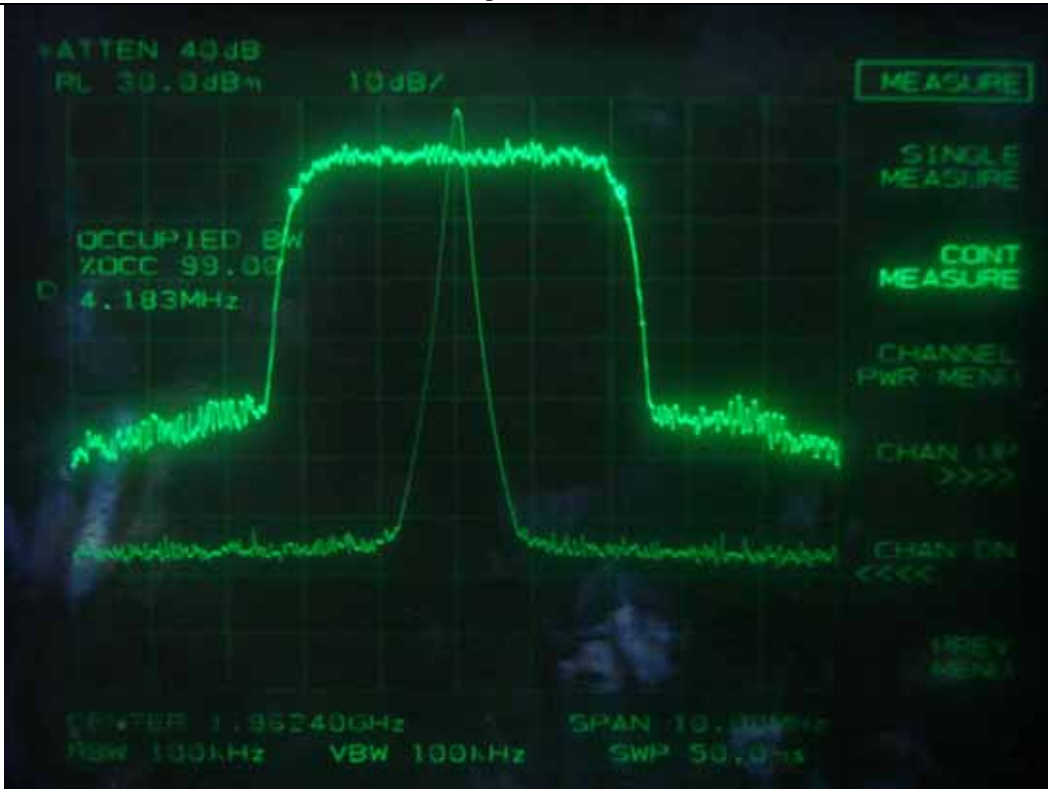
1xEVDO – 99 % Occupied Bandwidth (Middle Channel)



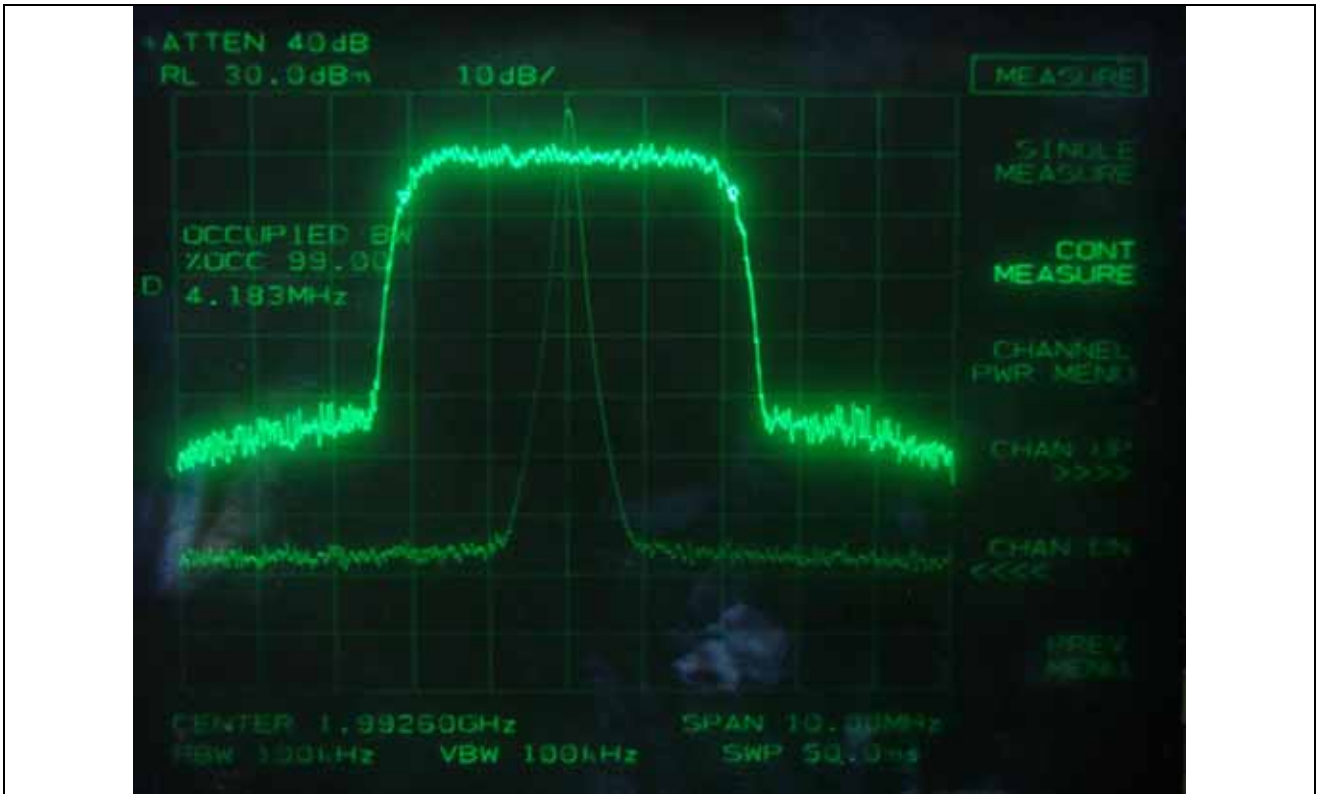
1xEVDO – 99 % Occupied Bandwidth (High Channel)



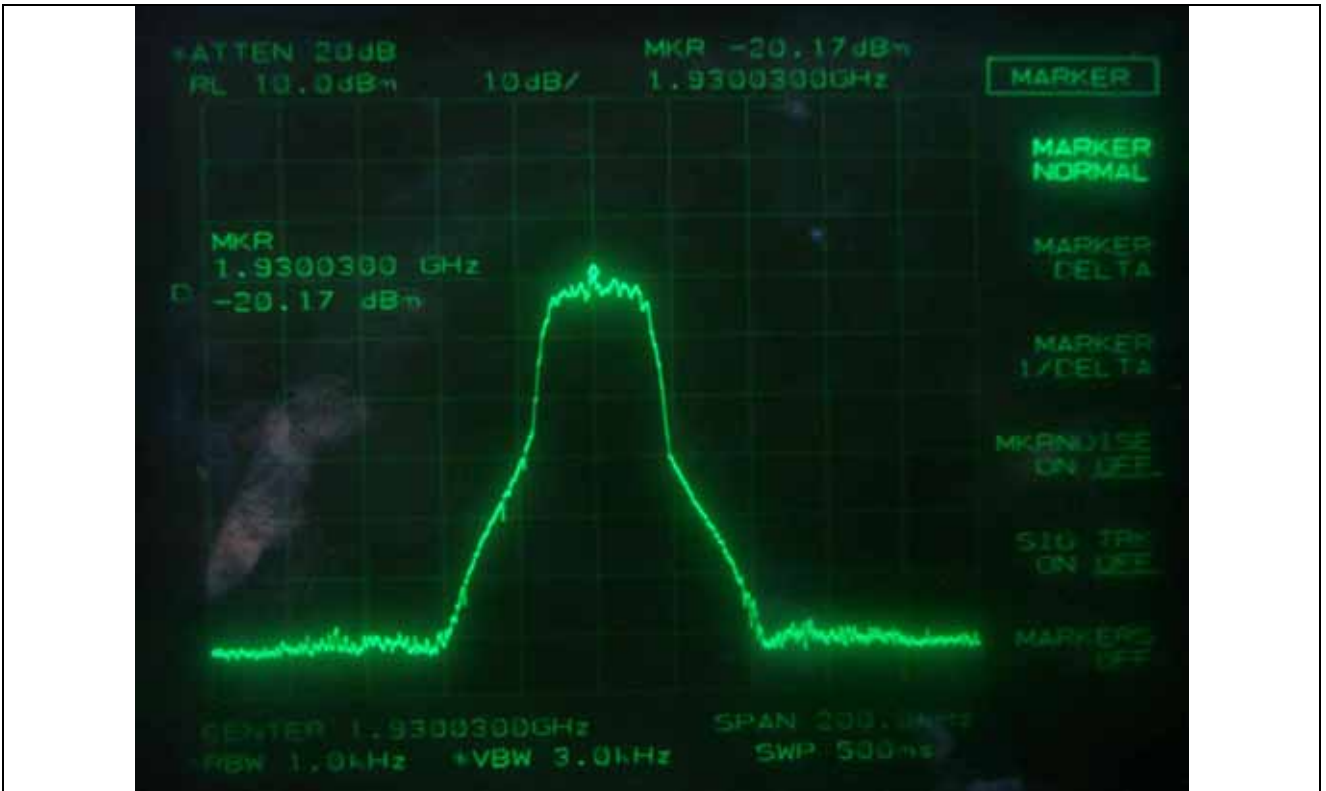
WCDMA – 99 % Occupied Bandwidth (Low Channel)



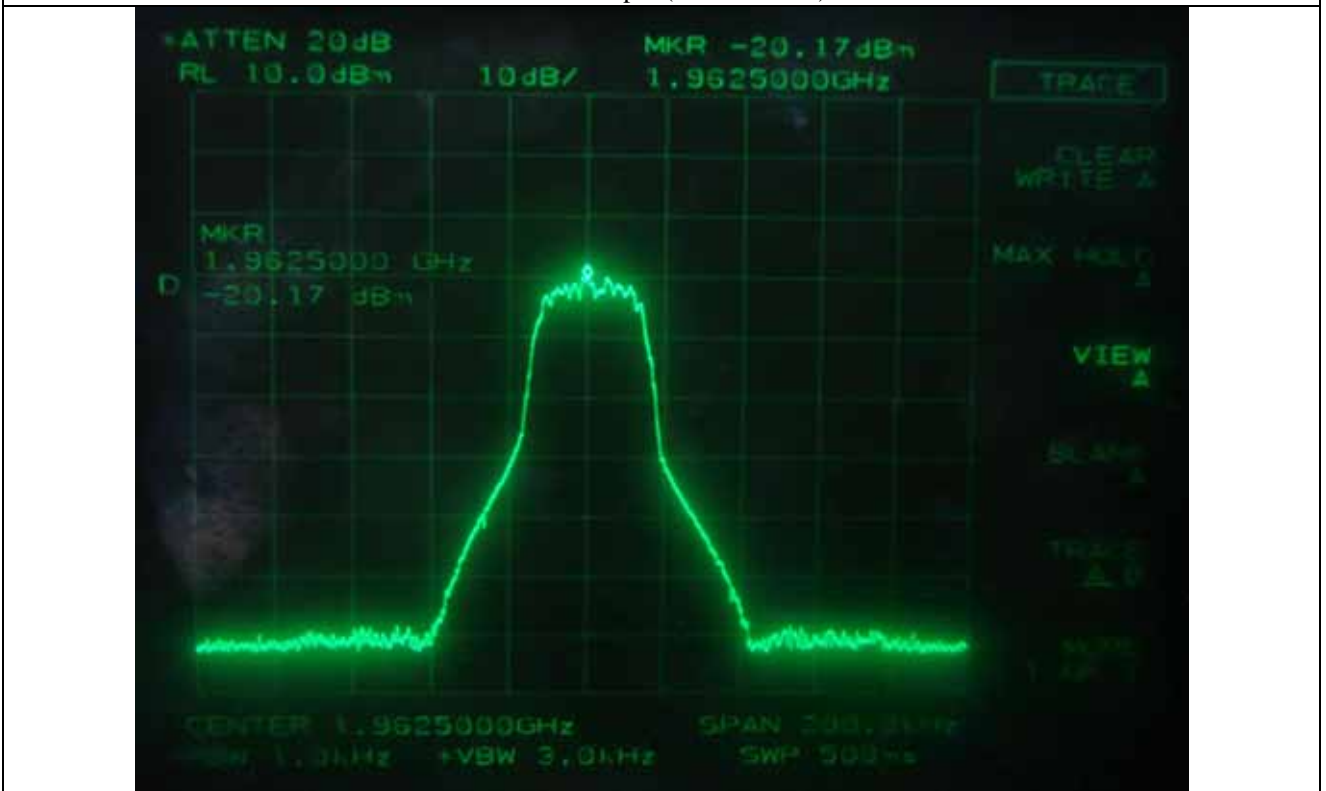
WCDMA – 99 % Occupied Bandwidth (Middle Channel)



