



TEST REPORT

Product : bikefinder
Trade mark :  
Model/Type reference : BFG1T
Serial Number : N/A
Report Number : EED32O81469402
FCC ID : 2ATRU-BFG1S
Date of Issue : Nov. 11, 2022
Test Standards : 47 CFR Part 2
47 CFR Part 22 subpart H
47 CFR Part 24 subpart E
Test result : PASS

Prepared for:

BikeFinder AS

Veritasveien 25, 4007 Stavanger, Postbox 4004 4092 Stavanger, Norway

Prepared by:

**Centre Testing International Group Co., Ltd.
Hongwei Industrial Zone, Bao'an 70 District,
Shenzhen, Guangdong, China**

TEL: +86-755-3368 3668

FAX: +86-755-3368 3385

Compiled by:

mark.chen.

Mark Chen

Aaron Ma

Aaron Ma

Reviewed by:

Tom Chen

Tom Chen

Date:

Nov. 11, 2022

Check No.: 7002190922



2 Version

Version No.	Date	Description
00	Nov. 11, 2022	Original

3 Test Summary

Test Item	Test Requirement	Test method	Result
GSM 850			
Conducted output power	Part 2.1046(a)/Part 22.913(a)	TIA-603-E-2016&KDB 971168 D01v03r01	PASS
Effective Radiated Power of Transmitter(ERP)	Part 2.1046(a)/Part 22.913(a)	TIA-603-E-2016&KDB 971168 D01v03r01	PASS
99% &26dBOccupied Bandwidth	Part 2.1049(h)	Part 22.917(b) &KDB 971168 D01v03r01	PASS
Band Edge at antenna terminals	Part 2.1051/Part 22.917(a)	Part 22.917(b) &KDB 971168 D01v03r01	PASS
Spurious emissions at antenna terminals	Part 2.1051/ Part 2.1057/ Part 22.917(a)(b)	TIA-603-E-2016&KDB 971168 D01v03r01	PASS
Field strength of spurious radiation	Part 2.1053/ Part 2.1057/ Part 22.917(a)(b)	TIA-603-E-2016&KDB 971168 D01v03r01	N/A
Frequency stability	Part 2.1055/ Part 22.355	TIA-603-E-2016&KDB 971168 D01v03r01	PASS
GSM 1900			
Conducted output power	Part 2.1046(a) /Part 24.232(c)	TIA-603-E-2016&KDB 971168 D01v03r01	PASS
Effective Radiated Power of Transmitter(EIRP)	Part 2.1046(a) / Part 24.232(c)	TIA-603-E-2016&KDB 971168 D01v03r01	PASS
peak-to-average ratio	Part 24.232(d)	KDB 971168 D01v03r01	PASS
99% &26dBOccupied Bandwidth	Part 2.1049(h)	Part 24.238(b) &KDB 971168 D01v03r01	PASS
Band Edge at antenna terminals	Part 2.1051/ Part 24.238(a)	Part 24.238(b) &KDB 971168 D01v03r01	PASS
Spurious emissions at antenna terminals	Part 2.1051/ Part 2.1057/ Part 24.238(a)(b)	TIA-603-E-2016&KDB 971168 D01v03r01	PASS
Field strength of spurious radiation	Part 2.1053 /Part 2.1057 / Part 24.238(a)(b)	TIA-603-E-2016&KDB 971168 D01v03r01	N/A
Frequency stability	Part 2.1055/Part 24.235	TIA-603-E-2016&KDB 971168 D01v03r01	PASS

Remark:

Company Name and Address shown on Report, the sample(s) and sample Information was/ were provided by the applicant who should be responsible for the authenticity which CTI hasn't verified.

This report only changed the product model No.,product name,trade mark,Address of Applicant,Address of Manufacturer ,All test data come from the report of No. EED32L00192302.

Remark:

1.Product add FPC temperature sensor,change antenna position and antenna elements dimensions,add Spurious emissions test.

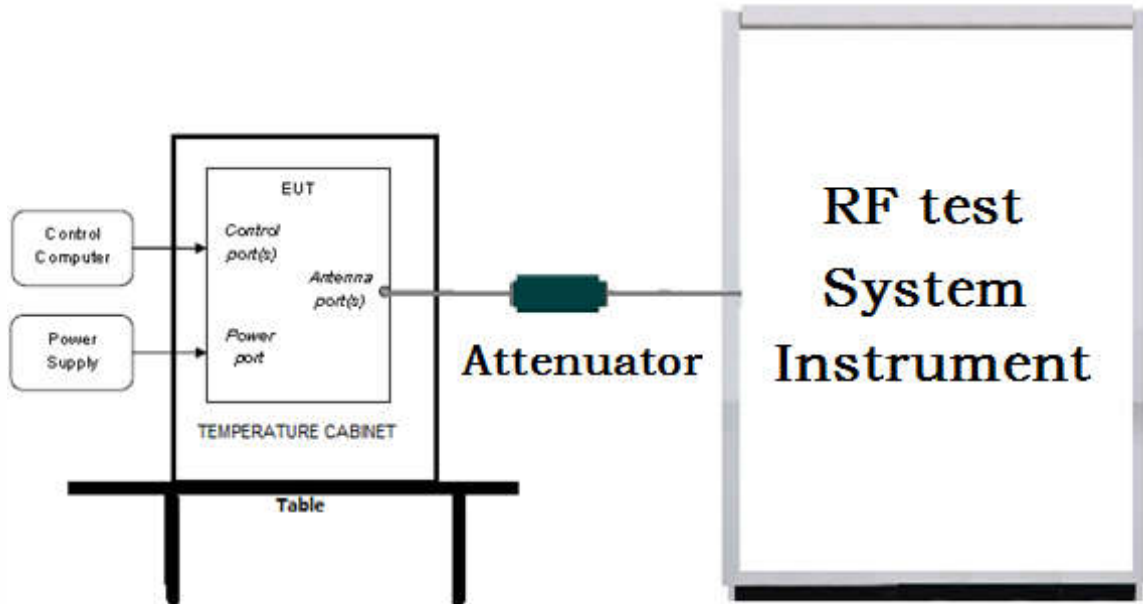
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5 Test Requirement

5.1 Test setup

5.1.1 For Conducted test setup



5.1.2 For Radiated Emissions test setup

Radiated Emissions setup:

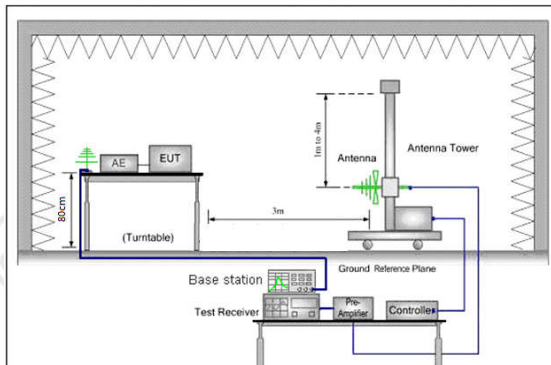


Figure 1. 30MHz to 1GHz

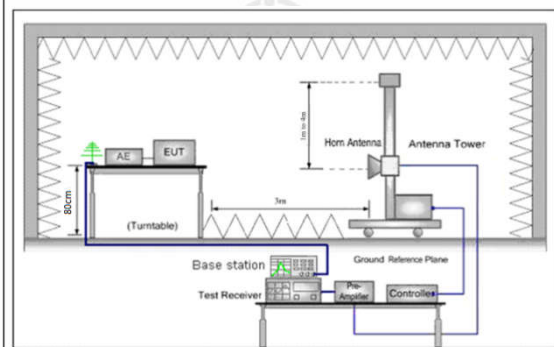


Figure 2. above 1GHz

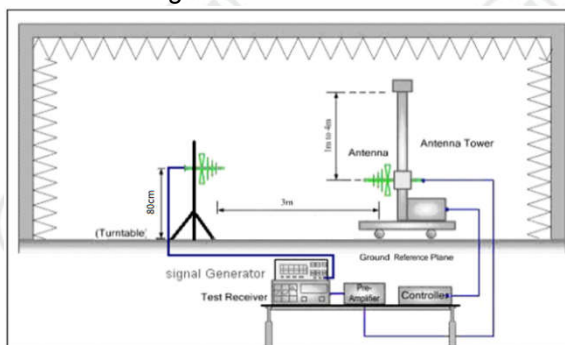


Figure 1. 30MHz to 1GHz

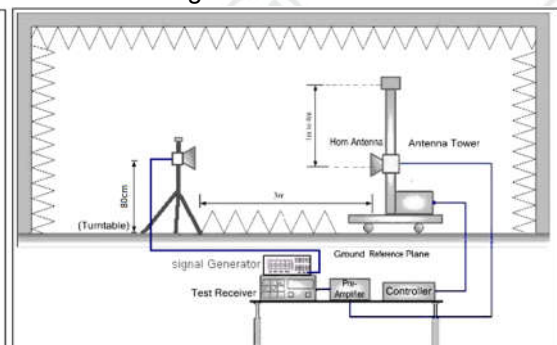


Figure 2. above 1GHz

5.2 Test Environment

Operating Environment:	
Temperature:	25.0 °C
Humidity:	56 % RH
Atmospheric Pressure:	1010kPa

5.3 Test Condition

Test channel:

Test Mode	Tx/Rx	RF Channel		
		Low(L)	Middle(cm)	High(H)
GPRS850	Tx (824 MHz ~849 MHz)	Channel 128	Channel 190	Channel 251
		824.2MHz	836.6 MHz	848.8 MHz
	Rx (869 MHz ~894 MHz)	Channel 128	Channel 190	Channel 251
		869.2 MHz	881.6 MHz	893.8 MHz
GPRS1900	Tx (1850 MHz ~1910 MHz)	Channel 512	Channel 661	Channel 810
		1850.2MHz	1880.0 MHz	1909.8 MHz
	Rx (1930 MHz ~1990 MHz)	Channel 512	Channel 661	Channel 810
		1930.2 MHz	1960.0 MHz	1989.8 MHz

Test mode:

band	Radiated	Conducted
GSM/GPRS 850	2)GPRS 8 Link	2)GPRS 8 Link
GSM/GPRS 1900	2)GPRS 8 Link	2)GPRS 8 Link



Test Mode	Test Modes description
GSM/TM2	GSM system, GPRS, GMSK modulation

6 General Information

6.1 Client Information

Applicant:	BikeFinder AS
Address of Applicant:	Veritasveien 25, 4007 Stavanger, Postbox 4004 4092 Stavanger, Norway
Manufacturer:	BikeFinder AS
Address of Manufacturer:	Veritasveien 25, 4007 Stavanger, Postbox 4004 4092 Stavanger, Norway
Factory:	High Quality PCB Co., Limited
Address of Factory:	1701 RM, Floor 17, Yunhua Shidai, Shajing Bao'an, Shenzhen

6.2 General Description of EUT

Product Name:	Bikefinder	
Model No.(EUT):	BFG1T	
Trade Mark:	 	
EUT Supports Radios application:	GPRS850 824-849MHz GPRS1900 1805 –1880MHz	
Power Supply:	AC Adapter	N/A
	Battery	Model: XHP11300 Polymer Lithium Ion Batteries 3.8V
USB Micro-B Plug cable:	NA	
USB Changing cable:	NA	
AUX cable:	NA	
AC Adapter (1) line:	NA	
Sample Received Date:	Jul. 19, 2019	
Sample tested Date:	Jul. 19, 2019 to Jul. 29, 2019	
Sample Received Date:	Sep. 19, 2022	
Sample tested Date:	Sep. 19, 2022 to Oct. 26, 2022	

6.3 Product Specification subjective to this standard

Frequency Band:	GPRS 850: Tx:824.20 -848.80MHz;Rx: 869.20 – 893.80MHz GPRS 1900: Tx:1850.20 – 1909.80MHz;Rx:1930.20 – 1989.80MHz
Modulation Type:	GPRS Mode with GMSK Modulation
SIM	IMEI: 352119100300344
Power class	3
Sample Type:	Portable device
Antenna Type and Gain:	Monopole LDS Antenna, GPRS 850 -3.03 dBi GPRS 1900 -10.64 dBi
Test Voltage:	DC 3.8V

Frequency/MHz	800	810	820	830	840	850	860	870	880	890	900
Peak Gain/dBi	-9.14	-8.46	-8.29	-7.61	-6.69	-5.79	-5.18	-4.59	-4	-3.65	-3.28
Efficiency/%	4.11	4.86	5.36	6.17	7.25	8.20	9.04	10.38	11.12	12.03	12.86
Frequency/MHz	910	920	930	940	950	960	970	980	990	1000	/
Peak Gain/dBi	-3.16	-3.2	-3.2	-3.29	-3.27	-3.32	-3.36	-3.08	-3.09	-3.03	/
Efficiency/%	12.68	12.53	12.39	12.07	12.36	12.09	12.11	12.99	12.80	12.78	/

Frequency/MHz	1700	1710	1720	1730	1740	1750	1760	1770	1780	1790
Peak Gain/dBi	-13	-13.38	-13.57	-13.28	-12.98	-12.51	-11.87	-11.17	-10.64	-11.12
Efficiency/%	1.71	1.60	1.58	1.72	1.92	2.21	2.67	3.19	3.53	3.33
Frequency/MHz	1800	1810	1820	1830	1840	1850	1860	1870	1880	1890
Peak Gain/dBi	-11.61	-12.68	-13.79	-14.58	-14.99	-15.47	-15.81	-16.02	-15.87	-16
Efficiency/%	2.98	2.49	1.98	1.65	1.47	1.29	1.16	1.08	1.09	1.02
Frequency/MHz	1900	1910	1920	1930	1940	1950	1960	1970	1980	1990
Peak Gain/dBi	-15.79	-15.85	-15.54	-15.7	-15.51	-14.98	-14.69	-14.7	-14.53	-14.43
Efficiency/%	1.01	1.01	1.03	1.03	1.04	1.14	1.18	1.16	1.21	1.23

6.4 Description of Support Units

The EUT has been tested independently

6.5 Test Location

All tests were performed at:

Centre Testing International Group Co., Ltd

Building C, Hongwei Industrial Park Block 70, Bao'an District, Shenzhen, China

Telephone: +86 (0) 755 33683668 Fax:+86 (0) 755 33683385

No tests were sub-contracted.

FCC Designation No.: CN1164

6.6 Deviation from Standards

None.

6.7 Abnormalities from Standard Conditions

None.

6.8 Other Information Requested by the Customer

None.

6.9 Measurement Uncertainty (95% confidence levels, k=2)

No.	Item	Measurement Uncertainty
1	Radio Frequency	7.9×10^{-8}
2	RF power, conducted	0.46dB (30MHz-1GHz)
		0.55dB (1GHz-18GHz)
3	Radiated Spurious emission test	4.3dB (30MHz-1GHz)
		4.5dB (1GHz-12.75GHz)
4	Conduction emission	3.5dB (9kHz to 150kHz)
		3.1dB (150kHz to 30MHz)
5	Temperature test	0.64°C
6	Humidity test	3.8%
7	DC power voltages	0.026%

7 Equipment List

RF test system					
Equipment	Manufacturer	Model No.	Serial Number	Cal. Date (mm-dd-yyyy)	Cal. Due date (mm-dd-yyyy)
Signal Generator	Keysight	E8257D	MY53401106	03-01-2019	02-28-2020
Spectrum Analyzer	Keysight	N9010A	MY54510339	03-01-2019	02-28-2020
Signal Generator	Keysight	N5182B	MY53051549	03-01-2019	02-28-2020
High-pass filter	Sinoscite	FL3CX03WG1 8NM12-0398-002	---	01-09-2019	01-08-2020
High-pass filter	MICRO-TRONICS	SPA-F-63029-4	---	01-09-2019	01-08-2020
DC Power	Keysight	E3642A	MY54426035	03-01-2019	02-28-2020
PC-1	Lenovo	R4960d	---	03-01-2019	02-28-2020
BT&WI-FI Automatic control	R&S	OSP120	101374	03-01-2019	02-28-2020
RF control unit	JS Tonscend	JS0806-2	15860006	03-01-2019	02-28-2020
RF control unit	JS Tonscend	JS0806-1	15860004	03-01-2019	02-28-2020
RF control unit	JS Tonscend	JS0806-4	158060007	03-01-2019	02-28-2020
BT&WI-FI Automatic test software	JS Tonscend	JS1120-2	---	03-01-2019	02-28-2020
Temperature/ Humidity Indicator	biaozhi	HM10	1804186	10-12-2018	10-11-2019

3M full-anechoic Chamber					
Equipment	Manufacturer	Model No.	Serial Number	Cal. date (mm-dd-yyyy)	Cal. Due date (mm-dd-yyyy)
RSE Automatic test software	JS Tonscend	JS36-RSE	10166	---	---
Receiver	Keysight	N9038A	MY57290136	03-01-2022	02-28-2023
Spectrum Analyzer	Keysight	N9020B	MY57111112	02-23-2022	02-22-2023
Spectrum Analyzer	Keysight	N9030B	MY57140871	02-23-2022	02-22-2023
TRILOG Broadband Antenna	Schwarzbeck	VULB 9163	9163-1148	04-30-2021	04-29-2024
Horn Antenna	Schwarzbeck	BBHA 9170	9170-832	04-17-2021	04-16-2024
Horn Antenna	ETS-LINDGREN	3117	57407	07-04-2021	07-03-2024
Preamplifier	EMCI	EMC184055SE	980597	04-20-2022	04-19-2023
Communication test set	R&S	CMW500	102898	12-24-2021	12-23-2022
Preamplifier	EMCI	EMC001330	980563	04-01-2022	03-31-2023
Preamplifier	JS Tonscend	980380	EMC051845 SE	12-24-2021	12-23-2022
Temperature/ Humidity Indicator	biaozhi	GM1360	EE1186631	04-11-2022	04-10-2023
Fully Anechoic Chamber	TDK	FAC-3	---	01-16-2021	01-15-2024
Cable line	Times	SFT205-NMSM-2.50M	394812-0001	---	---
Cable line	Times	SFT205-NMSM-2.50M	394812-0002	---	---
Cable line	Times	SFT205-NMSM-2.50M	394812-0003	---	---
Cable line	Times	SFT205-NMSM-2.50M	393495-0001	---	---
Cable line	Times	EMC104-NMNM-1000	SN160710	---	---
Cable line	Times	SFT205-NMSM-3.00M	394813-0001	---	---
Cable line	Times	SFT205-NMNM-1.50M	381964-0001	---	---
Cable line	Times	SFT205-NMSM-7.00M	394815-0001	---	---
Cable line	Times	HF160-KMKM-3.00M	393493-0001	---	---

8 Radio Technical Requirements Specification

Reference documents for testing:

No.	Identity	Document Title
1	PART 22	PART 22 – PUBLIC MOBILE SERVICES Subpart H – Cellular Radiotelephone Service
2	PART 24	PART 24 – PERSONAL COMMUNICATIONS SERVICES Subpart E – Broadband PCS
3	PART 2	Frequency allocations and radio treaty matters; general rules and regulations
4	TIA-603-E-2016	Land Mobile FM or PM -Communications Equipment -Measurement and Performance Standards
5	KDB971168 D01	KDB971168 D01 Power Meas License Digital Systems v03r01

Test Results List:

Test Requirement	Test method	Test item	Verdict	Note
Part 2.1046(a)/Part 22.913(a)/ part 24.232(c)	TIA-603-E-2016& KDB 971168 D01v03r01	Conducted output power	PASS	Appendix A)
Part 24.232(d)	KDB 971168 D01v03r01	peak-to-average ratio	PASS	Appendix B)
Part 2.1049(h)	Part 22.917(b)/ Part 24.238(b)/ Part 27.53(h) &KDB 971168 D01v03r01	99% &26dB Occupied Bandwidth	PASS	Appendix C)
Part 2.1051/Part 22.917(a)/ Part 24.238(a)	Part 22.917(b)/ Part 24.238(b)/ Part 27.53(h) &KDB 971168 D01v03r01	Band Edge at antenna terminals	PASS	Appendix D)
Part 2.1051/ Part 2.1057/ Part 22.917(a)(b)/ Part 24.238(a)(b)	TIA-603-E-2016& KDB 971168 D01v03r01	Spurious emissions at antenna terminals	PASS	Appendix E)
Part 2.1055/ Part 22.355/ Part 24.235	TIA-603-E-2016& KDB 971168 D01v03r01	Frequency stability	PASS	Appendix F)
Part 2.1053/ Part 2.1057/ Part 22.917(a)(b)/ Part 24.238(a)(b)	TIA-603-E-2016& KDB 971168 D01v03r01	Field strength of spurious radiation	PASS	Appendix G)
Part 2.1046(a)/Part 22.913(a)/ Part 24.232(c)	TIA-603-E-2016& KDB 971168 D01v03r01	Effective Radiated Power of Transmitter(ERP)	PASS	Appendix H)

Appendix A) RF Power Output

Test Band	Test Mode	Test Channel	Measured(dbm)	Limit (dbm)	Verdict
GSM850	GSM/TM2	LCH	33.72	38.5	PASS
		MCH	33.14	38.5	PASS
		HCH	32.29	38.5	PASS
Test Band	Test Mode	Test Channel	Measured(dbm)	Limit (dbm)	Verdict
GSM1900	GSM/TM2	LCH	30.91	33	PASS
		MCH	30.15	33	PASS
		HCH	30.79	33	PASS

Appendix B) Peak-to-Average Ratio

Test Band	Test Mode	Test Channel	Measured (db)	Limit (db)	Verdict
GSM1900	GSM/TM2	LCH	1.25	13	PASS
		MCH	1.20	13	PASS
		HCH	1.23	13	PASS

Appendix C) BandWidth

Test Band	Test Mode	Test Channel	Occupied Bandwidth (MHZ)	Emission Bandwidth (MHZ)	Verdict
GSM850	GSM/TM2	LCH	243.6	313	PASS
		MCH	244.0	318	PASS
		HCH	244.9	318	PASS

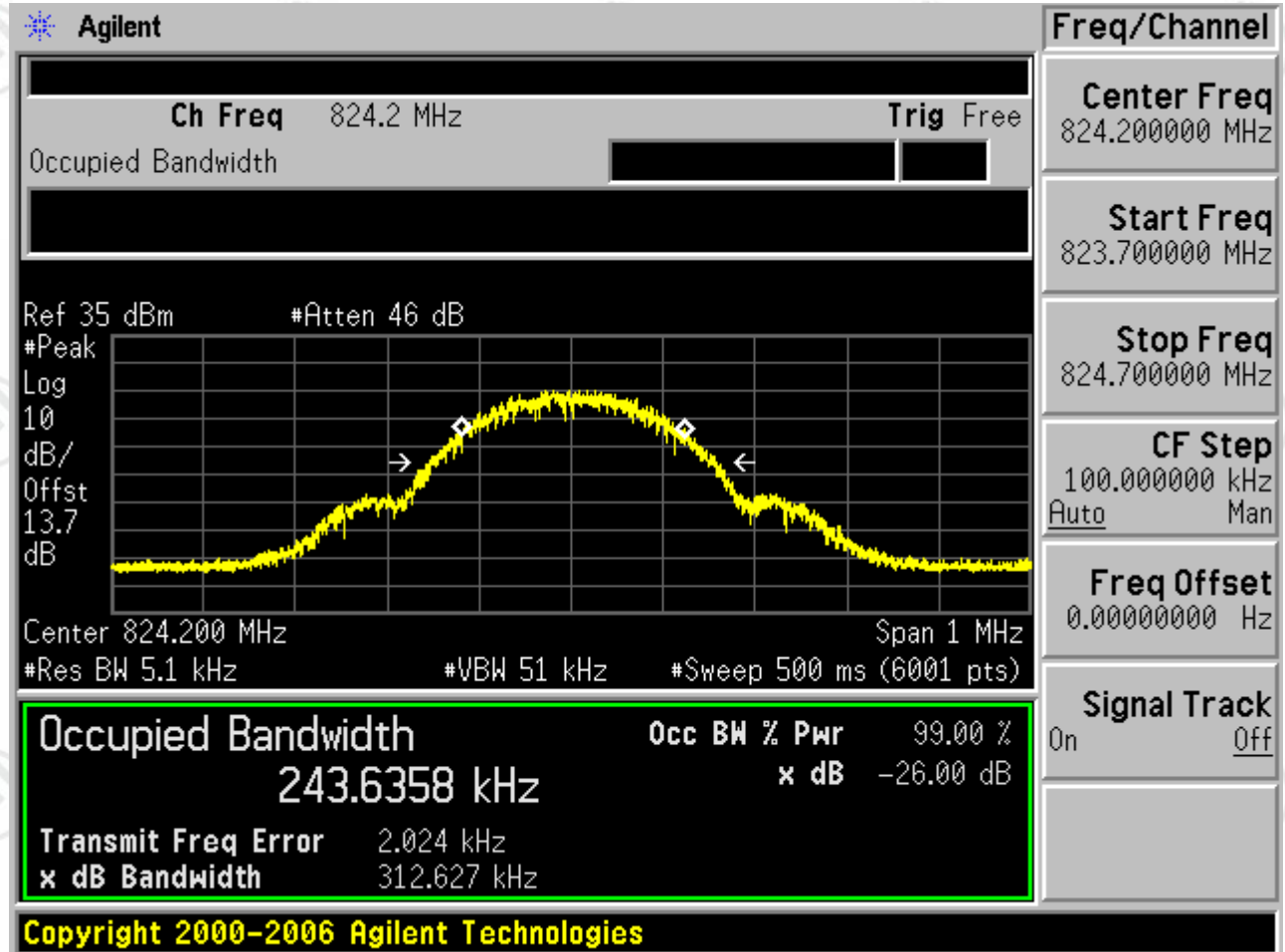
Test Band	Test Mode	Test Channel	Occupied Bandwidth (MHZ)	Emission Bandwidth (MHZ)	Verdict
GSM1900	GSM/TM2	LCH	247.2	316	PASS
		MCH	243.9	317	PASS
		HCH	246.7	313	PASS

