



Test Report Summary

FCC CFR 47, Part 27

Wireless Communications Service

Manufacturer: ADC Telecommunications

Name of Equipment: InterReach® Fusion 2.5 GHz WiMAX System

Model Number(s): FSN-2500-2-WMAX

Manufacturer's Address: P.O. Box 1101
Minneapolis, MN 55440-1101

Test Report Number: MN080820_WIMAX_2.5

Test Date(s): 11-13 August, 2008 (ETL)
19 August, 2008 (ADC)

According to testing performed at Intertek, the above-mentioned unit is in accordance with the applicable electromagnetic compatibility (EMC) portions of the requirements defined in FCC Part 27.

It is the manufacturer's responsibility to assure that additional production units of this model are manufactured with identical electrical and mechanical characteristics. Any modifications necessary for compliance made during testing on the above mentioned date(s) must be implemented in all production units for compliance to be maintained.

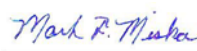
All testing was done in accordance with the Federal Communications Commission's CFR 47 Part 27 and the EUT fulfills the requirements of the Federal Communications Commission's CFR 47 Part 27.

Date: 20 August, 2008

Location: Intertek Testing Services (ETL)
7250 Hudson Blvd., Suite 100
Oakdale, MN 55128
Phone: (651) 730-1188
Fax: (651) 730-1282

ADC Telecommunications
1187 Park Place
Shakopee, MN 55379
Phone: (952) 403-8340

Testing Conducted by (ADC):
And Report Written by:


Mark F. Miska
Compliance Engineer



EMC Emission – T E S T R E P O R T

Test Report File Number: MN080820_WIMAX_2.5

Date of Issue: 20 August, 2008

Model Number(s): FSN-2500-2-WMAX

Product Name: InterReach® Fusion 2.5 GHz WiMAX System

Product Type: Repeater

Applicant: ADC Telecommunications

Manufacturer: ADC Telecommunications

License Holder: ADC Telecommunications

Address: P.O. Box 1101
Minneapolis, MN 55440-1101

Test Result: **Positive** Negative

Test Project Number: 3159556MIN-001
Reference(s)

Total pages including Appendices: 87



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2.0 REVISION DESCRIPTION

Rev	Total Pages	Date	Description
A	87	20 August, 2008	Original Release

3.0 DOCUMENTATION

3.1 Test Regulations

- 27.50 Power limits
- 27.53 Emission limits
- 27.54 Frequency stability

The emissions tests were performed according to the following regulations:

- FCC Part 22
- FCC Part 24
- FCC Part 27**
- FCC Part 90
- IC RSS-131 Issue 2

Environmental Conditions in the lab:

ADC

Temperature: 24° C
Relative Humidity: 42%
Atmospheric Pressure: 98.4 kPa

ETL

15-35° C
30-60%
86-106 kPa

Power Supply Utilized:

Power Supply System : 1 phase, 60 Hz, 120 VAC

3.2 Test Operation Mode

- Standby
- Test Program
- Practice Operation

■ Max composite in and out

3.3 Configuration of the Device Under Test:

Normal Operation – 2496 to 2690 MHz – Transmit (TX) and Receive (RX)

3.4 Product Options:

None

3.5 EUT Specifications and Requirements:

<u>RAU</u>	<u>Main Hub</u>	<u>Expansion Hub</u>
Length: 11.13"	Length: 15.0"	Length: 15.0"
Width: 11.25"	Width: 17.25"	Width: 17.25"
Height: 2.13"	Height: 3.5"	Height: 3.5"
Weight: 5 pounds	Weight: 15 pounds	Weight: 16 pounds

3.6 Cables:

Cable Type	Length	From	To
RF	> 3M	Ancillary Equip	EUT
RF	< 3M	EUT	50 Ohm Load
Power (2)	< 3M	Power	Input Power
Coax (75 Ohm)	> 3M	EUT	EUT
Optical (2)	< 3M	EUT	EUT

3.7 Power Requirements:

<u>Main Hub</u>	<u>Expansion Hub</u>
Voltage: 120 VAC	Voltage: 120 VAC
Amps: 1.0 A	Amps: 1.4 A

3.8 Typical Installation and/or Operating Environment:

Indoor. System is typically employed as an indoor repeater.

3.9 Other Special Requirements:

None

3.10 EUT Software:

Revision Level: Version V.6 or greater
Description: Internet Explorer

3.11 EUT System Components

Description	Model #	Serial #	FCC ID #
FSN-2500-2-WMAX	FUSION 2.5G WIMAX RAU GEN 2	None	
FSN-EH-2-WMAX	FUSION WIMAX EXPANSION HUB REV 2		
FSN-1-MH-2-WMAX	FUSION 2.5G WIMAX MAIN HUB REV 2		

3.12 Support Equipment

Description	Manufacturer	Model #	FCC ID #
Power Meter	HP	EPM-441A	
Signal Generator	Agilent	E4438C	
Signal Generator	Agilent	N5182A	

3.13 Deviations from Standard:

Modifications required to pass:

As indicated on the data sheet(s)

None

Test Specification Deviations: Additions to or Exclusions from:

As indicated in the Test Plan

None

3.14 General Remarks:

None.

3.15 Summary:

The requirements according to the technical regulations are

met

not Met

The equipment under test does

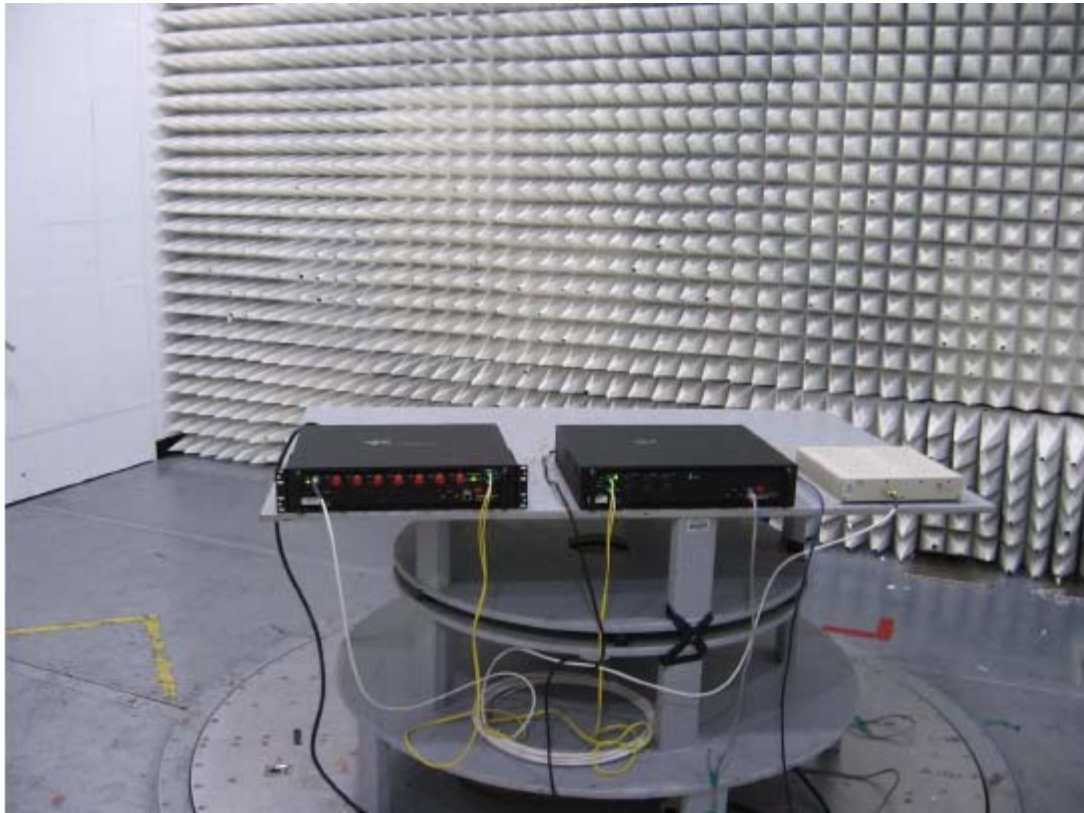
fulfill the general approval requirements mentioned in Section 3.1.

not fulfill the general approval requirements mentioned in Section 3.1.

4.0 TEST SET-UP DRAWINGS AND PHOTOS

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4.1 Test Set-up Photo, Radiated Emissions



4.2 Test Set-up Photo, Radiated Emissions



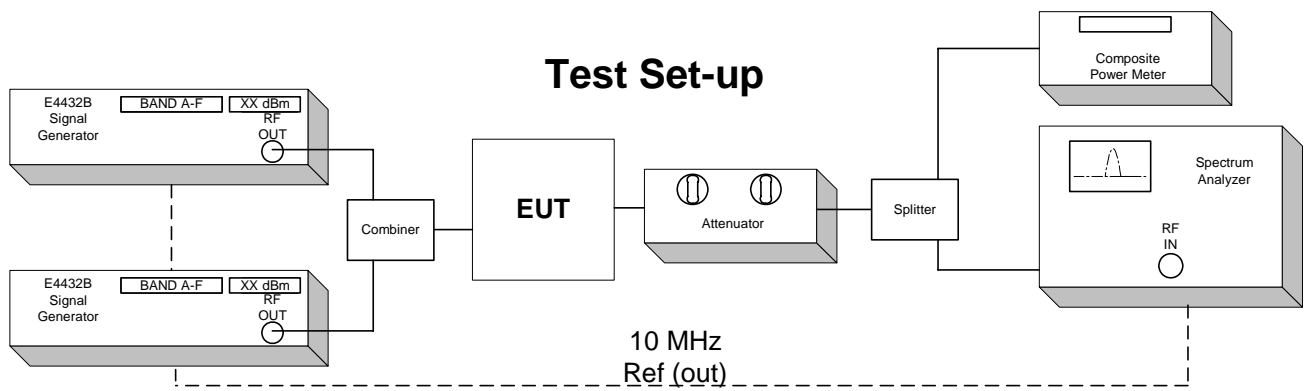
4.3 Test Set-up Drawings

Conducted and Radiated Emission Limits Test

Conducted Output Power Test

Inter-Modulation Test

Occupied Bandwidth Modulation Test



5.0 TEST RESULTS

5.1.1 27.50 RF Power Limits

Test Summary:

- The requirements are: **MET** NOT MET
- Minimum margin of compliance is 12.1 dB at 2593.0 MHz (64QAM)

Test Location:

- ETL (Oakdale, MN)
- ADC facility (Shakopee, MN)**

Test Distance:

- 3 Meters
- 10 Meters
- Conducted measurement**

Test Equipment (ADC):

1, 2, 6, 7, 13, 15

Test Limit:

Less than 3 Watts ERP or 34.77 dBm Limit

Test Data:

[Conducted Output Power; Section 7.2](#)

[Table of Contents; Section 1.0](#)

Test Engineer: Mark F. Miska

Date: 19 August, 2008

5.1.2 27.54 Frequency Stability

Test Summary:

- The requirements are: **MET** NOT MET
- The fundamental emission stays within the authorized frequency block.
- Frequency measured over a temperature range of –25 to 45° C and an input voltage range of 100 to 240 VAC.

Test Location:

ETL (Oakdale, MN)

ADC facility (Shakopee, MN)

Test Equipment (ADC):

3, 4, 5, 6, 9, 13, 15

Test Limit:

The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

Test Data:

[Frequency Stability; Section 7.3](#)

[Table of Contents; Section 1.0](#)

Test Engineer: Mark F. Miska

Date: 19 August, 2008

5.1.3 27.53 Emission Limitations

Test Summary:

- The requirements are: **MET** NOT MET
- Out of band emissions were less than -13 dBm.
- Outside the emission bandwidth of the carrier, all emissions are attenuated at least 26 dB below the transmitter power.

Test Location:

ETL (Oakdale, MN)

ADC facility (Shakopee, MN)

Test Equipment (ADC):

1, 2, 6, 7, 13, 15

Test Limit:

Out of band emissions:

Attenuated below the transmitting power (P) by a factor of at least $43 + 10\log(P)$ dB, or -13 dBm.

Outside of the carrier emissions bandwidth:

26 dB below the transmitter power

Test Data:

[Conducted Emissions; Section 7.1](#)

[Intermodulation; Section 7.4](#)

[Occupied Bandwidth; Section 7.5](#)

Radiated Emissions; ([Appendix B](#))

[Table of Contents; Section 1.0](#)

Test Engineer: Mark F. Miska

Date: 19 August, 2008

Date: 19 August, 2008

Date: 19 August, 2008

6.0 TEST EQUIPMENT

[Table of Contents: Section 1.0](#)

Number	Description	Manufacturer	Model	ADC Serial Number	Cal Due	Used
1	Spectrum Analyzer	HP	8563E	MC27690	6-5-09	<input checked="" type="checkbox"/>
2	Power Meter	HP	EPM-441A	MC27670	10-9-08	<input checked="" type="checkbox"/>
3	Multimeter	Fluke	79111	MC34730	6-24-10	<input checked="" type="checkbox"/>
4	Frequency Counter	HP	5347A	MC27548	1-16-09	<input checked="" type="checkbox"/>
5	Temperature Chamber	Thermotron	SM-32C	MC18966	4-8-09	<input checked="" type="checkbox"/>
6	Signal Generator	Agilent	E4437B	967974	1-15-10	<input checked="" type="checkbox"/>
7	Signal Generator	Agilent	E4438C	1013210	2-9-09	<input checked="" type="checkbox"/>
8	Attenuator	Huber Suhner	6810.17.A	N/A	CNR	<input type="checkbox"/>
9	Variable Auto Transformer	Staco	1520CT	MC44655	CNR	<input checked="" type="checkbox"/>
10	Digital Barometer	Fisher Scientific	02-403	MC50719	10-28-09	<input checked="" type="checkbox"/>
11	Data Acquisition Unit	Fluke	Hydra	MC27549	10-8-08	<input type="checkbox"/>
12	Attenuator	Aeroflex	49-30-33	N/A	CNR	<input type="checkbox"/>
13	Attenuator	Aeroflex	86-30-12	N/A	CNR	<input checked="" type="checkbox"/>
14	LNA	Lucix Corp	C020200L 1603	N/A	CNR	<input type="checkbox"/>
15	Signal Generator	Agilent	N5182A	LGC-522	3-22-10	<input checked="" type="checkbox"/>

Equipment with a Calibration Not Required (CNR) listing is verified and compensated for with NIST traceable calibrated equipment.

7.0

APPENDIX A

Conducted Emissions Test Data

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Test Engineer: Mark F. Miska

7.1 Conducted Emission Limits Test

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[Back to Emission Limits: Section 5.1.3](#)

The out of band emissions were measured directly from the EUT antenna output in the RX and TX path using a spectrum analyzer from 30 MHz to the 10th harmonic of the highest carrier frequency. Test signals used are 64QAM and QPSK. The different signals were input one at a time to the EUT. In all cases, the out of band emissions were less than -13 dBm from the equation

$$(19\text{dBm} - [43 + 10\log(0.08\text{W})])$$

Band edge compliance is also demonstrated using a 64QAM and QPSK signal at the upper and lower limits of the band.

The Main Hub and Expansion units are Part 15 devices and have been tested and are compliant as such.

Industry practice has generally set the input signal power level. Test signal used was ≈ 0 dBm input to Main Hub in the TX Path.

Industry practice has generally set the input signal power level. Test signal used was ≈ -33 dBm input to RAU in the RX Path.

Industry practice has generally set the output signal power level.

Main Hub:
Range: 100-240 VAC
Tested @: 120 VAC
Tested @: 1.0 A

Expansion Hub:
Range: 100-240 VAC
Tested @: 120 VAC
Tested @: 1.4 A

Remote Access Unit (RAU):
Range: 54 VDC
Tested @: 54 VDC
Tested @: 1.1 A

Application details for 2.1033(c)(10), and 2.1033(c)(13):

System Power is limited by a limiting attenuation chip (ALC) in WiMAX Main Hub with 30 dB of head room. Single channel operation, or multi-channel operation will not exceed nominal gain of the system.

PLL creates all the Local Oscillators that convert signal to IF and RF signals. When PLL is unlocked the band is shut down, this is to avoid transmission of any incorrect frequency.

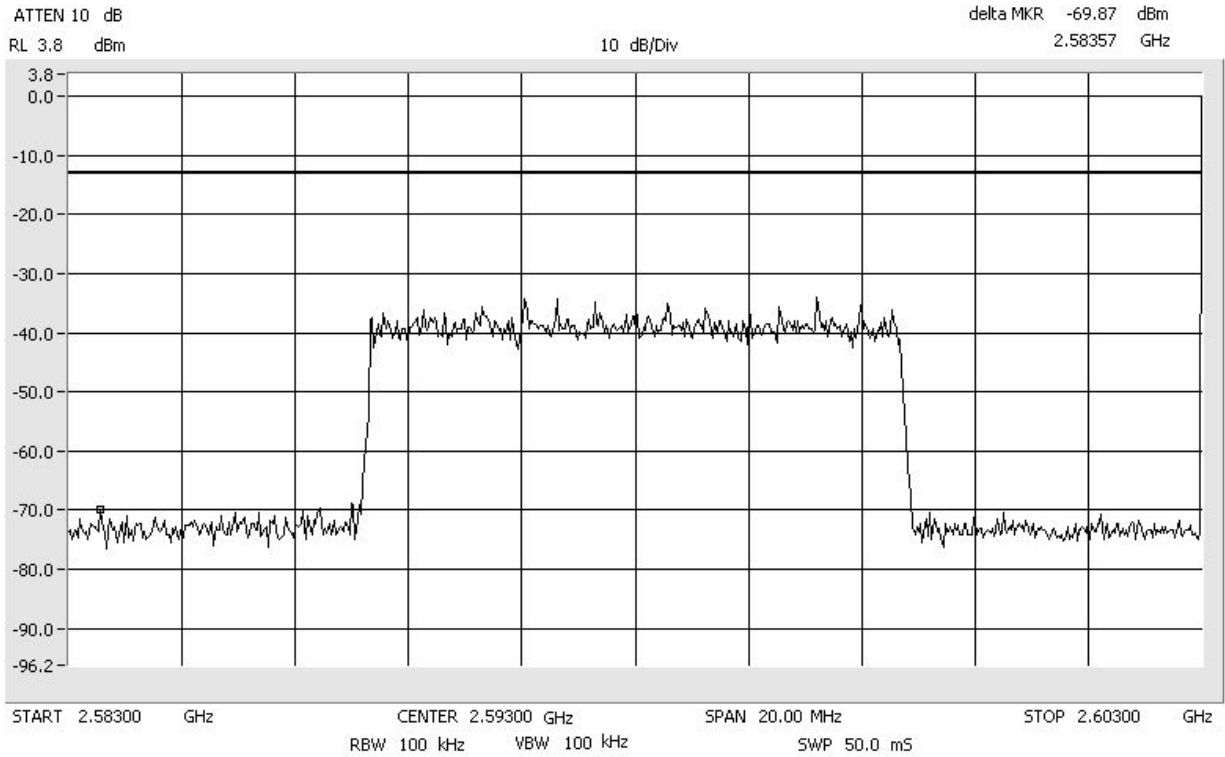
Internal to the electronics, the use of SAW filters provides for higher Q roll-off at band edges.

This equipment does not modulate the RF, so there is no modulation limiter. This equipment does not change the modulation of the RF or the occupied bandwidth of any channel. It transports the signal, as is, over an optical link. The RF input is not changed in the RF output.