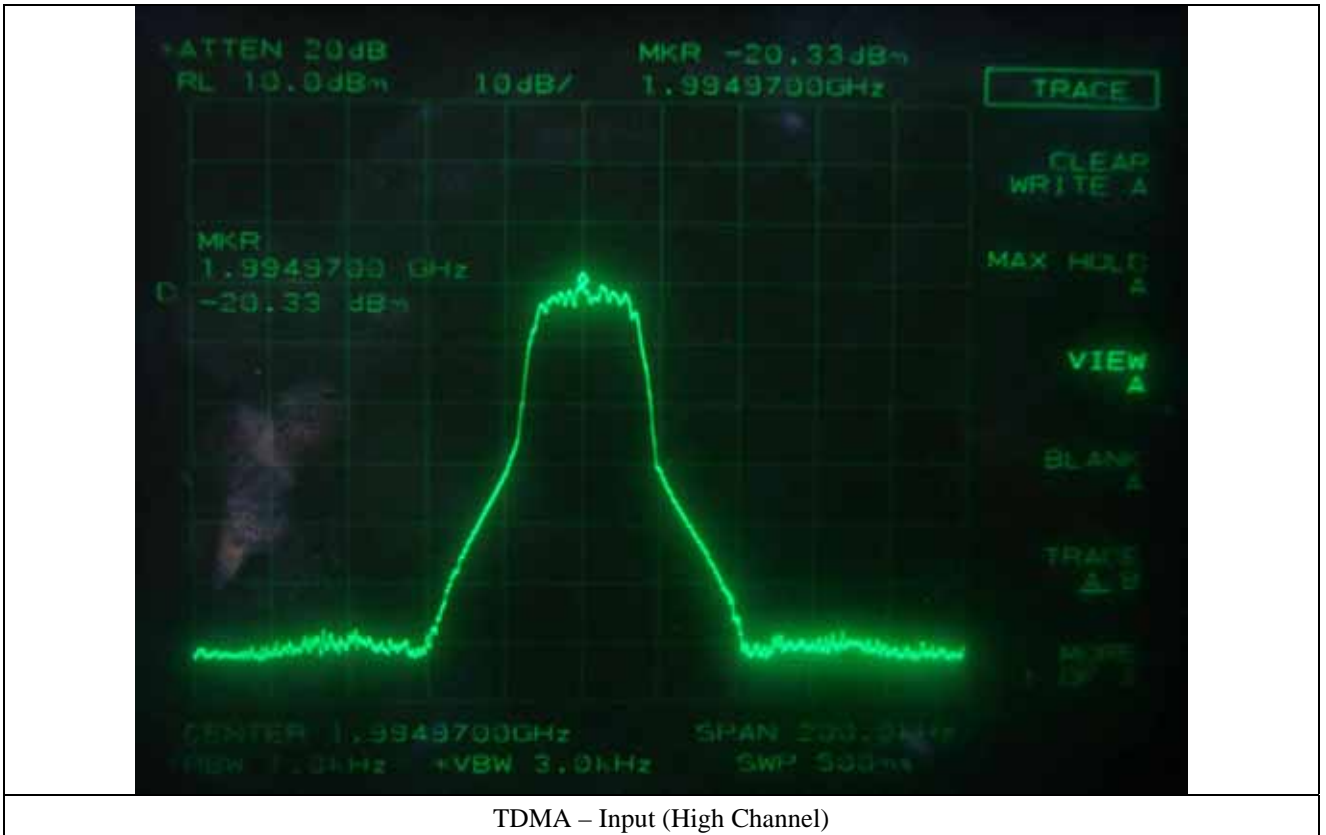
WCDMA – 99 % Occupied Bandwidth (High Channel)



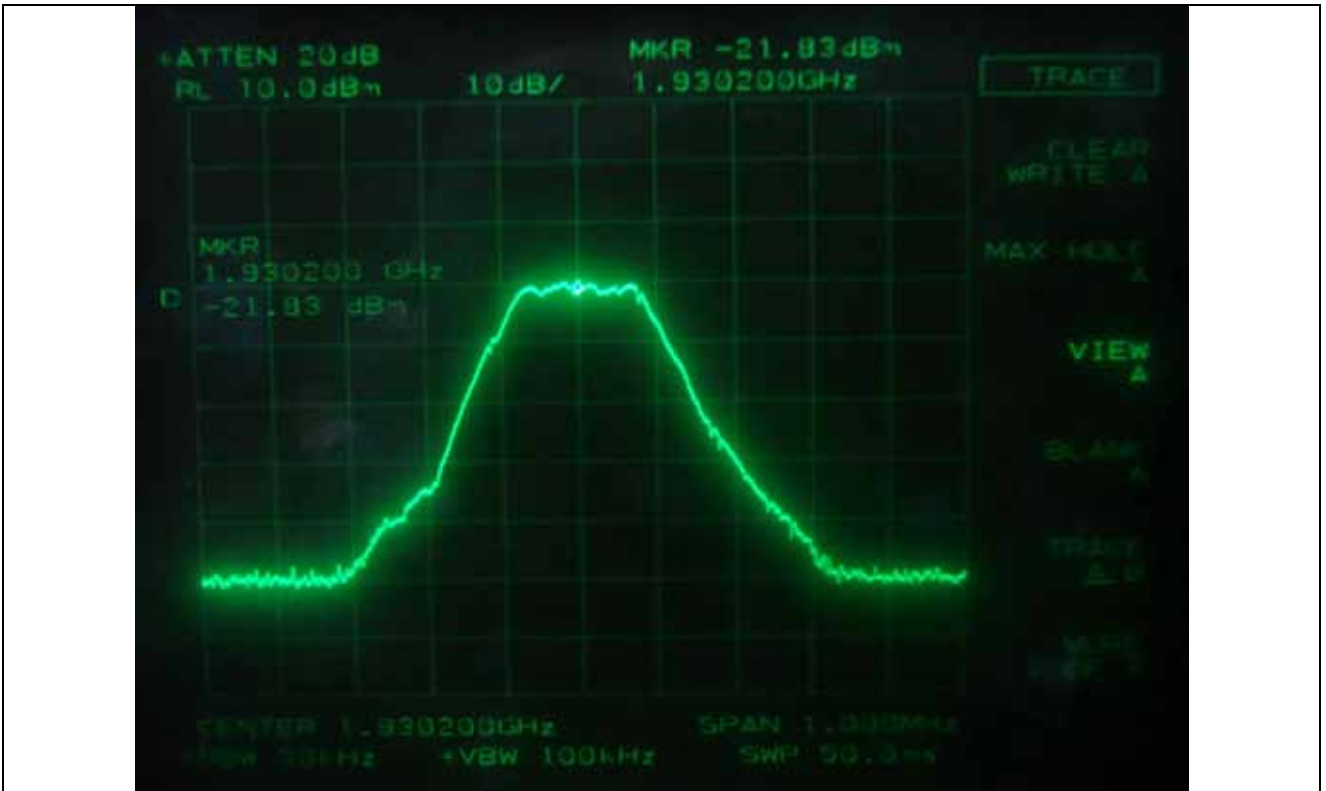
TDMA – Input (Low Channel)



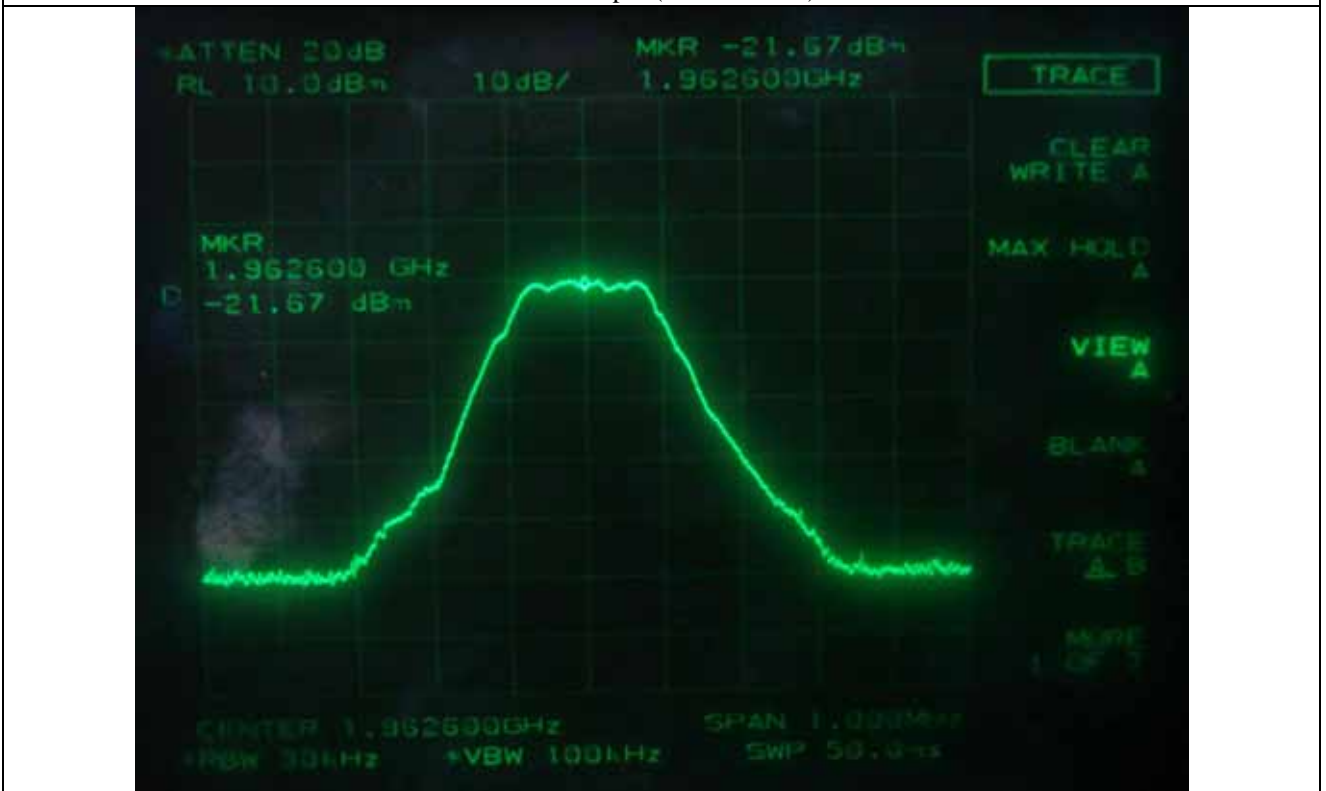
TDMA – Input (Middle Channel)



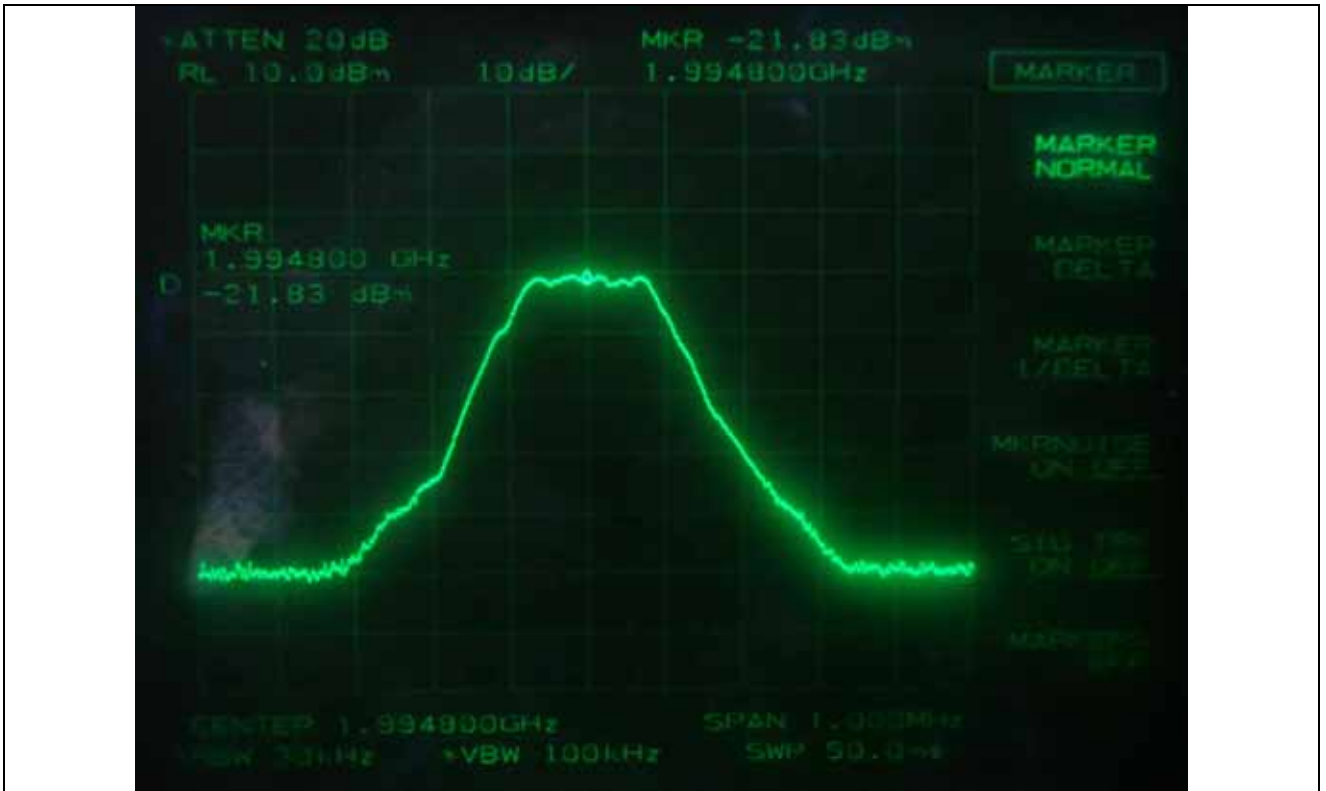
TDMA – Input (High Channel)