1 For GSM

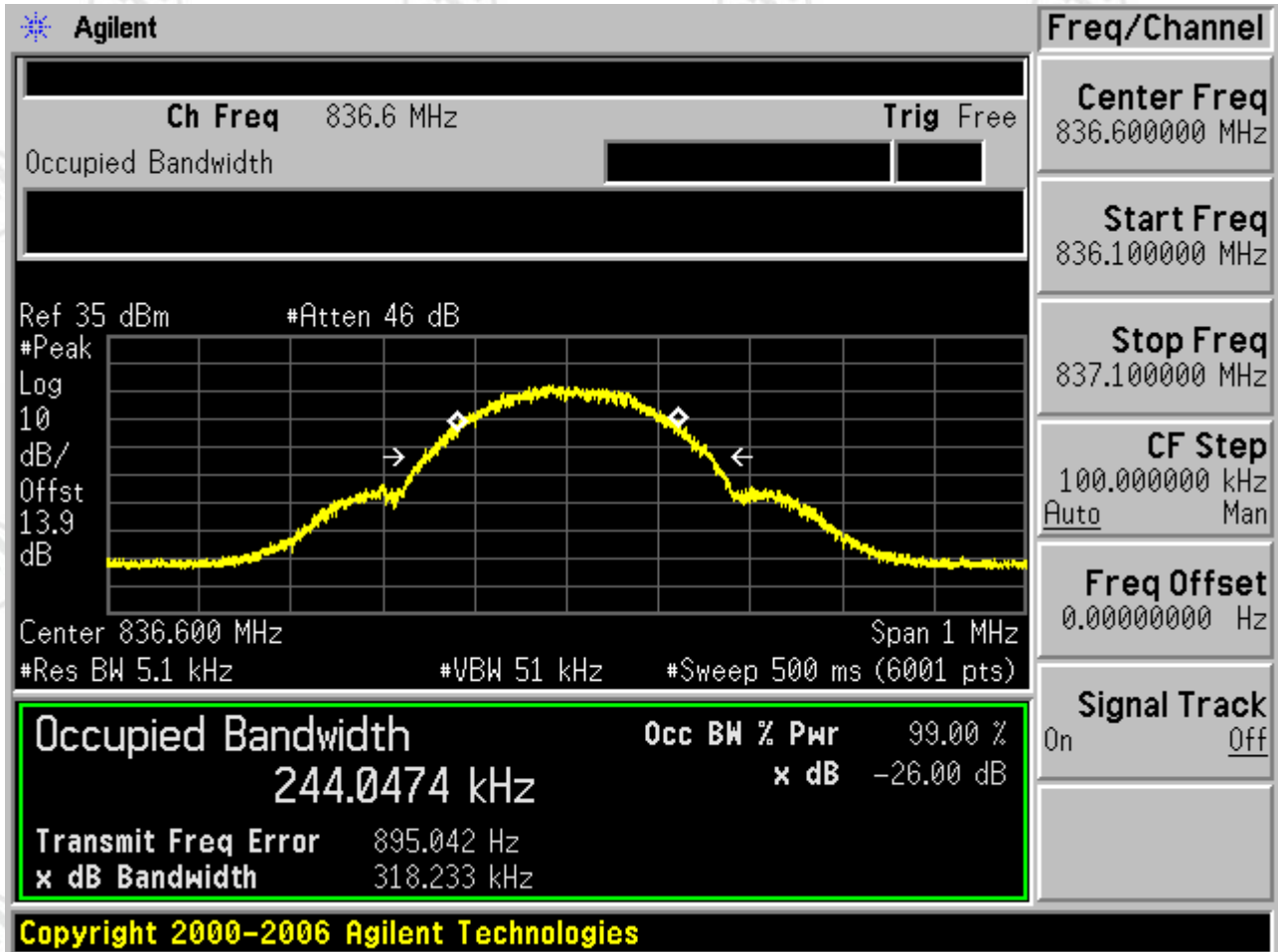
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1.1.1 Test Mode=GSM/TM2

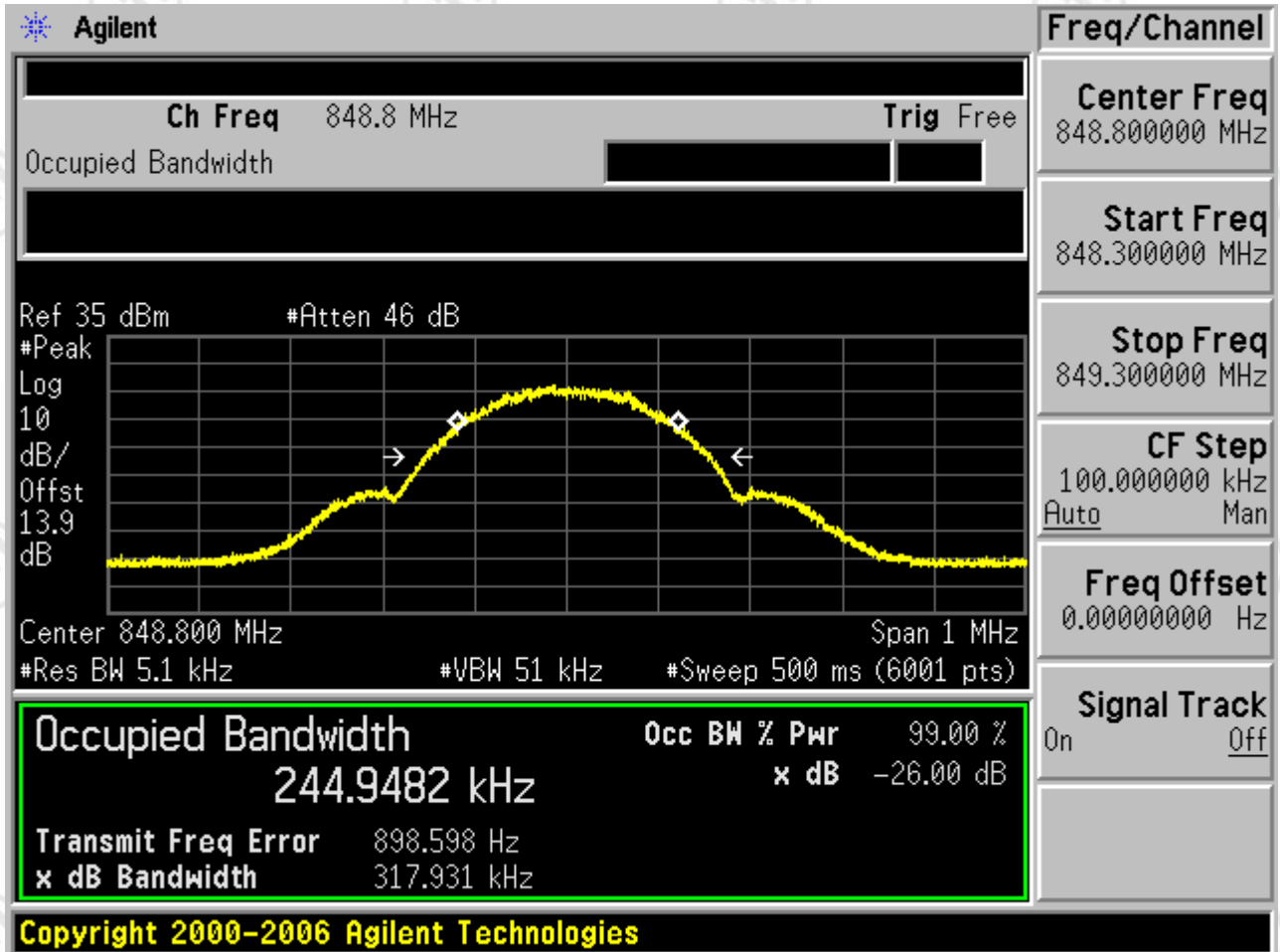
1.1.1.1 Test Channel=LCH



1.1.1.2 Test Channel=MCH

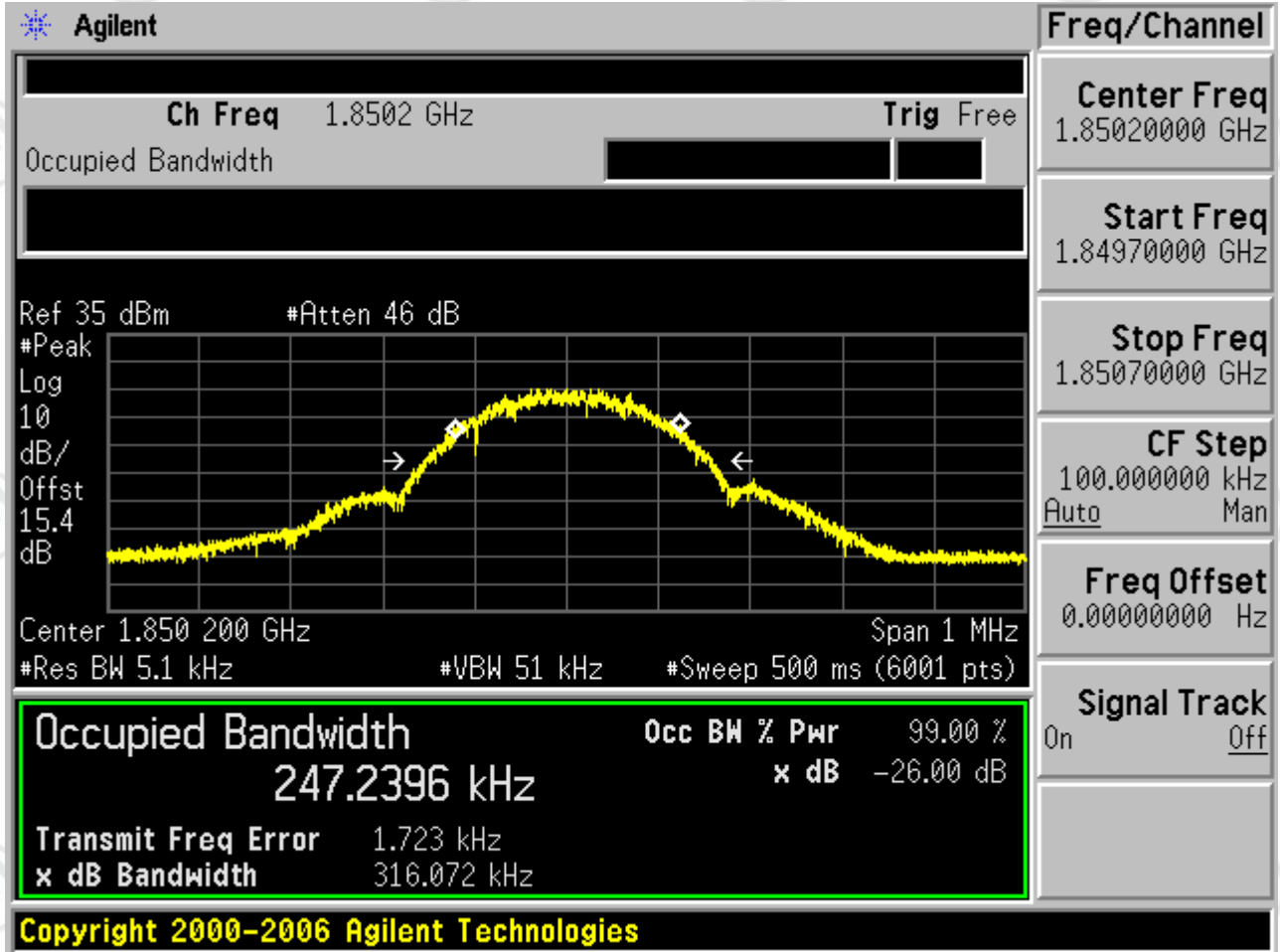


1.1.1.3 Test Channel=HCH

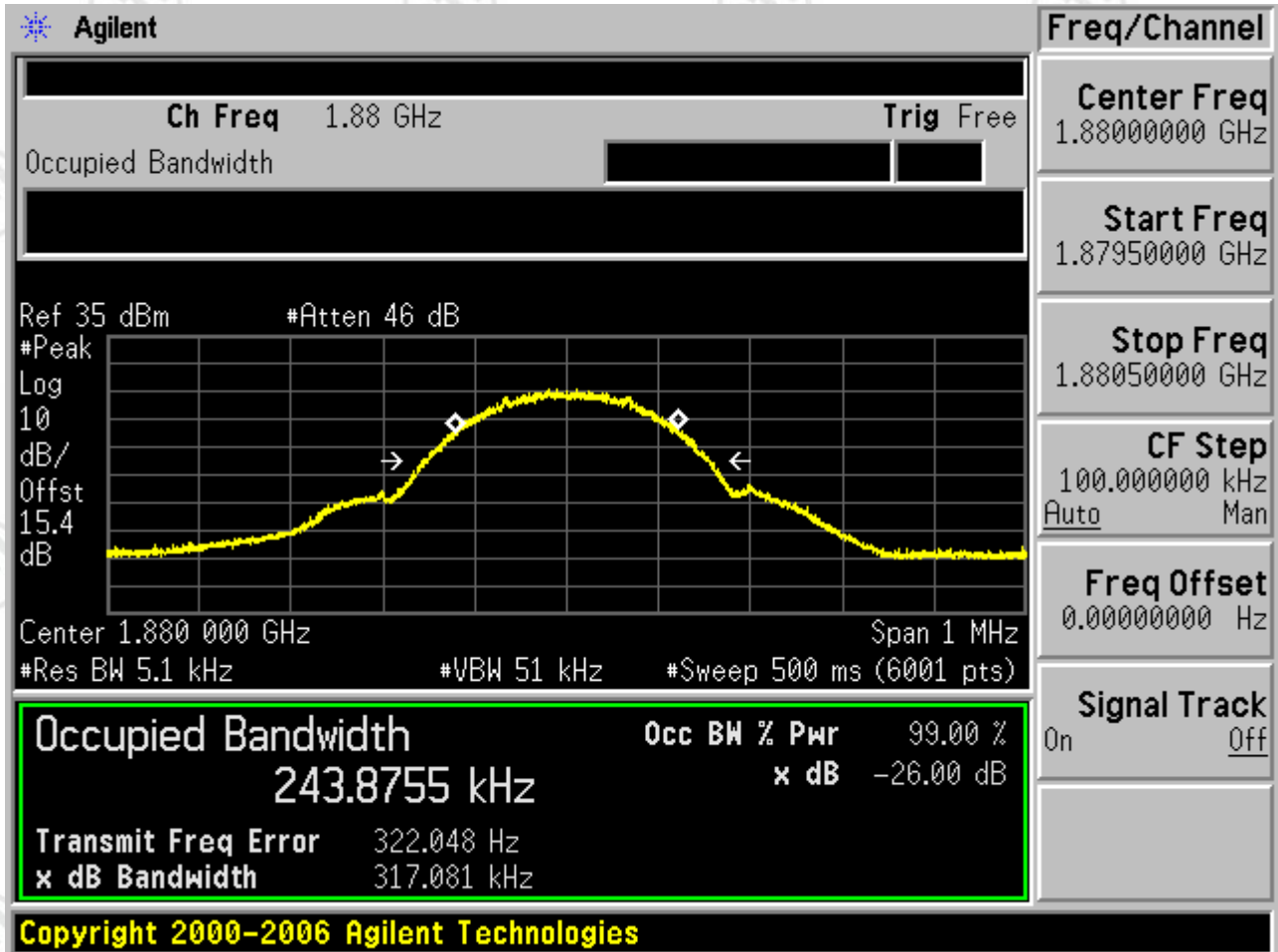


1.2 Test Mode=GSM/TM2

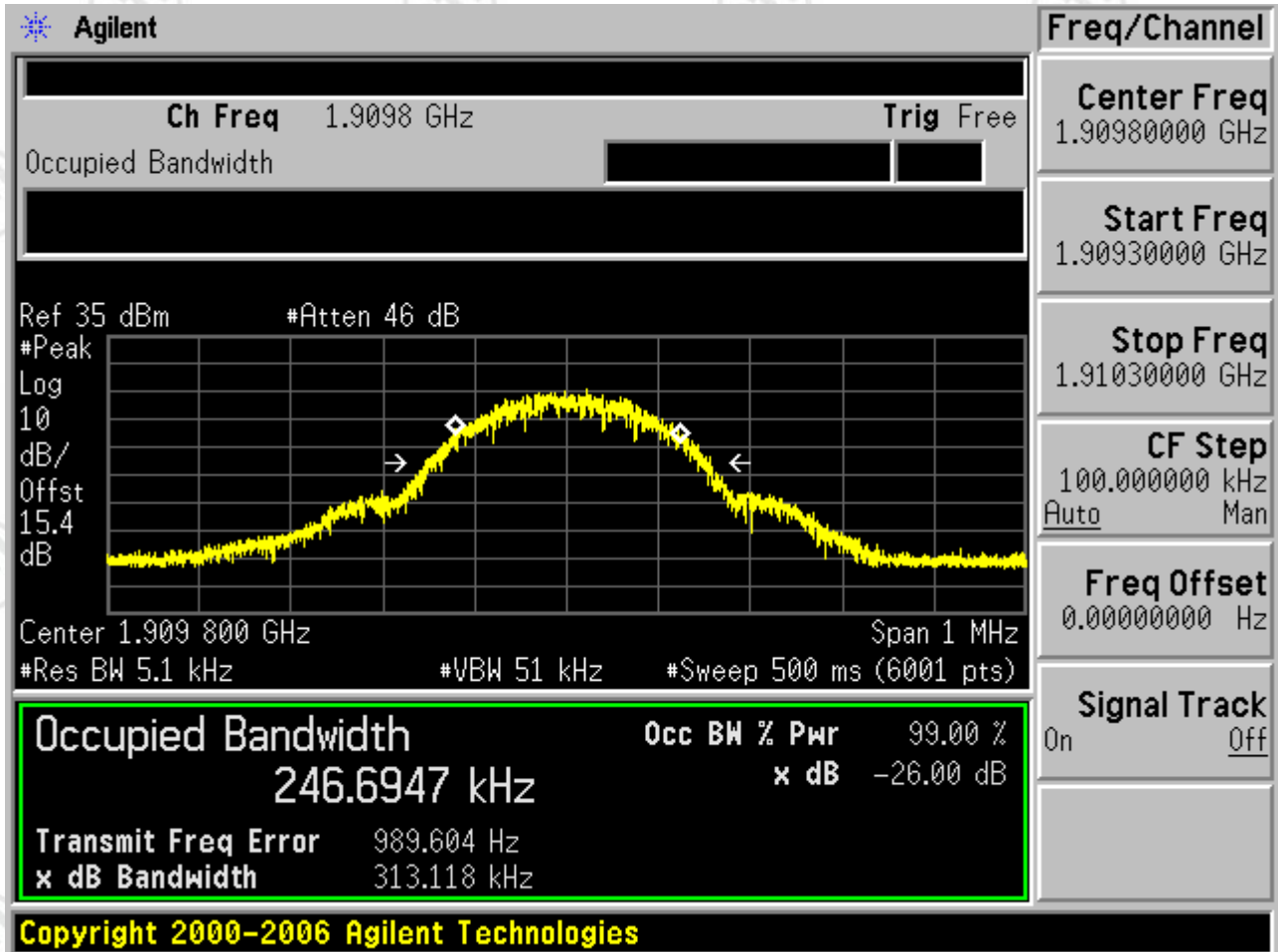
1.2.1.1 Test Channel=LCH



1.2.1.2 Test Channel=MCH



1.2.1.3 Test Channel=HCH



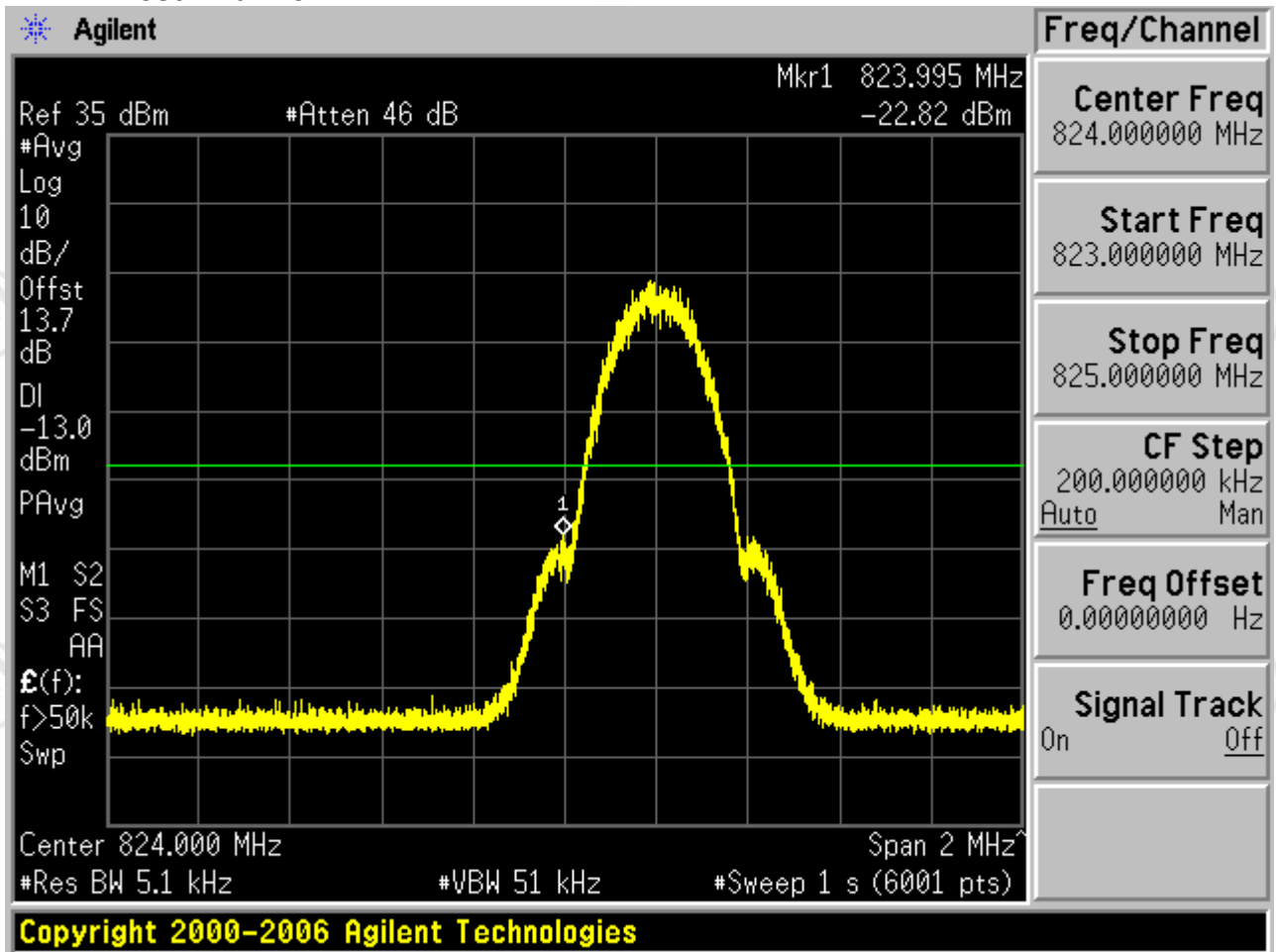
Appendix D) Band Edges Compliance

1 For GSM

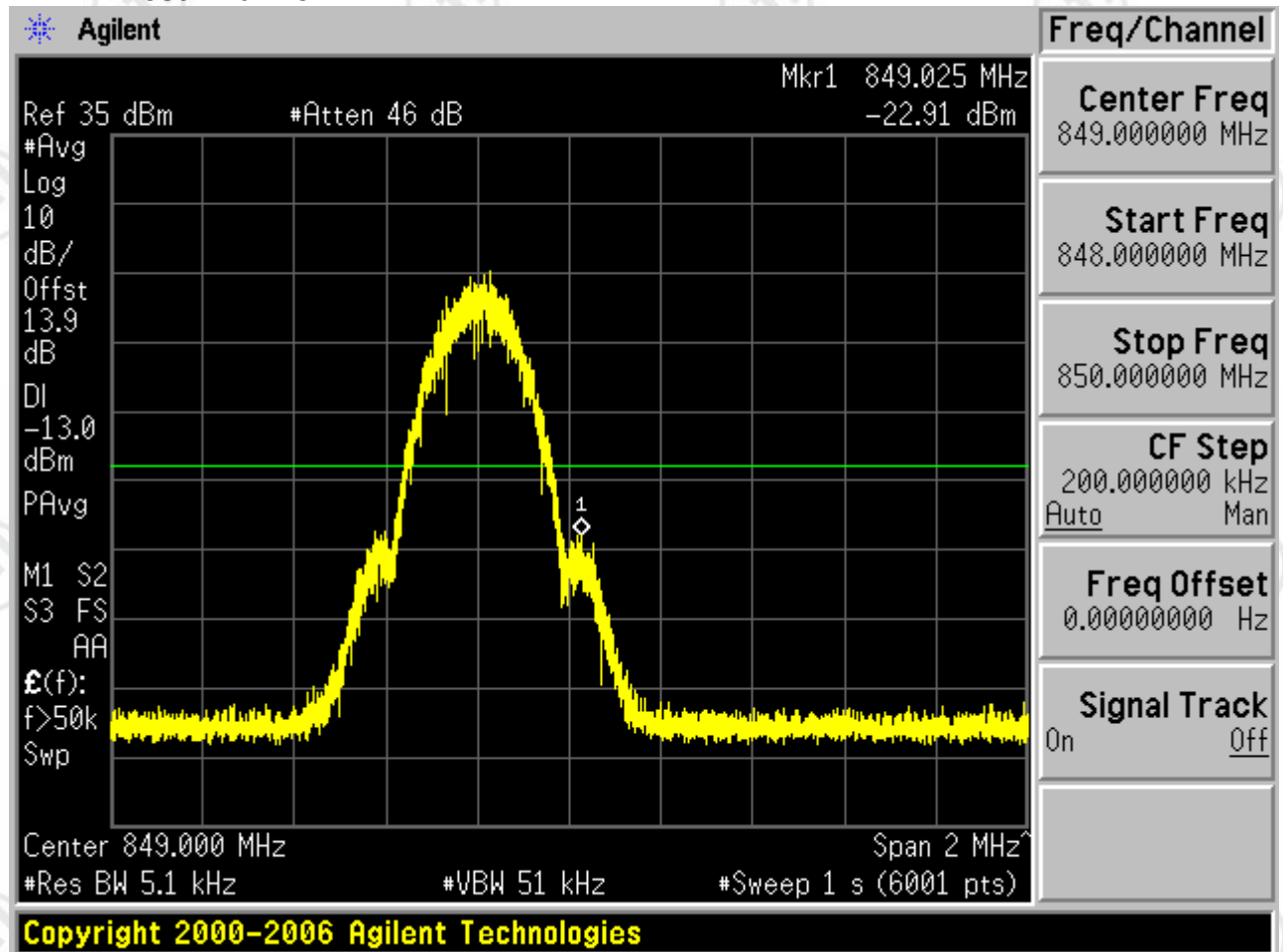
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1.1.1 Test Mode=GSM/TM2

