

FCC RF Test Report

Product Name: Mobile WiFi

Product Model: E5372s-32

Report Number: SYBH(Z-RF)020022014-2002

FCC ID: QISE5372S-32

Reliability Laboratory of Huawei Technologies Co., Ltd.

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Notice

1. The laboratory has Passed the accreditation by China National Accreditation Service for Conformity Assessment (CNAS). The accreditation number is L0310.
2. The laboratory has Passed the accreditation by The American Association for Laboratory Accreditation (A2LA). The accreditation number is 2174.01.
3. The laboratory has been listed by the US Federal Communications Commission to perform electromagnetic emission measurements. The site recognition number is 97456.
4. The laboratory has been listed by Industry Canada to perform electromagnetic emission measurements. The recognition numbers of test site are 6369A-2.
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8. The test report is only valid for the test samples.
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Applicant: Huawei Technologies Co., Ltd.
Address: Administration Building, Headquarters of Huawei Technologies Co., Ltd.,
Bantian, Longgang District, Shenzhen, 518129, P.R.C

Date of Receipt Sample: 2014-02-17
Start Date of Test: 2014-02-17
End Date of Test: 2014-02-20

Test Result: Pass

Approved by Senior Engineer:	2013-06-07	Dai Linjun	
	Date	Name	Signature

Prepared by:	2014-02-21	Zhu Mingjing	
	Date	Name	Signature



Modification Record

No.	Last Report No.	Modification Description
1		First report.

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1 General Information

1.1 Applied Standard

Applied Rules: 47 CFR FCC Part 2, Subpart J 2012
47 CFR FCC Part 15, Subpart C 2012

Test Method: FCC KDB 558074 D01 DTS Meas Guidance v03r01
FCC KDB 662911 D01 Multiple Transmitter Output v02
ANSI C63.10-2009, American National Standard for Testing Unlicensed
Wireless Devices.

1.2 Test Location

Test Location 1: Reliability Laboratory of Huawei Technologies Co., Ltd.
Address: Administration Building, Headquarters of Huawei Technologies Co., Ltd.,
Bantian, Longgang District, Shenzhen, 518129, P.R.C

1.3 Test Environment Condition

Ambient Temperature: 19.5to 25 °C
Ambient Relative Humidity: 40 to 55 %
Atmospheric Pressure: Not applicable

2 Test Summary

Test Item	FCC Part No.	Requirements	Test Result	Verdict
DTS (6 dB) Bandwidth	15.247(a)(2)	≥ 500 kHz.	Appendix A	Pass
Occupied Bandwidth (Only for IC requirement)	---	No limit.		--
Maximum Peak Conducted Output Power	15.247(b)(3)	For directional gain: < 30 dBm – (G[dBi] – 6 [dB]), peak; Otherwise: < 30 dBm, peak.	Appendix B	Pass
Maximum Power Spectral Density Level	15.247(e)	For directional gain: < 8 dBm/3 kHz – (G[dBi] – 6 [dB]), peak. Otherwise: < 8 dBm/3 kHz, peak.	Appendix C	Pass
Band Edges Compliance	15.247(d)	< -20 dBm/100 kHz if total peak power $\leq$ power limit.	Appendix D	Pass
Unwanted Emissions into Non-Restricted Frequency Bands			Appendix E	Pass
Unwanted Emissions into Restricted Frequency Bands (Radiated)	15.247(d) 15.209	FCC Part 15.209 field strength limit; RSS-Gen 7.2.5 field strength limit.	Appendix F	Pass
Conducted Emission at Power Port	15.207	FCC Part 15.207 conducted limit; RSS-Gen, 7.2.4 conducted limit.	Appendix G	Pass

3 Description of the Equipment under Test (EUT)

3.1 General Description

E5372s-32 is a LTE/UMTS/GSM triple mode and WiFi Wireless mobile WiFi; it can be used as a WiFi hotspot based on standard of IEEE802.11a/b/g/n. It supports 3G WCDMA and 4G LTE wireless internet accessing function. About 3G WCDMA wireless mode, it supports WCDMA and HSDPA/HSUPA/HSPA+/DC-HSDPA, operating in Band2 and Band5; and the 4G LTE, operating in Band7; and EDGE Quad Band; The WiFi is 2X2 and the frequency are 2.4GHz and 5 GHz.

E5372s-32 supports 1Tx2Rx for 3G WCDMA and 4G LTE.

R215 is a LTE/UMTS/GSM triple mode and WiFi Wireless mobile WiFi; it can be used as a WiFi hotspot based on standard of IEEE802.11a/b/g/n. It supports 3G WCDMA and 4G LTE wireless internet accessing function. About 3G WCDMA wireless mode, it supports WCDMA and HSDPA/HSUPA/HSPA+/DC-HSDPA, operating in Band5; and the 4G LTE, operating in Band7; and EDGE Quad Band; The WiFi is 2X2 and the frequency are 2.4GHz and 5 GHz.

R215 supports 1Tx2Rx for 3G WCDMA and 4G LTE.

E5372s-32 supports 1Tx2Rx for 3G WCDMA and 4G LTE.

E5372s-32 and R215 have the same PCB and same antenna, the difference is E5372s-32 add LTE Band1 & Band 8 and WCDMA B2 by software from R215, and change Menu key component on the PCB board. E5372s-32 and R215 have the same size, the difference is the colour of appearance and the silk mark of the performance.

The following table shows the 2 Models.

	E5372s-32	R215
GSM four band	support	support
WCDMA 2100M/900M	support	support
WCDMA 850M	support	support
WCDMA 1900M	support	No
LTE Band3/Band7/ Band20	support	support
LTE Band1/Band8	support	No
WiFi 2.4G&5G	support	support
All antenna	The same	The same
PCB	The same	The same
Adapter	HW-050100U1W HW-050100U2W	HW-050100U1W
Size	90.5(length)×56(width)× 14.4(height)(mm ³)	90.5(length)×56(width)× 14.4(height)(mm ³)

So the test data of WLAN are the same with **NO. SYBH(Z-RF)024052013-2002** RF report of R215.

3.2 EUT Identity

NOTE: Unless otherwise noted in the report, the functional boards installed in the units shall be selected from the below list, but not means all the functional boards listed below shall be installed in one unit.

3.2.1 Board

Board		
Software Version	Hardware Version	Description
21.221.05.00.00	CL1E5372SM	Main board

3.2.2 Sub-Assembly

Sub-Assembly			
Sub-Assembly Name	Model	Manufacturer	Description
Adapter	HW-050100U1W	HUAWEI	AC/DC adapter, 0degC-45degC,100V-240V,5.0V/1.0A, 2PIN/DC USB2.0 ,HUAWEI LOGO,
Adapter	HW-050100U2W	HUAWEI	Input Voltage : 100-240V ~50/60Hz, 0.2A Output Voltage:  5.0V 1.0A
Li-ion Battery	HB554666RAW	HUAWEI	Rated capacity: 1500mAh Nominal Voltage:  +3.7V Charging Voltage:  +4.2V
Li-ion Battery	HB5F2H	HUAWEI	Rated capacity: 1780mAh Nominal Voltage:  +3.7V Charging Voltage:  +4.2V
USB Cable	/	HUAWEI	Terminal Accessory, Terminal Dedicated

3.3 Technical Description

Characteristics	Description			
IEEE 802.11 WLAN Mode Supported	☒ 802.11b (20 MHz channel bandwidth), ☒ 802.11g (20 MHz channel bandwidth) ☒ 802.11n (20 MHz channel bandwidth), ☒ 802.11n (40 MHz channel bandwidth)			
TX/RX Operating Range	2412-2462 MHz band	fc = 2407 MHz + N * 5 MHz, where: - fc = “Operating Frequency” in MHz, - N = “Channel Number” with the range from 1 to 11 for the 20 MHz channel bandwidth, or 3 to 9 for the 40 MHz channel bandwidth.		
Data Rate	802.11b	1 Mbps, 2 Mbps, 5.5 Mbps, 11 Mbps		
	802.11g	6 Mbps, 9 Mbps, 12 Mbps, 18 Mbps, 24 Mbps, 36 Mbps, 48 Mbps, 54 Mbps		
	802.11n (SISO)	MCS 0 to MCS 7		
	802.11n (MIMO)	MCS 8 to MCS 15		
Modulation Type	DBPSK/DQPSK/CCK (DSSS), BPSK/QPSK/16QAM/64QAM (OFDM).			
Emission Designator	8M6G1D (for 802.11b mode), 16M5G7D (for 802.11g mod), 17M8G7D (for 802.11n (20M) , 17M7G7D (for 802.11n (20M) MIMO mode), 36M4G7D (for 802.11n (40M) mode), 36M4G7D (for 802.11n (40M) MIMO mode)			
TX Power Control	☒ Supported, ☐ Not Supported			
Standby Mode	☐ Supported, ☒ Not Supported			
Equipment Type	☐ Stand-alone equipment, ☐ Plug-in radio device, ☒ Combined equipment			
Antenna	Description	Isotropic Antenna,2400~2500MHz/5150~5850MHz,1.5dBi/2.1dBi,isotropic,5W,N-J, no		
	Type	☐ External, ☒ Integrated		
	Ports	☒ Ant 1, ☒ Ant 2, ☐ Ant 3		
	Smart System	☒ SISO (for 802.11b/g/n), ☒ MIMO (for 802.11n): 2 Tx & 2 Rx, ☐ Diversity (for 802.11b/g) : Tx & Rx		
	Gain	Ant 1: 1.5 dBi, Ant 2: 2.1 dBi (per antenna port, max.)		
	Remark	When the EUT is put into service, the practical maximum antenna gain should NOT exceed the value as described above.		
Power Supply	Type	☒ AC/DC Adapter	☐ PoE:	☐ Other:

4 General Test Conditions / Configurations

4.1 Test Modes

NOTE: Typical working modes for each IEEE 802.11 mode are selected to perform tests.

Test Mode	Test Modes Description
11B	IEEE 802.11b with data rate of 1 Mbps using SISO mode.
11G	IEEE 802.11g with data rate of 6 Mbps using SISO mode.
11N20	IEEE 802.11n with data rate of MCS0 and bandwidth of 20 MHz using SISO mode.
11N20m	IEEE 802.11n with data rate of MCS8 and bandwidth of 20 MHz using MIMO mode.
11N40	IEEE 802.11n with data rate of MCS0 and bandwidth of 40 MHz using SISO mode.
11N40m	IEEE 802.11n with data rate of MCS8 and bandwidth of 40 MHz using MIMO mode.

4.2 EUT Configurations

4.2.1 General Configurations

Configuration	Description
Test Antenna Ports	Until otherwise specified, - All TX tests are performed at all TX antenna ports of the EUT, and - All RX tests are performed at all RX antenna ports of the EUT.
Multiple RF Sources	Other than the tested RF source of the EUT, other RF source(s) are disabled or shutdown during measurements.

4.2.2 Customized Configurations

Test Mode	RF Ch.	TX Freq. [MHz]	Antenna Port	RX Freq. [MHz]	Ch. BW [MHz]
11B	L	Ch No. 1 / 2412 MHz	Ant1	---	20
			Ant2	---	20
	M	Ch No. 5 / 2433 MHz	Ant1	---	20
			Ant2	---	20
	H	Ch No. 9 / 2452 MHz	Ant1	---	20
			Ant2	---	20
11G	L	Ch No. 1 / 2412 MHz	Ant1	---	20
			Ant2	---	20
	M	Ch No. 5 / 2433 MHz	Ant1	---	20
			Ant2	---	20
	H	Ch No. 9 / 2452 MHz	Ant1	---	20
			Ant2	---	20
11N20	L	Ch No. 1 / 2412 MHz	Ant1	---	20
			Ant2	---	20
	M	Ch No. 5 / 2433 MHz	Ant1	---	20
			Ant2	---	20
	H	Ch No. 9 / 2452 MHz	Ant1	---	20
			Ant2	---	20
11N20m	L	Ch No. 1 / 2412 MHz	Ant1	---	20
			Ant2	---	20
	M	Ch No. 5 / 2433 MHz	Ant1	---	20
			Ant2	---	20
	H	Ch No. 9 / 2452 MHz	Ant1	---	20
			Ant2	---	20
11N40	L	Ch No. 3 / 2422 MHz	Ant1	---	40
			Ant2	---	40
	M	Ch No. 5 / 2432 MHz	Ant1	---	40

Test Mode	RF Ch.	TX Freq. [MHz]	Antenna Port	RX Freq. [MHz]	Ch. BW [MHz]
	H	Ch No. 7 / 2442 MHz	Ant2	---	40
			Ant1	---	40
			Ant2	---	40
11N40m	L	Ch No. 3 / 2422 MHz	Ant1	---	40
			Ant2	---	40
	M	Ch No. 5 / 2432 MHz	Ant1	---	40
			Ant2	---	40
	H	Ch No. 7 / 2442 MHz	Ant1	---	40
			Ant2	---	40



4.3 Test Environments

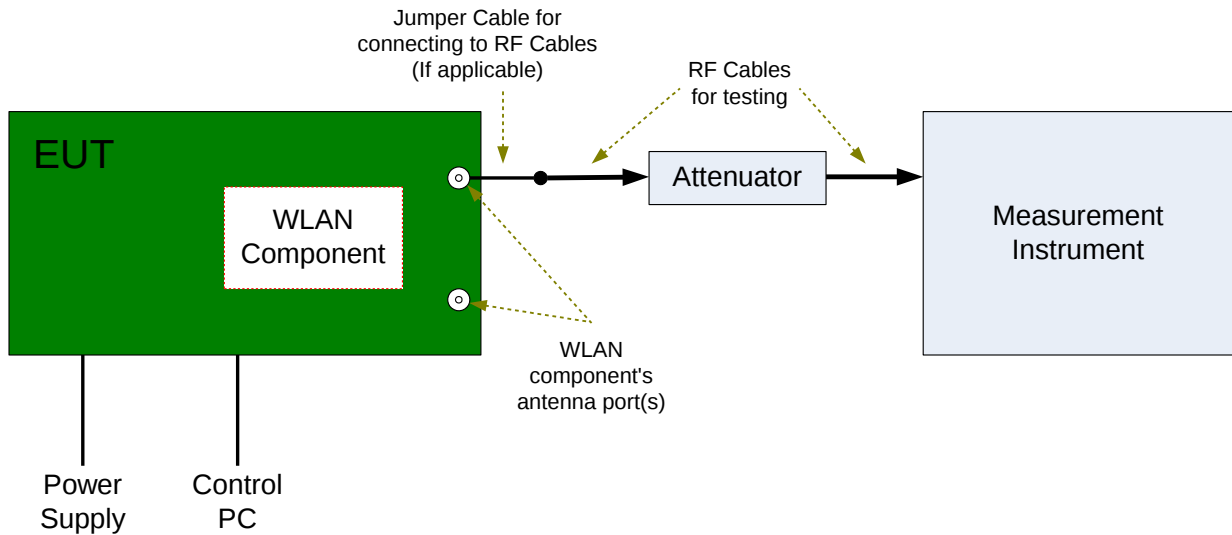
NOTE: The values used in the test report may be stringent than the declared.

Environment Parameter	Selected Values During Tests		
	Temperature	Voltage	Relative Humidity
NTNV	Ambient	3.7 VDC	Ambient

4.4 Test Setups

4.4.1 Test Setup 1

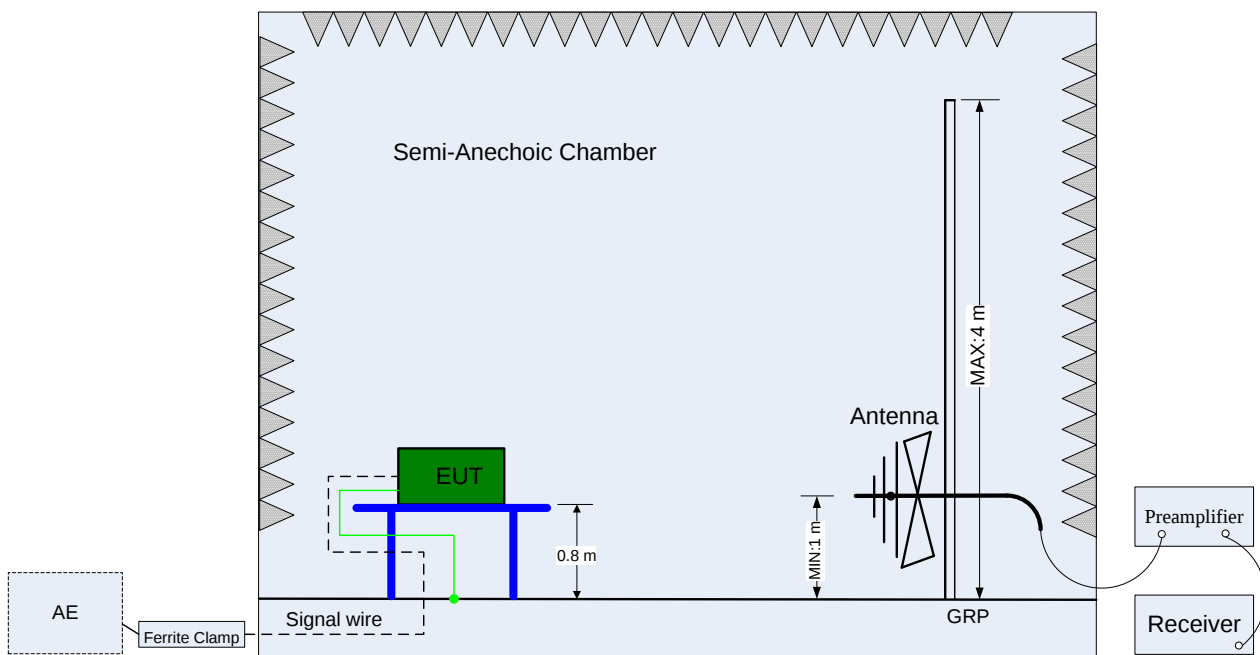
The WLAN component's antenna ports(s) of the EUT are connected to the measurement instrument per an appropriate attenuator. The EUT is controlled by PC/software to emit the specified signals for the purpose of measurements.



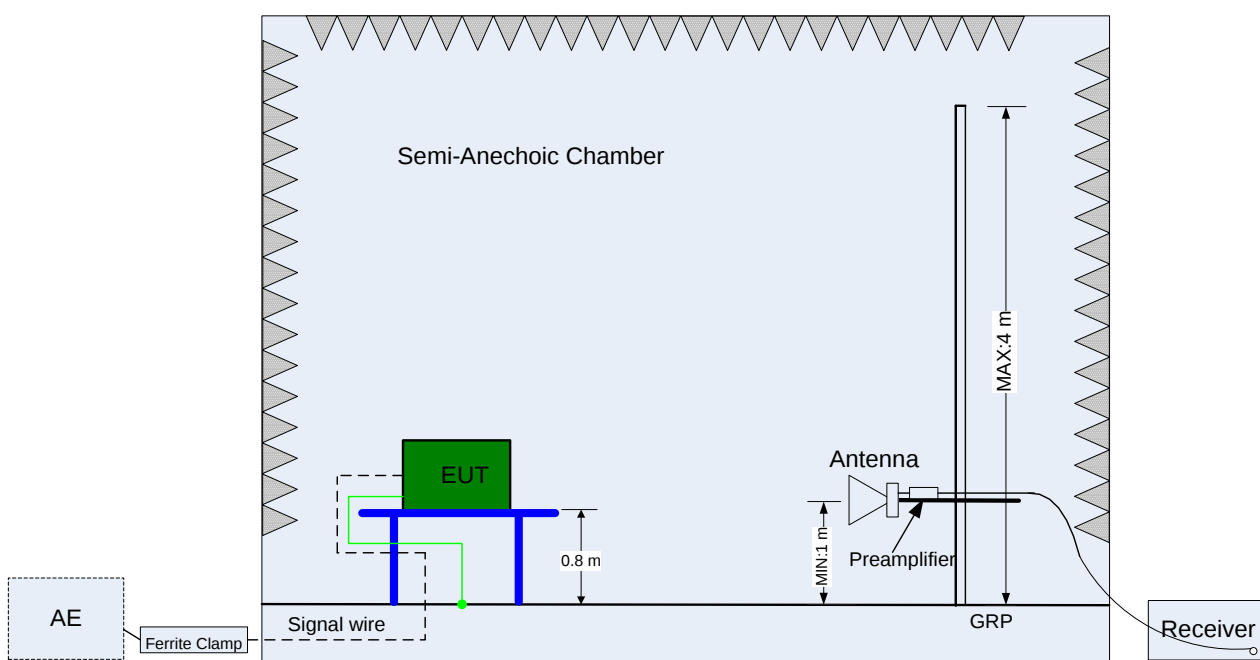
4.4.2 Test Setup 2

The test site semi-anechoic chamber has met the requirement of NSA tolerance 4 dB according to the standards: ANSI C63.4. The test distance is 3m. The setup is according to ANSI C63.4 and CAN/CSA-CEI/IEC CISPR 22.

The maximal emission value is acquired by adjusting the antenna height, polarisation and turntable azimuth. Normally, the height range of antenna is 1 m to 4 m, the azimuth range of turntable is 0° to 360°, and the receive antenna has two polarizations Vertical (V) and Horizontal (H).



(Below 1 GHz)

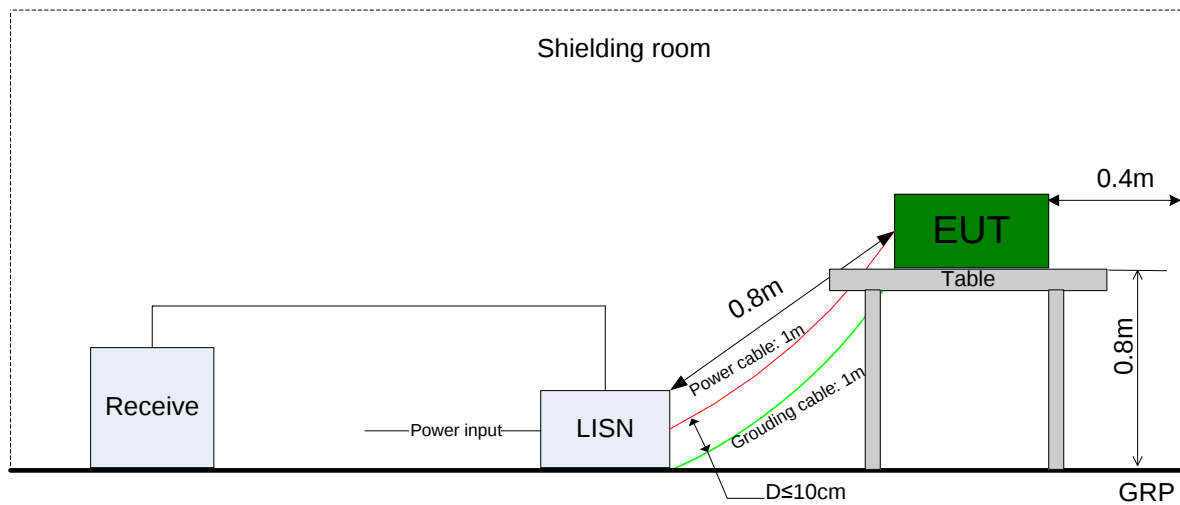


(Above 1 GHz)

4.4.3 Test Setup 3

The mains cable of the EUT (maybe per AC/DC Adapter) must be connected to LISN. The LISN shall be placed 0.8 m from the boundary of EUT and bonded to a ground reference plane for LISN mounted on top of the ground reference plane. This distance is between the closest points of the LISN and the EUT. All other units of the EUT and associated equipment shall be at least 0.8m from the LISN.

Ground connections, where required for safety purposes, shall be connected to the reference ground point of the LISN and, where not otherwise provided or specified by the manufacturer, shall be of same length as the mains cable and run parallel to the mains connection at a separation distance of not more than 0.1 m.



4.5 Test Conditions

Test Case	Test Conditions	
	Configuration	Description
DTS (6 dB) Bandwidth	Measurement Method	FCC KDB 558074 §8.2 Option 2.
	Test Environment	NTNV
	Test Setup	Test Setup 1
	EUT Configuration	11B_L@Ant1, 11B_L@Ant2, 11B_M@Ant1, 11B_M@Ant2, 11B_H@Ant1, 11B_H@Ant2, 11G_L@Ant1, 11G_L@Ant2, 11G_M@Ant1, 11G_M@Ant2, 11G_H@Ant1, 11G_H@Ant2, 11N20_L@Ant1, 11N20_L@Ant2, 11N20_M@Ant1, 11N20_M@Ant2, 11N20_H@Ant1, 11N20_H@Ant2, 11N20m_L@Ant1, 11N20m_L@Ant2, 11N20m_M@Ant1, 11N20m_M@Ant2, 11N20m_H@Ant1, 11N20m_H@Ant2, 11N40_L@Ant1, 11N40_L@Ant2, 11N40_M@Ant1, 11N40_M@Ant2, 11N40_H@Ant1, 11N40_H@Ant2, 11N40m_L@Ant1, 11N40m_L@Ant2, 11N40m_M@Ant1, 11N40m_M@Ant2, 11N40m_H@Ant1, 11N40m_H@Ant2,
Occupied Bandwidth (Only for IC requirement)	Measurement Method	RSS-Gen, 4.6.1.
	Test Environment	NTNV
	Test Setup	Test Setup 1
	EUT Configuration	11B_L@Ant1, 11B_L@Ant2, 11B_M@Ant1, 11B_M@Ant2, 11B_H@Ant1, 11B_H@Ant2, 11G_L@Ant1, 11G_L@Ant2, 11G_M@Ant1, 11G_M@Ant2, 11G_H@Ant1, 11G_H@Ant2, 11N20_L@Ant1, 11N20_L@Ant2, 11N20_M@Ant1, 11N20_M@Ant2, 11N20_H@Ant1, 11N20_H@Ant2, 11N20m_L@Ant1, 11N20m_L@Ant2, 11N20m_M@Ant1, 11N20m_M@Ant2, 11N20m_H@Ant1, 11N20m_H@Ant2, 11N40_L@Ant1, 11N40_L@Ant2, 11N40_M@Ant1, 11N40_M@Ant2, 11N40_H@Ant1, 11N40_H@Ant2, 11N40m_L@Ant1, 11N40m_L@Ant2, 11N40m_M@Ant1, 11N40m_M@Ant2, 11N40m_H@Ant1, 11N40m_H@Ant2,
Maximum Peak Conducted Output Power	Measurement Method	FCC KDB 558074 §9.1 .2 (integrated band power method).
	Test Environment	NTNV
	Test Setup	Test Setup 1
	EUT Configuration	11B_L@Ant1, 11B_L@Ant2, 11B_M@Ant1, 11B_M@Ant2, 11B_H@Ant1, 11B_H@Ant2, 11G_L@Ant1, 11G_L@Ant2, 11G_M@Ant1, 11G_M@Ant2, 11G_H@Ant1, 11G_H@Ant2, 11N20_L@Ant1, 11N20_L@Ant2, 11N20_M@Ant1, 11N20_M@Ant2, 11N20_H@Ant1, 11N20_H@Ant2,

Test Case	Test Conditions	
	Configuration	Description
		11N20m_L@Ant1, 11N20m_L@Ant2, 11N20m_M@Ant1, 11N20m_M@Ant2, 11N20m_H@Ant1, 11N20m_H@Ant2, 11N40_L@Ant1, 11N40_L@Ant2, 11N40_M@Ant1, 11N40_M@Ant2, 11N40_H@Ant1, 11N40_H@Ant2, 11N40m_L@Ant1, 11N40m_L@Ant2, 11N40m_M@Ant1, 11N40m_M@Ant2, 11N40m_H@Ant1, 11N40m_H@Ant2,
Maximum Power Spectral Density Level	Measurement Method	FCC KDB 558074 §10.2 (peak PSD).
	Test Environment	NTNV
	Test Setup	Test Setup 1
	EUT Configuration	11B_L@Ant1, 11B_L@Ant2, 11B_M@Ant1, 11B_M@Ant2, 11B_H@Ant1, 11B_H@Ant2, 11G_L@Ant1, 11G_L@Ant2, 11G_M@Ant1, 11G_M@Ant2, 11G_H@Ant1, 11G_H@Ant2, 11N20_L@Ant1, 11N20_L@Ant2, 11N20_M@Ant1, 11N20_M@Ant2, 11N20_H@Ant1, 11N20_H@Ant2, 11N20m_L@Ant1, 11N20m_L@Ant2, 11N20m_M@Ant1, 11N20m_M@Ant2, 11N20m_H@Ant1, 11N20m_H@Ant2, 11N40_L@Ant1, 11N40_L@Ant2, 11N40_M@Ant1, 11N40_M@Ant2, 11N40_H@Ant1, 11N40_H@Ant2, 11N40m_L@Ant1, 11N40m_L@Ant2, 11N40m_M@Ant1, 11N40m_M@Ant2, 11N40m_H@Ant1, 11N40m_H@Ant2,
Band Edges Compliance	Measurement Method	FCC KDB 558074 §13.0.
	Test Environment	NTNV
	Test Setup	Test Setup 1
	EUT Configuration	11B_L@Ant1, 11B_L@Ant2, 11B_H@Ant1, 11B_H@Ant2, 11G_L@Ant1, 11G_L@Ant2, 11G_H@Ant1, 11G_H@Ant2, 11N20_L@Ant1, 11N20_L@Ant2, 11N20_H@Ant1, 11N20_H@Ant2, 11N20m_L@Ant1, 11N20m_L@Ant2, 11N20m_H@Ant1, 11N20m_H@Ant2, 11N40_L@Ant1, 11N40_L@Ant2, 11N40_H@Ant1, 11N40_H@Ant2, 11N40m_L@Ant1, 11N40m_L@Ant2, 11N40m_H@Ant1, 11N40m_H@Ant2,
Unwanted Emissions into Non-Restricted Frequency Bands	Measurement Method	FCC KDB 558074 §11.0
	Test Environment	NTNV
	Test Setup	Test Setup 1
	EUT Configuration	11B_L@Ant1, 11B_L@Ant2, 11B_M@Ant1, 11B_M@Ant2, 11B_H@Ant1, 11B_H@Ant2, 11G_L@Ant1, 11G_L@Ant2, 11G_M@Ant1, 11G_M@Ant2, 11G_H@Ant1, 11G_H@Ant2, 11N20_L@Ant1, 11N20_L@Ant2, 11N20_M@Ant1, 11N20_M@Ant2, 11N20_H@Ant1, 11N20_H@Ant2, 11N20m_L@Ant1, 11N20m_L@Ant2, 11N20m_M@Ant1, 11N20m_M@Ant2, 11N20m_H@Ant1, 11N20m_H@Ant2,

Test Case	Test Conditions	
	Configuration	Description
		11N20m_M@Ant2, 11N20m_H@Ant1, 11N20m_H@Ant2, 11N40_L@Ant1, 11N40_L@Ant2, 11N40_M@Ant1, 11N40_M@Ant2, 11N40_H@Ant1, 11N40_H@Ant2, 11N40m_L@Ant1, 11N40m_L@Ant2, 11N40m_M@Ant1, 11N40m_M@Ant2, 11N40m_H@Ant1, 11N40m_H@Ant2,
Unwanted Emissions into Restricted Frequency Bands (Radiated)	Measurement Method	ANSI C63.10; FCC KDB 558074 §12.1, Radiated
	Test Environment	NTNV
	Test Setup	Test Setup 2
	EUT Placement	☐ Flatwise, ☐ Upright, ☐ Hung
	EUT Configuration	(1) 30 MHz to 1 GHz: 11B_L@Ant1 (Worst Conf.). (2) 1 GHz to 3 GHz: 11B_L@Ant1, 11B_L@Ant2, 11B_H@Ant1, 11B_H@Ant2, 11G_L@Ant1, 11G_L@Ant2, 11G_H@Ant1, 11G_H@Ant2, 11N20_L@Ant1, 11N20_L@Ant2, 11N20_H@Ant1, 11N20_H@Ant2, 11N20m_L@Ant1, 11N20m_L@Ant2, 11N20m_H@Ant1, 11N20m_H@Ant2, 11N40_L@Ant1, 11N40_L@Ant2, 11N40_H@Ant1, 11N40_H@Ant2, 11N40m_L@Ant1, 11N40m_L@Ant2, 11N40m_H@Ant1, 11N40m_H@Ant2, (3) 3 GHz to 18 GHz: 11B_L@Ant1 (Worse Conf.), 11B_H@Ant1 (Worse Conf.). (4) 18 GHz to 26.5 GHz: 11B_L@Ant1 (Worse Conf.), 11B_H@Ant1 (Worse Conf.).
AC Power Line Conducted Emissions	Measurement Method	AC mains conducted.
	Test Environment	NTNV
	Test Setup	Test Setup 3
	EUT Configuration	11B_L@Ant1 (Worst Conf.).



5 Main Test Instruments

Equipment Name	Manufacturer	Model	Serial Number	Cal Date	Cal- Due
Power supply	KEITHLEY	2303	1288003	2012-11-19	2014-11-18
Wireless Communication Test set	Agilent	N4010A	MY49081592	2013-10-29	2014-10-28
Universal Radio Communication Tester	R&S	CMU200	113164	2013-07-18	2014-07-17
Universal Radio Communication Tester	R & S	CMW500	126855	2013-08-08	2015-08-09
Spectrum Analyzer	Agilent	E4440A	MY48250119	2013-08-09	2014-08-08
Signal Analyzer	R&S	FSQ31	200021	2013-10-29	2014-10-28
Spectrum Analyzer	Agilent	N9030A	MY49431698	2013-10-29	2014-10-28
Temperature Chamber	ESPEC	MW3030	06114003	2013-05-14	2014-05-13
Signal generator	Agilent	E8257D	MY51500314	2013-04-15	2014-04-14
Vector Signal Generator	R&S	SMU200A	104162	2013-10-29	2014-10-28
Test receiver	R&S	ESU26	100150	2013-05-15	2014-05-14
Spectrum analyzer	R&S	FSU3	200474	2013-12-24	2014-12-23
Spectrum analyzer	R&S	FSU43	100144	2013-12-24	2014-12-23
Double-Ridged Waveguide Horn Antenna (1G~18GHz)	R&S	HF907	100304	2013-02-02	2015-02-01
Trilog Broadband Antenna (30M~3GHz)	SCHWARZBECK	VULB 9163	9163-490	2013-02-02	2015-02-01
LOOP Antennas(9kHz-30MHz)	R&S	HFH2-Z2	100262	2013-03-23	2015-03-22
Pyramidal Horn Antenna(18GHz-26-GHz)	ETS-LINDGREN	3160-09	5140299	2013-03-05	2015-03-04
Artificial Mains Network	R&S	ENV4200	100134	2013-12-24	2014-12-23
Artificial Mains Network	R&S	ENV216	100382	2013-12-24	2014-12-23

END



Appendix for Test report

Appendix A: DTS (6 dB) Bandwidth

In this document, the "DTS6dBBW" refers to the measured "DTS (6 dB) Bandwidth" value. In this Appendix, the "fc(DTS6dBBW)" refers to the centre of the measured "DTS6dBBW". The introduction of the "fc(DTS6dBBW)" is due to that other measurements use it as the spectrum analyzer setting.

For measurements on smart antenna systems (devices with multiple transmit chains), the test is performed at each chain, and used as respective results for each chain.

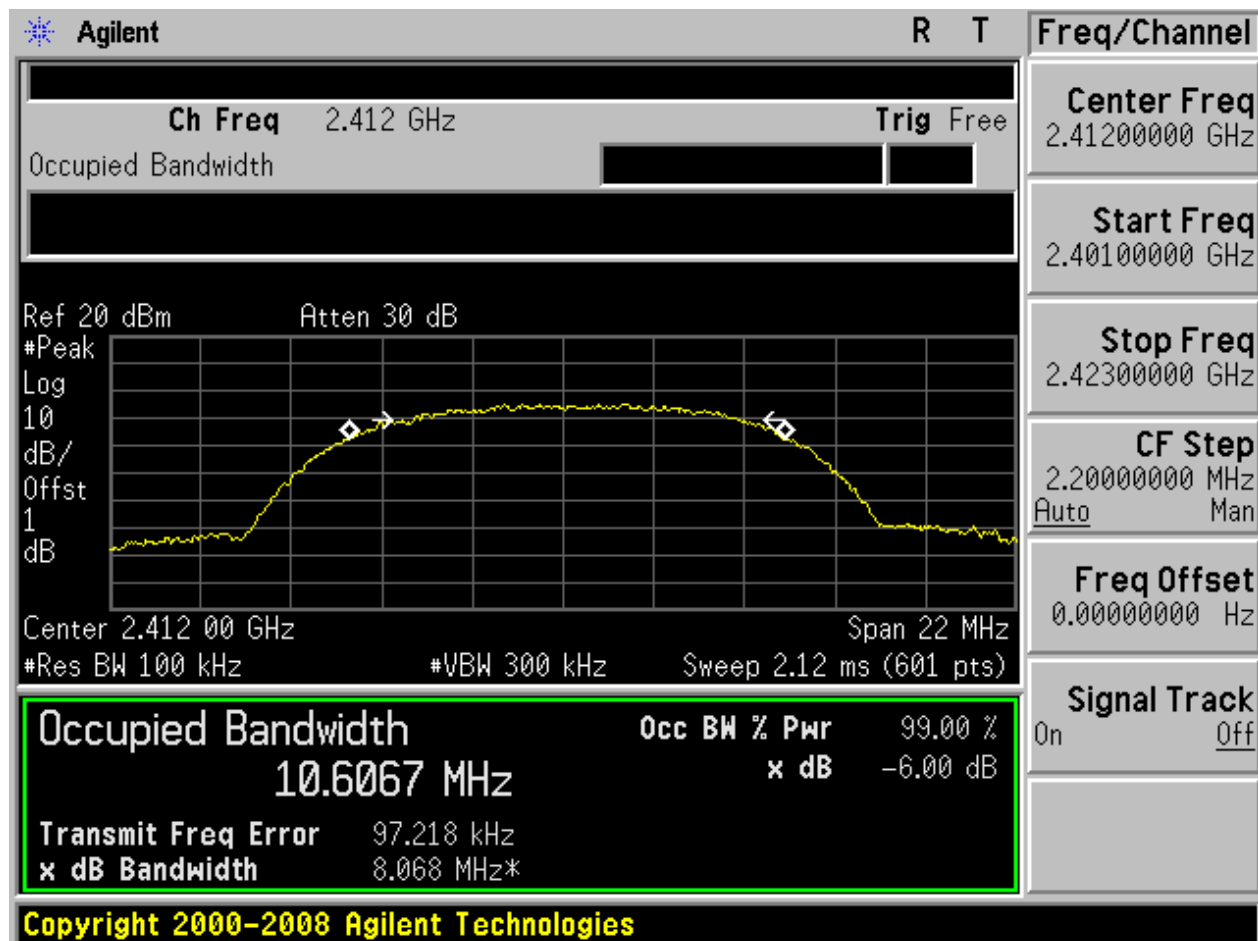
Part I - Test Results

Test Mode	Test Channel	Frequency[MHz]	Ant	DTS6dBBW[MHz]	Verdict
11B	L	2412	Ant 1	8.07	pass
11B	L	2412	Ant 2	8.30	pass
11B	M	2437	Ant 1	8.50	pass
11B	M	2437	Ant 2	8.56	pass
11B	H	2462	Ant 1	8.40	pass
11B	H	2462	Ant 2	8.08	pass
11G	L	2412	Ant 1	16.43	pass
11G	L	2412	Ant 2	15.17	pass
11G	M	2437	Ant 1	15.85	pass
11G	M	2437	Ant 2	16.34	pass
11G	H	2462	Ant 1	12.04	pass
11G	H	2462	Ant 2	15.46	pass
11N20	L	2412	Ant 1	17.74	pass
11N20	L	2412	Ant 2	17.71	pass
11N20	M	2437	Ant 1	17.00	pass
11N20	M	2437	Ant 2	17.27	pass
11N20	H	2462	Ant 1	17.38	pass
11N20	H	2462	Ant 2	16.60	pass
11N20m	L	2412	Ant 1	17.68	pass
11N20m	L	2412	Ant 2	15.79	pass
11N20m	M	2437	Ant 1	16.43	pass
11N20m	M	2437	Ant 2	15.99	pass
11N20m	H	2462	Ant 1	16.09	pass
11N20m	H	2462	Ant 2	17.03	pass
11N40	L	2422	Ant 1	35.91	pass
11N40	L	2422	Ant 2	36.09	pass
11N40	M	2437	Ant 1	36.35	pass
11N40	M	2437	Ant 2	36.35	pass



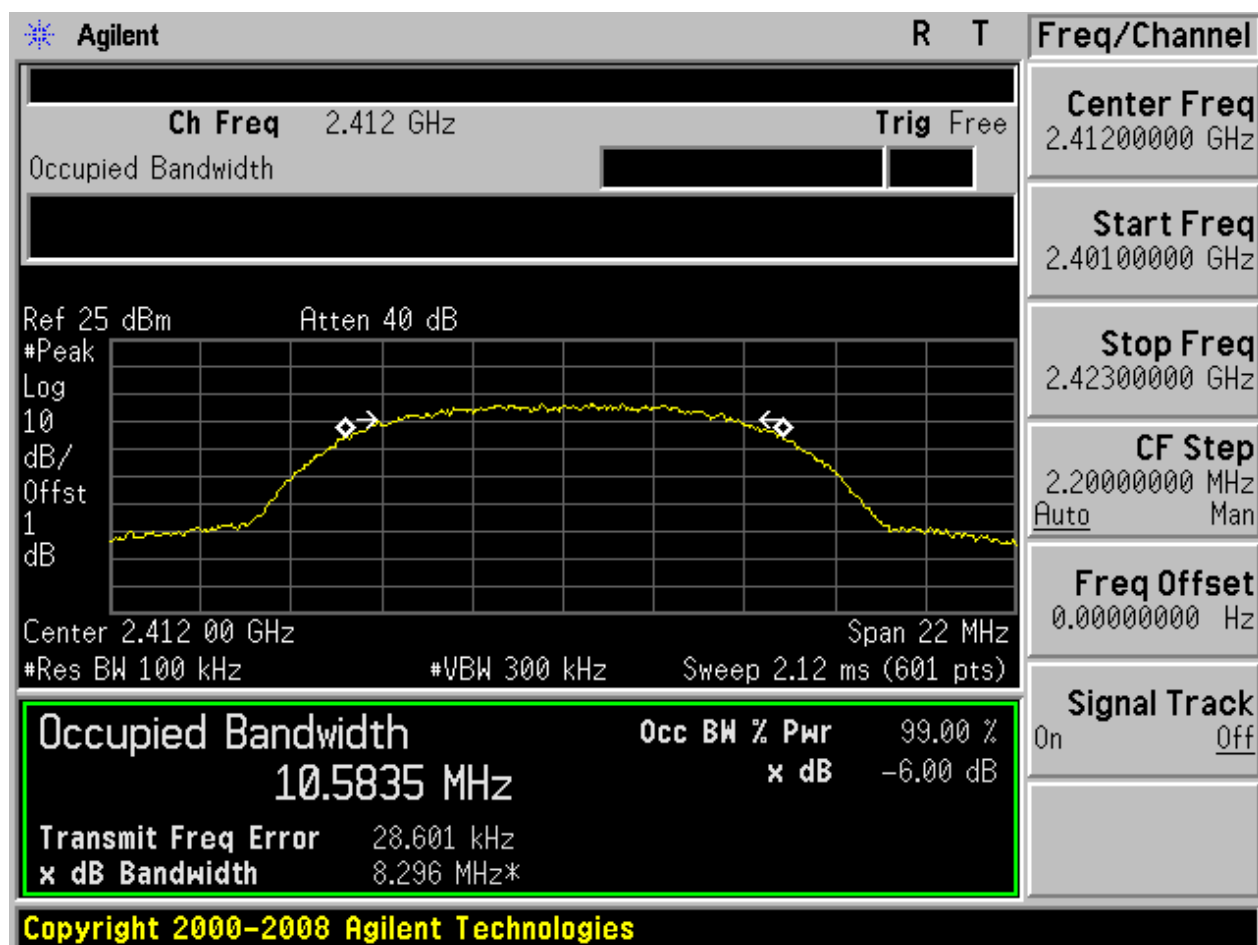
Test Mode	Test Channel	Frequency[MHz]	Ant	DTS6dBBW[MHz]	Verdict
11N40	H	2452	Ant 1	35.78	pass
11N40	H	2452	Ant 2	36.38	pass
11N40m	L	2422	Ant 1	34.52	pass
11N40m	L	2422	Ant 2	36.39	pass
11N40m	M	2437	Ant 1	35.43	pass
11N40m	M	2437	Ant 2	35.44	pass
11N40m	H	2452	Ant 1	32.64	pass
11N40m	H	2452	Ant 2	32.99	pass

1.1 11B L@Ant 1



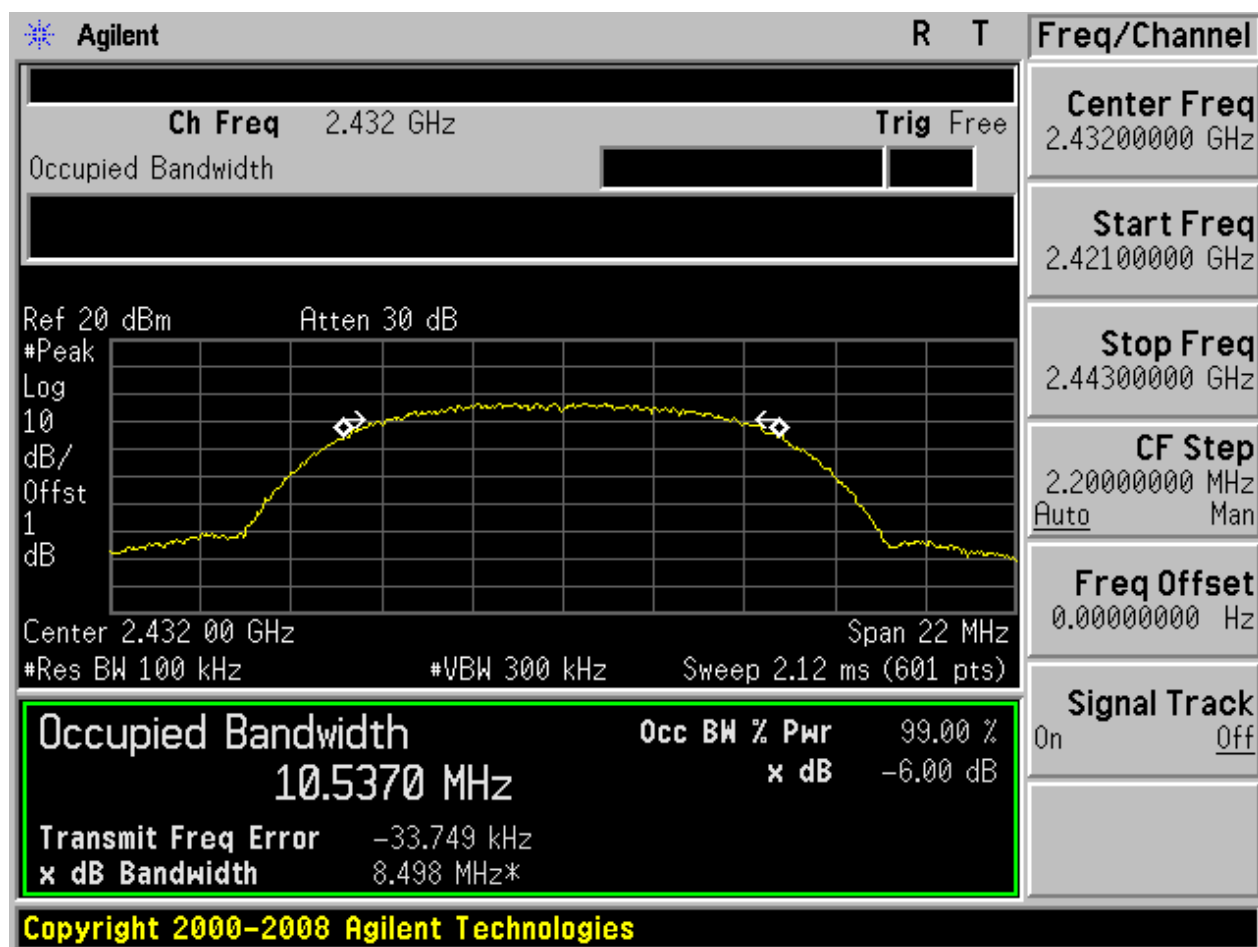


1.2 11B_L@Ant 2



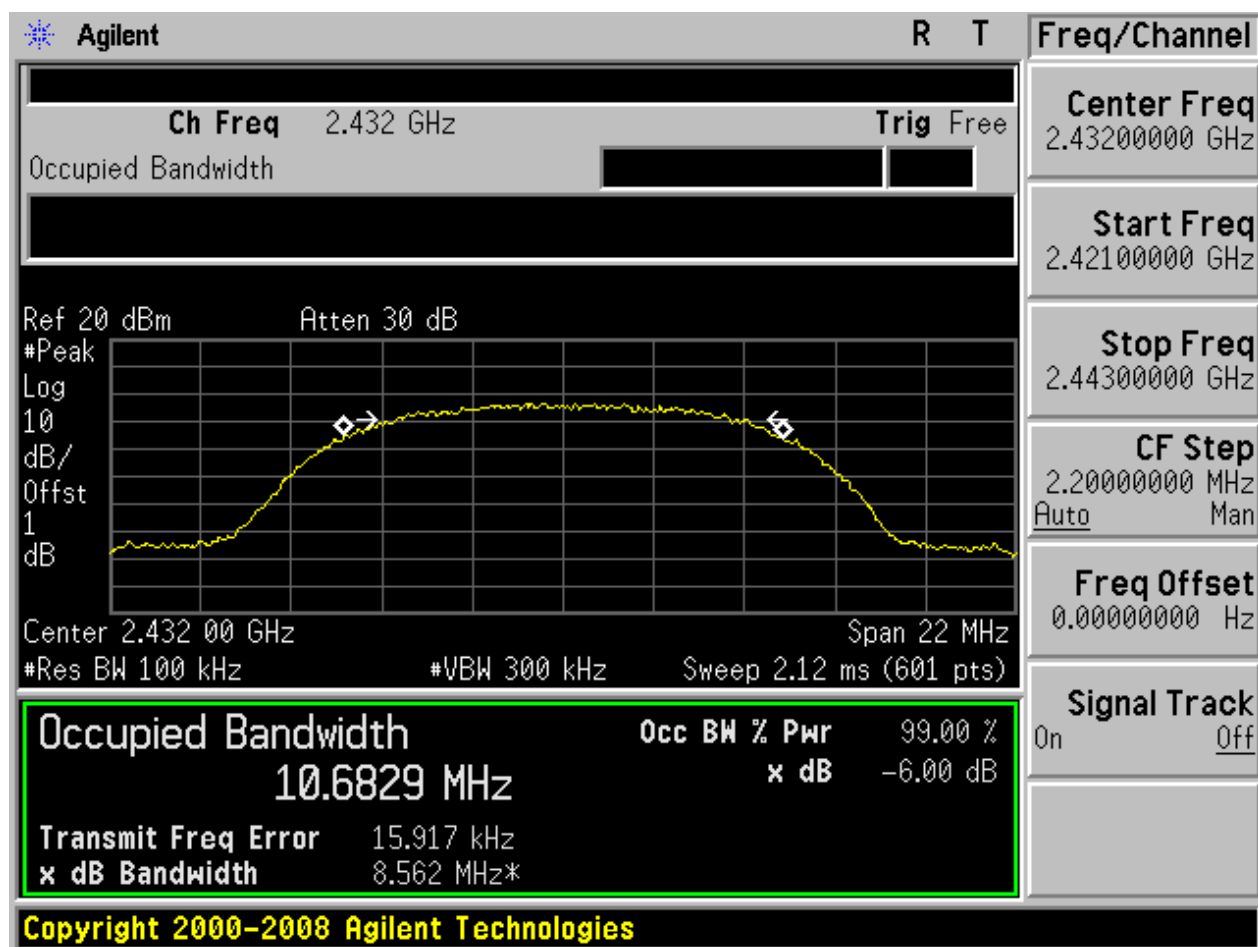


1.3 11B_M@Ant 1



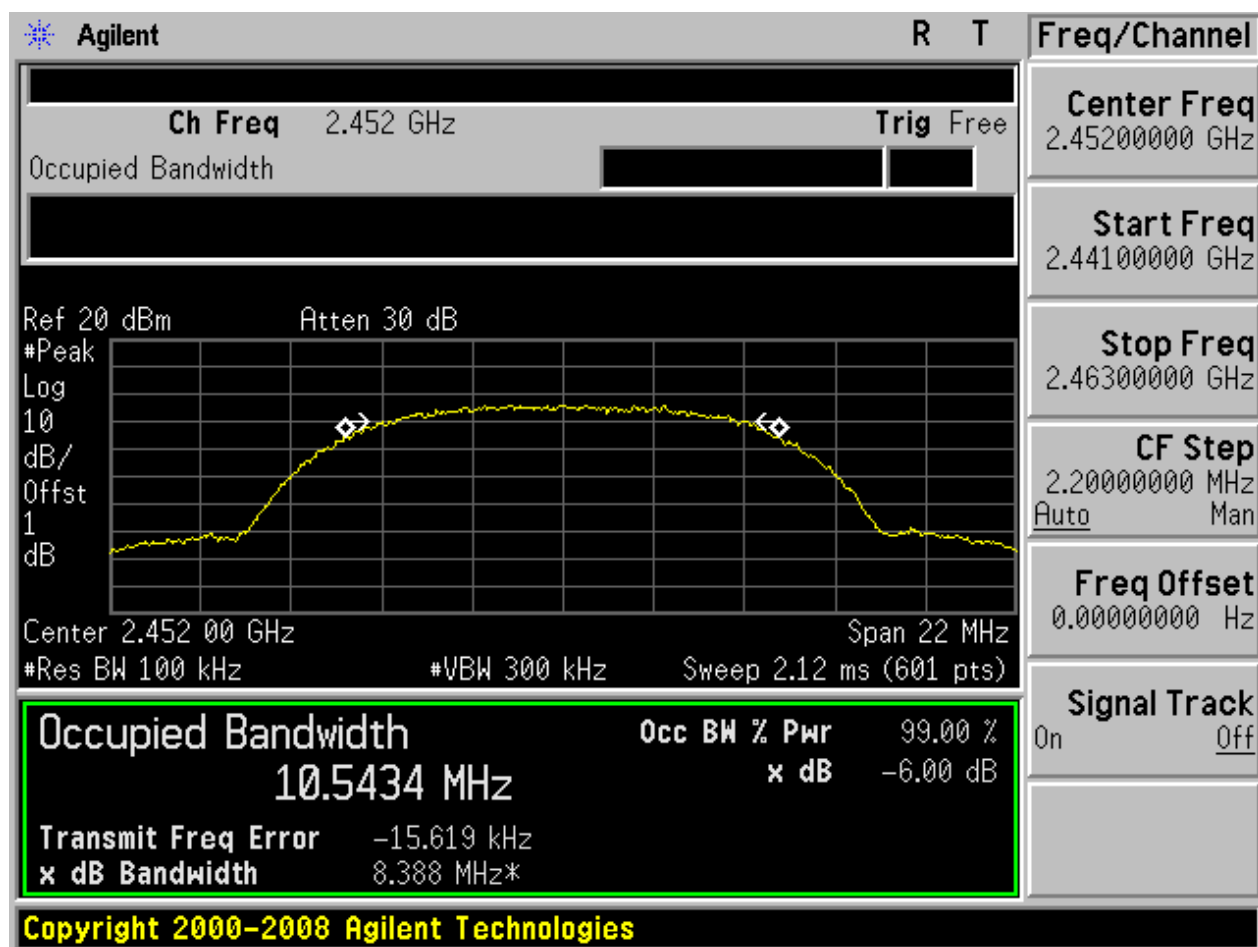


1.4 11B_M@Ant 2



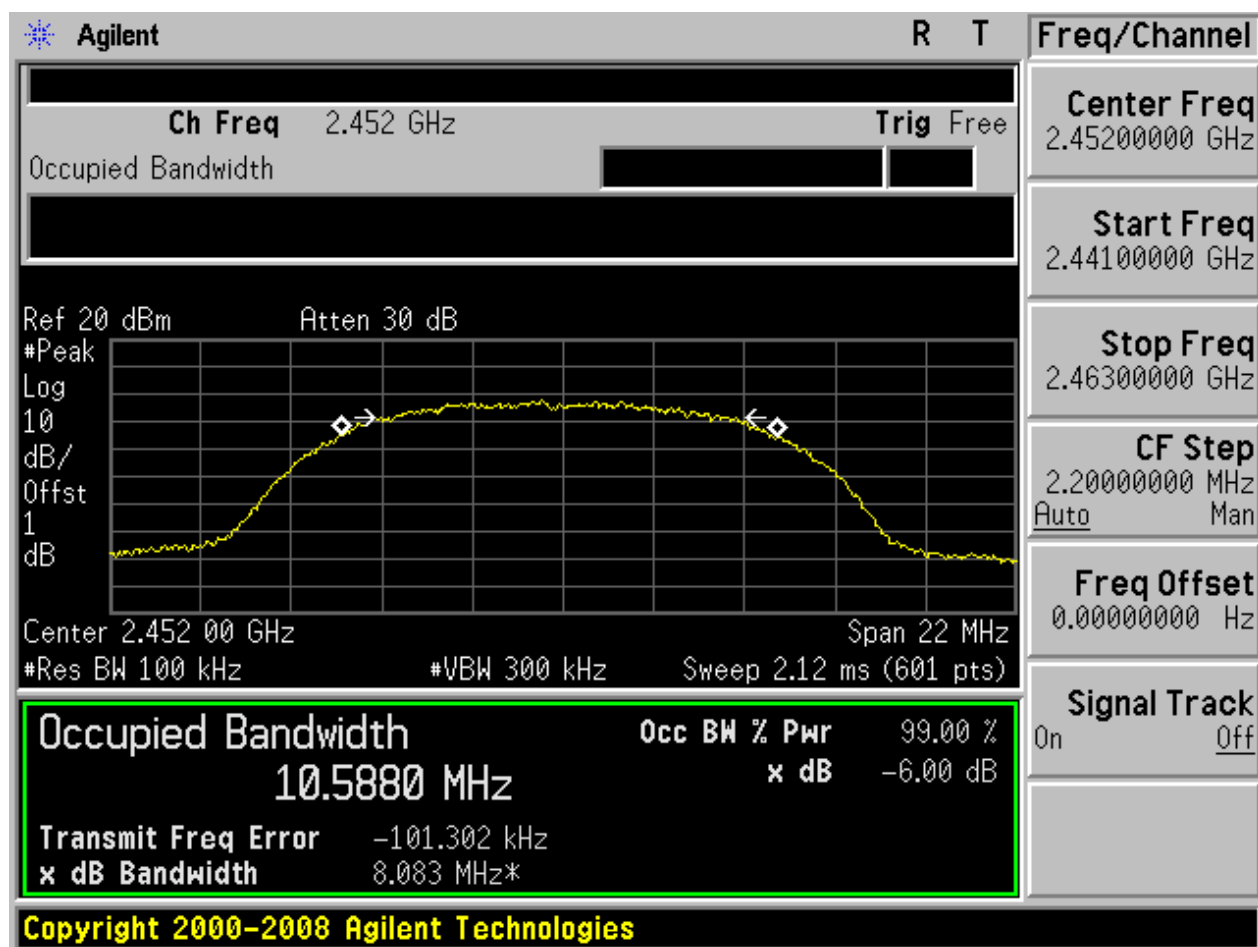


1.5 11B_H@Ant 1



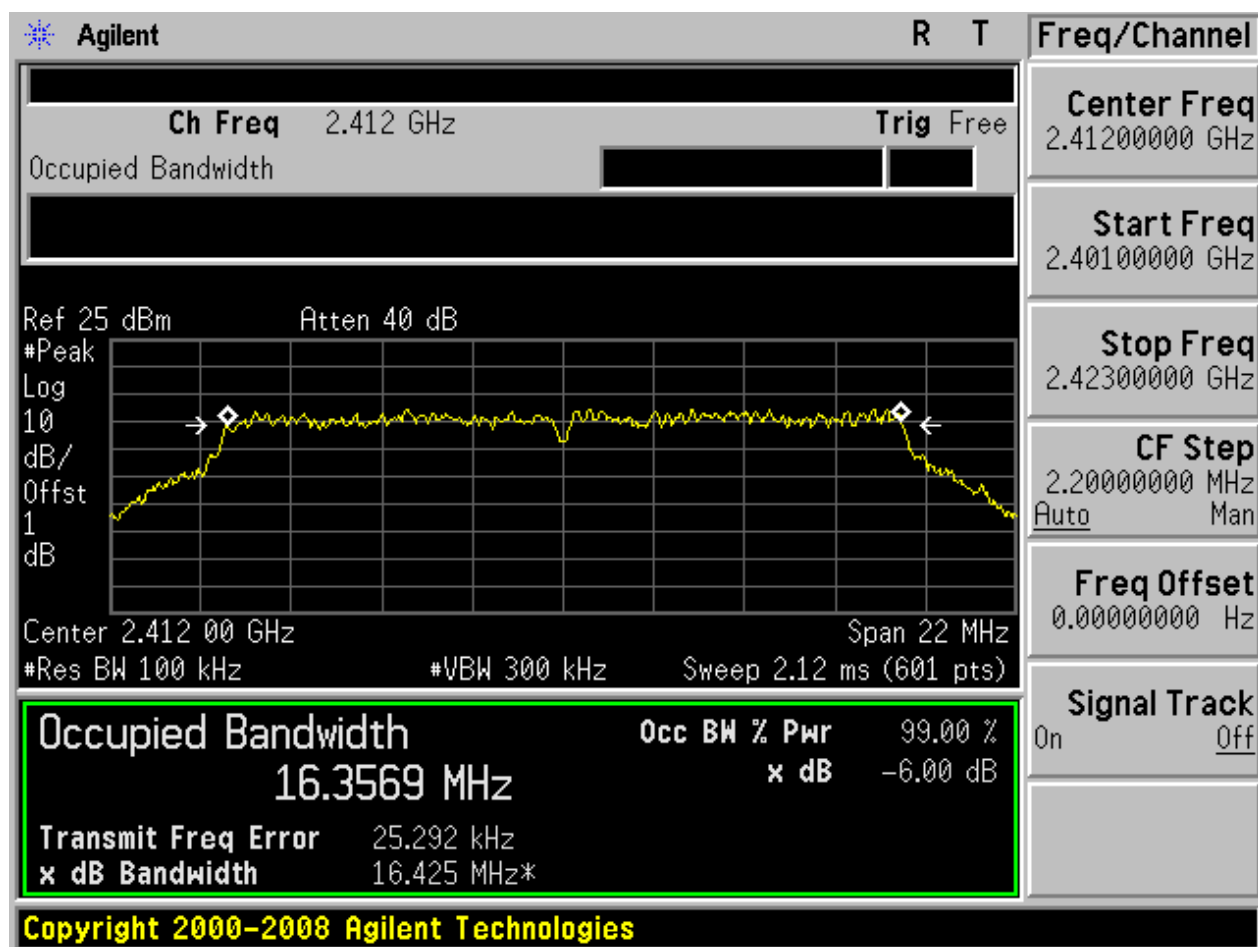


1.6 11B_H@Ant 2



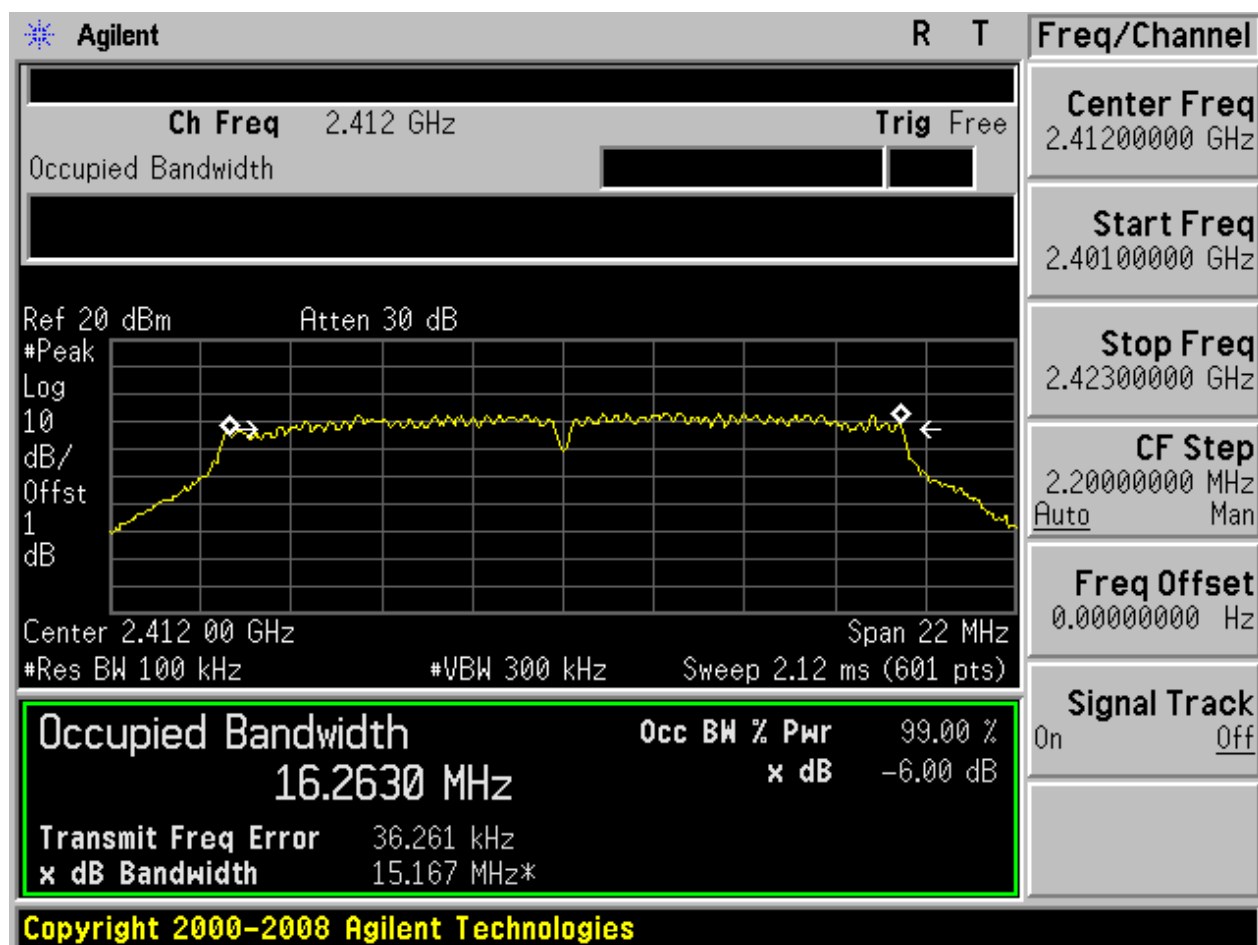


1.7 11G_L@Ant 1



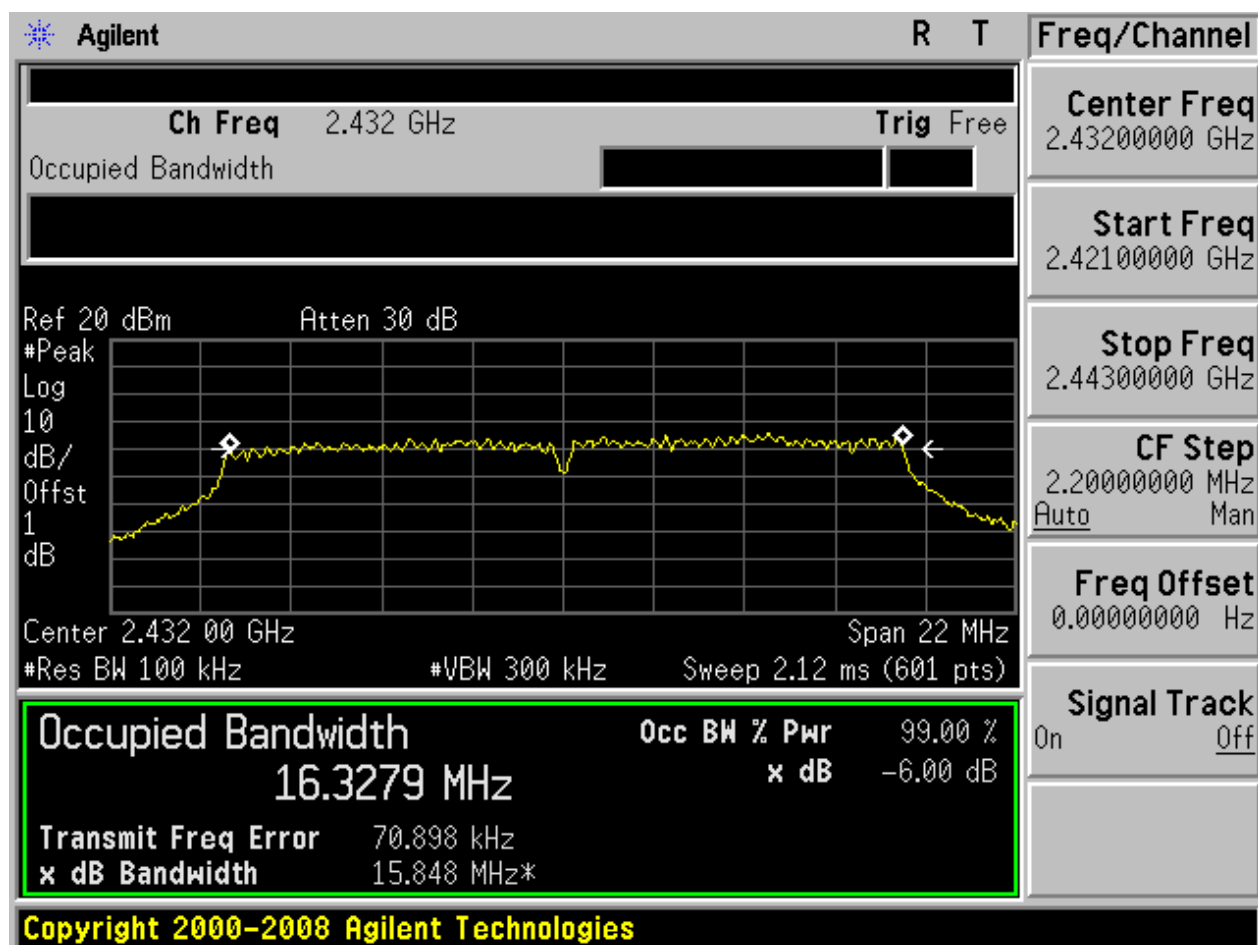


1.8 11G_L@Ant 2



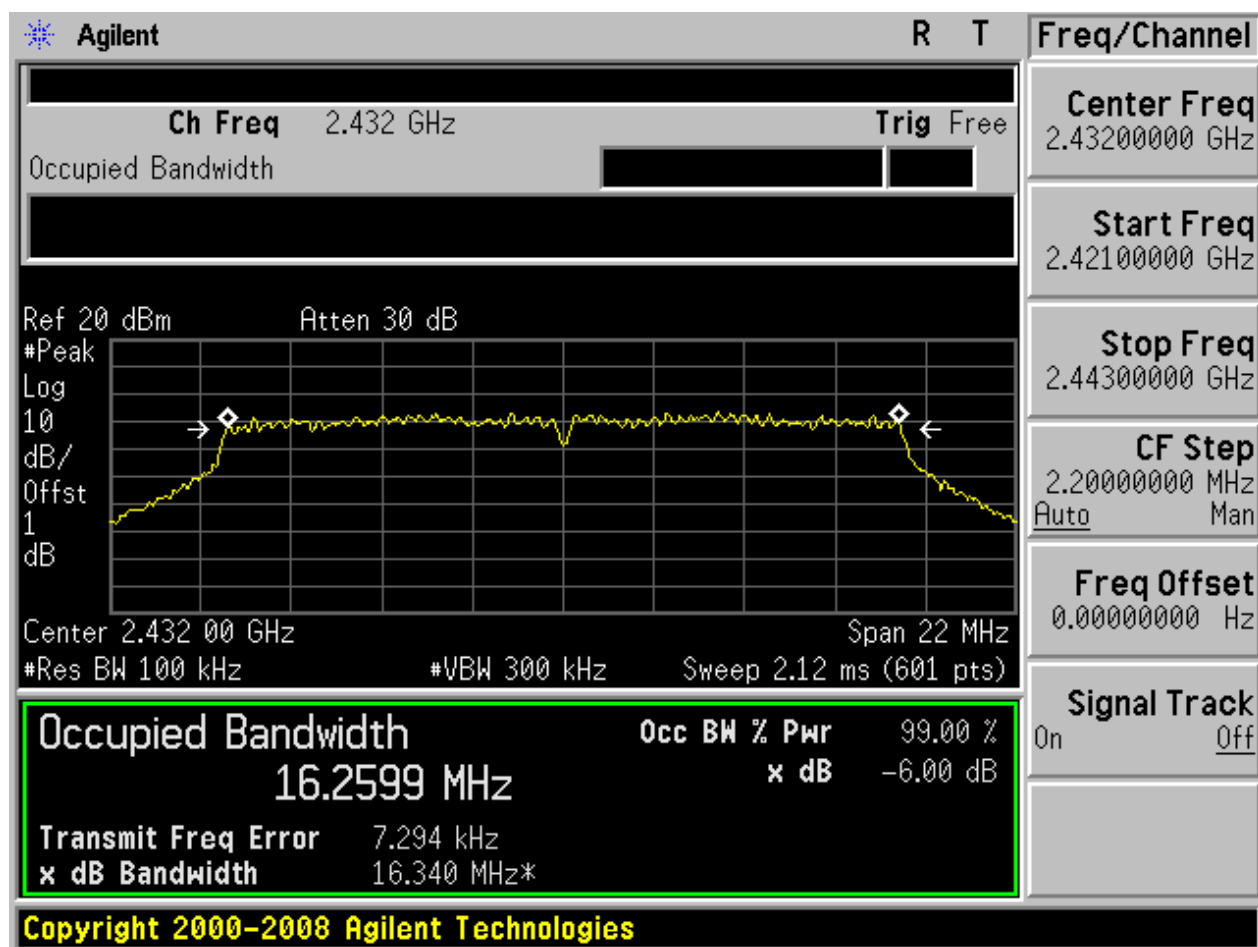


1.9 11G_M@Ant 1



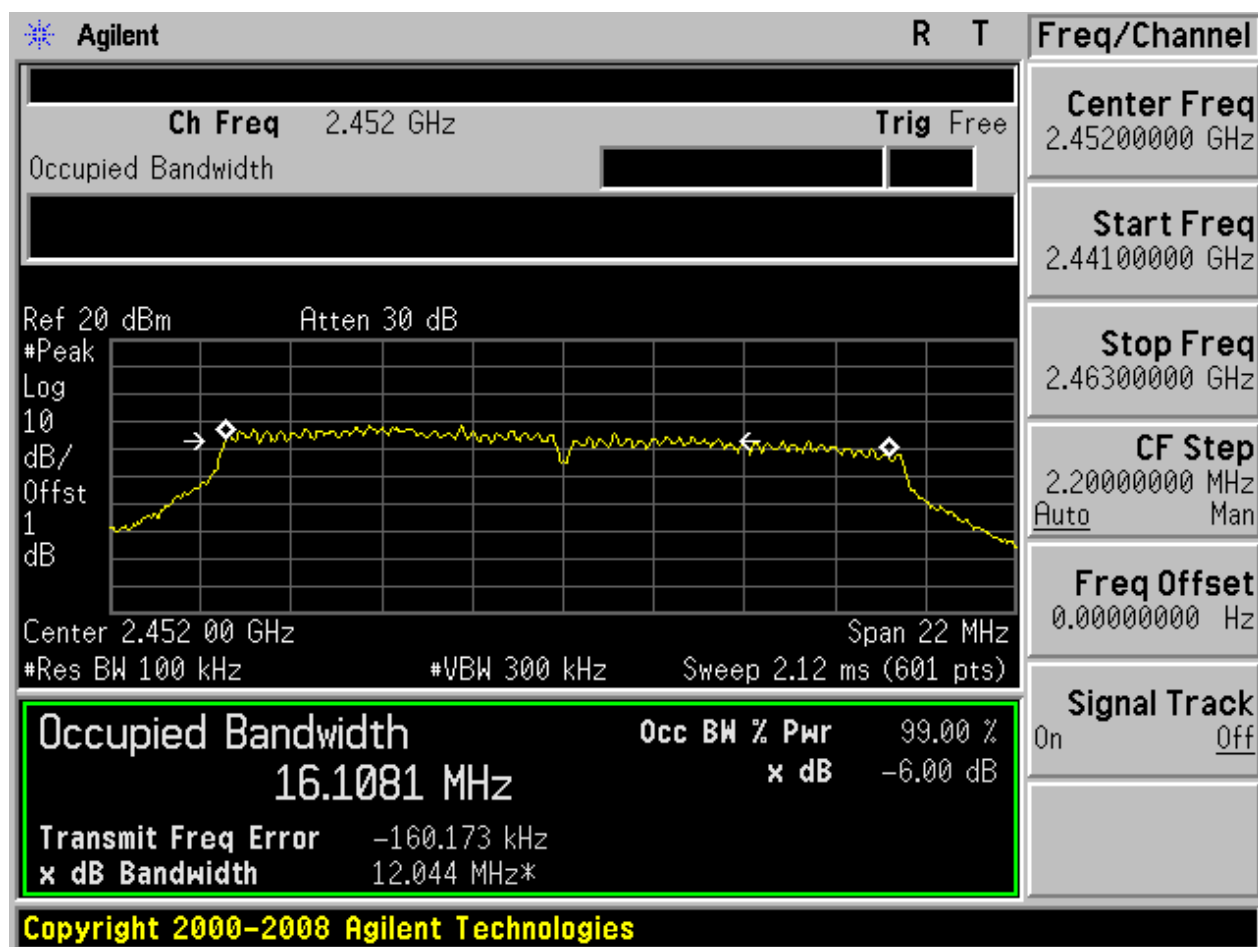


1.10 11G_M@Ant 2



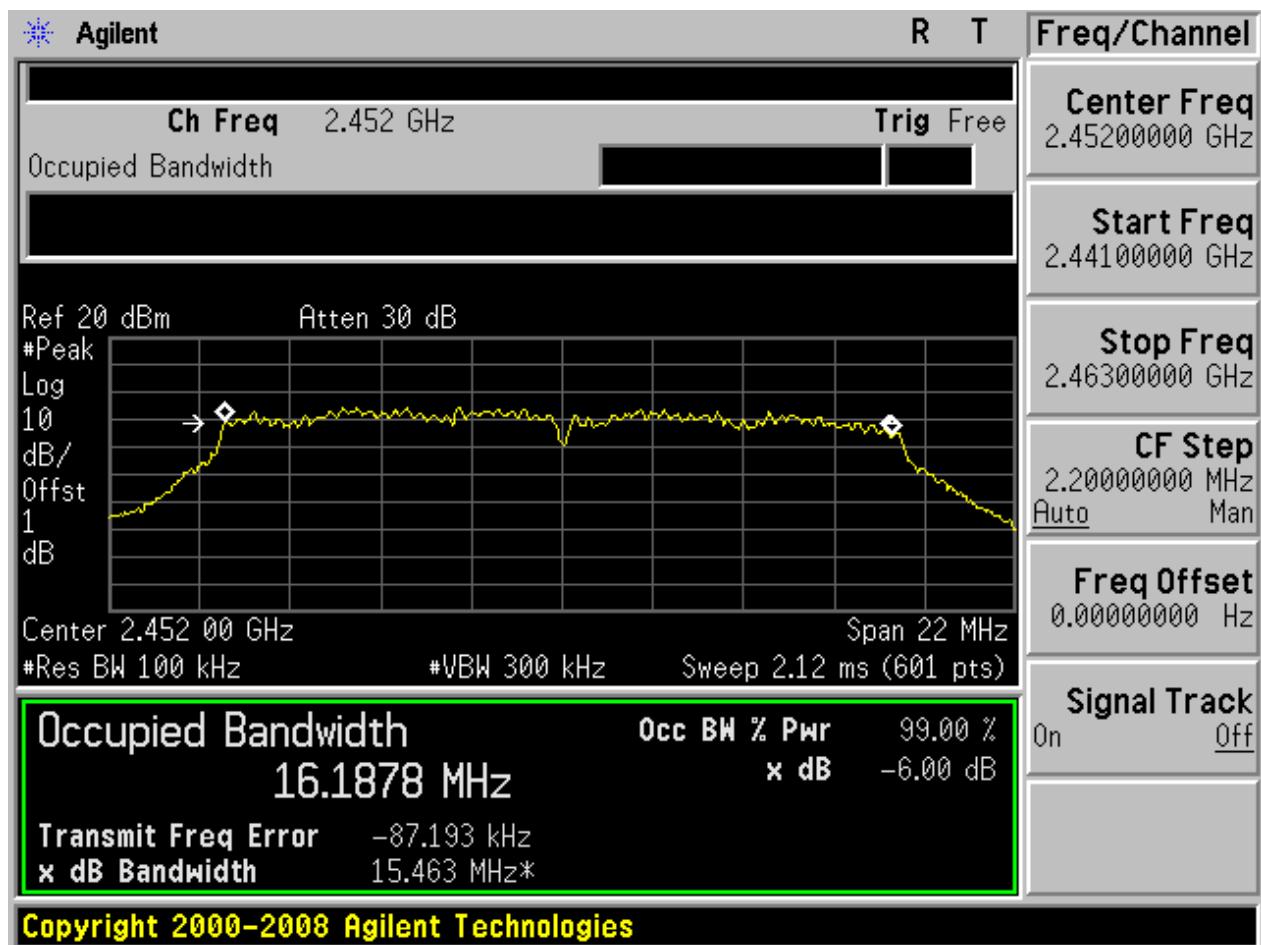


1.11 11G_H@Ant 1



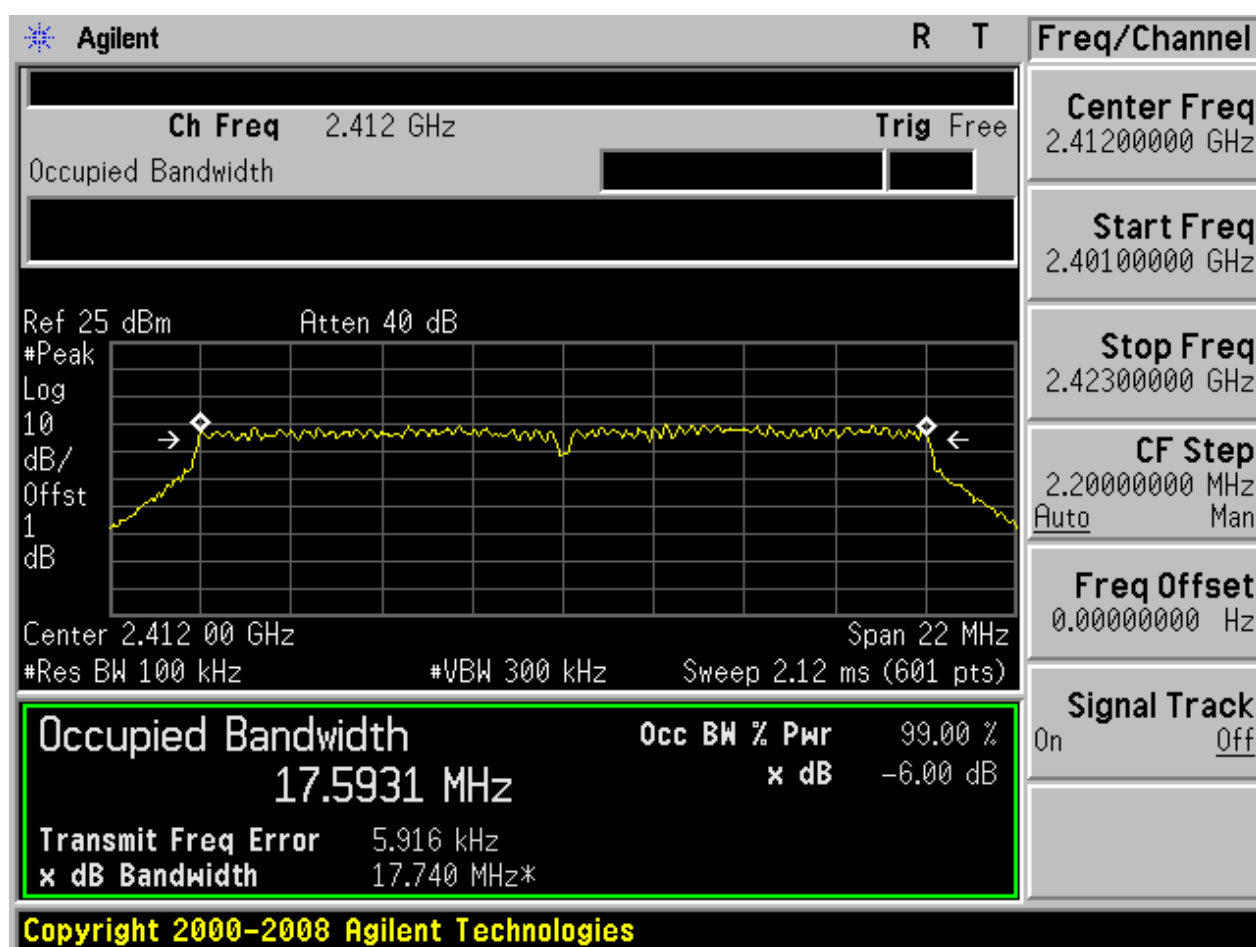


1.12 11G_H@Ant 2



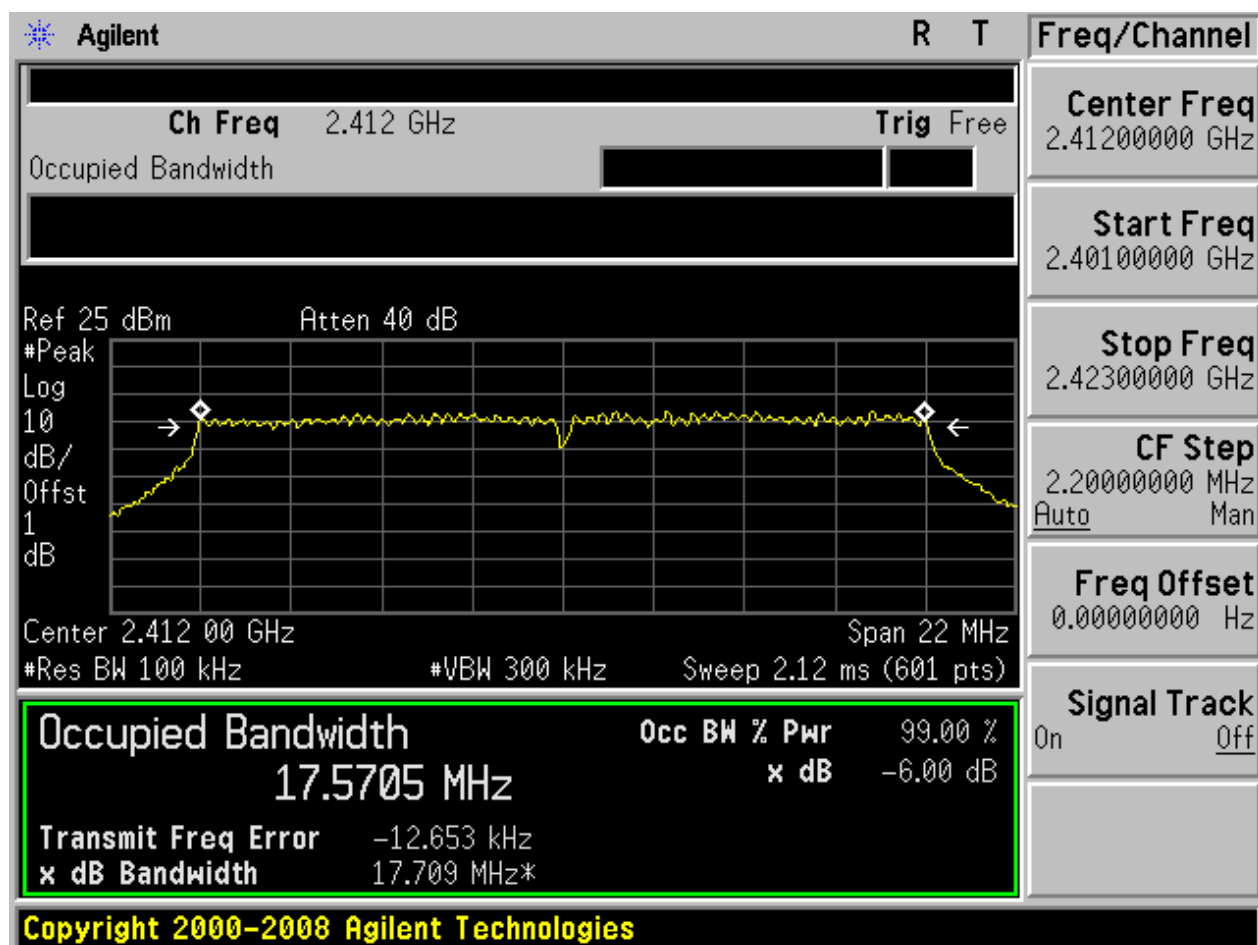


1.13 11N20_L@Ant 1



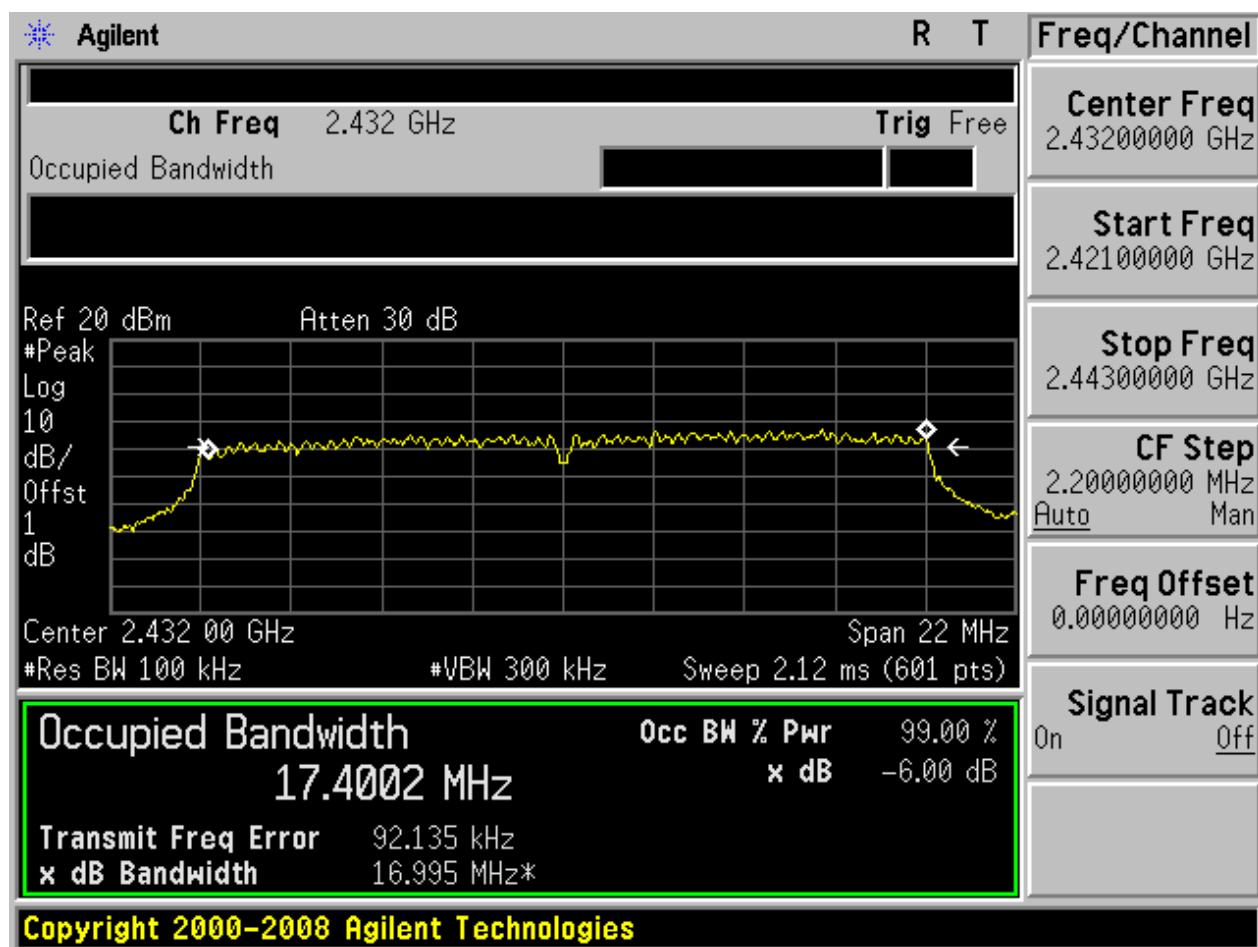


1.14 11N20_L@Ant 2



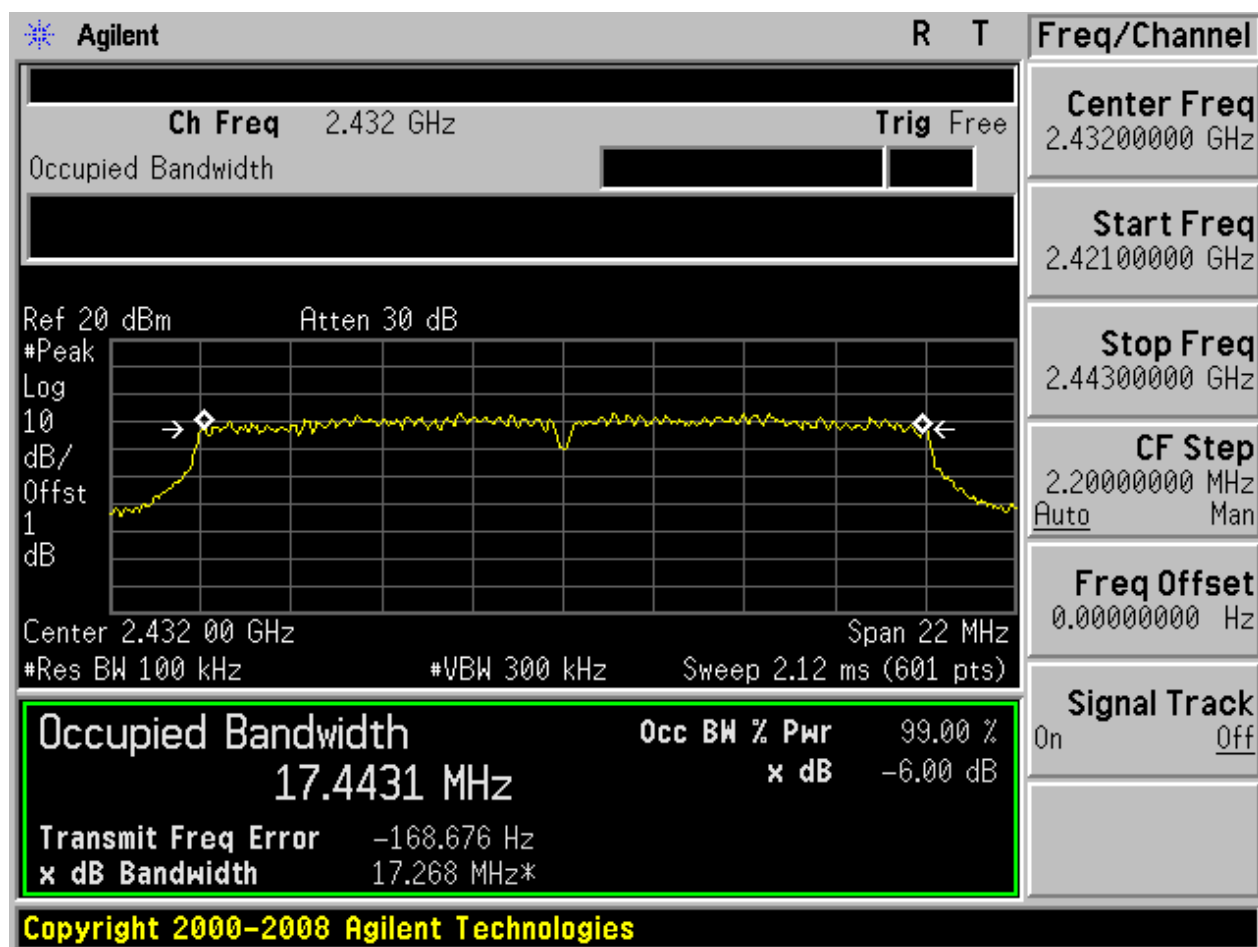


1.15 11N20_M@Ant 1



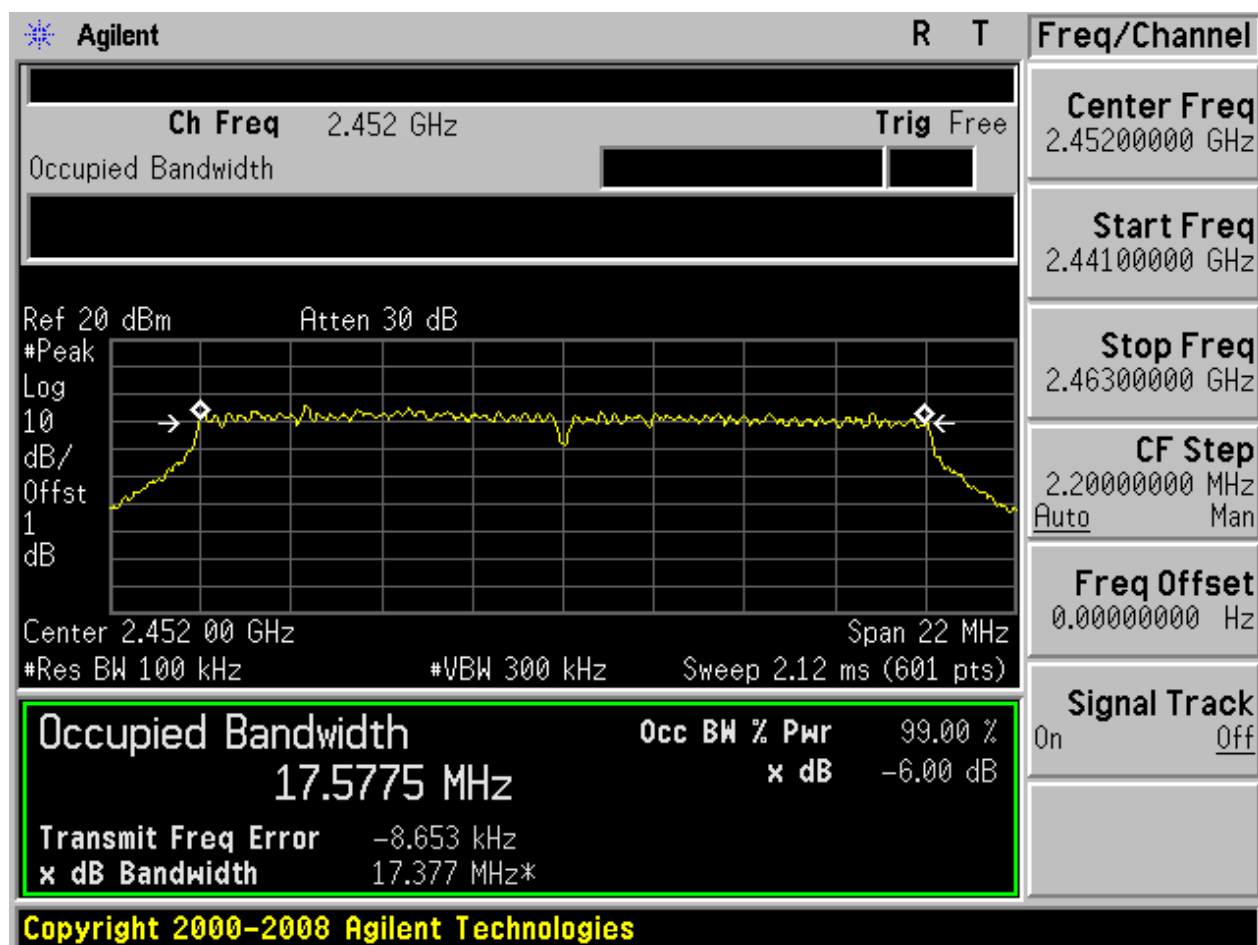


1.16 11N20_M@Ant 2



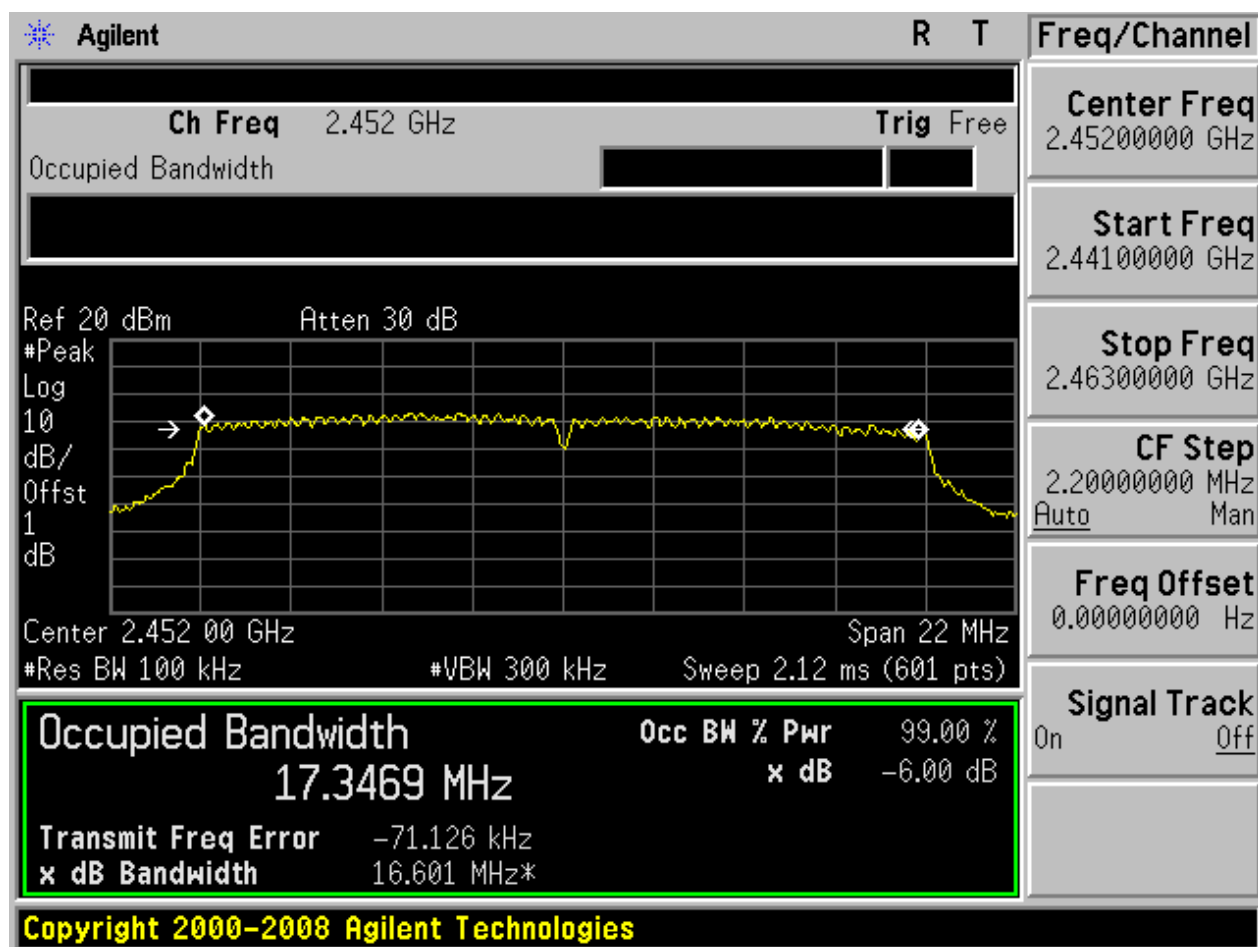


1.17 11N20_H@Ant 1



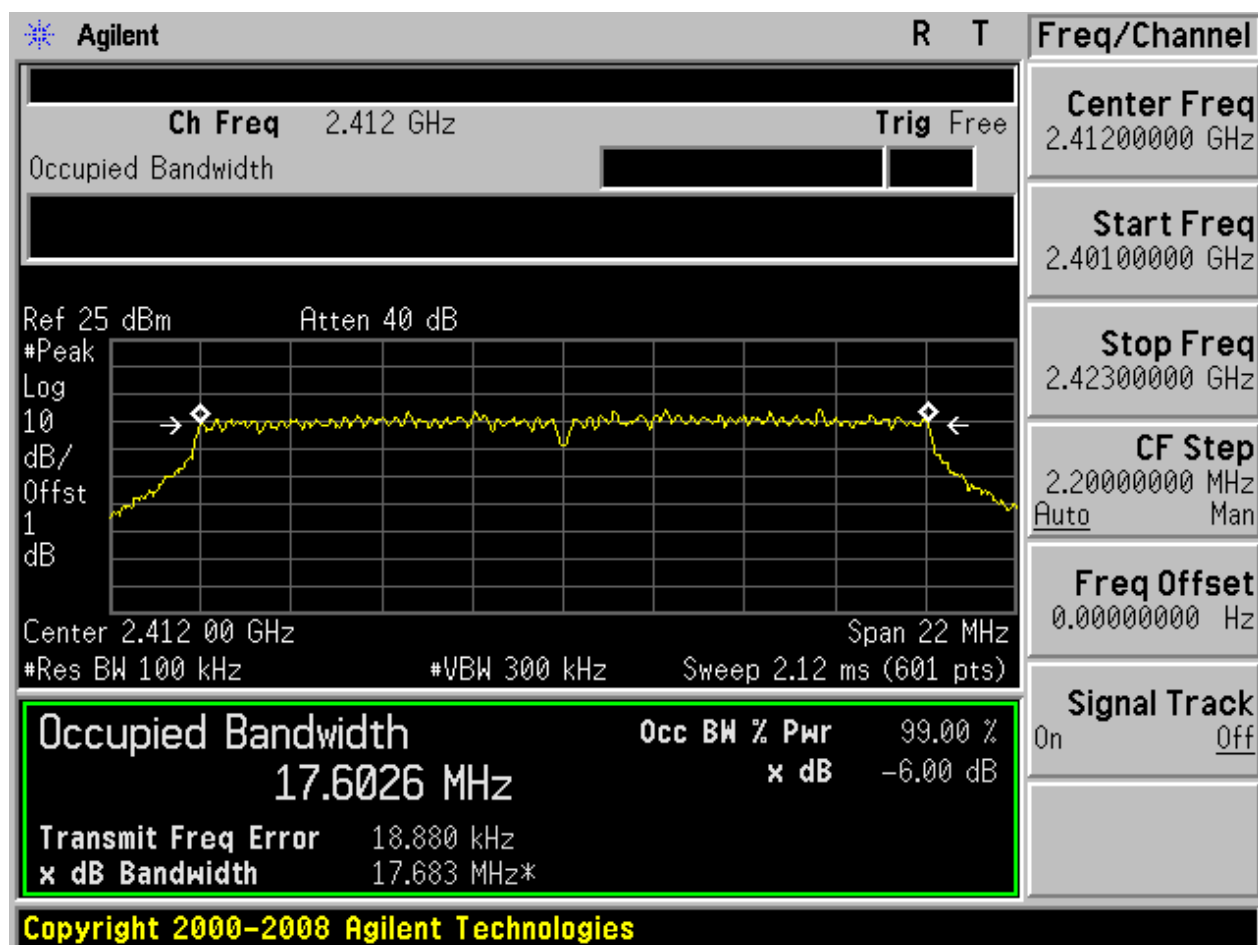


1.18 11N20_H@Ant 2



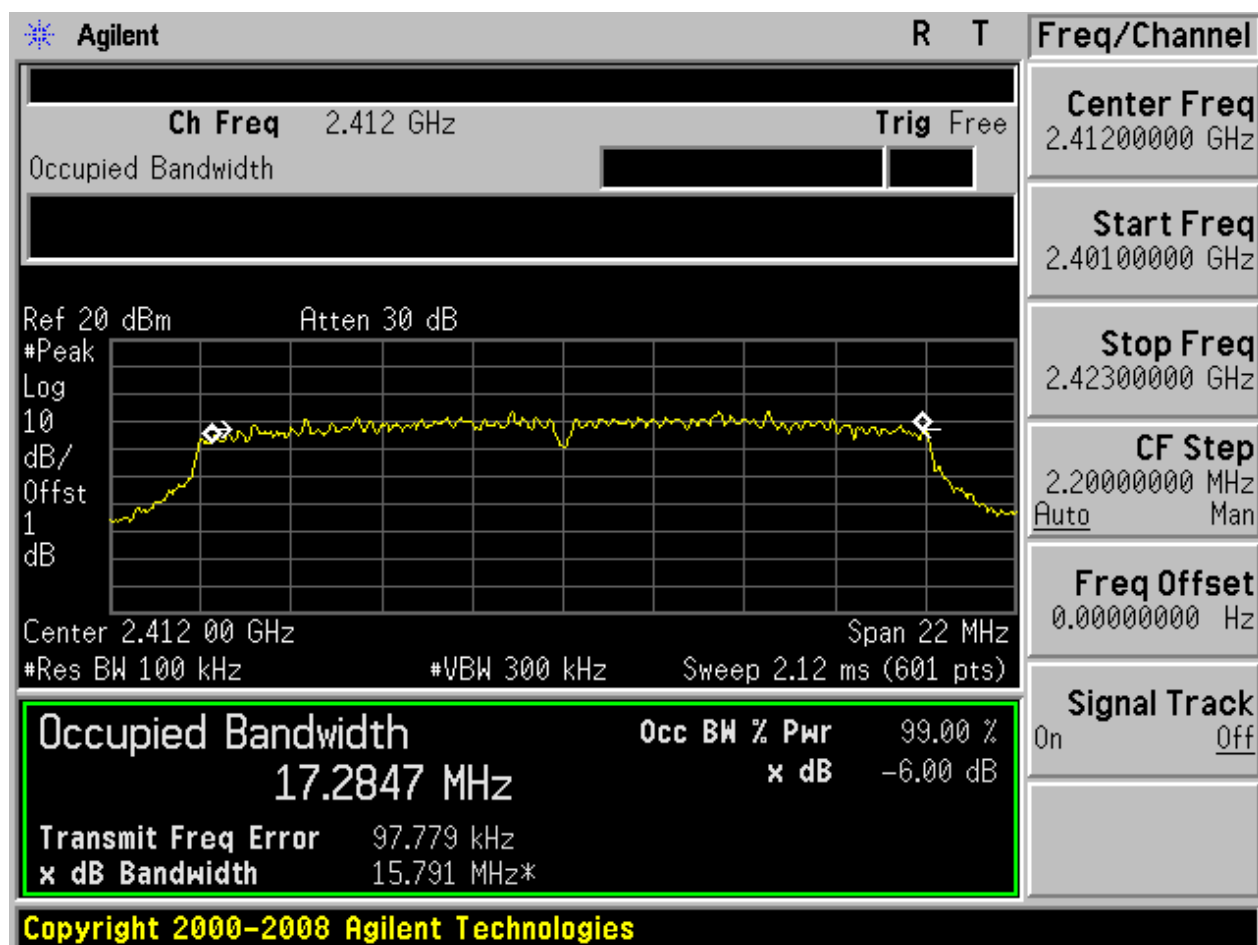


1.19 11N20m_L@Ant 1

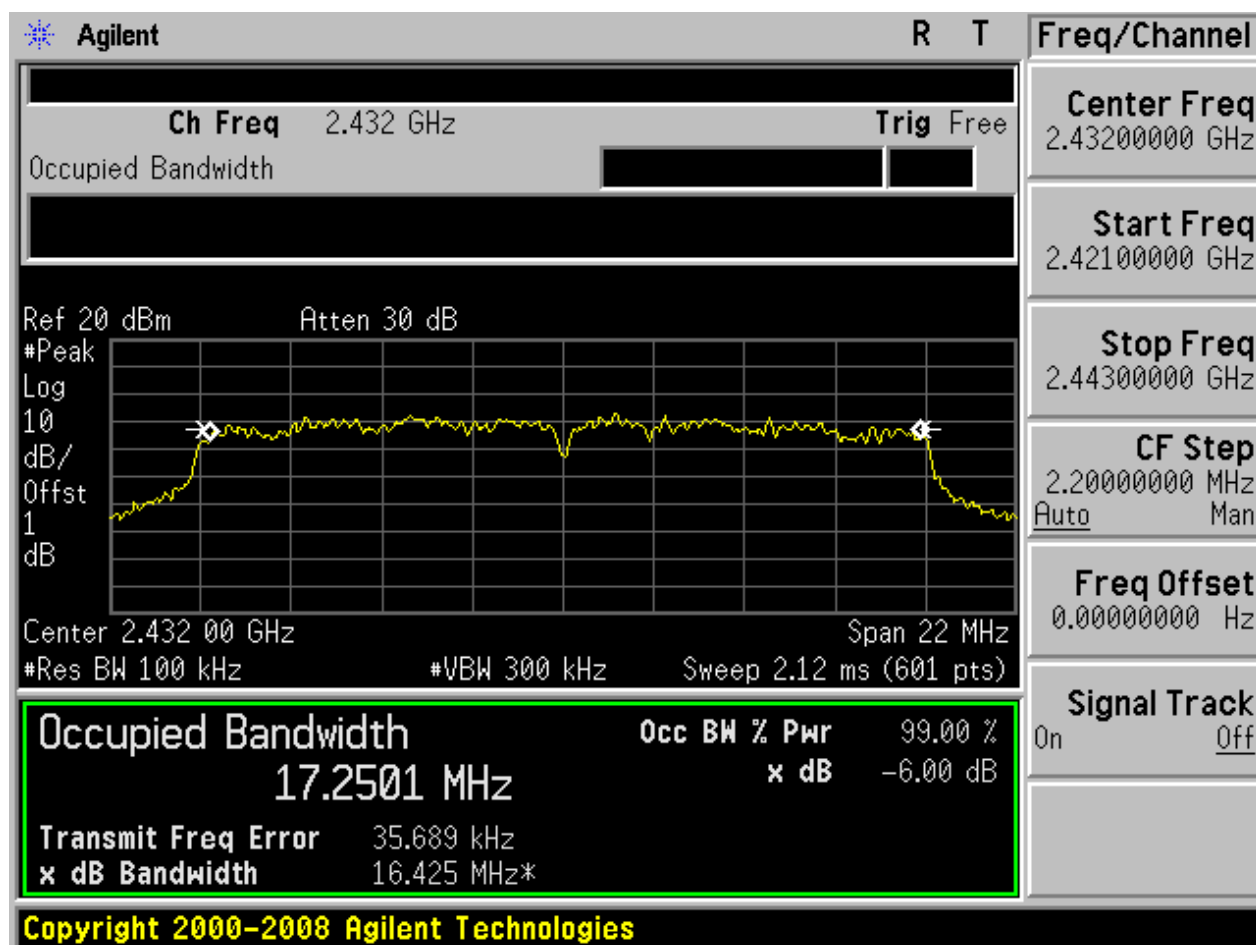




1.20 11N20m_L@Ant 2

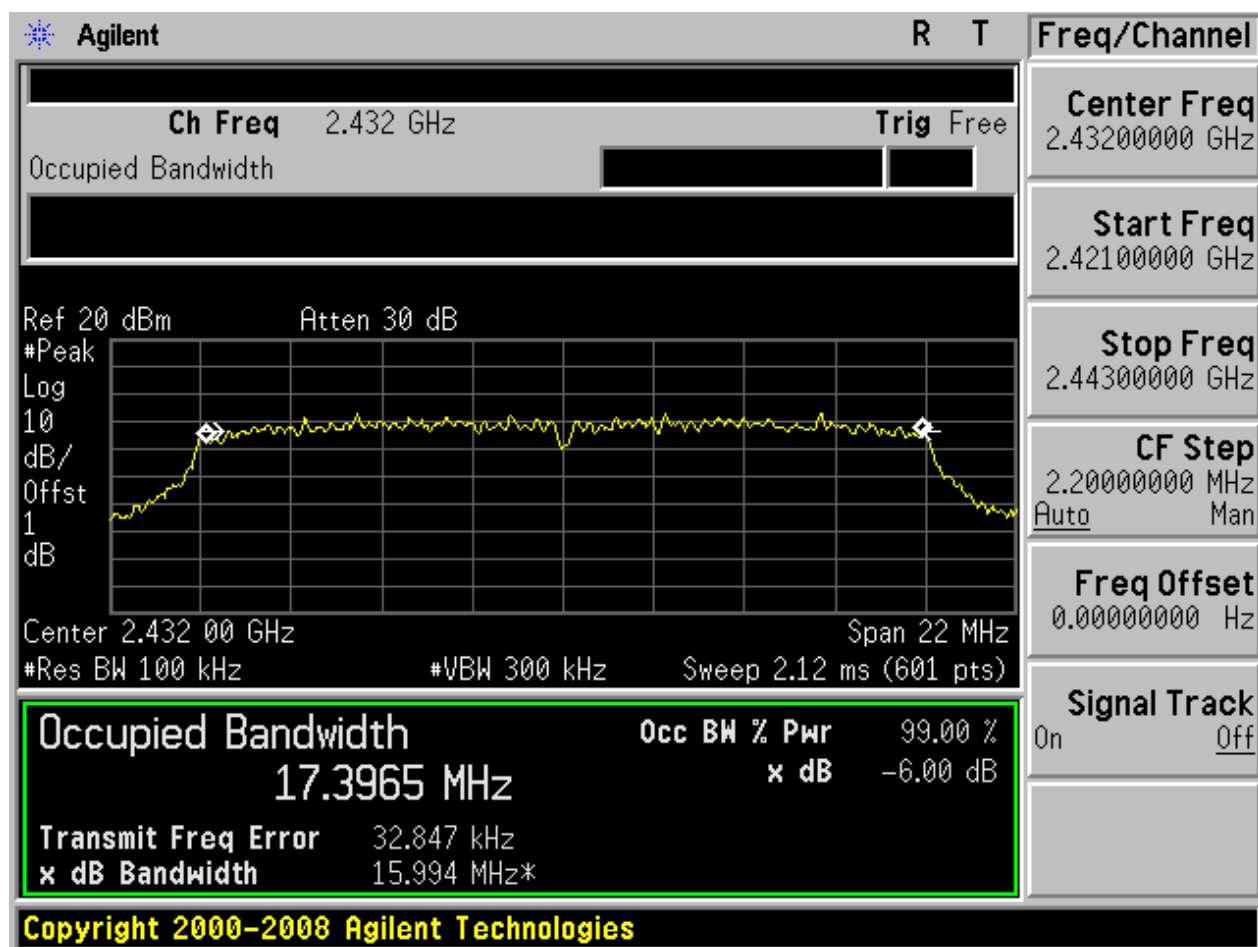


1.21 11N20m_M@Ant 1



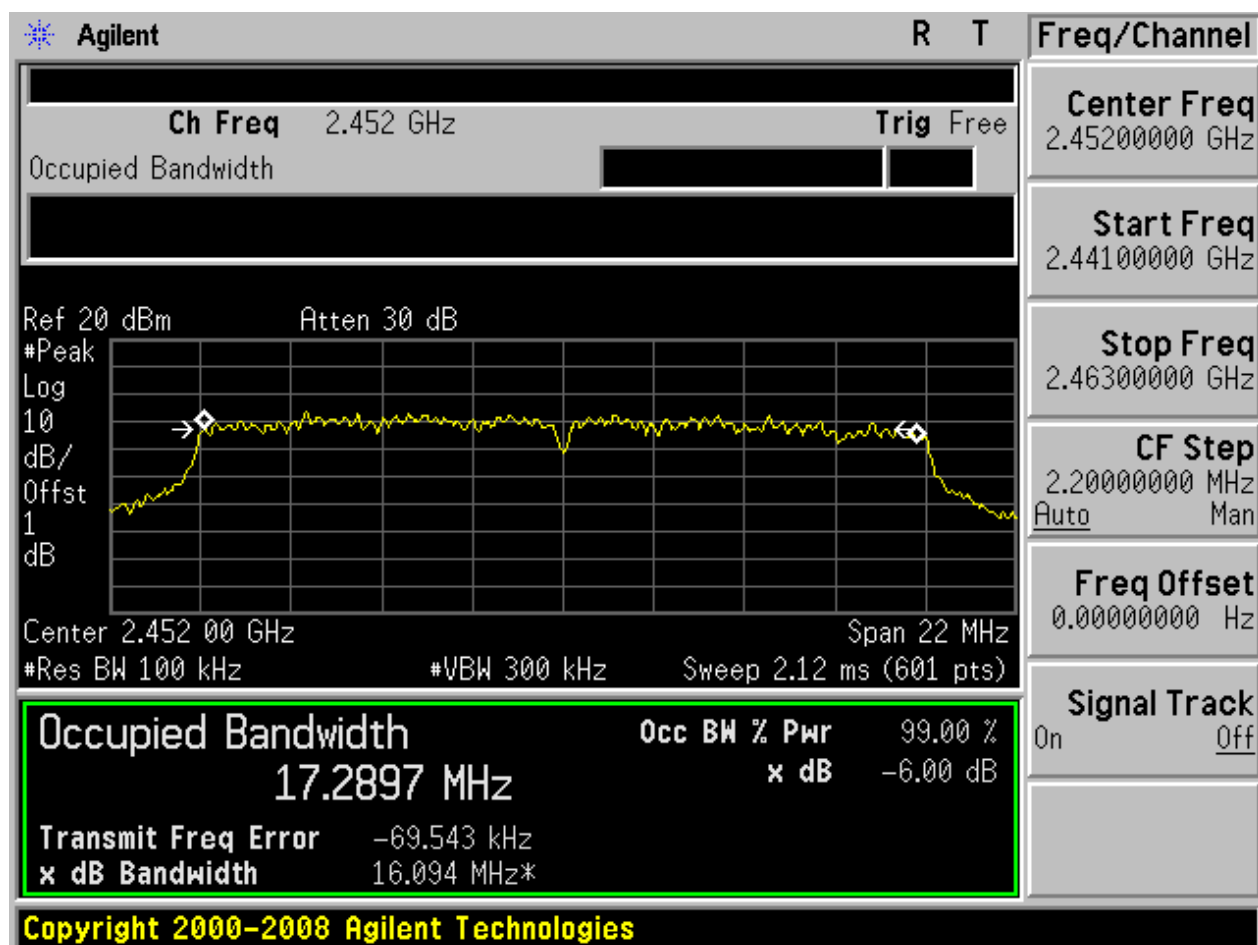


1.22 11N20m_M@Ant 2



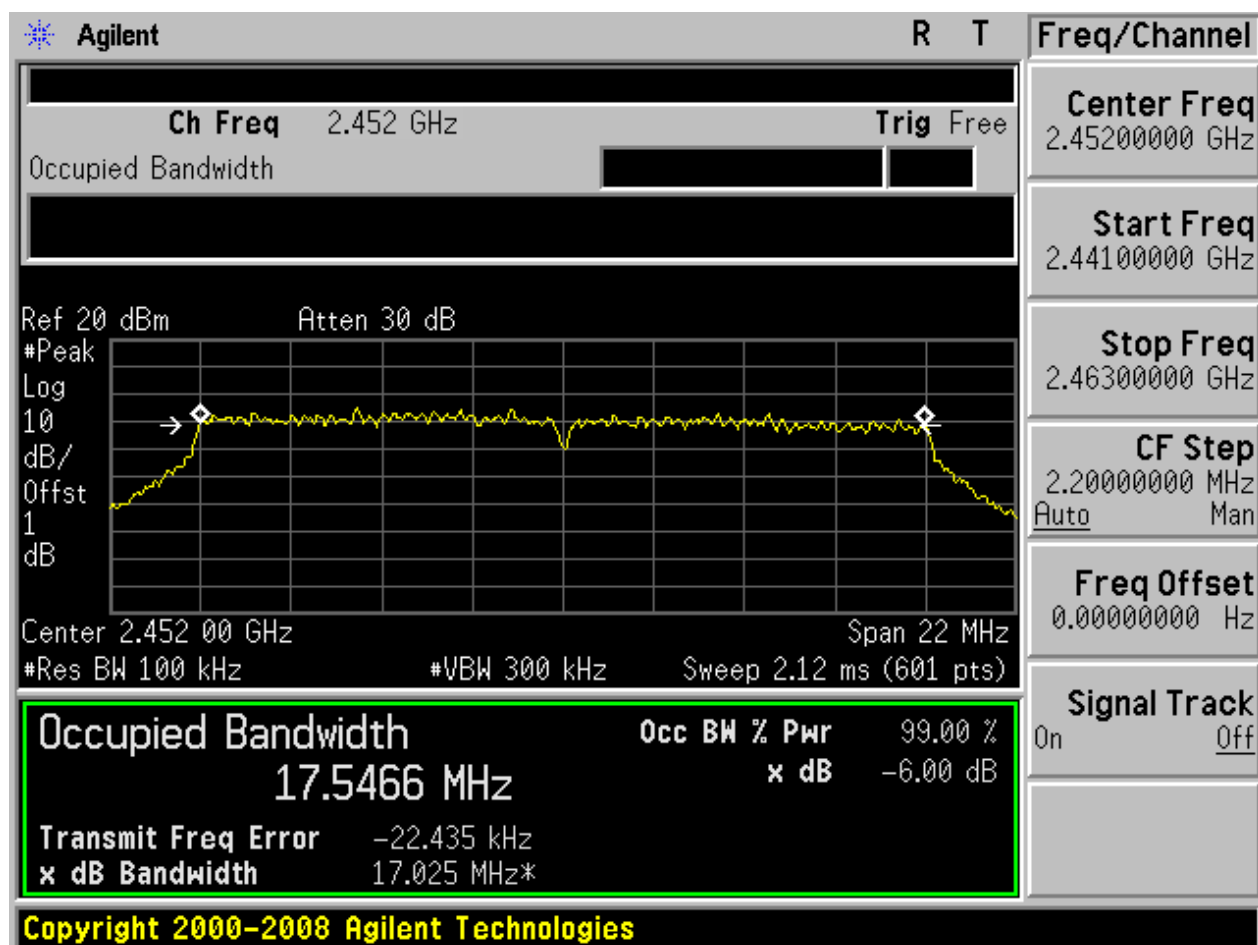


1.23 11N20m_H@Ant 1



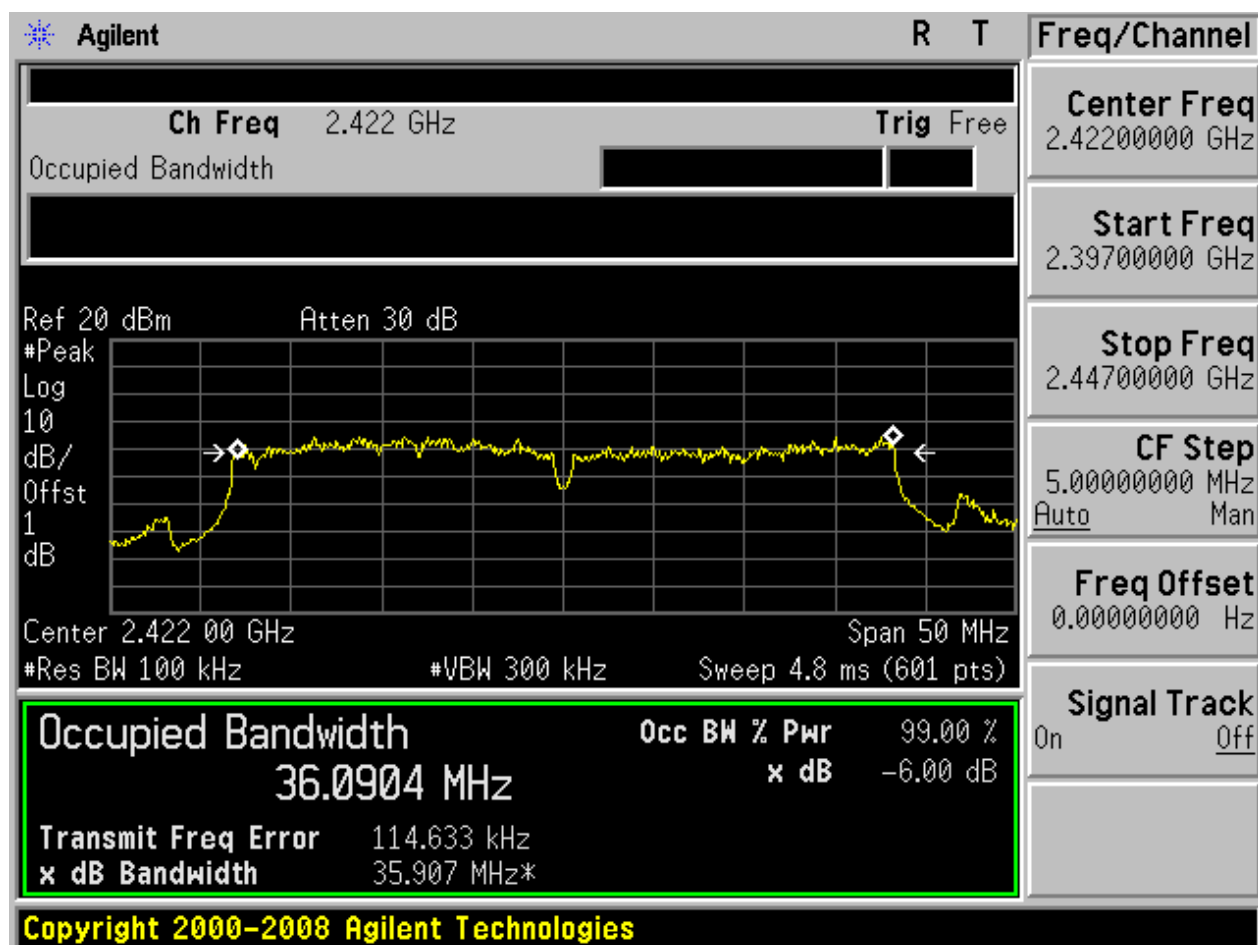


1.24 11N20m_H@Ant 2



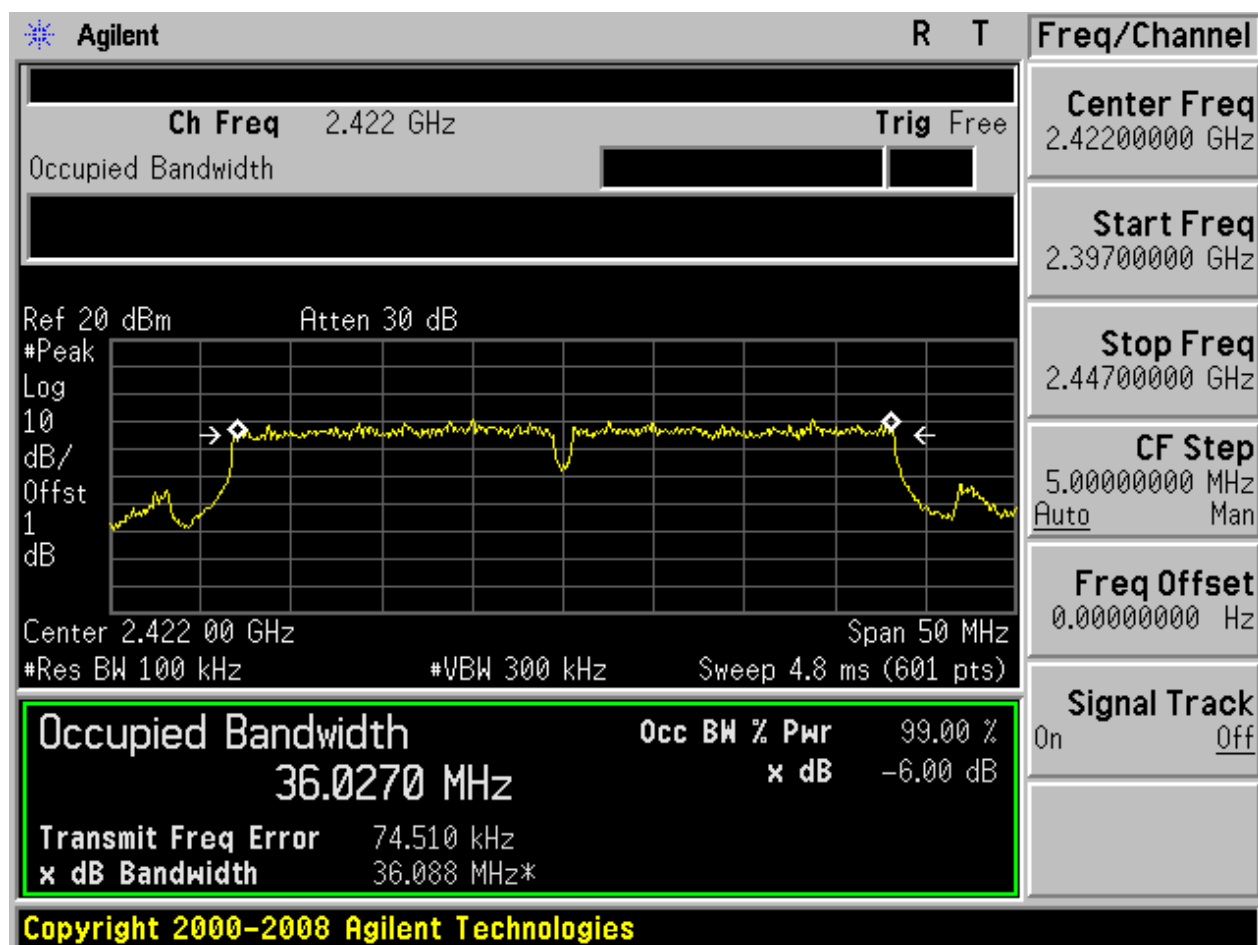


1.25 11N40_L@Ant 1



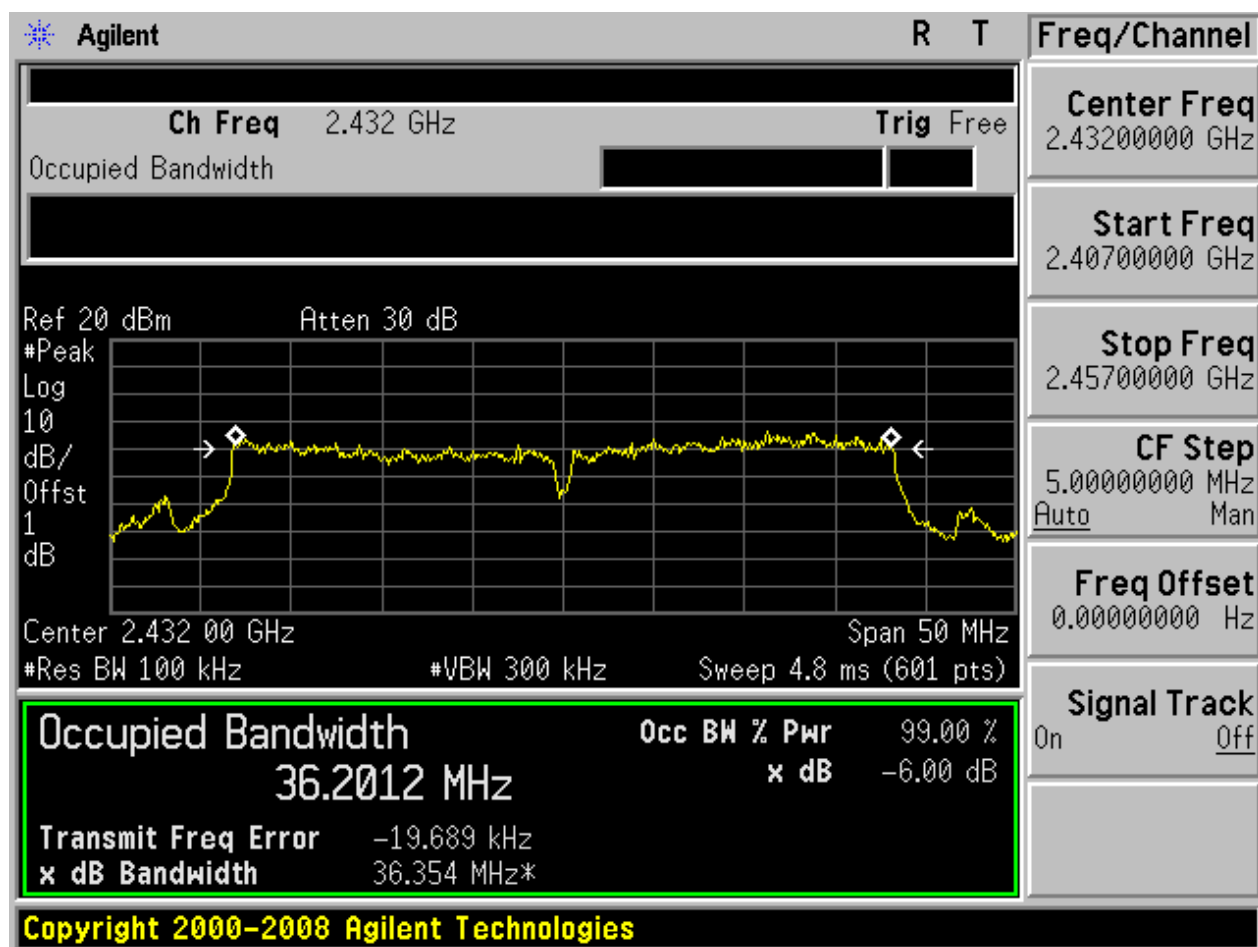


1.26 11N40_L@Ant 2



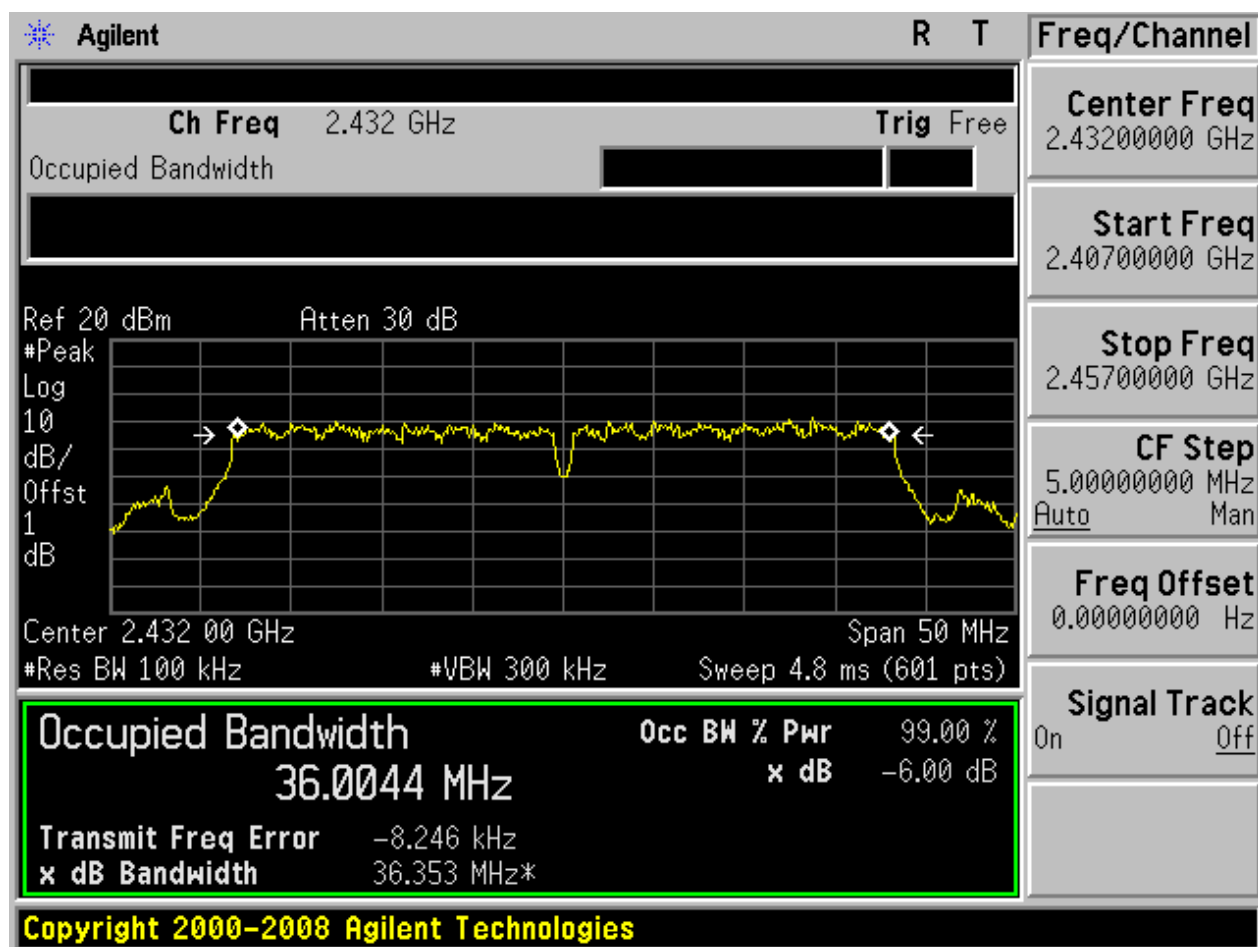


1.27 11N40_M@Ant 1

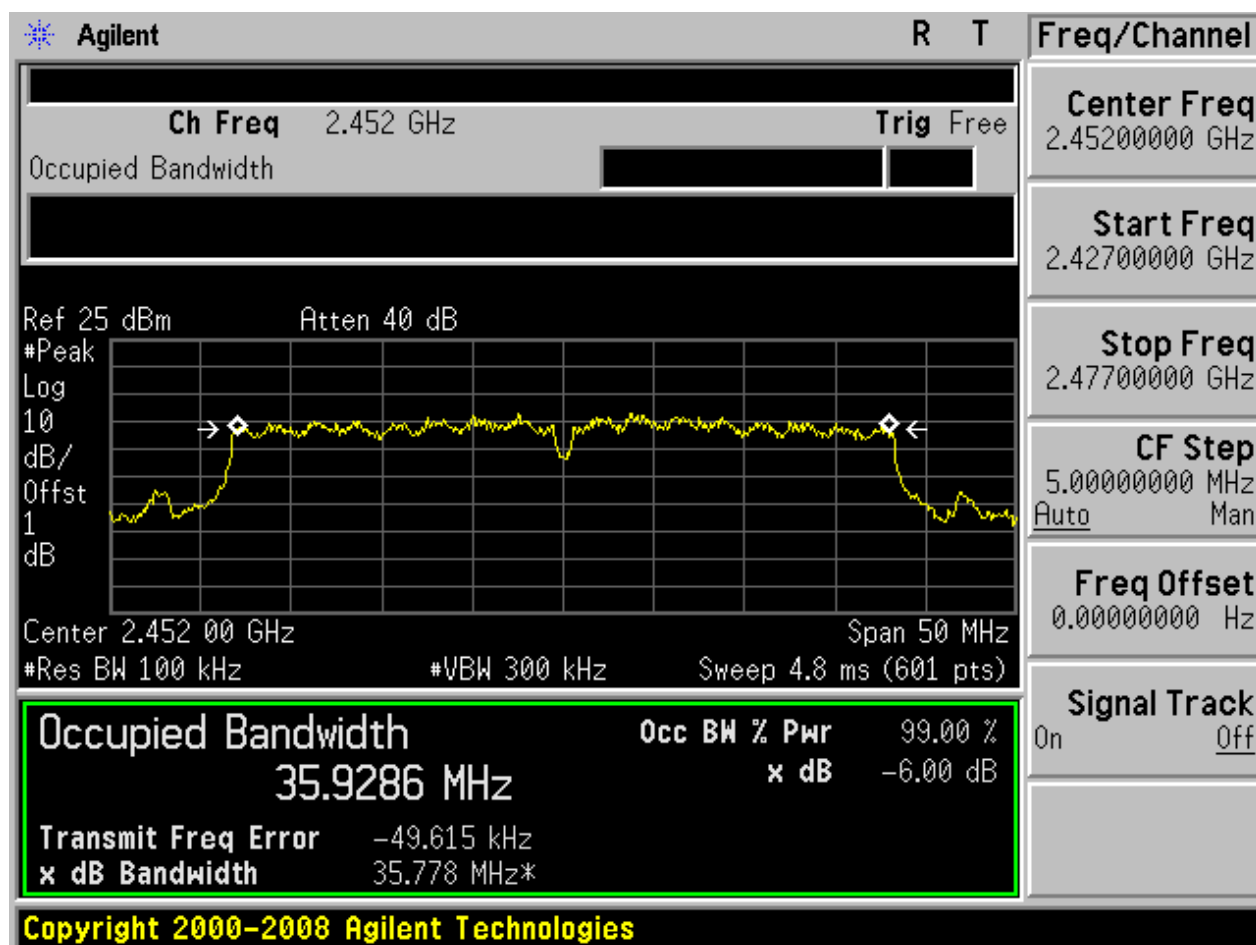




1.28 11N40_M@Ant 2

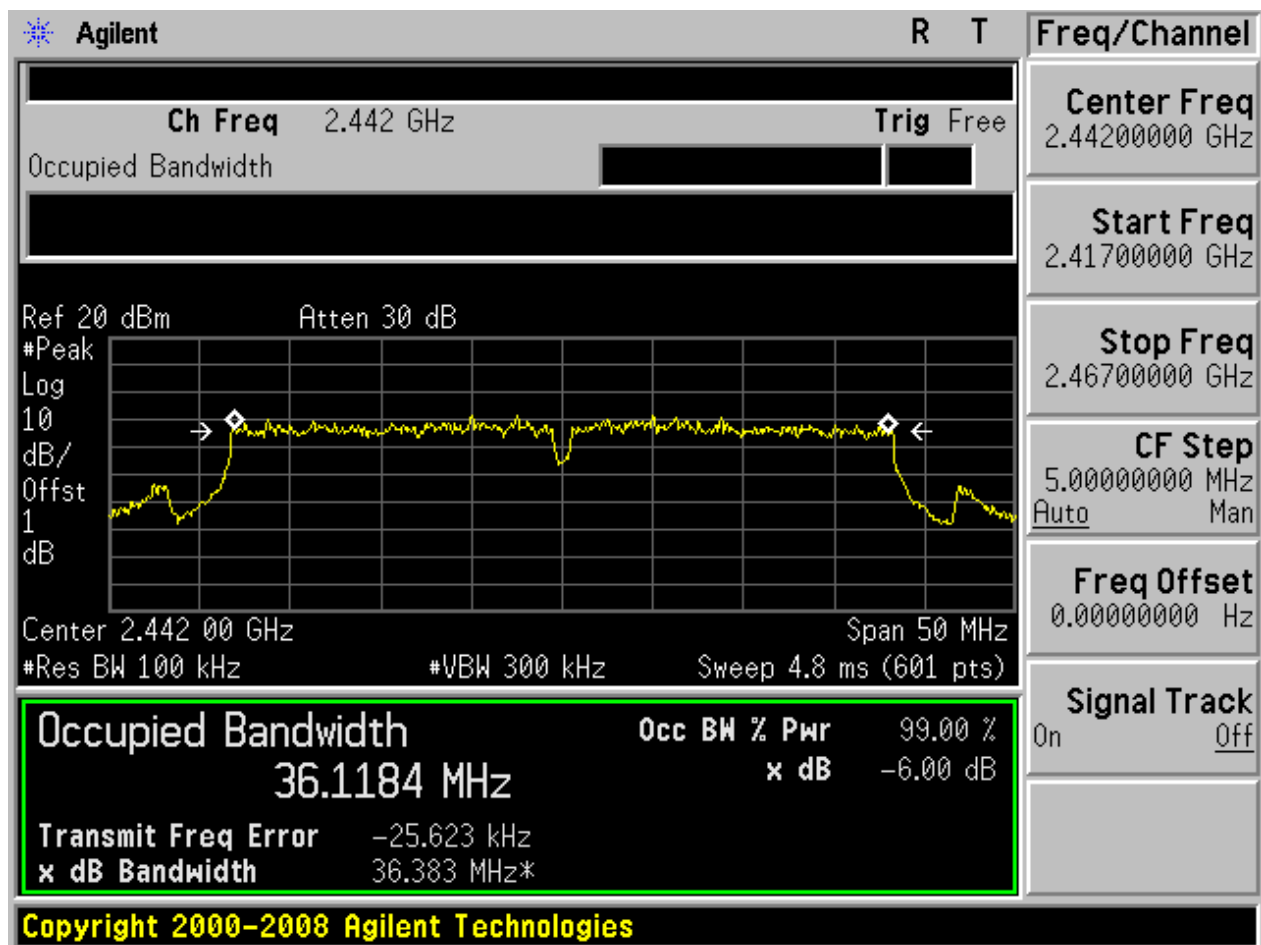


1.29 11N40_H@Ant 1



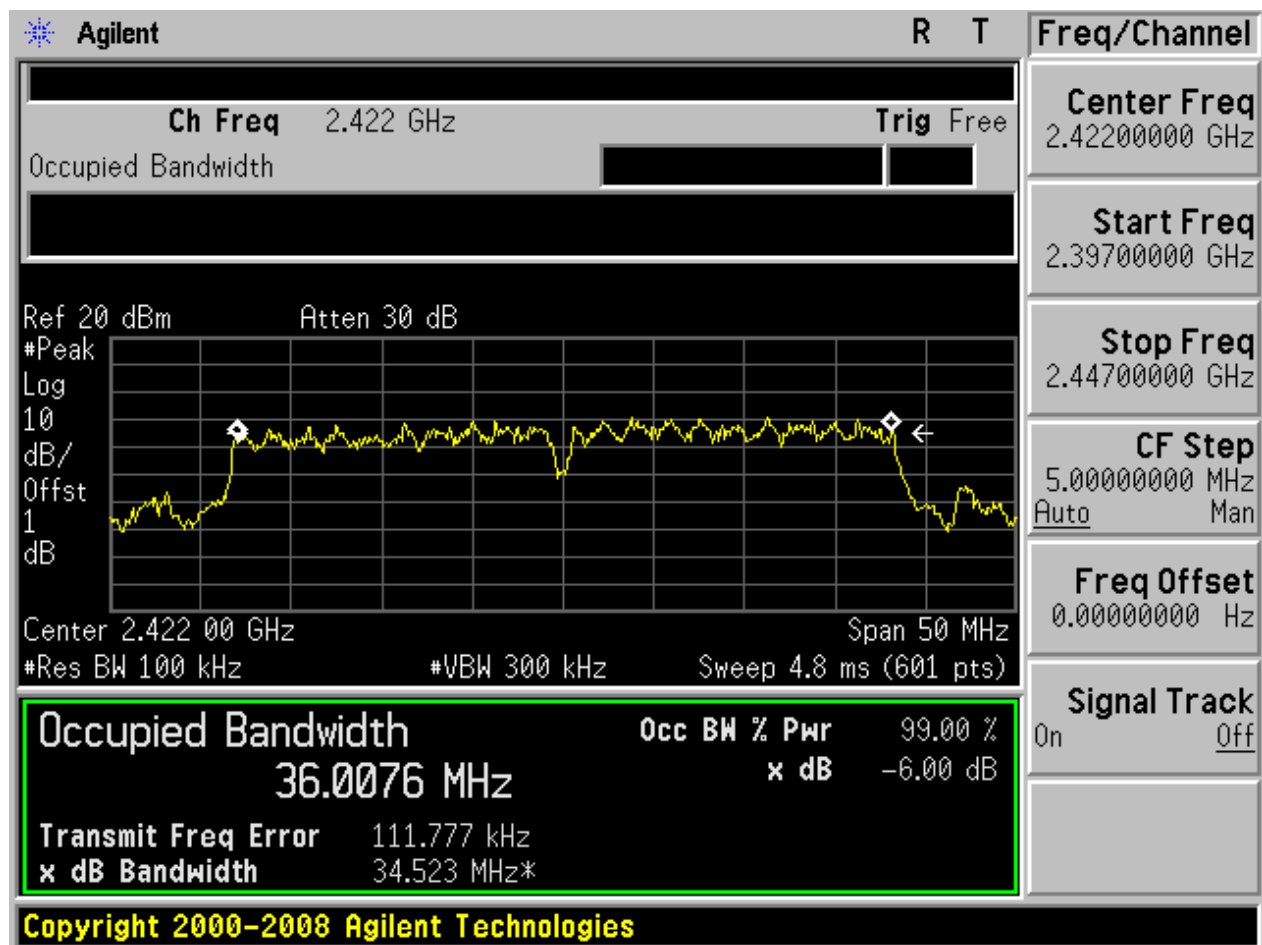


1.30 11N40_H@Ant 2



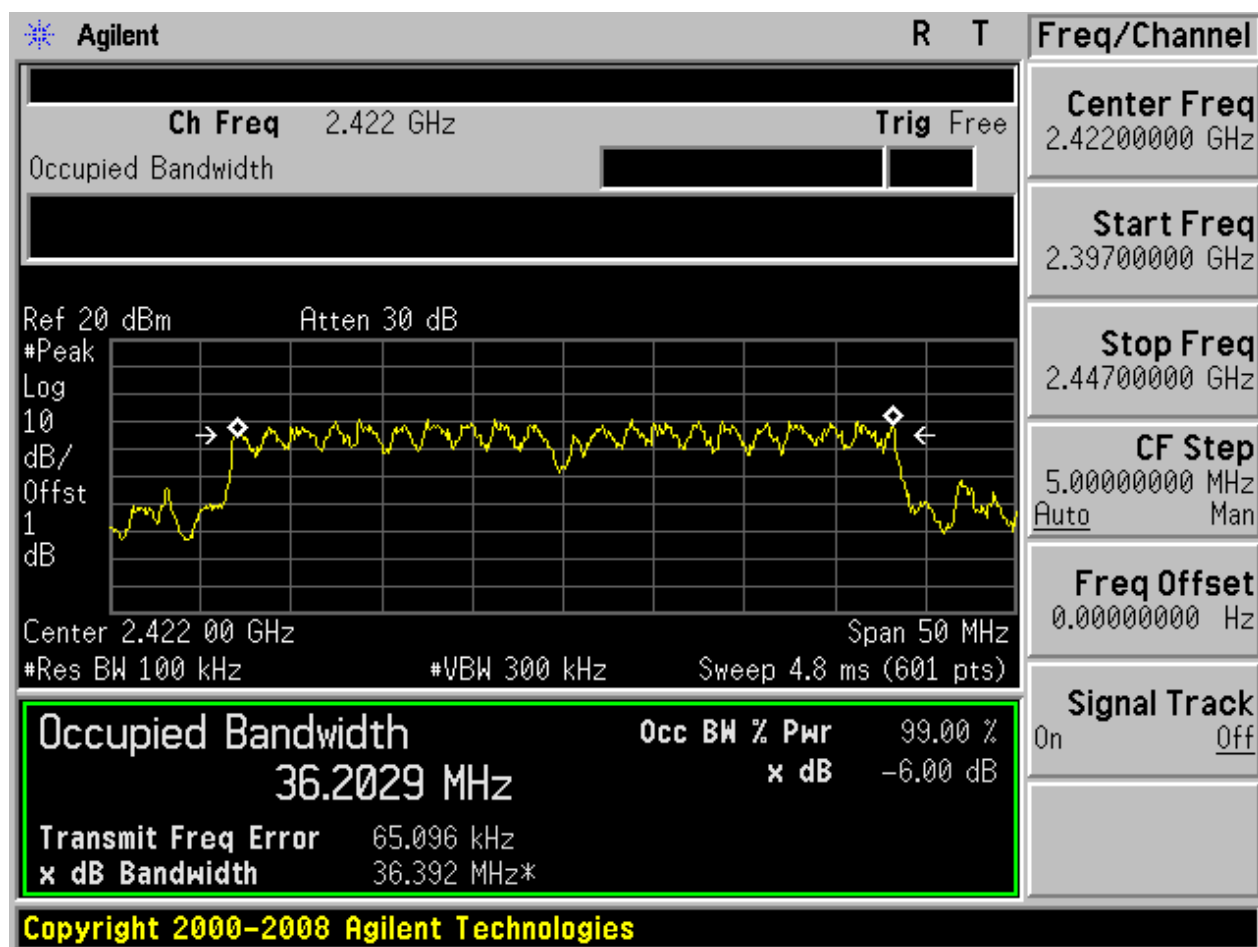


1.31 11N40m_L@Ant 1



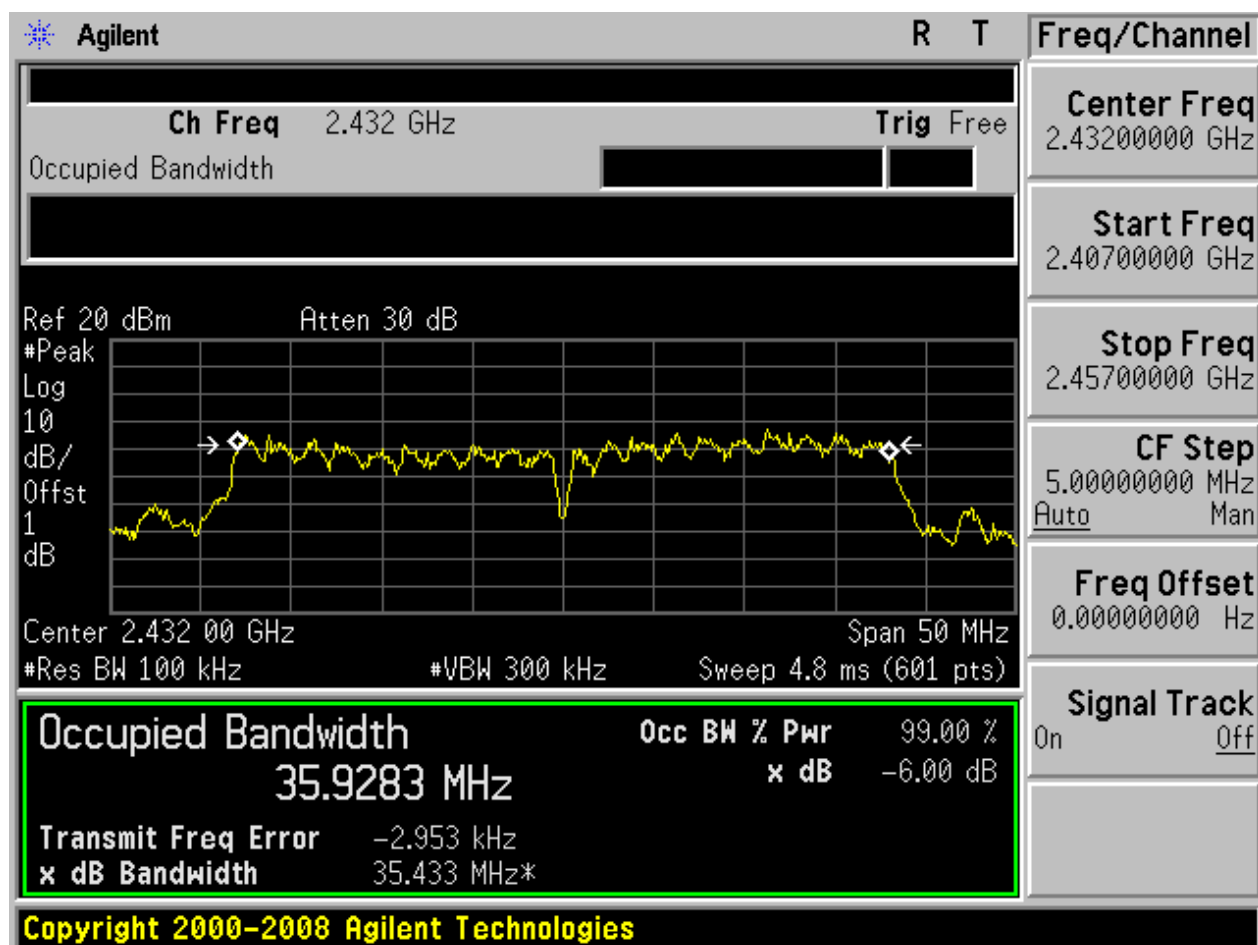


1.32 11N40m_L@Ant 2



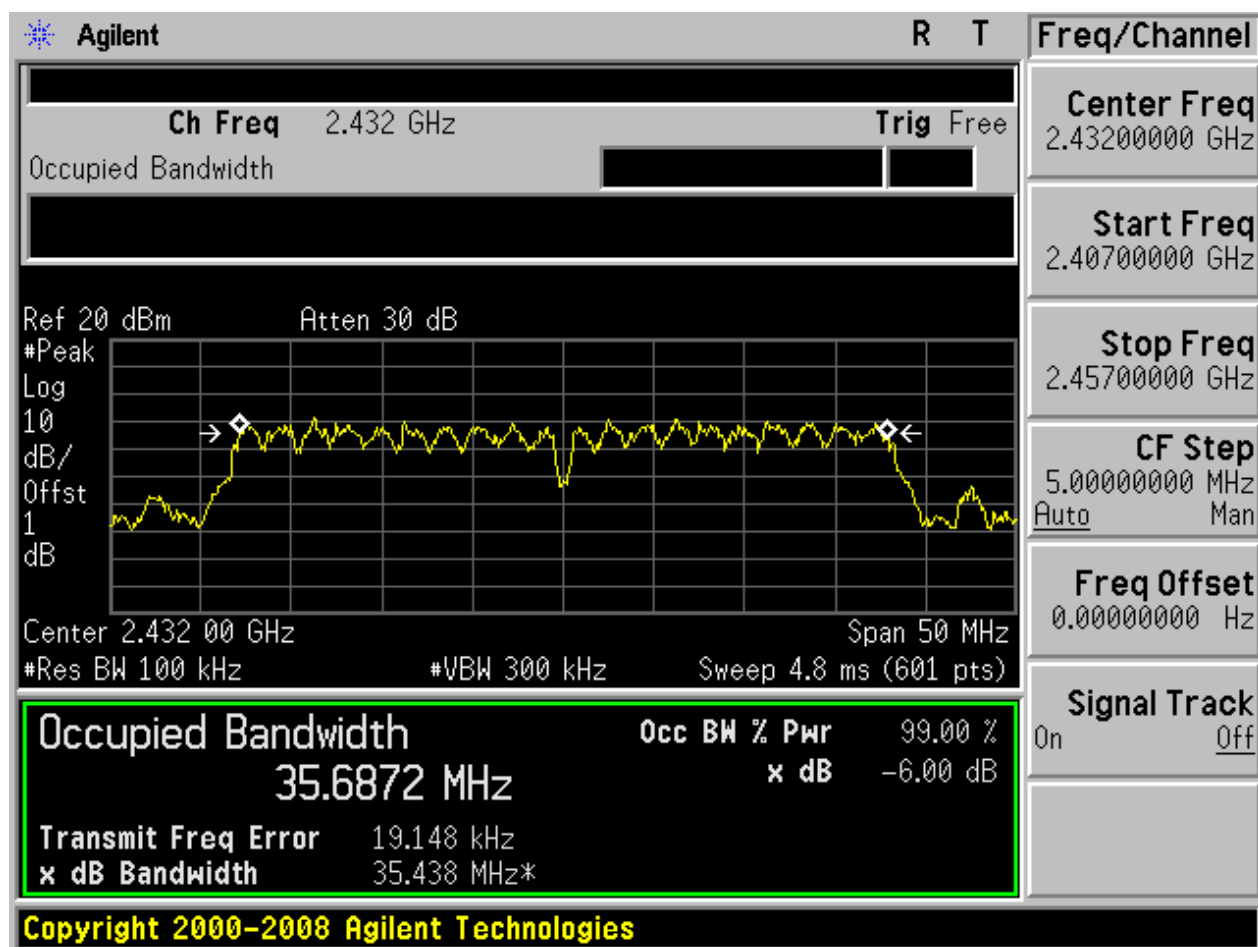


1.34 11N40m_M@Ant 1

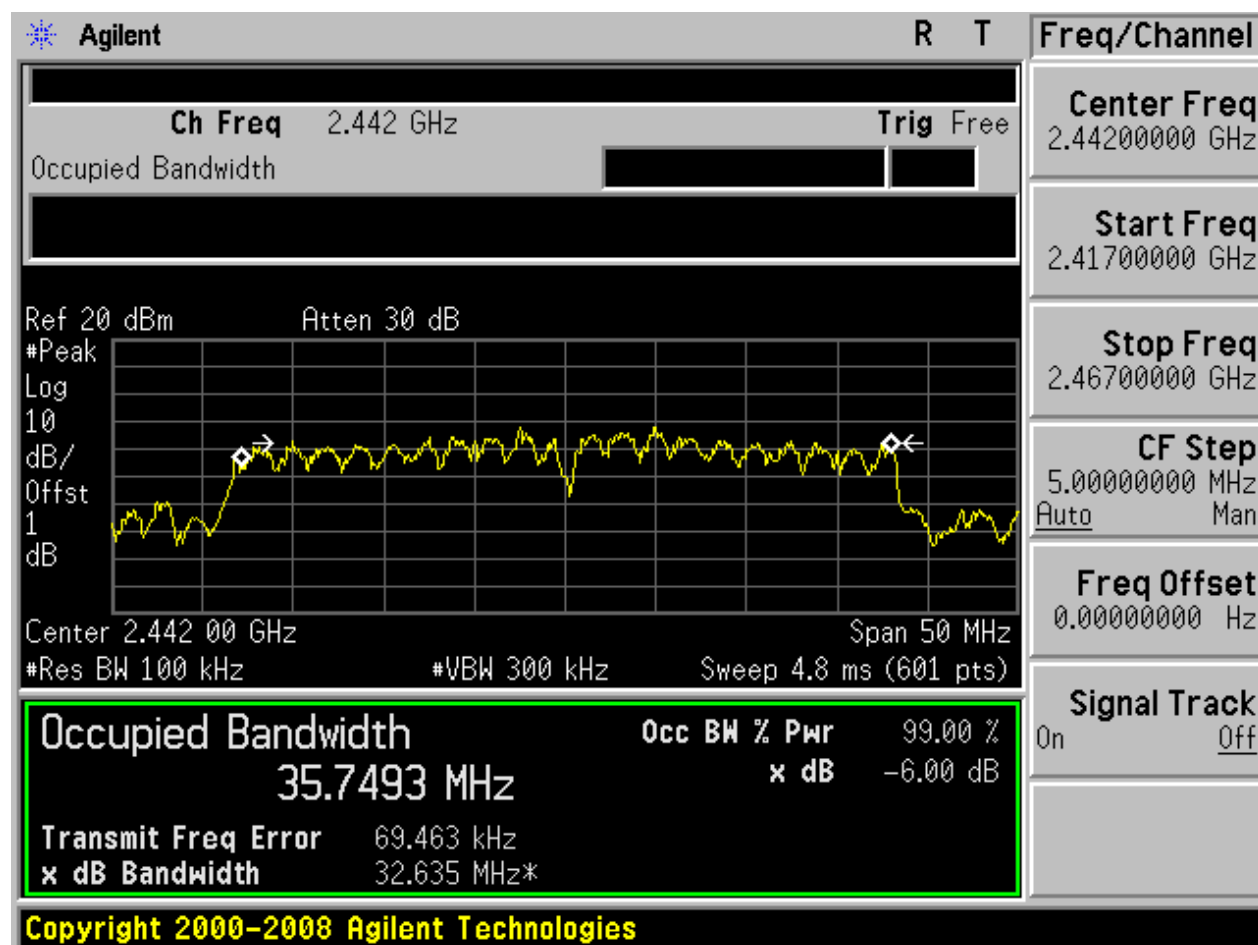




1.33 11N40m_M@Ant 2

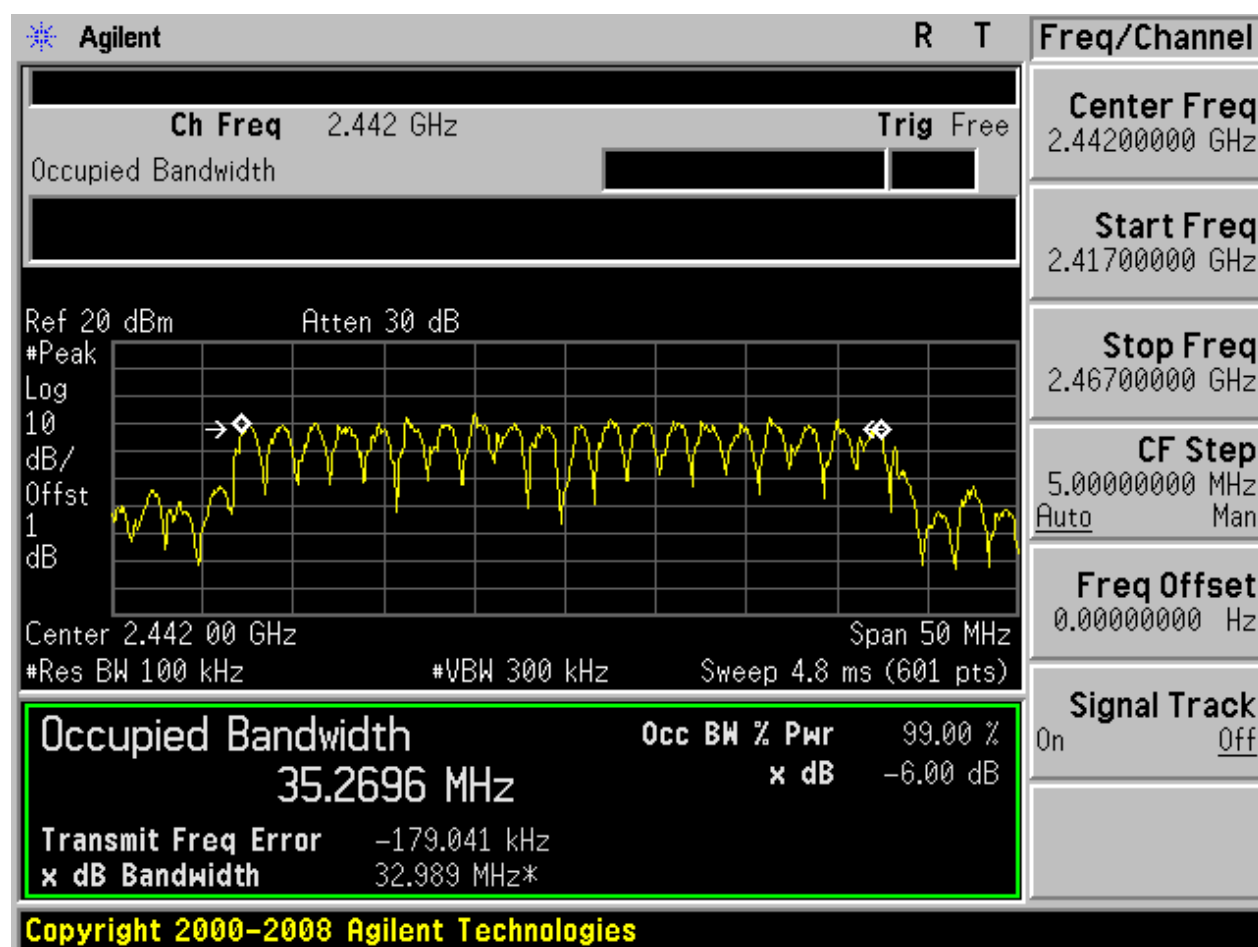


1.35 11N40m_H@Ant 1





1.36 11N40m_H@Ant 2



Appendix B: Maximum Peak Conducted Output Power

Part I - Test Results

Test Mode	Test Channel	Frequency[MHz]	Ant	Meas. Level (Cond.) [dBm]	Verdict
11B	L	2412	Ant 1	18.09	pass
11B	L	2412	Ant 2	18.67	pass
11B	M	2437	Ant 1	19.25	pass
11B	M	2437	Ant 2	19.22	pass
11B	H	2462	Ant 1	18.65	pass
11B	H	2462	Ant 2	19.62	pass
11G	L	2412	Ant 1	18.15	pass
11G	L	2412	Ant 2	18.84	pass
11G	M	2437	Ant 1	19.25	pass
11G	M	2437	Ant 2	19.64	pass
11G	H	2462	Ant 1	19.01	pass
11G	H	2462	Ant 2	19.92	pass
11N20	L	2412	Ant 1	18.02	pass
11N20	L	2412	Ant 2	18.83	pass
11N20	M	2437	Ant 1	19.02	pass
11N20	M	2437	Ant 2	19.11	pass
11N20	H	2462	Ant 1	18.53	pass
11N20	H	2462	Ant 2	19.62	pass
11N20m	L	2412	Ant 1	17.62	---
11N20m	L	2412	Ant 2	18.60	---
11N20m	L	2412	Sum	21.15	pass
11N20m	M	2437	Ant 1	19.33	---
11N20m	M	2437	Ant 2	19.07	---
11N20m	M	2437	Sum	22.21	pass
11N20m	H	2462	Ant 1	18.46	---
11N20m	H	2462	Ant 2	19.28	---
11N20m	H	2462	Sum	21.90	pass
11N40	L	2422	Ant 1	19.58	pass
11N40	L	2422	Ant 2	20.06	pass
11N40	M	2437	Ant 1	19.79	pass
11N40	M	2437	Ant 2	20.31	pass
11N40	H	2452	Ant 1	19.87	pass
11N40	H	2452	Ant 2	20.46	pass
11N40m	L	2422	Ant 1	19.47	---
11N40m	L	2422	Ant 2	20.61	---

Test Mode	Test Channel	Frequency[MHz]	Ant	Meas. Level (Cond.) [dBm]	Verdict
11N40m	L	2422	Sum	23.09	pass
11N40m	M	2437	Ant 1	20.12	---
11N40m	M	2437	Ant 2	19.73	---
11N40m	M	2437	Sum	22.94	pass
11N40m	H	2452	Ant 1	19.67	---
11N40m	H	2452	Ant 2	20.17	---
11N40m	H	2452	Sum	22.94	pass

Appendix C: Maximum Power Spectral Density Level

Part I - Test Results

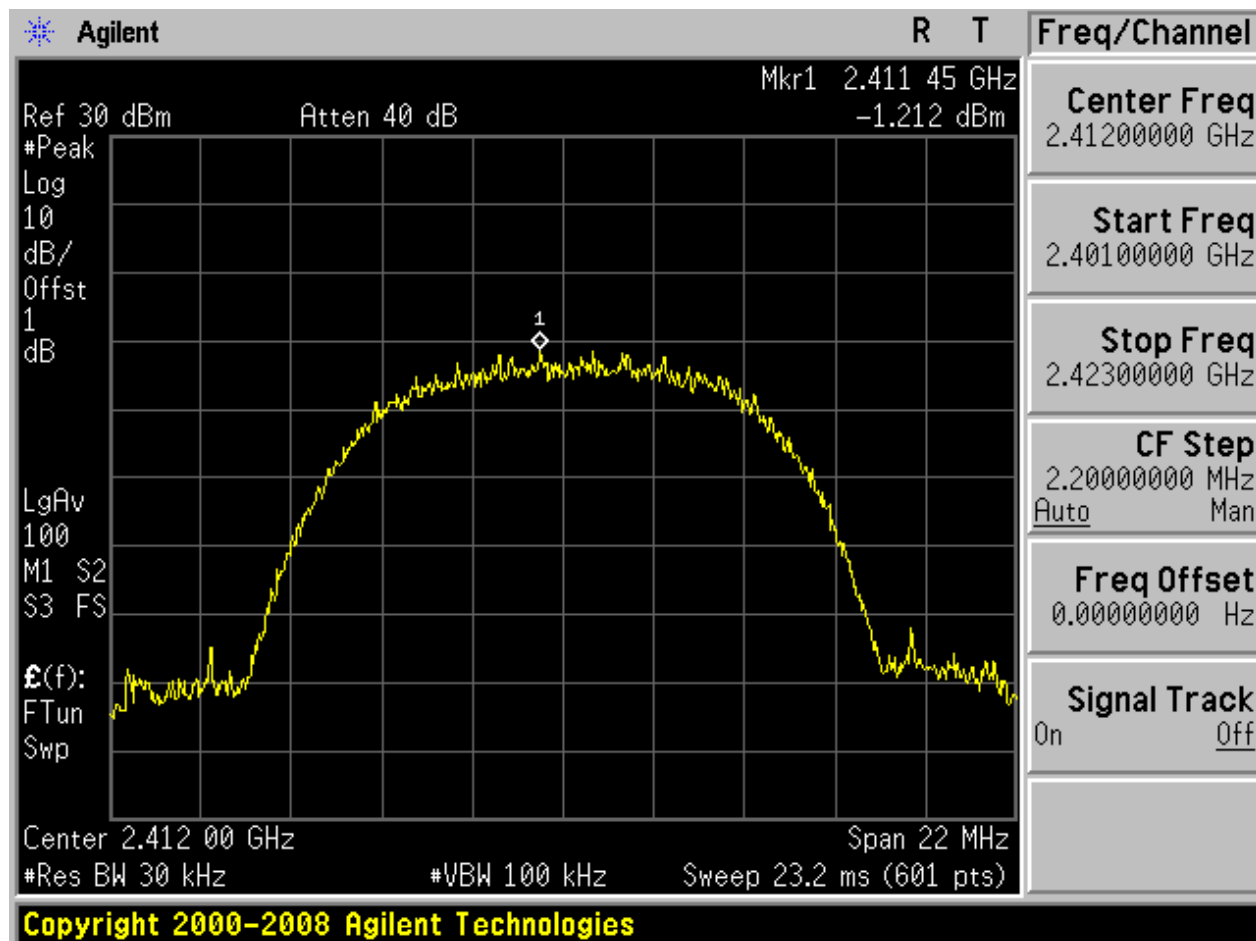
Test Mode	Test Channel	Frequency[MHz]	Ant	PD[MHz]	Verdict
11B	L	2412	Ant 1	-1.21	pass
11B	L	2412	Ant 2	-0.37	pass
11B	M	2437	Ant 1	0.17	pass
11B	M	2437	Ant 2	-0.35	pass
11B	H	2462	Ant 1	0.16	pass
11B	H	2462	Ant 2	0.41	pass
11G	L	2412	Ant 1	-9.73	pass
11G	L	2412	Ant 2	-2.88	pass
11G	M	2437	Ant 1	-11.62	pass
11G	M	2437	Ant 2	-2.41	pass
11G	H	2462	Ant 1	-8.36	pass
11G	H	2462	Ant 2	-2.55	pass
11N20	L	2412	Ant 1	-8.63	pass
11N20	L	2412	Ant 2	-3.43	pass
11N20	M	2437	Ant 1	-9.55	pass
11N20	M	2437	Ant 2	-3.75	pass
11N20	H	2462	Ant 1	-7.29	pass
11N20	H	2462	Ant 2	-3.41	pass
11N20m	L	2412	Ant 1	-9.29	pass
11N20m	L	2412	Ant 2	-3.53	pass
11N20m	M	2437	Ant 1	-4.74	pass
11N20m	M	2437	Ant 2	-3.58	pass
11N20m	H	2462	Ant 1	-2.67	pass
11N20m	H	2462	Ant 2	-0.75	pass
11N40	L	2422	Ant 1	-12.61	pass
11N40	L	2422	Ant 2	-6.56	pass
11N40	M	2437	Ant 1	-11.71	pass
11N40	M	2437	Ant 2	-6.72	pass
11N40	H	2452	Ant 1	-11.20	pass
11N40	H	2452	Ant 2	-5.88	pass
11N40m	L	2422	Ant 1	-6.02	pass
11N40m	L	2422	Ant 2	-6.51	pass
11N40m	M	2437	Ant 2	-11.00	pass
11N40m	M	2437	Ant 1	-6.20	pass
11N40m	H	2452	Ant 1	-10.07	pass