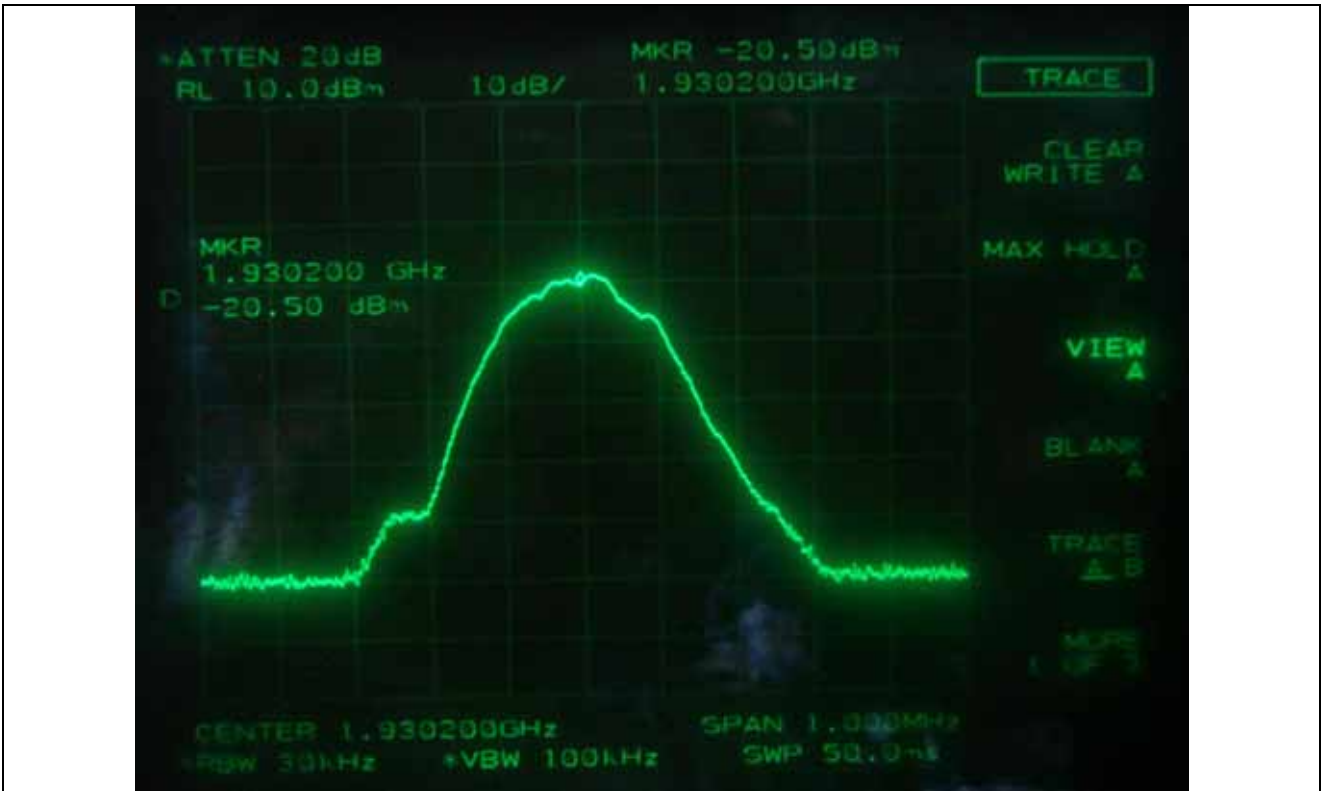
GSM – Input (Low Channel)



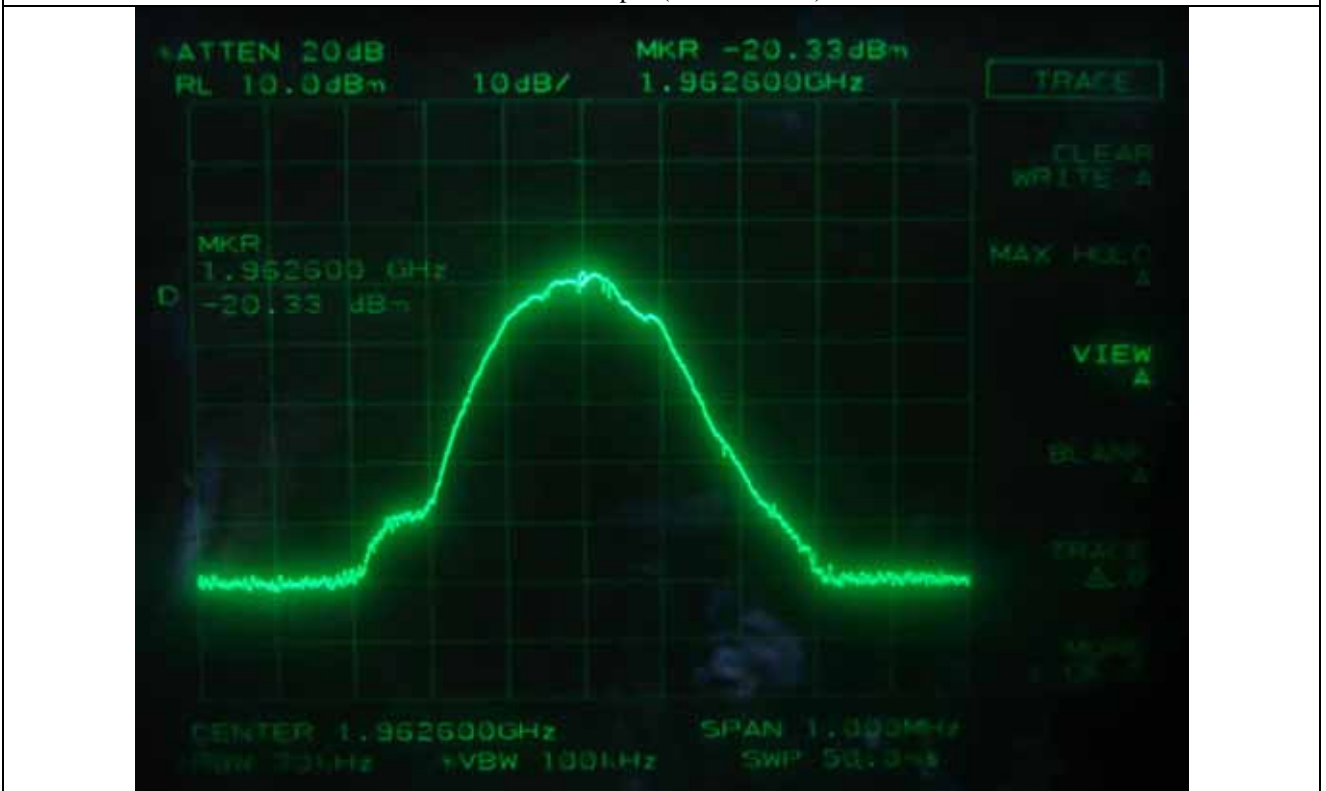
GSM – Input (Middle Channel)



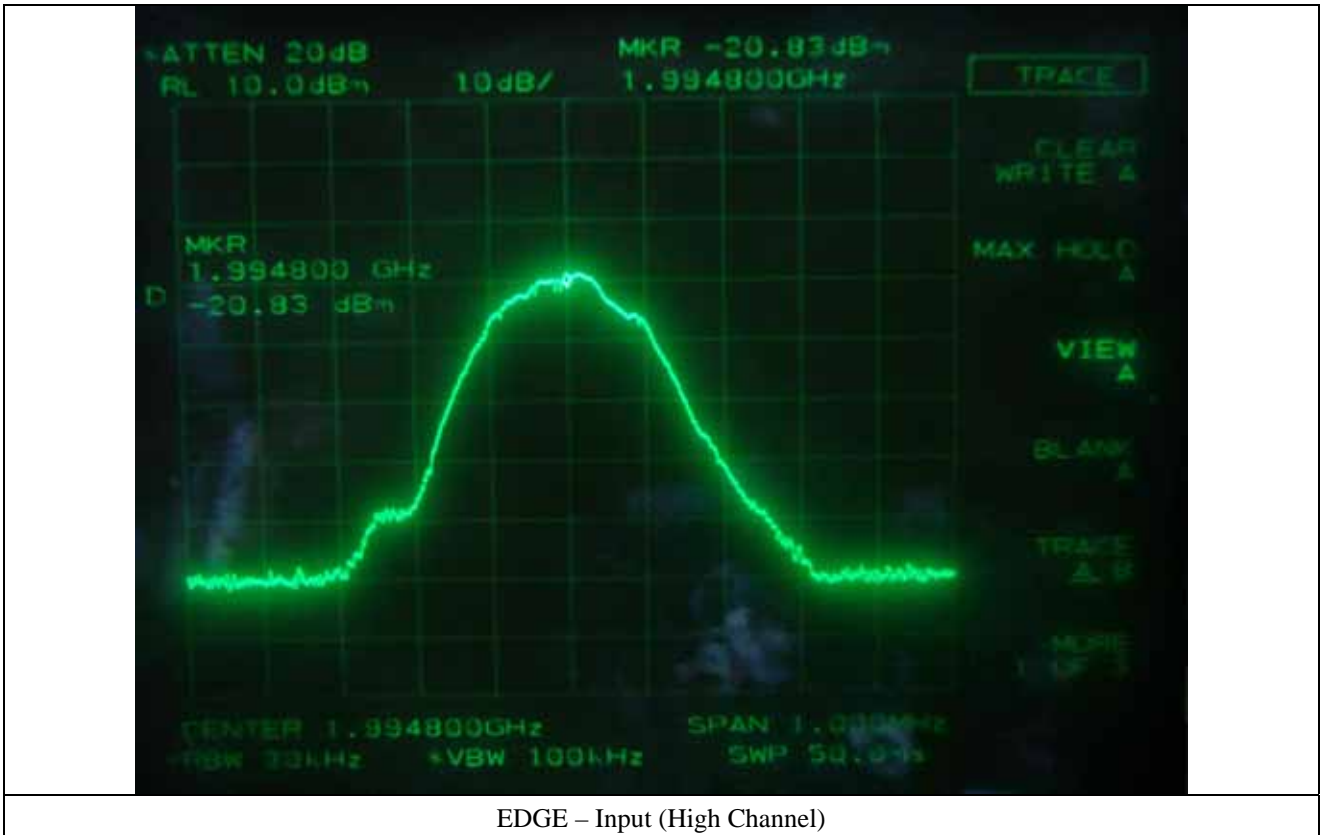
GSM – Input (High Channel)



EDGE – Input (Low Channel)



EDGE – Input (Middle Channel)



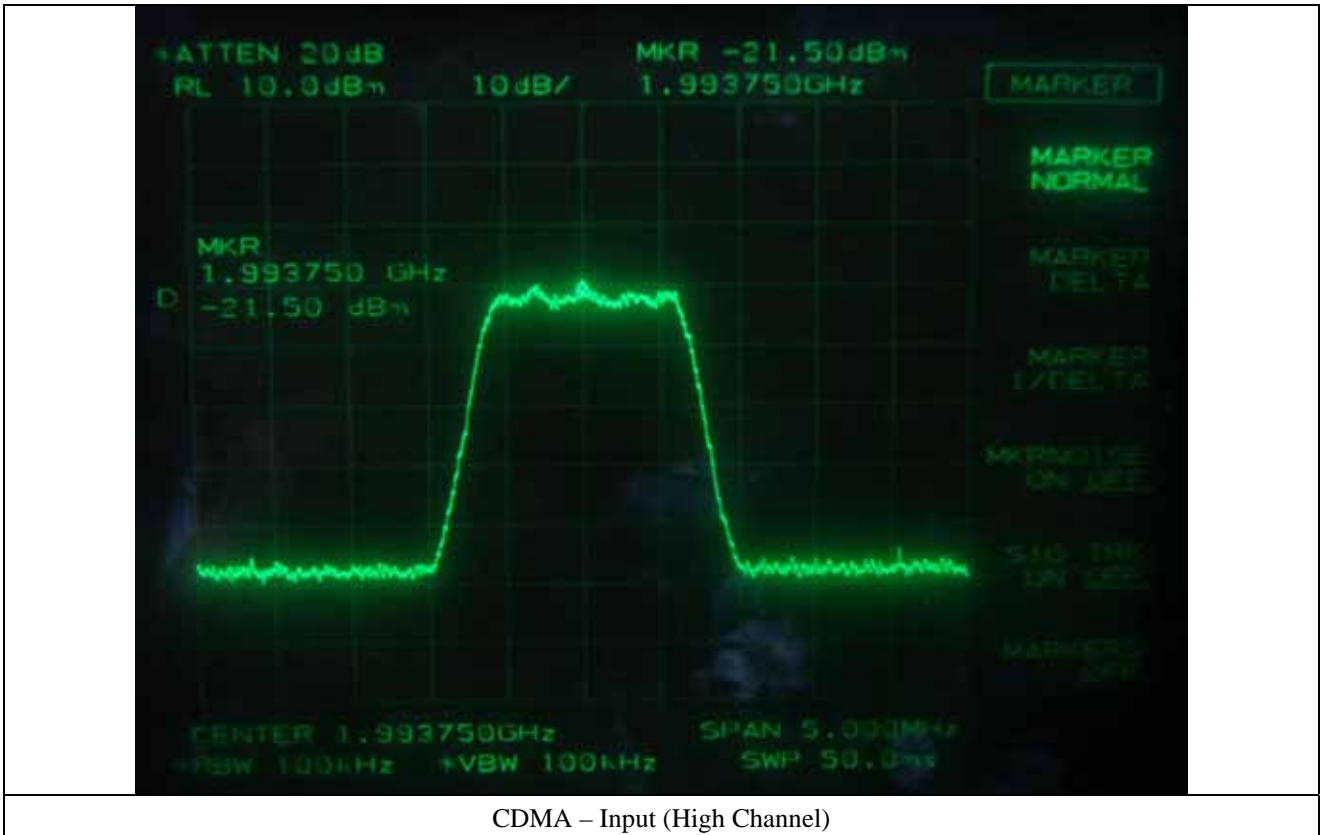
EDGE – Input (High Channel)