1.1.1.1 Test Channel=LCH

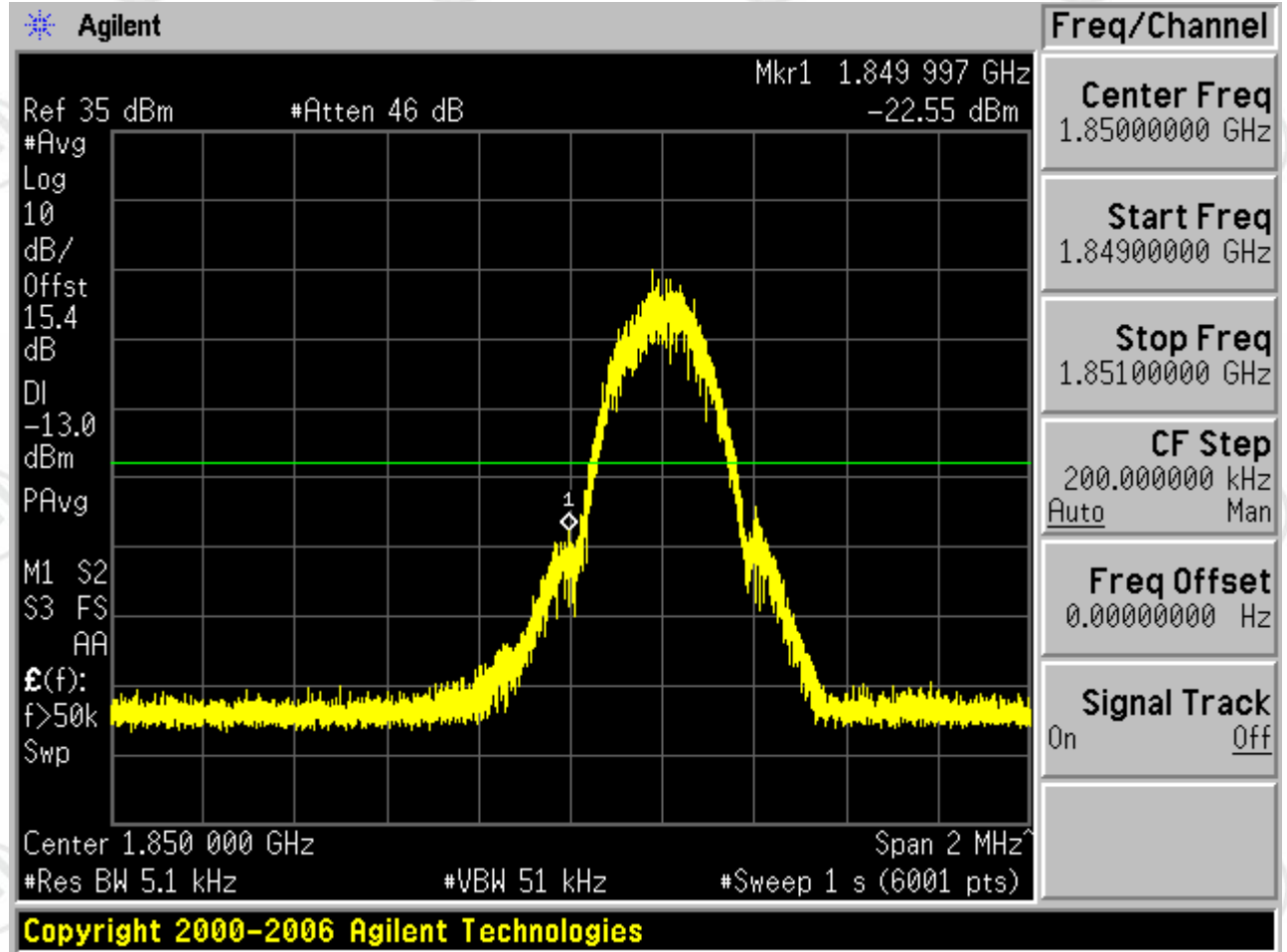


1.1.1.2 Test Channel=HCH

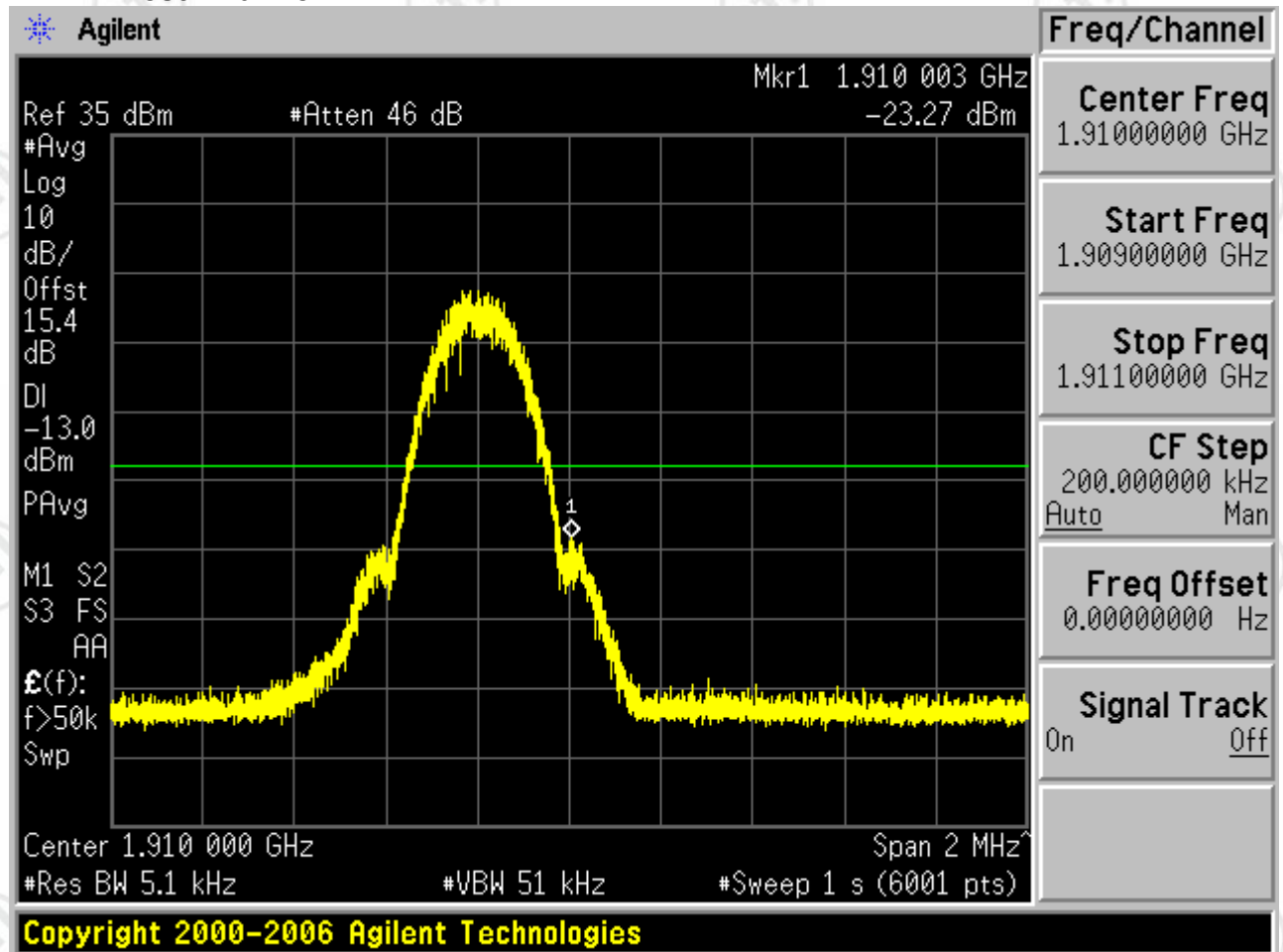


1.1.2 Test Mode=GSM/TM2

1.1.2.1 Test Channel=LCH



1.1.2.2 Test Channel=HCH



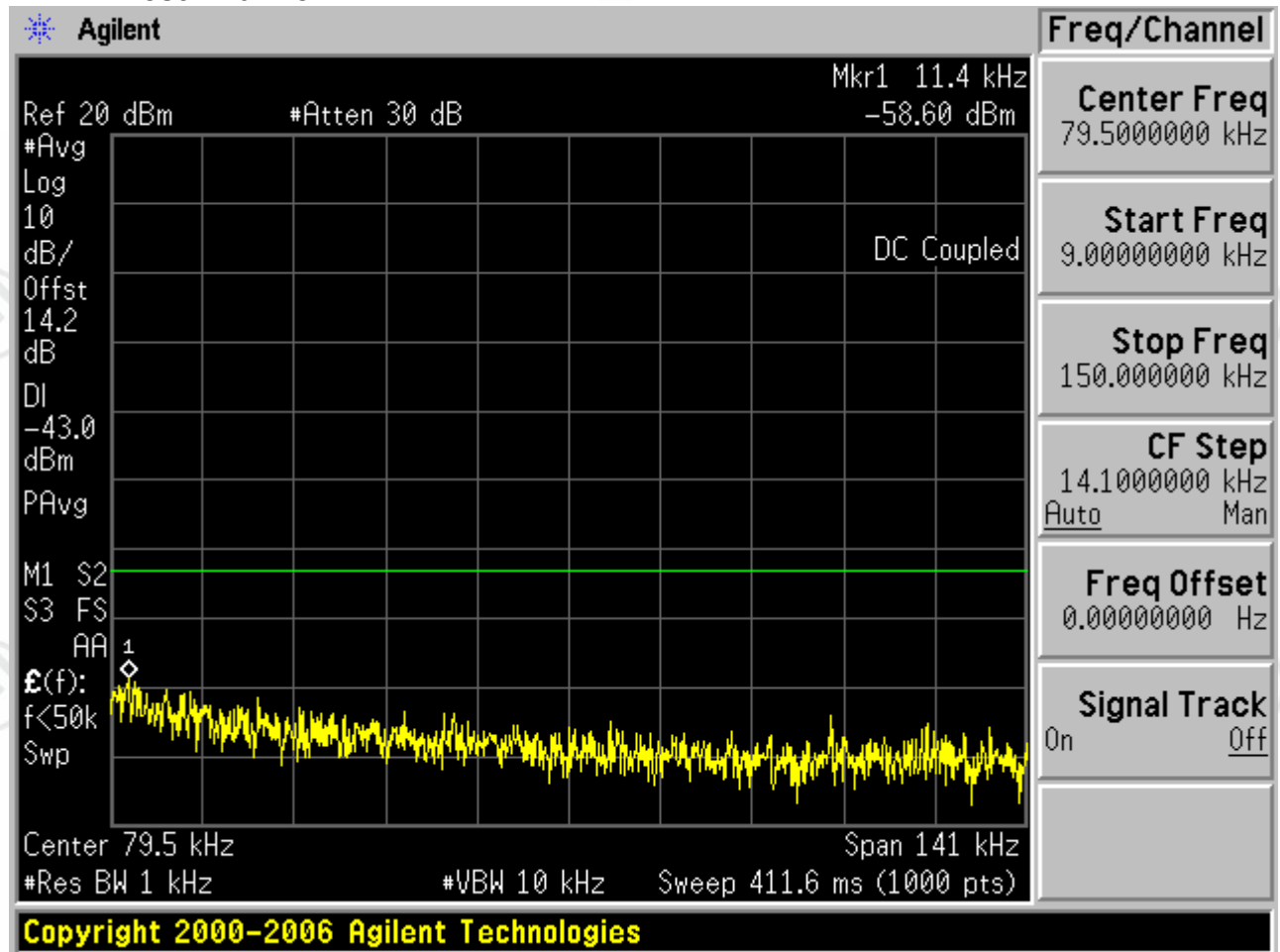
Appendix E) Spurious Emission at Antenna Terminal

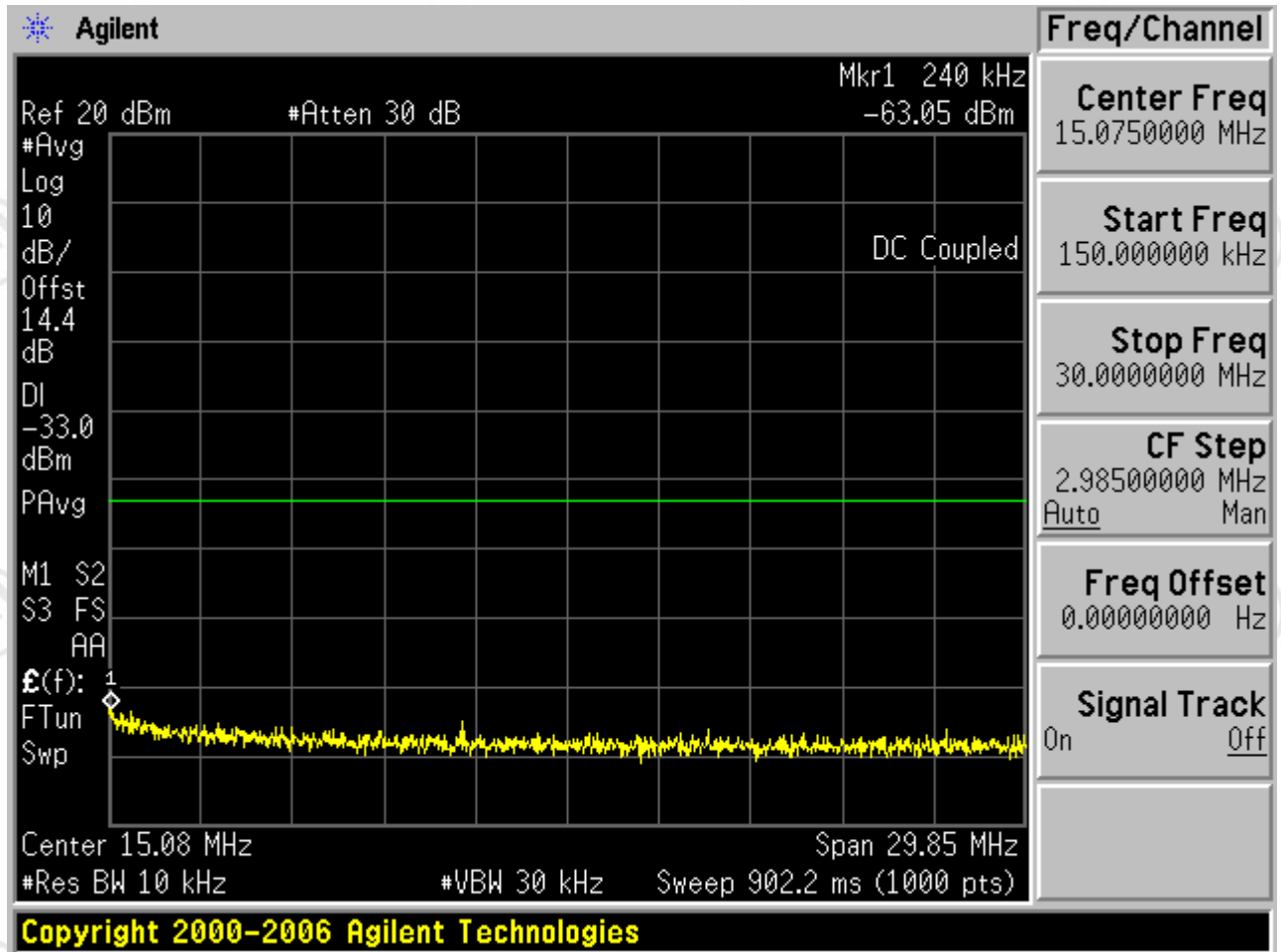
1 For GSM

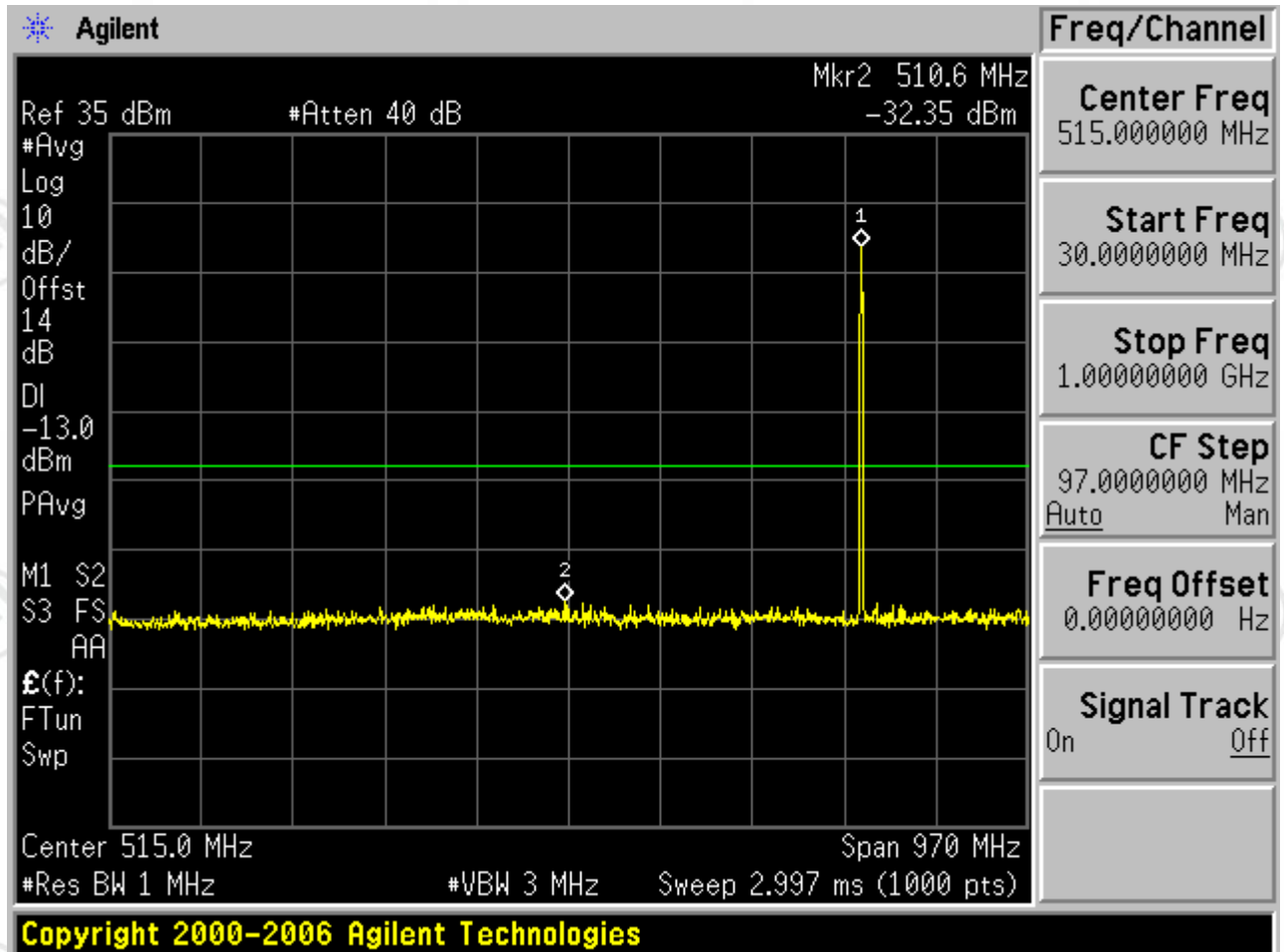
1.1 Test Band=GSM850

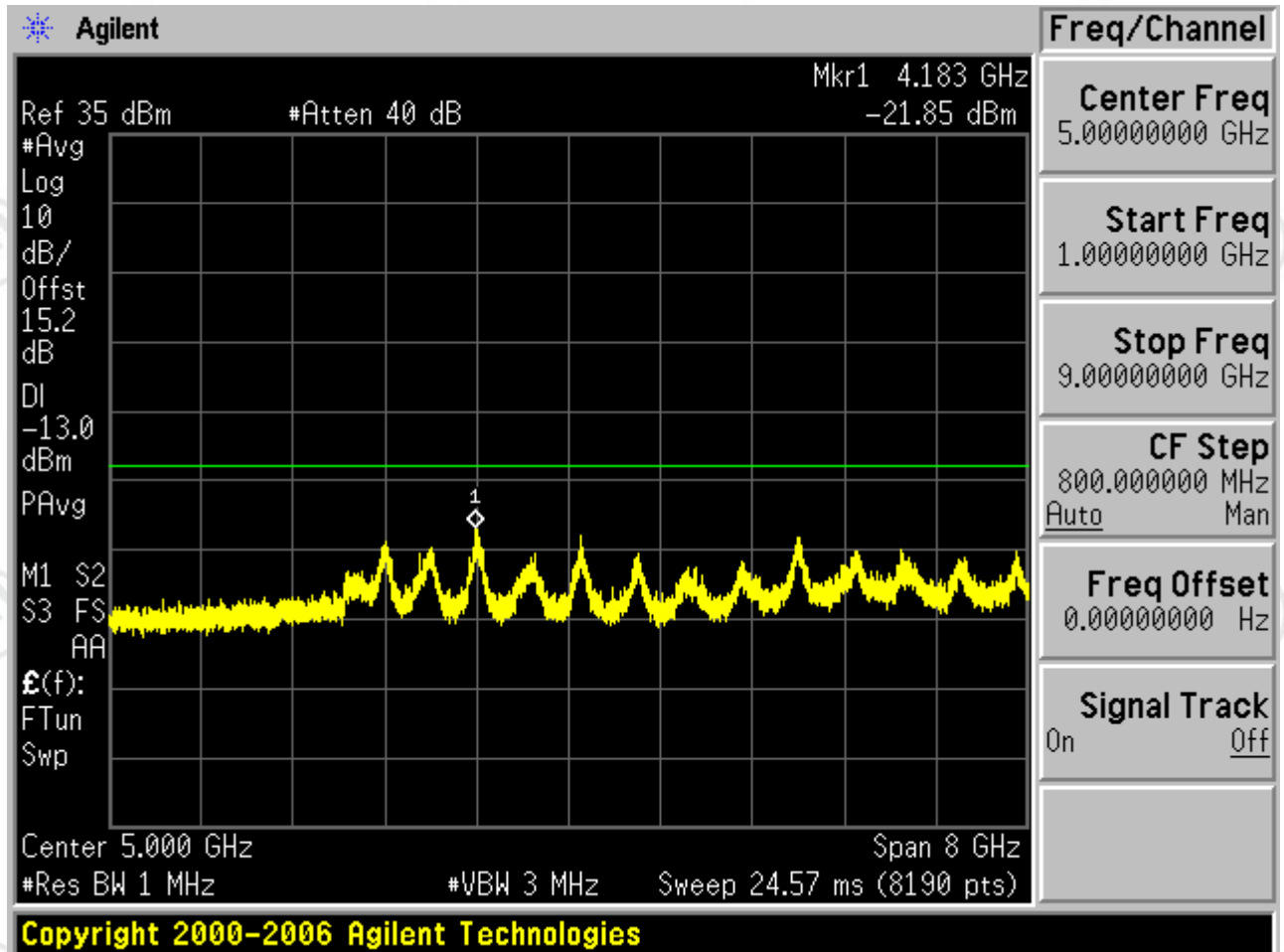
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1.1.1.1 Test Channel=LCH