Test Mode	Test Channel	Frequency[MHz]	Ant	PD[MHz]	Verdict
11N40m	H	2452	Ant 2	-4.92	pass

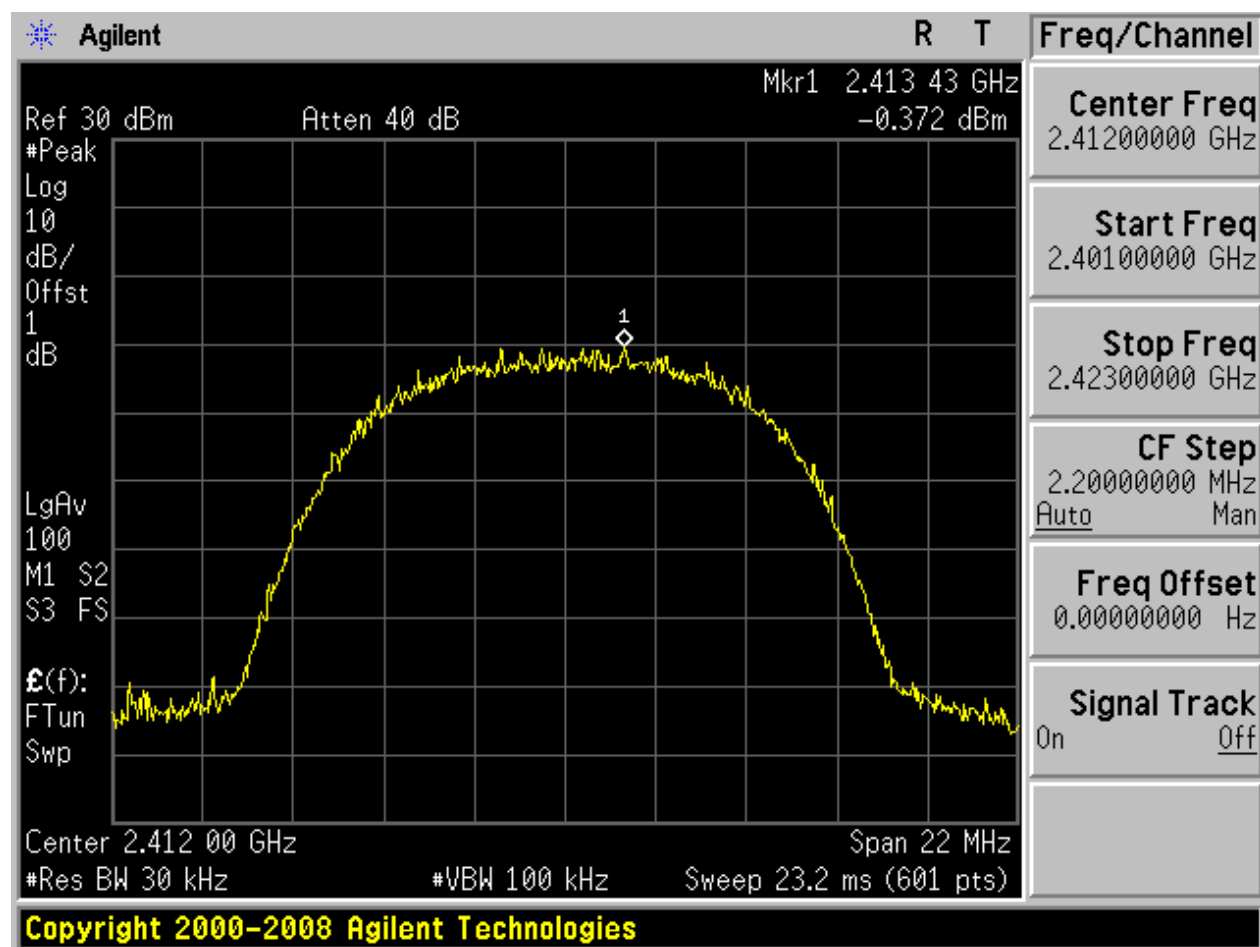
Part II - Test Plots

2.1 11B_L@Ant 1



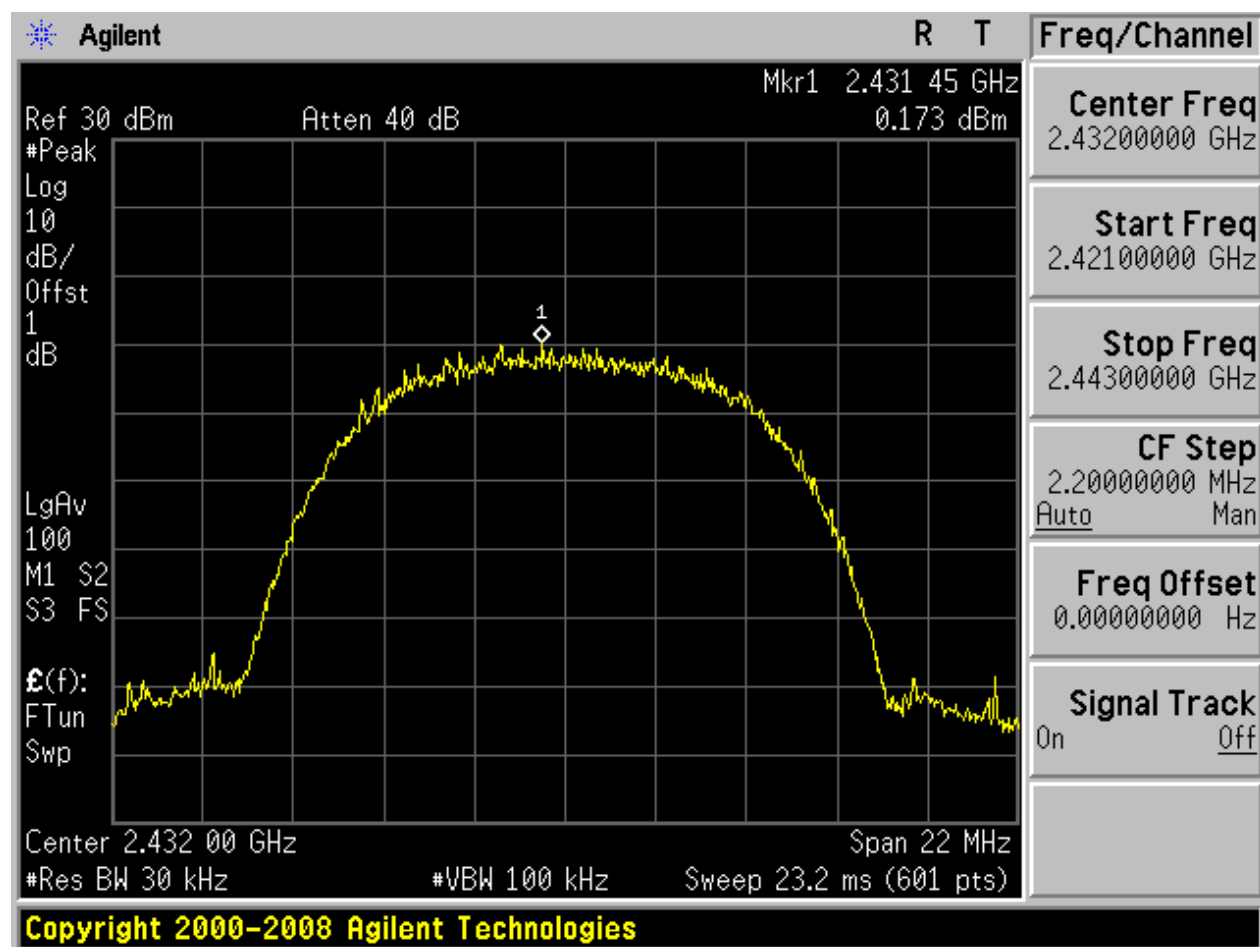


2.2 11B_L@Ant 2



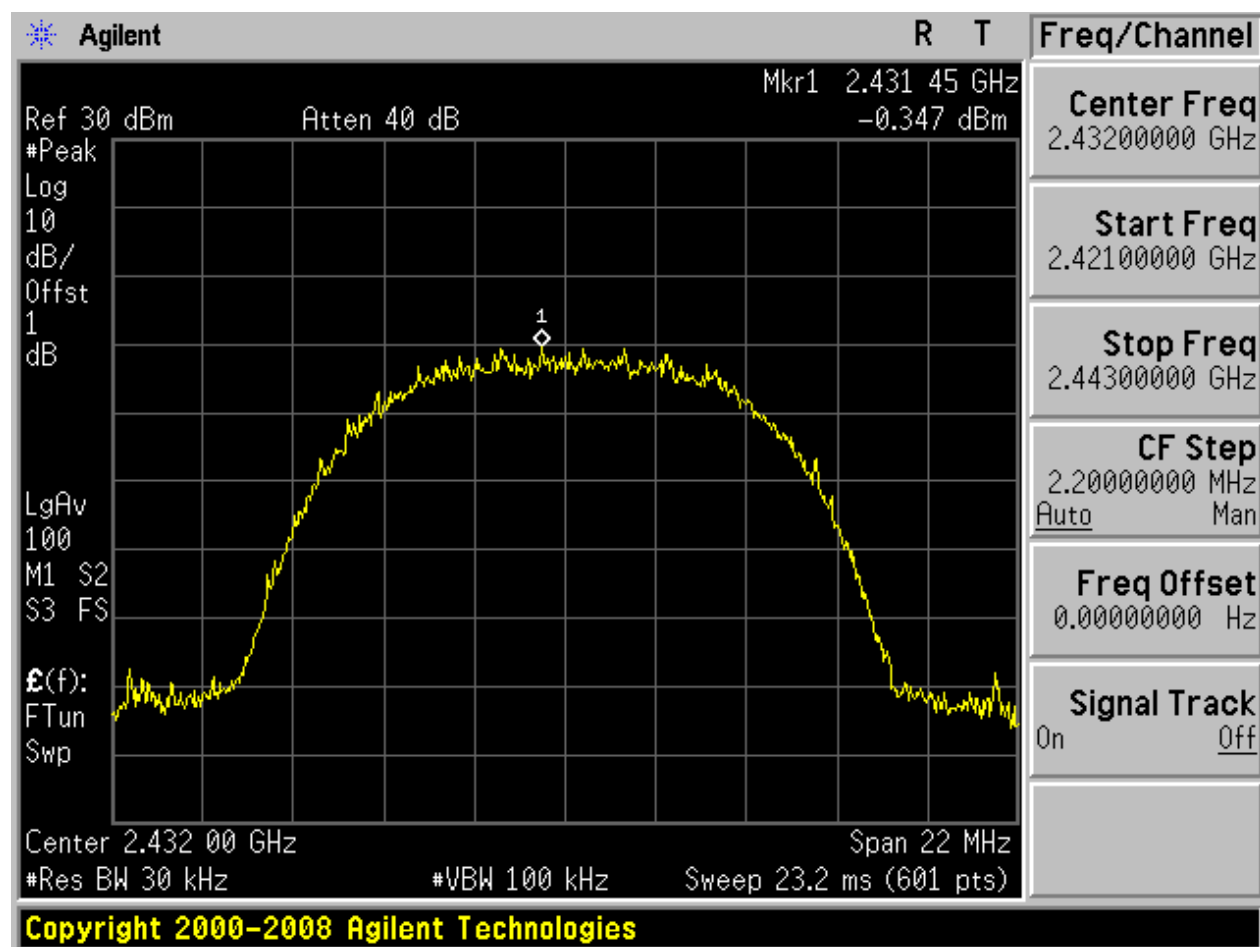


2.3 11B_M@Ant 1

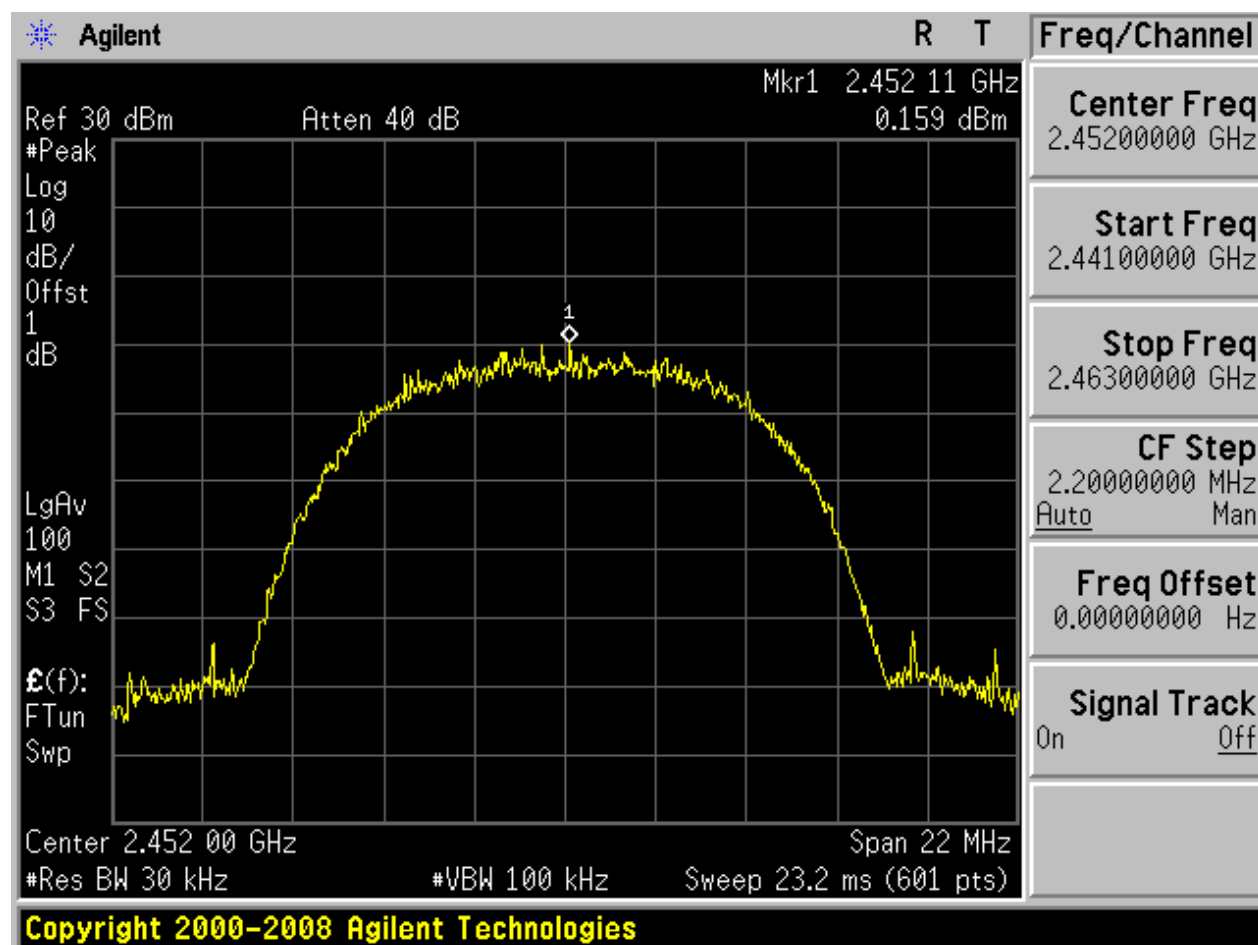




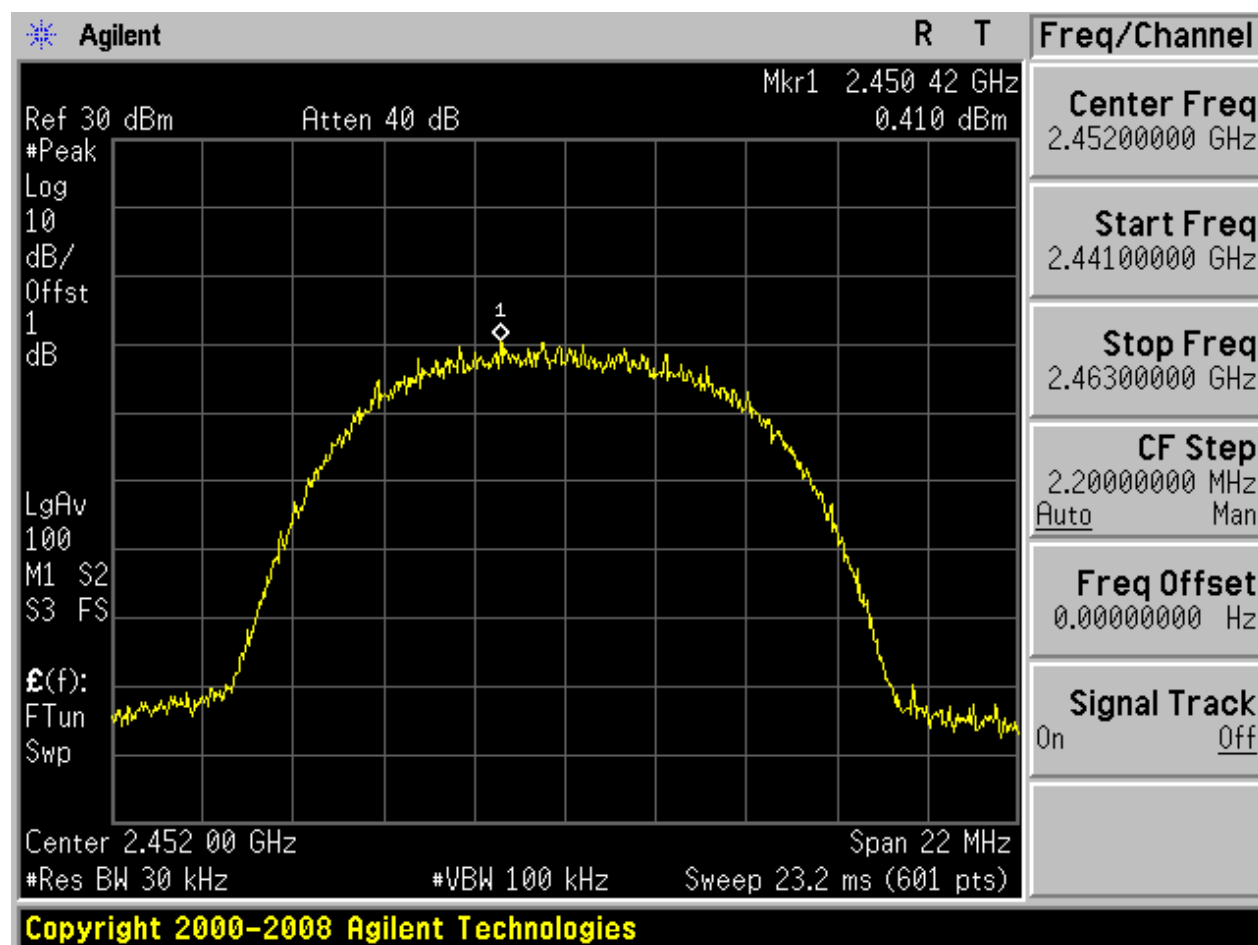
2.4 11B_M@Ant 2



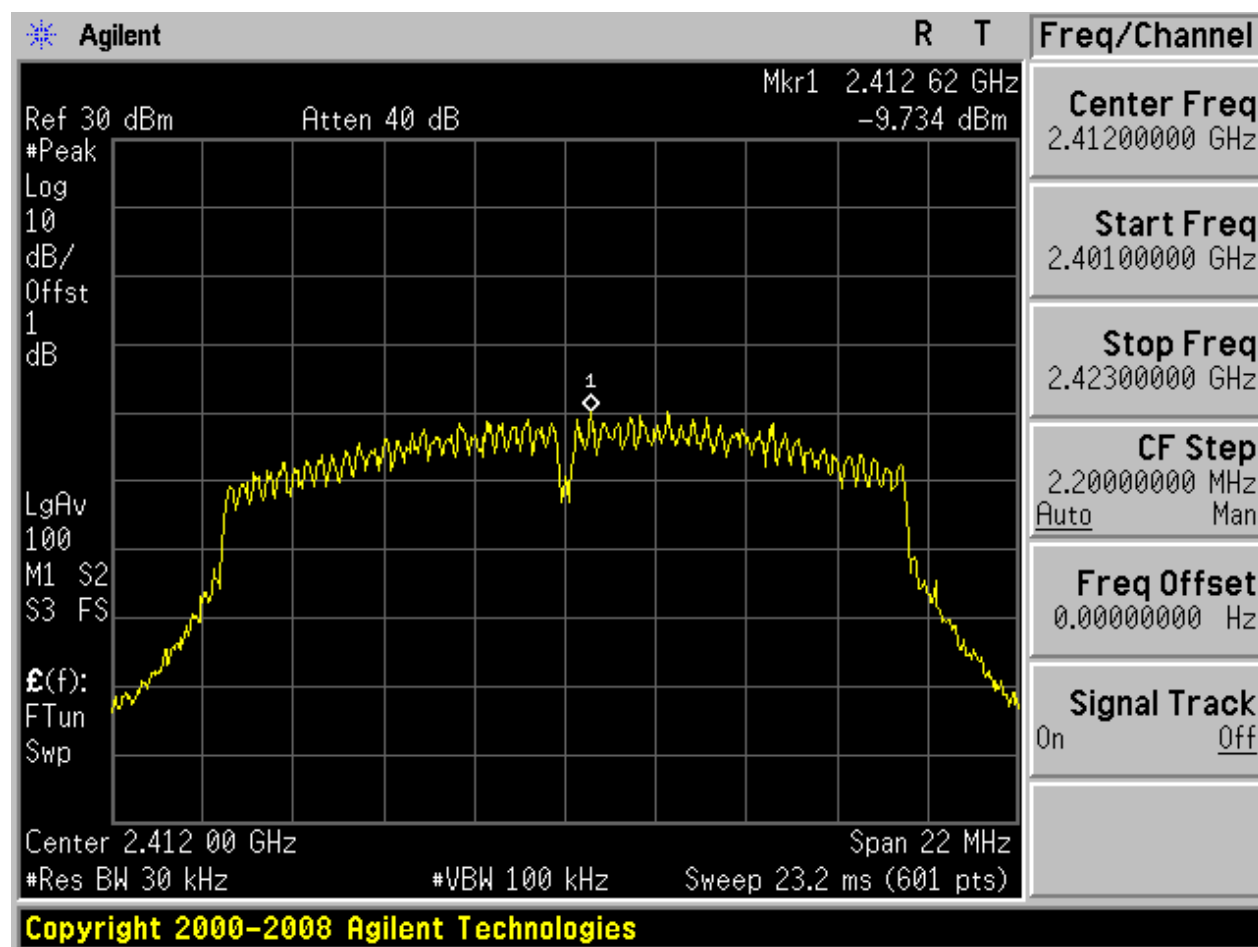
2.5 11B_H@Ant 1



2.6 11B_H@Ant 2

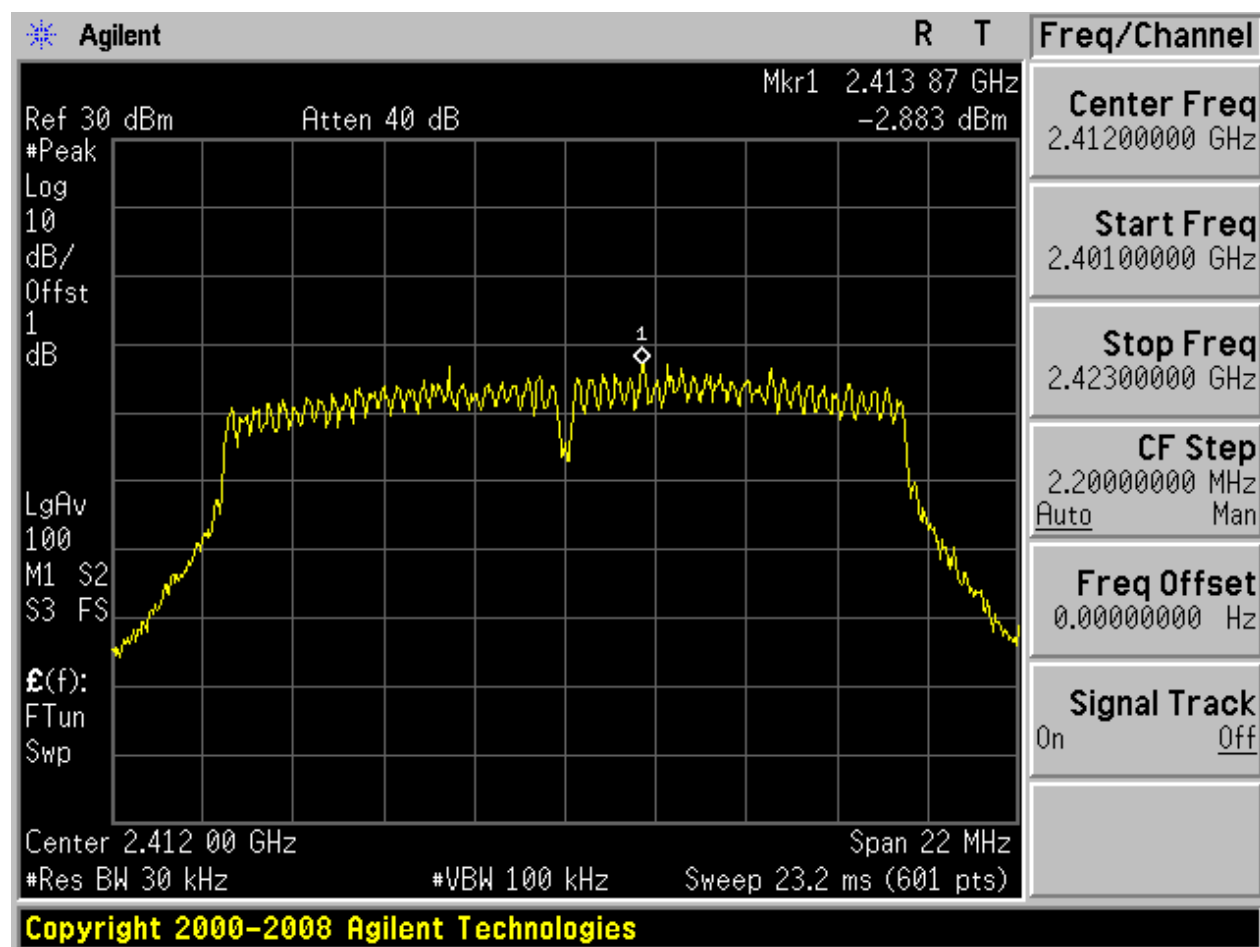


2.7 11G_L@Ant 1



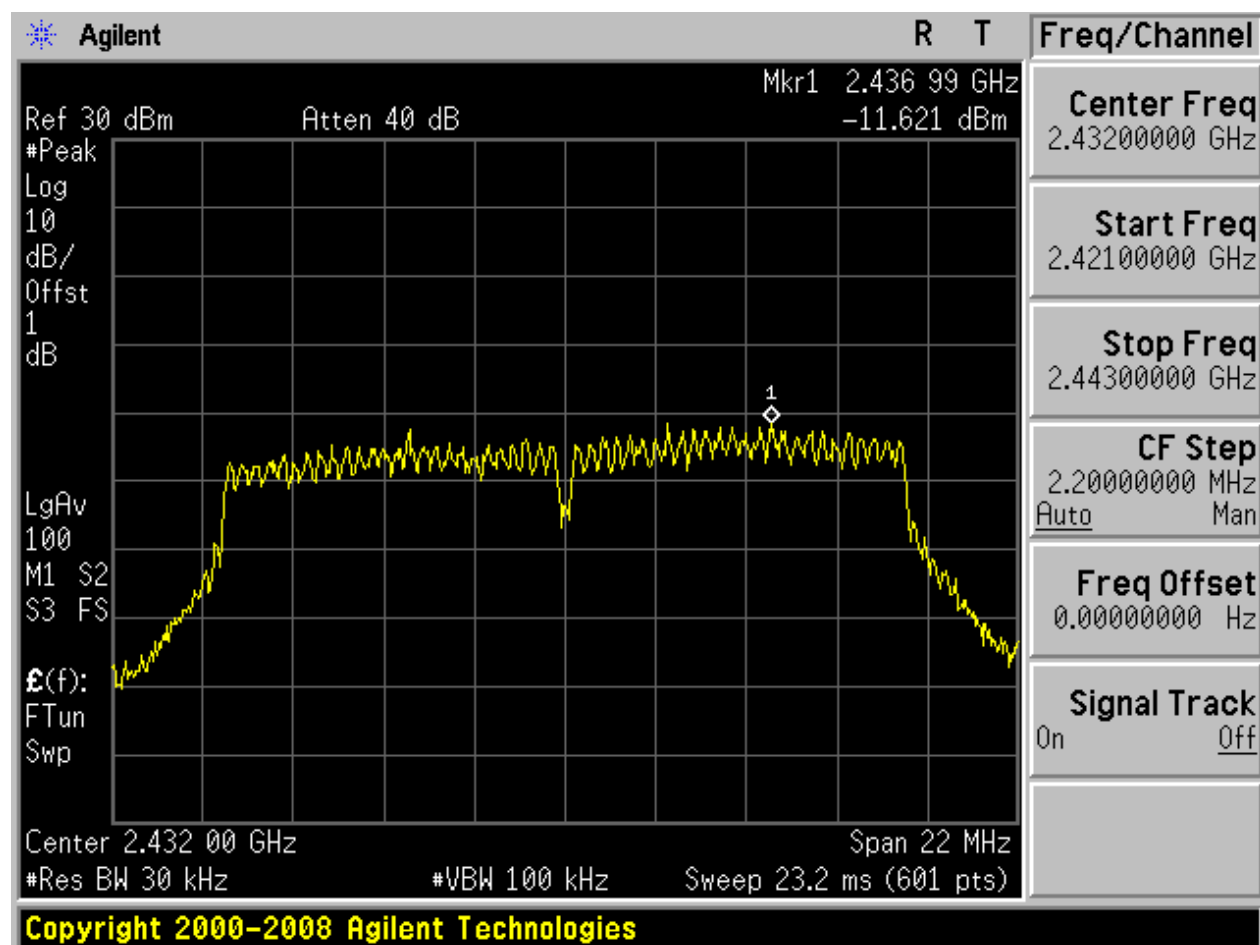


2.8 11G_L@Ant 2



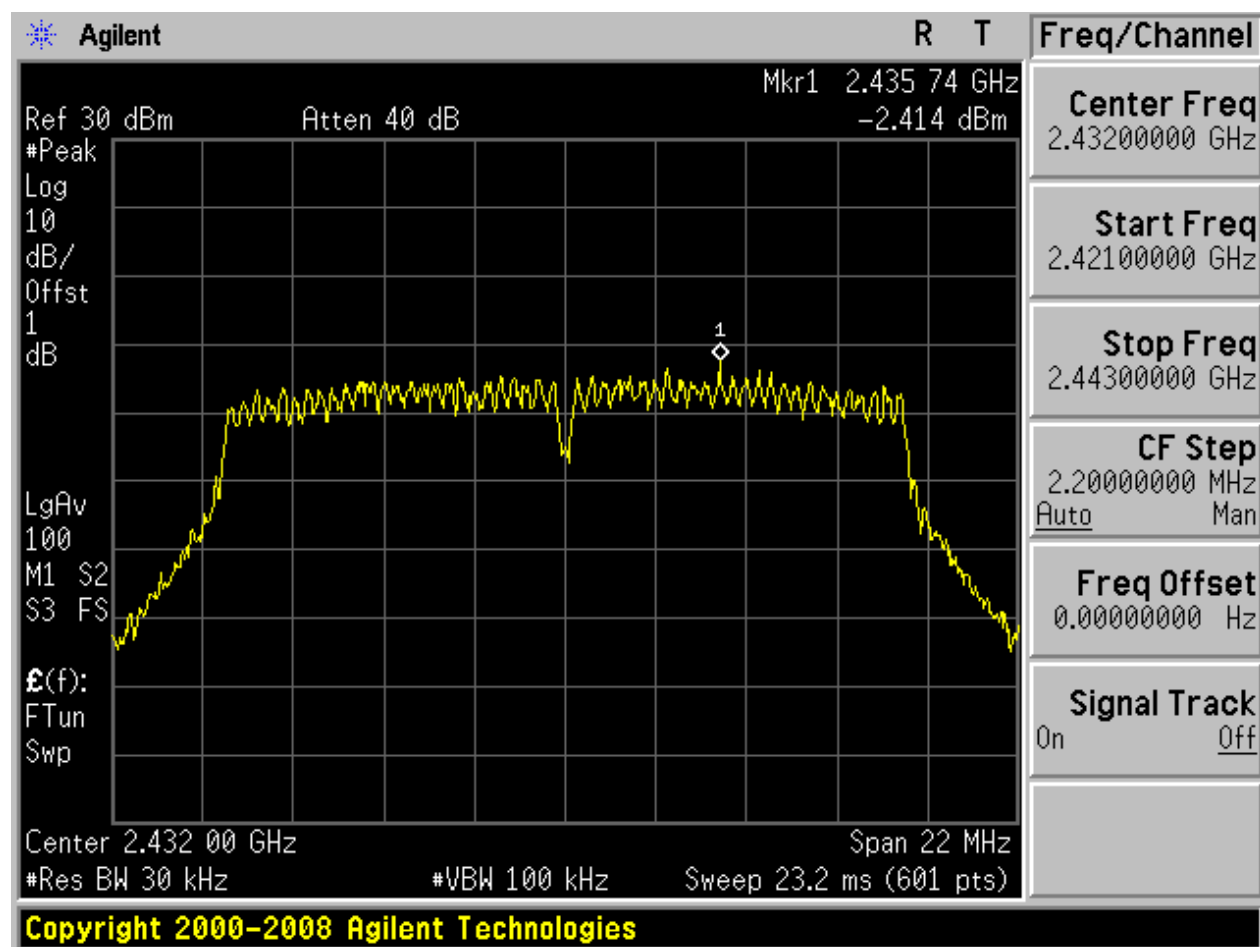


2.9 11G_M@Ant 1



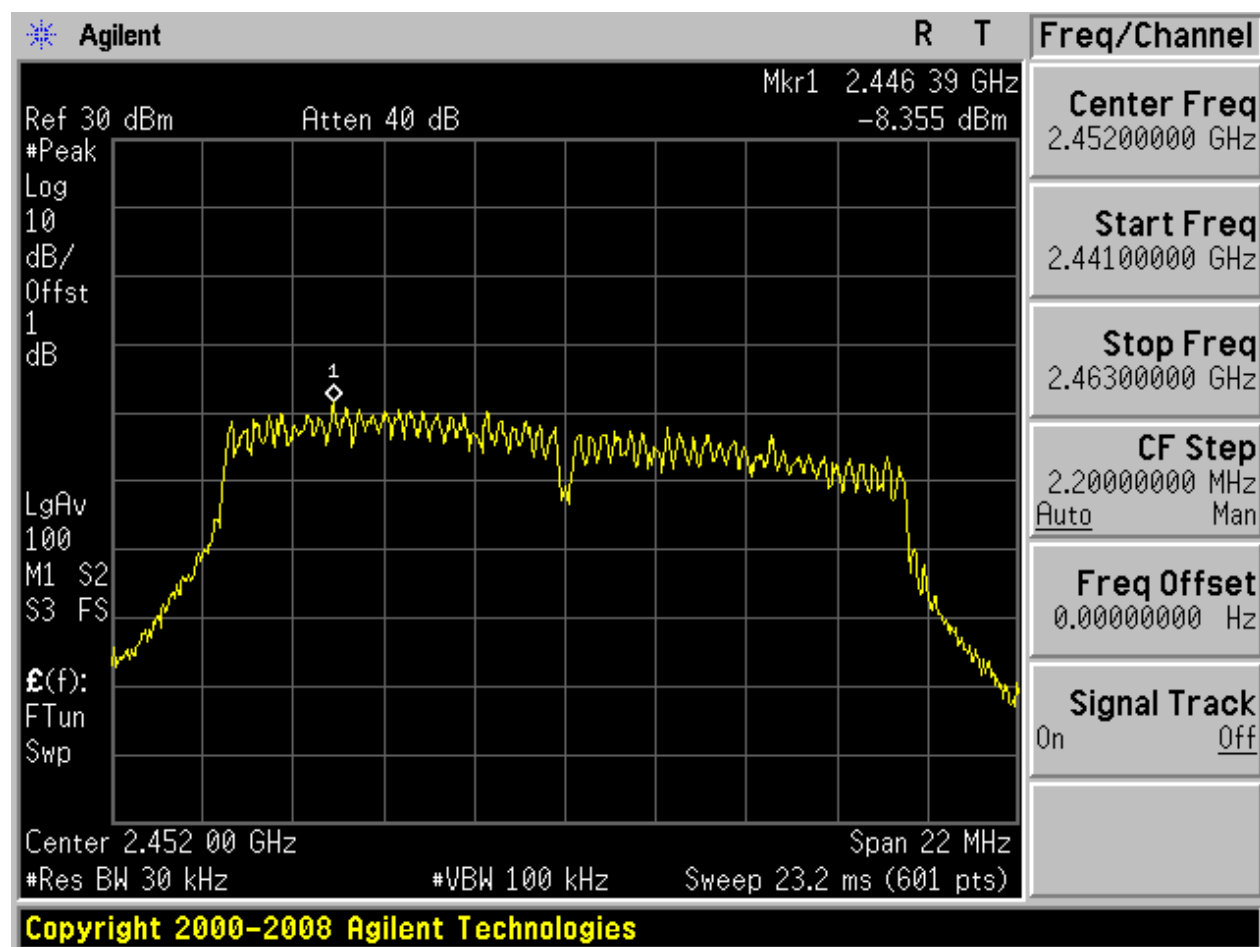


2.10 11G_M@Ant 2



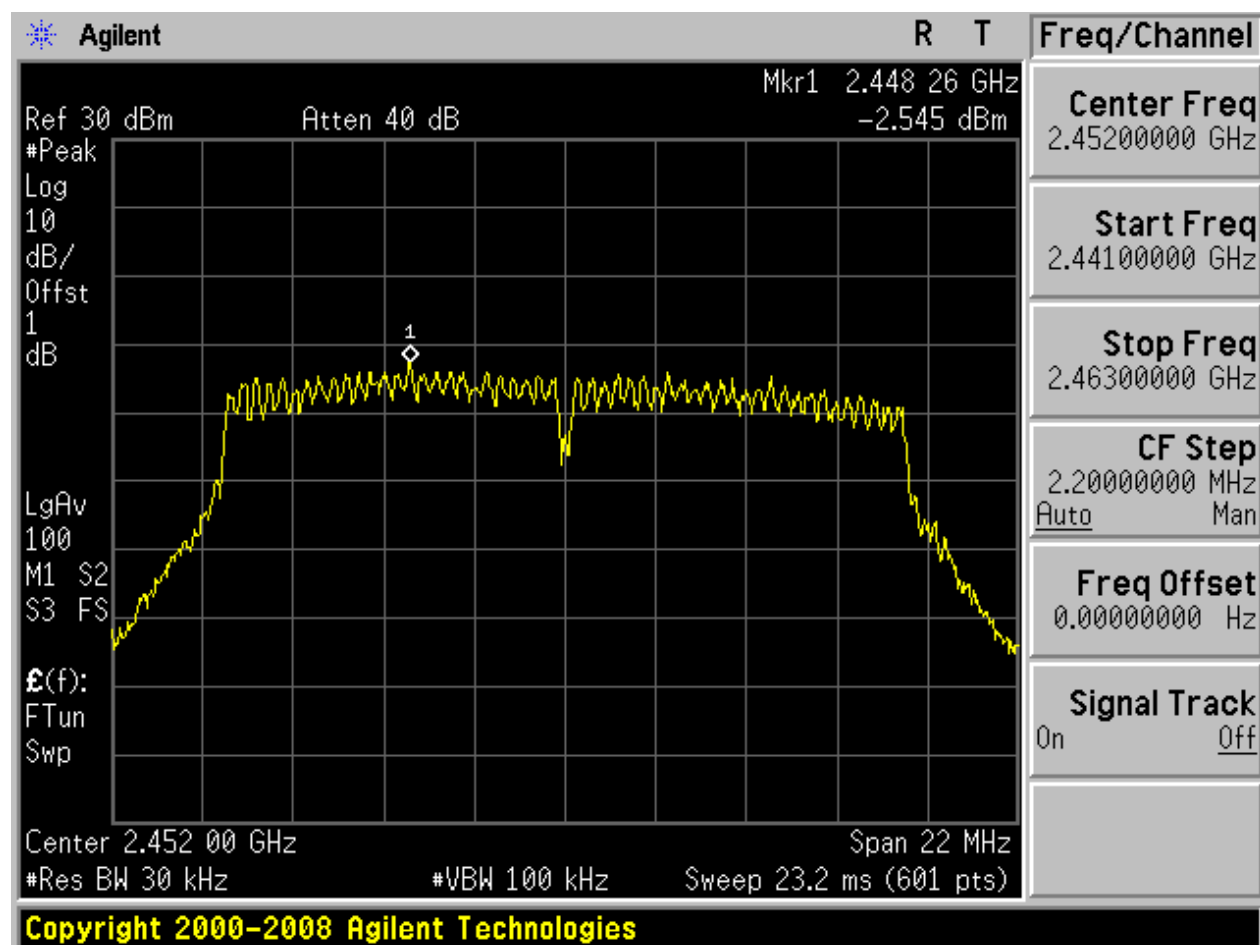


2.11 11G_H@Ant 1



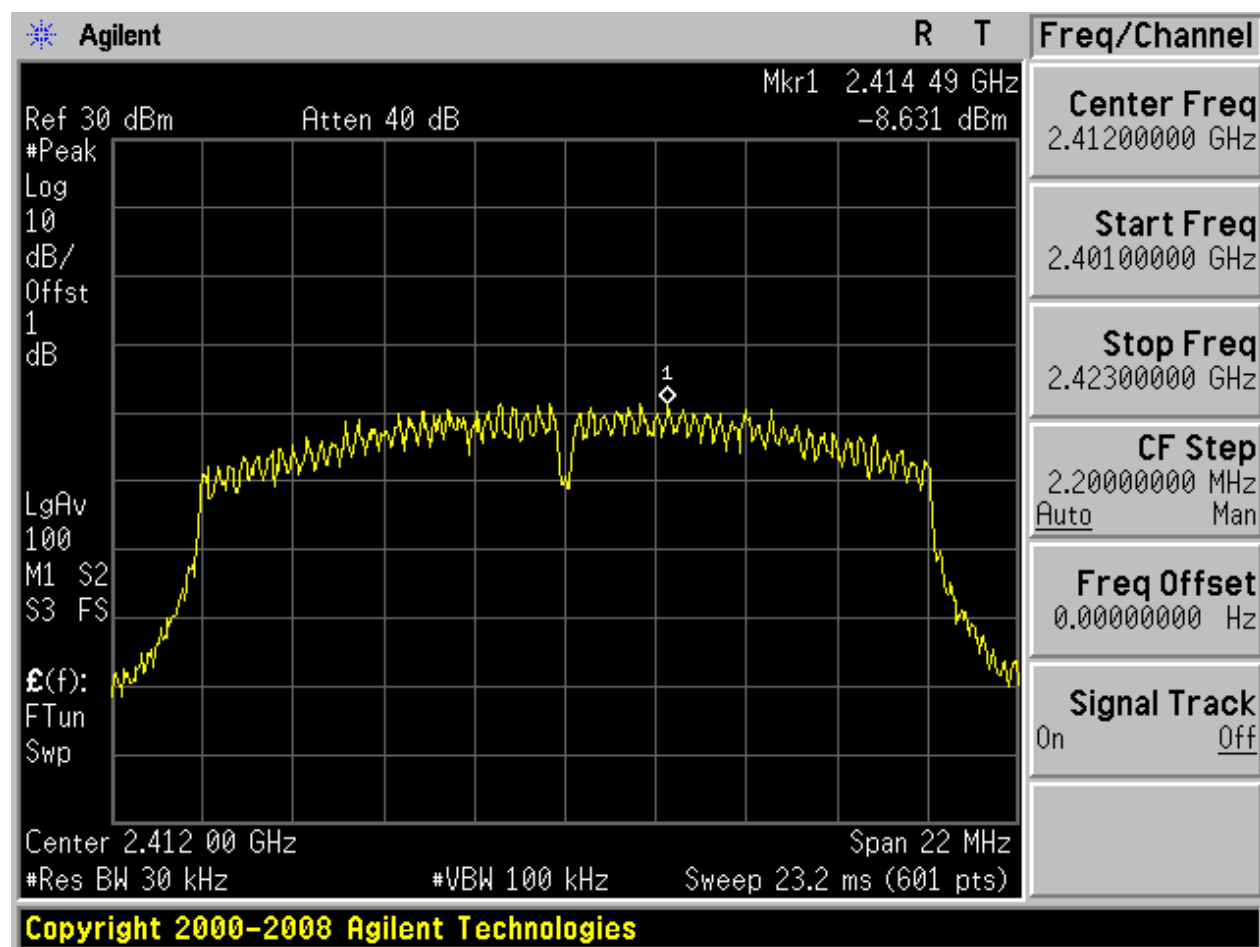


2.12 11G_H@Ant 2

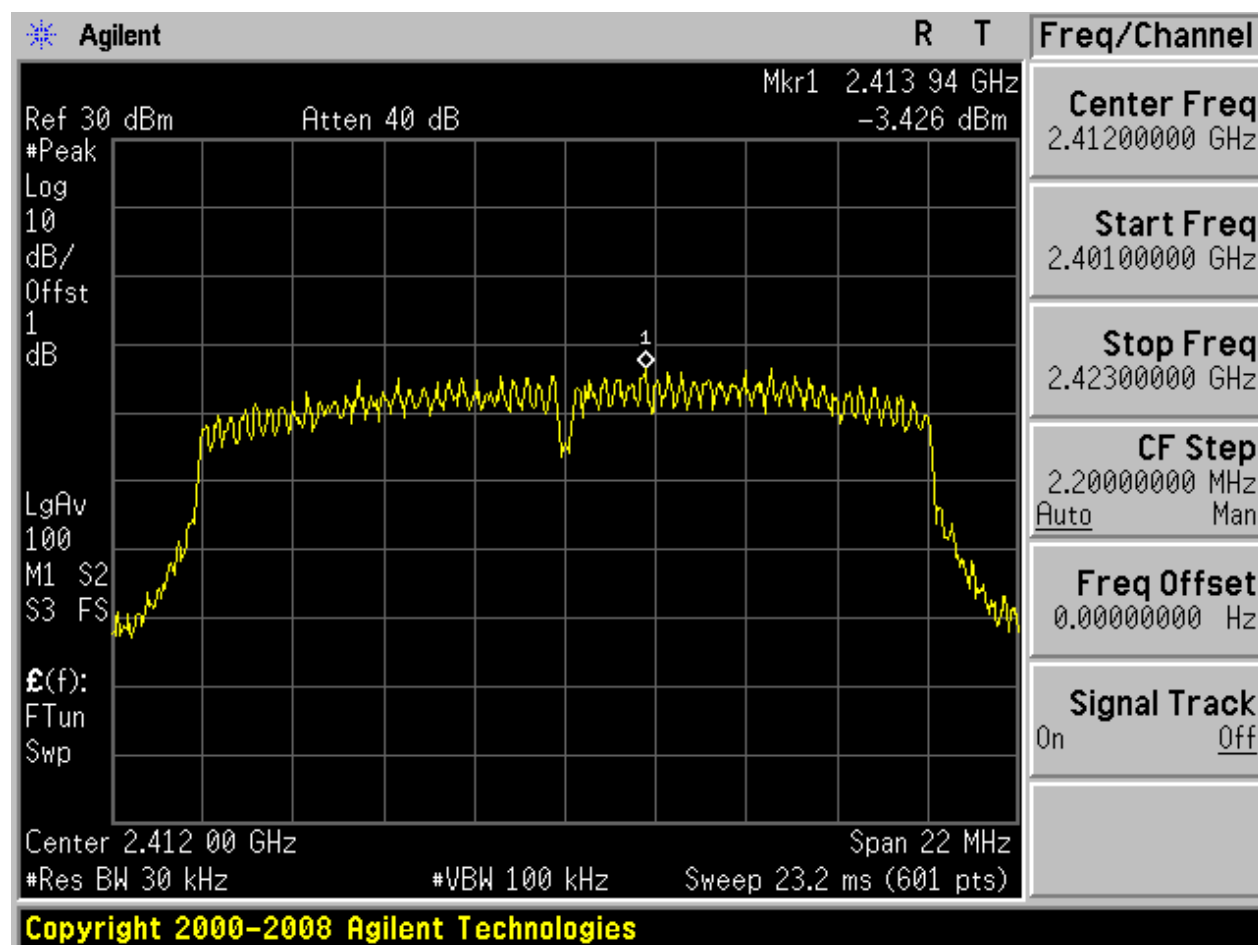




2.13 11N20_L@Ant 1

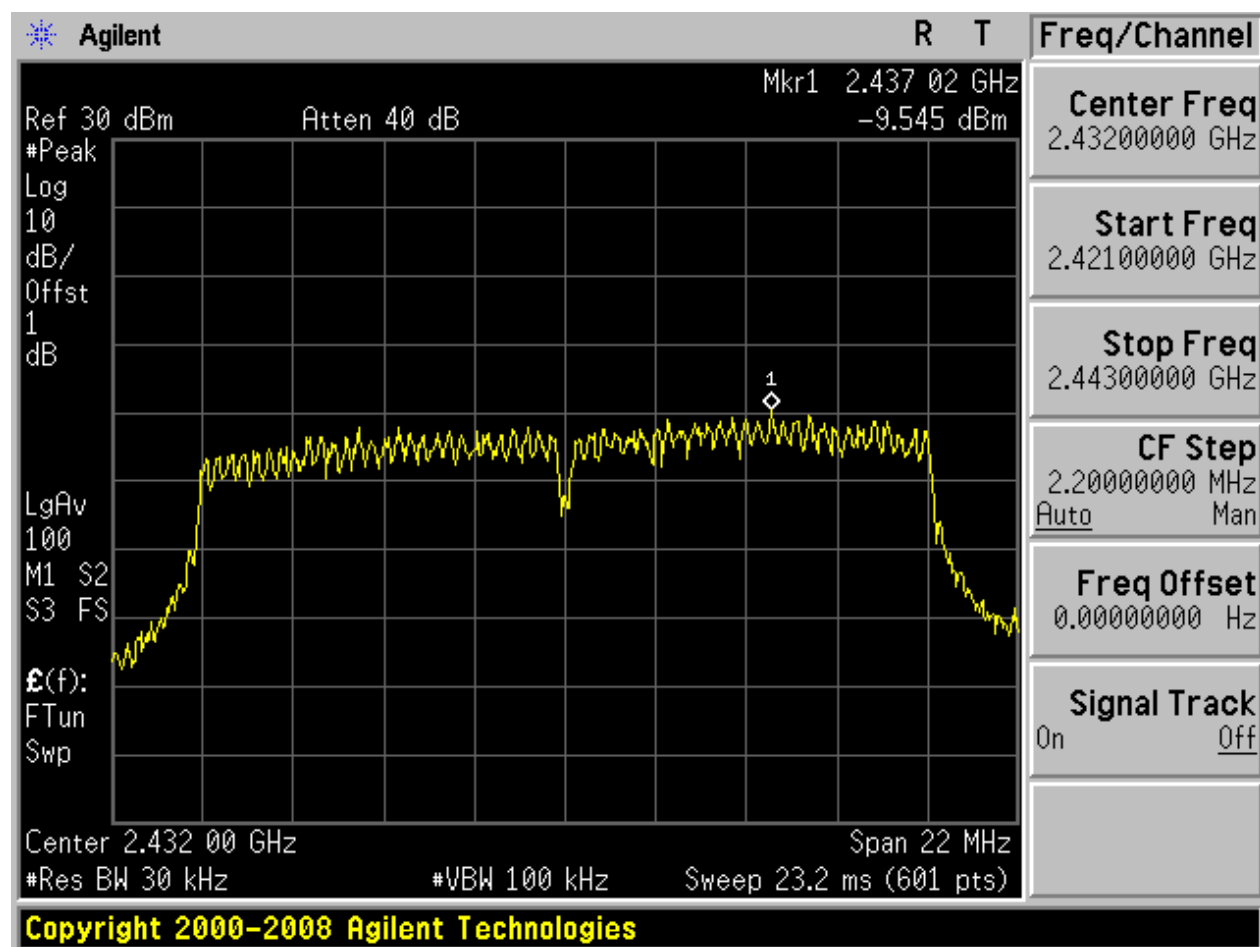


2.14 11N20_L@Ant 2



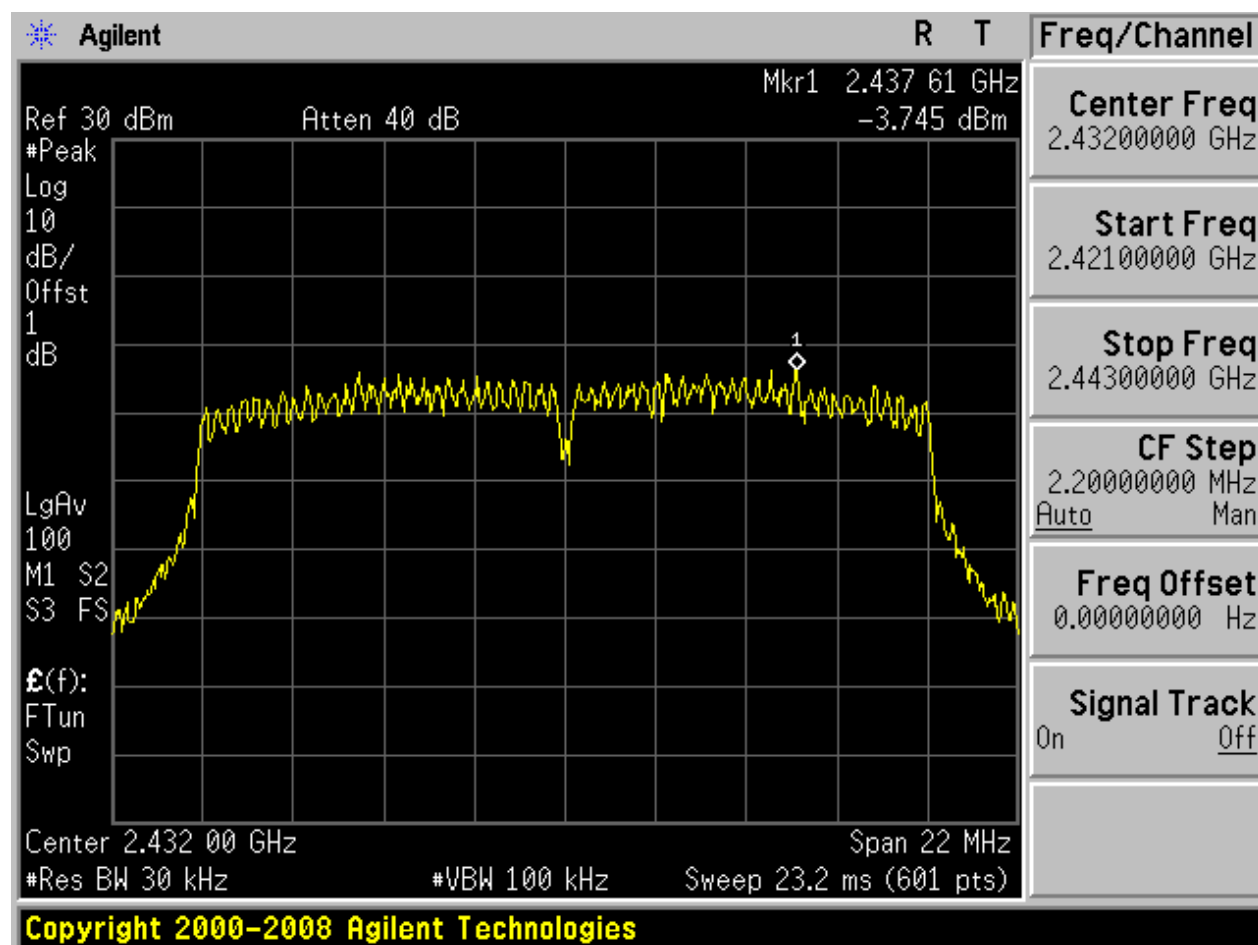


2.15 11N20_M@Ant 1



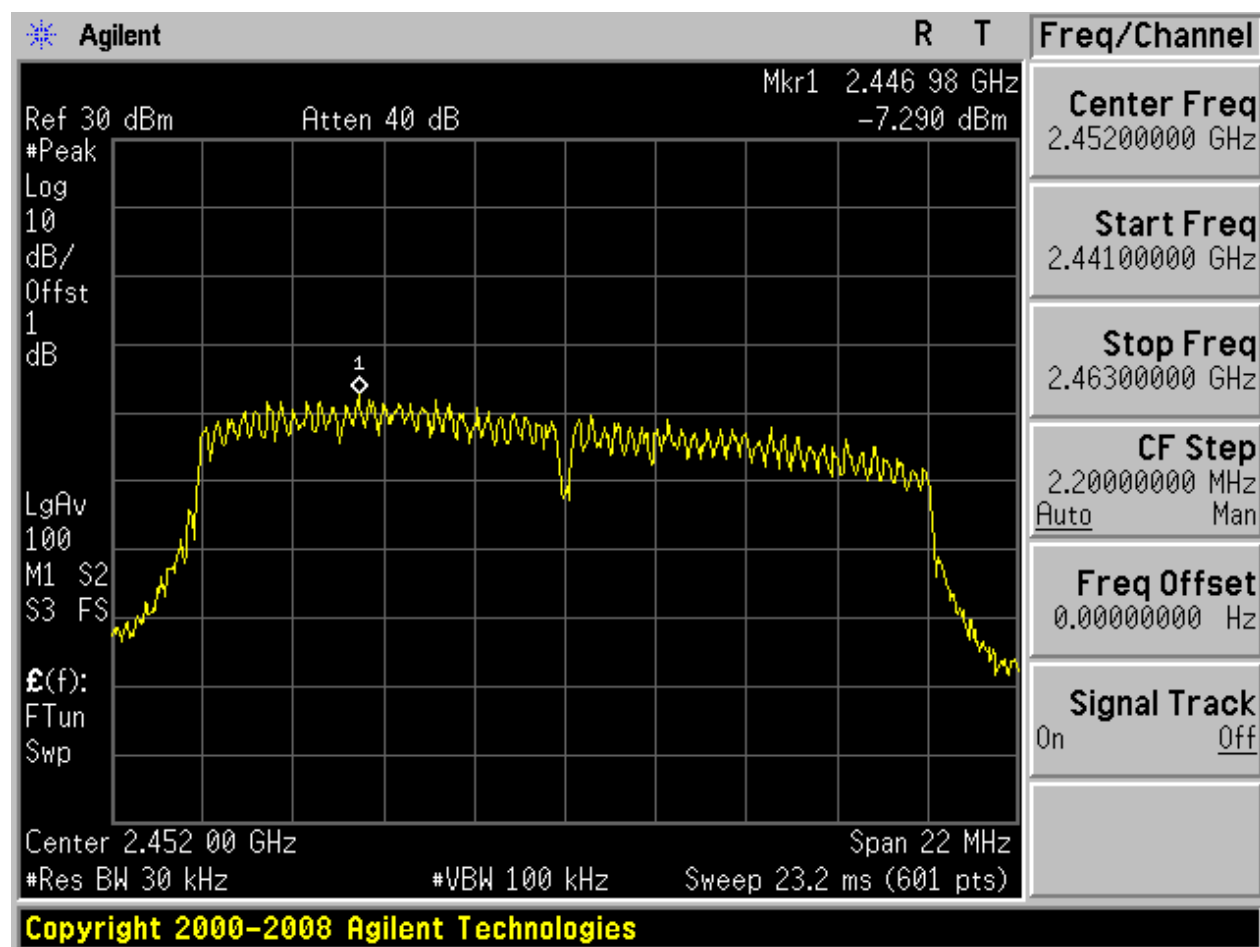


2.16 11N20_M@Ant 2



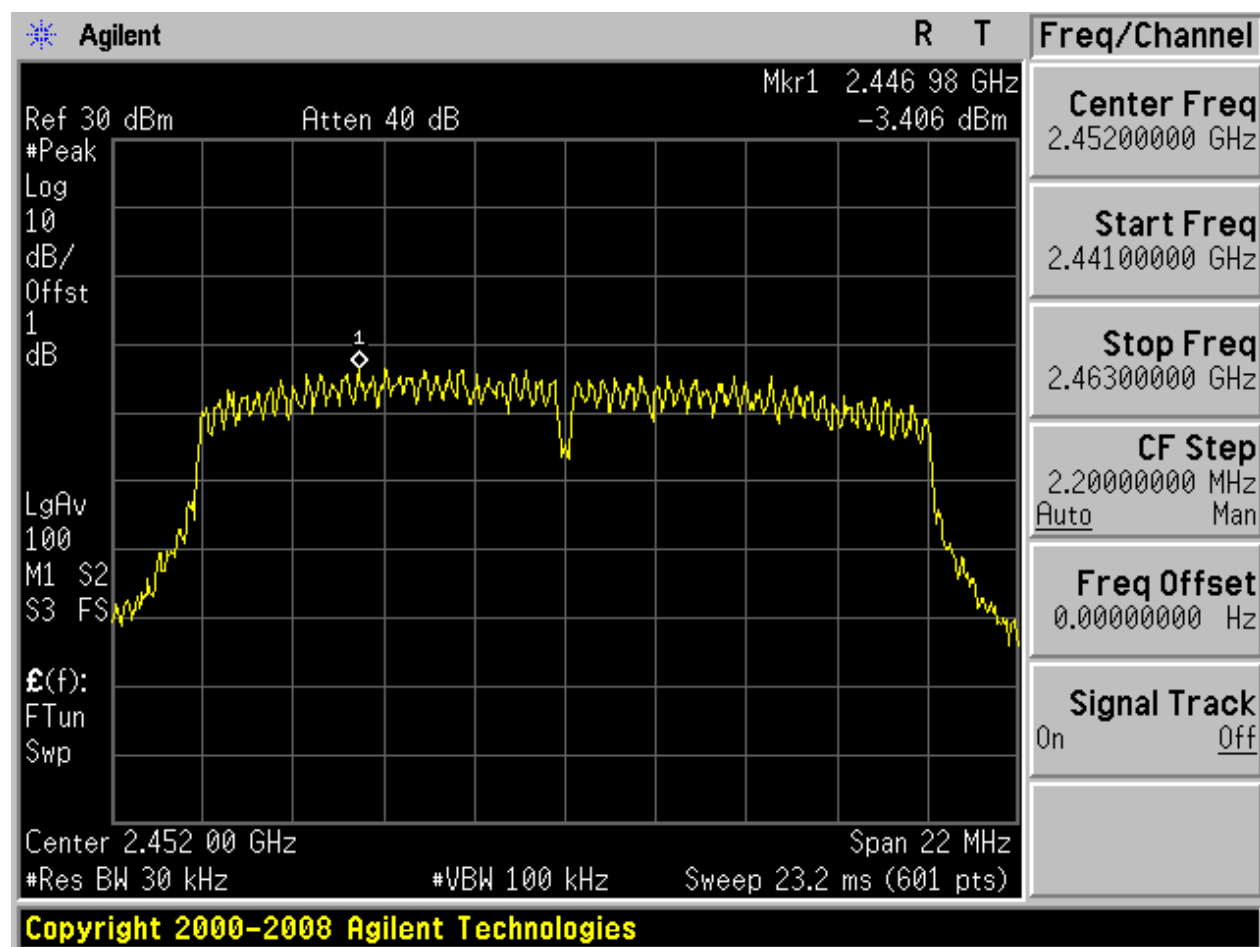


2.17 11N20_H@Ant 1



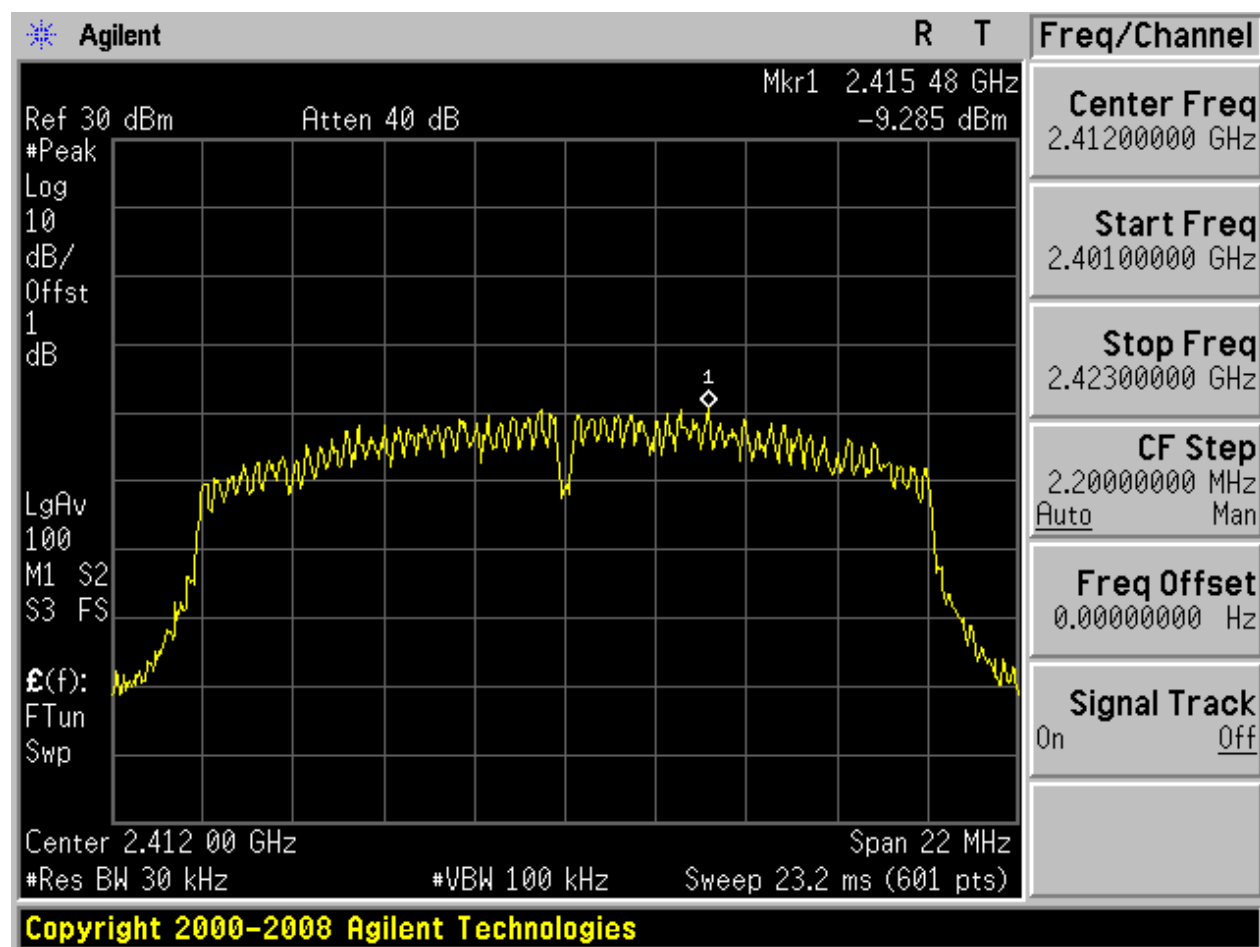


2.18 11N20_H@Ant 2



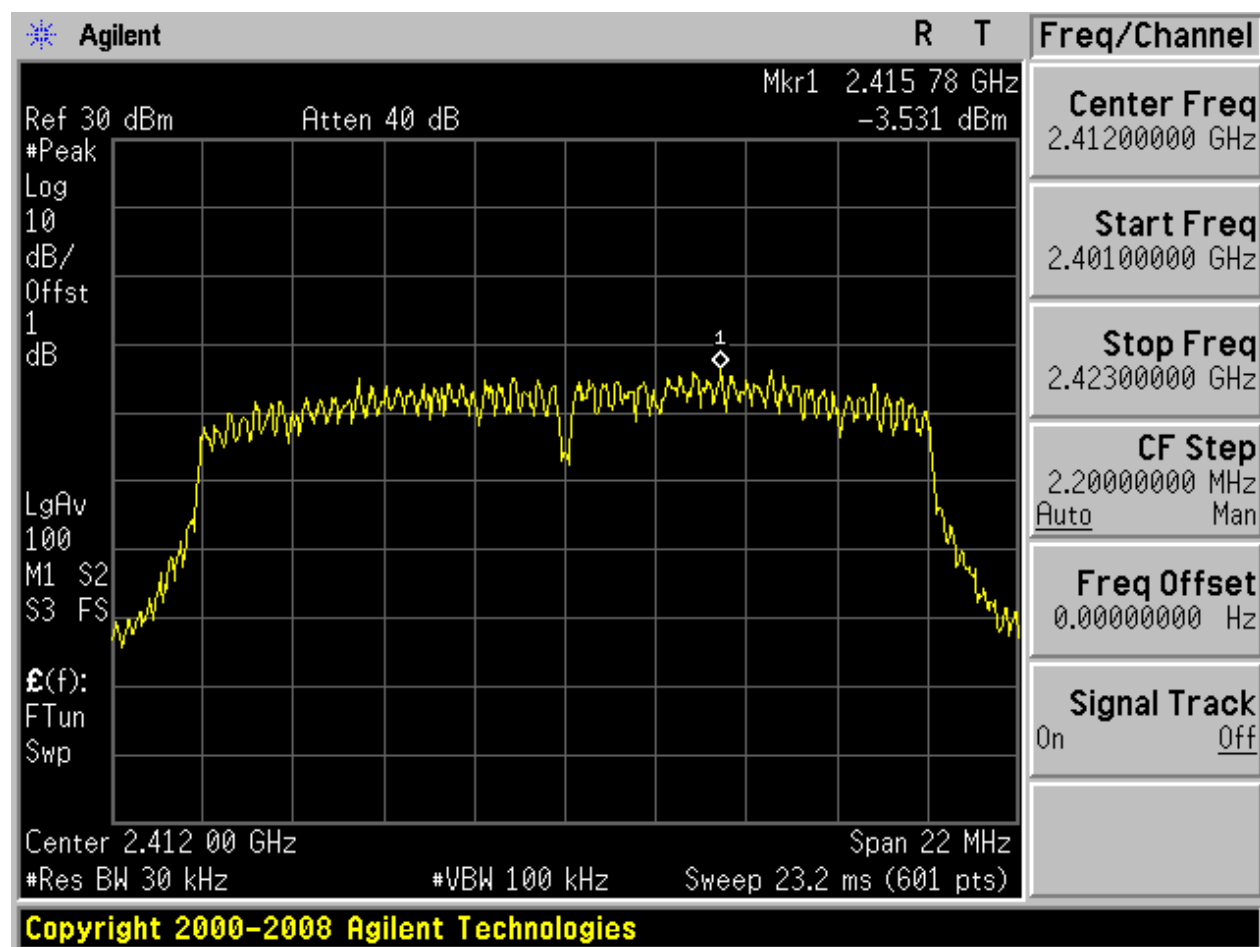


2.19 11N20m_L@Ant 1



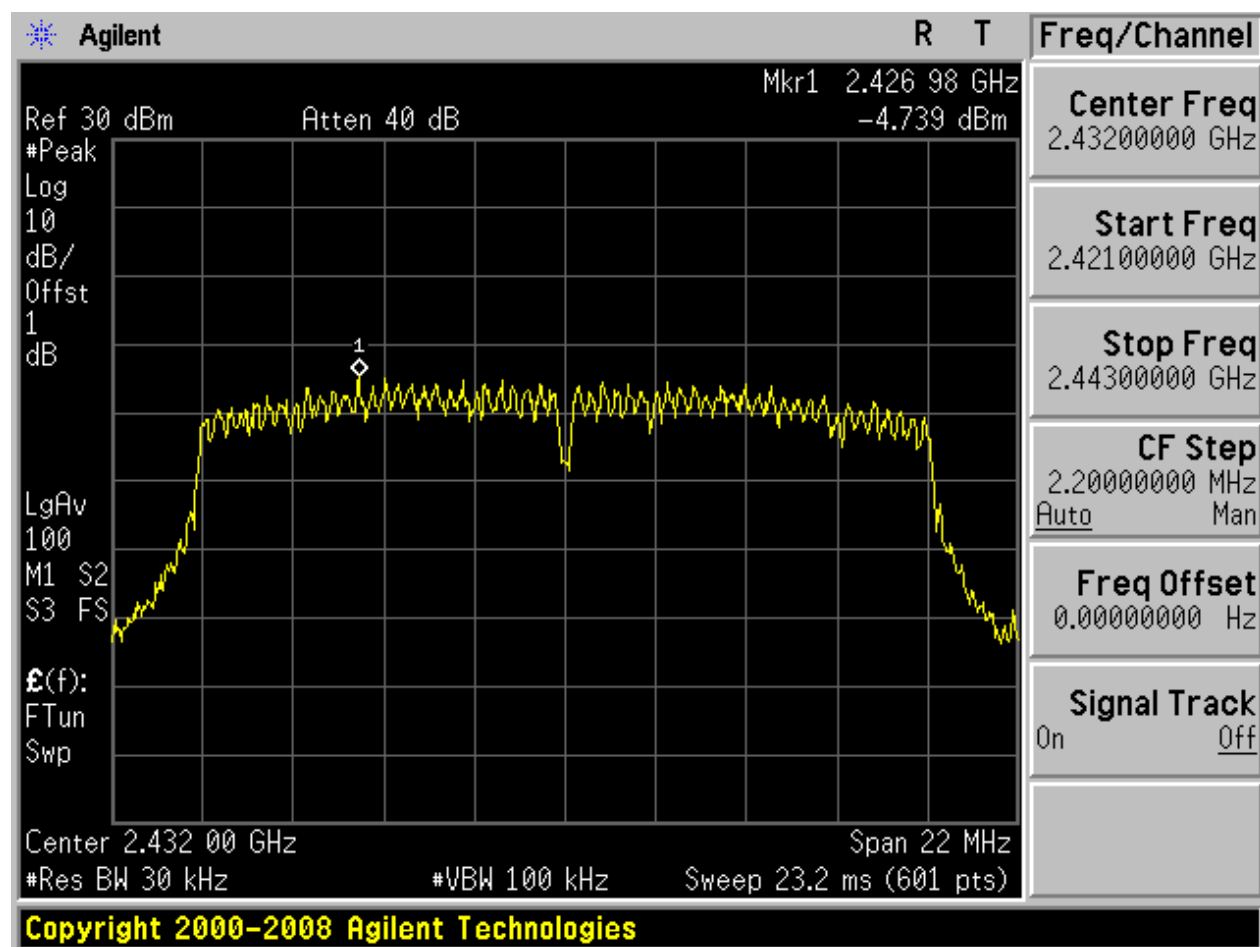


2.20 11N20m_L@Ant 2



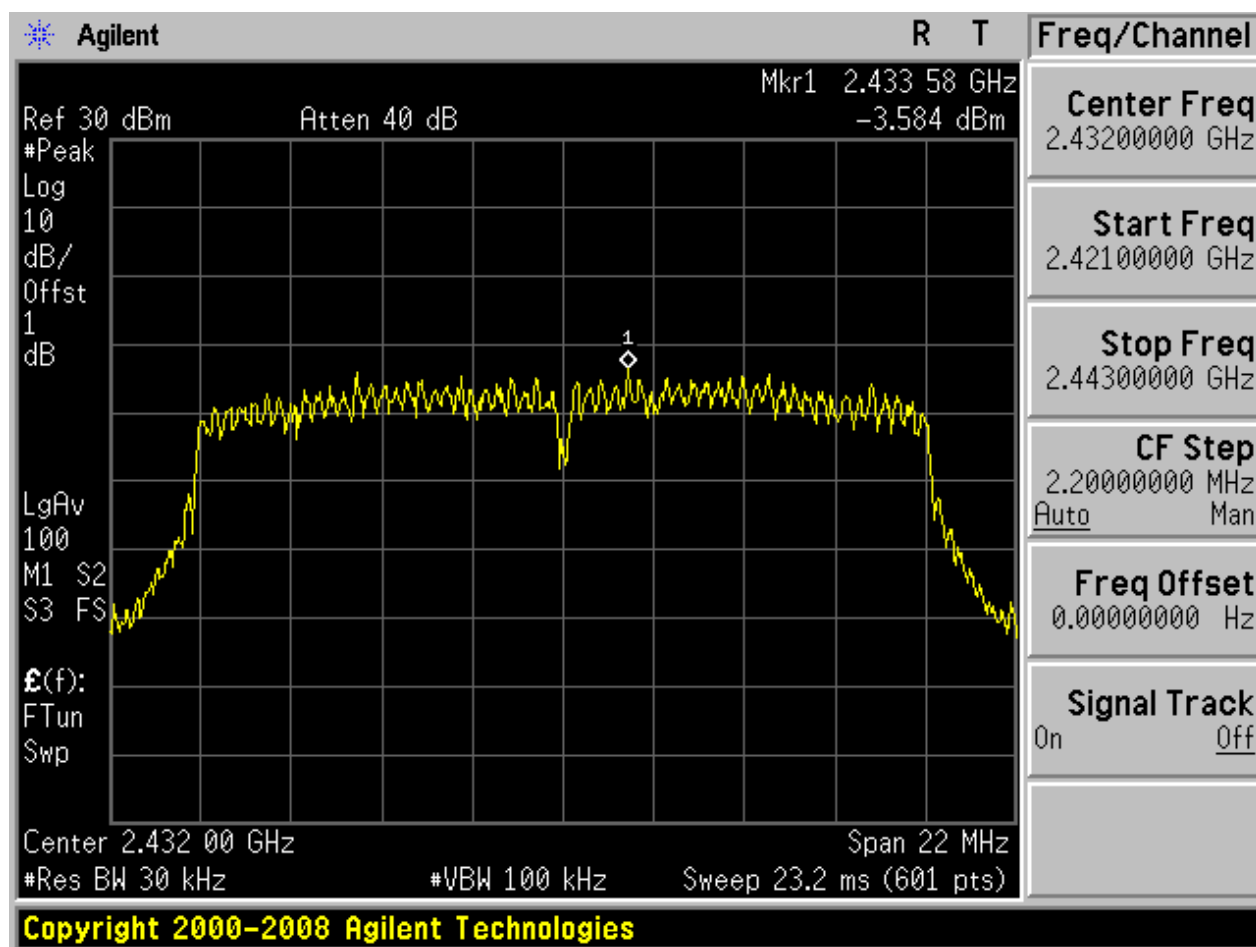


2.21 11N20m_M@Ant 1



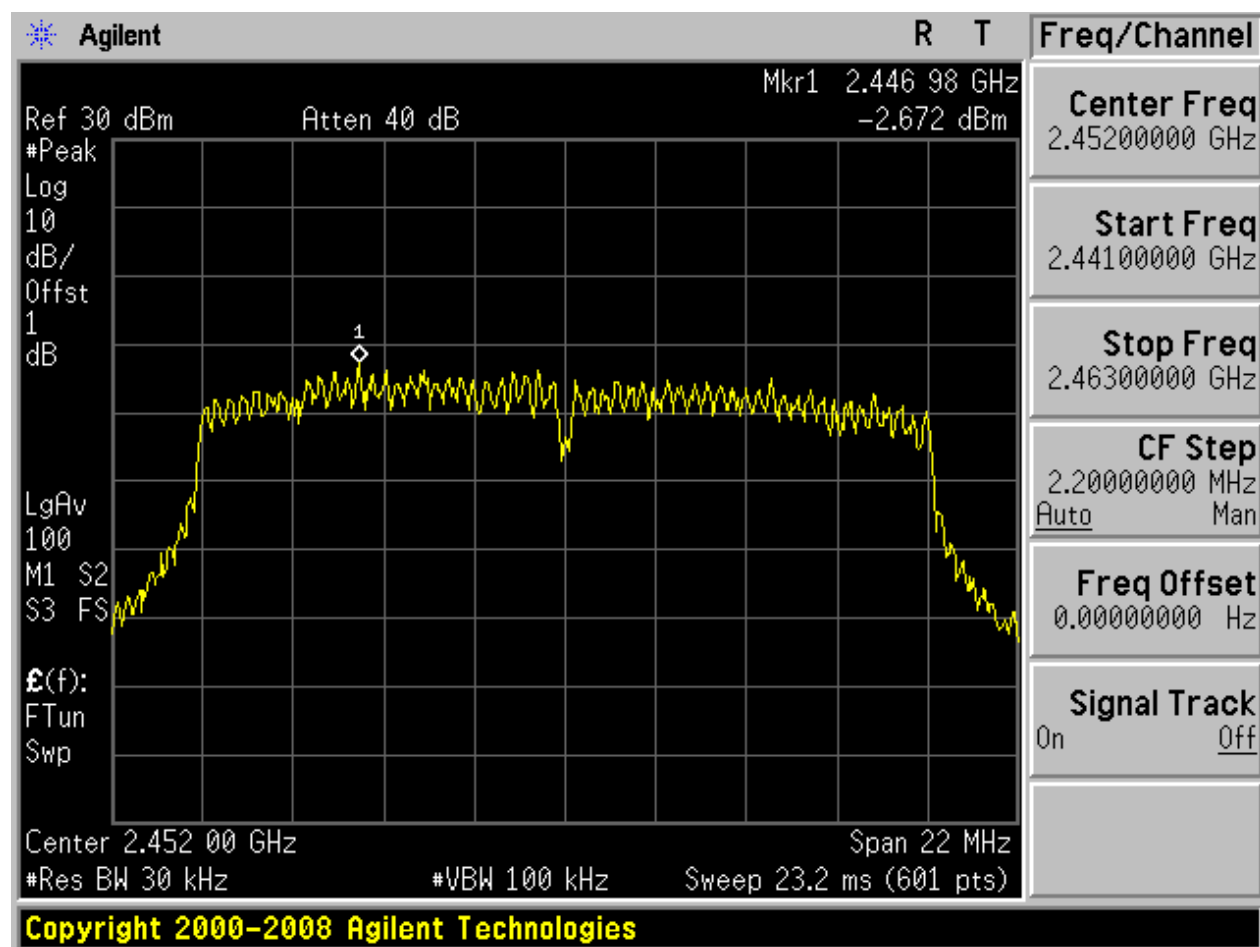


2.22 11N20m_M@Ant 2



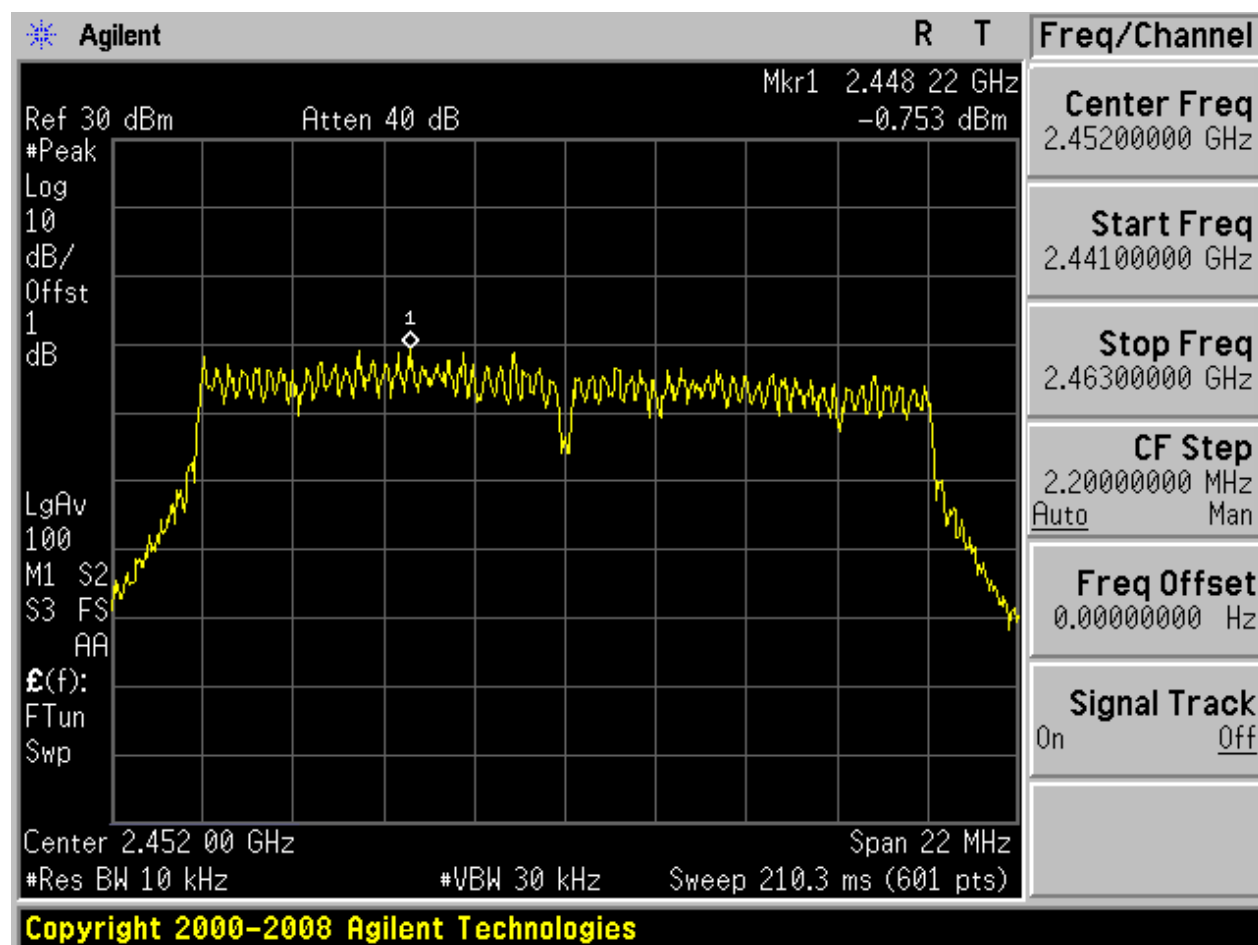


2.23 11N20m_H@Ant 1



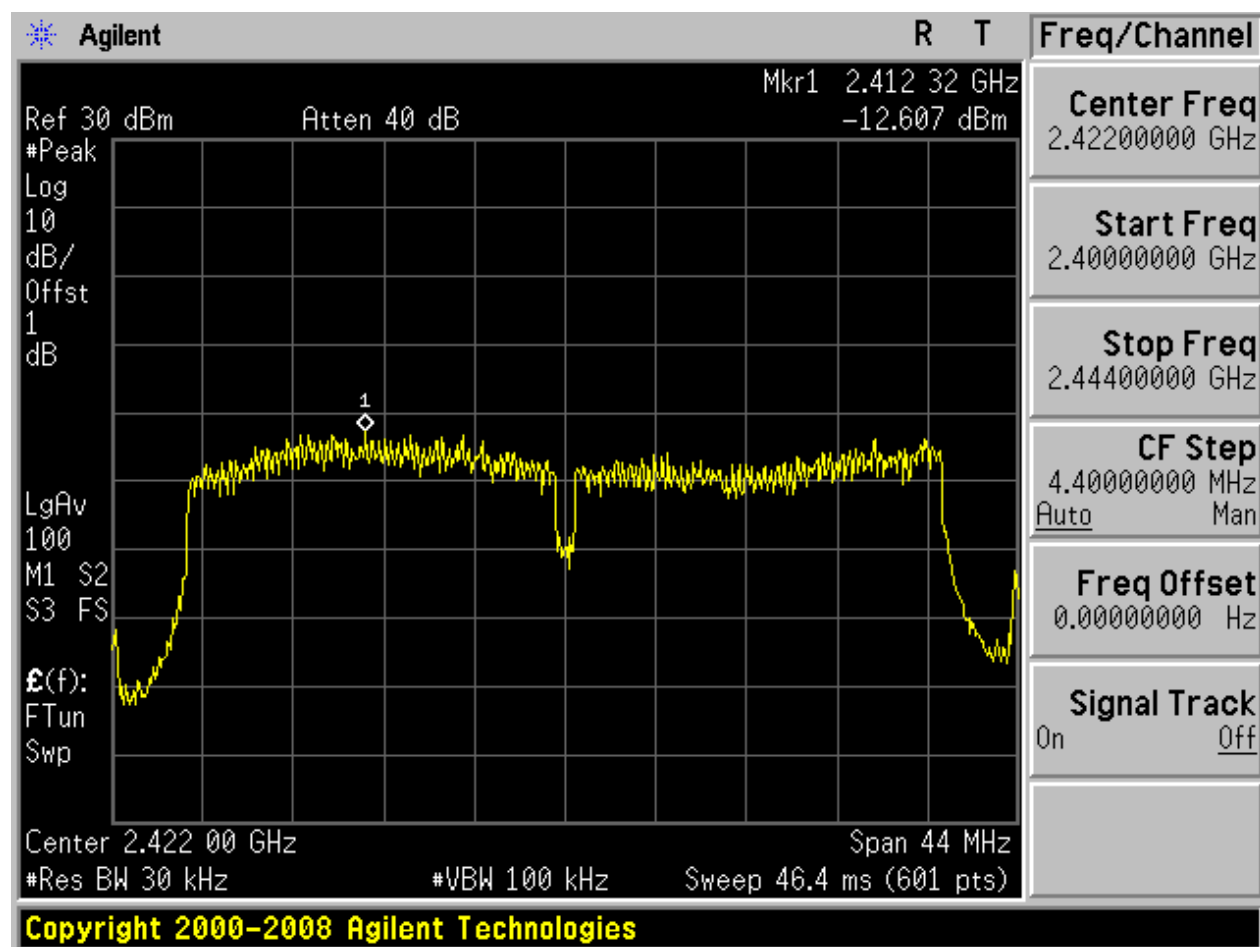


2.24 11N20m_H@Ant 2



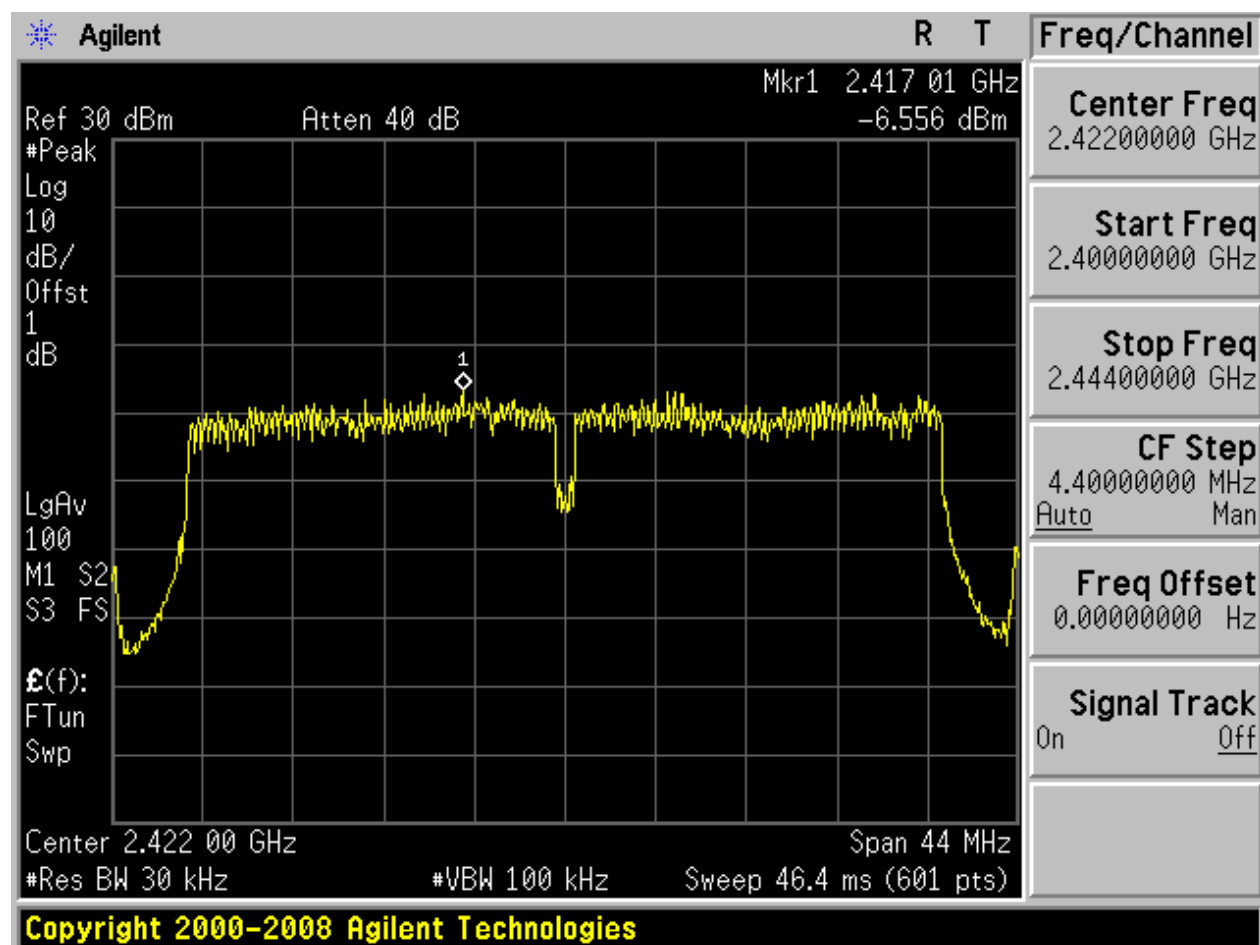


2.25 11N40_L@Ant 1



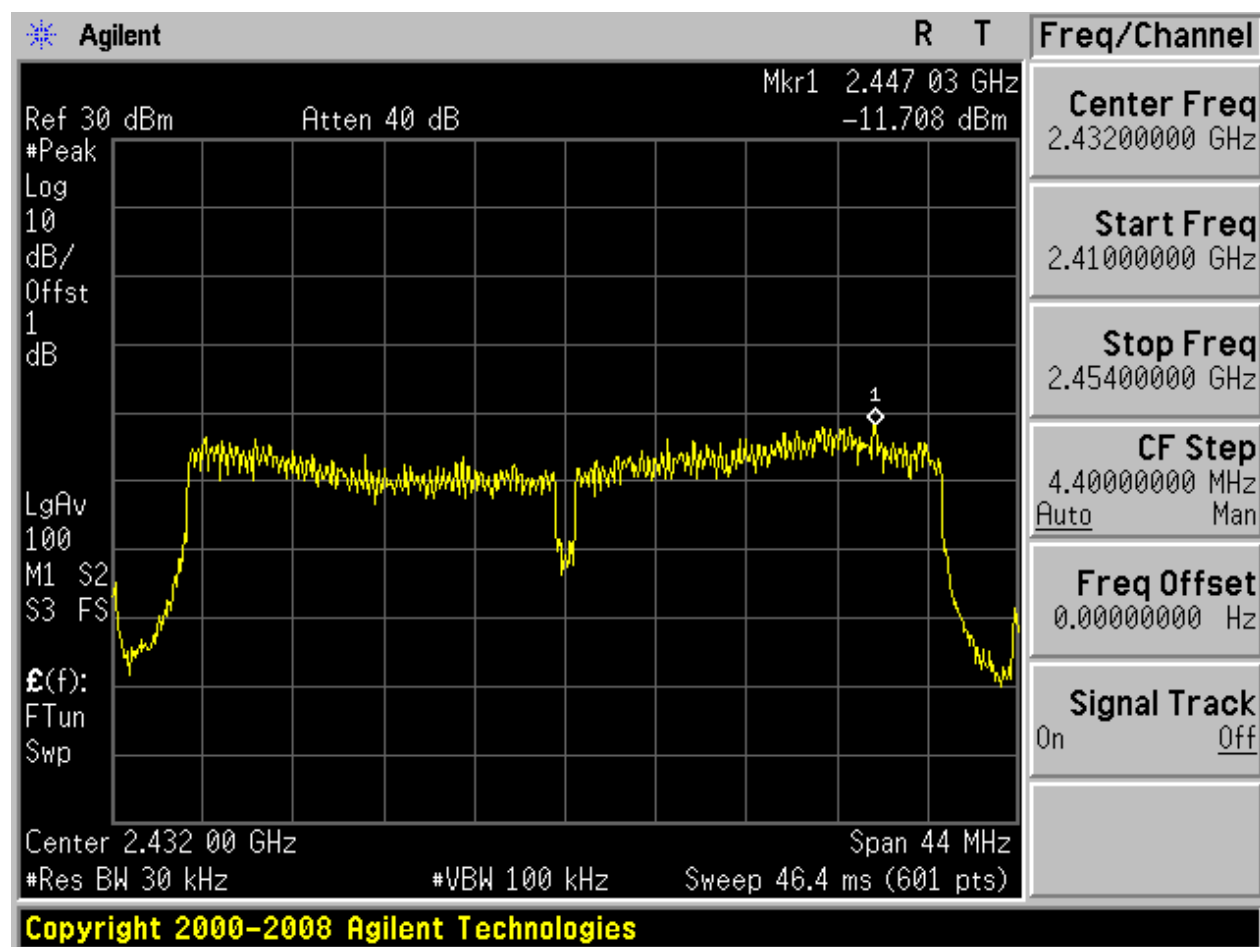


2.26 11N40_L@Ant 2



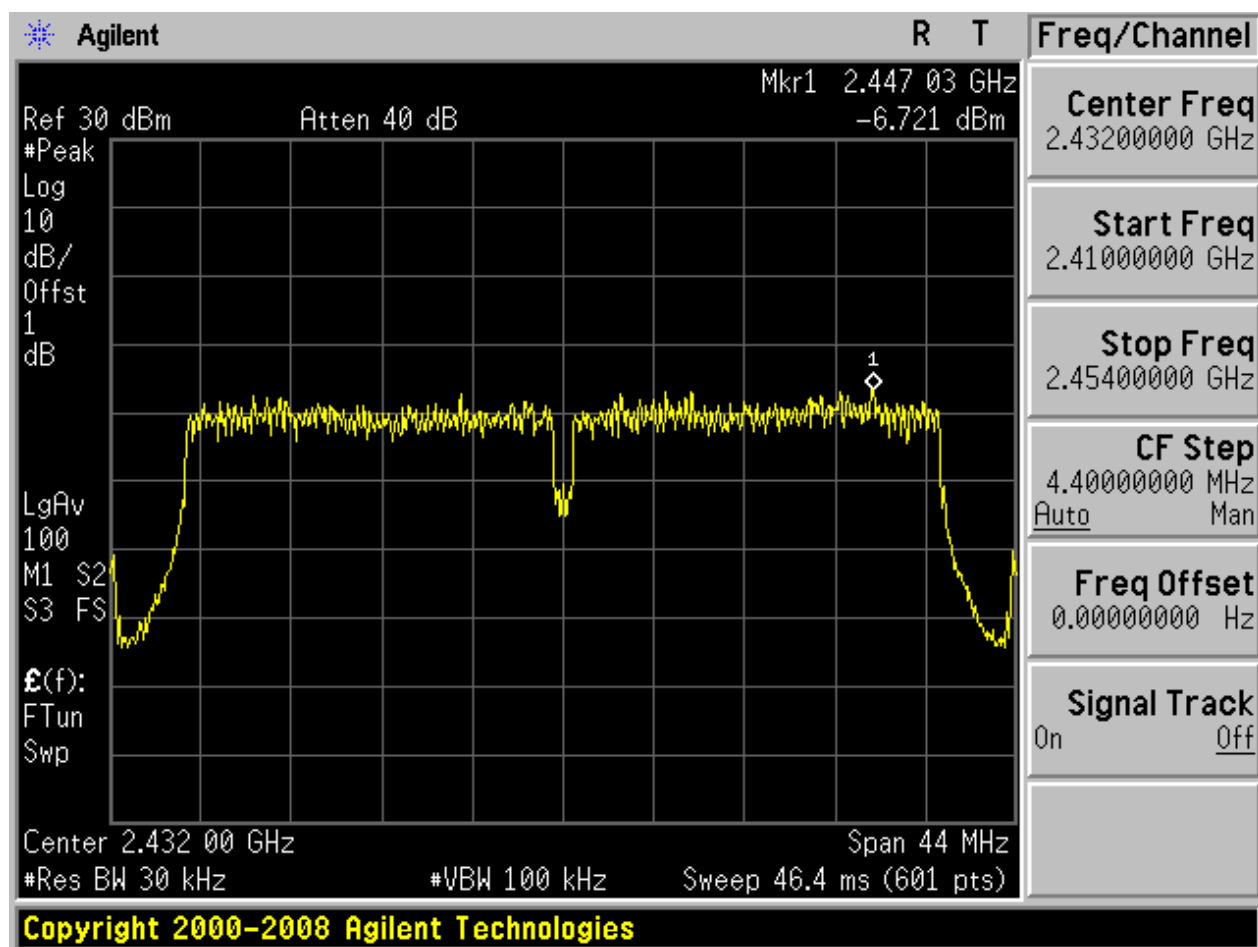


2.27 11N40_M@Ant 1



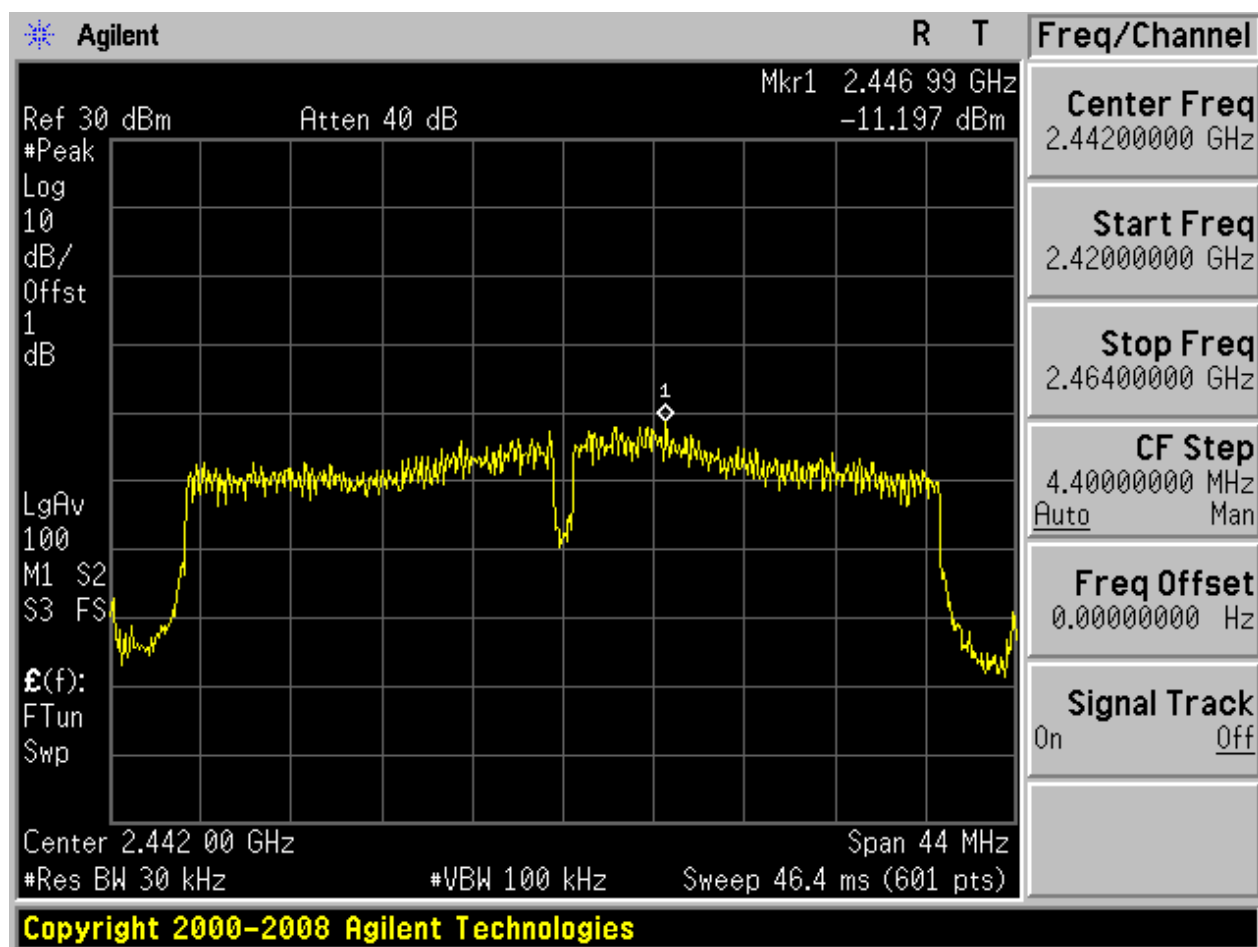


2.28 11N40_M@Ant 2



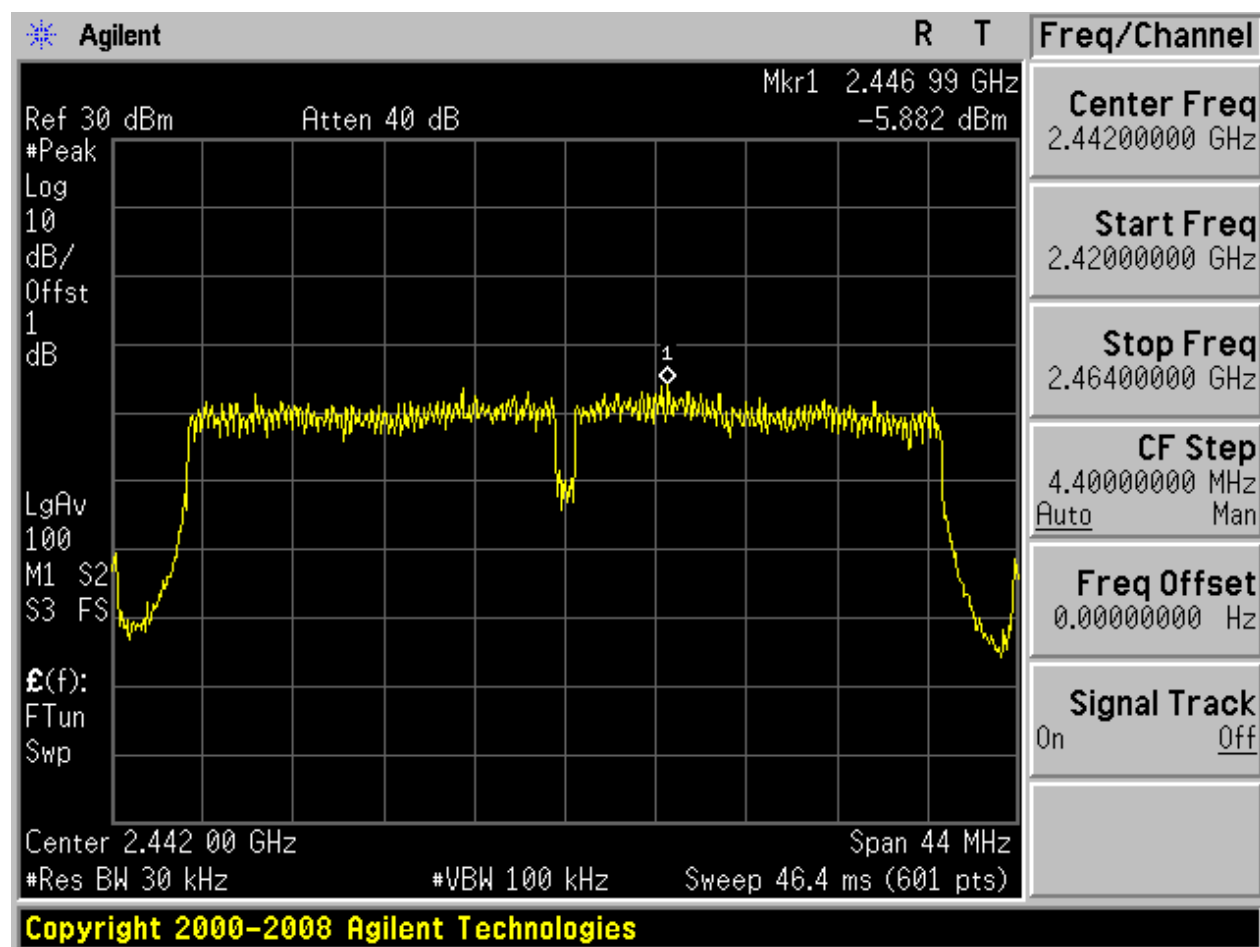


2.29 11N40_H@Ant 1



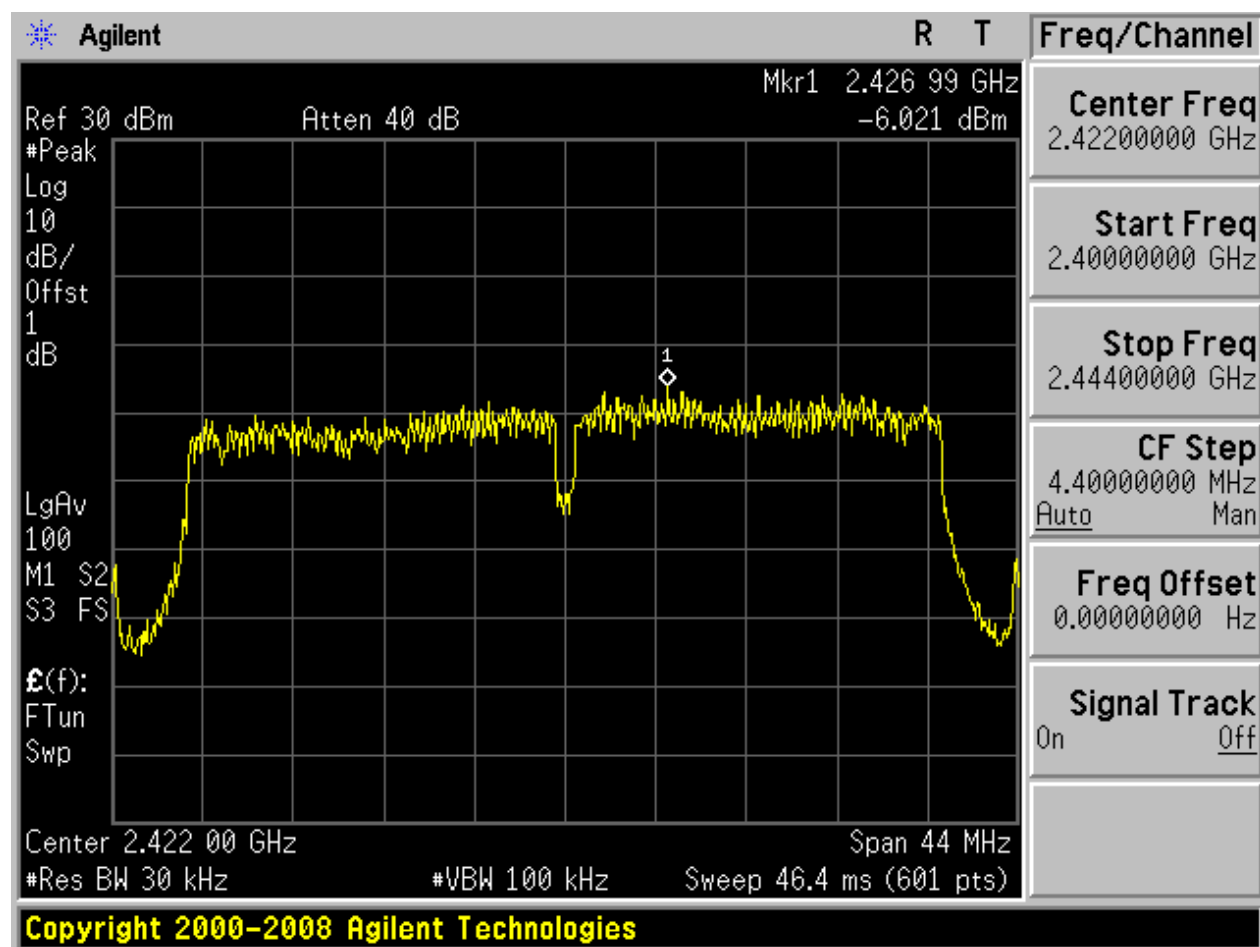


2.30 11N40_H@Ant 2



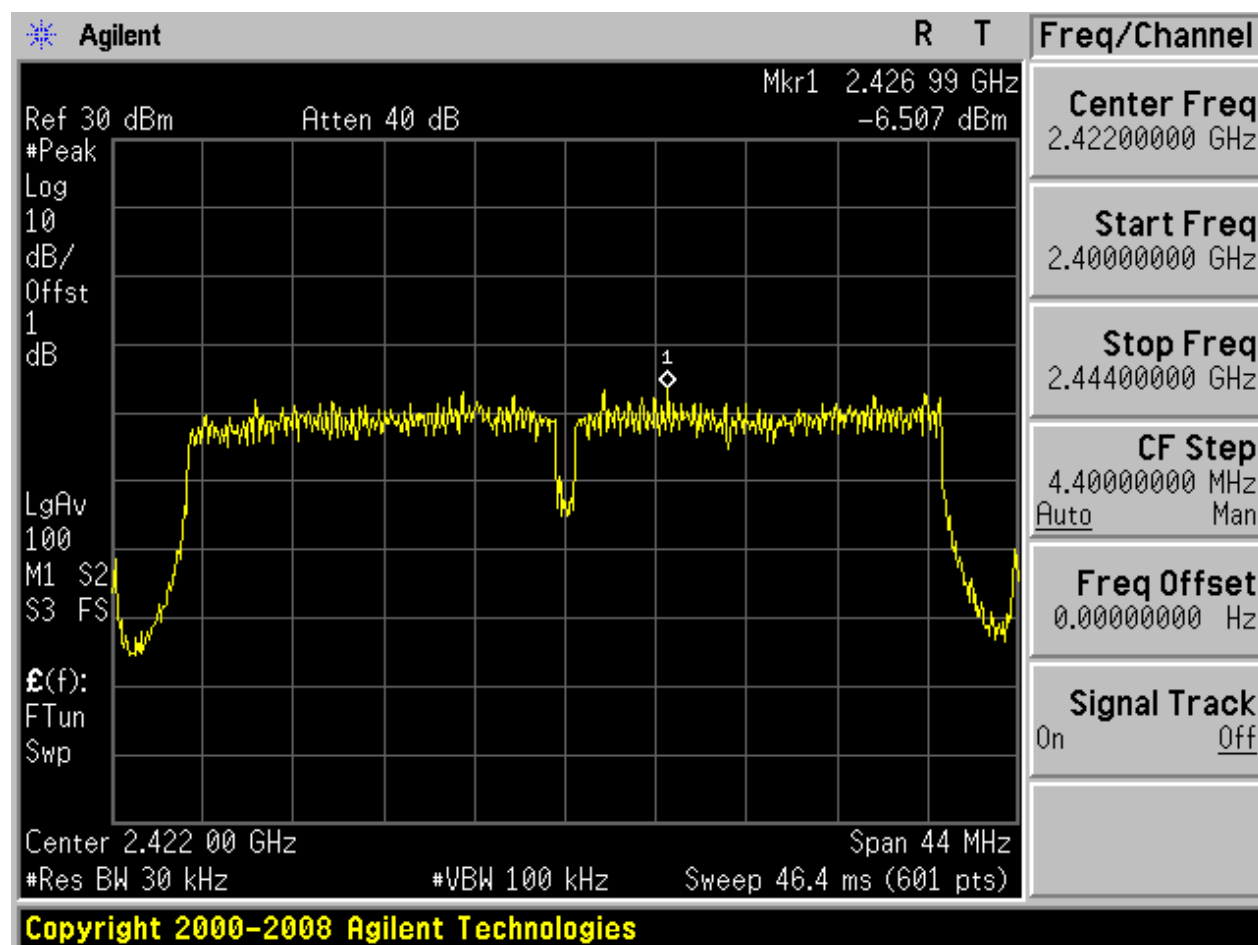


2.31 11N40m_L@Ant 1



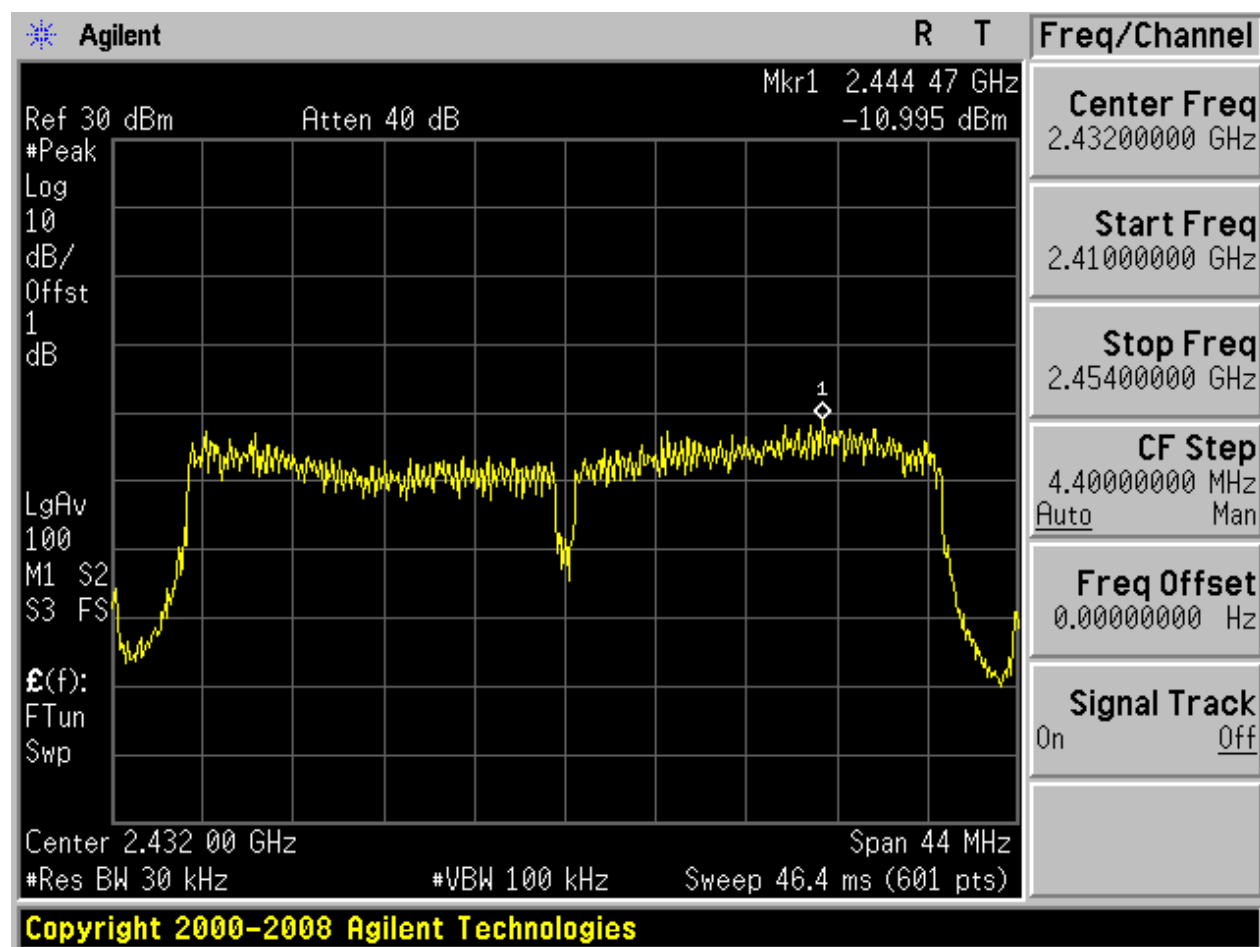


2.32 11N40m_L@Ant 2



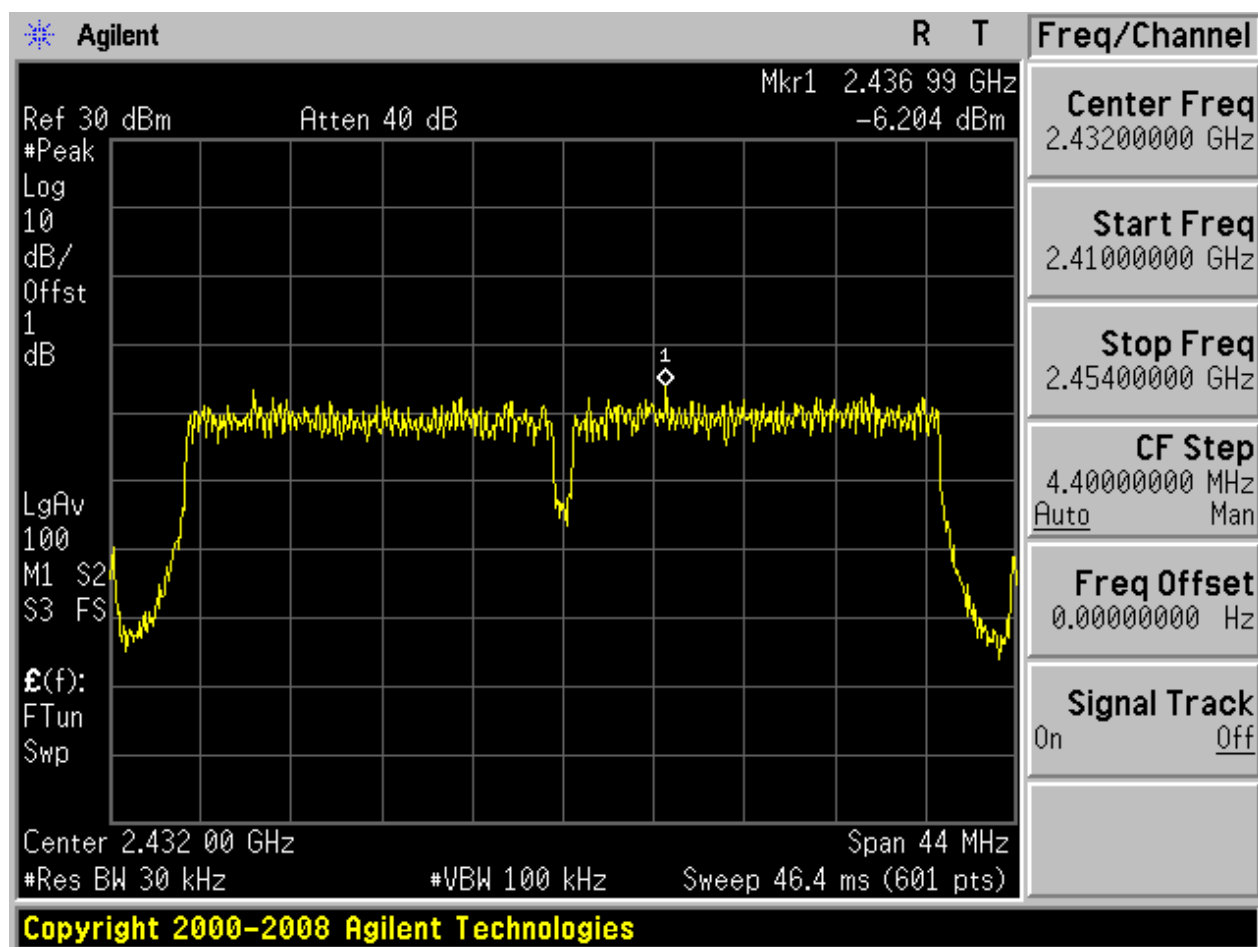


2.34 11N40m_M@Ant 2



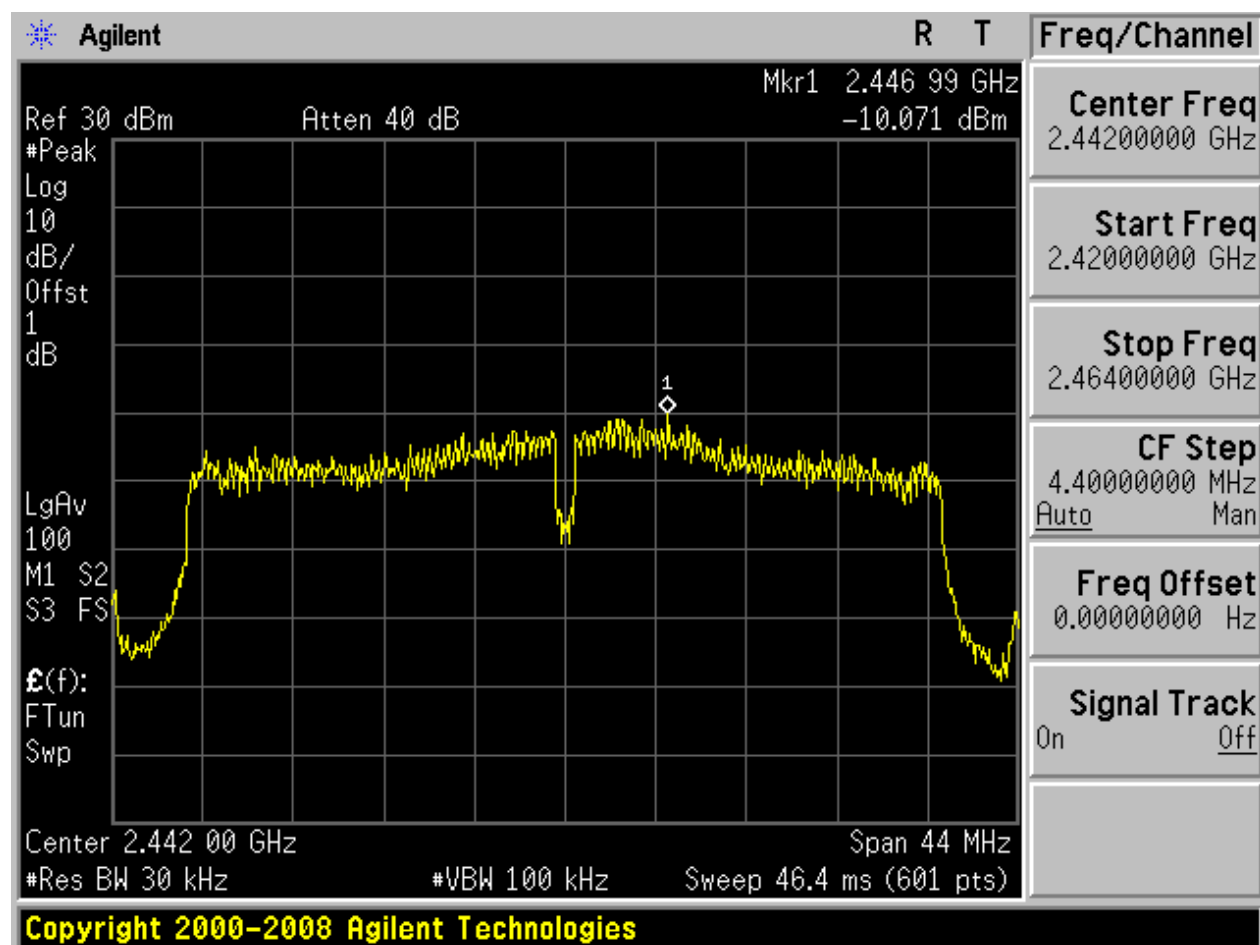


2.33 11N40m_M@Ant 1

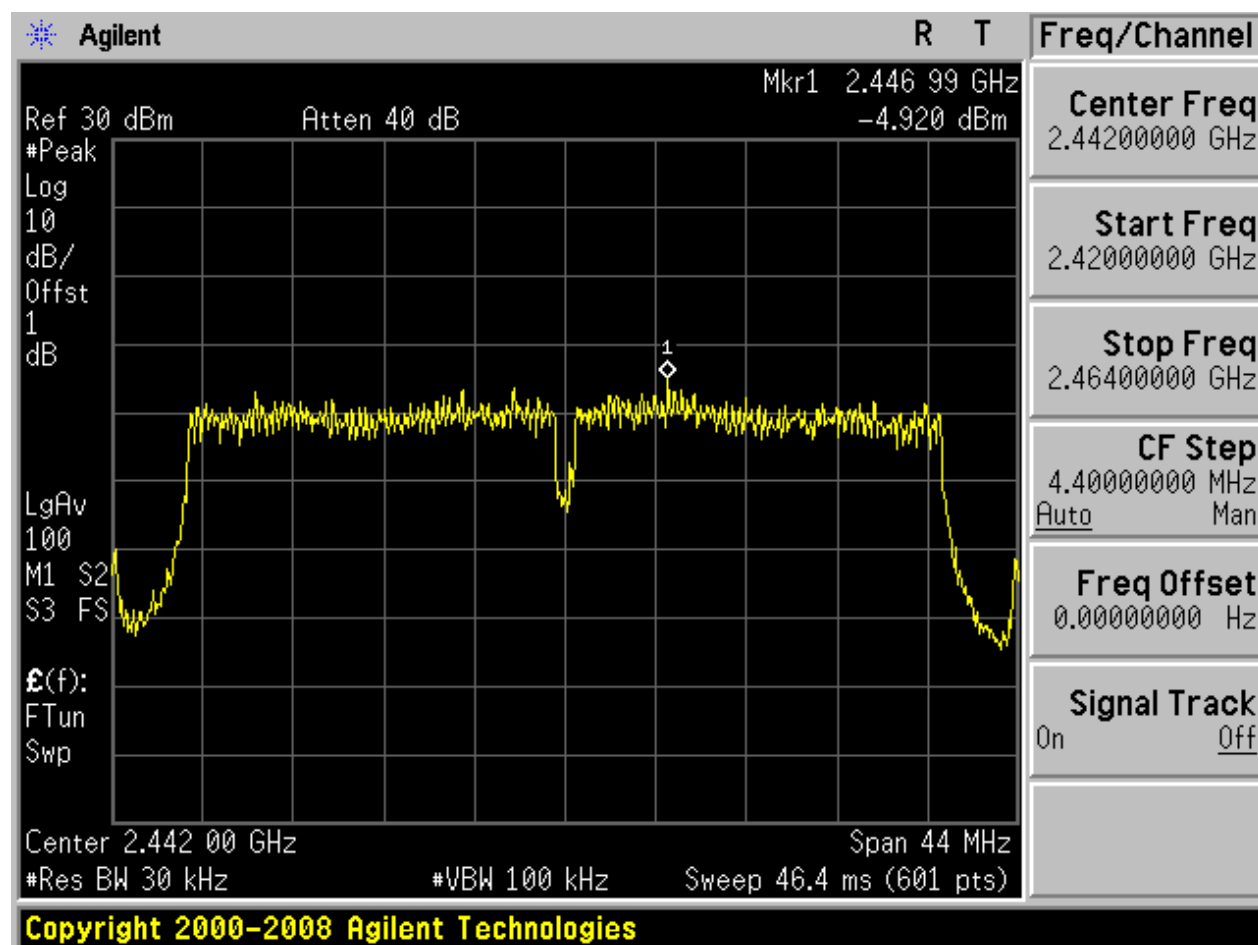




2.35 11N40m_H@Ant 1



2.36 11N40m_H@Ant 2



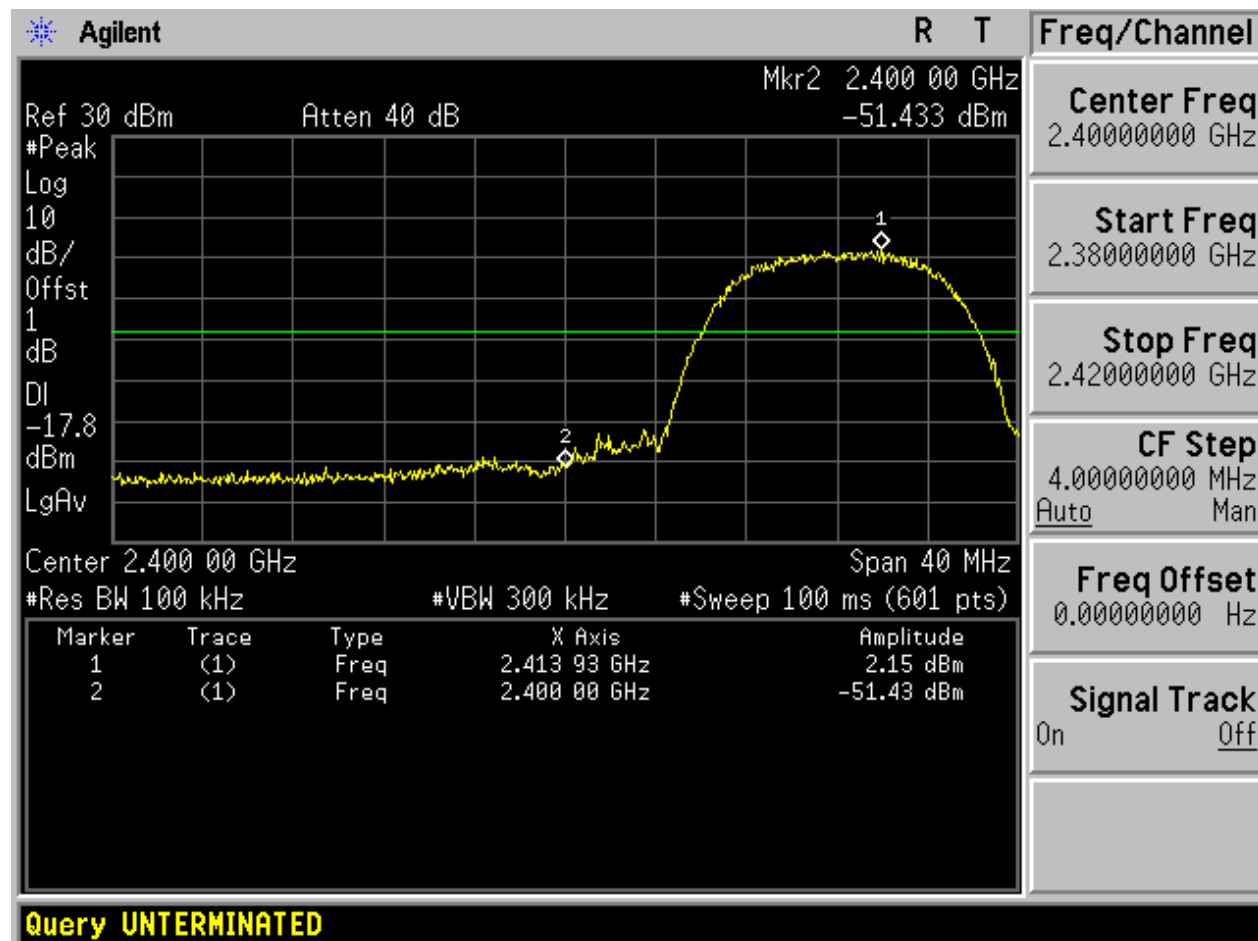
Appendix D: Band Edges Compliance

Part I - Test Results

Test Mode	Test Channel	Frequency[MHz]	Ant	Carrier Power[dBm]	Max.Spurious Level[dBm]	Verdict
11B	L	2412	Ant 1	2.15	-51.43	pass
11B	L	2412	Ant 2	3.78	-50.56	pass
11B	H	2462	Ant 1	-0.65	-54.16	pass
11B	H	2462	Ant 2	2.84	-53.44	pass
11G	L	2412	Ant 1	-5.38	-48.39	pass
11G	L	2412	Ant 2	1.05	-40.69	pass
11G	H	2462	Ant 1	-7.91	-54.52	pass
11G	H	2462	Ant 2	0.60	-52.19	pass
11N20	L	2412	Ant 1	-3.63	-46.80	pass
11N20	L	2412	Ant 2	1.05	-40.19	pass
11N20	H	2462	Ant 1	-6.02	-53.30	pass
11N20	H	2462	Ant 2	0.60	-51.66	pass
11N20m	L	2412	Ant 1	-0.90	-42.25	pass
11N20m	L	2412	Ant 2	1.01	-41.44	pass
11N20m	H	2462	Ant 1	0.24	-51.73	pass
11N20m	H	2462	Ant 2	8.08	-37.16	pass
11N40	L	2422	Ant 1	-7.84	-39.21	pass
11N40	L	2422	Ant 2	-2.09	-30.91	pass
11N40	H	2452	Ant 1	-11.03	-50.03	pass
11N40	H	2452	Ant 2	-3.15	-51.22	pass
11N40m	L	2422	Ant 1	-3.30	-32.31	pass
11N40m	L	2422	Ant 2	-1.75	-38.88	pass
11N40m	H	2452	Ant 1	-10.17	-51.26	pass
11N40m	H	2452	Ant 2	-3.63	-52.82	pass