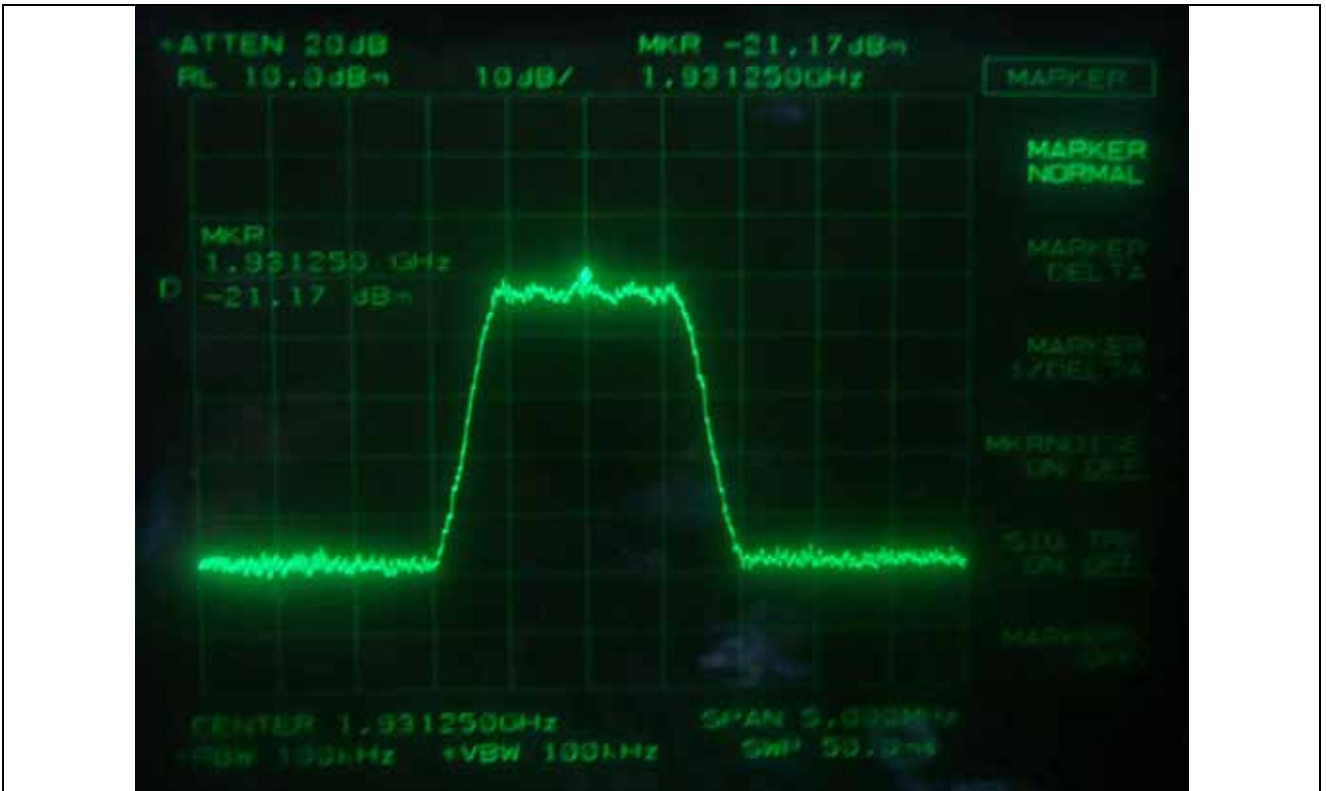


CDMA – Input (Low Channel)

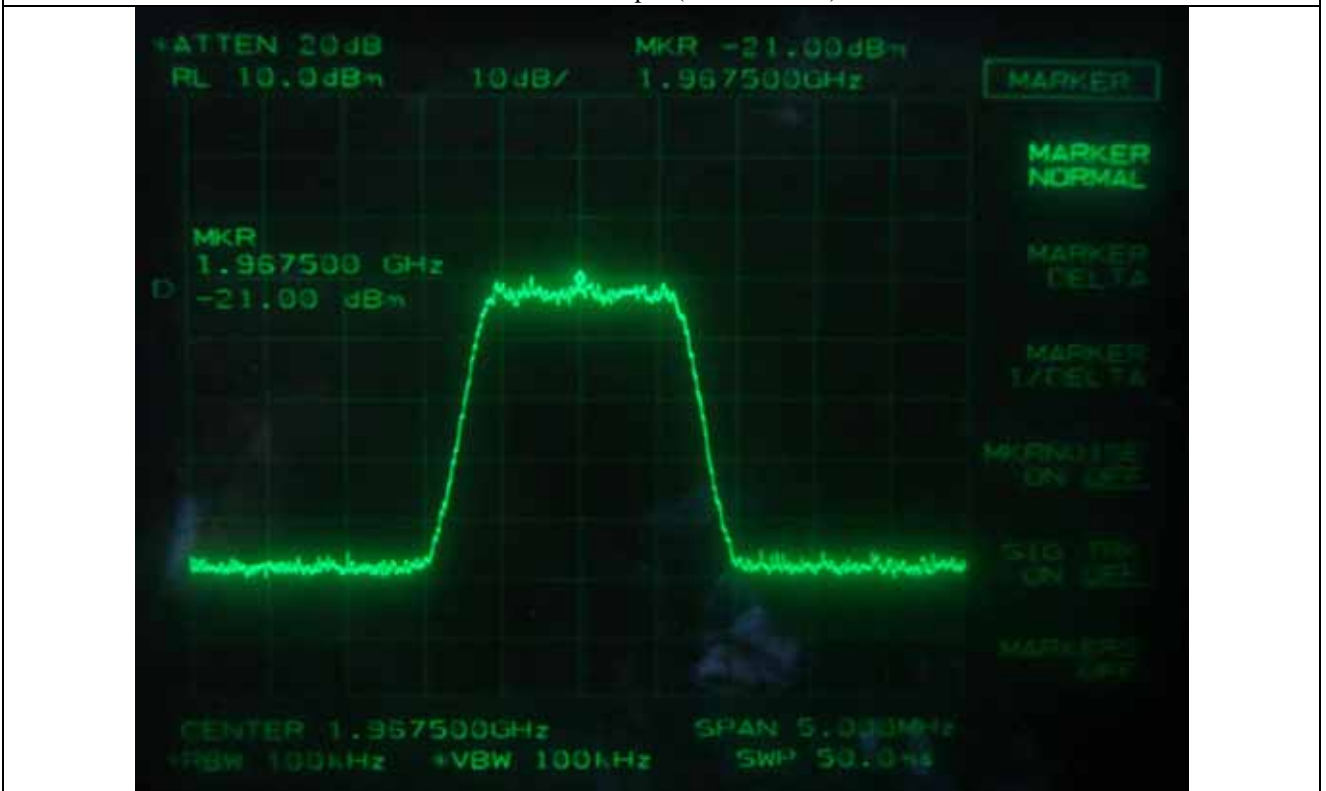


CDMA – Input (Middle Channel)





1xEVDO – Input (Low Channel)



1xEVDO – Input (Middle Channel)



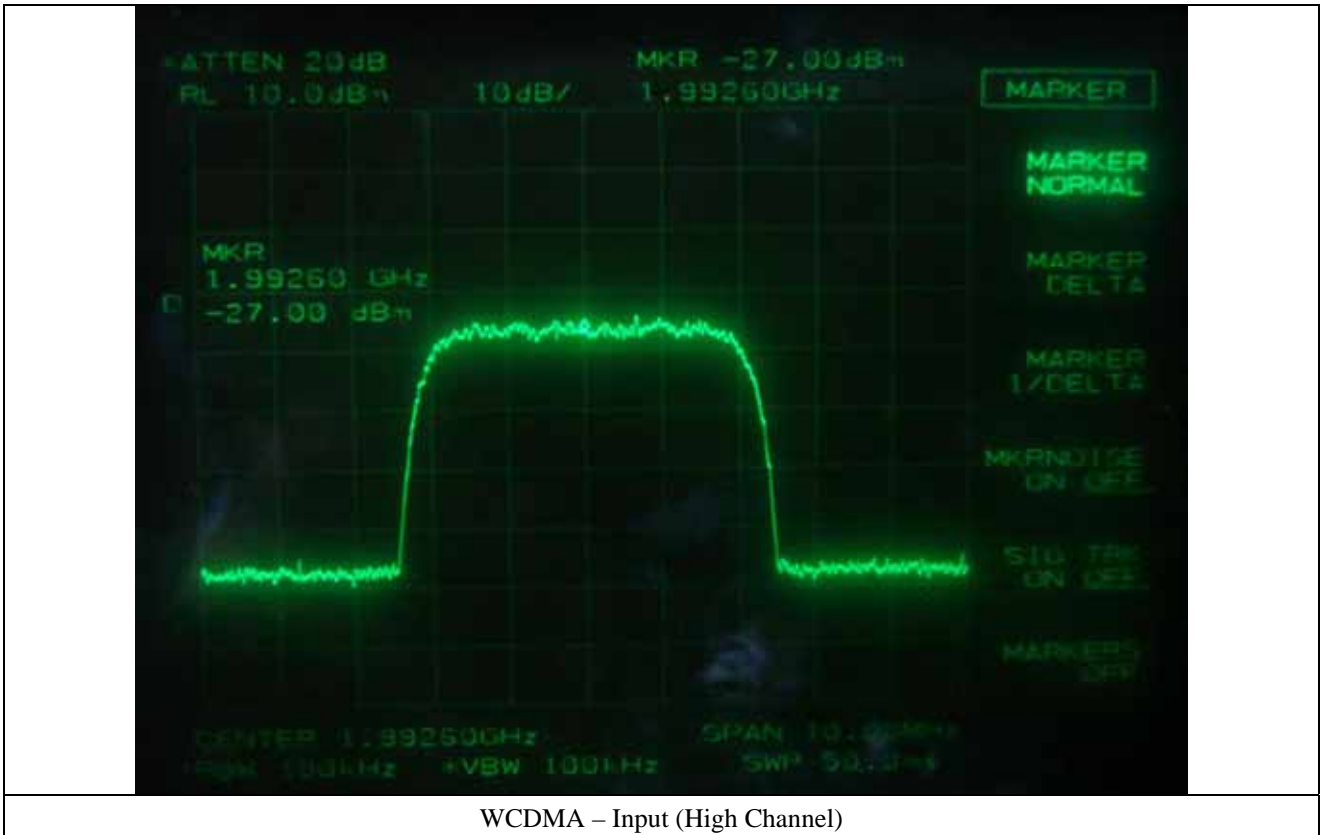
1xEVDO – Input (High Channel)



WCDMA – Input (Low Channel)



WCDMA – Input (Middle Channel)

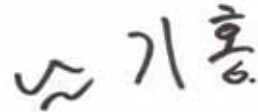


6.3.3 Test Result for Part 27 C (700LTE)

- . Test Date : April 11 ~ 12, 2011
- . Temperature : 24 °C
- . Relative humidity : 50 % R.H.
- . Test Result : Pass

Channel	Modulation	26 dB Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)
Low	QPSK	11.830	9.000
	16QAM	11.830	9.033
	64QAM	11.830	9.033
Middle	QPSK	11.830	9.033
	16QAM	11.830	9.033
	64QAM	11.830	9.033
High	QPSK	11.830	9.033
	16QAM	11.830	9.033
	64QAM	11.830	9.033

Remark: According to above result, the carrier frequency shall be within the frequency block edges.



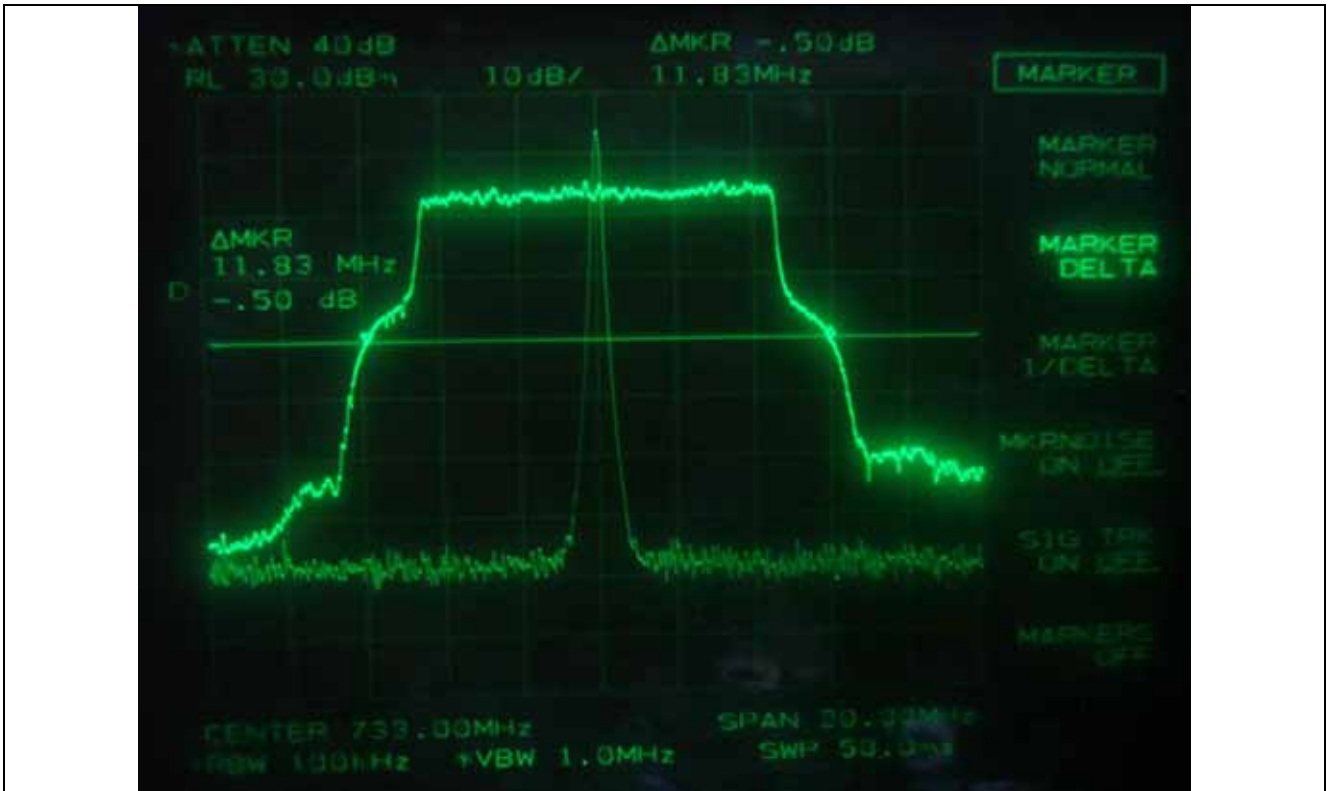
Tested by: Ki-Hong, Nam / Senior Engineer



QPSK – 26 dB Bandwidth (Low Channel)