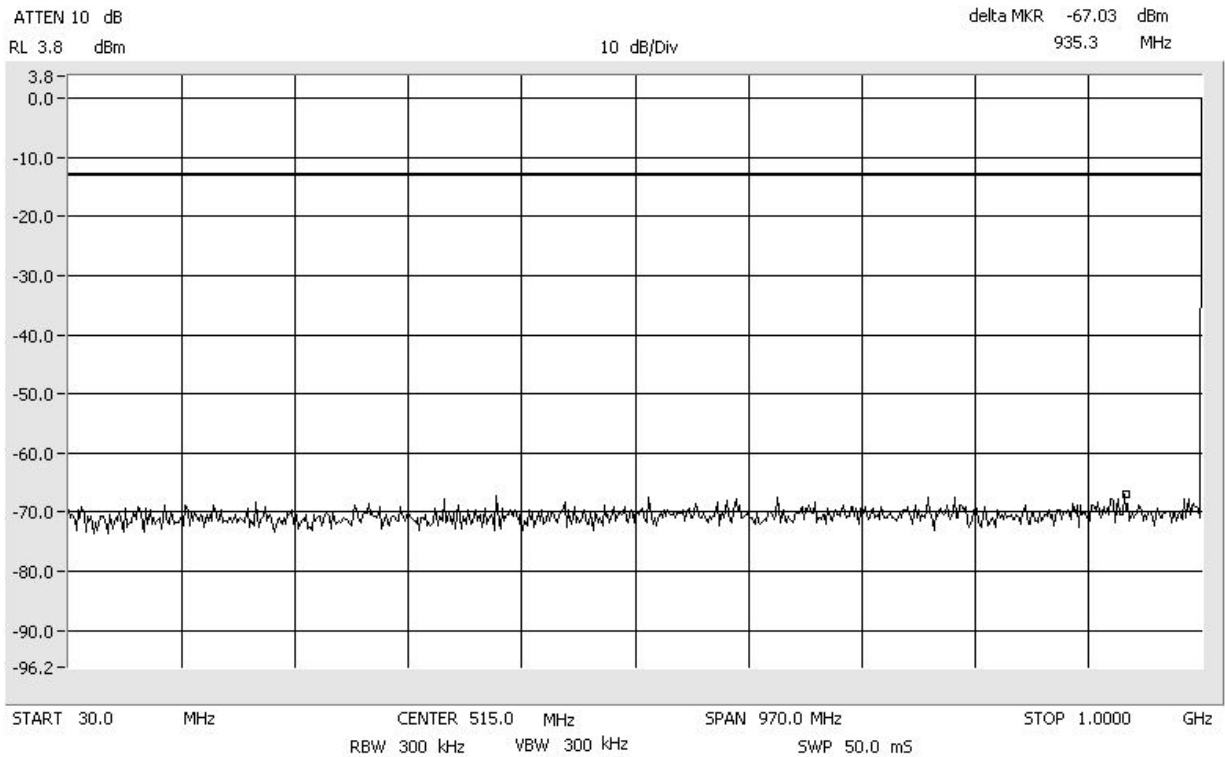
This is a constant gain device, so the setup controls the output. There is an overdrive and overpower limit control that prevents excess power.

Results:
Pass (See plots)