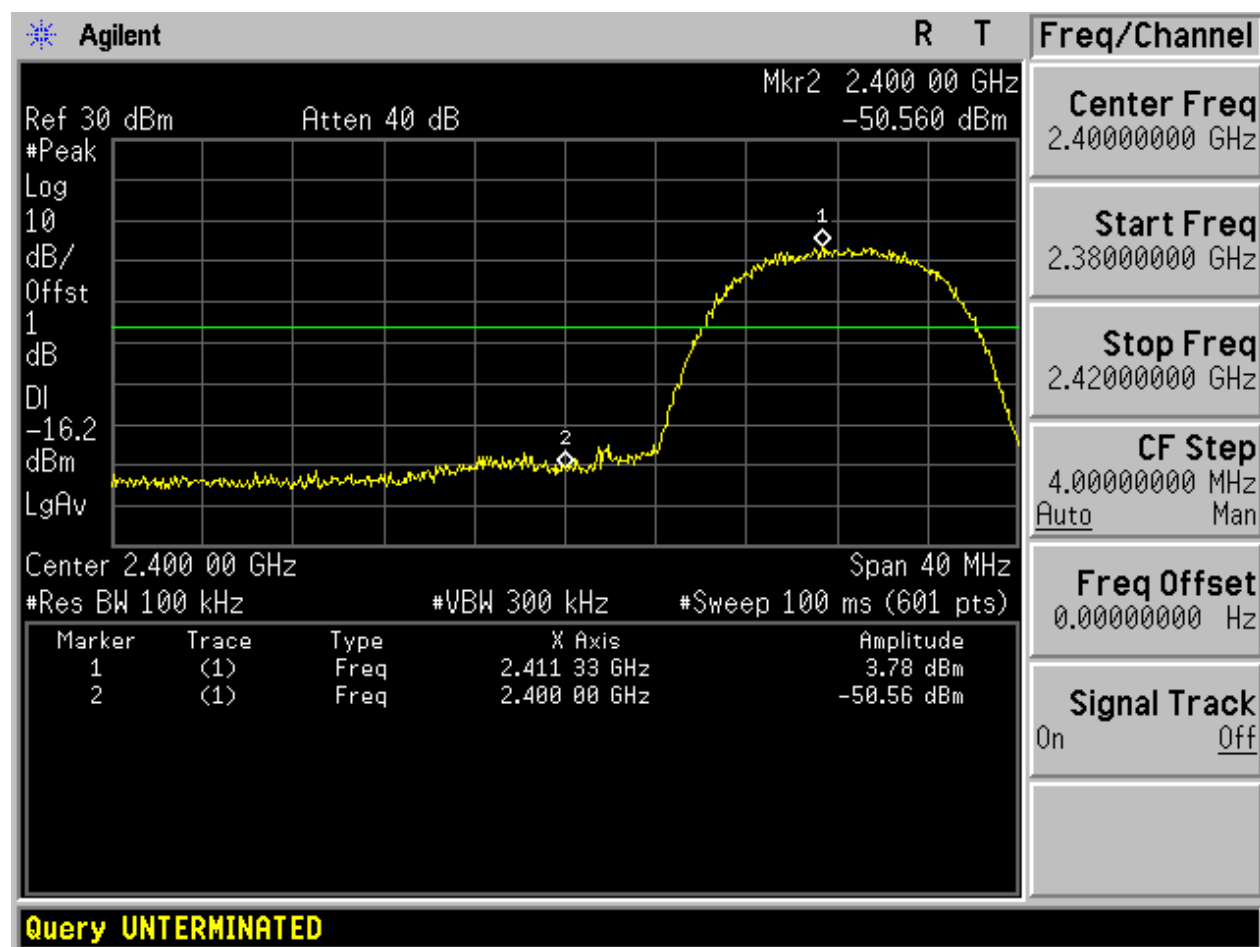
Part II - Test Plots

3.1 11B_L@Ant 1



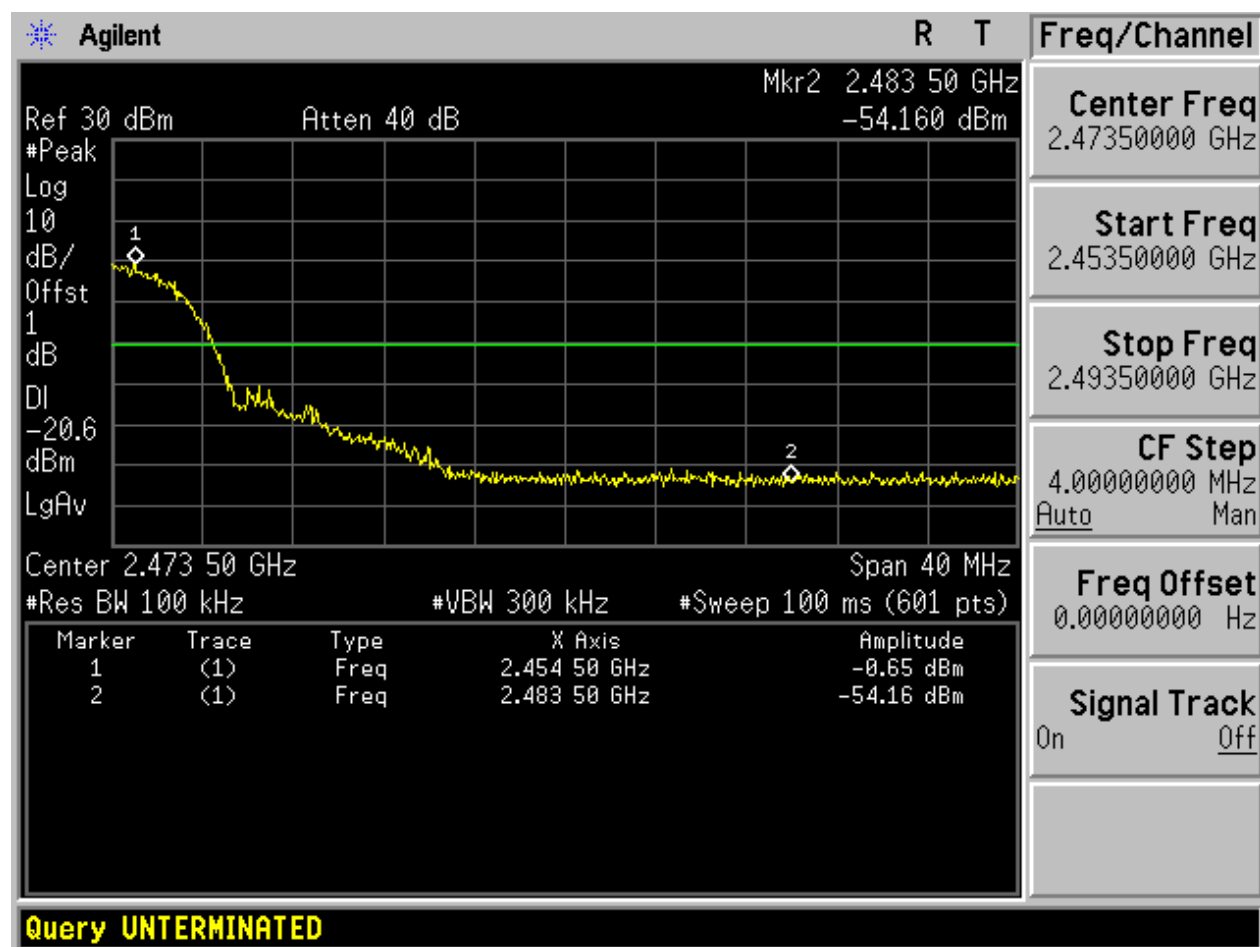


3.2 11B_L@Ant 2



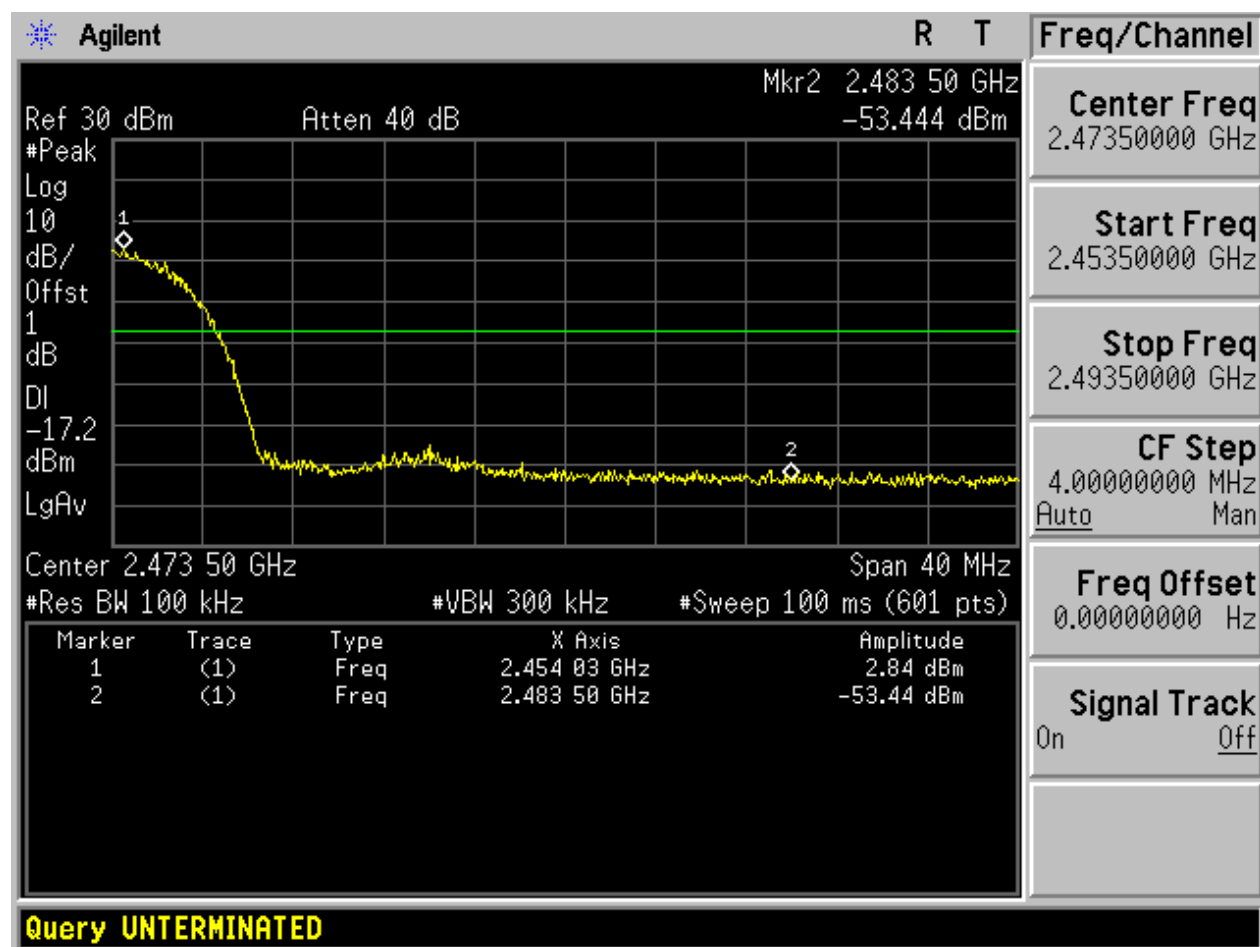


3.3 11B_H@Ant 1



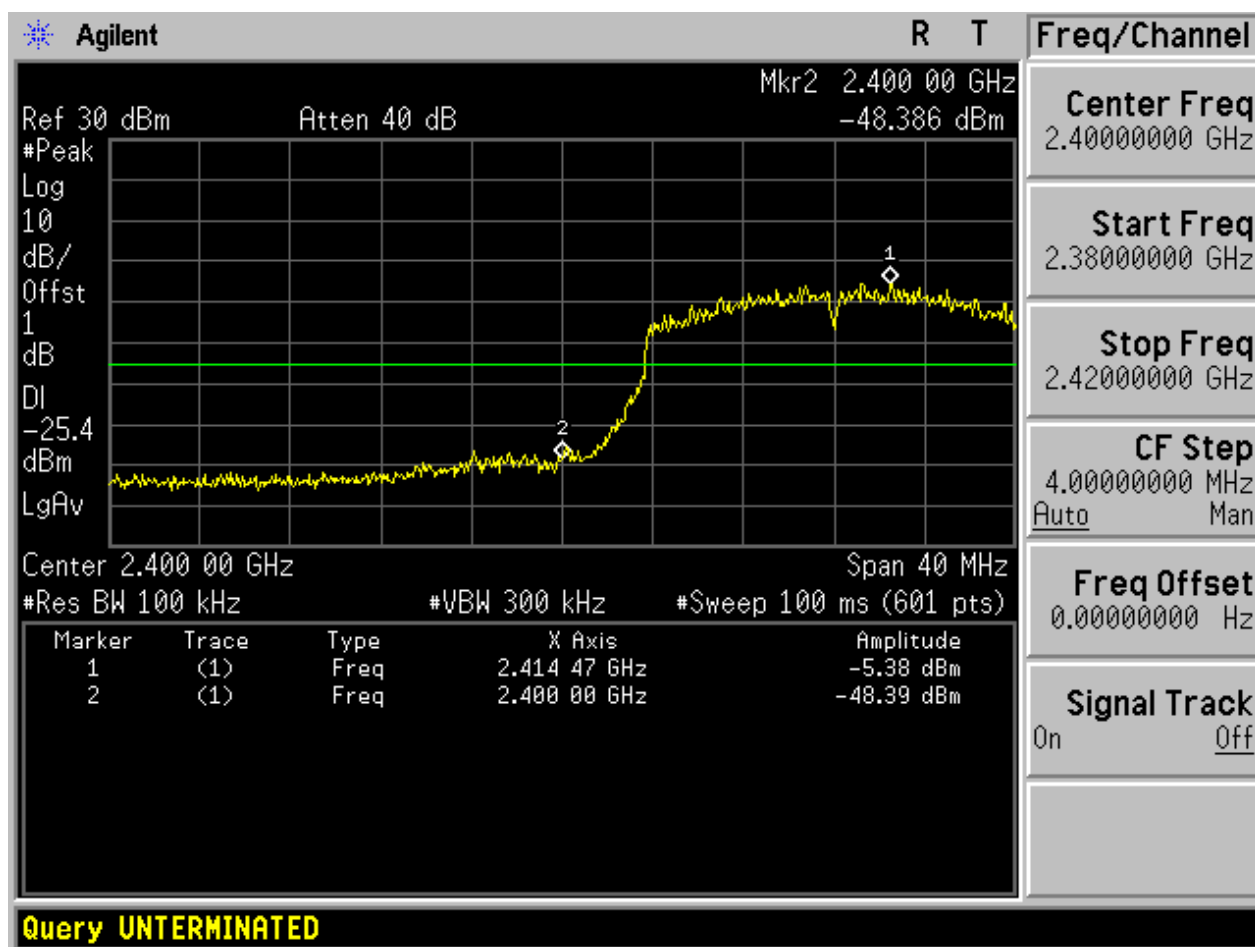


3.4 11B_H@Ant 2



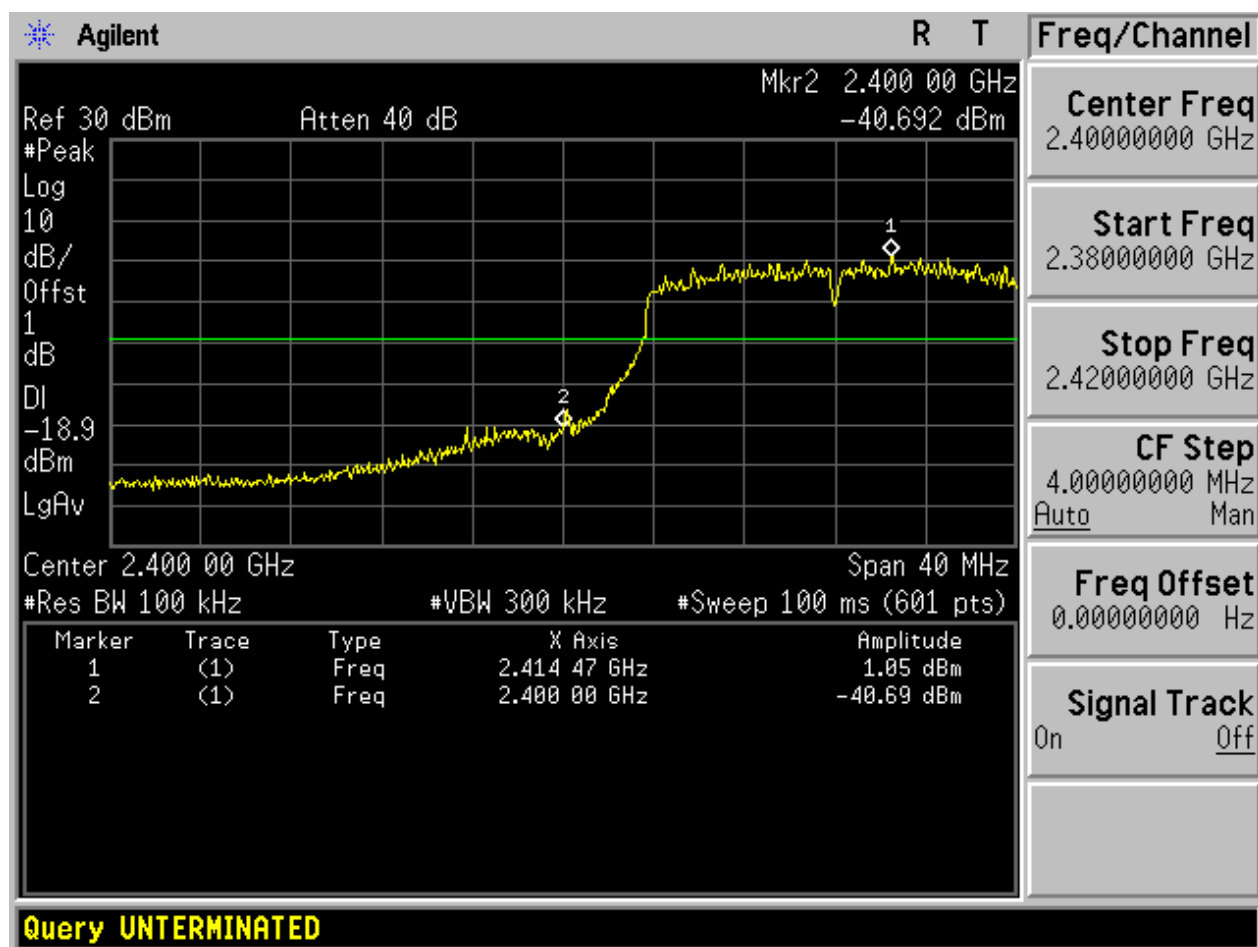


3.5 11G_L@Ant 1



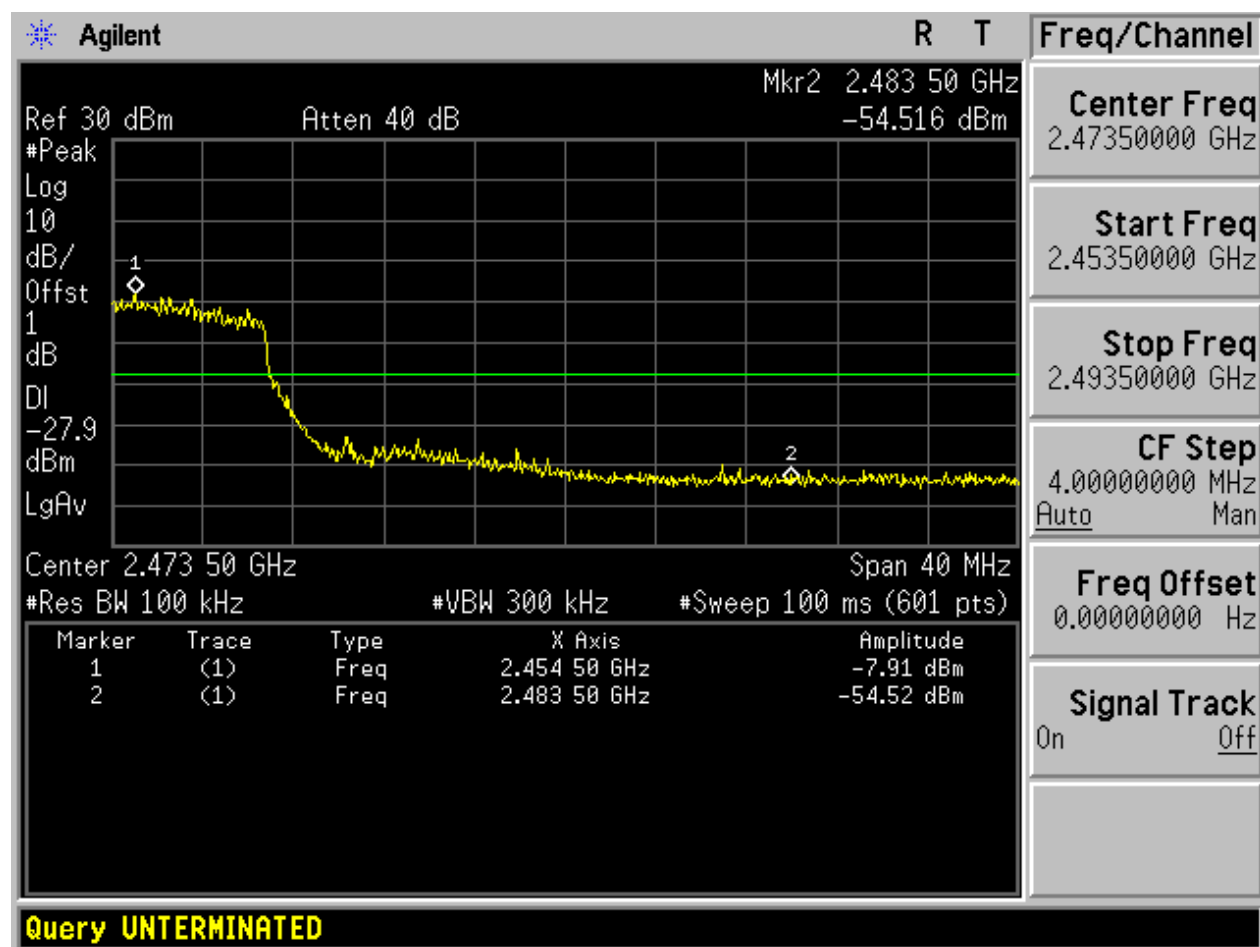


3.6 11G_L@Ant 2



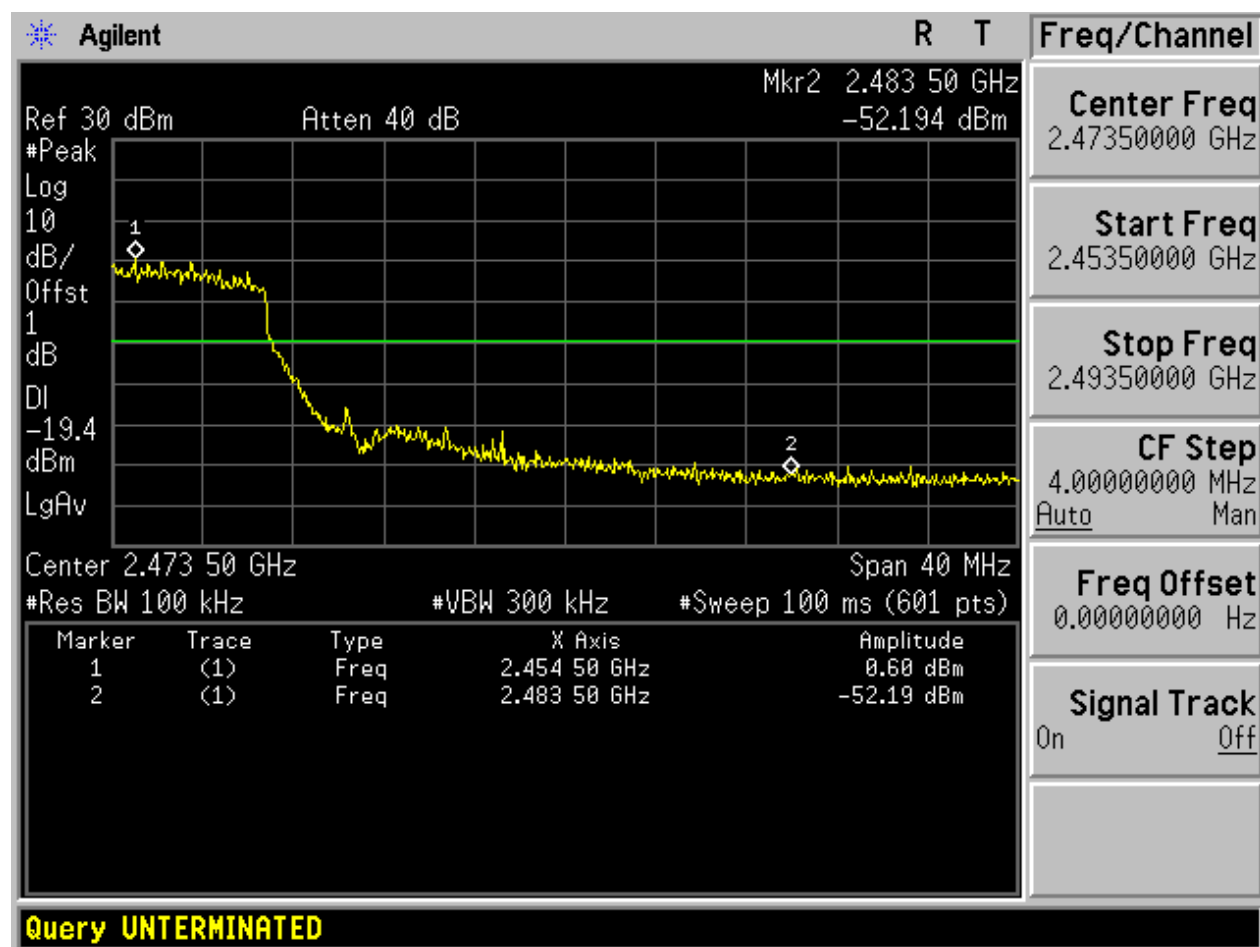


3.7 11G_H@Ant 1



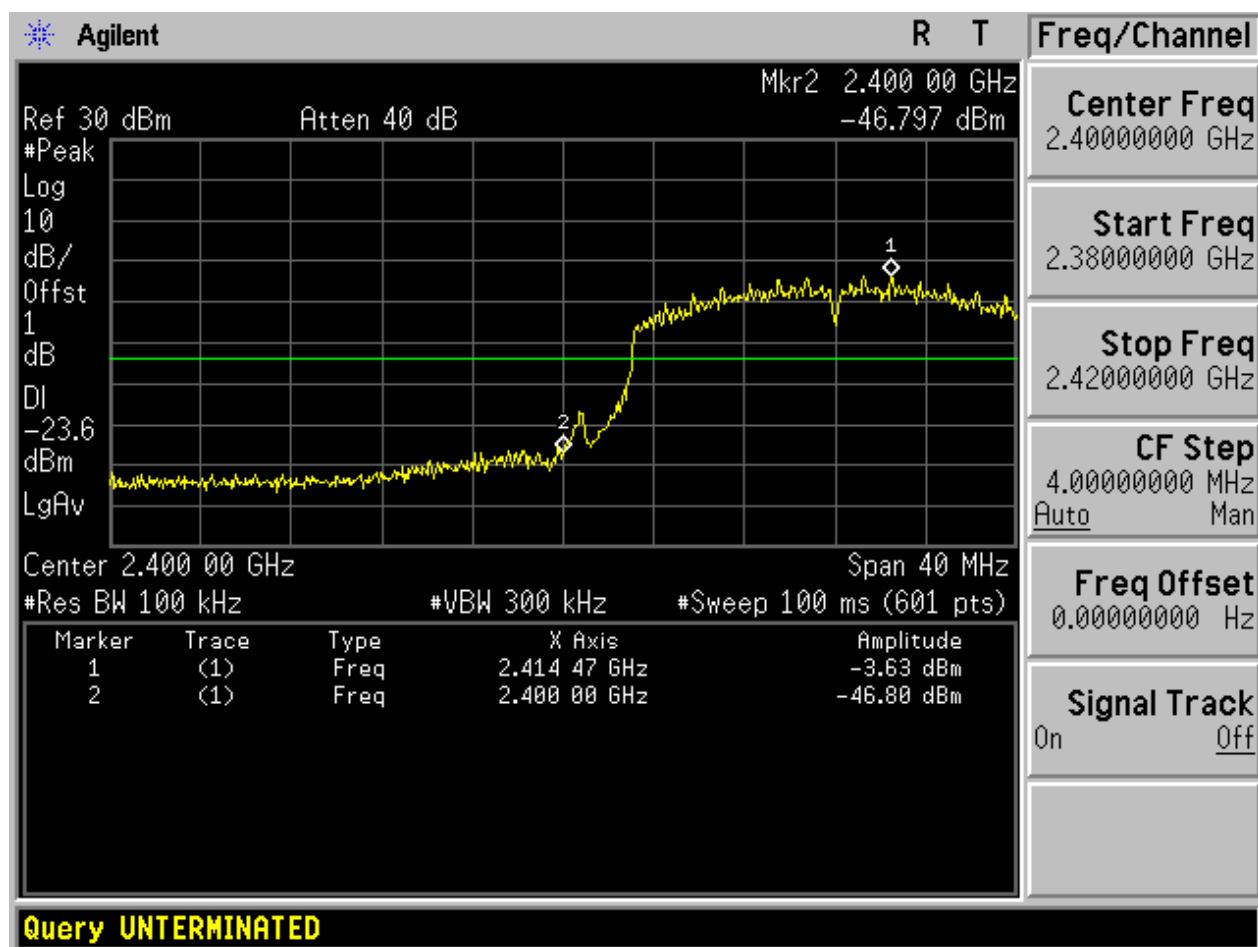


3.8 11G_H@Ant 2

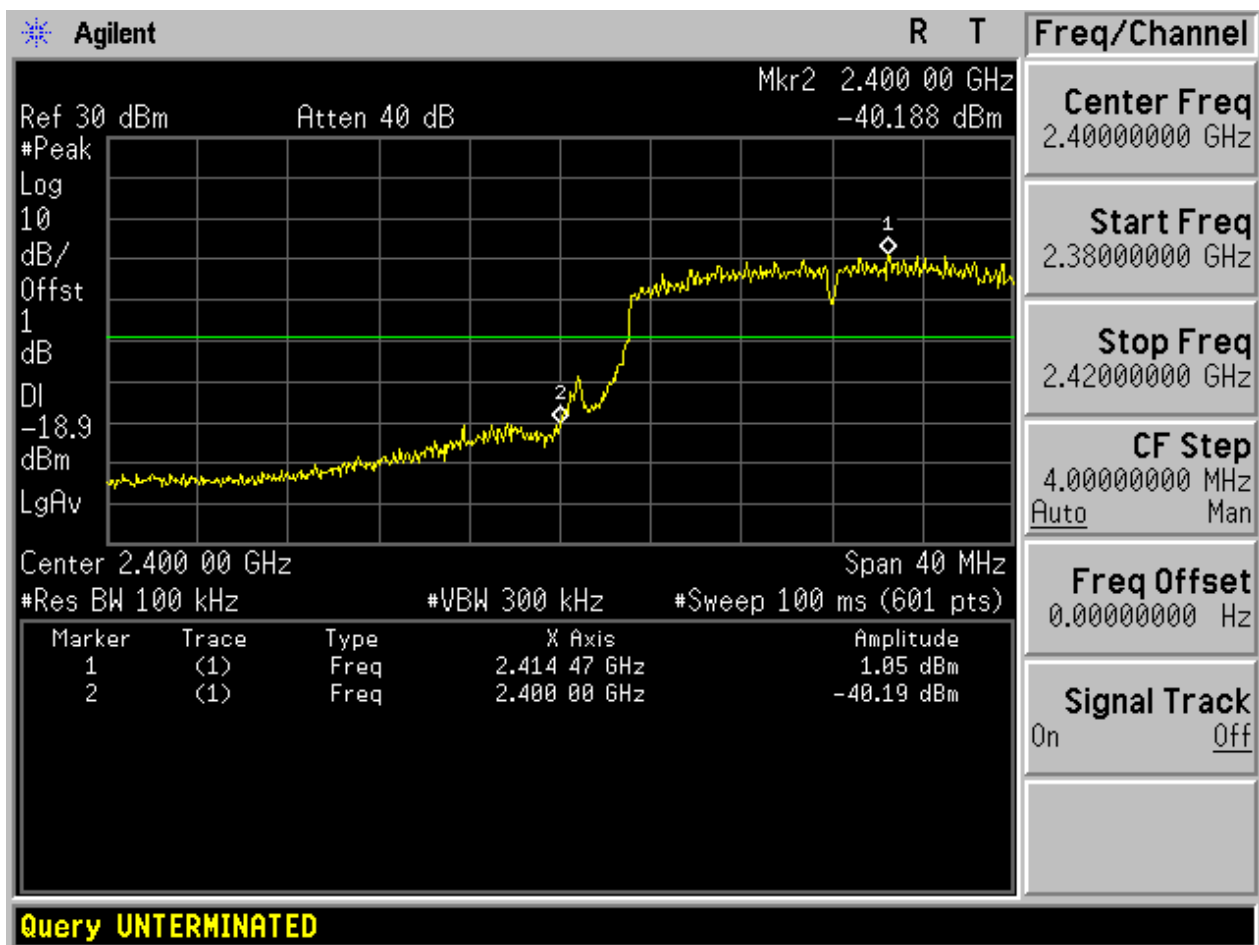




3.9 11N20_L@Ant 1

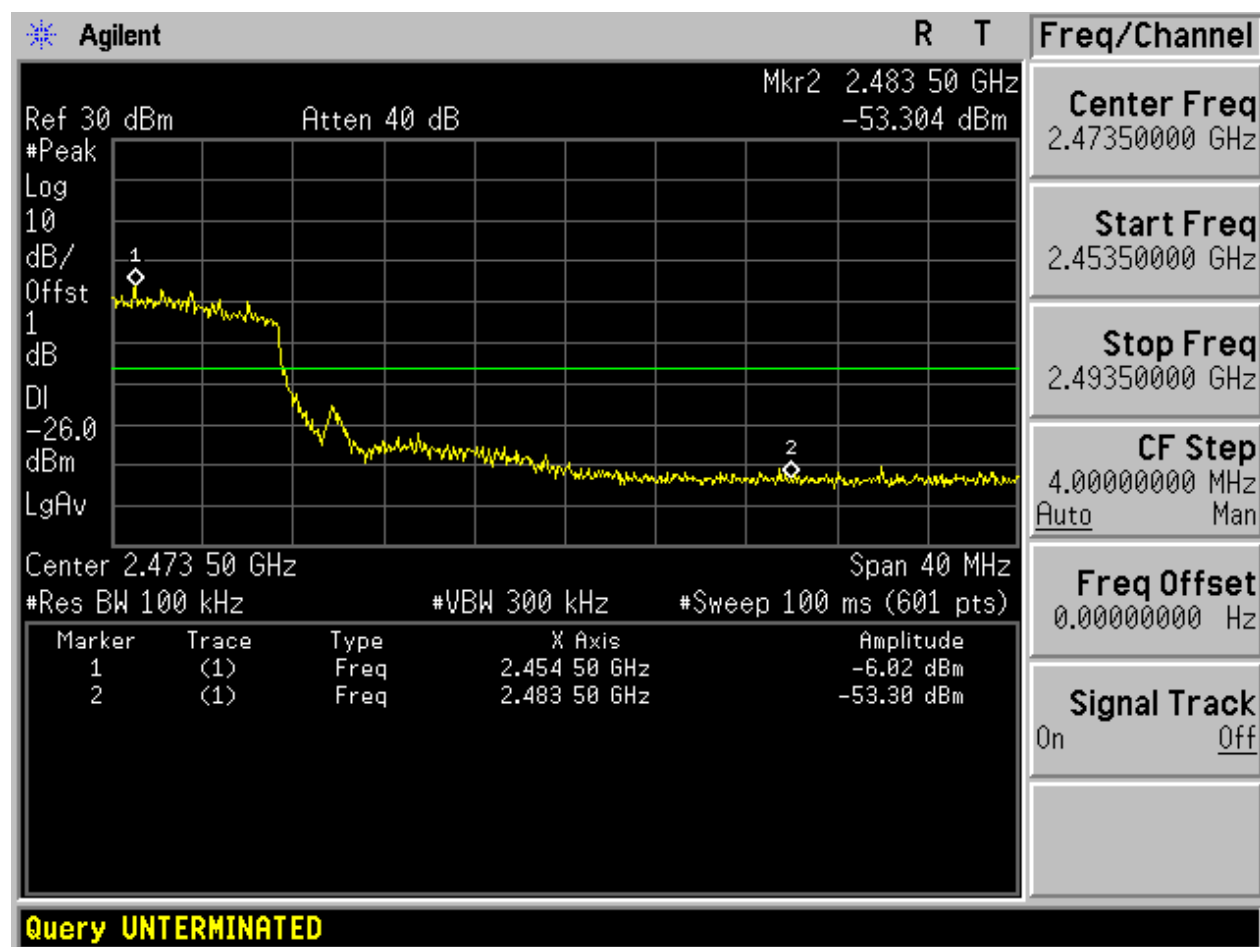


3.10 11N20_L@Ant 2

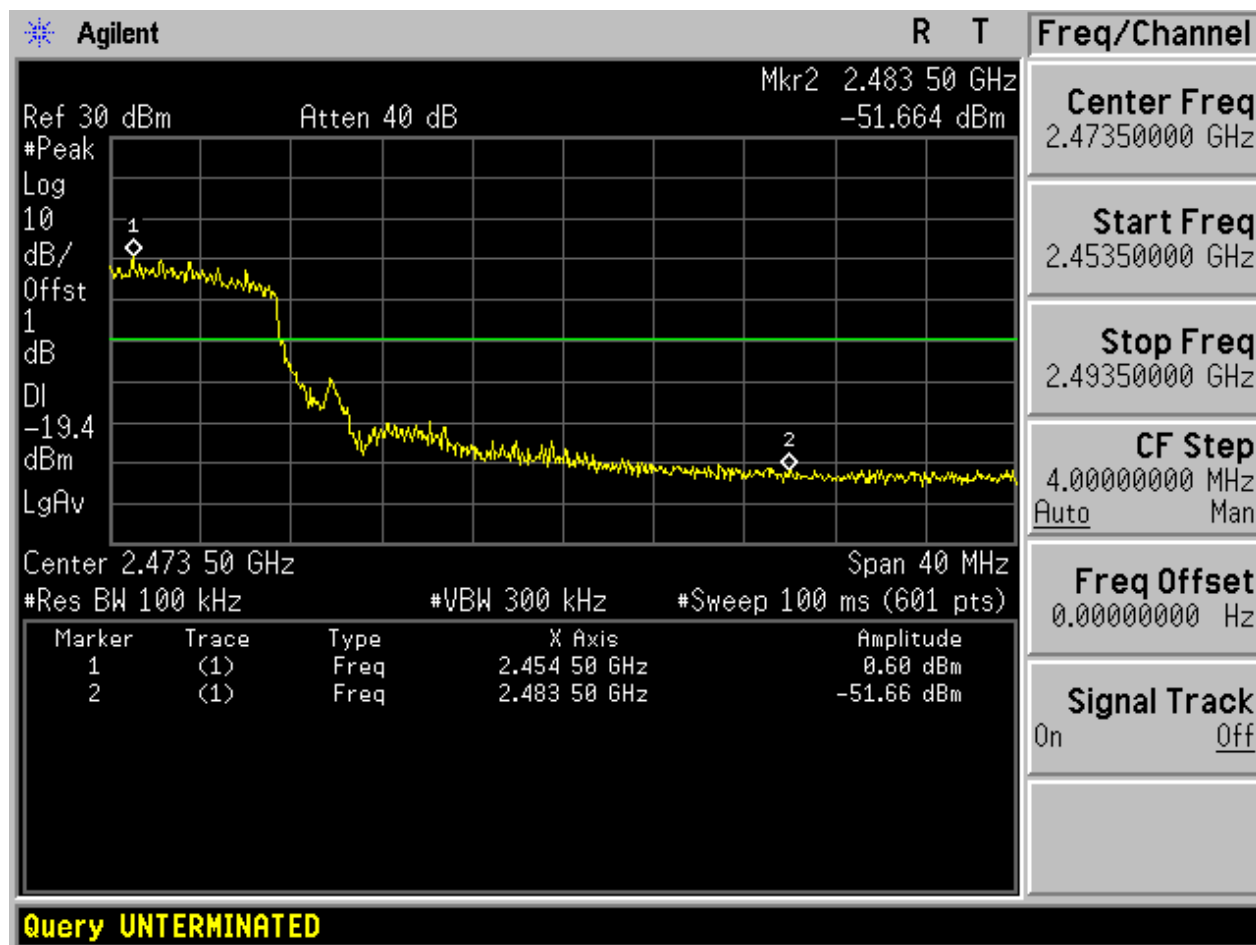




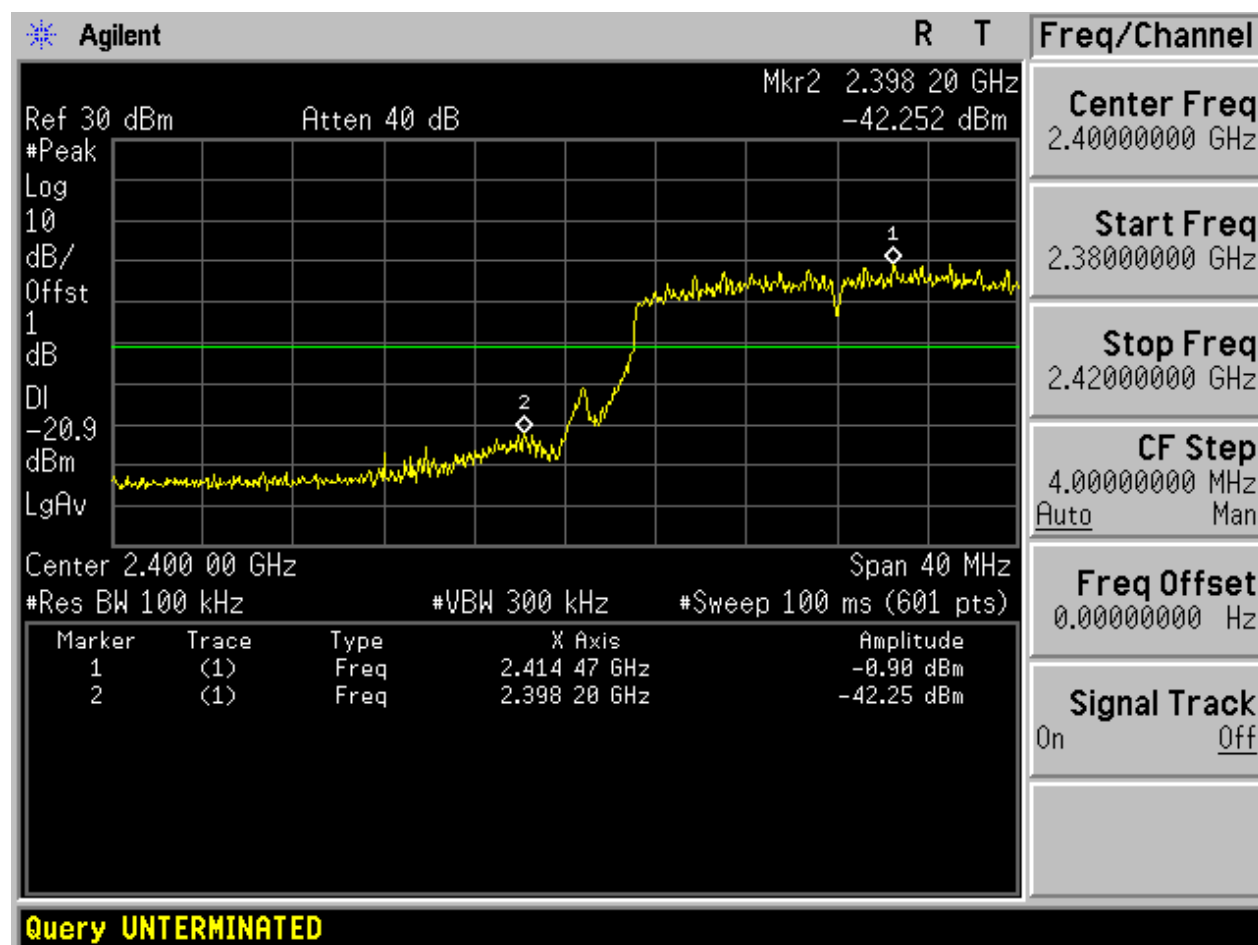
3.11 11N20_H@Ant 1



3.12 11N20_H@Ant 2

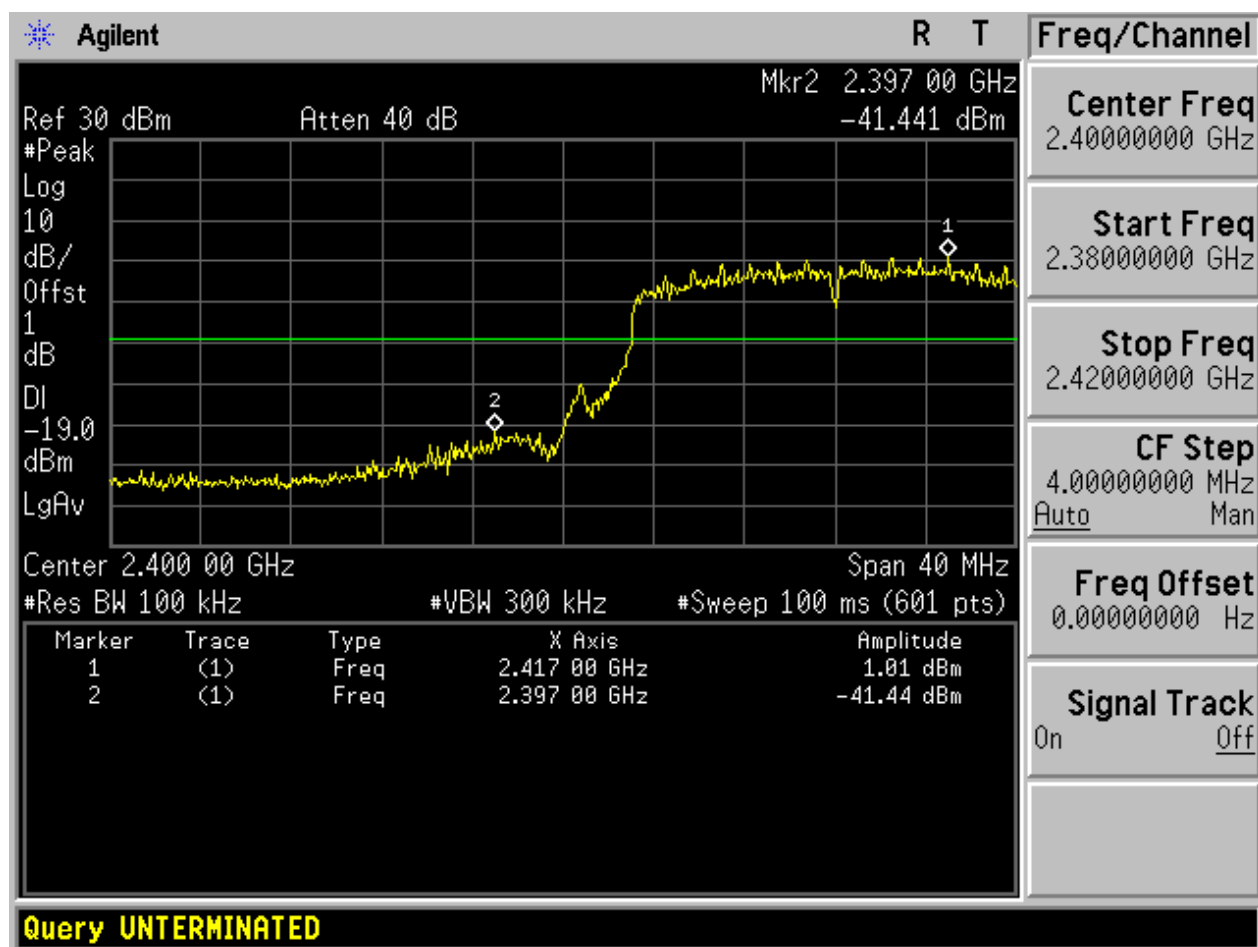


3.13 11N20m_L@Ant 1

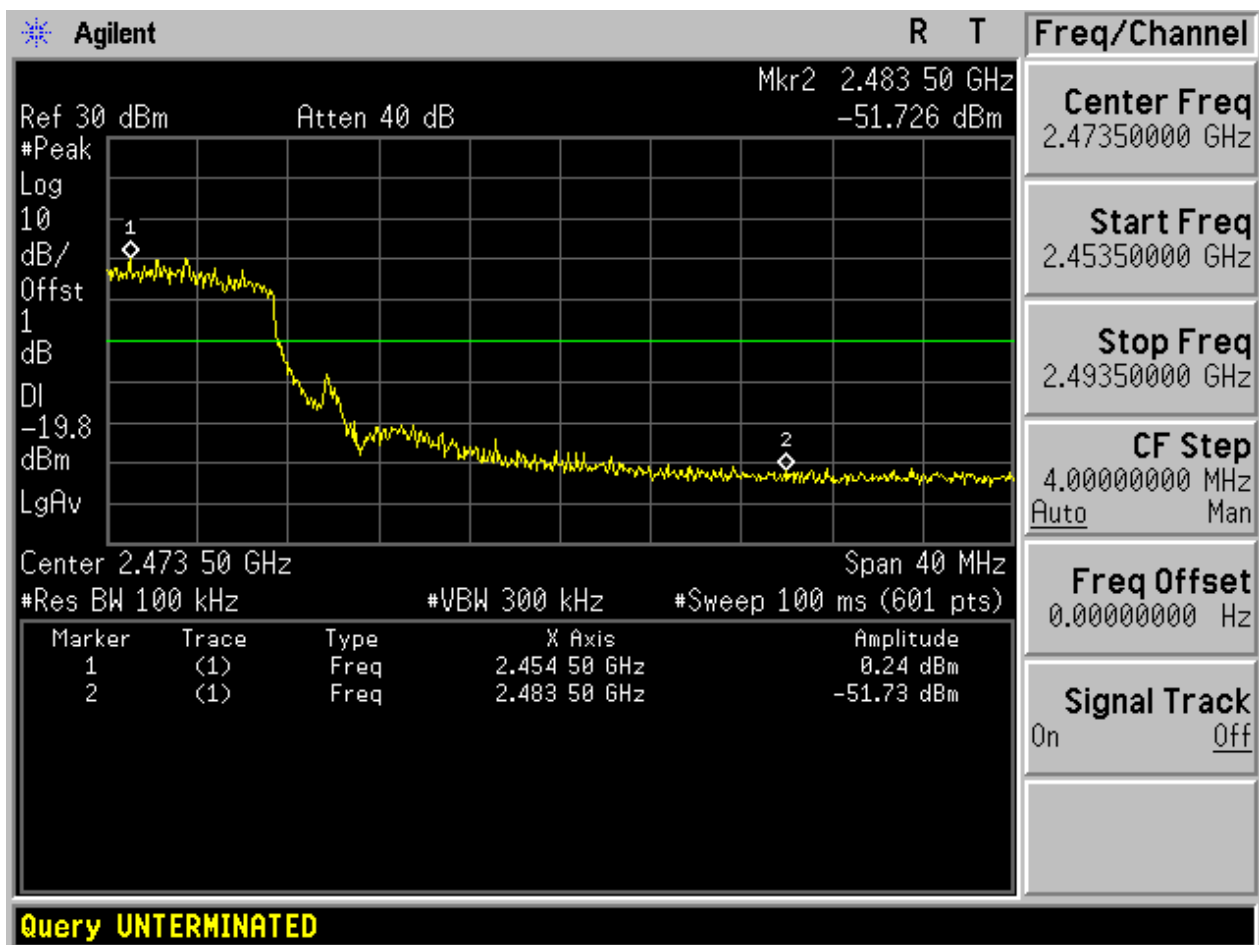




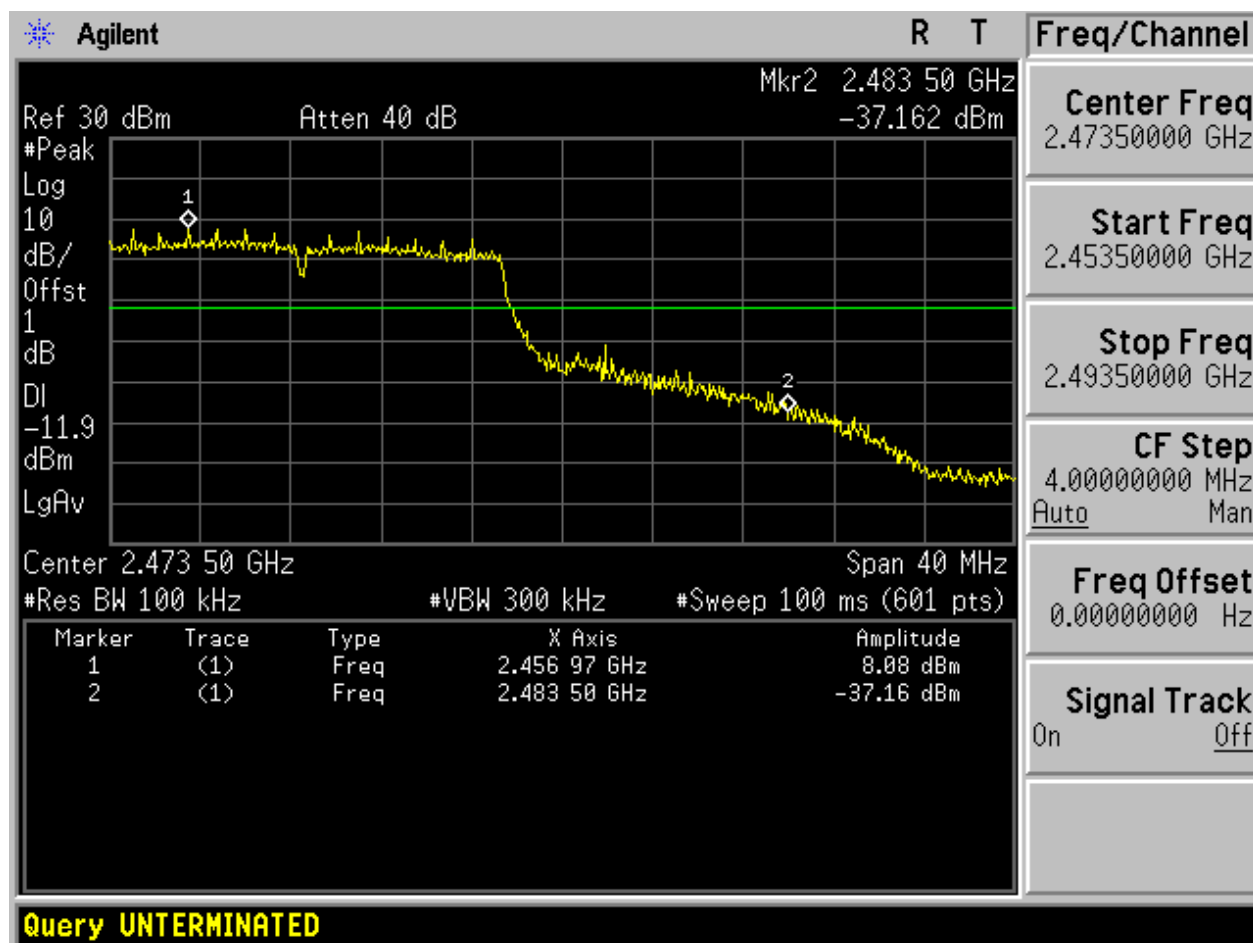
3.14 11N20m_L@Ant 2



3.15 11N20m_H@Ant 1

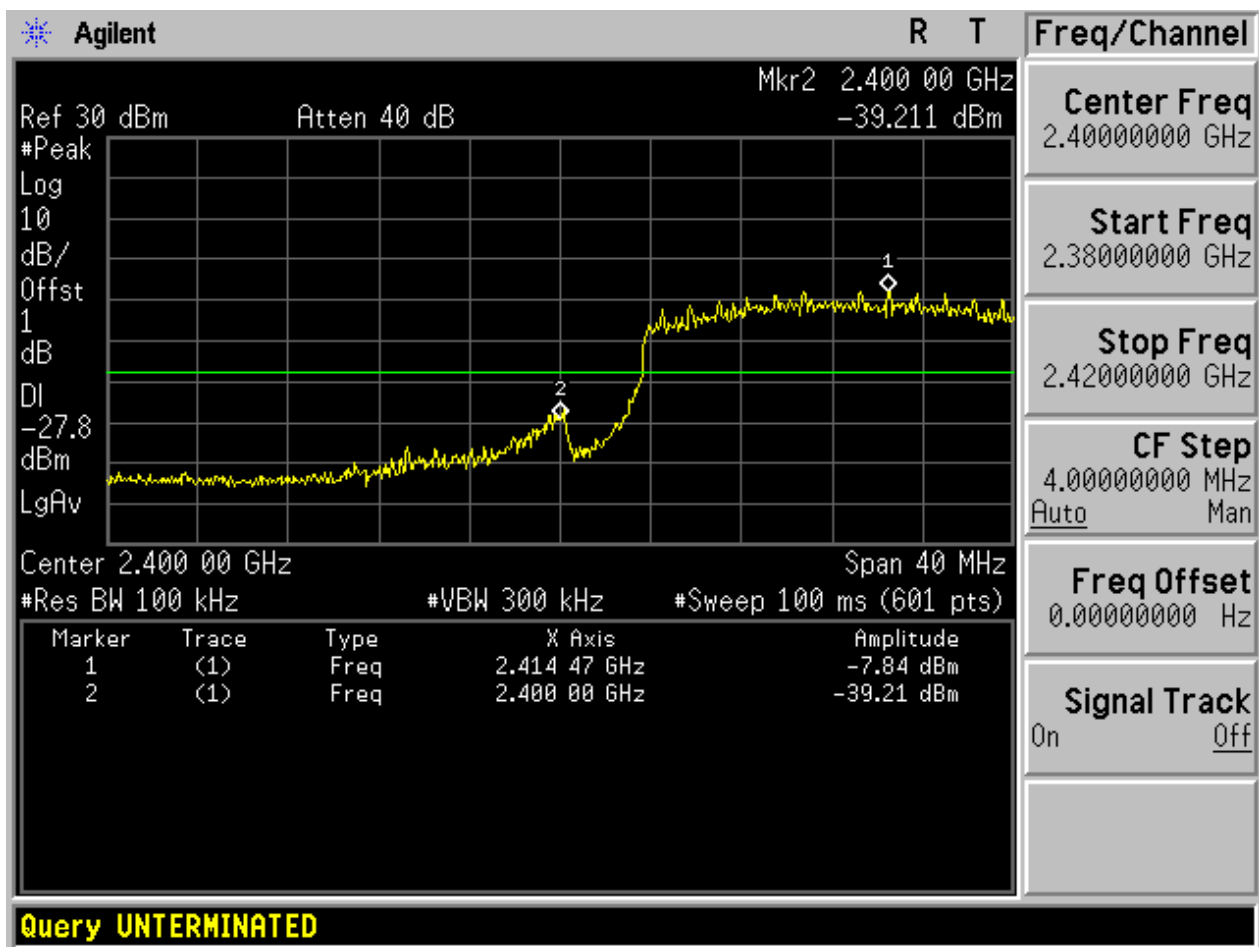


3.16 11N20m_H@Ant 2



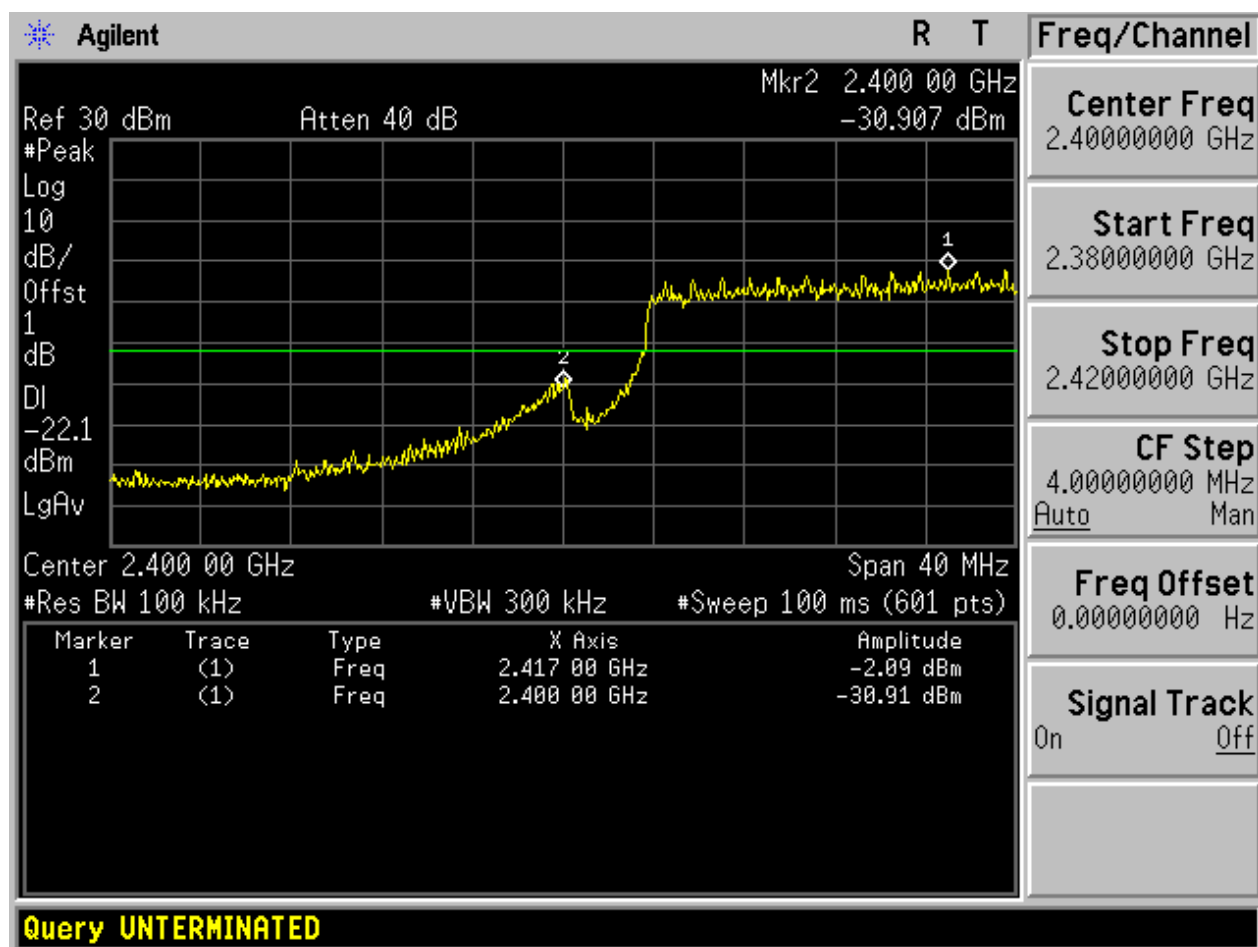


3.17 11N40_L@Ant 1



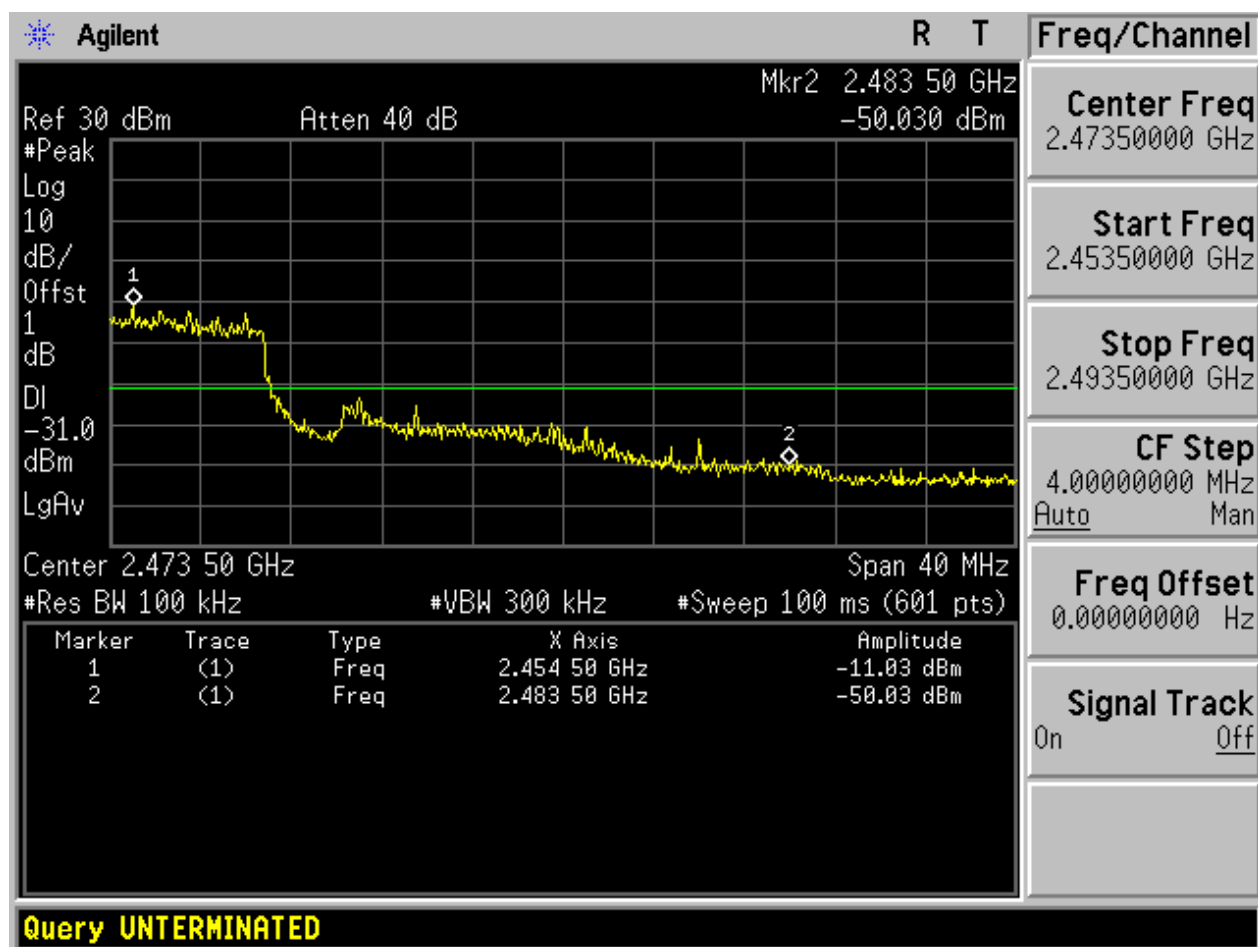


3.18 11N40_L@Ant 2

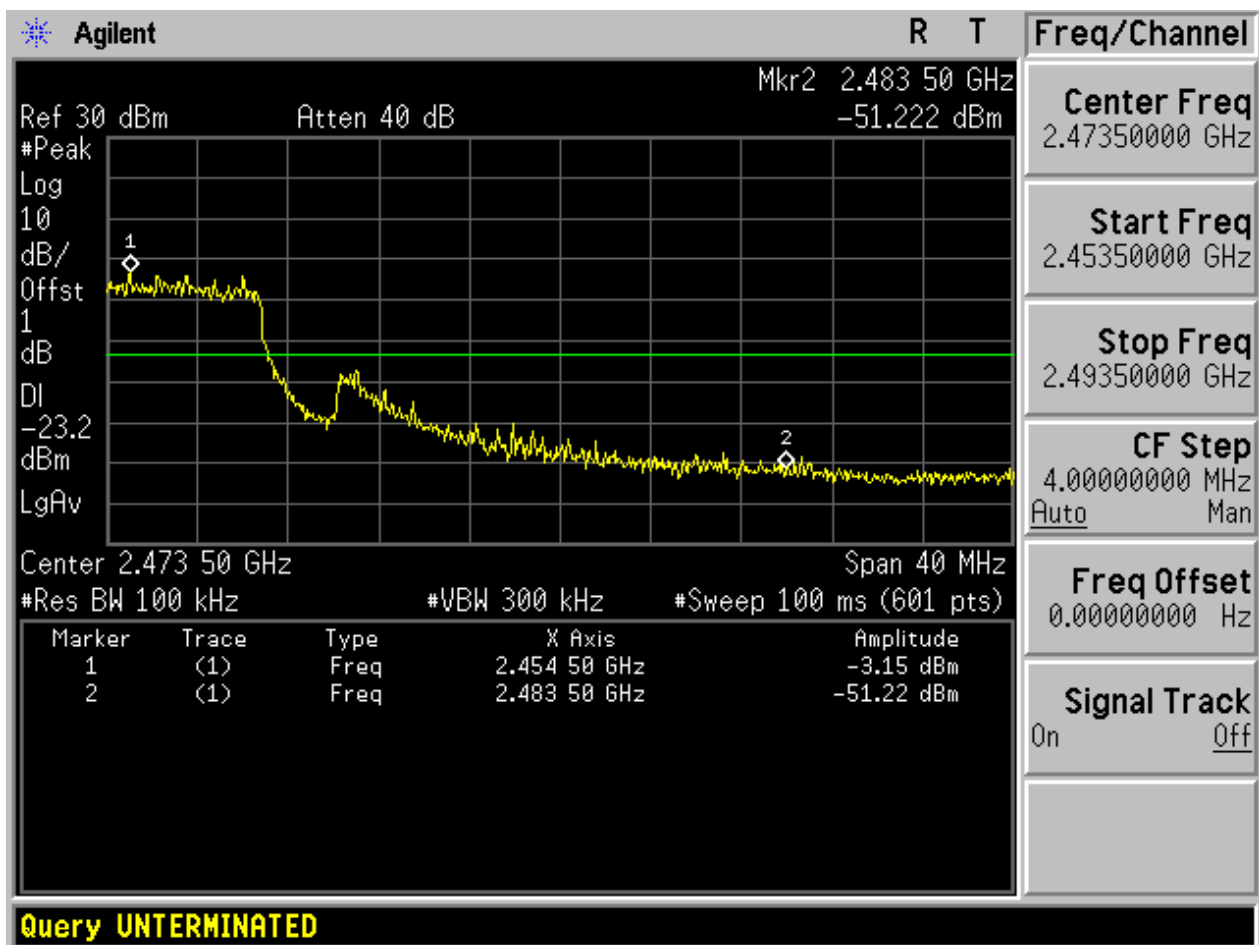




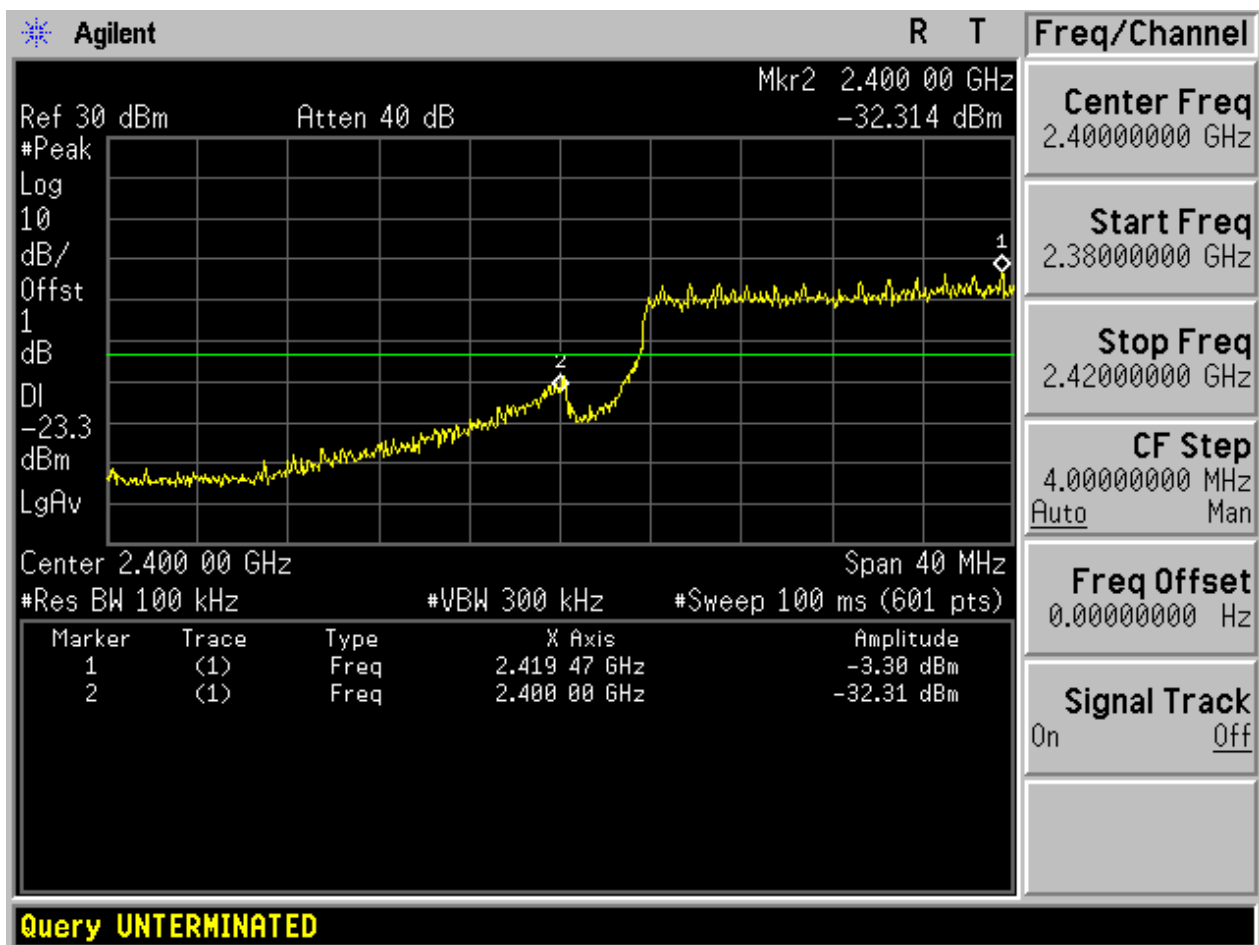
3.19 11N40_H@Ant 1



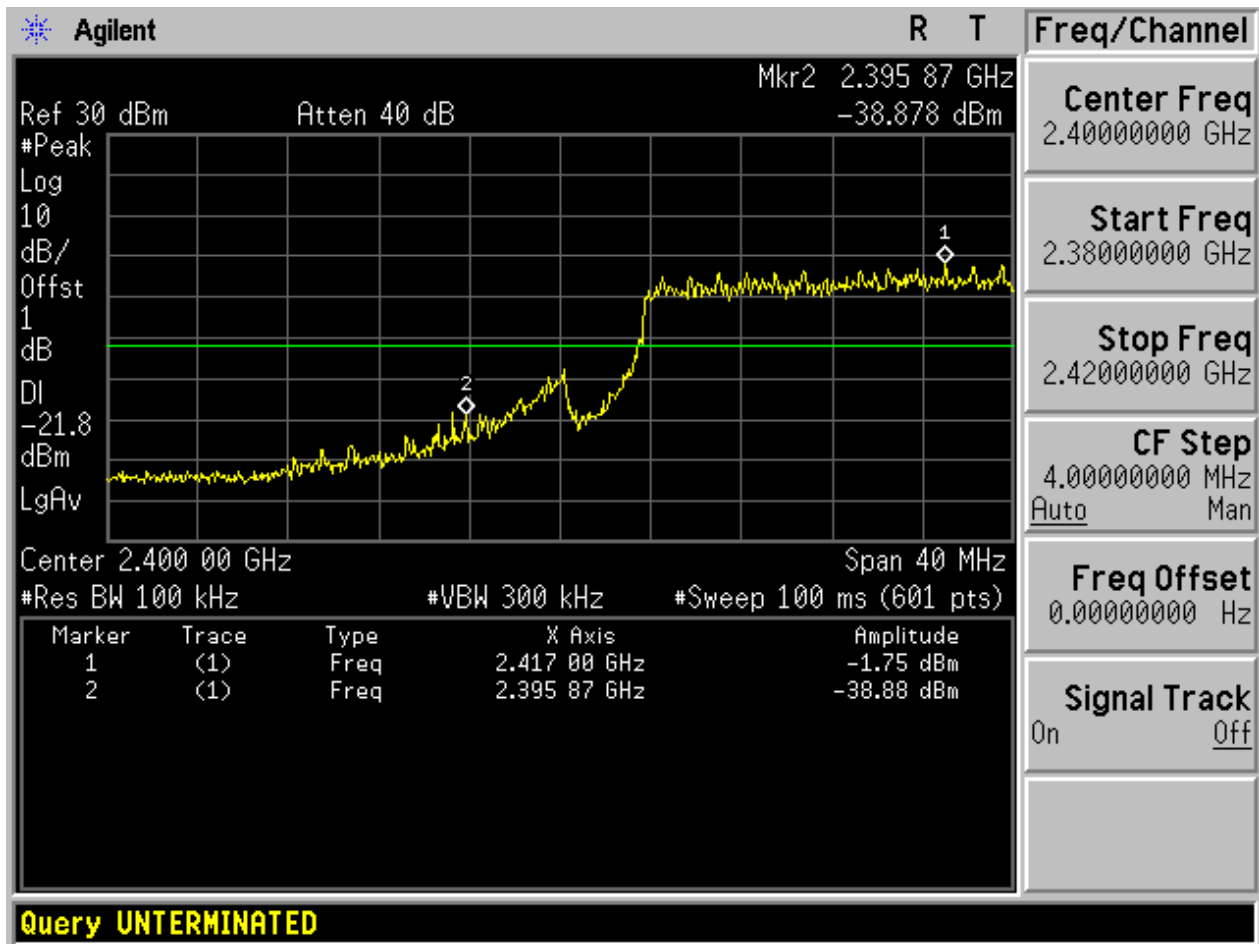
3.20 11N40_H@Ant 2



3.21 11N40m_L@Ant 1

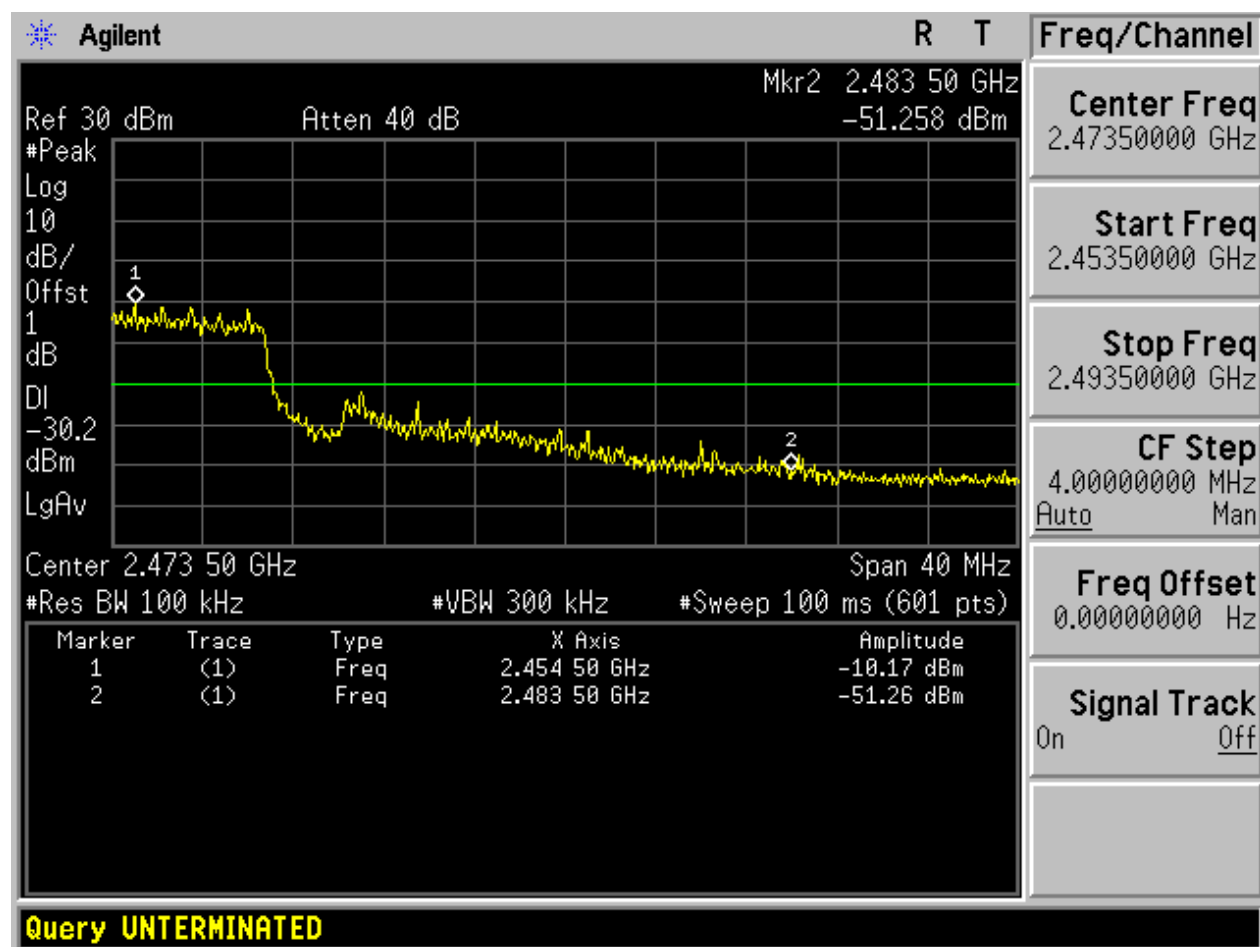


3.22 11N40m_L@Ant 2



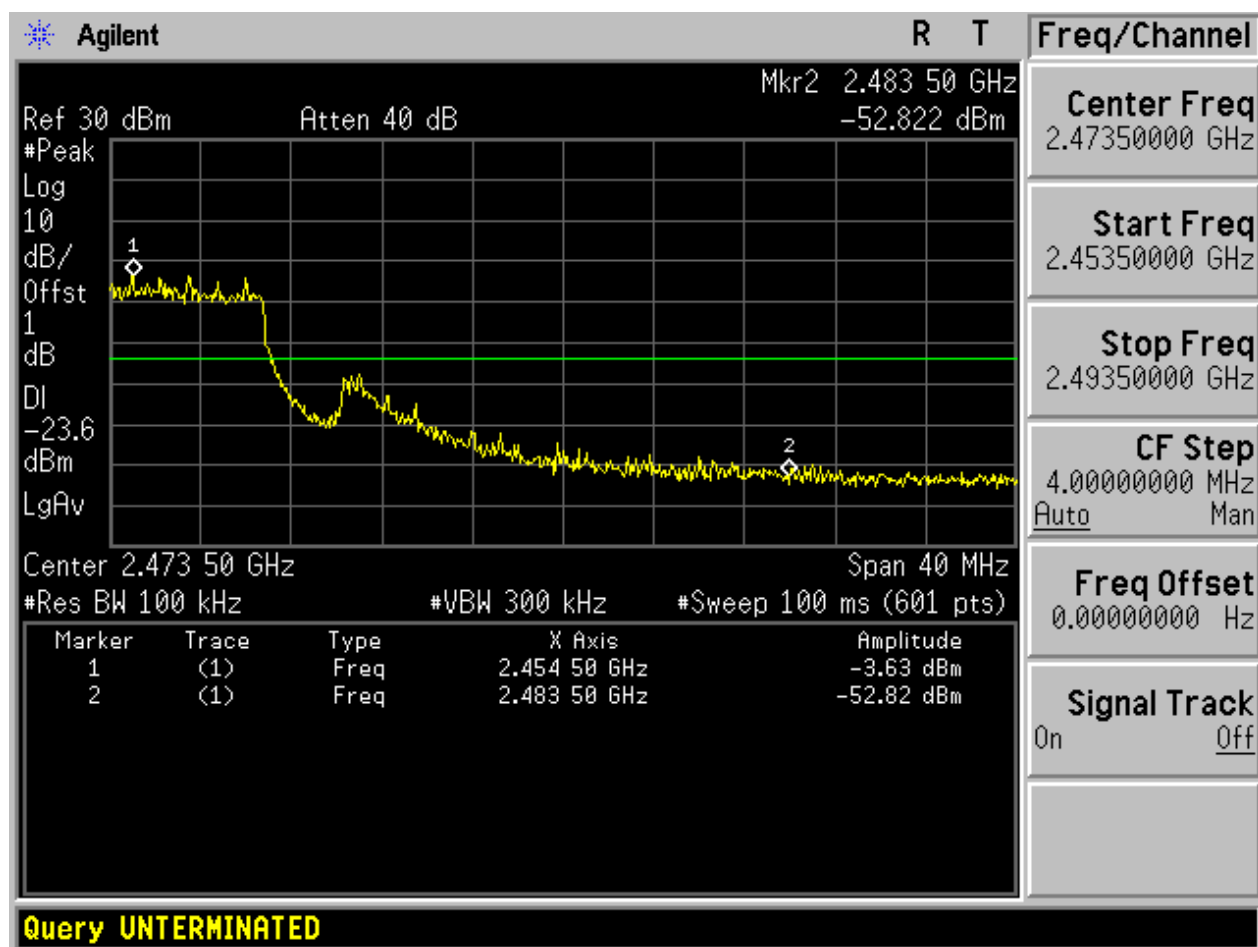


3.23 11N40m_H@Ant 1





3.24 11N40m_H@Ant 2



Appendix E: Unwanted Emissions into Non-Restricted Frequency

Bands

In this Appendix, the "Pref", which is used as the reference level, refers to the peak power level in any 100 kHz bandwidth within the fundamental emission, the "Puw" refers to the maximum emission power in 100 kHz band segments outside of the authorized frequency band.

Considering that the higher ratio of RBW to the span for the frequency ranges below 30 MHz makes the results determination be complicated, a narrower RBW other than 100 kHz is used for these ranges. The measured value should add a RBW correction factor (RBWCF) where $RBWCF [dB] = 10 \times \lg(100 [kHz]/\text{narrower RBW [kHz]})$. As to this Appendix, the narrower RBW is 1 kHz and RBWCF is 20 dB for the frequency 9 kHz to 150 kHz, and the narrower RBW is 10 kHz and RBWCF is 10 dB for the frequency 150 kHz to 30 MHz.

For measurements on smart antenna systems (devices with multiple transmit chains), the test is performed at each chain and used as respective results for each chain, due to the relative-limit requirement.

In the result table, the "< Limit" denotes that "The Puw [dBm] is less than Pref[dBm]-20[dBm], see test plots for detailed".

Part I - Test Results

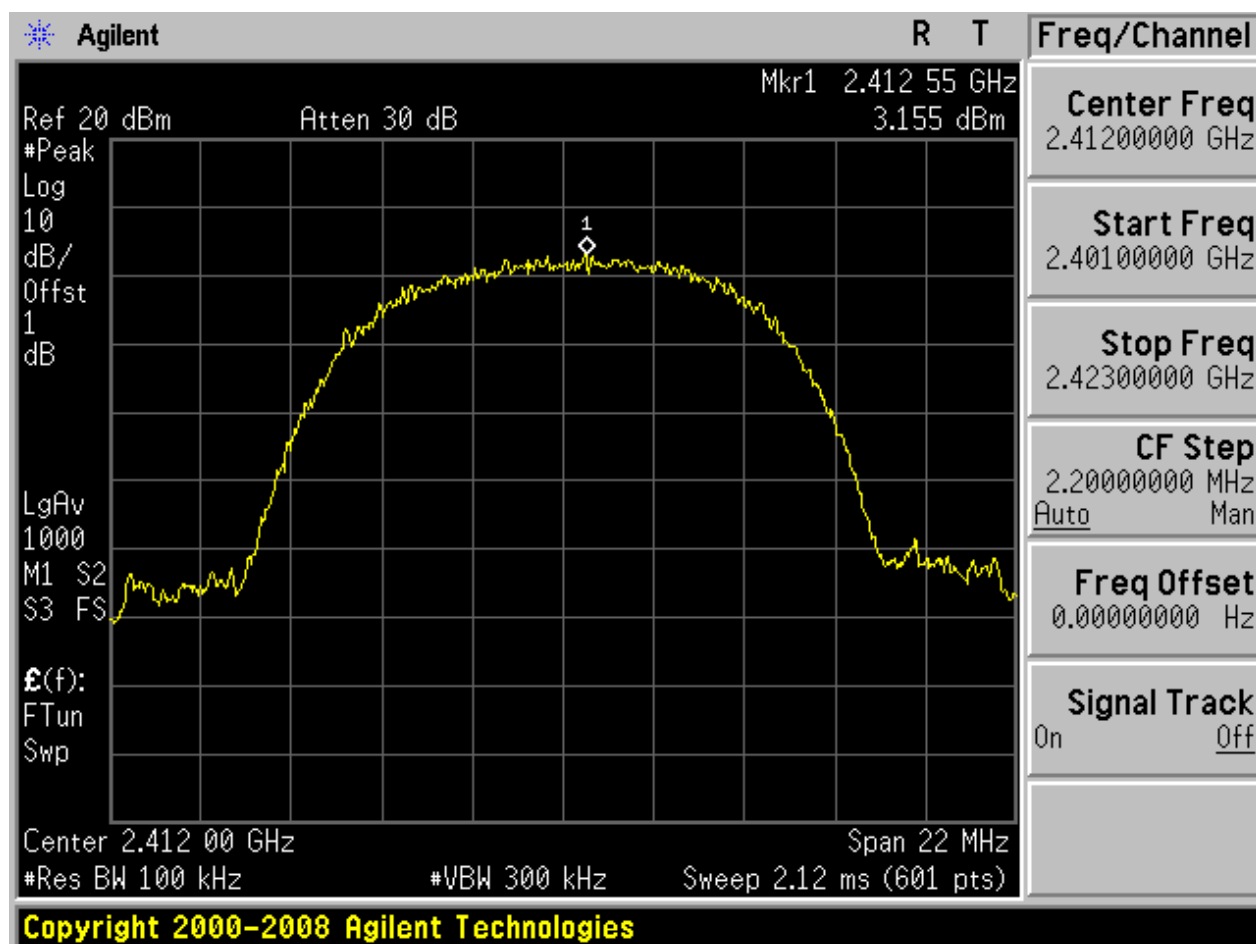
Test Mode	Test Channel	Frequency[MHz]	Ant	Pref[dBm]	Puw[dBm]	Verdict
11B	L	2412	Ant 1	3.16	<limit	pass
11B	L	2412	Ant 2	3.97	<limit	pass
11B	M	2437	Ant 1	4.75	<limit	pass
11B	M	2437	Ant 2	4.34	<limit	pass
11B	H	2462	Ant 1	4.45	<limit	pass
11B	H	2462	Ant 2	5.13	<limit	pass
11G	L	2412	Ant 1	-5.04	<limit	pass
11G	L	2412	Ant 2	1.20	<limit	pass
11G	M	2437	Ant 1	-7.05	<limit	pass
11G	M	2437	Ant 2	0.81	<limit	pass
11G	H	2462	Ant 1	-3.82	<limit	pass
11G	H	2462	Ant 2	1.62	<limit	pass
11N20	L	2412	Ant 1	-2.94	<limit	pass
11N20	L	2412	Ant 2	1.27	<limit	pass
11N20	M	2437	Ant 1	-5.03	<limit	pass
11N20	M	2437	Ant 2	0.82	<limit	pass
11N20	H	2462	Ant 1	-2.27	<limit	pass

Test Mode	Test Channel	Frequency[MHz]	Ant	Pref[dBm]	Puw[dBm]	Verdict
11N20	H	2462	Ant 2	1.58	<limit	pass
11N20m	L	2412	Ant 1	-3.72	<limit	pass
11N20m	L	2412	Ant 2	1.37	<limit	pass
11N20m	M	2437	Ant 1	0.27	<limit	pass
11N20m	M	2437	Ant 2	1.04	<limit	pass
11N20m	H	2462	Ant 1	1.74	<limit	pass
11N20m	H	2462	Ant 2	2.01	<limit	pass
11N40	L	2422	Ant 1	-7.28	<limit	pass
11N40	L	2422	Ant 2	-1.96	<limit	pass
11N40	M	2437	Ant 1	-6.05	<limit	pass
11N40	M	2437	Ant 2	-1.61	<limit	pass
11N40	H	2452	Ant 1	-6.07	<limit	pass
11N40	H	2452	Ant 2	-0.94	<limit	pass
11N40m	L	2422	Ant 1	5.56	<limit	pass
11N40m	L	2422	Ant 2	-1.43	<limit	pass
11N40m	M	2437	Ant 2	-5.45	<limit	pass
11N40m	M	2437	Ant 1	-1.91	<limit	pass
11N40m	H	2452	Ant 1	-5.13	<limit	pass
11N40m	H	2452	Ant 2	-1.01	<limit	pass

Part II - Test Plots

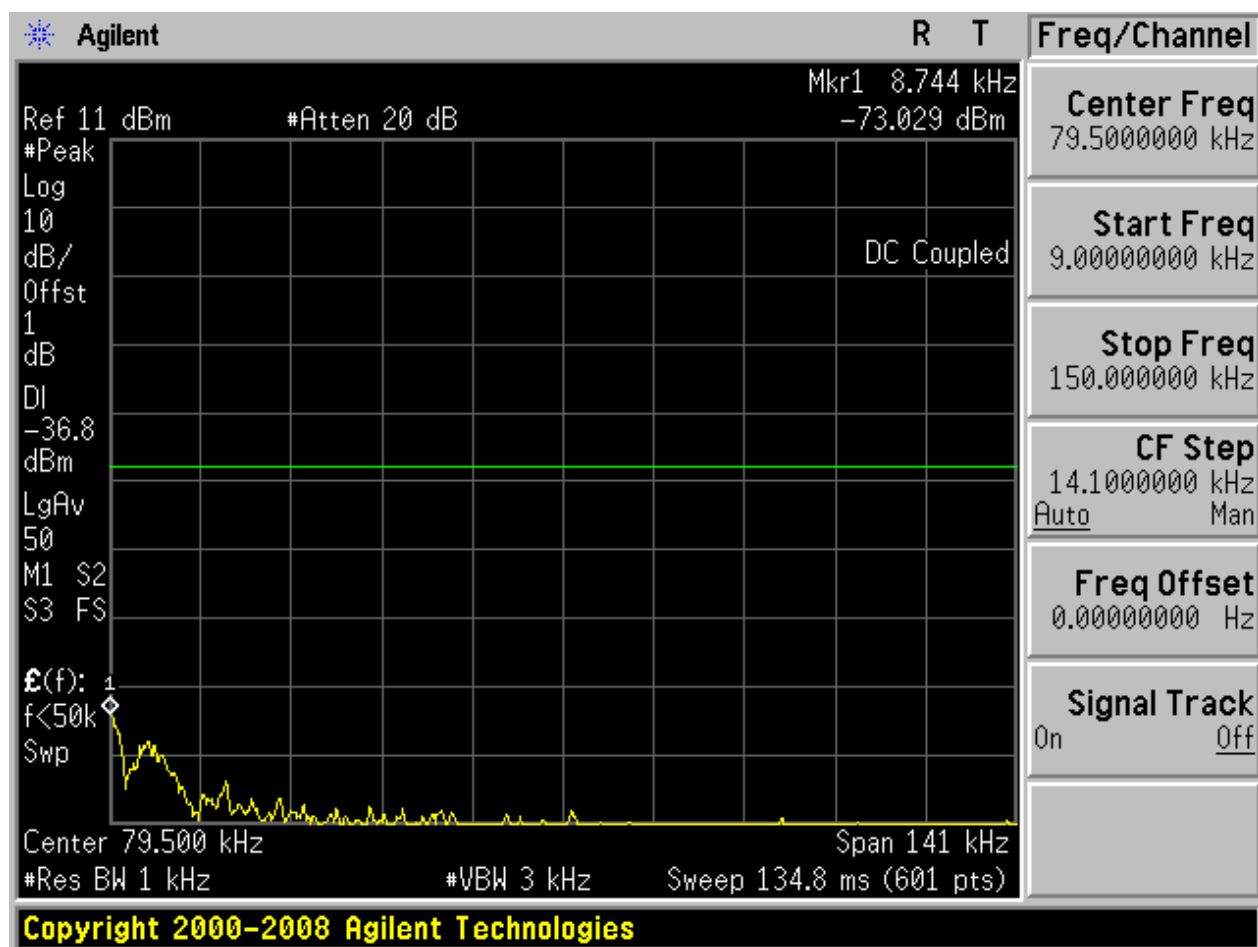
4.1 11B_L@Ant 1

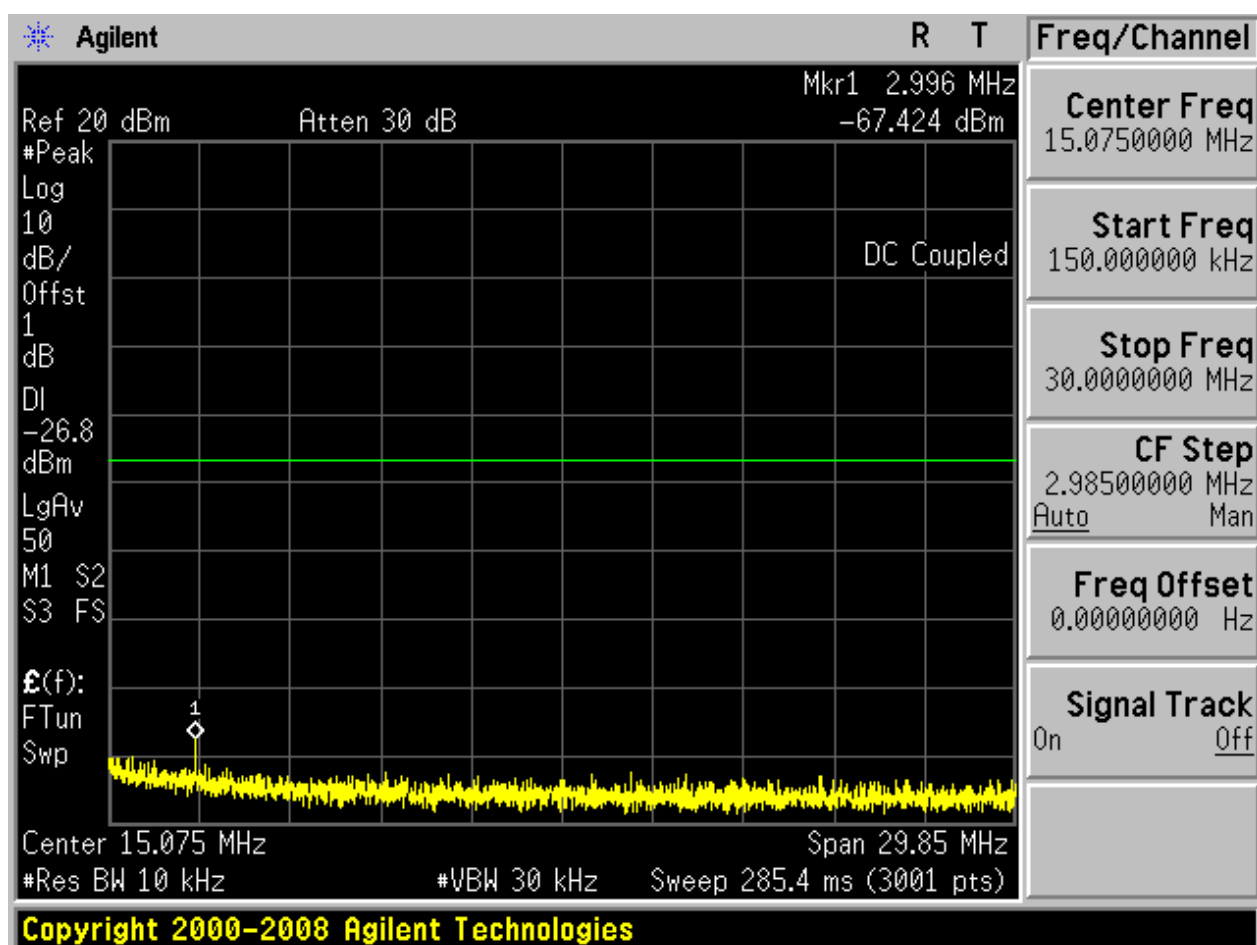
Pref:

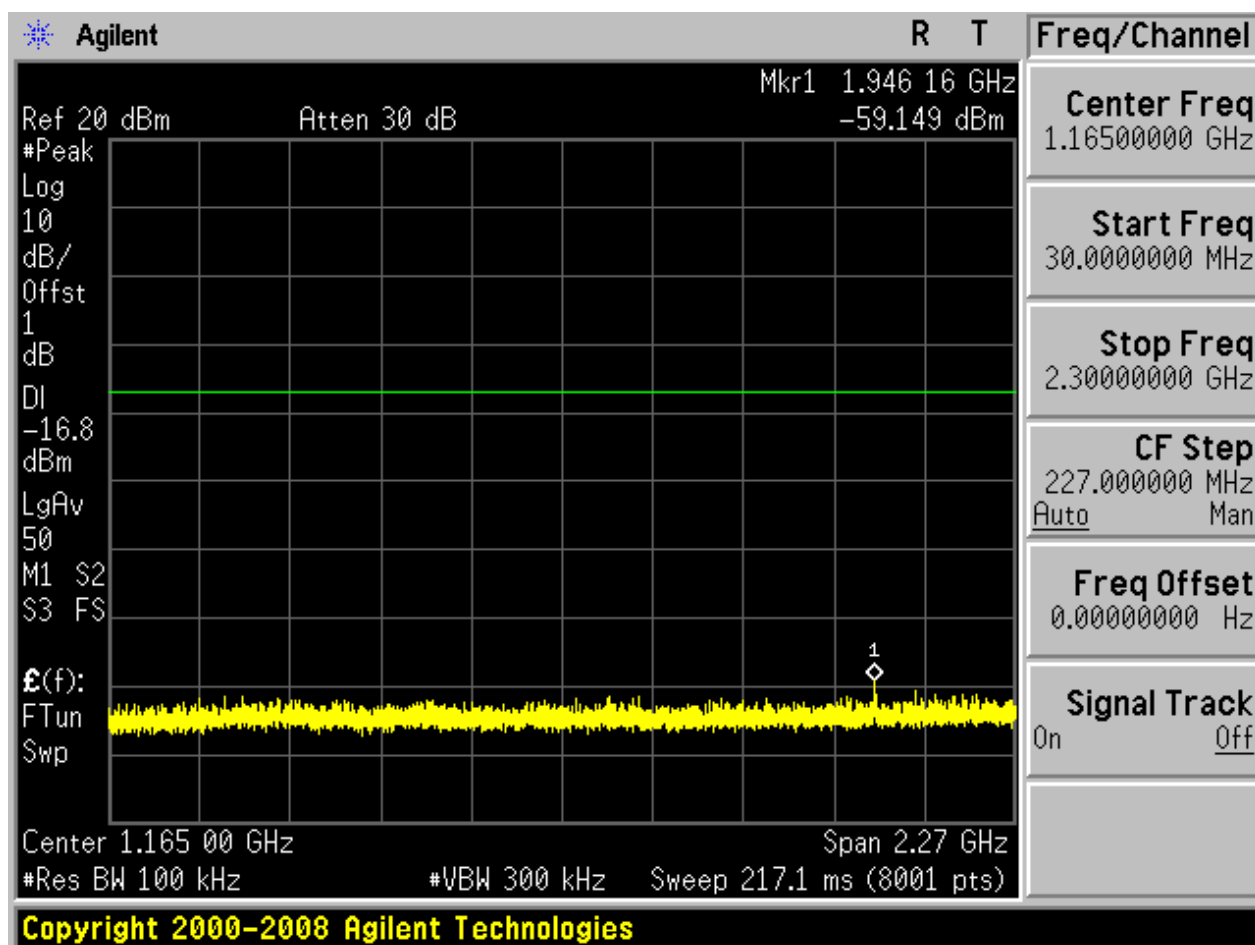


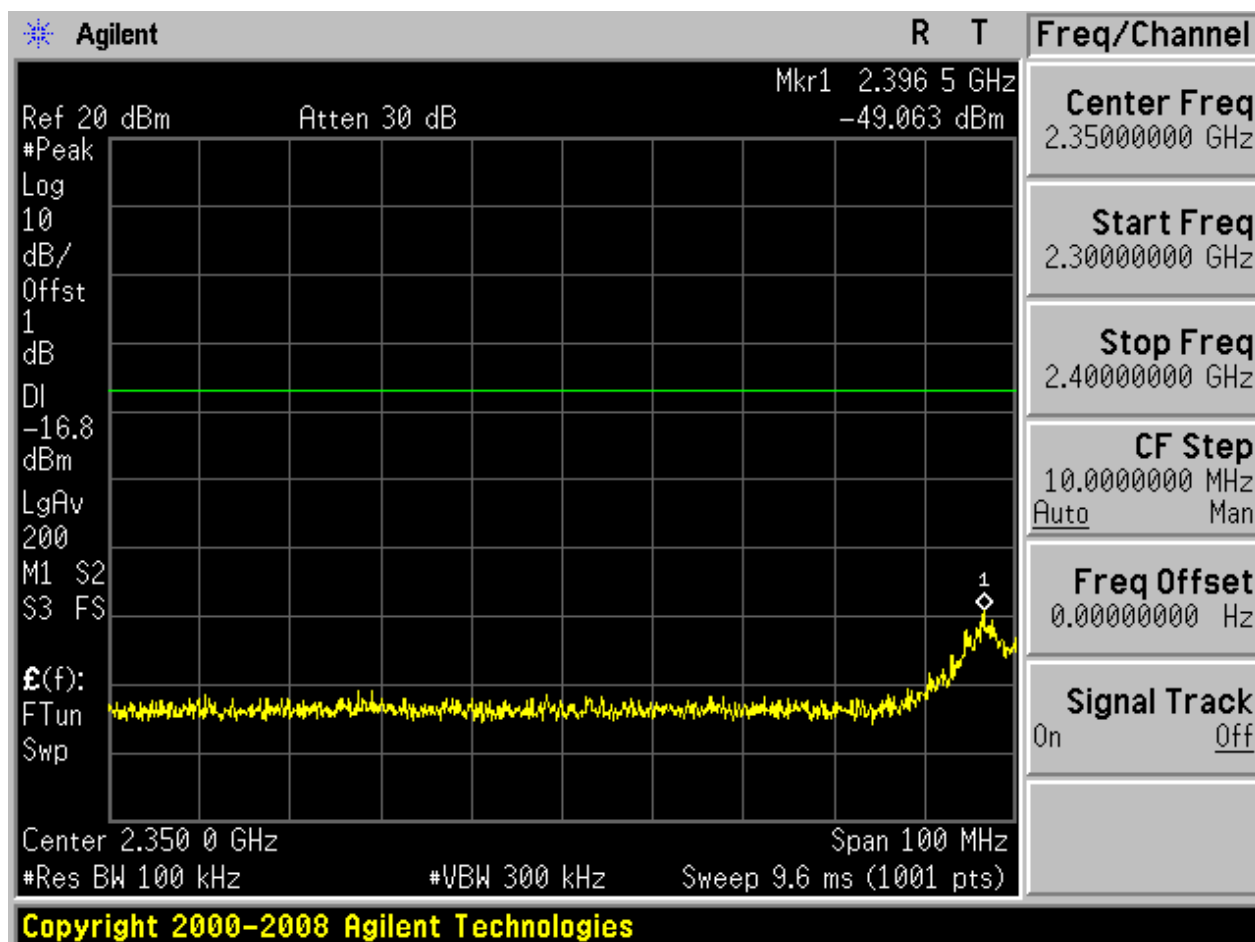


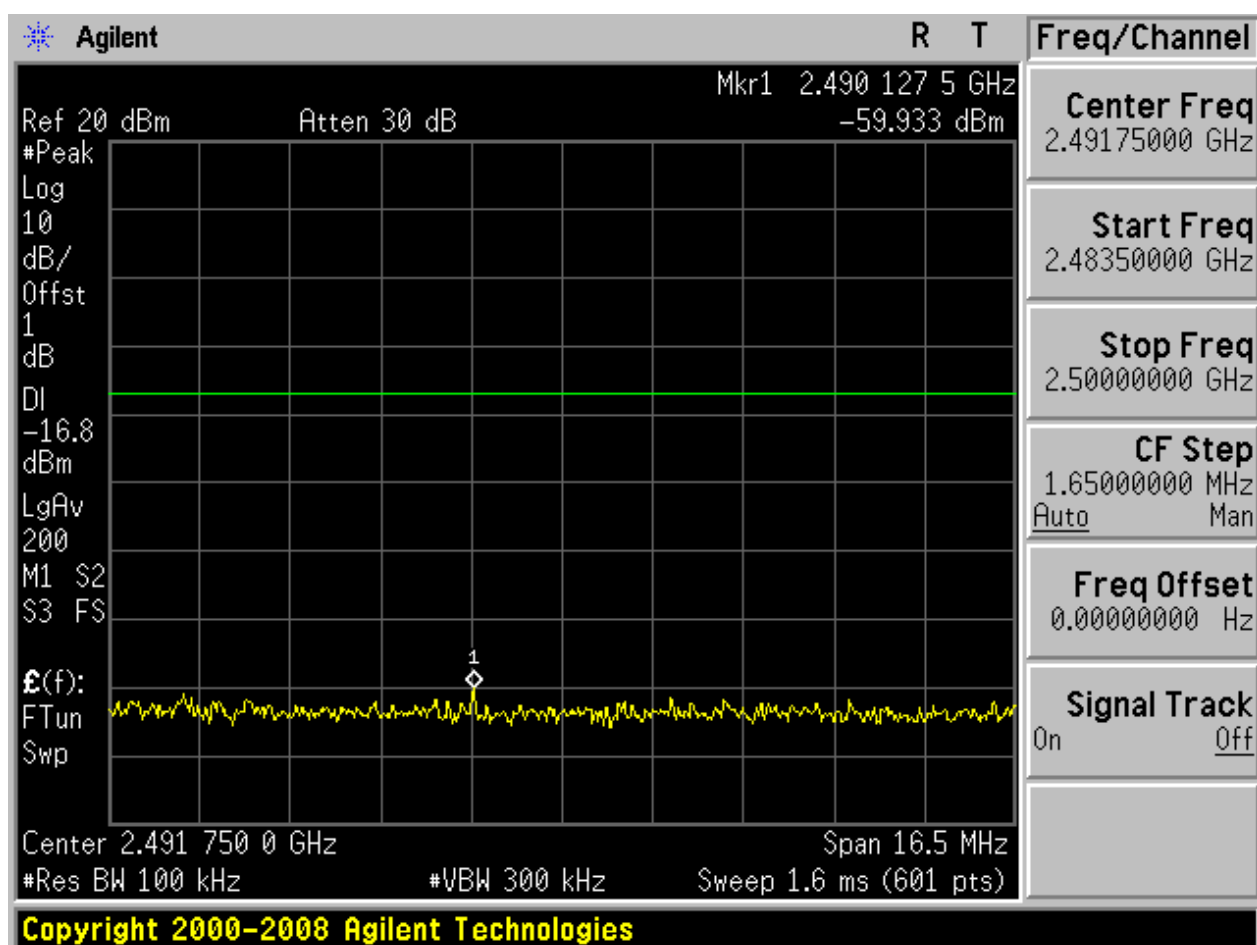
Puw:

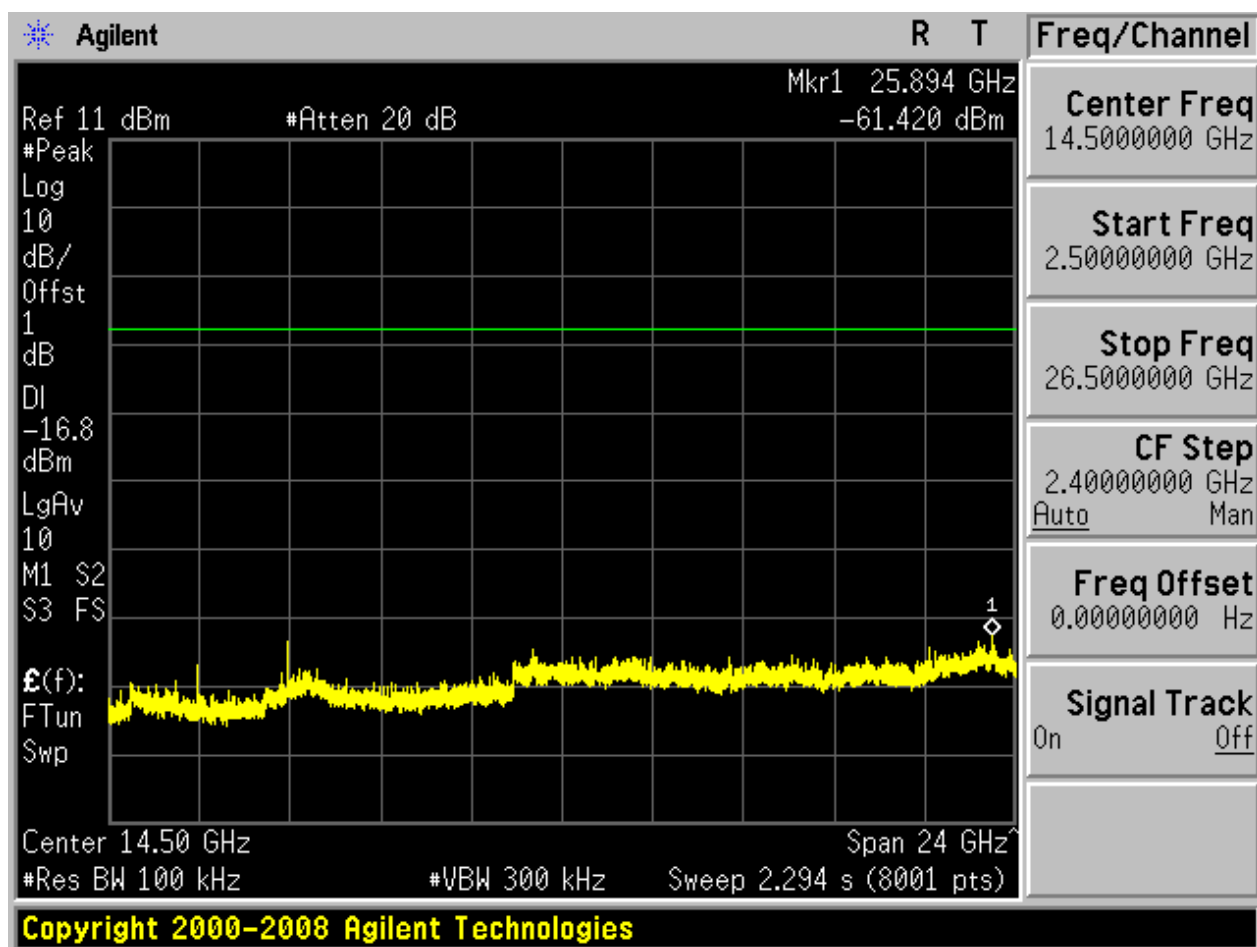






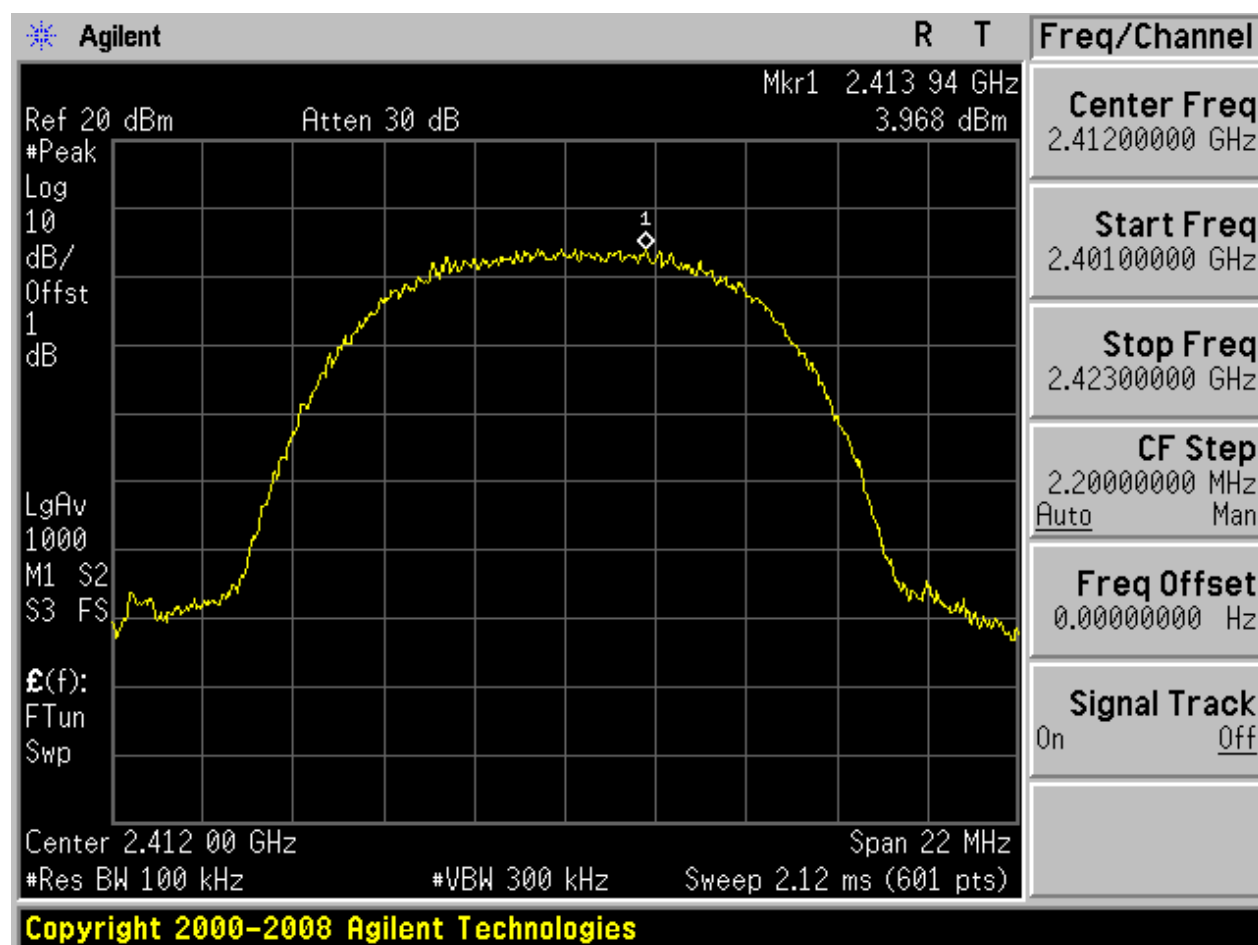






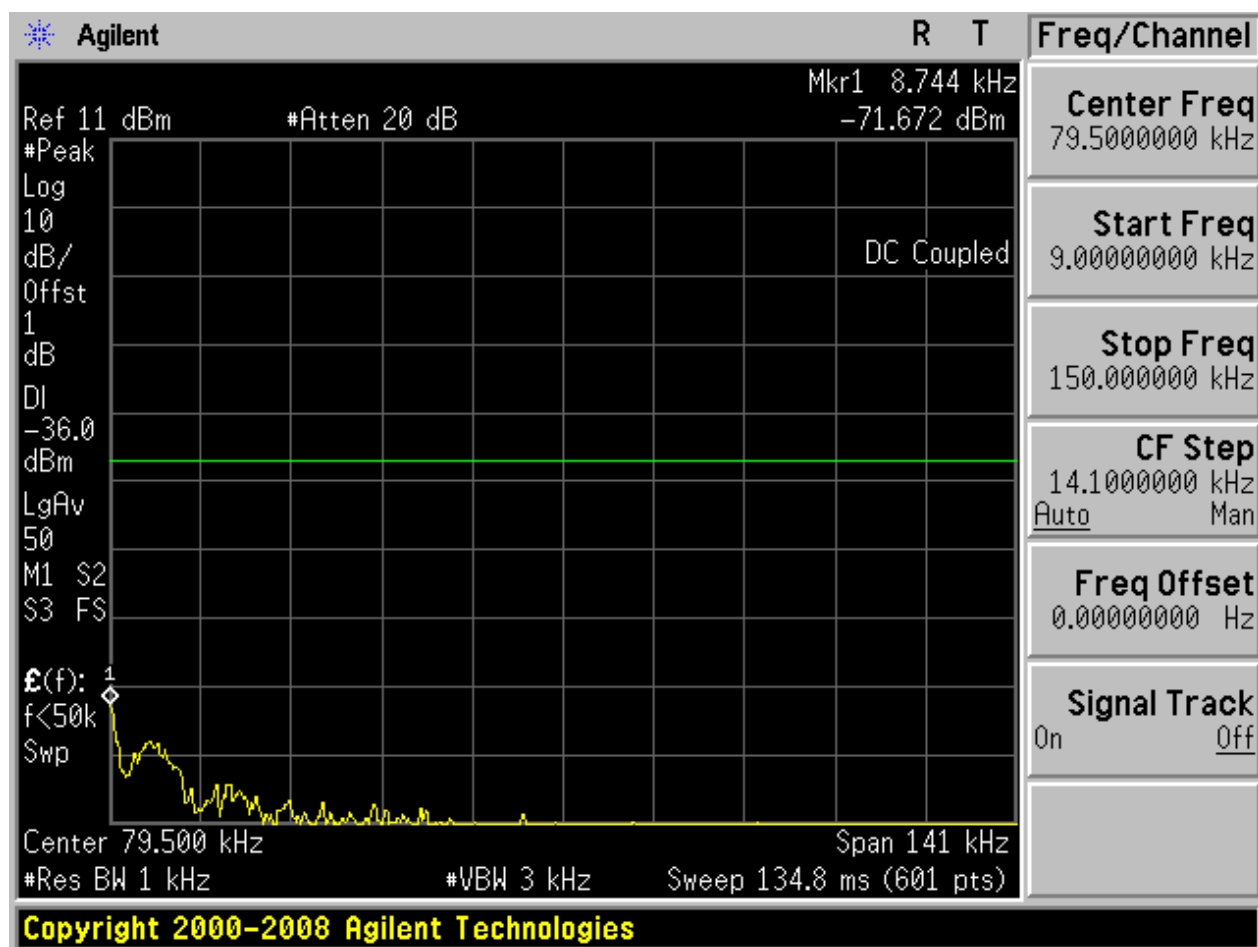
4.2 11B_L@Ant 2

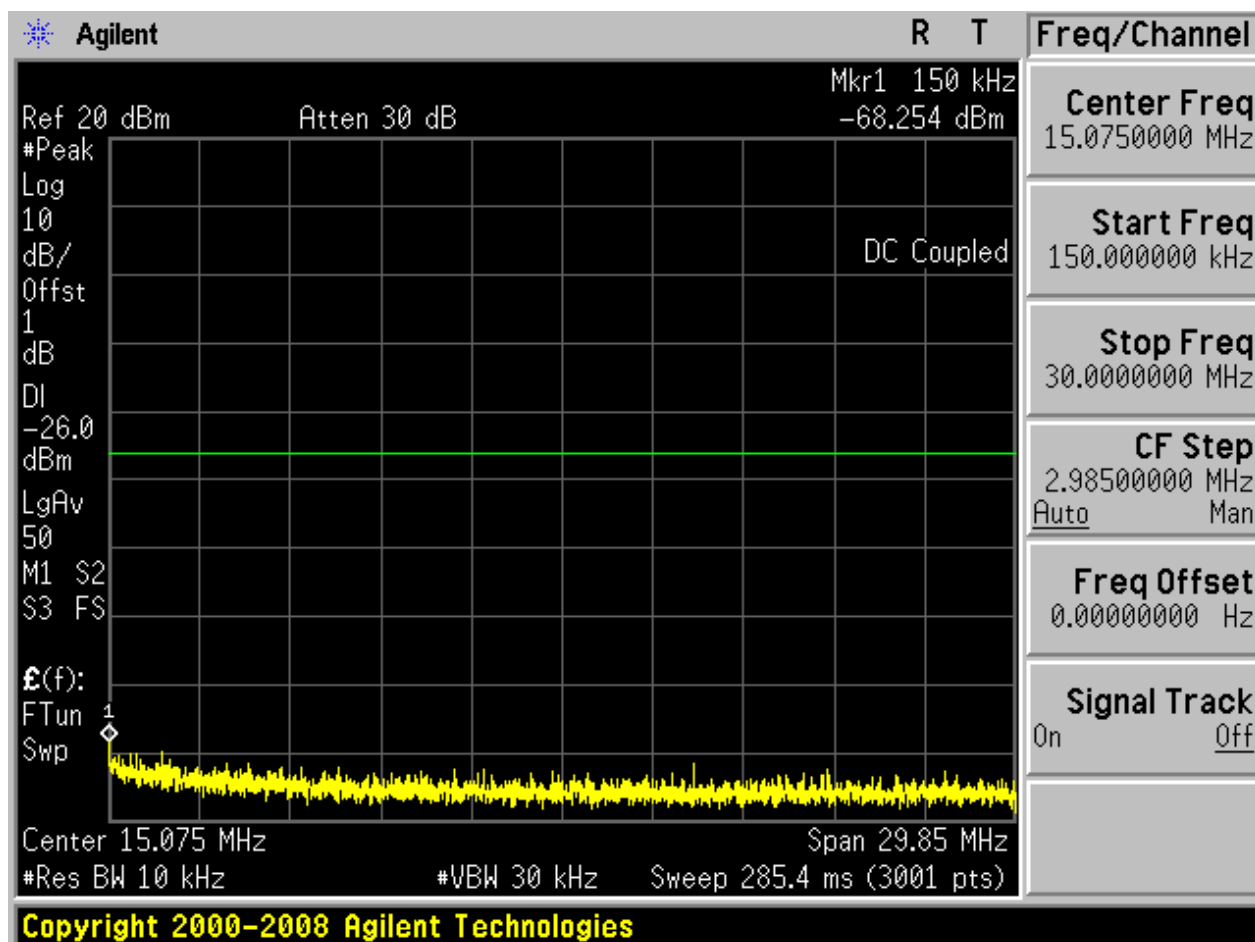
Pref:

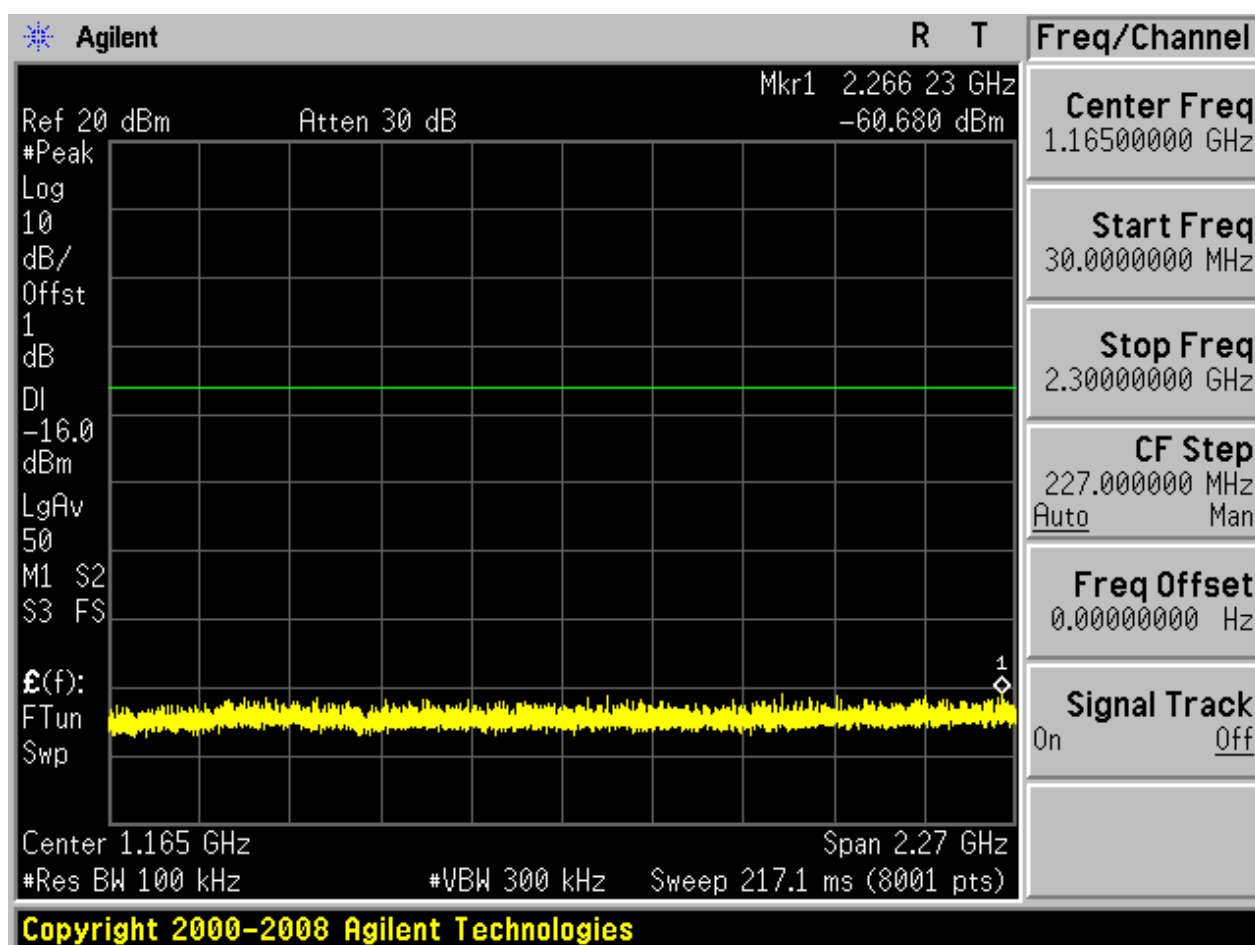


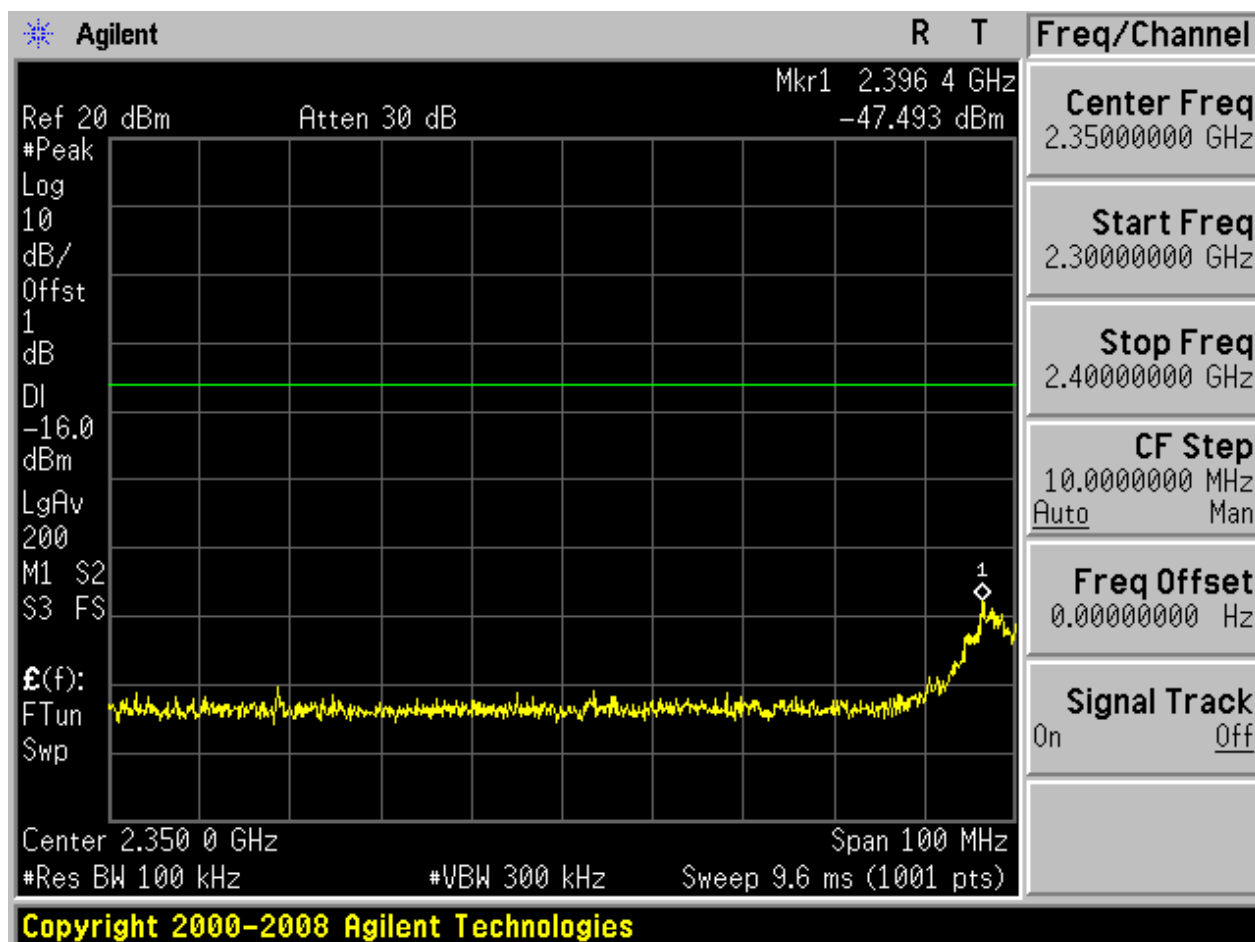


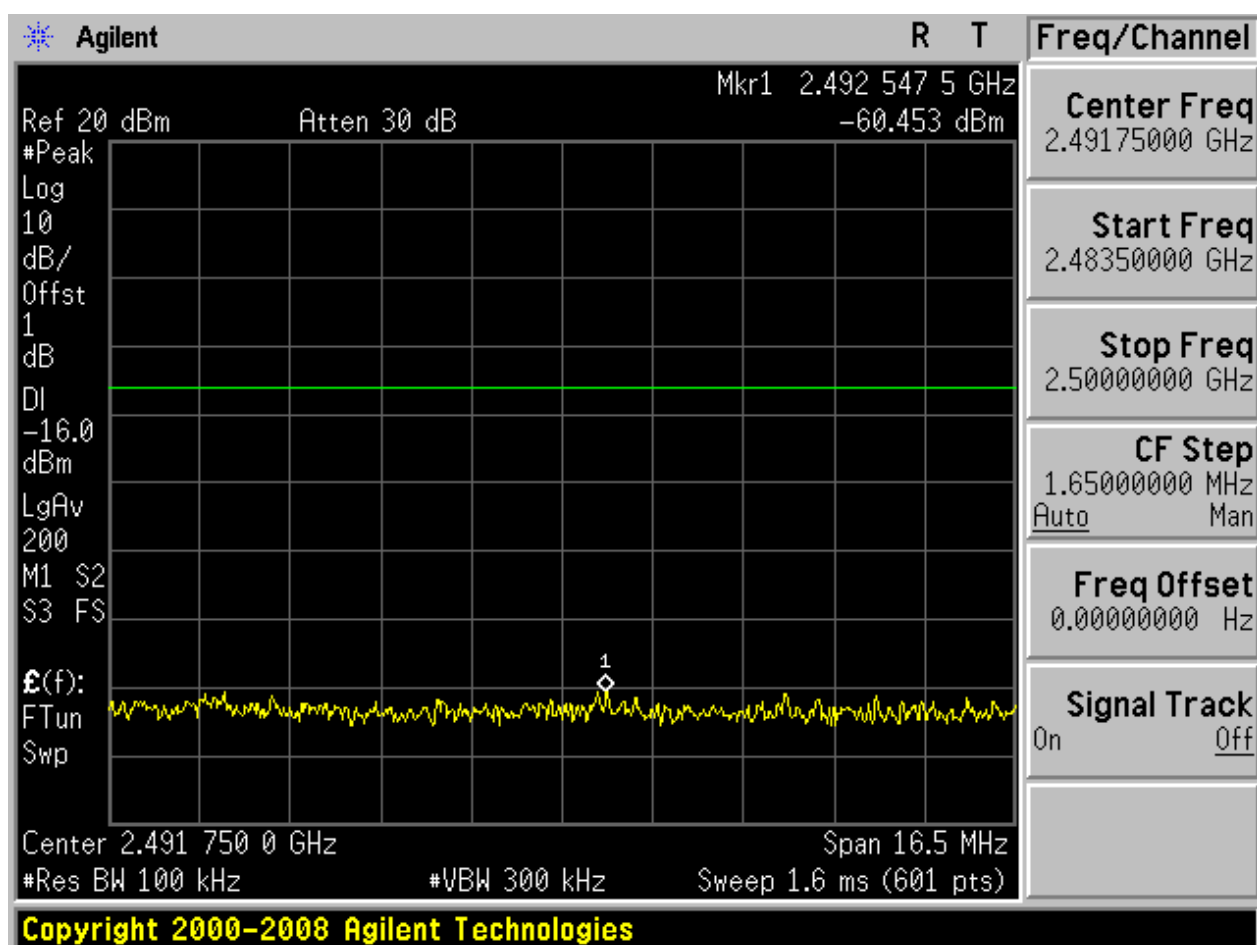
Puw:

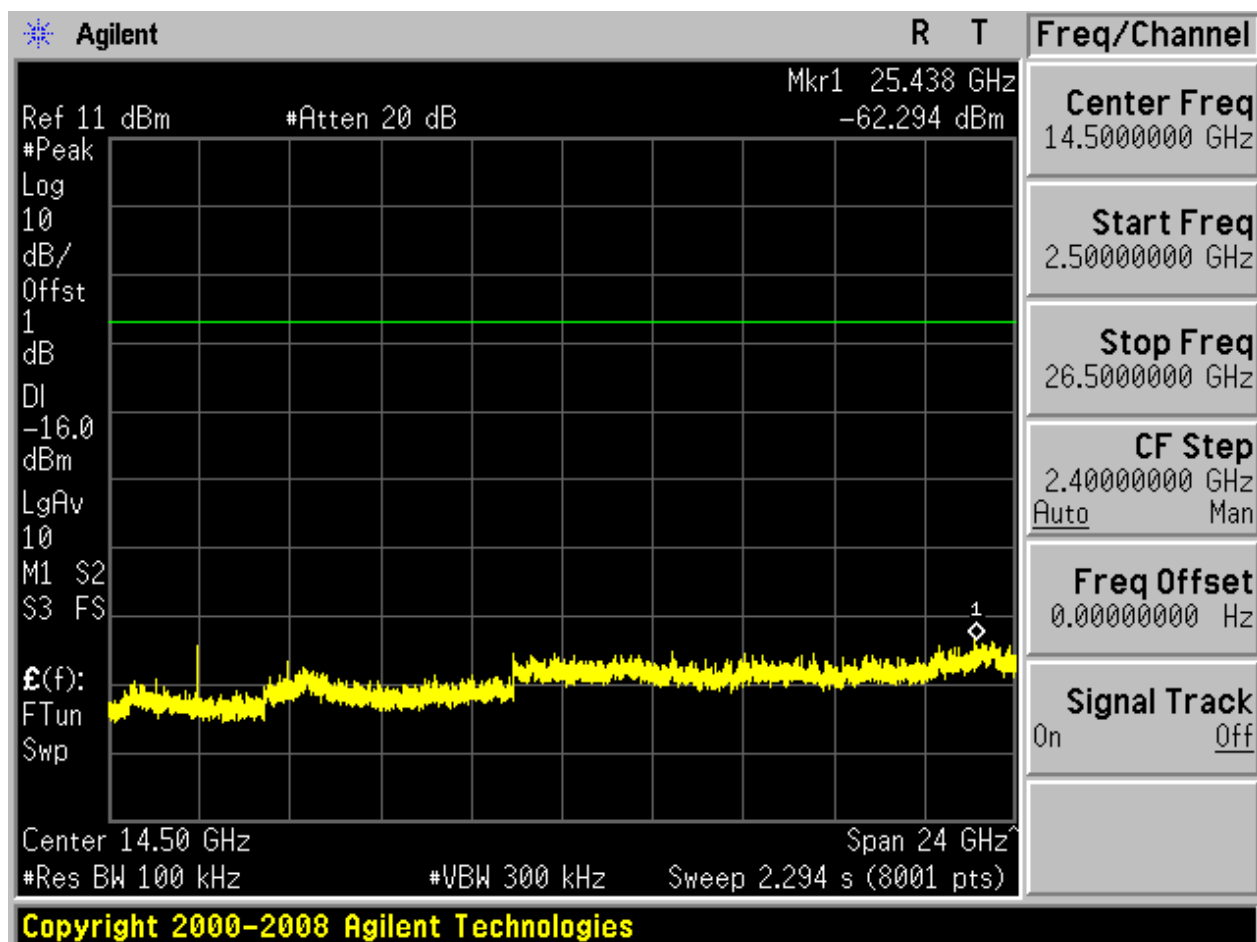






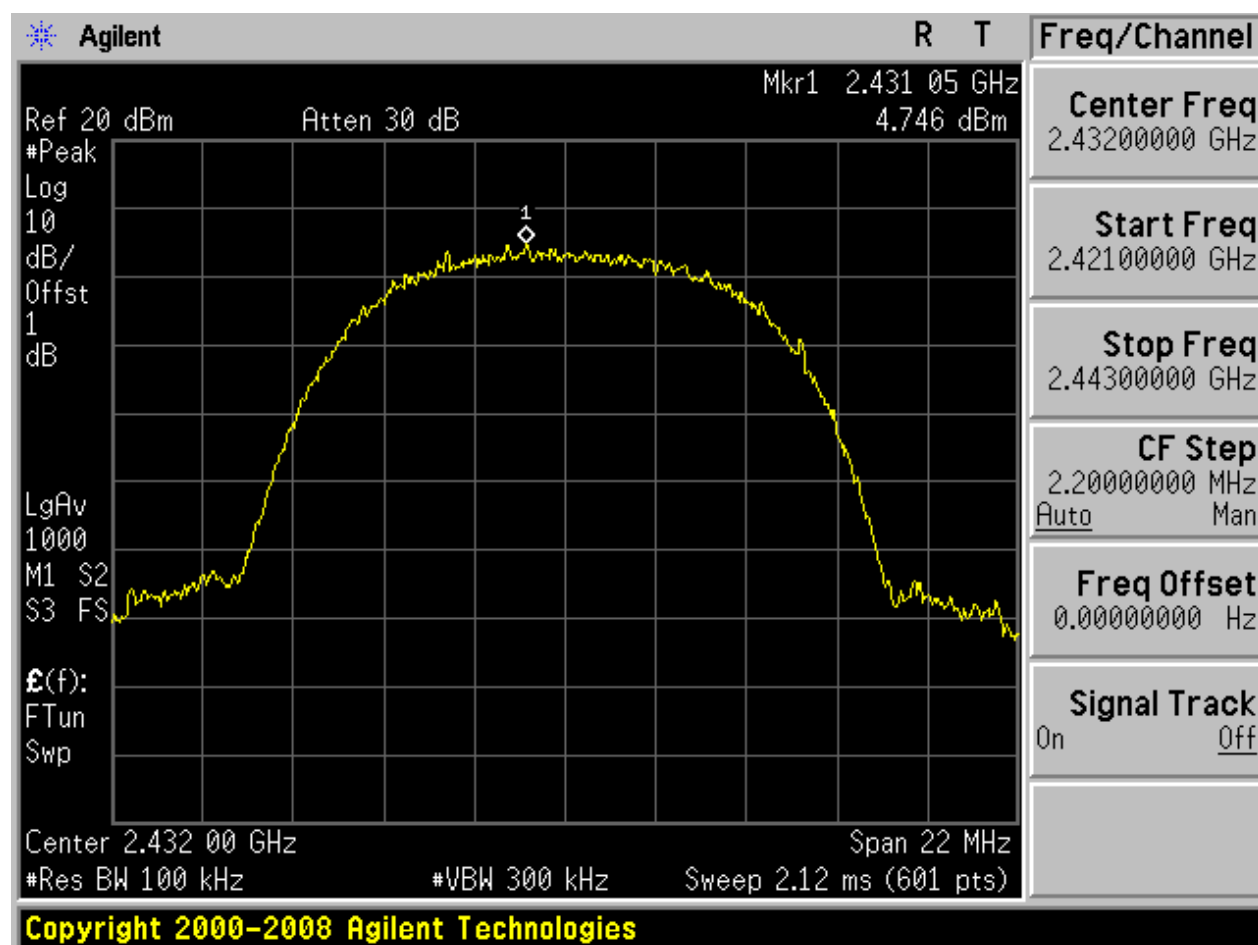






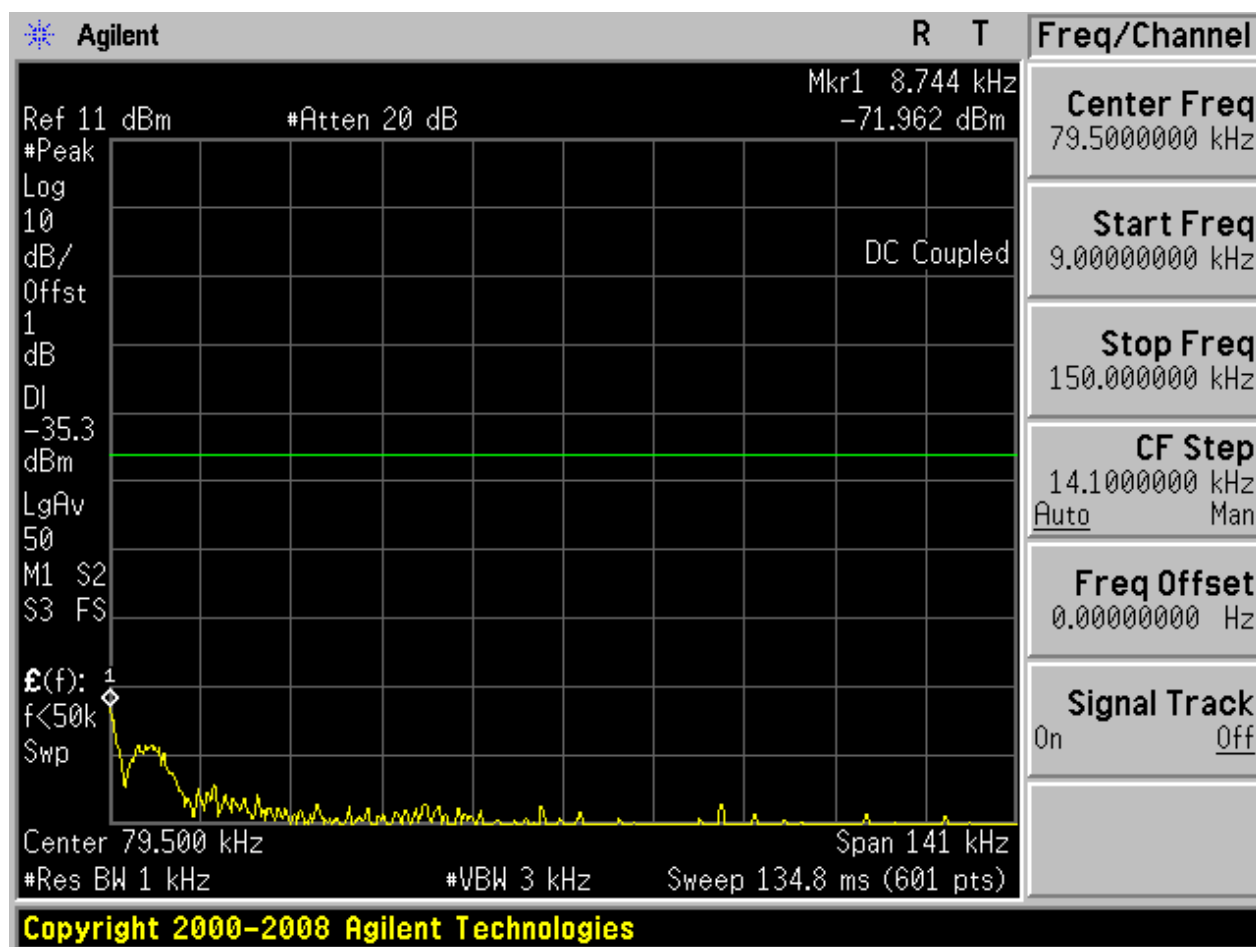
4.3 11B_M@Ant 1

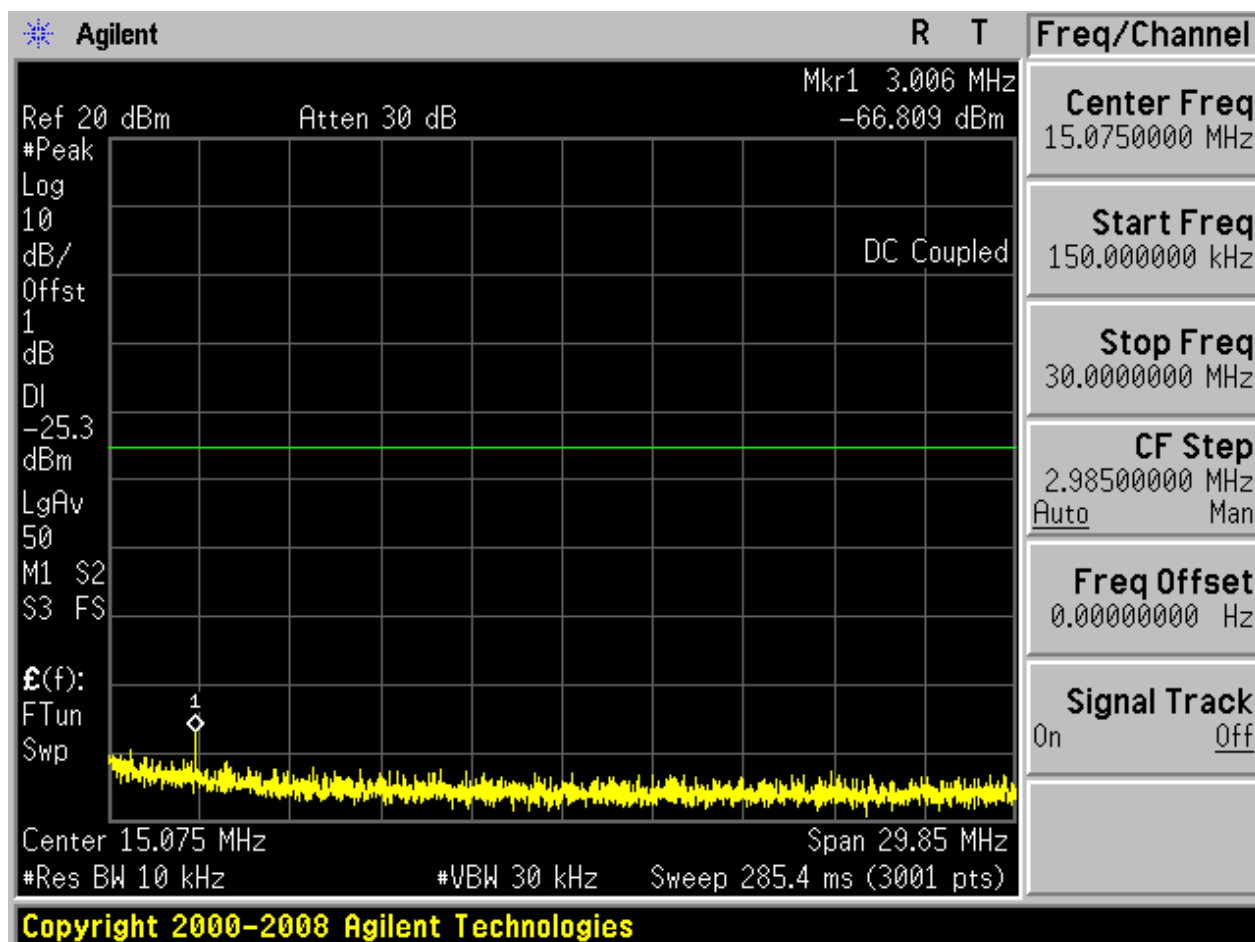
Pref:

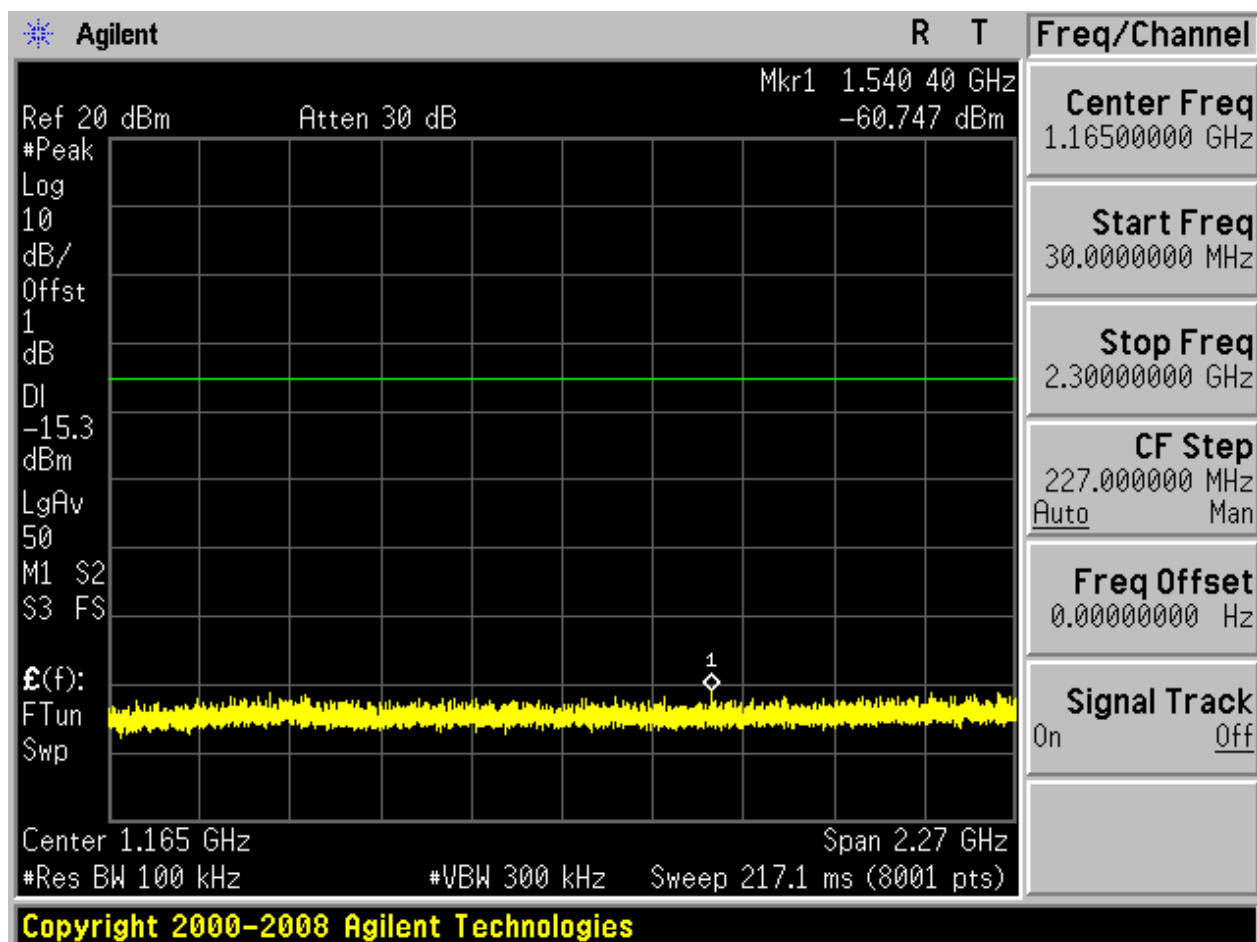


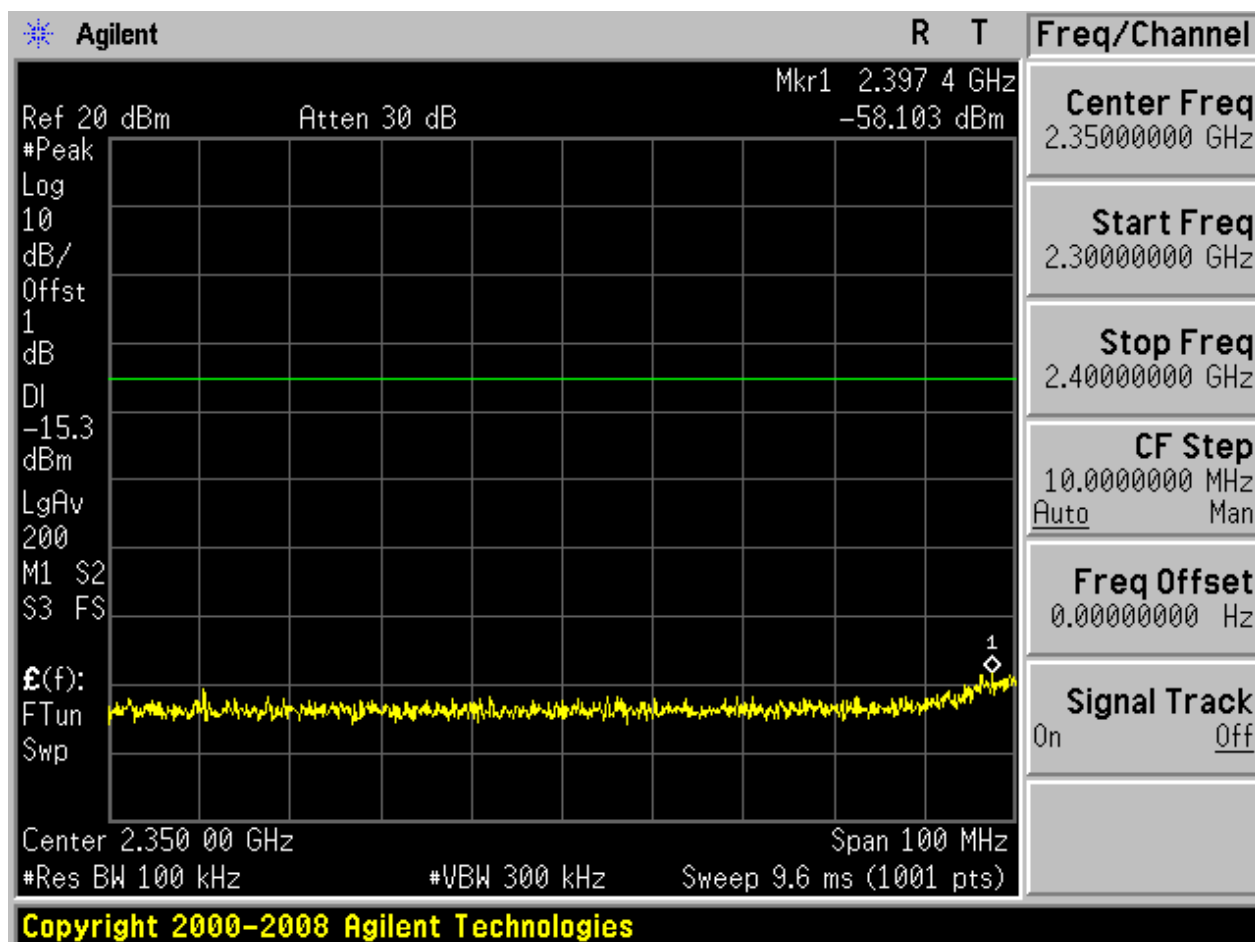


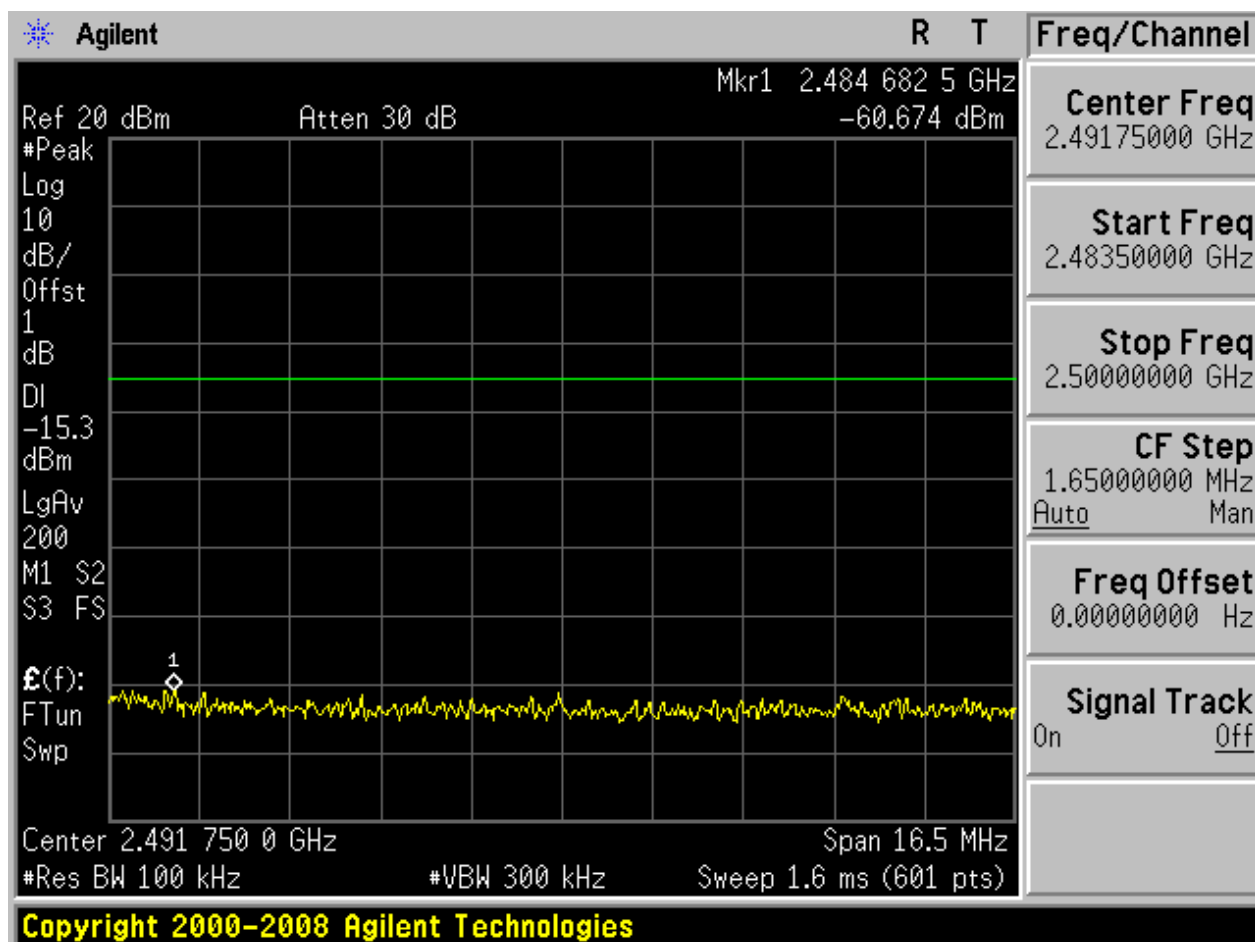
Puw:

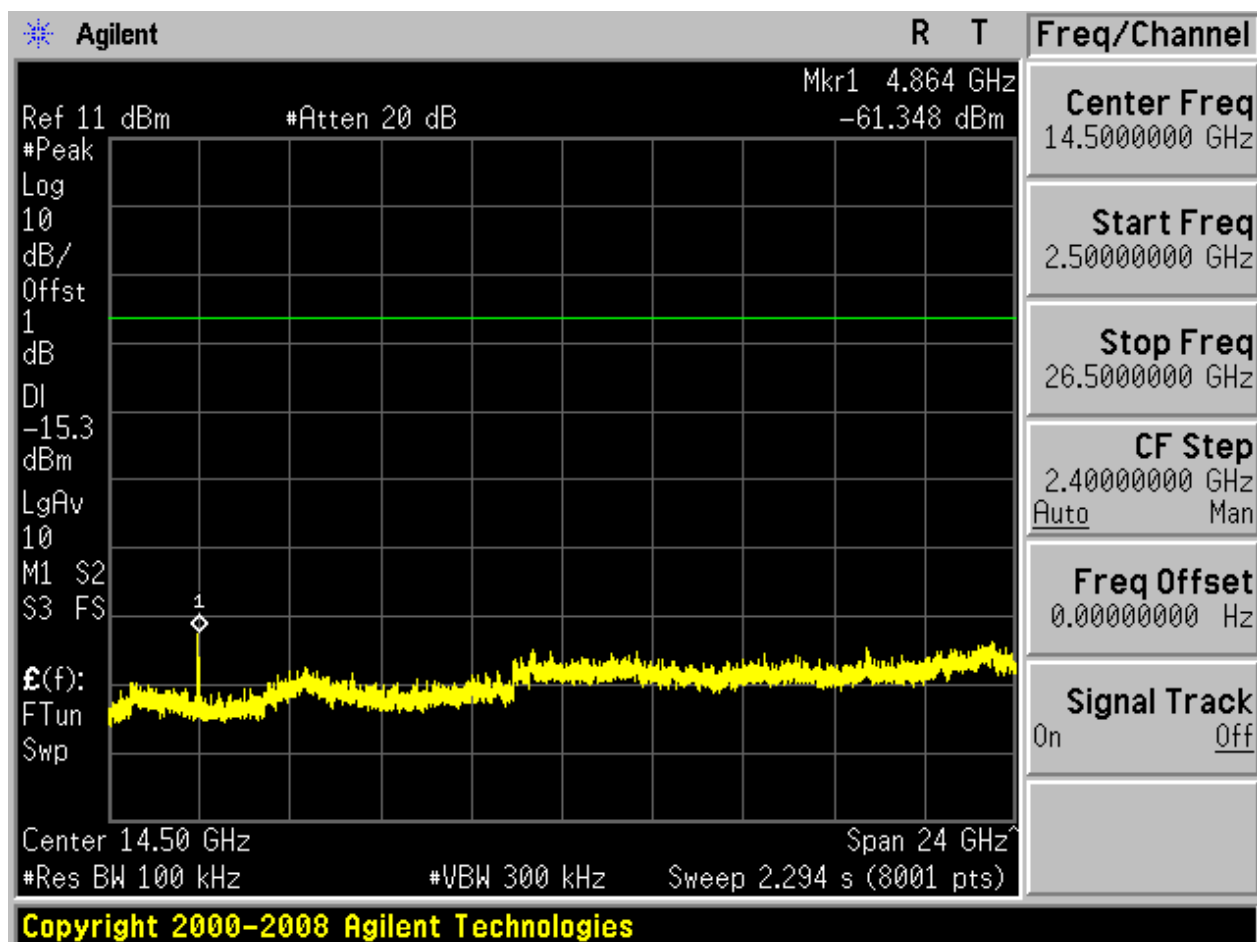






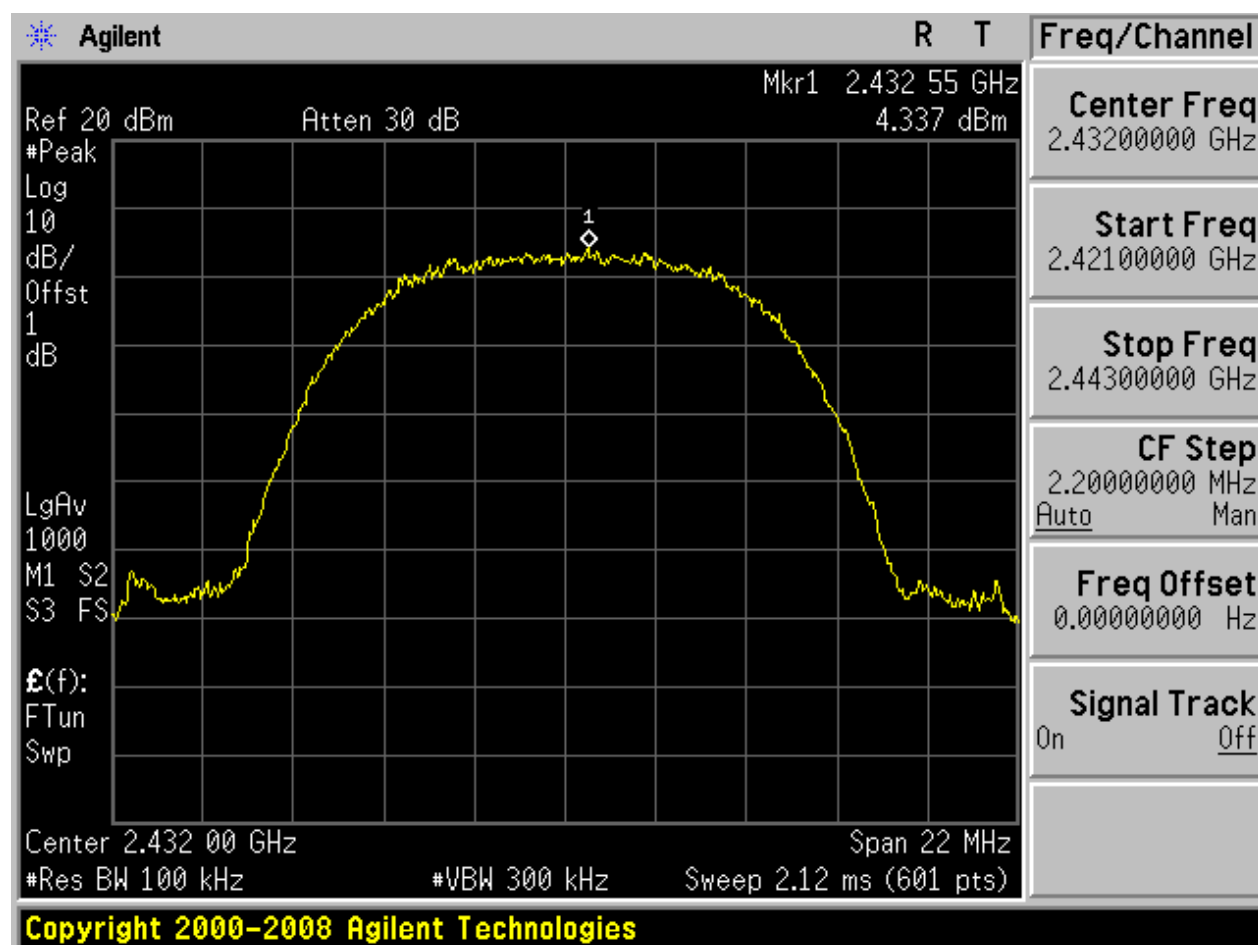






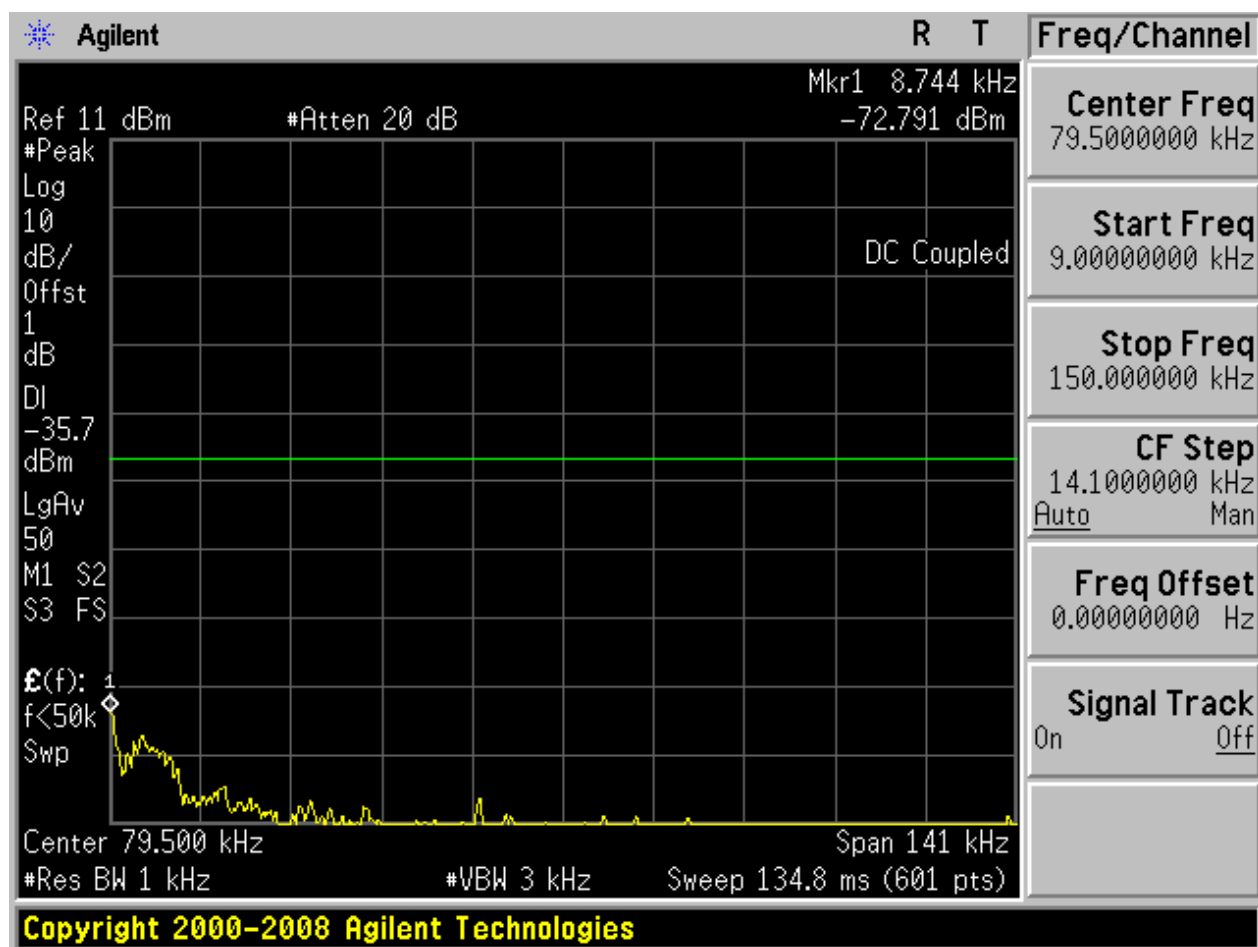
4.4 11B_M@Ant 2

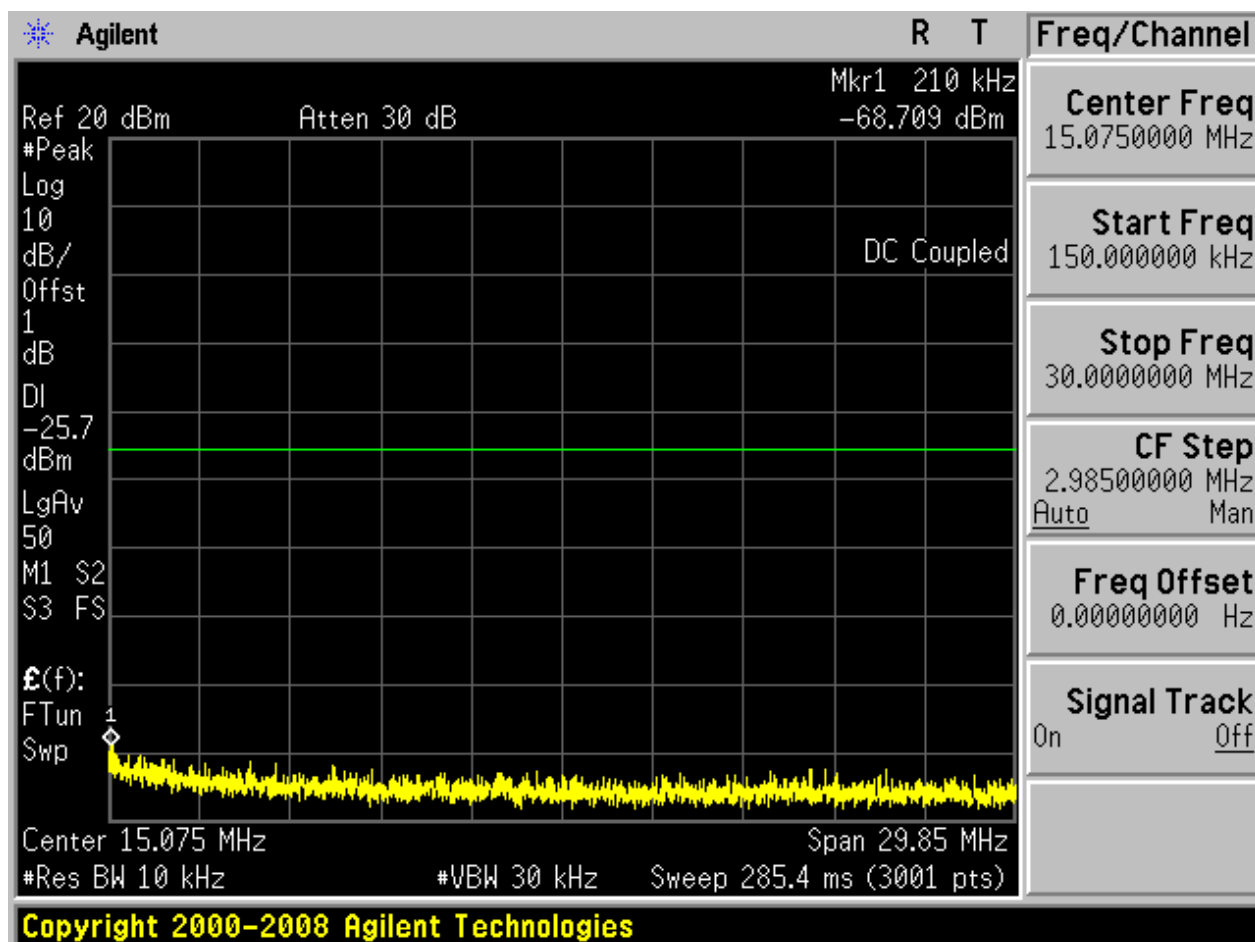
Pref:

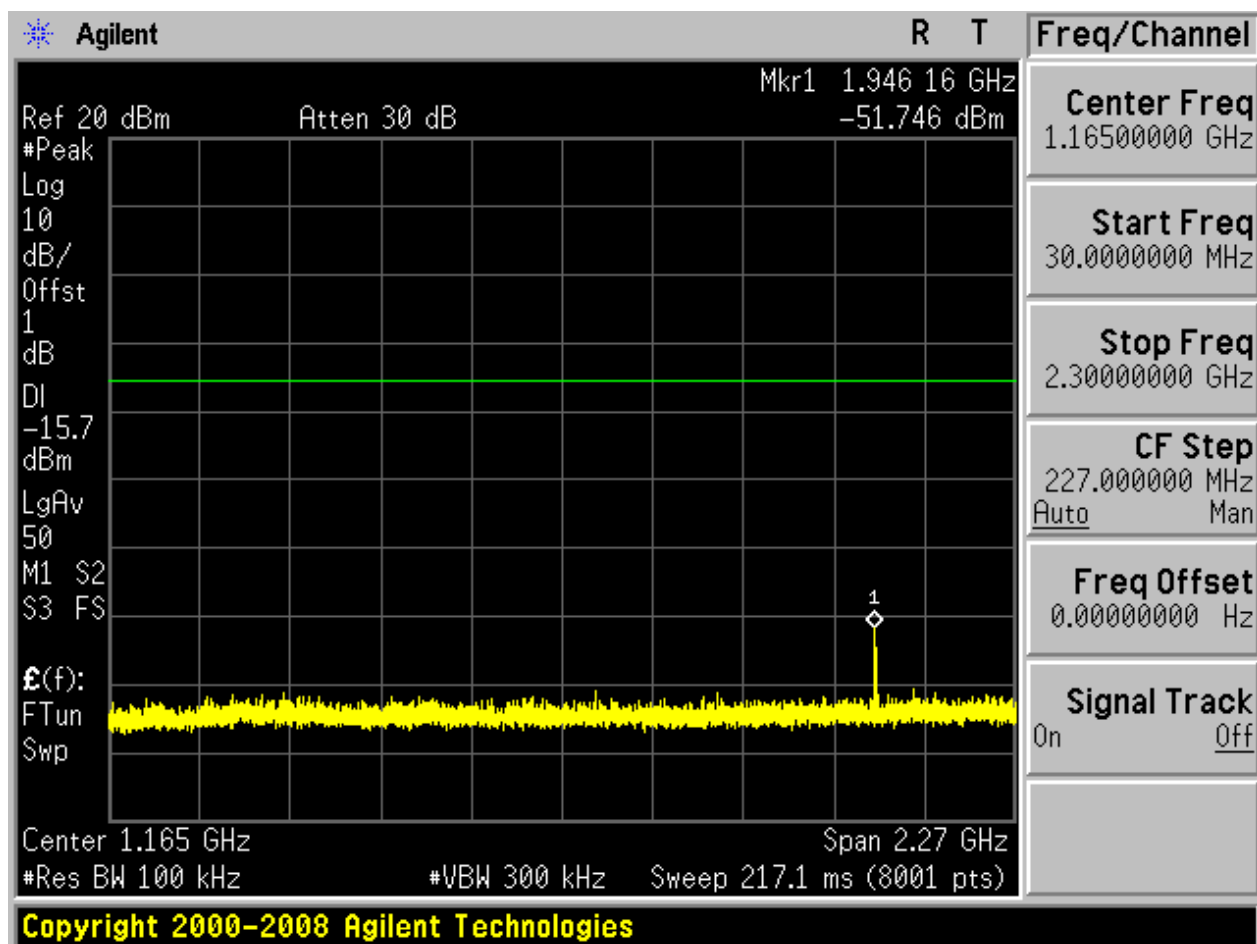


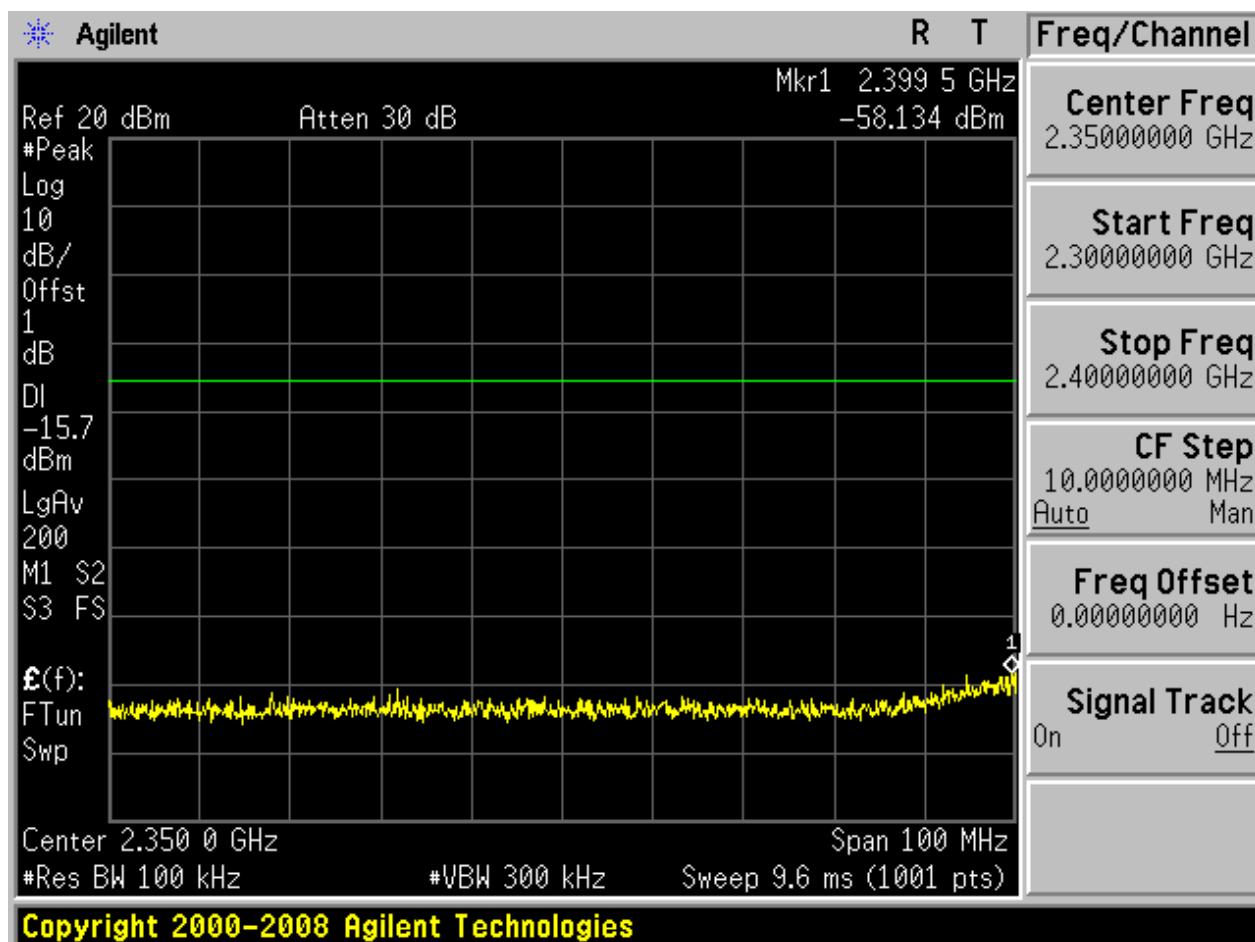


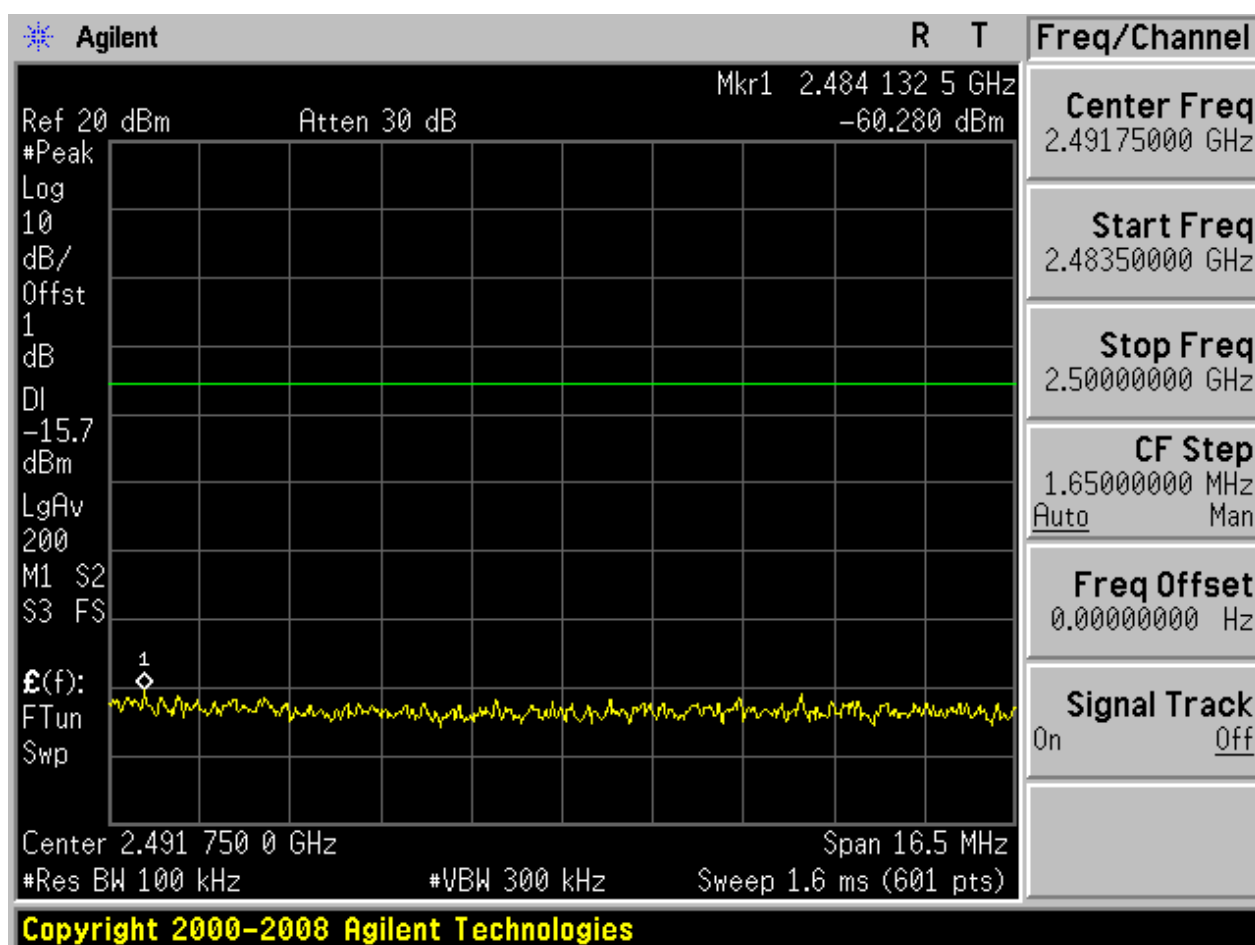
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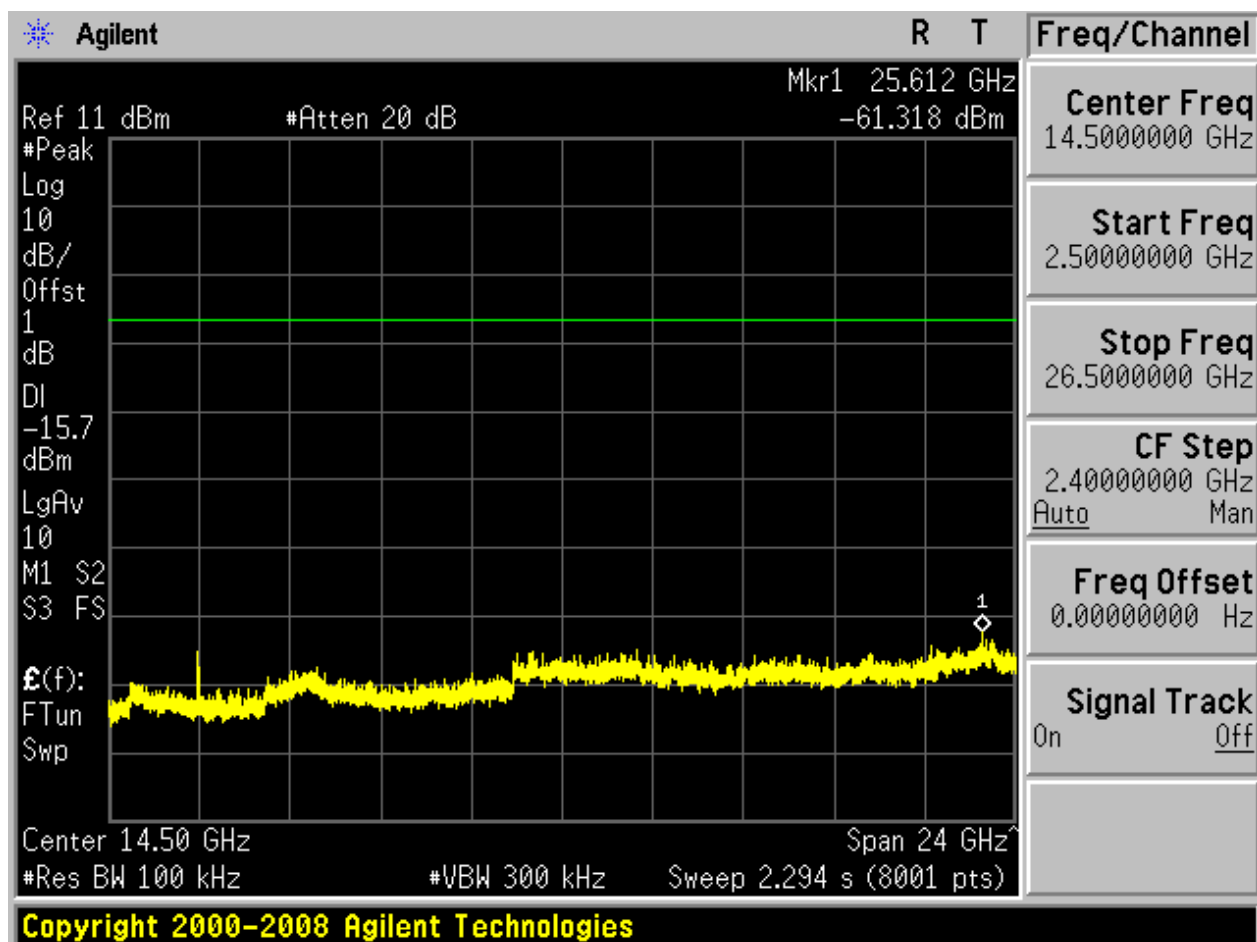






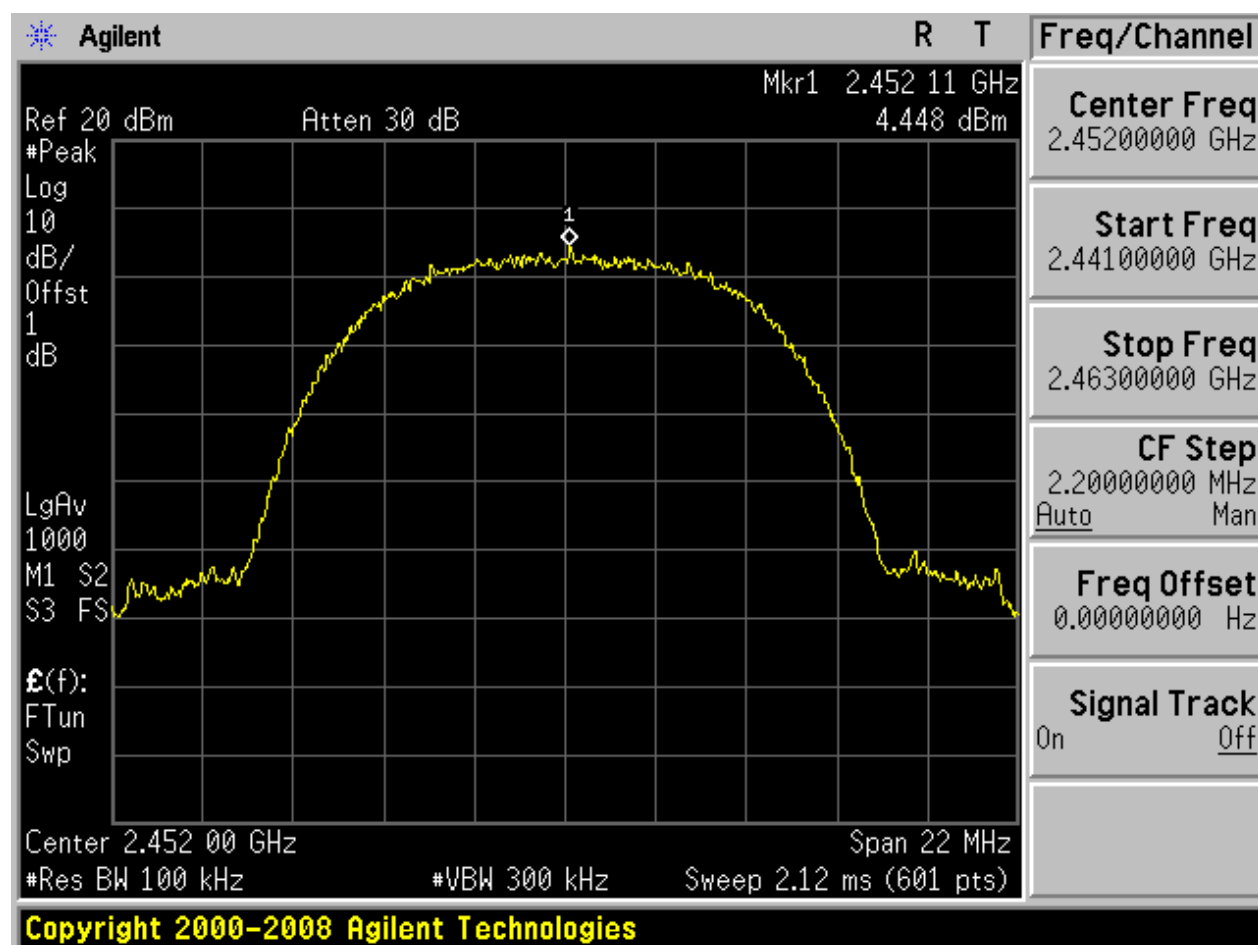






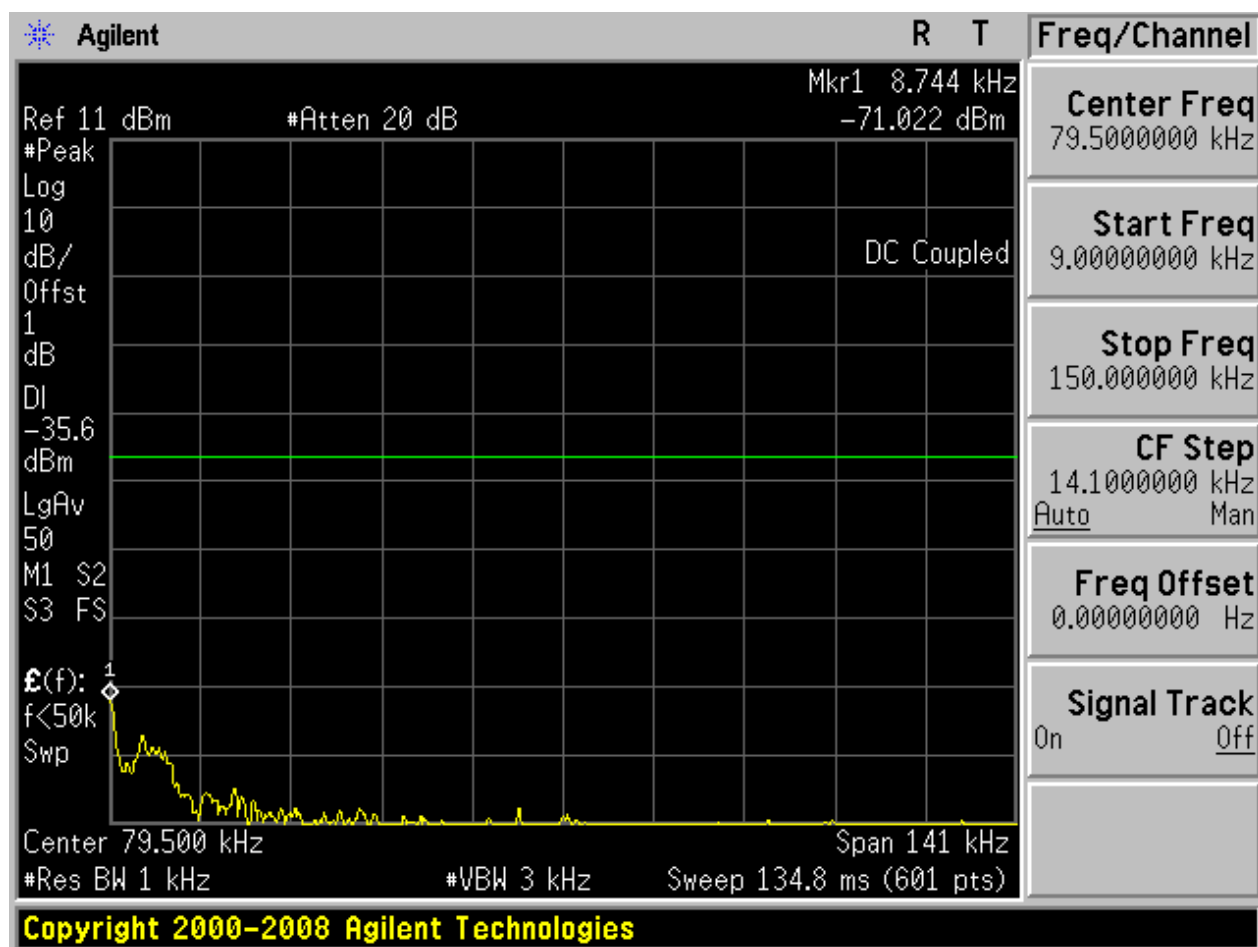
4.5 11B_H@Ant 1

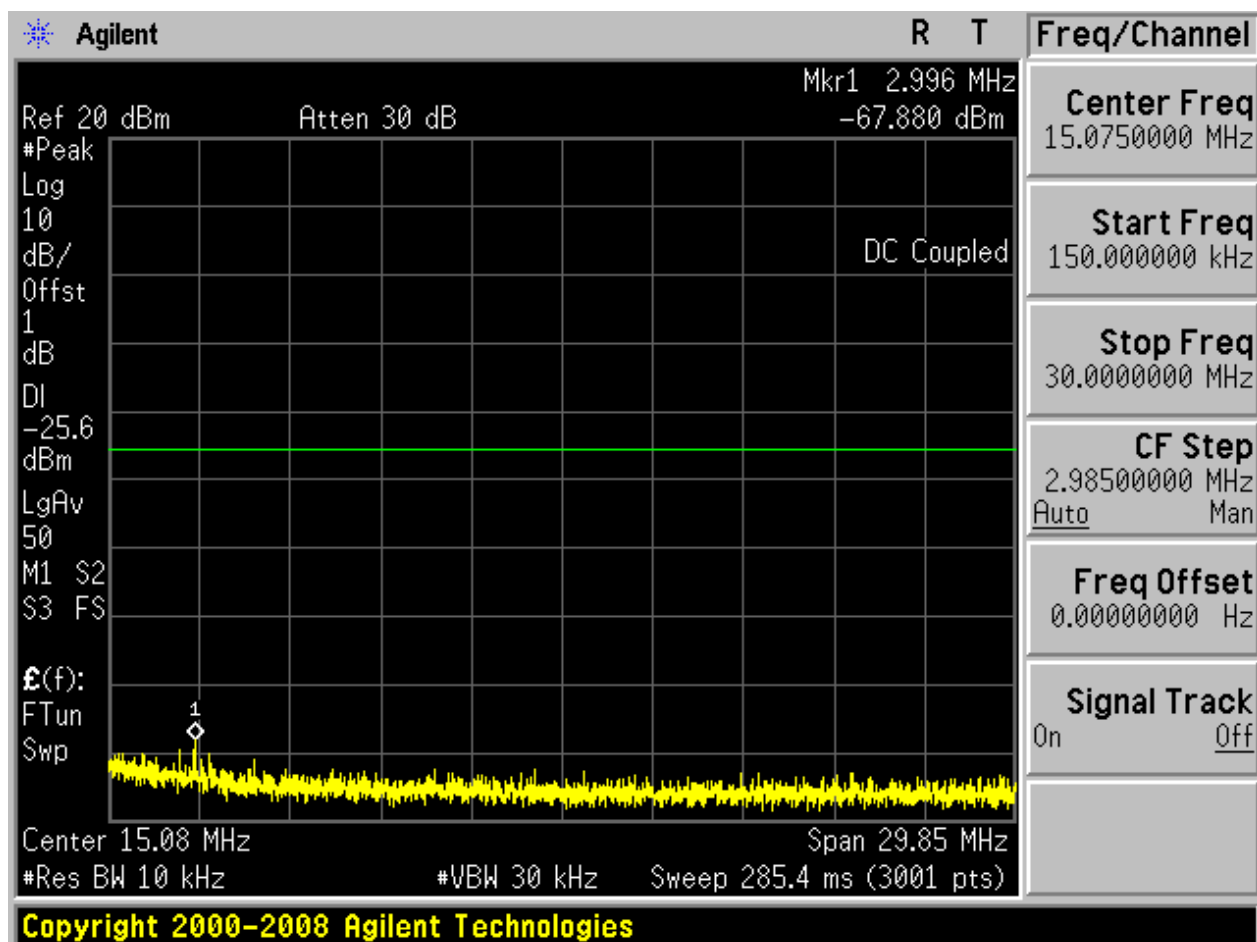
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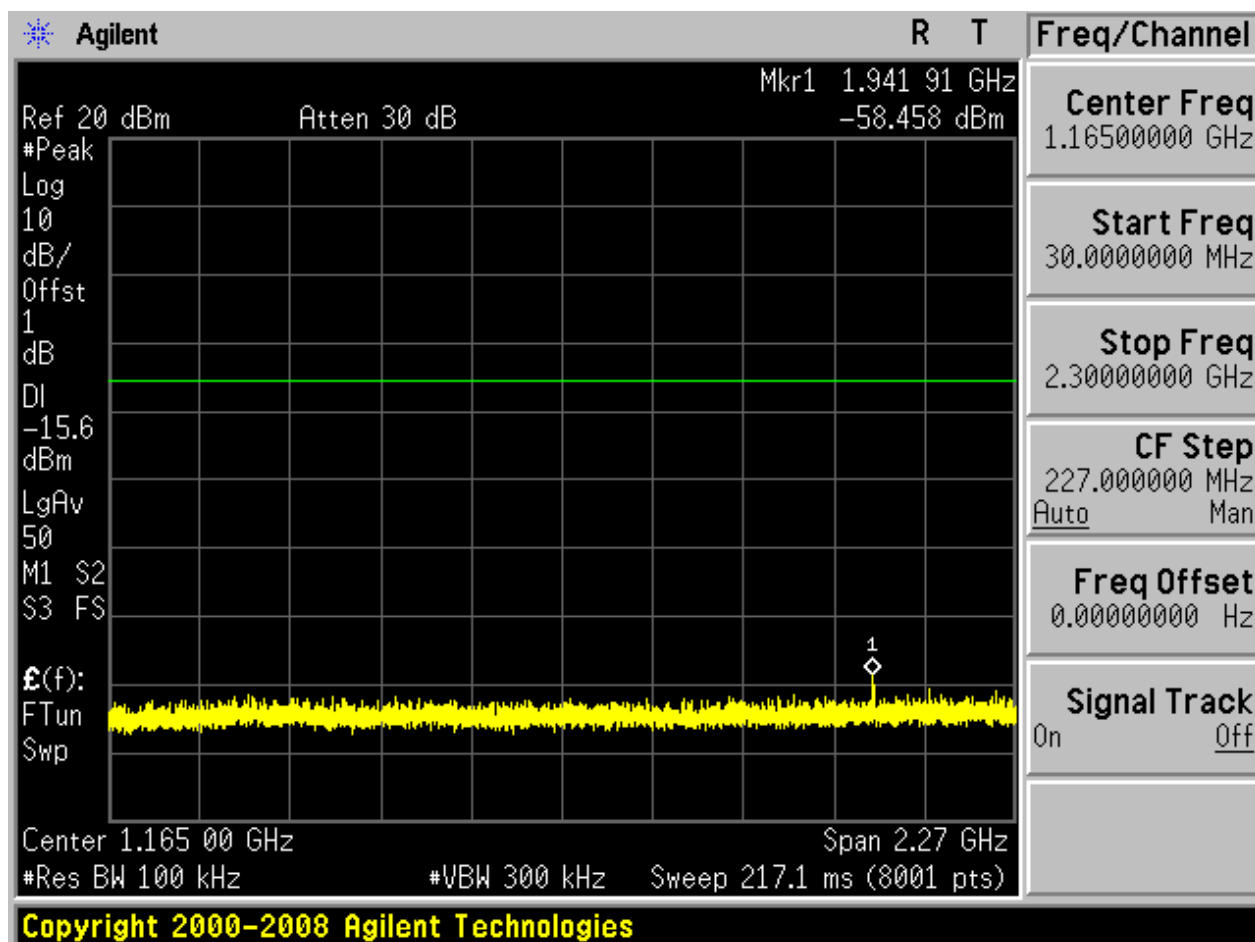


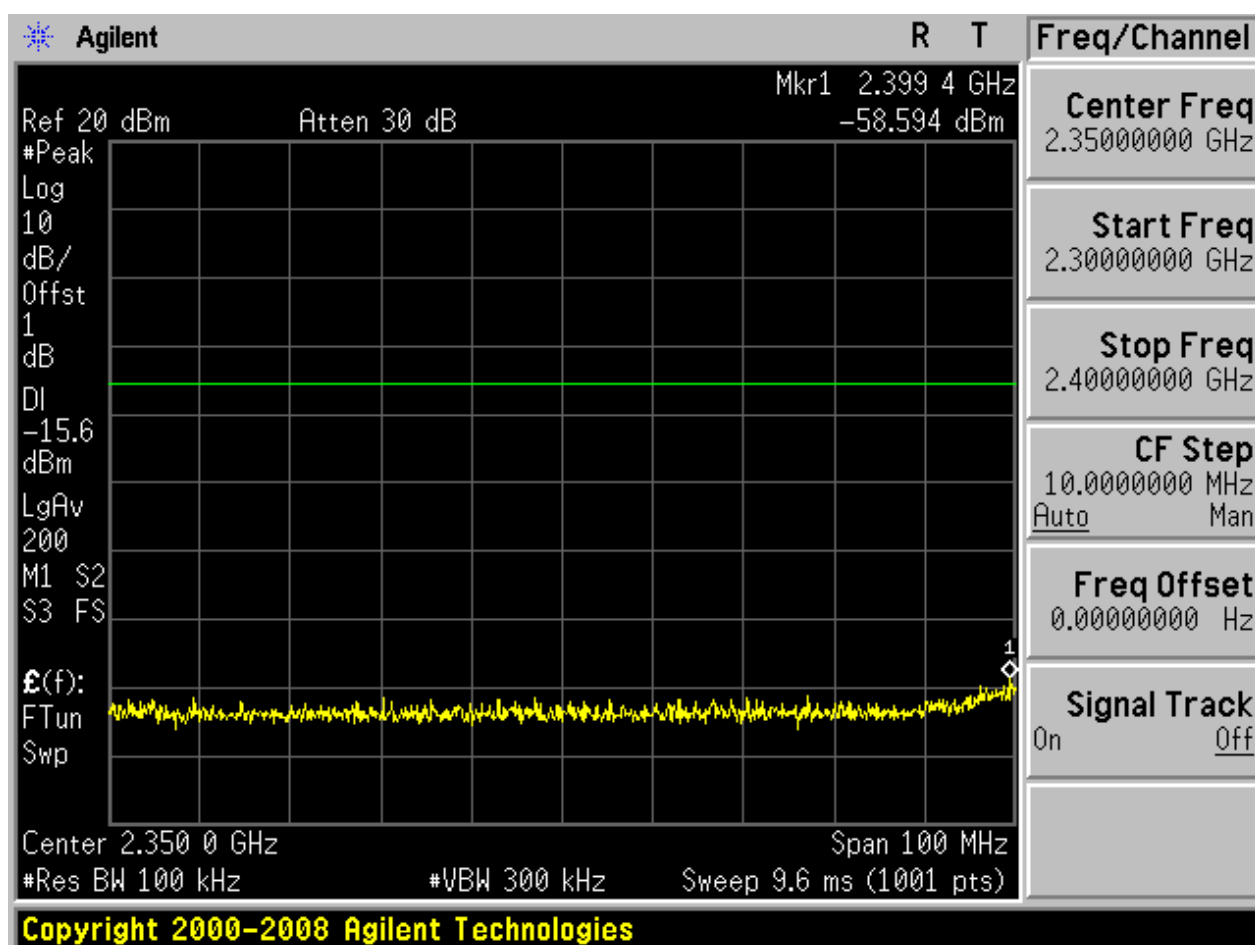


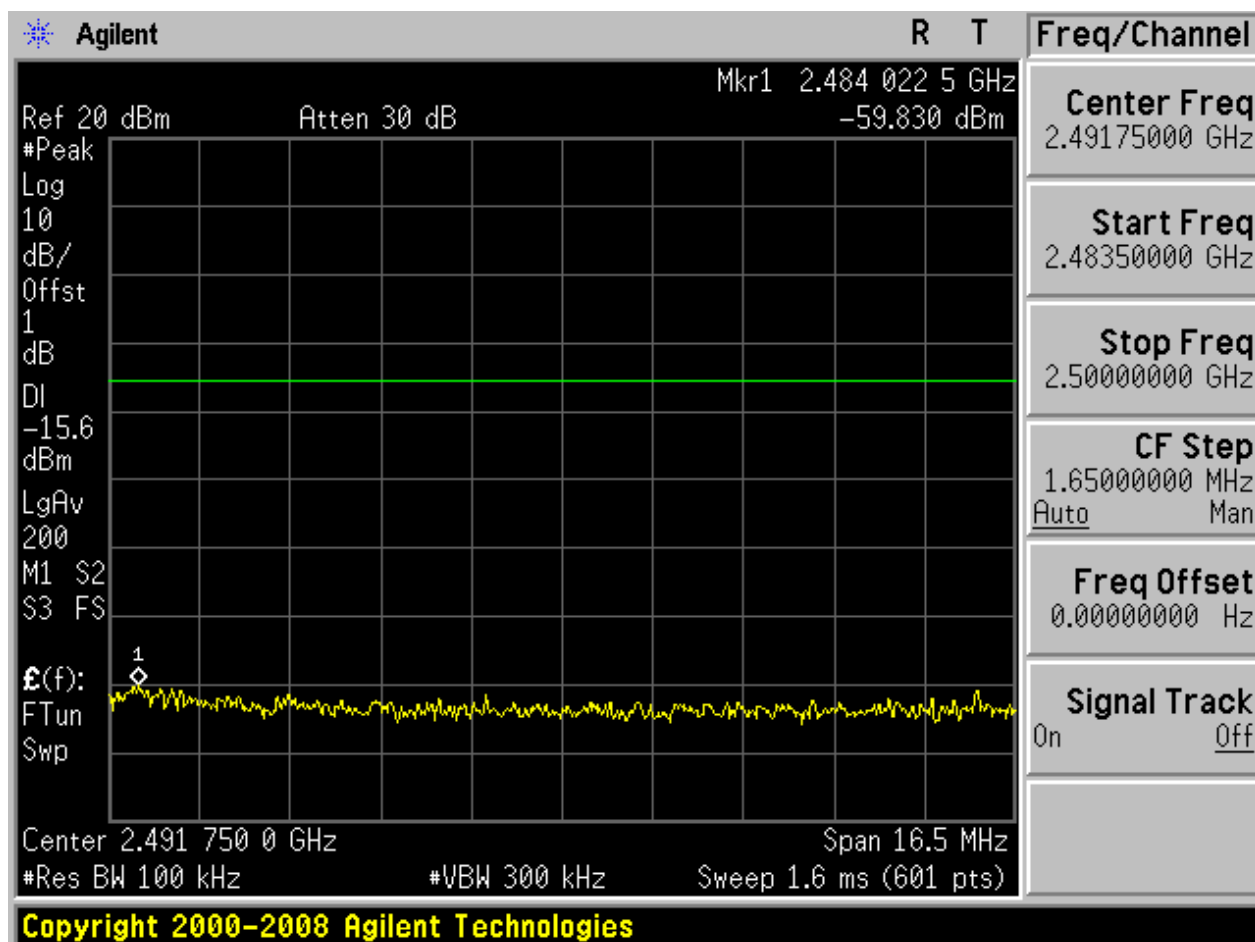
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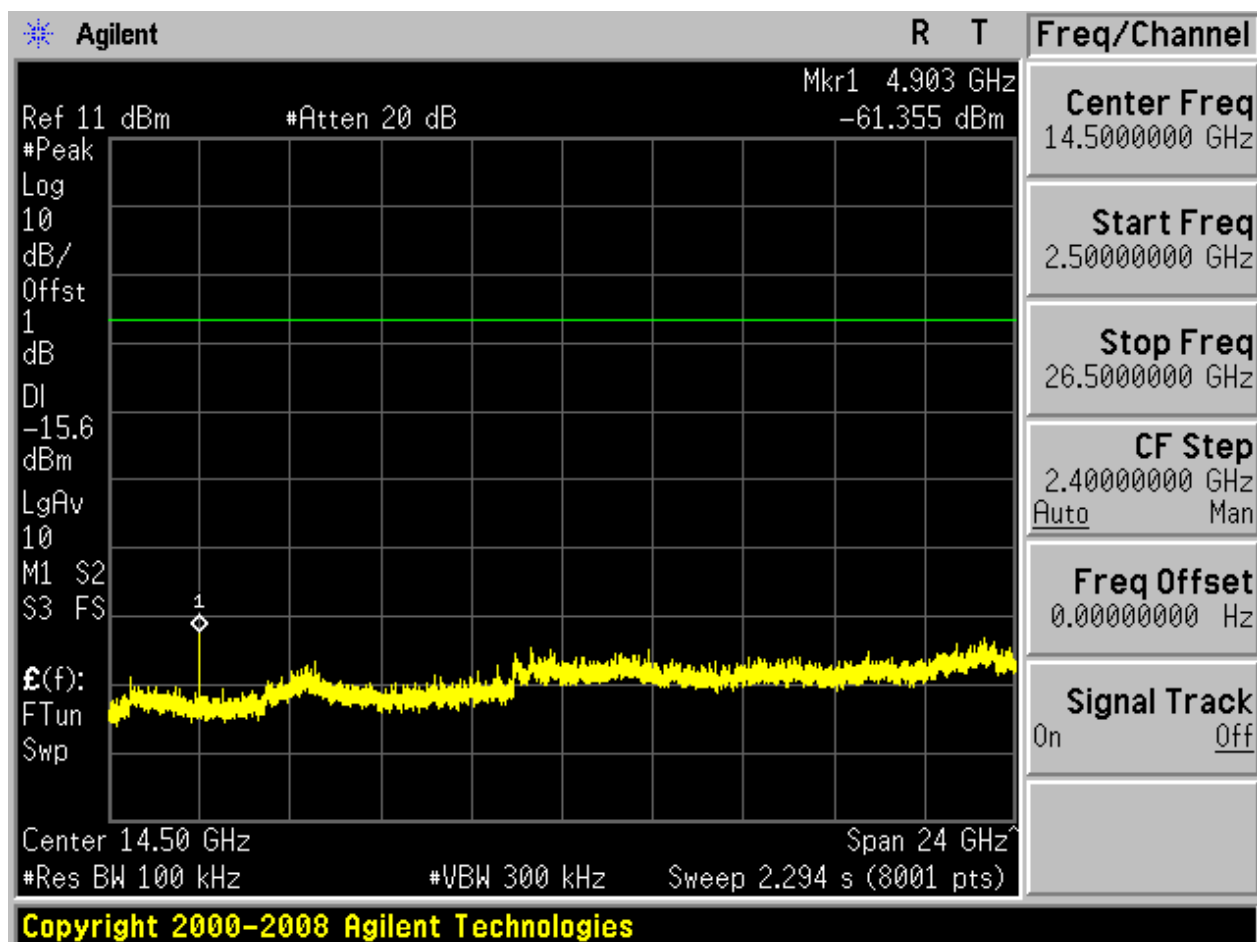