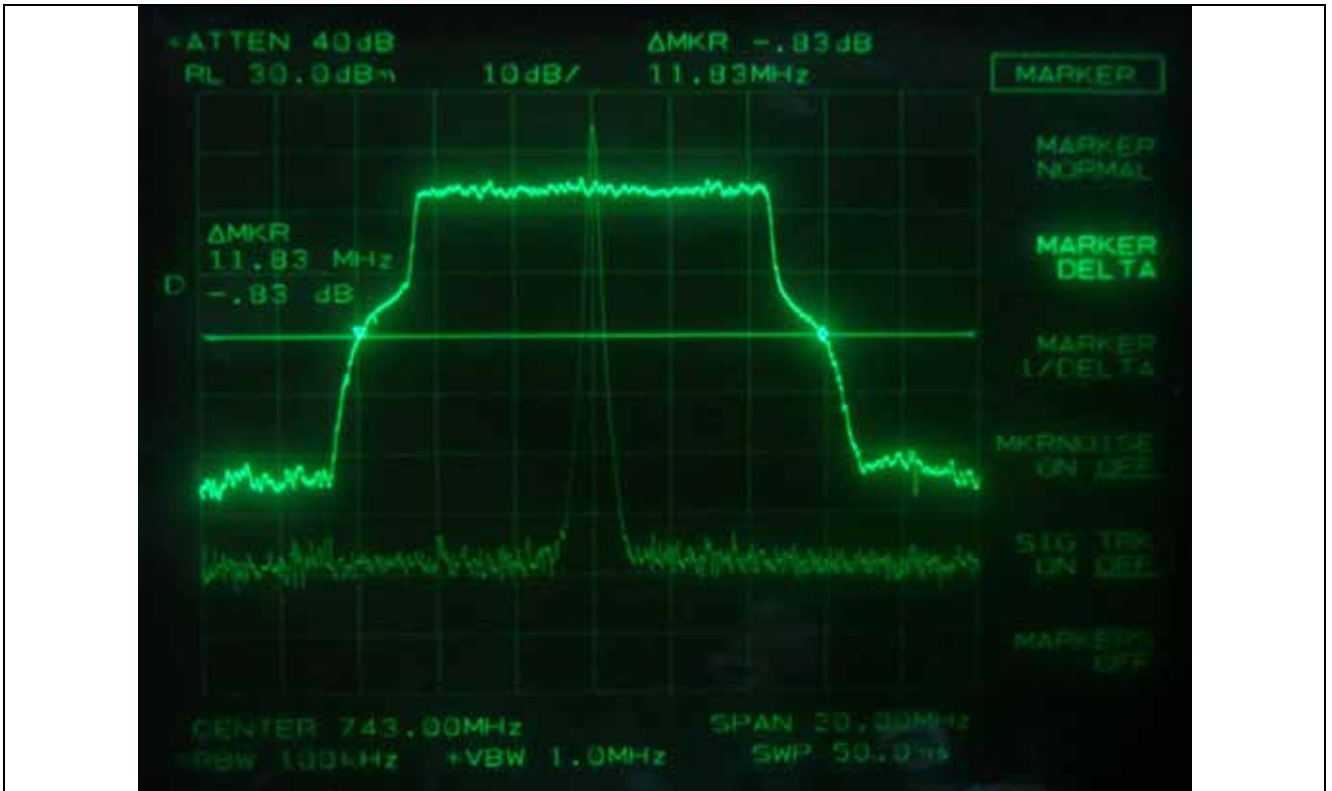
16QAM – 26 dB Bandwidth (Low Channel)



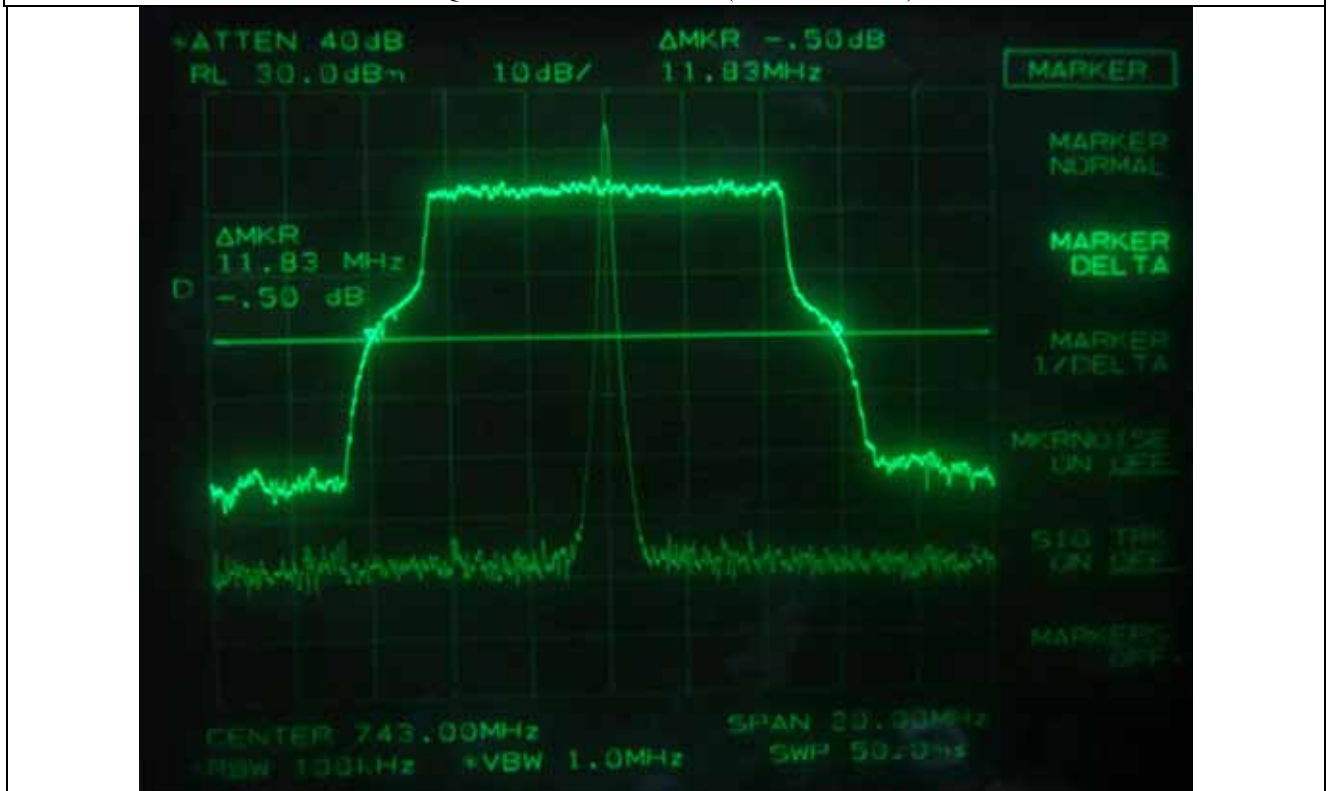
64QAM – 26 dB Bandwidth (Low Channel)



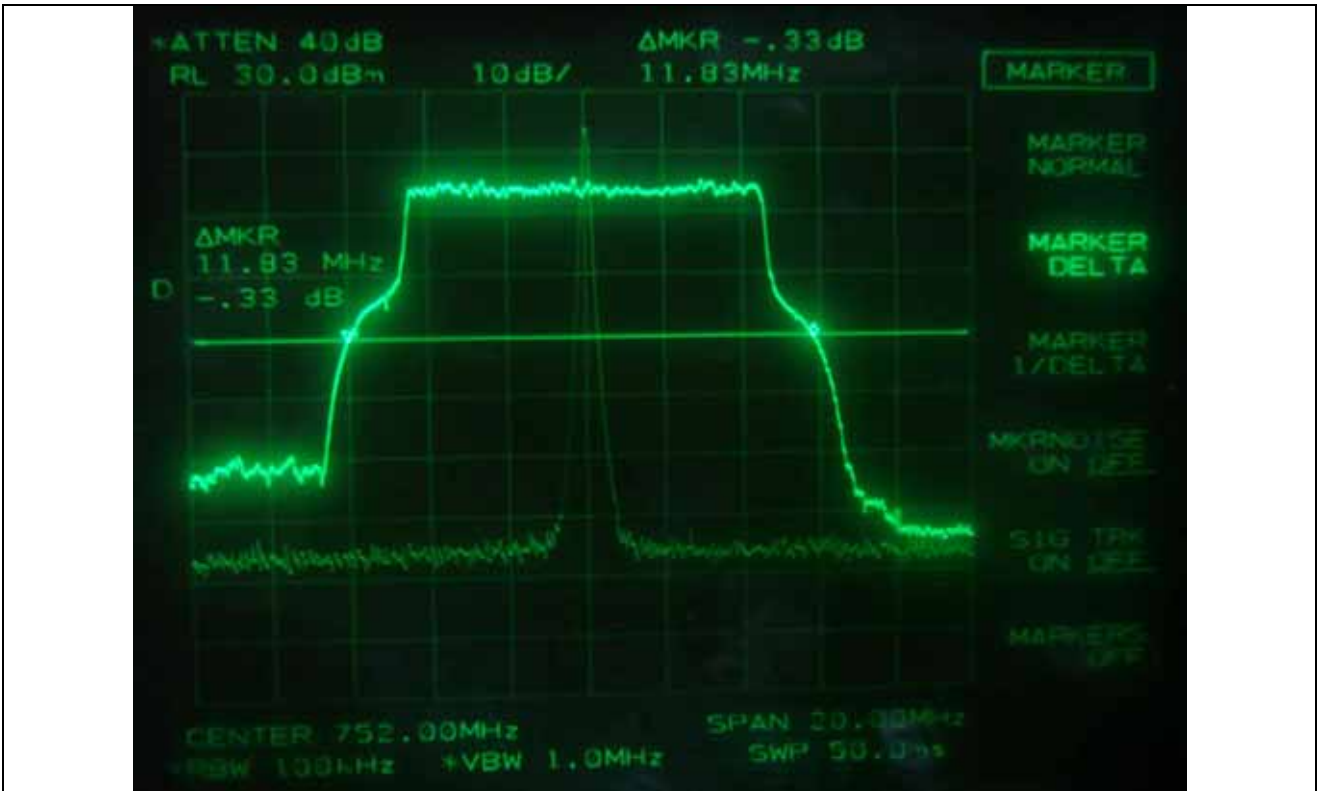
QPSK – 26 dB Bandwidth (Middle Channel)



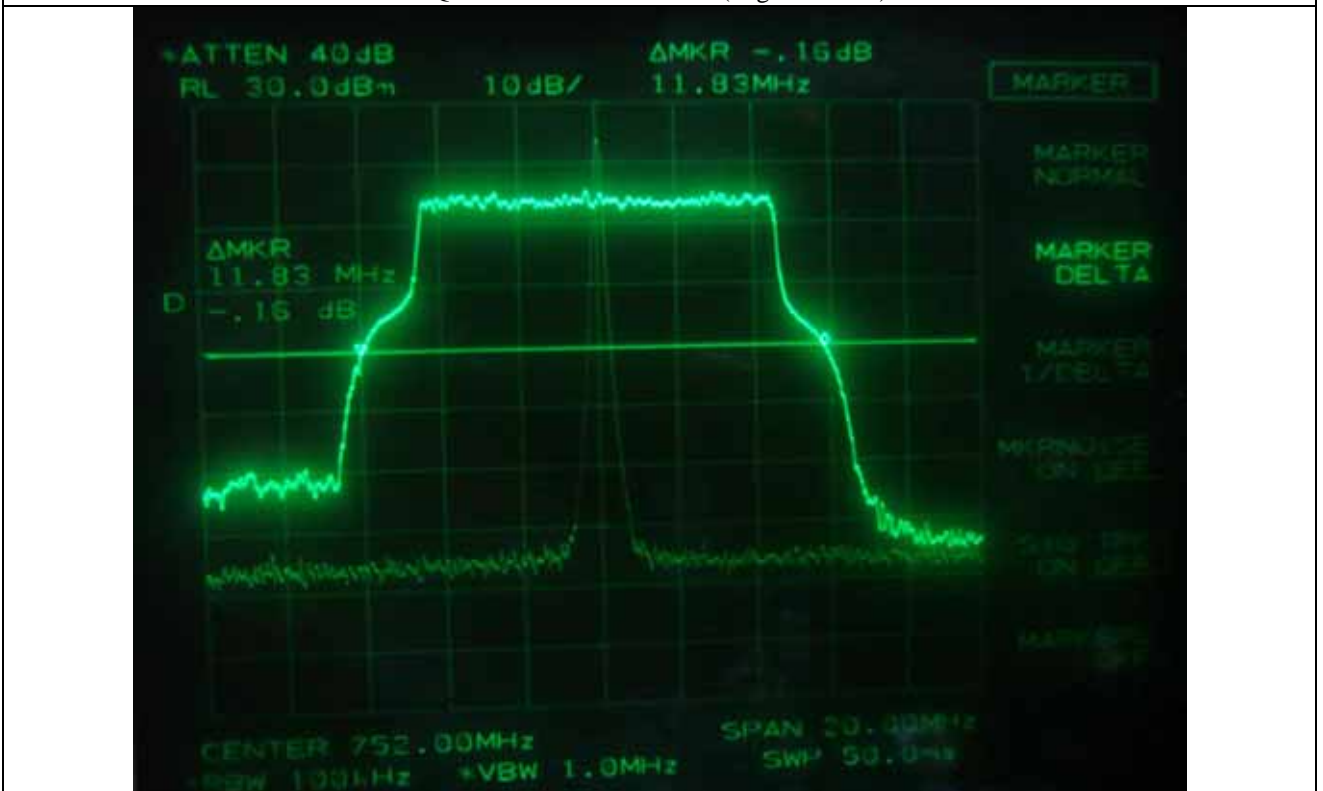
16QAM – 26 dB Bandwidth (Middle Channel)