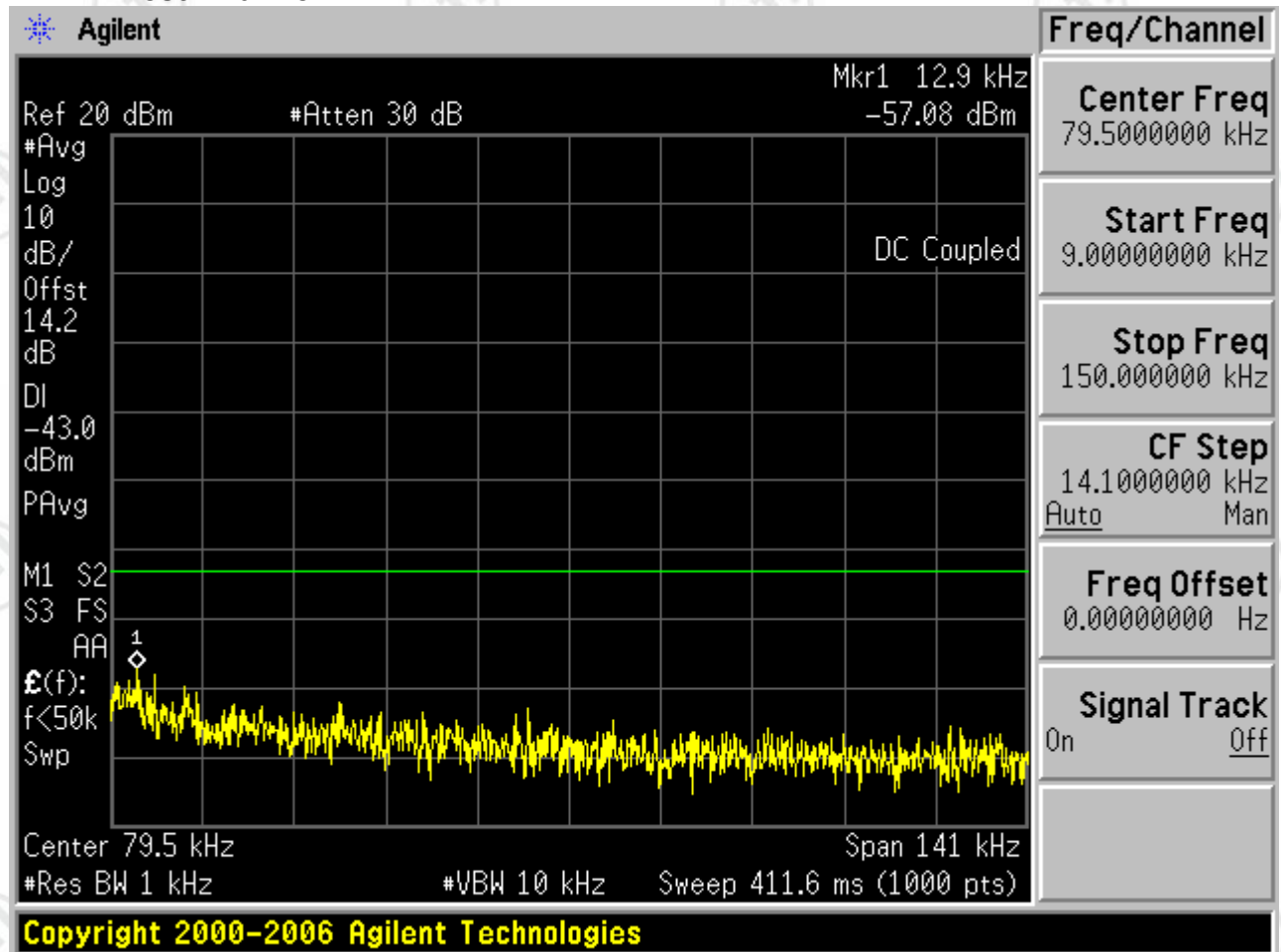


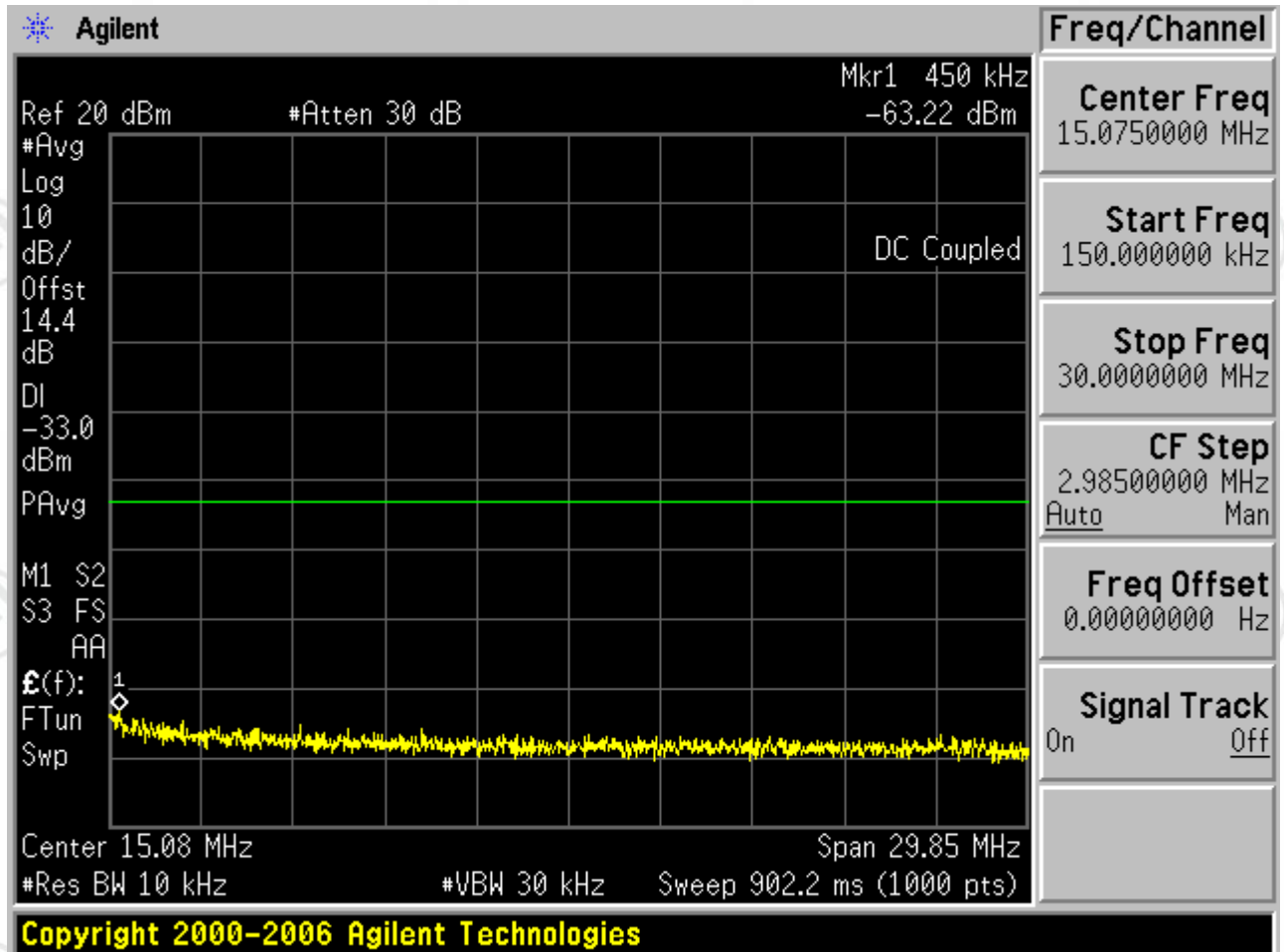


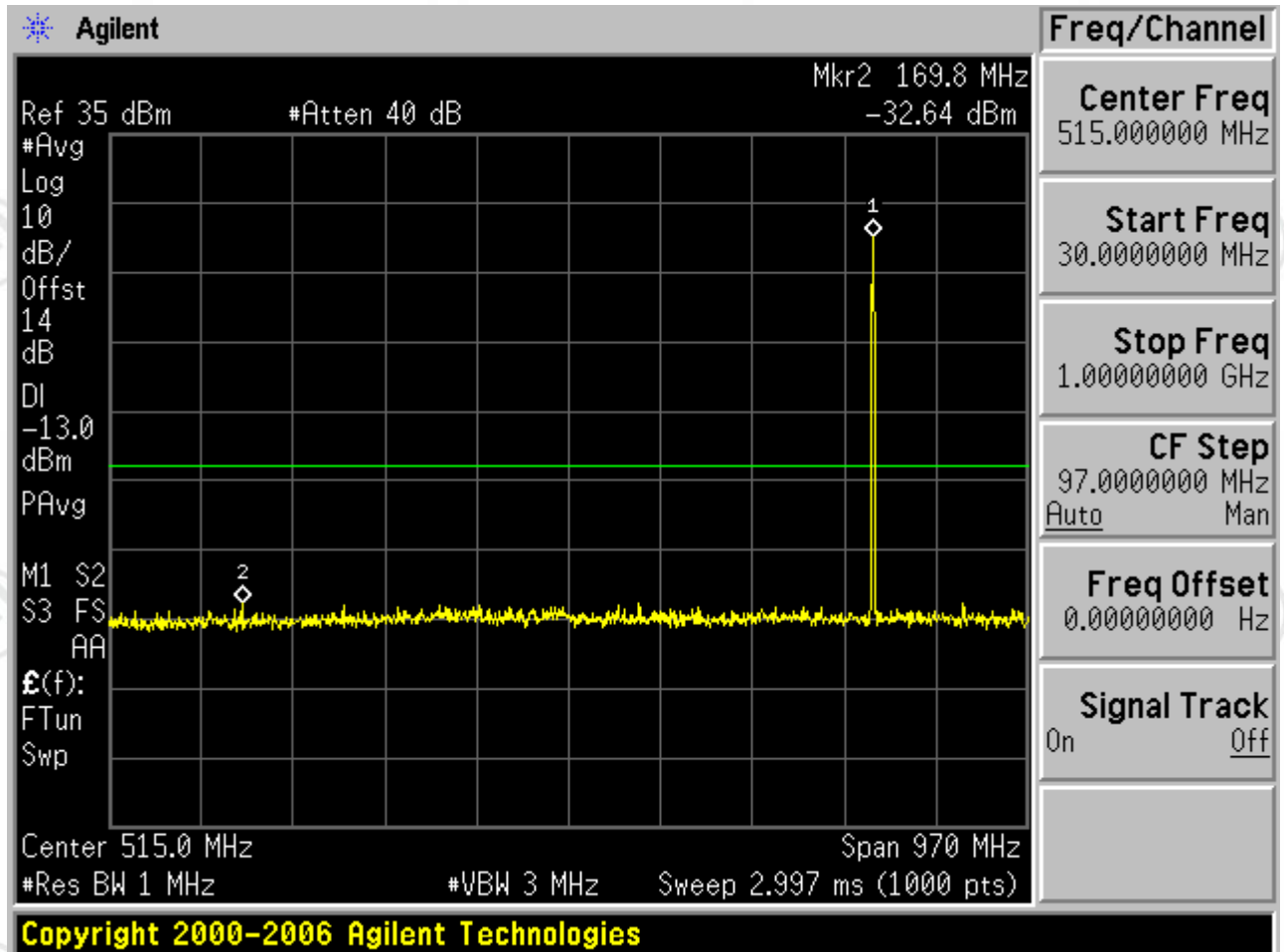


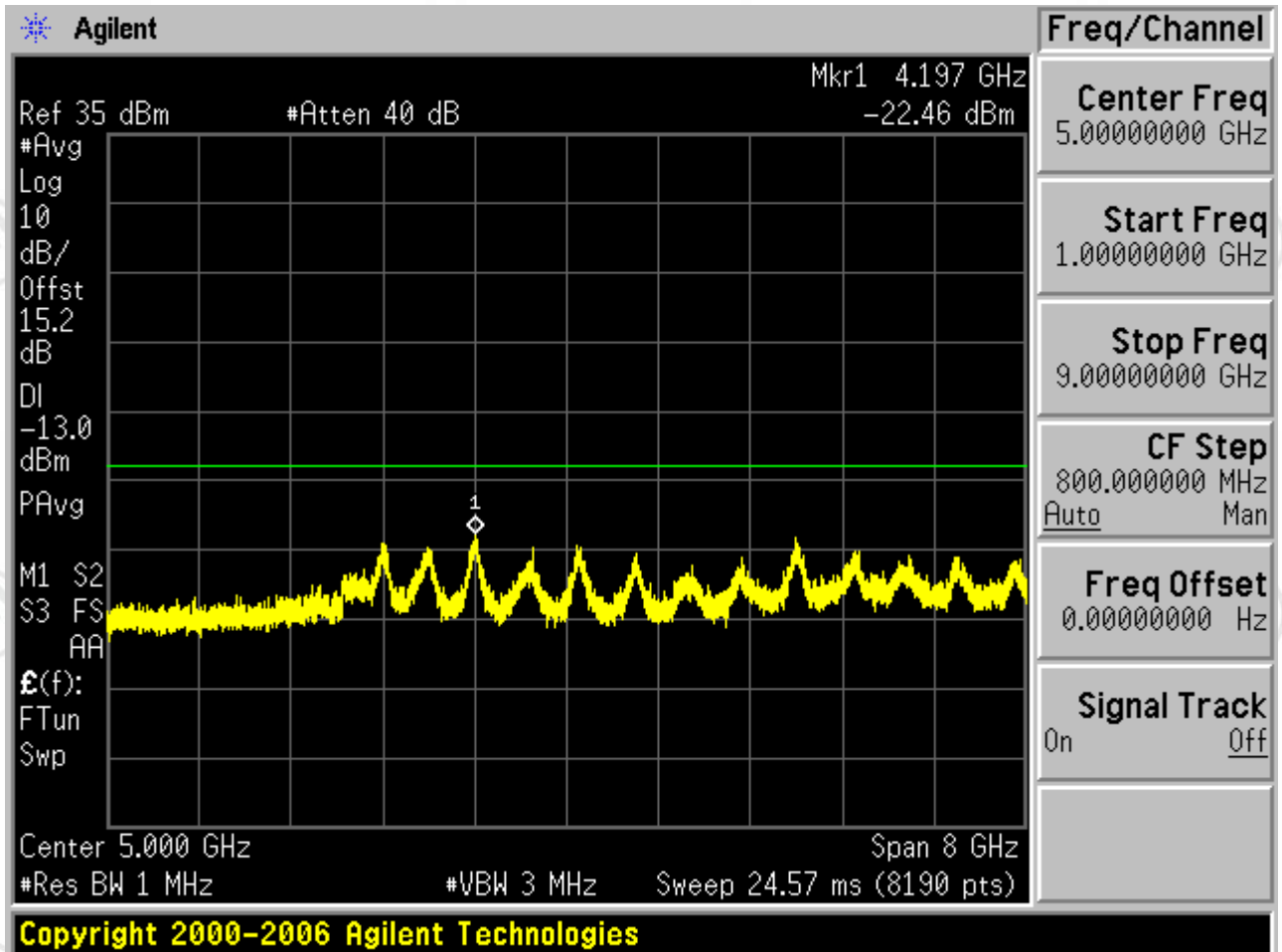


1.1.1.2 Test Channel=MCH

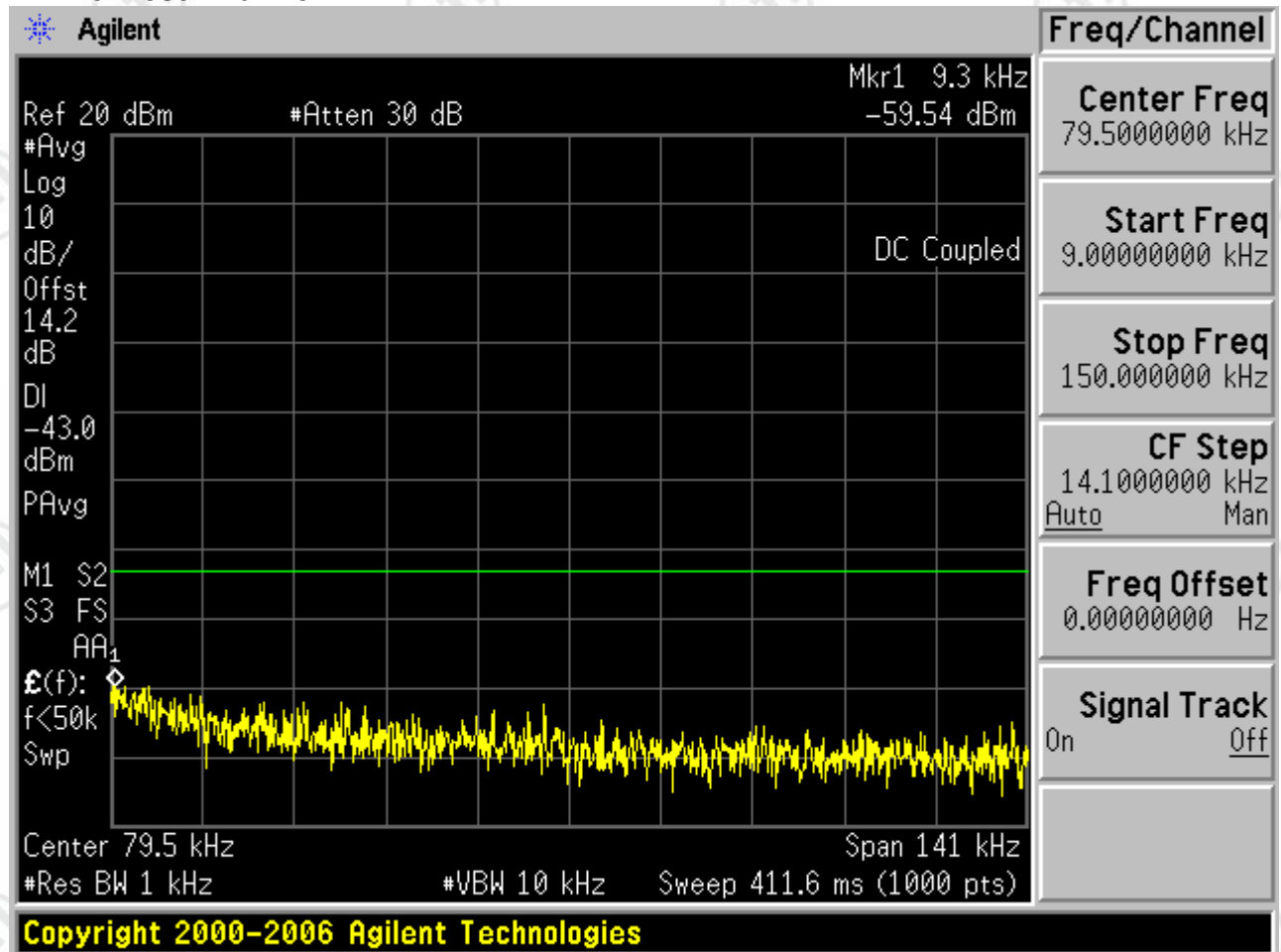


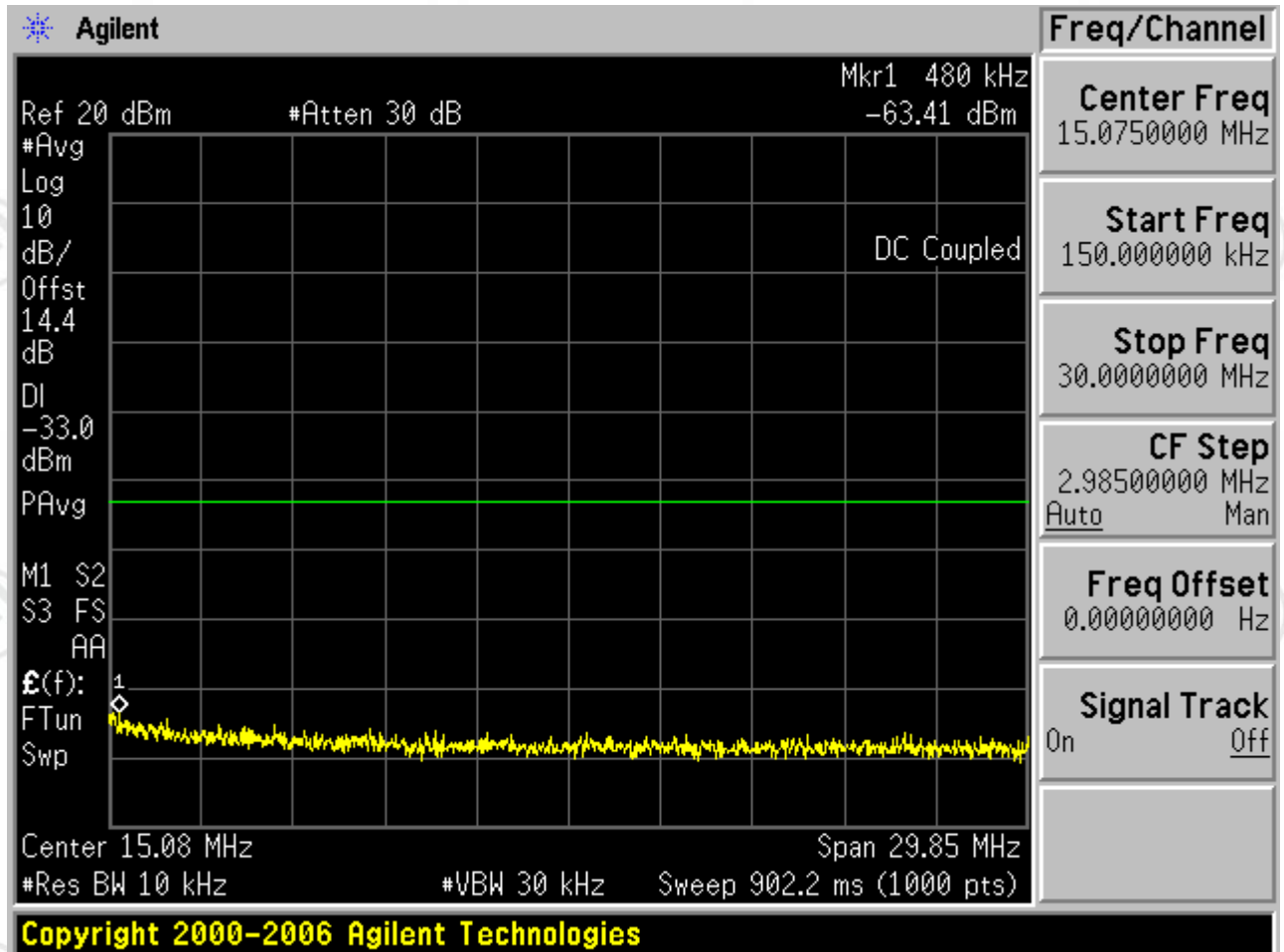


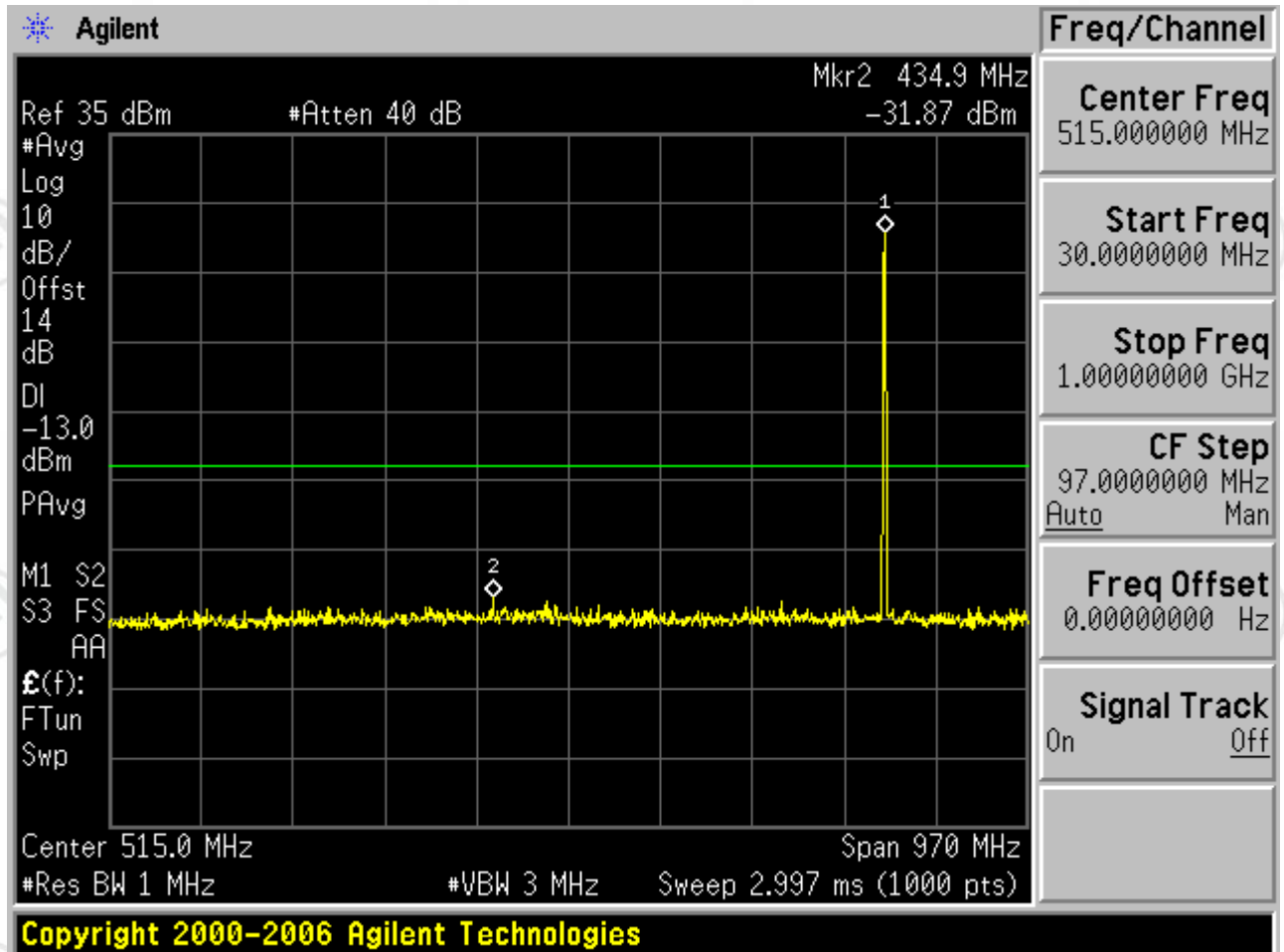


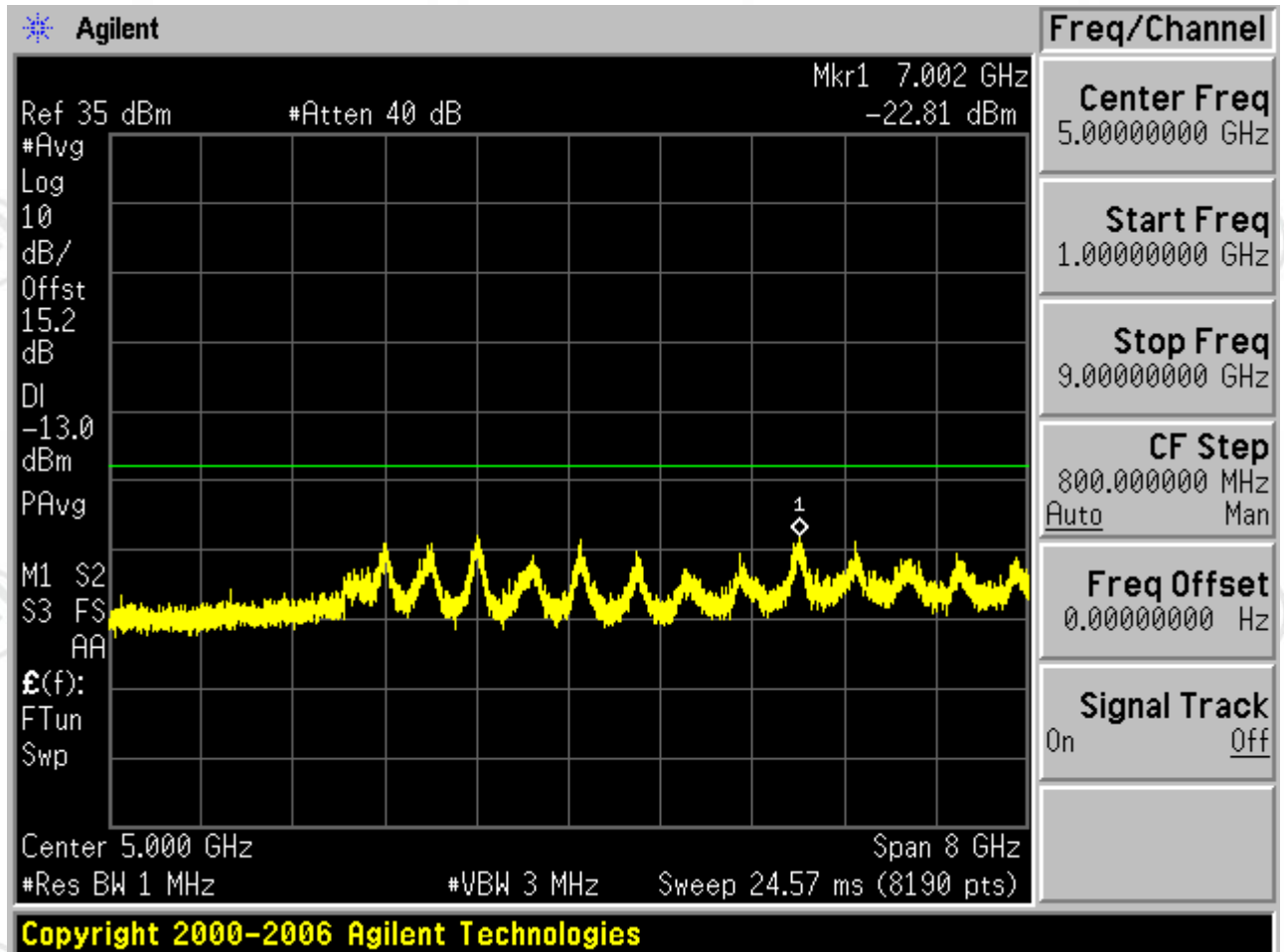


1.1.1.3 Test Channel=HCH



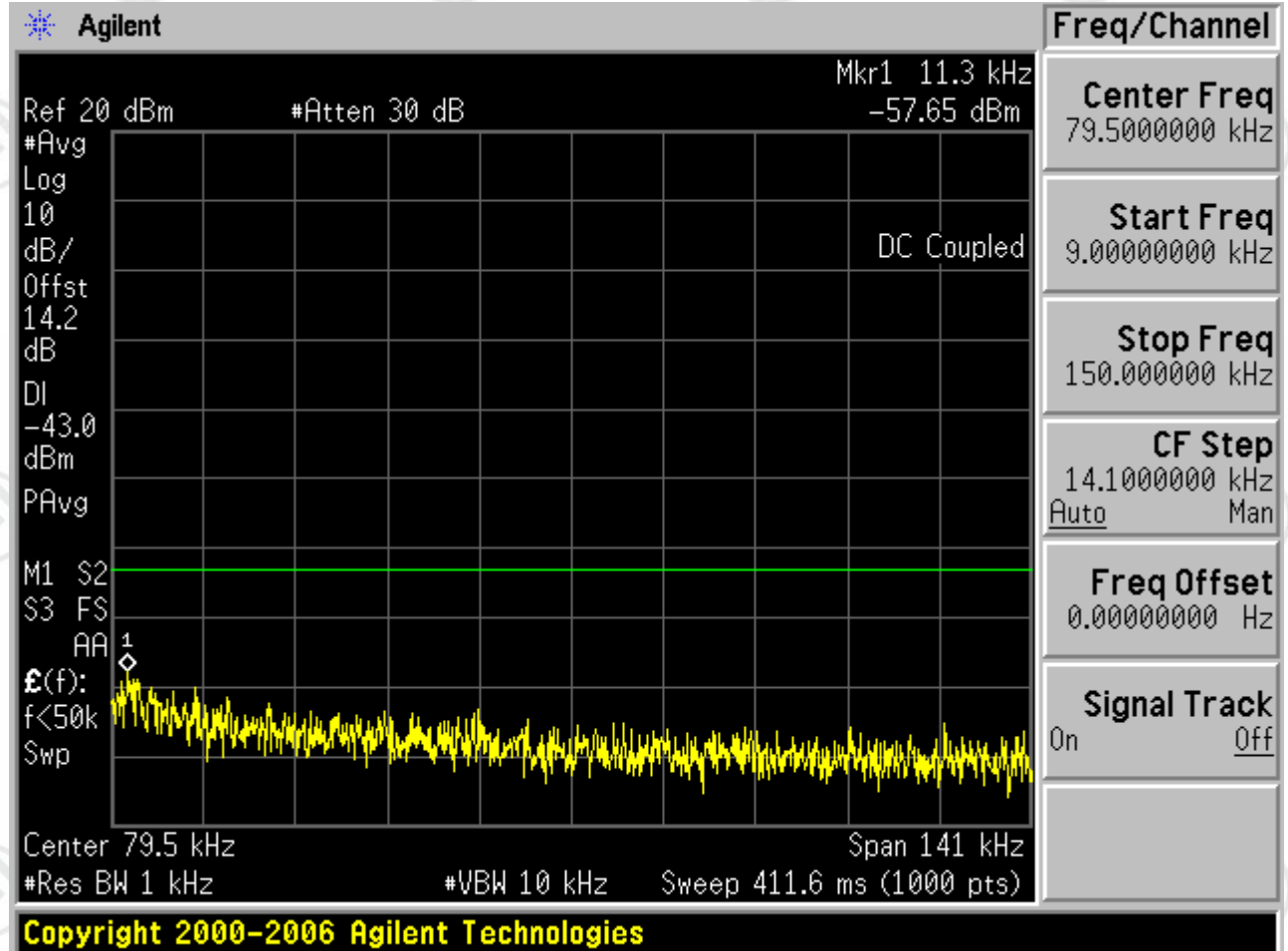


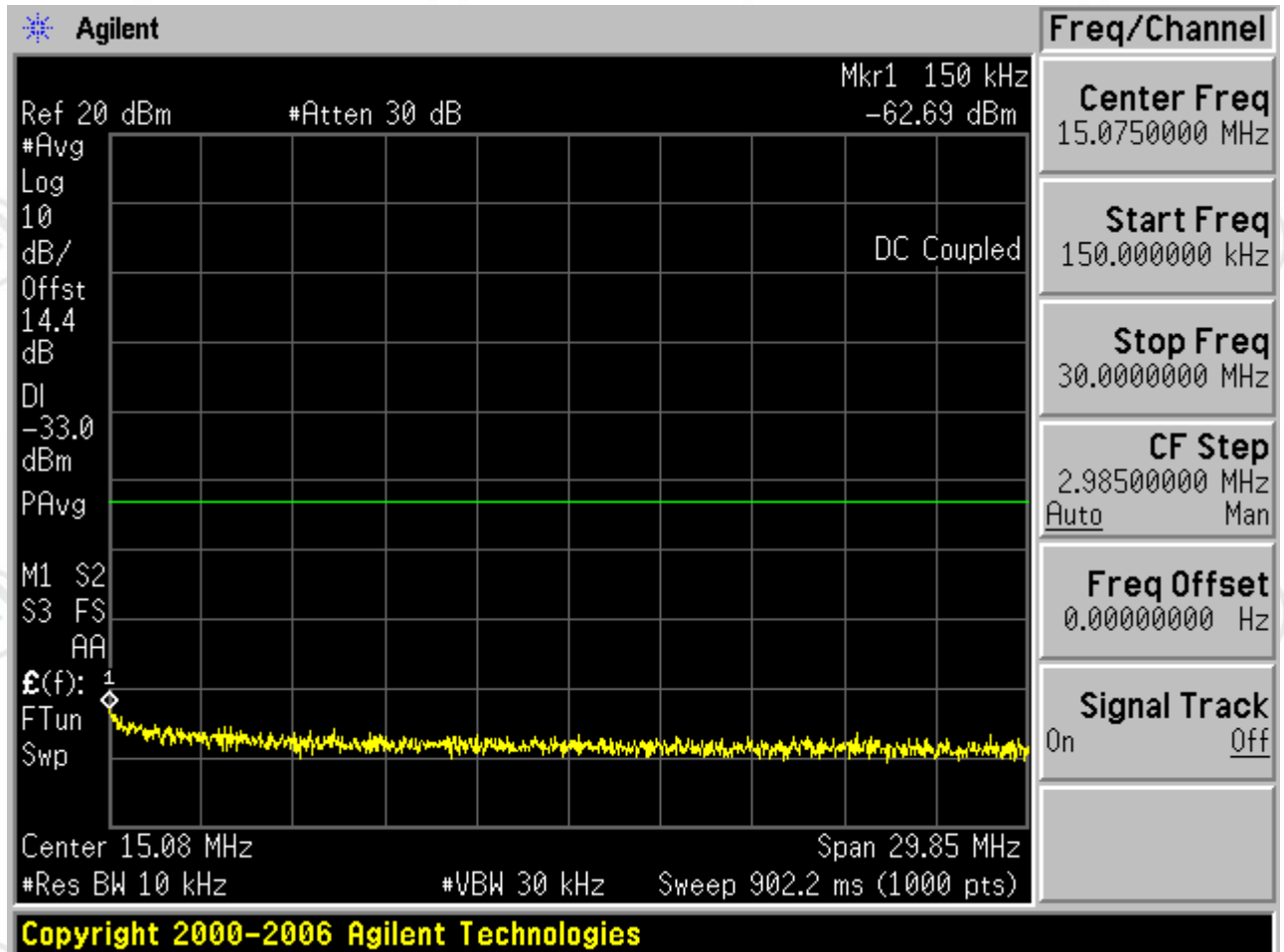


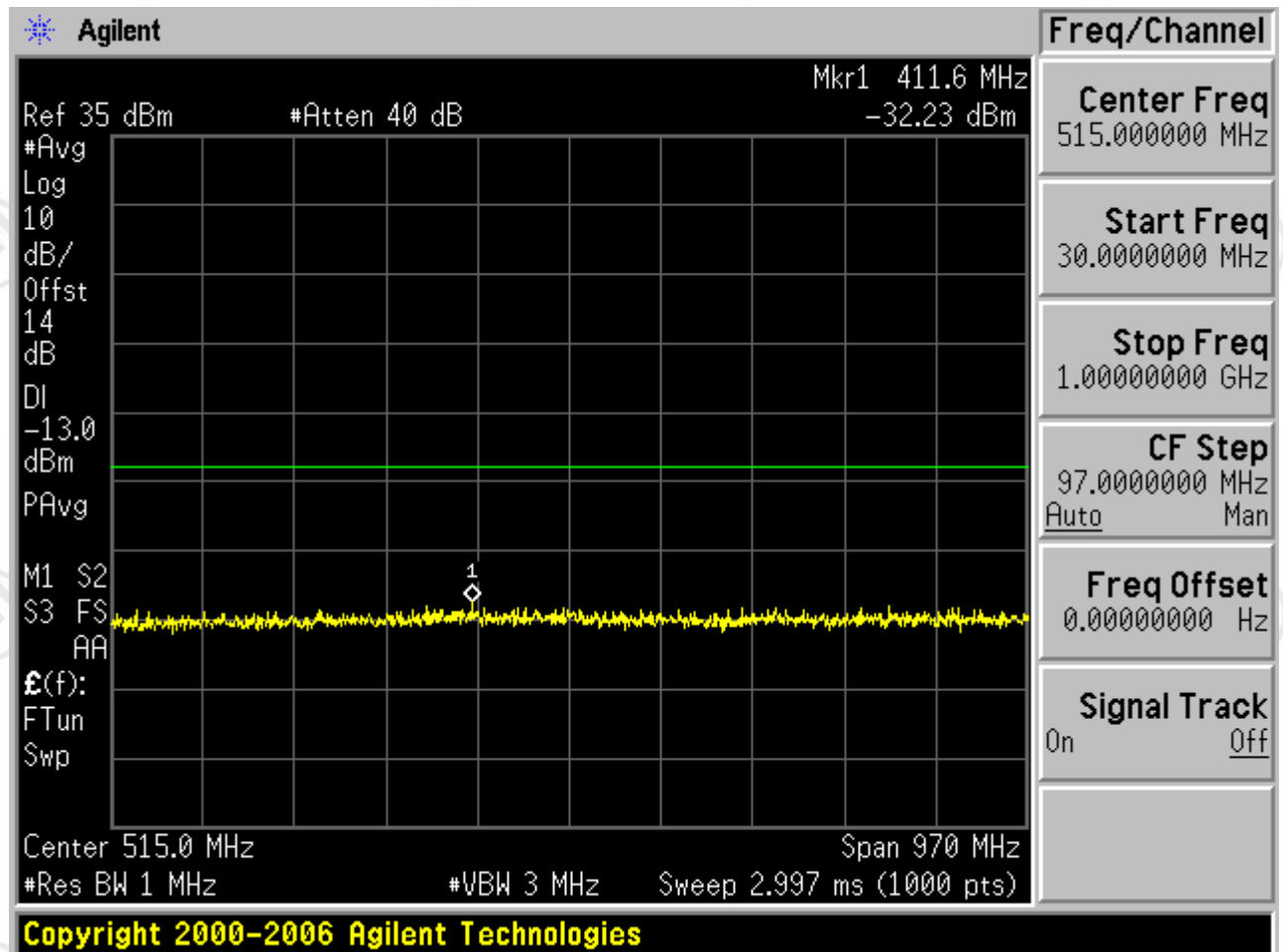


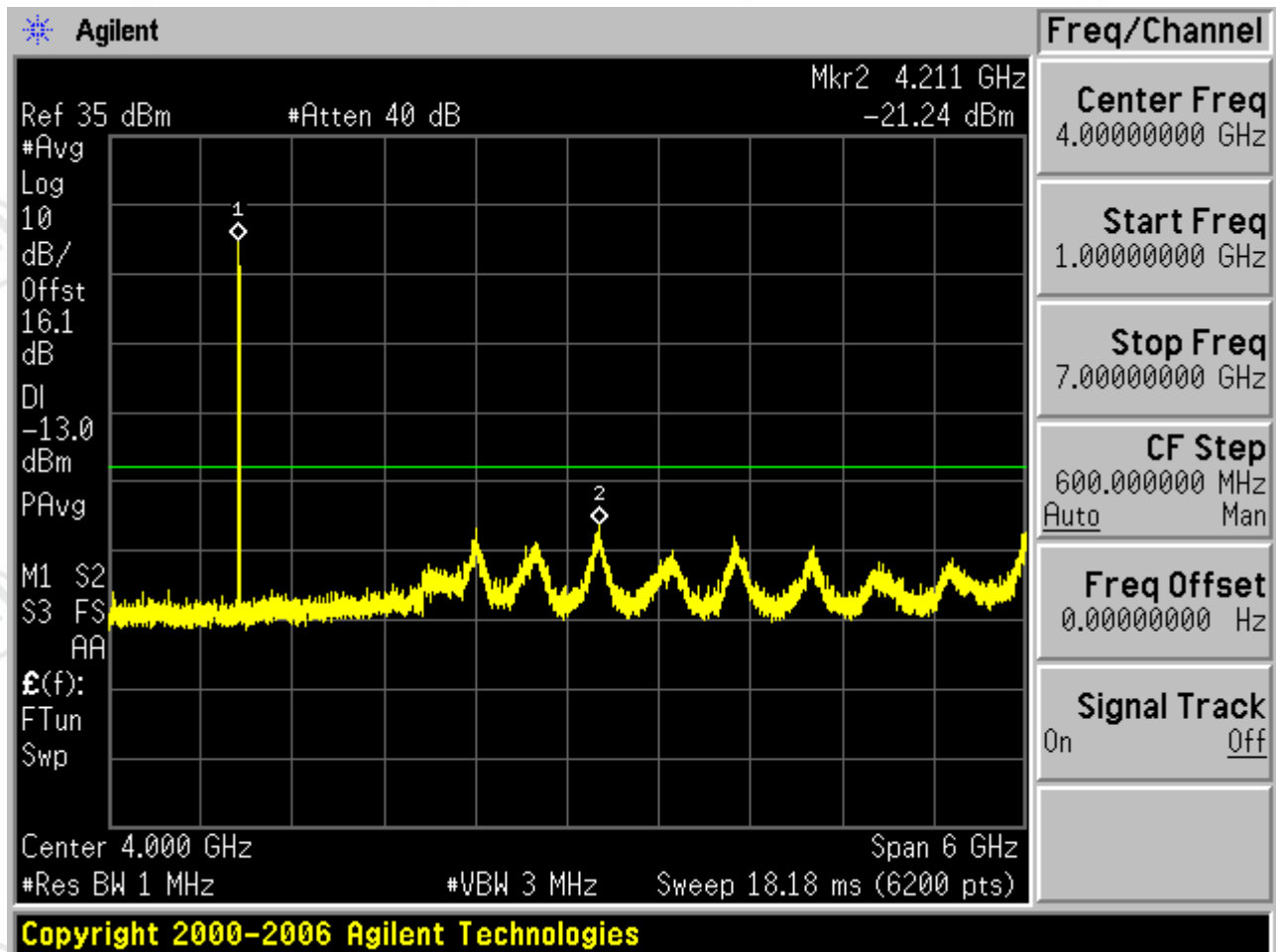
1.1.2 Test Mode=GSM/TM2

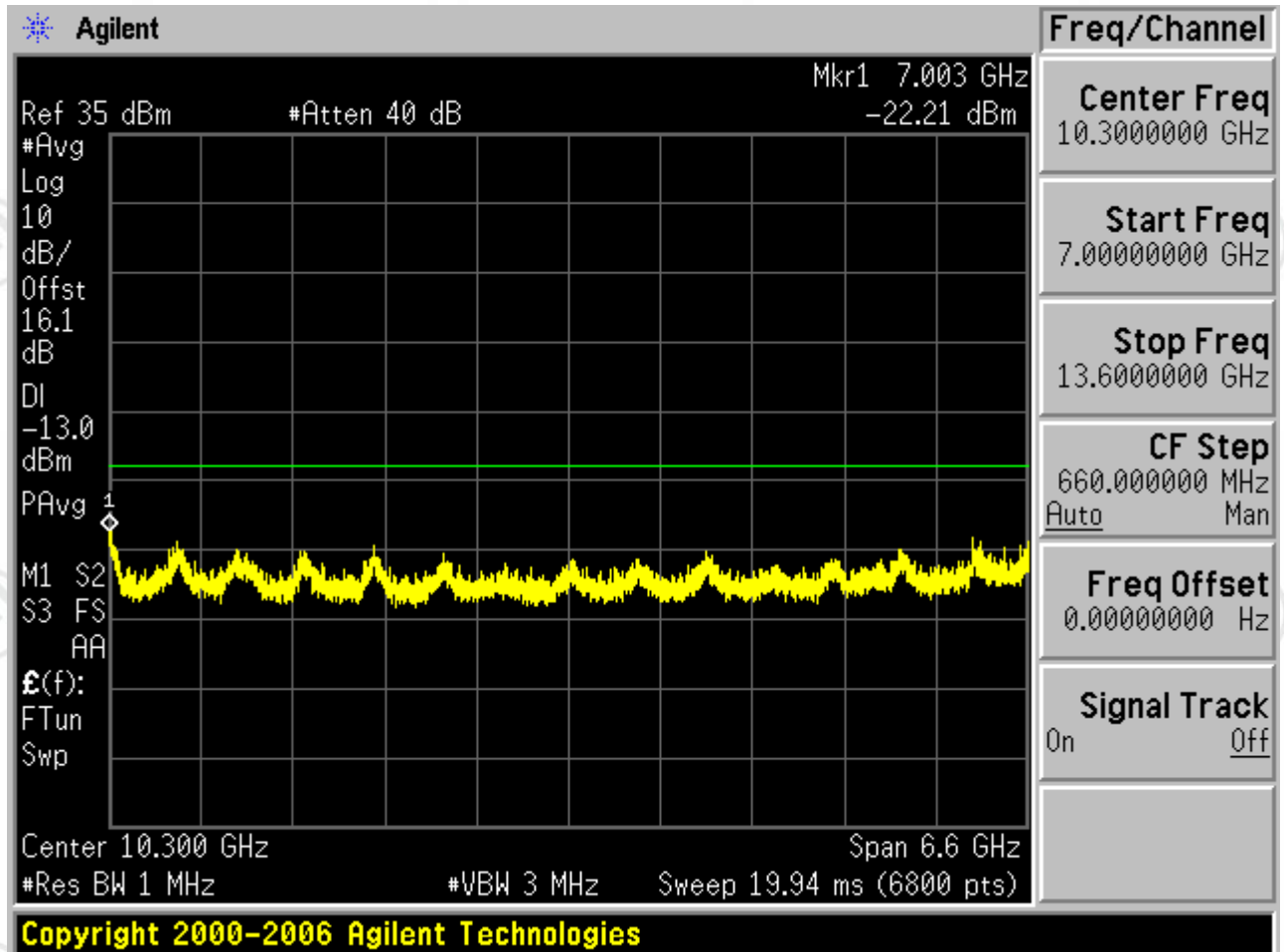
1.1.2.1 Test Channel=LCH

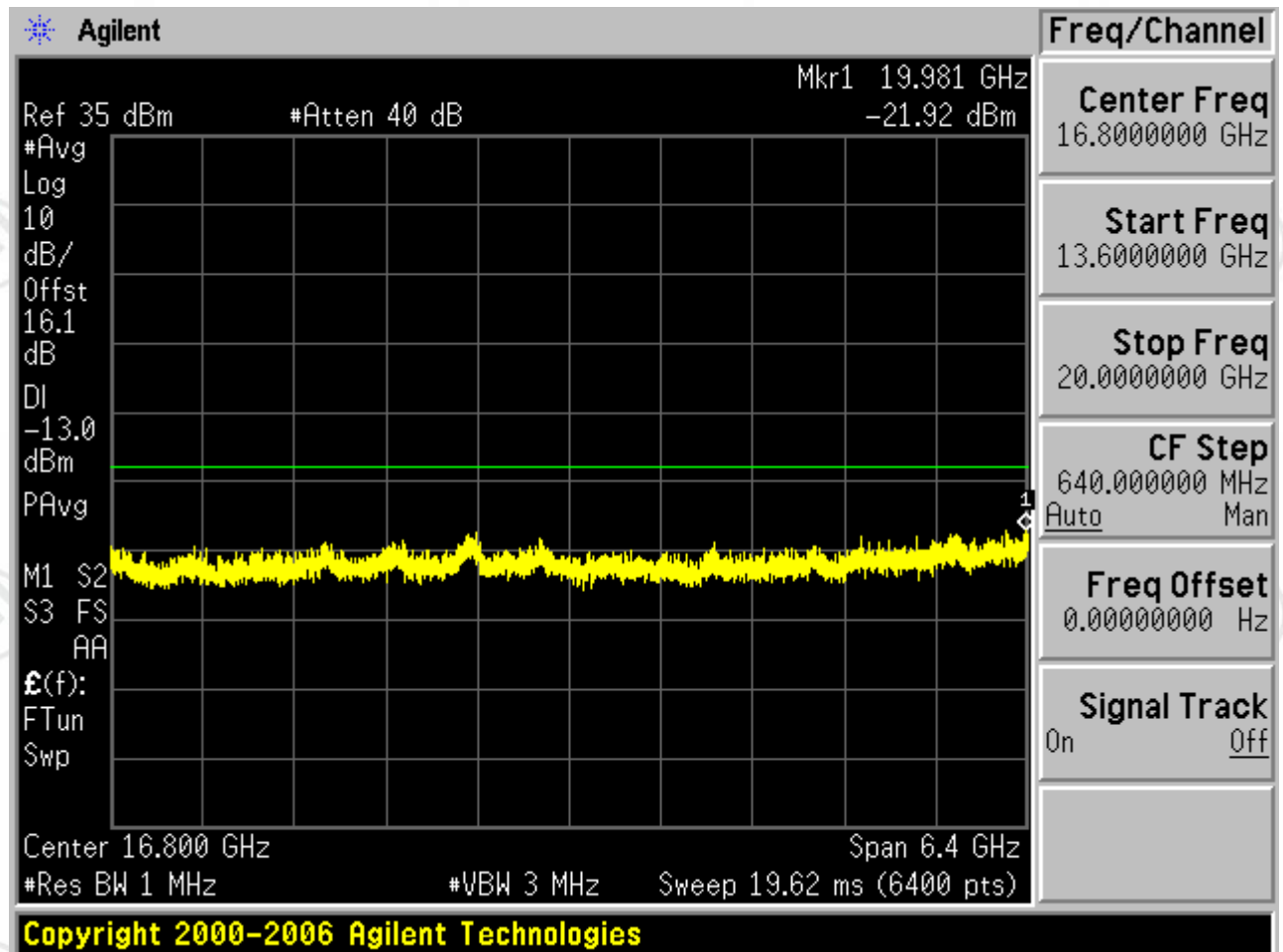




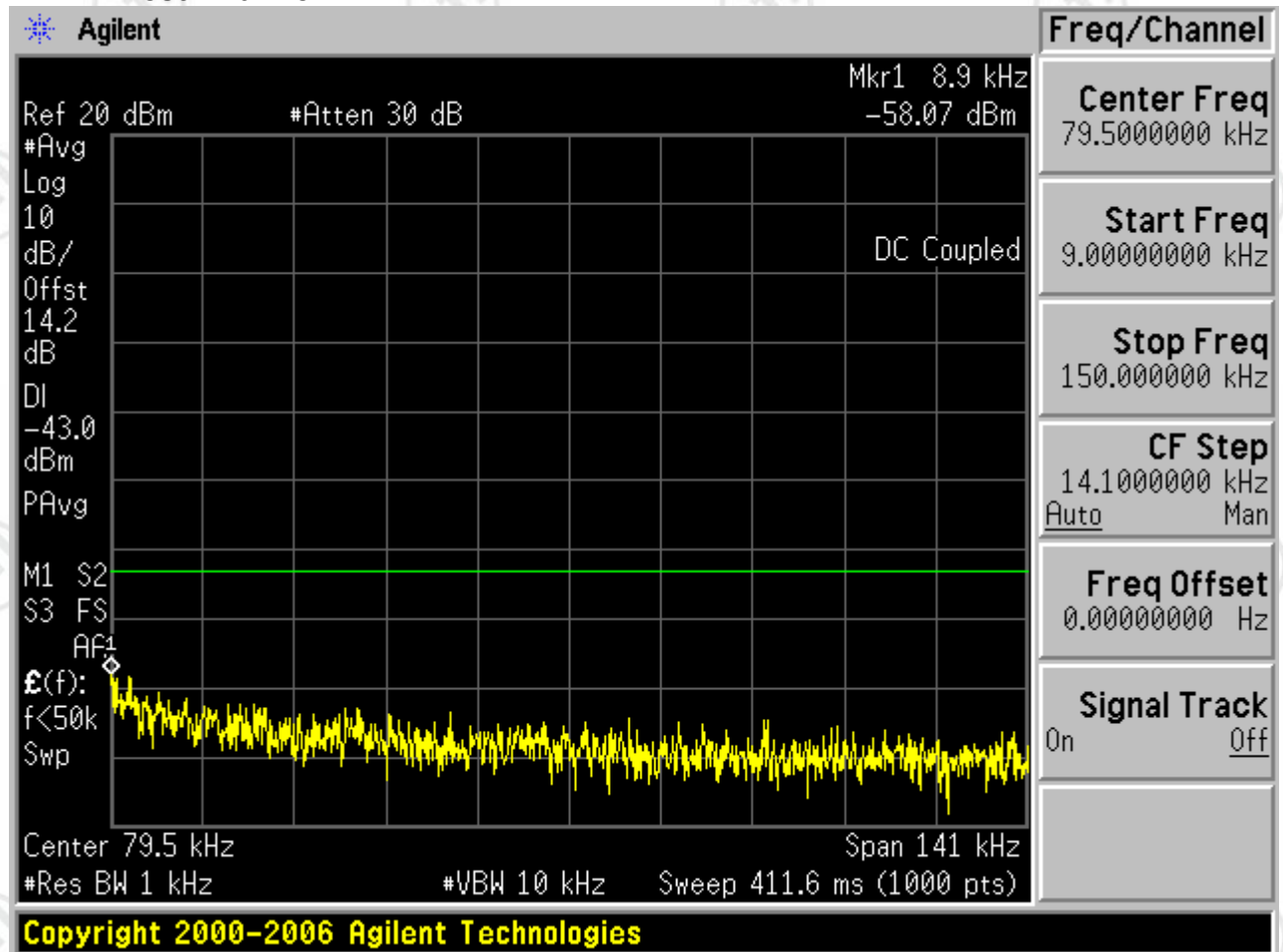


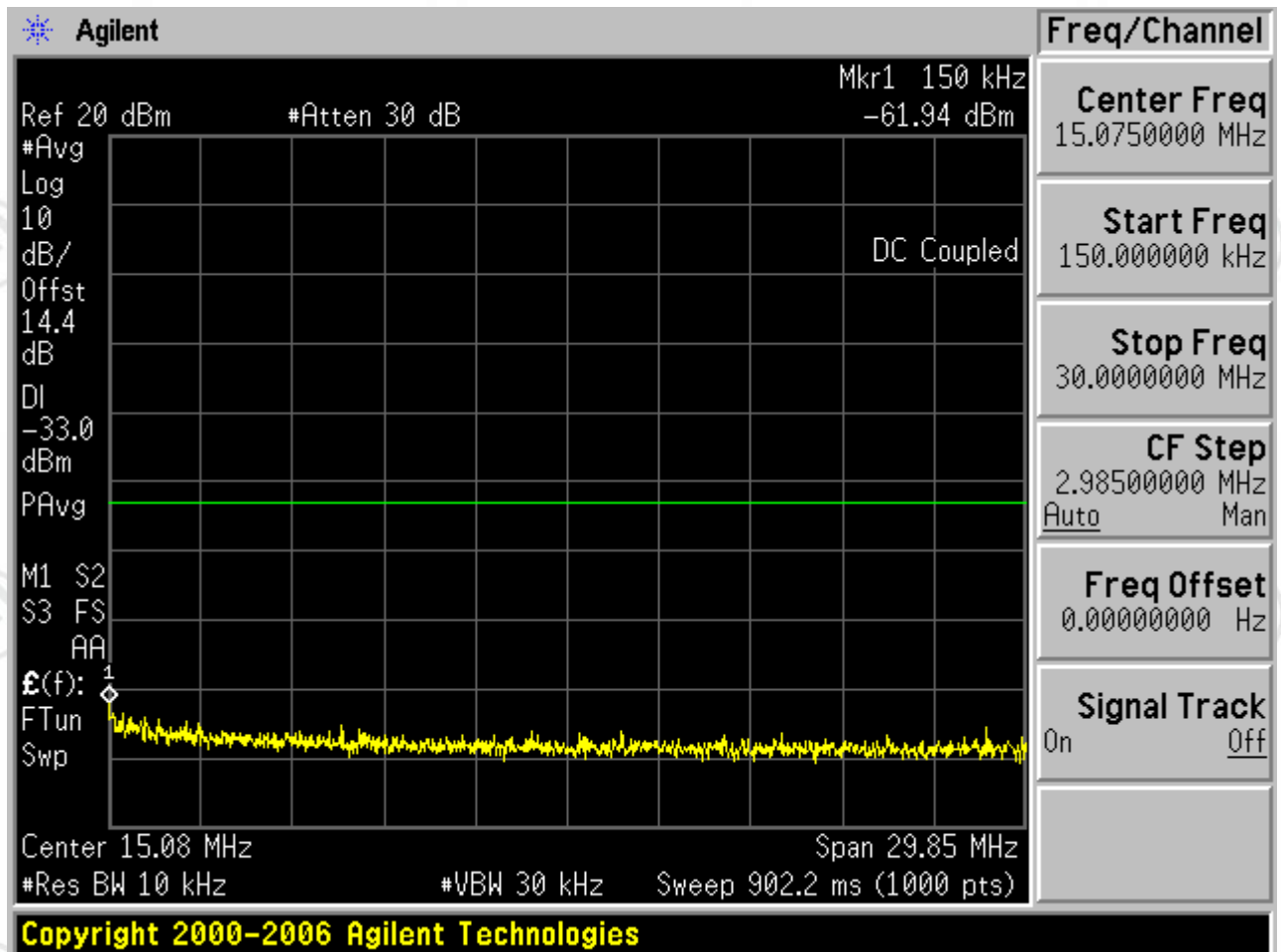


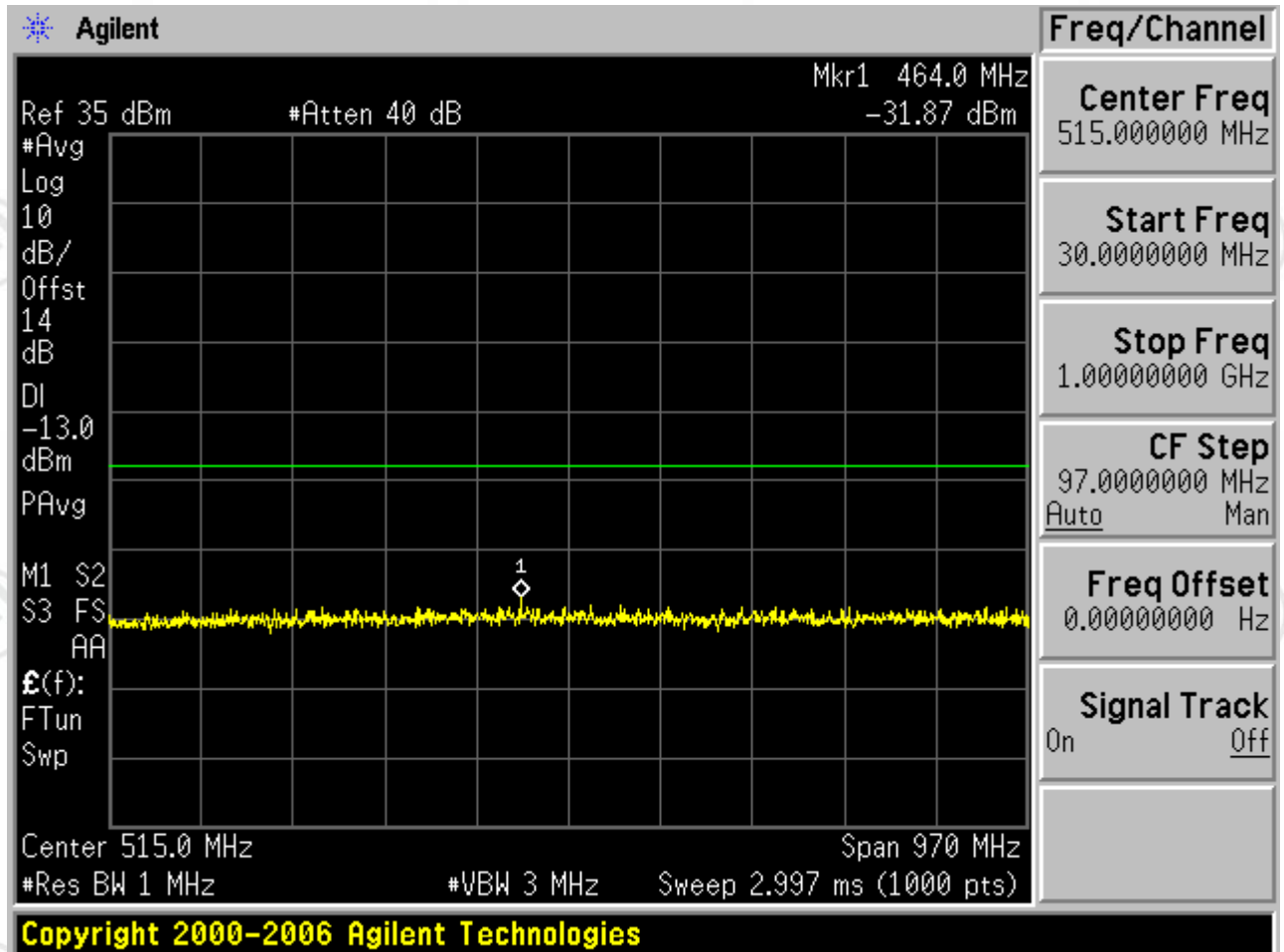


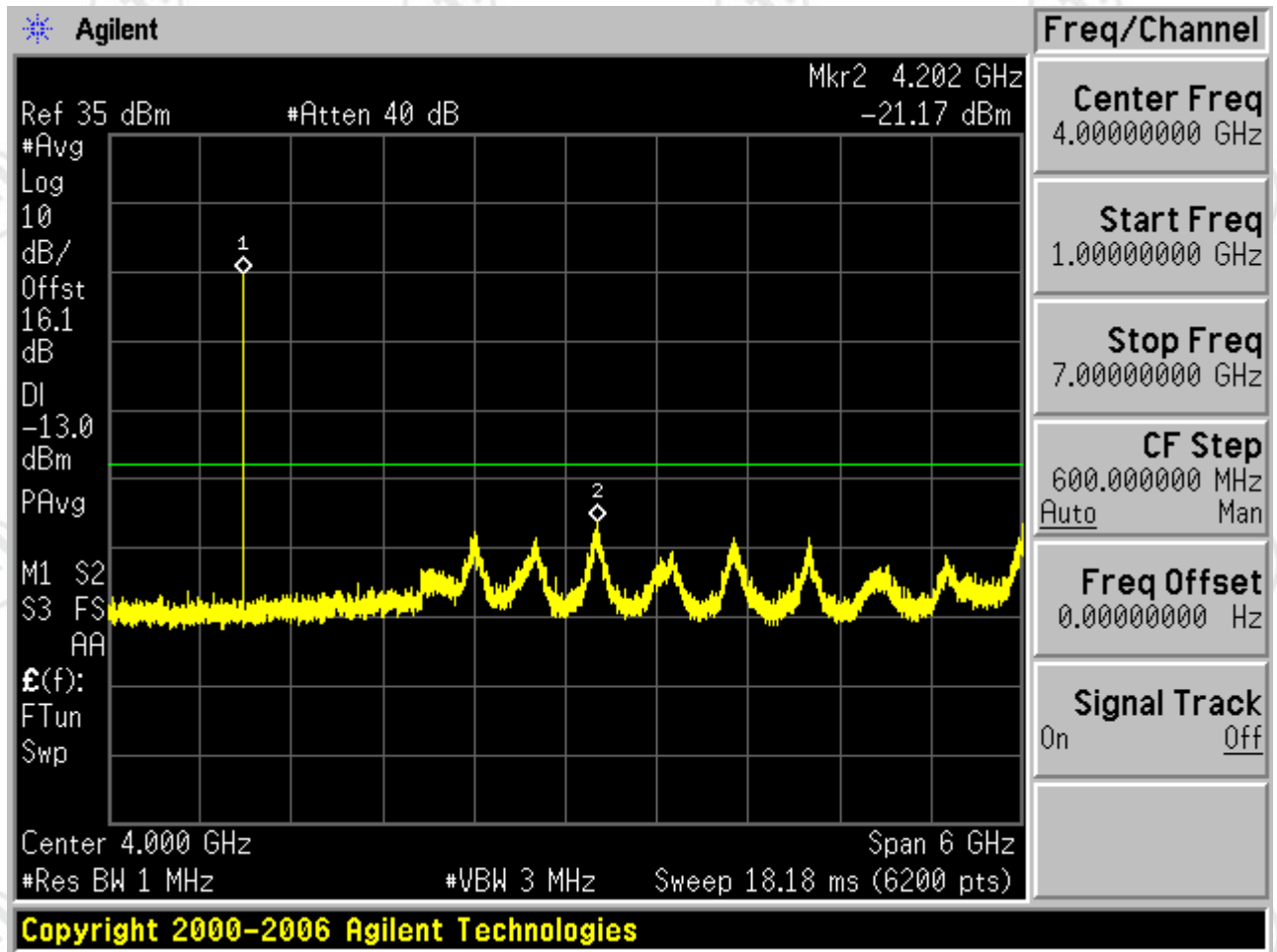


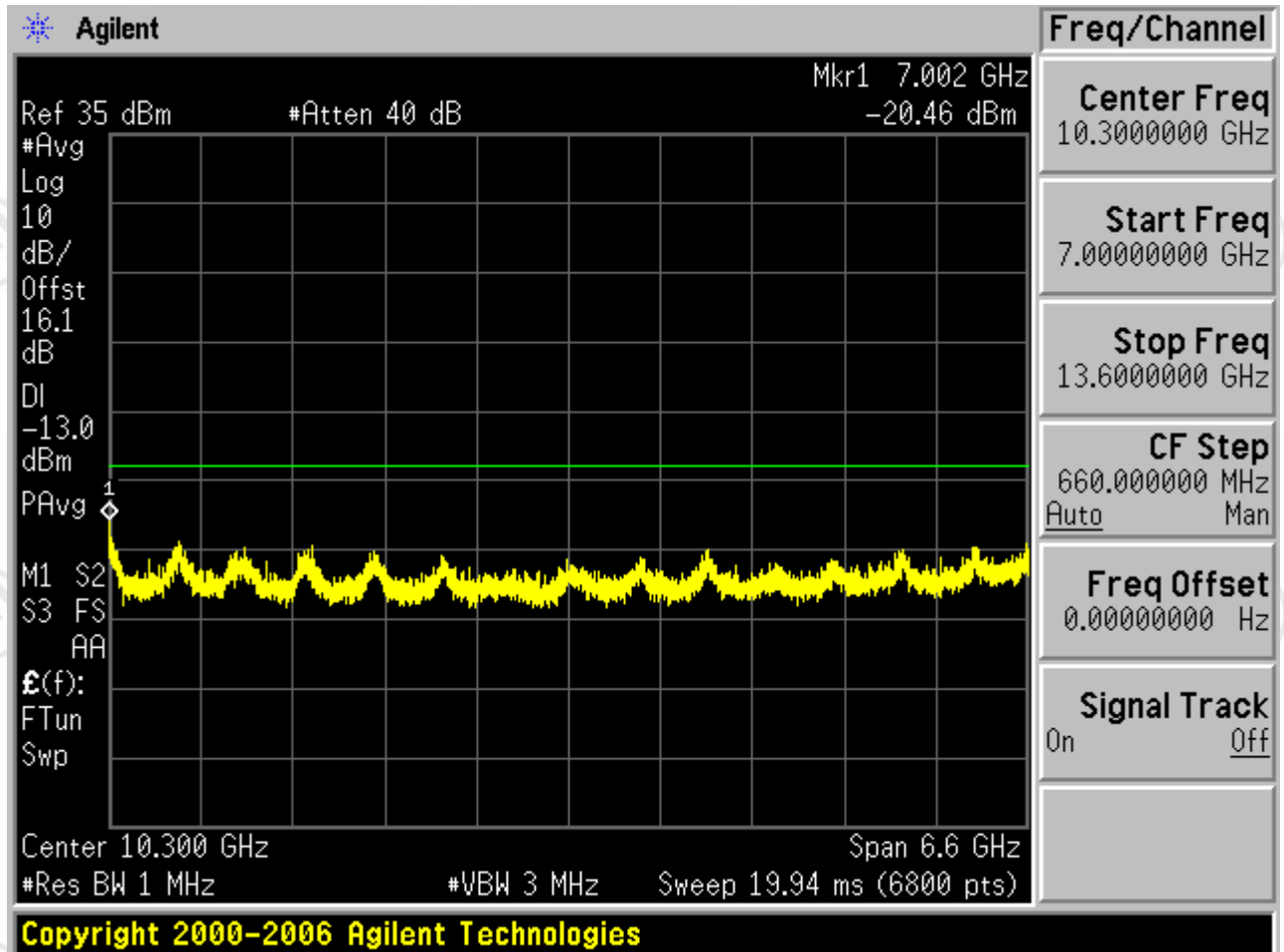
1.1.2.2 Test Channel=MCH

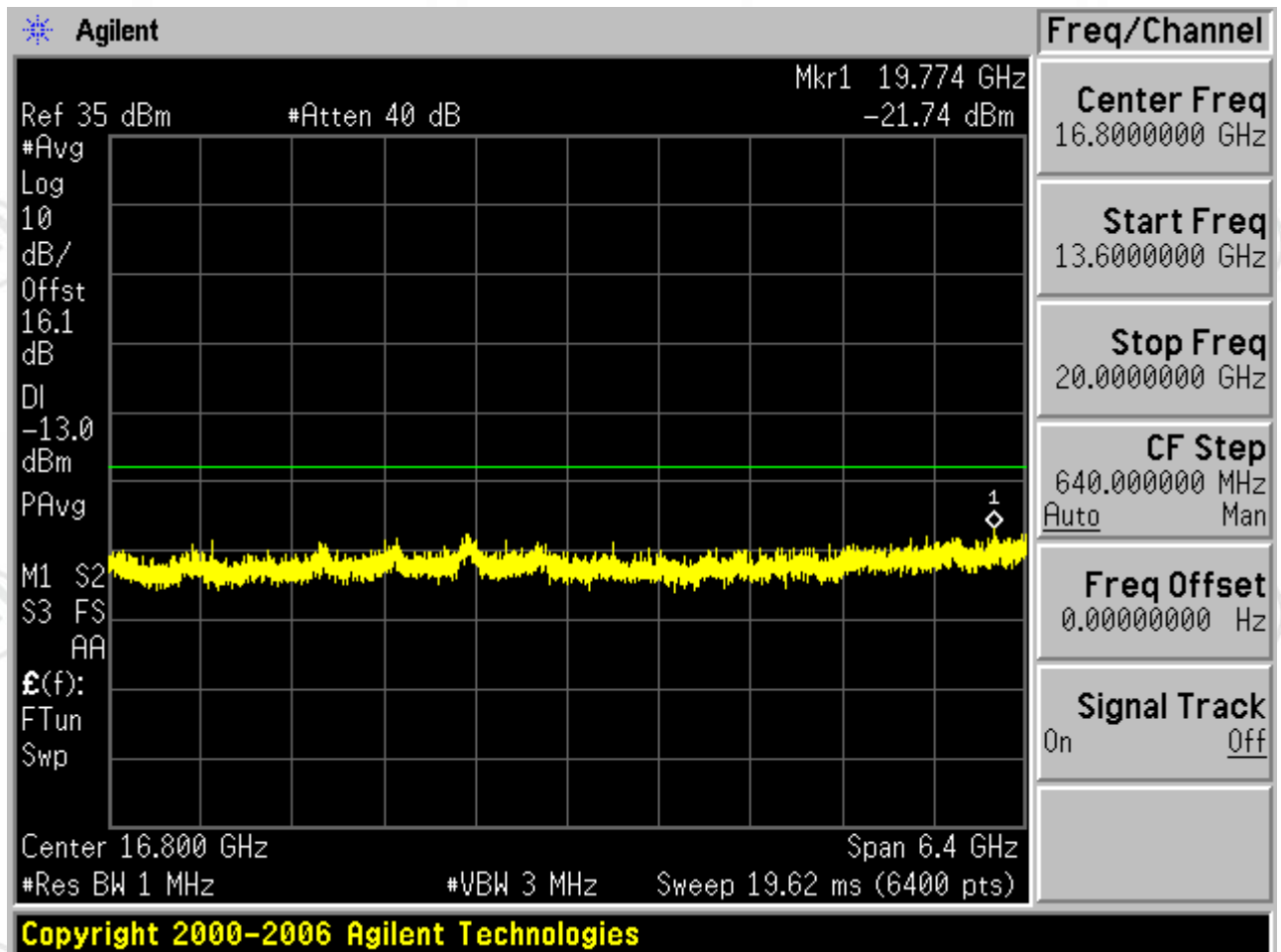




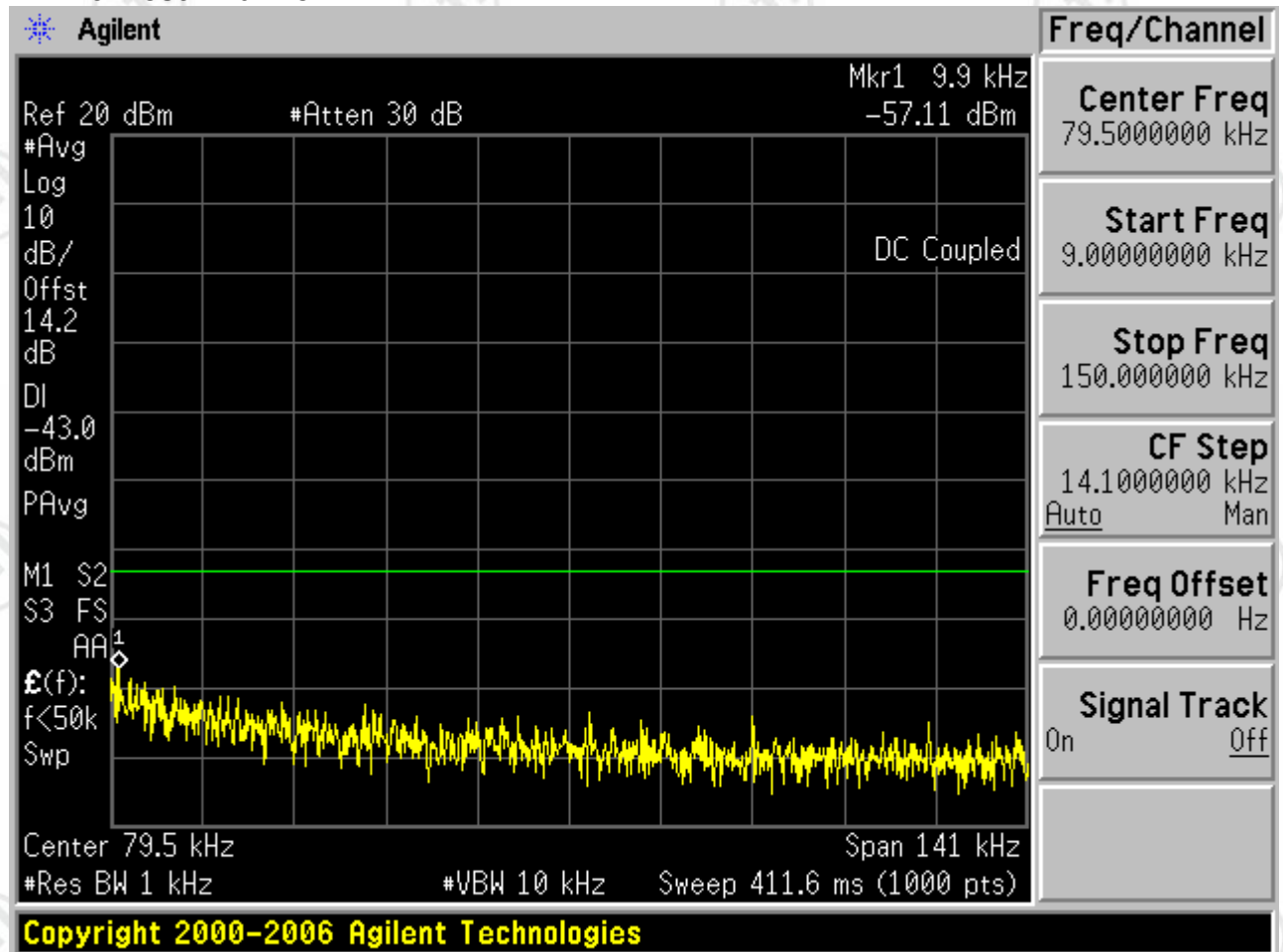


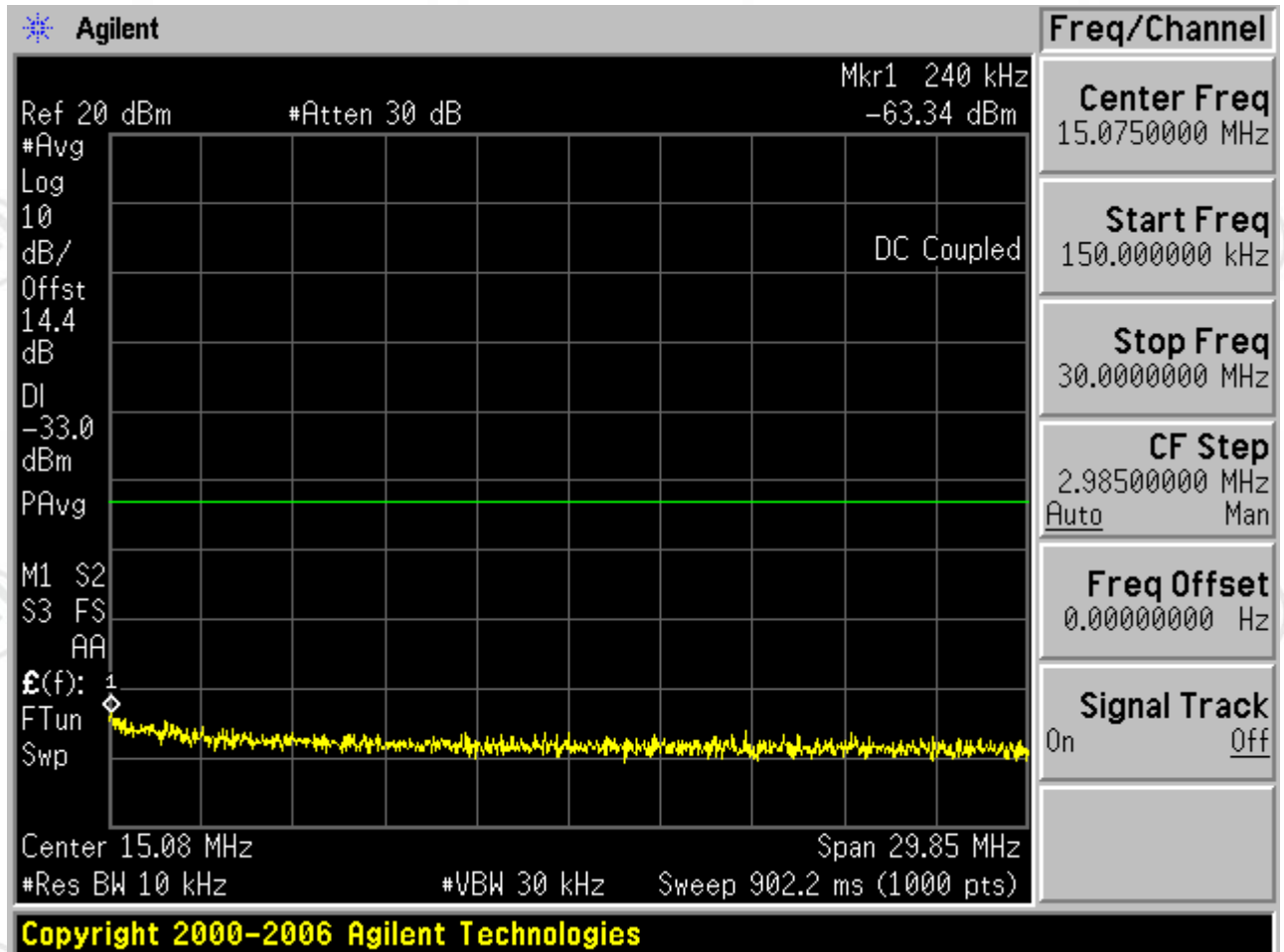