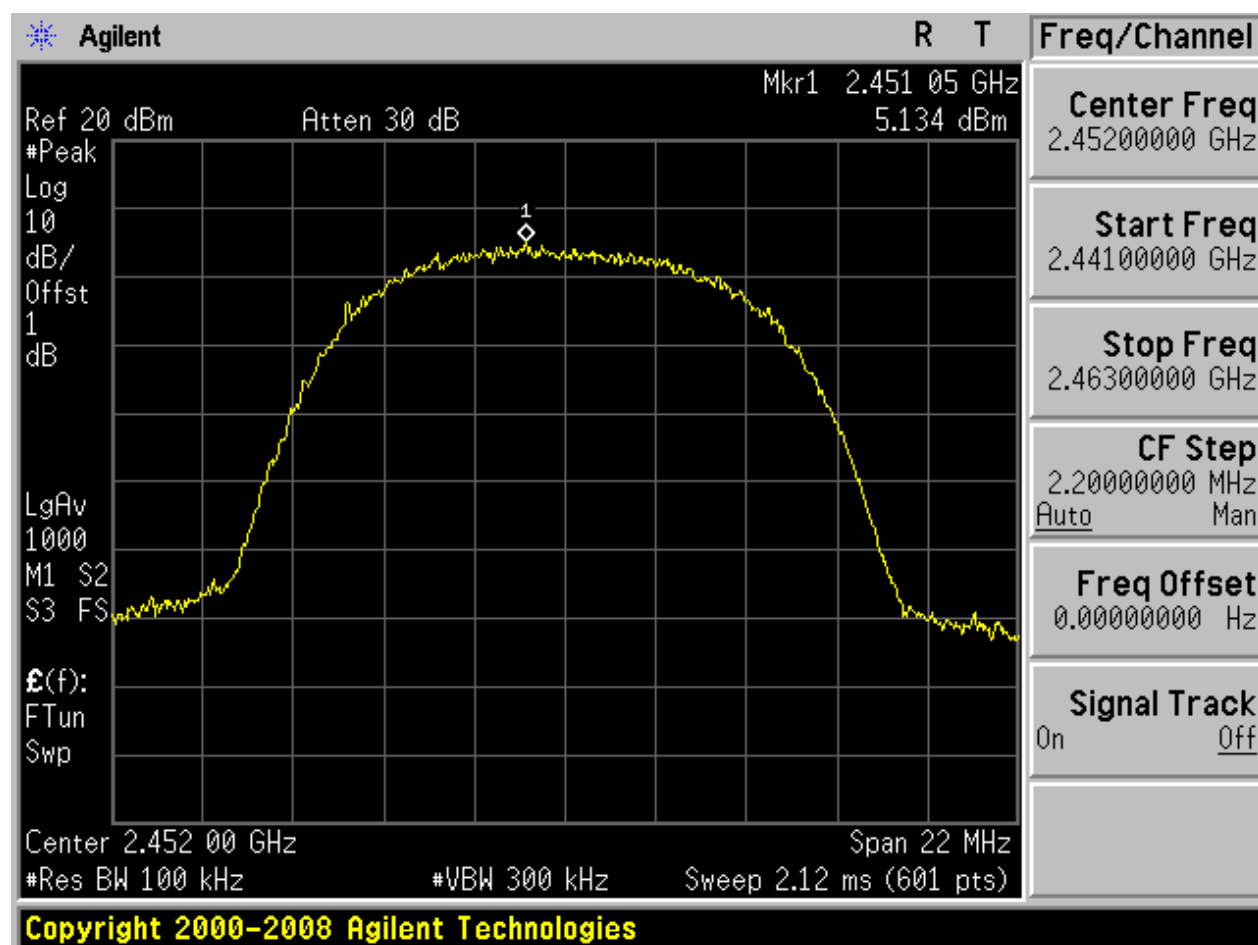






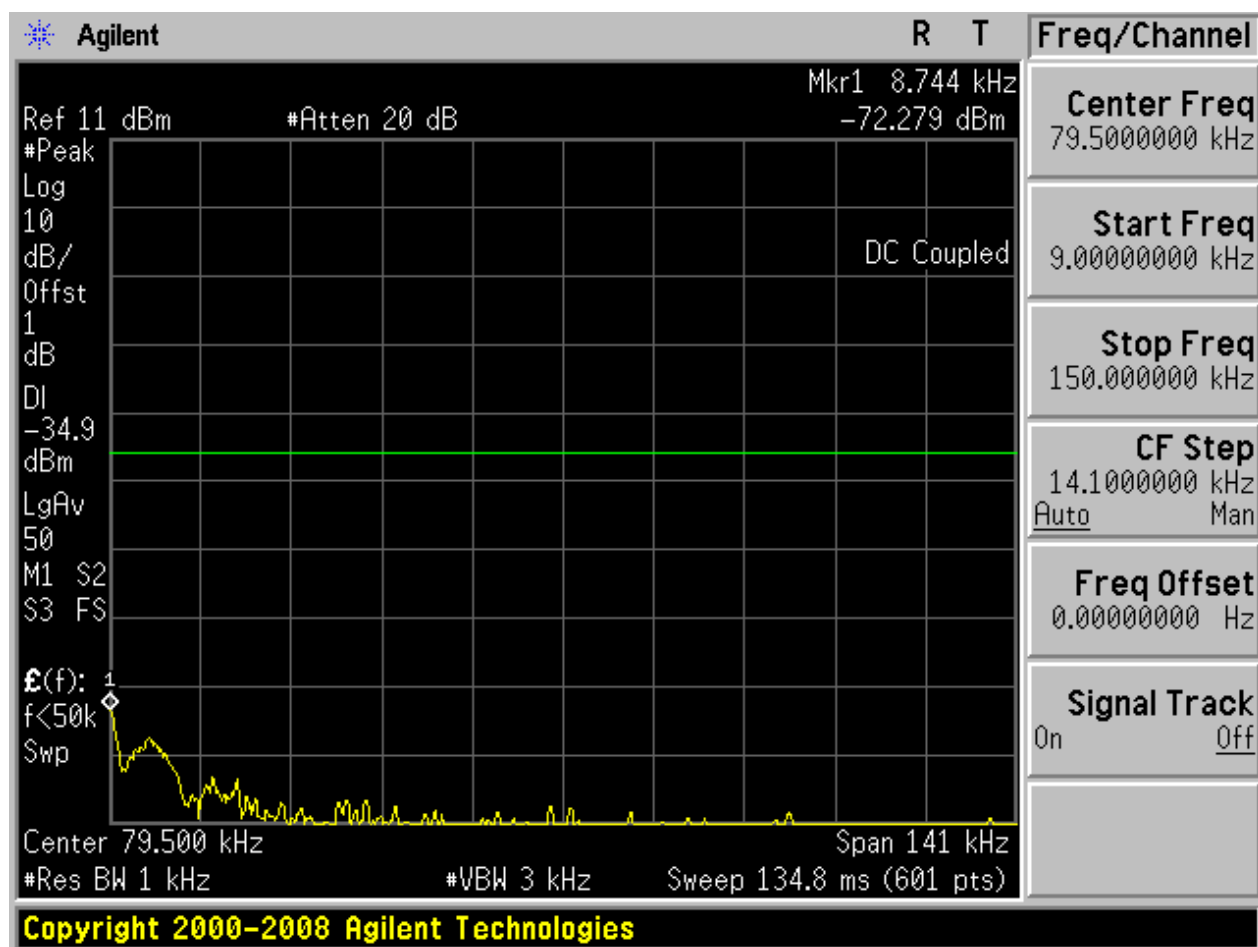
4.6 11B_H@Ant 2

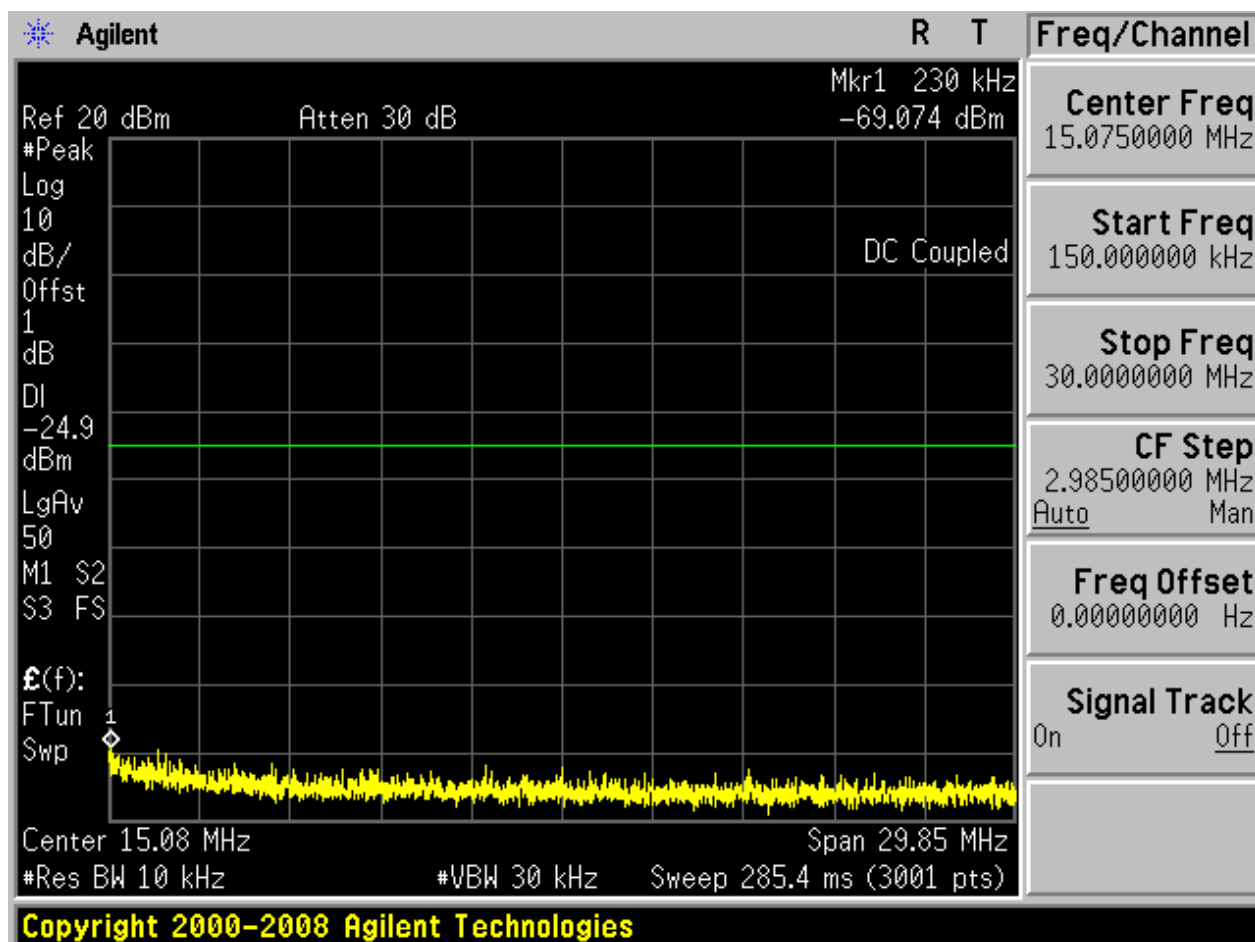
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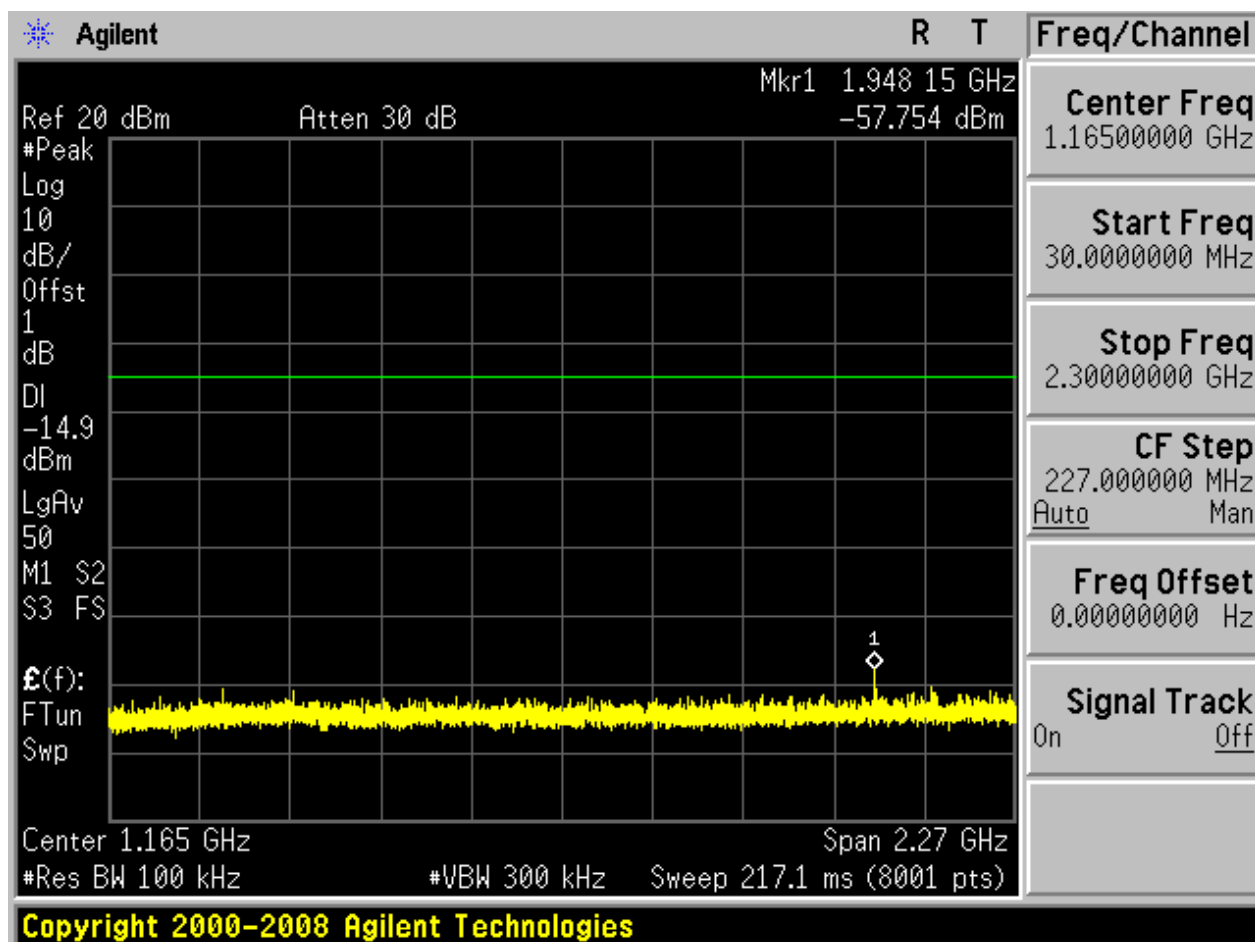


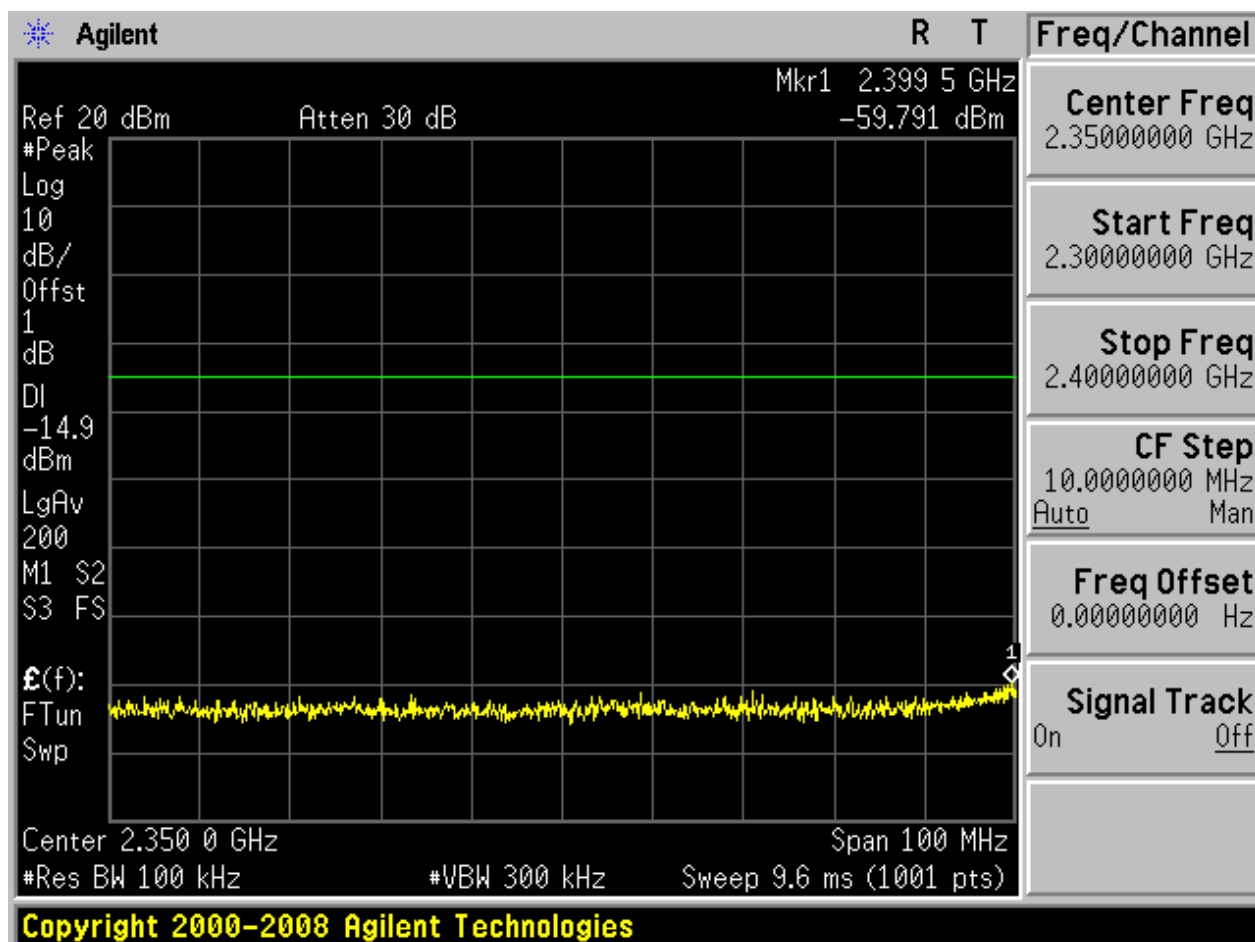


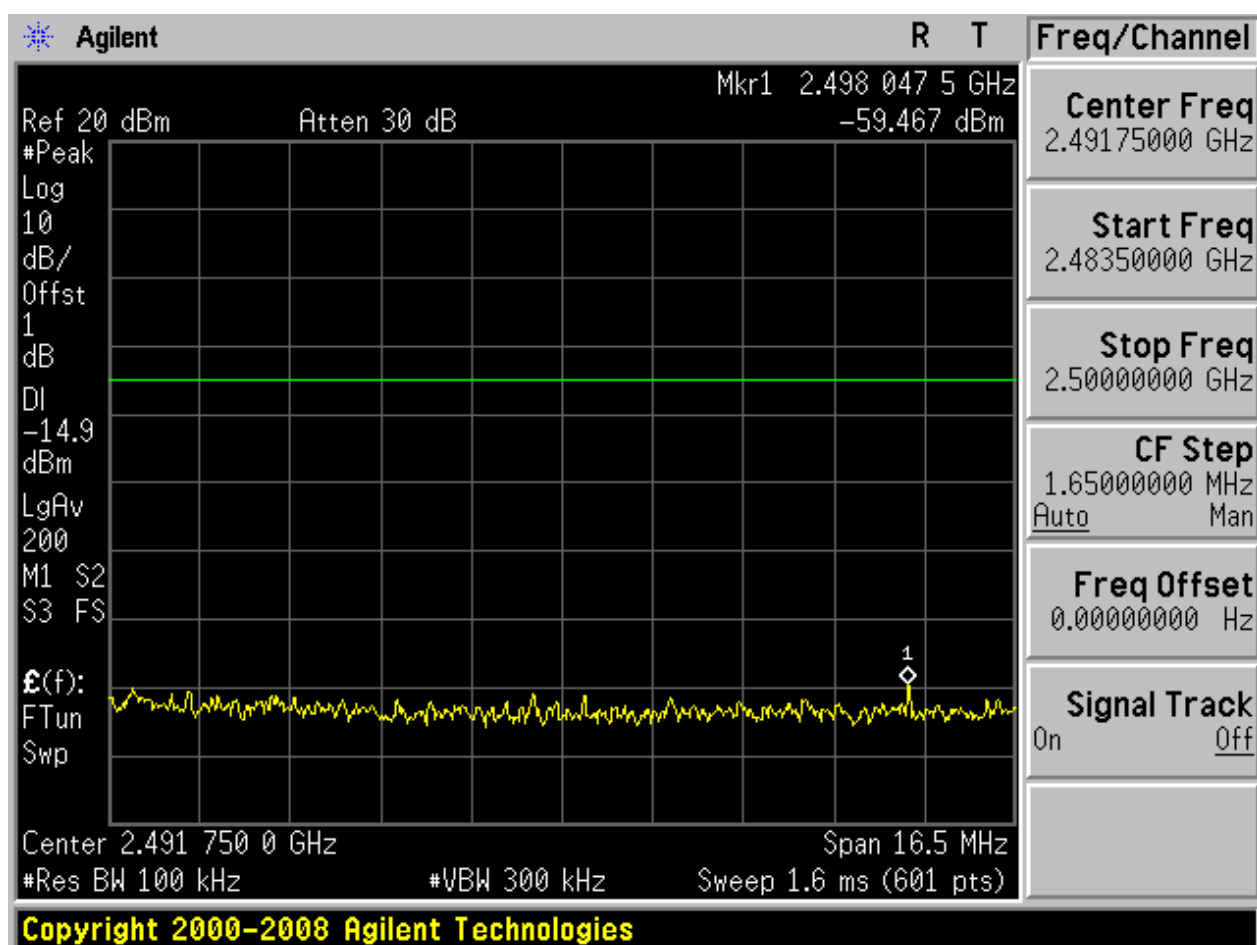
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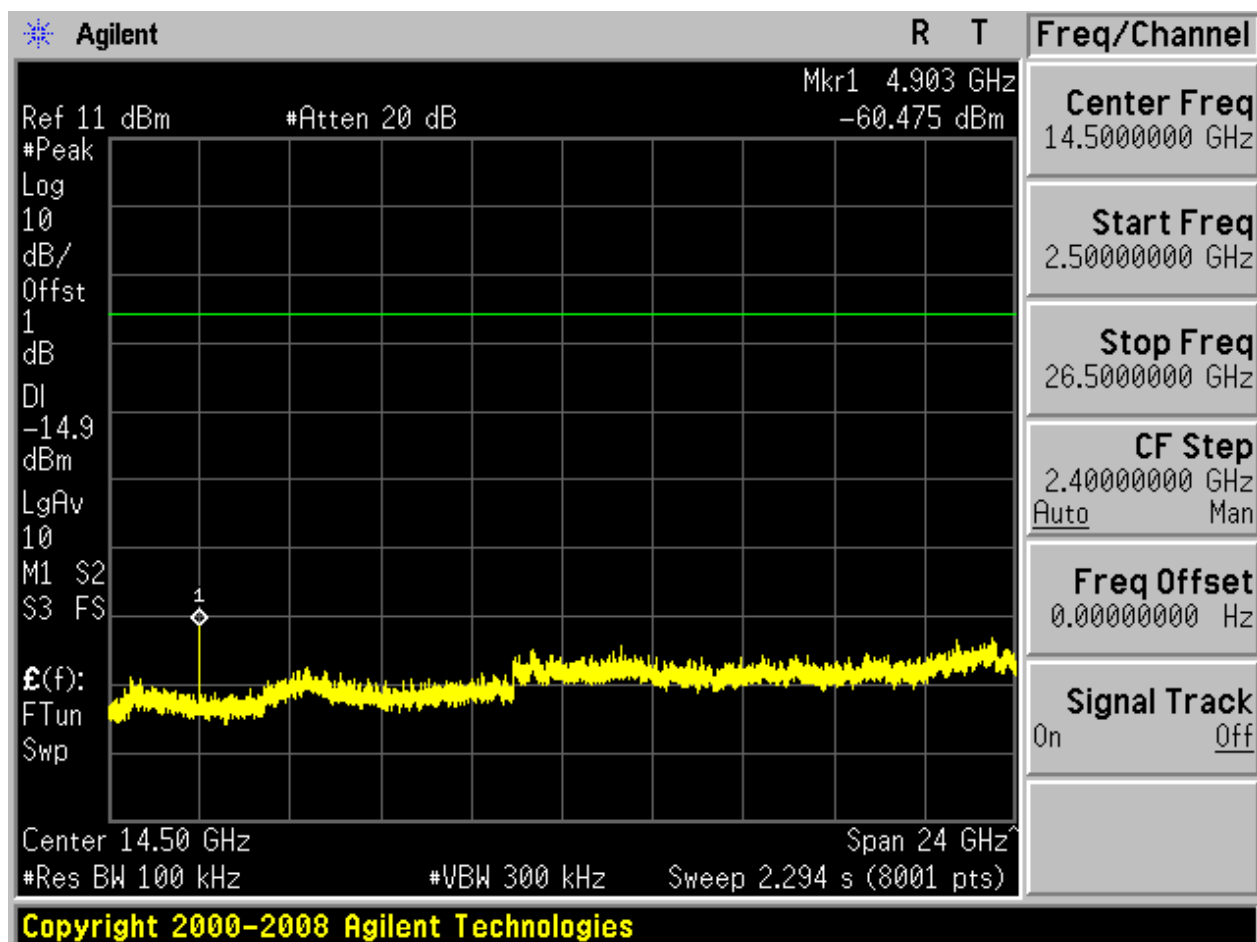






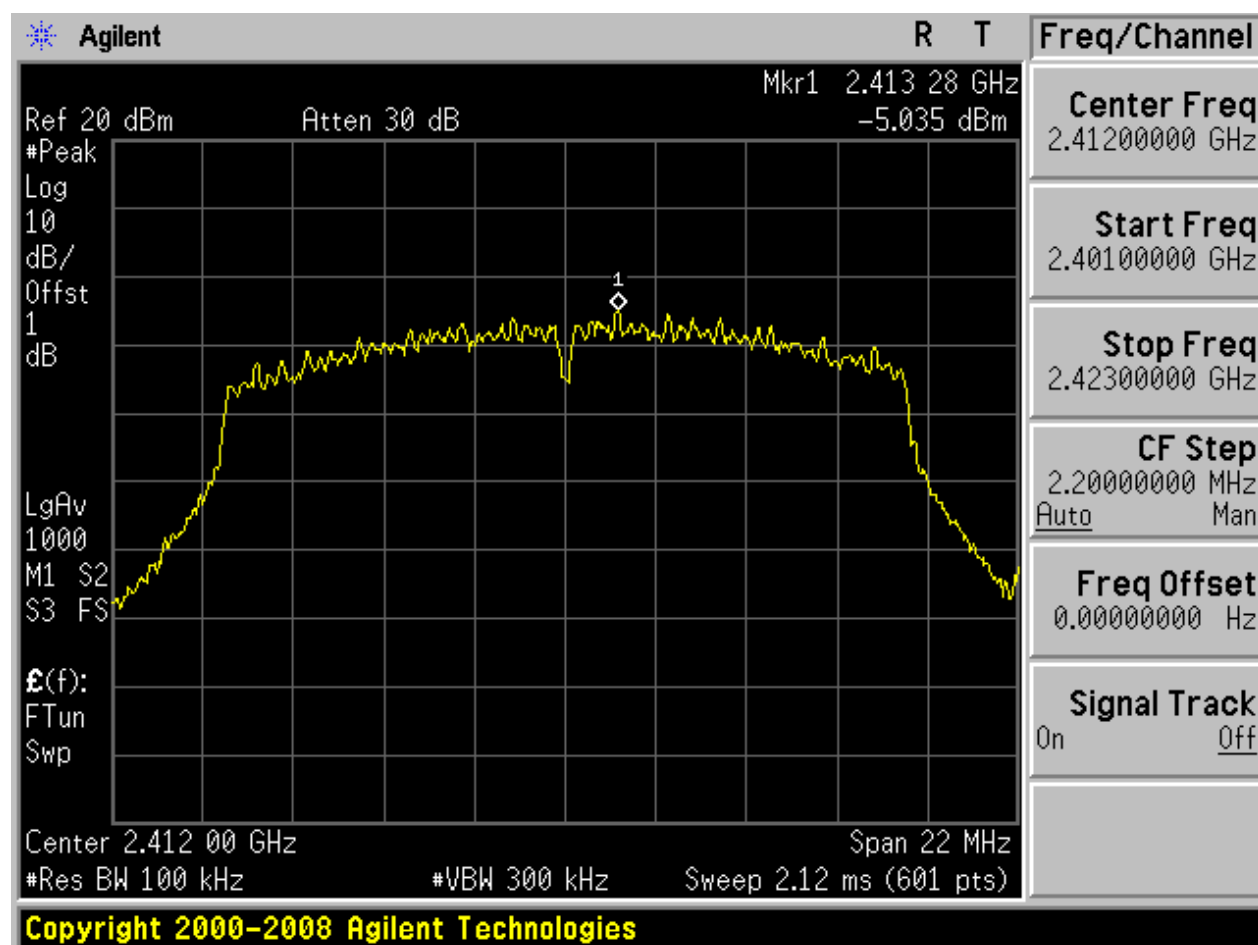






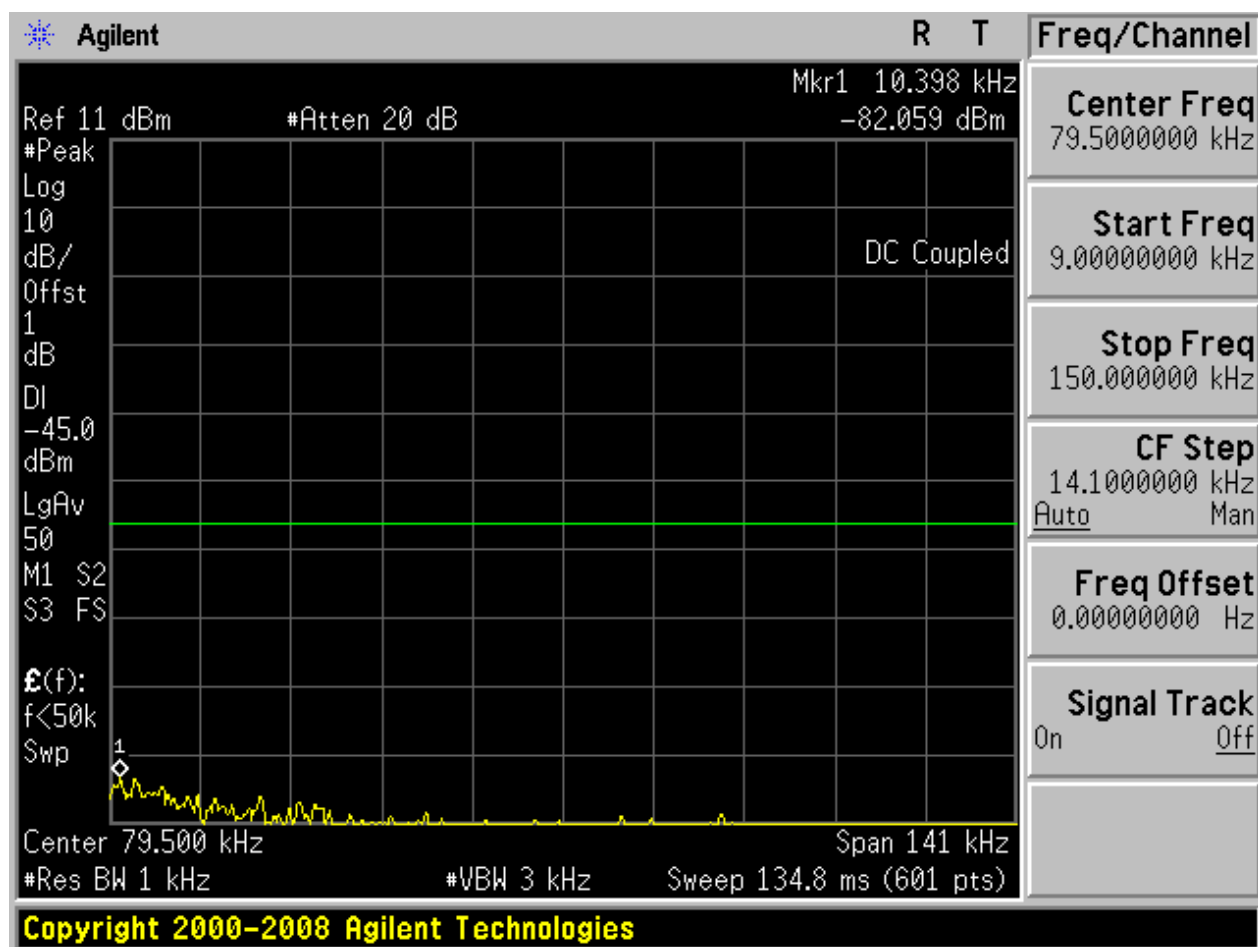
4.7 11G_L@Ant 1

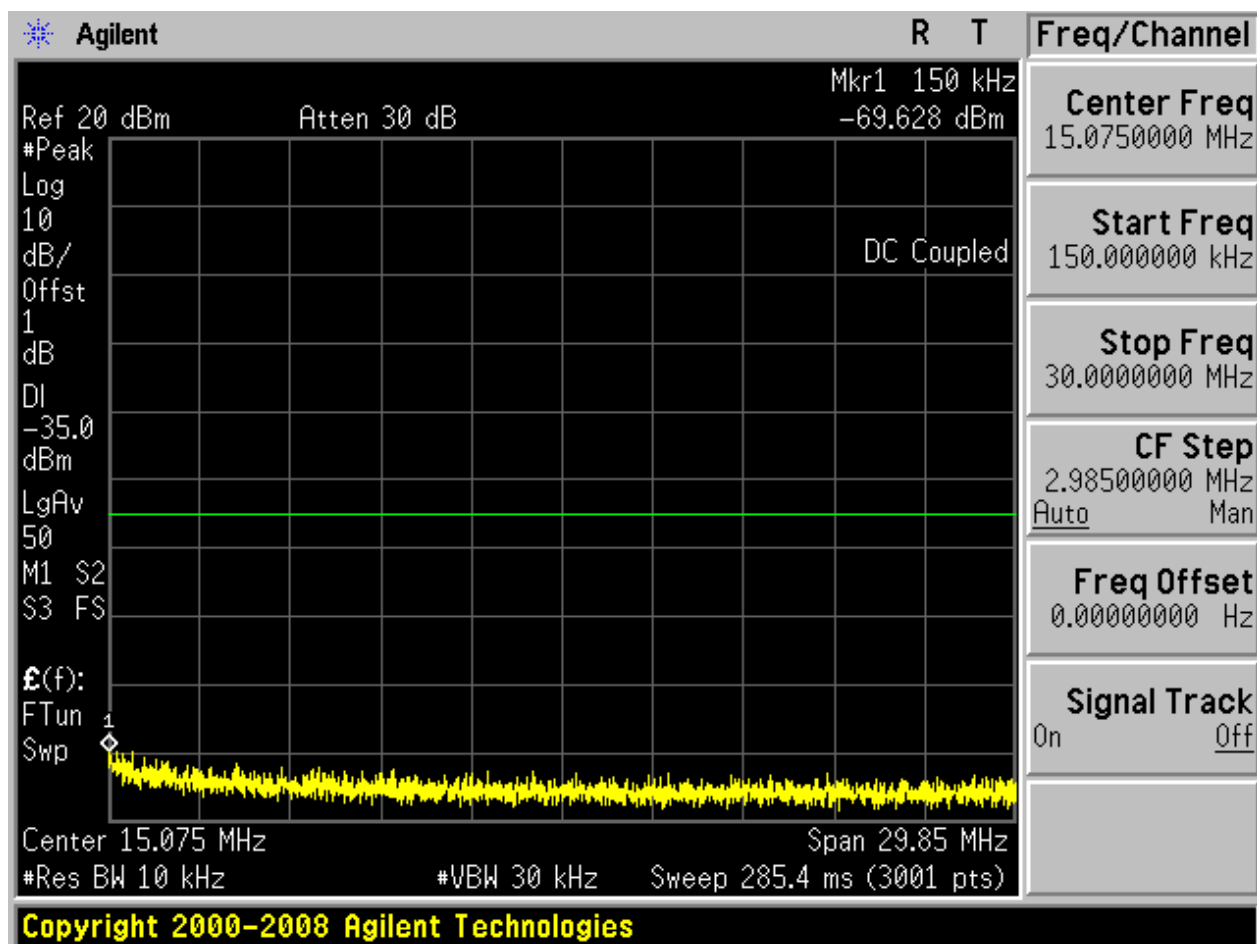
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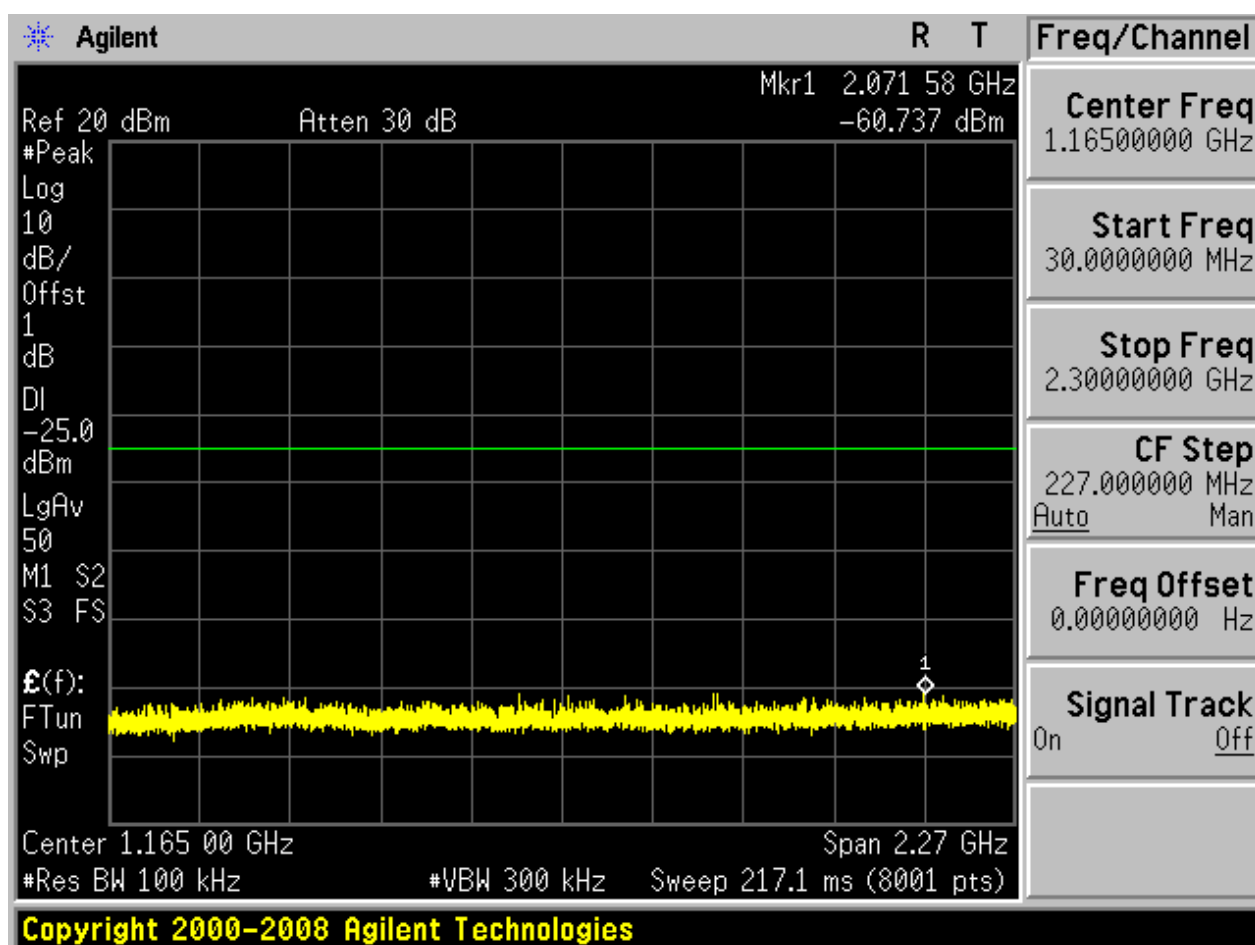


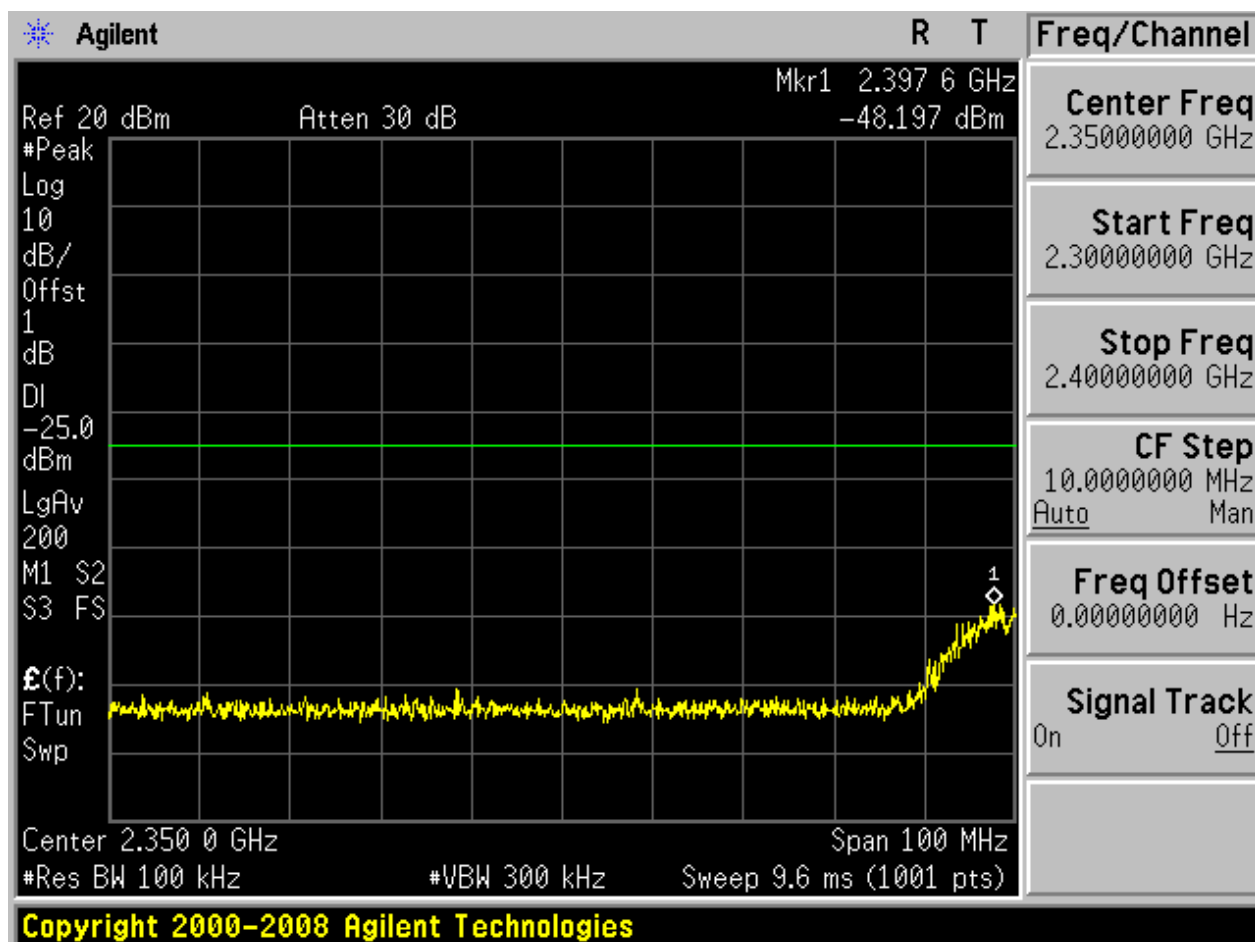


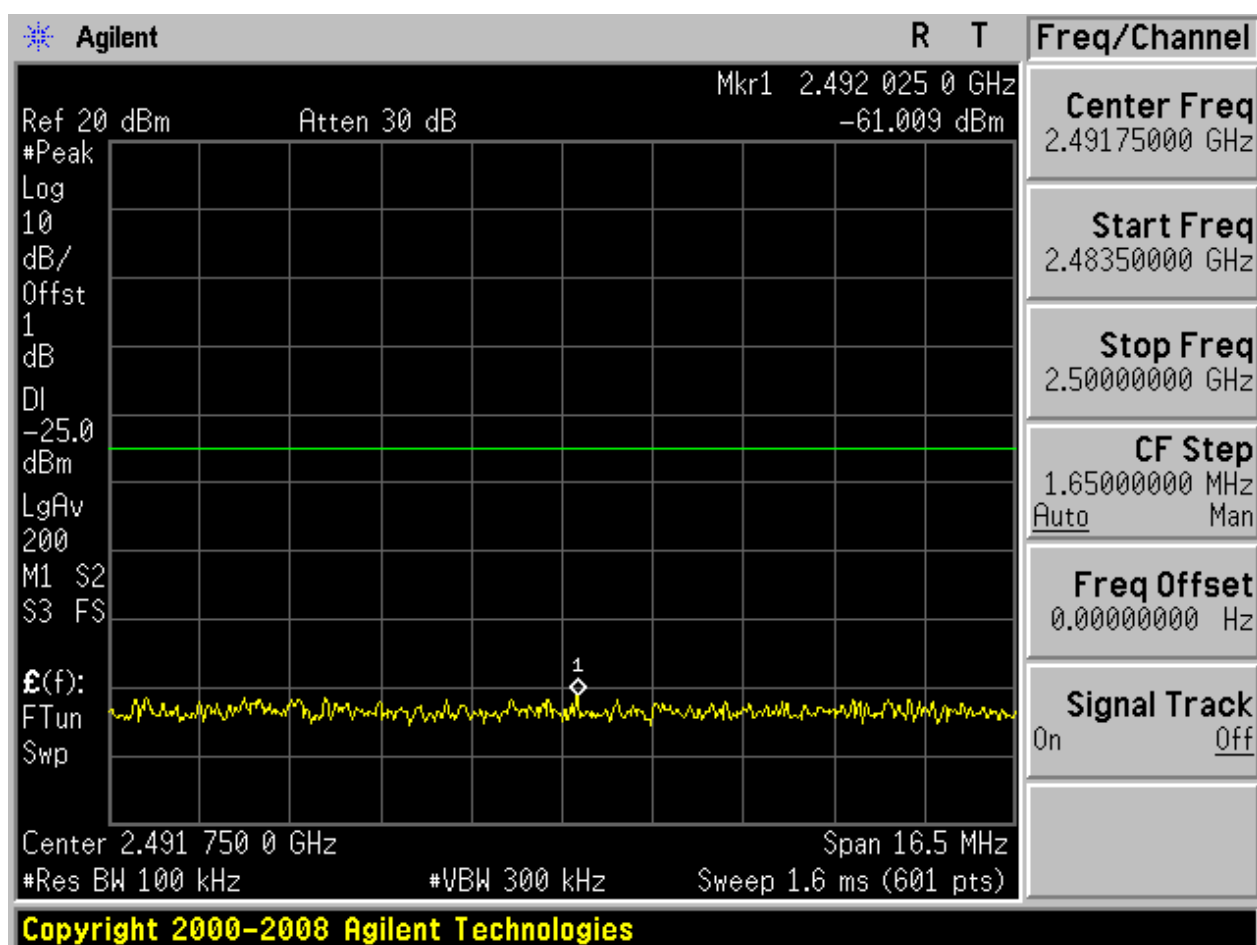
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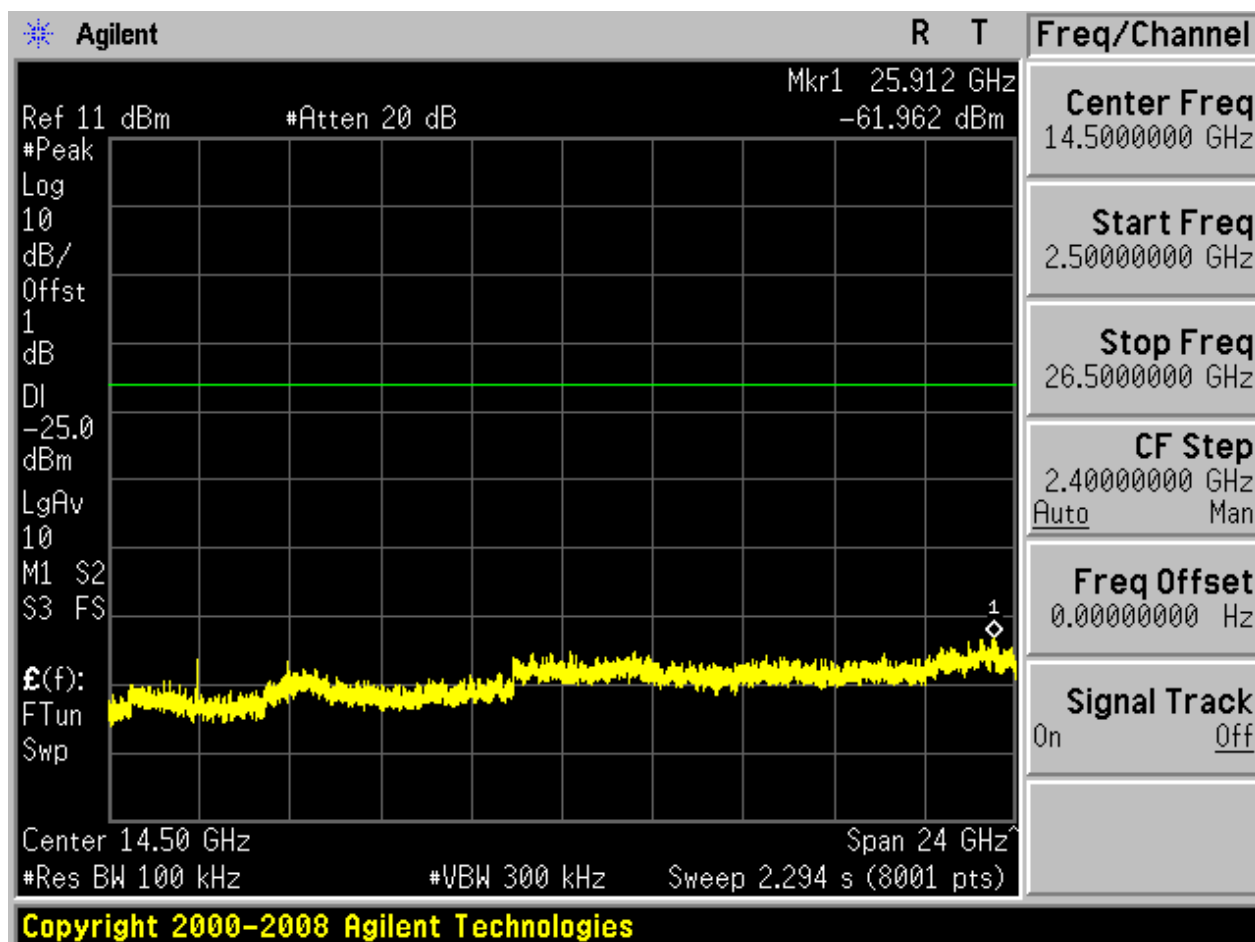








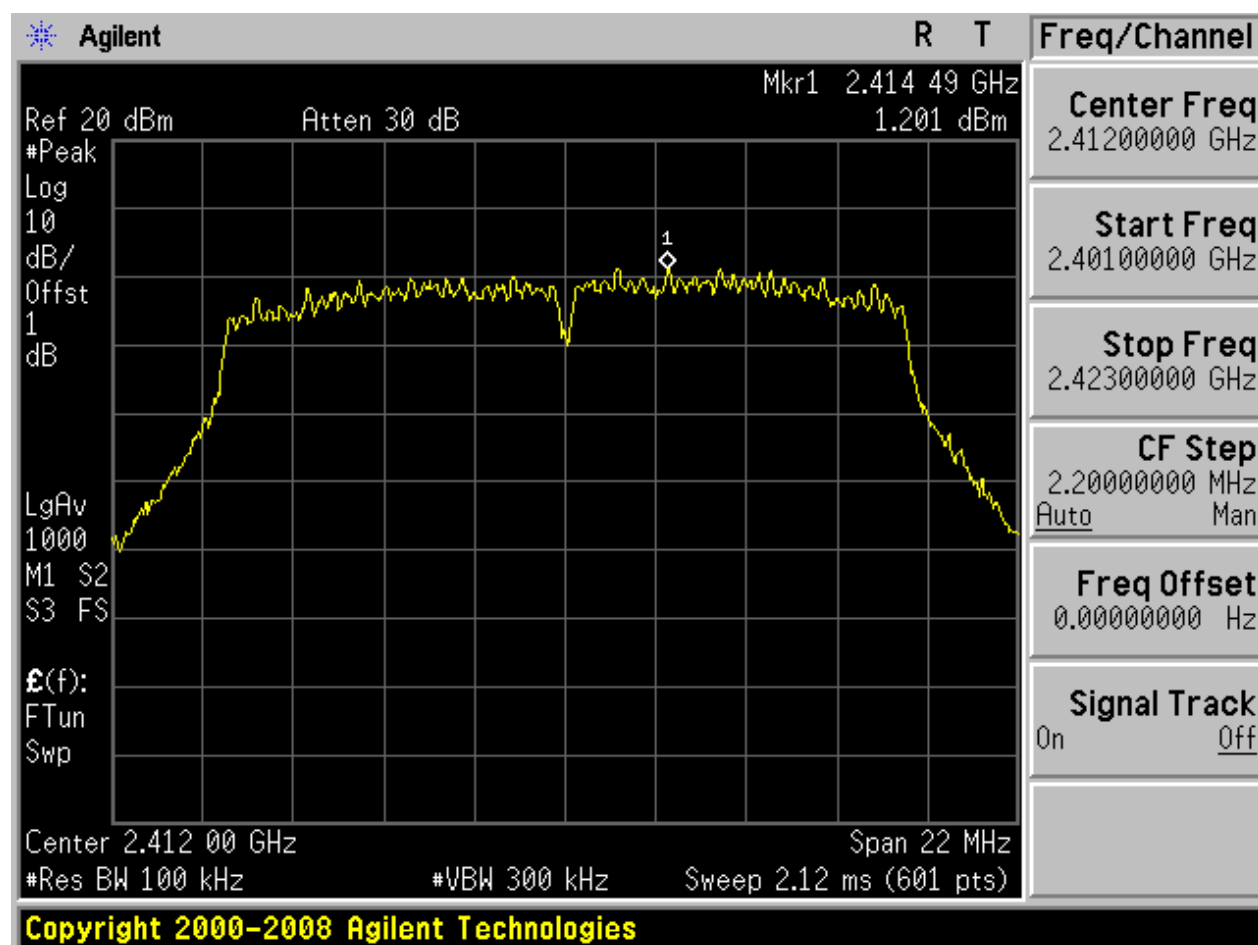






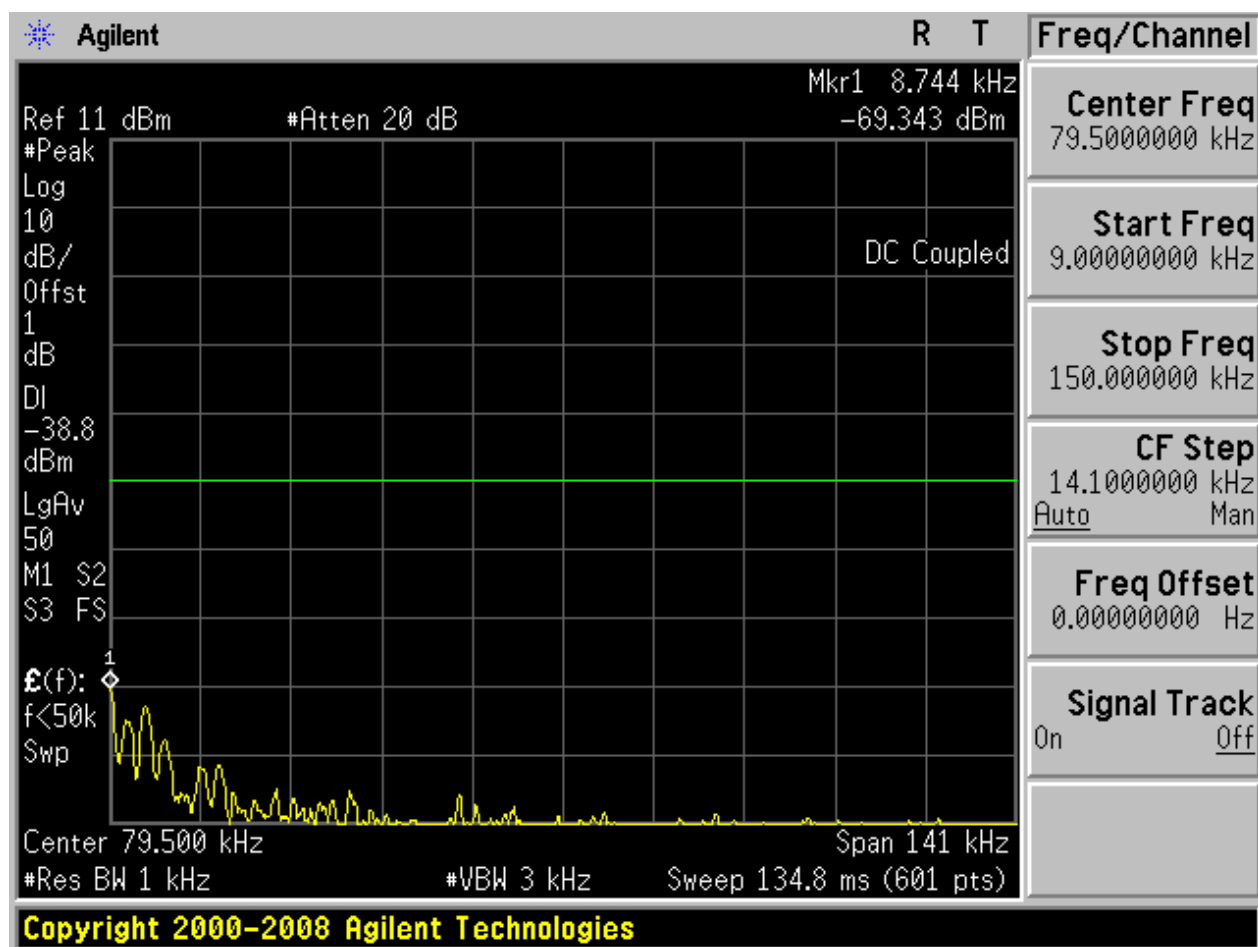
4.8 11G_L@Ant 2

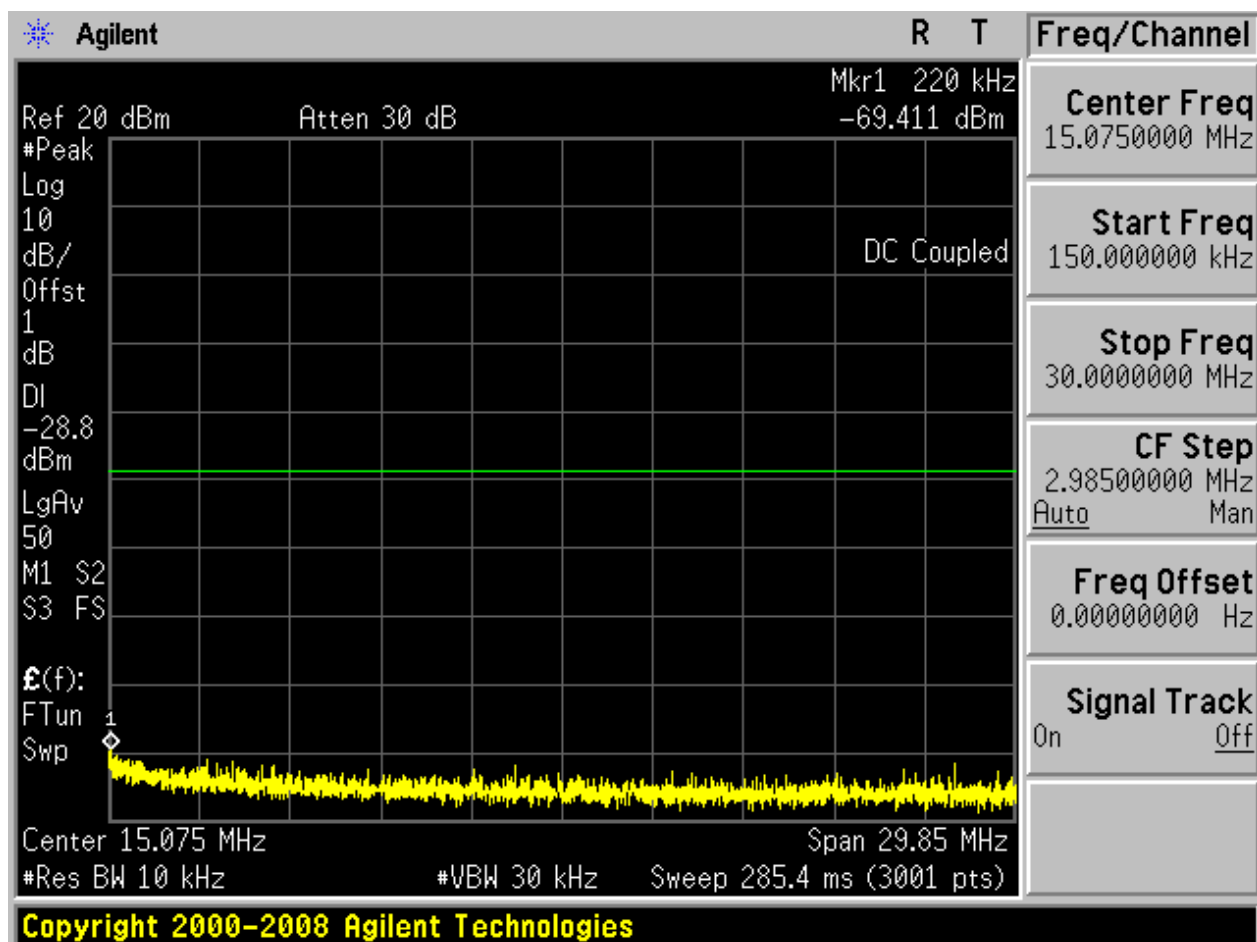
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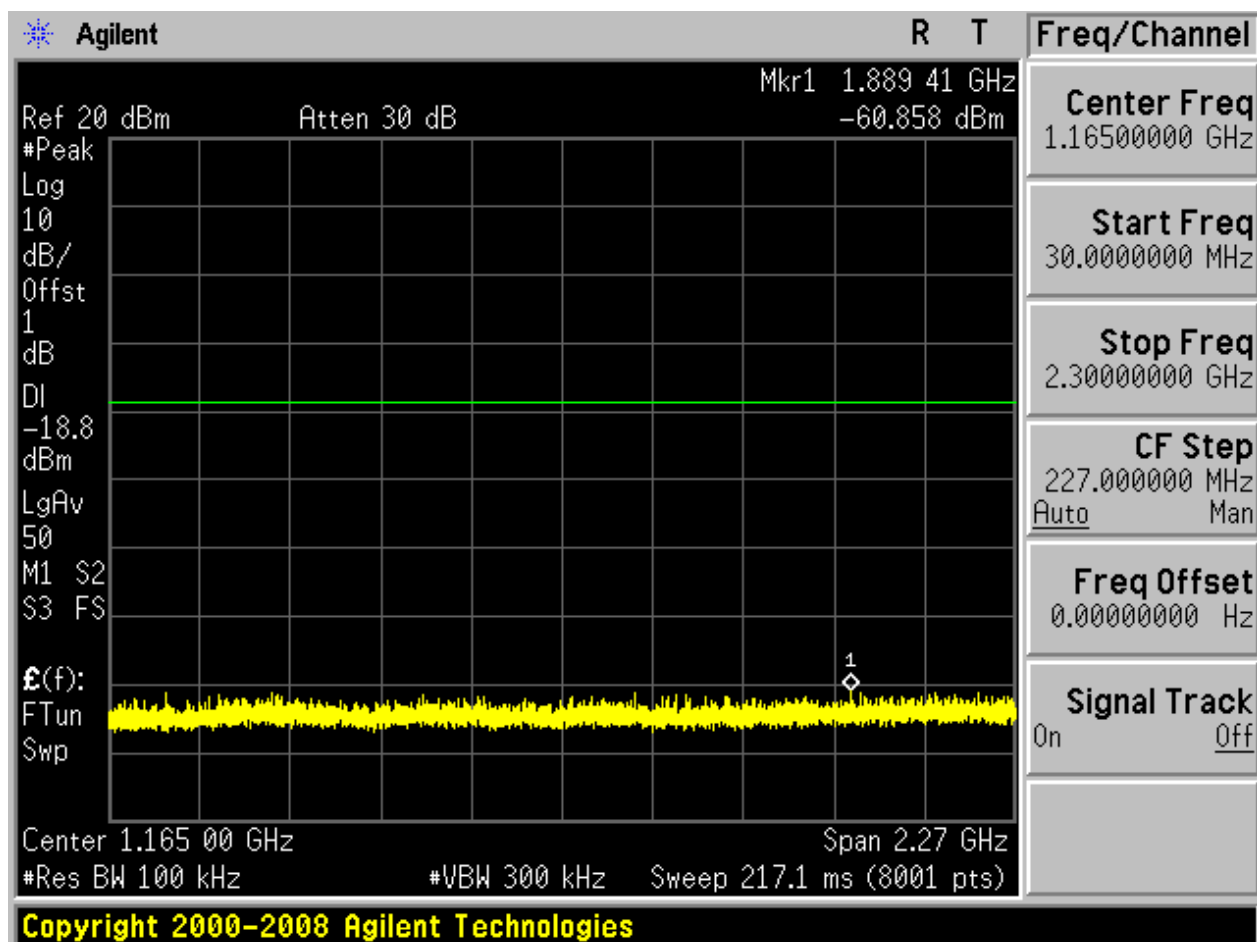


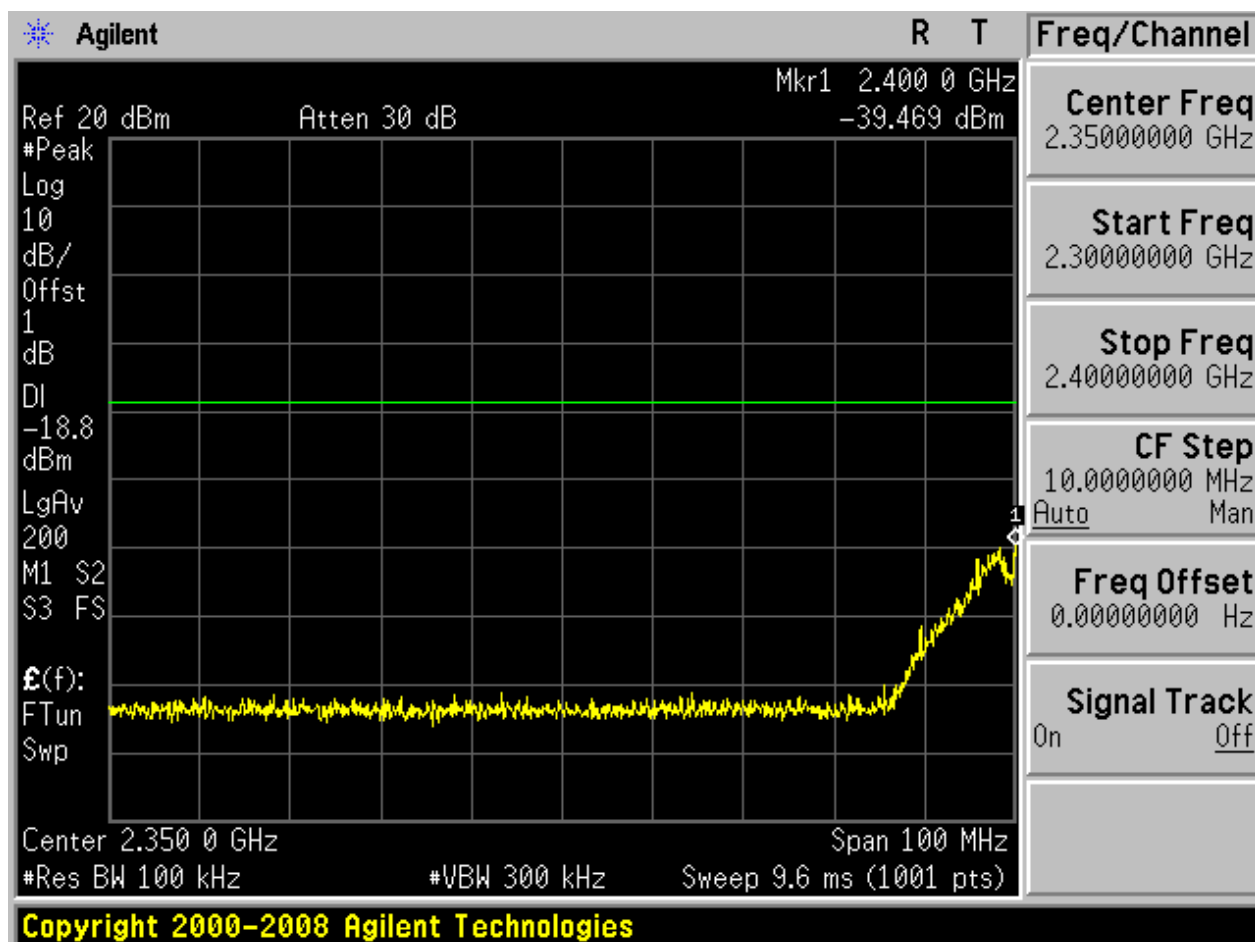


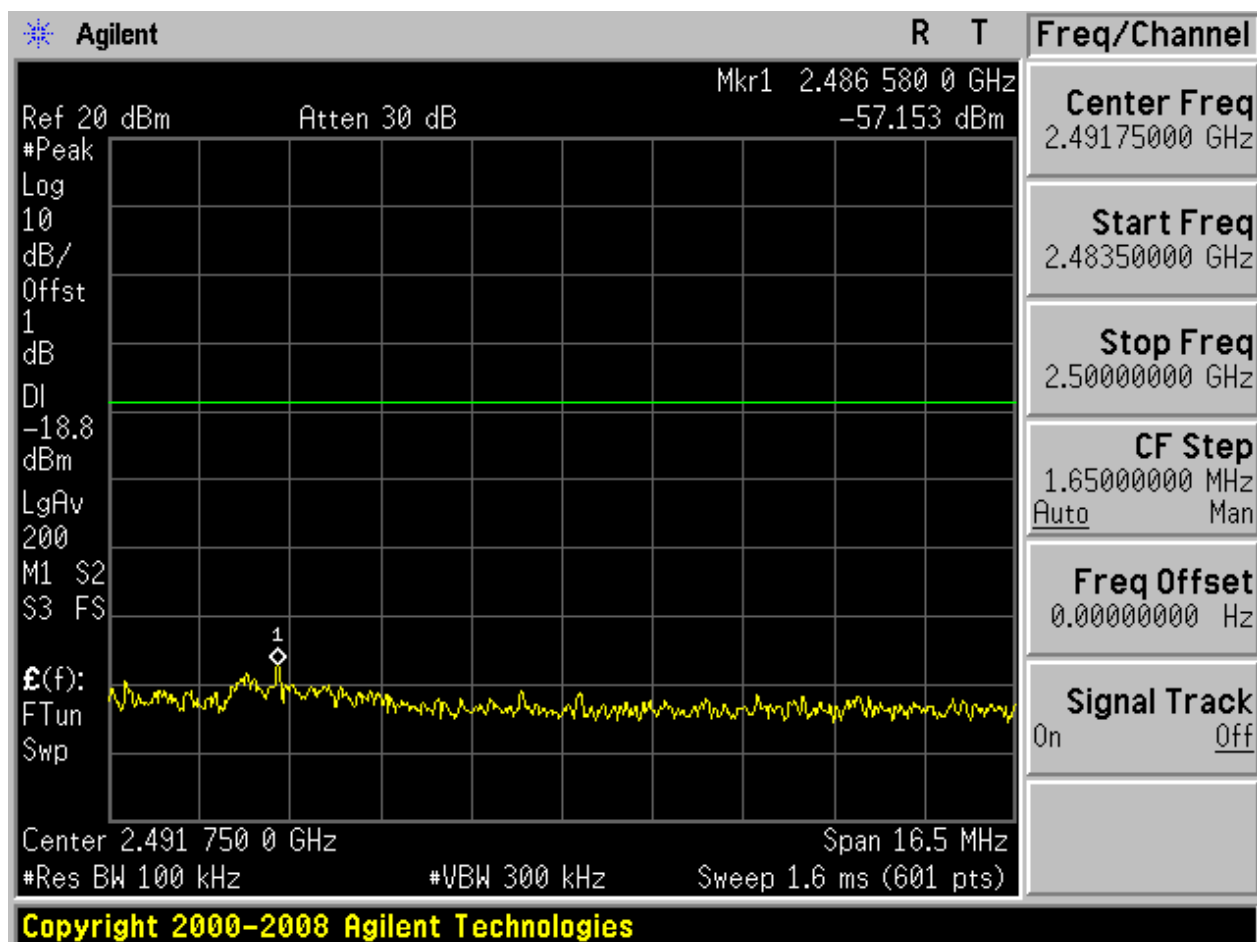
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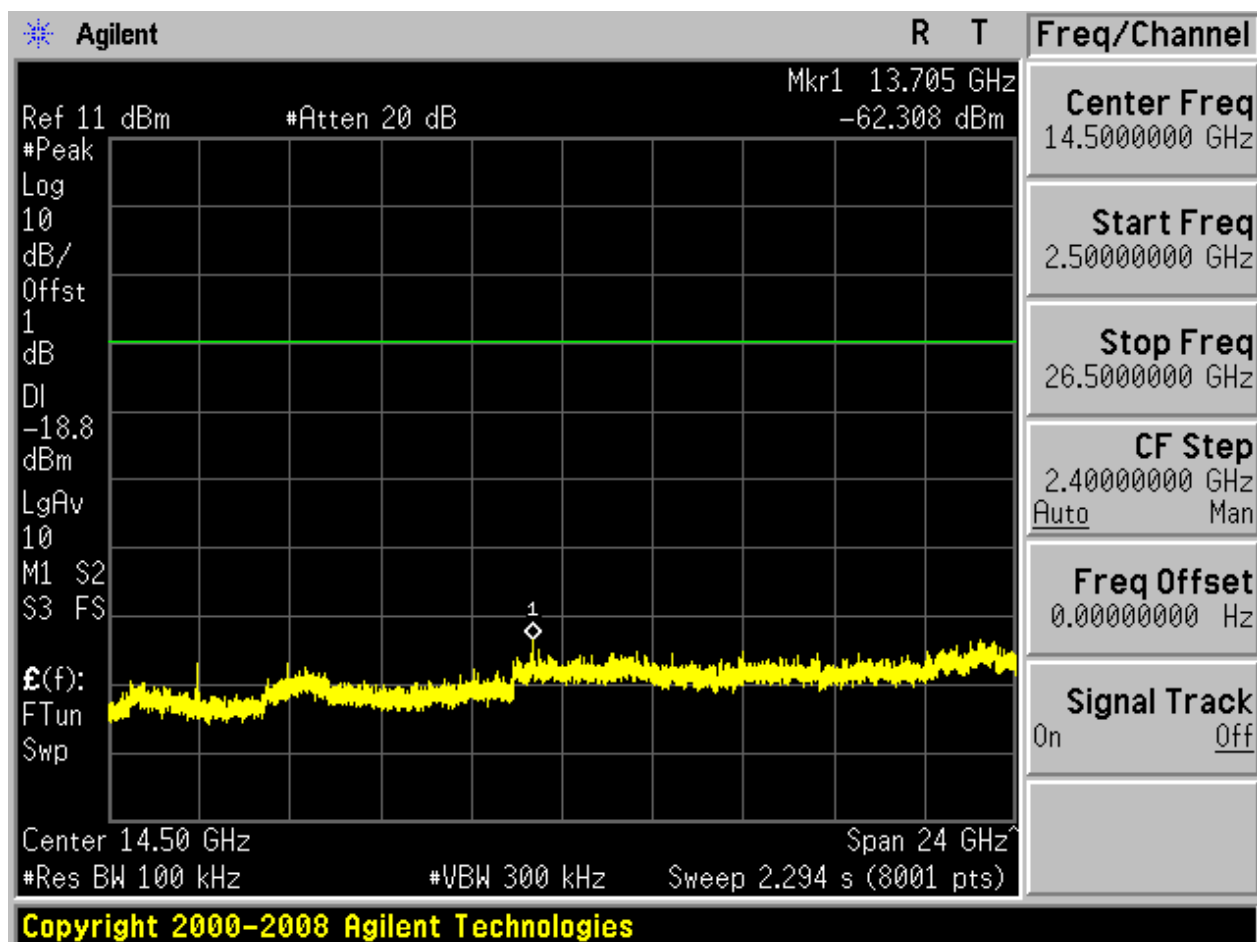






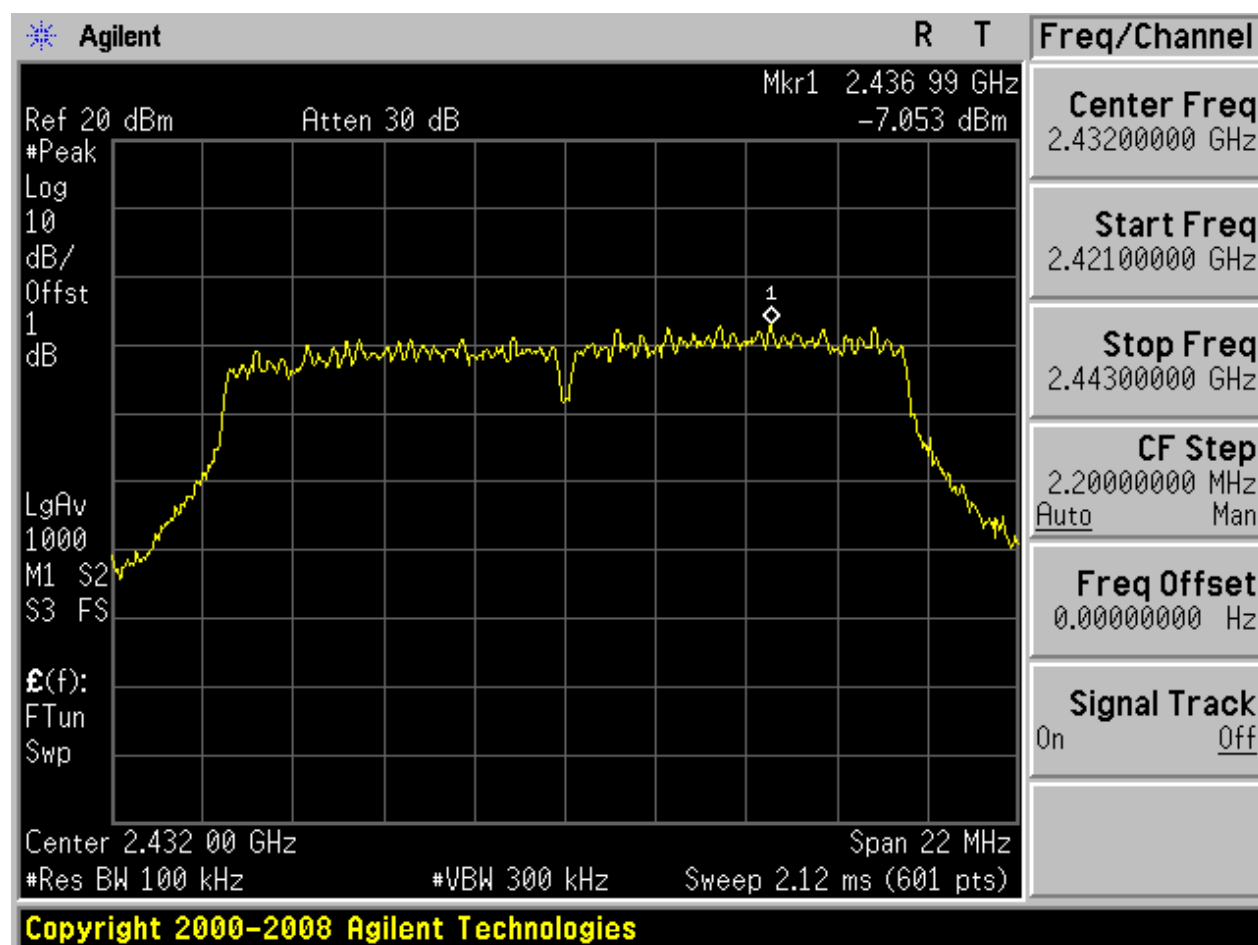






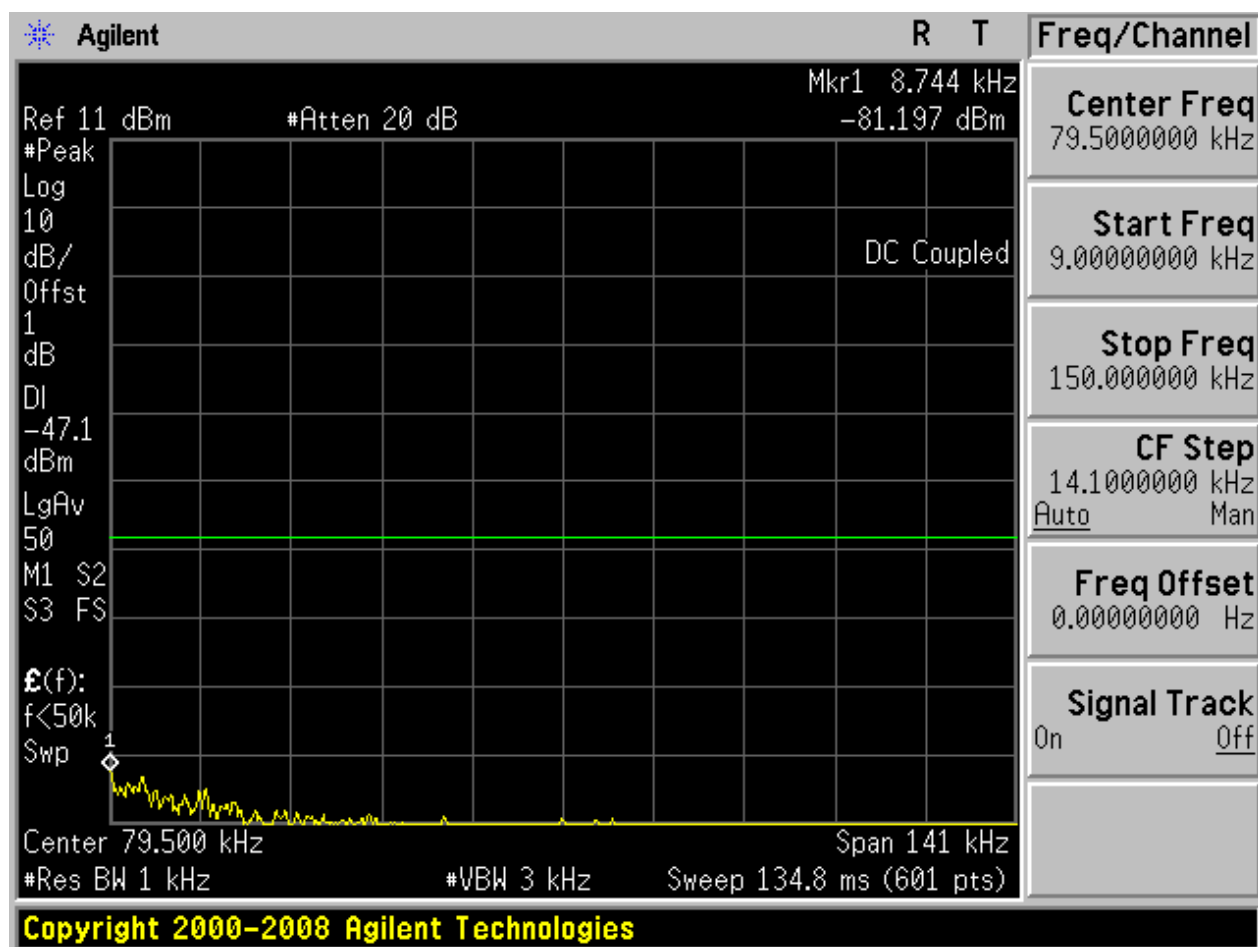
4.9 11G_M@Ant 1

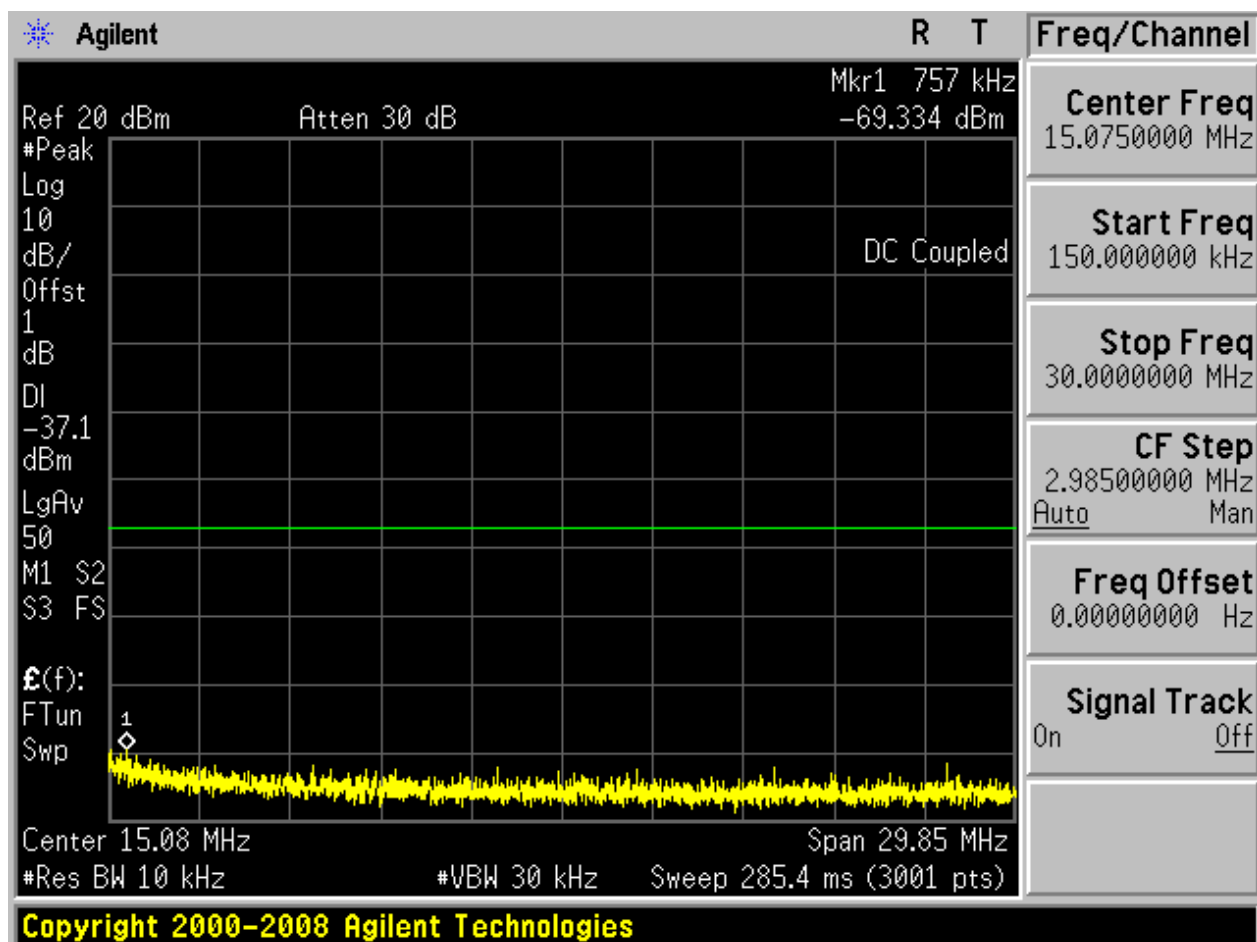
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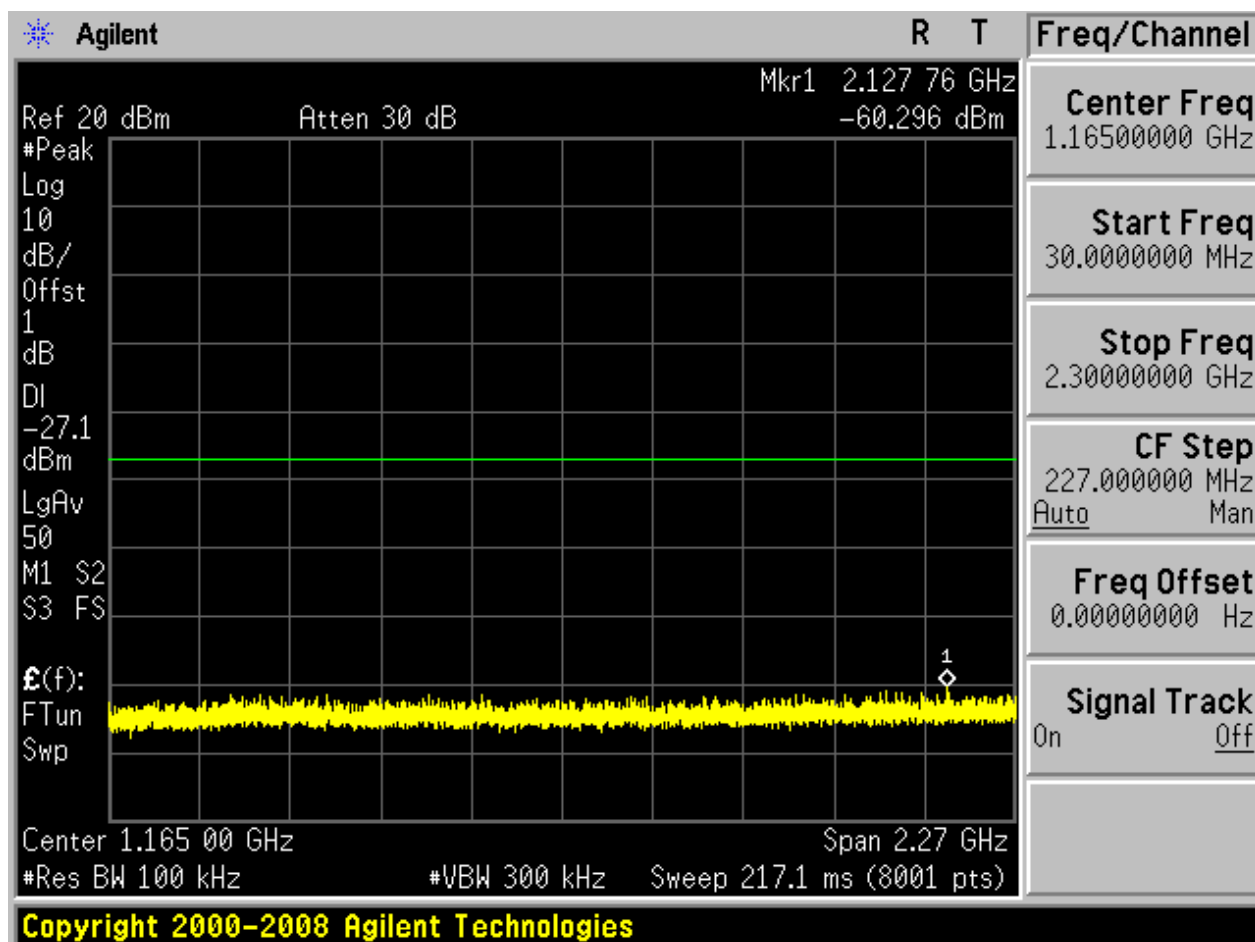


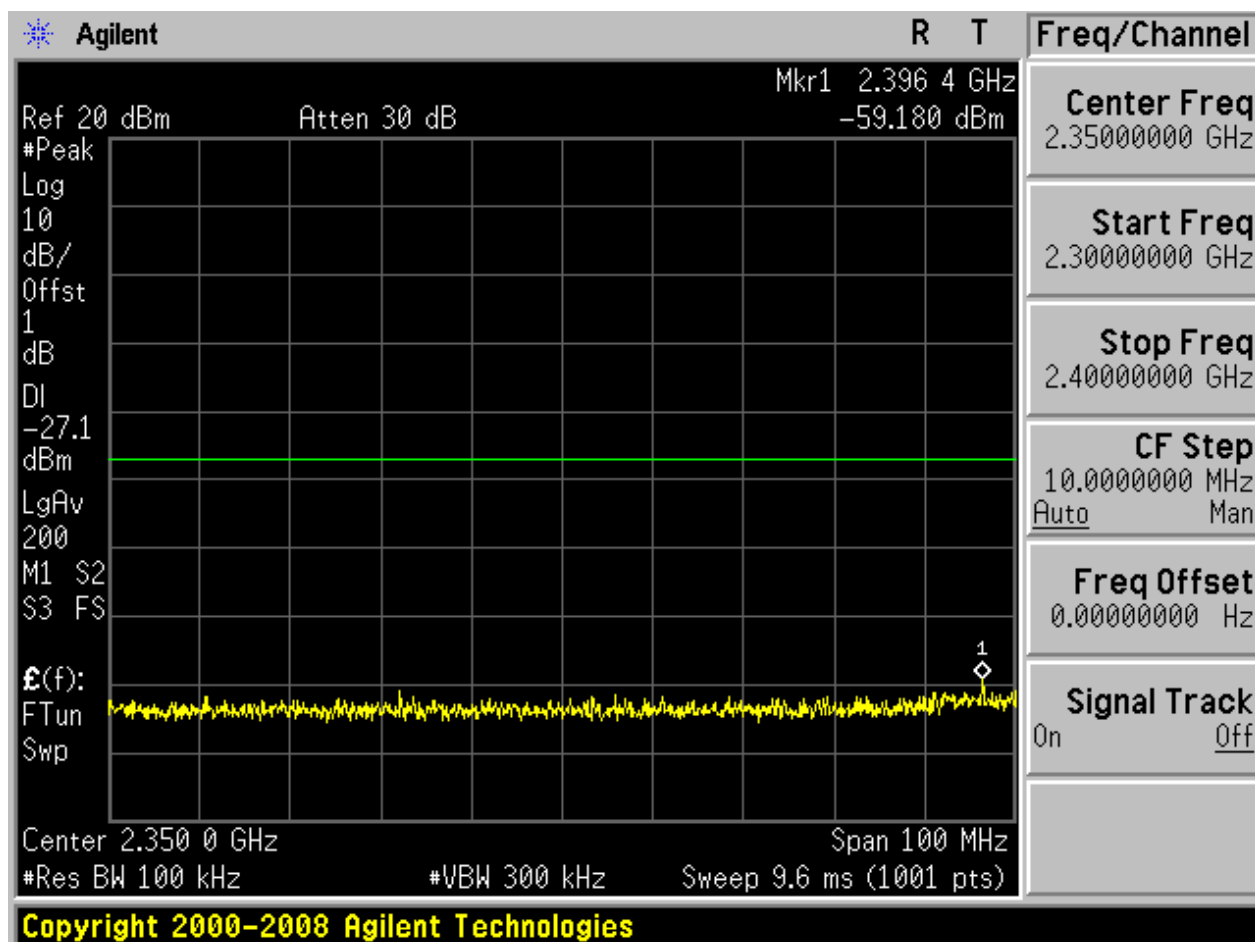


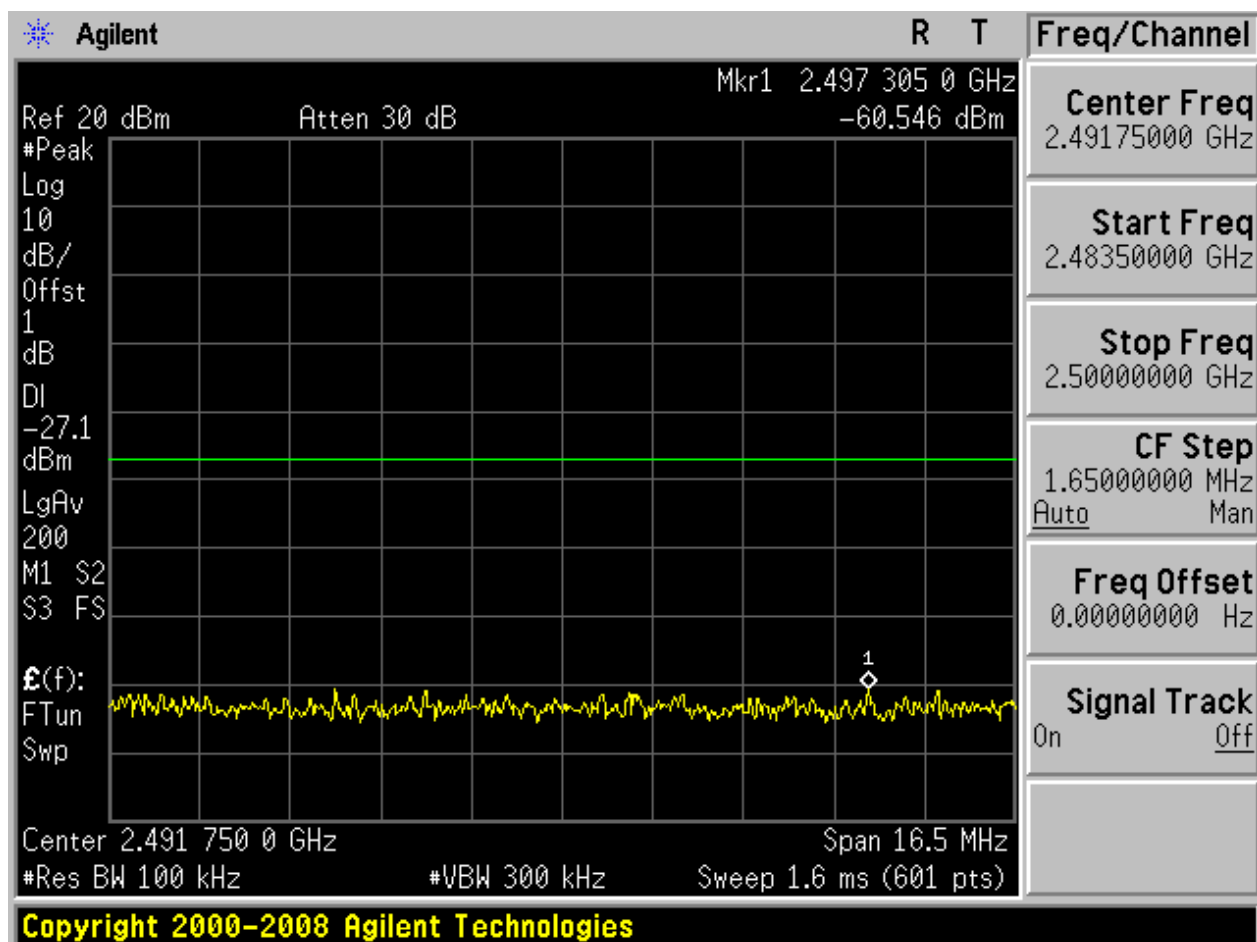
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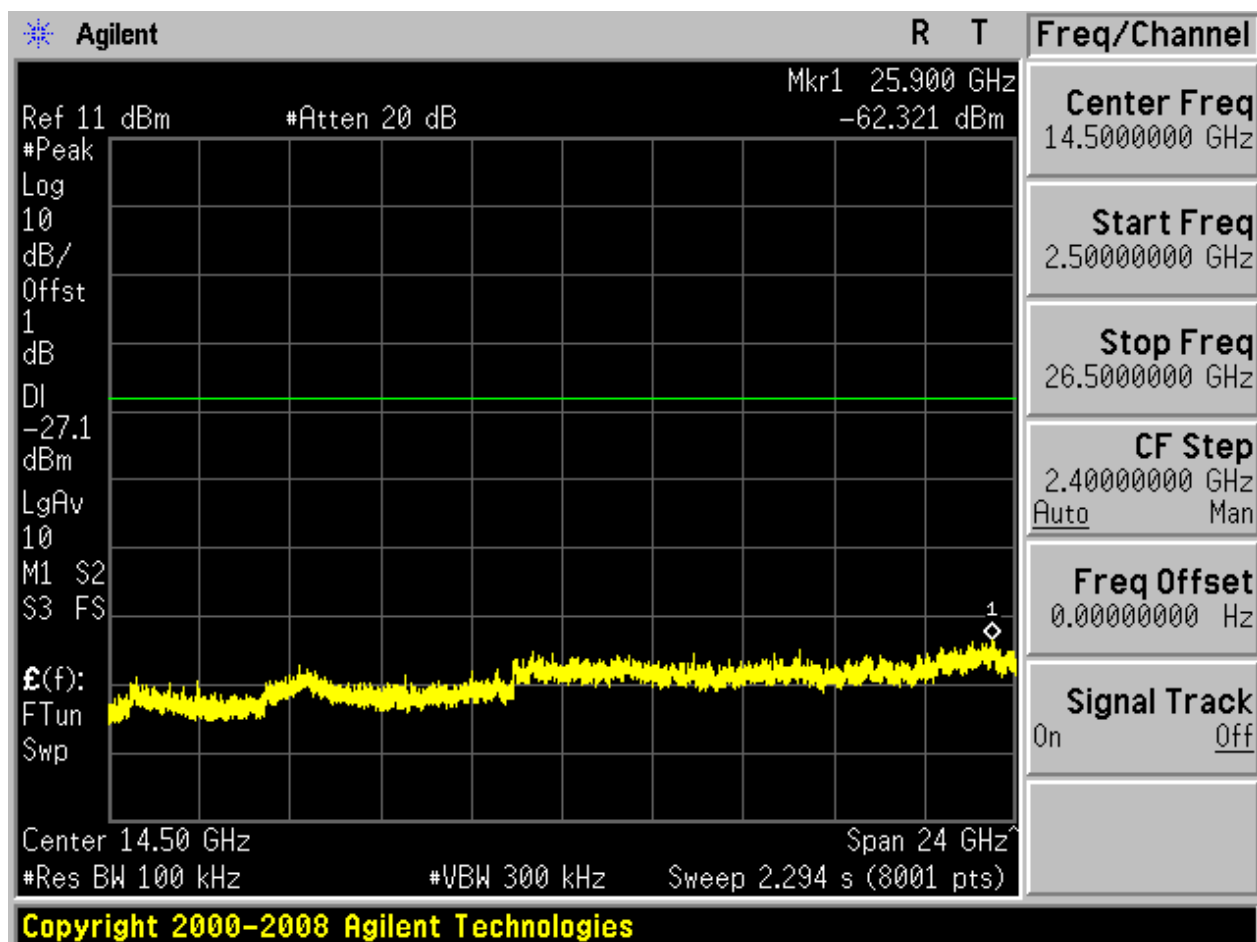








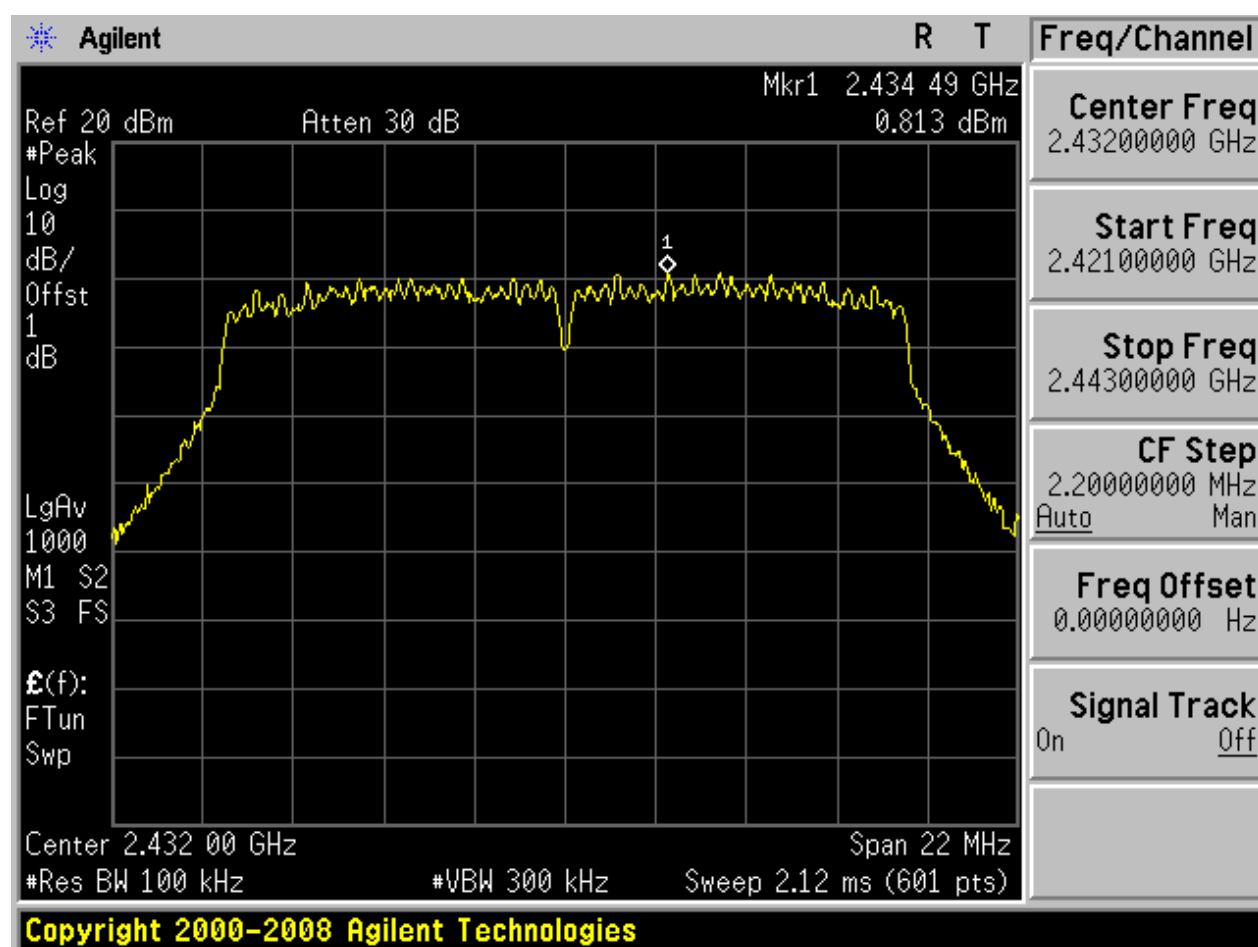






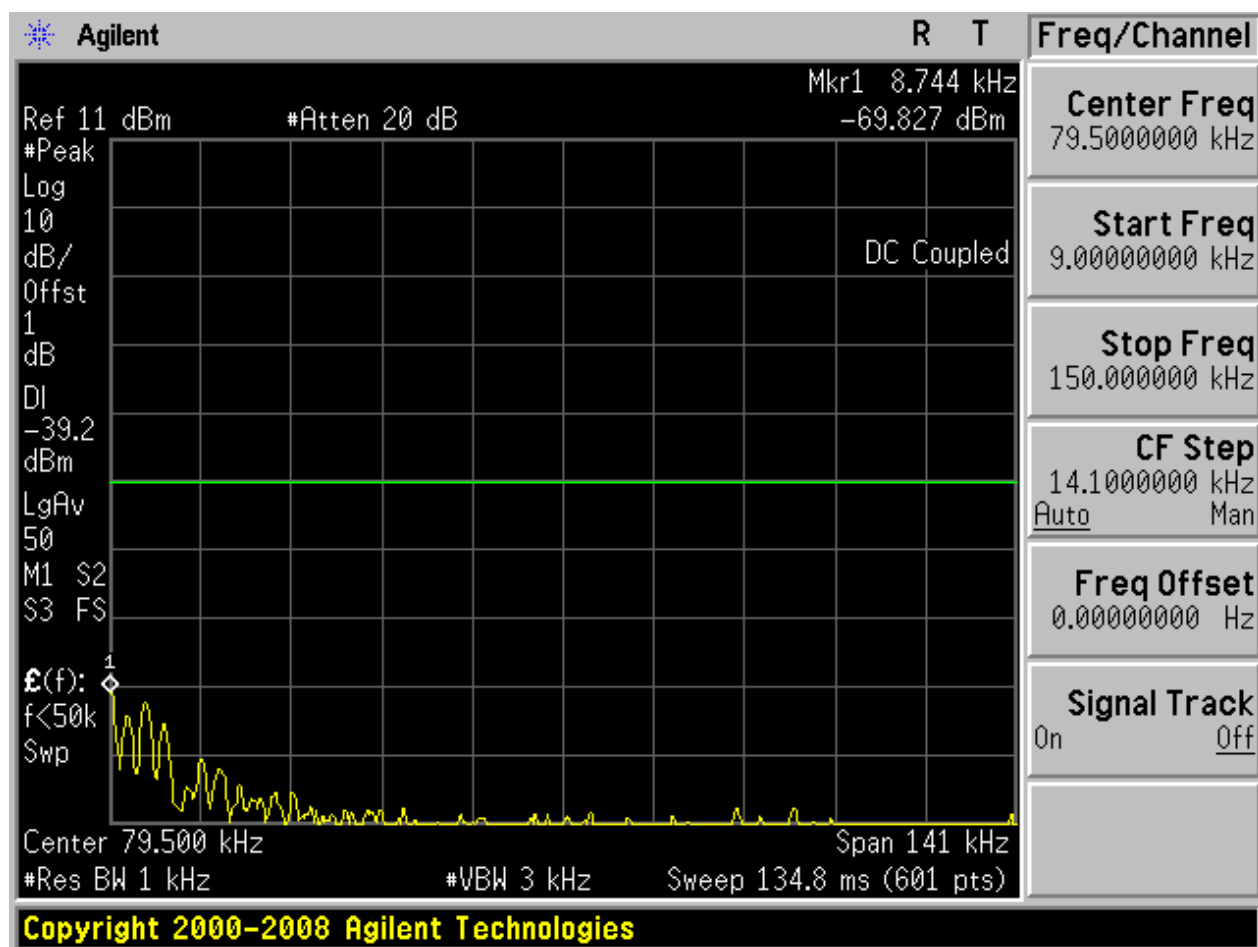
4.10 11G_M@Ant 2

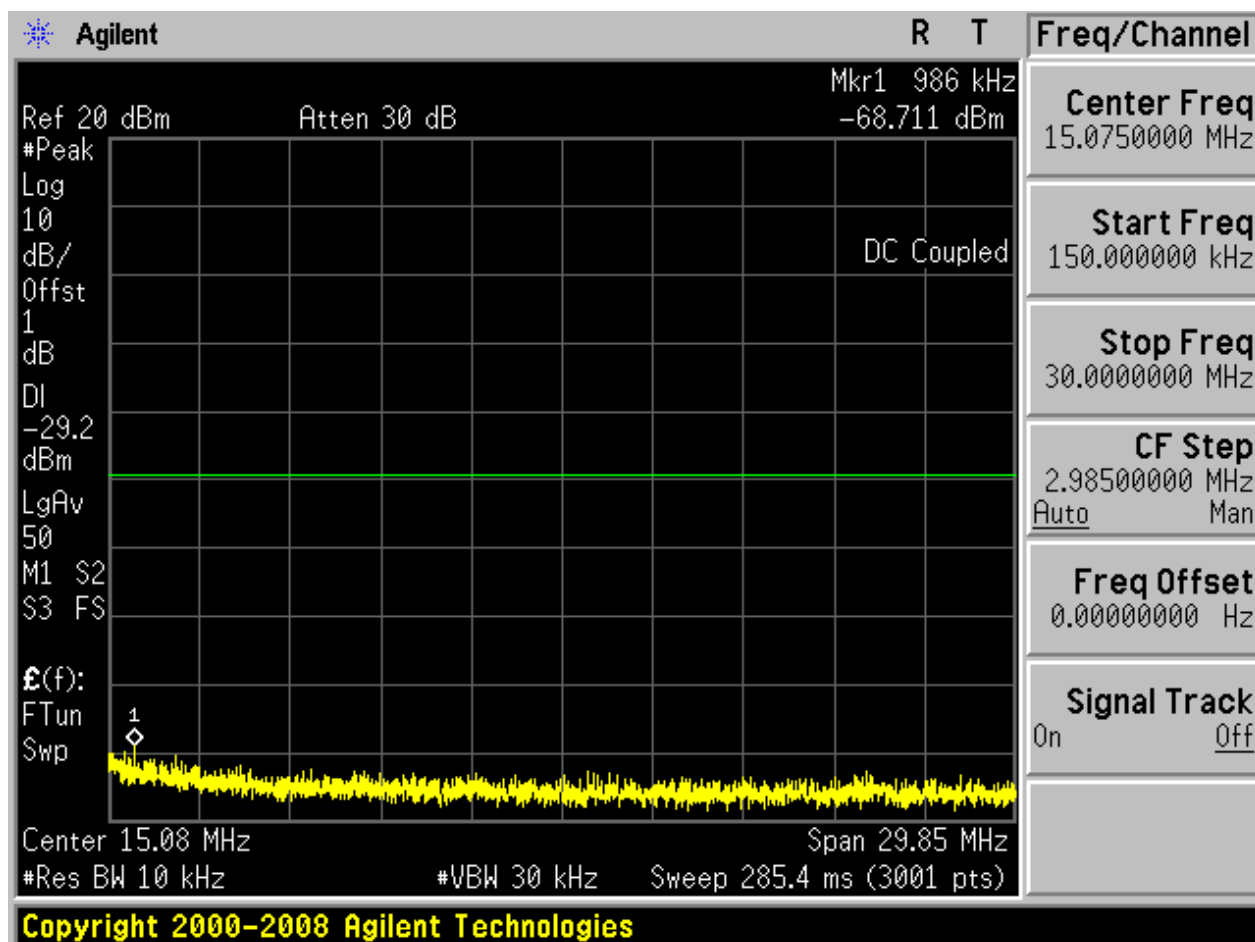
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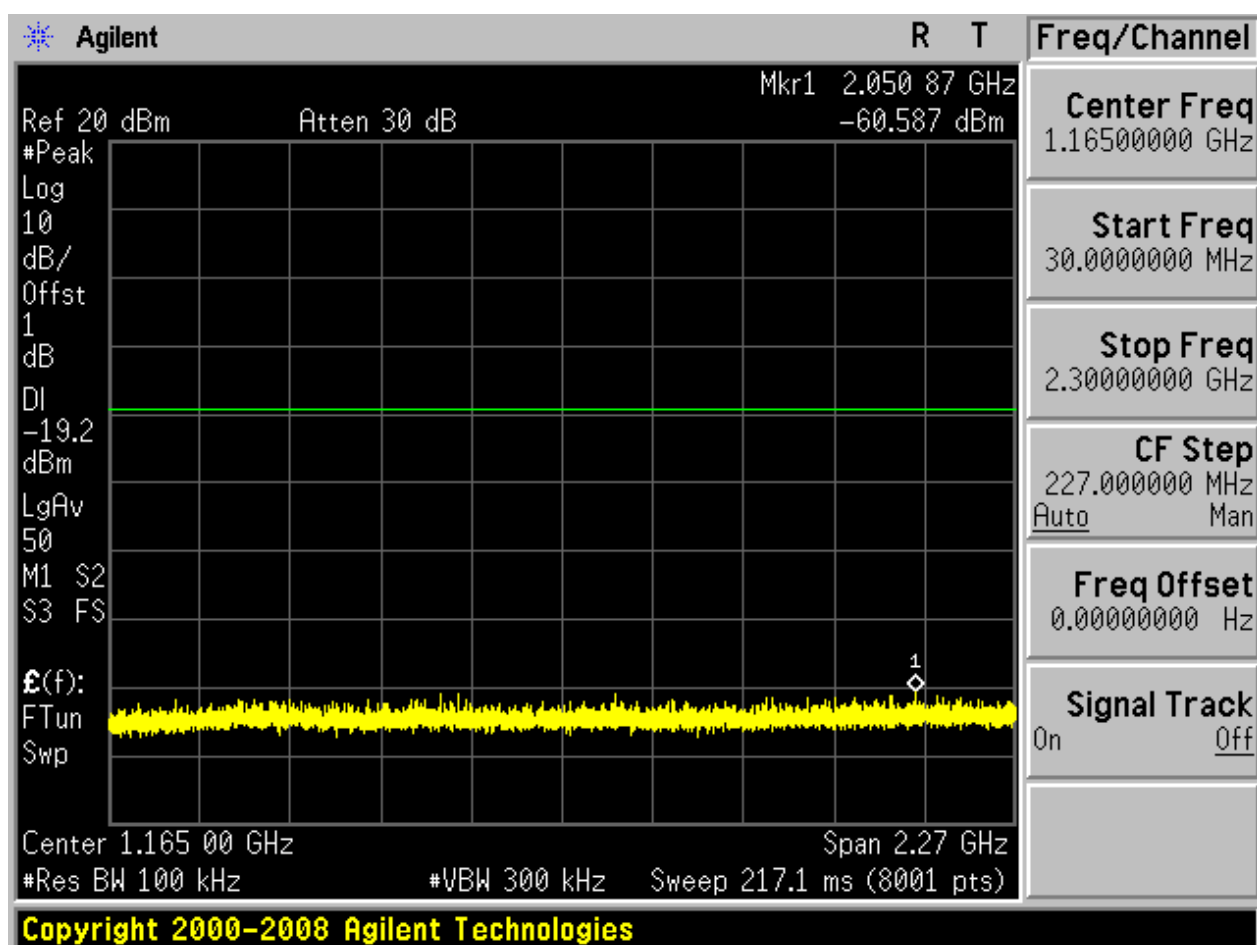


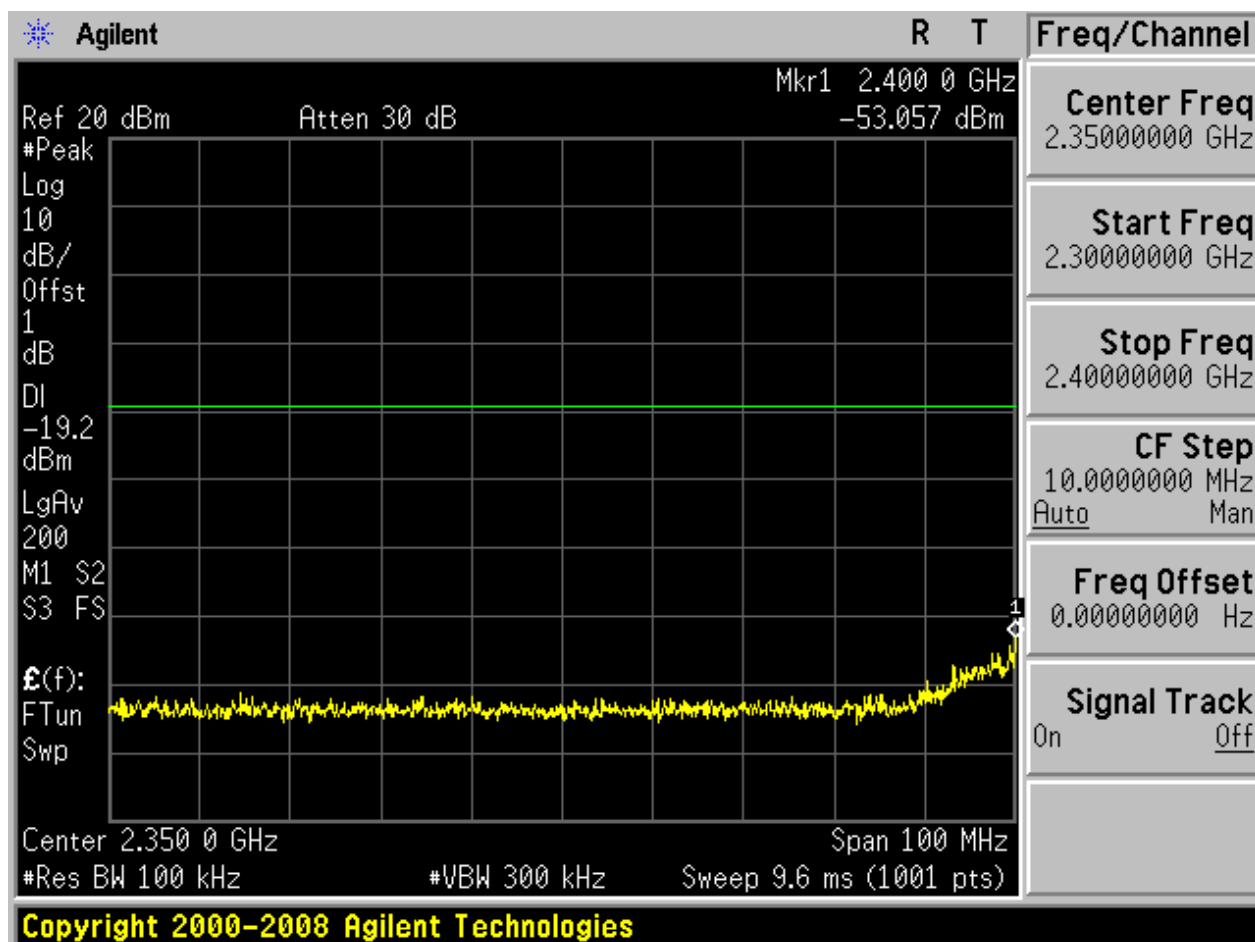


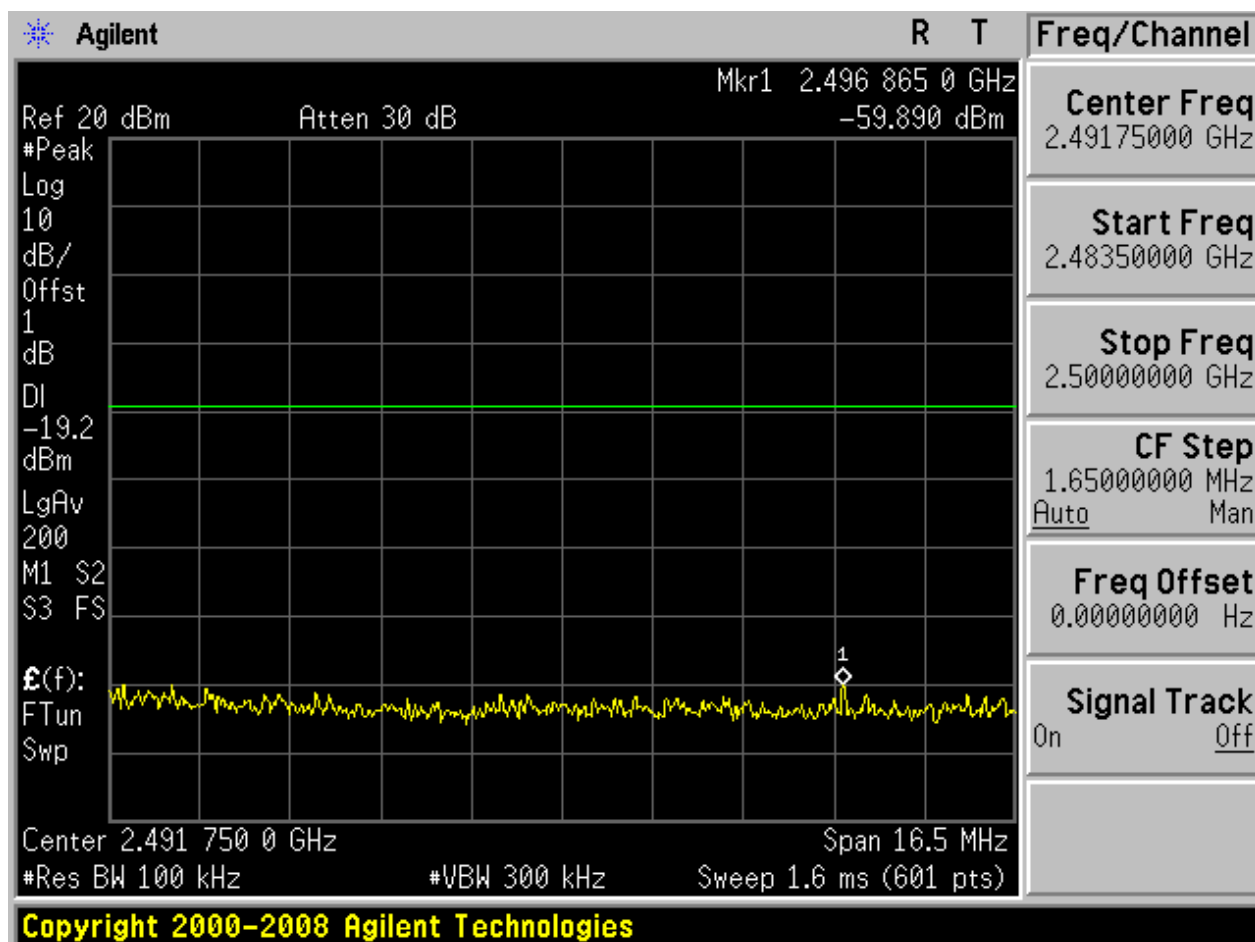
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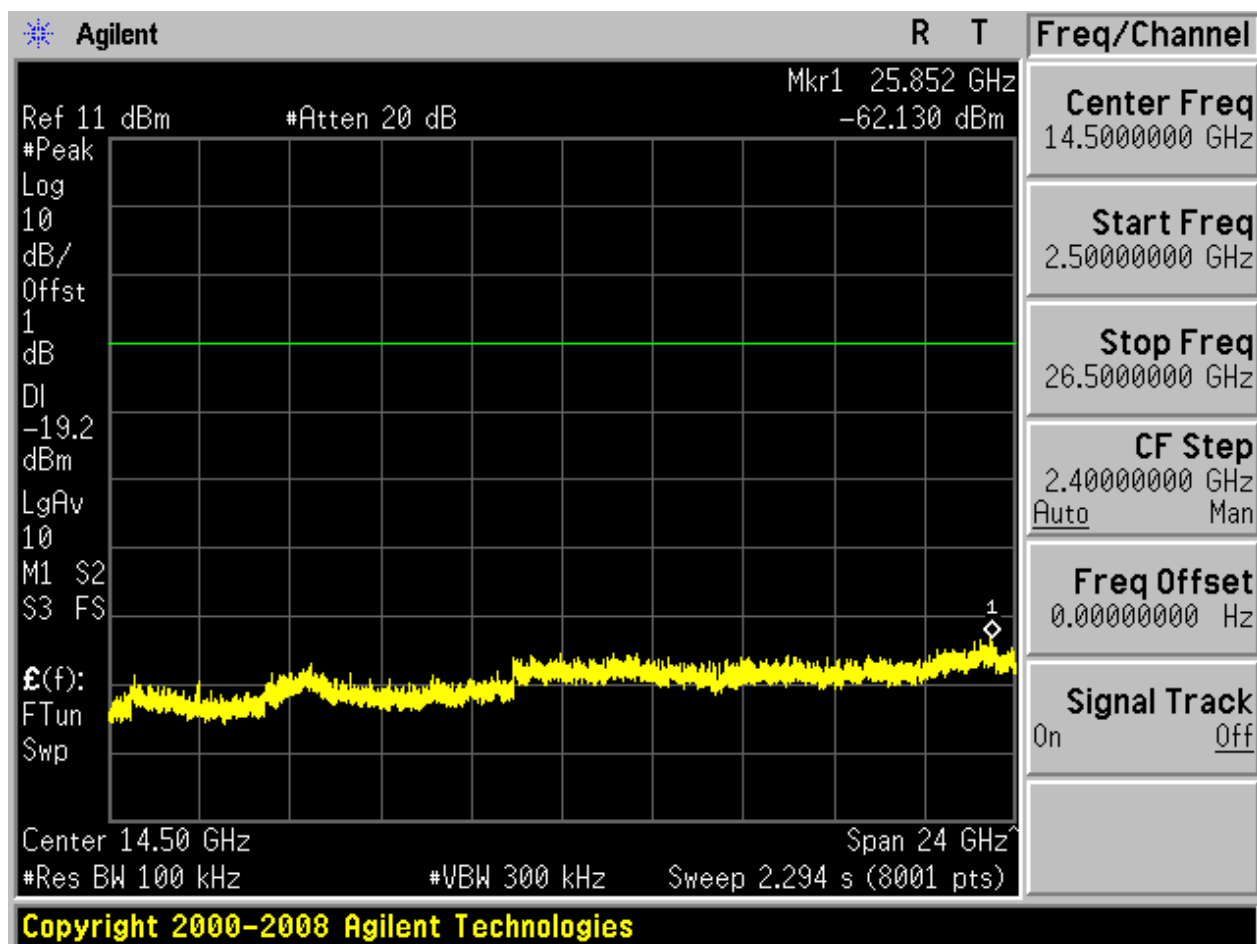






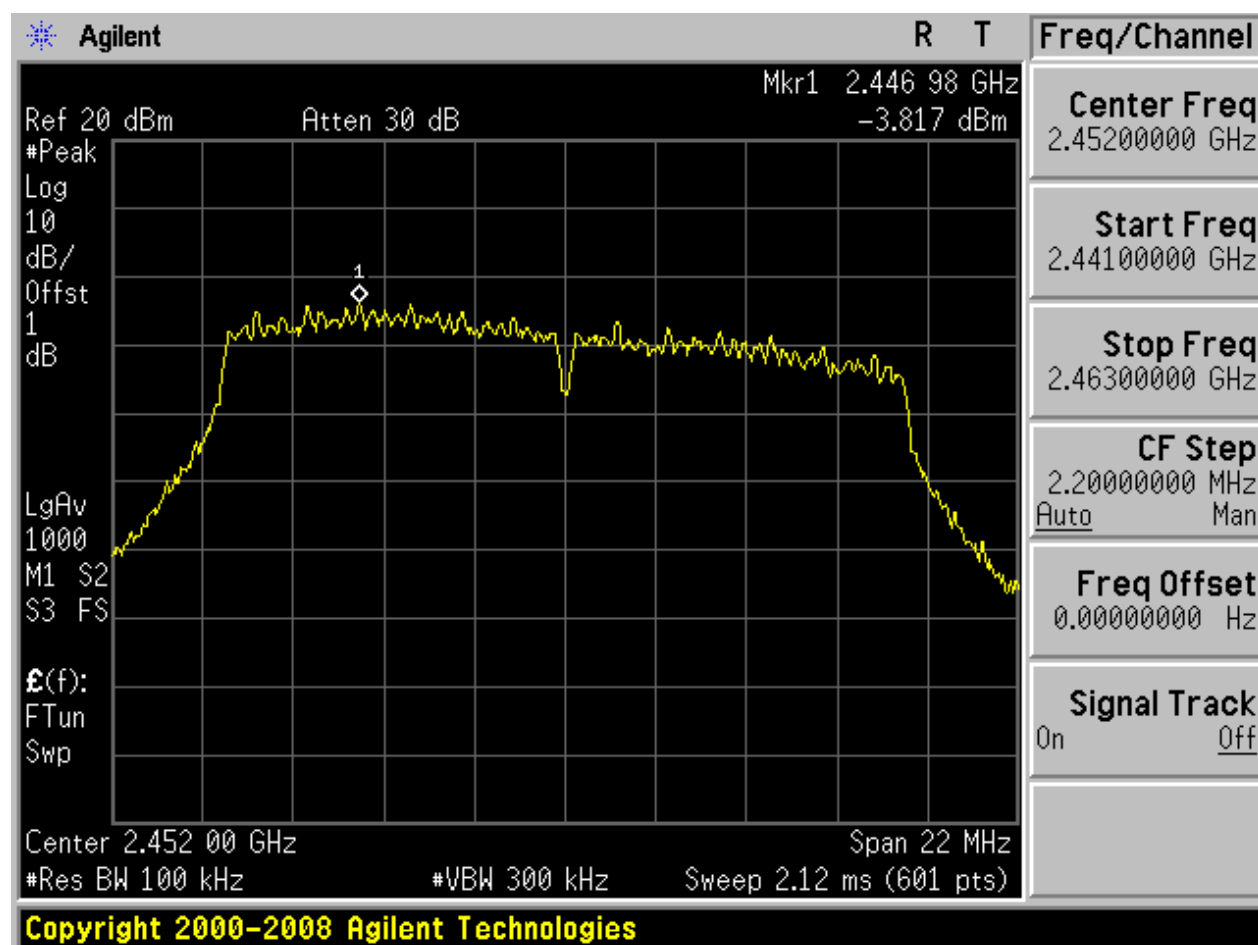






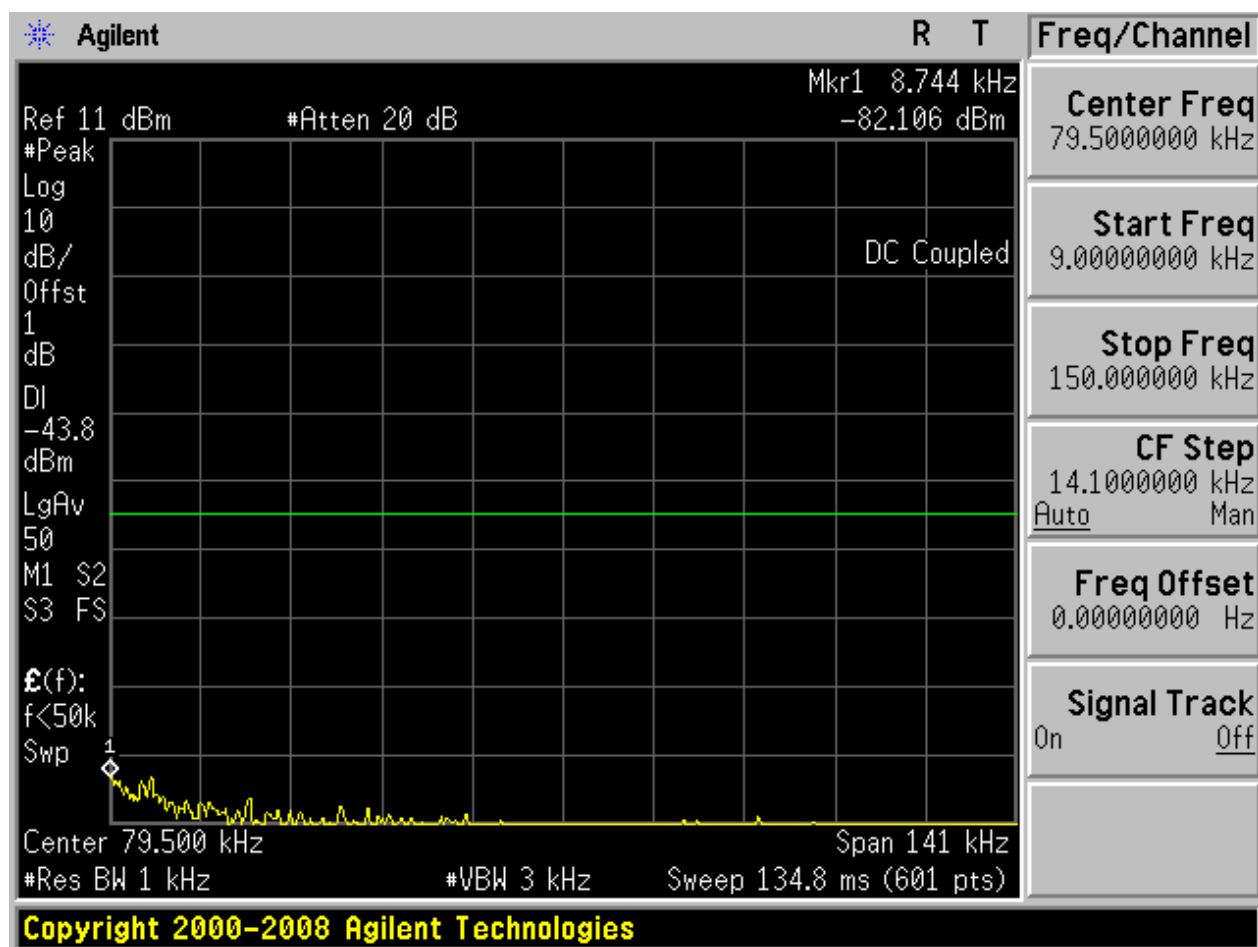
4.11 11G_H@Ant 1

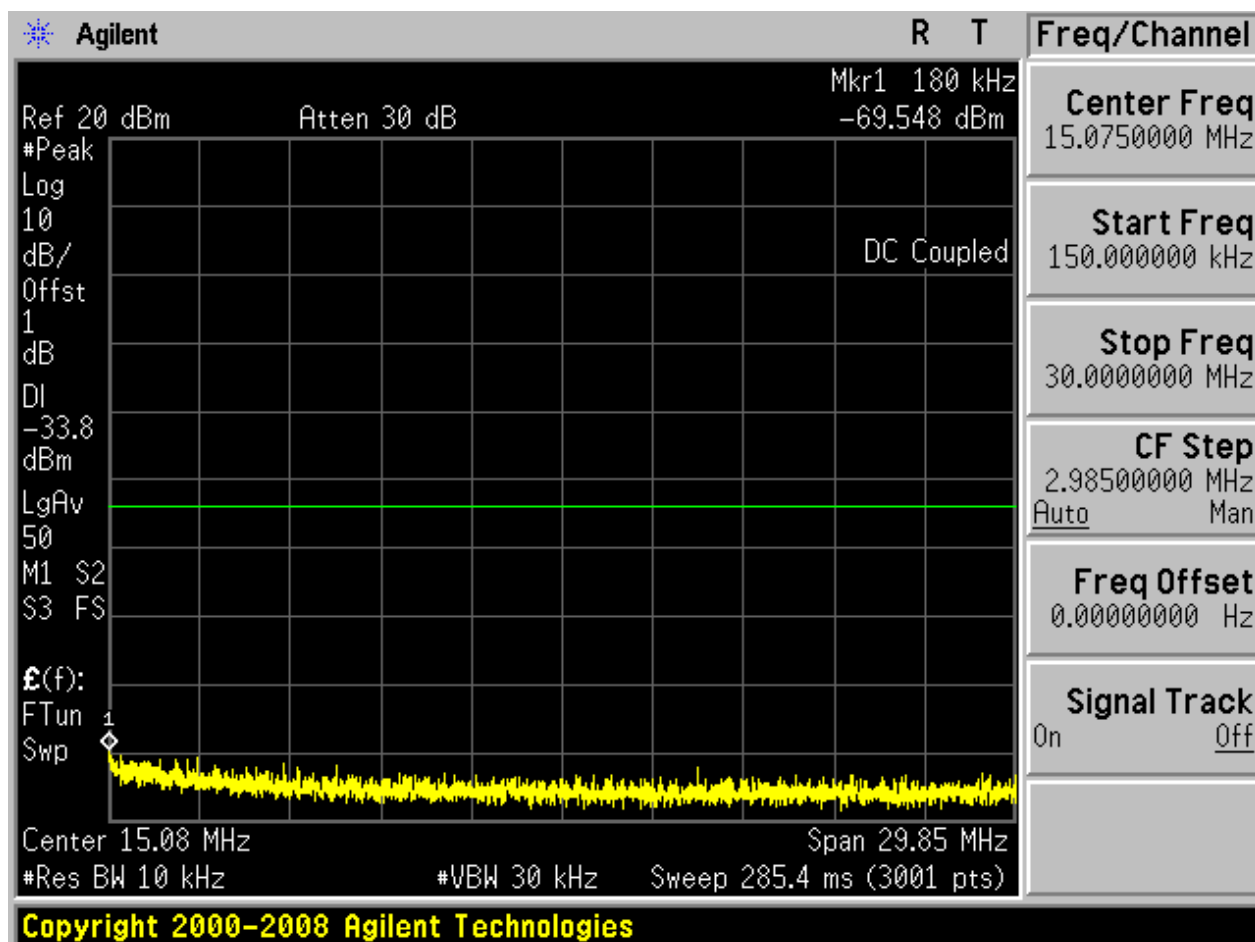
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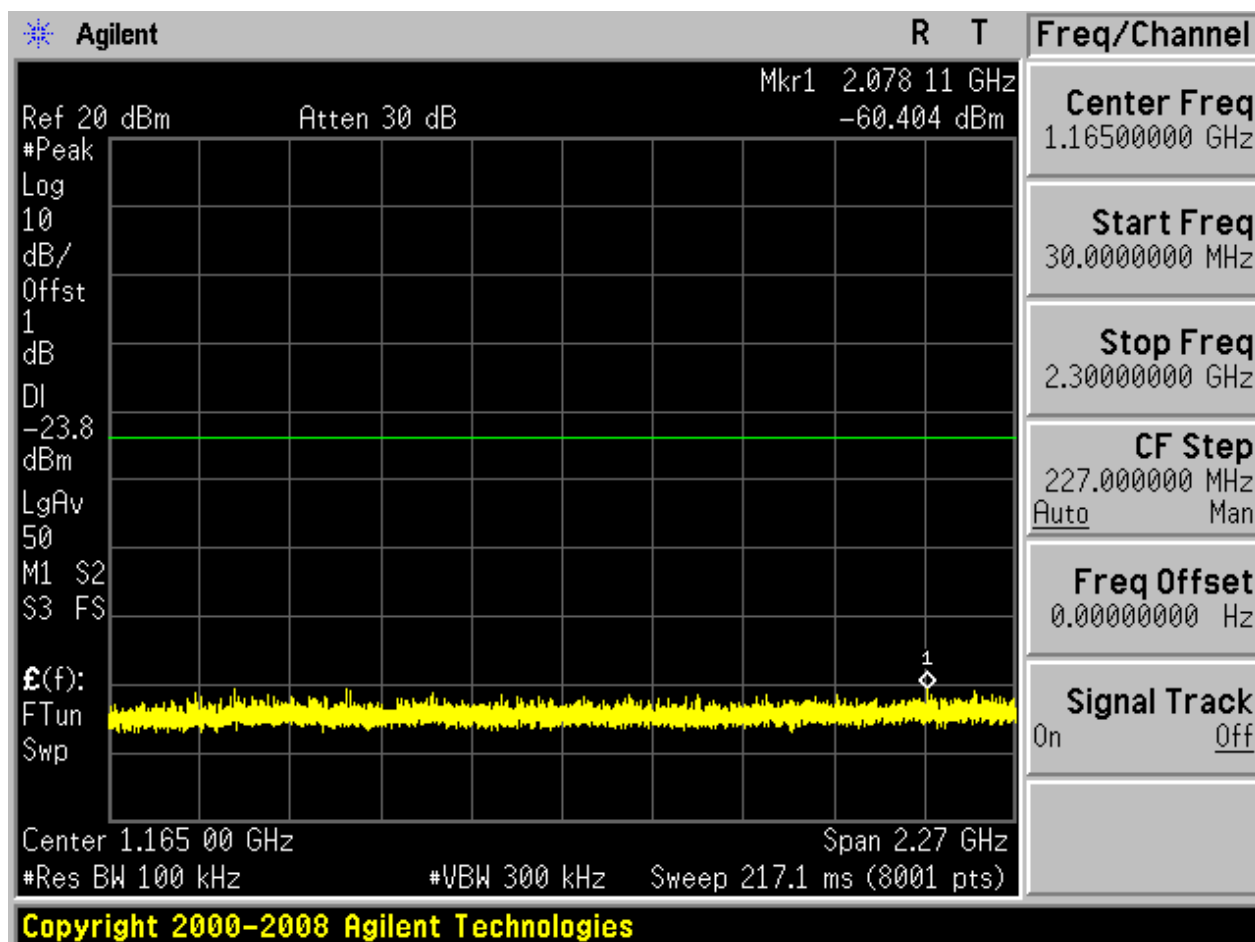


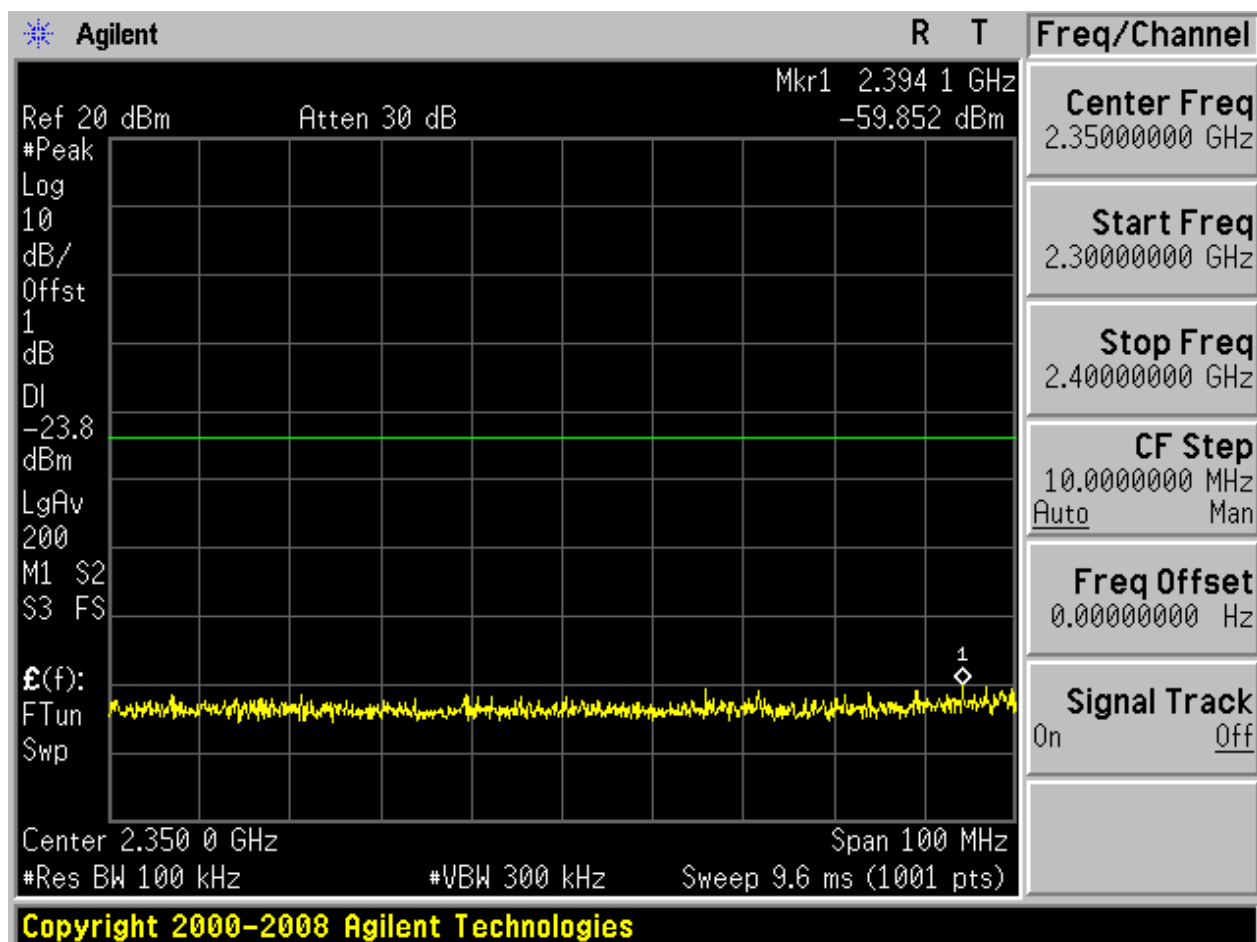


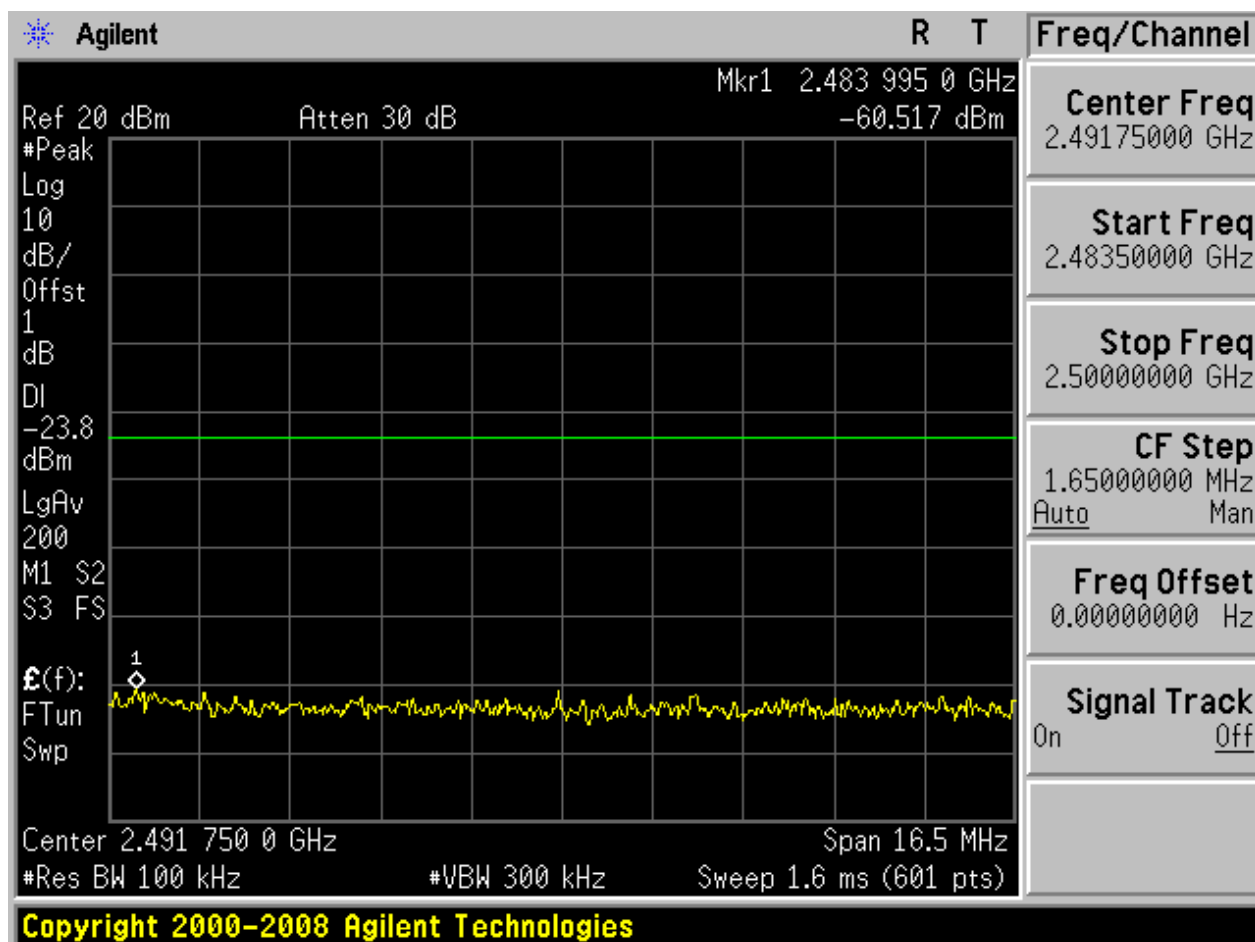
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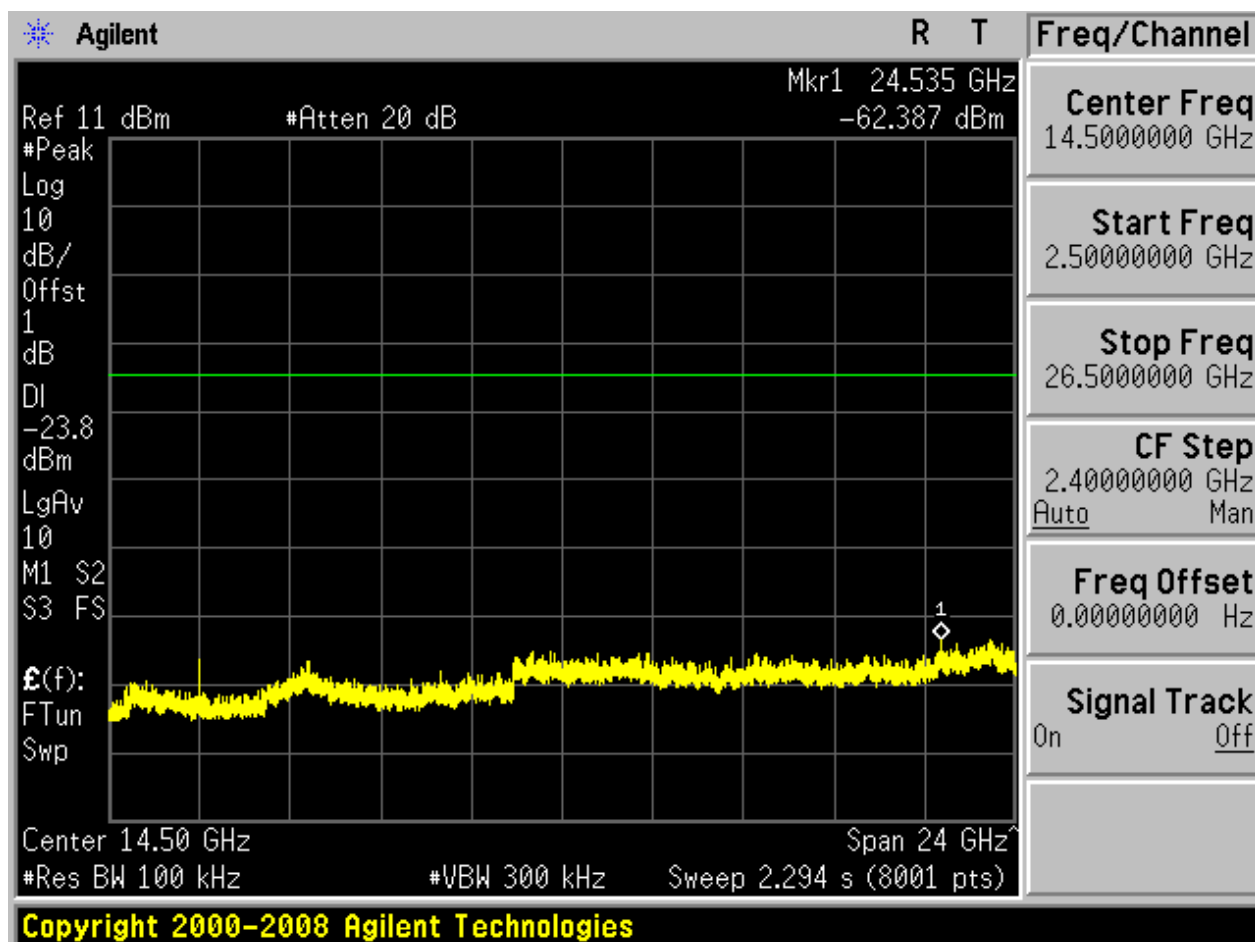








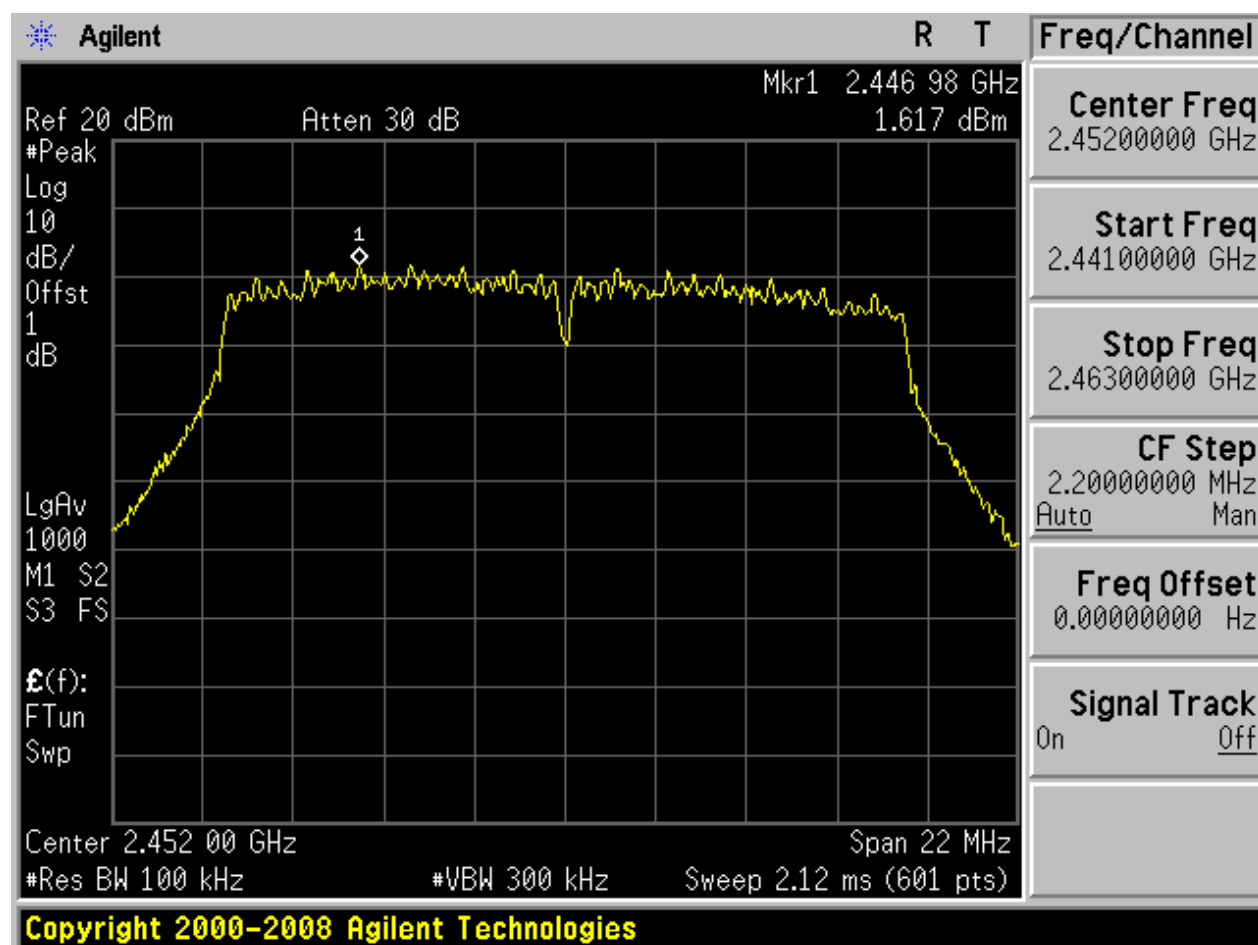






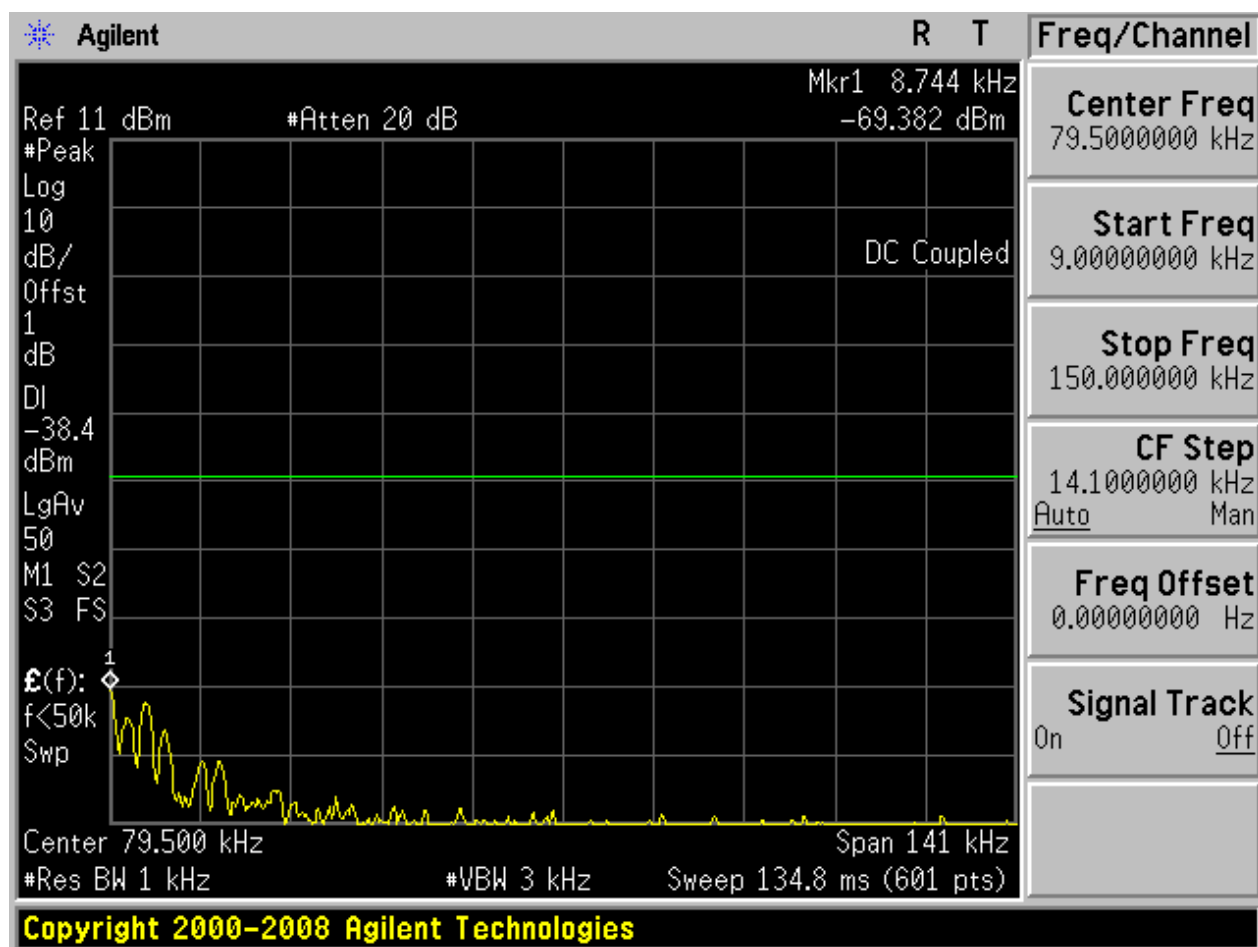
4.12 11G_H@Ant 2

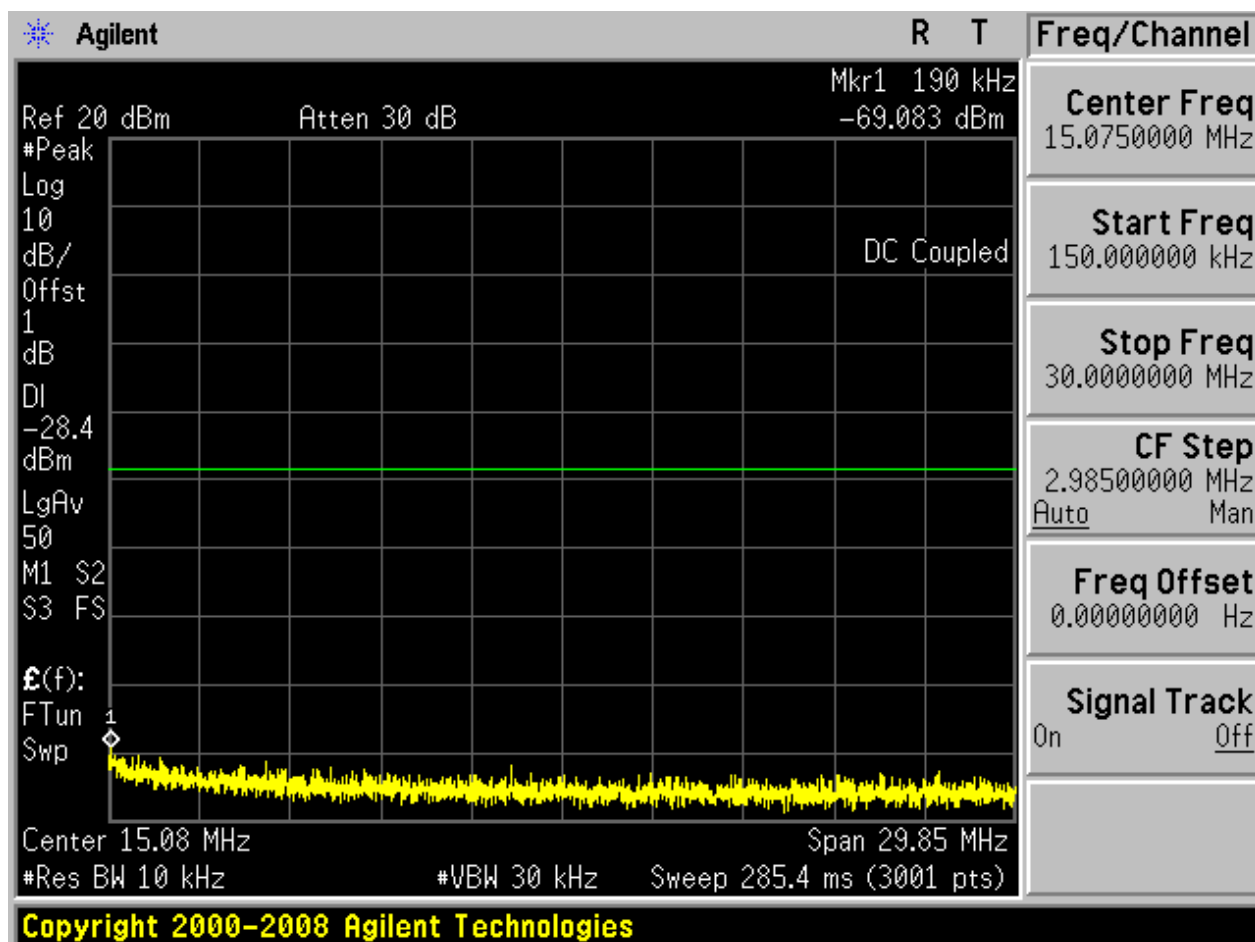
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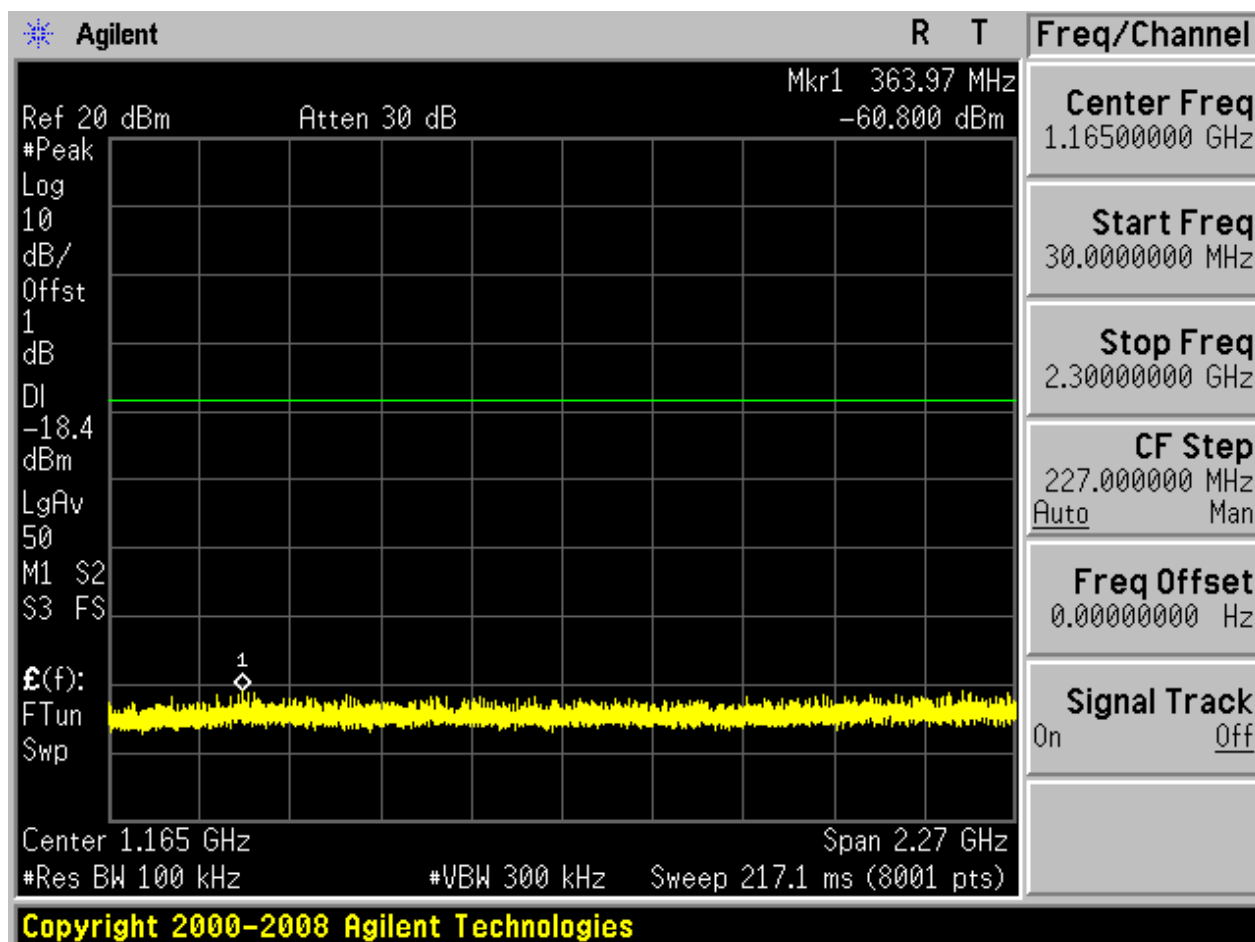