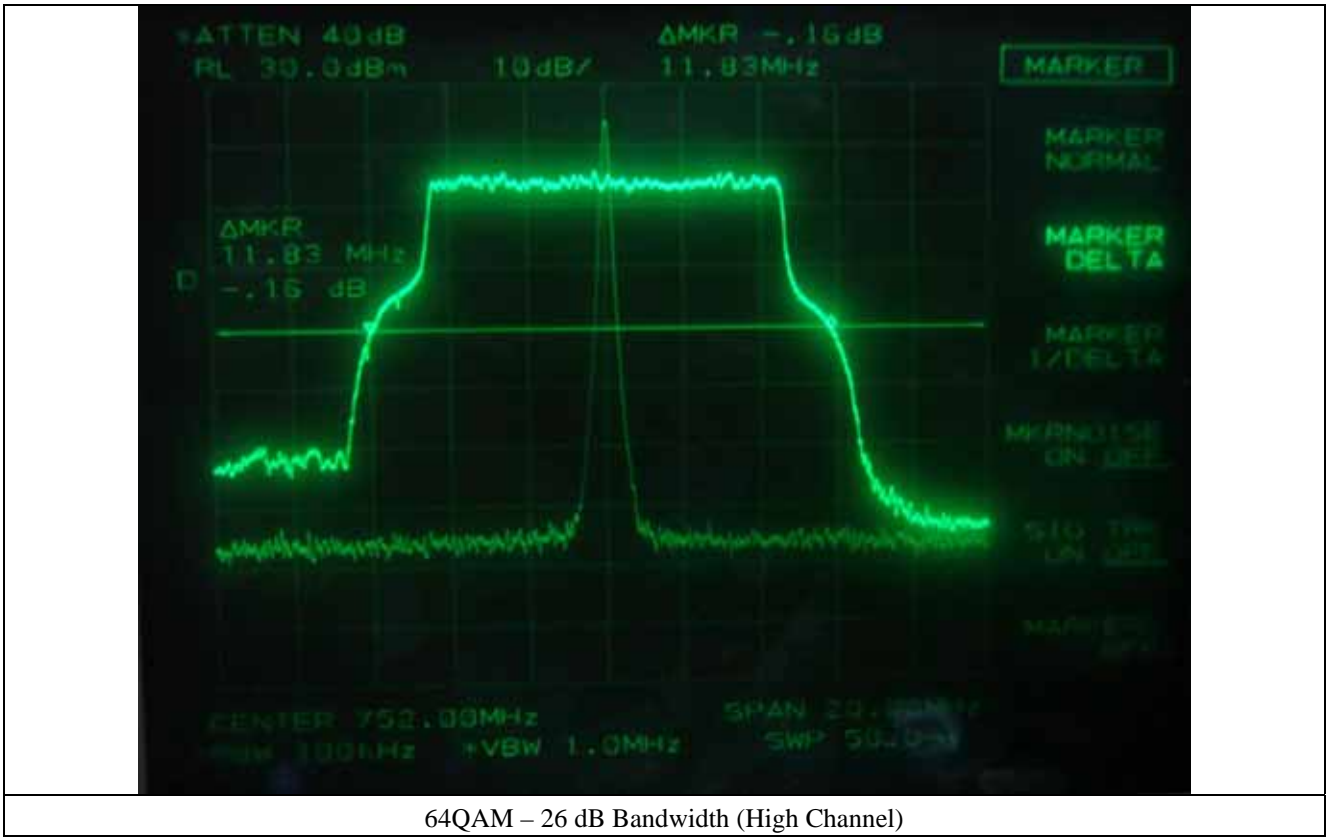
64QAM – 26 dB Bandwidth (Middle Channel)

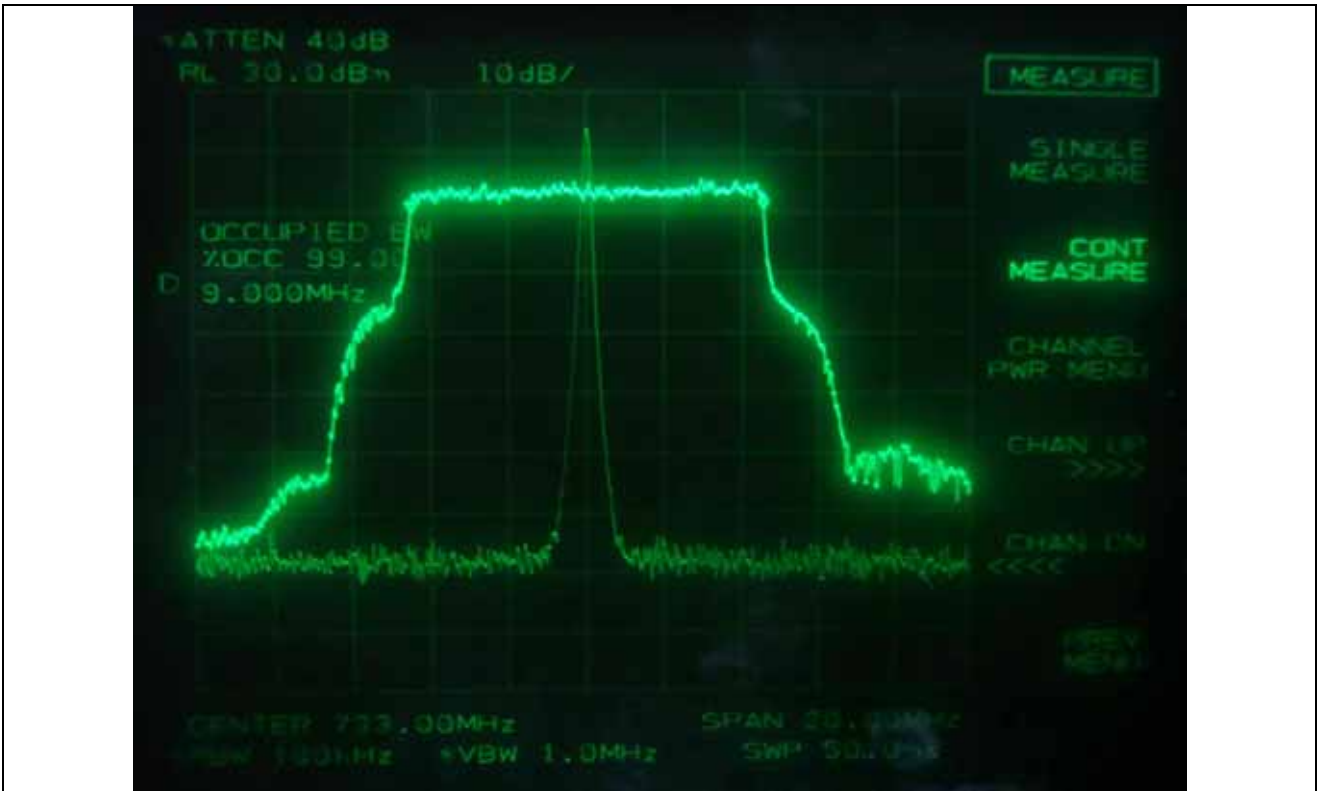


QPSK – 26 dB Bandwidth (High Channel)

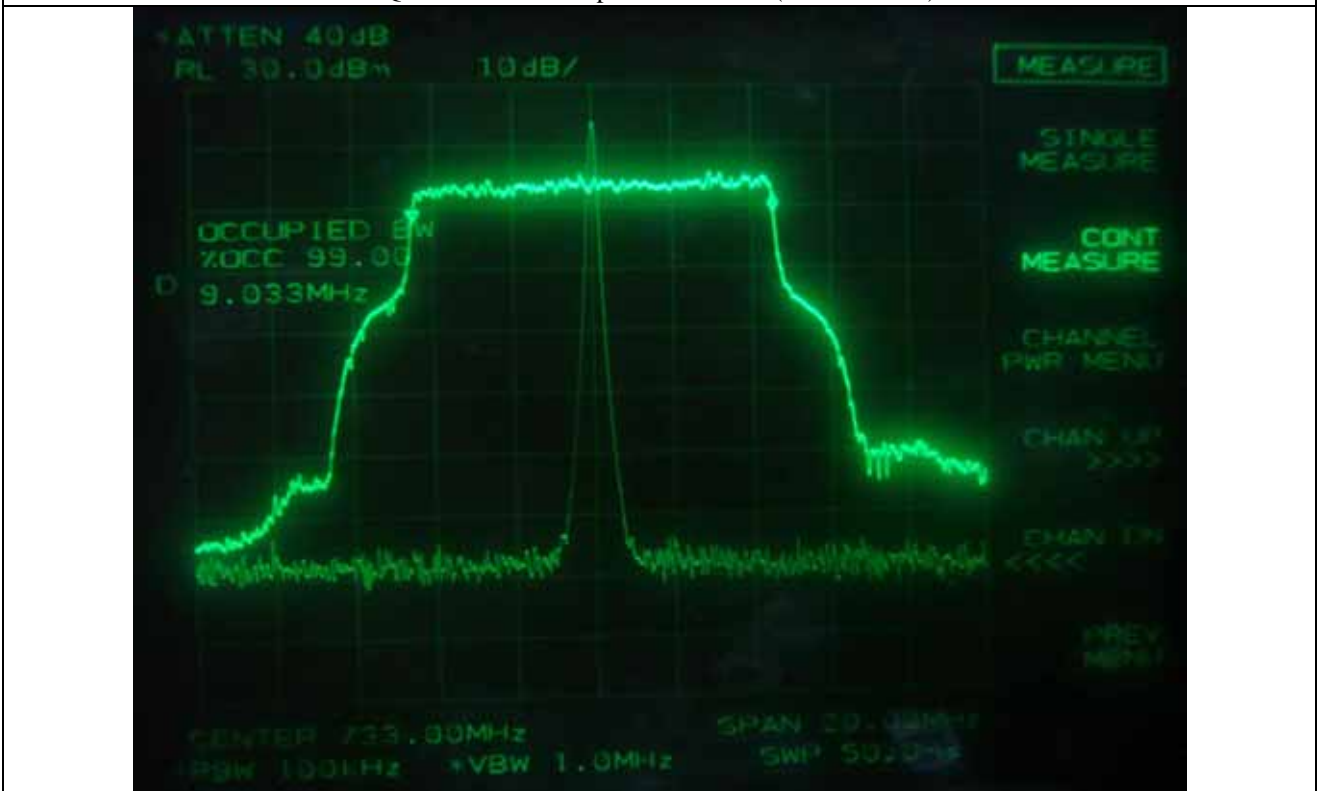


16QAM – 26 dB Bandwidth (High Channel)