Conducted Emissions 64QAM WiMAX
Center: 2593 MHz Span: 20 MHz RBW/VBW: 100 kHz

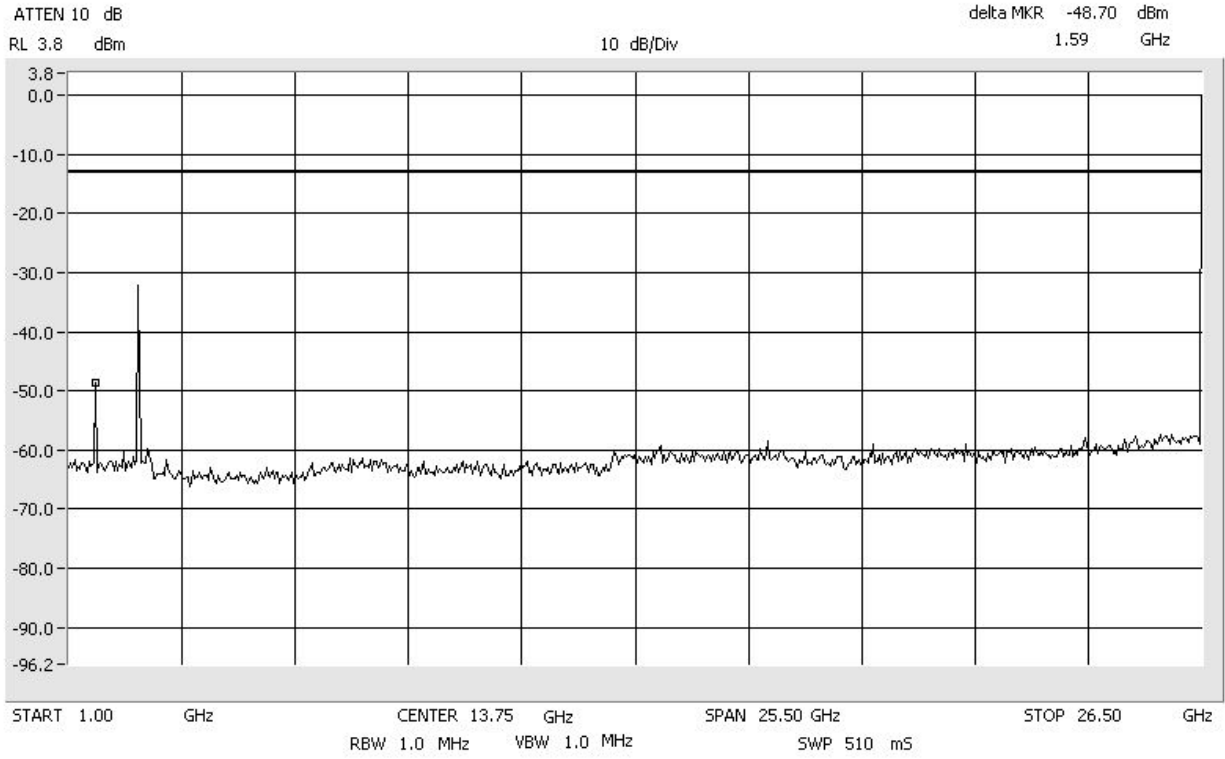


Conducted Emissions 64QAM WiMAX
Span: 30 MHz to 1 GHz RBW/VBW: 300 kHz

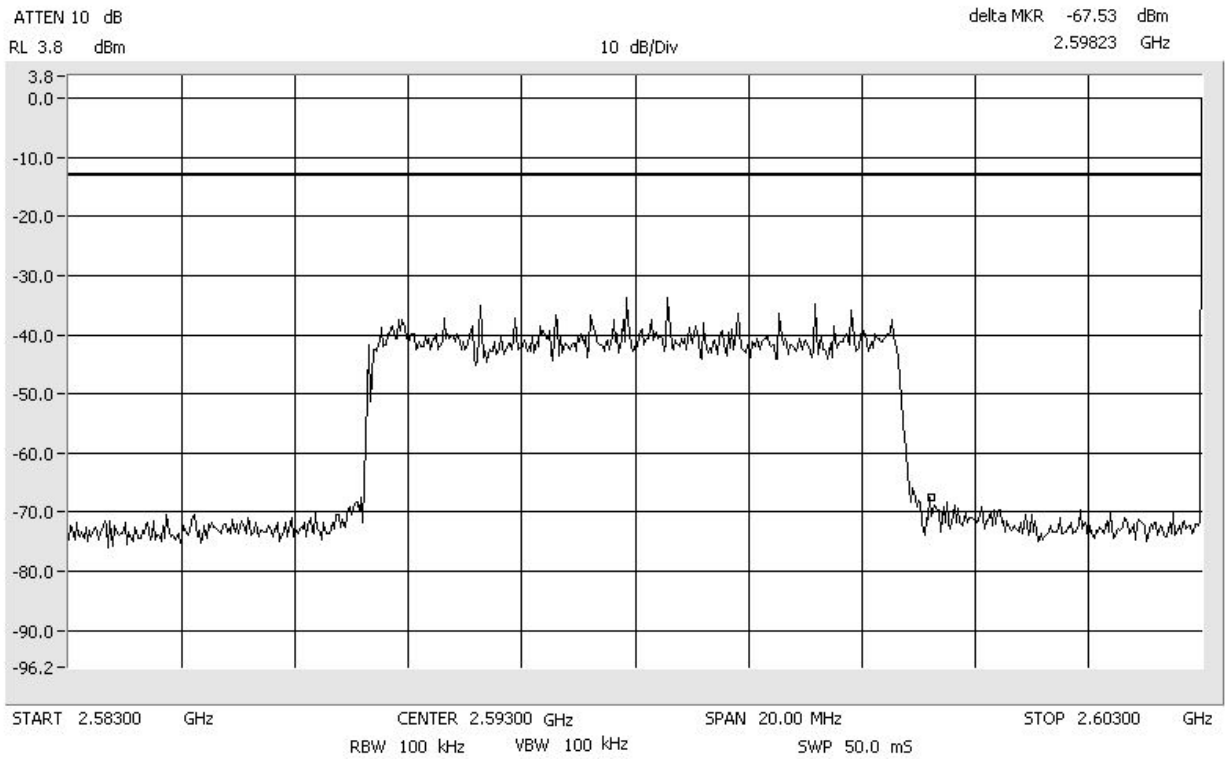


Conducted Emissions
Span: 1 GHz to 26.5 GHz

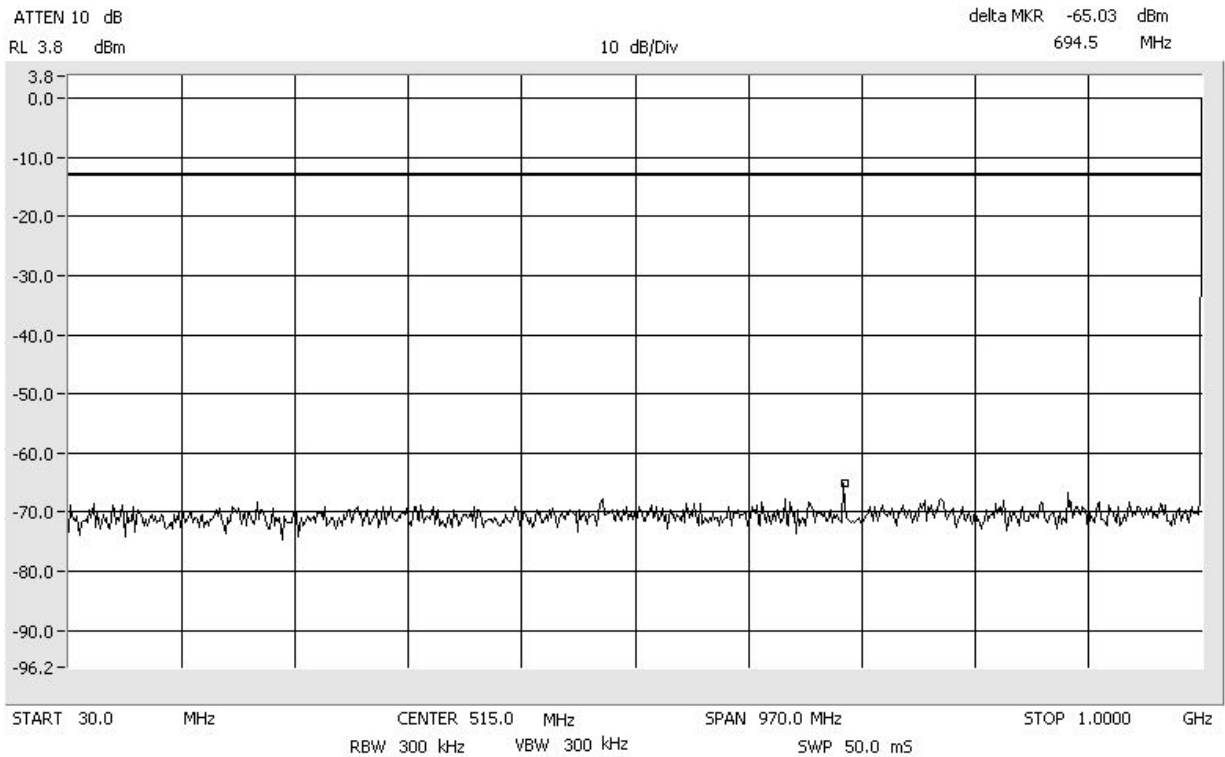
64QAM WiMAX
RBW/VBW: 1 MHz



Conducted Emissions QPSK WiMAX
Center: 2593 MHz Span: 20 MHz RBW/VBW: 100 kHz

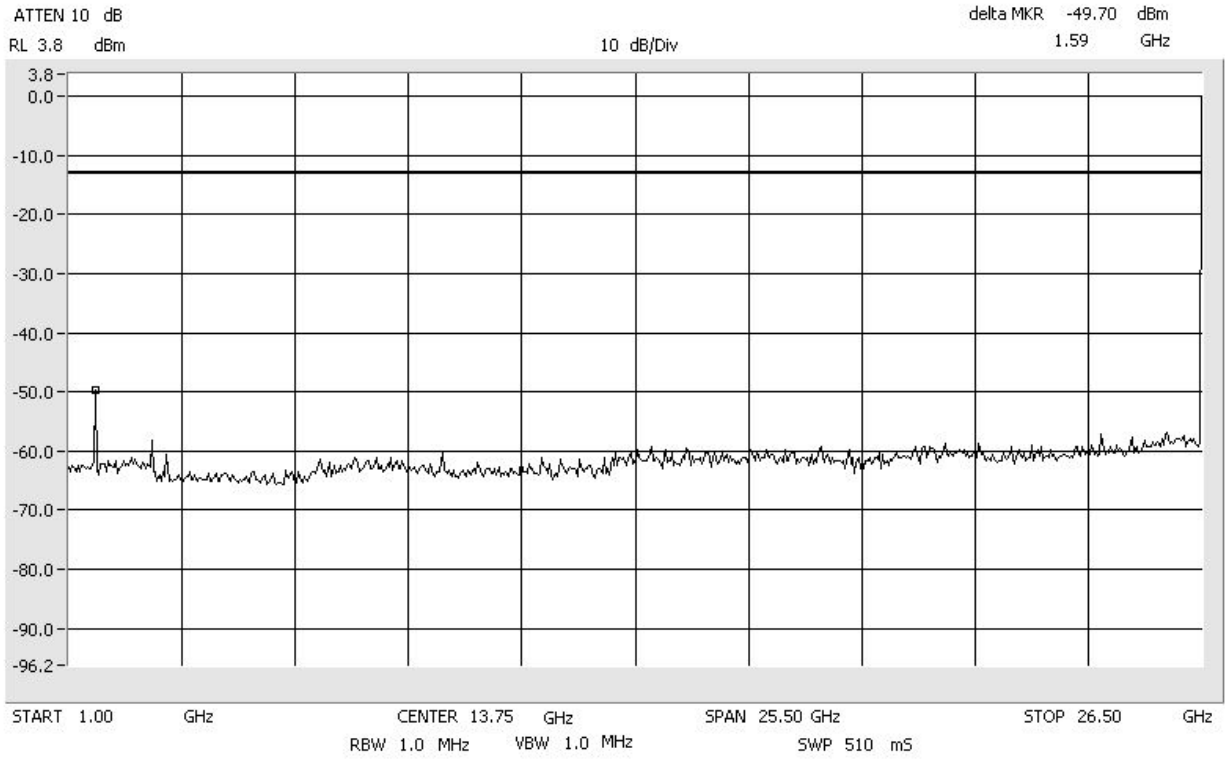


Conducted Emissions QPSK WiMAX
Span: 30 MHz to 1 GHz RBW/VBW: 300 kHz

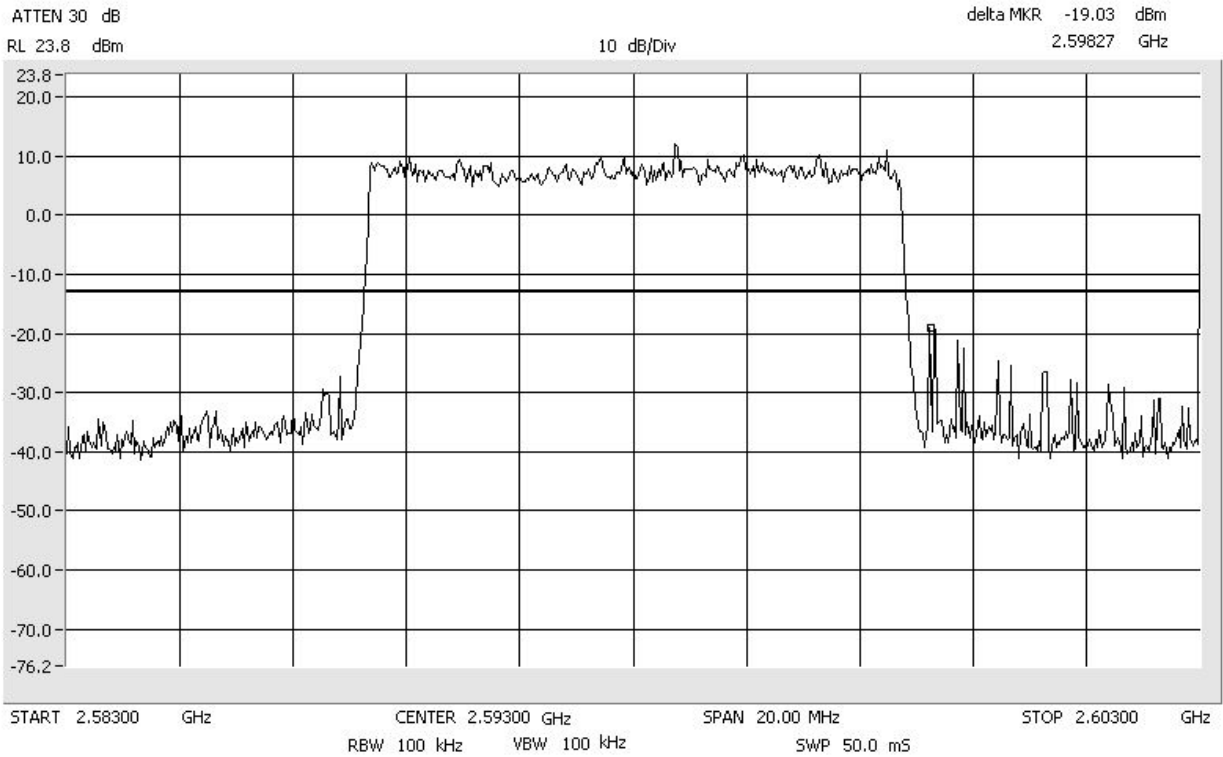


Conducted Emissions
Span: 1 GHz to 26.5 GHz

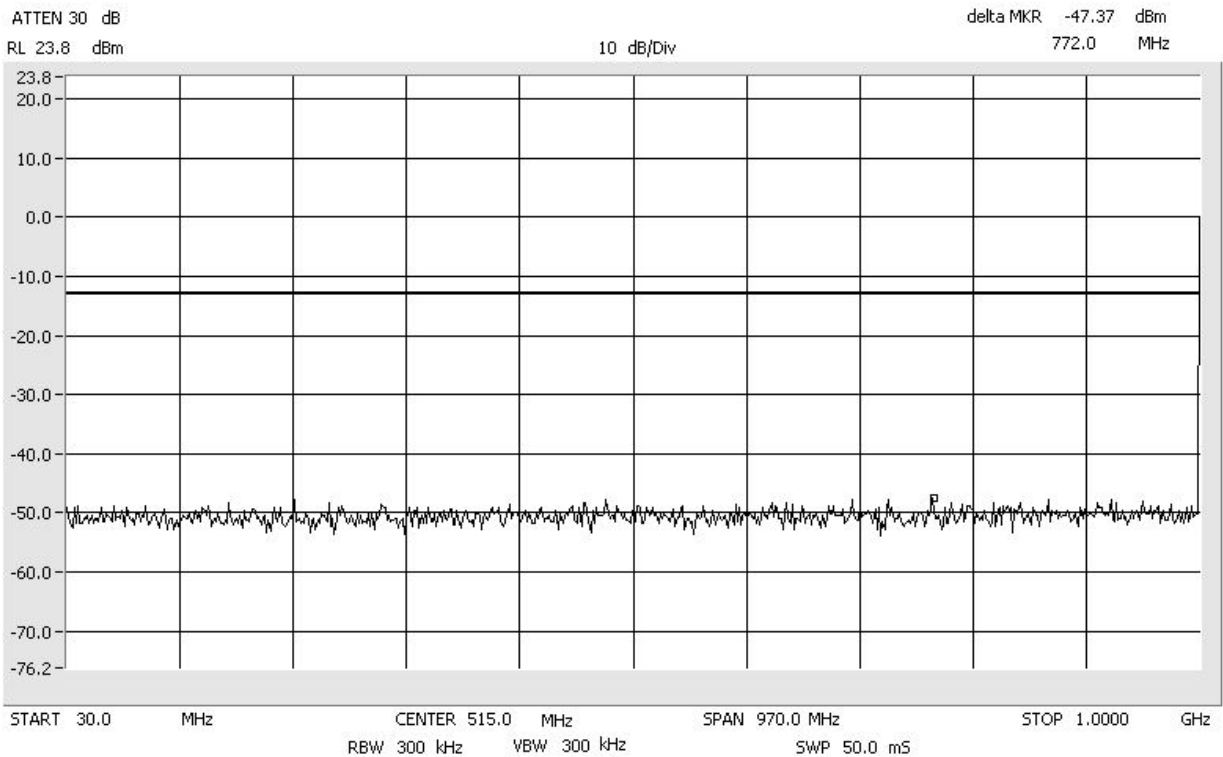
QPSK WiMAX
RBW/VBW: 1 MHz



Conducted Emissions 64QAM WiMAX
 Center: 2593 MHz Span: 20 MHz RBW/VBW: 100 kHz

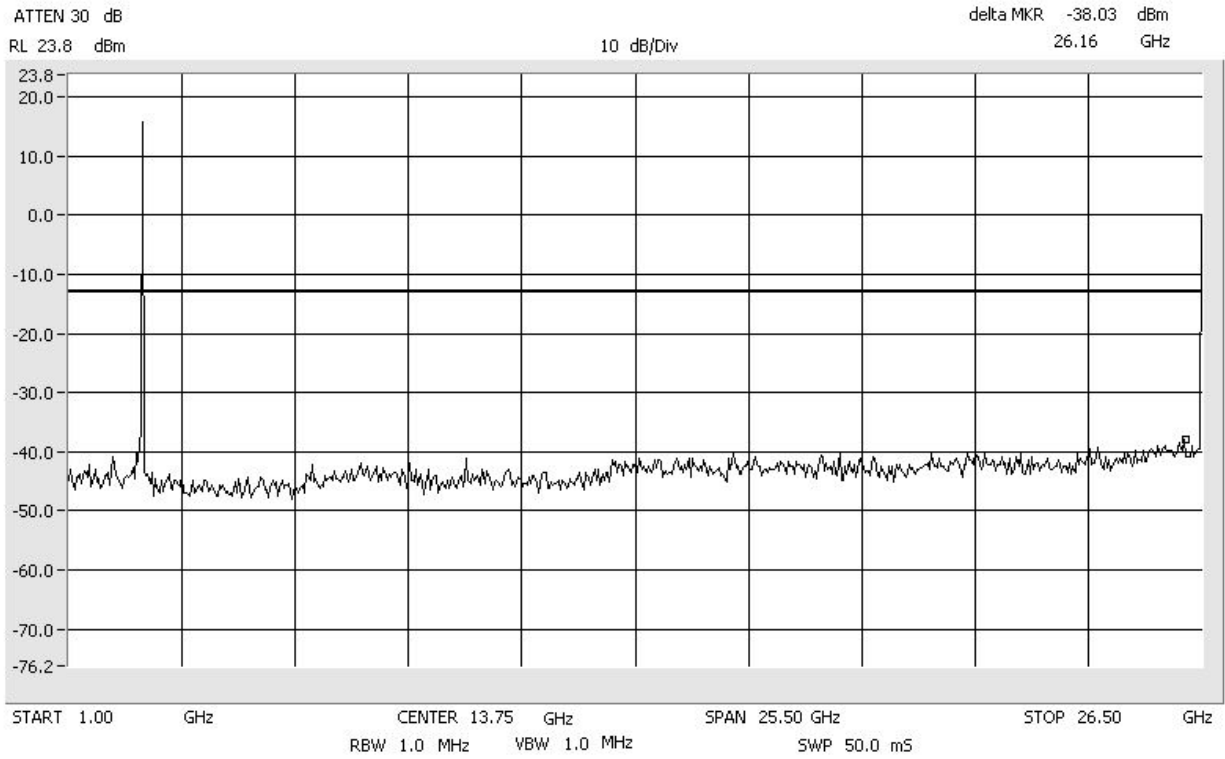


Conducted Emissions 64QAM WiMAX
 Span: 30 MHz to 1 GHz RBW/VBW: 300 kHz

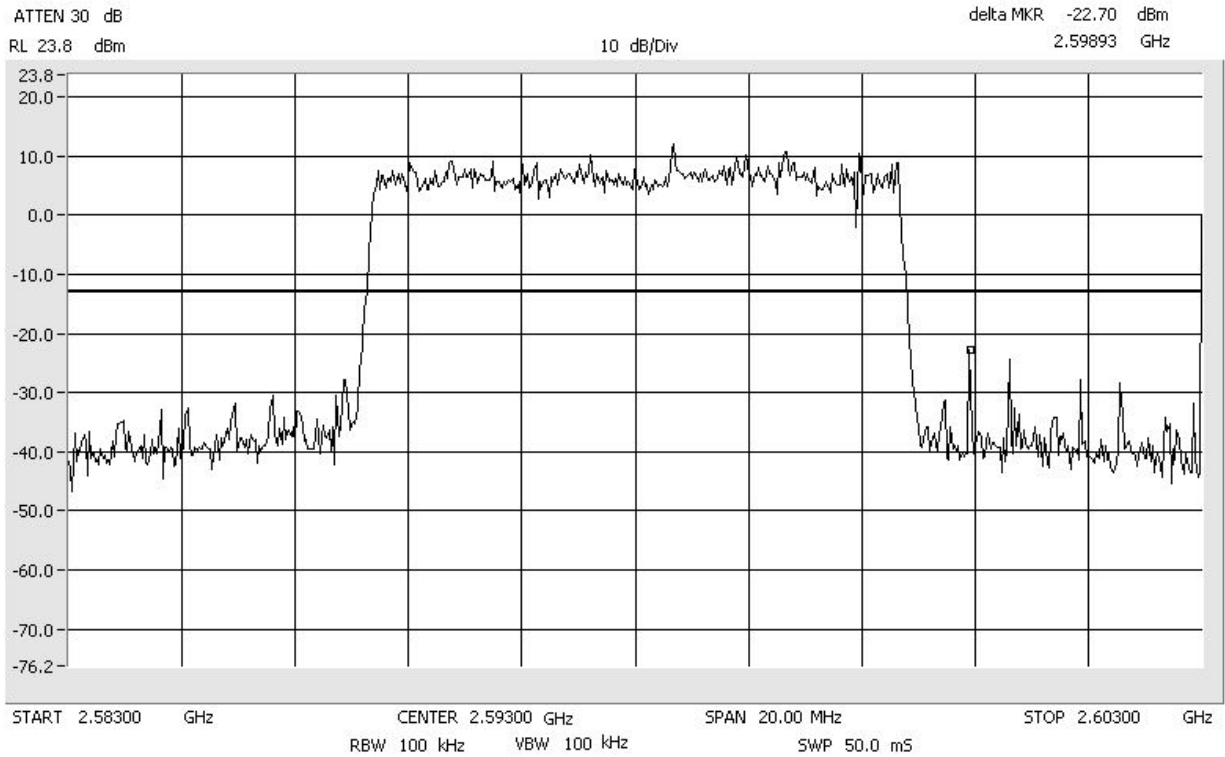


Conducted Emissions
Span: 1 GHz to 26.5 GHz

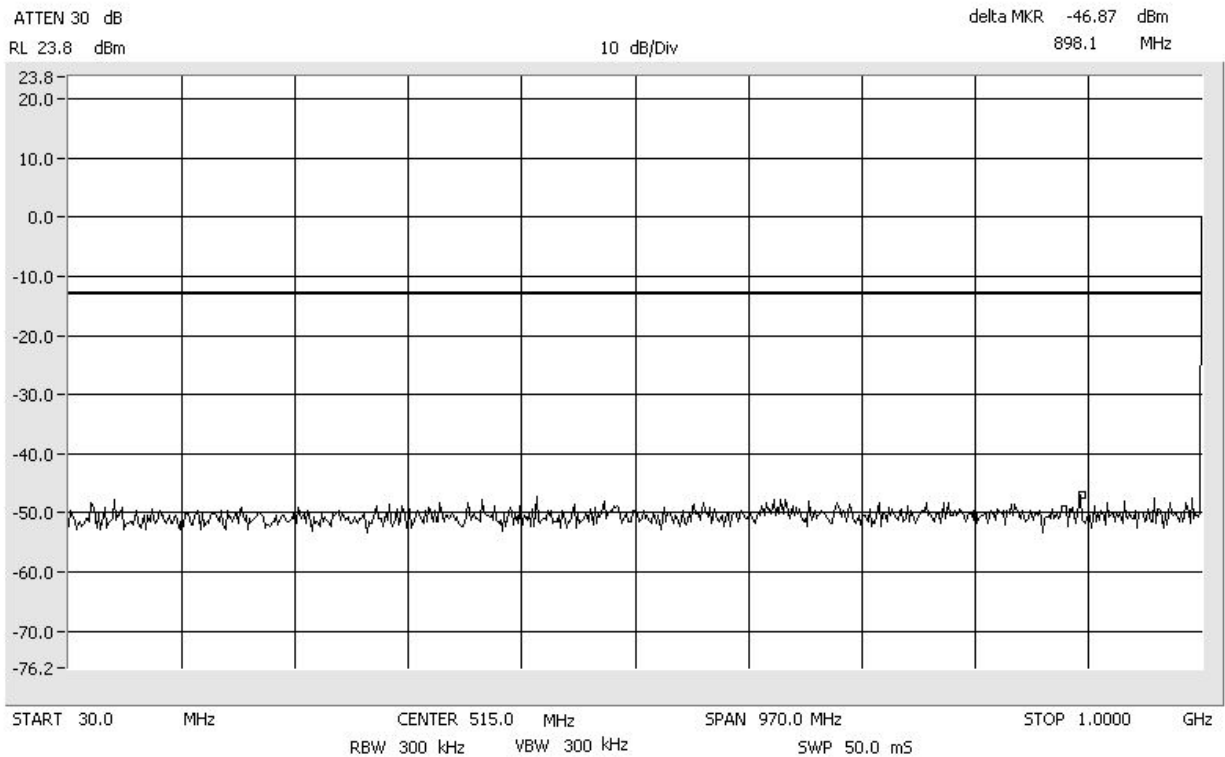
64QAM WiMAX
RBW/VBW: 1 MHz



Conducted Emissions QPSK WiMAX
Center: 2593 MHz Span: 20 MHz RBW/VBW: 100 kHz

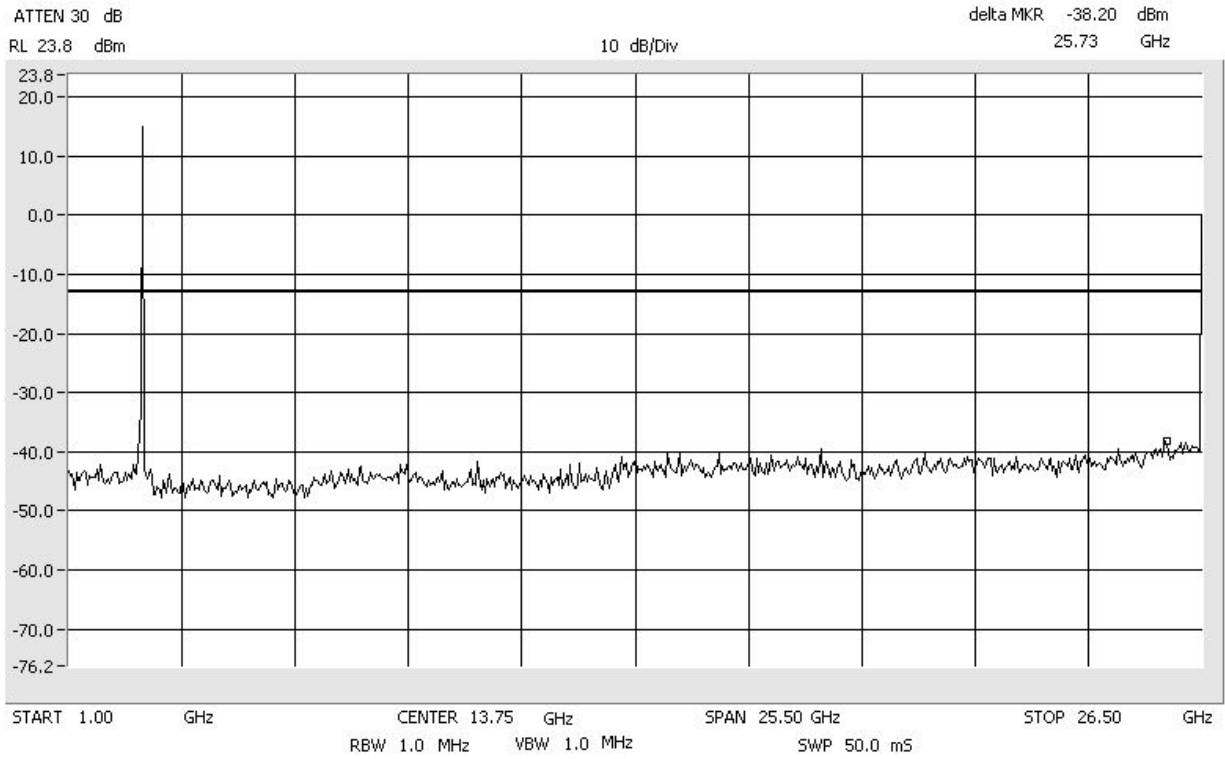


Conducted Emissions QPSK WiMAX