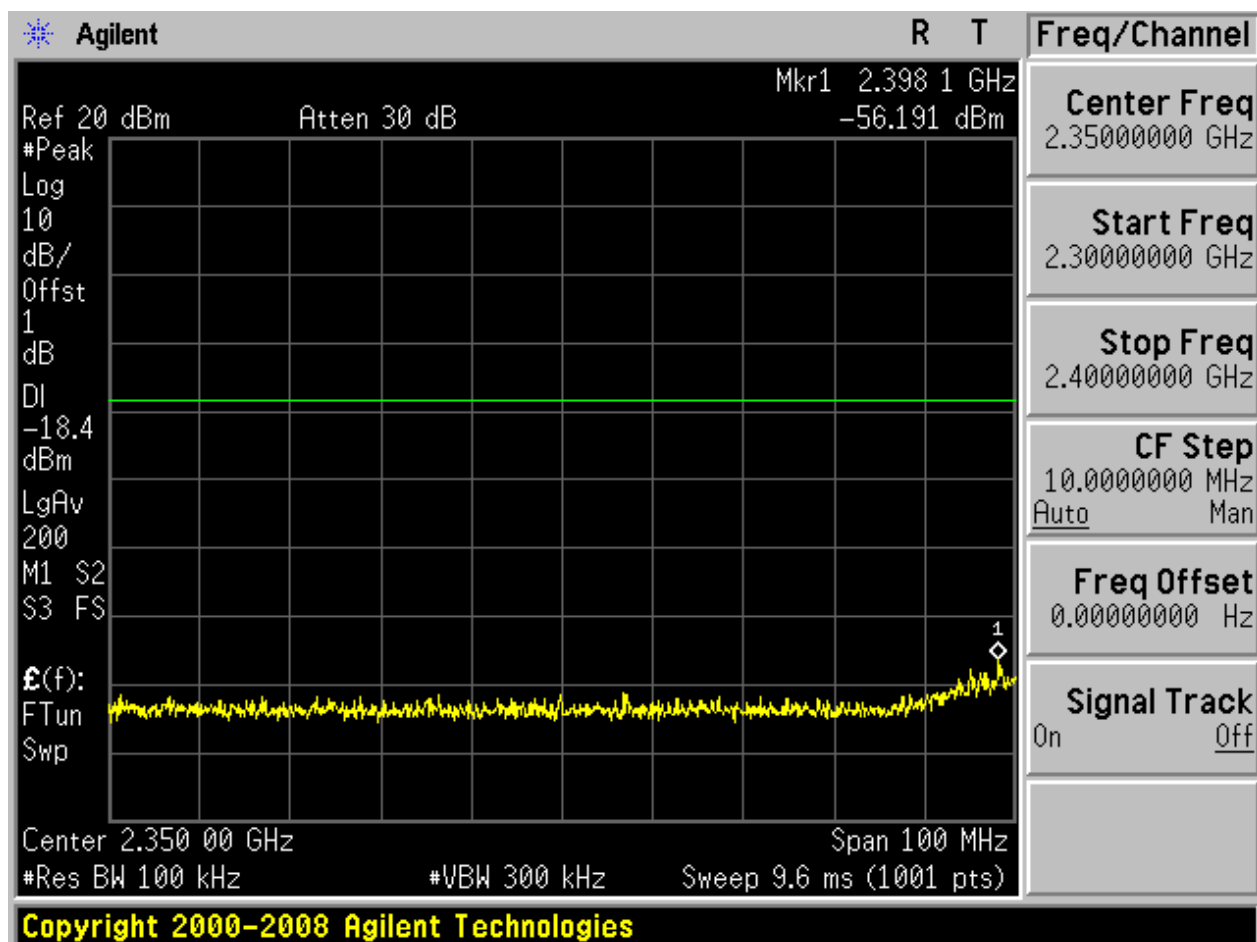


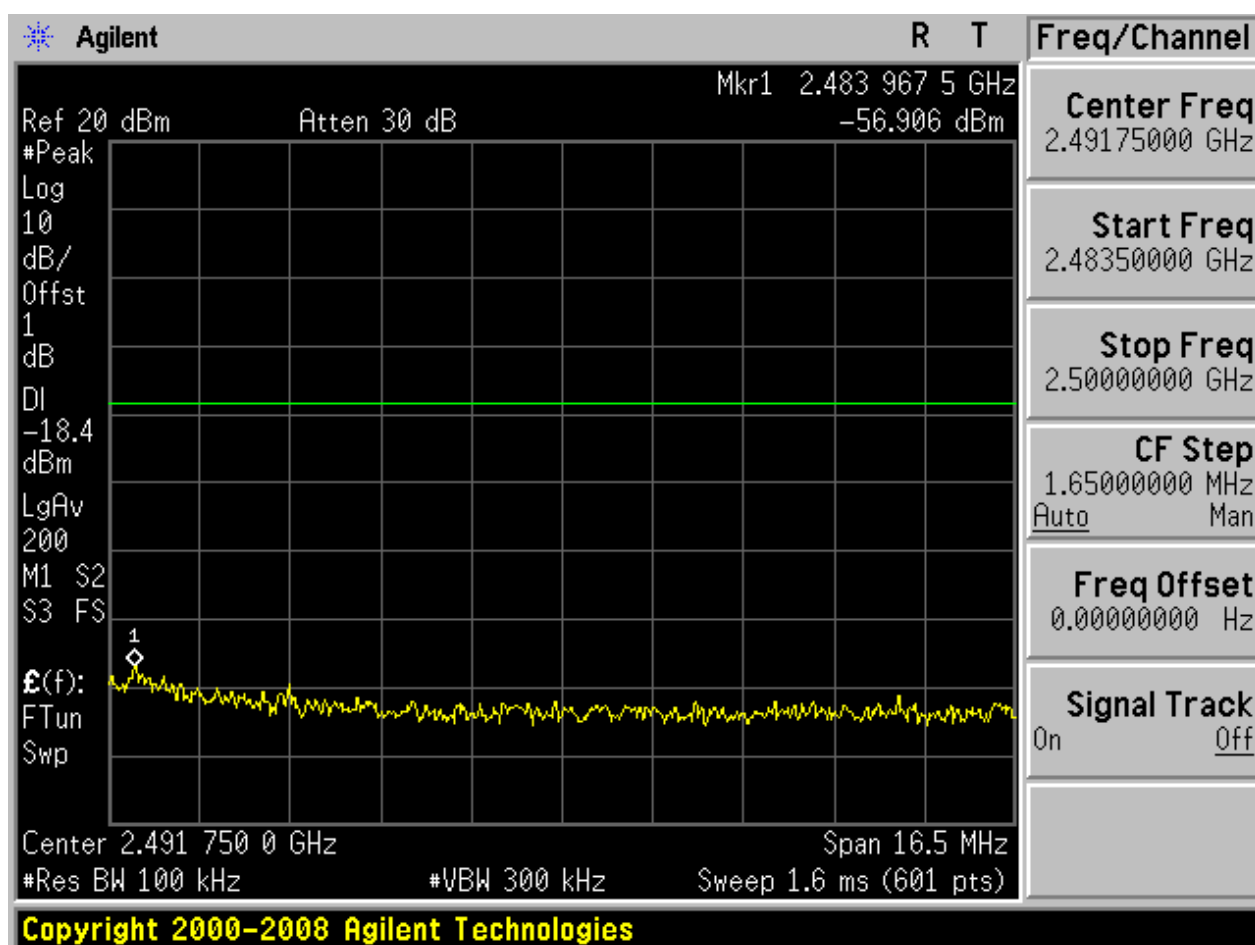
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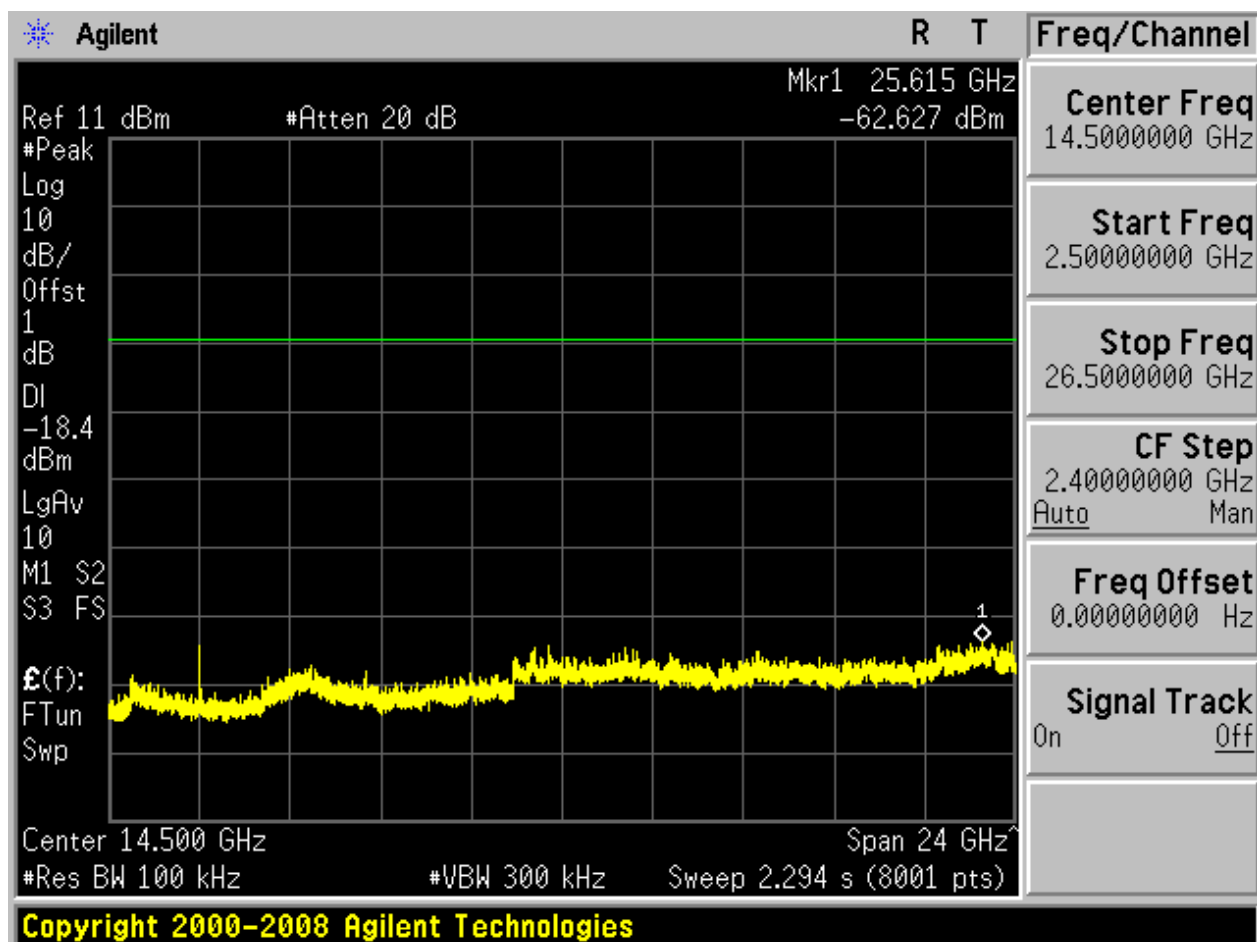






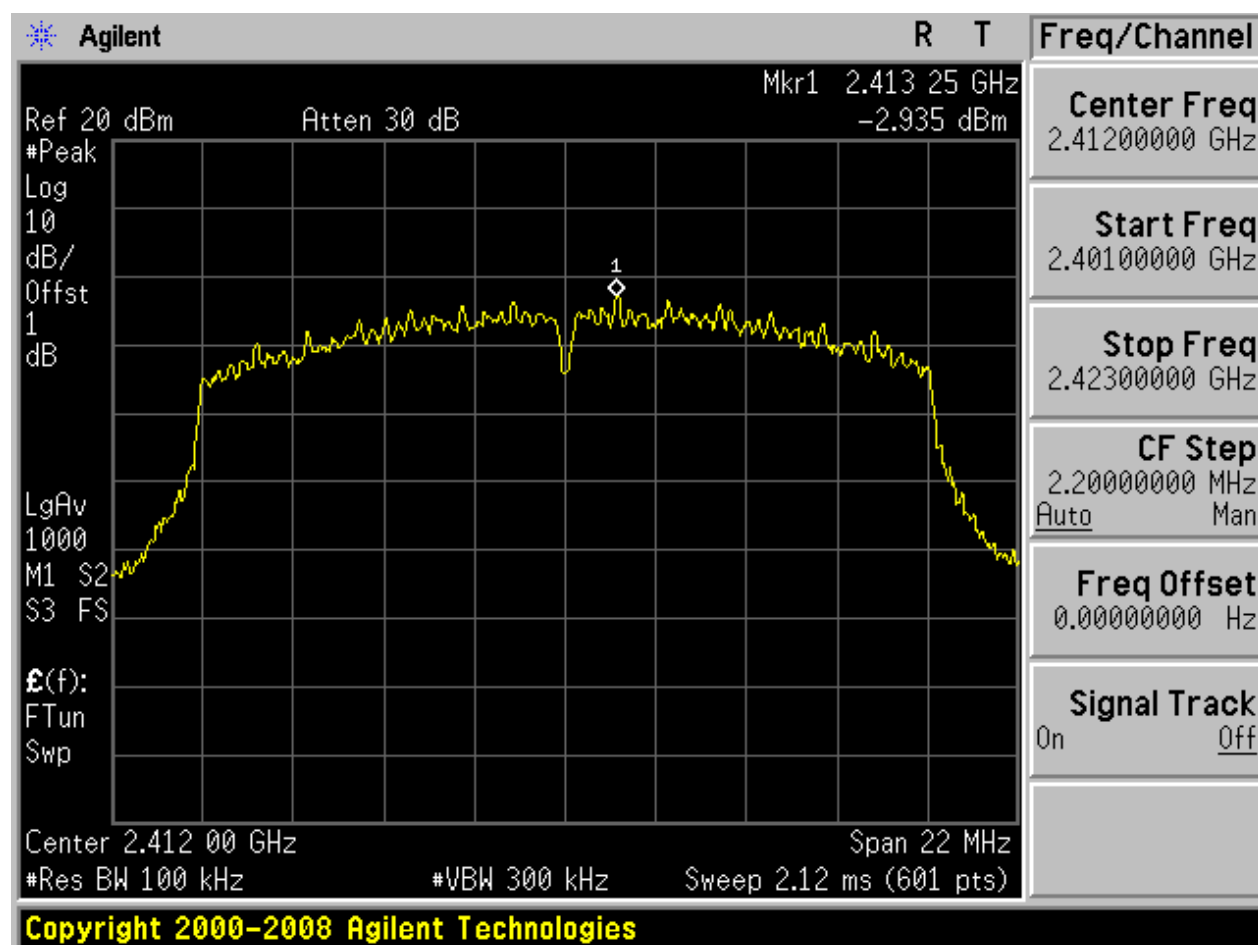






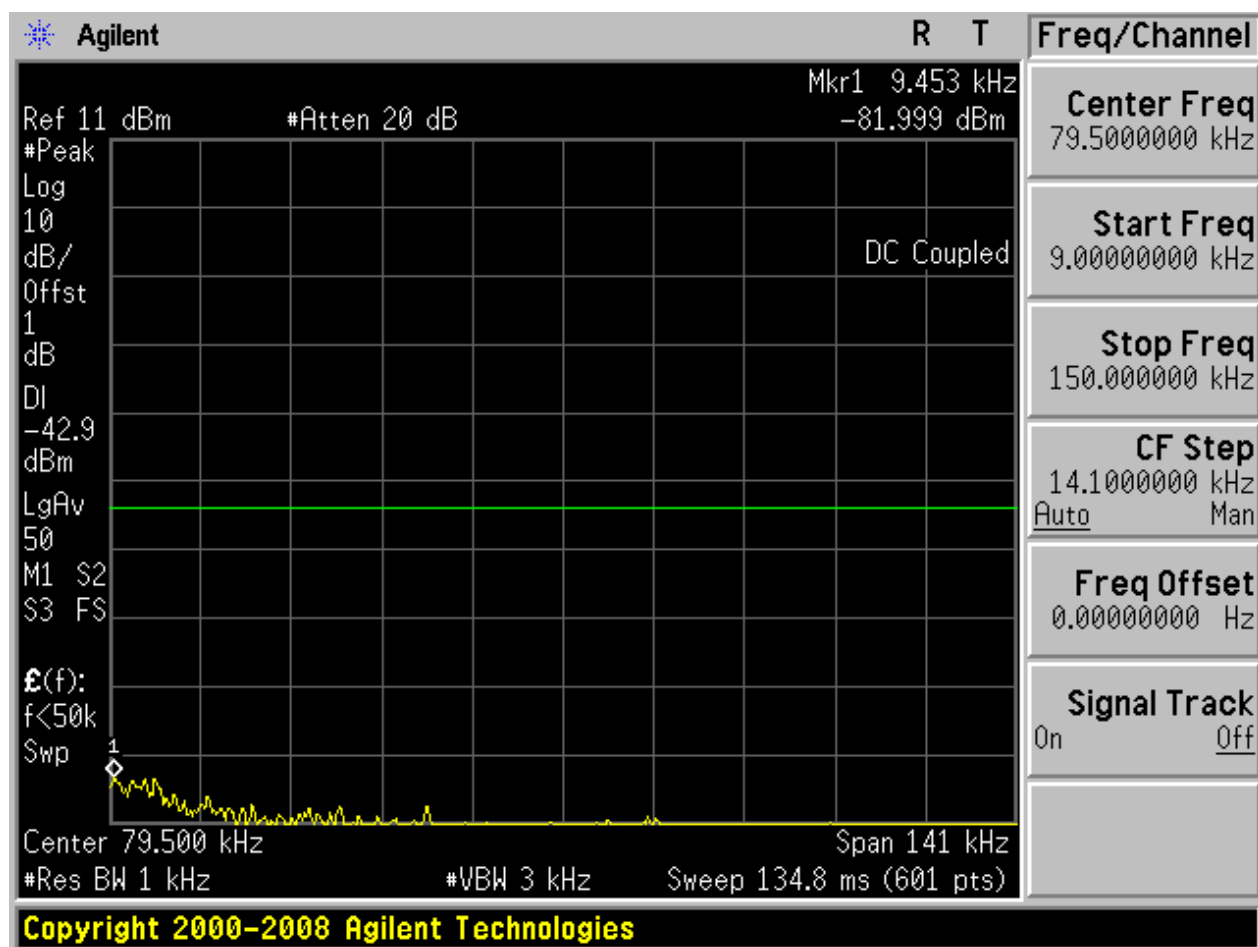
4.13 11N20_L@Ant 1

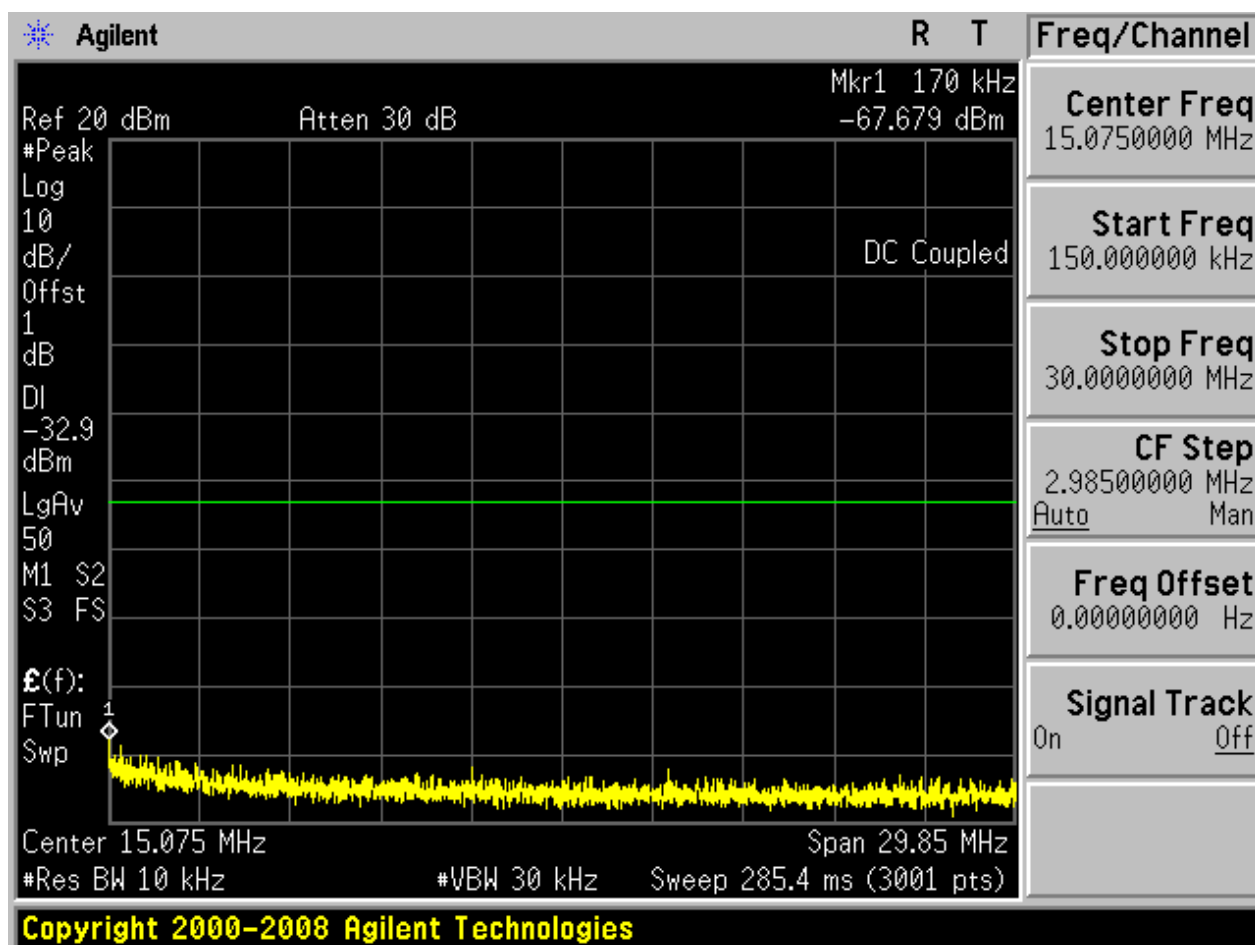
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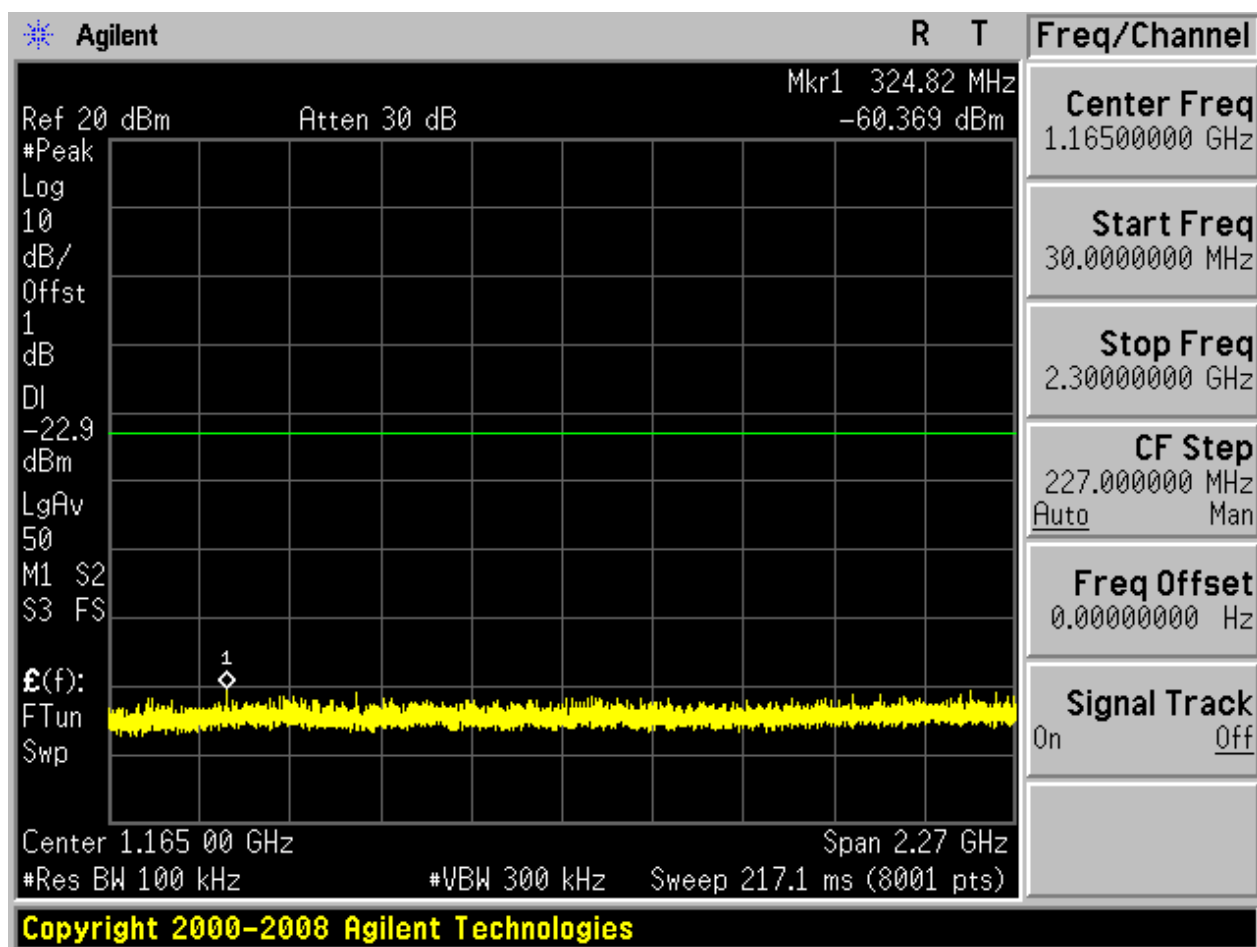


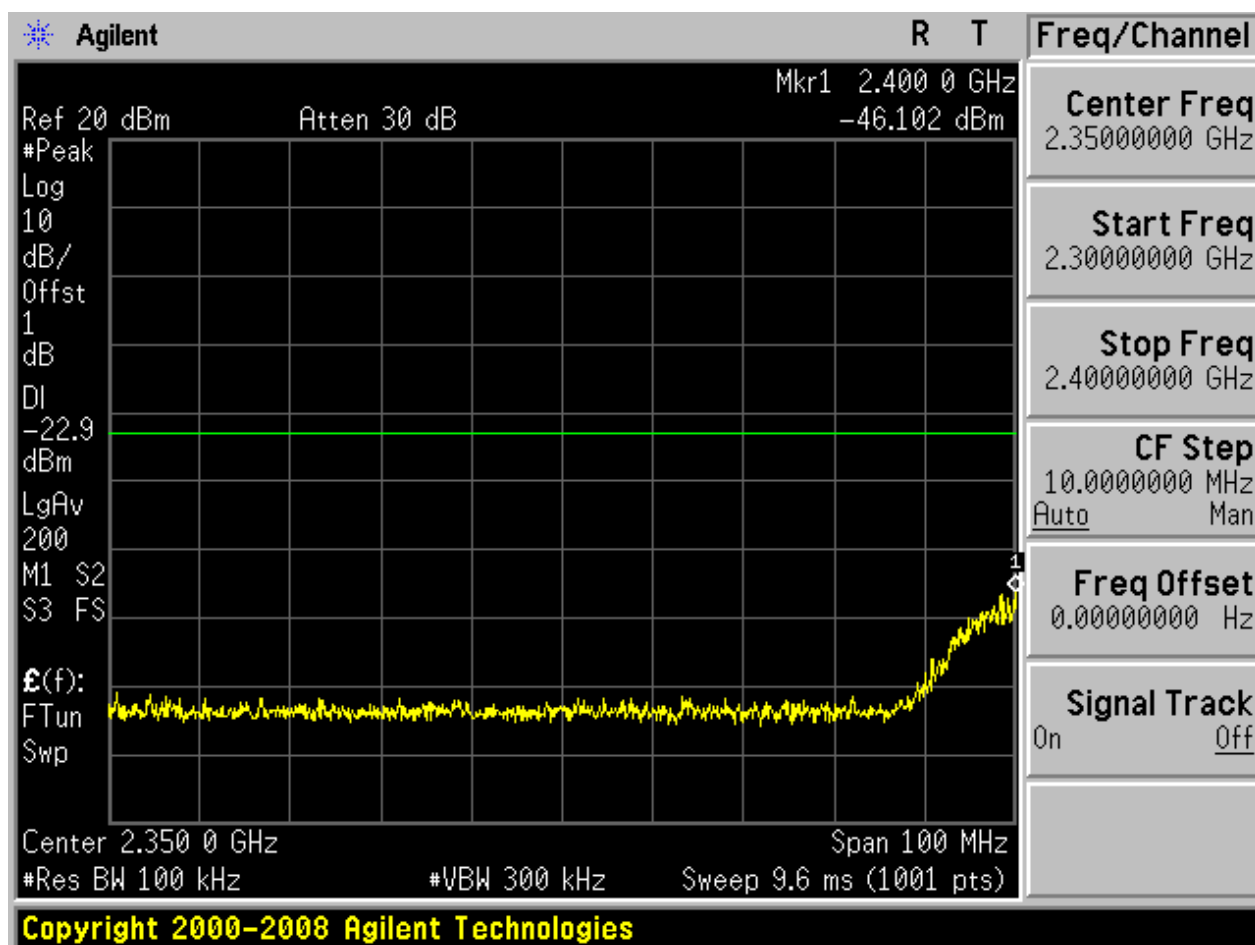


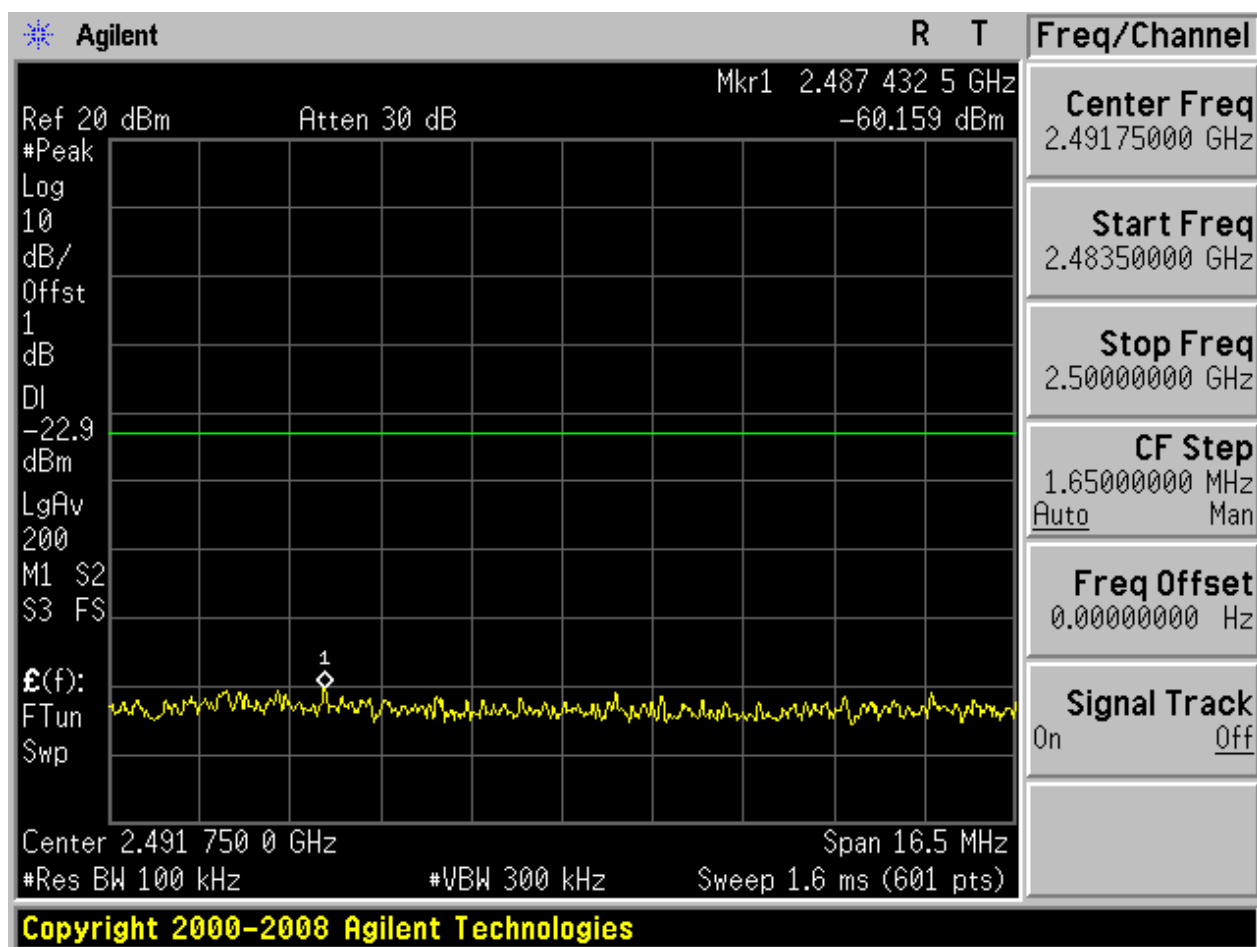
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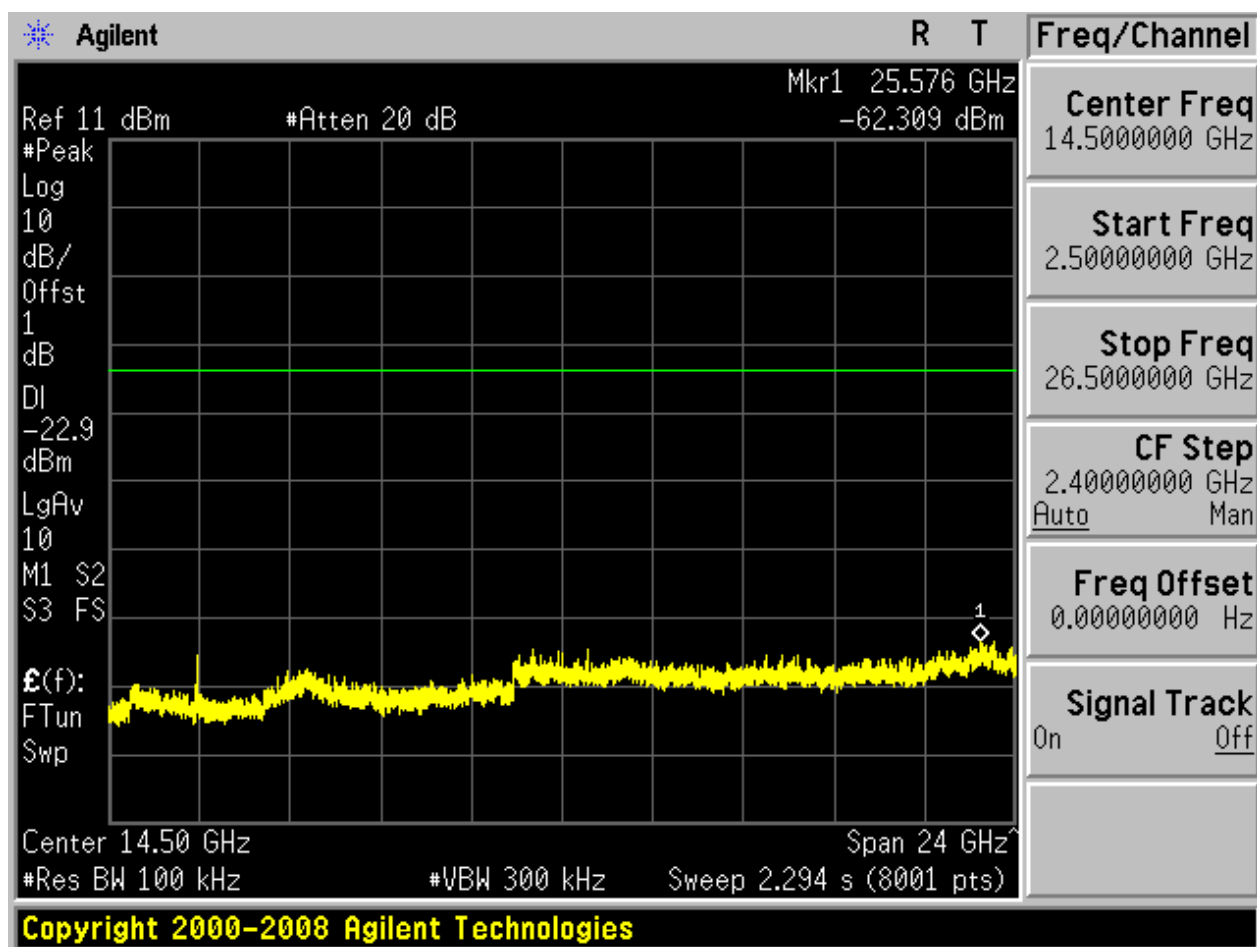






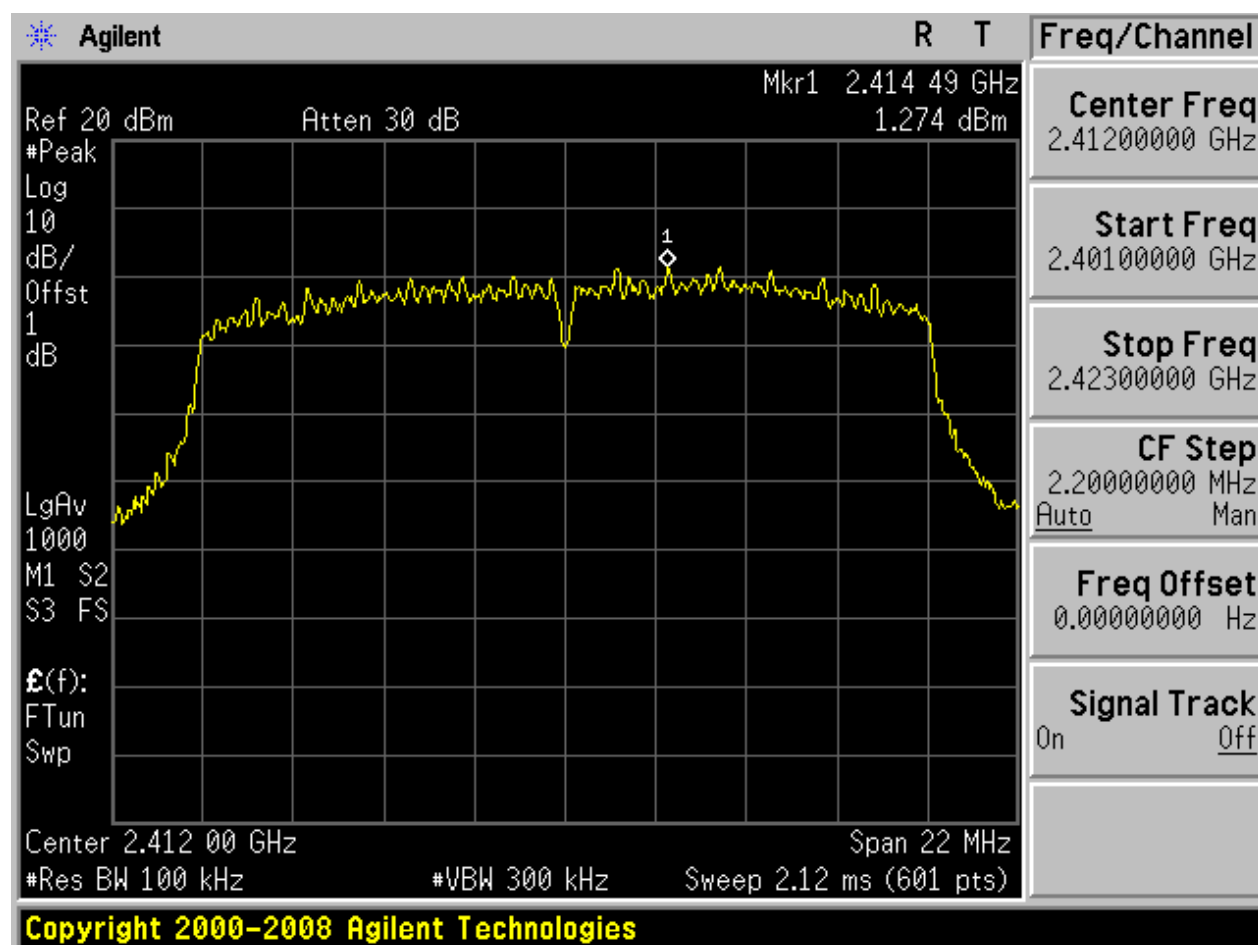






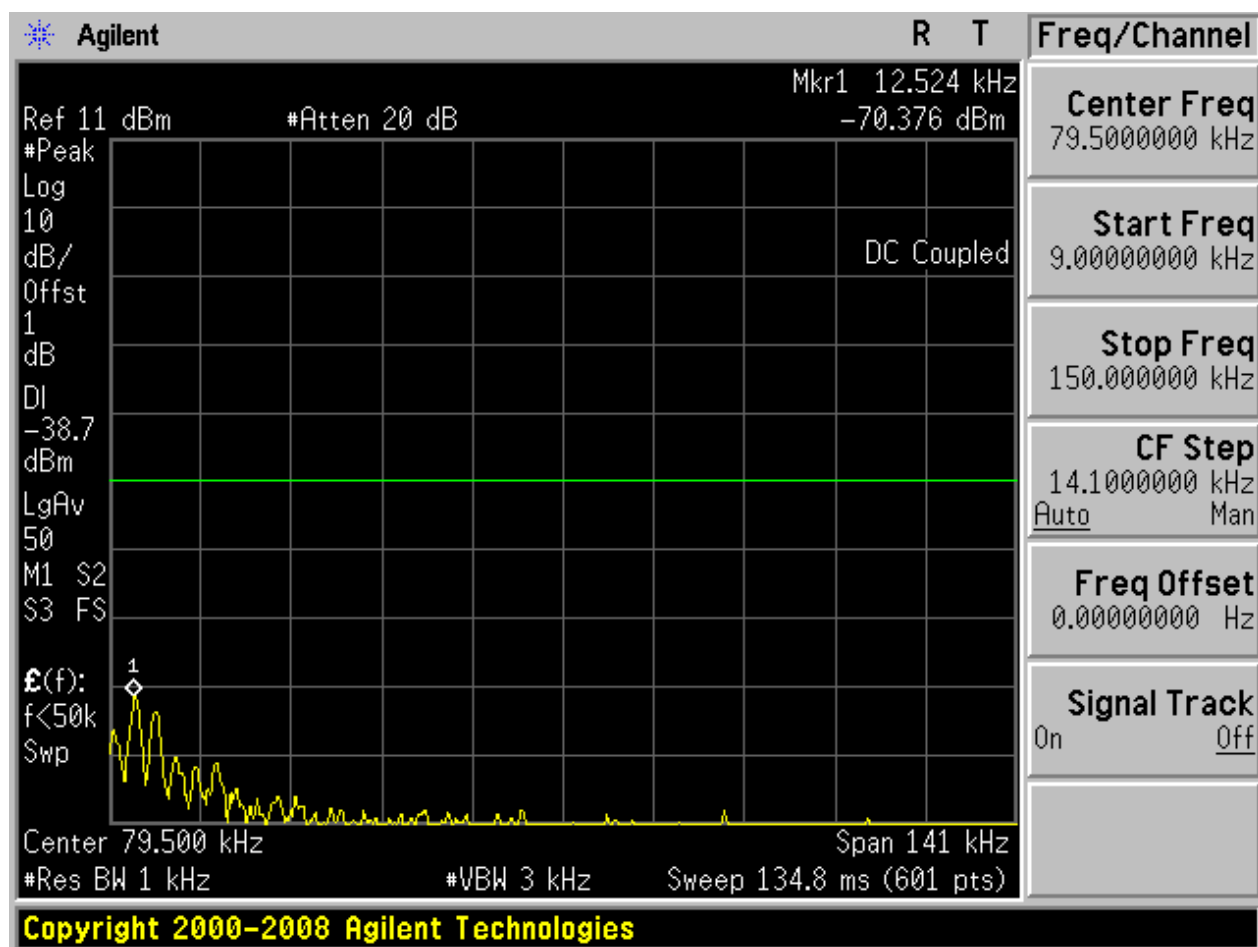
4.14 11N20_L@Ant 2

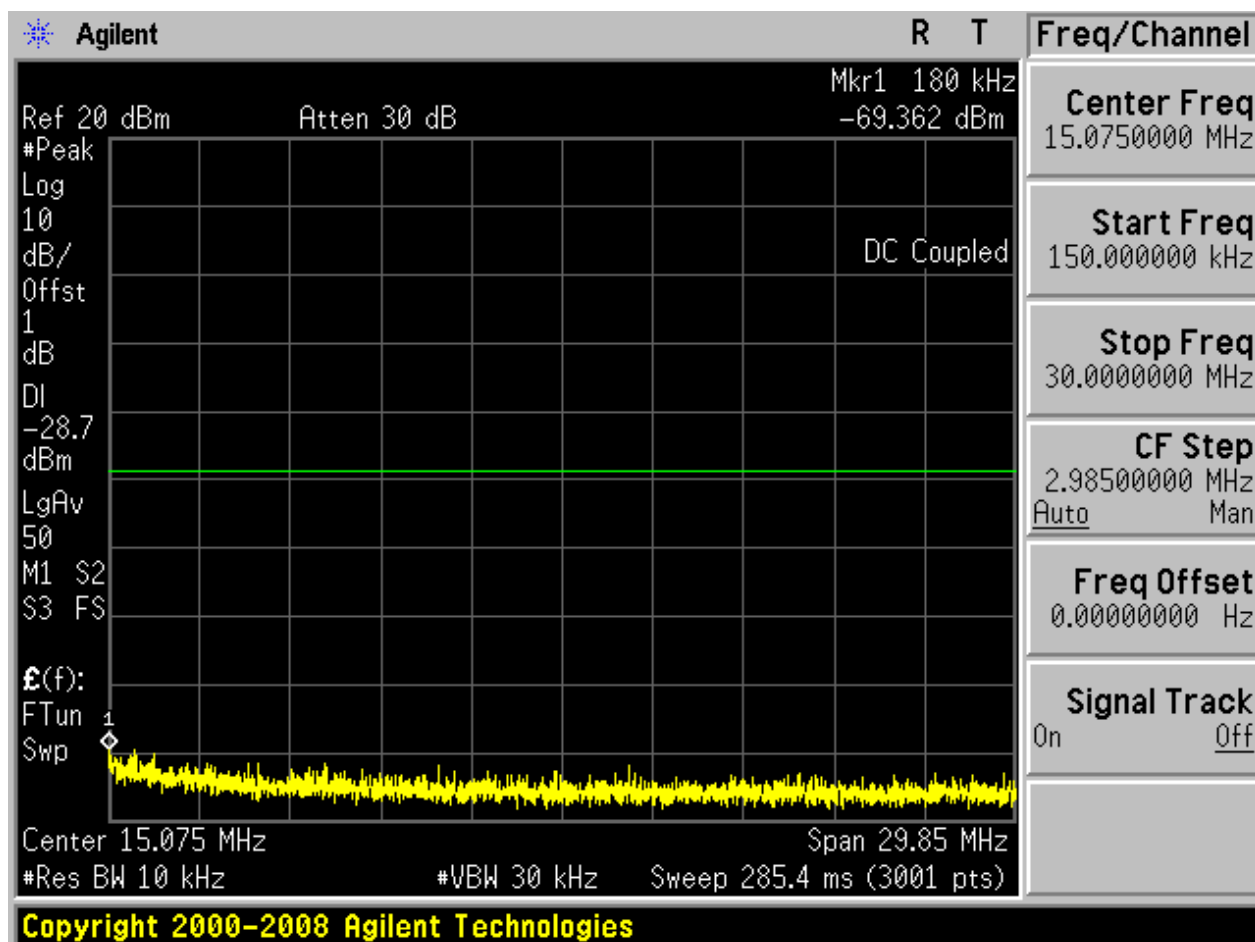
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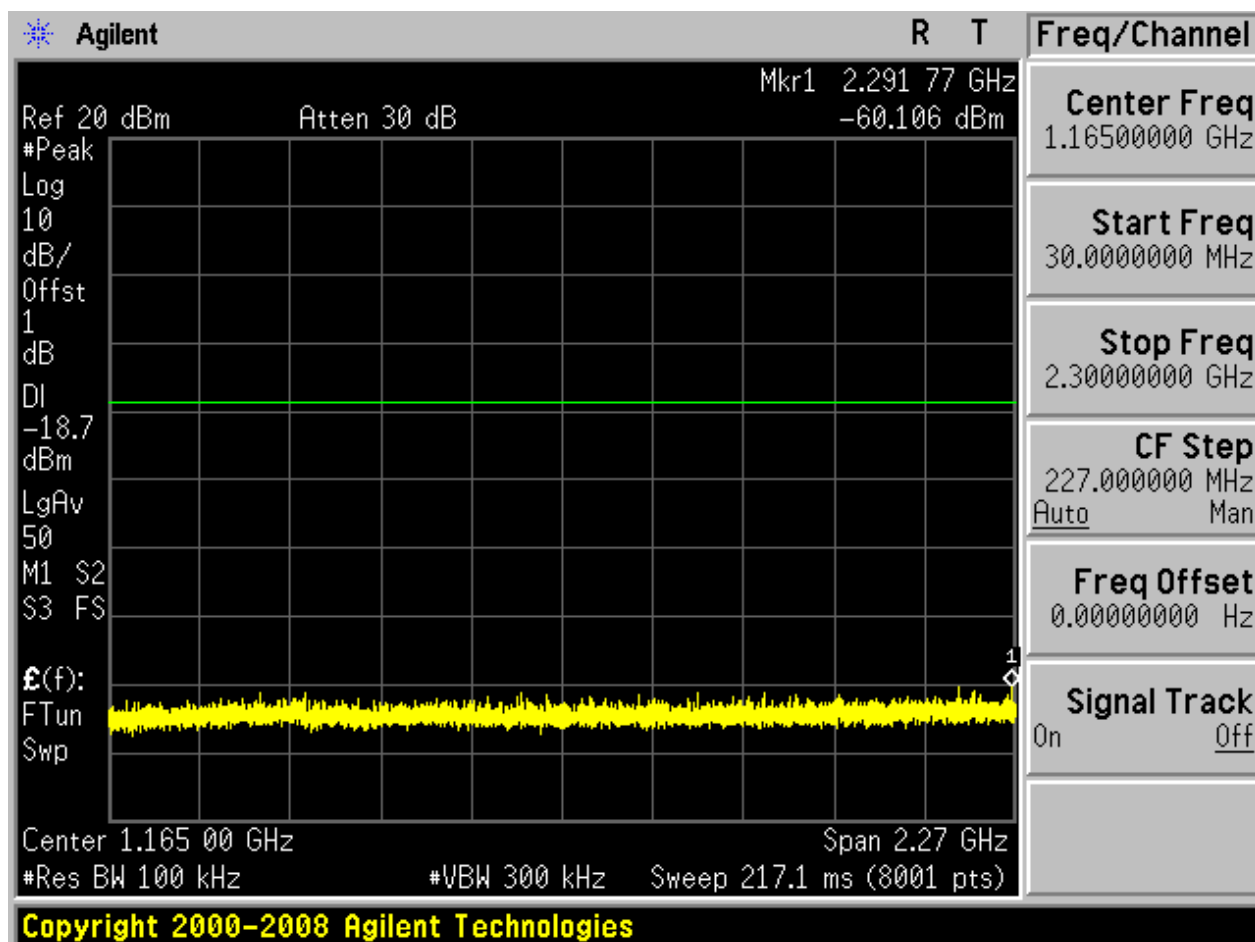


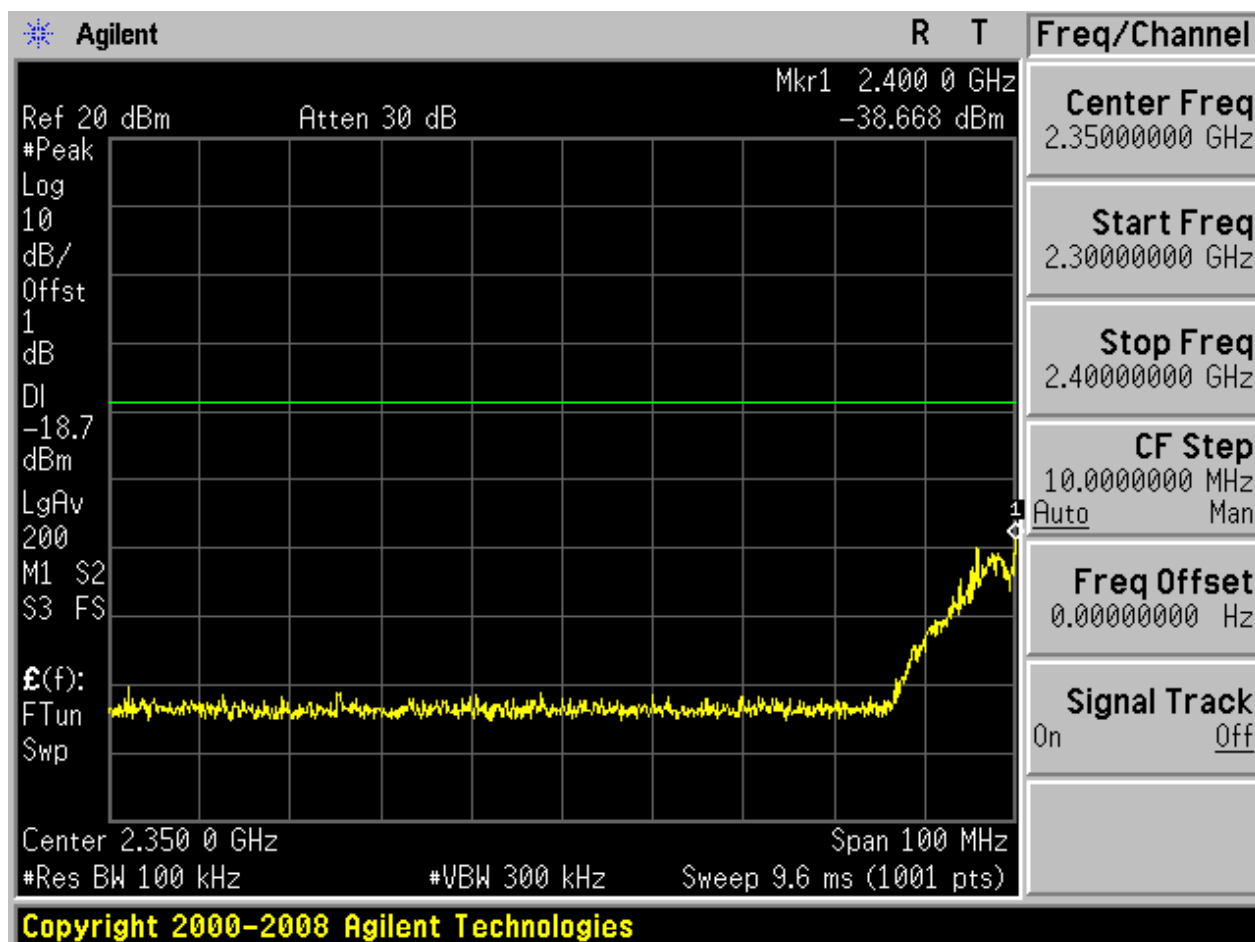


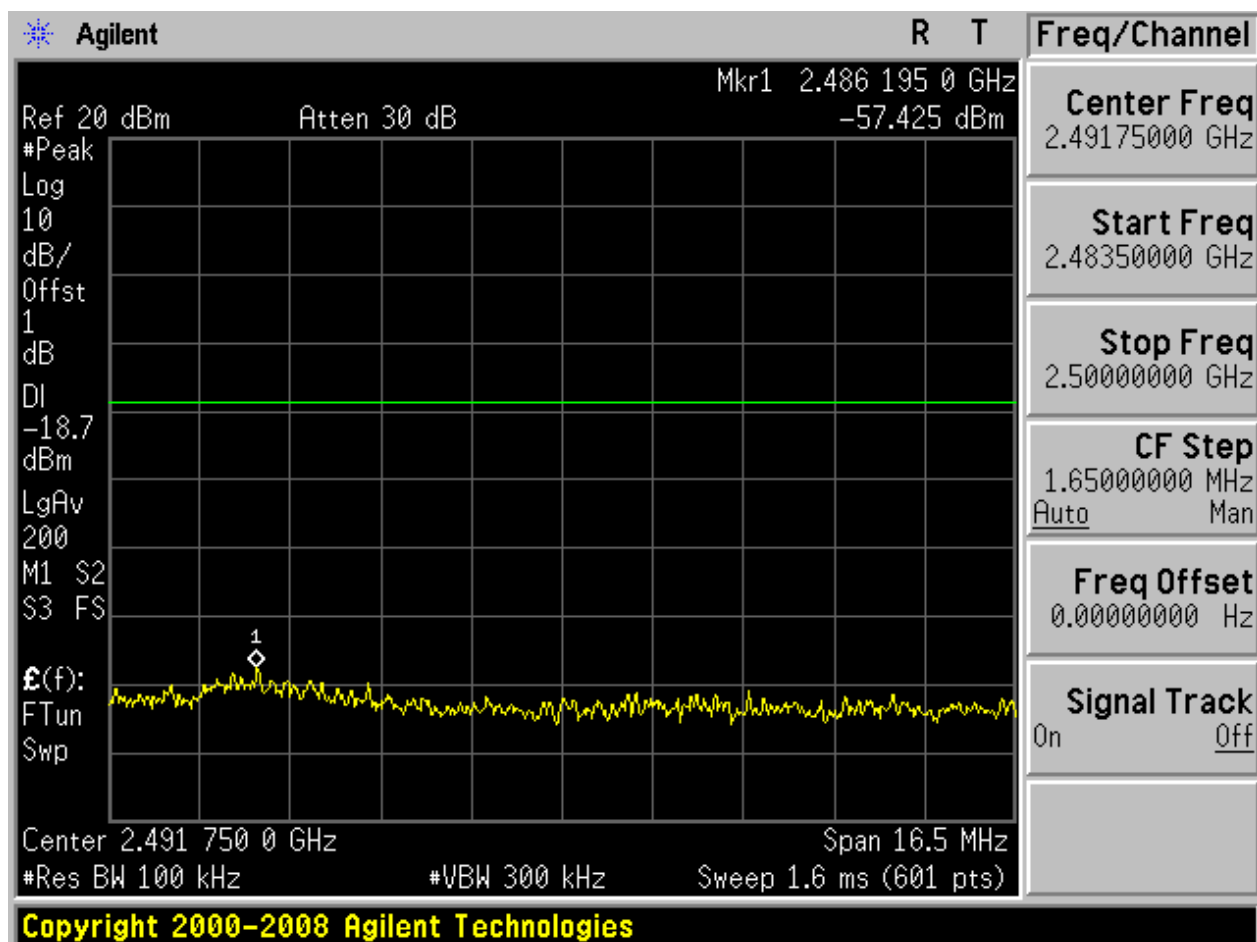
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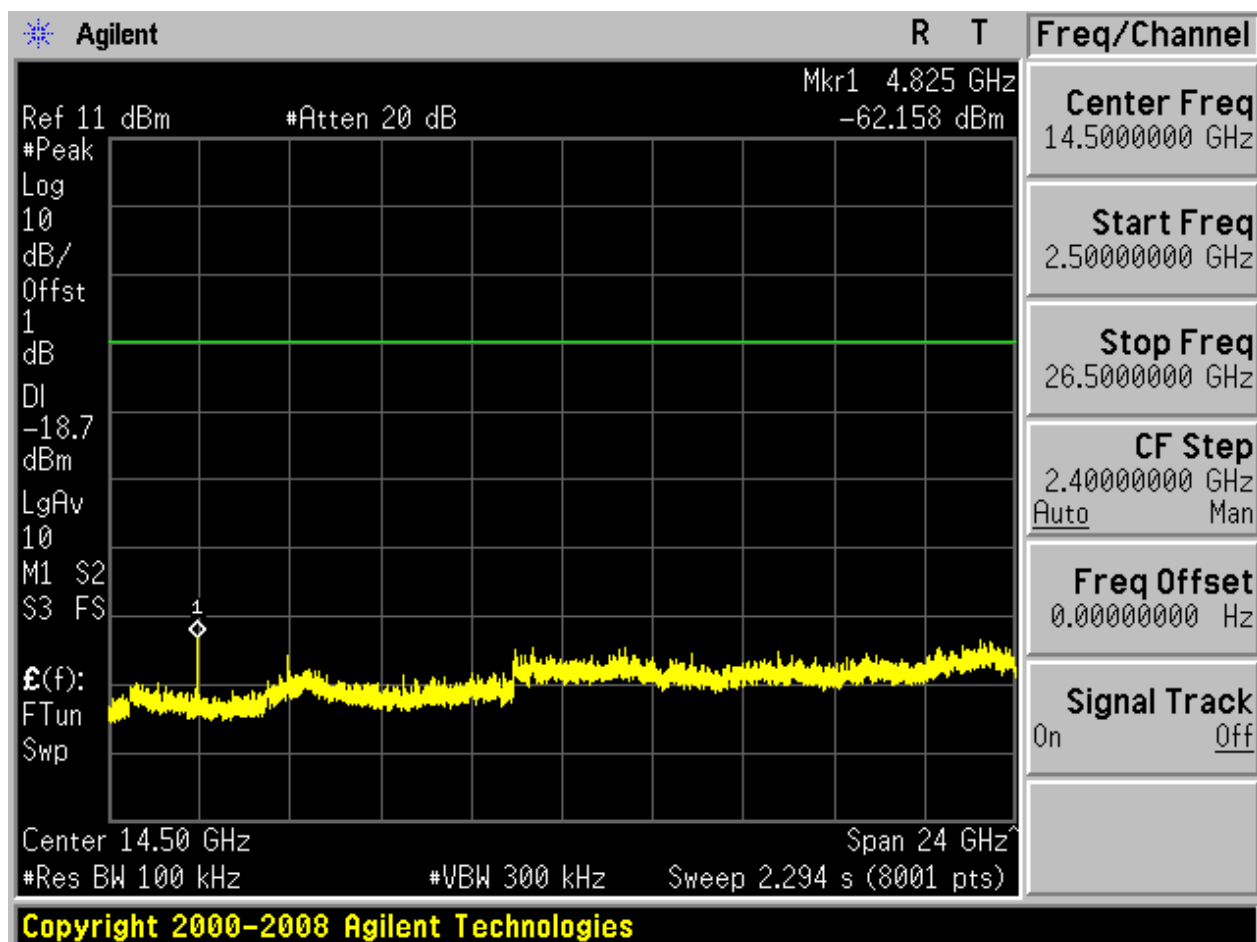








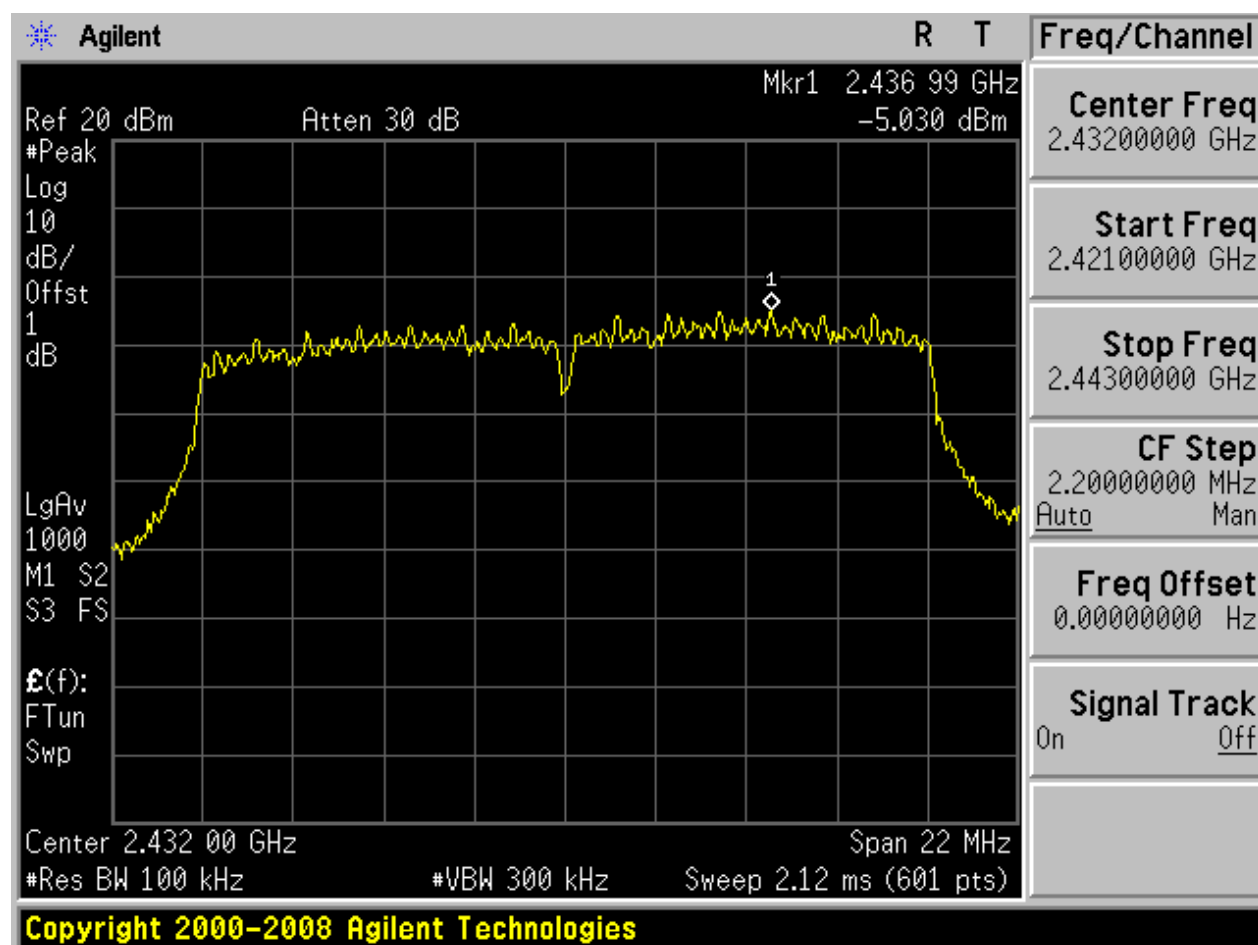






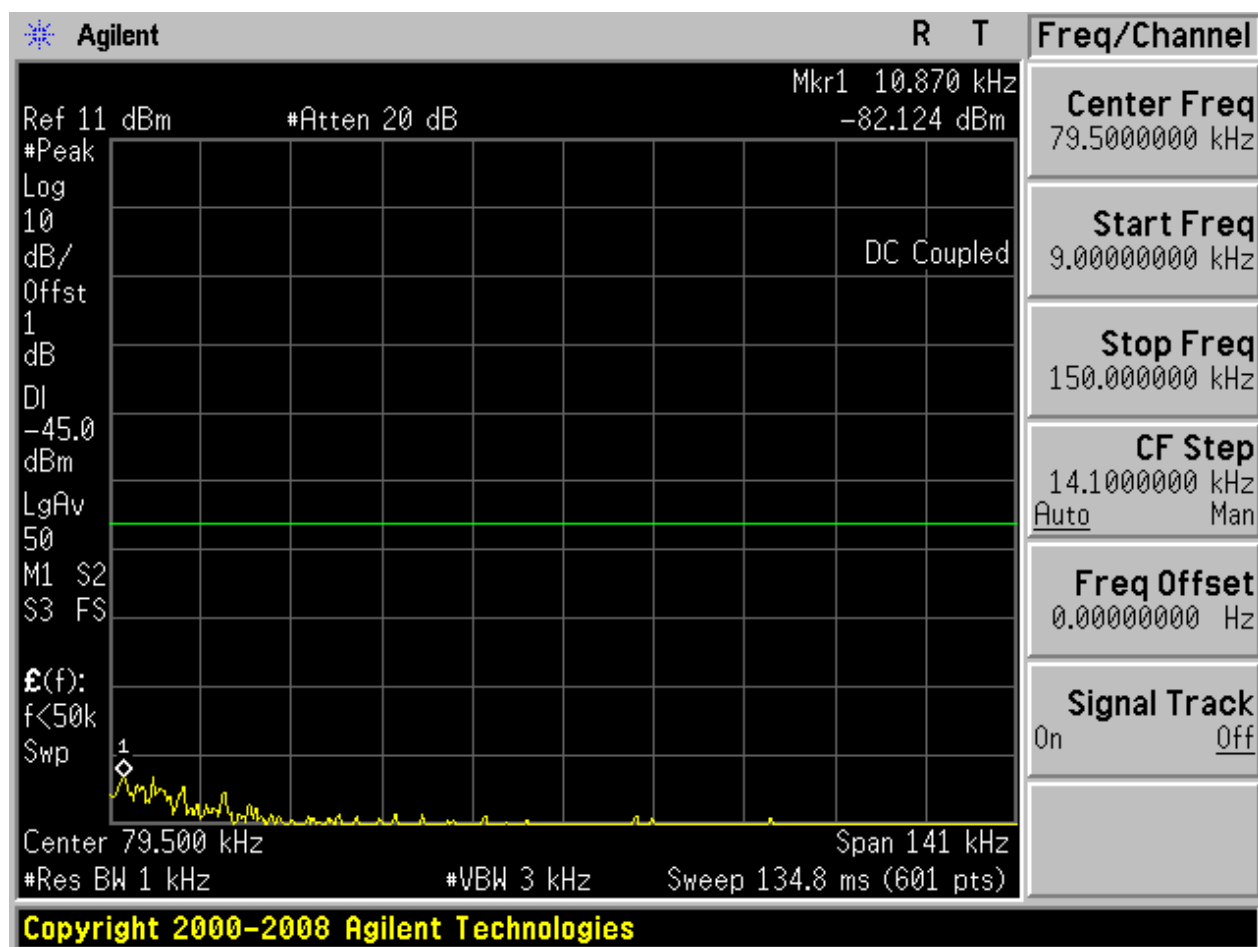
4.15 11N20_M@Ant 1

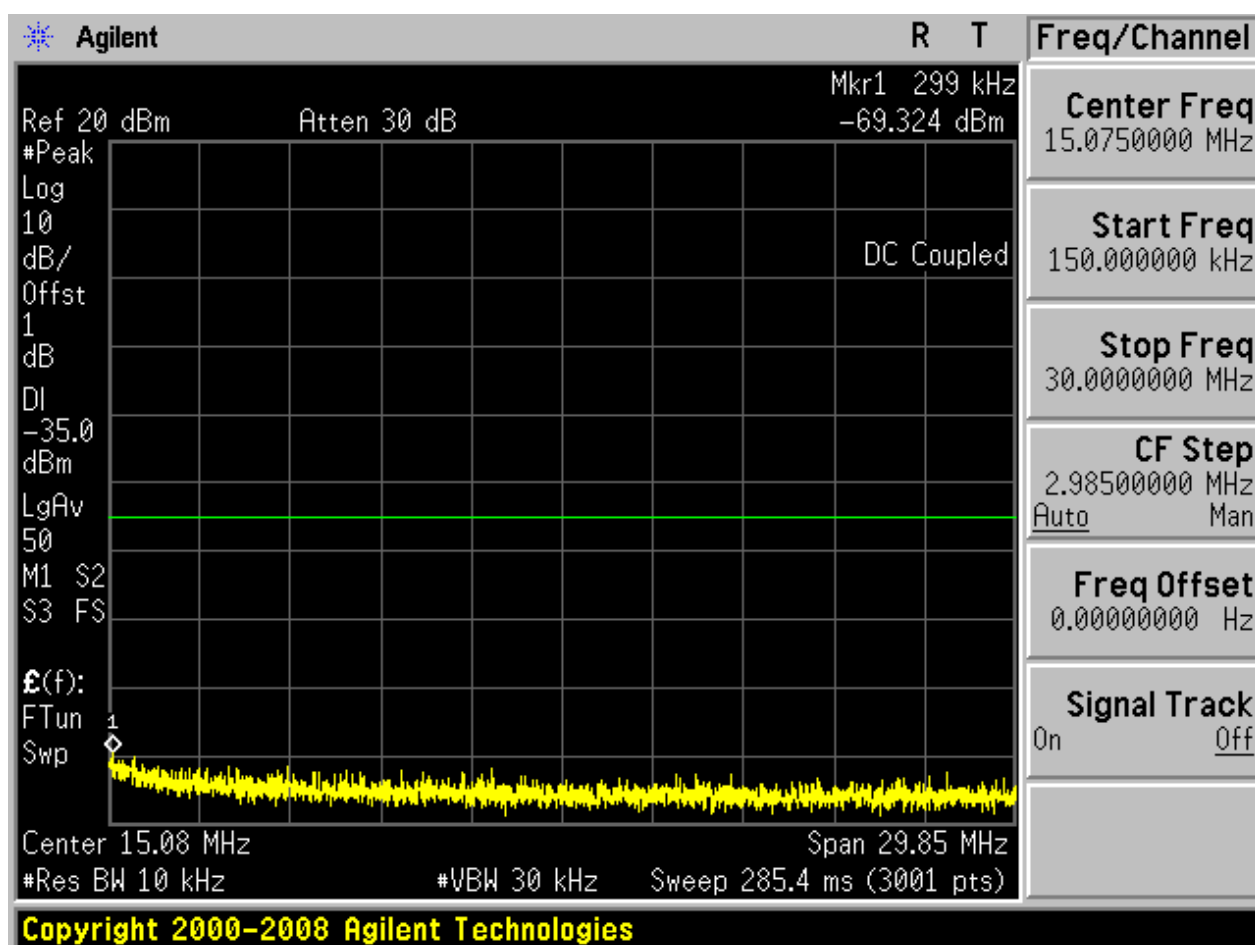
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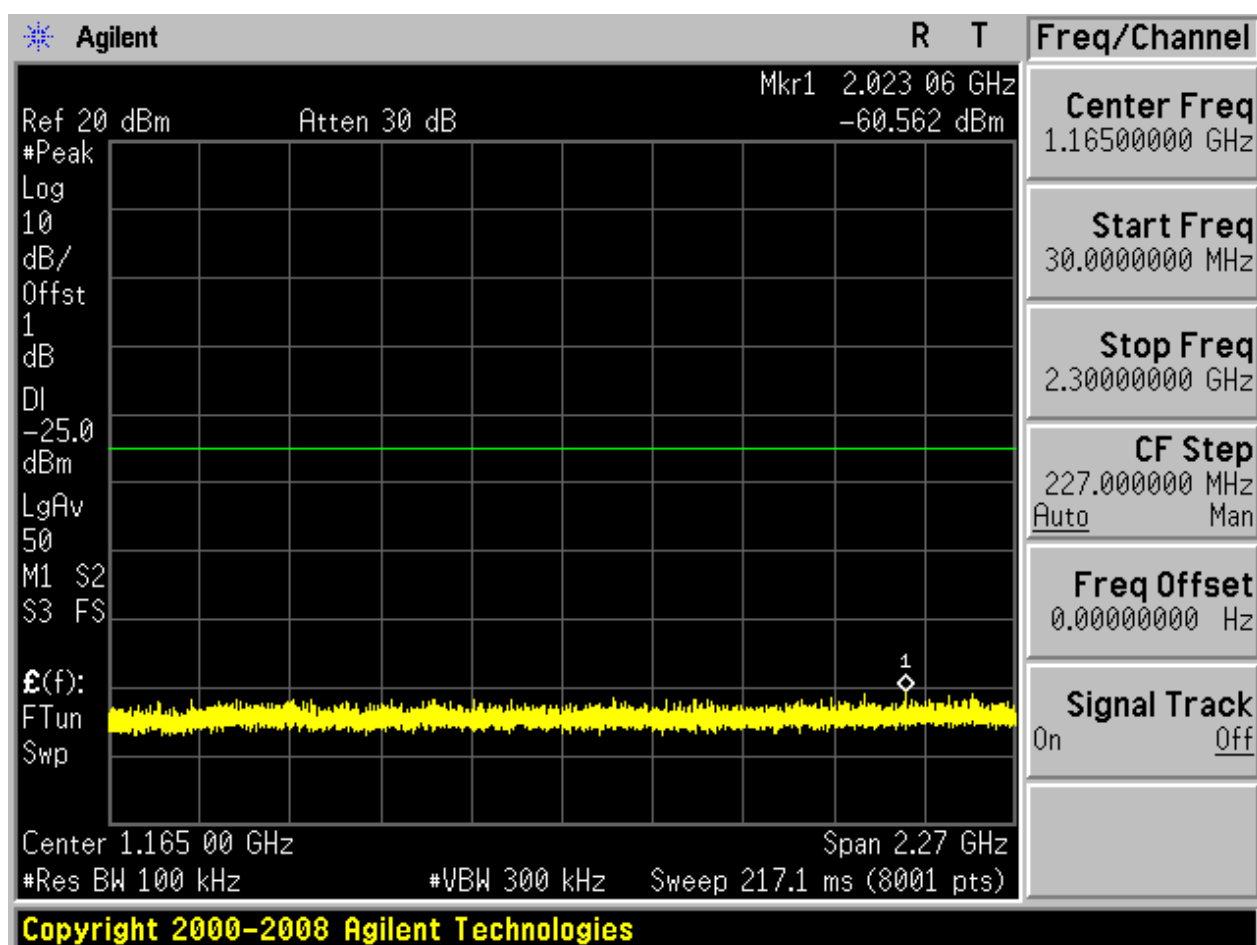


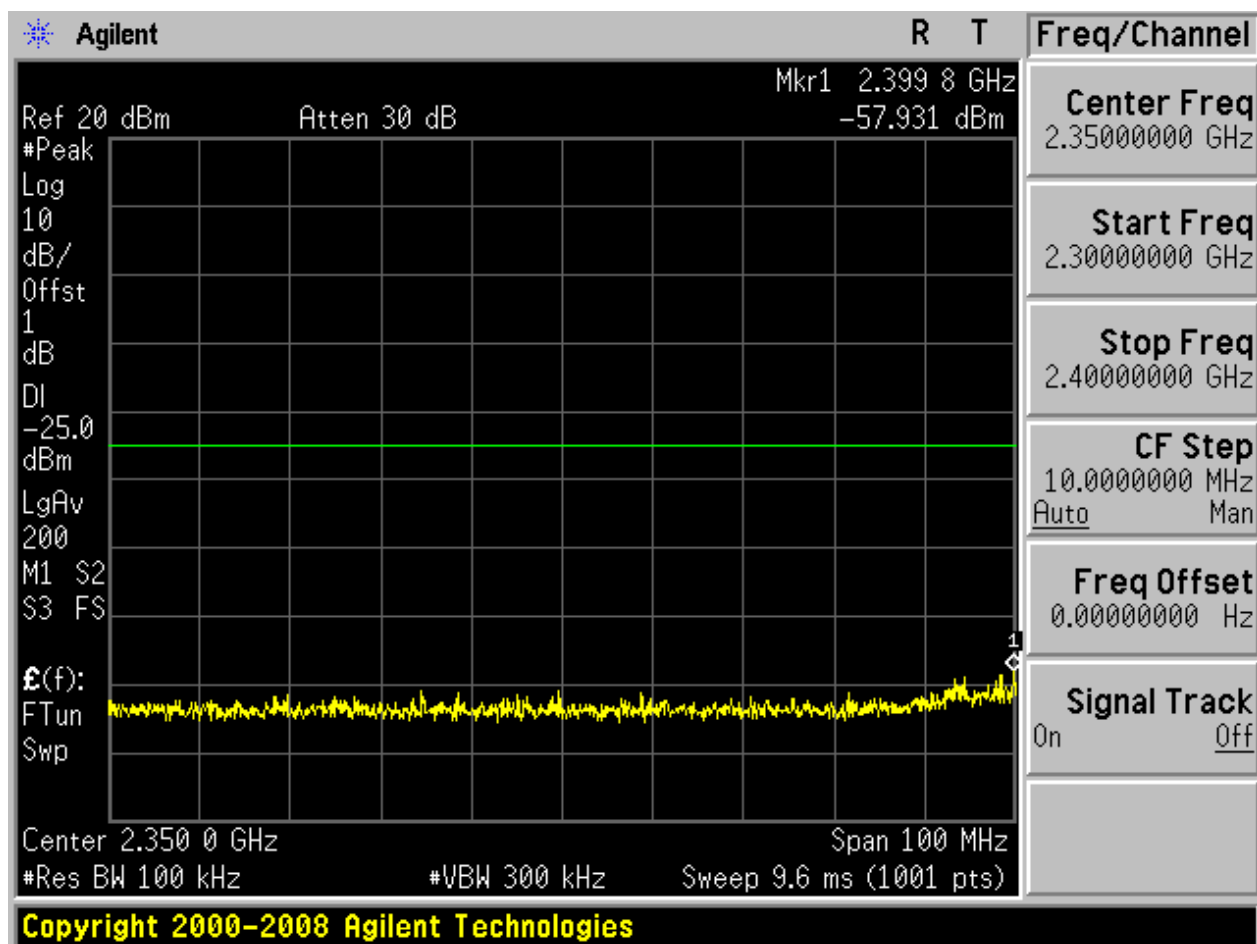


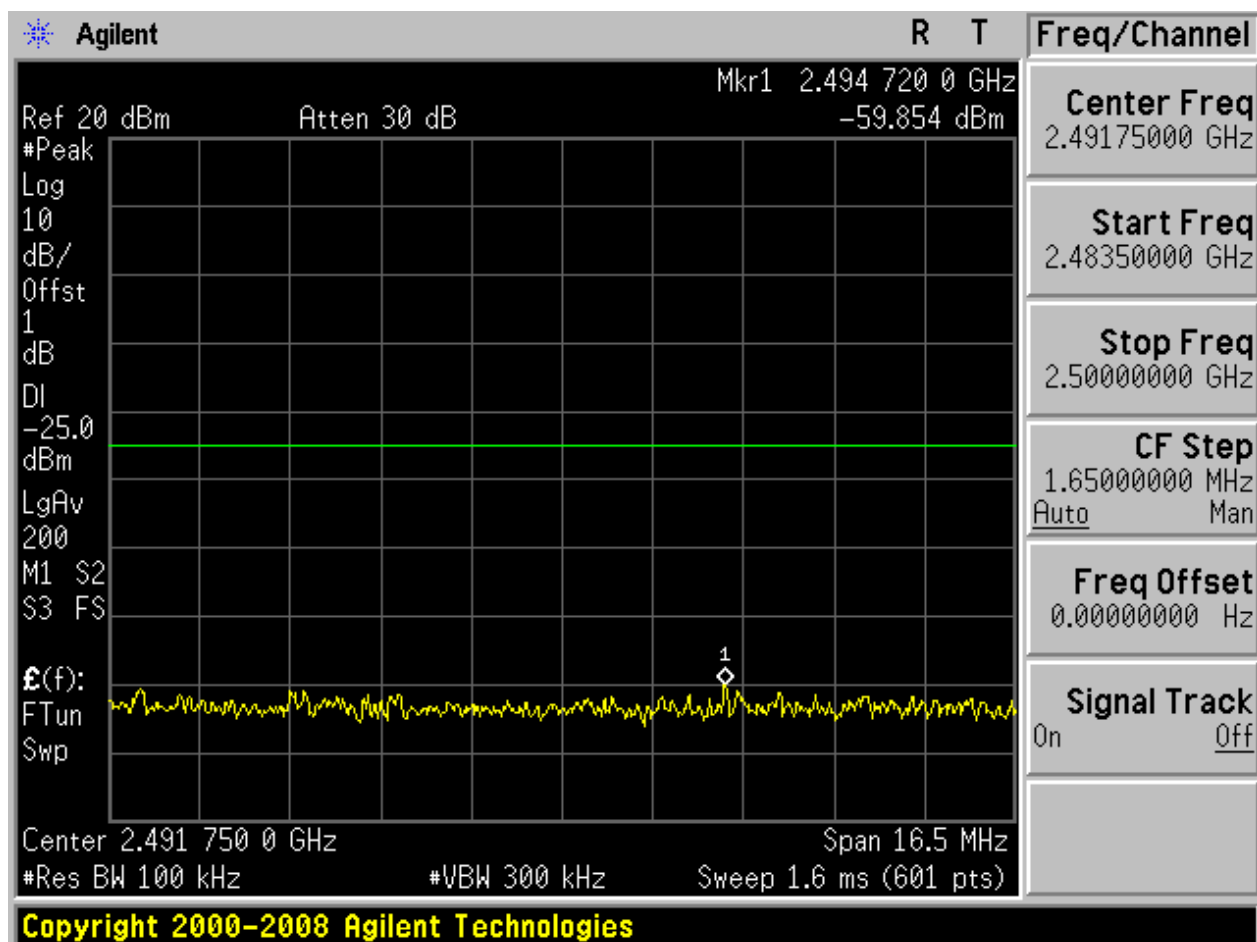
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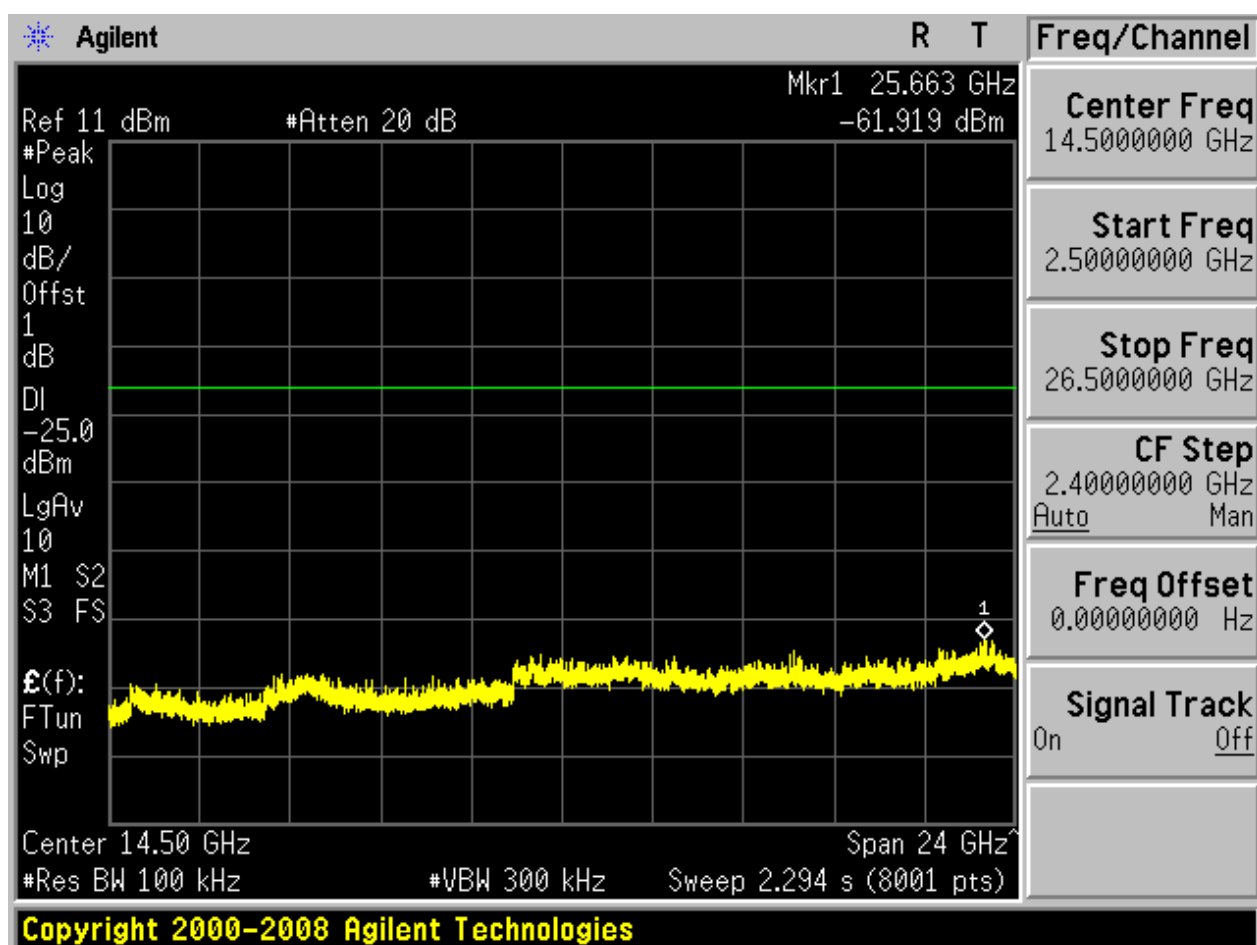








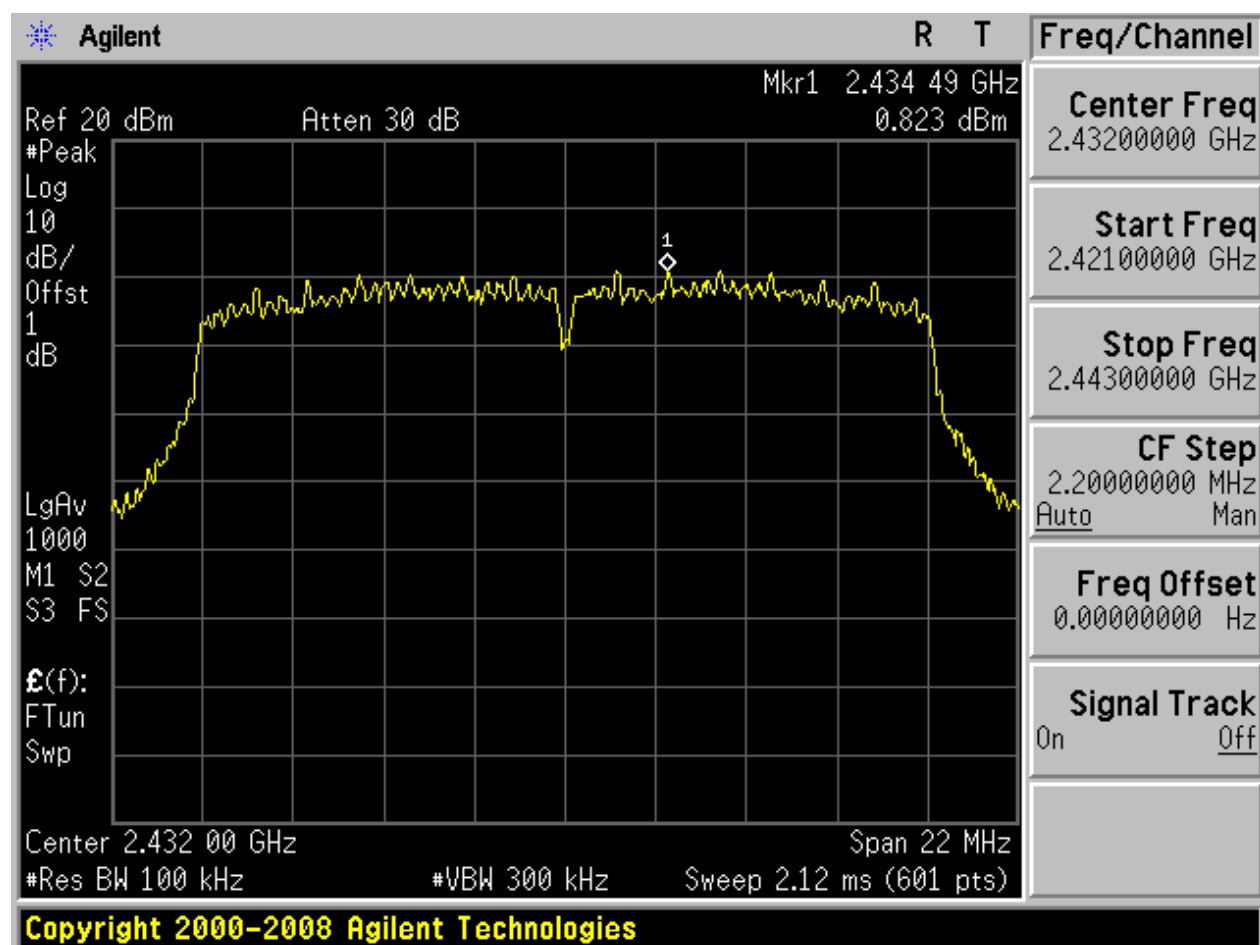






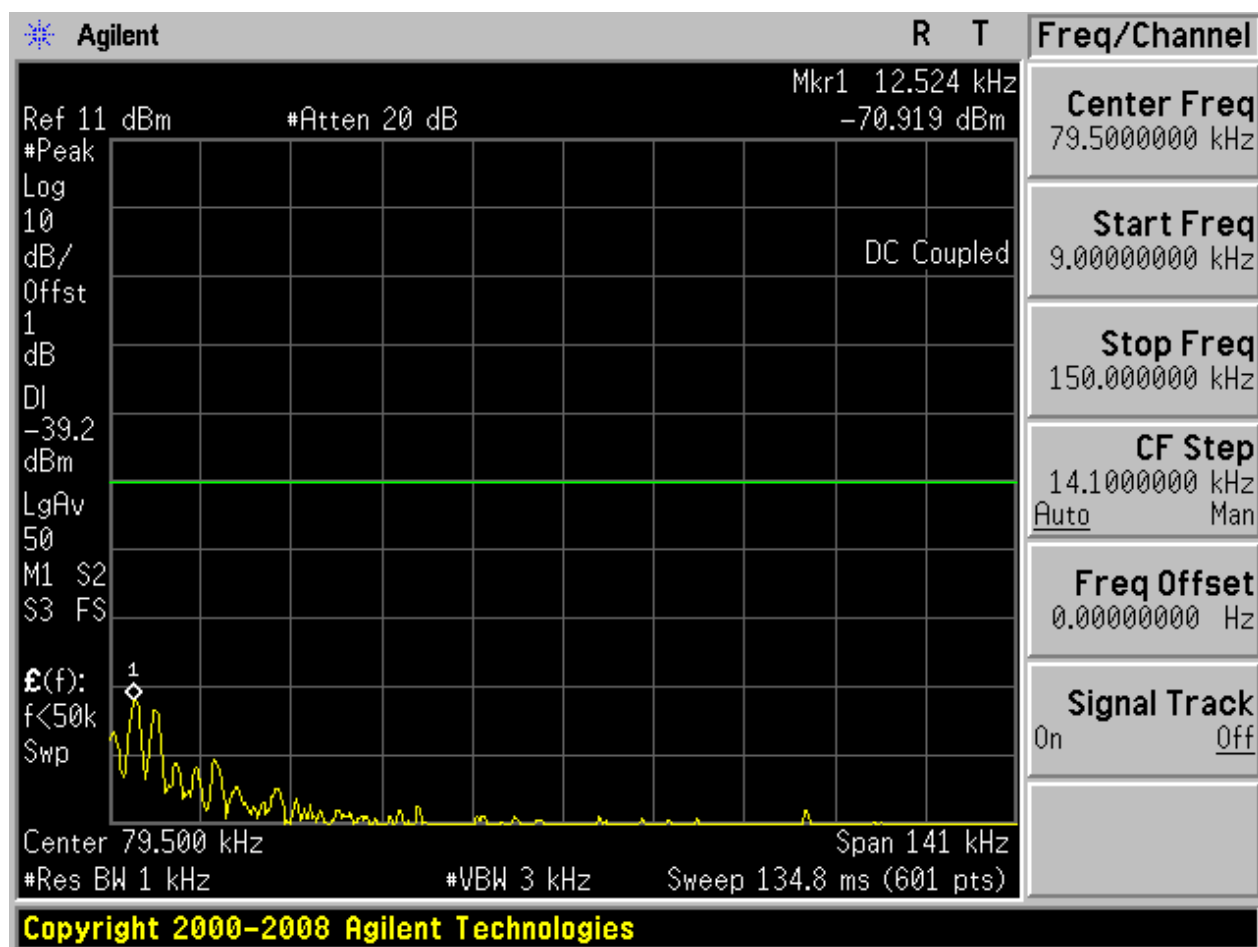
4.16 11N20_M@Ant 2

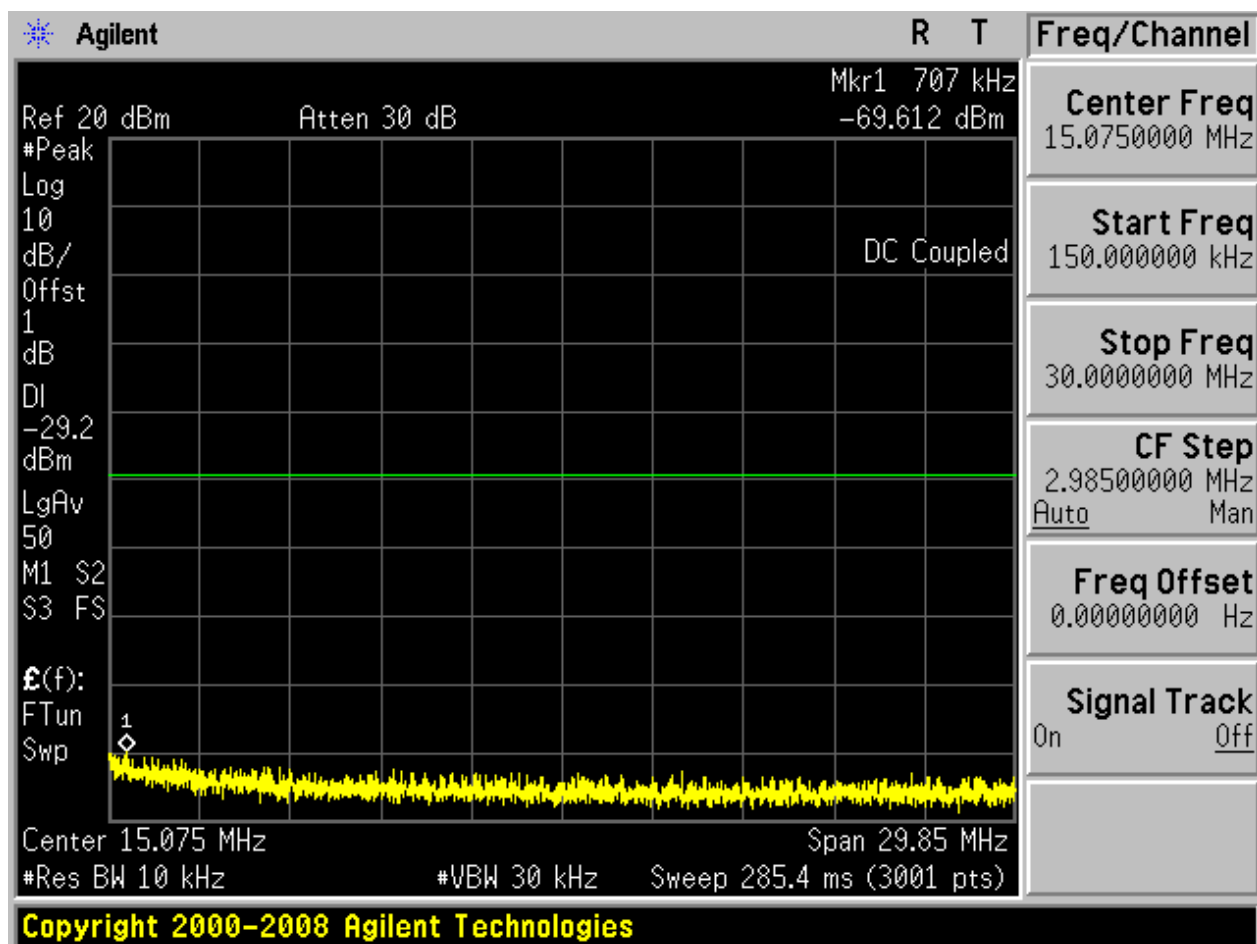
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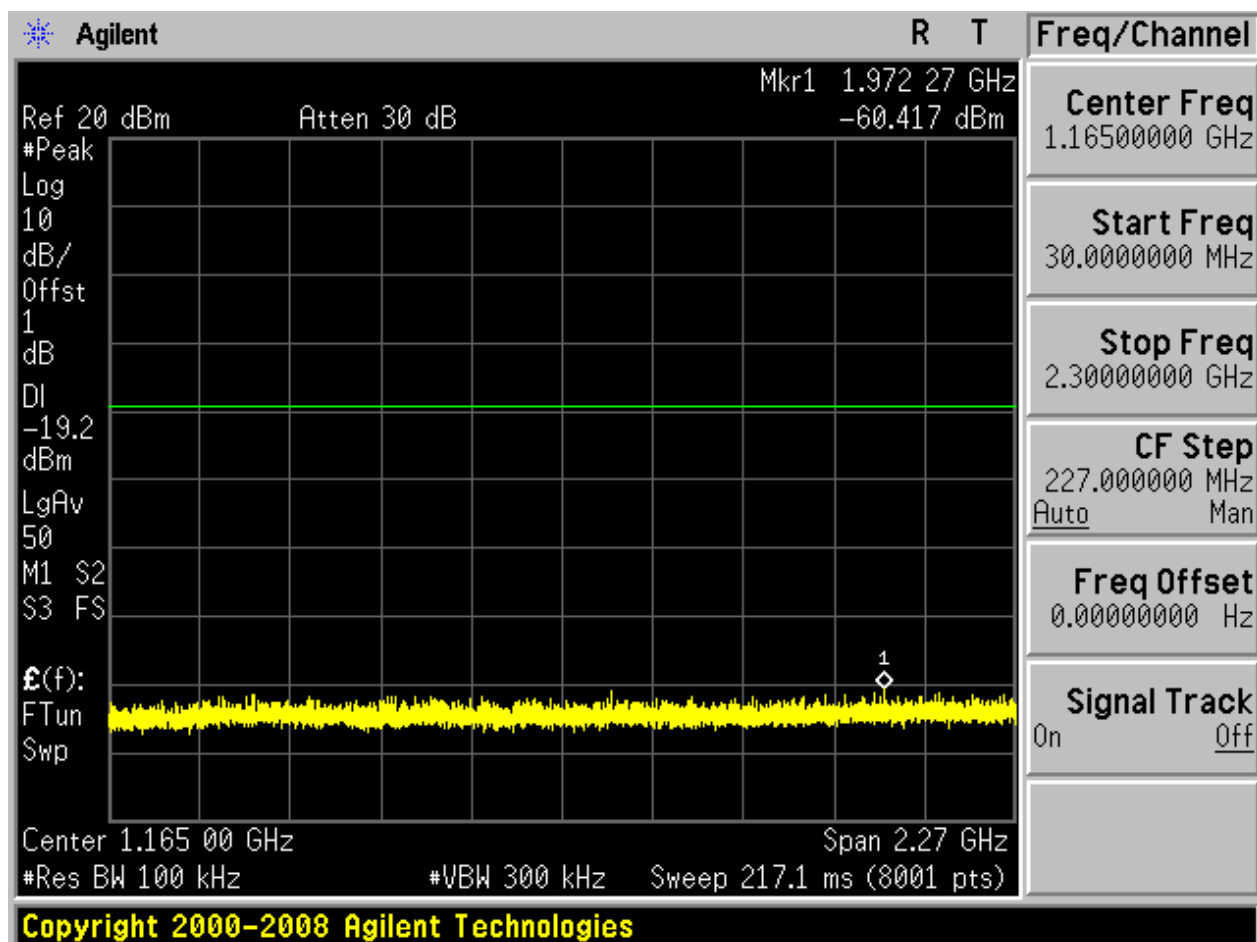


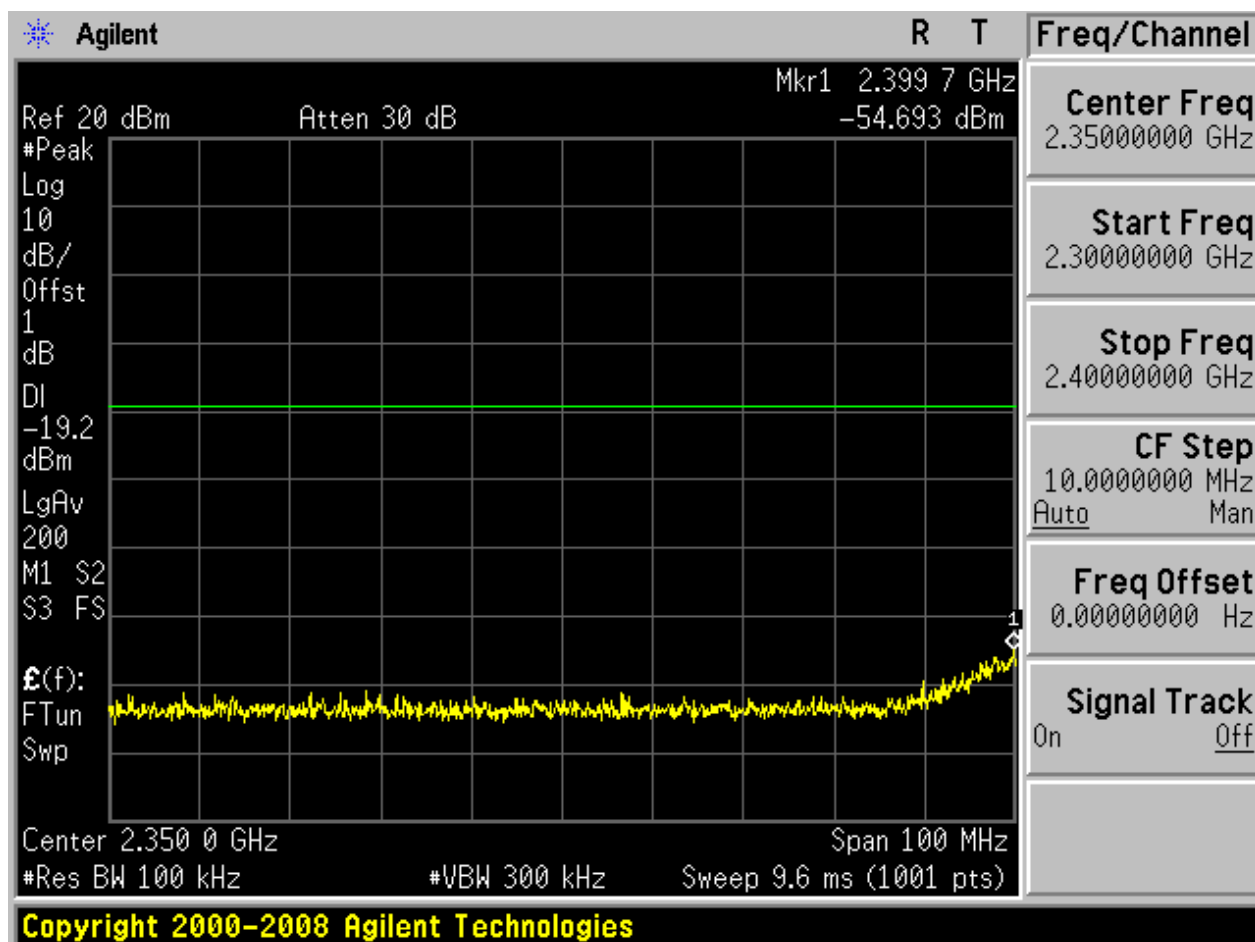


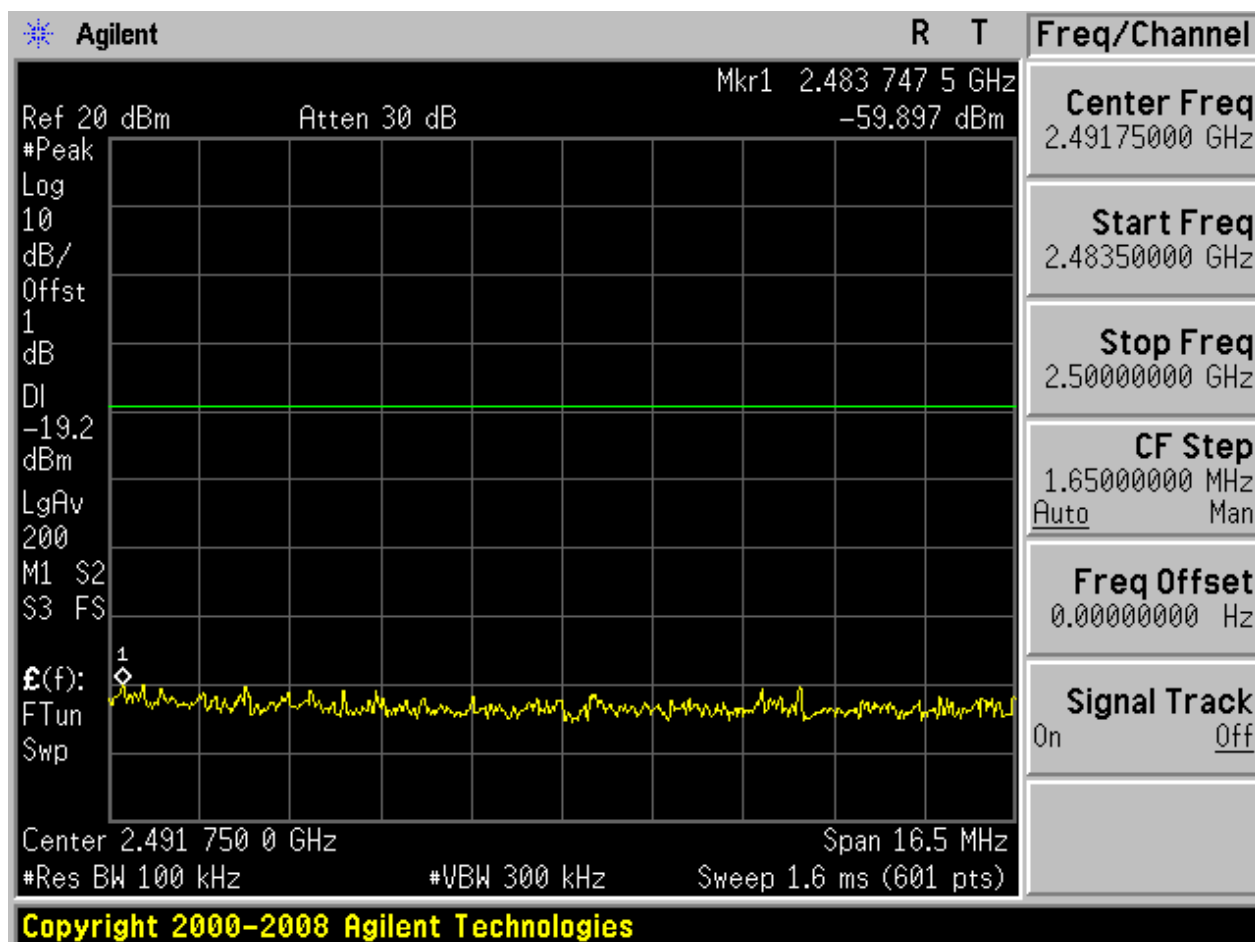
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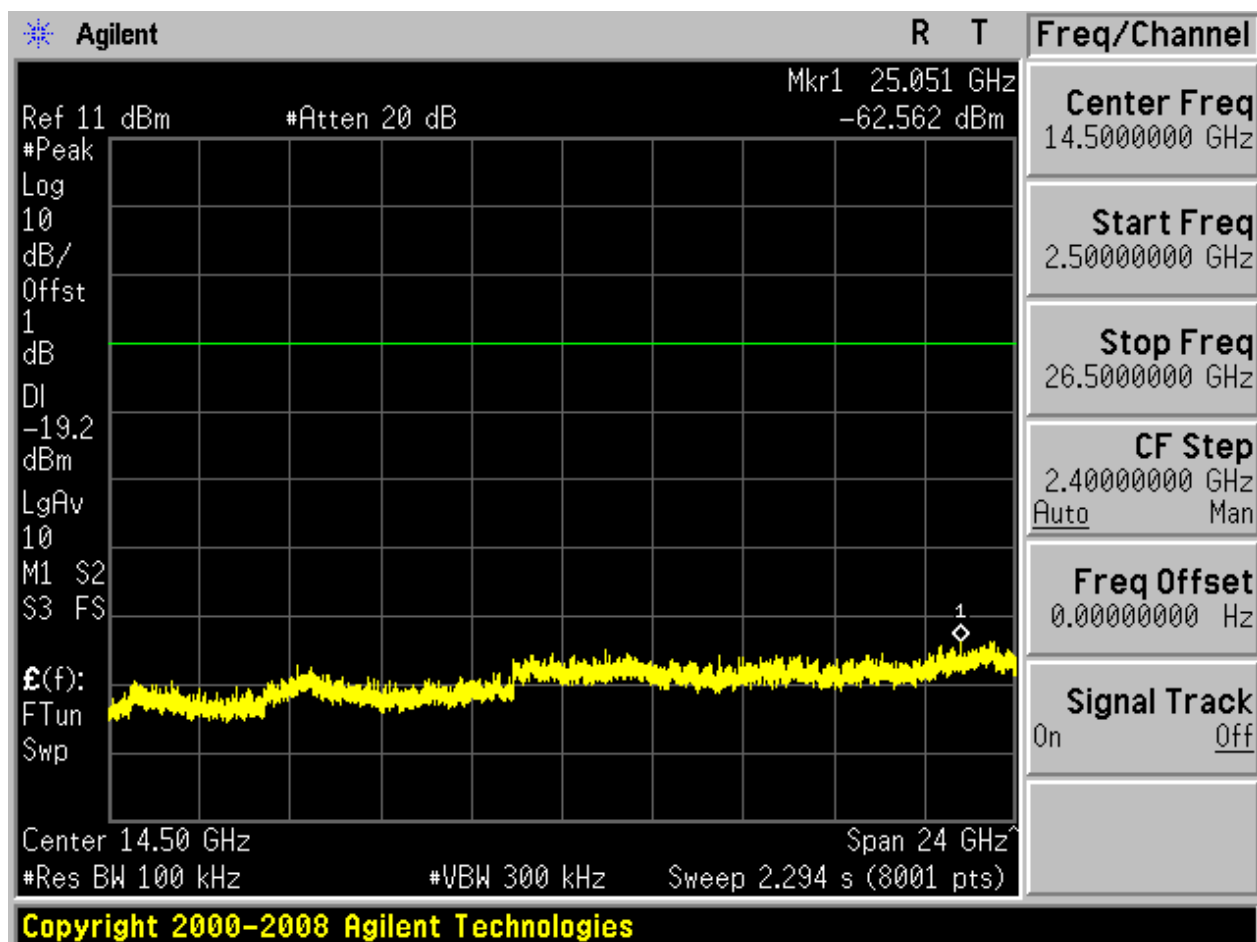








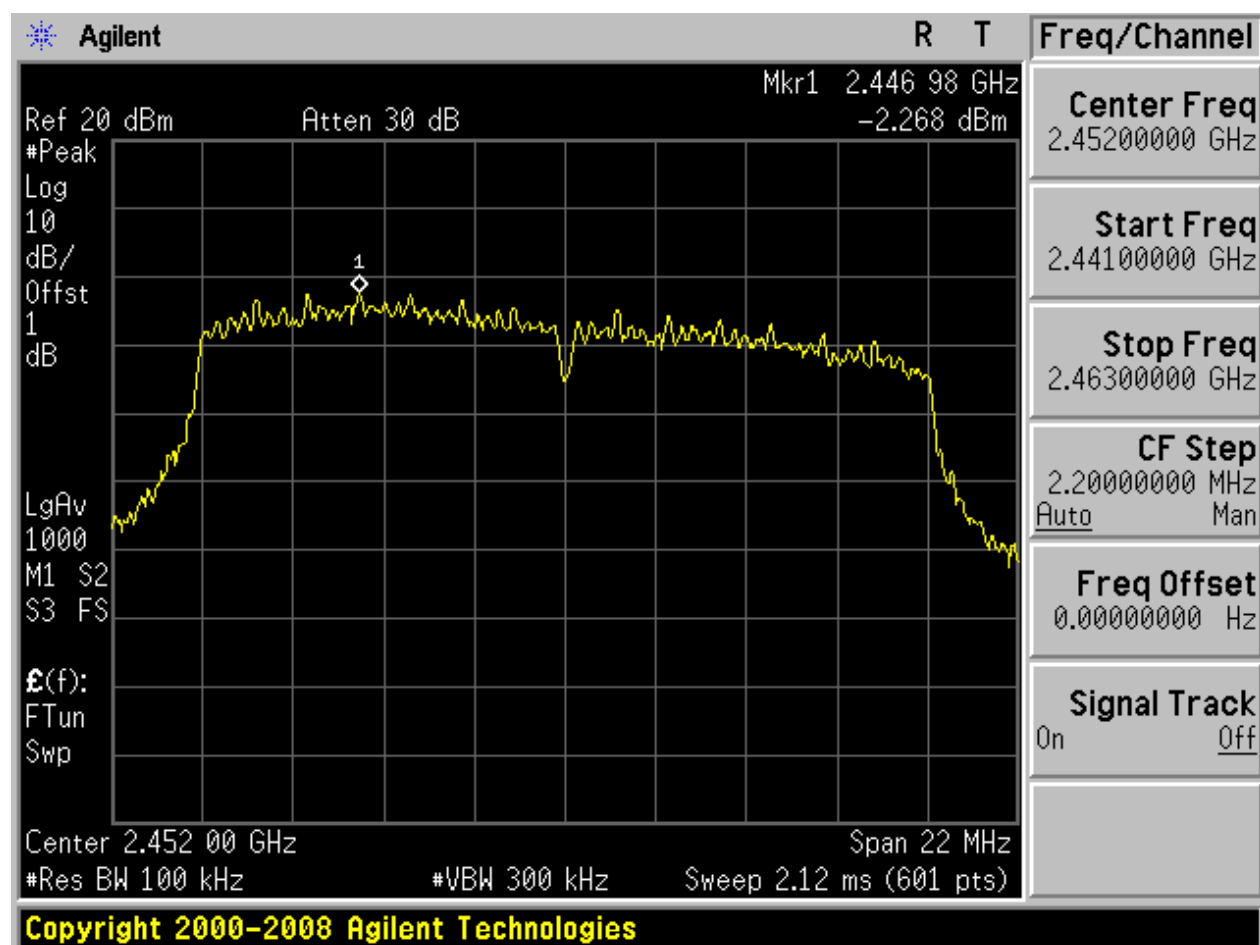






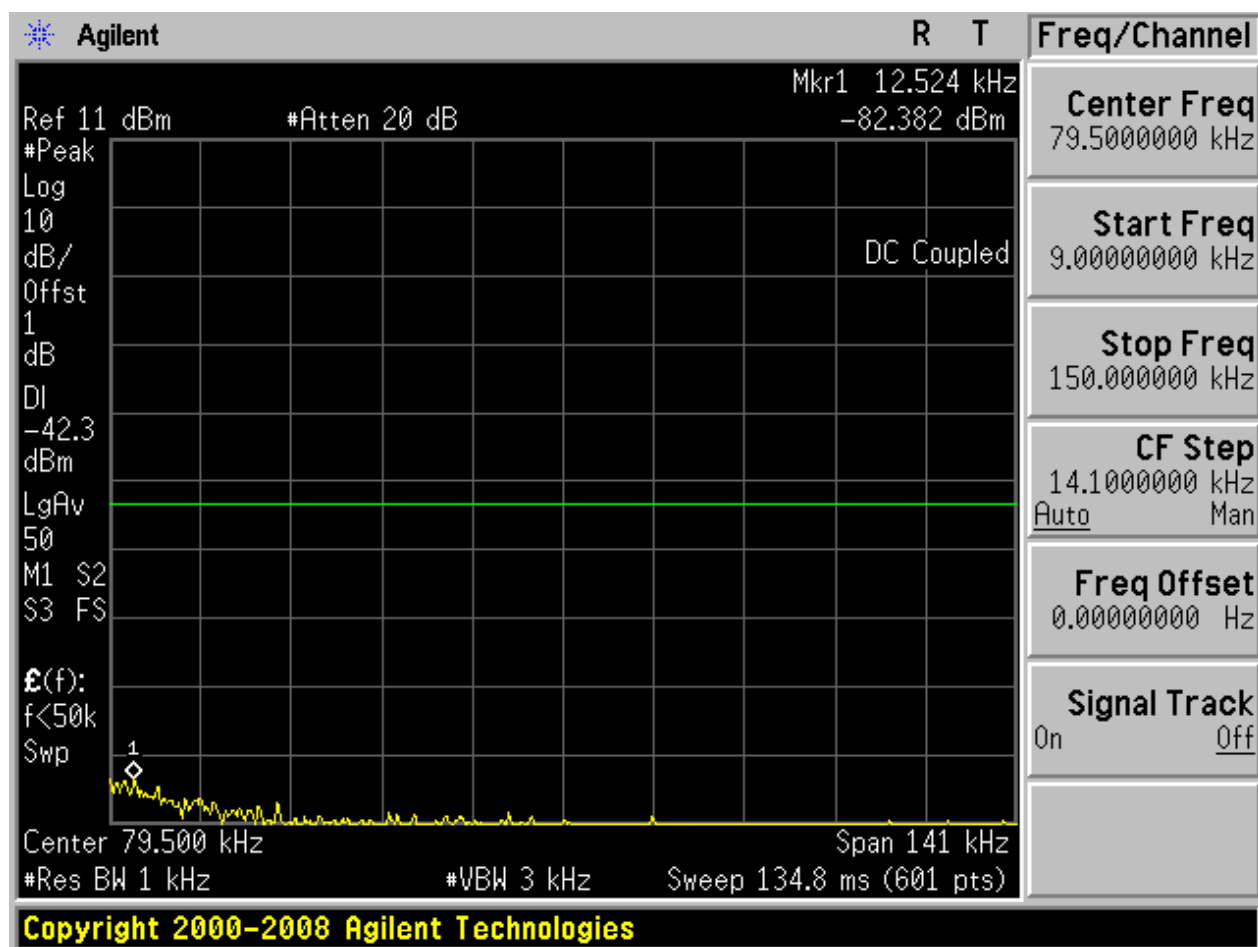
4.17 11N20_H@Ant 1

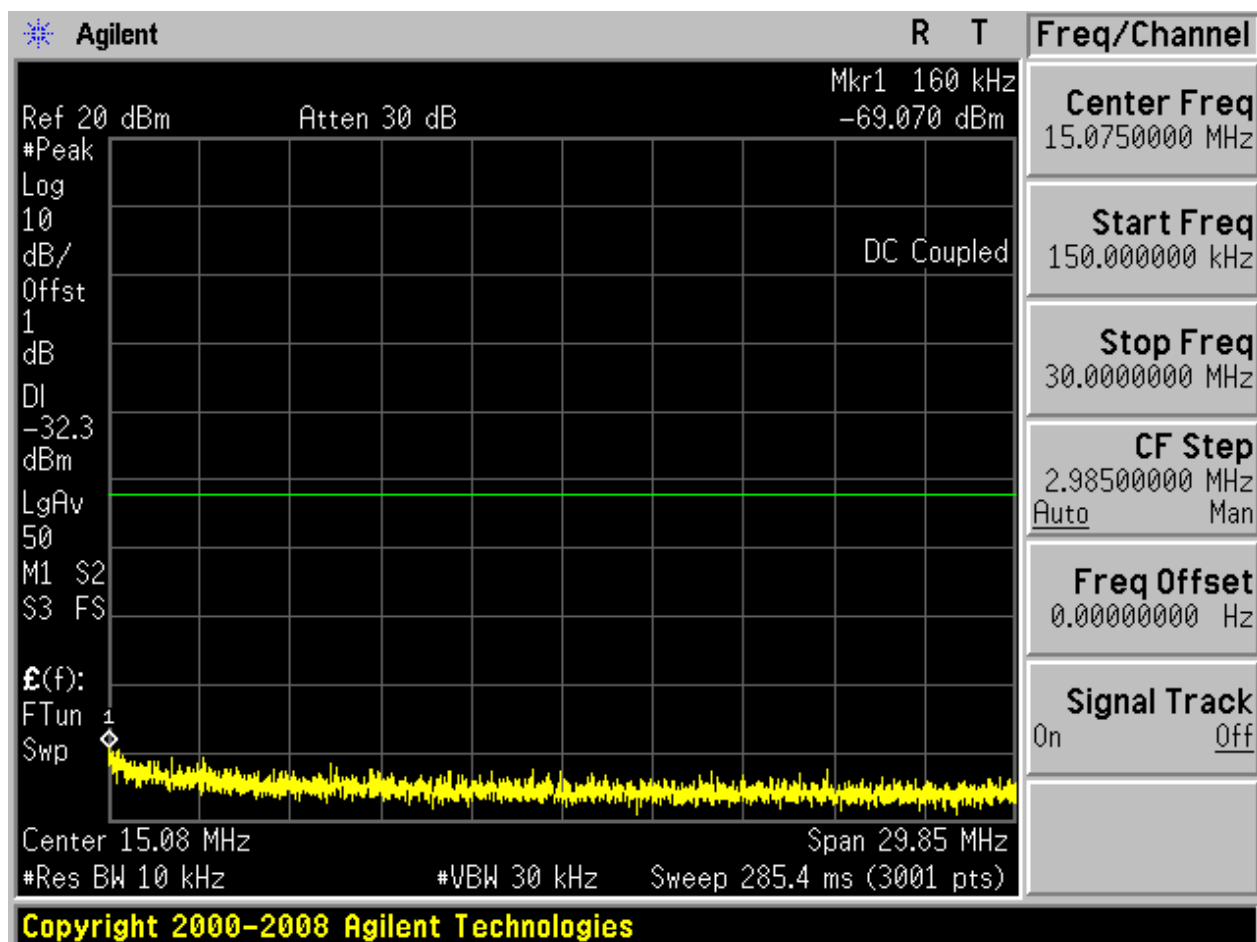
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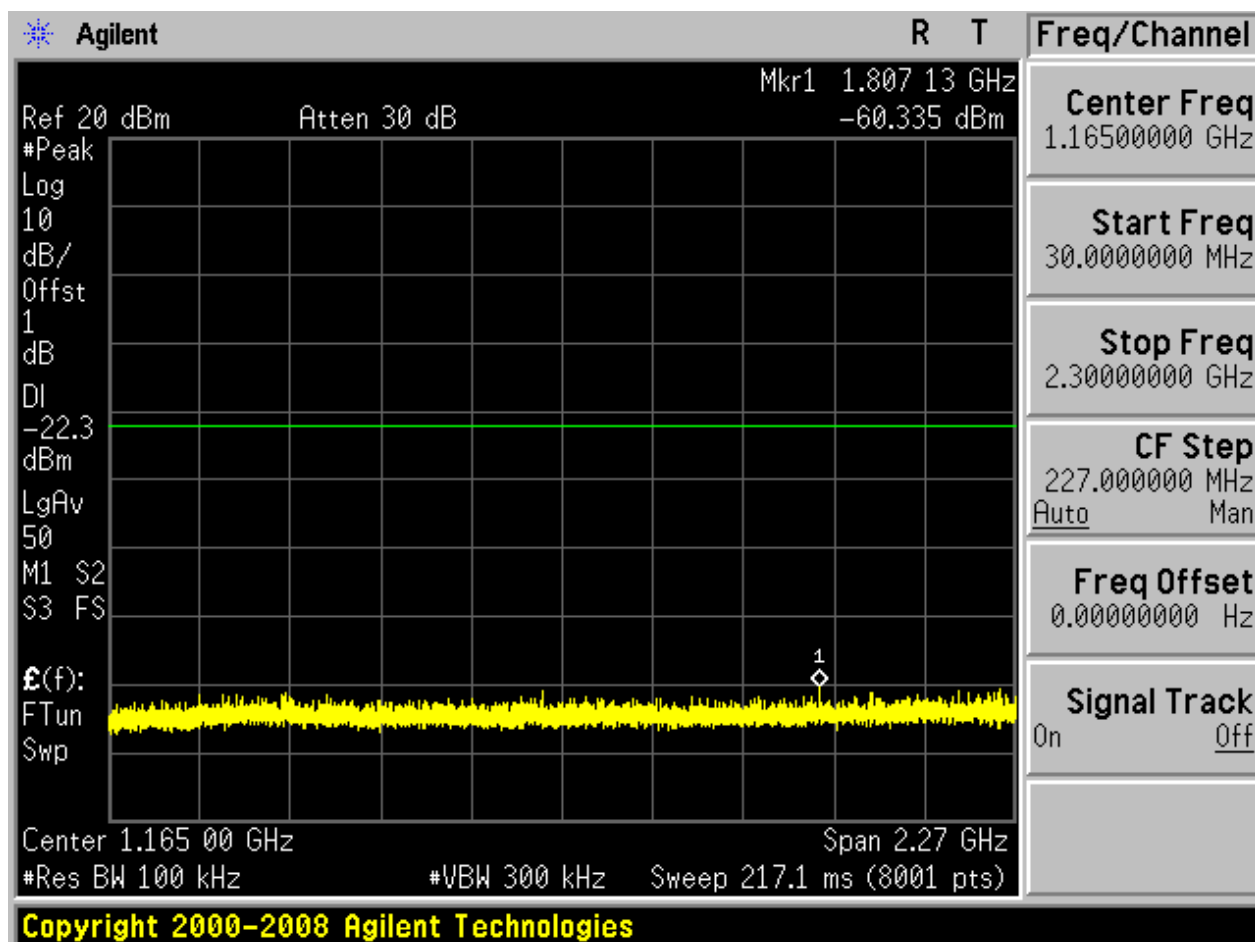


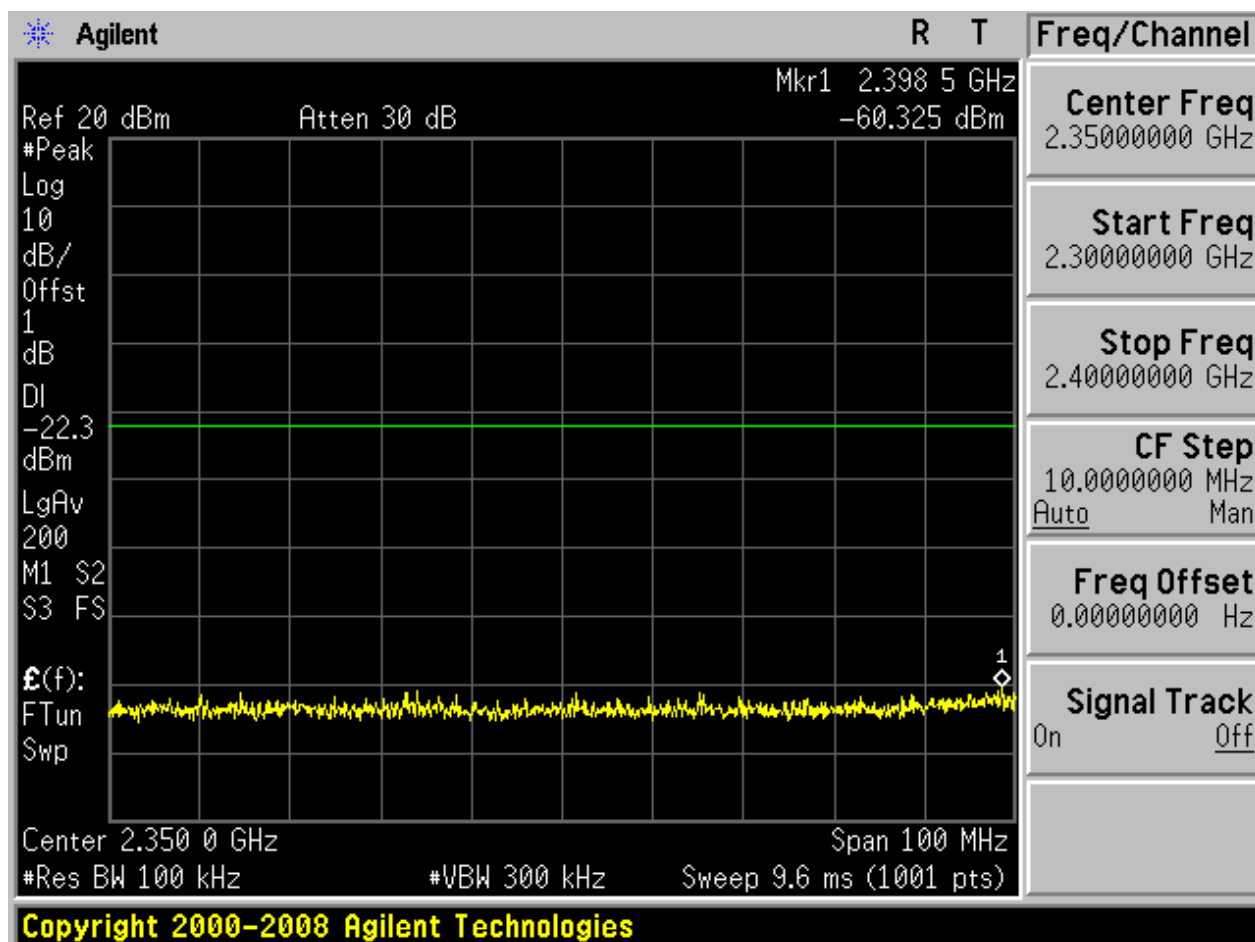


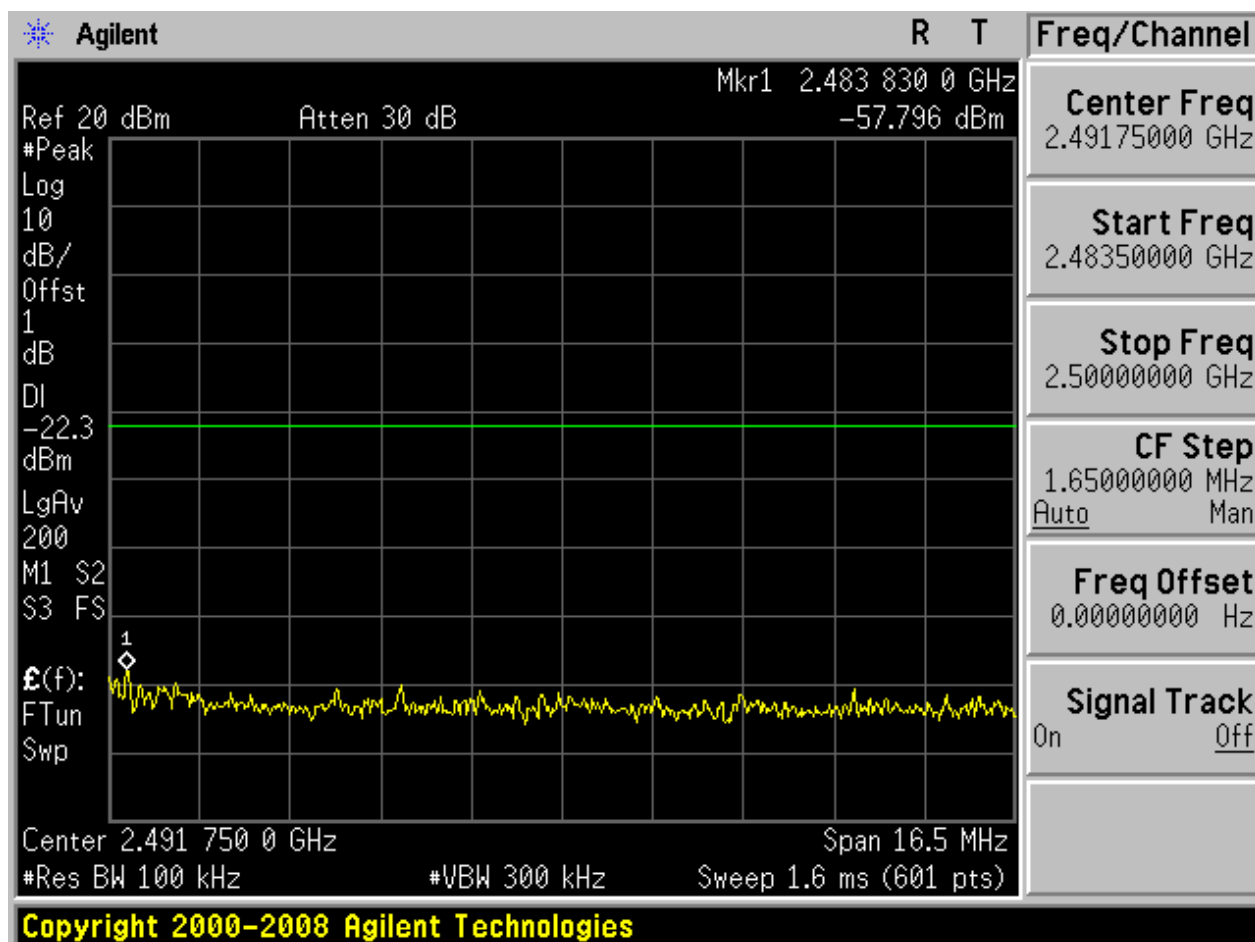
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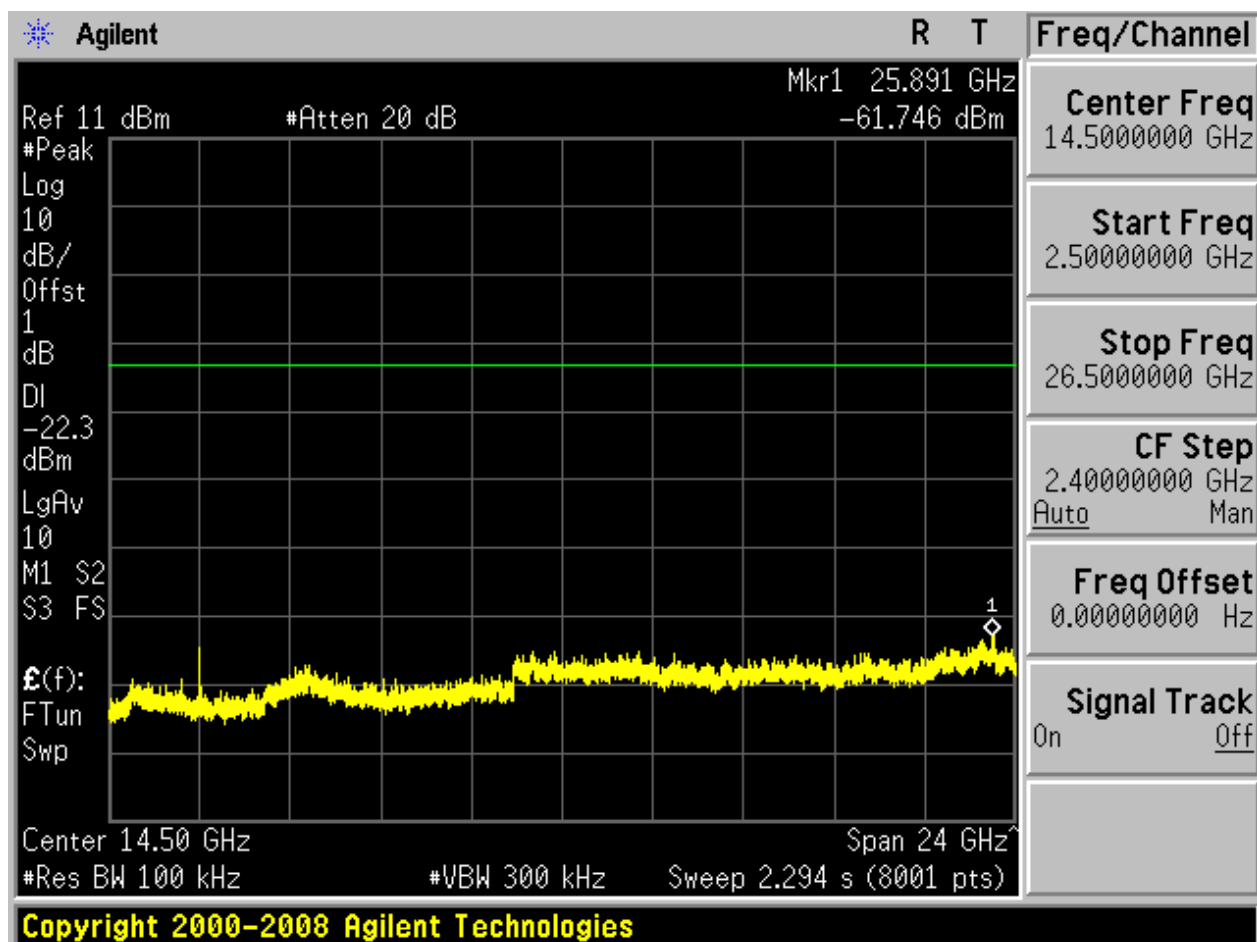






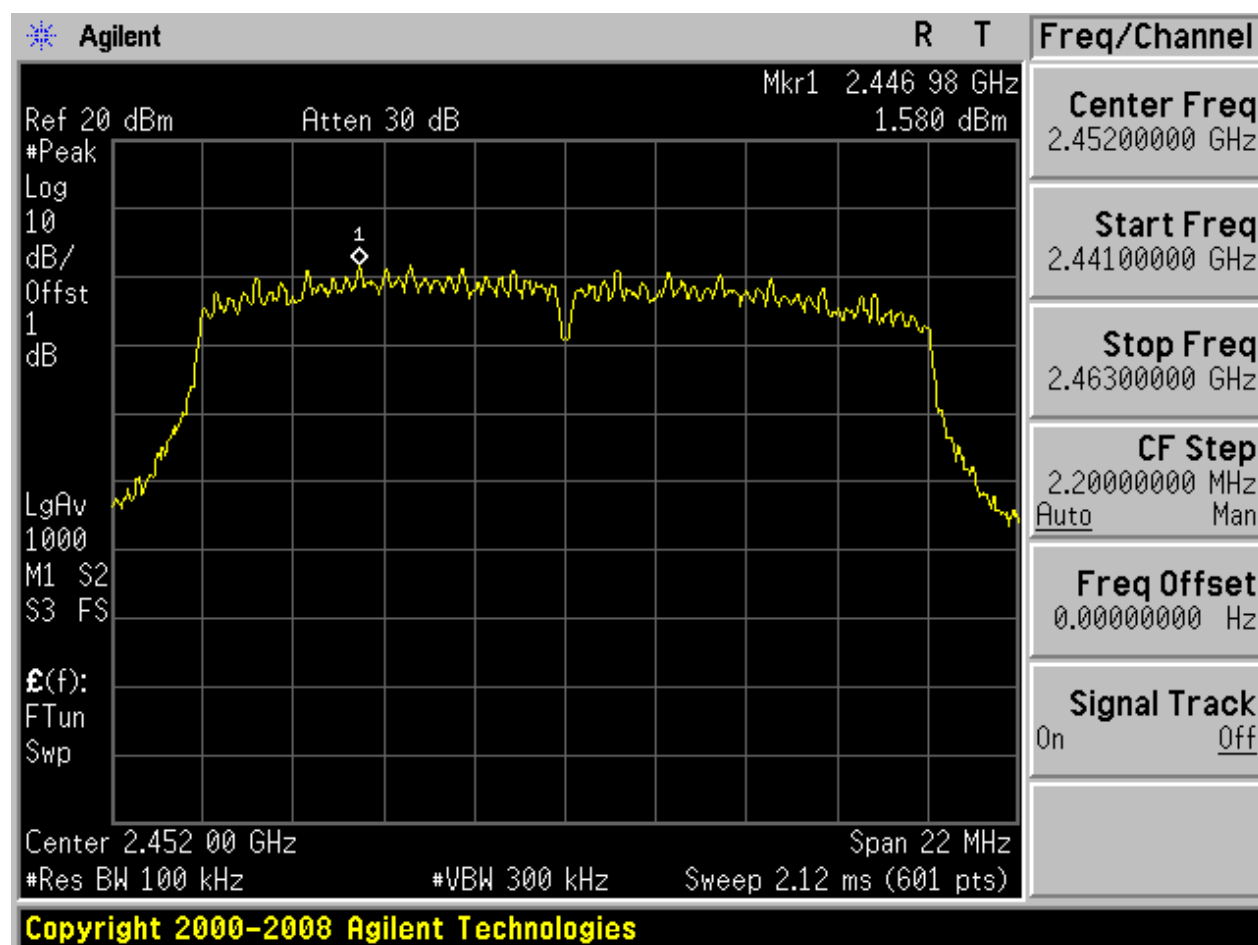




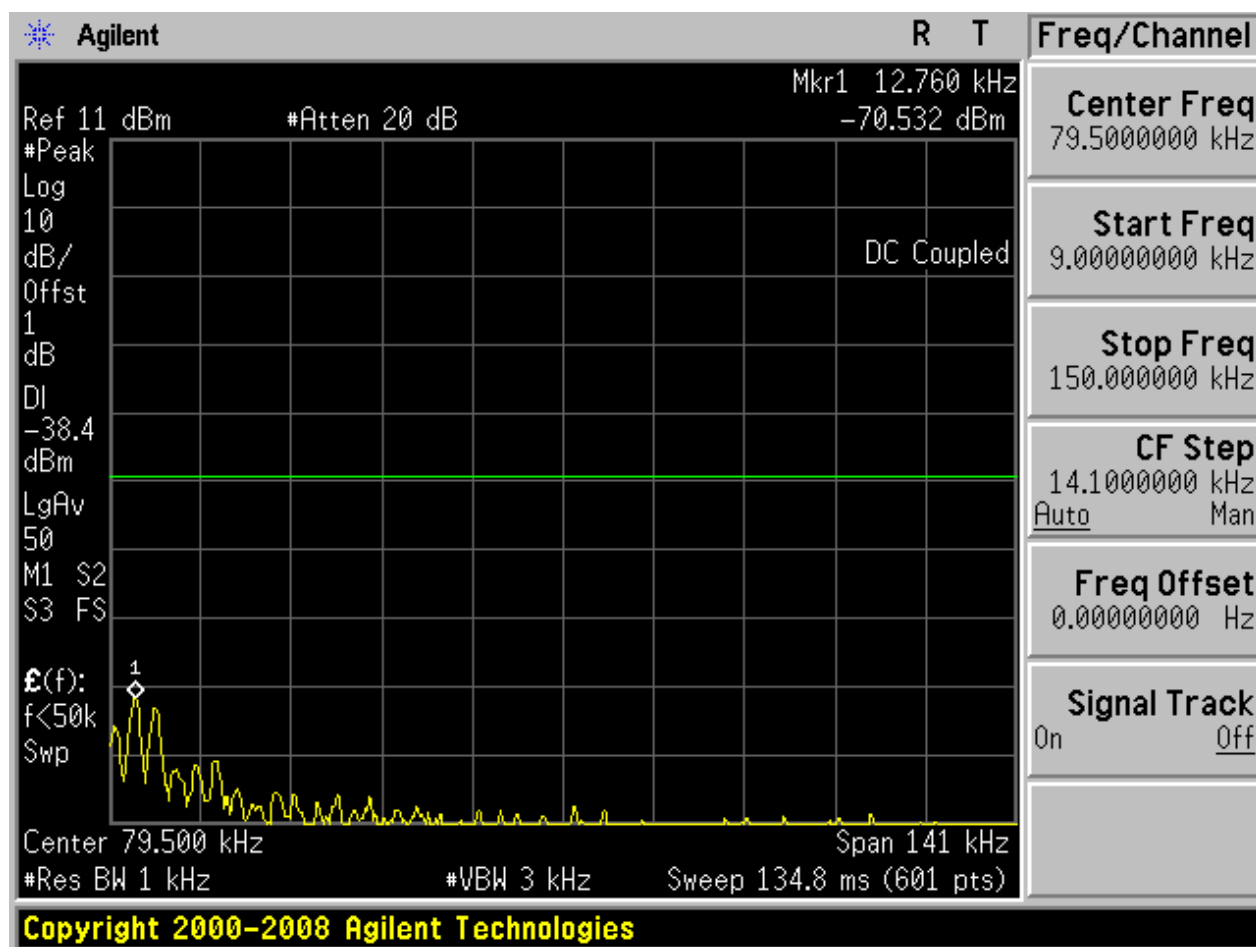


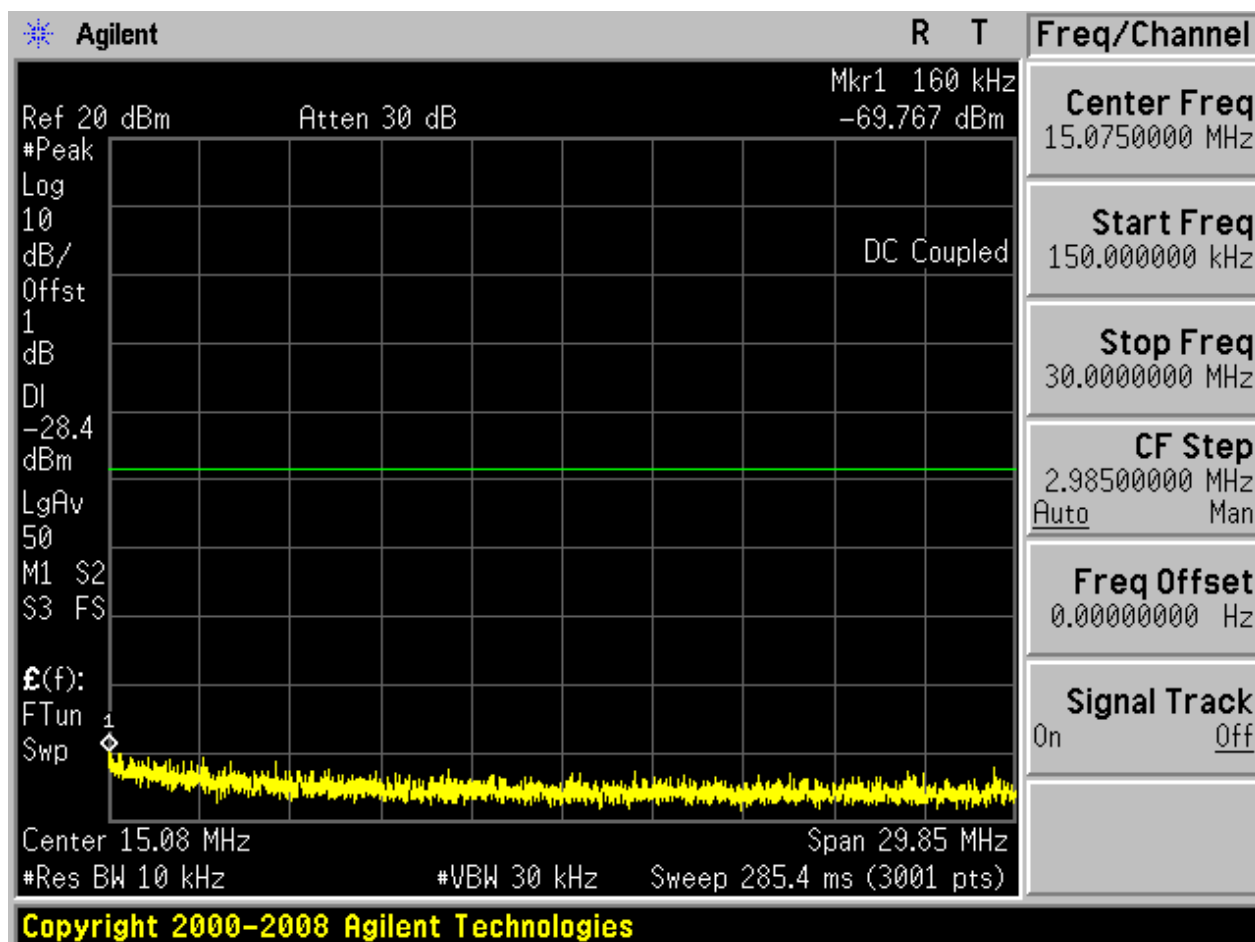
4.18 11N20_H@Ant 2

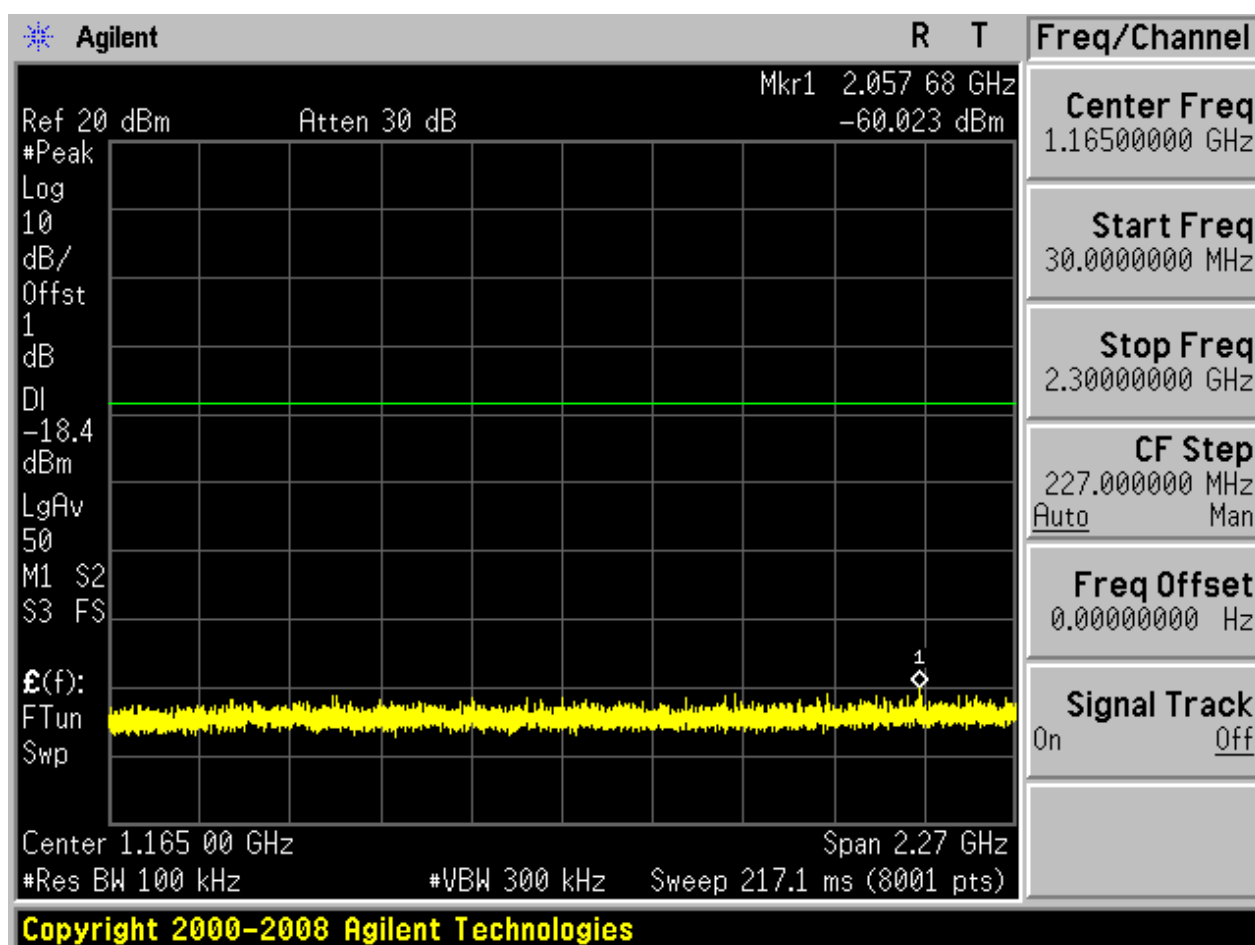
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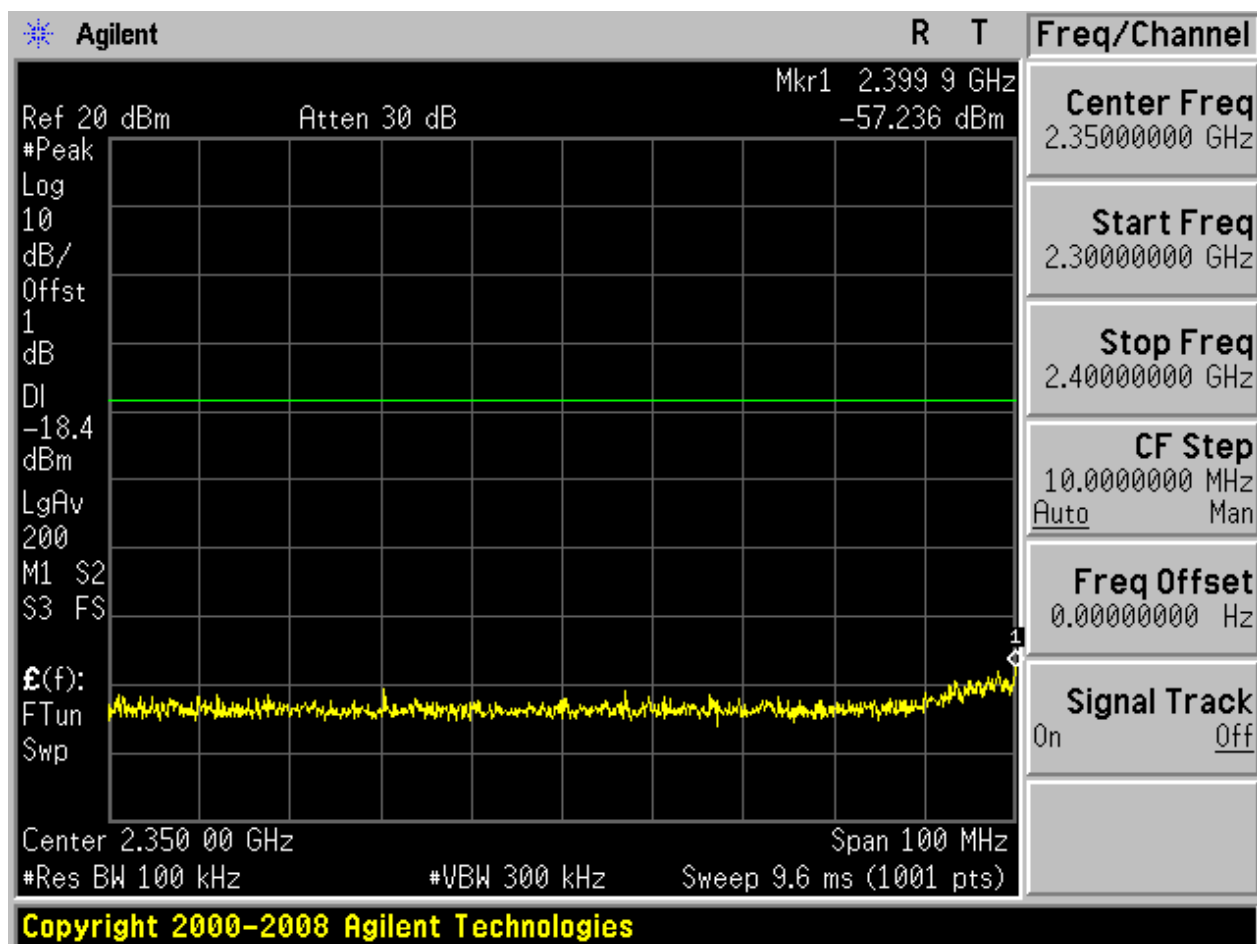


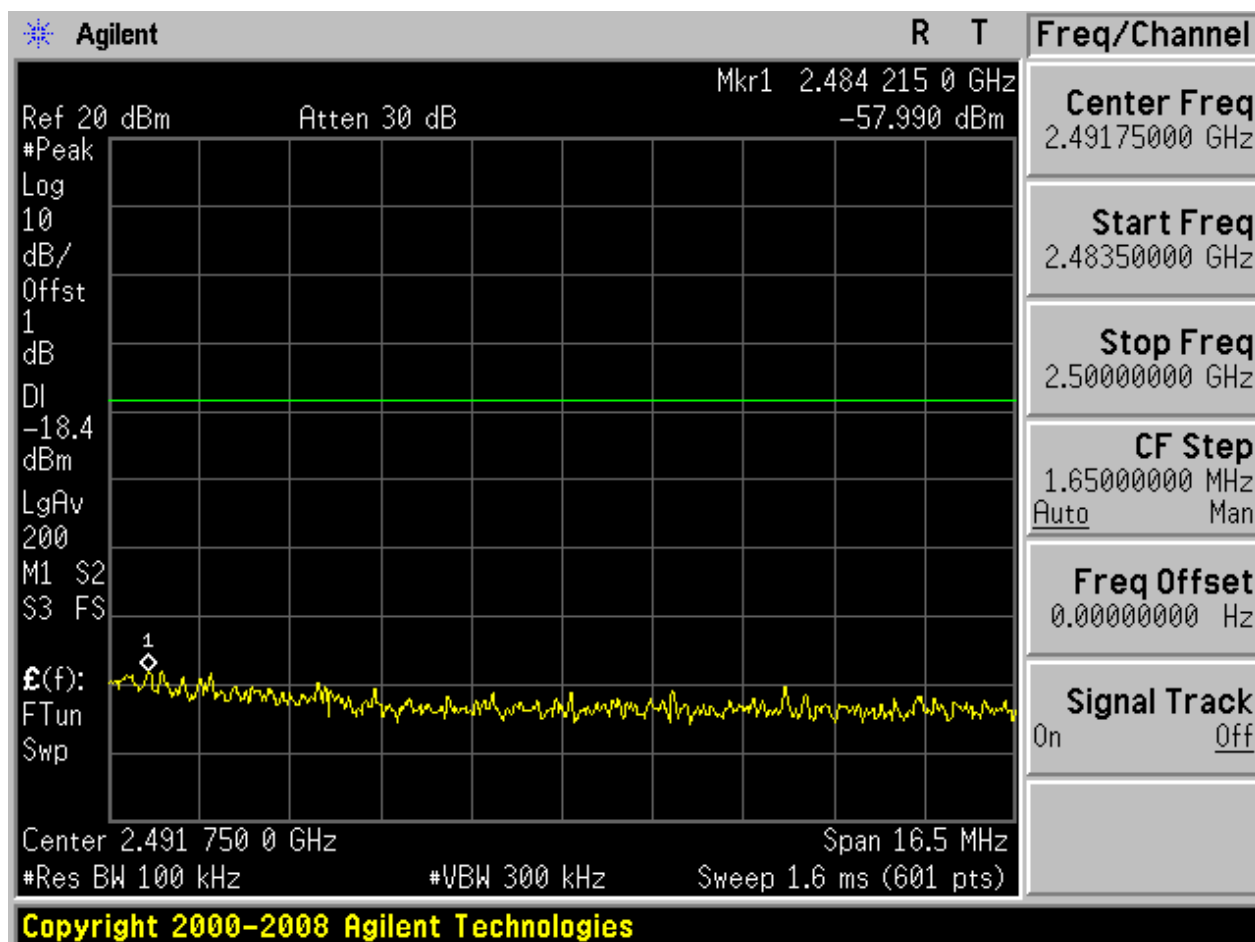
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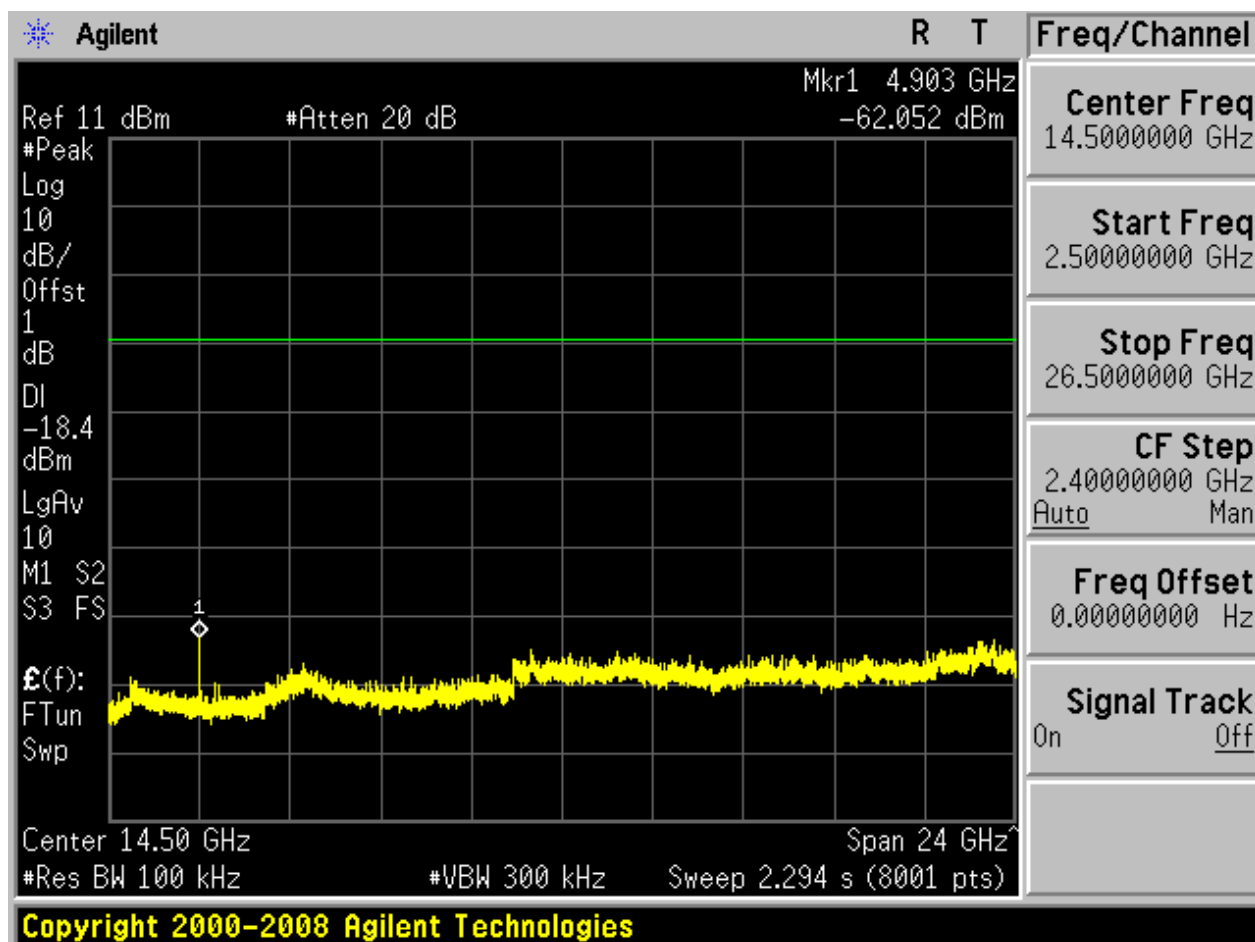






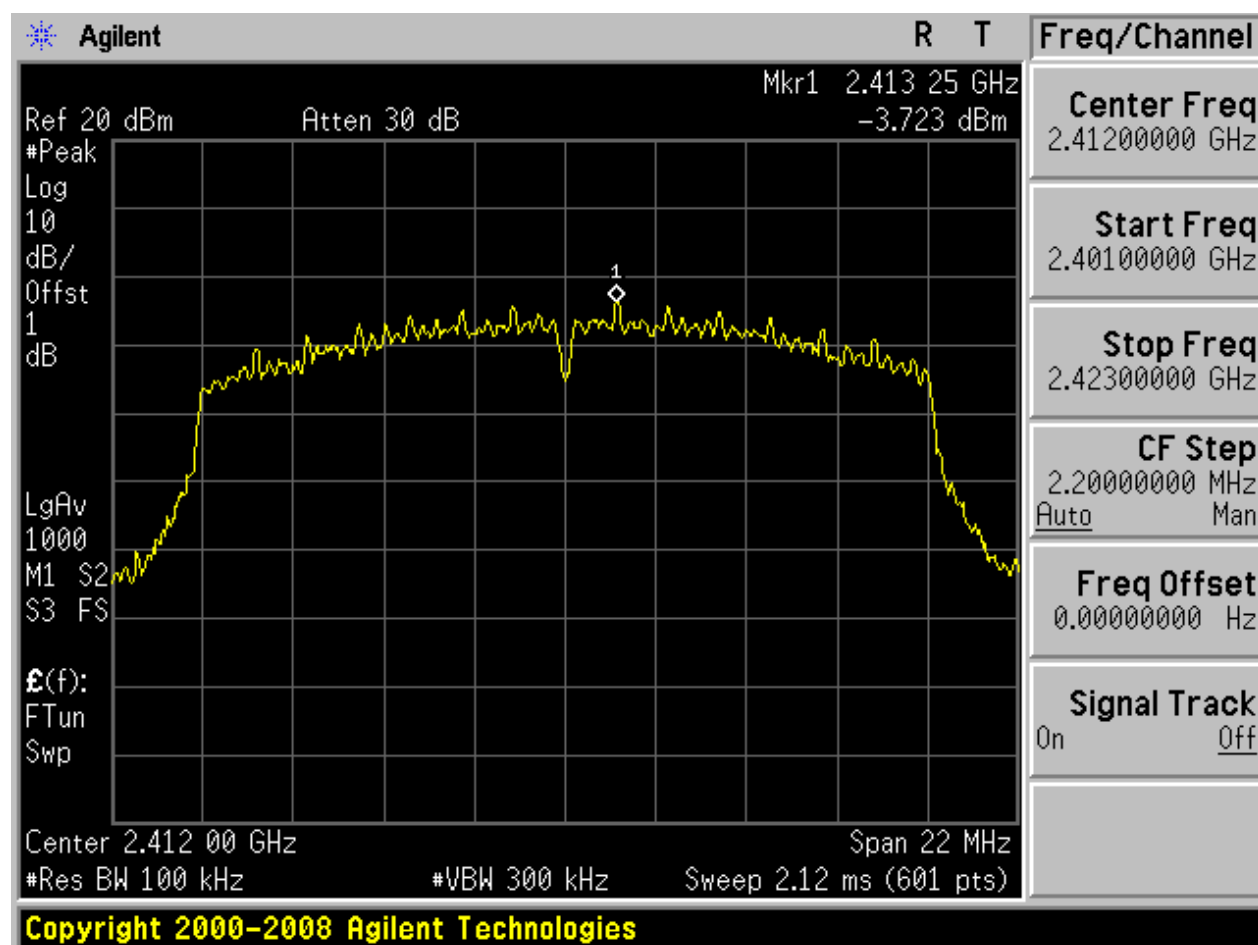






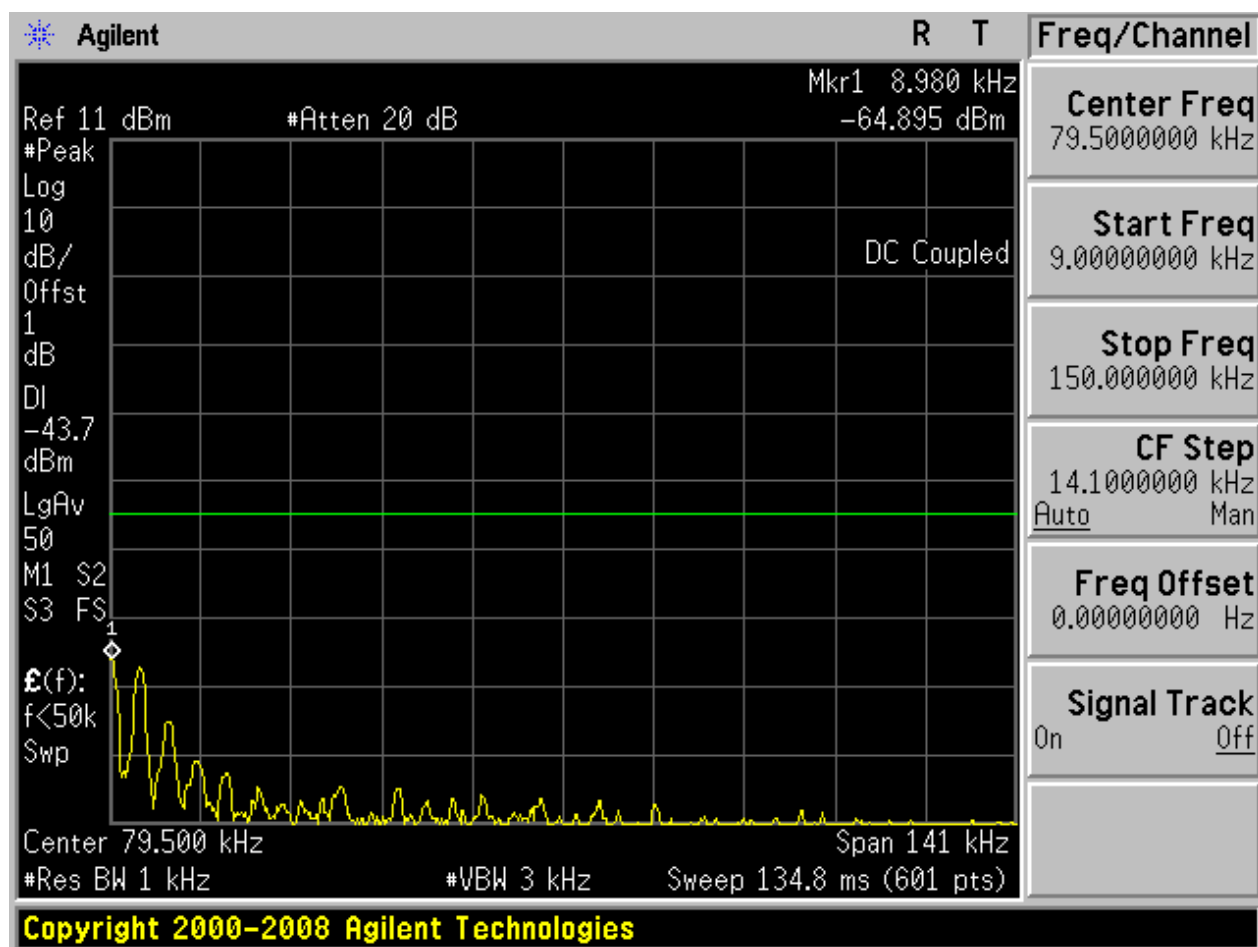
4.19 11N20m_L@Ant 1

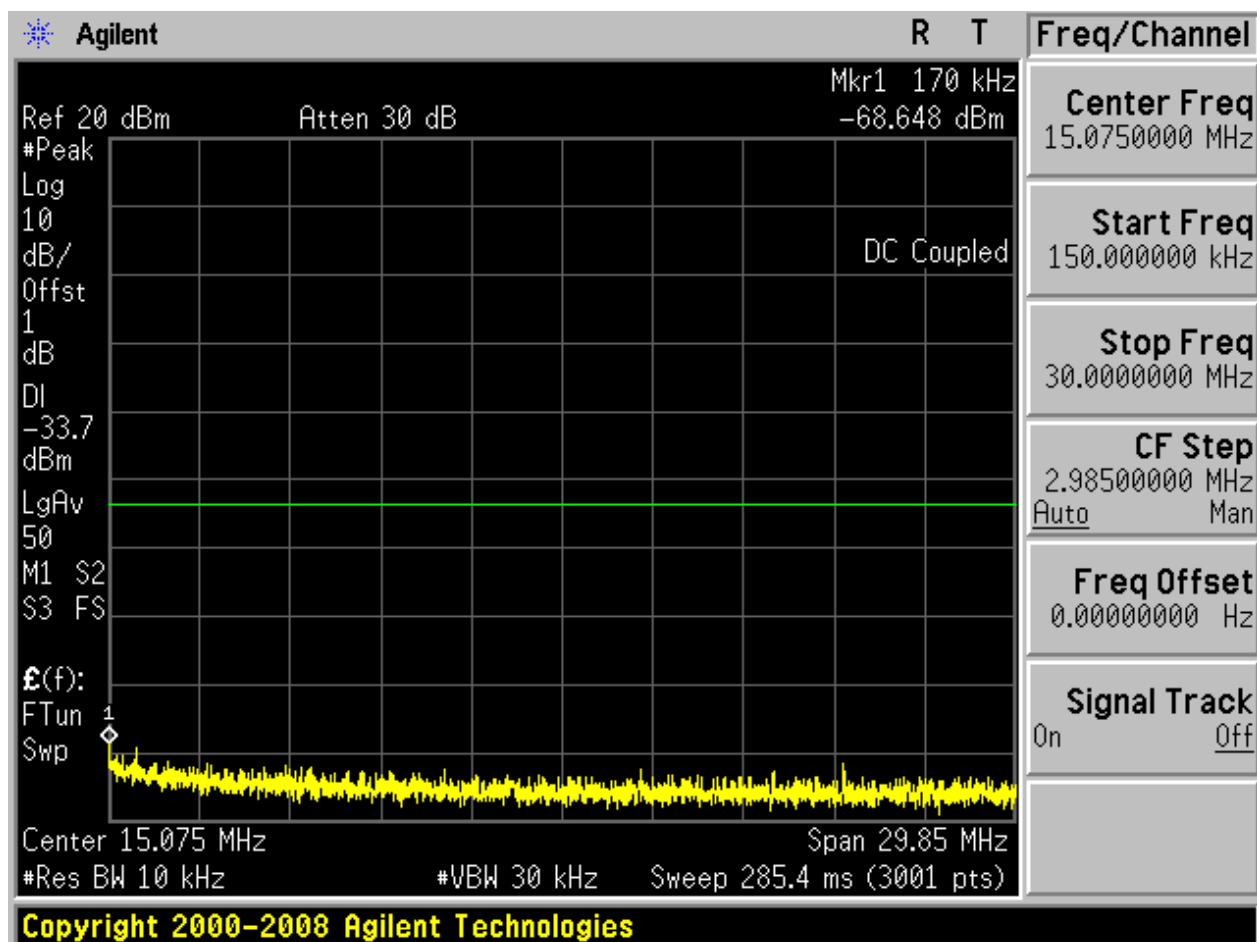
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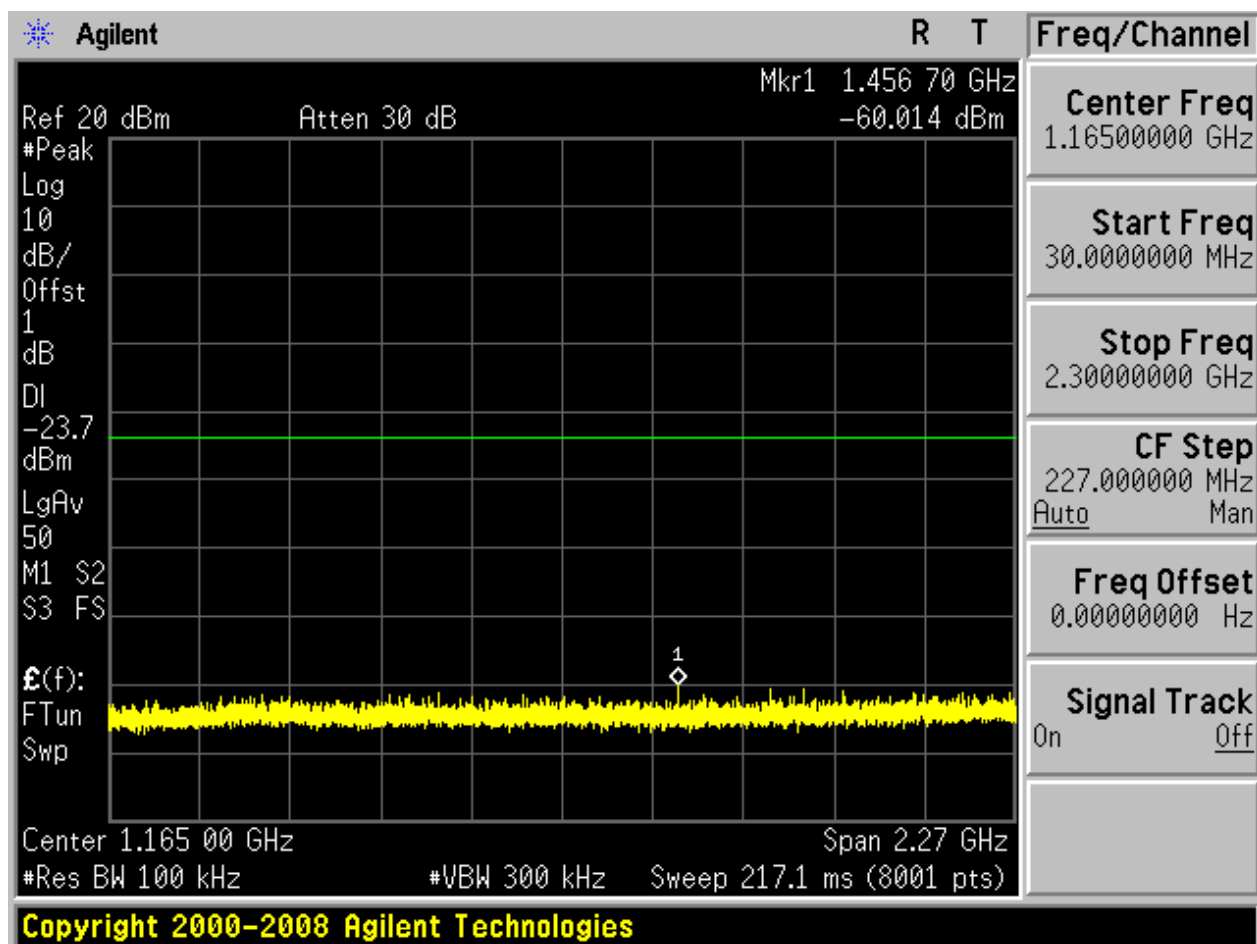