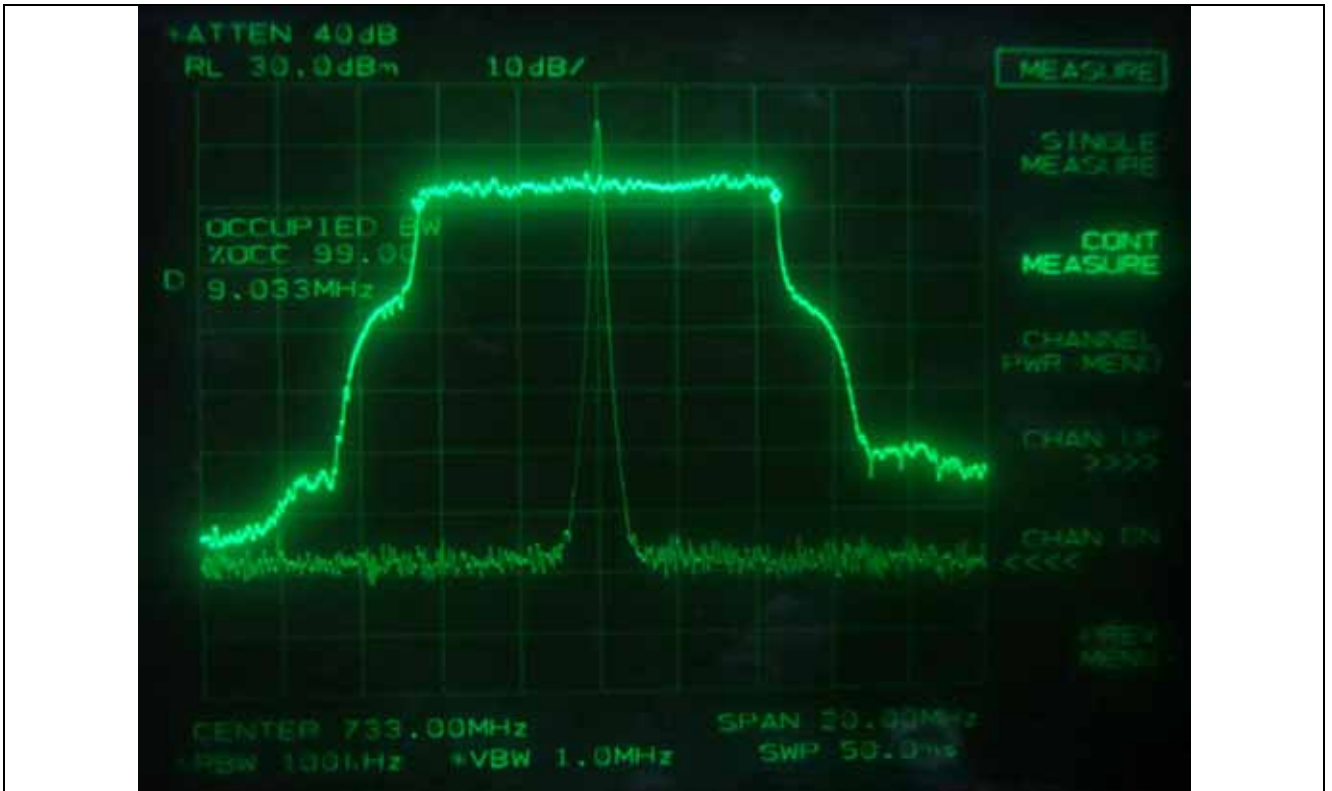




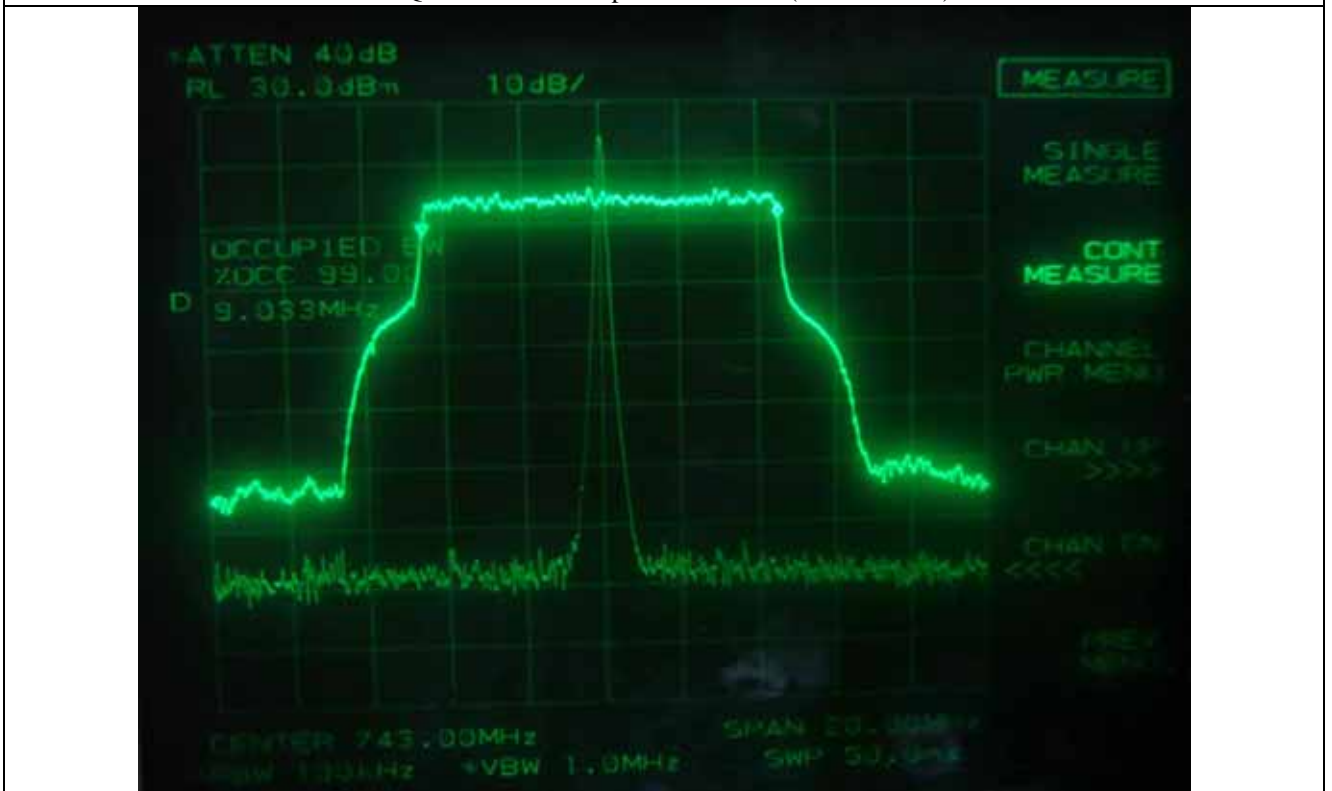
QPSK – 99 % Occupied Bandwidth (Low Channel)



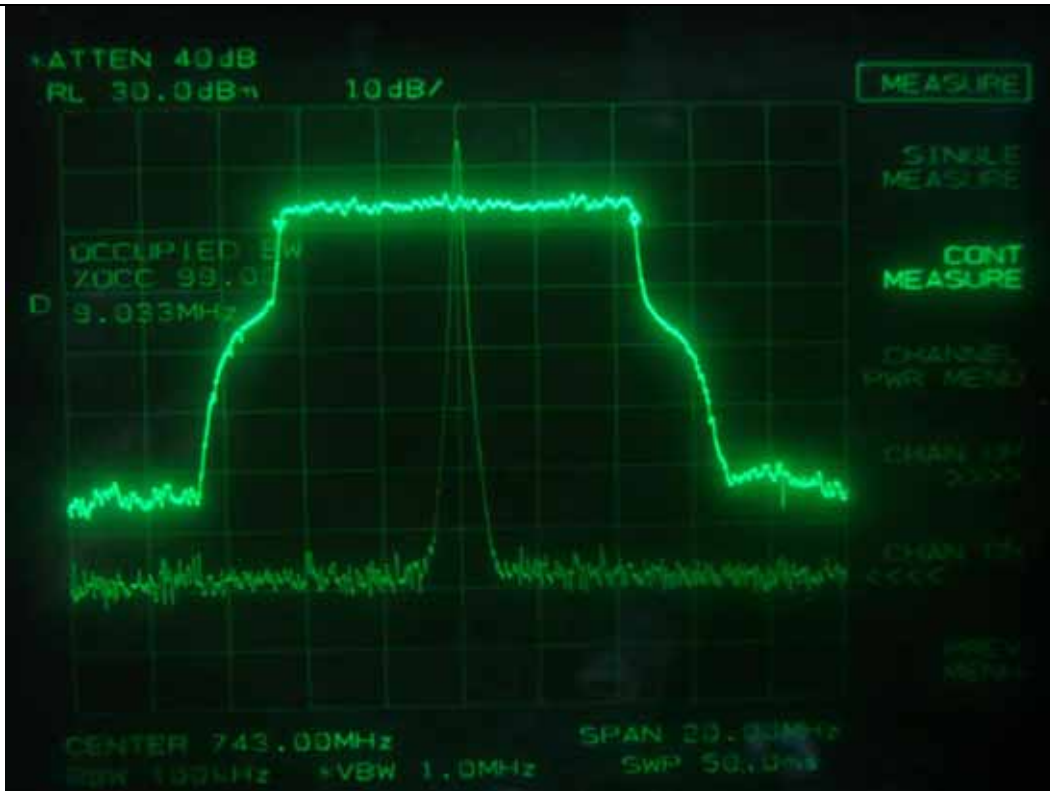
16QAM – 99 % Occupied Bandwidth (Low Channel)



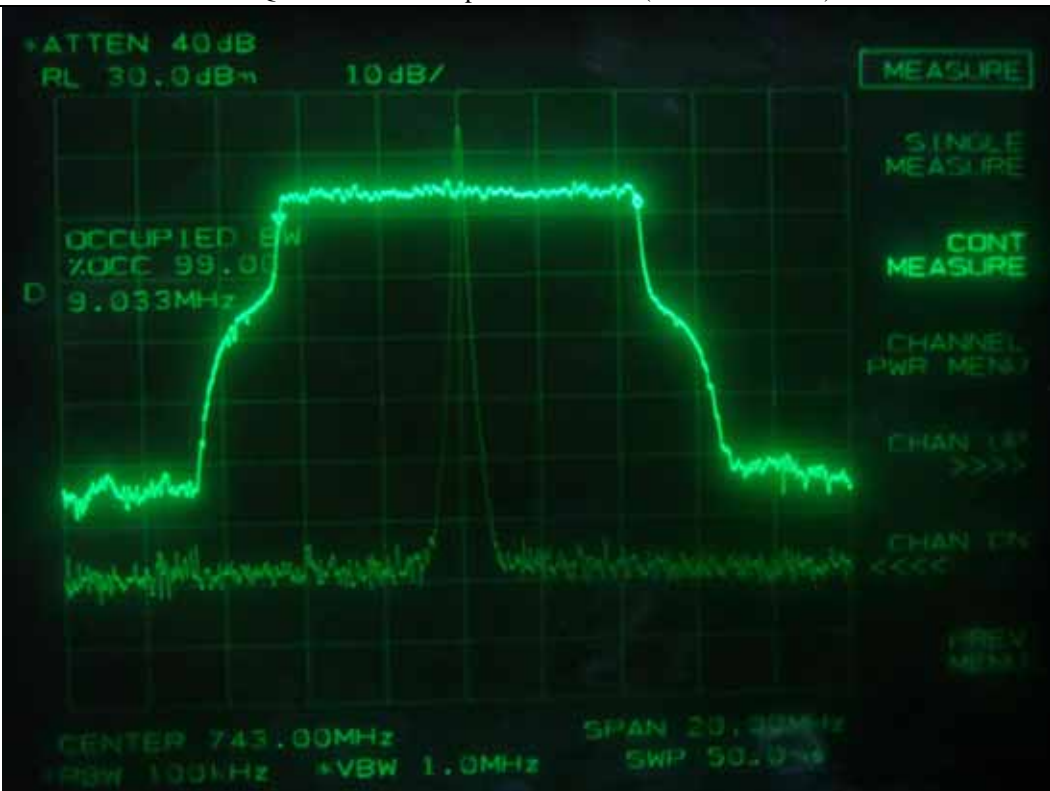
64QAM – 99 % Occupied Bandwidth (Low Channel)



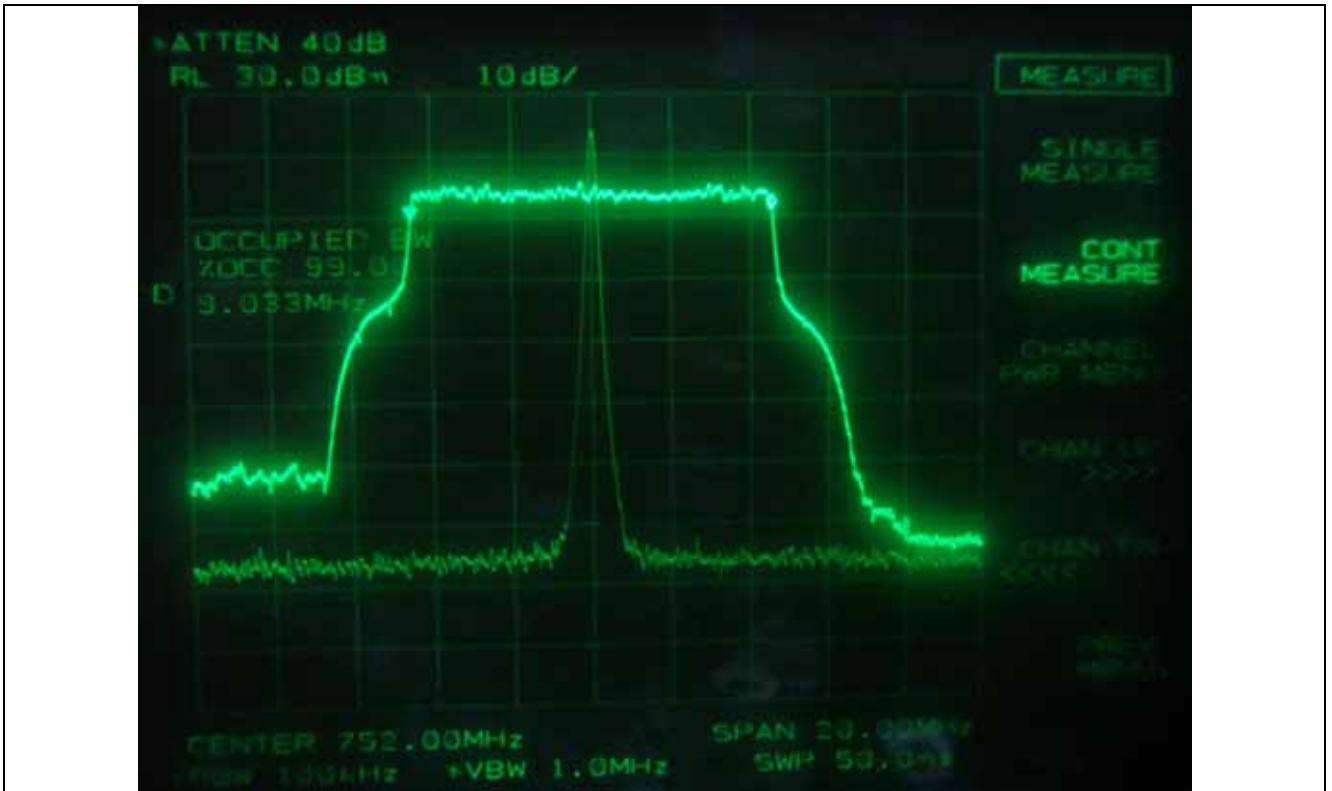
QPSK – 99 % Occupied Bandwidth (Middle Channel)



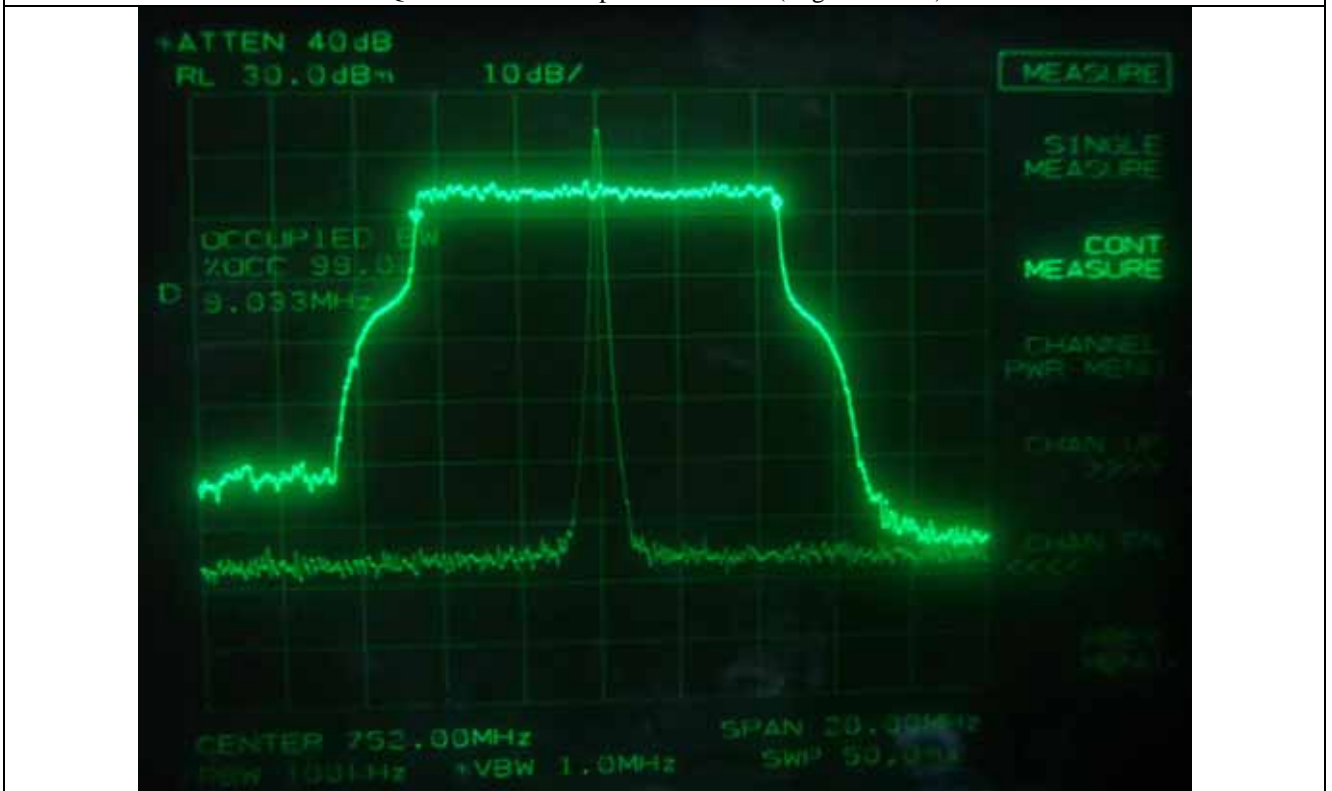
16QAM – 99 % Occupied Bandwidth (Middle Channel)