Span: 30 MHz to 1 GHz RBW/VBW: 300 kHz

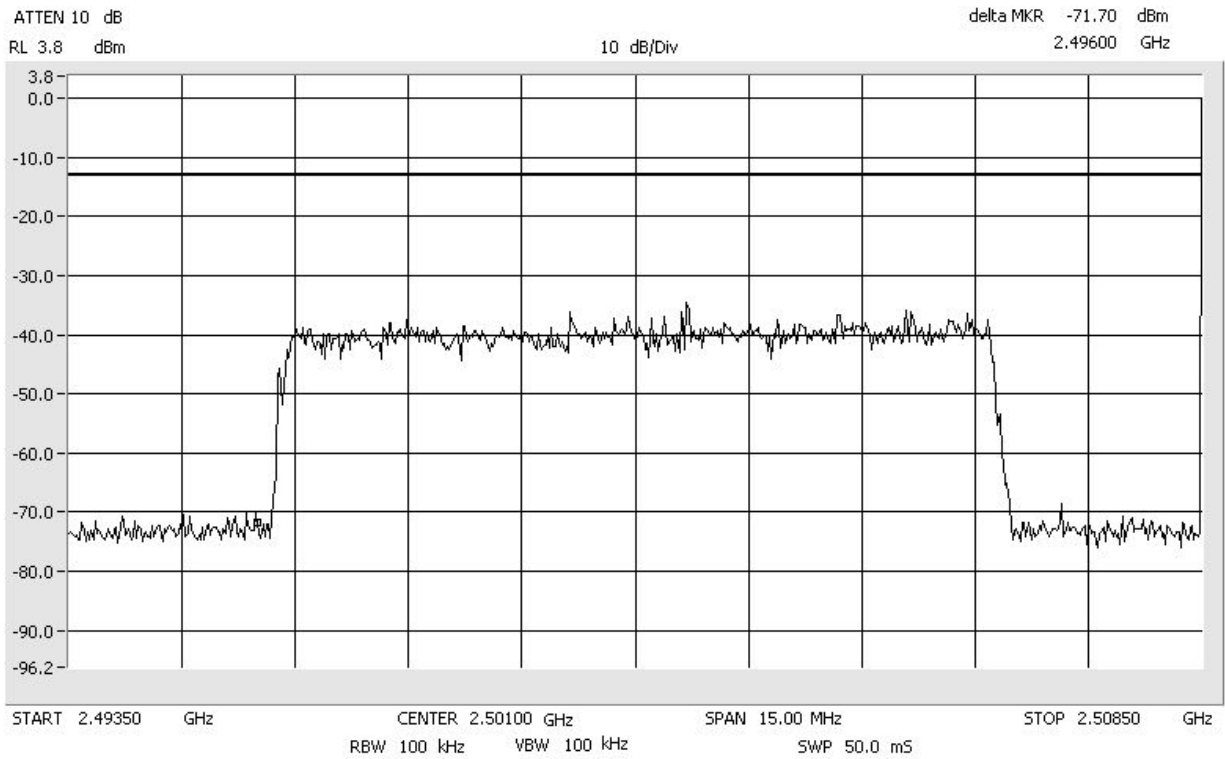


Conducted Emissions
Span: 1 GHz to 26.5 GHz

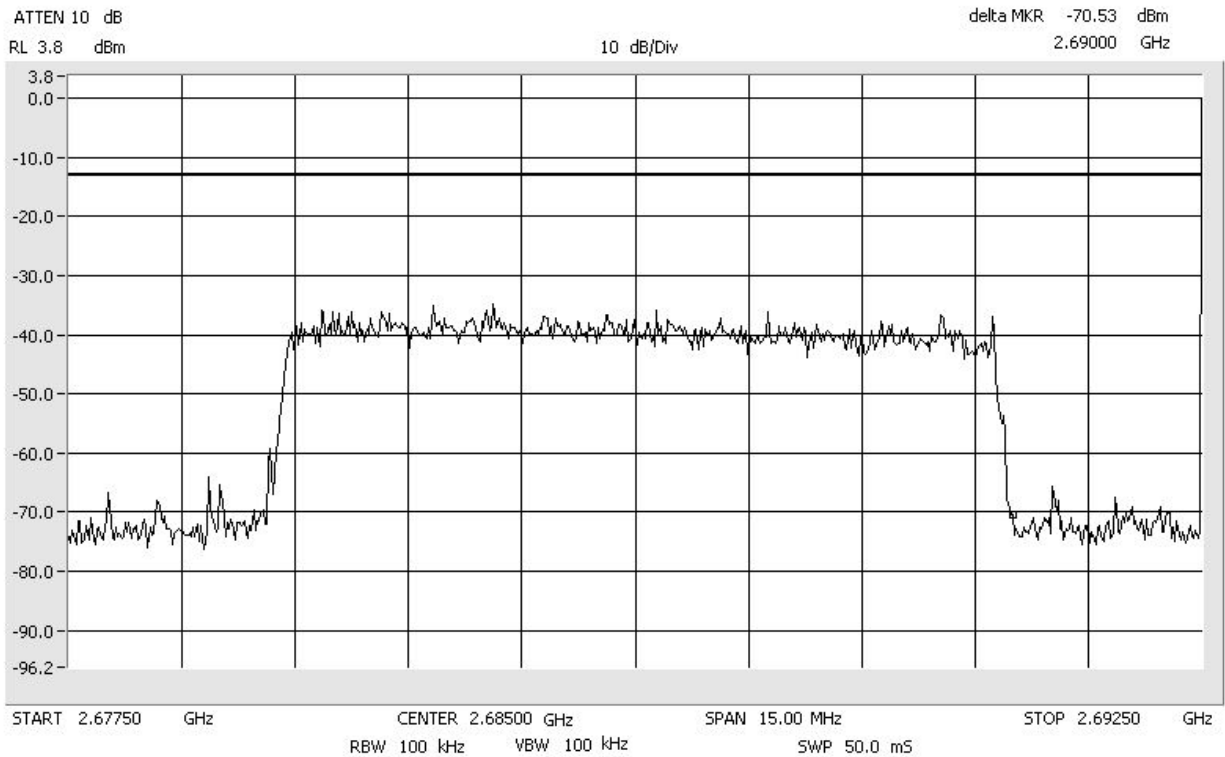
QPSK WiMAX
RBW/VBW: 1 MHz



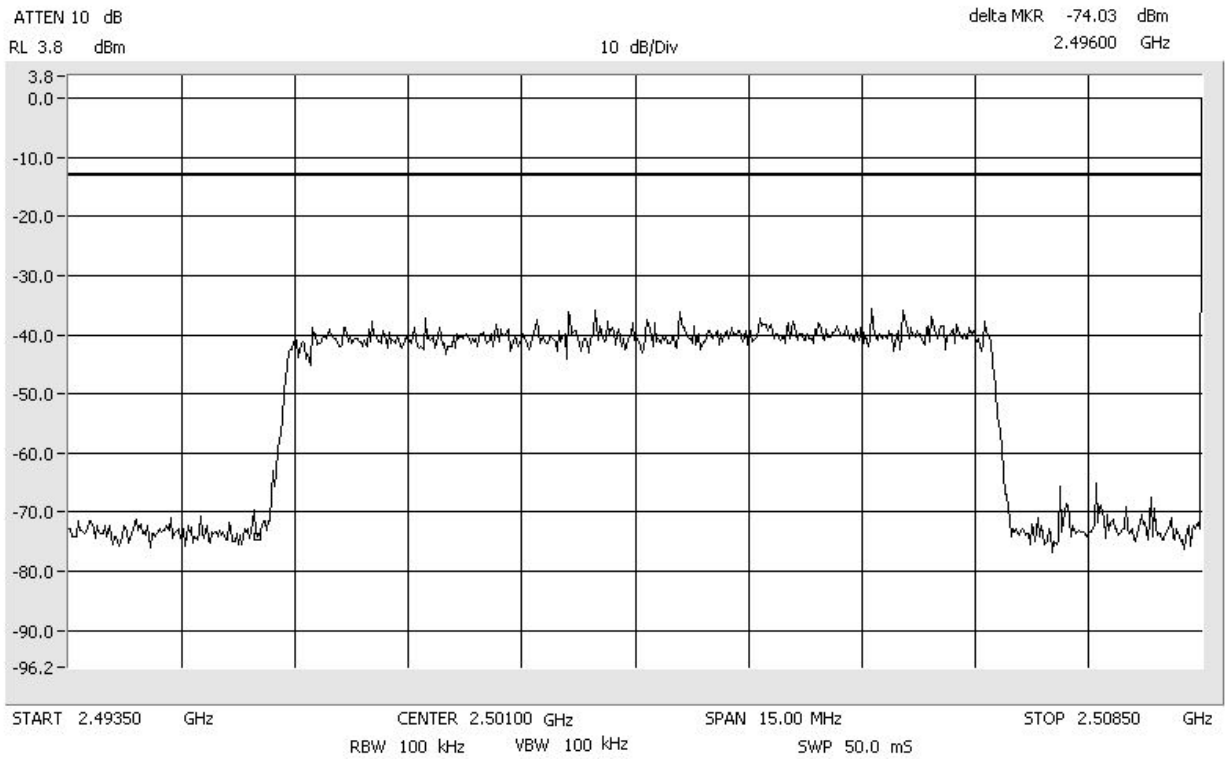
Band_Edge_RX 64QAM
Center: 2501.0 MHz Span: 15 MHz RBW: 100 kHz VBW: 100 kHz



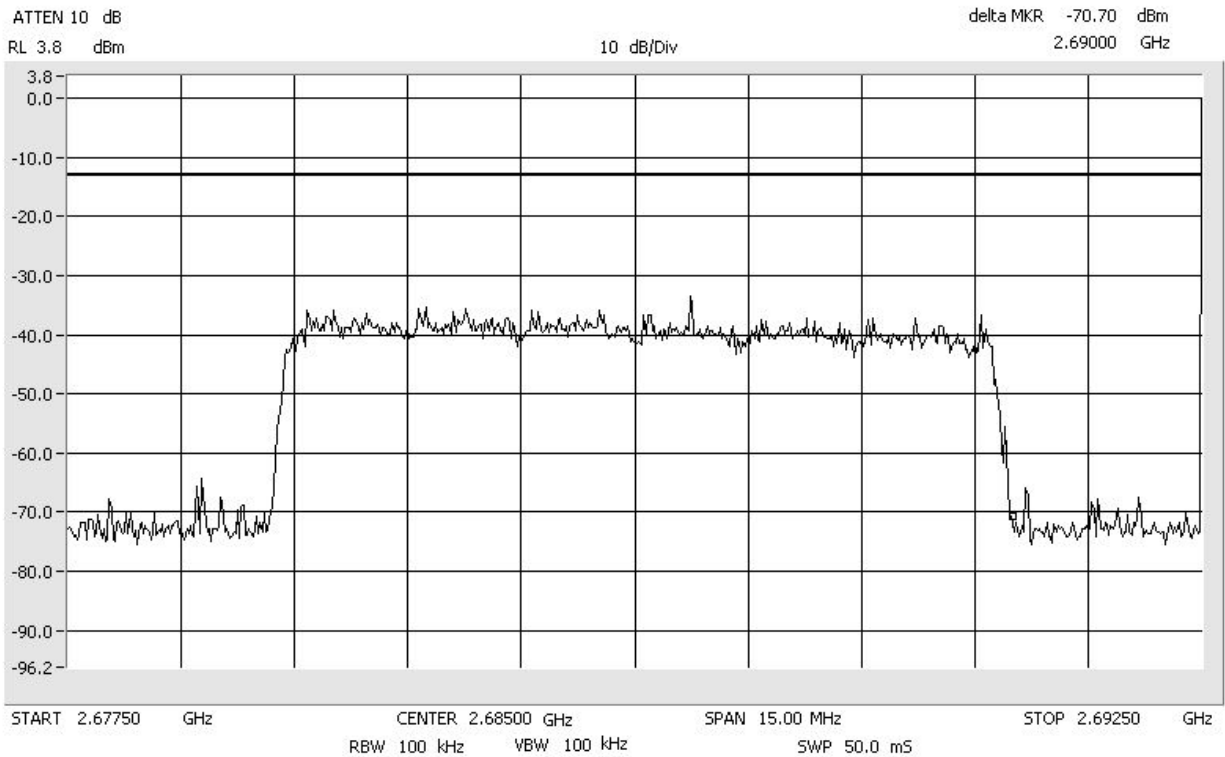
Band_Edge_RX 64QAM
Center: 2685.0 MHz Span: 15 MHz RBW: 100 kHz VBW: 100 kHz



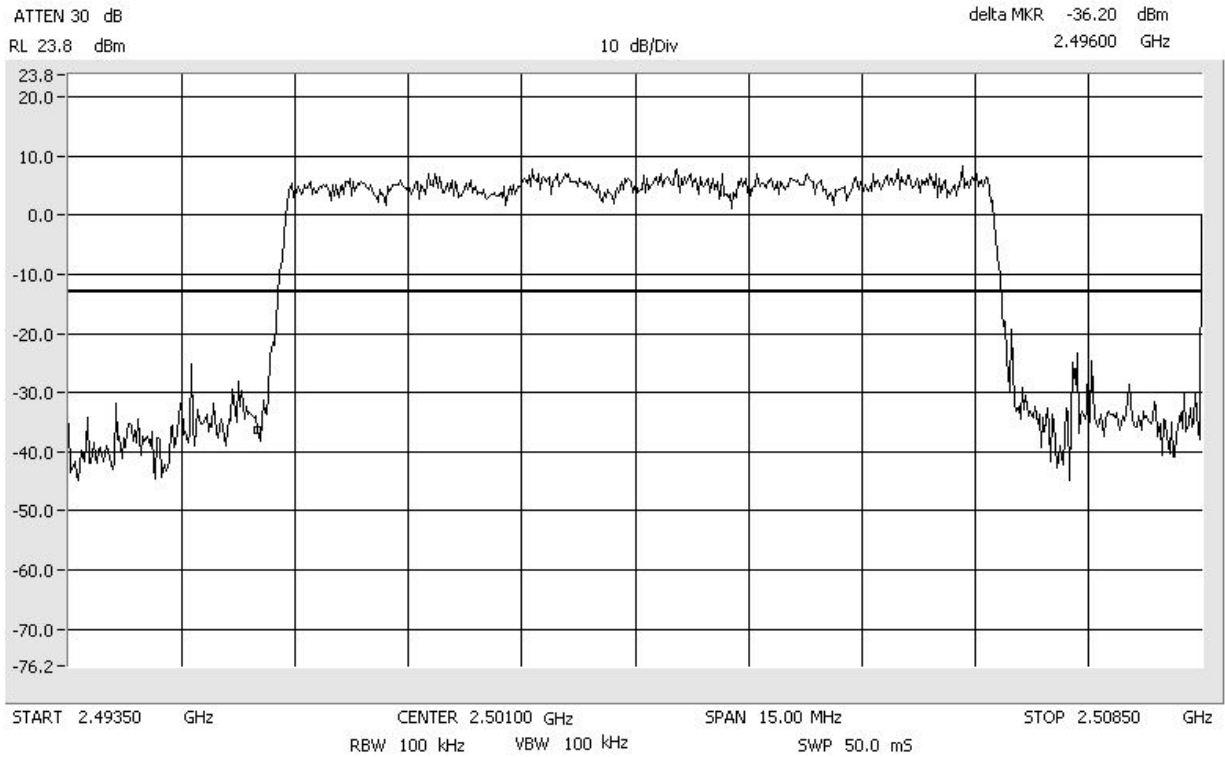
Band_Edge_RX QPSK
Center: 2501.0 MHz Span: 15 MHz RBW: 100 kHz VBW: 100 kHz



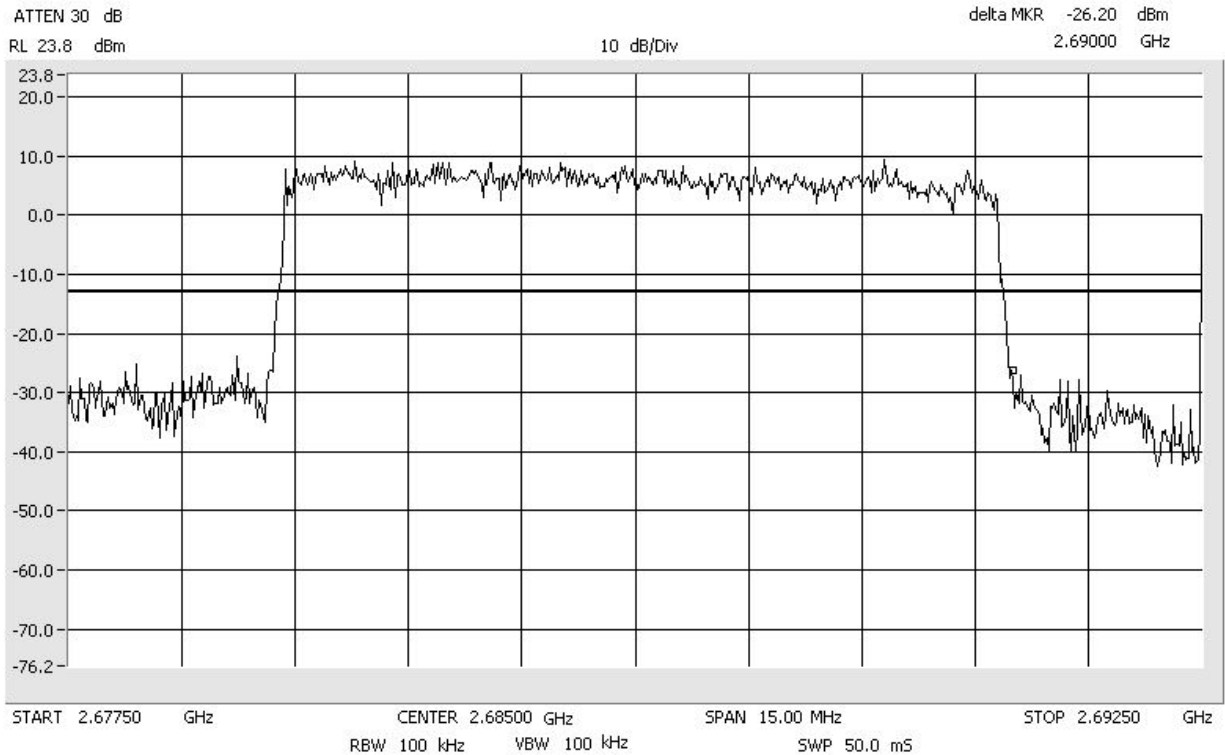
Band_Edge_RX QPSK
Center: 2685.0 MHz Span: 15 MHz RBW: 100 kHz VBW: 100 kHz



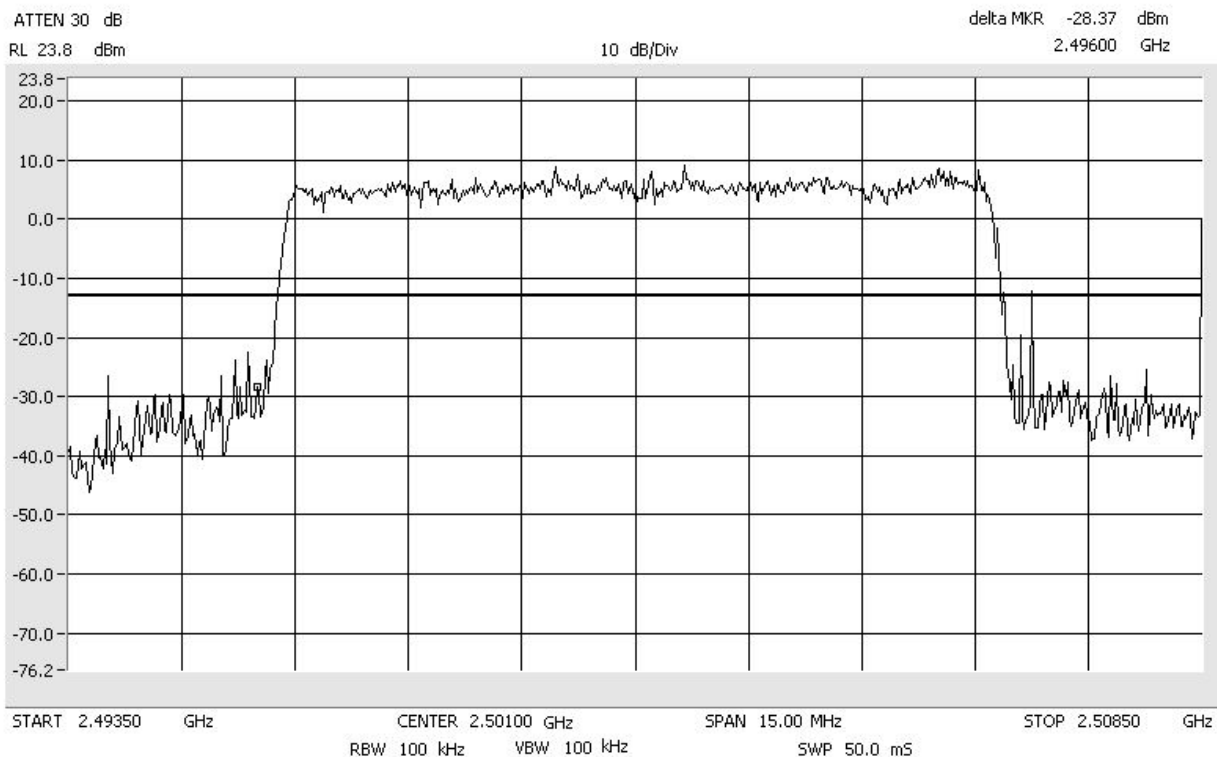
Band_Edge_TX 64QAM
Center: 2501.0 MHz Span: 15 MHz RBW: 100 kHz VBW: 100 kHz



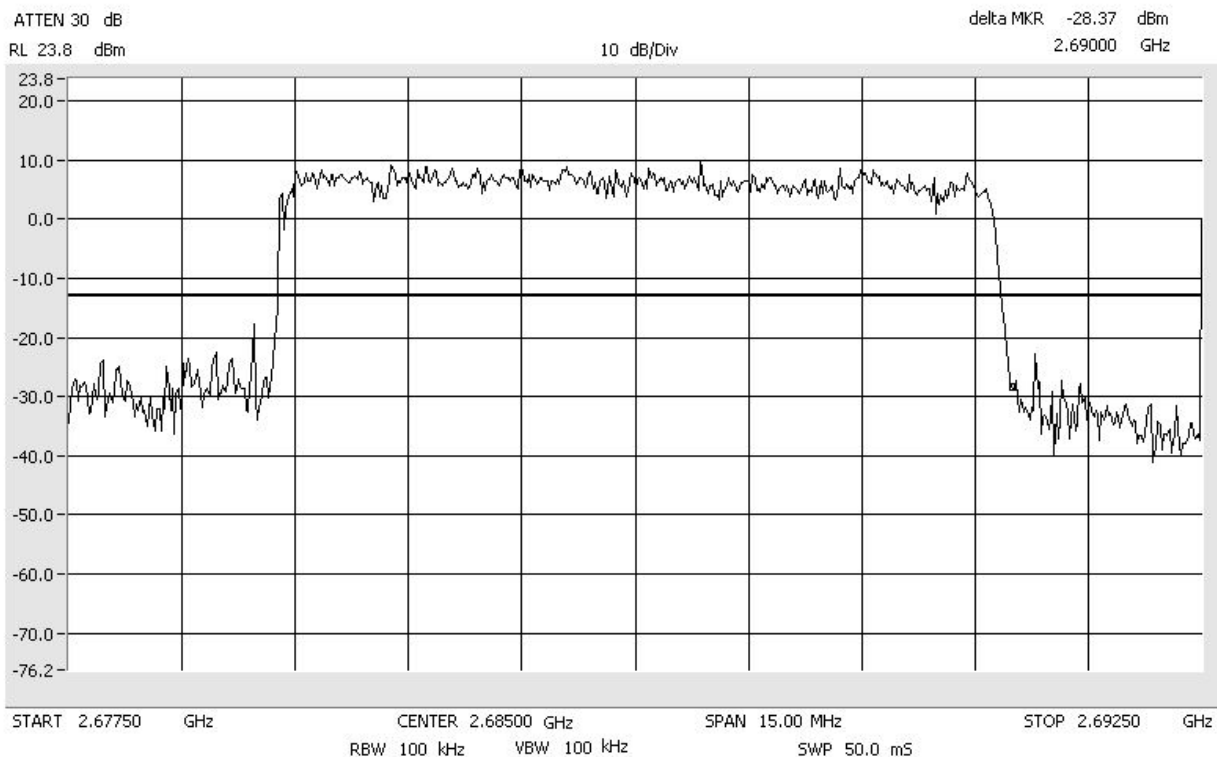
Band_Edge_TX 64QAM
Center: 2685.0 MHz Span: 15 MHz RBW: 100 kHz VBW: 100 kHz



Band_Edge_TX QPSK
Center: 2501.0 MHz Span: 15 MHz RBW: 100 kHz VBW: 100 kHz



Band_Edge_TX QPSK
Center: 2685.0 MHz Span: 15 MHz RBW: 100 kHz VBW: 100 kHz



7.2 Conducted Output Power Test

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*Note: The EUT is a fixed repeater and not a base station.