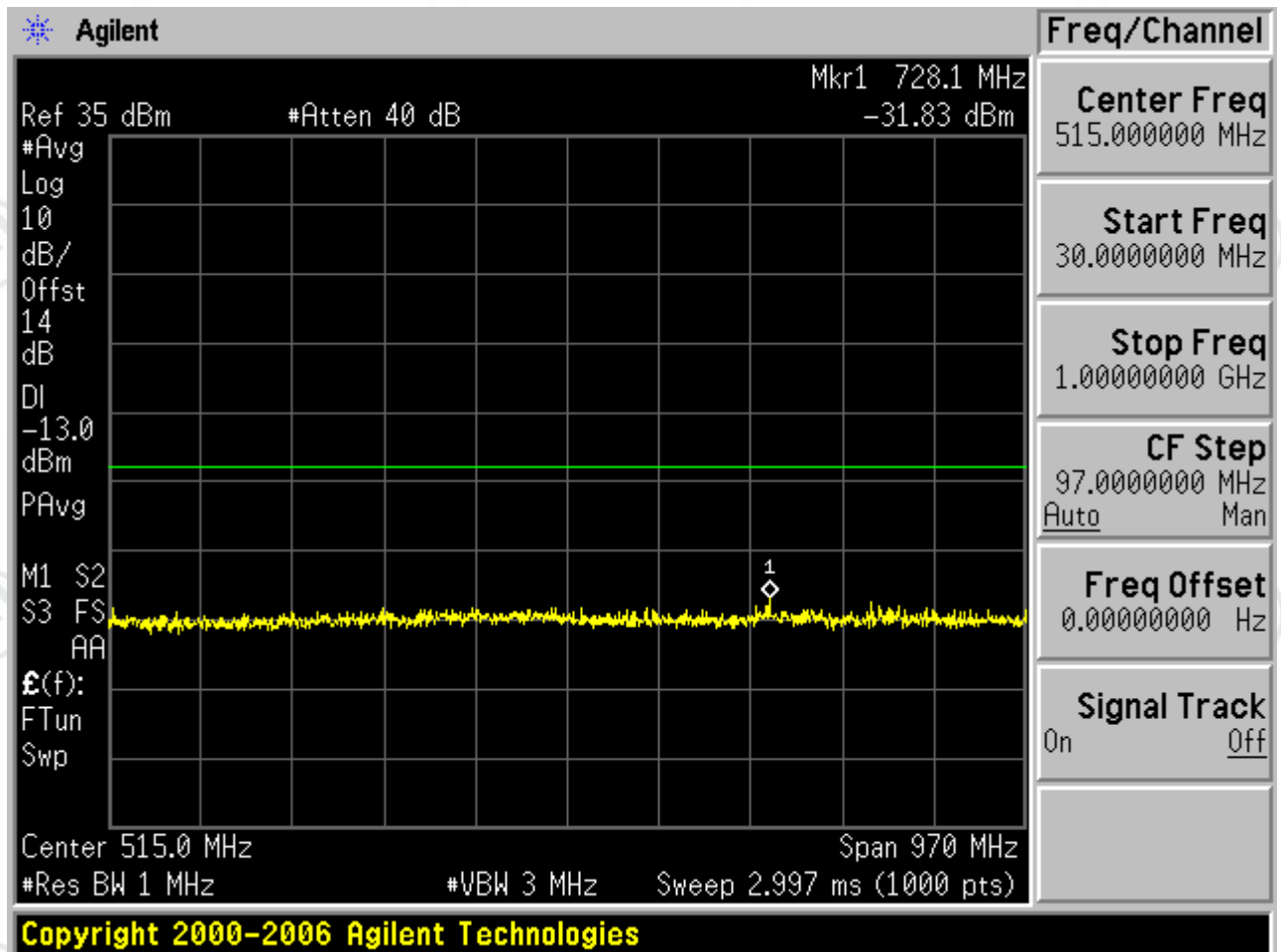


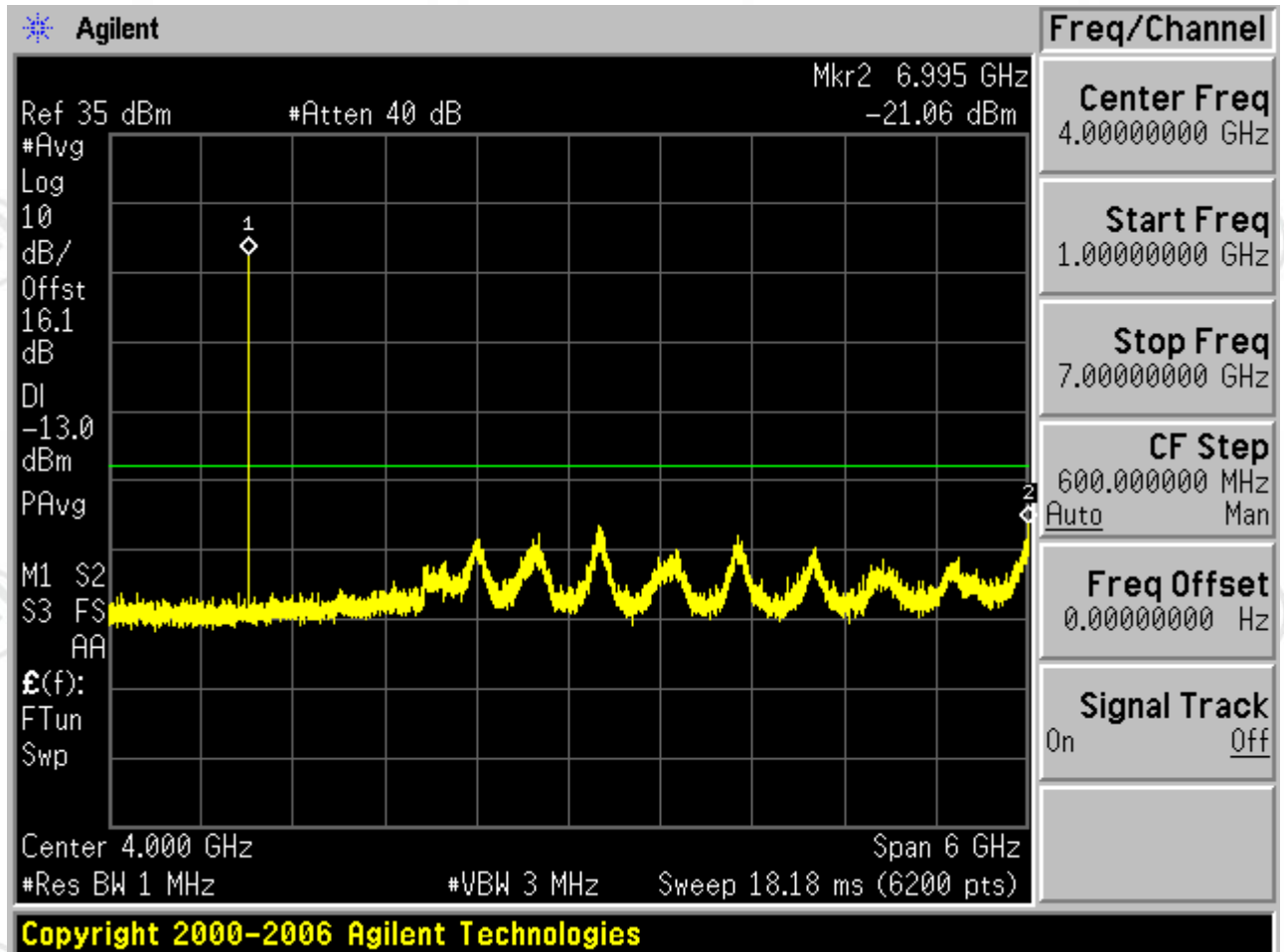


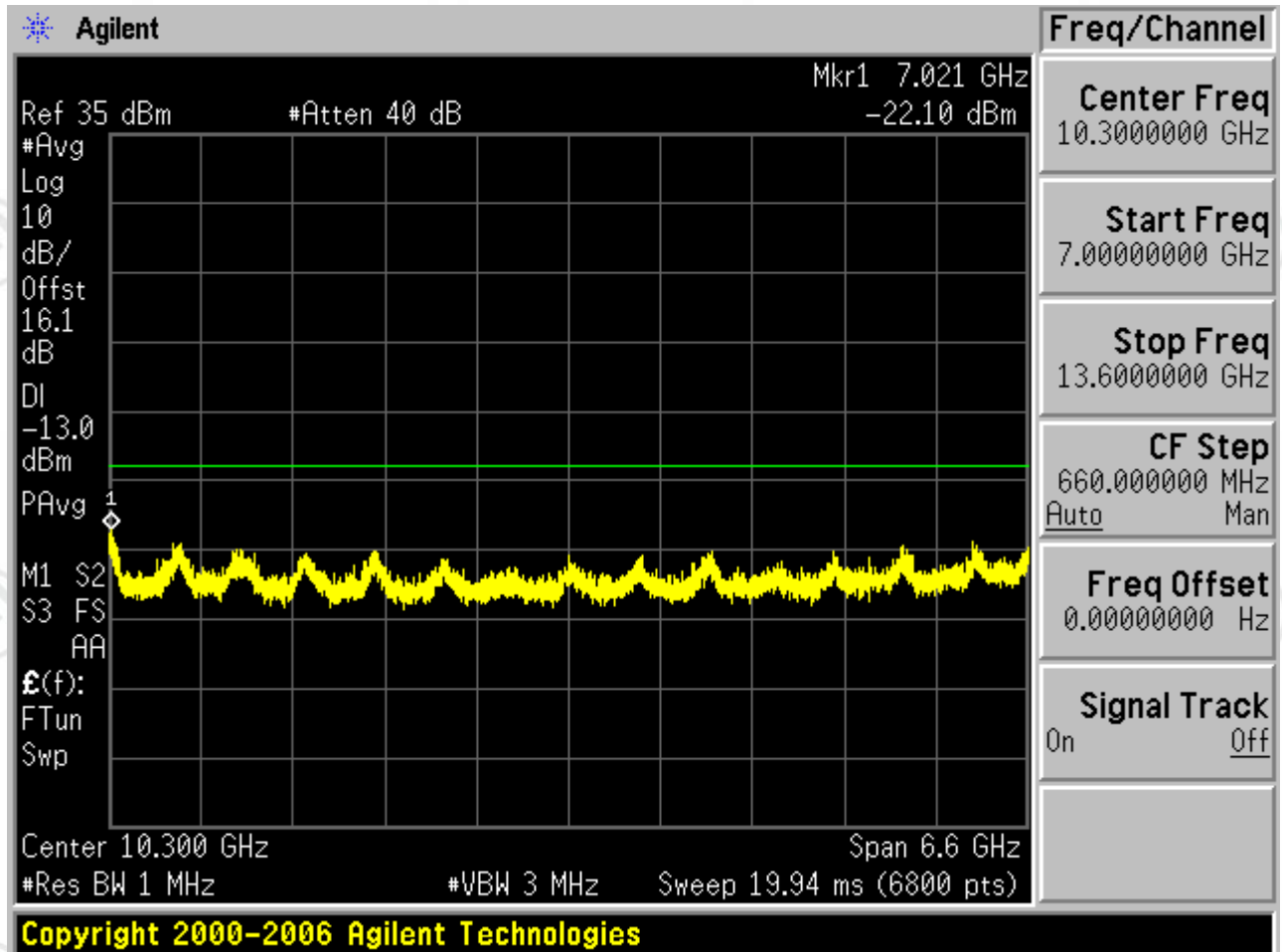
1.1.2.3 Test Channel=HCH

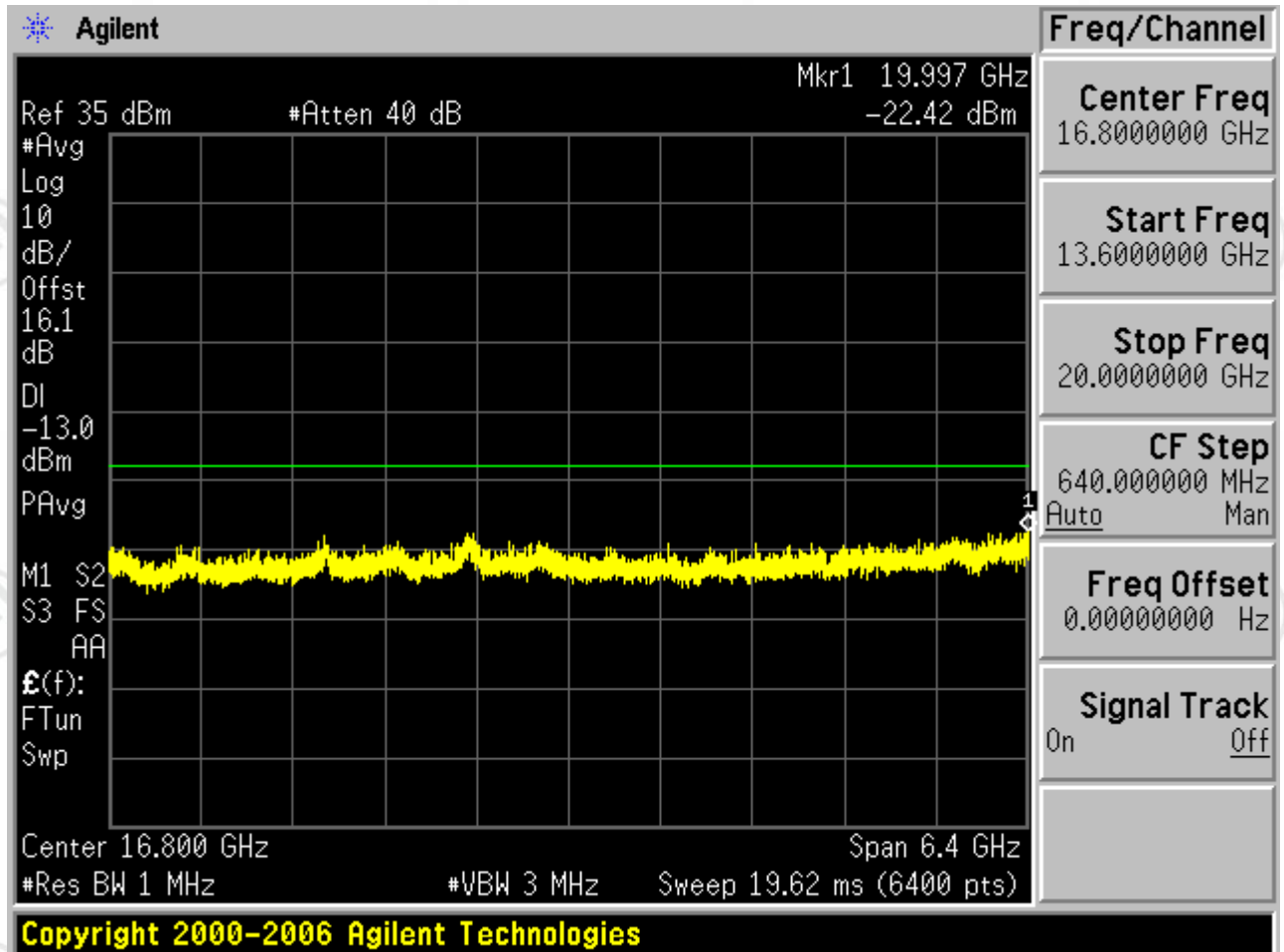












Appendix F) Frequency Stability

Frequency Error vs. Voltage:

Test Band	Test Mode	Test Channel	Test Temp.	Test Volt.	Freq.Error (Hz)	Freq.vs.rated (ppm)	Limit (ppm)	Verdict
GSM850	TM2	LCH	TN	VN	8.01	0.009719	±2.5	PASS
			TN	End point	19.24	0.023344	±2.5	PASS
		MCH	TN	VN	19.76	0.023619	±2.5	PASS
			TN	End point	20.02	0.023930	±2.5	PASS
		HCH	TN	VN	18.40	0.021678	±2.5	PASS
			TN	End point	19.37	0.022820	±2.5	PASS

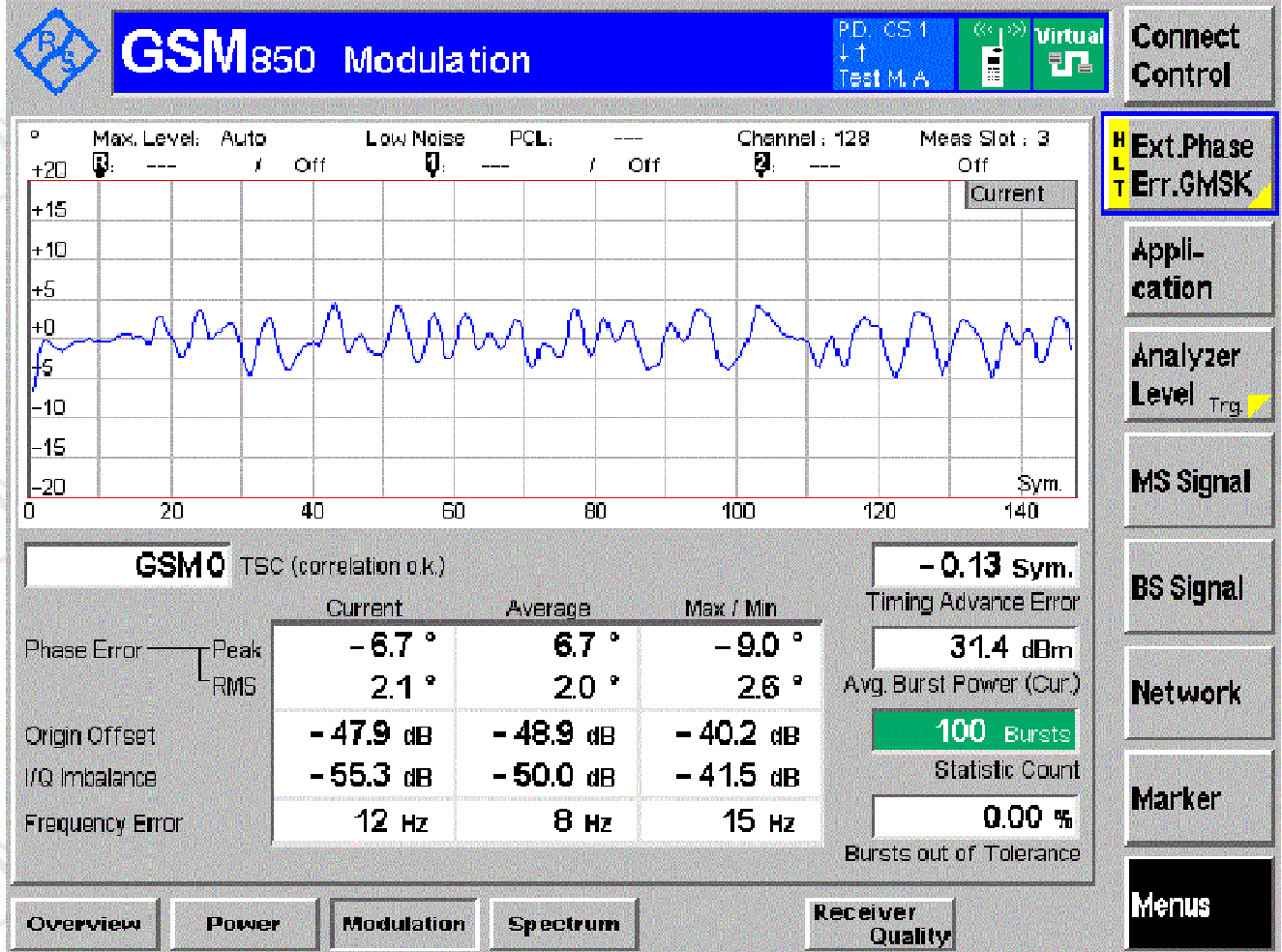
Test Band	Test Mode	Test Channel	Test Temp.	Test Volt.	Freq.Error (Hz)	Freq.vs.rated (ppm)	Limit (ppm)	Verdict
GSM1900	TM2	LCH	TN	VN	10.07	0.005443	±2.5	PASS
			TN	End point	-18.57	-0.010037	±2.5	PASS
		MCH	TN	VN	12.14	0.006457	±2.5	PASS
			TN	End point	14.02	0.007457	±2.5	PASS
		HCH	TN	VN	15.11	0.007912	±2.5	PASS
			TN	End point	12.11	0.006341	±2.5	PASS

Frequency Error vs. Temperature:

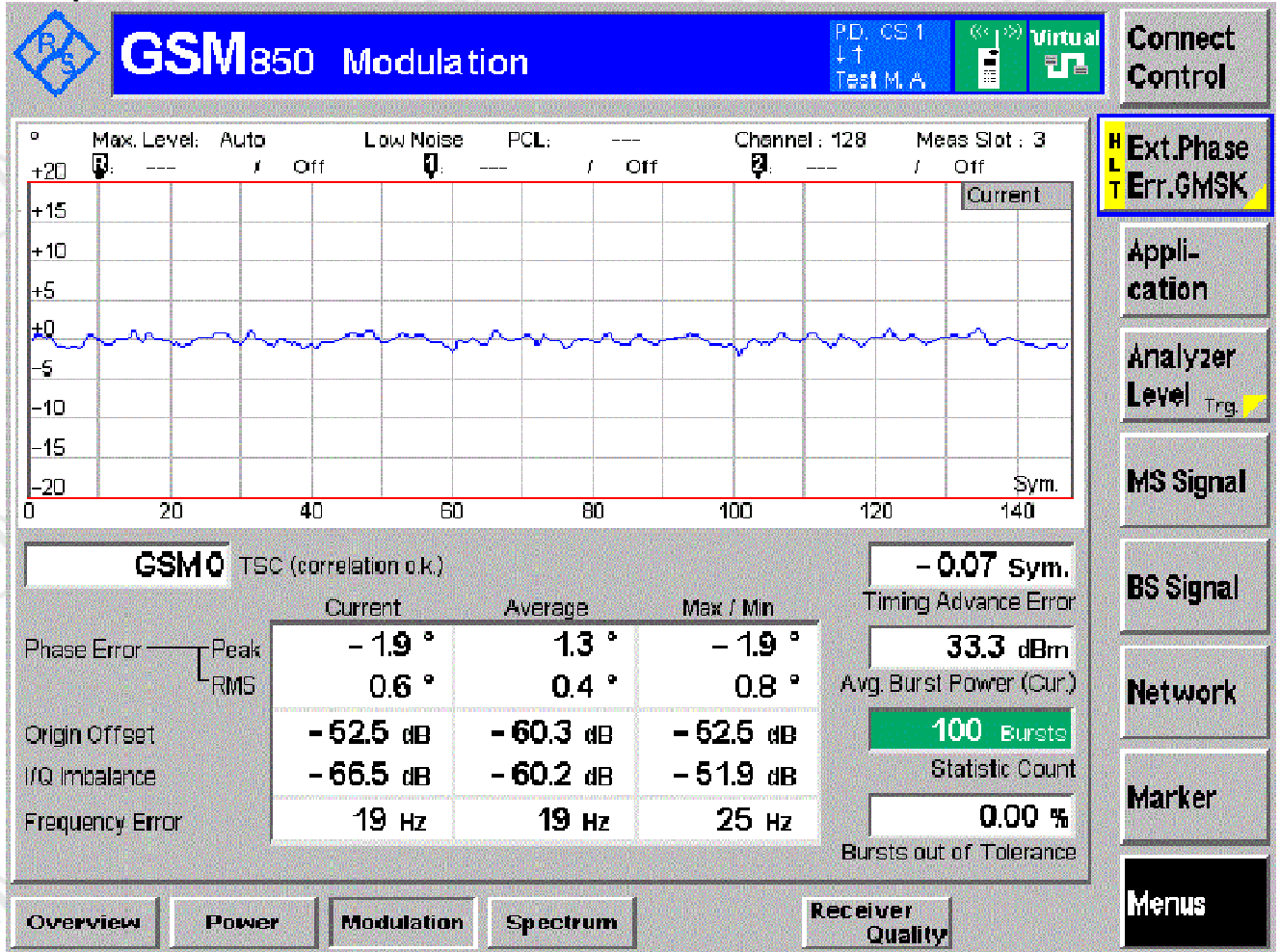