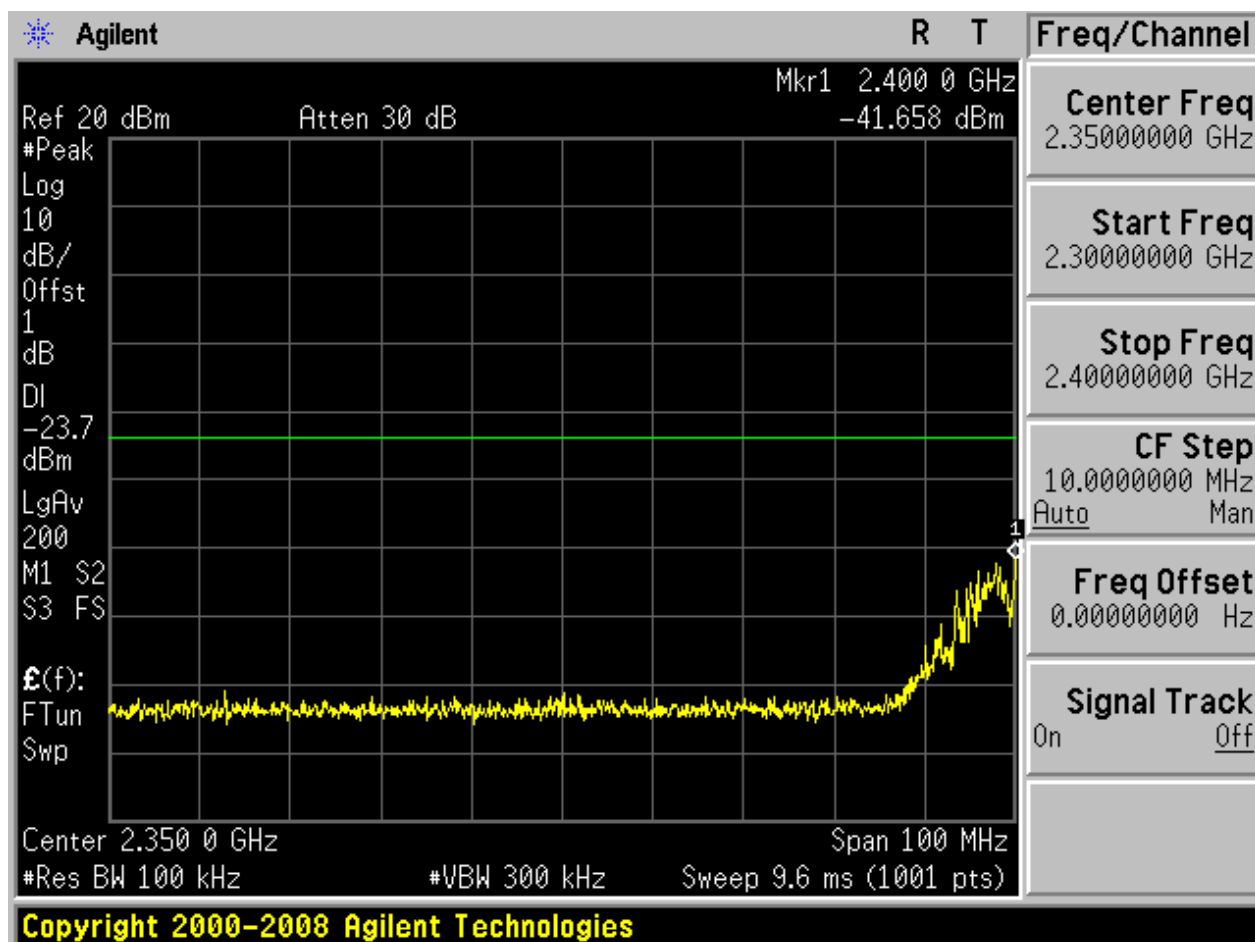


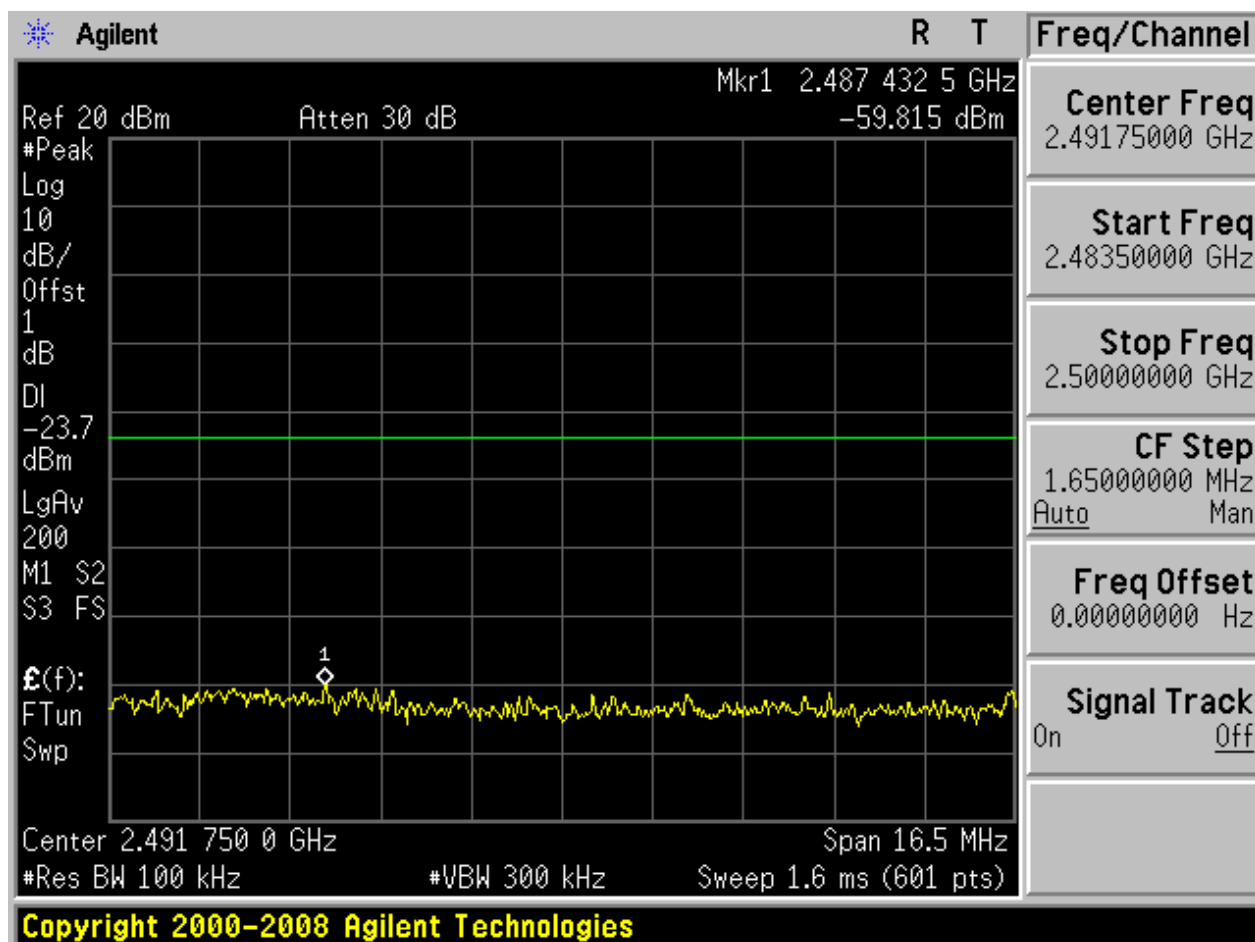
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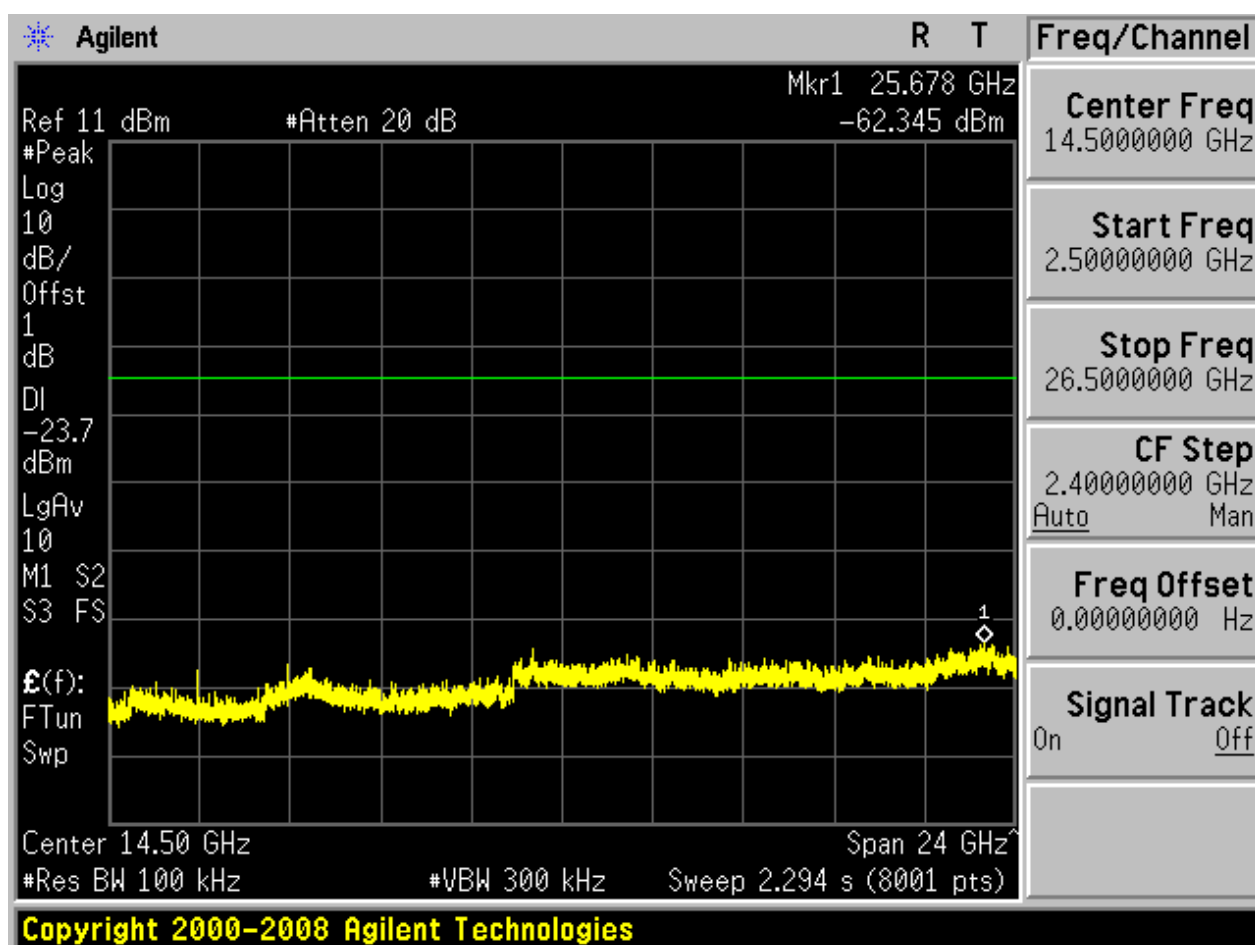








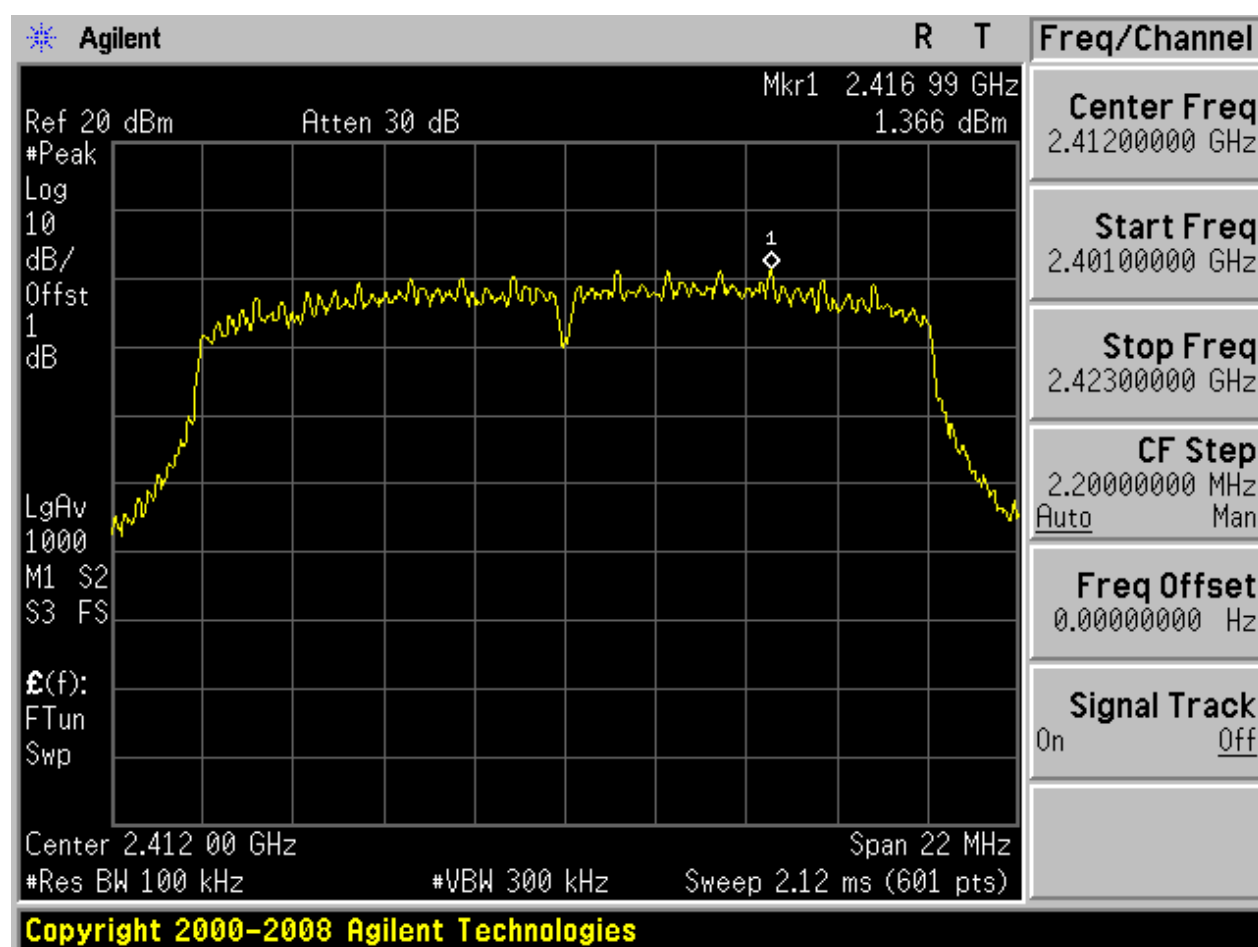






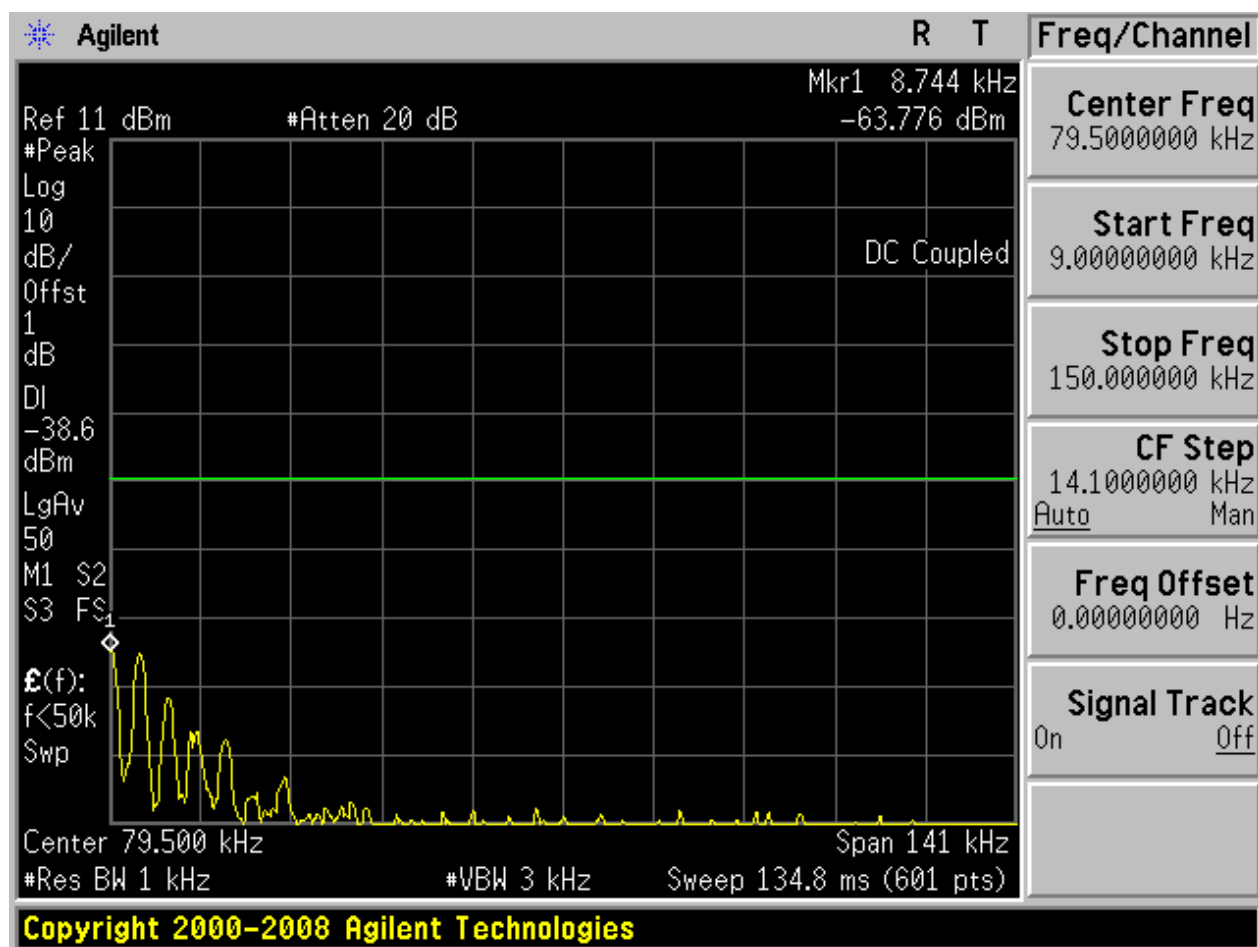
4.20 11N20m_L@Ant 2

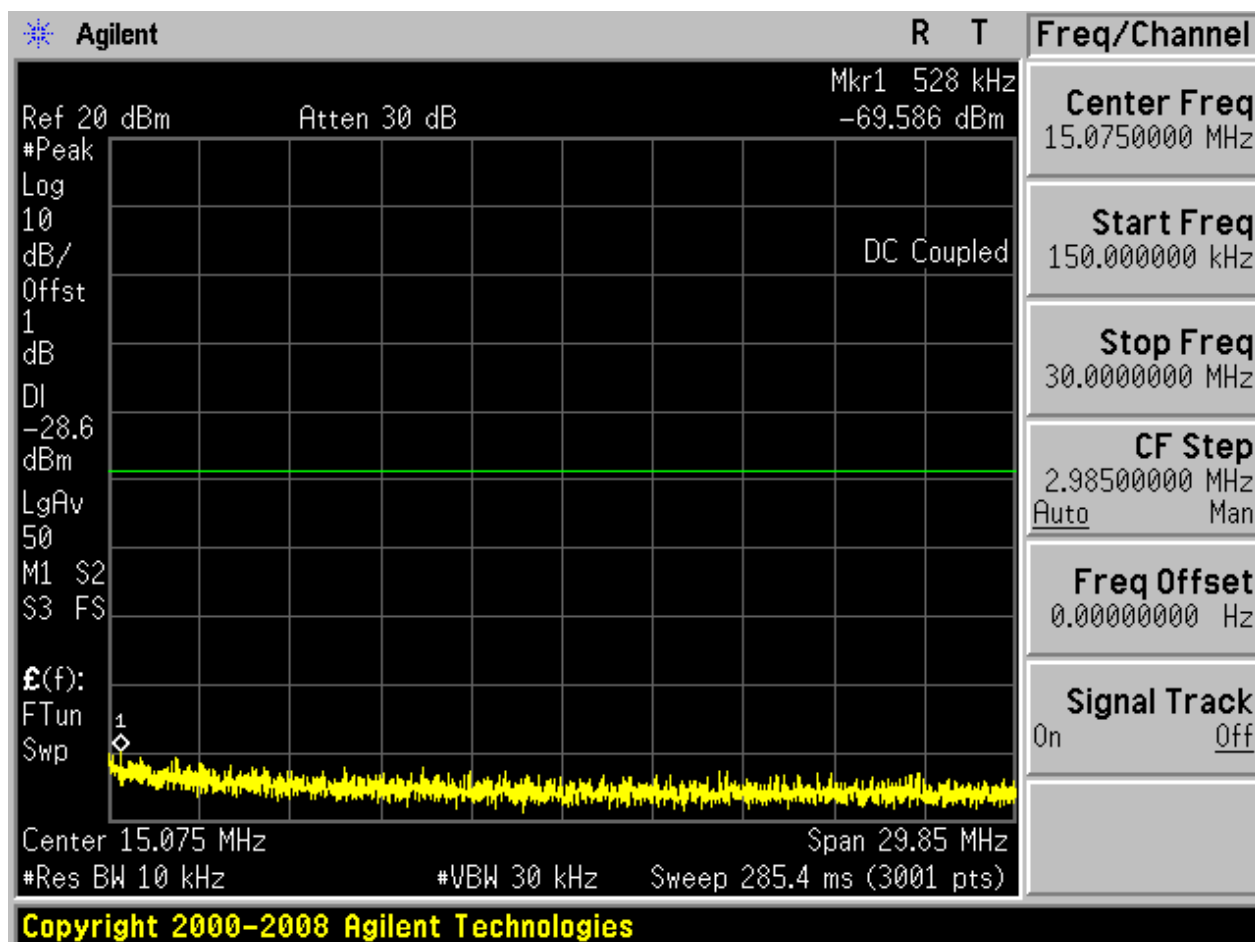
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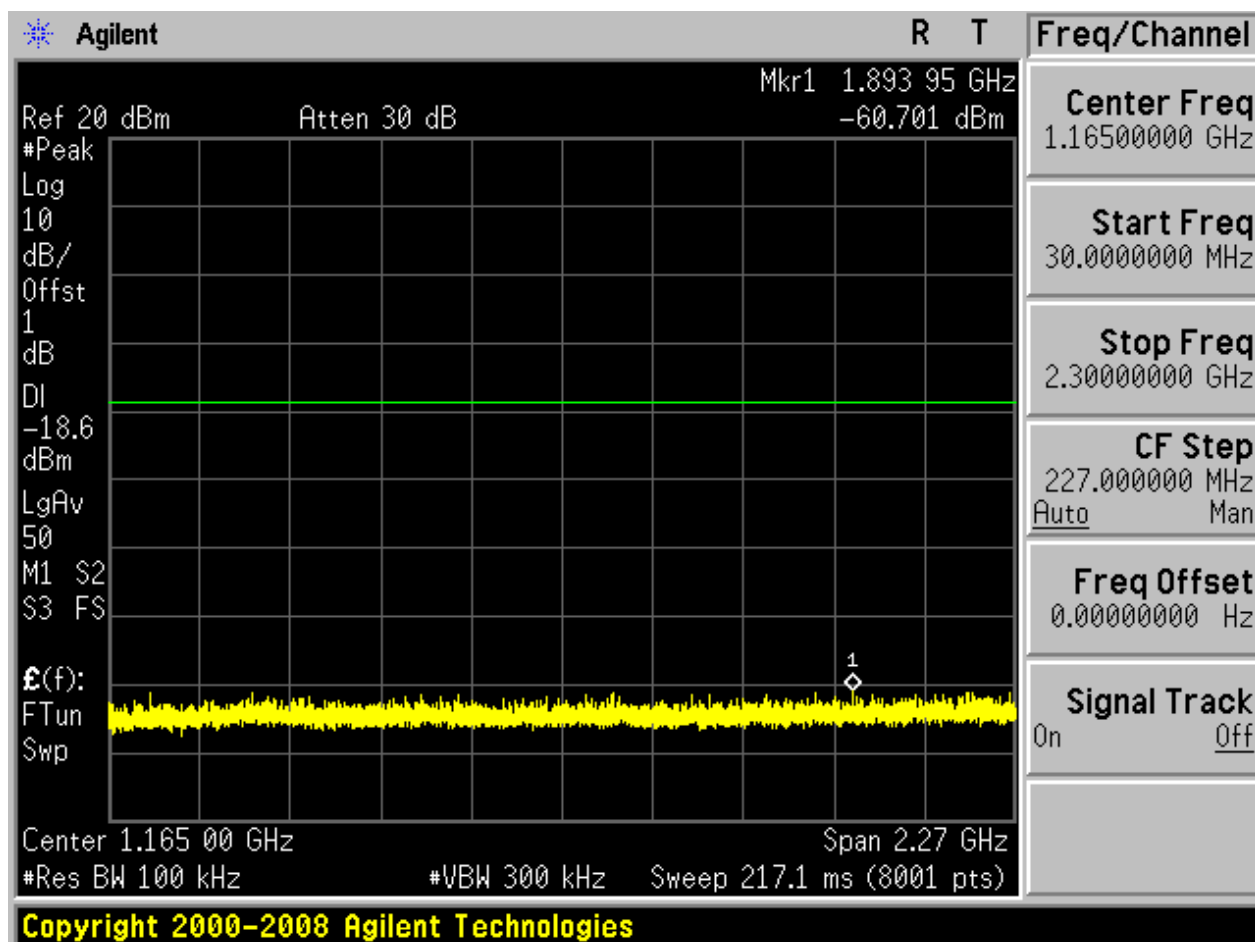


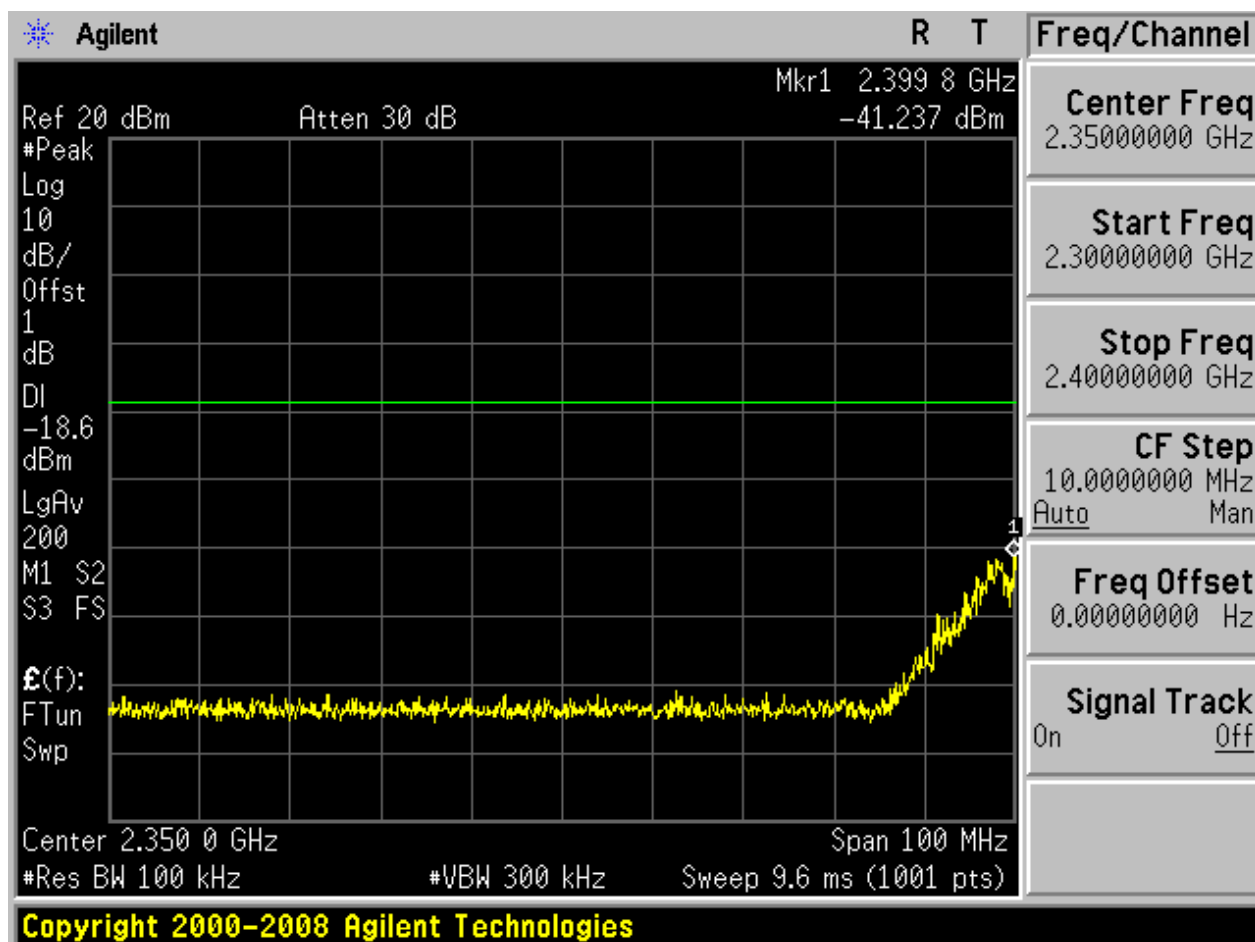


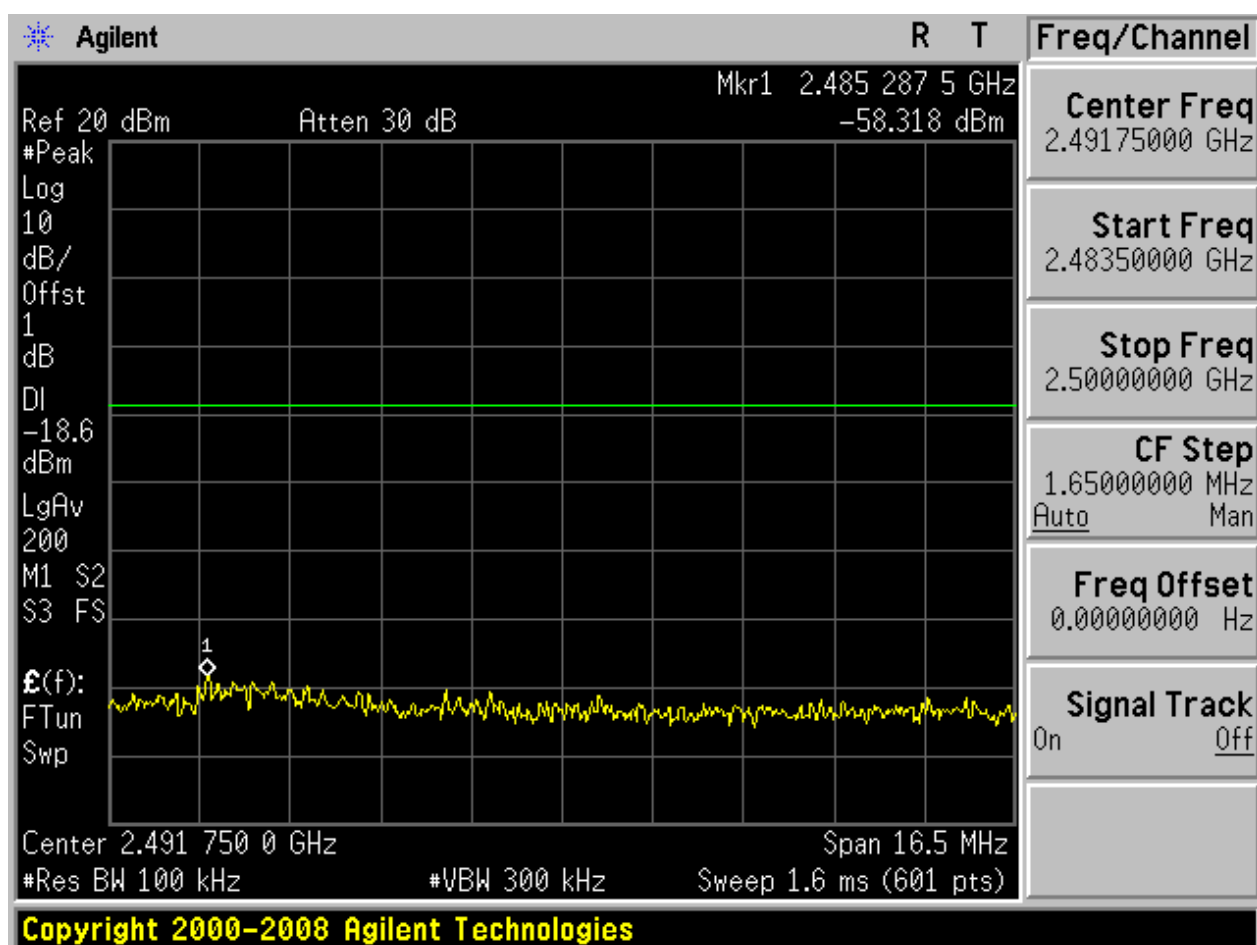
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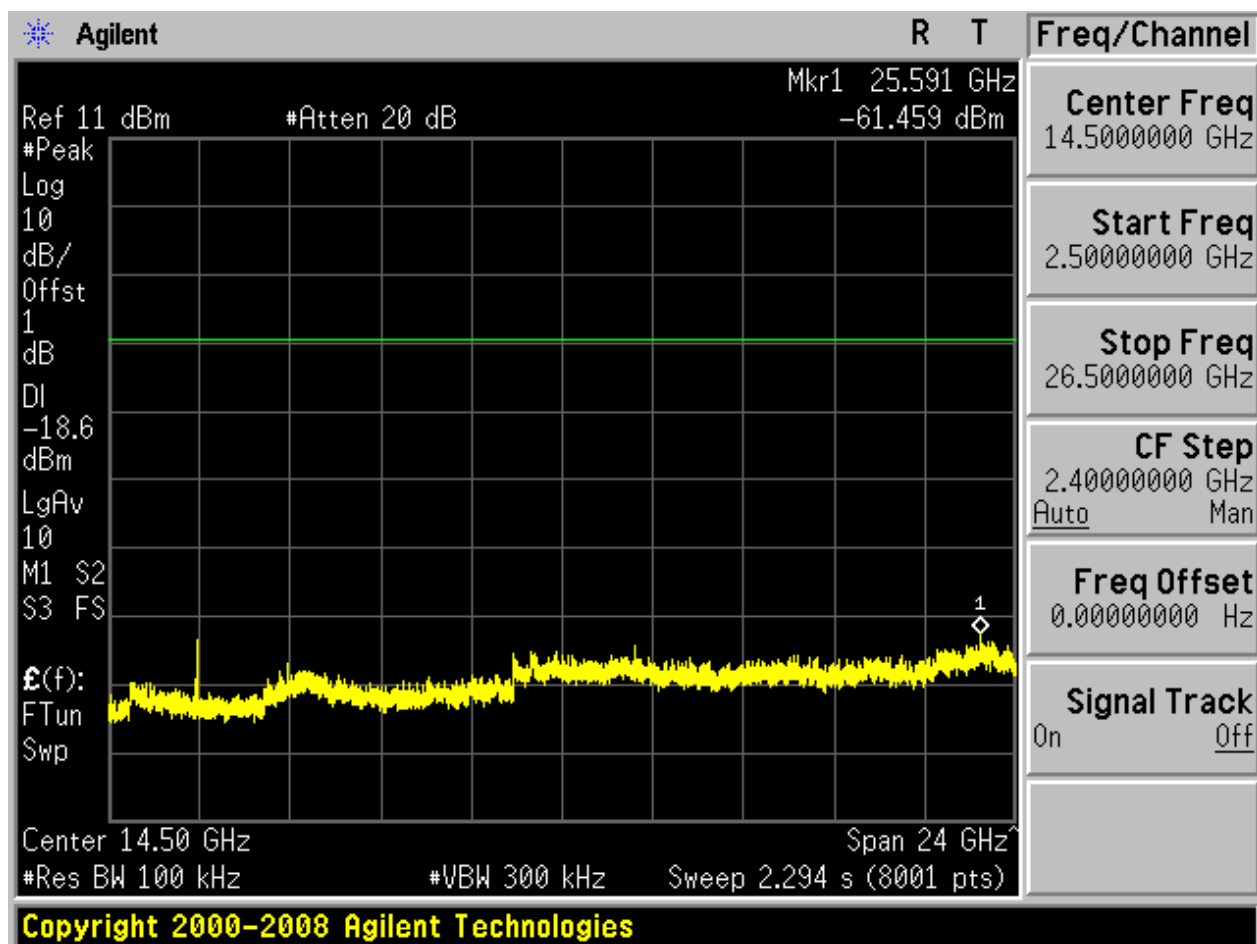






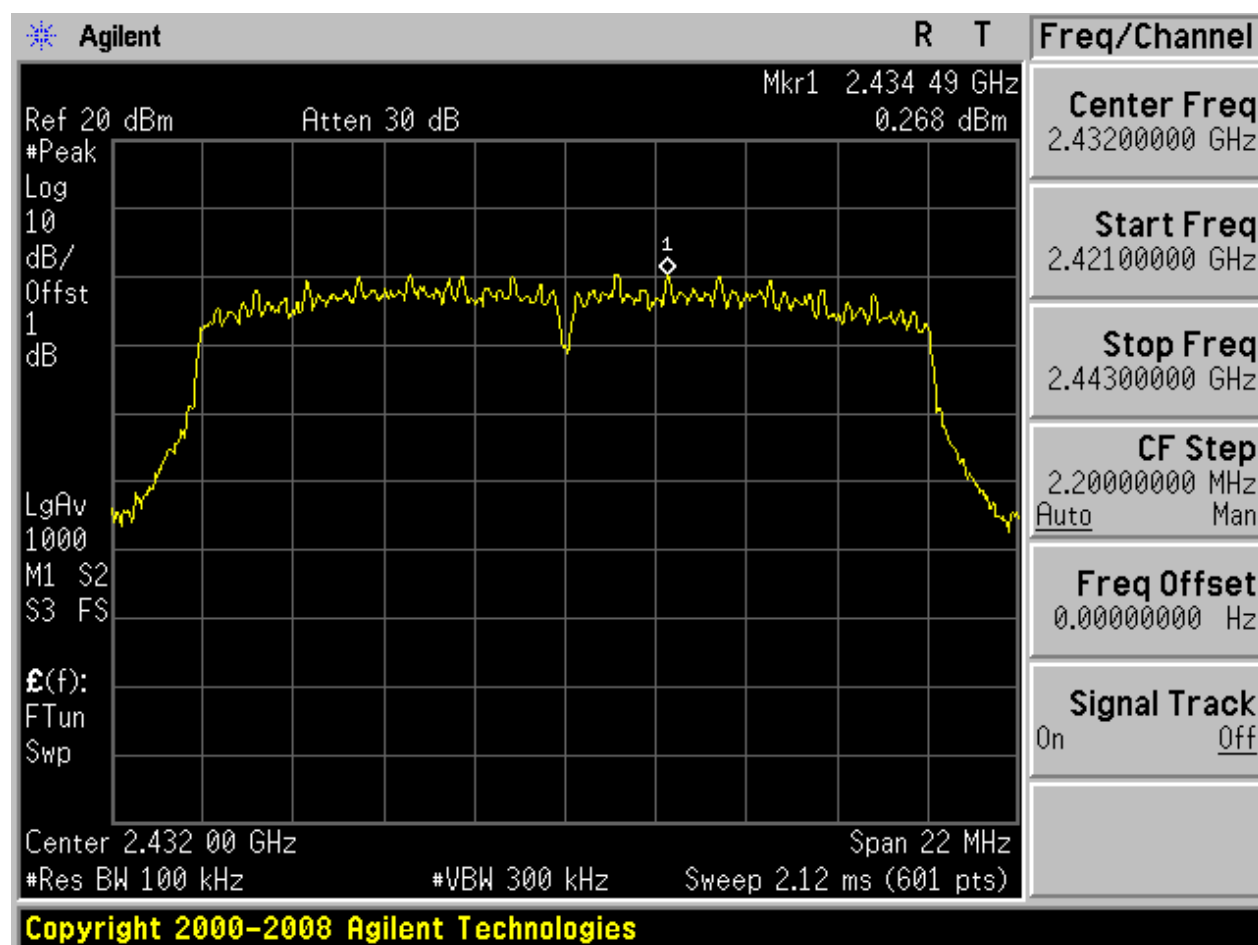






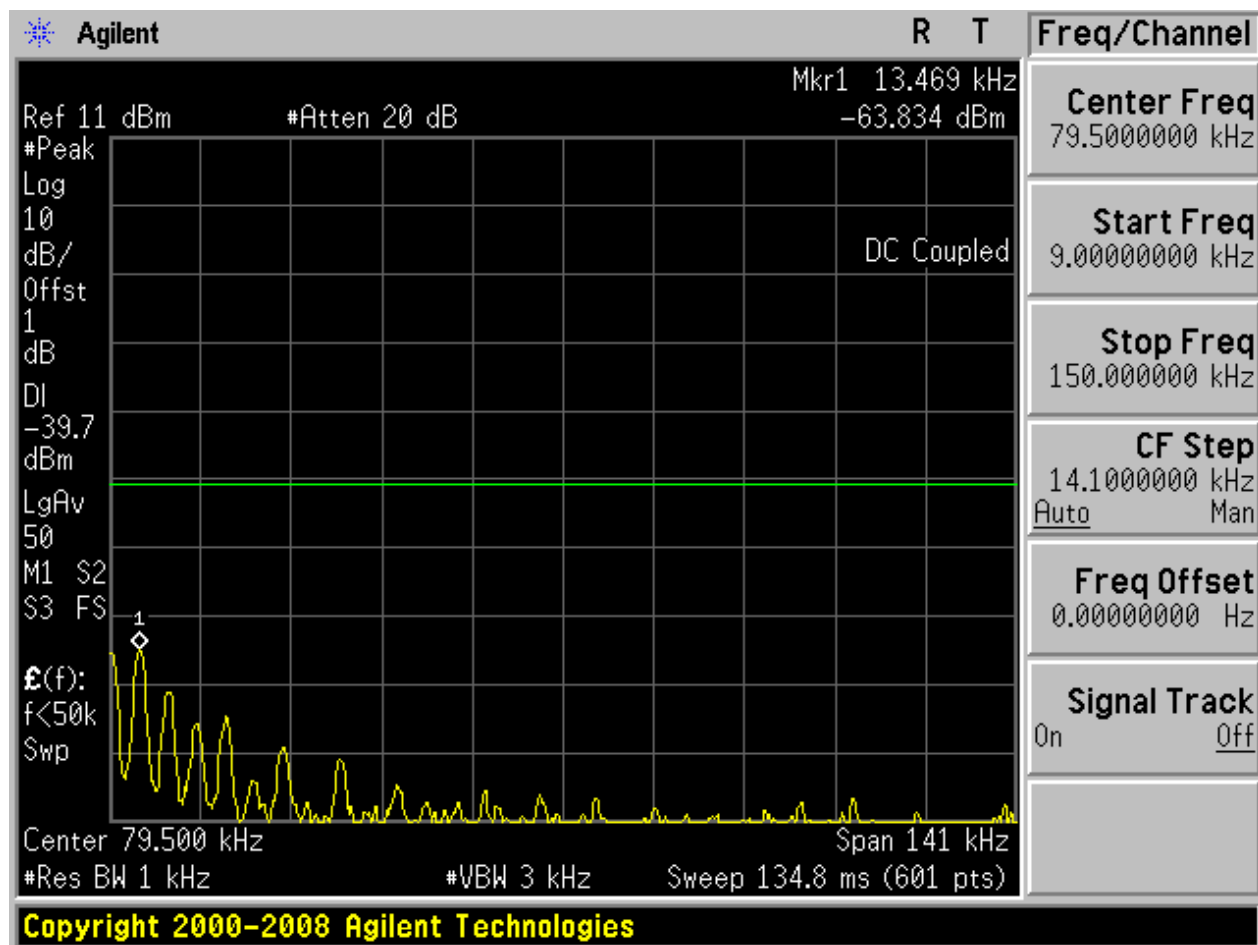
4.21 11N20m_M@Ant 1

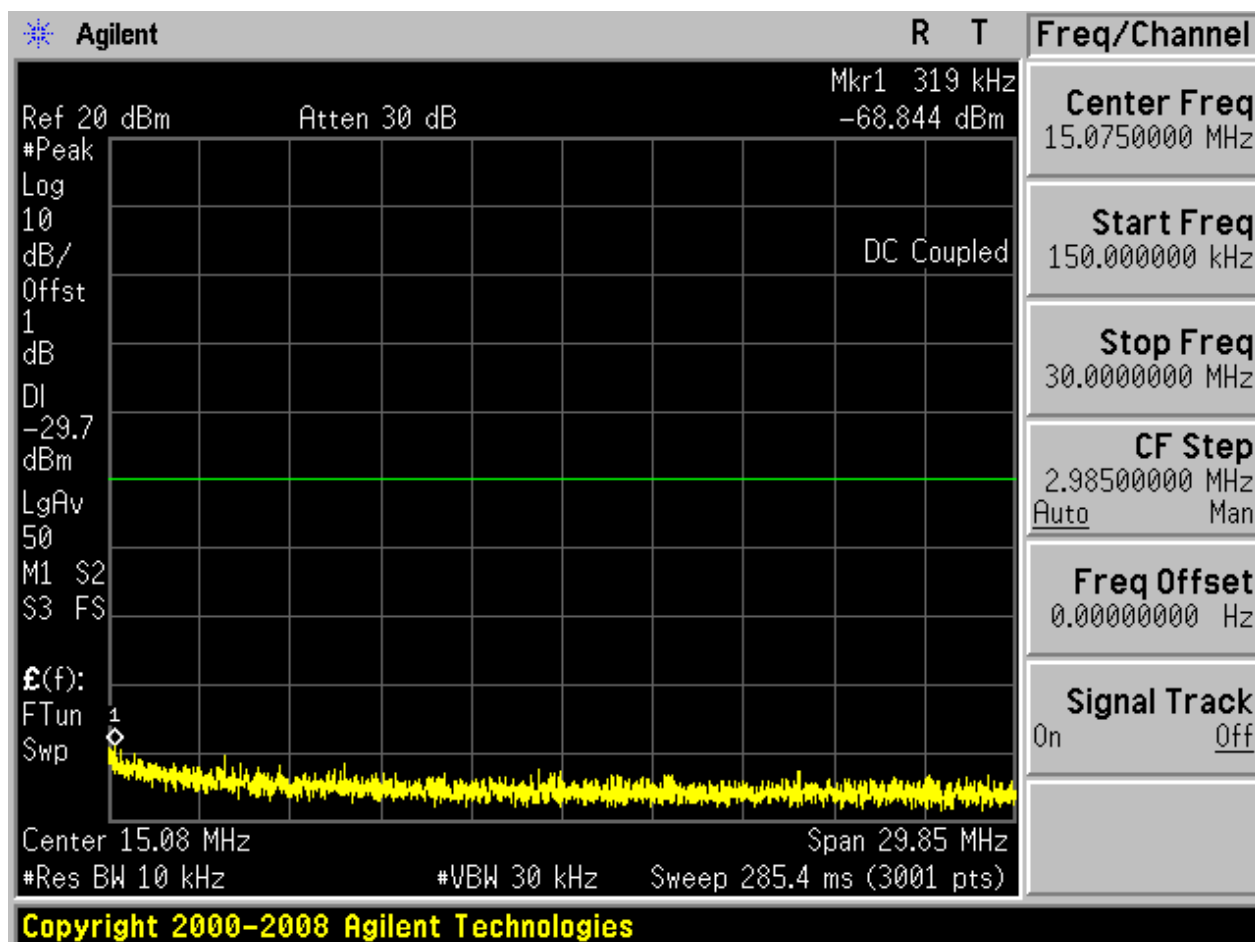
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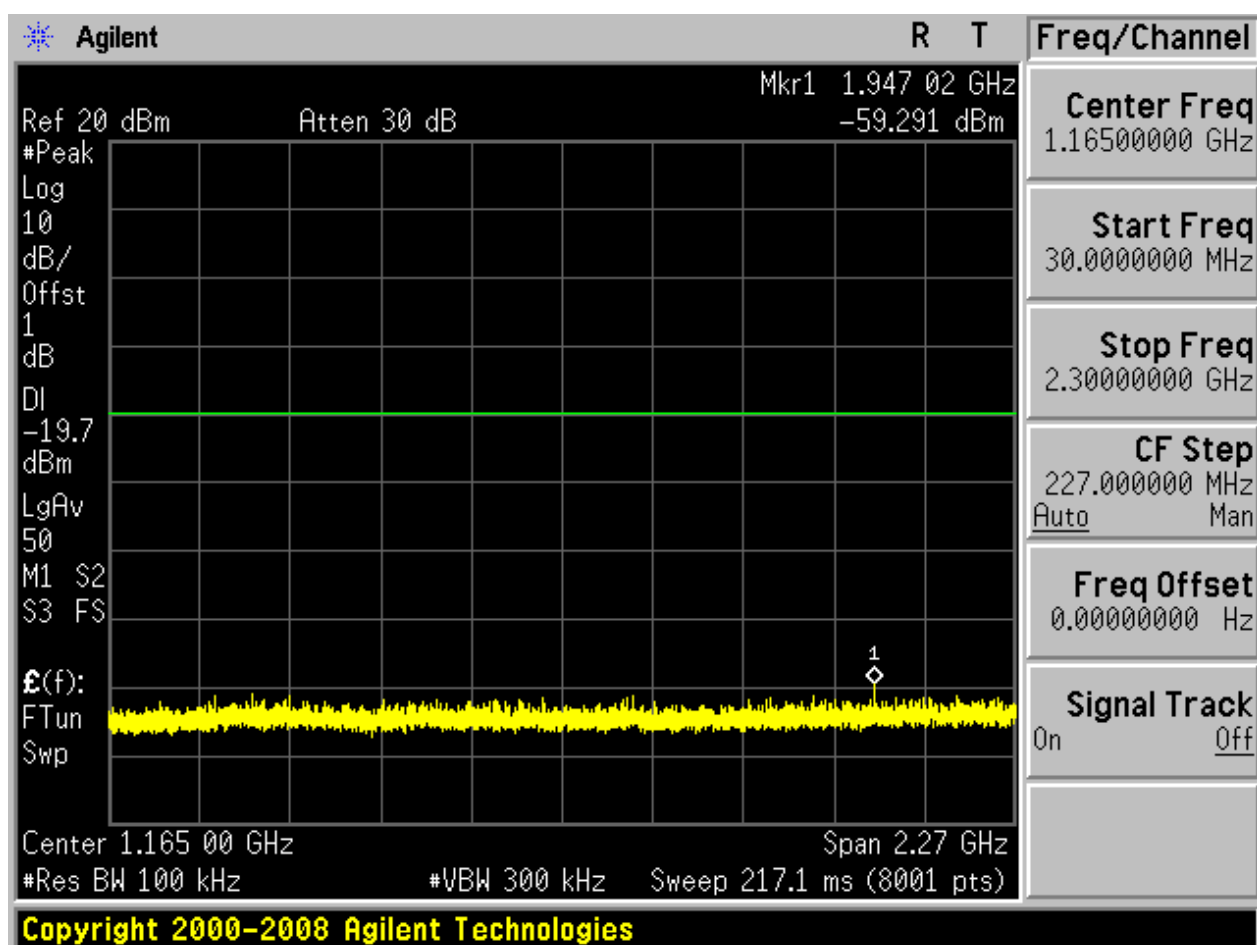


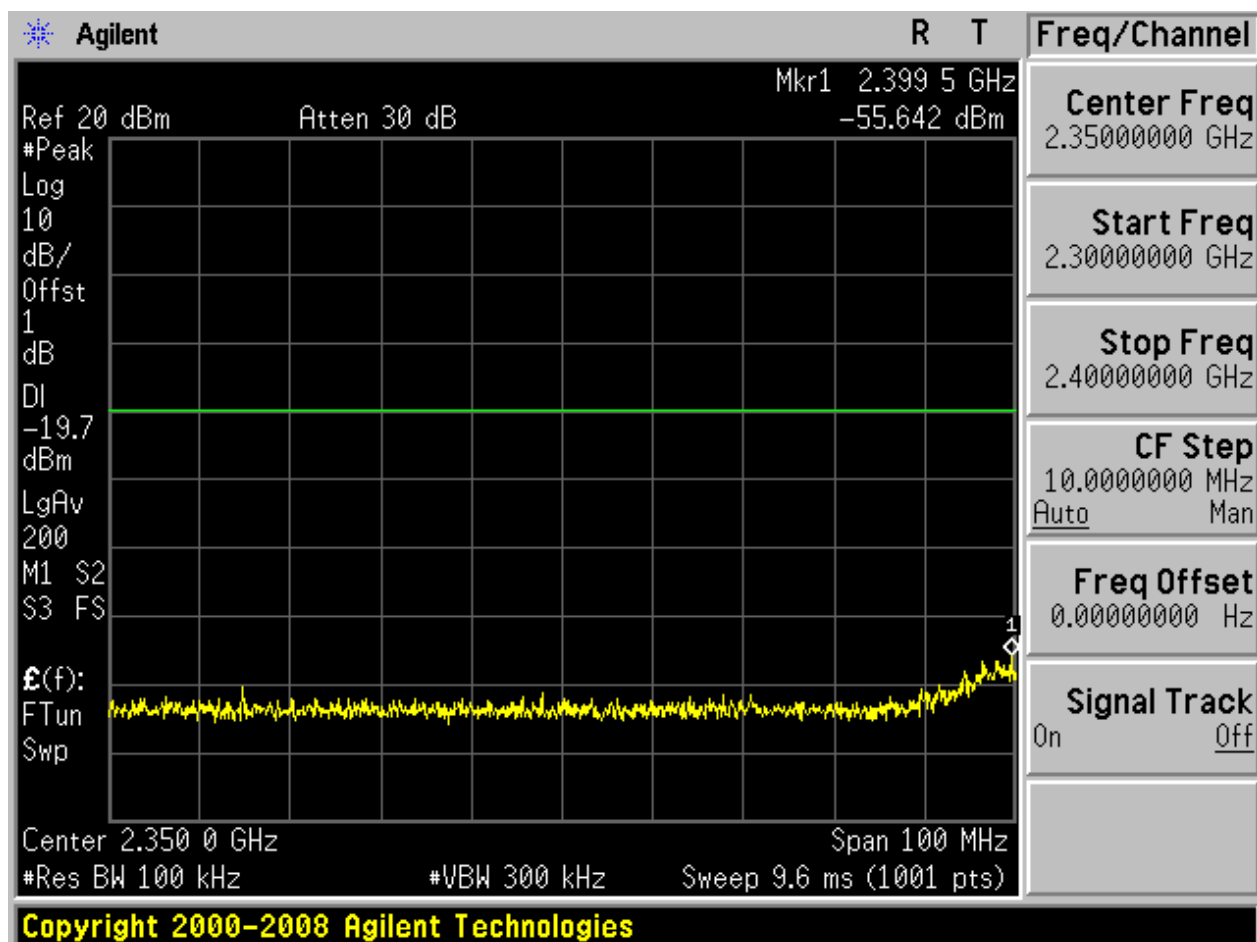


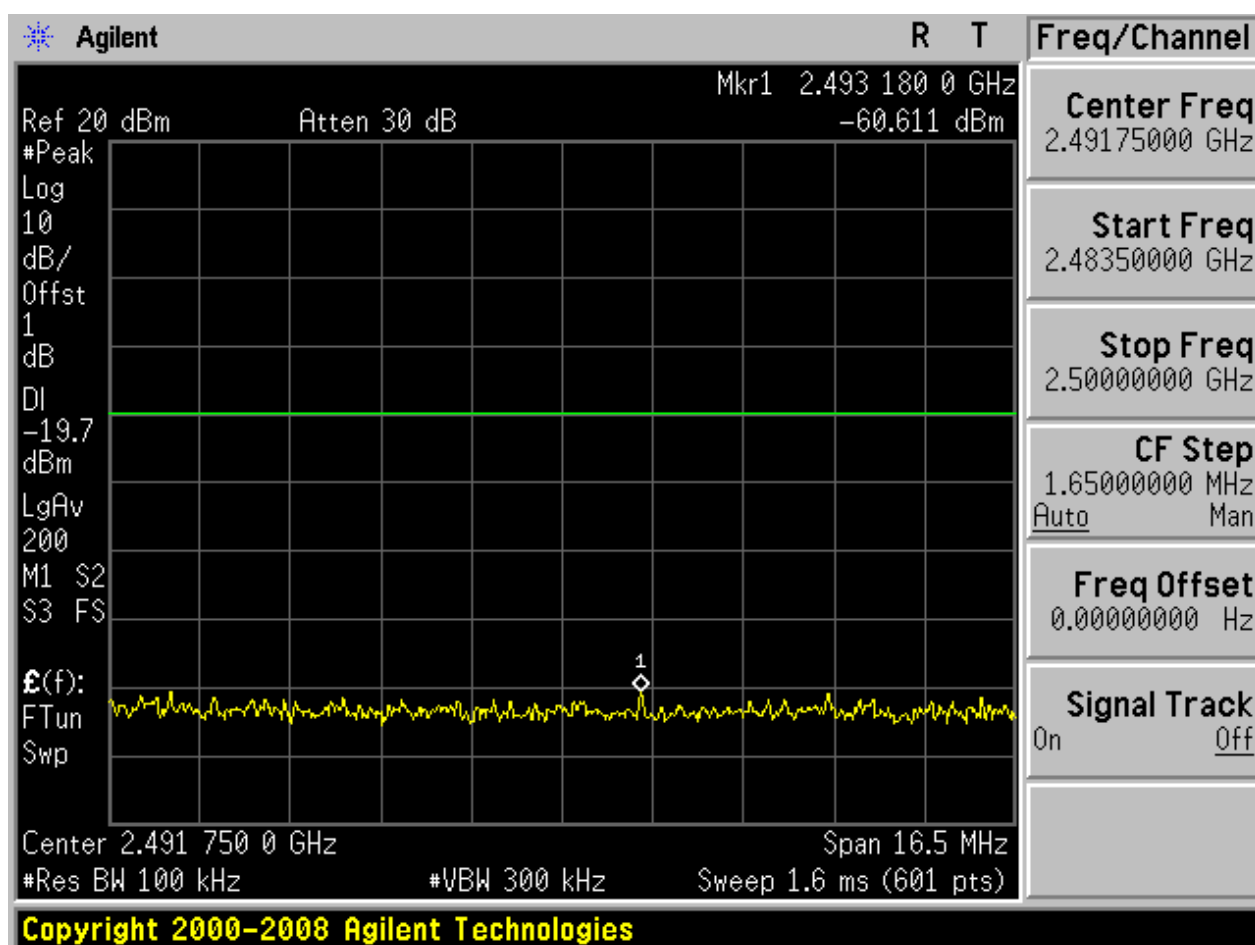
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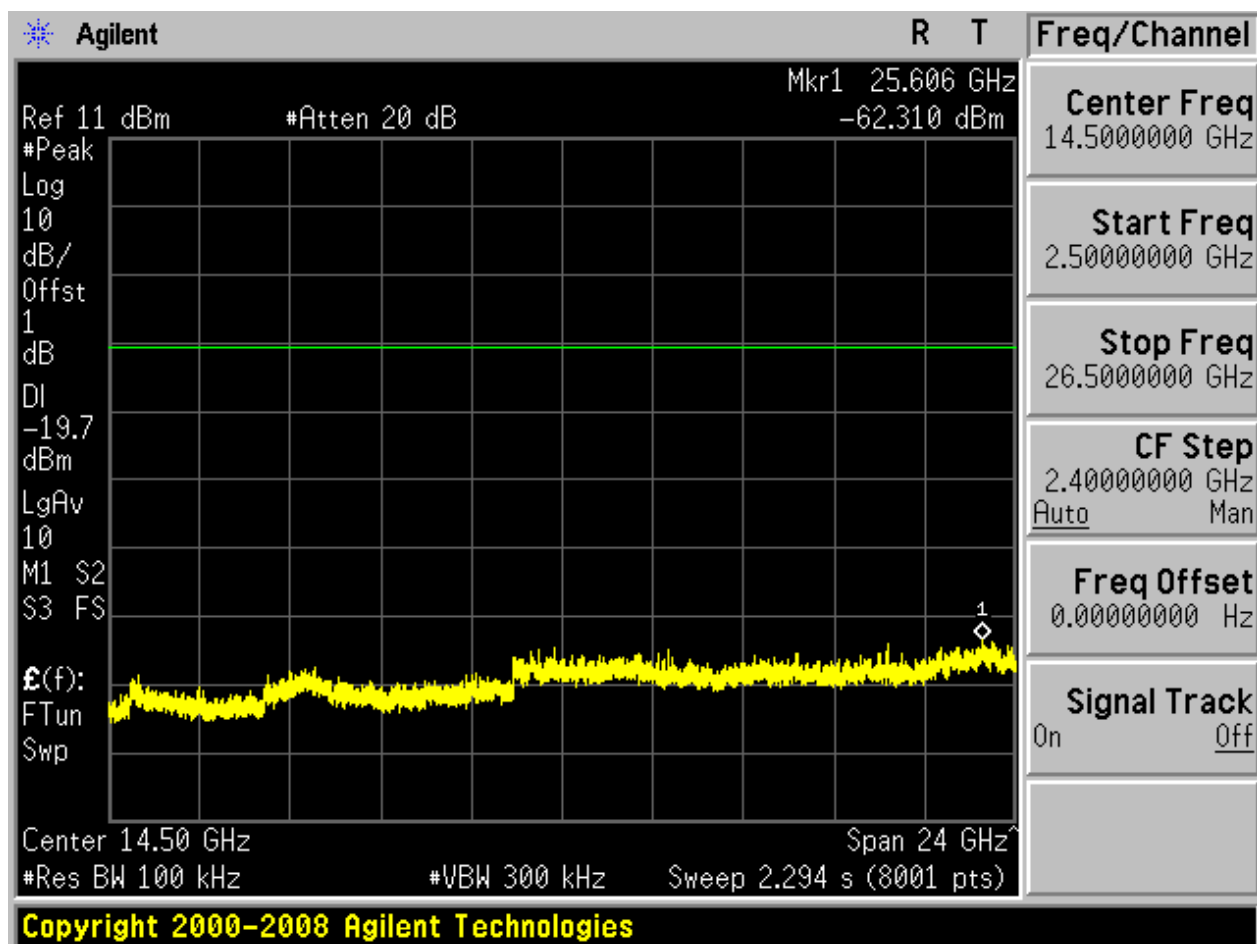








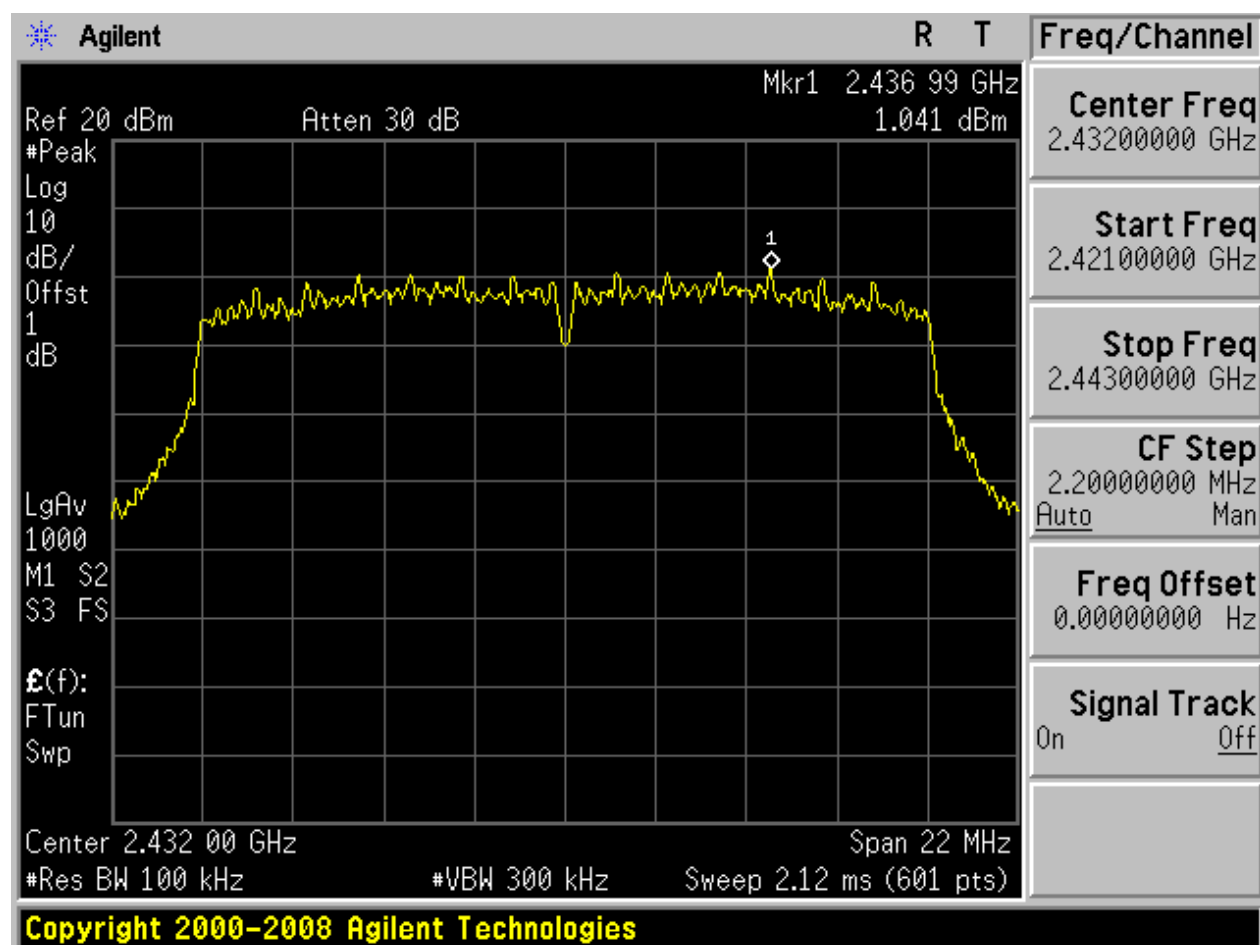






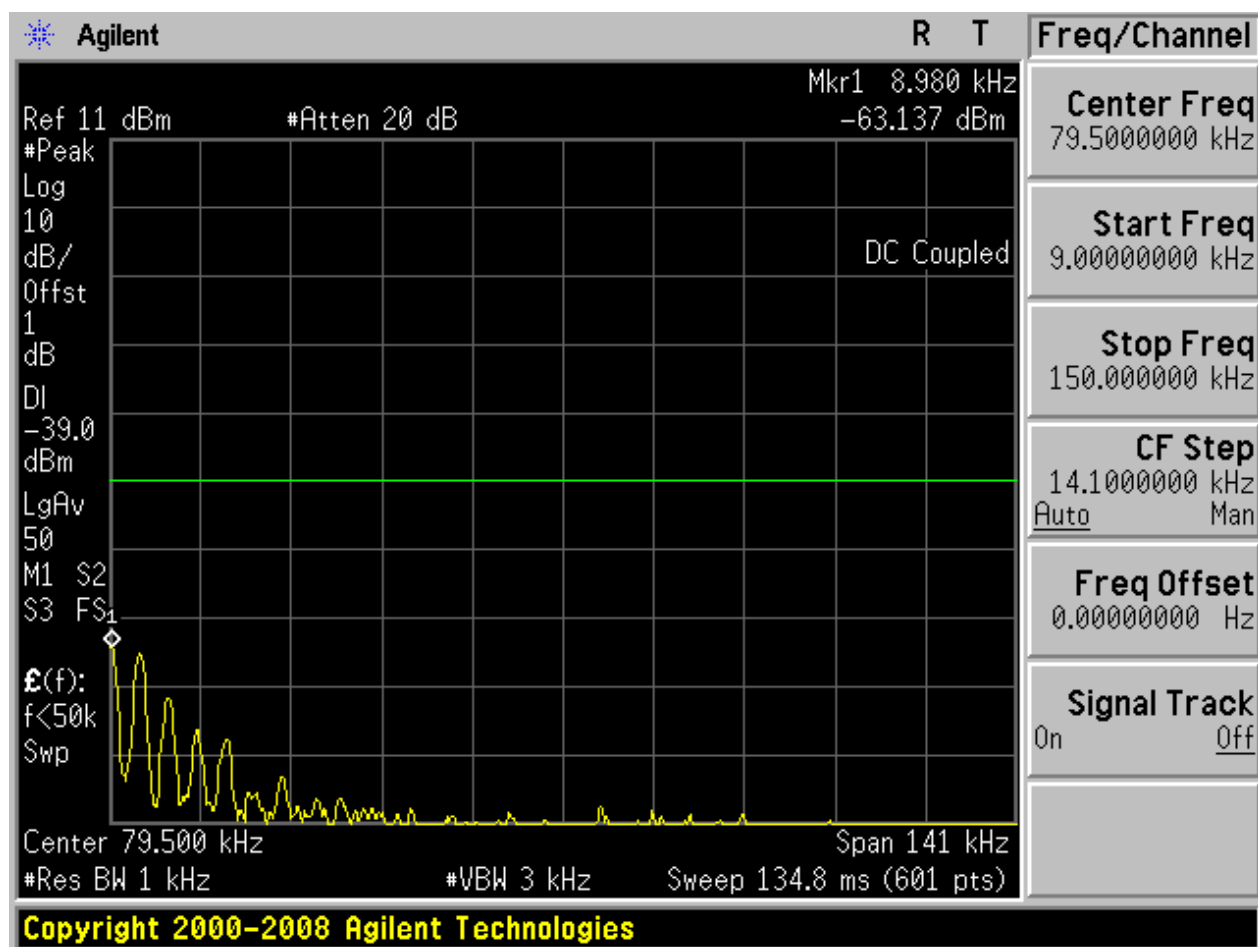
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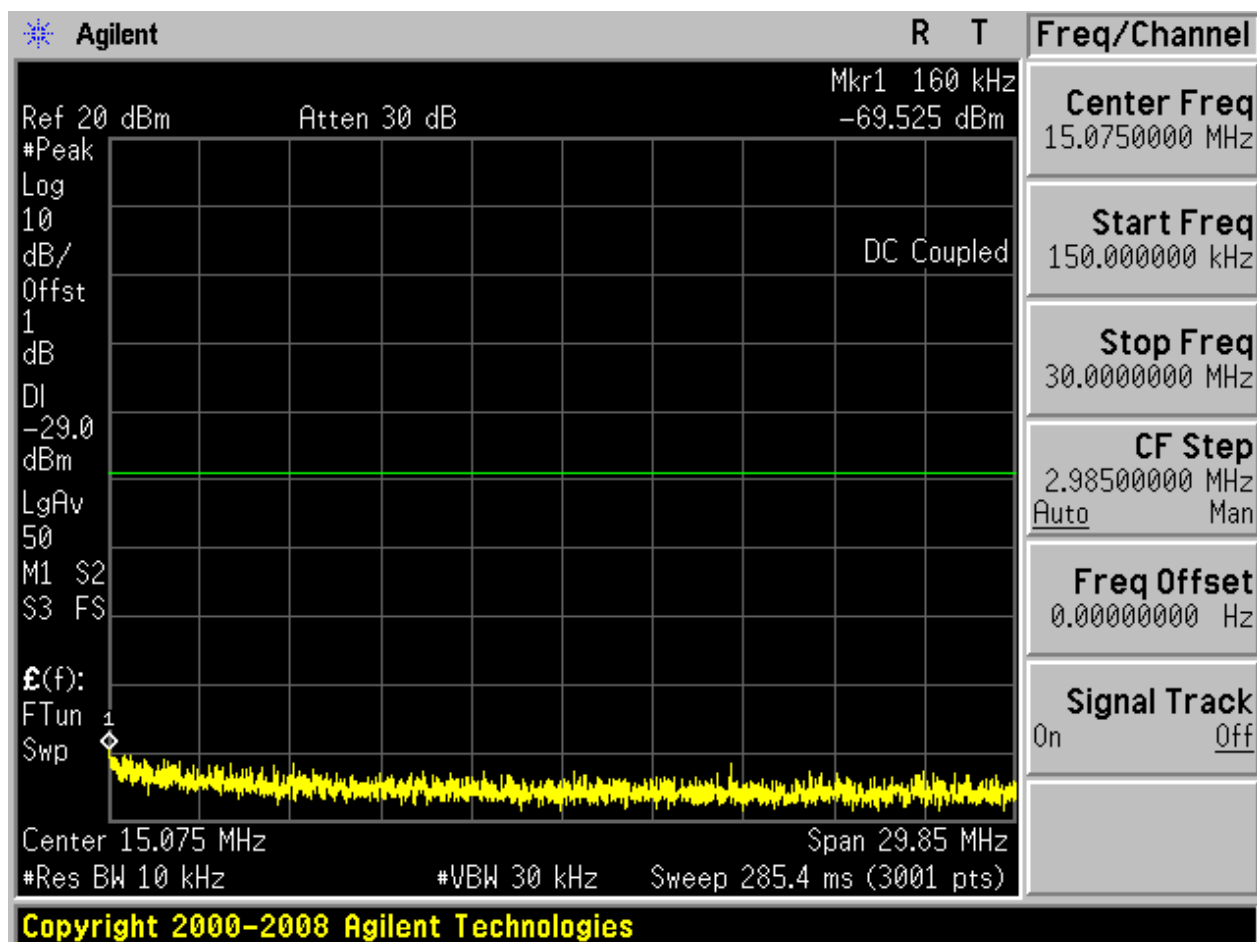
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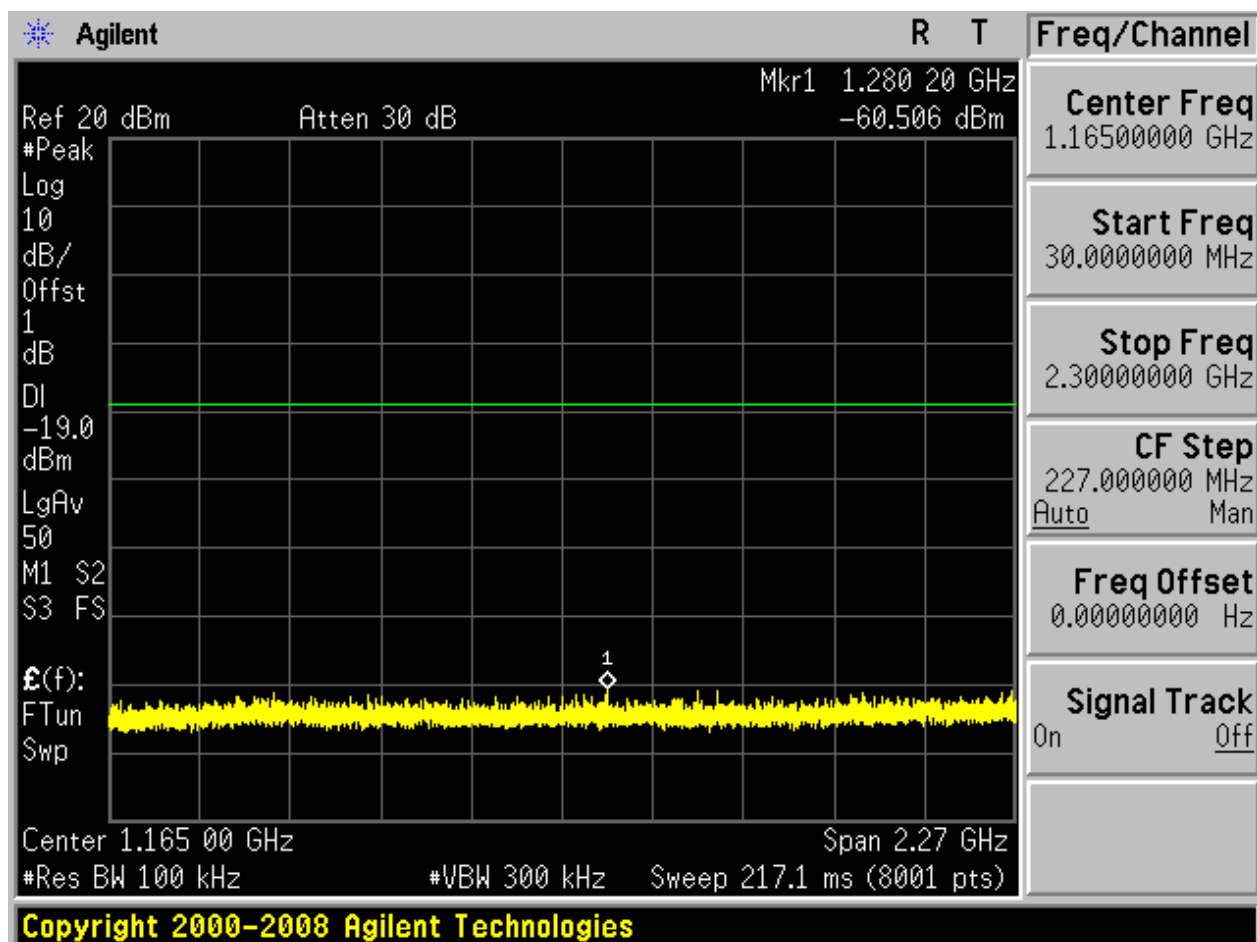


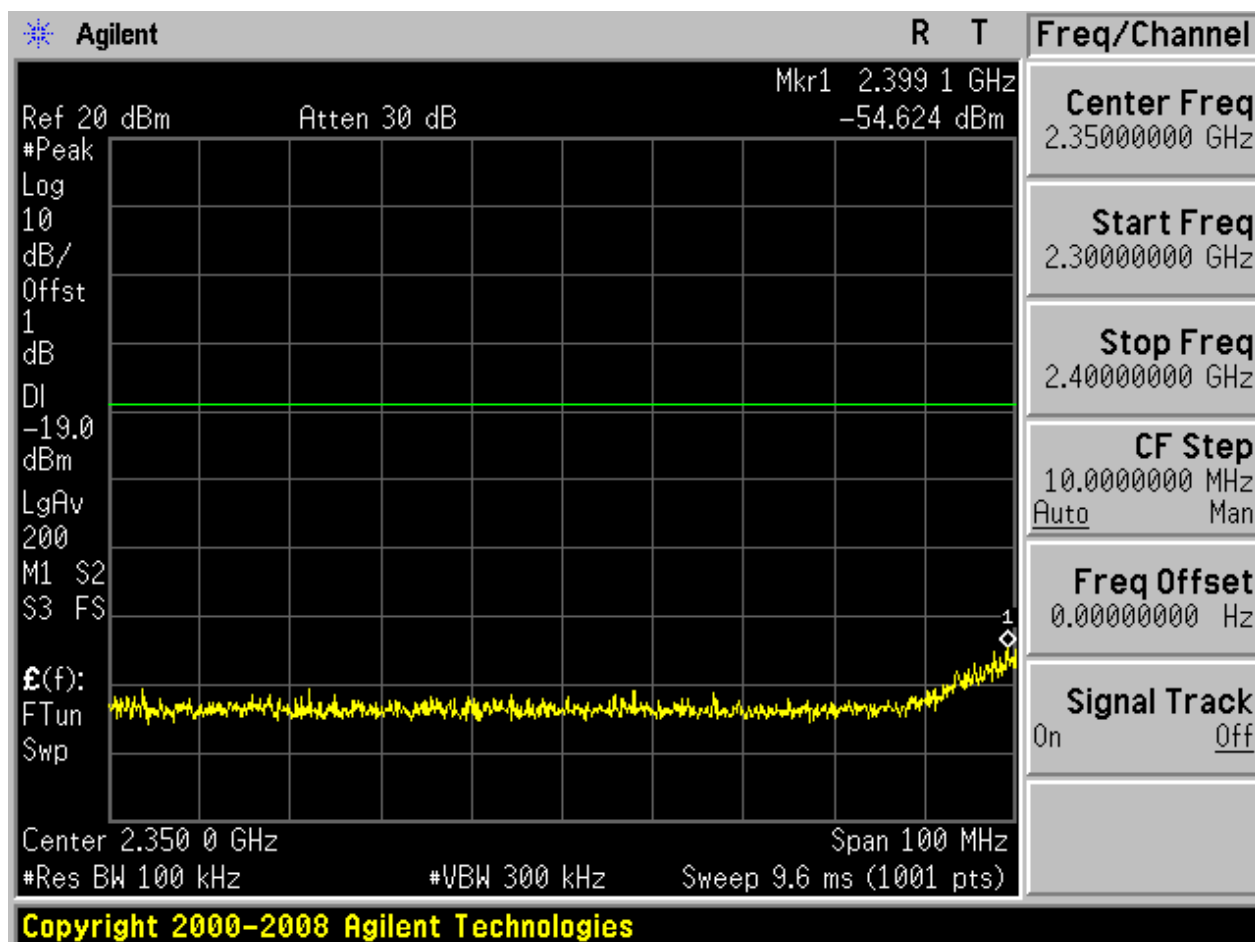


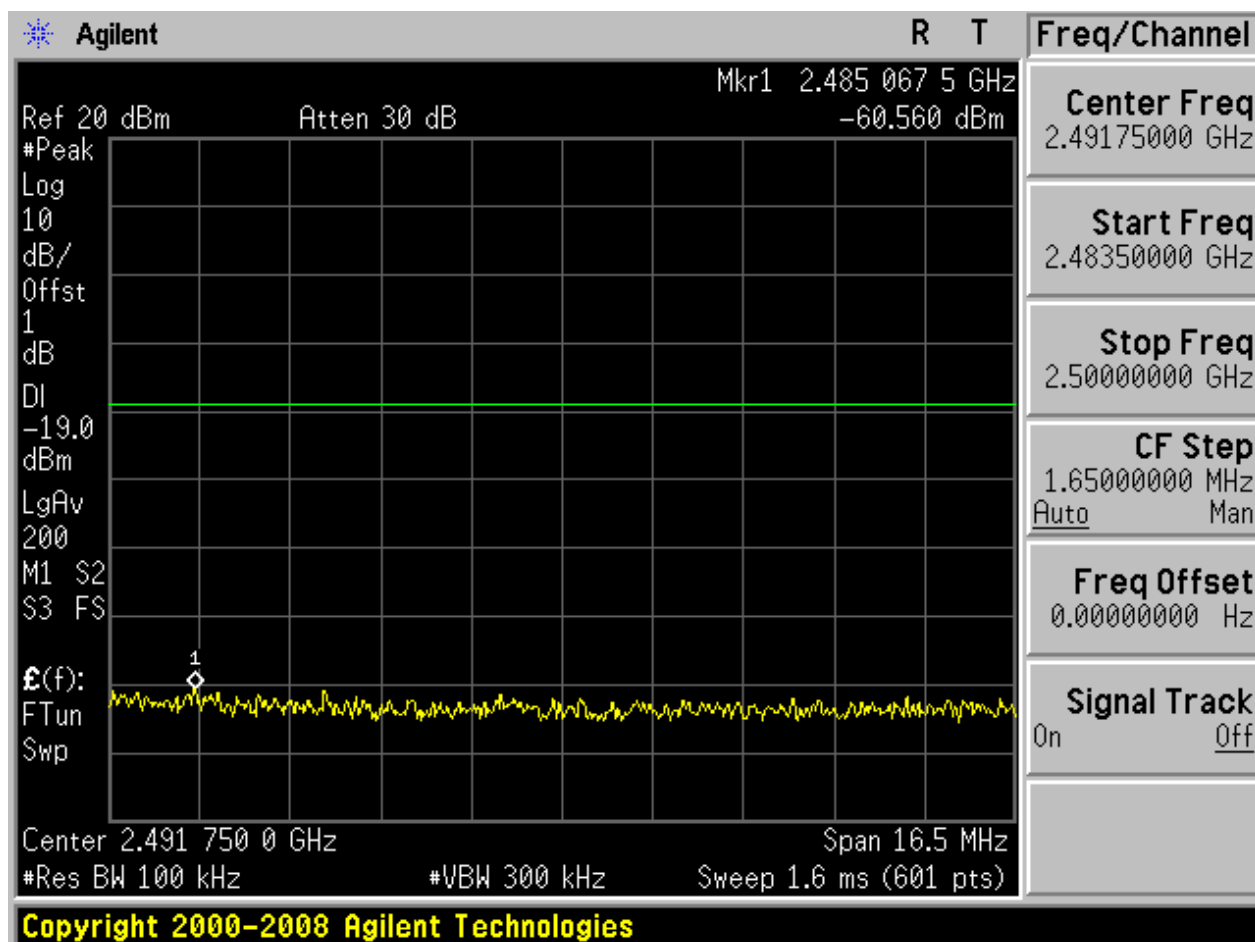
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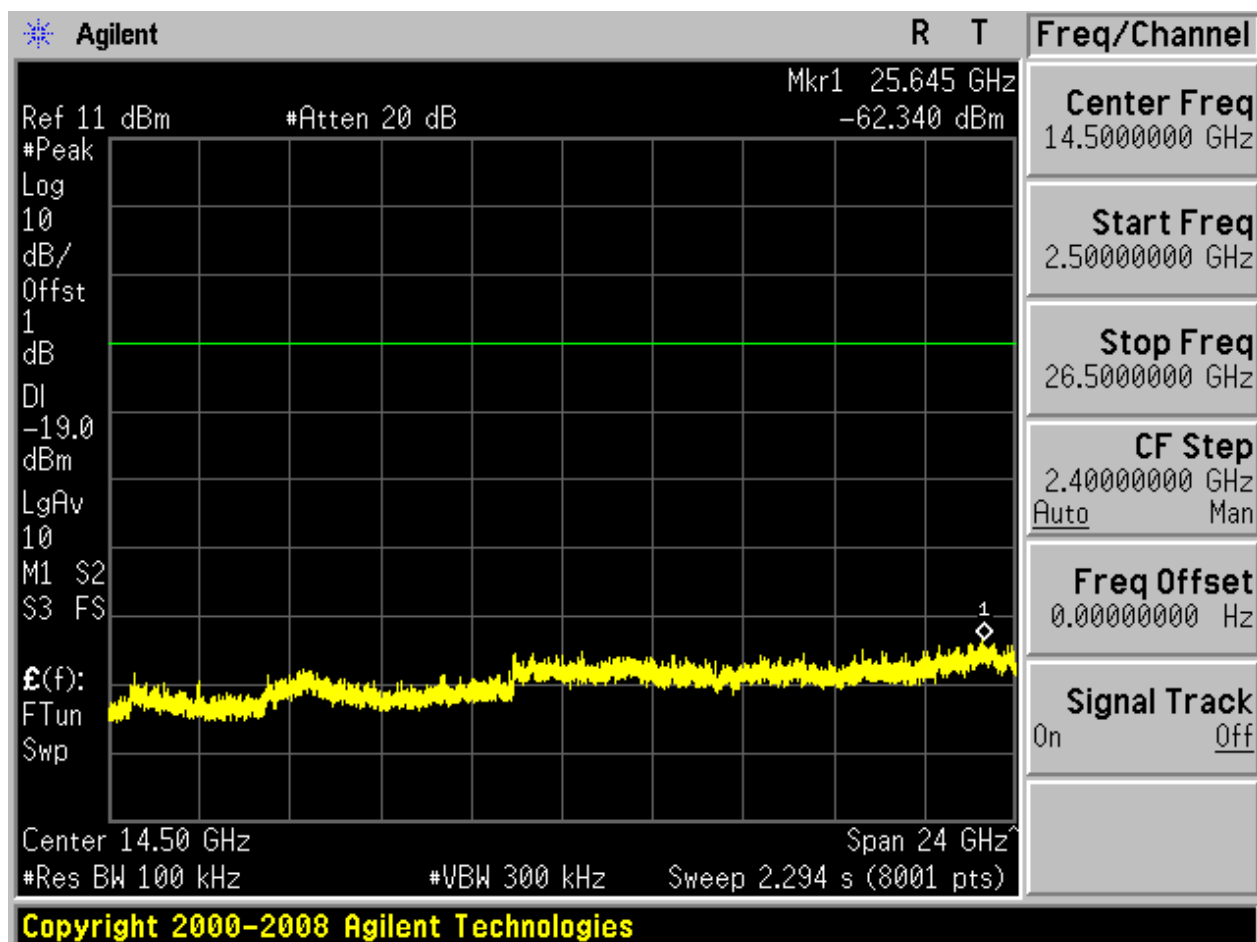








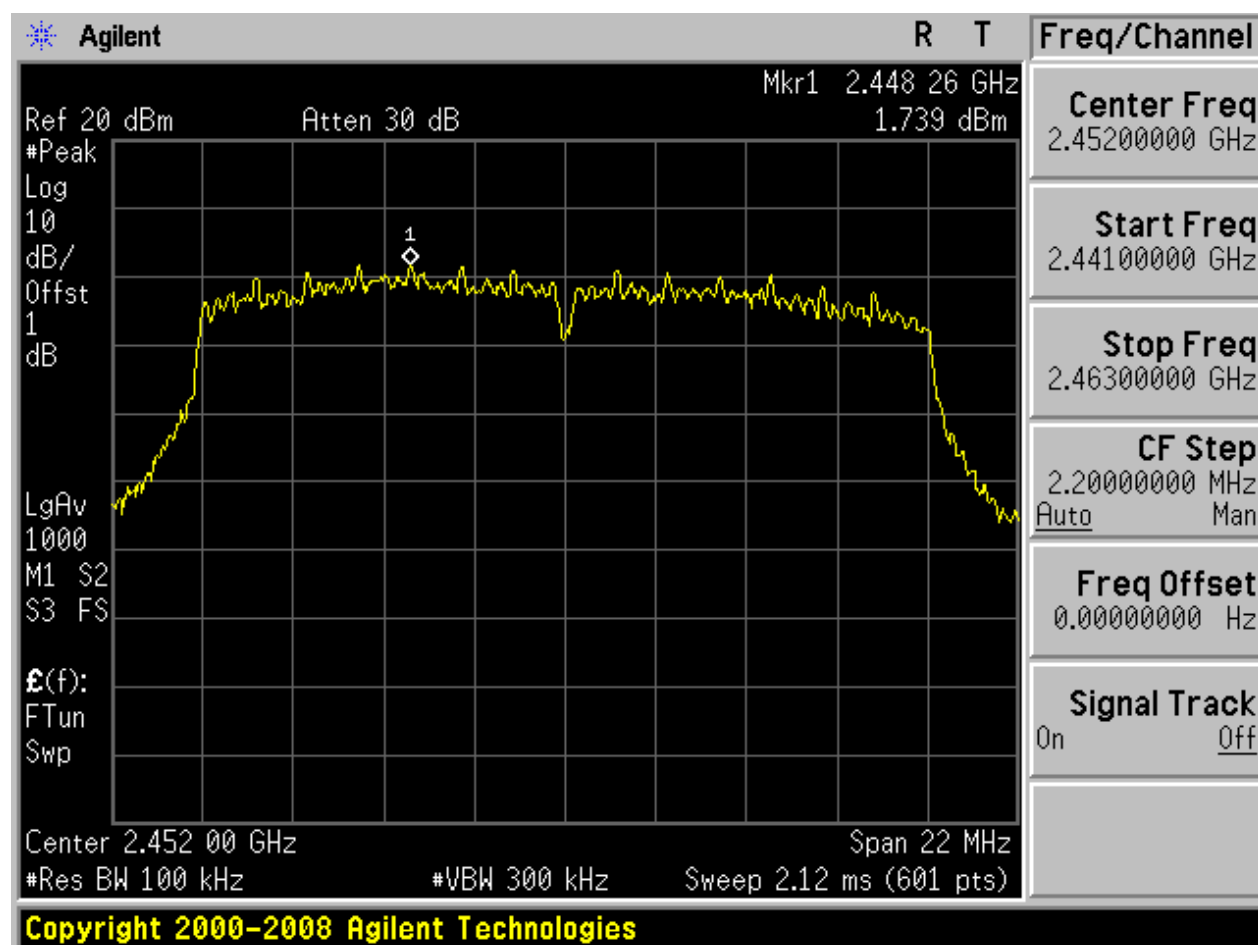






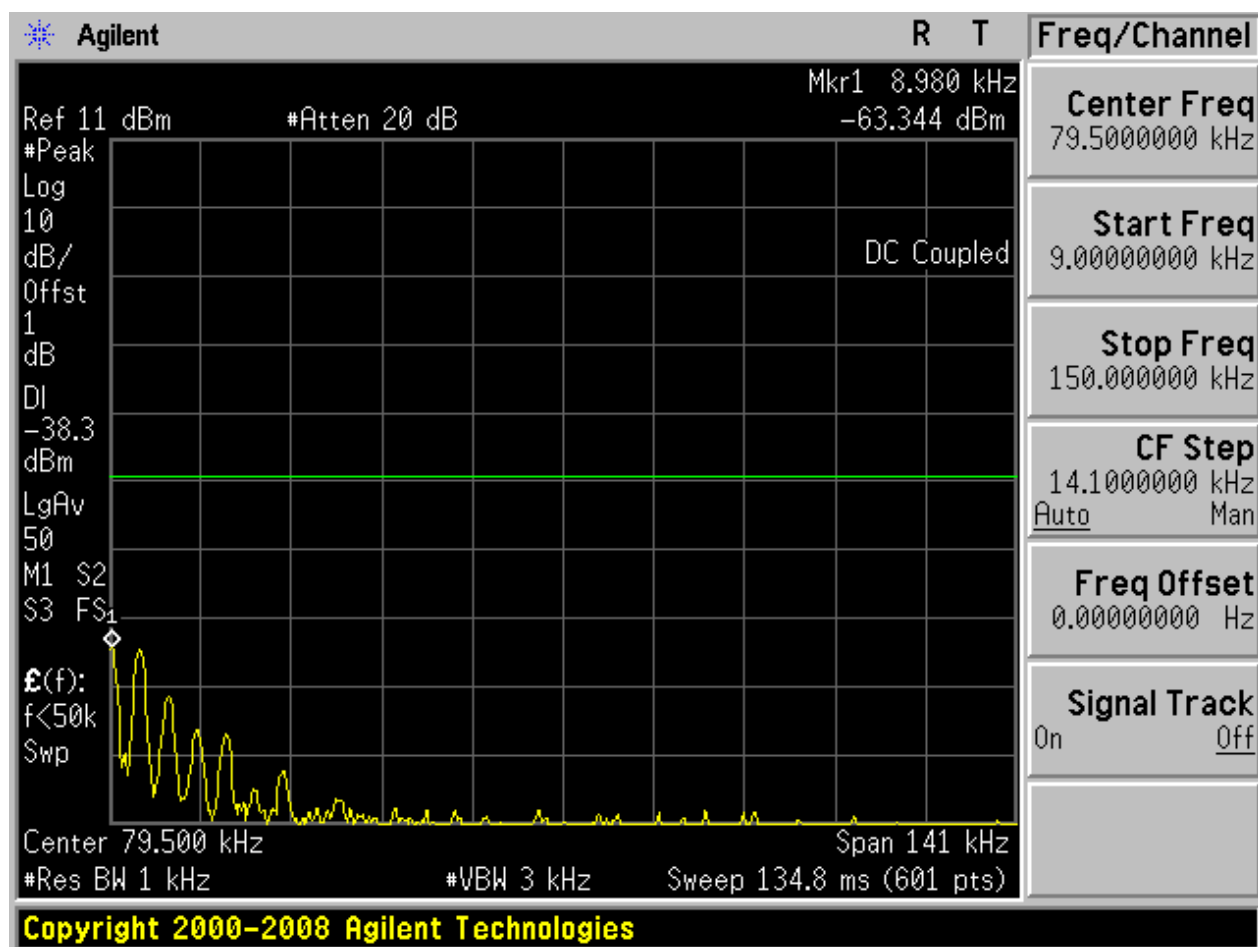
4.23 11N20m_H@Ant 1

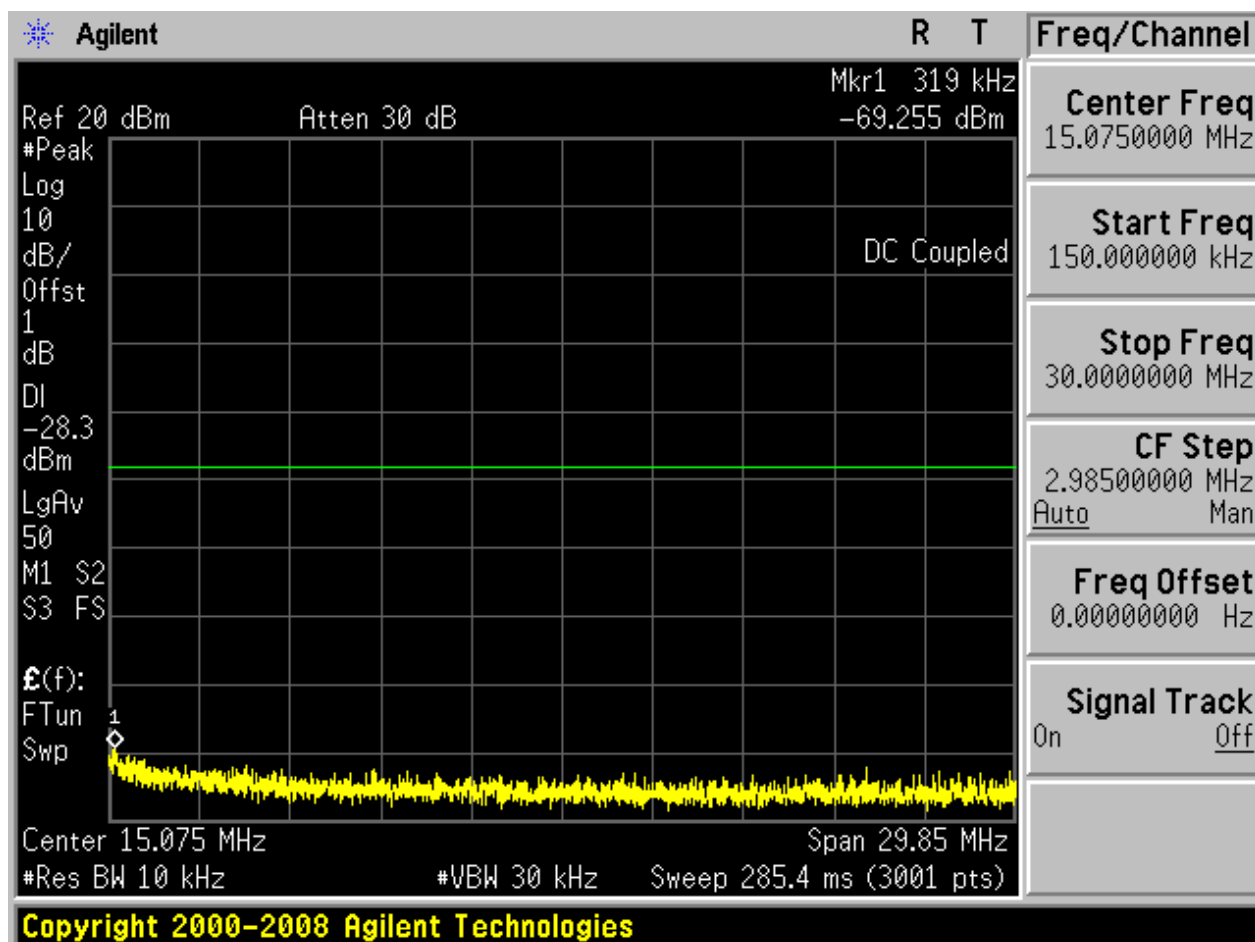
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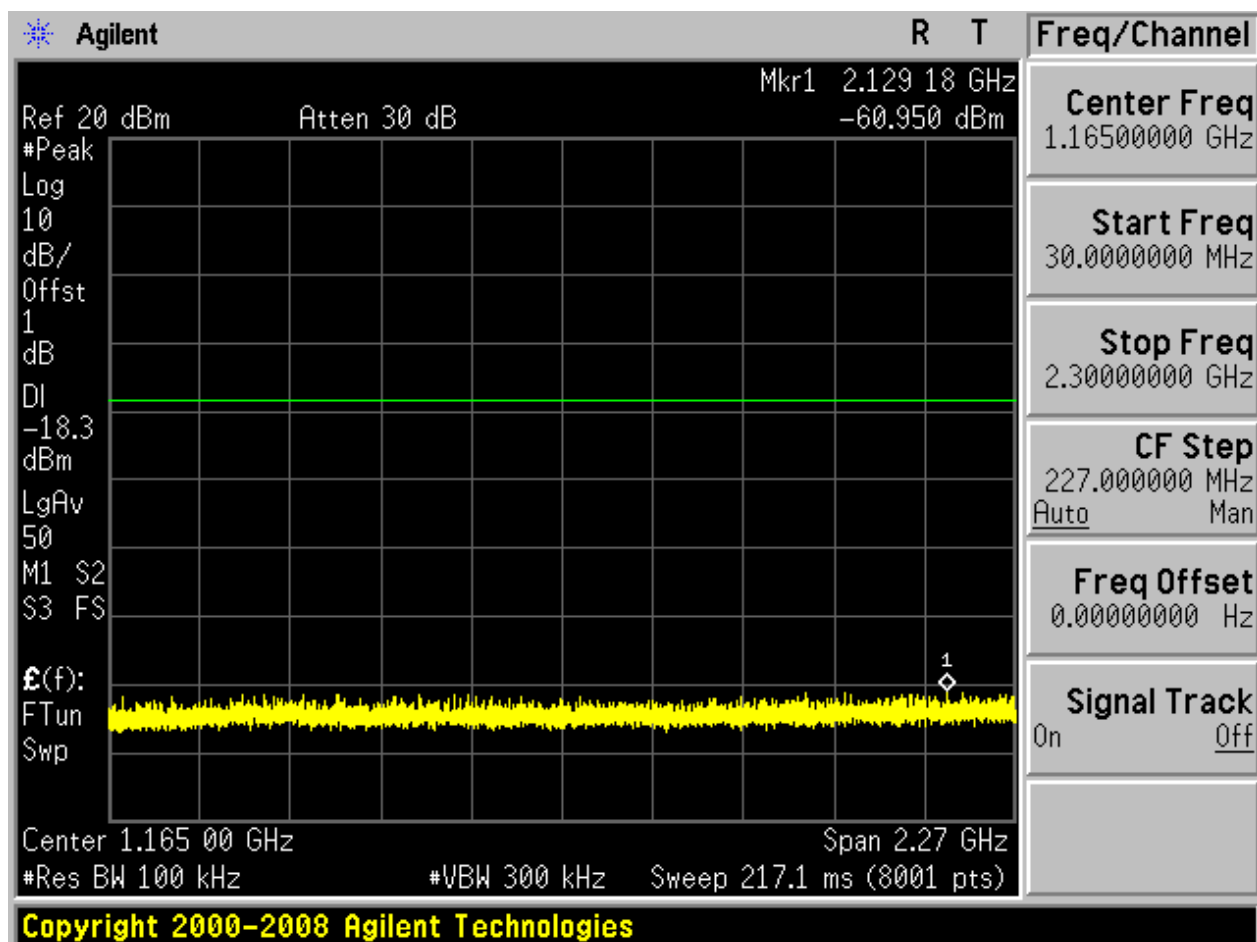


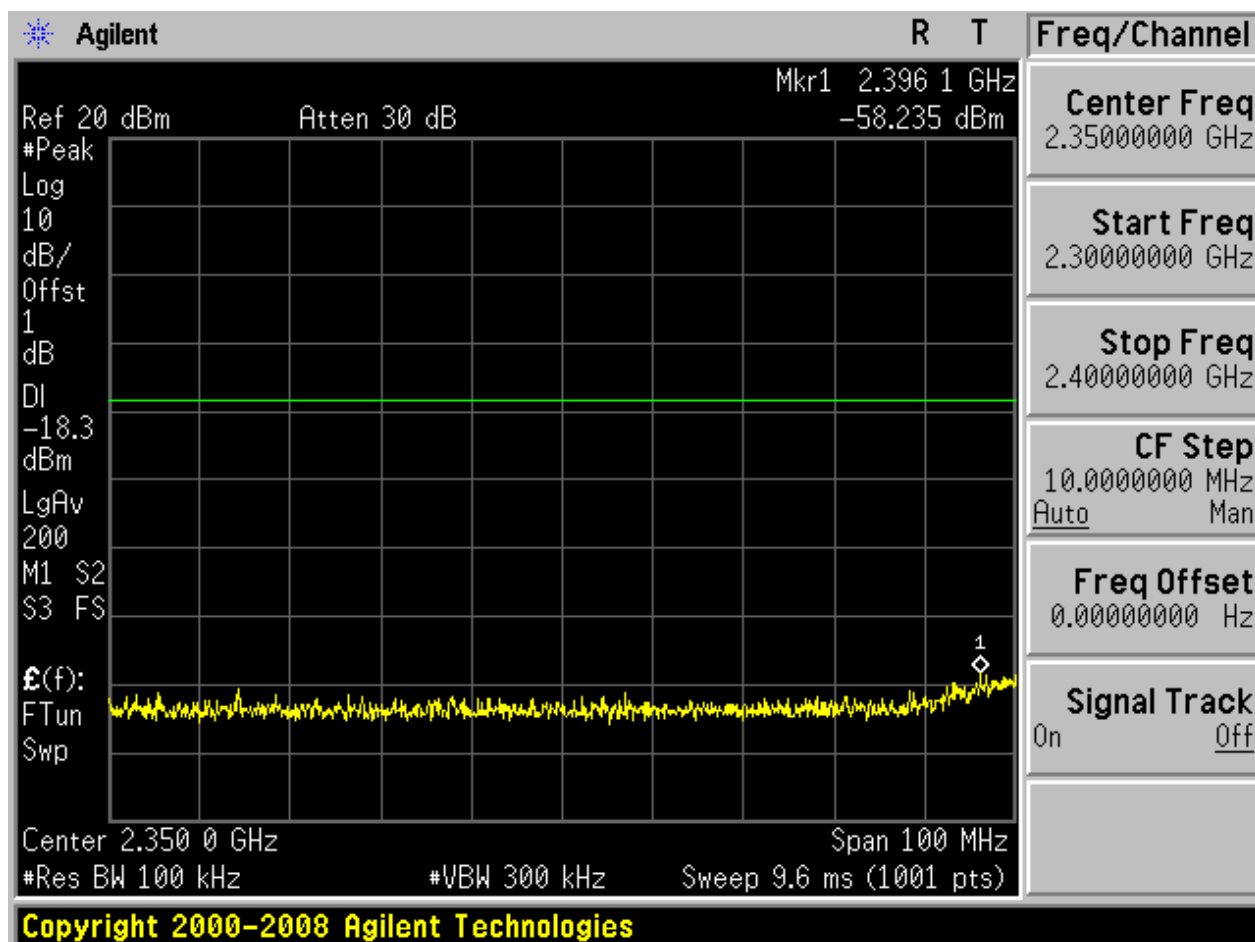


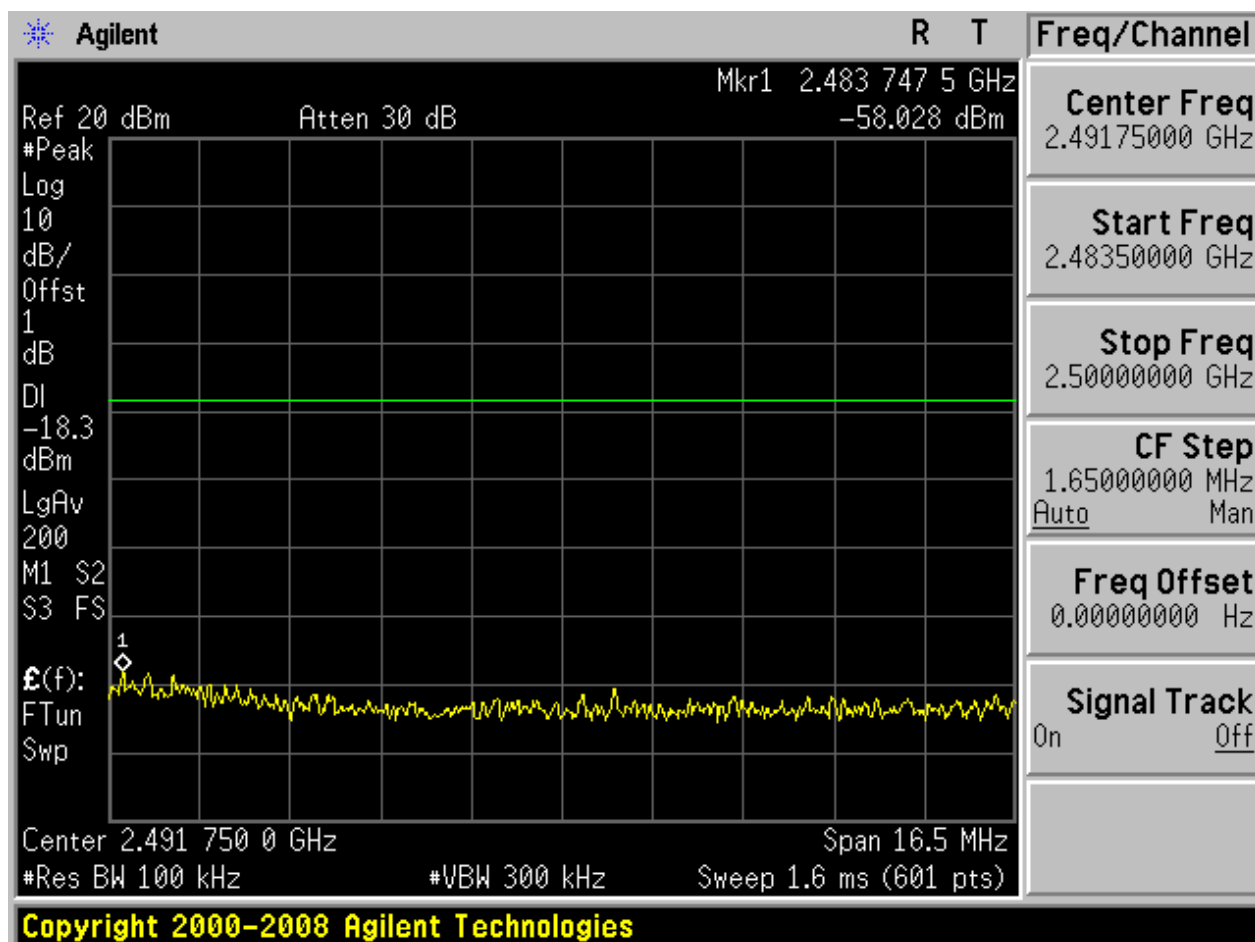
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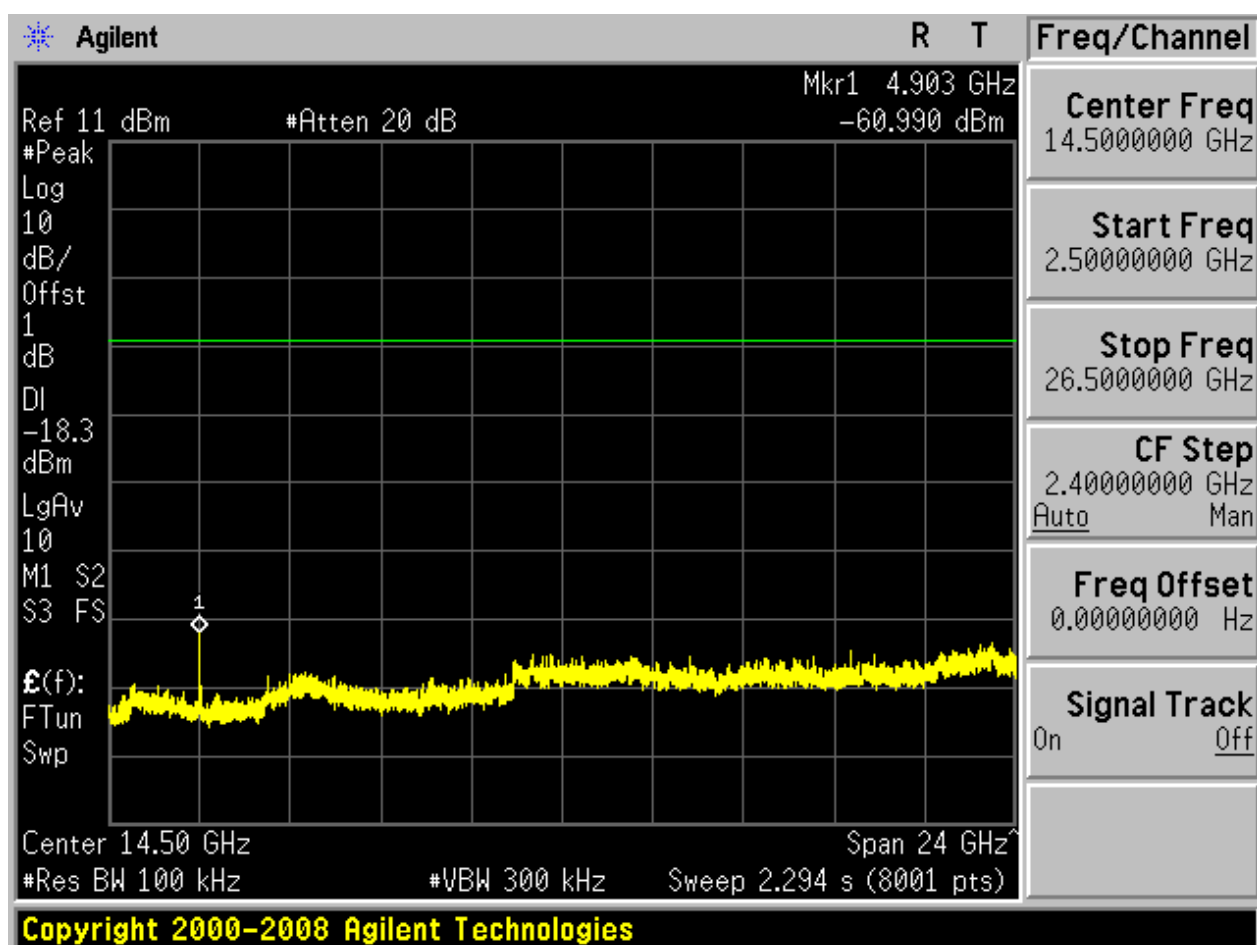






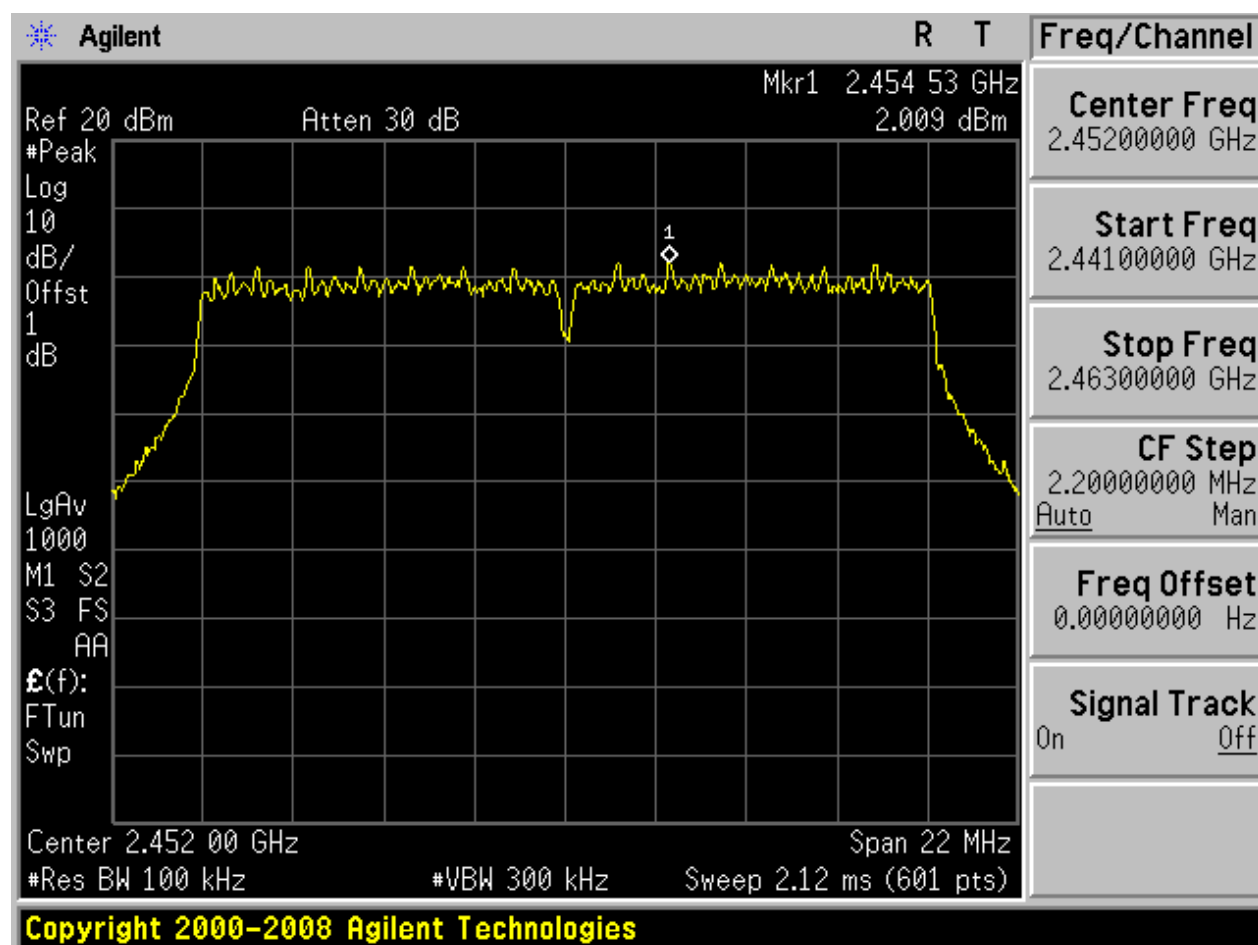




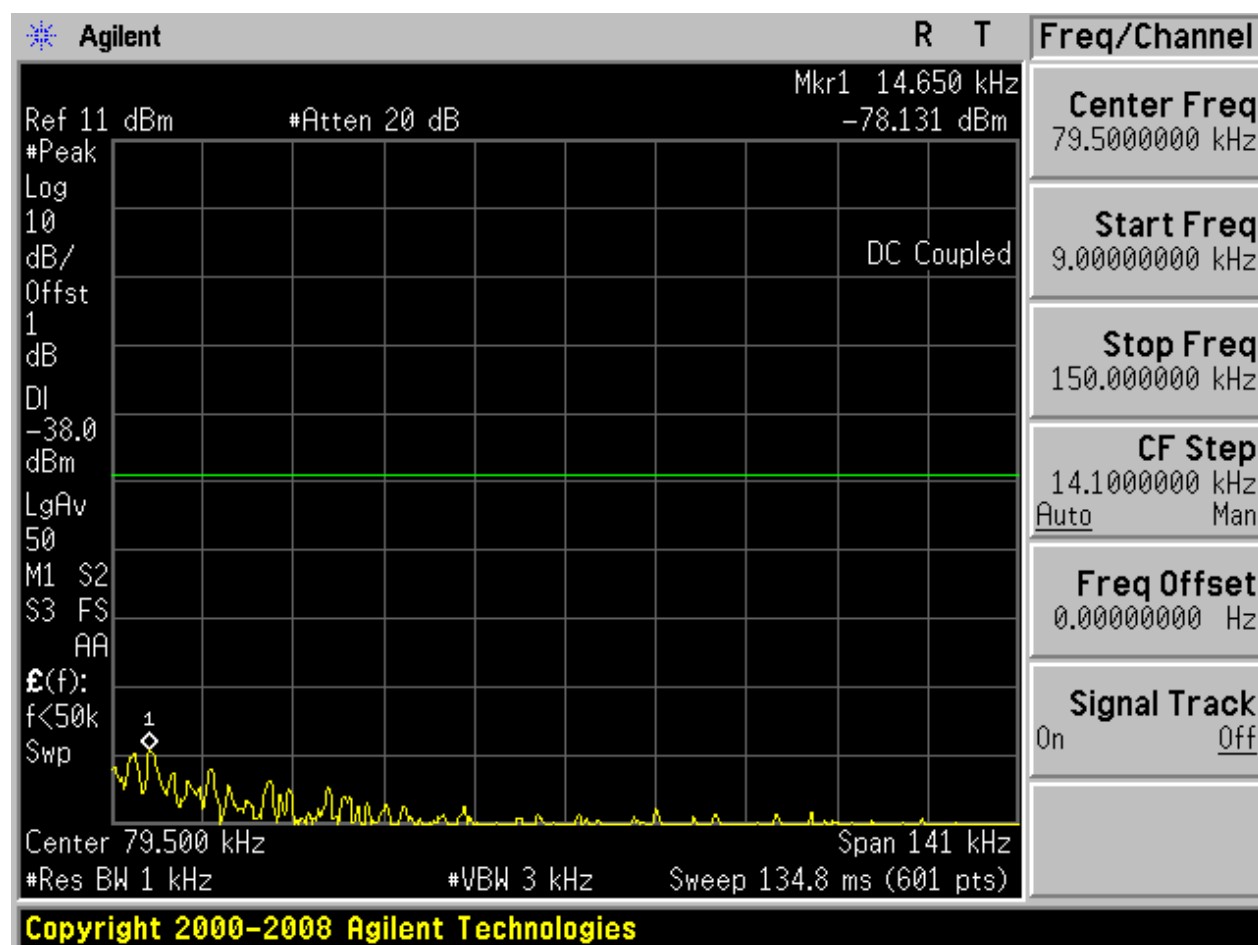


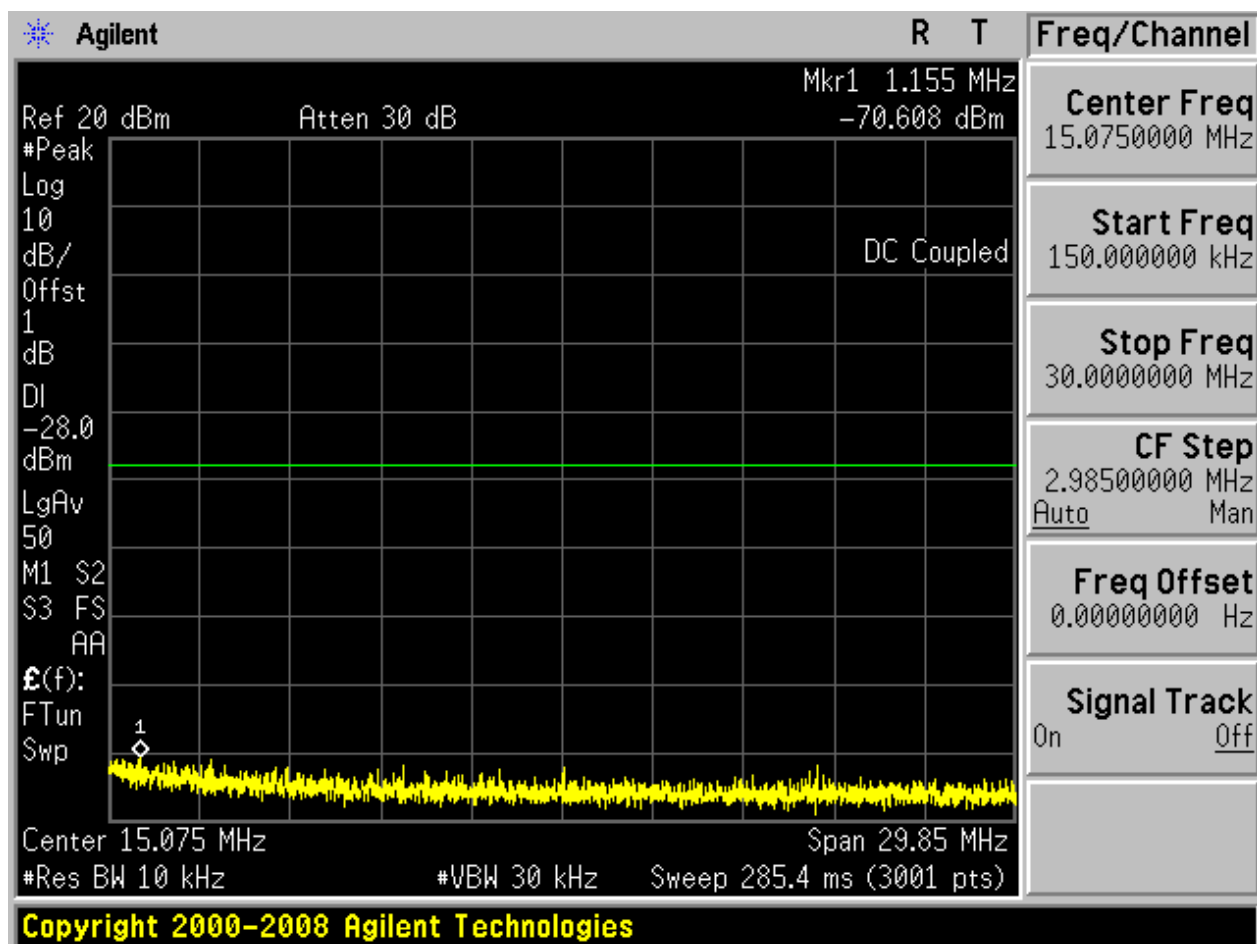
4.24 11N20m_H@Ant 2

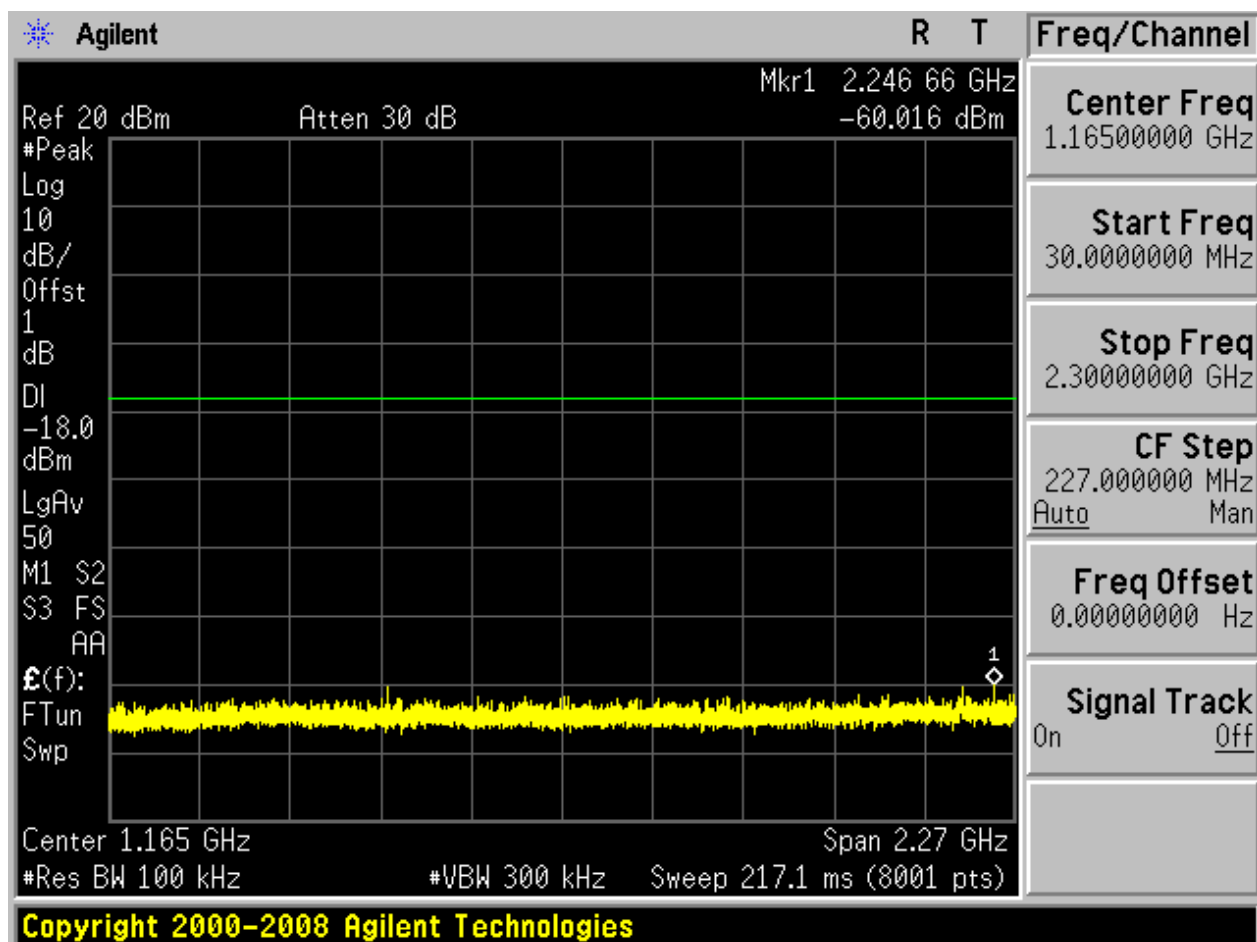
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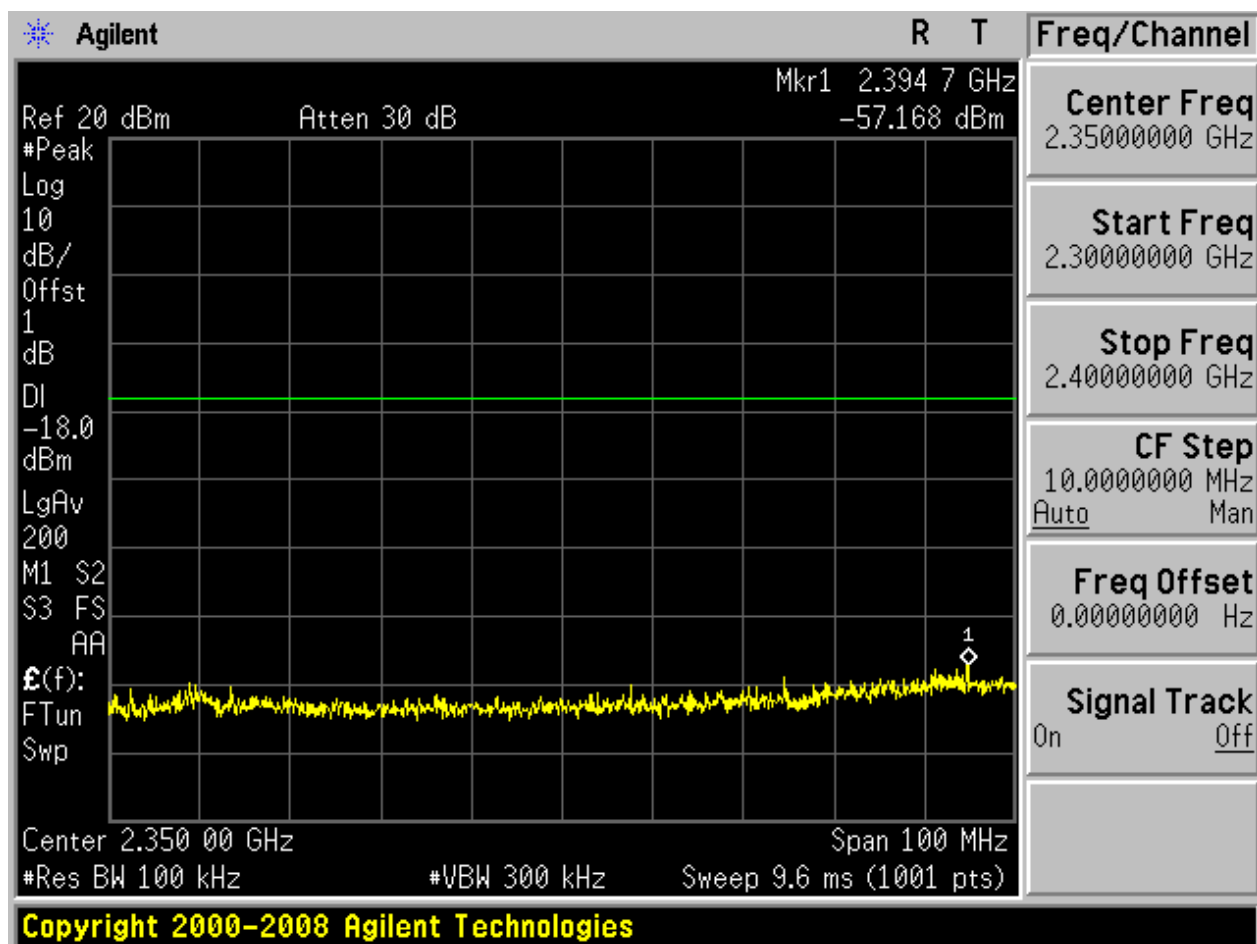


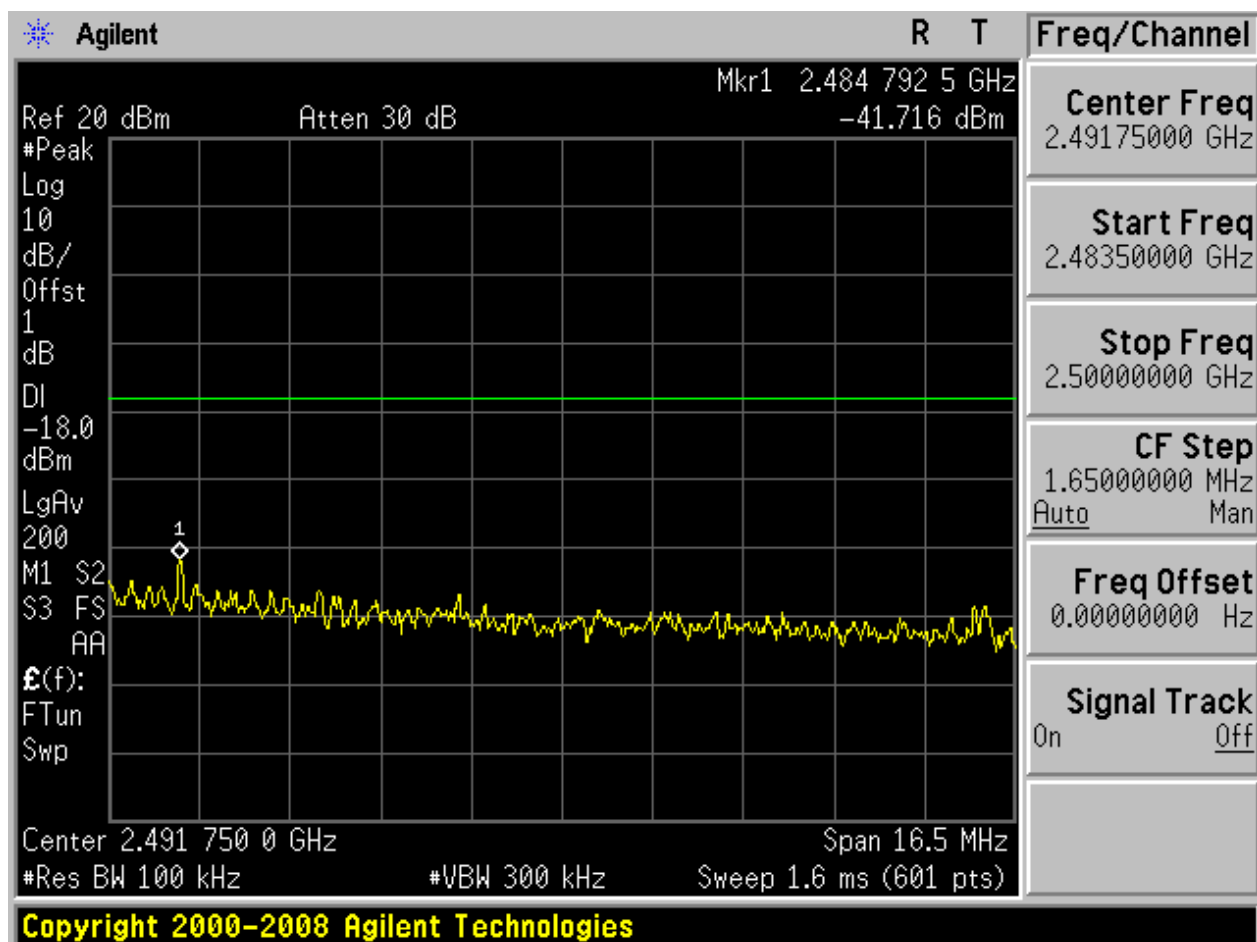
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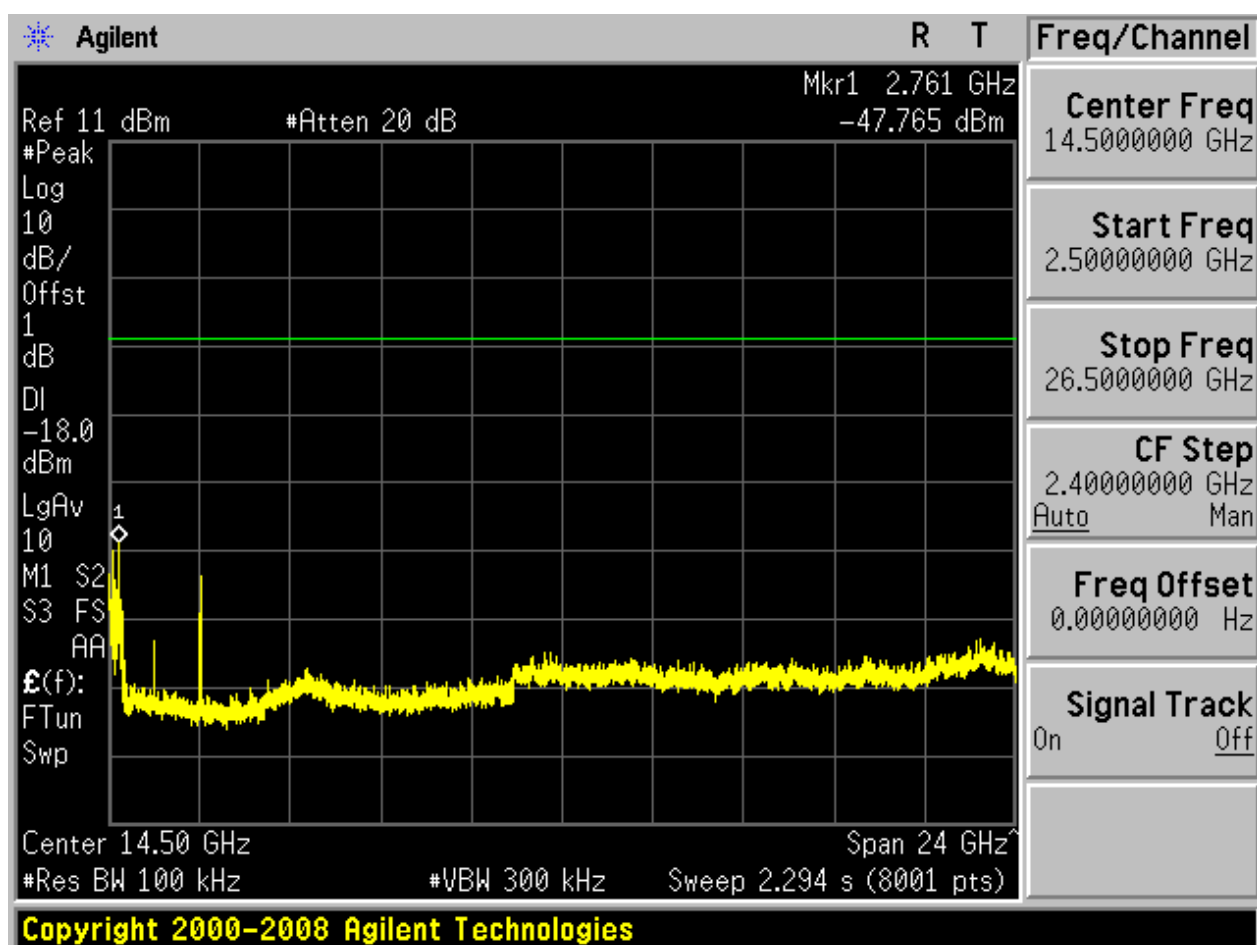








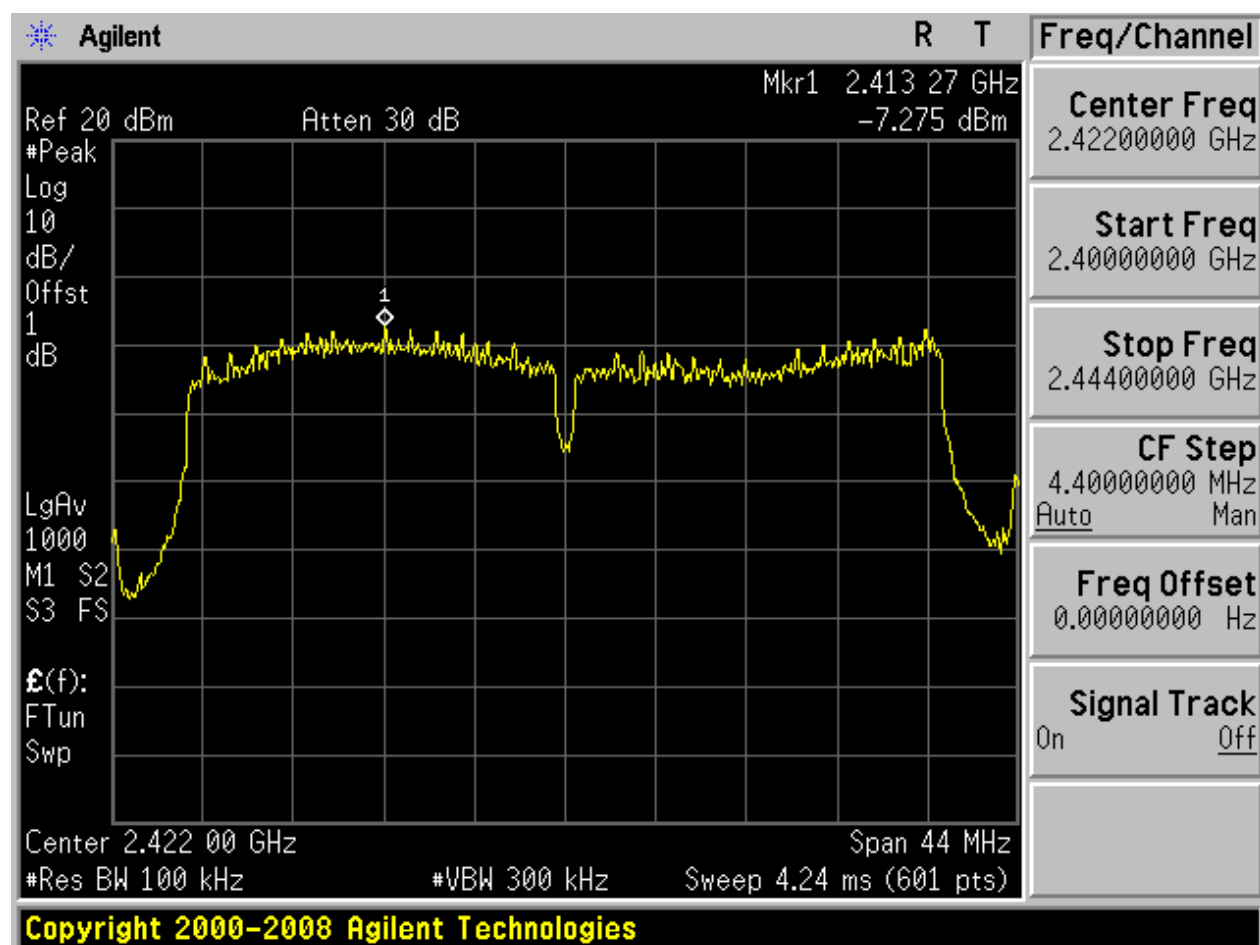






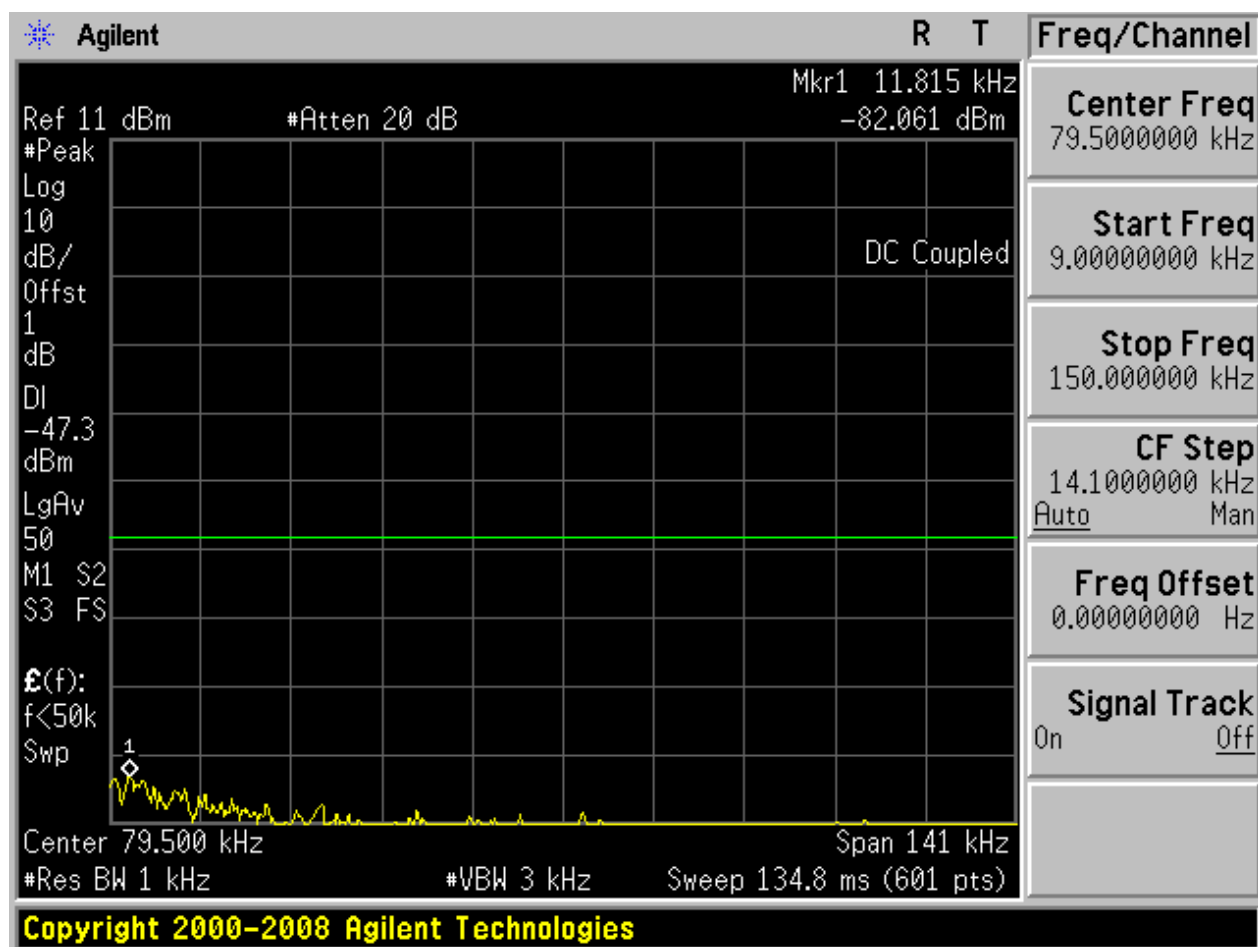
4.25 11N40_L@Ant 1

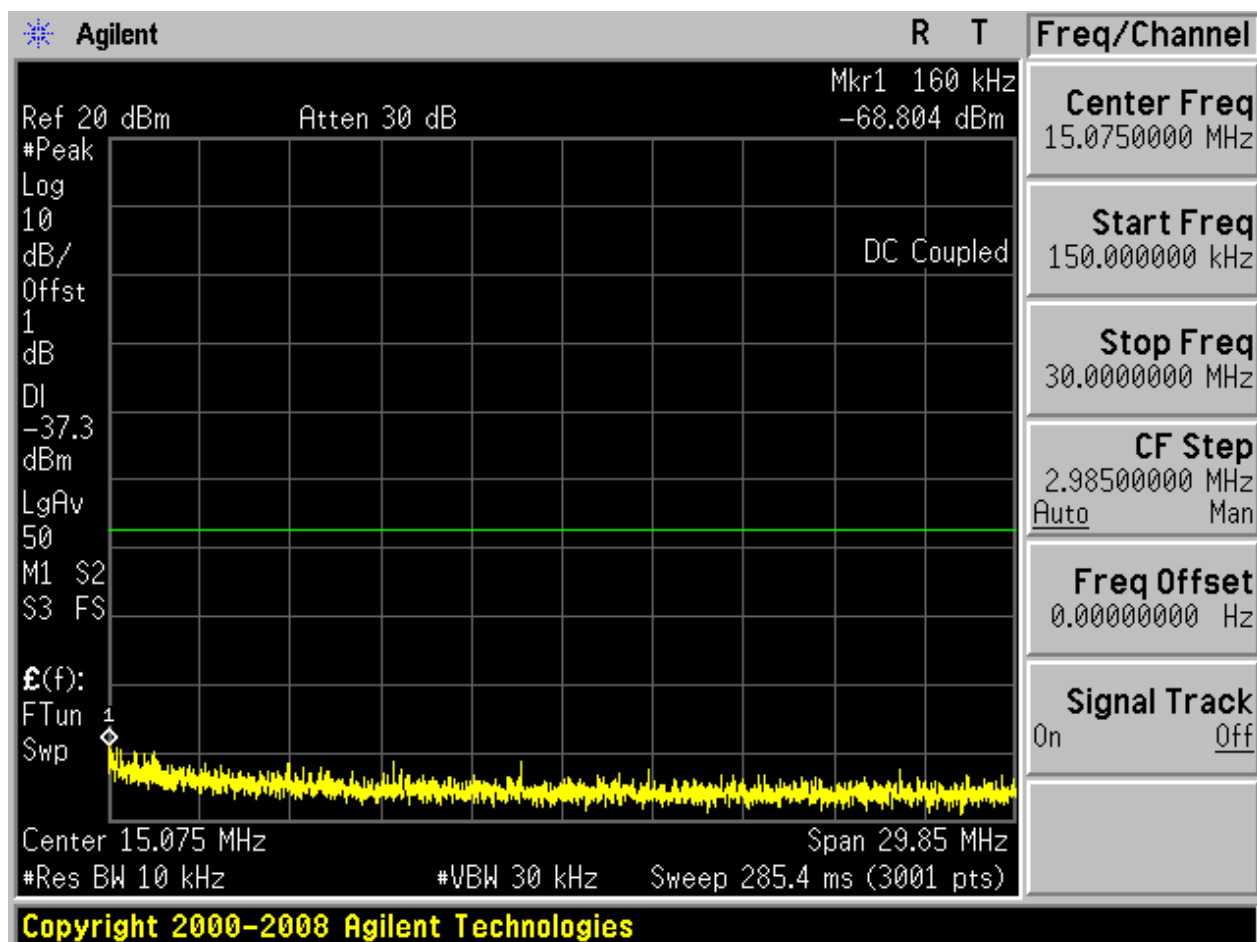
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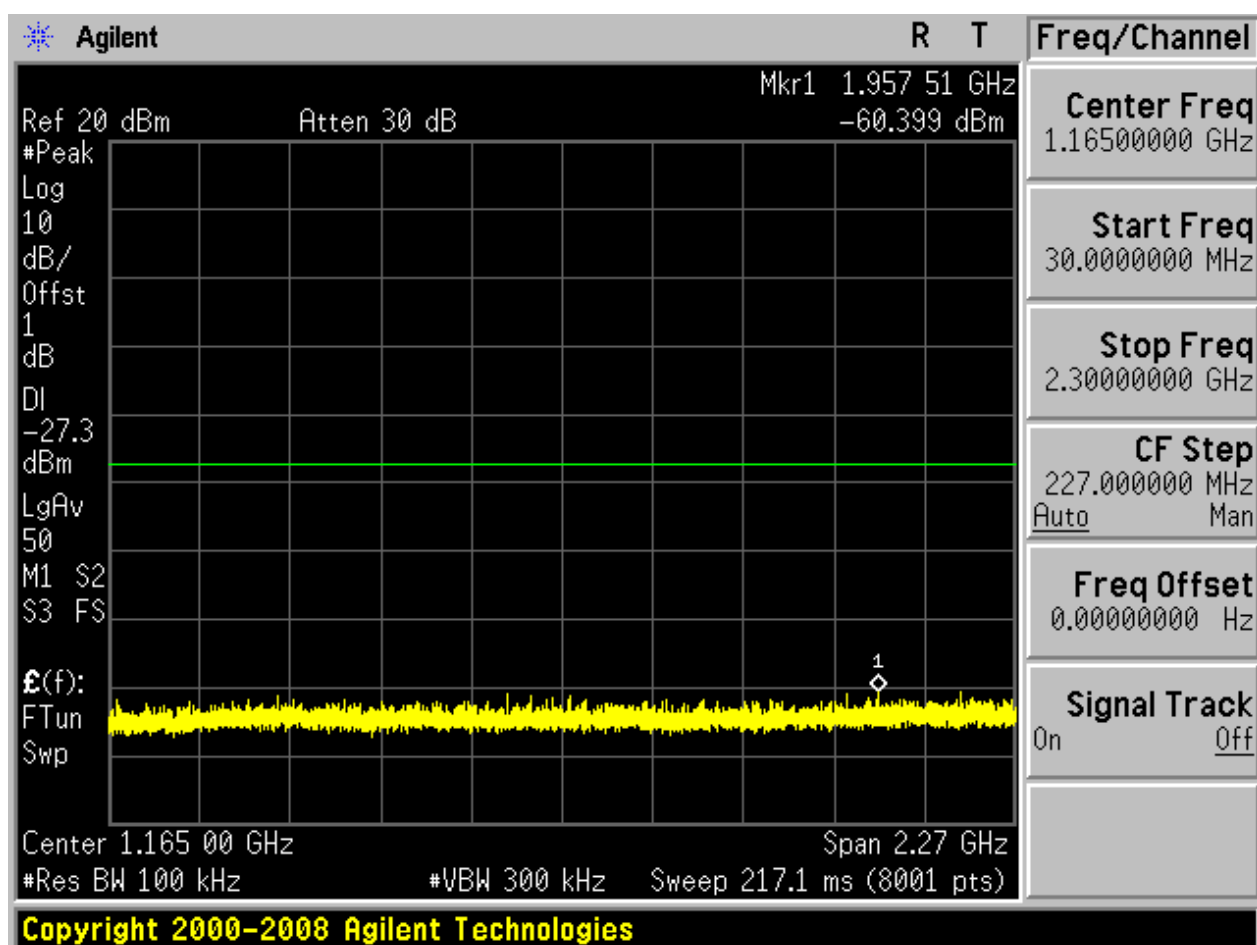


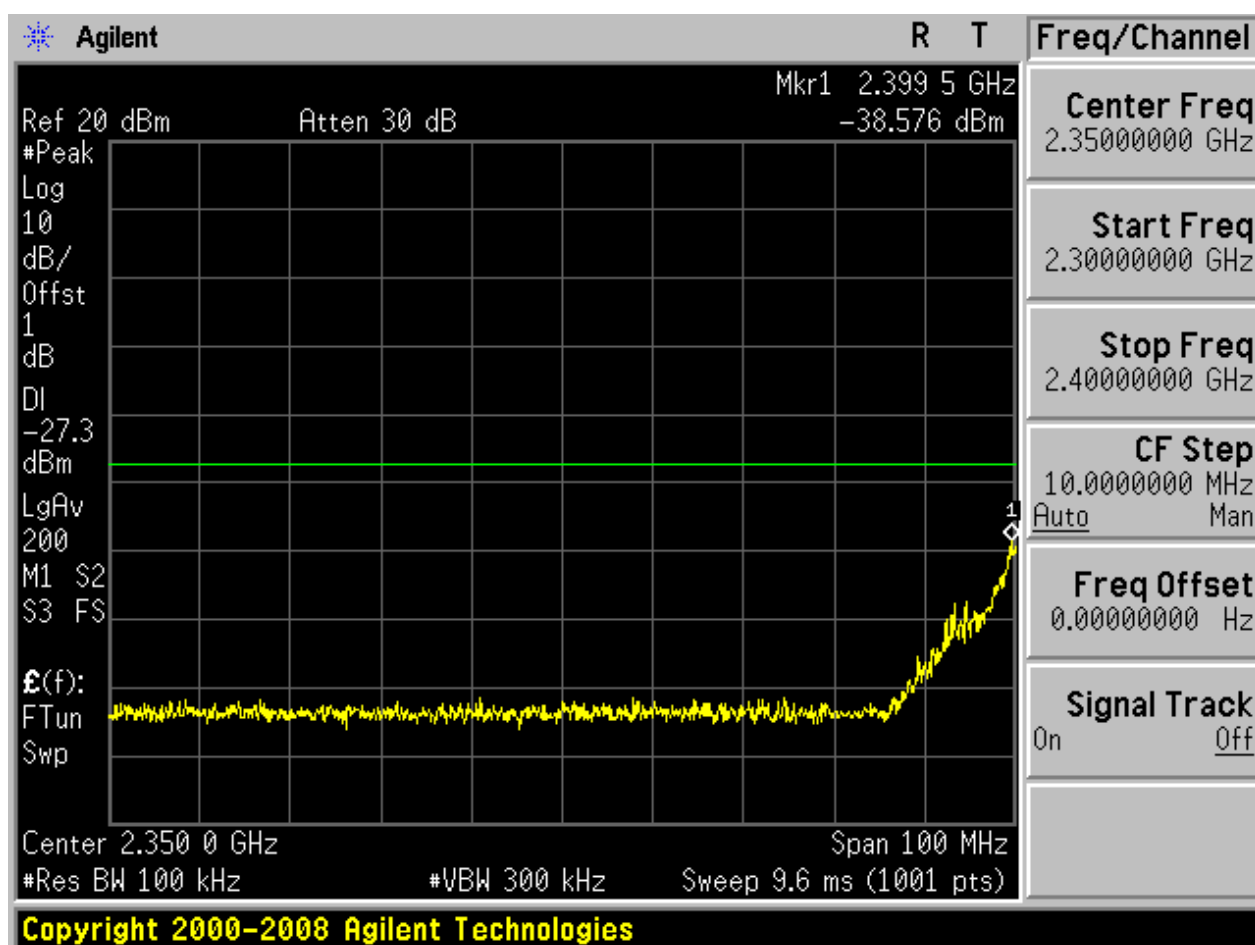


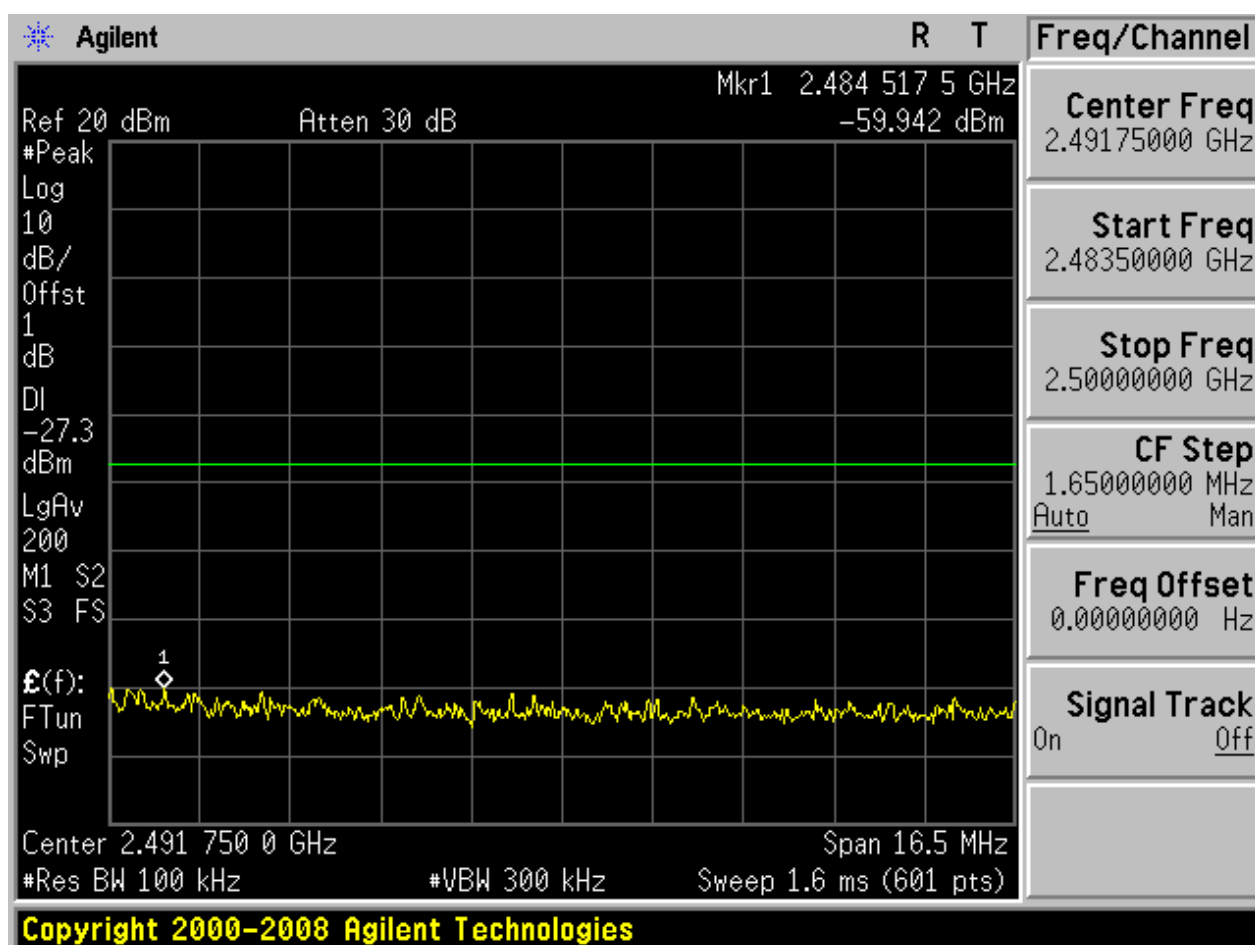
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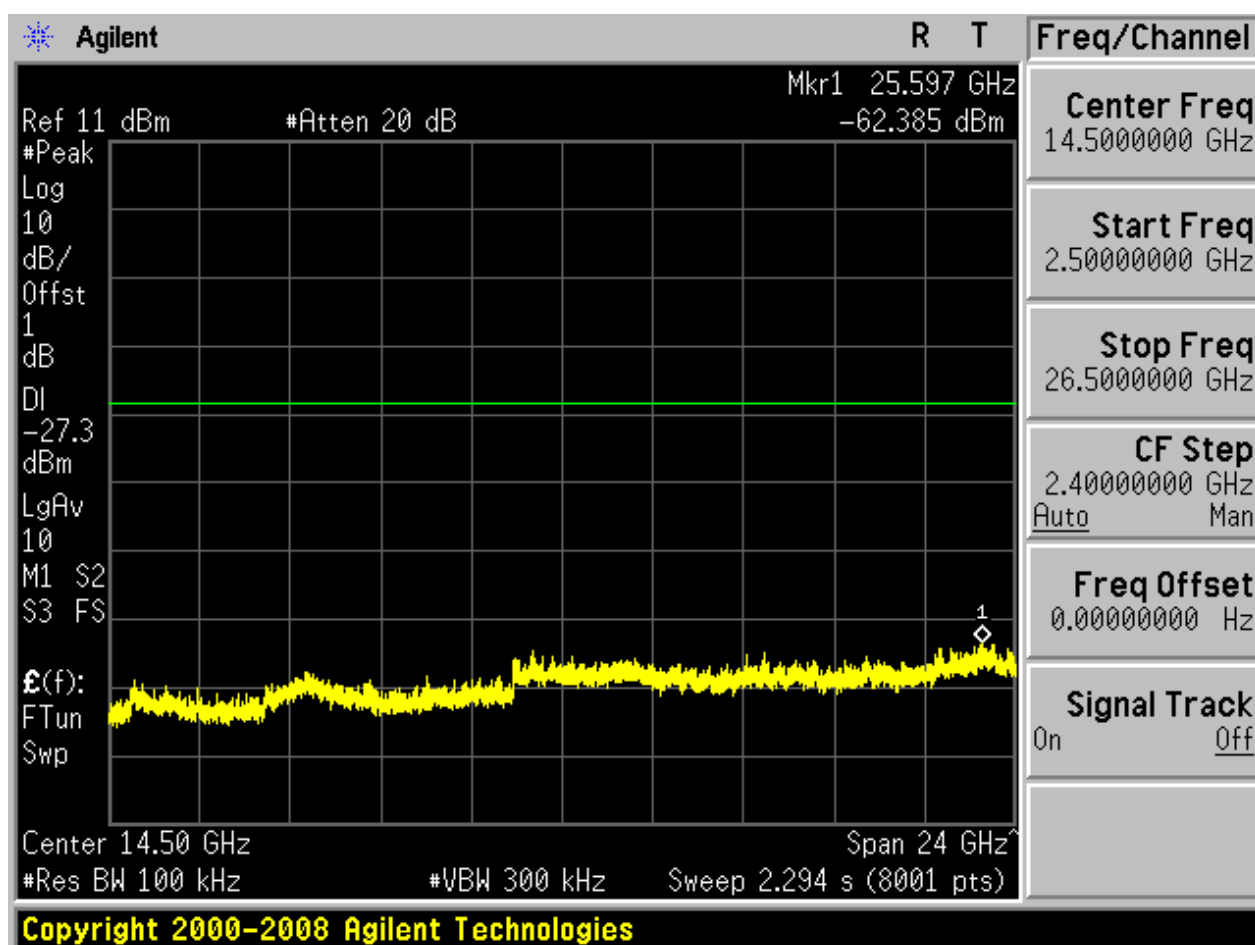






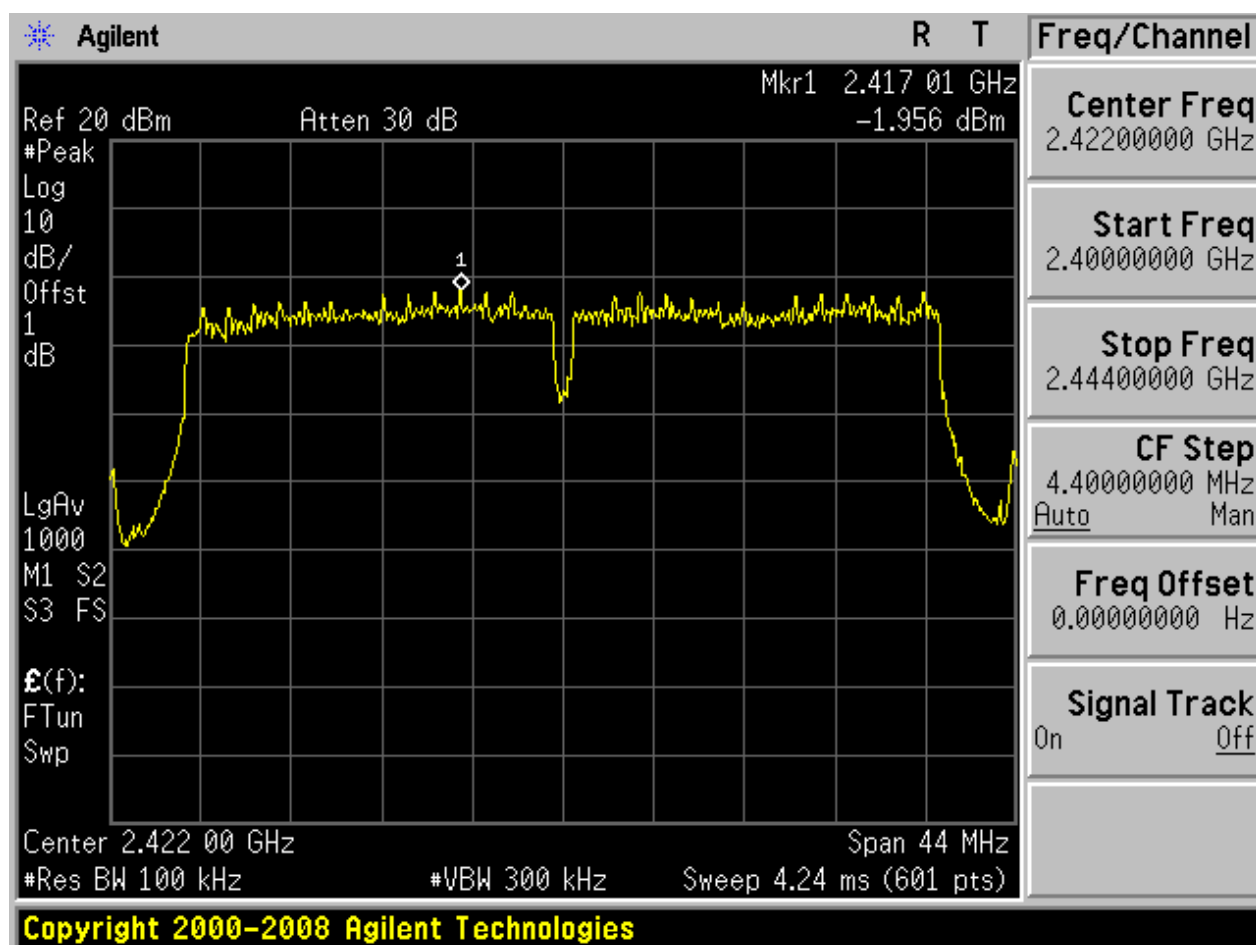






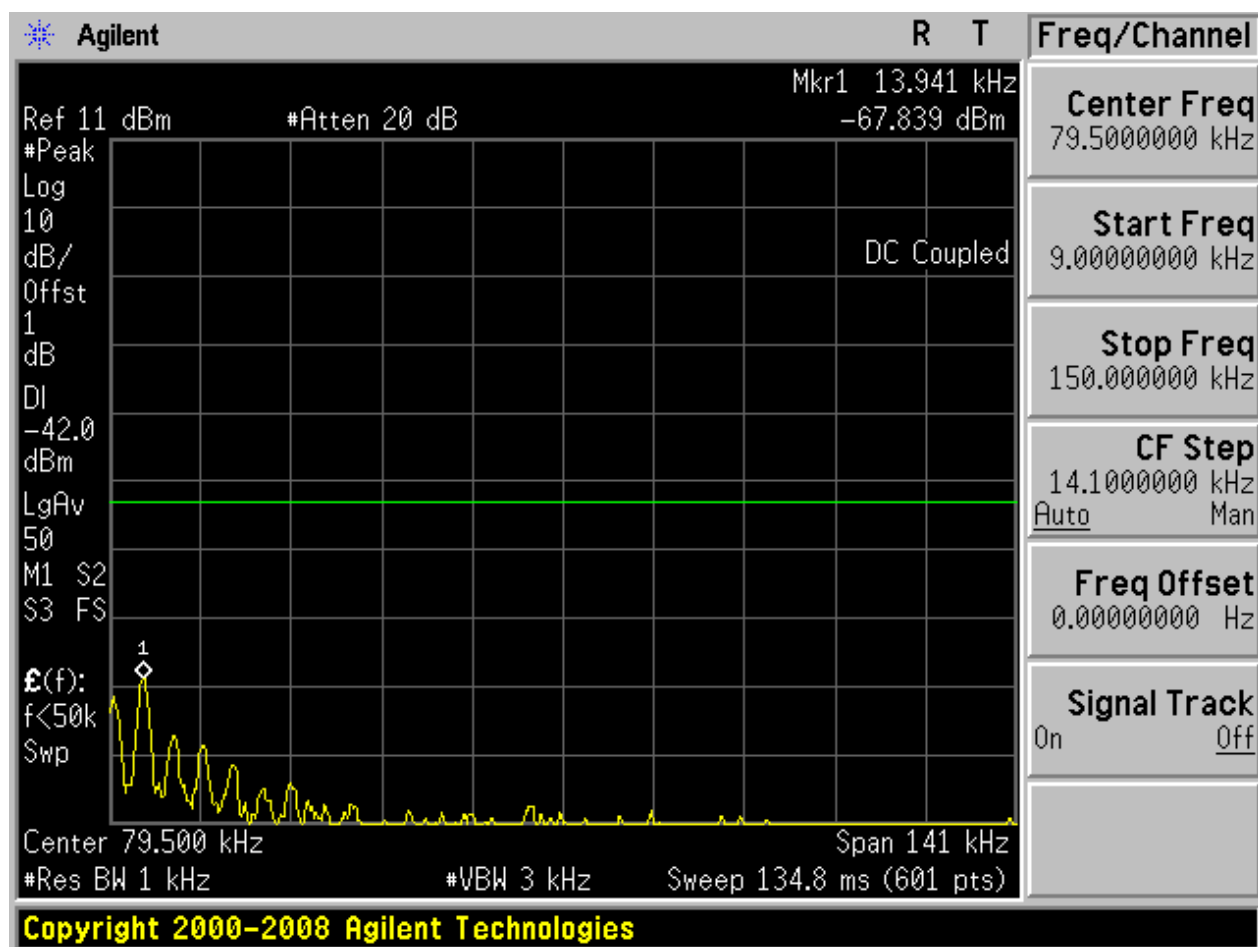
4.26 11N40_L@Ant 2

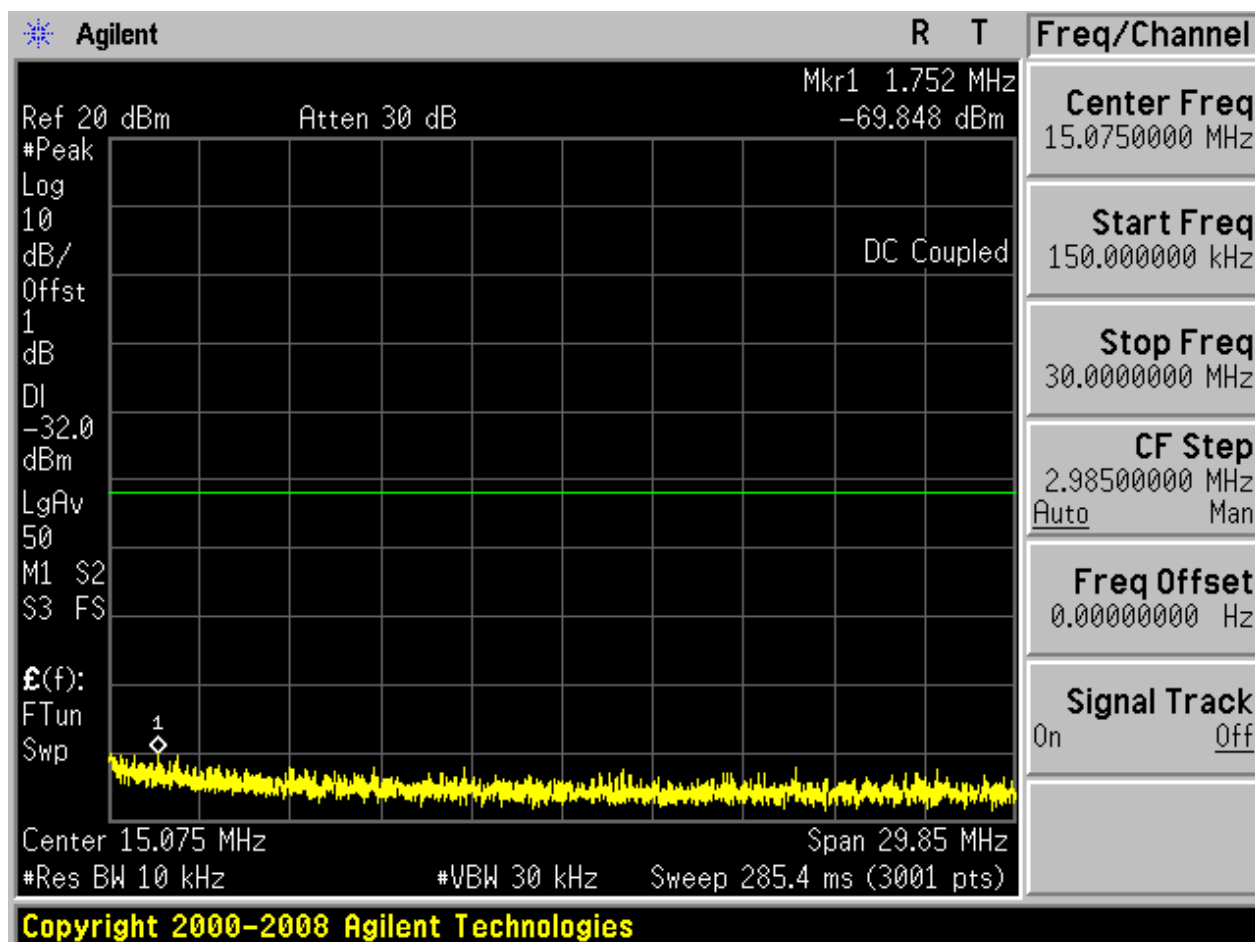
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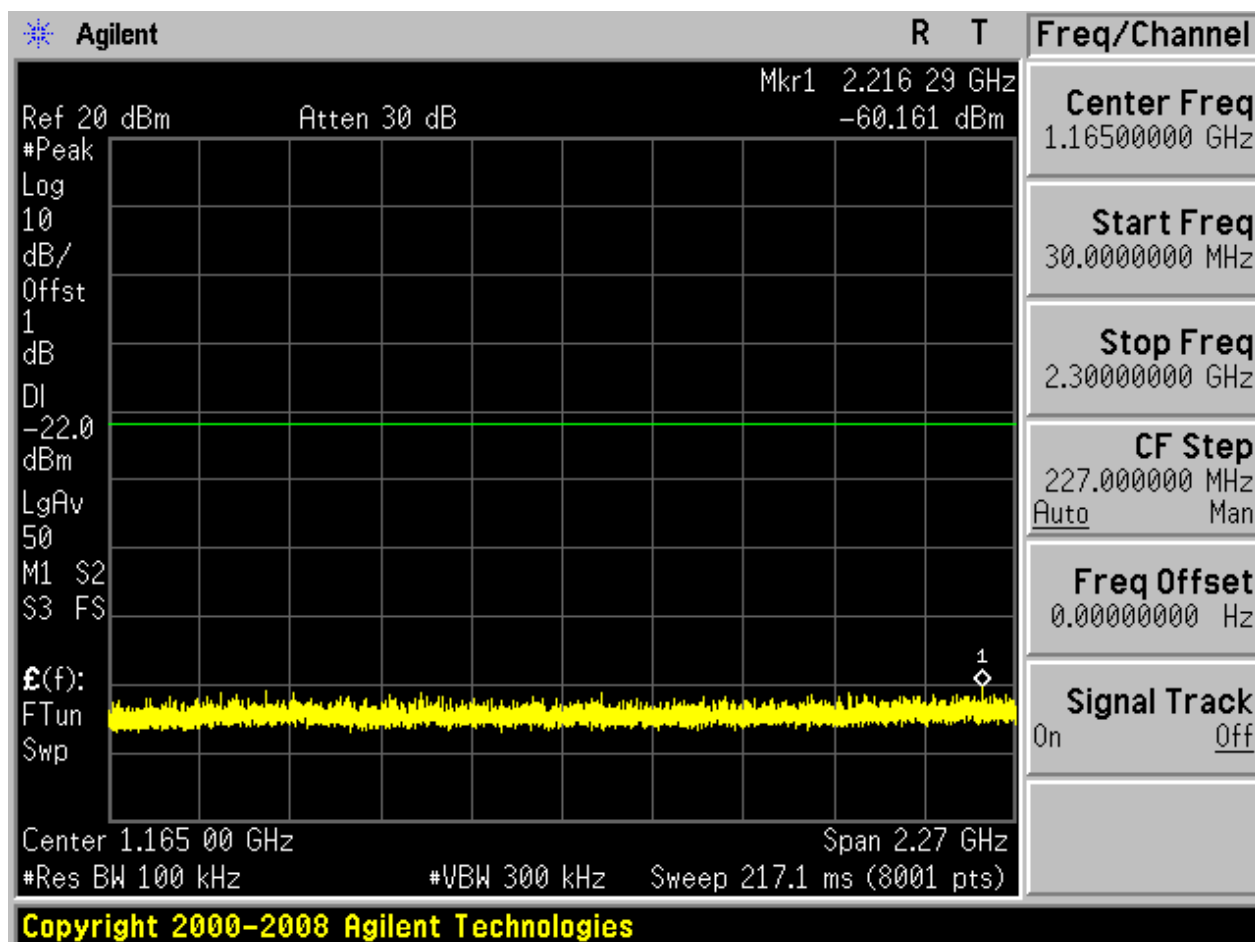