This measurement was made as a direct conducted emission measurement. The output from the EUT antenna connector was connected to the power meter. The carrier output, below, was conducted using a single 64QAM and QPSK signal generator. The power meter level was offset to compensate for attenuators and cable loss between the EUT and the power meter.

A signal was used at the low, mid and high parts of the selected band. The power meter level was offset by 30.0 dB to compensate for cable loss and attenuation between the EUT and the power meter.

64QAM - TX	0.18 Watts
Carrier Frequency	Carrier Output
2501.0 MHz	<u>21.87</u> dBm
2593.0 MHz	<u>22.67</u> dBm
2685.0 MHz	<u>22.53</u> dBm

QPSK - TX	0.18 Watts
Carrier Frequency	Carrier Output
2501.0 MHz	<u>21.55</u> dBm
2593.0 MHz	<u>22.48</u> dBm
2685.0 MHz	<u>22.37</u> dBm

64QAM - RX	0.012 mWatts
Carrier Frequency	Carrier Output
2501.0 MHz	<u>-20.43</u> dBm
2593.0 MHz	<u>-19.31</u> dBm
2685.0 MHz	<u>-19.27</u> dBm

QPSK - RX	0.012 mWatts
Carrier Frequency	Carrier Output
2501.0 MHz	<u>-20.38</u> dBm
2593.0 MHz	<u>-19.29</u> dBm
2685.0 MHz	<u>-19.35</u> dBm

7.3 Frequency Stability Test

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Host/Expansion	RAU			
Input Voltage	Input Voltage	Carrier Frequency	Measured Frequency	Meets Requirements?
100 VAC	45.9 VDC	2496.200 MHz	2496.200 MHz	Yes
170 VAC	54 VDC	2496.200 MHz	2496.200 MHz	Yes
240 VAC	62.1 VDC	2496.200 MHz	2496.200 MHz	Yes
100 VAC	45.9 VDC	2593.000 MHz	2593.000 MHz	Yes
170 VAC	54 VDC	2593.000 MHz	2593.000 MHz	Yes
240 VAC	62.1 VDC	2593.000 MHz	2593.000 MHz	Yes
100 VAC	45.9 VDC	2689.800 MHz	2689.800 MHz	Yes
170 VAC	54 VDC	2689.800 MHz	2689.800 MHz	Yes
240 VAC	62.1 VDC	2689.800 MHz	2689.800 MHz	Yes
Temperature		Carrier Frequency	Measured Frequency	Meets Requirements?
-25 Deg. C		2496.200 MHz	2496.200 MHz	Yes
-20 Deg. C		2496.200 MHz	2496.200 MHz	Yes
-10 Deg. C		2496.200 MHz	2496.200 MHz	Yes
0 Deg. C		2496.200 MHz	2496.200 MHz	Yes
10 Deg. C		2496.200 MHz	2496.200 MHz	Yes
20 Deg. C		2496.200 MHz	2496.200 MHz	Yes
30 Deg. C		2496.200 MHz	2496.200 MHz	Yes
40 Deg. C		2496.200 MHz	2496.200 MHz	Yes
45 Deg. C		2496.200 MHz	2496.200 MHz	Yes
-25 Deg. C		2593.000 MHz	2593.000 MHz	Yes
-20 Deg. C		2593.000 MHz	2593.000 MHz	Yes
-10 Deg. C		2593.000 MHz	2593.000 MHz	Yes
0 Deg. C		2593.000 MHz	2593.000 MHz	Yes
10 Deg. C		2593.000 MHz	2593.000 MHz	Yes
20 Deg. C		2593.000 MHz	2593.000 MHz	Yes
30 Deg. C		2593.000 MHz	2593.000 MHz	Yes
40 Deg. C		2593.000 MHz	2593.000 MHz	Yes
45 Deg. C		2593.000 MHz	2593.000 MHz	Yes
-25 Deg. C		2689.800 MHz	2689.800 MHz	Yes
-20 Deg. C		2689.800 MHz	2689.800 MHz	Yes
-10 Deg. C		2689.800 MHz	2689.800 MHz	Yes
0 Deg. C		2689.800 MHz	2689.800 MHz	Yes
10 Deg. C		2689.800 MHz	2689.800 MHz	Yes
20 Deg. C		2689.800 MHz	2689.800 MHz	Yes
30 Deg. C		2689.800 MHz	2689.800 MHz	Yes
40 Deg. C		2689.800 MHz	2689.800 MHz	Yes
45 Deg. C		2689.800 MHz	2689.800 MHz	Yes

7.4 Intermodulation Test

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[Back to Emission Limits: Section 5.1.3](#)

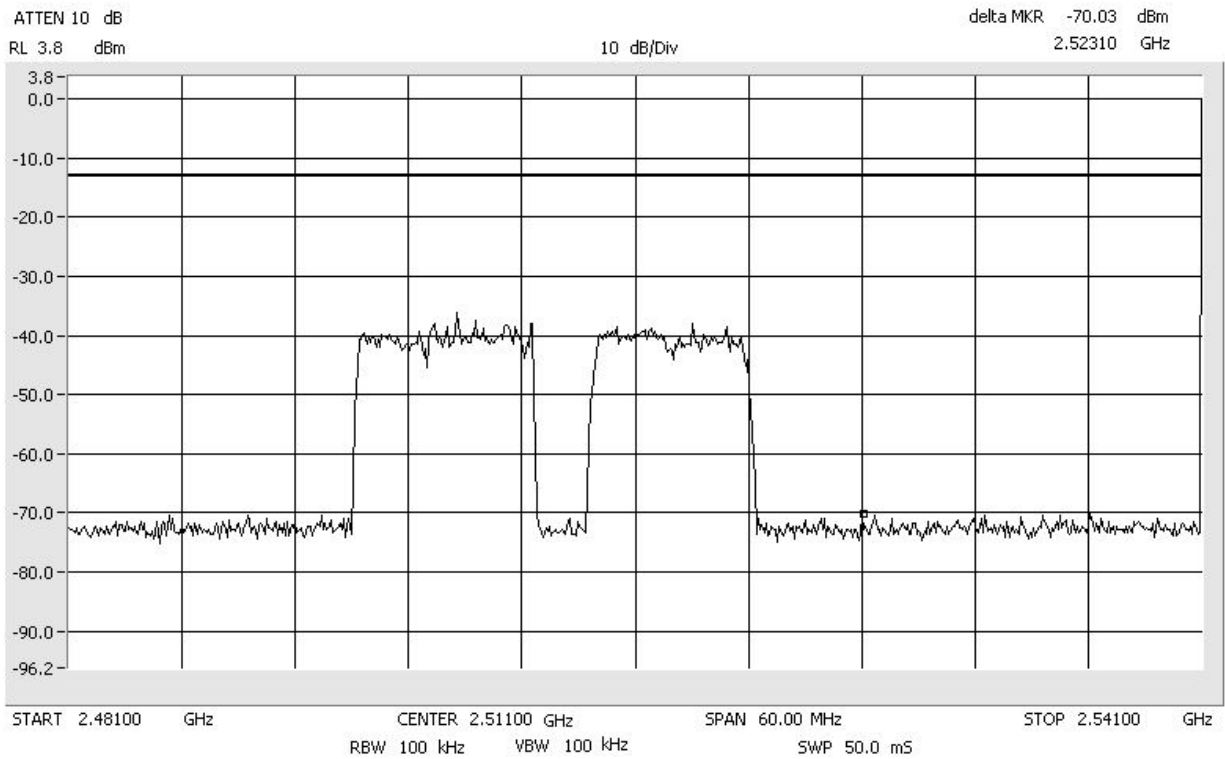
The inter-modulation products test was performed for the EUT. Three tests were performed with the modulation type. Test 1 was with 2 signals input to the EUT at lower end channels. Test 2 was with 2 signals input to the EUT at upper end channels. Test 3 was with 2 signals input to the EUT at upper and lower end channels. The modulation types tested were 64QAM and QPSK. An investigation was made from 30 MHz to the 10th Harmonic of the highest fundamental frequency (~26.5 GHz). The following plots show the results.

The system can be operated from 2496-2690 MHz. WiMAX Gen 2 has 30 MHz bandwidth, and frequency could be tuned in 250 KHz steps. Inter-modulation products were tested at the lower 30 MHz band (2496 to 2526 MHz) and the higher 30 MHz band (2660 to 2690 MHz) to show out-of-band compliance.

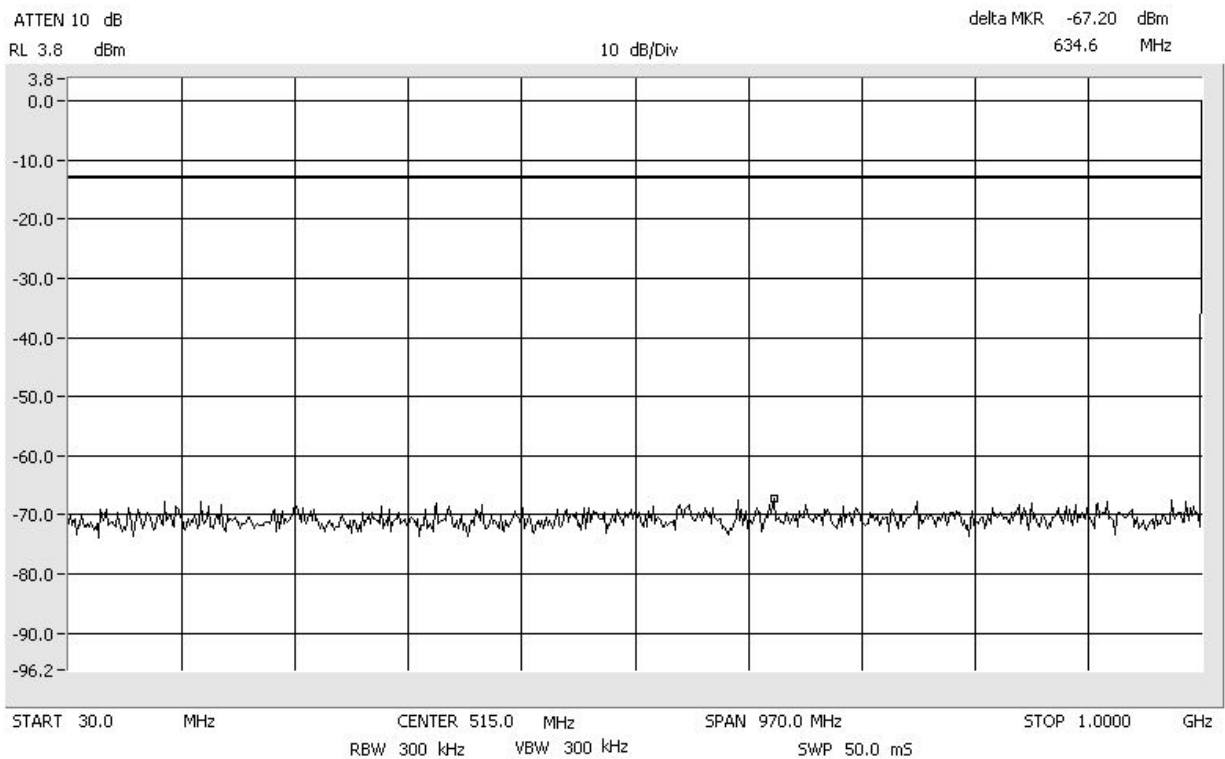
Results:

(See Plots)

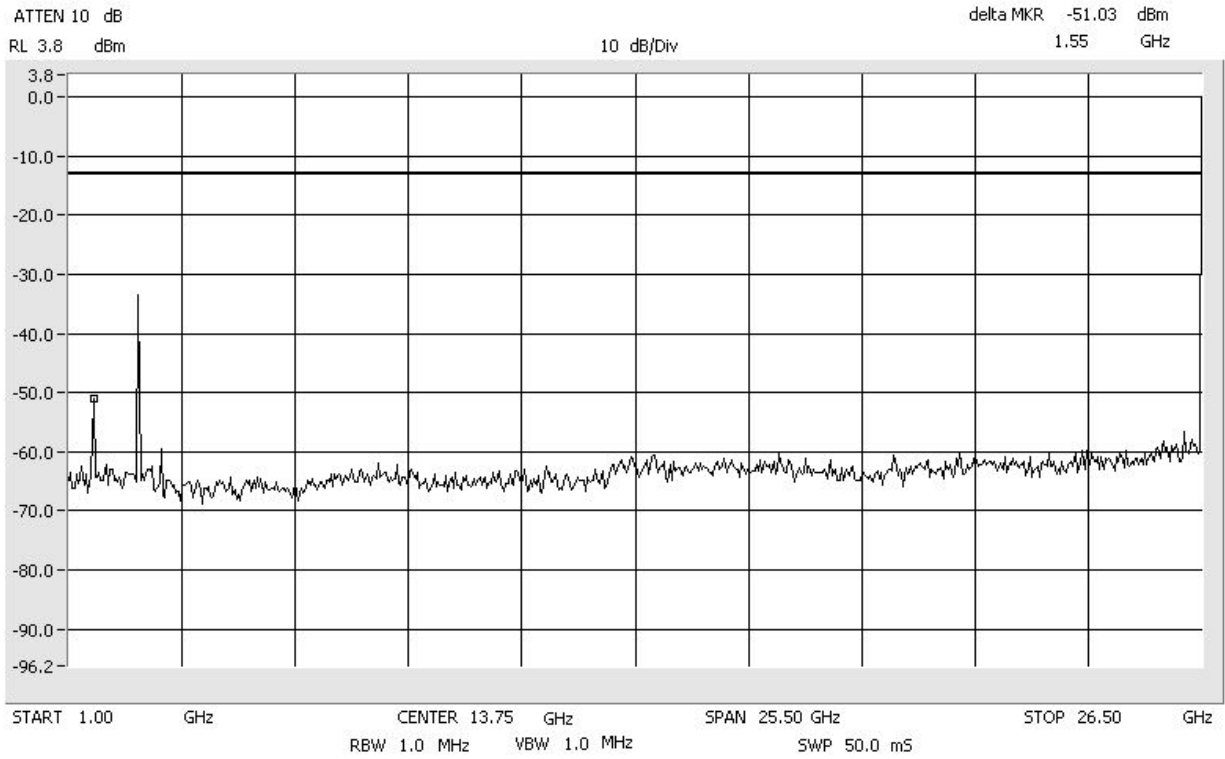
Intermodulation 64QAM_Low_Low WiMAX
Center: 2511 MHz Span: 60 MHz RBW/VBW: 100 kHz



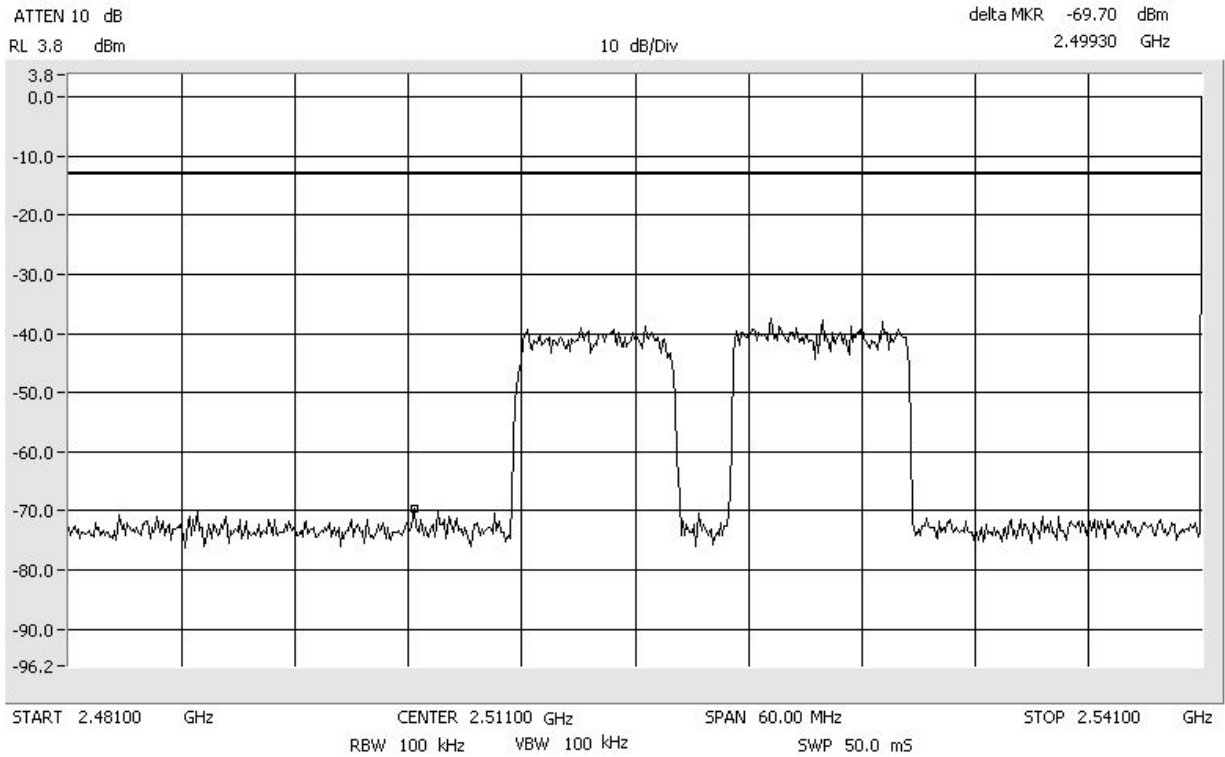
Intermodulation 64QAM_Low_Low WiMAX
Span: 30 MHz to 1 GHz RBW/VBW: 300 kHz