Test Band	Test Mode	Test Channel	Test Volt.	Test Temp	Freq.Error (Hz)	Freq.vs.rated (ppm)	Limit (ppm)	Verdict
GSM850	TM2	LCH	VN	-30	8.39	0.010180	±2.5	PASS
			VN	-20	2.71	0.003288	±2.5	PASS
			VN	-10	2.84	0.003446	±2.5	PASS
			VN	0	0.84	0.001019	±2.5	PASS
			VN	10	6.97	0.008457	±2.5	PASS
			VN	20	7.62	0.009245	±2.5	PASS
			VN	30	9.04	0.010968	±2.5	PASS
			VN	40	12.66	0.015360	±2.5	PASS
			VN	50	11.56	0.014026	±2.5	PASS
GSM850	TM2	MCH	VN	-30	17.63	0.021073	±2.5	PASS
			VN	-20	16.53	0.019759	±2.5	PASS
			VN	-10	11.36	0.013579	±2.5	PASS
			VN	0	16.40	0.019603	±2.5	PASS
			VN	10	13.95	0.016675	±2.5	PASS
			VN	20	19.31	0.023082	±2.5	PASS
			VN	30	17.37	0.020763	±2.5	PASS
			VN	40	9.43	0.011272	±2.5	PASS
			VN	50	8.39	0.010029	±2.5	PASS
GSM850	TM2	HCH	VN	-30	16.21	0.019098	±2.5	PASS
			VN	-20	15.63	0.018414	±2.5	PASS
			VN	-10	15.30	0.018025	±2.5	PASS
			VN	0	11.69	0.013772	±2.5	PASS
			VN	10	14.08	0.016588	±2.5	PASS
			VN	20	14.21	0.016741	±2.5	PASS
			VN	30	10.33	0.012170	±2.5	PASS
			VN	40	18.53	0.021831	±2.5	PASS
			VN	50	10.40	0.012253	±2.5	PASS