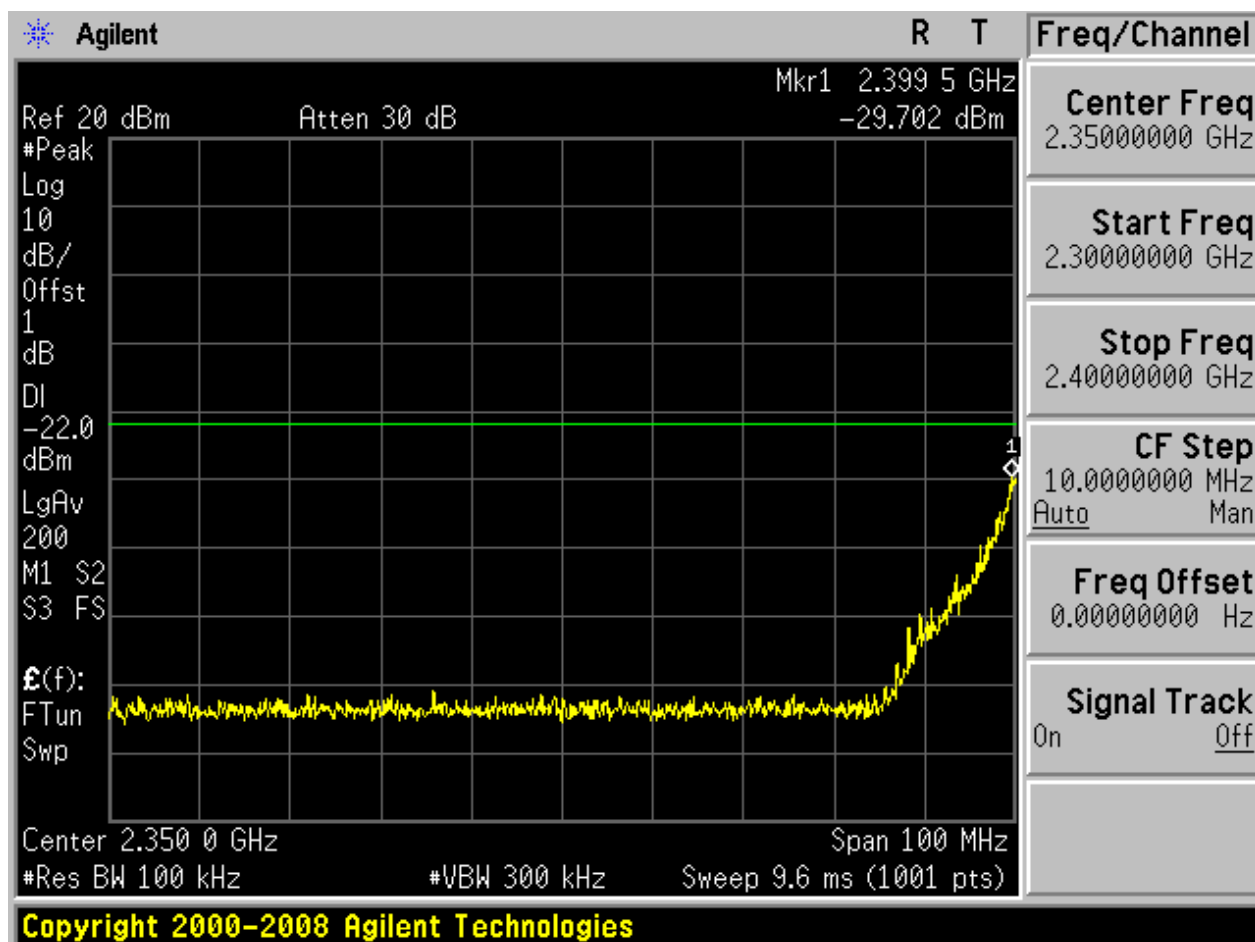


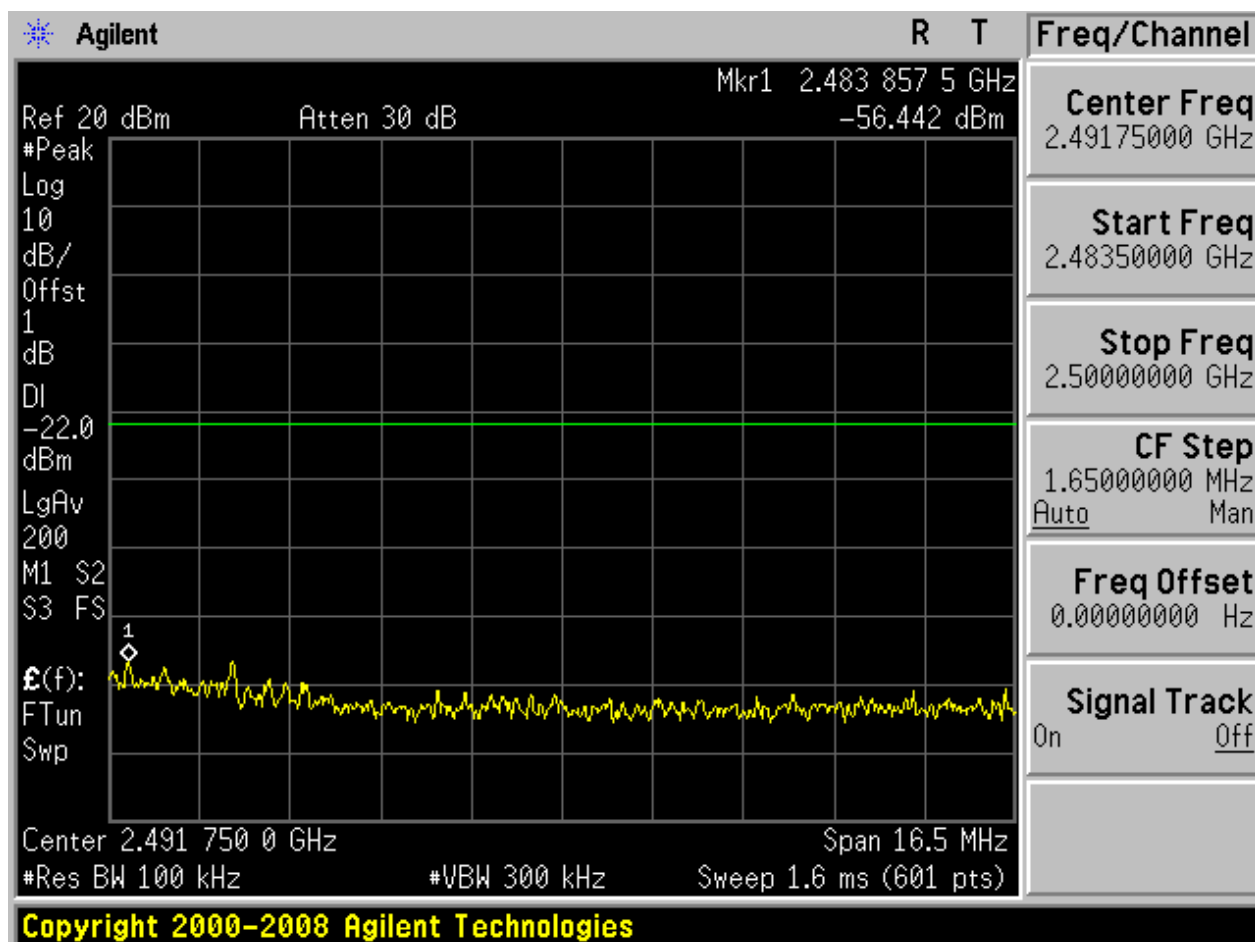
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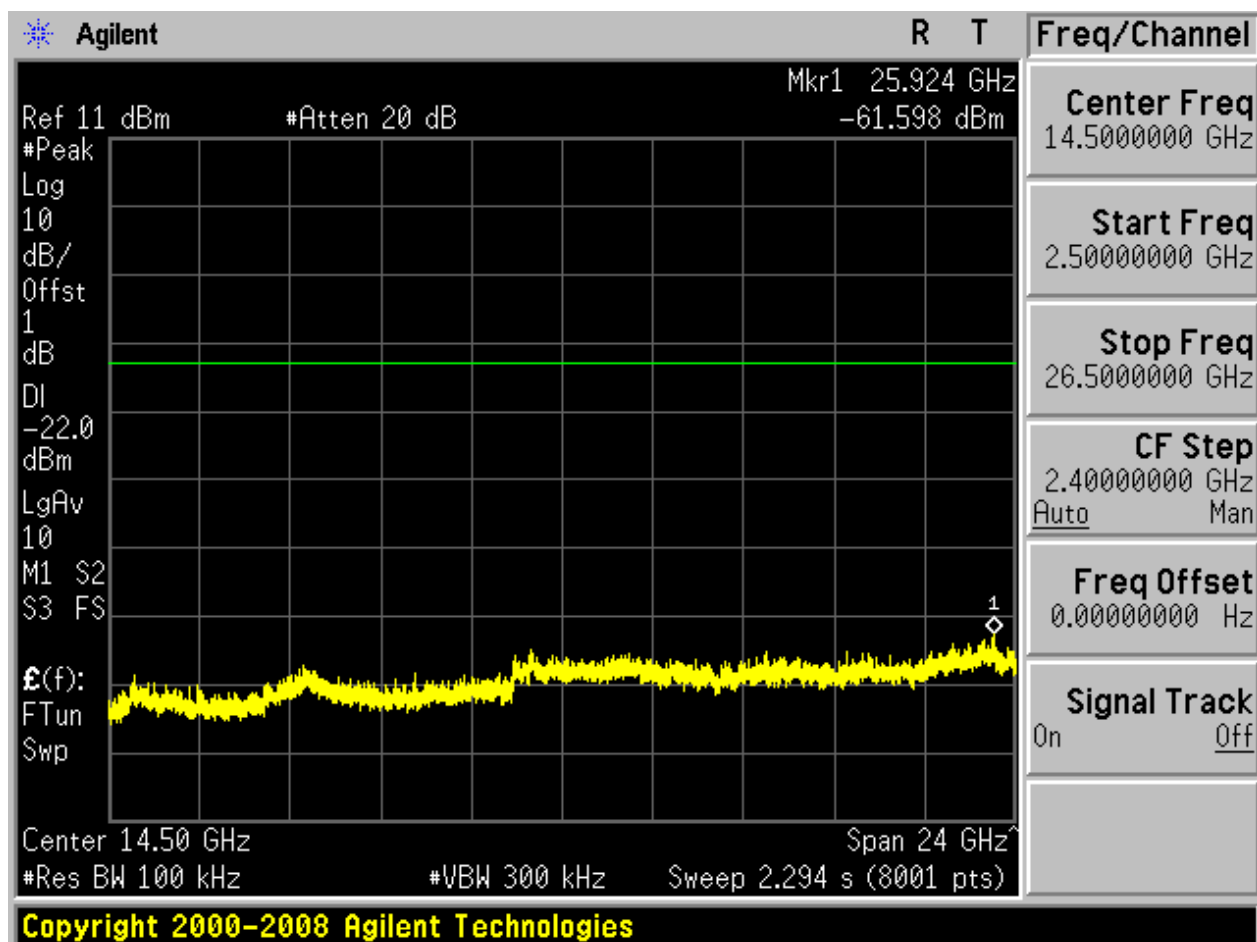








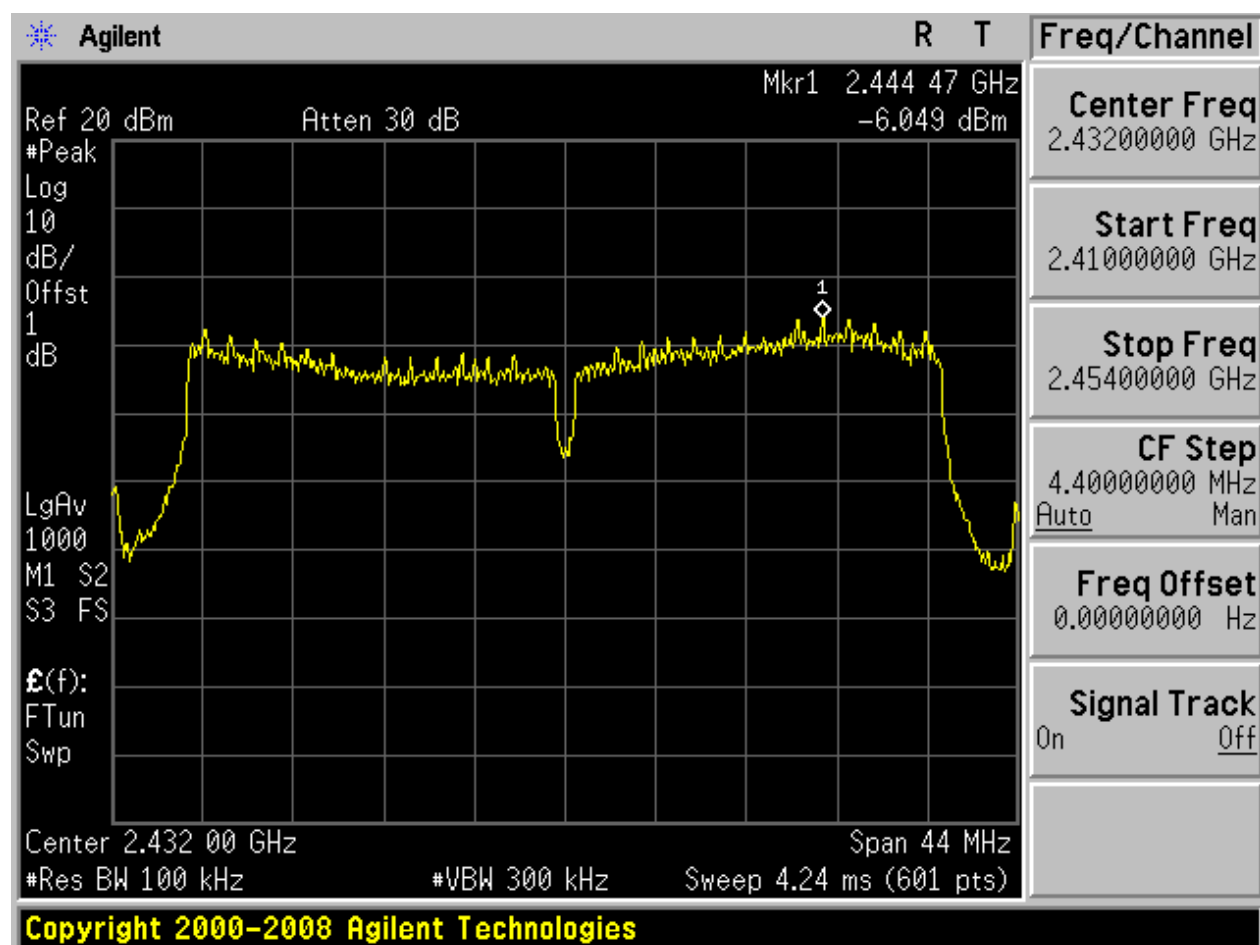






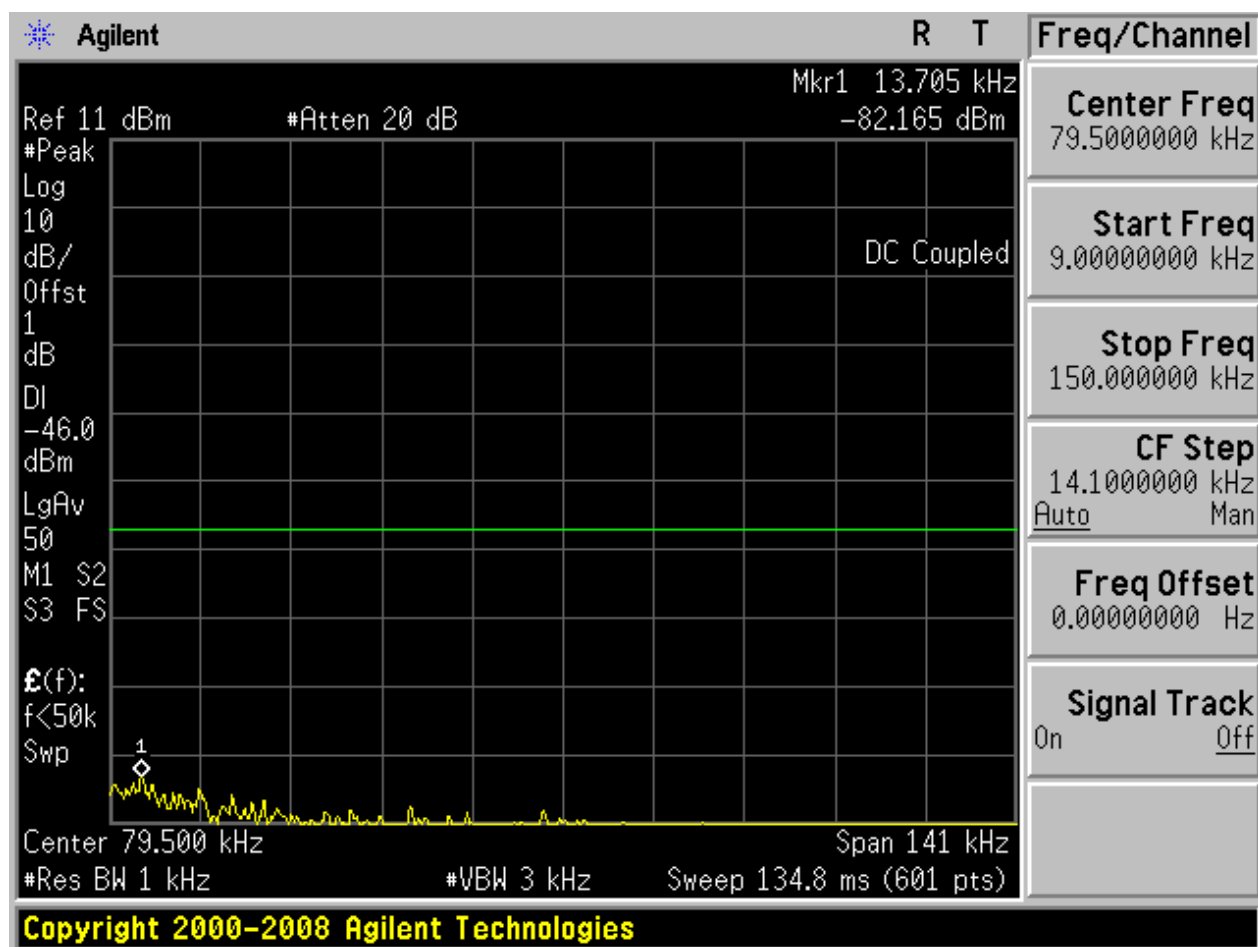
4.27 11N40_M@Ant 1

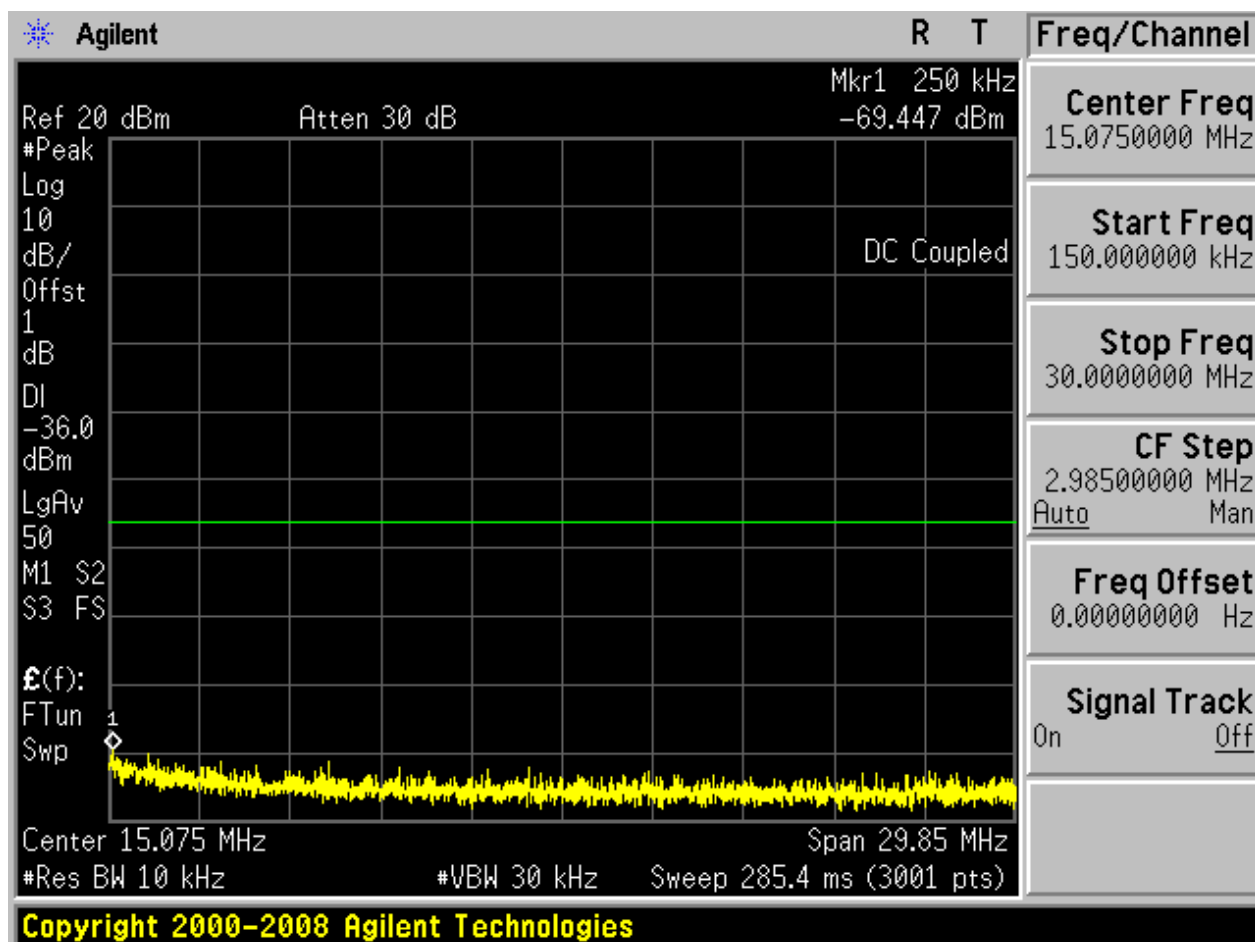
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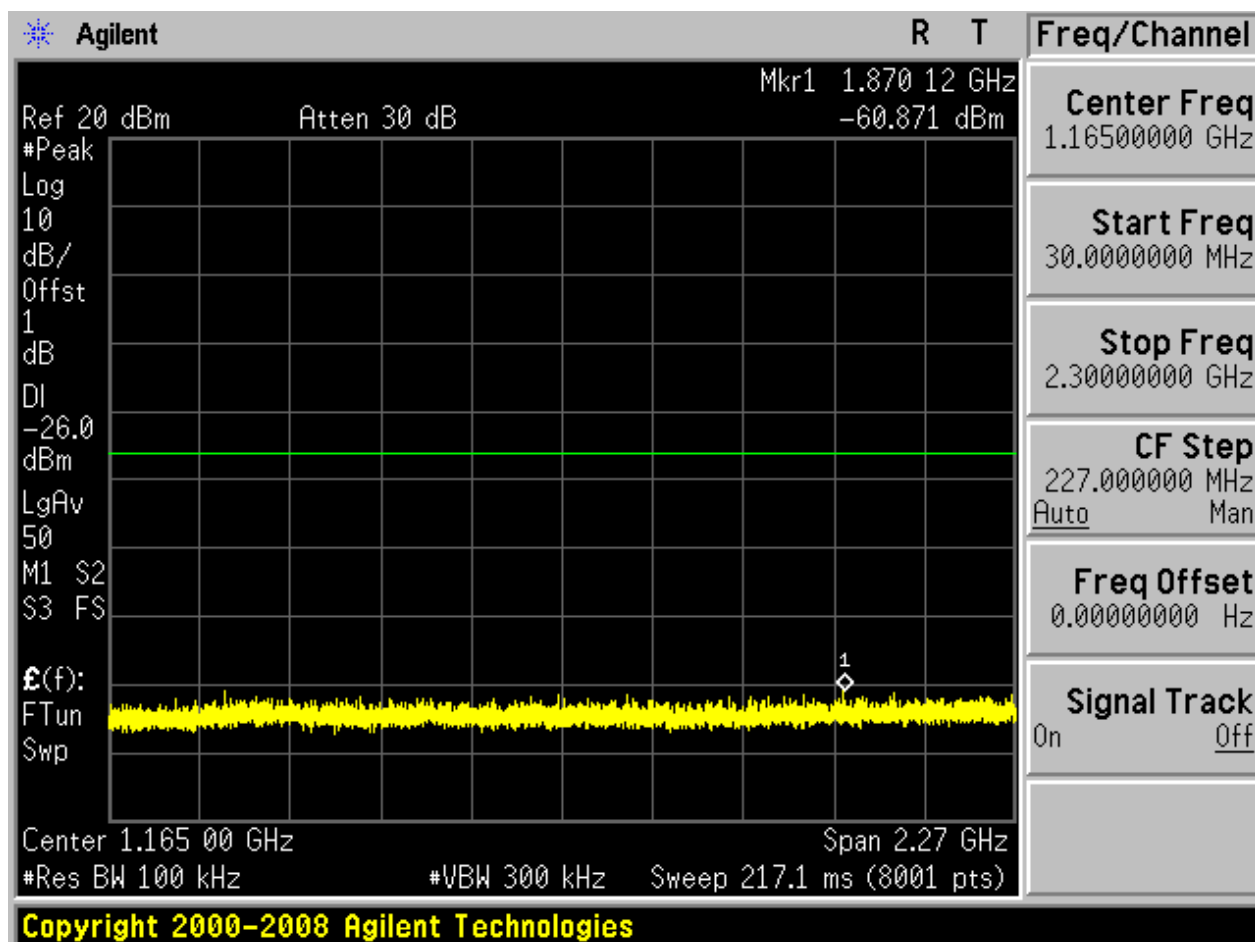


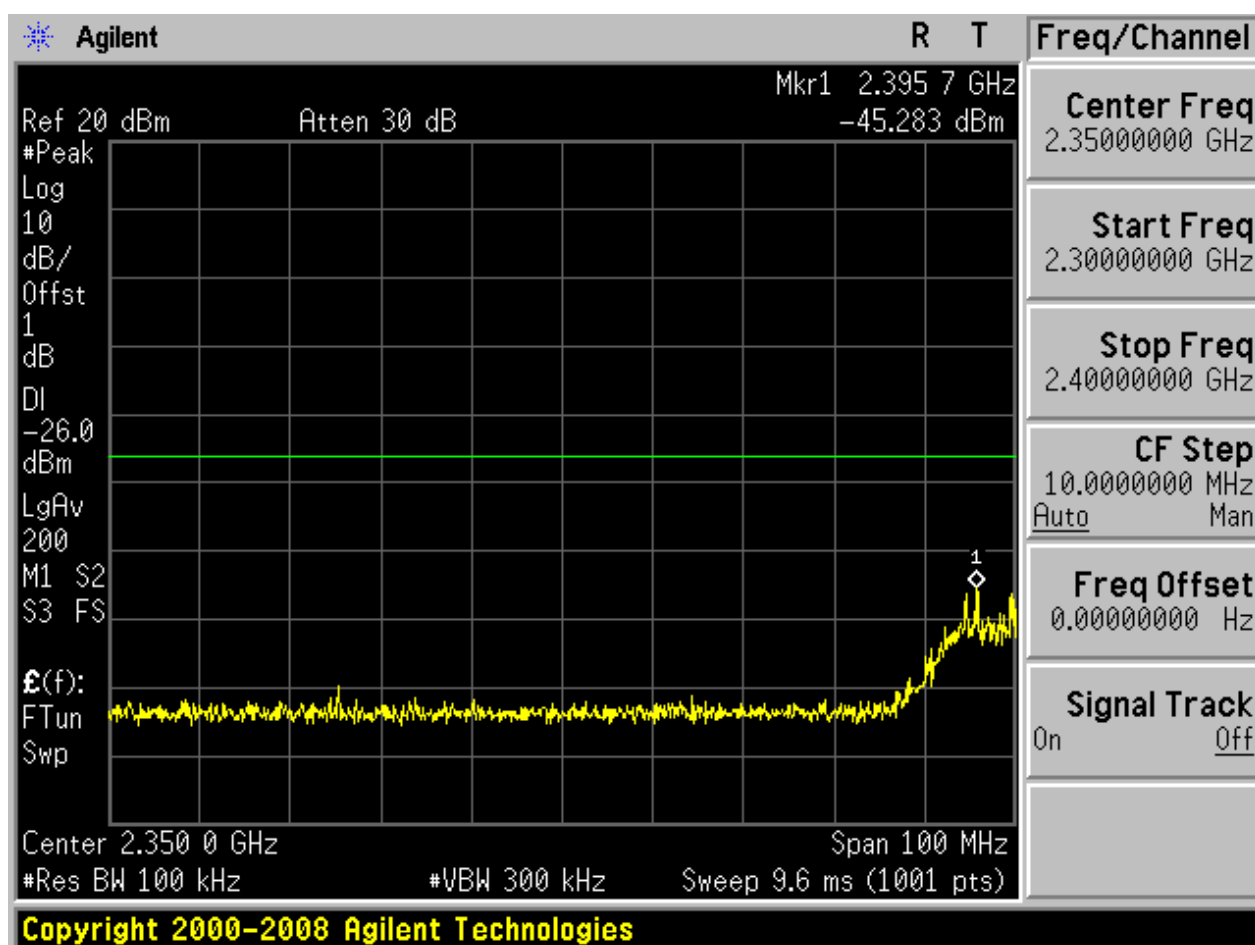


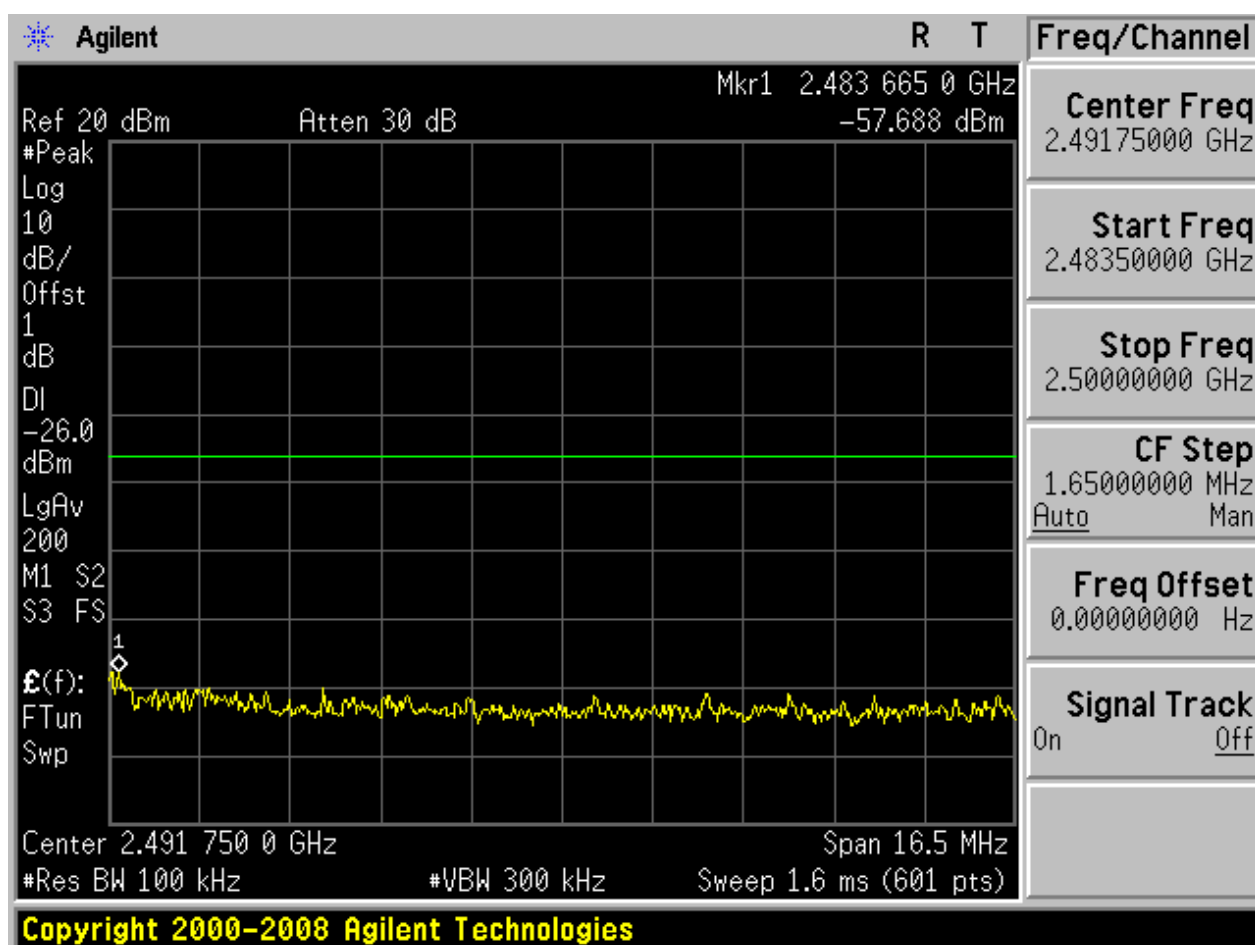
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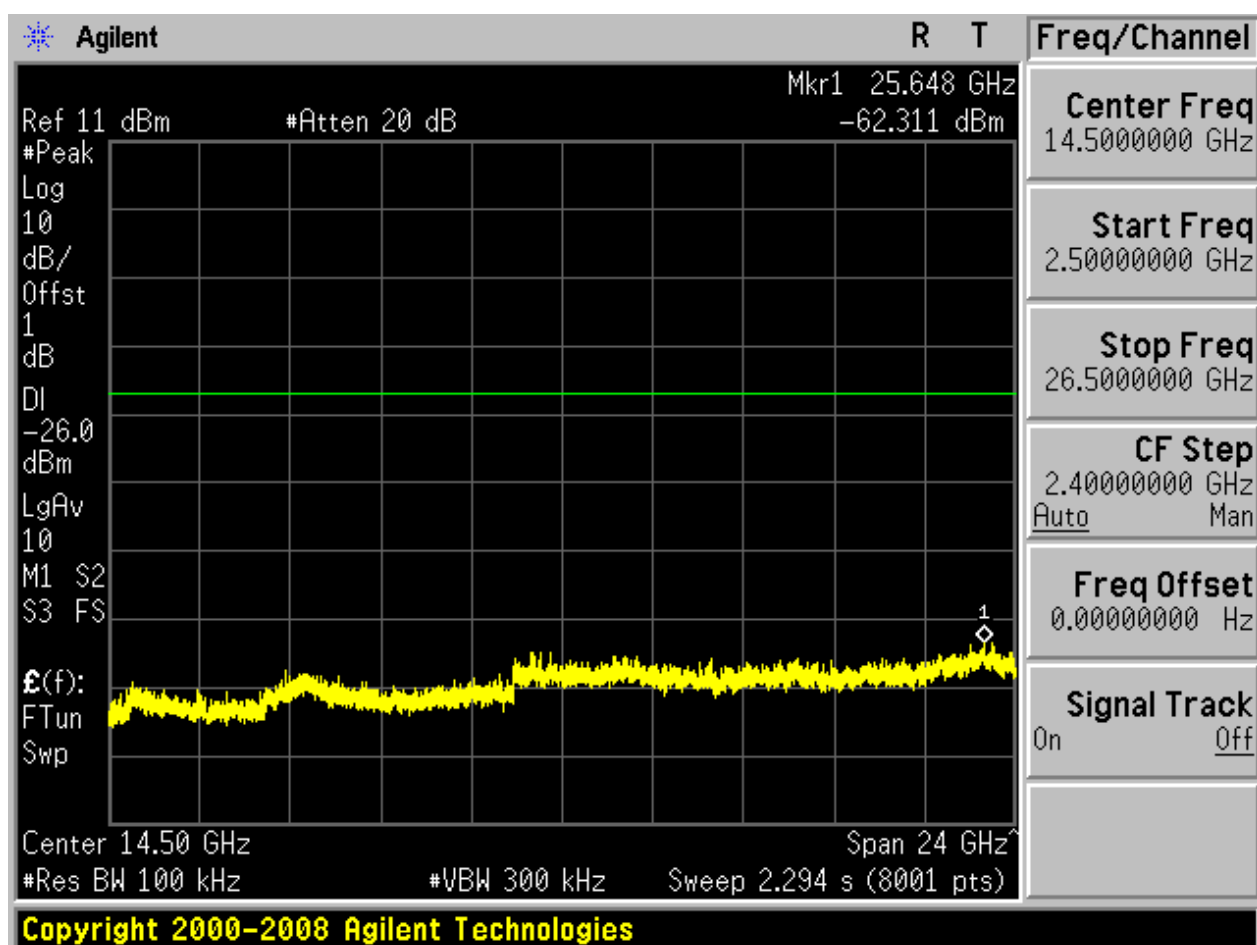






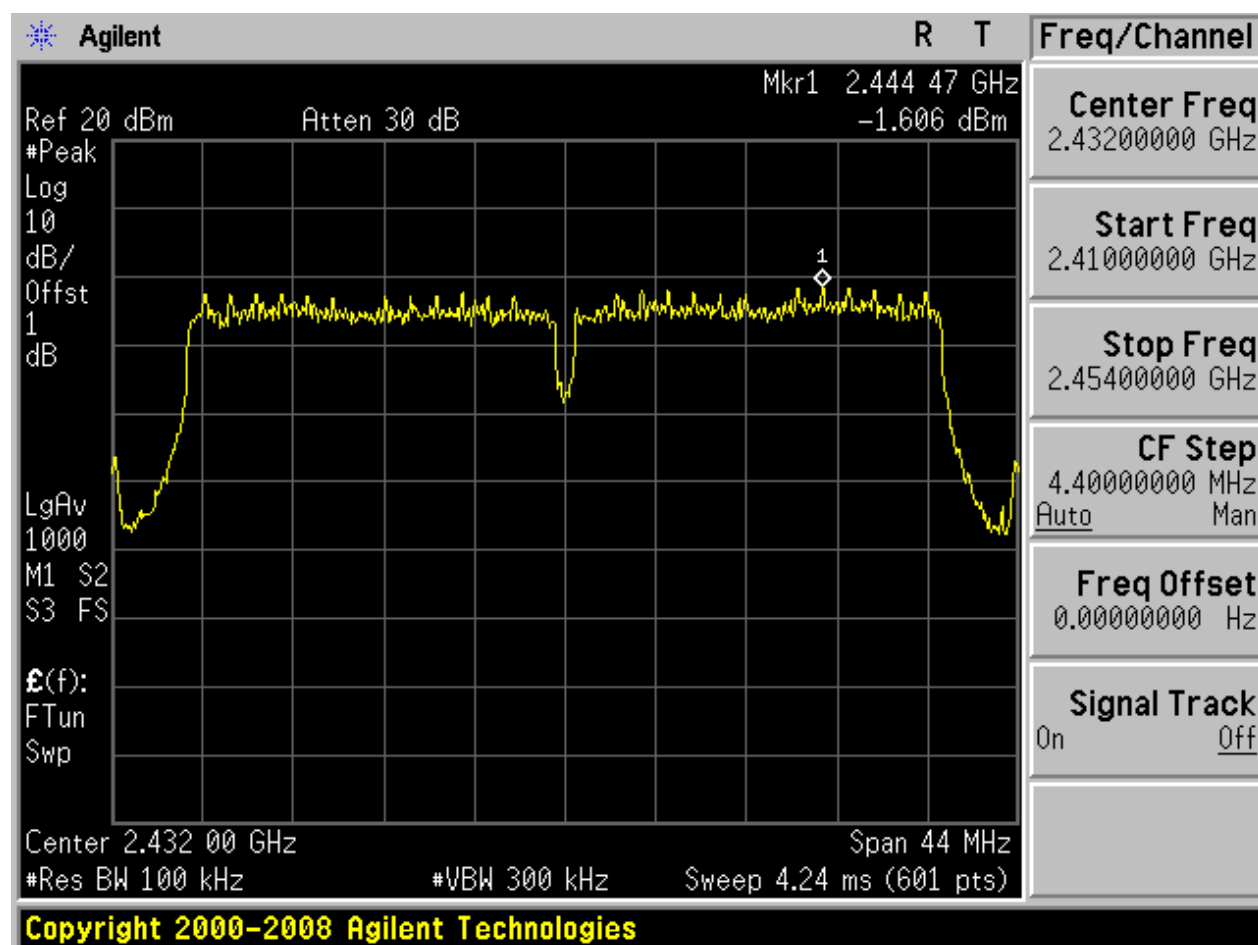






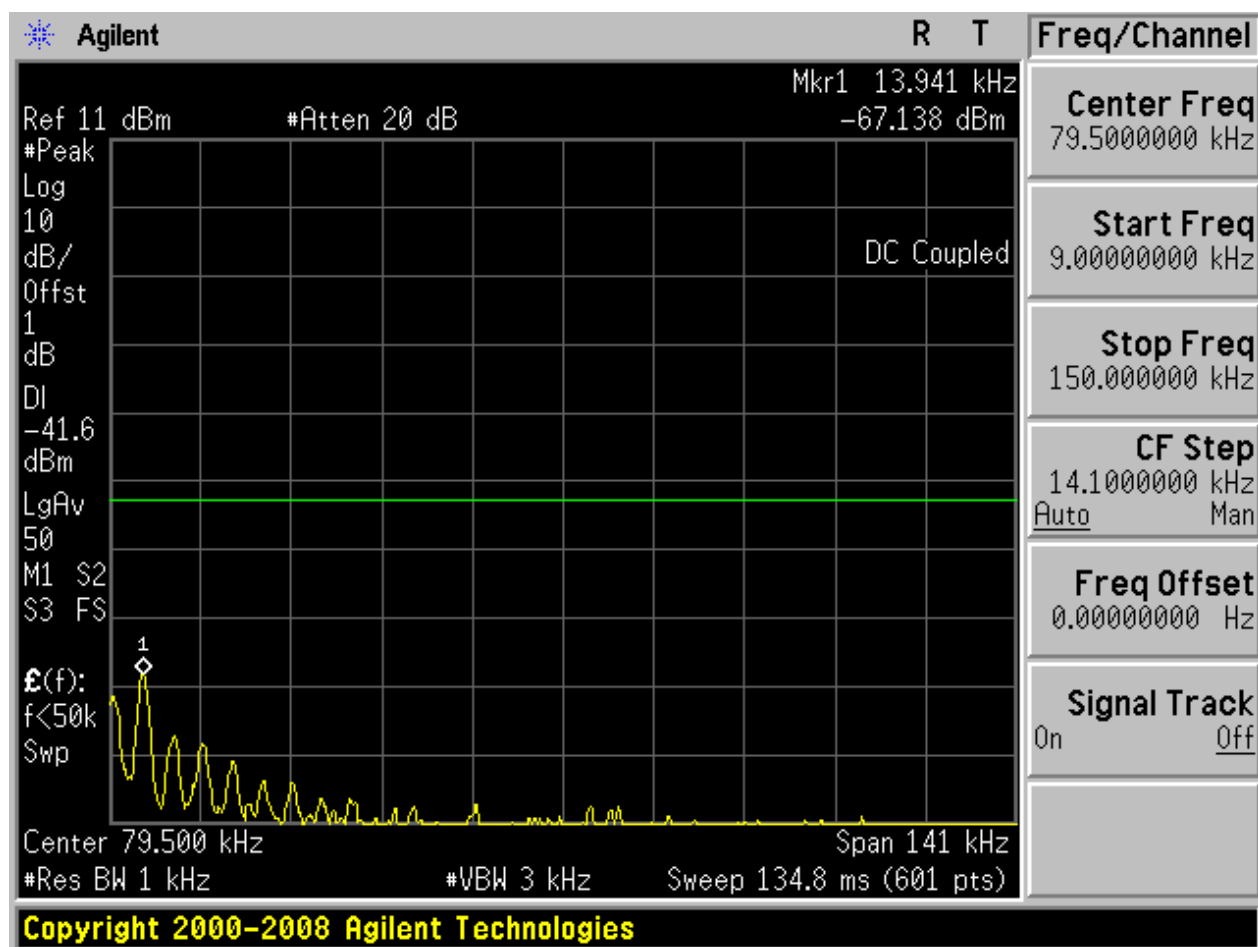
4.28 11N40_M@Ant 2

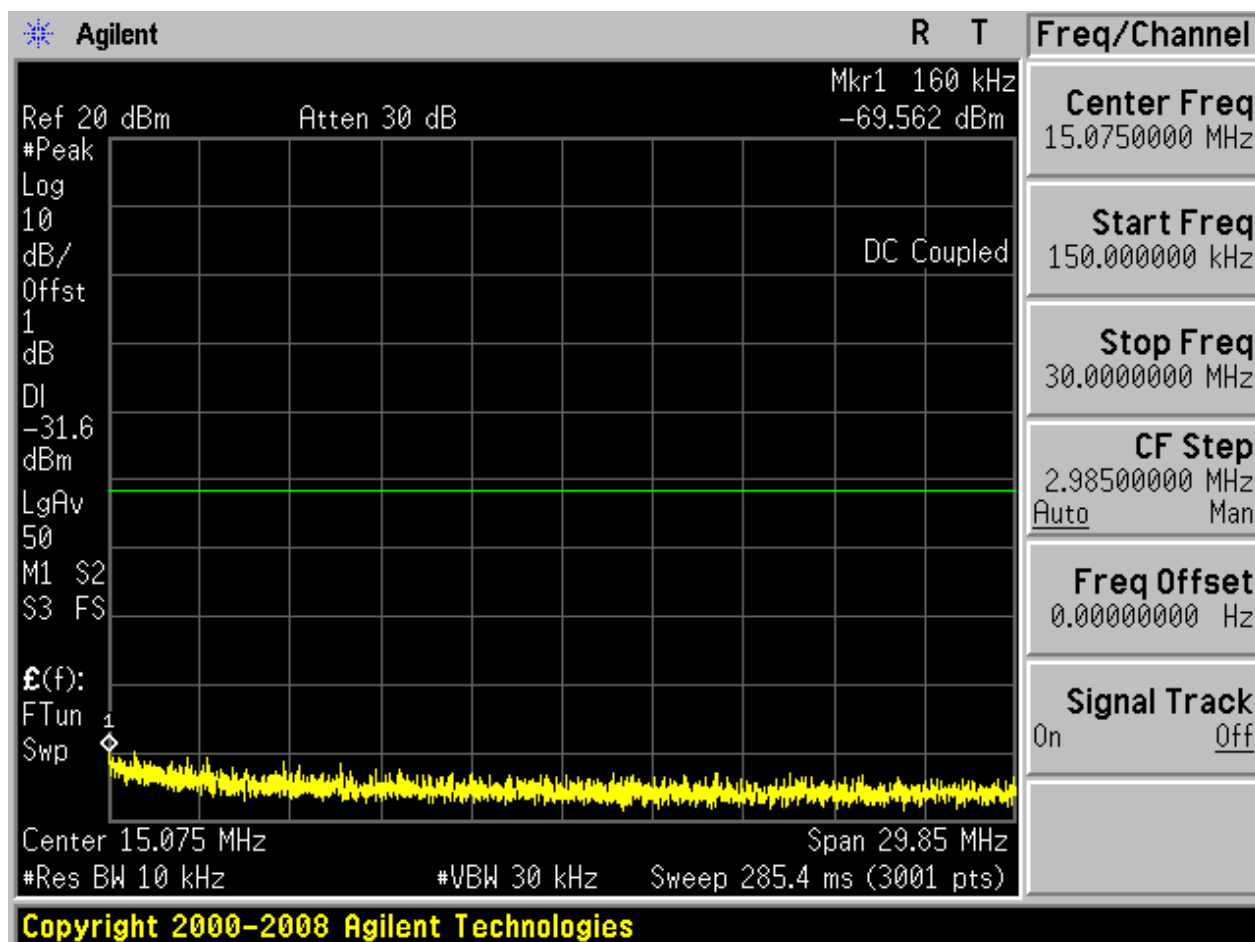
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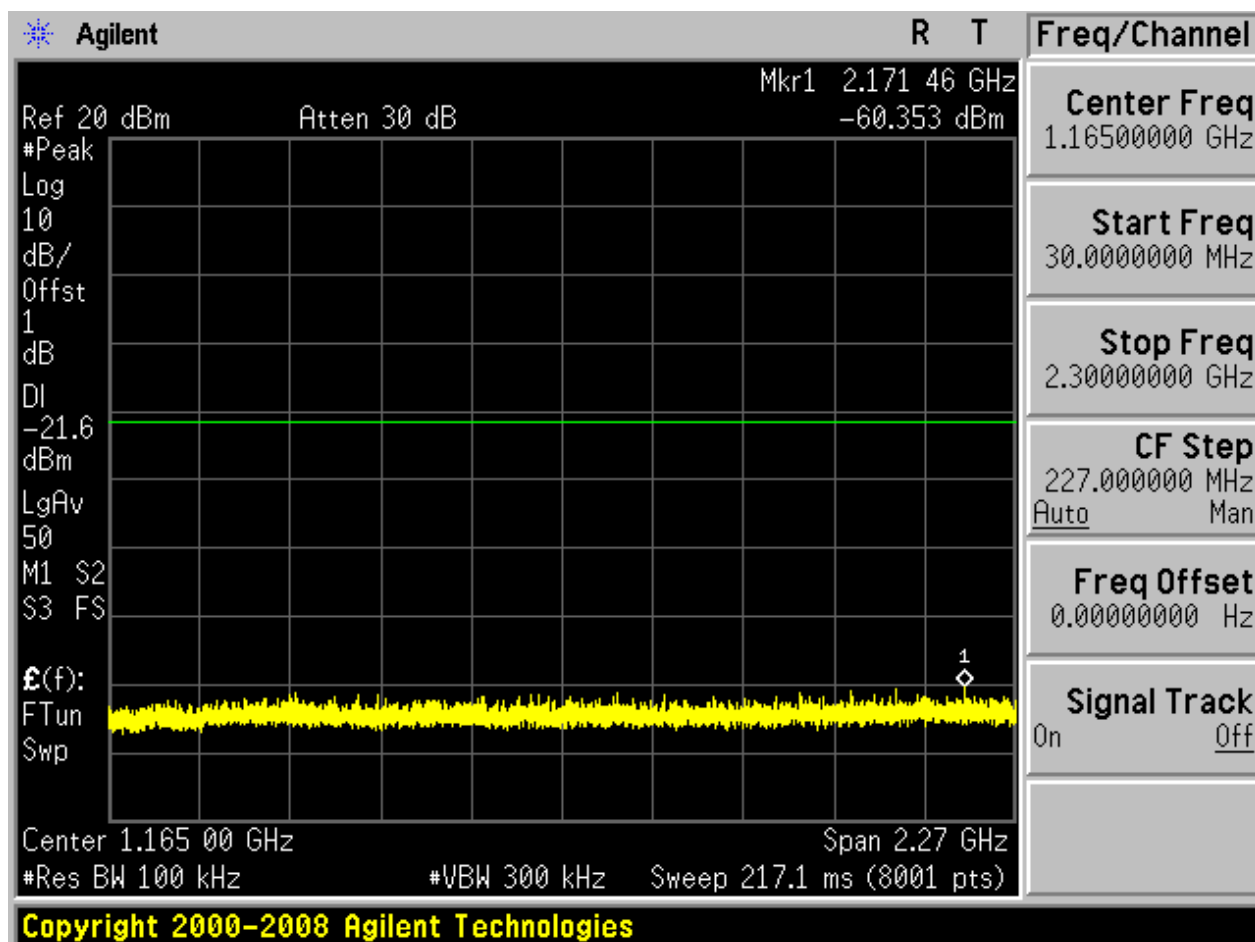


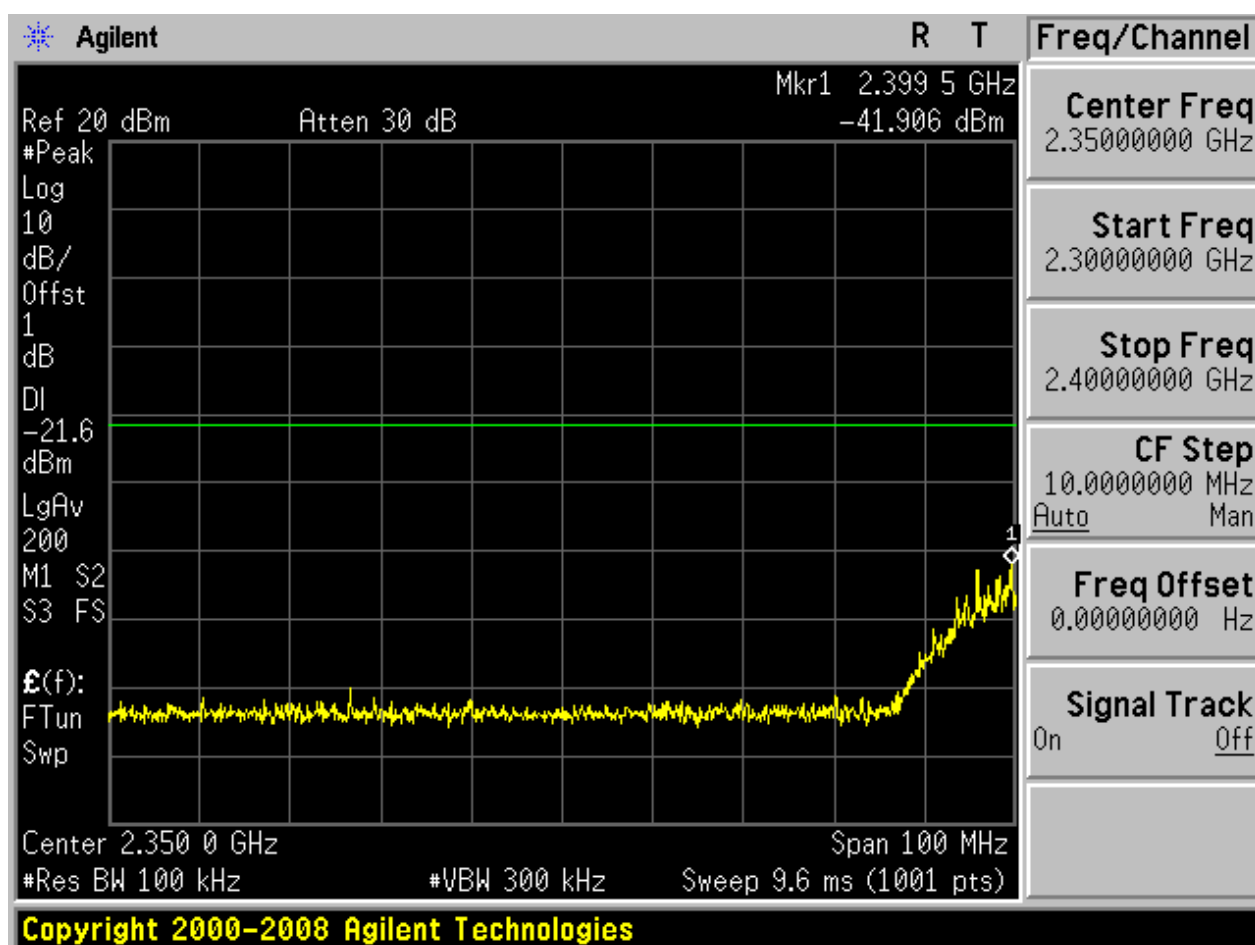


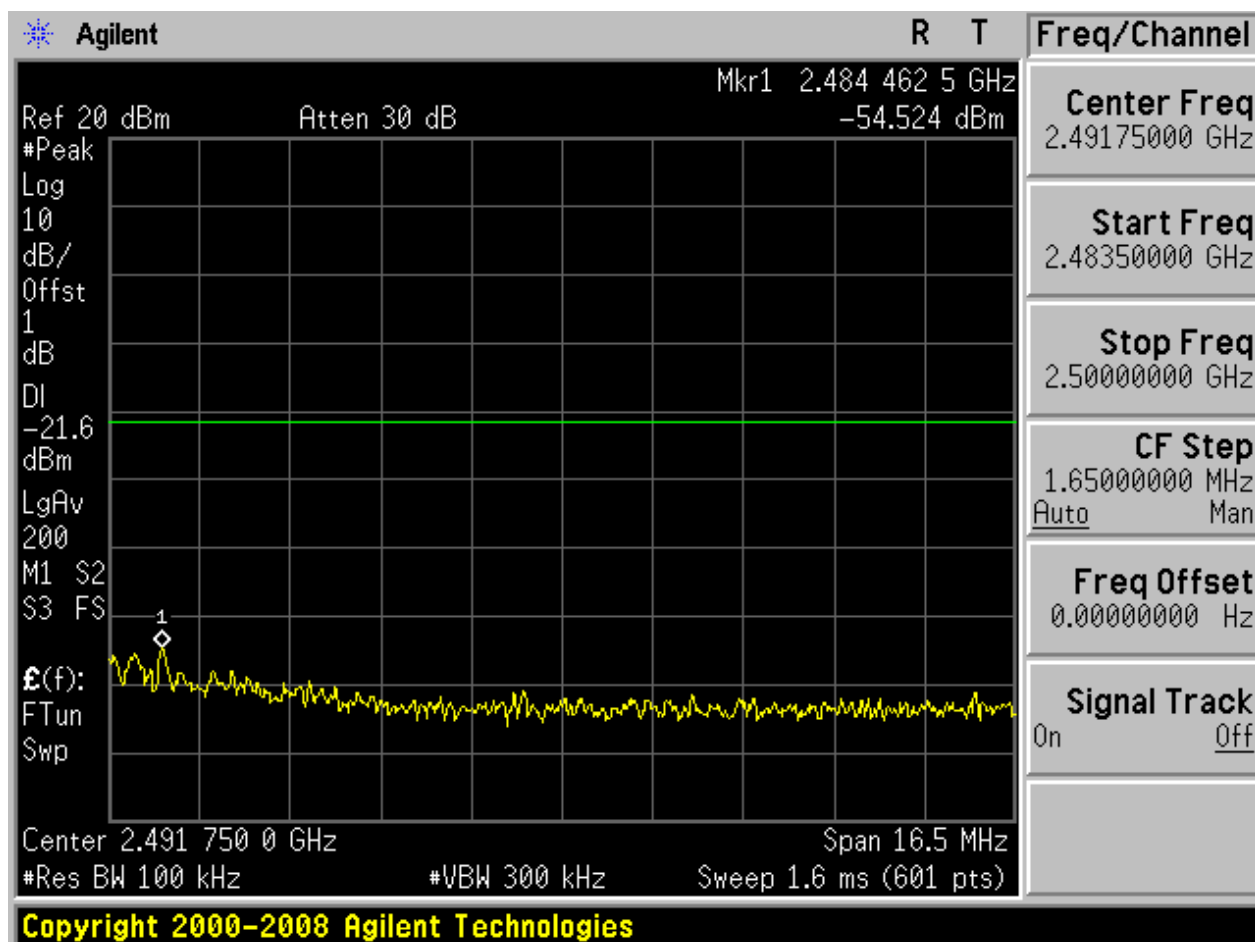
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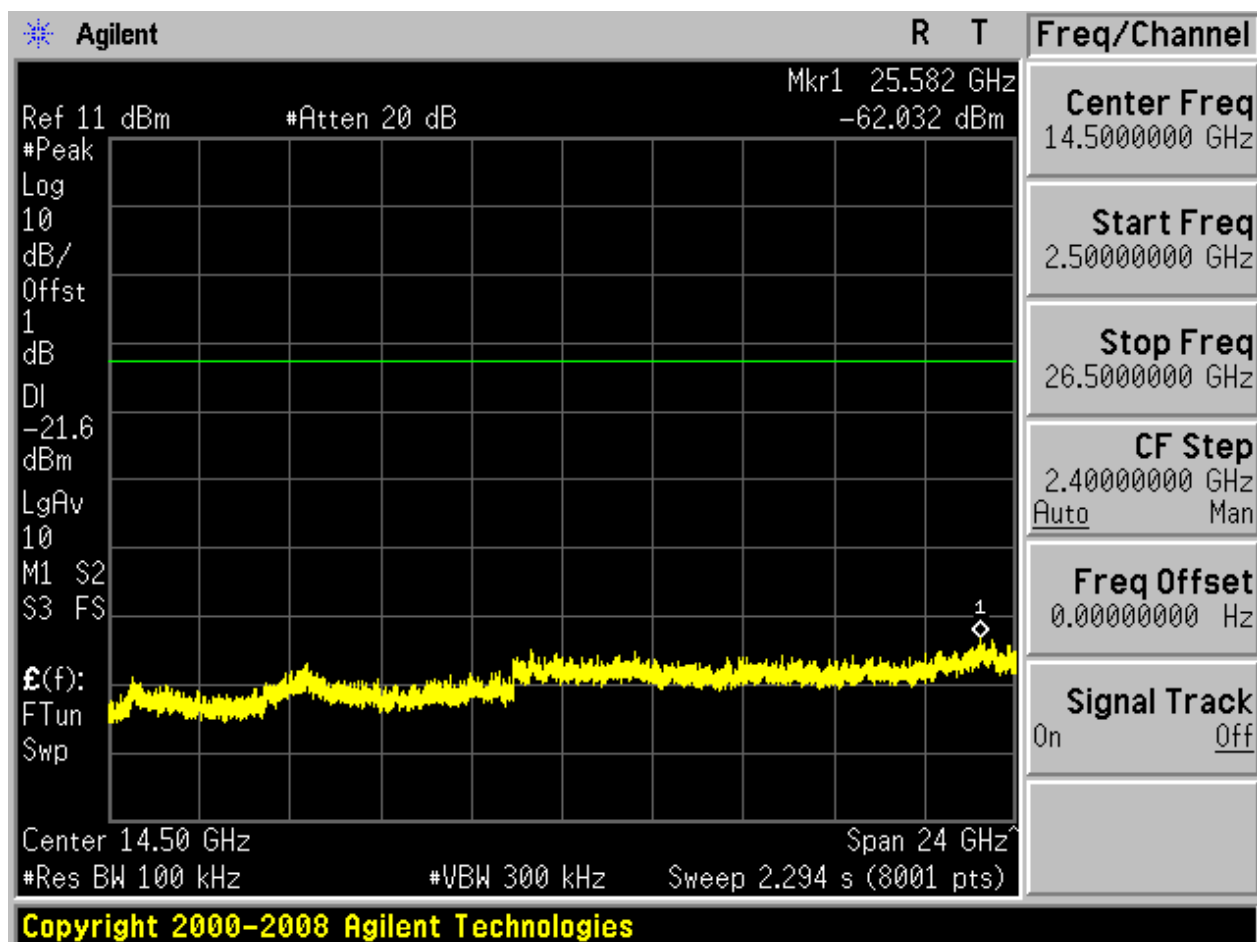








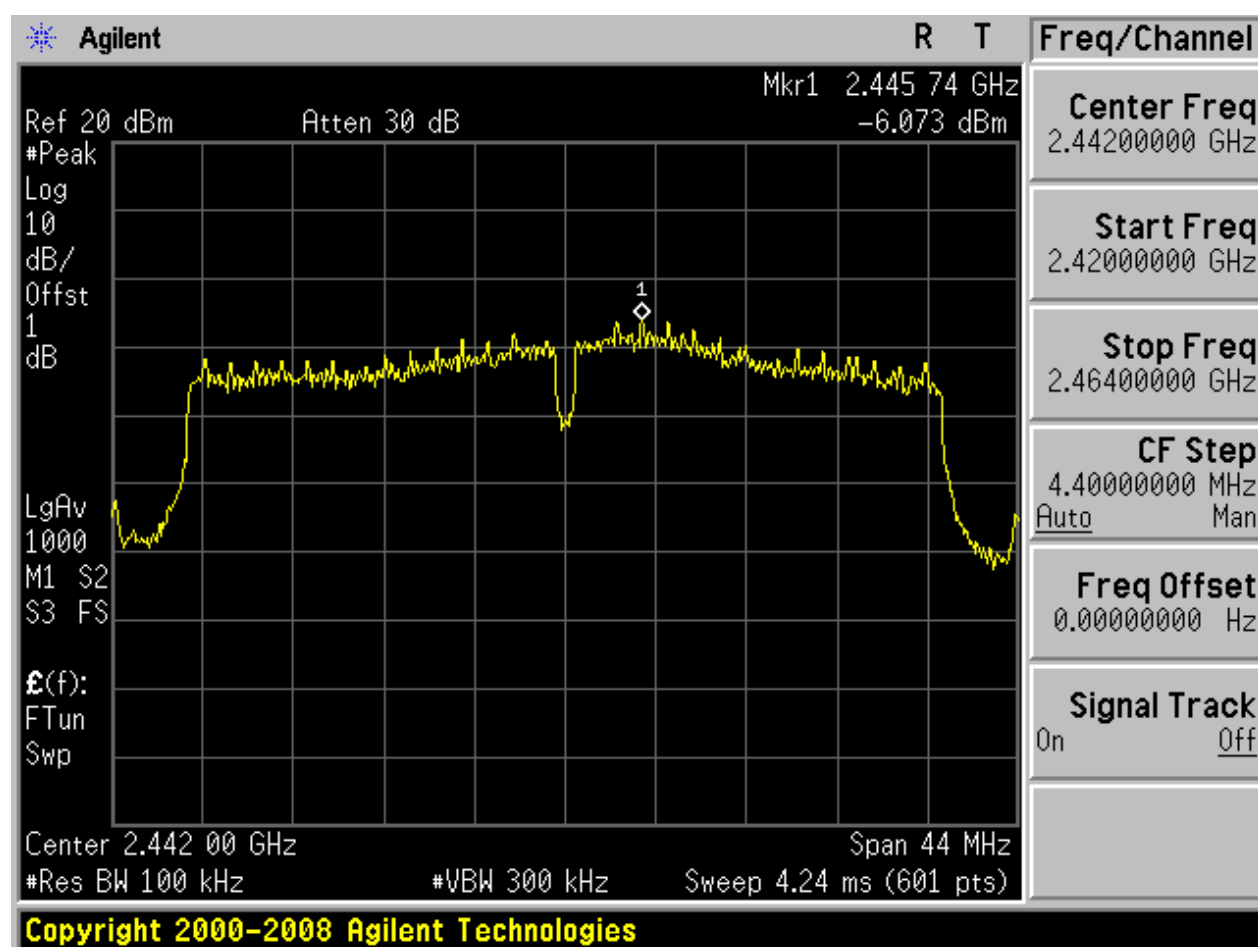






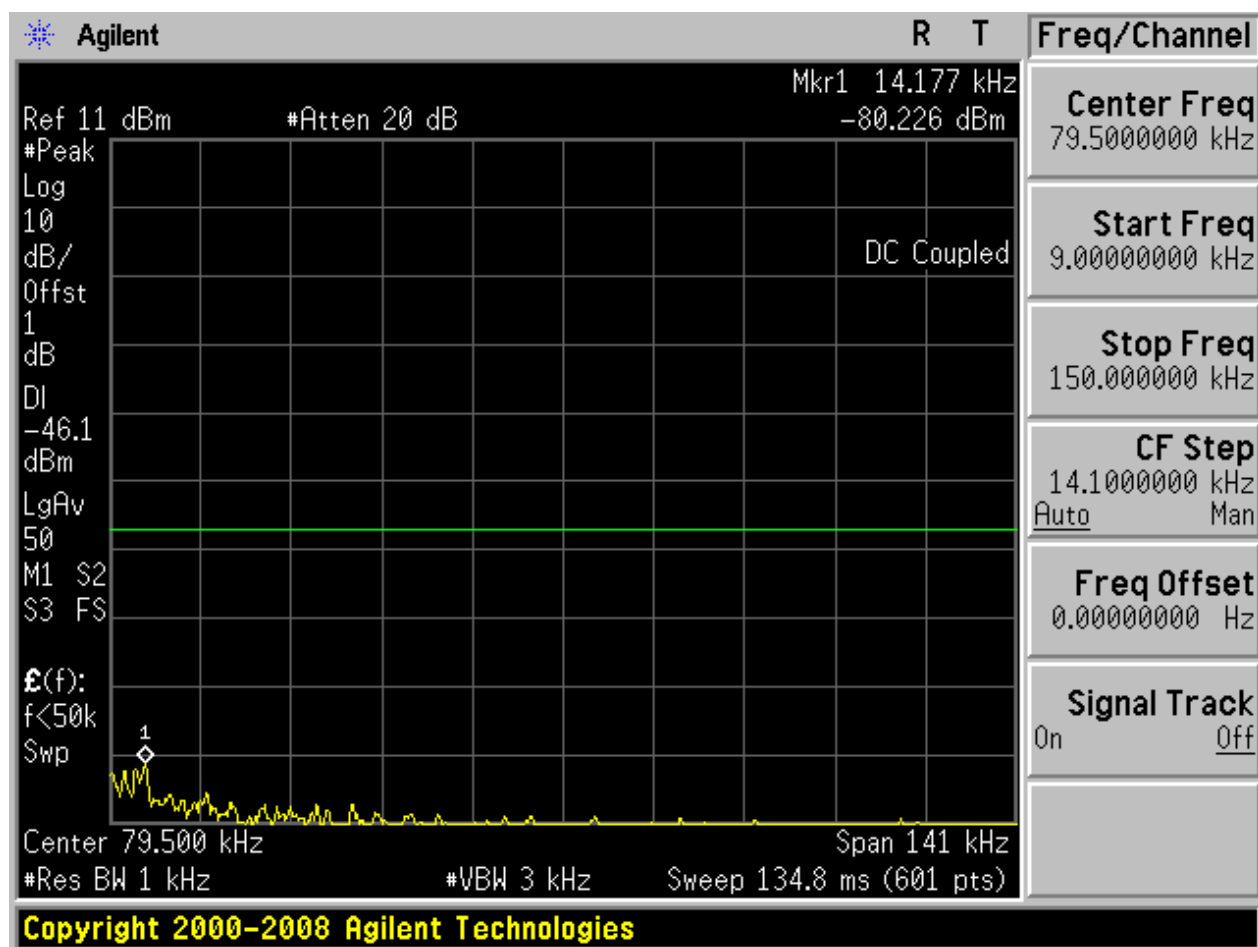
4.29 11N40_H@Ant 1

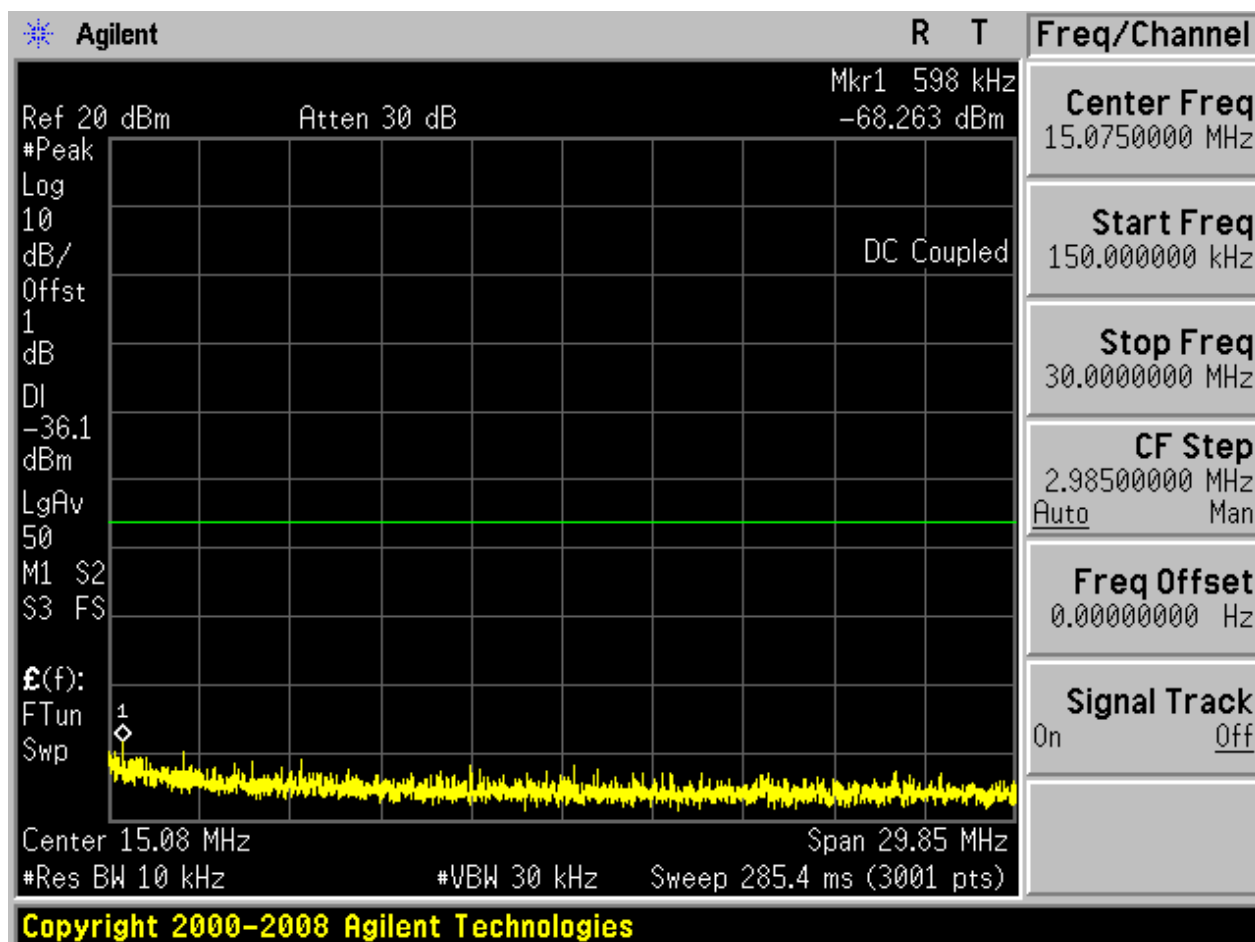
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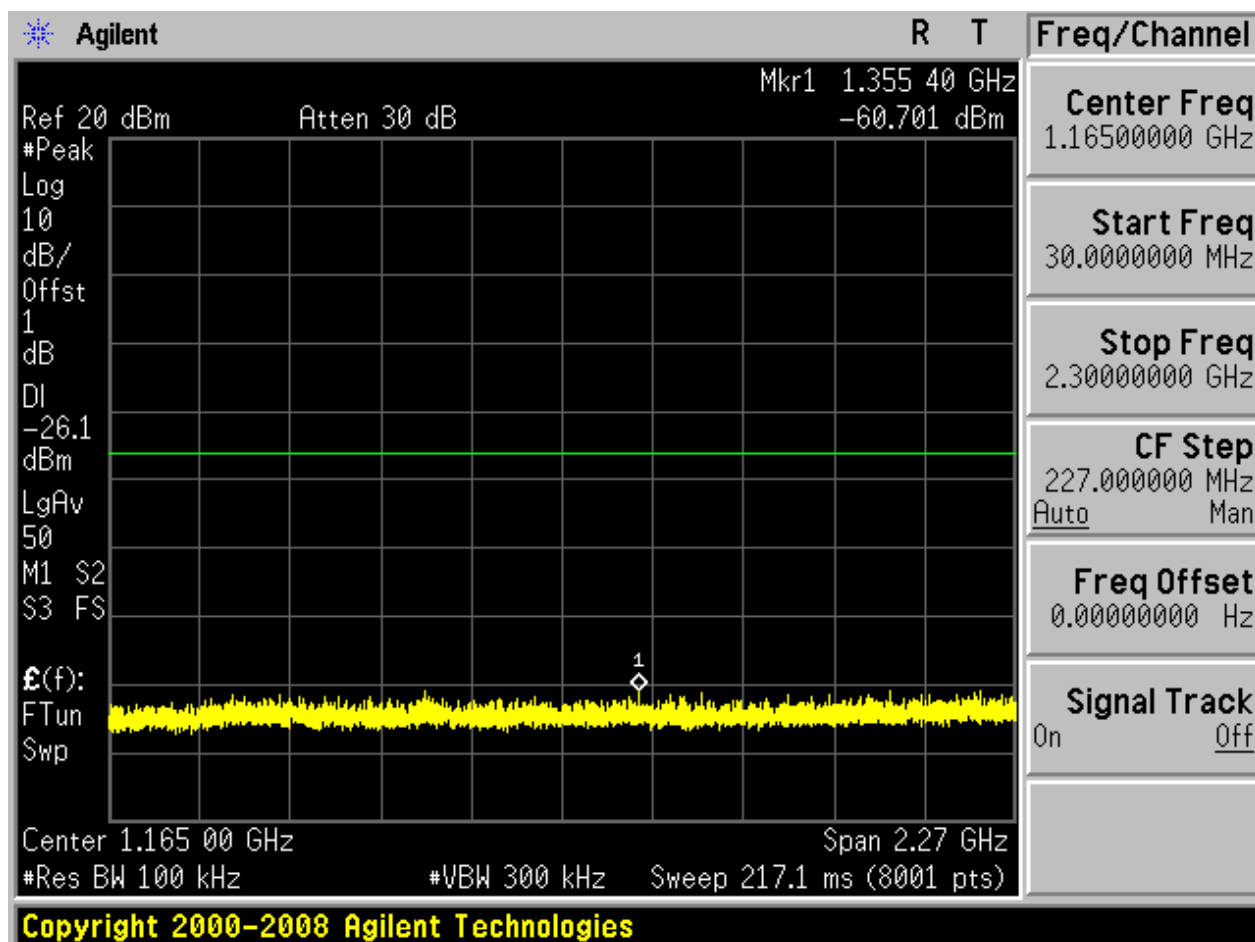


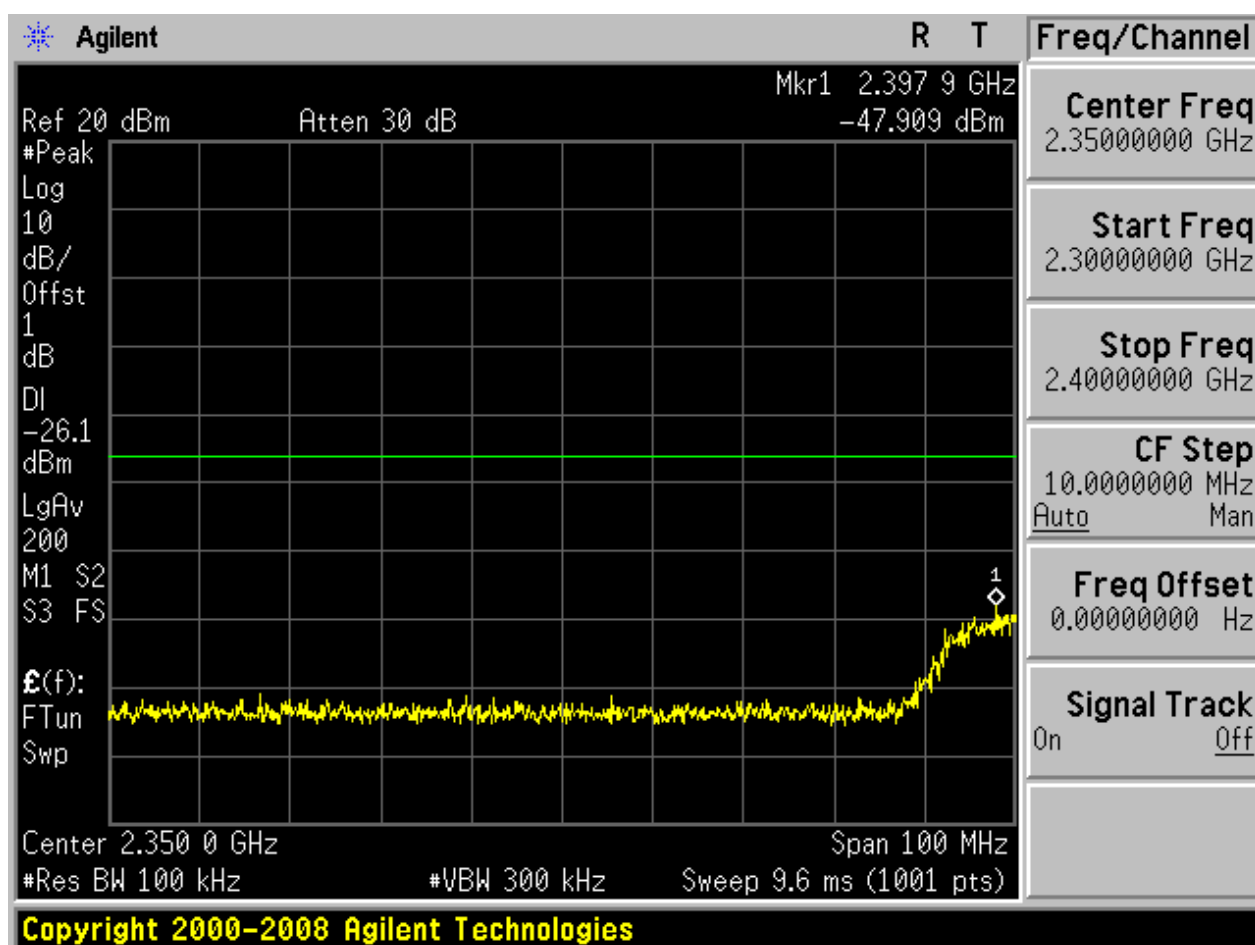


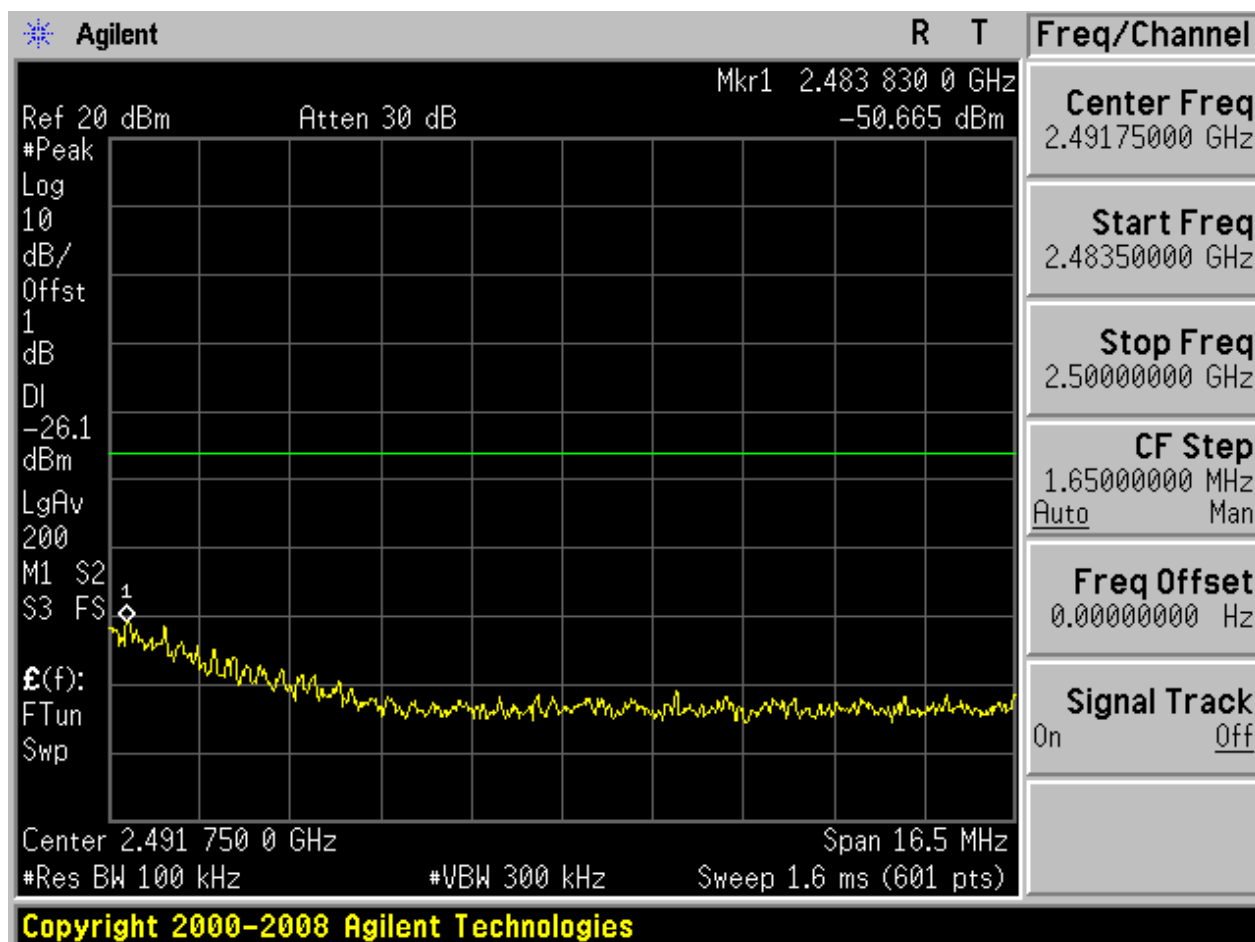
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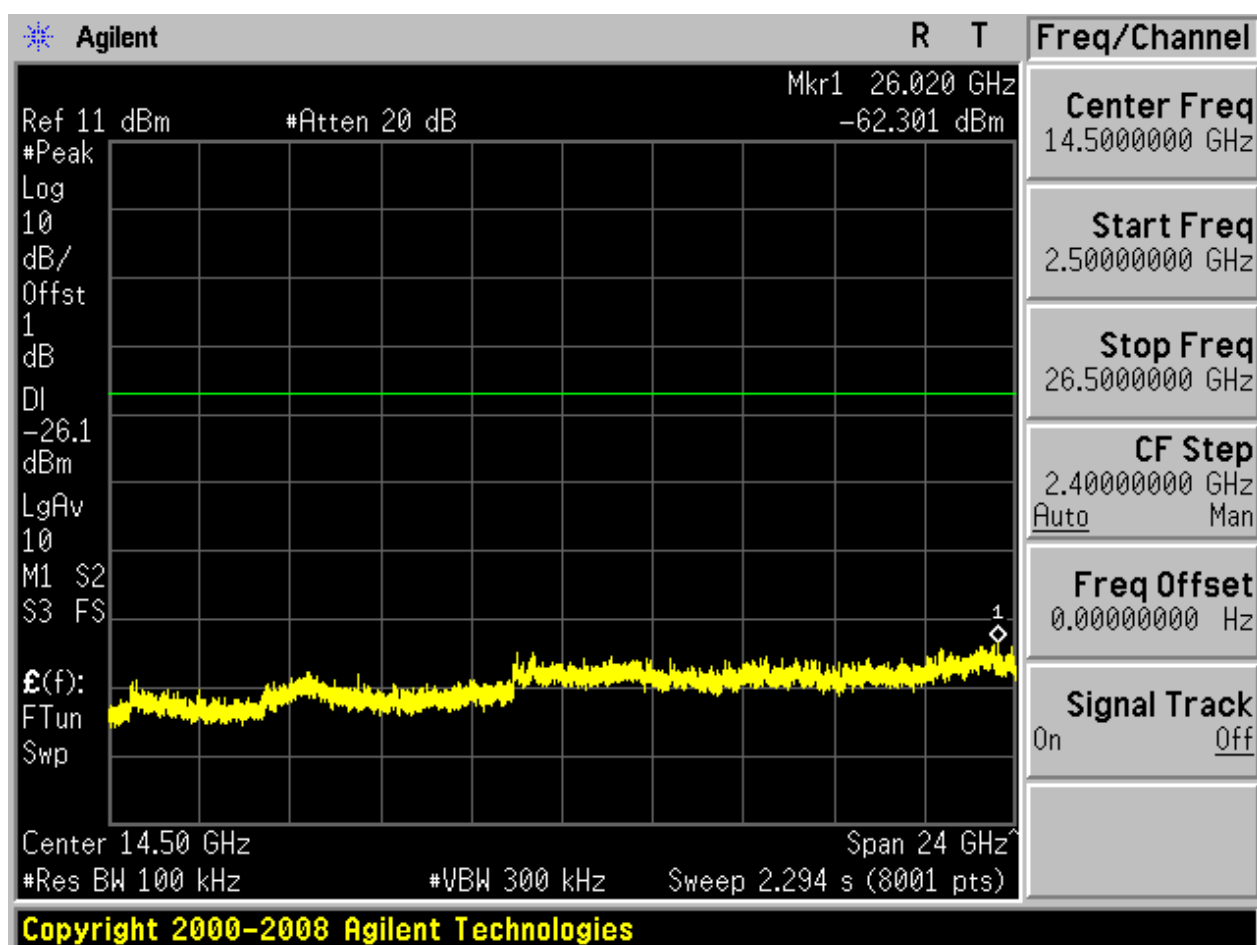






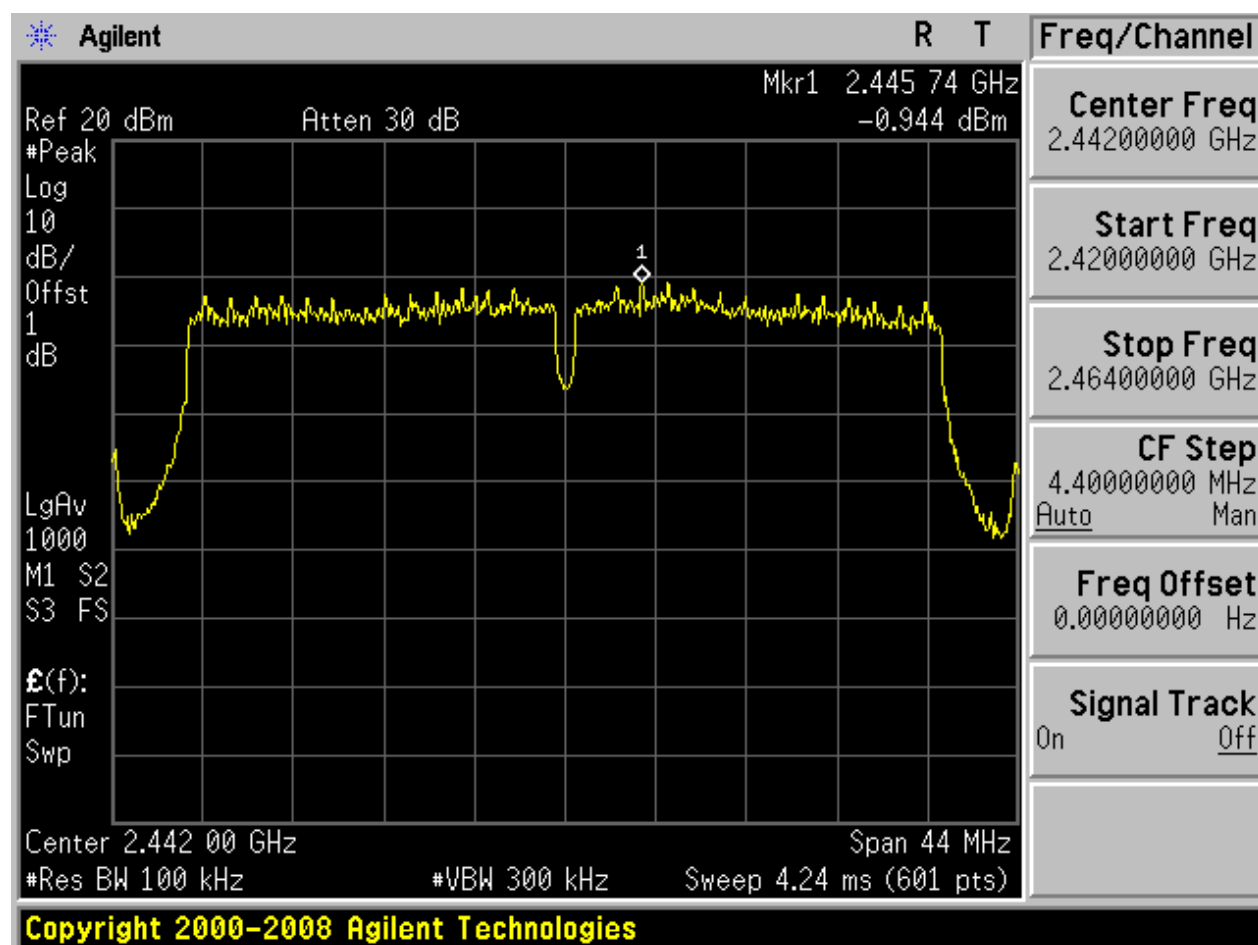






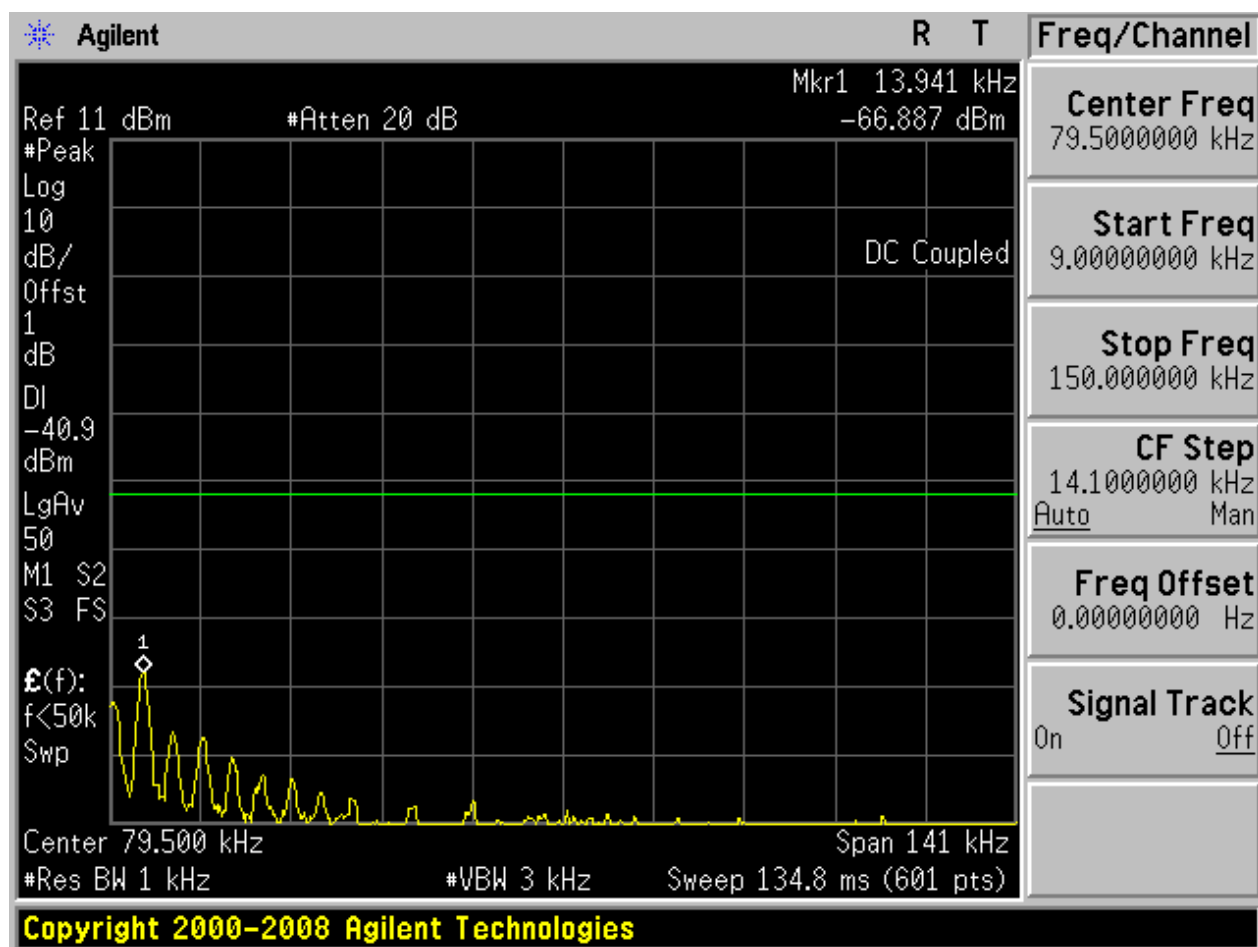
4.30 11N40_H@Ant 2

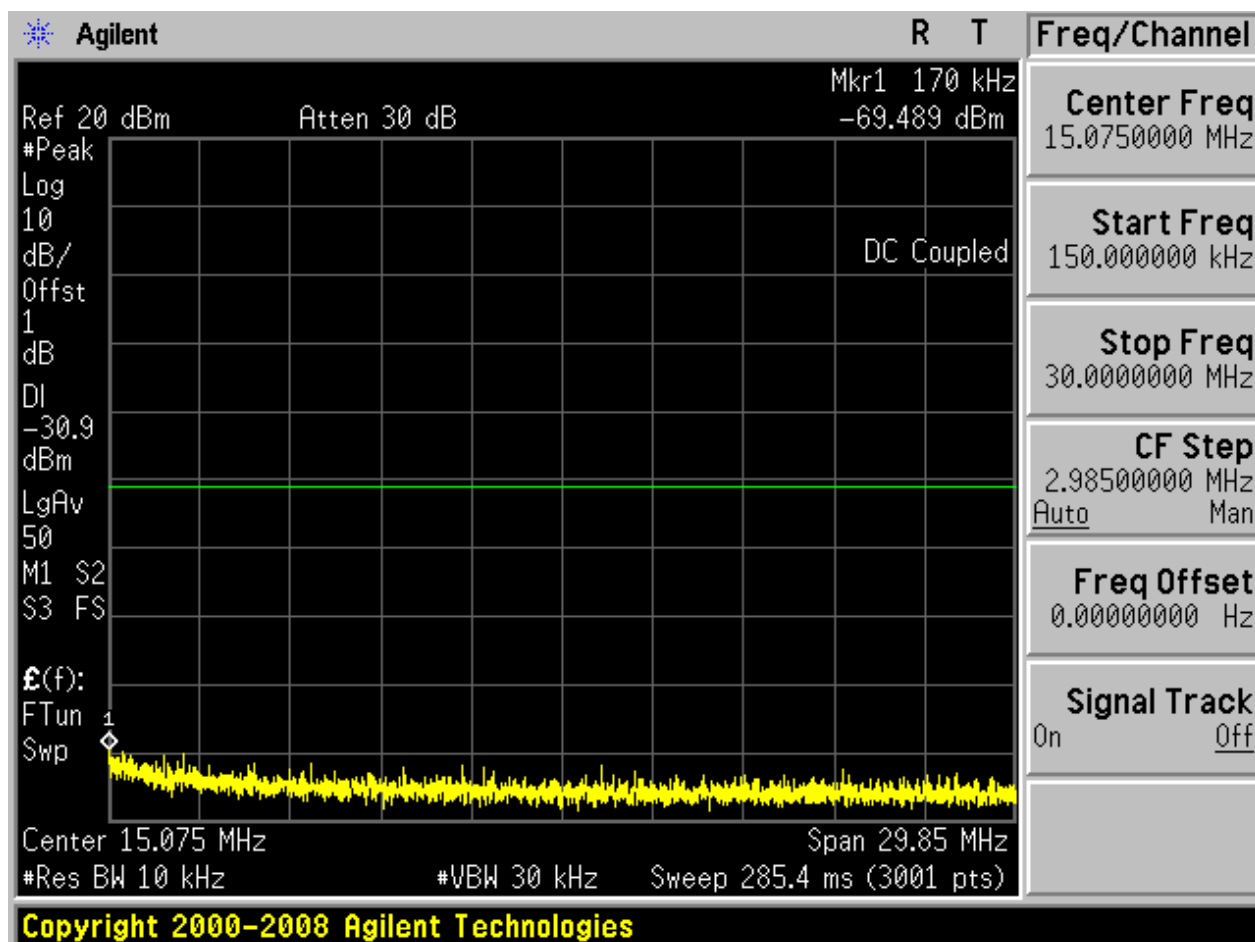
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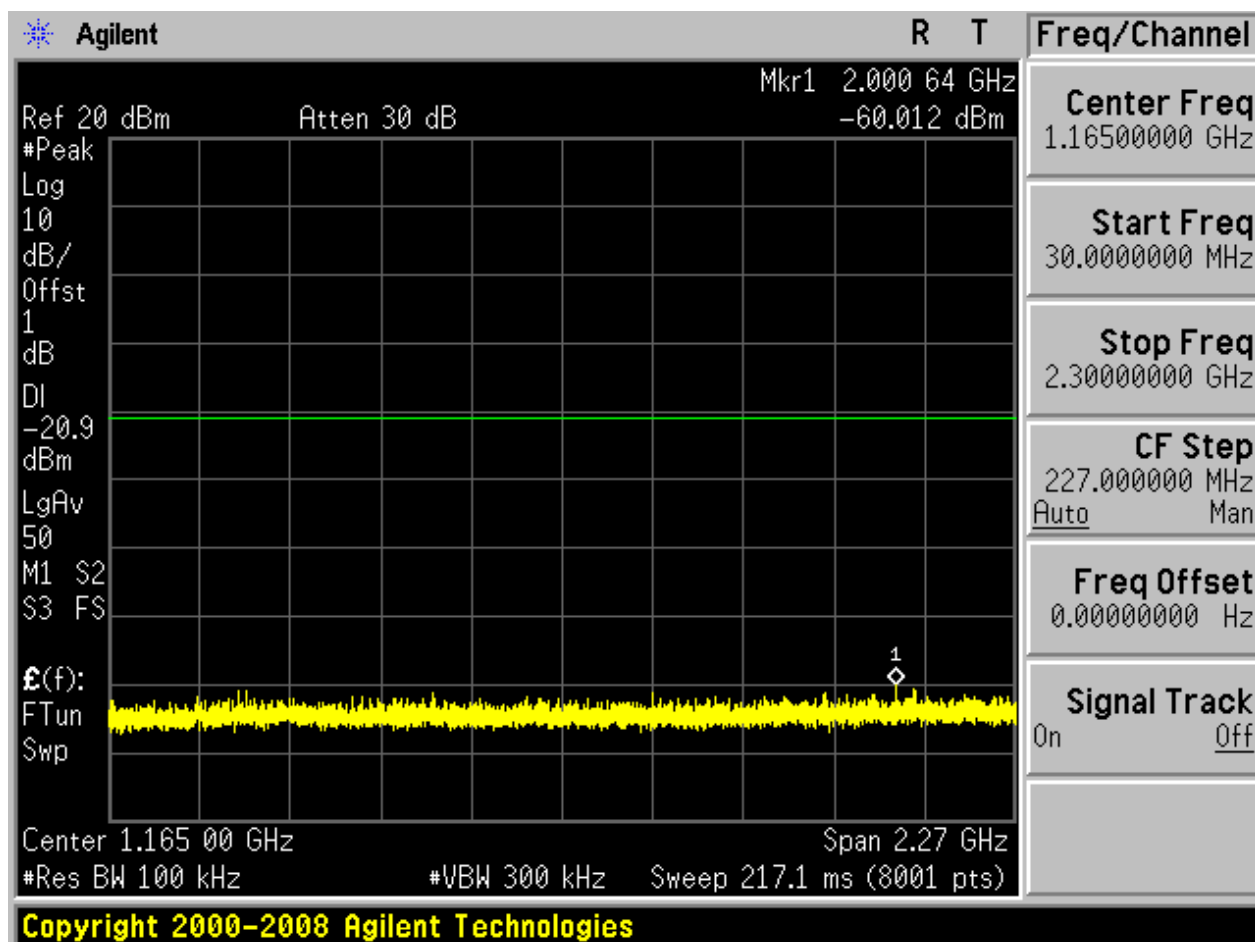


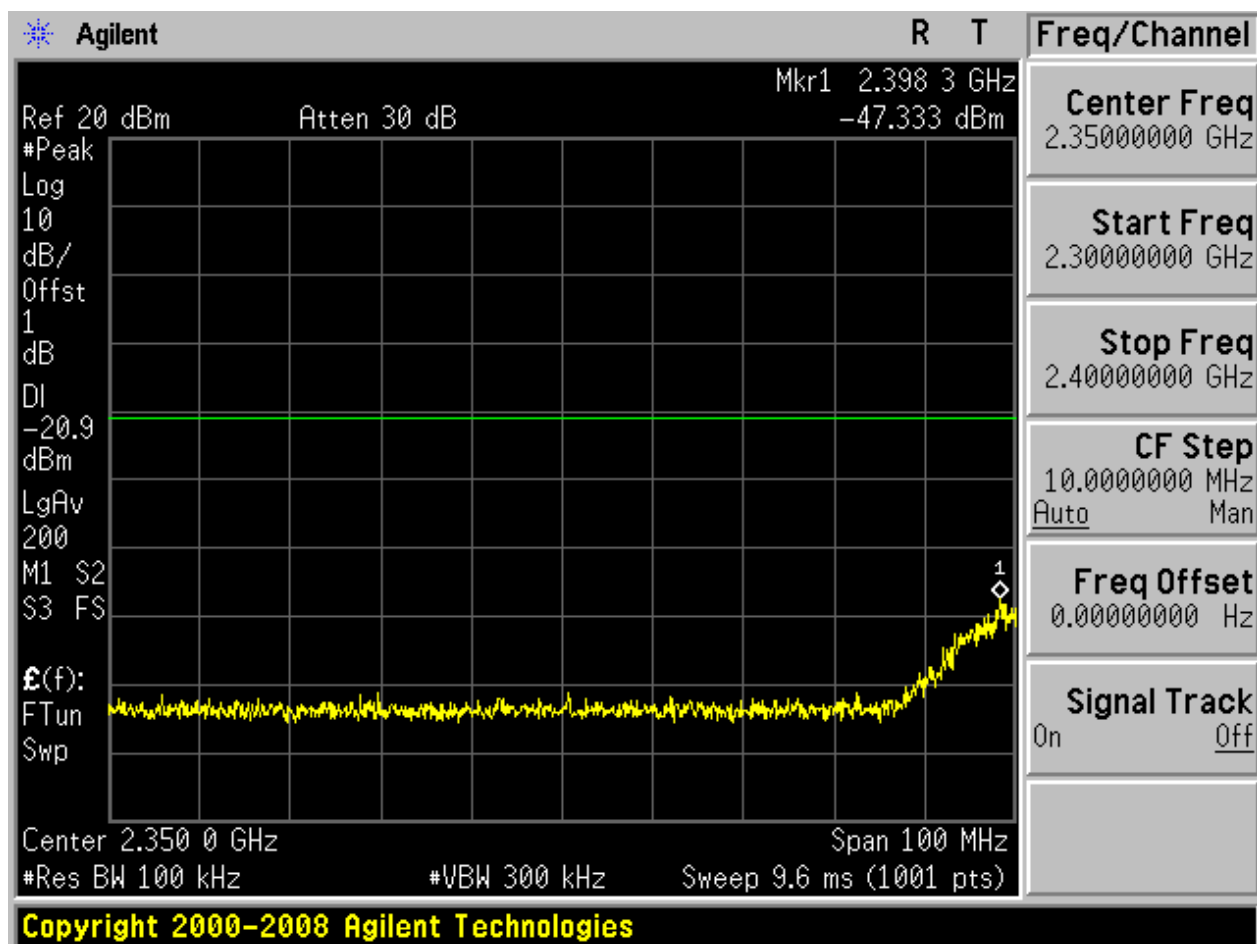


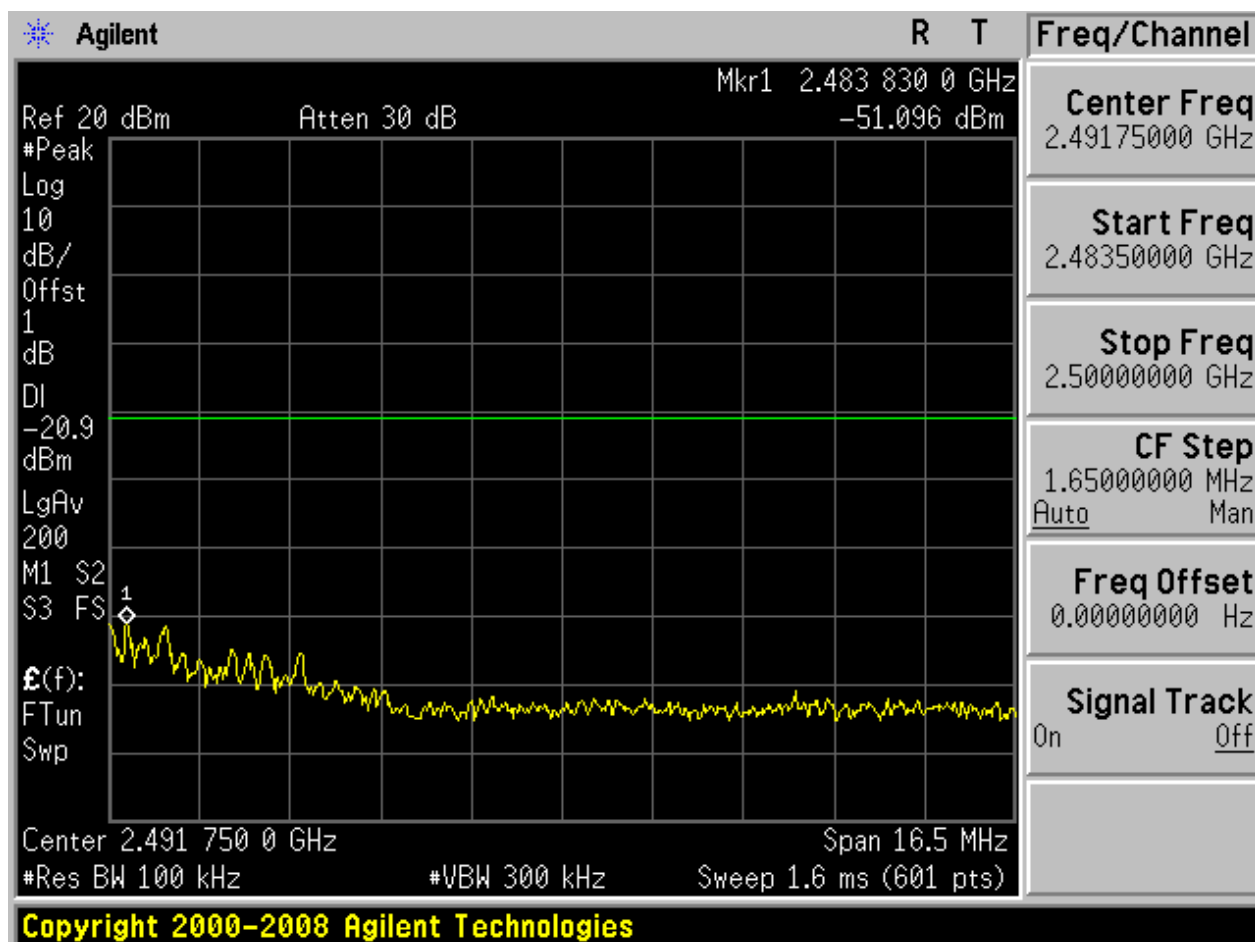
Puw:

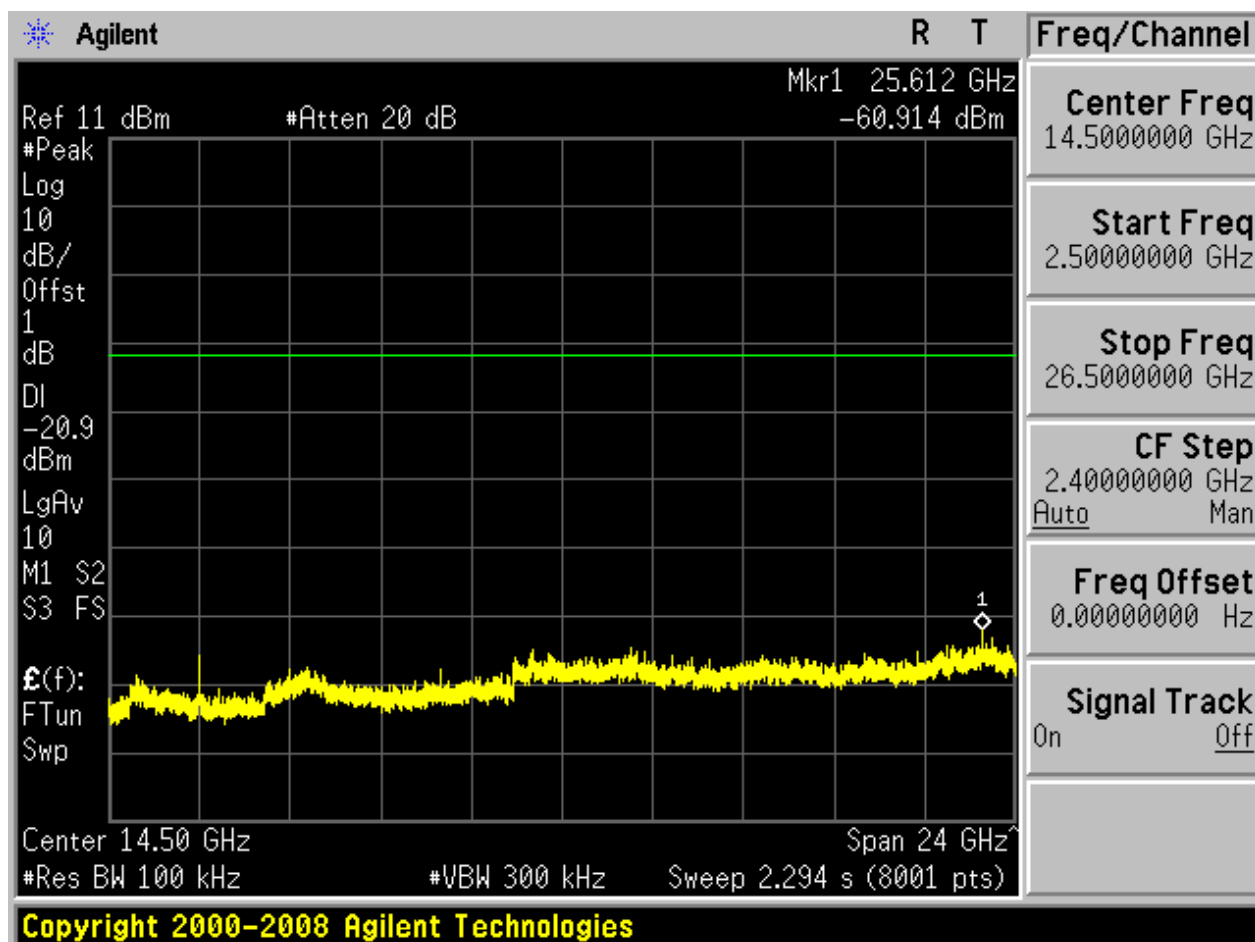








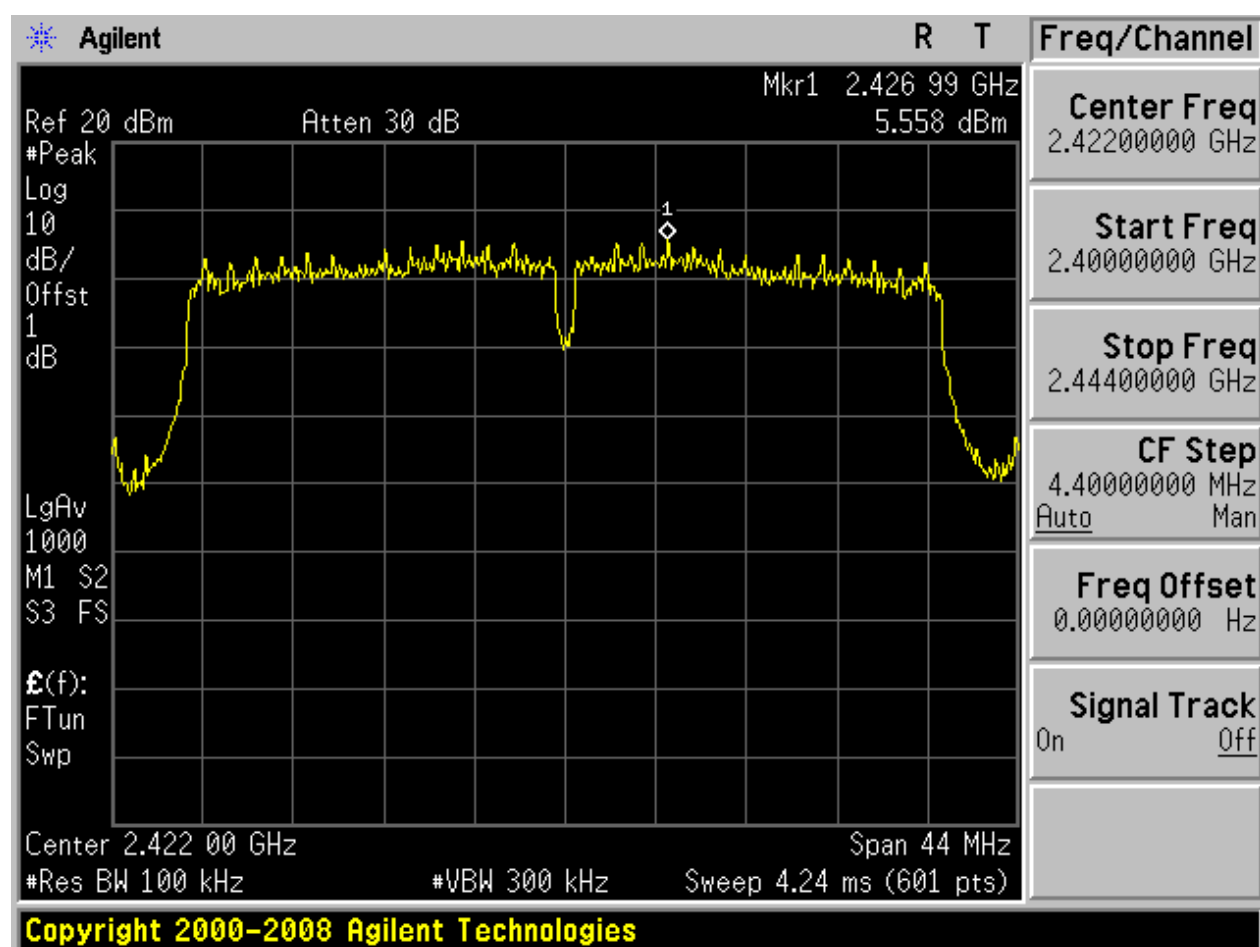






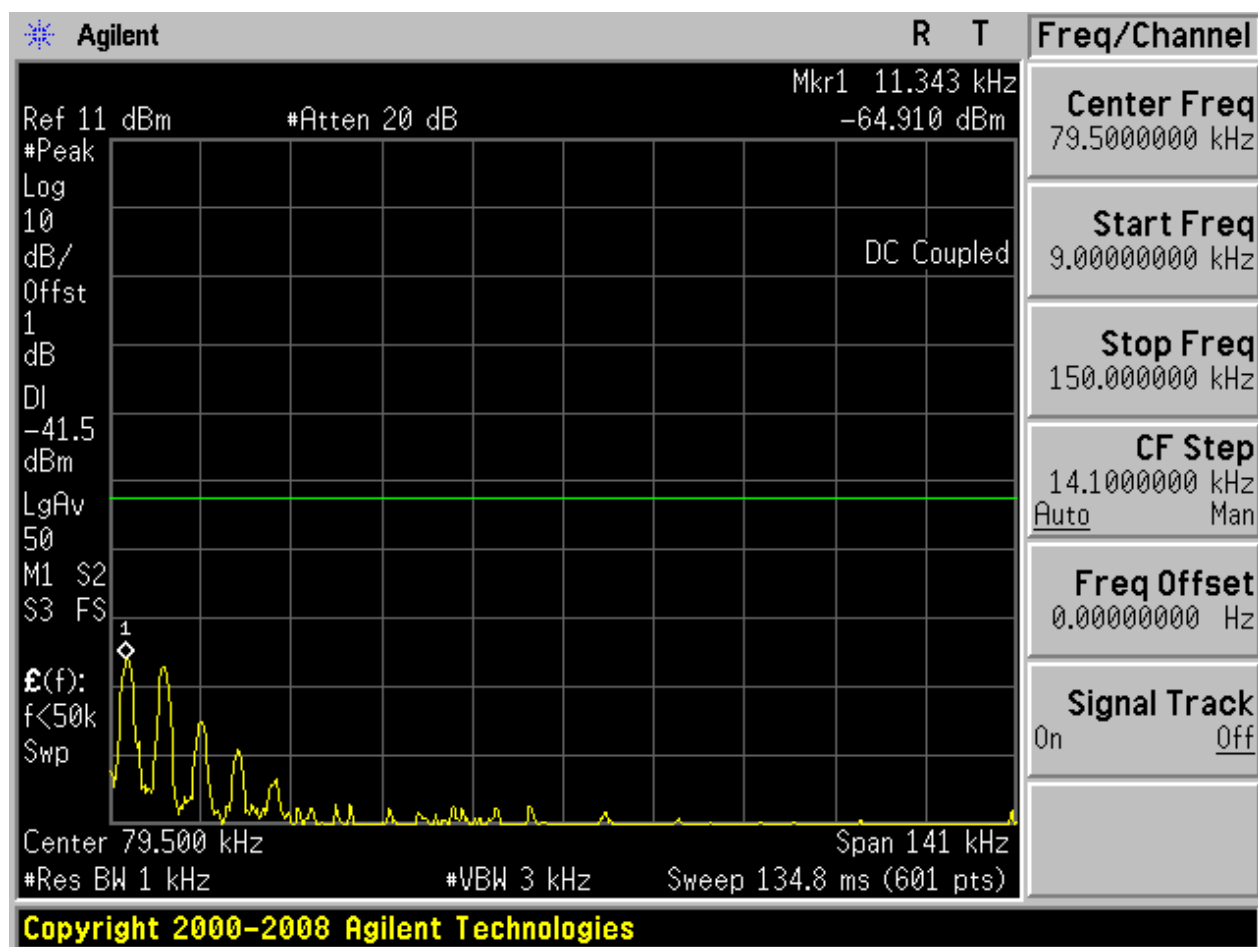
4.31 11N40m_L@Ant 1

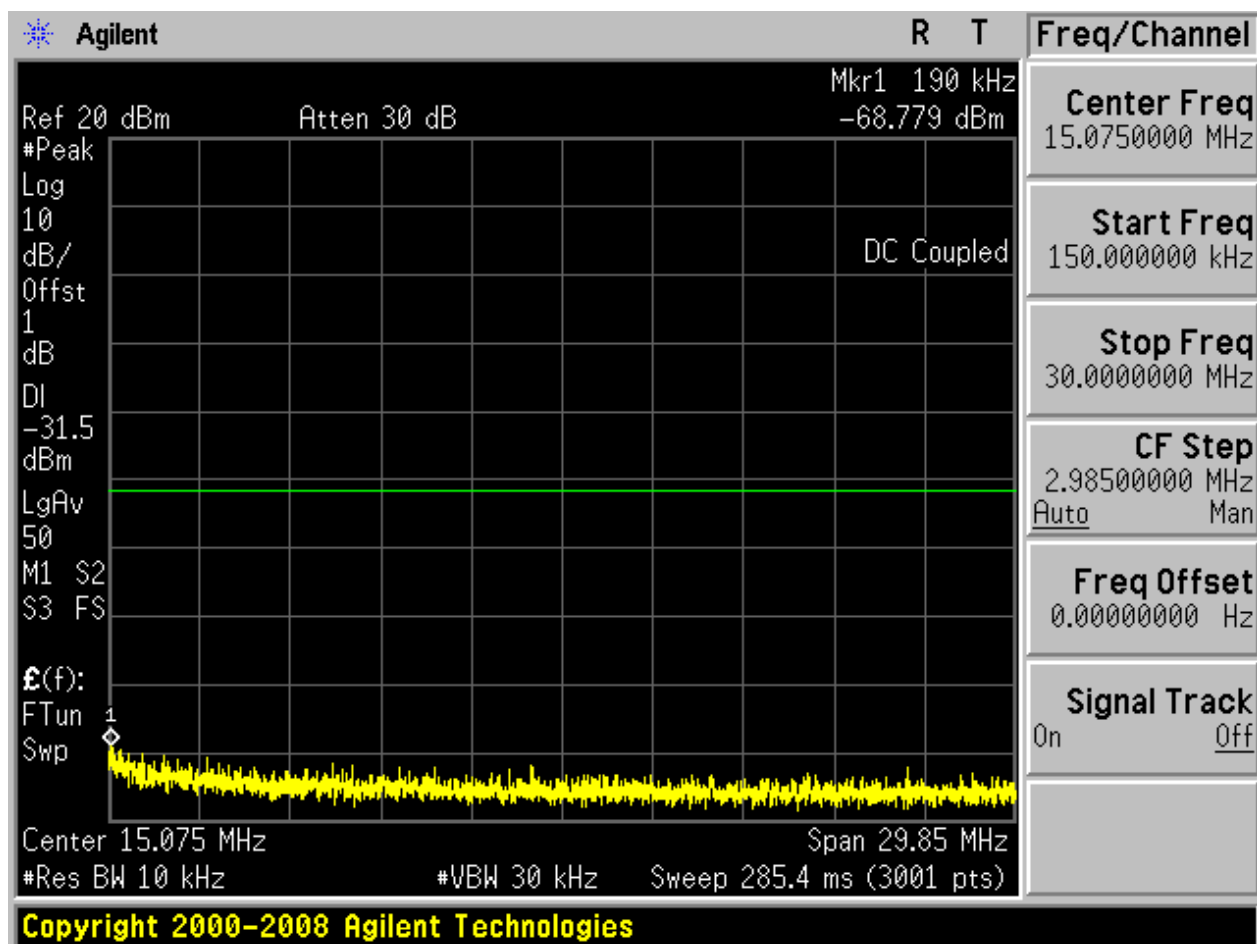
Pref:

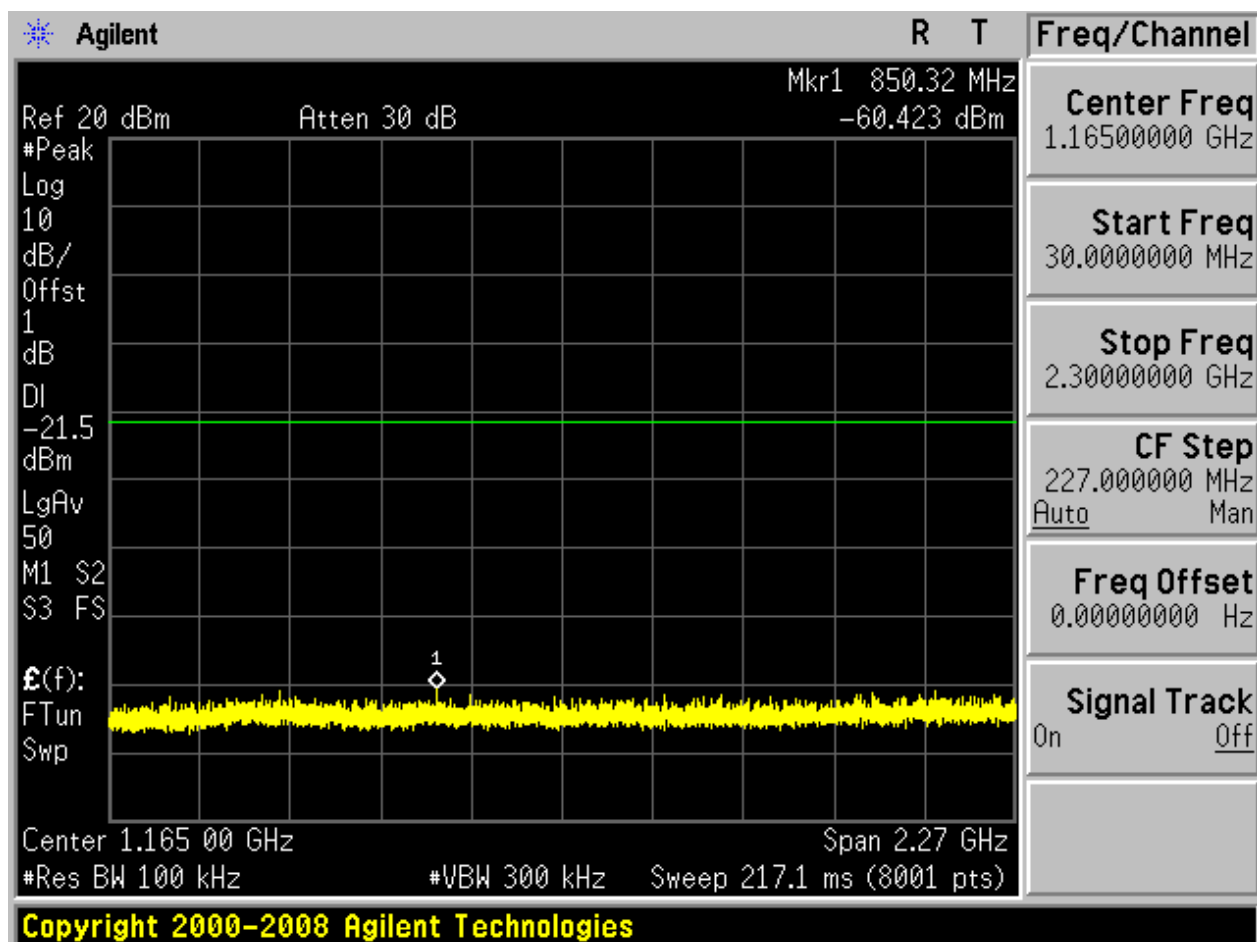


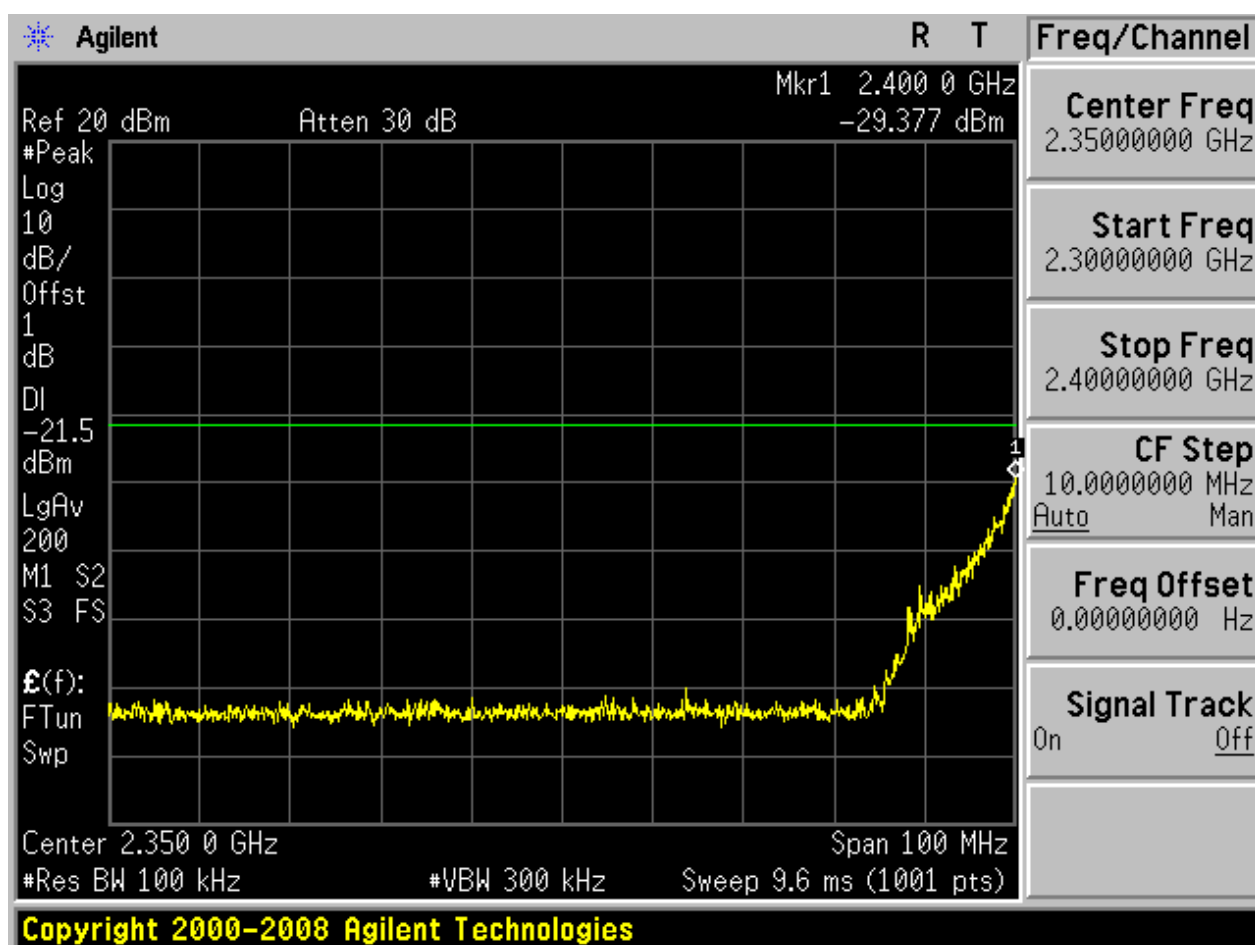


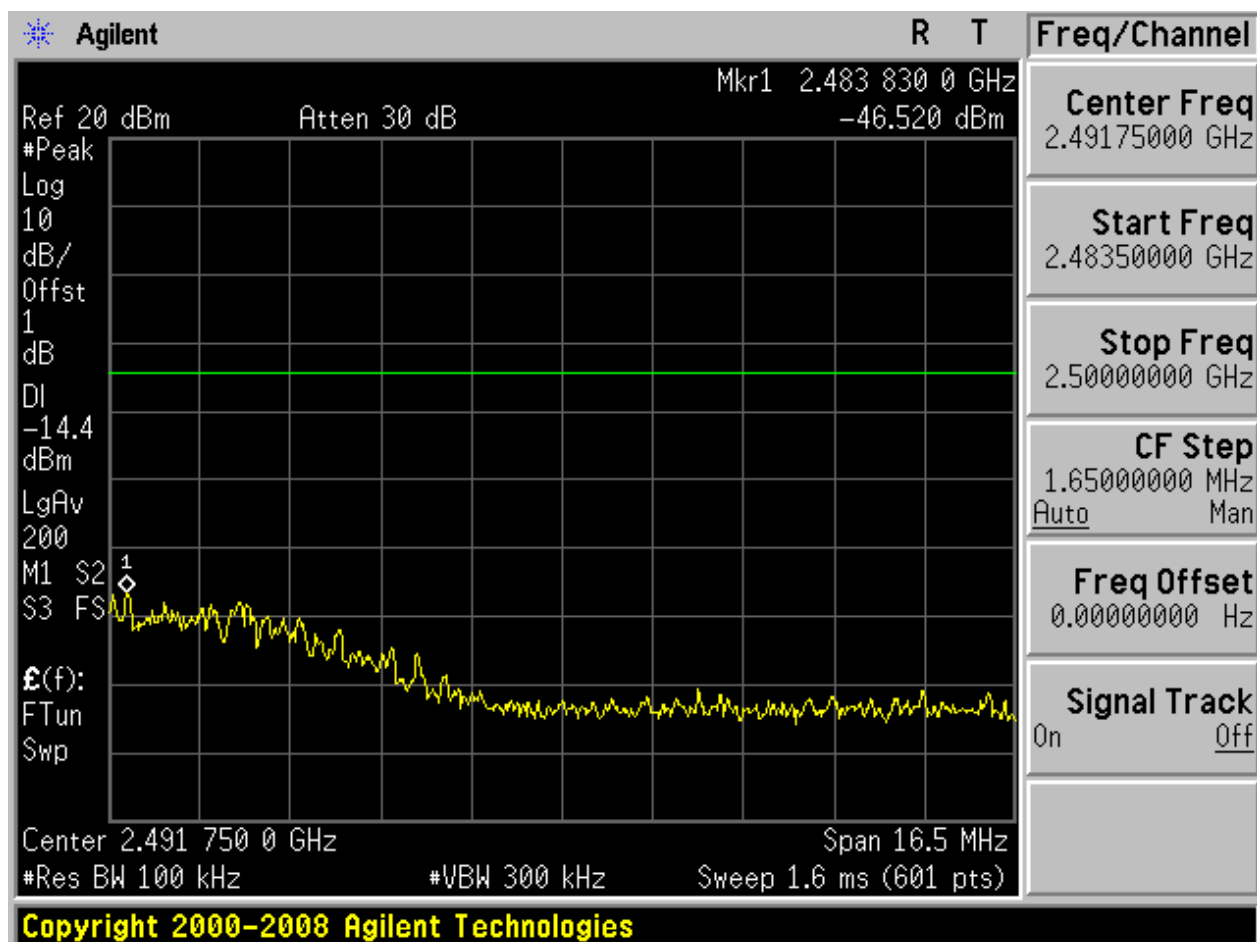
Puw:

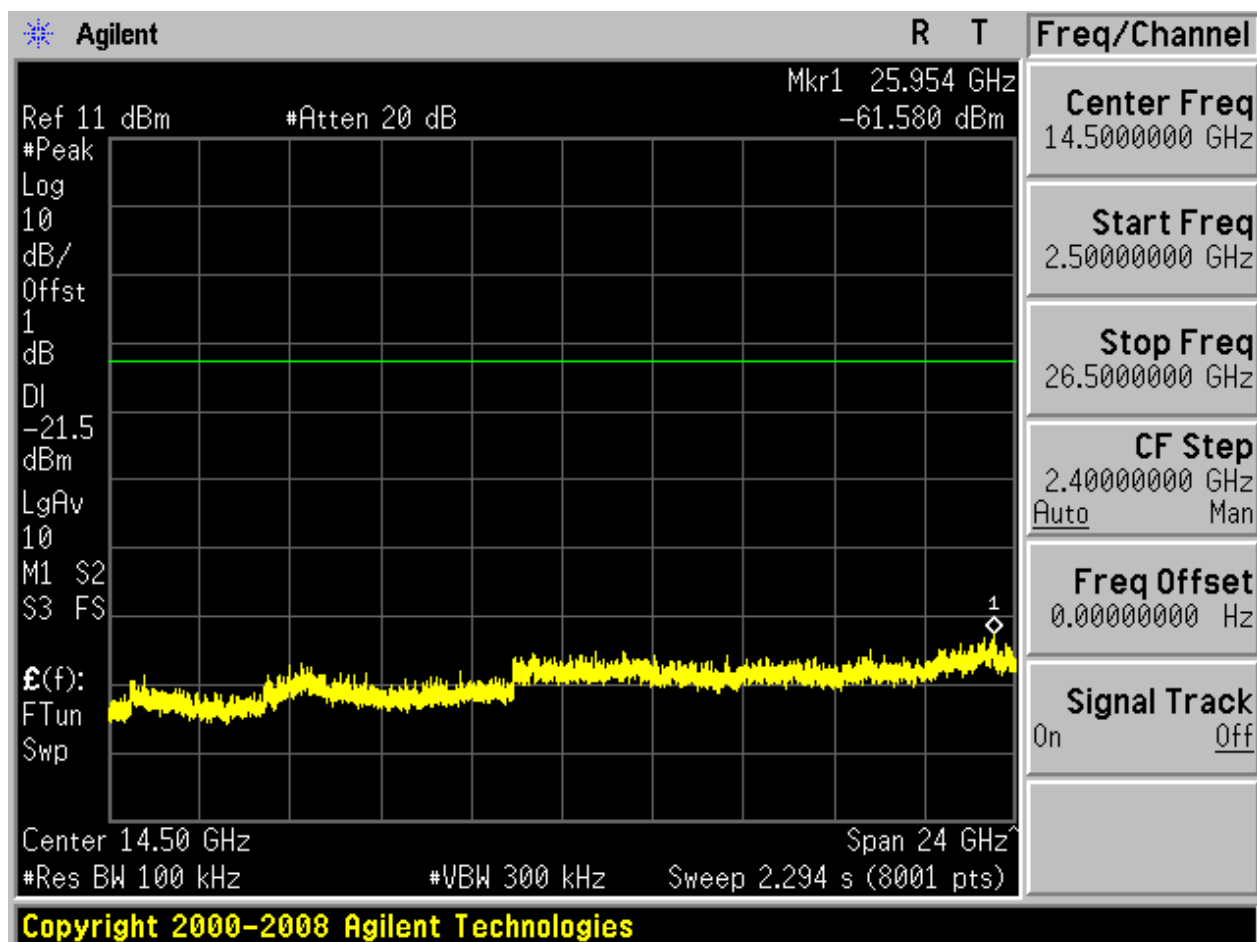






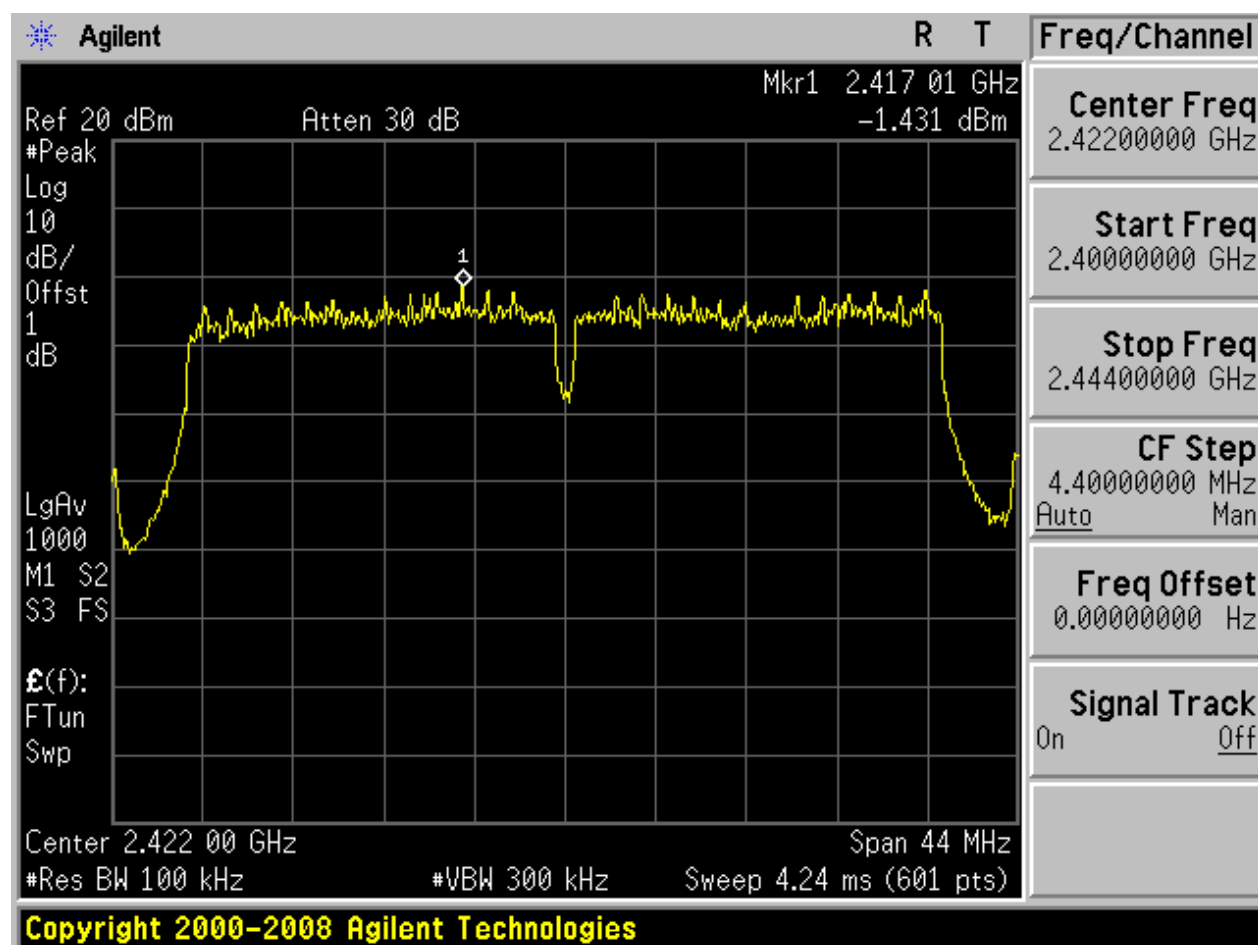






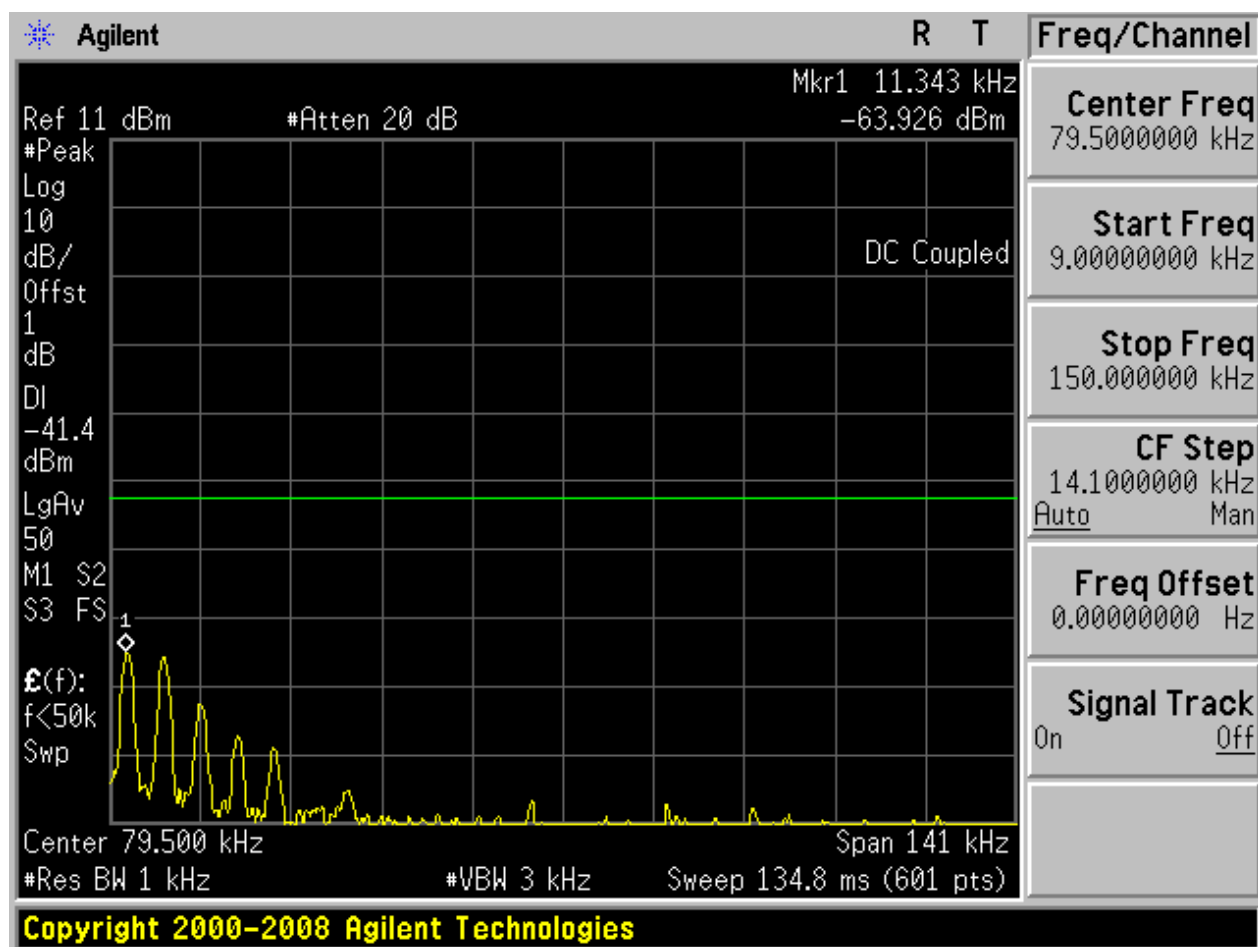
4.32 11N40m_L@Ant 2

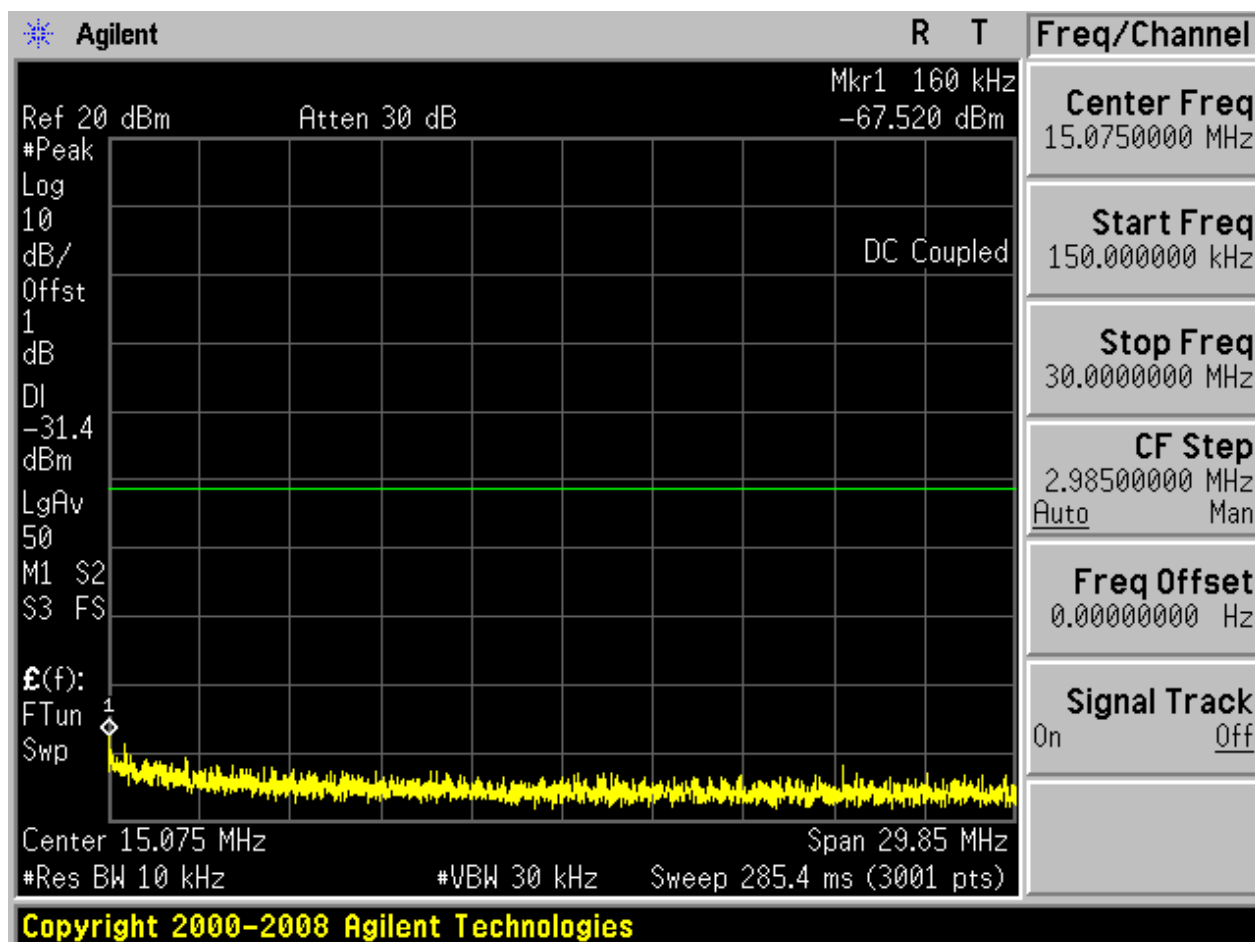
Pref:

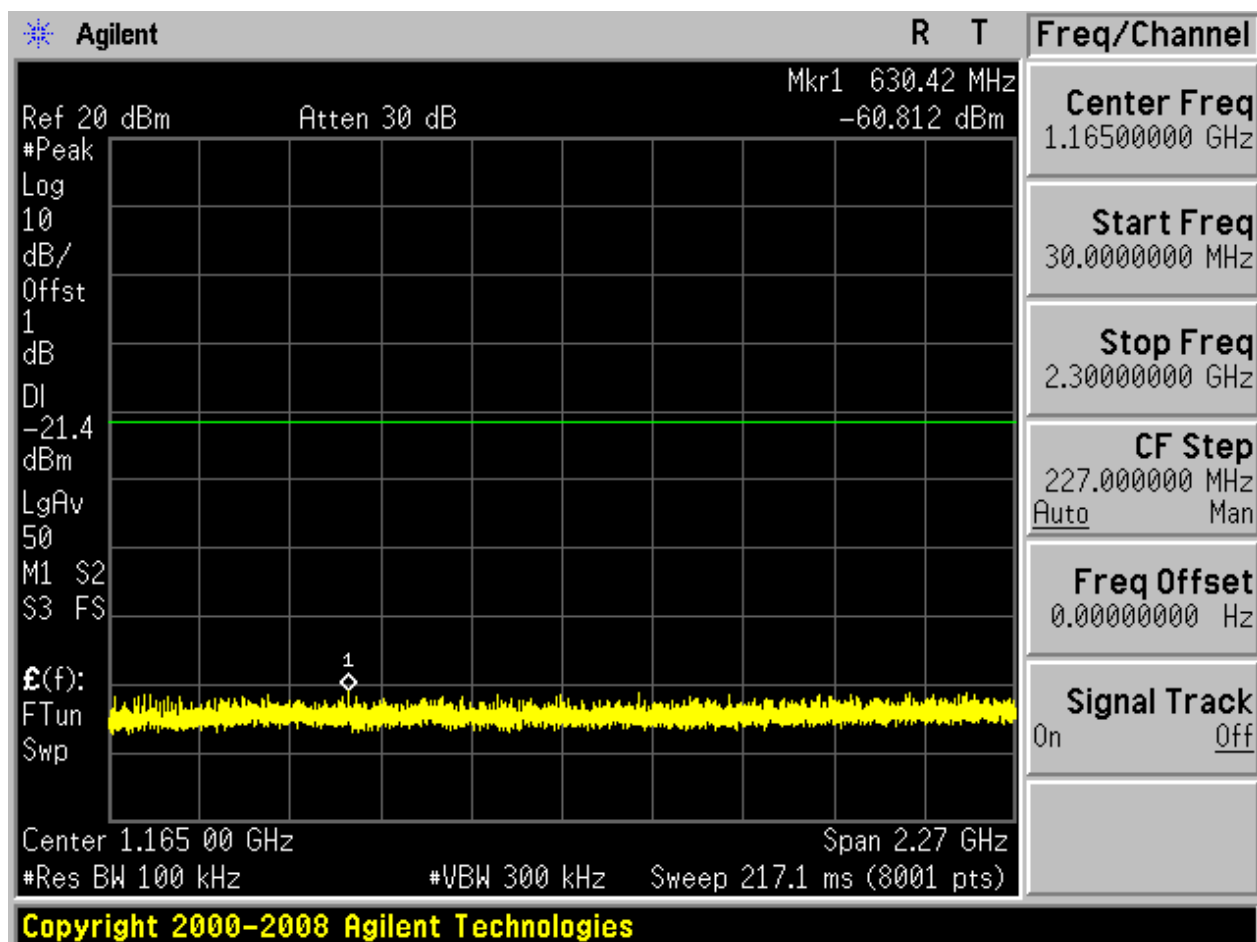


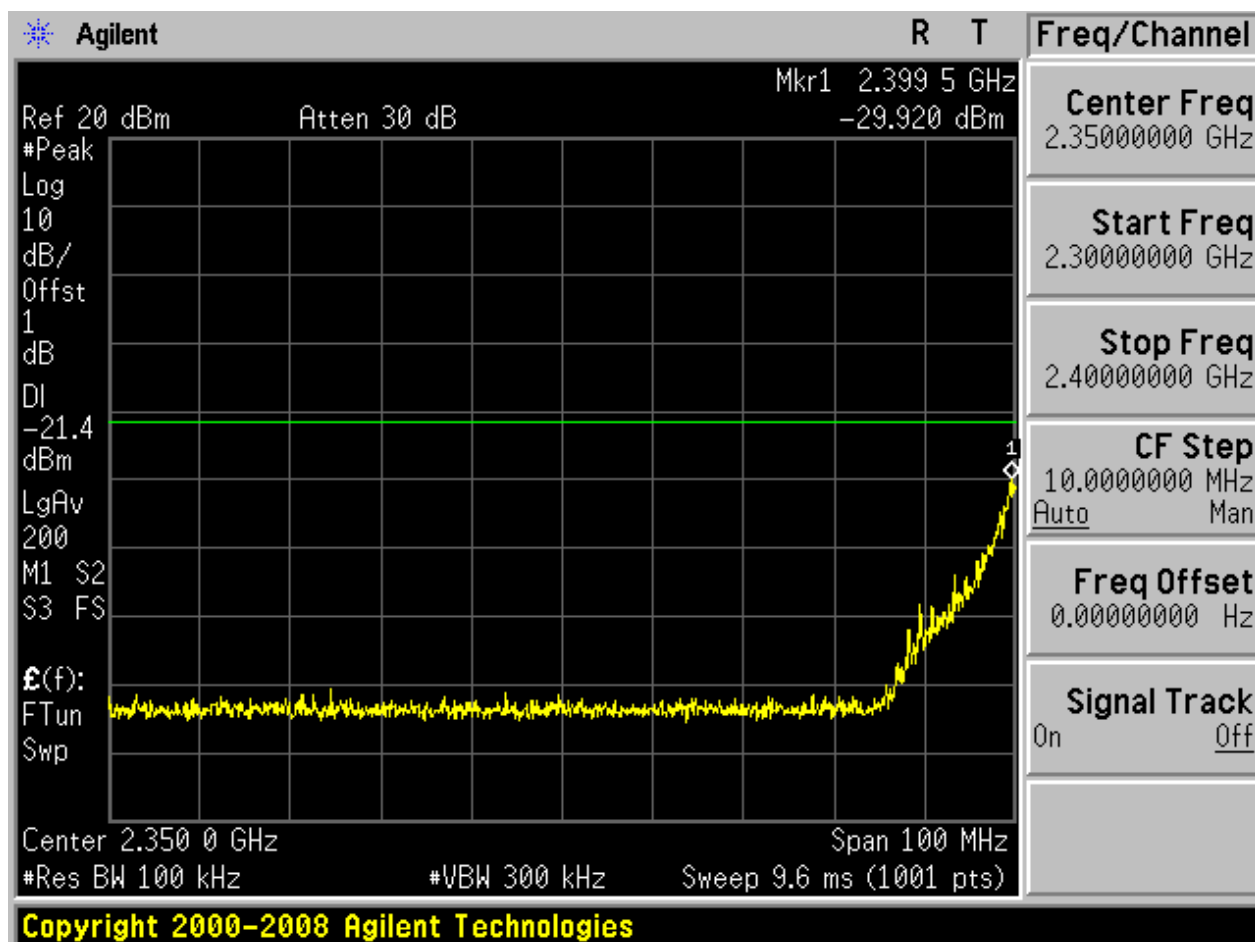


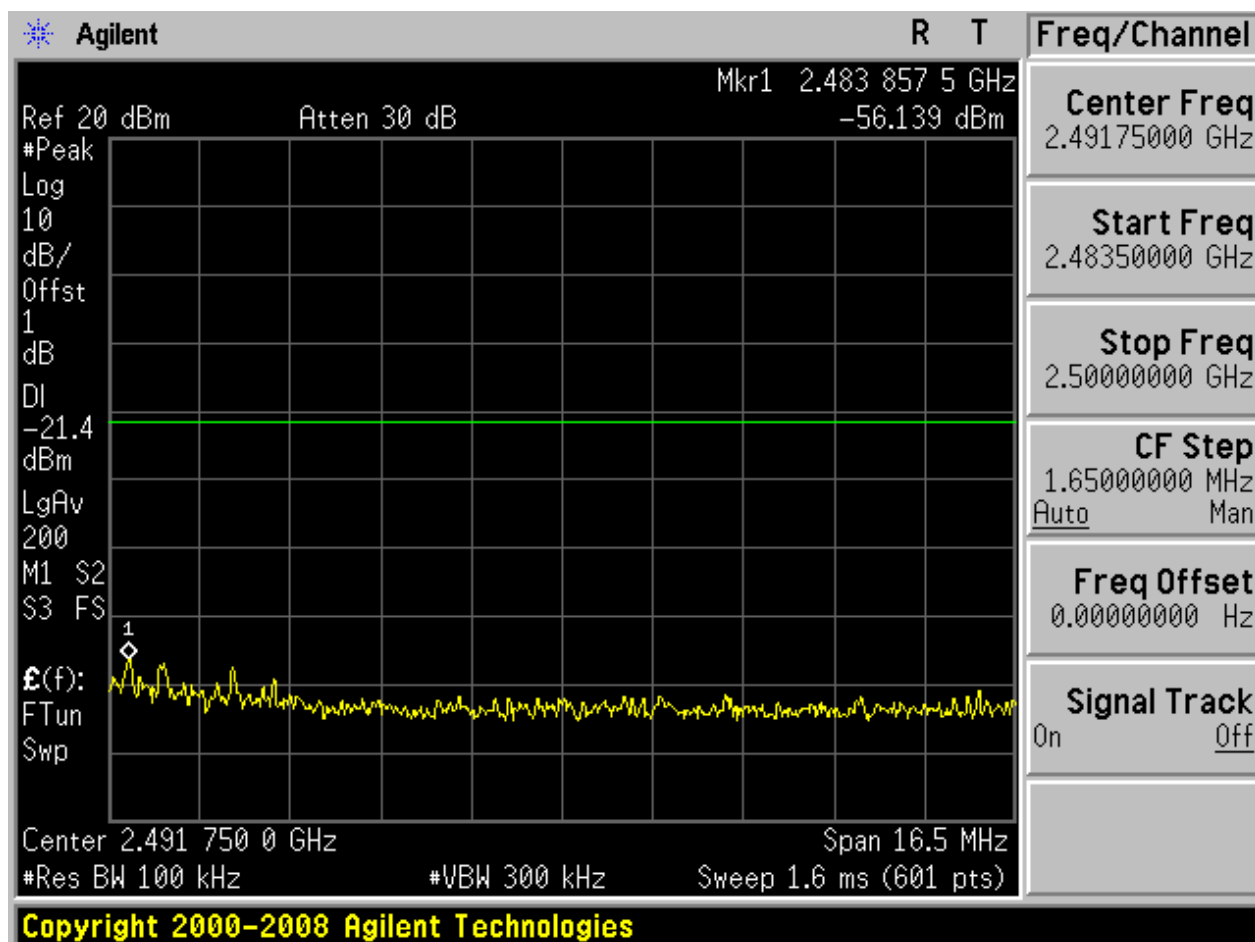
Puw:

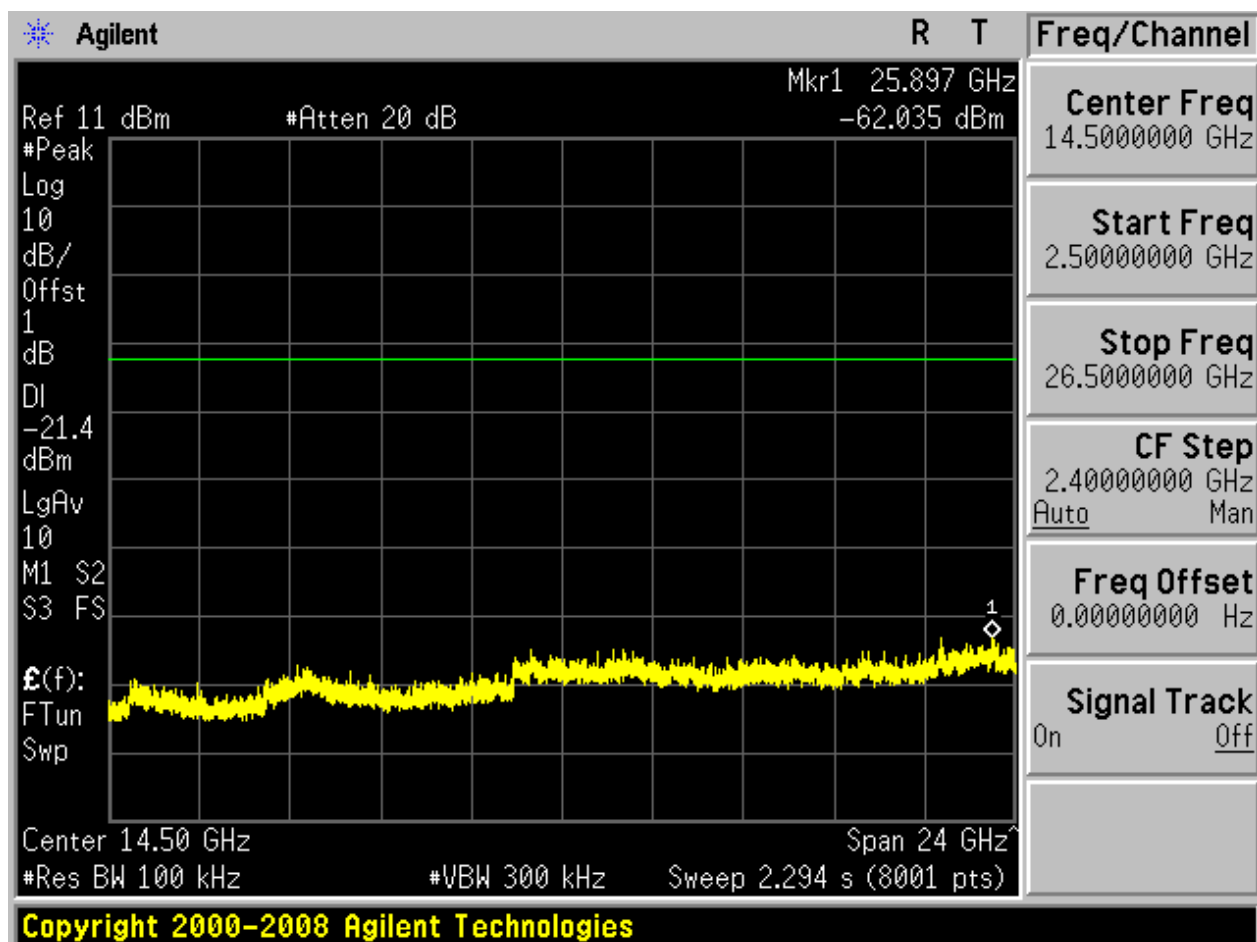






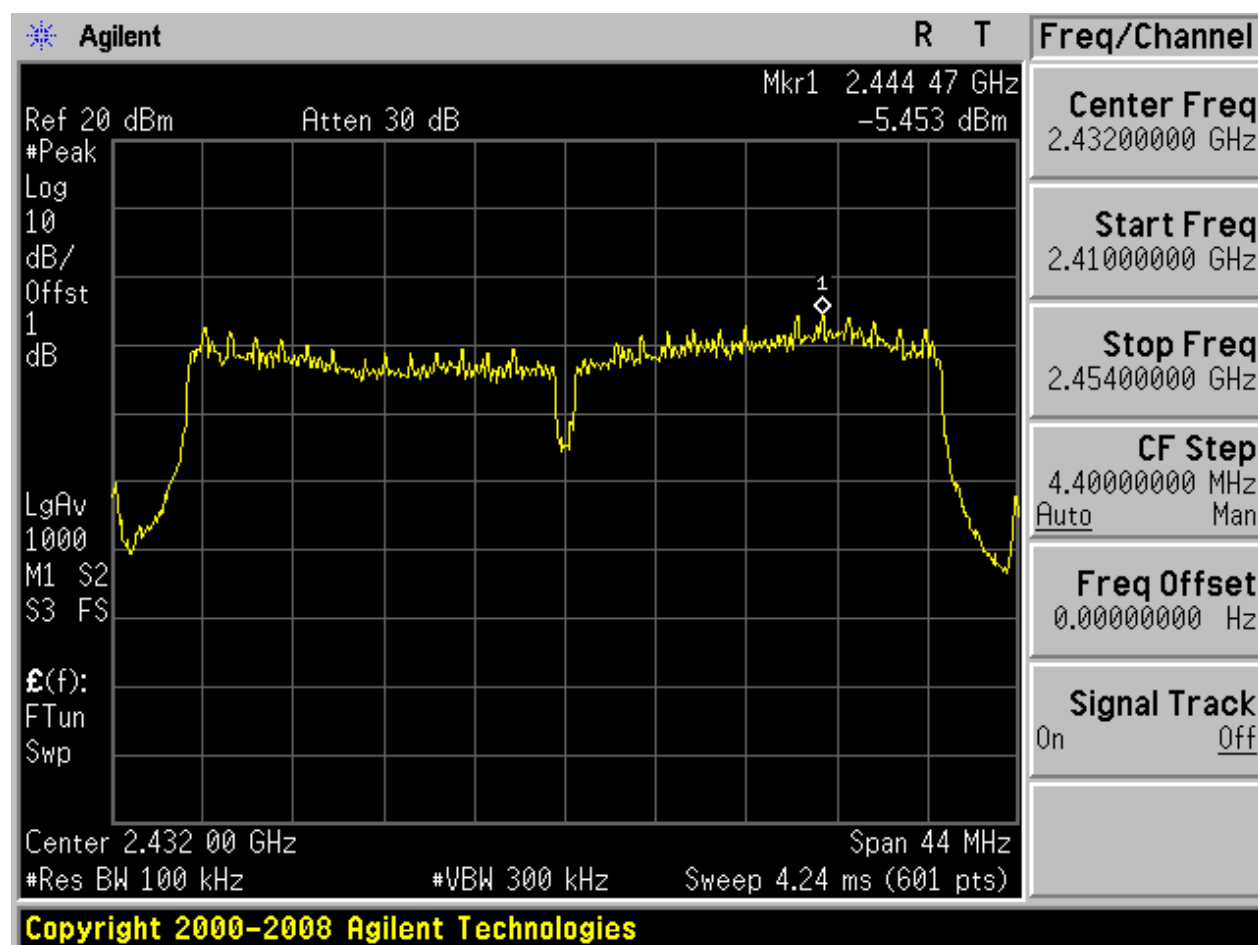






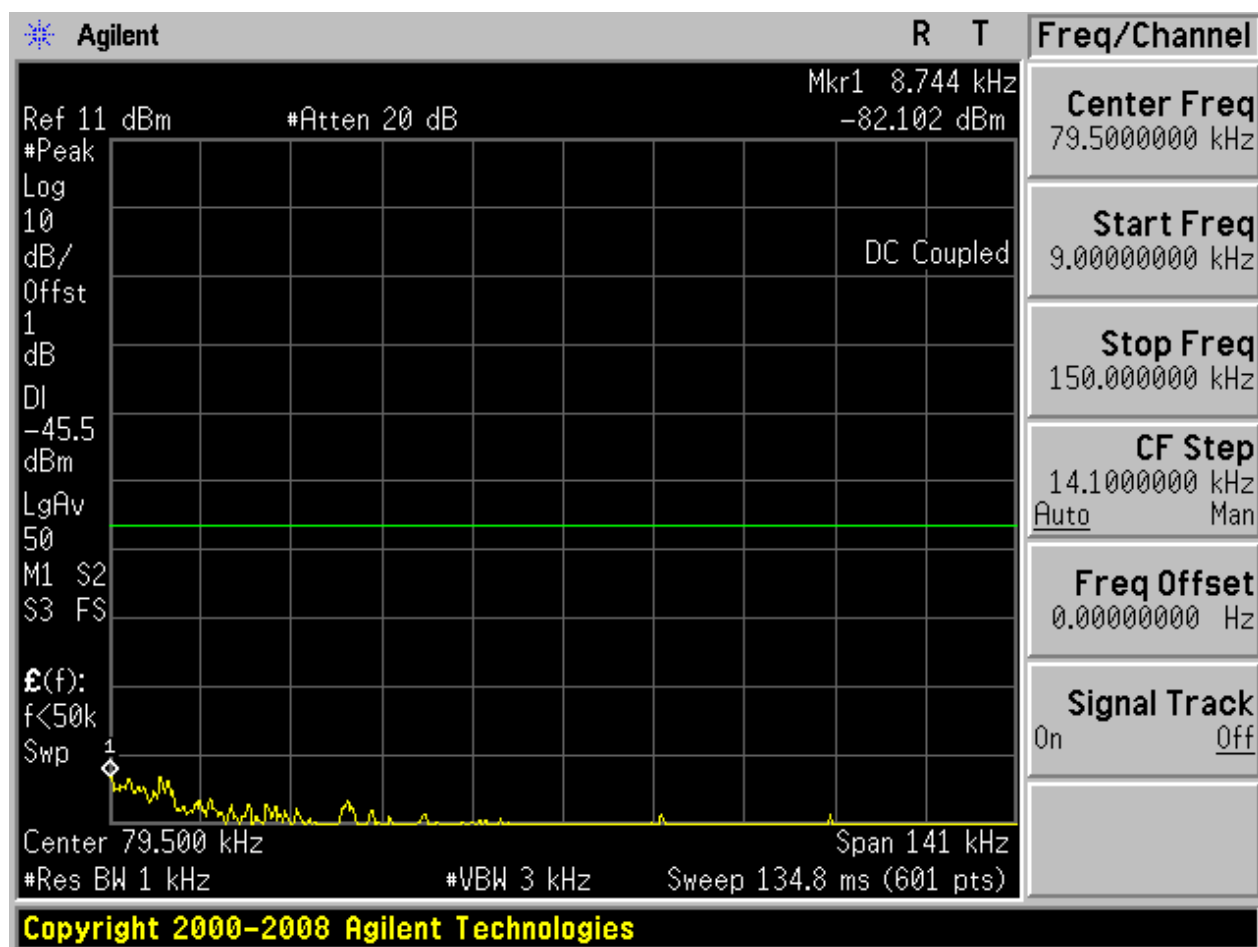
4.34 11N40m_M@Ant 1

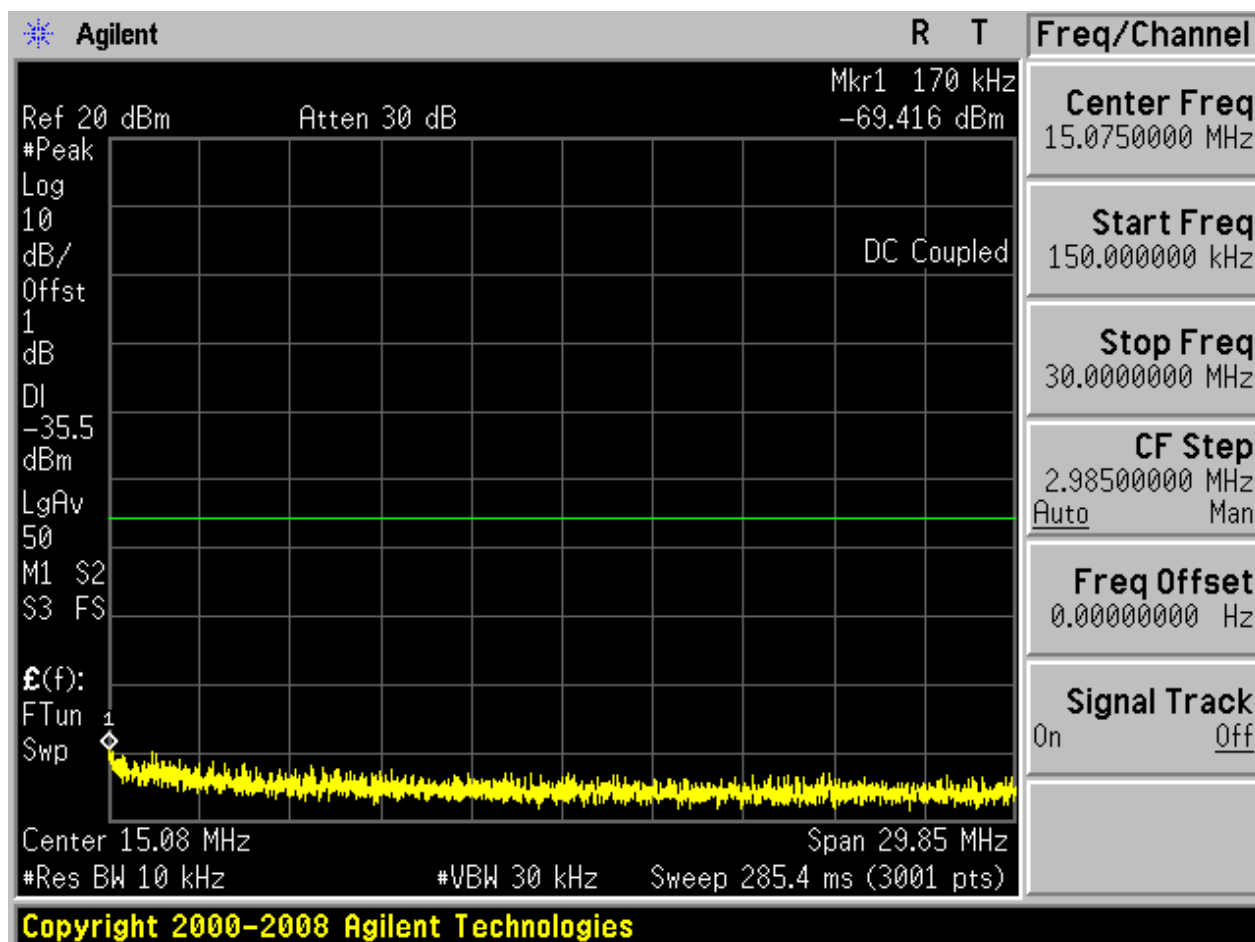
Pref:

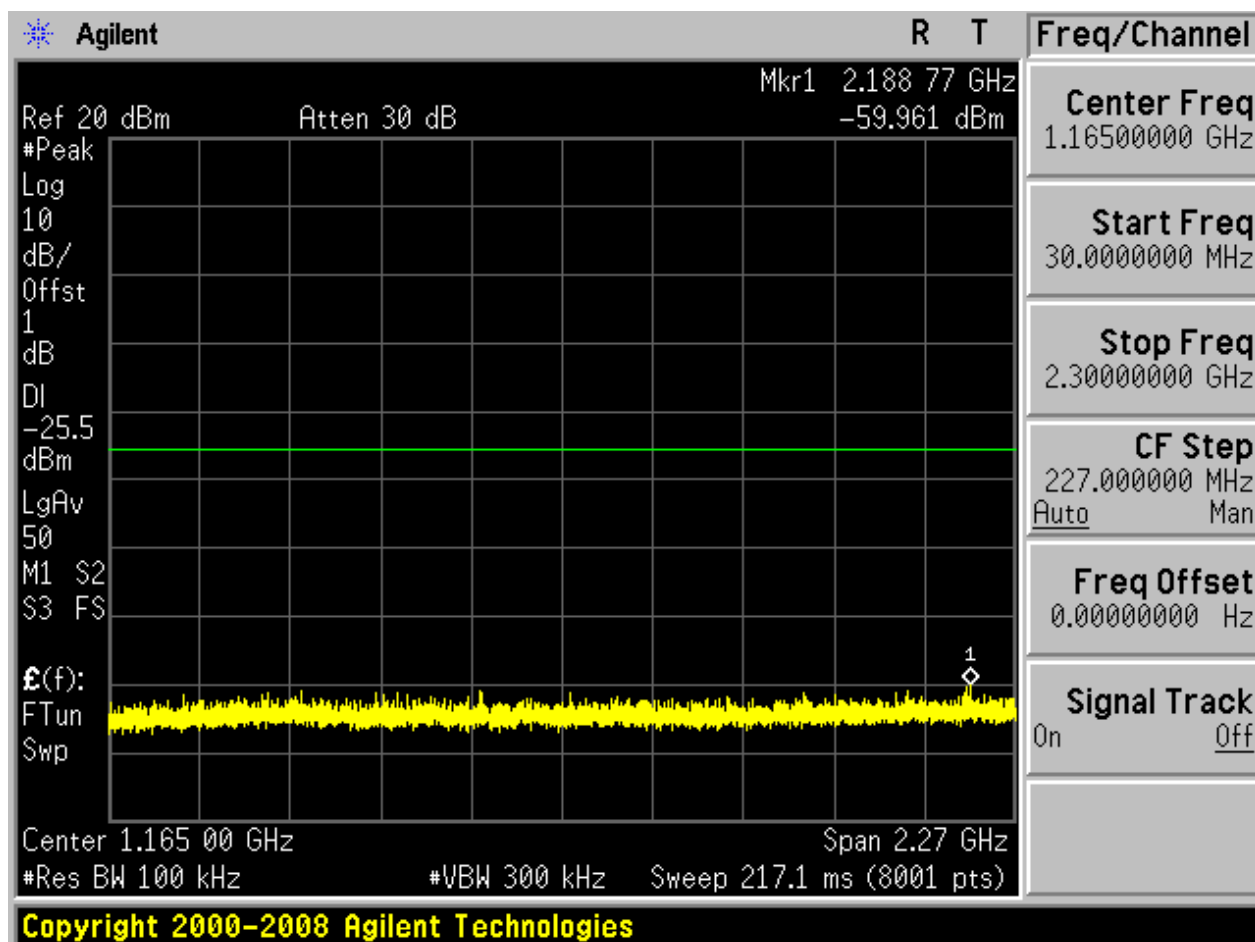


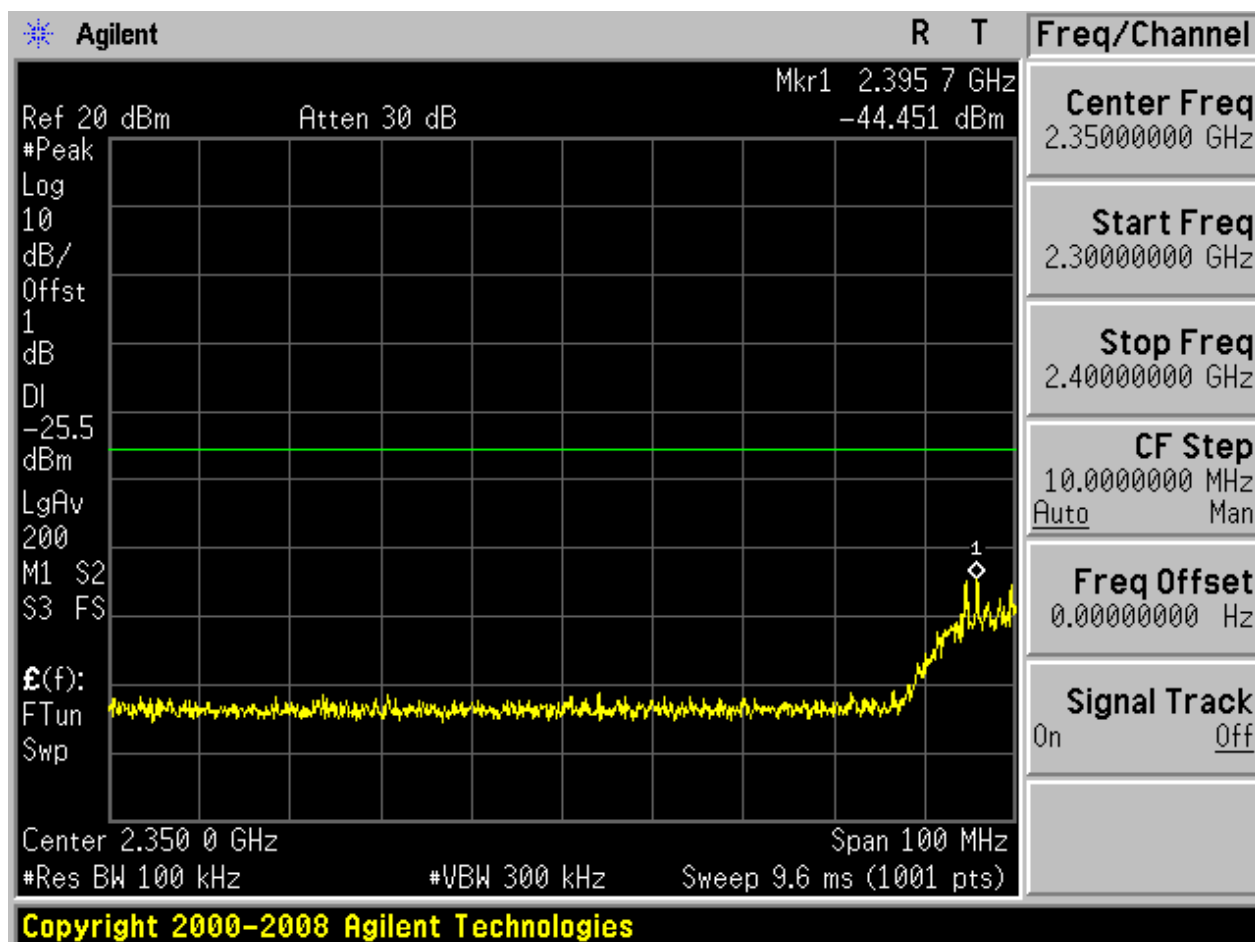


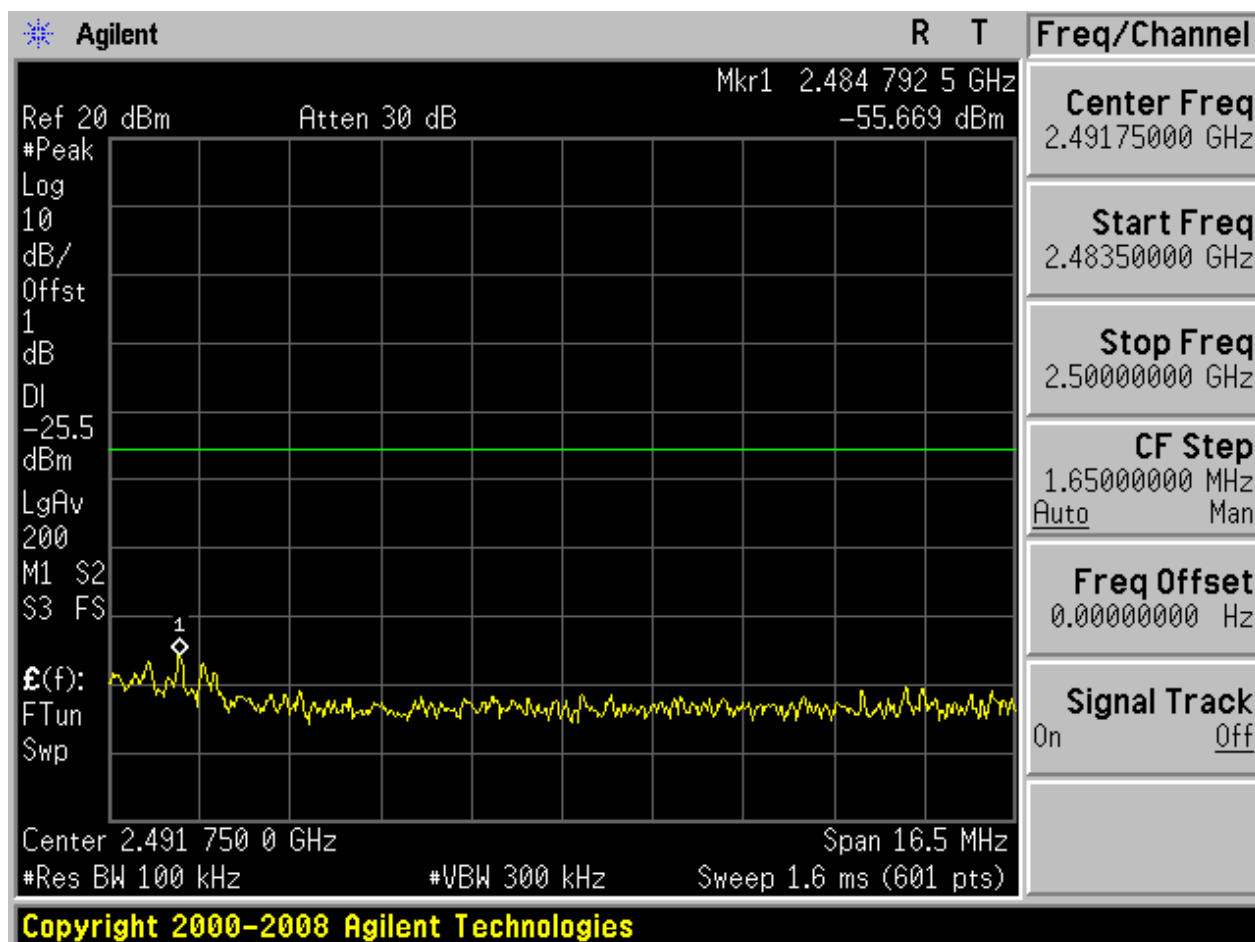
Puw:

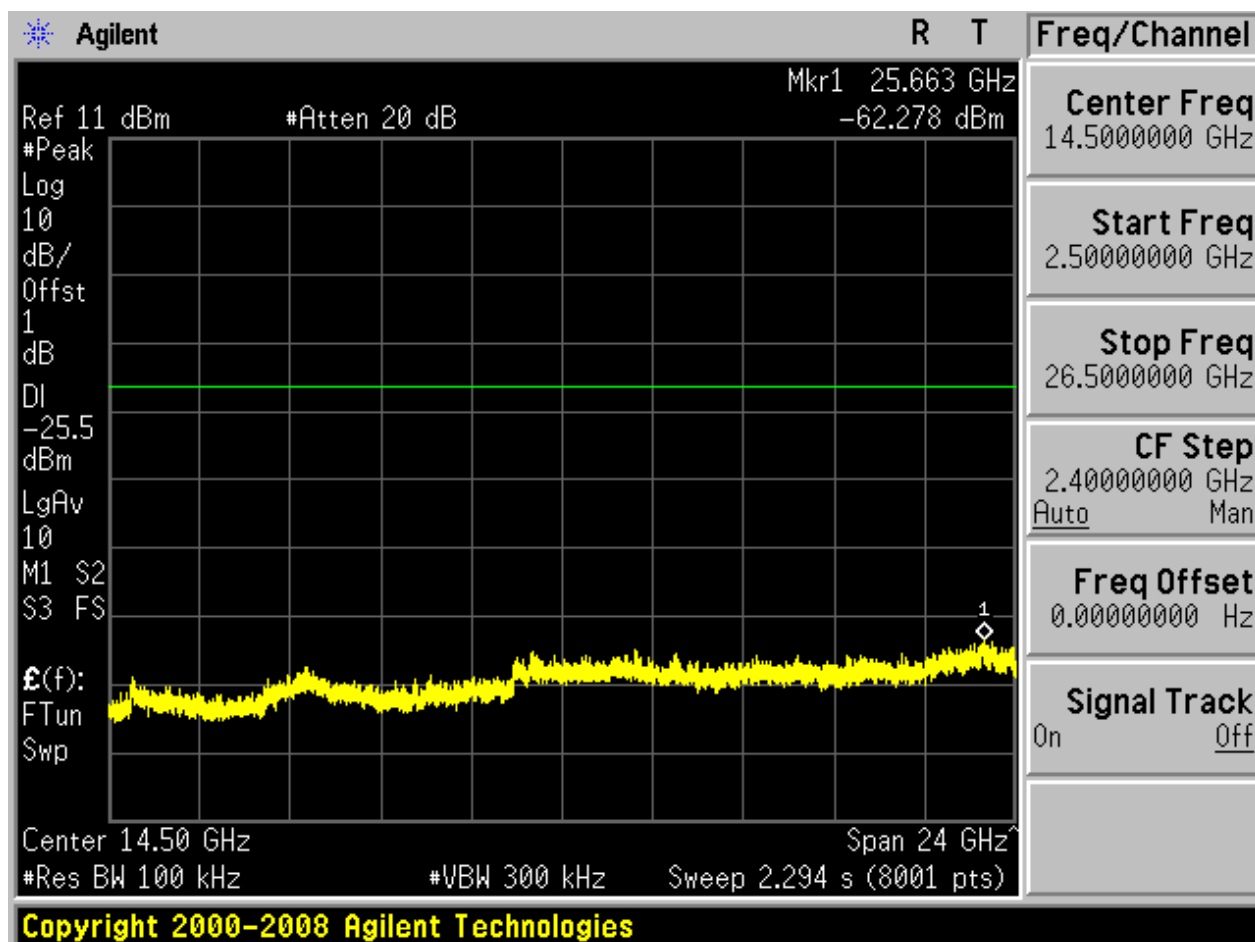






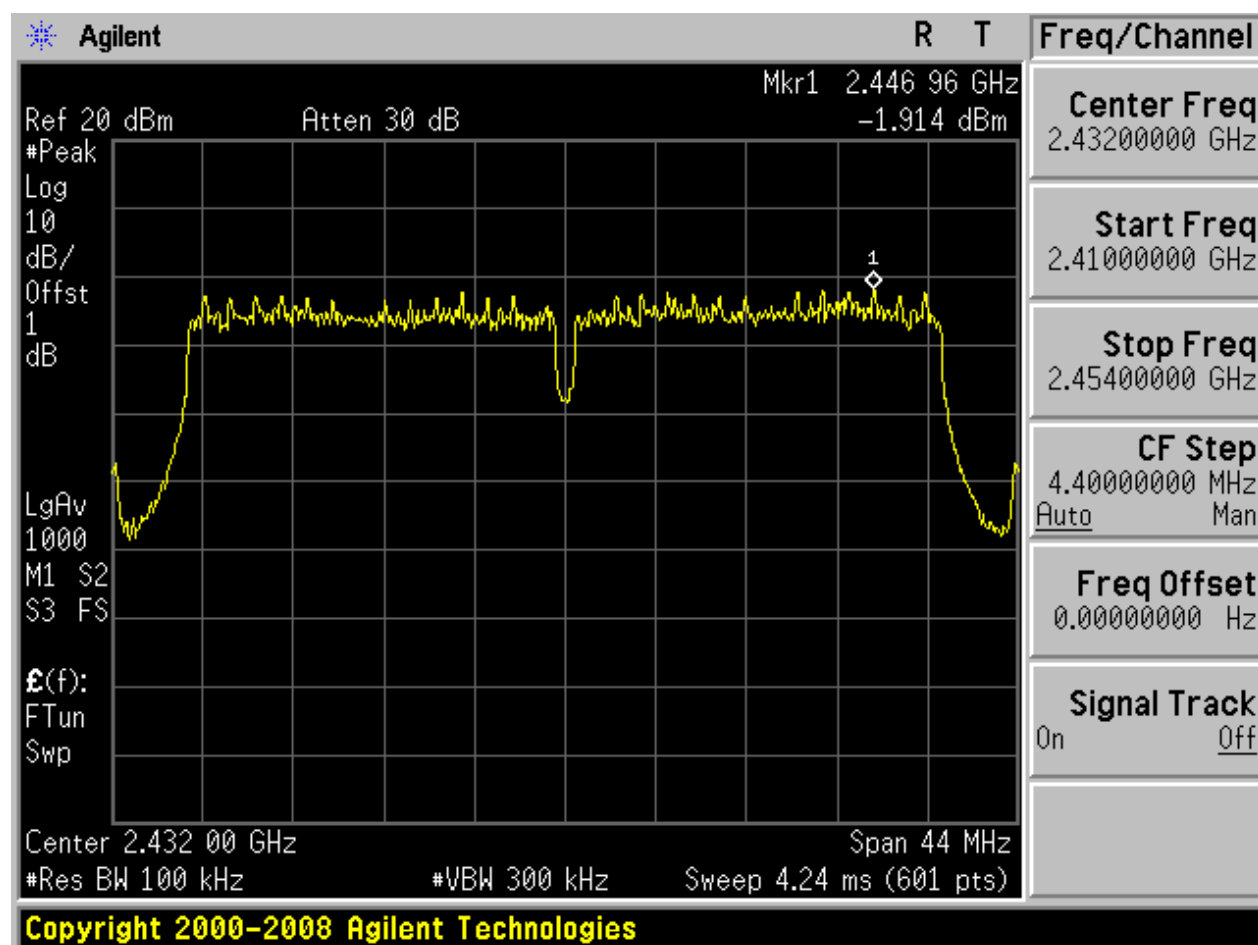






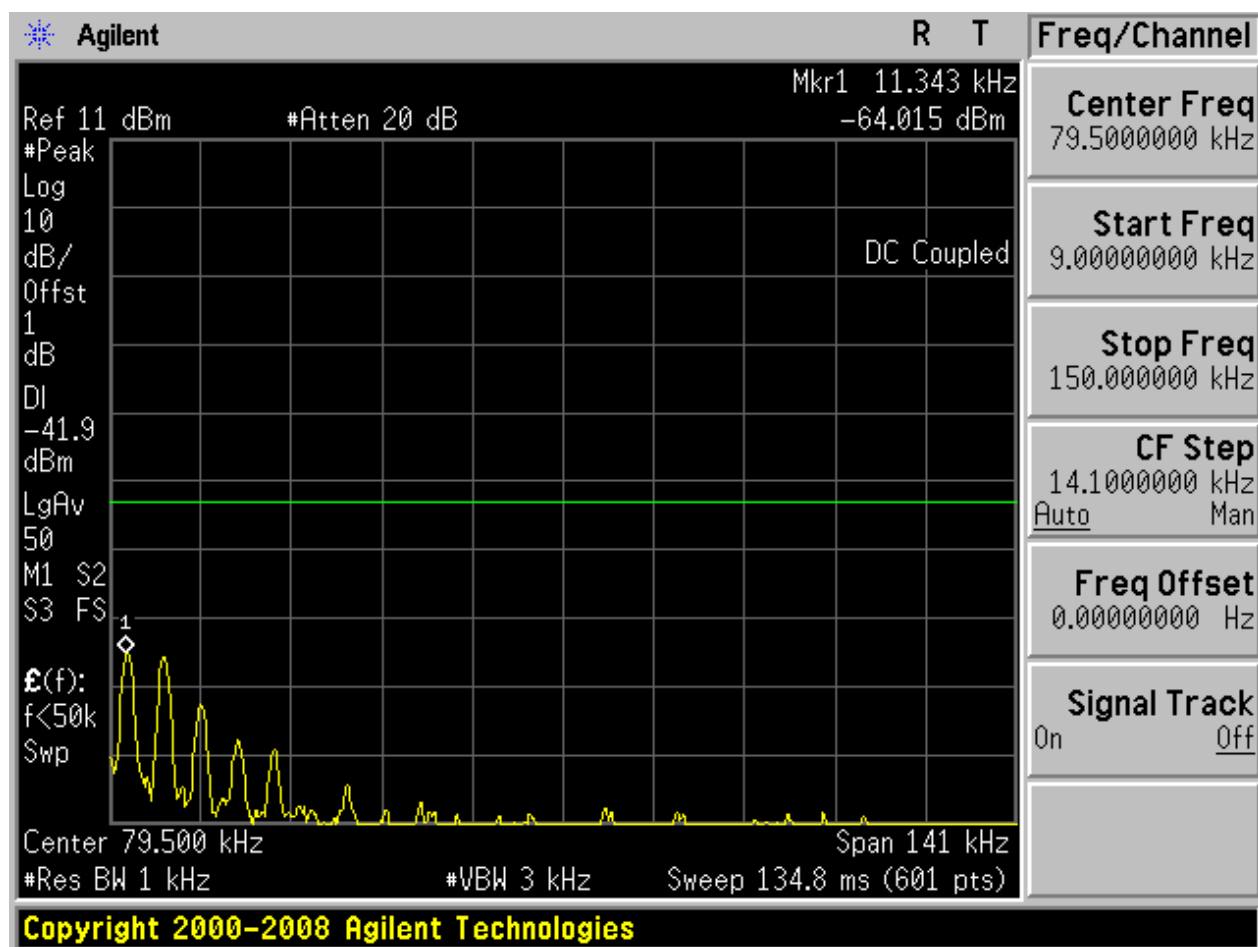
4.33 11N40m_M@Ant 2

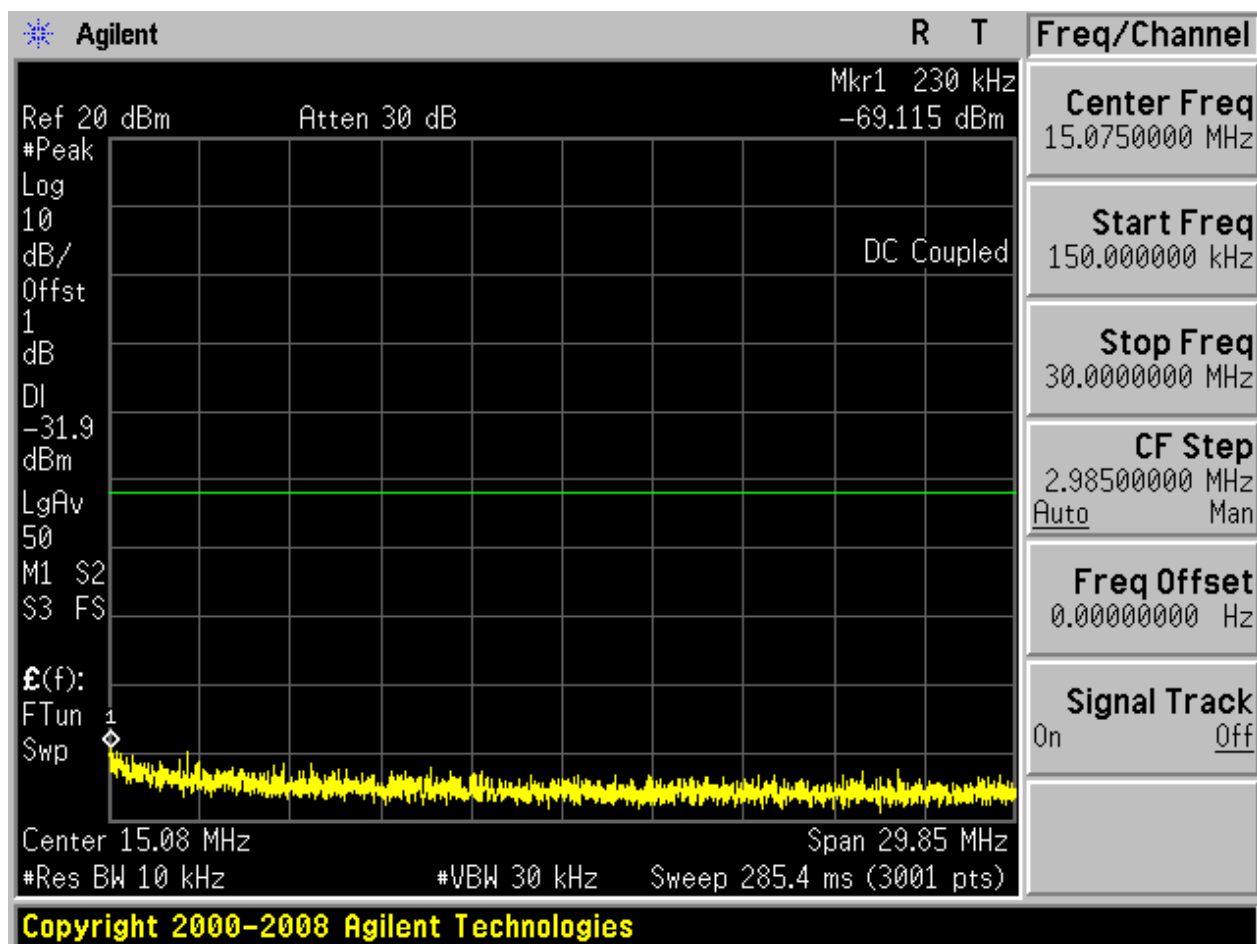
Pref:

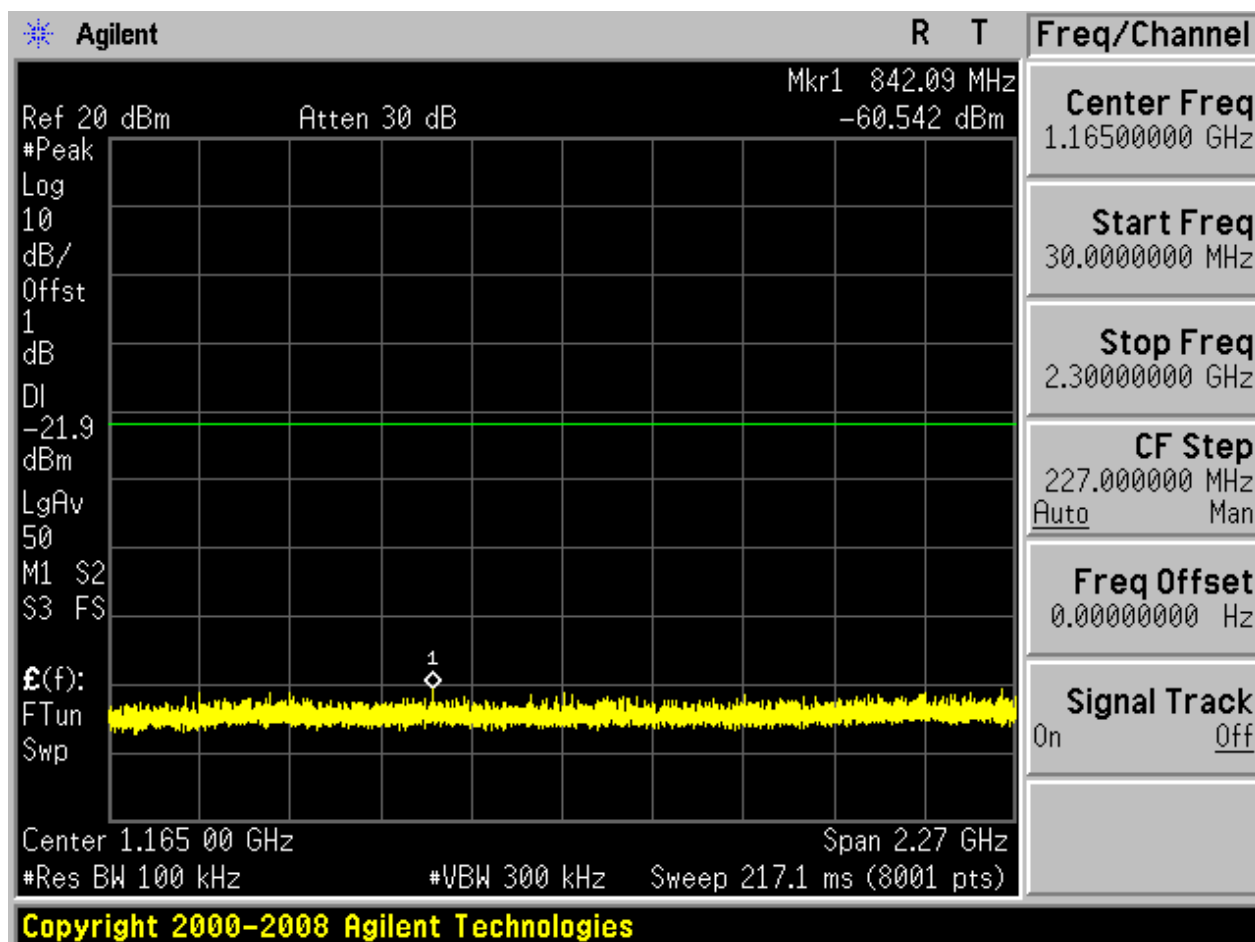


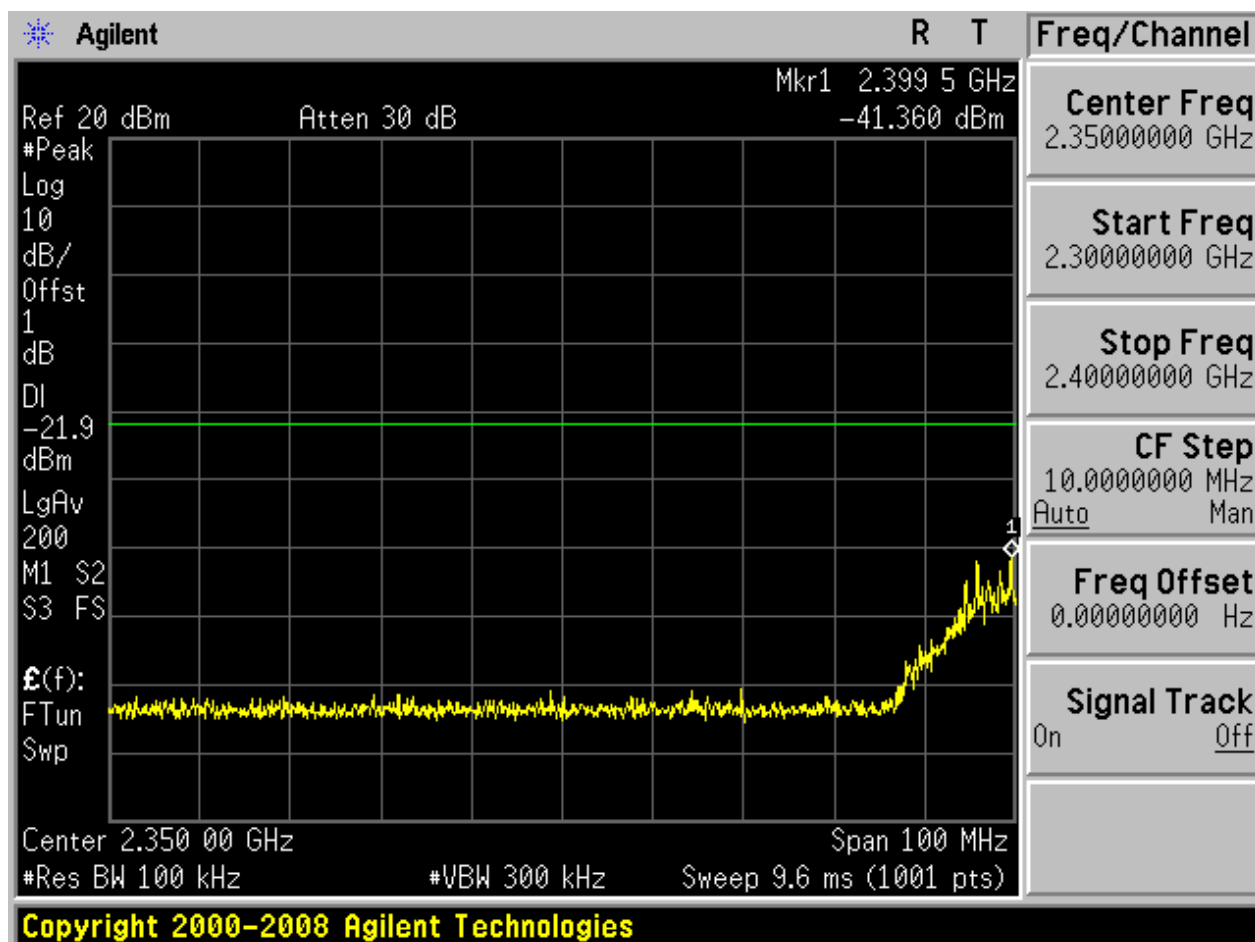


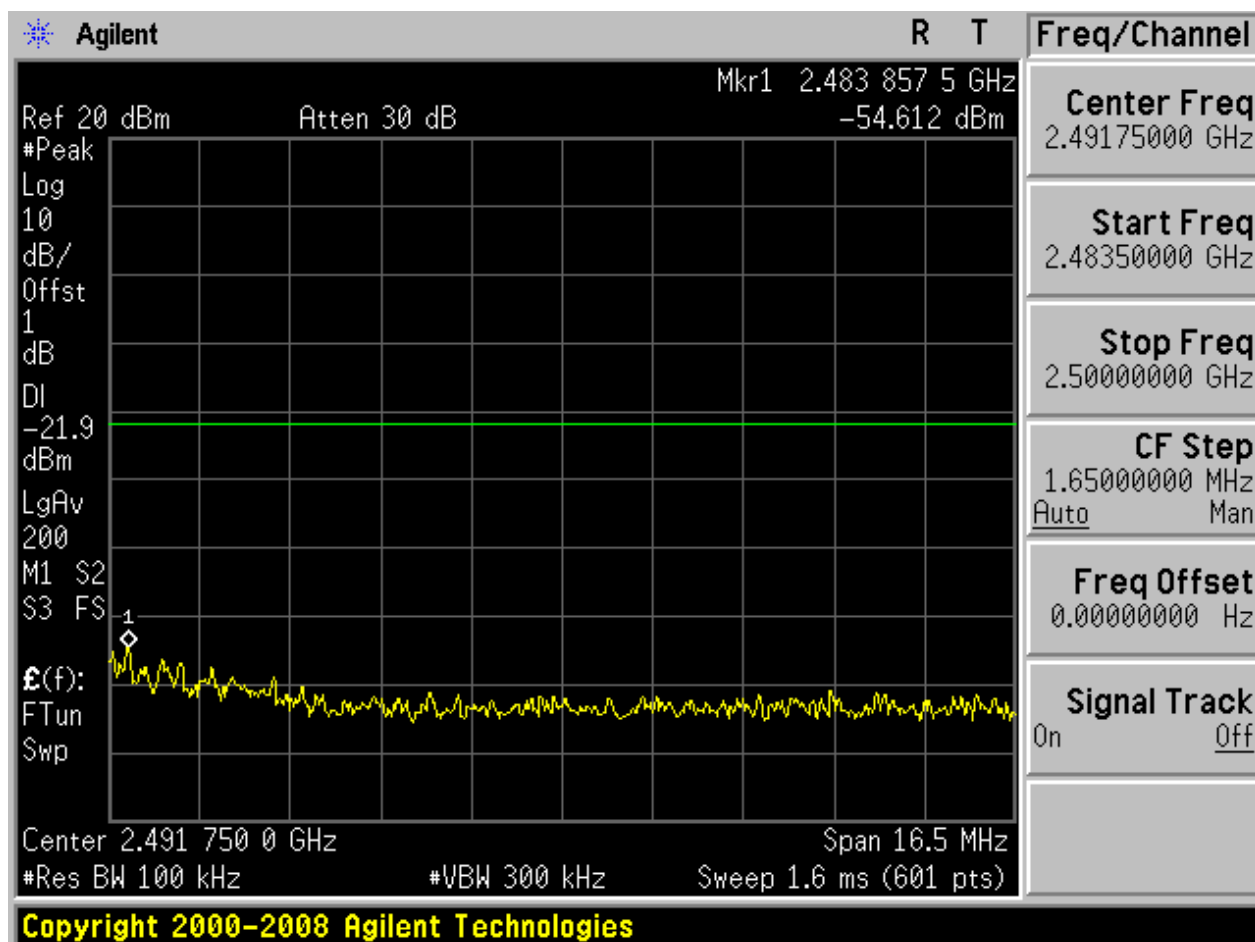
Puw:

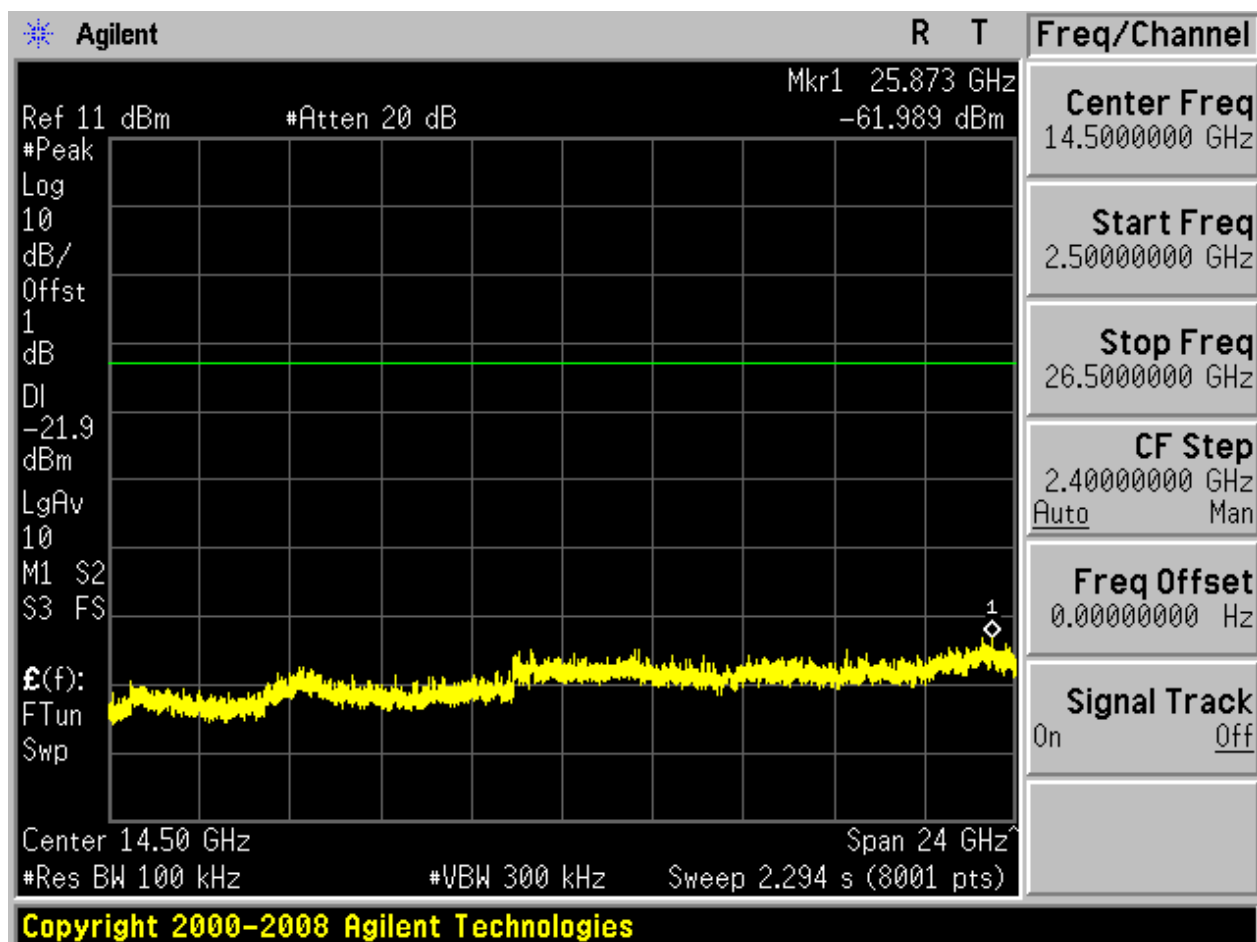






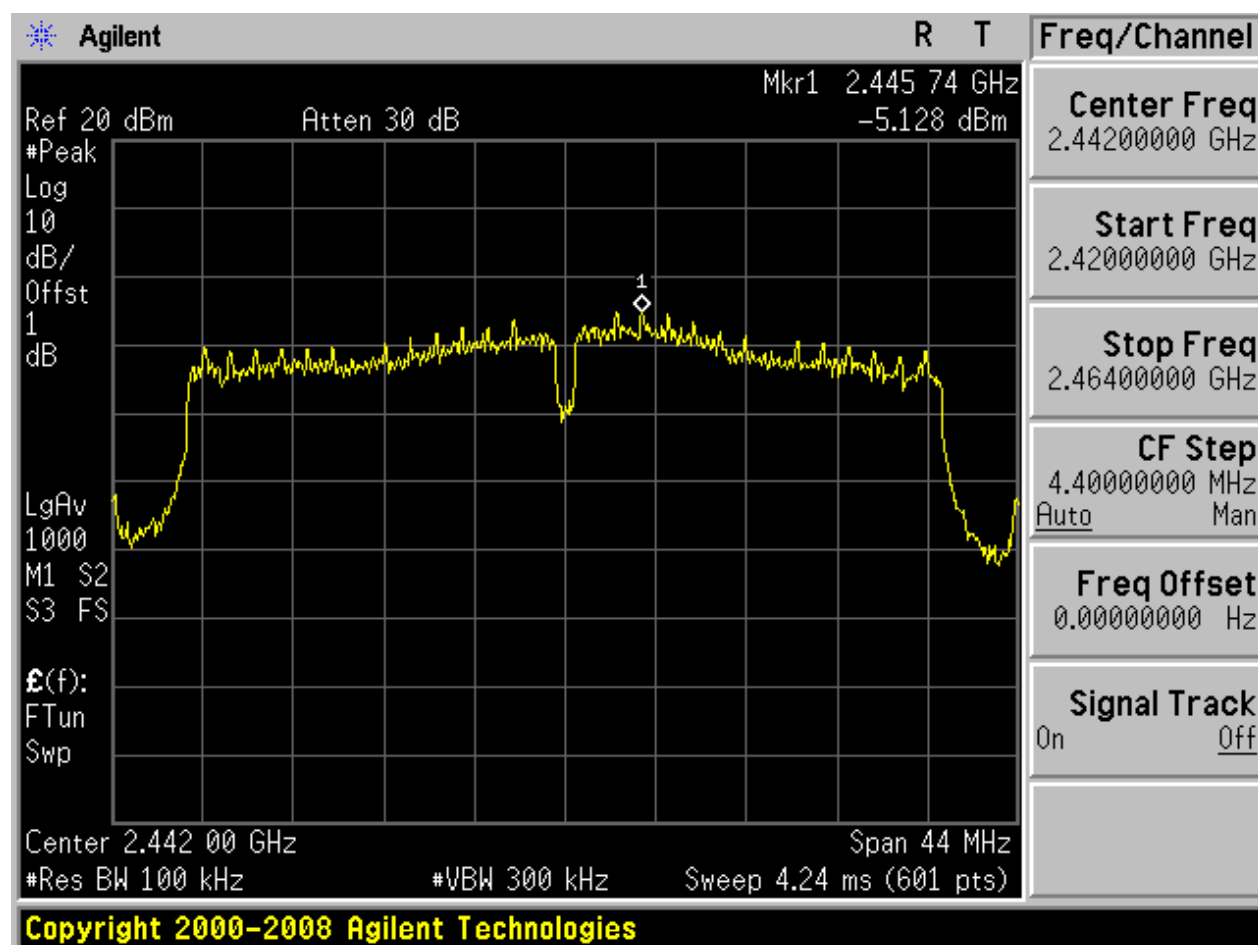






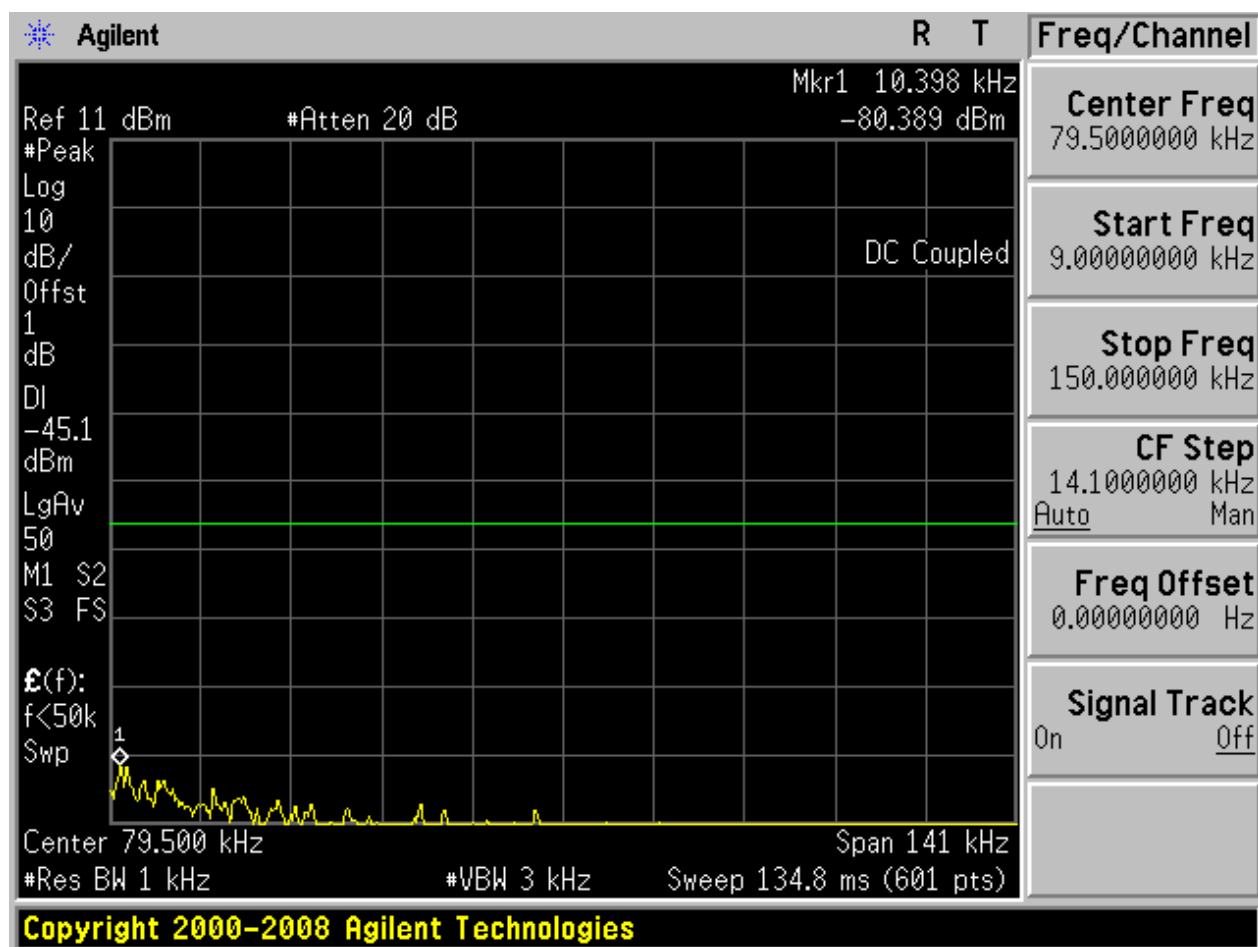
4.35 11N40m_H@Ant 1

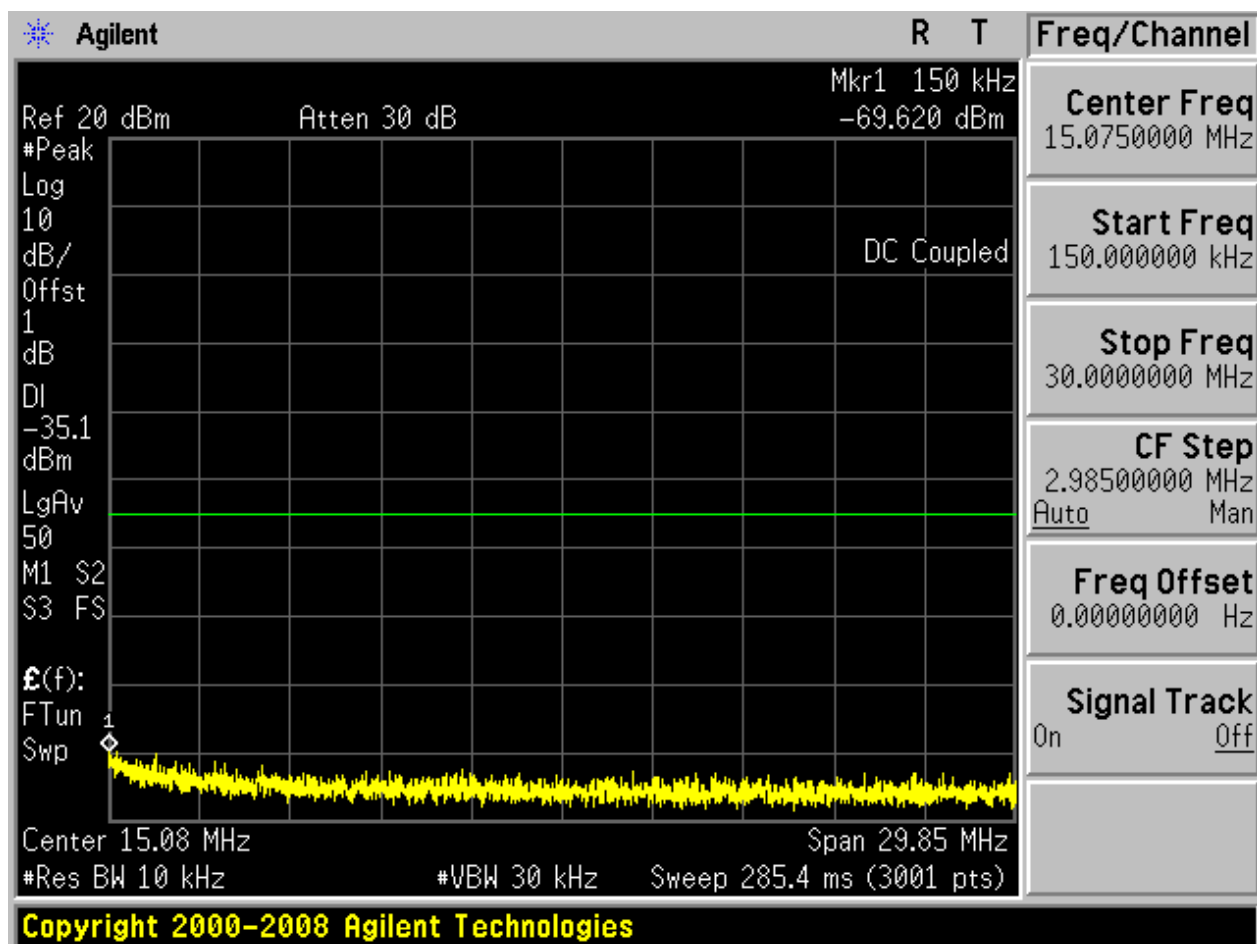
Pref:

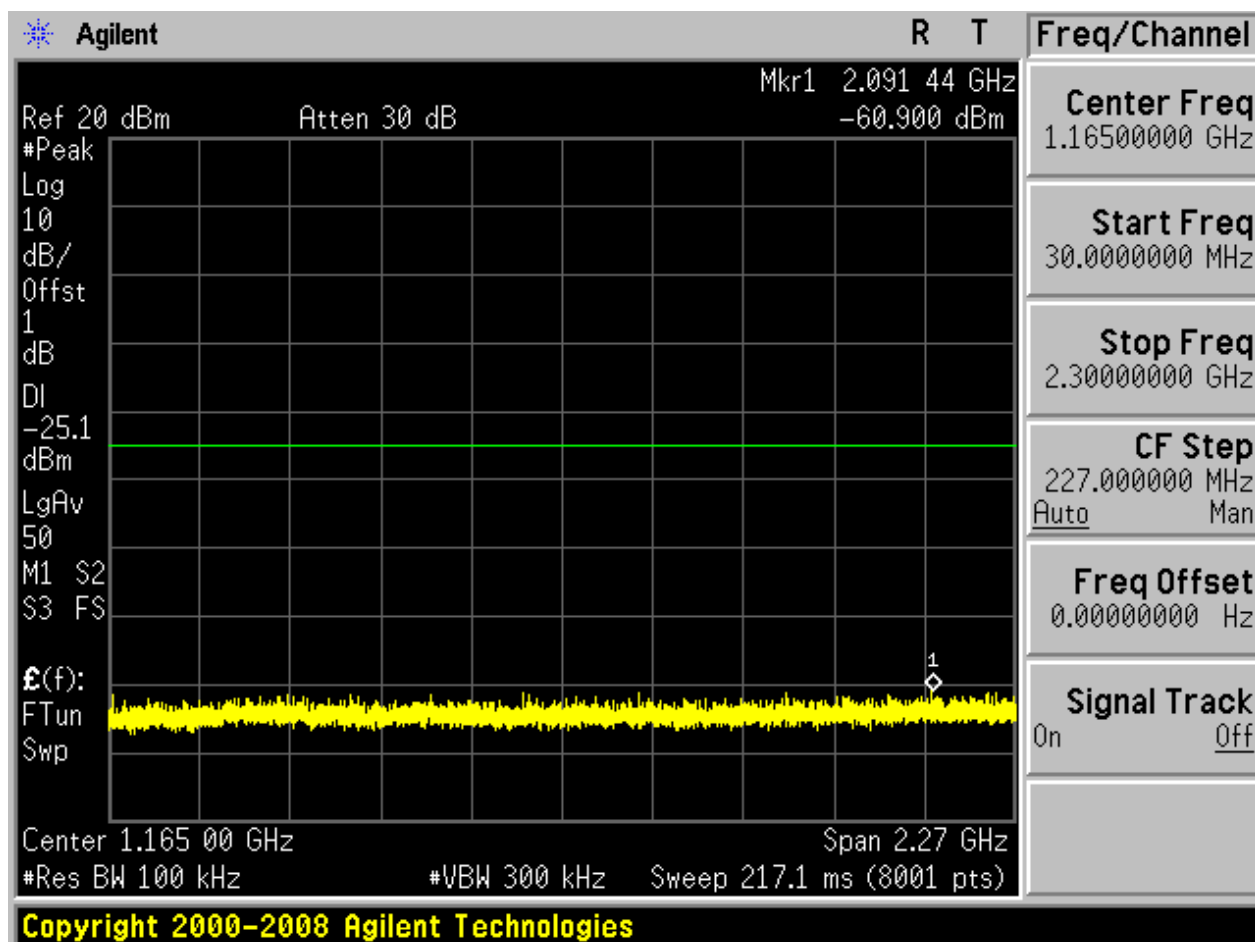


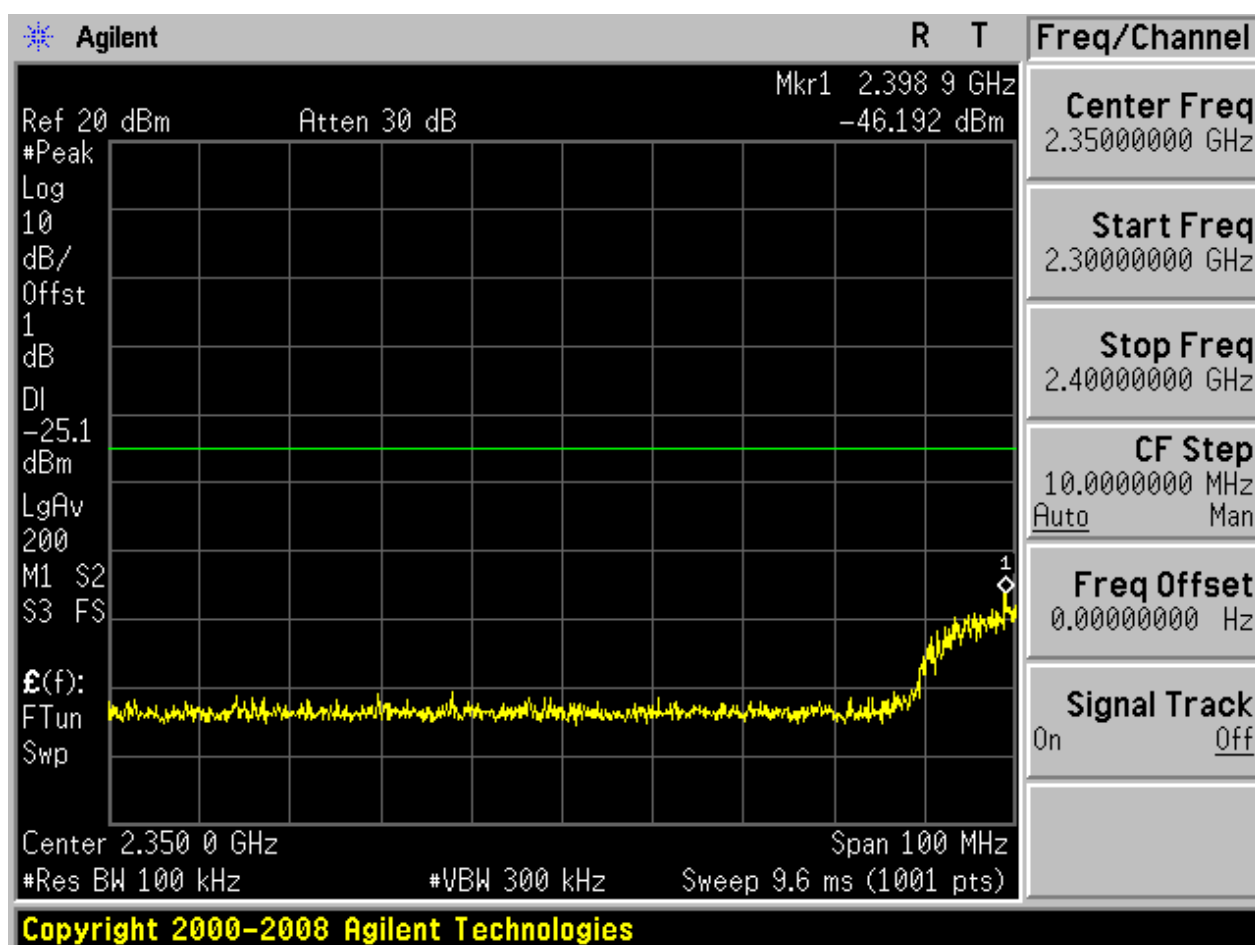


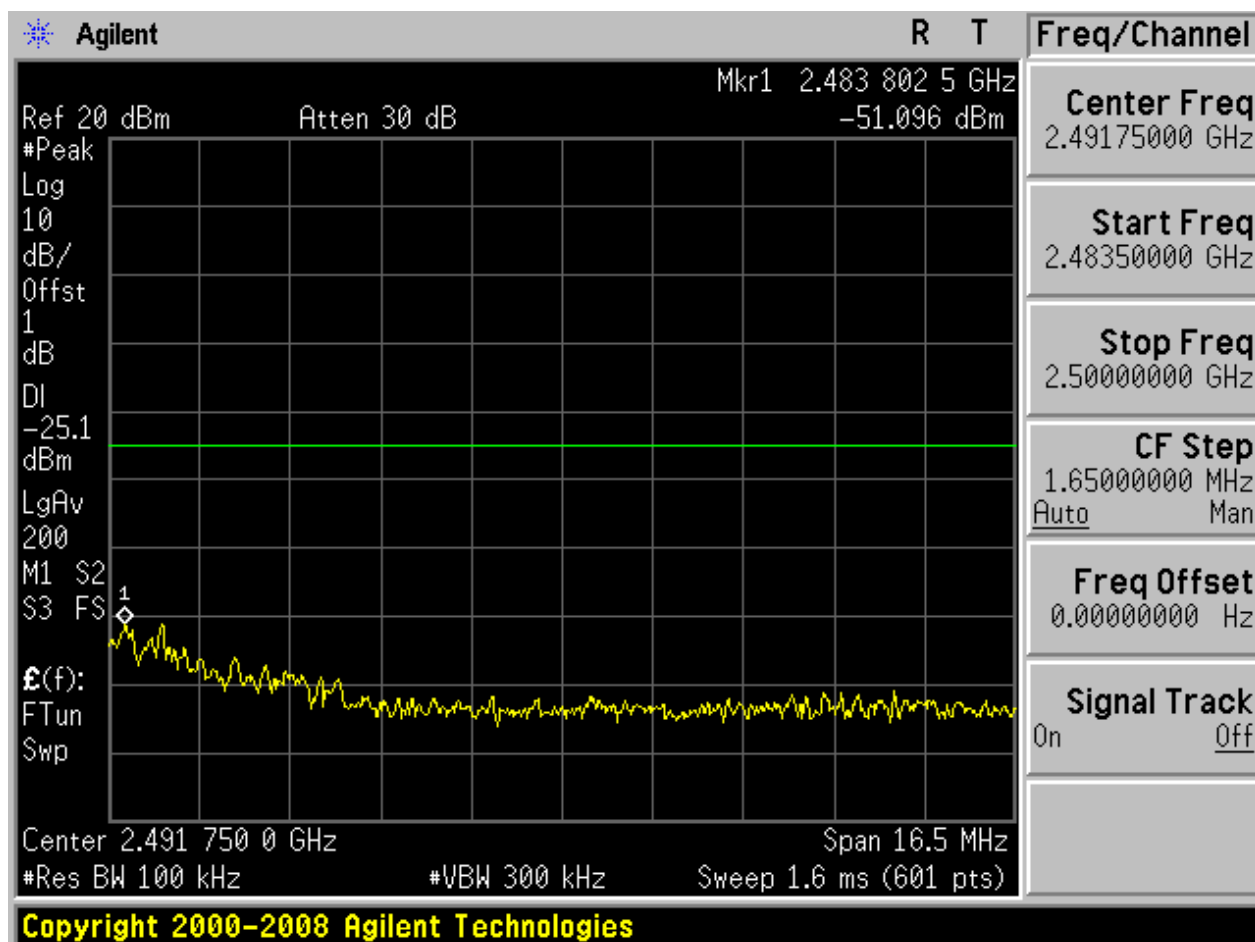
Puw:

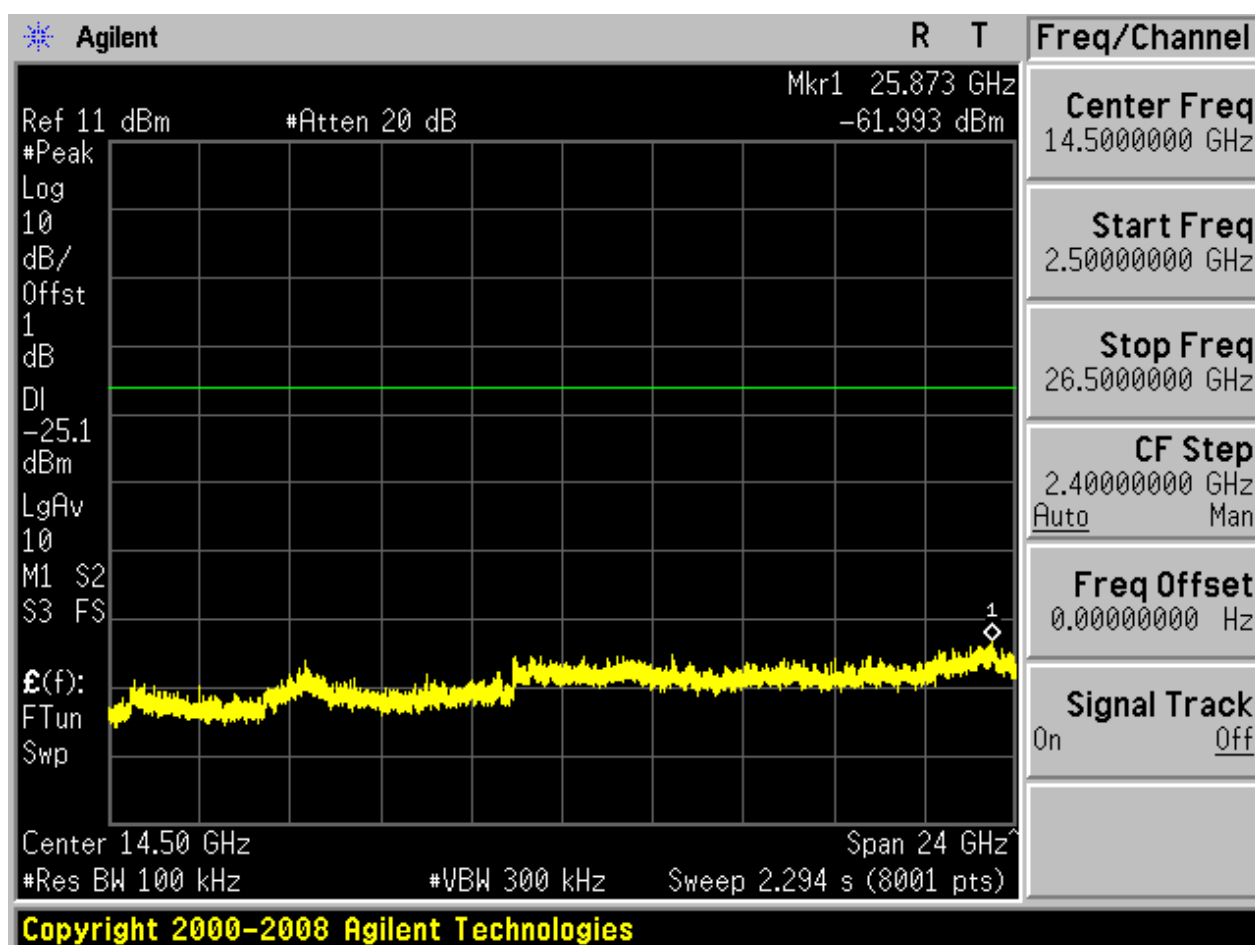








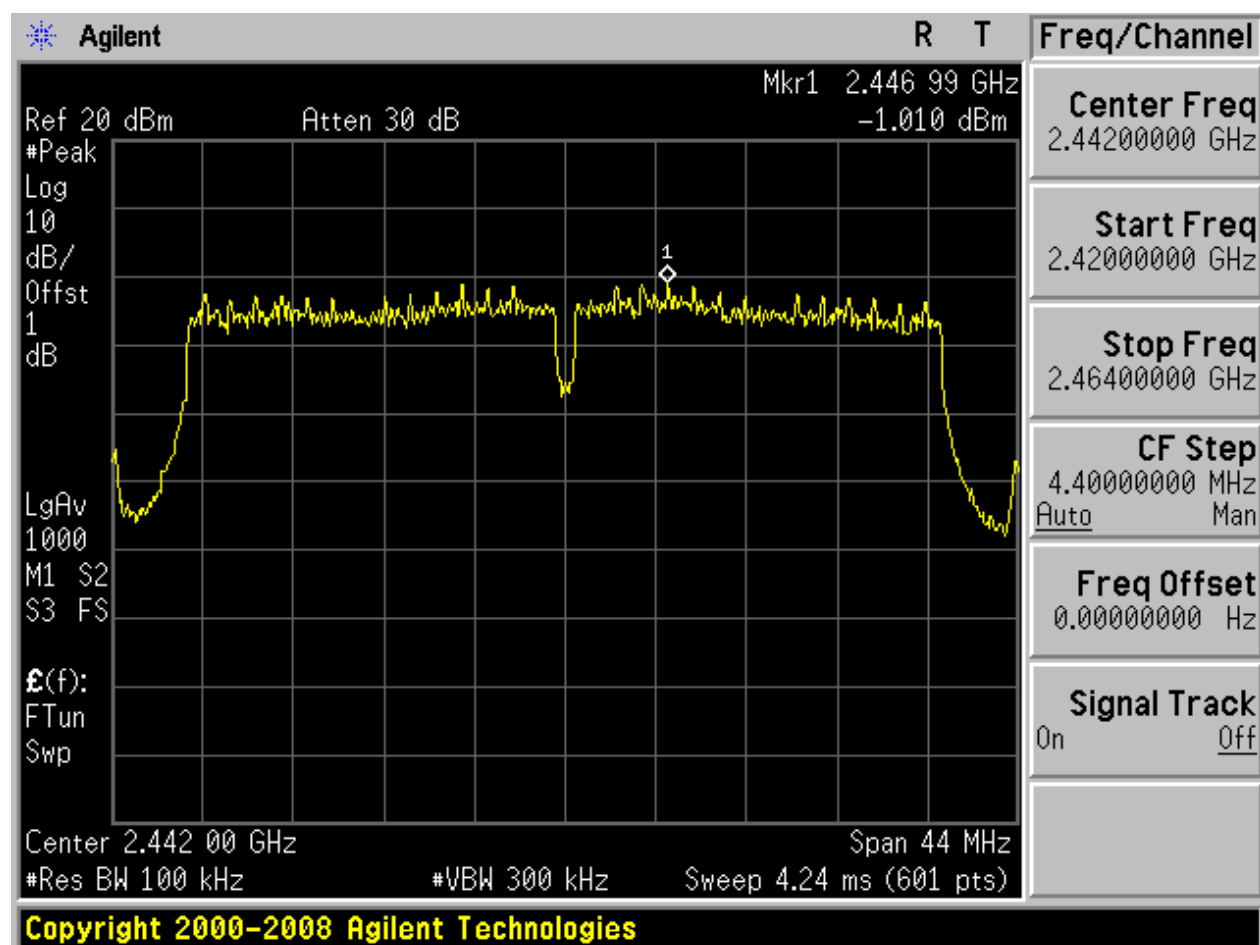






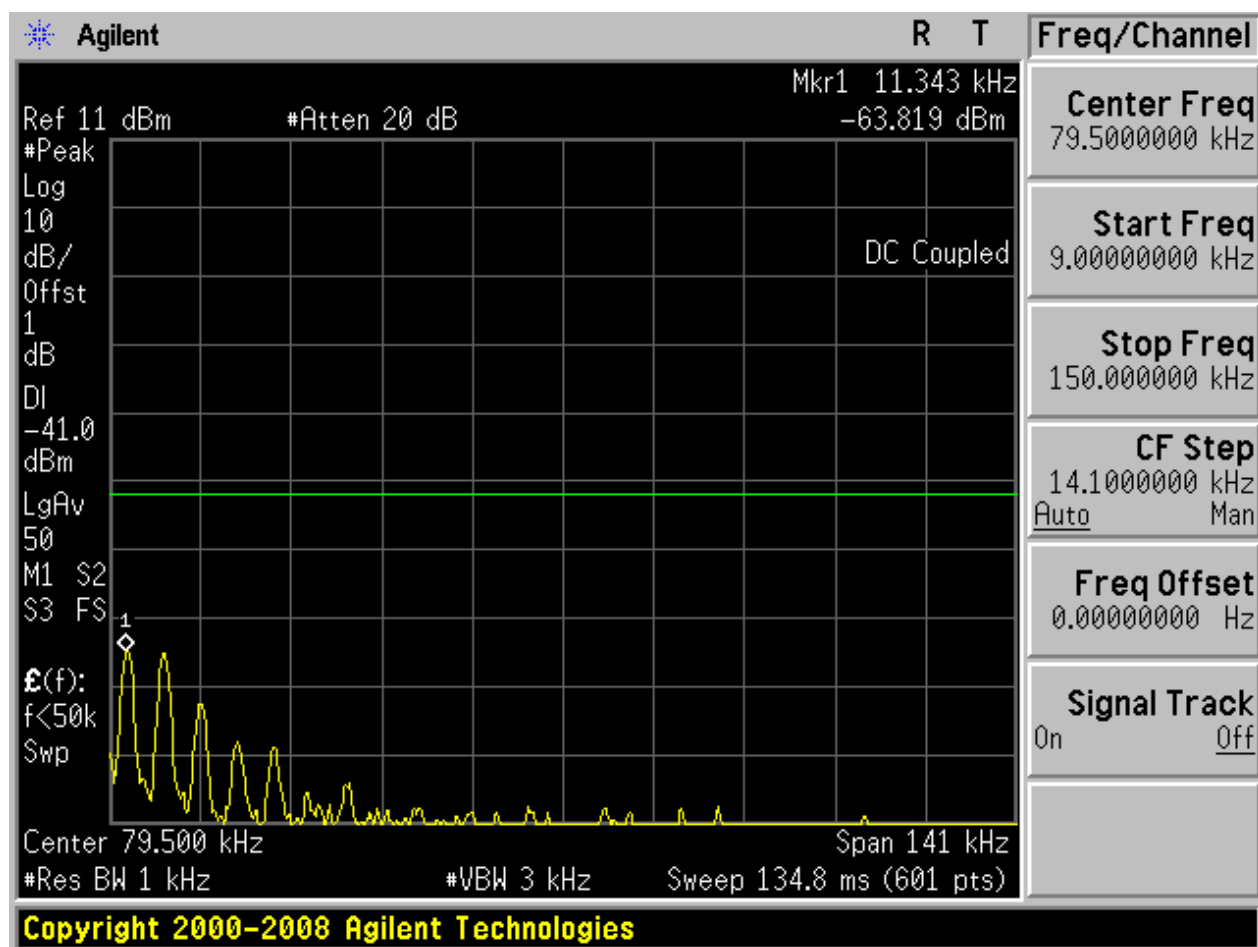
4.36 11N40m_H@Ant 2

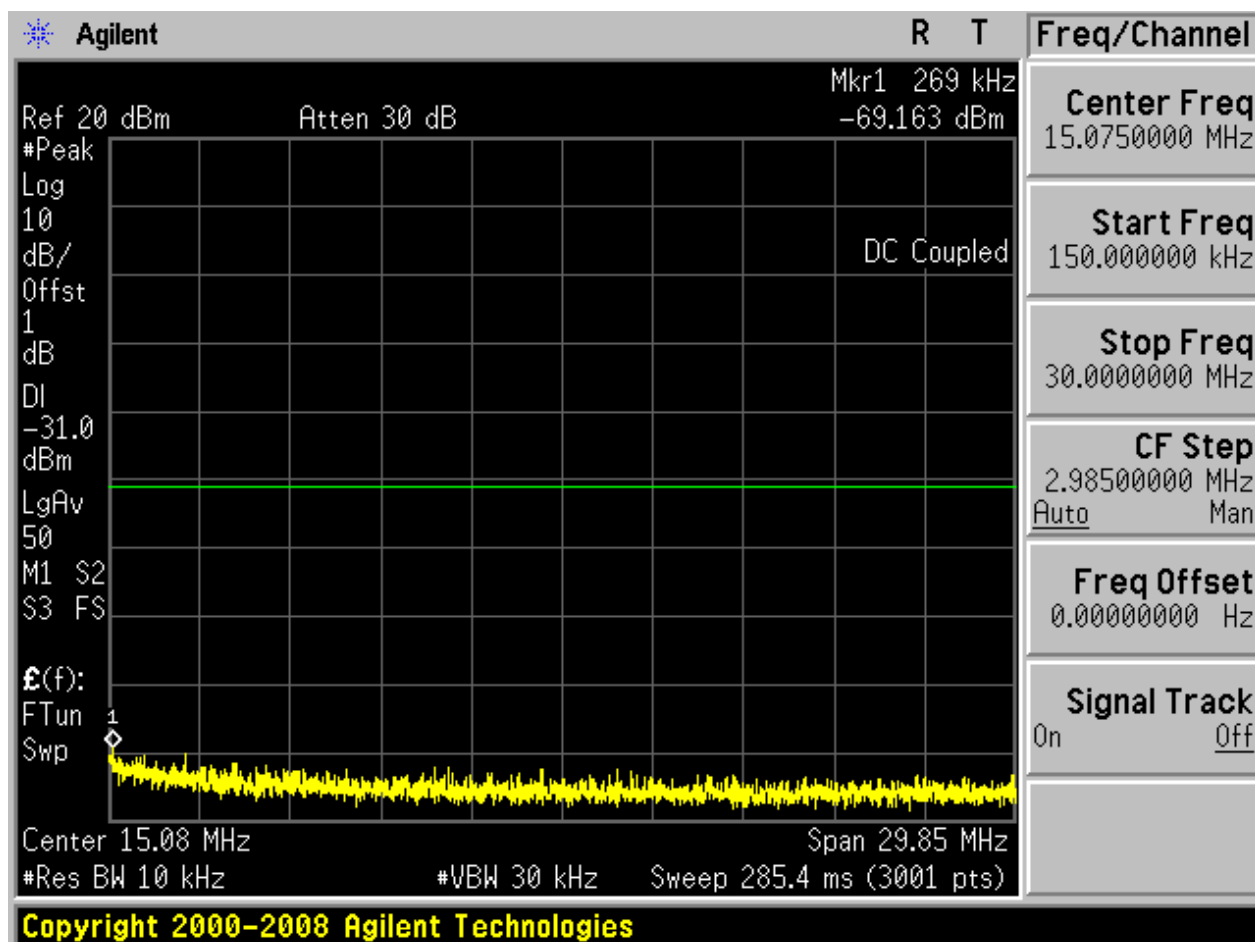
Pref:

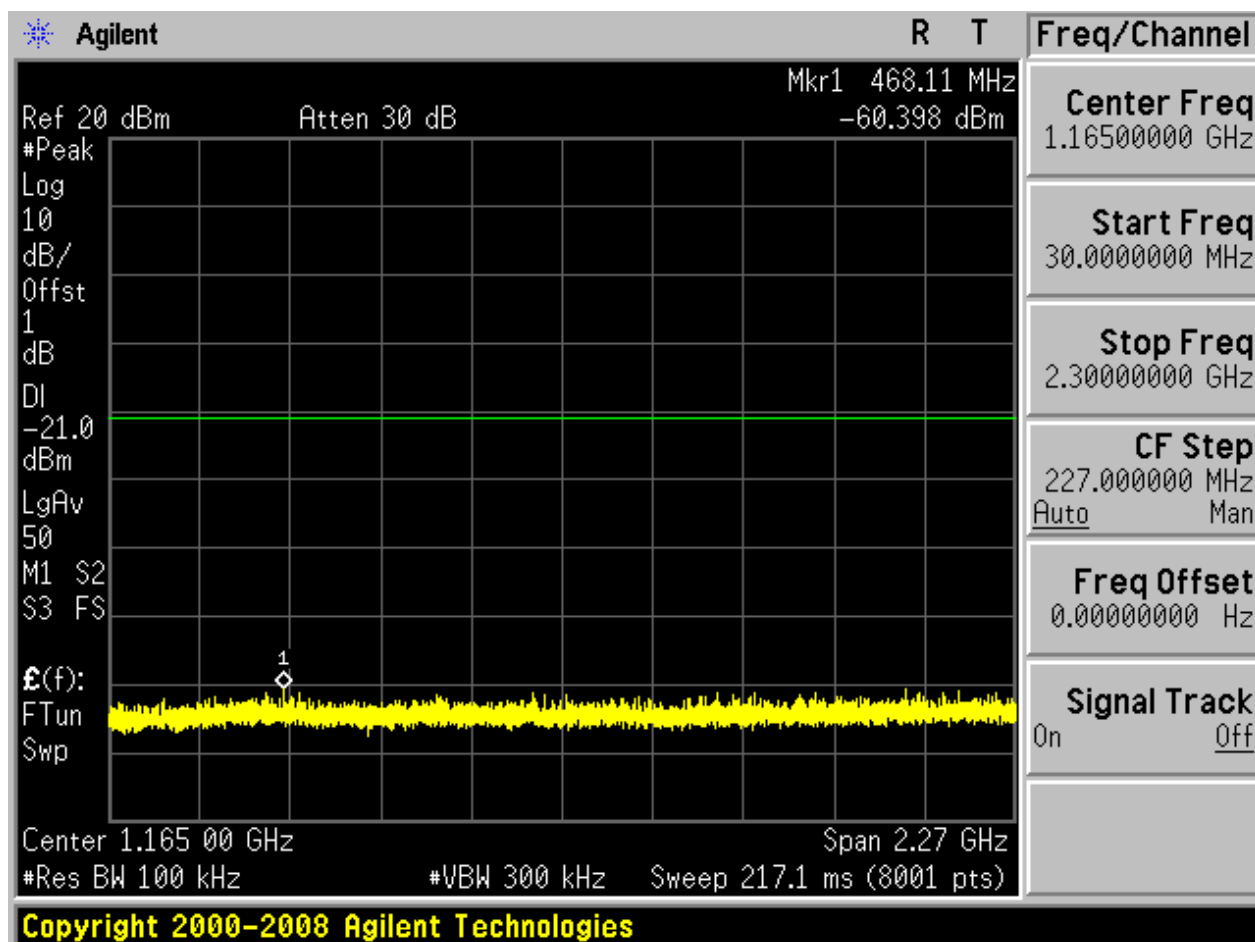


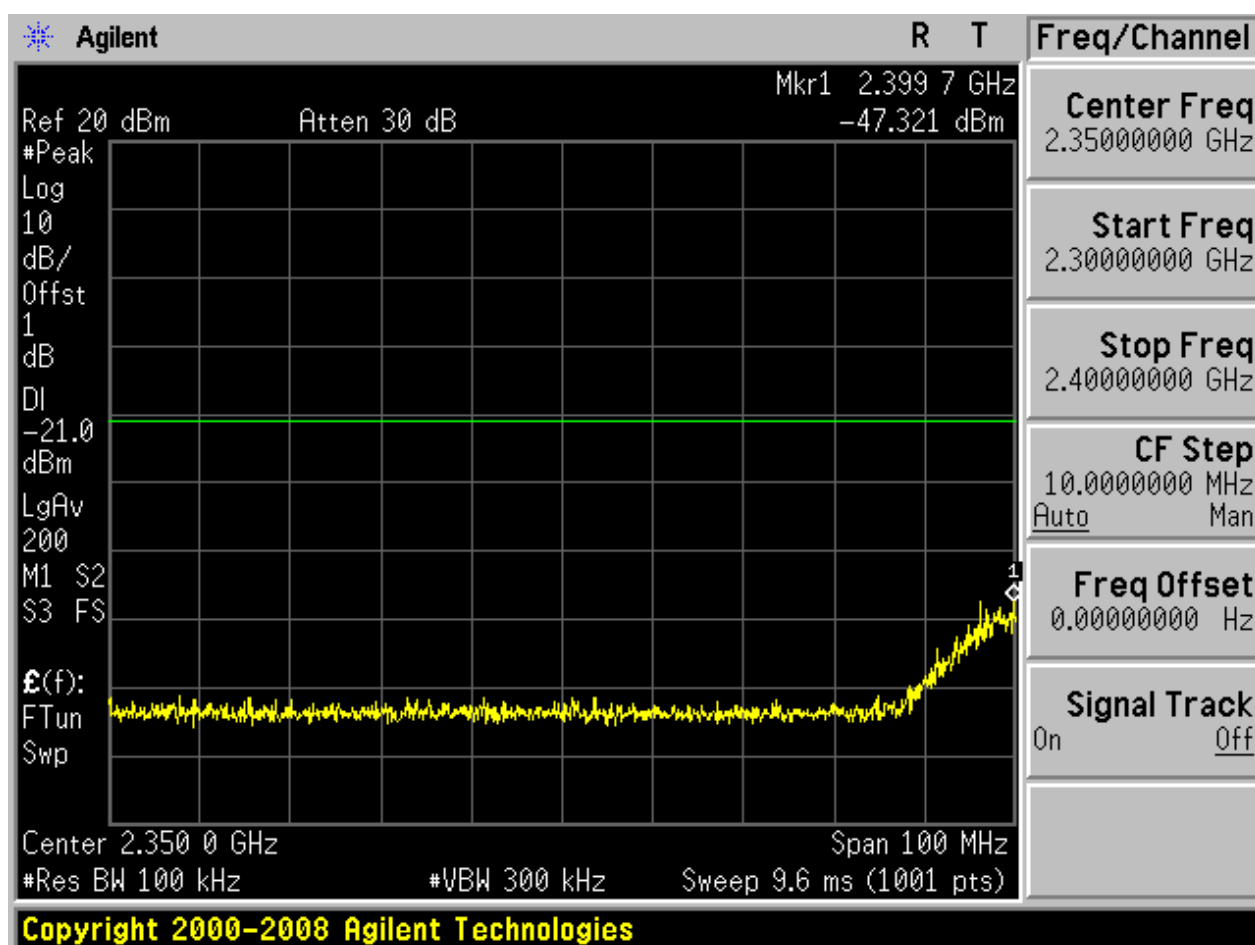


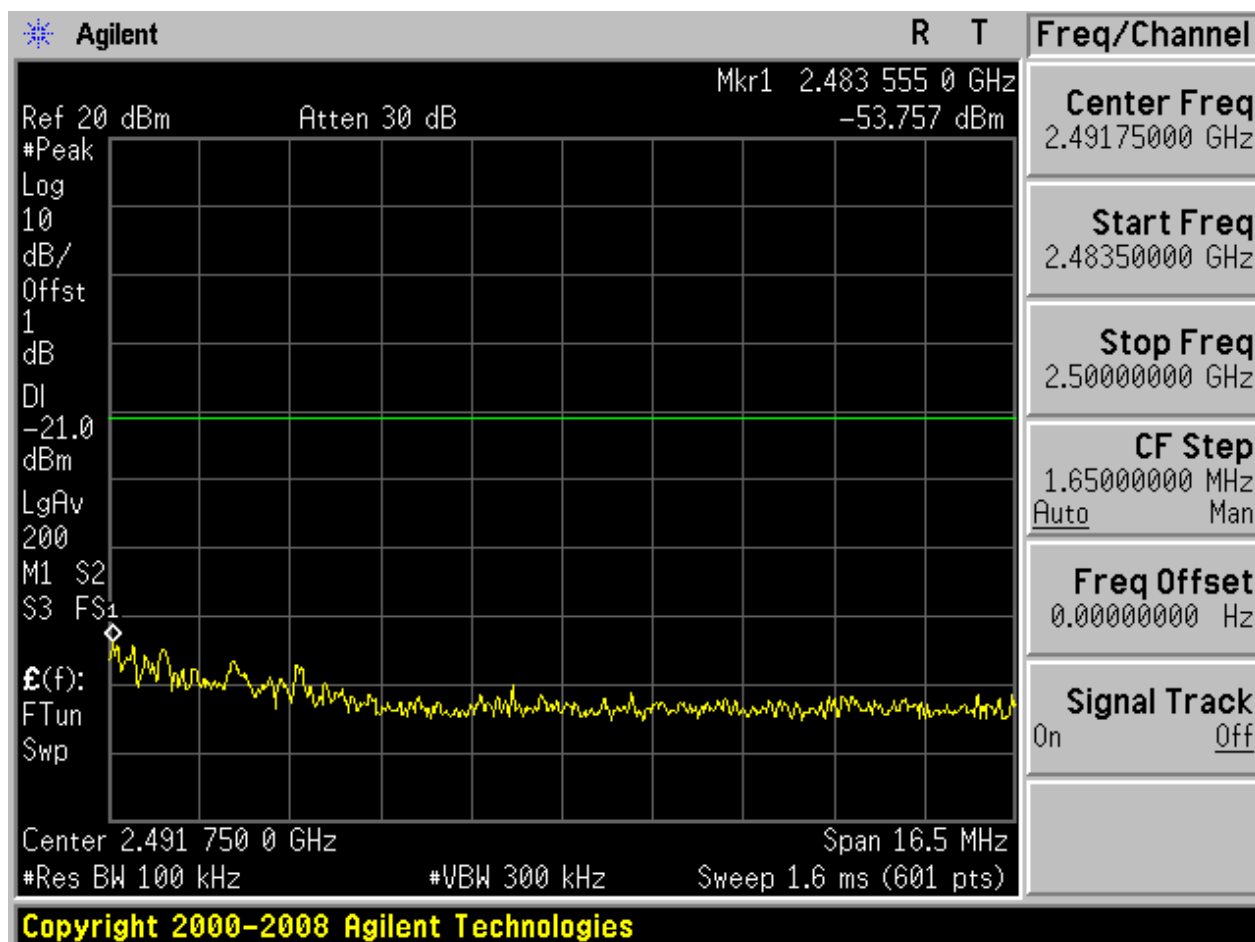
Puw:

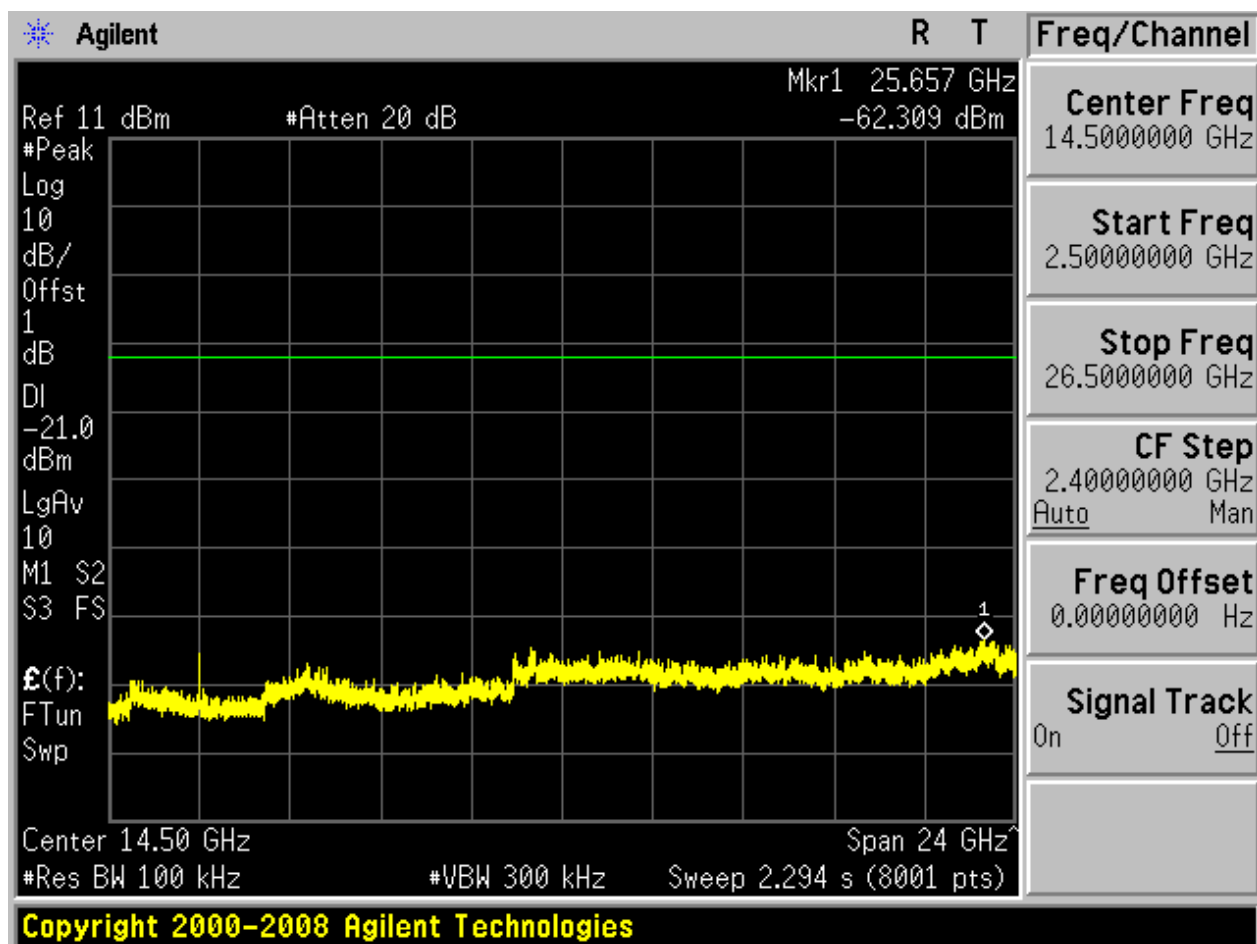










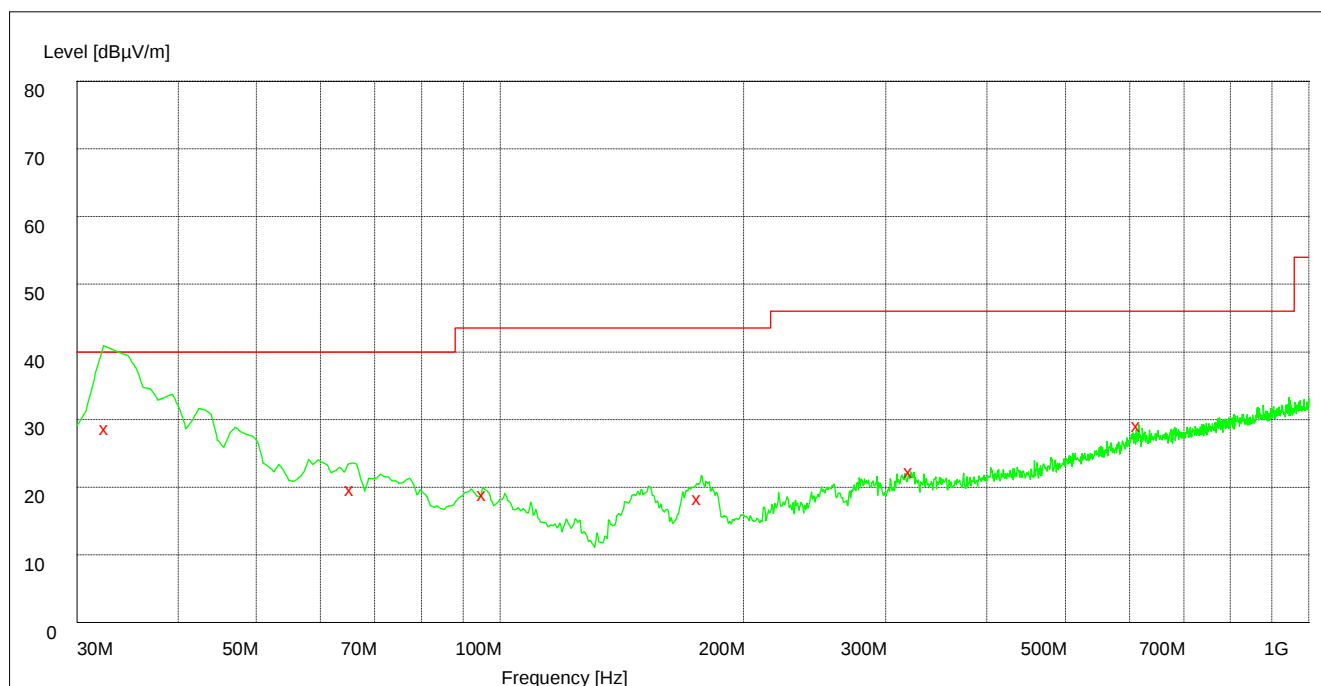


Appendix F

Radiated Spurious Emission & Spurious in Restricted Band (according to FCC Part 15.247(d) & 15.205 & 15.209)

Part 1: Testing Range of “30 MHz to 1 GHz”

- Note 1: The test results and plot for testing range of “30 MHz to 1 GHz” showed as below is the WORST case for all Test Modes and Channels. This range will not be presented for each Test Mode and each Channel.
- Note 2: The emissions in this range are mainly from the Platform Device (Notepad PC and its ancillary components).



MEASUREMENT RESULT: QP Detector

Frequency MHz	Level dBμV/m	Transd dB	Limit dBμV/m	Margin dB	Height cm	Azimuth deg	Polarisation
32.700000	30.10	11.8	40.0	9.9	100.0	0.00	VERTICAL
65.760000	21.00	10.1	40.0	19.0	200.0	52.00	VERTICAL
95.820000	20.30	12.8	43.5	23.2	104.0	34.00	VERTICAL
176.700000	19.70	10.7	43.5	23.8	101.0	334.00	VERTICAL
322.500000	23.70	16.1	46.0	22.3	105.0	339.00	HORIZONTAL
616.380000	30.60	22.8	46.0	15.4	194.0	115.00	VERTICAL

Part 2: Testing Range of “18 GHz to 26.5 GHz”

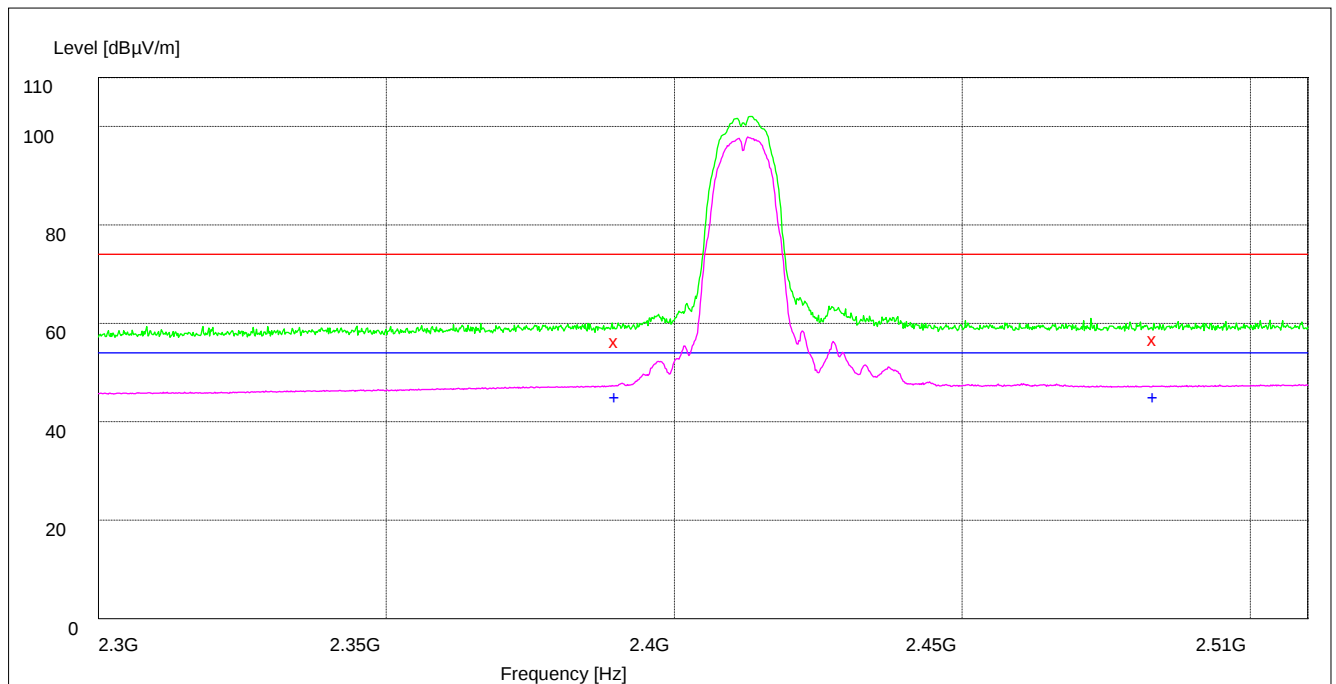
Note: No peak found in pre- test.

Part 3: Testing Range of “2.3GHz to 2.51GHz”

- Note 1: The testing range of “2.3 GHz to 2.51 GHz” is for checking radiated emissions located in restricted bands near the EUT operating bands.
- Note 2: Two limits are required in the testing range above 1 GHz, that is Peak limit (74 dB μ V/m) and Average Limit (54 dB μ V/m).
- Note 3: The peak spike exceeds the limit line is EUT’s operating frequency.

Test Mode: 11B/ Antenna 1

Channel 01



Note: The peak exceeds the limit line is carrier frequency.

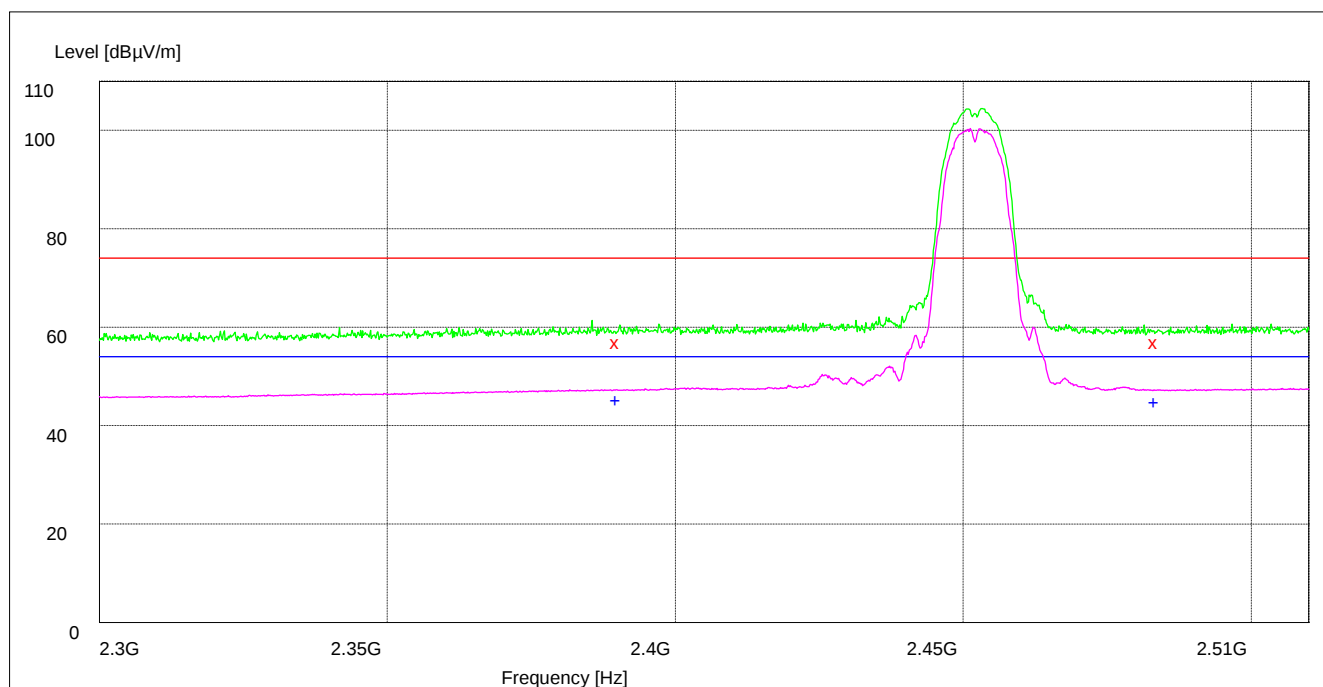
MEASUREMENT RESULT: PK Detector

Frequency MHz	Level dB μ V/m	Transd dB	Limit dB μ V/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	58.40	34.8	74.0	15.6	150.0	148.00	VERTICAL
2483.500000	58.70	35.1	74.0	15.3	150.0	244.00	HORIZONTAL

MEASUREMENT RESULT: AV Detector

Frequency MHz	Level dB μ V/m	Transd dB	Limit dB μ V/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	46.90	34.8	54.0	7.1	100.0	171.00	VERTICAL
2483.500000	46.80	35.1	54.0	7.2	100.0	142.00	VERTICAL

Channel 09



Note: The peak exceeds the limit line is carrier frequency.

MEASUREMENT RESULT: PK Detector

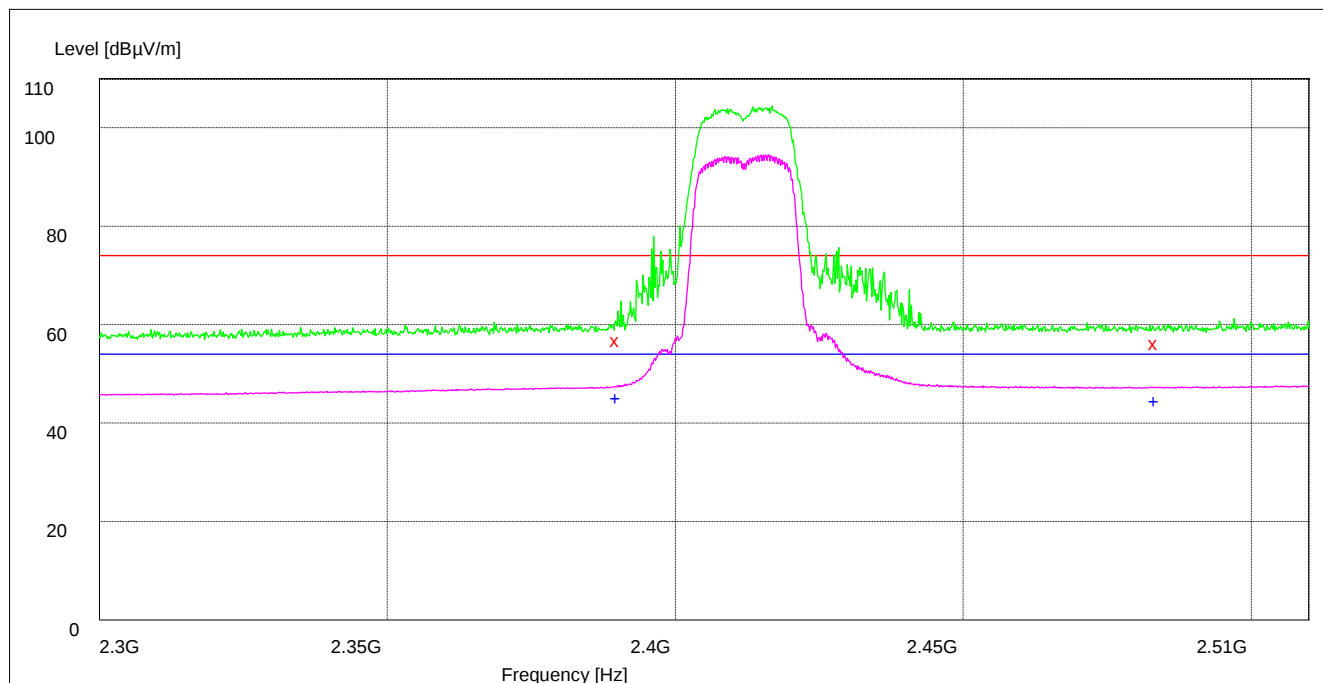
Frequency MHz	Level dBμV/m	Transd dB	Limit dBμV/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	58.80	34.8	74.0	15.2	100.0	264.00	VERTICAL
2483.500000	58.70	35.1	74.0	15.3	100.0	312.00	VERTICAL

MEASUREMENT RESULT: AV Detector

Frequency MHz	Level dBμV/m	Transd dB	Limit dBμV/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	46.90	34.8	54.0	7.1	145.0	8.00	VERTICAL
2483.500000	46.70	35.1	54.0	7.3	150.0	167.00	HORIZONTAL

Test Mode: 11G/ Antenna 1

Channel 01



Note: The peak exceeds the limit line is carrier frequency.

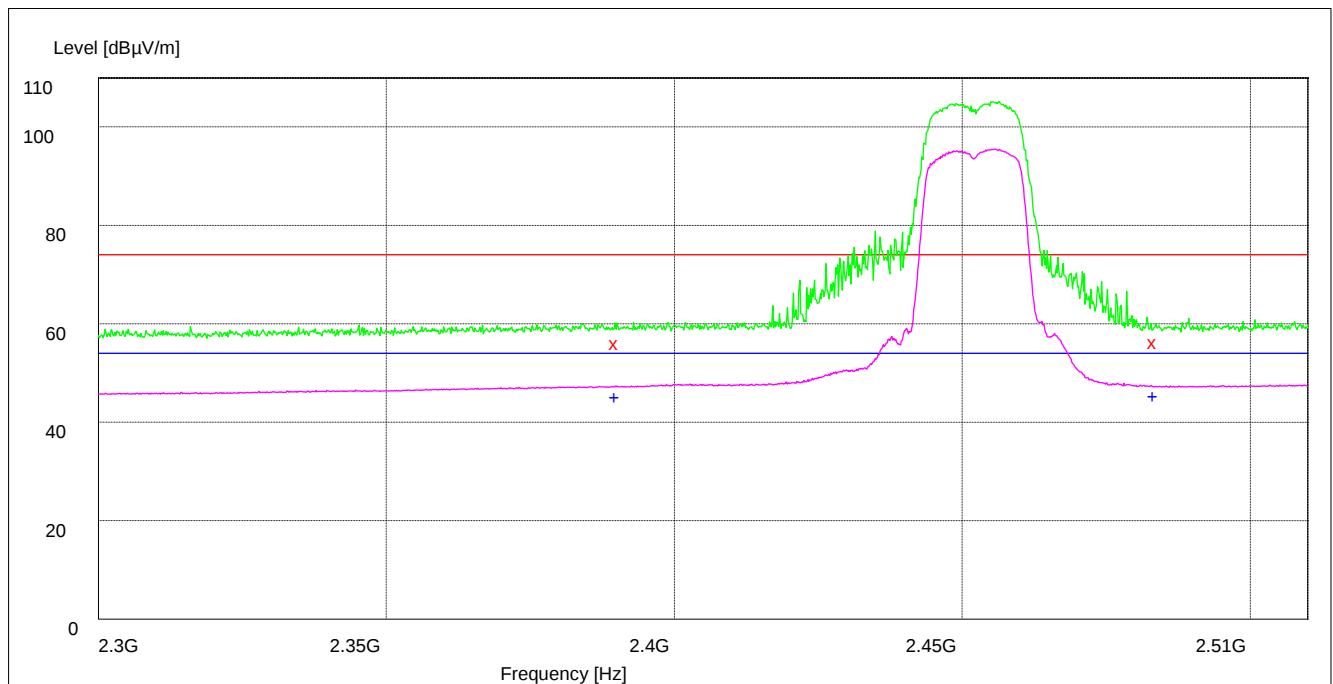
MEASUREMENT RESULT: PK Detector

Frequency MHz	Level dBμV/m	Transd dB	Limit dBμV/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	58.60	34.8	74.0	15.4	100.0	176.00	VERTICAL
2483.500000	58.00	35.1	74.0	16.0	129.0	44.00	HORIZONTAL

MEASUREMENT RESULT: AV Detector

Frequency MHz	Level dBμV/m	Transd dB	Limit dBμV/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	46.90	34.8	54.0	7.1	100.0	312.00	VERTICAL
2483.500000	46.50	35.1	54.0	7.5	110.0	0.00	HORIZONTAL

Channel 09



Note: The peak exceeds the limit line is carrier frequency.

MEASUREMENT RESULT: PK Detector

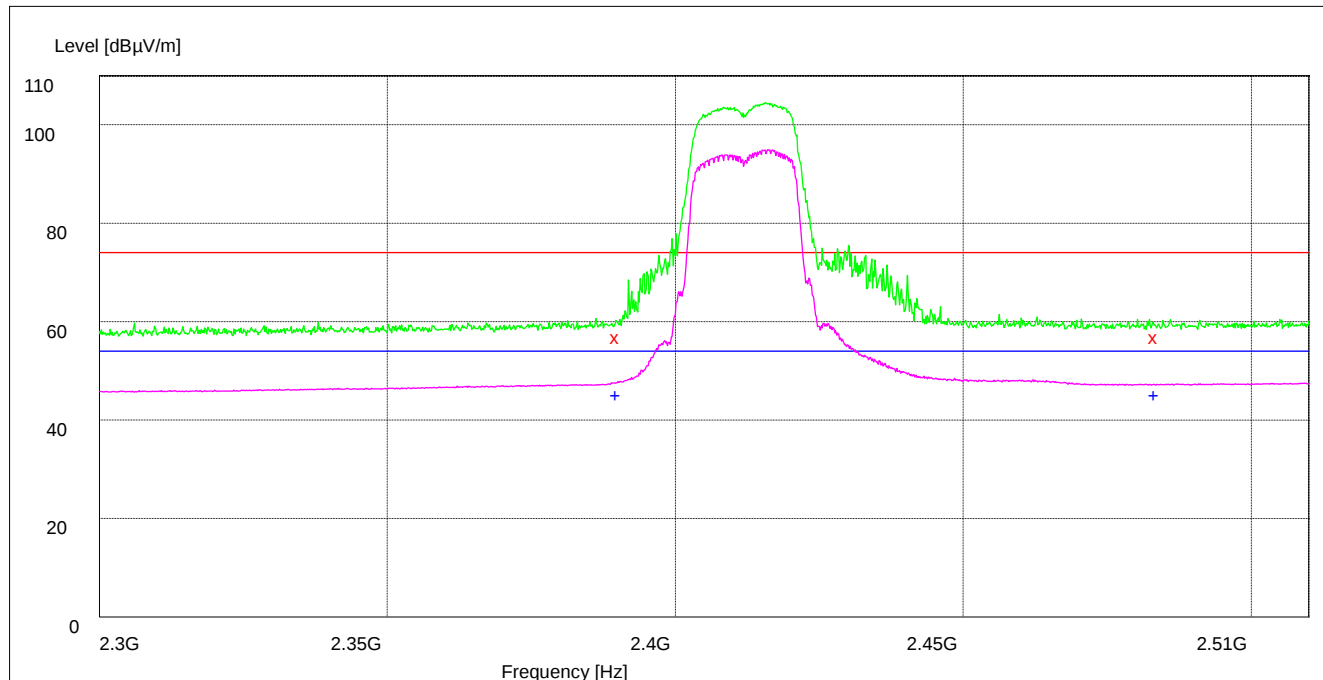
Frequency MHz	Level dBμV/m	Transd dB	Limit dBμV/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	58.00	34.8	74.0	16.0	138.0	210.00	HORIZONTAL
2483.500000	58.20	35.1	74.0	15.8	149.0	206.00	HORIZONTAL

MEASUREMENT RESULT: AV Detector

Frequency MHz	Level dBμV/m	Transd dB	Limit dBμV/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	47.00	34.8	54.0	7.0	100.0	107.00	HORIZONTAL
2483.500000	47.10	35.1	54.0	6.9	129.0	106.00	HORIZONTAL

Test Mode: 11N-20M/SISO-Antenna 1

Channel 01



Note: The peak exceeds the limit line is carrier frequency.

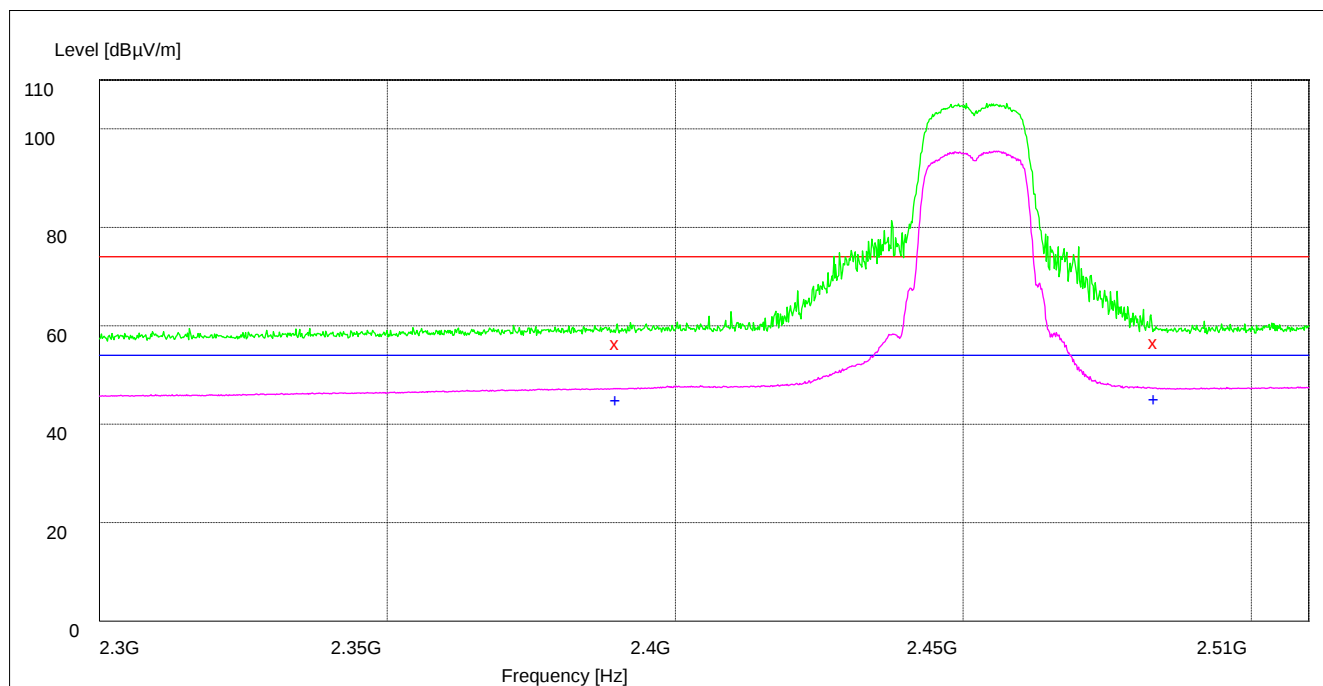
MEASUREMENT RESULT: PK Detector

Frequency MHz	Level dBμV/m	Transd dB	Limit dBμV/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	58.80	34.8	74.0	15.2	100.0	243.00	HORIZONTAL
2483.500000	58.70	35.1	74.0	15.3	120.0	17.00	HORIZONTAL

MEASUREMENT RESULT: AV Detector

Frequency MHz	Level dBμV/m	Transd dB	Limit dBμV/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	46.90	34.8	54.0	7.1	131.0	121.00	VERTICAL
2483.500000	46.80	35.1	54.0	7.2	131.0	203.00	HORIZONTAL

Channel 09



Note: The peak exceeds the limit line is carrier frequency.

MEASUREMENT RESULT: PK Detector

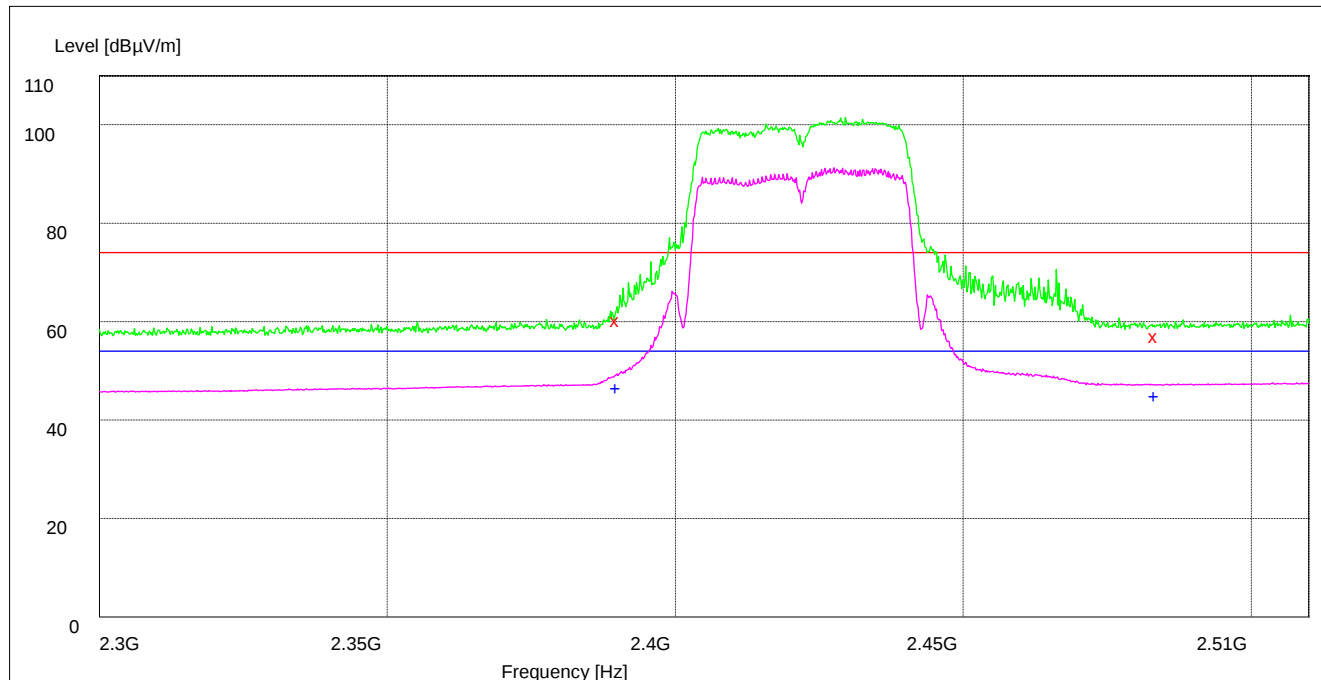
Frequency MHz	Level dBμV/m	Transd dB	Limit dBμV/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	58.40	34.8	74.0	15.6	102.0	160.00	HORIZONTAL
2483.500000	58.50	35.1	74.0	15.5	102.0	271.00	VERTICAL

MEASUREMENT RESULT: AV Detector

Frequency MHz	Level dBμV/m	Transd dB	Limit dBμV/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	46.80	34.8	54.0	7.2	128.0	192.00	VERTICAL
2483.500000	46.90	35.1	54.0	7.1	112.0	198.00	HORIZONTAL

Test Mode: 11N-40M/SISO-Antenna 1

Channel 03



Note: The peak exceeds the limit line is carrier frequency.

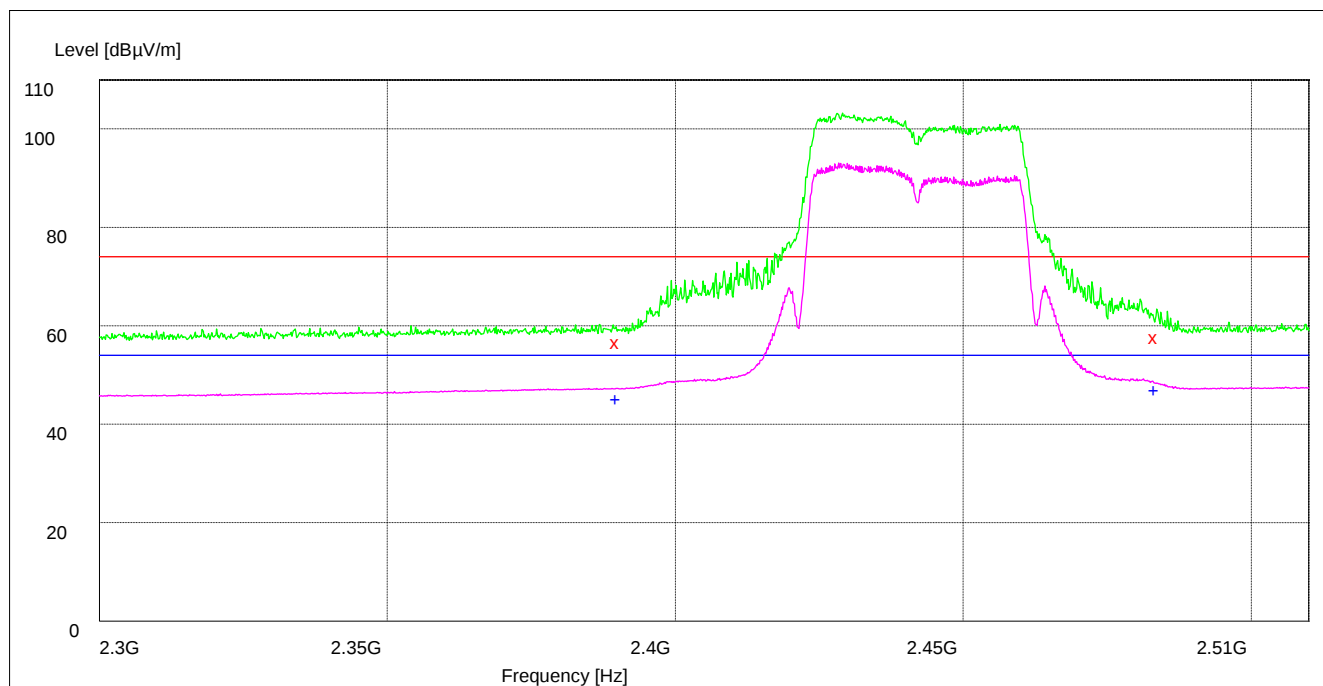
MEASUREMENT RESULT: PK Detector

Frequency MHz	Level dBμV/m	Transd dB	Limit dBμV/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	62.20	34.8	74.0	11.8	100.0	115.00	HORIZONTAL
2483.500000	58.90	35.1	74.0	15.1	113.0	79.00	HORIZONTAL

MEASUREMENT RESULT: AV Detector

Frequency MHz	Level dBμV/m	Transd dB	Limit dBμV/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	48.40	34.8	54.0	5.6	100.0	109.00	HORIZONTAL
2483.500000	46.70	35.1	54.0	7.3	147.0	25.00	VERTICAL

Channel 07



Note: The peak exceeds the limit line is carrier frequency.

MEASUREMENT RESULT: PK Detector

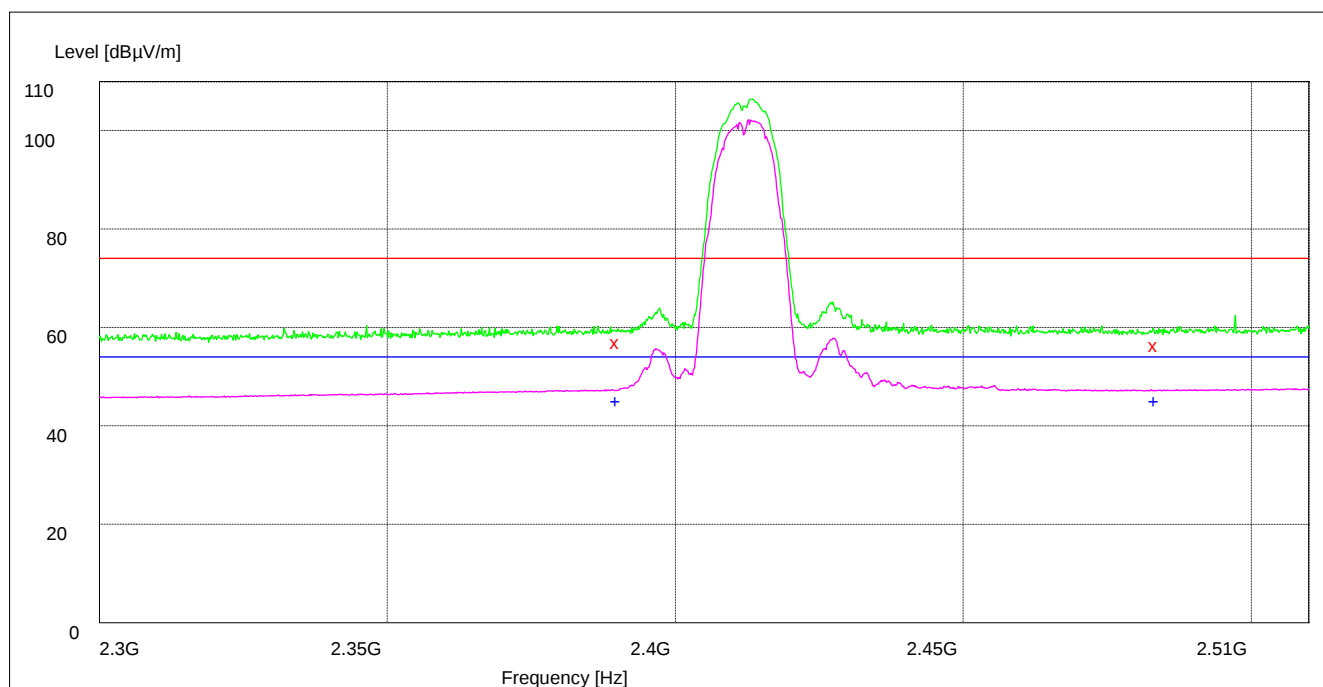
Frequency MHz	Level dBμV/m	Transd dB	Limit dBμV/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	58.50	34.8	74.0	15.5	103.0	207.00	VERTICAL
2483.500000	59.50	35.1	74.0	14.5	103.0	166.00	HORIZONTAL

MEASUREMENT RESULT: AV Detector

Frequency MHz	Level dBμV/m	Transd dB	Limit dBμV/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	46.90	34.8	54.0	7.1	150.0	43.00	HORIZONTAL
2483.500000	48.90	35.1	54.0	5.1	150.0	210.00	HORIZONTAL

Test Mode: 11B/ Antenna 2

Channel 01



Note: The peak exceeds the limit line is carrier frequency.

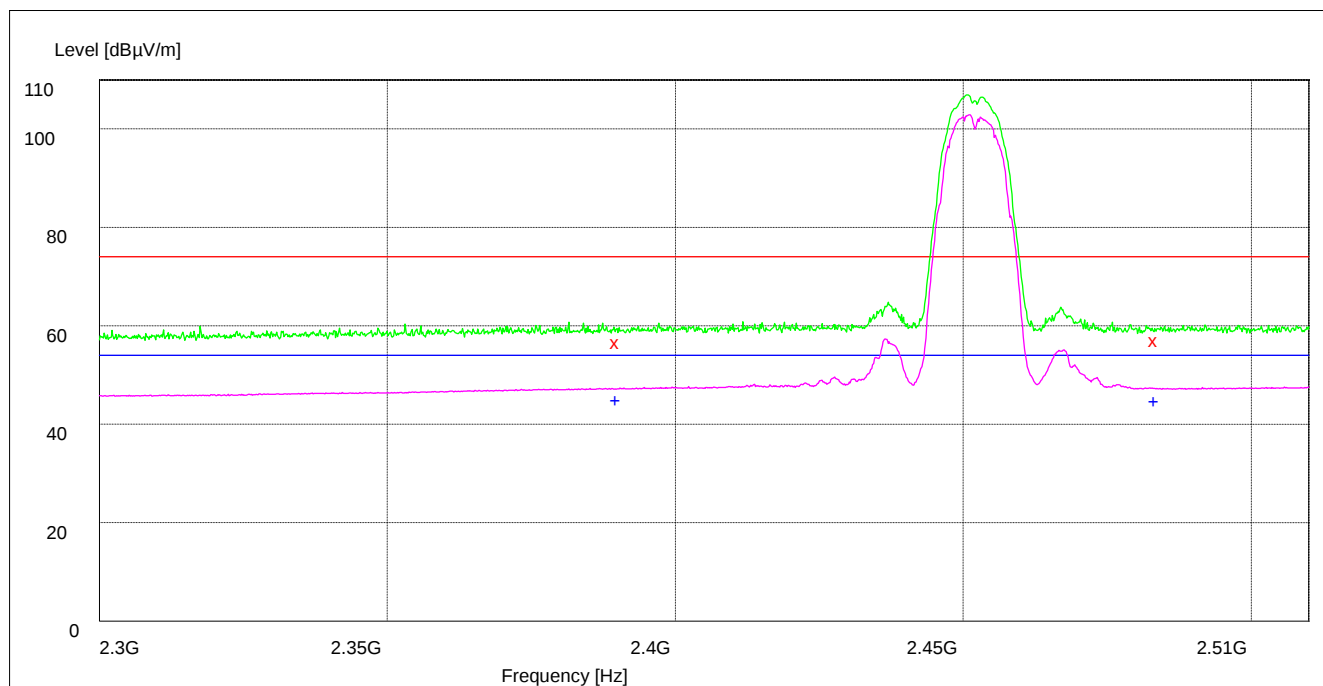
MEASUREMENT RESULT: PK Detector

Frequency MHz	Level dBμV/m	Transd dB	Limit dBμV/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	58.80	34.8	74.0	15.2	125.0	311.00	VERTICAL
2483.500000	58.30	35.1	74.0	15.7	119.0	148.00	HORIZONTAL

MEASUREMENT RESULT: AV Detector

Frequency MHz	Level dBμV/m	Transd dB	Limit dBμV/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	46.90	34.8	54.0	7.1	147.0	312.00	VERTICAL
2483.500000	46.80	35.1	54.0	7.2	122.0	299.00	HORIZONTAL

Channel 09



Note: The peak exceeds the limit line is carrier frequency.

MEASUREMENT RESULT: PK Detector

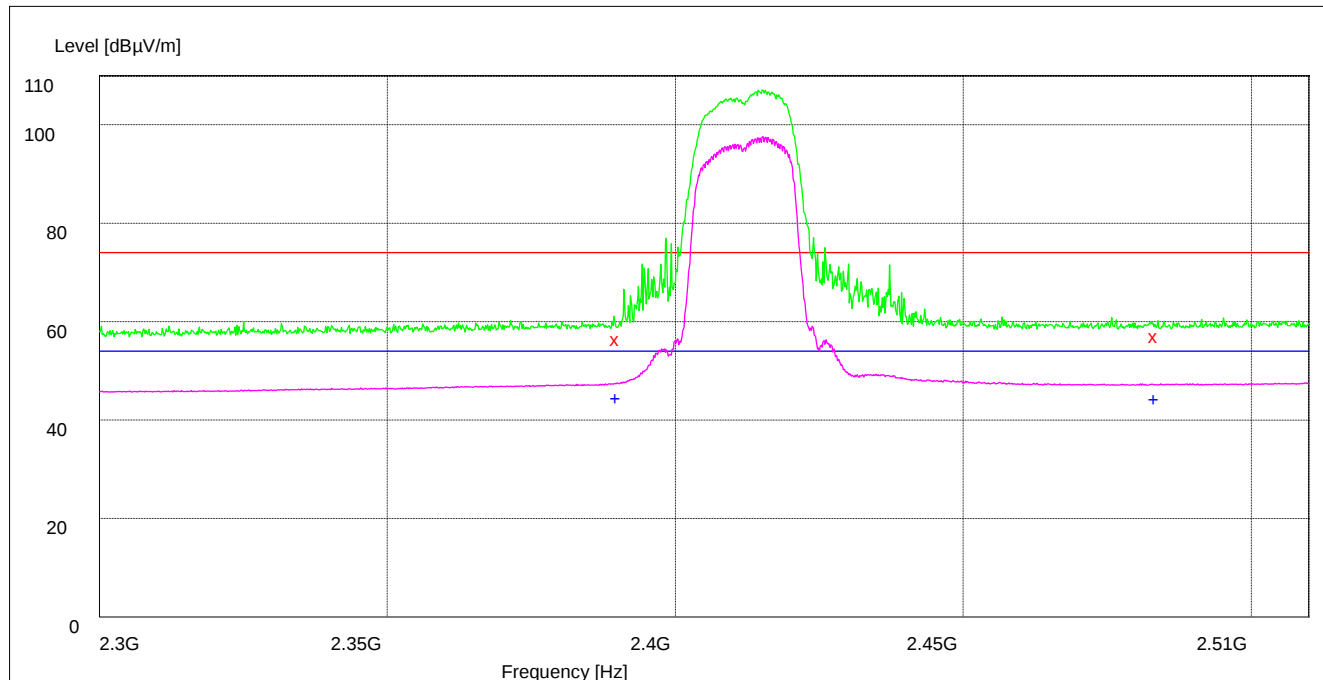
Frequency MHz	Level dBμV/m	Transd dB	Limit dBμV/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	58.50	34.8	74.0	15.5	105.0	203.00	VERTICAL
2483.500000	59.00	35.1	74.0	15.0	103.0	44.00	VERTICAL

MEASUREMENT RESULT: AV Detector

Frequency MHz	Level dBμV/m	Transd dB	Limit dBμV/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	58.50	34.8	74.0	15.5	105.0	203.00	VERTICAL
2483.500000	59.00	35.1	74.0	15.0	103.0	44.00	VERTICAL

Test Mode: 11G/ Antenna 2

Channel 01



Note: The peak exceeds the limit line is carrier frequency.

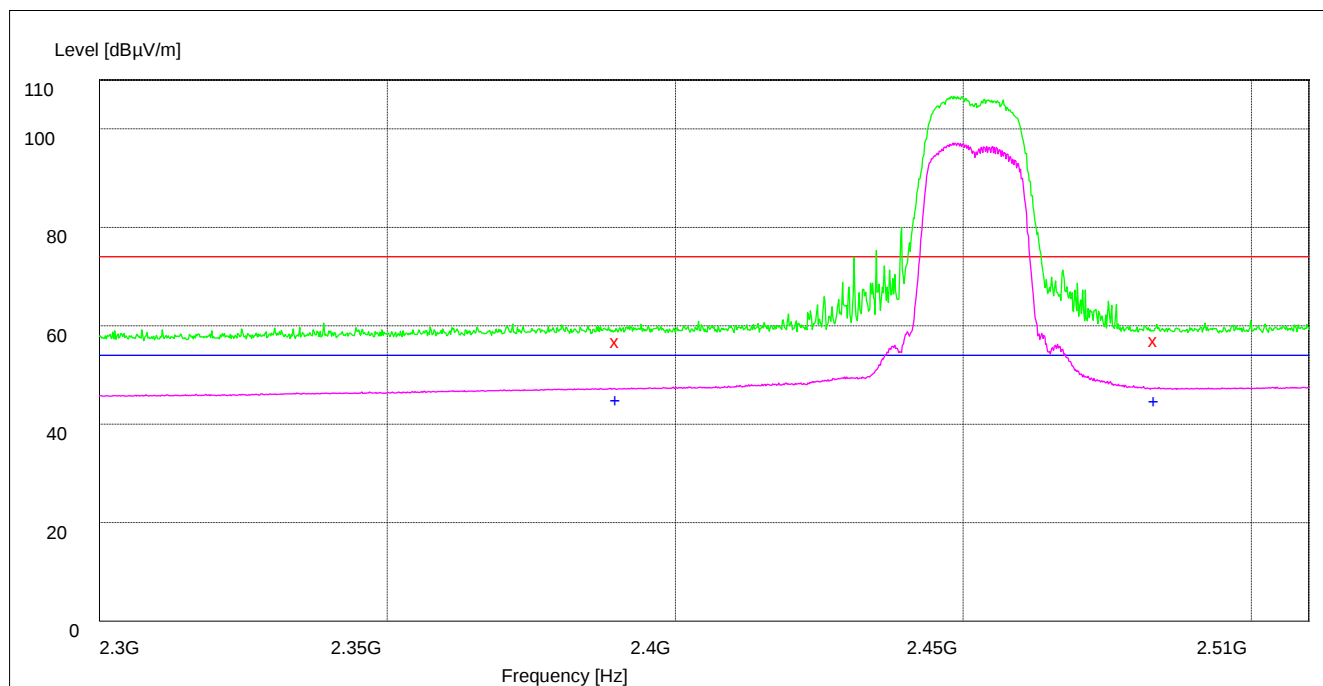
MEASUREMENT RESULT: PK Detector

Frequency MHz	Level dBμV/m	Transd dB	Limit dBμV/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	58.40	34.8	74.0	15.6	150.0	148.00	HORIZONTAL
2483.500000	58.90	35.1	74.0	15.1	150.0	0.00	VERTICAL

MEASUREMENT RESULT: AV Detector

Frequency MHz	Level dBμV/m	Transd dB	Limit dBμV/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	46.30	34.8	54.0	7.7	100.0	266.00	HORIZONTAL
2483.500000	46.10	35.1	54.0	7.9	100.0	274.00	HORIZONTAL

Channel 09



Note: The peak exceeds the limit line is carrier frequency.

MEASUREMENT RESULT: PK Detector

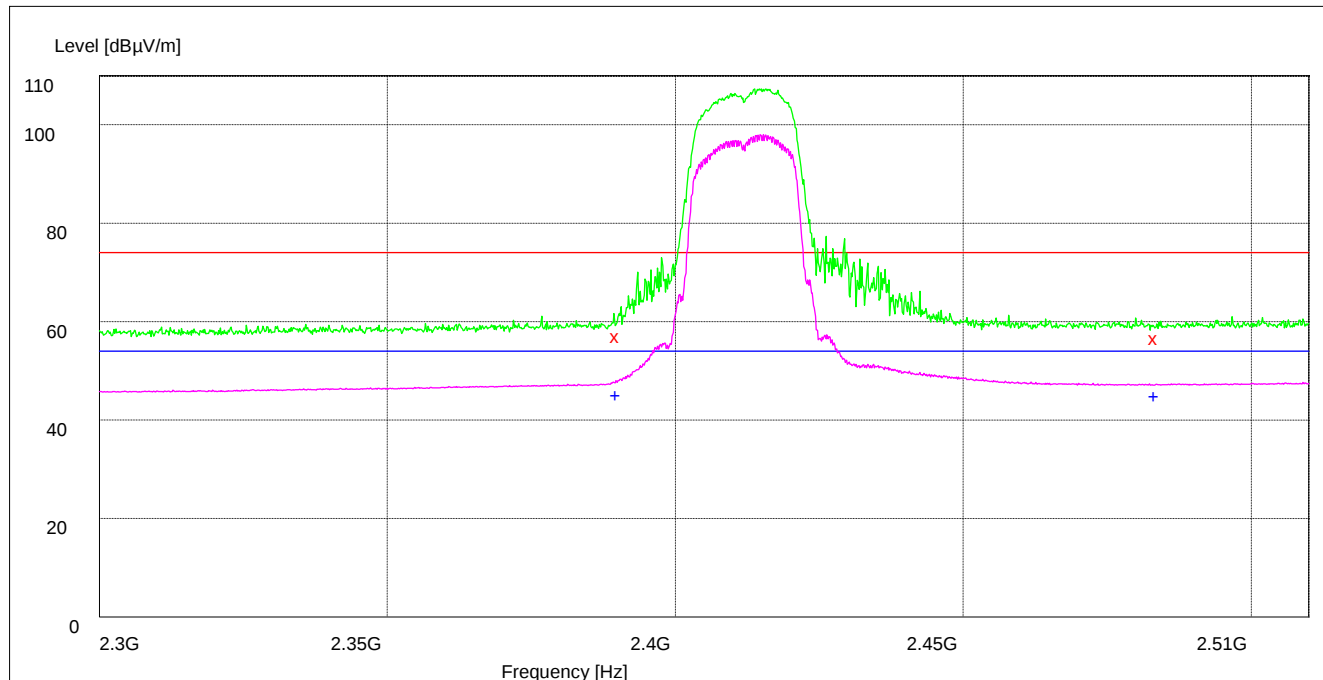
Frequency MHz	Level dBμV/m	Transd dB	Limit dBμV/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	58.60	34.8	74.0	15.4	150.0	133.00	HORIZONTAL
2483.500000	59.00	35.1	74.0	15.0	150.0	332.00	HORIZONTAL

MEASUREMENT RESULT: AV Detector

Frequency MHz	Level dBμV/m	Transd dB	Limit dBμV/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	46.80	34.8	54.0	7.2	100.0	12.00	HORIZONTAL
2483.500000	46.70	35.1	54.0	7.3	100.0	137.00	VERTICAL

Test Mode: 11N-20M/SISO-Antenna 2

Channel 01



Note: The peak exceeds the limit line is carrier frequency.

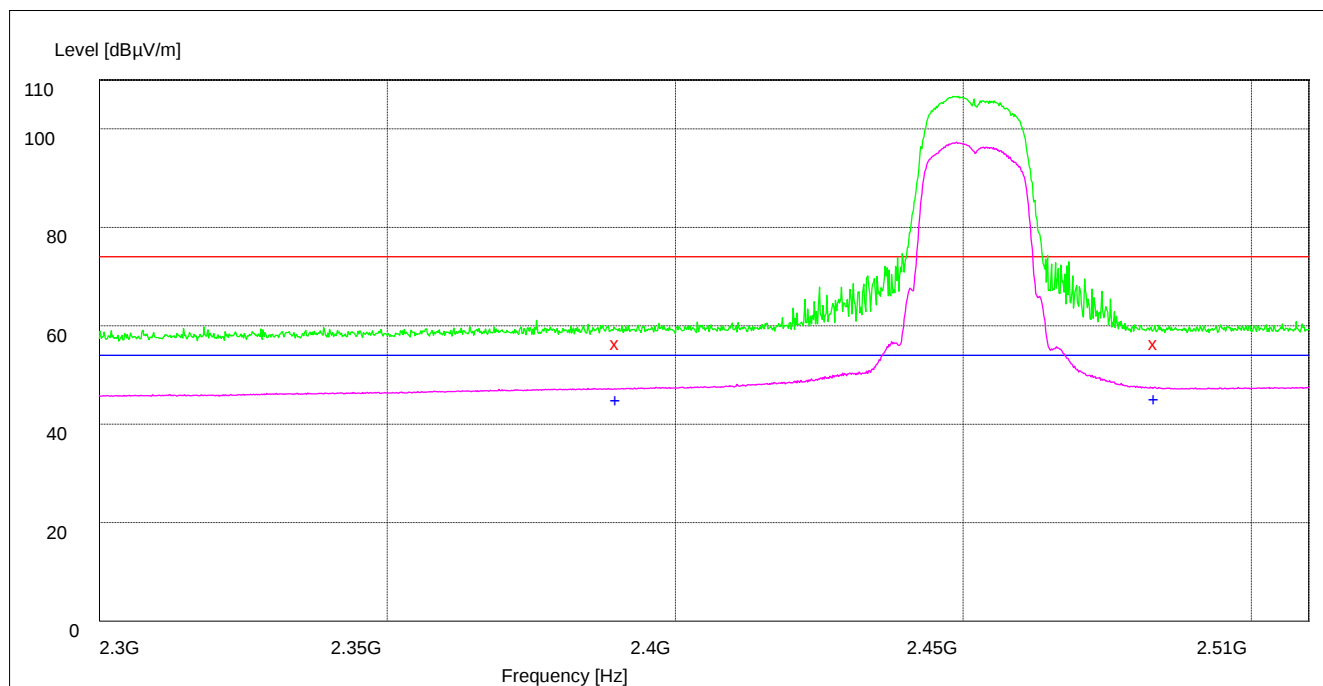
MEASUREMENT RESULT: PK Detector

Frequency MHz	Level dBμV/m	Transd dB	Limit dBμV/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	58.90	34.8	74.0	15.1	113.0	38.00	VERTICAL
2483.500000	58.50	35.1	74.0	15.5	105.0	15.00	VERTICAL

MEASUREMENT RESULT: AV Detector

Frequency MHz	Level dBμV/m	Transd dB	Limit dBμV/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	47.00	34.8	54.0	7.0	100.0	267.00	HORIZONTAL
2483.500000	46.70	35.1	54.0	7.3	145.0	264.00	HORIZONTAL

Channel 09



Note: The peak exceeds the limit line is carrier frequency.

MEASUREMENT RESULT: PK Detector

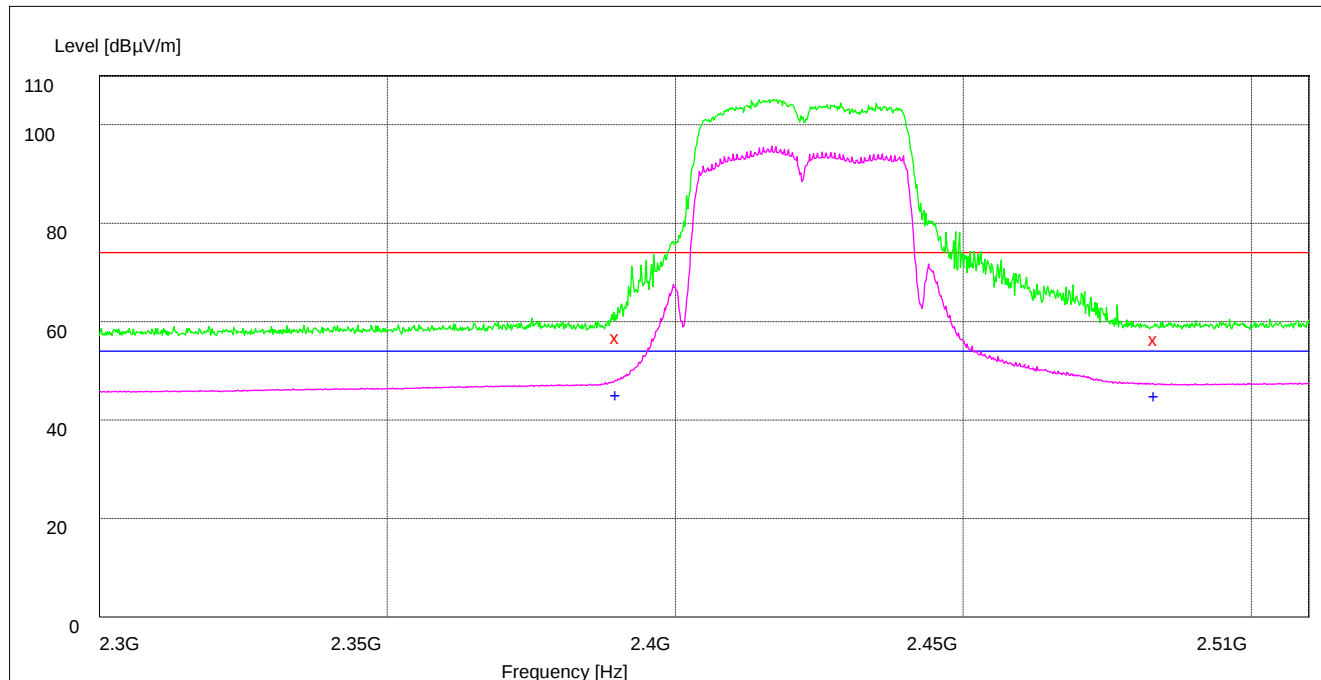
Frequency MHz	Level dBμV/m	Transd dB	Limit dBμV/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	58.40	34.8	74.0	15.6	100.0	172.00	HORIZONTAL
2483.500000	58.40	35.1	74.0	15.6	140.0	278.00	VERTICAL

MEASUREMENT RESULT: AV Detector

Frequency MHz	Level dBμV/m	Transd dB	Limit dBμV/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	46.80	34.8	54.0	7.2	101.0	315.00	HORIZONTAL
2483.500000	46.90	35.1	54.0	7.1	101.0	188.00	HORIZONTAL

Test Mode: 11N-40M/SISO-Antenna 2

Channel 03



Note: The peak exceeds the limit line is carrier frequency.

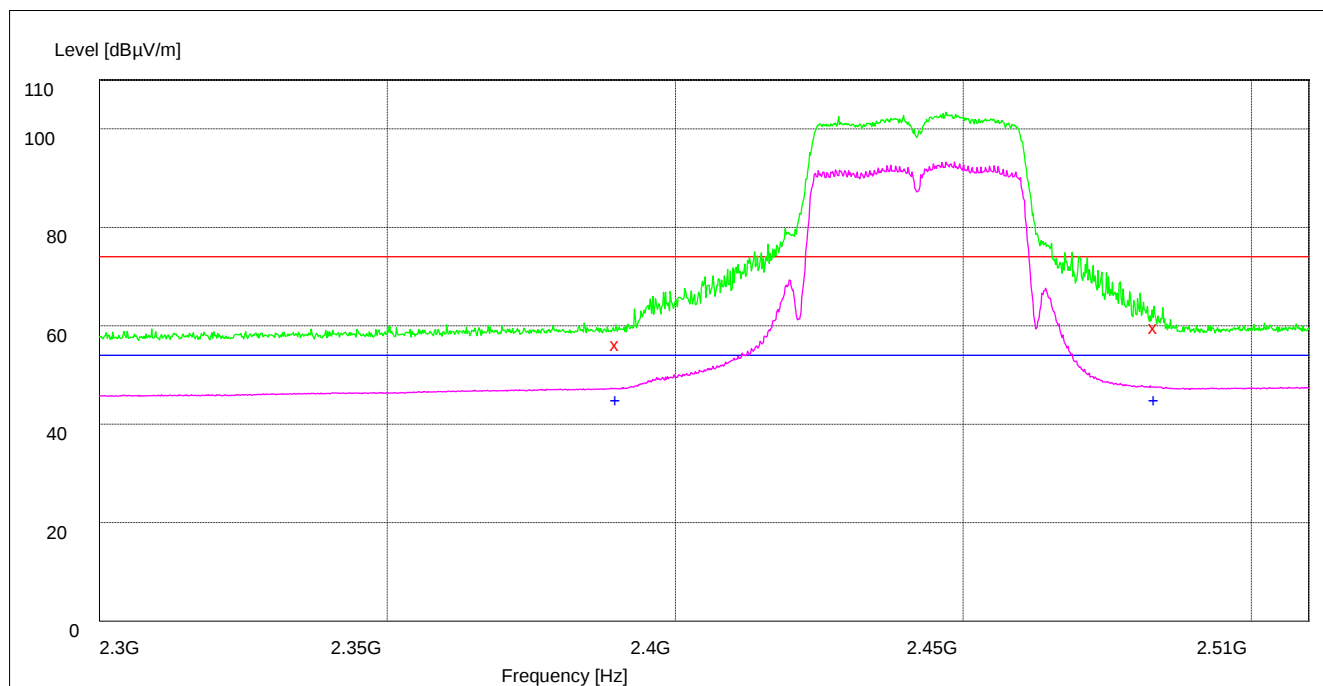
MEASUREMENT RESULT: PK Detector

Frequency MHz	Level dBμV/m	Transd dB	Limit dBμV/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	58.80	34.8	74.0	15.2	100.0	208.00	HORIZONTAL
2483.500000	58.30	35.1	74.0	15.7	146.0	8.00	HORIZONTAL

MEASUREMENT RESULT: AV Detector

Frequency MHz	Level dBμV/m	Transd dB	Limit dBμV/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	46.90	34.8	54.0	7.1	132.0	78.00	HORIZONTAL
2483.500000	46.70	35.1	54.0	7.3	137.0	181.00	VERTICAL

Channel 07



Note: The peak exceeds the limit line is carrier frequency.

MEASUREMENT RESULT: PK Detector

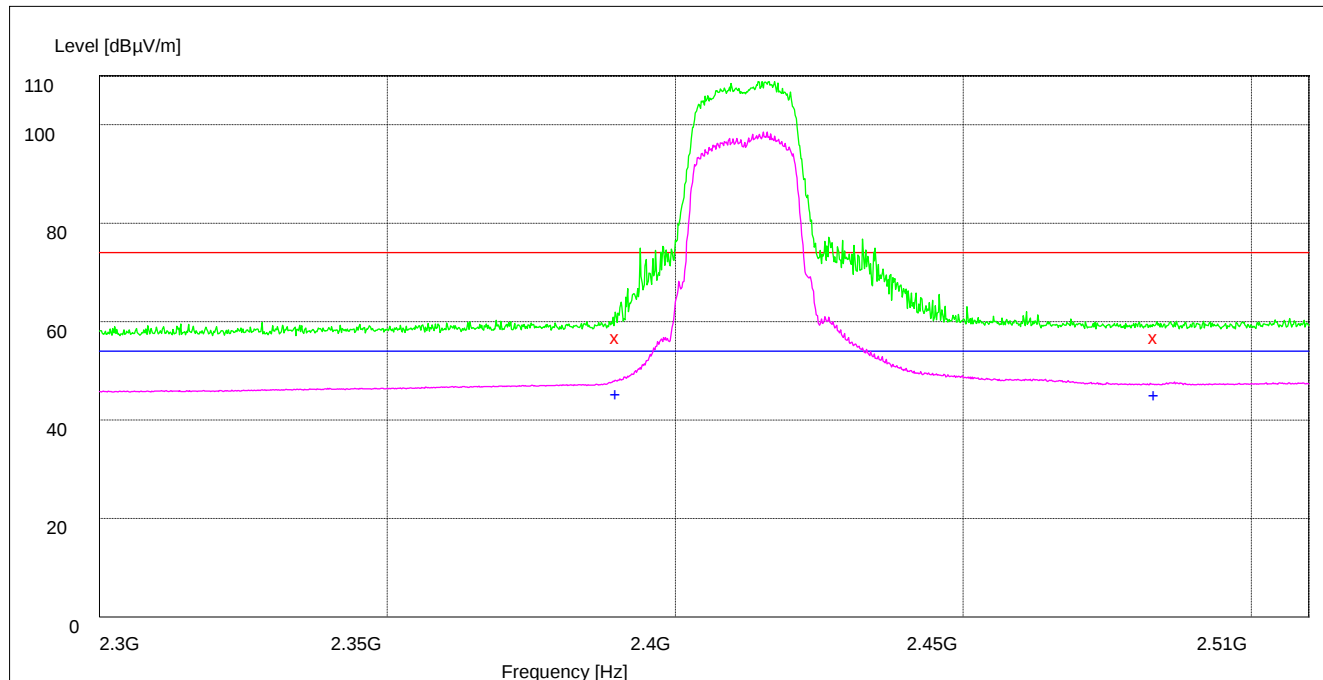
Frequency MHz	Level dBμV/m	Transd dB	Limit dBμV/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	58.20	34.8	74.0	15.8	109.0	201.00	HORIZONTAL
2483.500000	61.60	35.1	74.0	12.4	100.0	220.00	HORIZONTAL

MEASUREMENT RESULT: AV Detector

Frequency MHz	Level dBμV/m	Transd dB	Limit dBμV/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	46.80	34.8	54.0	7.2	141.0	178.00	HORIZONTAL
2483.500000	46.80	35.1	54.0	7.2	100.0	188.00	HORIZONTAL

Test Mode: 11N-20M/MIMO

Channel 01



Note: The peak exceeds the limit line is carrier frequency.

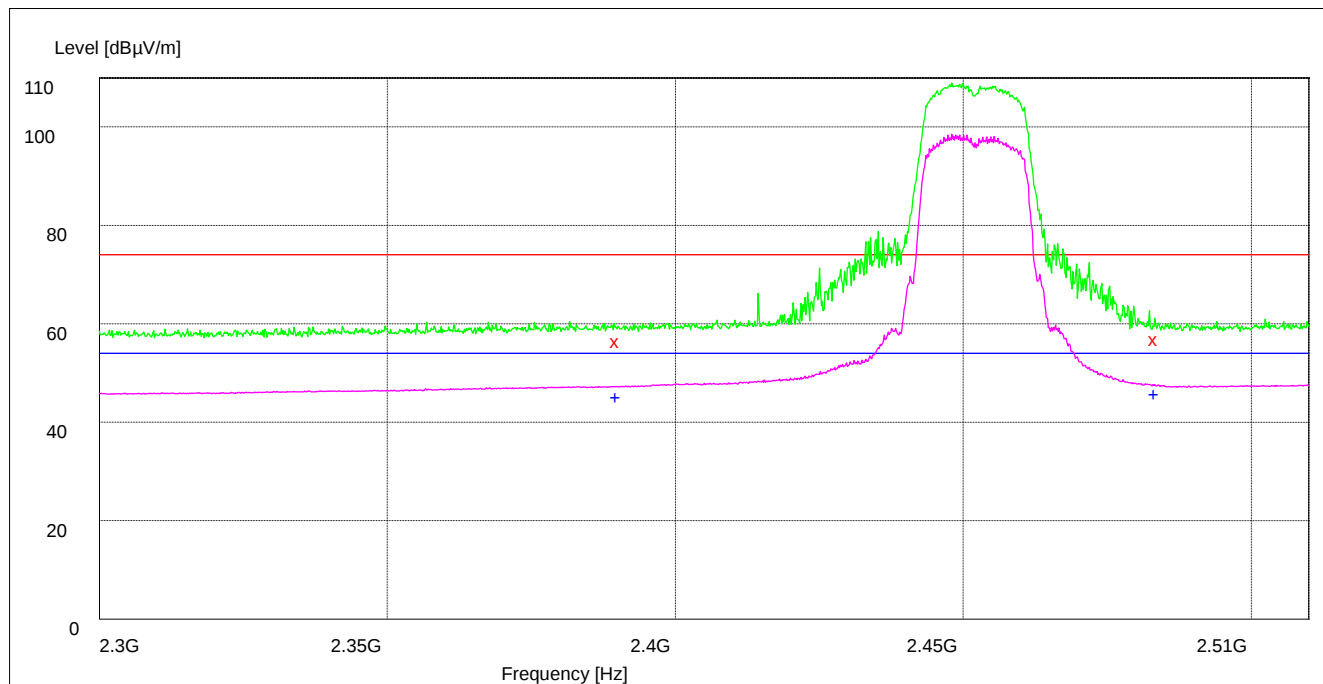
MEASUREMENT RESULT: PK Detector

Frequency MHz	Level dBμV/m	Transd dB	Limit dBμV/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	58.70	34.8	74.0	15.3	100.0	334.00	VERTICAL
2483.500000	58.80	35.1	74.0	15.2	100.0	192.00	HORIZONTAL

MEASUREMENT RESULT: AV Detector

Frequency MHz	Level dBμV/m	Transd dB	Limit dBμV/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	47.10	34.8	54.0	6.9	100.0	223.00	HORIZONTAL
2483.500000	46.90	35.1	54.0	7.1	100.0	206.00	HORIZONTAL

Channel 09



Note: The peak exceeds the limit line is carrier frequency.

MEASUREMENT RESULT: PK Detector

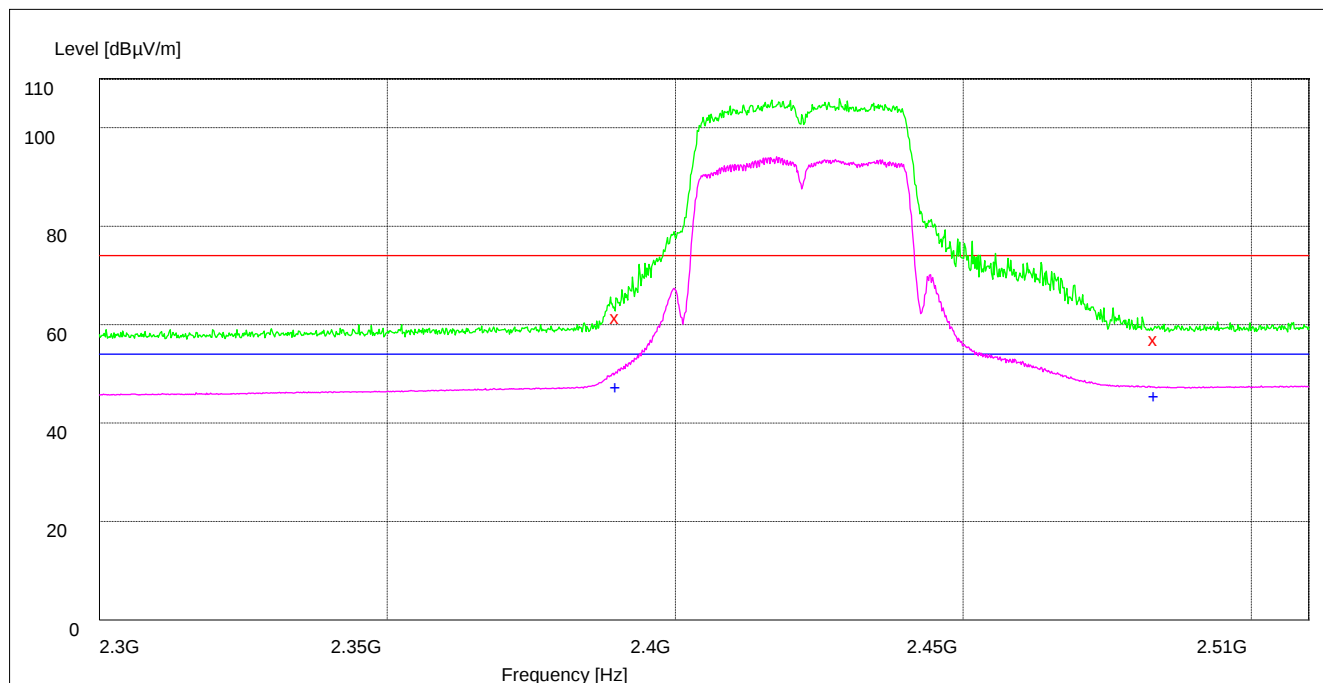
Frequency MHz	Level dBμV/m	Transd dB	Limit dBμV/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	58.40	34.8	74.0	15.6	113.0	0.00	VERTICAL
2483.500000	58.70	35.1	74.0	15.3	121.0	39.00	HORIZONTAL

MEASUREMENT RESULT: AV Detector

Frequency MHz	Level dBμV/m	Transd dB	Limit dBμV/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	46.90	34.8	54.0	7.1	143.0	352.00	HORIZONTAL
2483.500000	47.60	35.1	54.0	6.4	101.0	263.00	HORIZONTAL

Test Mode: 11N-40M/MIMO

Channel 03



Note: The peak exceeds the limit line is carrier frequency.

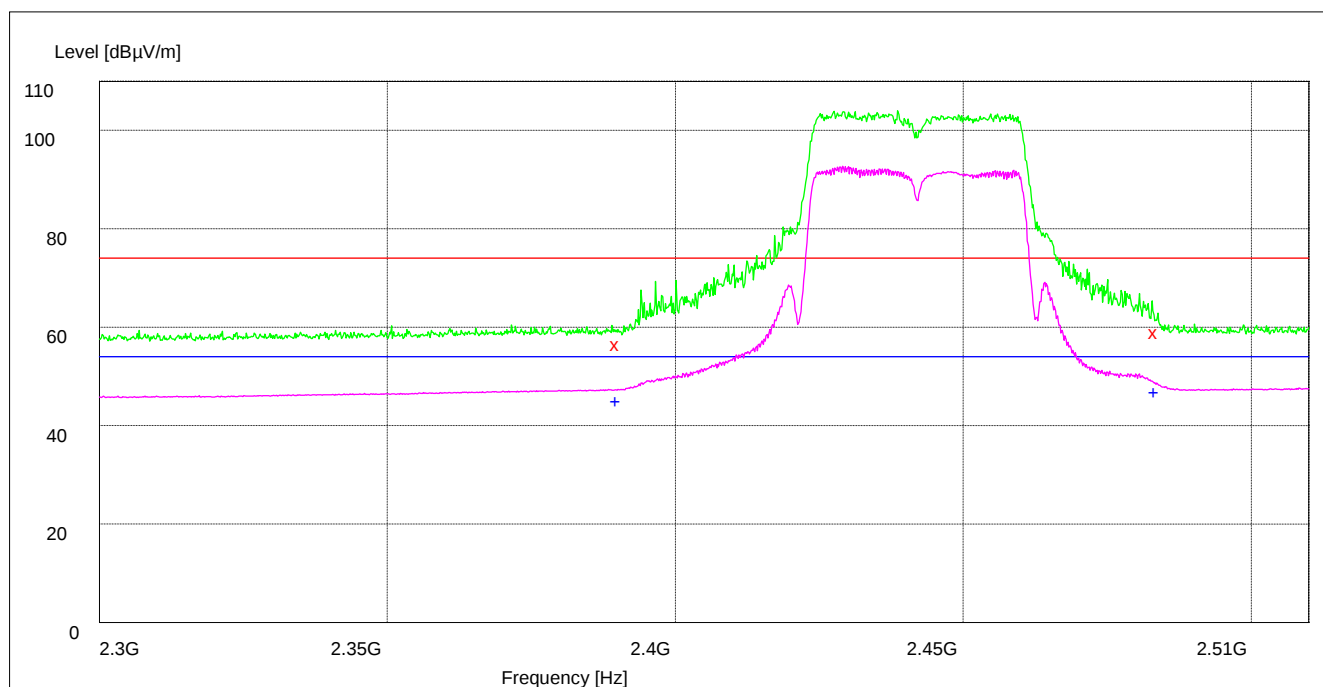
MEASUREMENT RESULT: PK Detector

Frequency MHz	Level dBμV/m	Transd dB	Limit dBμV/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	63.30	34.8	74.0	10.7	145.0	104.00	HORIZONTAL
2483.500000	58.90	35.1	74.0	15.1	115.0	49.00	VERTICAL

MEASUREMENT RESULT: AV Detector

Frequency MHz	Level dBμV/m	Transd dB	Limit dBμV/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	49.10	34.8	54.0	4.9	100.0	241.00	HORIZONTAL
2483.500000	47.30	35.1	54.0	6.7	100.0	200.00	HORIZONTAL

Channel 07



Note: The peak exceeds the limit line is carrier frequency.

MEASUREMENT RESULT: PK Detector

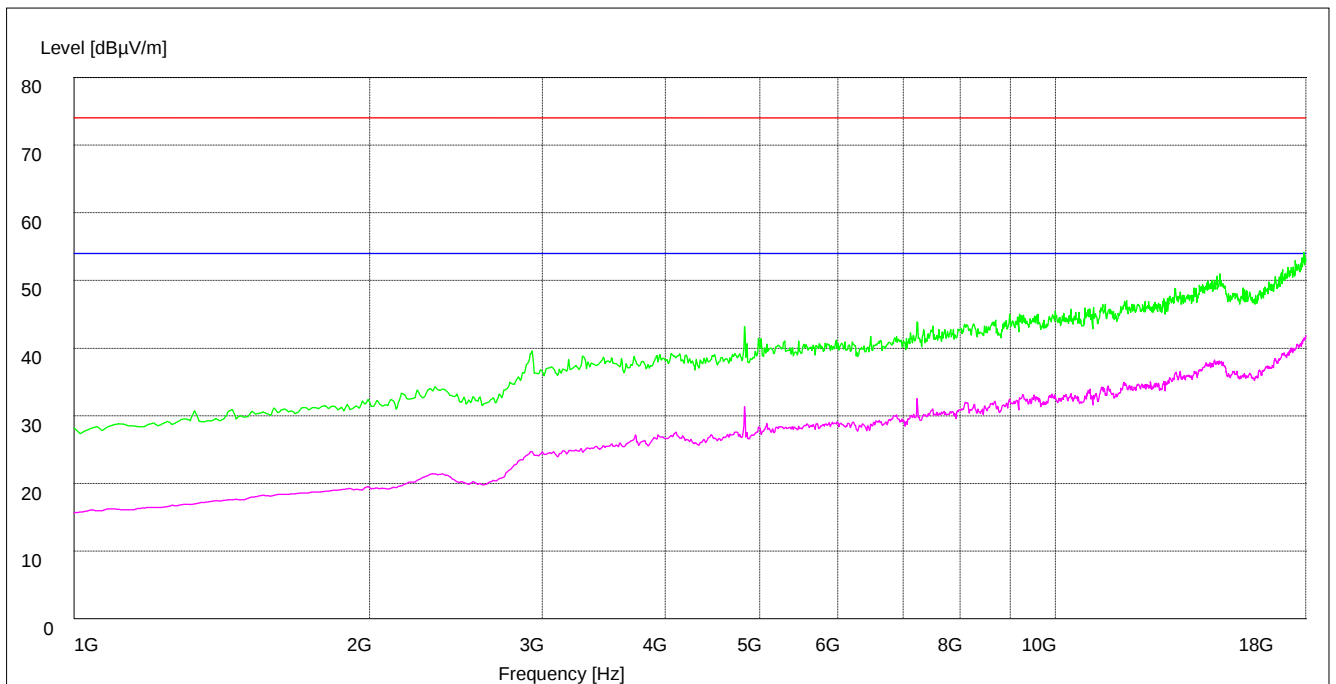
Frequency MHz	Level dBμV/m	Transd dB	Limit dBμV/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	58.50	34.8	74.0	15.5	146.0	23.00	VERTICAL
2483.500000	60.90	35.1	74.0	13.1	138.0	351.00	VERTICAL

MEASUREMENT RESULT: AV Detector

Frequency MHz	Level dBμV/m	Transd dB	Limit dBμV/m	Margin dB	Height cm	Azimuth deg	Polarization
2390.000000	46.80	34.8	54.0	7.2	121.0	0.00	VERTICAL
2483.500000	48.60	35.1	54.0	5.4	100.0	218.00	HORIZONTAL

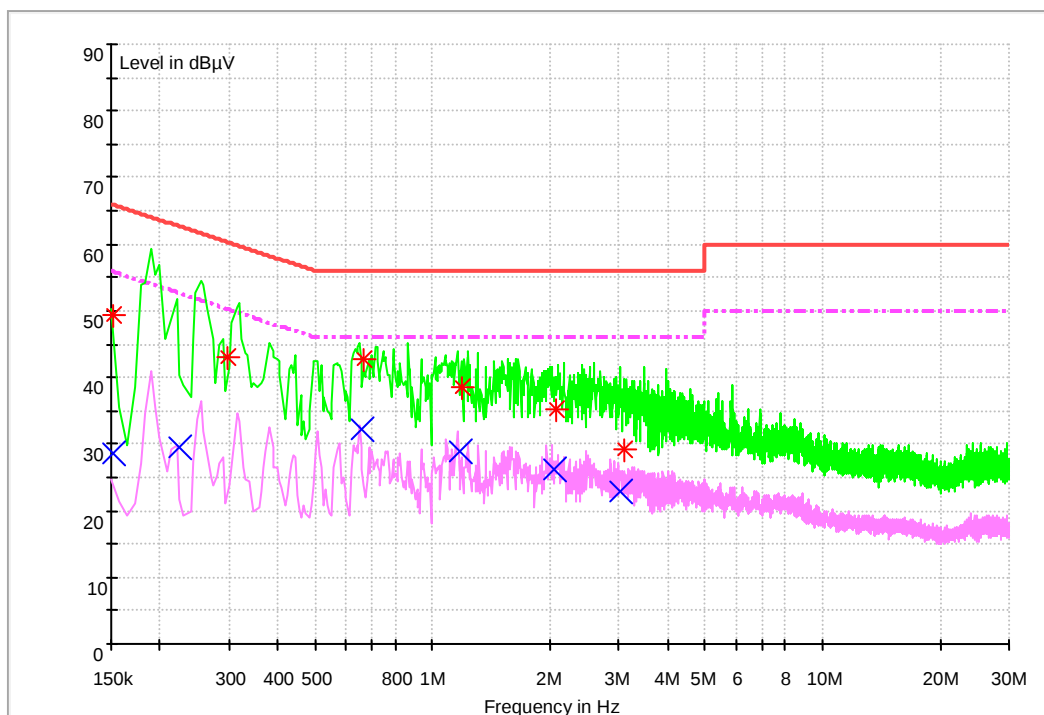
Part 4: Testing Range of “1 GHz to 18 GHz”

- Note 1: The test results and plot for testing range of “1 GHz to 18 GHz” showed as below is the WORST case for all Test Modes and Channels. This range will not be presented for each Test Mode and each Channel.
- Note 2: The testing range of “1 GHz to 18 GHz” is for checking radiated emissions located in restricted bands faraway from the EUT operating bands.
- Note 3: Two limits are required in the testing range above 1 GHz, that is Peak limit (74 dB μ V/m) and Average Limit (54 dB μ V/m).



Appendix G: Conducted Emission at Power Port

Channel 6



MEASUREMENT RESULT: QP Detector

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Line	PE
0.150934	49.3	9.7	65.9	16.6	L1	FLO
0.296846	43.0	9.7	60.3	17.3	L1	FLO
0.663926	42.9	9.7	56.0	13.1	N	FLO
1.182214	38.5	9.7	56.0	17.5	N	FLO
2.069306	35.4	9.7	56.0	20.6	N	FLO
3.108314	29.2	9.7	56.0	26.8	L1	FLO

MEASUREMENT RESULT: AV Detector

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Line	PE
0.151491	28.7	9.7	55.9	27.2	L1	FLO
0.224918	29.5	9.7	52.6	23.1	L1	FLO
0.661216	32.1	9.7	46.0	13.9	N	FLO
1.178951	29.0	9.7	46.0	17.0	N	FLO
2.059496	26.3	9.7	46.0	19.7	N	FLO
3.014760	22.8	9.7	46.0	23.2	L1	FLO

END