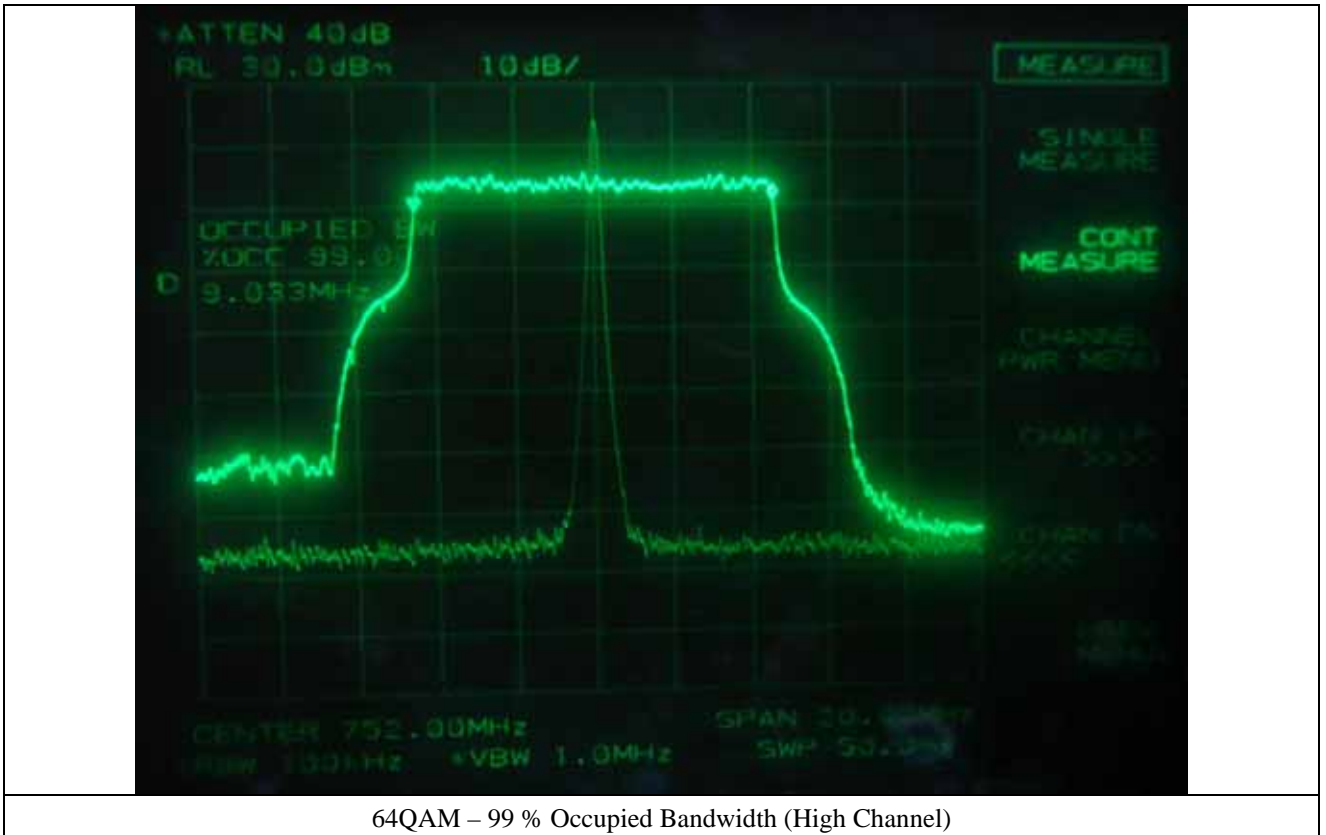
64QAM – 99 % Occupied Bandwidth (Middle Channel)



QPSK – 99 % Occupied Bandwidth (High Channel)



16QAM – 99 % Occupied Bandwidth (High Channel)

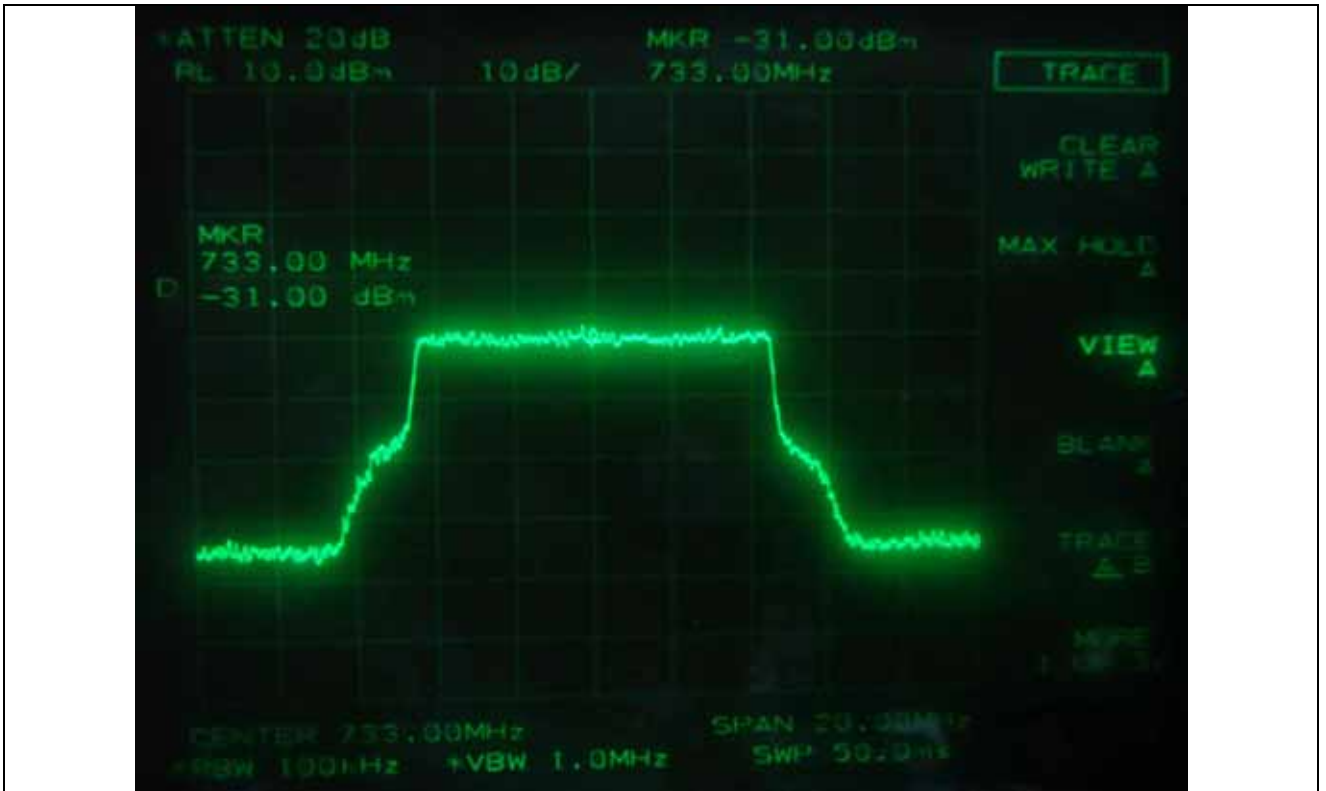




QPSK – Input (Low Channel)



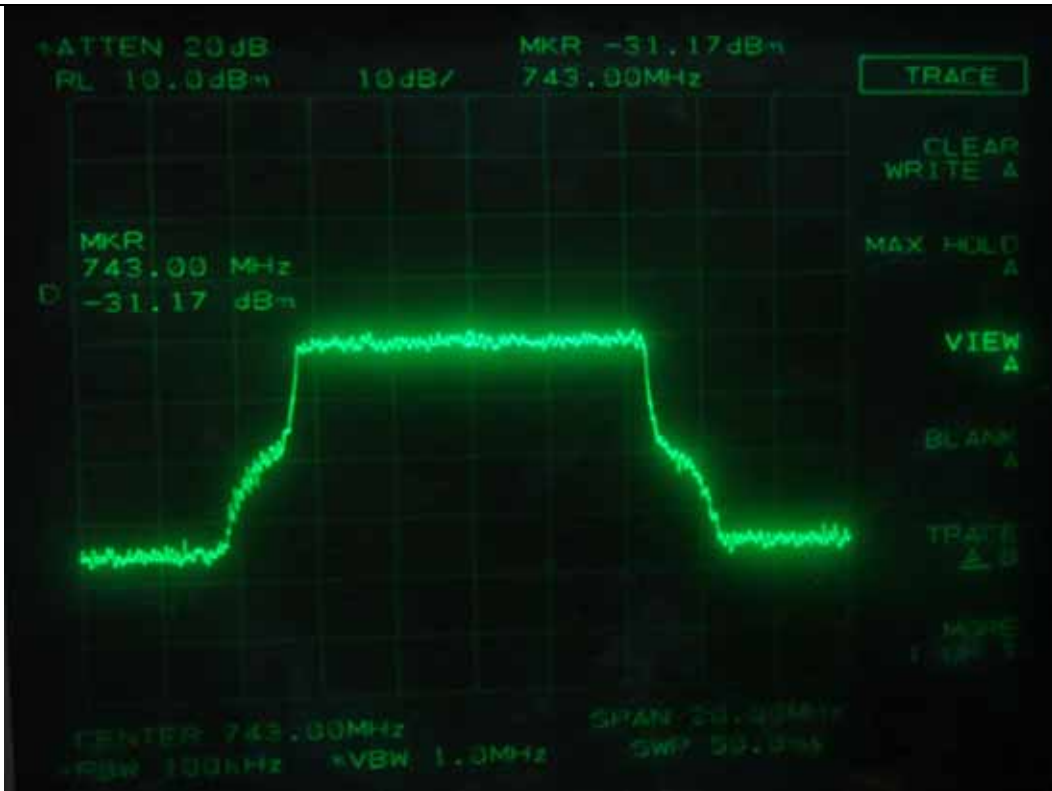
16QAM – Input (Low Channel)



64QAM – Input (Low Channel)



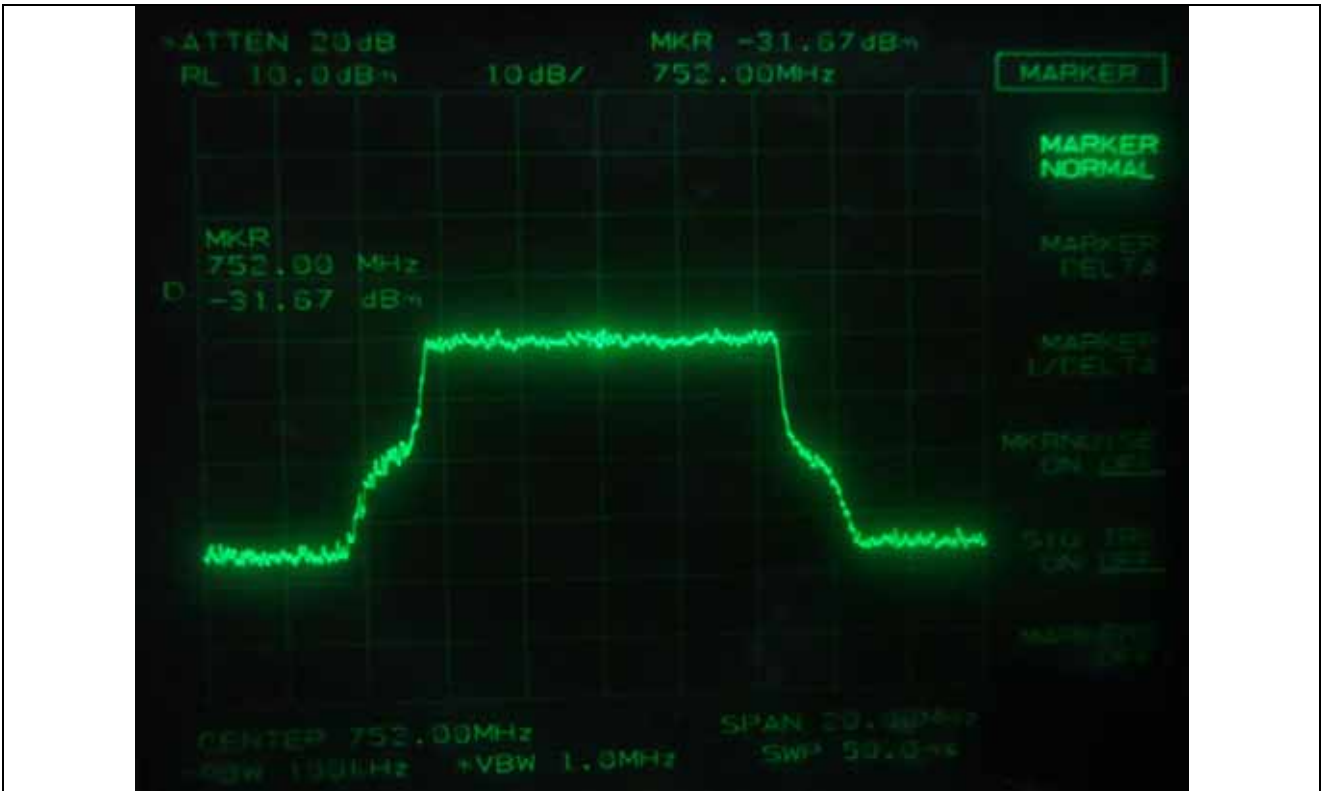
QPSK – Input (Middle Channel)



16QAM – Input (Middle Channel)



64QAM – Input (Middle Channel)



QPSK – Input (High Channel)



16QAM – Input (High Channel)