Test Band	Test Mode	Test Channel	Test Volt.	Test Temp	Freq.Error (Hz)	Freq.vs.rated (ppm)	Limit (ppm)	Verdict
GSM1900	TM2	LCH	VN	-30	17.05	0.009215	±2.5	PASS
			VN	-20	18.47	0.009983	±2.5	PASS
			VN	-10	30.99	0.016750	±2.5	PASS
			VN	0	30.67	0.016577	±2.5	PASS
			VN	10	41.65	0.022511	±2.5	PASS
			VN	20	29.83	0.016123	±2.5	PASS
			VN	30	37.77	0.020414	±2.5	PASS
			VN	40	32.09	0.017344	±2.5	PASS
			VN	50	22.60	0.012215	±2.5	PASS
GSM1900	TM2	MCH	VN	-30	10.98	0.005840	±2.5	PASS
			VN	-20	15.69	0.008346	±2.5	PASS
			VN	-10	15.88	0.008447	±2.5	PASS
			VN	0	18.02	0.009585	±2.5	PASS
			VN	10	19.24	0.010234	±2.5	PASS
			VN	20	24.28	0.012915	±2.5	PASS
			VN	30	20.79	0.011059	±2.5	PASS
			VN	40	16.47	0.008761	±2.5	PASS
			VN	50	11.95	0.006356	±2.5	PASS
GSM1900	TM2	HCH	VN	-30	13.62	0.007132	±2.5	PASS
			VN	-20	19.95	0.010446	±2.5	PASS
			VN	-10	16.14	0.008451	±2.5	PASS
			VN	0	20.53	0.010750	±2.5	PASS
			VN	10	2.58	0.001351	±2.5	PASS
			VN	20	10.07	0.005273	±2.5	PASS
			VN	30	18.73	0.009807	±2.5	PASS
			VN	40	18.02	0.009436	±2.5	PASS
			VN	50	16.53	0.008655	±2.5	PASS