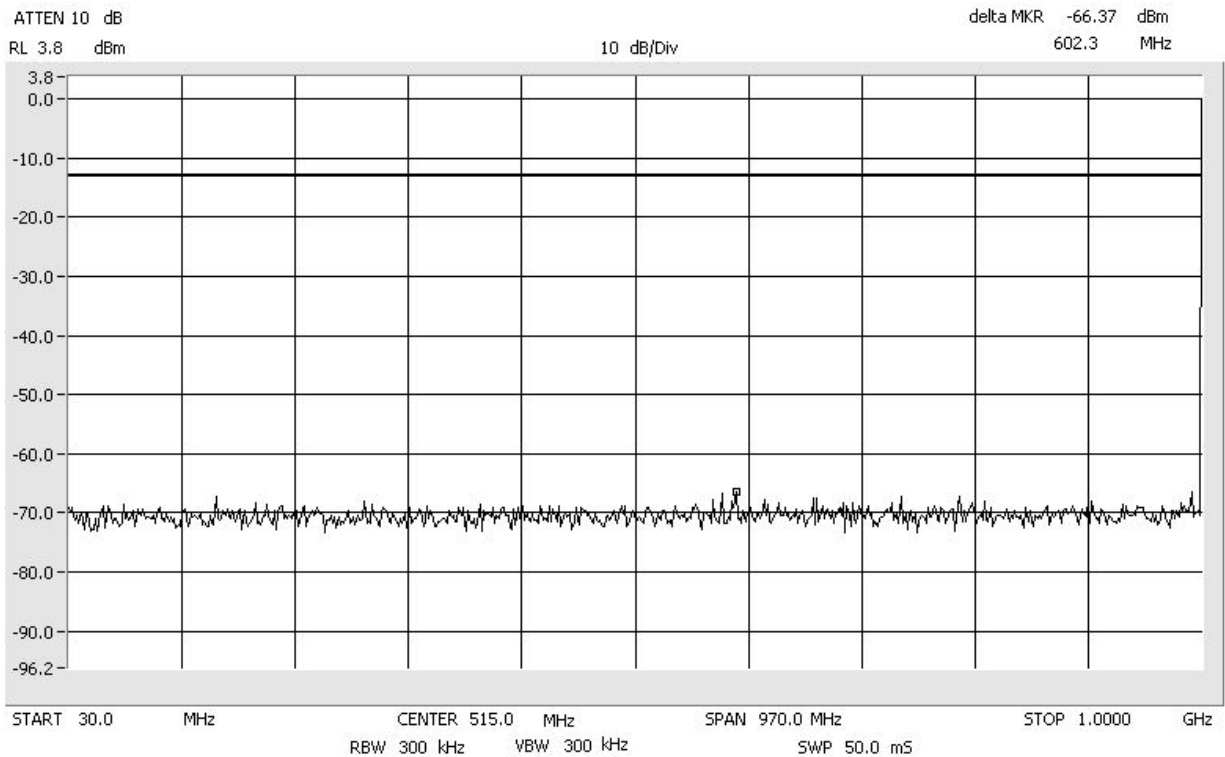
Intermodulation 64QAM_Low_Low WiMAX
Span: 1 GHz to 26.5 GHz RBW/VBW: 1 MHz



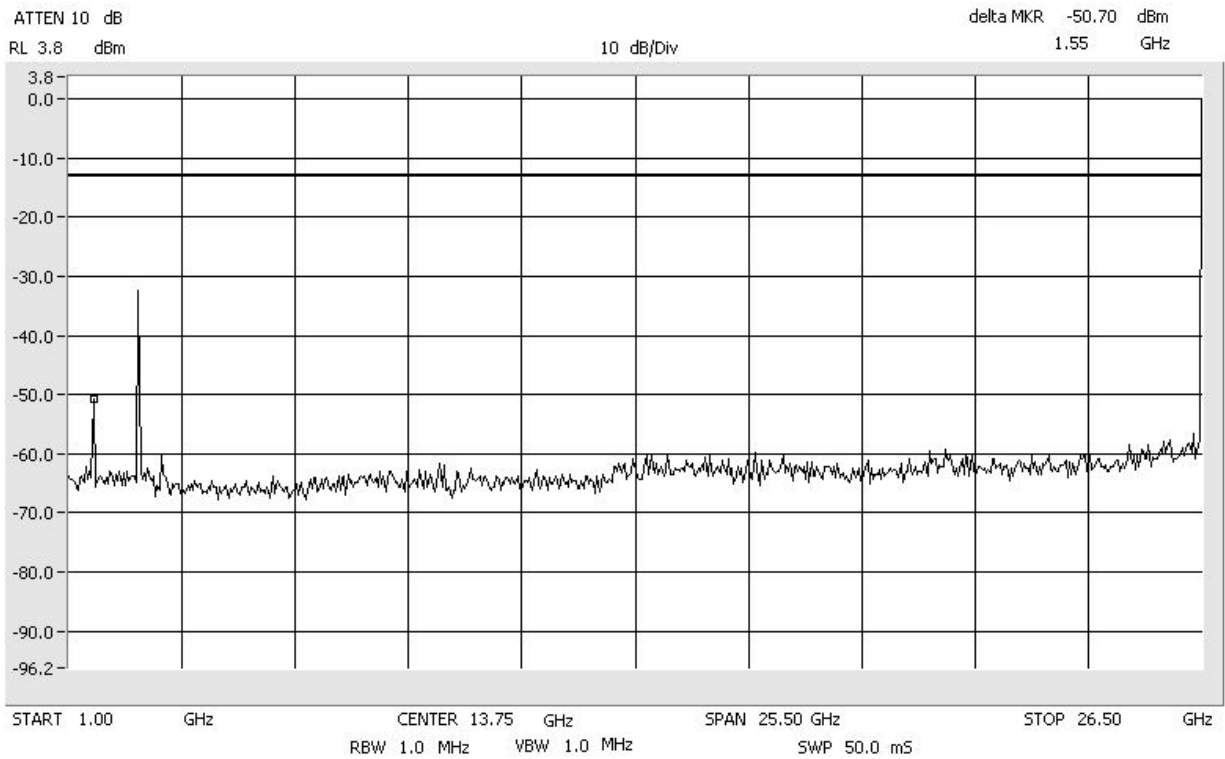
Intermodulation 64QAM_High_Low WiMAX
Center: 2511 MHz Span: 60 MHz RBW/VBW: 100 kHz



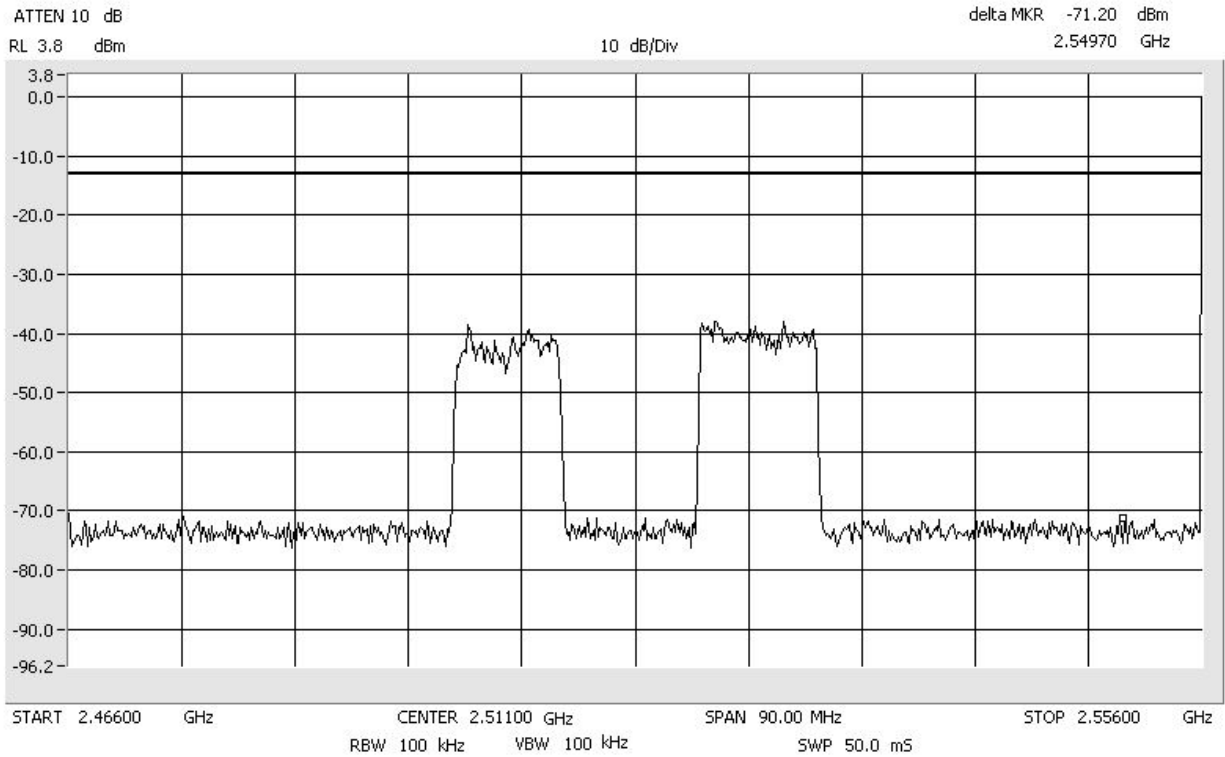
Intermodulation 64QAM_High_Low WiMAX
Span: 30 MHz to 1 GHz RBW/VBW: 300 kHz



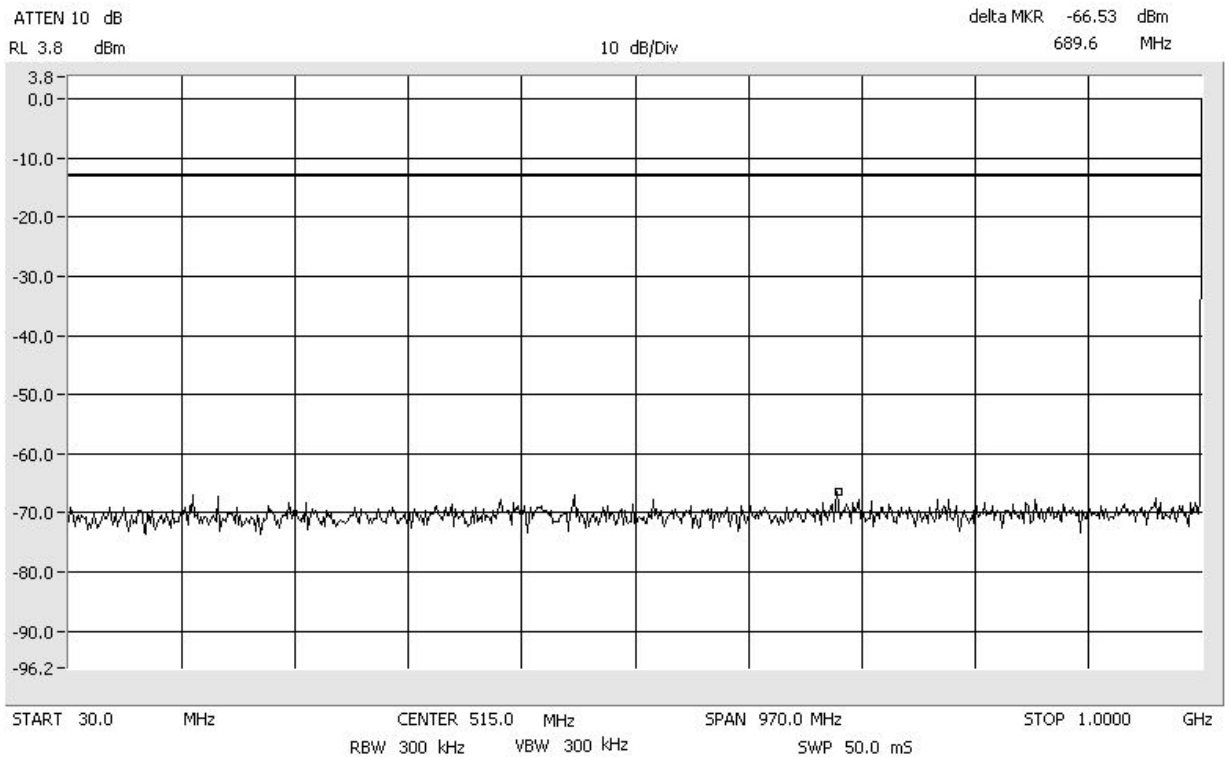
Intermodulation 64QAM_High_Low WiMAX
Span: 1 GHz to 26.5 GHz RBW/VBW: 1 MHz



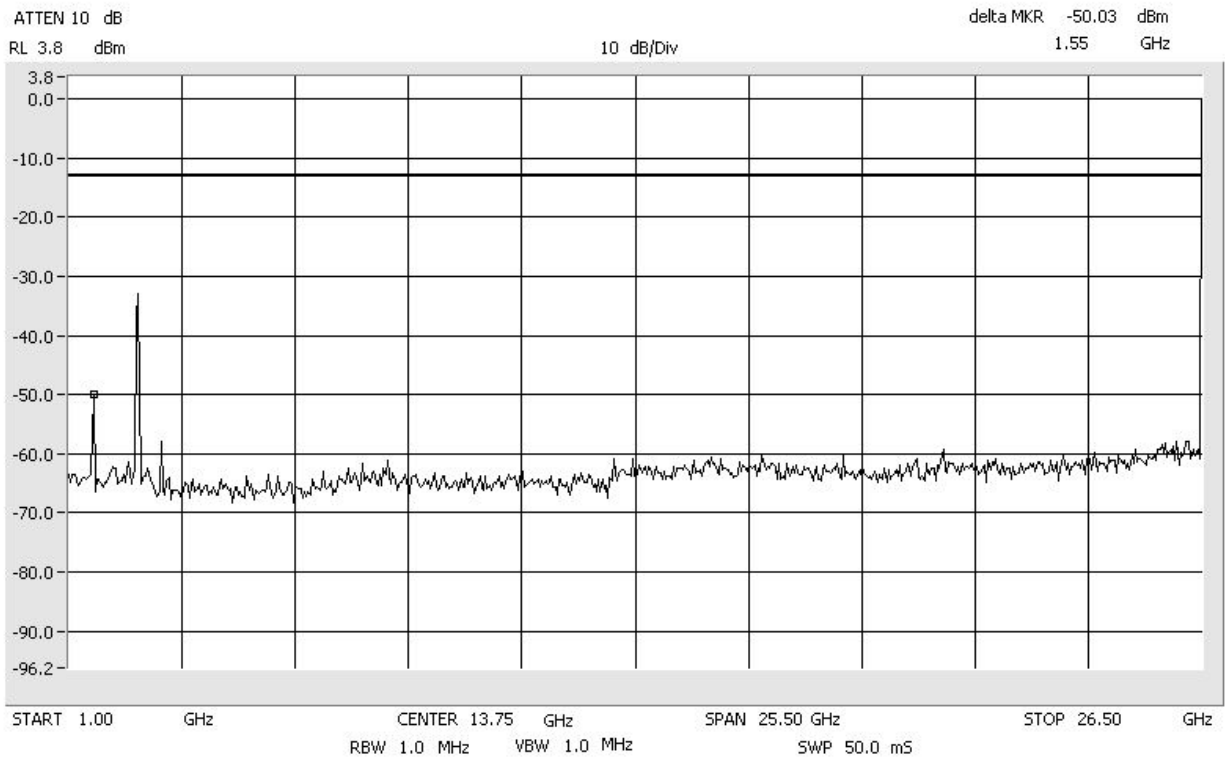
Intermodulation 64QAM_Apart_Low WiMAX
Center: 2511 MHz Span: 90 MHz RBW/VBW: 100 kHz



Intermodulation 64QAM_Apart_Low WiMAX
Span: 30 MHz to 1 GHz RBW/VBW: 300 kHz



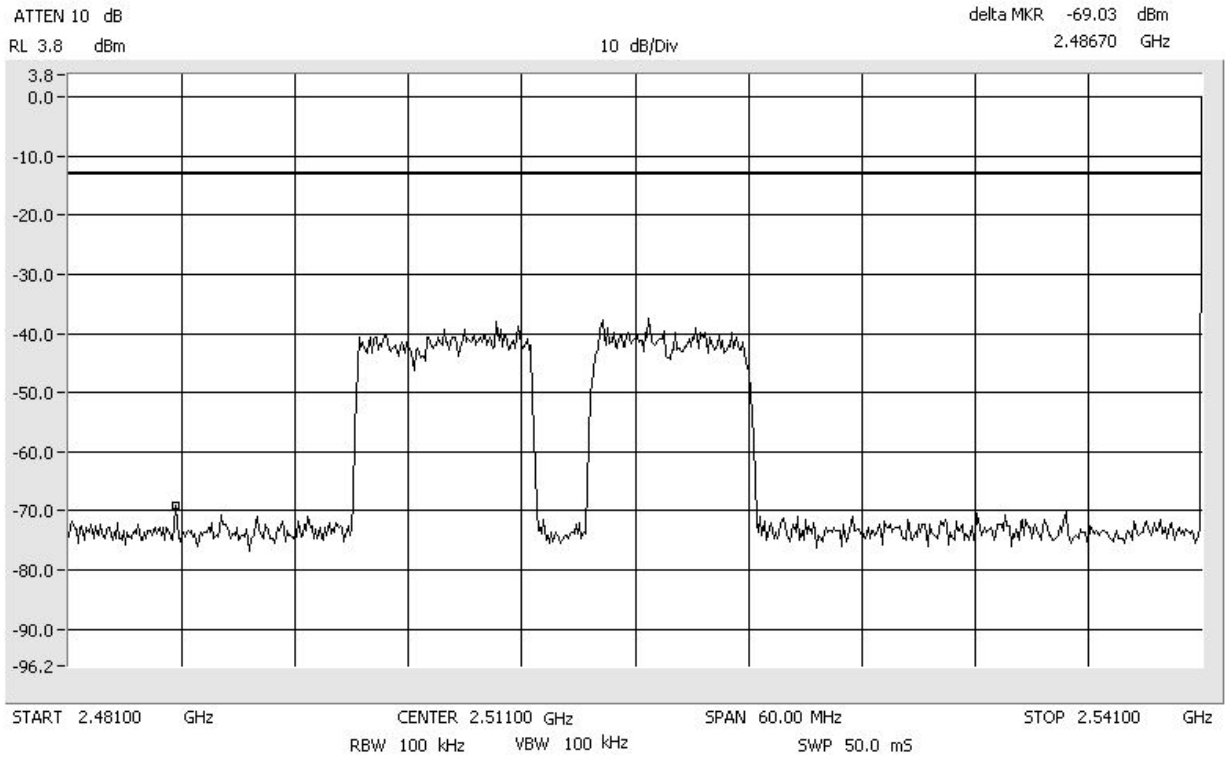
Intermodulation 64QAM_Apart_Low WiMAX
Span: 1 GHz to 26.5 GHz RBW/VBW: 1 MHz