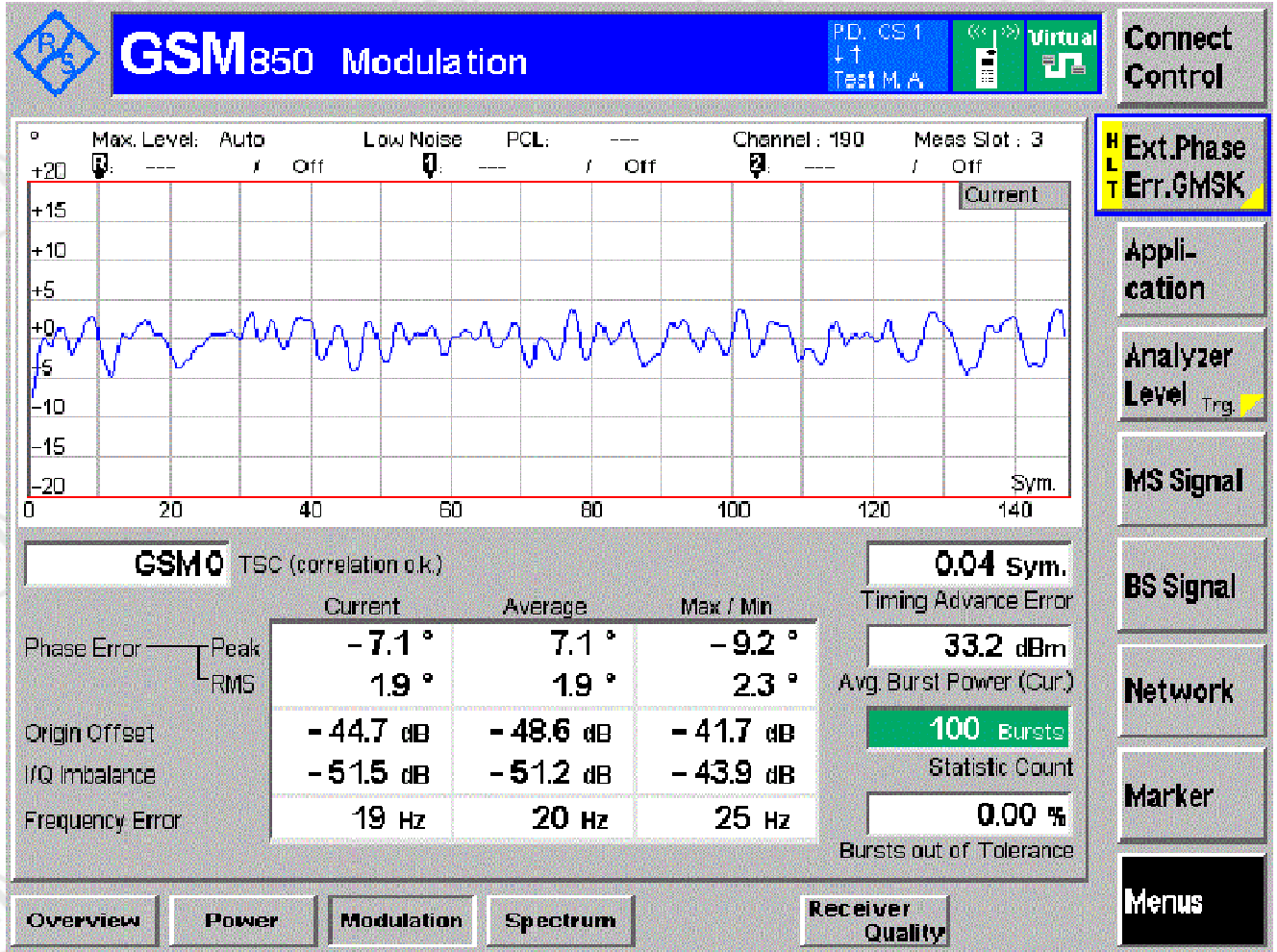
GSM850
LCH



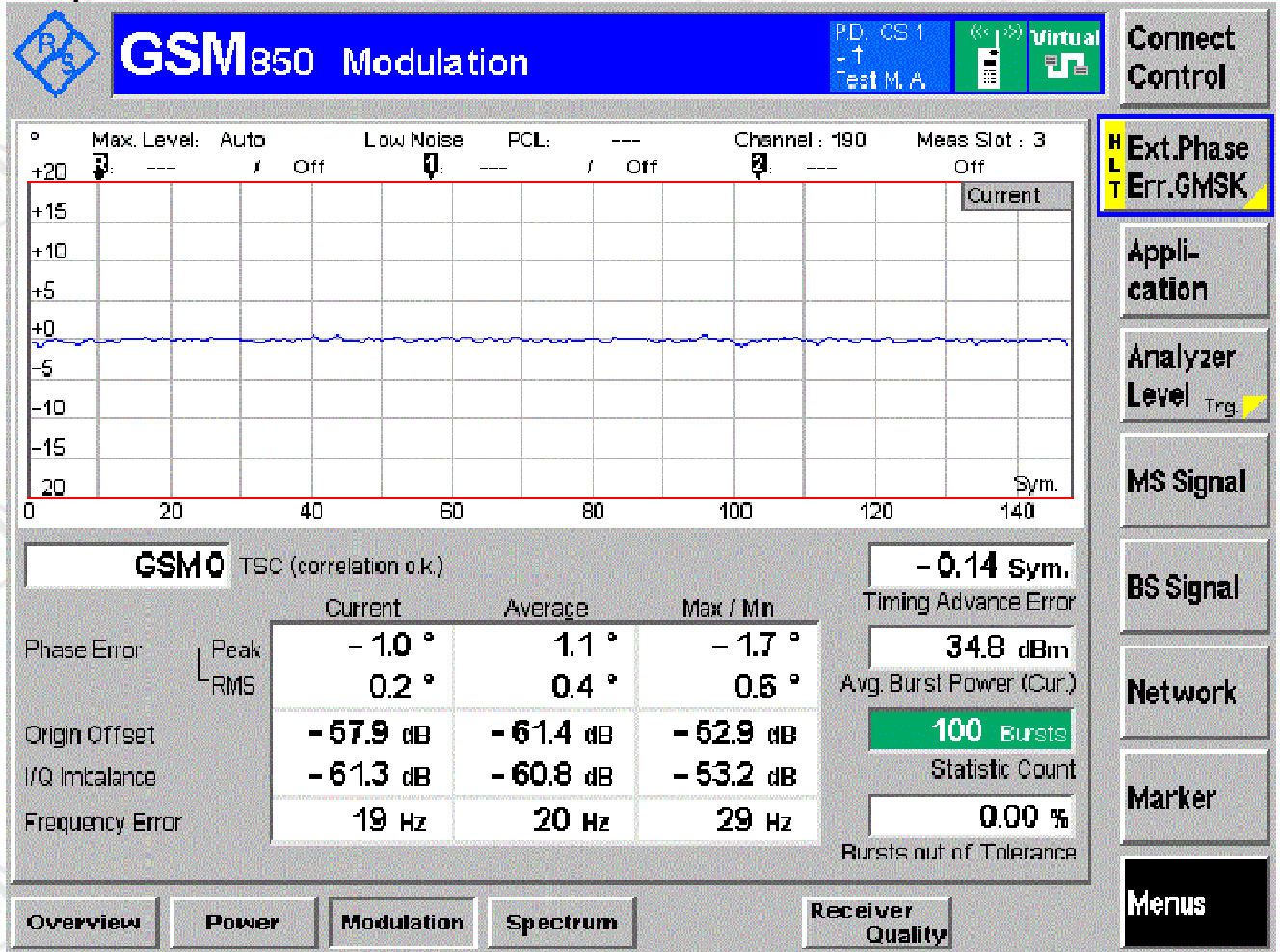
End point



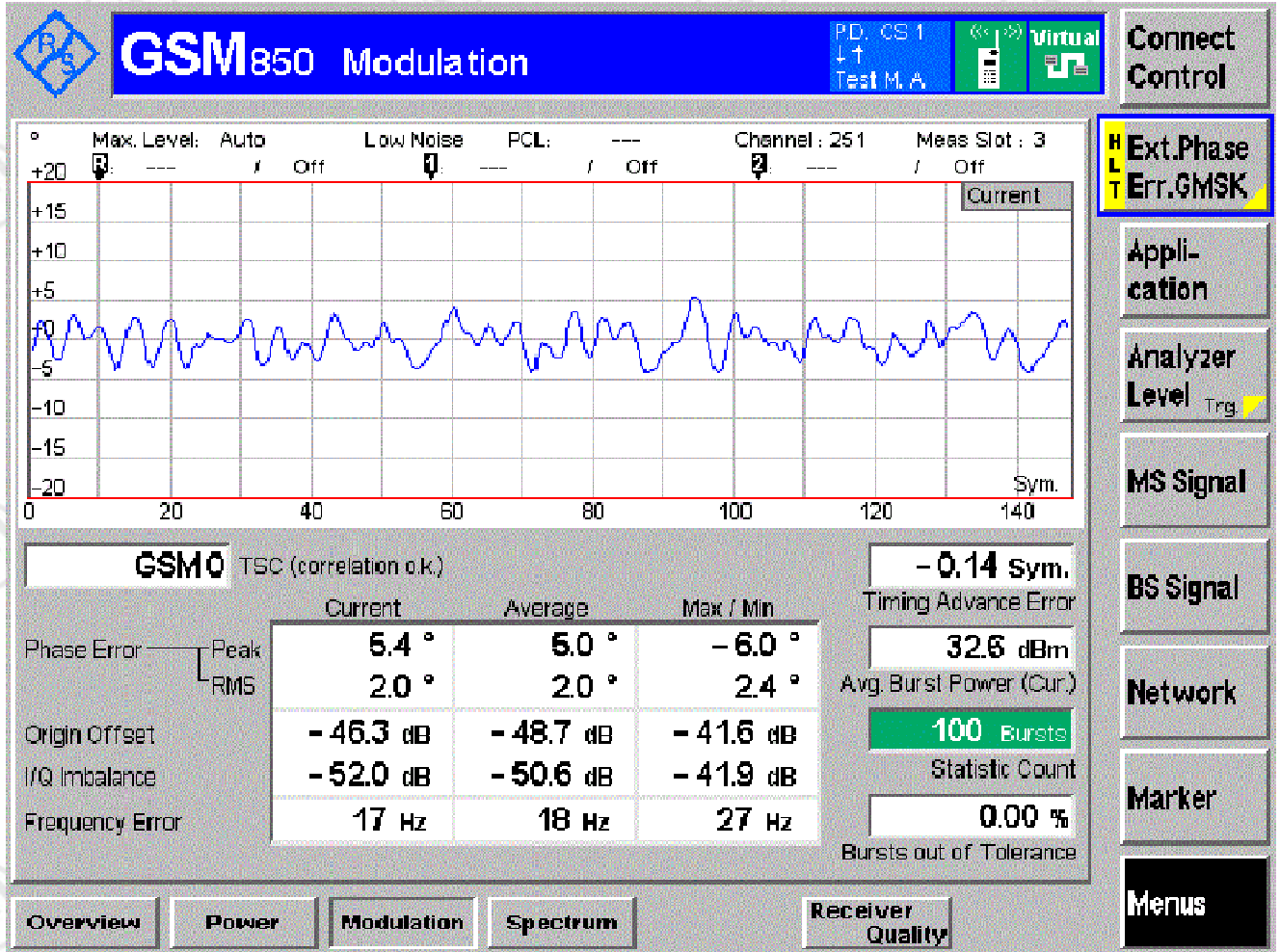
MCH



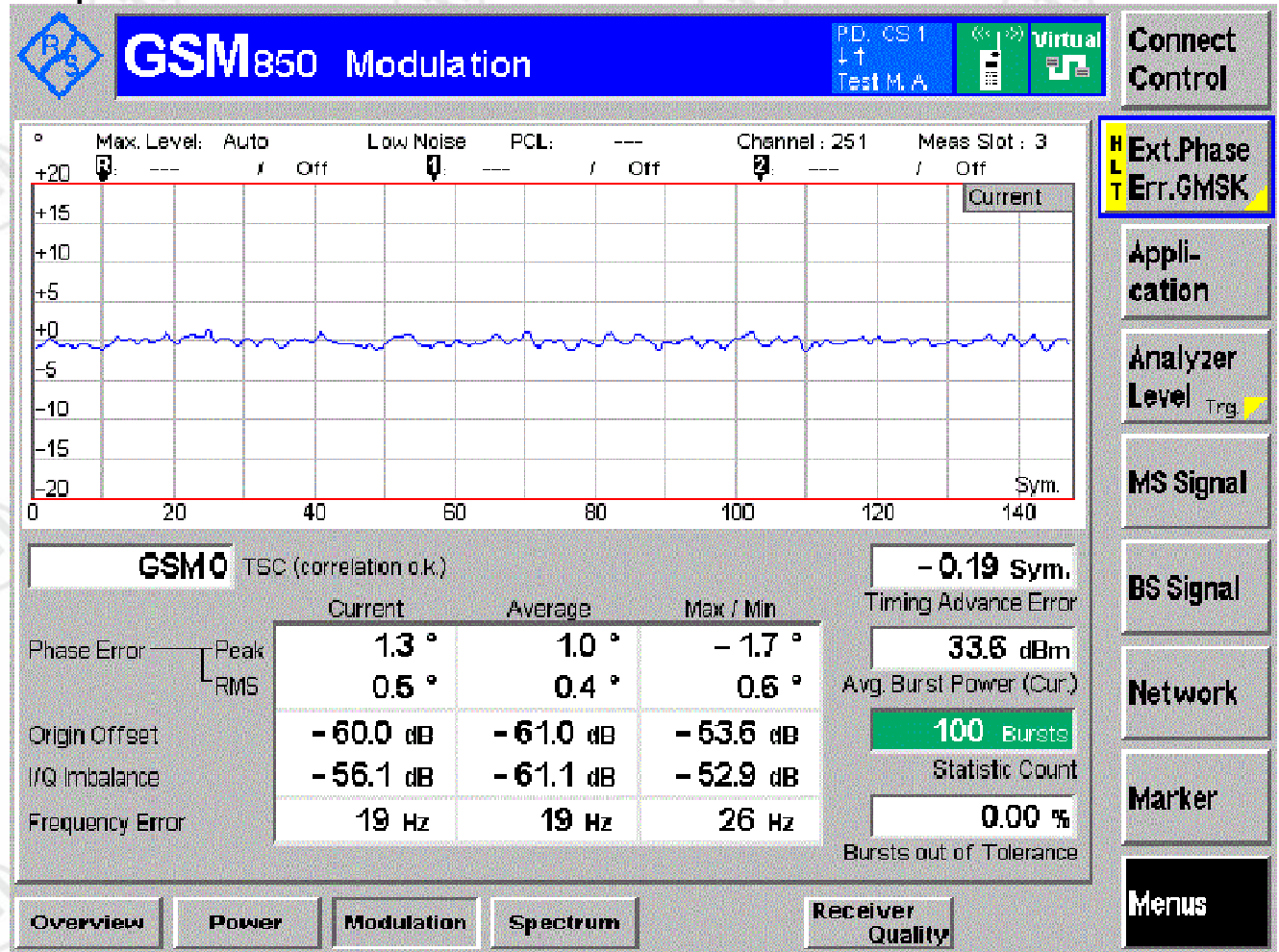
End point



HCH

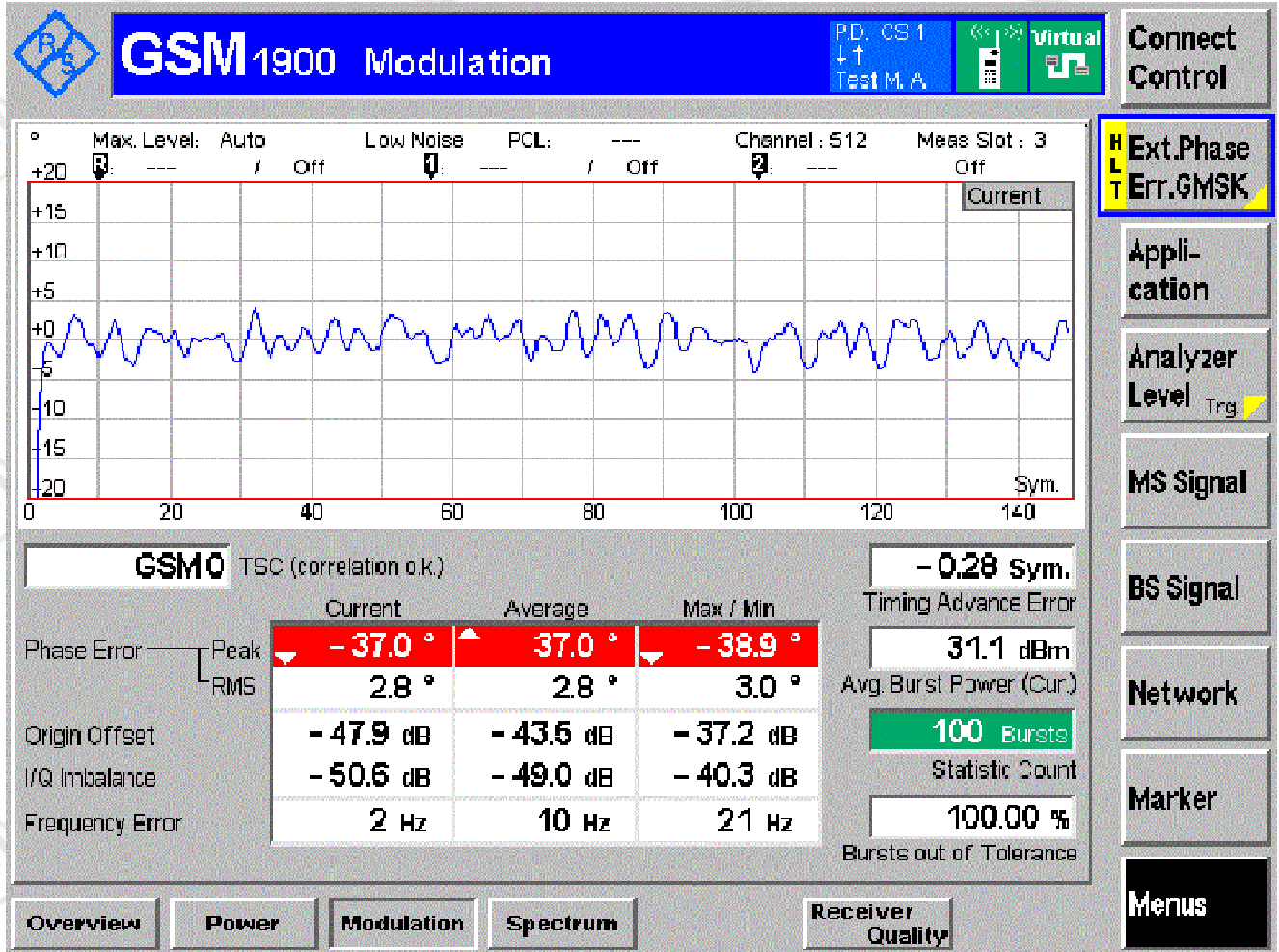


End point



GSM1900

LCH



End Point

GSM1900 Modulation
PD: CS 1
L+
Test M. A.
Virtual
Connect Control

Max. Level: Auto Low Noise PCL: Channel: 512 Meas Slot: 3

Off Off Off Off Off

GSM0 TSC (correlation o.k.)

	Current	Average	Max / Min
Phase Error	-35.7 °	35.5 °	-36.9 °
Peak	2.8 °	2.8 °	3.0 °
RMS	-44.3 dB	-43.9 dB	-36.9 dB
Origin Offset	-57.2 dB	-48.4 dB	-36.9 dB
I/Q Imbalance	-17 Hz	-19 Hz	-30 Hz
Frequency Error			

-0.33 Sym.

Timing Advance Error

31.0 dBm

Avg. Burst Power (Cur)

100 Bursts

Statistic Count

100.00 %

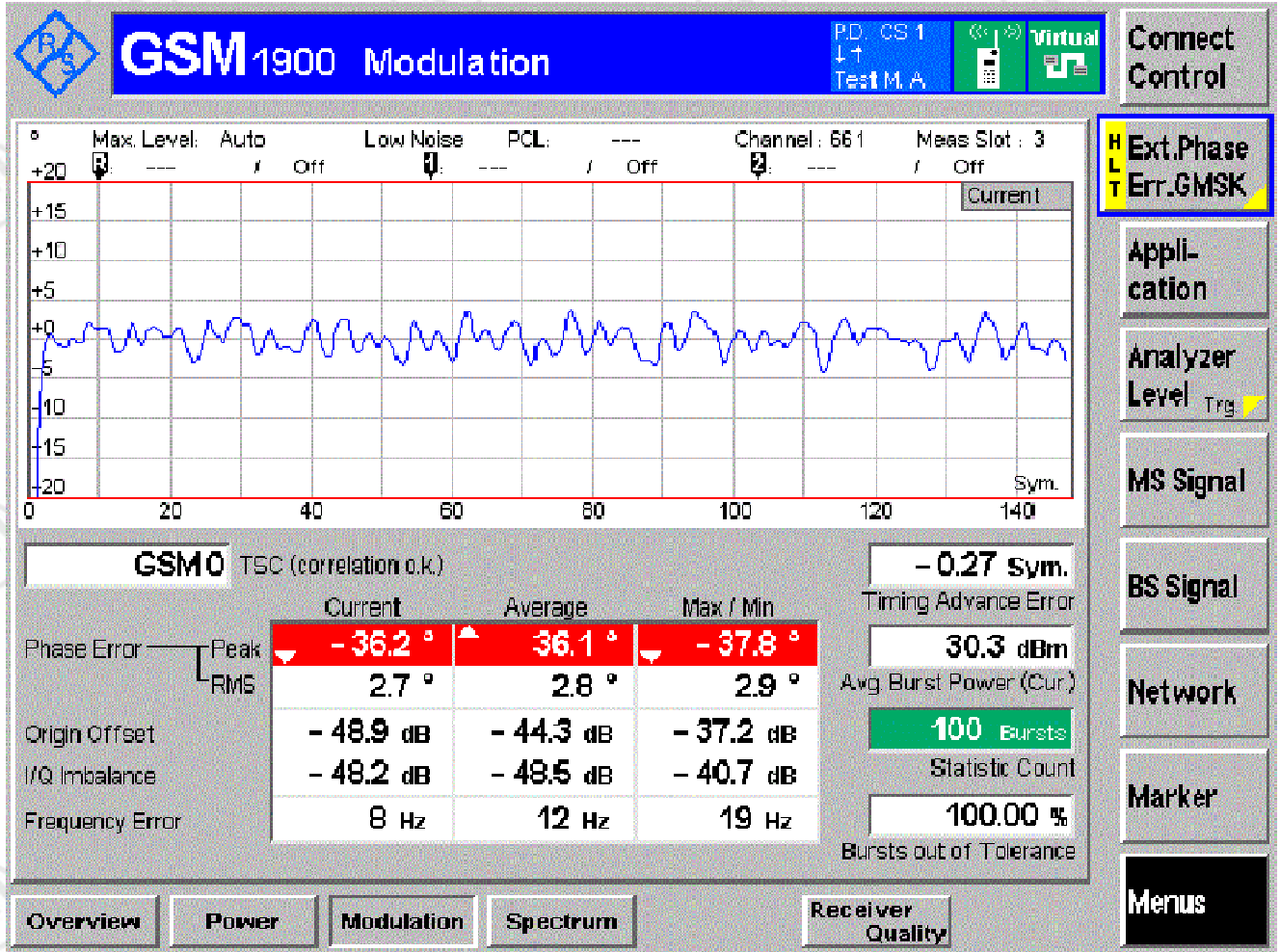
Bursts out of Tolerance

Overview
Power
Modulation
Spectrum

Receiver Quality

Ext.Phase Err.GMSK
Application
Analyzer Level Trg
MS Signal
BS Signal
Network
Marker
Menus

MCH



End Point

GSM1900 Modulation

PD: CS 1
 L+
 Test M. A.

Virtual

Connect Control

Max. Level: Auto
 Low Noise: Off
 PCL: Off
 Channel: 661
 Meas Slot: 3

Ext.Phase Err.GMSK

GSM0 TSC (correlation o.k.)

	Current	Average	Max / Min
Phase Error	-35.5 °	36.3 °	-37.8 °
Peak RMS	2.7 °	2.8 °	2.9 °
Origin Offset	-37.6 dB	-44.5 dB	-37.5 dB
I/Q Imbalance	-58.8 dB	-48.9 dB	-40.9 dB
Frequency Error	27 Hz	14 Hz	27 Hz

-0.27 Sym.
 Timing Advance Error

30.3 dBm
 Avg. Burst Power (Cur)

100 Bursts
 Statistic Count

100.00 %
 Bursts out of Tolerance

Overview

Power

Modulation

Spectrum

Receiver Quality

Connect Control

Ext.Phase Err.GMSK

Application

Analyzer Level Trg

MS Signal

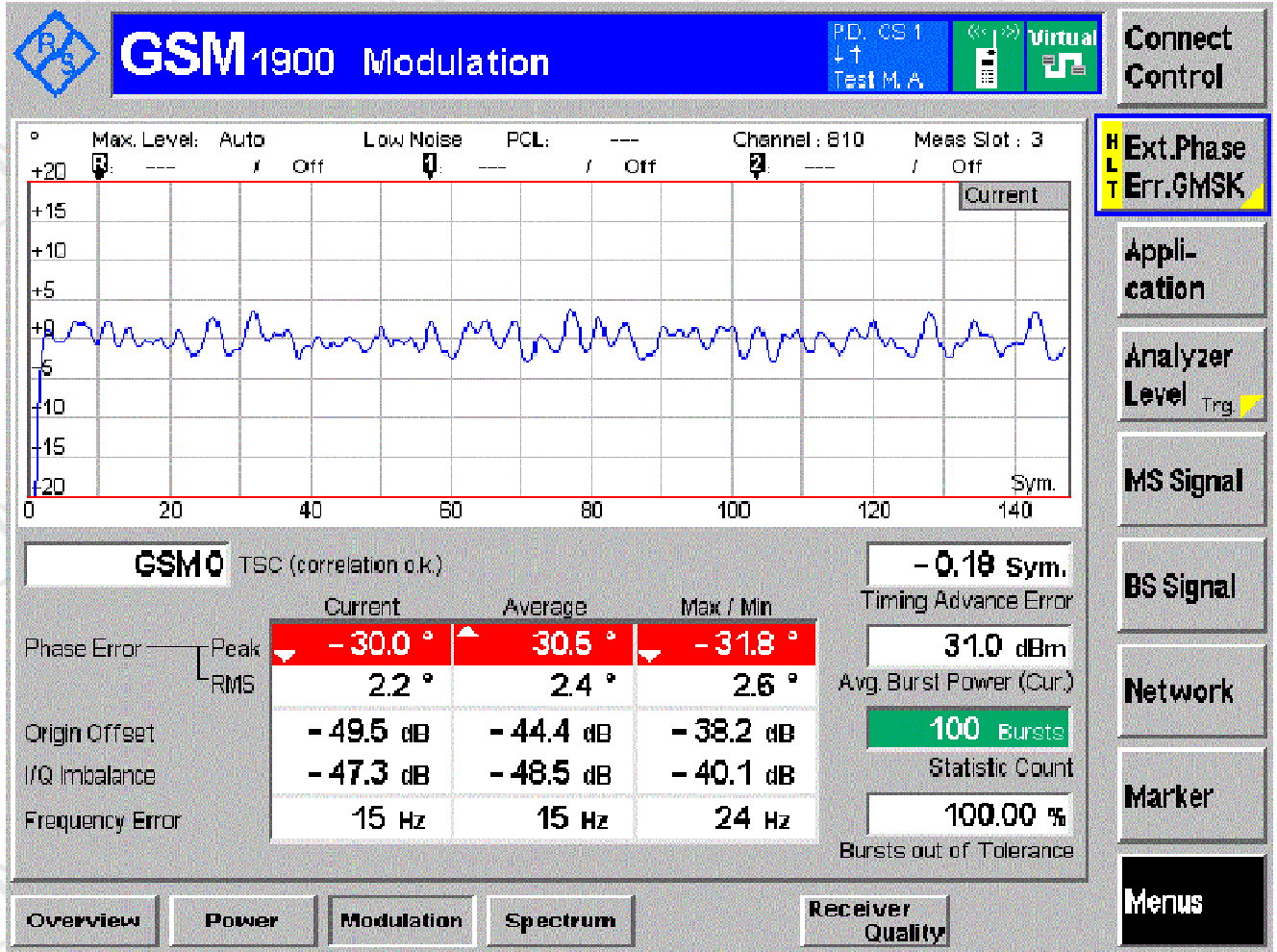
BS Signal

Network

Marker

Menus

HCH



End Point

GSM1900 Modulation

PD: CS 1
 ↓ ↑
 Test M. A.

Virtual

Connect Control

Max. Level: Auto
Low Noise
PCL: ---
Channel: 810
Meas Slot: 3

Off
 Off
 Off
 Off
 Off

GSM0 TSC (correlation o.k.)

-0.18 Sym.

	Current	Average	Max / Min	
Phase Error	-31.8 °	30.5 °	-32.0 °	-0.18 Sym.
Peak	2.5 °	2.4 °	2.6 °	31.0 dBm
RMS	2.5 °	2.4 °	2.6 °	Avg. Burst Power (Cur)
Origin Offset	-40.0 dB	-44.3 dB	-36.7 dB	100 Bursts
I/Q Imbalance	-47.7 dB	-49.5 dB	-41.0 dB	Statistic Count
Frequency Error	11 Hz	12 Hz	17 Hz	100.00 %

Bursts out of Tolerance

Overview

Power

Modulation

Spectrum

Receiver Quality

Ext.Phase

Err.GMSK

Application

Analyzer Level Trg

MS Signal

BS Signal

Network

Marker

Menus

LCH