Intermodulation
Center: 2511 MHz

QPSK_Low_Low
Span: 60 MHz

WiMAX
RBW/VBW: 100 kHz

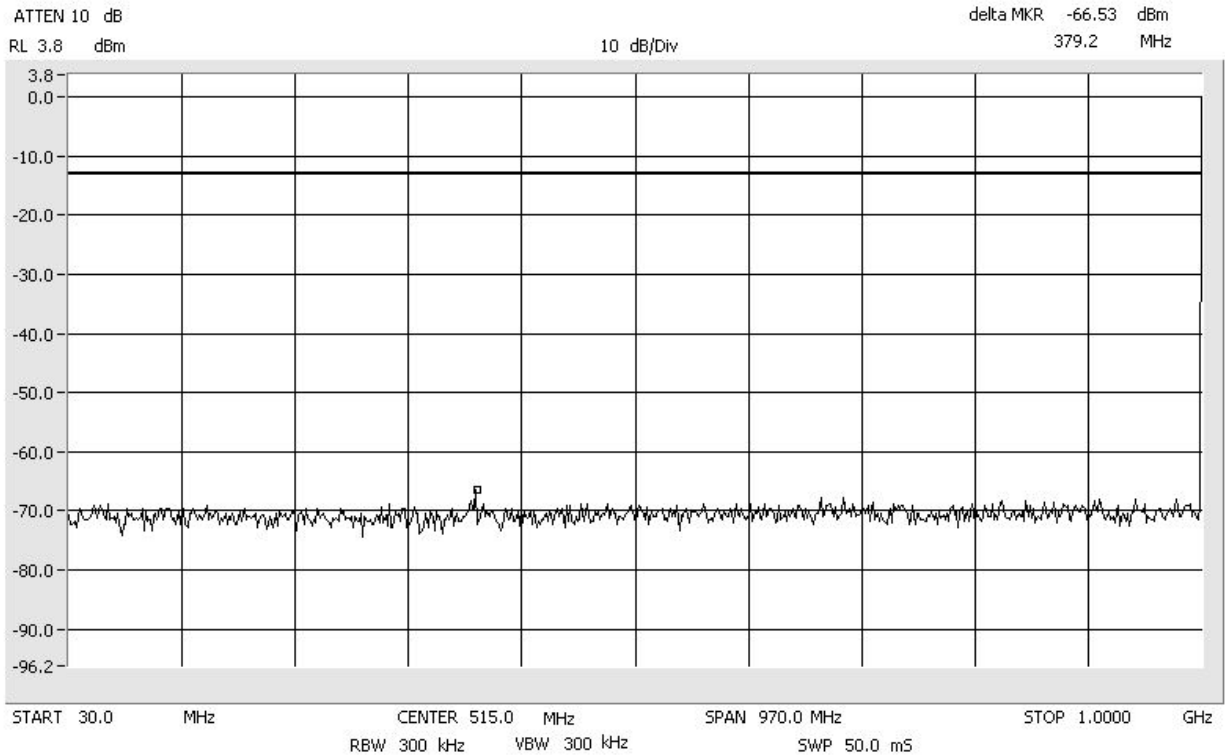


Intermodulation
Span: 30 MHz to 1 GHz

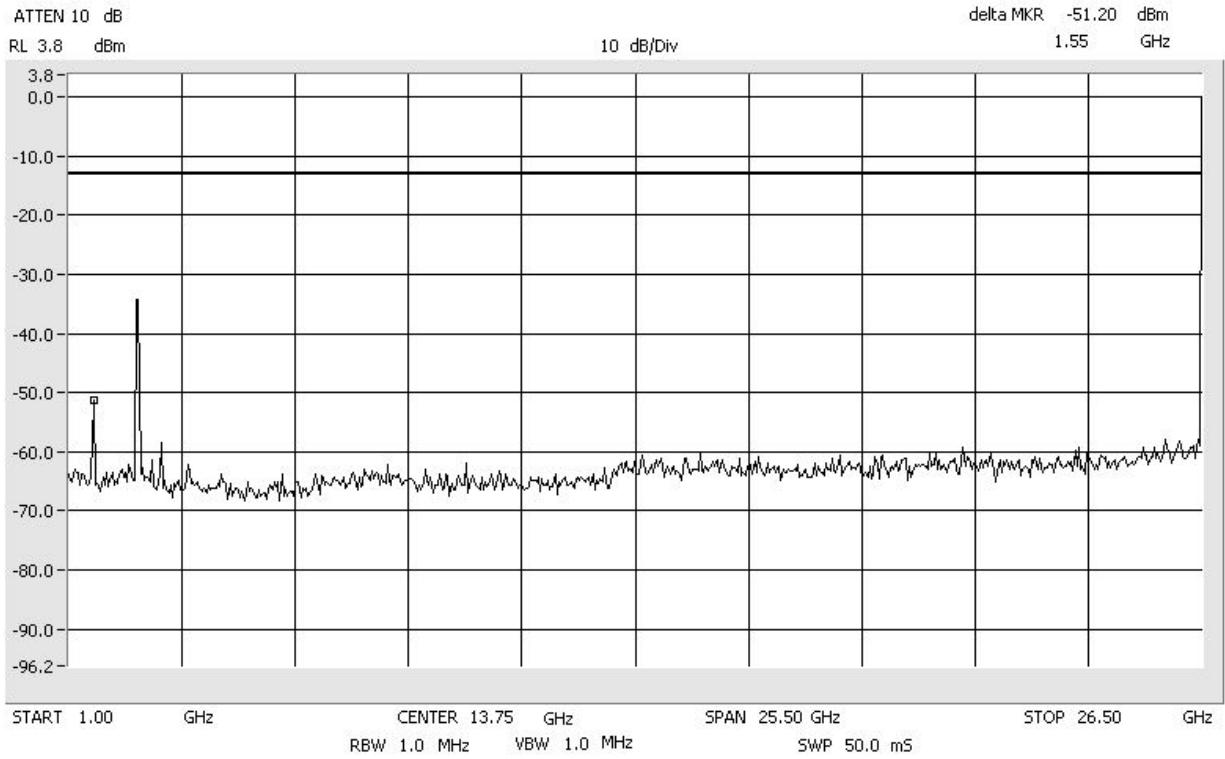
QPSK_Low_Low

WiMAX

RBW/VBW: 300 kHz



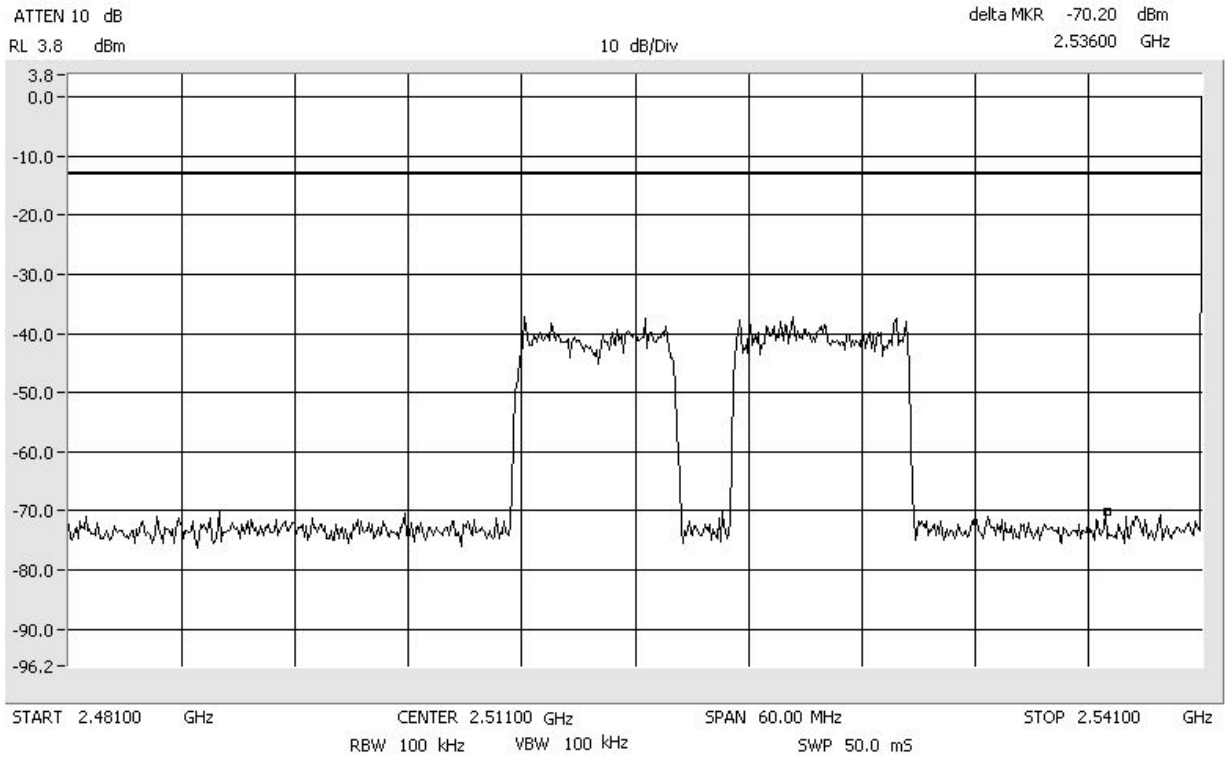
Intermodulation QPSK_Low_Low WiMAX
Span: 1 GHz to 26.5 GHz RBW/VBW: 1 MHz



Intermodulation
Center: 2511 MHz

QPSK_High_Low
Span: 60 MHz

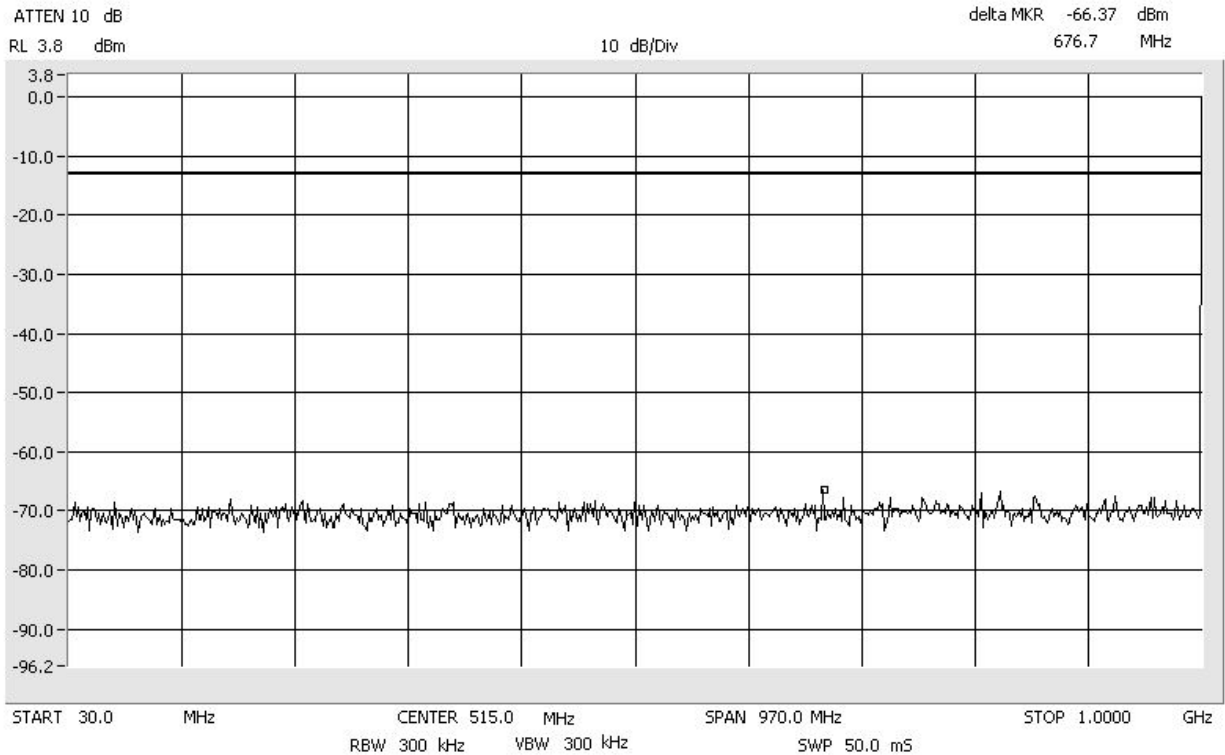
WiMAX
RBW/VBW: 100 kHz



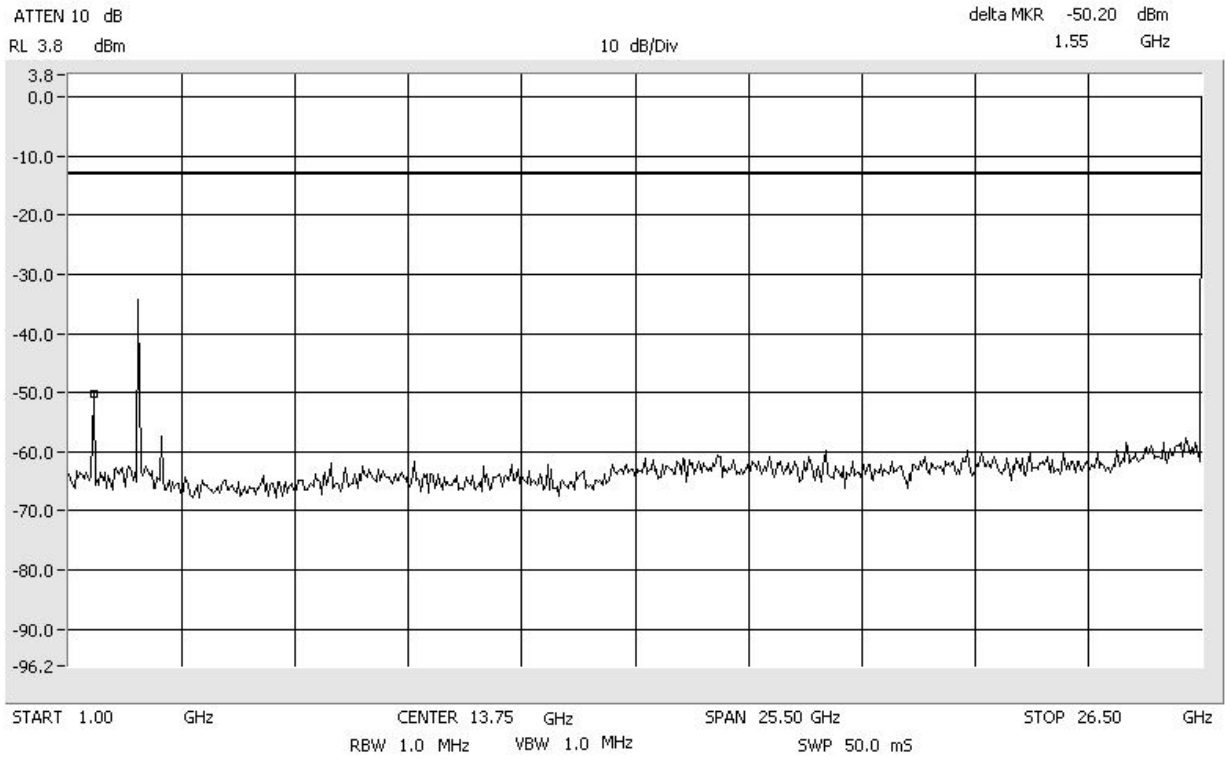
Intermodulation
Span: 30 MHz to 1 GHz

QPSK_High_Low

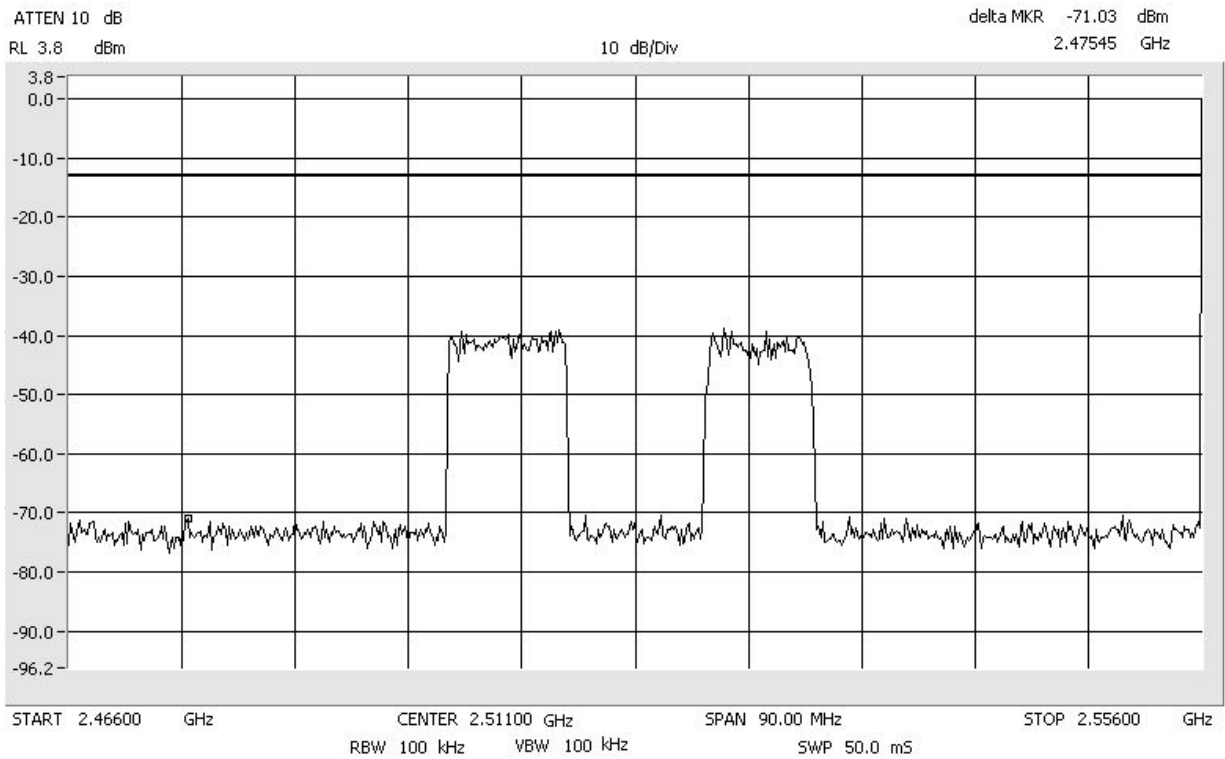
WiMAX
RBW/VBW: 300 kHz



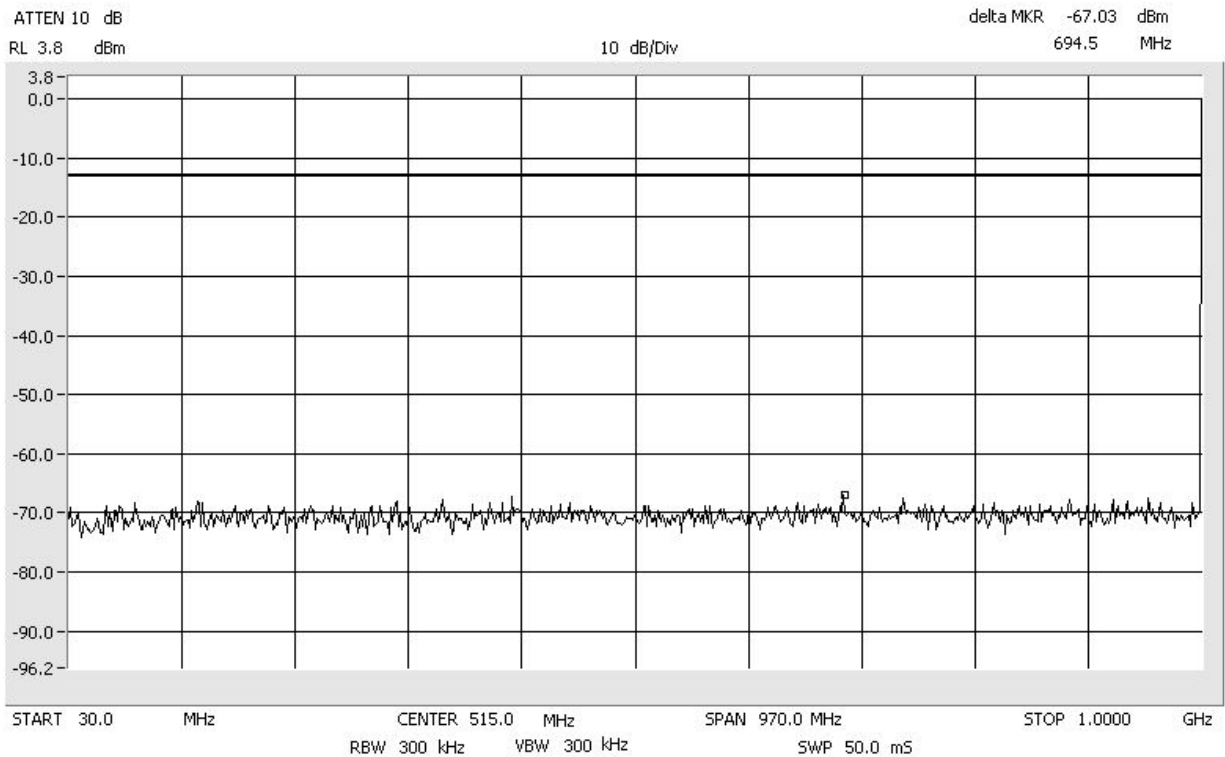
Intermodulation QPSK_High_Low WiMAX
Span: 1 GHz to 26.5 GHz RBW/VBW: 1 MHz



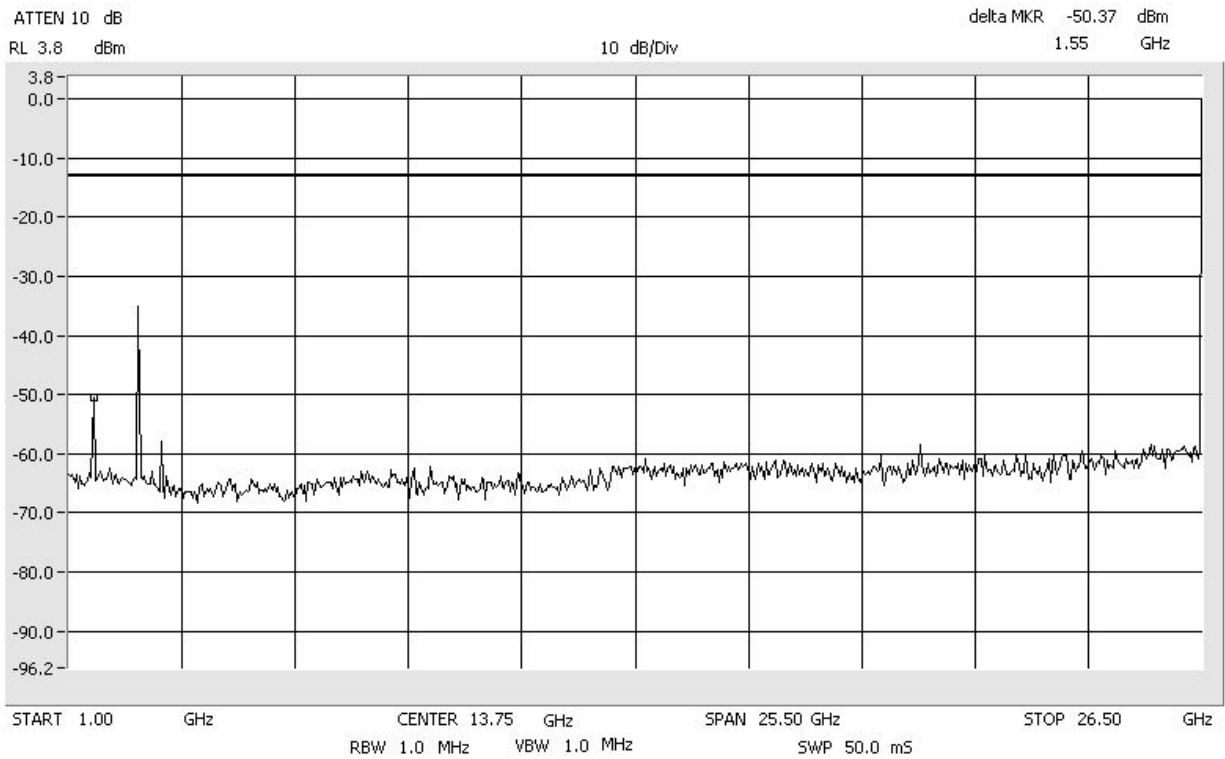
Intermodulation QPSK_Apart_Low WiMAX
Center: 2511 MHz Span: 90 MHz RBW/VBW: 100 kHz



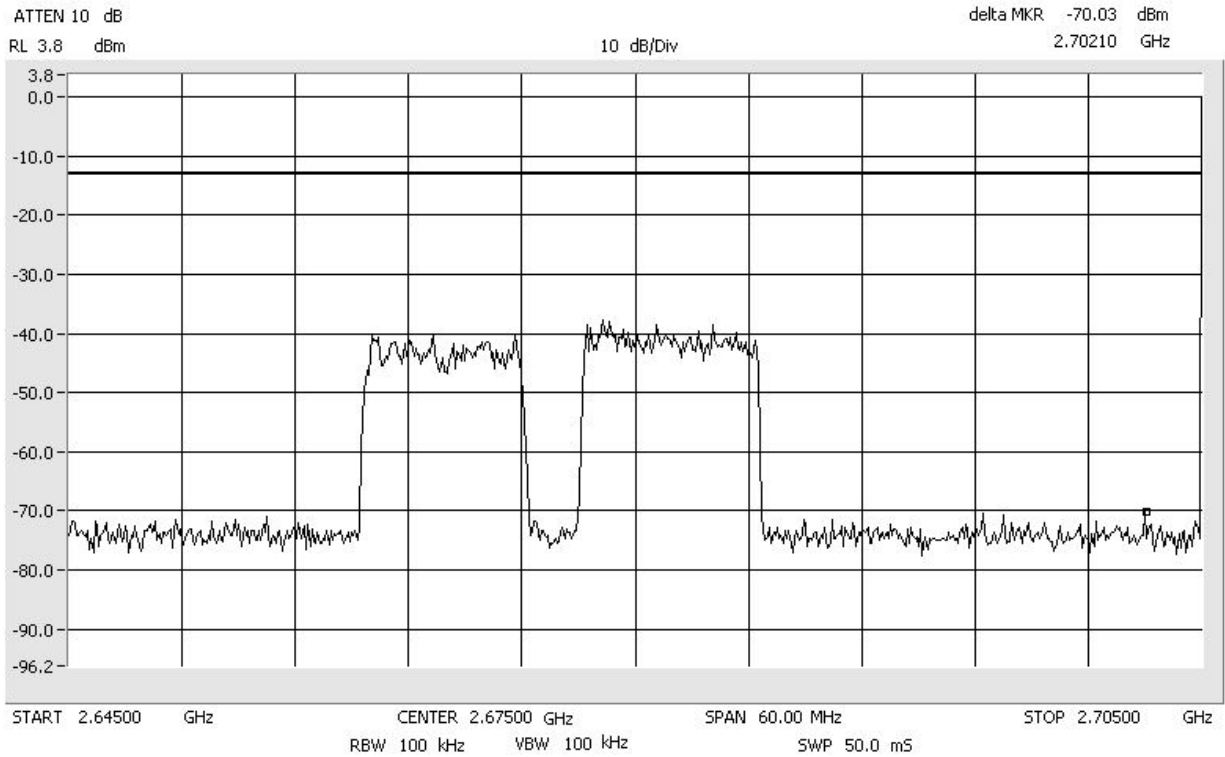
Intermodulation QPSK_Apart_Low WiMAX
Span: 30 MHz to 1 GHz RBW/VBW: 300 kHz



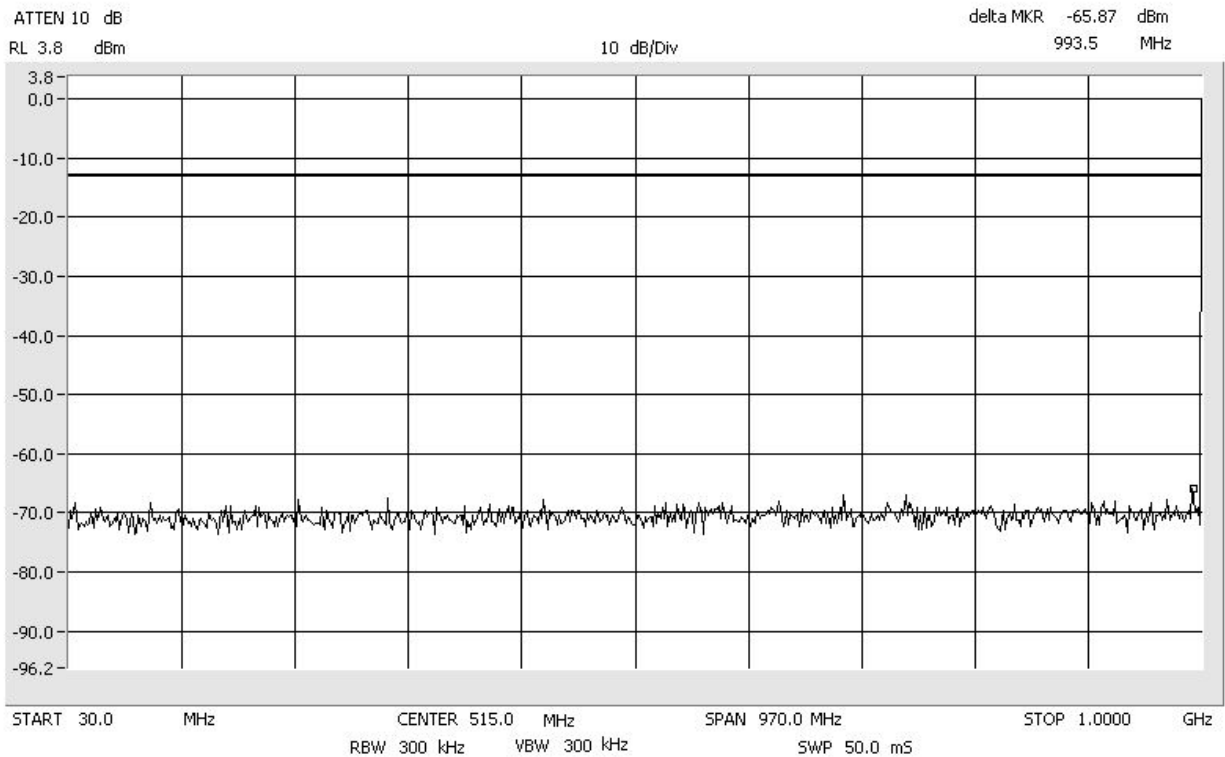
Intermodulation QPSK_Apart_Low WiMAX
Span: 1 GHz to 26.5 GHz RBW/VBW: 1 MHz



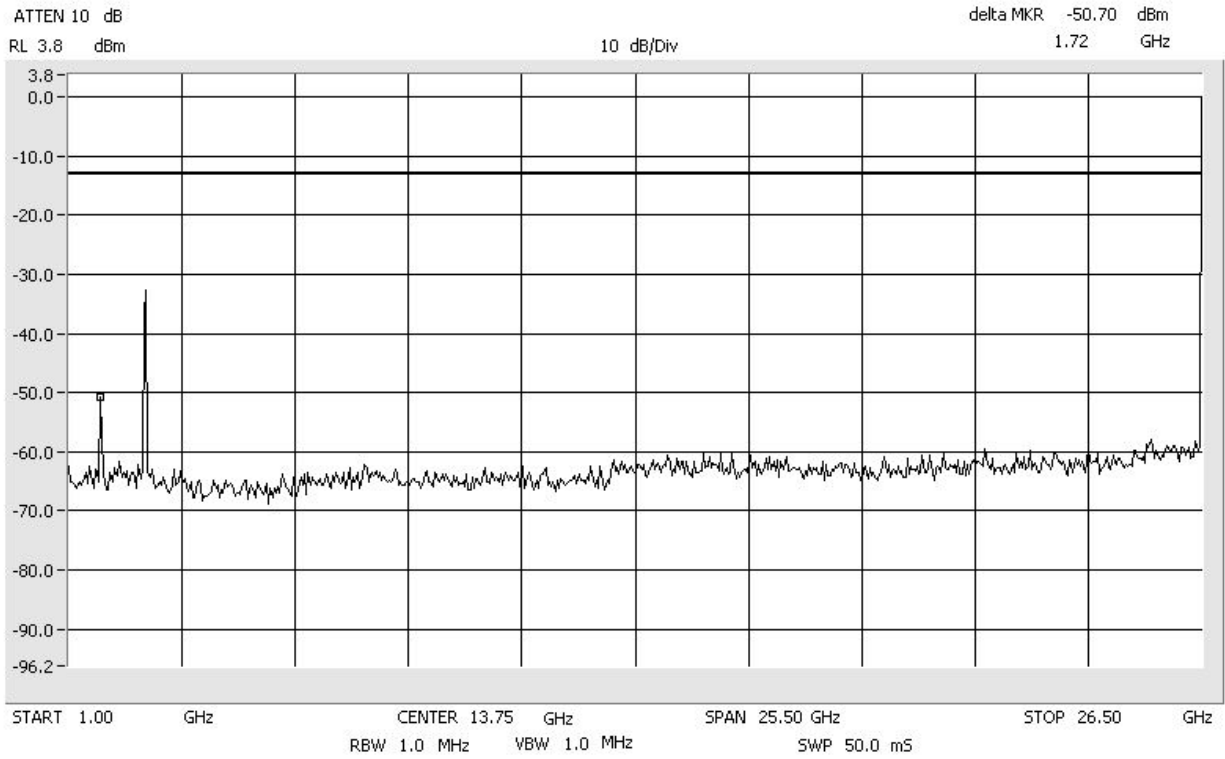
Intermodulation 64QAM_Low_High WiMAX
Center: 2675 MHz Span: 60 MHz RBW/VBW: 100 kHz



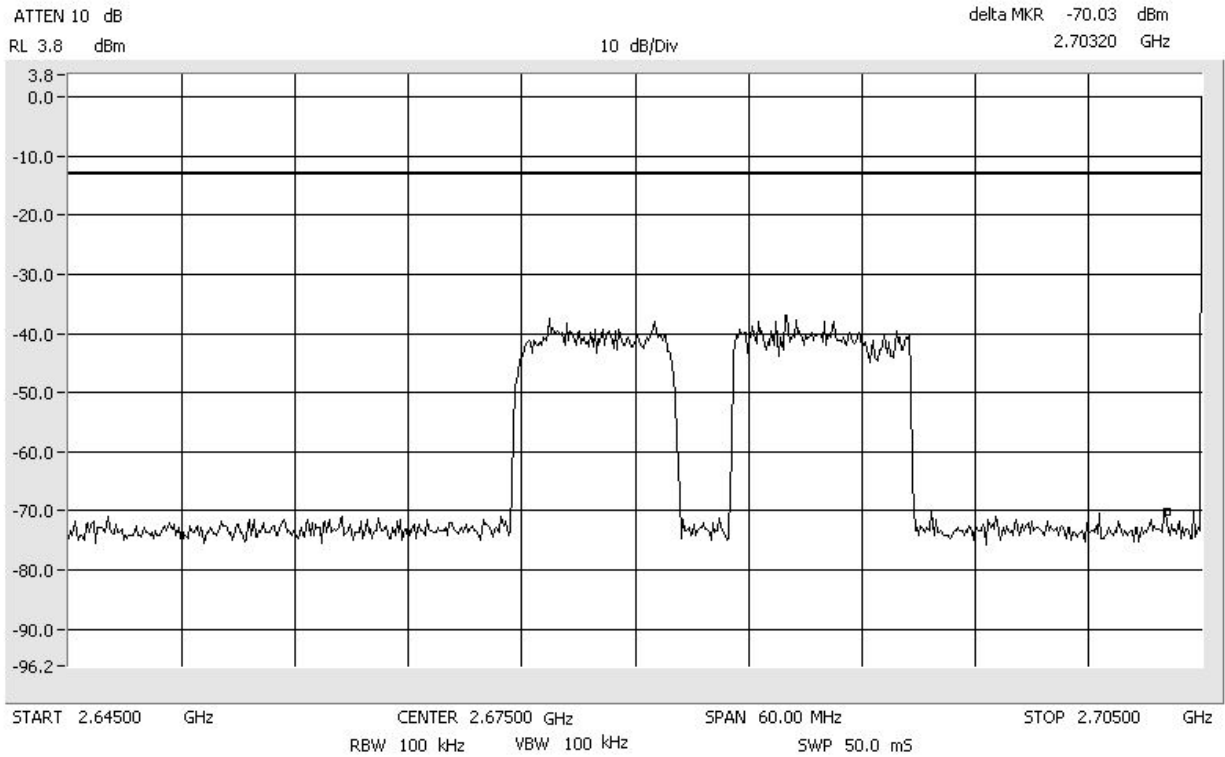
Intermodulation 64QAM_Low_High WiMAX
Span: 30 MHz to 1 GHz RBW/VBW: 300 kHz



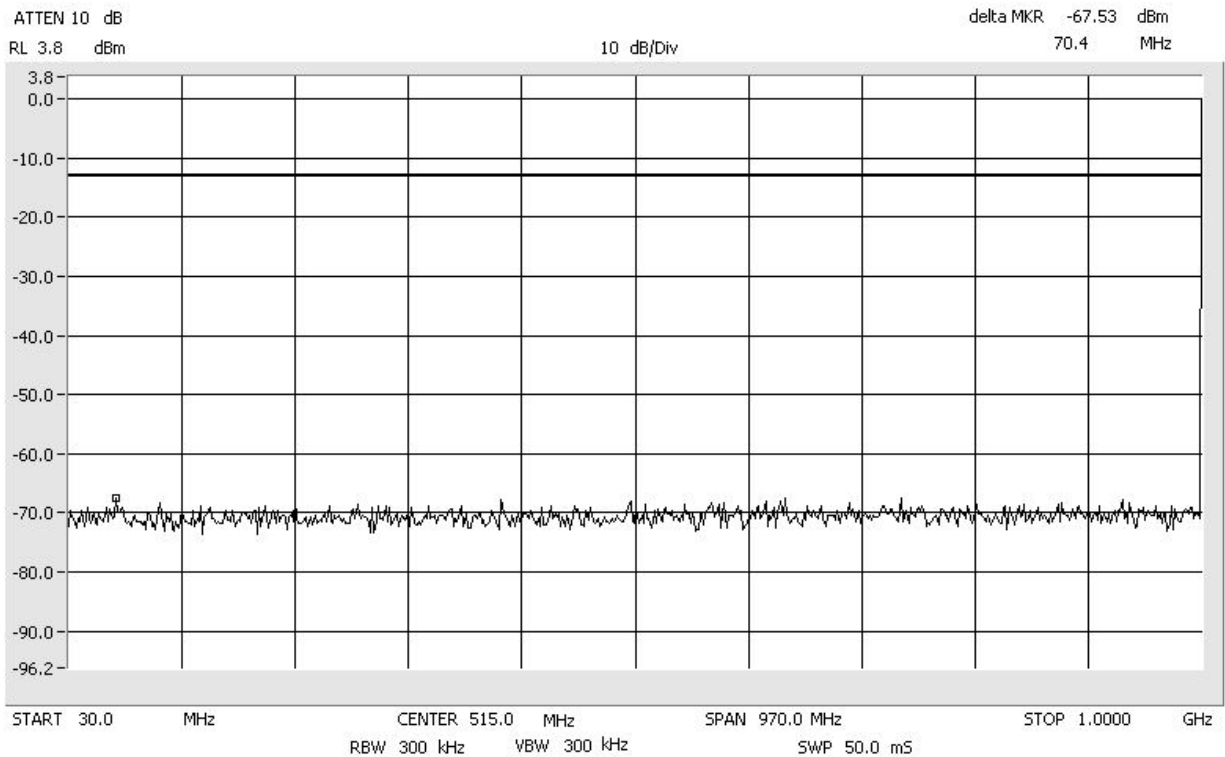
Intermodulation 64QAM_Low_High WiMAX
Span: 1 GHz to 26.5 GHz RBW/VBW: 1 MHz



Intermodulation 64QAM_High_High WiMAX
Center: 2675 MHz Span: 60 MHz RBW/VBW: 100 kHz



Intermodulation 64QAM_High_High WiMAX
Span: 30 MHz to 1 GHz RBW/VBW: 300 kHz



Intermodulation 64QAM_High_High WiMAX
Span: 1 GHz to 26.5 GHz RBW/VBW: 1 MHz

